



Pioneer Energy Services

Dual Induction Log

API No.

15-053-21312-00-00

Company Bird Dog Oil, LLC

Well Stollenberg-Svoboda #1-17

Field Stollenberg

County Ellsworth

State

Kansas

Location

1445' FNL / 1305' FEL

Other Services
CNL/CDL
MEL/BHCS

Sec: 17

Twp: 16S

Rge: 10W

Elevation

Permanent Datum Ground Level Elevation 1885
Log Measured From Kelly Bushing 9 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

K.B. 1894
D.F.
G.L. 1885

Date

5/23/2014

Run Number

One

Depth Driller

3460

Depth Logger

3460

Bottom Logged Interval

3459

Top Log Interval

350

Casing Driller

8.625 @ 392

Casing Logger

392

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

9600

Density / Viscosity

9.3 49

pH / Fluid Loss

11.0 8.8

Source of Sample

Flowline

Rm @ Meas. Temp

0.20 @ 70

Rmf @ Meas. Temp

0.15 @ 70

Rmc @ Meas. Temp

0.27 @ 70

Source of Rmf / Rmc

Charts

Rm @ BHT

0.13 @ 111

Operating Rig Time

4 Hours

Max Rec. Temp. F

111

Equipment Number

17

Location

Hays

Recorded By

R. Barnhart

Witnessed By

Derek Patterson

<<< 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 Log-Tech, Inc.
(785) 625-3858

Clafiln, KS:

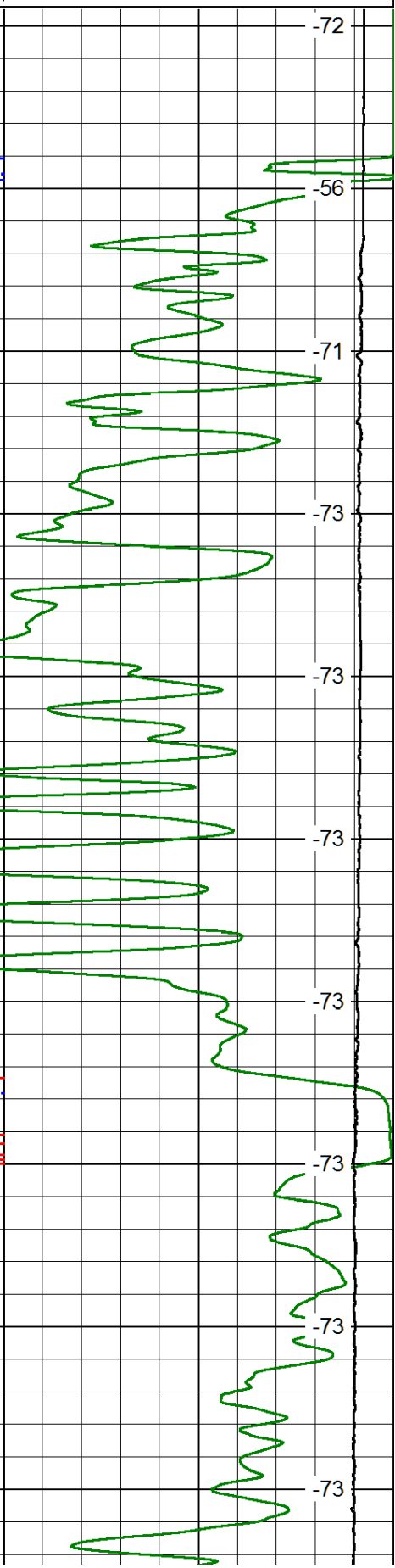
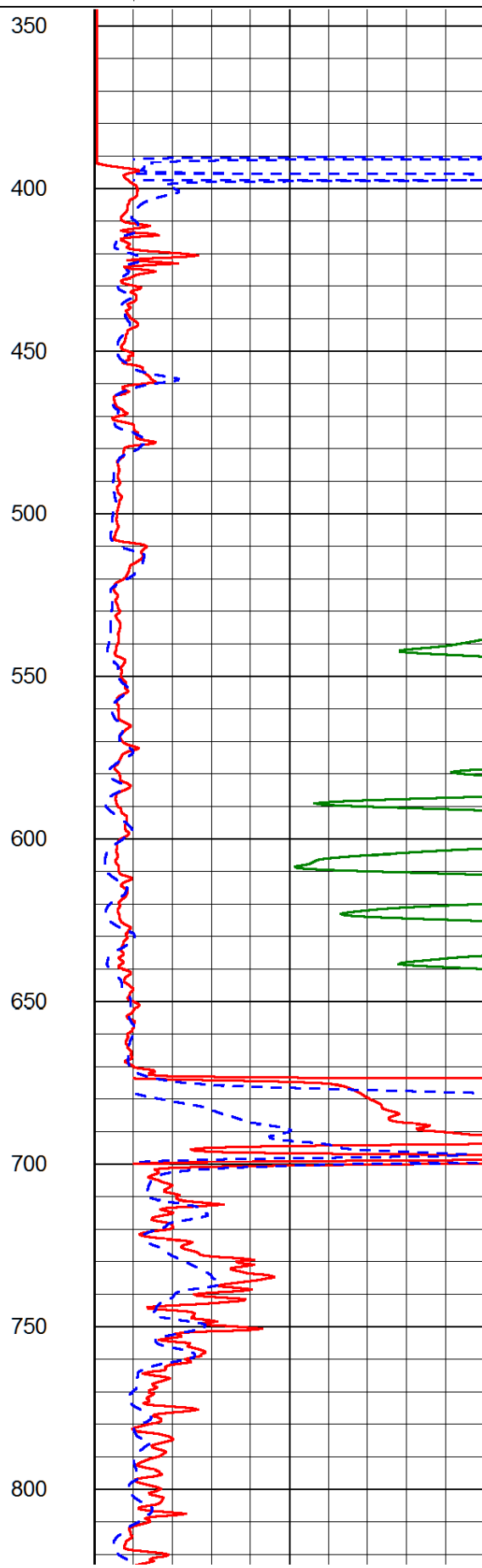
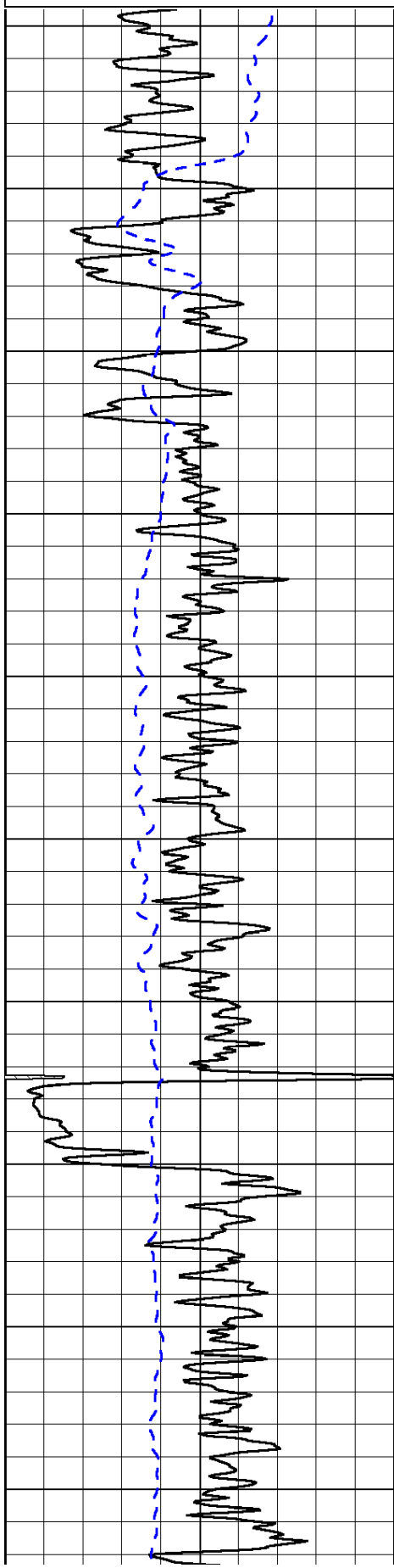
Hwy 4 & 156: 2NE to 160 Rd., 6 1/2N to Q Rd., 2E, 1 1/2N, W into

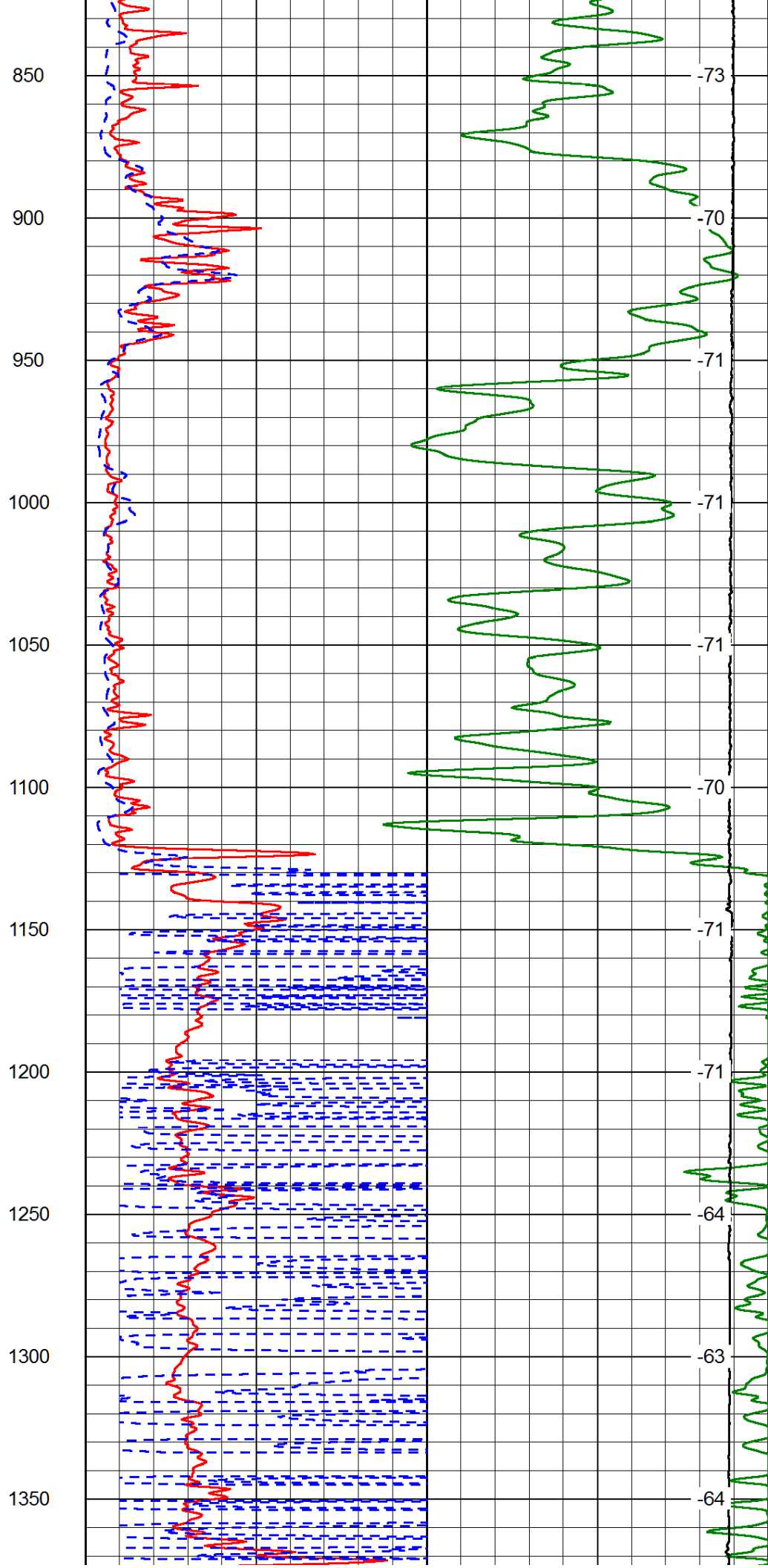
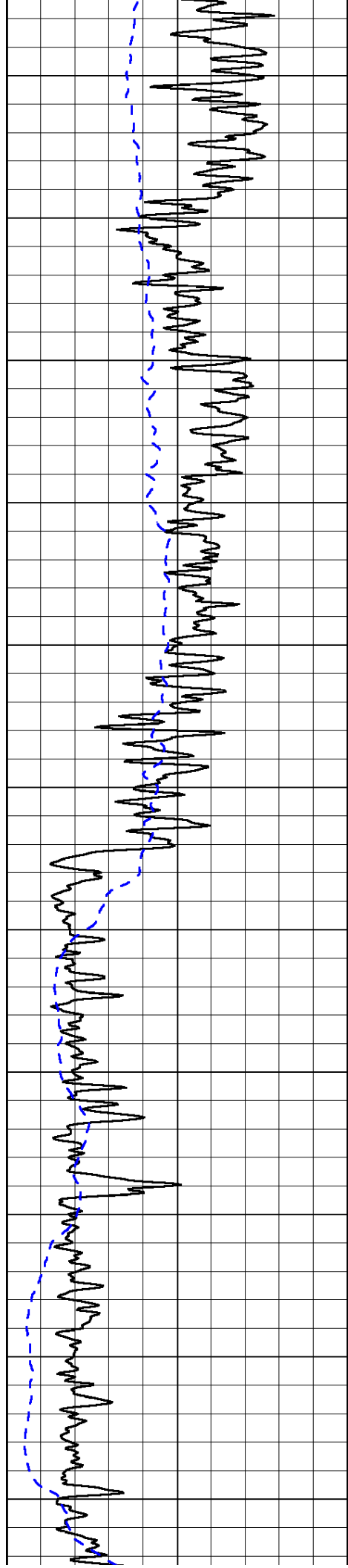
Database File: birddog_stolteberg-hd.db
Dataset Pathname: dil/brdmain
Presentation Format: dil2in
Dataset Creation: Fri May 23 17:56:26 2014
Charted by: Depth in Feet scaled 1:600

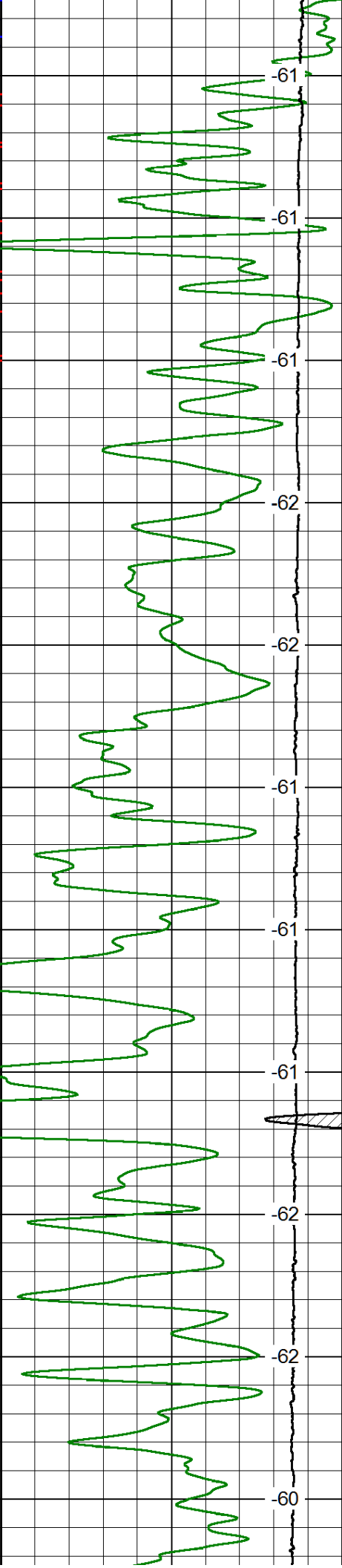
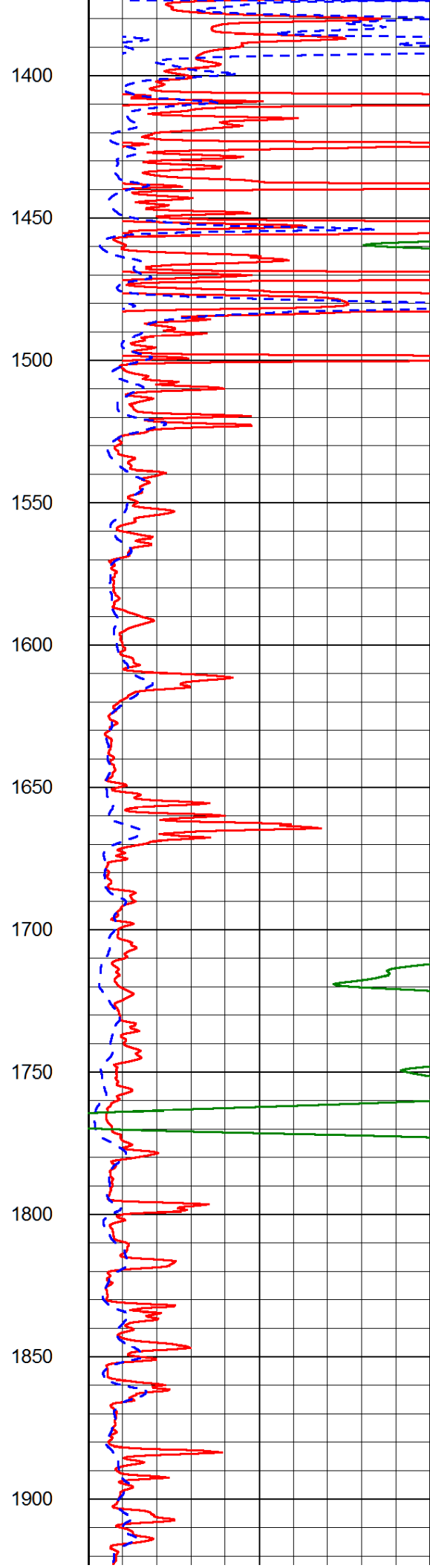
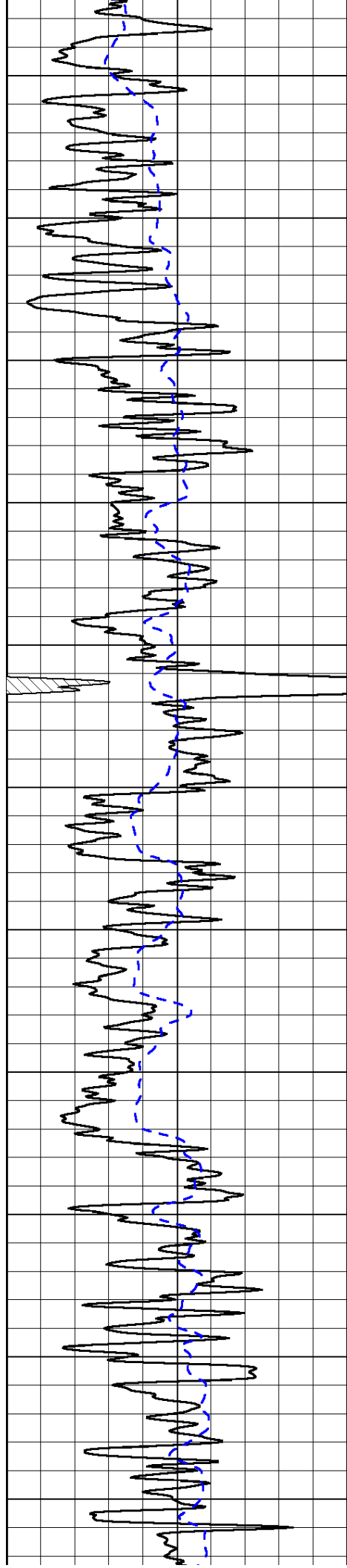
0	Gamma Ray	150
-200	SP (mV)	0

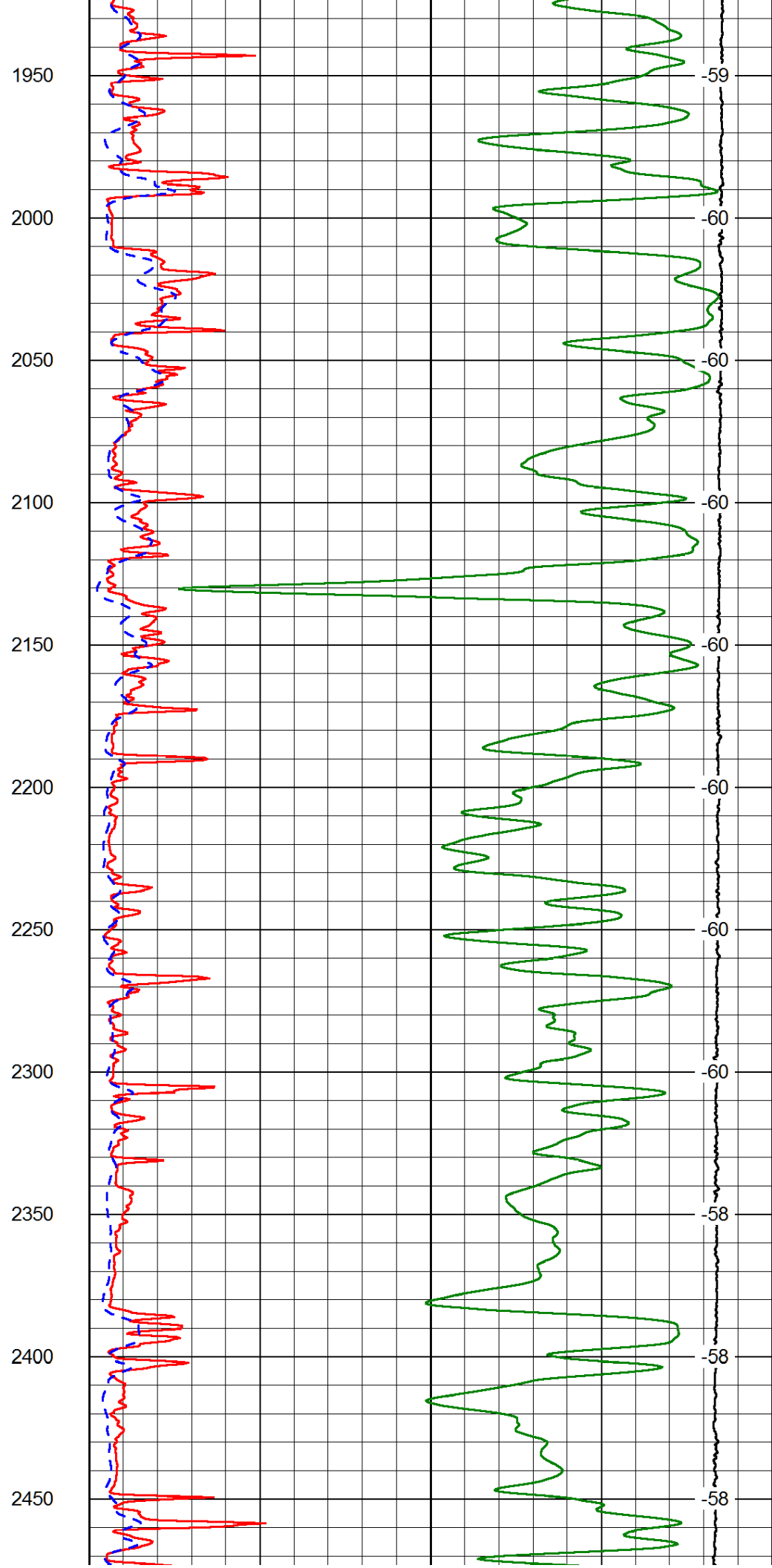
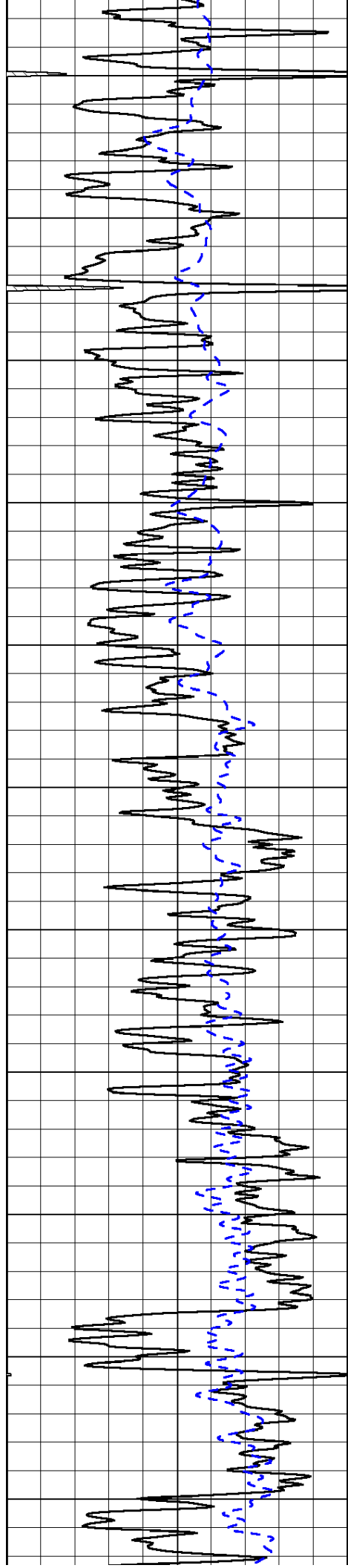
0	Shallow Resistivity	50
0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

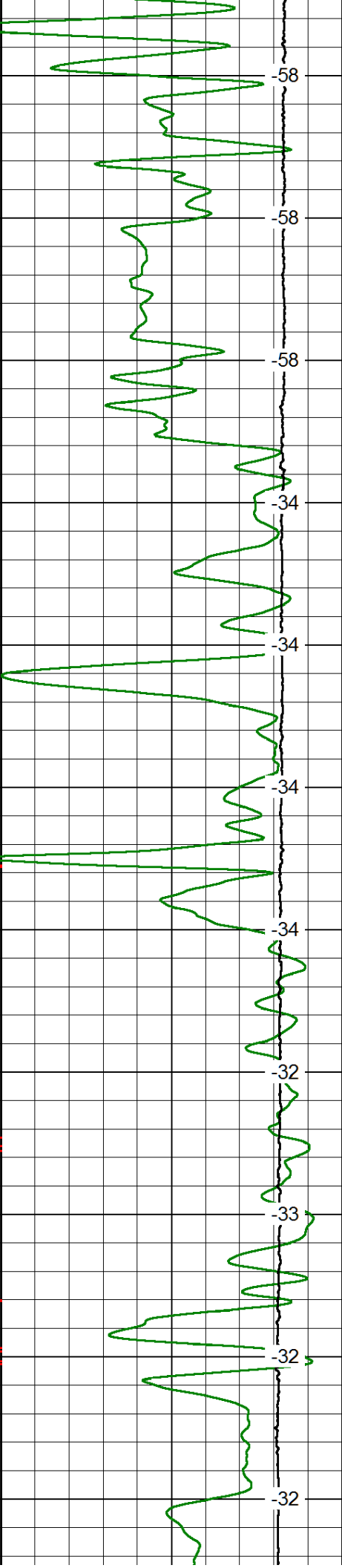
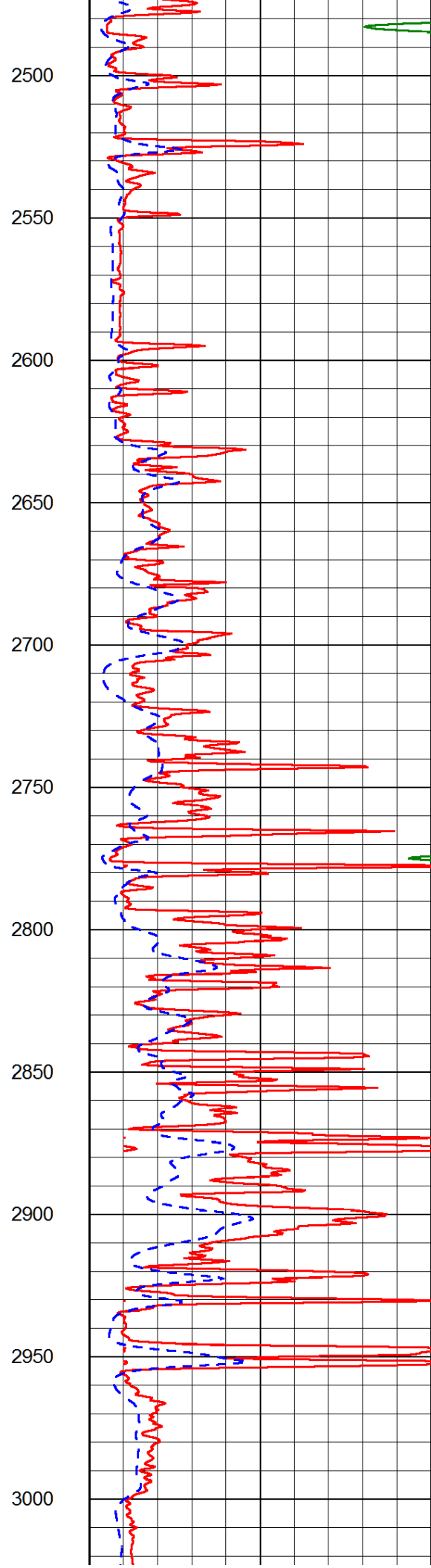
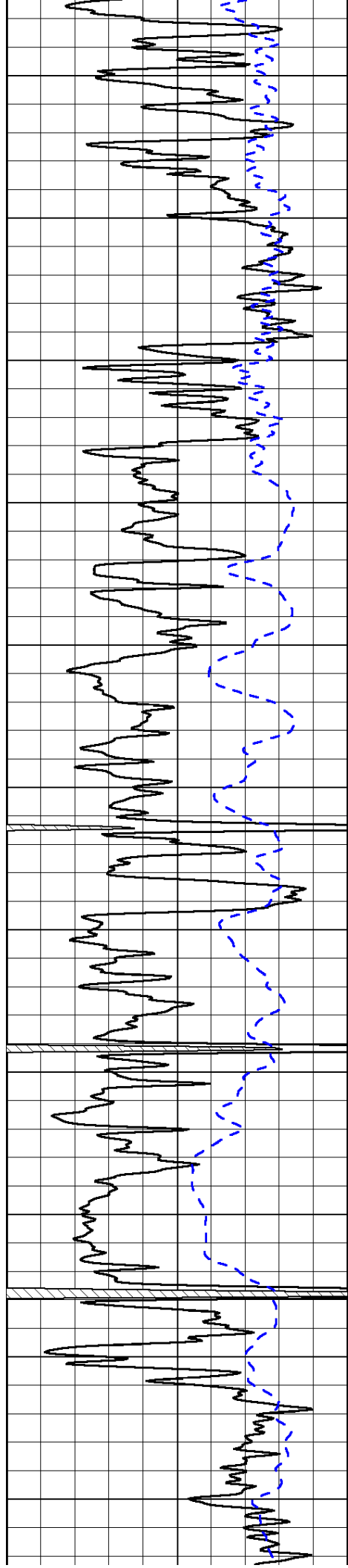
LSPD

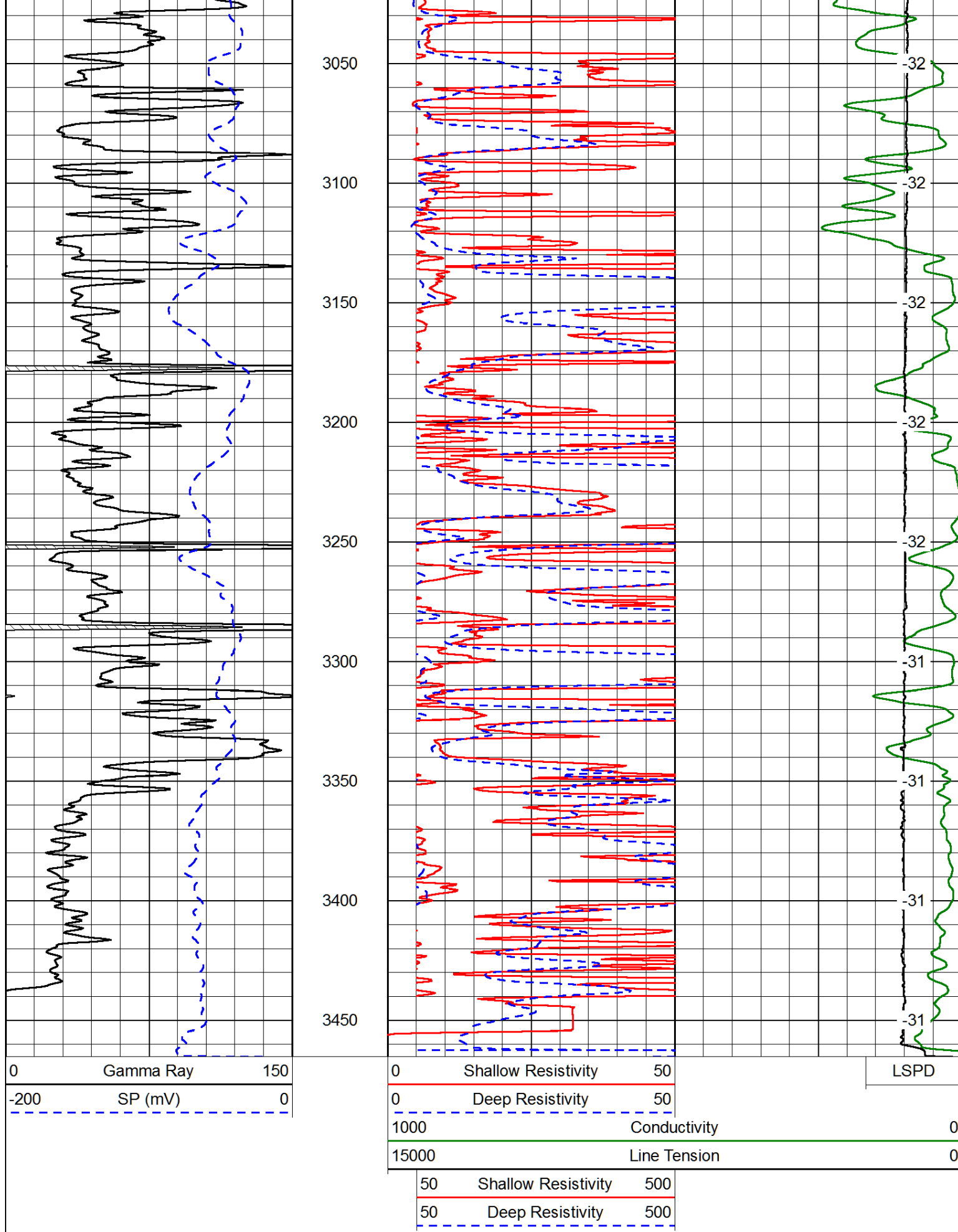










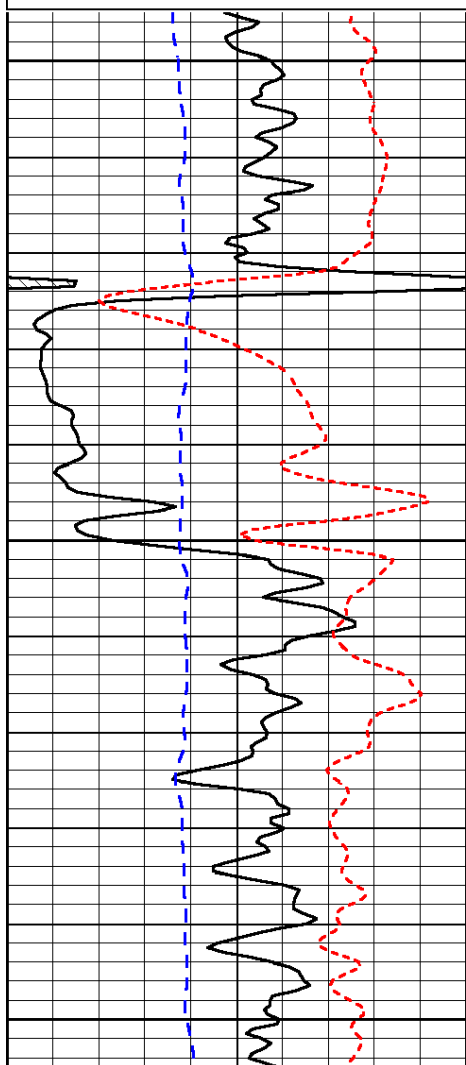


Presentation Format: dil
Dataset Creation: Fri May 23 17:56:26 2014
Charted by: Depth in Feet scaled 1:240

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

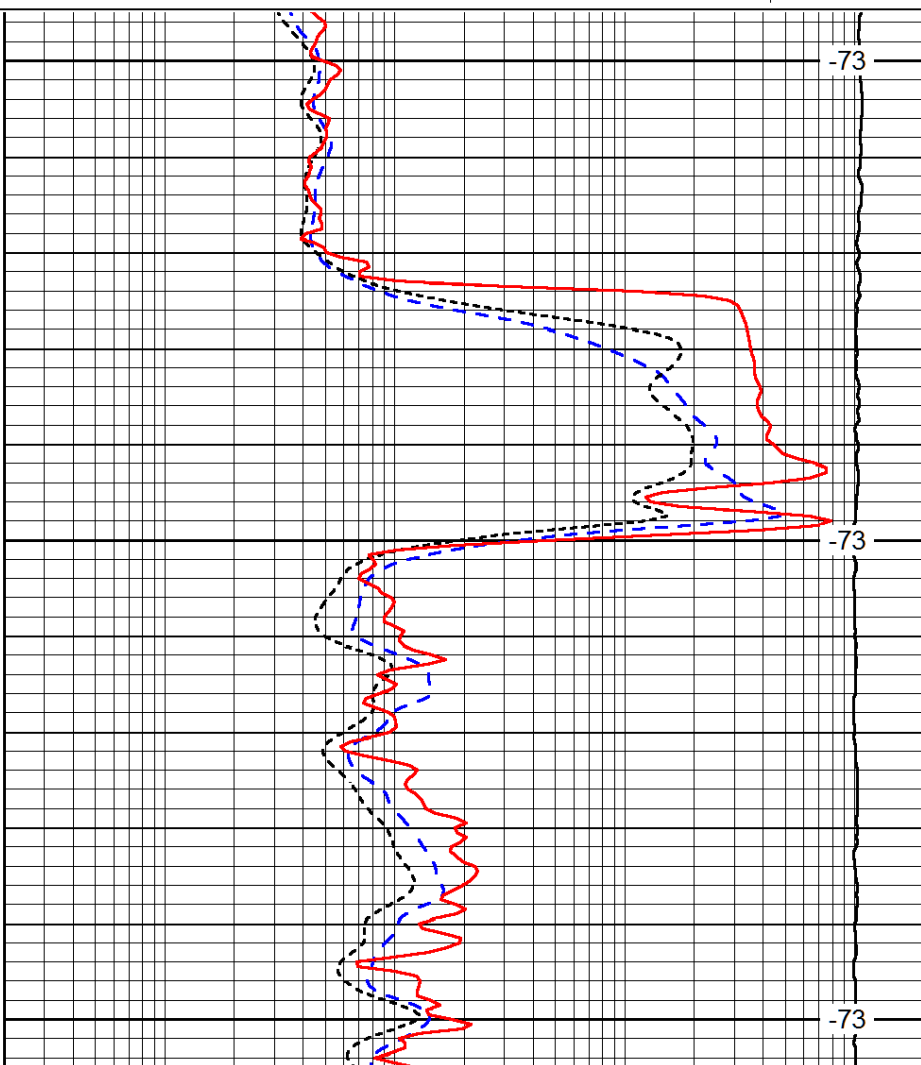
LSPD



650

700

750



-73

-73

-73

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

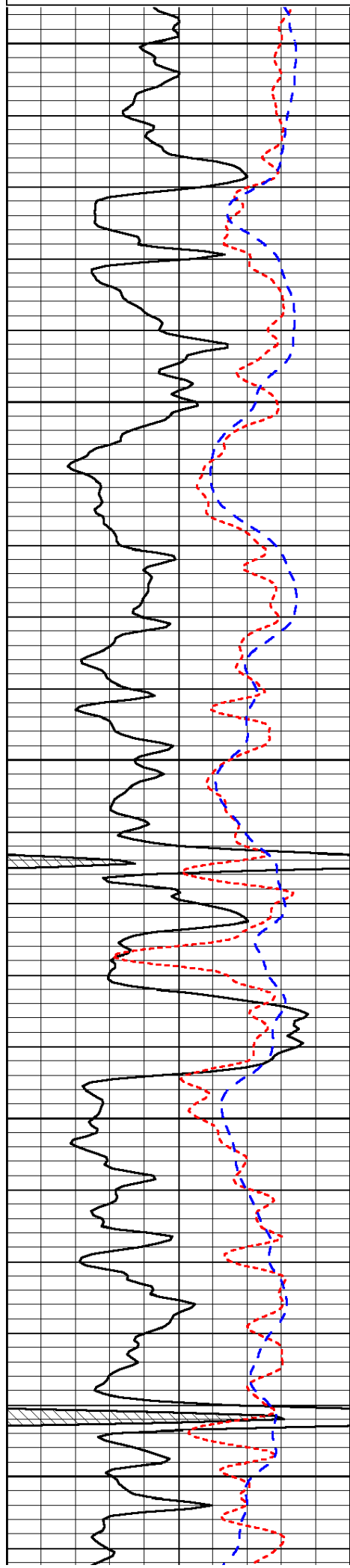
LSPD

Database File: birddog_stolteberg-hd.db
Dataset Pathname: dil/brdmain
Presentation Format: dil
Dataset Creation: Fri May 23 17:56:26 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



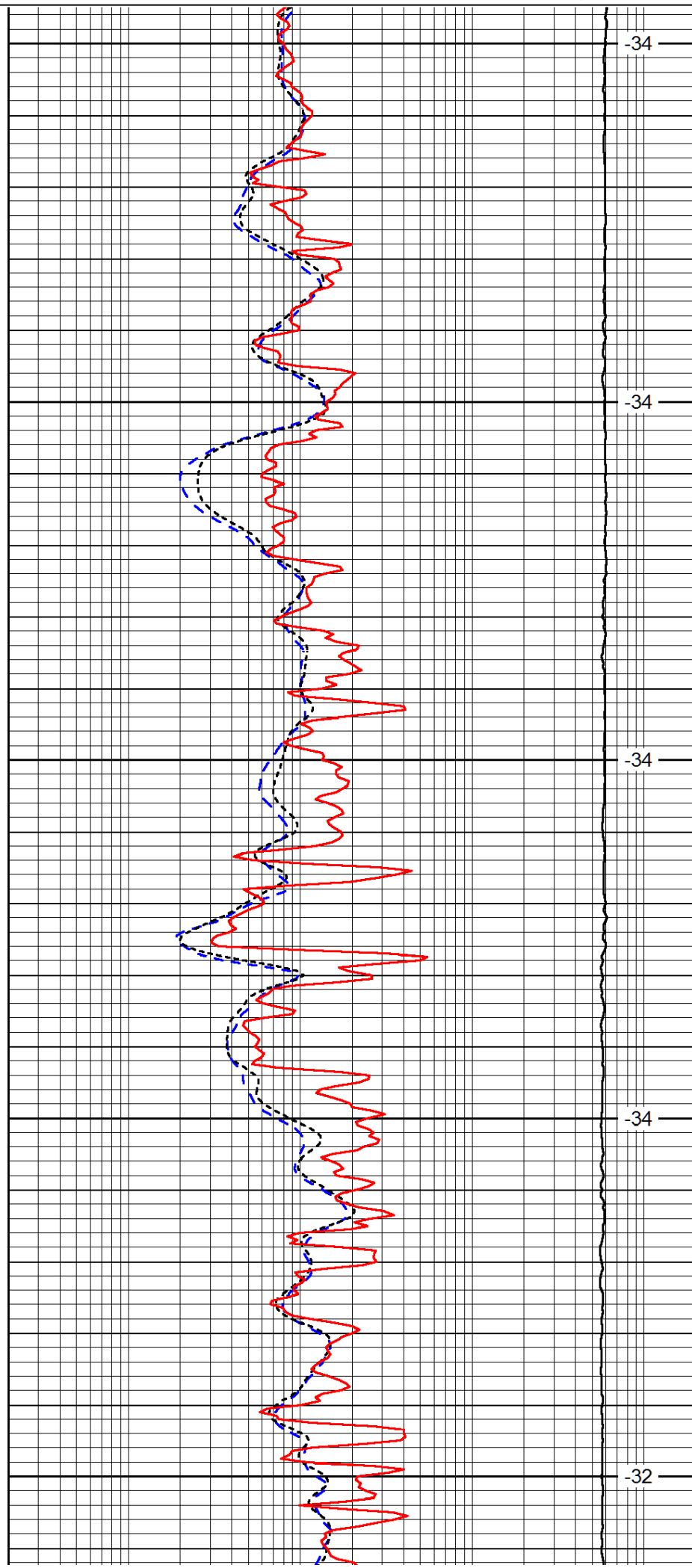
2650

2700

2750

2800

2850



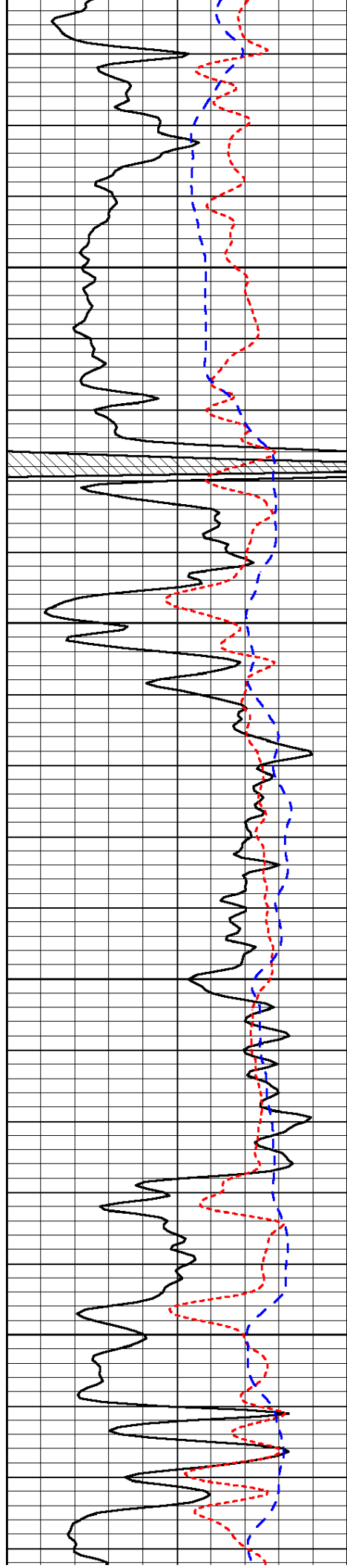
-34

-34

-34

-34

-32

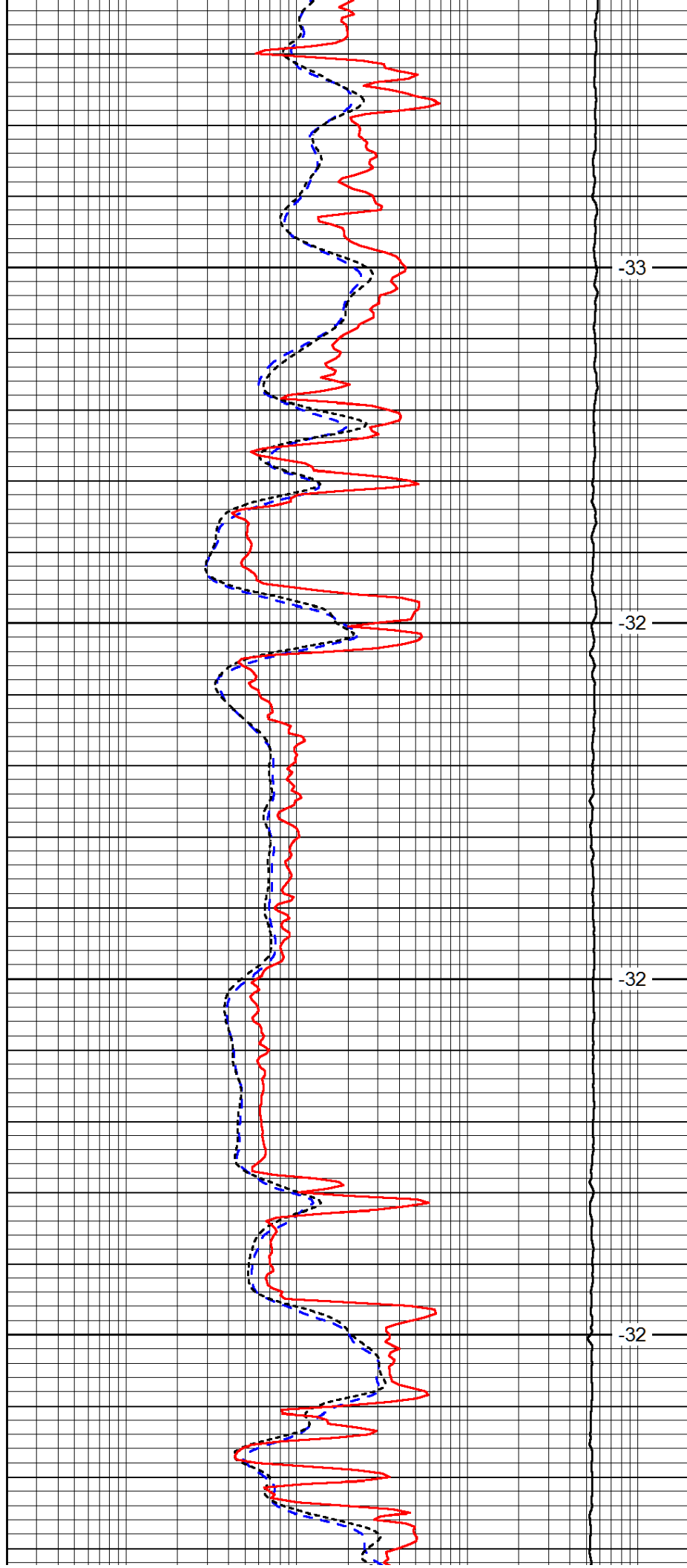


2900

2950

3000

3050

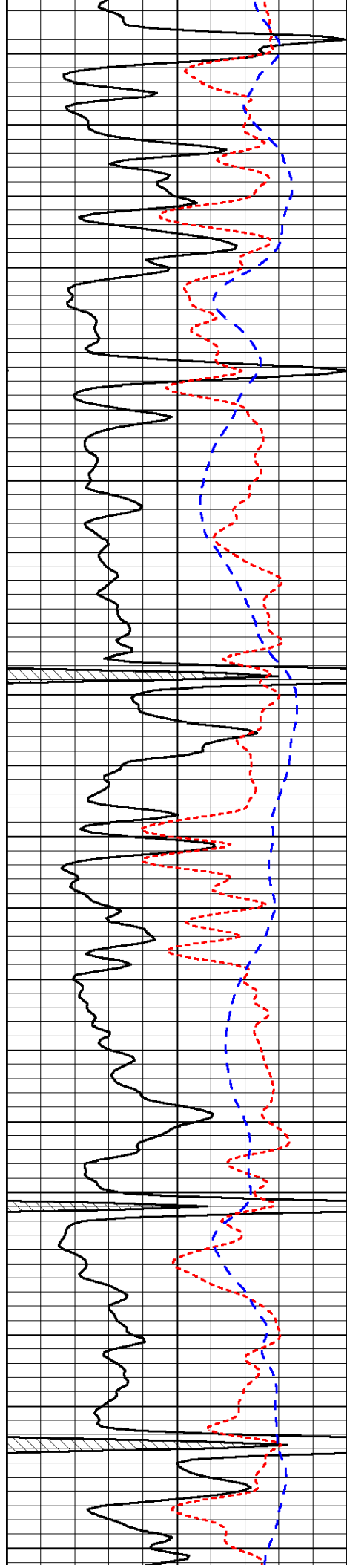


-33

-32

-32

-32



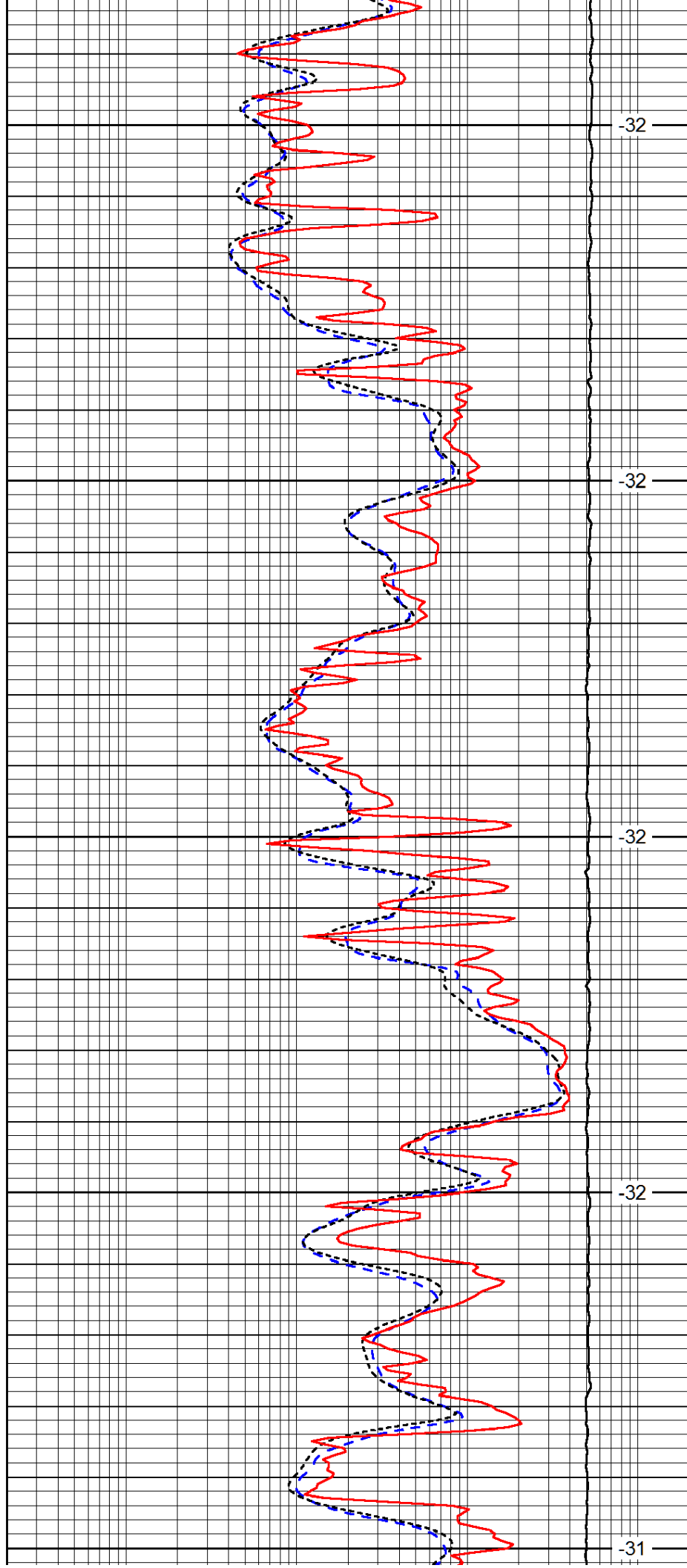
3100

3150

3200

3250

3300



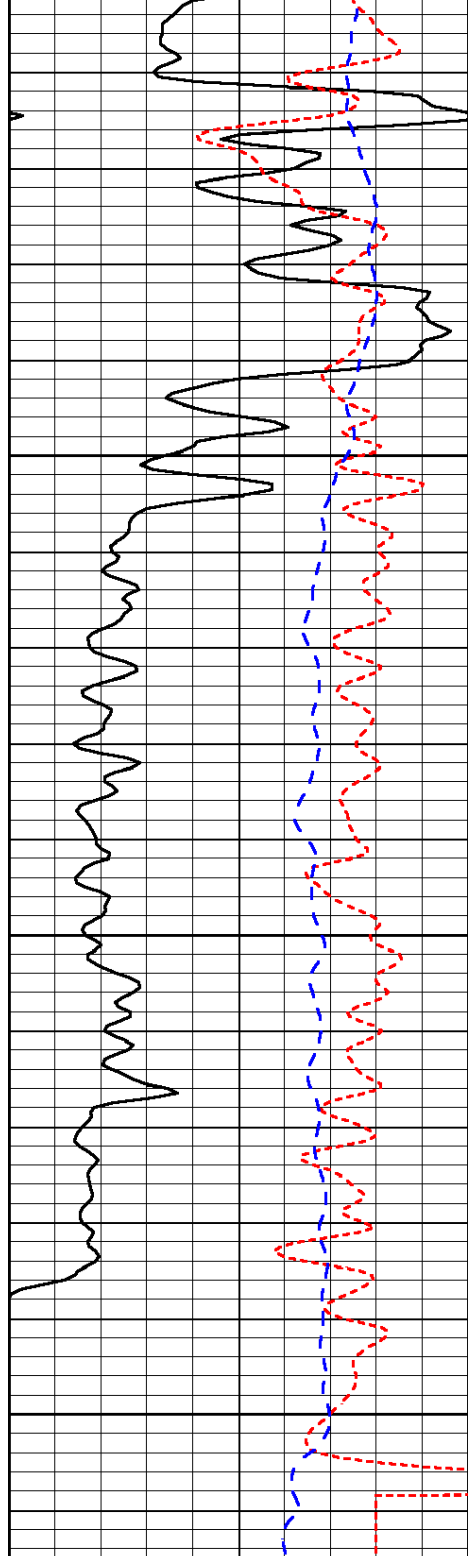
-32

-32

-32

-32

-31

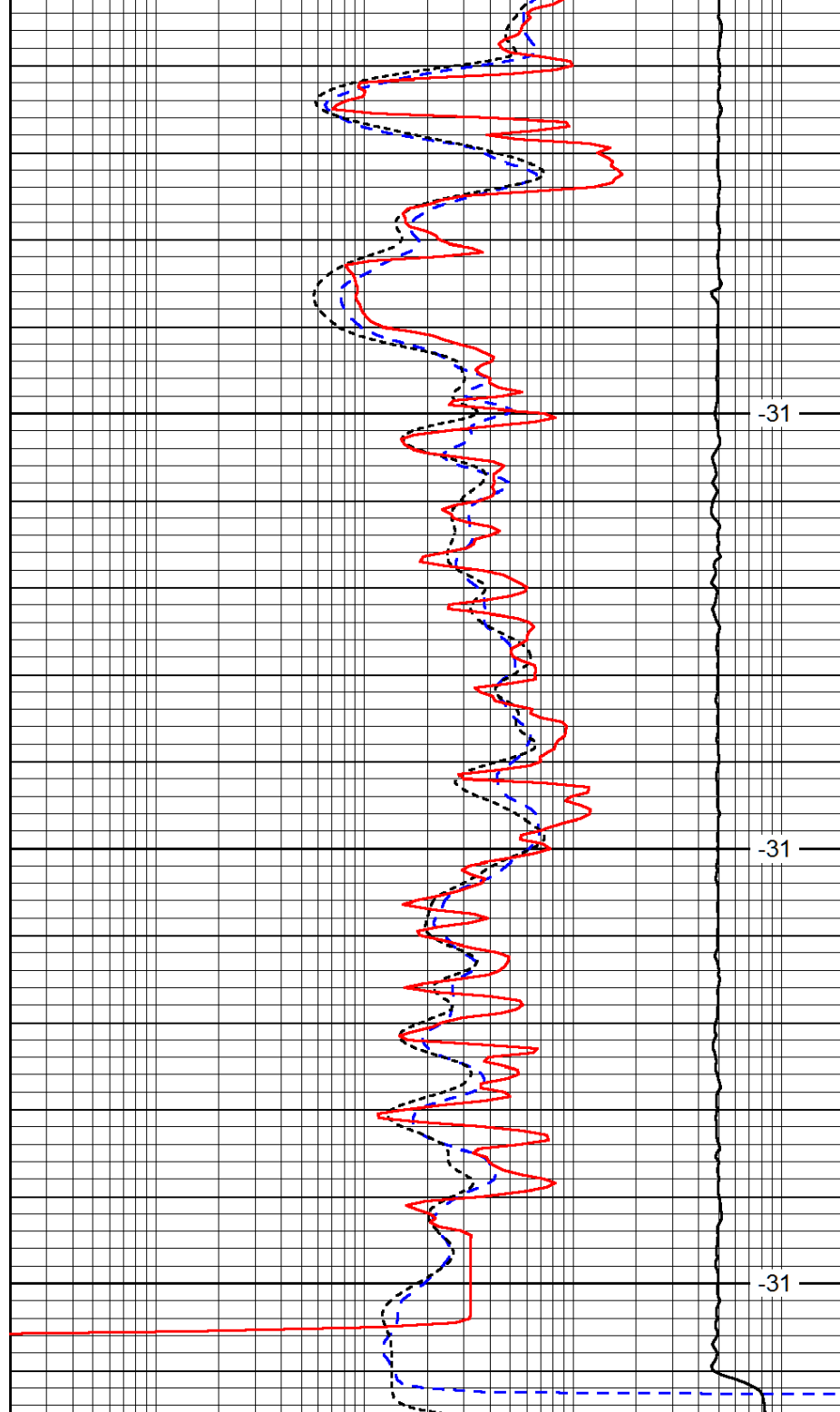


0	Gamma Ray	150
-160	RXO/RT	40
-200	SP (mV)	0

3350

3400

3450



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

LSPD

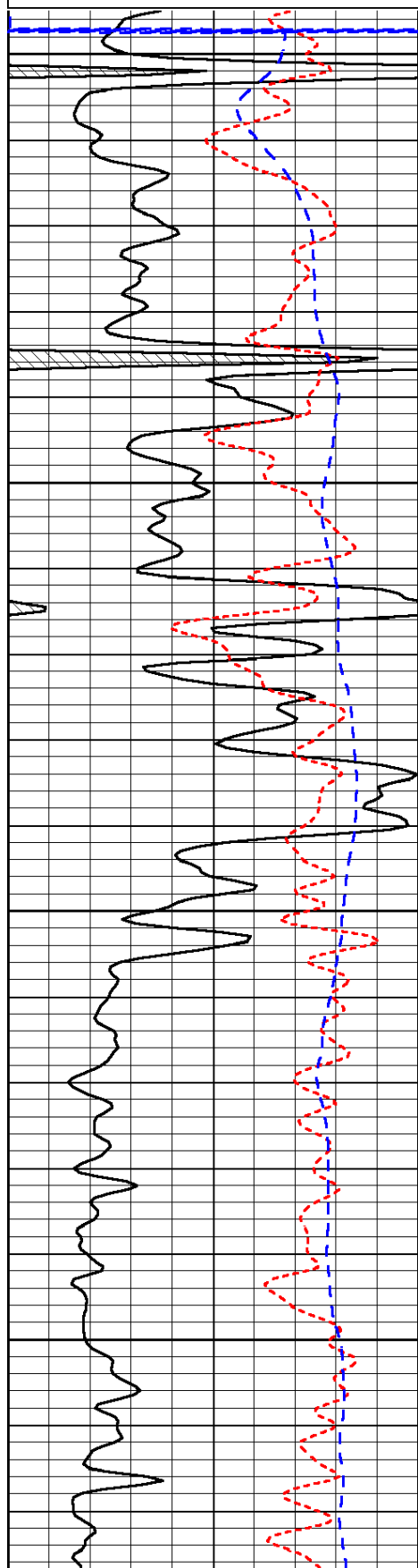


Repeat Section

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

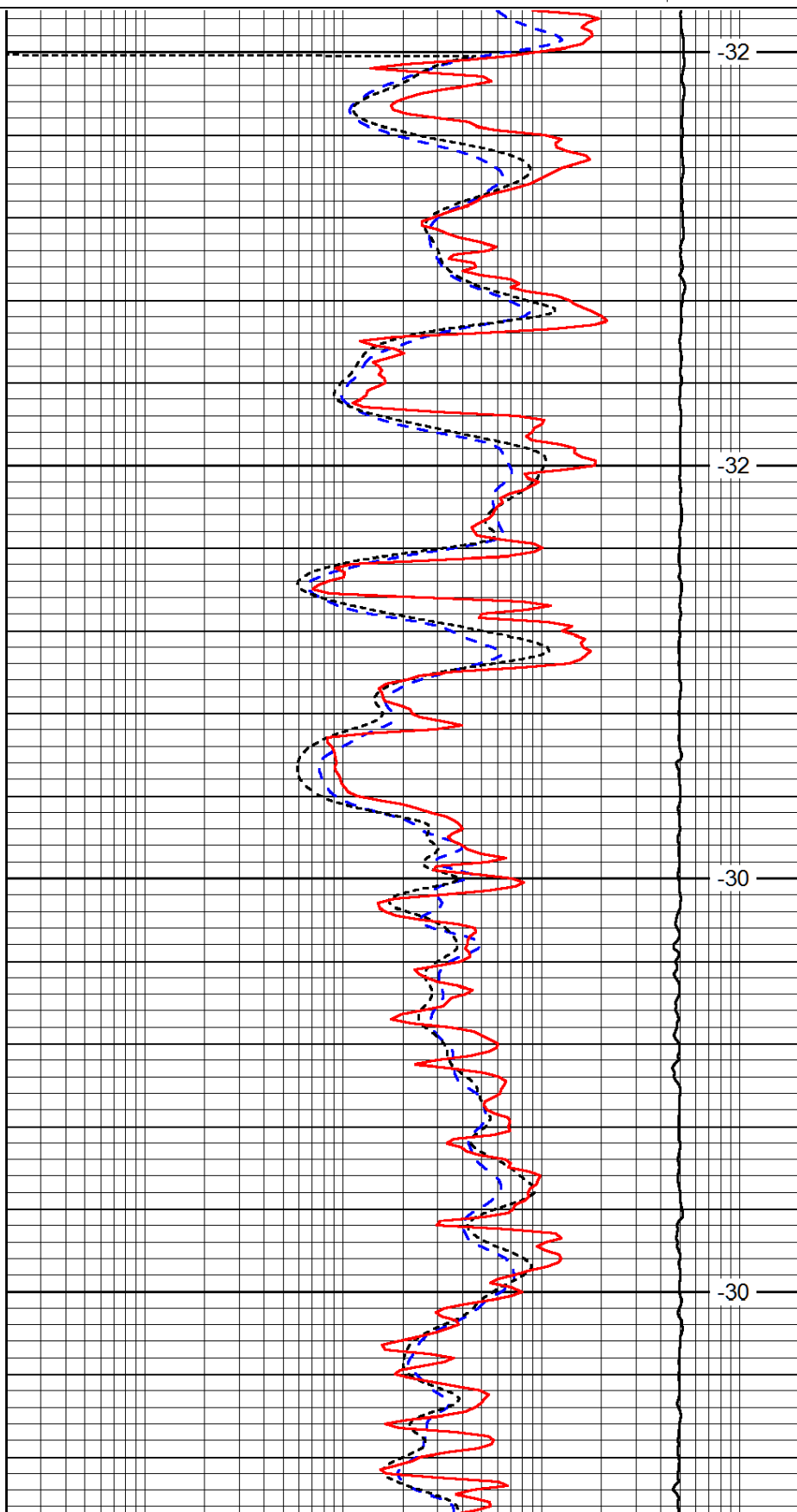


3250

3300

3350

3400

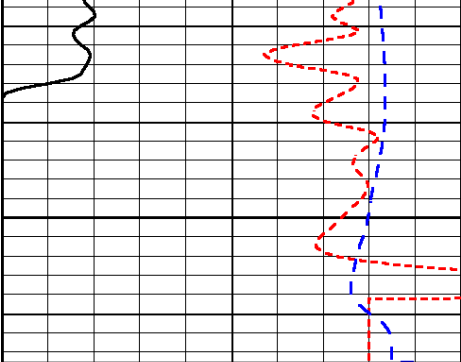


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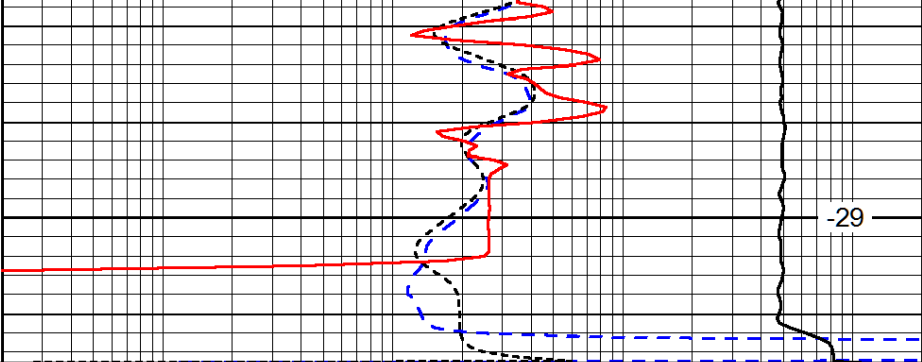
-32

-30

-30



3450



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