



Pioneer Energy Services

# Dual Induction Log

API No.	15-185-23980-00-00	
Company	Murfin Drilling Company, Inc.	
Well	David #1-9	
Field	Wildcat	
County	Stafford	State
		Kansas
Location	330' FNL & 1320' FWL	
Sec: 9	Twp: 23S	Rge: 12W
Permanent Datum	Ground Level	Elevation 1845
Log Measured From	Kelly Bushing	11 Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing	
		Other Services CNL/CDL MEL/BHCS
		Elevation K.B. 1856 D.F. 1845 G.L. 1845

Date	8/2/2014
Run Number	One
Depth Driller	3850
Depth Logger	3851
Bottom Logged Interval	3850
Top Log Interval	0
Casing Driller	8.625 @ 643
Casing Logger	643
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	6400
Density / Viscosity	9.3   61
pH / Fluid Loss	9.5   8.0
Source of Sample	Flowline
Rm @ Meas. Temp	1.00 @ 89
Rmf @ Meas. Temp	0.75 @ 89
Rmc @ Meas. Temp	1.35 @ 89
Source of Rmf / Rmc	Charts
Rm @ BHT	0.78 @ 115
Operating Rig Time	5 Hours
Max Rec. Temp. F	115
Equipment Number	91
Location	Hays
Recorded By	D. Schmidt
Witnessed By	Chuck Schmalz

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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

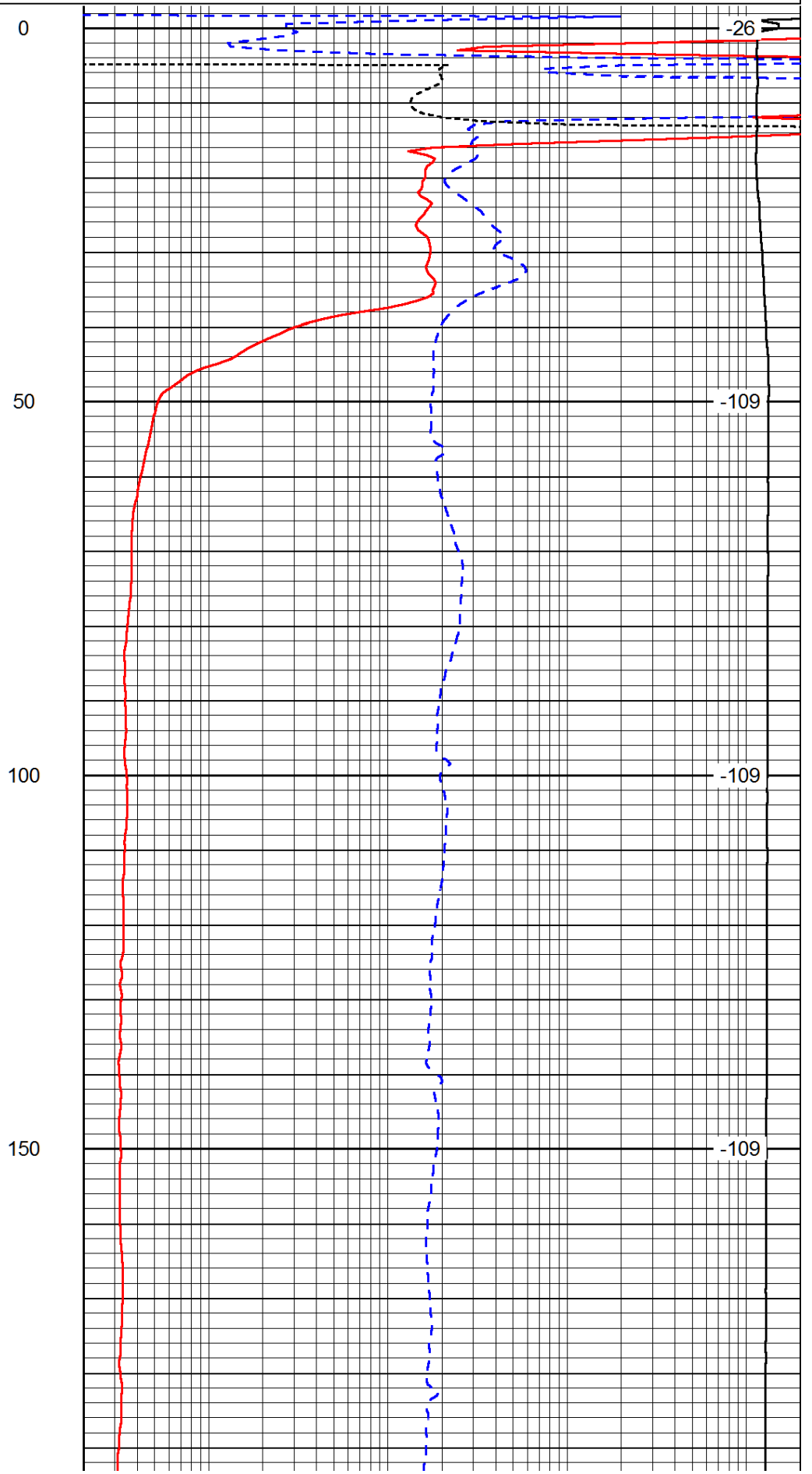
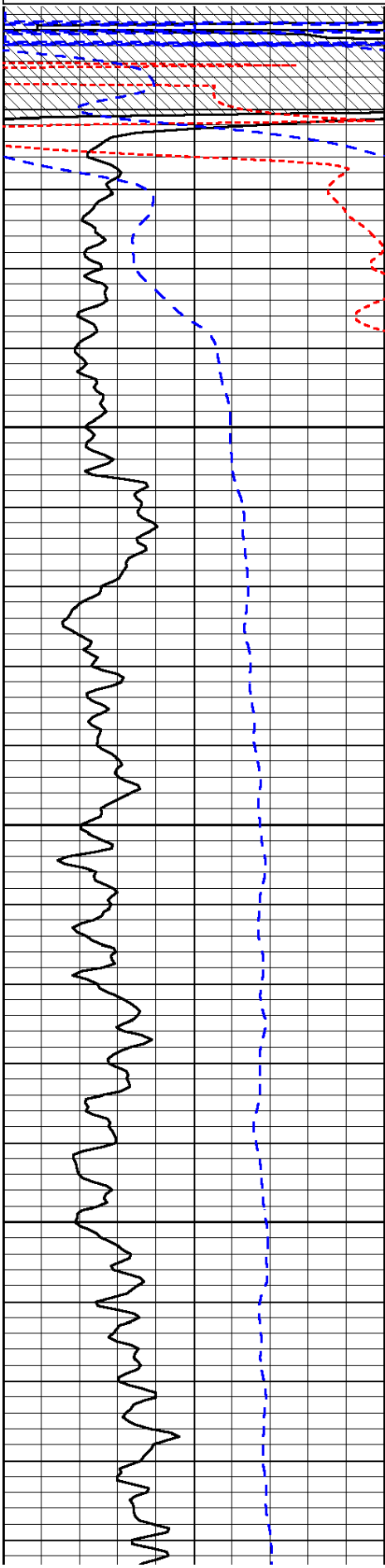
Thank you for using Log-Tech, Inc.  
 (785) 625-3858  
 St. John,  
 North to 70 Rd, 5 East, 1 North, 1/4 East,  
 South into

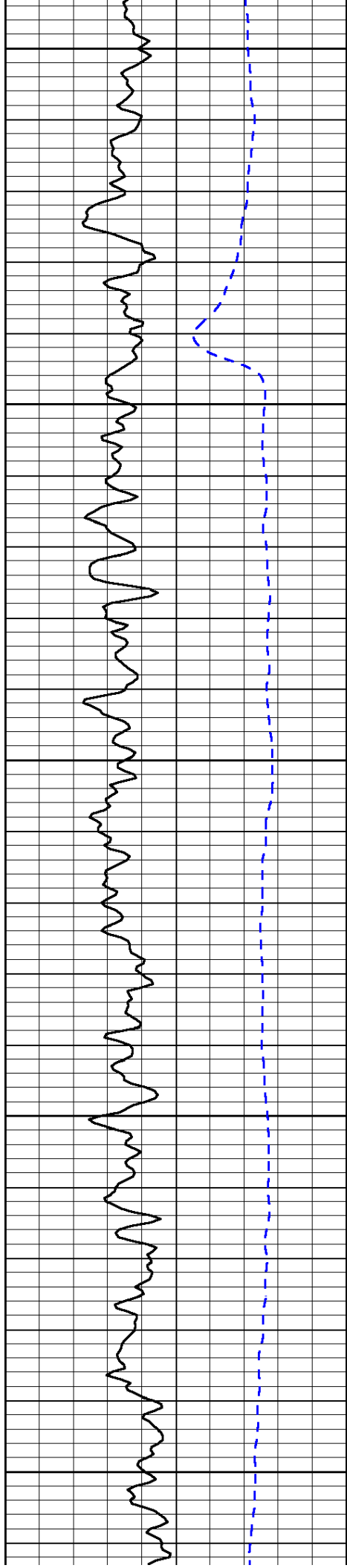
Database File: murfin\_david\_1-9hd.db  
 Dataset Pathname: dil/mrfstck  
 Presentation Format: dil  
 Dataset Creation: Sat Aug 02 20:35:02 2014  
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
-160	RXO/RT	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





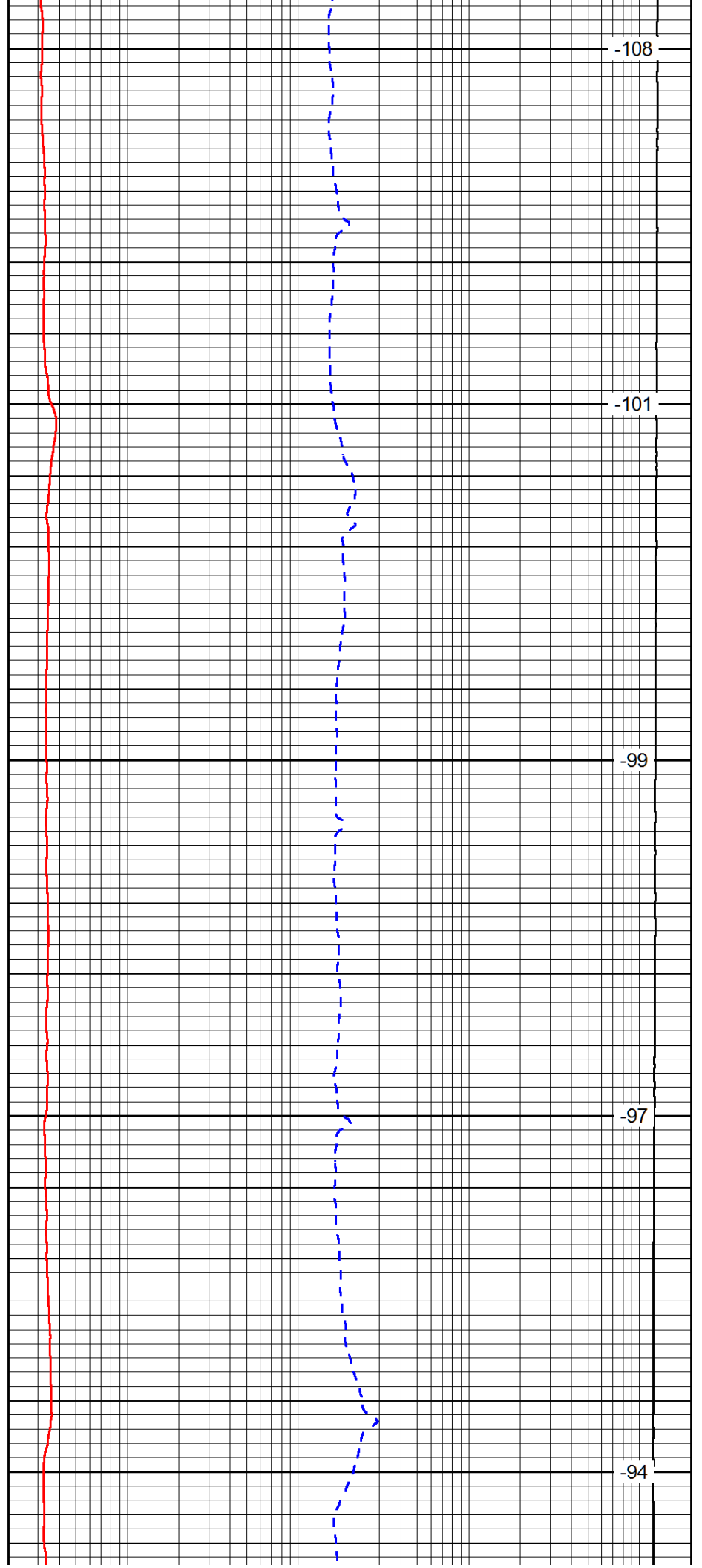
200

250

300

350

400



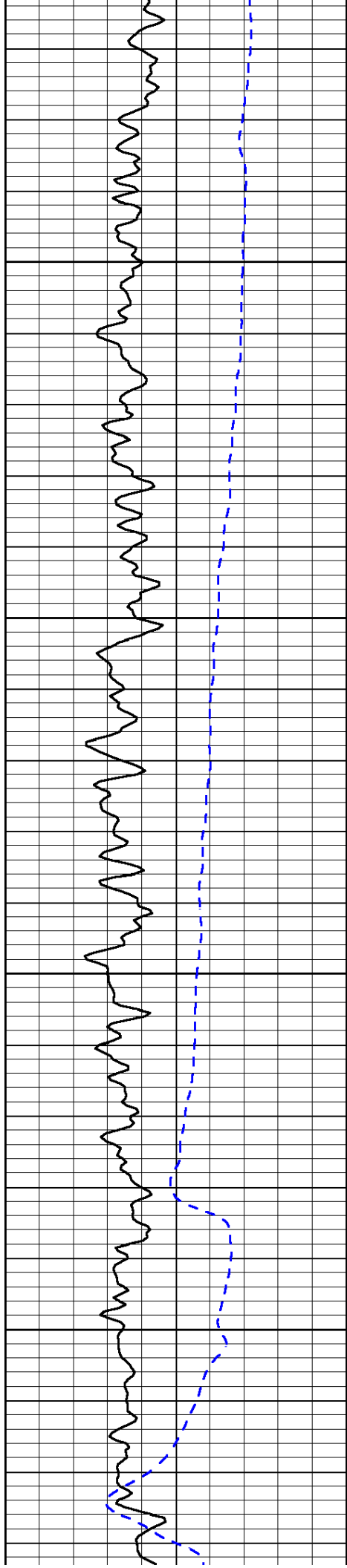
-108

-101

-99

-97

-94

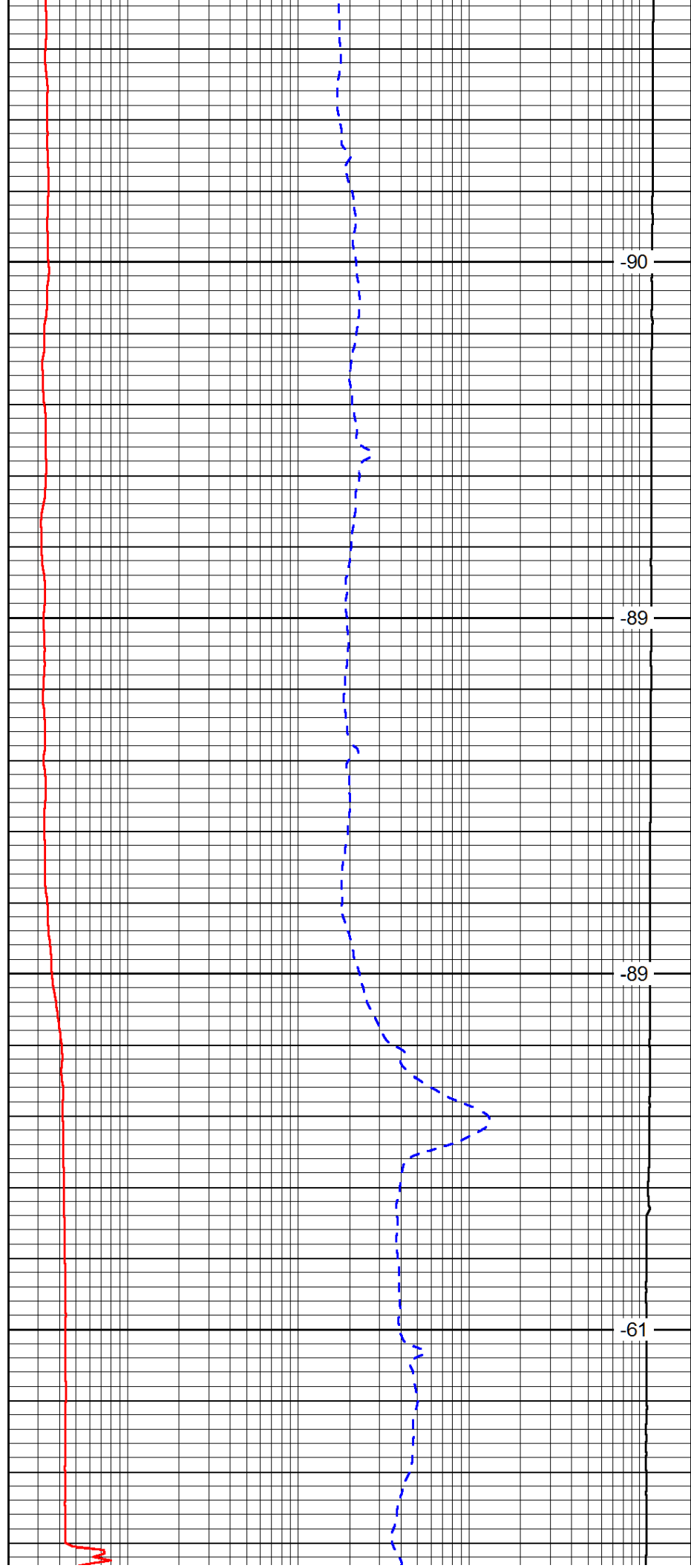


450

500

550

600

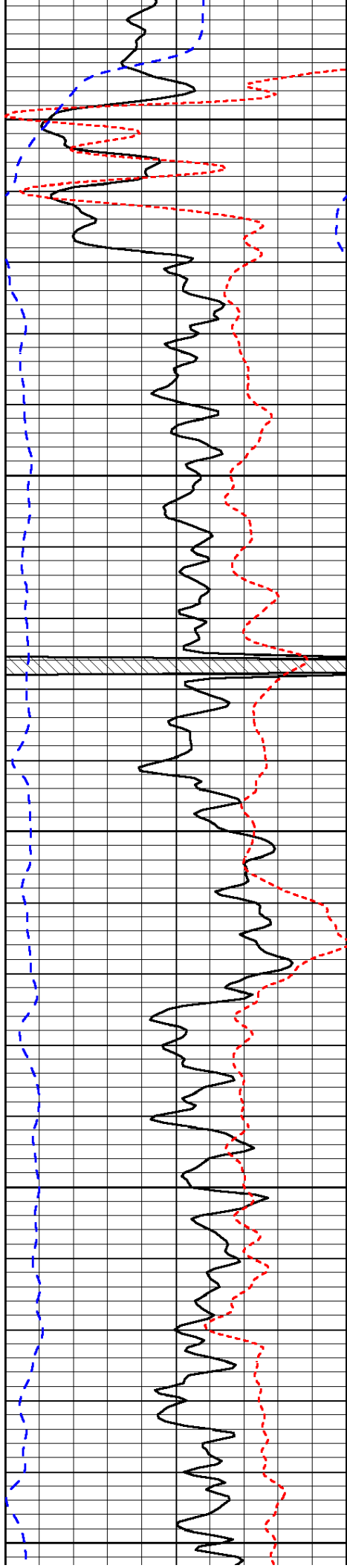


-90

-89

-89

-61



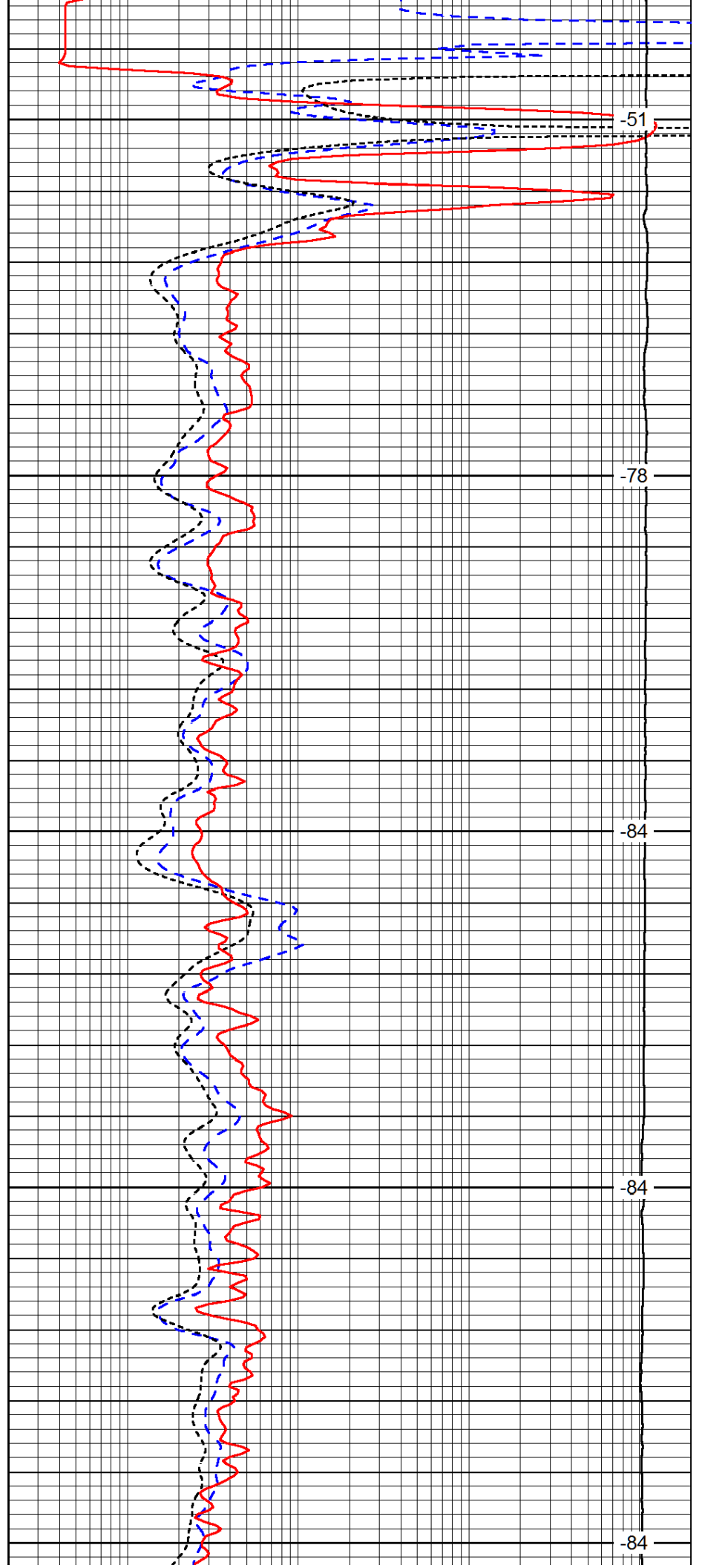
650

700

750

800

850



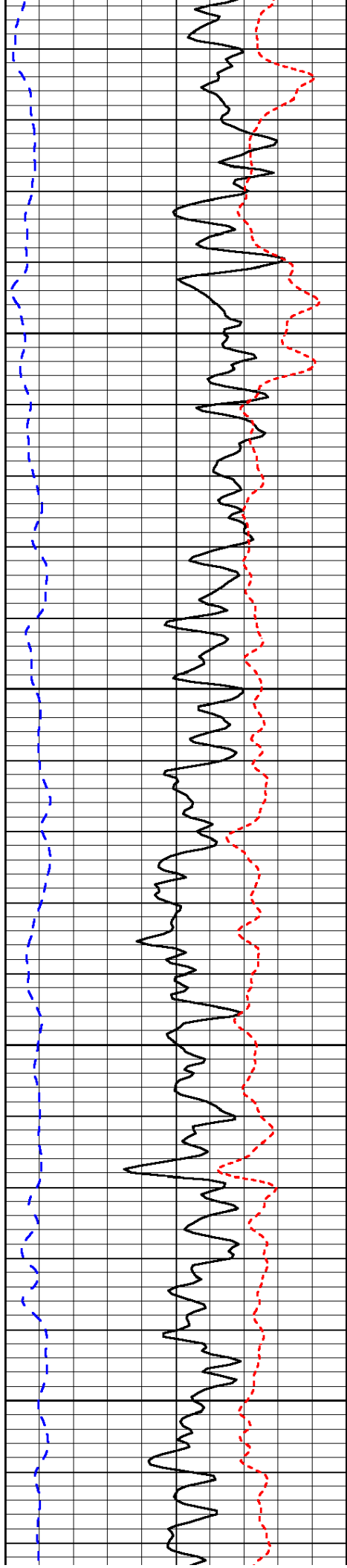
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78

84

84

84



900

950

1000

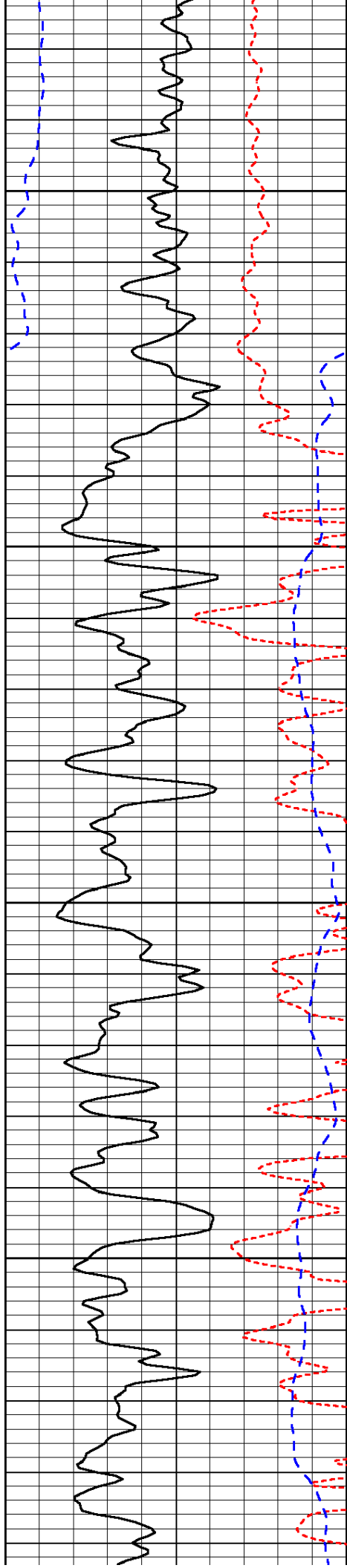
1050

-84

-80

-82

-82

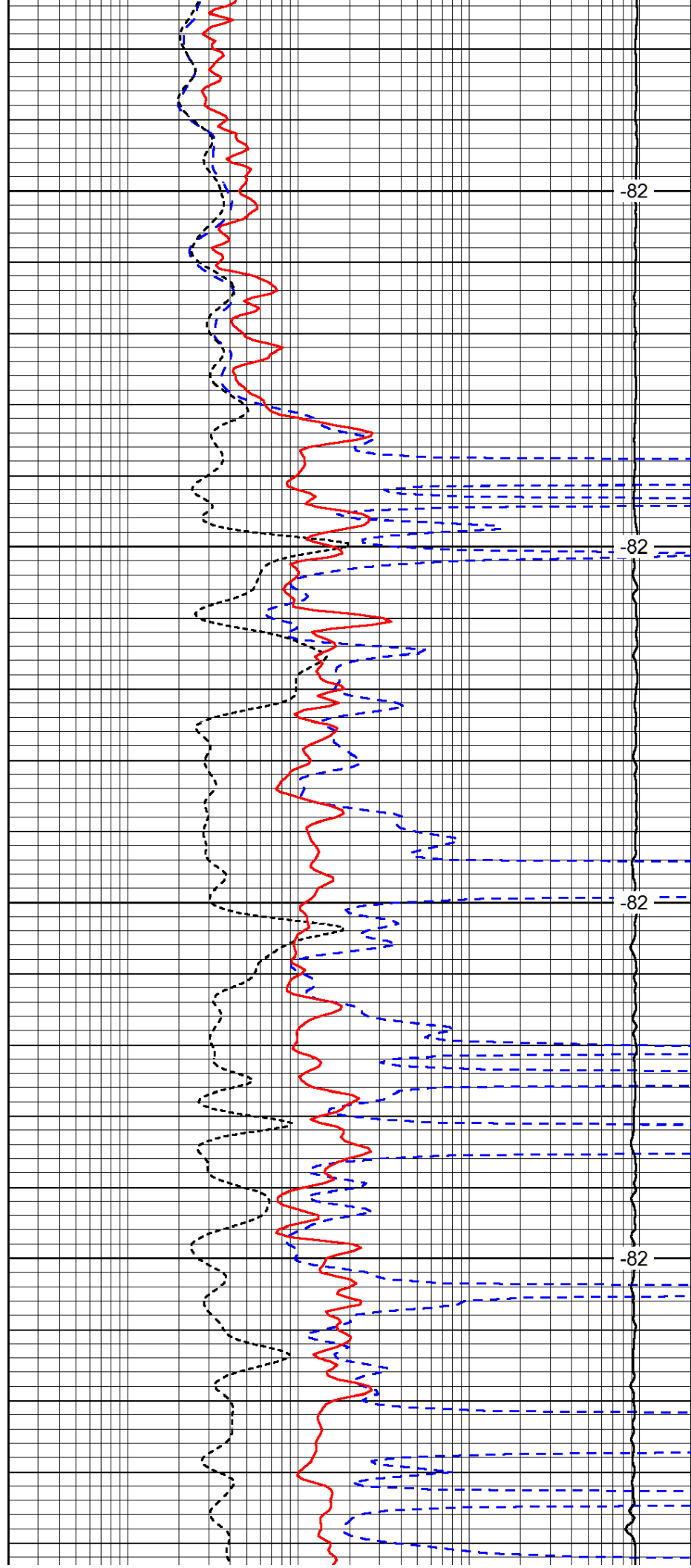


1100

1150

1200

1250

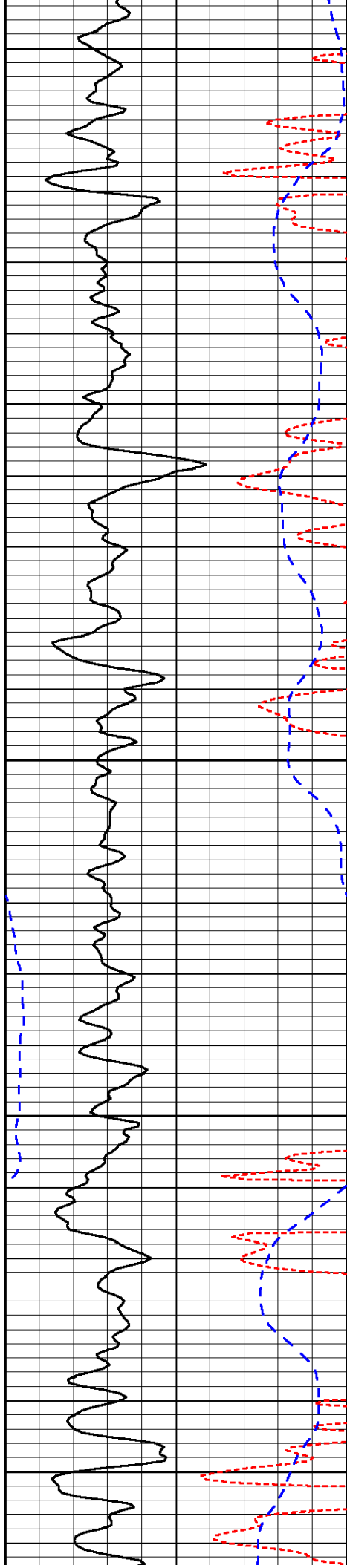


-82

-82

-82

-82



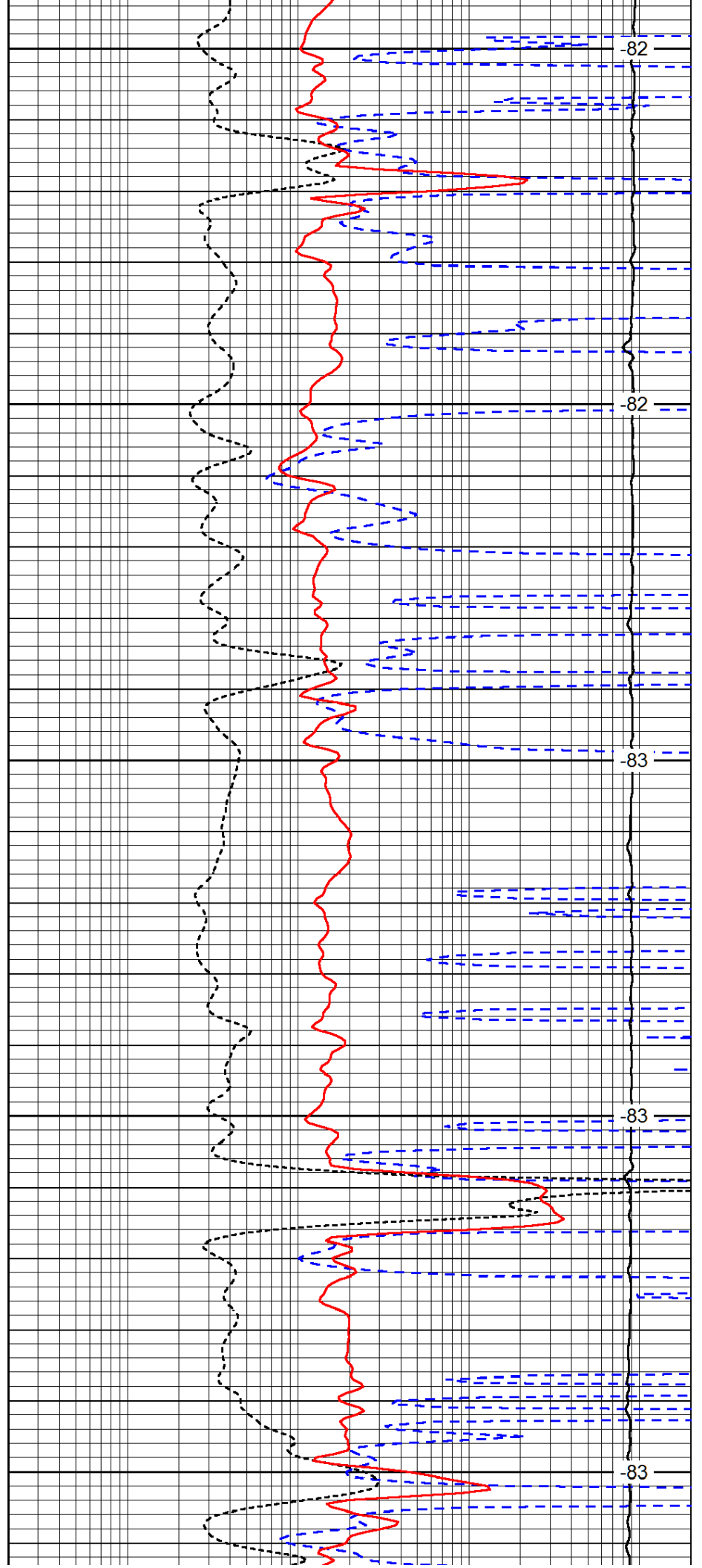
1300

1350

1400

1450

1500



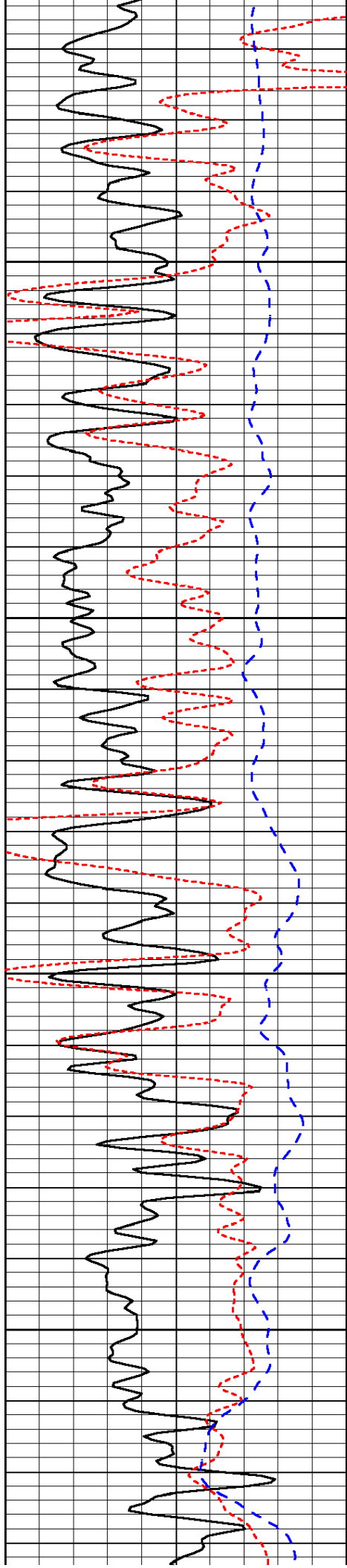
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-82

-83

-83

-83

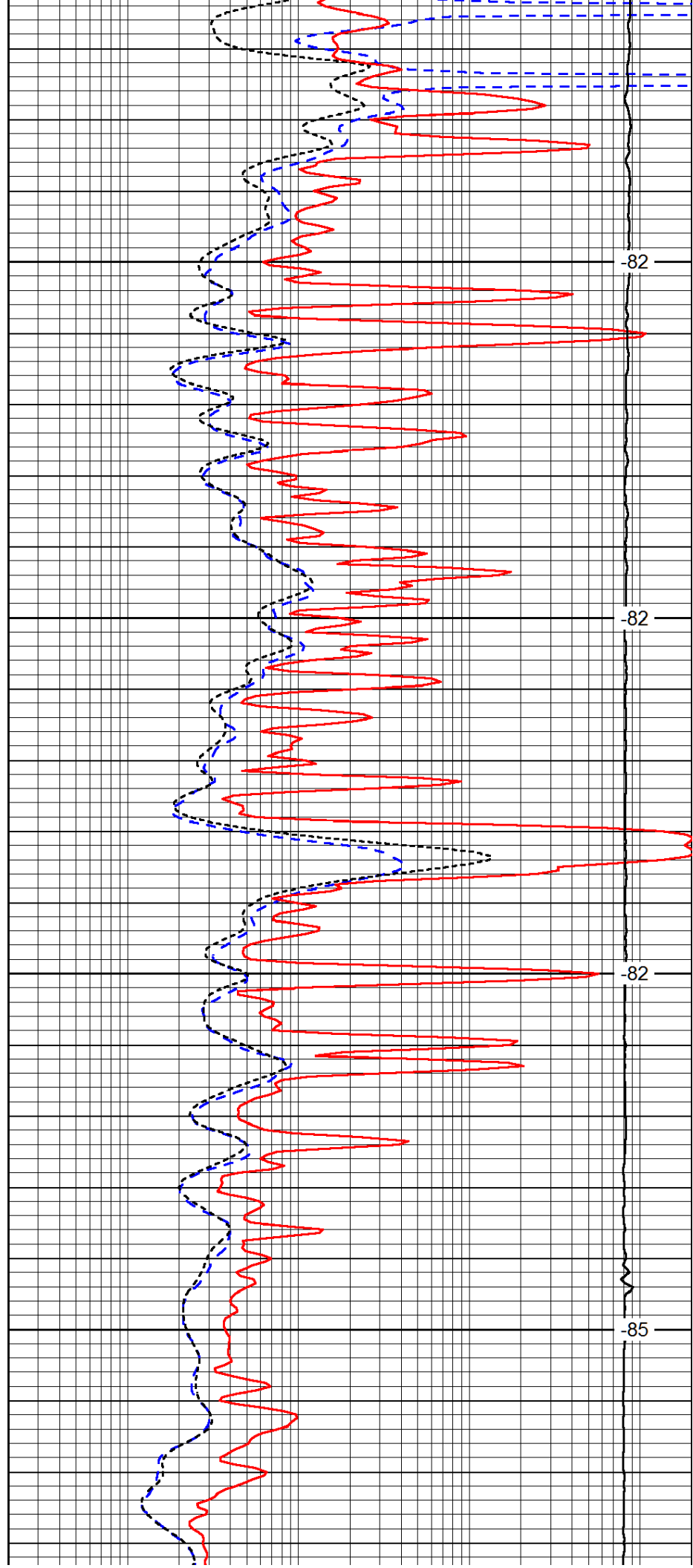


1550

1600

1650

1700

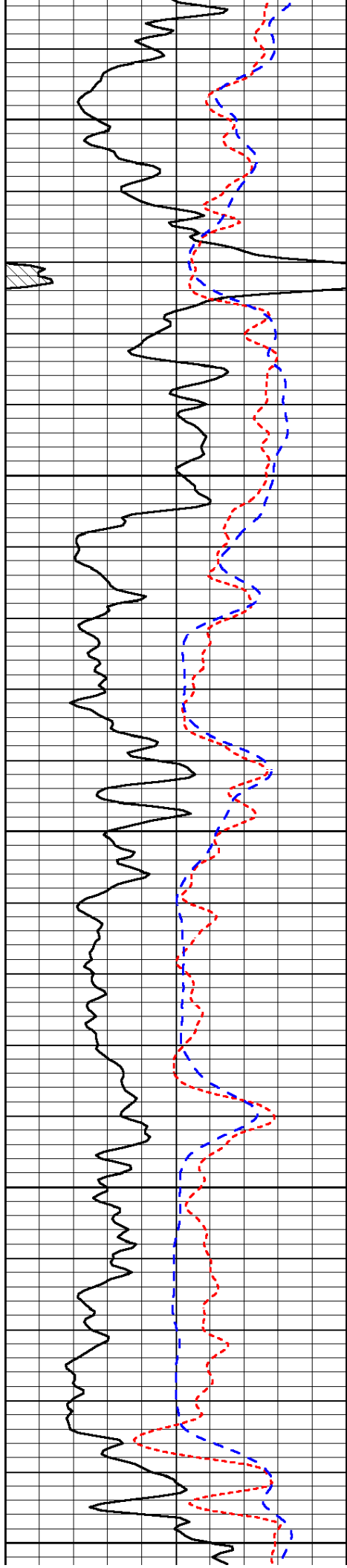


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-82

-82

-85



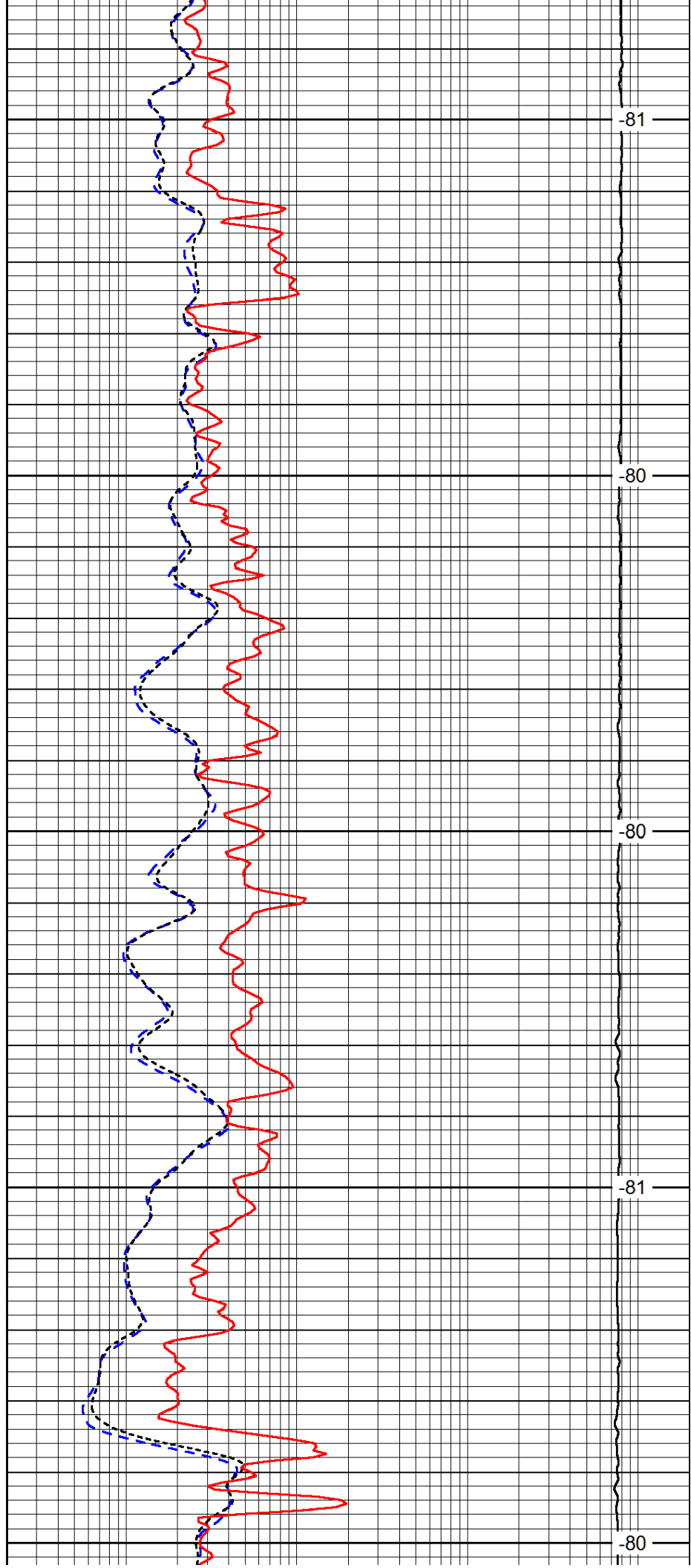
1750

1800

1850

1900

1950



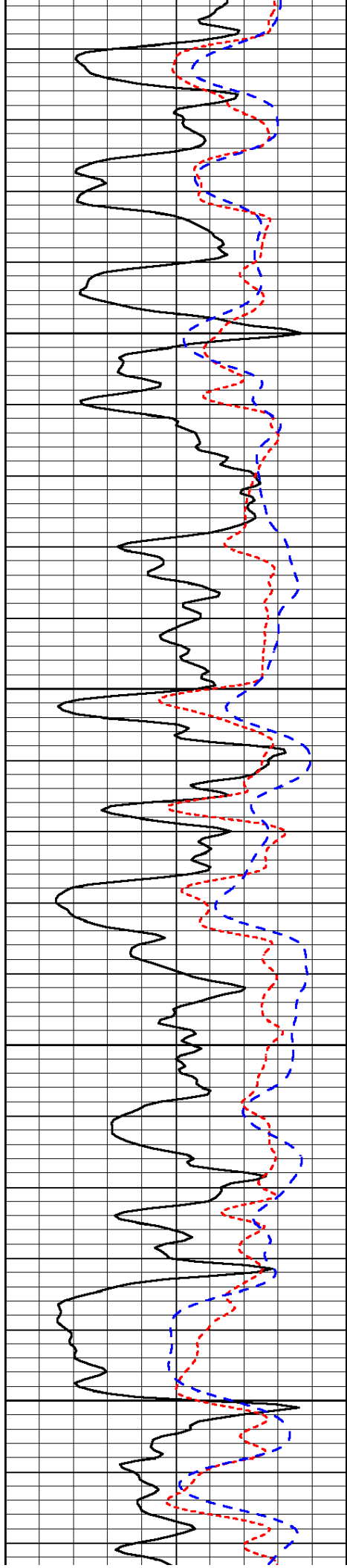
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-80

-80

-81

-80

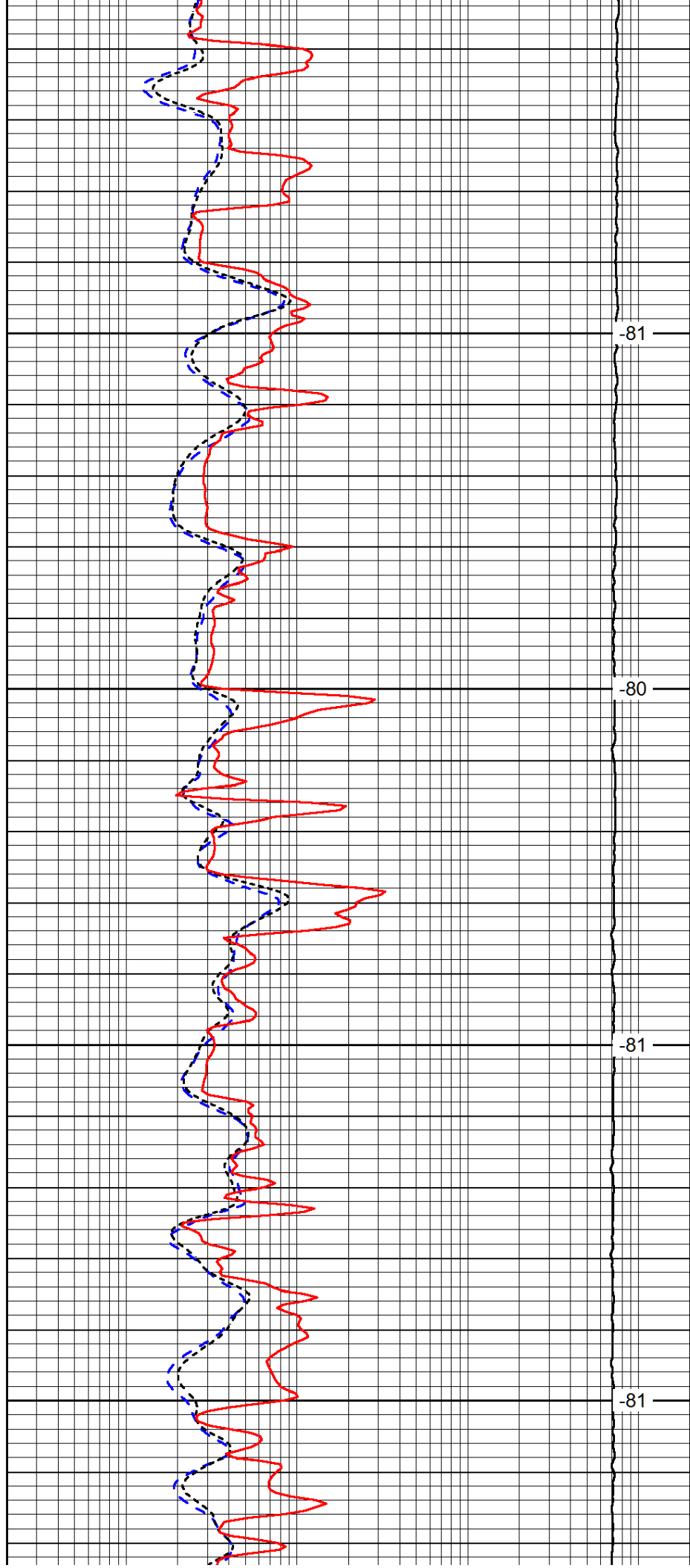


2000

2050

2100

2150

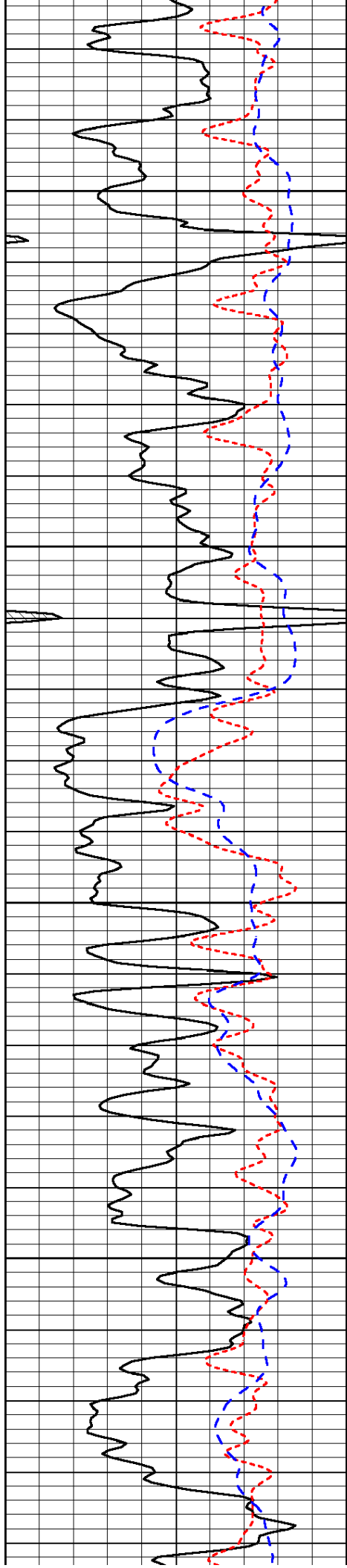


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-80

-81

-81

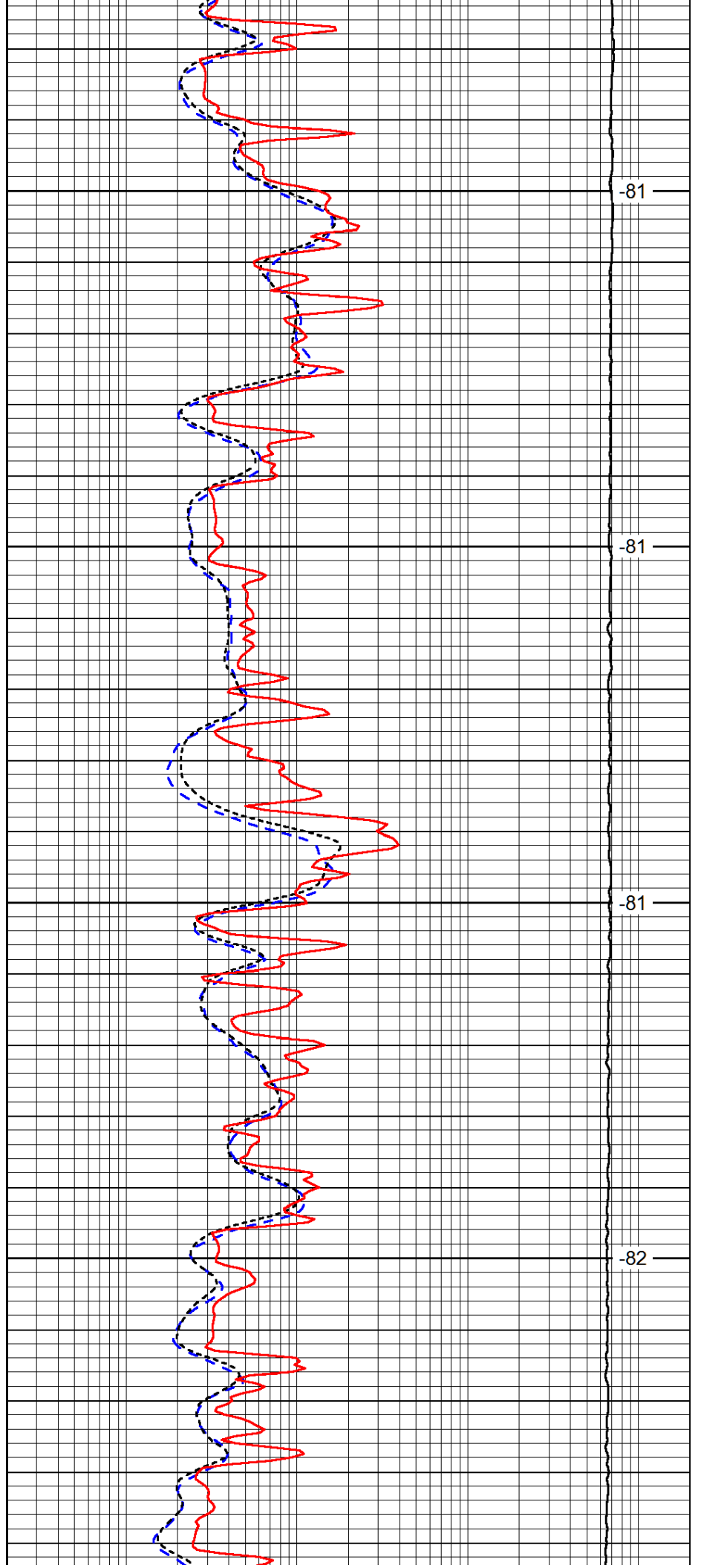


2200

2250

2300

2350

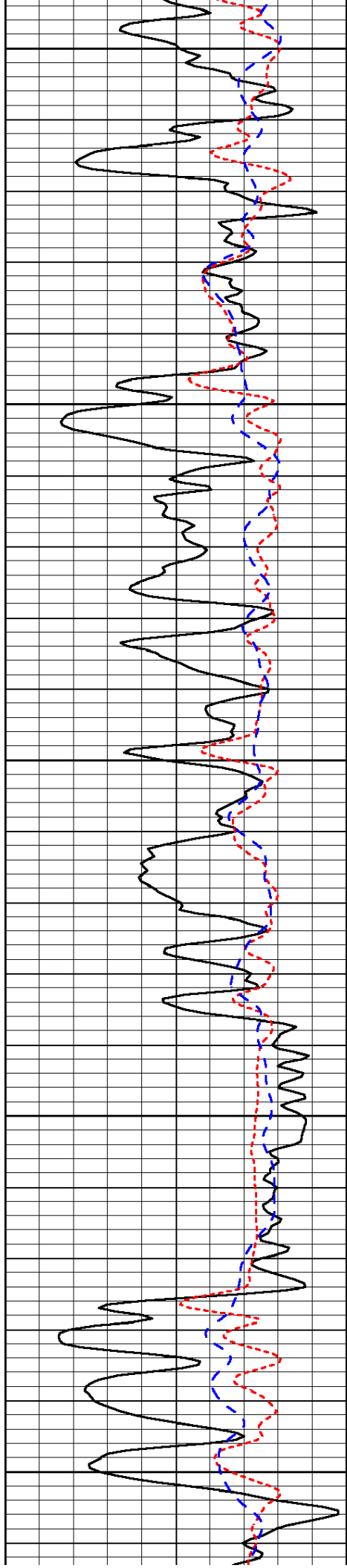


-81

-81

-81

-82



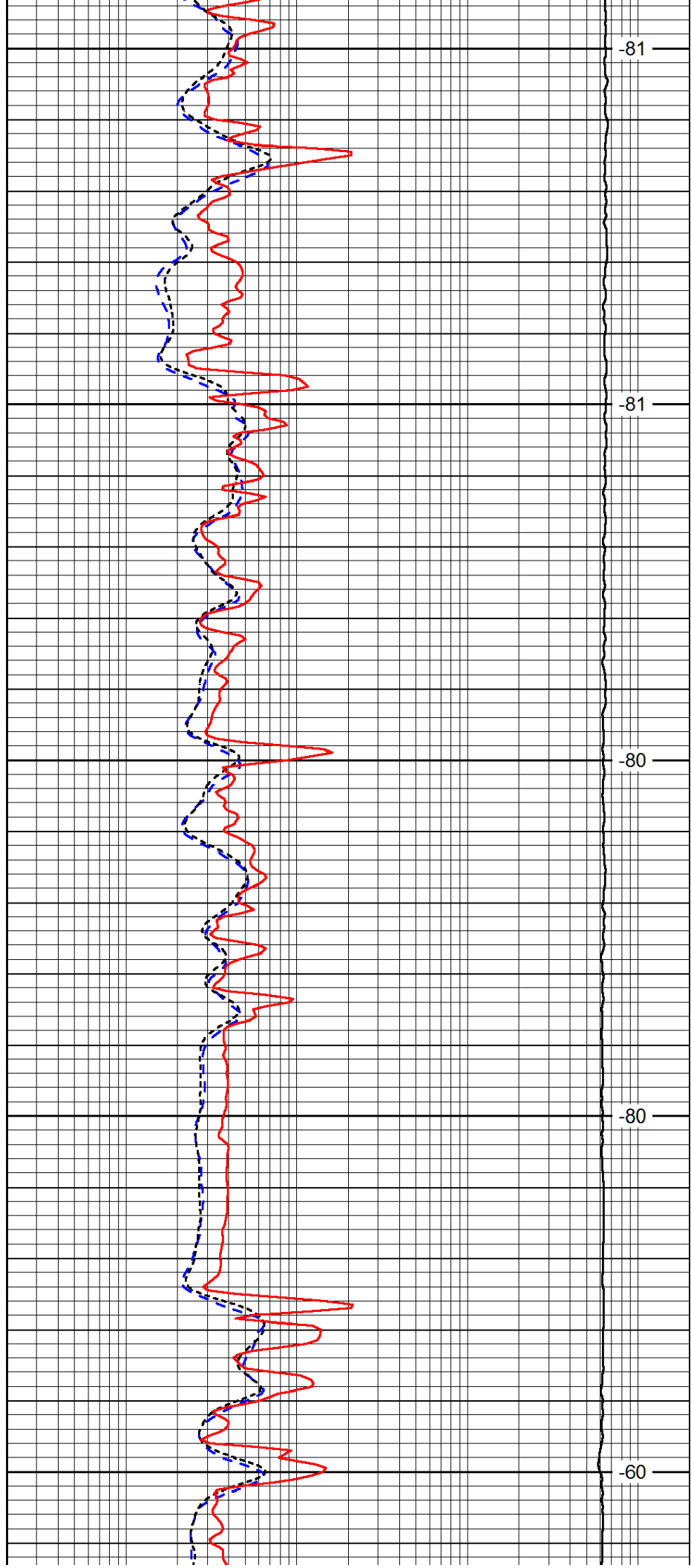
2400

2450

2500

2550

2600



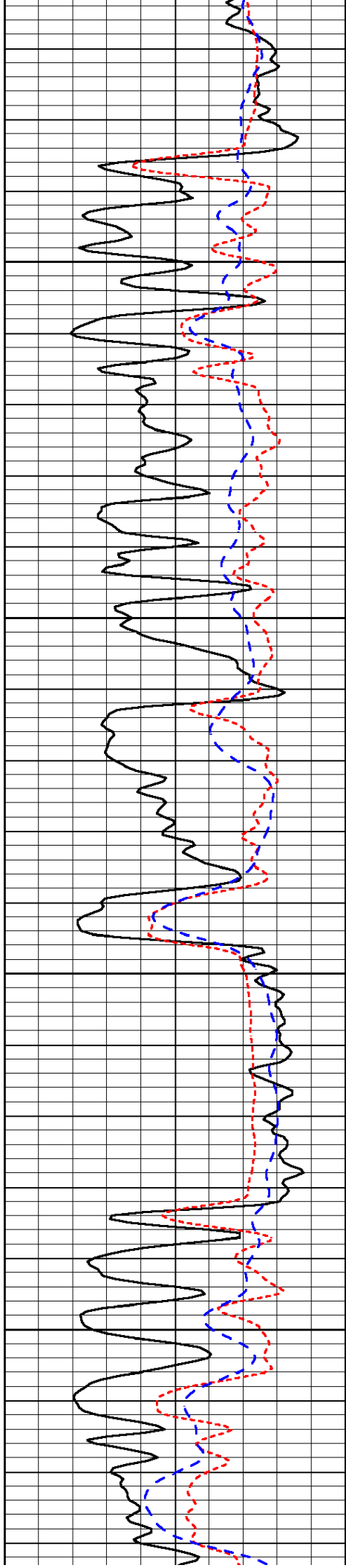
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-81

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-80

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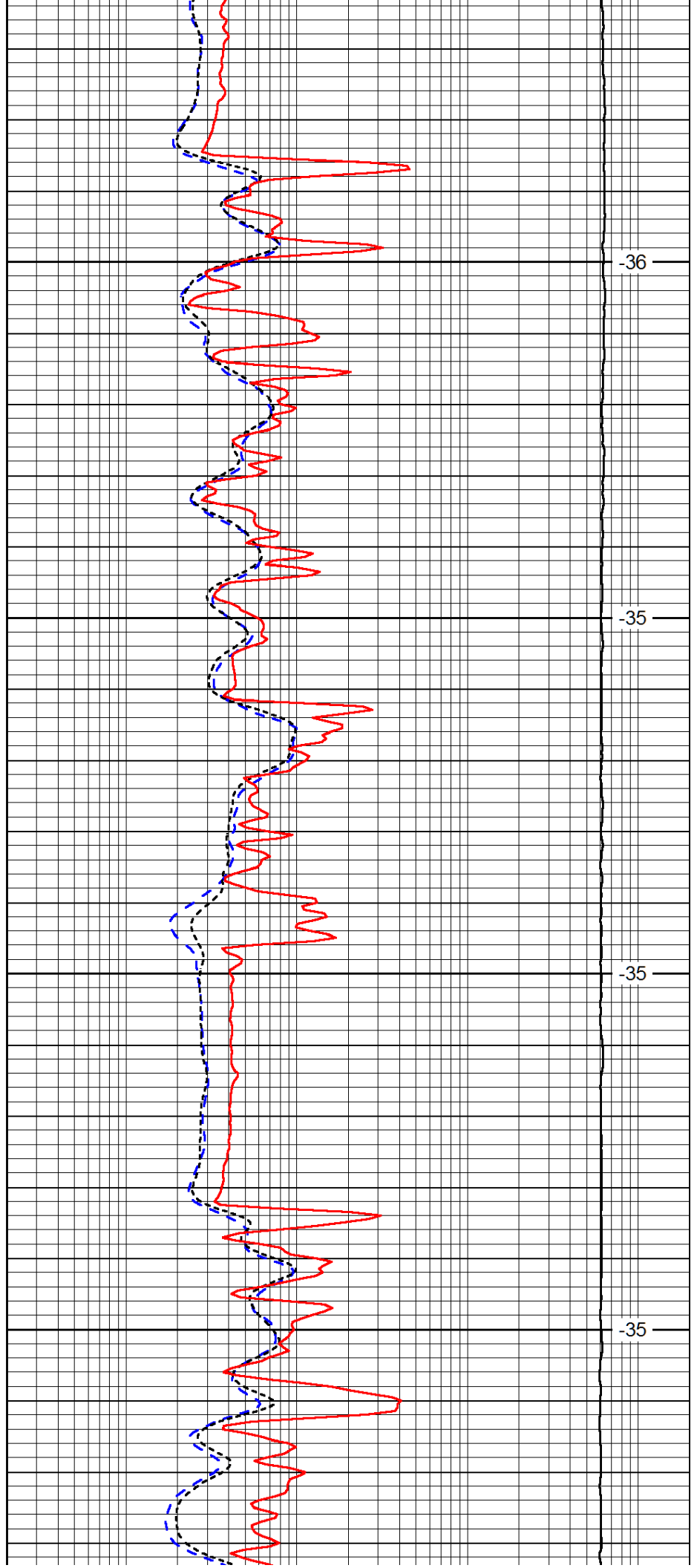


2650

2700

2750

2800

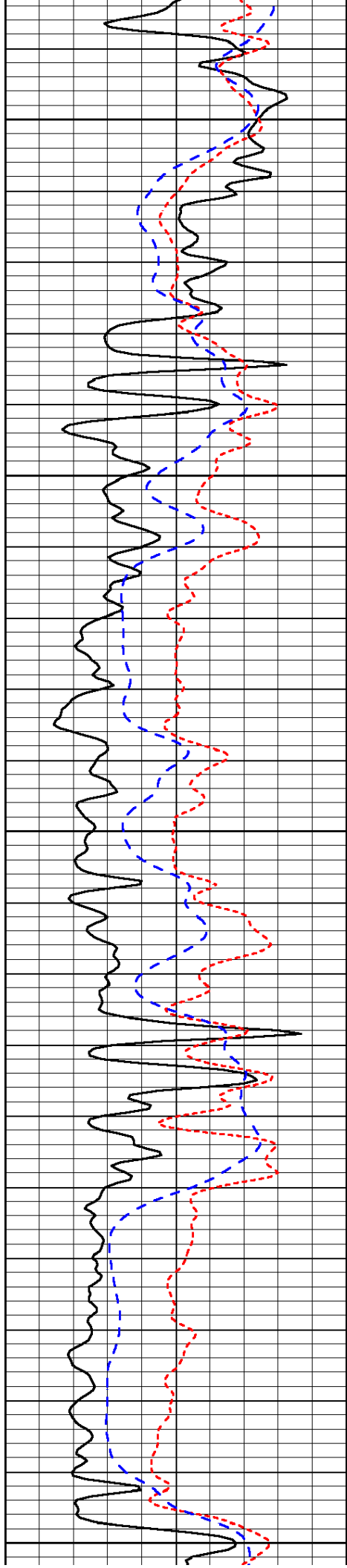


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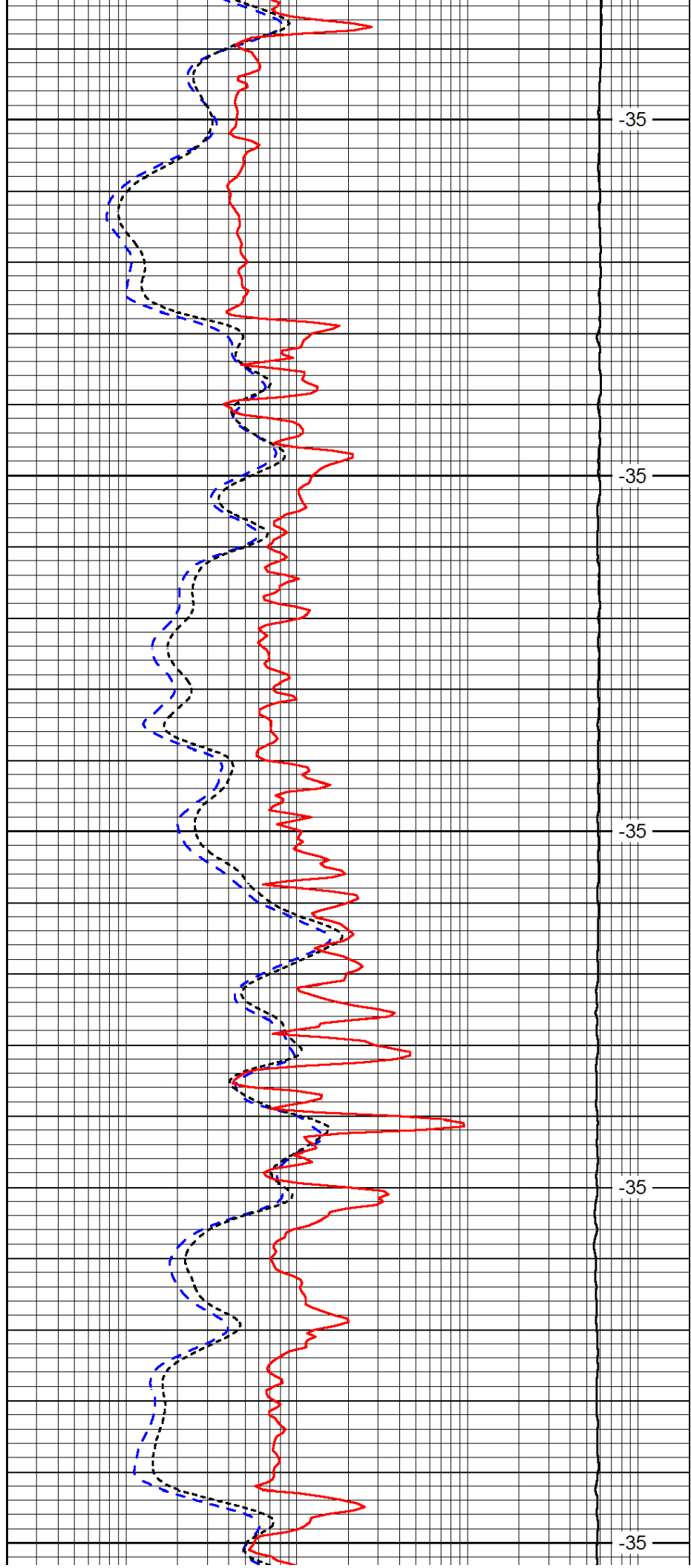
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2900

2950

3000

3050



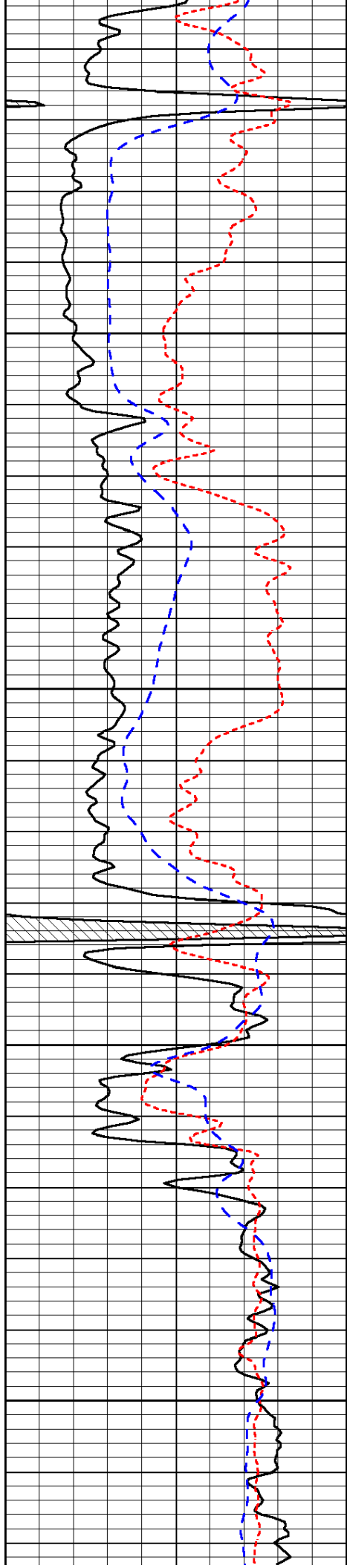
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-35

-35

-35

-35

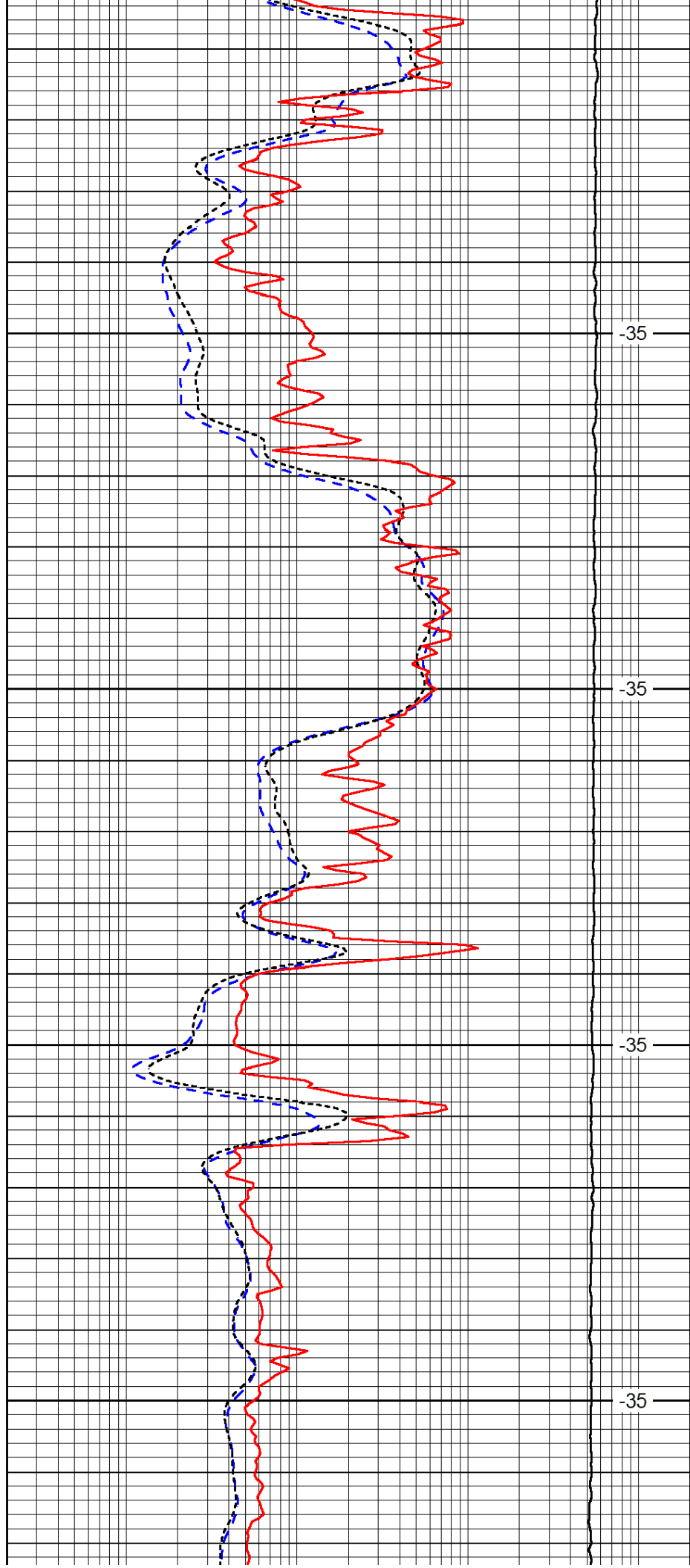


3100

3150

3200

3250

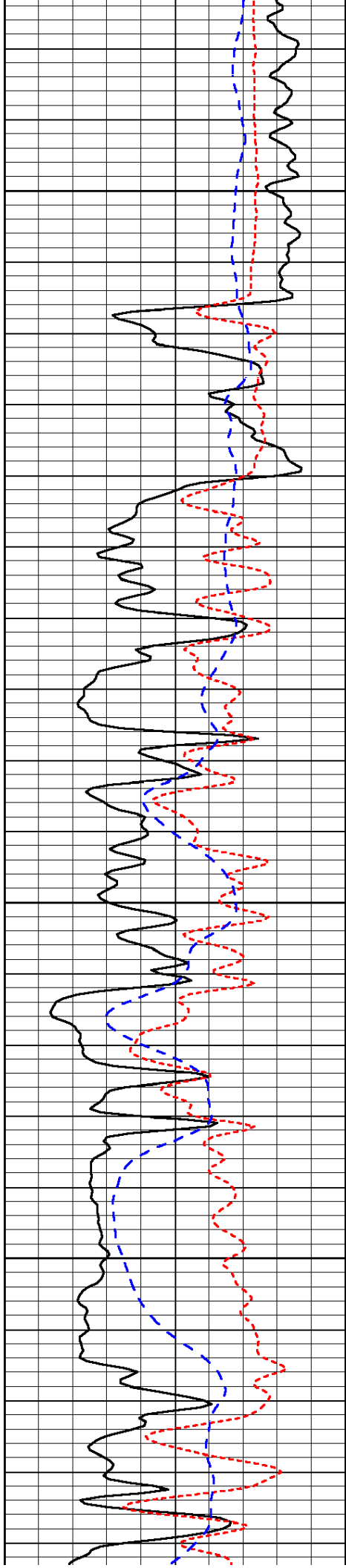


-35

-35

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-35

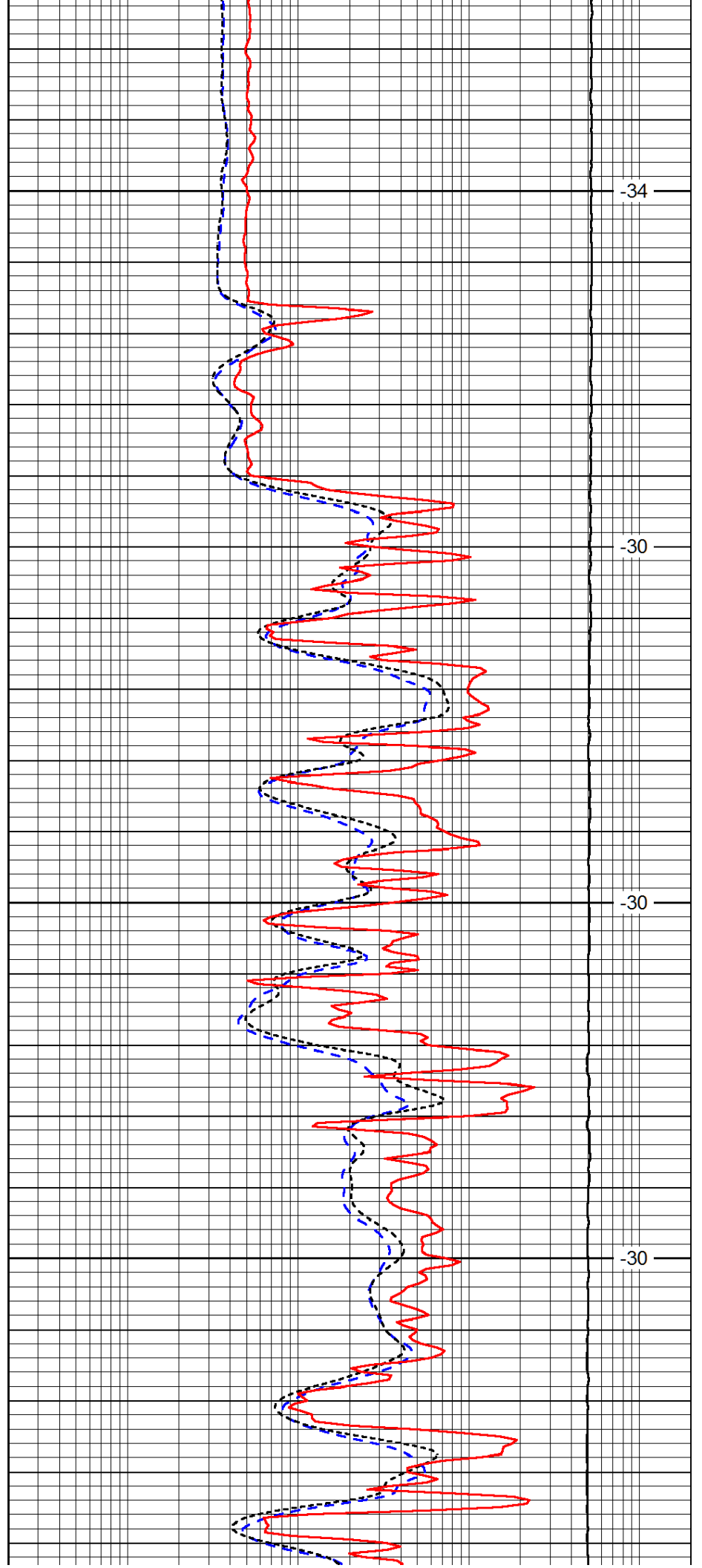


3300

3350

3400

3450

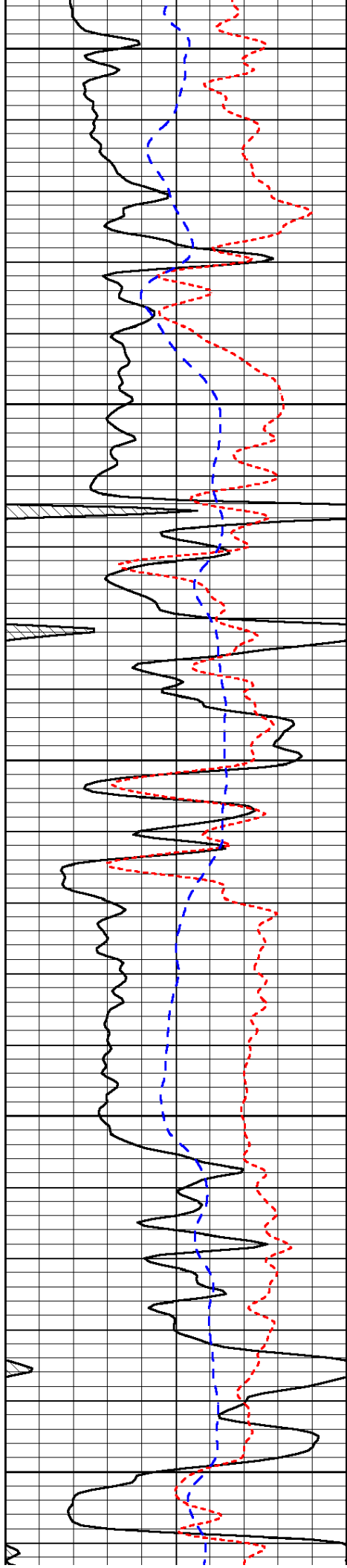


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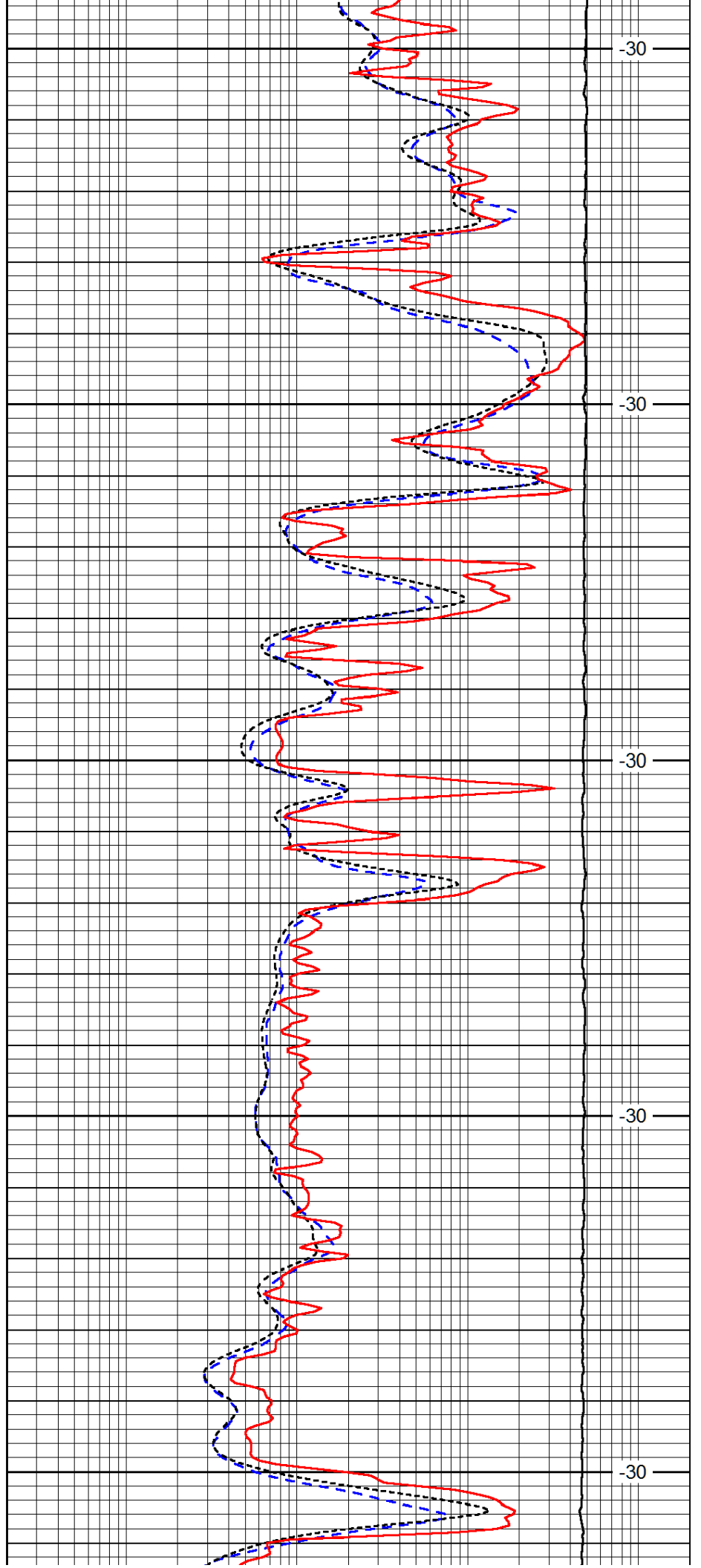
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3550

3600

3650

3700



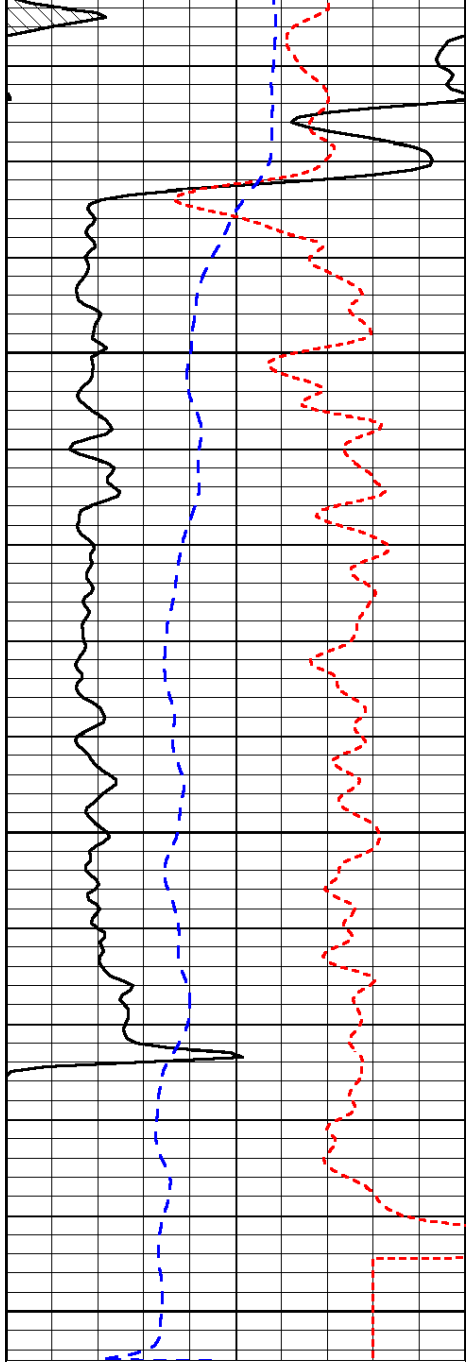
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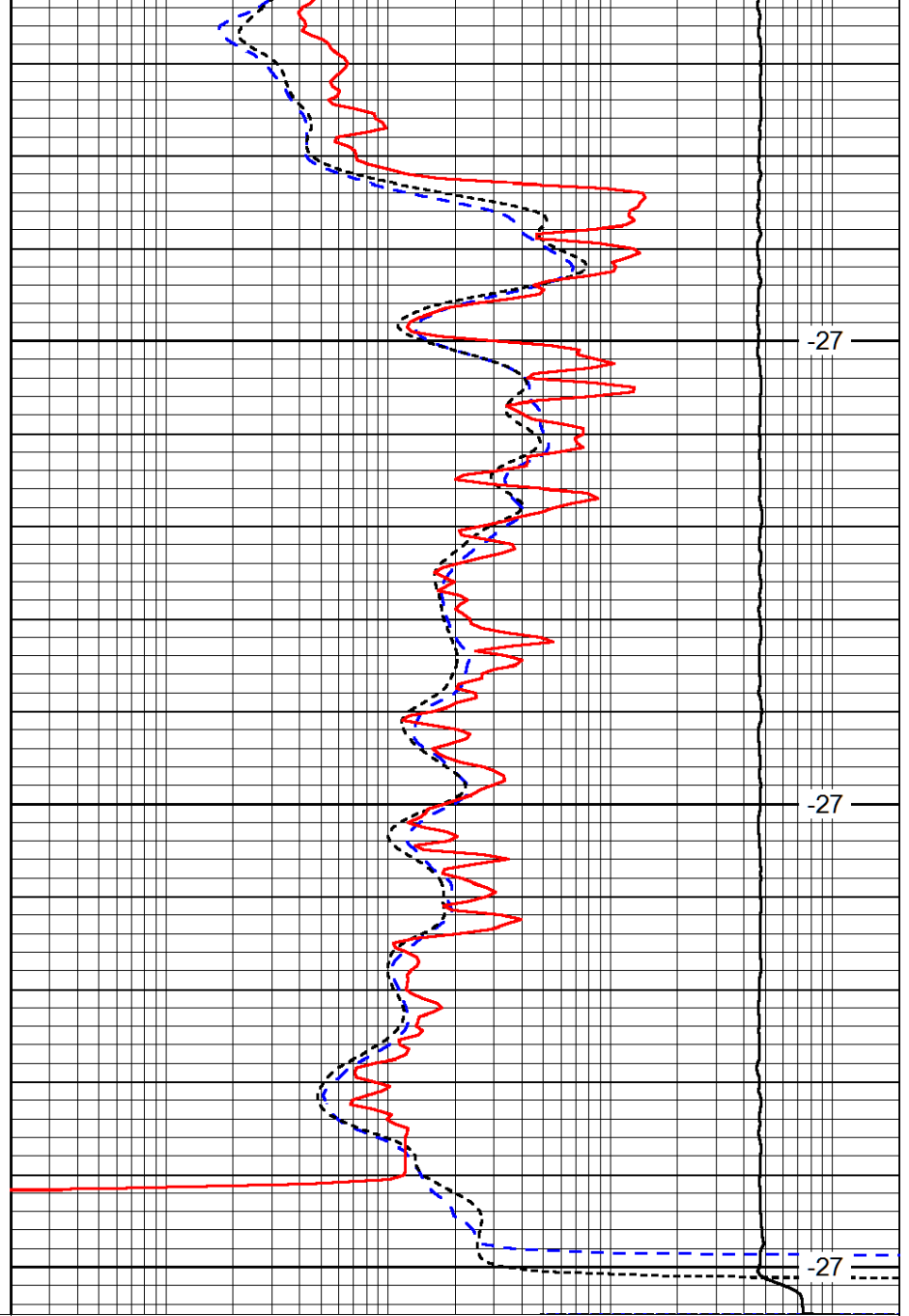


3750

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