



Dual Induction Log

Pioneer Energy Services

API No.

15-109-21,351-00-00

Company Cobalt Energy, LLC

Well Boyd 'A' #1-16

Field Wildcat

County

Logan

State

Kansas

Location

406' FSL & 1669' FEL

Sec: 16

Twp: 11S

Rge: 34W

Elevation

Permanent Datum Ground Level Elevation 3189
Log Measured From Kelly Bushing 11 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

K.B. 3200
D.F.
G.L. 3189

Date

10/19/2014

Run Number

One

Depth Driller

4817

Depth Logger

4817

Bottom Logged Interval

4816

Top Log Interval

200

Casing Driller

8.625 @ 224

Casing Logger

224

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

3.500

Density / Viscosity

9.5 55

pH / Fluid Loss

10.5 7.2

Source of Sample

Flowline

Rm @ Meas. Temp

.53 @ 68

Rmf @ Meas. Temp

.40 @ 68

Rmc @ Meas. Temp

.72 @ 68

Source of Rmf / Rmc

Charts

Rm @ BHT

.29 @ 124

Operating Rig Time

4 Hours

Max Rec. Temp. F

124

Equipment Number

108

Location

Hays

Recorded By

J. Henrickson

Witnessed By

Paul Gunzelman

<<< 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

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www.pioneerres.com
785 625 3858

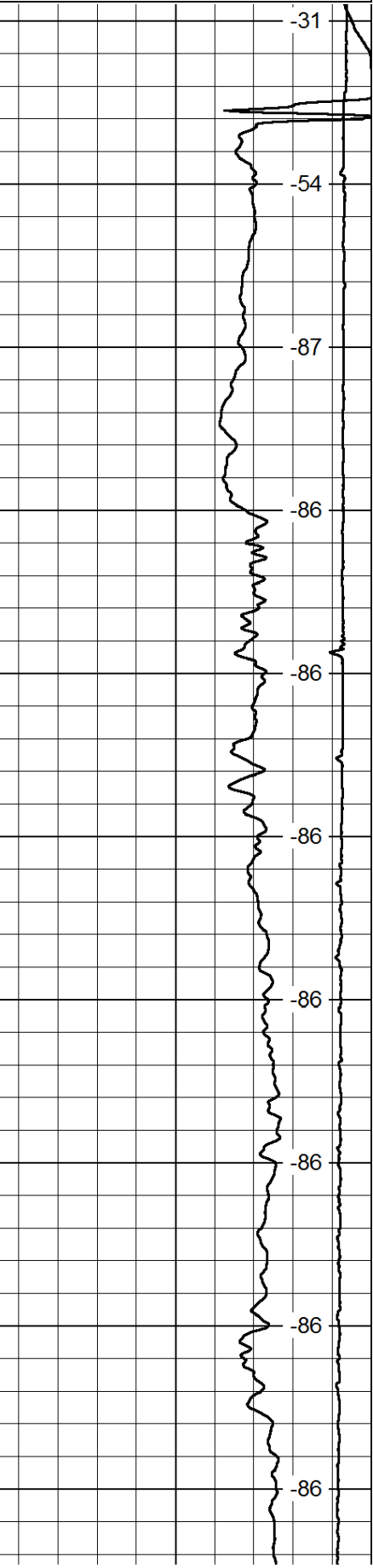
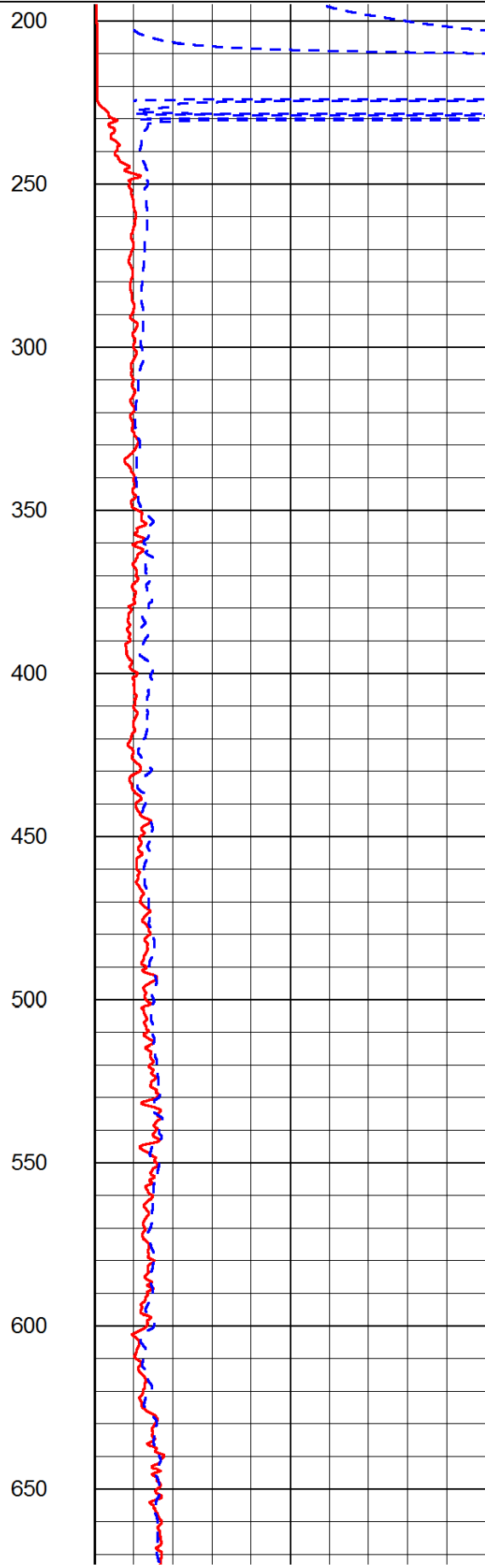
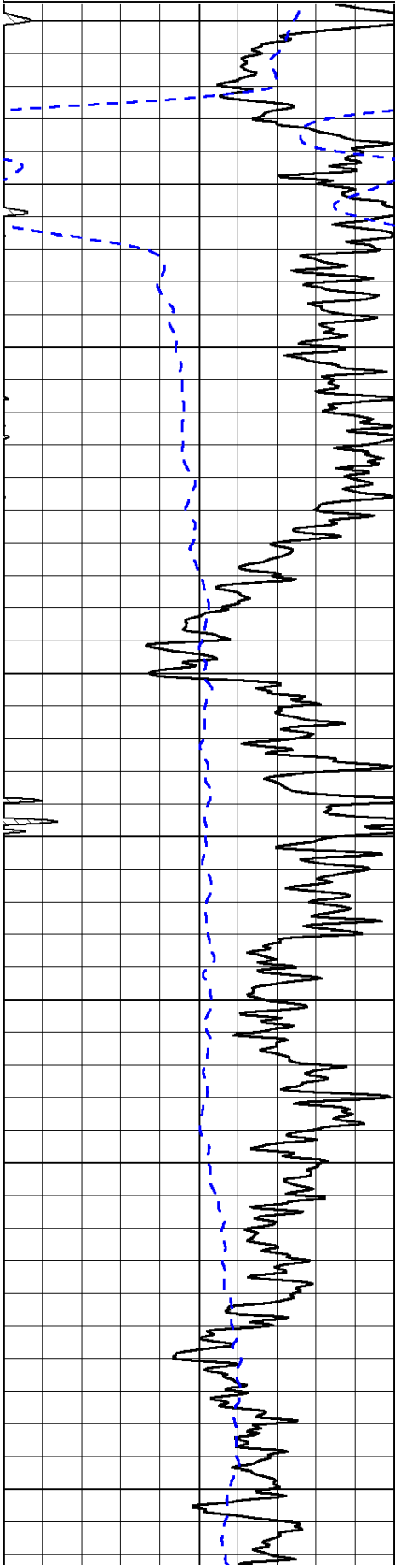
Monument Kansas
4 West, 1 South, 1/2 West, North Into

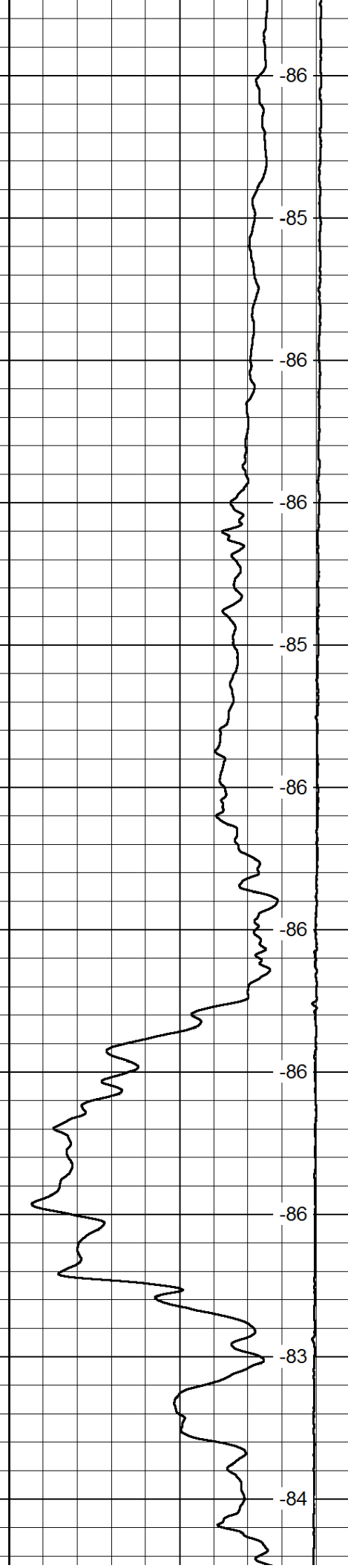
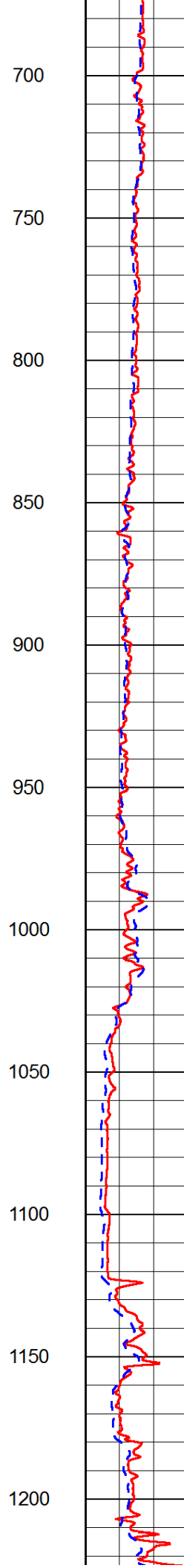
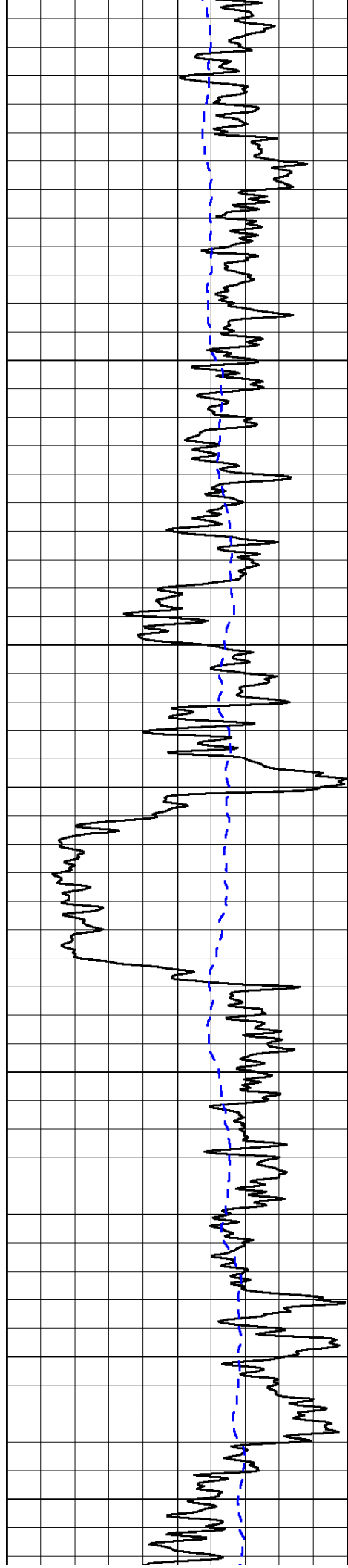
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Dataset Creation: Sun Oct 19 16:35:31 2014
Charted by: Depth in Feet scaled 1:600

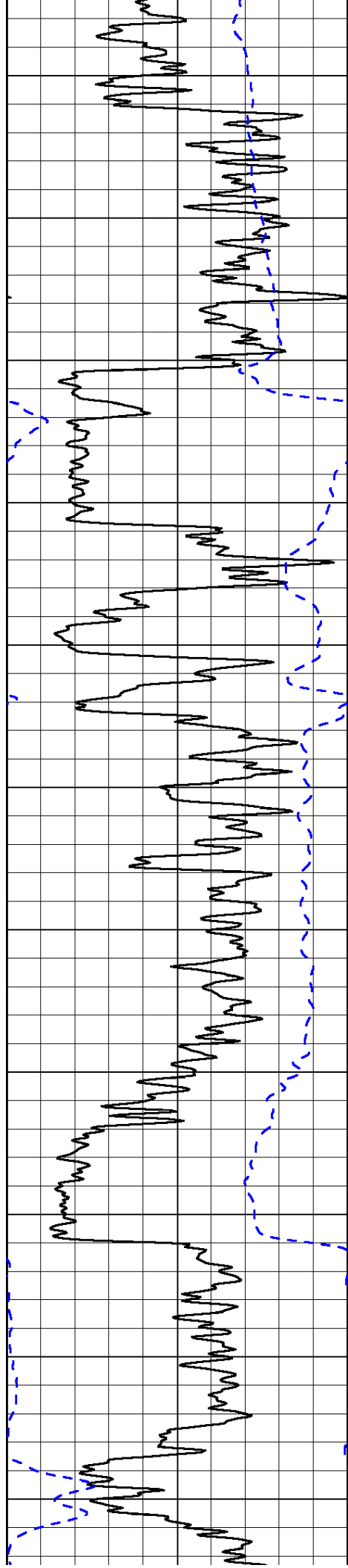
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-200	SP (mV)	0

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

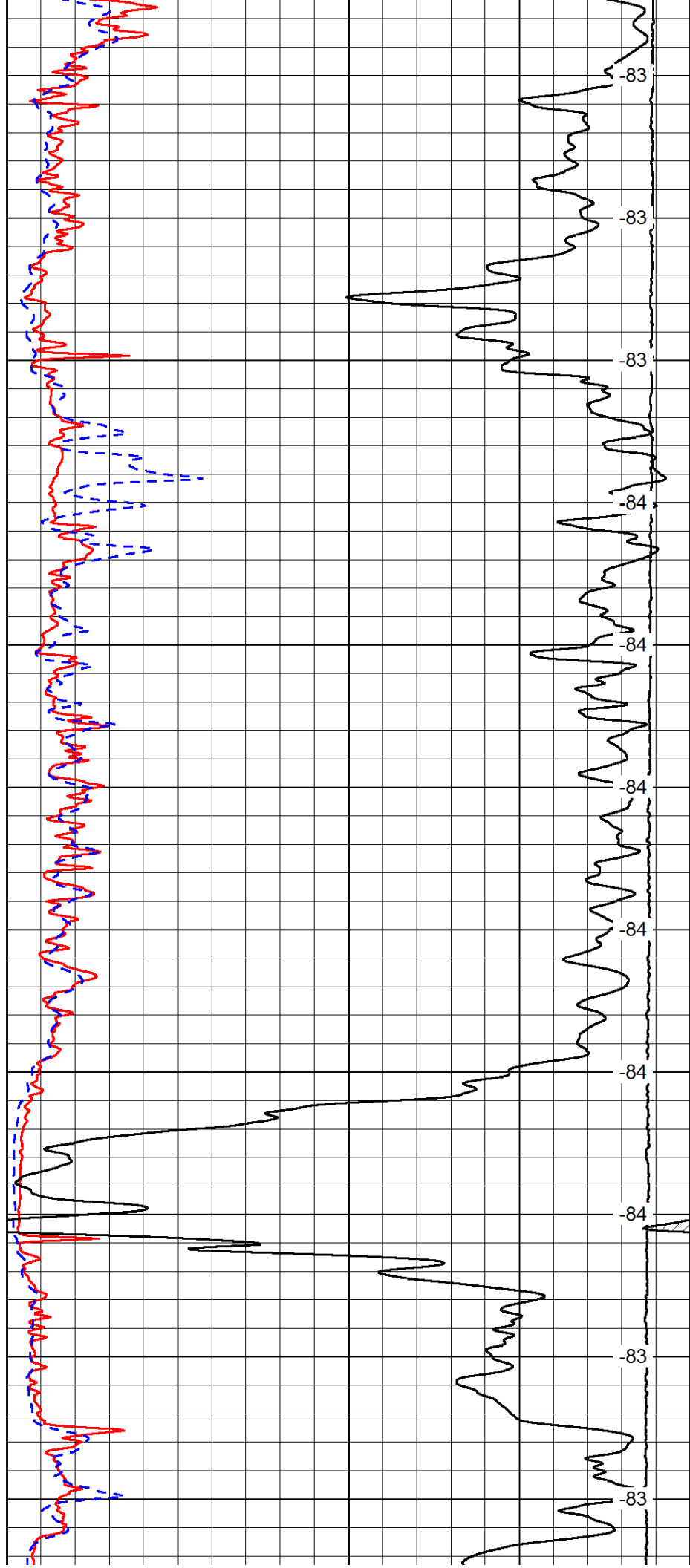
LSPD

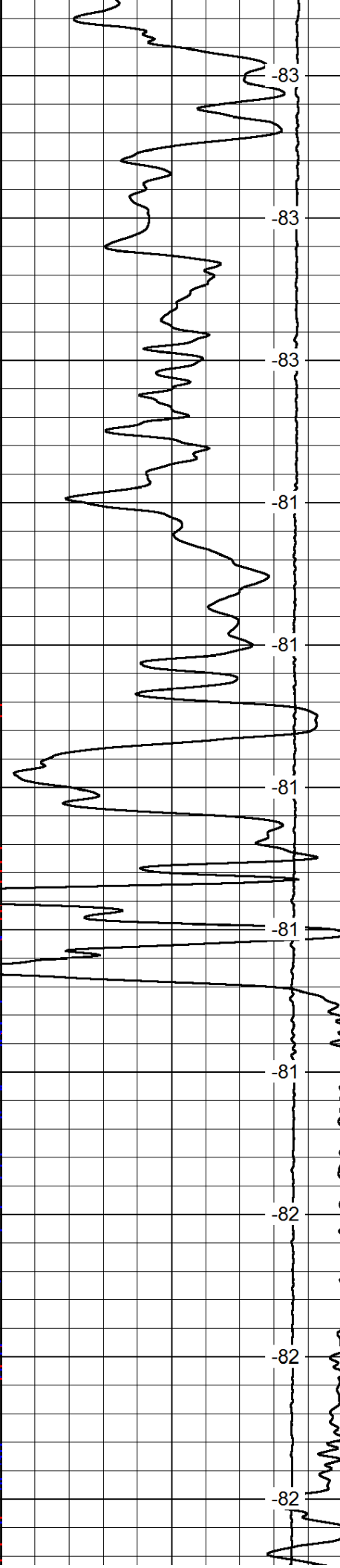
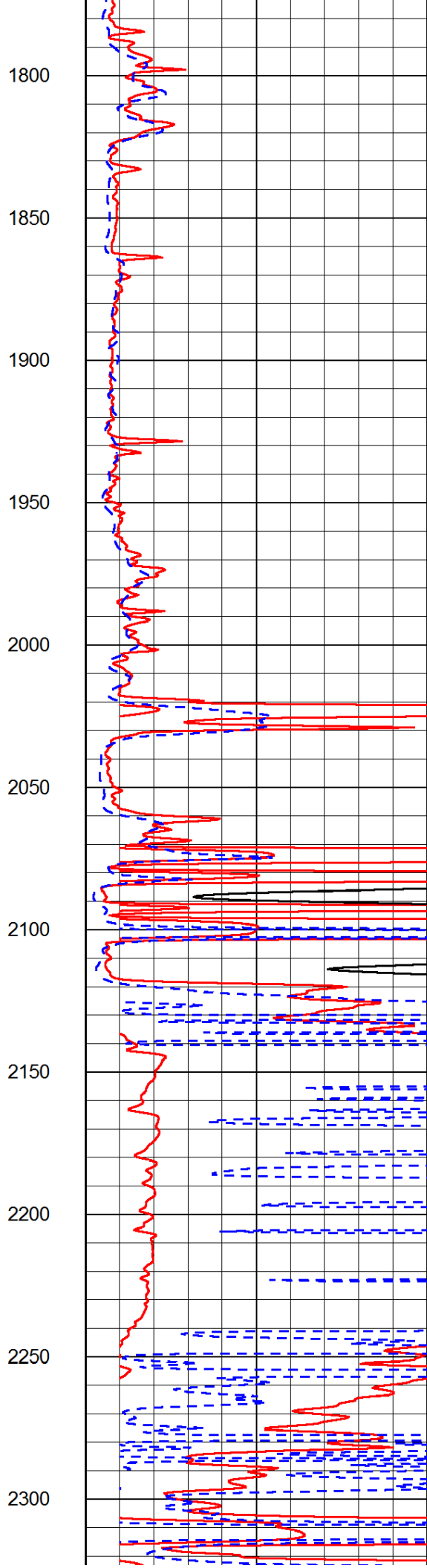
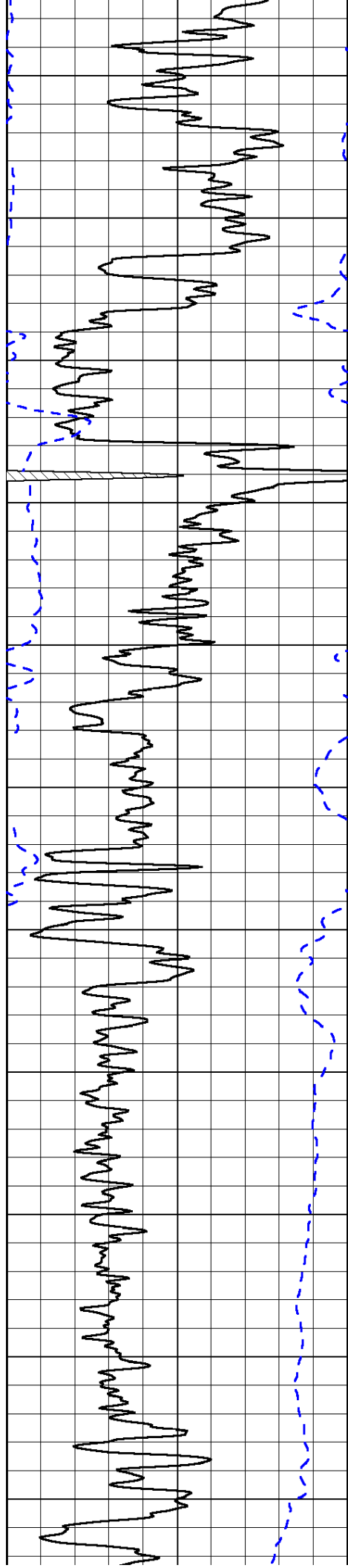


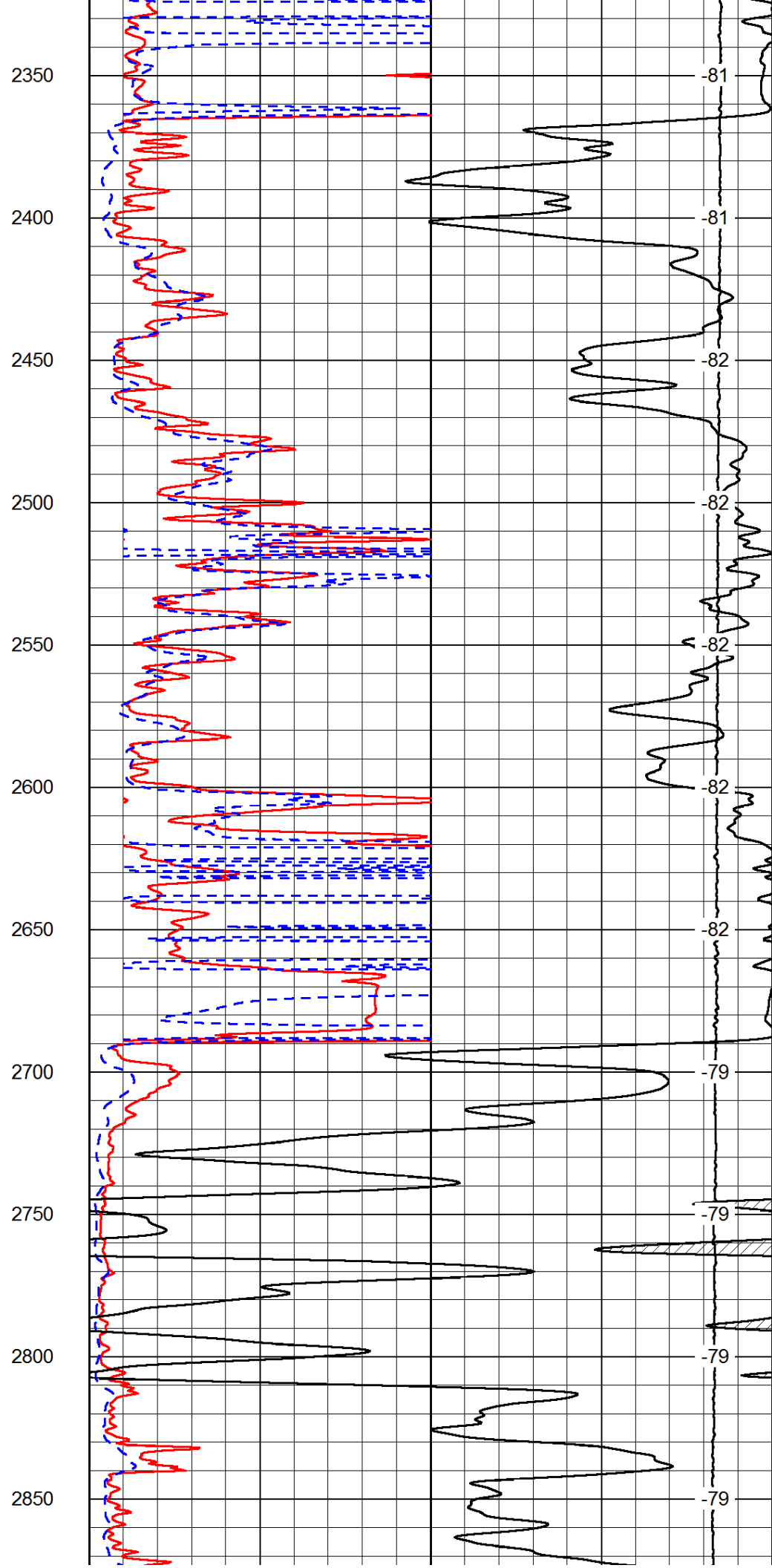
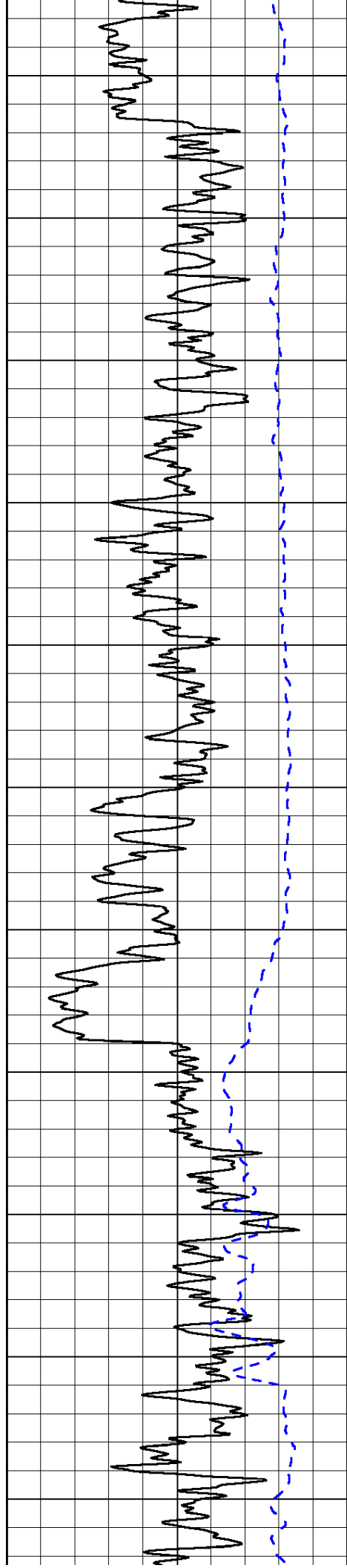


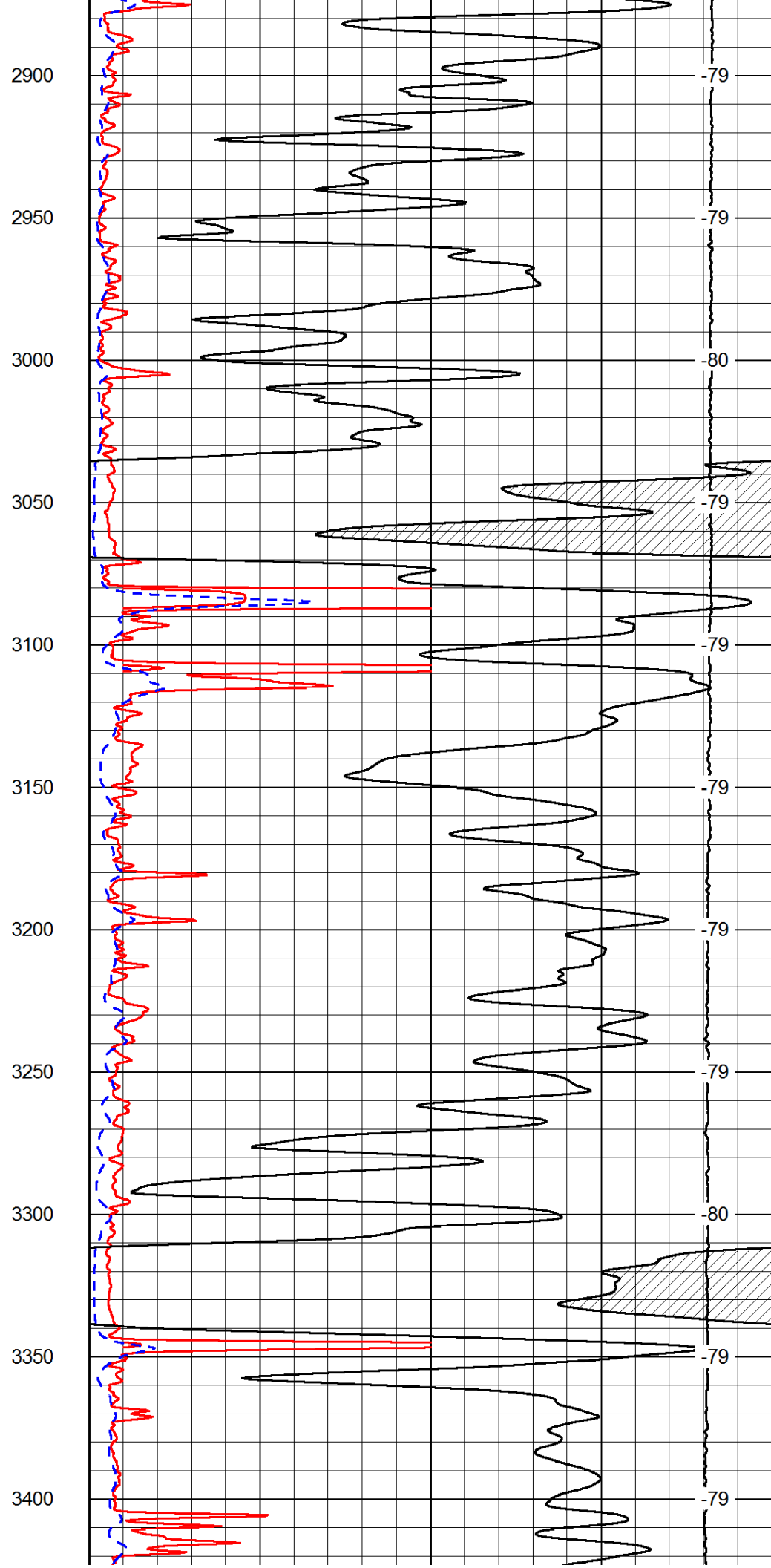
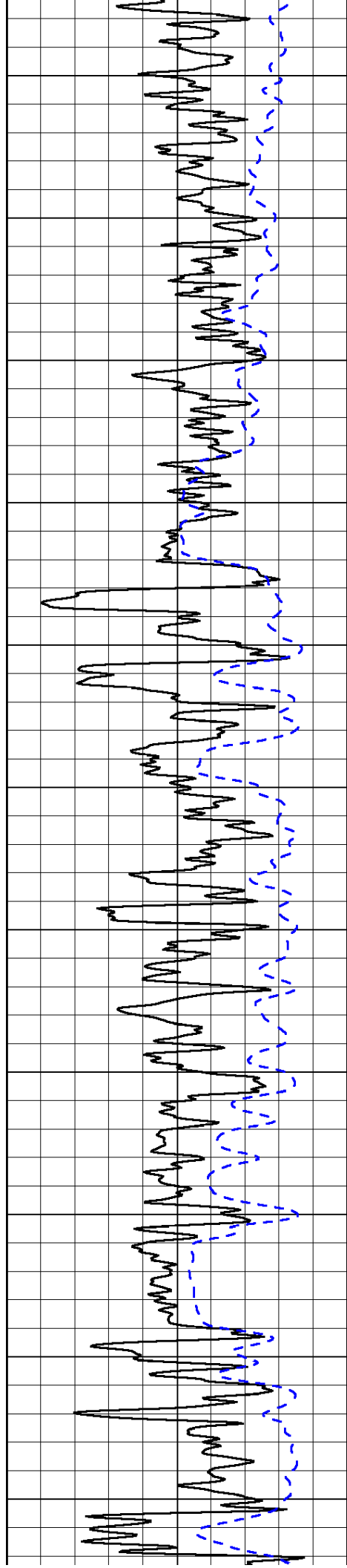


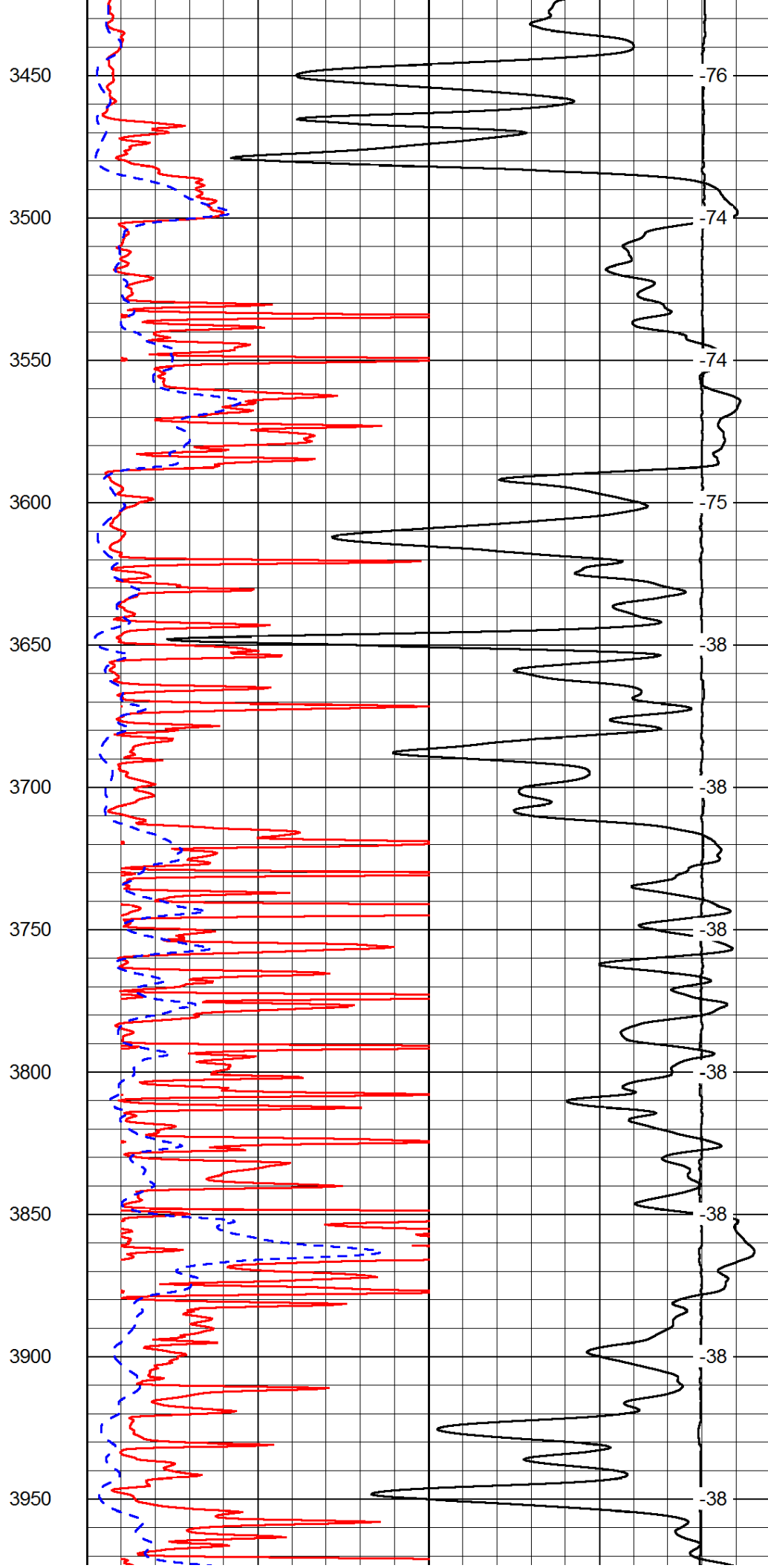
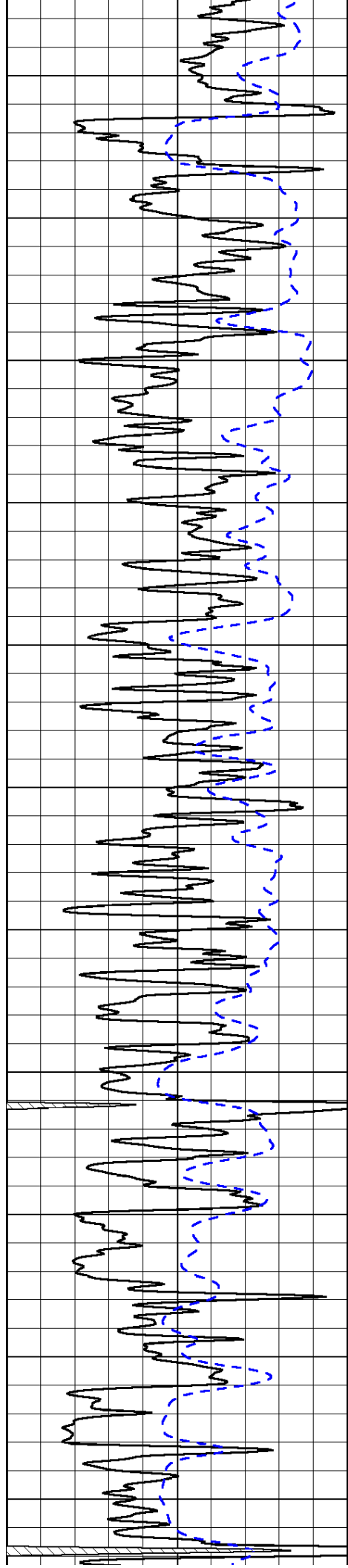
1250
1300
1350
1400
1450
1500
1550
1600
1650
1700
1750

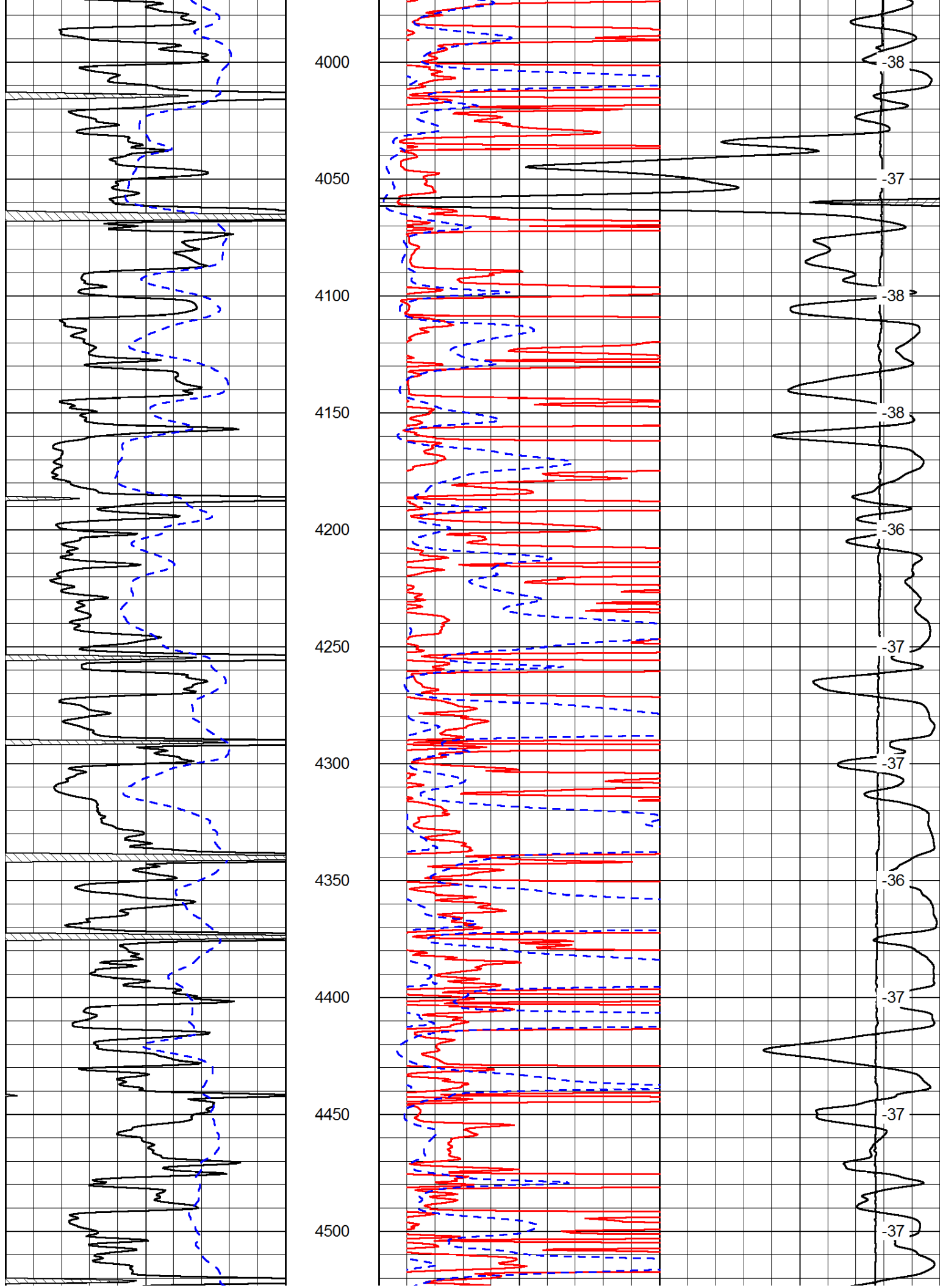


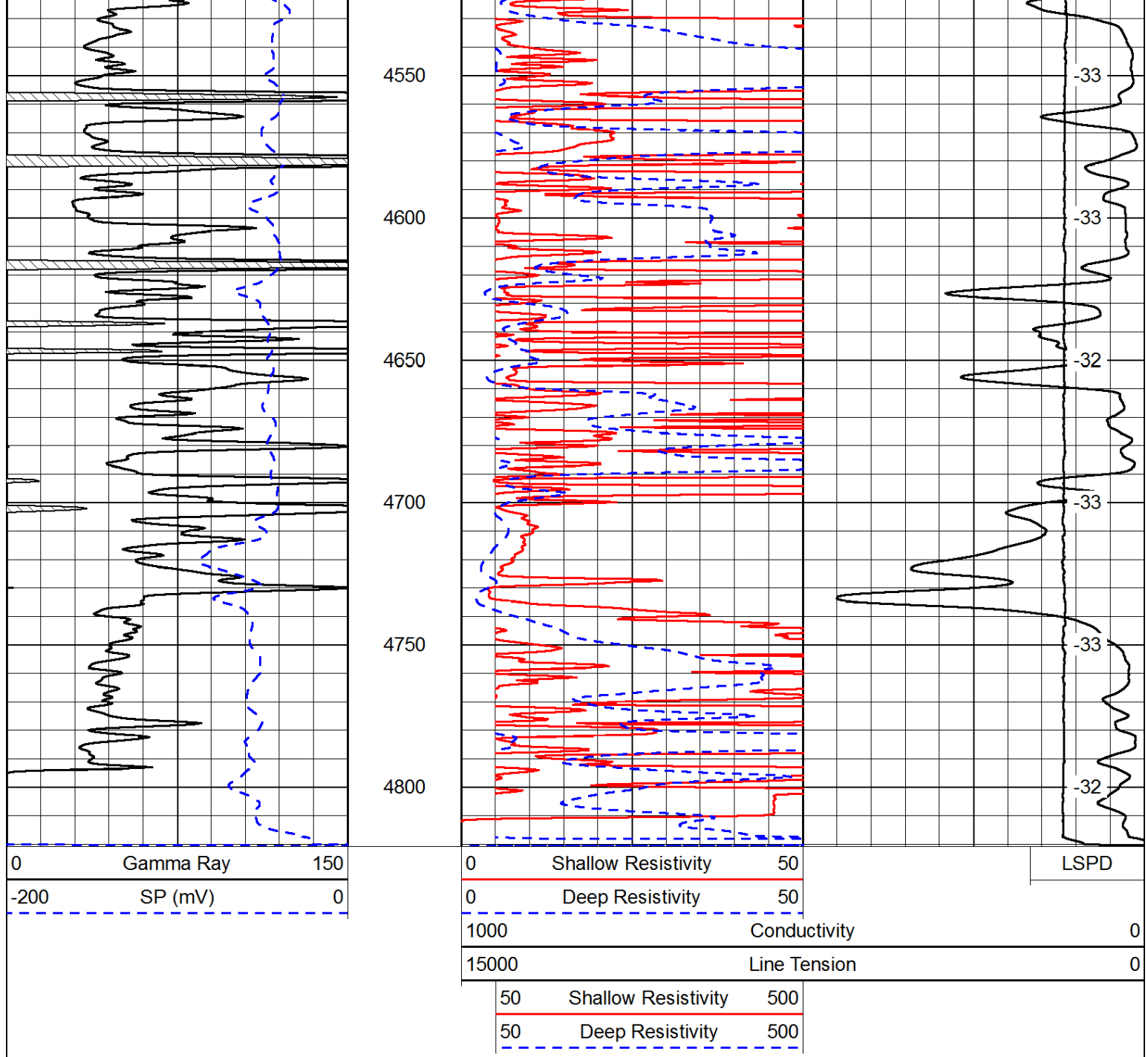




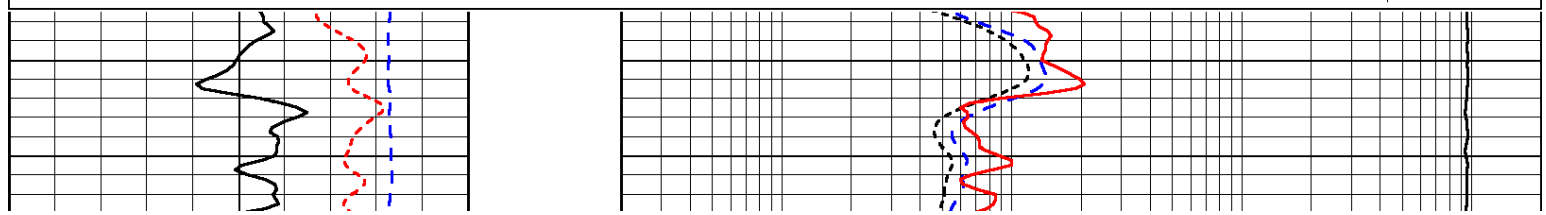
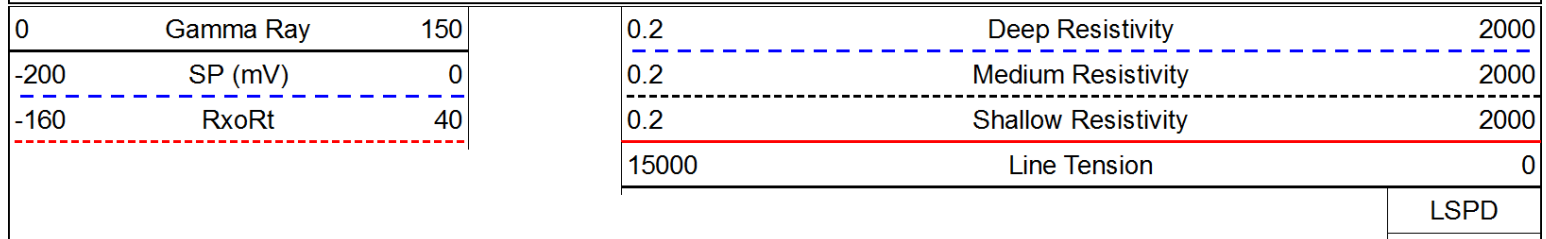


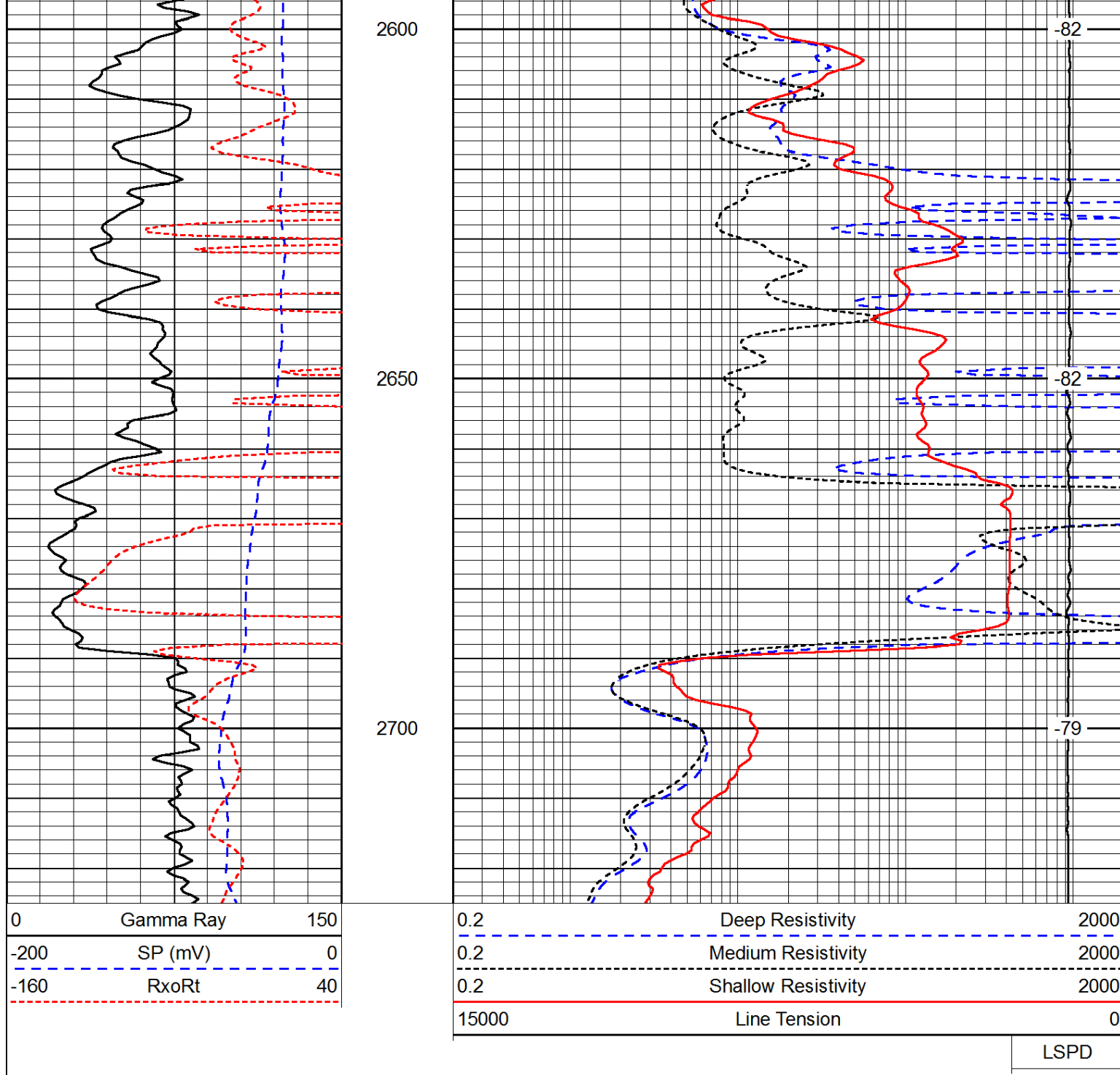




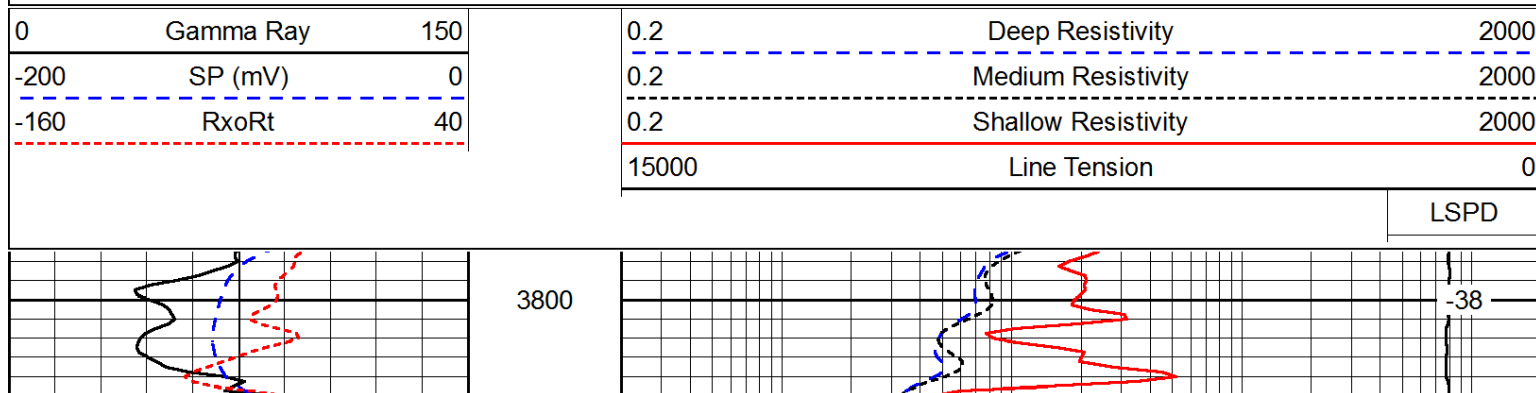


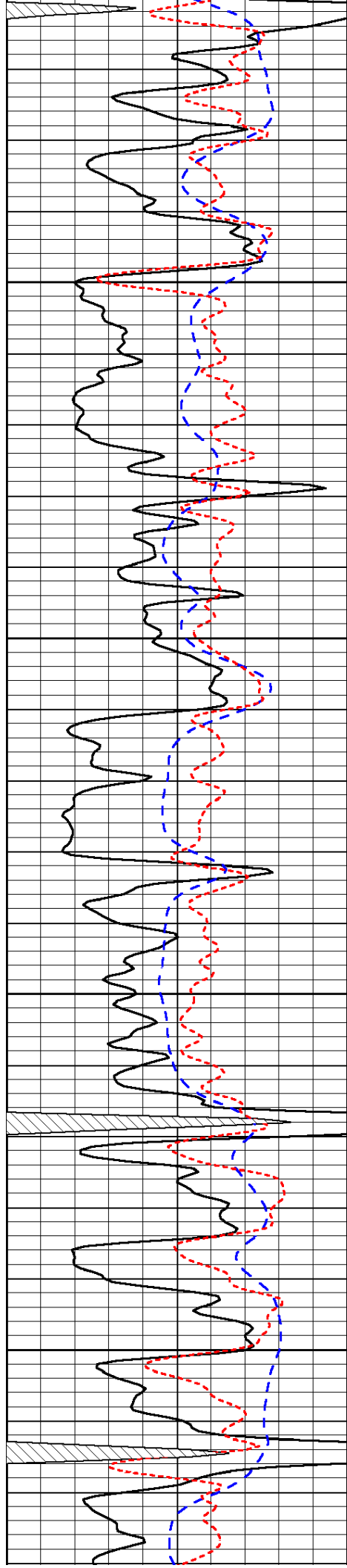
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 Presentation Format: dil
 Dataset Creation: Sun Oct 19 16:35:31 2014
 Charted by: Depth in Feet scaled 1:240





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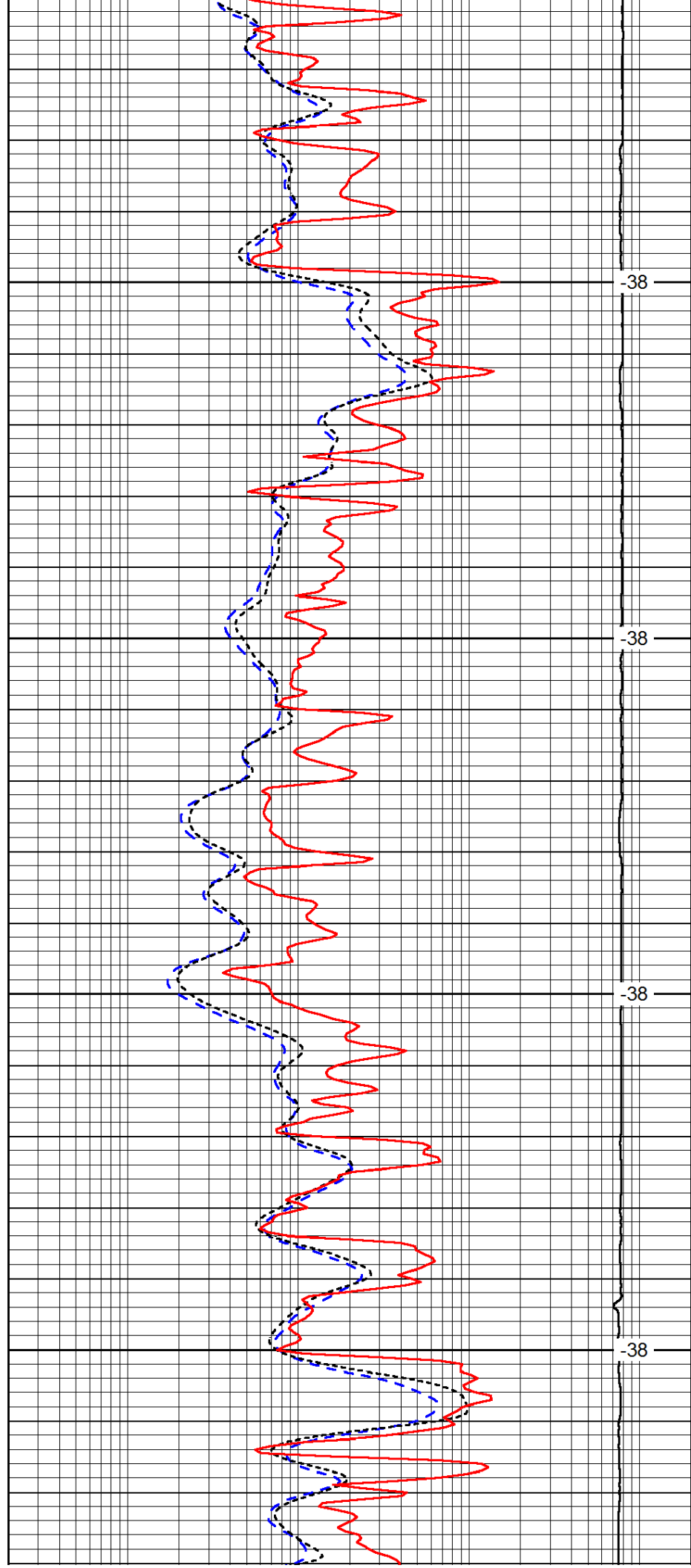


3850

3900

3950

4000

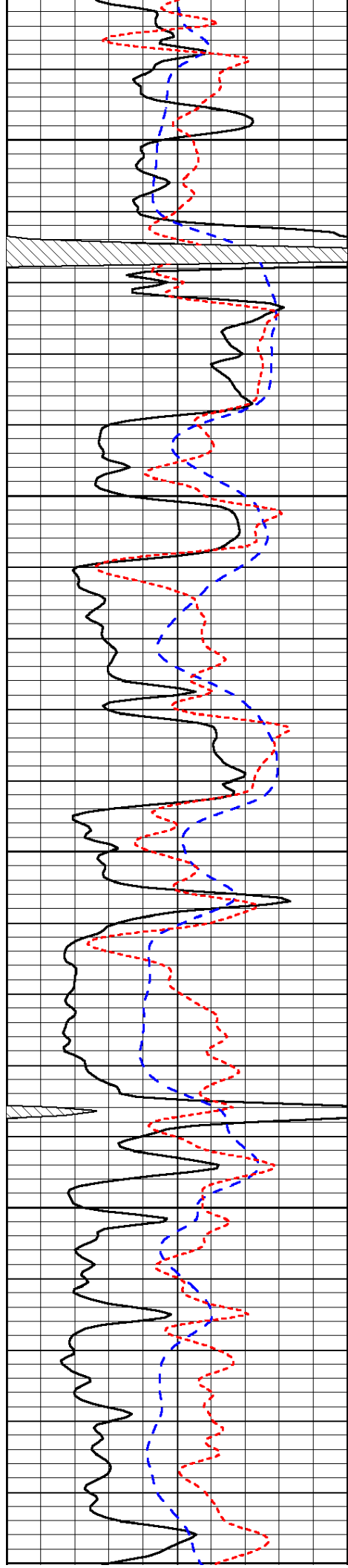


-38

-38

-38

-38



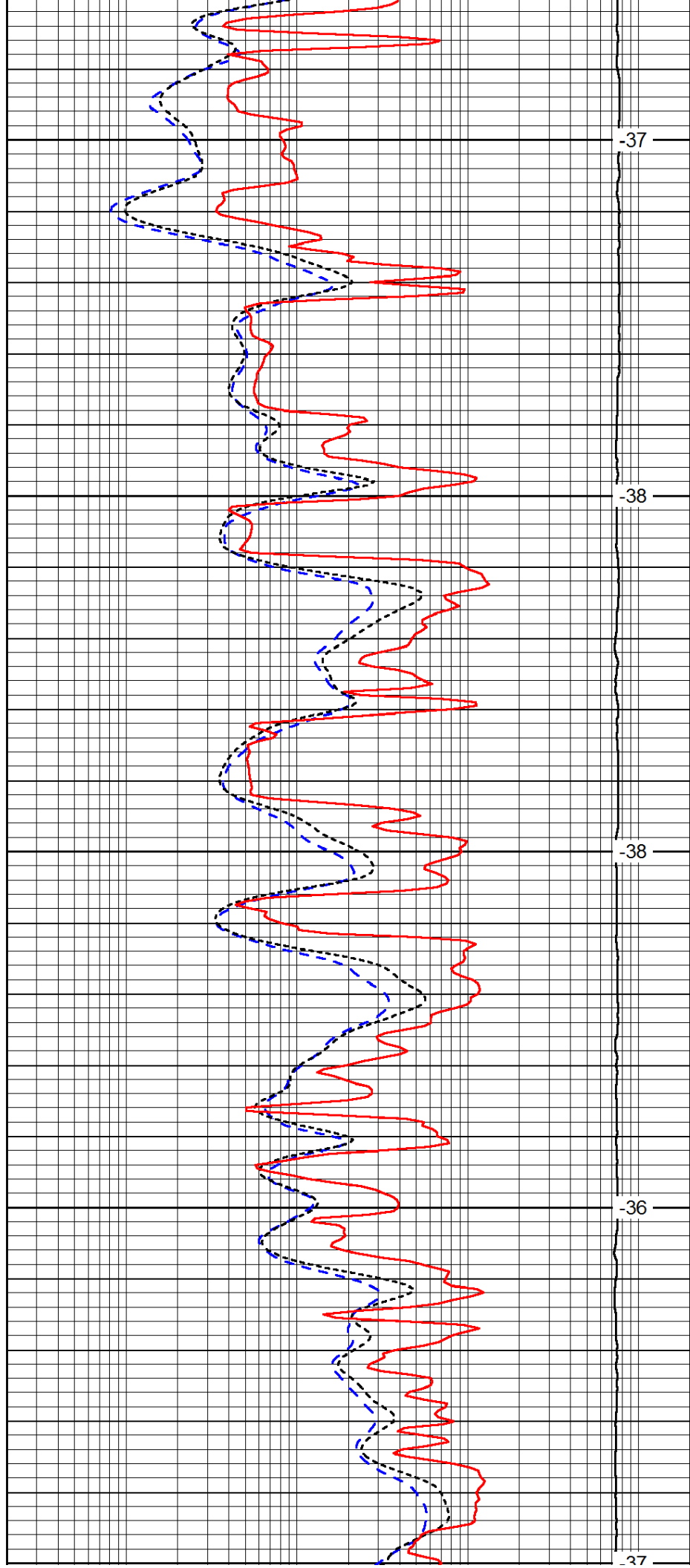
4050

4100

4150

4200

4250



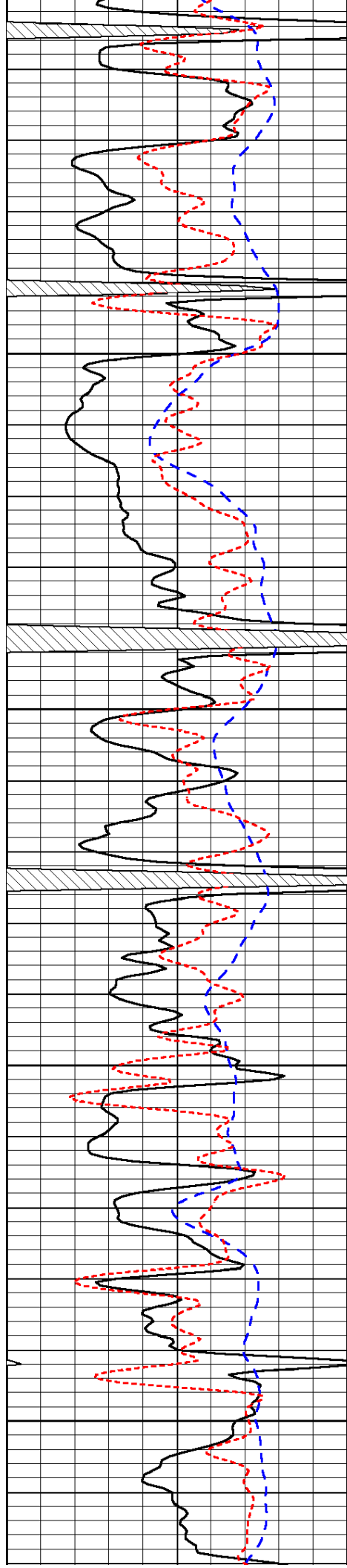
-37

-38

-38

-36

-37

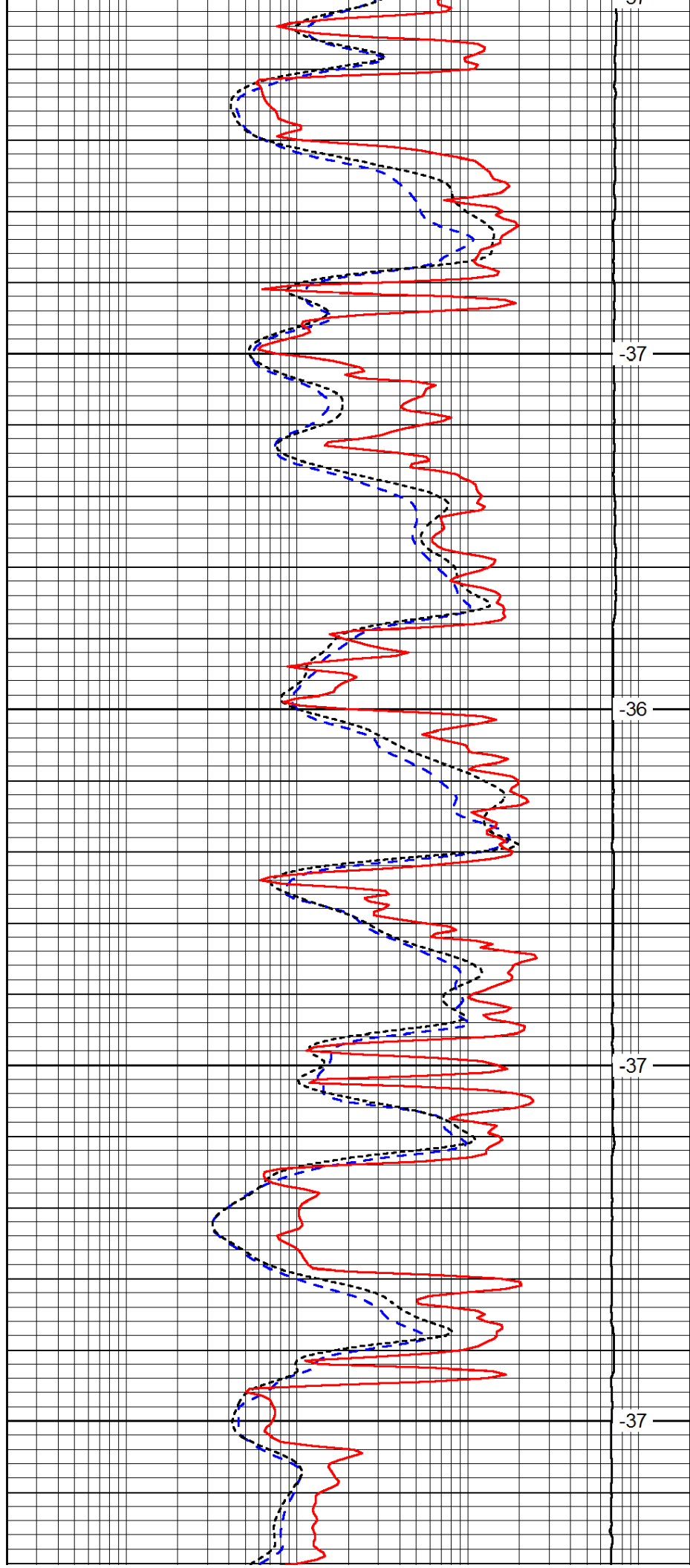


4300

4350

4400

4450

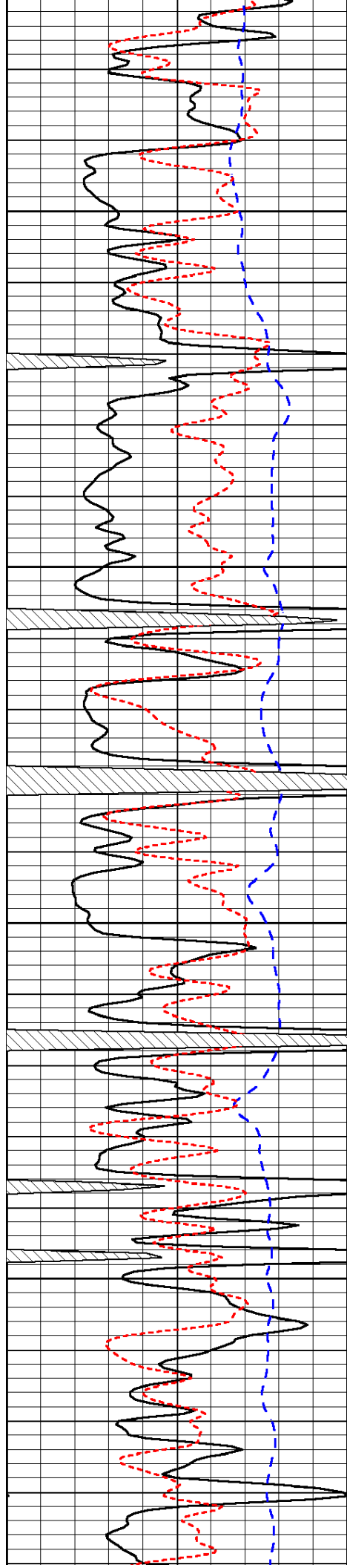


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-36

-37

-37

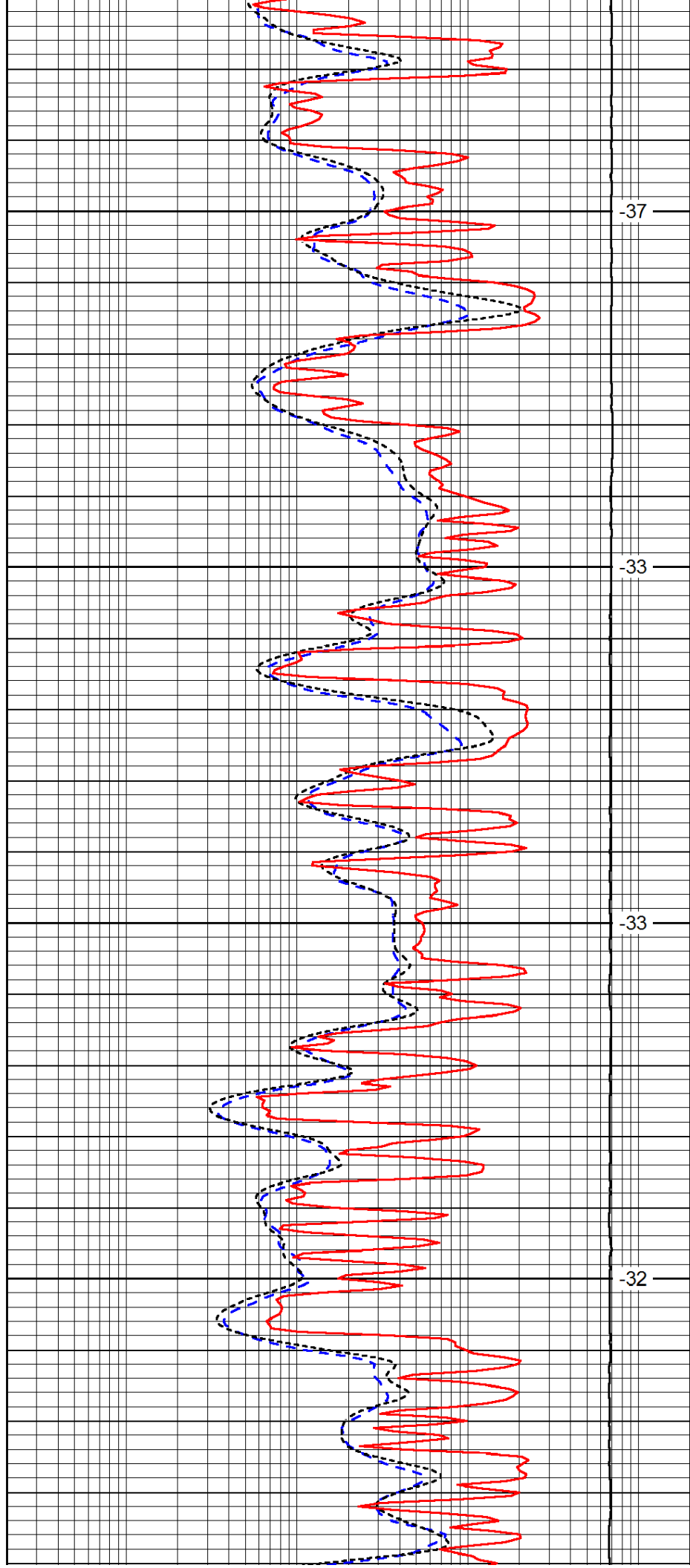


4500

4550

4600

4650

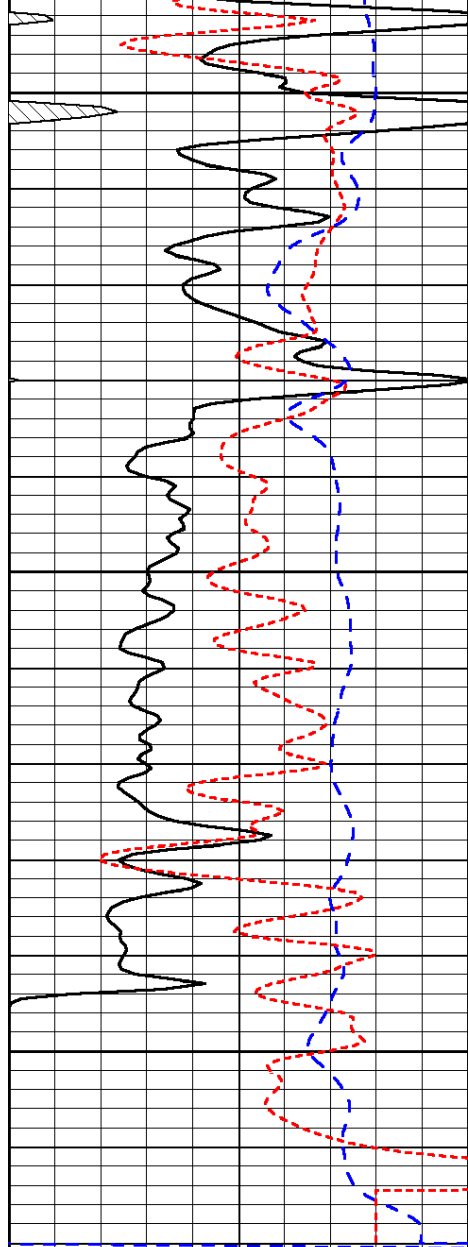


-37

-33

-33

-32

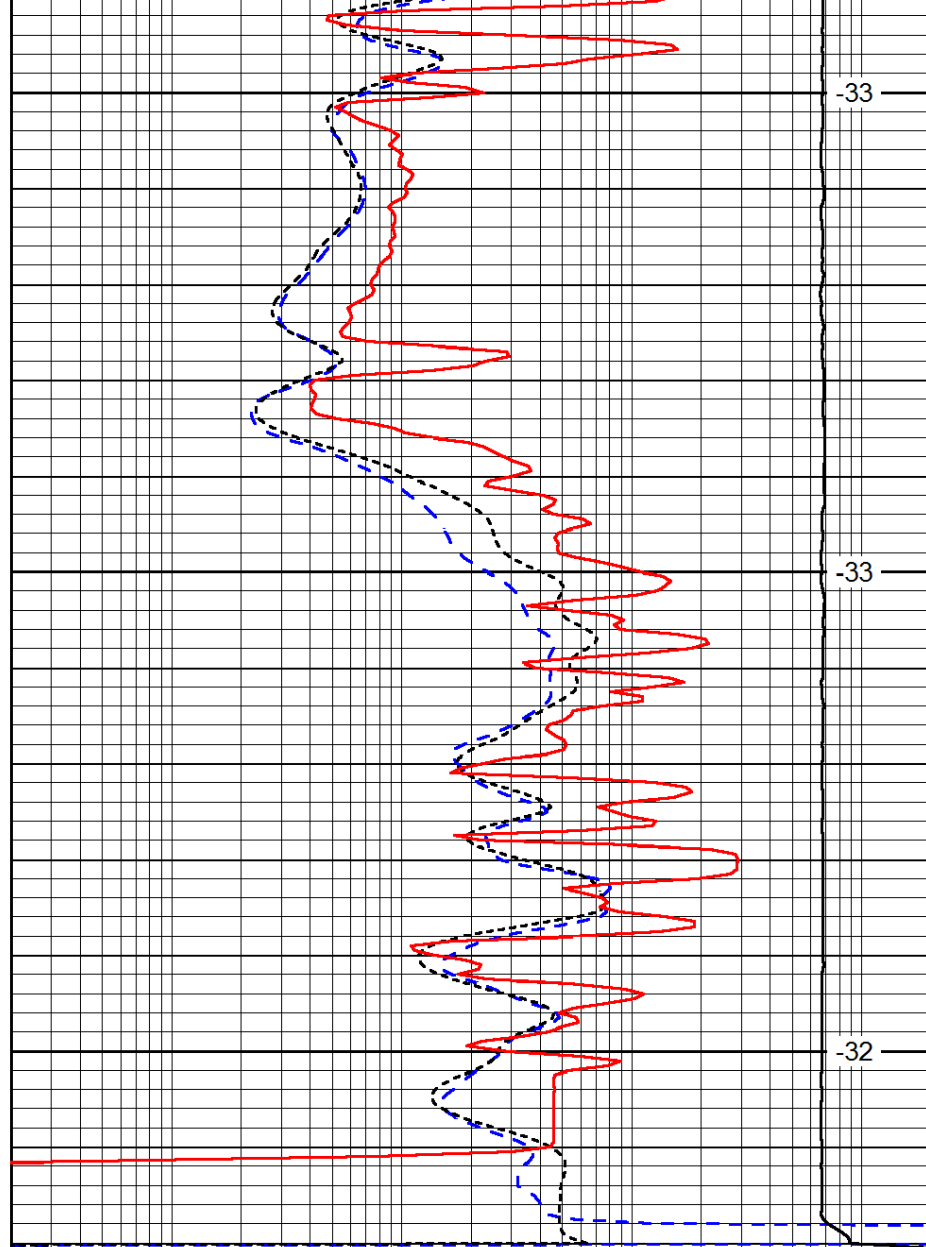


4700

4750

4800

0	Gamma Ray	150
-200	SP (mV)	0
-160	RxoRt	40



-33

-33

-32

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

LSPD