



Pioneer Energy Services

# Dual Induction Log

15-153-20,975-00-00

API No.

Company **Murfin Drilling Company, Inc.**

Well **Mary Ann No. 8-1**

Field **Scoda**

County **Rawlins** State

**Kansas**

Location **1470' FNL & 630' FWL**

Sec: **1** Twp: **1S** Rge: **36W**

Other Services  
CNL/CDL  
MEL/BHCS

Permanent Datum **Ground Level** Elevation **3130**

Log Measured From **Kelly Bushing** 11 Ft. Above Perm. Datum

K.B. 3141  
D.F. 3130  
G.L. 3130

Date	2/2/14		
Run Number	One		
Depth Driller	4482		
Depth Logger	4485		
Bottom Logged Interval	4484		
Top Log Interval	00		
Casing Driller	8.625 @ 265		
Casing Logger	265		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	1,000		
Density / Viscosity	8.9   48		
pH / Fluid Loss	11.5   6.0		
Source of Sample	Flowline		
Rm @ Meas. Temp	.90 @ 52		
Rmf @ Meas. Temp	.68 @ 52		
Rmc @ Meas. Temp	1.22 @ 52		
Source of Rmf / Rmc	Charts		
Rm @ BHT	.39 @ 121		
Operating Rig Time	5 Hours		
Max Rec. Temp. F	121		
Equipment Number	15		
Location	Hays		
Recorded By	J. Hennickson		
Witnessed By	Wes Hansen		

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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

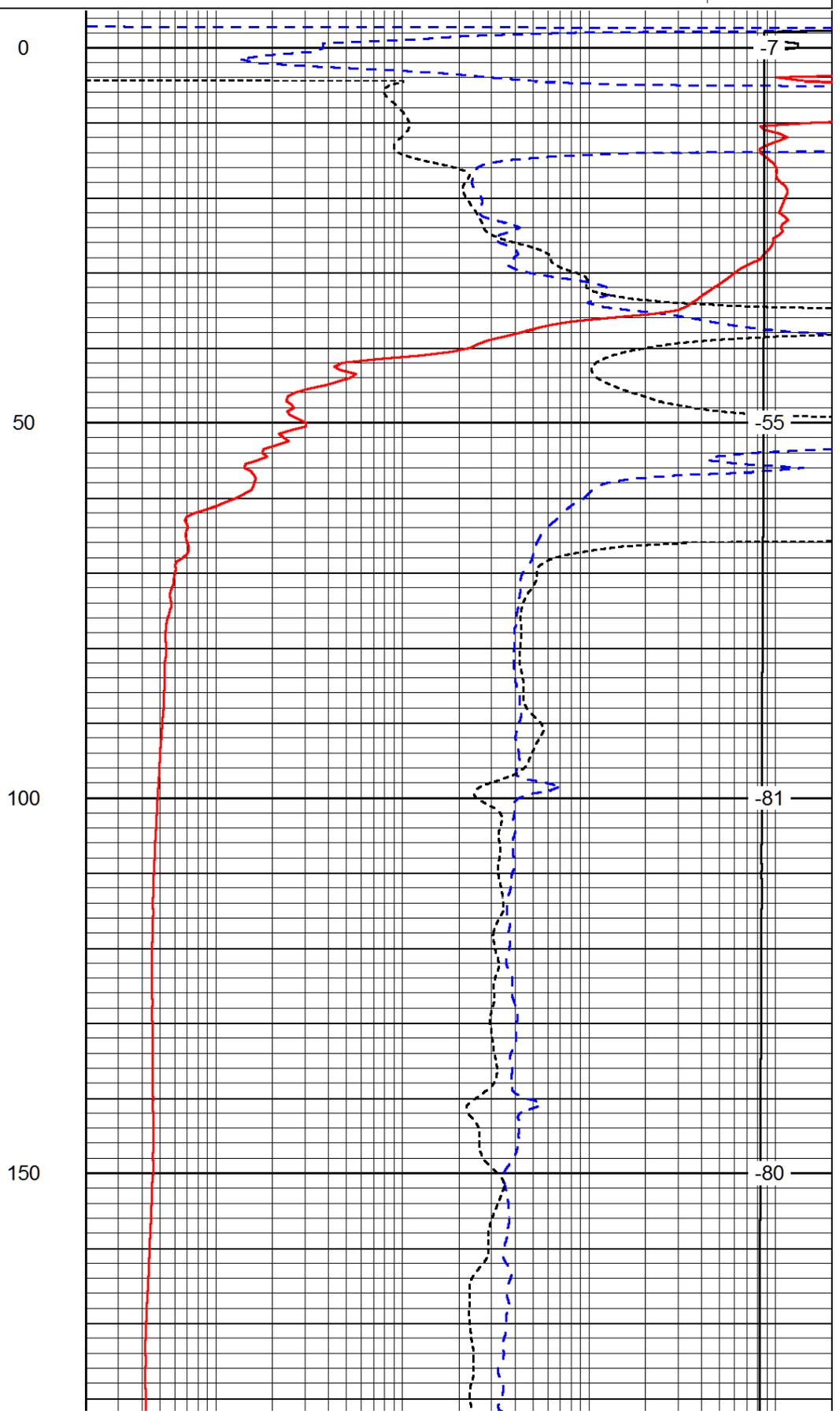
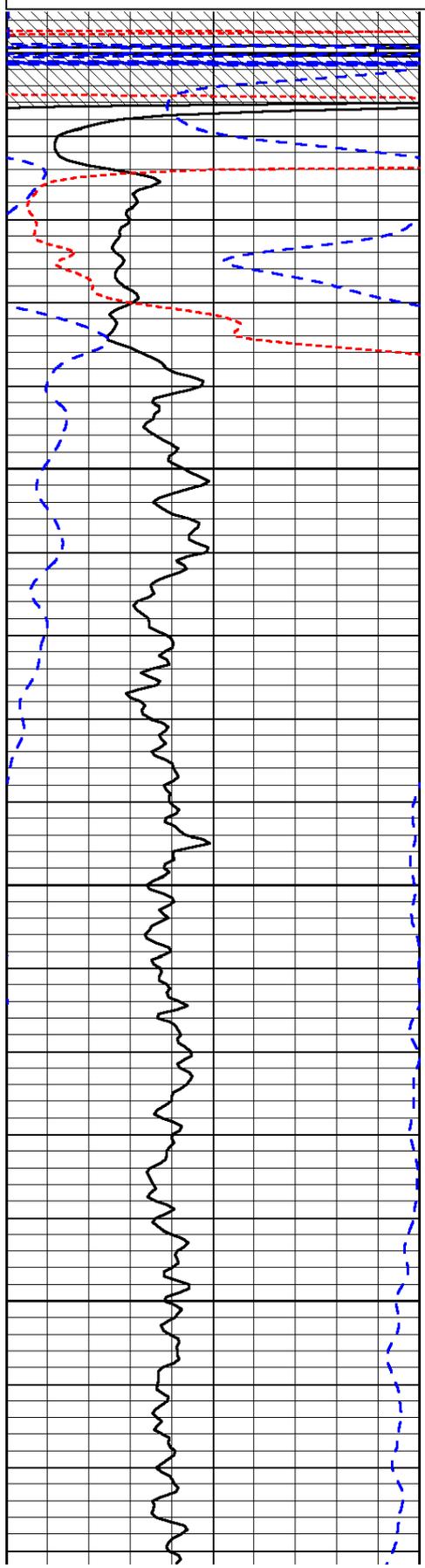
Beardsley Kansas  
North to AA Rd, West to 7 Rd, 3 North, West Into  
(Follow Lease Rd West all the Way to the Rig through curves)

Database File: murfin\_mary\_ann\_8\_1hd.db  
 Dataset Pathname: DIL/murfstk  
 Presentation Format: dil  
 Dataset Creation: Mon Feb 03 01:10:53 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)



0

50

100

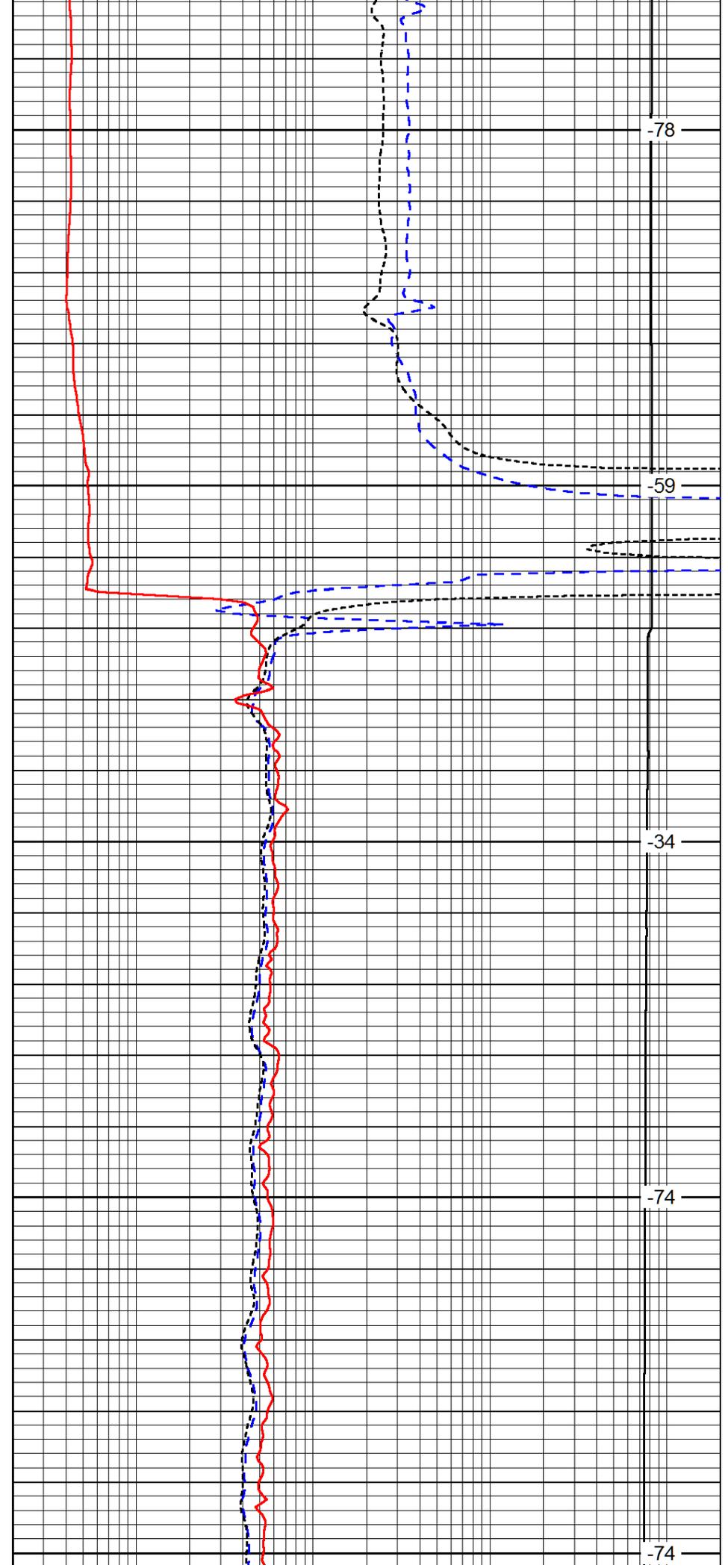
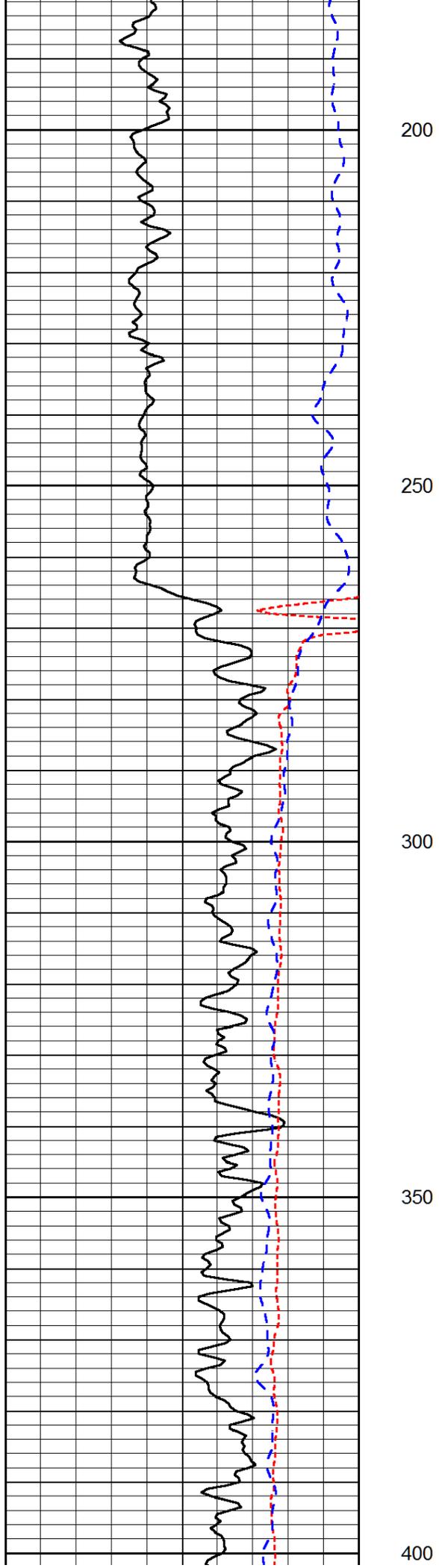
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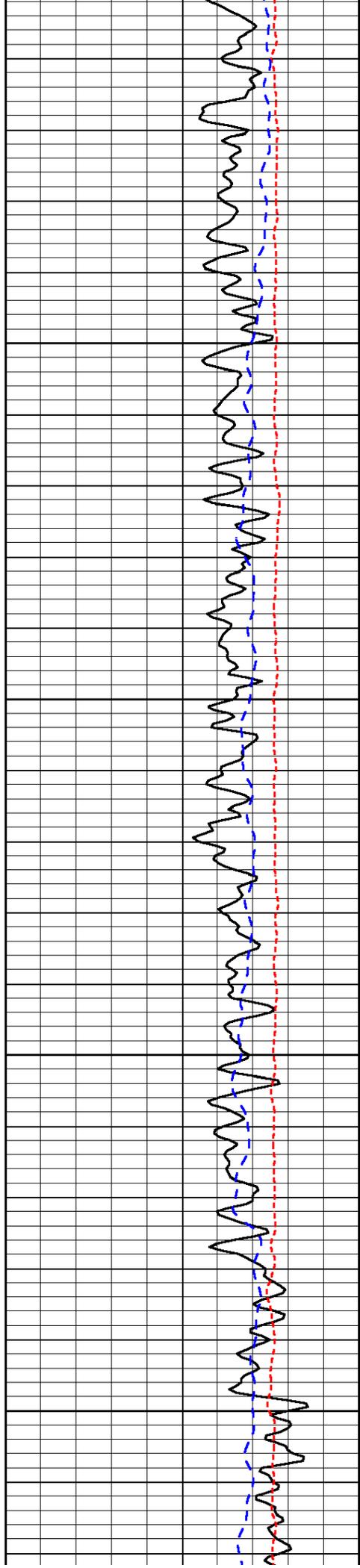
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-81

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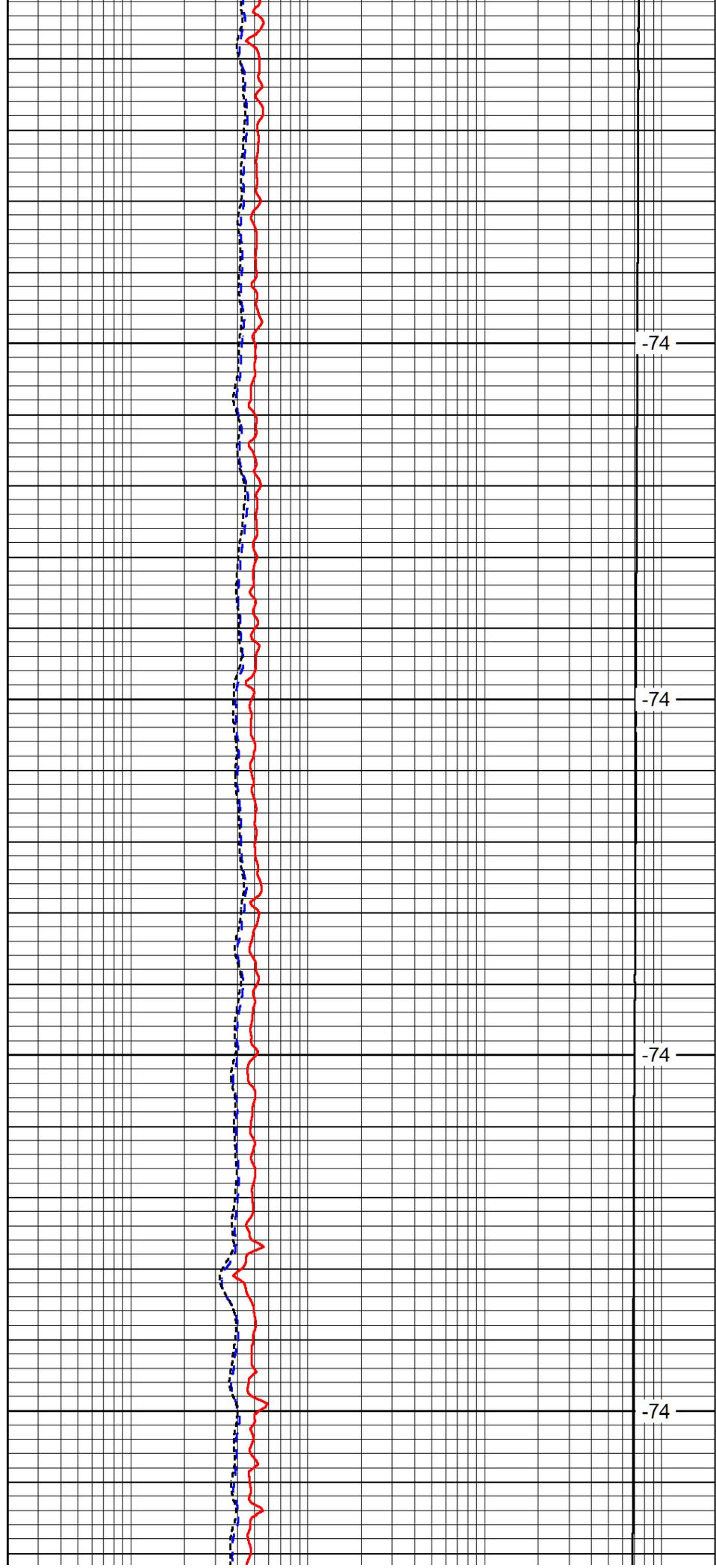


450

500

550

600

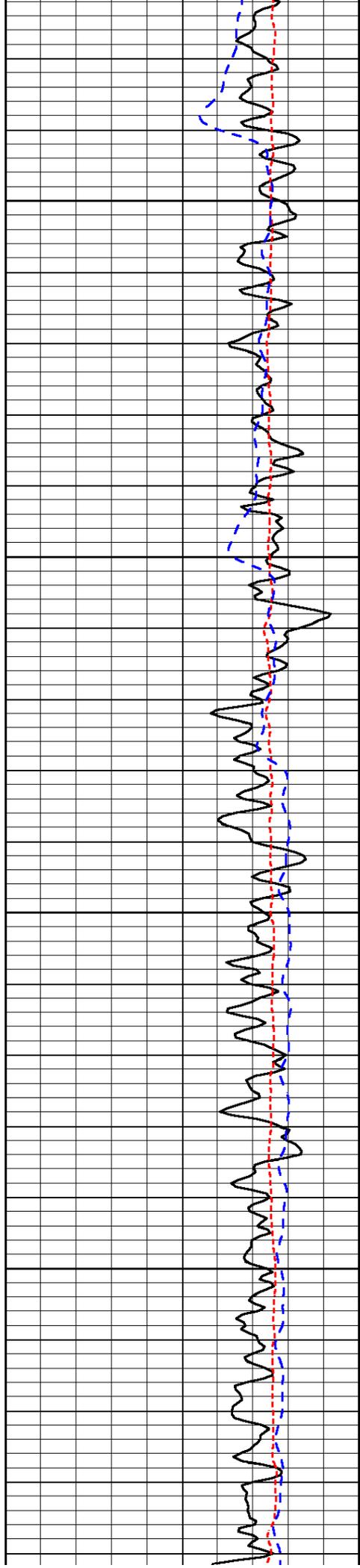


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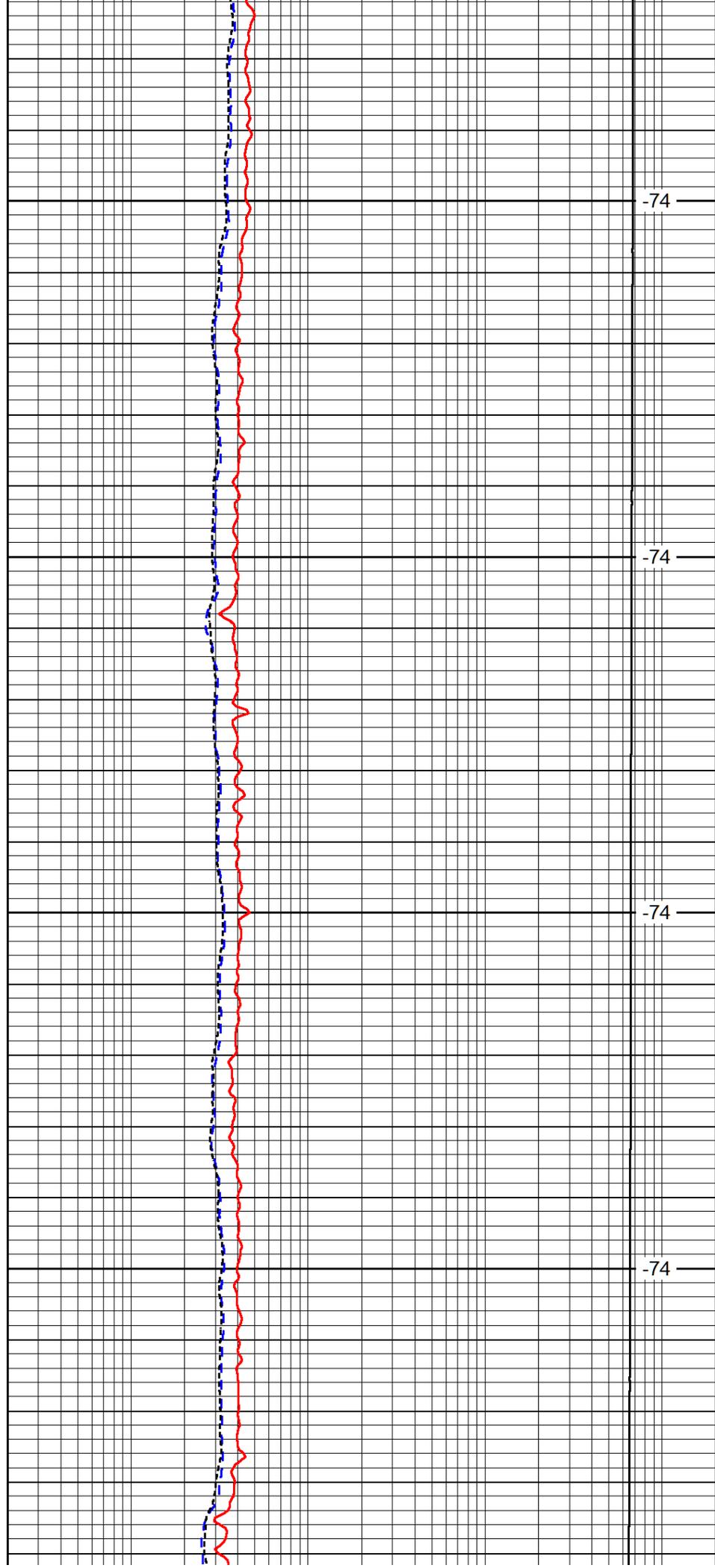


650

700

750

800

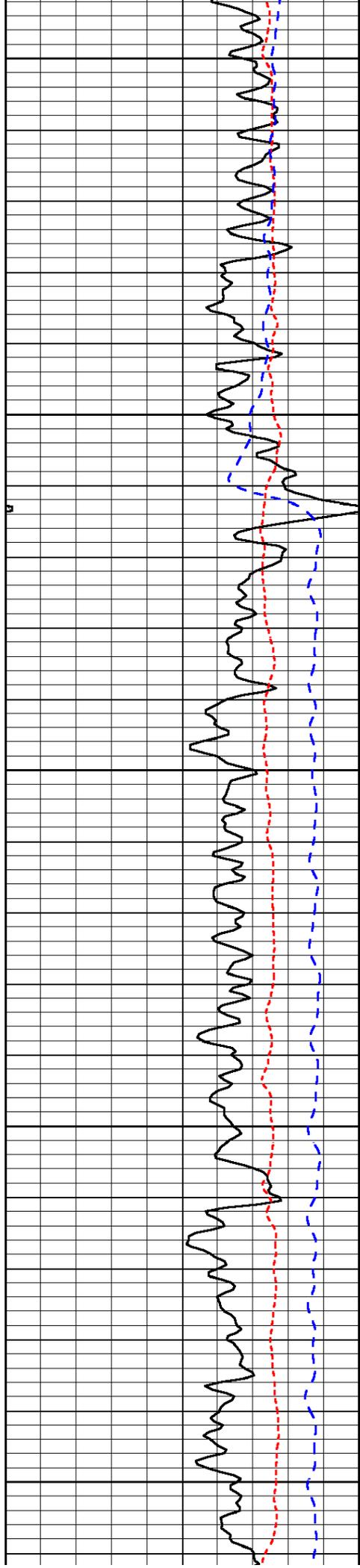


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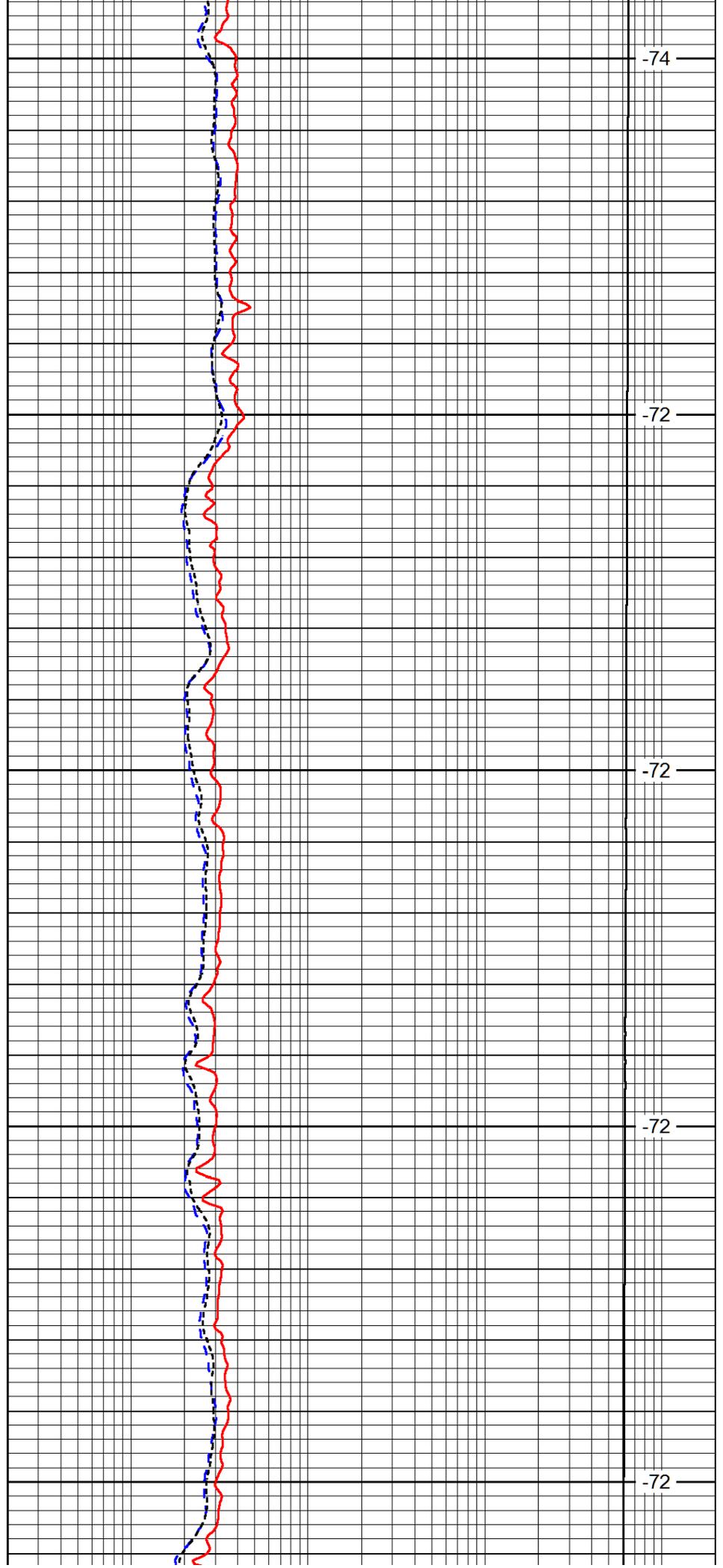
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900

950

1000

1050



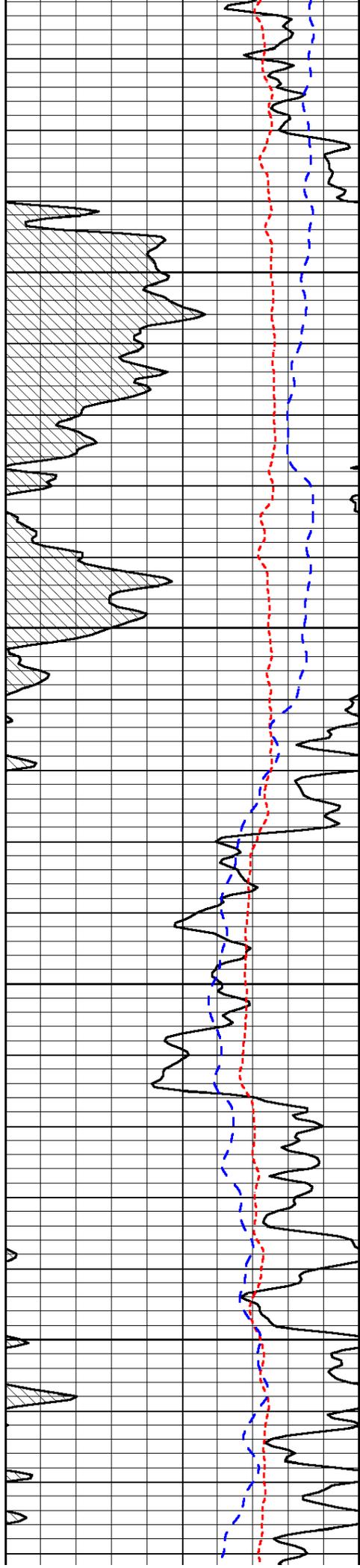
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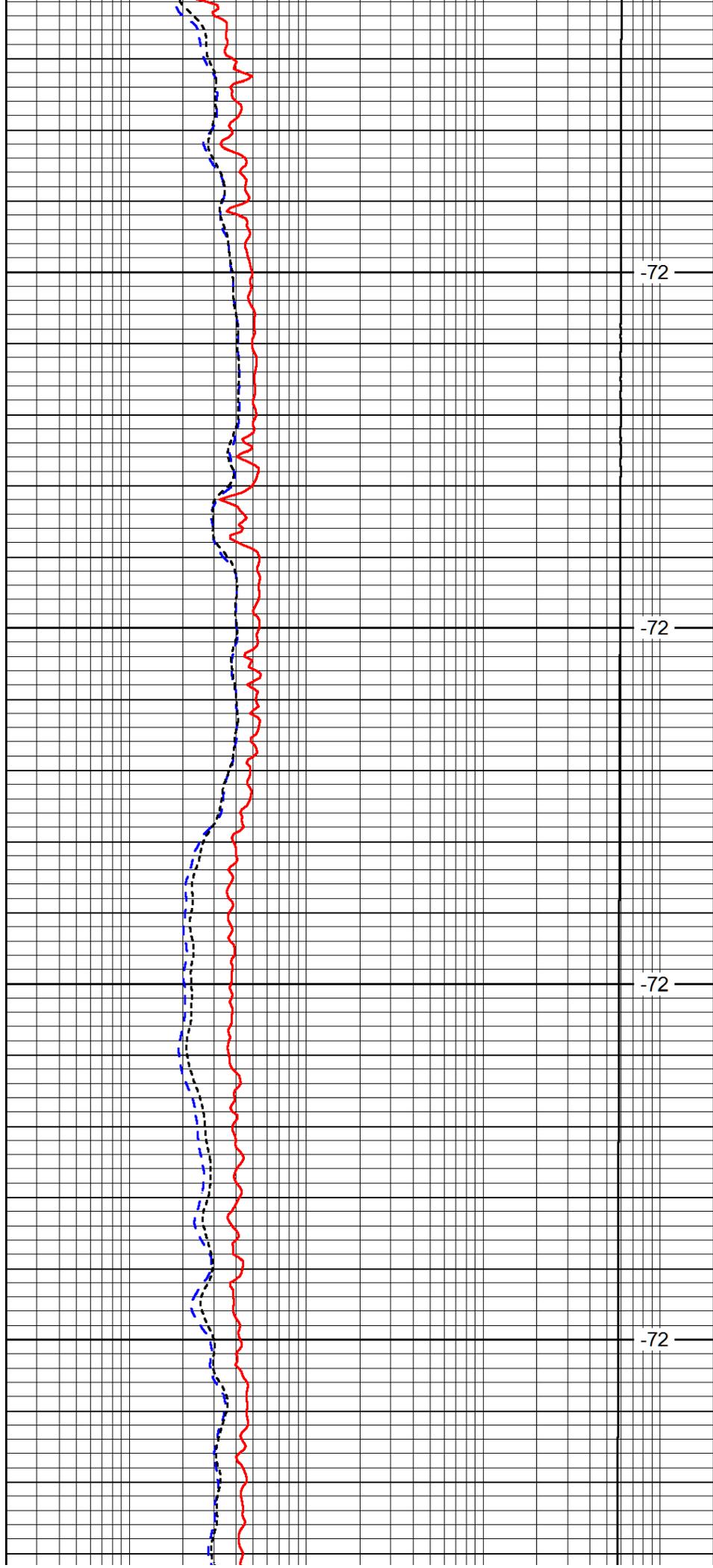


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1150

1200

1250

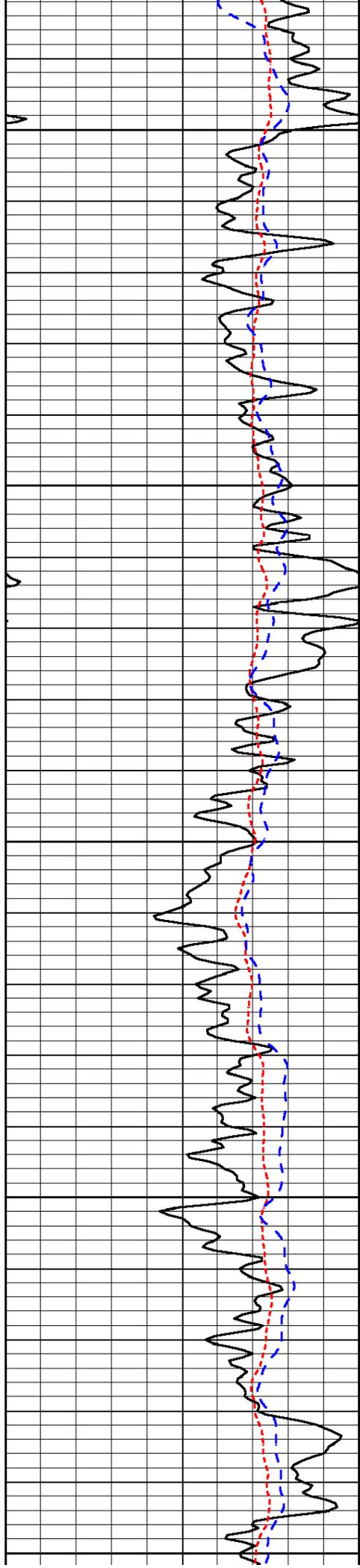


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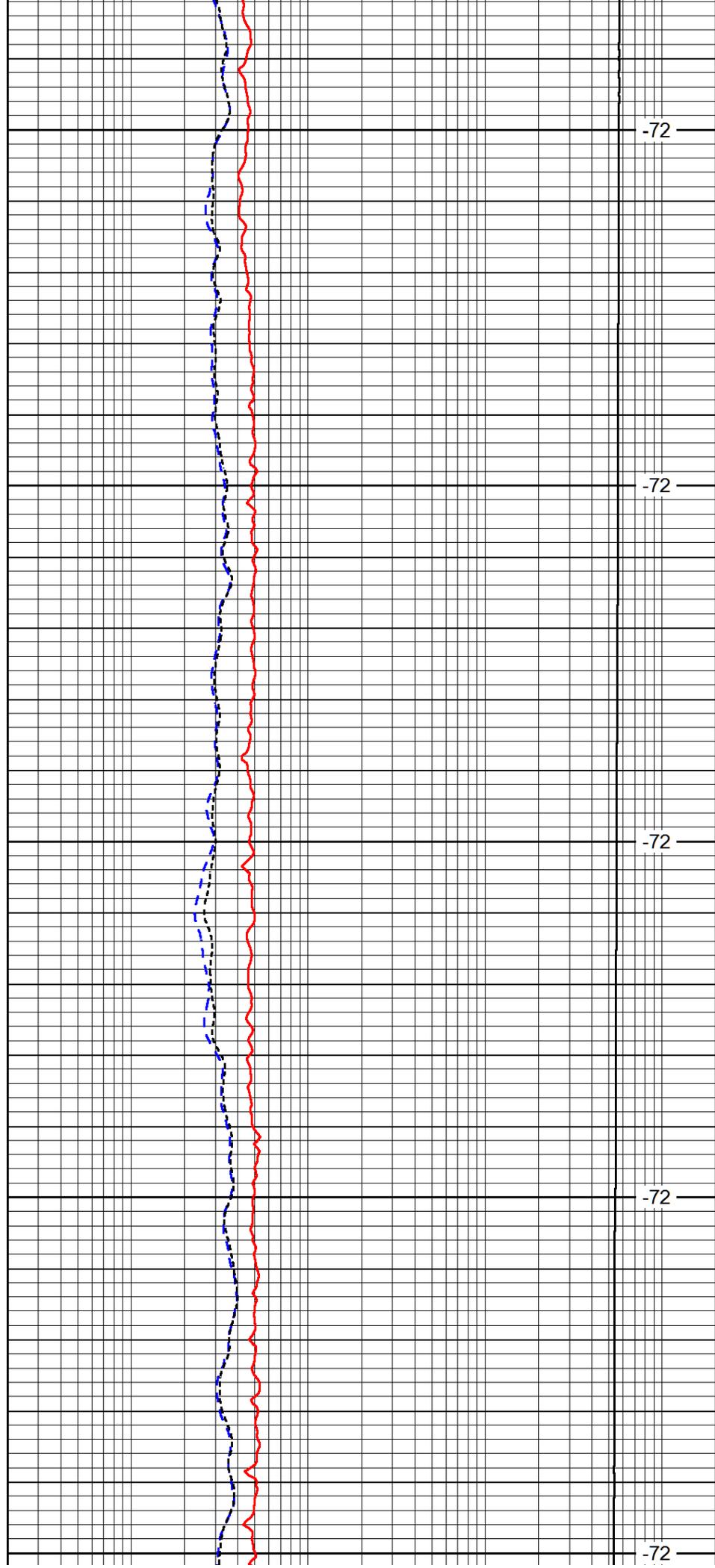
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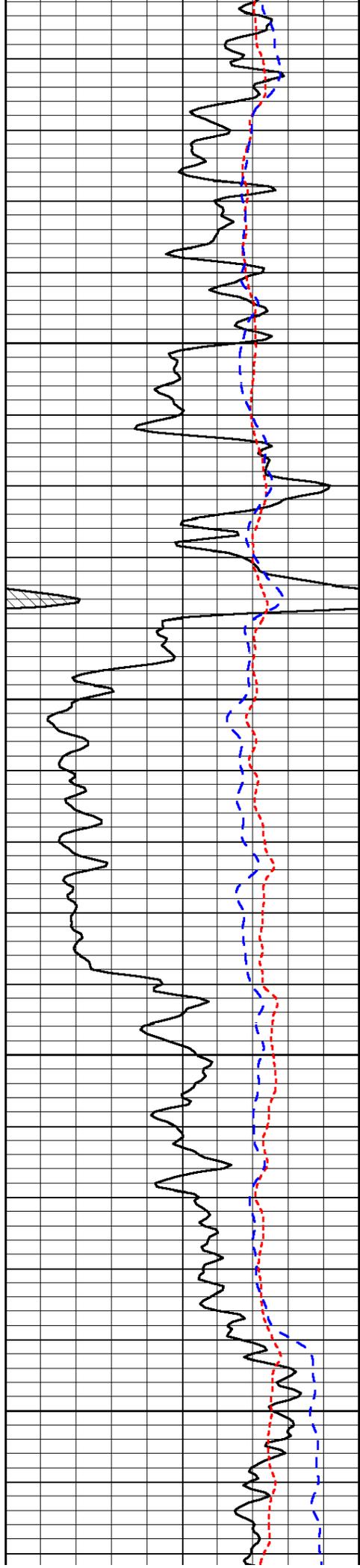
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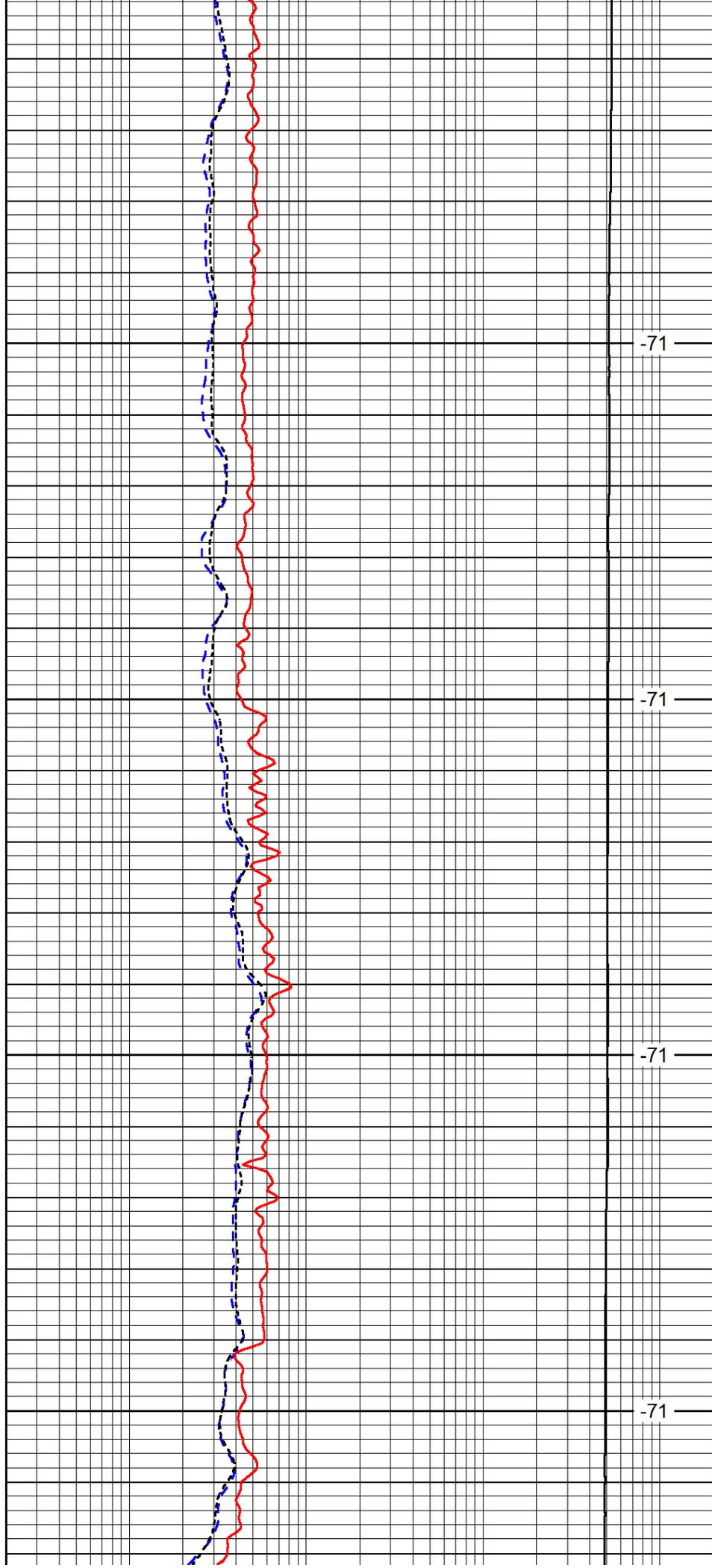


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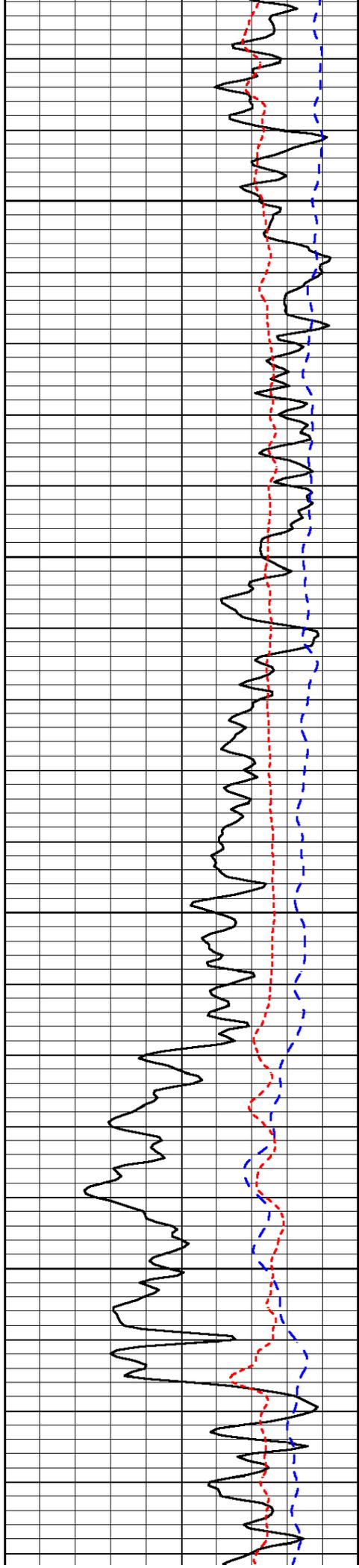


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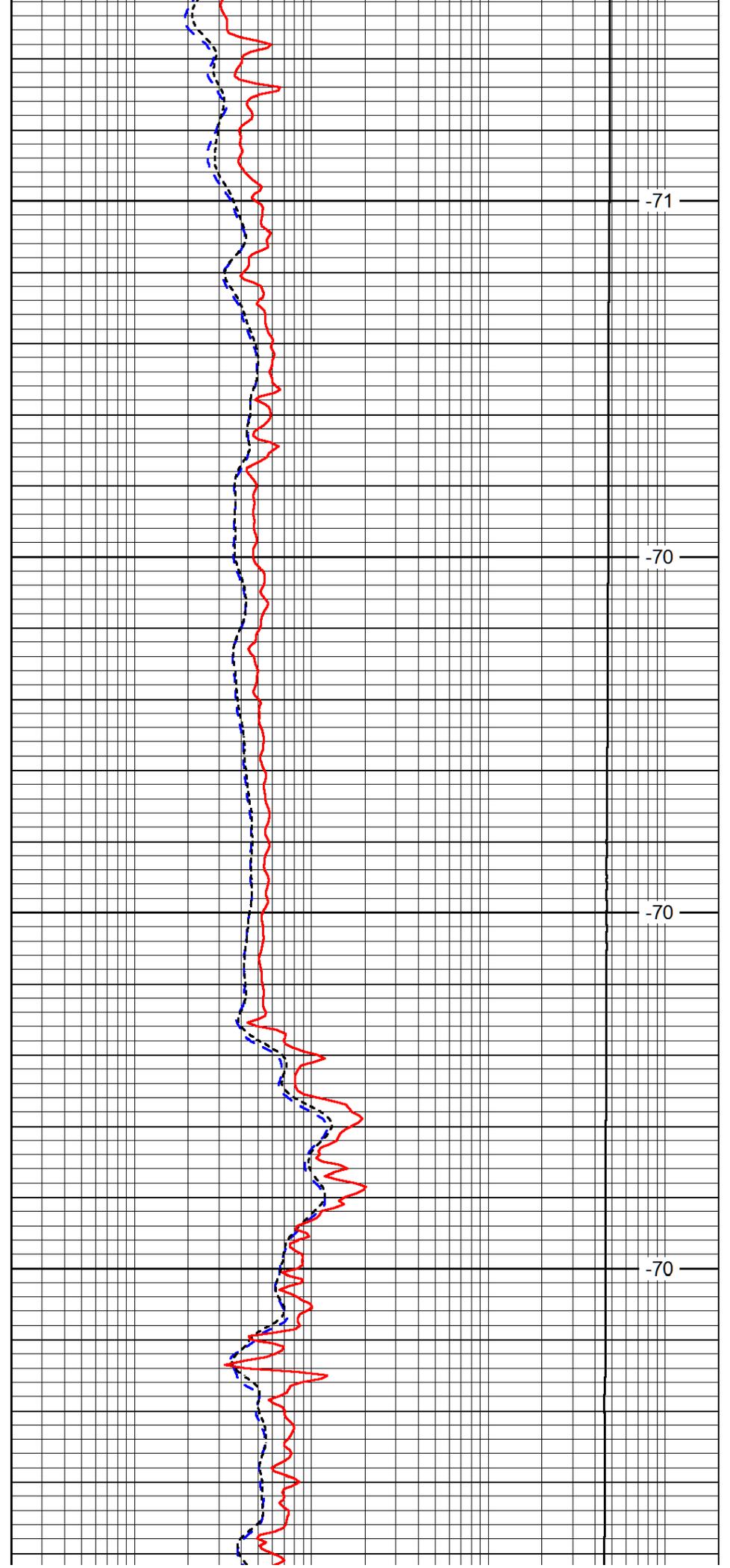


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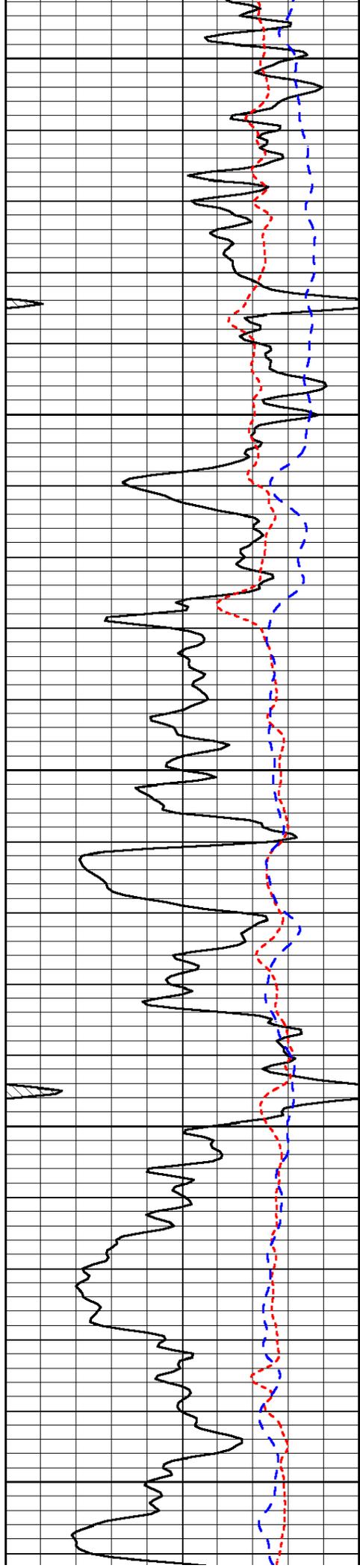


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1950

2000

2050

2100

2150

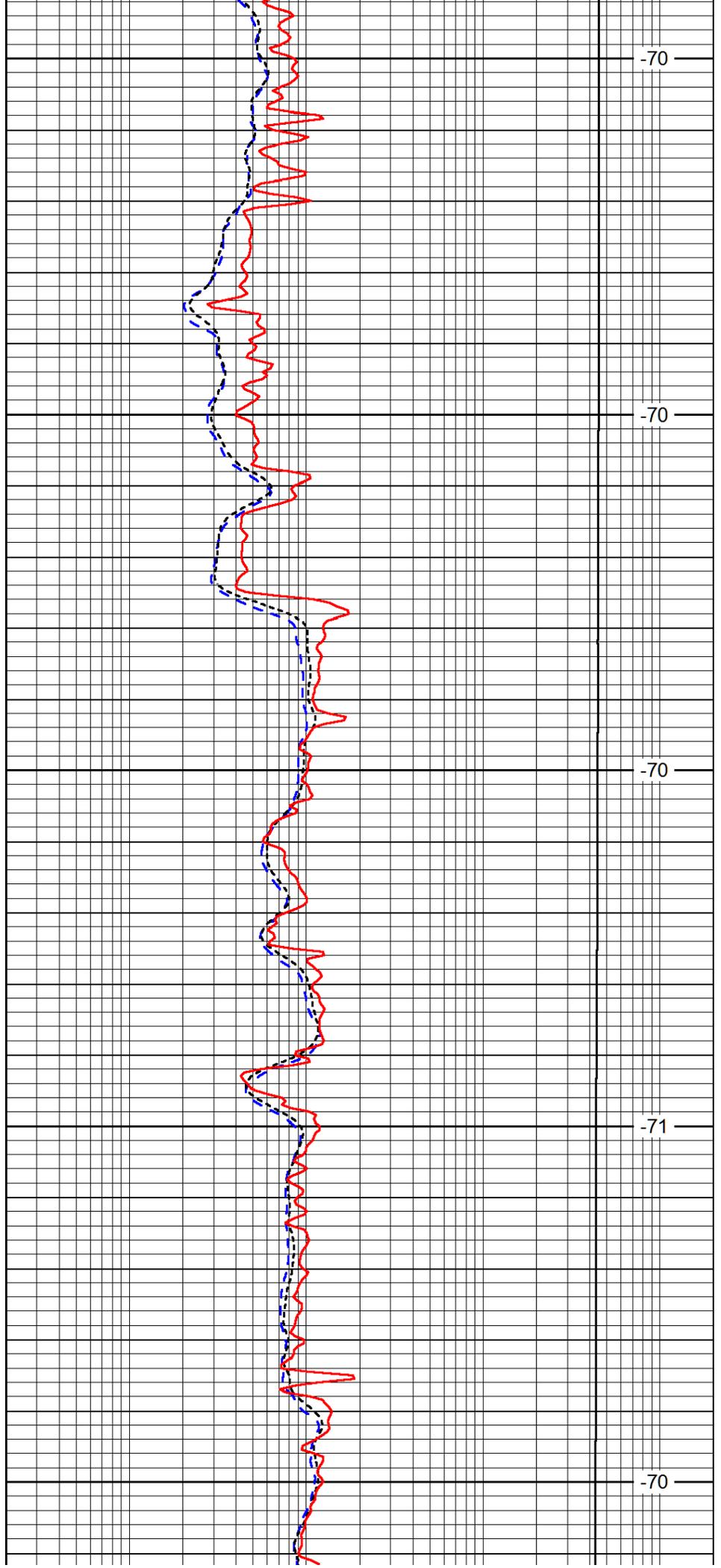
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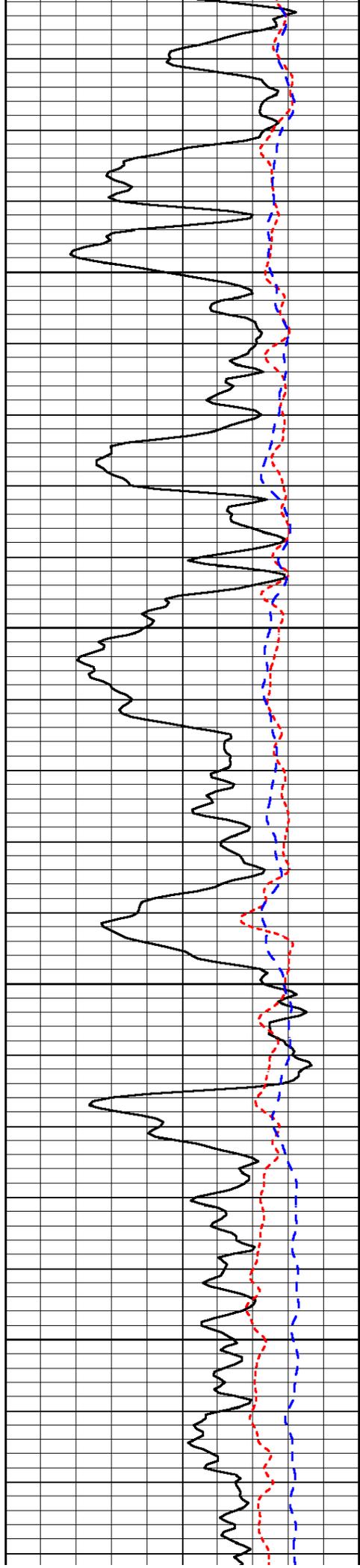
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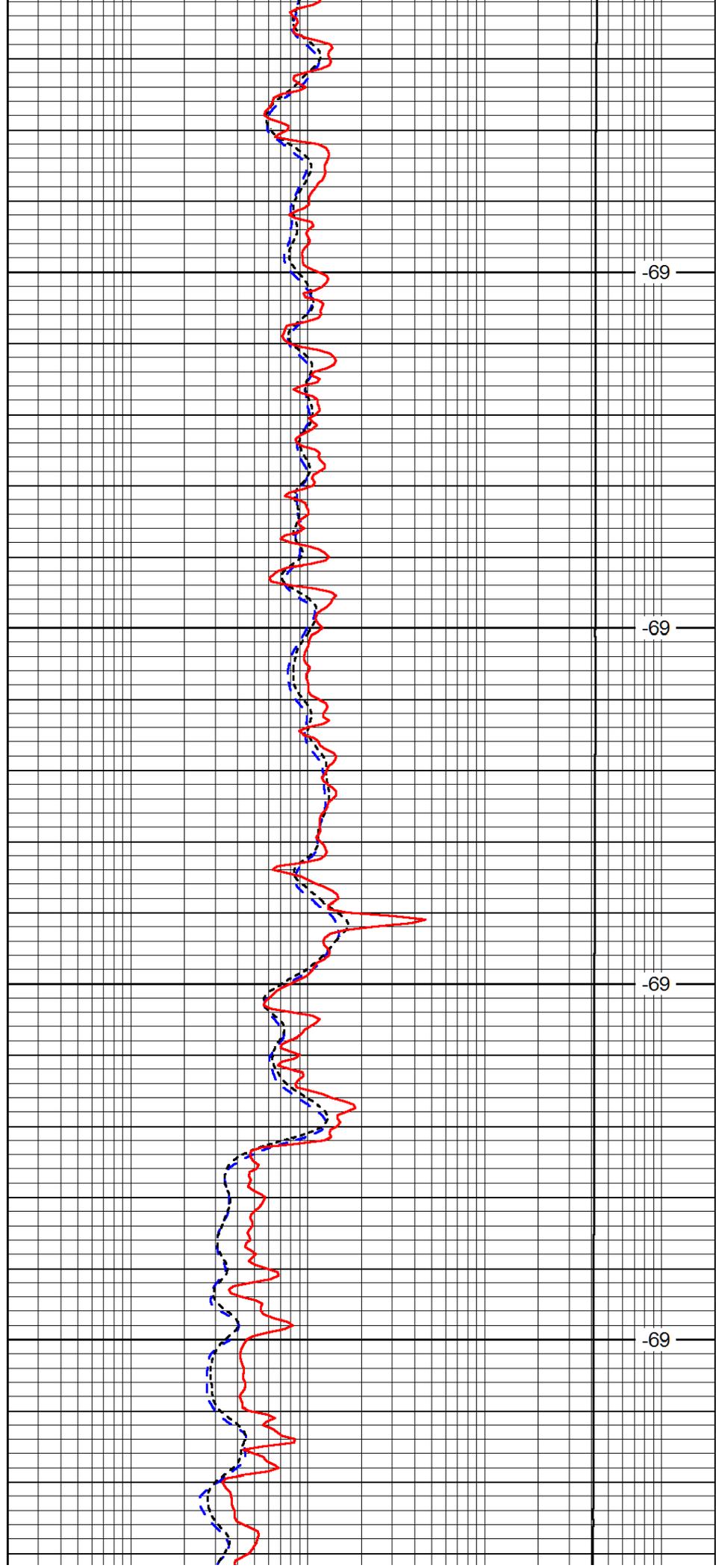


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300

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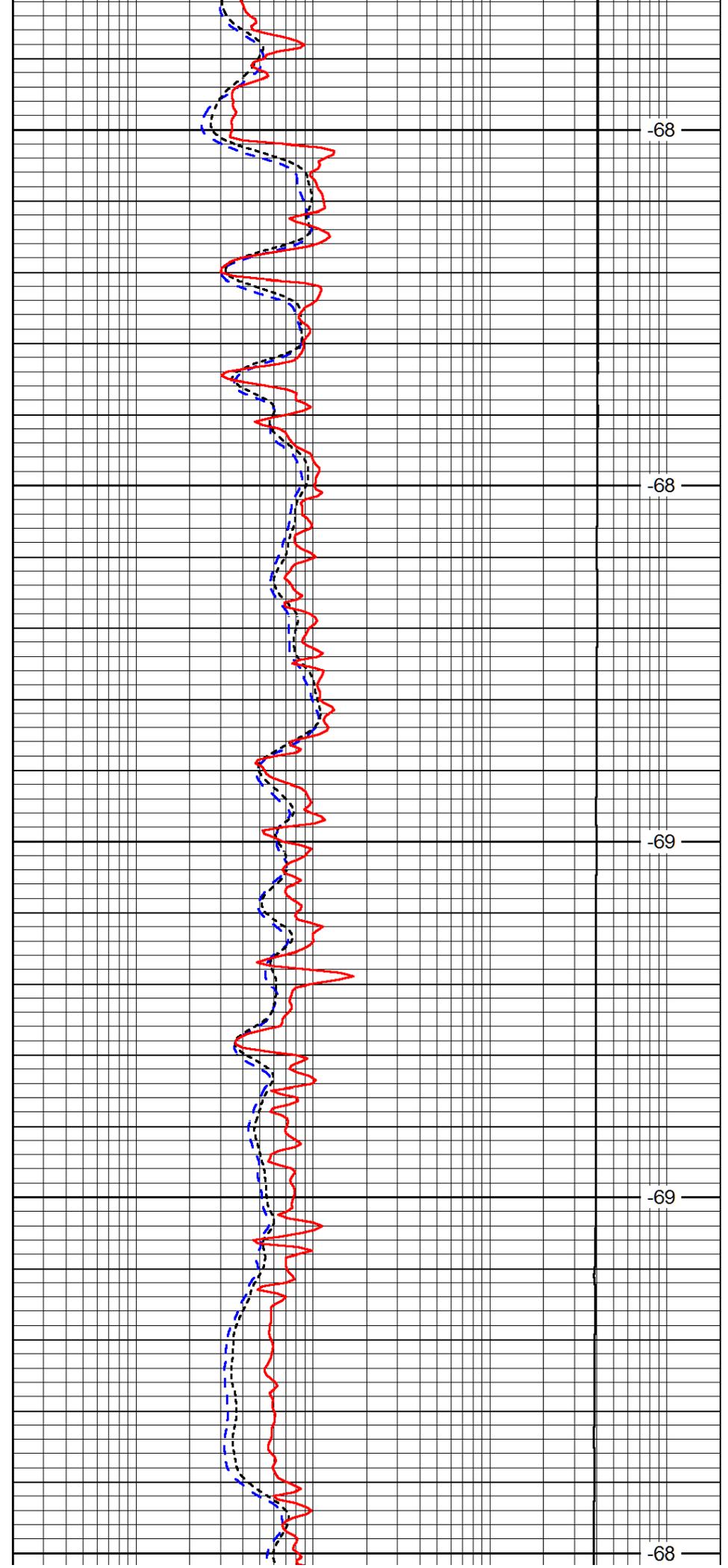
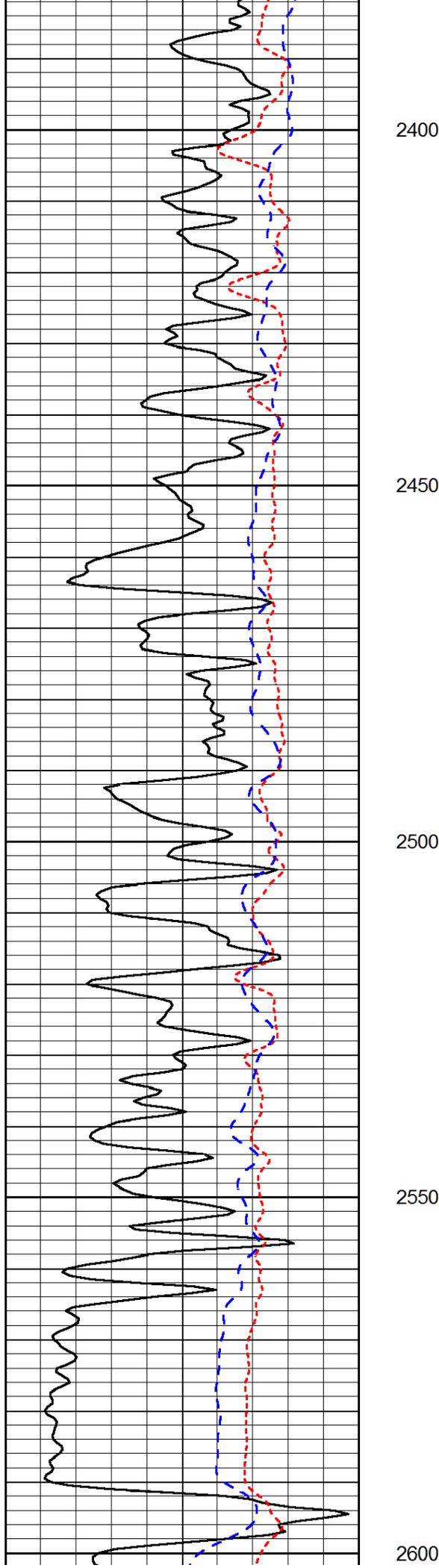


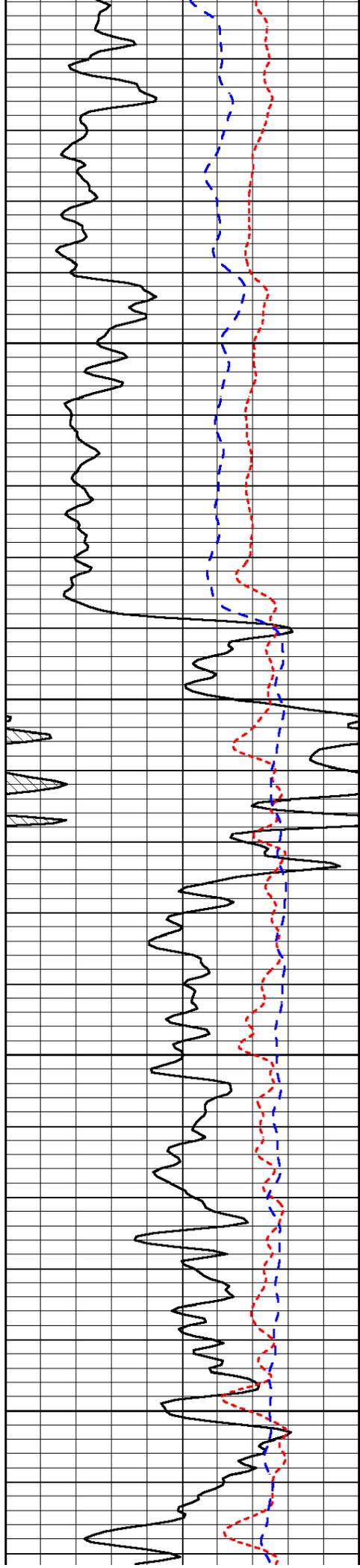
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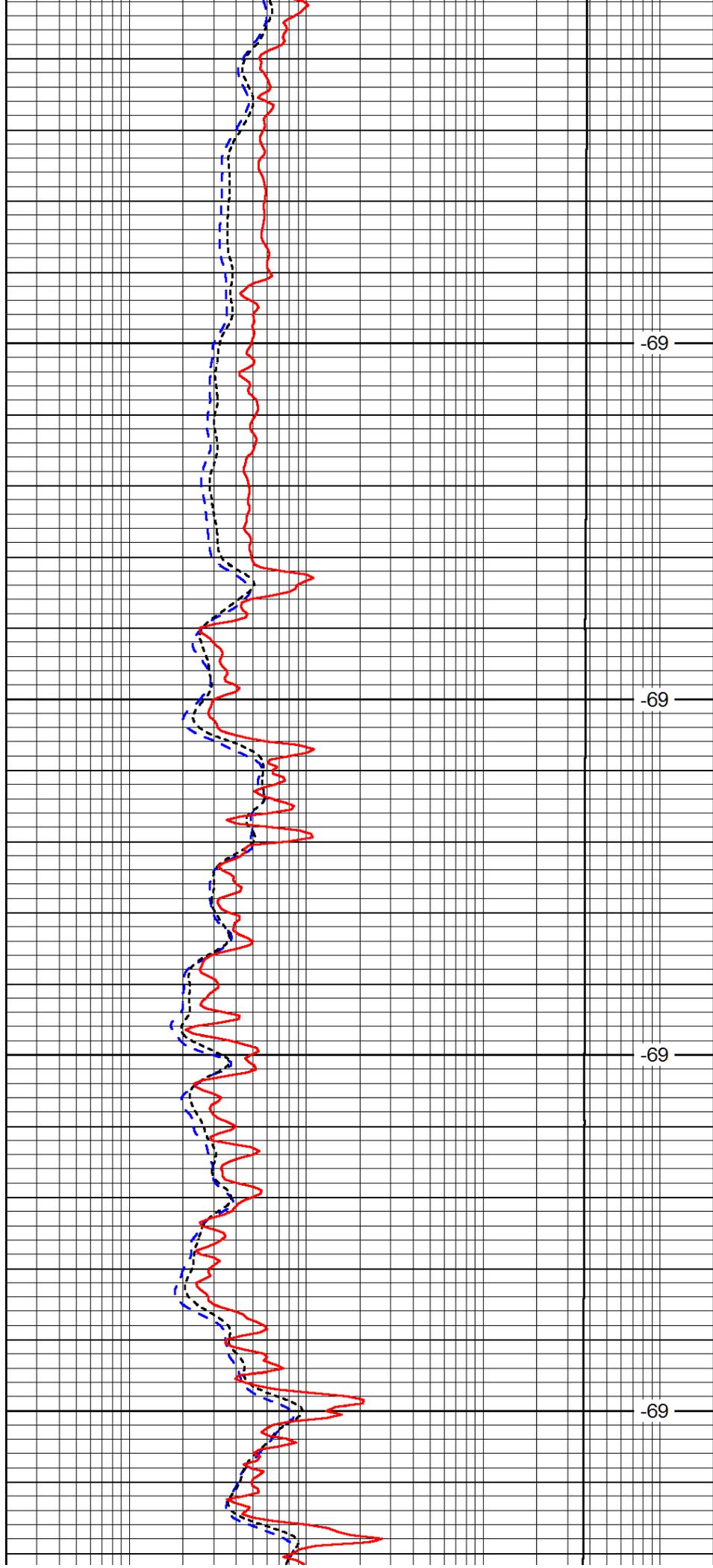


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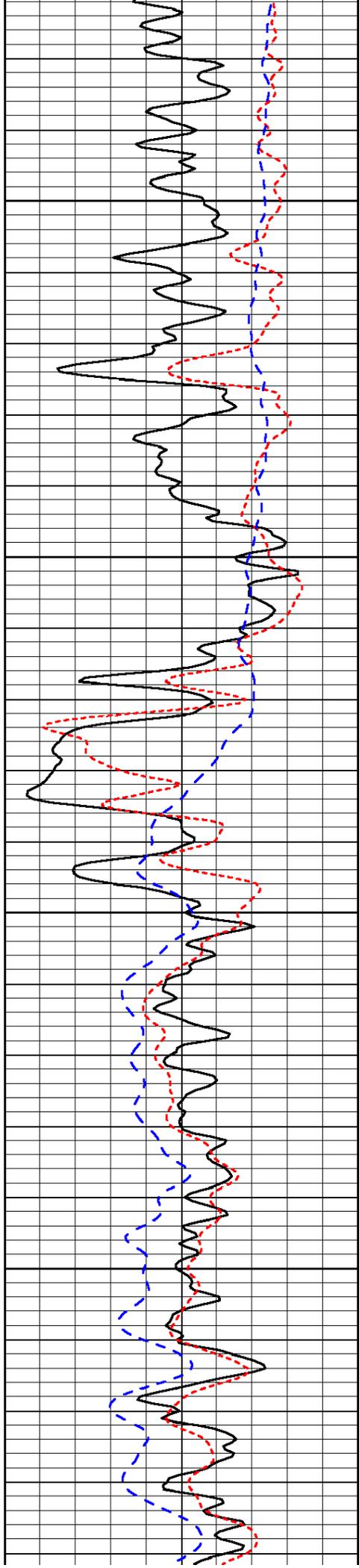


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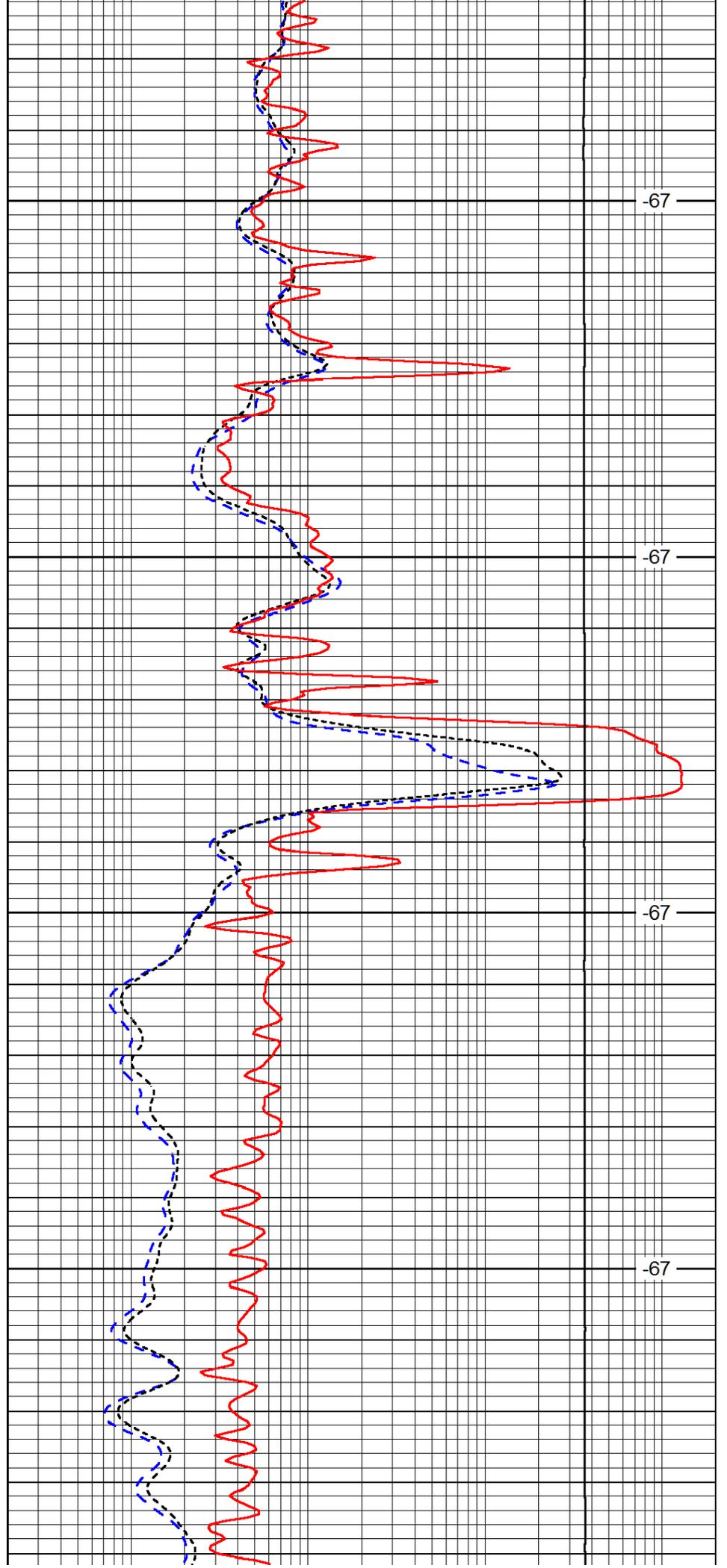


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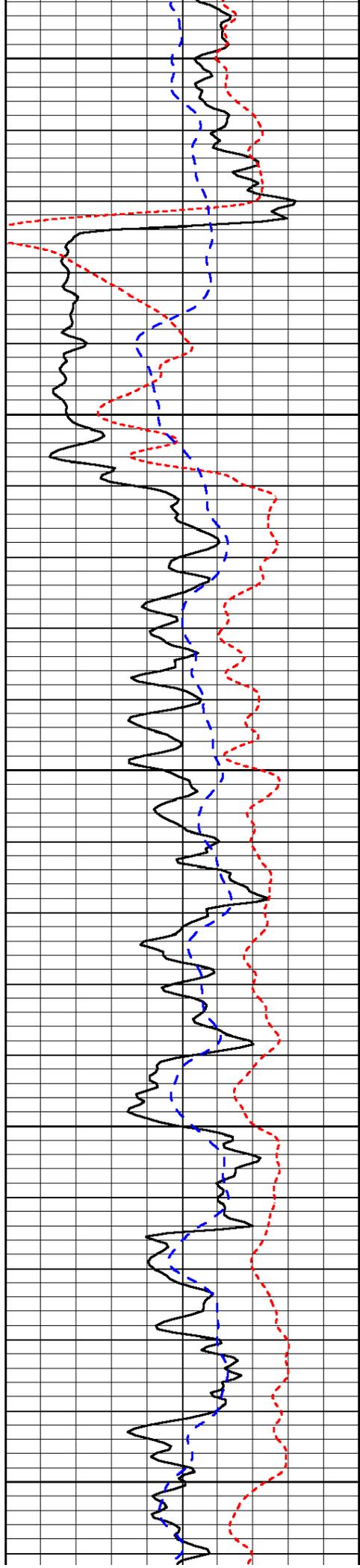


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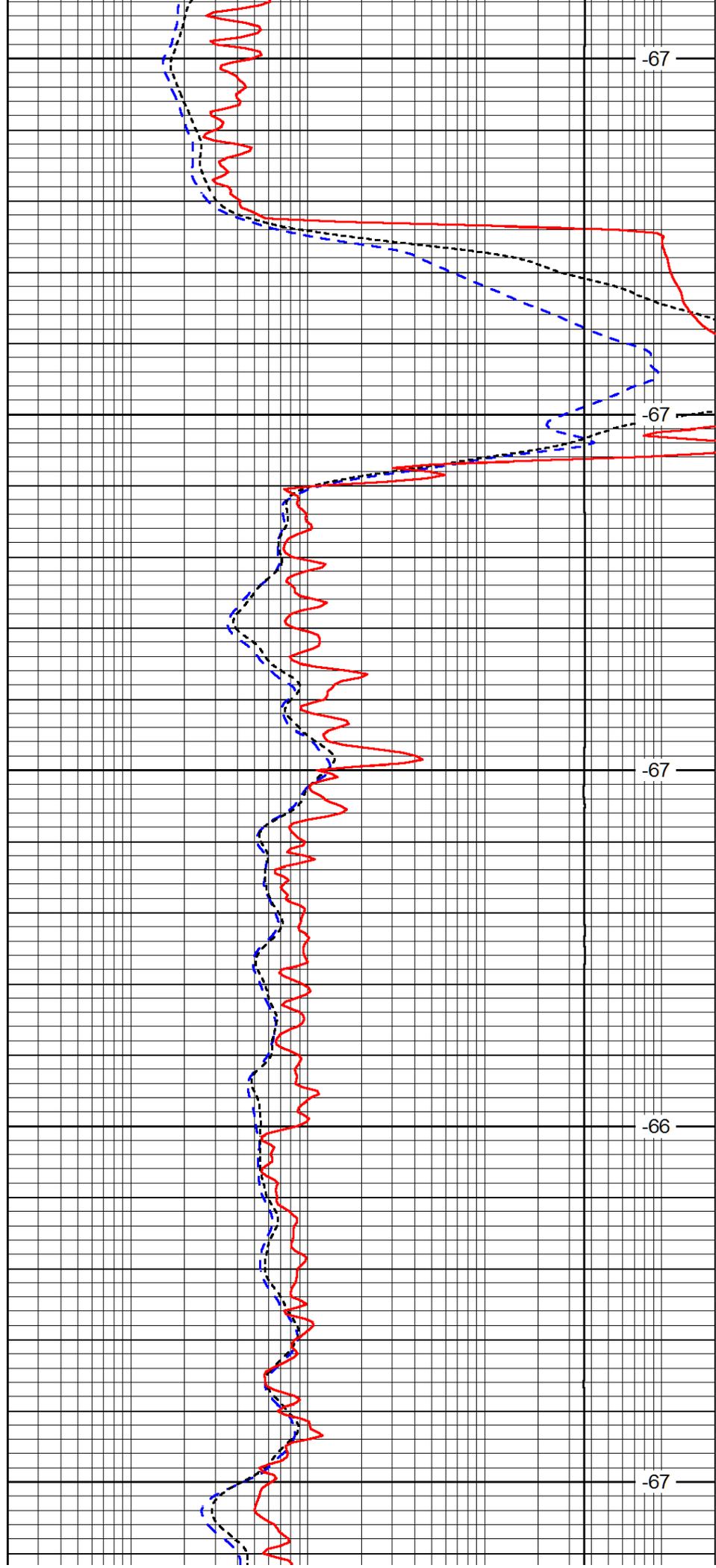
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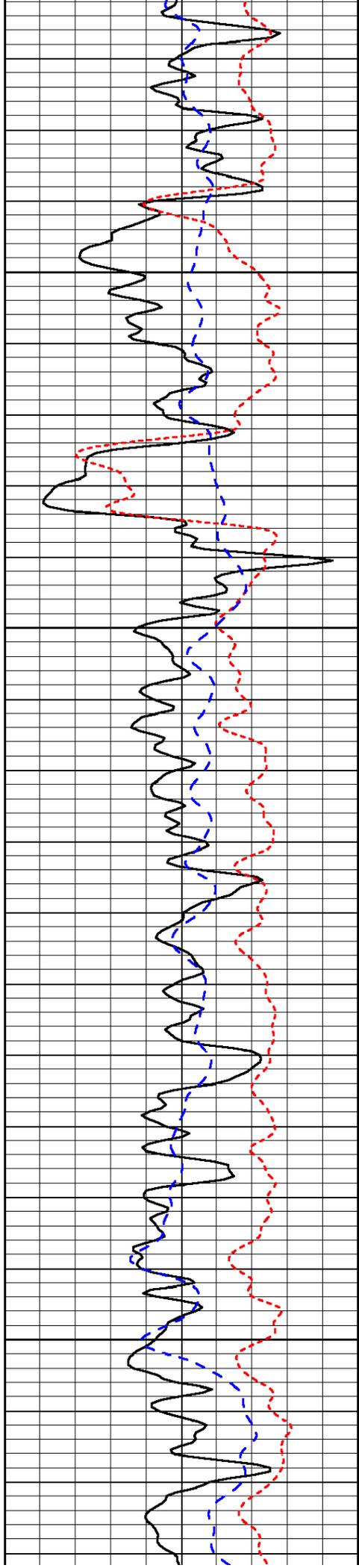
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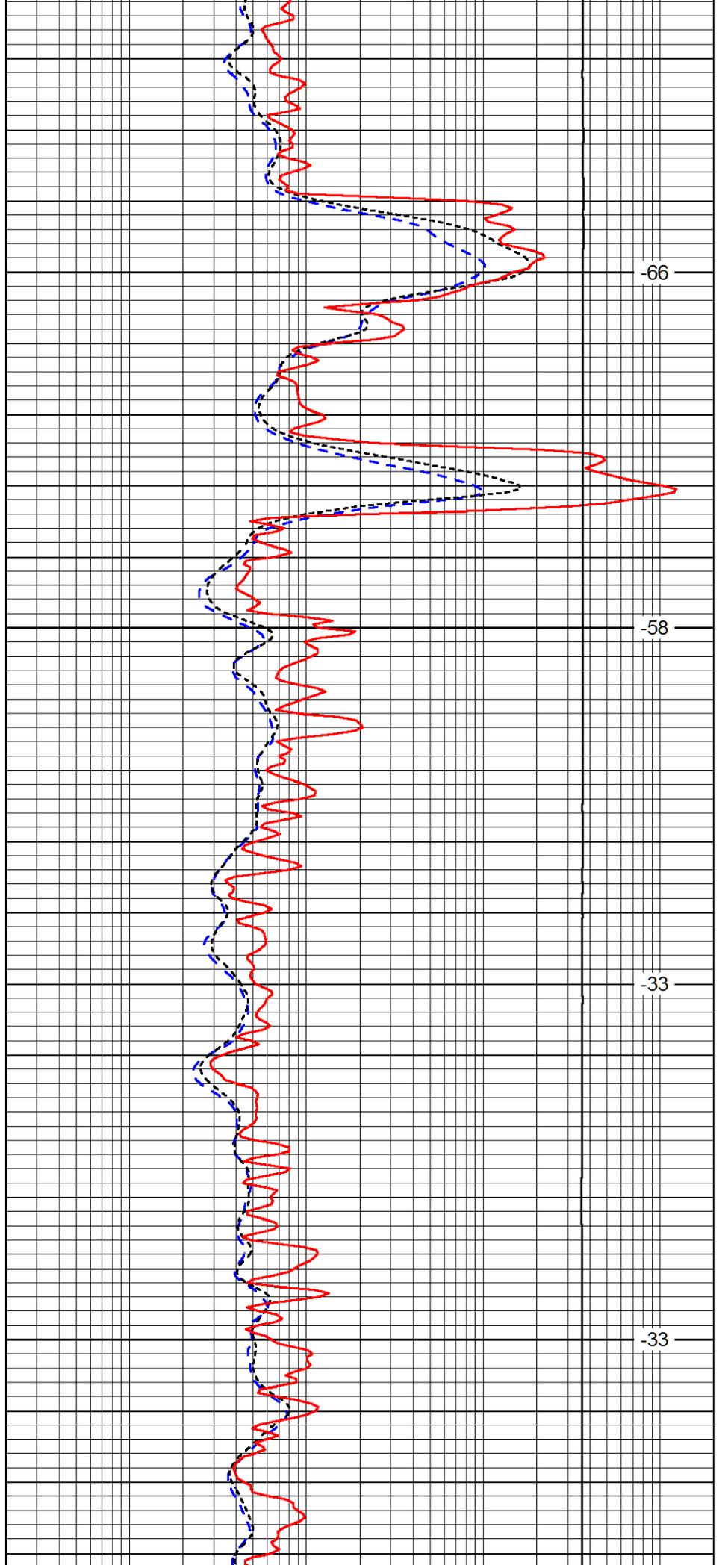


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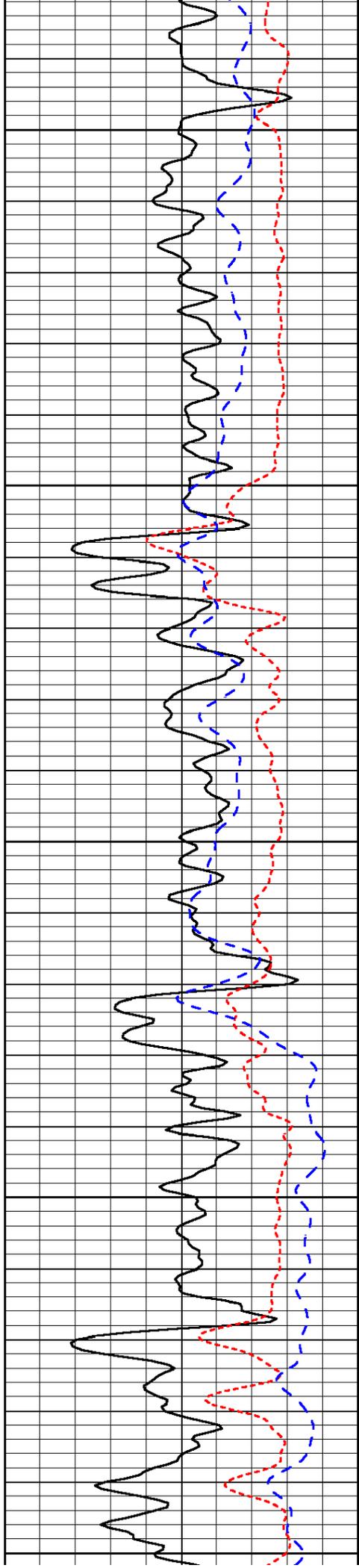


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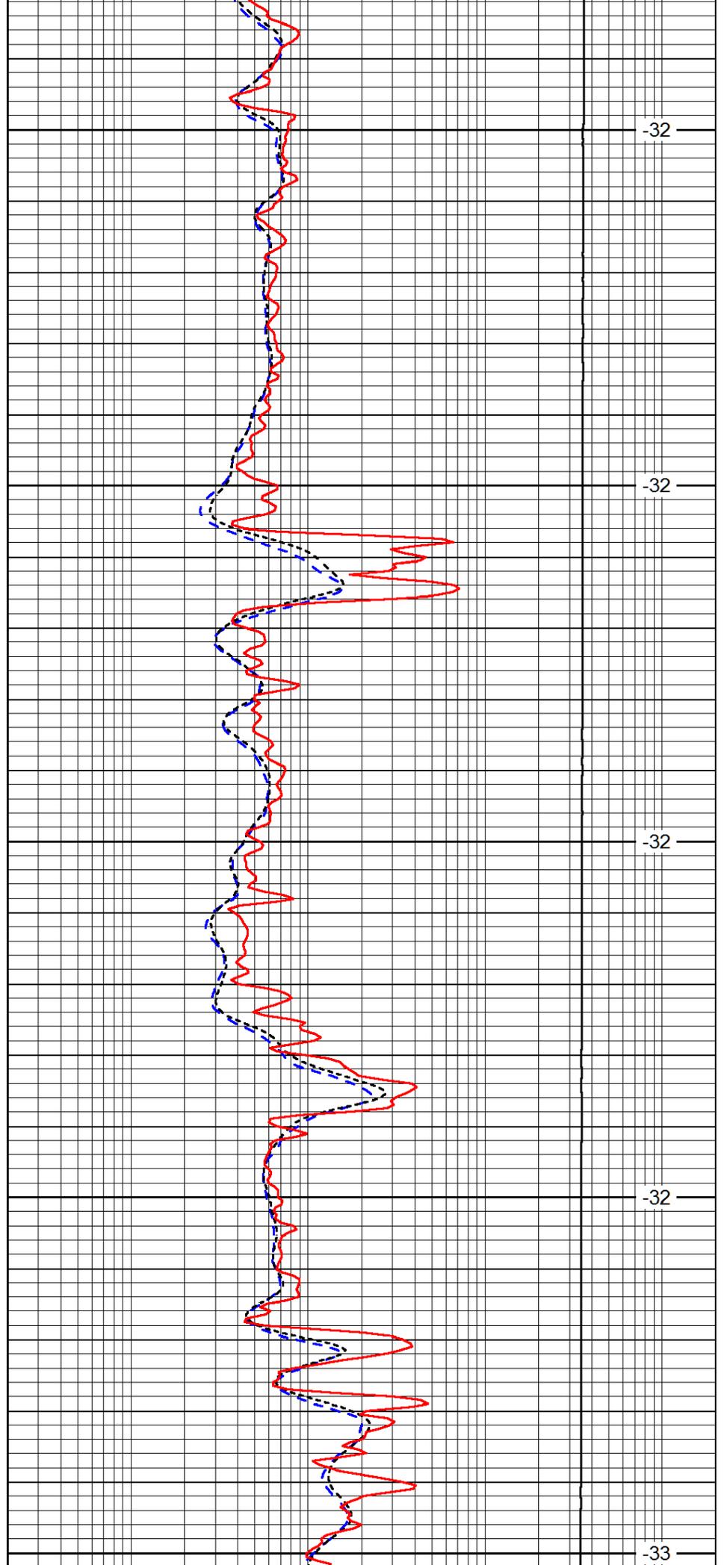
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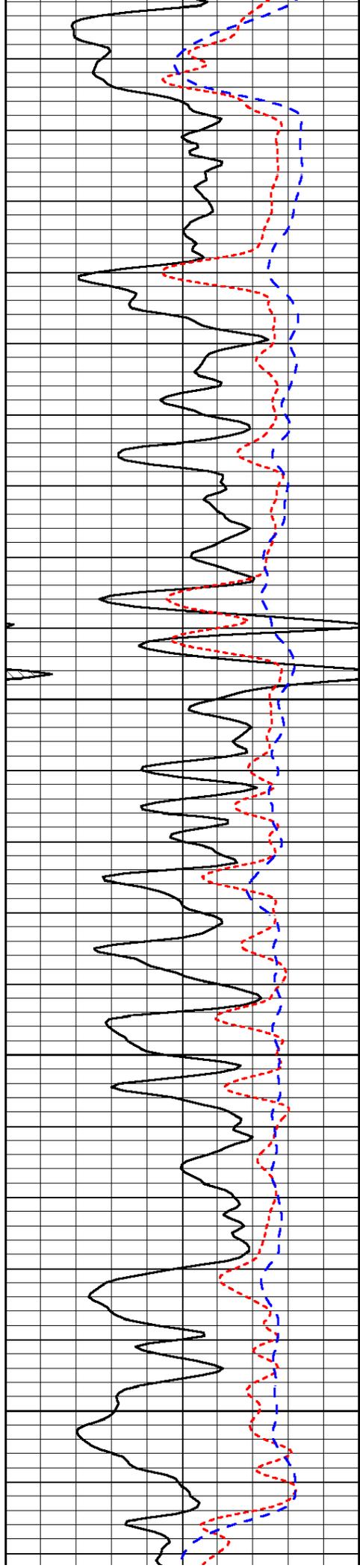
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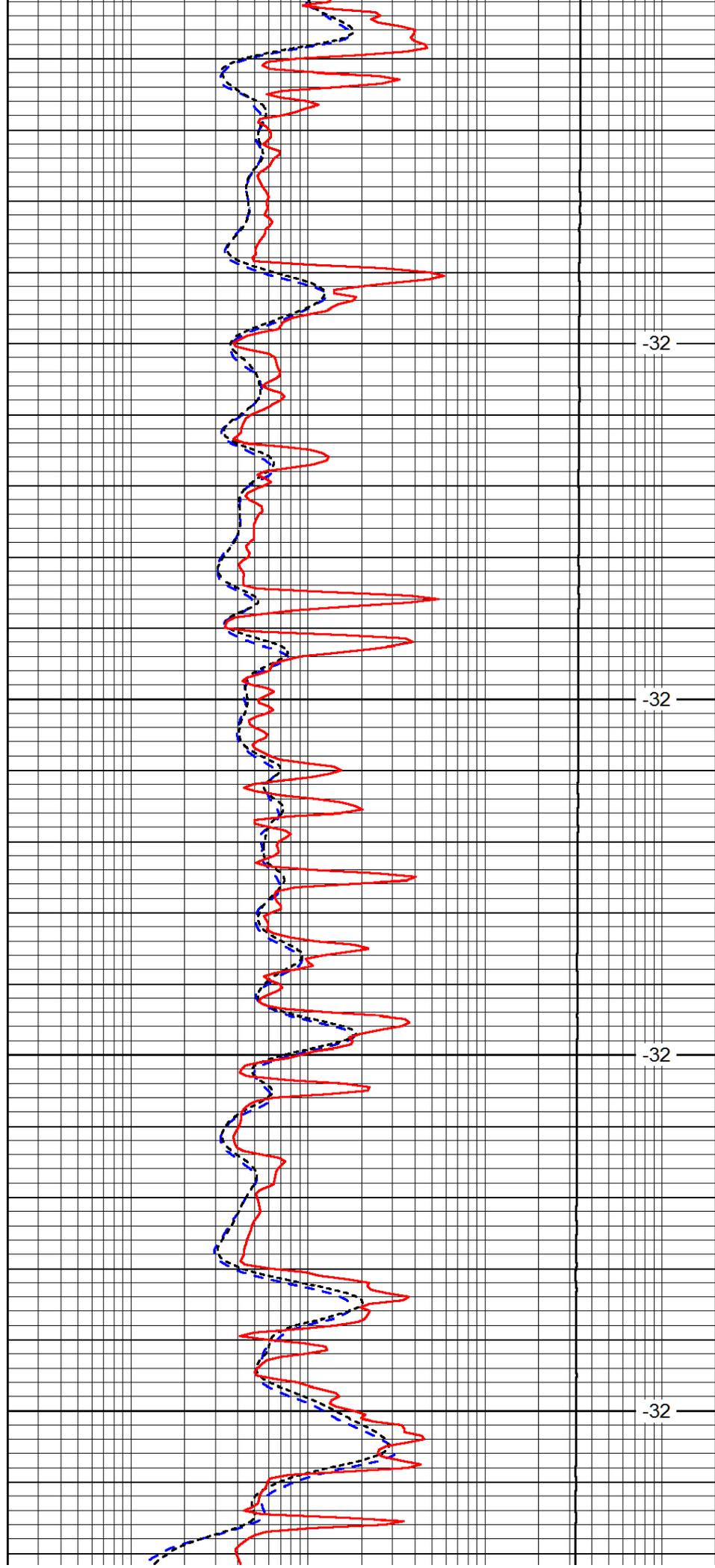


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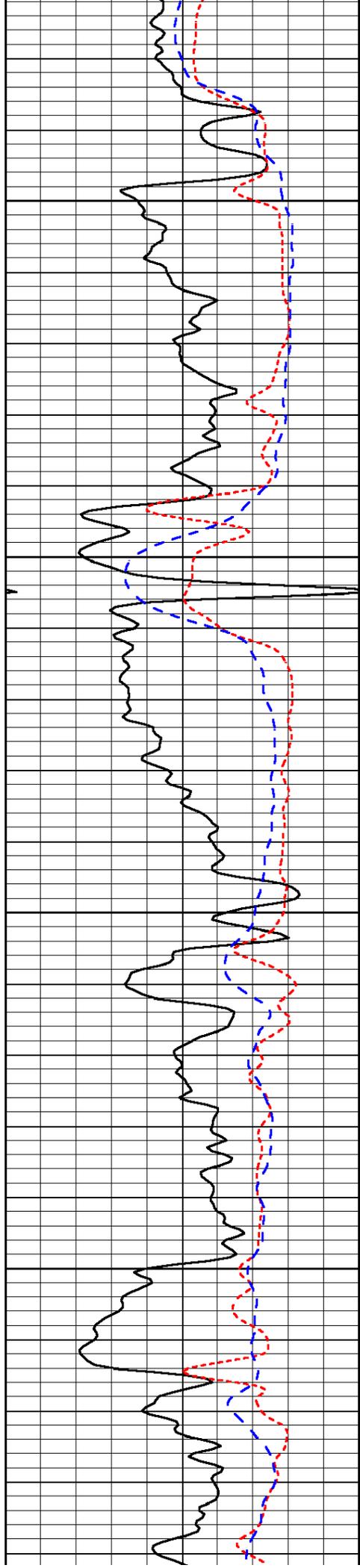


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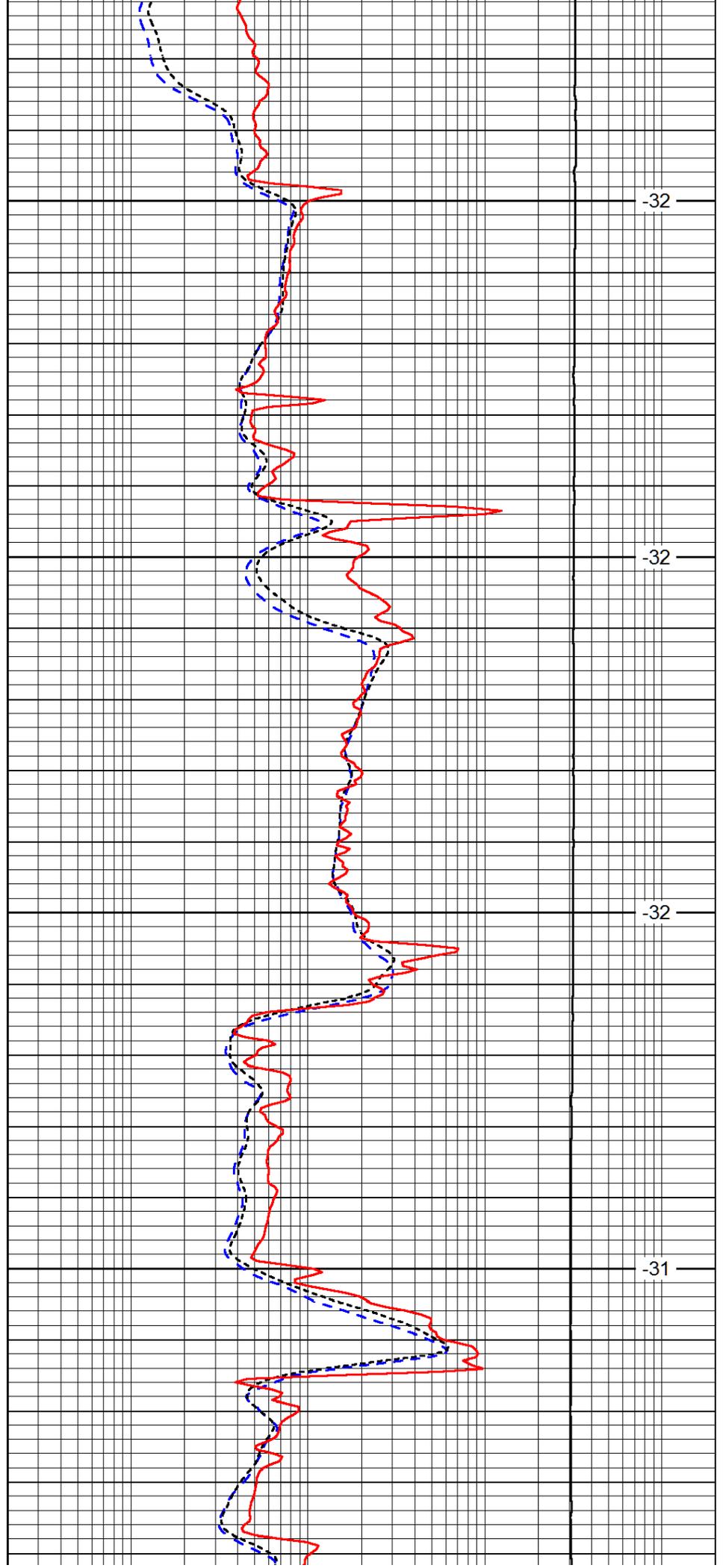


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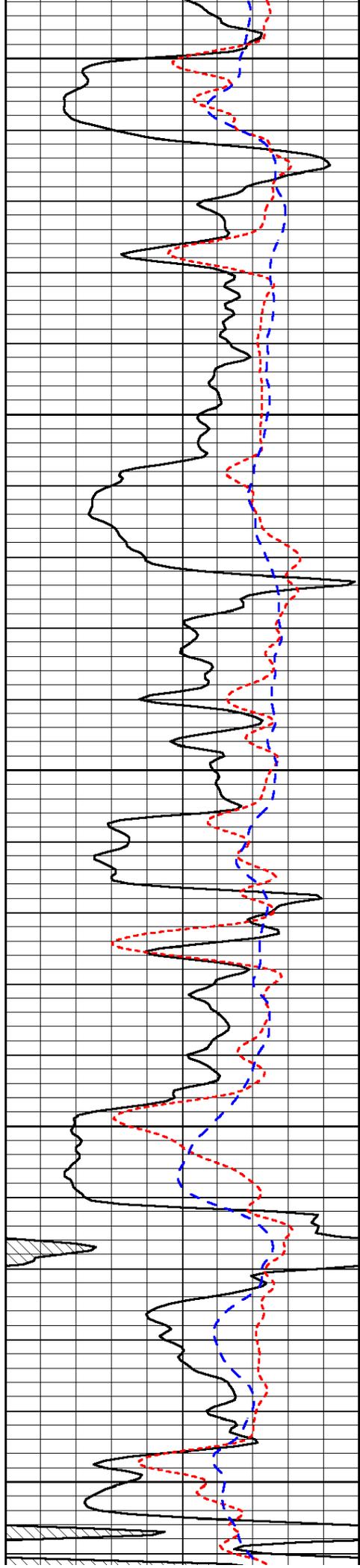


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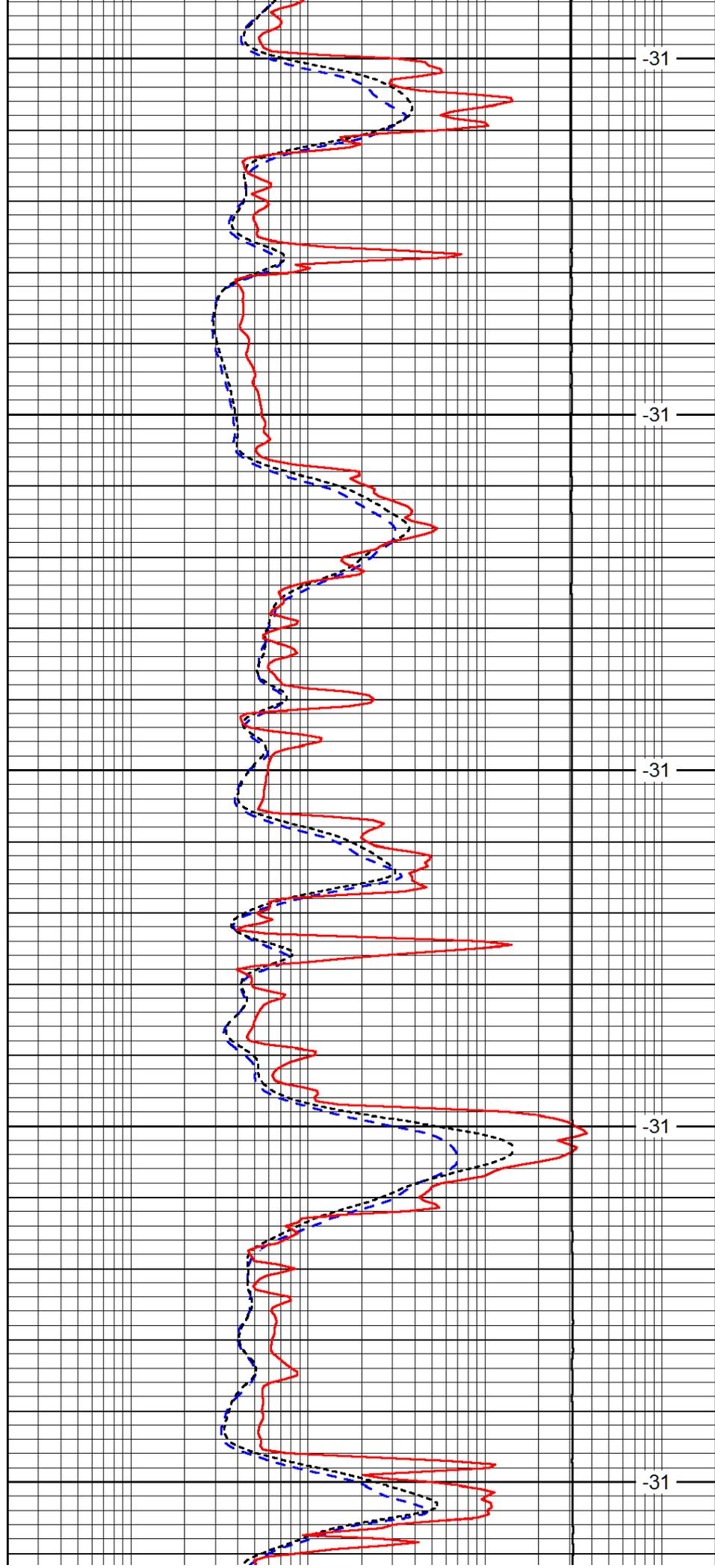
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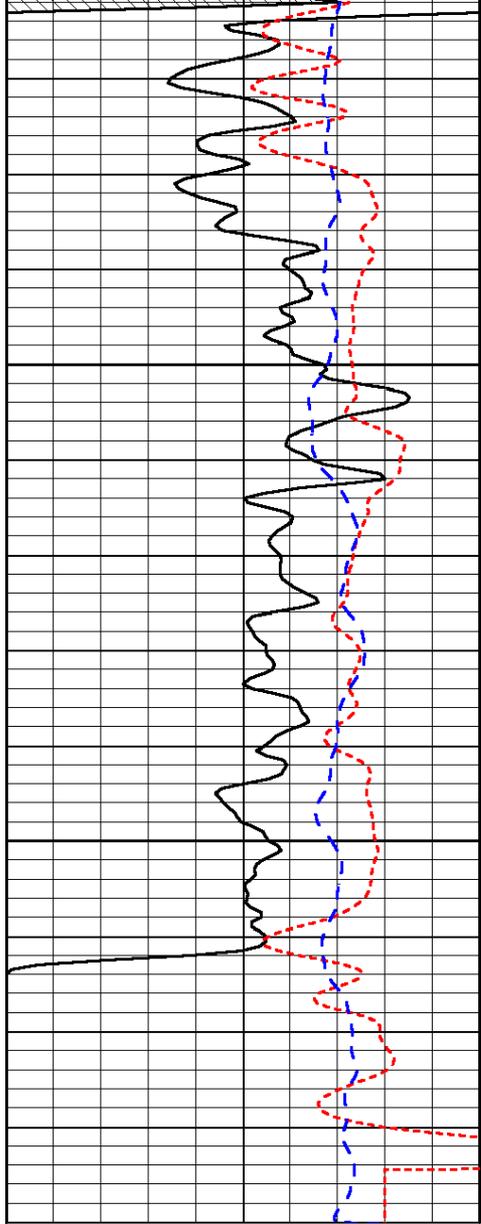
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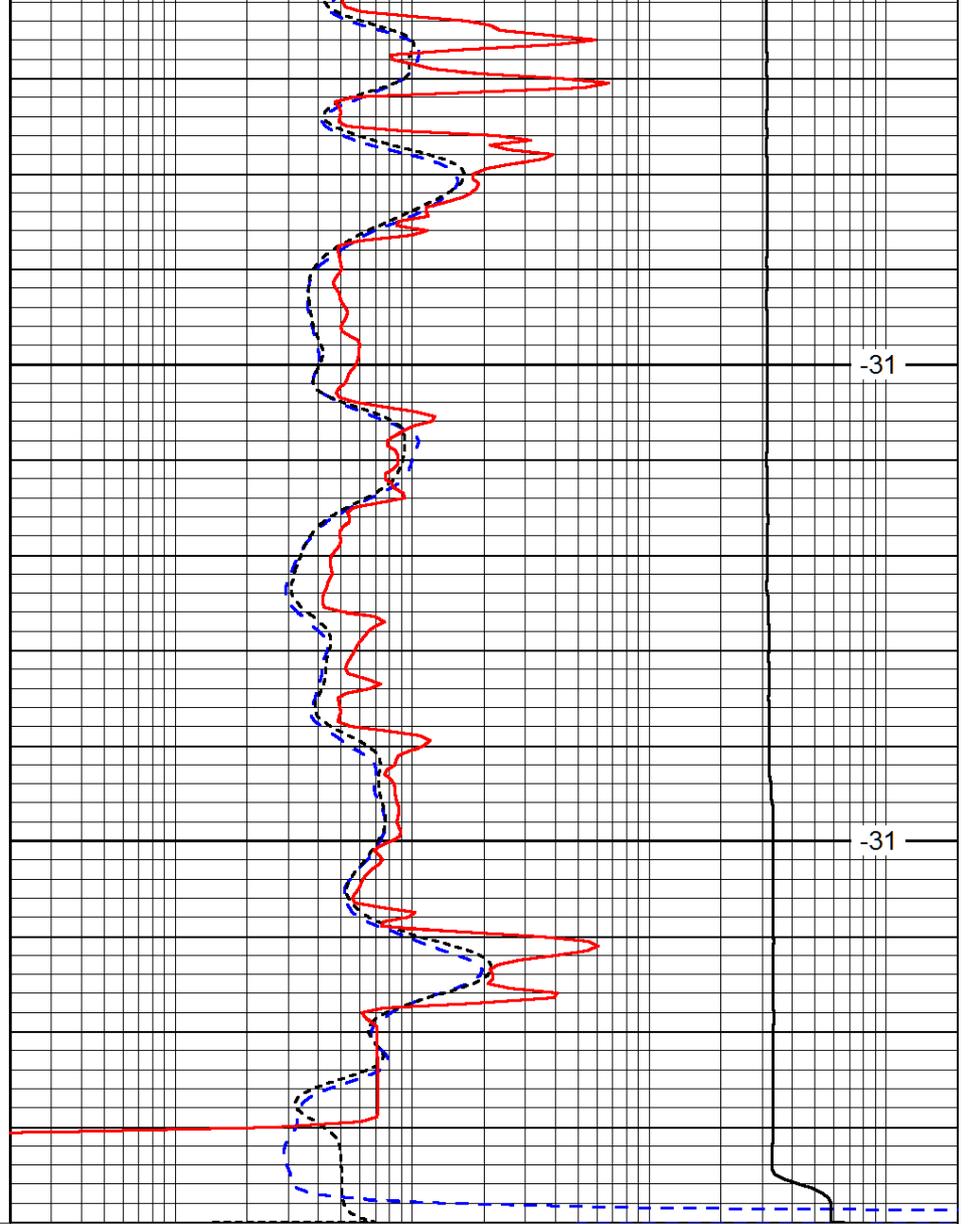
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0	Gamma Ray (GAPI)	150
-160	RXO/RT	40
-200	SP (mV)	0

4400

4450



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)