



Pioneer Energy Services

Dual Induction Log

API No.

15-185-23,780-00-00

Company **H & B Petroleum Corporation**

Well **Hufford No. 7**

Field

County

Stafford

State

Kansas

Location

**W/2 W/2 SE NW
1980' FNL & 1400' FWL**

Other Services
CNL/CDL
MEL

Sec: 33

Twp: 21 S

Rge: 13 W

Elevation

Permanent Datum Ground Level Elevation 1896
Log Measured From Kelly Bushing 7 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

K.B. 1903
D.F. 1896
G.L. 1896

Date

12/22/2012

Run Number

One

Depth Driller

3850

Depth Logger

3853

Bottom Logged Interval

3852

Top Log Interval

600

Casing Driller

8.625 @ 615

Casing Logger

615

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

12,000

Density / Viscosity

9.5 58

pH / Fluid Loss

9.0 15.2

Source of Sample

Flowline

Rm @ Meas. Temp

.29 @ 50

Rmf @ Meas. Temp

.22 @ 50

Rmc @ Meas. Temp

.39 @ 50

Source of Rmf / Rmc

Charts

Rm @ BHT

.13 @ 115

Operating Rig Time

4 Hours

Max Rec. Temp. F

115

Equipment Number

108

Location

Hays

Recorded By

D. Martin

Witnessed By

Jim Musgrove

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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

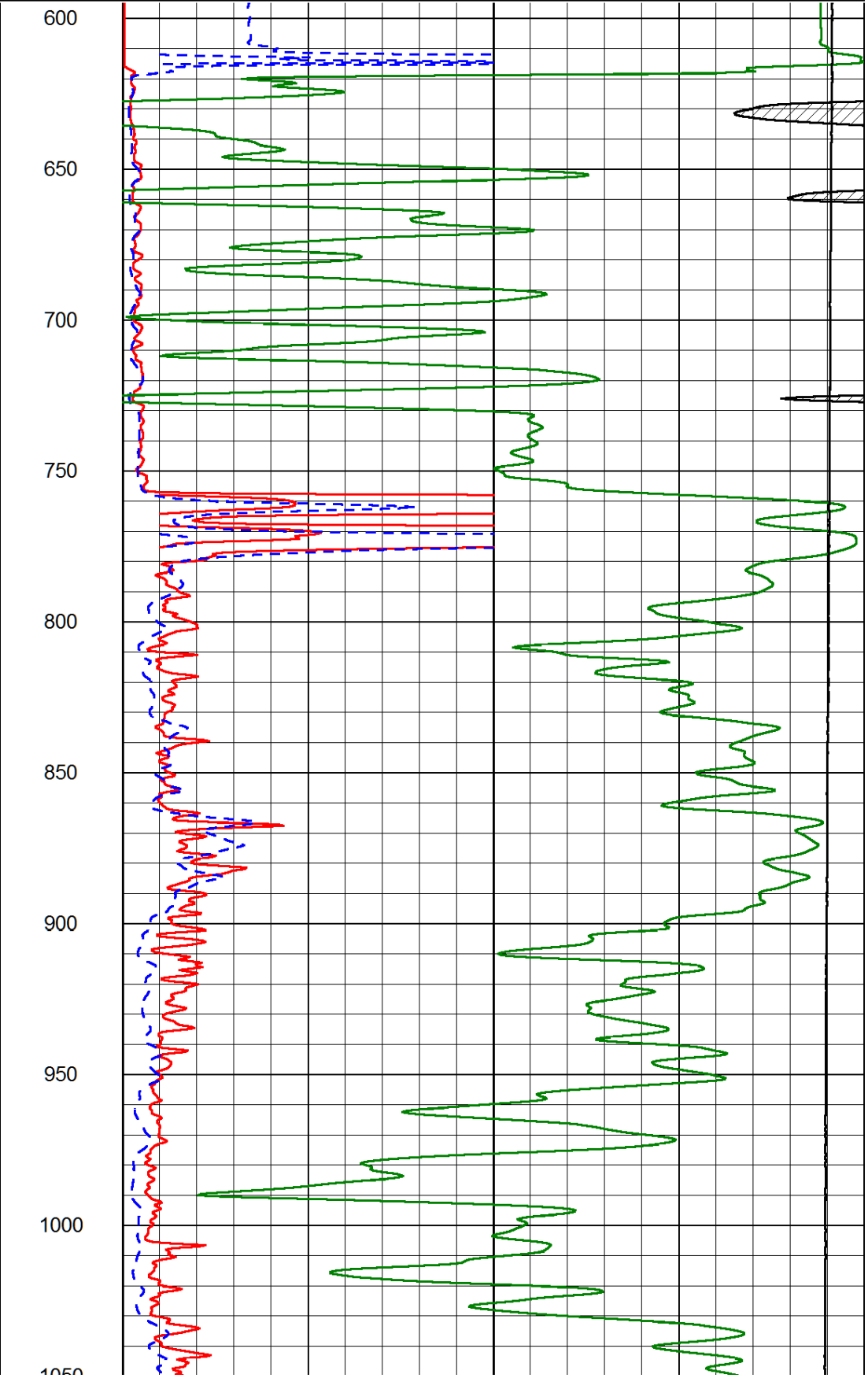
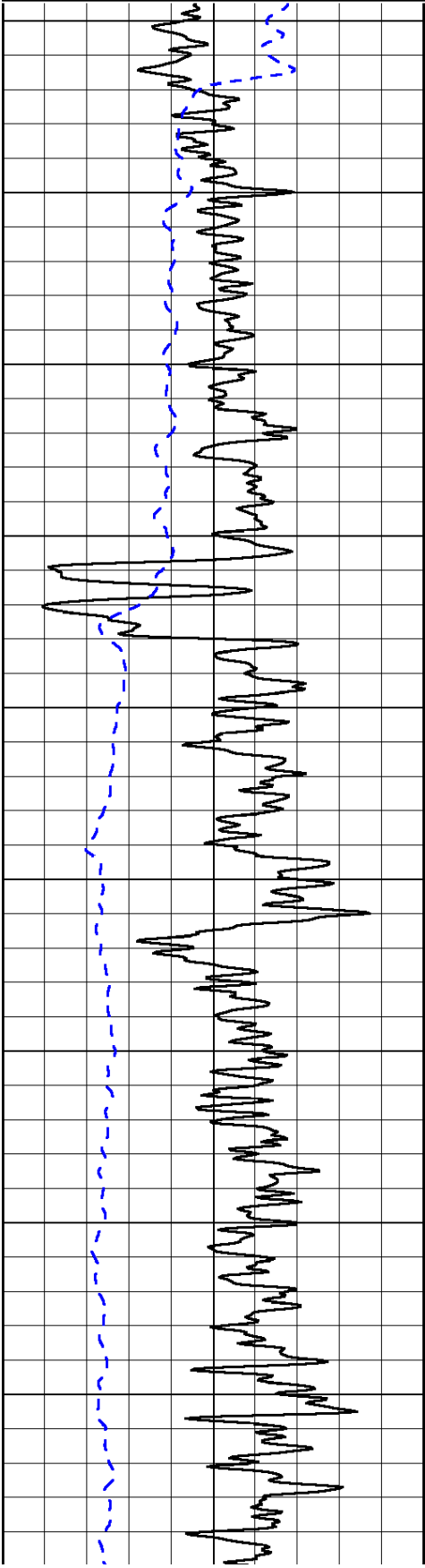
Thank you for using Log-Tech, Inc.
(785) 625-3858

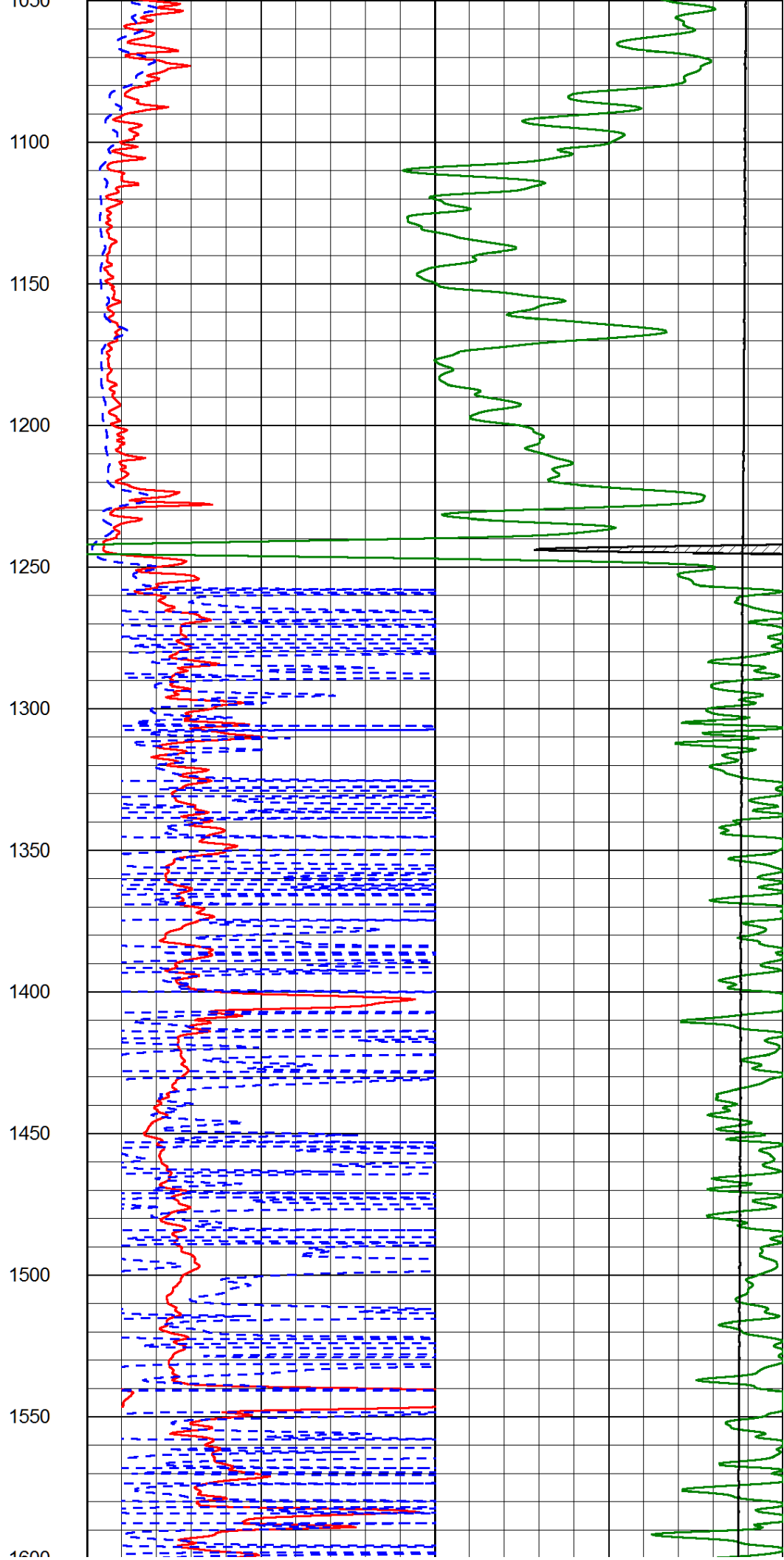
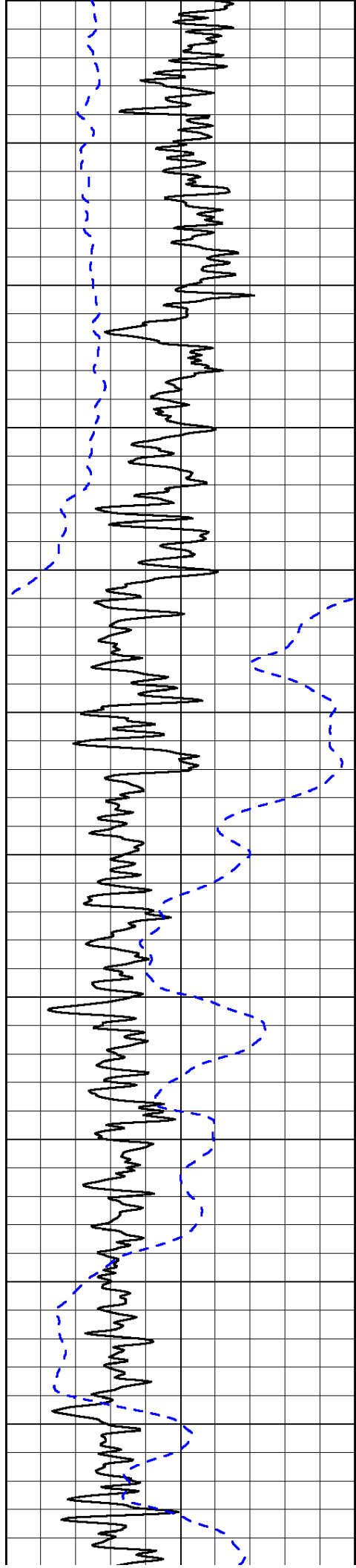
Hwy 281 & K-19 Junction,
2 N, 1 W, 1/2 S, E Into

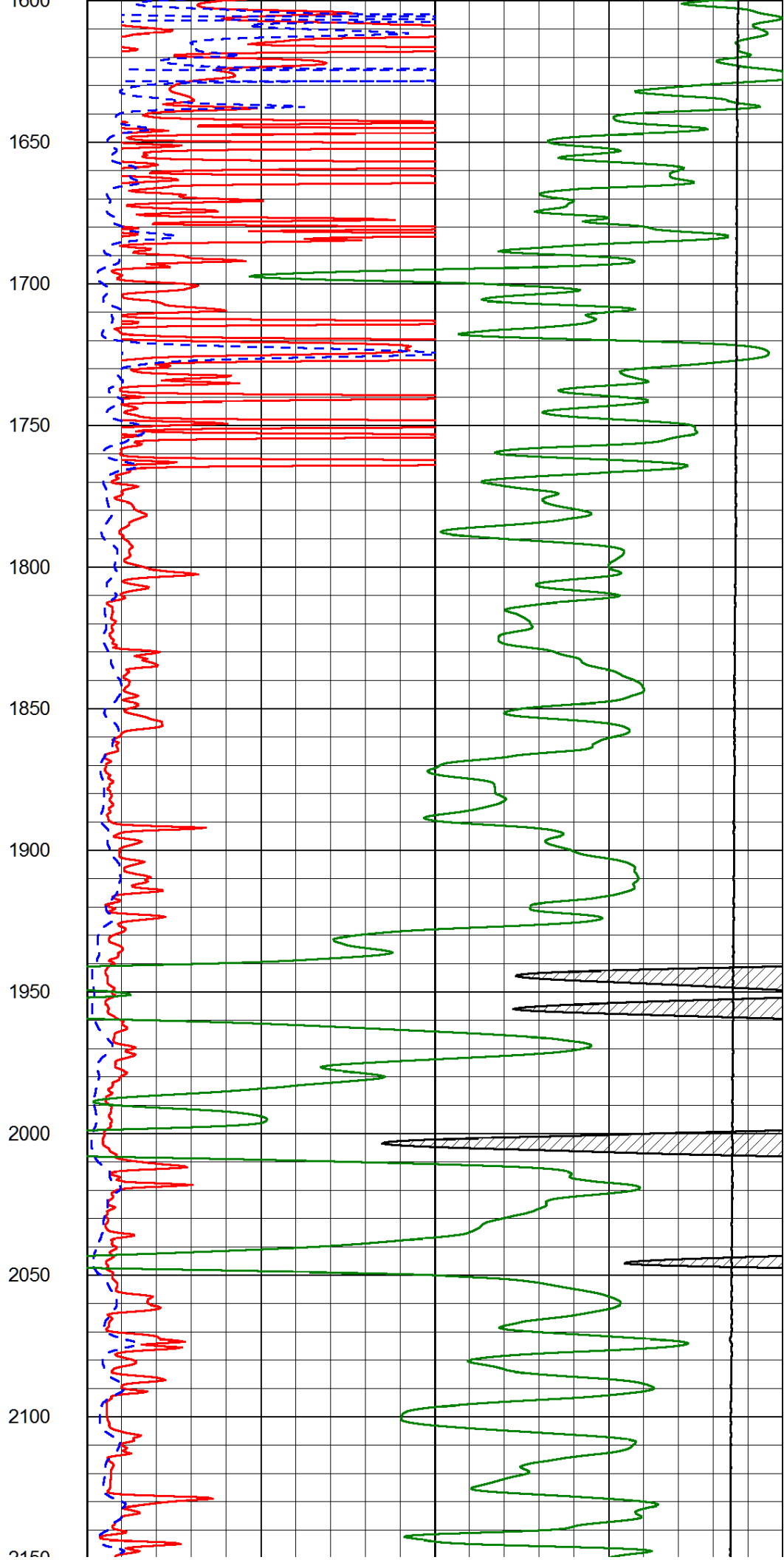
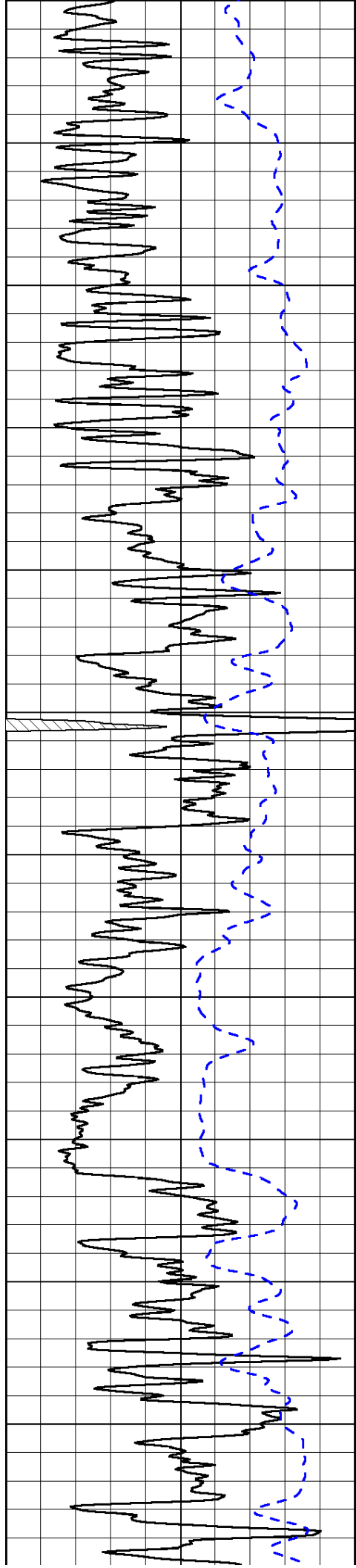
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Dataset Creation: Sat Dec 22 20:31:26 2012
Charted by: Depth in Feet scaled 1:600

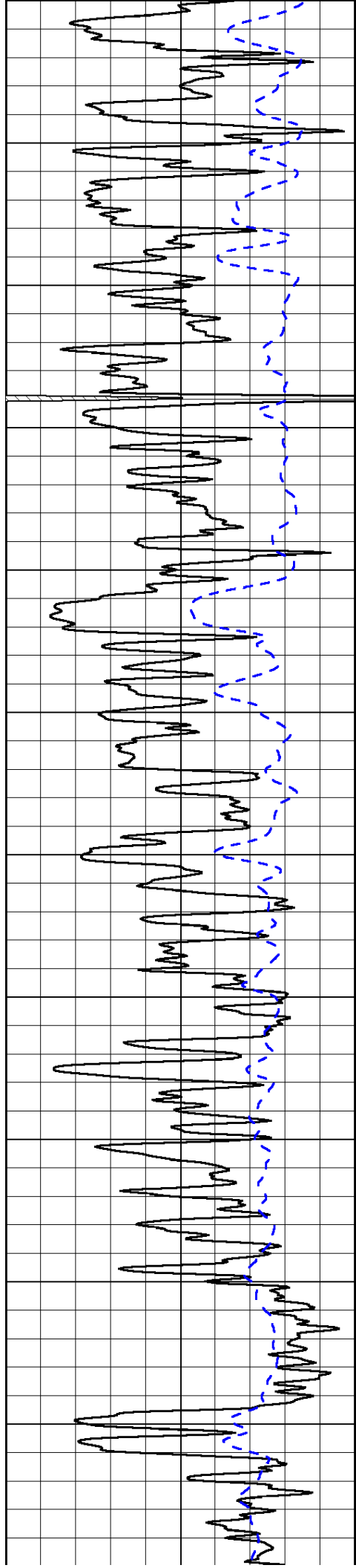
0	Gamma Ray (GAPI)	150
-200	SP (mV)	0

0	Shallow Resistivity (Ohm-m)	50
0	Deep Resistivity (Ohm-m)	50
1000	Conductivity (Ohm-m)	0
15000	Line Tension (lb)	0
	Shallow Resistivity	
50	(Ohm-m)	500
50	Deep Resistivity (Ohm-m)	500

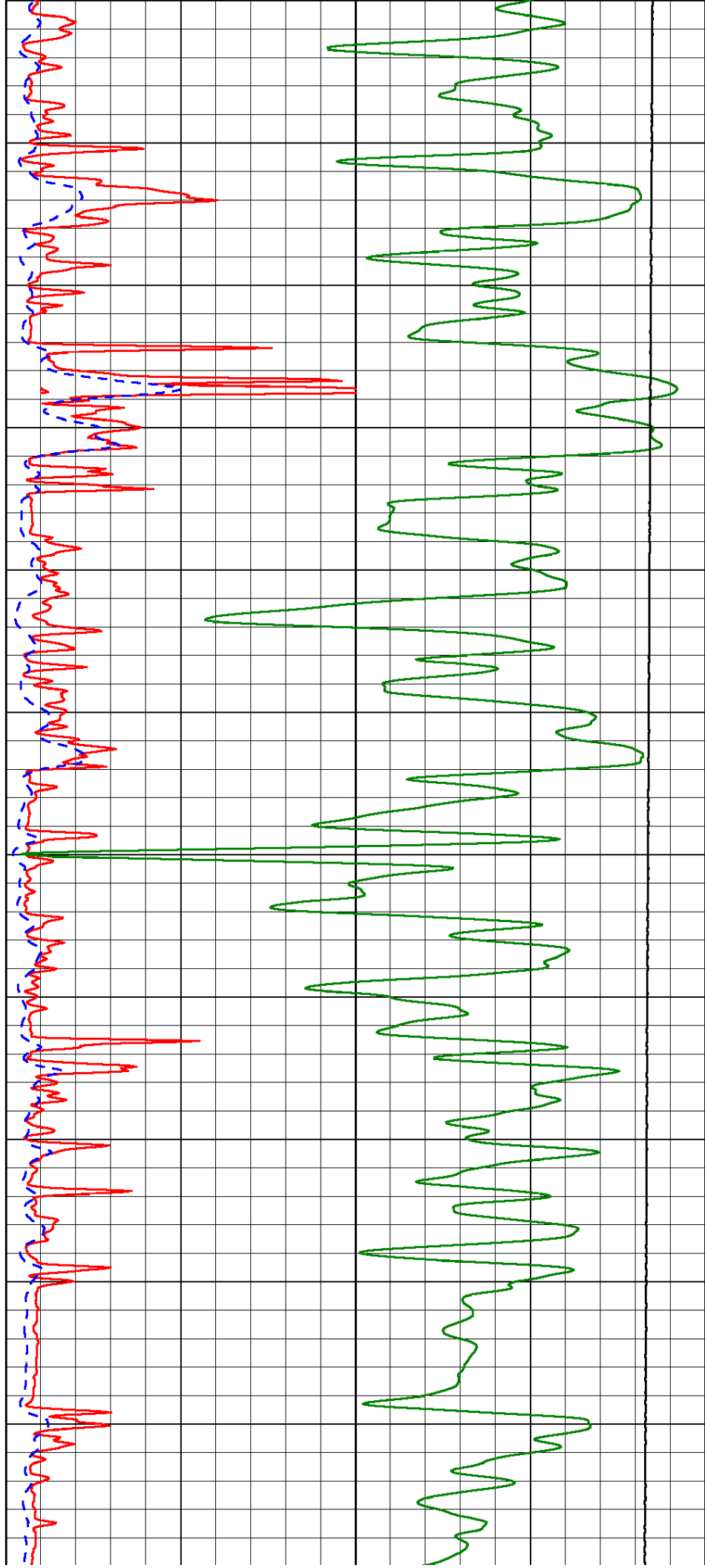


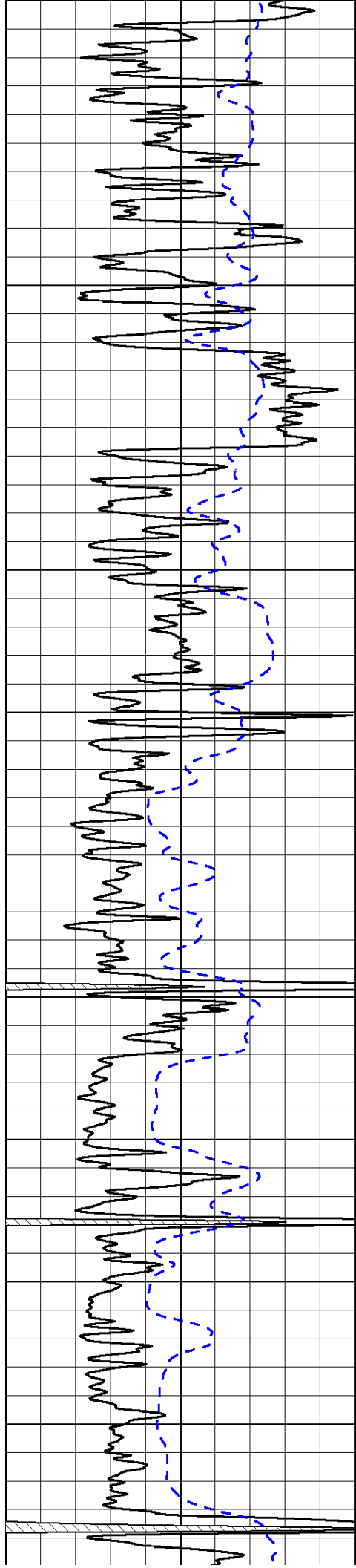




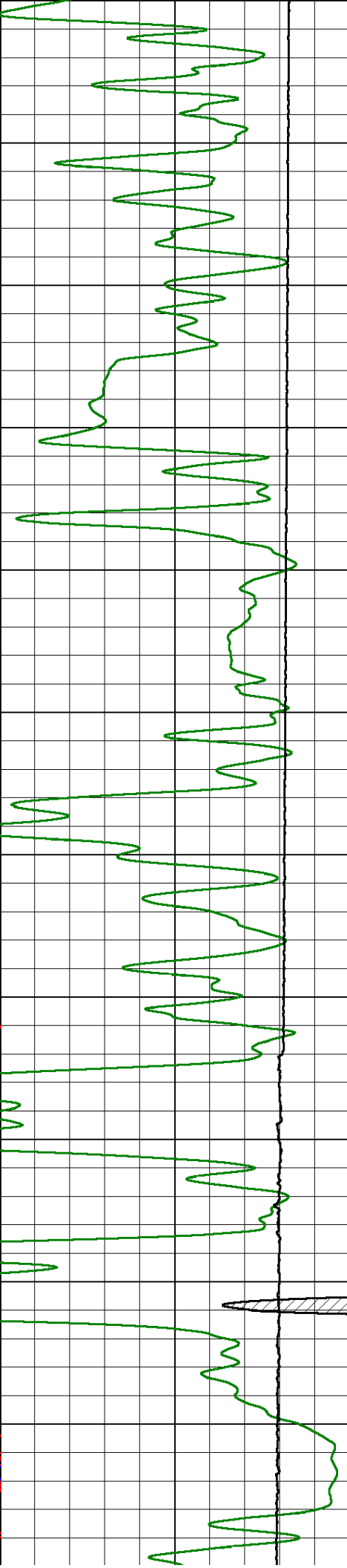
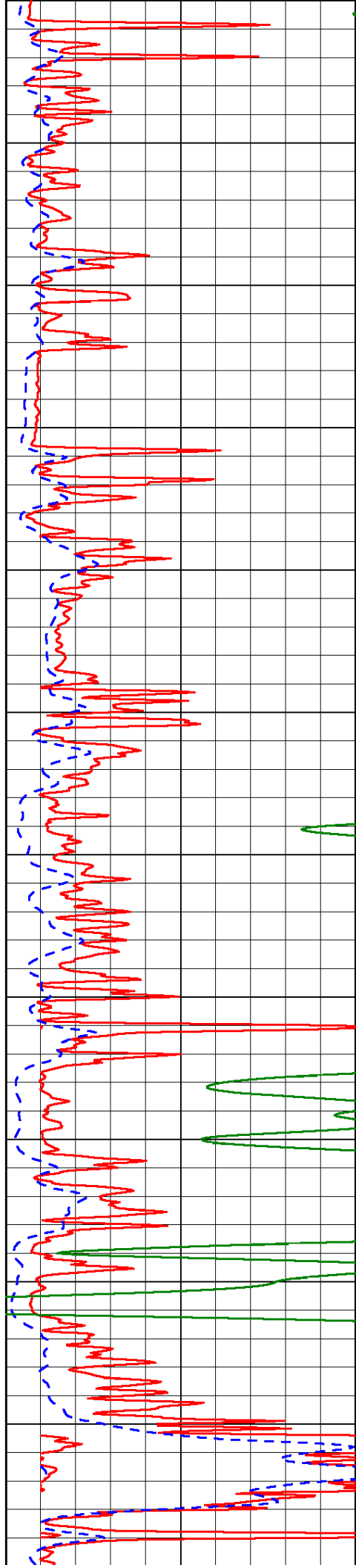


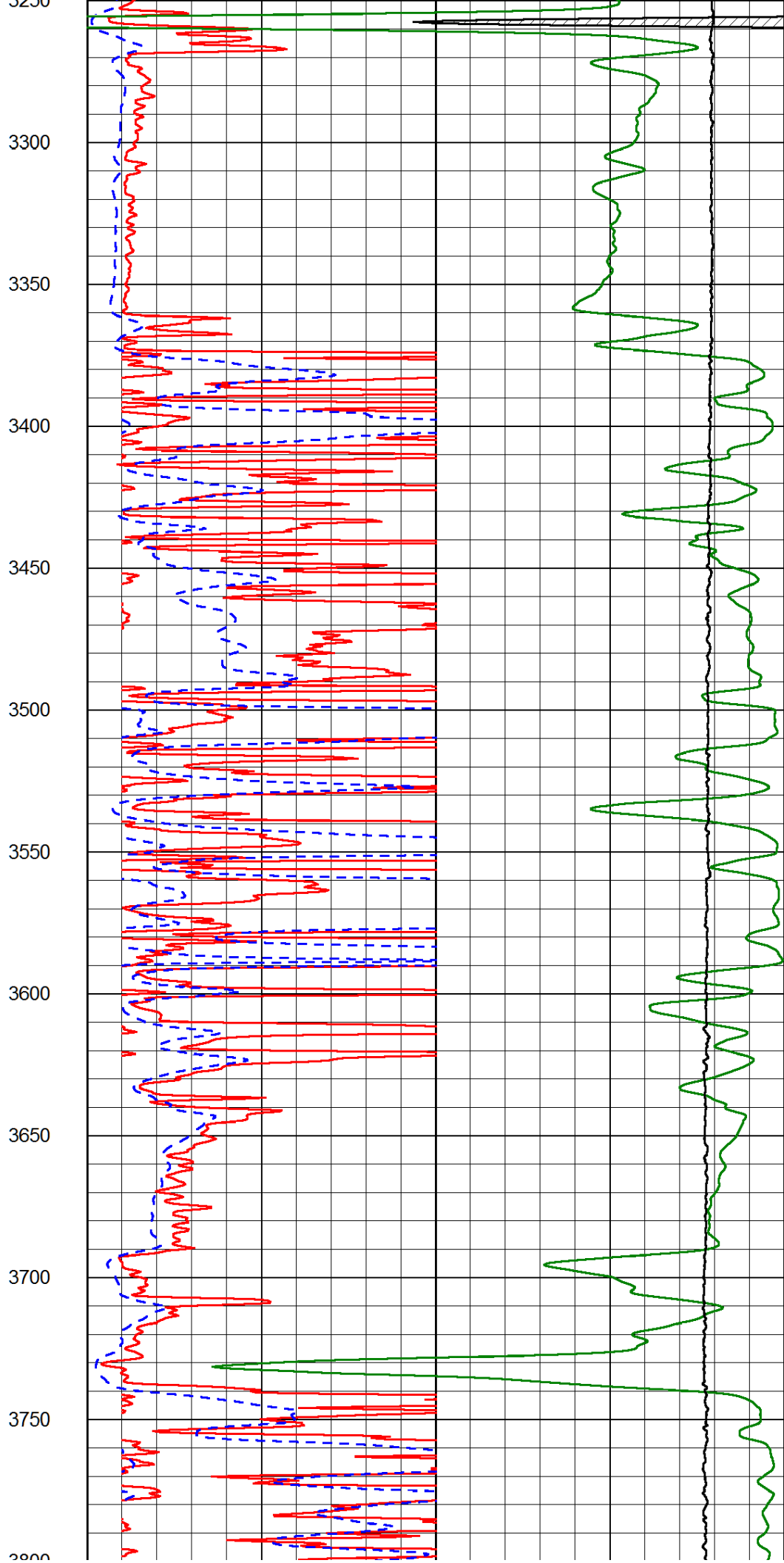
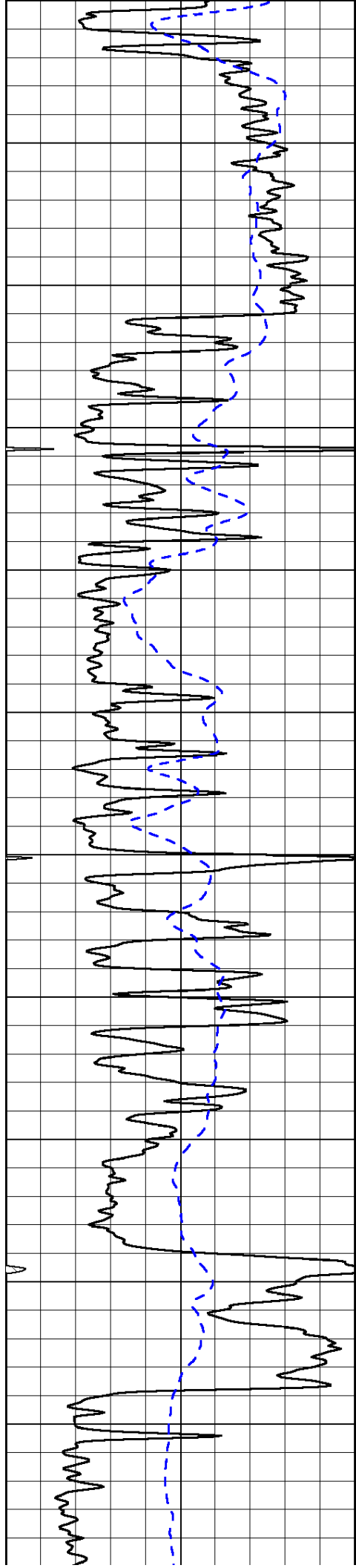
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650
2700

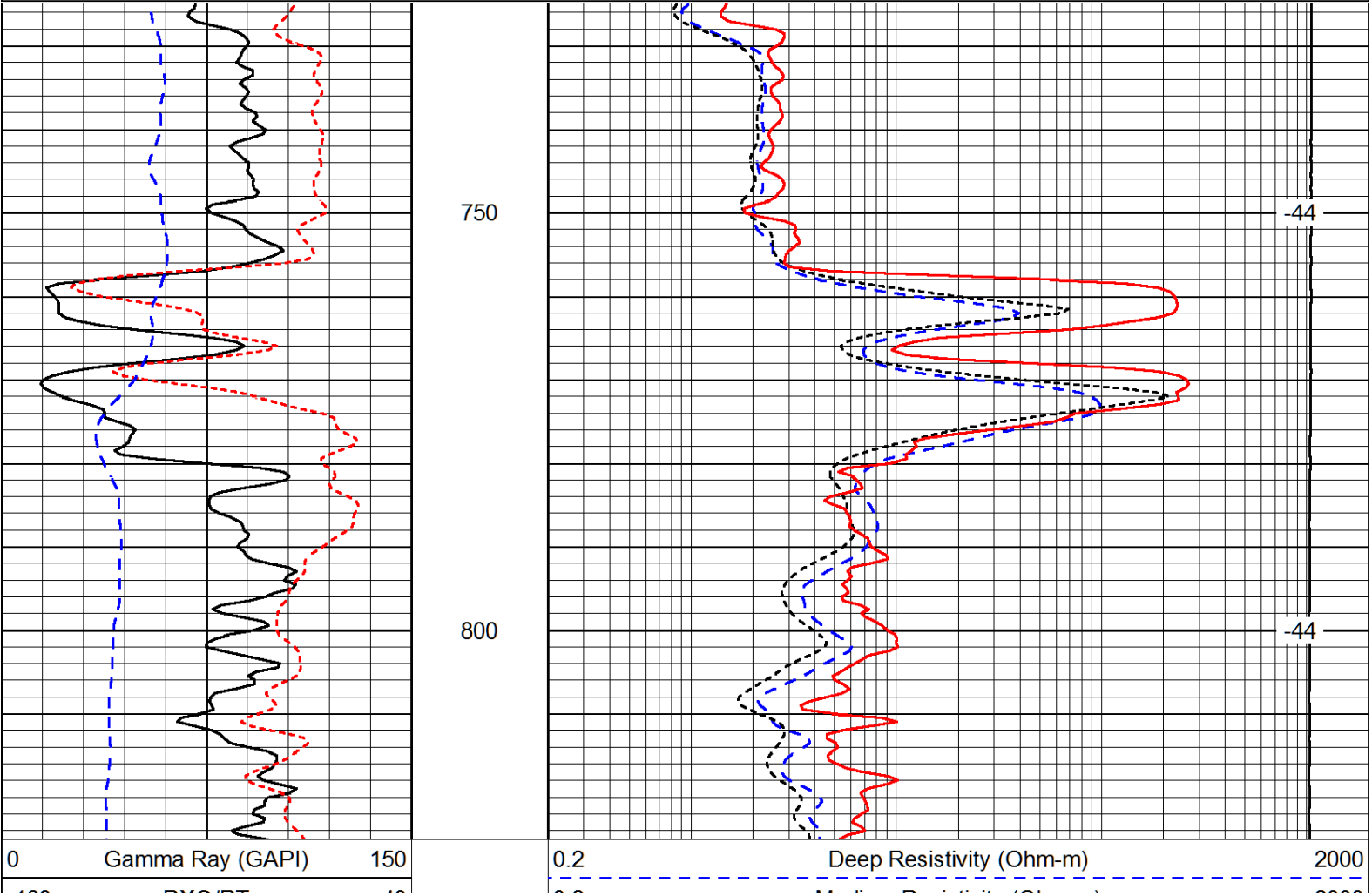
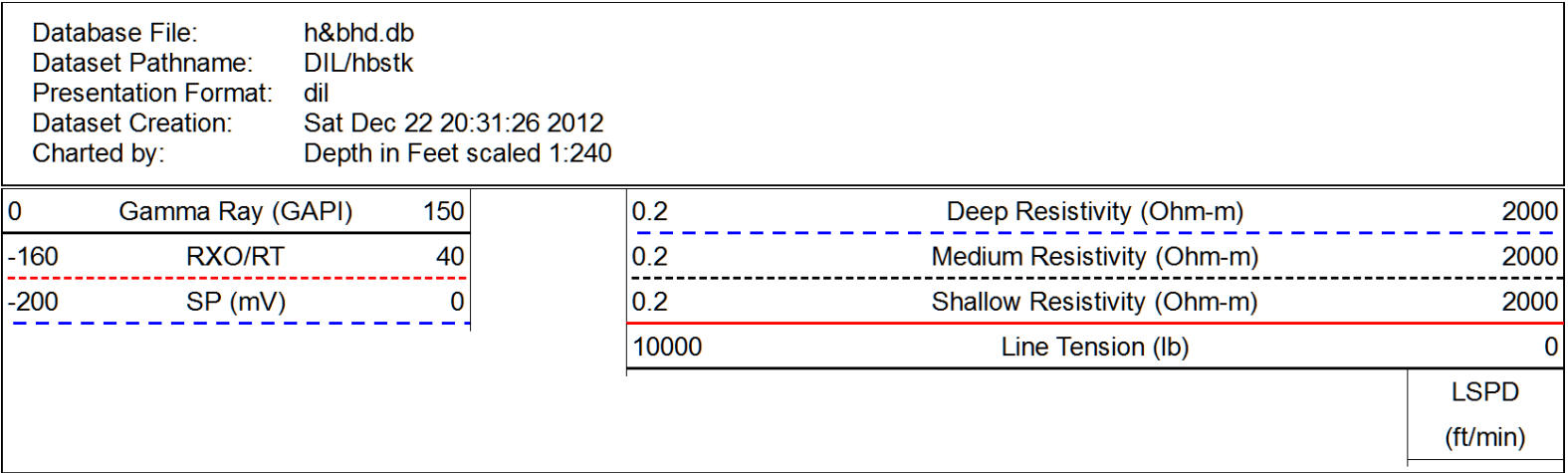
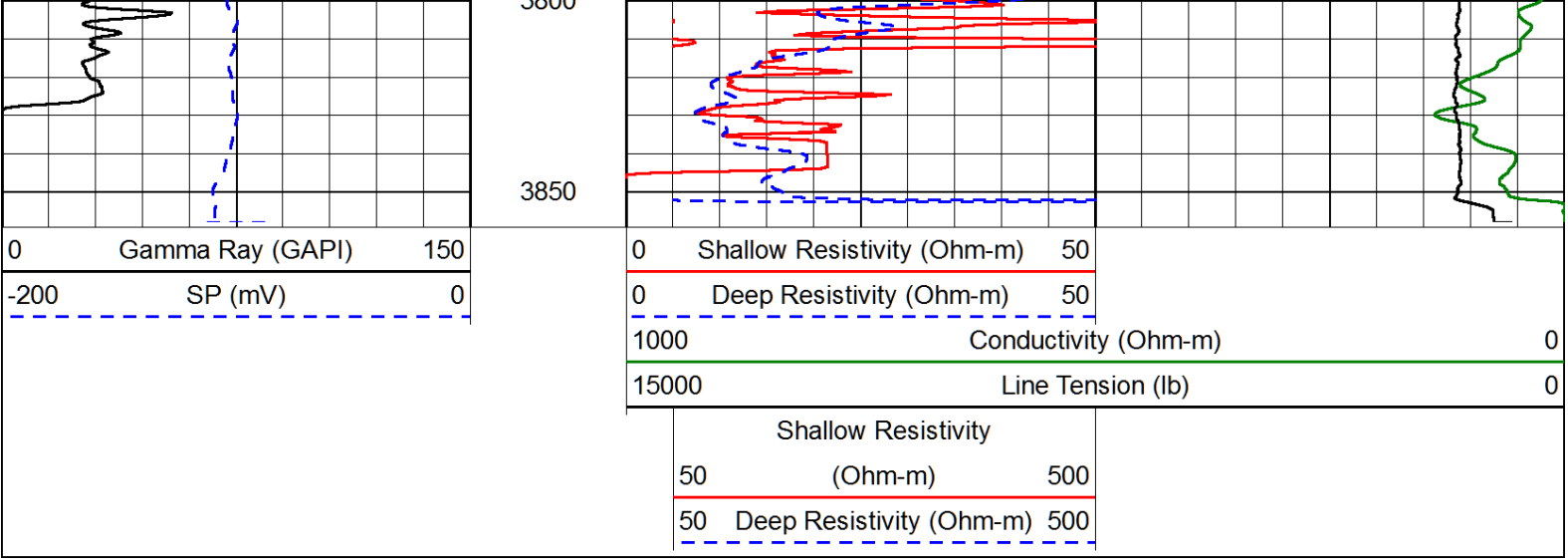




2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200
3250



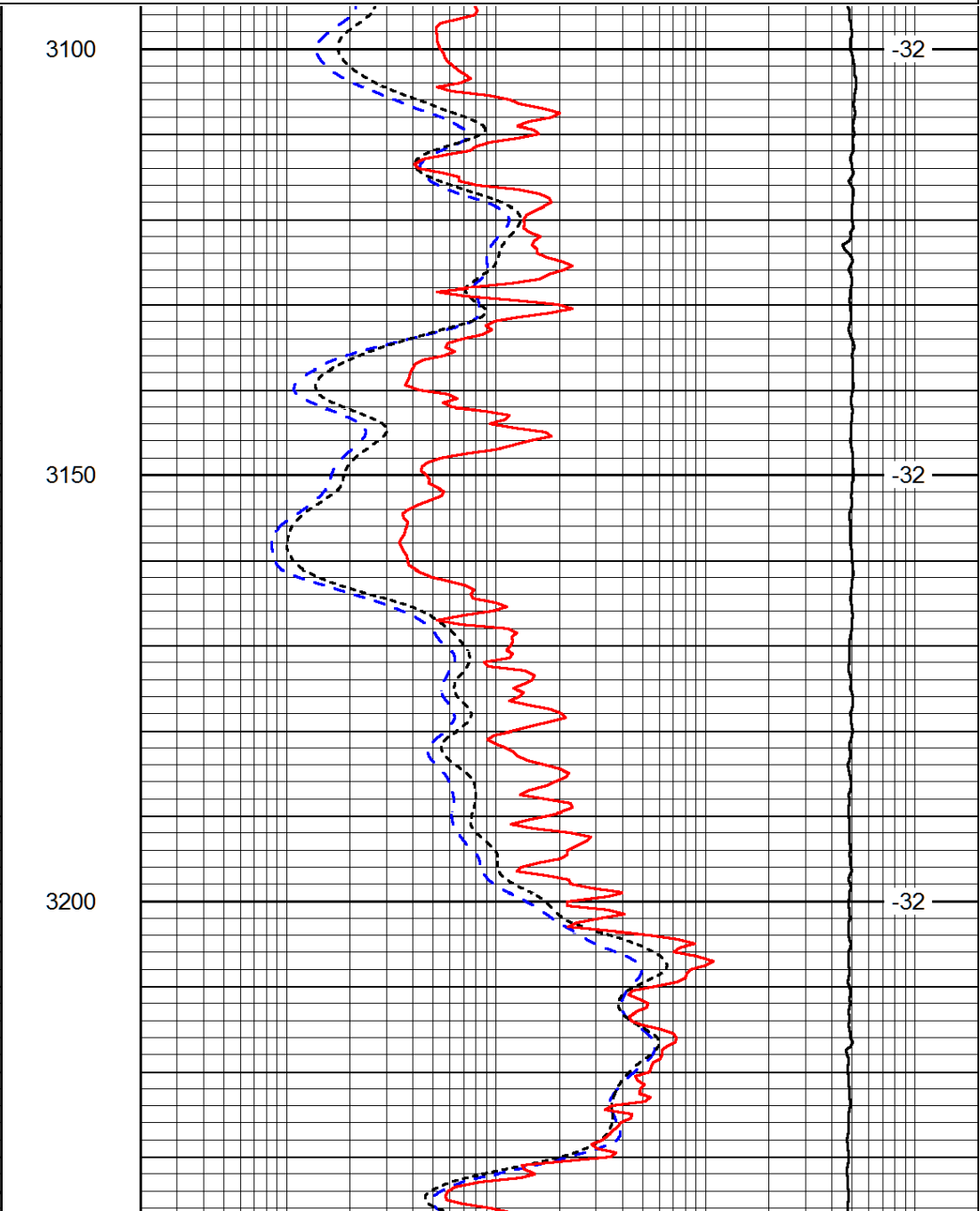
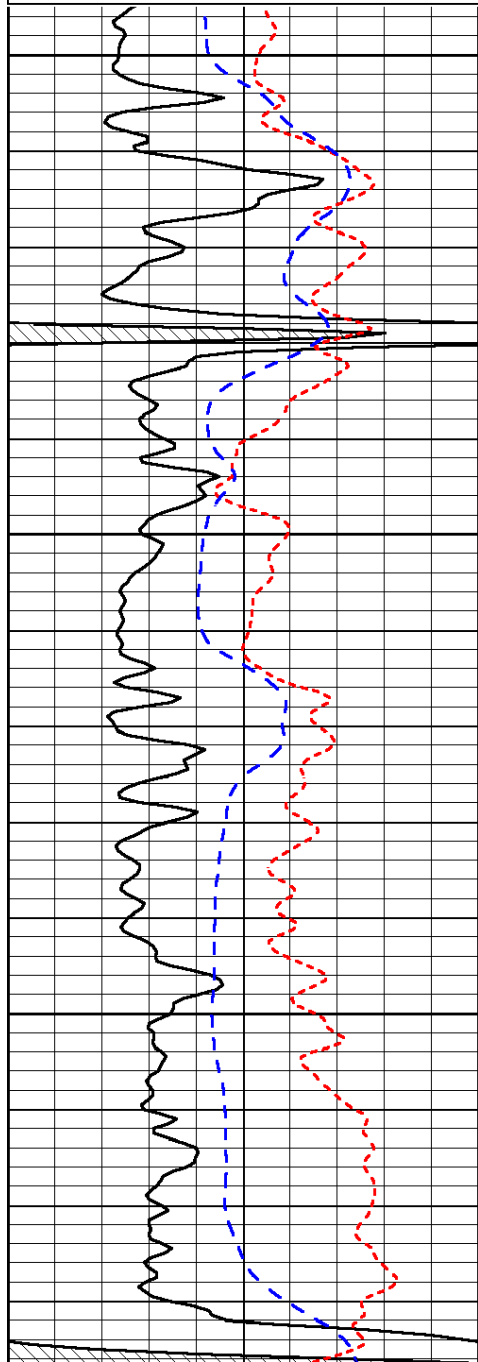


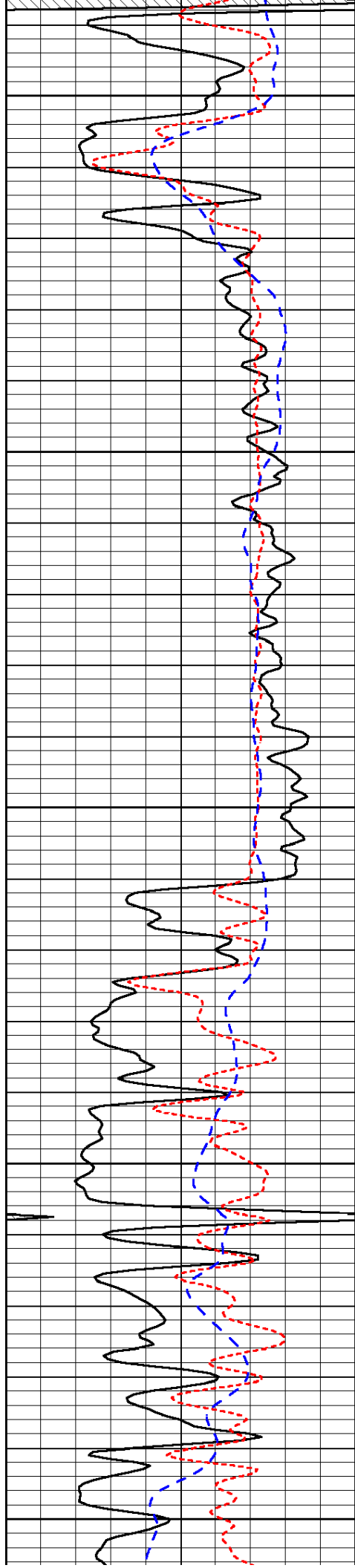


-160	RXO/RT	40
-200	SP (mV)	0

0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0
		LSPD (ft/min)

Database File: h&bhd.db					
Dataset Pathname: DIL/hbstk					
Presentation Format: dil					
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Charted by: Depth in Feet scaled 1:240					
0	Gamma Ray (GAPI)	150	0.2	Deep Resistivity (Ohm-m)	2000
-160	RXO/RT	40	0.2	Medium Resistivity (Ohm-m)	2000
-200	SP (mV)	0	0.2	Shallow Resistivity (Ohm-m)	2000
			10000	Line Tension (lb)	0
				LSPD (ft/min)	





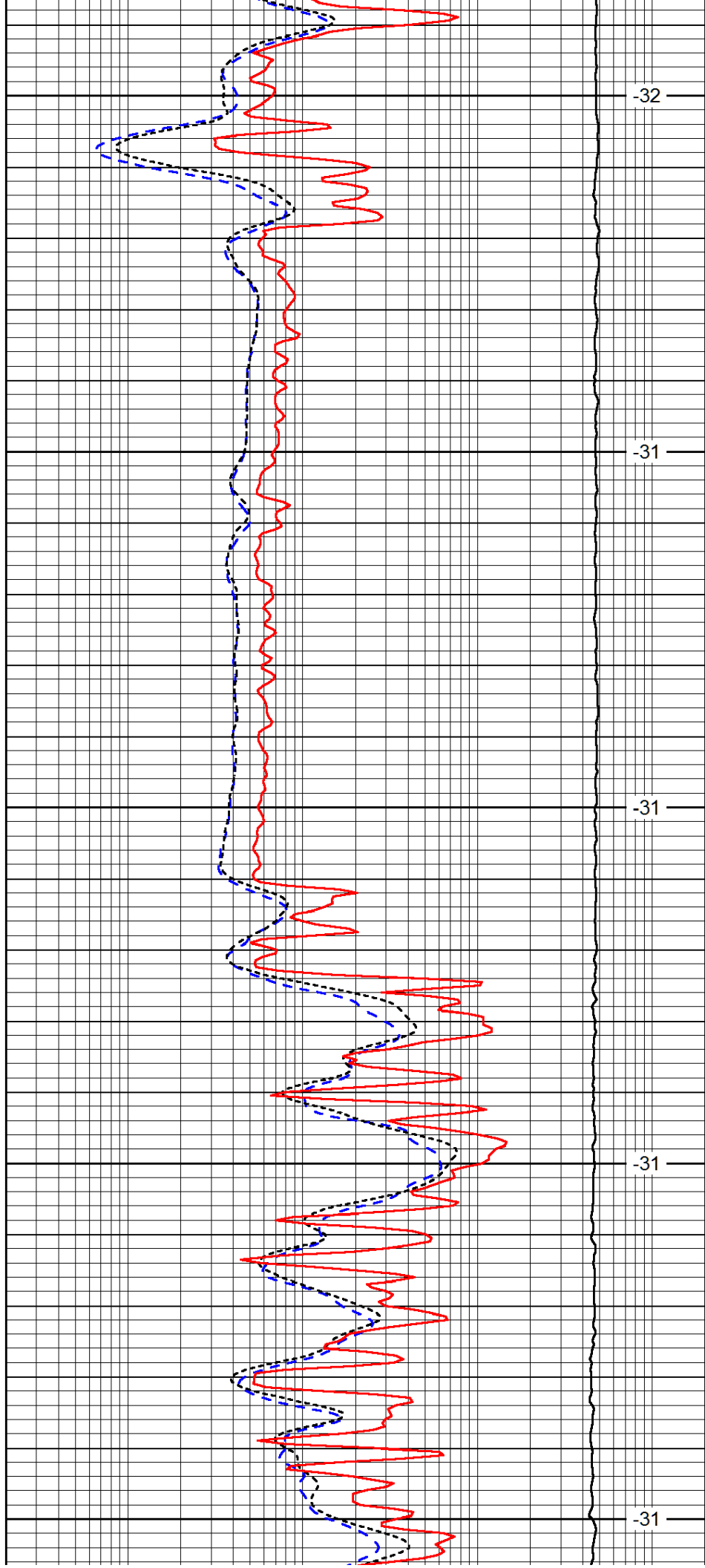
3250

3300

3350

3400

3450



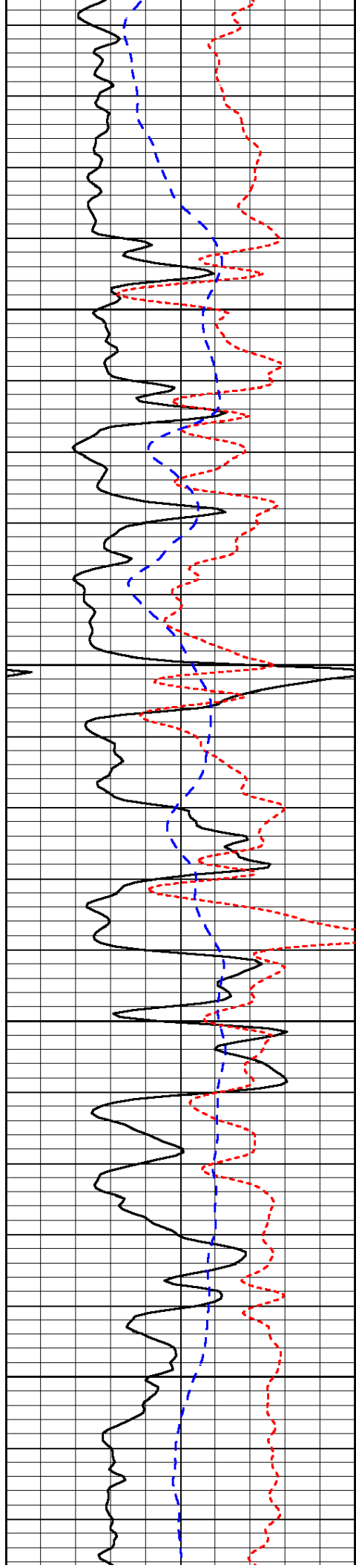
-32

-31

-31

-31

-31

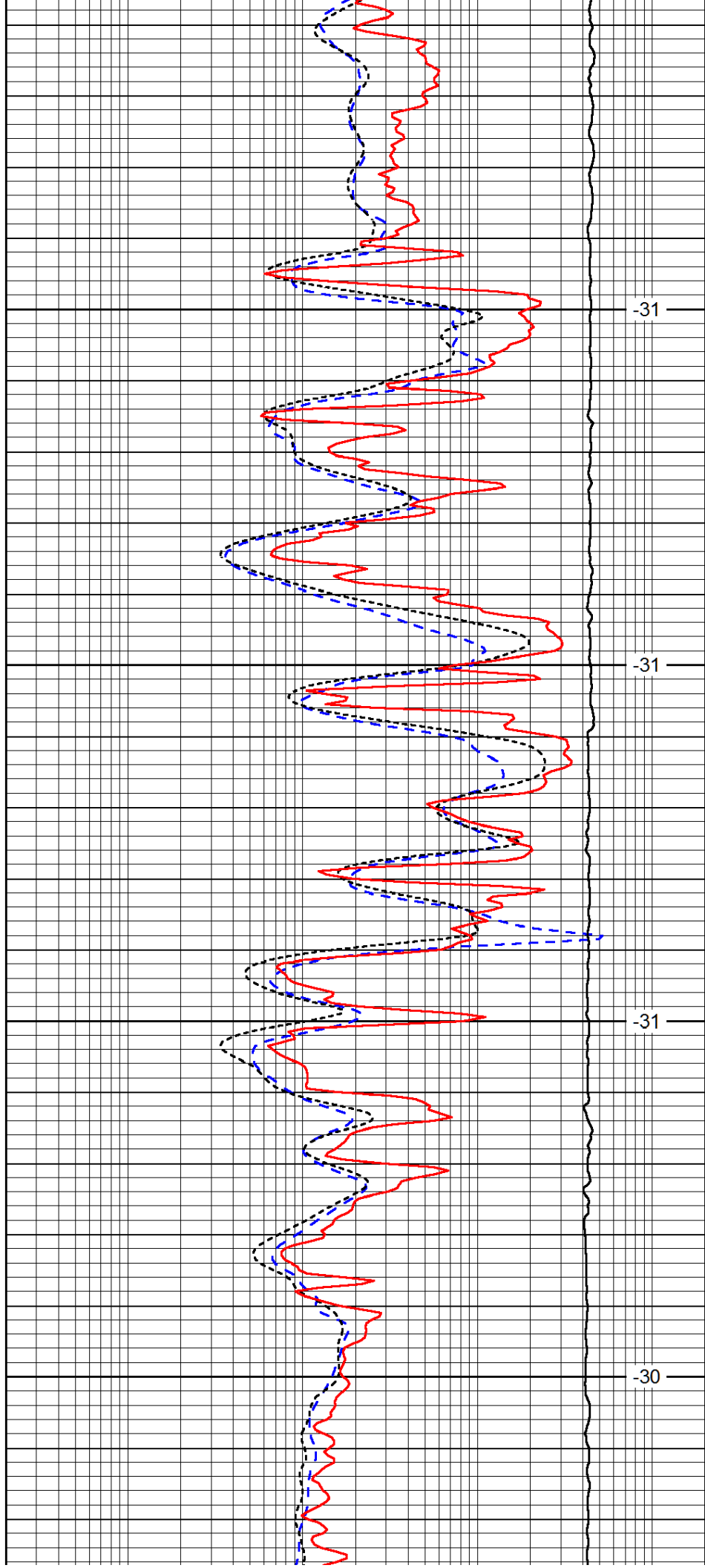


3500

3550

3600

3650

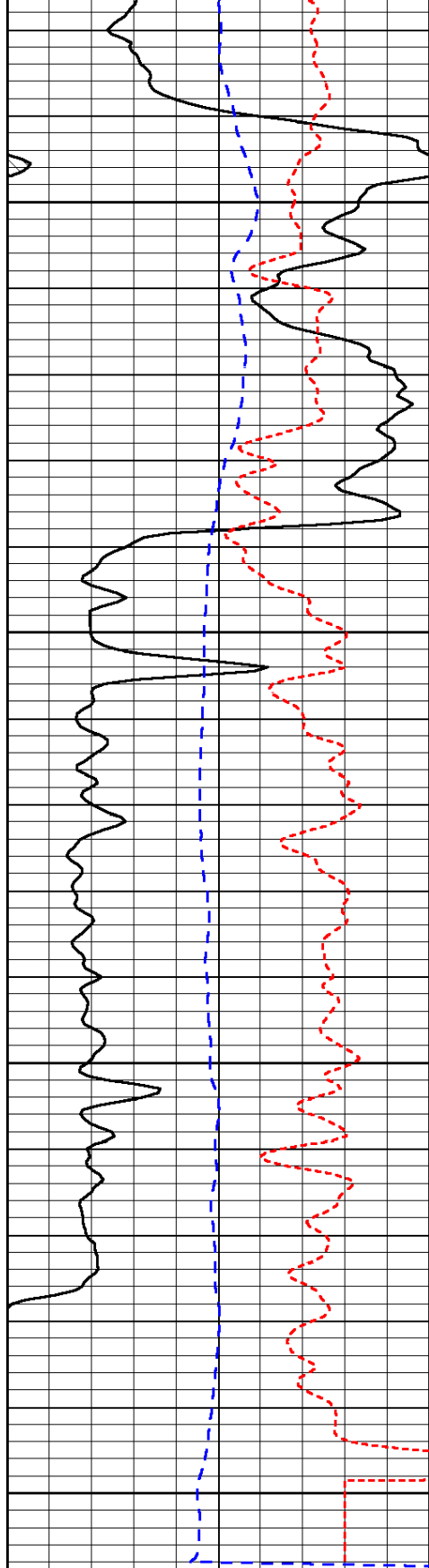


-31

-31

-31

-30



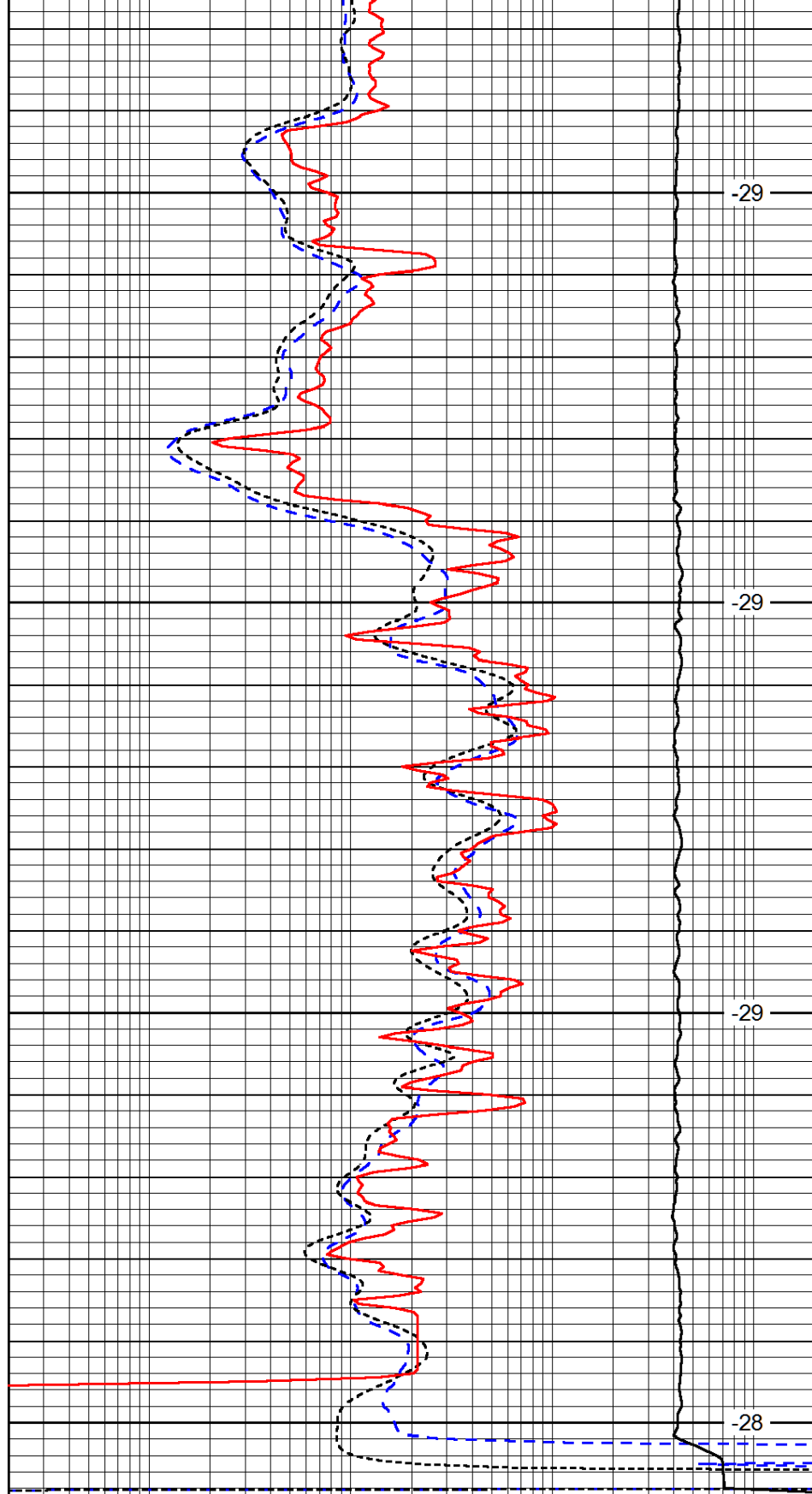
0	Gamma Ray (GAPI)	150
-160	RXO/RT	40
-200	SP (mV)	0

3700

3750

3800

3850



0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

LSPD
(ft/min)