



Pioneer Energy Services

## Dual Induction Log

API No.

15-135-25564-00-00

Company Berexco, LLC

Well Kelle #1

Field Wildcat

County

Ness

State

Kansas

Location

NE NE SW NE  
1370' FNL / 1330' FEL

Sec: 4

Twp: 16S

Rge: 25W

Elevation

Permanent Datum Ground Level  
Log Measured From Kelly Bushing  
Drilling Measured From Kelly Bushing

Elevation  
K.B. 2526  
D.F. 2519  
G.L. 2519

Date

4/12/2013

Run Number

One

Depth Driller

4600

Depth Logger

4602

Bottom Logged Interval

4601

Top Log Interval

250

Casing Driller

8.625 @ 304

Casing Logger

300

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

4000

Density / Viscosity

9.4 51

pH / Fluid Loss

9.0 10.0

Source of Sample

Flowline

Rm @ Meas. Temp

0.70 @ 65

Rmf @ Meas. Temp

0.53 @ 65

Rmc @ Meas. Temp

0.95 @ 65

Source of Rmf / Rmc

Charts

Rm @ BHT

0.37 @ 122

Operating Rig Time

4 Hours

Max Rec. Temp. F

122

Equipment Number

15

Location

Hays

Recorded By

R. Barnhart

Witnessed By

Marklin Armstrong

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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

Arnold, KS:  
2W to I Rd., 3 1/2N, NW to rig

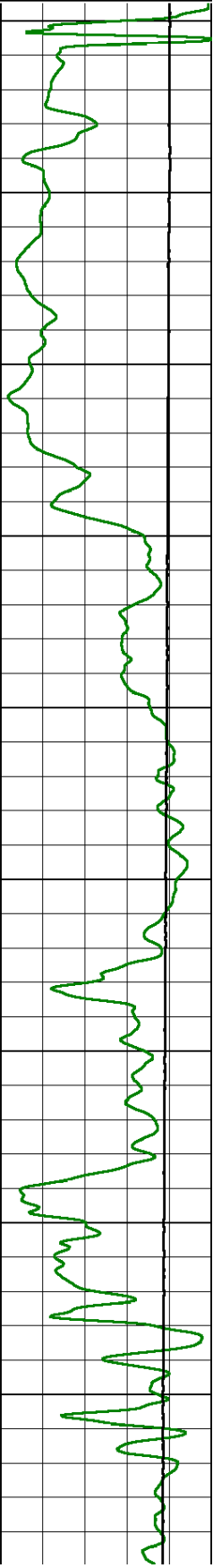
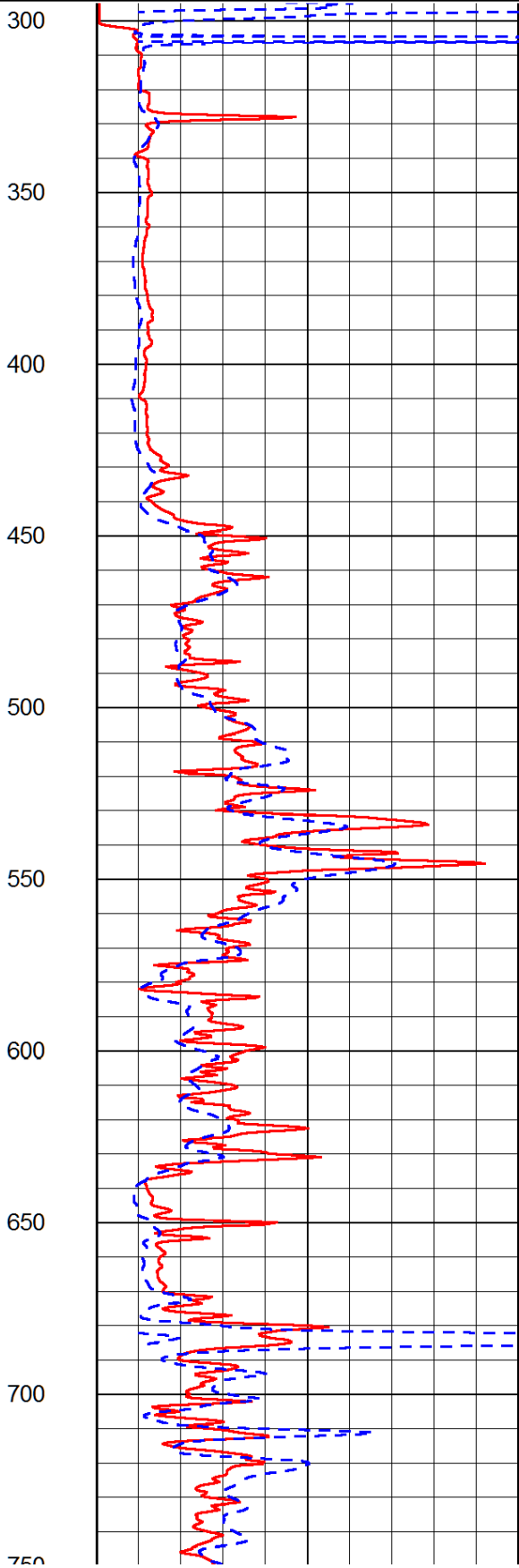
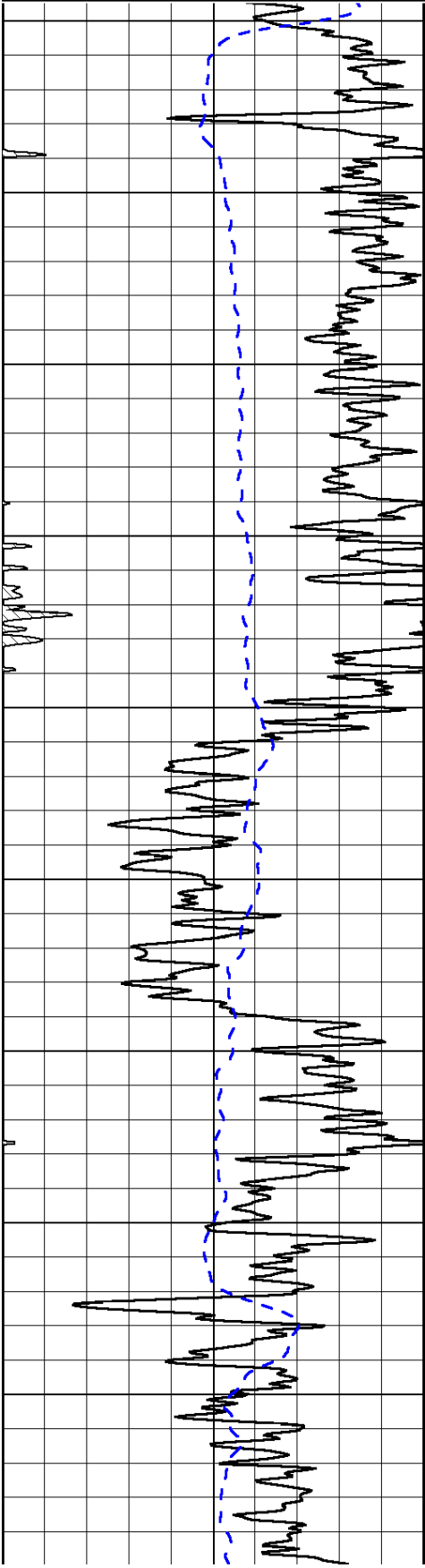
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Presentation Format: dil2in  
Dataset Creation: Fri Apr 12 17:12:13 2013  
Charted by: Depth in Feet scaled 1:600

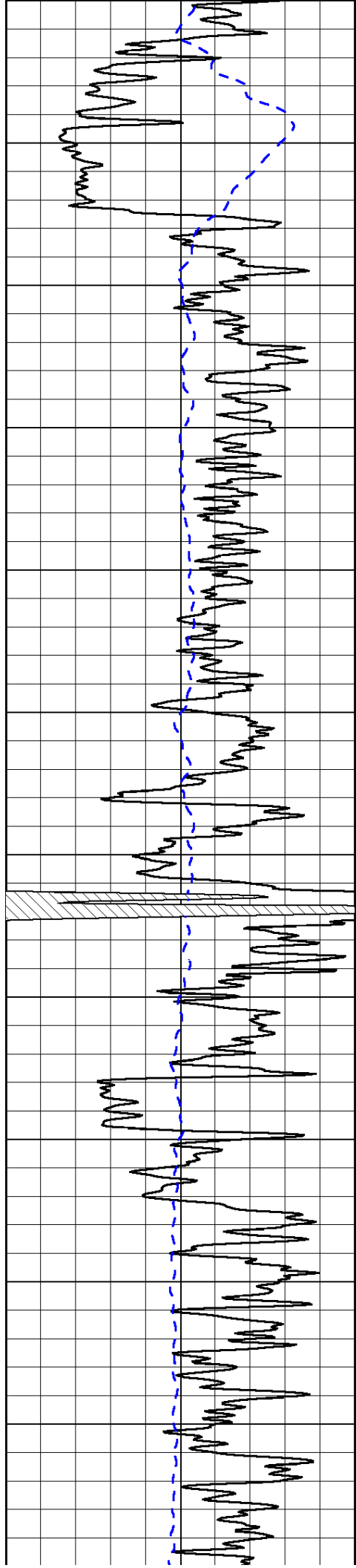
Charted by: Depth in Feet scaled 1:500

|                                            |                  |     |
|--------------------------------------------|------------------|-----|
| 0                                          | Gamma Ray (GAPI) | 150 |
| -200                                       | SP (mV)          | 0   |
| <hr style="border-top: 1px dashed blue;"/> |                  |     |

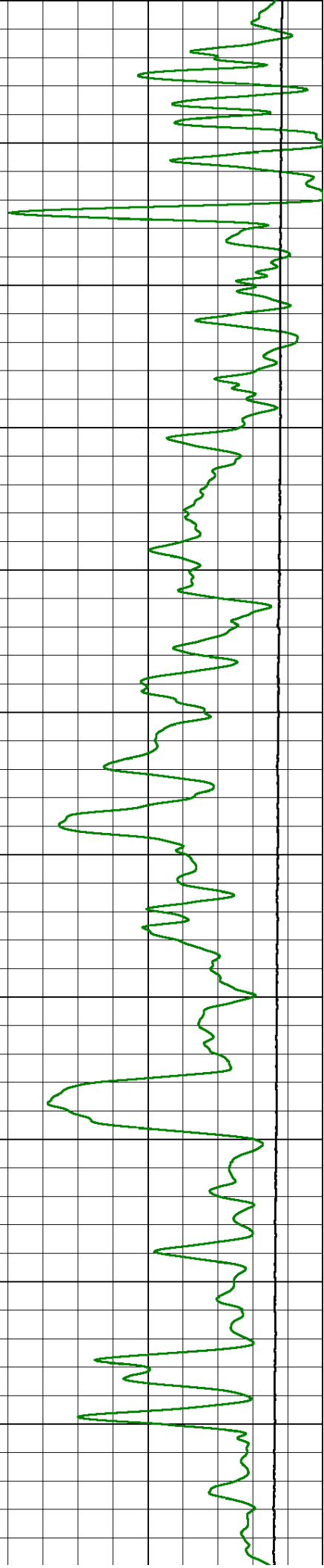
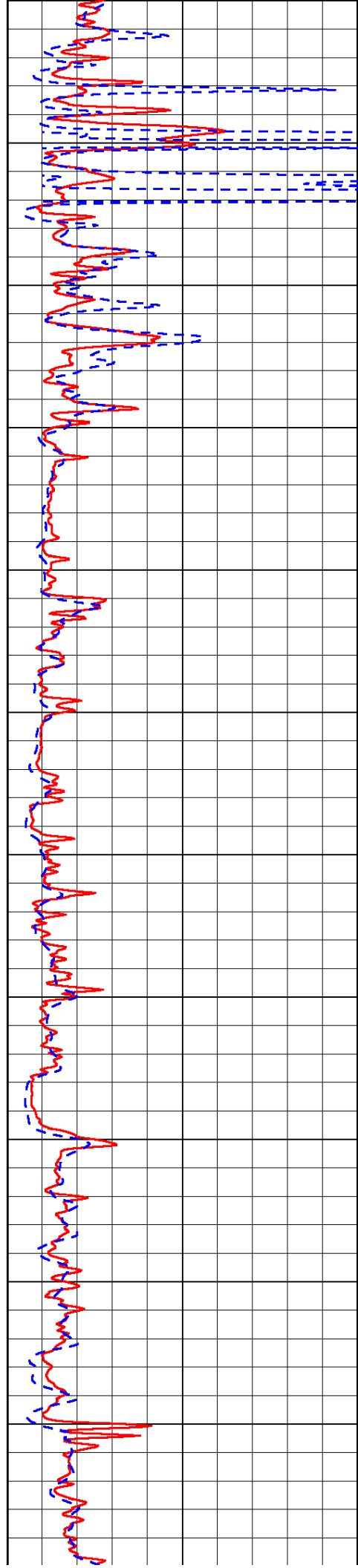
|       |                             |    |
|-------|-----------------------------|----|
| 0     | Shallow Resistivity (Ohm-m) | 50 |
| 0     | Deep Resistivity (Ohm-m)    | 50 |
| 1000  | Conductivity (Ohm-m)        | 0  |
| 15000 | Line Tension (lb)           | 0  |

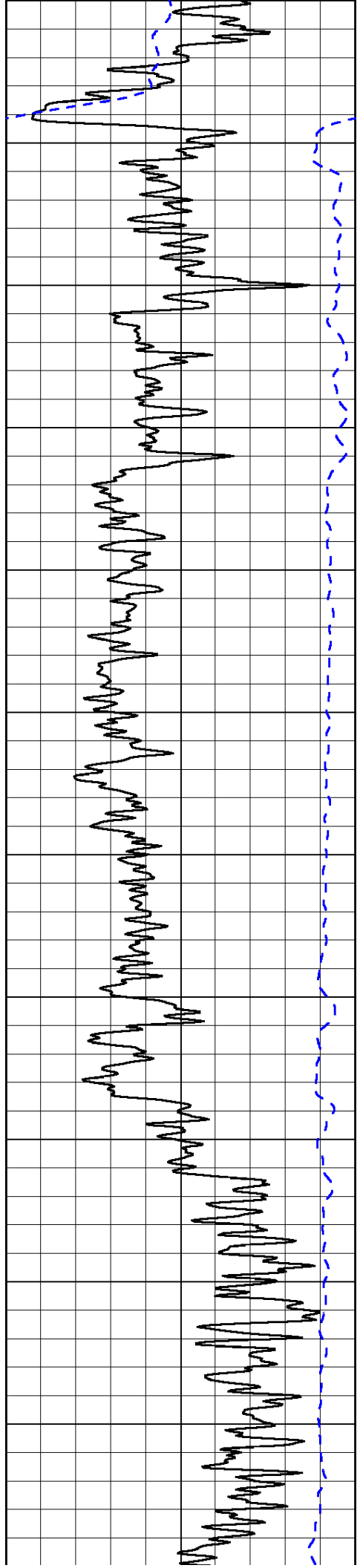
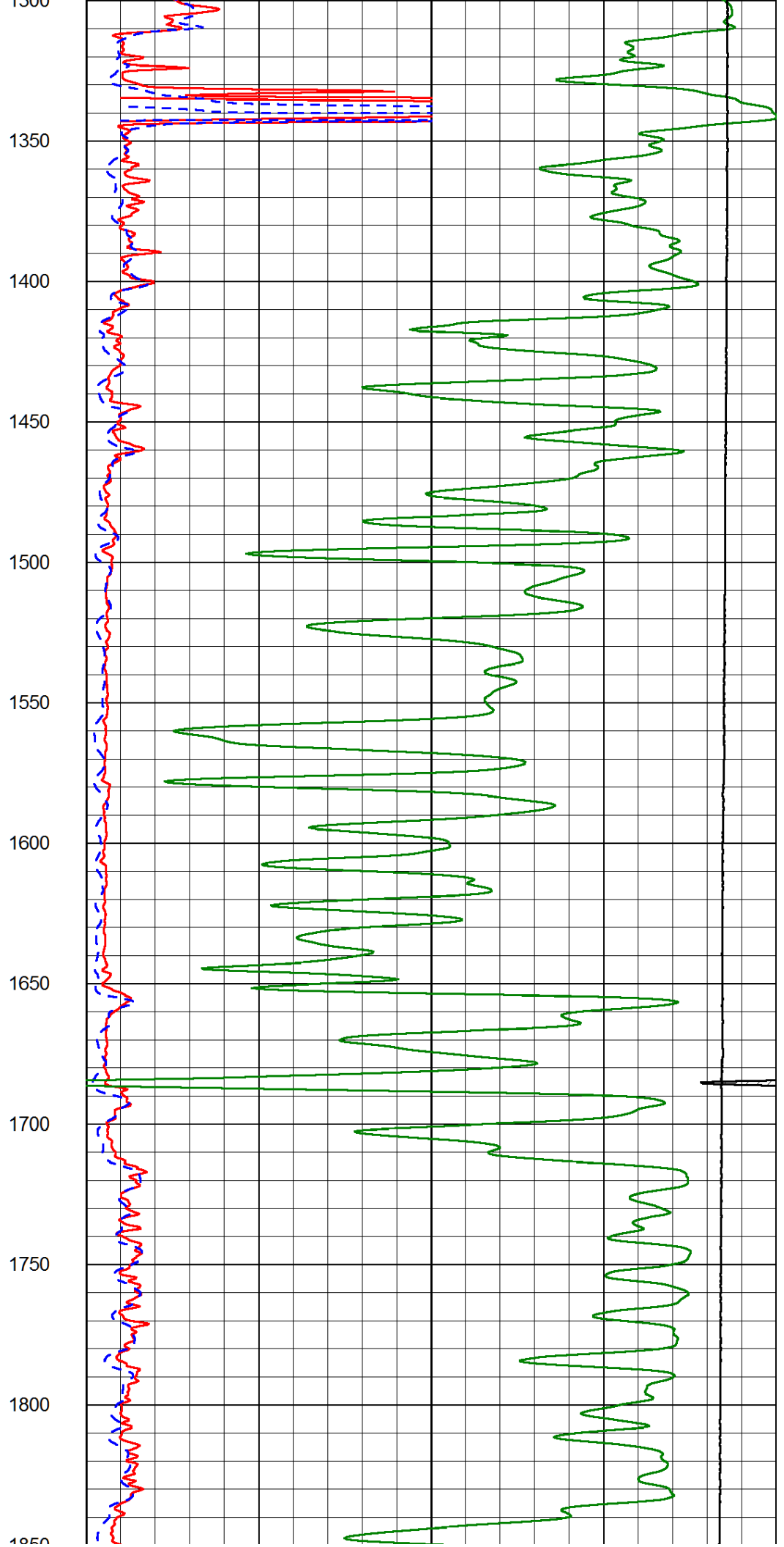
|                     |                          |     |
|---------------------|--------------------------|-----|
| Shallow Resistivity |                          |     |
| 50                  | (Ohm-m)                  | 500 |
| 50                  | Deep Resistivity (Ohm-m) | 500 |

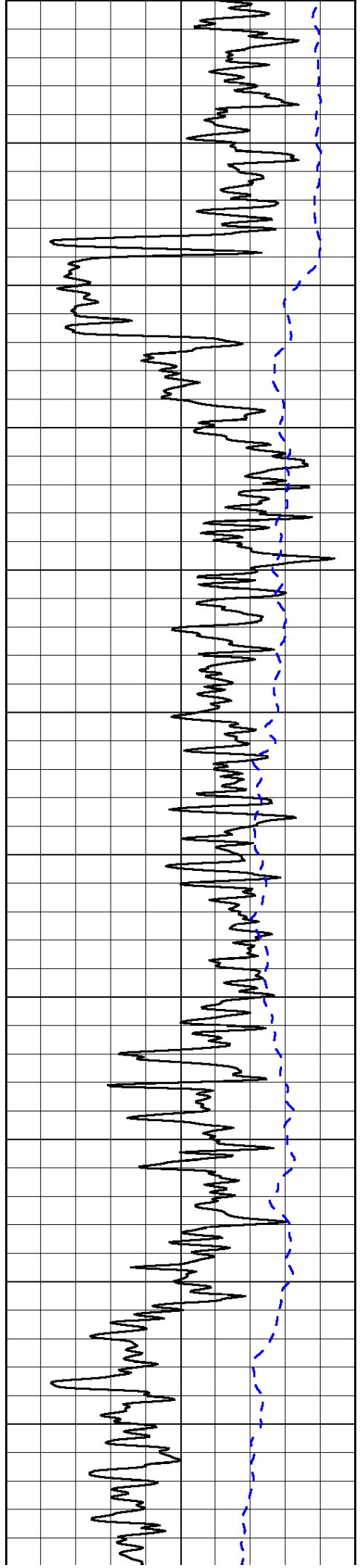
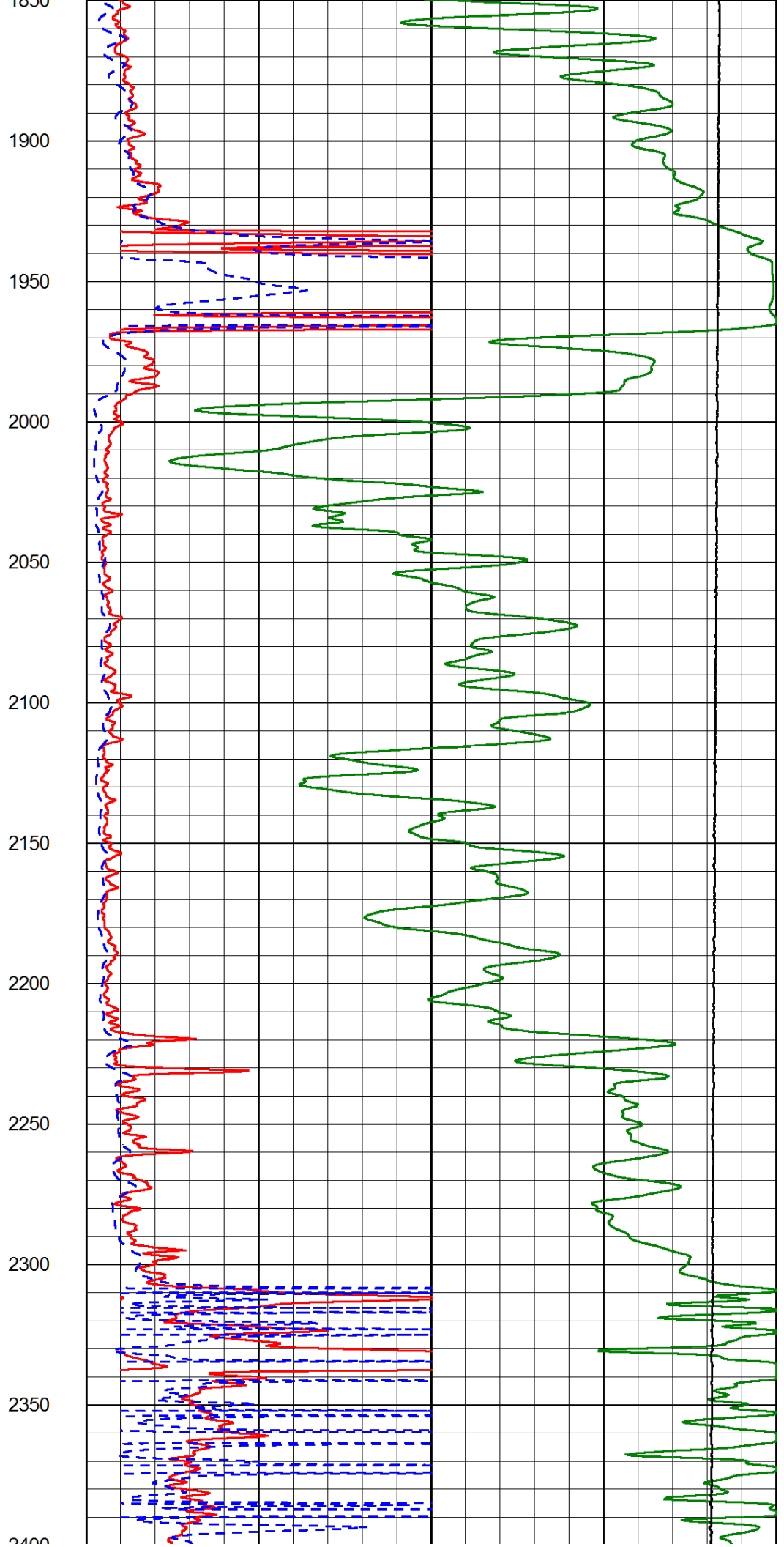


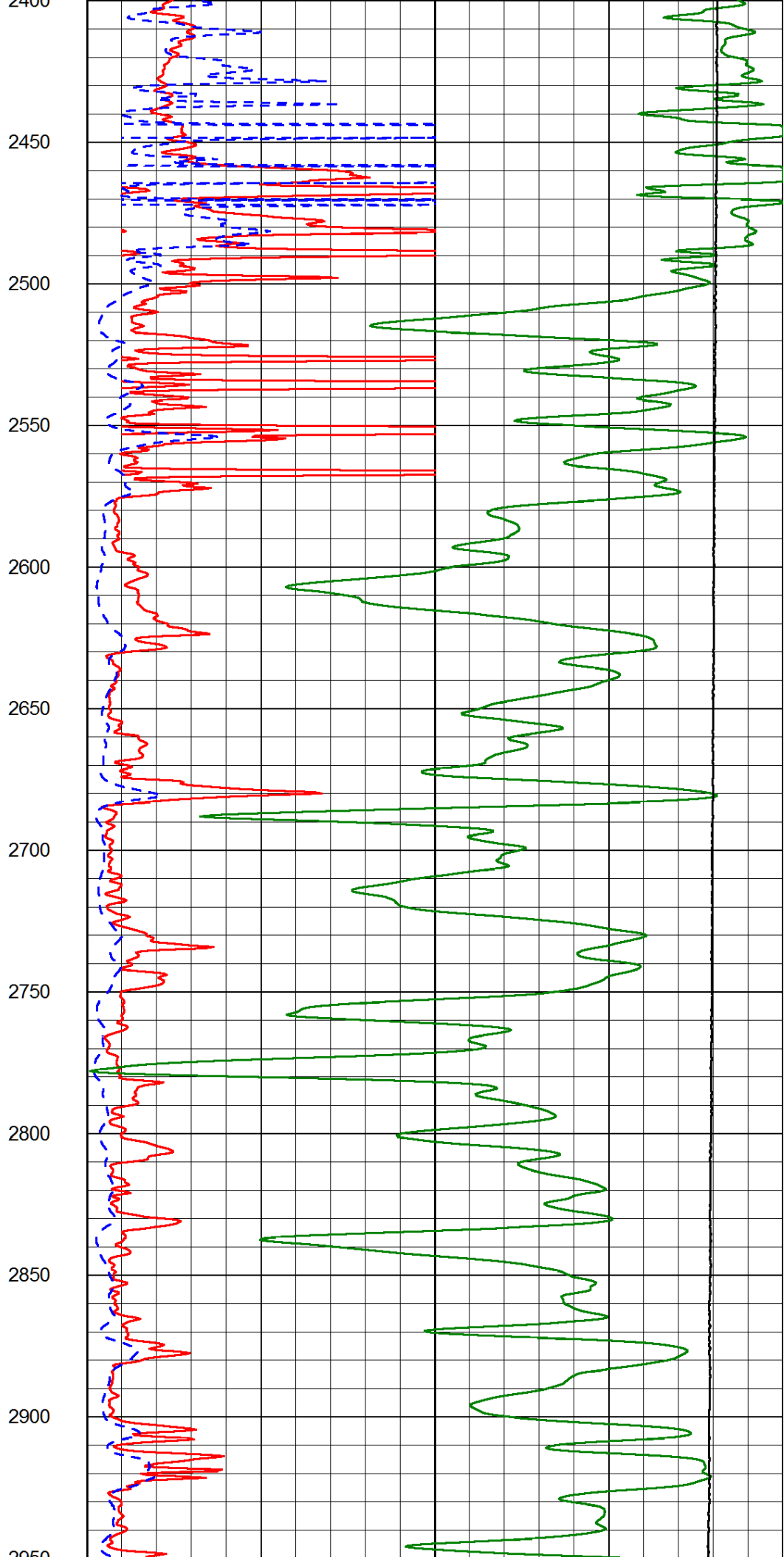
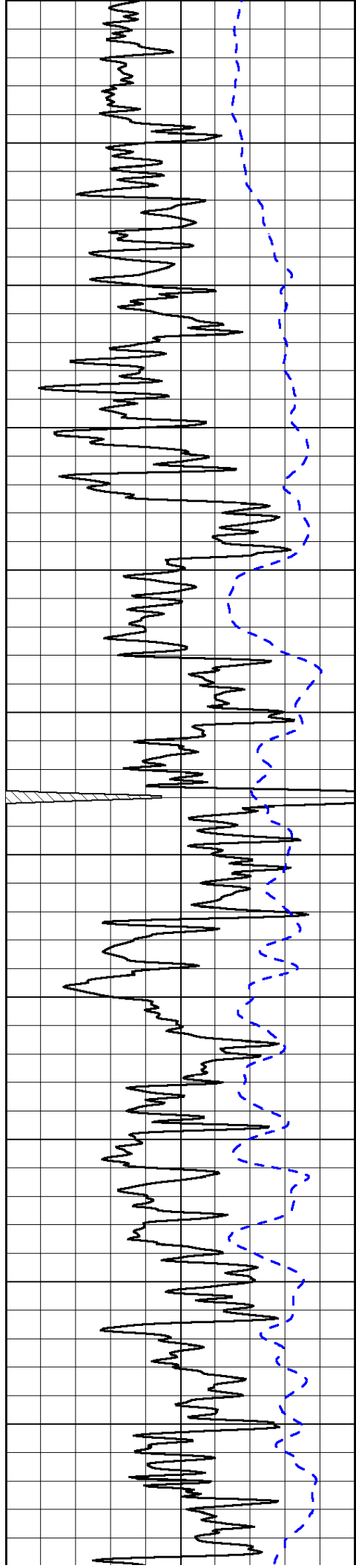


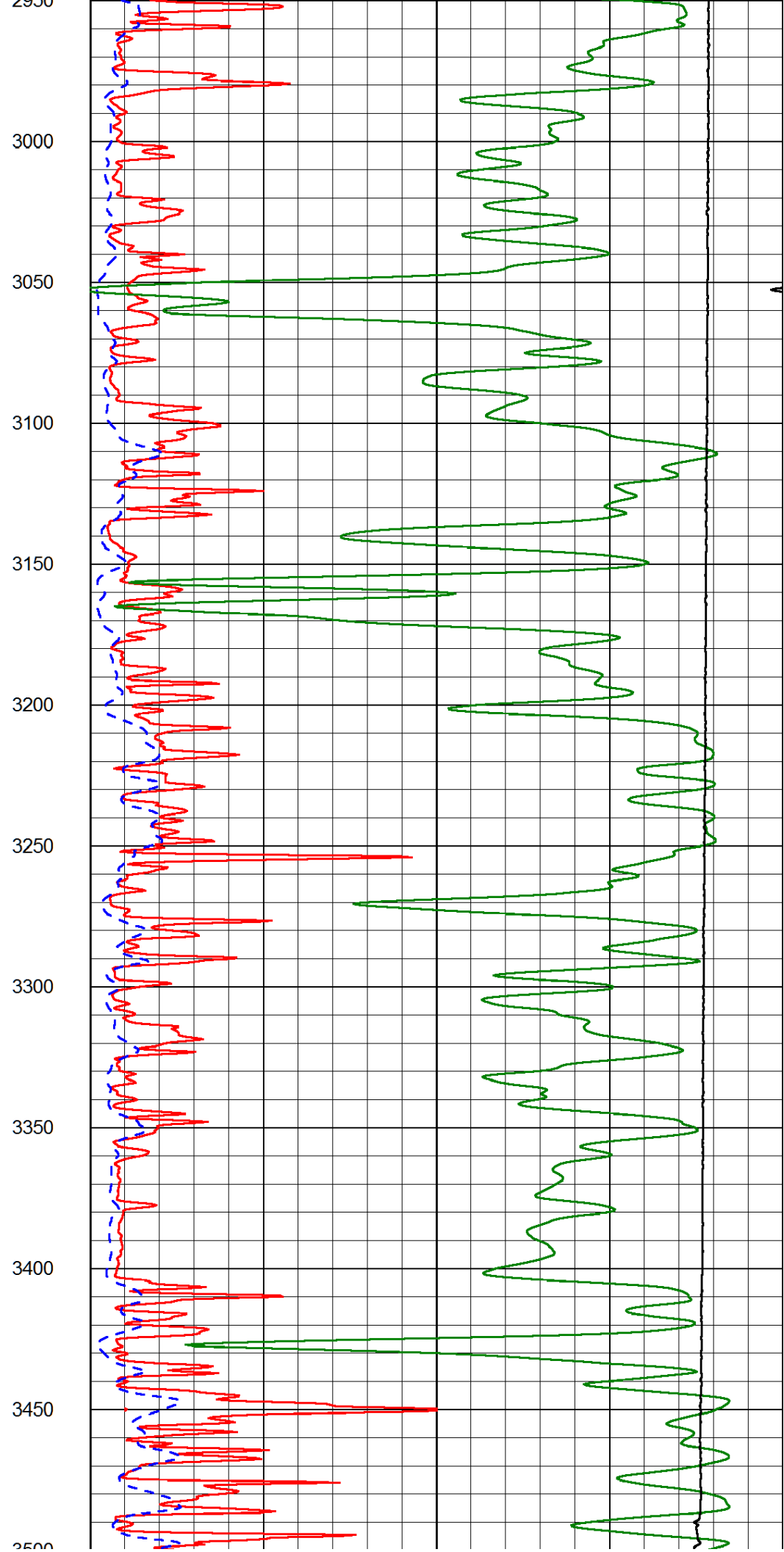
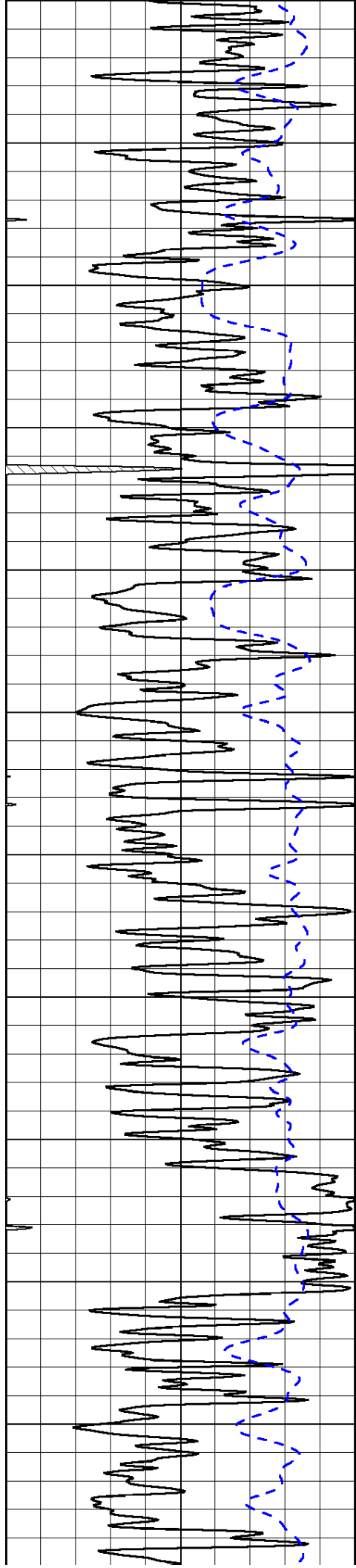
750  
800  
850  
900  
950  
1000  
1050  
1100  
1150  
1200  
1250  
1300

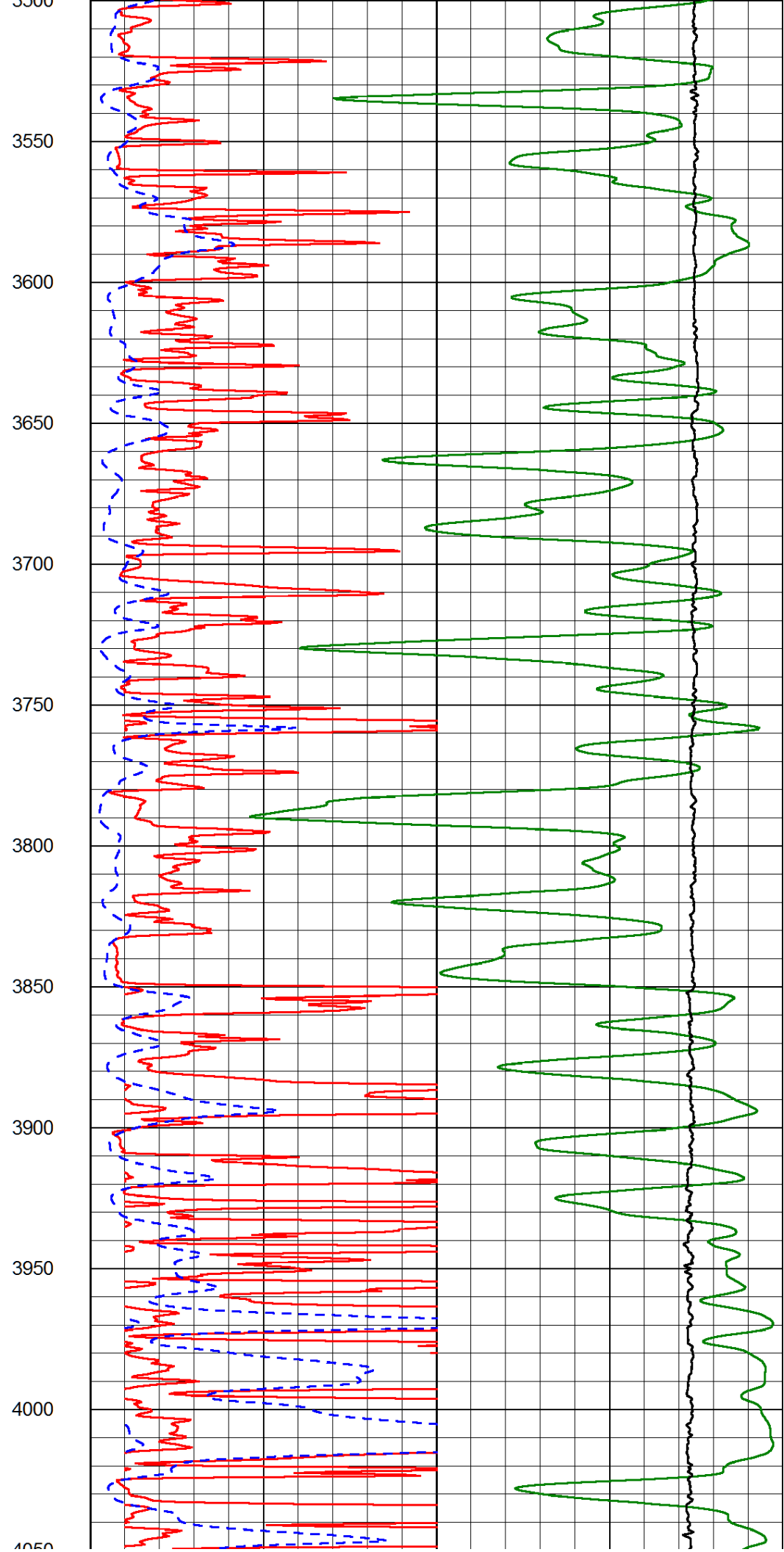
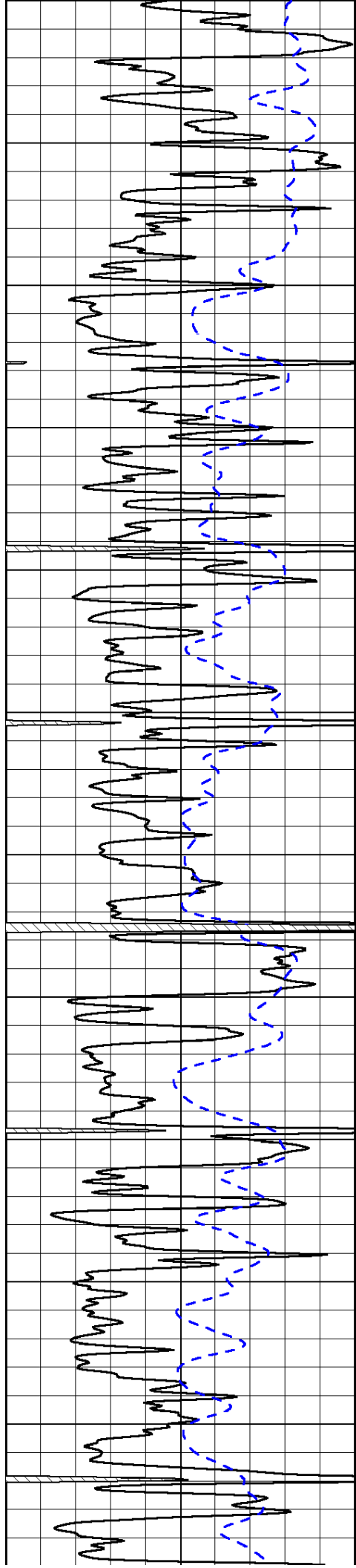


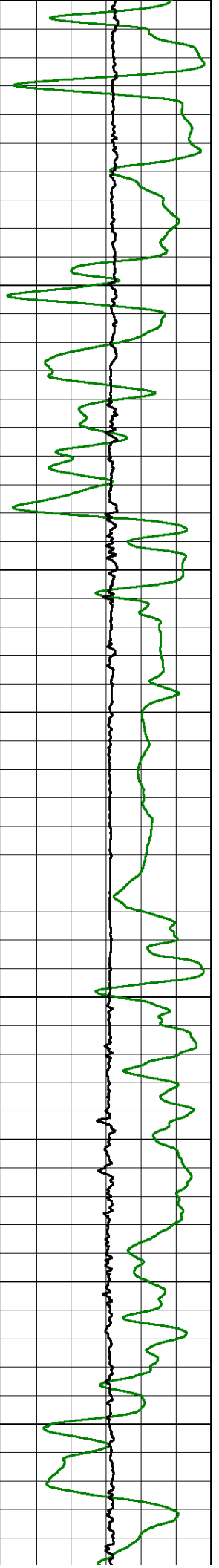
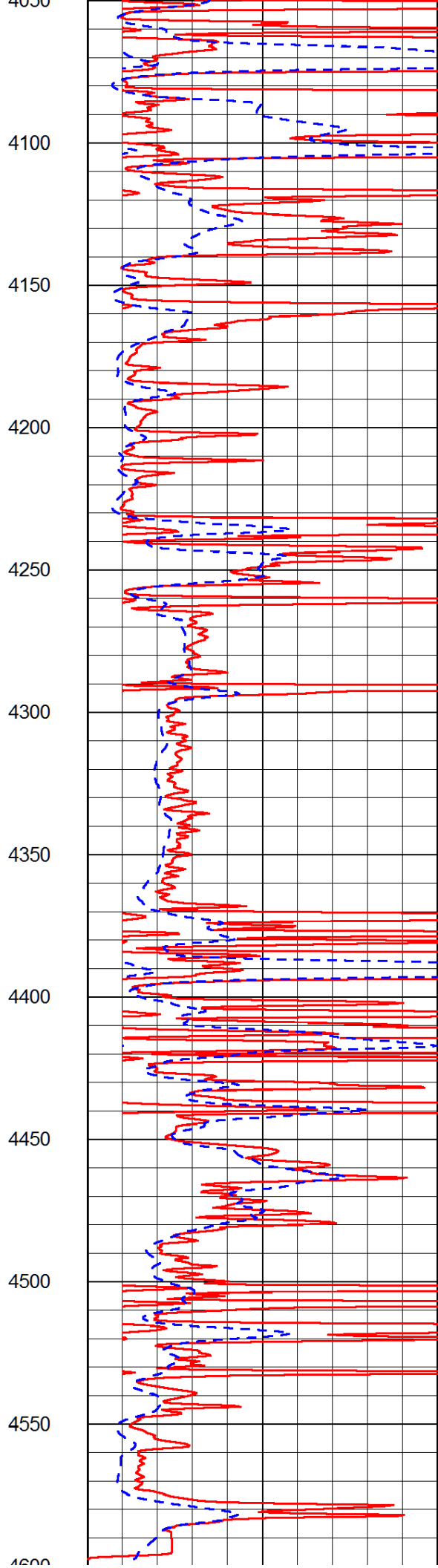
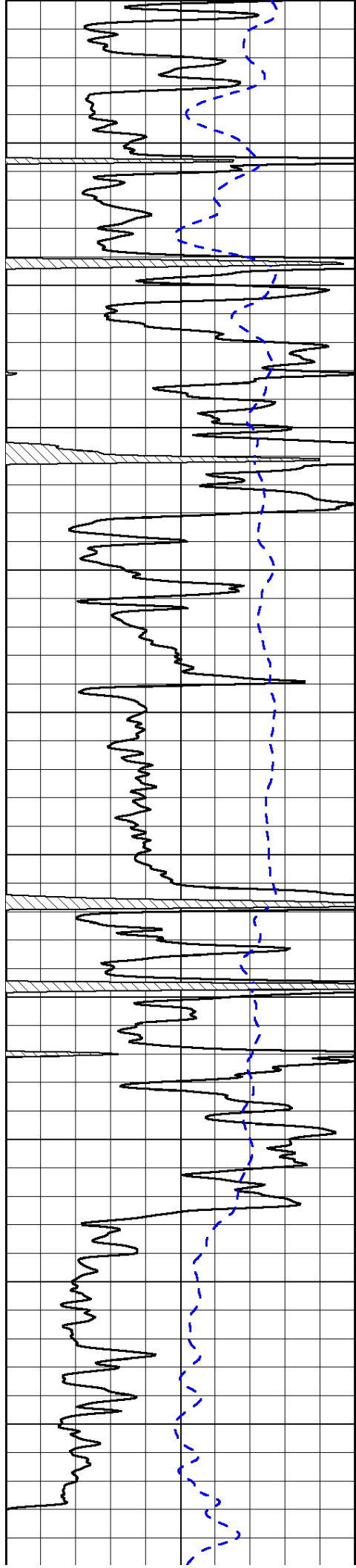


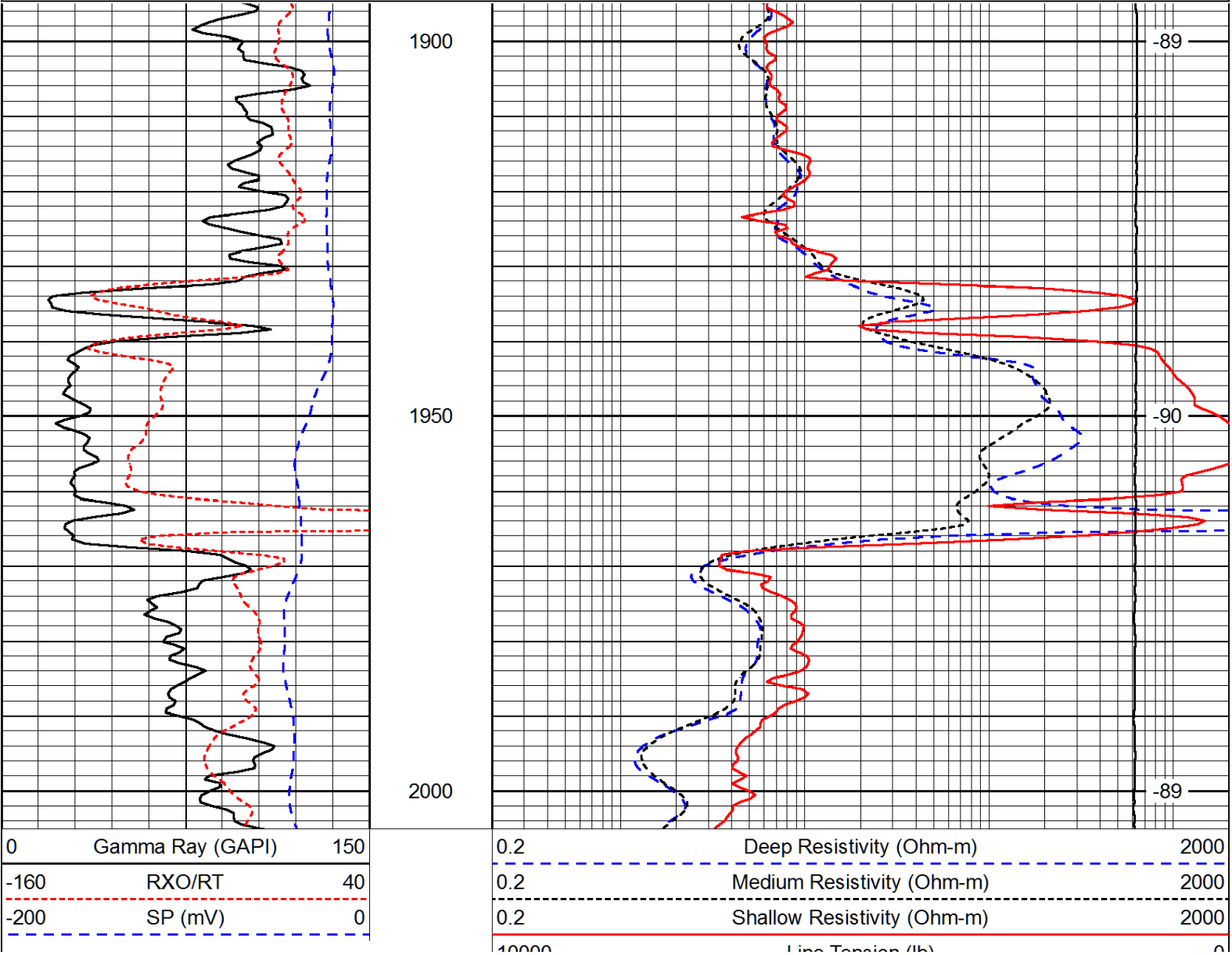
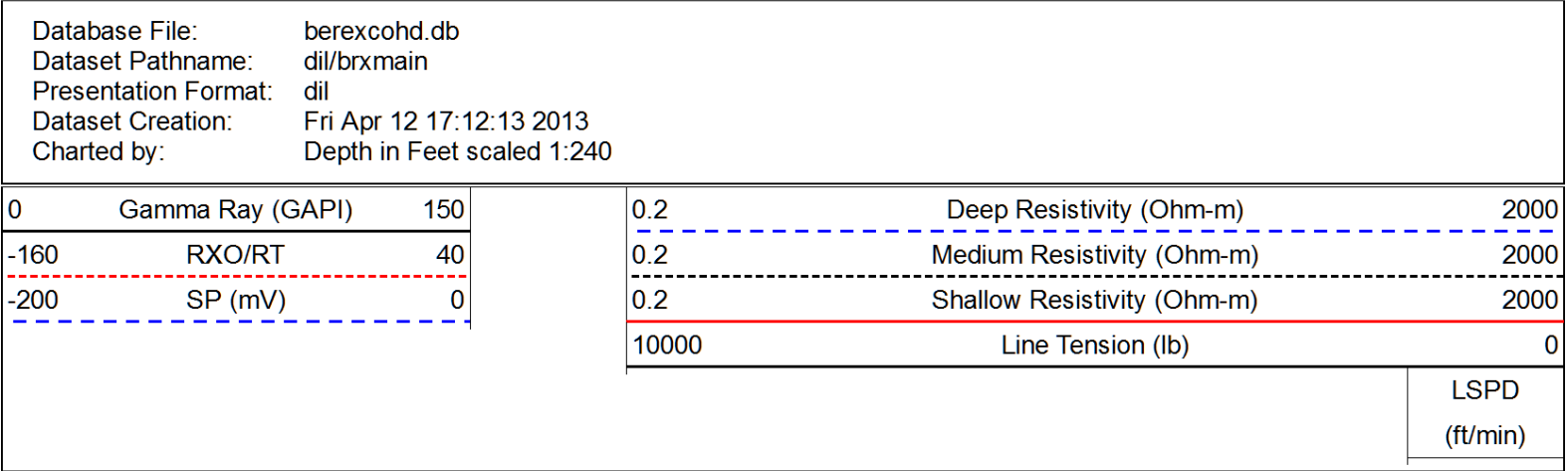
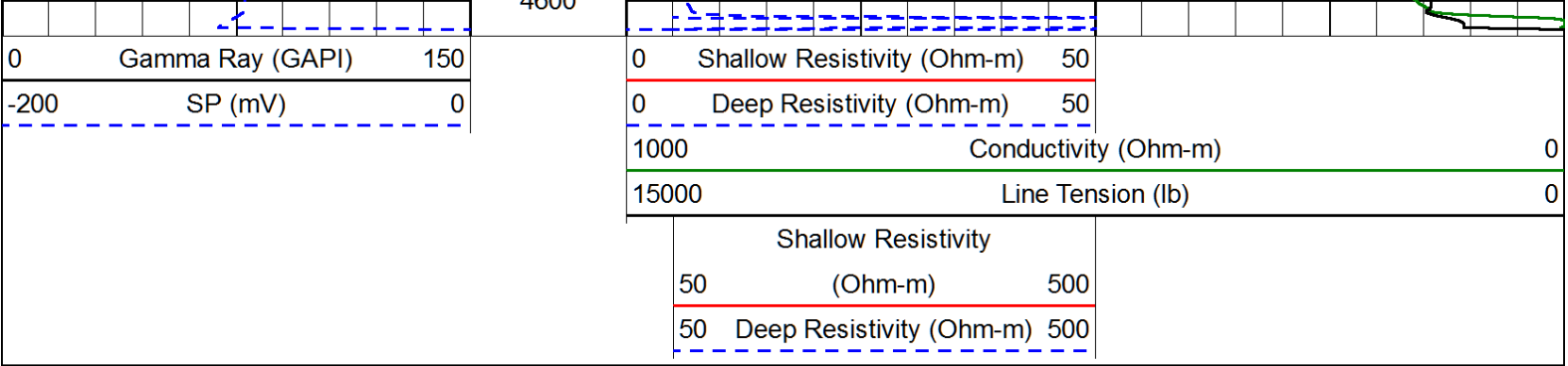








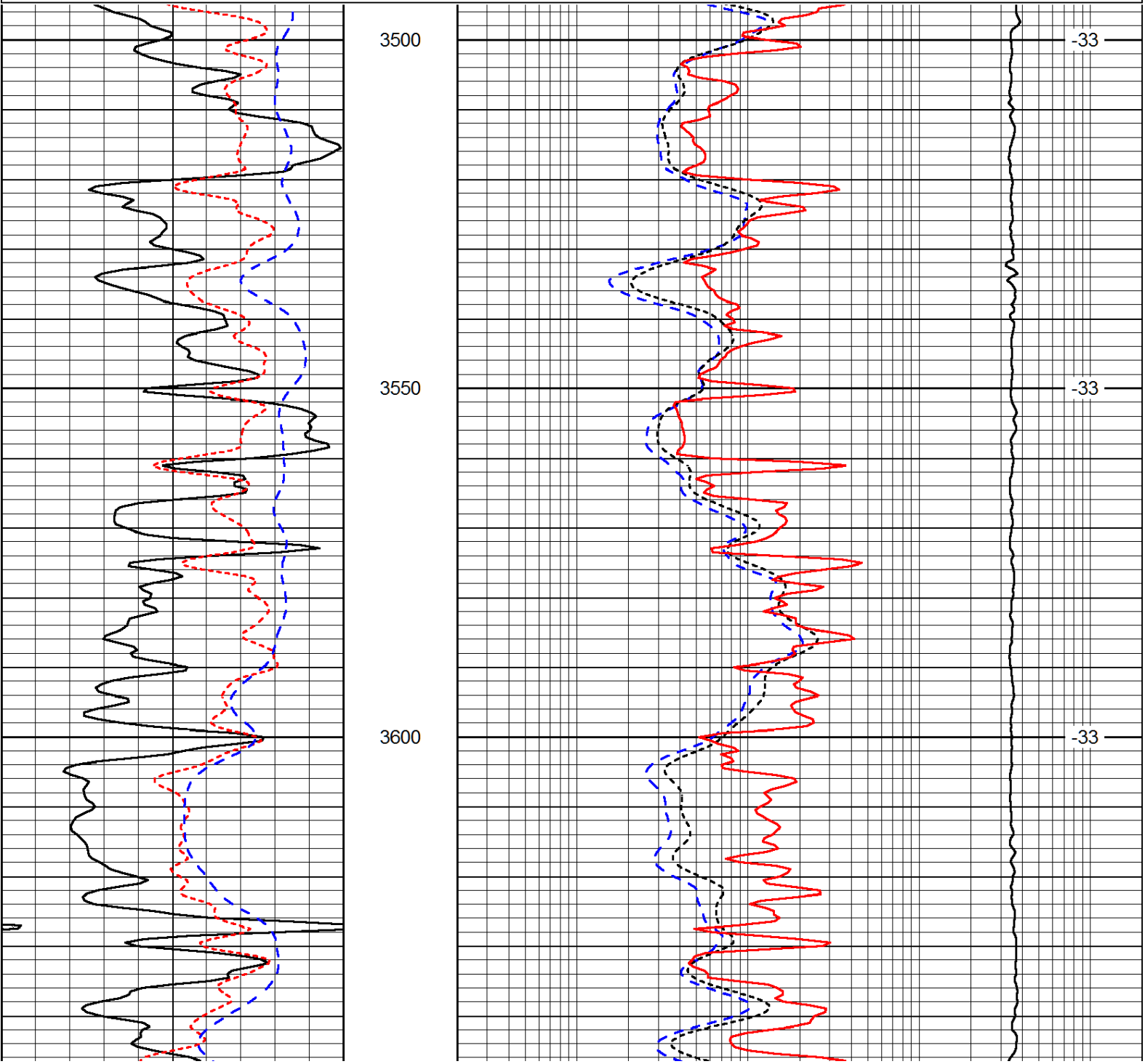


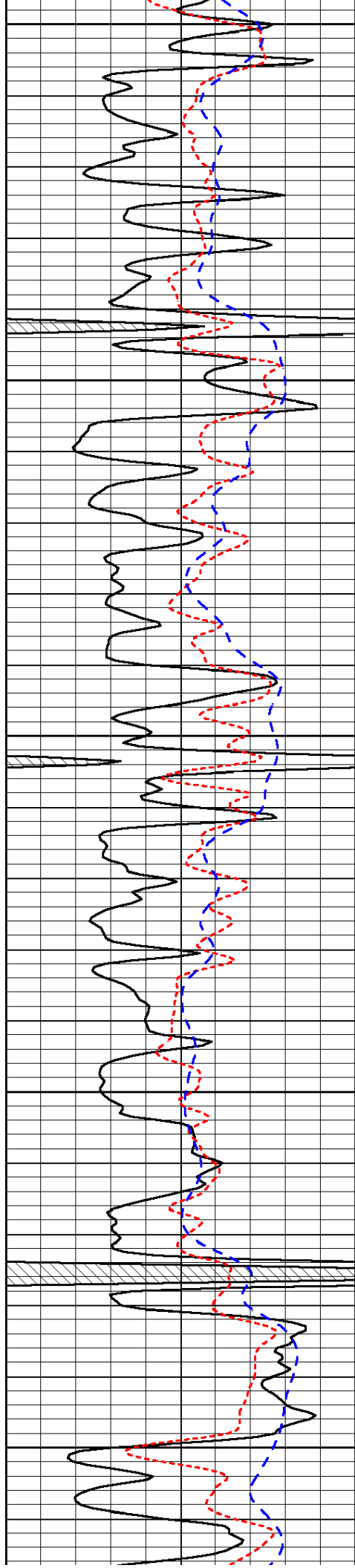


Database File:berexcohd.db  
Dataset Pathname:dil/brxmain  
Presentation Format:dil  
Dataset Creation:Fri Apr 12 17:12:13 2013  
Charted by:Depth in Feet scaled 1:240

|      |                  |     |       |                             |      |
|------|------------------|-----|-------|-----------------------------|------|
| 0    | Gamma Ray (GAPI) | 150 | 0.2   | Deep Resistivity (Ohm-m)    | 2000 |
| -160 | RXO/RT           | 40  | 0.2   | Medium Resistivity (Ohm-m)  | 2000 |
| -200 | SP (mV)          | 0   | 0.2   | Shallow Resistivity (Ohm-m) | 2000 |
|      |                  |     | 10000 | Line Tension (lb)           | 0    |

LSPD  
(ft/min)





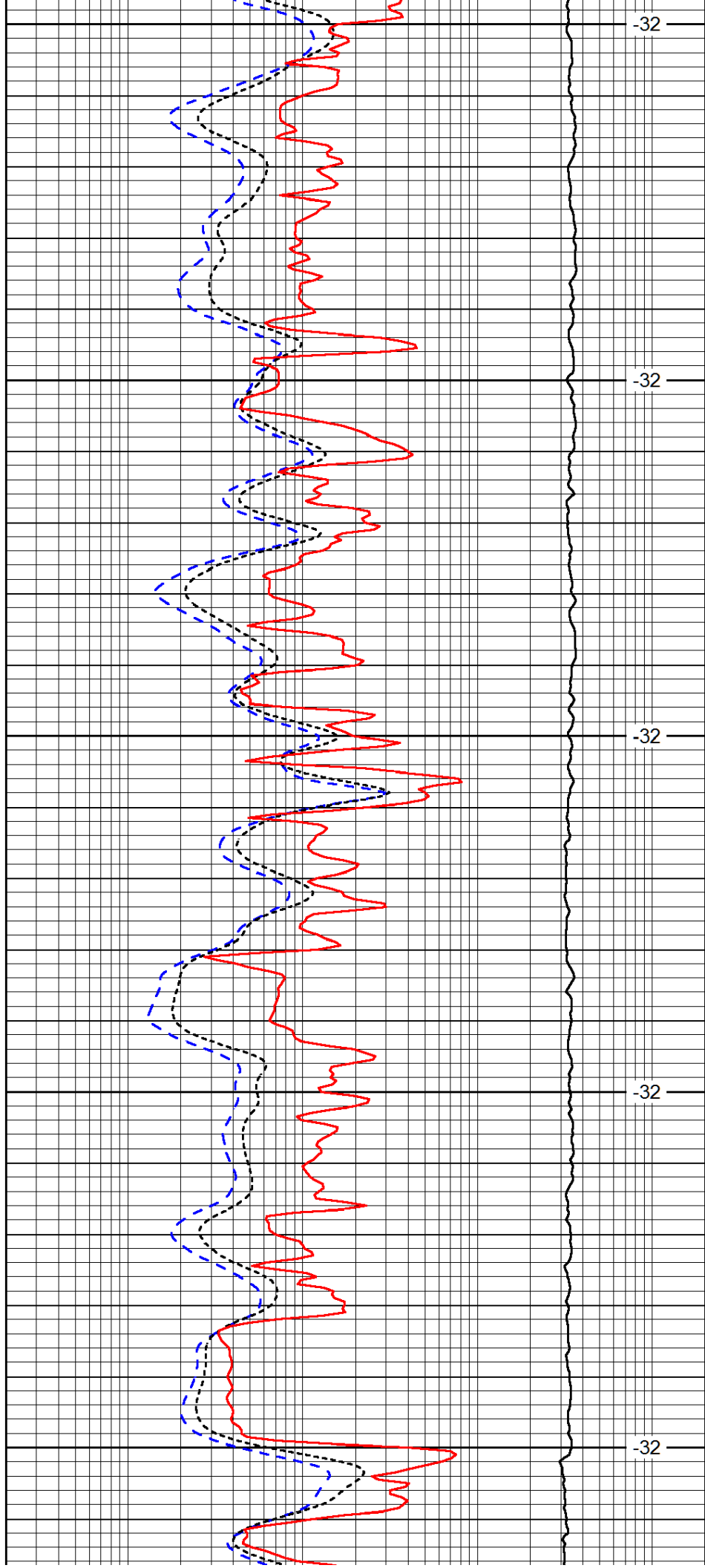
3650

3700

3750

3800

3850



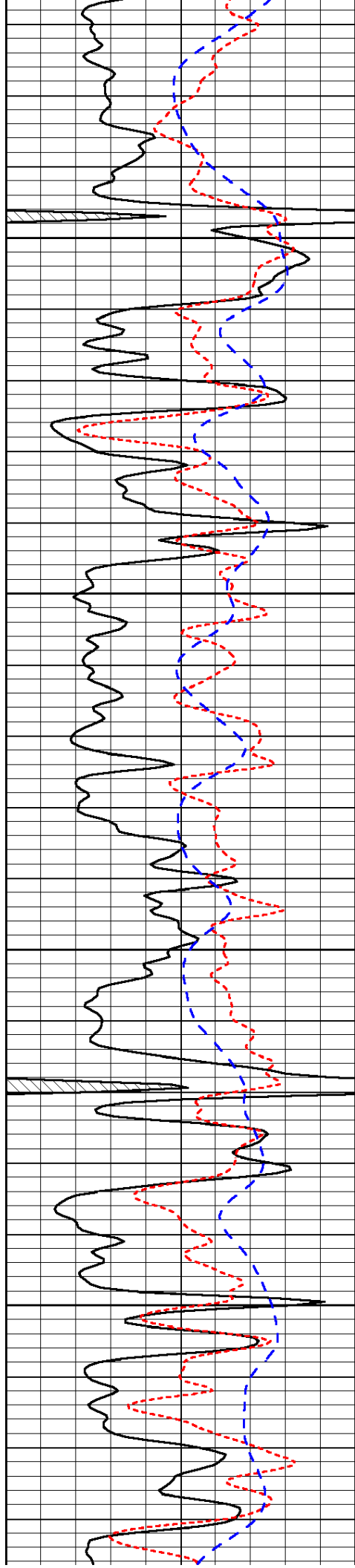
-32

-32

-32

-32

-32

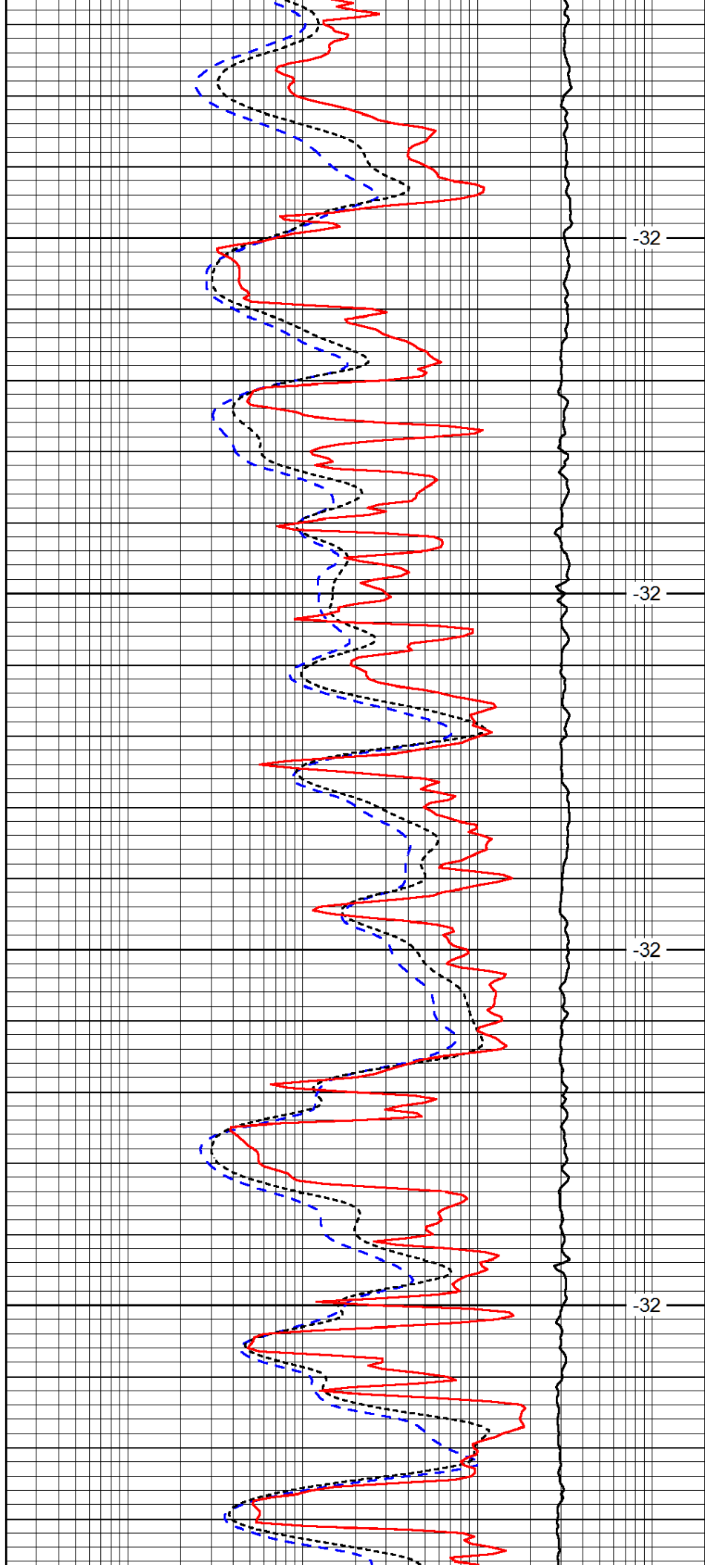


3900

3950

4000

4050

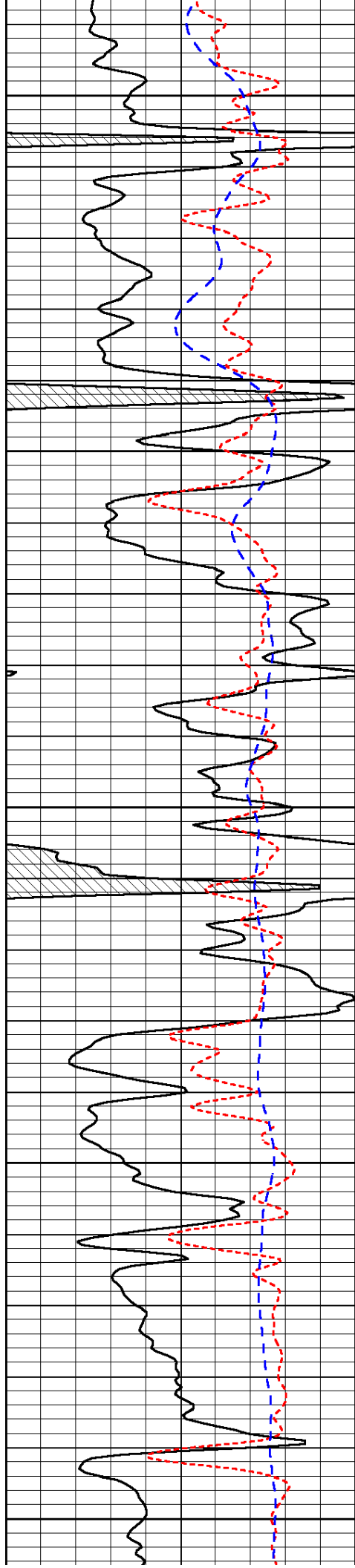


-32

-32

-32

-32



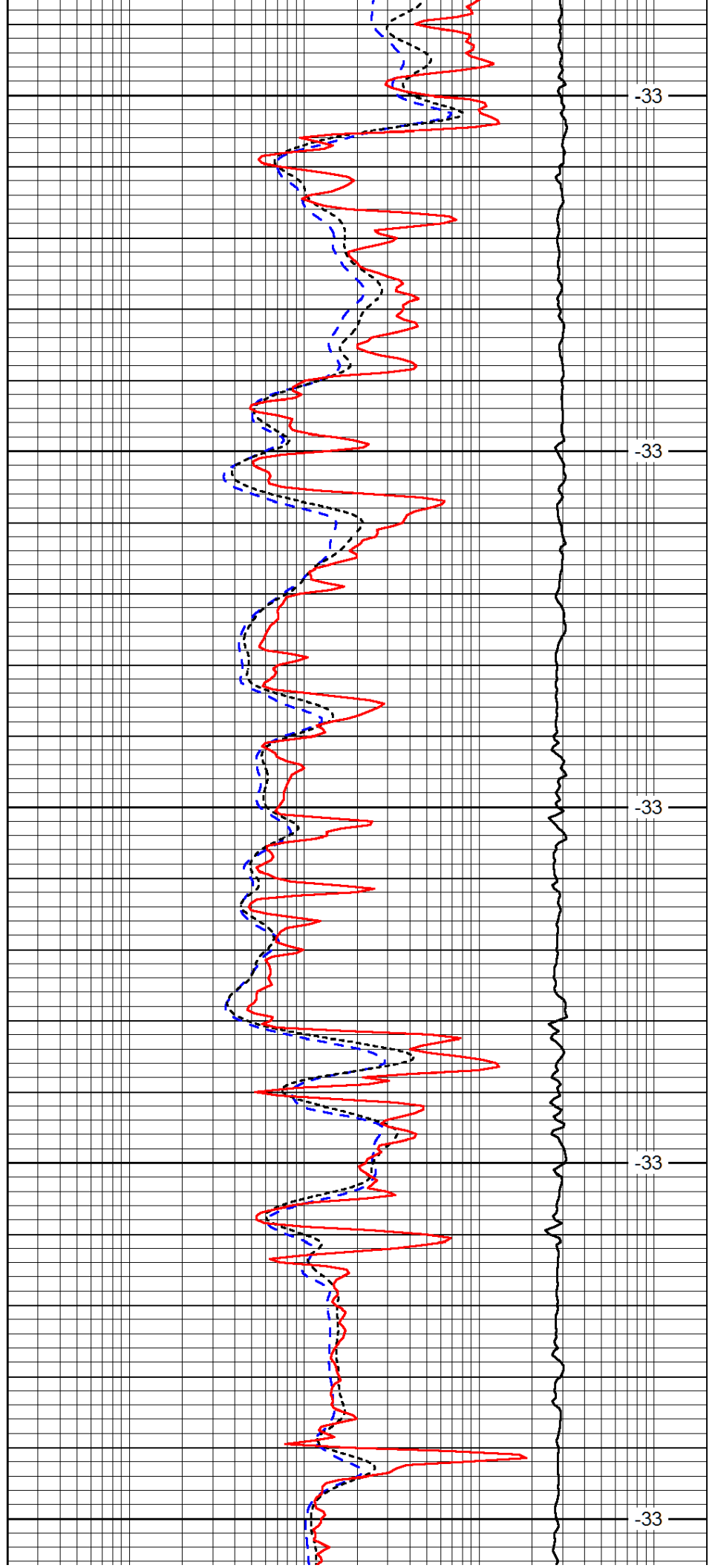
4100

4150

4200

4250

4300



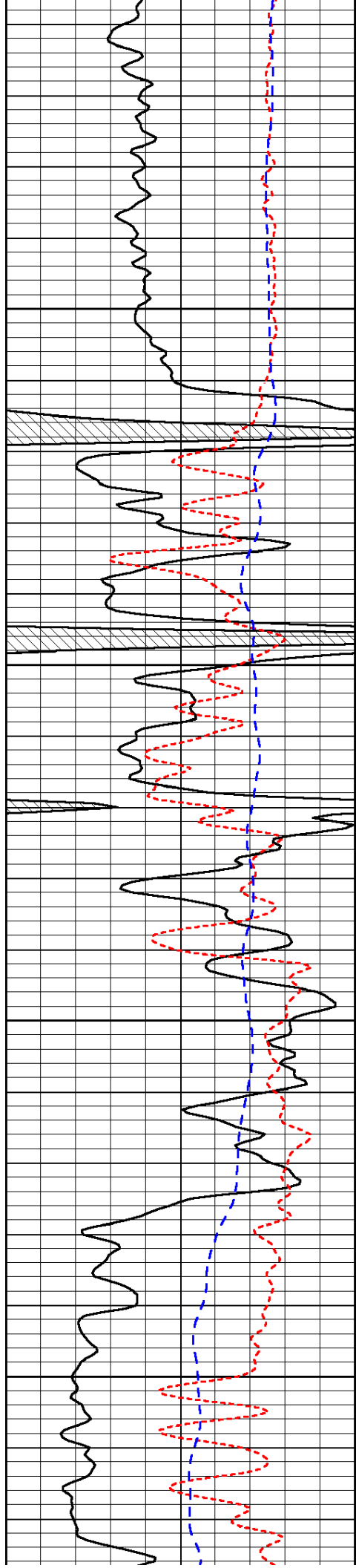
-33

-33

-33

-33

-33

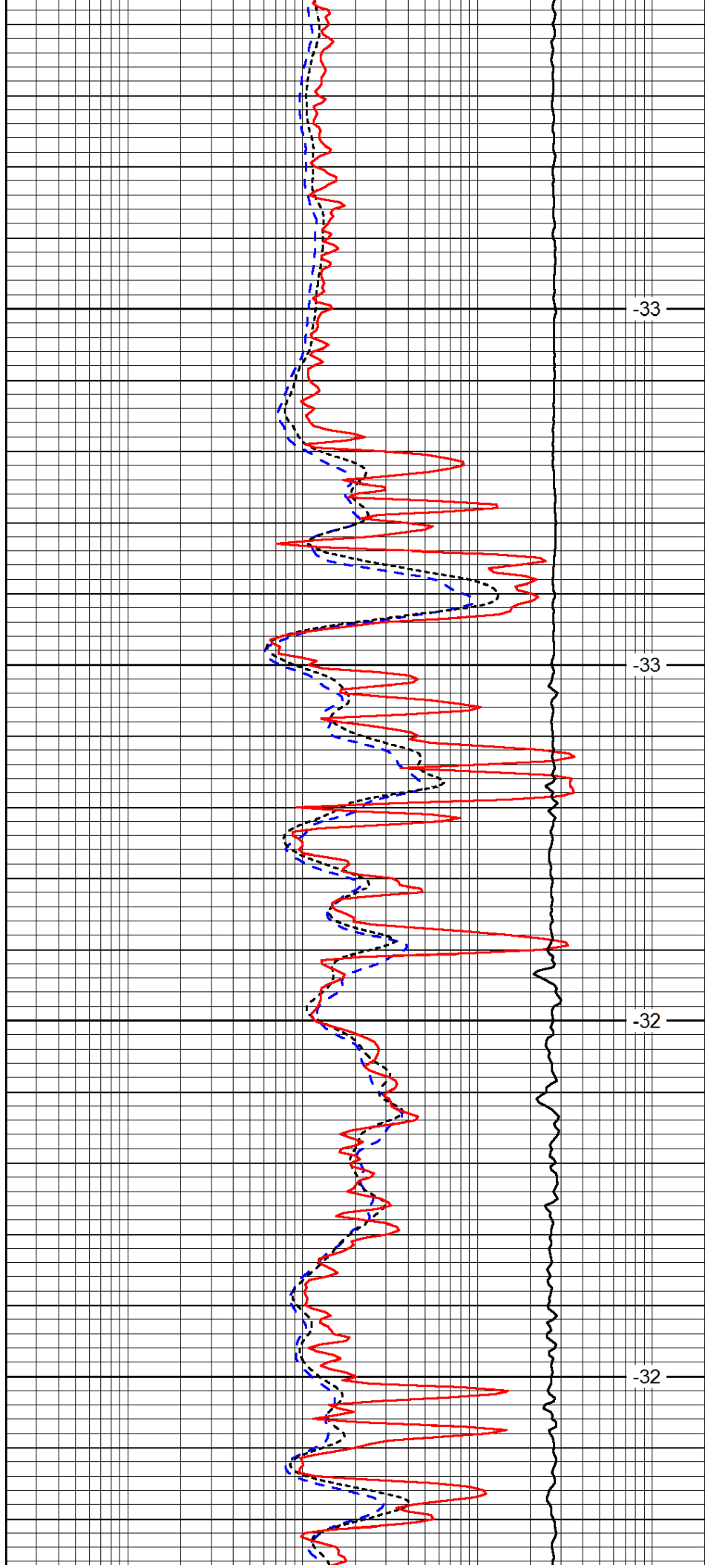


4350

4400

4450

4500

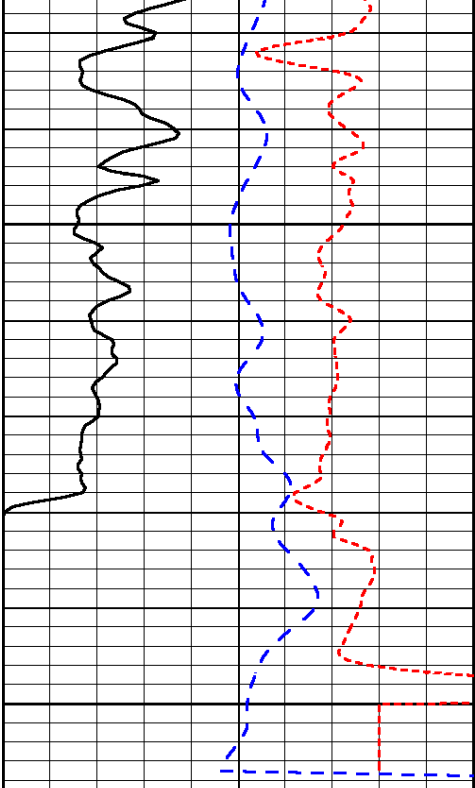


-33

-33

-32

-32



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

4550

4600



|       |                             |      |
|-------|-----------------------------|------|
| 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)