



Pioneer Energy Services

## Dual Induction Log

API No.

15-007-23932-00-00

Company N-10 Exploration, LLC

Well Medicine River Ranch "D" #7

Field Landis

County Barber State

Kansas

Location 330' FSL / 2120' FEL

Sec: 10 Twp: 34S Rge: 11W

Permanent Datum Ground Level Elevation 1356

Log Measured From Kelly Bushing 10 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing Elevation 1366  
D.F. 1366  
G.L. 1356

Date 5/10/2013

Run Number One

Depth Driller 4950

Depth Logger 4950

Bottom Logged Interval 4949

Top Log Interval 250

Casing Driller 8.625 @ 266

Casing Logger 264

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 5000

Density / Viscosity 9.3 60

pH / Fluid Loss 9.5 9.6

Source of Sample Flowline

Rm @ Meas. Temp 0.28 @ 68

Rmf @ Meas. Temp 0.21 @ 68

Rmc @ Meas. Temp 0.38 @ 68

Source of Rmf / Rmc Charts

Rm @ BHT 0.15 @ 126

Operating Rig Time 4 Hours

Max Rec. Temp. F 126

Equipment Number 17

Location Hays

Recorded By R. Barnhart

Witnessed By Tim Pierce

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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

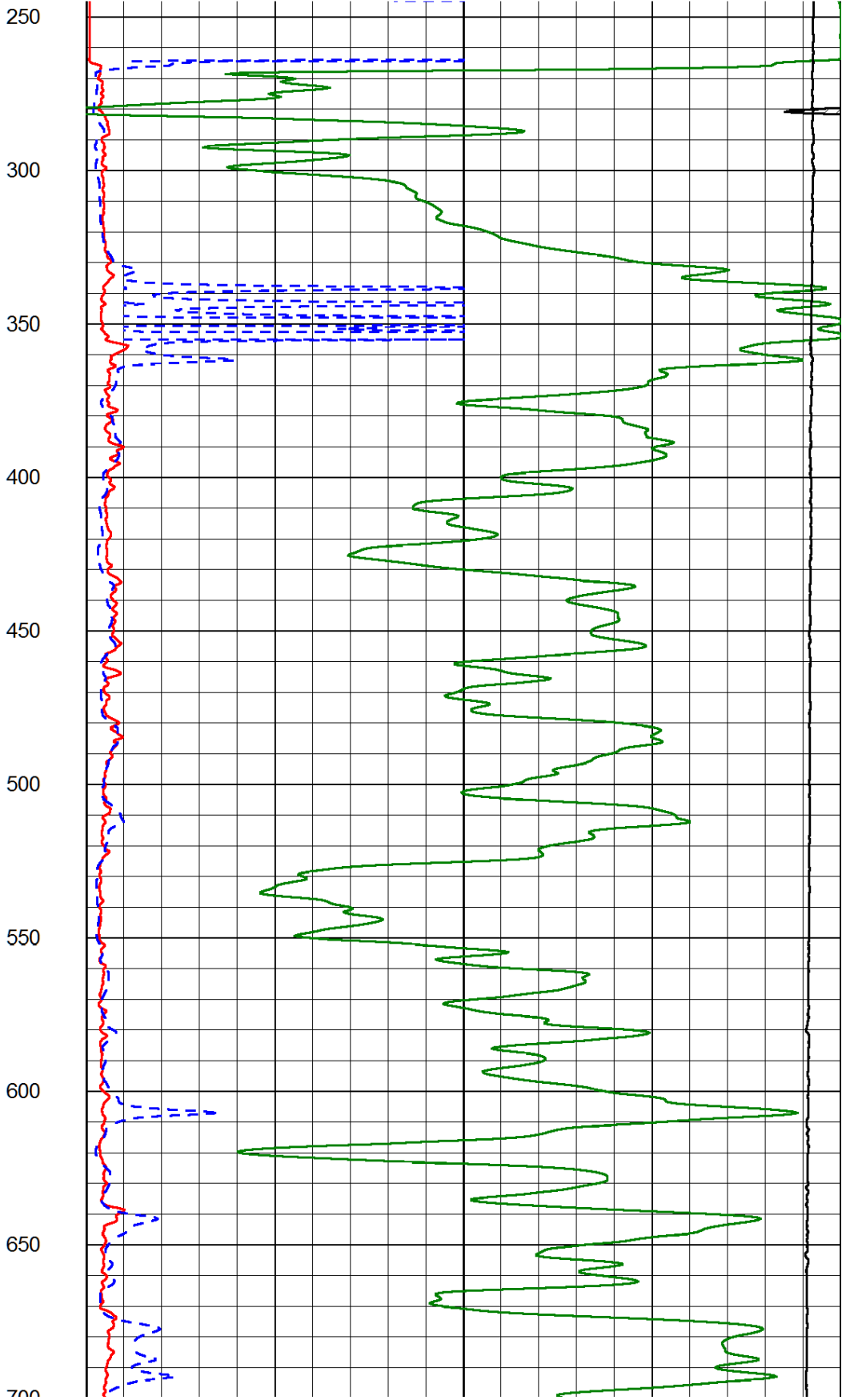
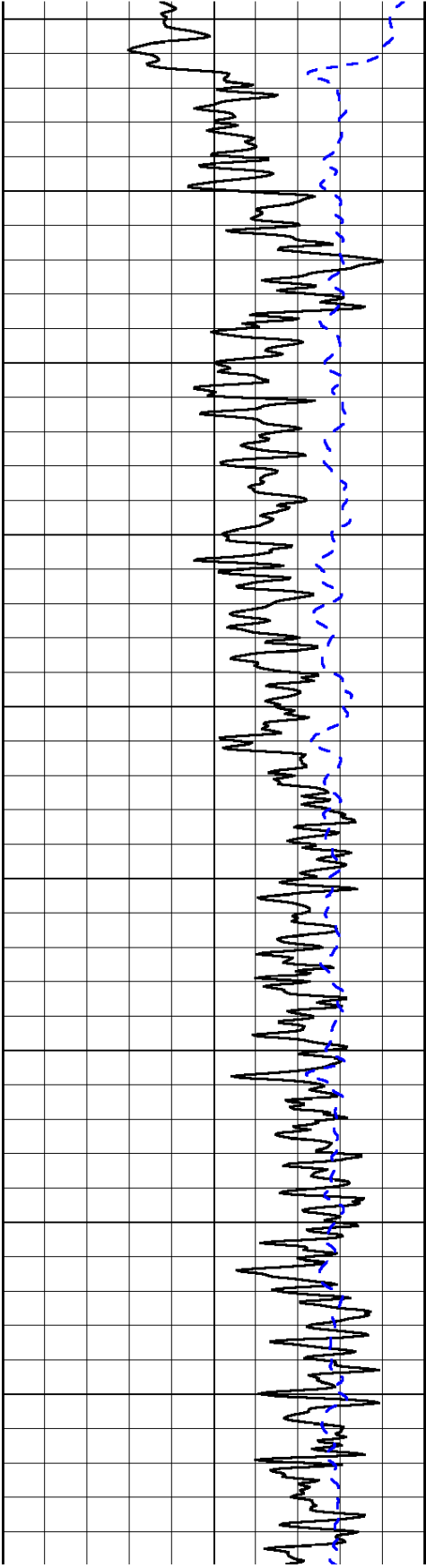
Thank you for using Log-Tech, Inc.  
(785) 625-3858

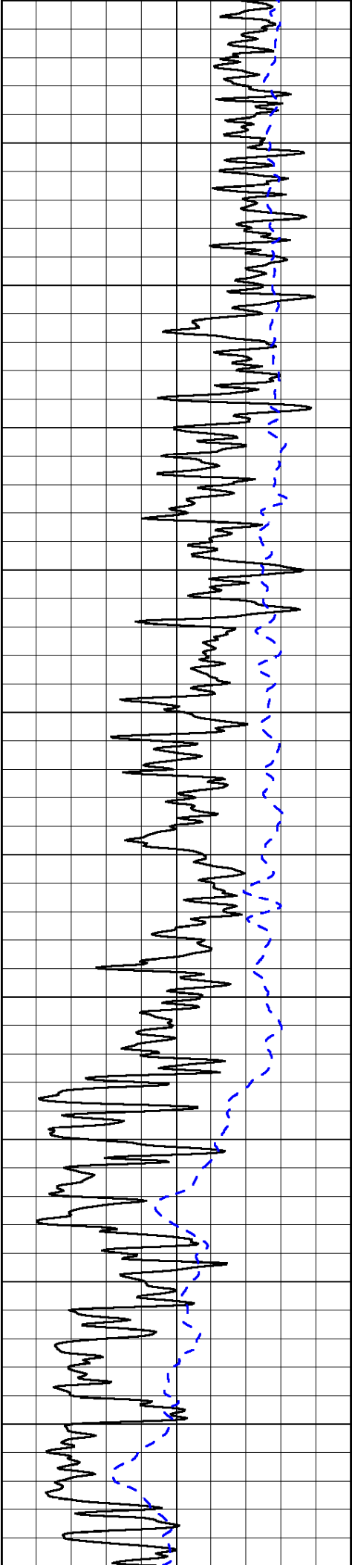
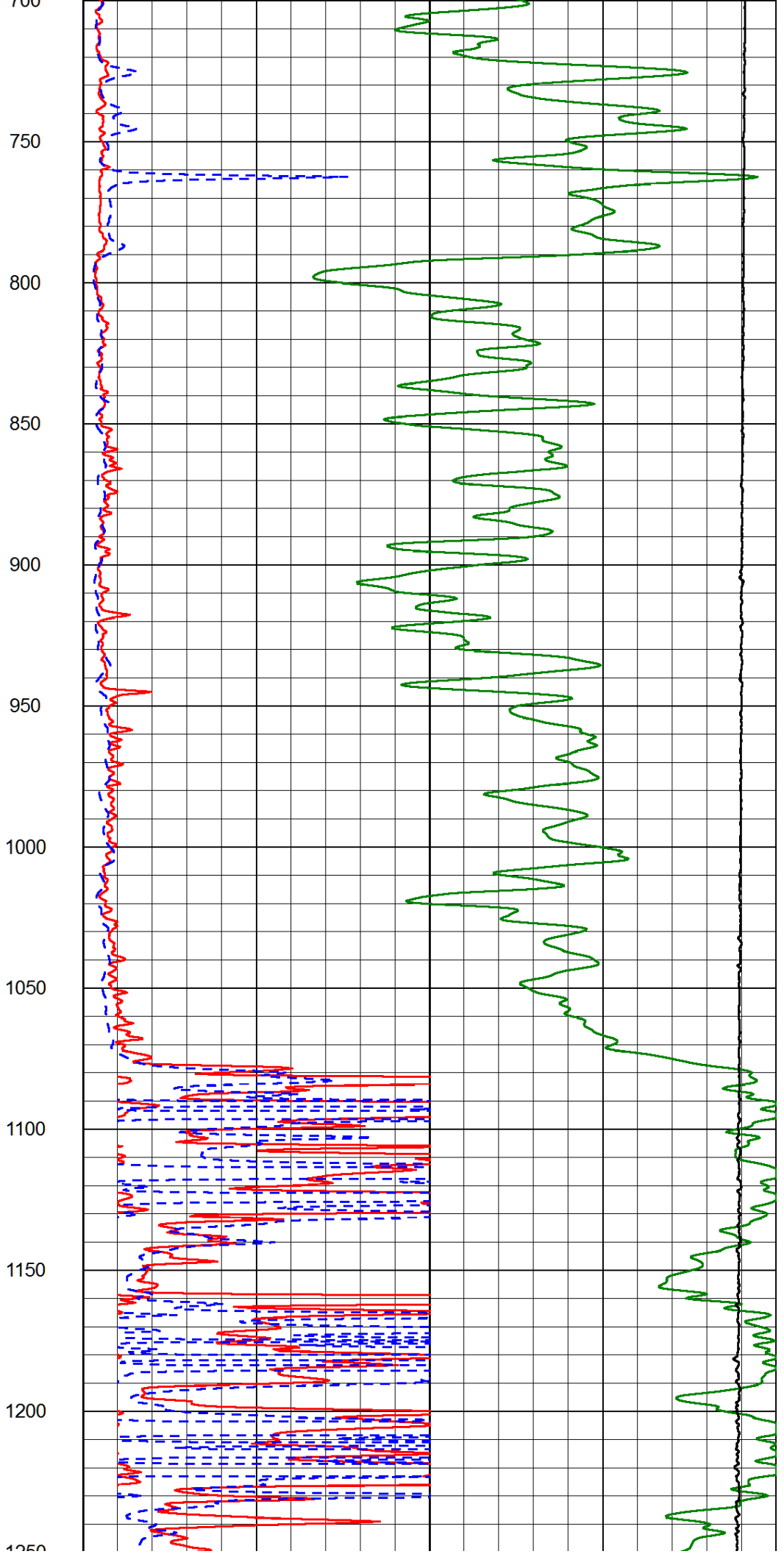
Medicine Lodge, KS:  
S to Gerlane Rd., E to Bethel, S to Scott Canyon Rd., 1 1/2W, N into

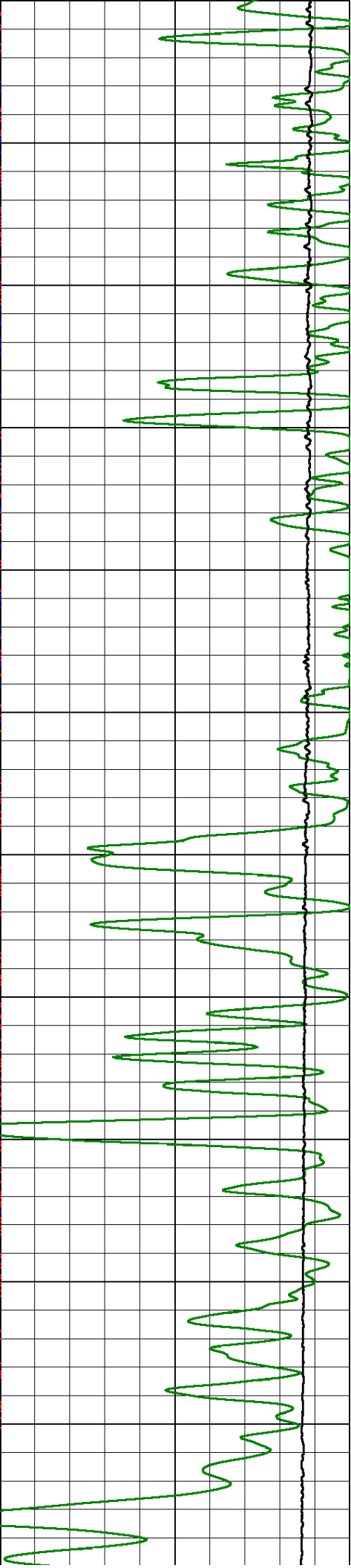
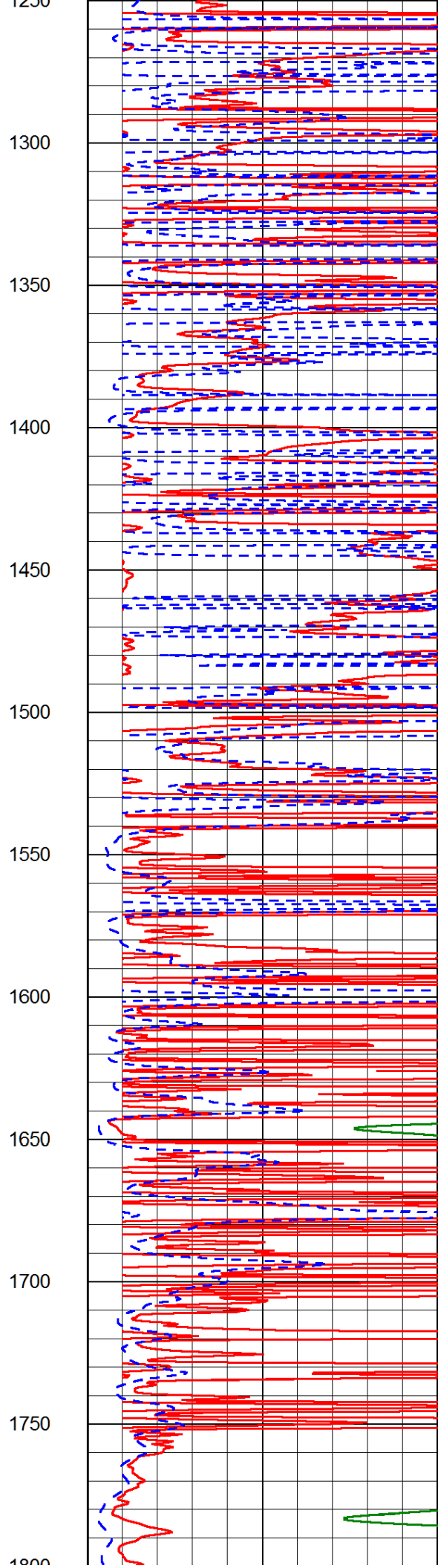
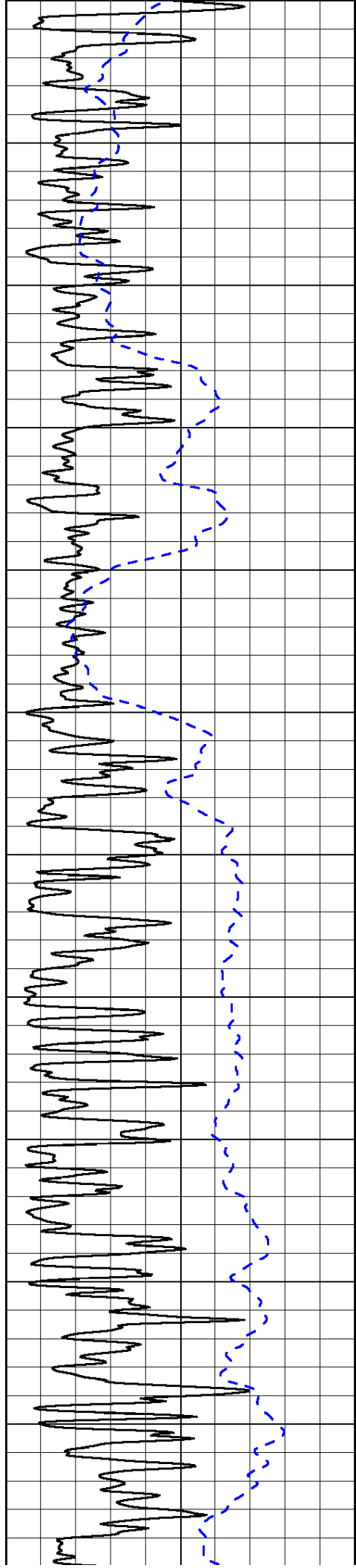
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Presentation Format: dil2in  
Dataset Creation: Fri May 10 22:42:53 2013  
Charted by: Depth in Feet scaled 1:600

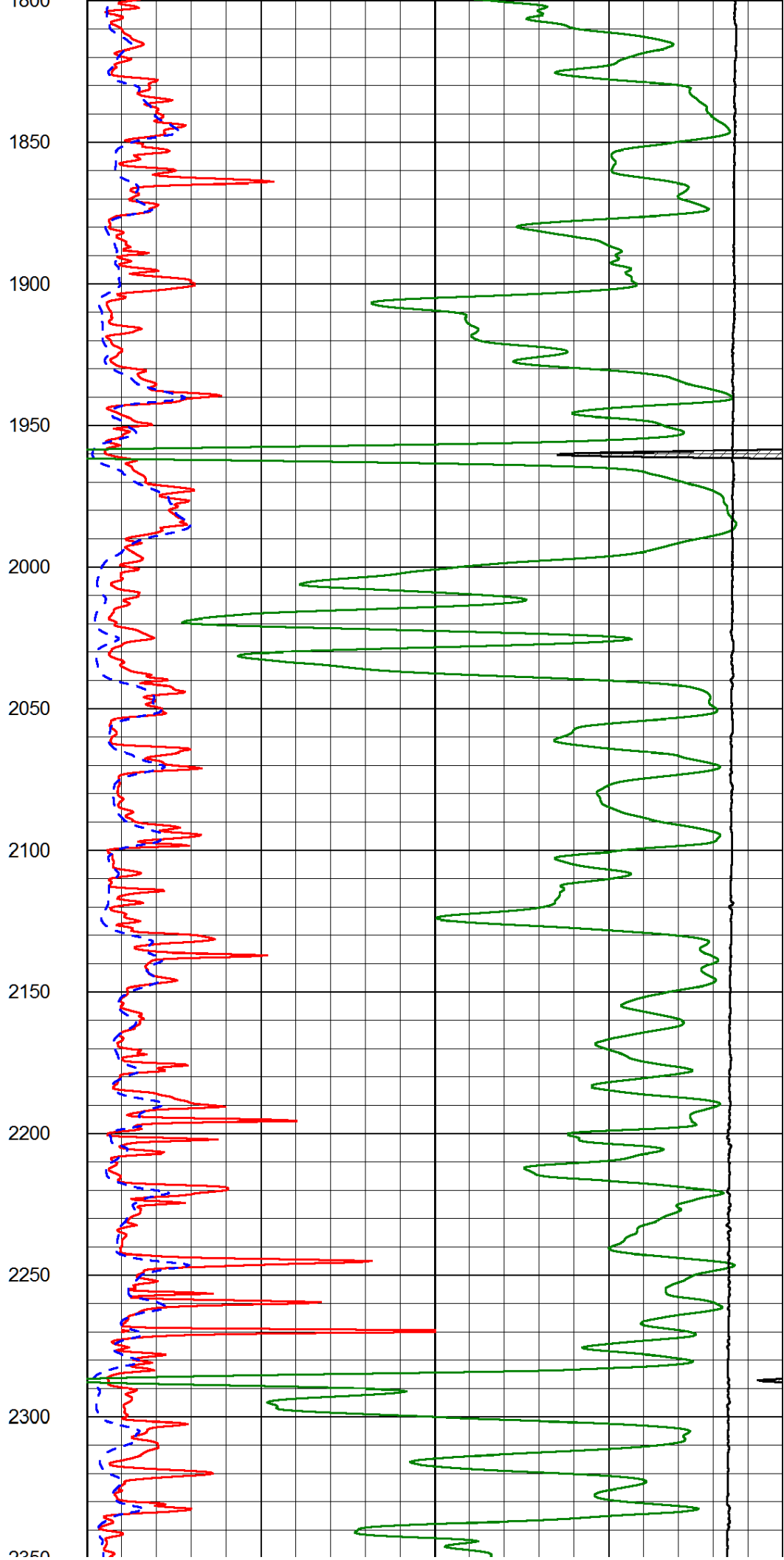
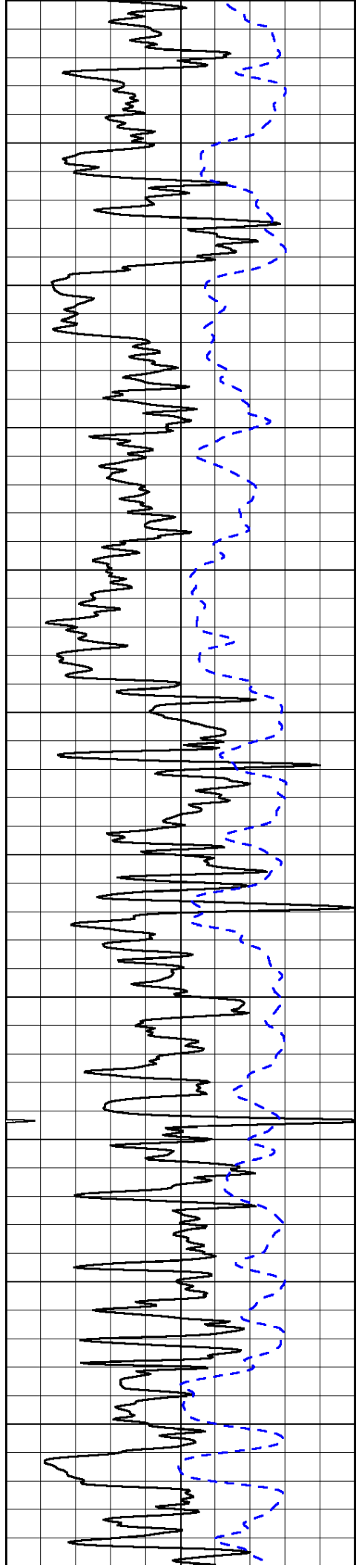
|                                            |                  |     |
|--------------------------------------------|------------------|-----|
| 0                                          | Gamma Ray (GAPI) | 150 |
| -200                                       | SP (mV)          | 0   |
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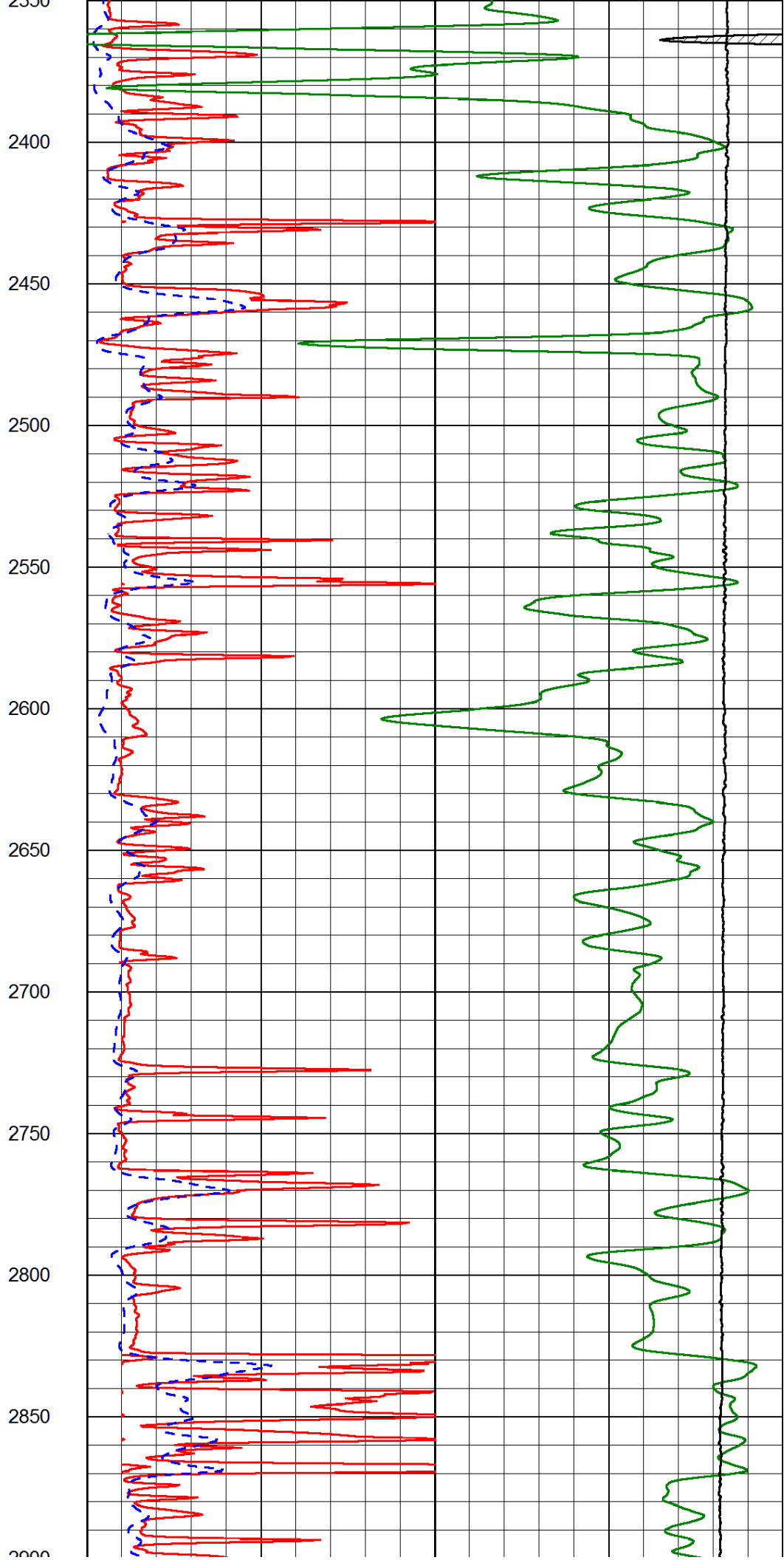
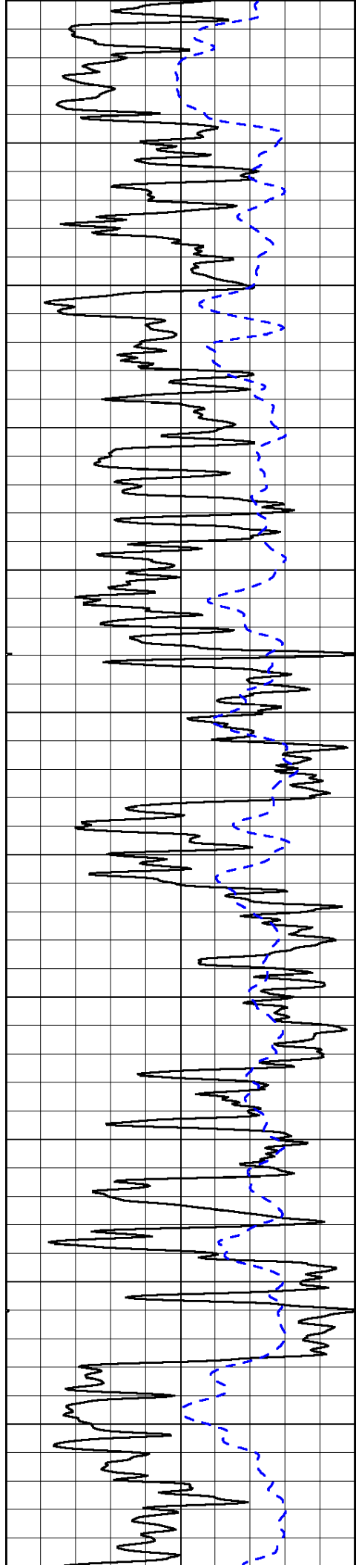
|                                            |                             |     |
|--------------------------------------------|-----------------------------|-----|
| 0                                          | Shallow Resistivity (Ohm-m) | 50  |
| 0                                          | Deep Resistivity (Ohm-m)    | 50  |
| 1000                                       | Conductivity (Ohm-m)        | 0   |
| 15000                                      | Line Tension (lb)           | 0   |
| <hr/>                                      |                             |     |
| Shallow Resistivity                        |                             |     |
| 50                                         | (Ohm-m)                     | 500 |
| 50                                         | Deep Resistivity (Ohm-m)    | 500 |
| <hr style="border-top: 1px dashed blue;"/> |                             |     |

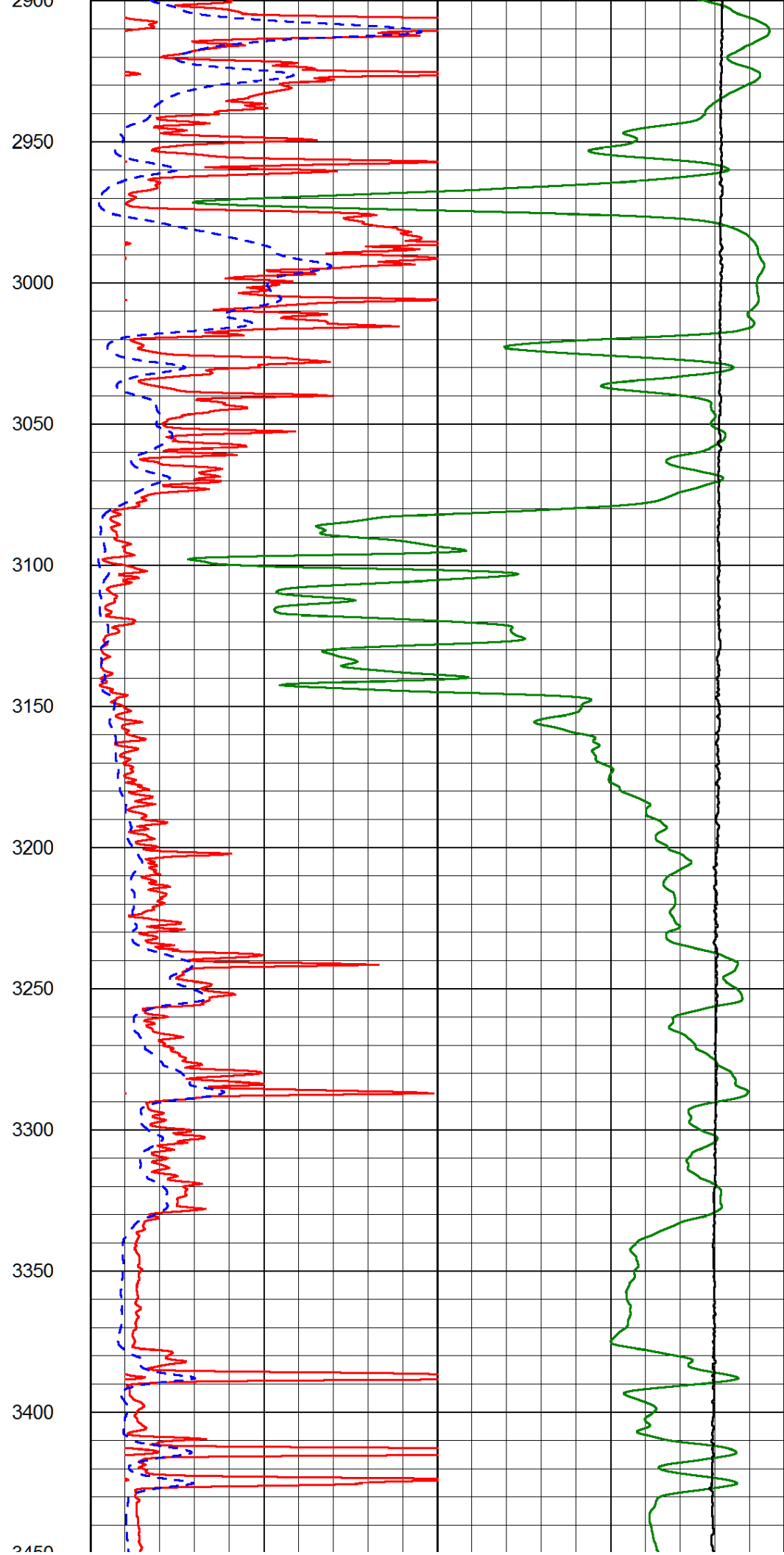
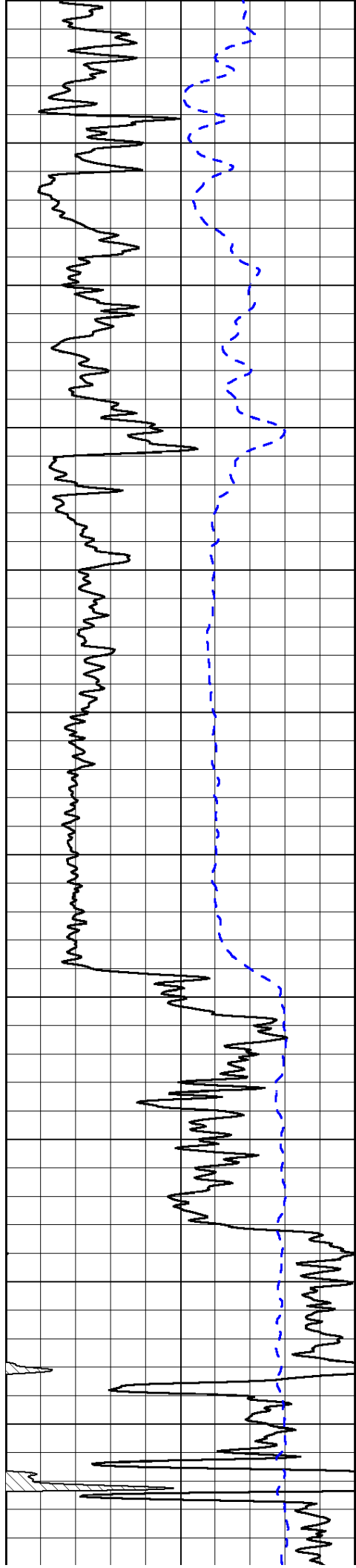


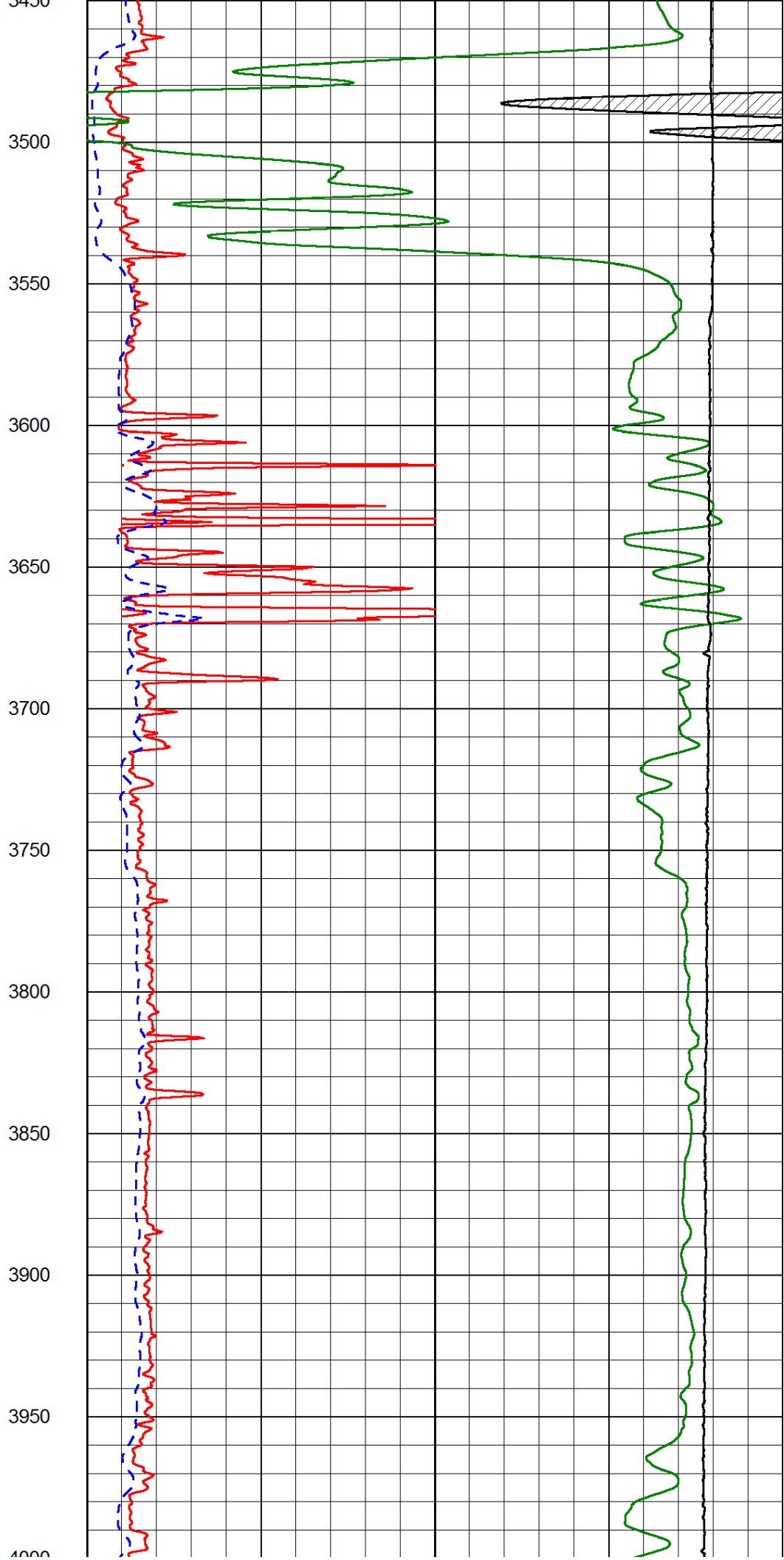
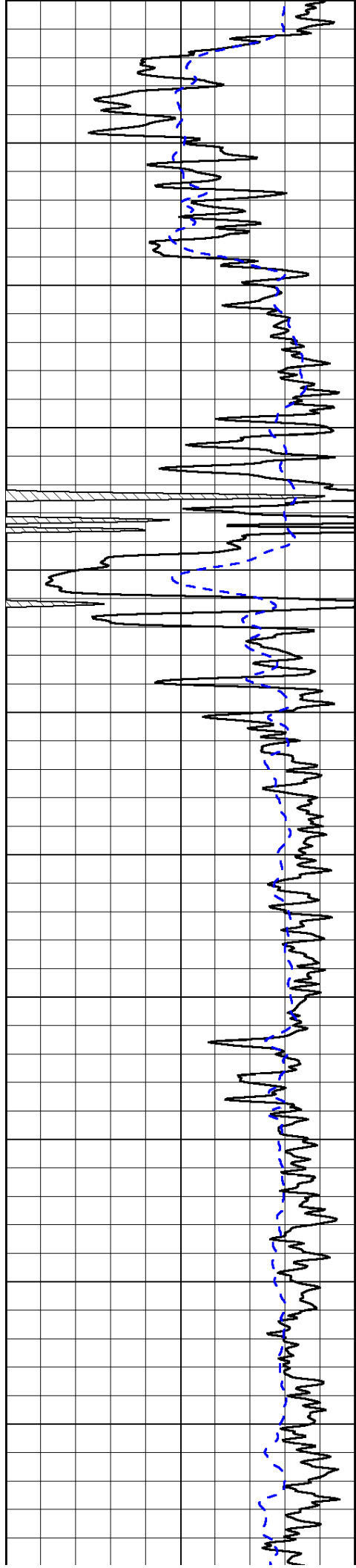




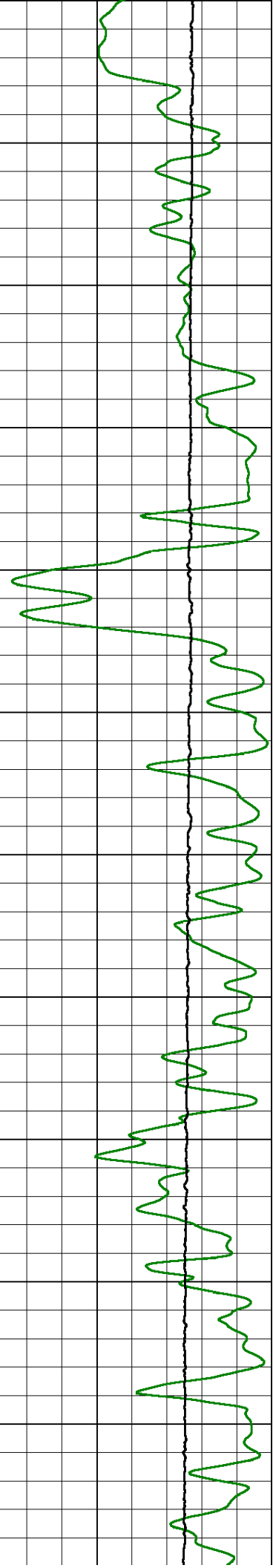
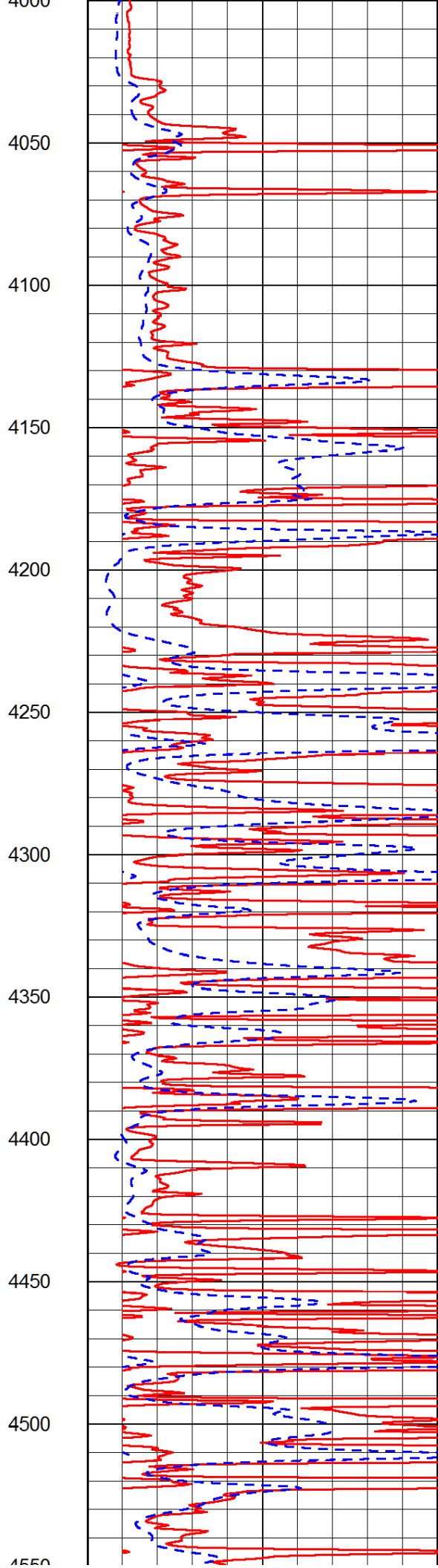
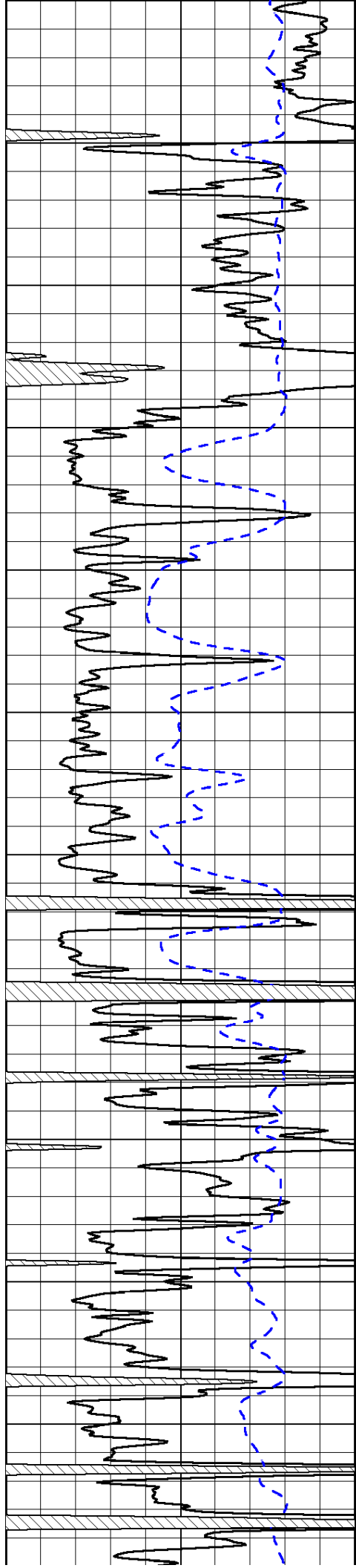


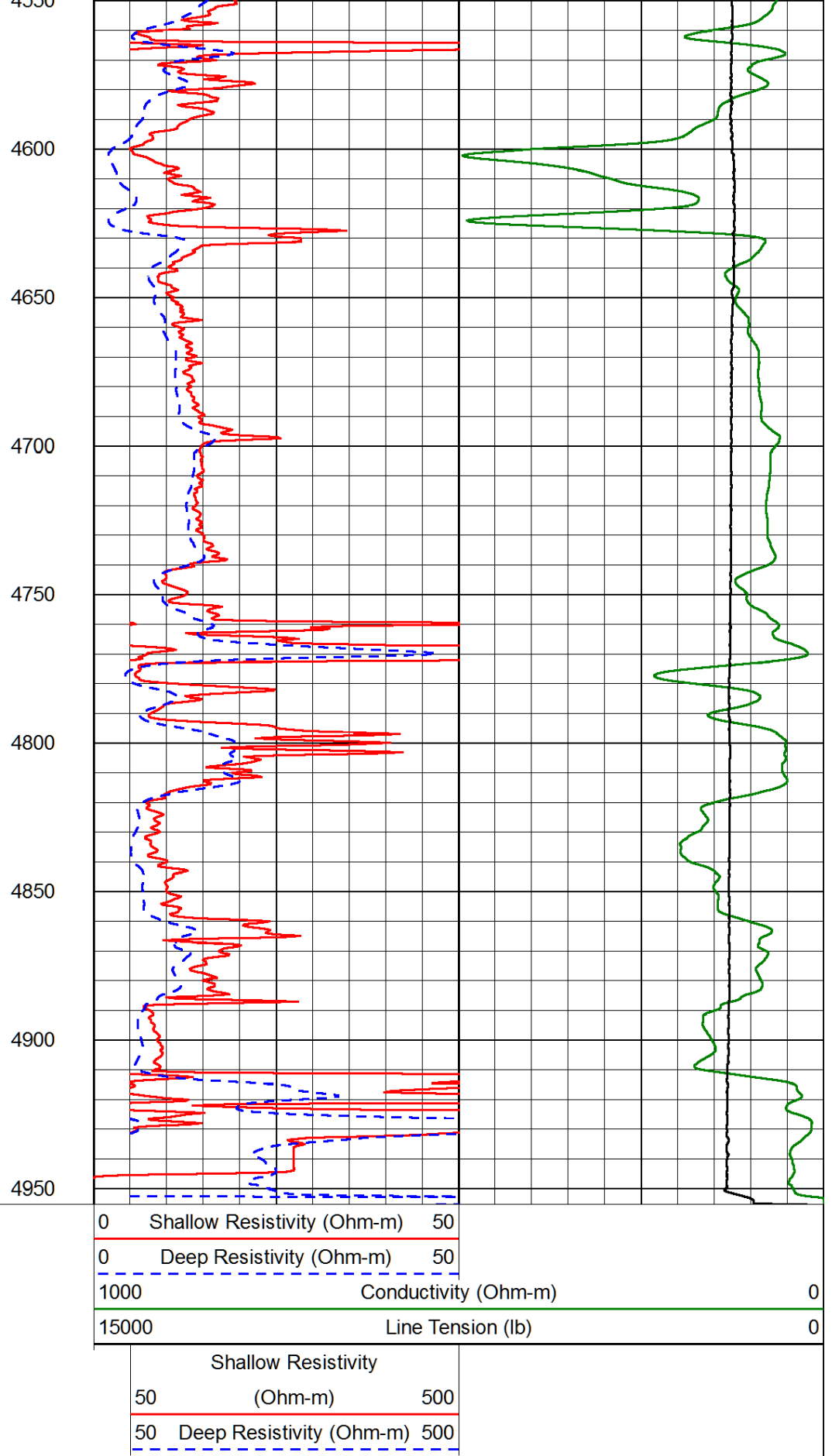
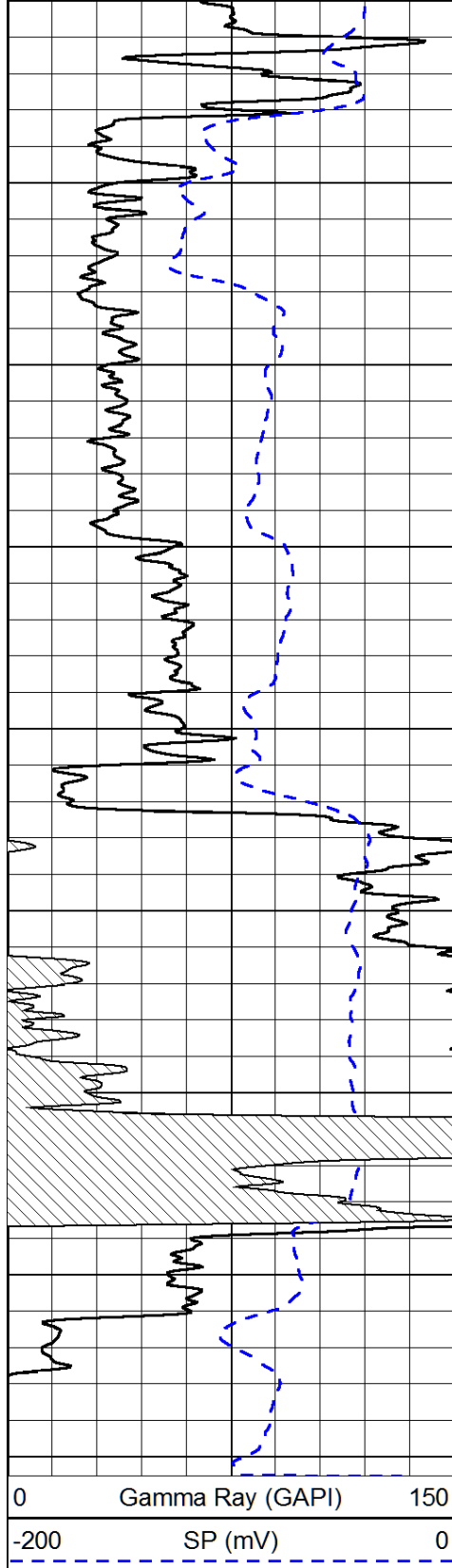










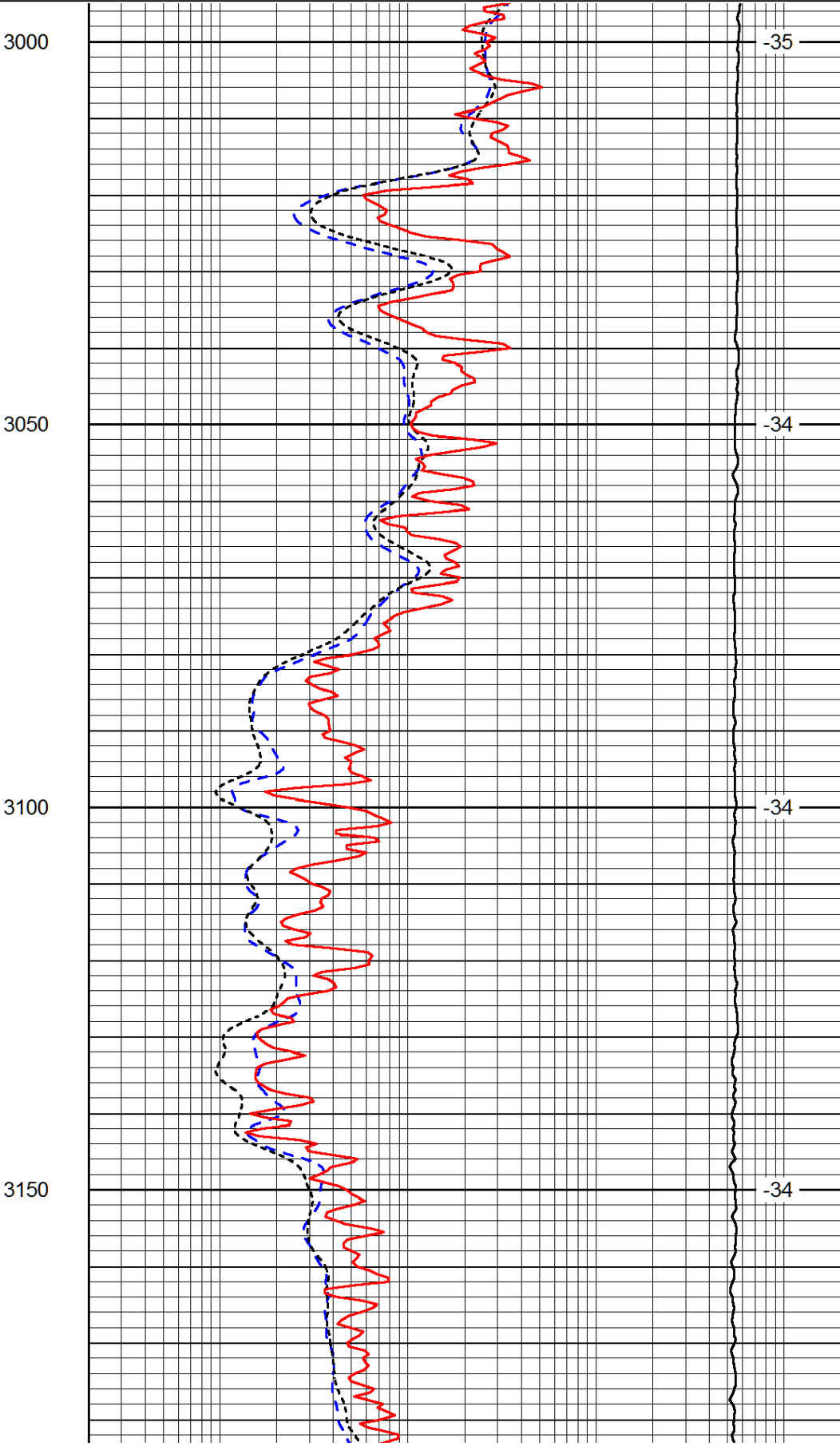
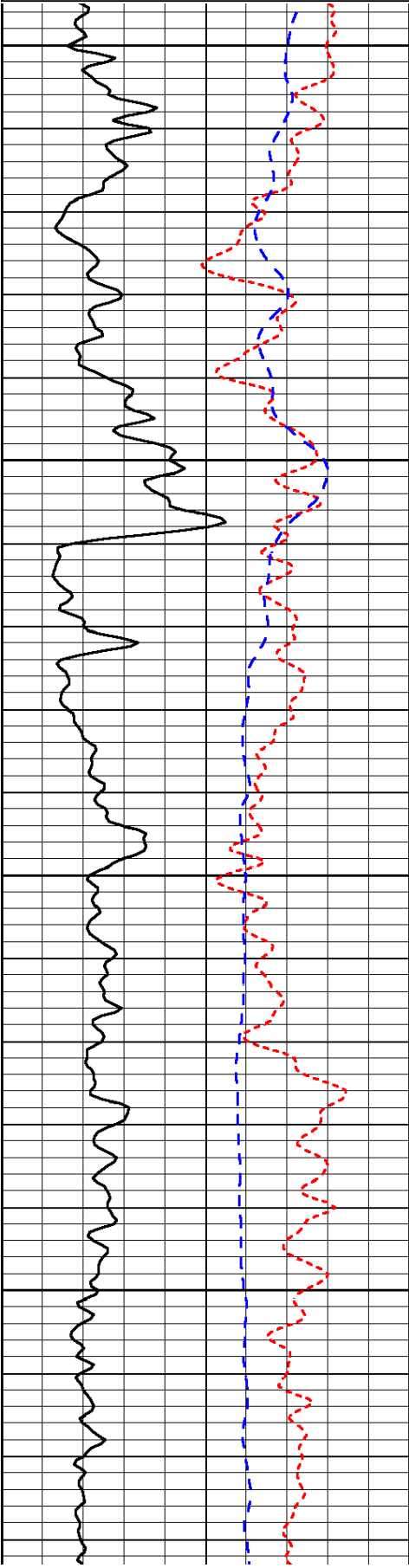


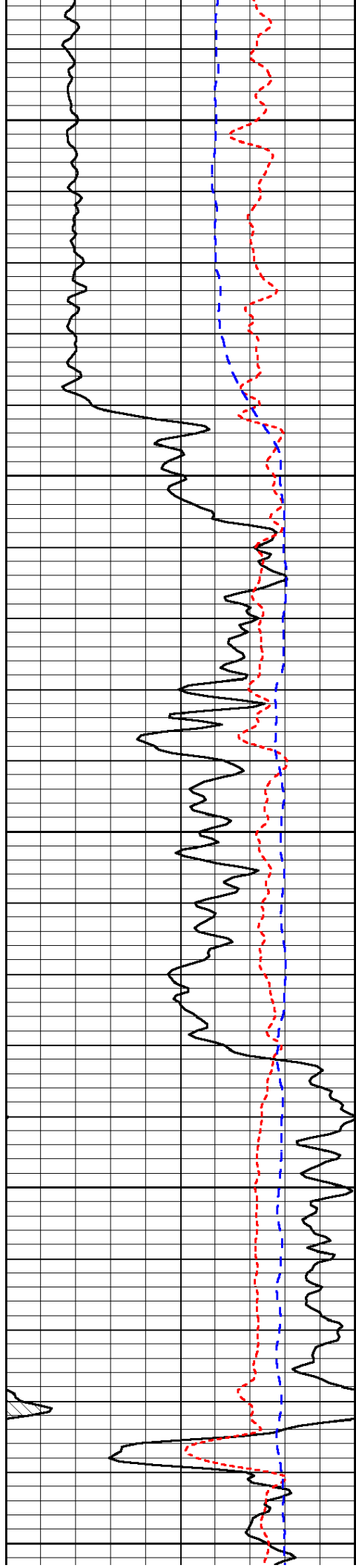
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 Dataset Pathname: dil/n10main  
 Presentation Format: dil  
 Dataset Creation: Fri May 10 22:42:53 2013  
 Charted by: Depth in Feet scaled 1:240

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

|       |                             |      |
|-------|-----------------------------|------|
| 0.2   | Deep Resistivity (Ohm-m)    | 2000 |
| 0.2   | Medium Resistivity (Ohm-m)  | 2000 |
| 0.2   | Shallow Resistivity (Ohm-m) | 2000 |
| 10000 | Line Tension (lb)           | 0    |

LSPD  
(ft/min)





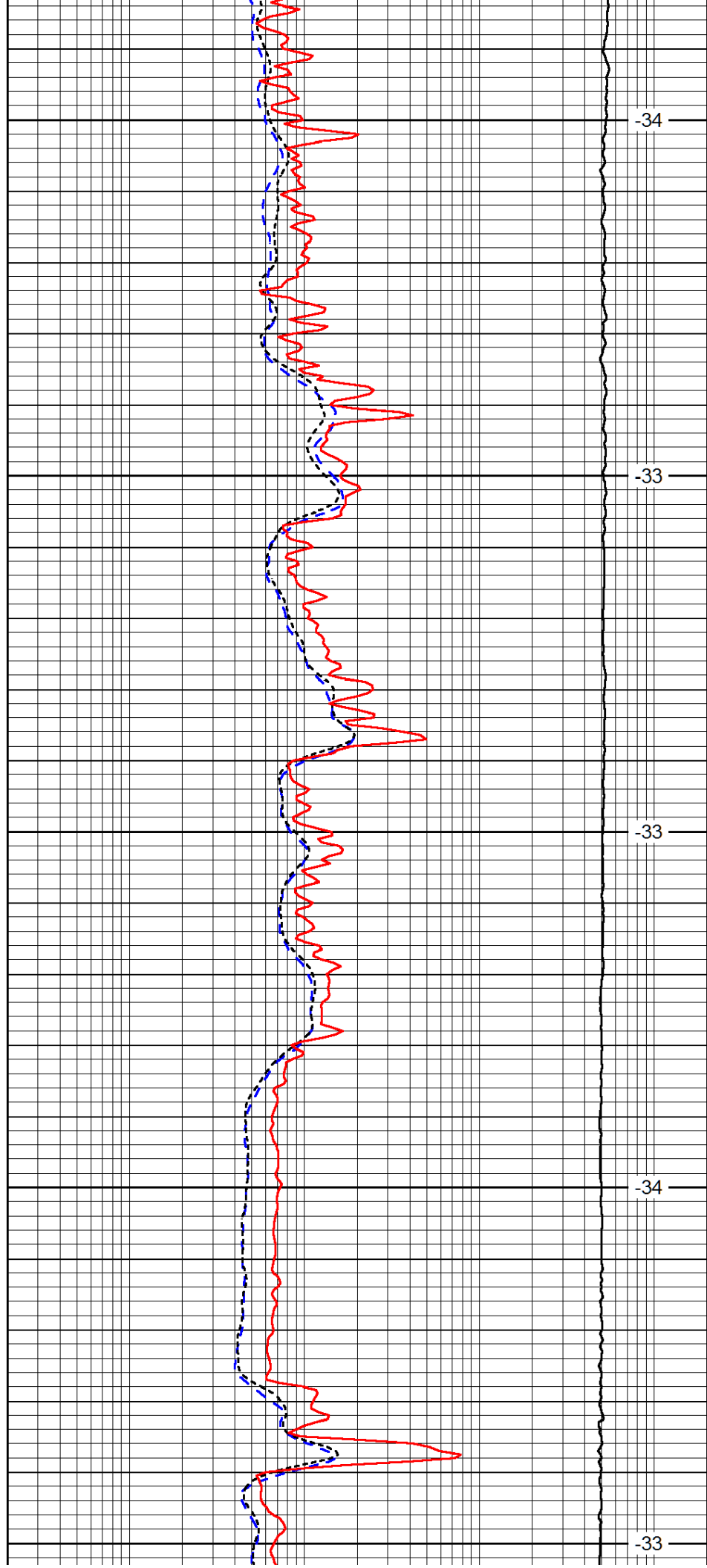
3200

3250

3300

3350

3400



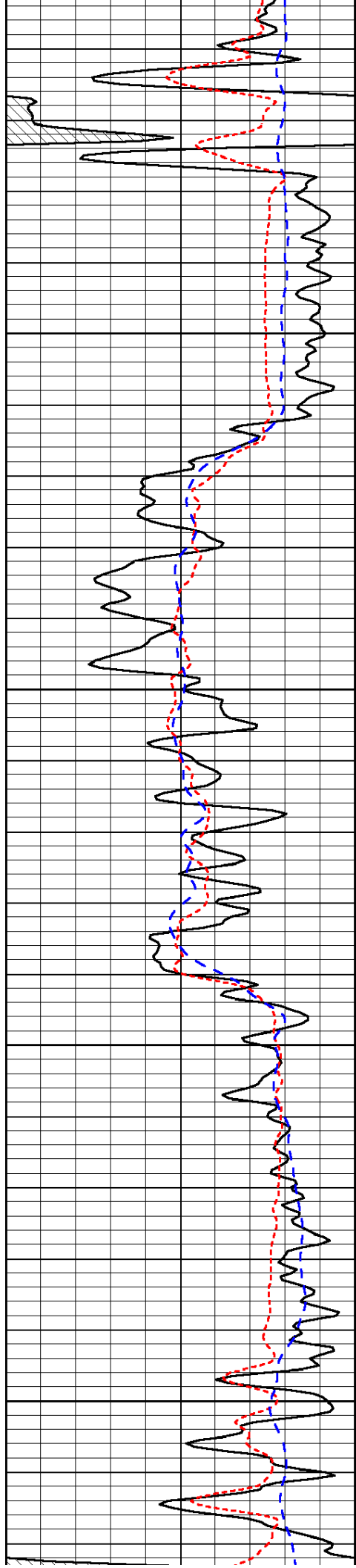
-34

-33

-33

-34

-33

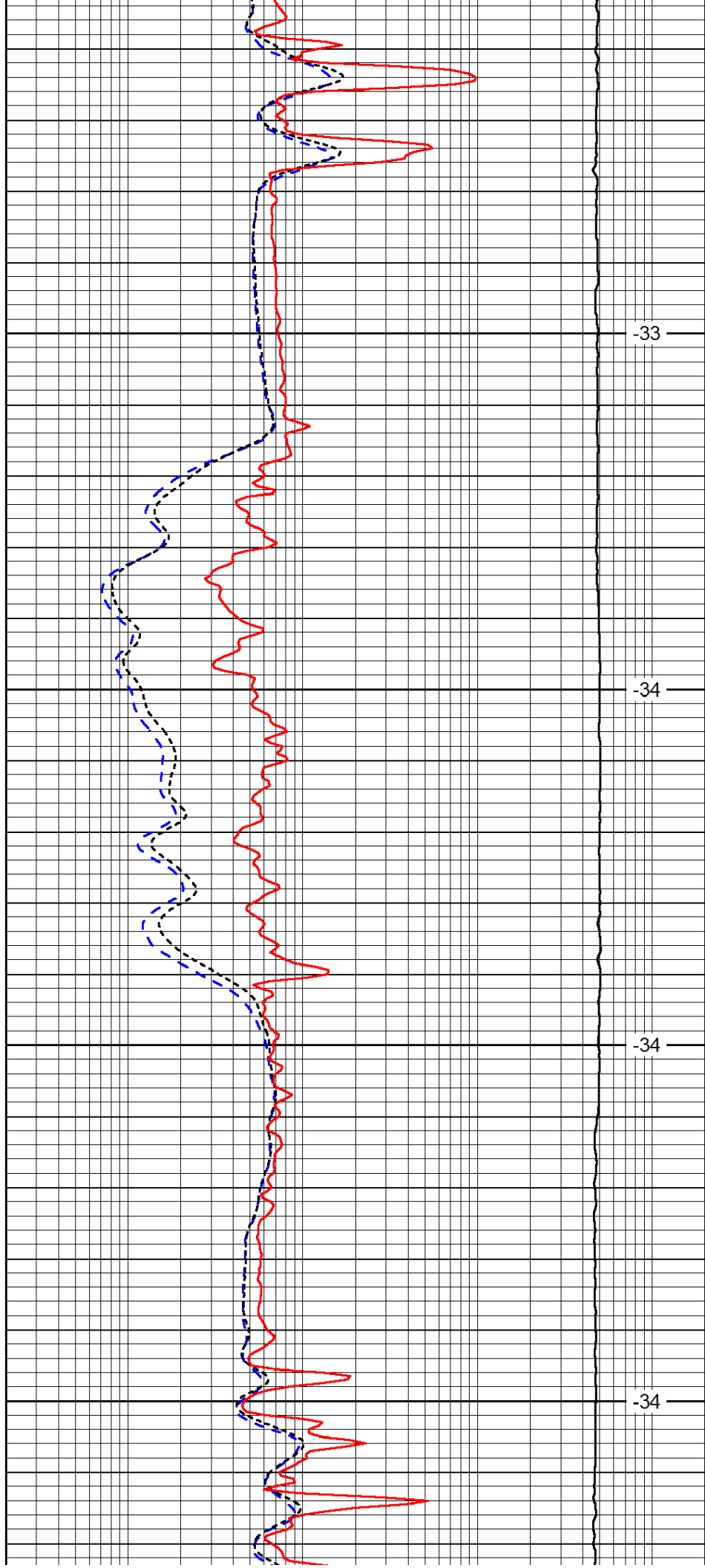


3450

3500

3550

3600

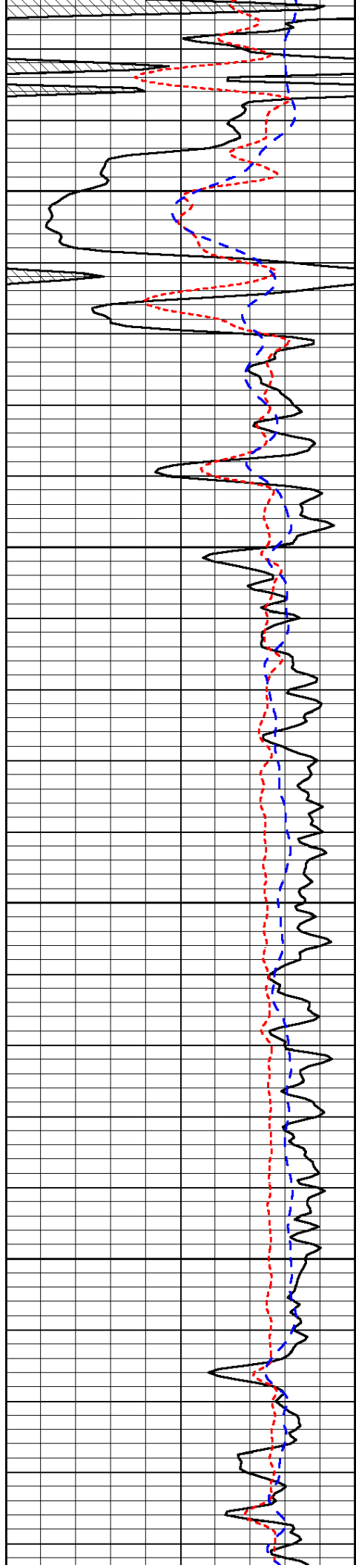


-33

-34

-34

-34

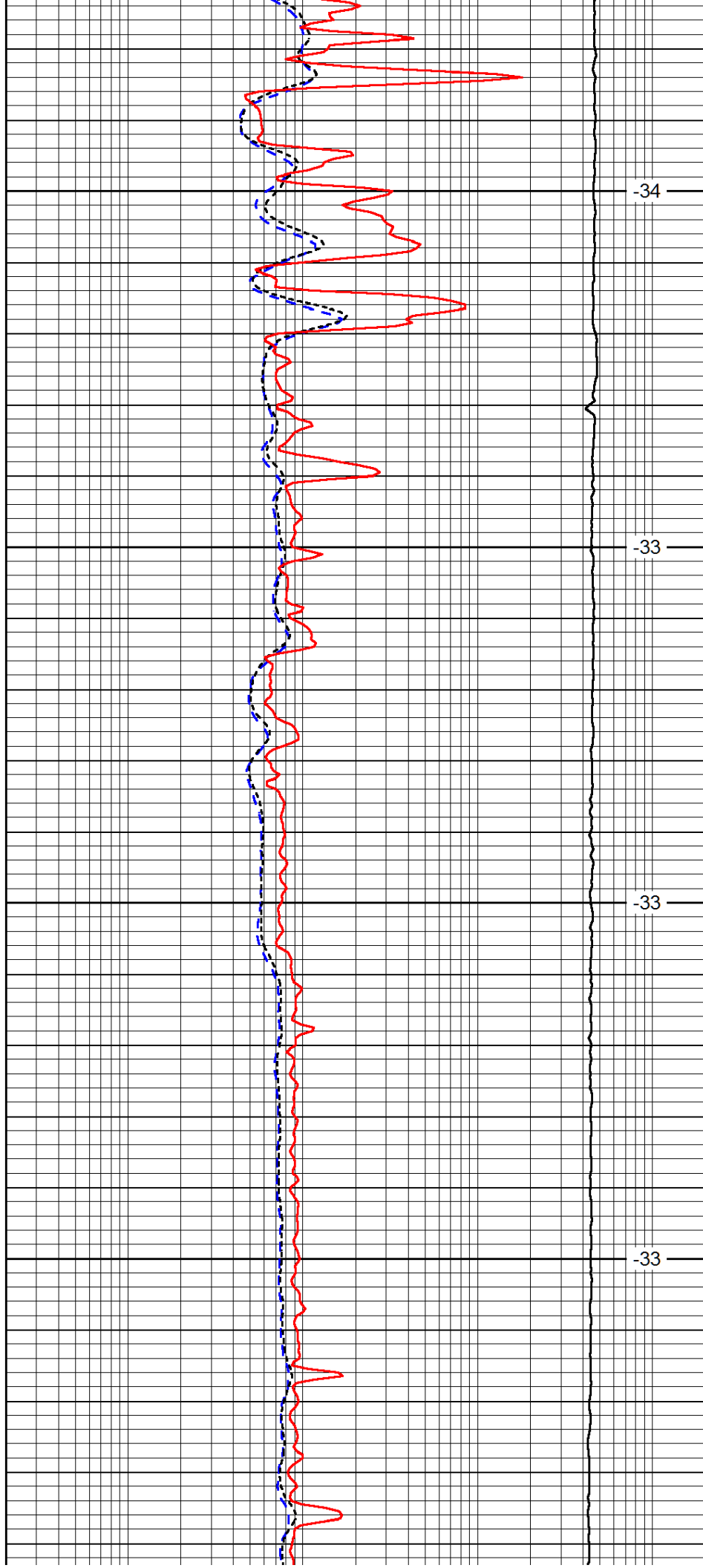


3650

3700

3750

3800

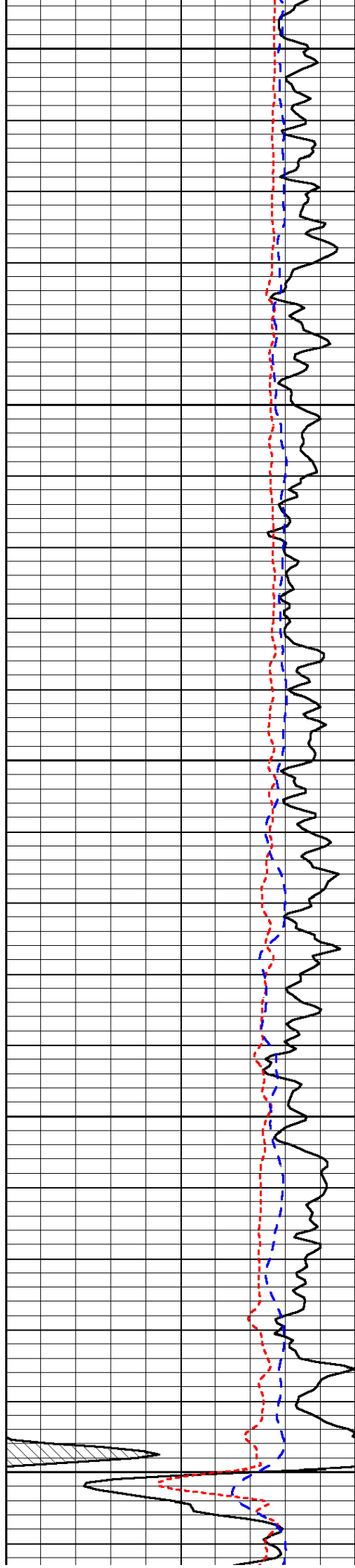


-34

-33

-33

-33



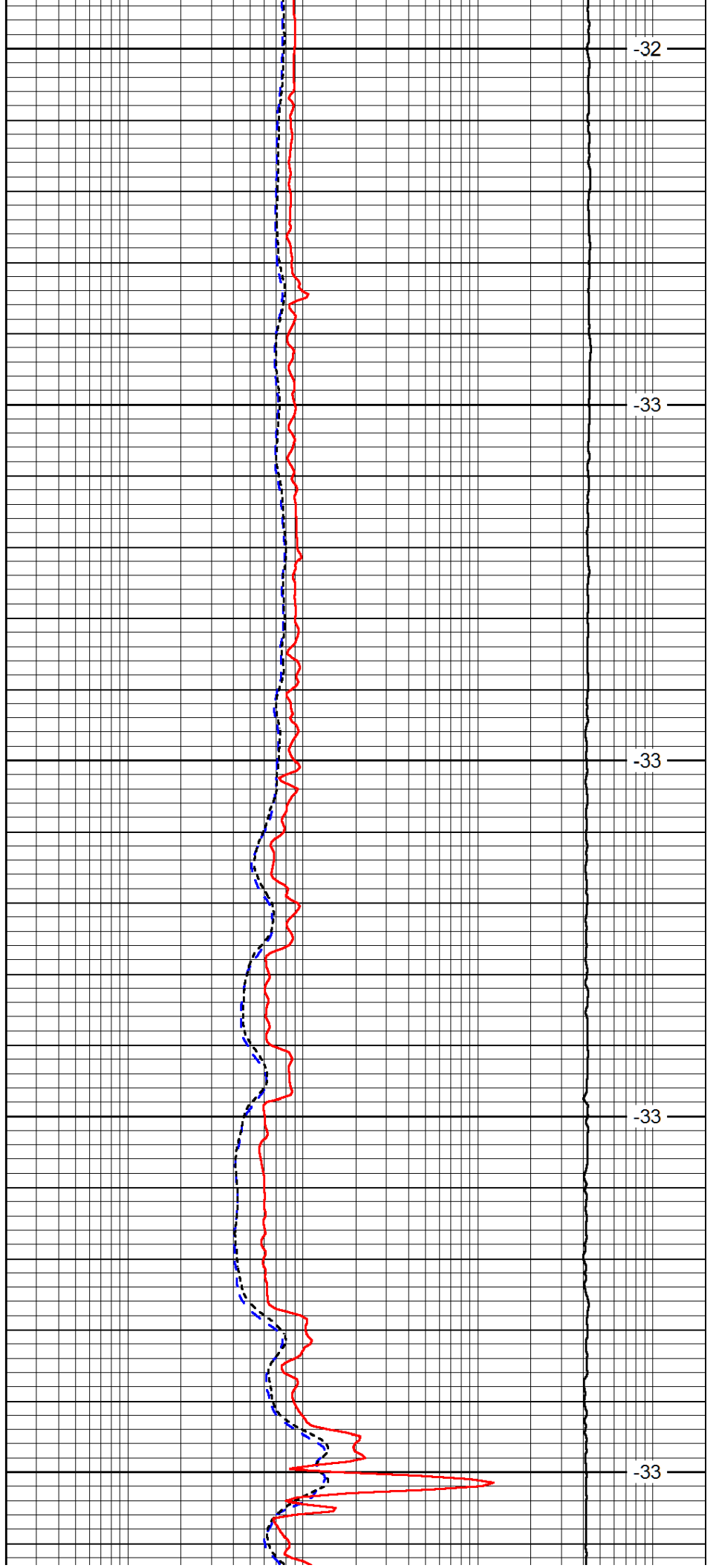
3850

3900

3950

4000

4050



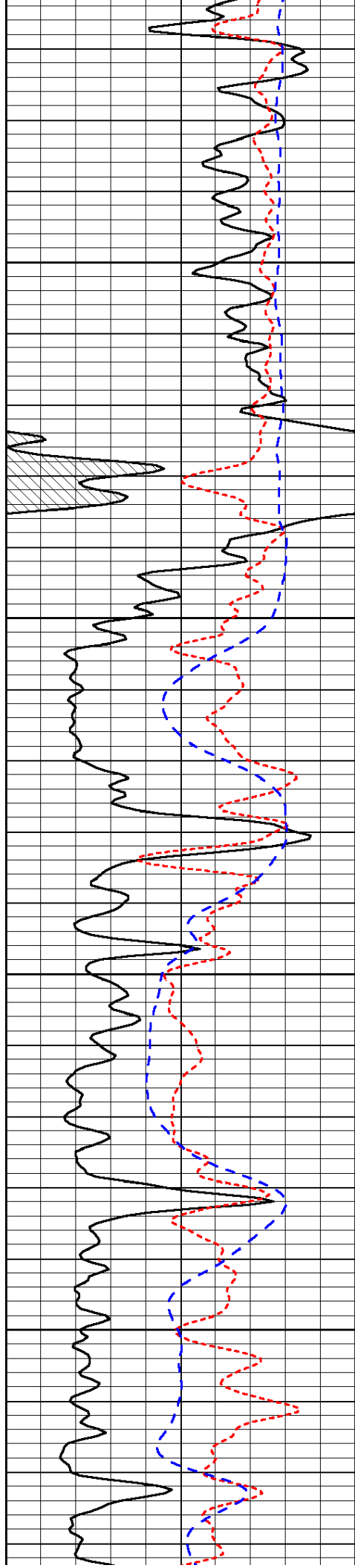
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3900

3950

4000

4050

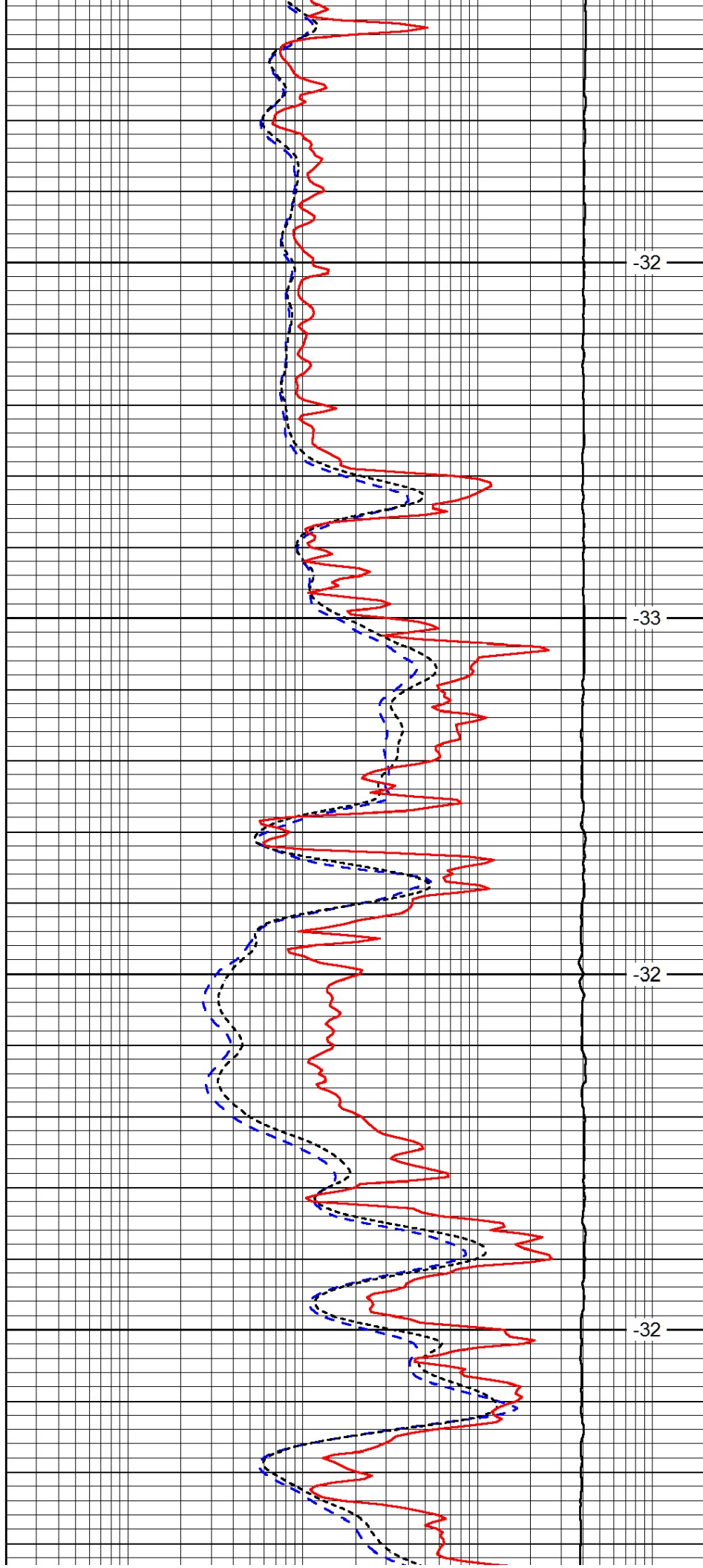


4100

4150

4200

4250



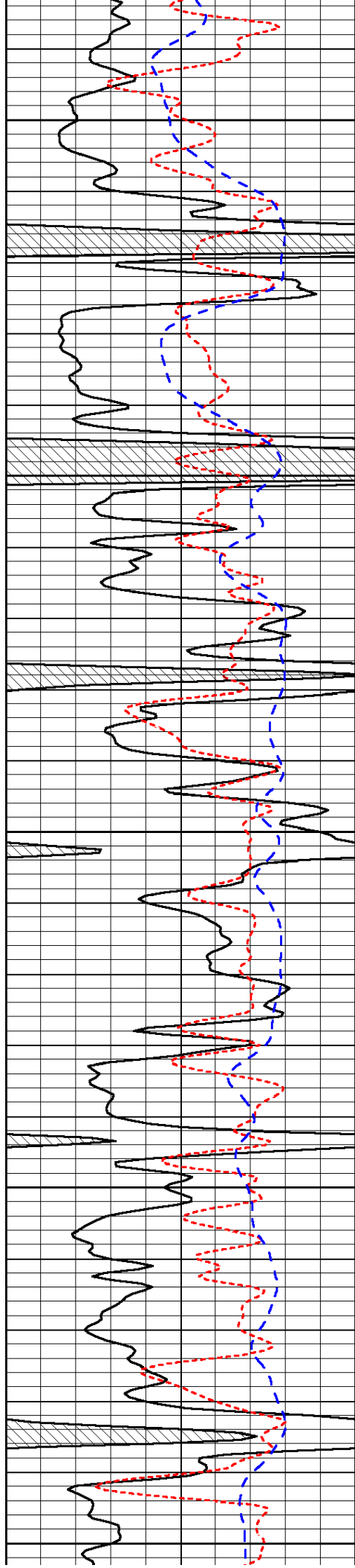
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-33

-32

-32





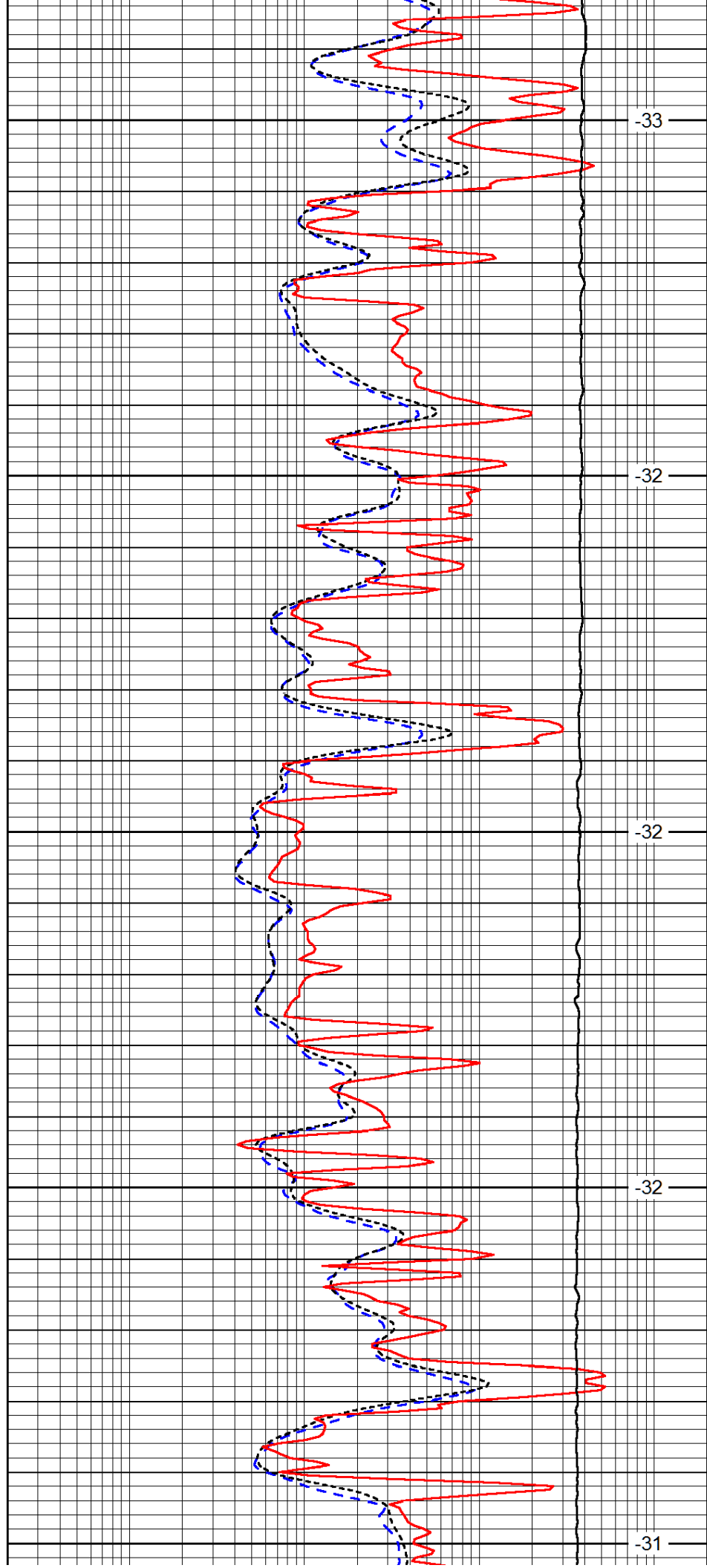
4300

4350

4400

4450

4500



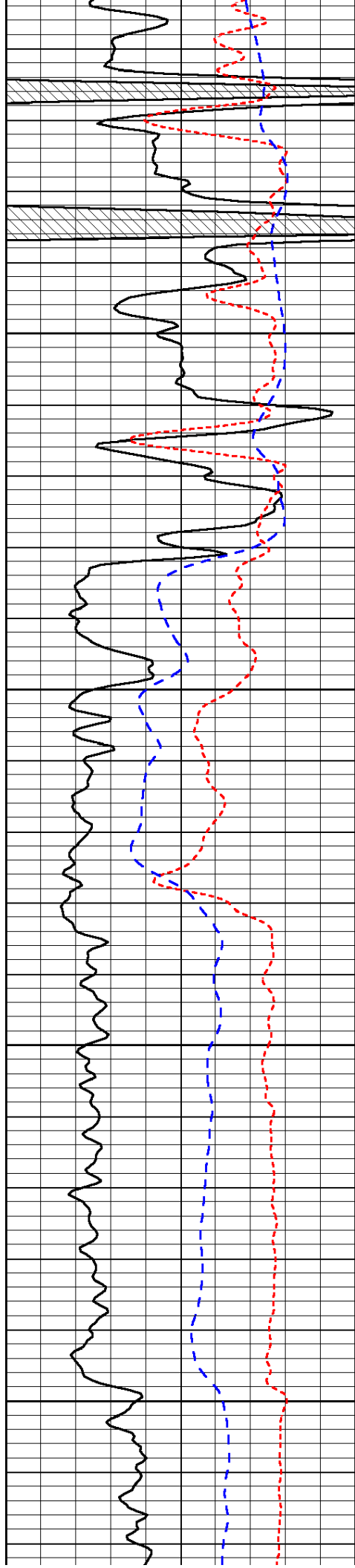
-33

-32

-32

-32

-31

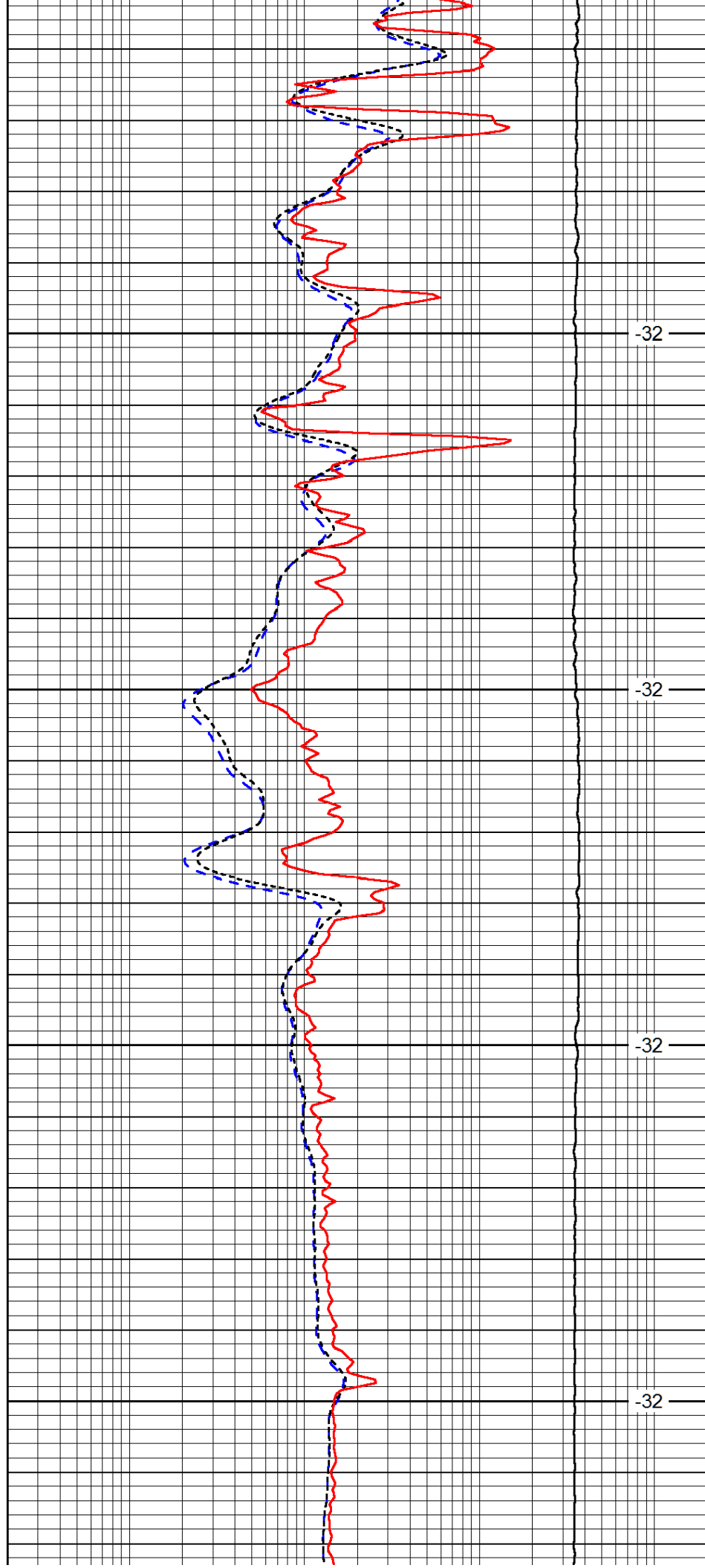


4550

4600

4650

4700

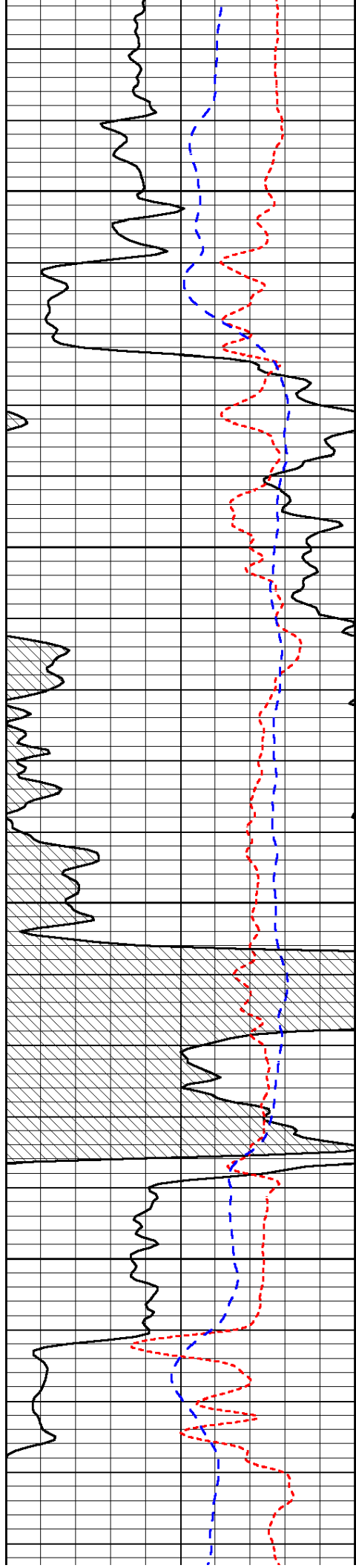


-32

-32

-32

-32

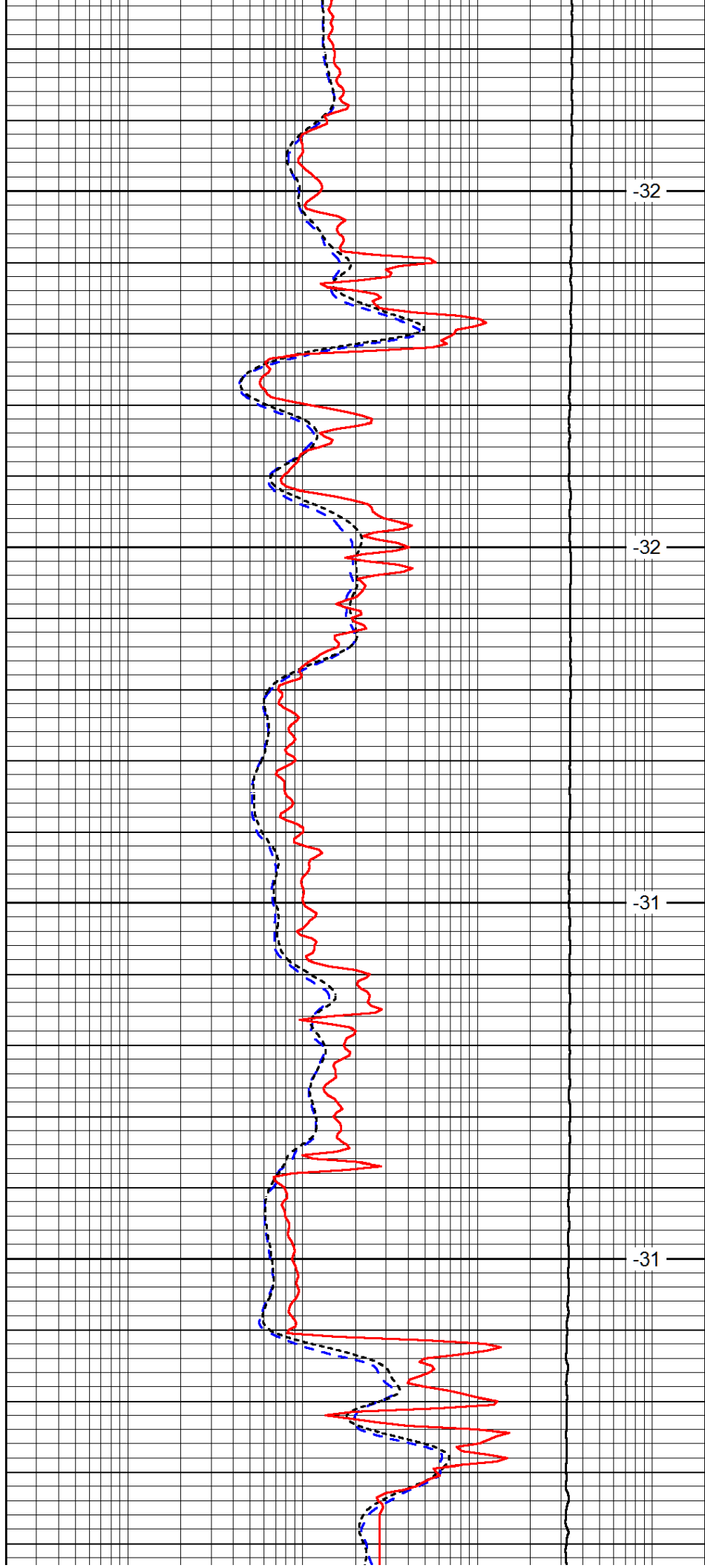


4750

4800

4850

4900



-32

-32

-31

-31

