



Pioneer Energy Services

Dual Induction Log

15-171-20905-00-00

API No.

Company **Murfin Drilling Company, Inc.**

Well **Welch #1-18**

Field

County **Scott**

State

Kansas

Location

990' FSL & 1015' FWL

Other Services
CNL/CDL
MEL/BHCS

Sec: **18**

Twp: **16S**

Rge: **32W**

Elevation

K.B. 2966
D.F. 2955
G.L. 2955

Permanent Datum Ground Level

Elevation 2955

Log Measured From Kelly Busing

11 Ft. Above Perm. Datum

Drilling Measured From Kelly Busing

Date

9/10/2012

Run Number

One

Depth Driller

4715

Depth Logger

4717

Bottom Logged Interval

4716

Top Log Interval

0

Casing Driller

8.625 @ 222

Casing Logger

222

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

4800

Density / Viscosity

9.2 67

pH / Fluid Loss

10.5 6.5

Source of Sample

Flowline

Rm @ Meas. Temp

0.70 @ 60

Rmf @ Meas. Temp

0.53 @ 60

Rmc @ Meas. Temp

0.95 @ 60

Source of Rmf / Rmc

Charts

Rm @ BHT

0.34 @ 125

Operating Rig Time

6 Hours

Max Rec. Temp. F

125

Equipment Number

91

Location

Hays

Recorded By

D. Schmidt

Witnessed By

Tom Funk

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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.pioneerenergy.com
 785 625 3858
 Hwy 4 & 83 junction,
 4.7 North to 270 Rd, 1 1/2 West,
 N&W to location

Database File: c:\warrior\data\murfin_welch #1-18\murfin_091012hd.db
 Dataset Pathname: dil\mrfstack
 Presentation Format: dil2in
 Dataset Creation: Mon Sep 10 10:24:29 2012
 Charted by: Depth in Feet scaled 1:600

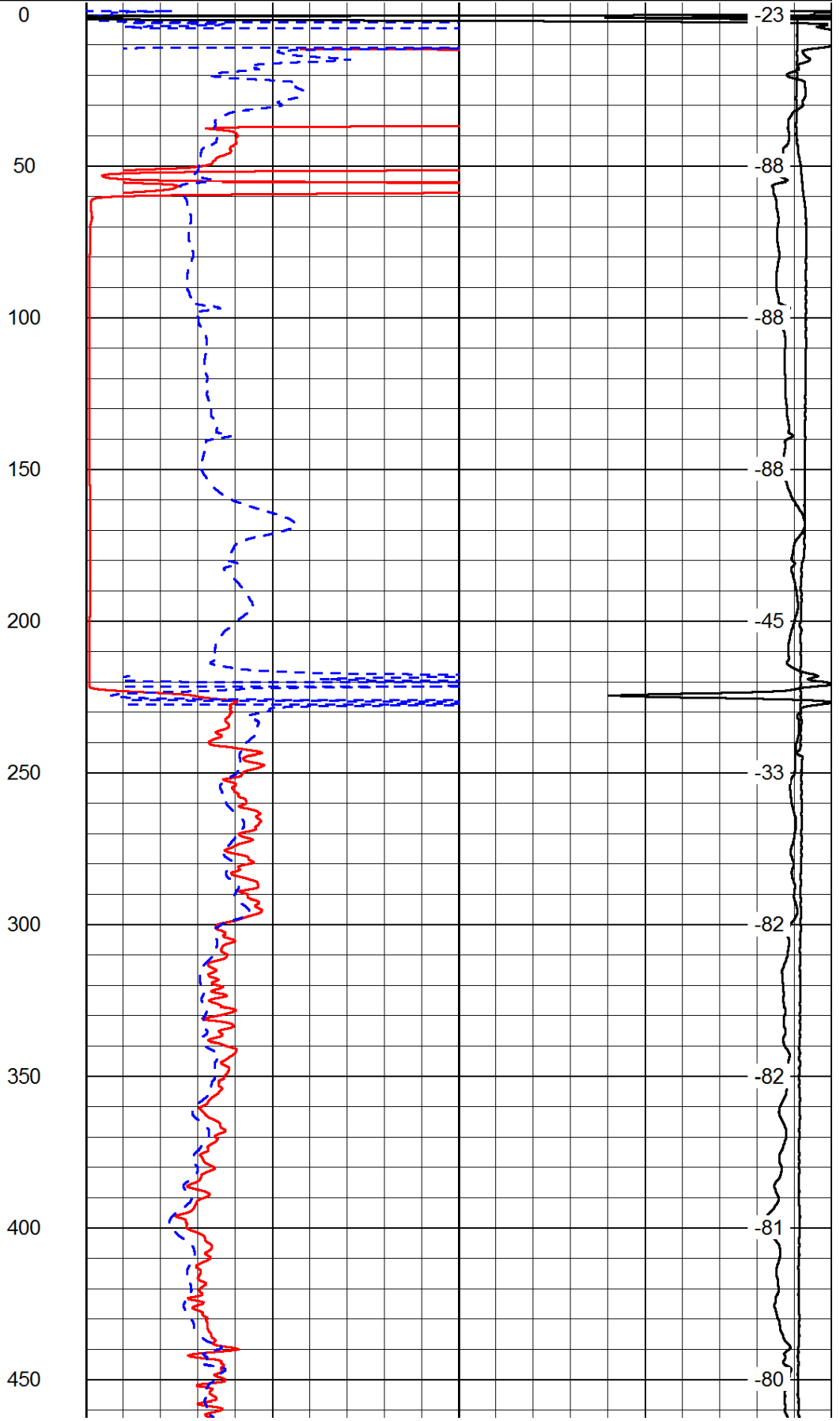
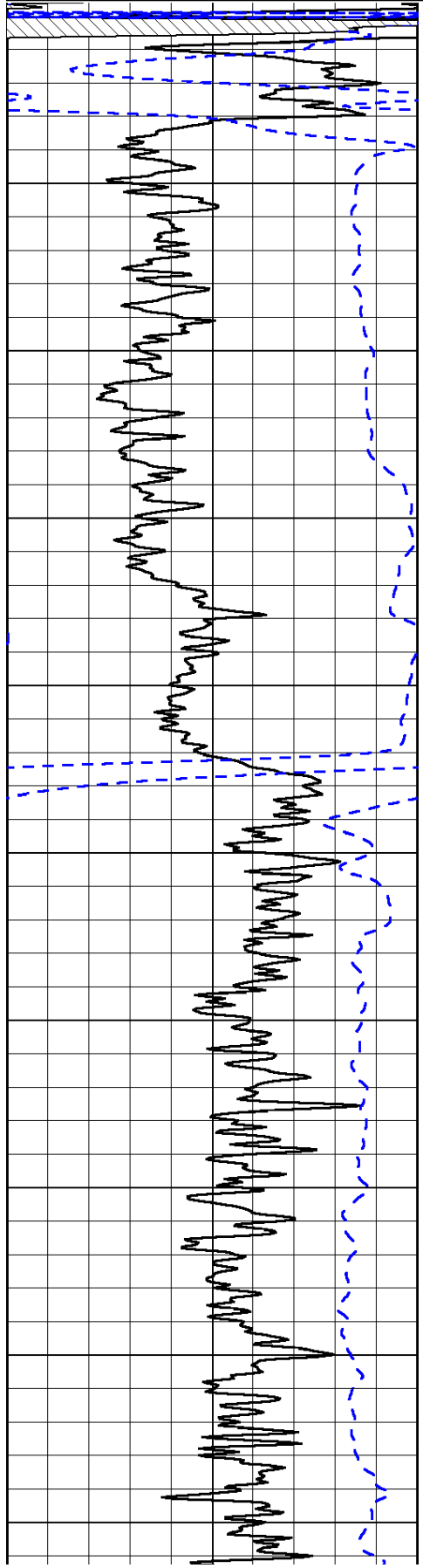
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-200	SP (mV)	0

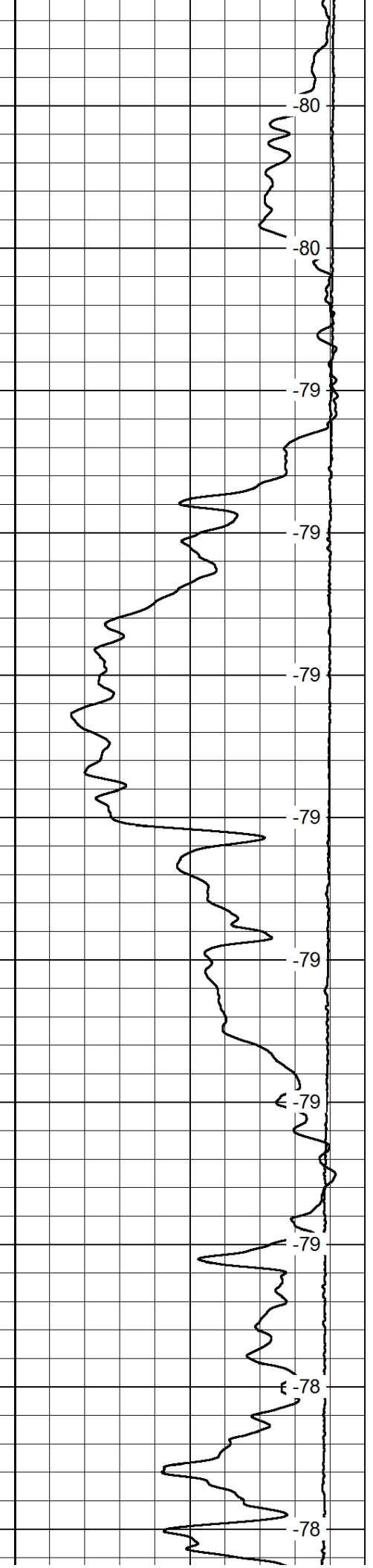
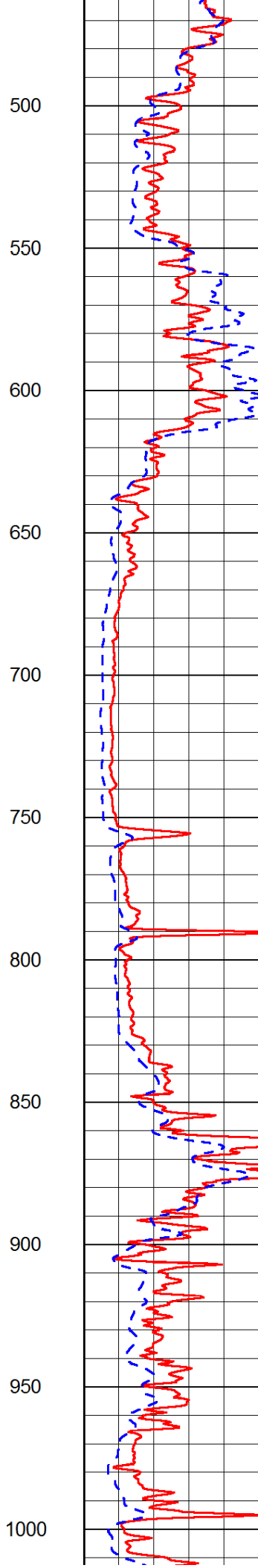
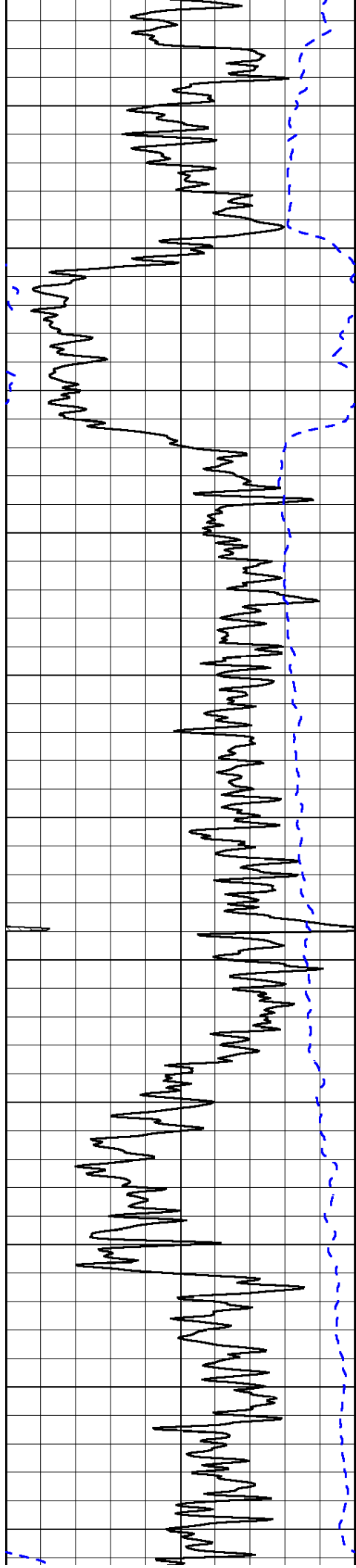
0	Shallow Resistivity	50
0	Deep Resistivity	50

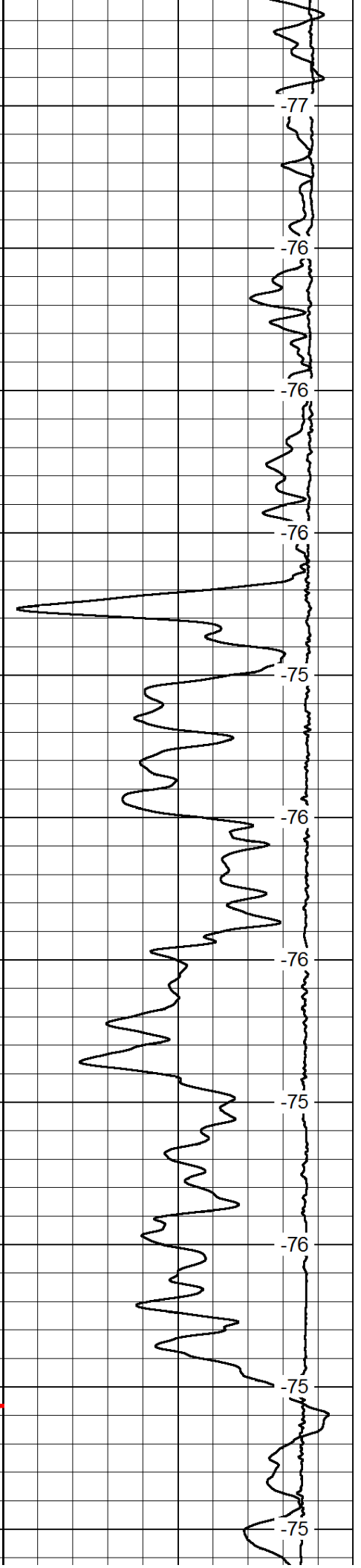
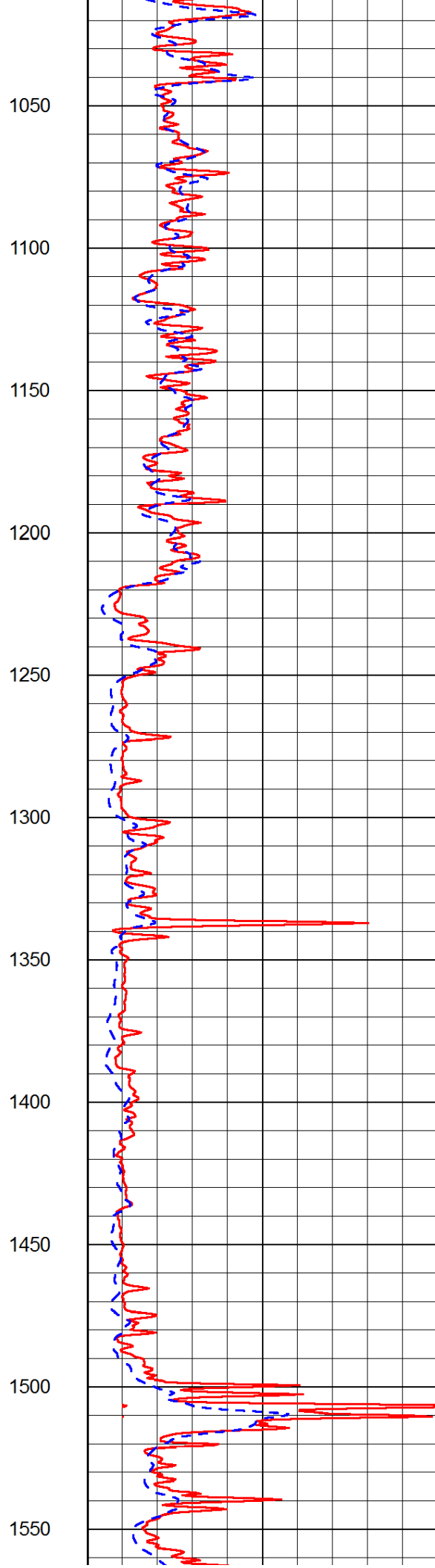
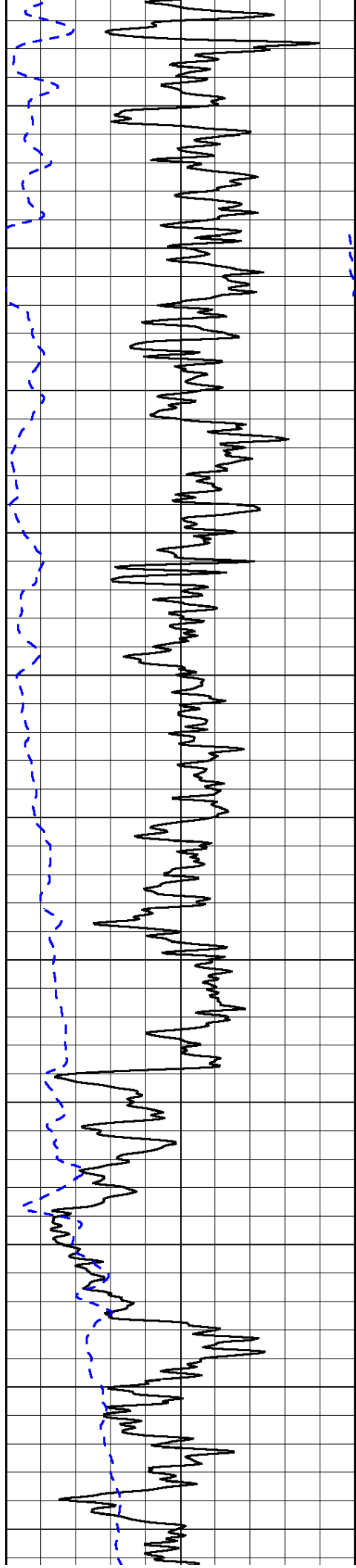
LSPD

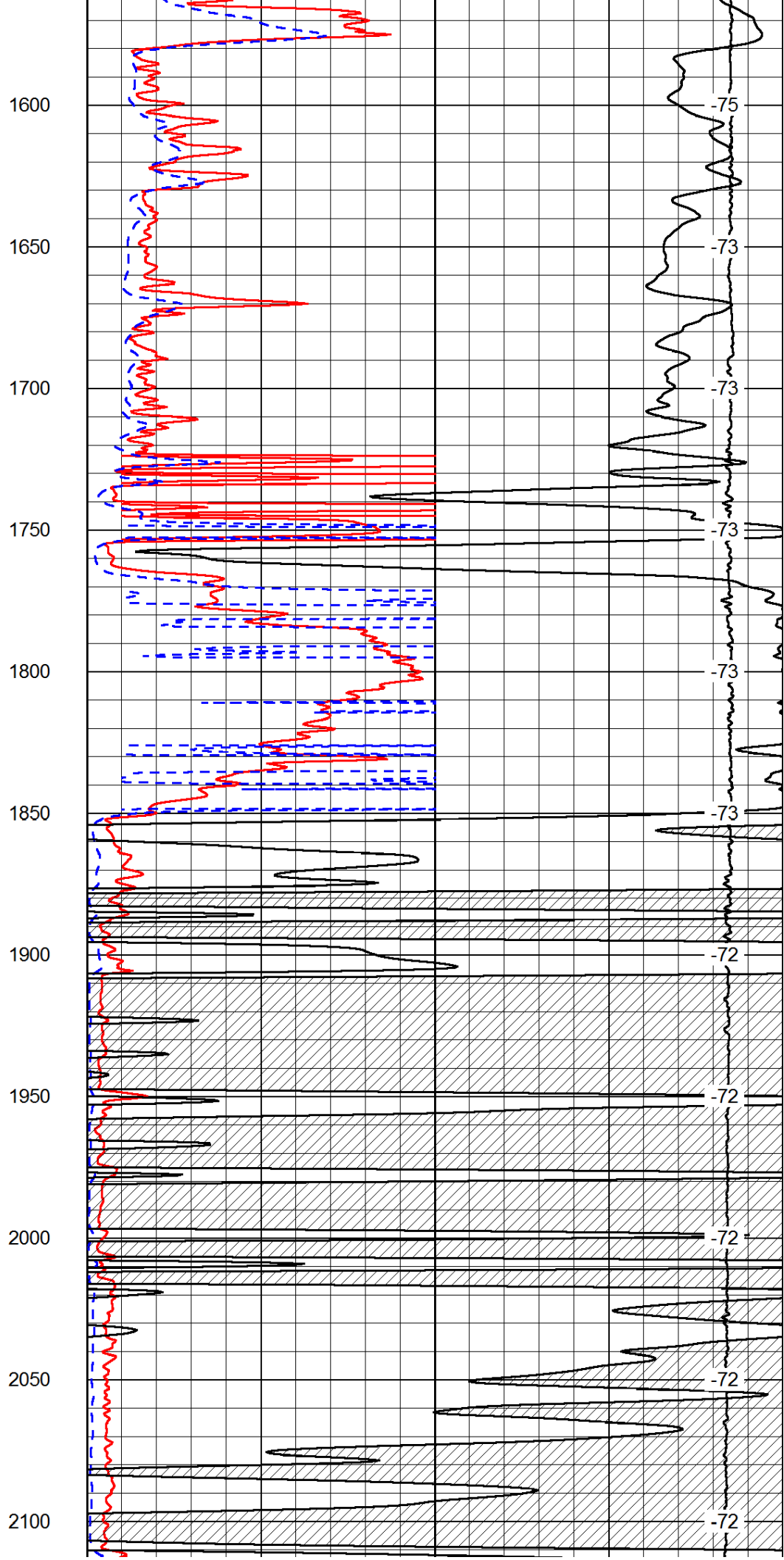
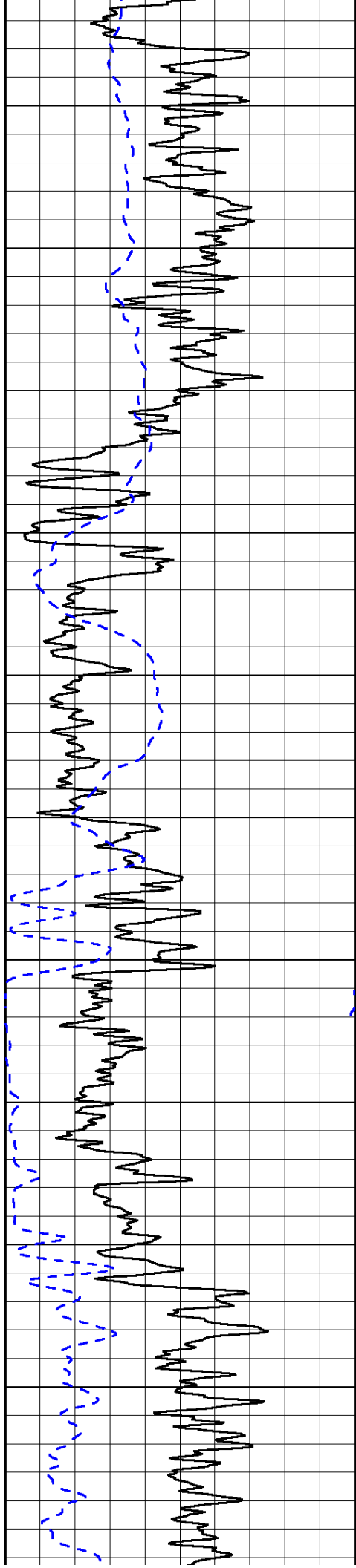
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15000	Line Tension	0

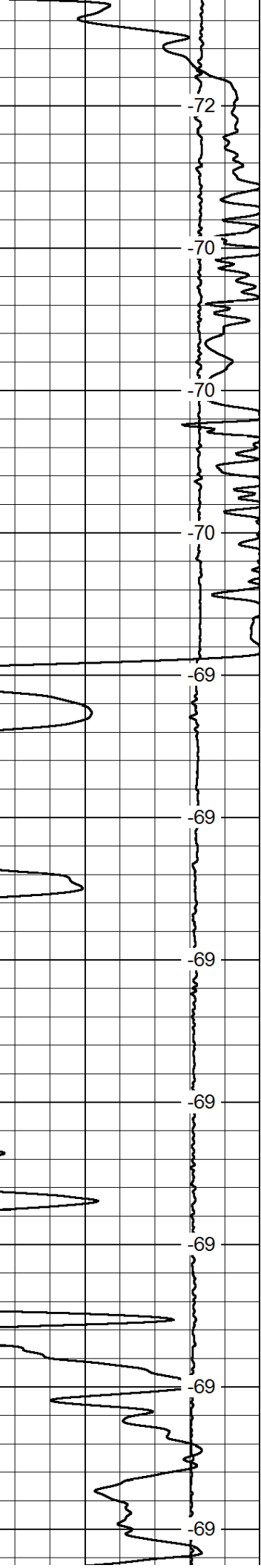
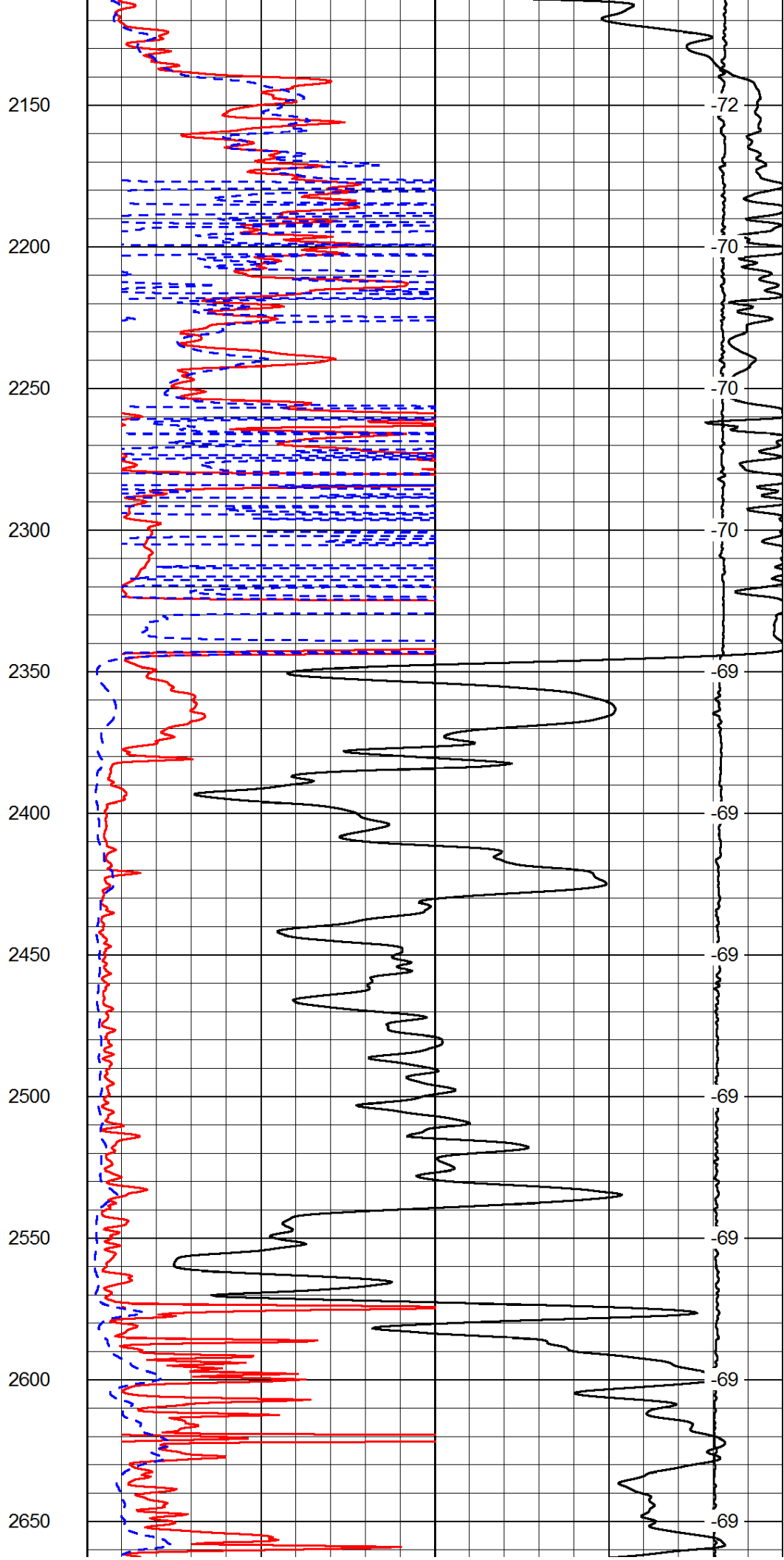
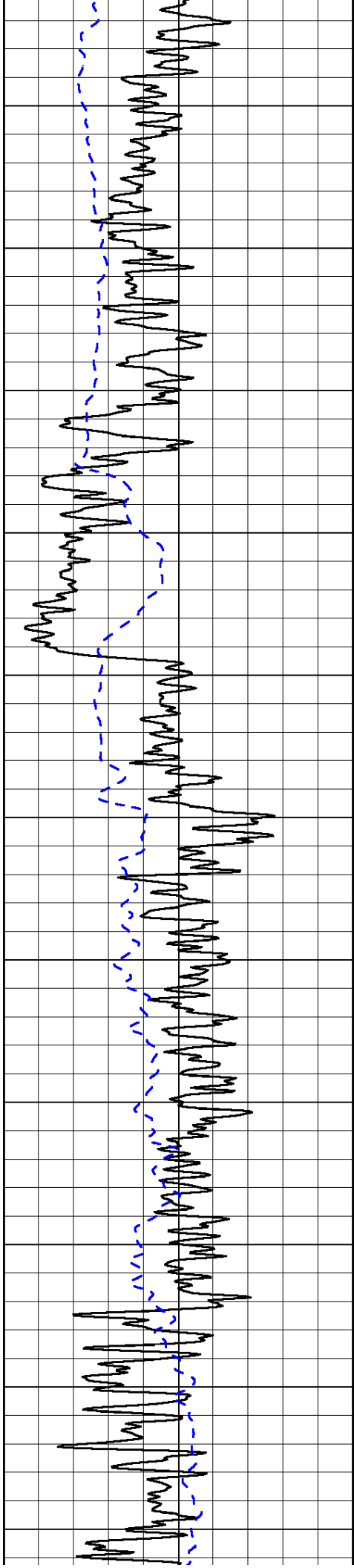
50	Shallow Resistivity	500
50	Deep Resistivity	500

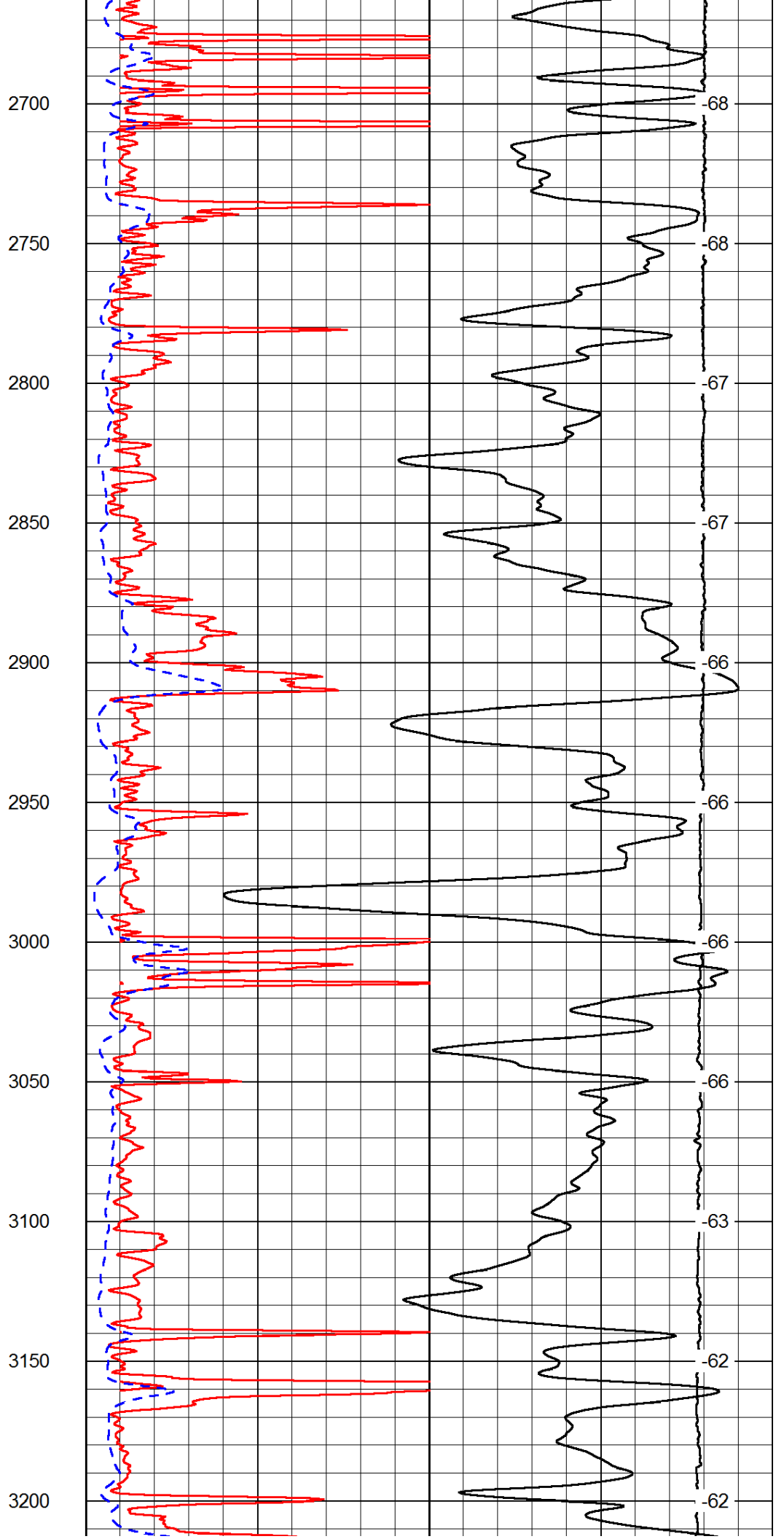
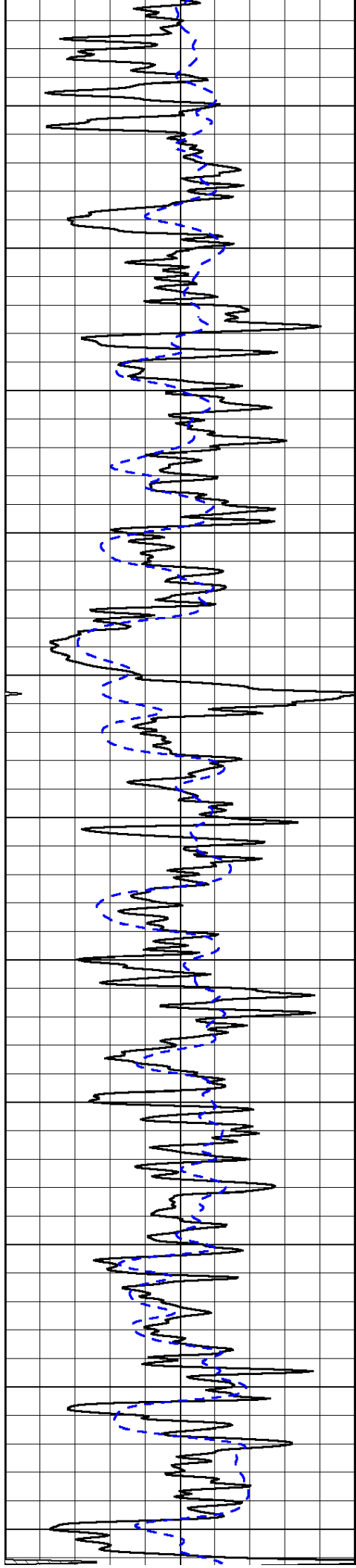


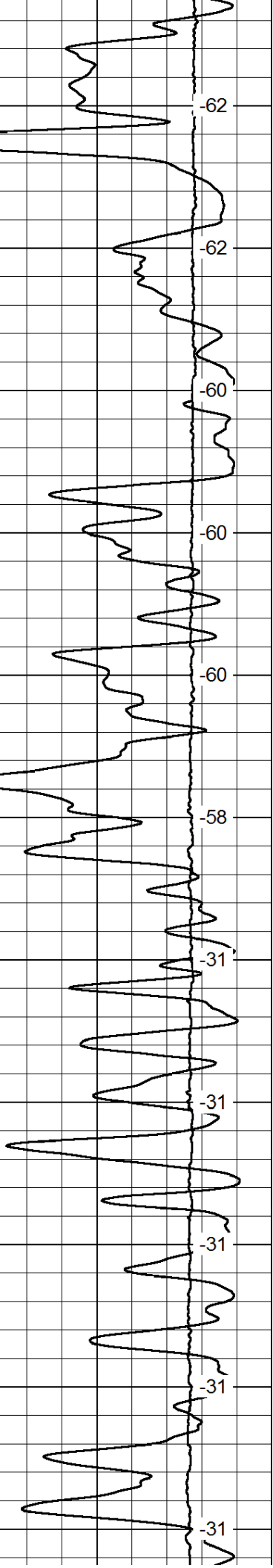
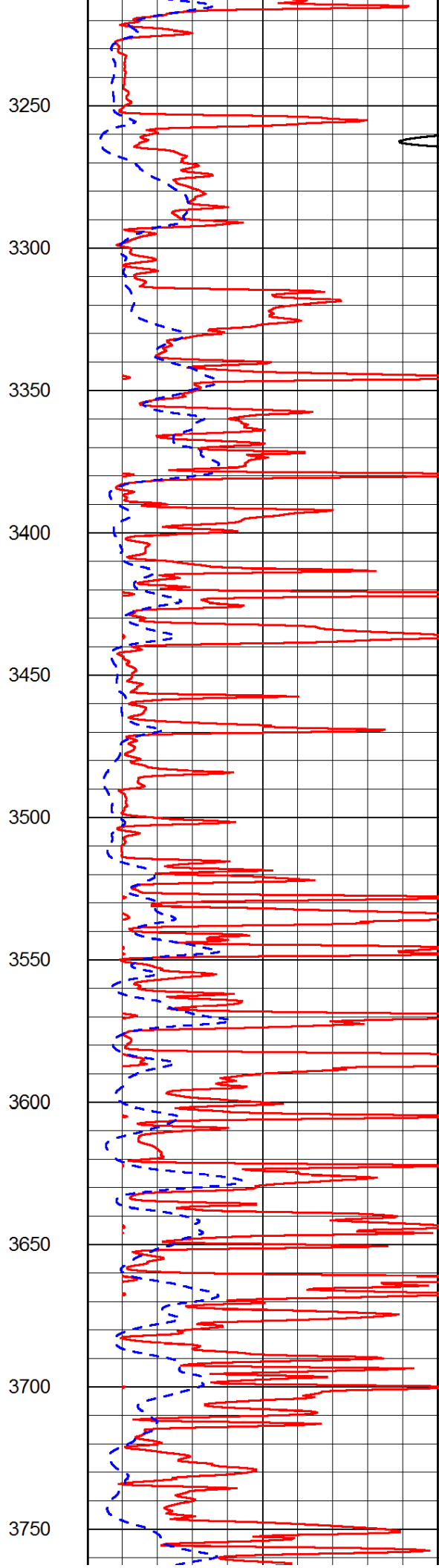
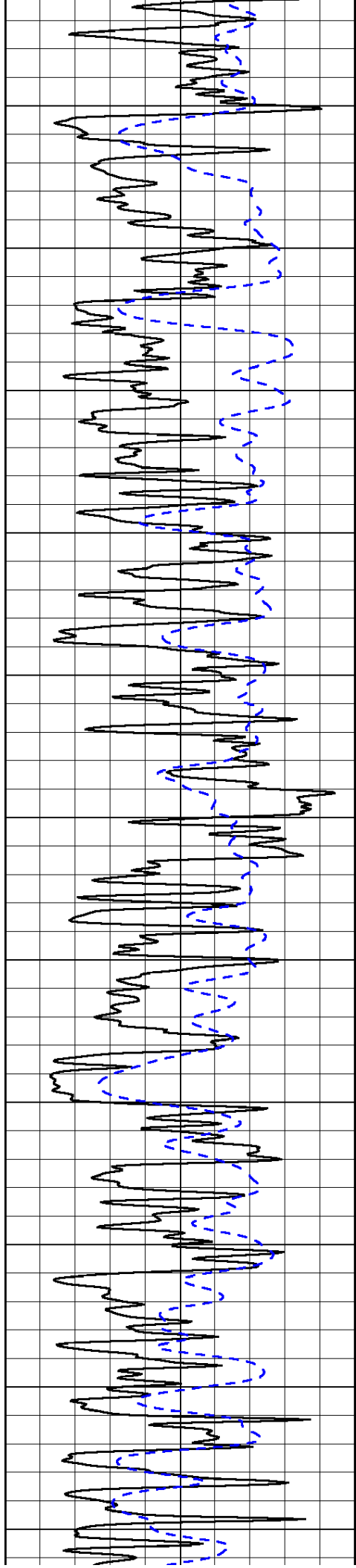


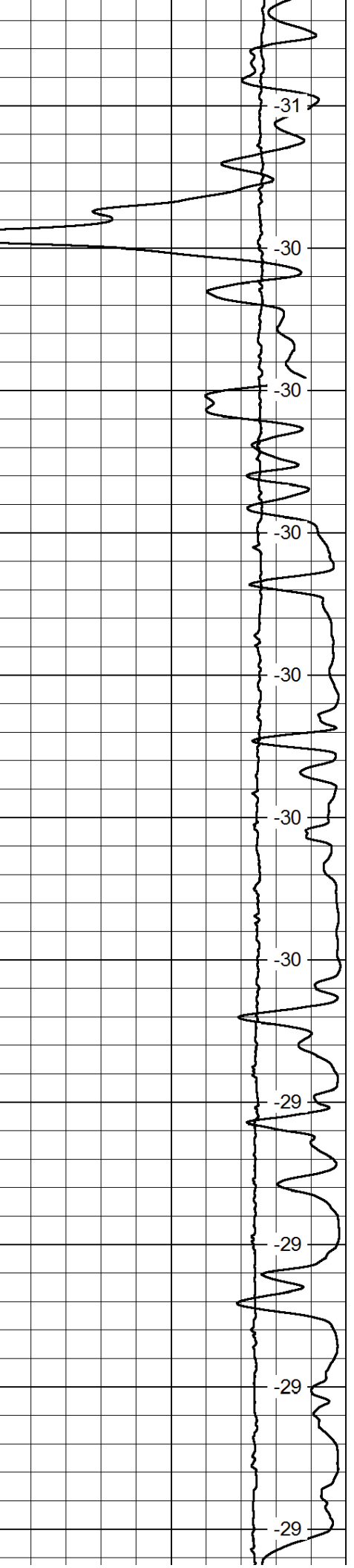
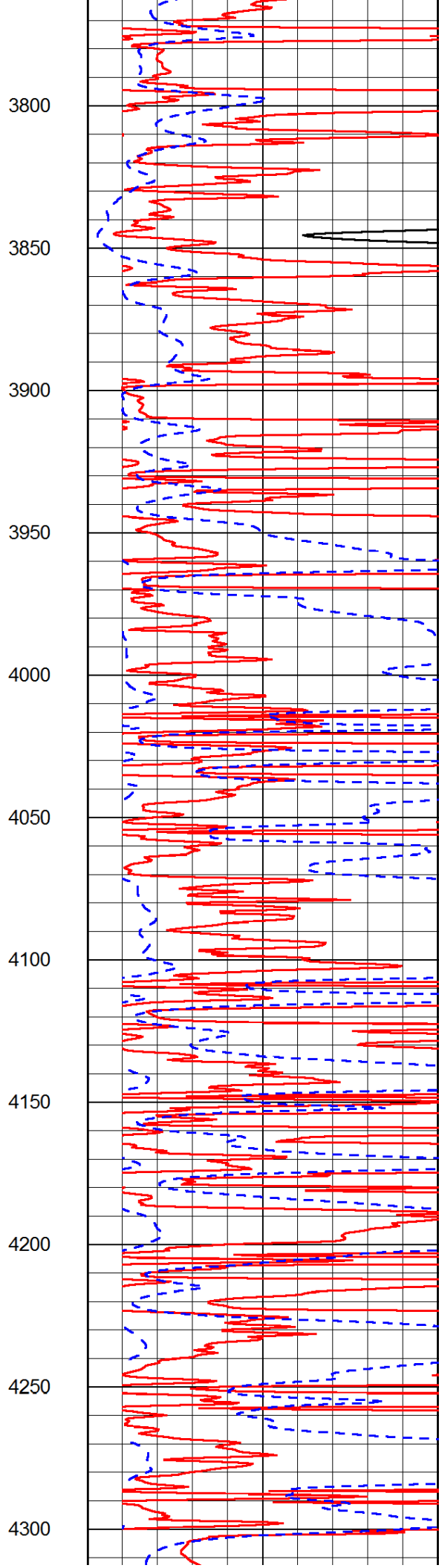
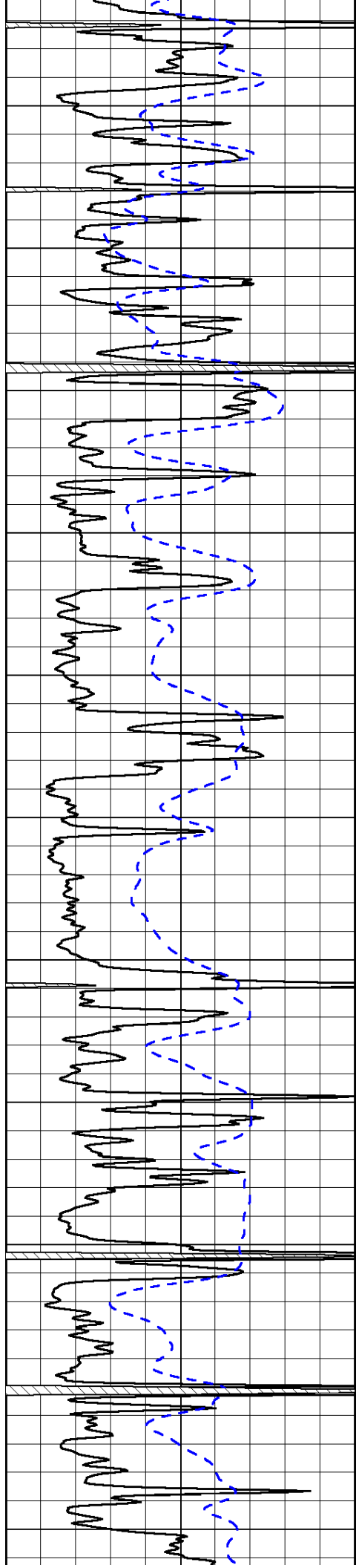












3800

3850

3900

3950

4000

4050

4100

4150

4200

4250

4300

-31

-30

-30

-30

-30

-30

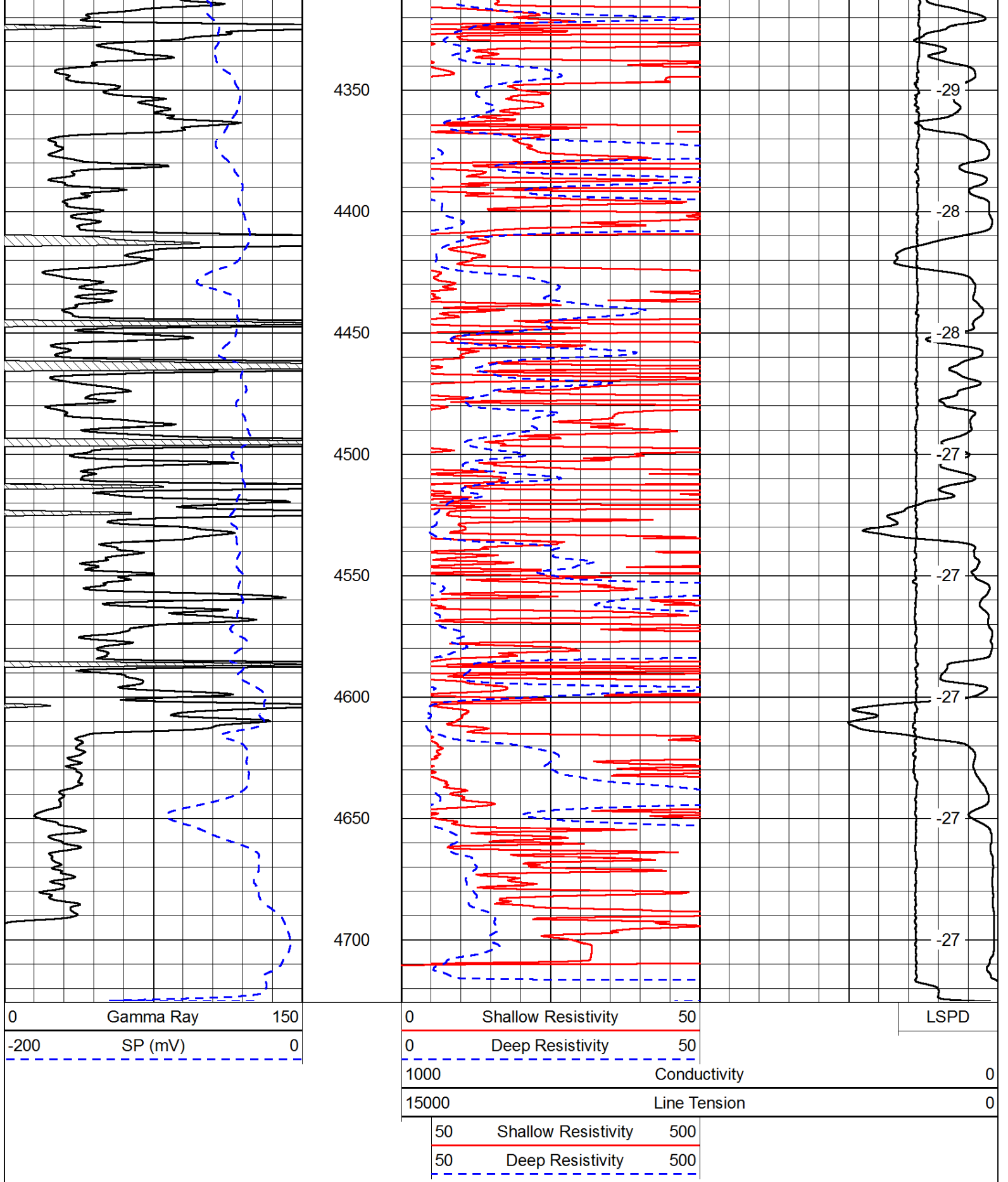
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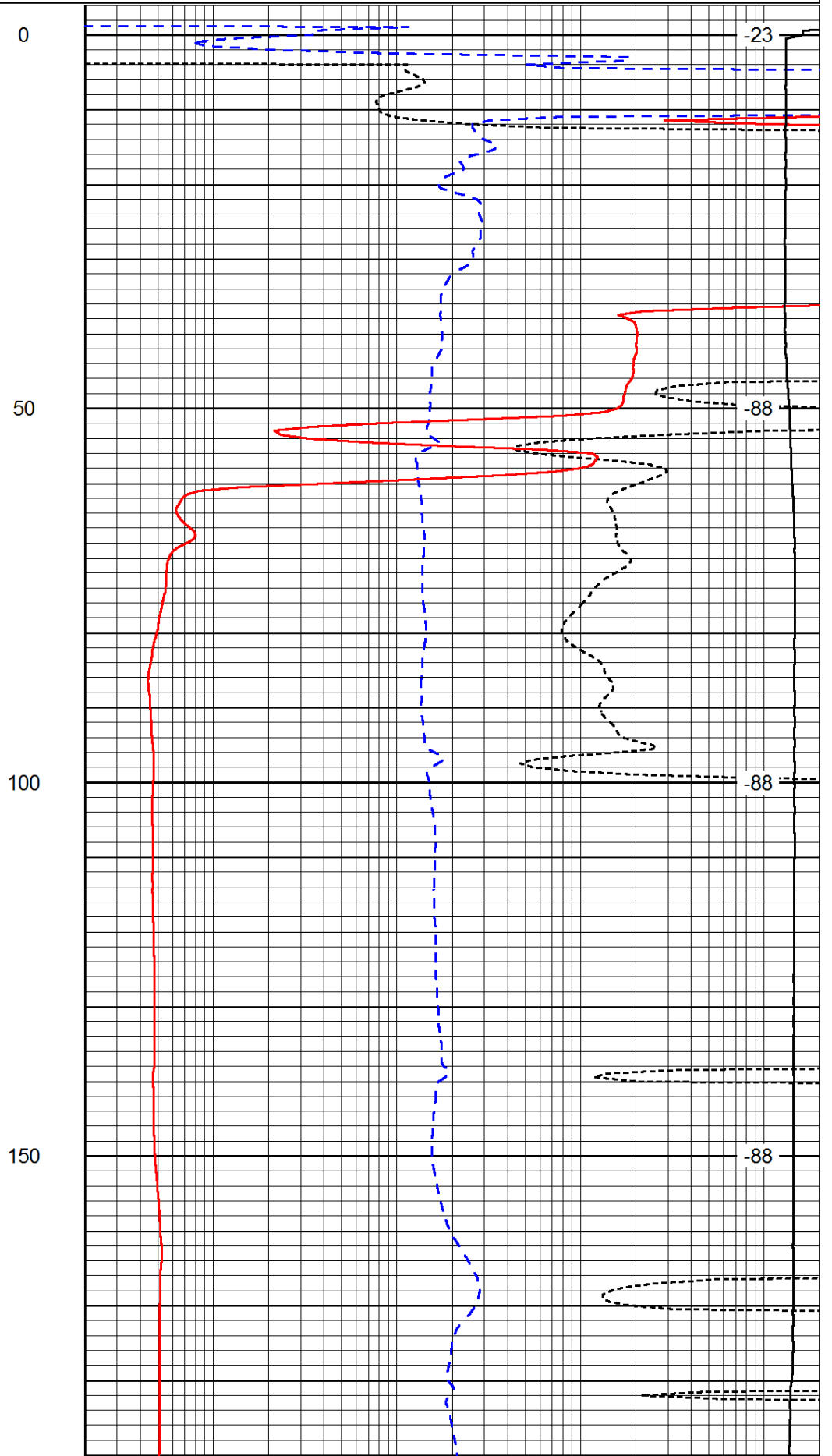
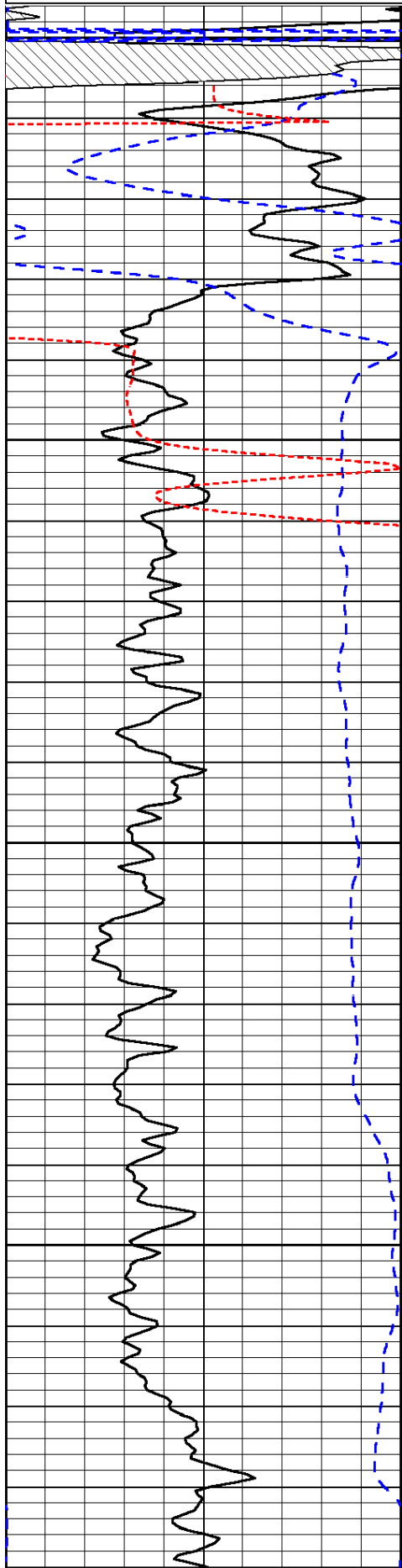


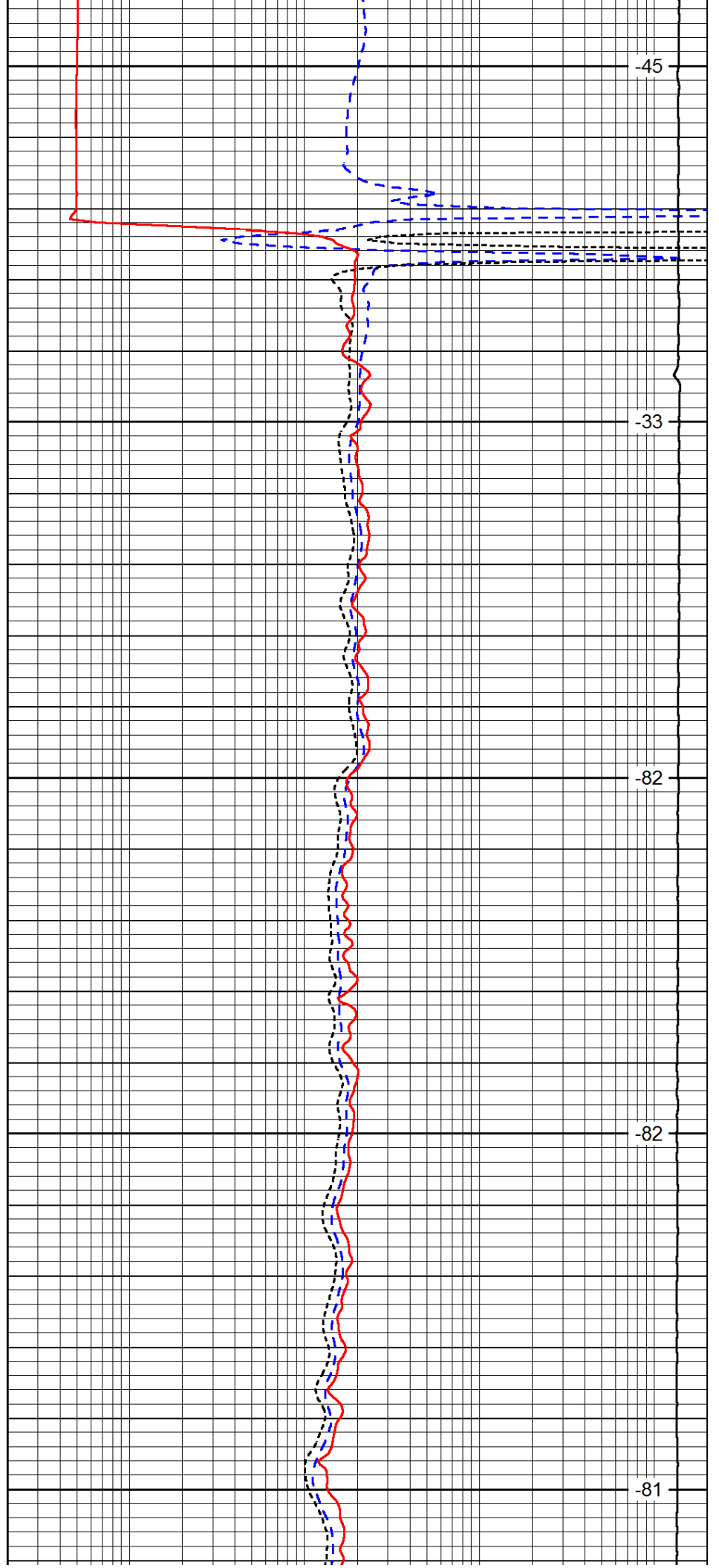
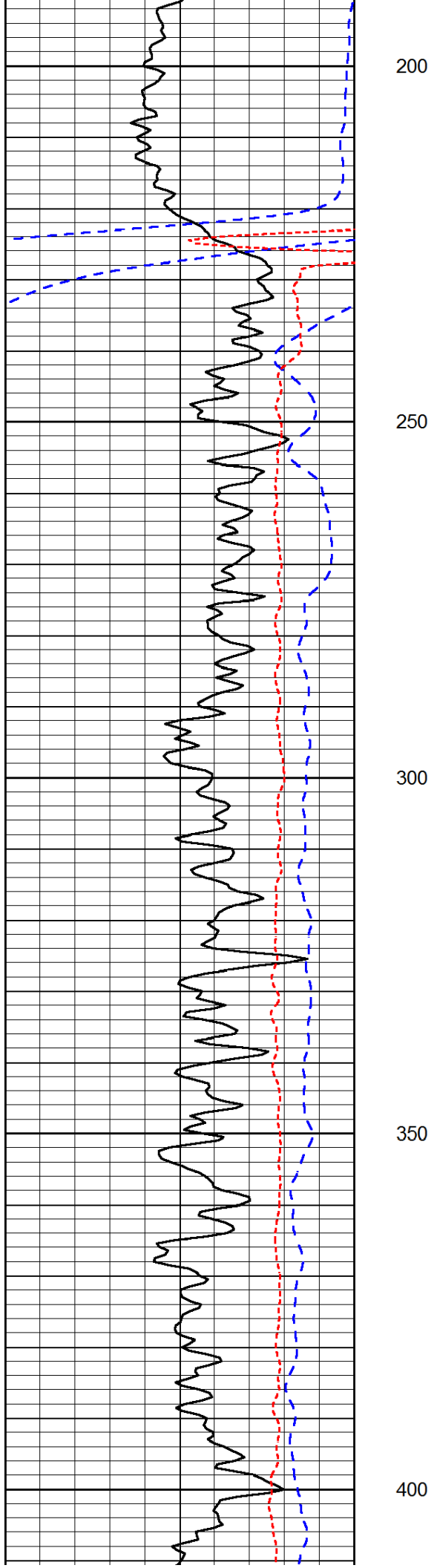
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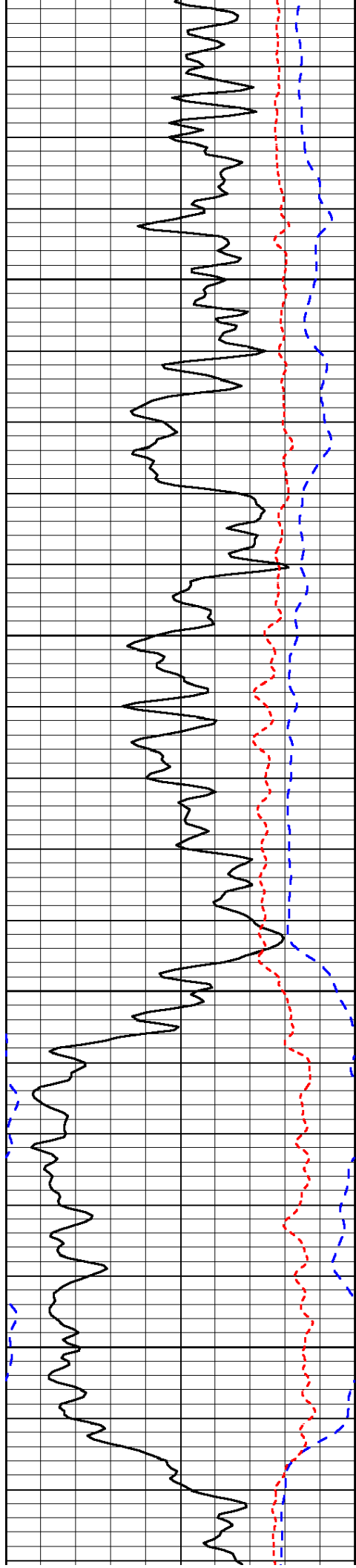
0	Gamma Ray	150
-200	SP (mV)	0
-160	RxoRt	40

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD





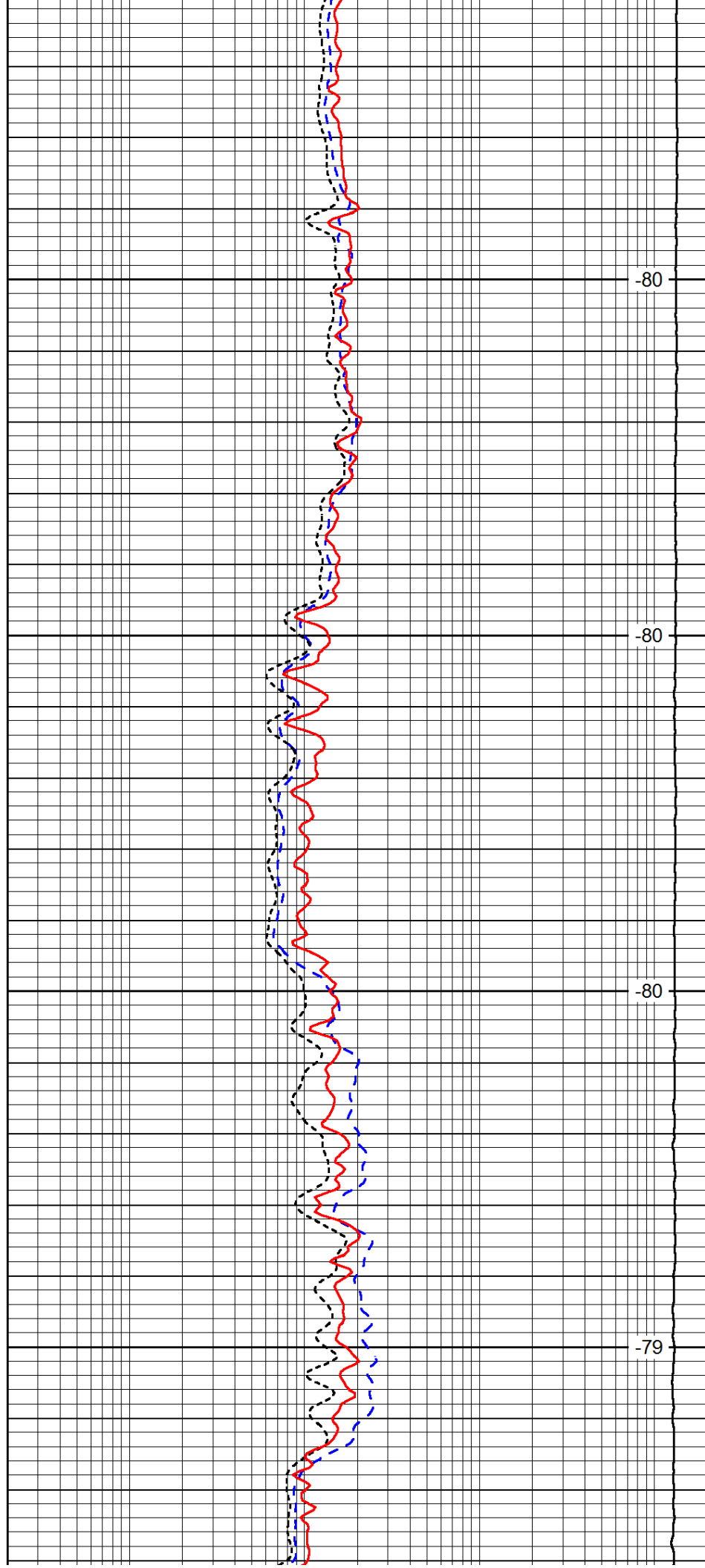


450

500

550

600

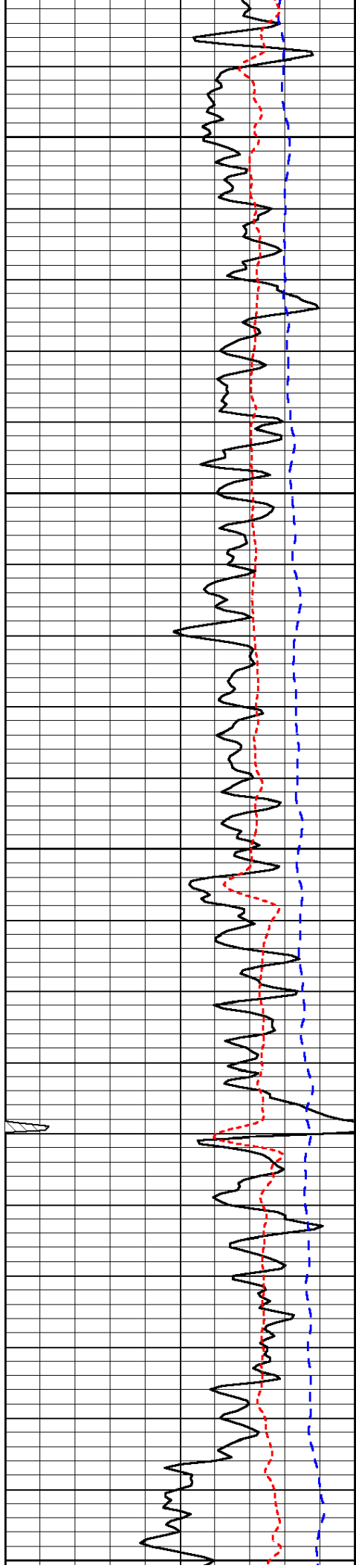


-80

-80

-80

-79



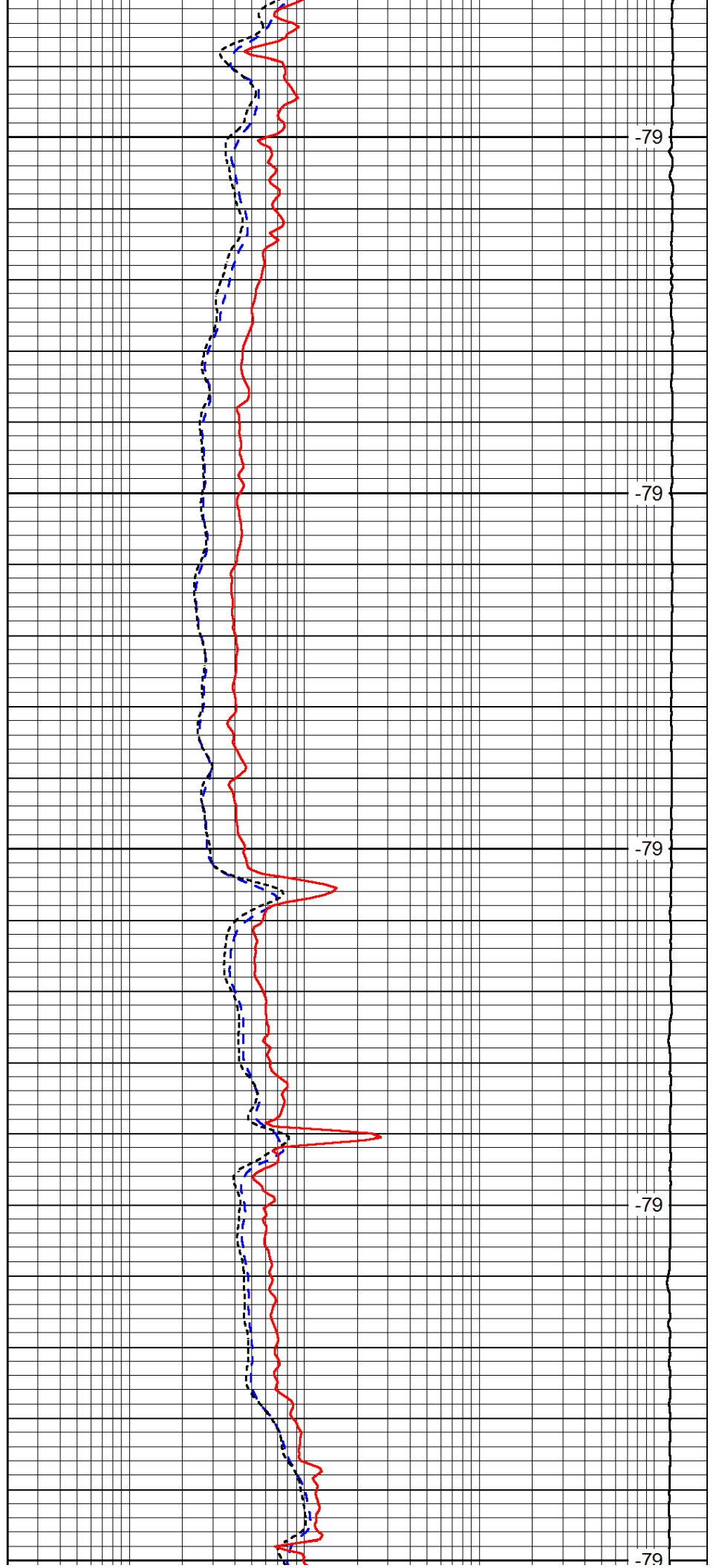
650

700

750

800

850



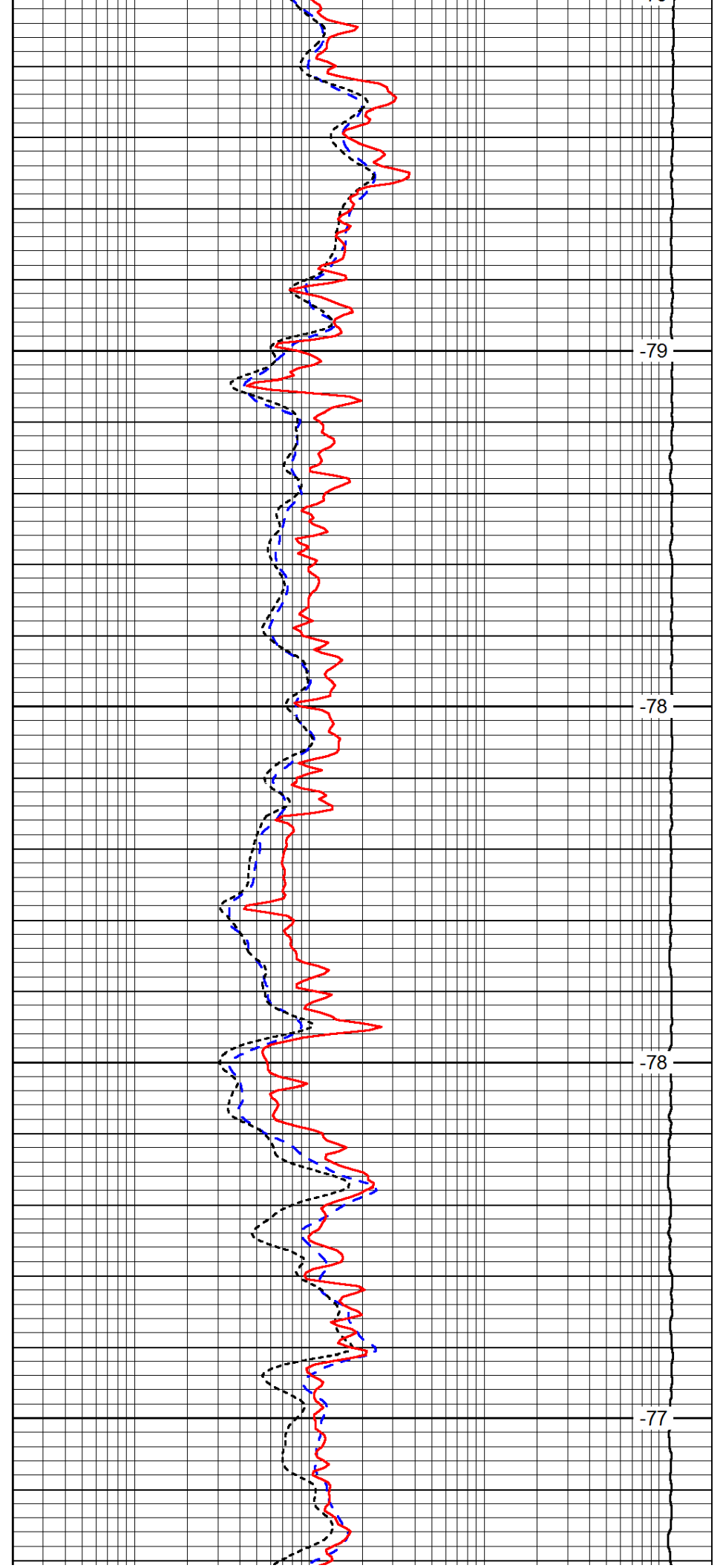
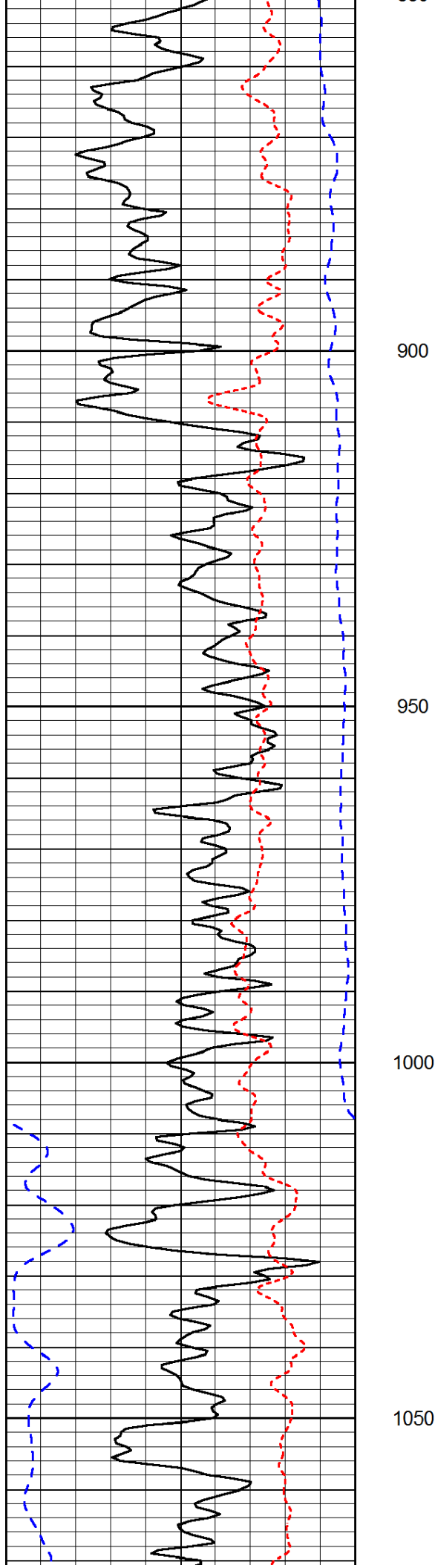
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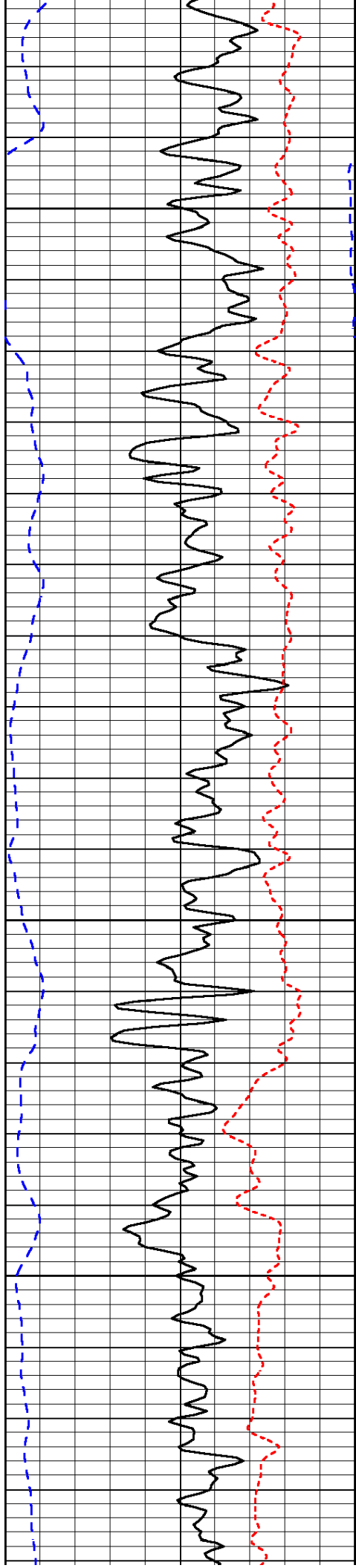
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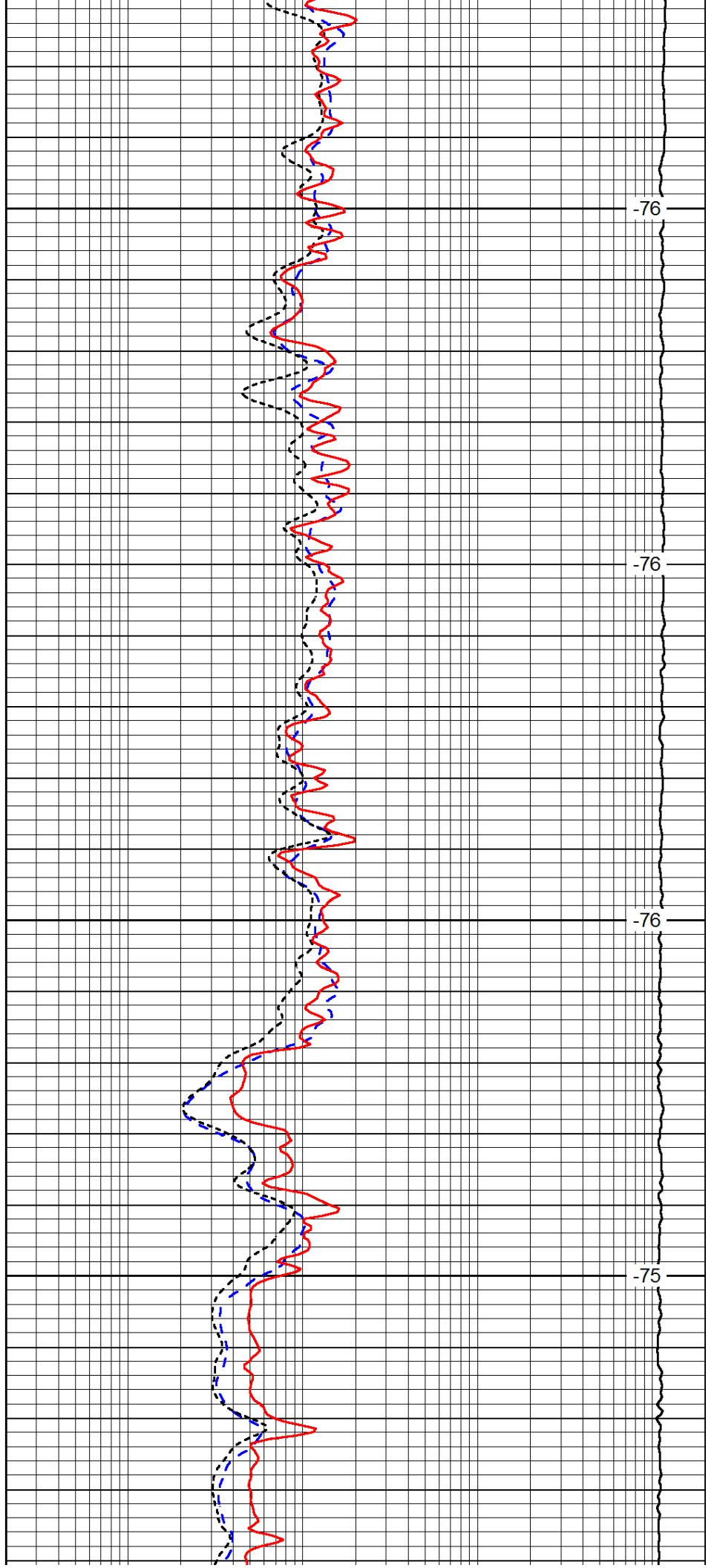


1100

1150

1200

1250

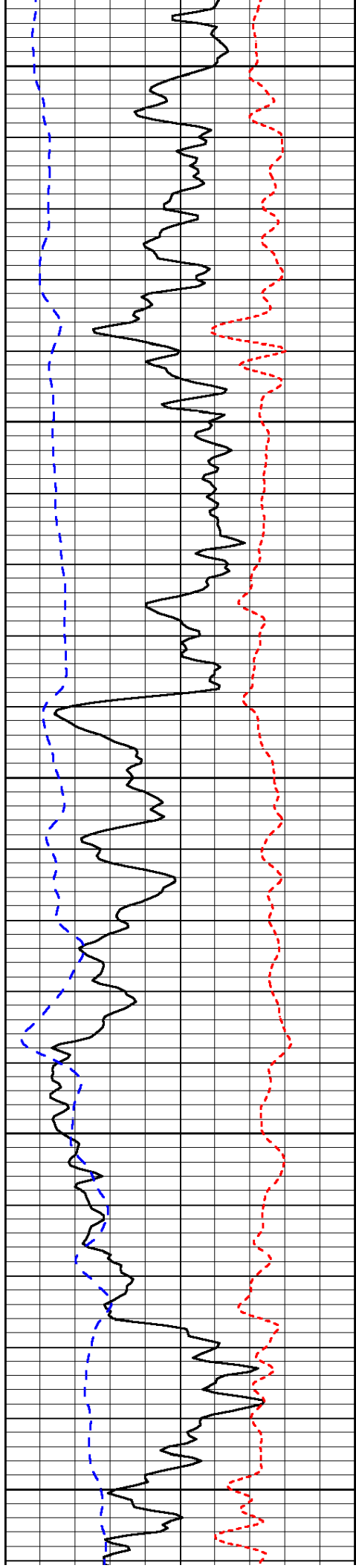


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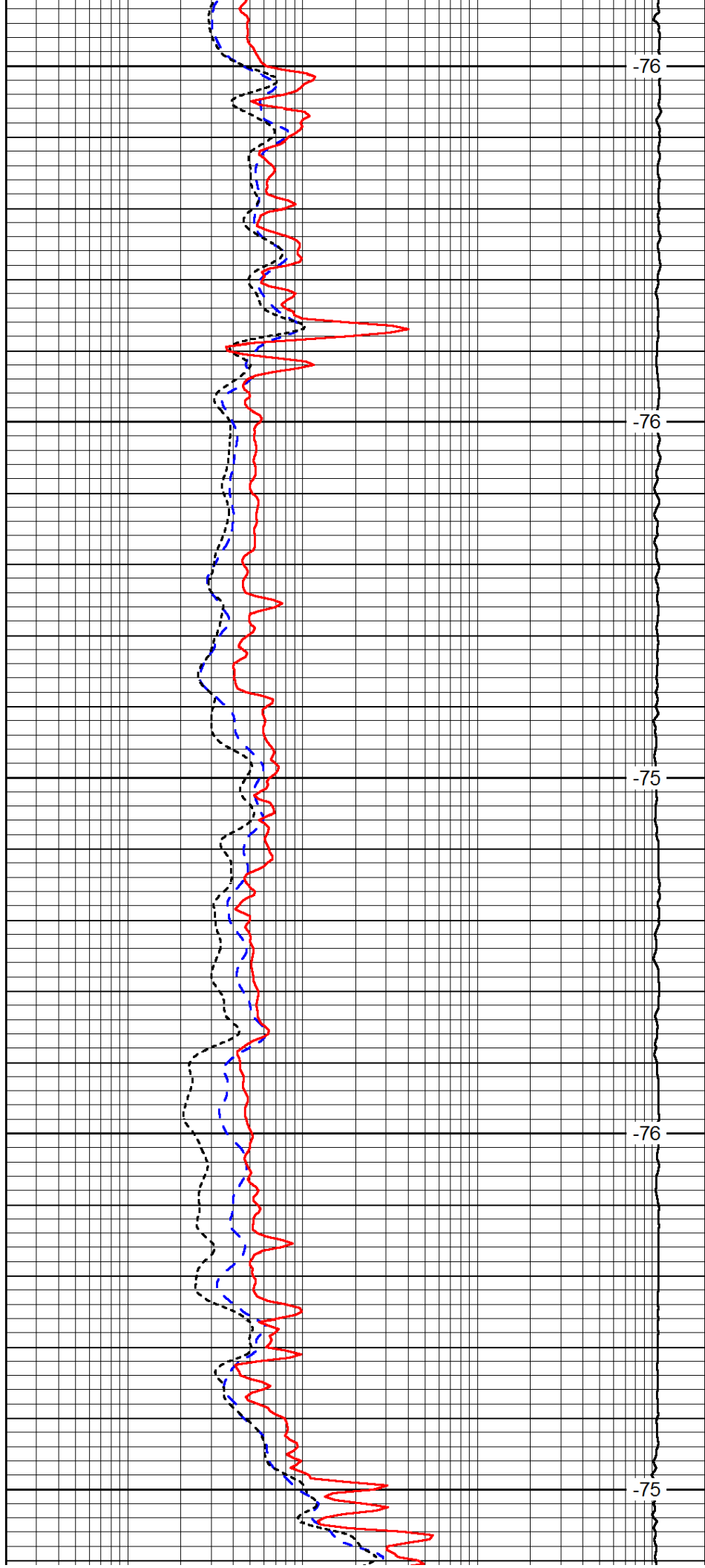
1300

1350

1400

1450

1500



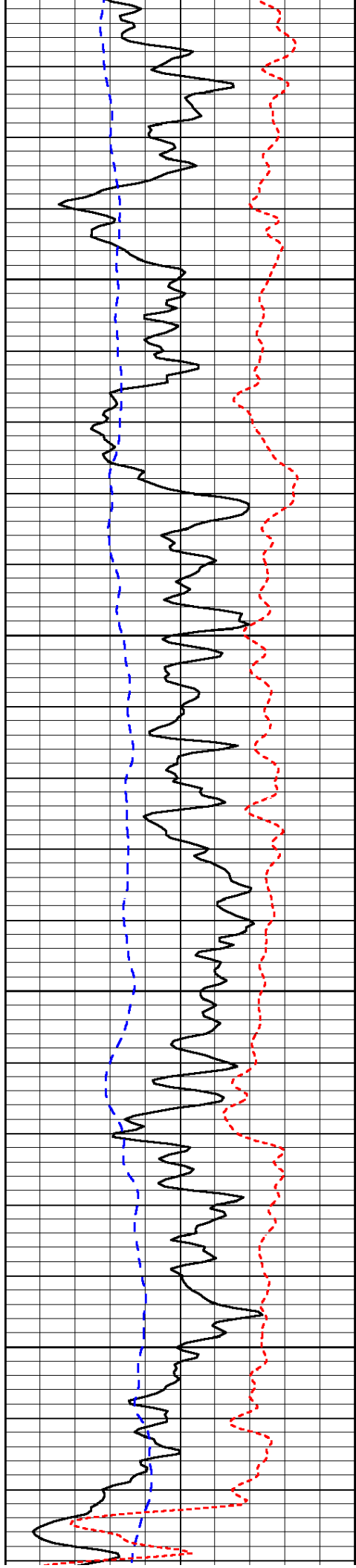
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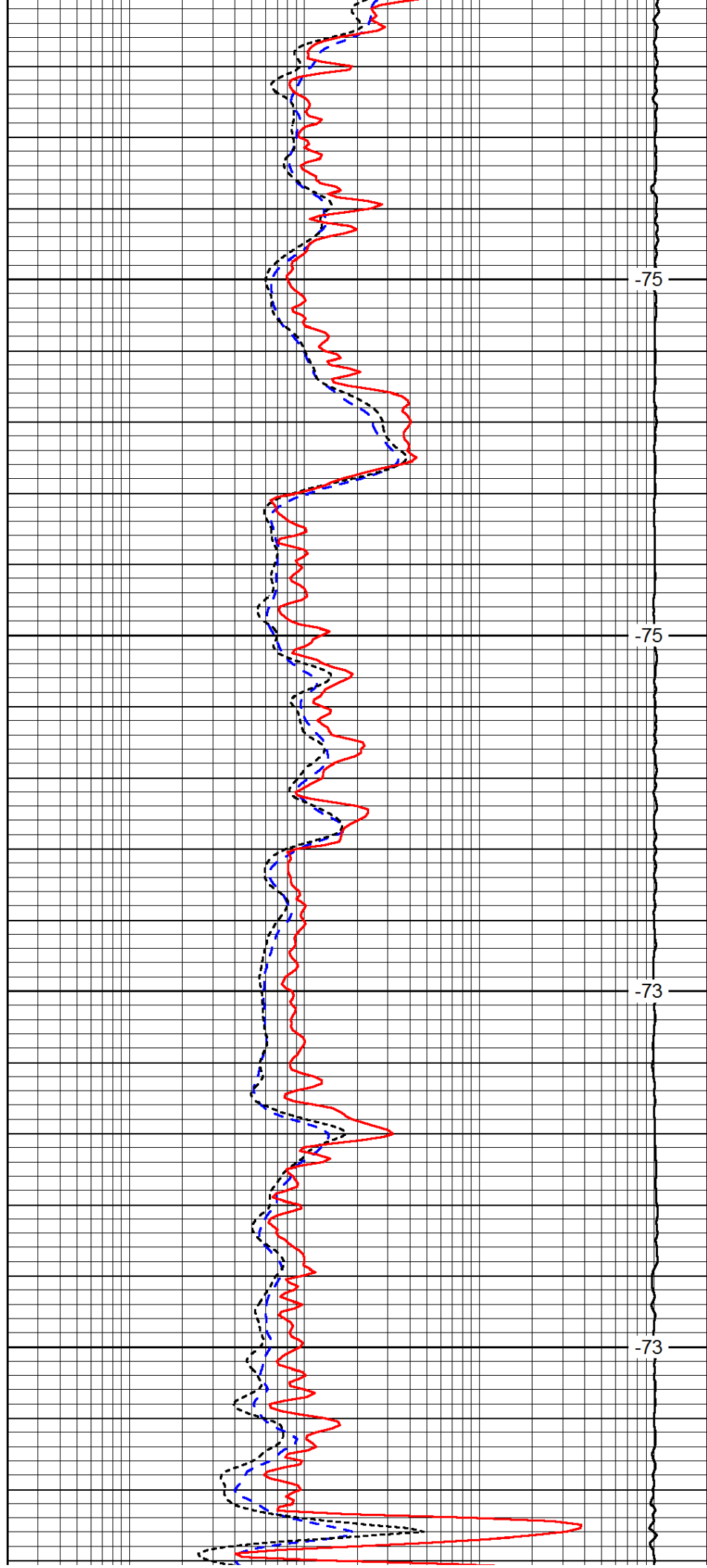


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1600

1650

1700

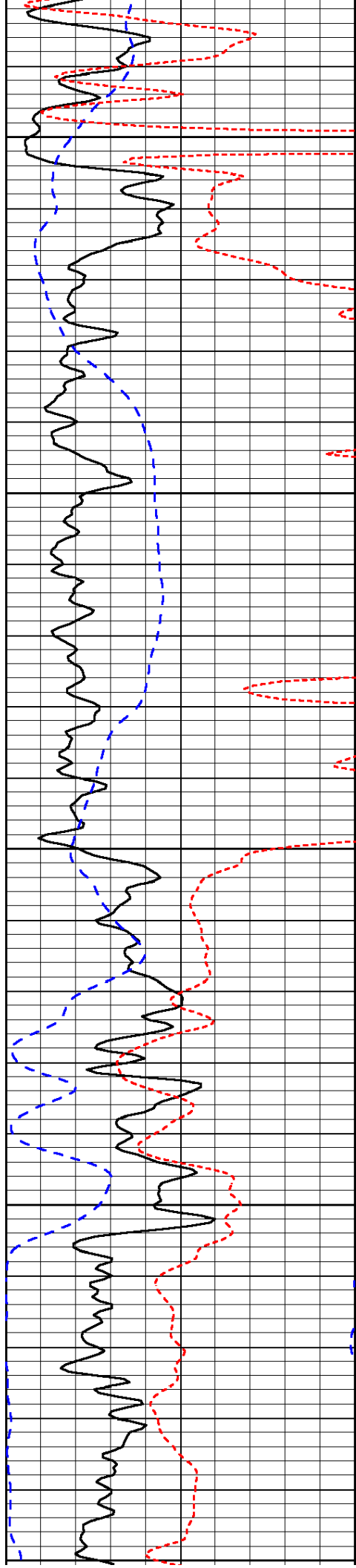


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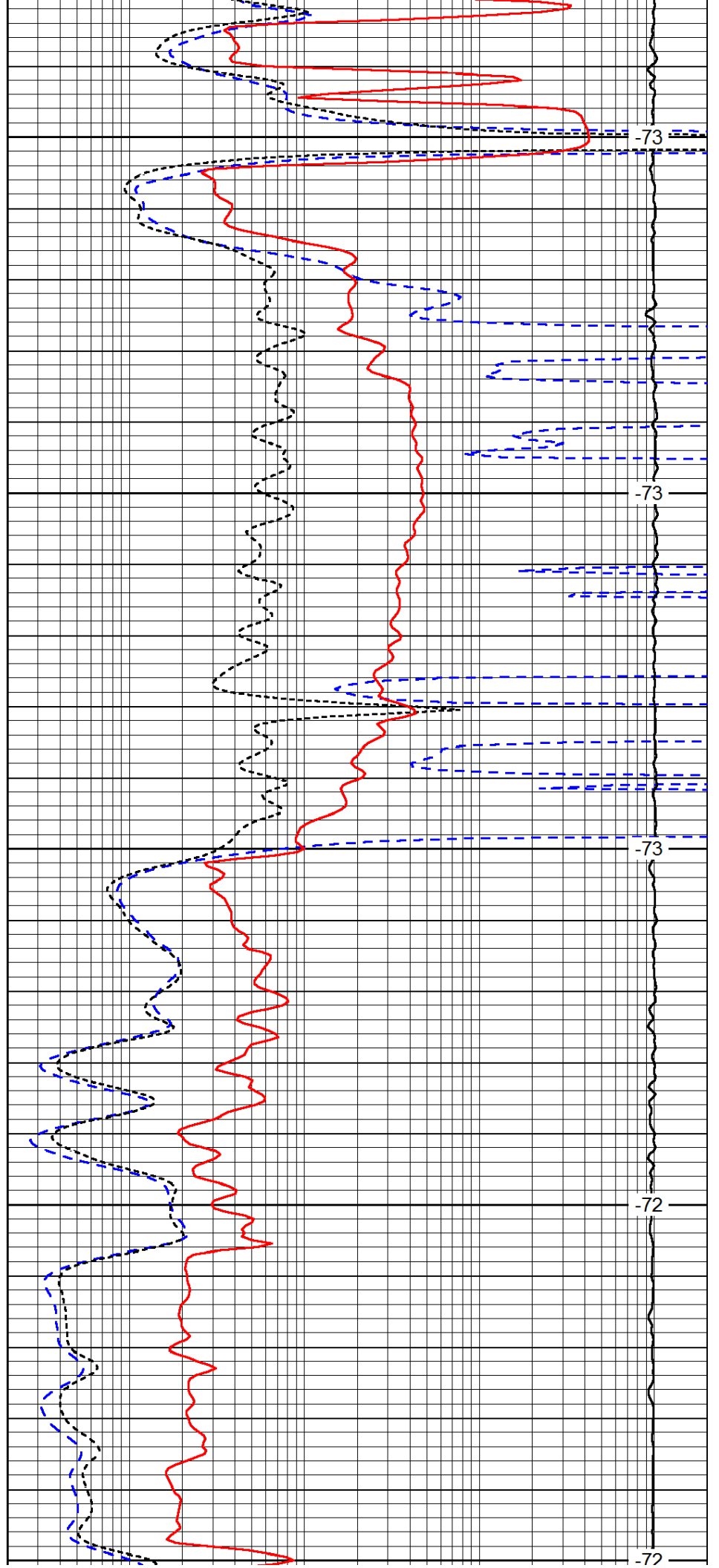
1750

1800

1850

1900

1950



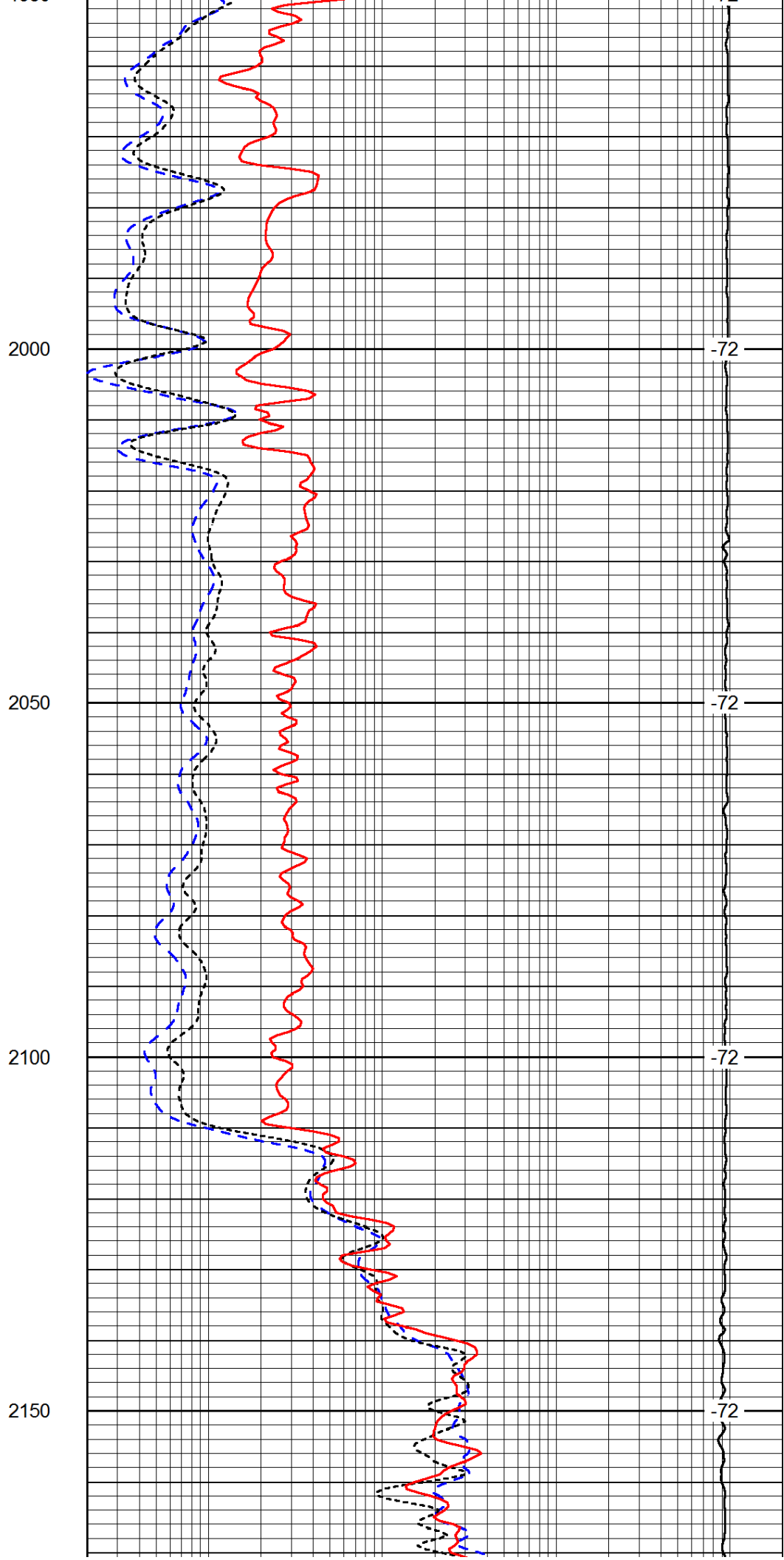
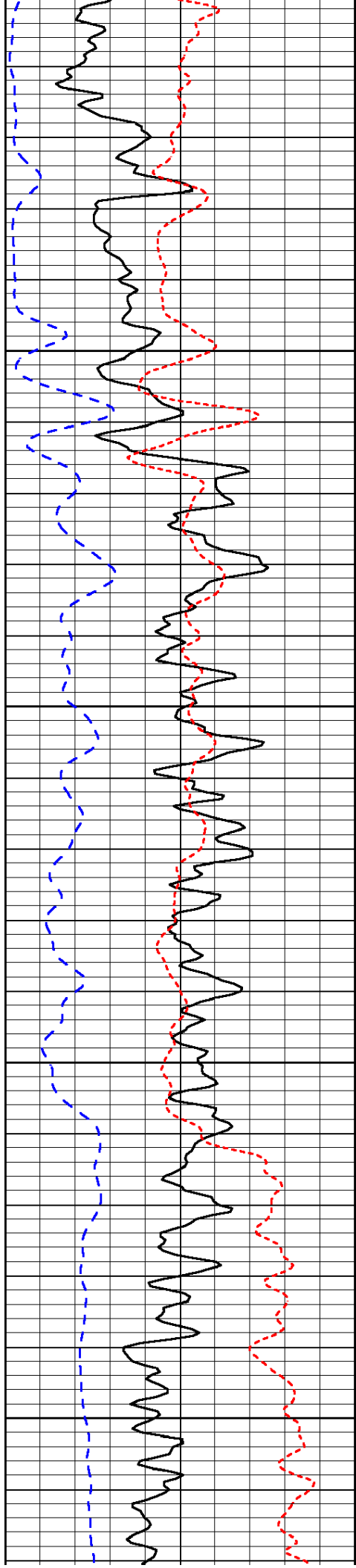
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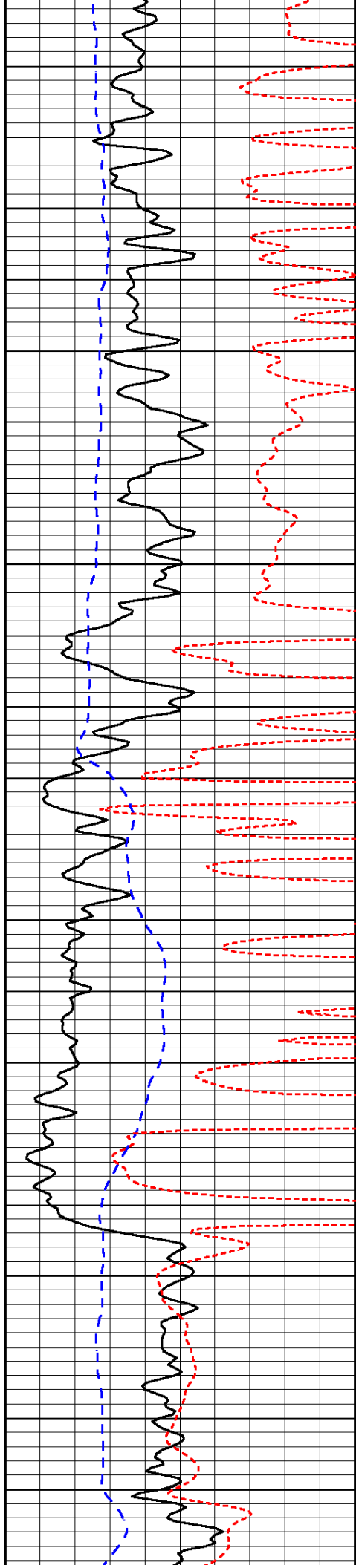
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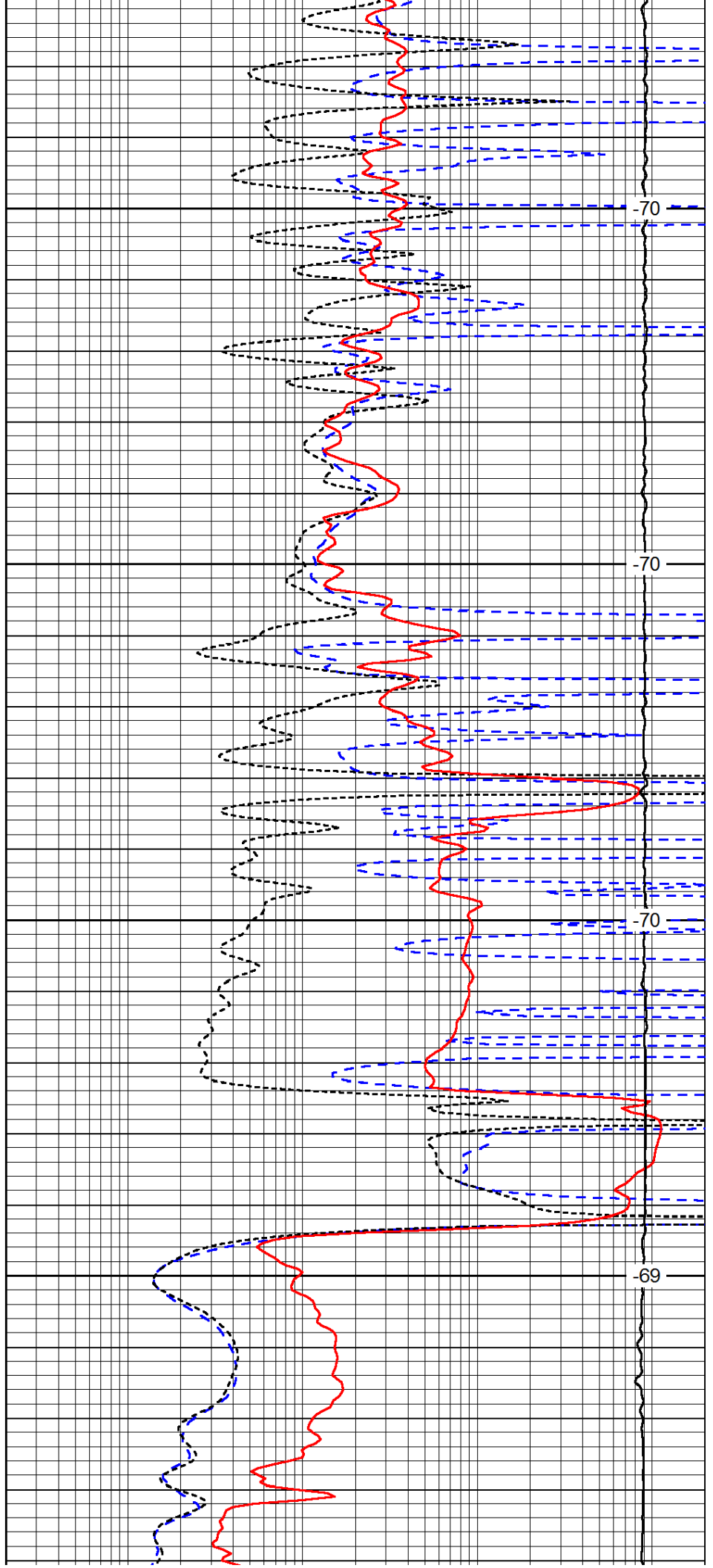


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2250

2300

2350

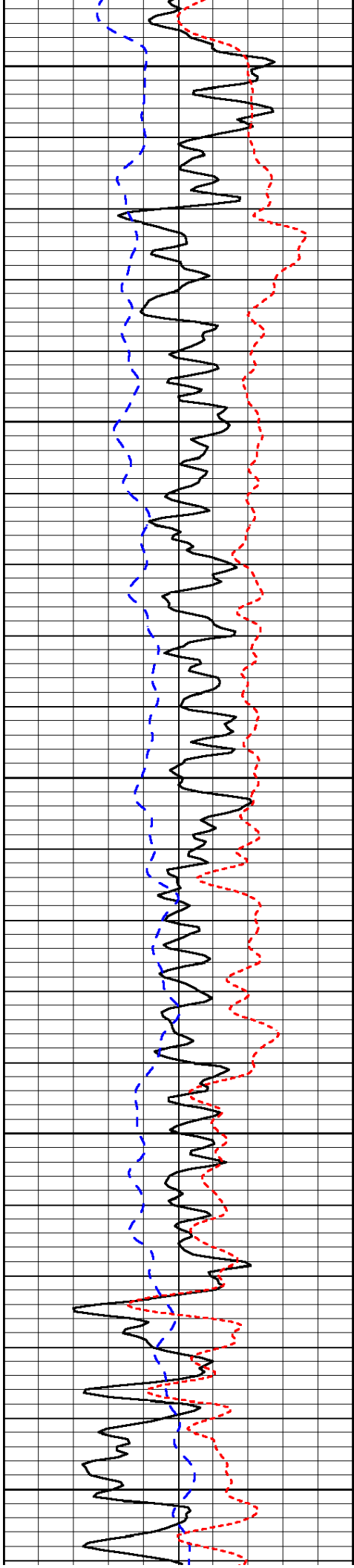


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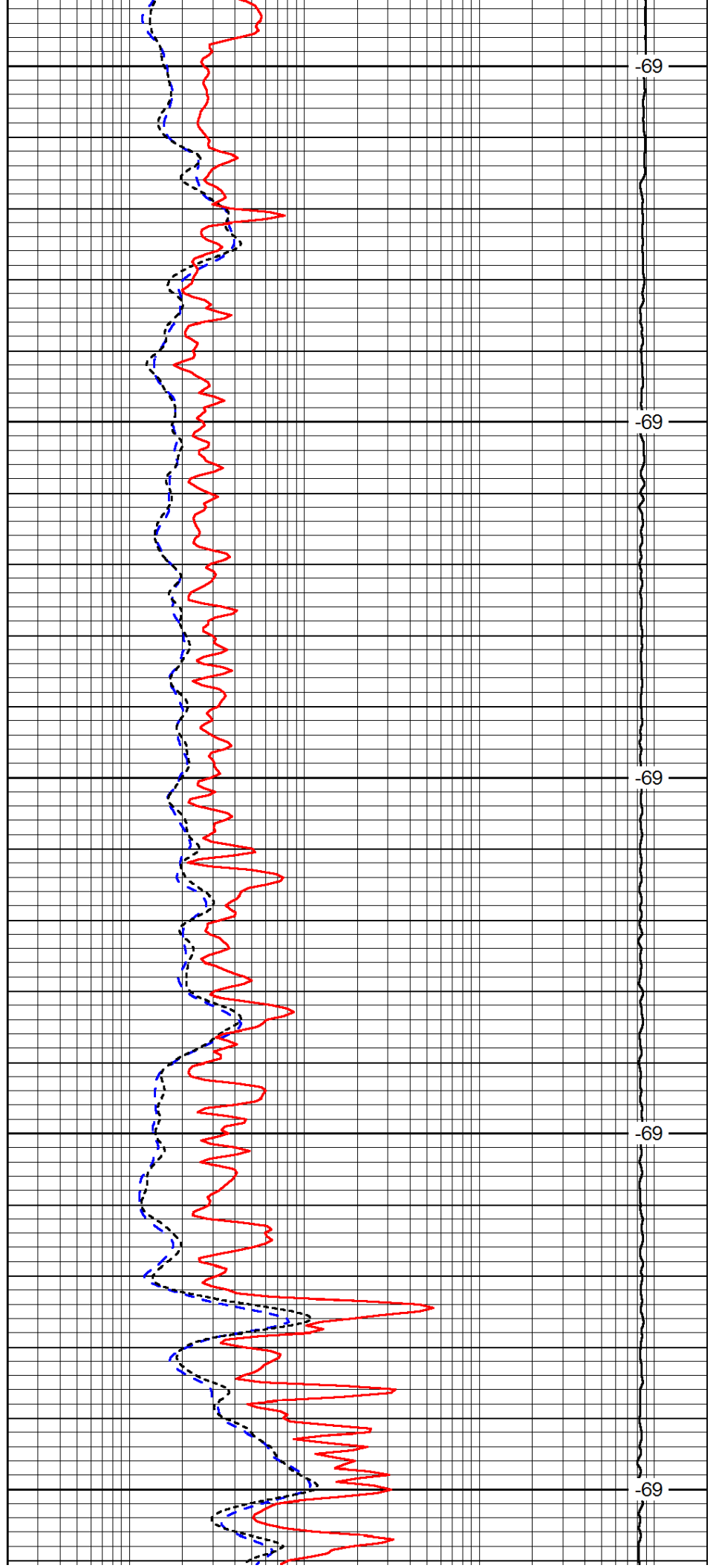
2400

2450

2500

2550

2600



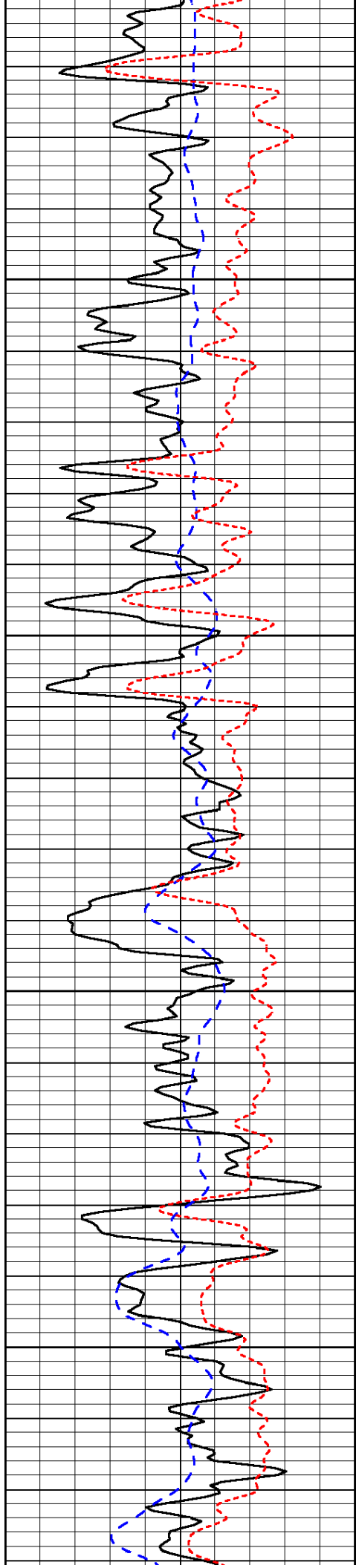
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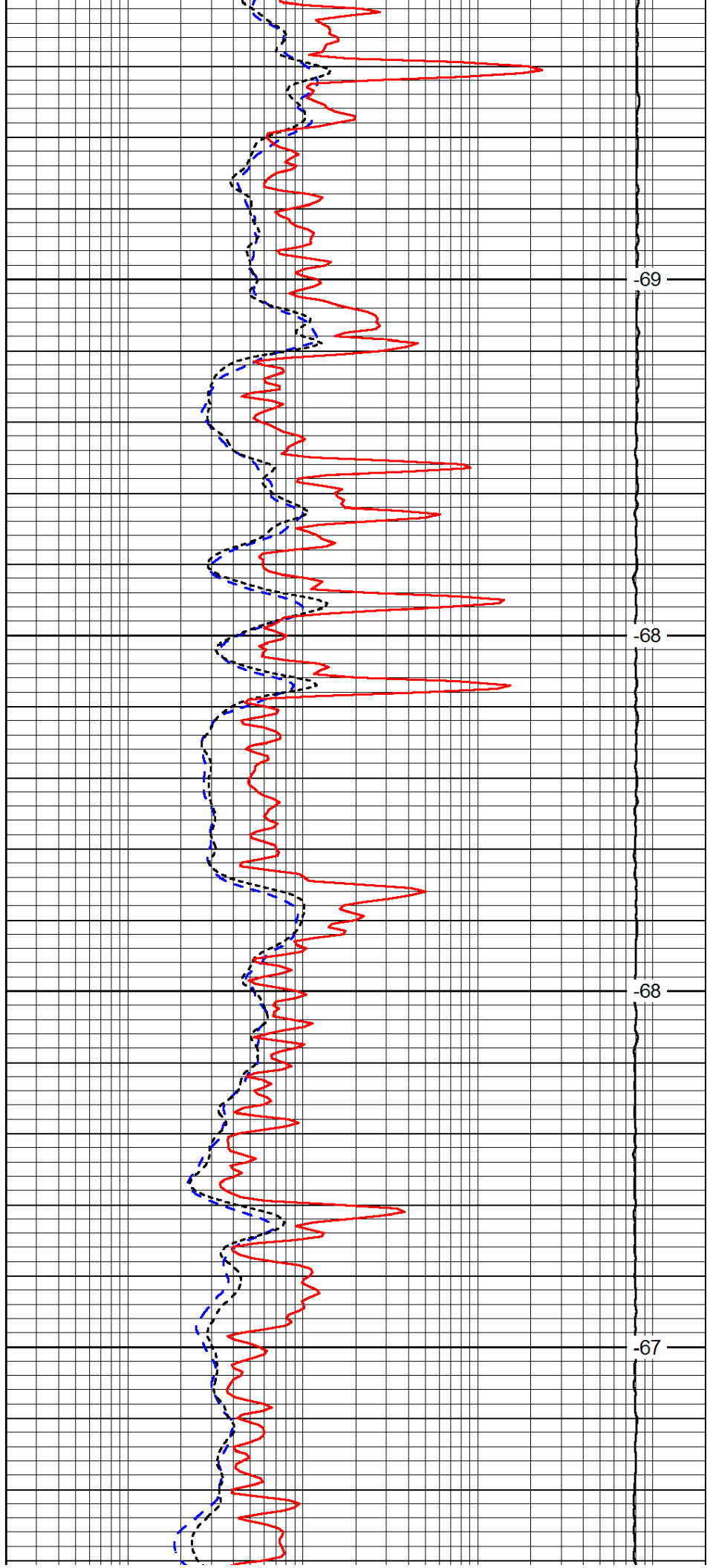


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2700

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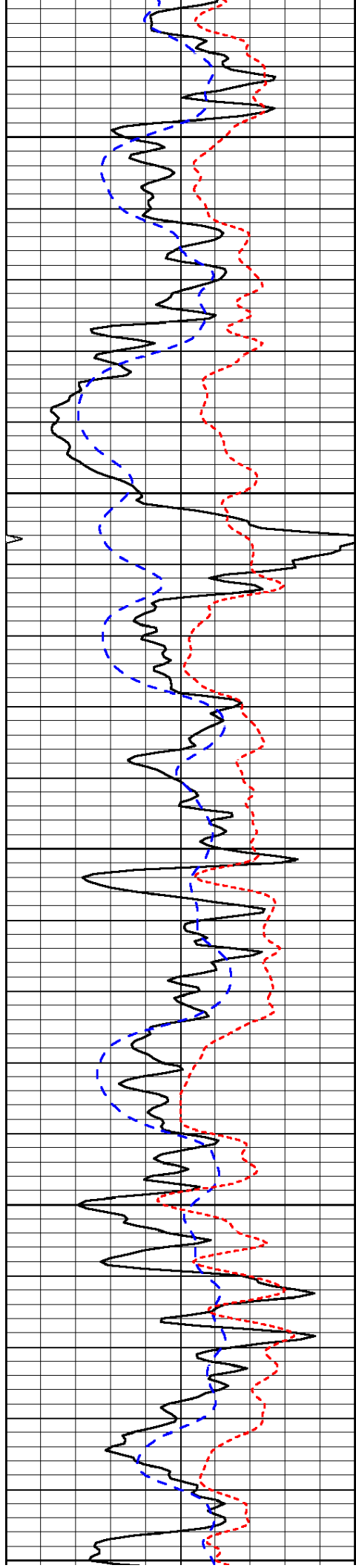


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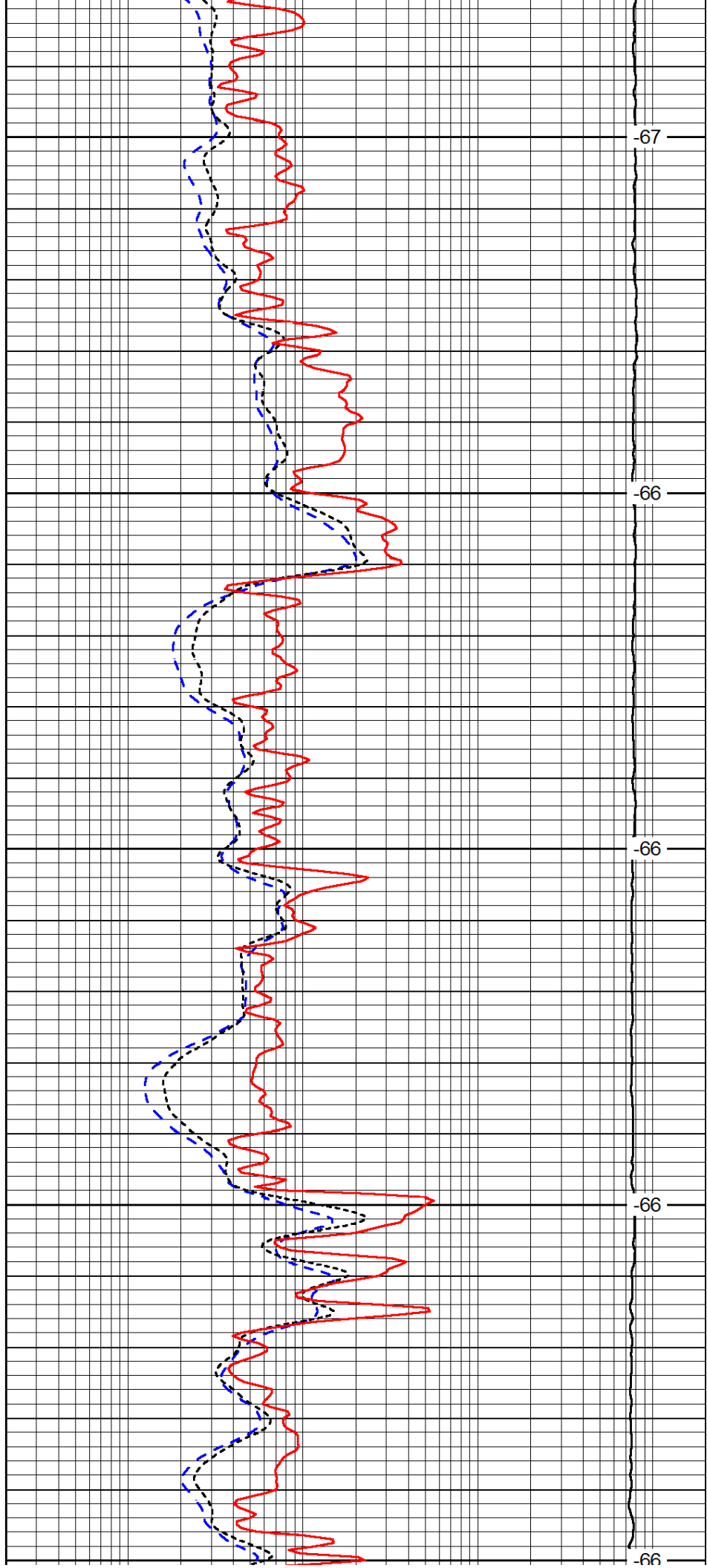
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2900

2950

3000

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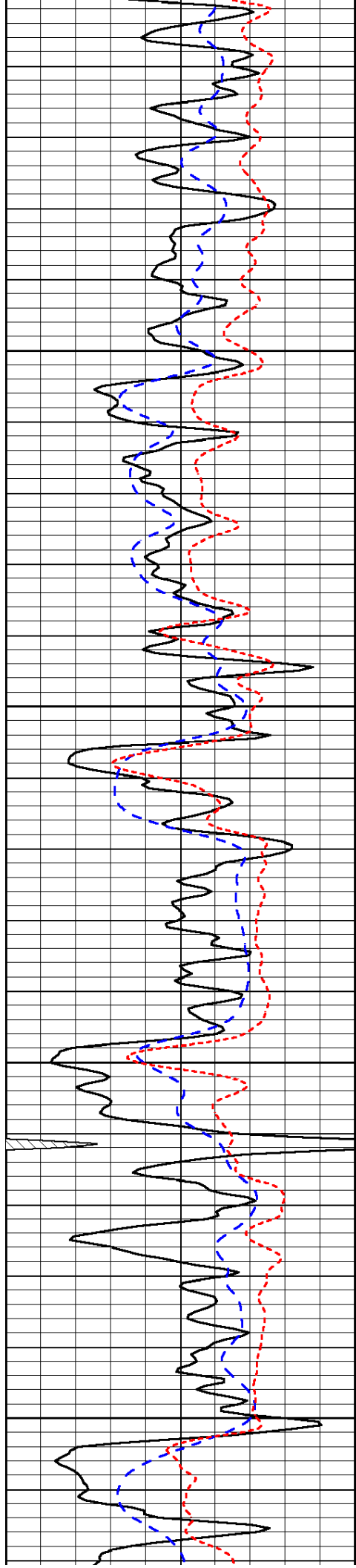
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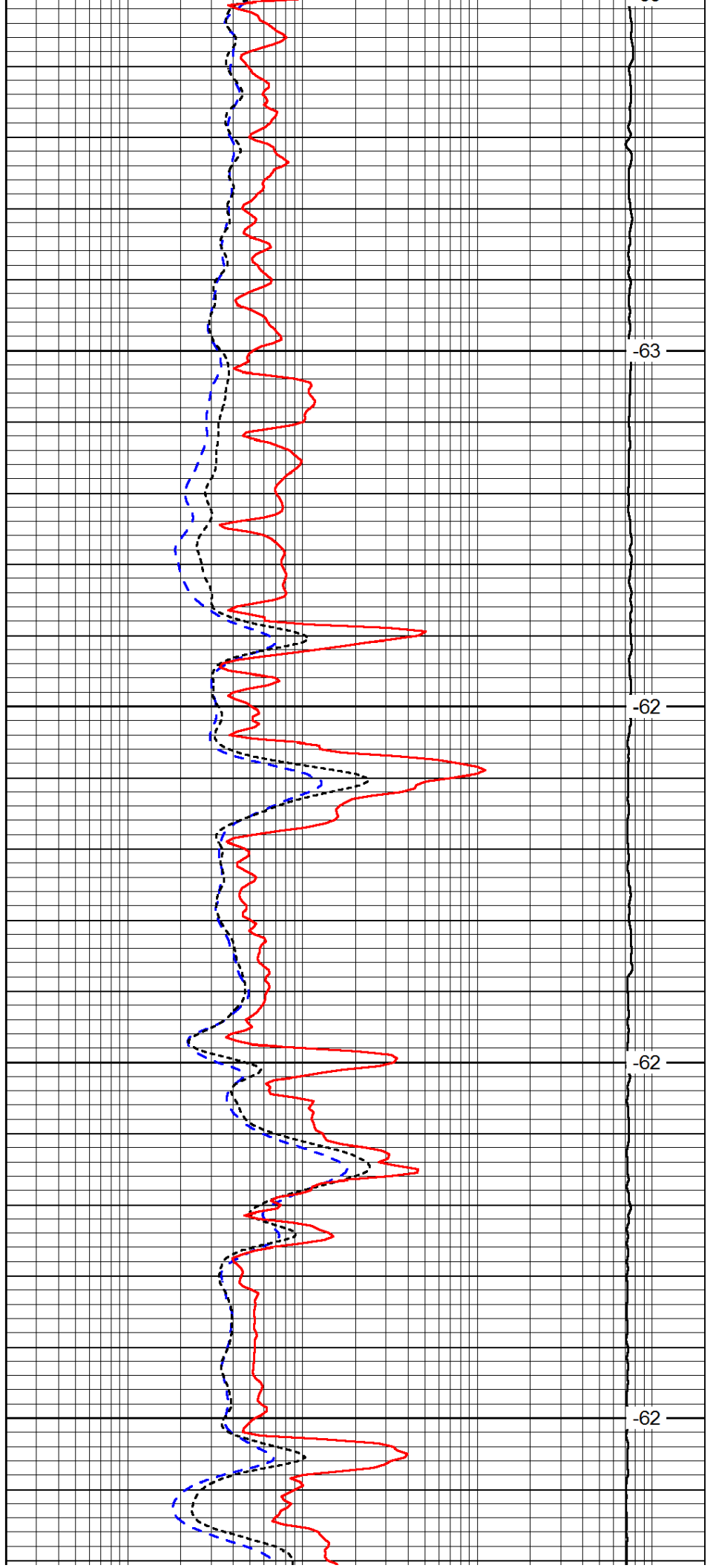


3100

3150

3200

3250

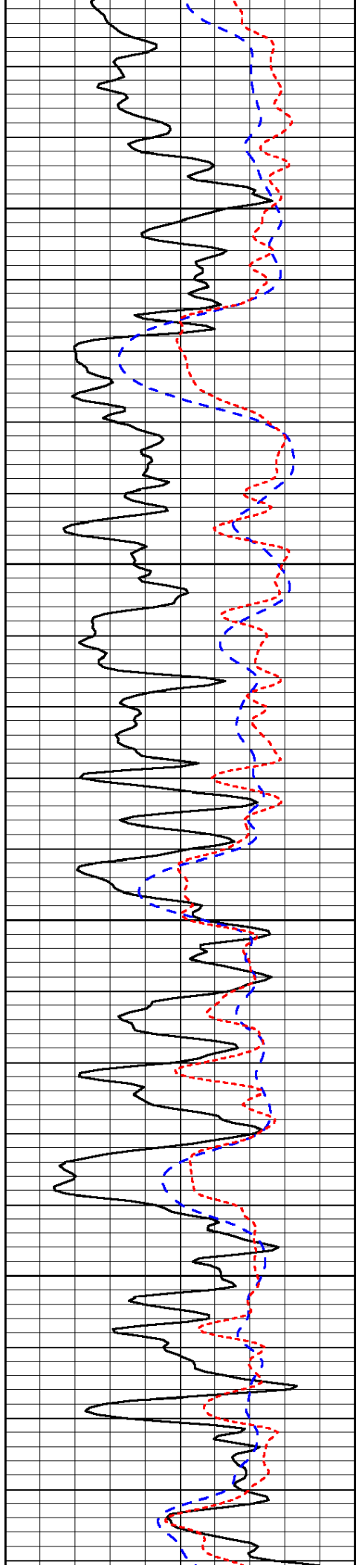


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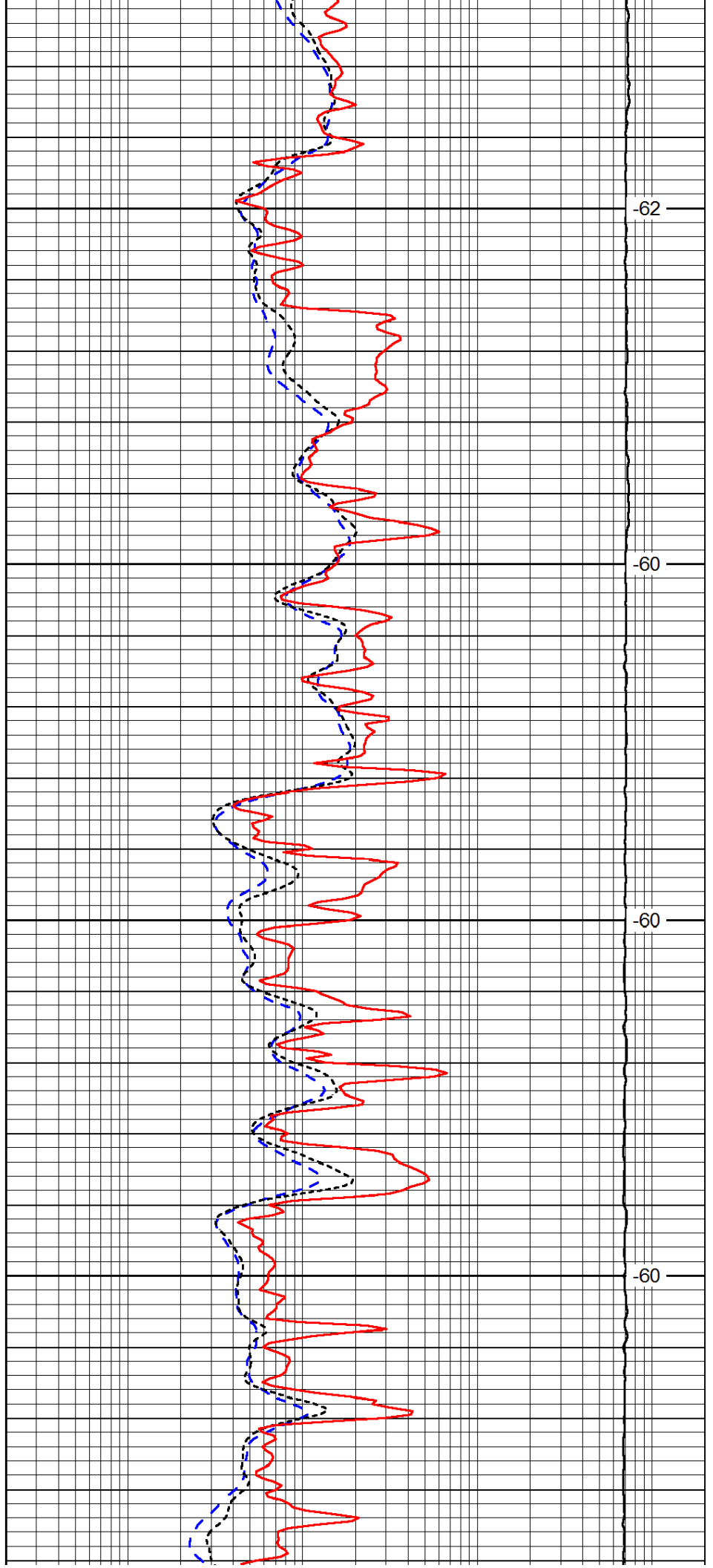


3300

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3400

3450

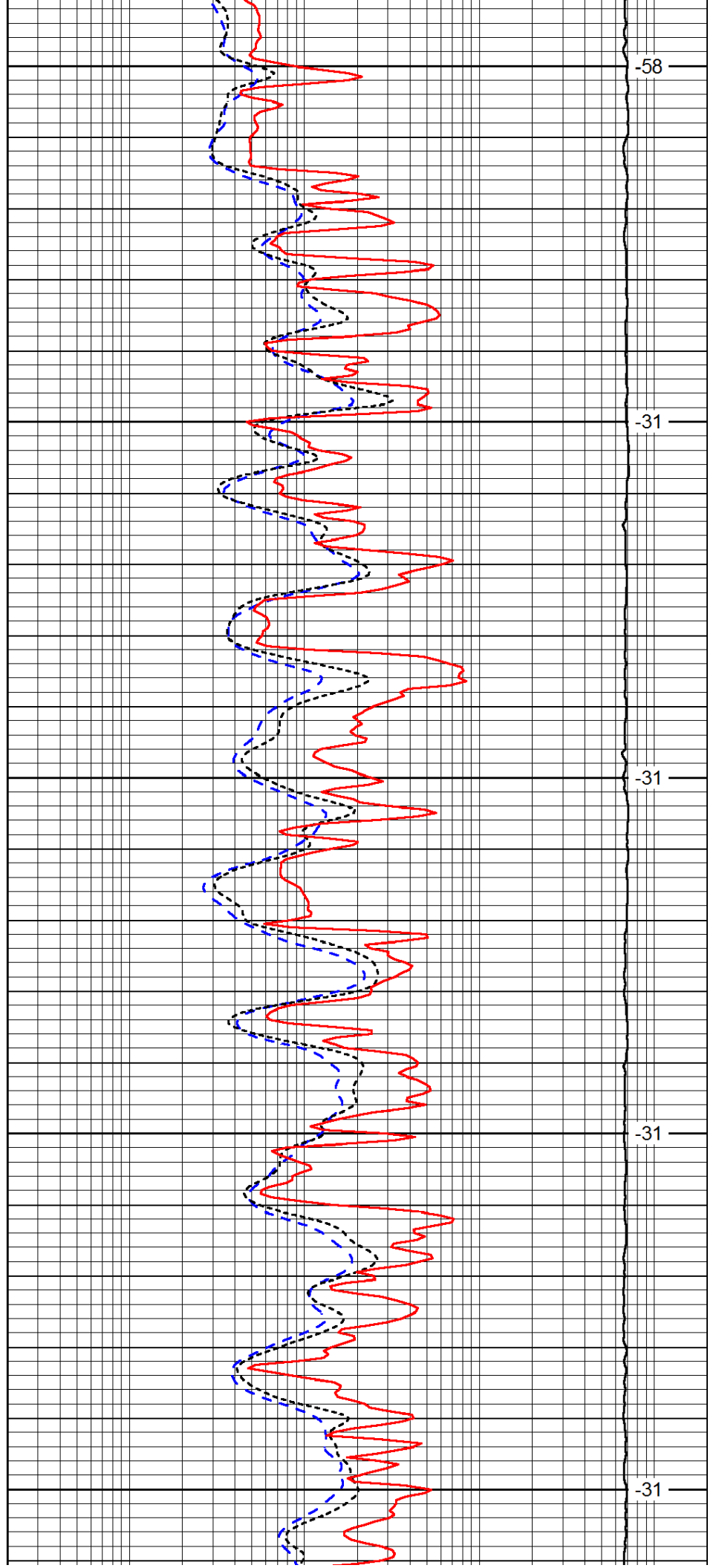
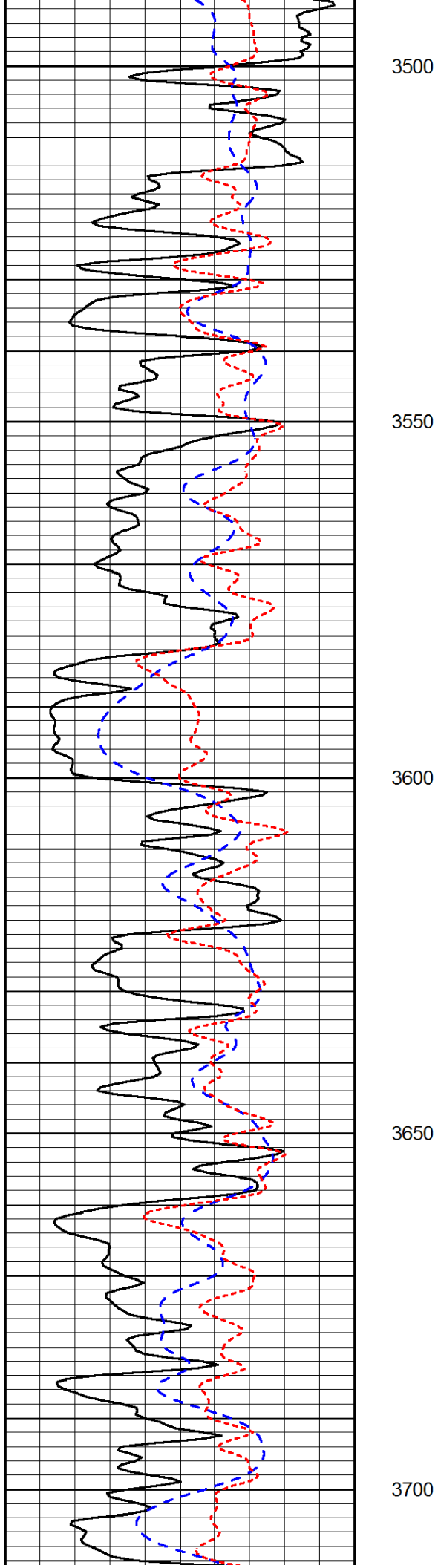


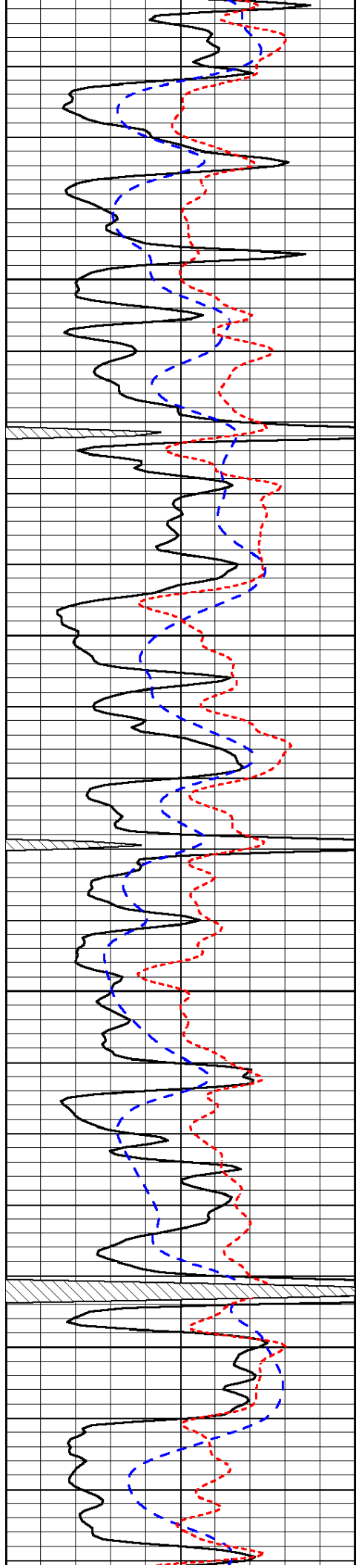
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-60

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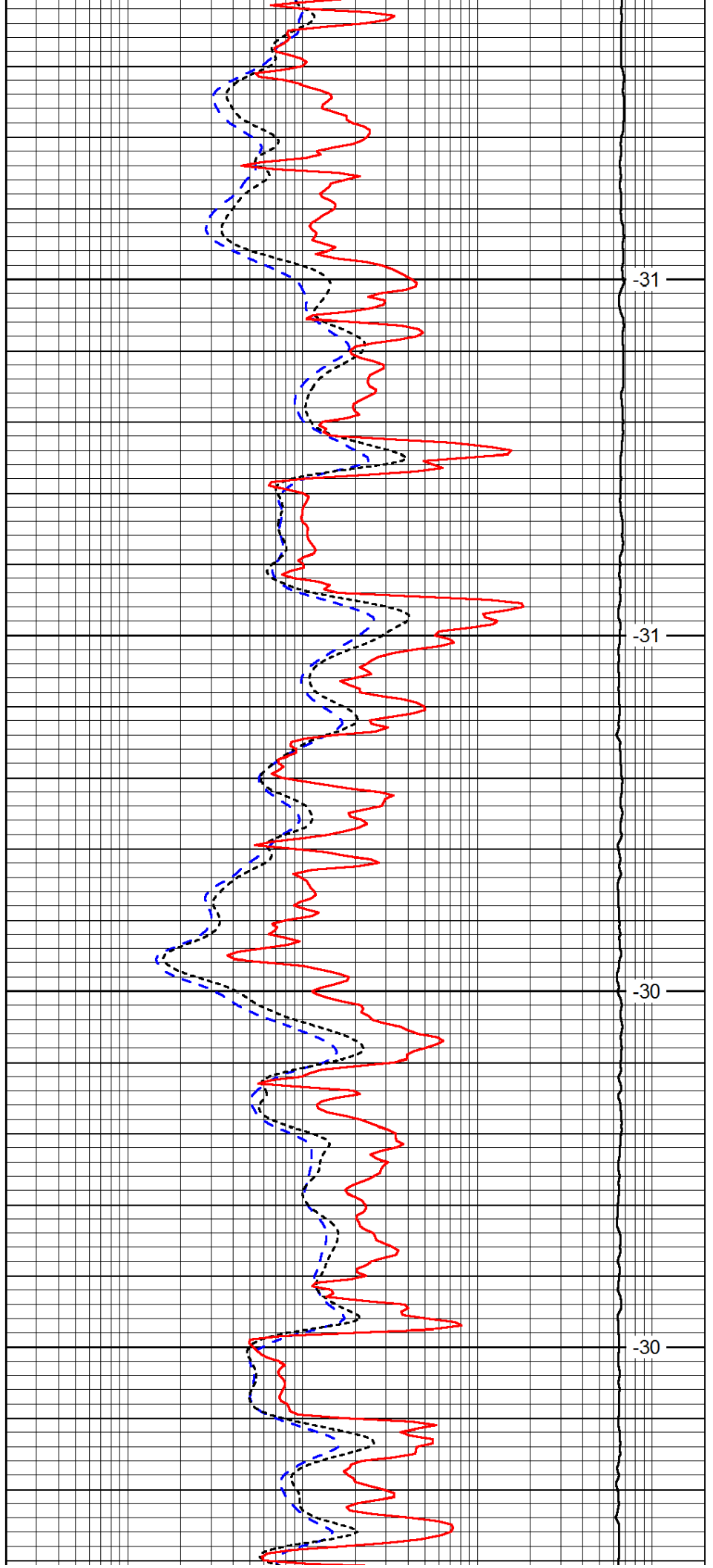


3750

3800

3850

3900

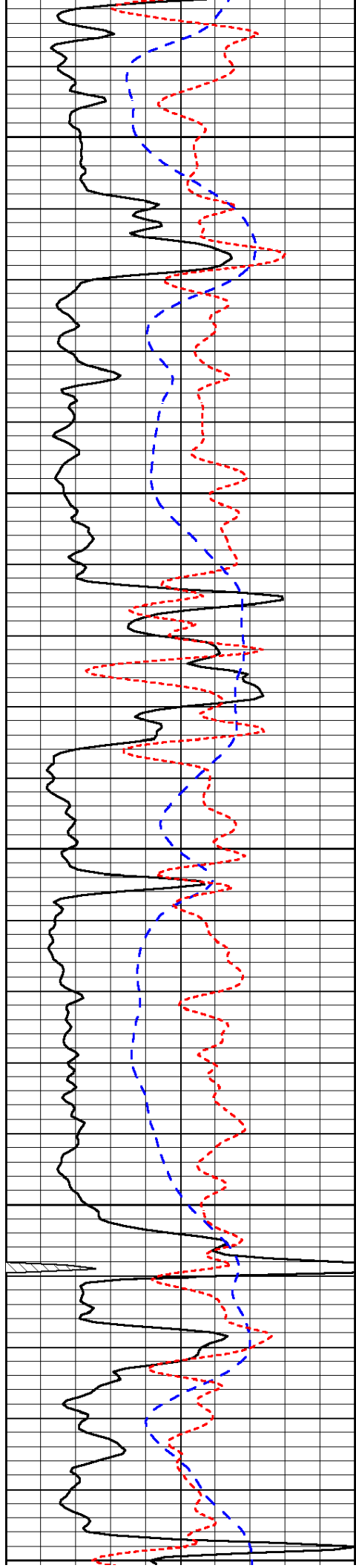


-31

-31

-30

-30



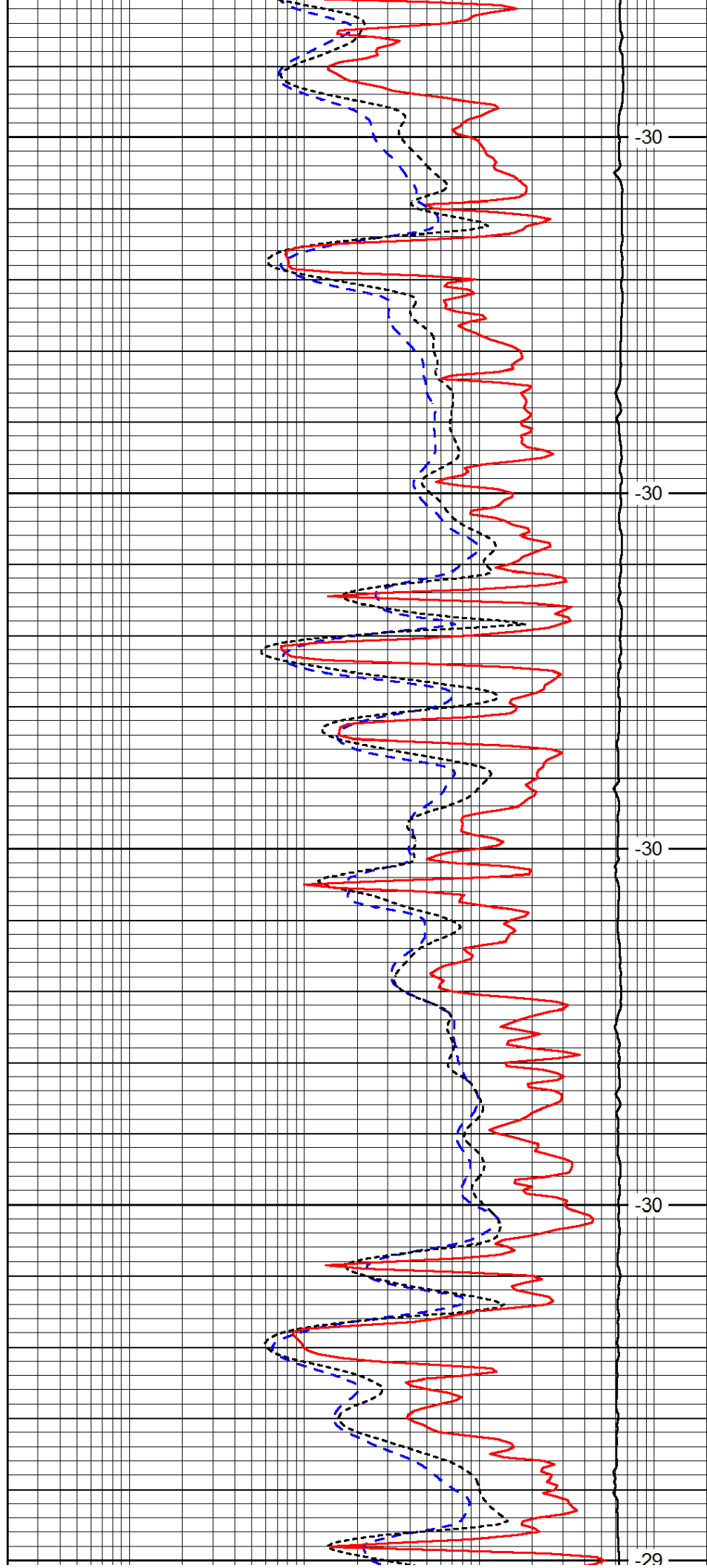
3950

4000

4050

4100

4150



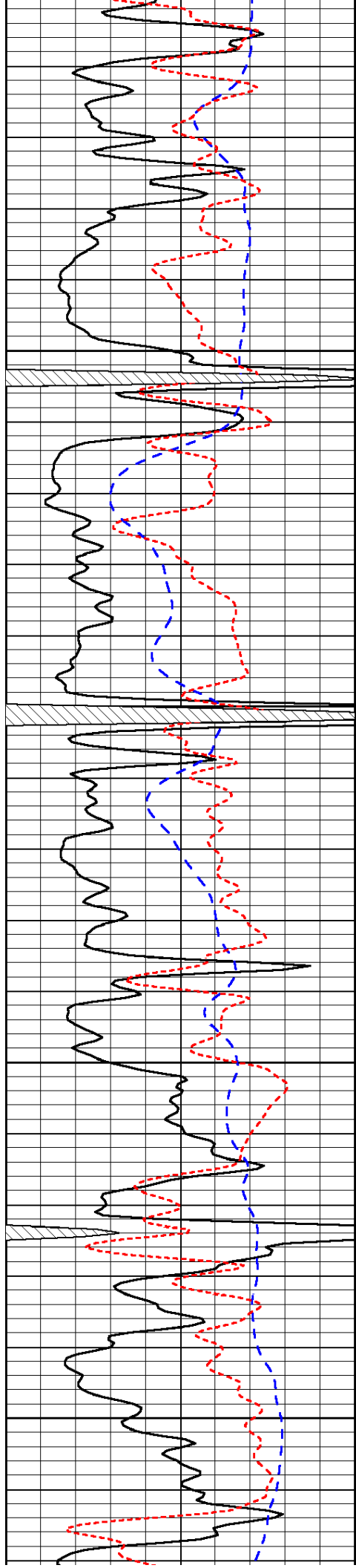
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-30

-30

-30

-29

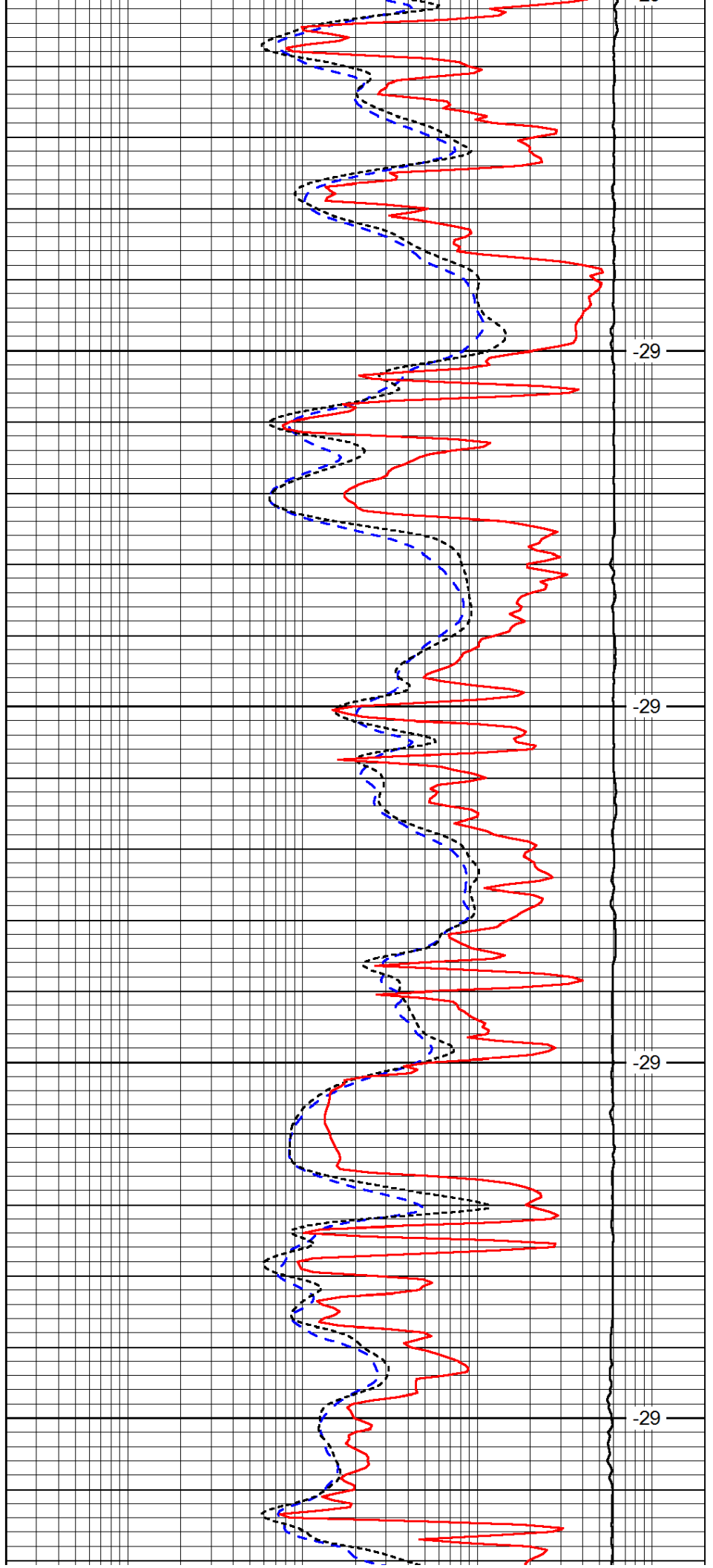


4200

4250

4300

4350

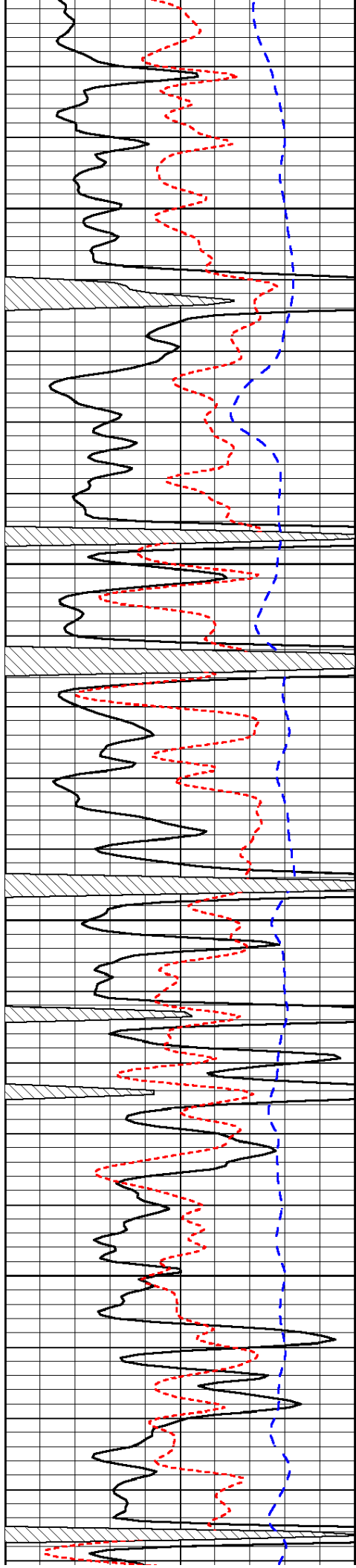


-29

-29

-29

-29

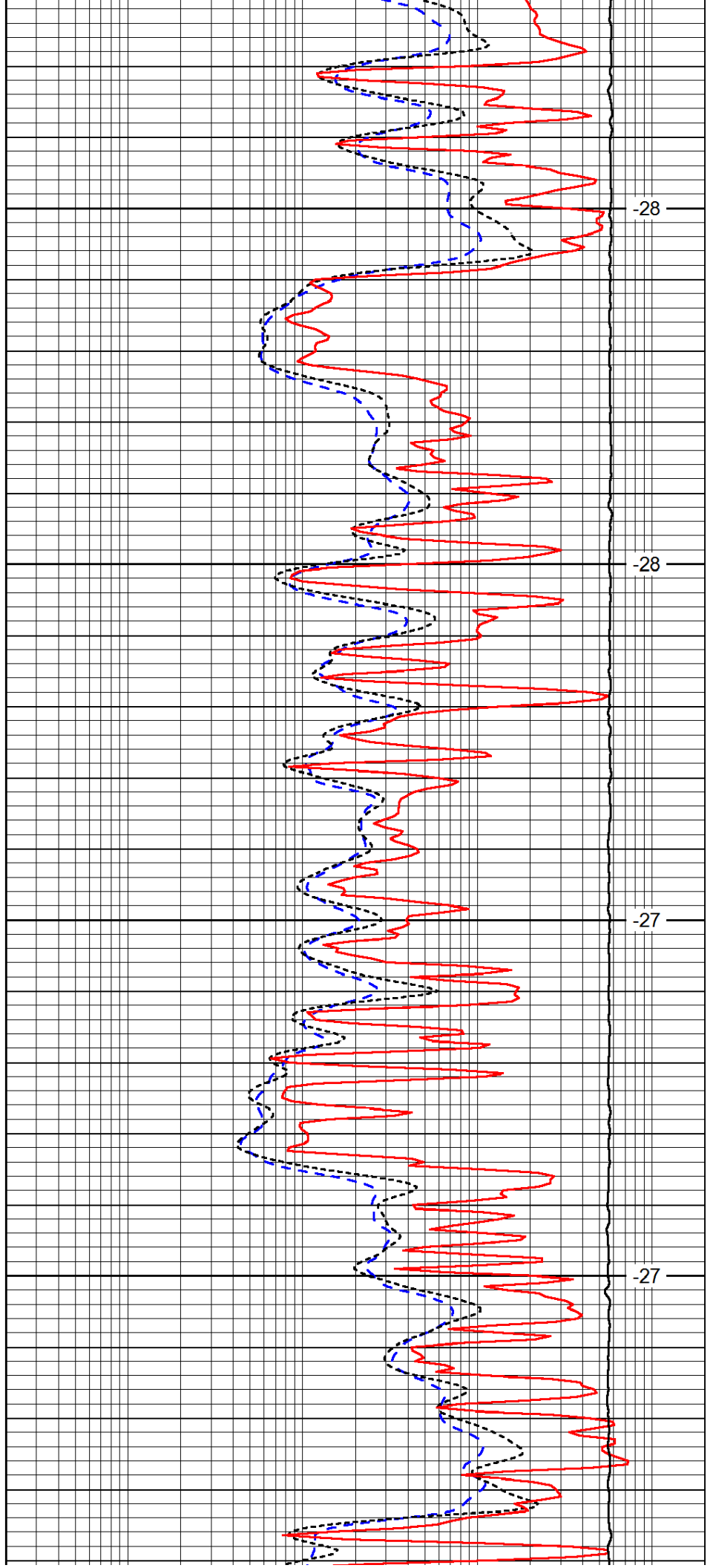


4400

4450

4500

4550

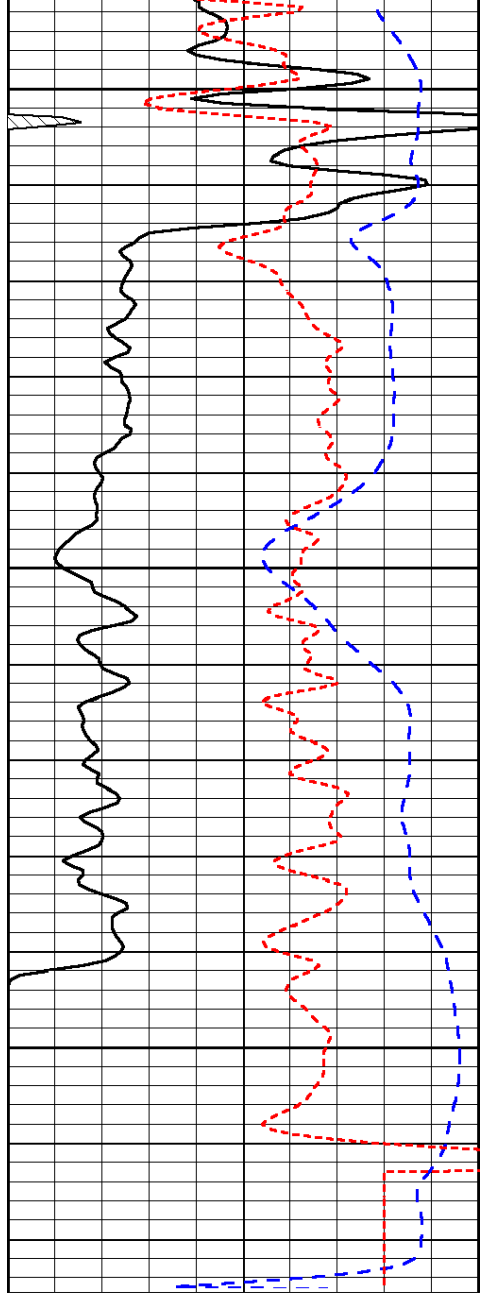


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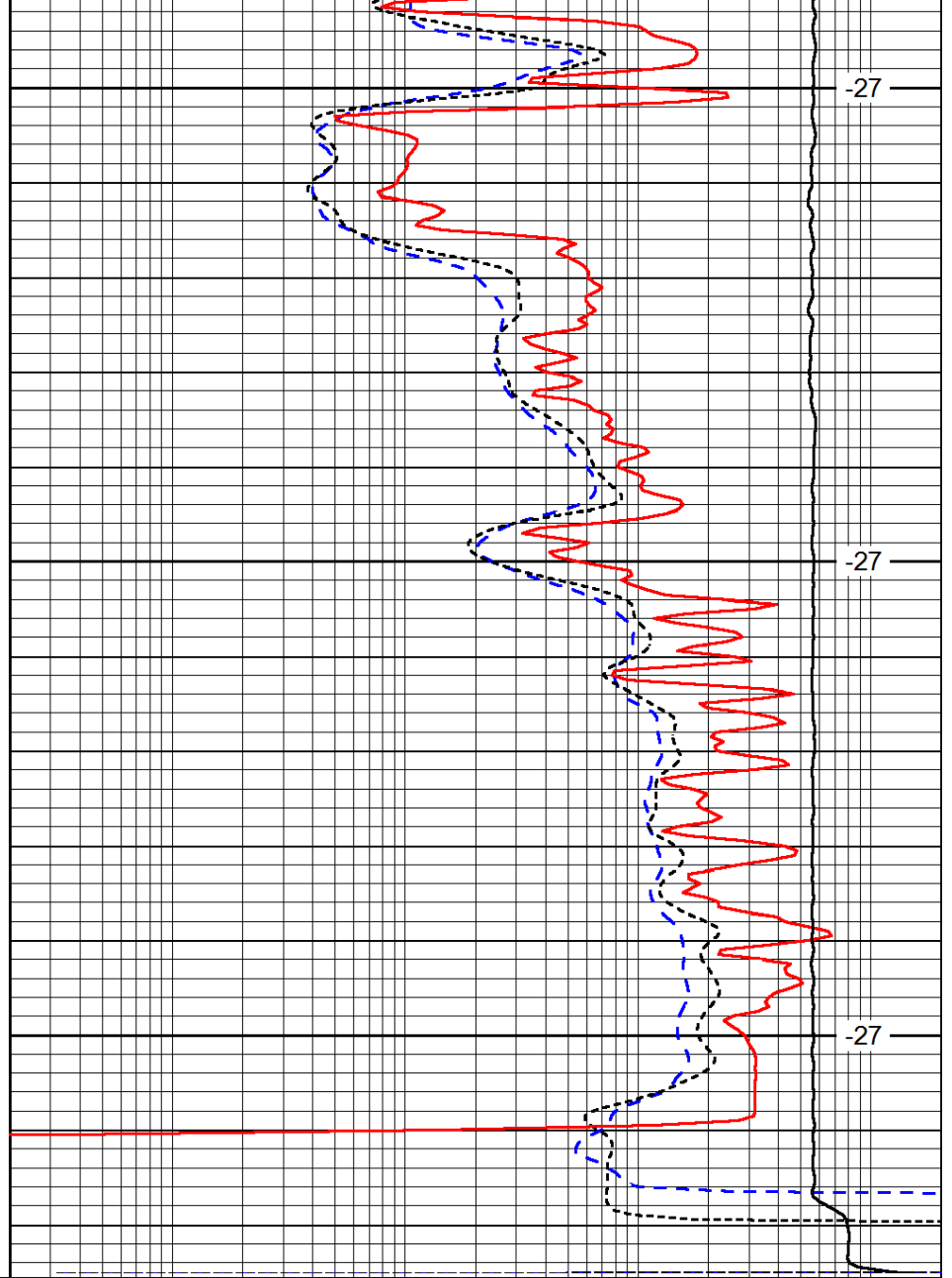
-28

-27

-27



4600
4650
4700



-27
-27
-27

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

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD