



Dual Induction Log

Pioneer Energy Services

API No.

15-063-22,171-00-00

Company Lario Oil & Gas Company
Well Ottley "A" # 4-4
Field Logo Southeast
County Gove State Kansas

Location 1,980' FNL & 660' FEL

Sec: 4 Twp: 13S Rge: 31W

Other Services
CNL/CDL
MEL

Elevation

K.B. 2941
D.F. 2929
G.L. 2929

Permanent Datum Ground Level Elevation 2929
Log Measured From Kelly Bushing 12 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Date 1/12/2014

Run Number One

Depth Driller 4700

Depth Logger 4697

Bottom Logged Interval 4696

Top Log Interval 250

Casing Driller 8.625 @ 262

Casing Logger 262

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 4000

Density / Viscosity 9.2 56

pH / Fluid Loss 9.5 10.4

Source of Sample Flowline

Rm @ Meas. Temp .44 @ 62

Rmf @ Meas. Temp .33 @ 62

Rmc @ Meas. Temp .59 @ 62

Source of Rmf / Rmc Charts

Rm @ BHT .22 @ 123

Operating Rig Time 4 Hours

Max Rec. Temp. F 123

Equipment Number 108

Location Hays

Recorded By J. Long

Witnessed By Macklin Armstrong

<<< 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

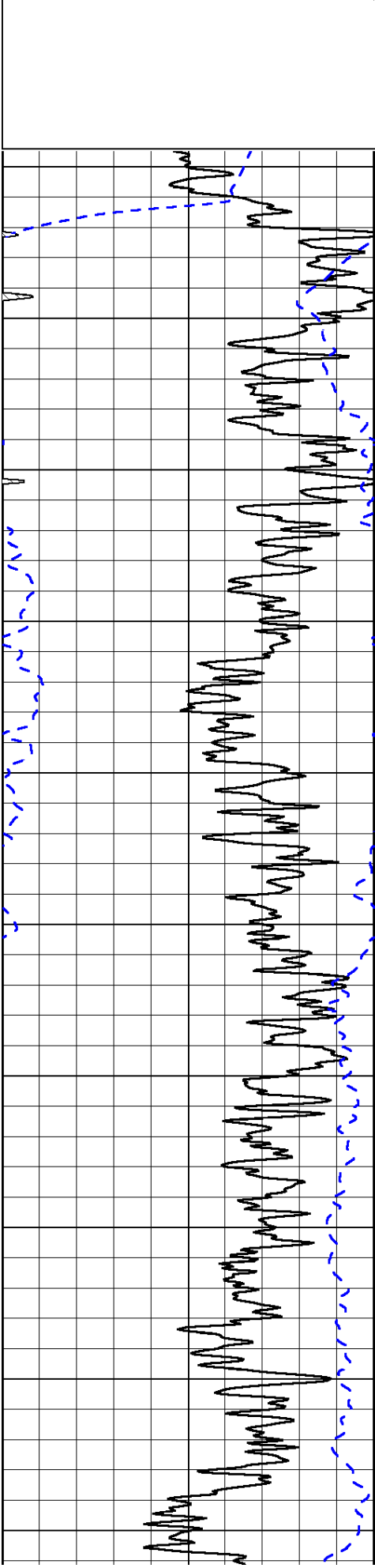
Thank you for using Pioneer Energy Services
www.pioneerres.com
785 625 3858

Oakley, 11 South to Seneca Road, 5 East, 1/2 South, West Into

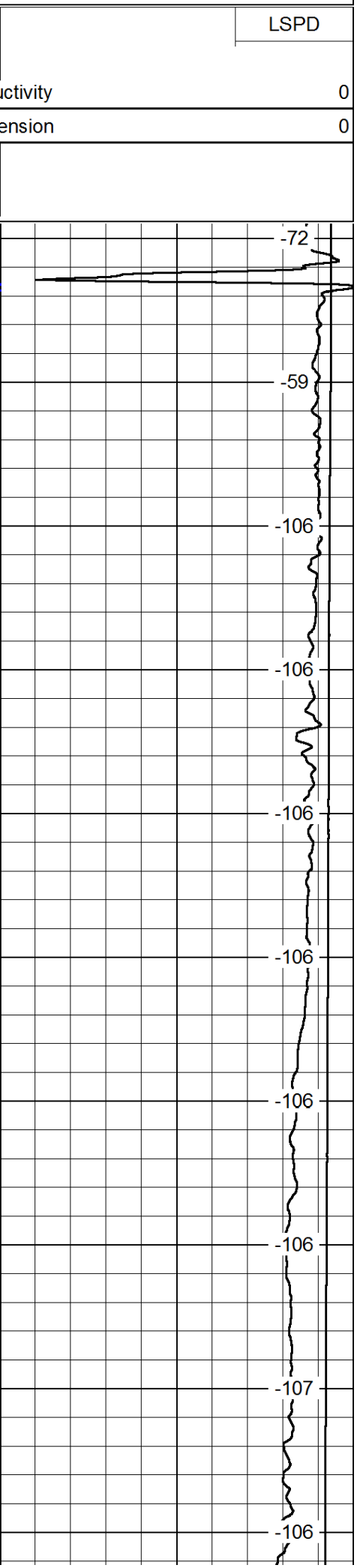
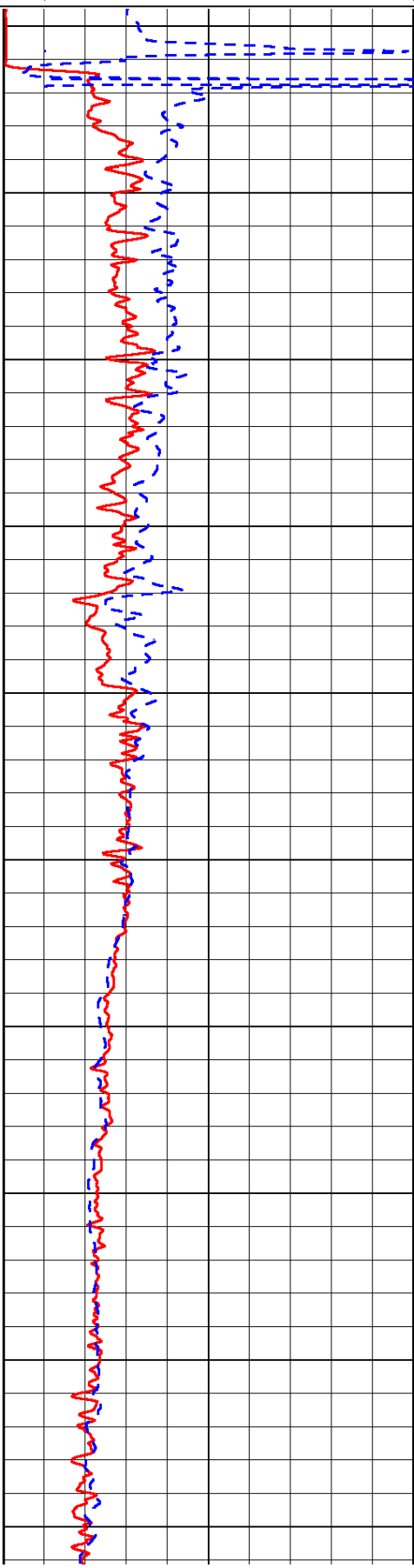
Database File: c:\warrior\data\lario_ottley a # 4-4\lario_ottley_a_4-4hd.db
Dataset Pathname: dil\laristck
Presentation Format: dil2in
Dataset Creation: Sun Jan 12 01:21:03 2014
Charted by: Depth in Feet scaled 1:600

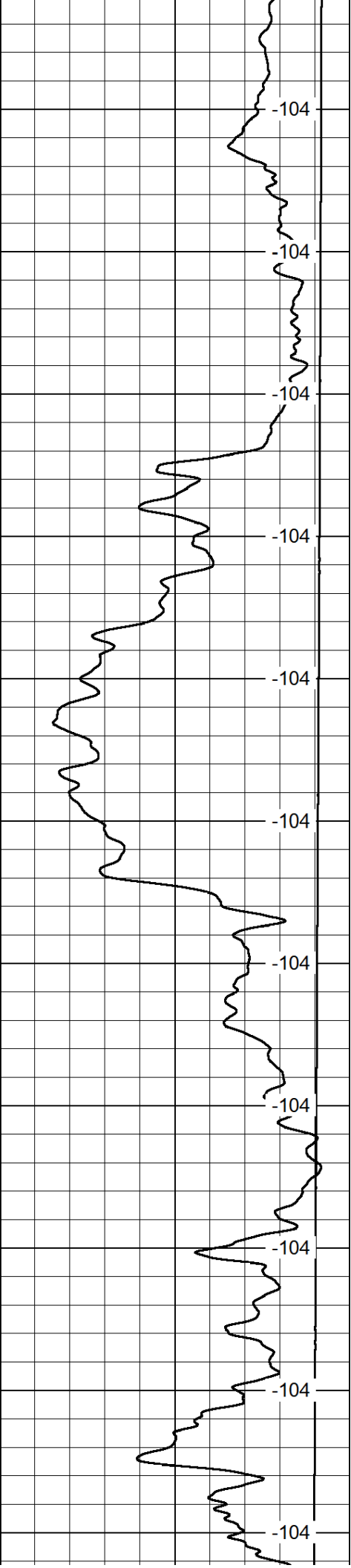
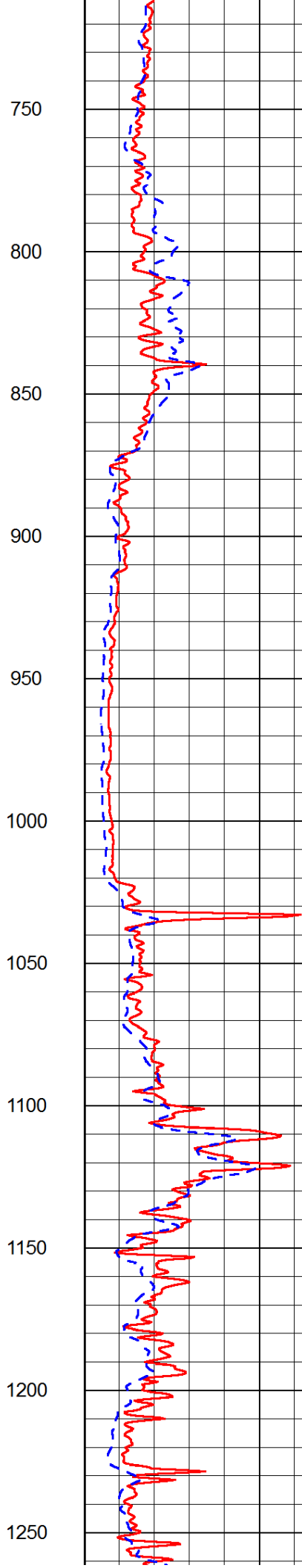
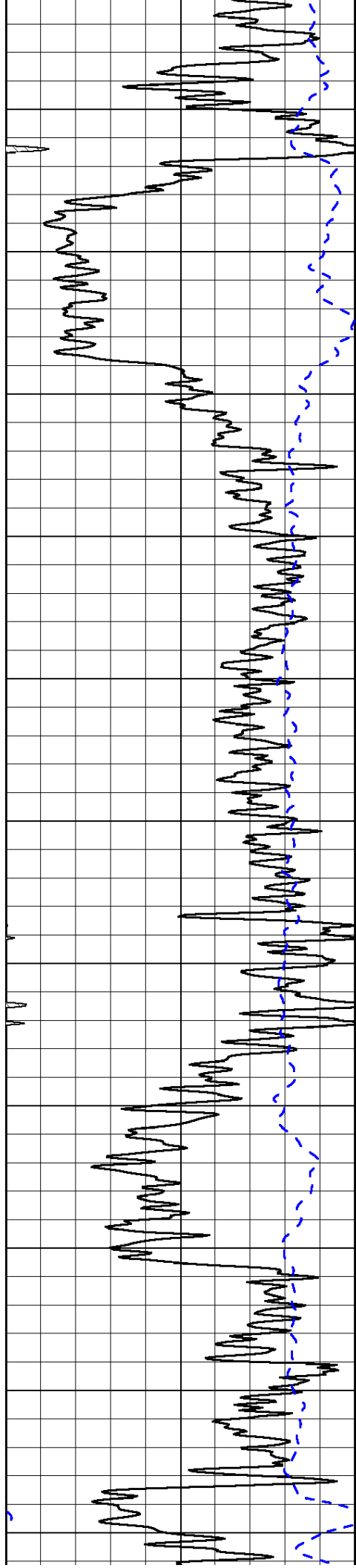
Charted by: Depth in Feet scaled 1:500

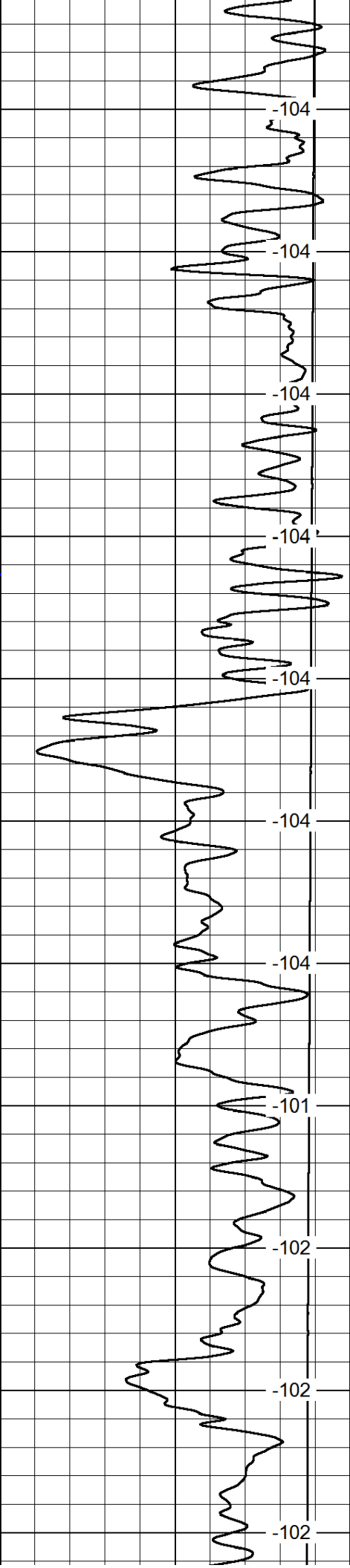
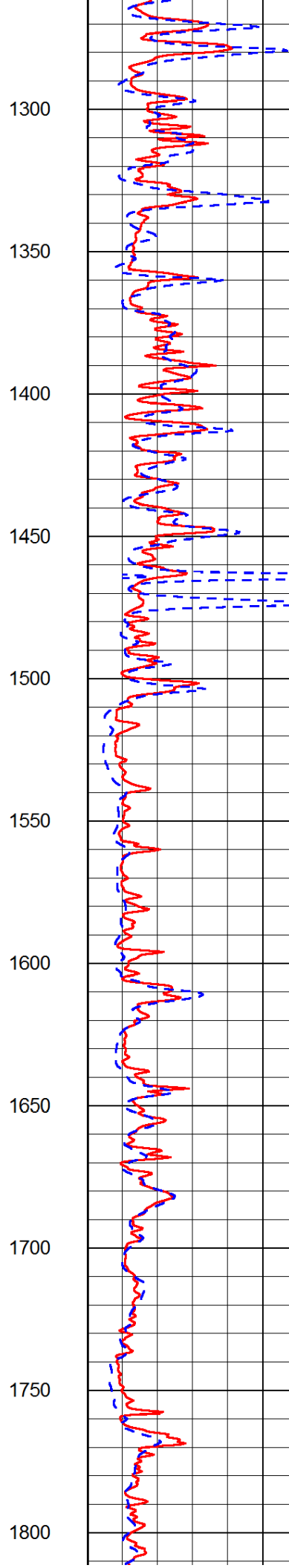
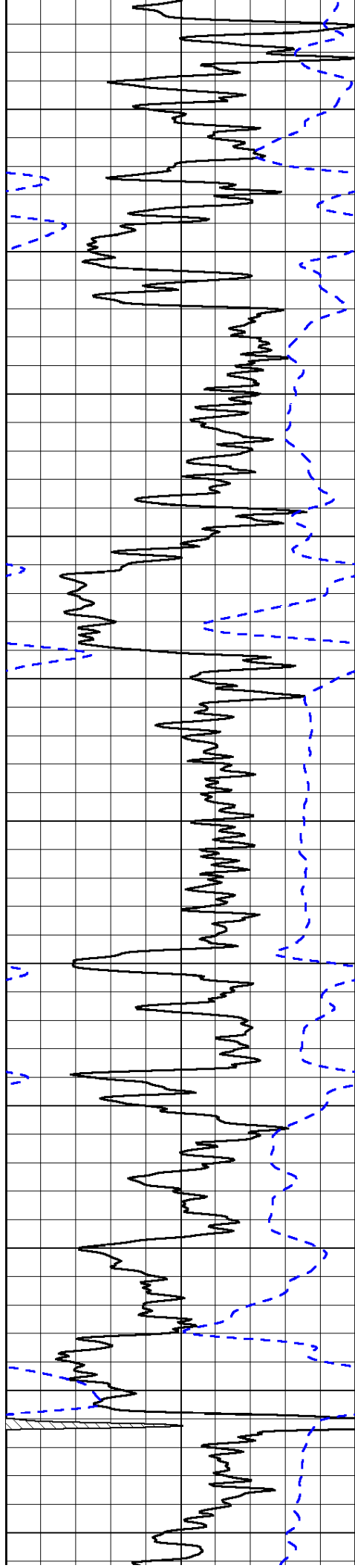
0	Gamma Ray	150
-200	SP (mV)	0

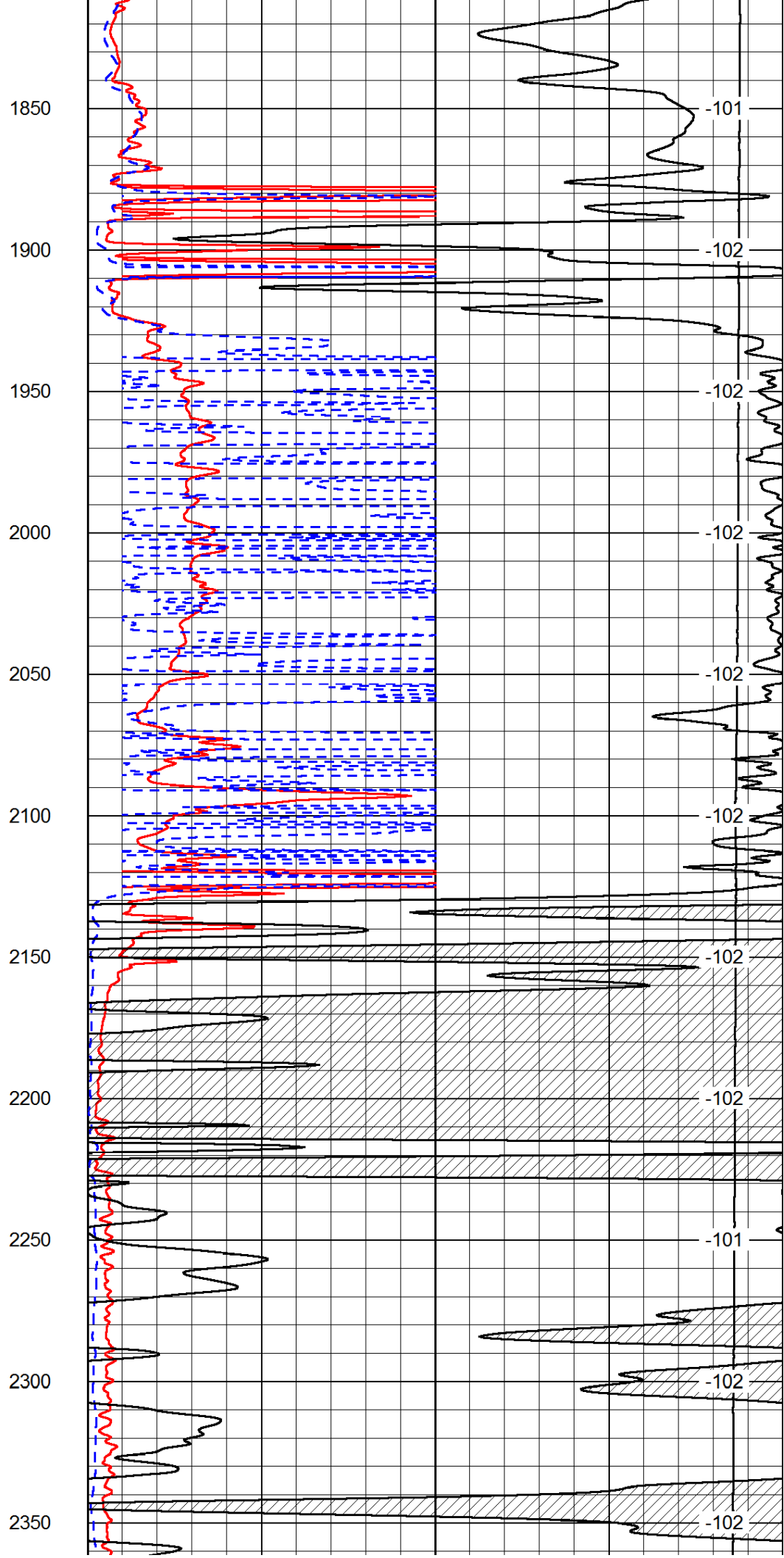
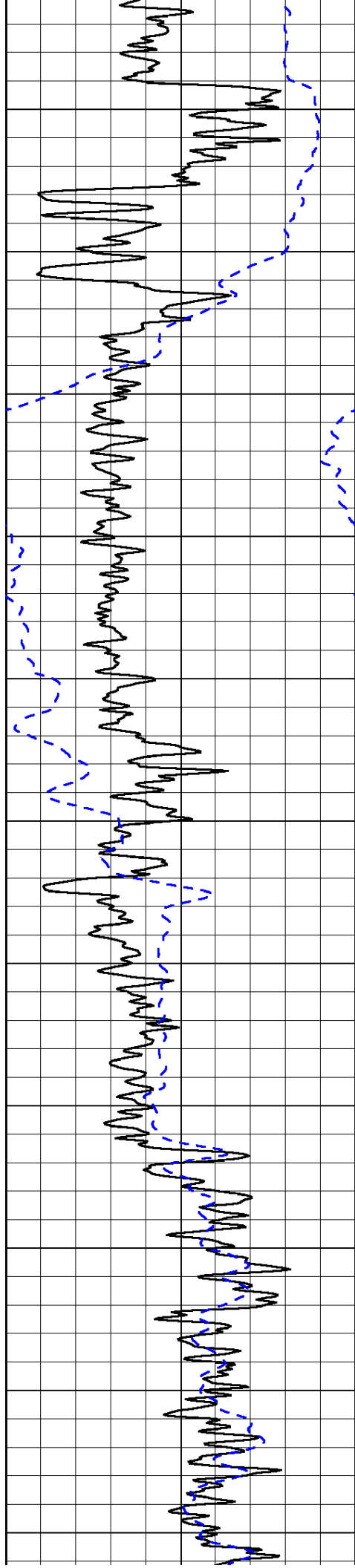


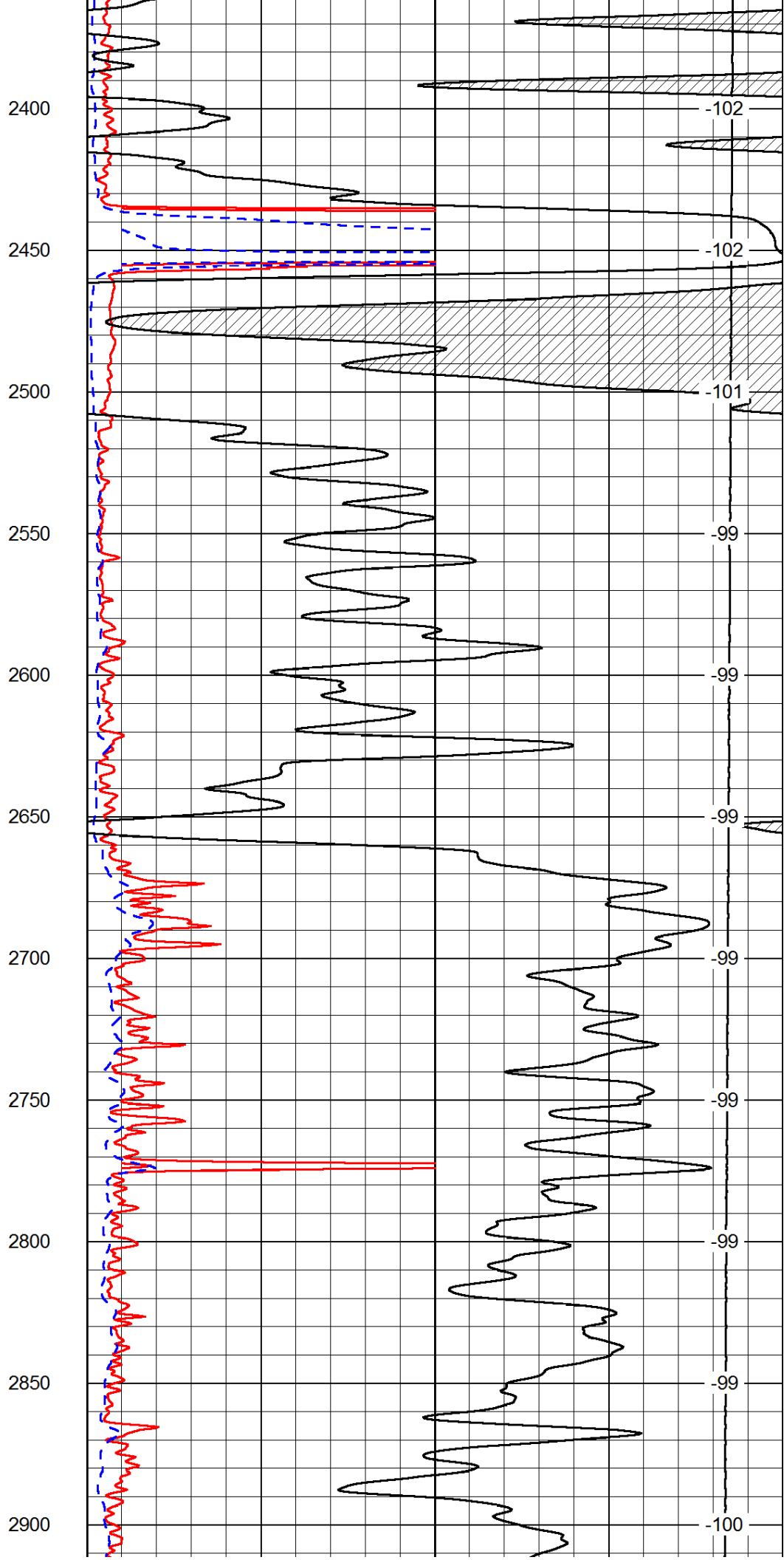
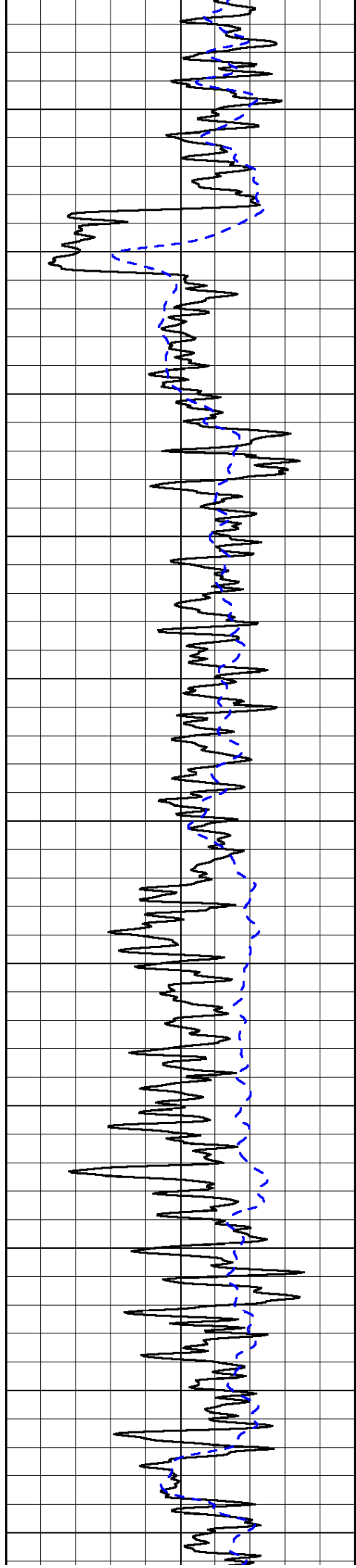
0	Shallow Resistivity	50
0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

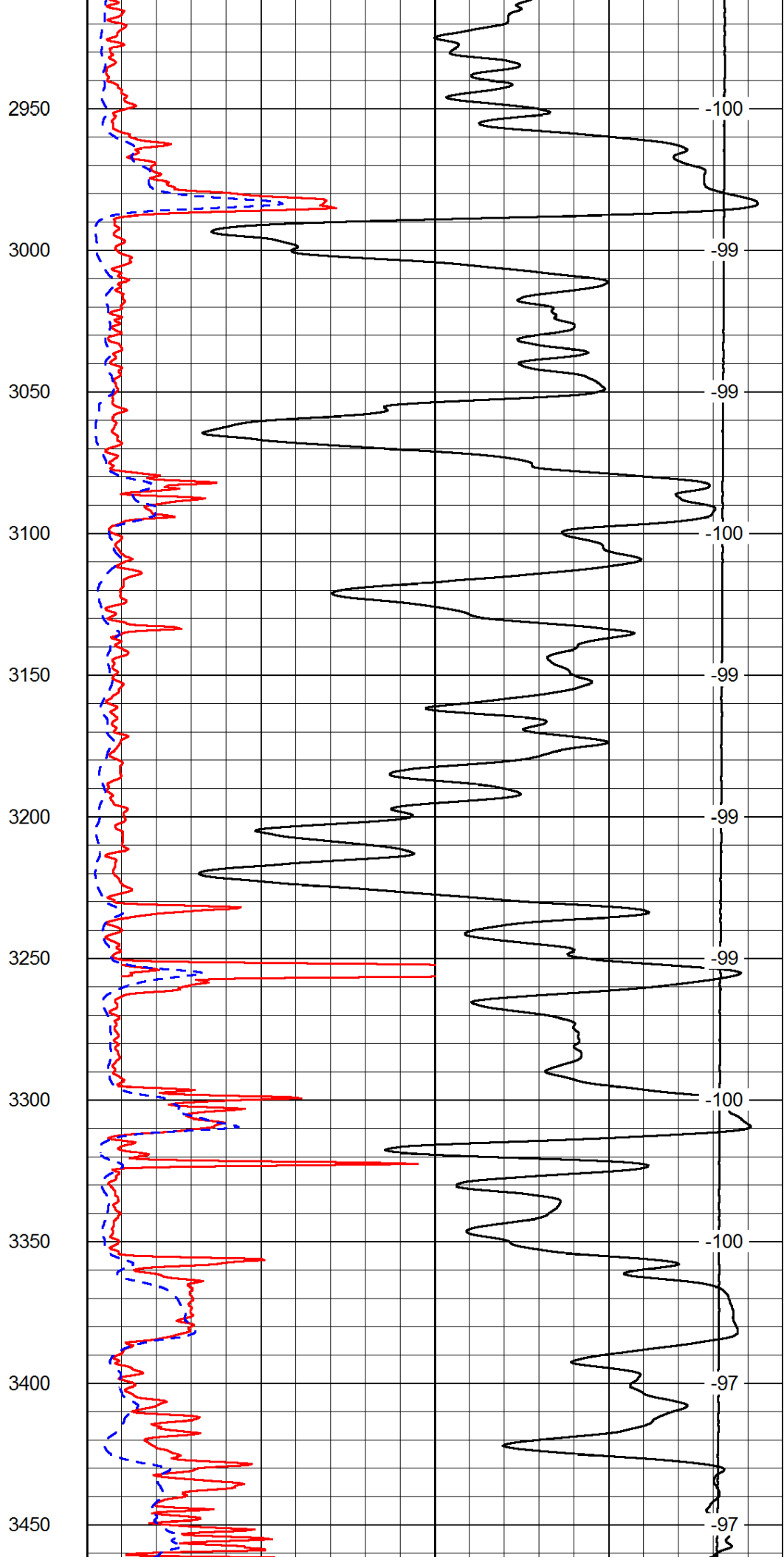
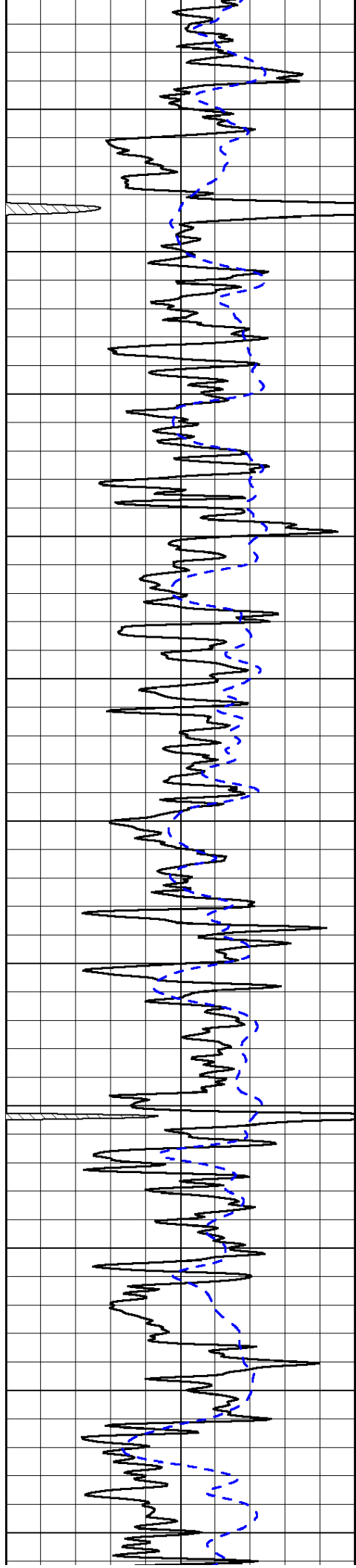


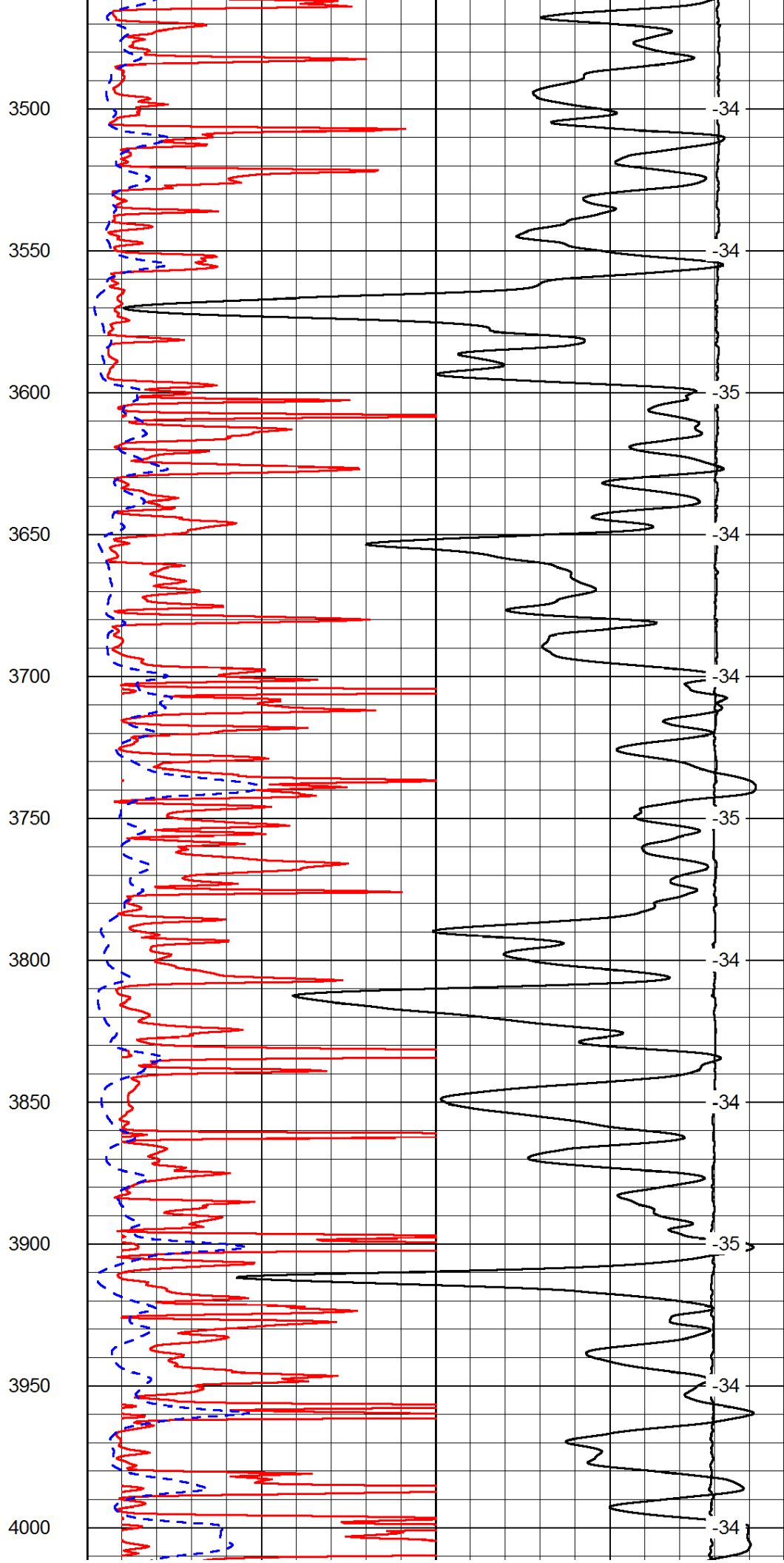
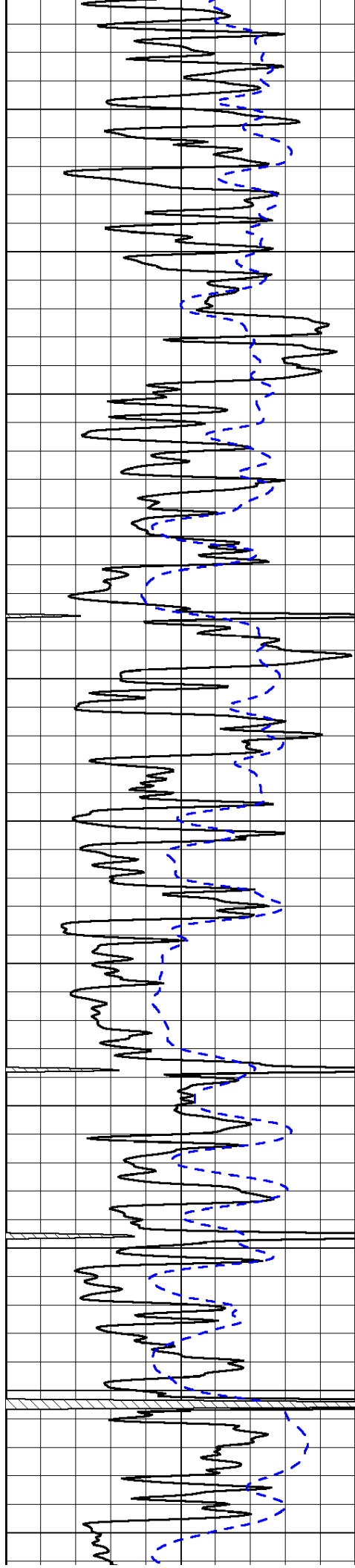


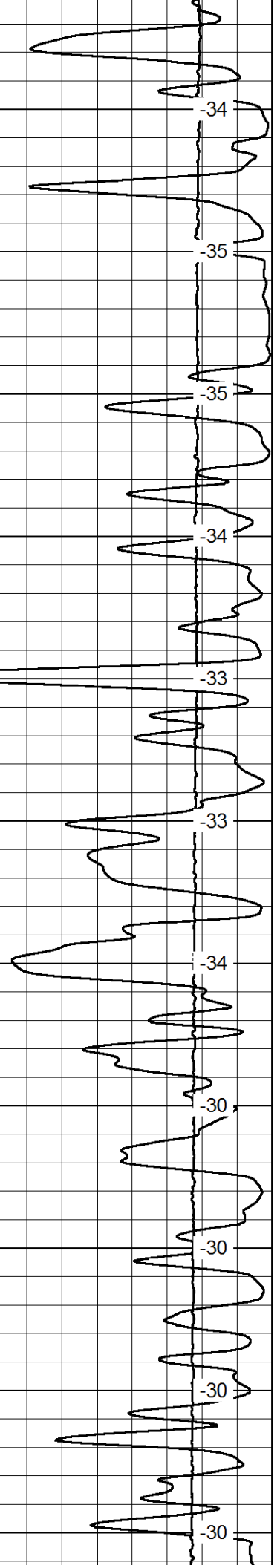
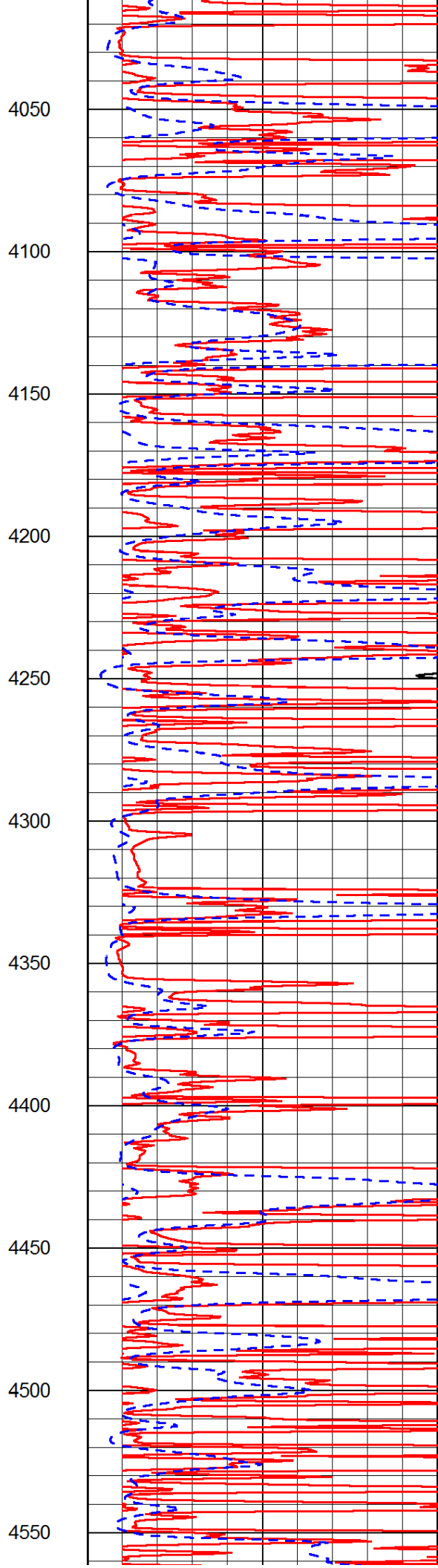
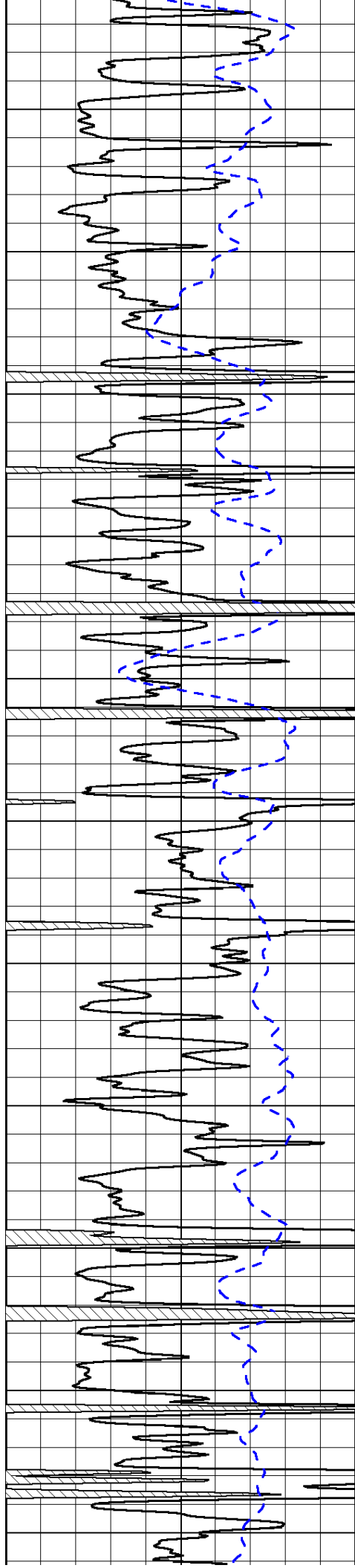


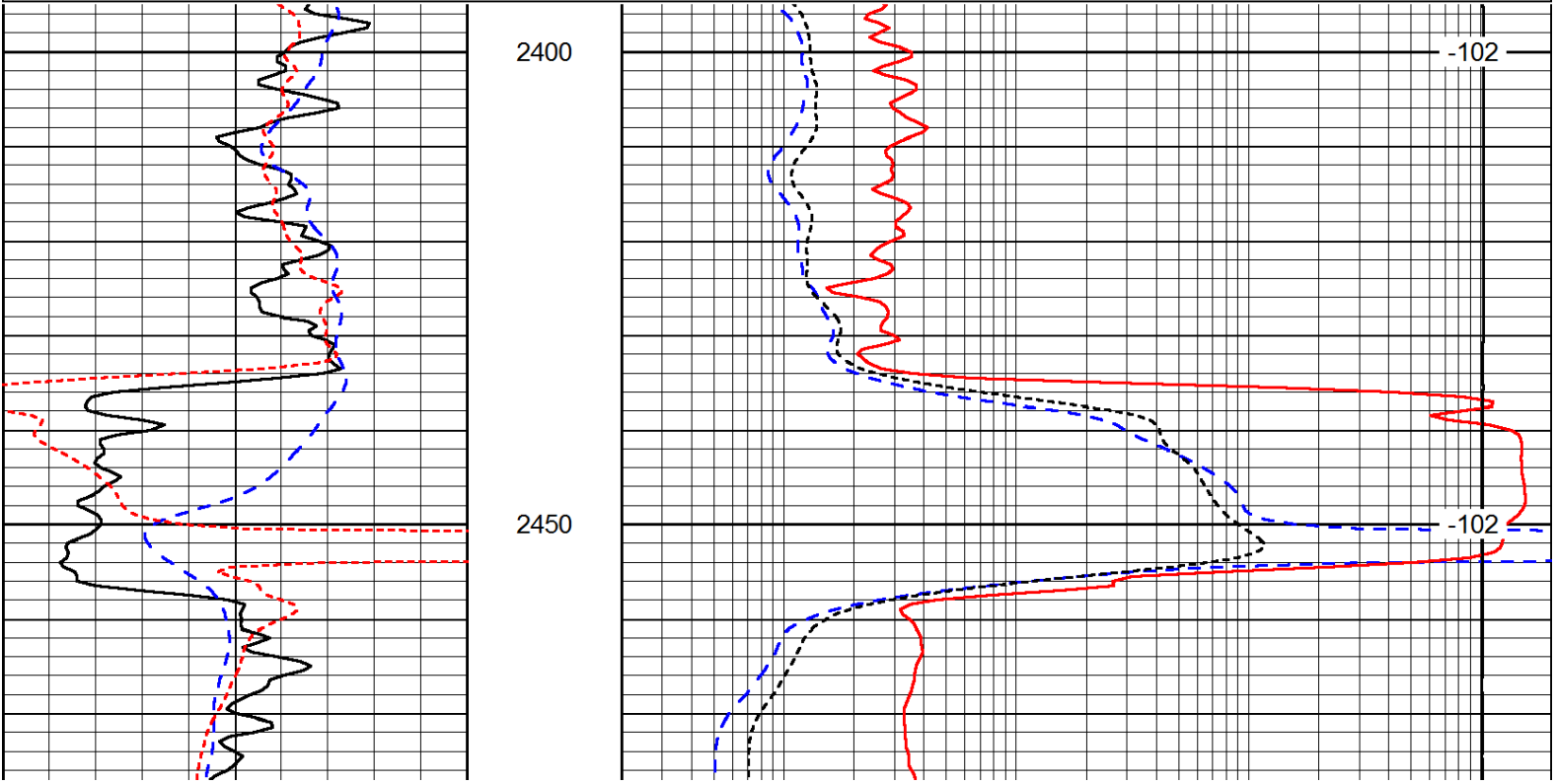
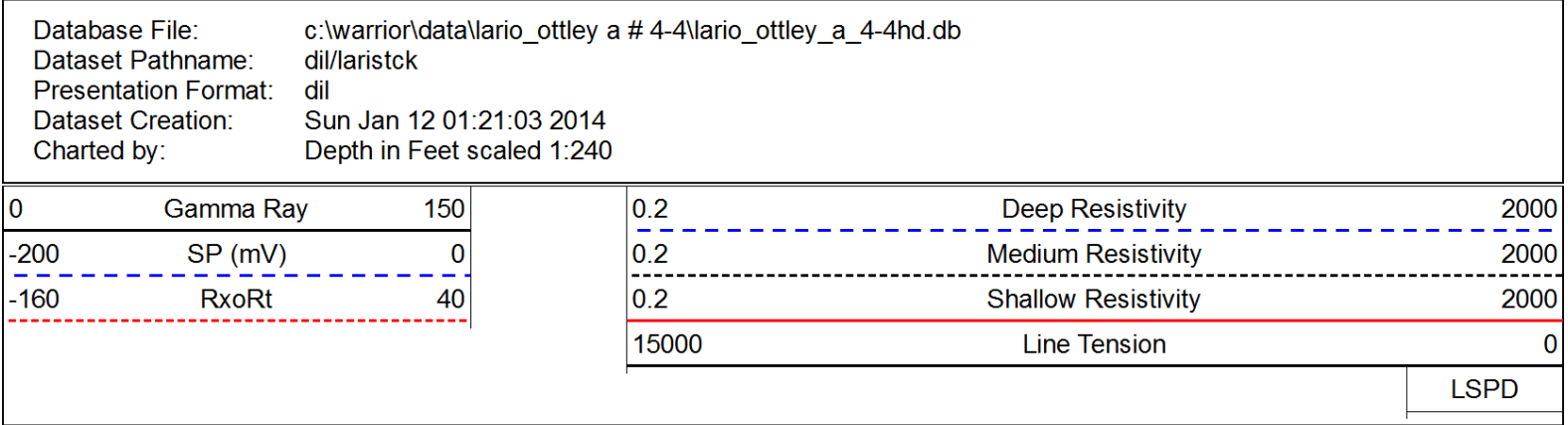
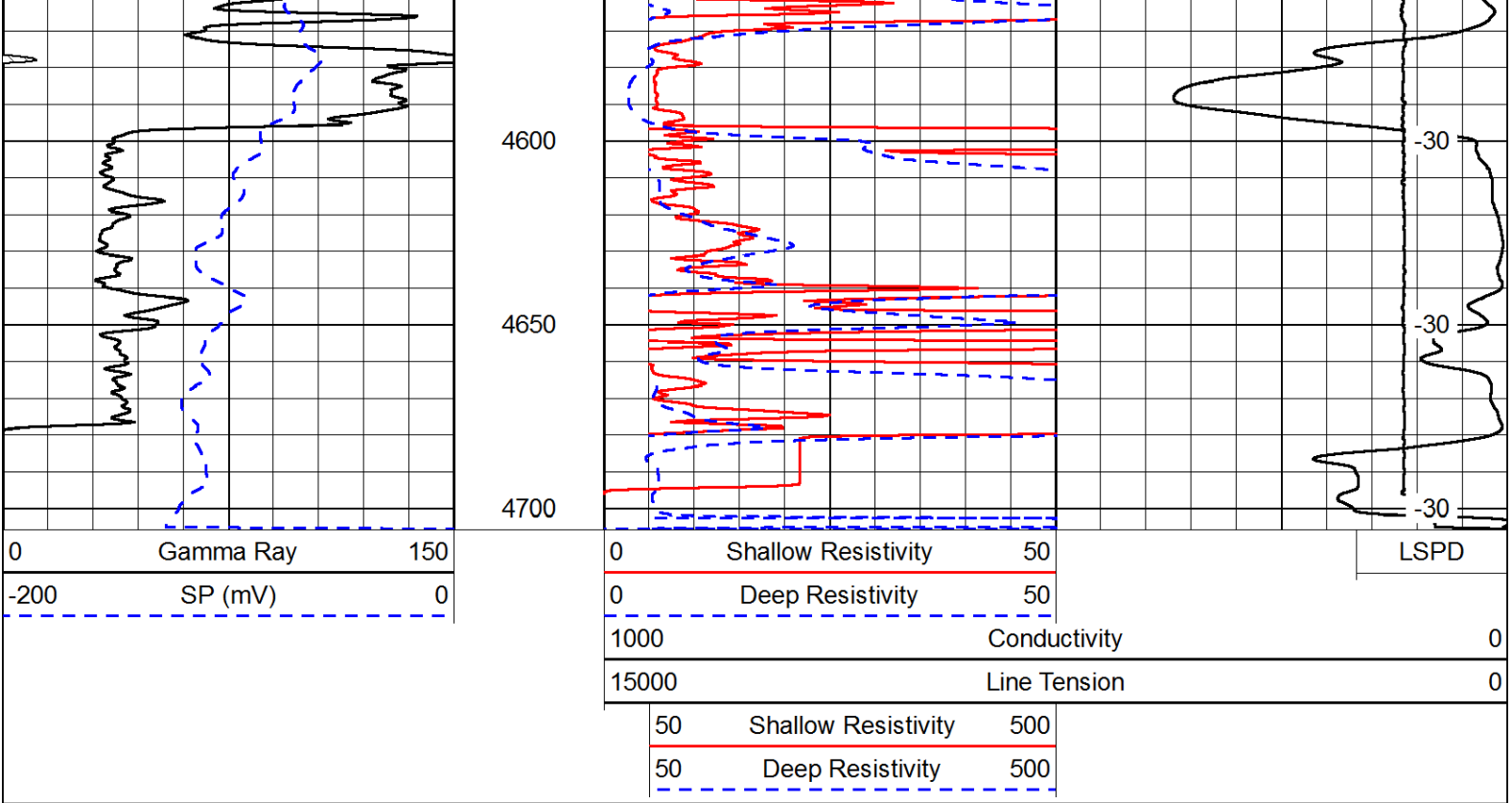


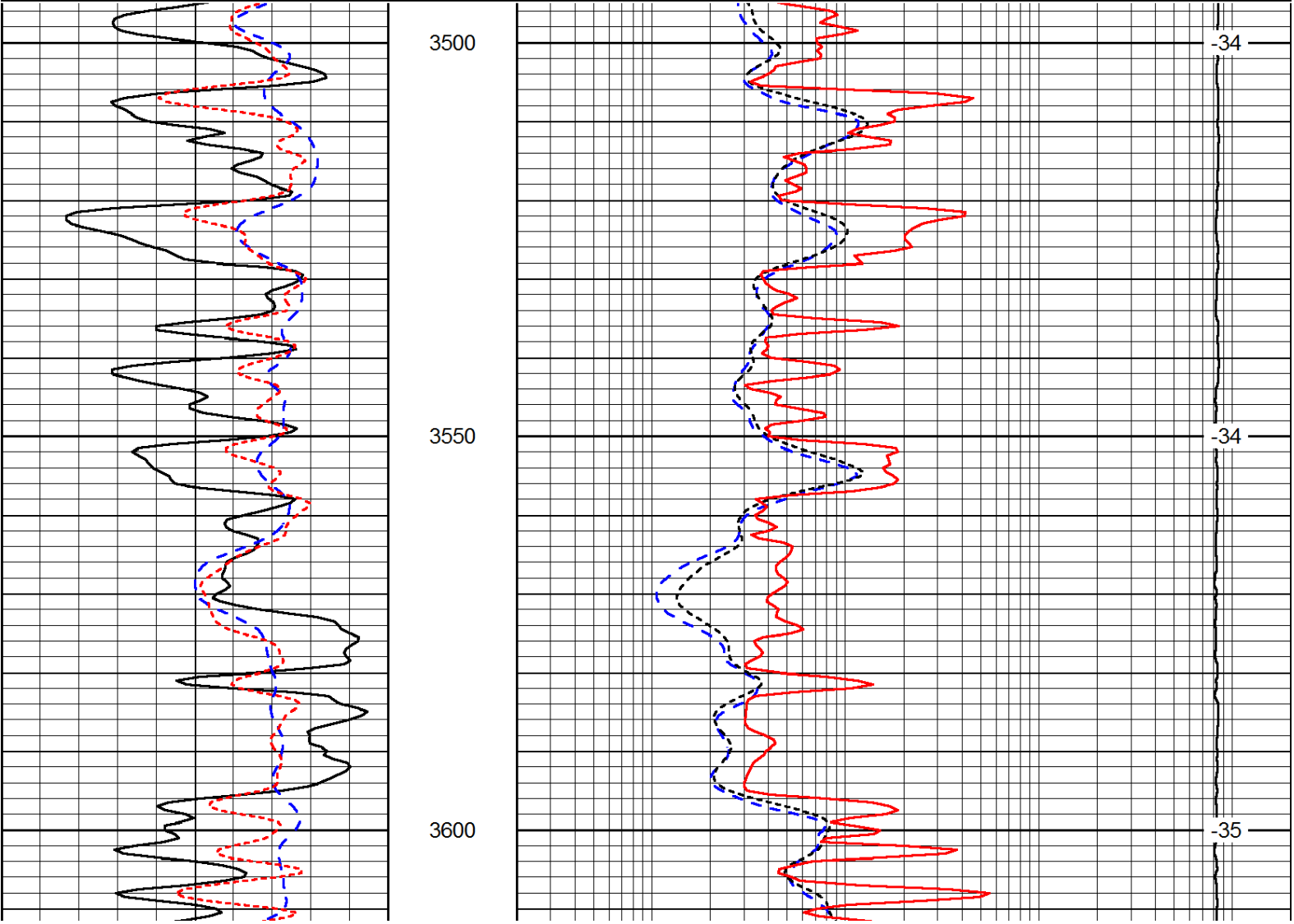
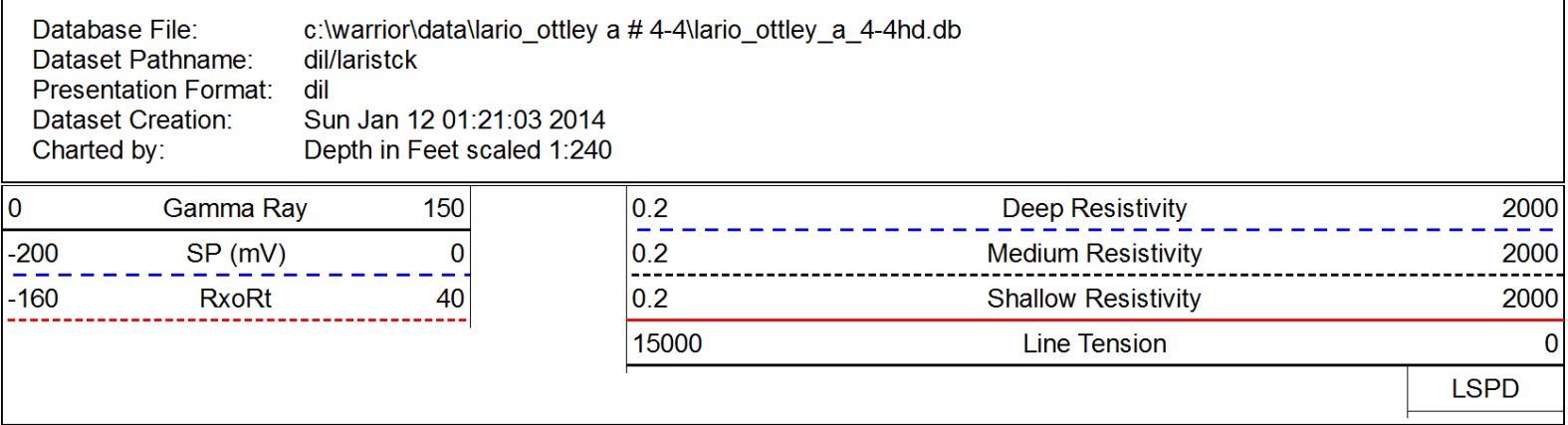
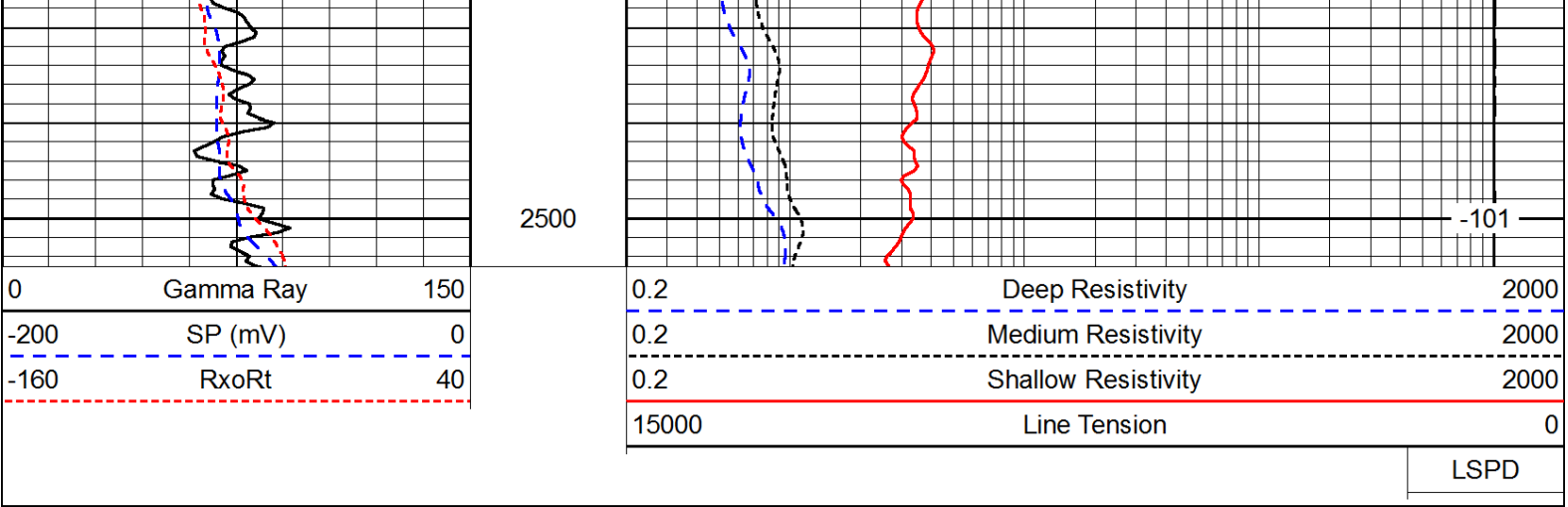


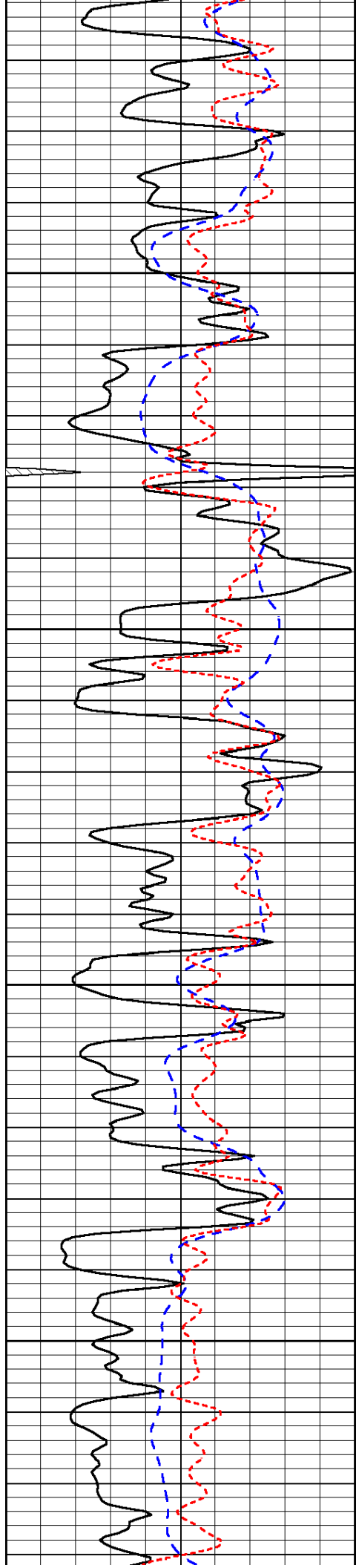










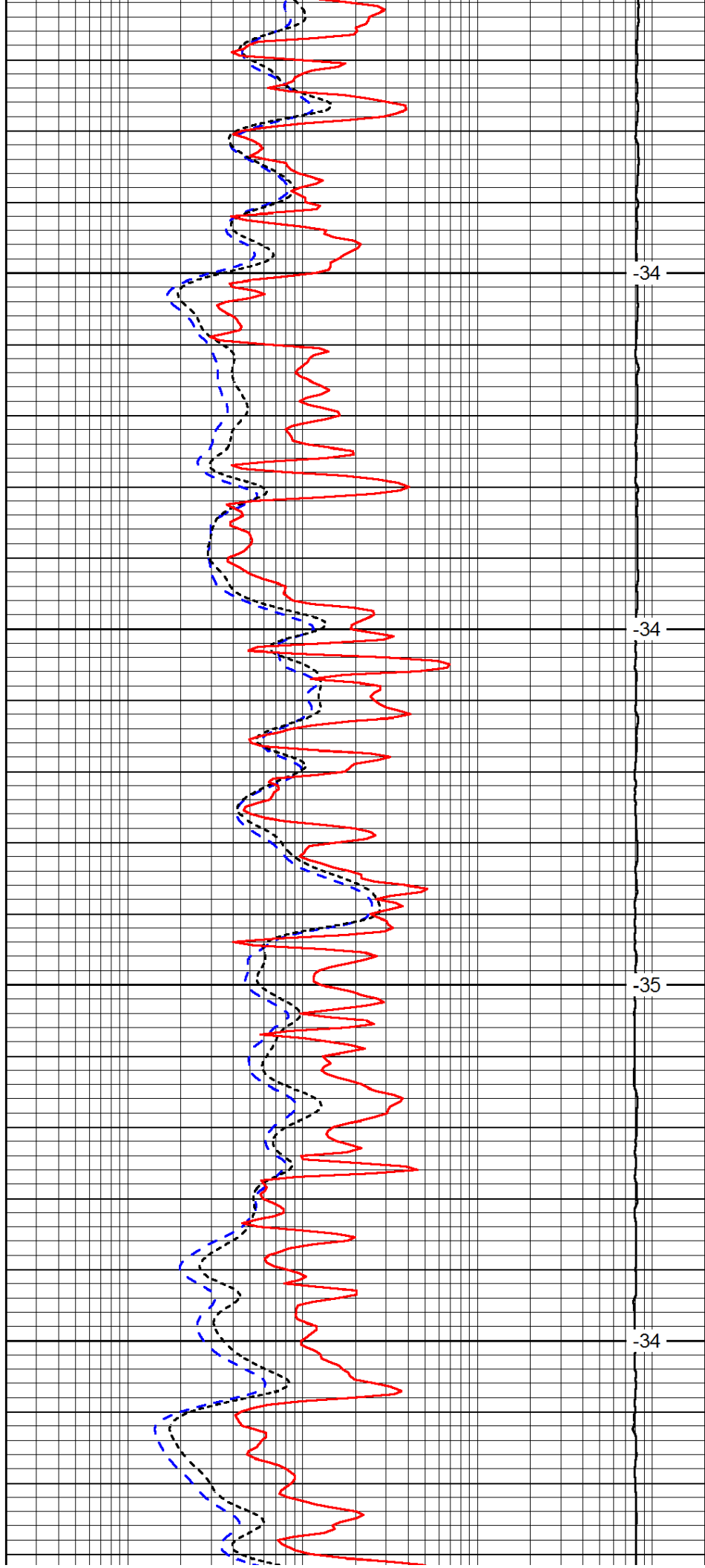


3650

3700

3750

3800

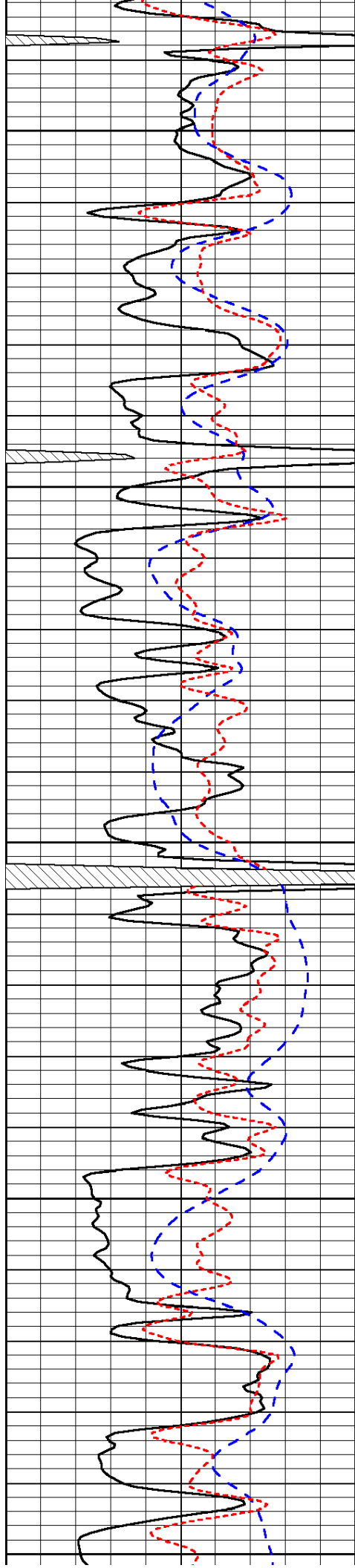


-34

-34

-35

-34



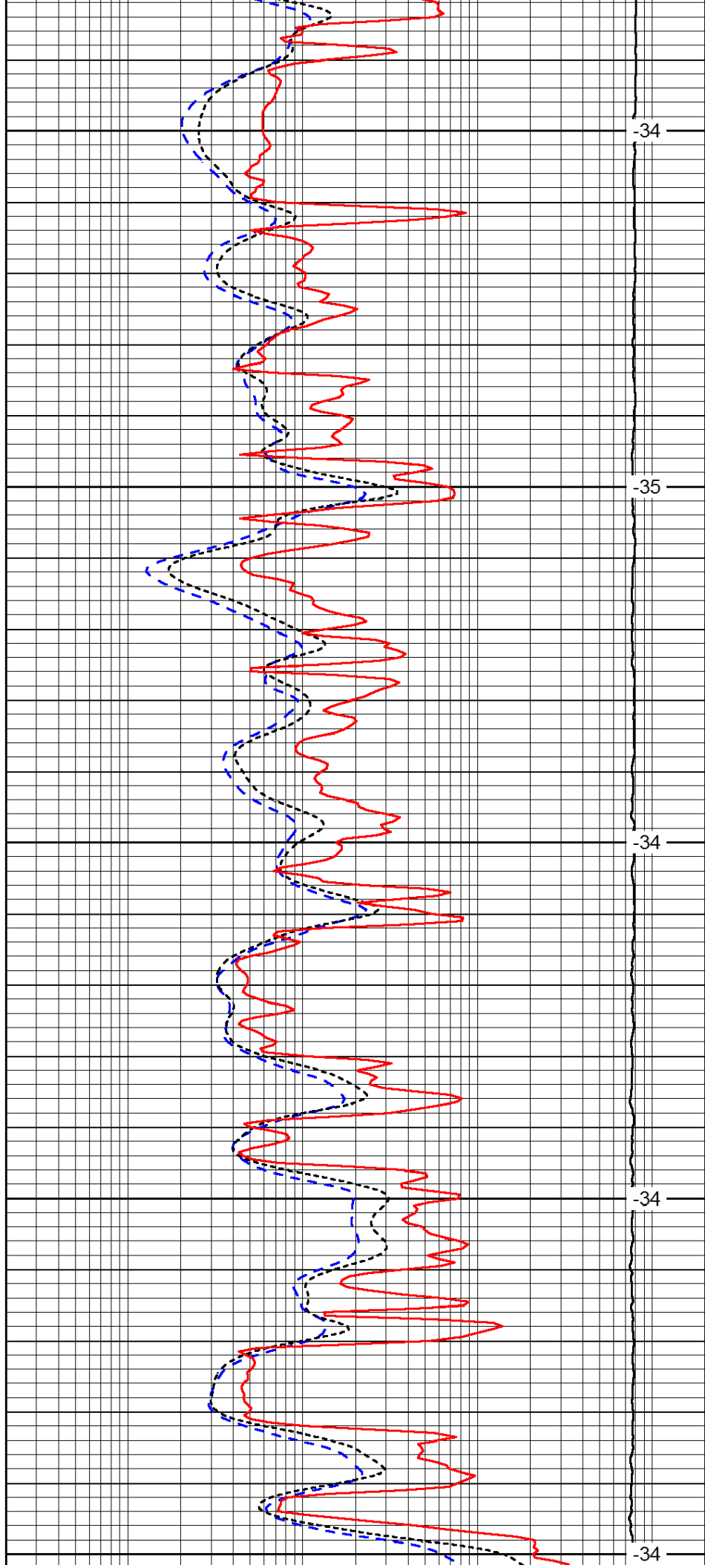
3850

3900

3950

4000

4050



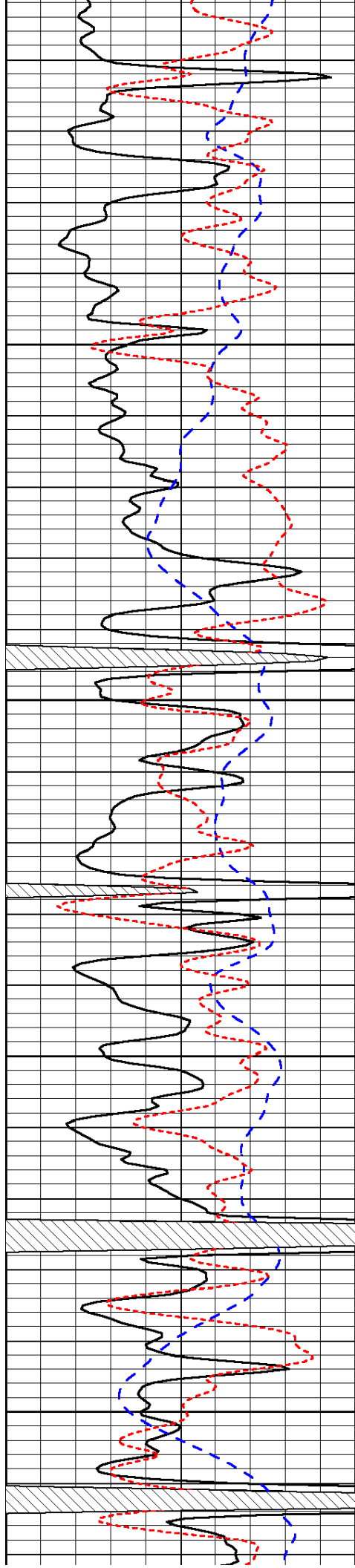
-34

-35

-34

-34

-34

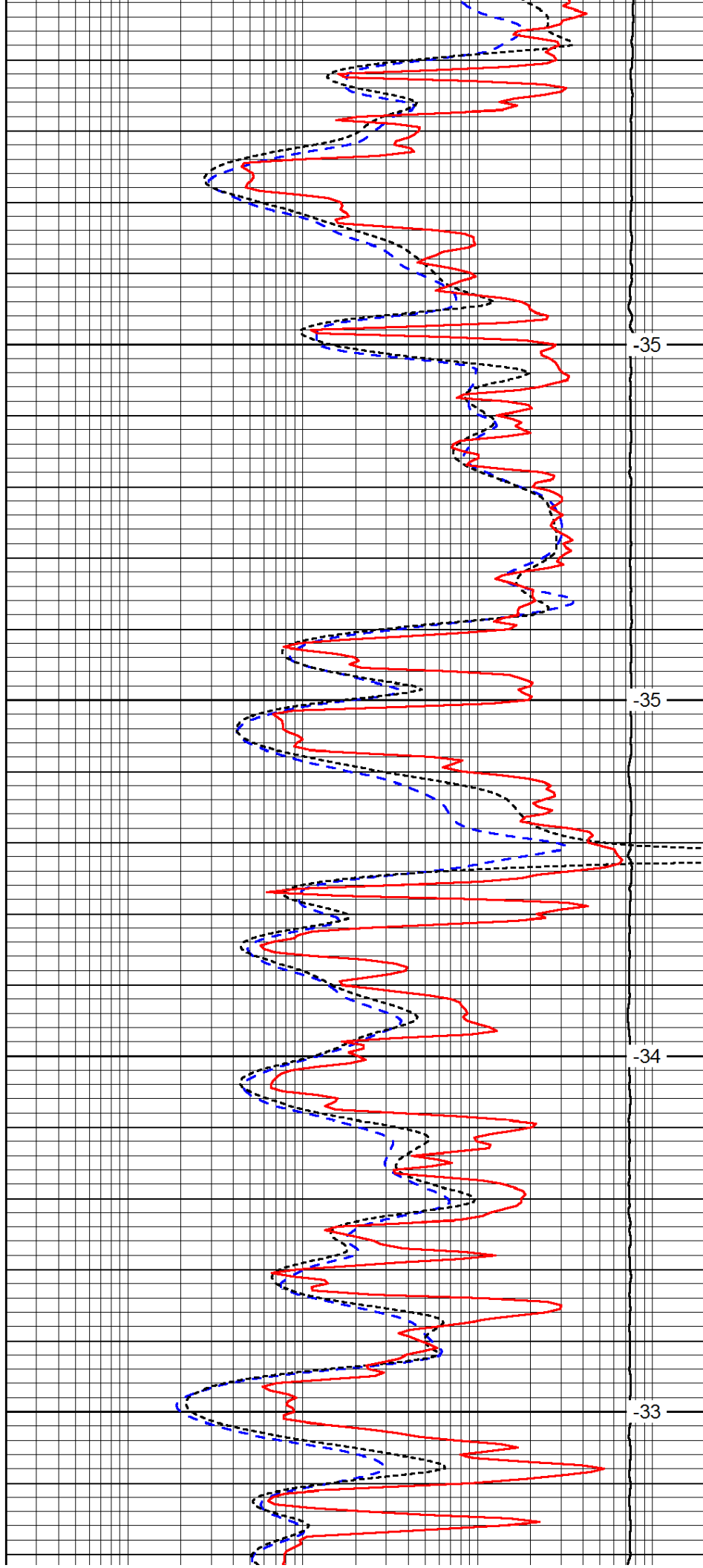


4100

4150

4200

4250

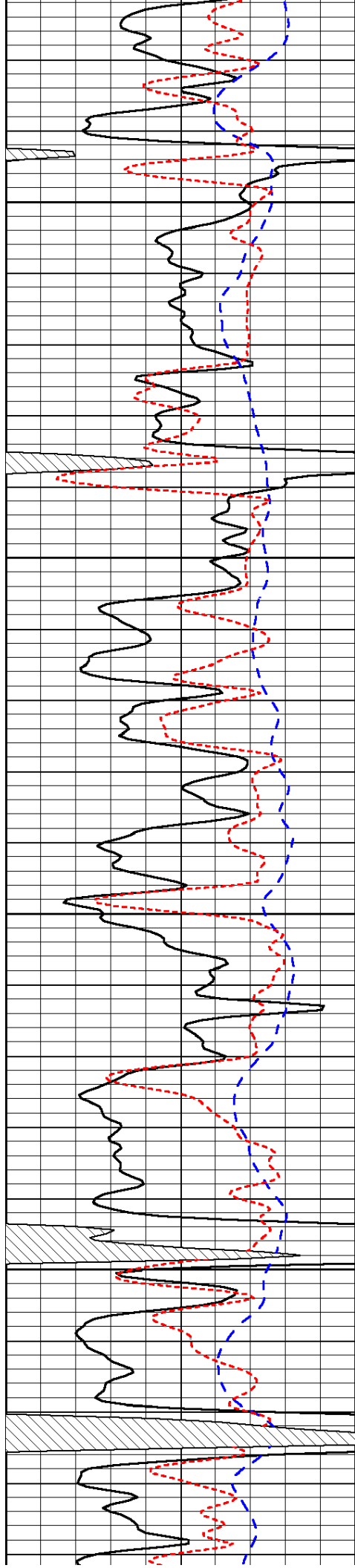


-35

-35

-34

-33



4300

4350

4400

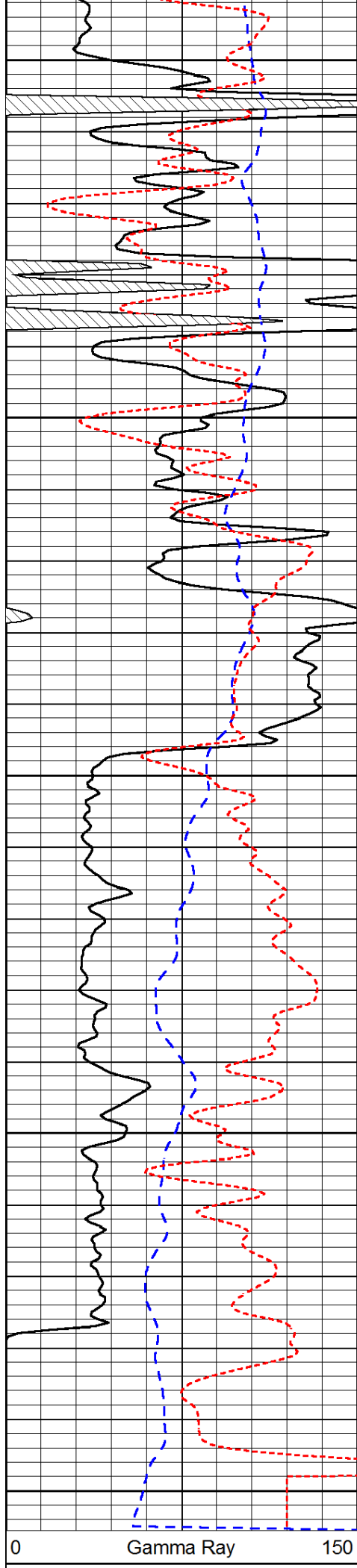
4450

-33

-34

-30

-30



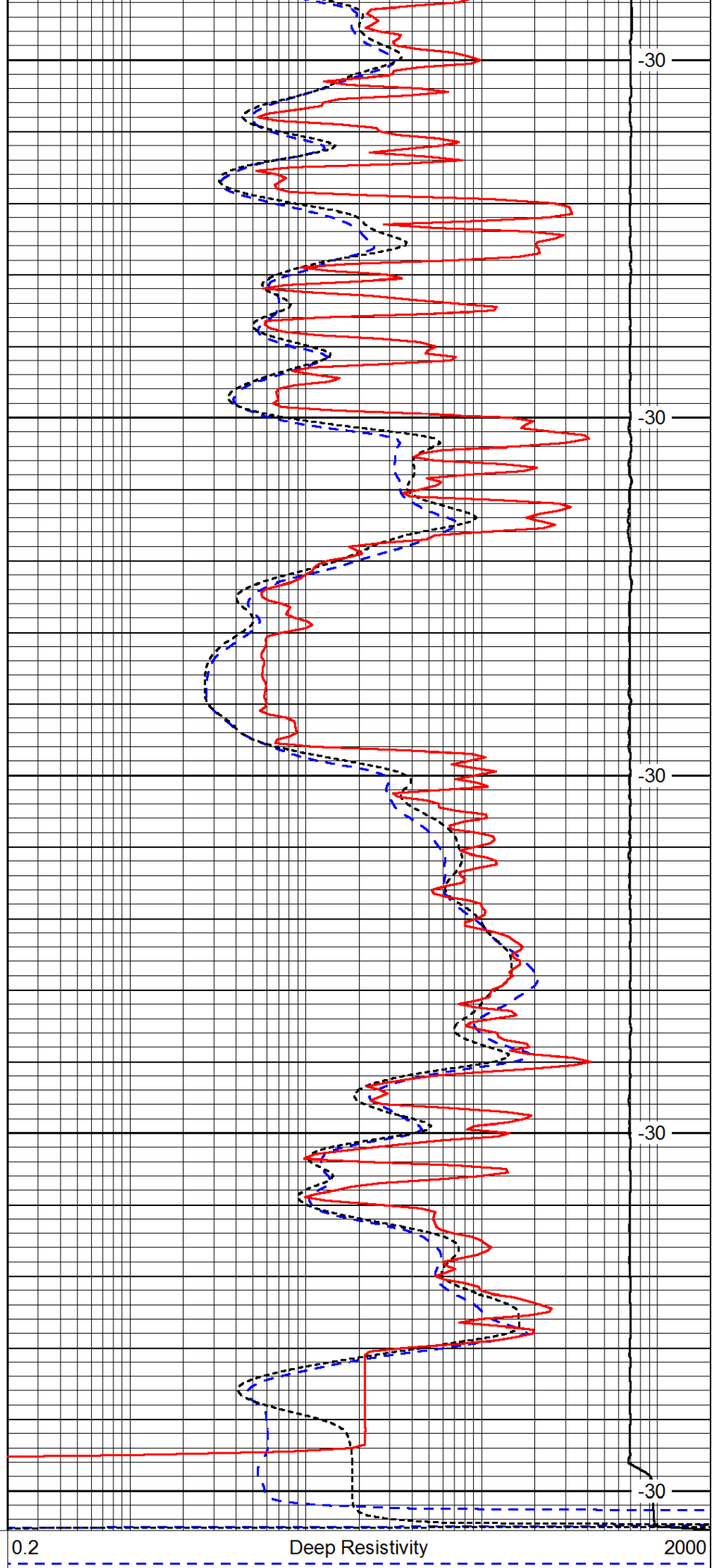
4500

4550

4600

4650

4700



-30

-30

-30

-30

-30

-200	SP (mV)	0
-160	RxoRt	40

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