



Pioneer Energy Services

Dual Induction Log

API No.

15-153-21033-00-00

Company Murfin Drilling Company, Inc.

Well Dan # 1-9

Field Wildcat

County Rawlins

State

Kansas

Location

330' FSL & 1650' FEL

Other Services
CNL/CDL
MEL/BHCS

Sec: 9

Twp: 1 S

Rge: 35 W

Elevation

K.B. 3173
D.F.
G.L. 3162

Permanent Datum Ground Level

Elevation 3162

Log Measured From Kelly Bushing

11 Ft. Above Perm. Datum

K.B. 3173
D.F.
G.L. 3162

Drilling Measured From Kelly Bushing

11 Ft. Above Perm. Datum

K.B. 3173
D.F.
G.L. 3162

Date 07-17-2014

Run Number One

Depth Driller 4472

Depth Logger 4478

Bottom Logged Interval 4477

Top Log Interval 0

Casing Driller 8.625 @ 263

Casing Logger 265

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 600

Density / Viscosity 9.1 58

pH / Fluid Loss 10.0 8.8

Source of Sample Flowline

Rm @ Meas. Temp 0.90 @ 68

Rmf @ Meas. Temp 0.68 @ 68

Rmc @ Meas. Temp 1.12 @ 68

Source of Rmf / Rmc Charts

Rm @ BHT 0.51 @ 121

Operating Rig Time 5 Hours

Max Rec. Temp. F 121

Equipment Number 17

Location Hays

Recorded By Y. Ruiz

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

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(785) 625-3858

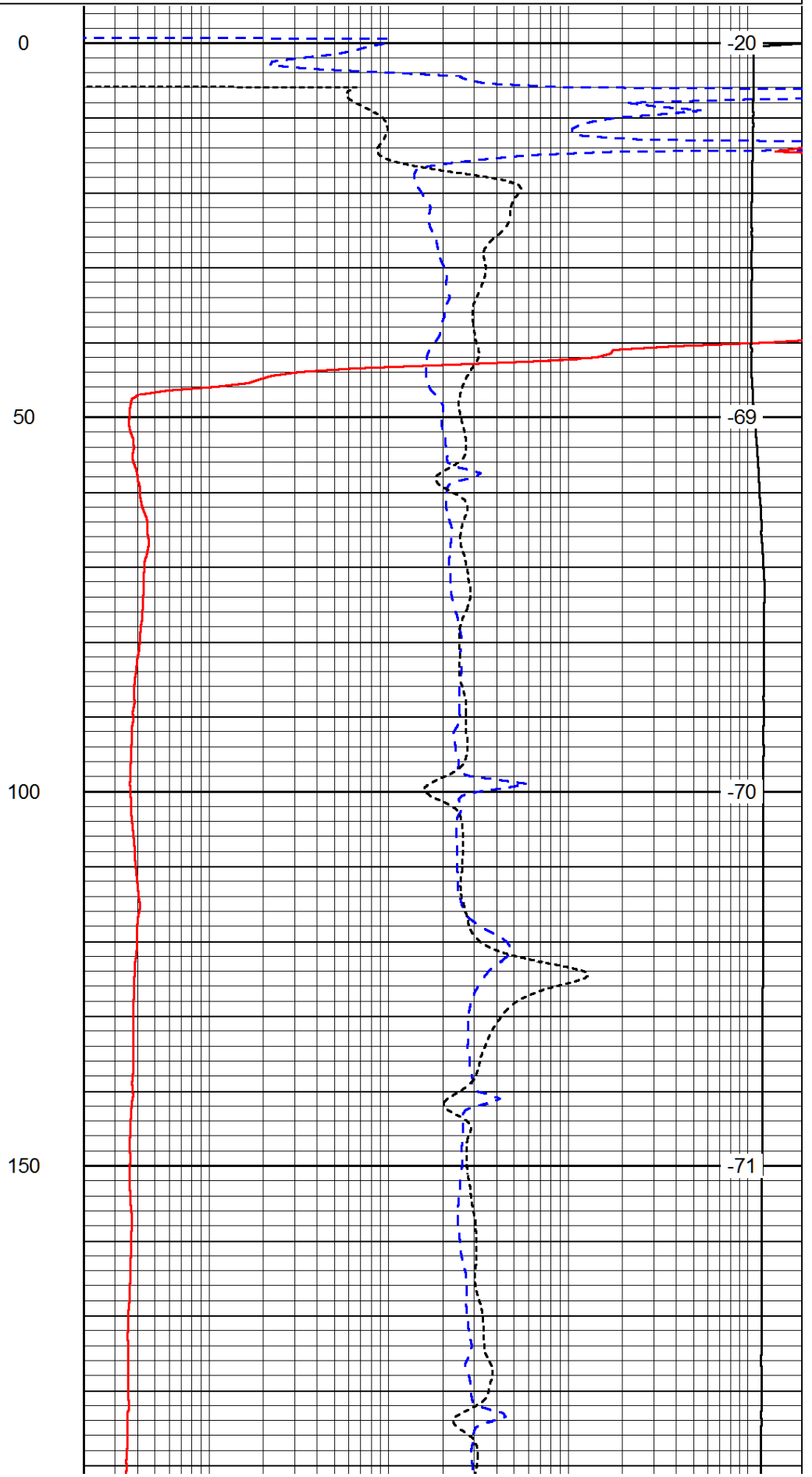
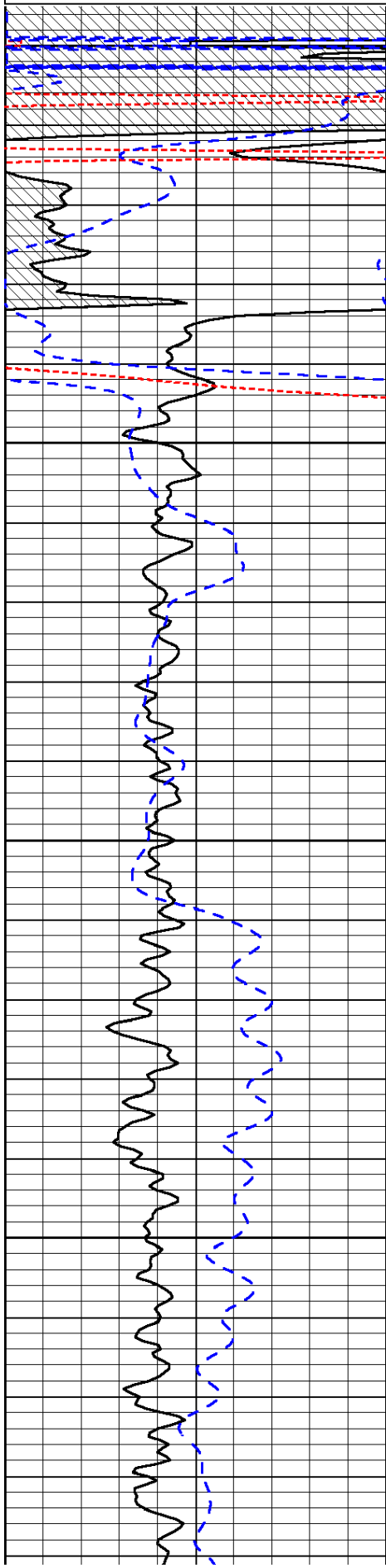
Beardsley,
North to CC rd, 1/4 West,
North into

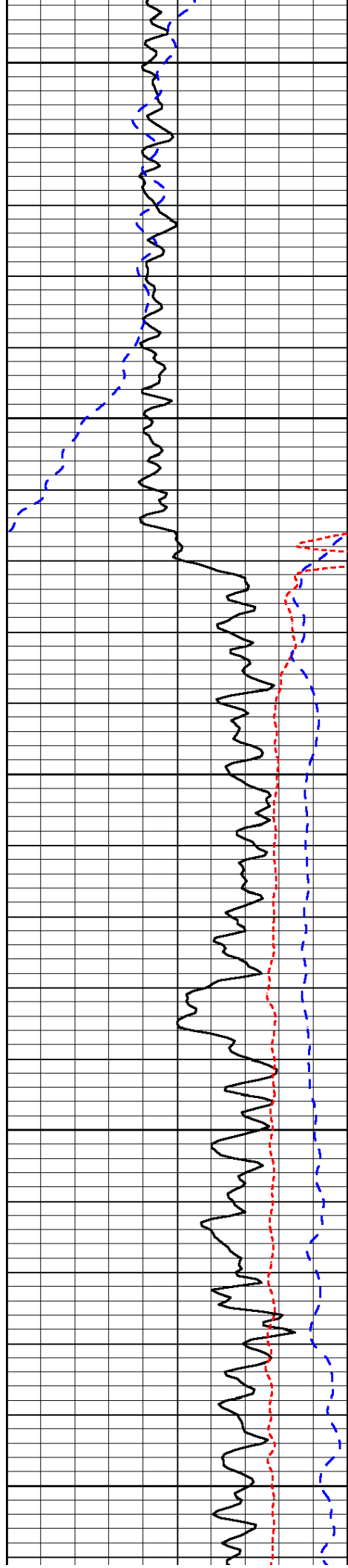
Database File: murfin_dan_1_9_hd.db
Dataset Pathname: DIL/murstk
Presentation Format: dil
Dataset Creation: Thu Jul 17 22:37:11 2014
Charted by: Depth in Feet scaled 1:240

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





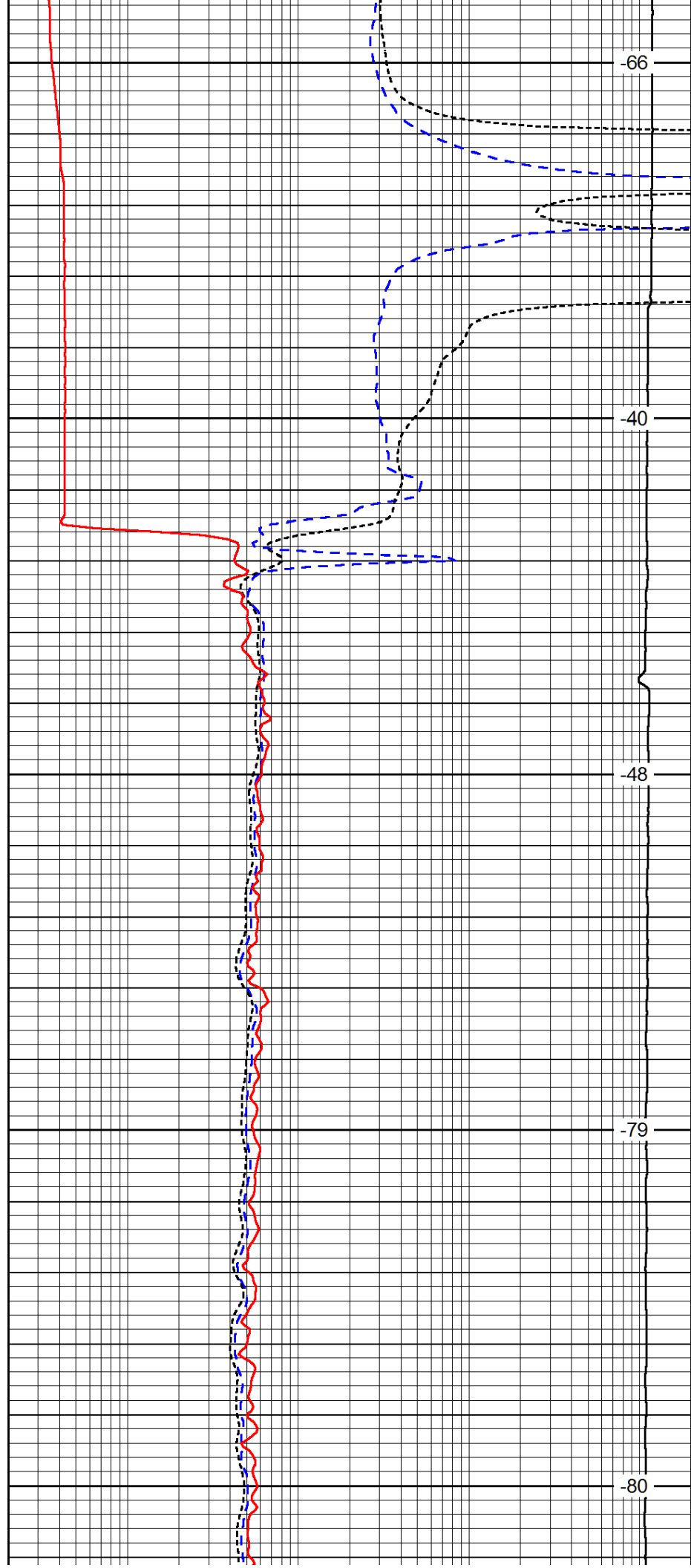
200

250

300

350

400



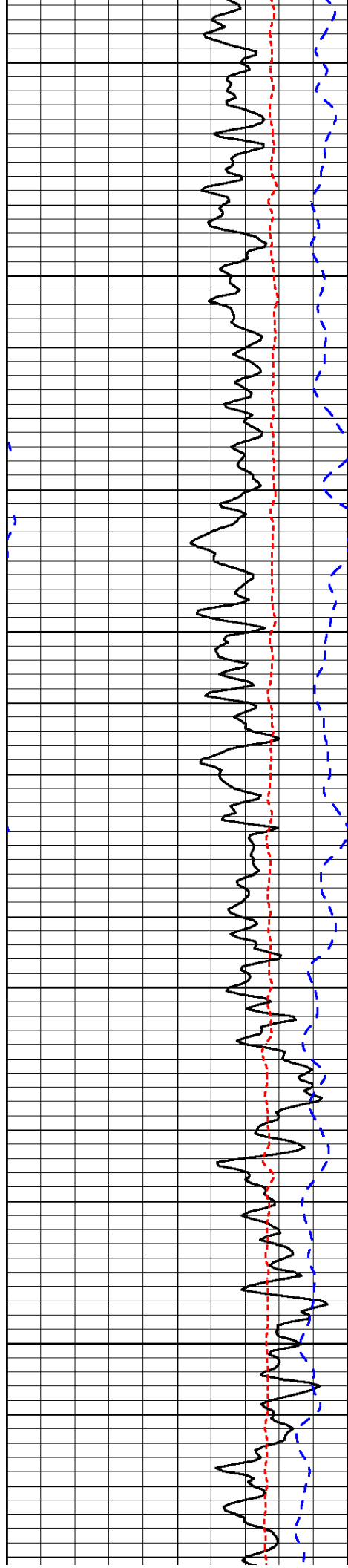
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-40

-48

-79

-80

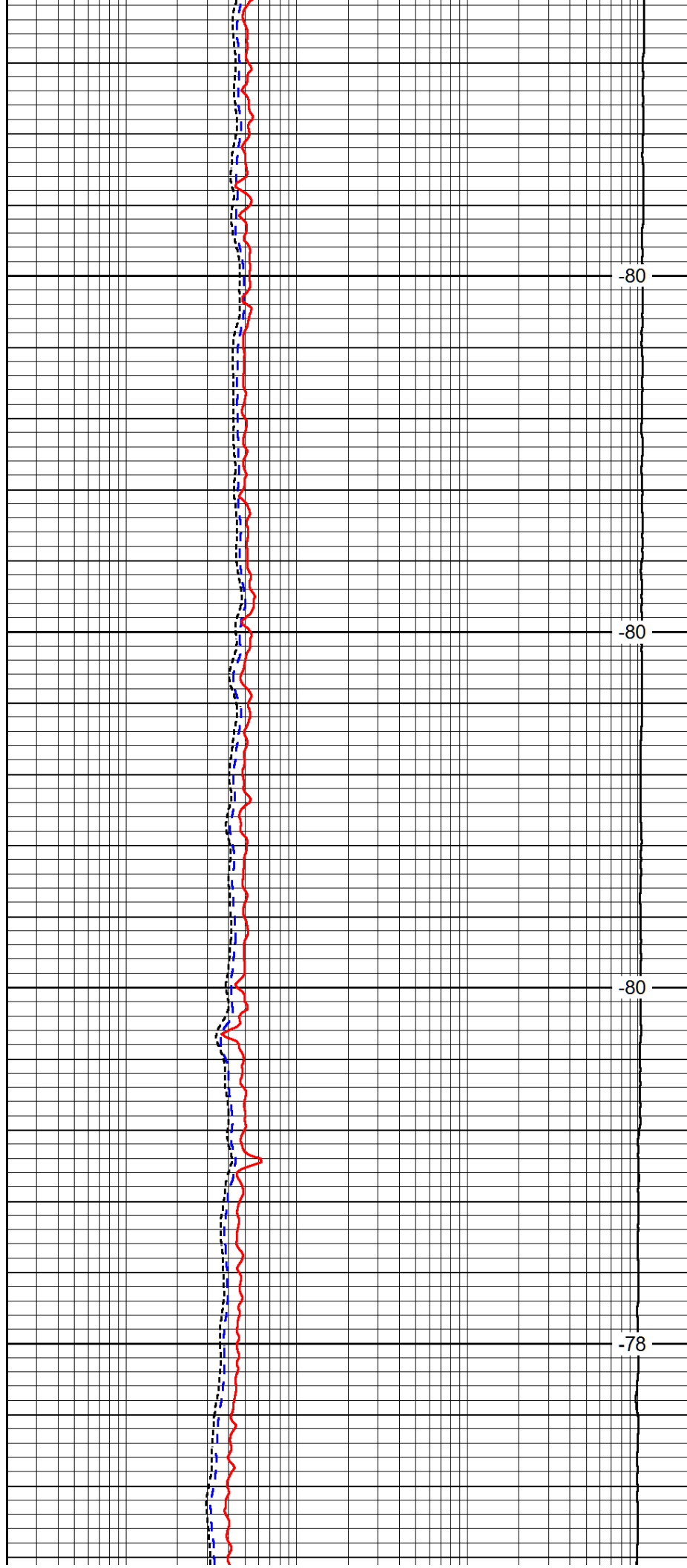


450

500

550

600

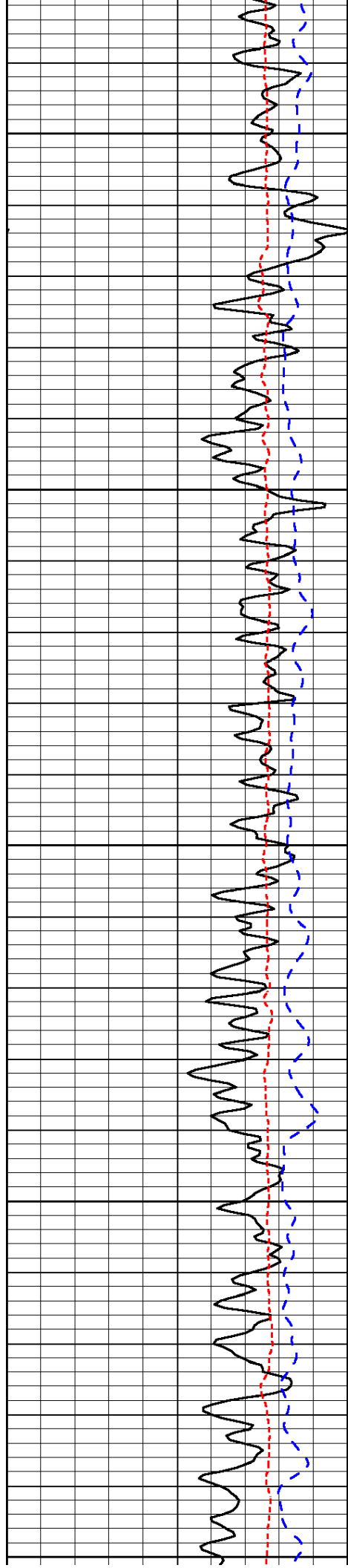


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-80

-80

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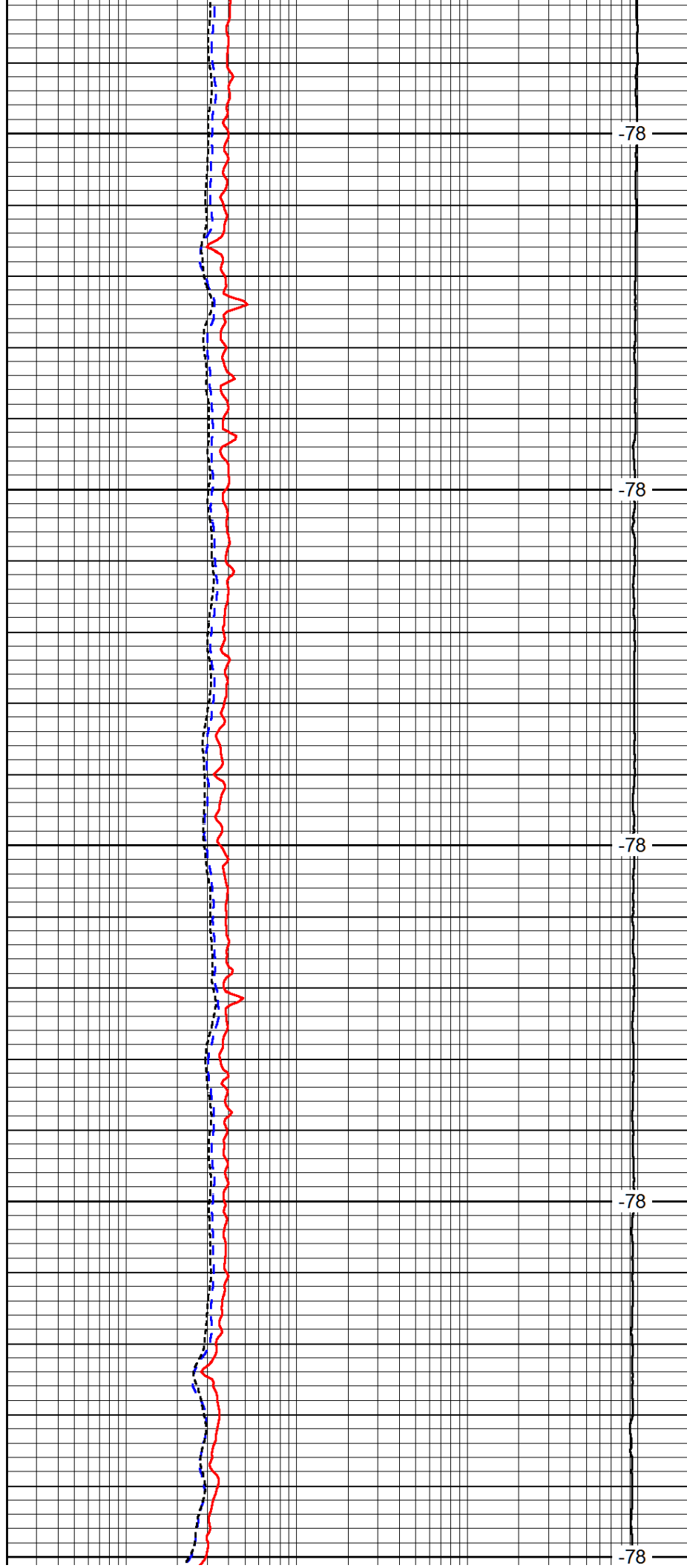
650

700

750

800

850



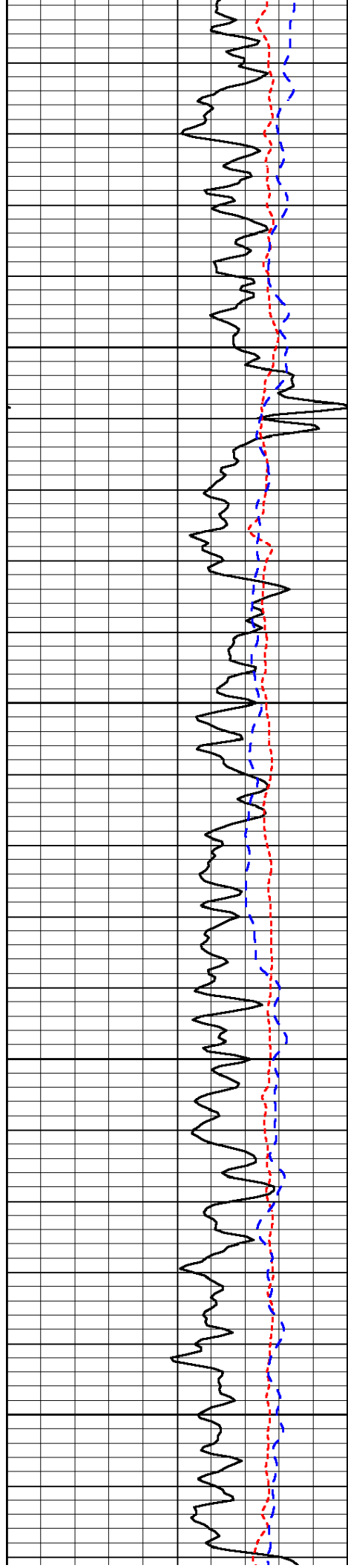
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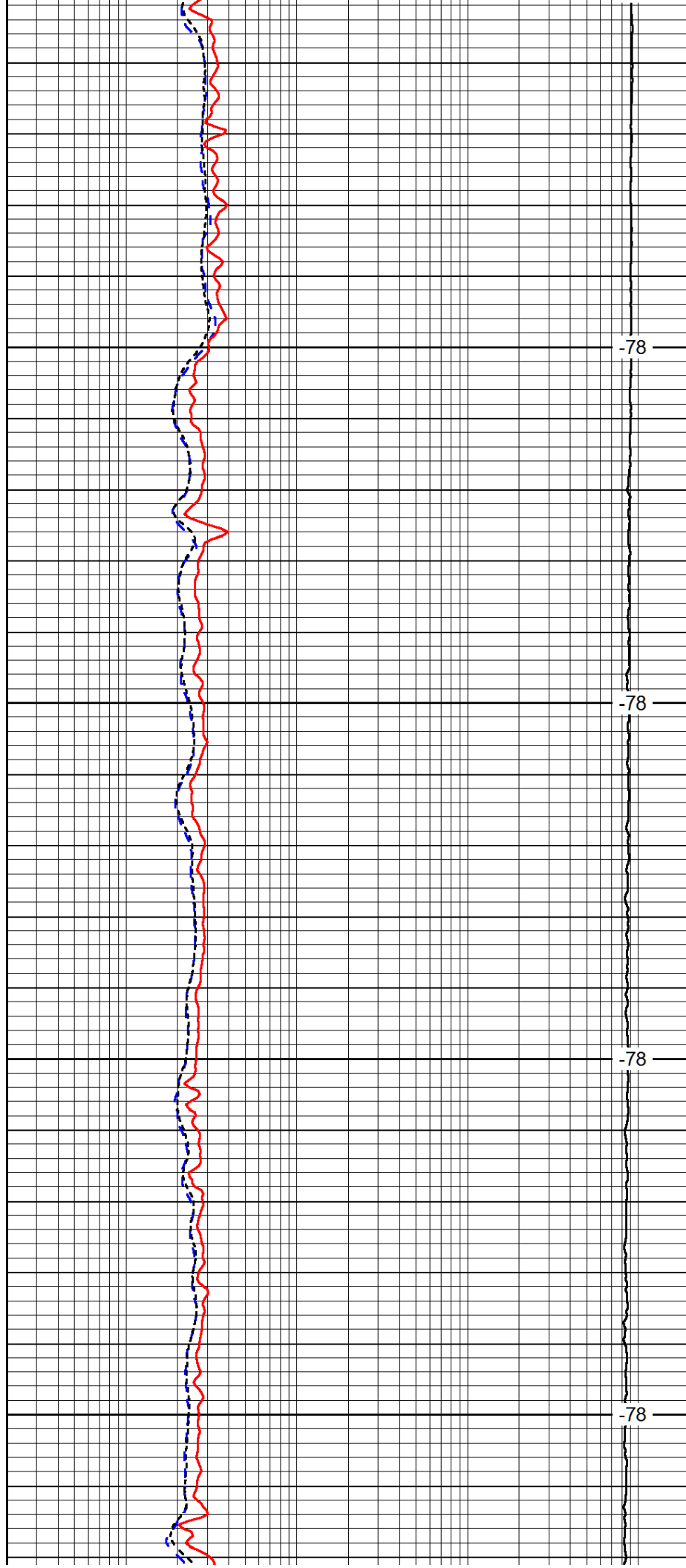


900

950

1000

1050

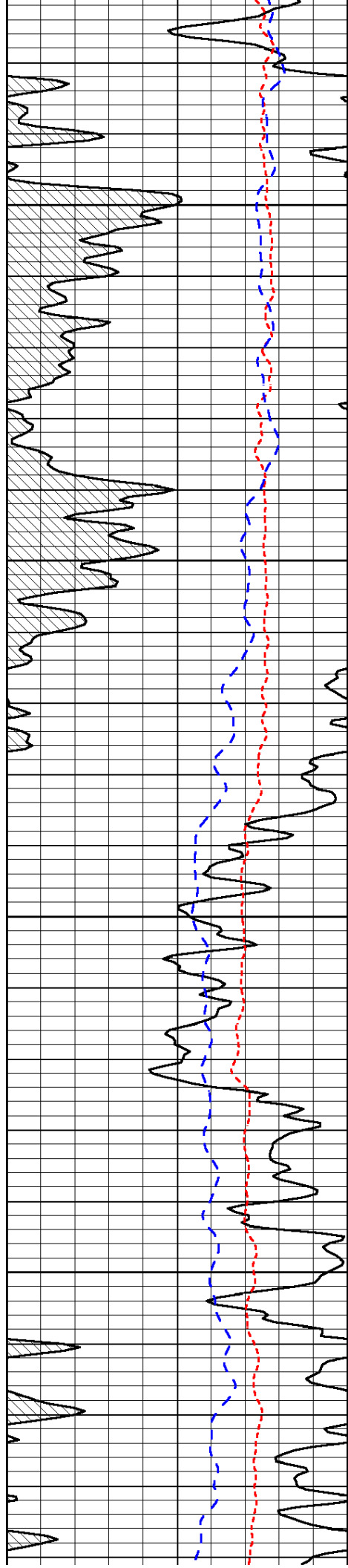


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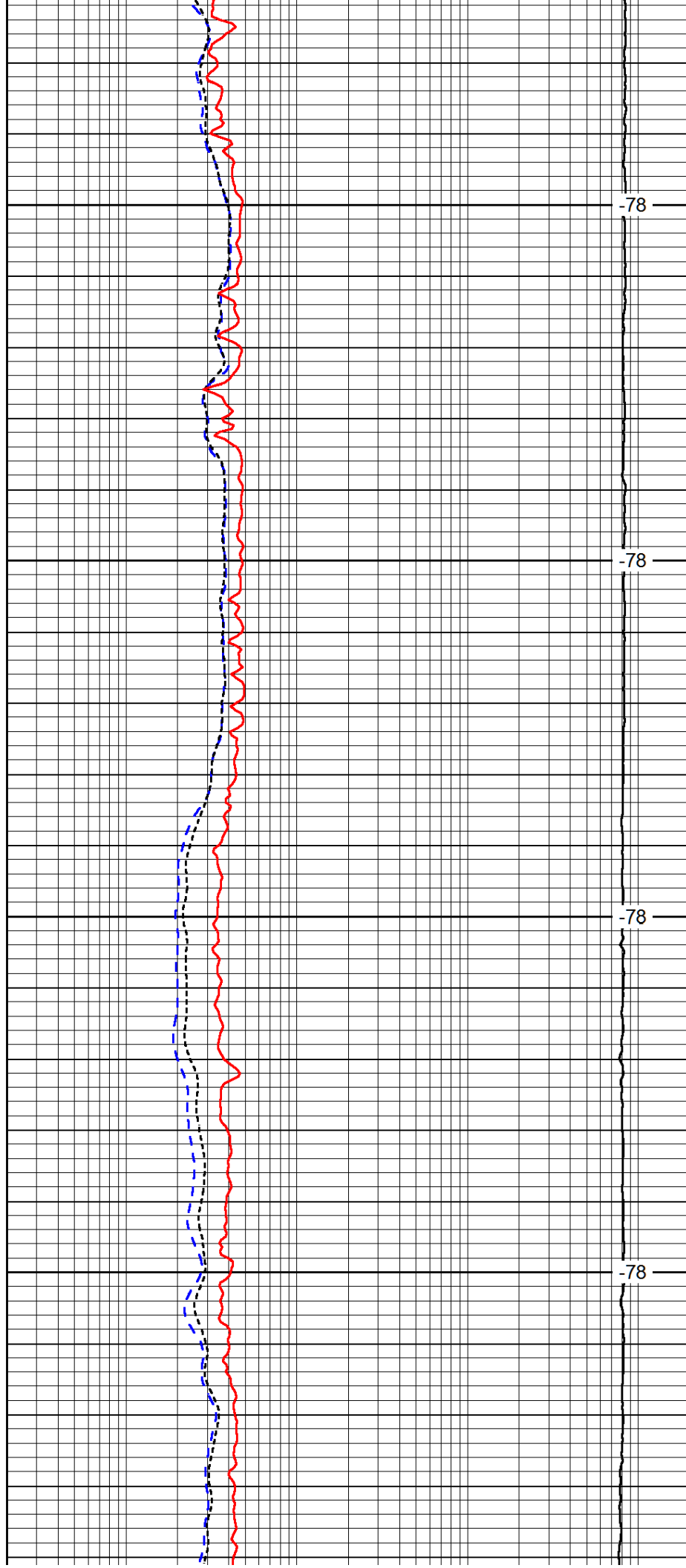


1100

1150

1200

1250

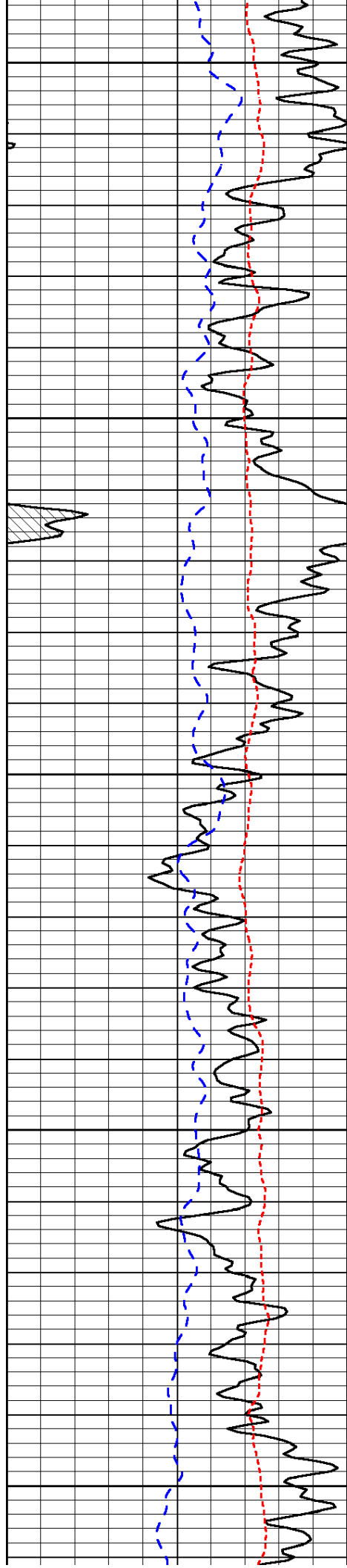


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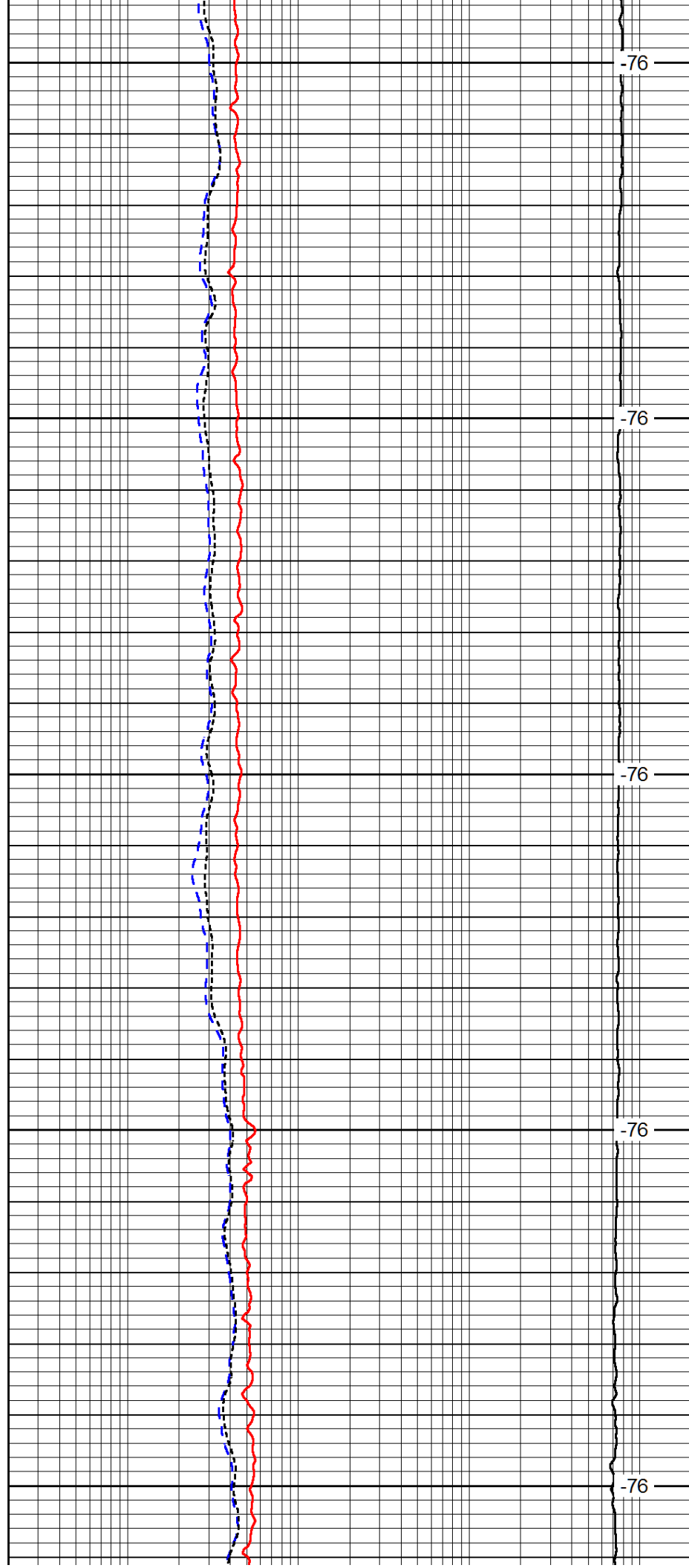
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1350

1400

1450

1500



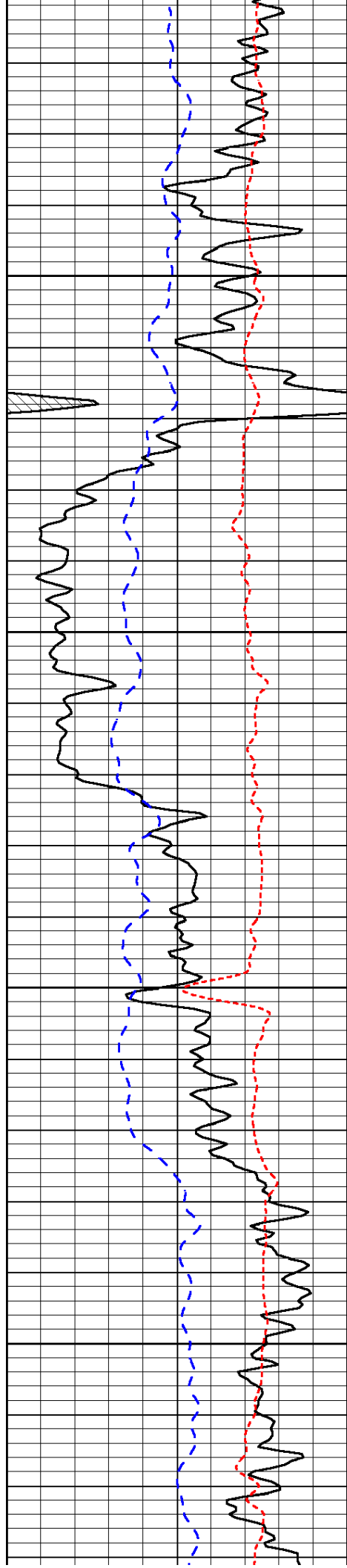
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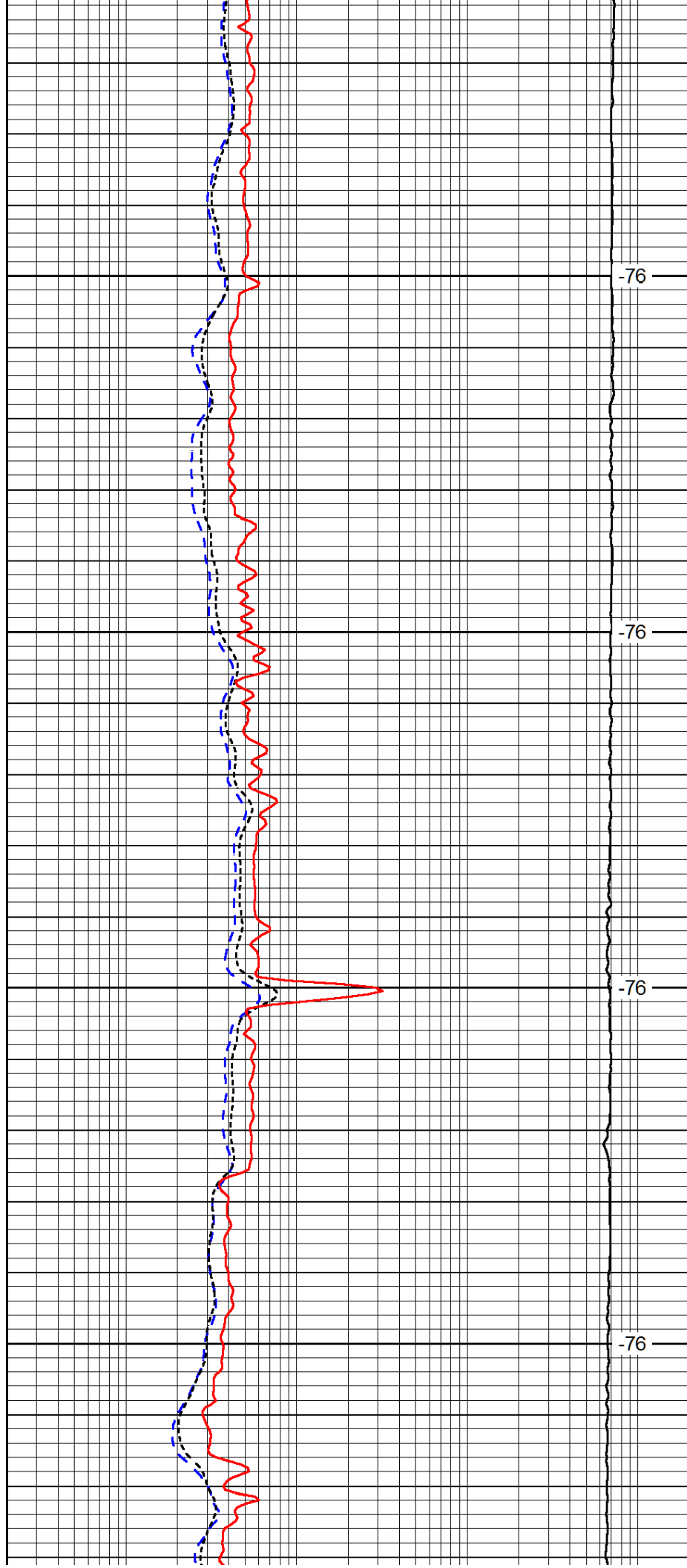


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1600

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1700

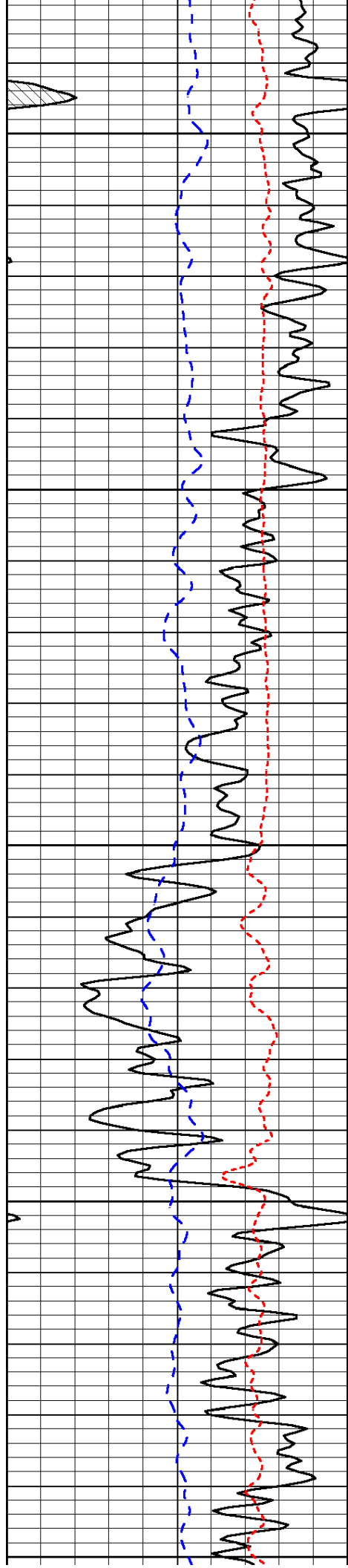


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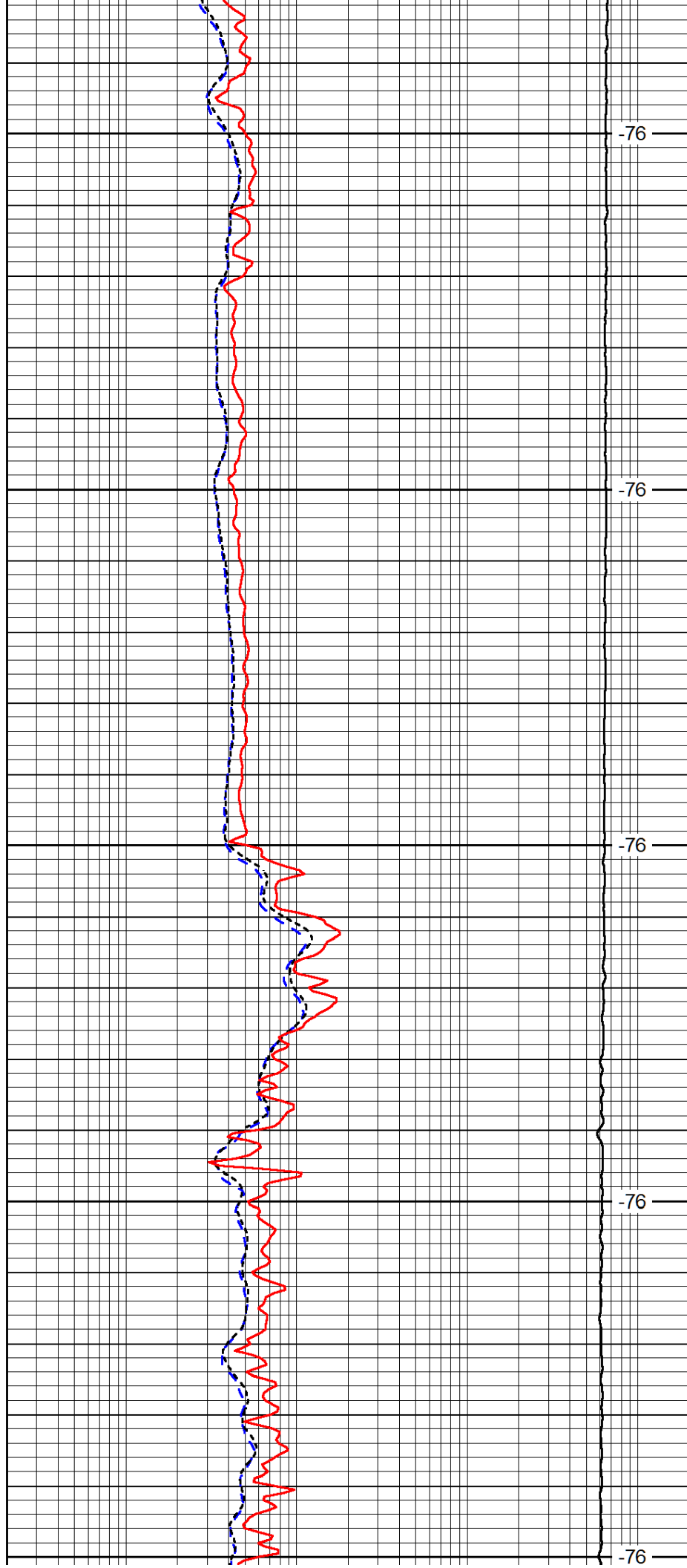
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1800

1850

1900

1950



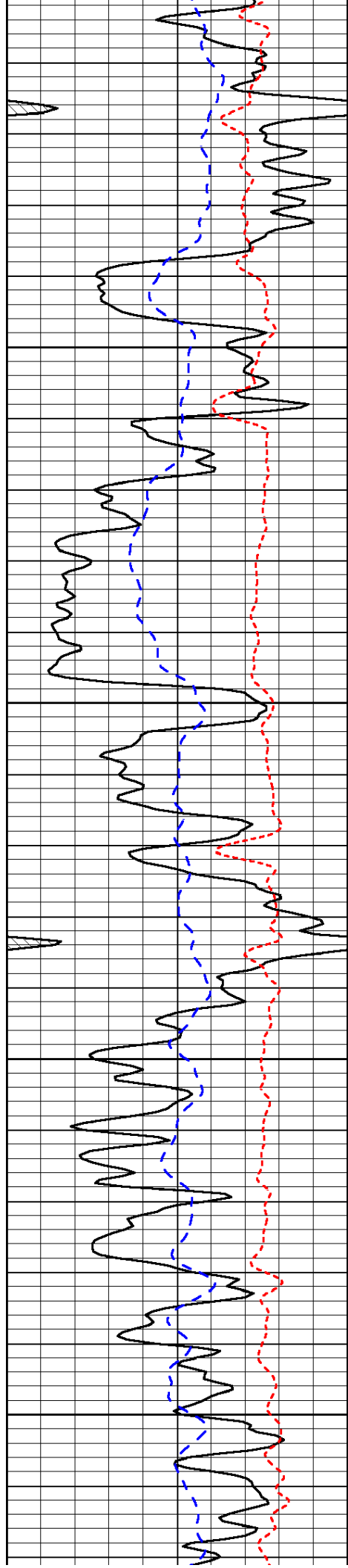
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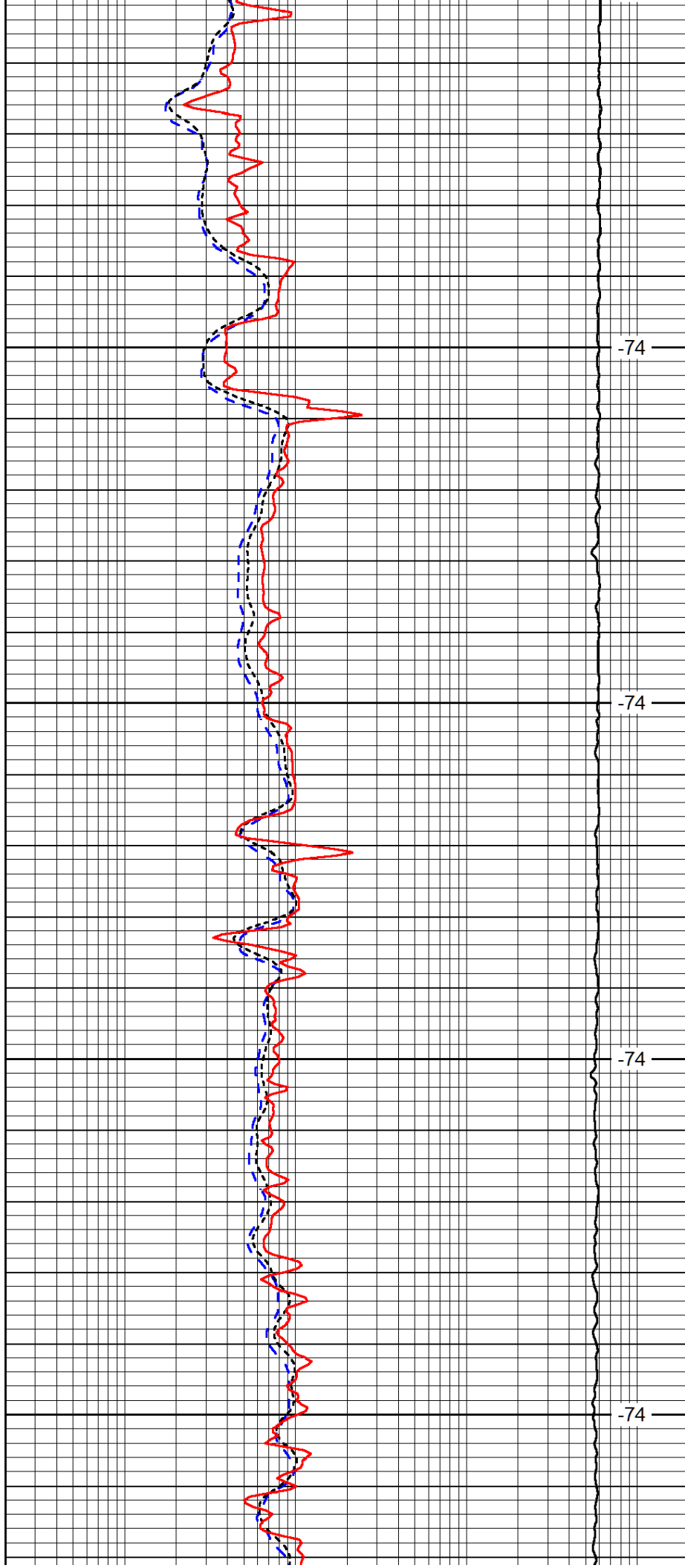


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2050

2100

2150

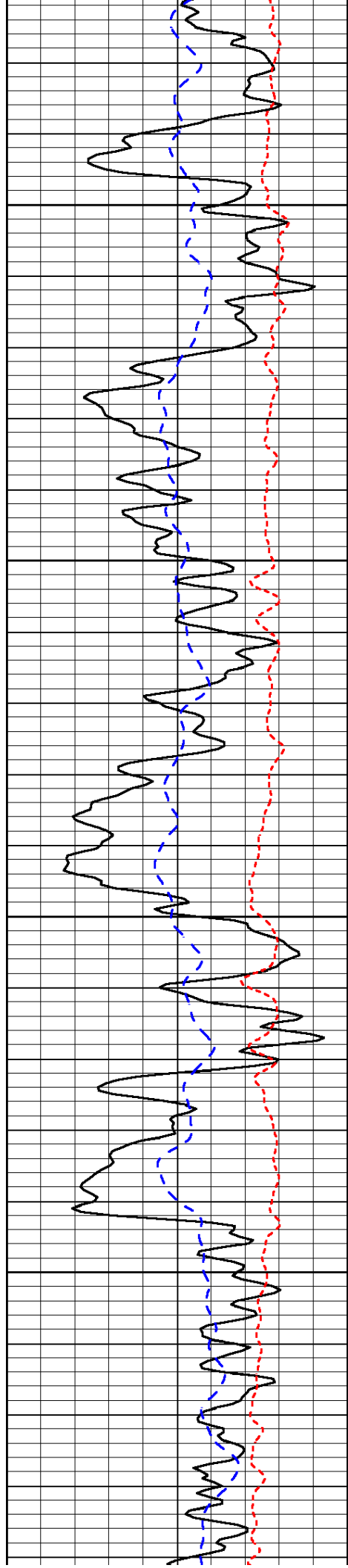


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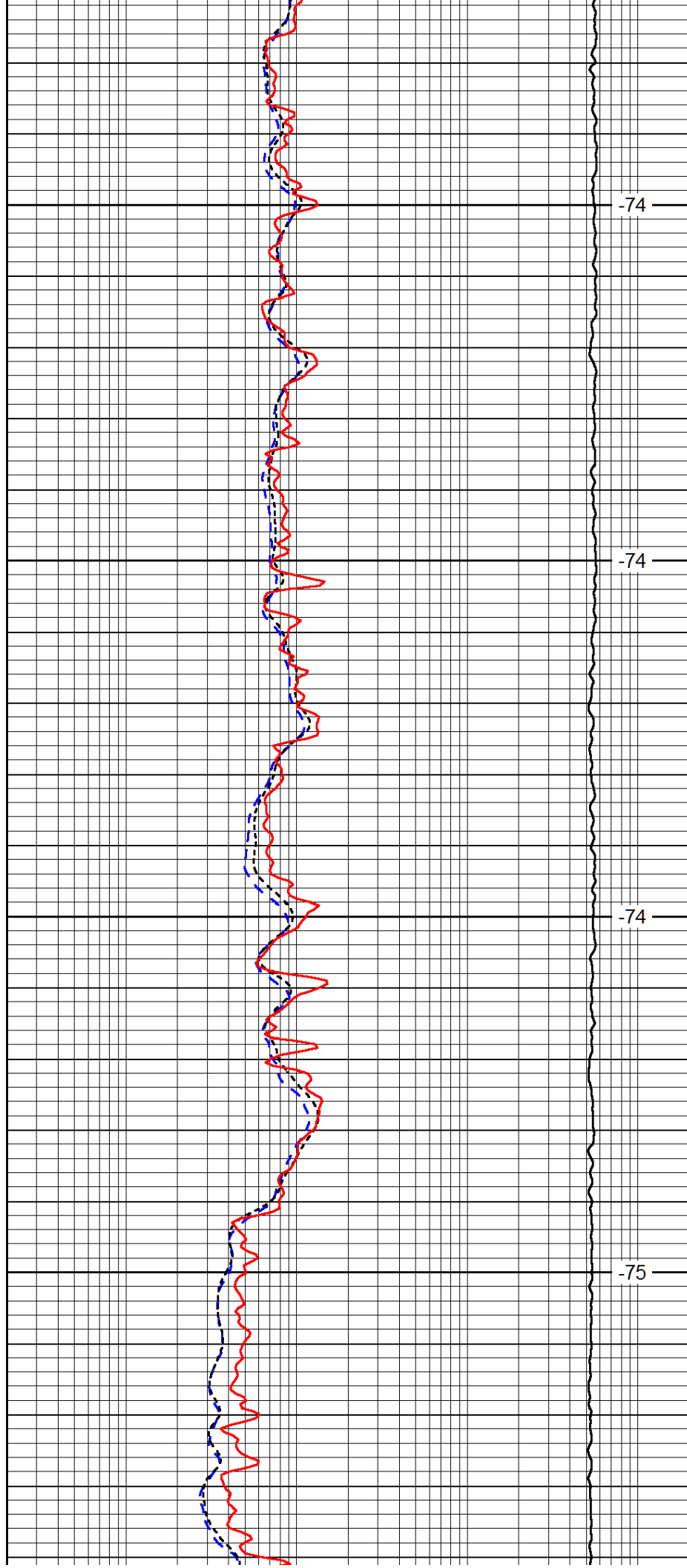


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2250

2300

2350

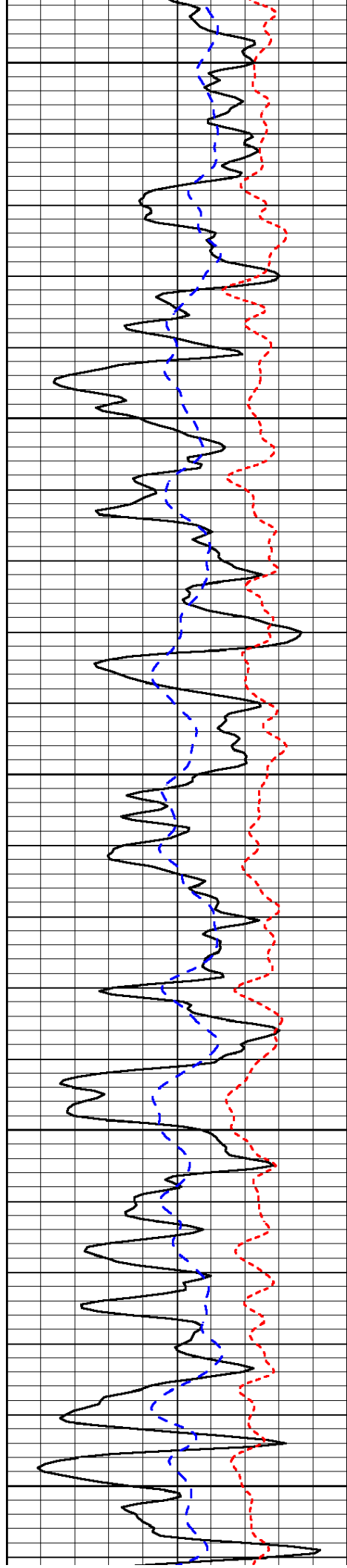


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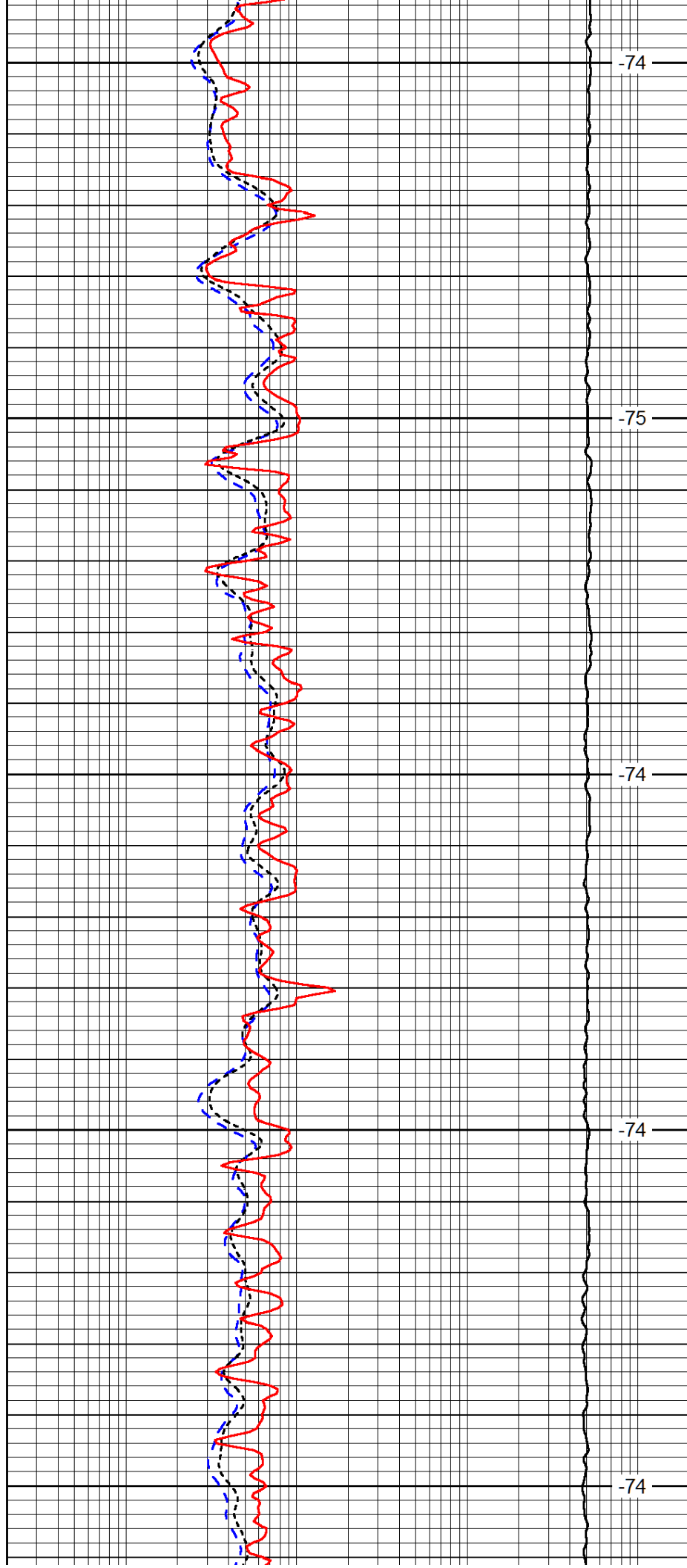
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2450

2500

2550

2600



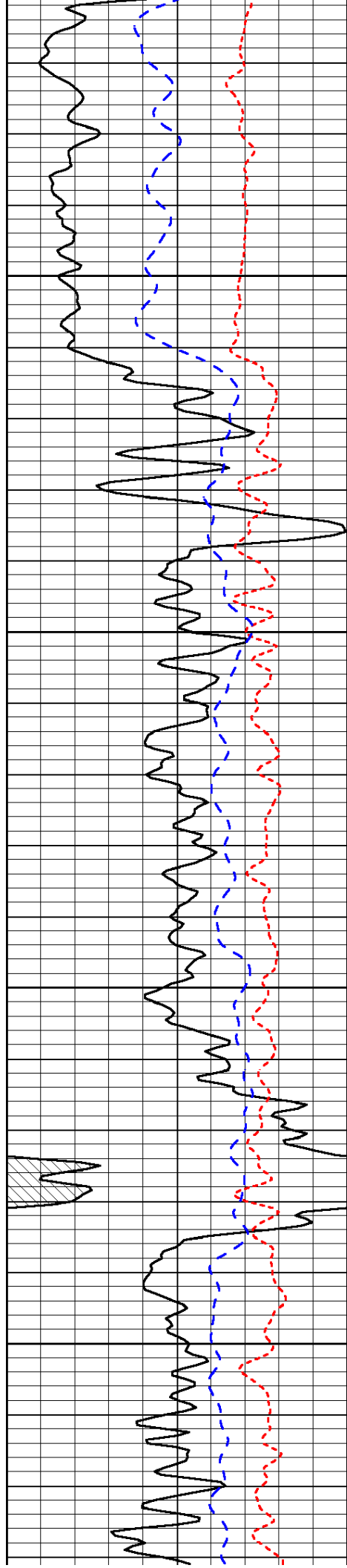
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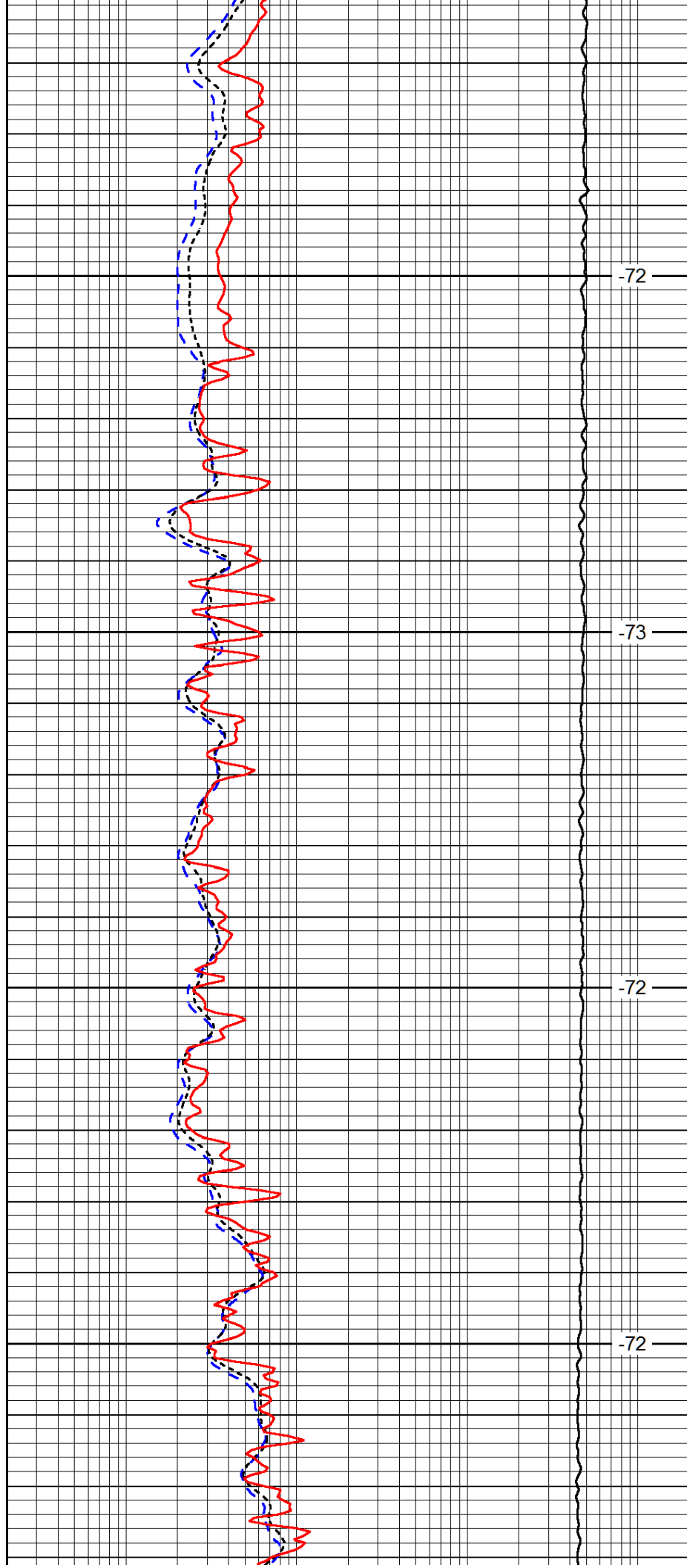


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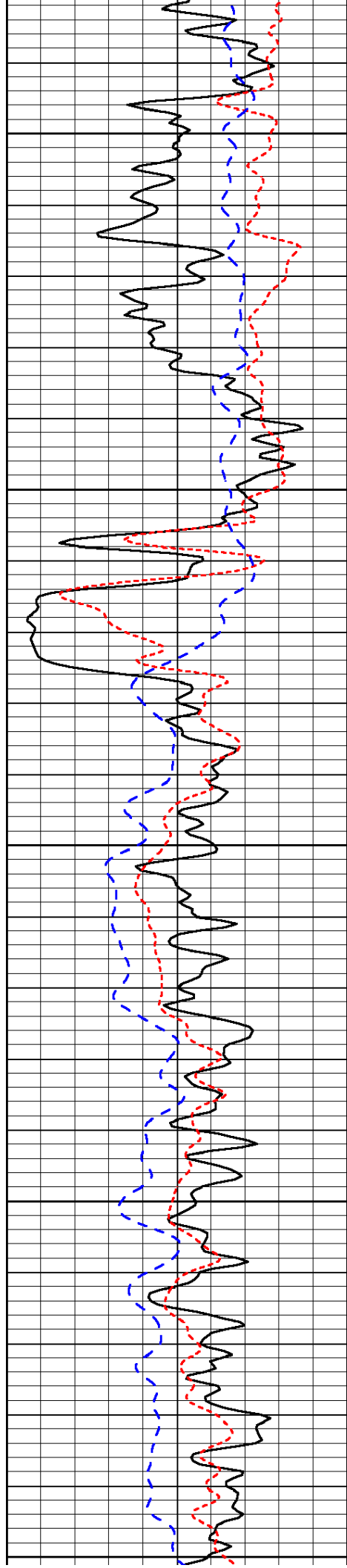


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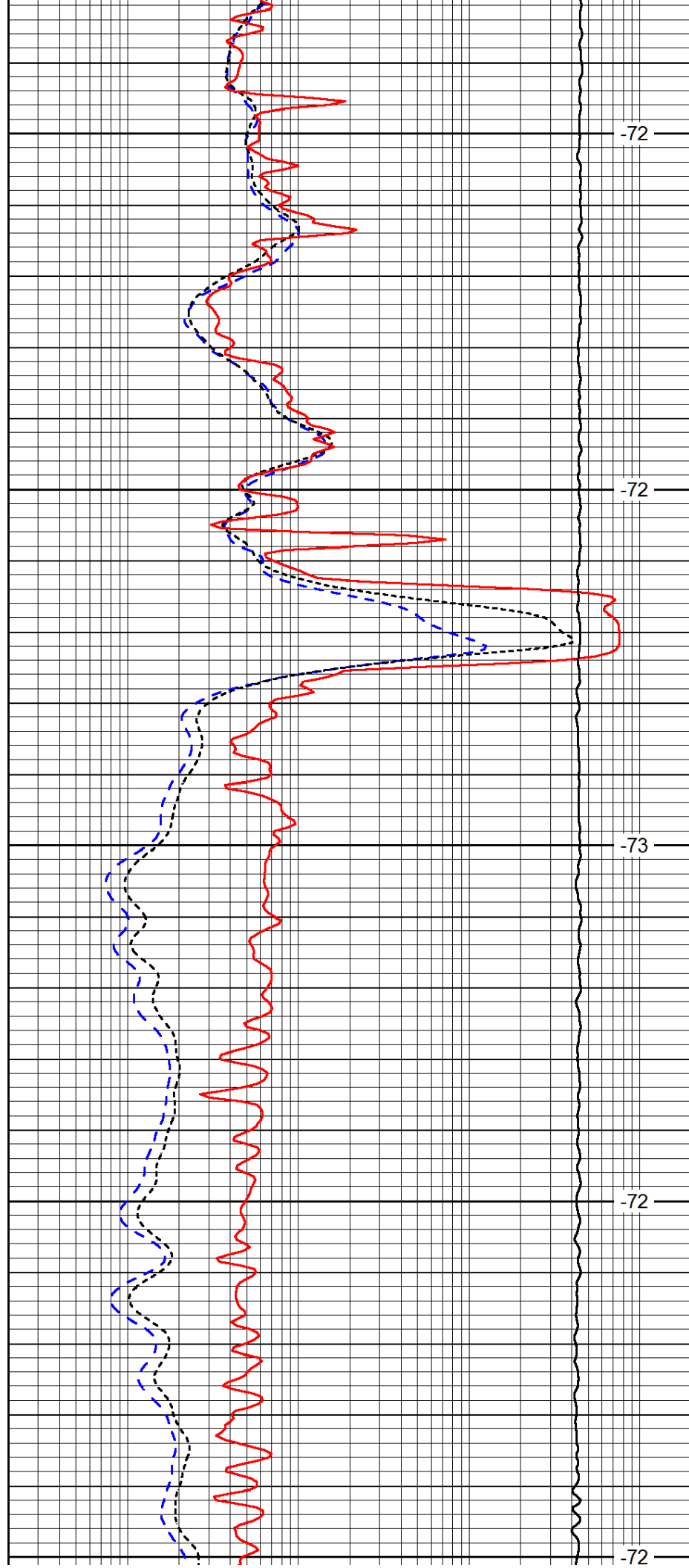
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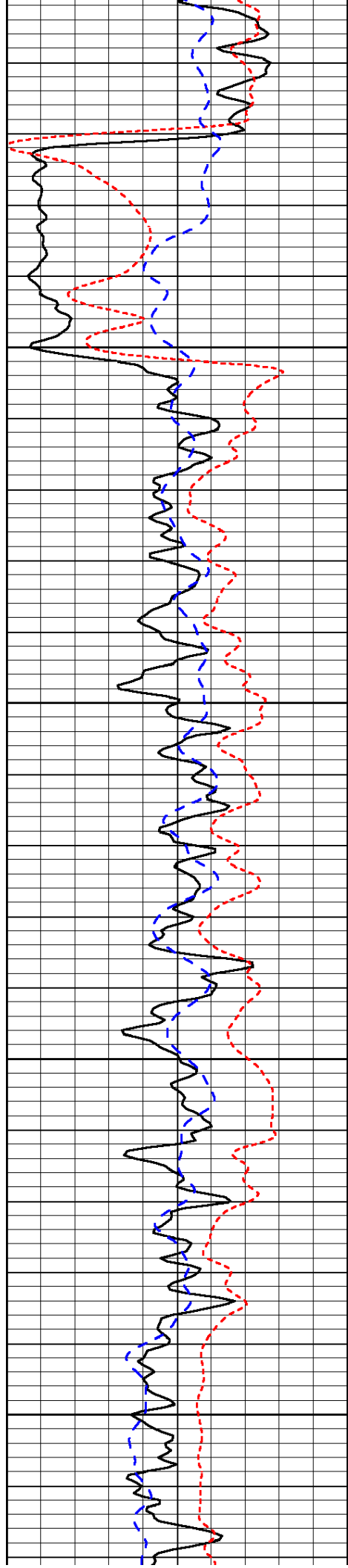
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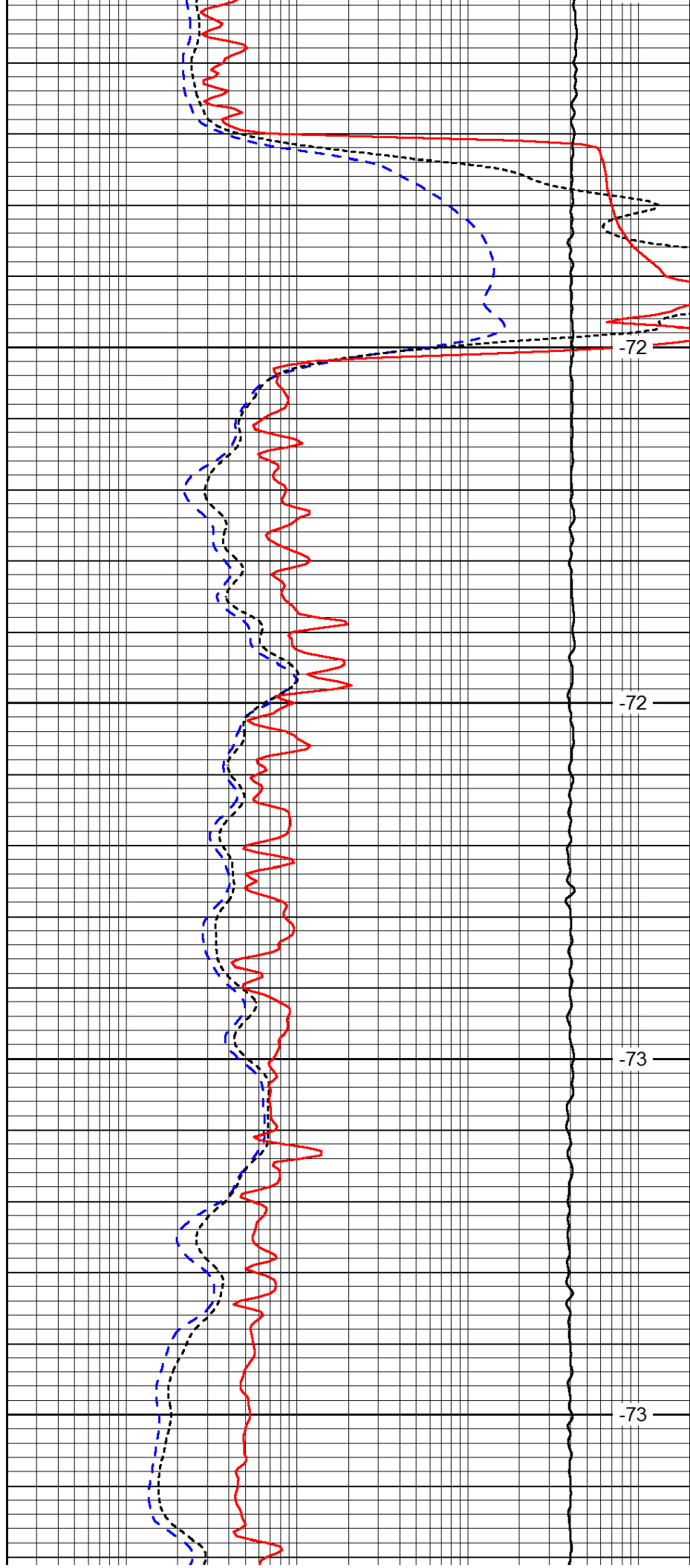


3100

3150

3200

3250

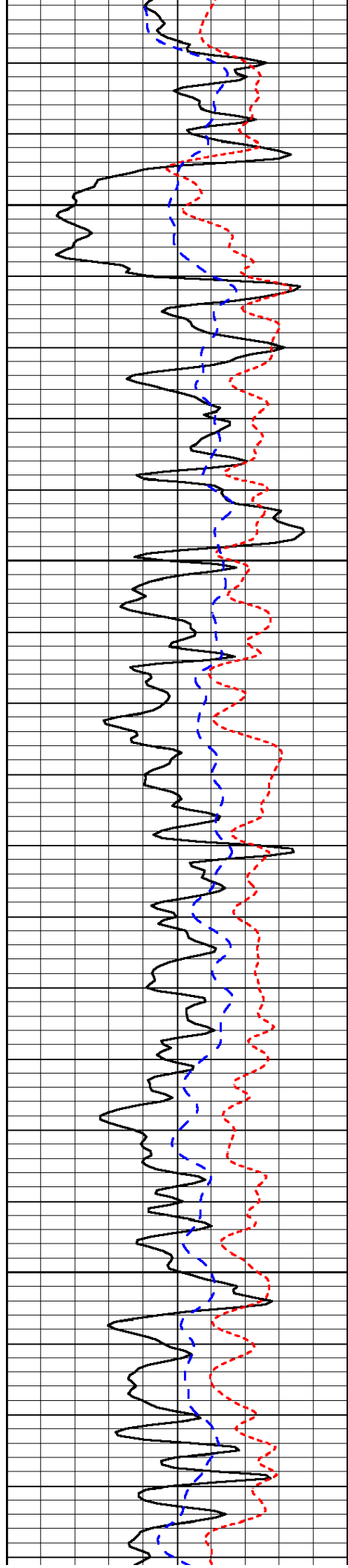


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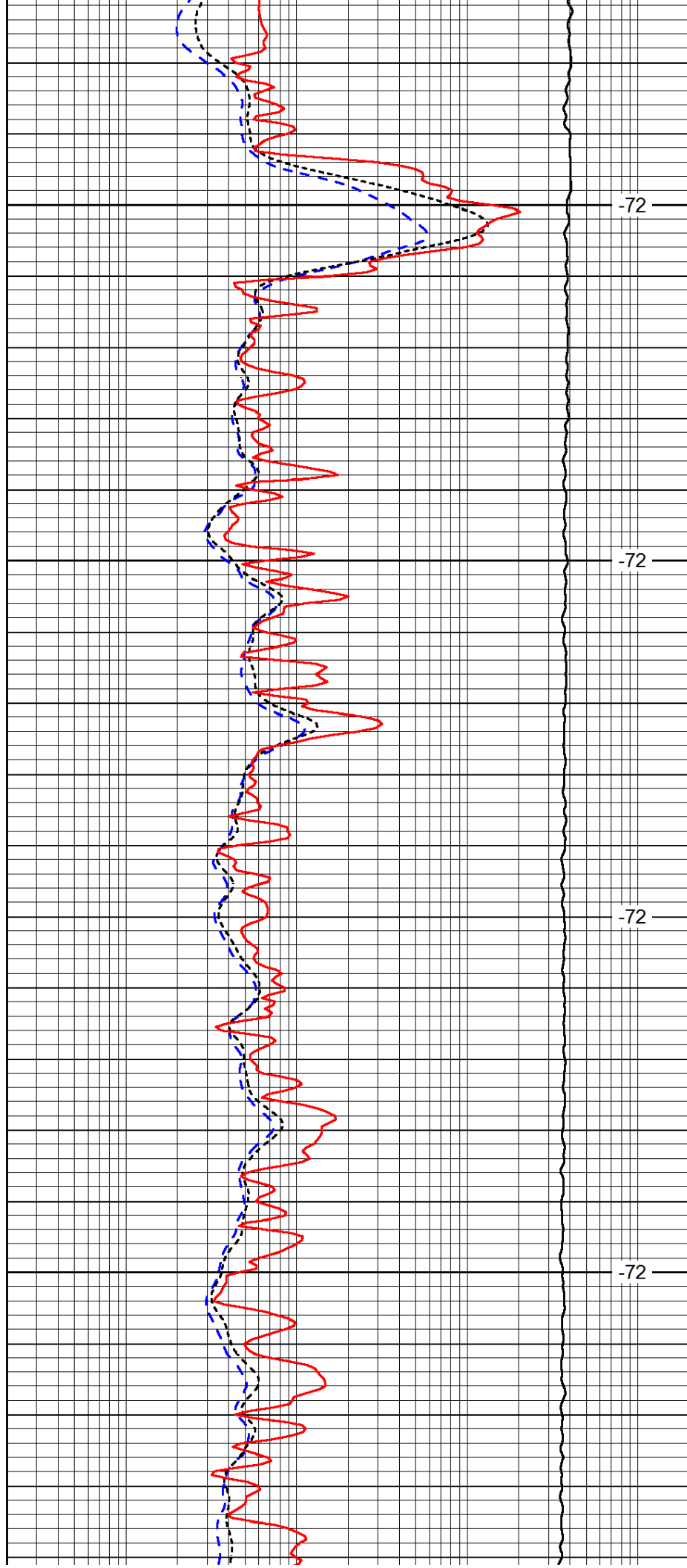


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3400

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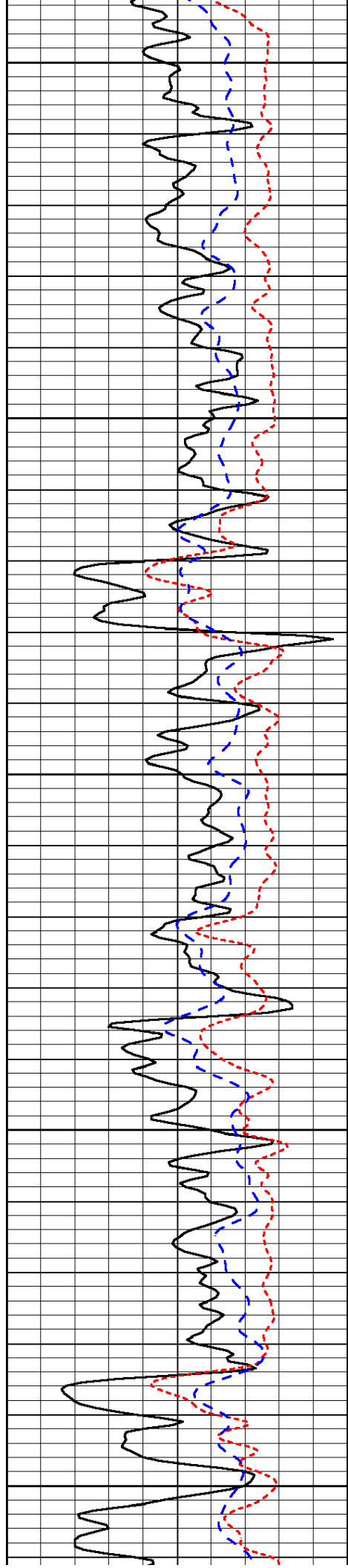


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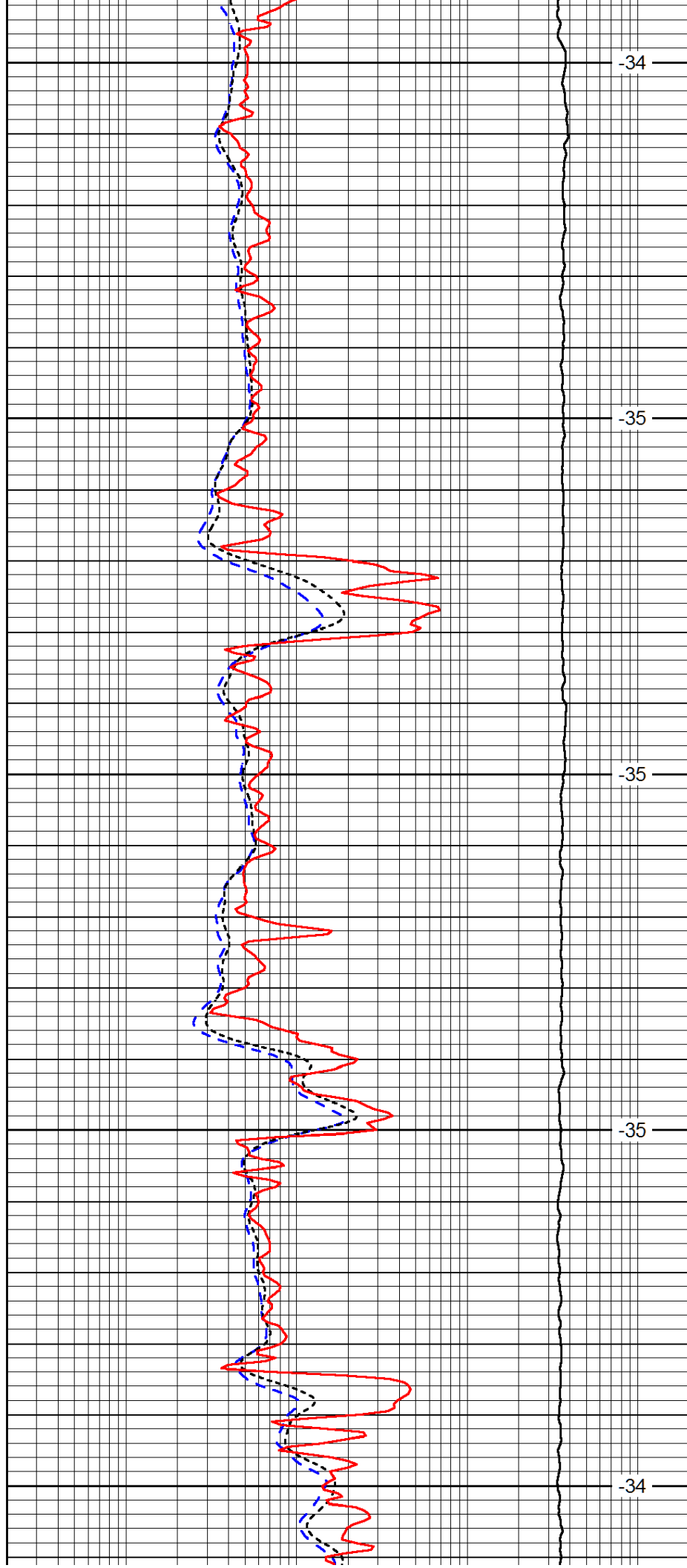
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3700



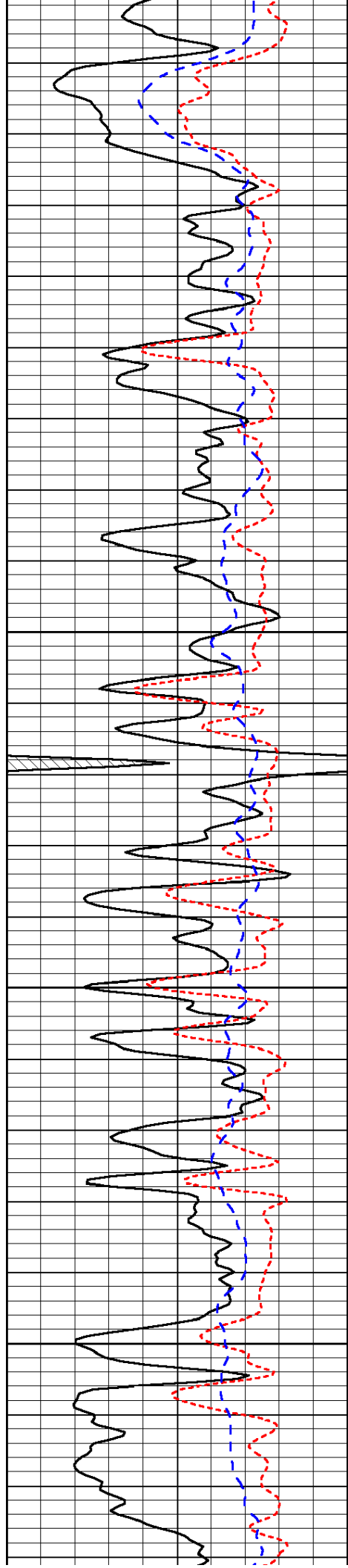
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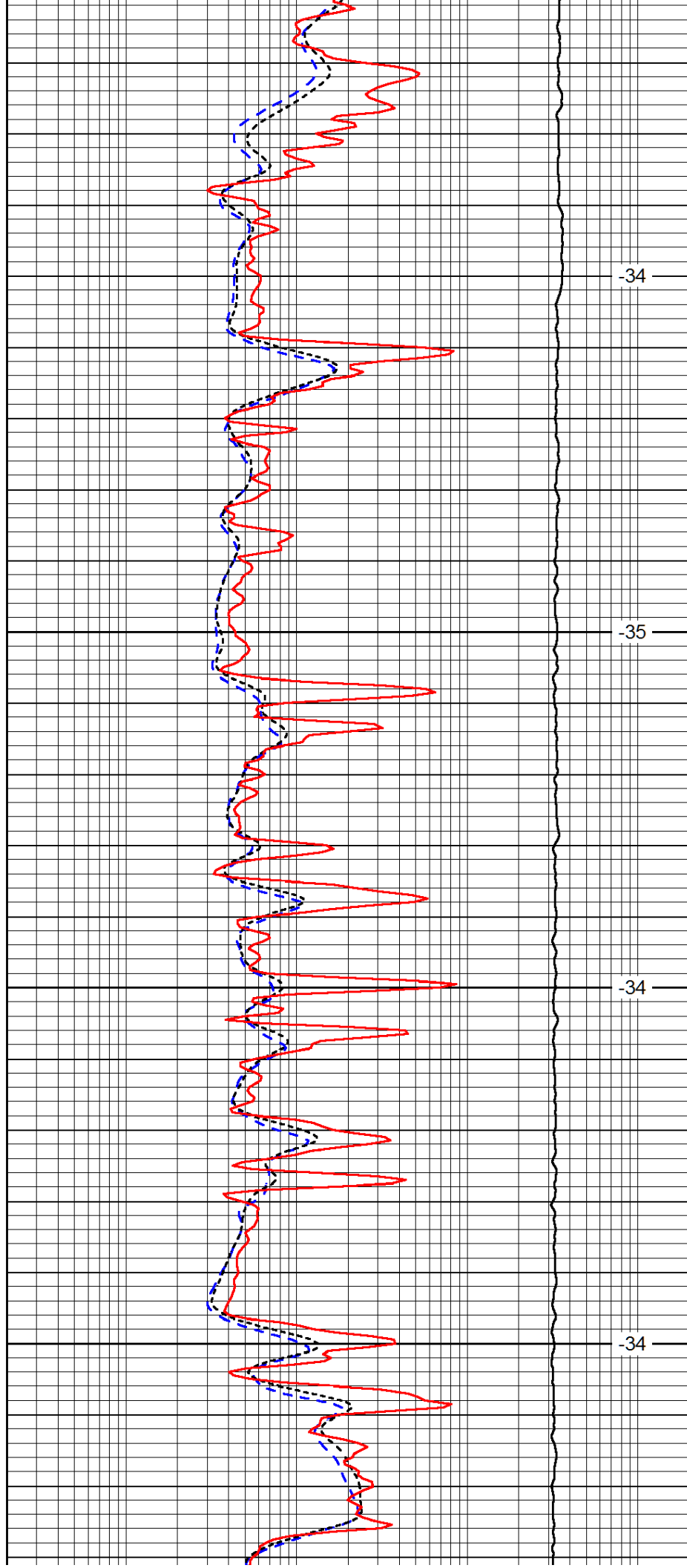


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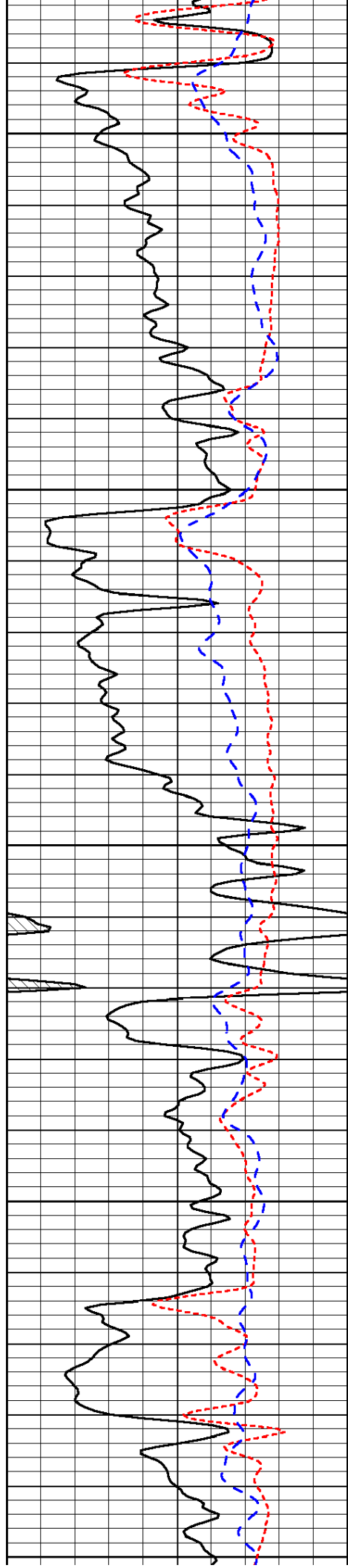


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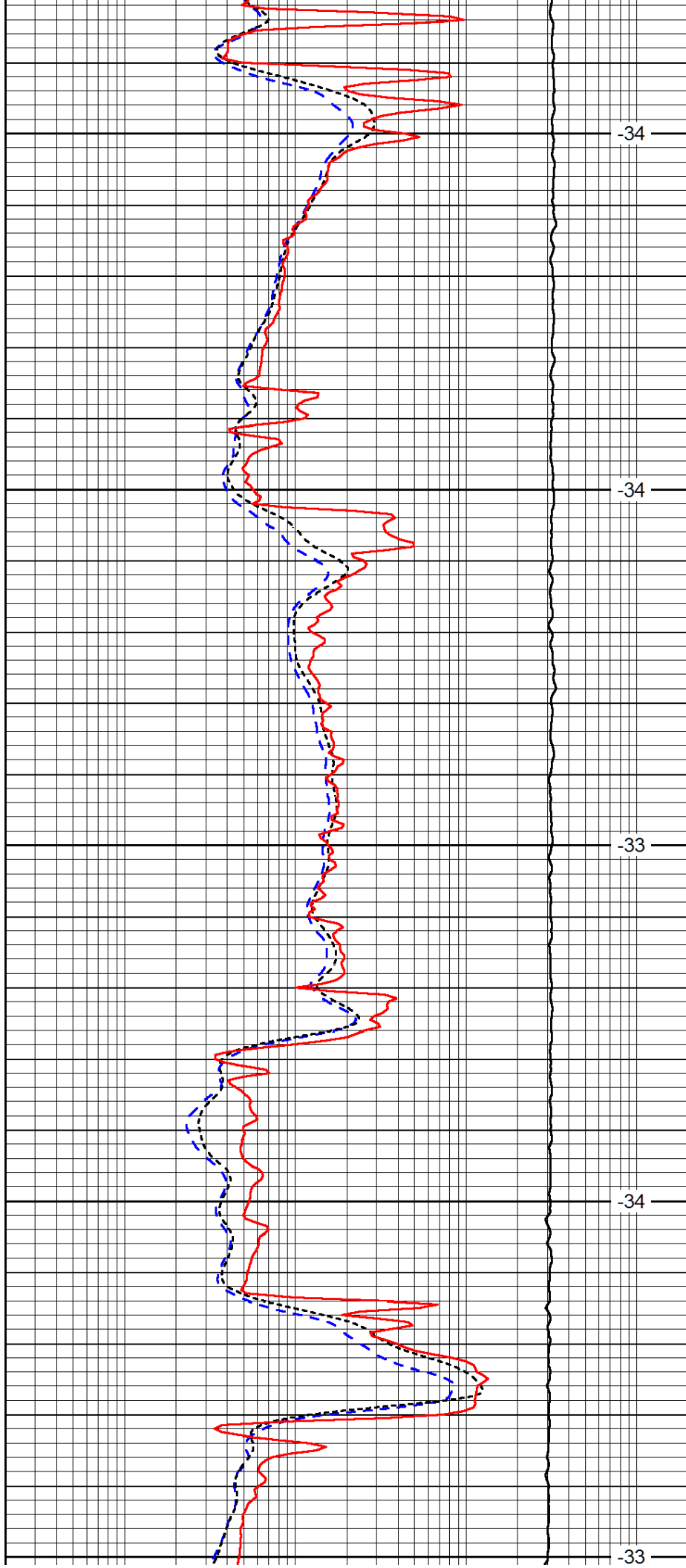
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4000

4050

4100

4150



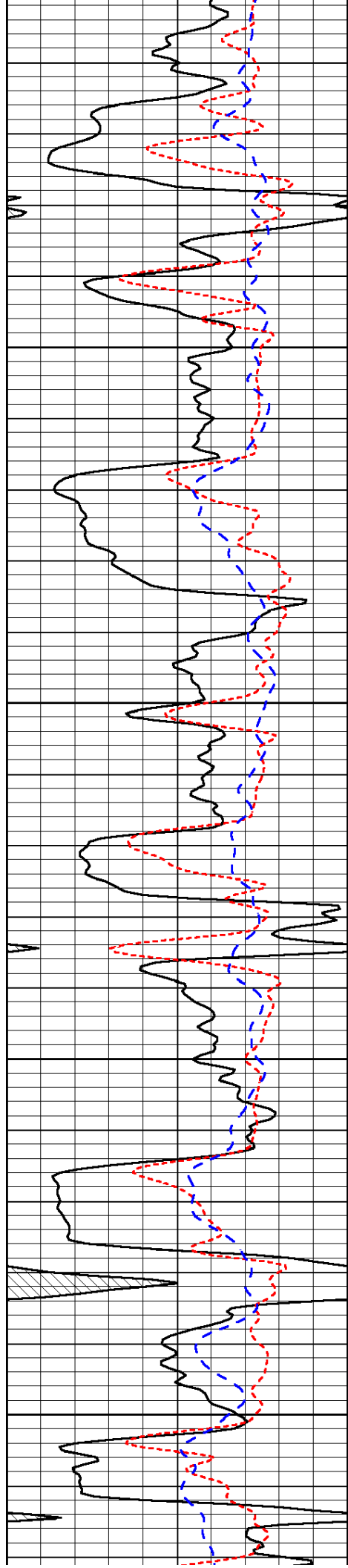
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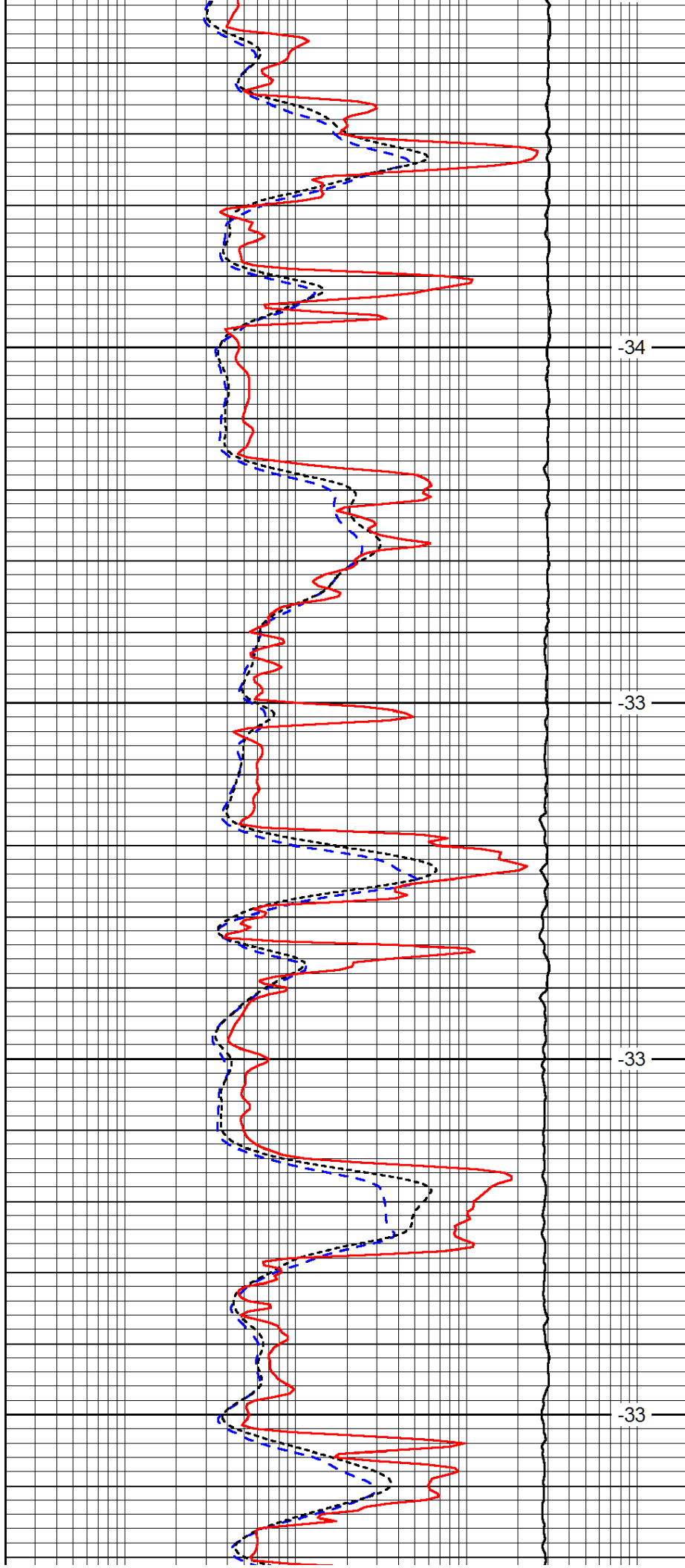


4200

4250

4300

4350

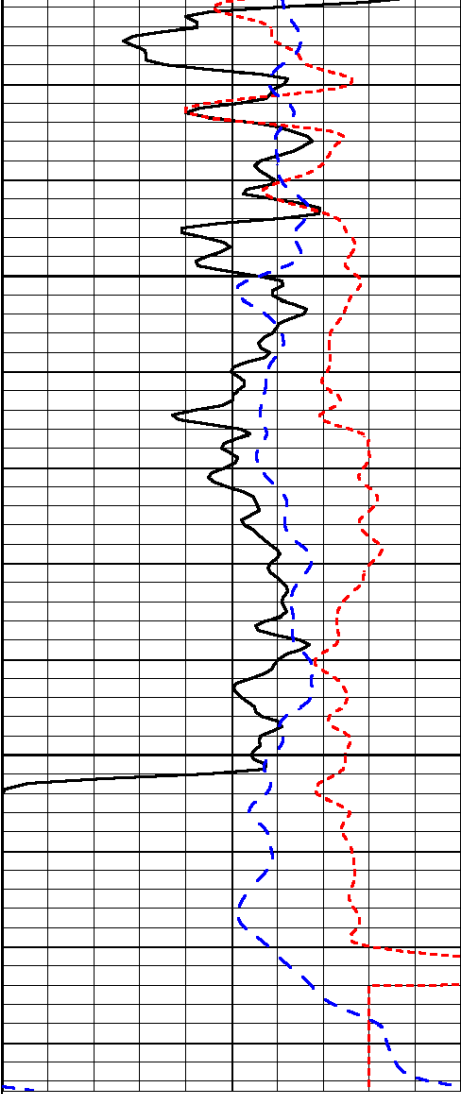


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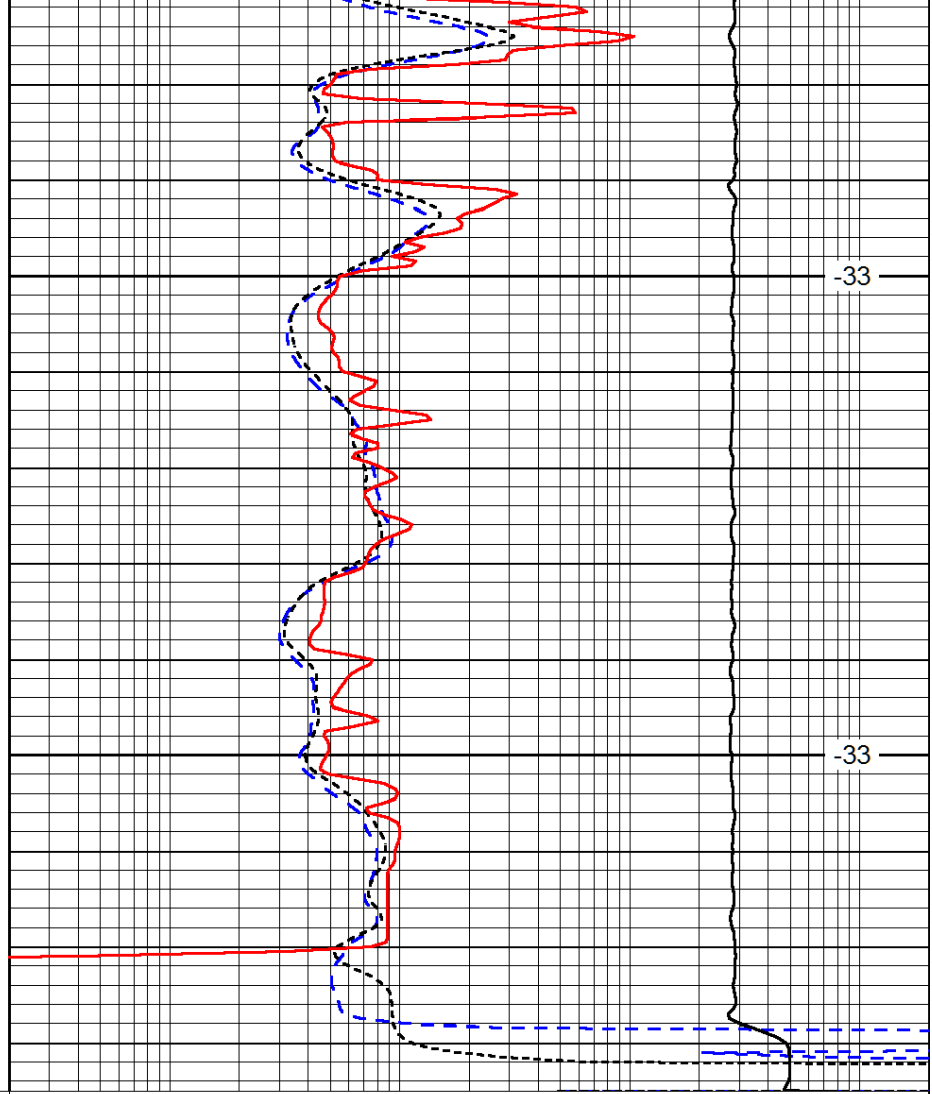
-33



4400

4450

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



-33

-33

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

LSPD