



Pioneer Energy Services

# Dual Induction Log

15-007-24,190-00-00

API No.

Company **Woolsey Operating Company, LLC**

Well **Warren Fee #11**

Field **Medicine Lodge North**

County **Barber** State **Kansas**

Location

**SE NW  
1900' FNL & 1950' FWL**

Other Services  
CNL/CDL

Sec: **19** Twp: **32S** Rge: **12W**

Permanent Datum **Ground Level**

Log Measured From **Kelly Bushing**

Elevation **1644**

Drilling Measured From **Bushing** 12 Ft. Above Perm. Datum

Elevation

K.B. 1656  
D.F. 1644  
G.L. 1644

Date **7/27/2014**

Run Number **One**

Depth Driller **4906**

Depth Logger **4908**

Bottom Logged Interval **4907**

Top Log Interval **200**

Casing Driller **13.375 @ 235**

Casing Logger **231**

Bit Size **7.875**

Type Fluid in Hole **Chemical**

Salinity,ppm CL **5000**

Density / Viscosity **9.0 54**

pH / Fluid Loss **9.5 9.2**

Source of Sample **Flowline**

Rm @ Meas. Temp **0.32 @ 90**

Rmf @ Meas. Temp **0.24 @ 90**

Rmc @ Meas. Temp **0.43 @ 90**

Source of Rmf / Rmc **Charts**

Rm @ BHT **0.23 @ 125**

Operating Rig Time **3 Hours**

Max Rec. Temp. F **125**

Equipment Number **15**

Location **Hays**

Recorded By **D.Kerr**

Witnessed By **Bill Klaver**

<<< Fold Here >>>

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

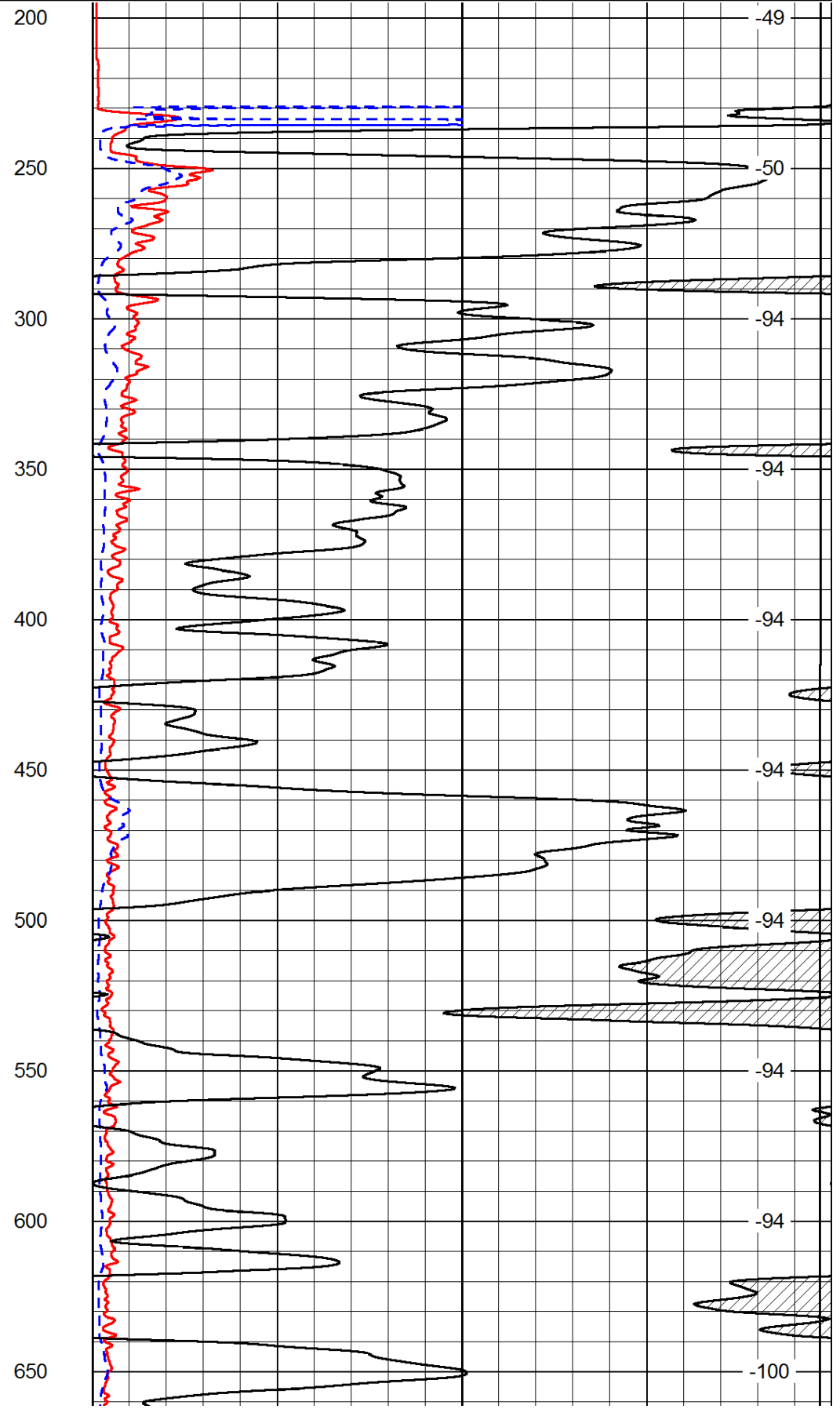
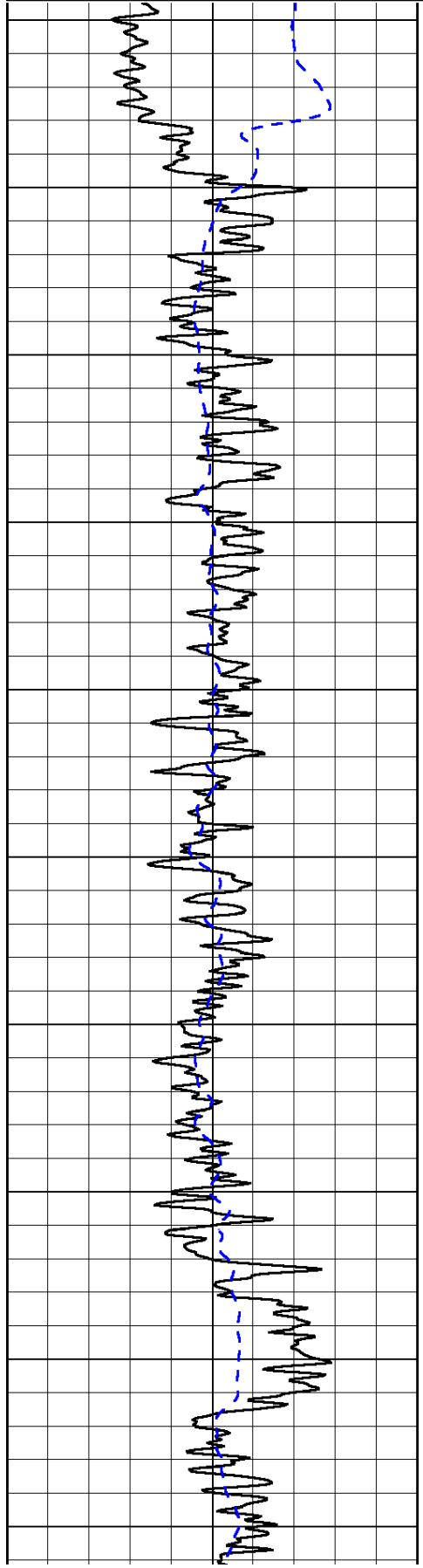
Medicine Lodge KS, 4 West to Gyp Hill RD,  
4 South, West and North Into(2 Miles)

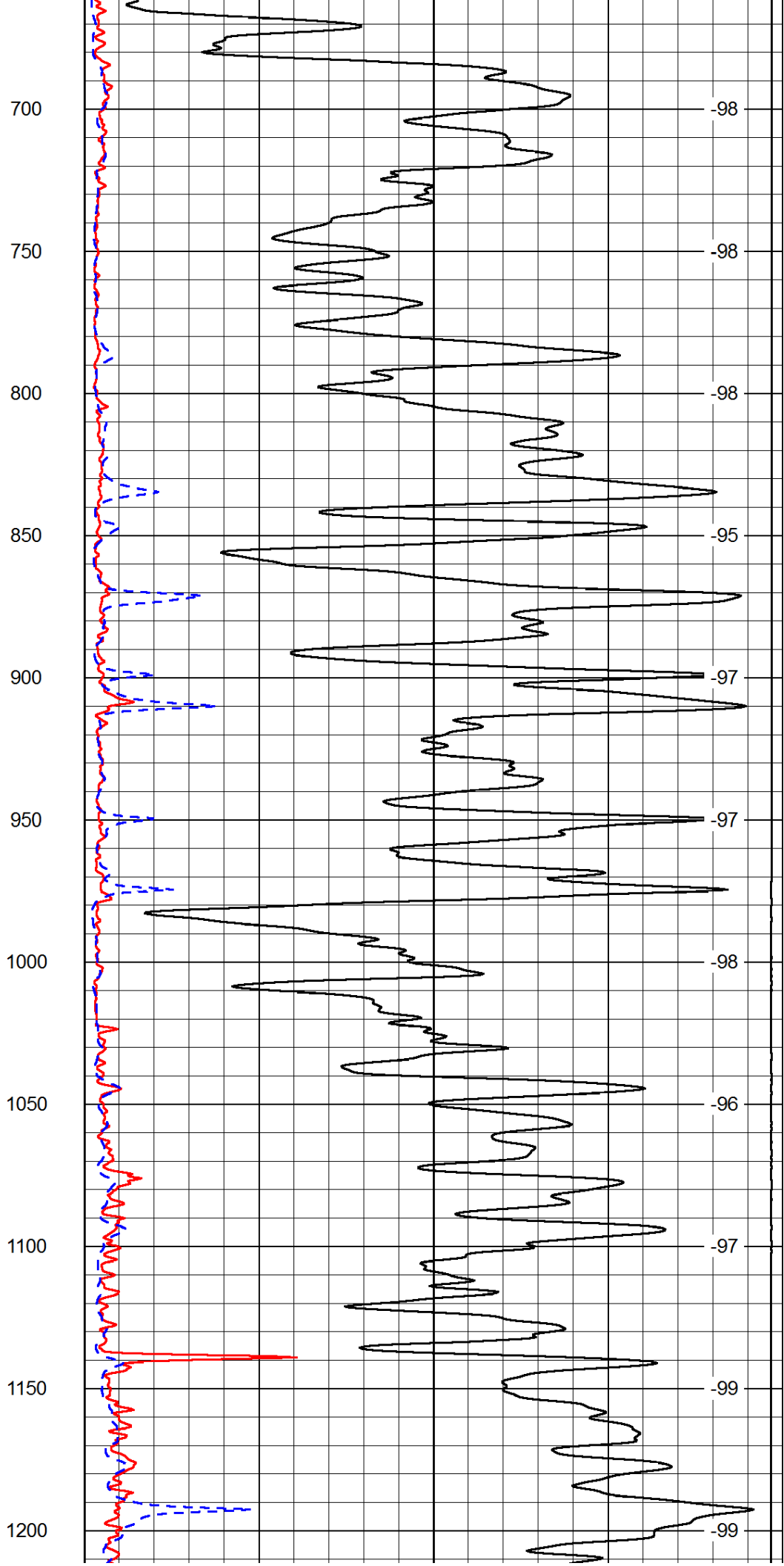
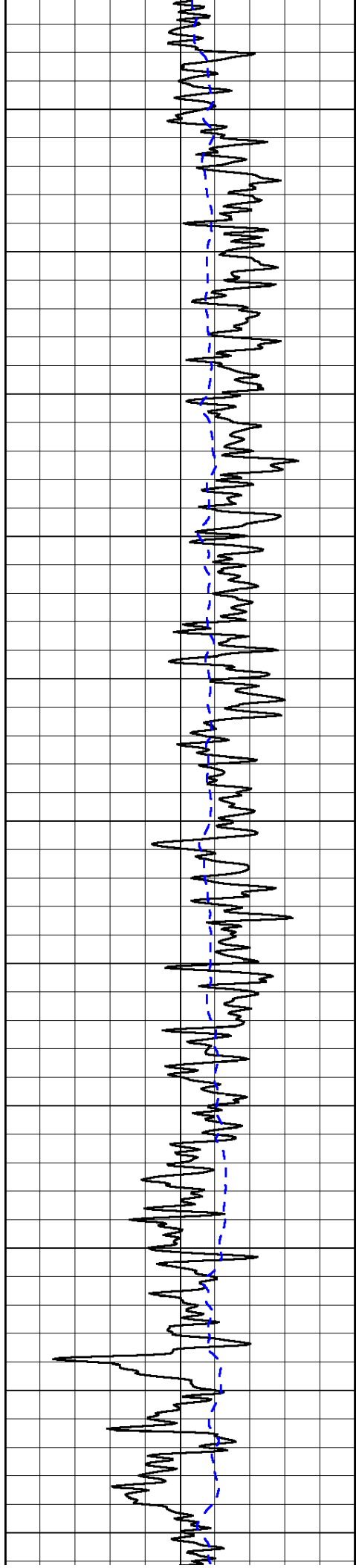
Database File: c:\warrior\data\woolsey\_warren fee #11\woolsey\_warrenfee\_11hd.db  
Dataset Pathname: DIL\woolstk  
Presentation Format: dil2in  
Dataset Creation: Sun Jul 27 04:25:20 2014  
Charted by: Depth in Feet scaled 1:600

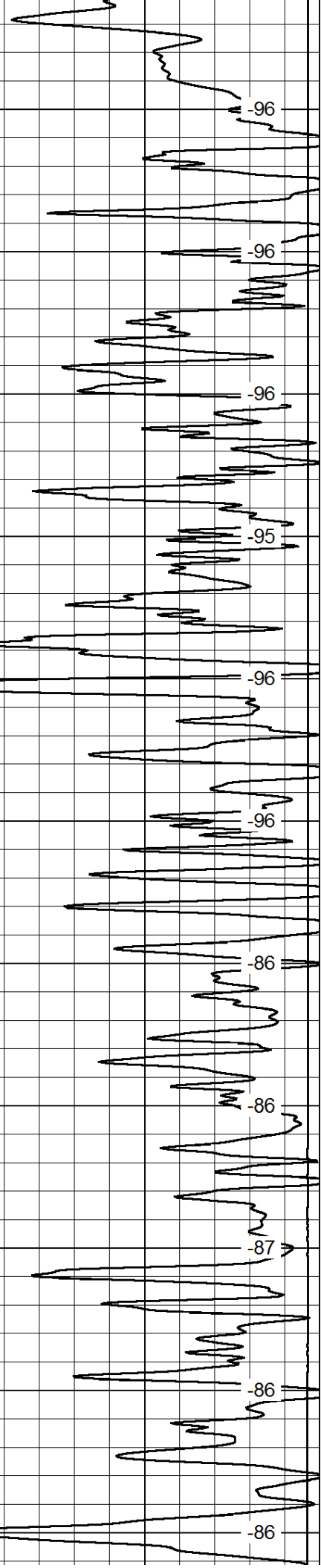
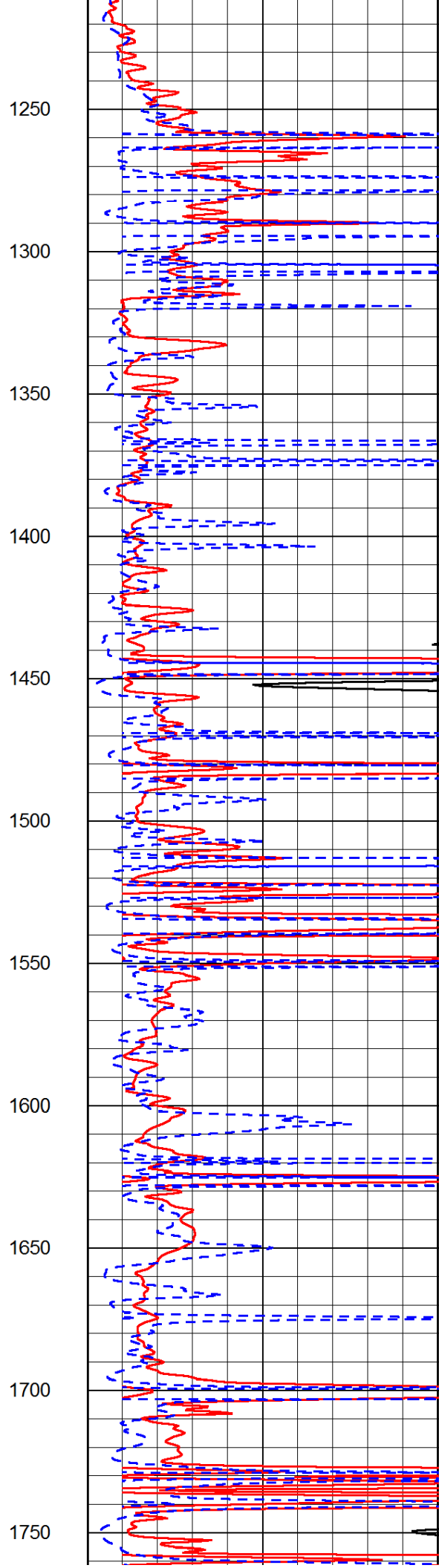
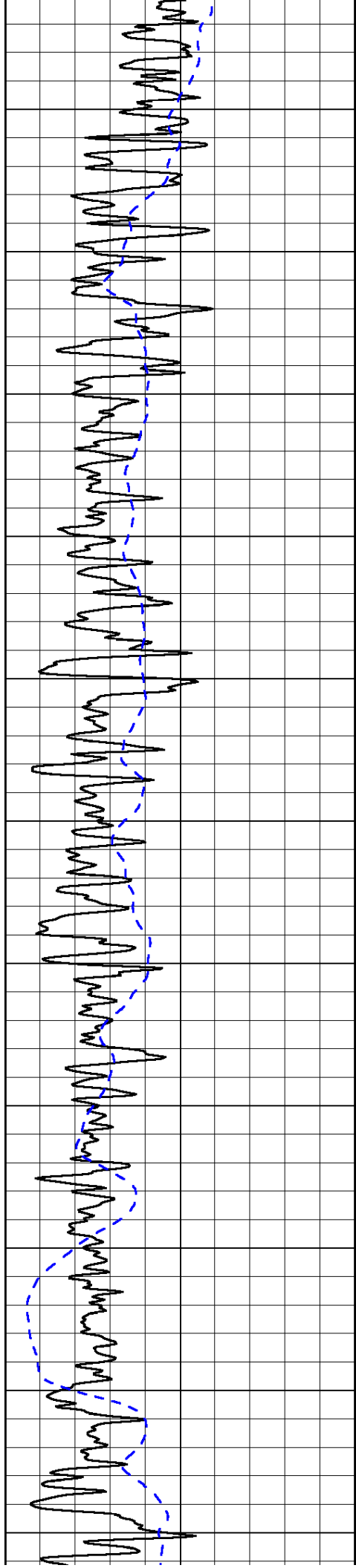
0	Gamma Ray	150
-200	SP (mV)	0

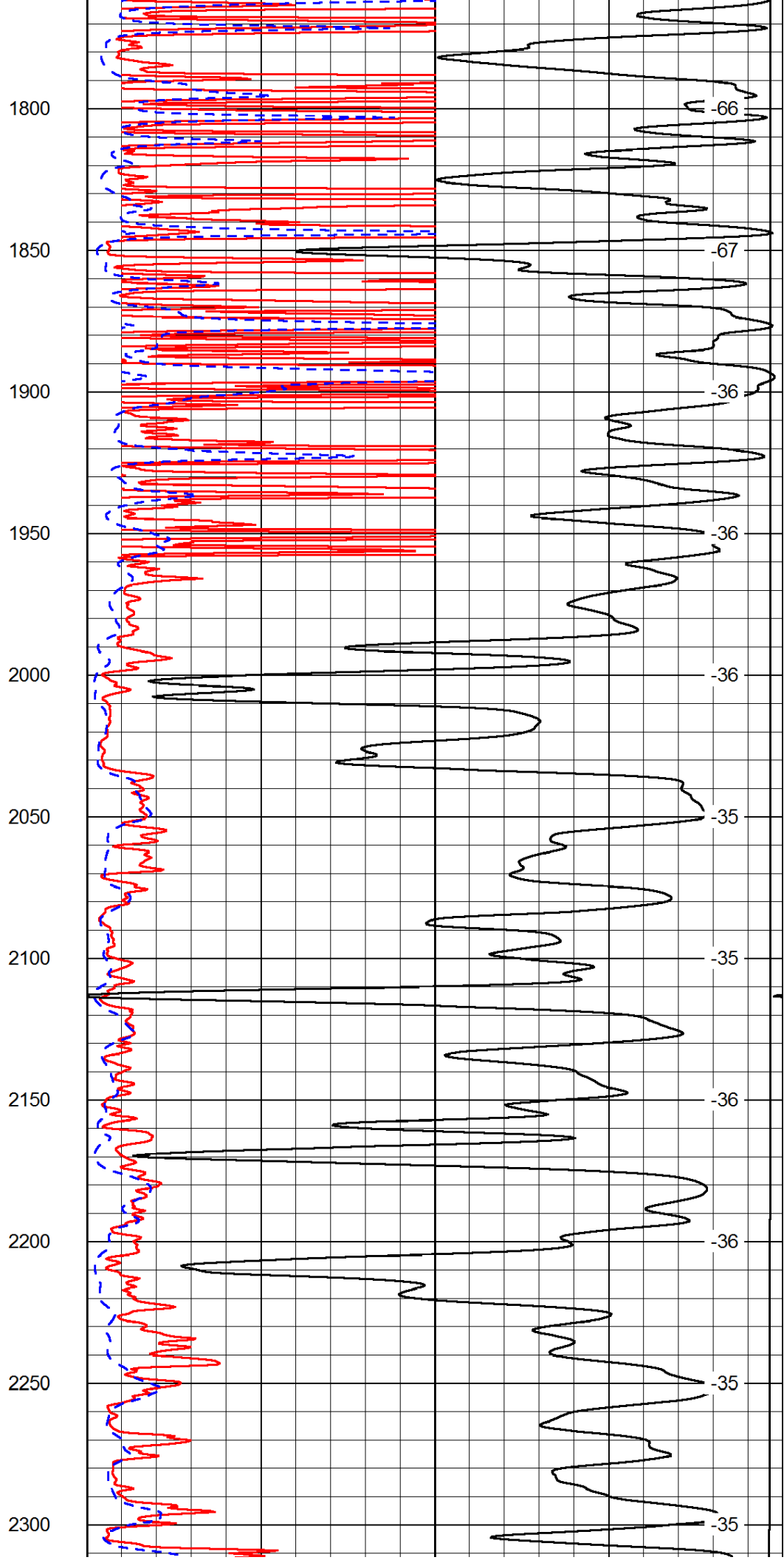
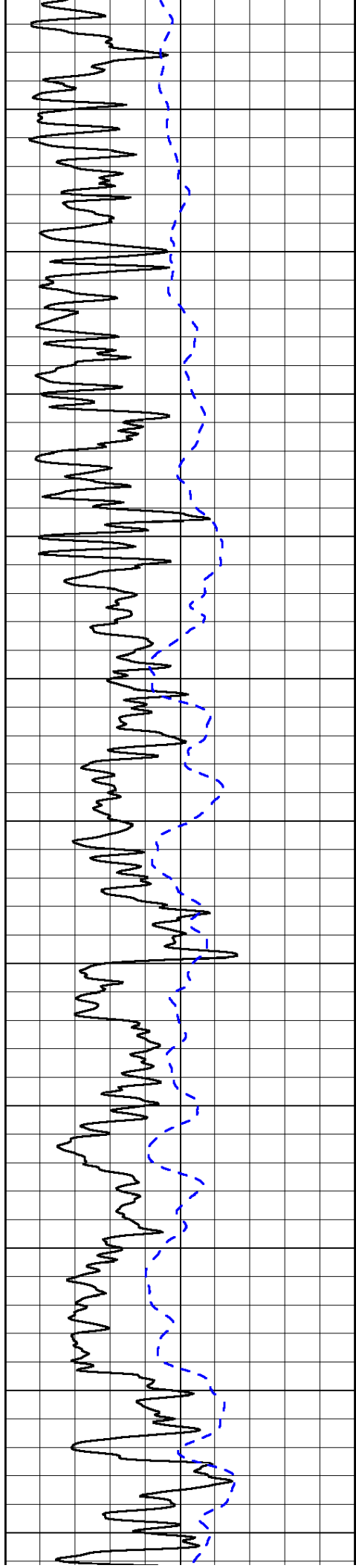
0	Shallow Resistivity	50
0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

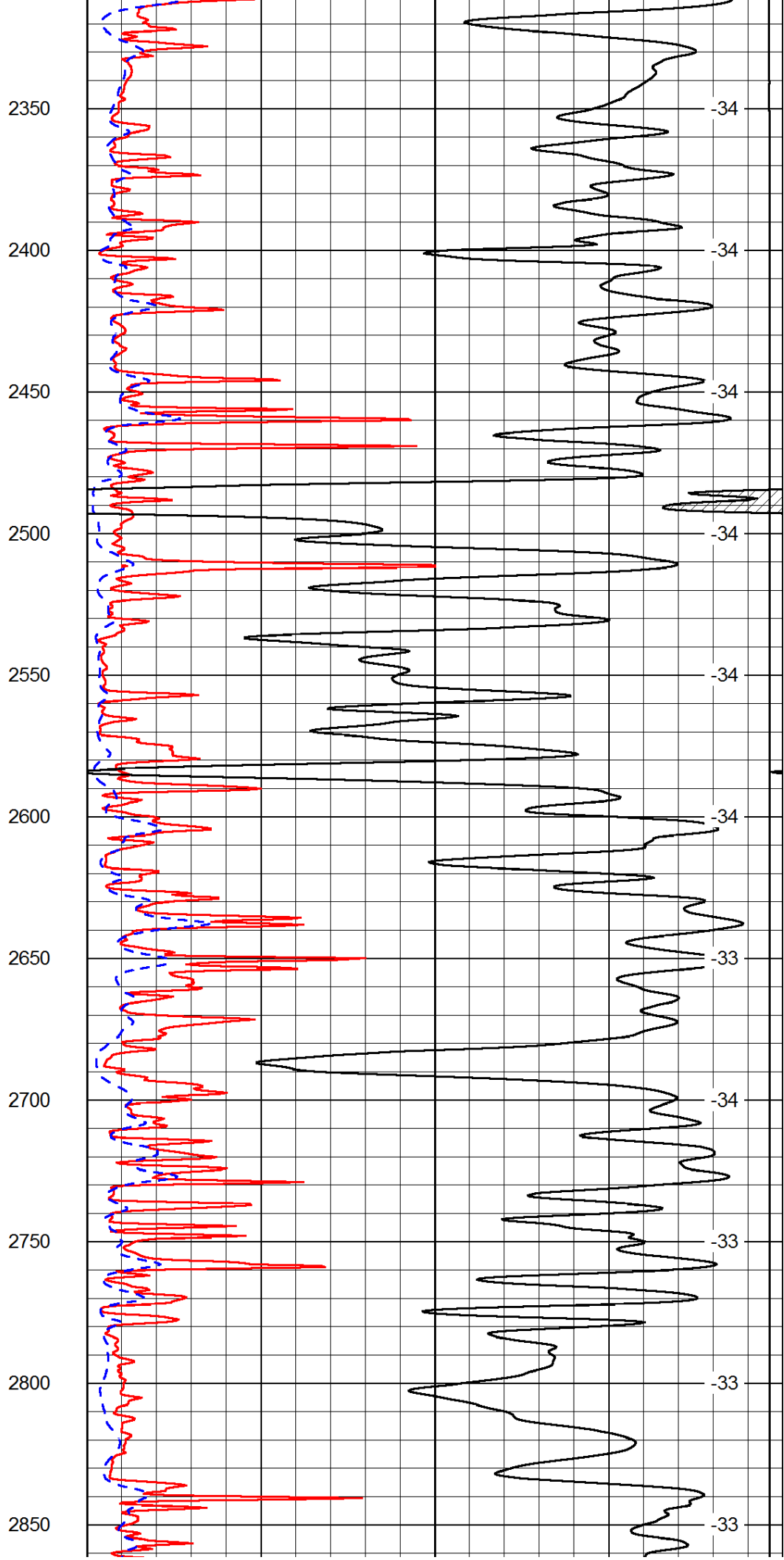
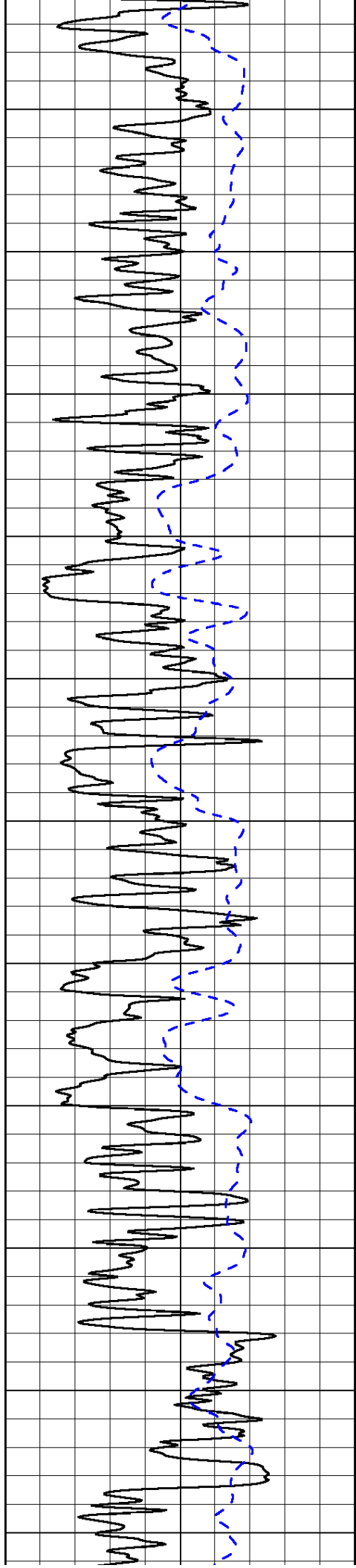
LSPD
------

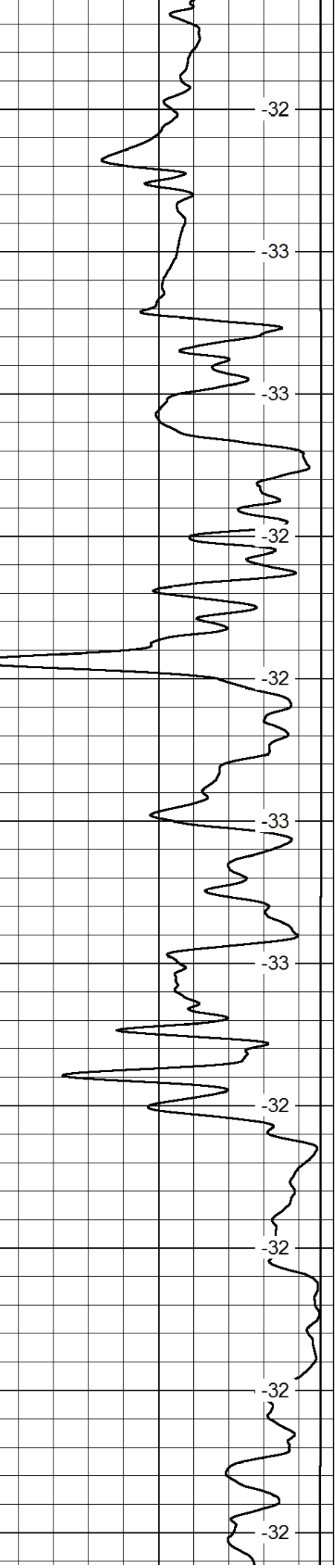
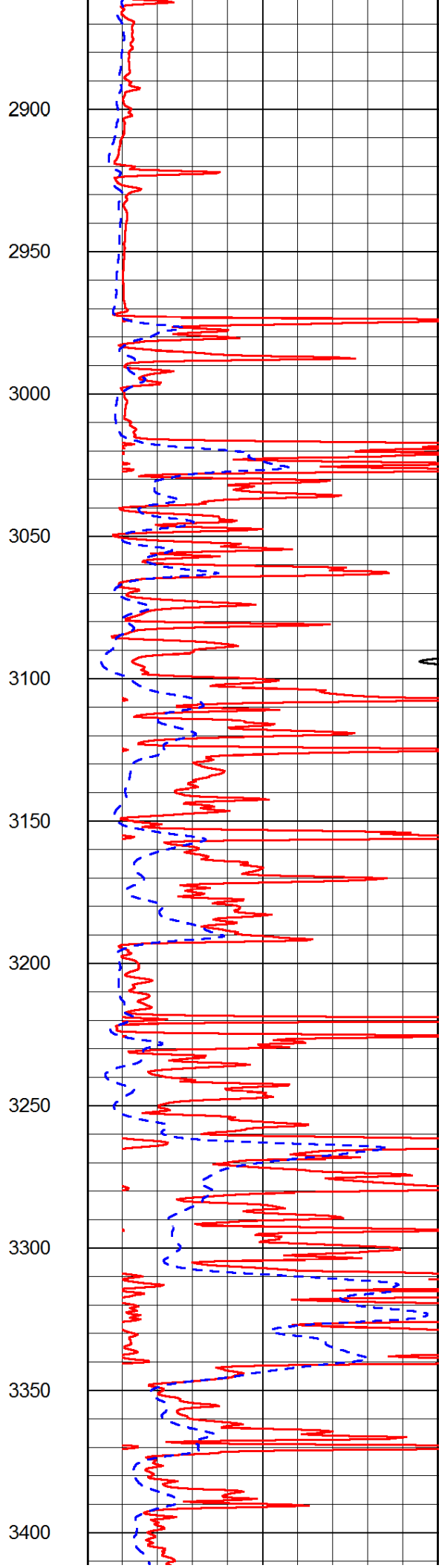
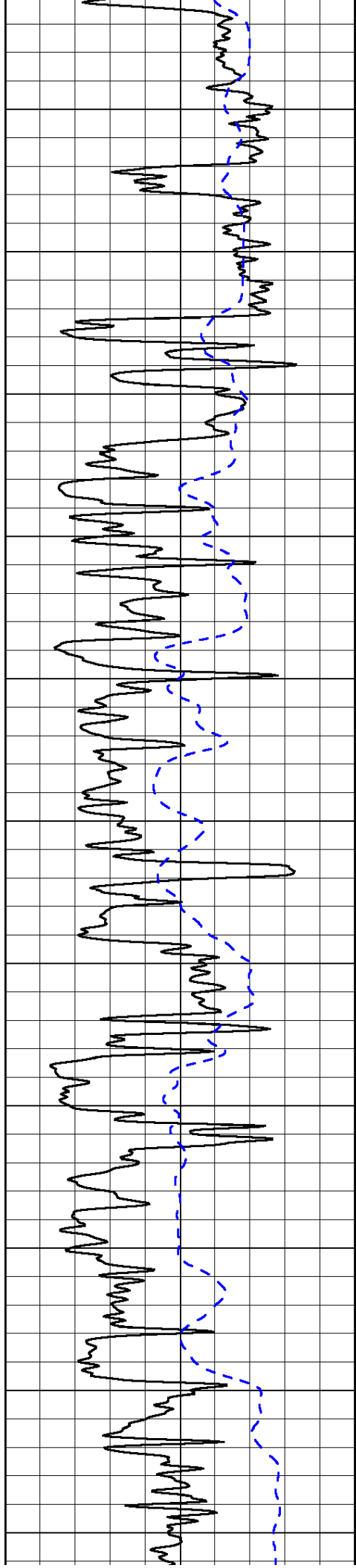


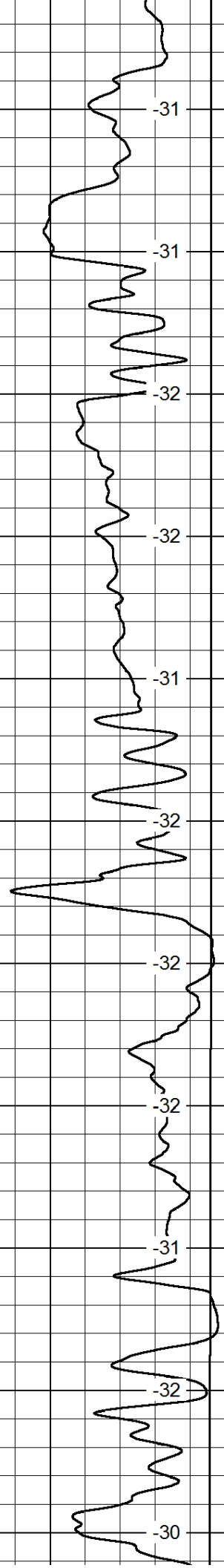
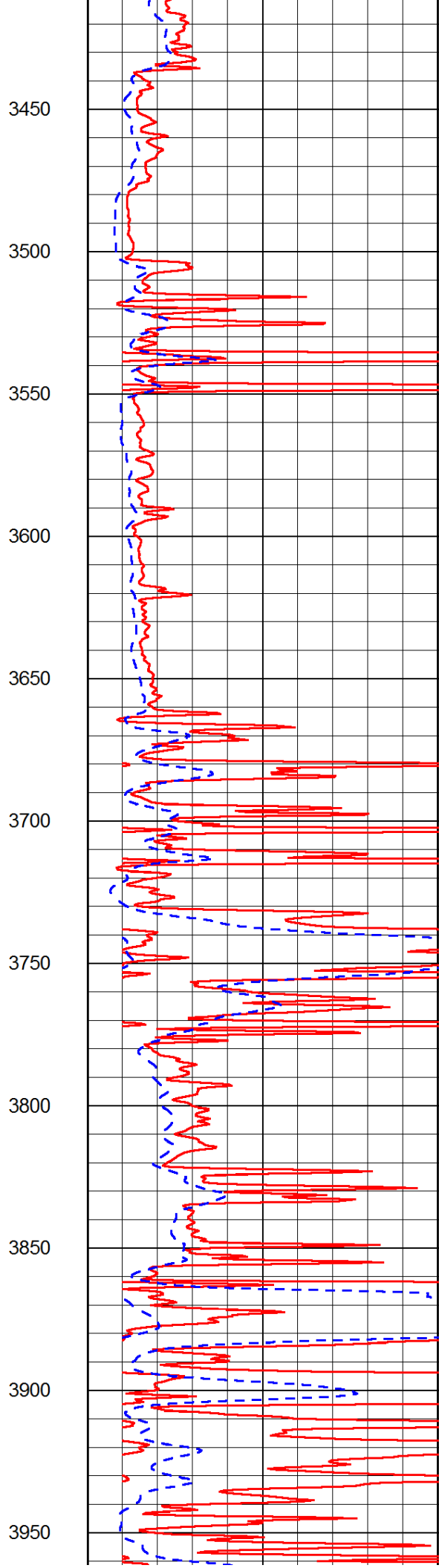
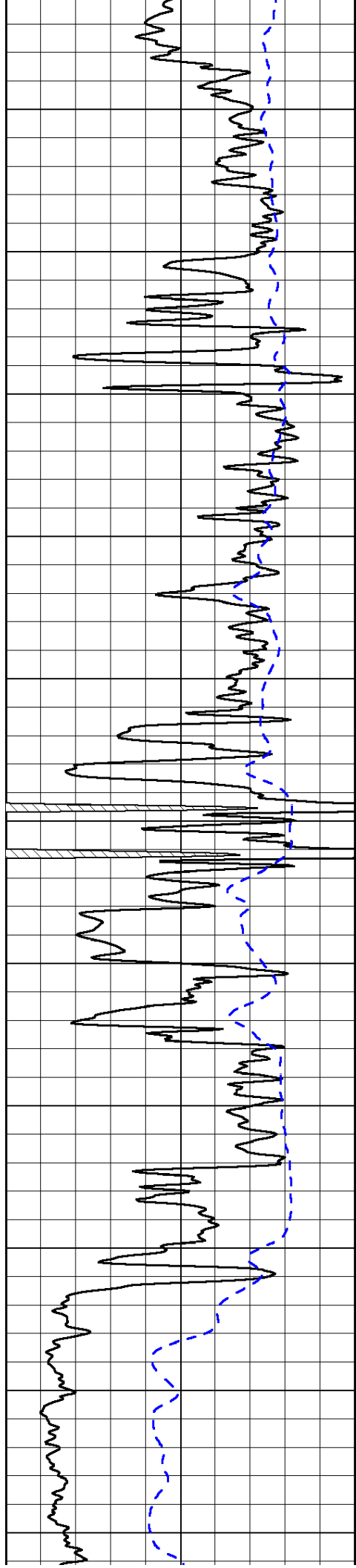




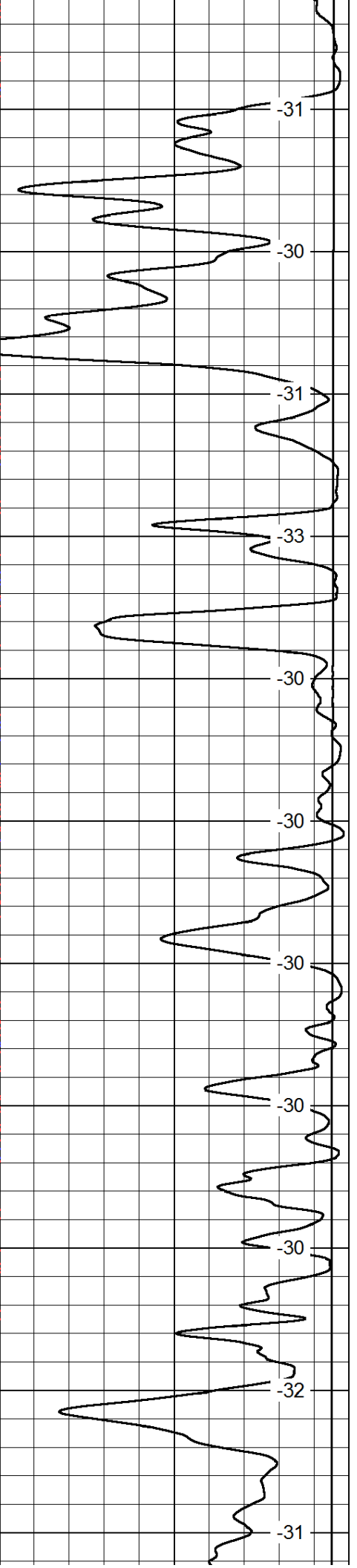
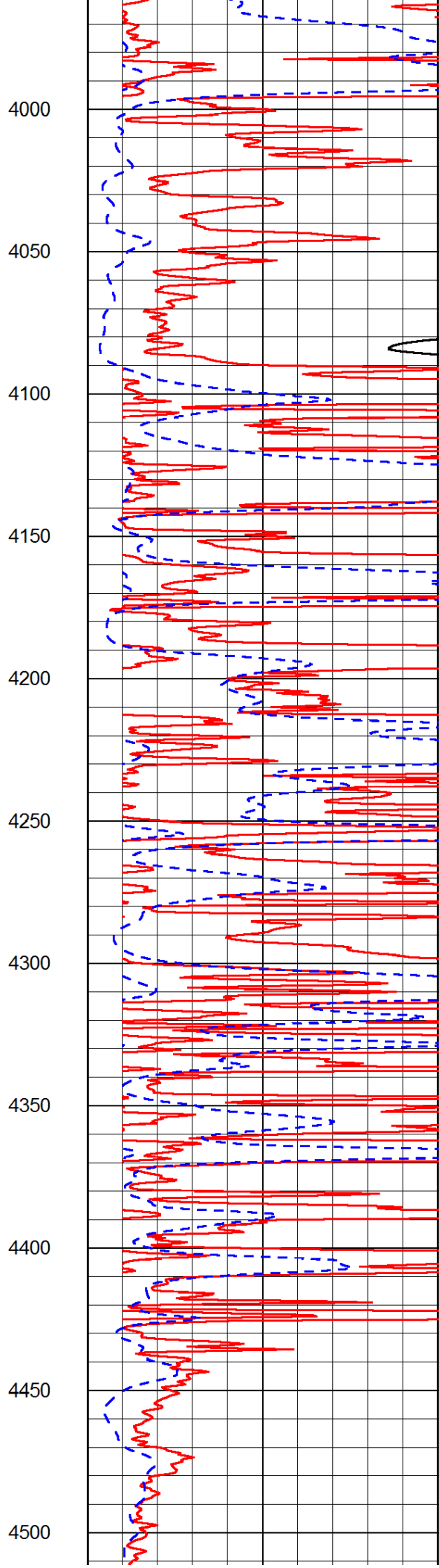
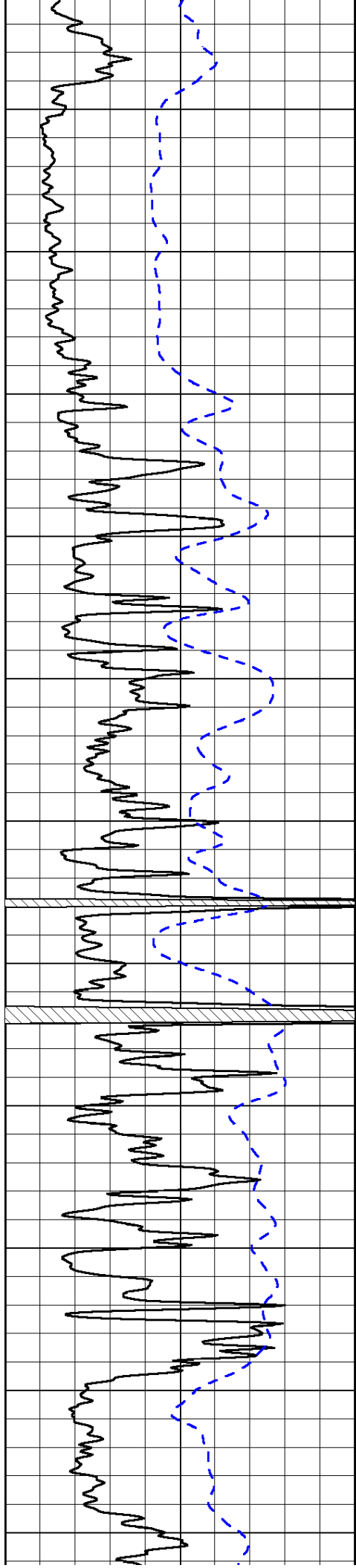


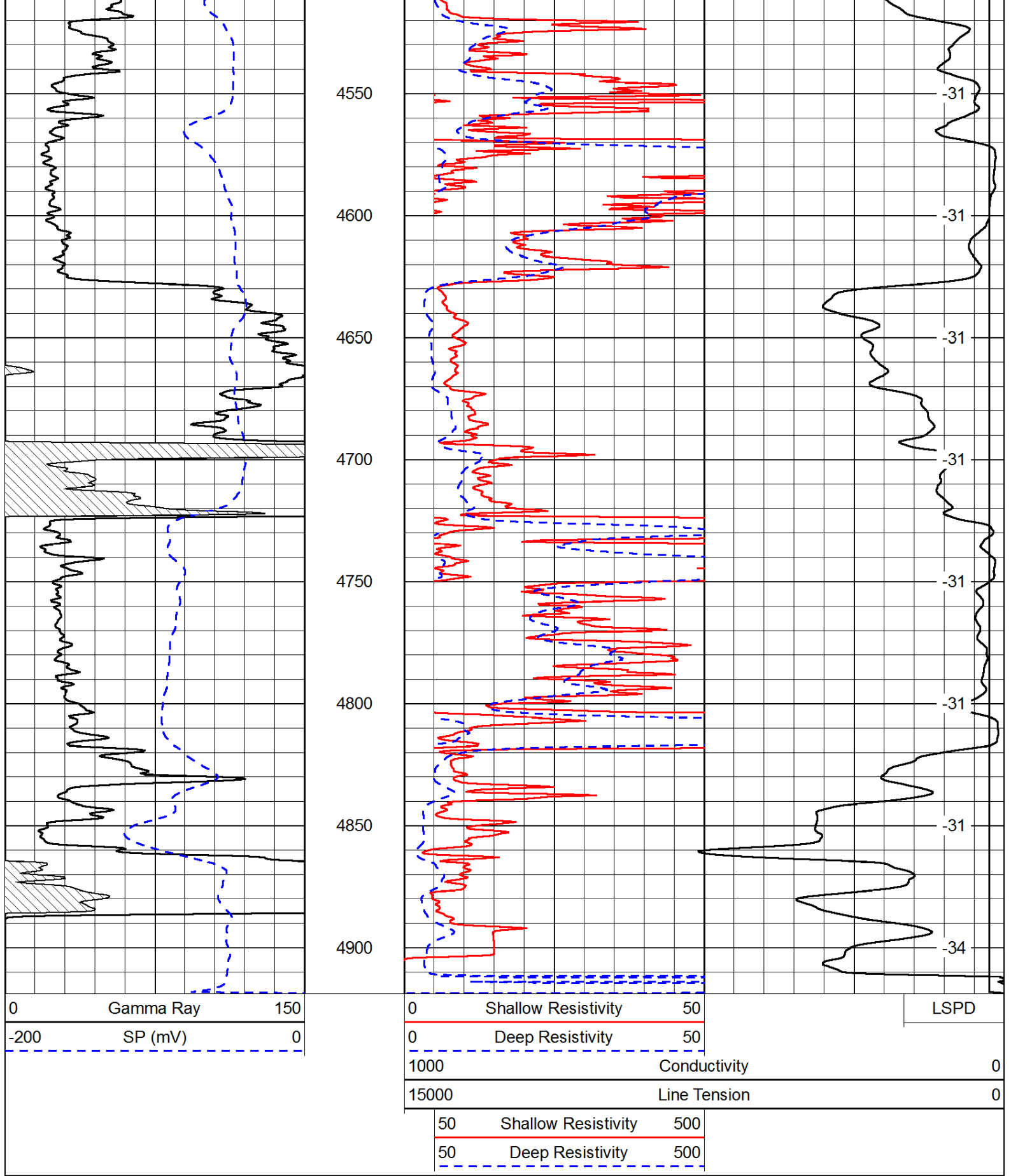










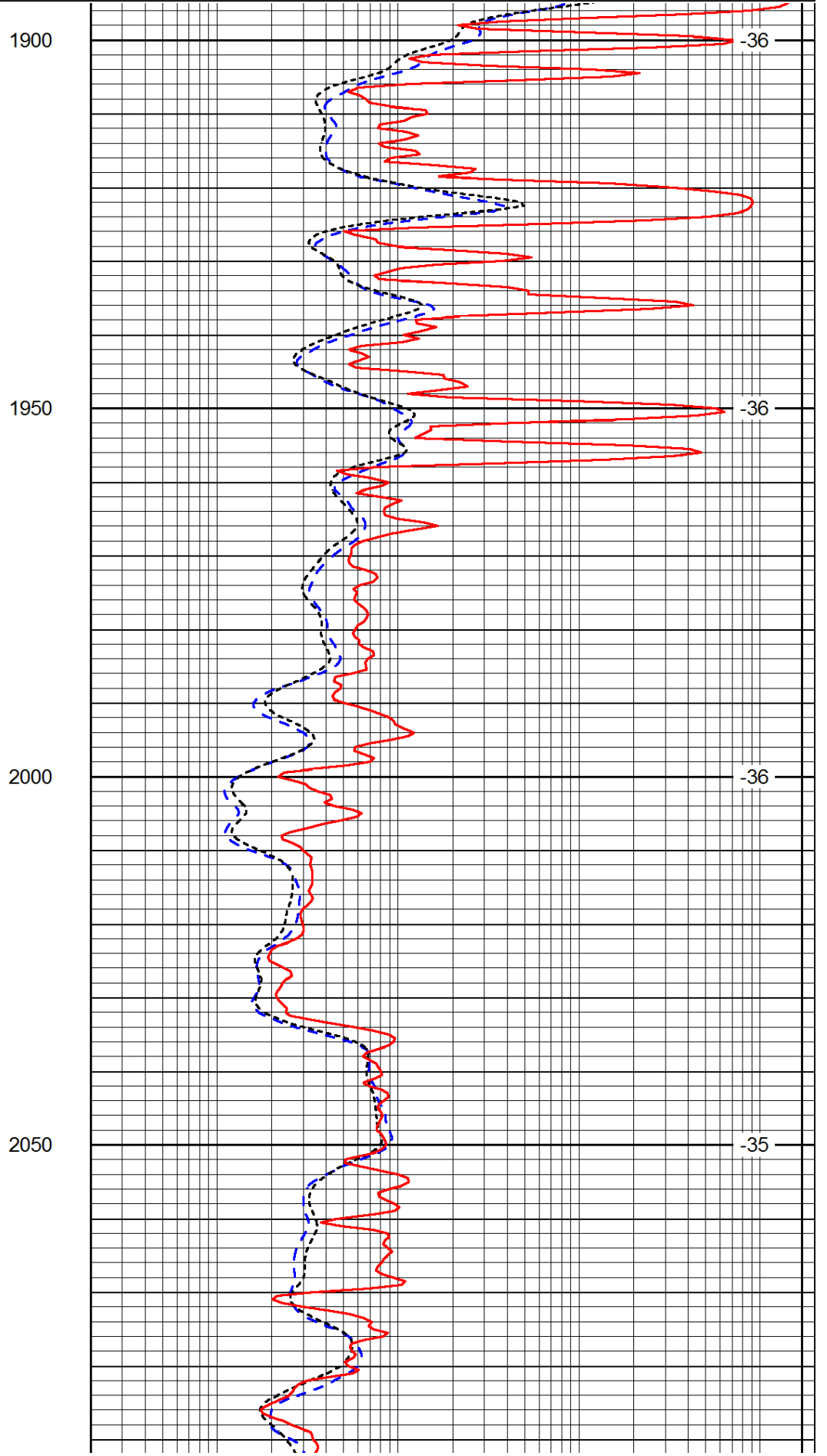
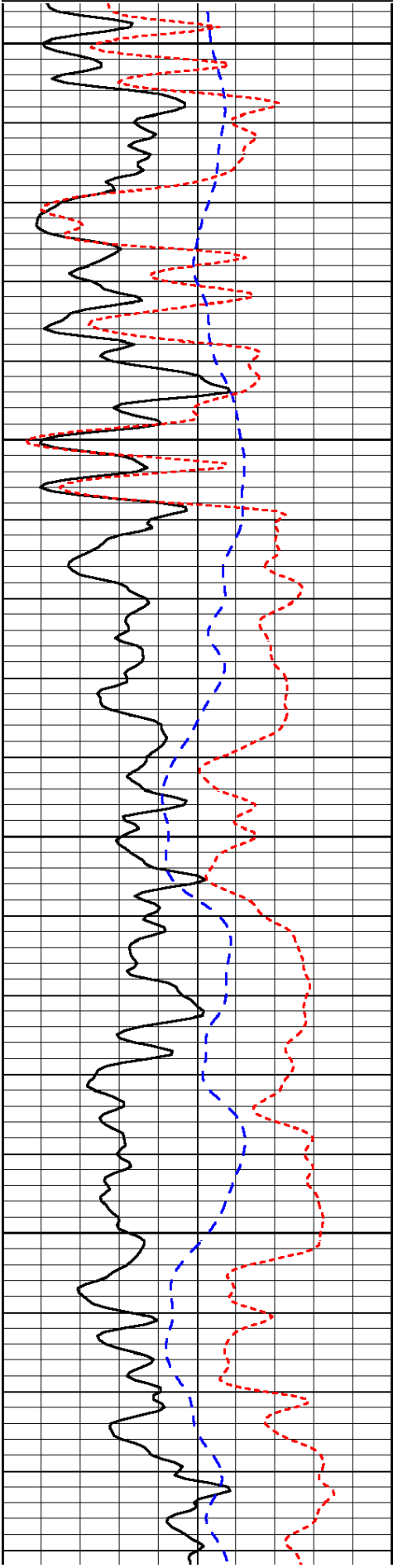


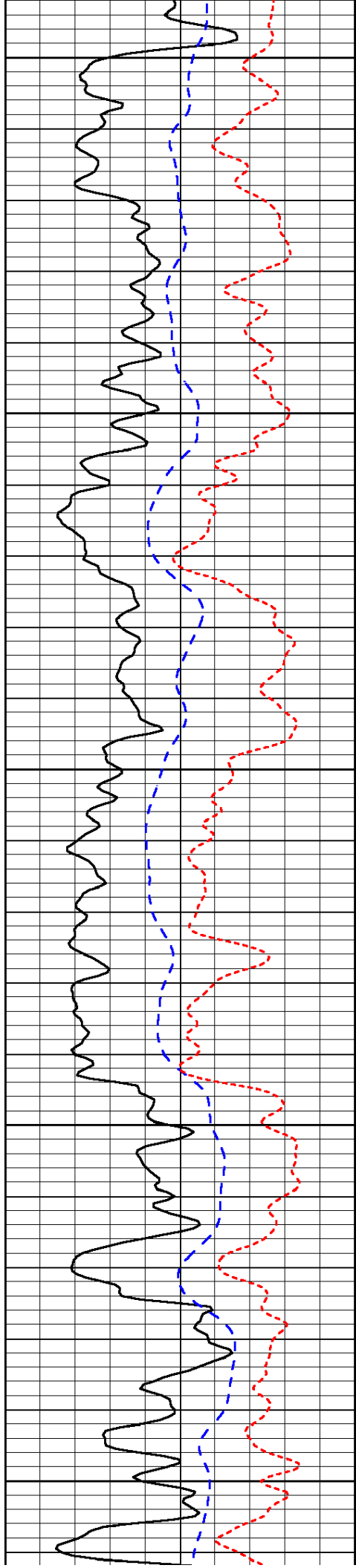
Database File: c:\warrior\data\woolsey\_warren fee #11\woolsey\_warrenfee\_11hd.db  
 Dataset Pathname: DIL/woolstk  
 Presentation Format: dil  
 Dataset Creation: Sun Jul 27 04:25:20 2014  
 Charted by: Depth in Feet scaled 1:240

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





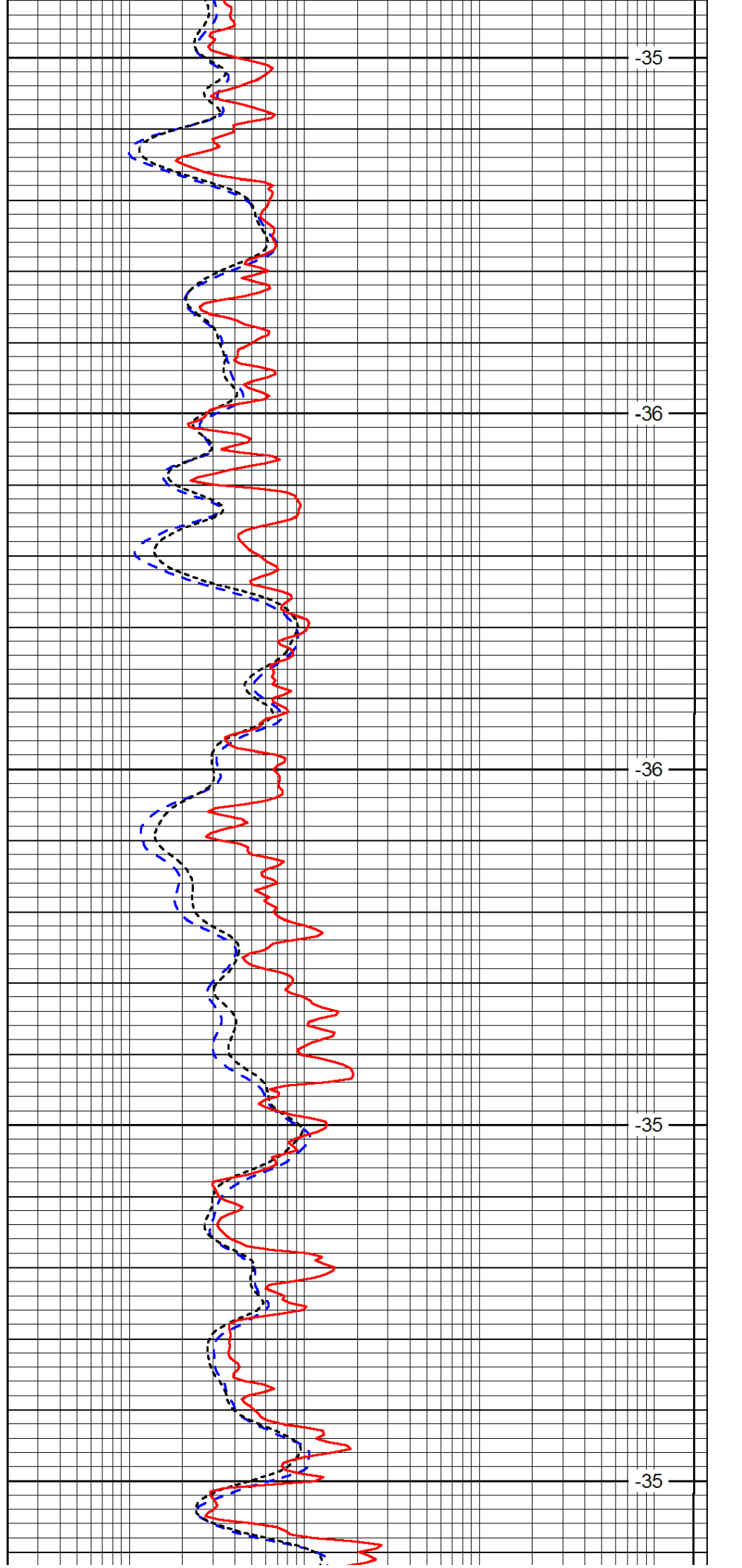
2100

2150

2200

2250

2300



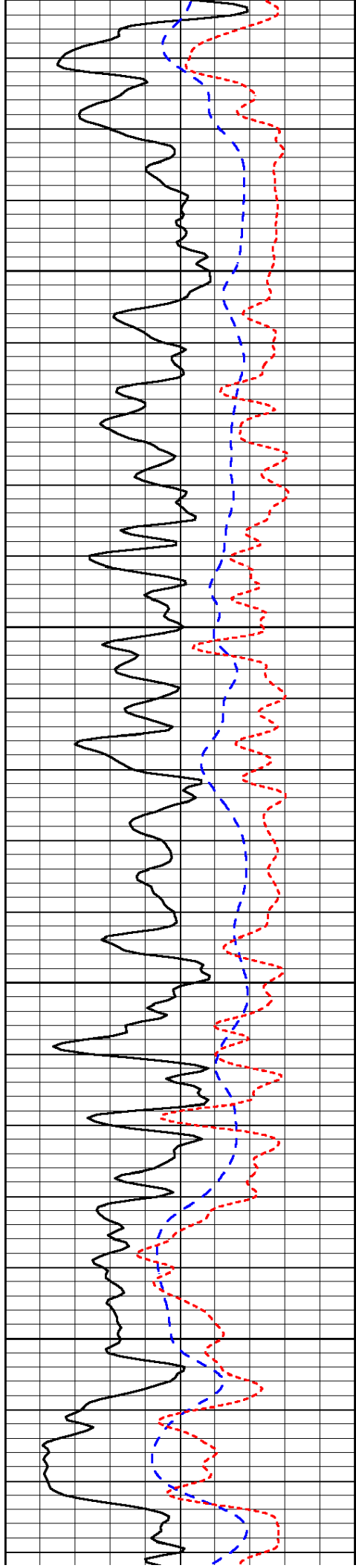
-35

-36

-36

-35

-35

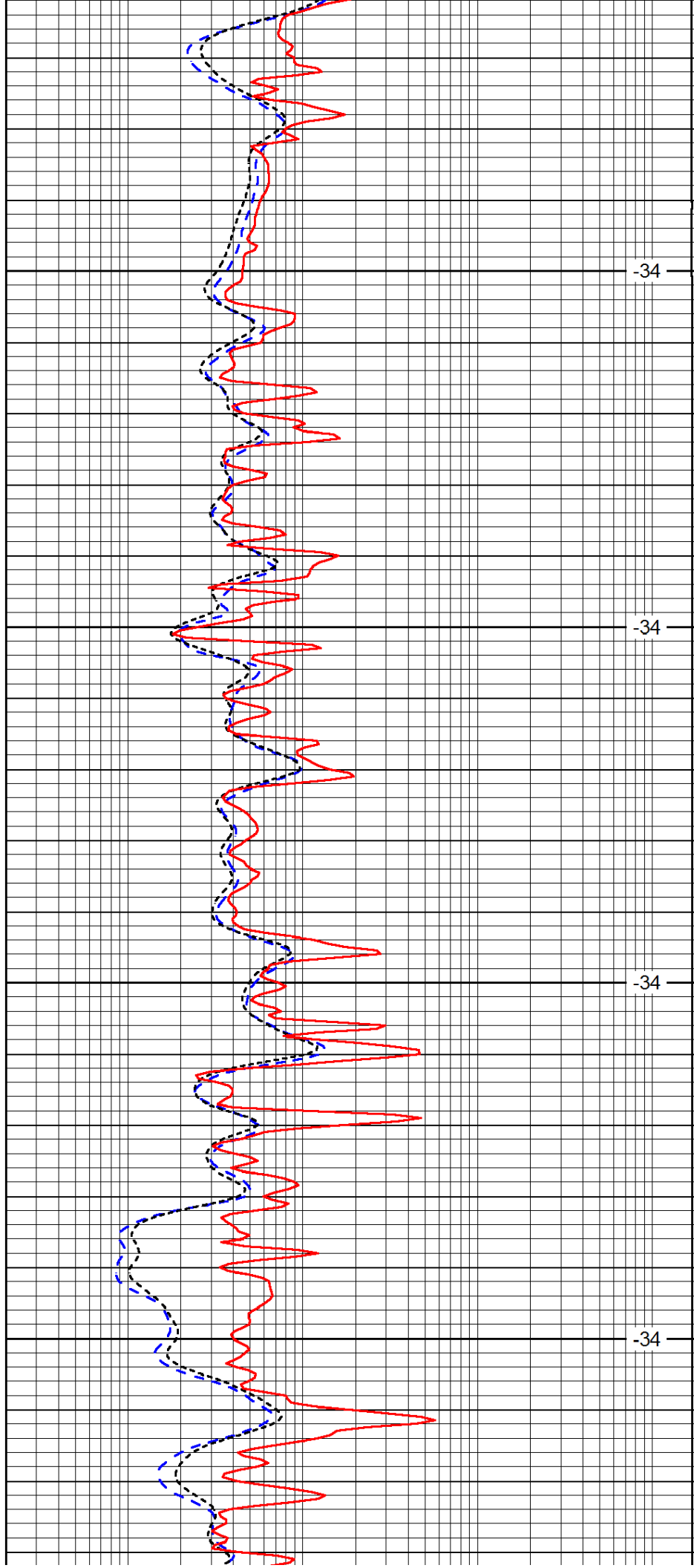


2350

2400

2450

2500

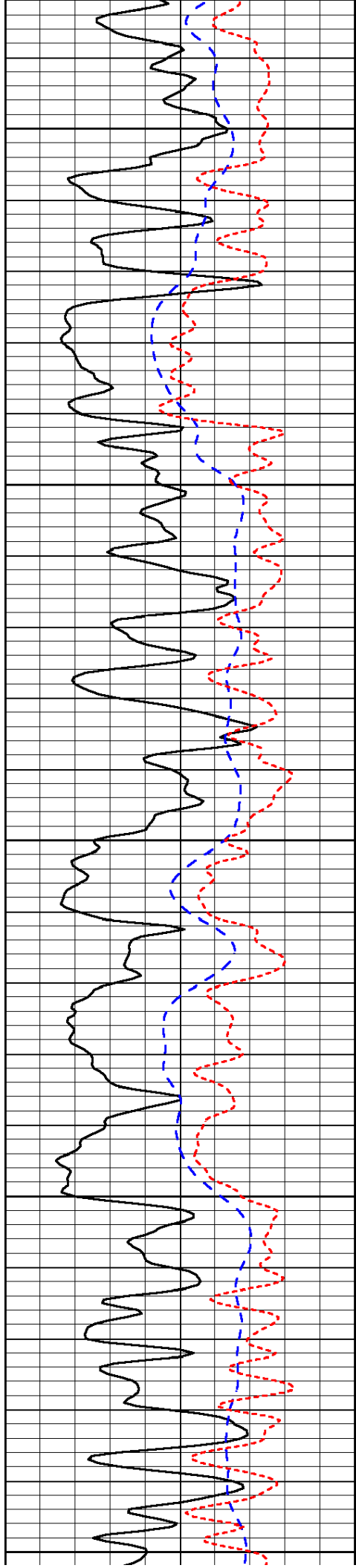


-34

-34

-34

-34



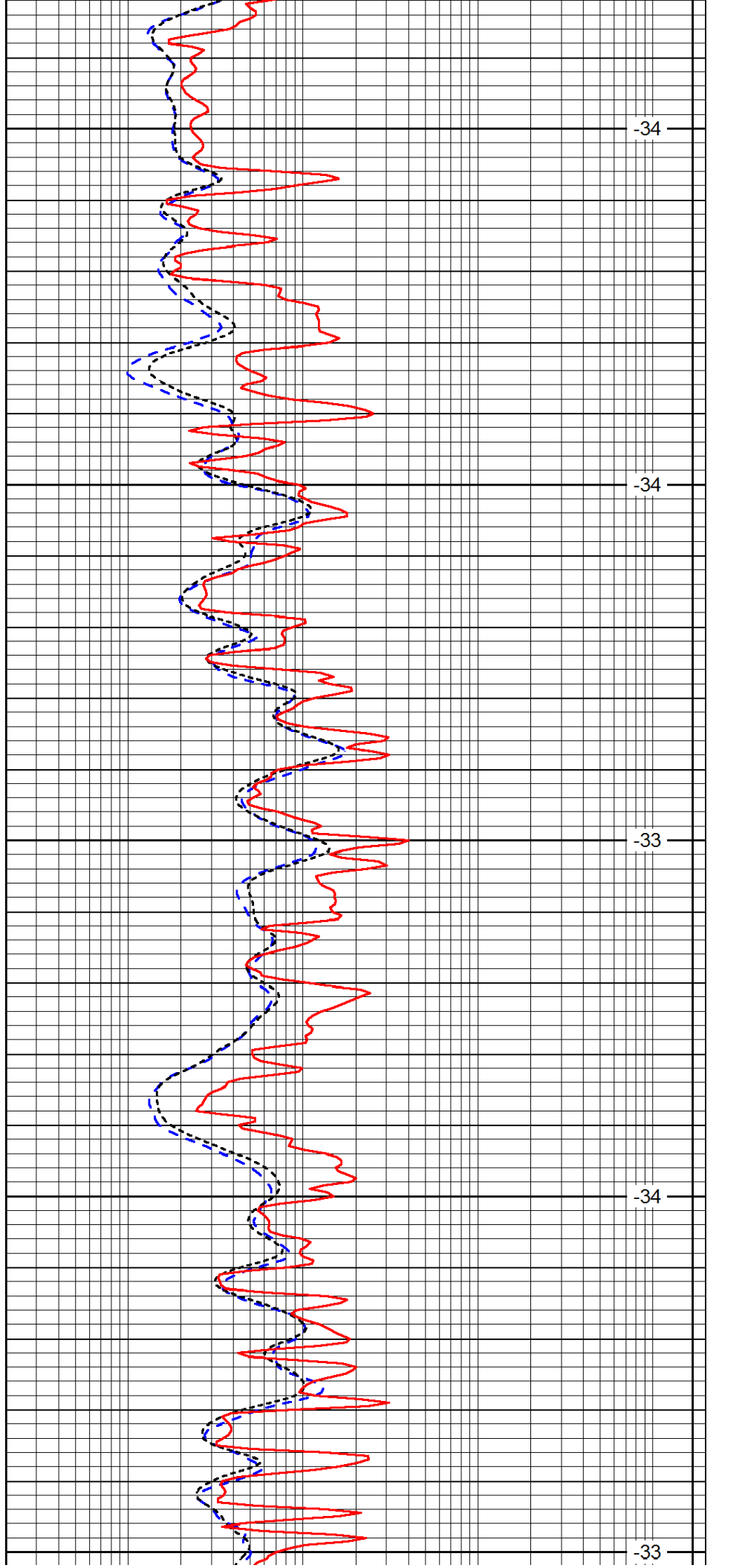
2550

2600

2650

2700

2750



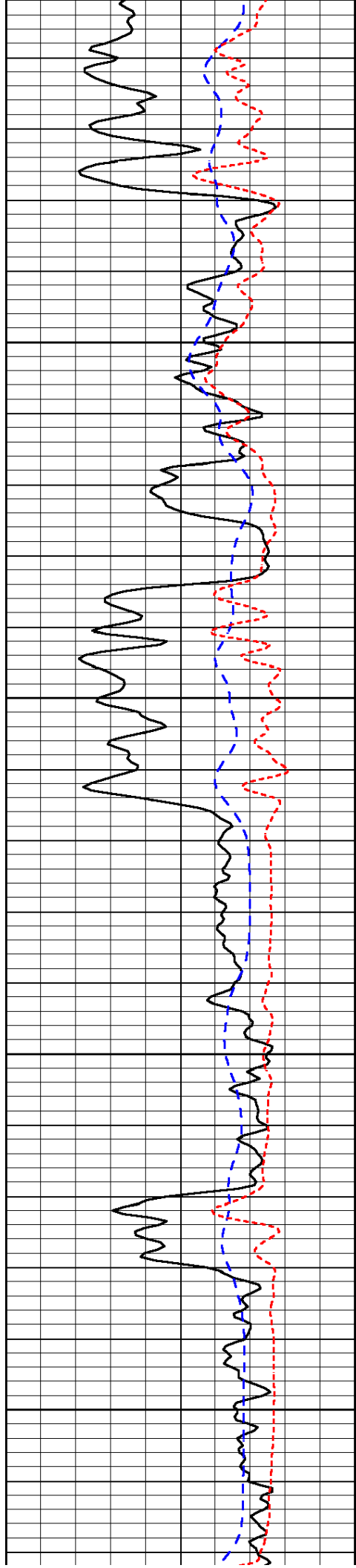
-34

-34

-33

-34

-33

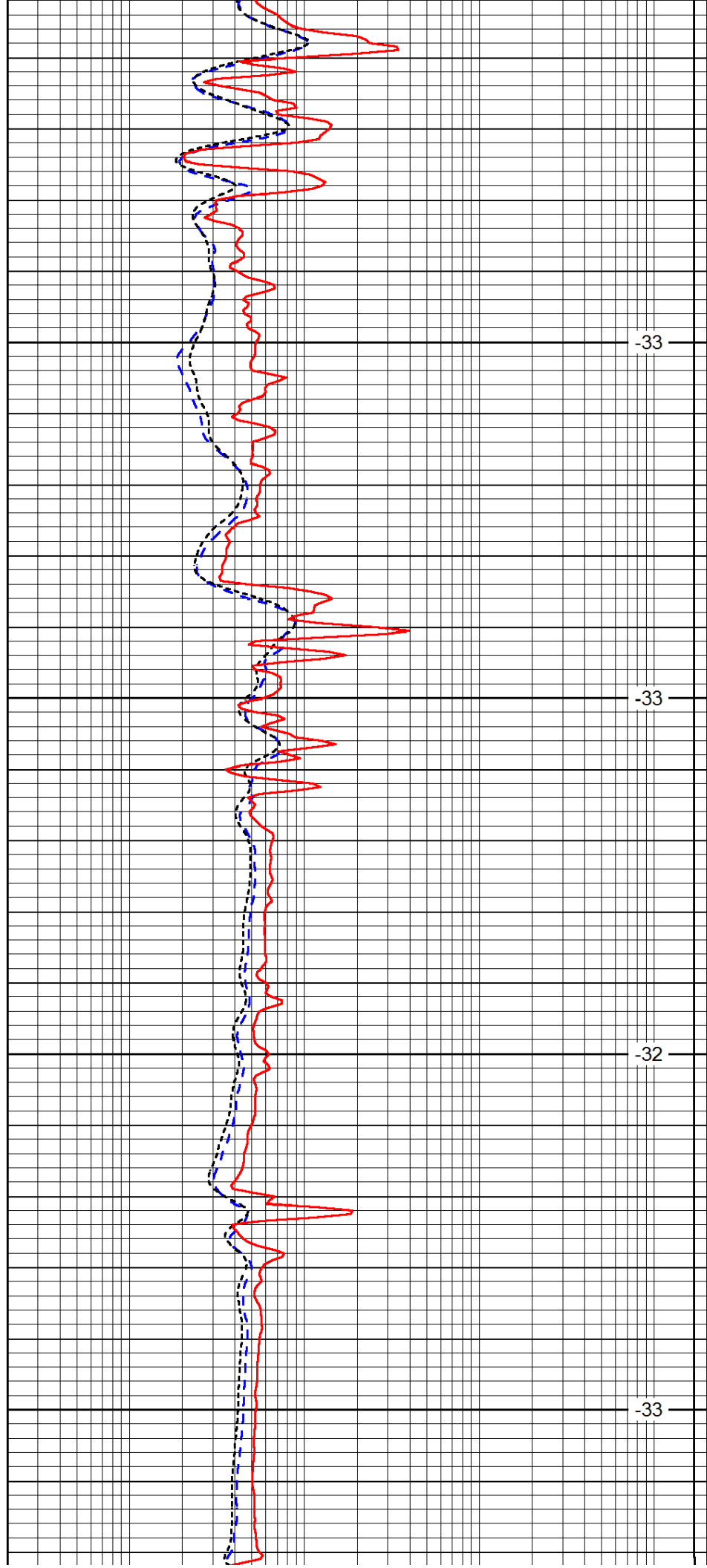


2800

2850

2900

2950

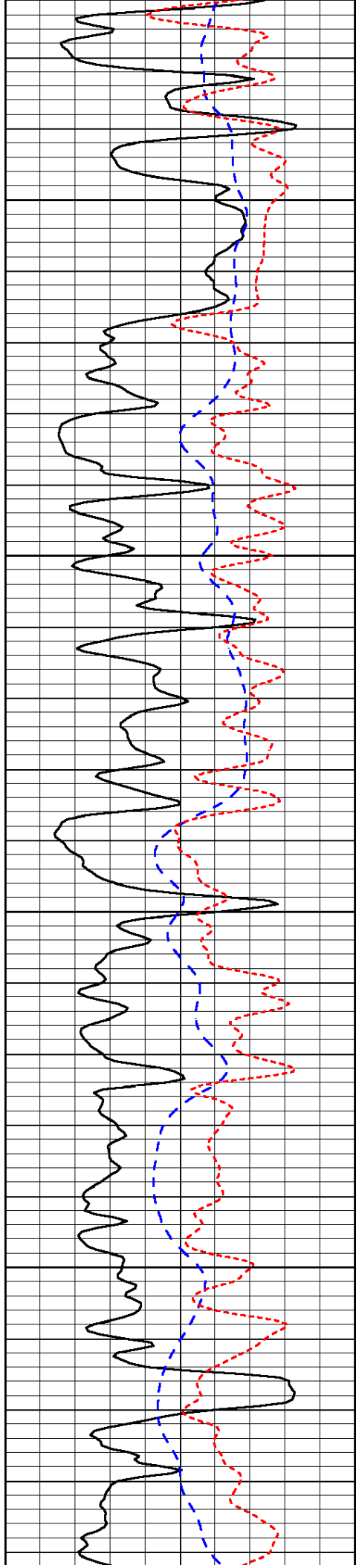


-33

-33

-32

-33

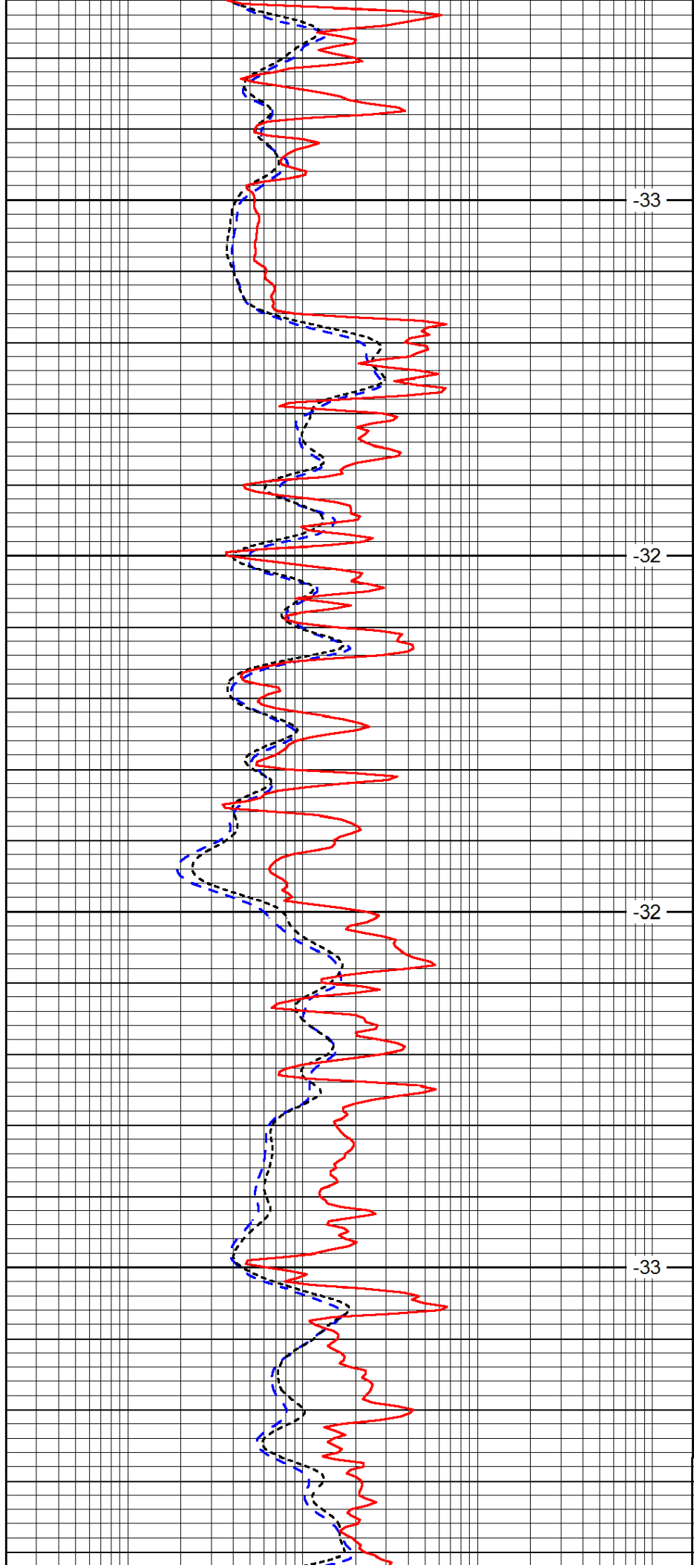


3000

3050

3100

3150



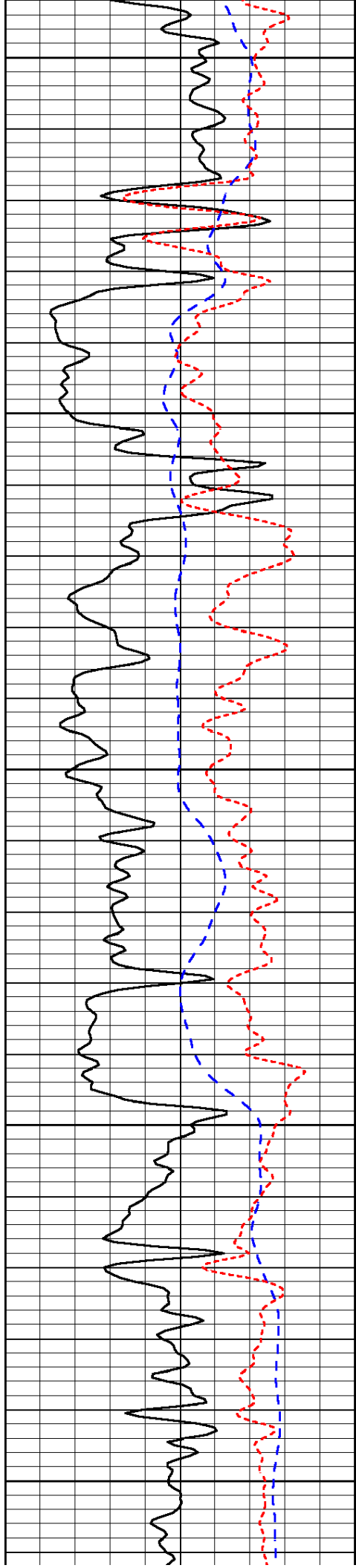
-33

-32

-32

-33





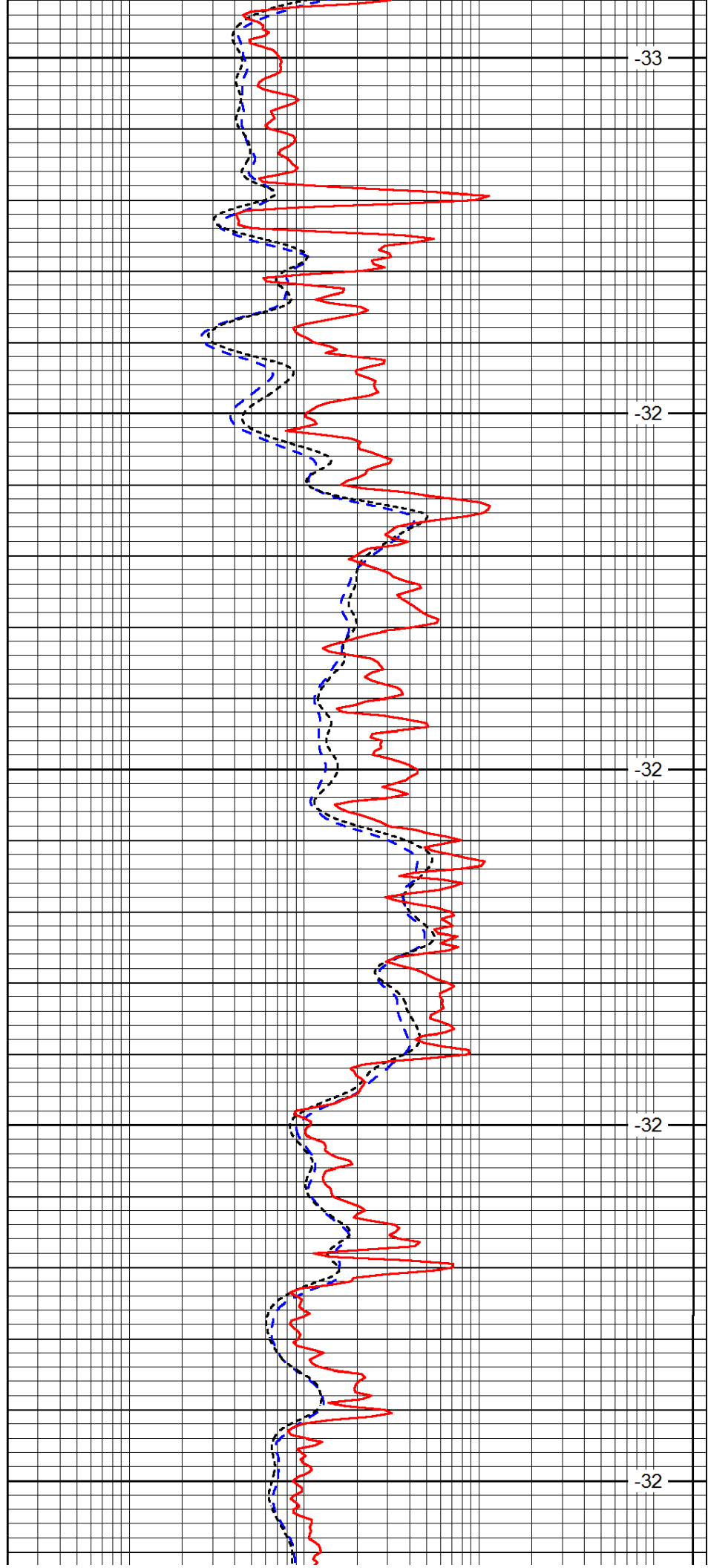
3200

3250

3300

3350

3400



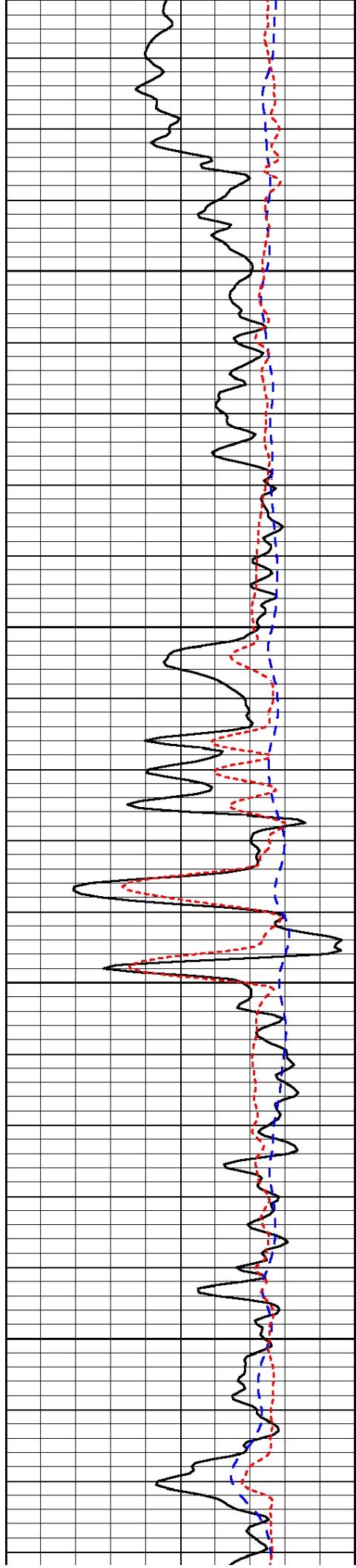
-33

-32

-32

-32

-32

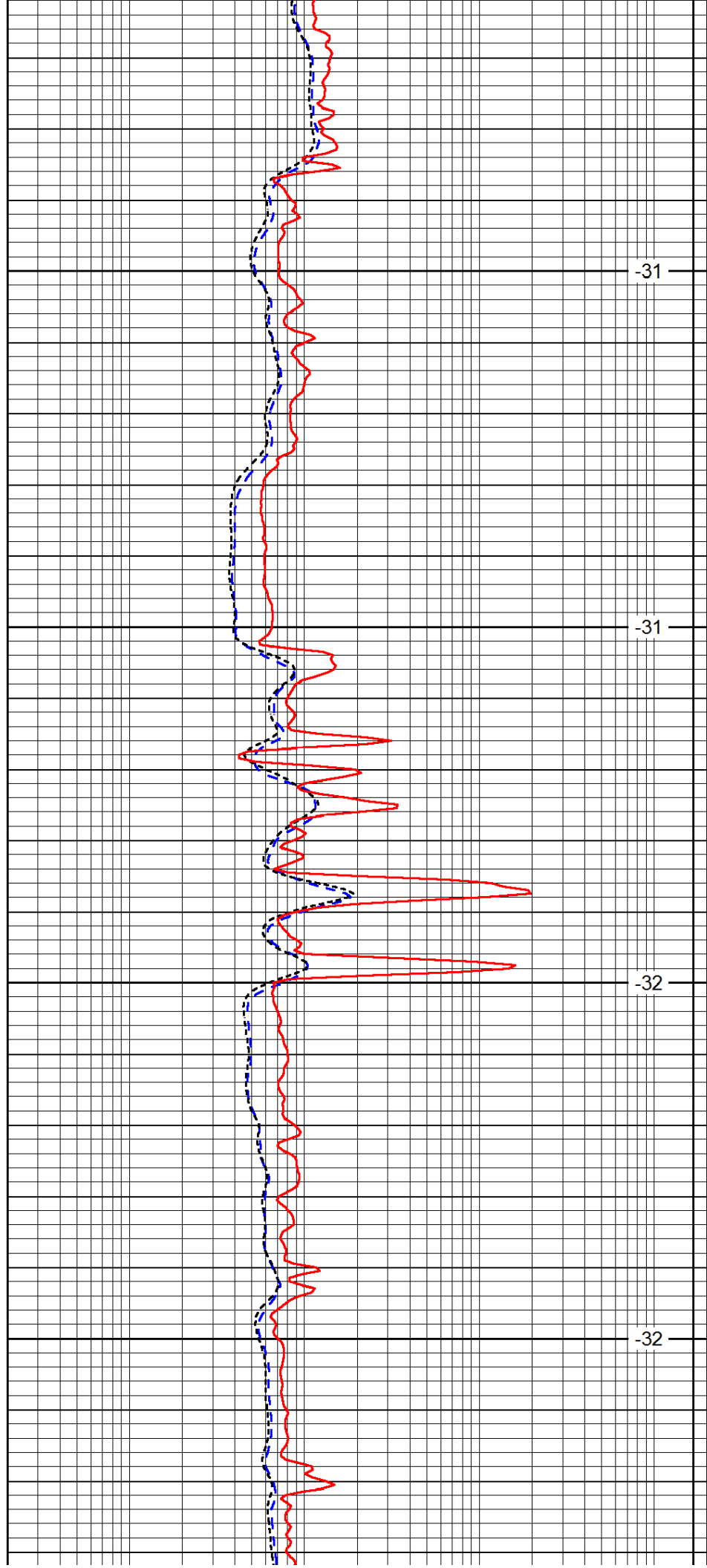


3450

3500

3550

3600

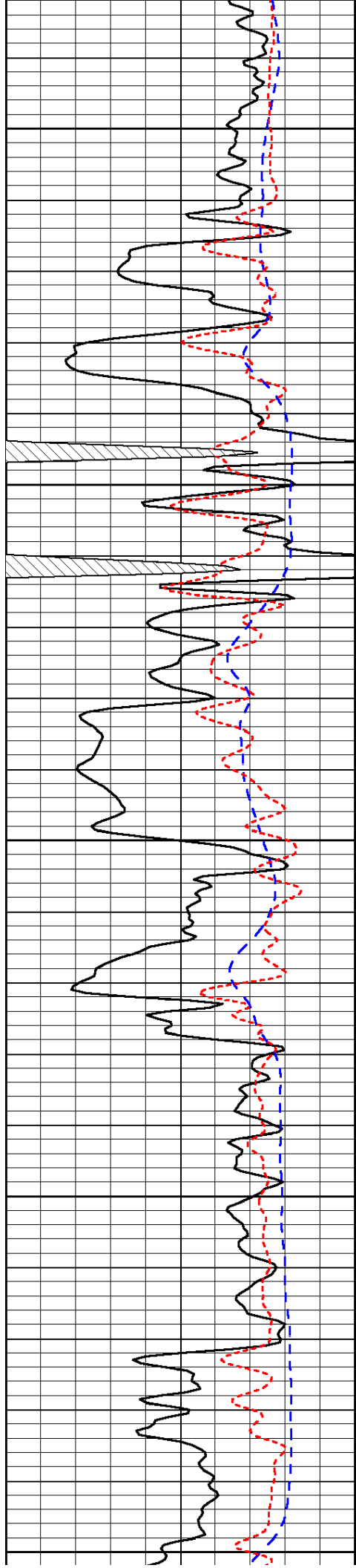


-31

-31

-32

-32



3650

3700

3750

3800

3850

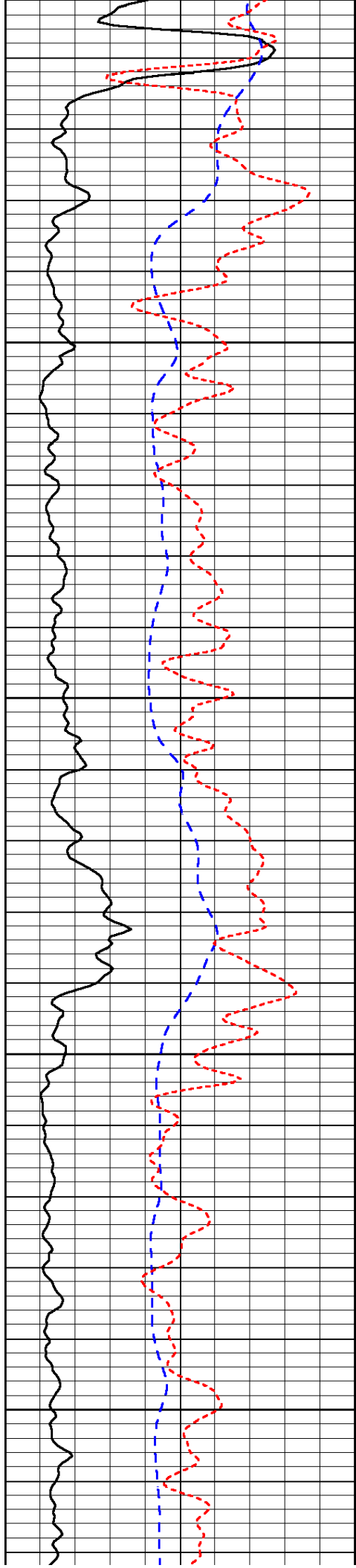
-31-

-32-

-32-

-32-

-31-

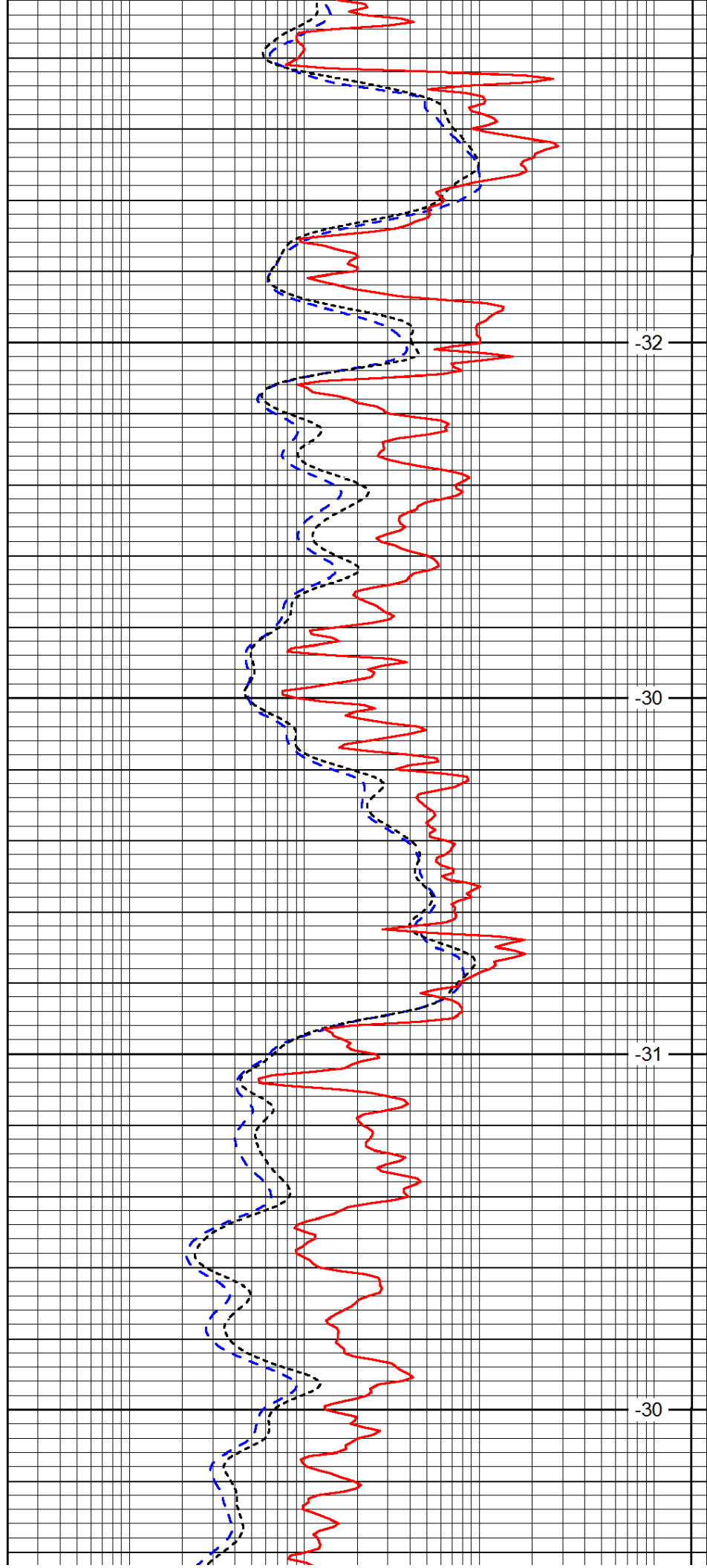


3900

3950

4000

4050

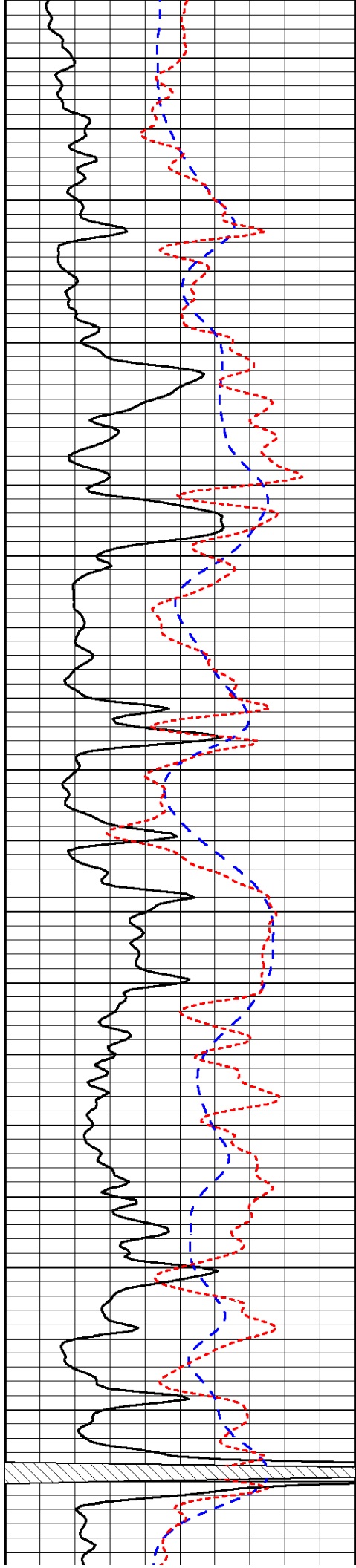


-32

-30

-31

-30

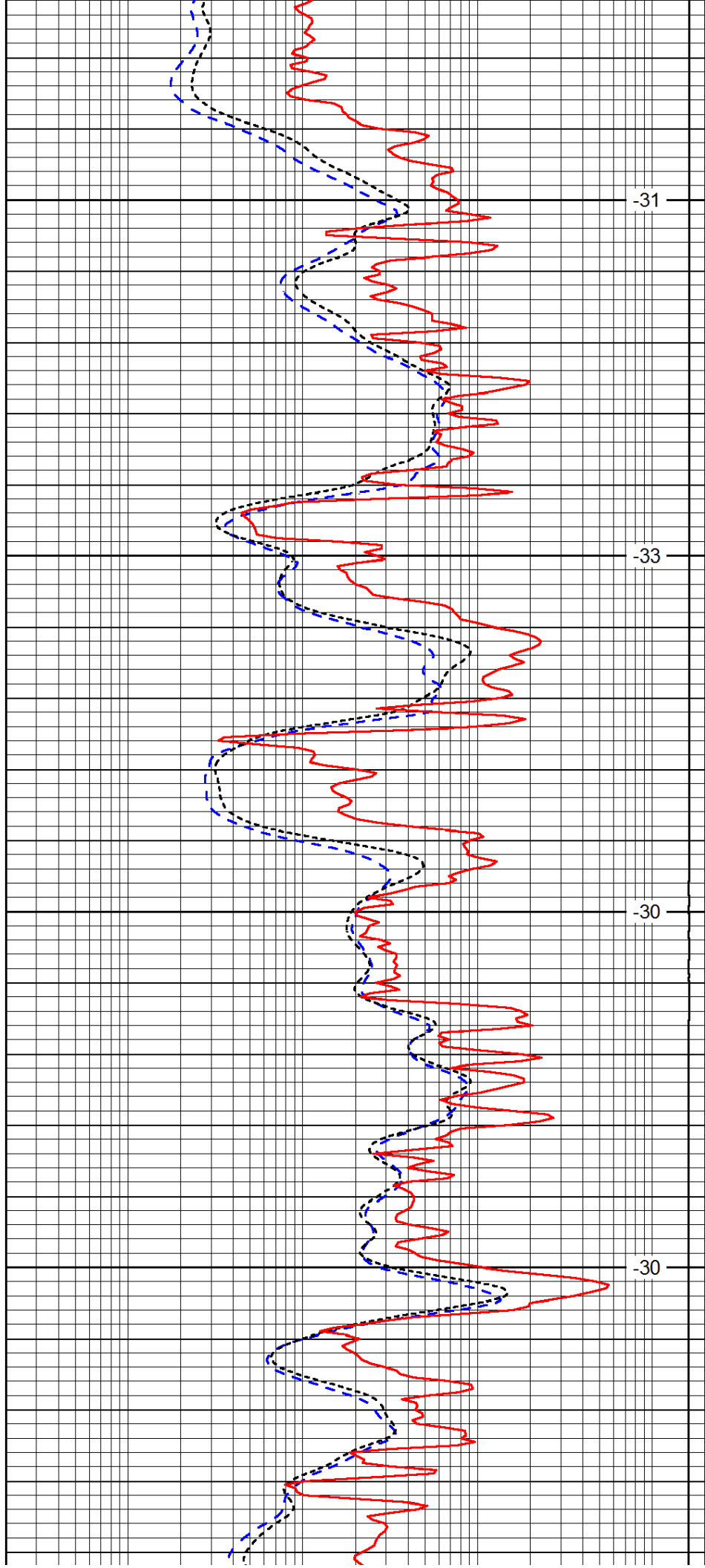


4100

4150

4200

4250

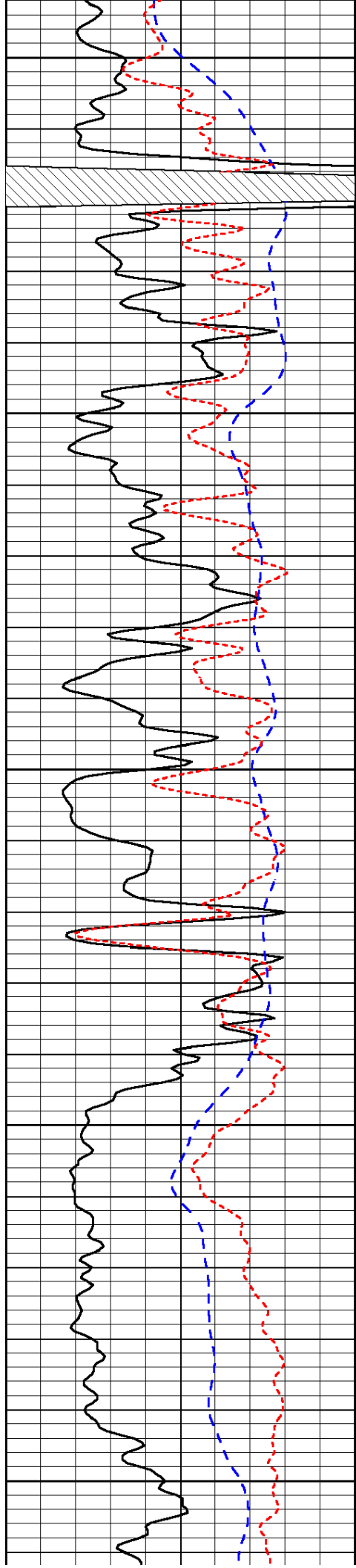


-31

-33

-30

-30



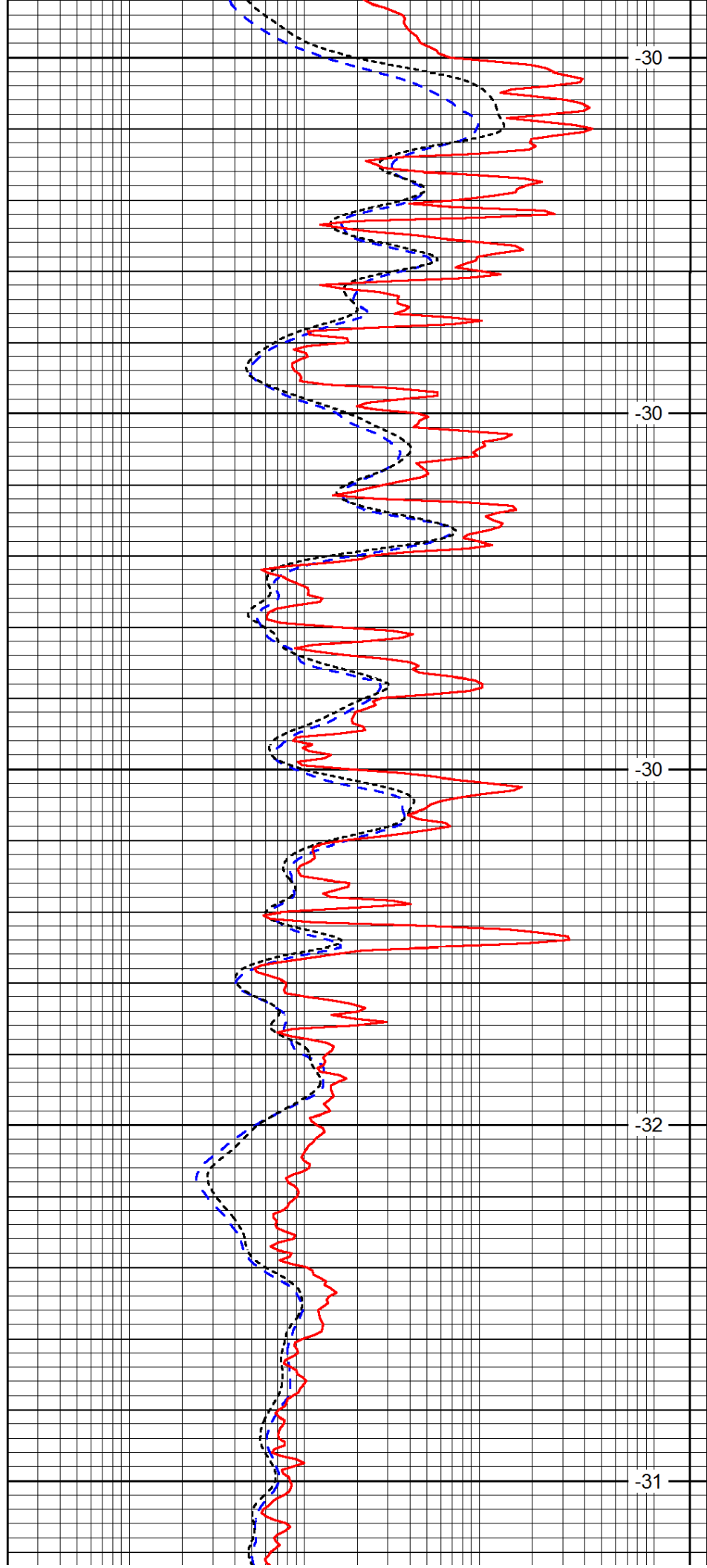
4300

4350

4400

4450

4500



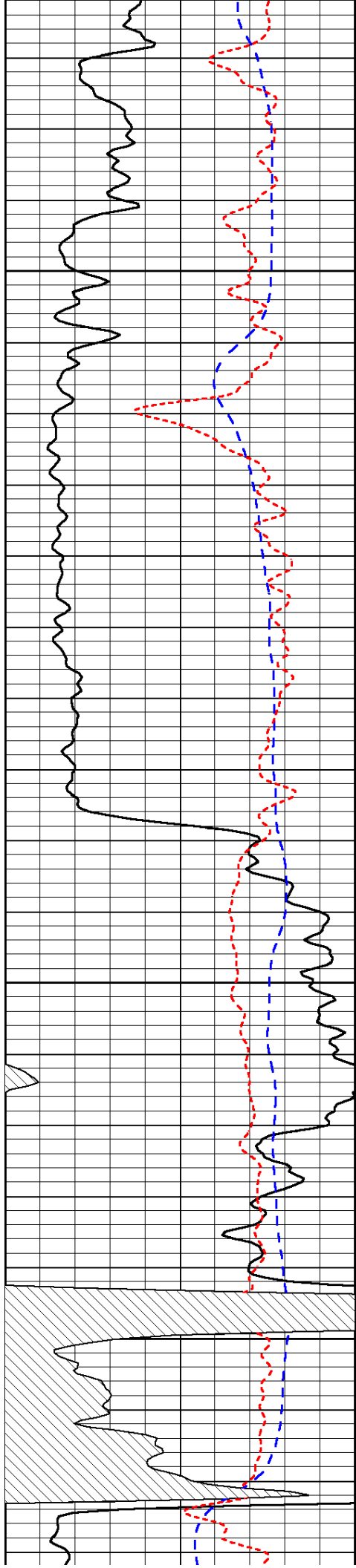
-30

-30

-30

-32

-31

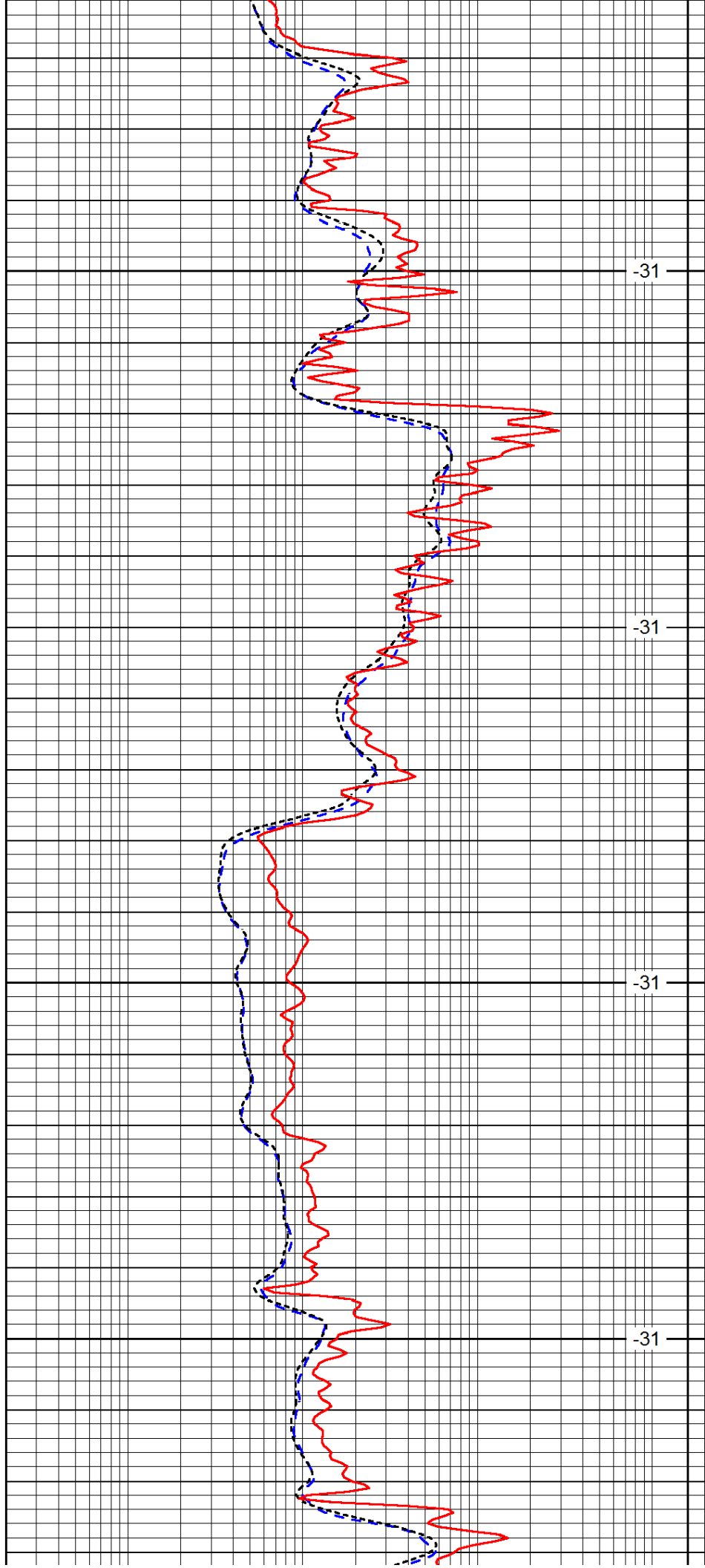


4550

4600

4650

4700

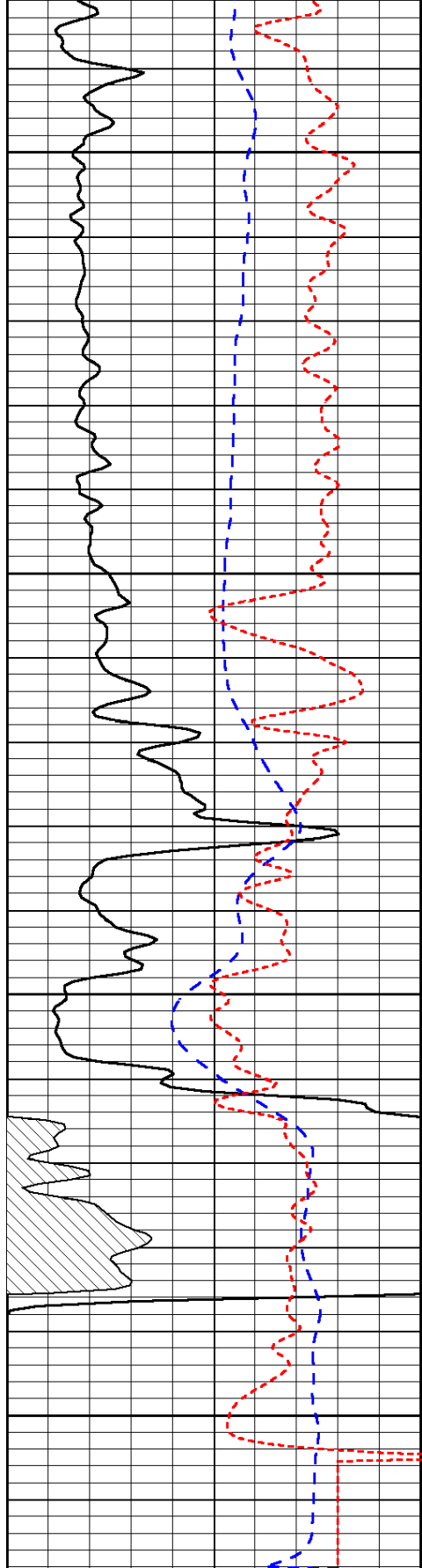


-31

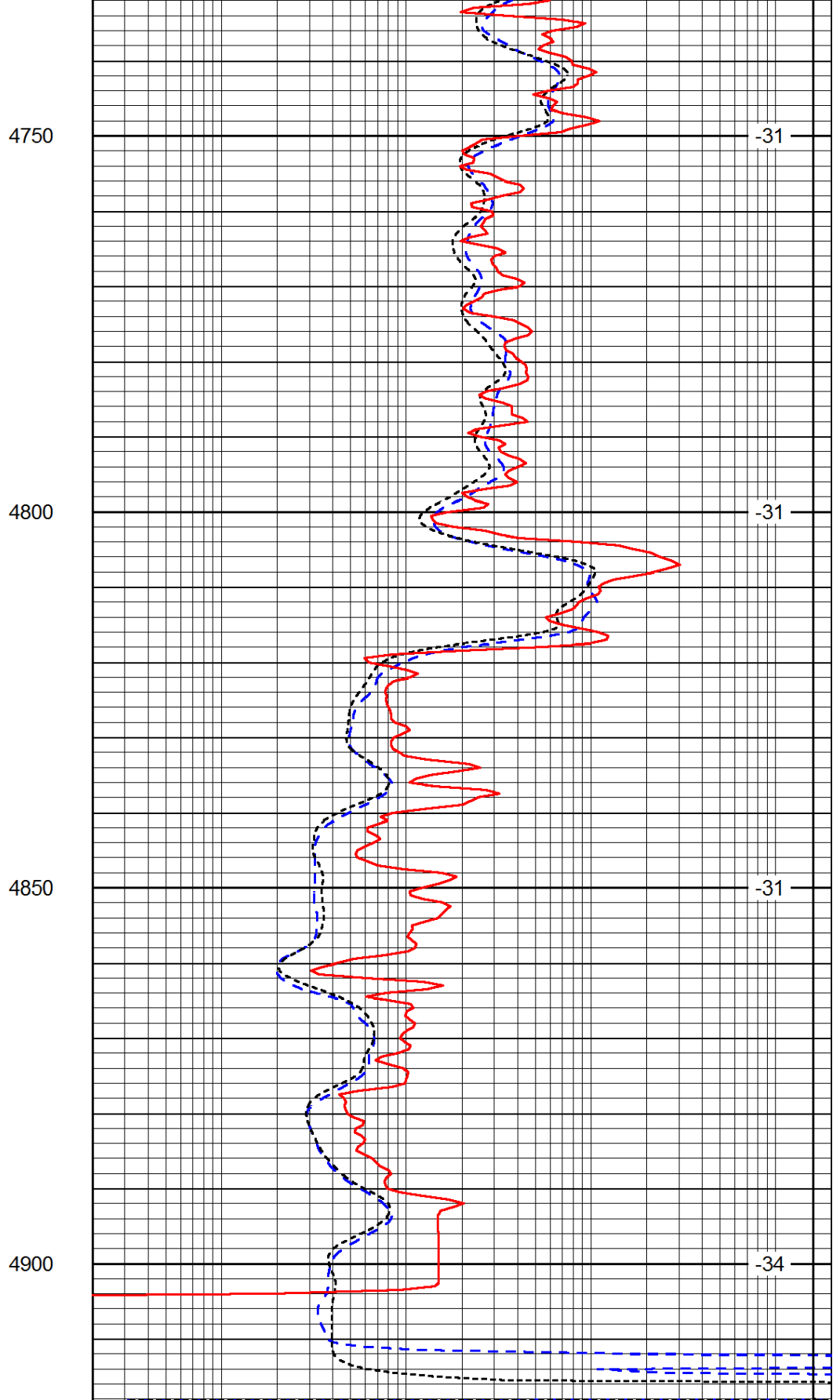
-31

-31

-31



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