



Pioneer Energy Services

# Dual Induction Log

API No.	15-063-22,233-00-00	
Company	Murfin Drilling Company, Inc.	
Well	Roemer-Bell No.2-1	
Field	Wildcat	
County	Gove	State
		Kansas
Location	900' FSL & 335' FEL	
Sec: 1	Twp: 15S	Rge: 30W
Permanent Datum	Ground Level	Elevation 2618
Log Measured From	Kelly Bushing	11 Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing	
		Other Services CNL/CDL MEL/BHCS
		Elevation K.B. 2629 D.F. G.L. 2618

Date	11/17/2014
Run Number	One
Depth Driller	4406
Depth Logger	4405
Bottom Logged Interval	4404
Top Log Interval	0
Casing Driller	8.625 @ 221
Casing Logger	217
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	2.600
Density / Viscosity	9.3   53
pH / Fluid Loss	10.5   6.8
Source of Sample	Flowline
Rm @ Meas. Temp	.75 @ 50
Rmf @ Meas. Temp	.56 @ 50
Rmc @ Meas. Temp	1.01 @ 50
Source of Rmf / Rmc	Charts
Rm @ BHT	.31 @ 120
Operating Rig Time	5 Hours
Max Rec. Temp. F	120
Equipment Number	51
Location	Hays
Recorded By	C. Desaire
Witnessed By	Larry Nicholson

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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

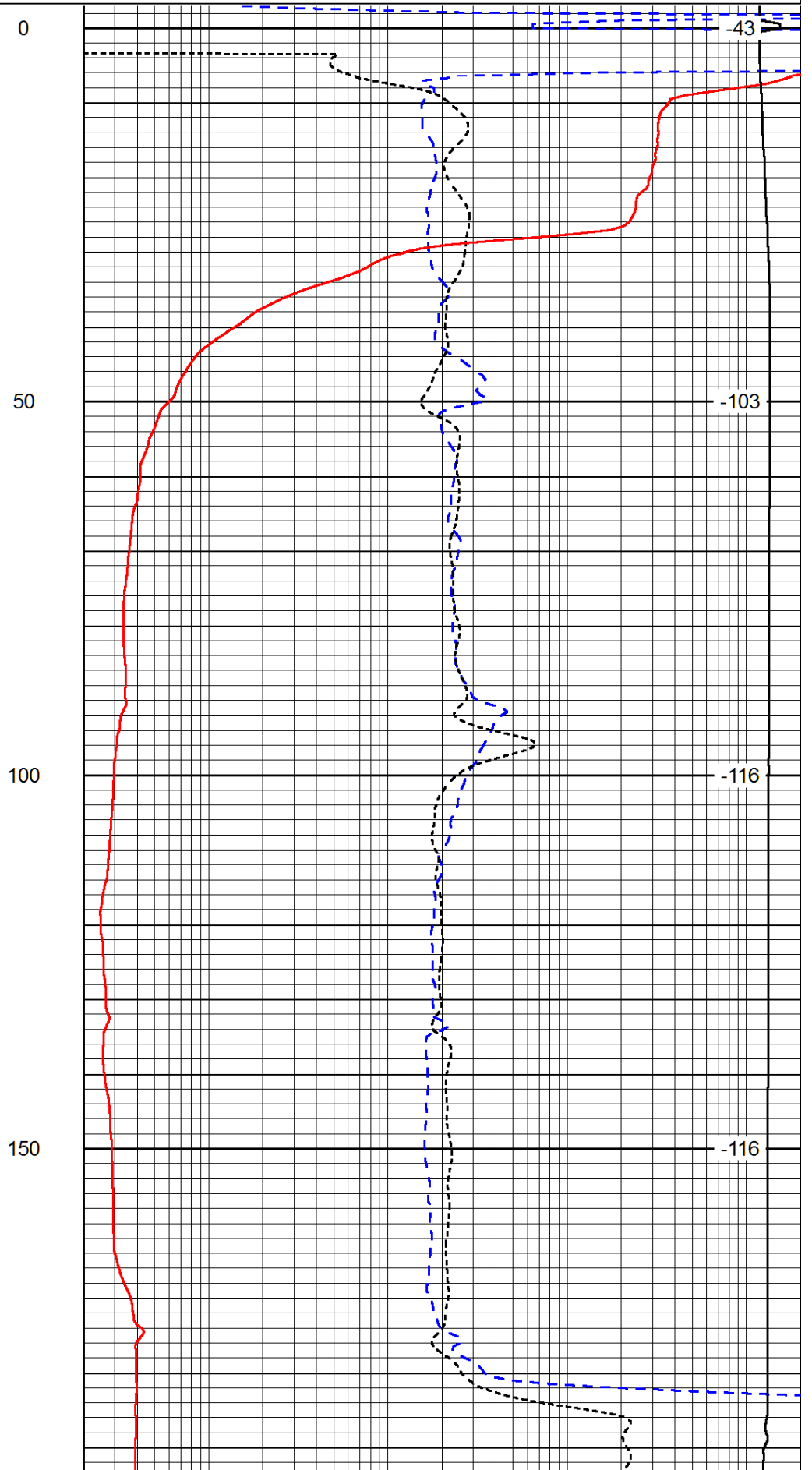
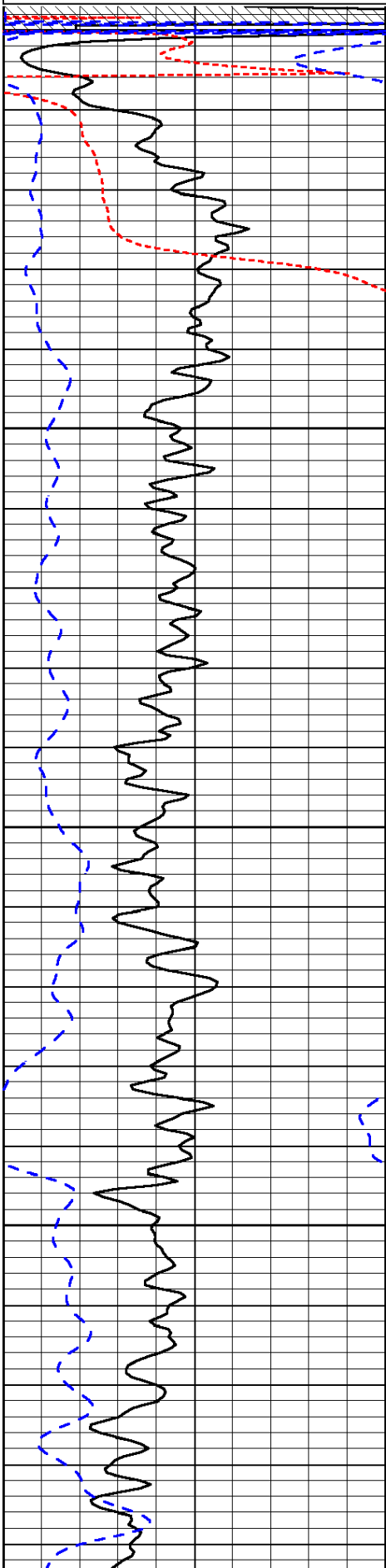
Healy KS, 10 N, W Into

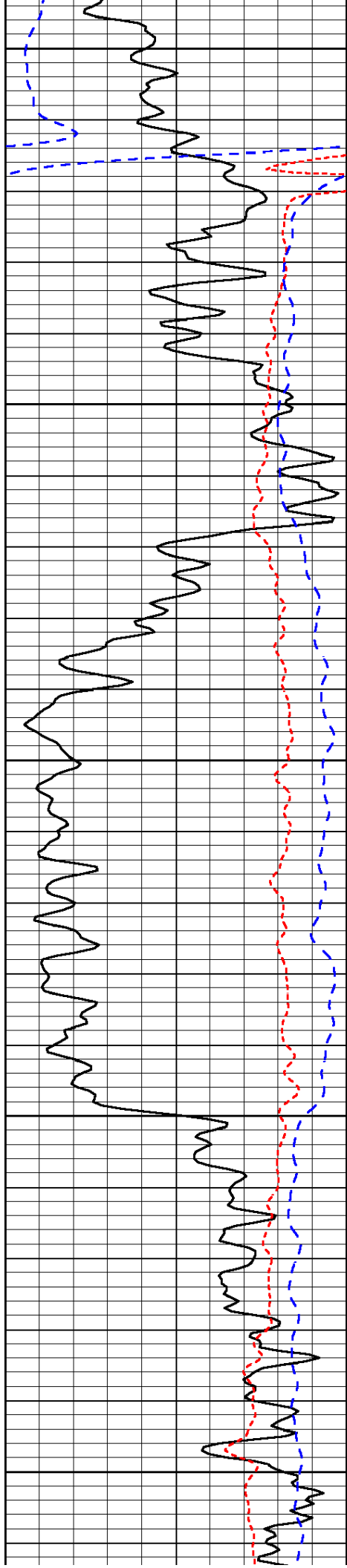
Database File: murfhd.db  
 Dataset Pathname: dil/murfstk  
 Presentation Format: dil  
 Dataset Creation: Mon Nov 17 10:31:56 2014  
 Charted by: Depth in Feet scaled 1:240

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

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD





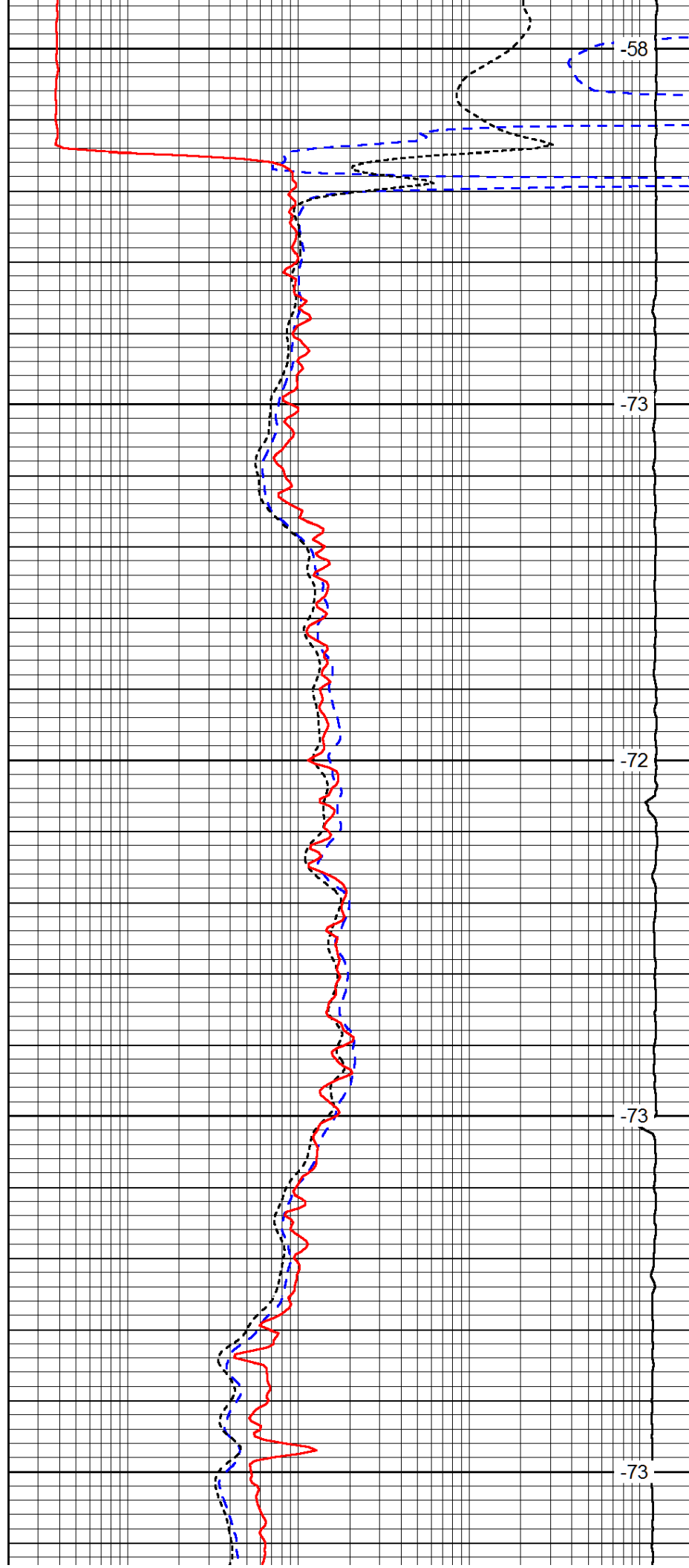
200

250

300

350

400



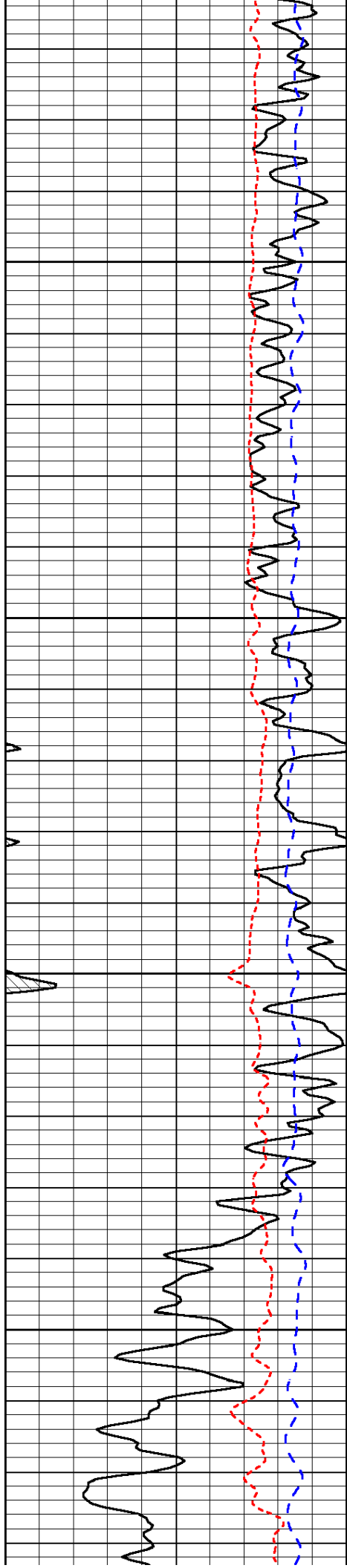
-58

-73

-72

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-73

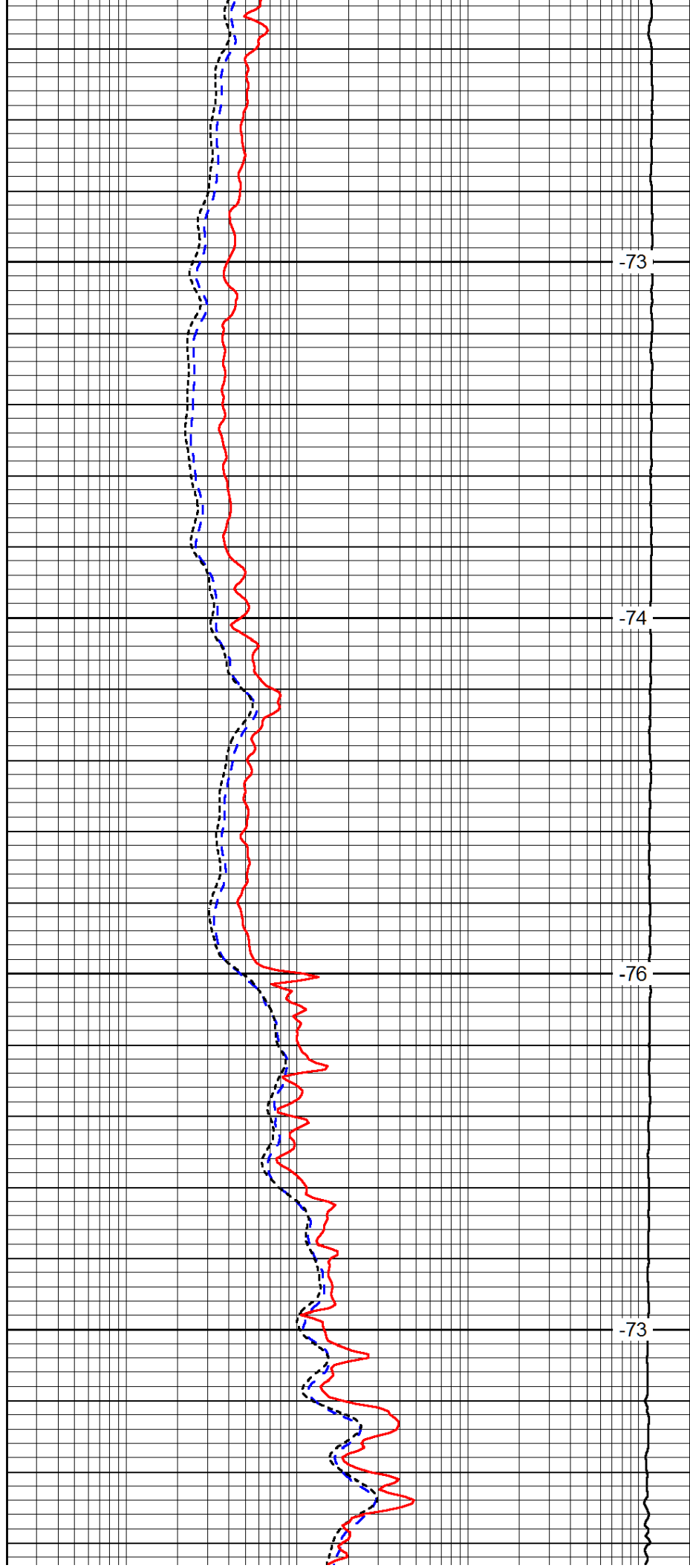


450

500

550

600

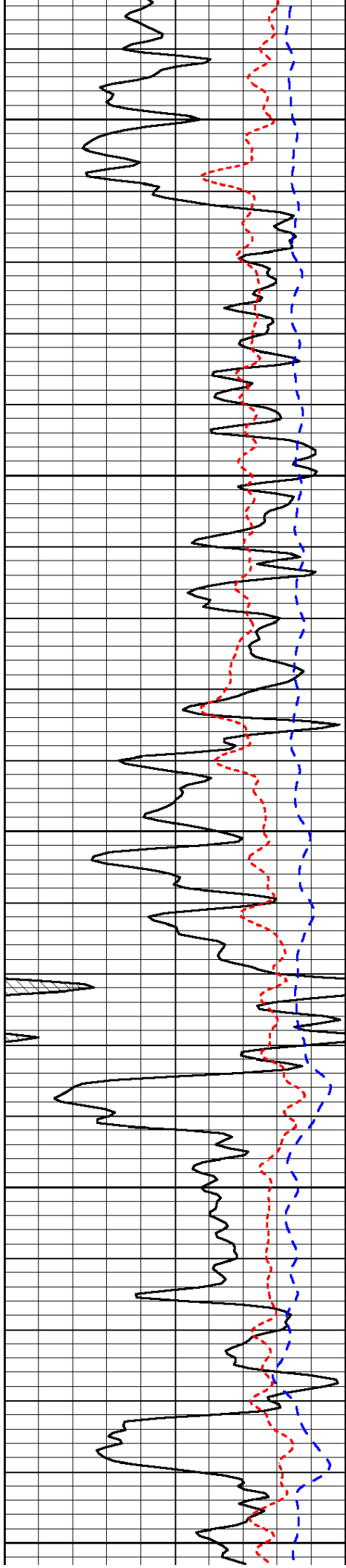


-73

-74

-76

-73



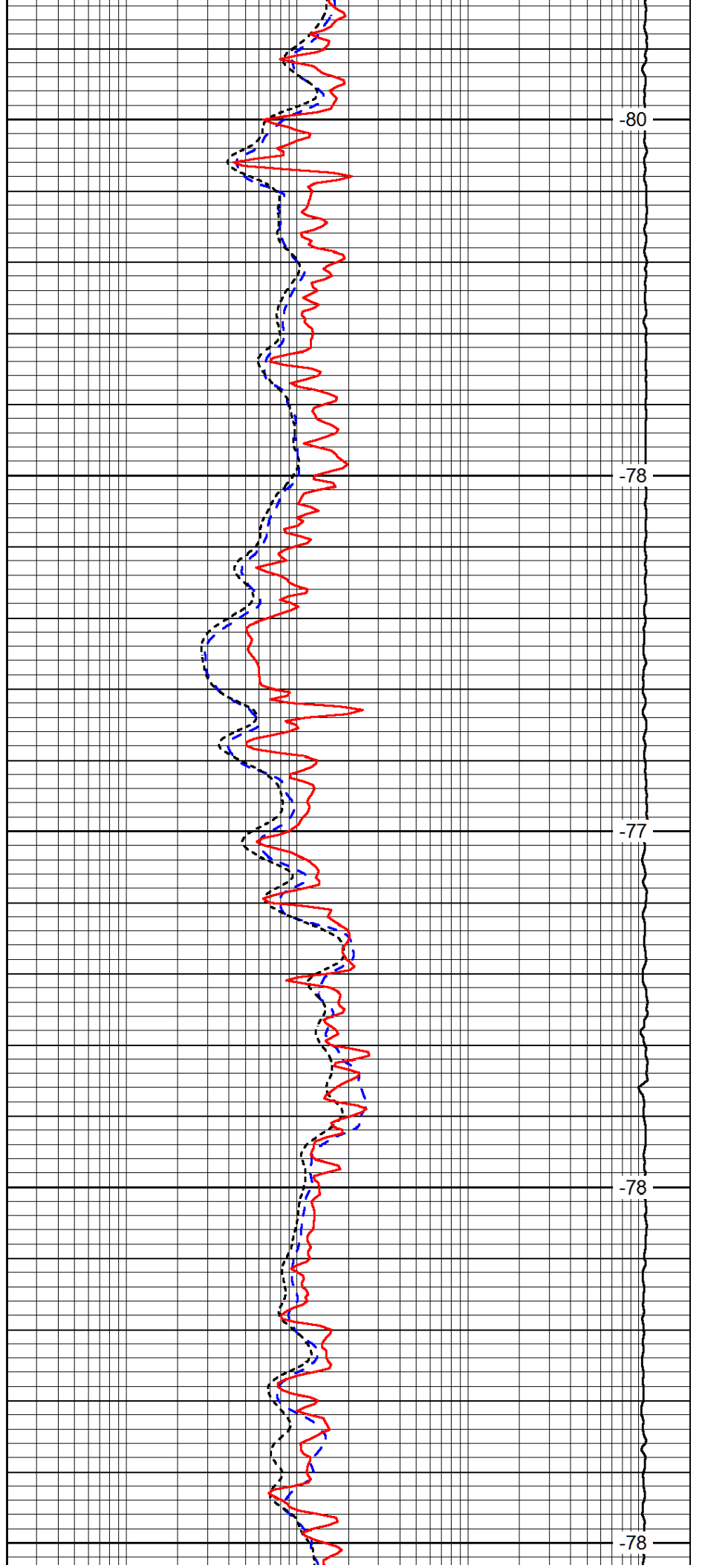
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700

750

800

850



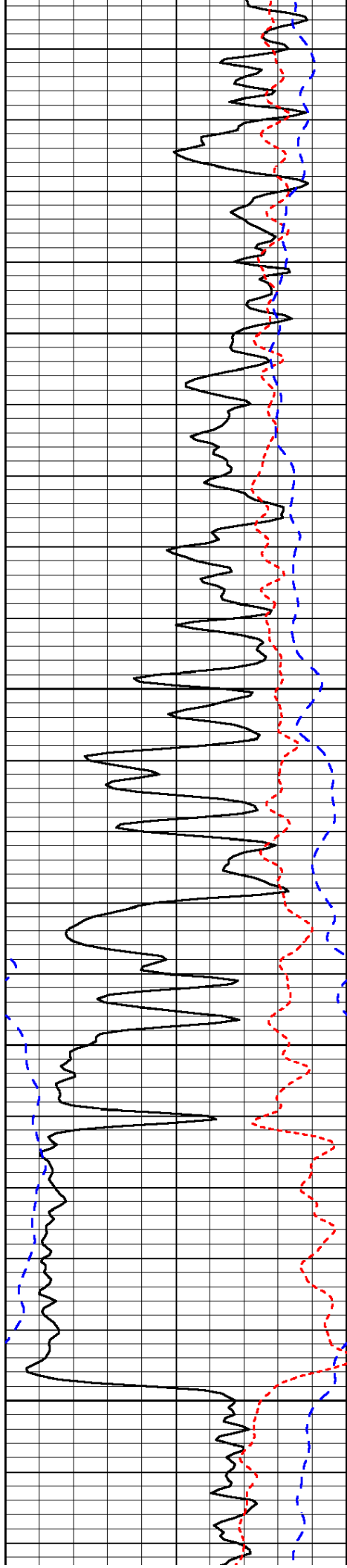
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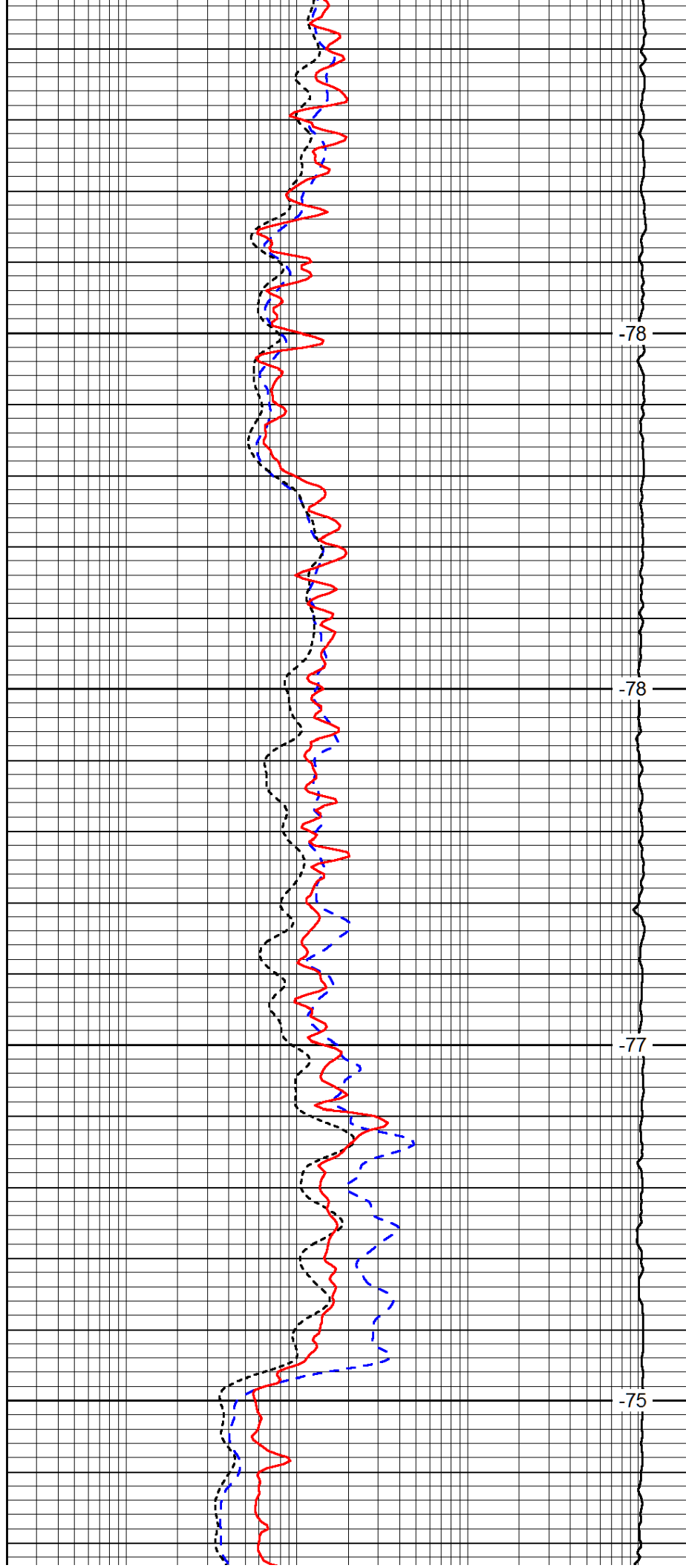


900

950

1000

1050

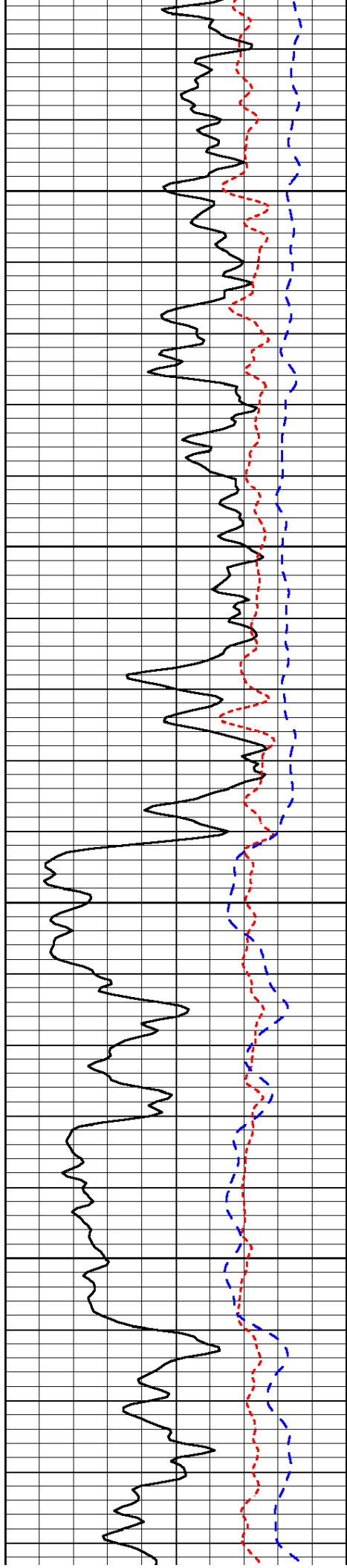


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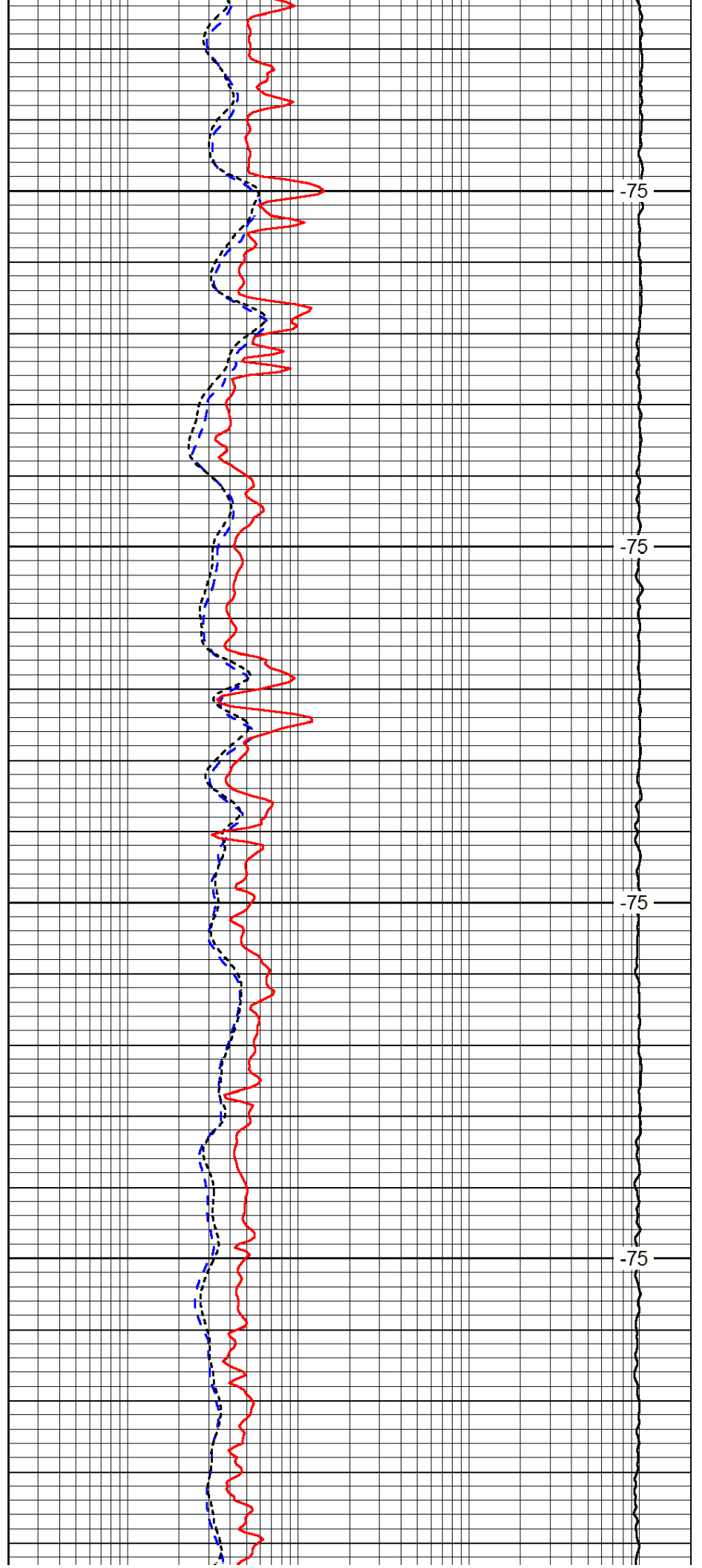


1100

1150

1200

1250

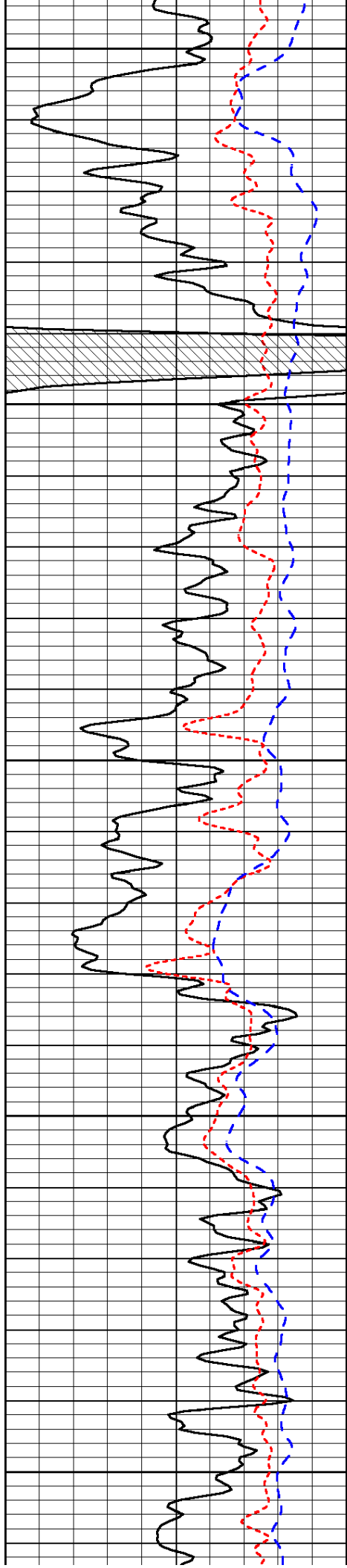


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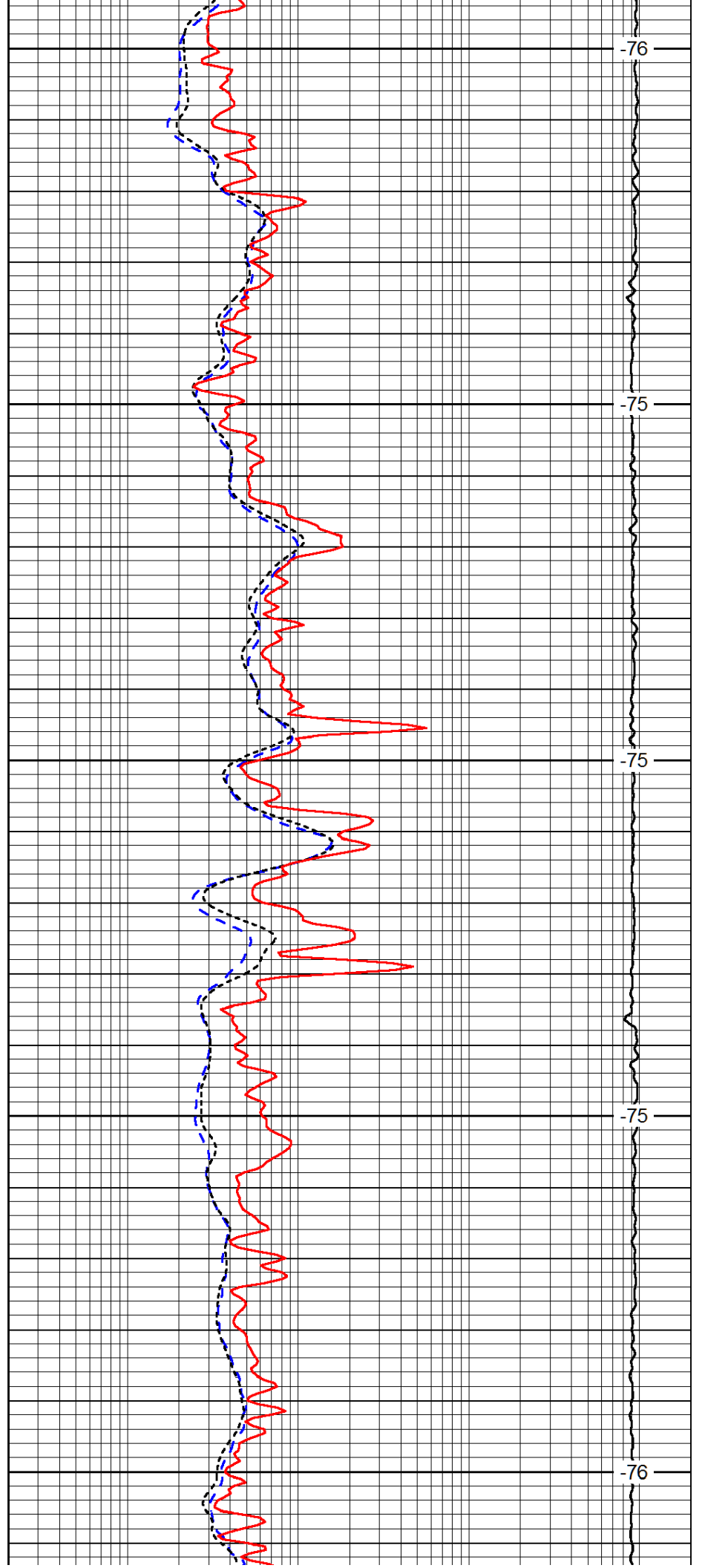
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1400

1450

1500



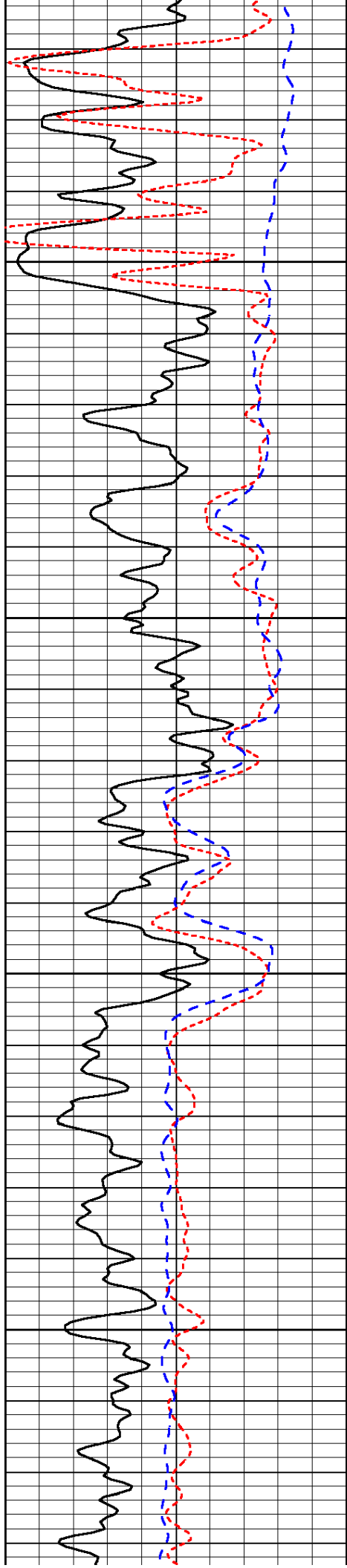
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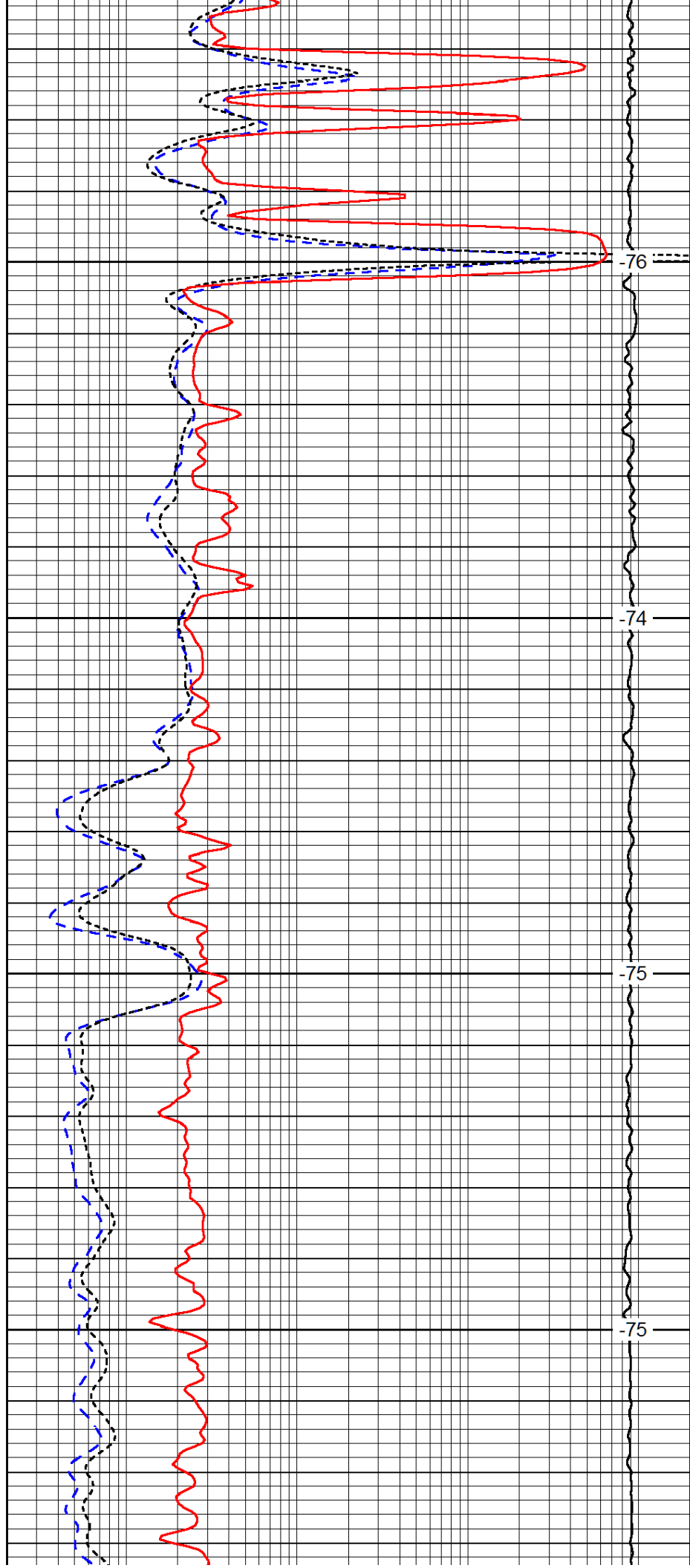


1550

1600

1650

1700

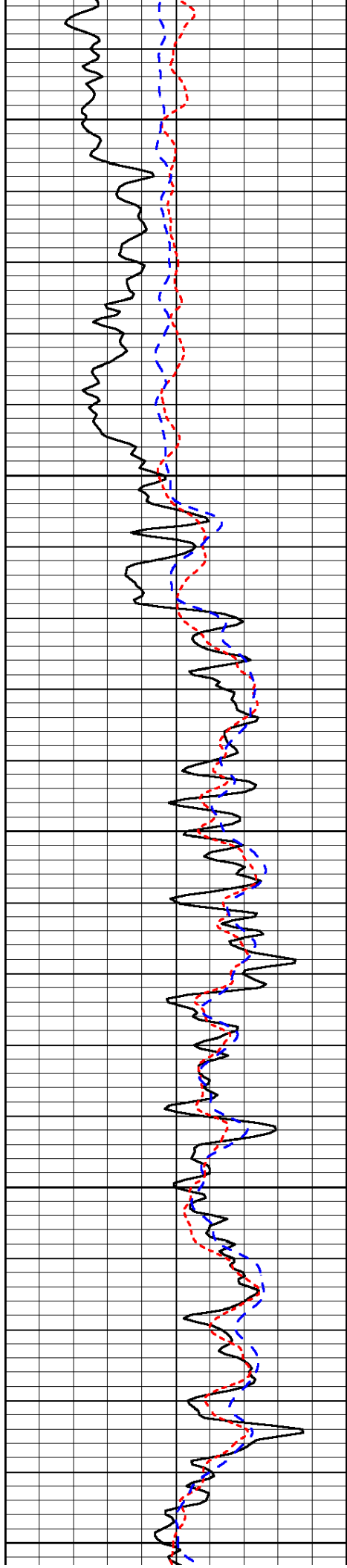


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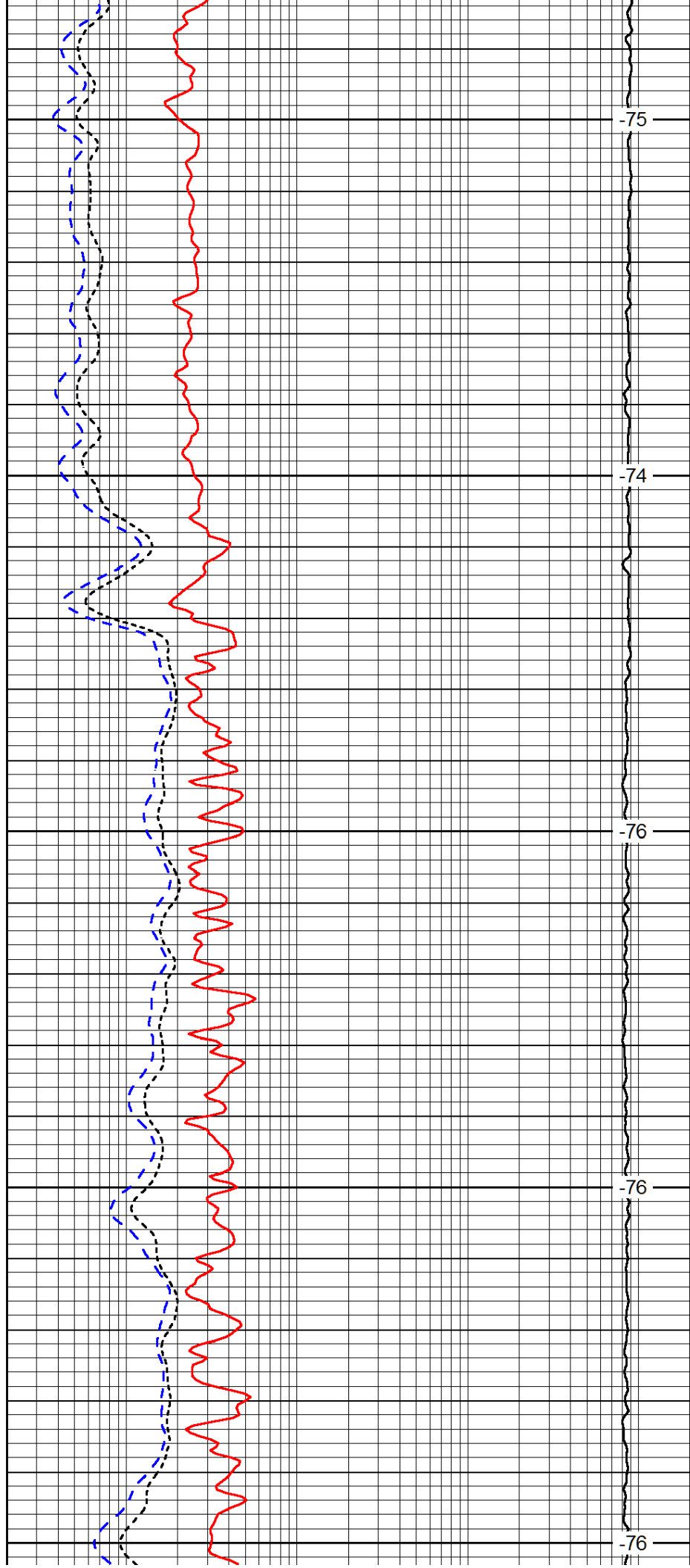
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1800

1850

1900

1950



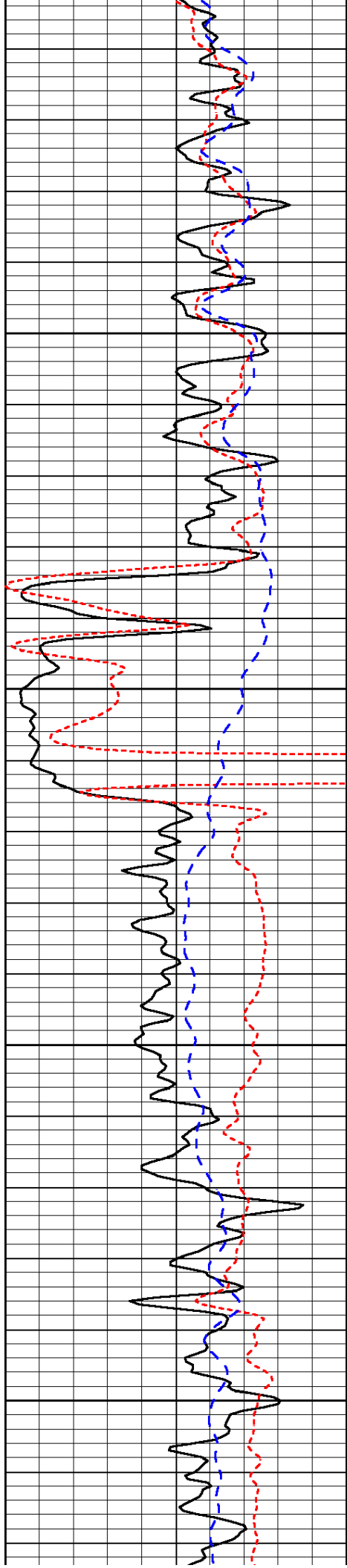
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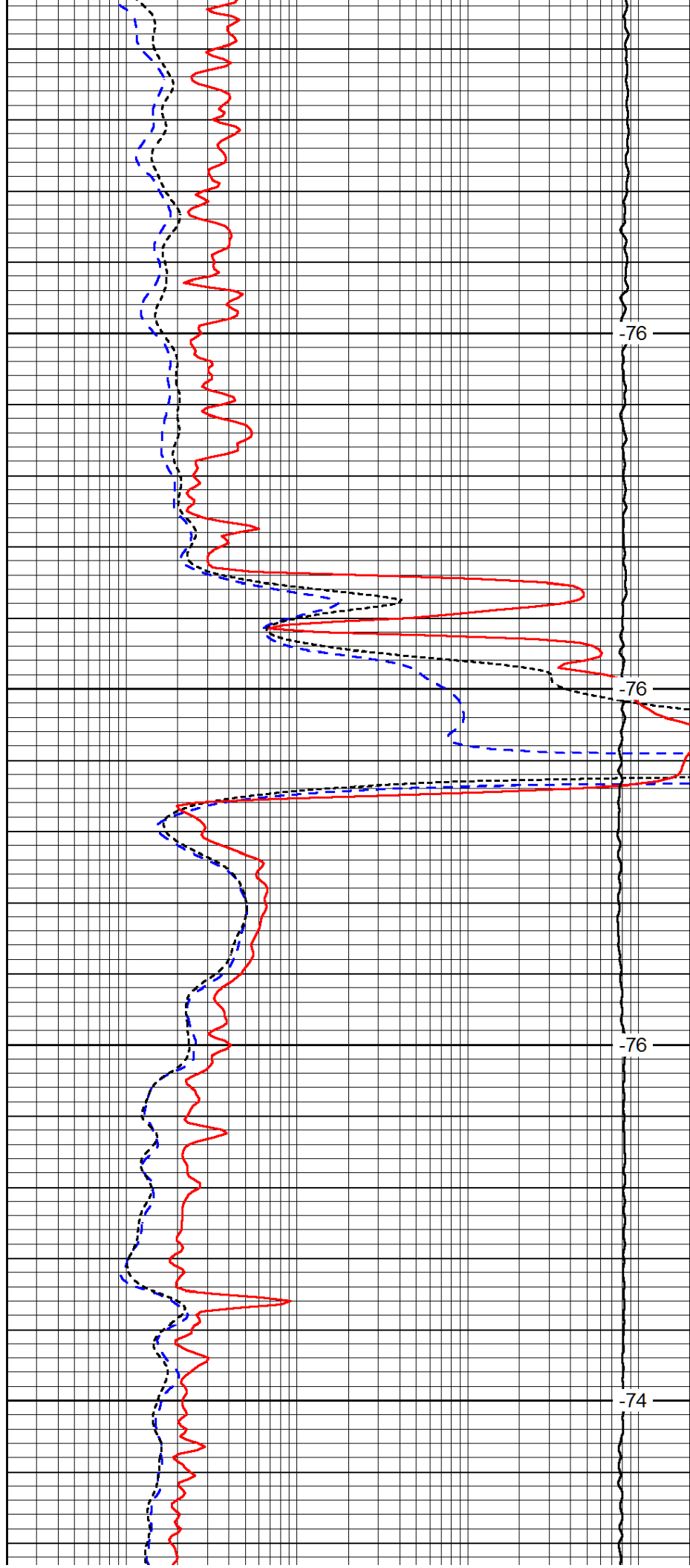


2000

2050

2100

2150

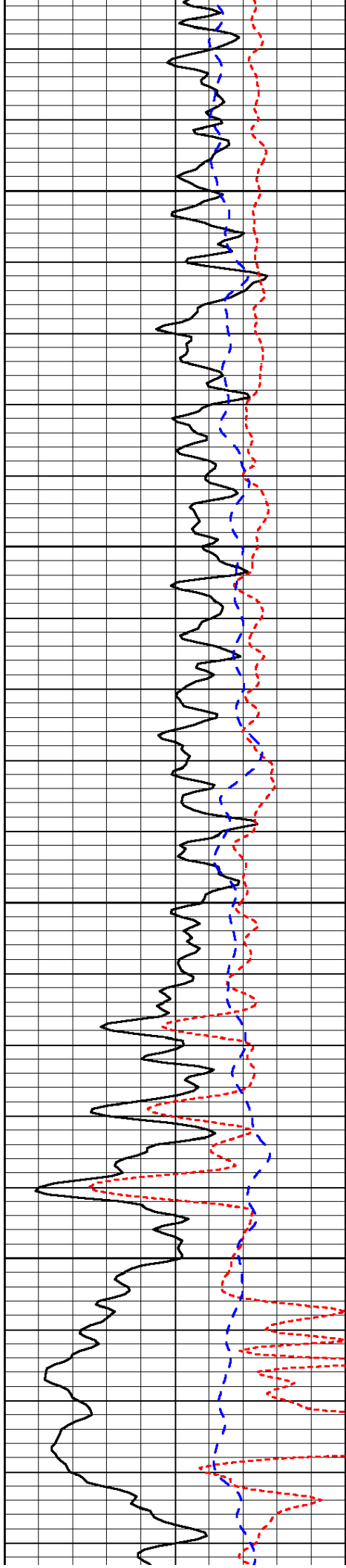


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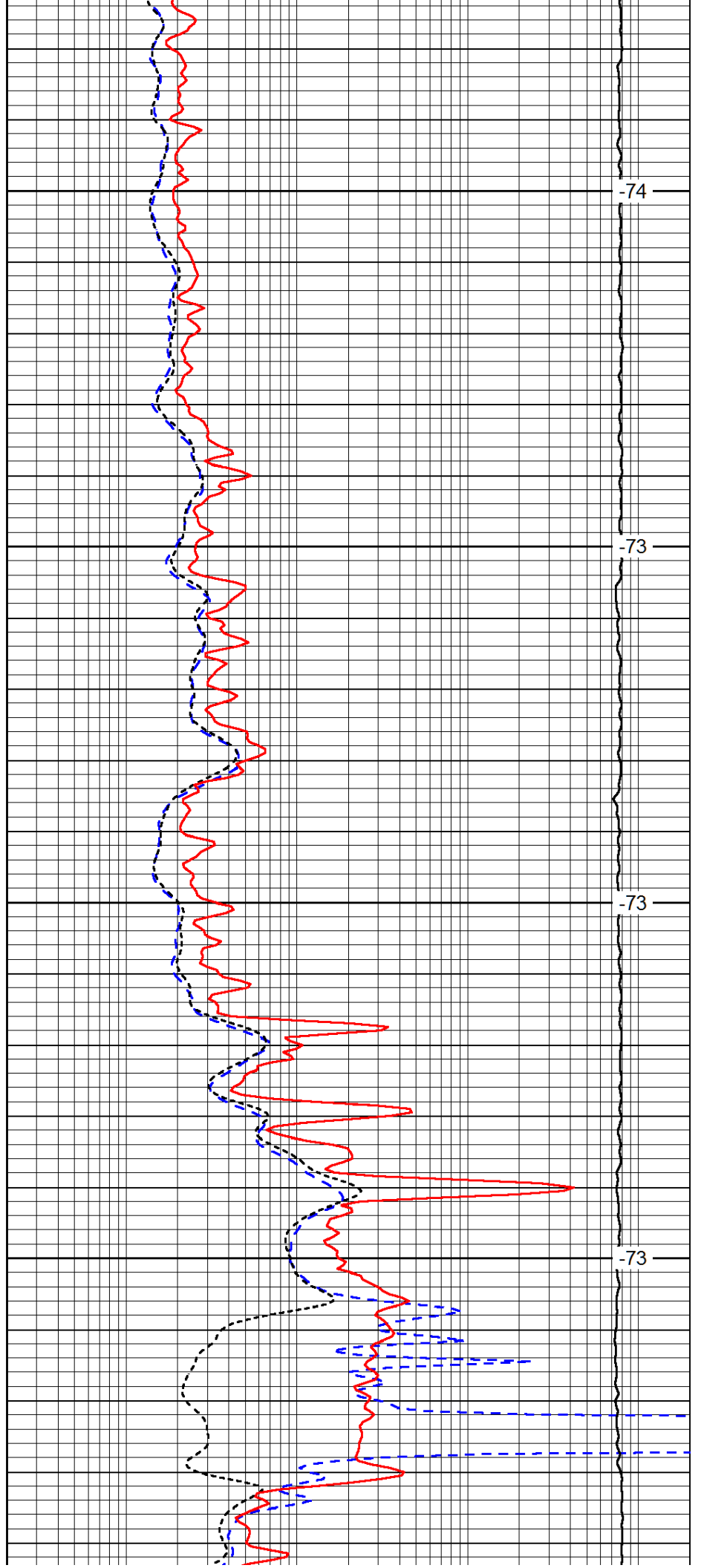


2200

2250

2300

2350

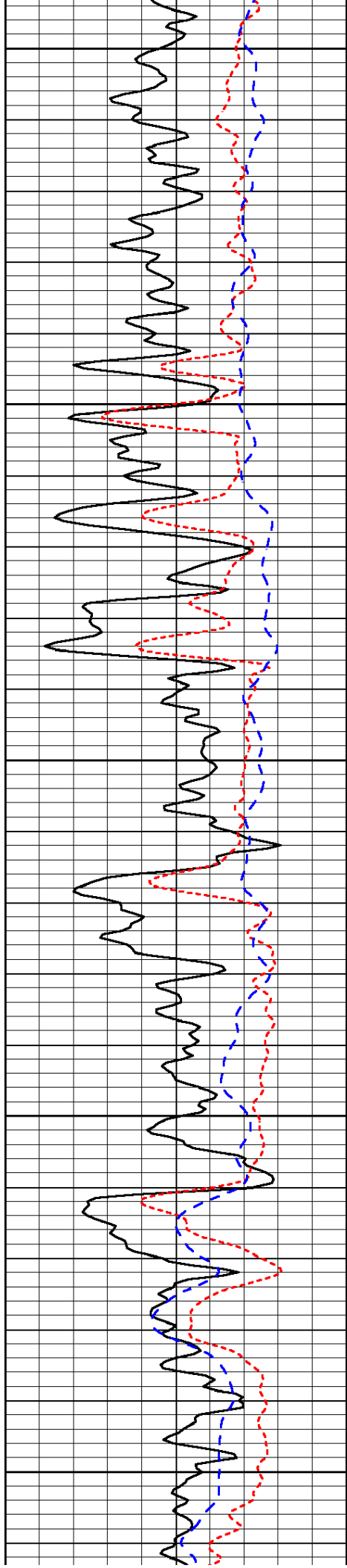


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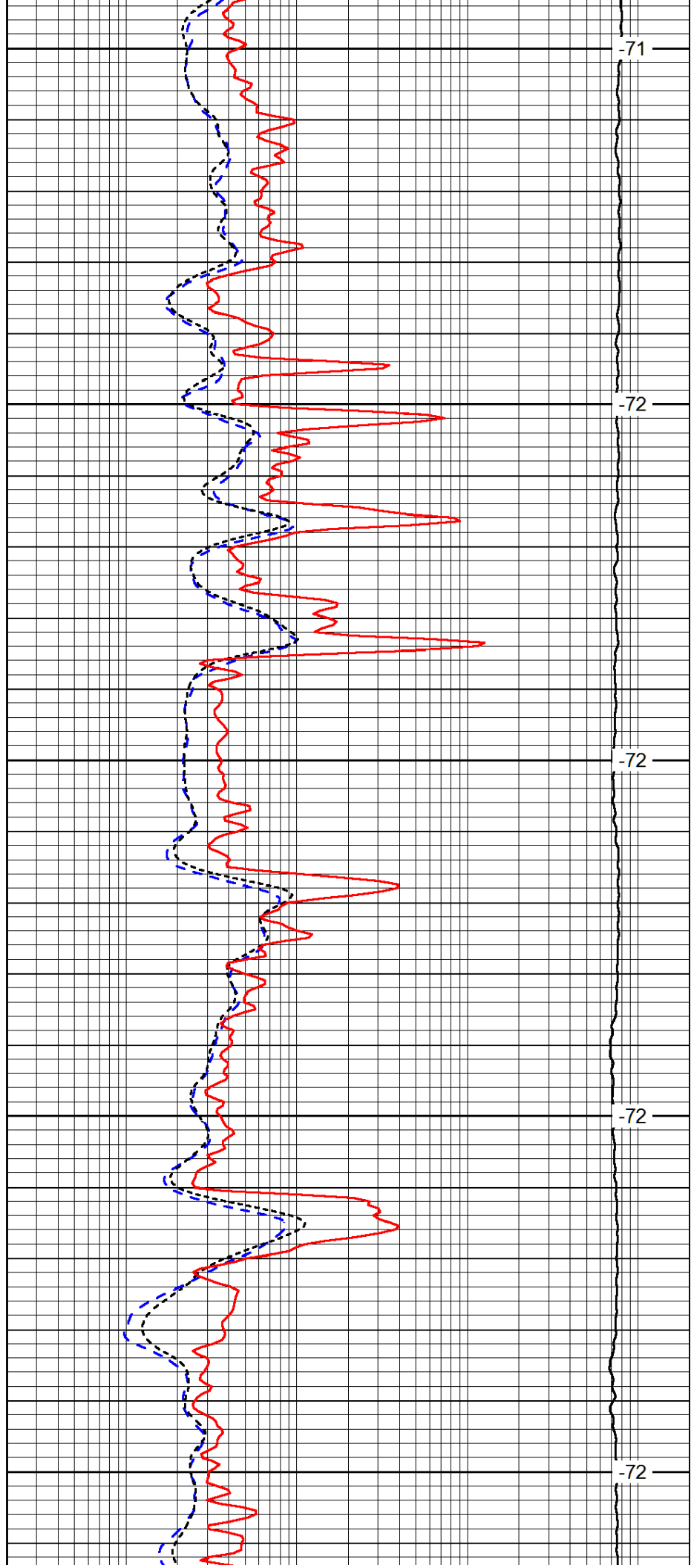
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2450

2500

2550

2600



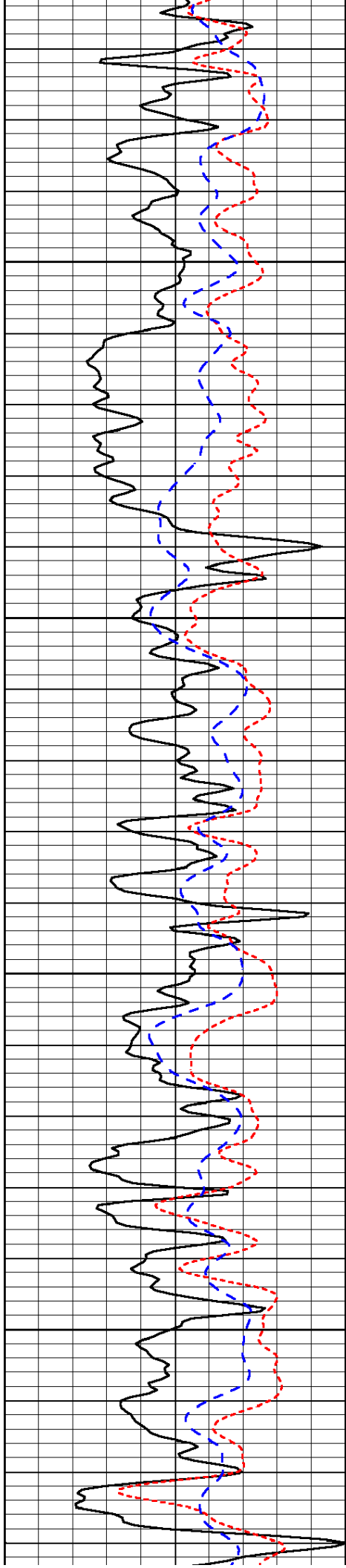
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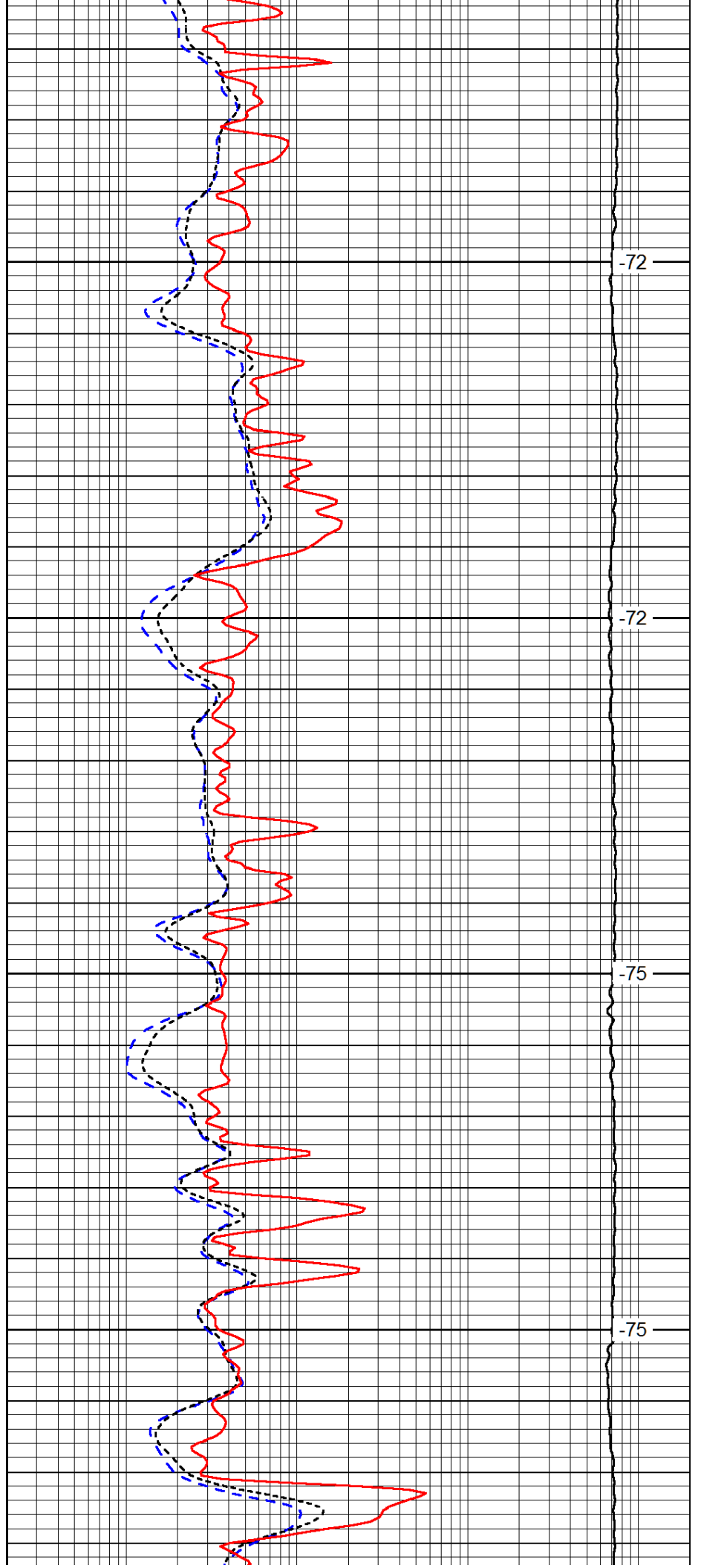


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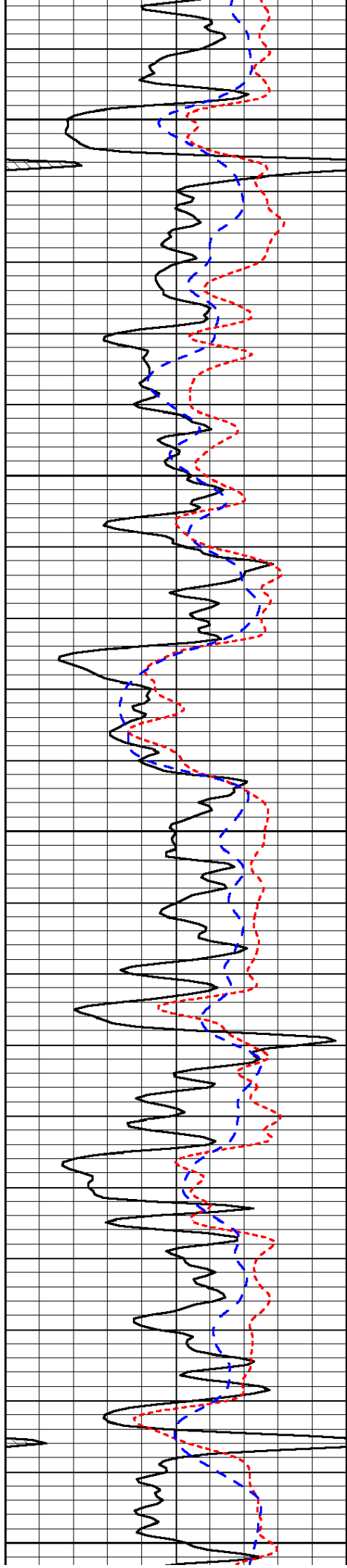


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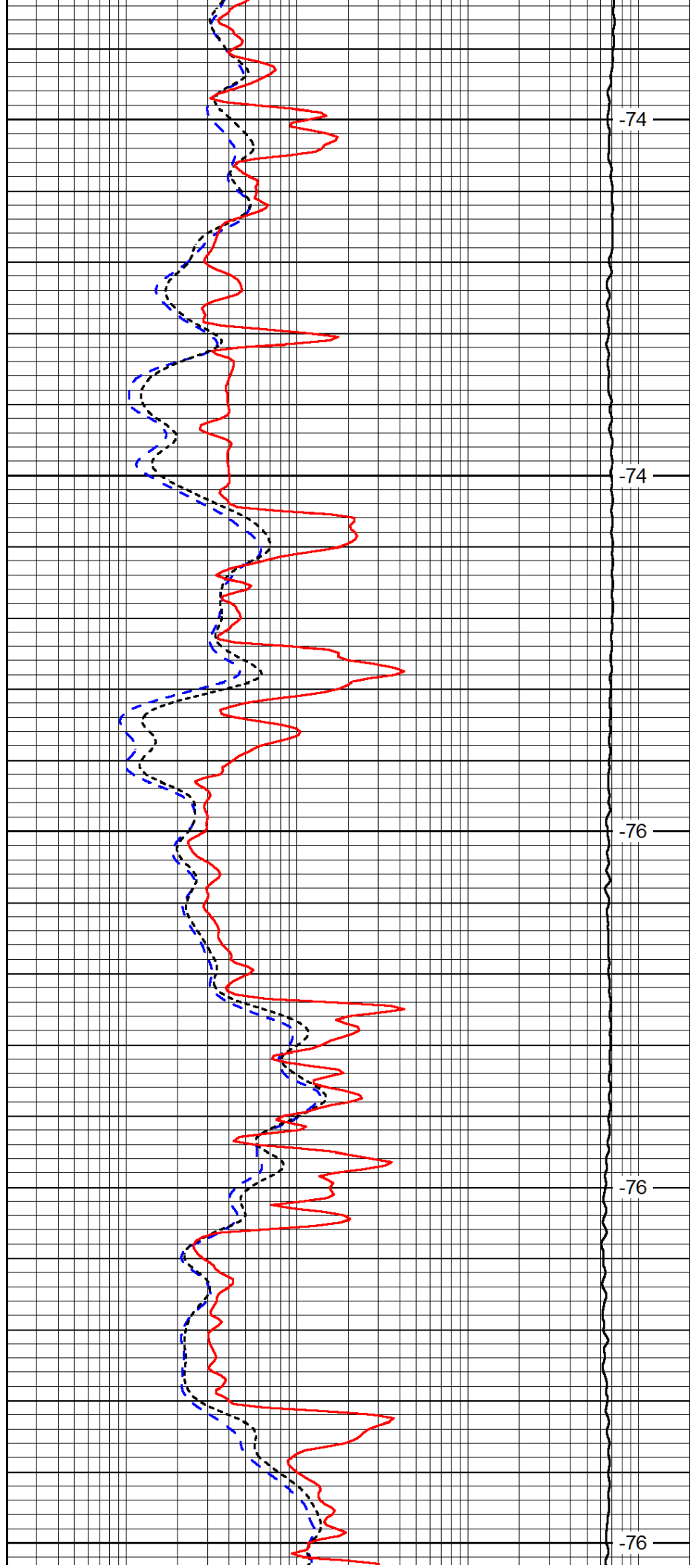
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2900

2950

3000

3050



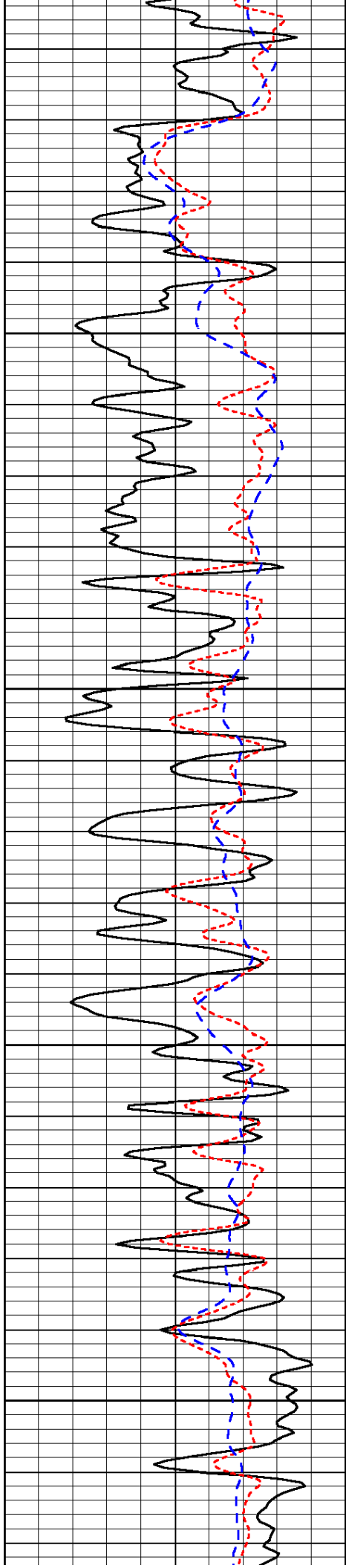
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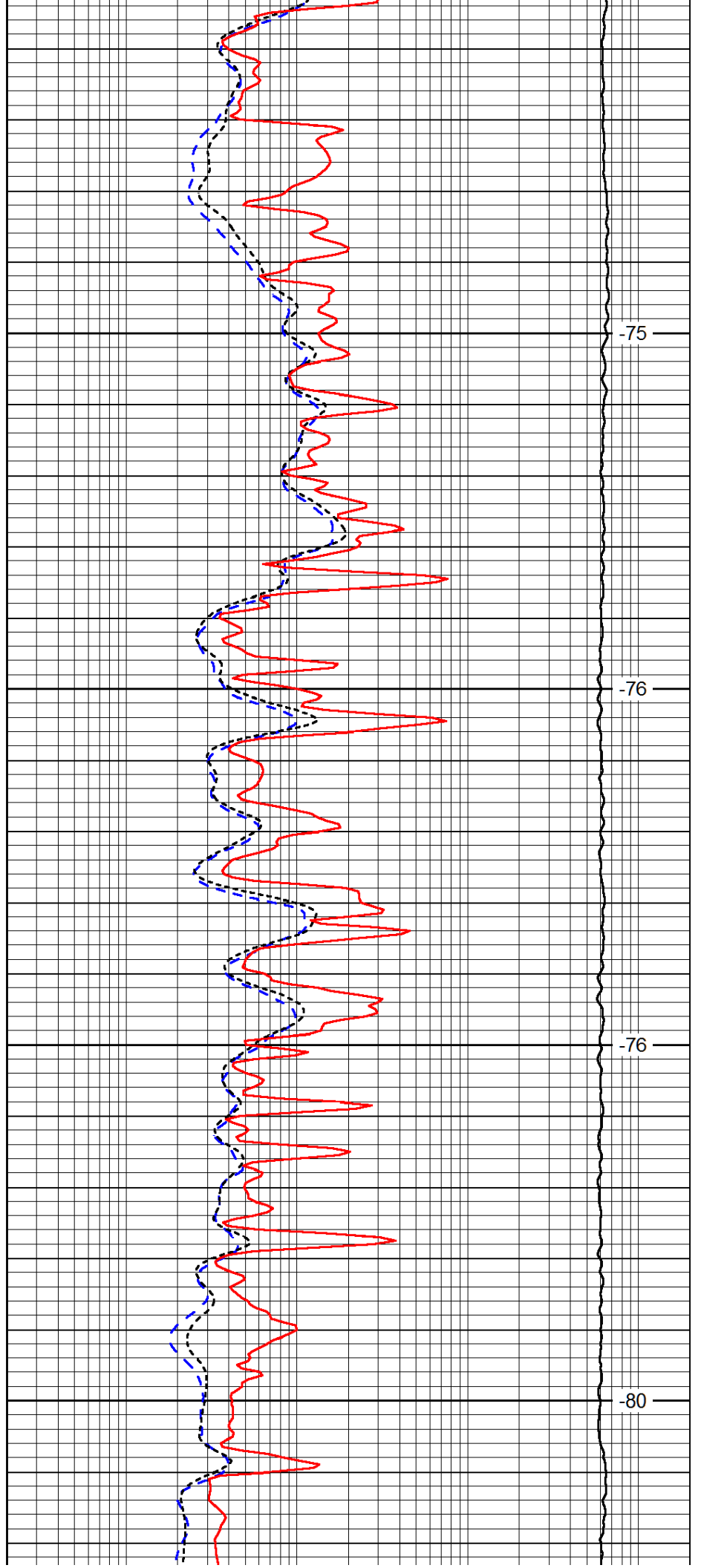


3100

3150

3200

3250

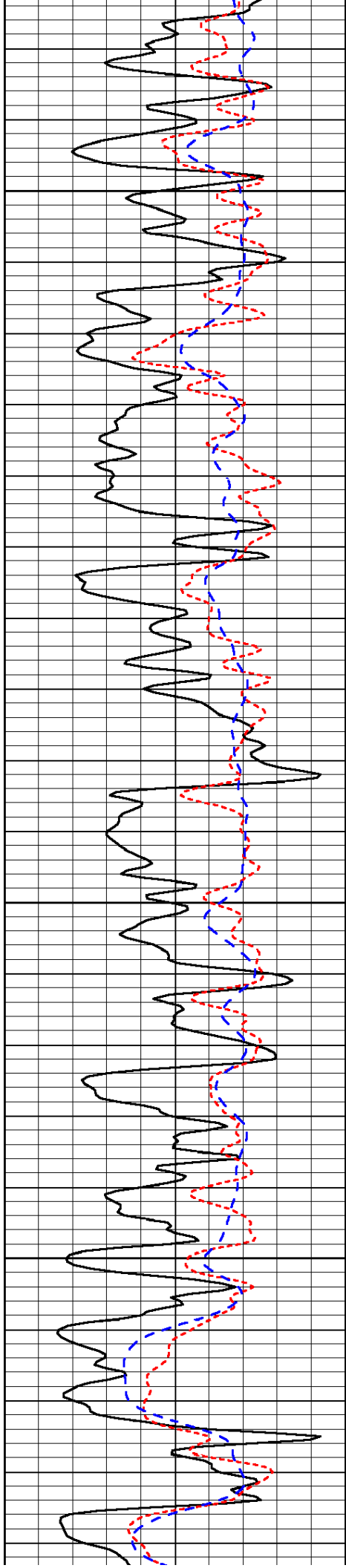


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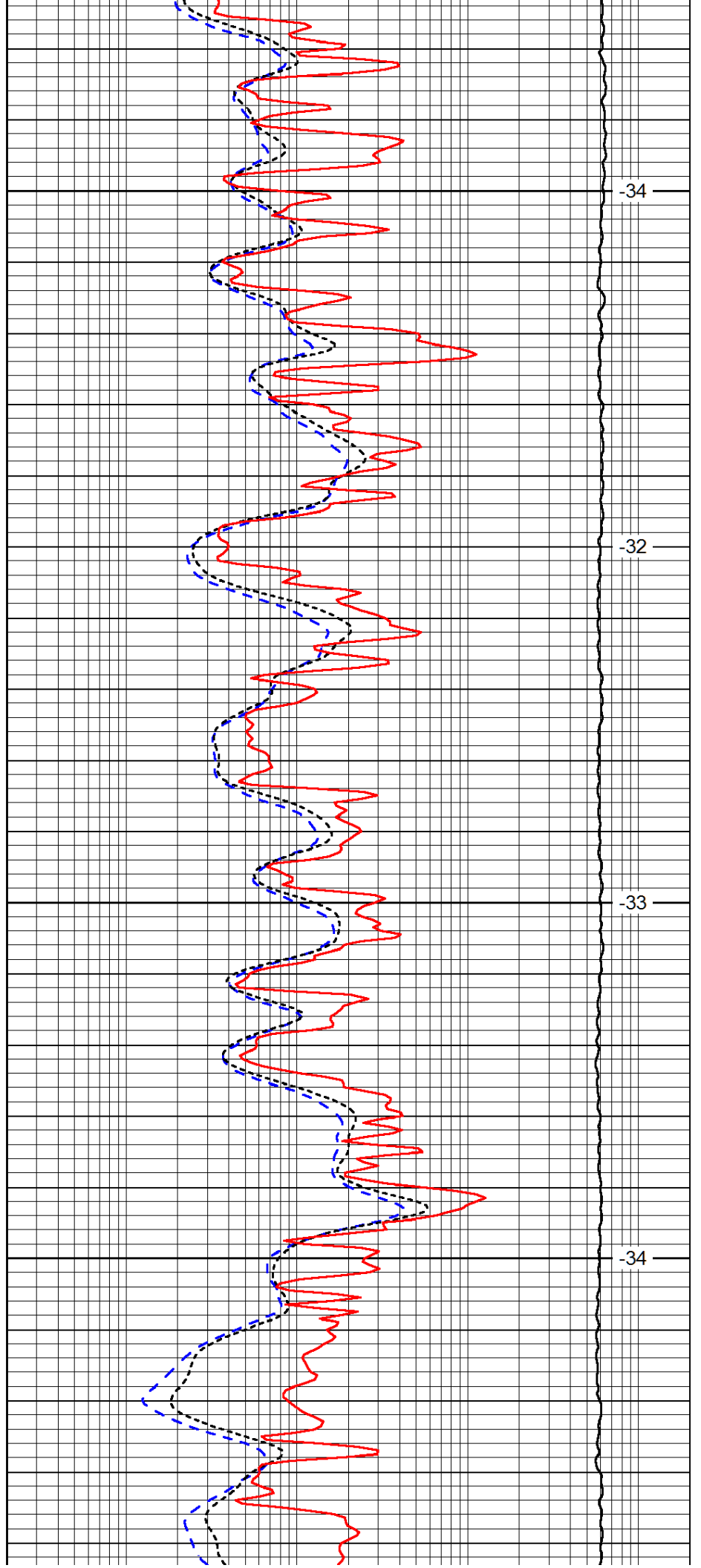


3300

3350

3400

3450

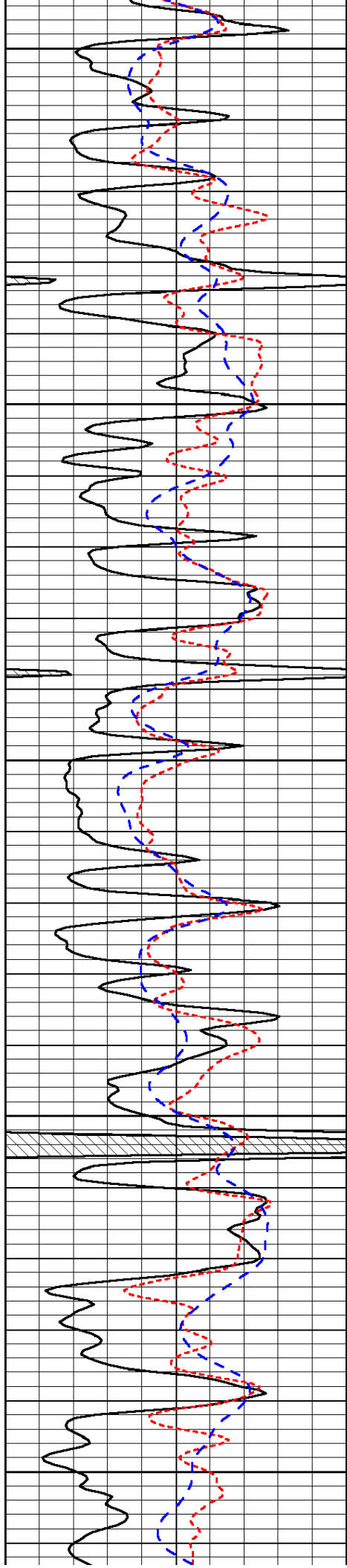


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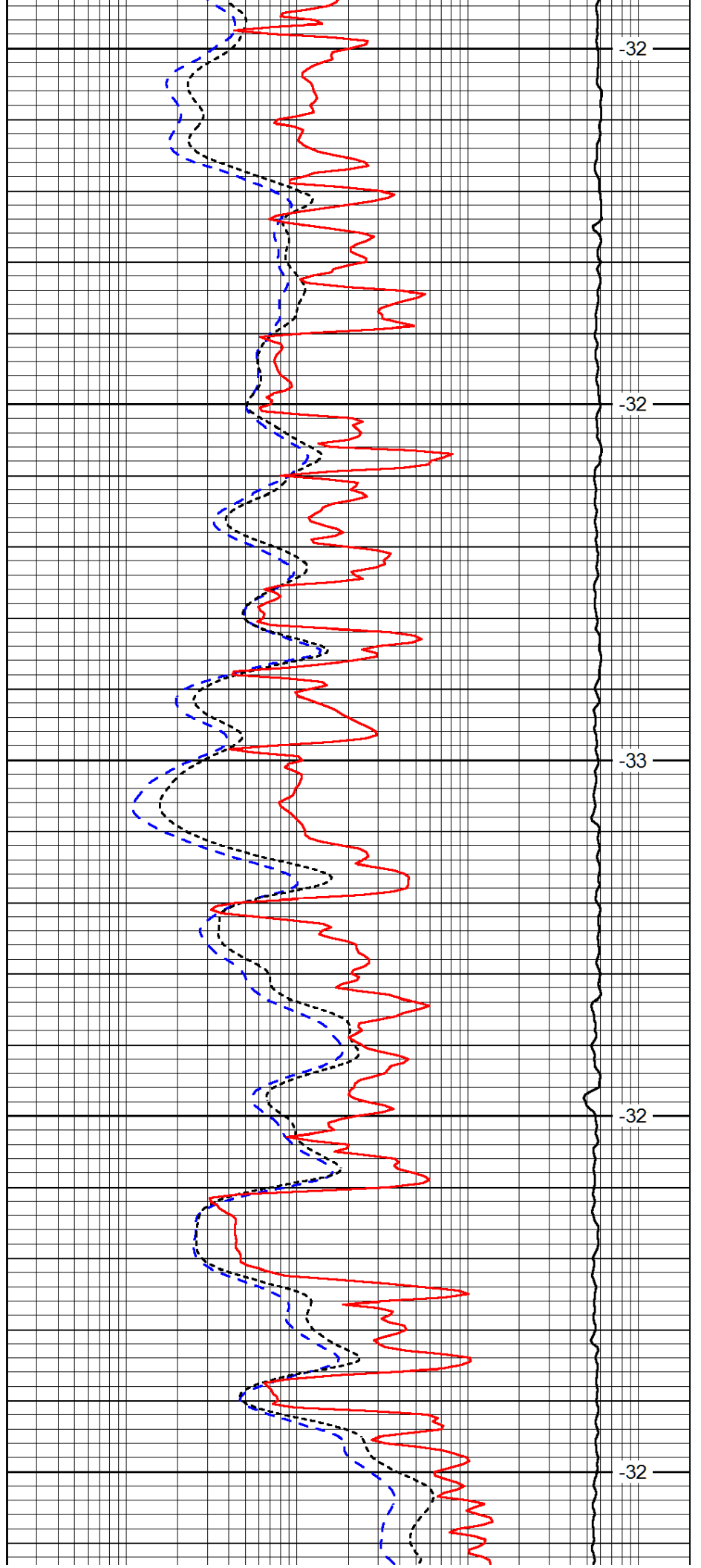
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3550

3600

3650

3700



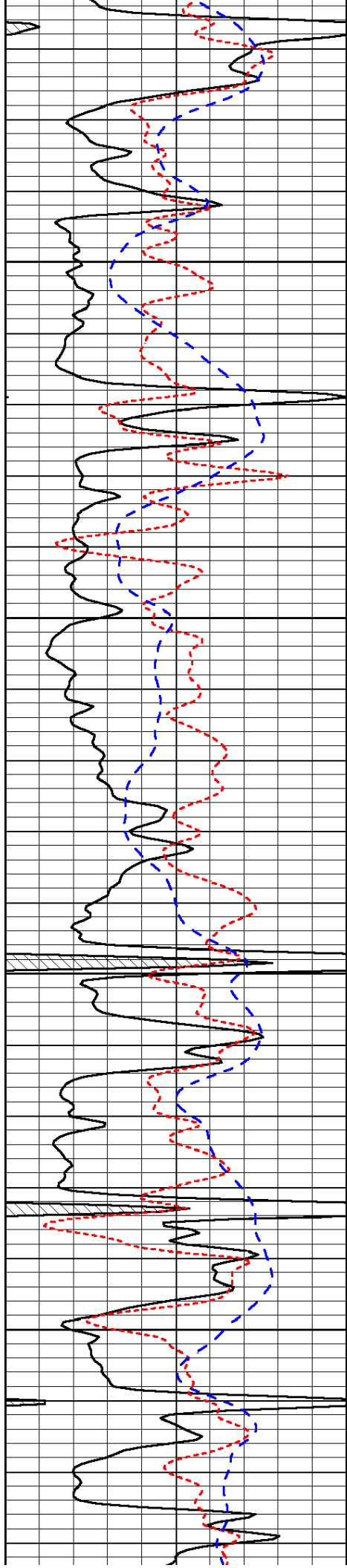
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-33

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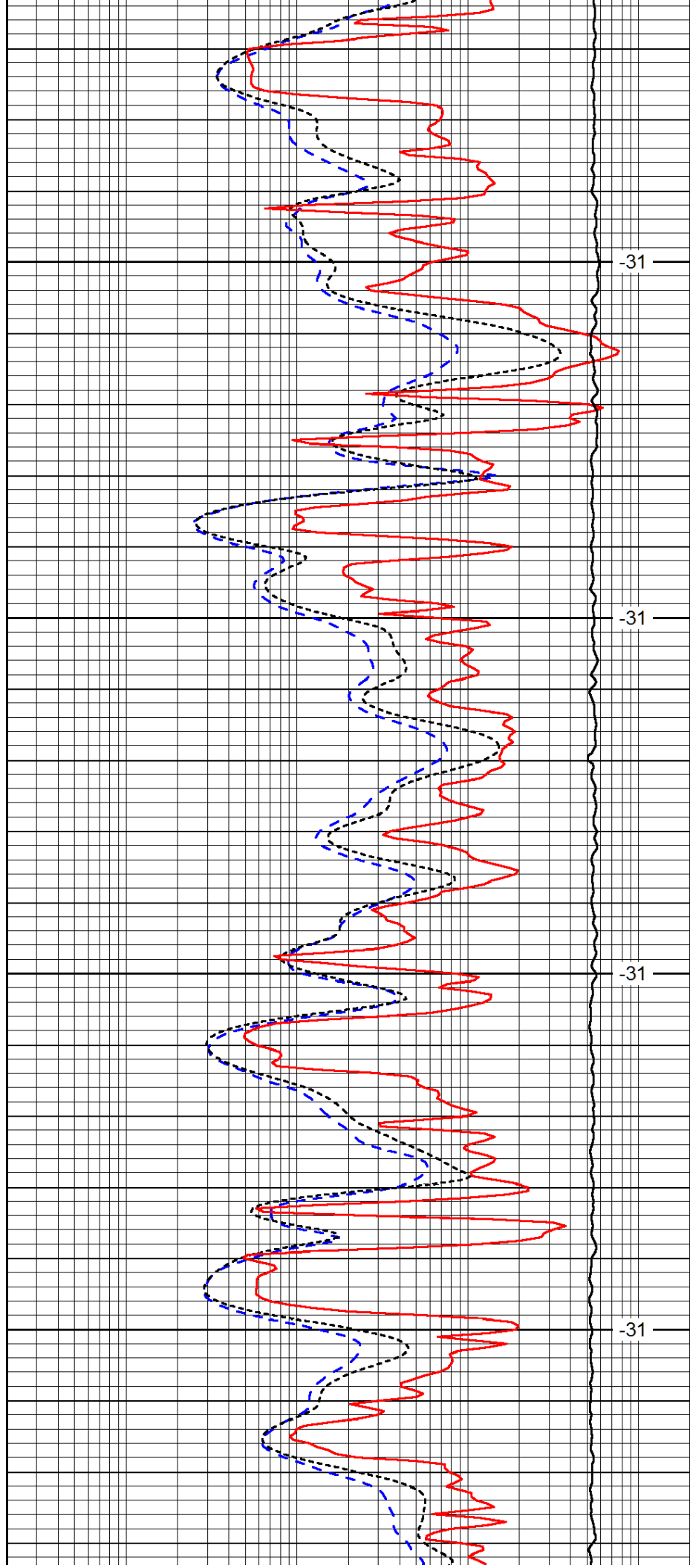


3750

3800

3850

3900

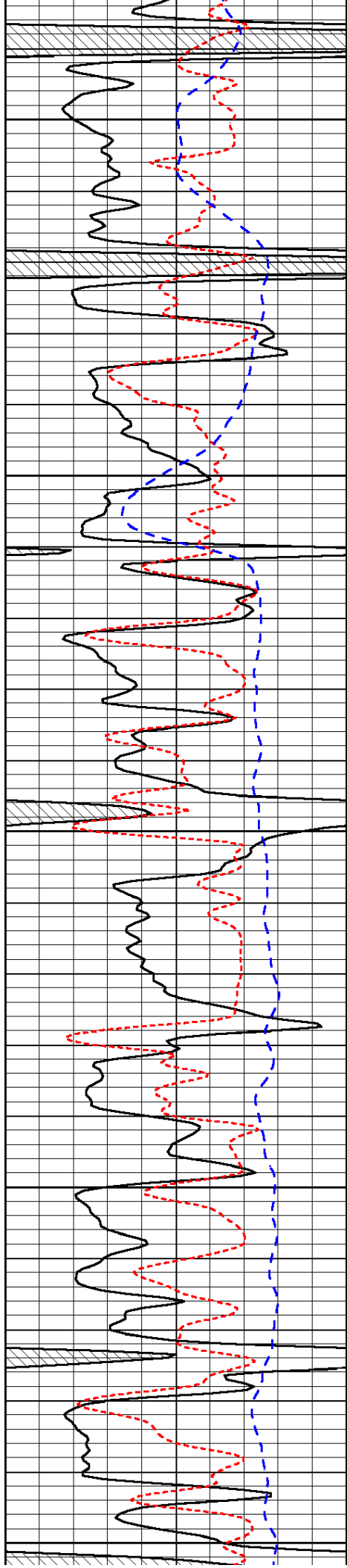


-31

-31

-31

-31



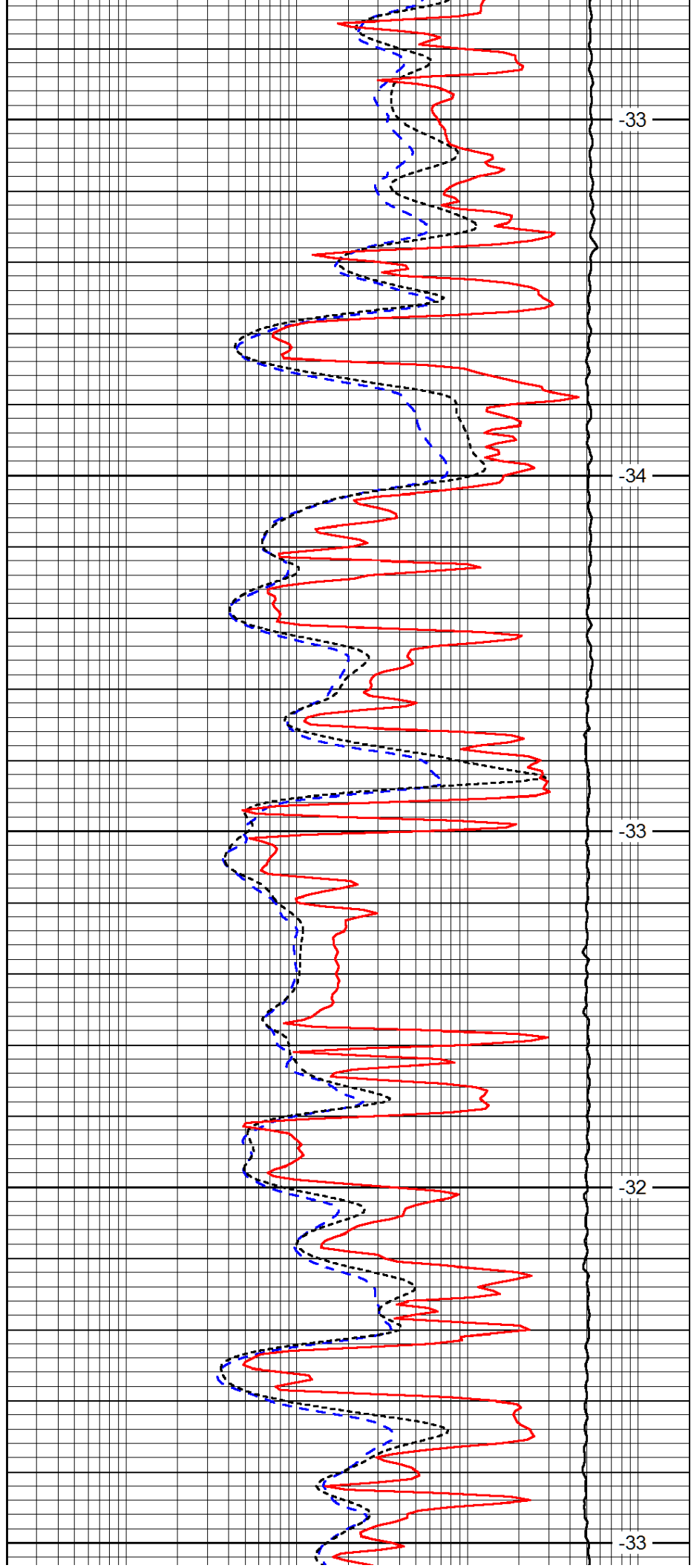
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4000

4050

4100

4150



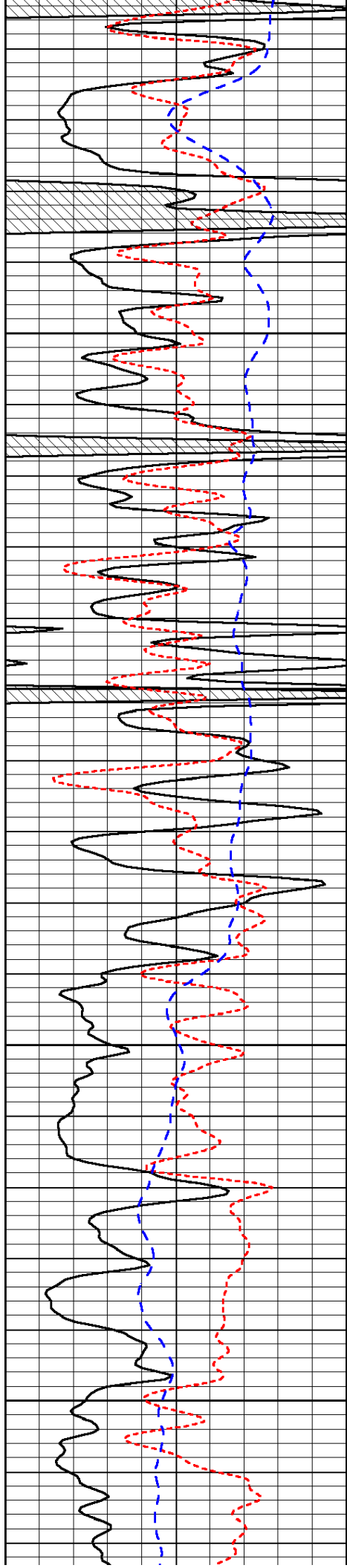
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-34

-33

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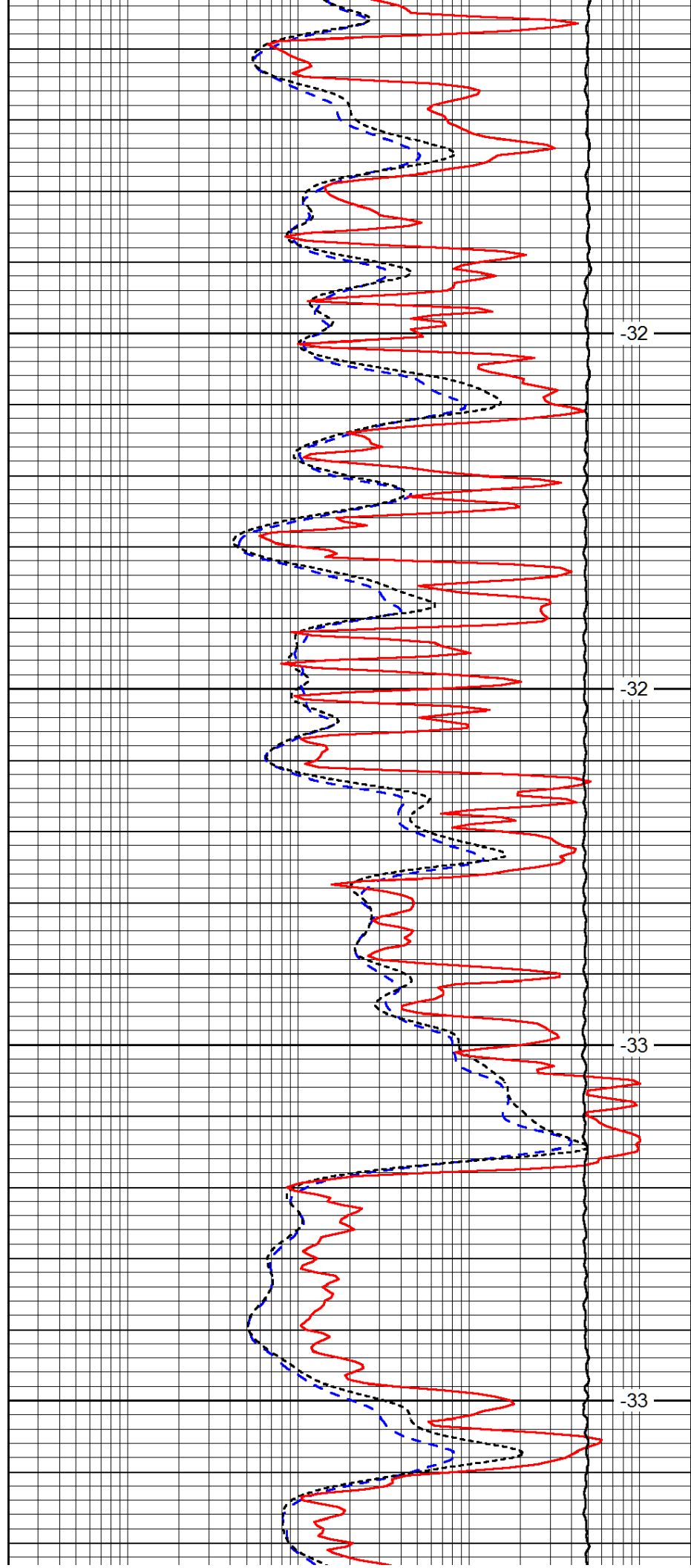


4200

4250

4300

4350

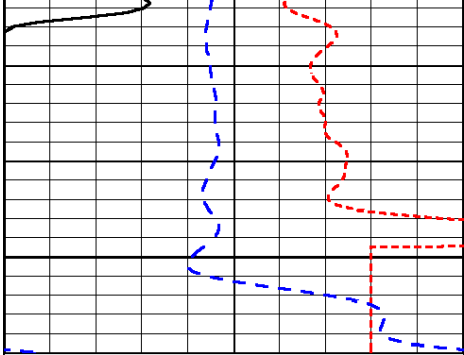


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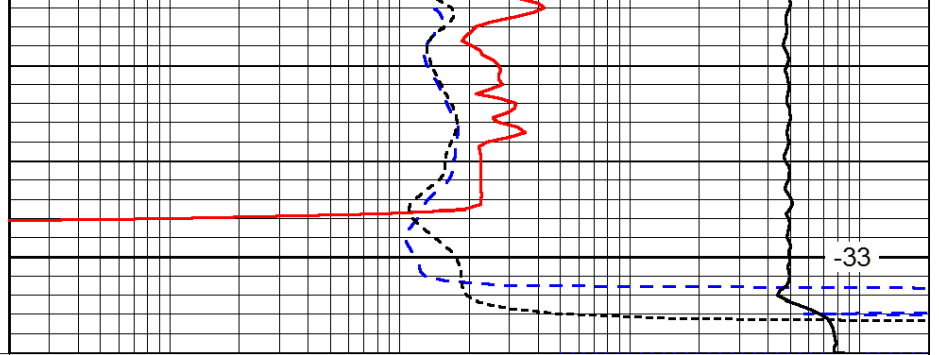
-33

-33



4400

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



-33

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD