



Pioneer Energy Services

Dual Induction Log

API No.

15-051-26676-00-00

Company TDI, Inc.

Well Stackhouse Ranch # 1

Field Unnamed

County Ellis State

Kansas

Location

1060' FNL & 360' FEL

Sec: 13

Twp: 12 S

Rge: 19 W

Elevation

Permanent Datum

Ground Level

Elevation 2198

Log Measured From

Kelly Bushing 10 Ft. Above Perm. Datum

K.B. 2208

Drilling Measured From

Kelly Bushing

D.F. 2198

Date

05-22-2014

Run Number

One

Depth Driller

3899

Depth Logger

3902

Bottom Logged Interval

3901

Top Log Interval

200

Casing Driller

8.625 @ 223

Casing Logger

224

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

2500

Density / Viscosity

9.2 54

pH / Fluid Loss

10.0 7.6

Source of Sample

Flowline

Rm @ Meas. Temp

0.68 @ 70

Rmf @ Meas. Temp

0.51 @ 70

Rmc @ Meas. Temp

0.92 @ 70

Source of Rmf / Rmc

Charts

Rm @ BHT

0.41 @ 115

Operating Rig Time

4 Hours

Max Rec. Temp. F

117

Equipment Number

17

Location

Hays

Recorded By

Y. Ruiz

Witnessed By

Herb Deines

Tom Denning

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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

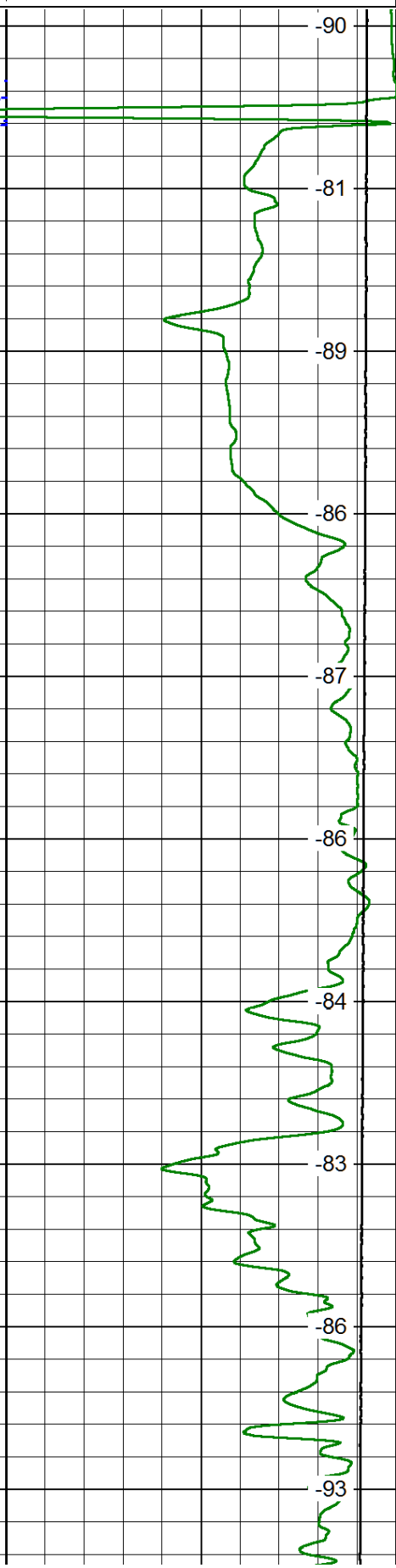
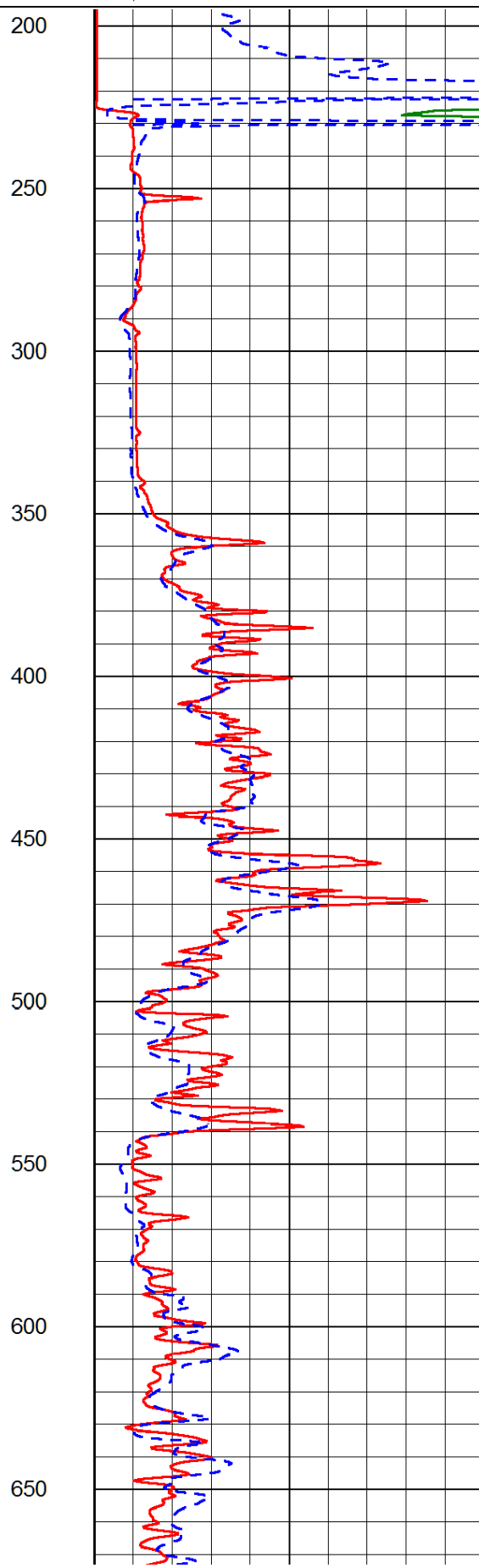
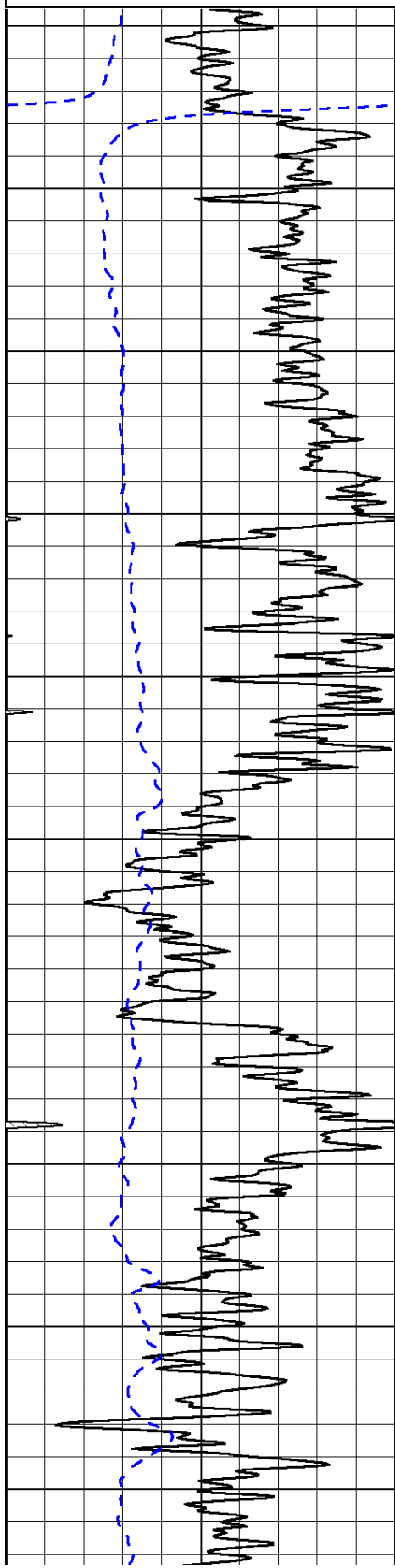
Thank you for using Log-Tech, Inc.
(785) 625-3858
Hays,
North to Buckeye Rd, 3 1/4 West, 1/3 North,
East into

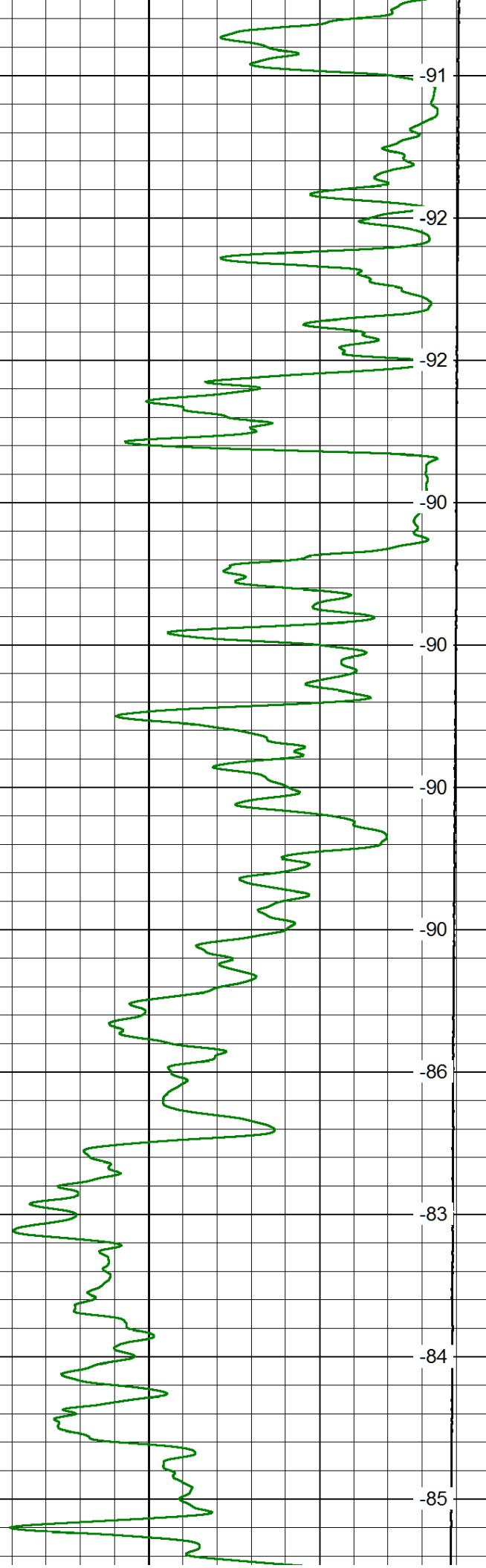
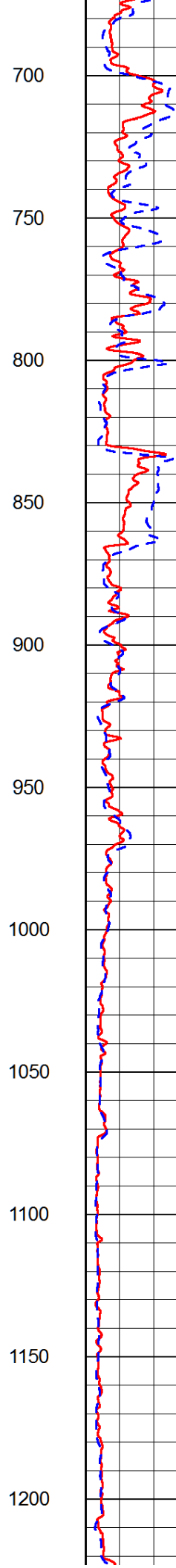
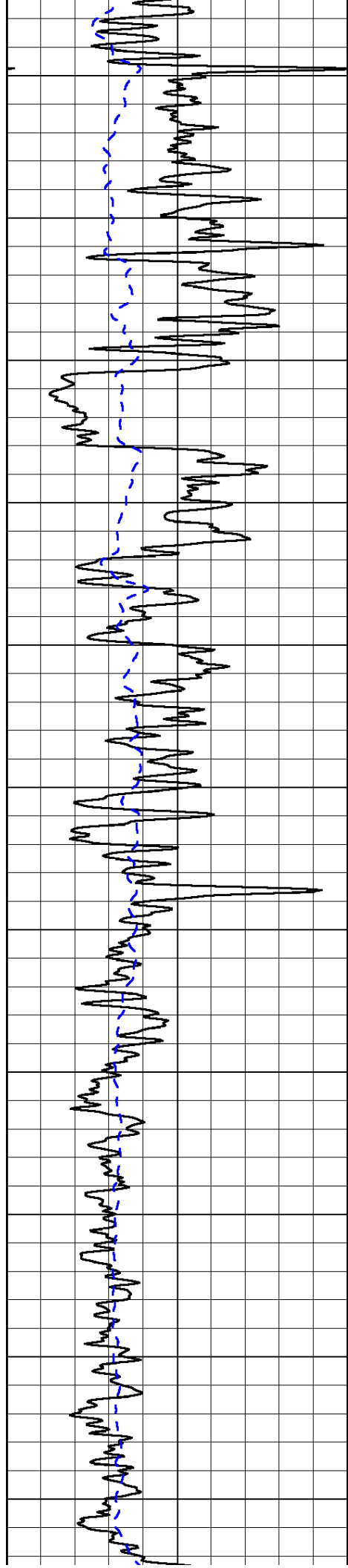
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Dataset Creation: Thu May 22 14:25:36 2014
Charted by: Depth in Feet scaled 1:600

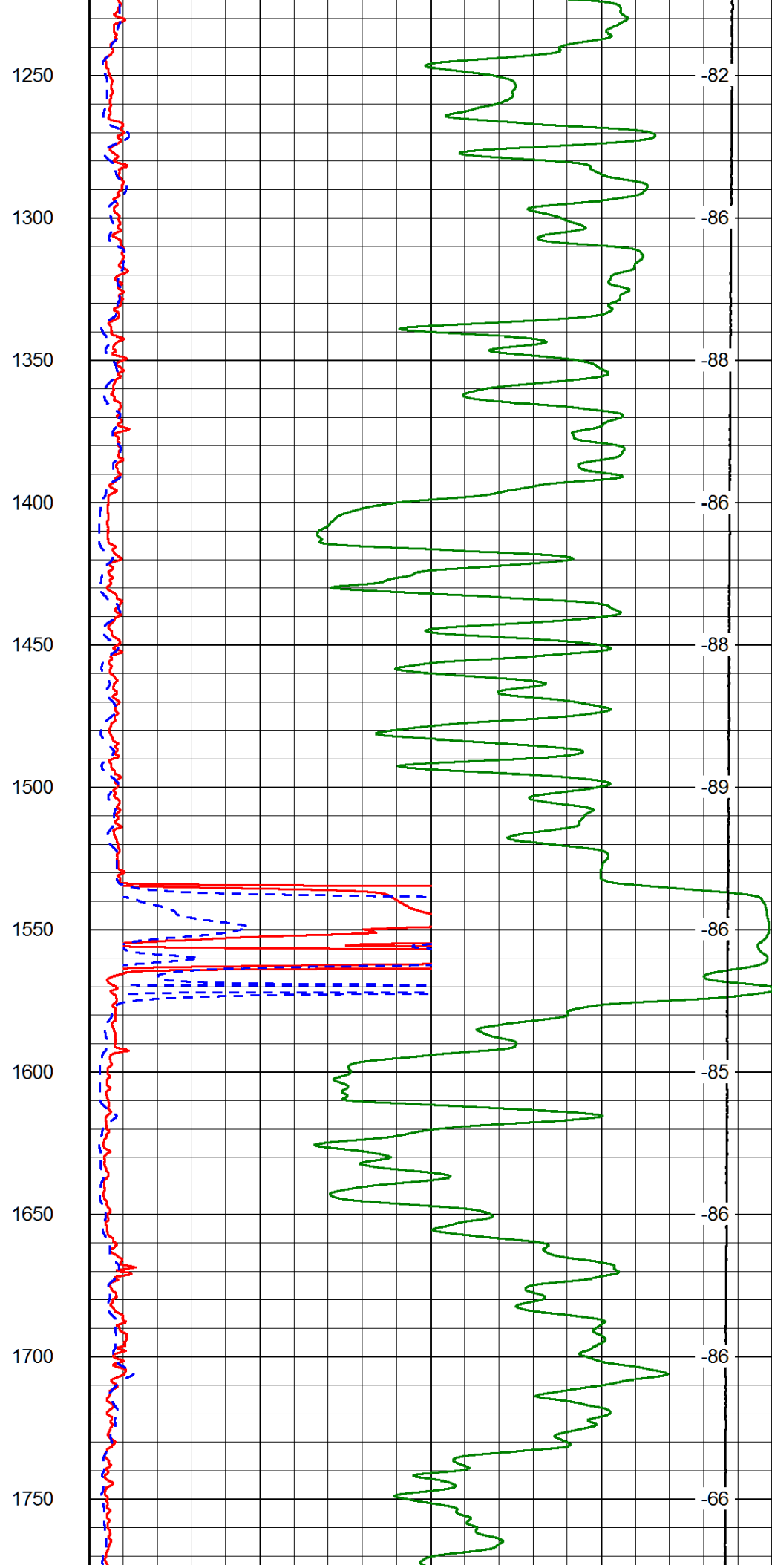
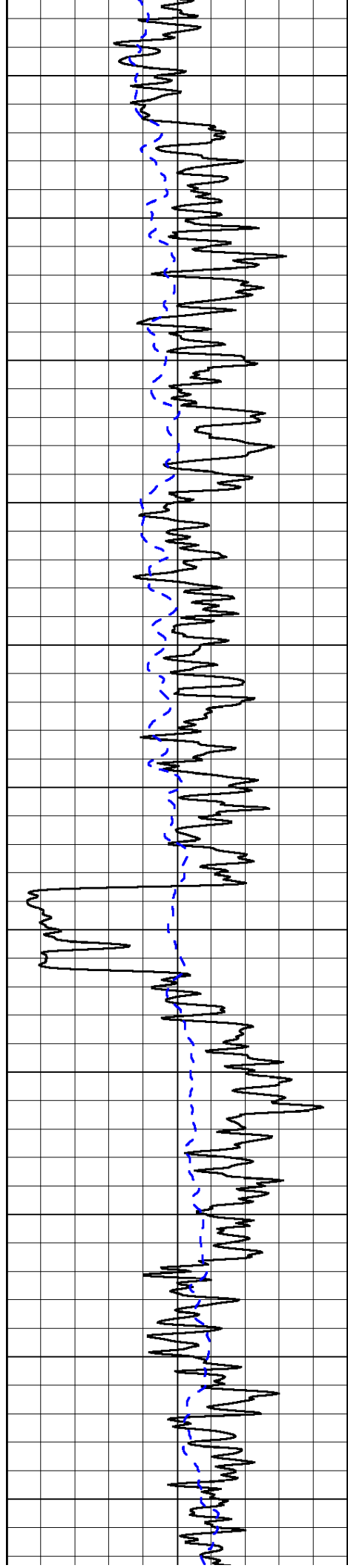
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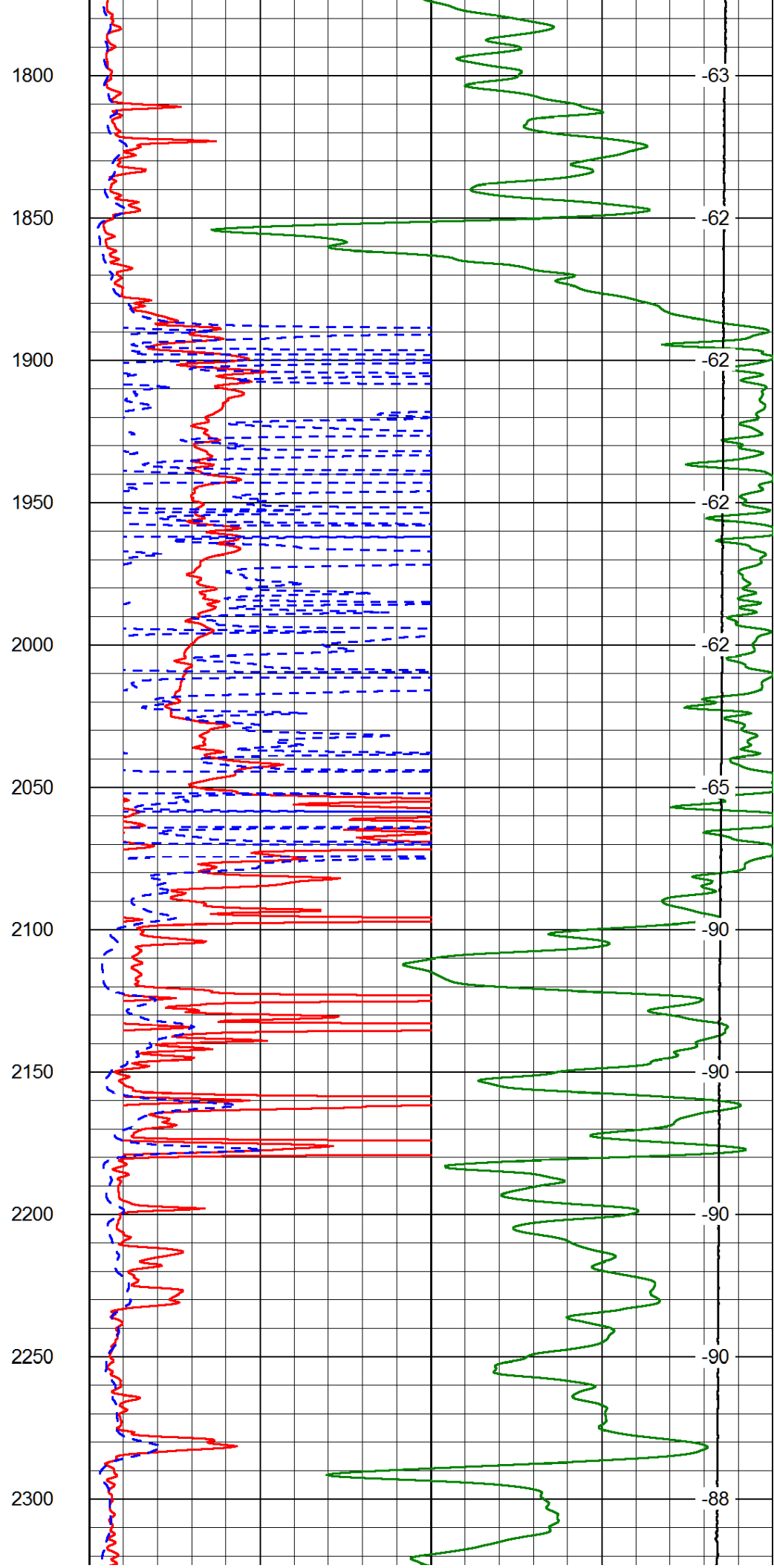
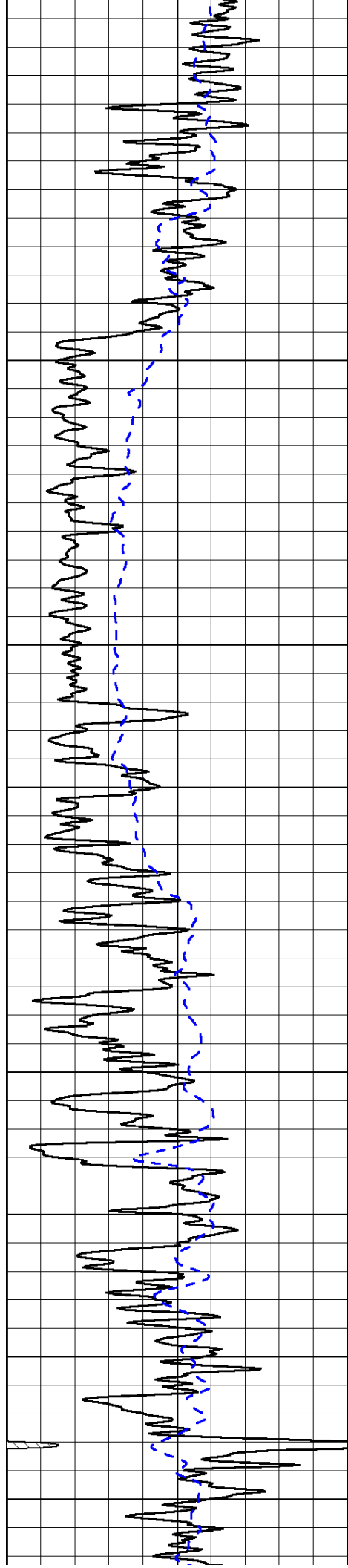
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0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

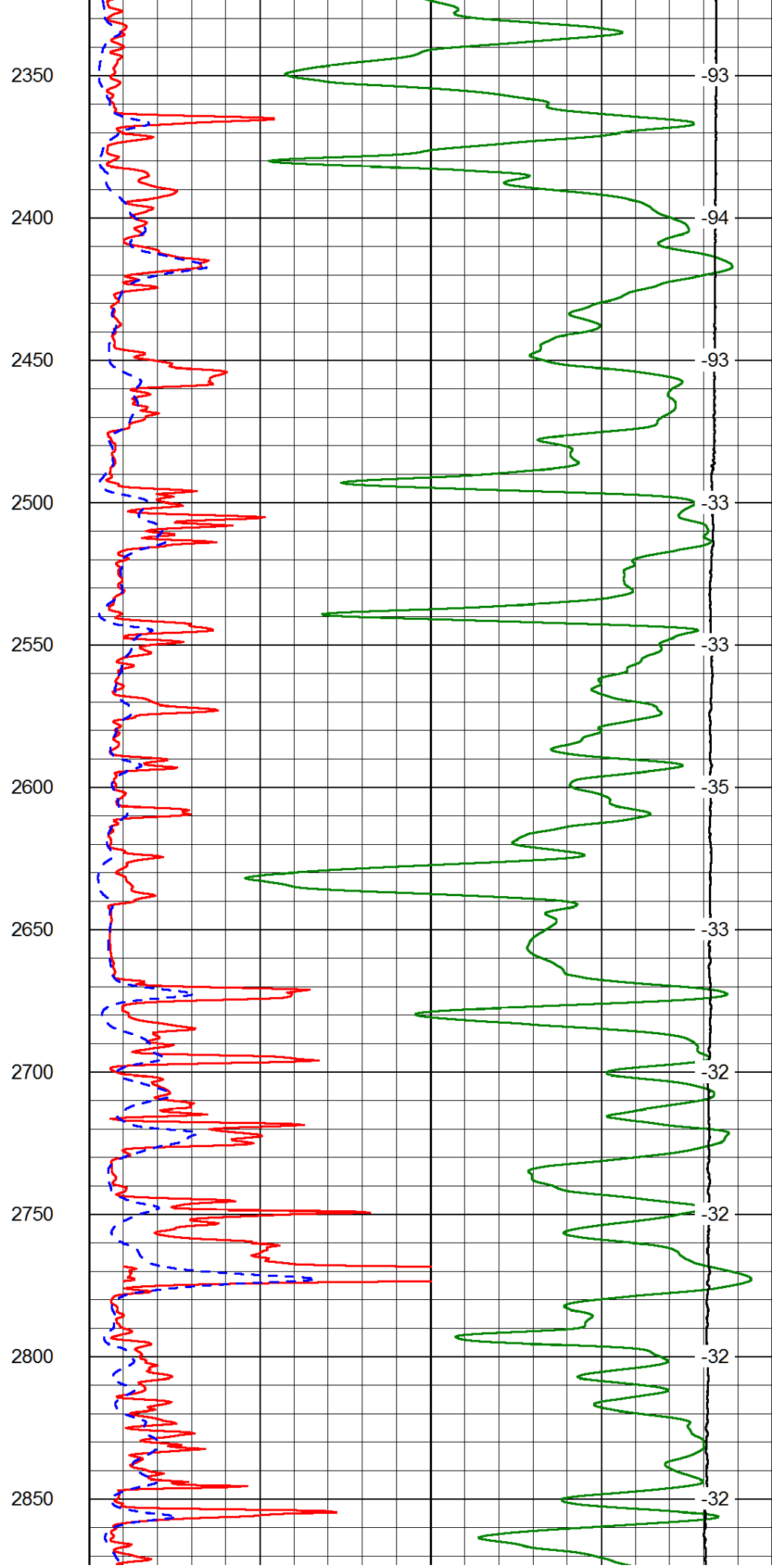
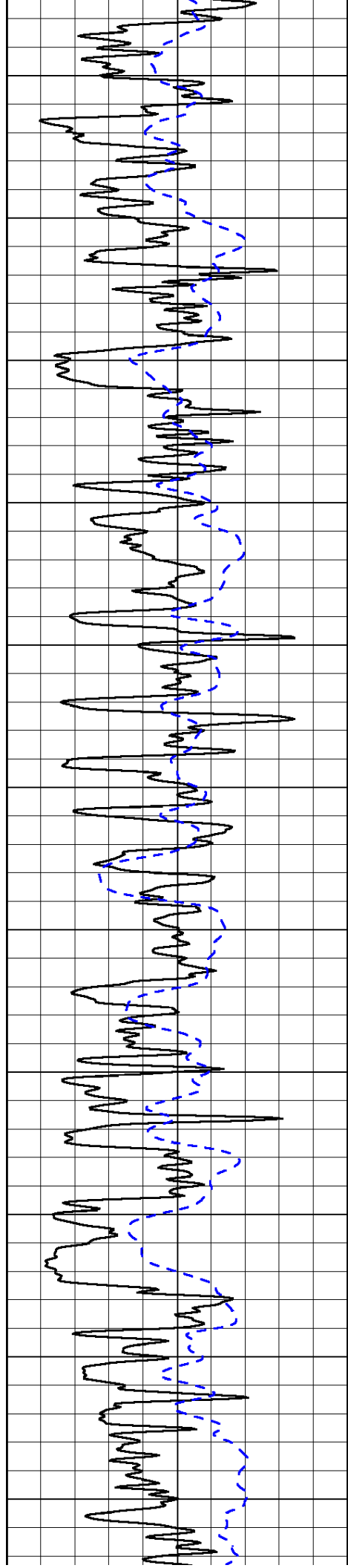
LSPD

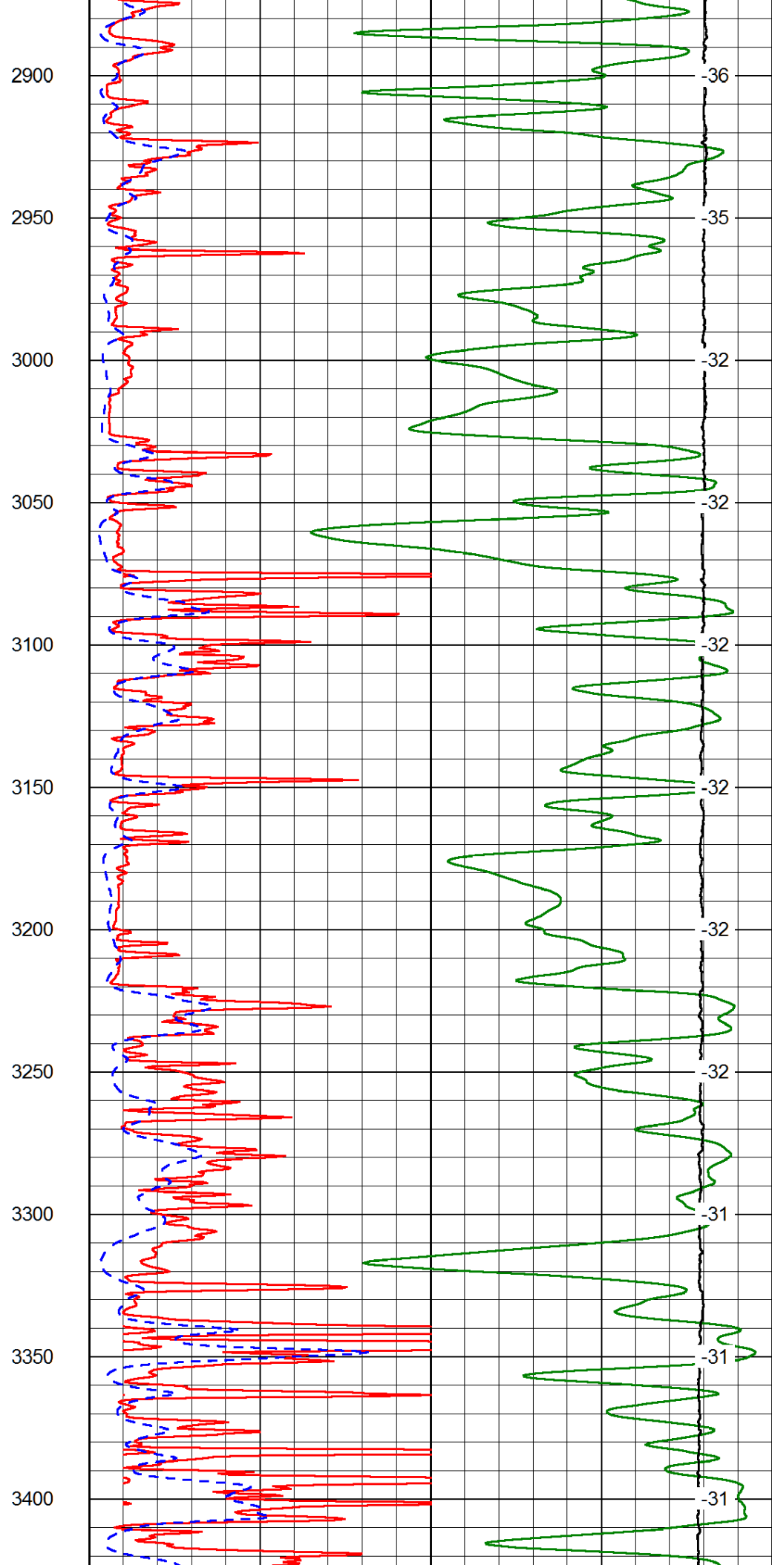
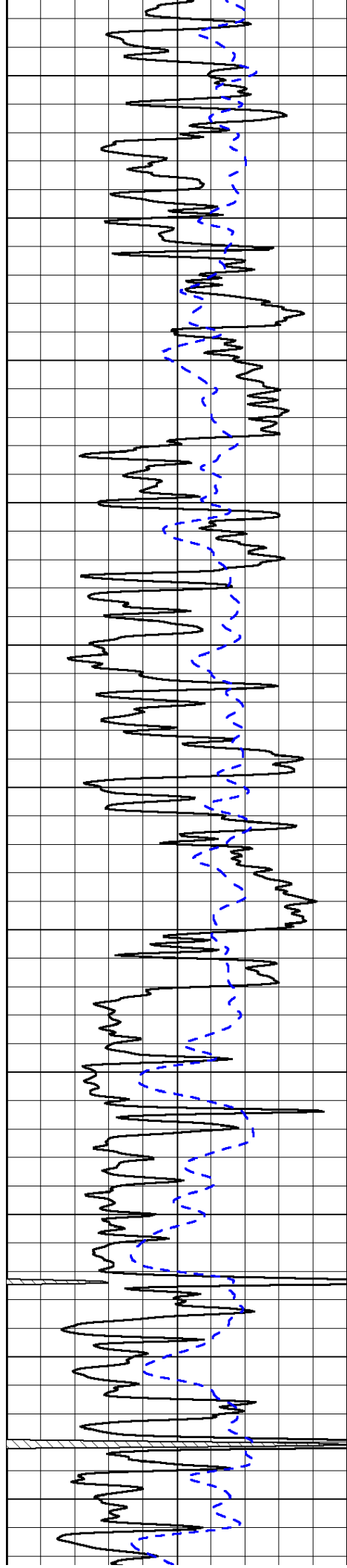


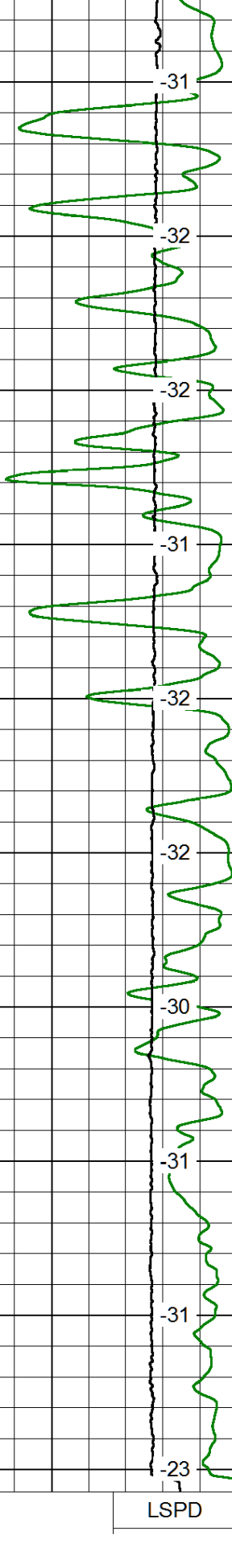
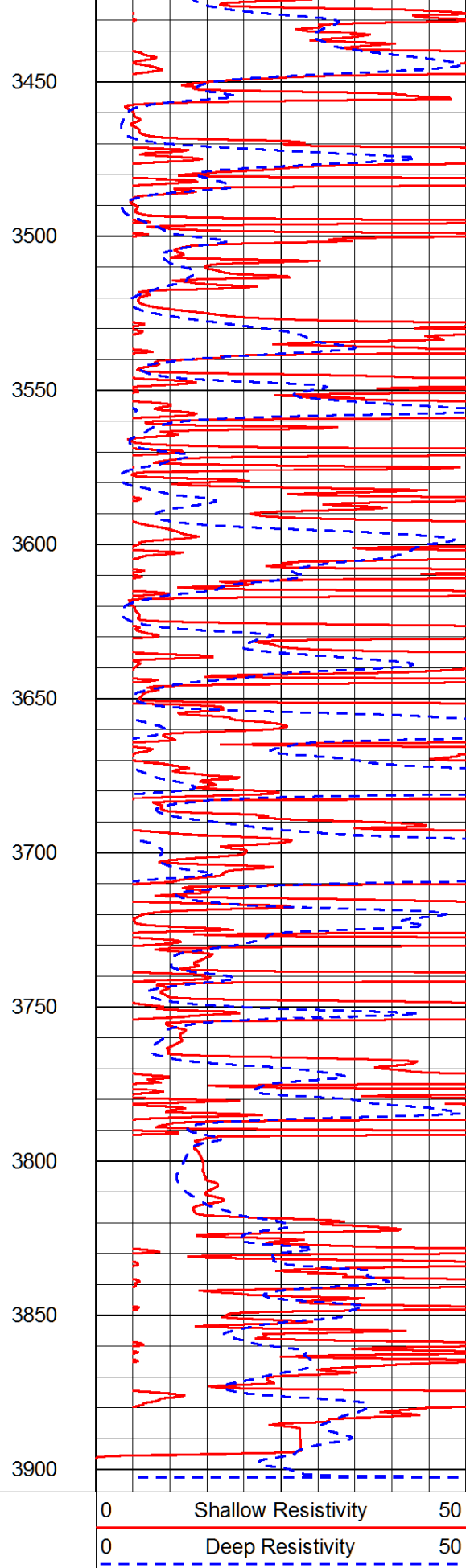
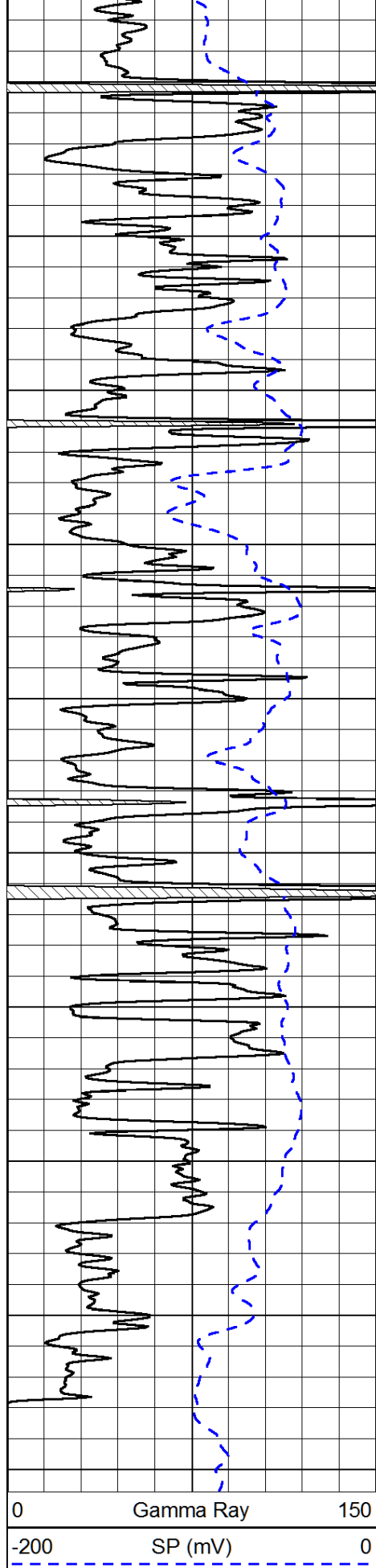












0 Gamma Ray 150
-200 SP (mV) 0

0 Shallow Resistivity 50
0 Deep Resistivity 50

LSPD

1000 Conductivity 0
15000 Line Tension 0

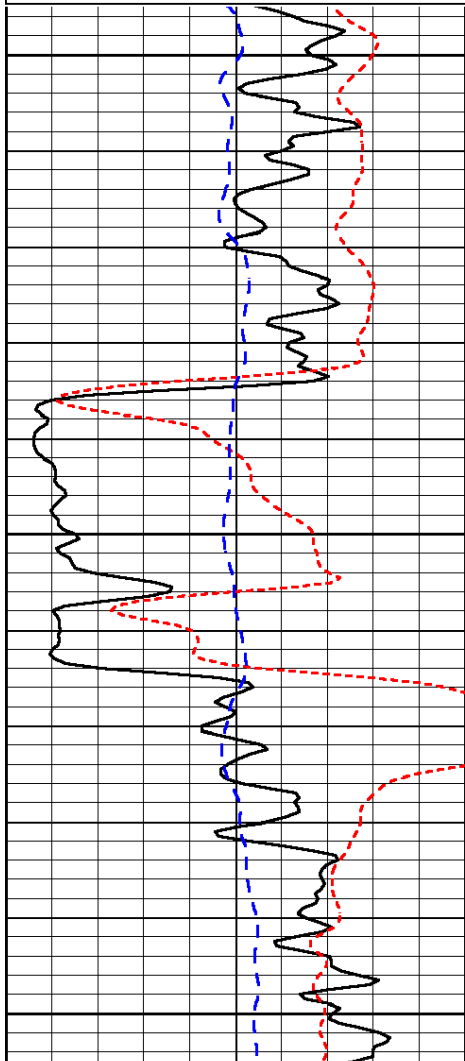
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50 Deep Resistivity 500

Database File: tdihd.db
Dataset Pathname: DIL/tdistl
Presentation Format: dil
Dataset Creation: Thu May 22 14:25:36 2014
Charted by: Depth in Feet scaled 1:240

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

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD

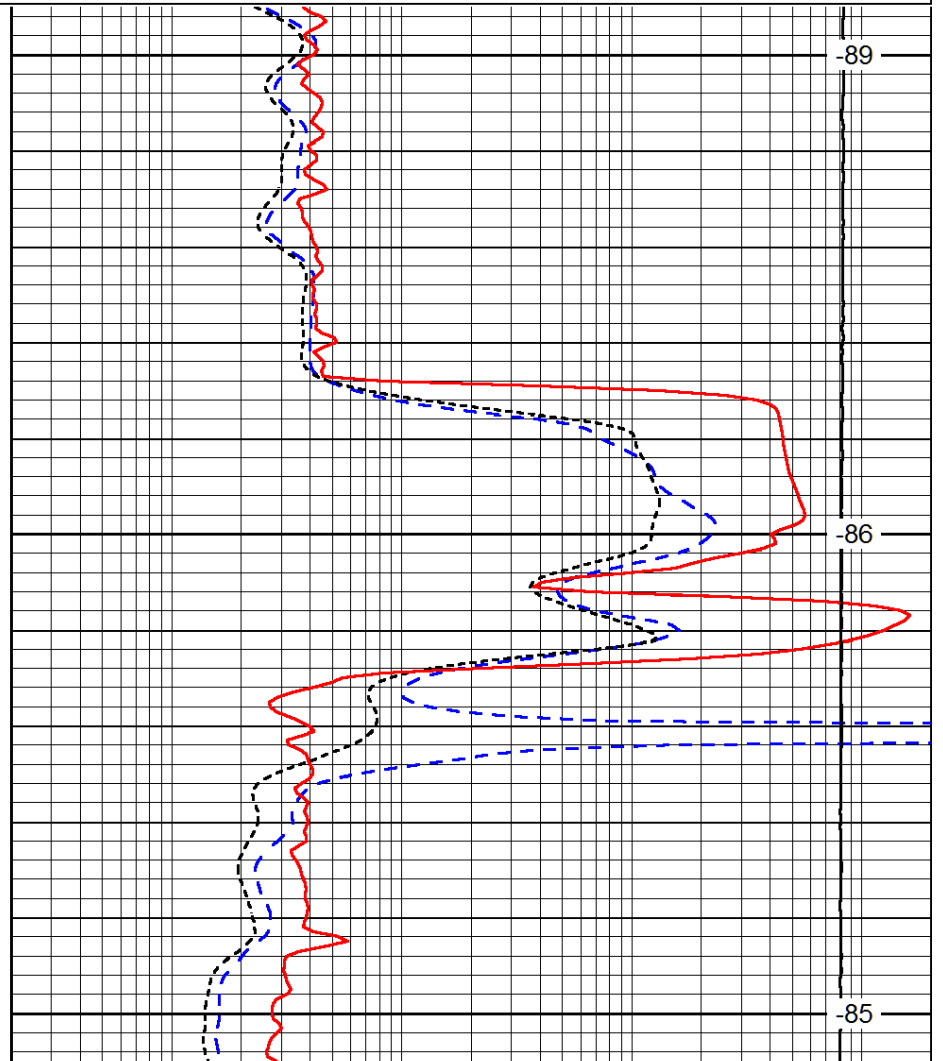


0	Gamma Ray	150
-160	RXO/RT	40
-200	SP (mV)	0

1500

1550

1600



0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000

LSPD

Database File: tdihd.db
Dataset Pathname: DIL/tdistl
Presentation Format: dil
Dataset Creation: Thu May 22 14:25:36 2014
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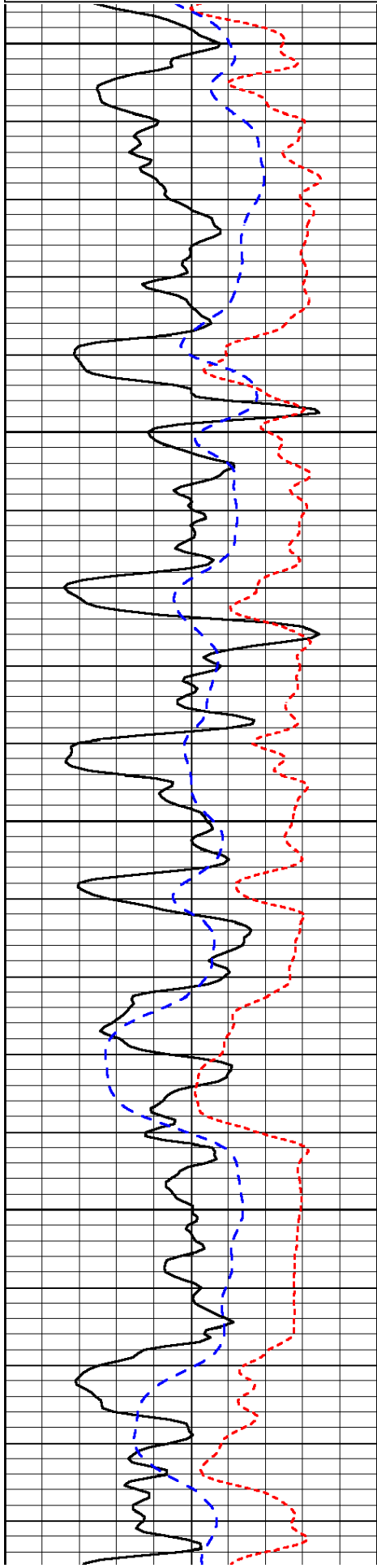
0	Gamma Ray	150
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0.2	Deep Resistivity	2000
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-160	RXO/RT	40
-200	SP (mV)	0

0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD

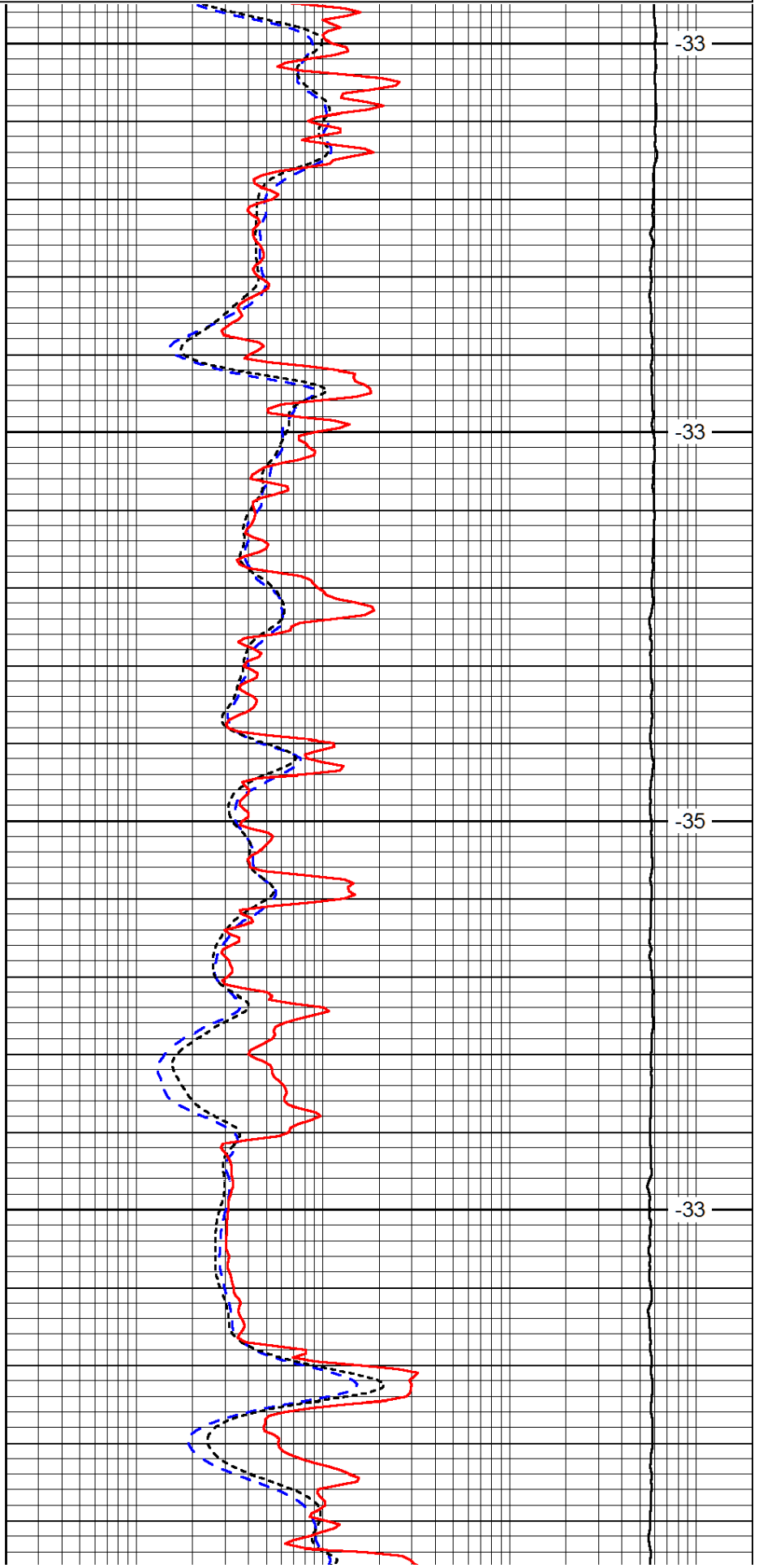


2500

2550

2600

2650

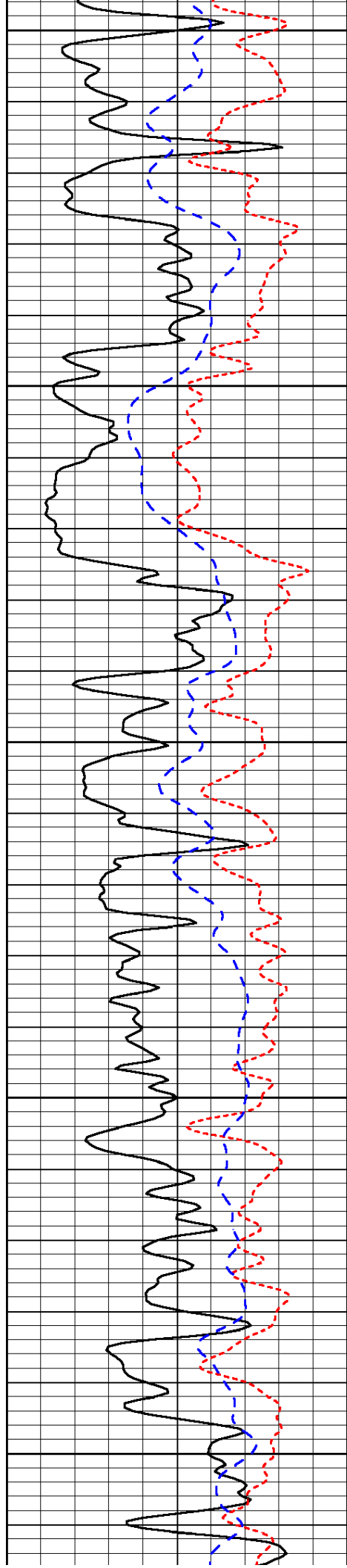


-33

-33

-35

-33



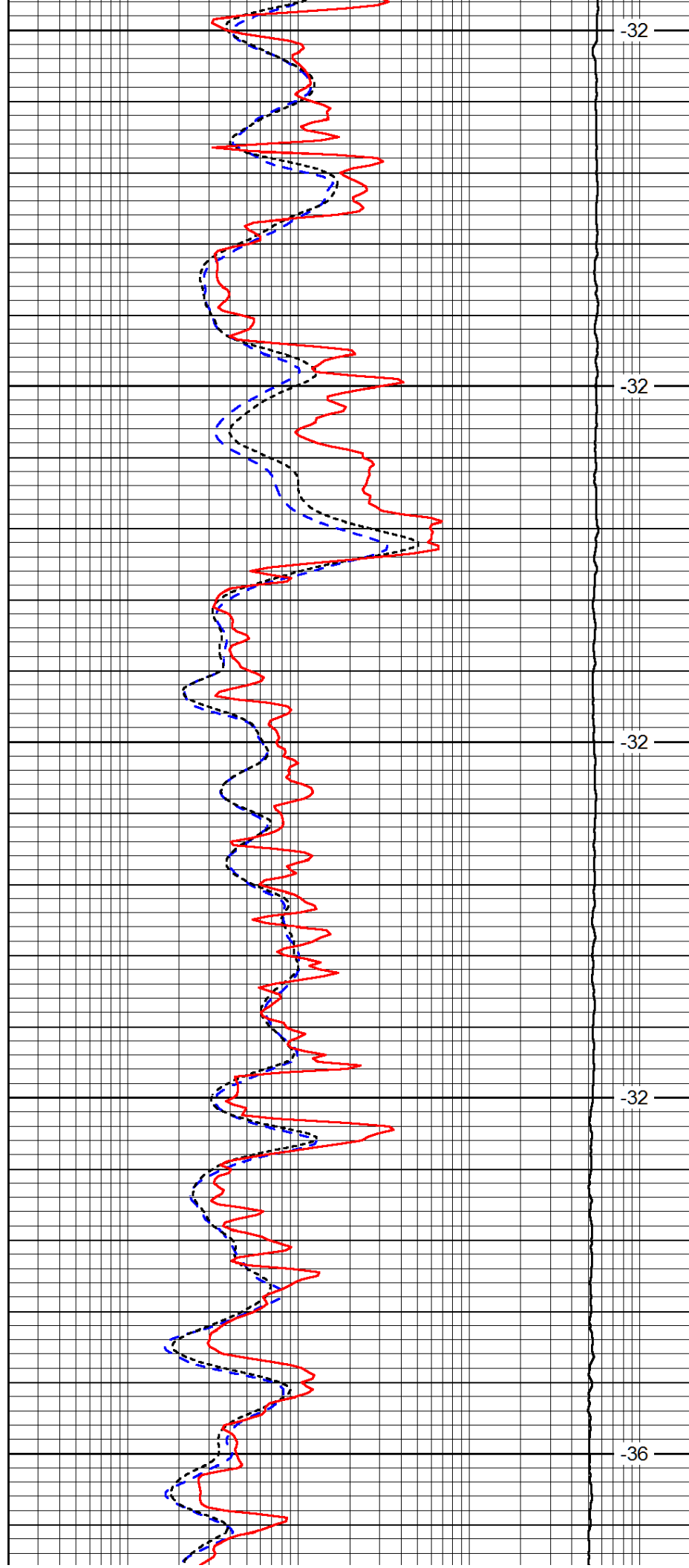
2700

2750

2800

2850

2900



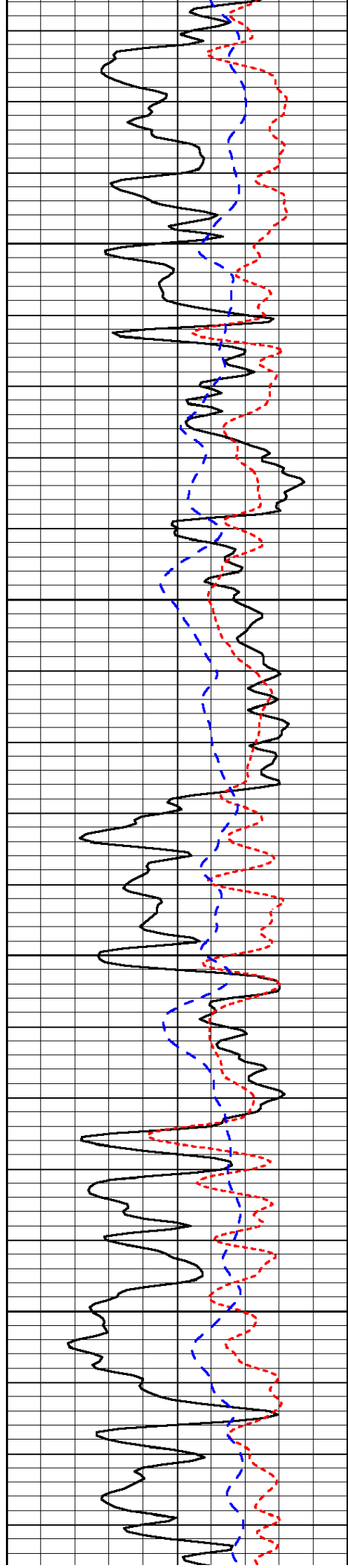
-32

-32

-32

-32

-36

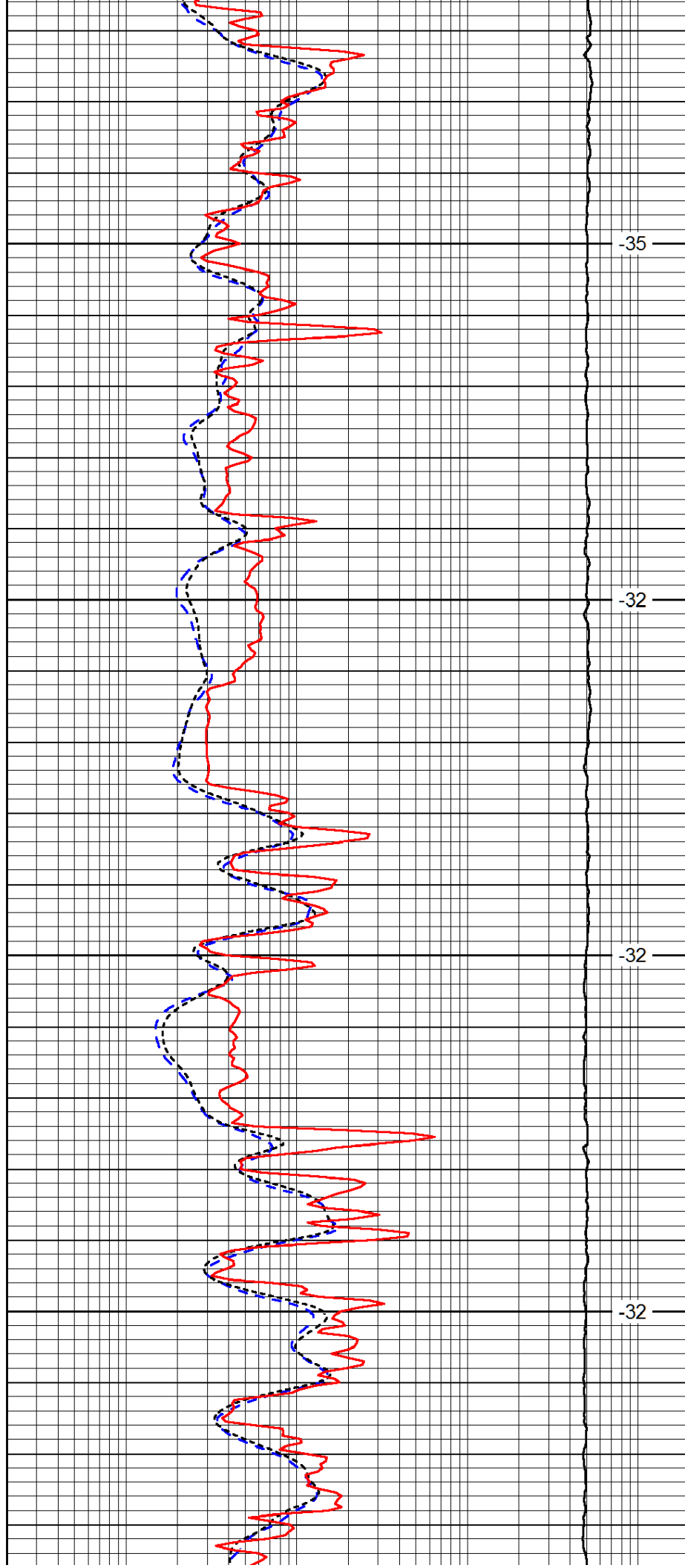


2950

3000

3050

3100

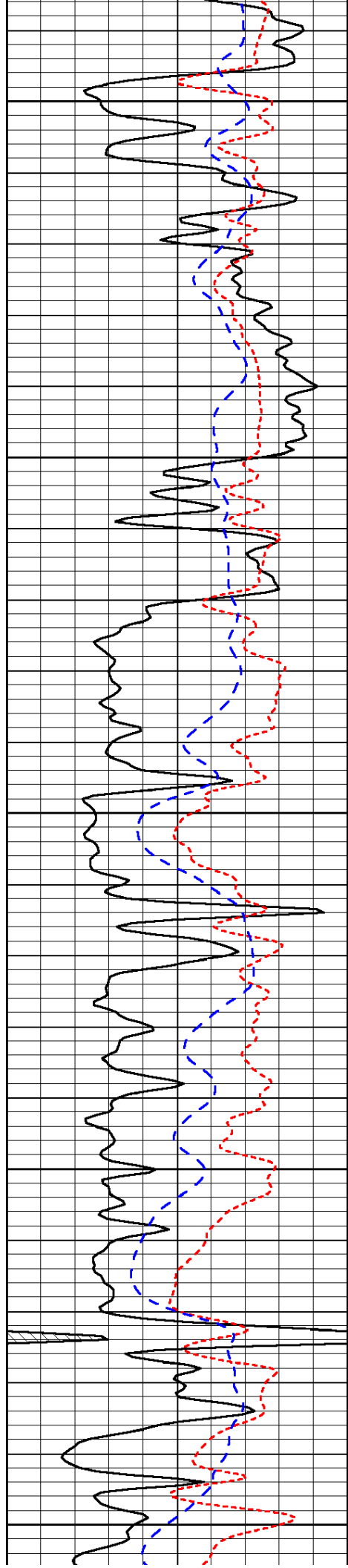


-35

-32

-32

-32



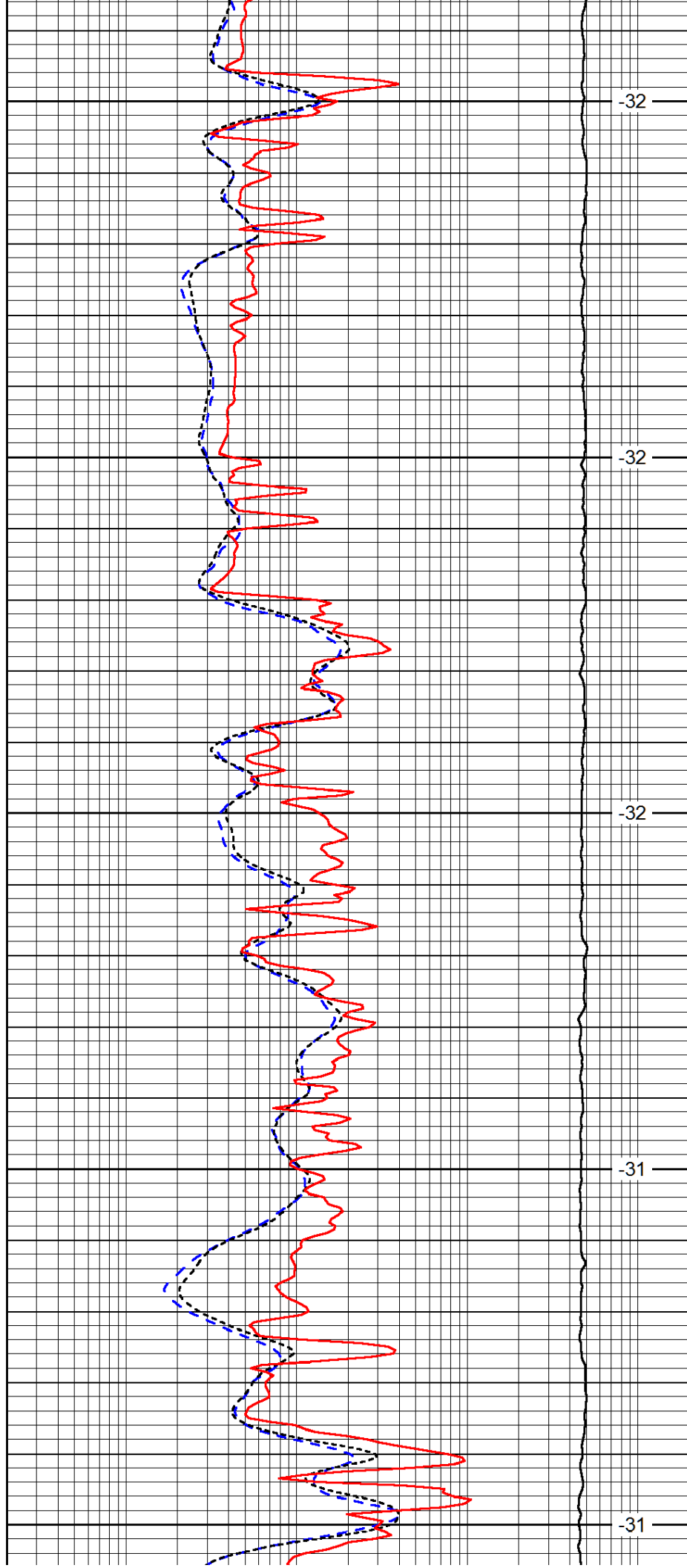
3150

3200

3250

3300

3350



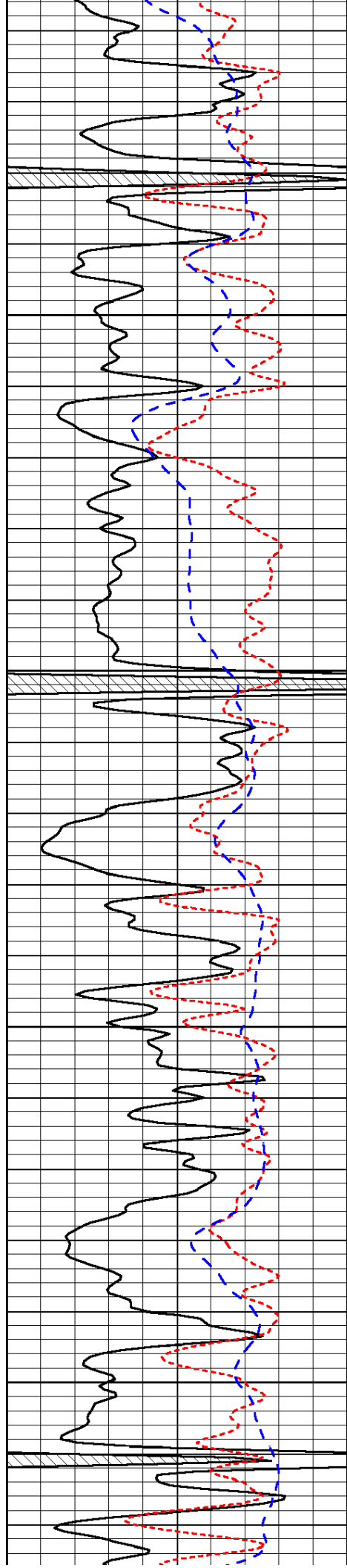
-32

-32

-32

-31

-31

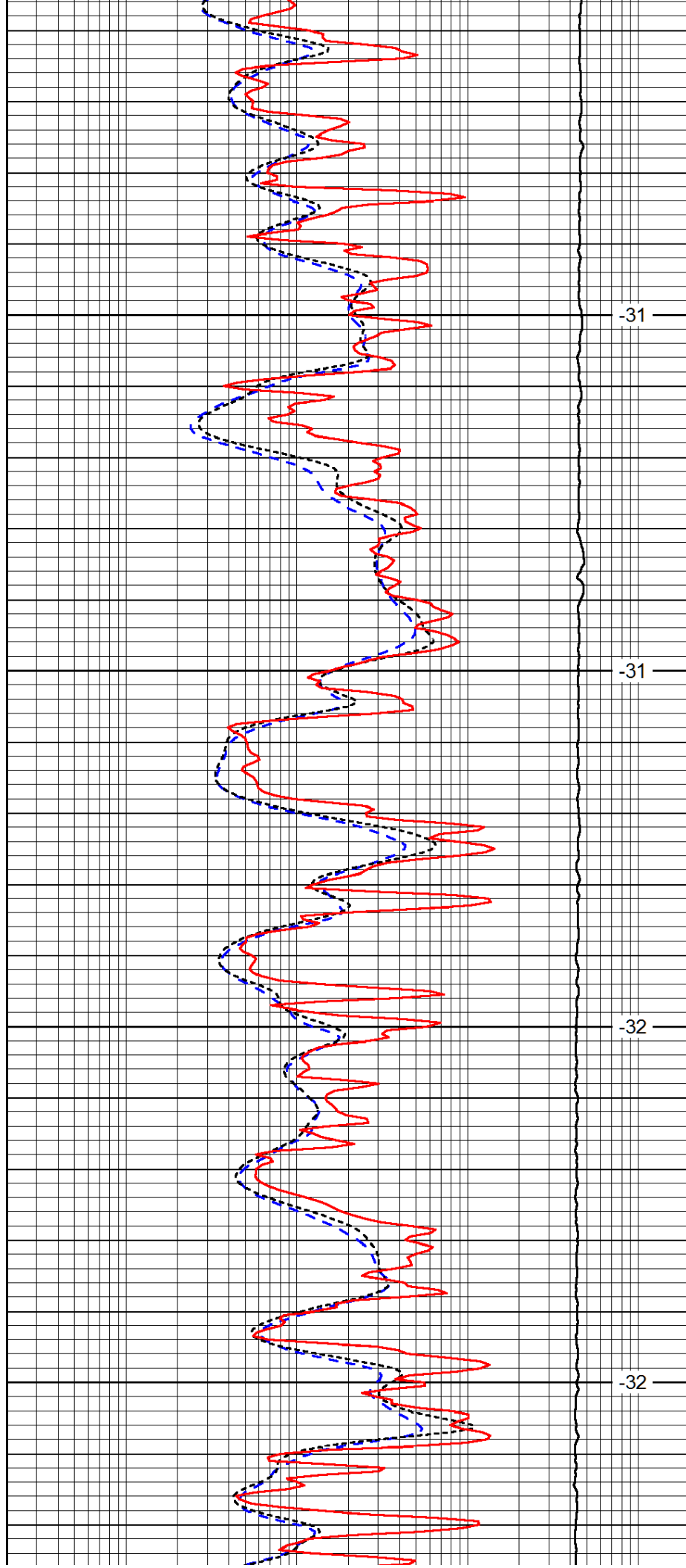


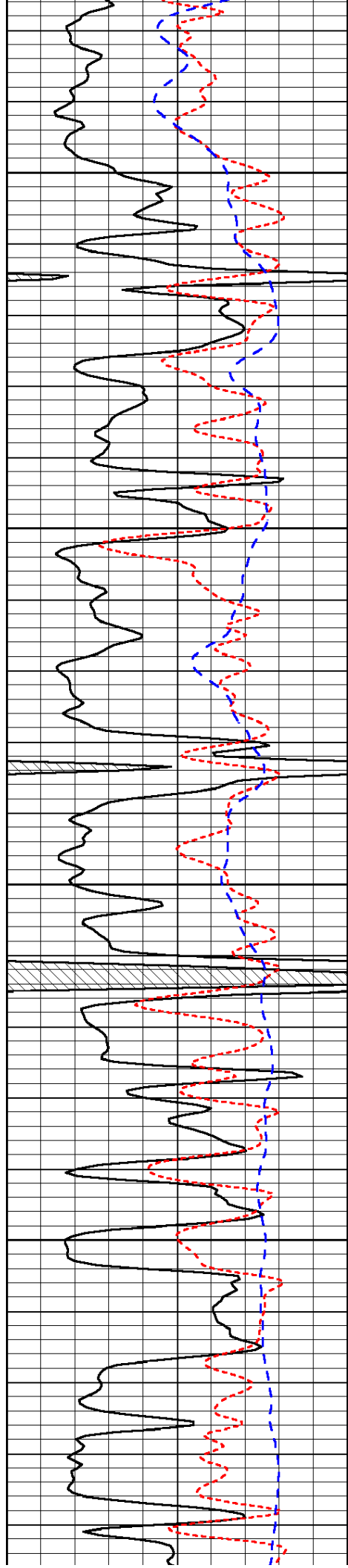
3400

3450

3500

3550



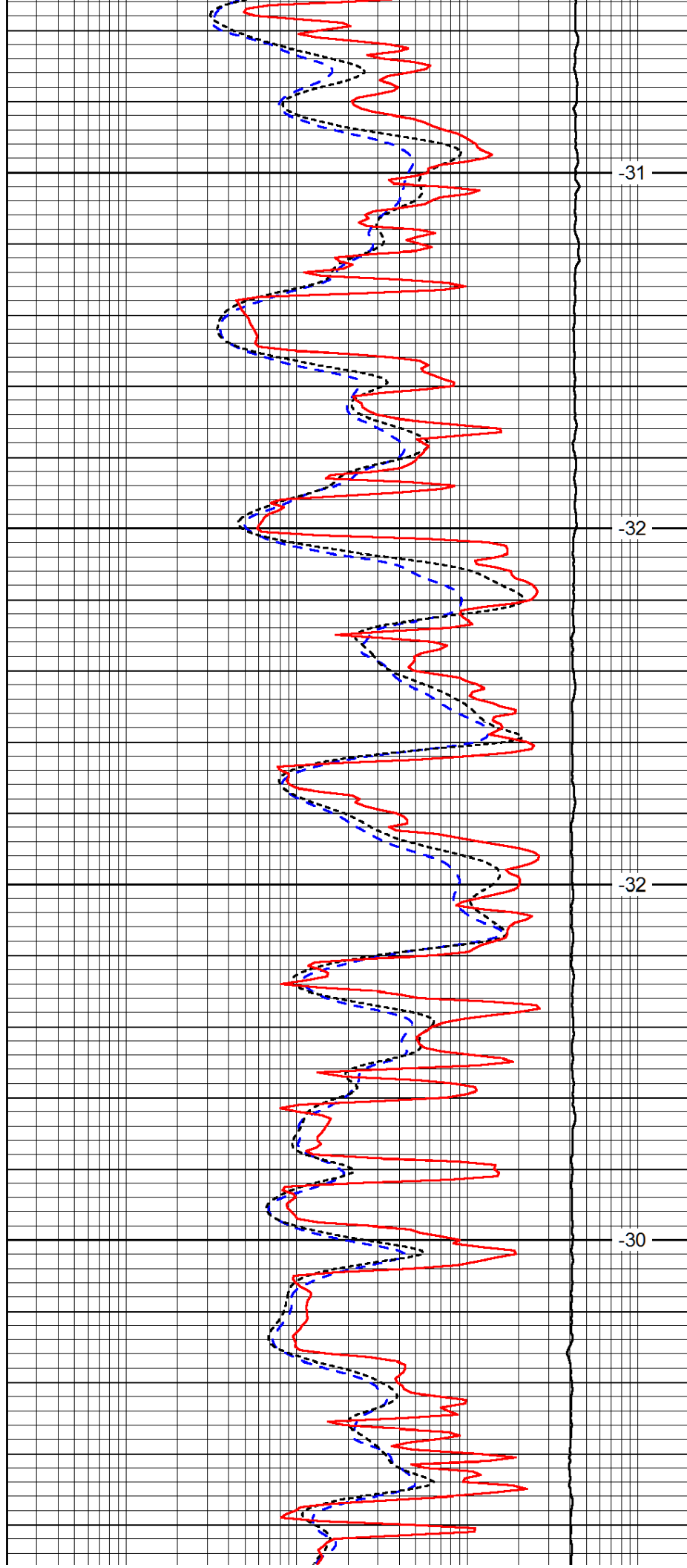


3600

3650

3700

3750

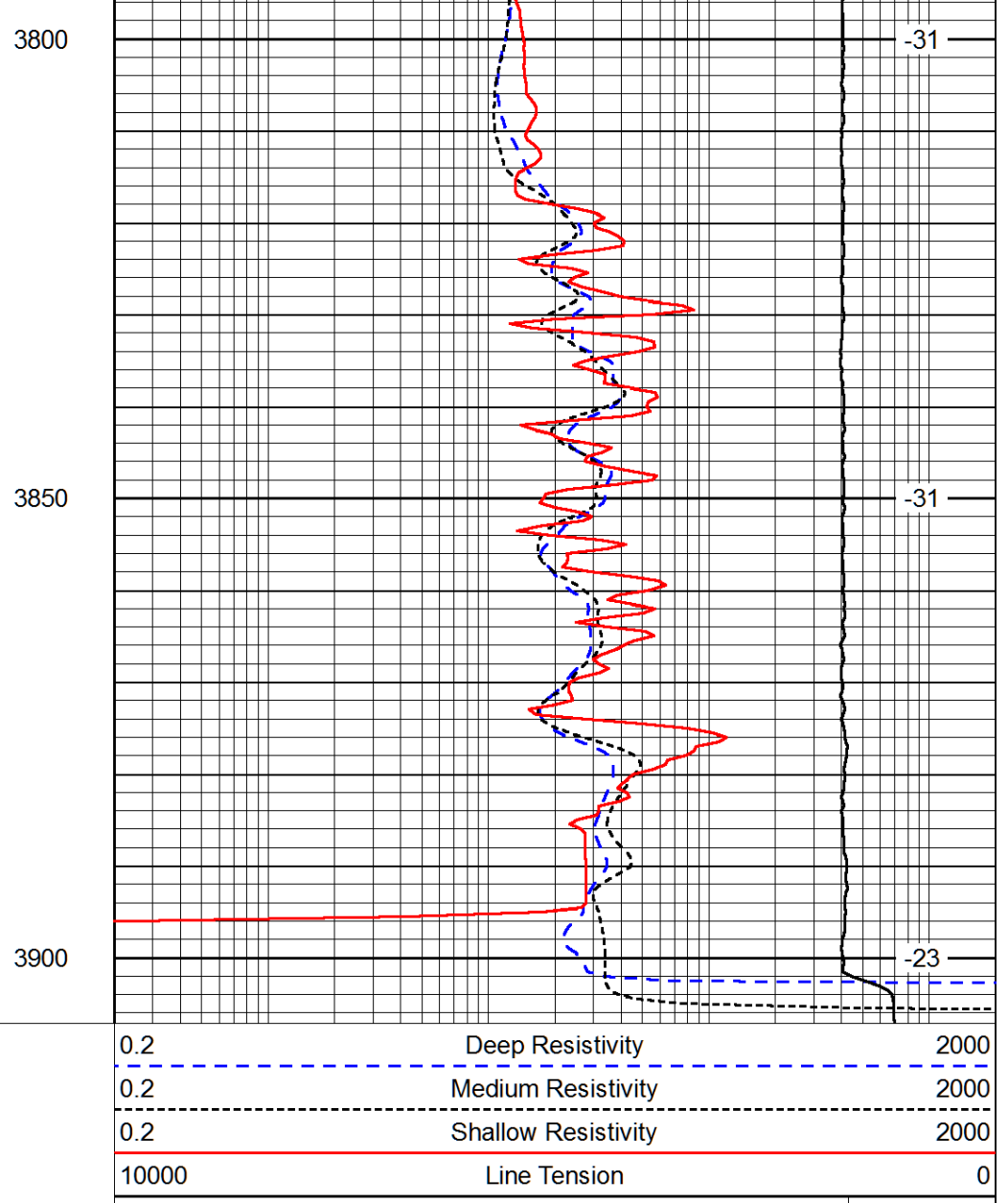
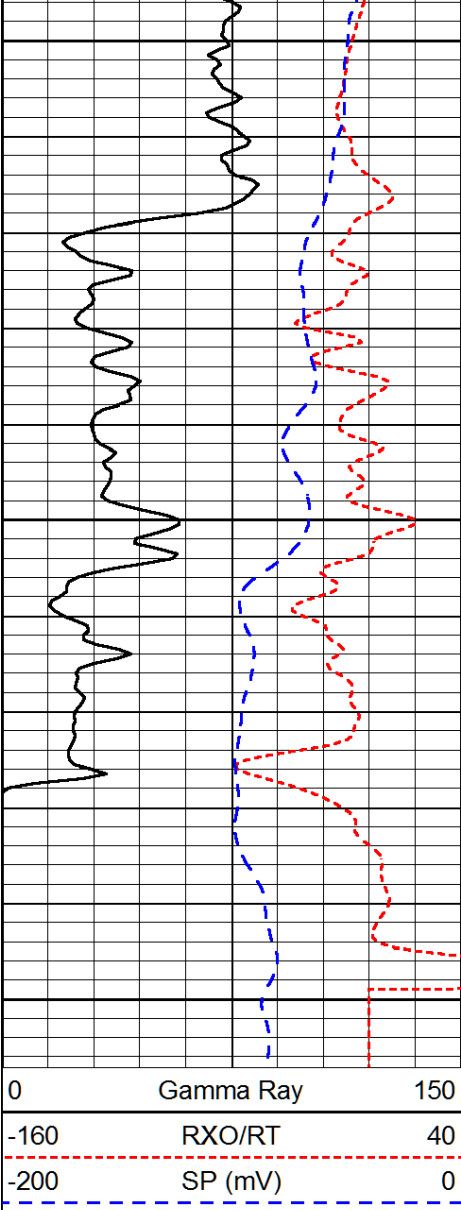


-31

-32

-32

-30



LSPD