



Pioneer Energy Services

Dual Induction Log

API No.

15-193-20,925-00-00

Company **Questa Energy Corporation**

Well **Bertrand No. 2-22**

Field **Ohl**

County **Thomas**

State

Kansas

Location

2,548' FNL & 1,868' FEL

Sec: **22**

Twp: **9S**

Rge: **32W**

Other Services
CNL/CDL
MEL/BHCS

Permanent Datum **Ground Level** Elevation **3071**

Log Measured From **Kelly Bushing** 10 Ft. Above Perm. Datum

K.B. 3081
D.F.
G.L. 3071

Drilling Measured From **Kelly Bushing**

Elevation

Date **9/13/2014**

Run Number **One**

Depth Driller **4730**

Depth Logger **4730**

Bottom Logged Interval **4729**

Top Log Interval **350**

Casing Driller **8.625 @ 356**

Casing Logger **357**

Bit Size **7.875**

Type Fluid in Hole **Chemical**

Salinity, ppm CL **1800**

Density / Viscosity **9.2 38**

pH / Fluid Loss **10.0 7.8**

Source of Sample **Flowline**

Rm @ Meas. Temp **1.10 @ 70**

Rmf @ Meas. Temp **.83 @ 70**

Rmc @ Meas. Temp **1.49 @ 70**

Source of Rmf / Rmc **Charts**

Rm @ BHT **.62 @ 123**

Operating Rig Time **4 1/2 Hours**

Max Rec. Temp. F **123**

Equipment Number **108**

Location **Hays**

Recorded By **J. Long**

Witnessed By **Justin Carter**

<<< 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

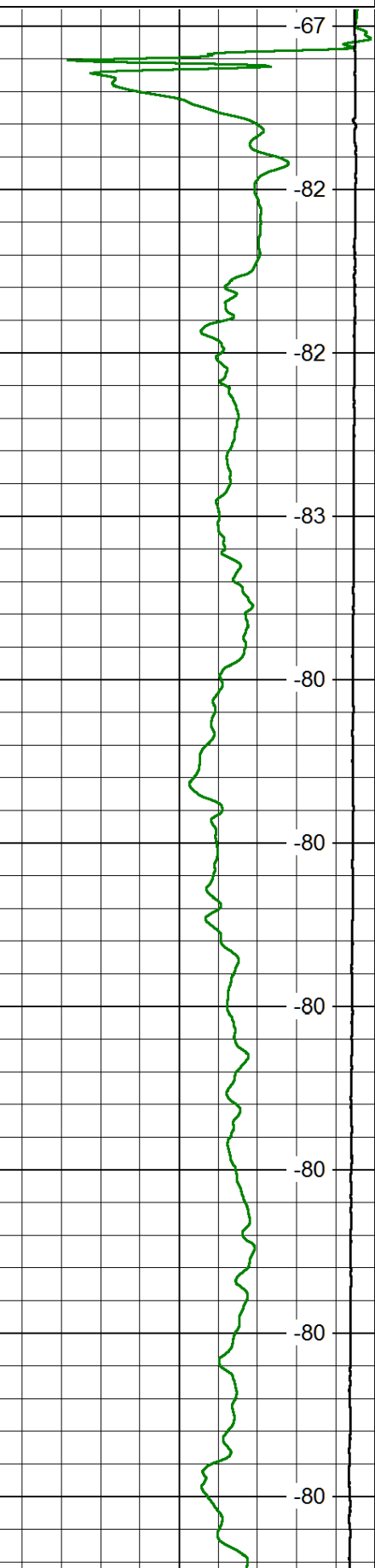
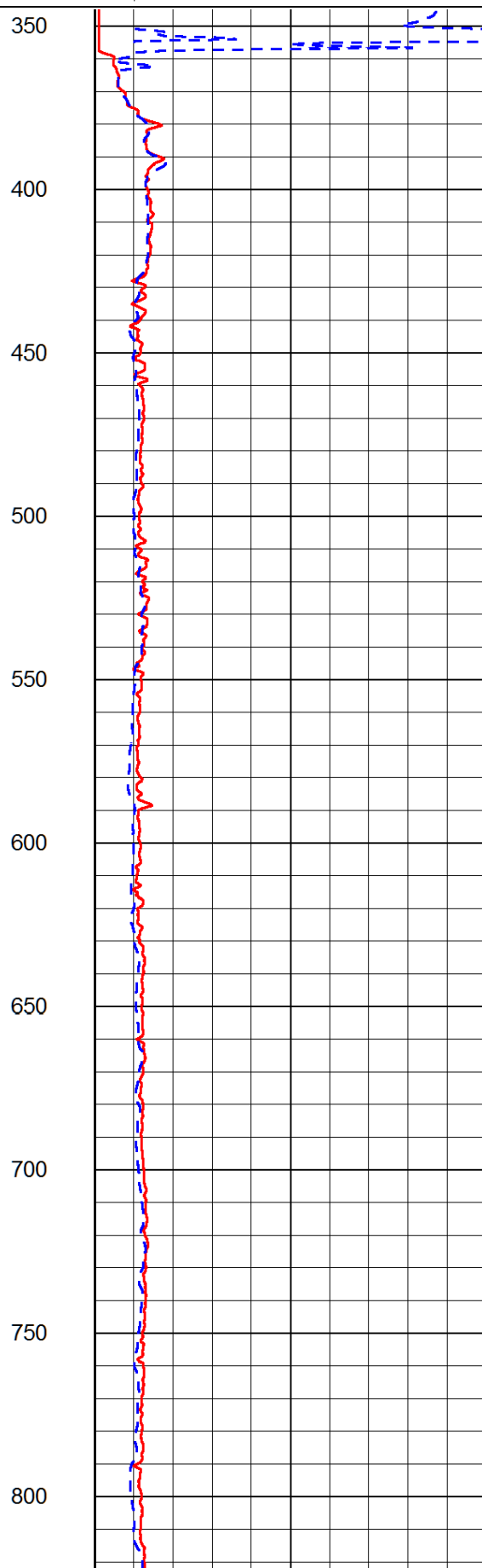
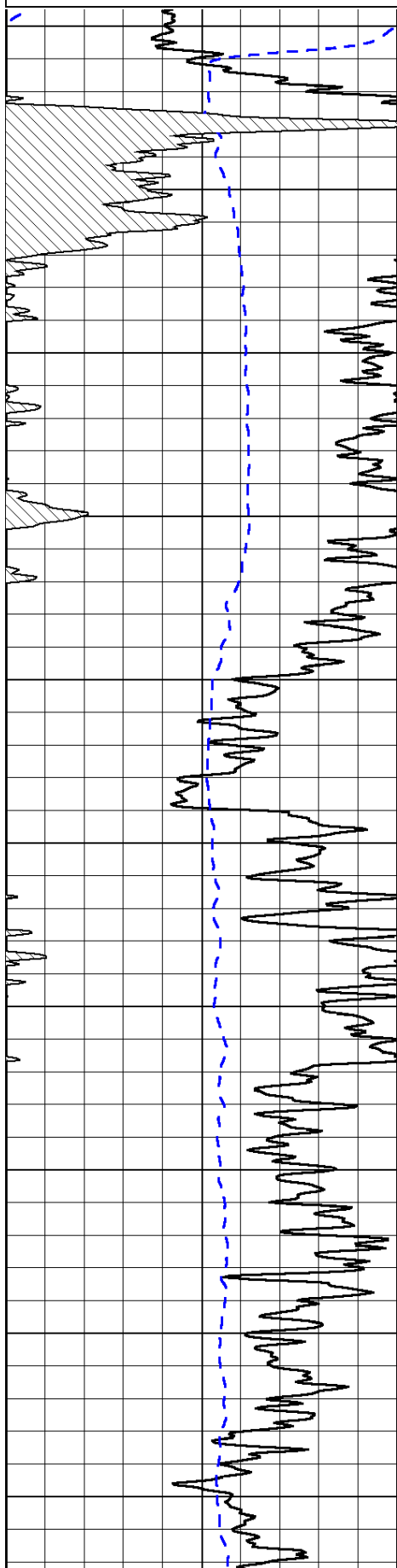
Oakley (Highway 83 & I-70 Intersection), 4 1/2 North, West Into

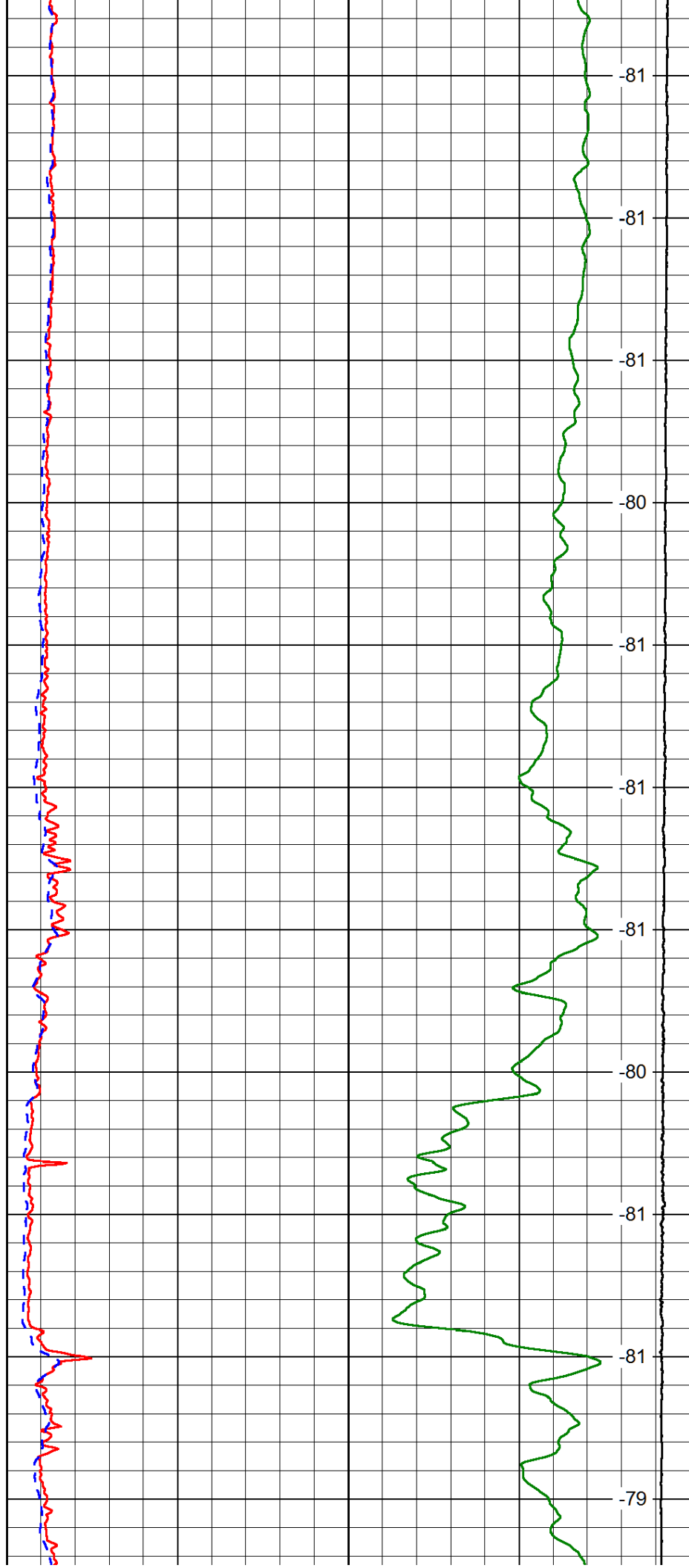
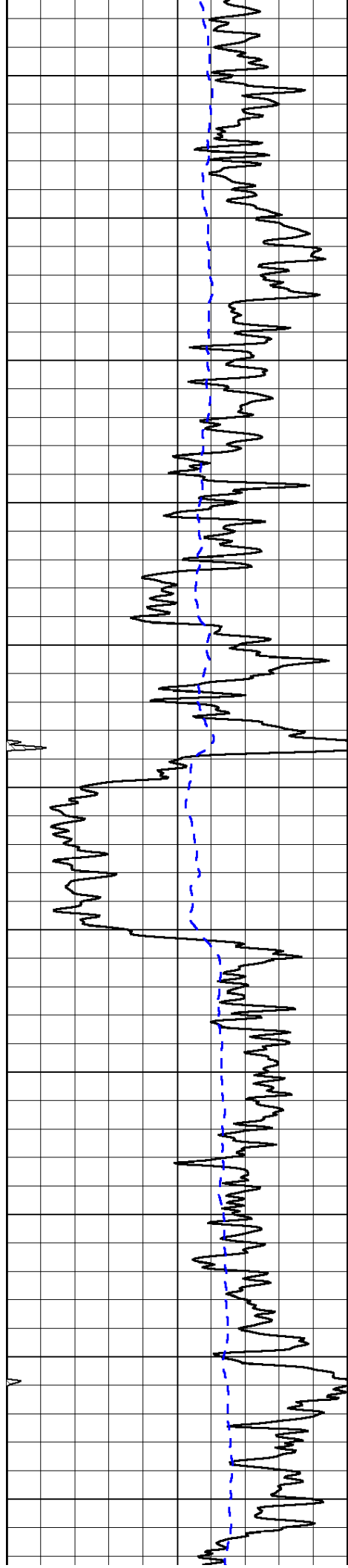
Database File: **questa_bertrand_2-22hd.db**
Dataset Pathname: **dil/quesstck**
Presentation Format: **dil2in**
Dataset Creation: **Sat Sep 13 08:45:52 2014**
Charted by: **Depth in Feet scaled 1:600**

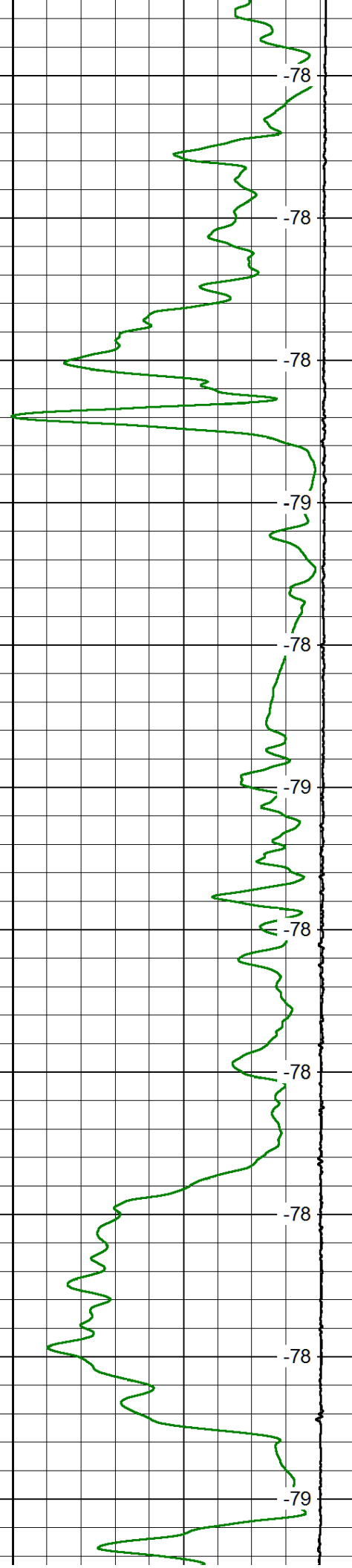
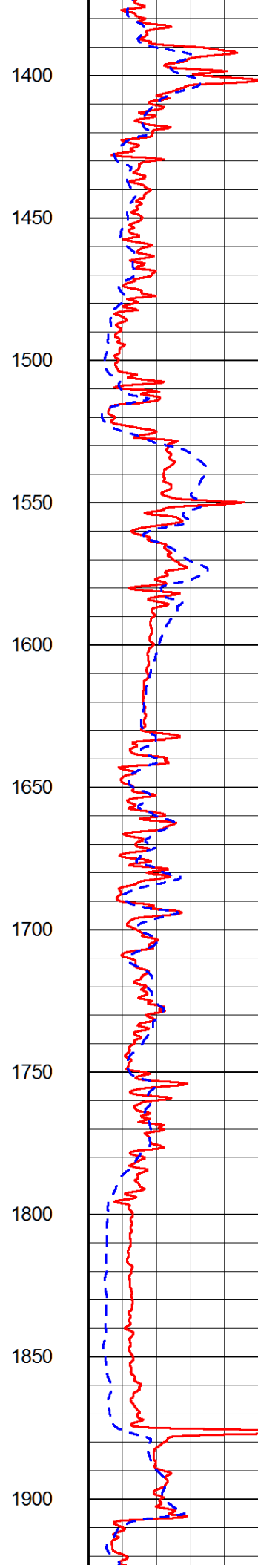
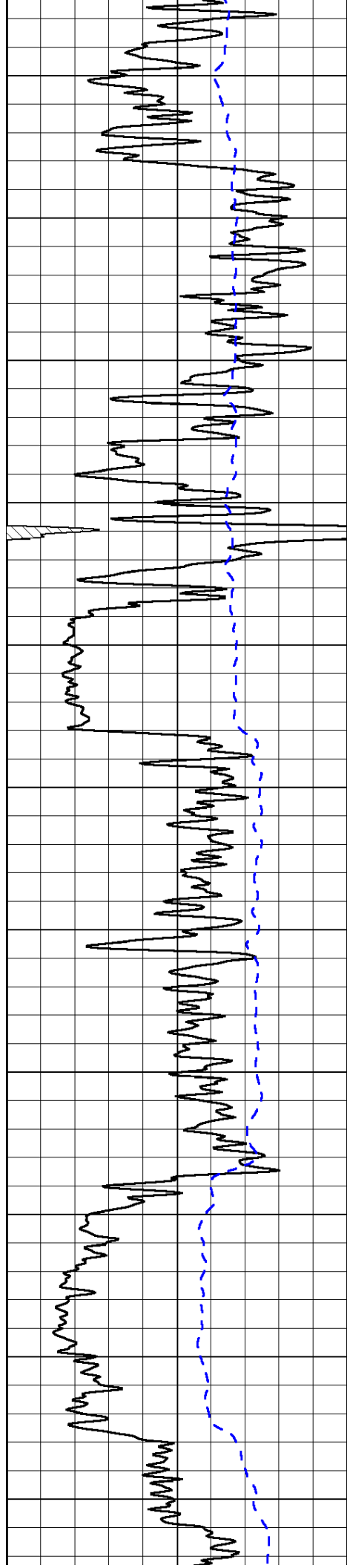
0	Gamma Ray	150
-200	SP (mV)	0

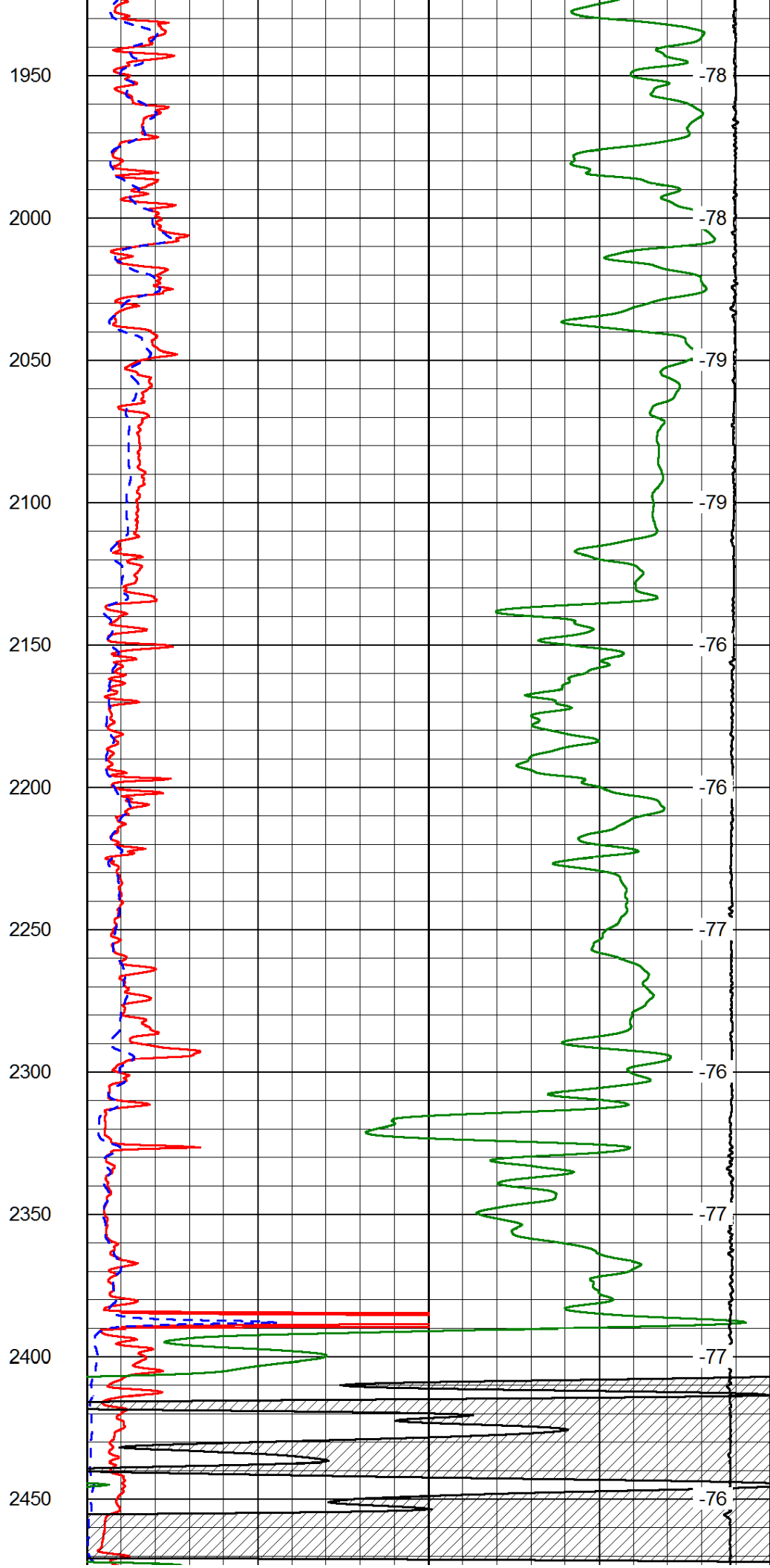
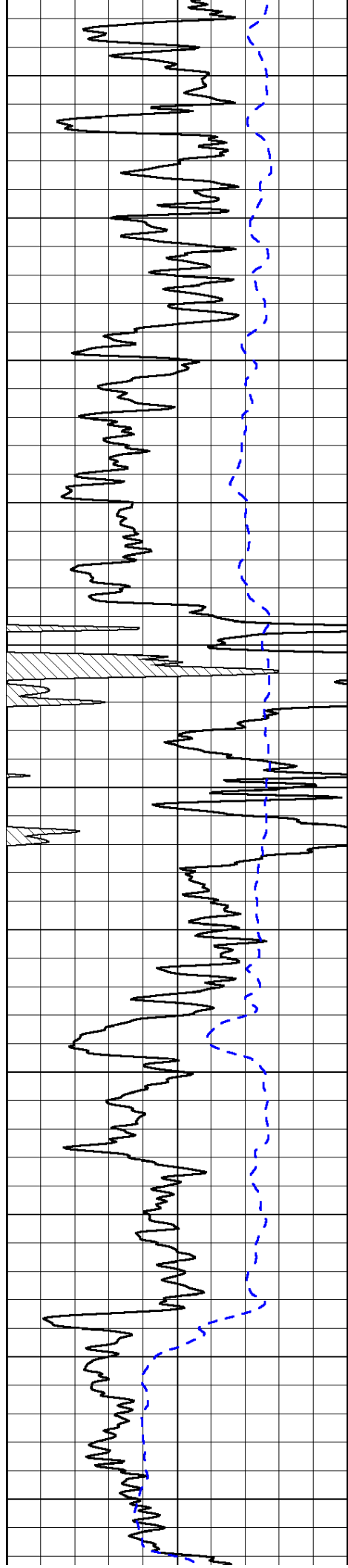
0	Shallow Resistivity	50
0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

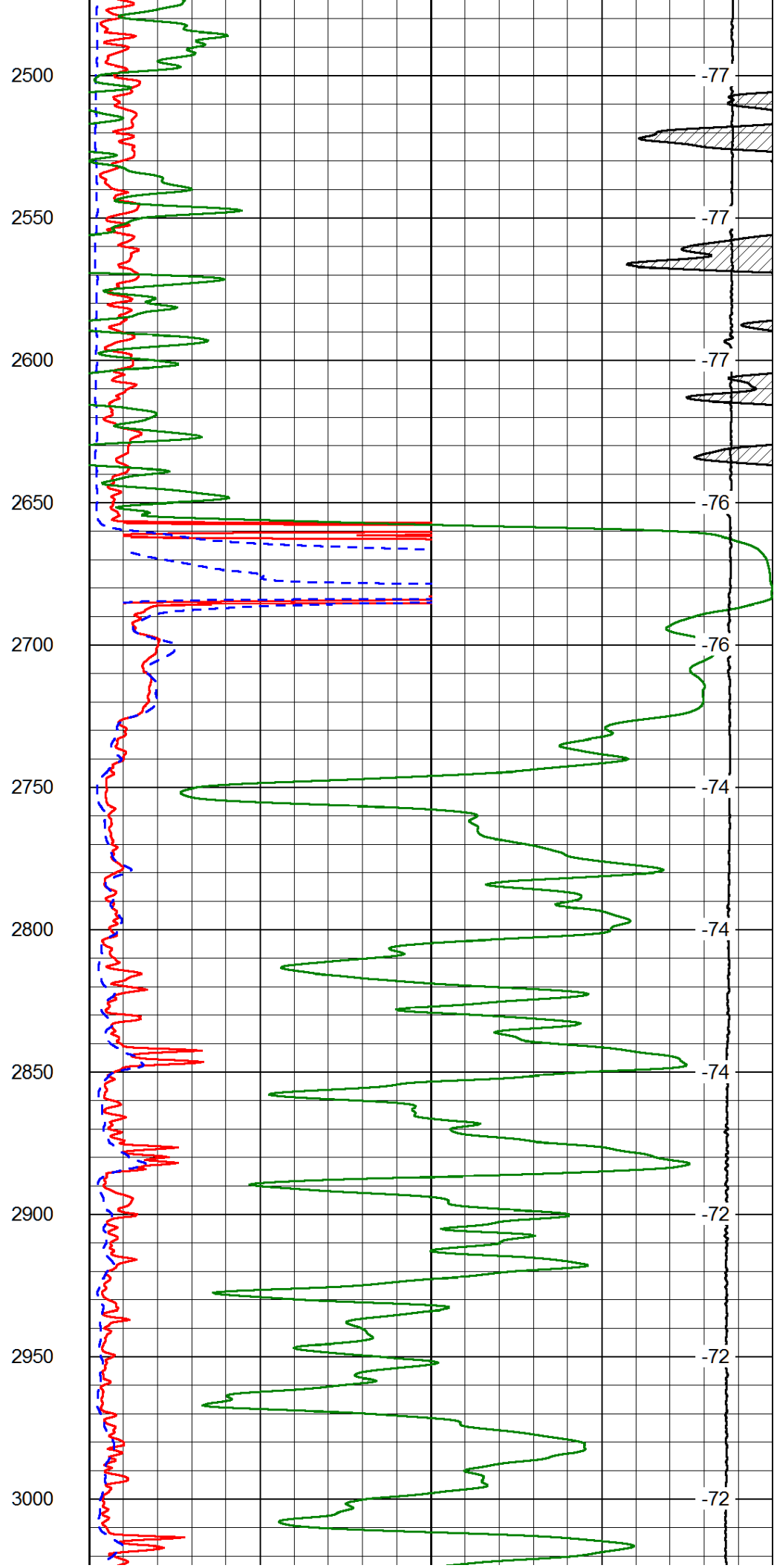
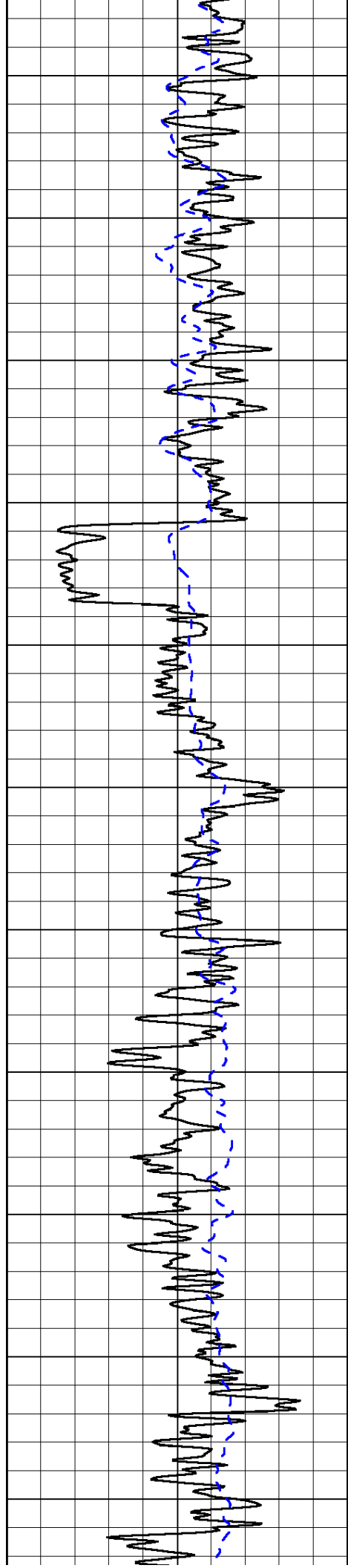
LSPD

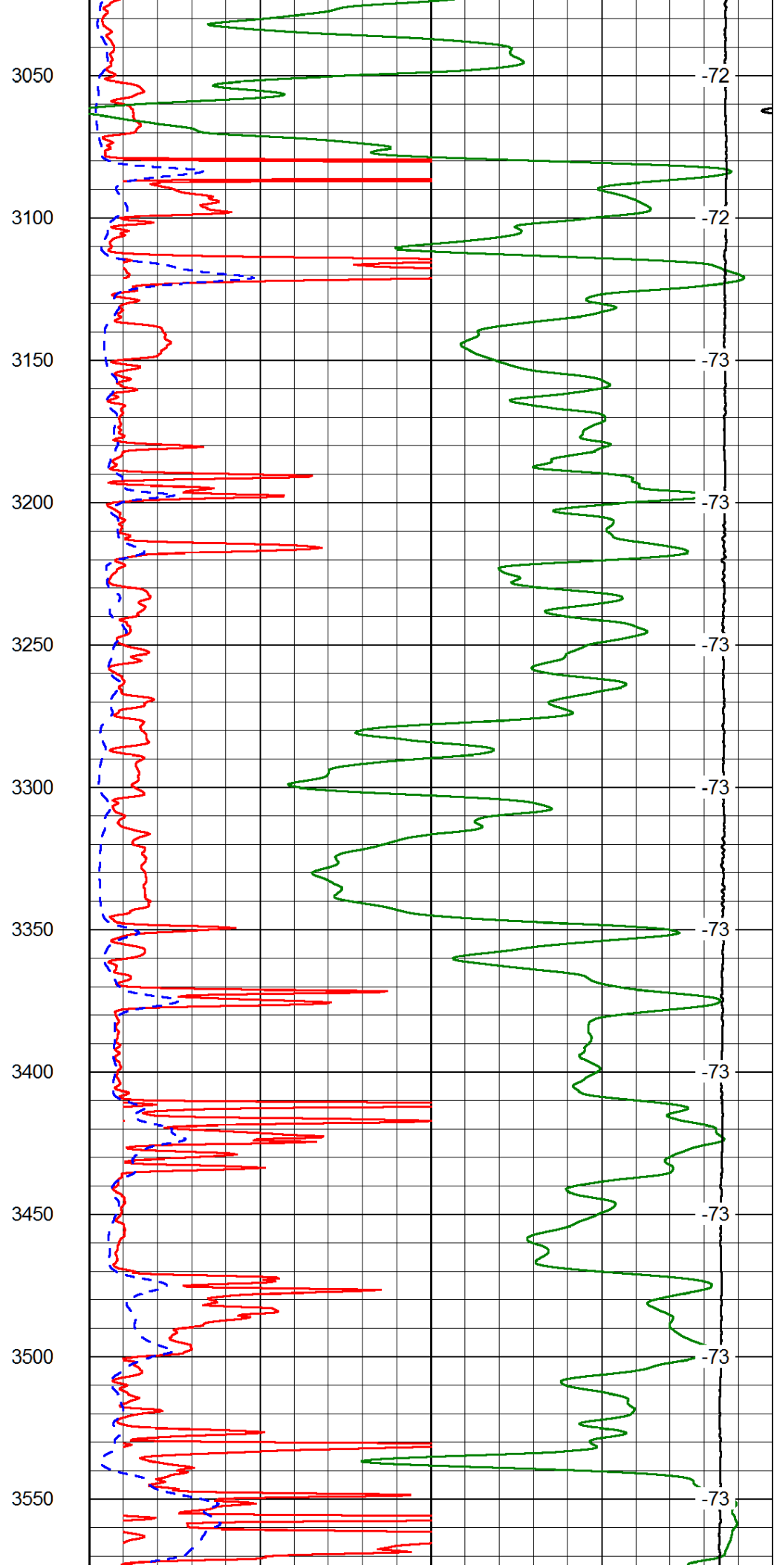
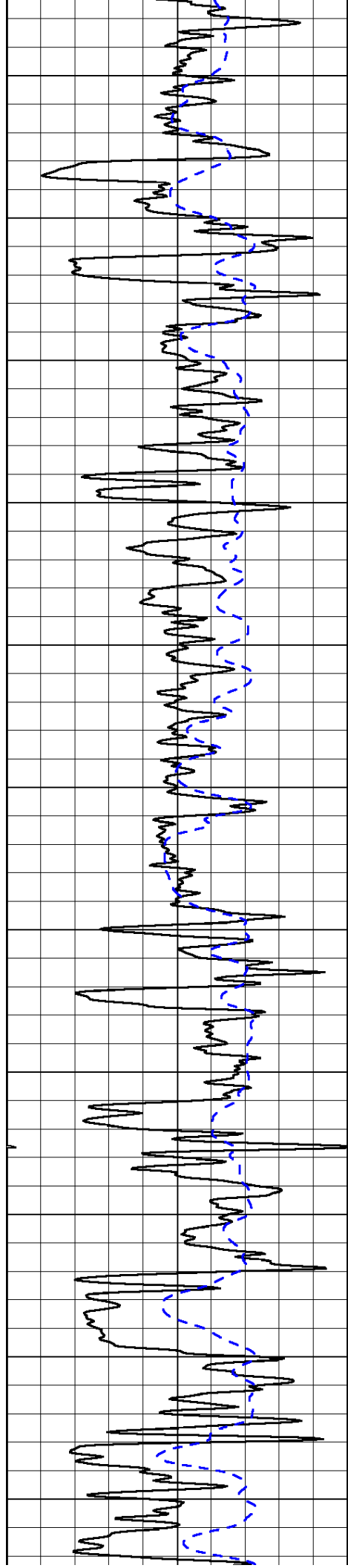


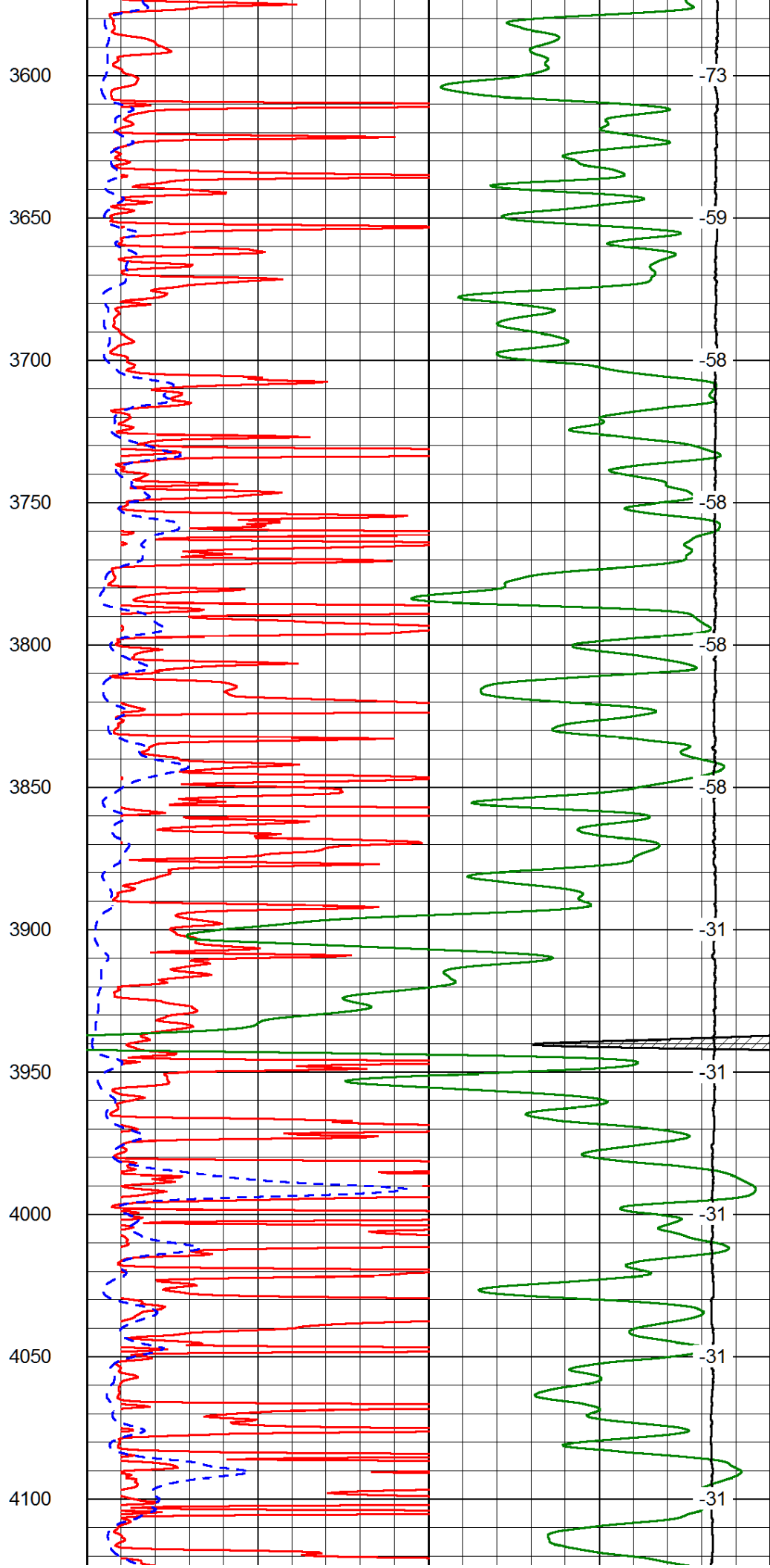
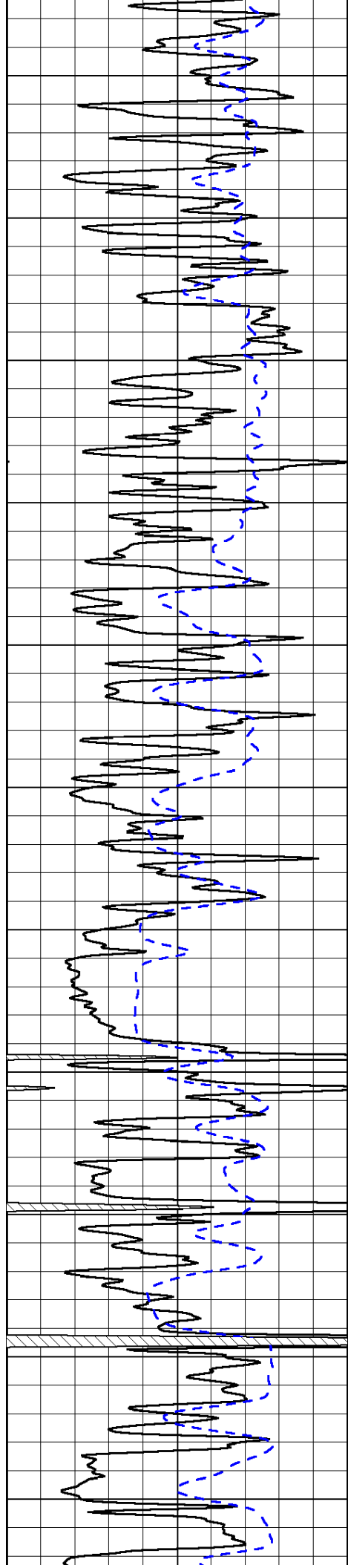


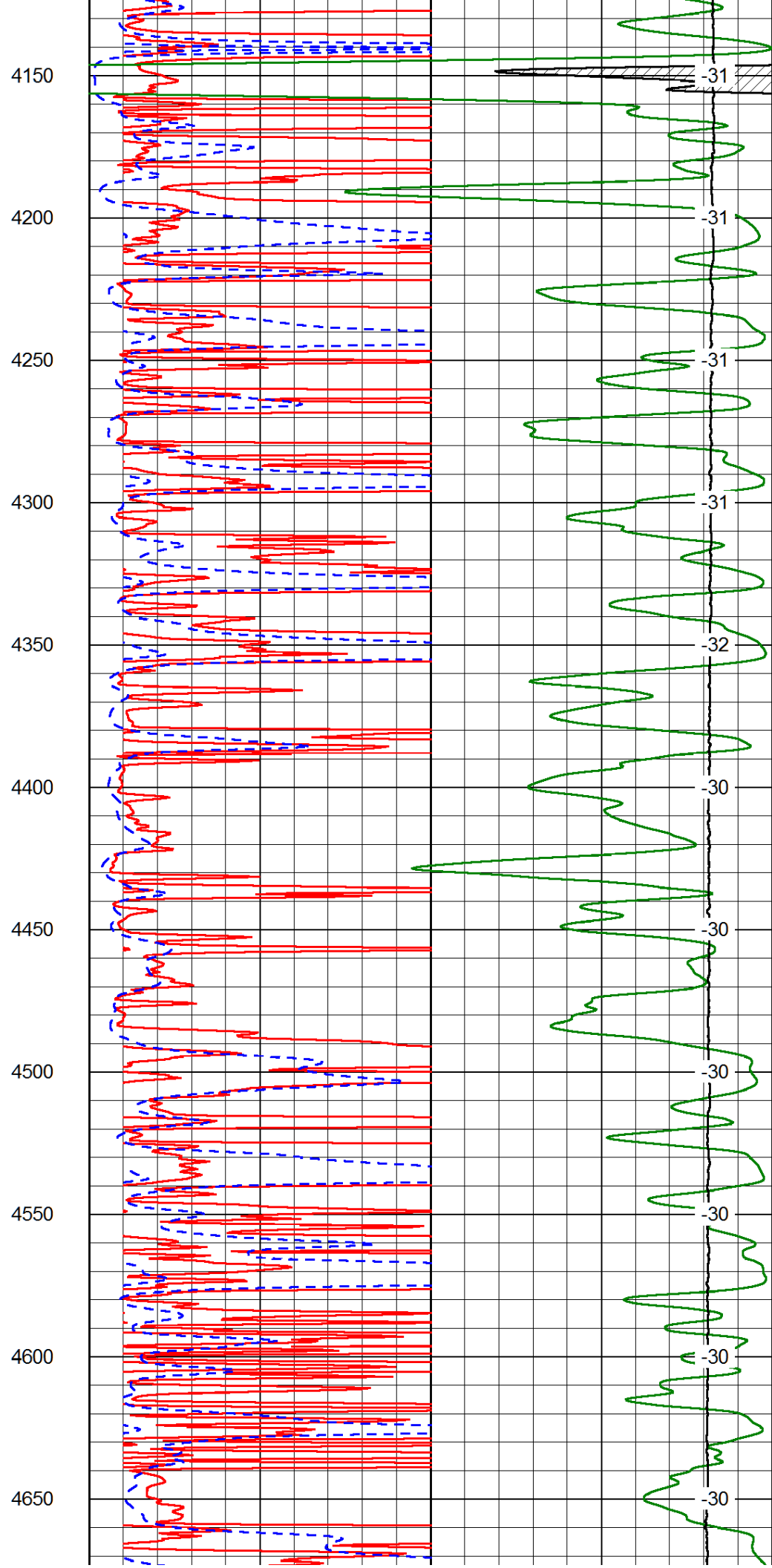
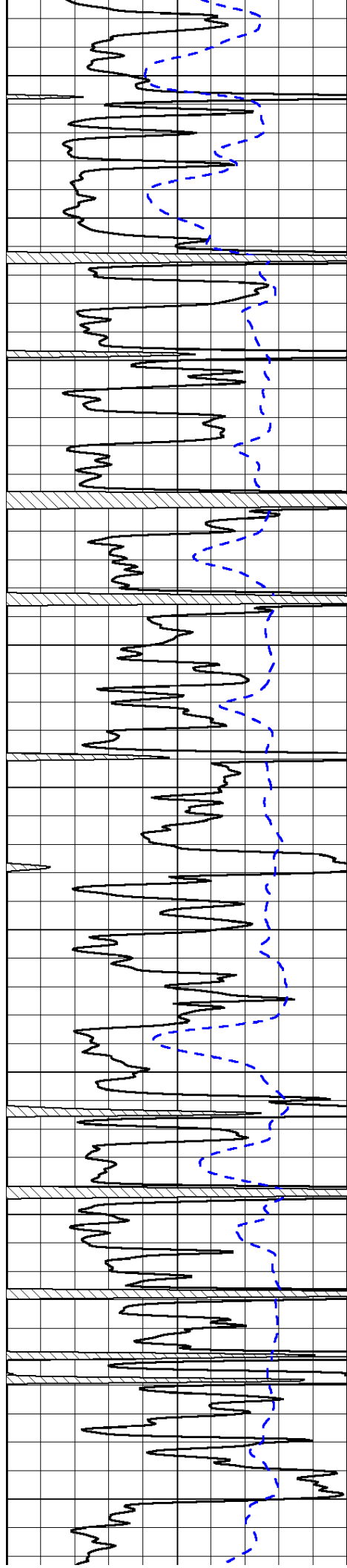


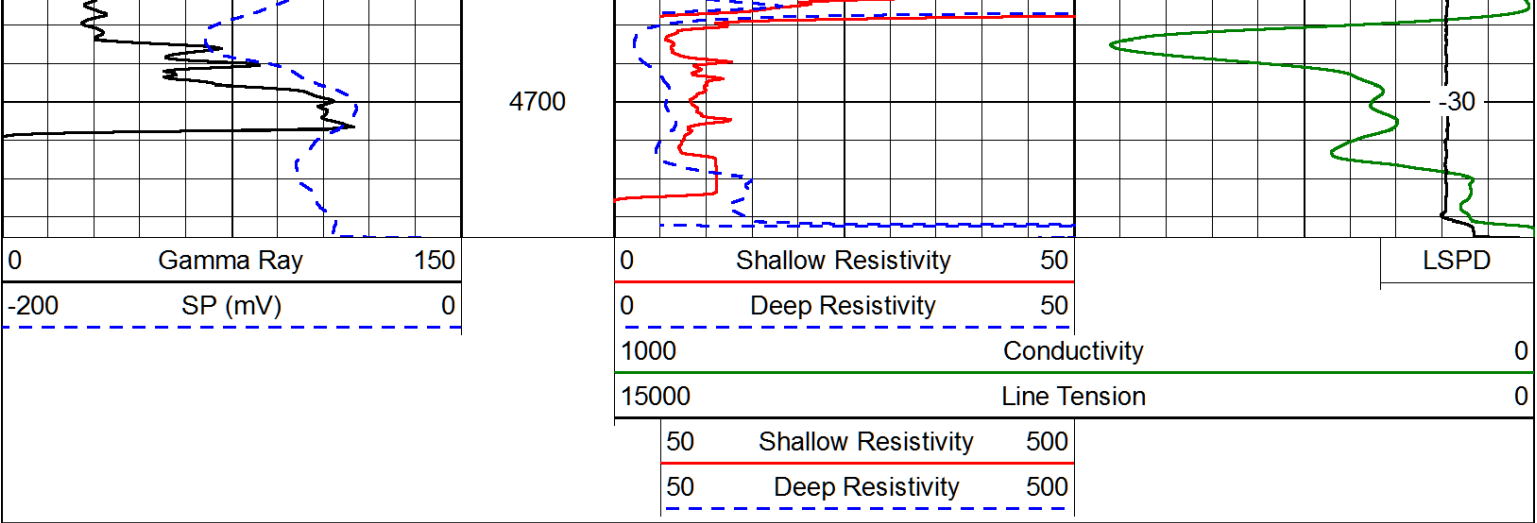




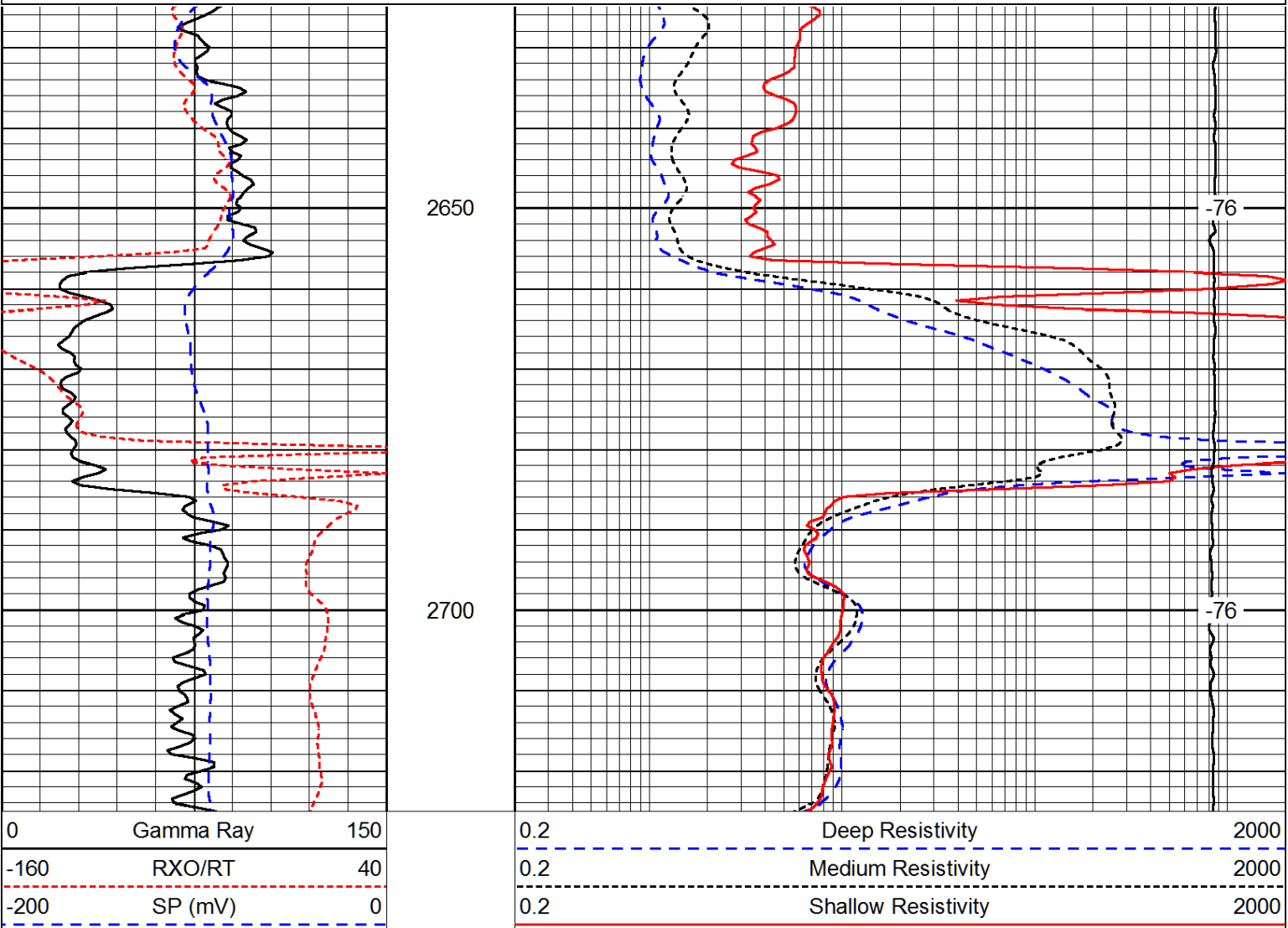
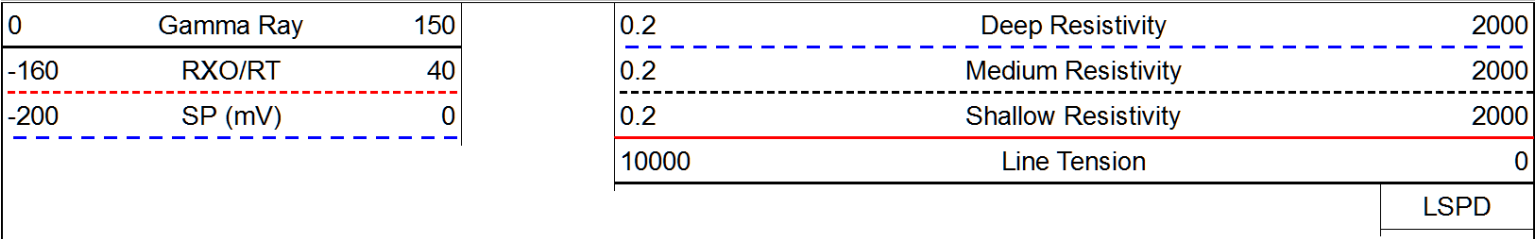








Database File: questa_bertrand_2-22hd.db
Dataset Pathname: dil/quesstck
Presentation Format: dil
Dataset Creation: Sat Sep 13 08:45:52 2014
Charted by: Depth in Feet scaled 1:240



Database File: questa_bertrand_2-22hd.db

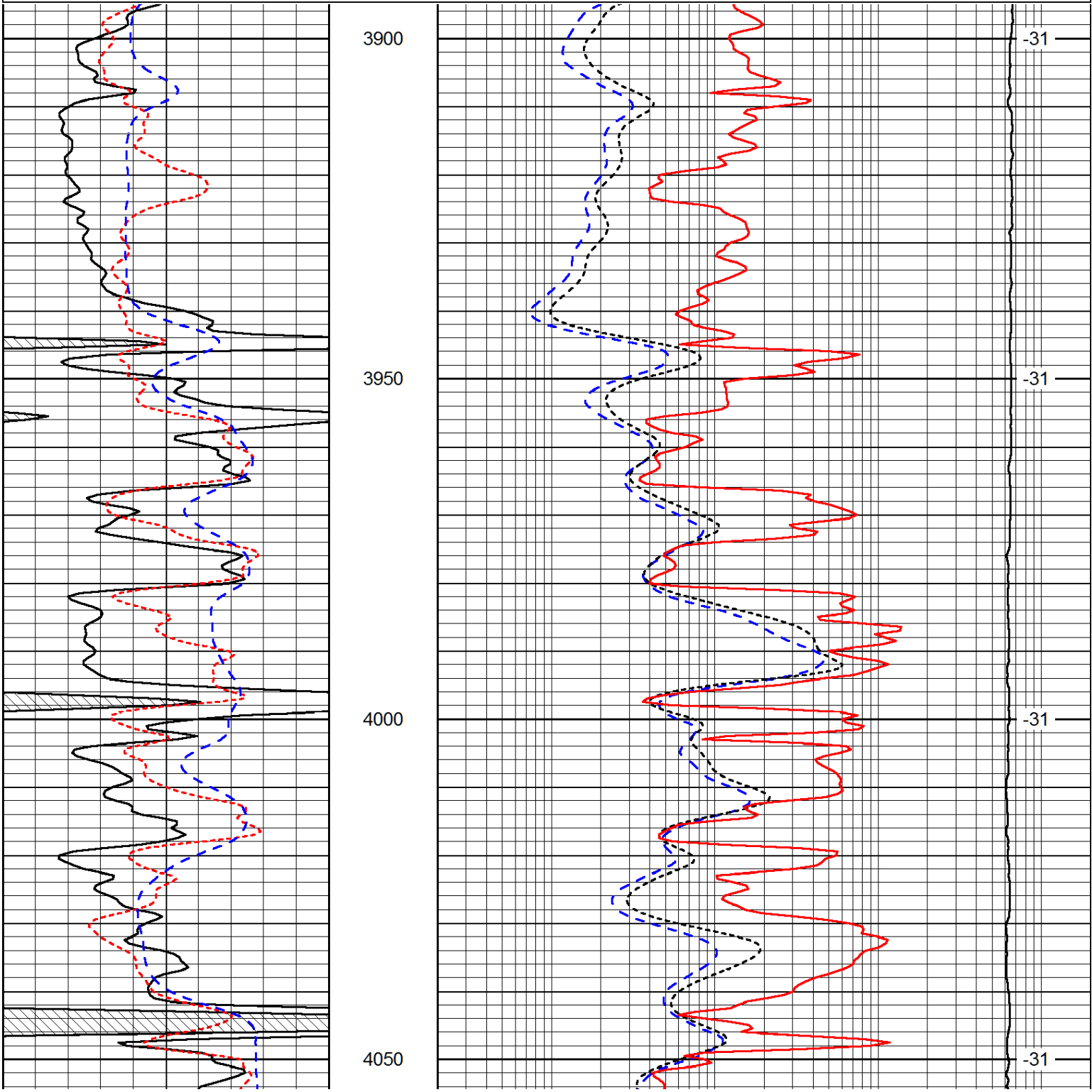
Dataset Pathname: dil/quesstck

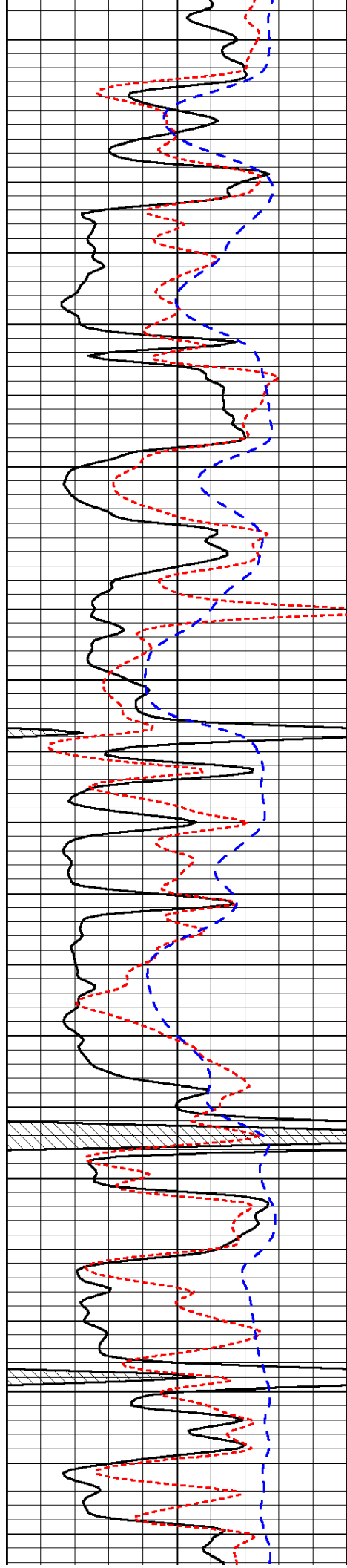
Presentation Format: dil

Dataset Creation: Sat Sep 13 08:45:52 2014

Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150	0.2	Deep Resistivity	2000
-160	RXO/RT	40	0.2	Medium Resistivity	2000
-200	SP (mV)	0	0.2	Shallow Resistivity	2000
			10000	Line Tension	0
					LSPD



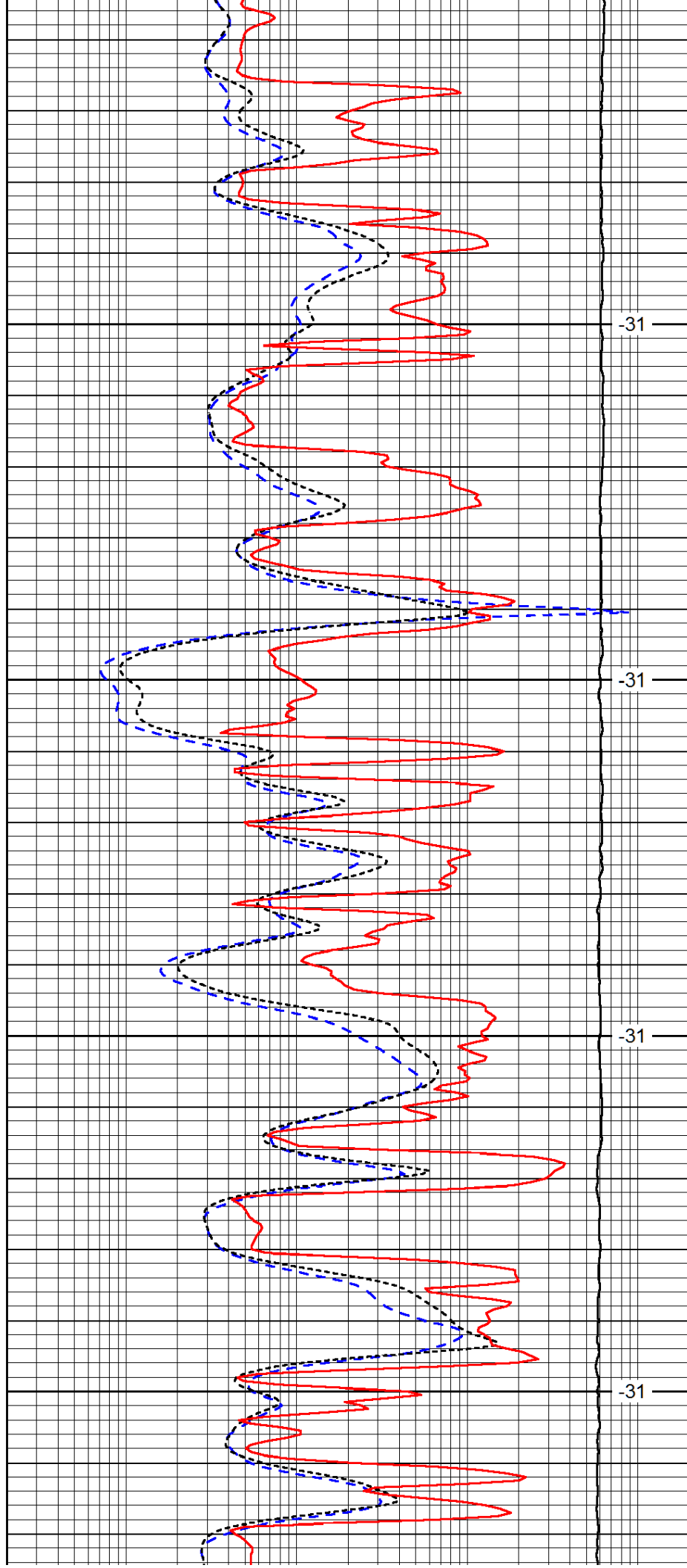


4100

4150

4200

4250

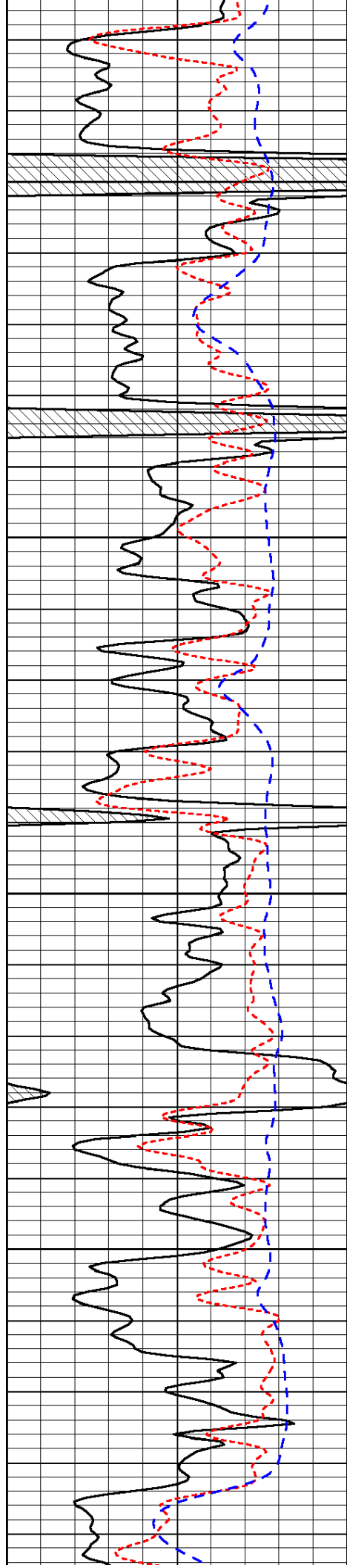


-31

-31

-31

-31

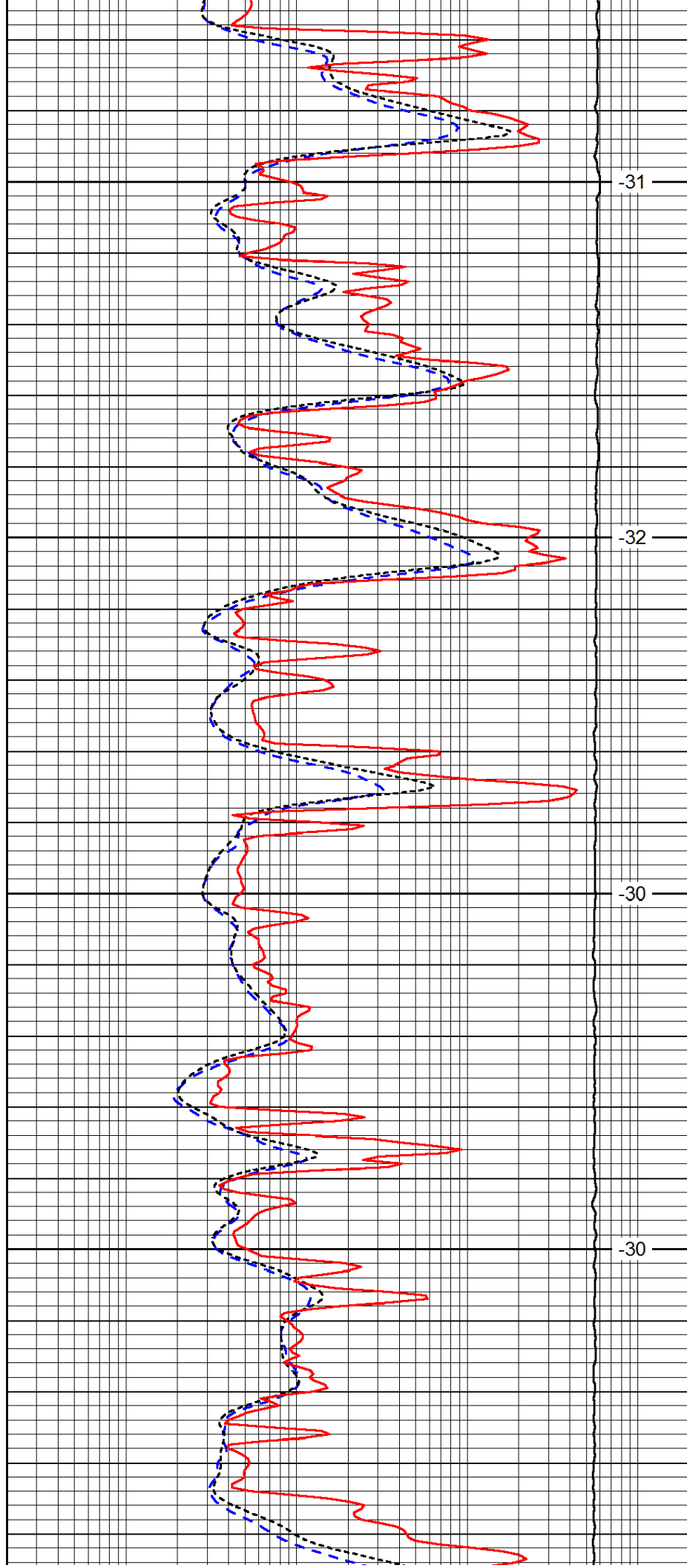


4300

4350

4400

4450

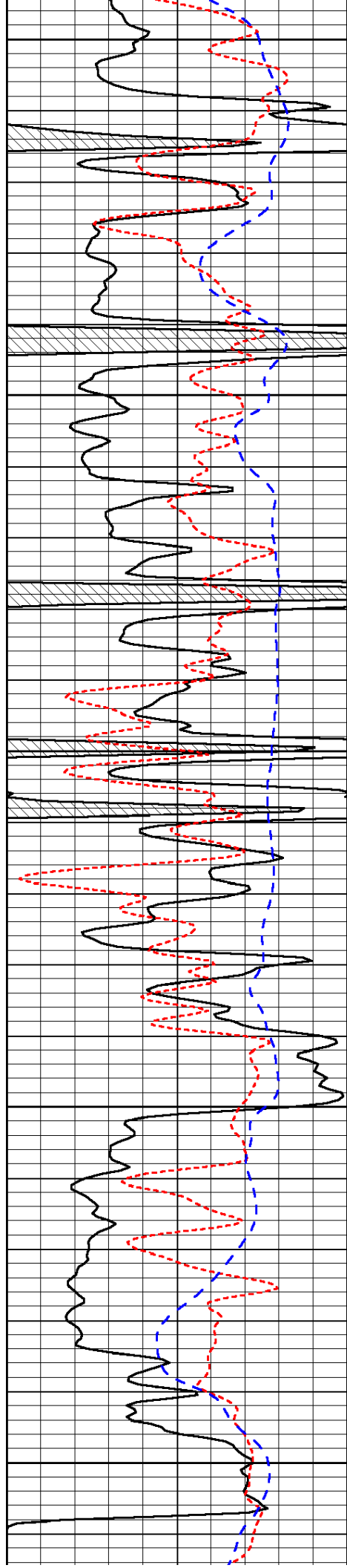


-31

-32

-30

-30



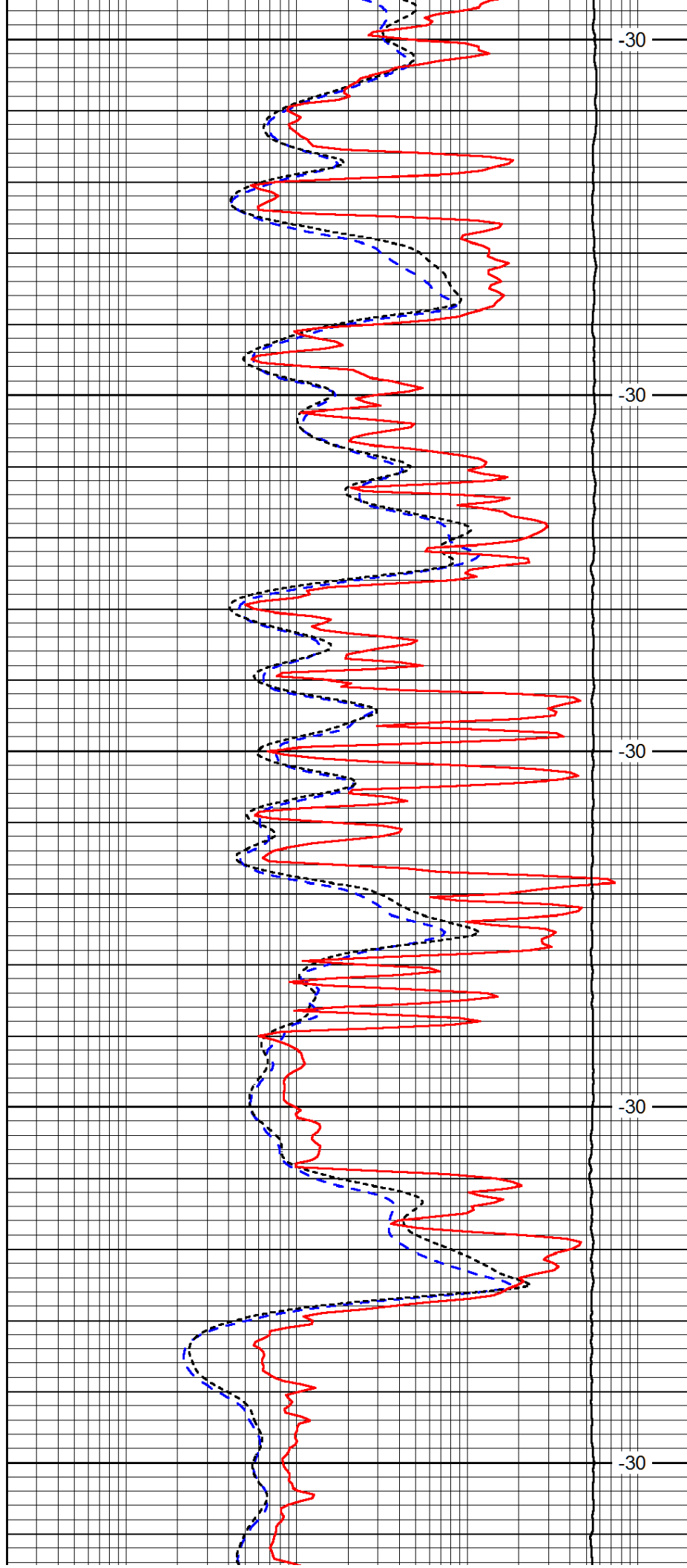
4500

4550

4600

4650

4700



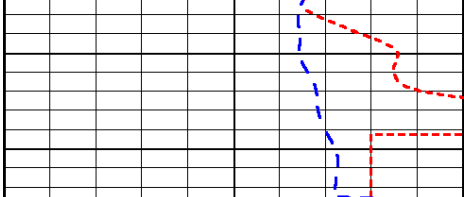
-30

-30

-30

-30

-30



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