



Dual Induction Log

Pioneer Energy Services

API No.

15-069-20470-00-00

Company American Warrior, Inc.

Well Shadow # 6-17

Field Shadow

County Gray State

Kansas

Location

NW-SE-NE-NW
779' FNL & 2279' FWL

Other Services
CNL/CDL
MEL

Sec: 17 Twp: 28 S Rge: 30 W

Permanent Datum Ground Level Elevation 2805
Log Measured From Kelly Bushing 13 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Elevation
K.B. 2818
D.F.
G.L. 2805

Date 3/18/2014

Run Number One

Depth Driller 5300

Depth Logger 5301

Bottom Logged Interval 5300

Top Log Interval 1700

Casing Driller 8.625 @ 1743

Casing Logger 1742

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 2300

Density / Viscosity 9.2 53

pH / Fluid Loss 10.5 7.6

Source of Sample Flowline

Rm @ Meas. Temp 0.90 @ 38

Rmf @ Meas. Temp 0.67 @ 38

Rmc @ Meas. Temp 1.21 @ 38

Source of Rmf / Rmc Charts

Rm @ BHT 0.26 @ 131

Operating Rig Time 4 Hours

Max Rec. Temp. F 131

Equipment Number 91

Location Hays

Recorded By Y. Ruiz

Witnessed By Wyatt Urban

<<< 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.pioneerres.com
785 625 3858
Copeland,
1/2 East to 3 Rd, 5 North, 1/2 West,
South into

Database File: c:\warrior\data\amwar_shadow # 6-17\american_warrior_031814hd.db
Dataset Pathname: DIL\awstml
Presentation Format: dil2in
Dataset Creation: Wed Mar 19 01:16:39 2014
Charted by: Depth in Feet scaled 1:600

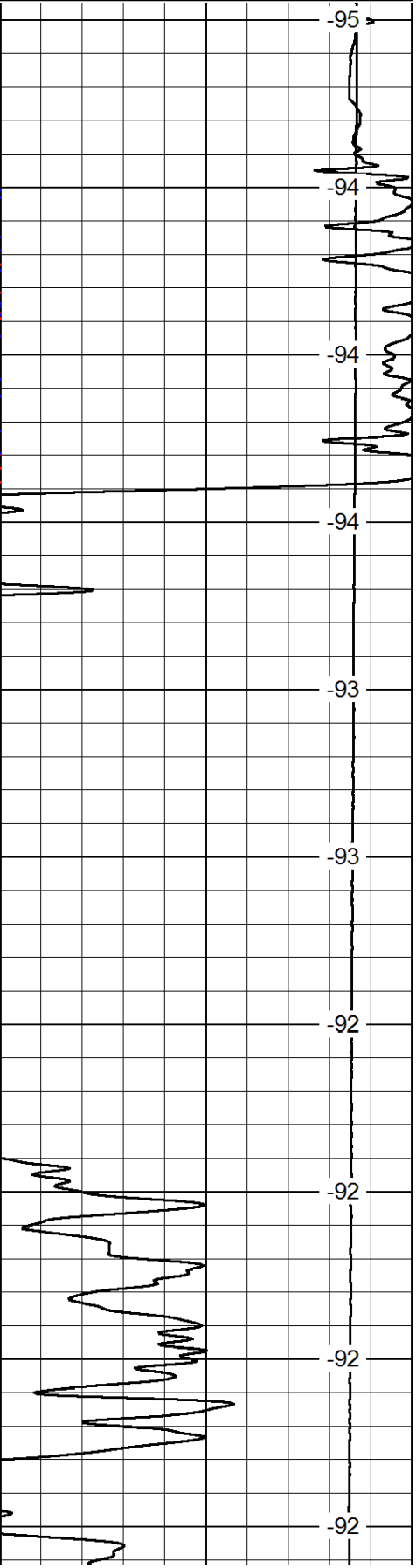
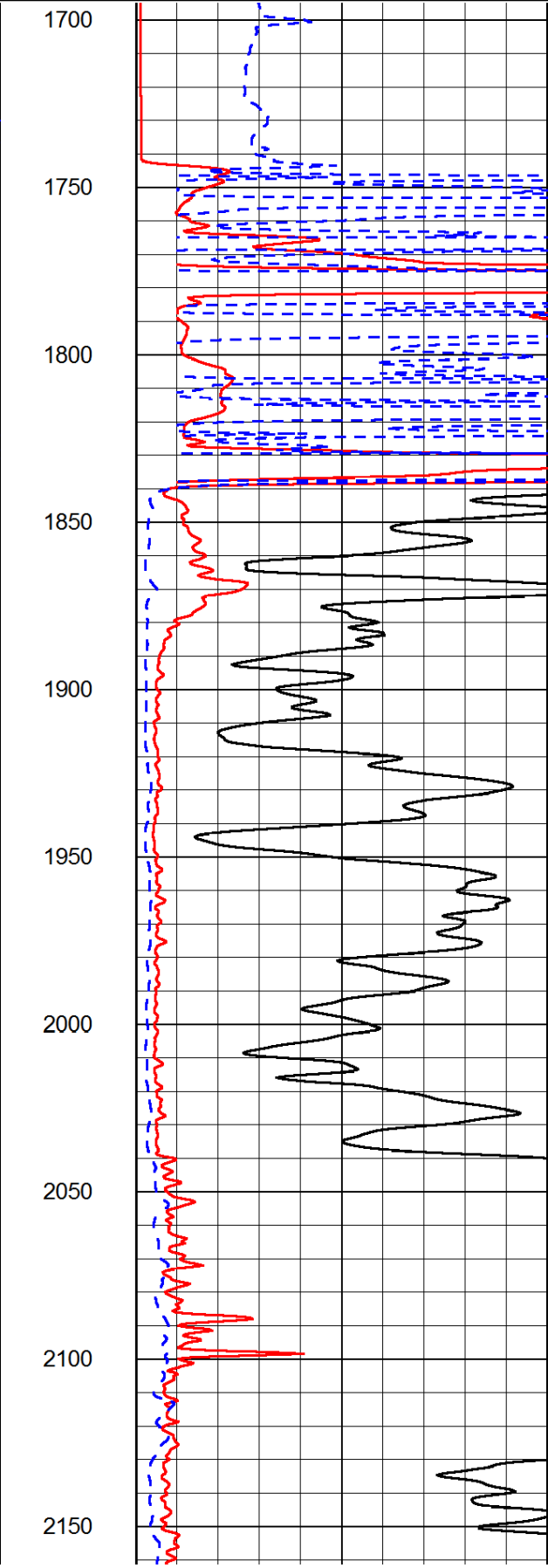
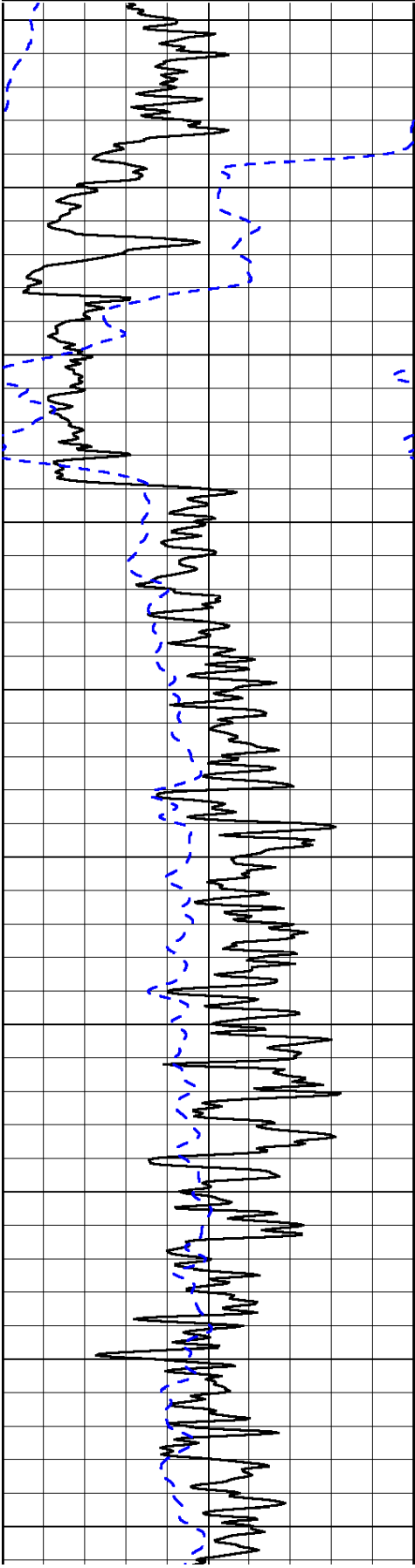
Charted by: Depth in Feet scaled 1:600

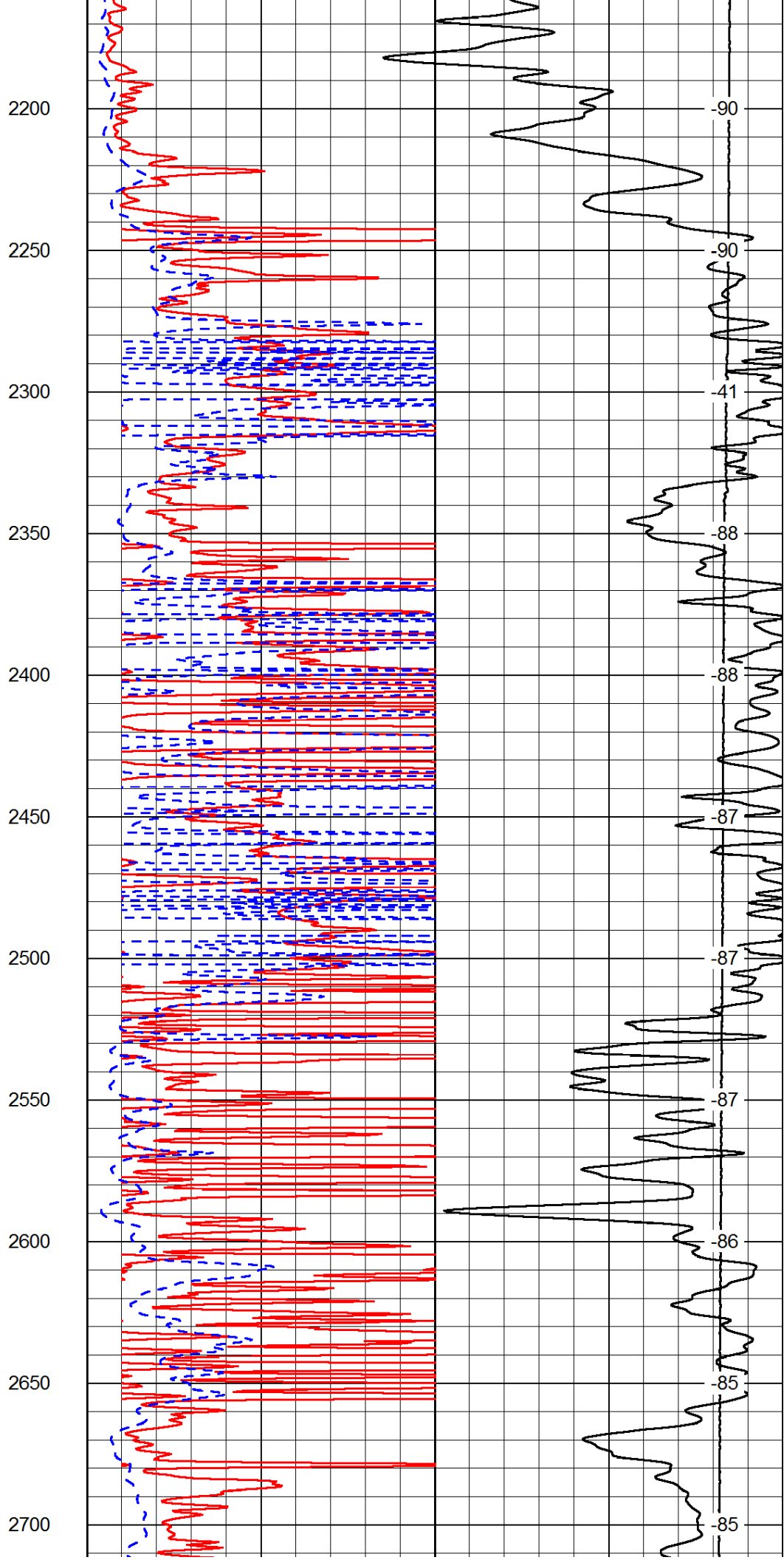
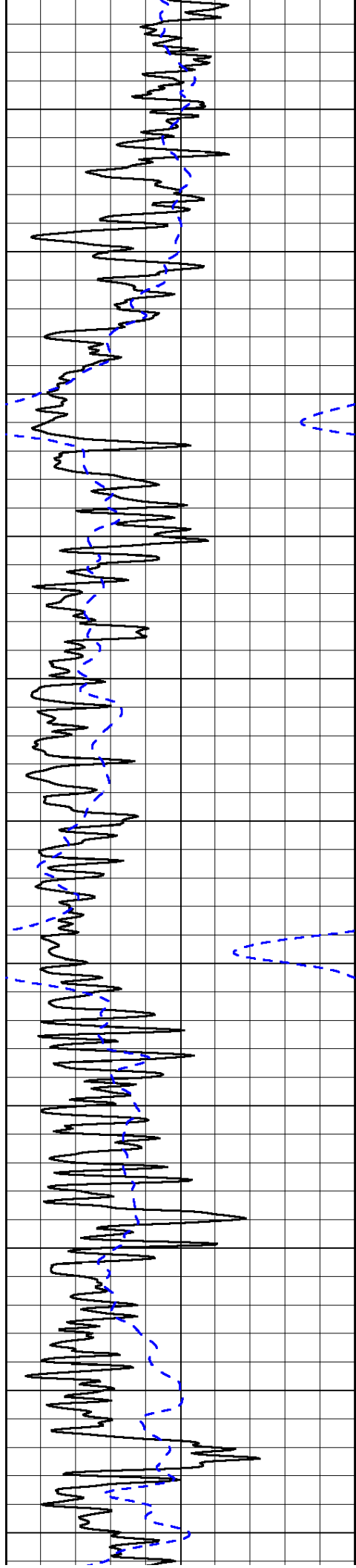
0	Gamma Ray	150
-200	SP (mV)	0

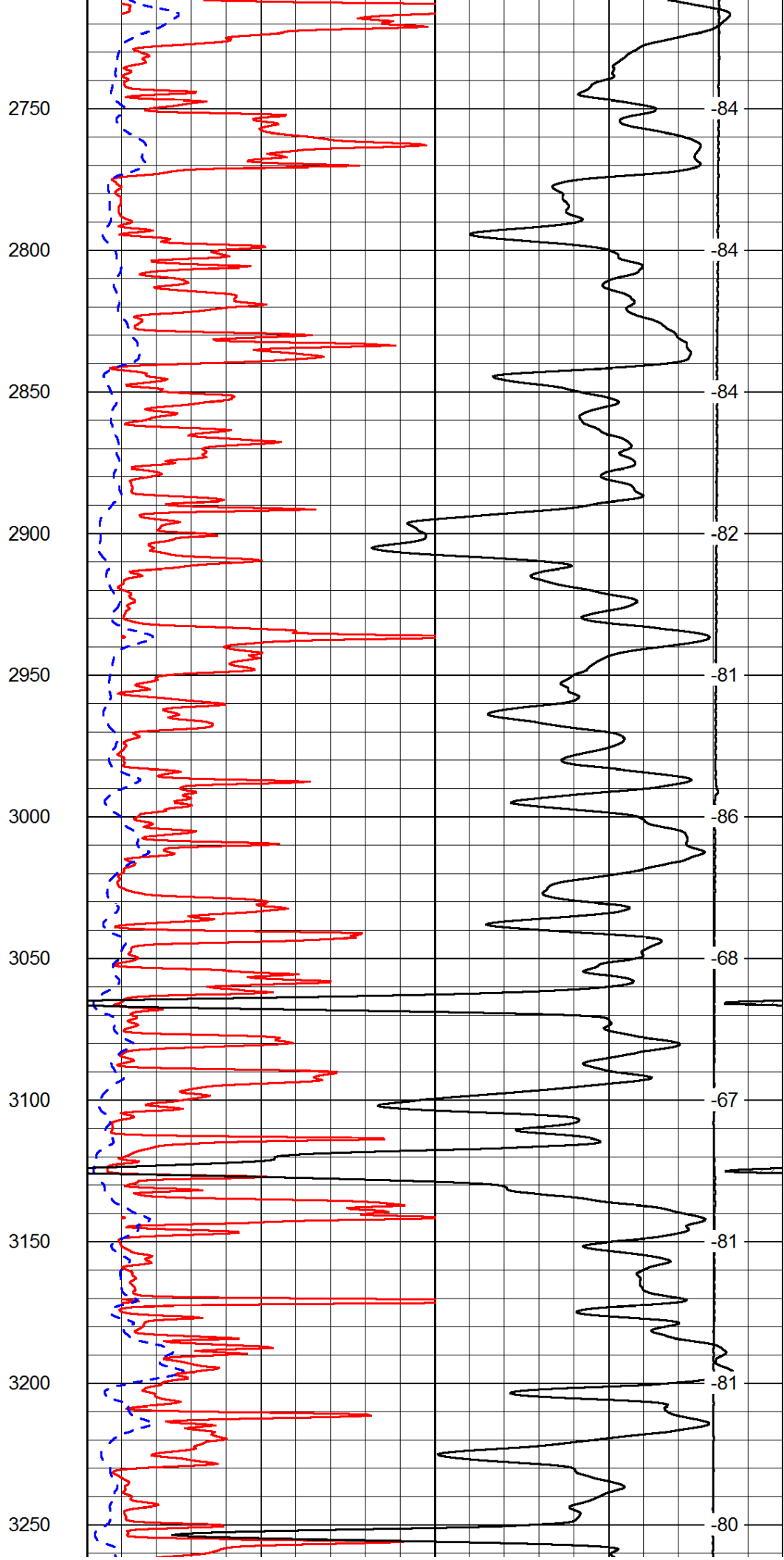
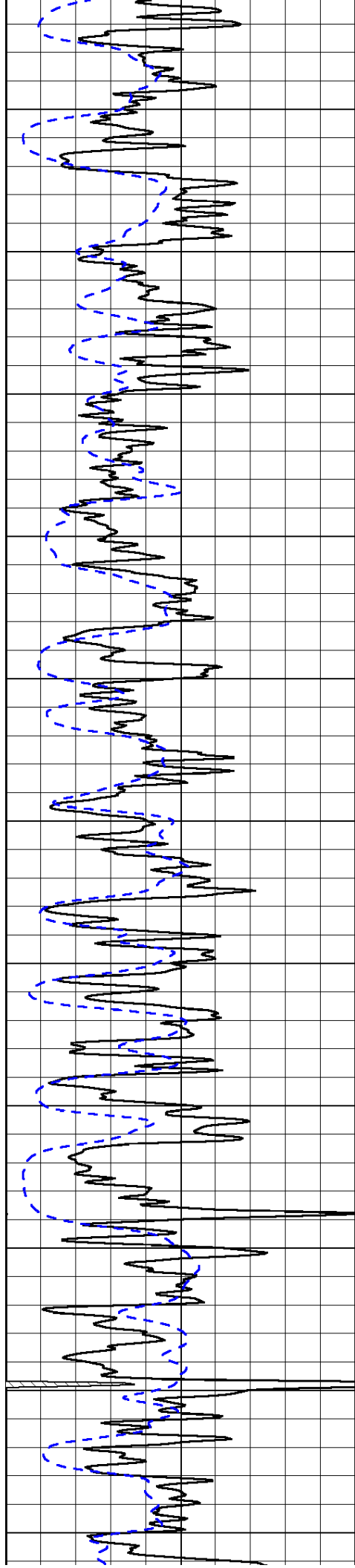
0	Shallow Resistivity	50
0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0

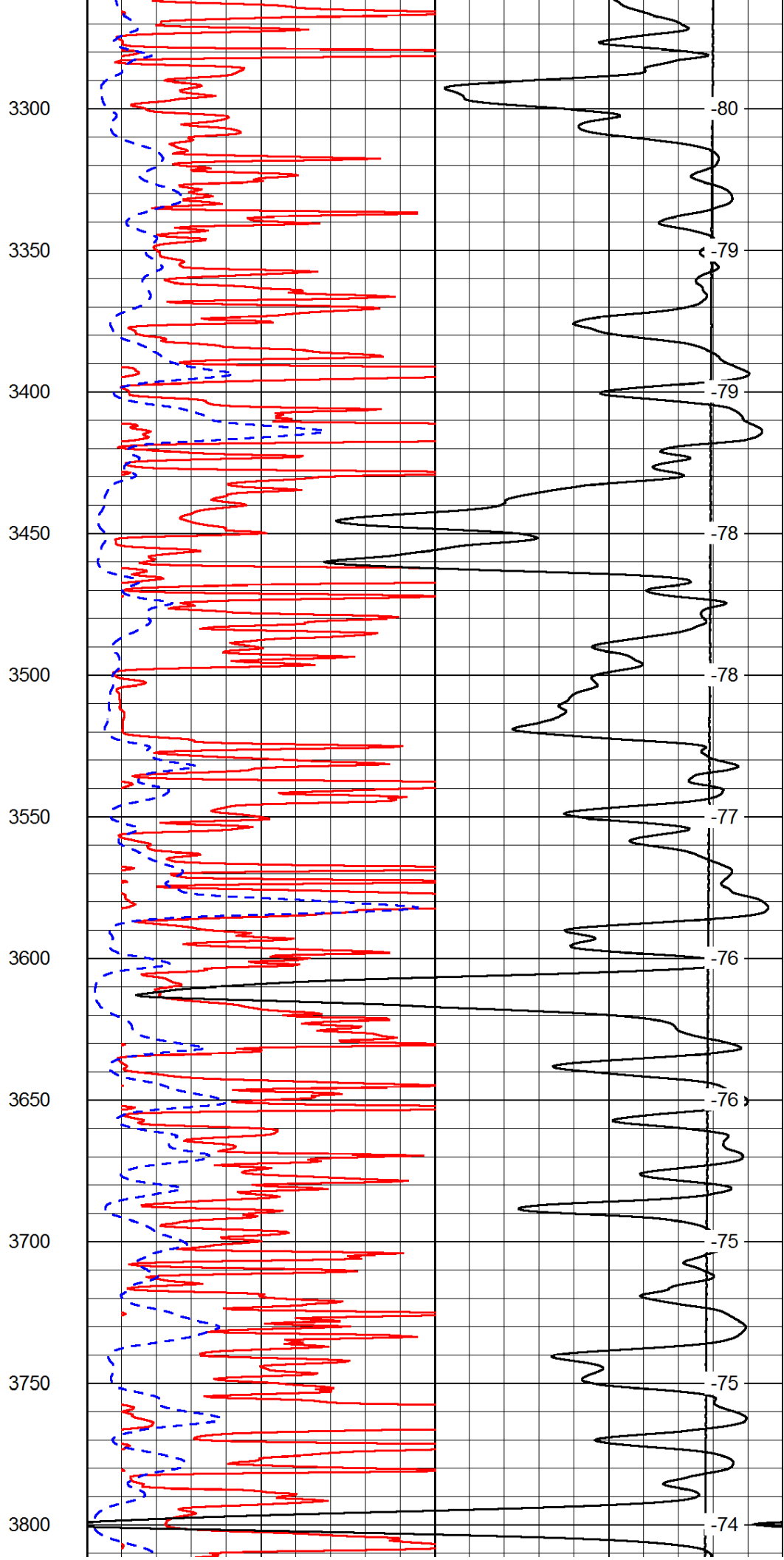
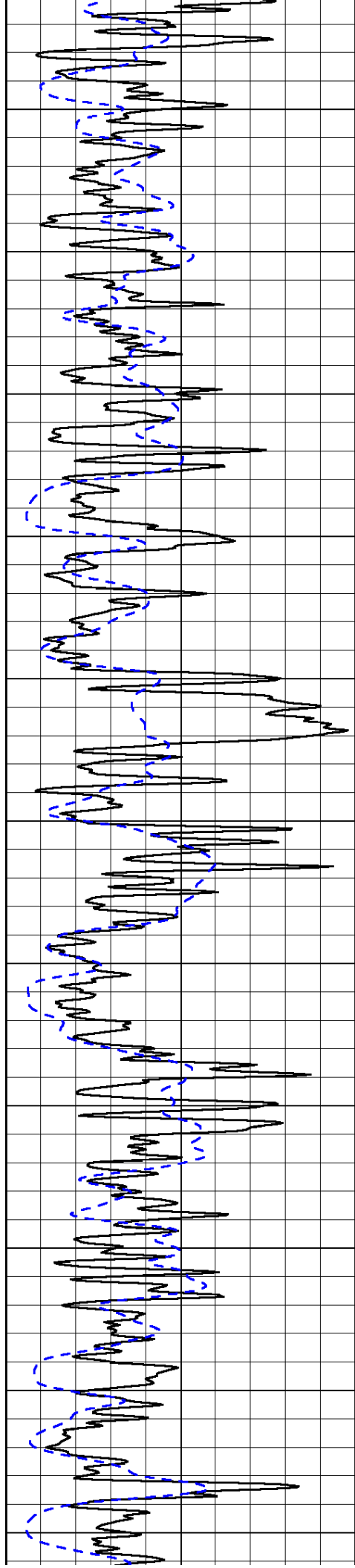
50	Shallow Resistivity	500
50	Deep Resistivity	500

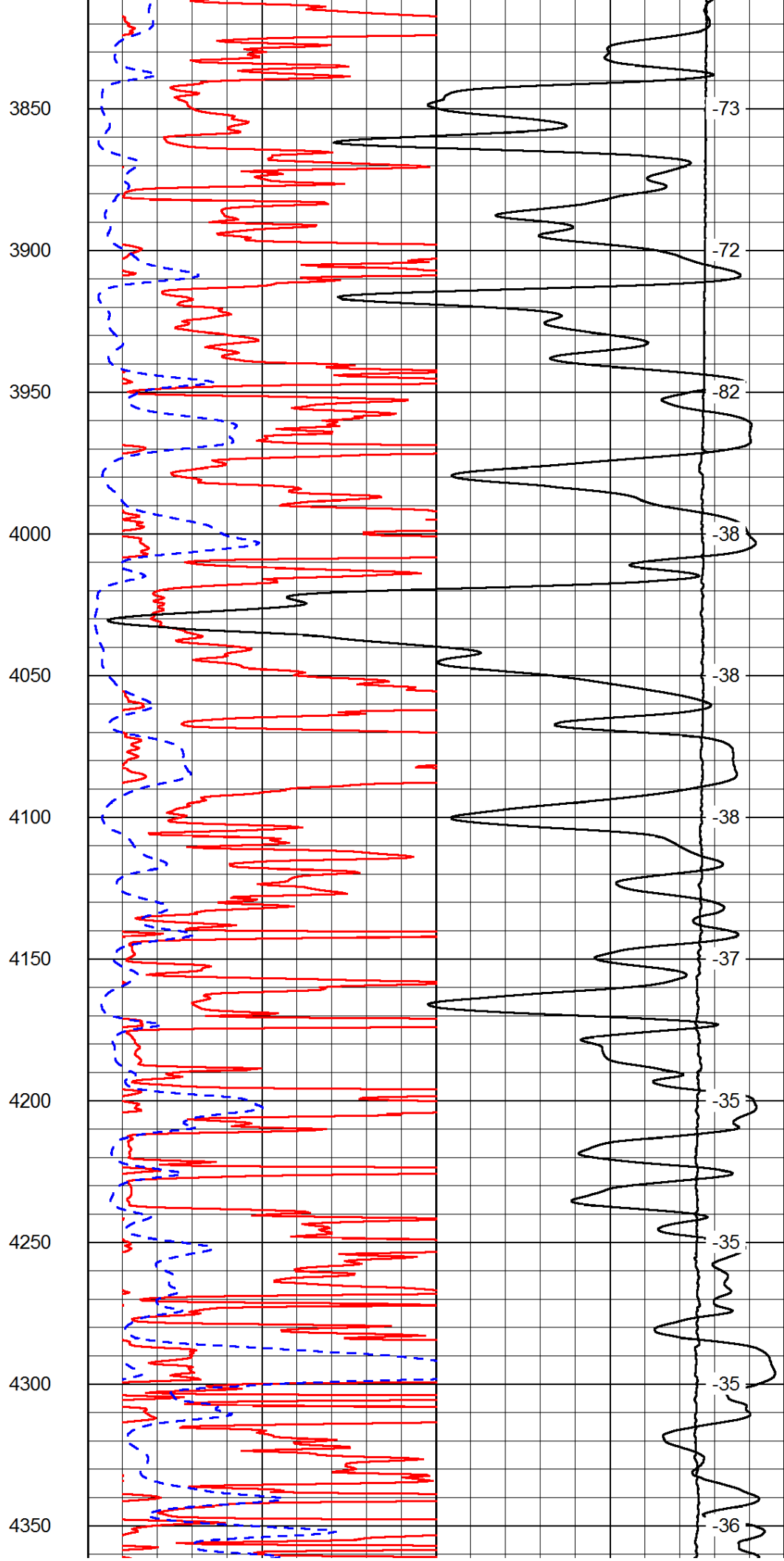
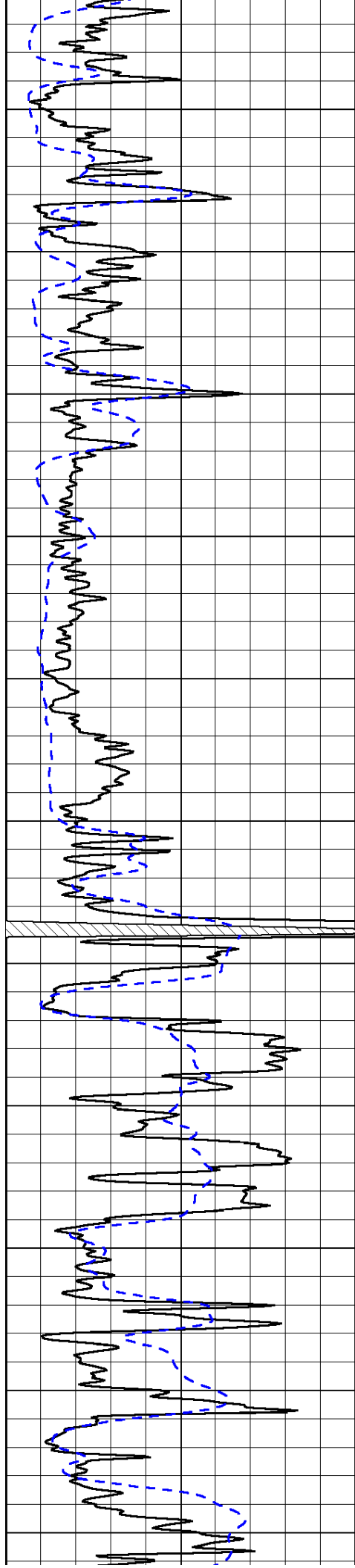
LSPD	0
------	---

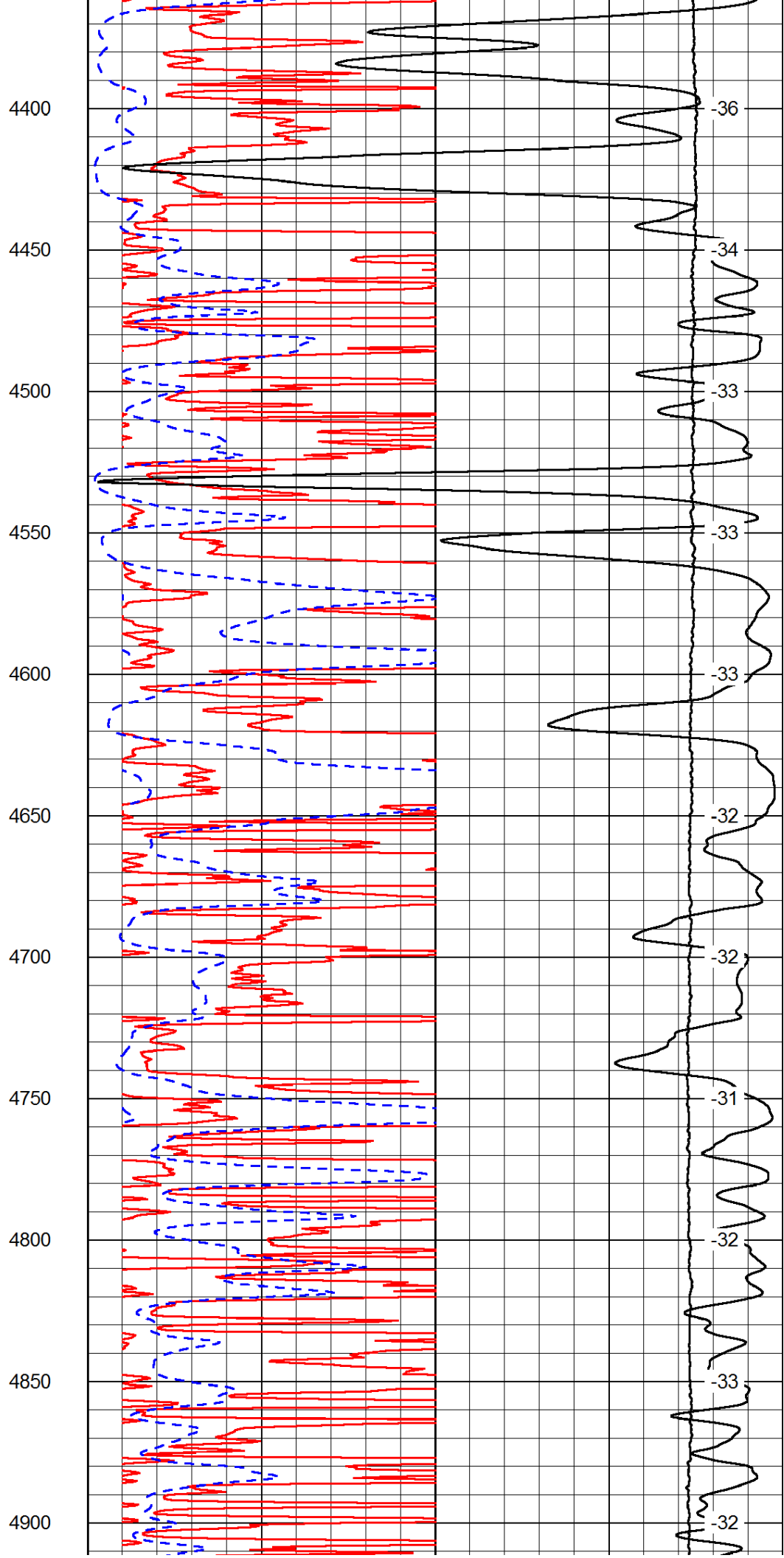
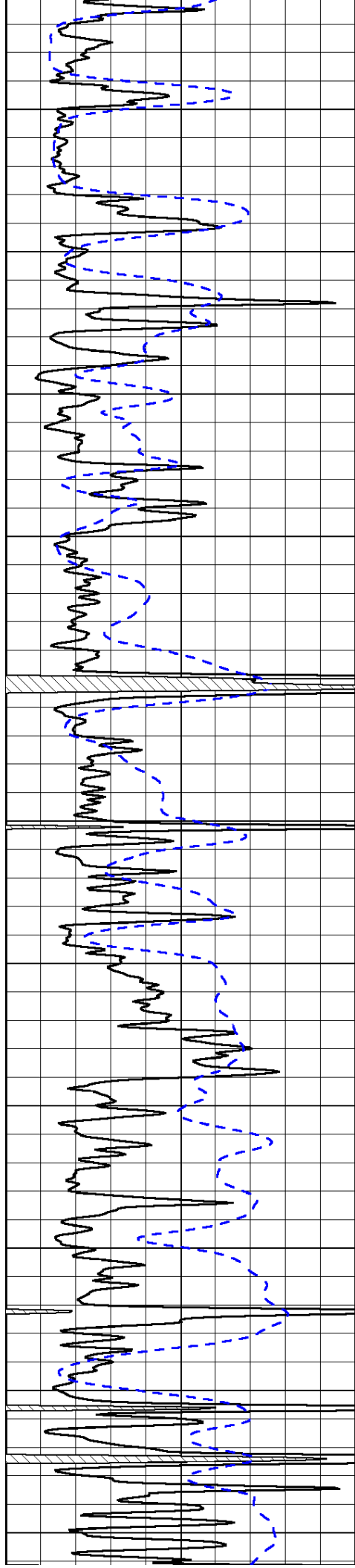


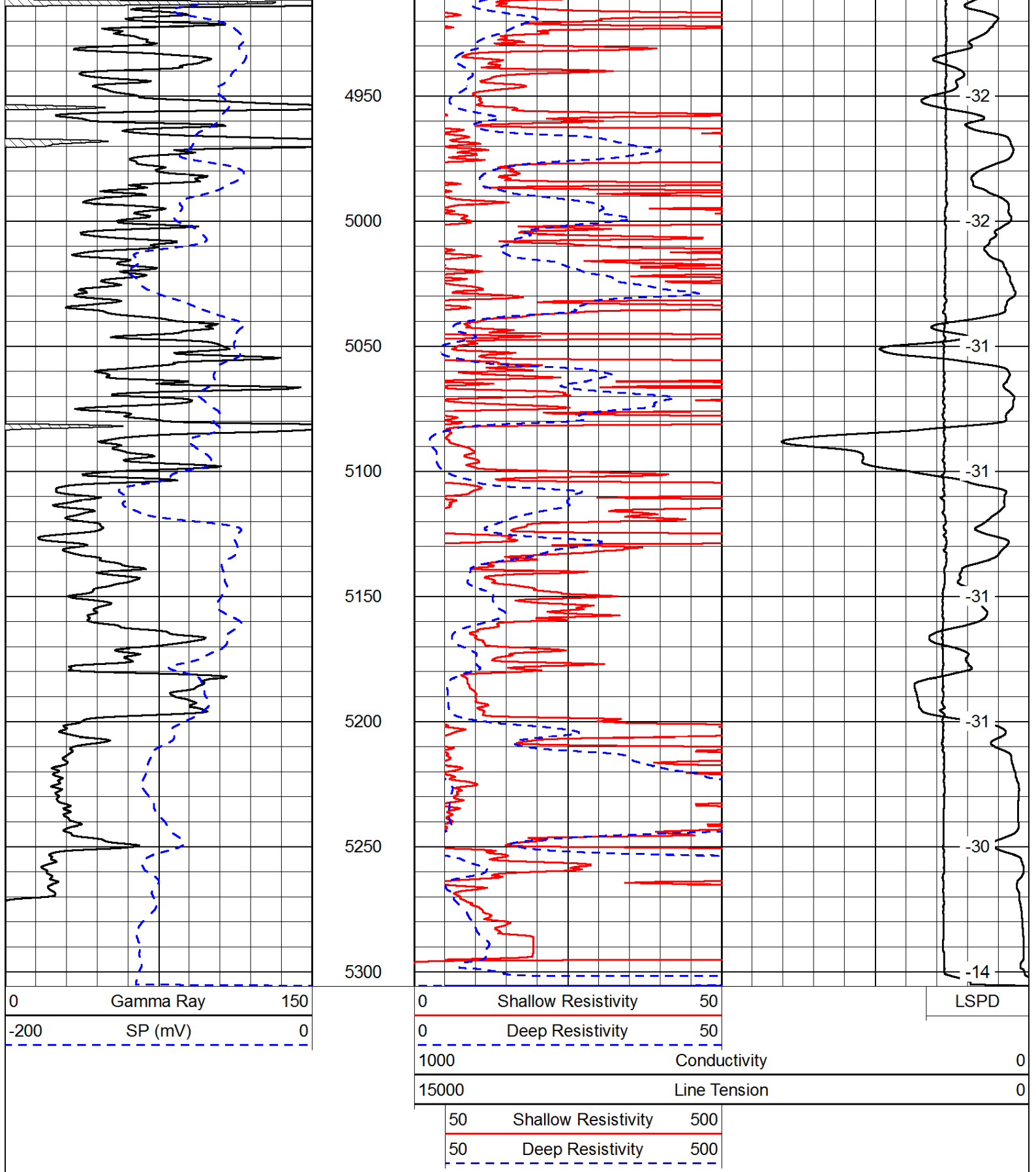




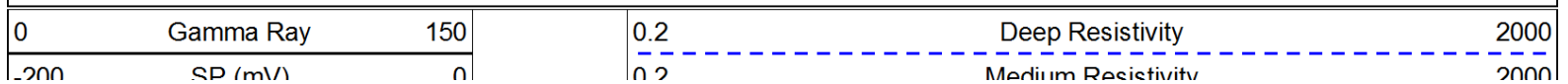








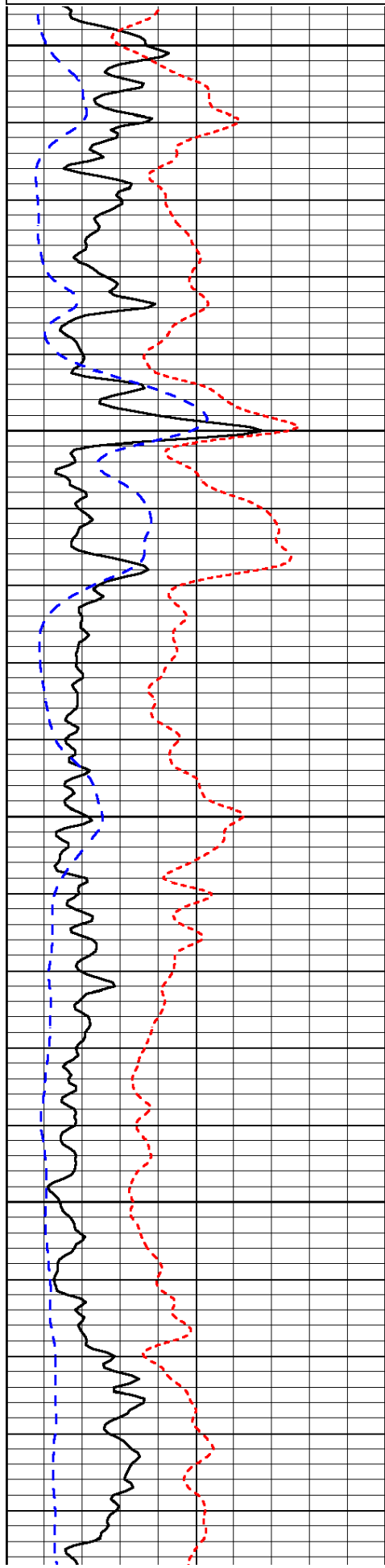
Database File: c:\warrior\data\amwar_shadow #6-17\american_warrior_031814hd.db
 Dataset Pathname: DIL\awstml
 Presentation Format: dil
 Dataset Creation: Wed Mar 19 01:16:39 2014
 Charted by: Depth in Feet scaled 1:240



200	0.2	0
-160	RxoRt	40

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

LSPD

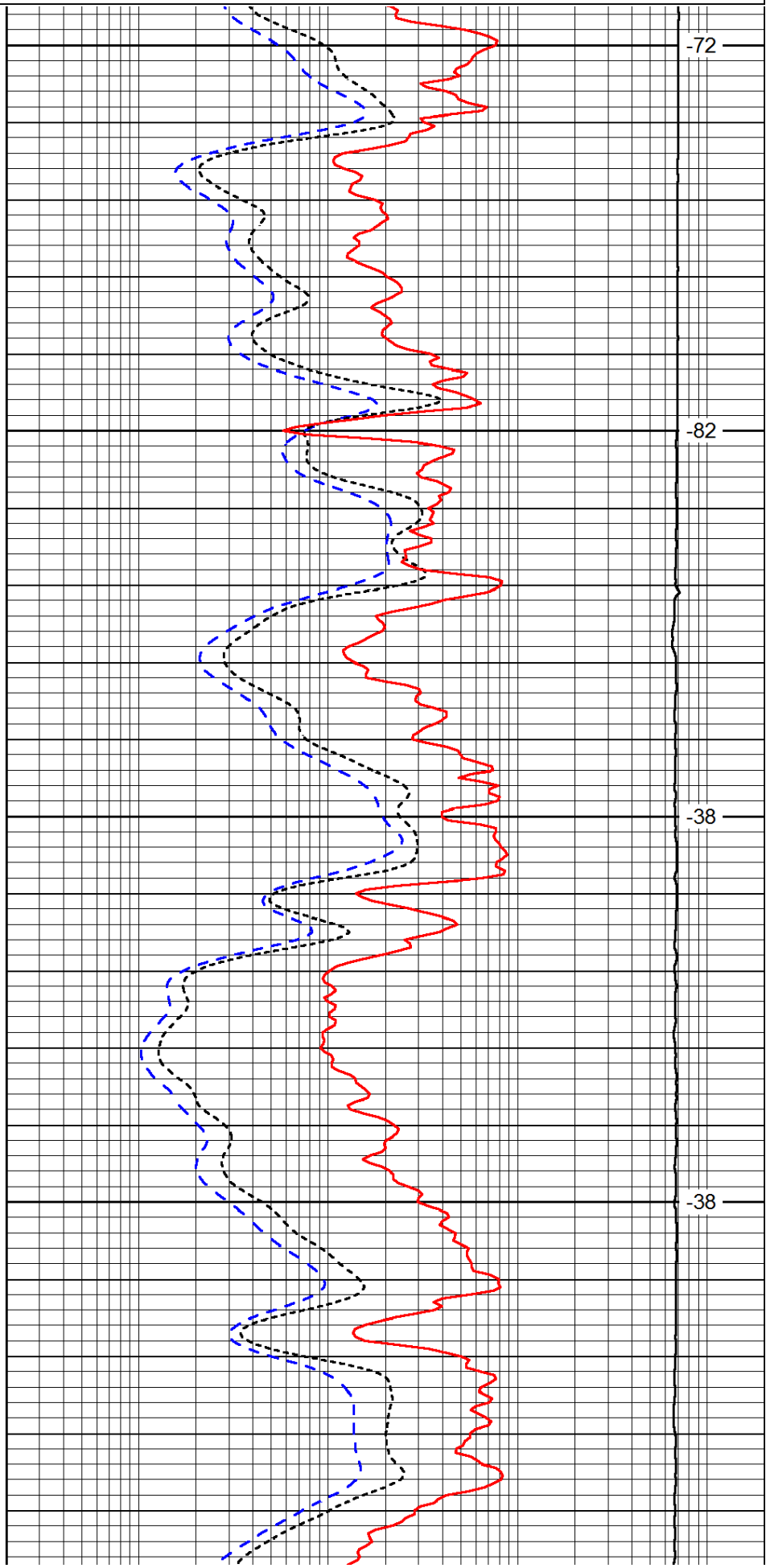


3900

3950

4000

4050

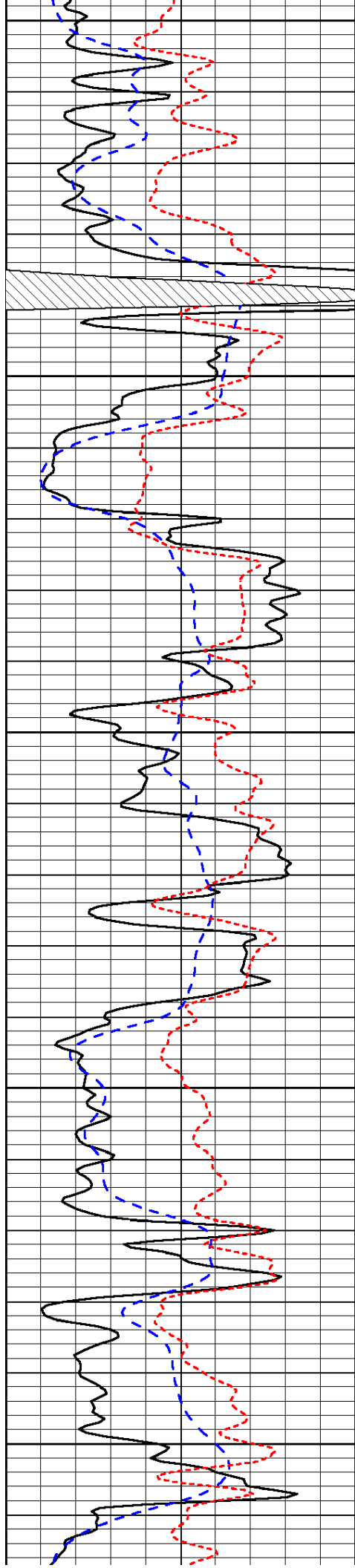


-72

-82

-38

-38



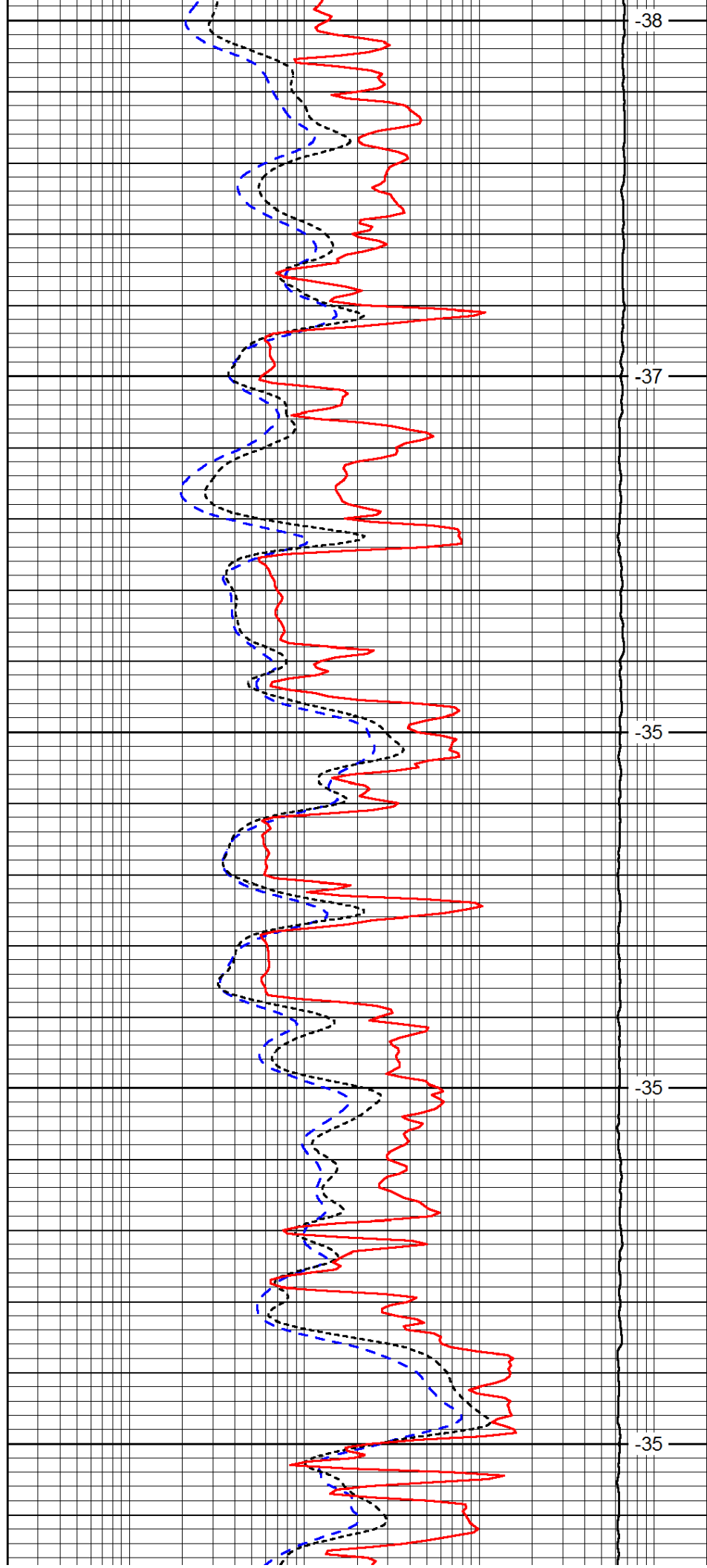
4100

4150

4200

4250

4300



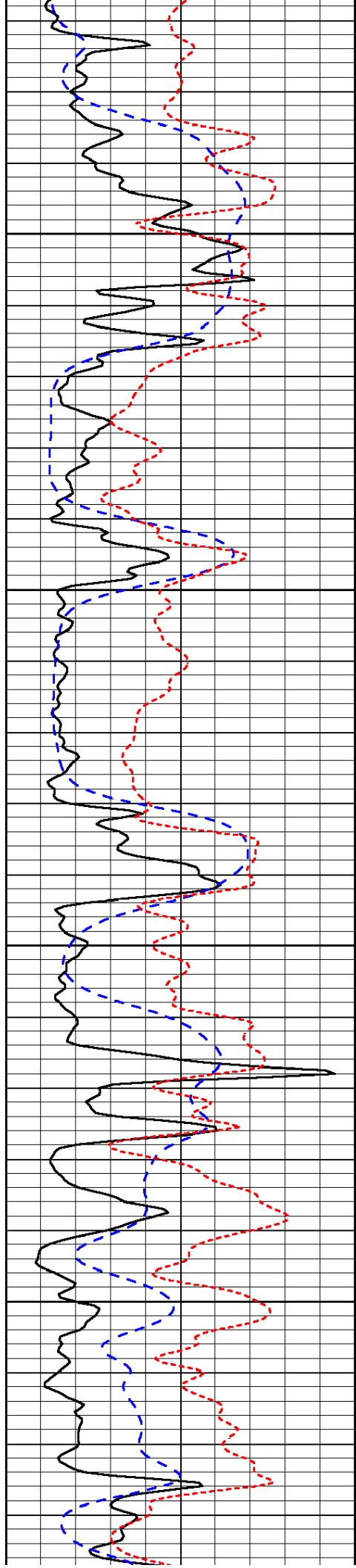
-38

-37

-35

-35

-35

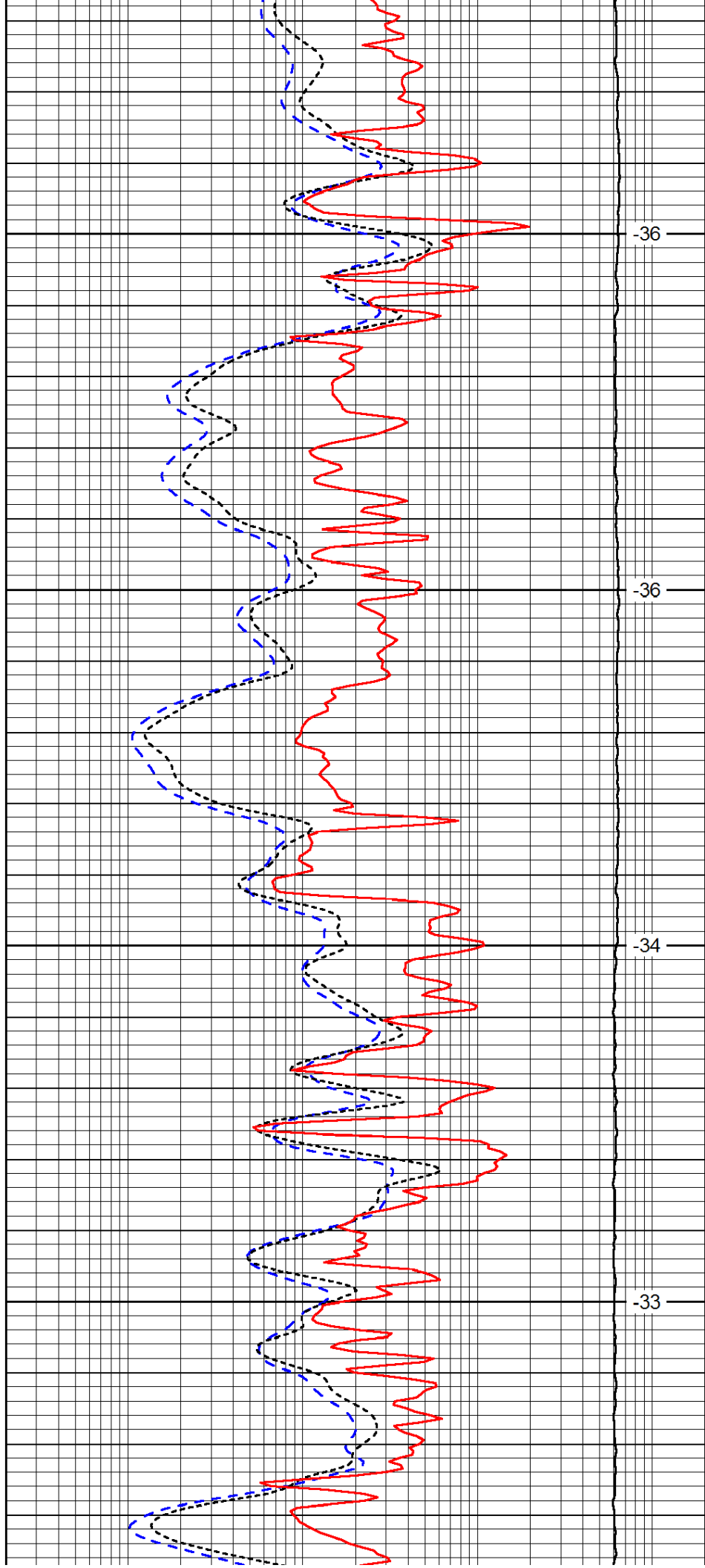


4350

4400

4450

4500

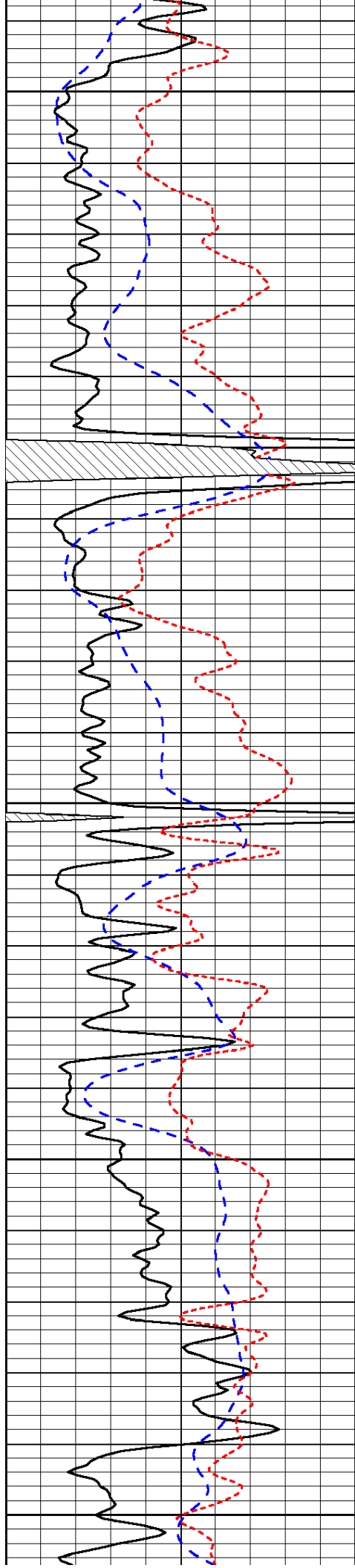


-36

-36

-34

-33



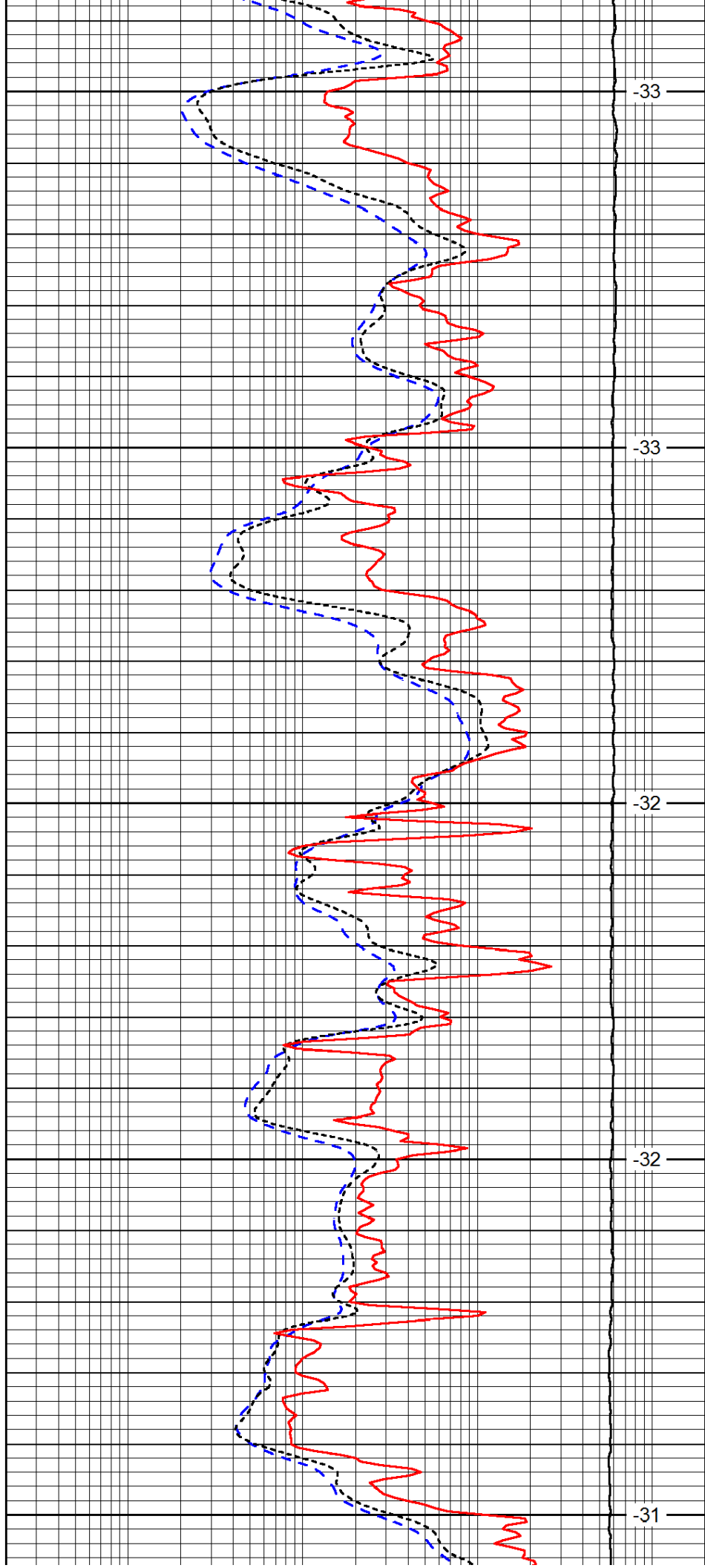
4550

4600

4650

4700

4750



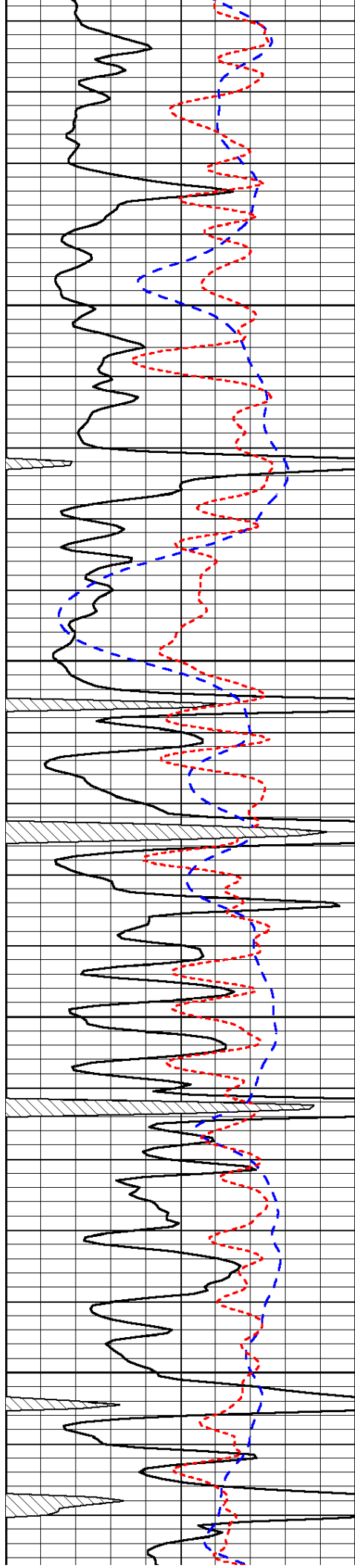
-33

-33

-32

-32

-31

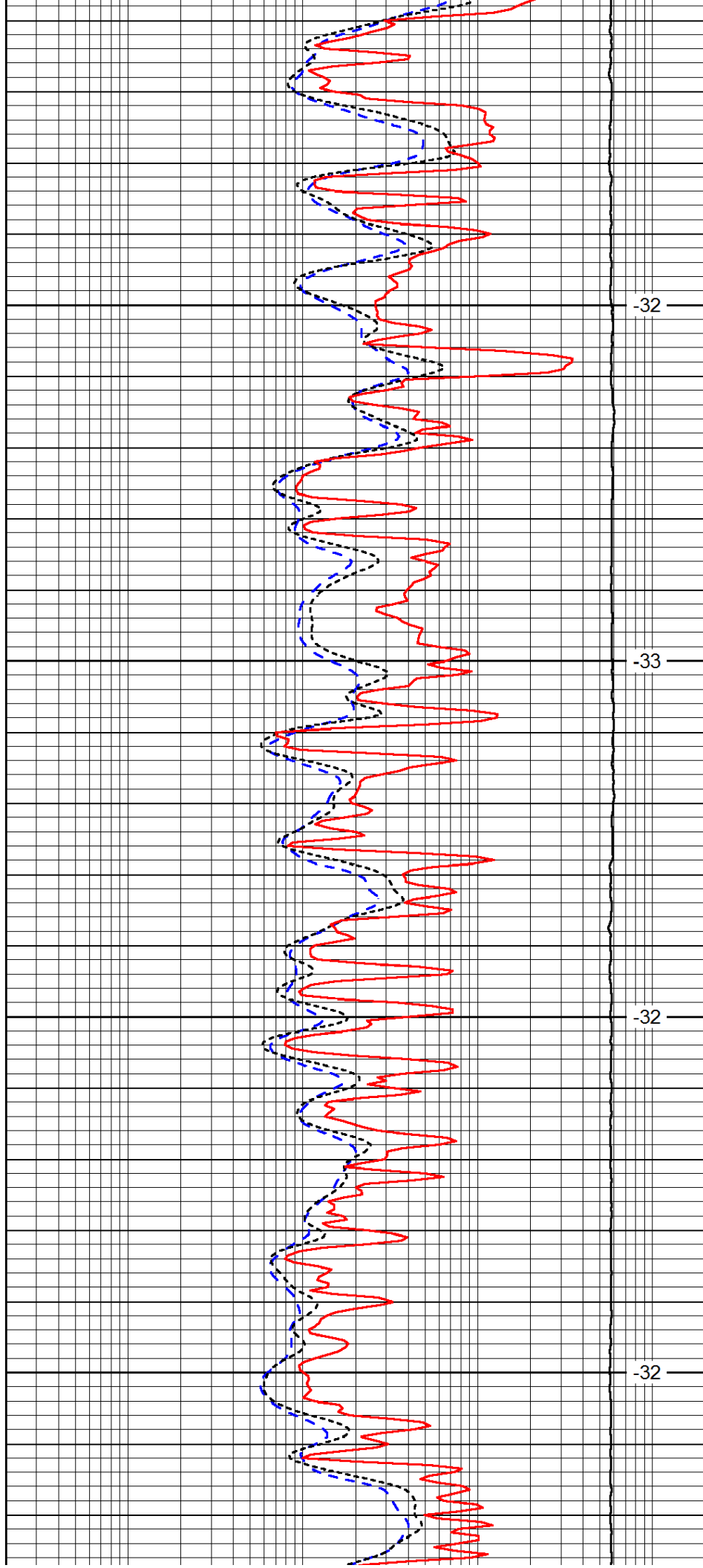


4800

4850

4900

4950

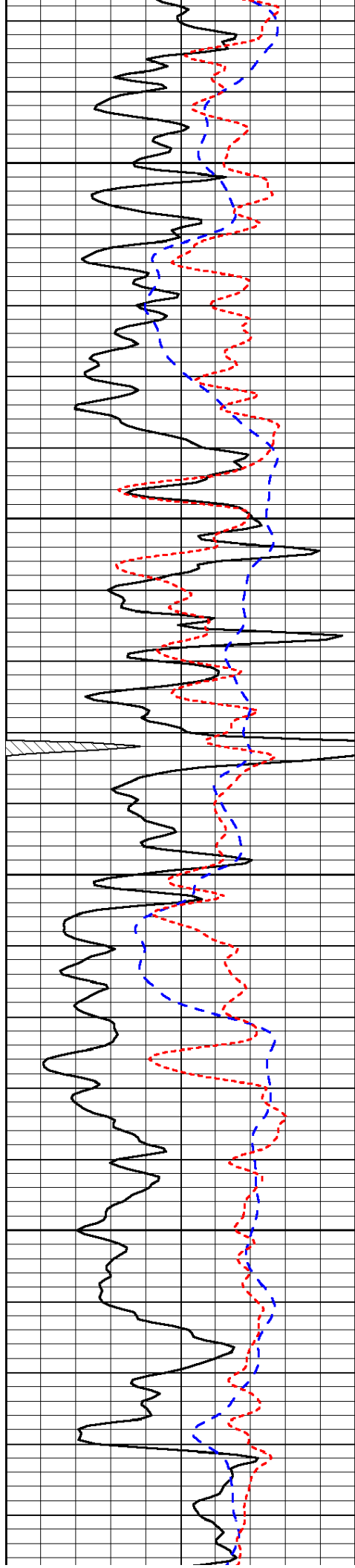


-32

-33

-32

-32

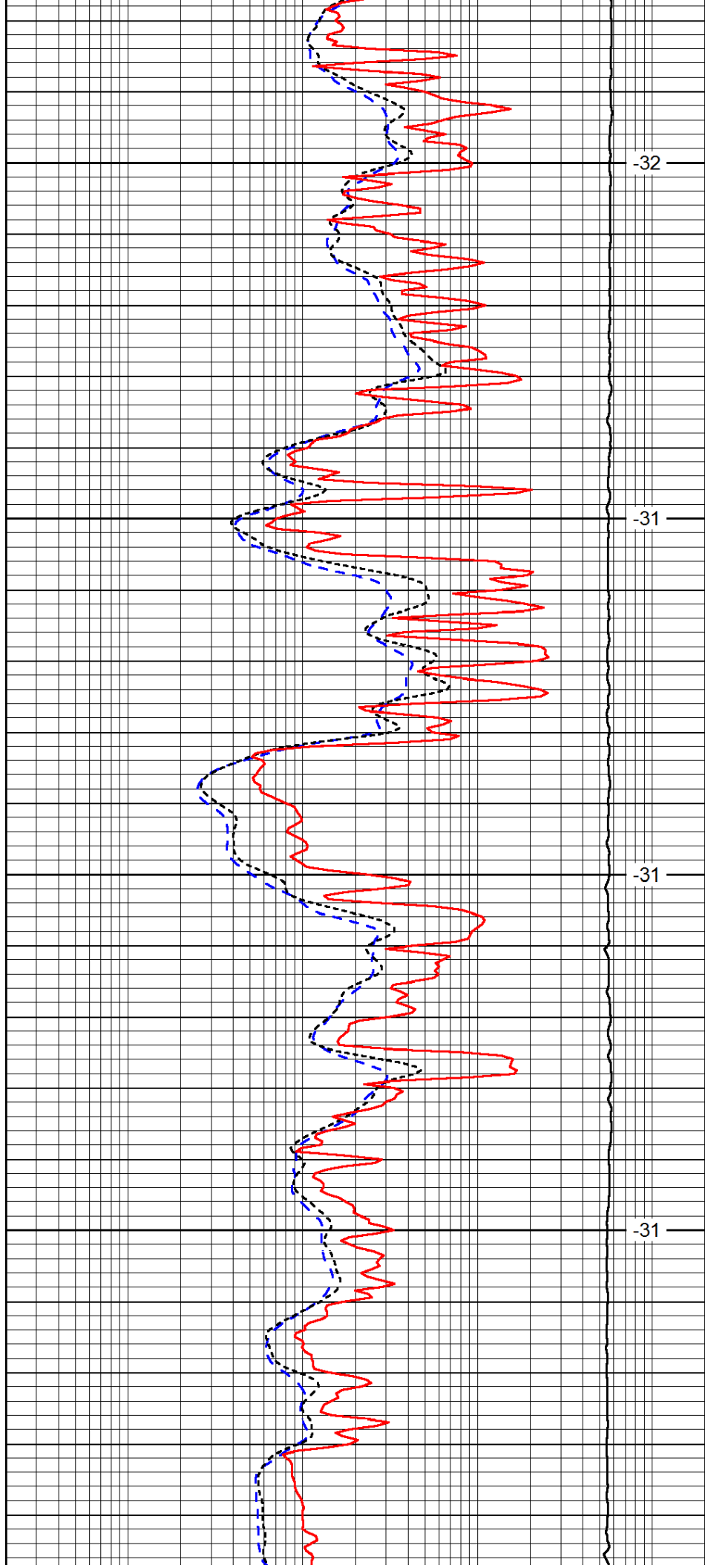


5000

5050

5100

5150

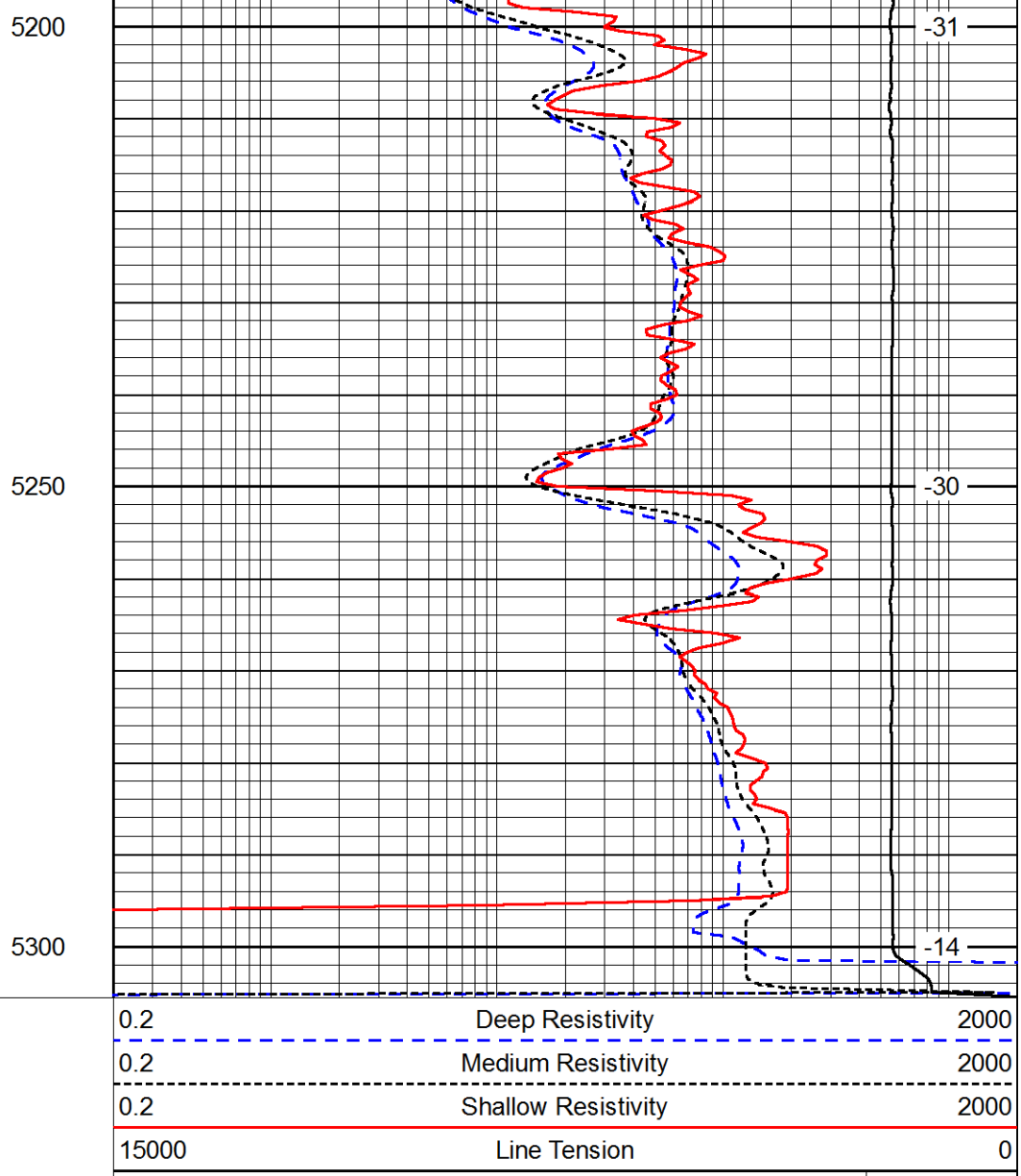
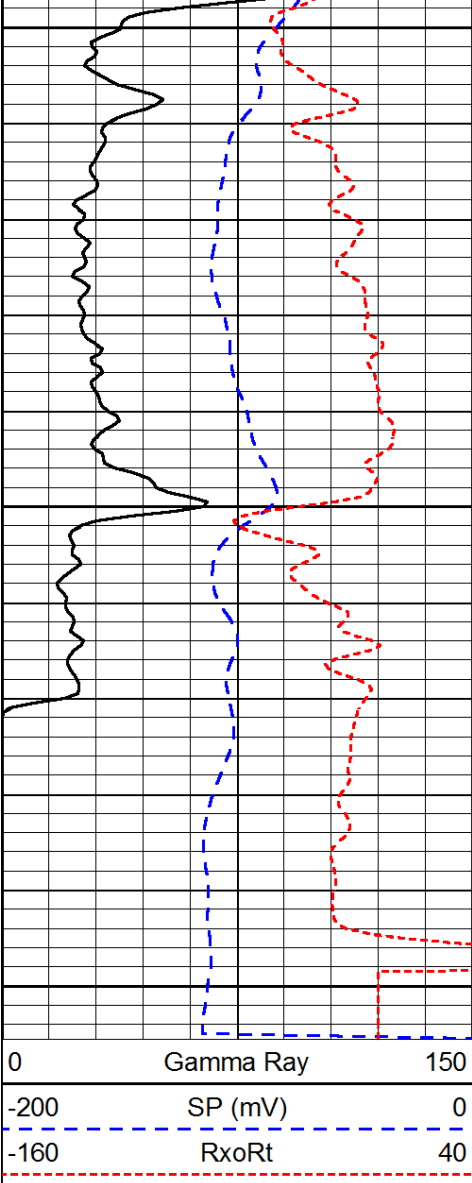


-32

-31

-31

-31



LSPD