



Pioneer Energy Services

# Dual Induction Log

15-069-20,393-00-00

API No.

Company **Falcon Exploration, Inc.**

Well **James Koehn No.1-31(NW)**

Field

County **Gray**

State

**Kansas**

Location

**E/2 SW SE NW1/4  
2310' FNL & 1670' FWL**

Other Services  
CNL/CDL  
MEL/BHCS

Sec: **31**

Twp: **28S**

Rge: **30W**

Elevation

Permanent Datum **Ground Level**

**2829**

Log Measured From **Kelly Bushing**

**13 Ft. Above Perm. Datum**

Drilling Measured From **Kelly Bushing**

**13 Ft. Above Perm. Datum**

Date

**9/19/2012**

Run Number

**One**

Depth Driller

**5550**

Depth Logger

**5549**

Bottom Logged Interval

**5548**

Top Log Interval

**1850**

Casing Driller

**8.625 @ 1863**

Casing Logger

**1856**

Bit Size

**7.875**

Type Fluid in Hole

**Chemical**

Salinity,ppm CL

**4.800**

Density / Viscosity

**9.05 63**

pH / Fluid Loss

**10.0 8.8**

Source of Sample

**Flowline**

Rm @ Meas. Temp

**.44 @ 67**

Rmf @ Meas. Temp

**.33 @ 67**

Rmc @ Meas. Temp

**.59 @ 67**

Source of Rmf / Rmc

**Charts**

Rm @ BHT

**.22 @ 132**

Operating Rig Time

**6 Hours**

Max Rec. Temp. F

**132**

Equipment Number

**17**

Location

**Hays**

Recorded By

**C. Desaire**

Witnessed By

**Dave Williams**

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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

Montezuma KS, W to Hwy 144,  
5 W, 1/2 N, E Into

Database File: c:\warrior\data\falcon\_james koehn #1-31(nw)\falhd.db  
Dataset Pathname: dil/falstk  
Presentation Format: dil2in  
Dataset Creation: Wed Sep 19 09:43:39 2012  
Charted by: Depth in Feet scaled 1:600

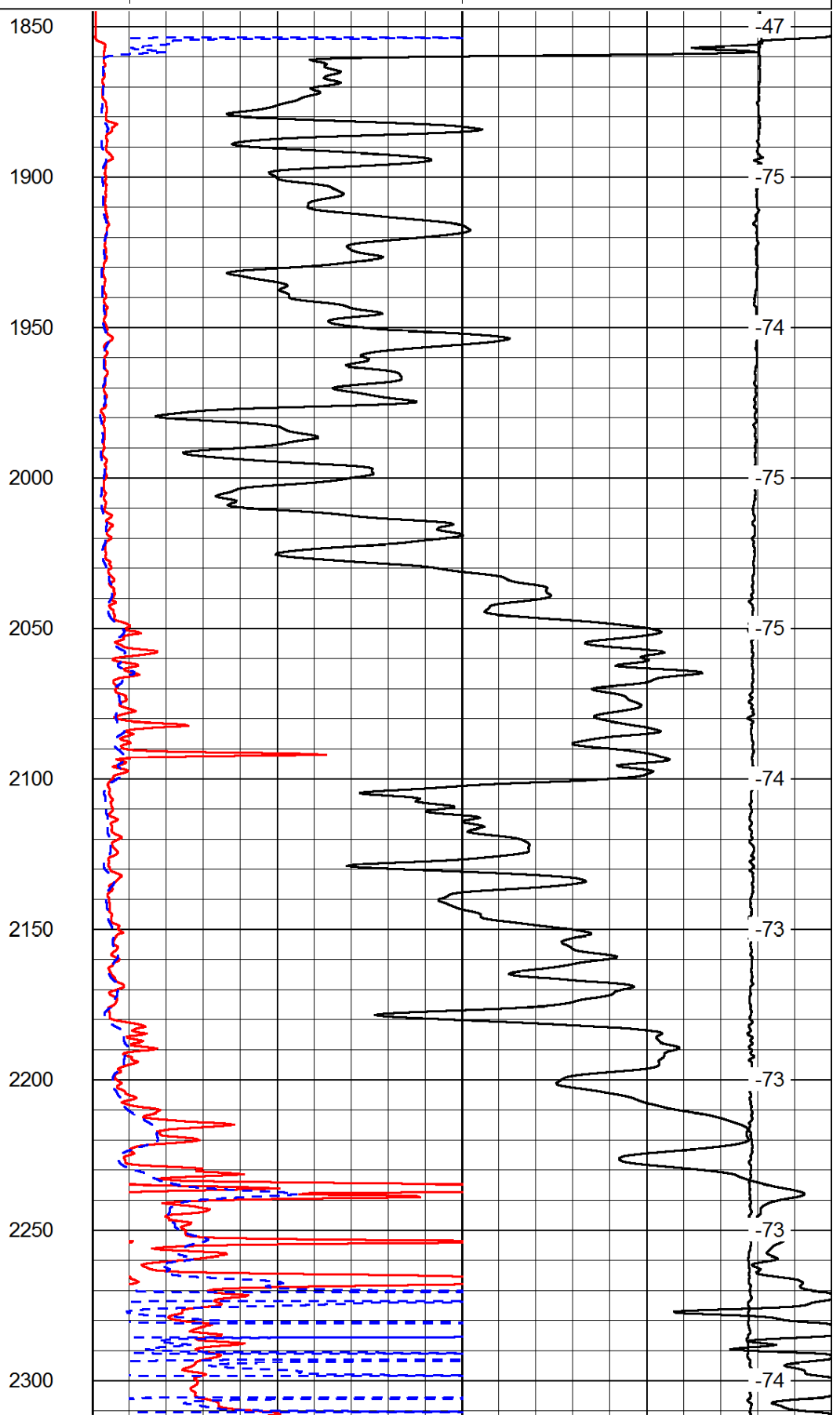
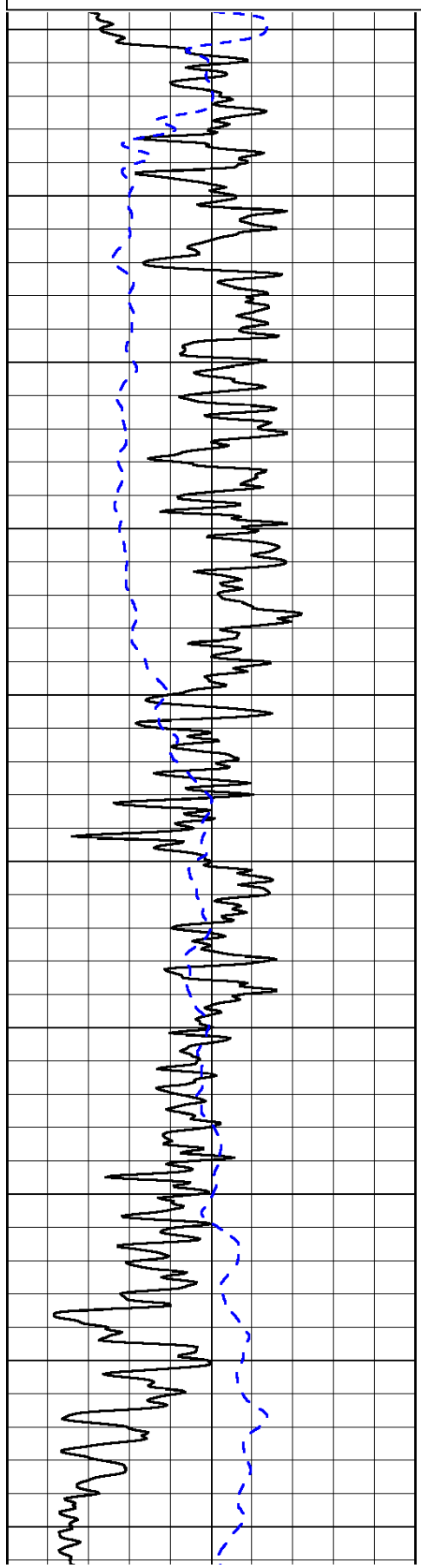
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-200	SP (mV)	0

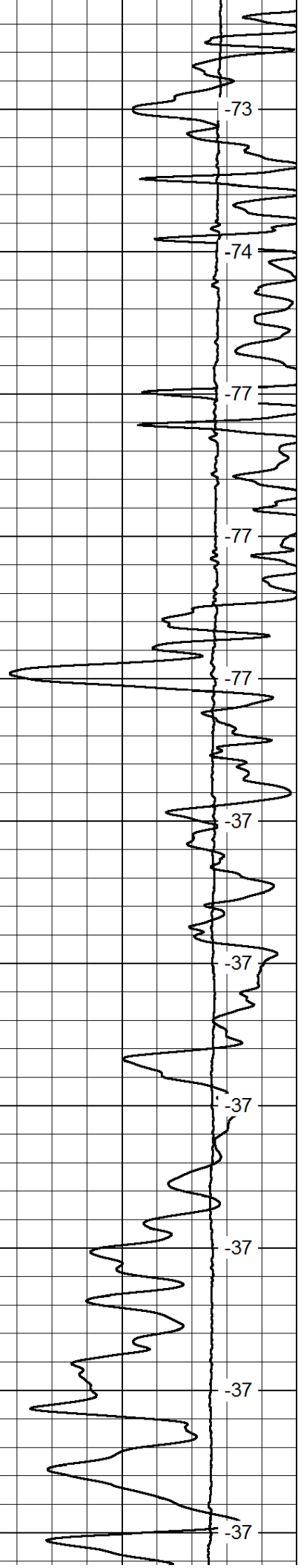
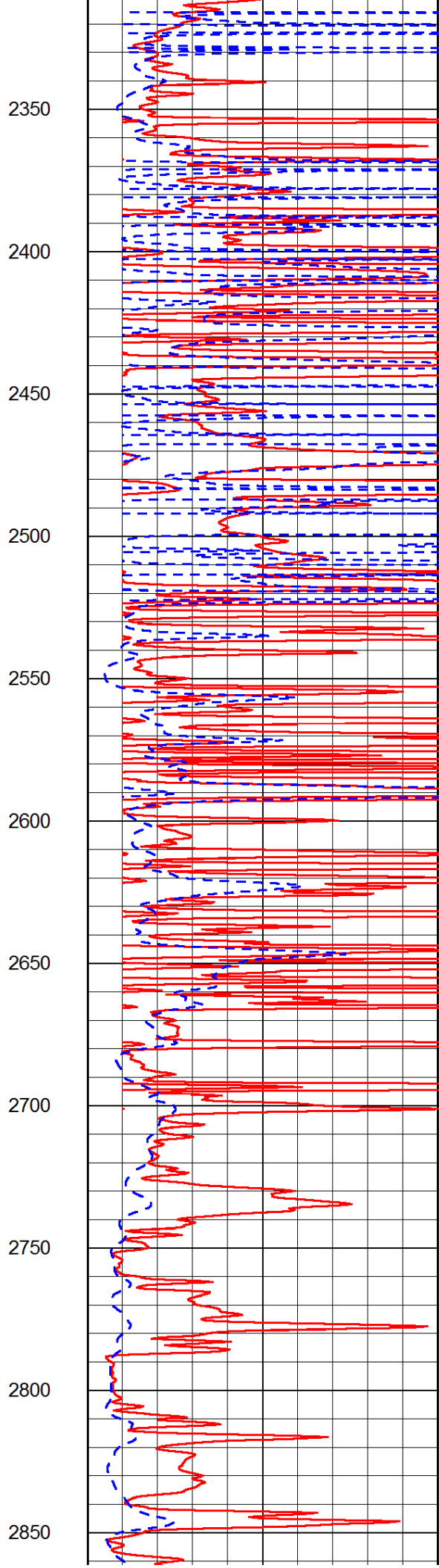
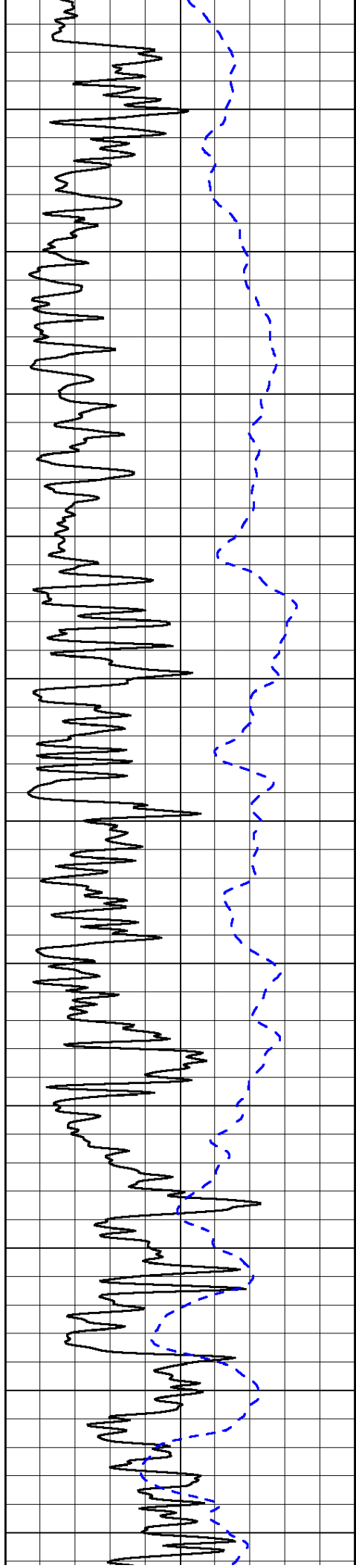
0	Shallow Resistivity	50
0	Deep Resistivity	50

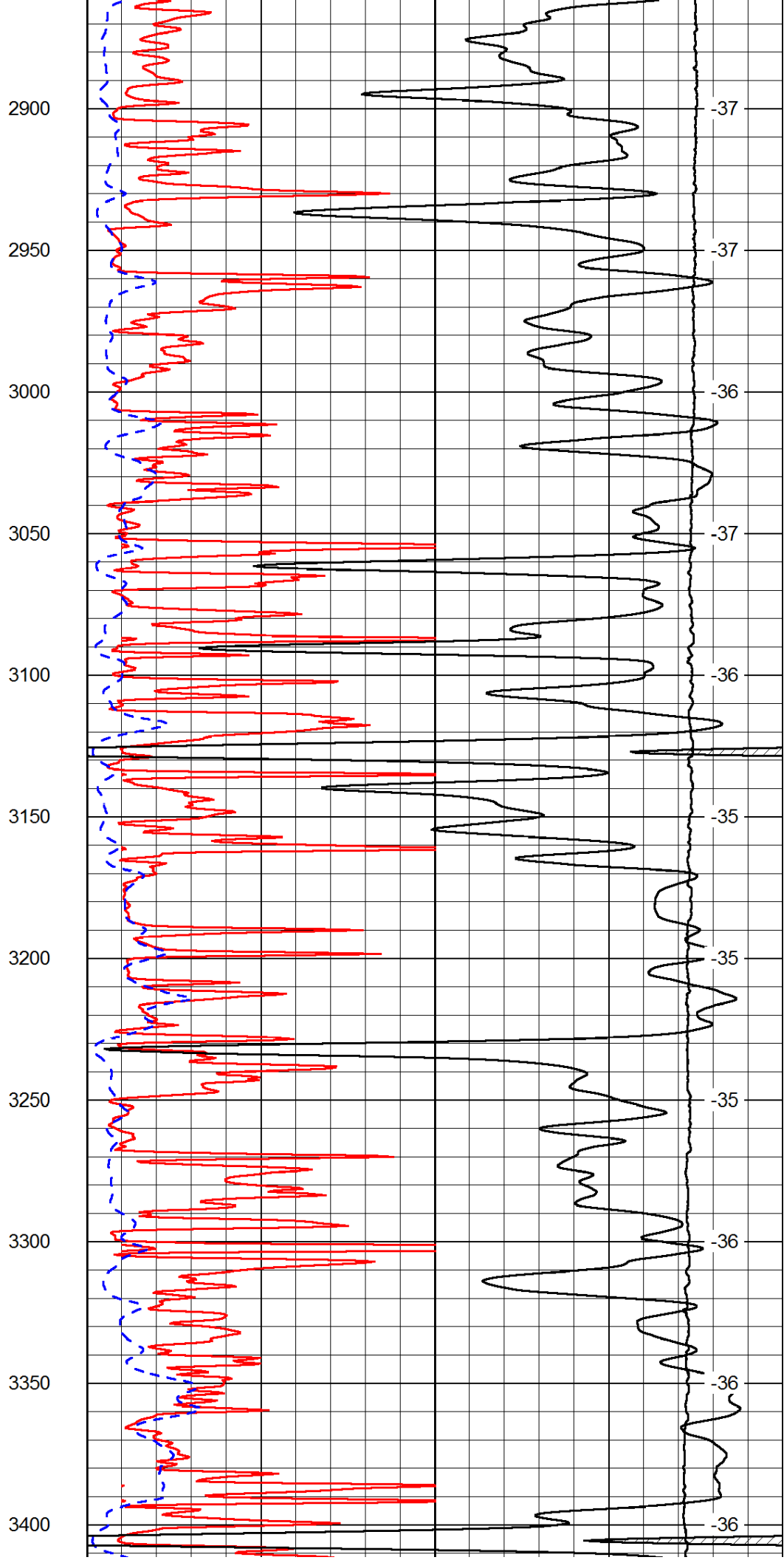
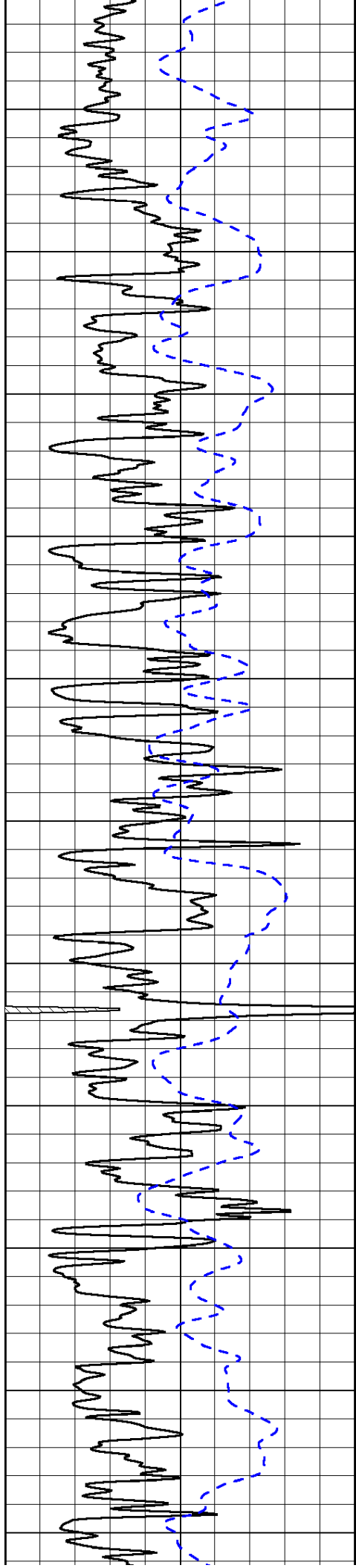
LSPD

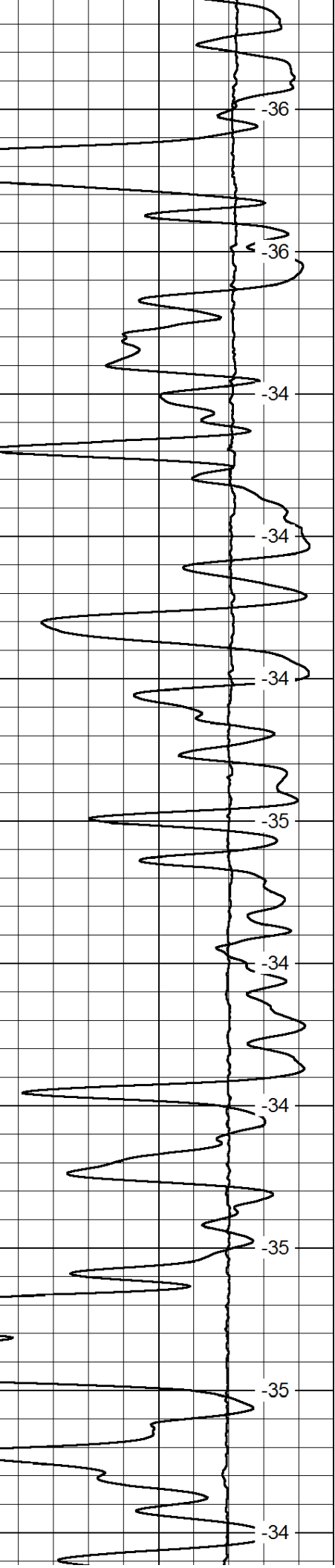
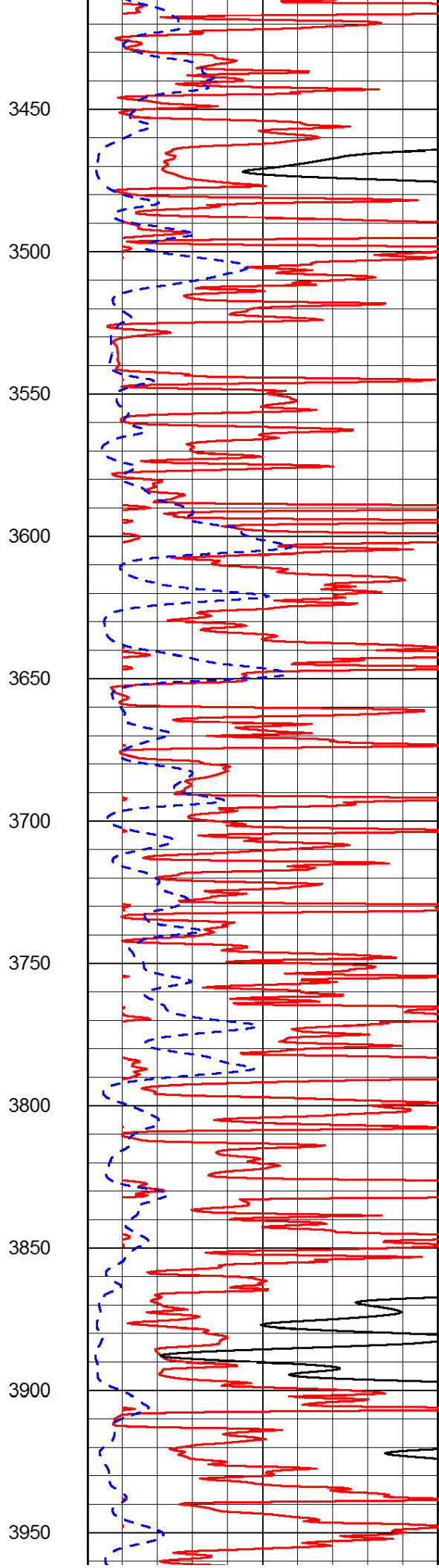
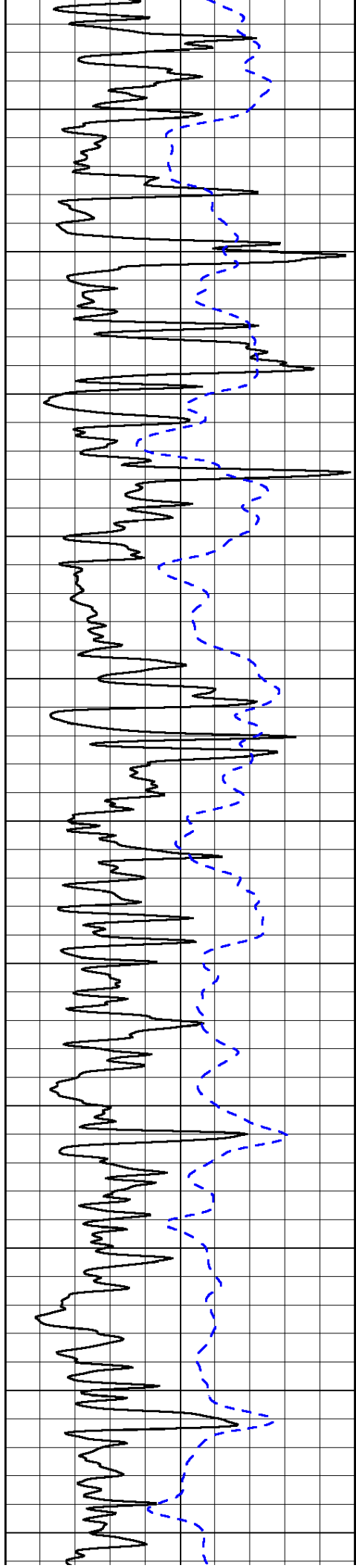
1000	Conductivity	0
15000	Line Tension	0

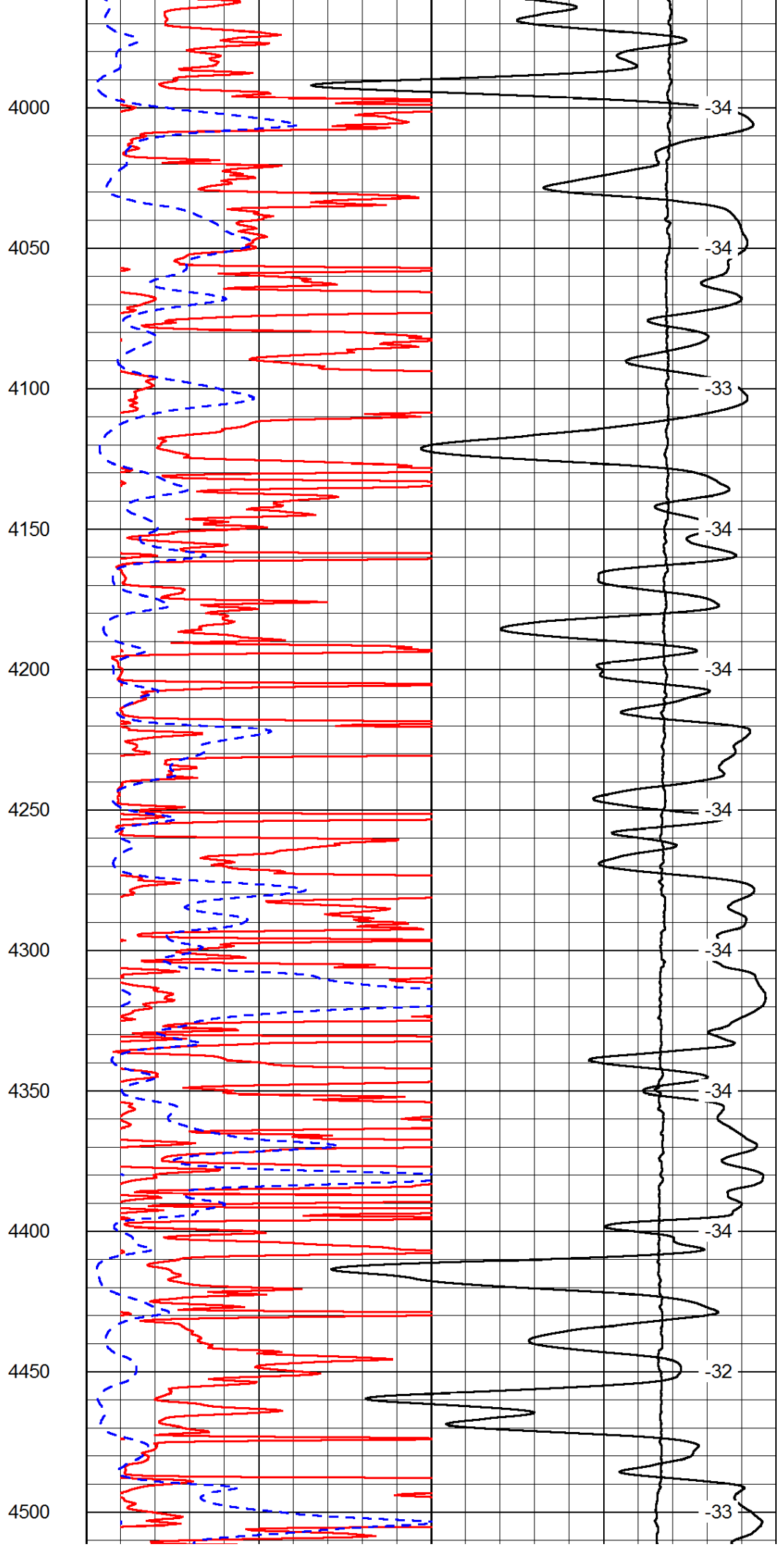
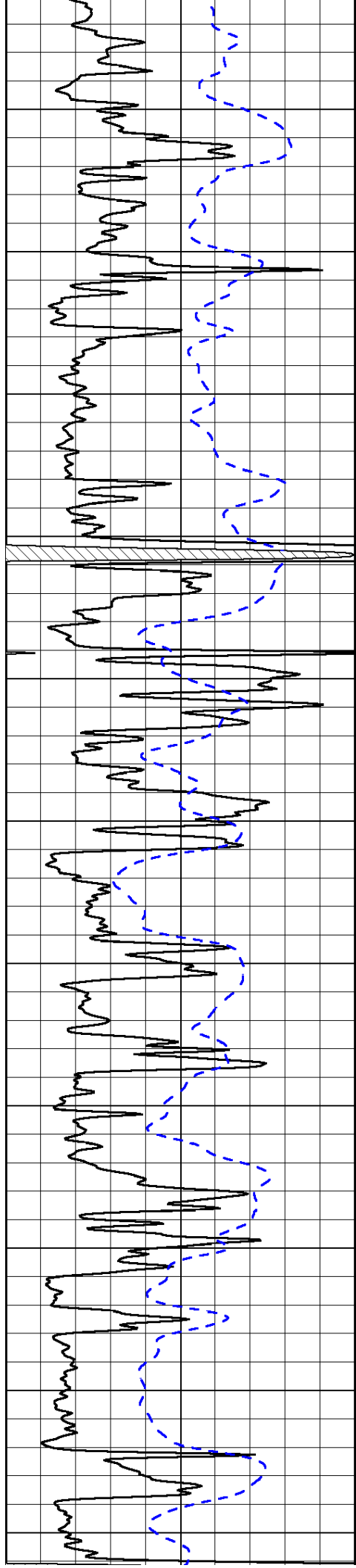
50	Shallow Resistivity	500
50	Deep Resistivity	500

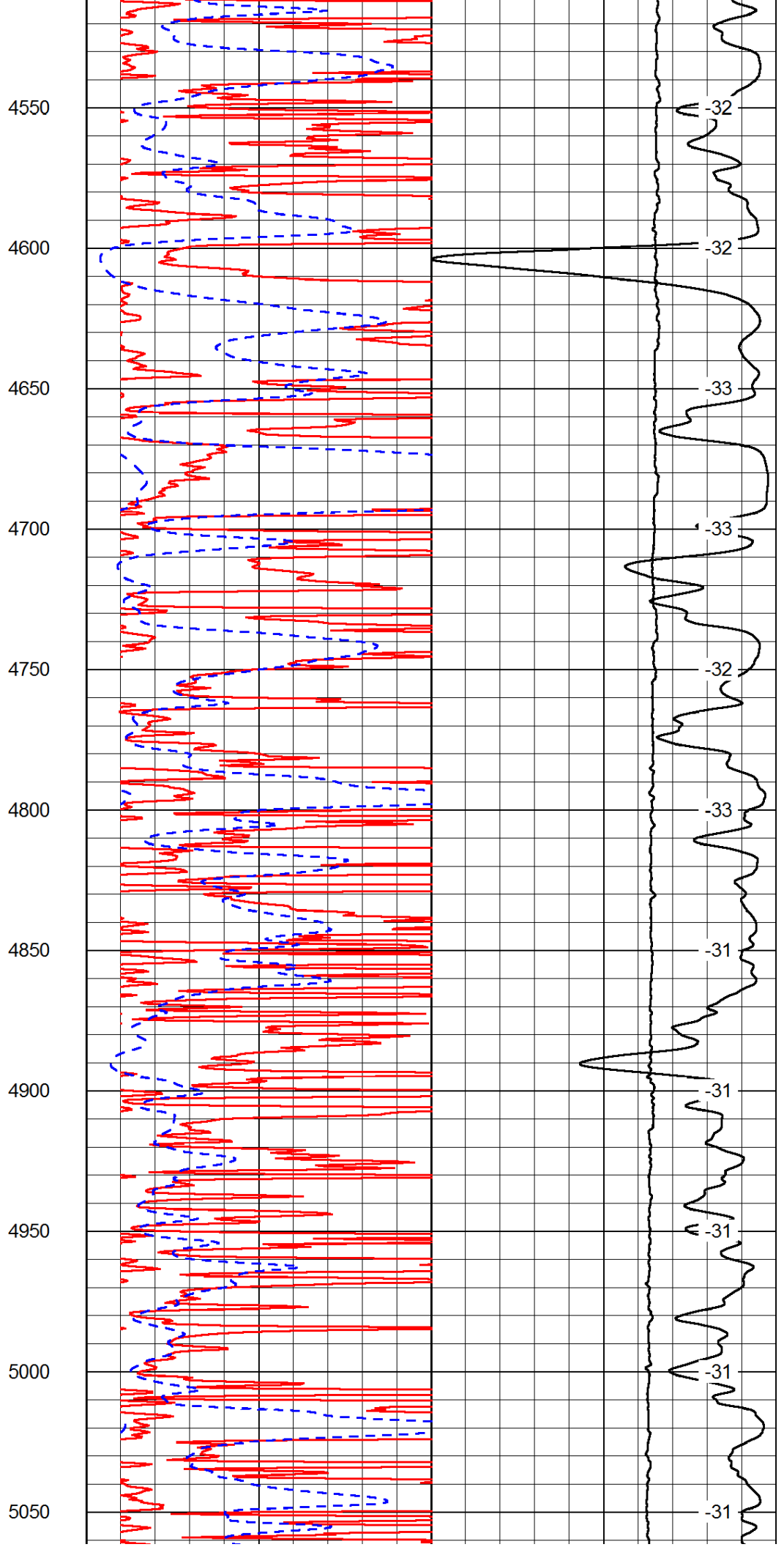
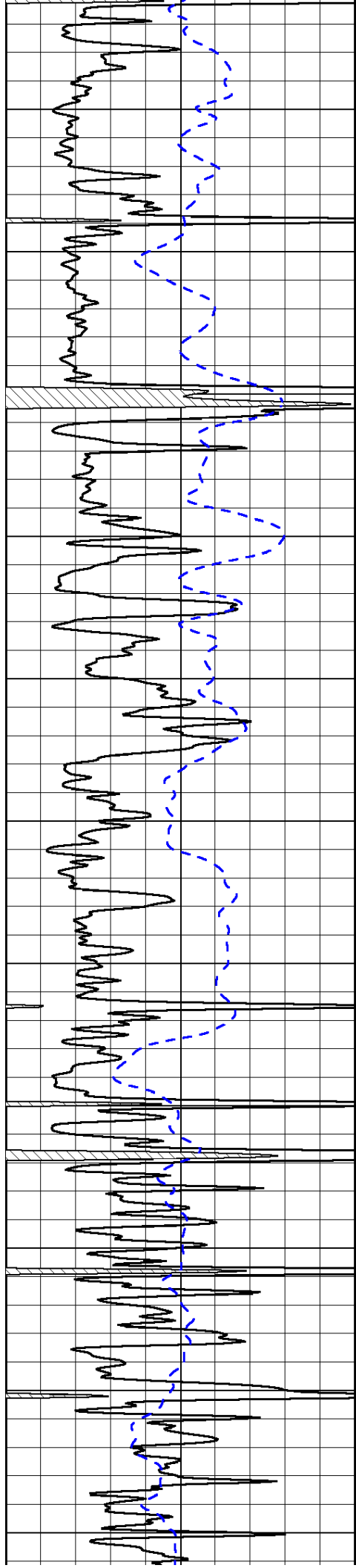


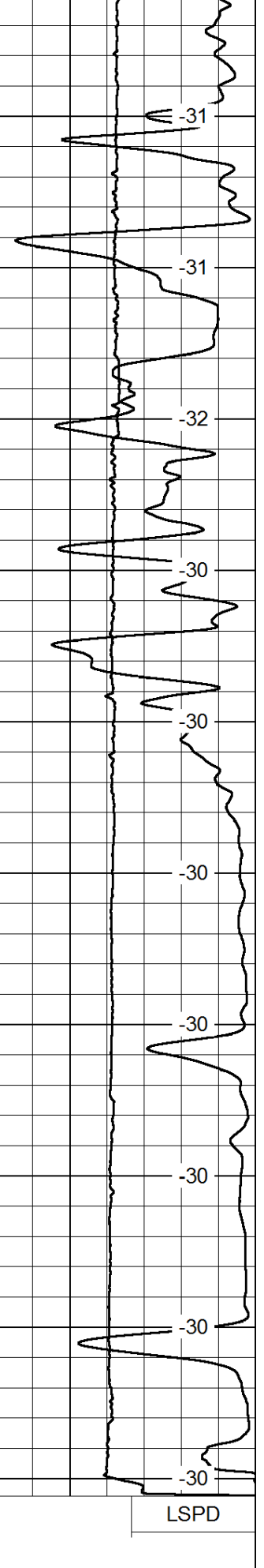
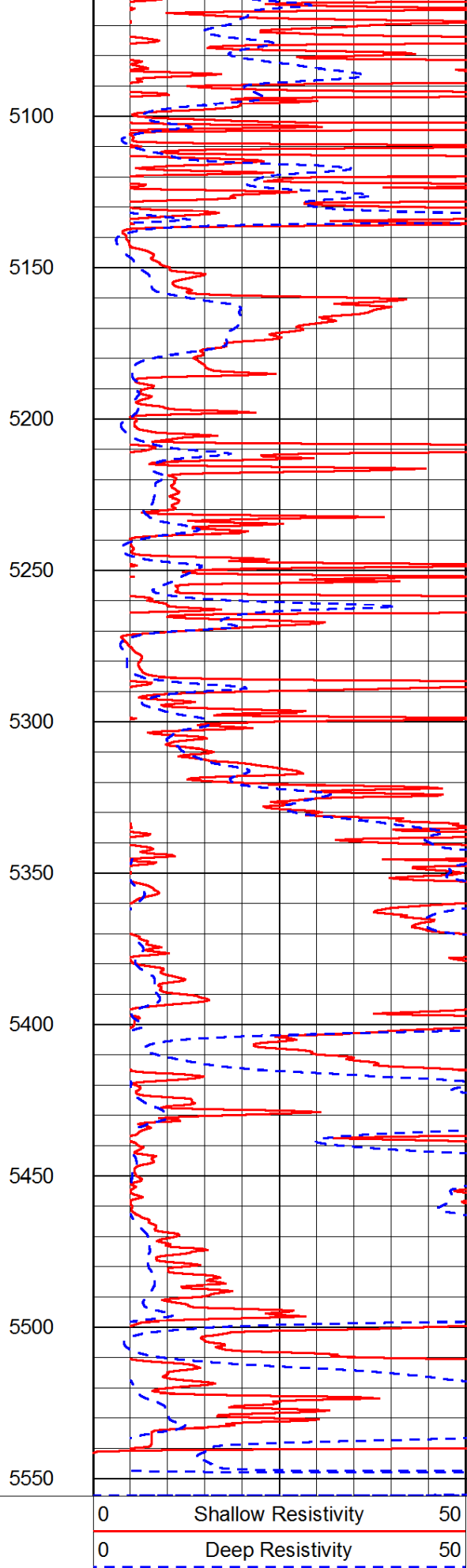
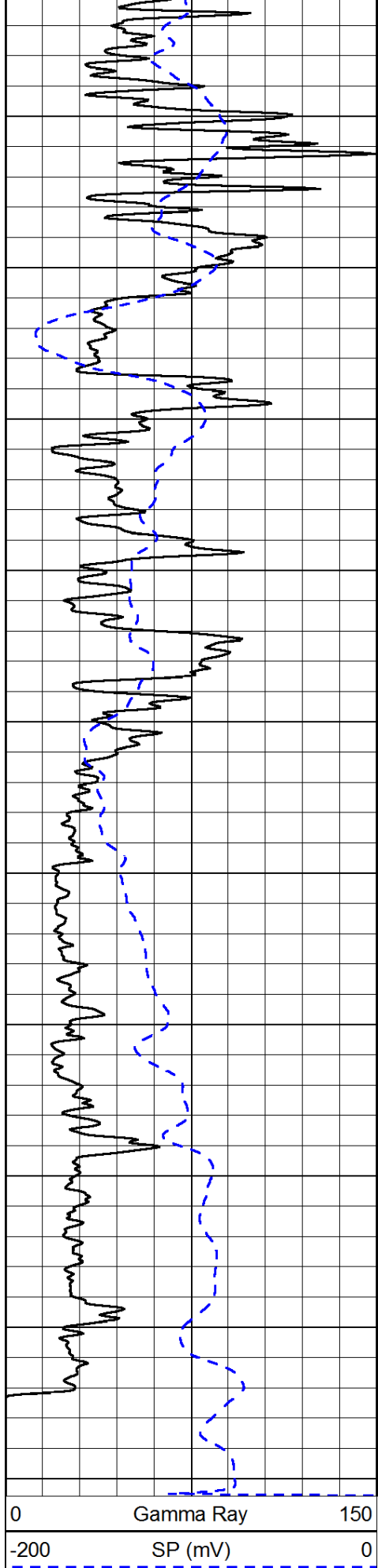












0      Gamma Ray      150  
 -200      SP (mV)      0

0      Shallow Resistivity      50  
 0      Deep Resistivity      50

LSPD

1000      Conductivity      0  
 15000      Line Tension      0

50      Shallow Resistivity      500

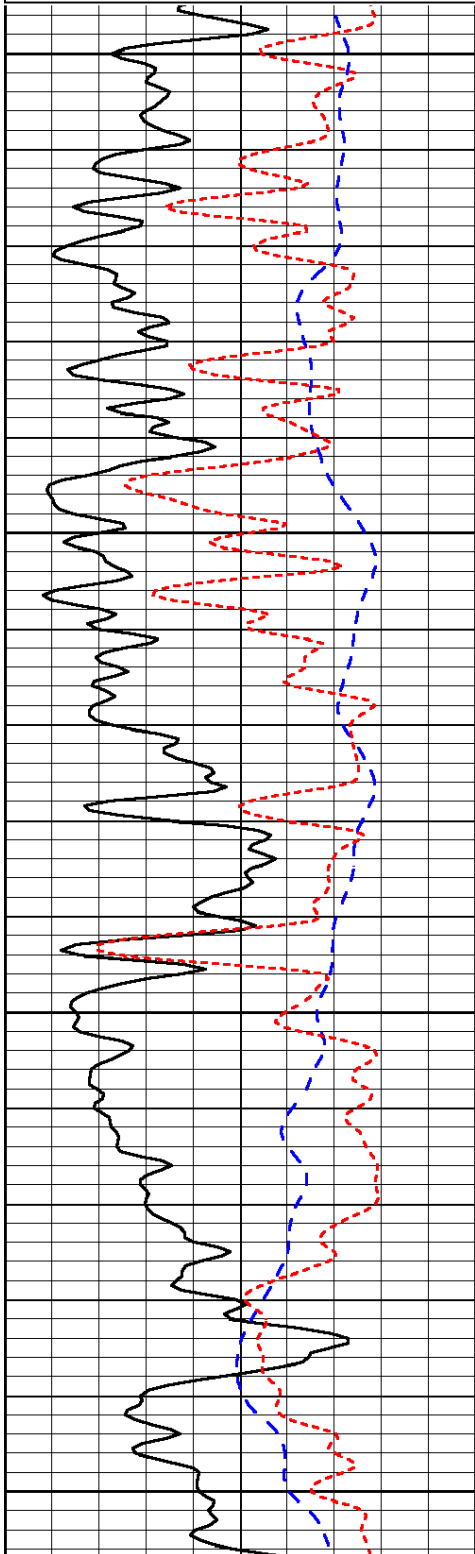


Database File: c:\warrior\data\facon\_james\_koehn #1-31(nw)\falhd.db  
 Dataset Pathname: dil/falstk  
 Presentation Format: dil  
 Dataset Creation: Wed Sep 19 09:43:39 2012  
 Charted by: Depth in Feet scaled 1:240

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

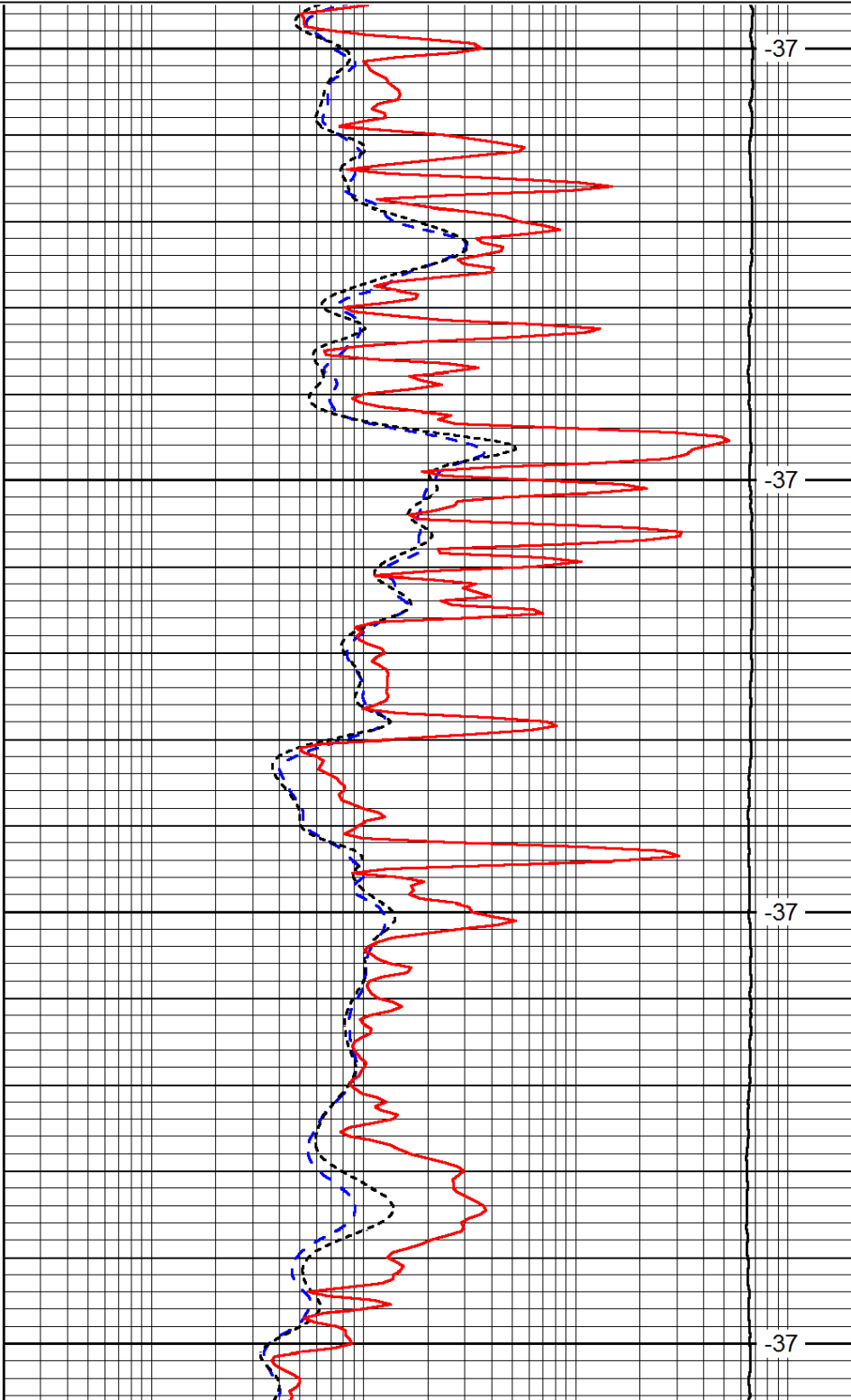


2600

2650

2700

2750

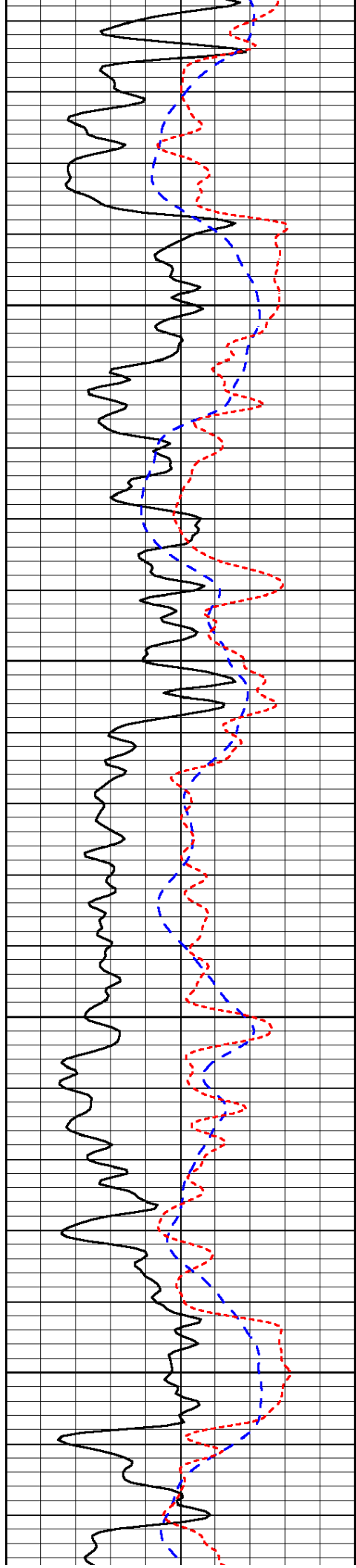


-37

-37

-37

-37

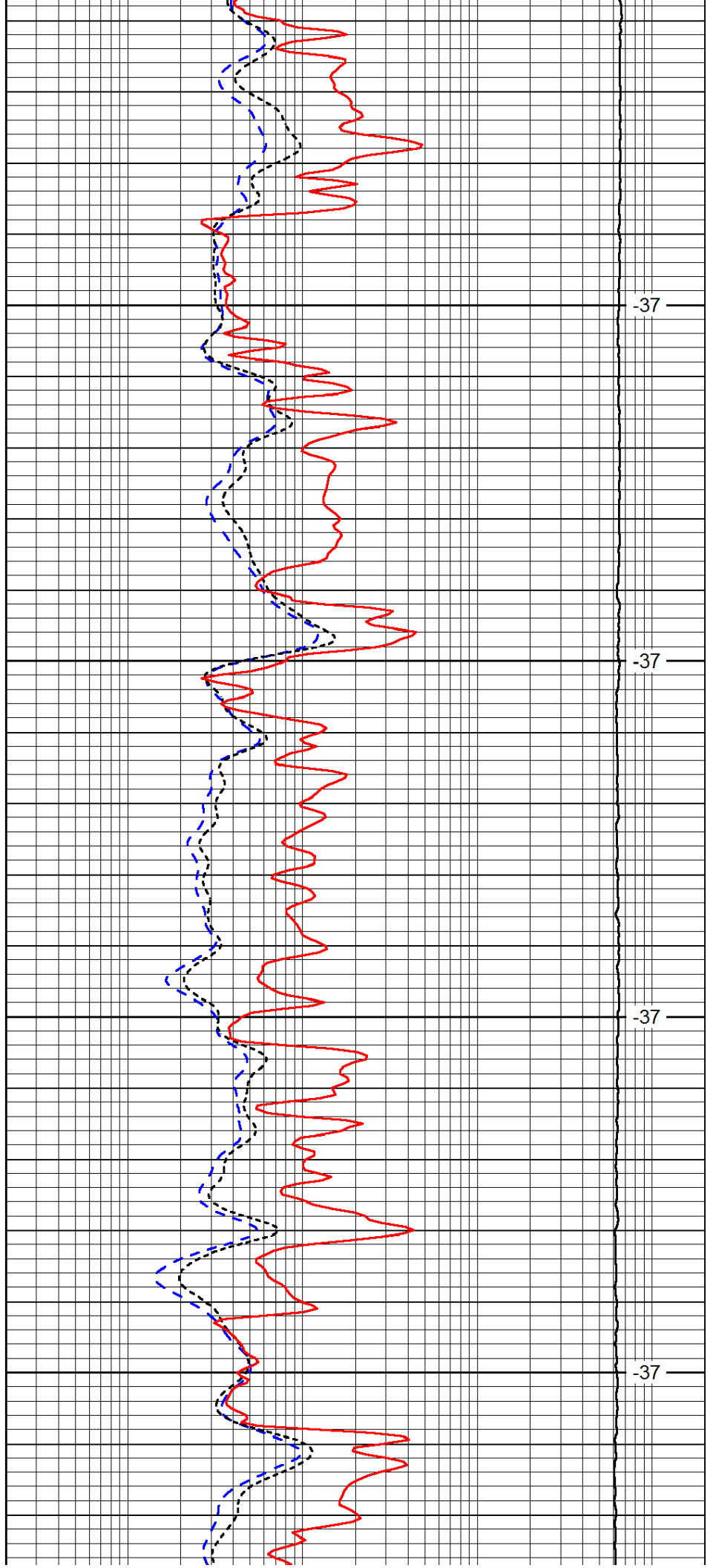


2800

2850

2900

2950

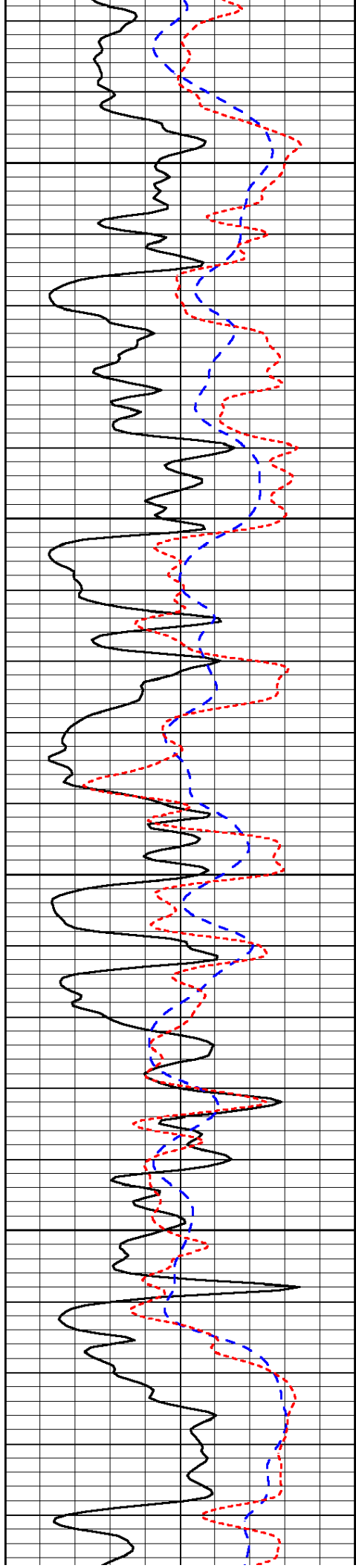


-37

-37

-37

-37

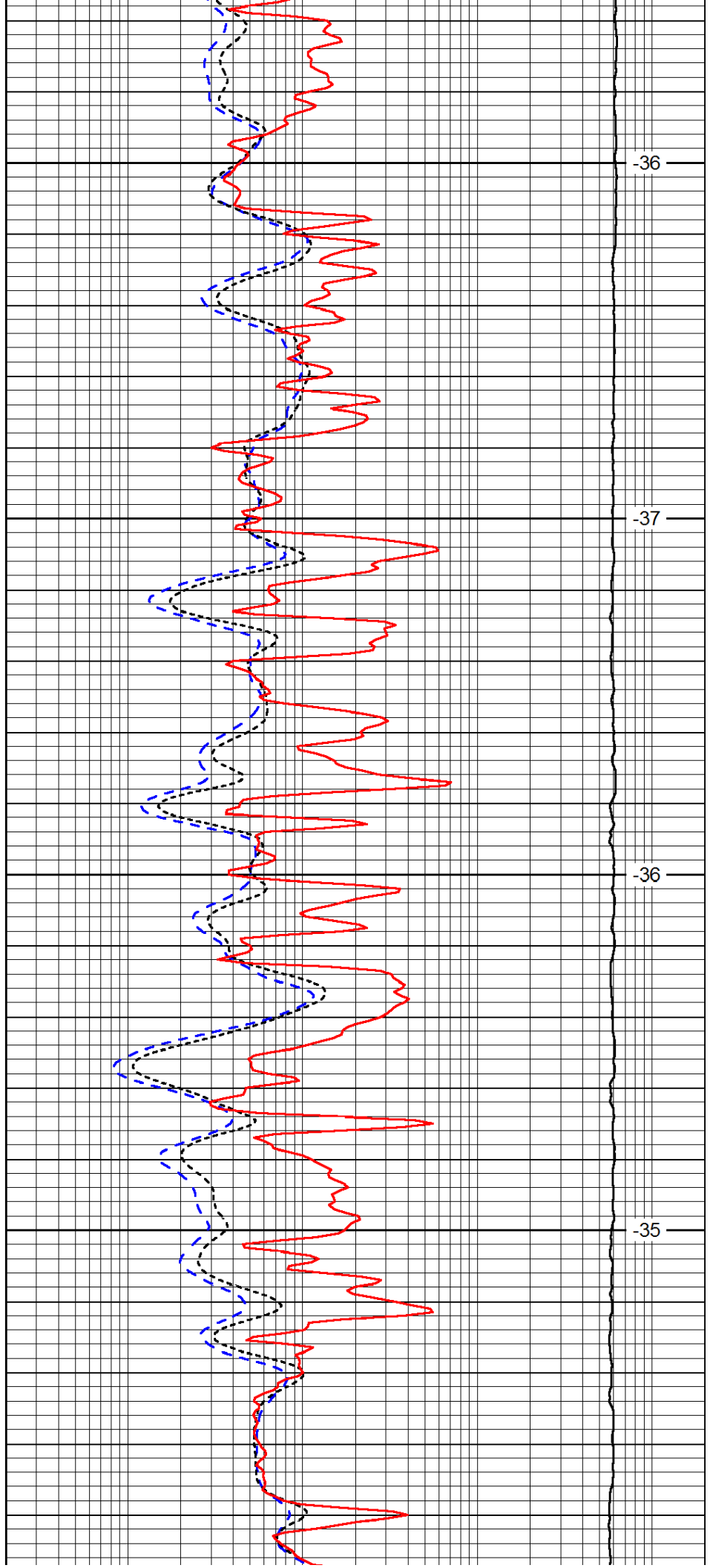


3000

3050

3100

3150

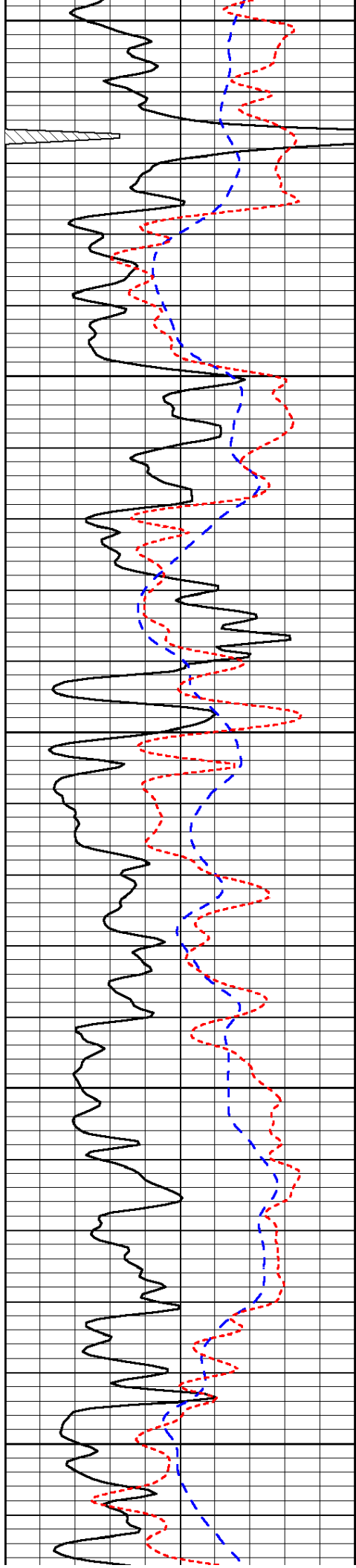


-36

-37

-36

-35



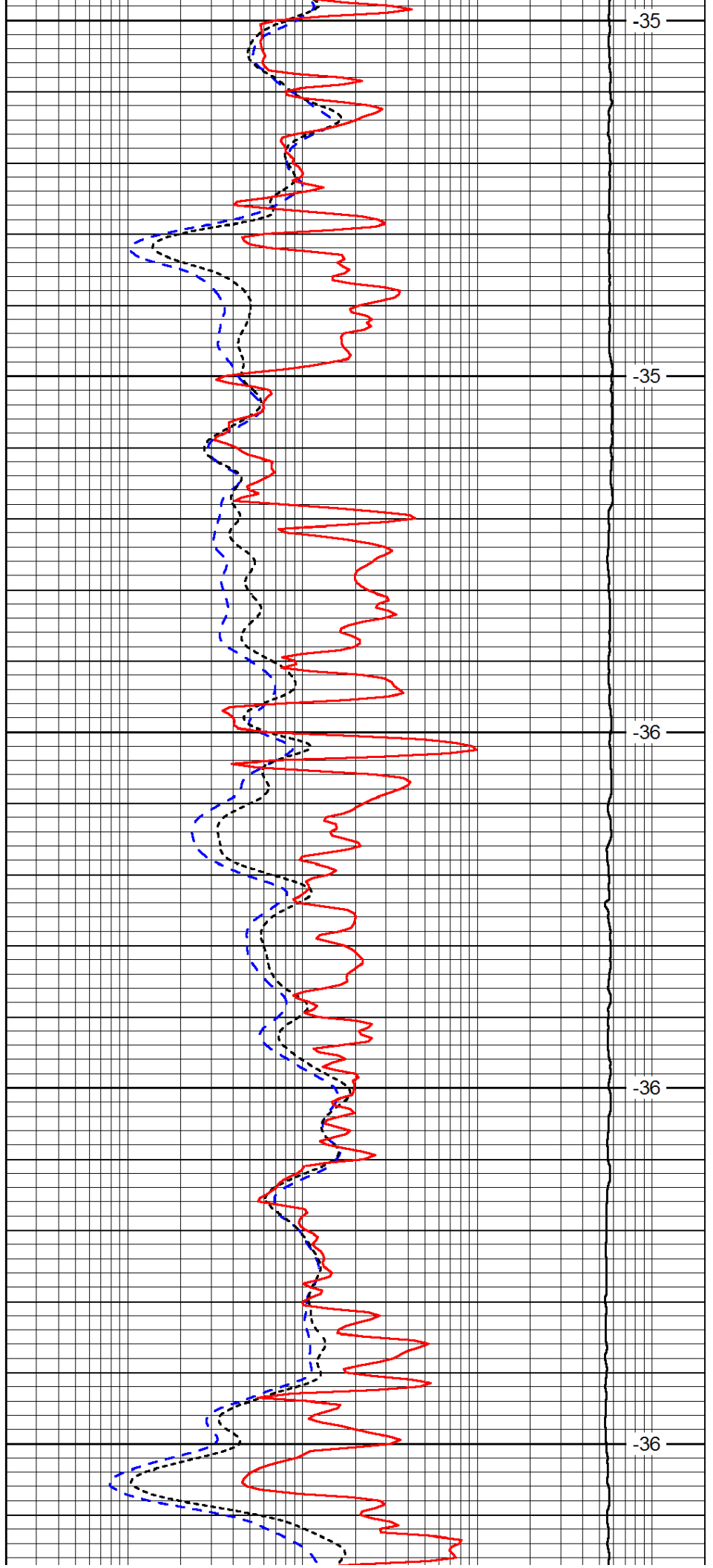
3200

3250

3300

3350

3400



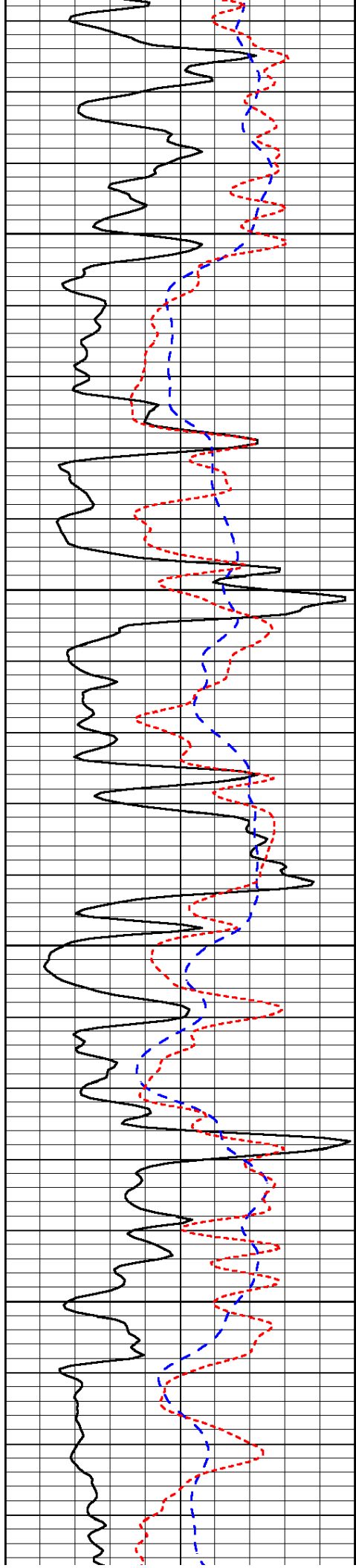
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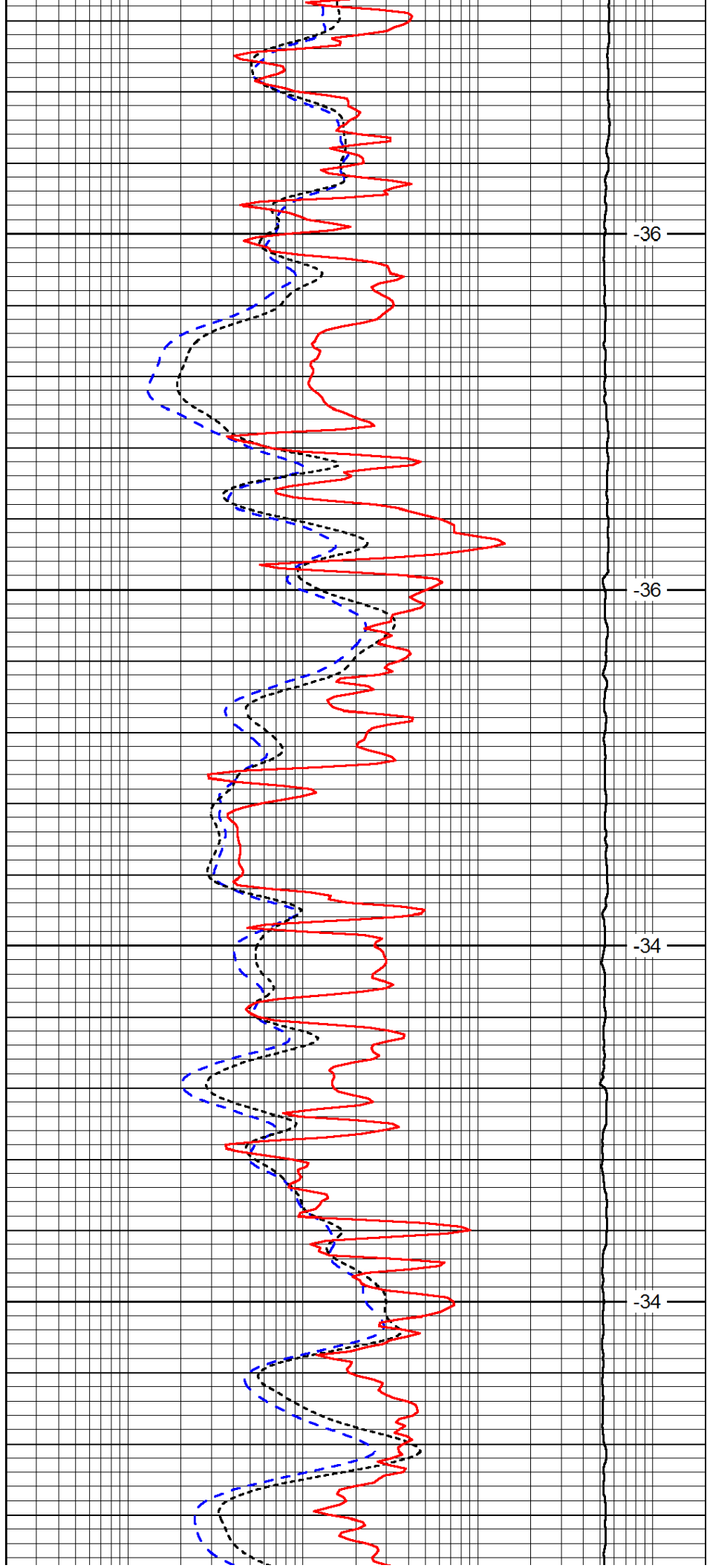


3450

3500

3550

3600

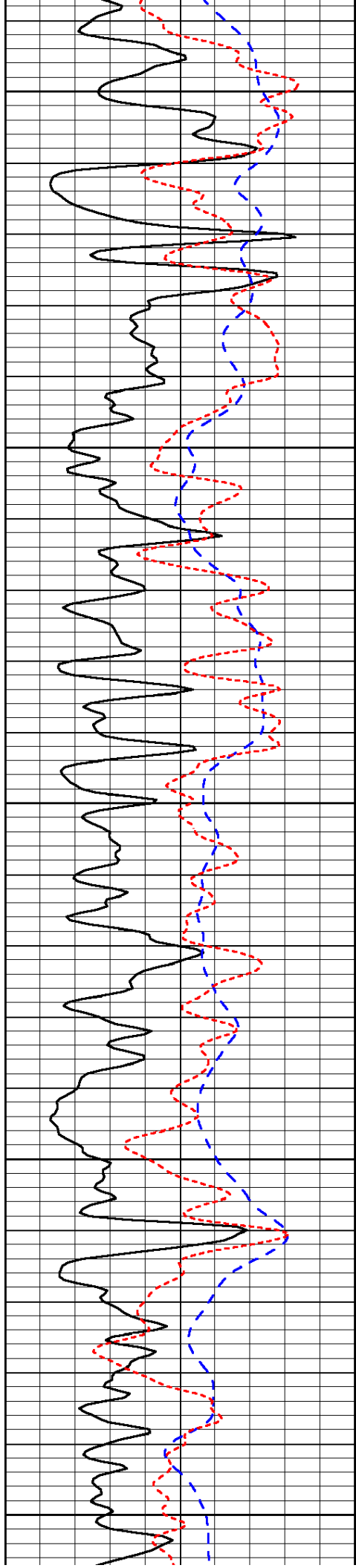


-36

-36

-34

-34



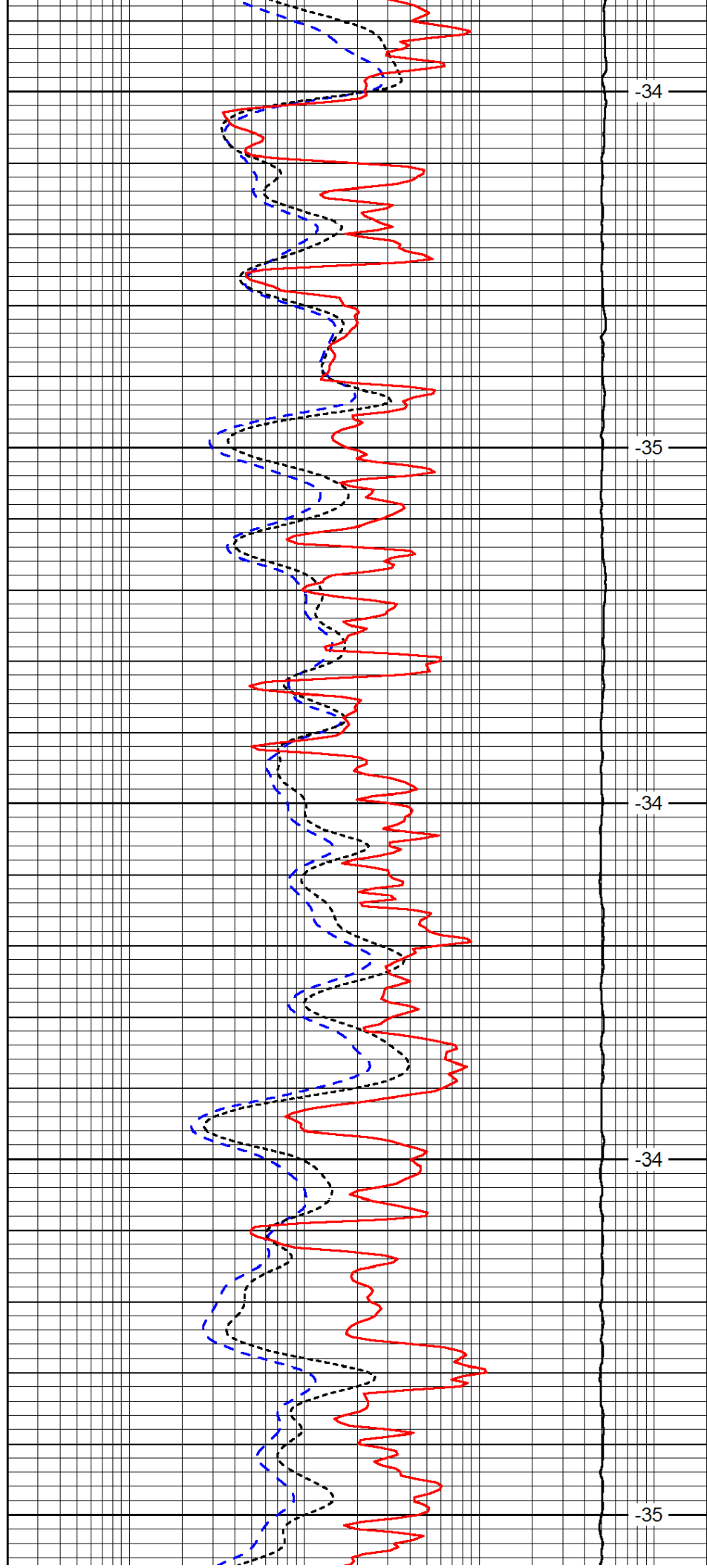
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3700

3750

3800

3850



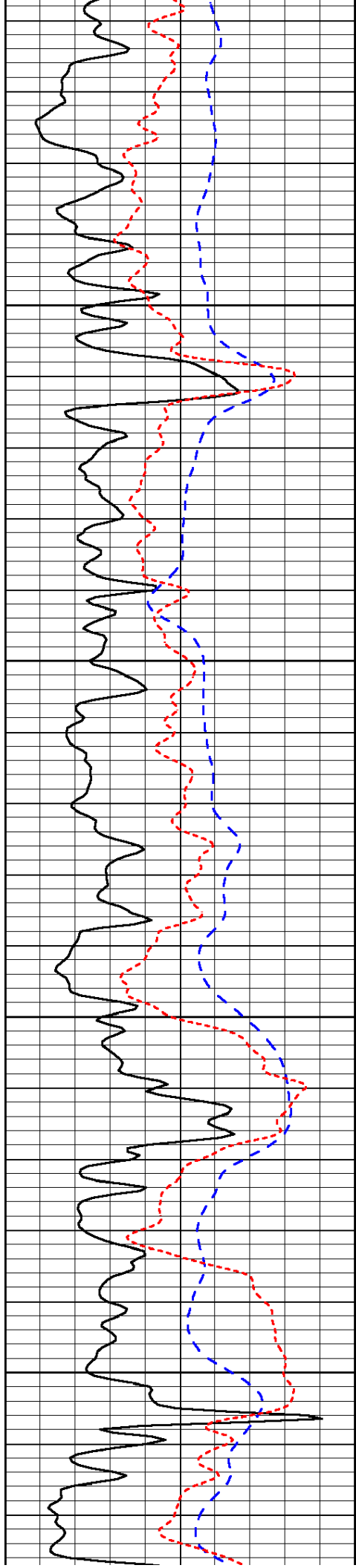
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-34

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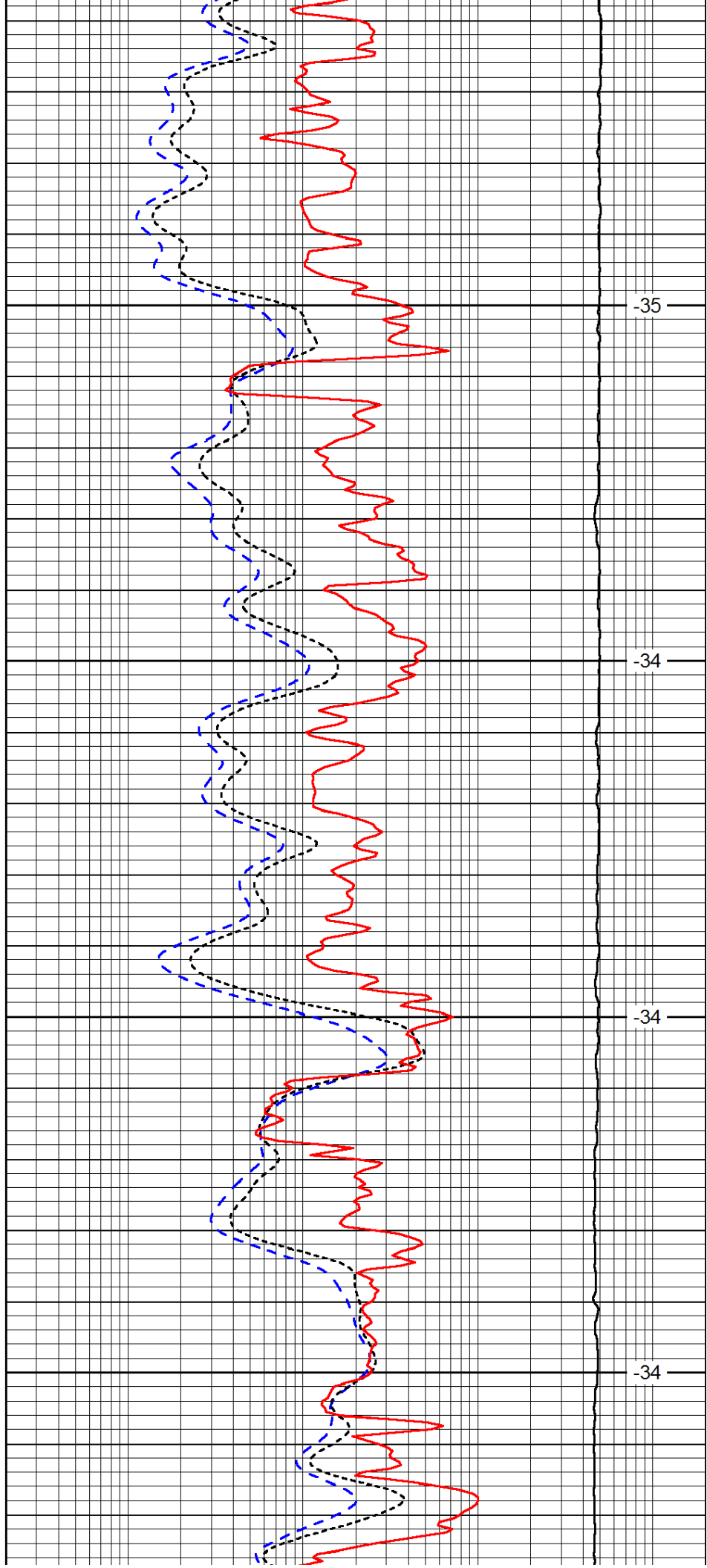


3900

3950

4000

4050

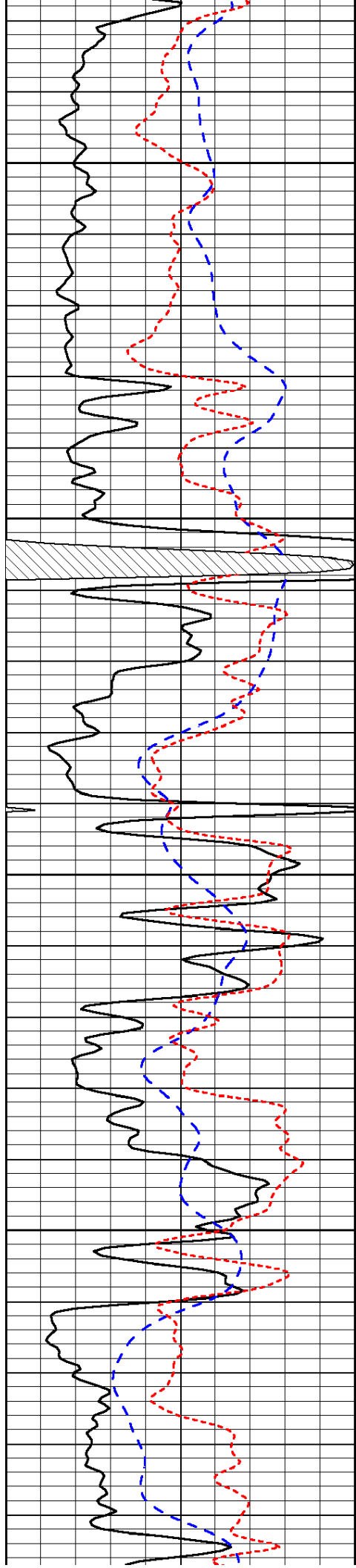


-35

-34

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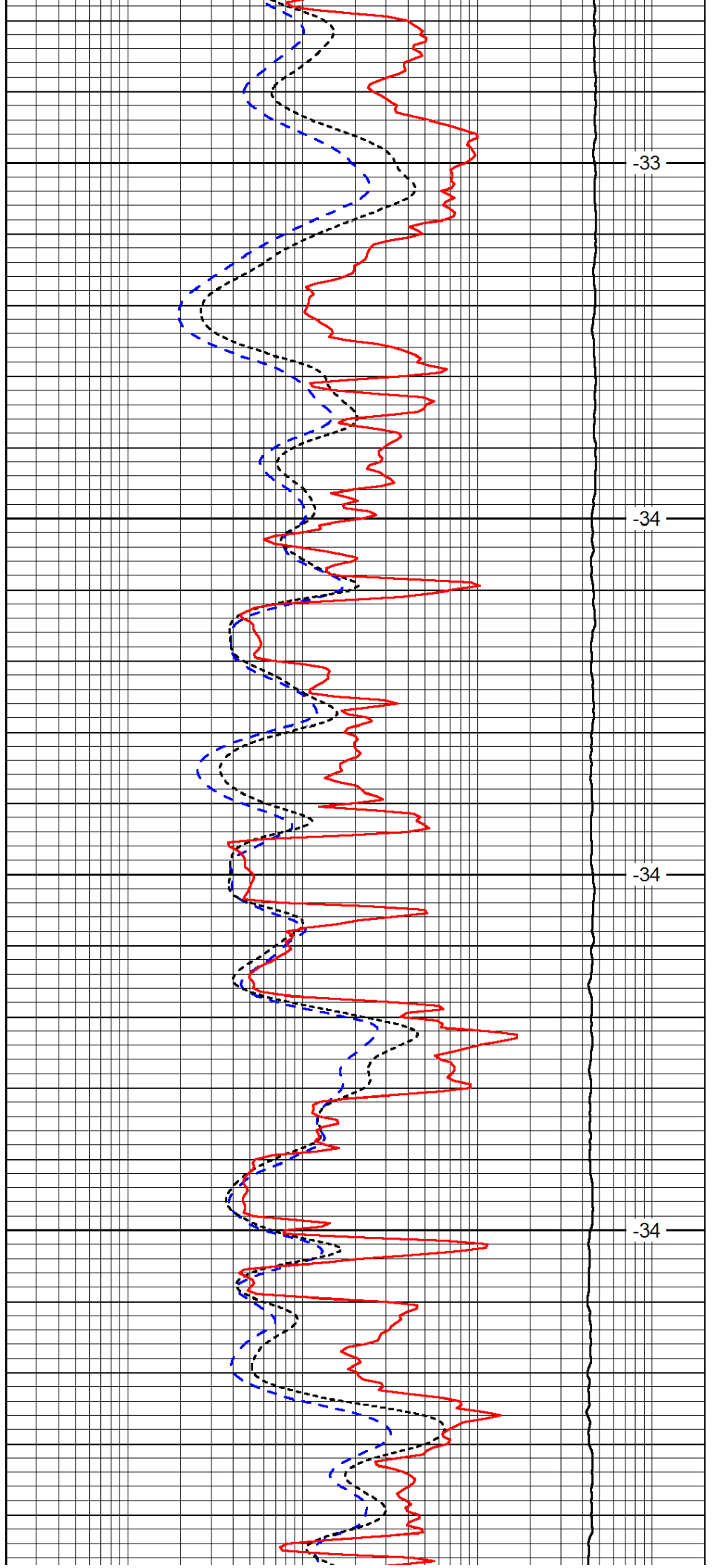


4100

4150

4200

4250



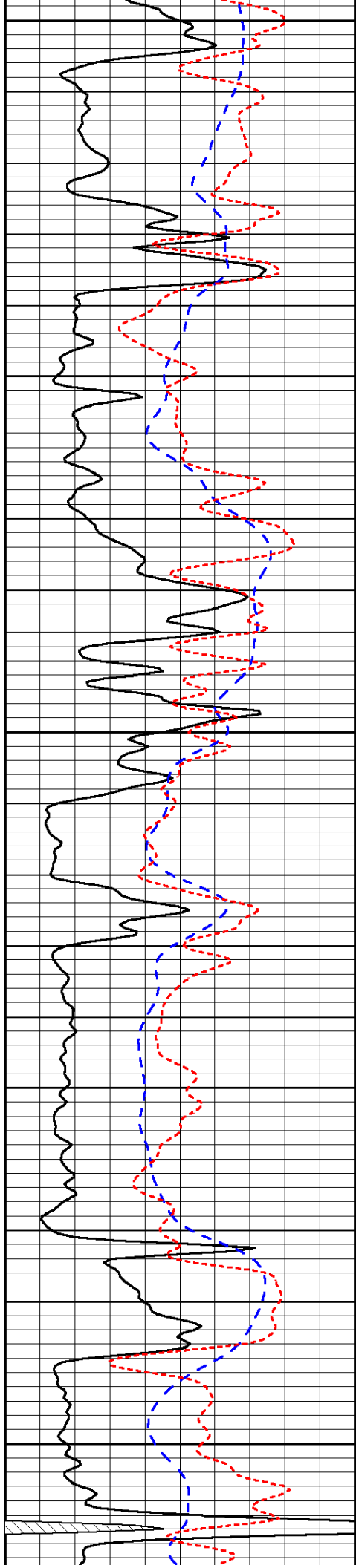
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-34

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-34





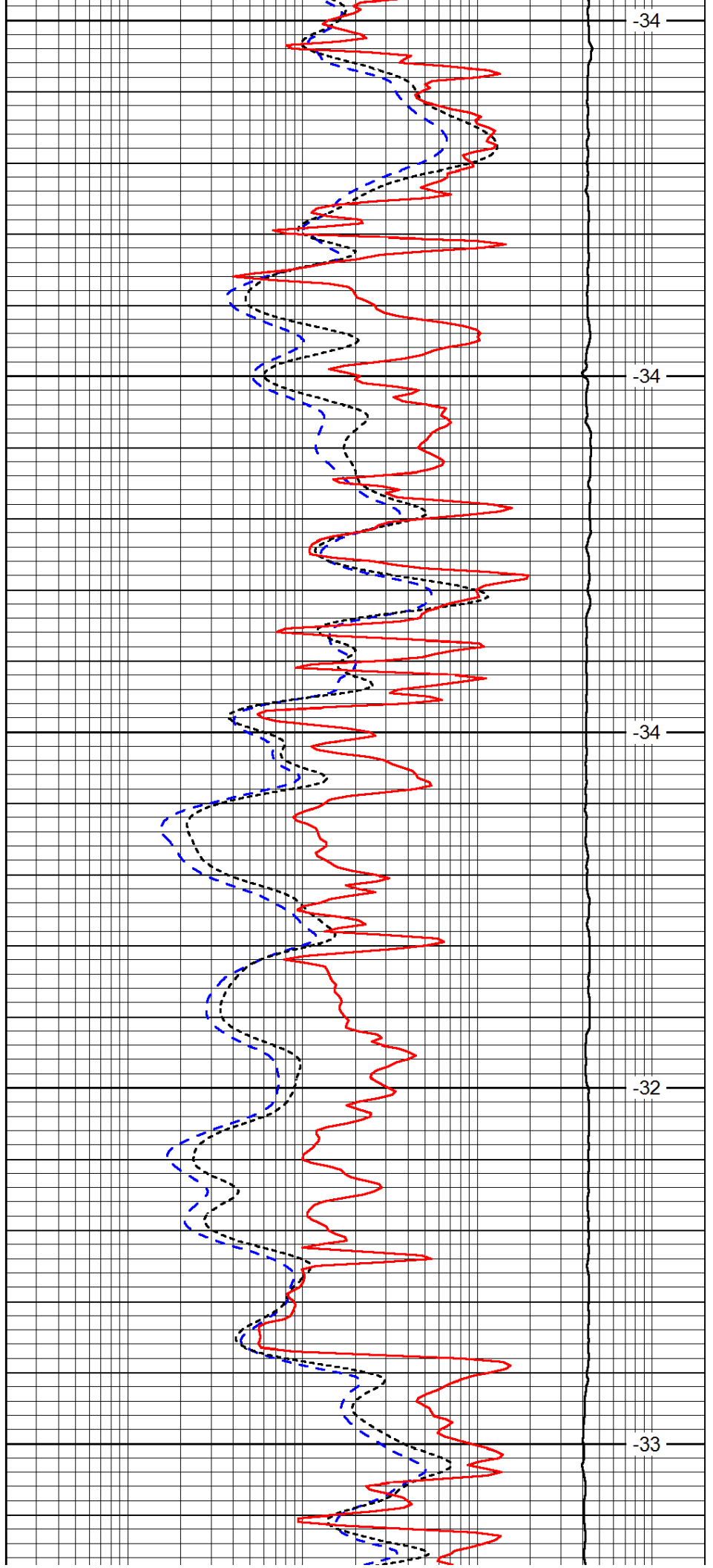
4300

4350

4400

4450

4500



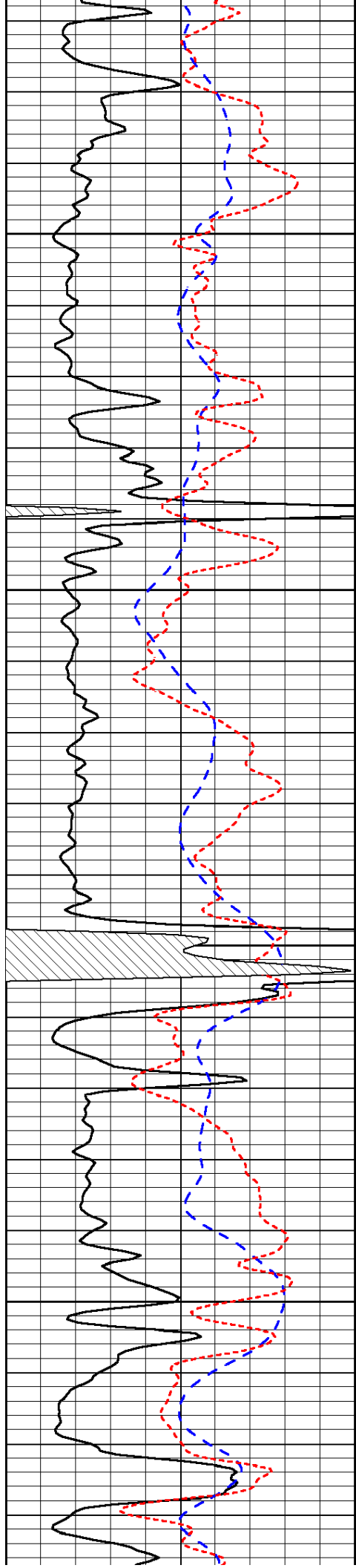
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-34

-34

-32

-33

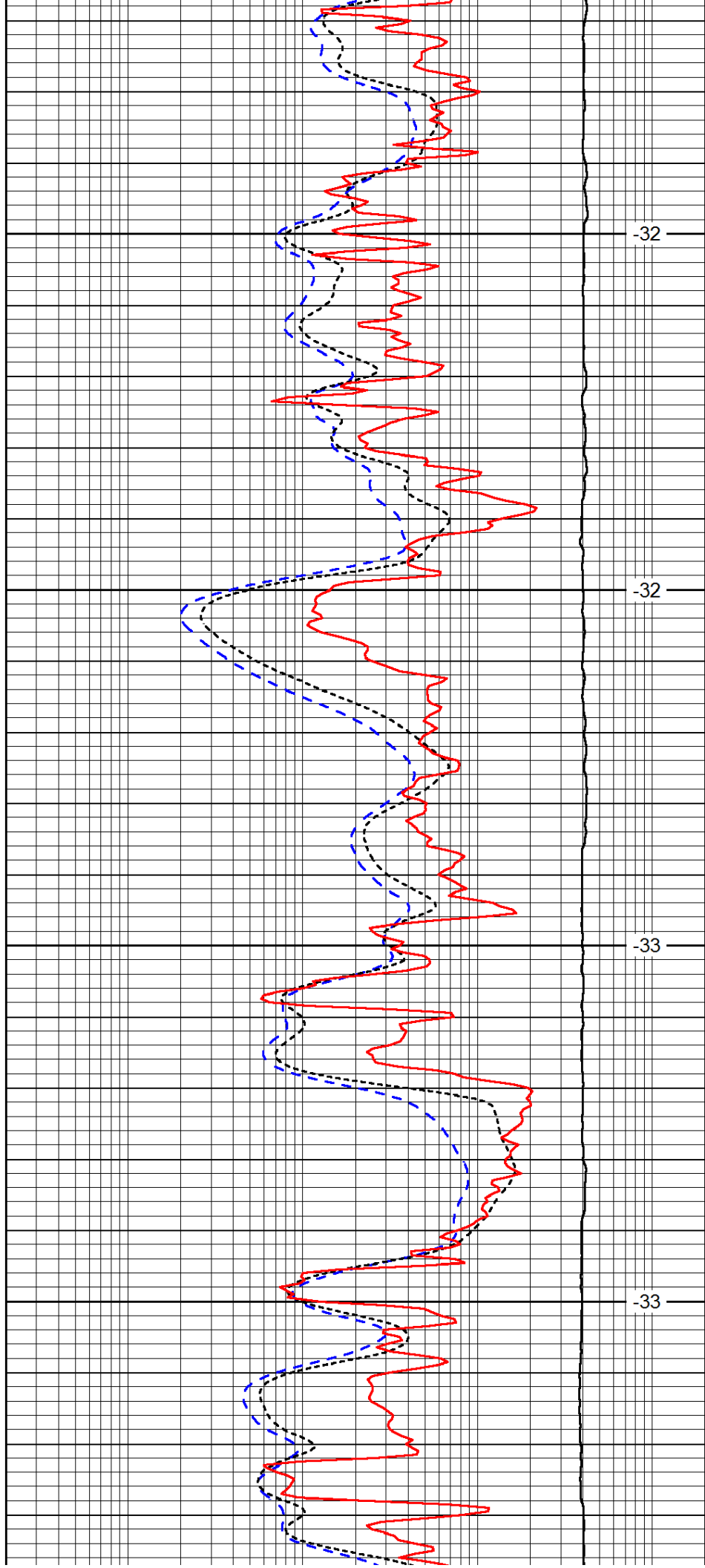


4550

4600

4650

4700

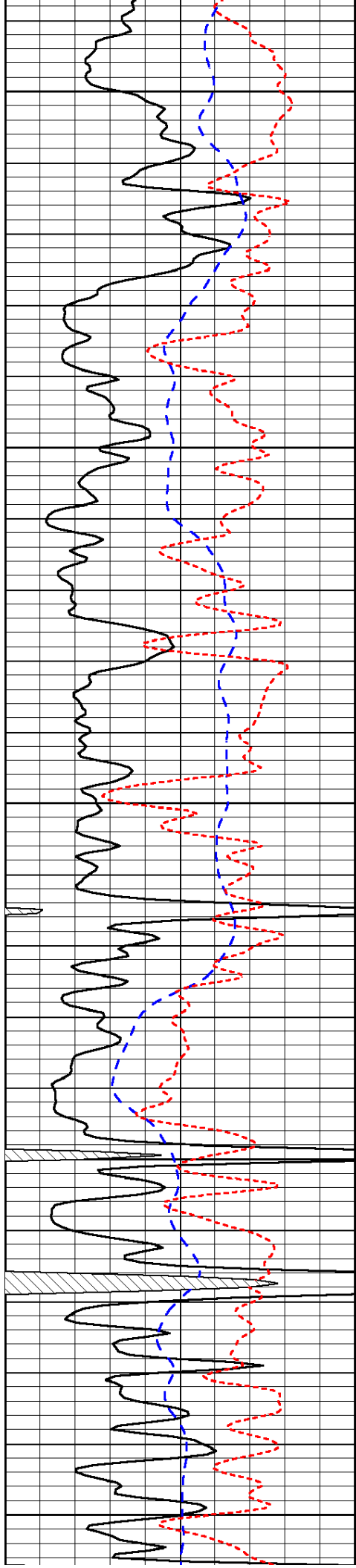


-32

-32

-33

-33



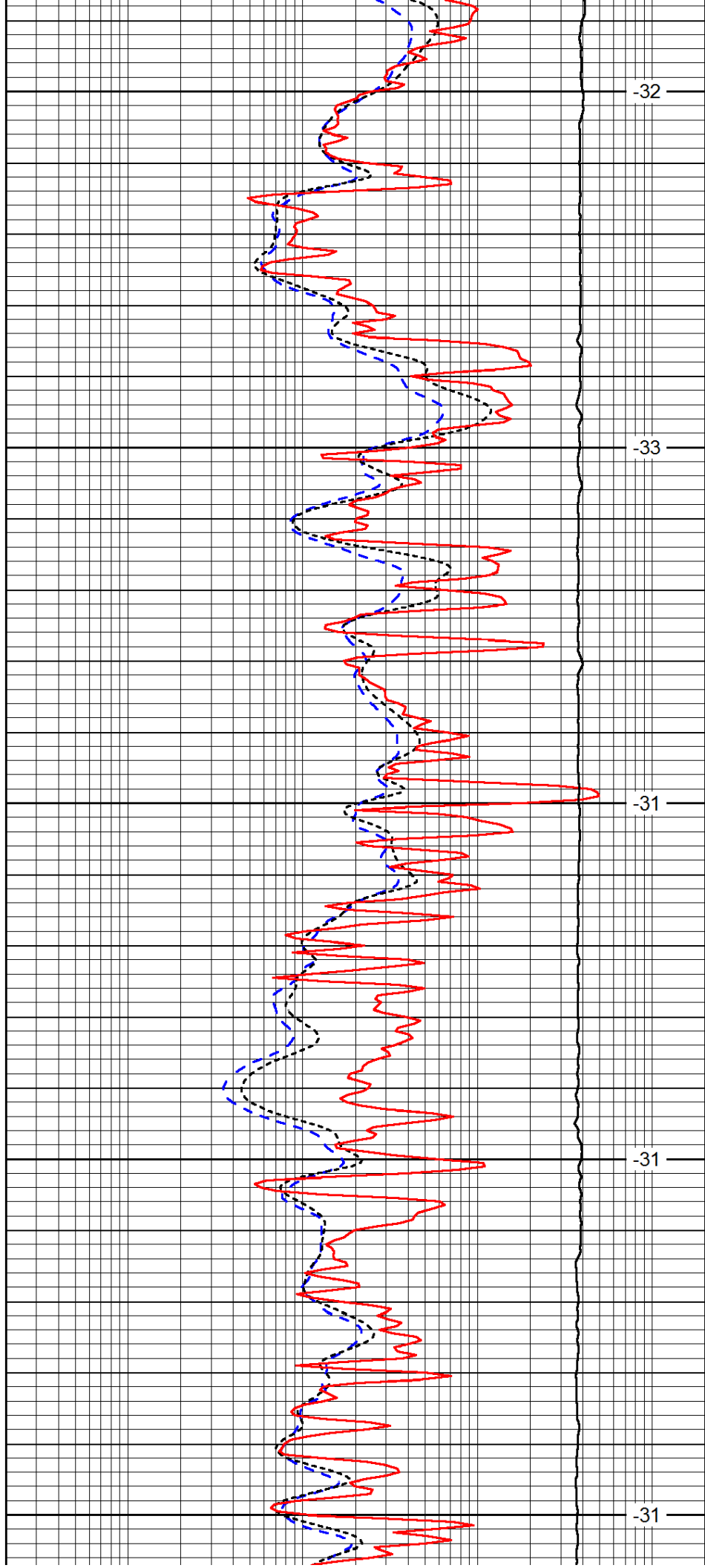
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4800

4850

4900

4950



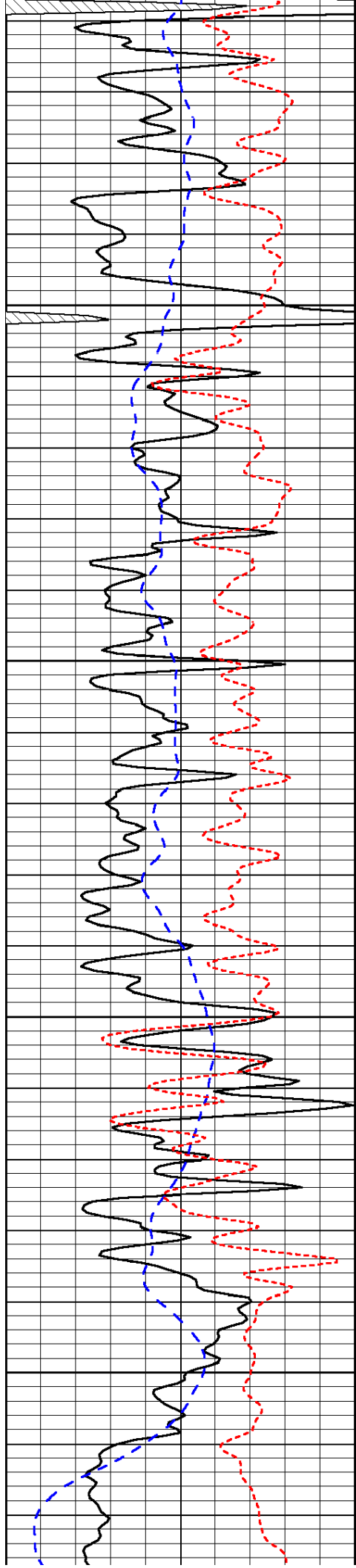
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-31

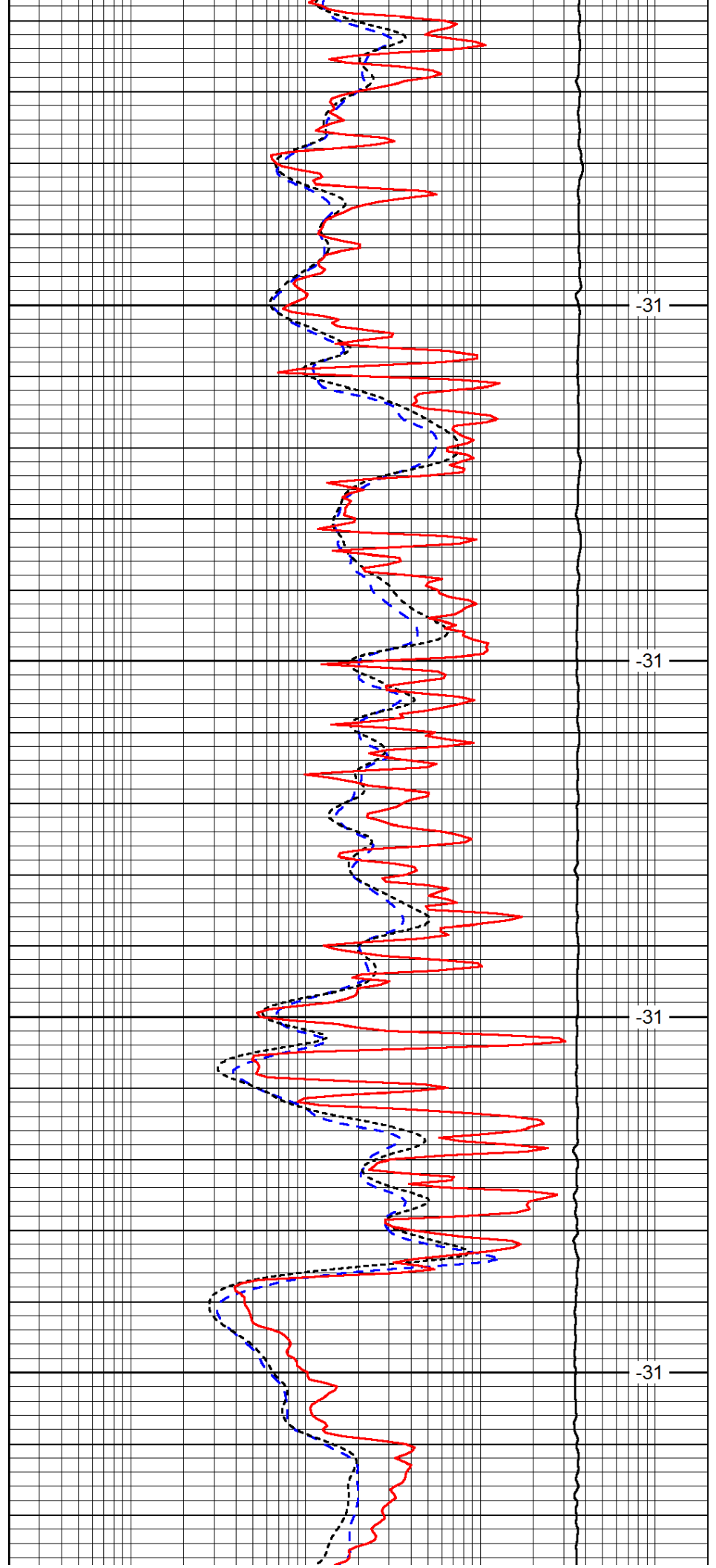


5000

5050

5100

5150

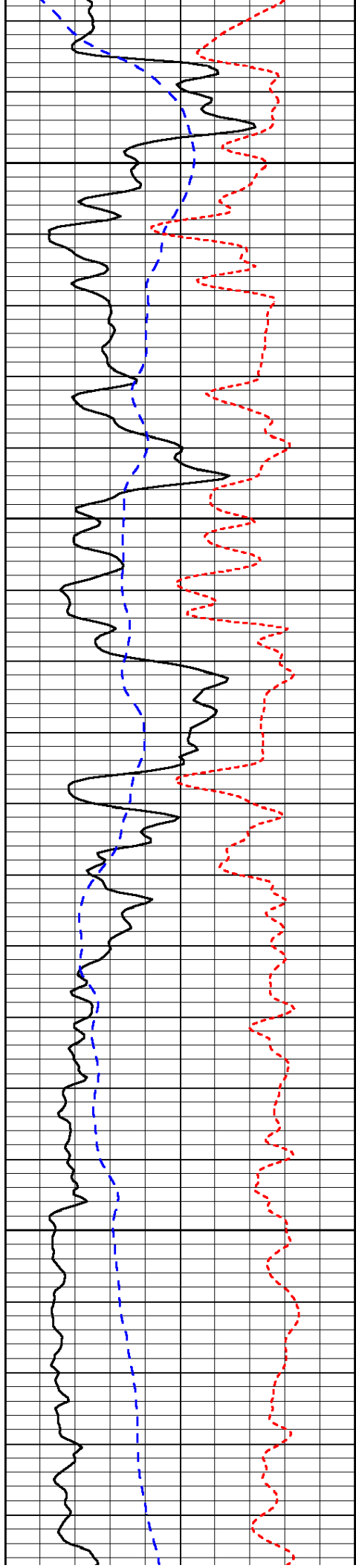


-31

-31

-31

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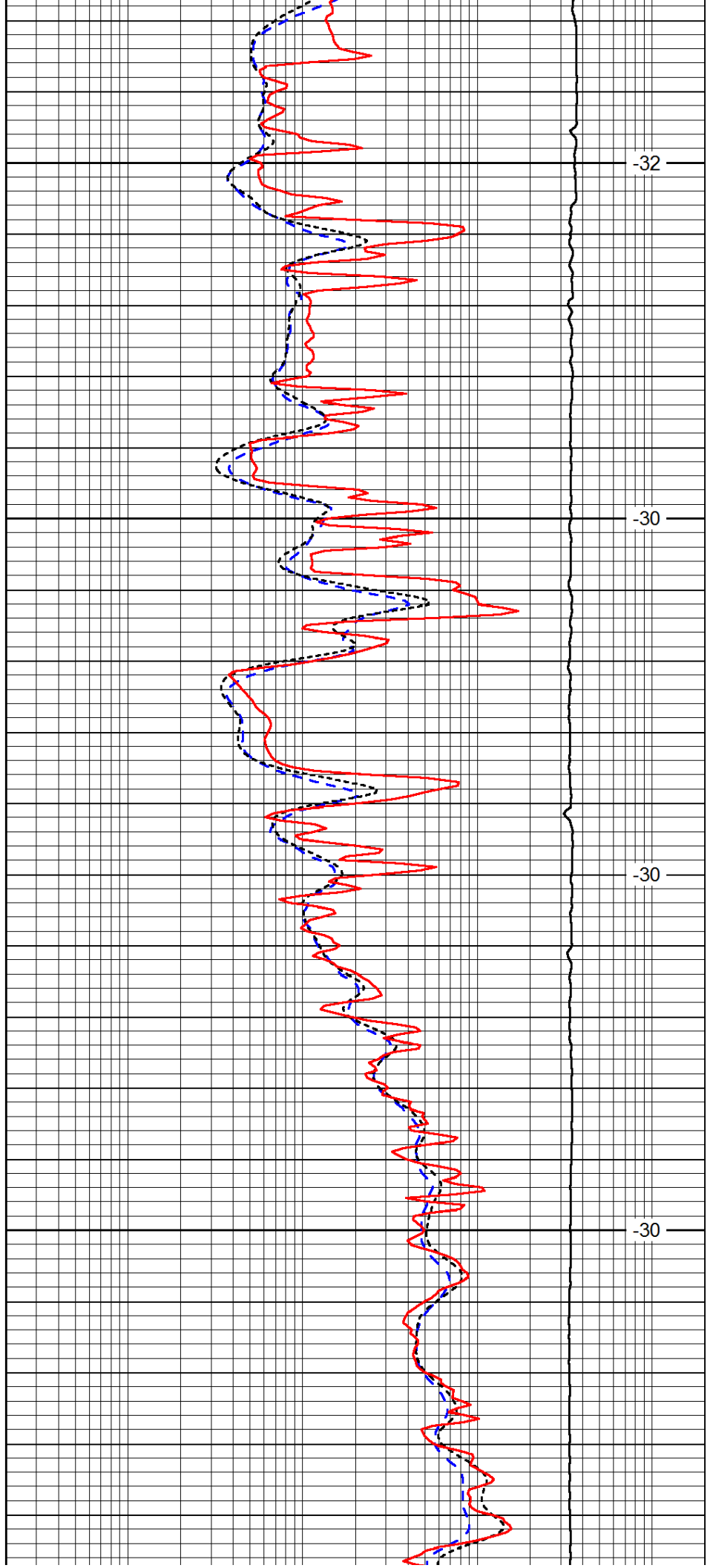


5200

5250

5300

5350

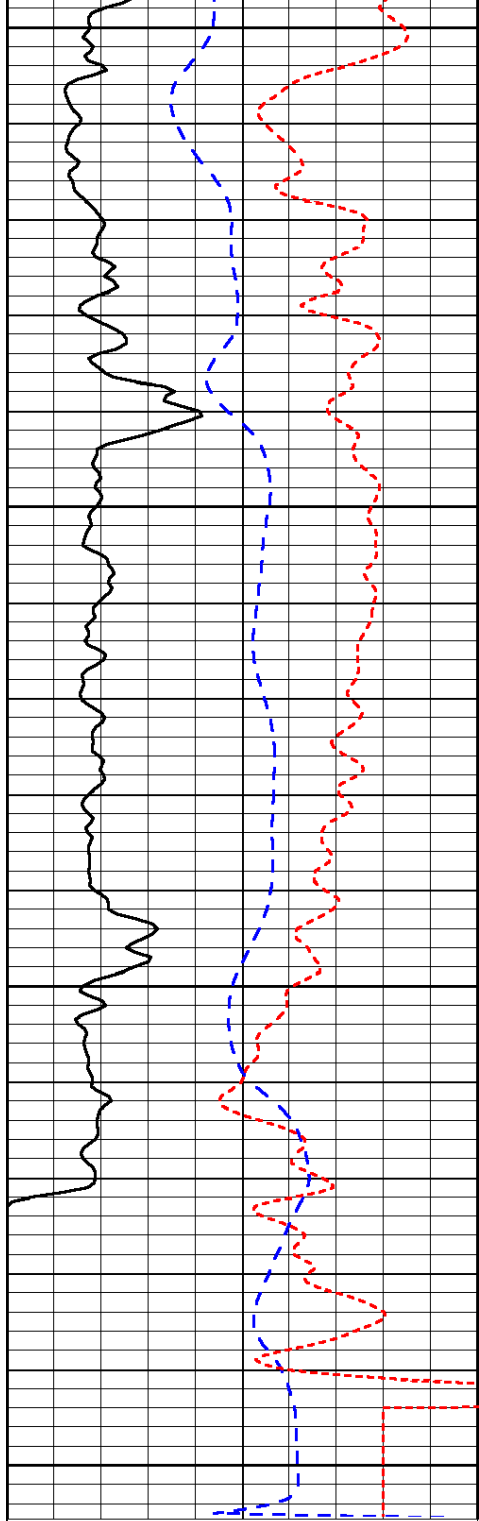


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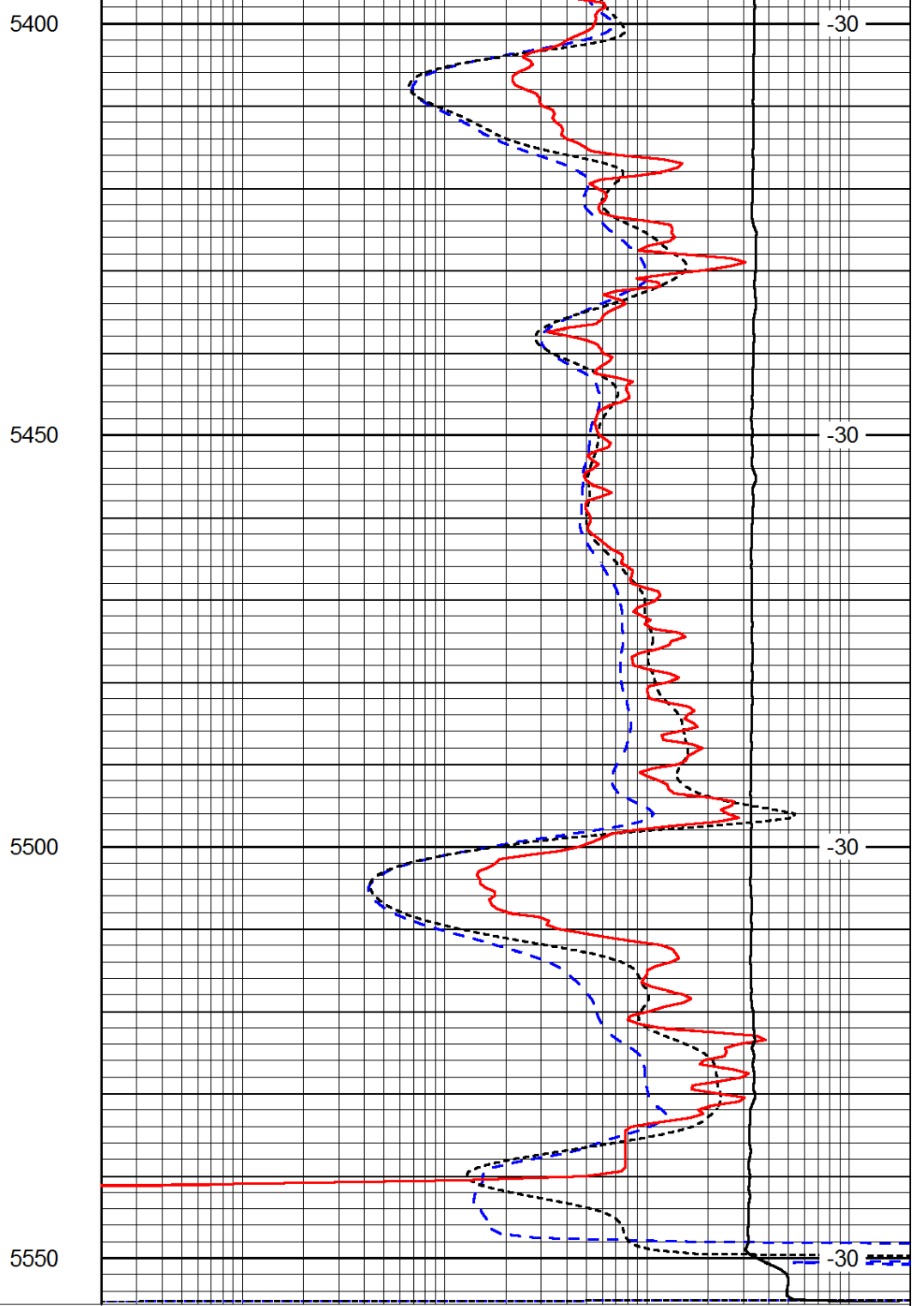
-30

-30

-30



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