



Dual Induction Log

Pioneer Energy Services

API No.		Company Black Tea Oil, LLC			
		Well Krebs R #4			
		Field Bridges			
		County Logan	State		Kansas
15-109-21283-00-00		Location 2970' FSL & 962' FWL			Other Services CNL/CDL
Permanent Datum Log Measured From Drilling Measured From		Sec: 26 Kelly Bushing Kelly Bushing	Twp: 14S 8 Ft. Above Perm. Datum	Rge: 32W Elevation 2717 K.B. 2725 D.F. 2717 G.L. 2717	Elevation
Date	6/10/2014				
Run Number	One				
Depth Driller	4485				
Depth Logger	4484				
Bottom Logged Interval	4483				
Top Log Interval	250				
Casing Driller	8.625 @ 264				
Casing Logger	264				
Bit Size	7.875				
Type Fluid in Hole	Chemical				
Salinity, ppm CL	3000				
Density / Viscosity	9.0 40				
pH / Fluid Loss	10.5 7.2				
Source of Sample	Flowline				
Rm @ Meas. Temp	0.75 @ 75				
Rmf @ Meas. Temp	0.56 @ 75				
Rmc @ Meas. Temp	1.01 @ 75				
Source of Rmf / Rmc	Charts				
Rm @ BHT	0.46 @ 123				
Operating Rig Time	3 Hours				
Max Rec. Temp. F	123				
Equipment Number	91				
Location	Hays				
Recorded By	D. Schmidt				
Witnessed By	Richard Thomasson				

<<< Fold Here >>>

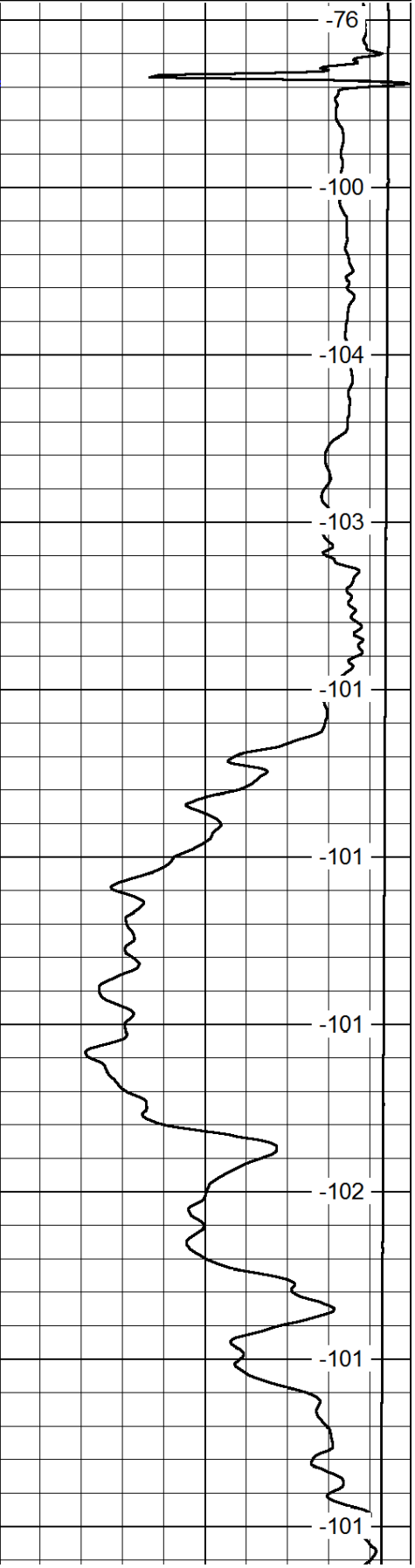
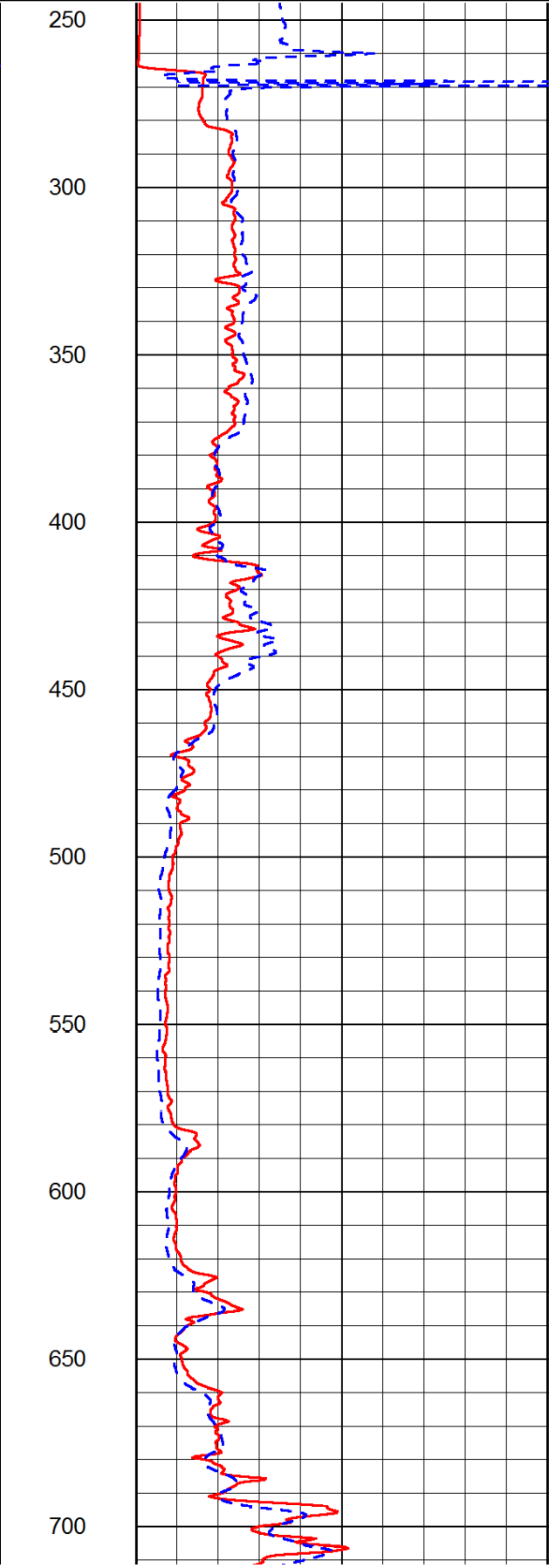
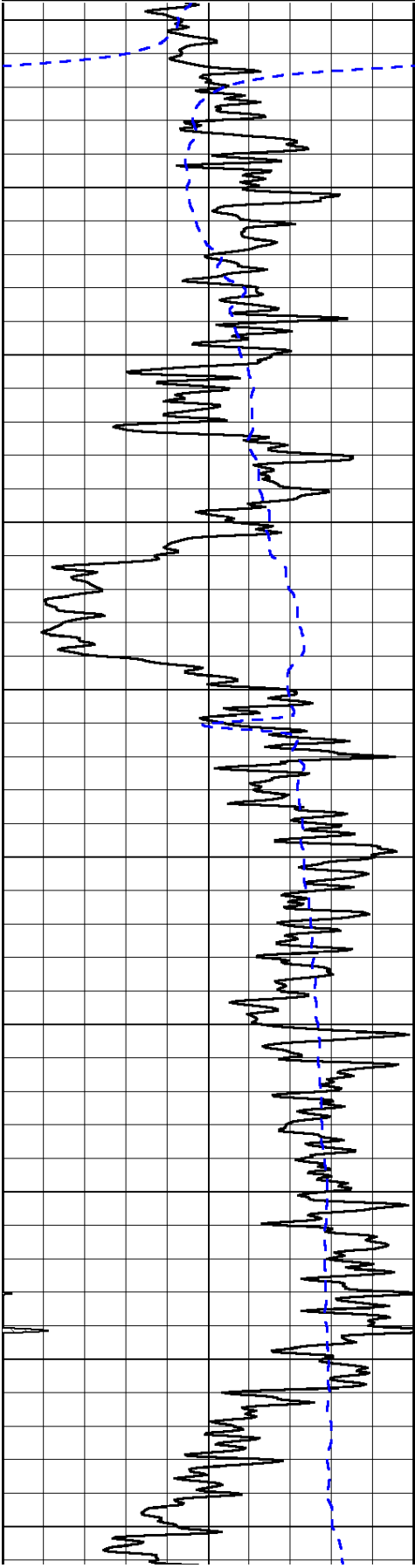
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

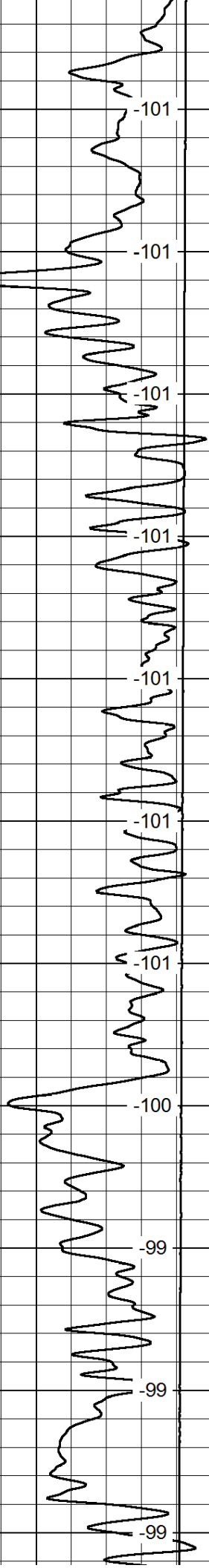
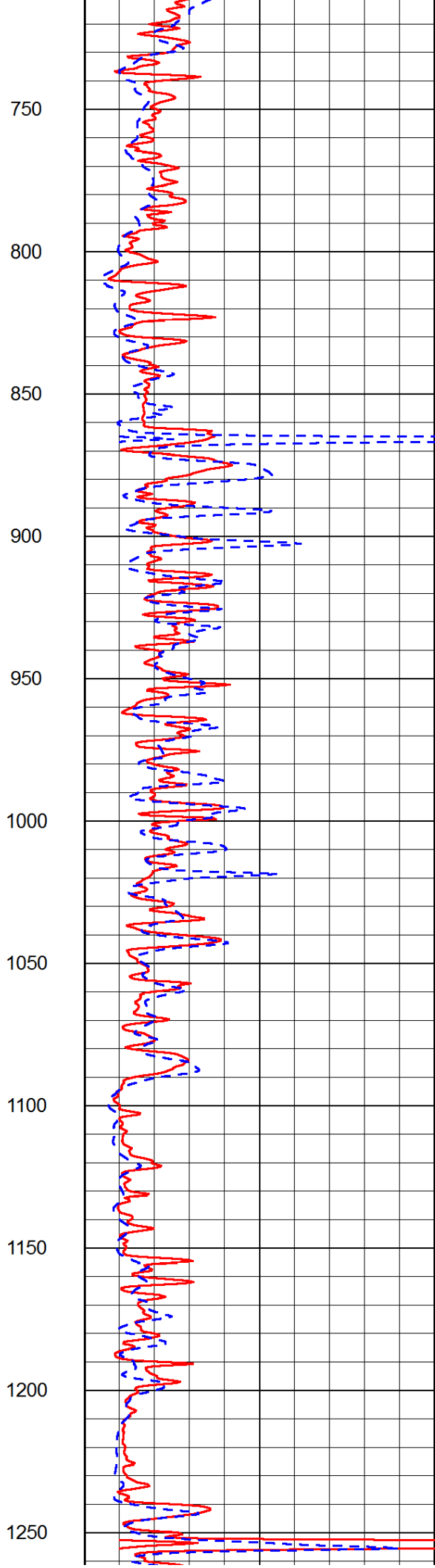
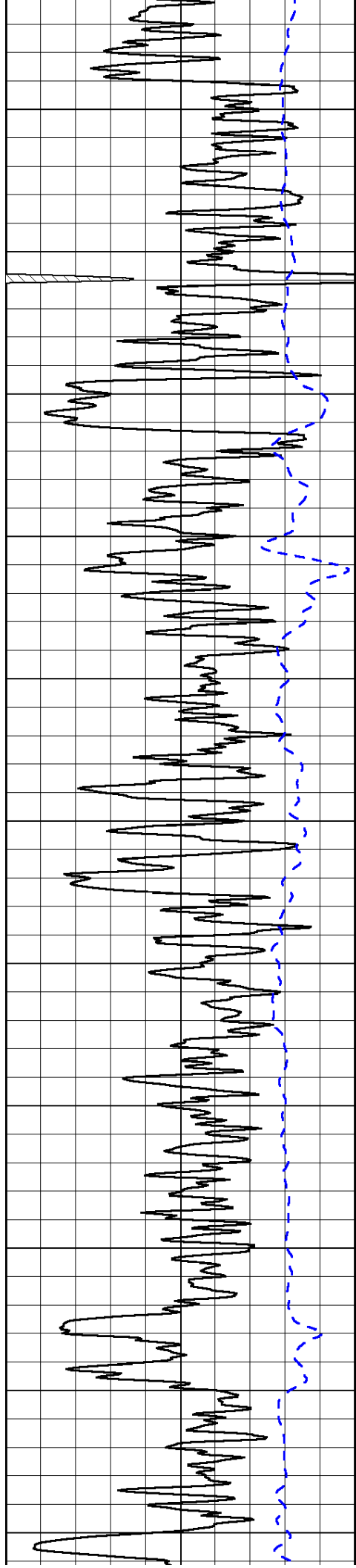
Comments

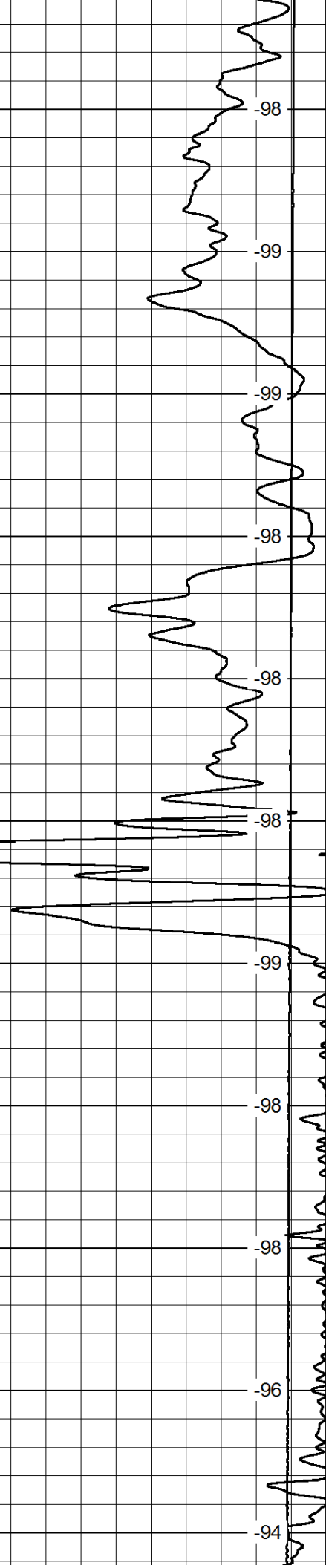
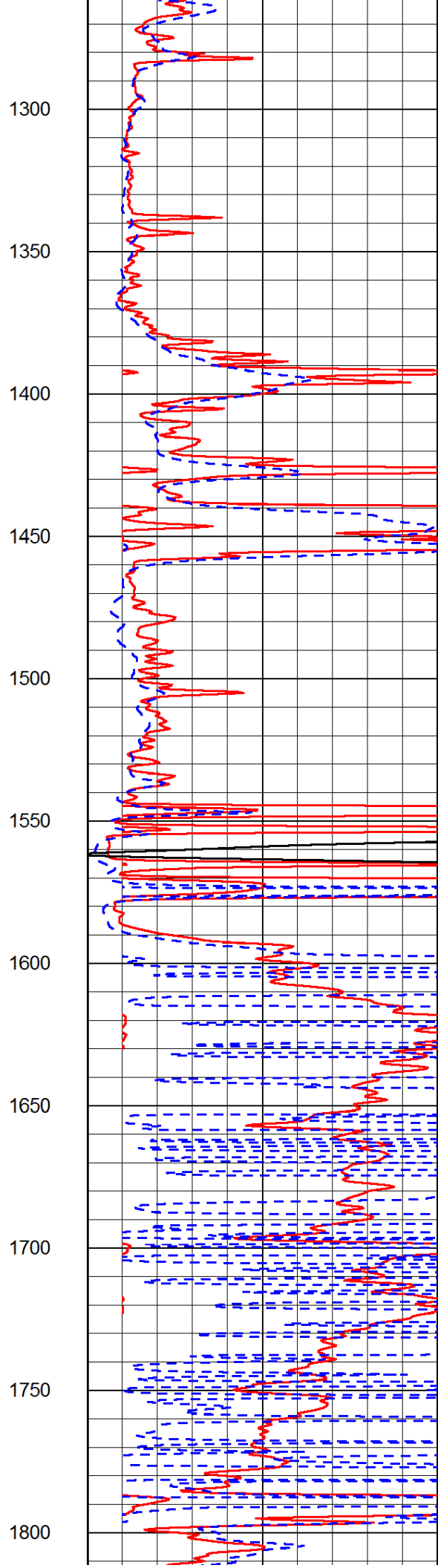
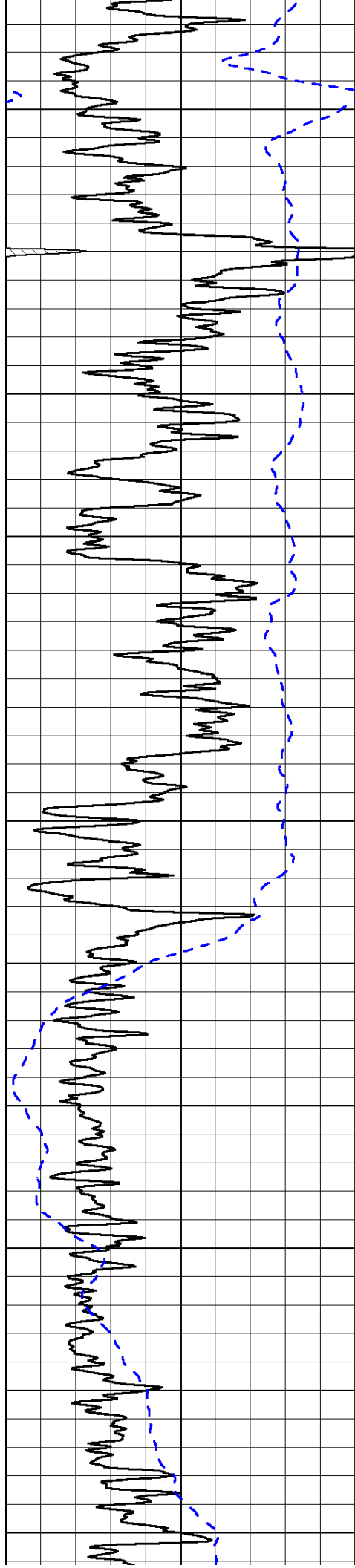
Thank you for using Pioneer Energy Services
www.pioneerres.com
785 625 3858
Oakley,
South to Jayhawk Rd, 1/2 South,
1/4 East, 1/4 South,
West & South into

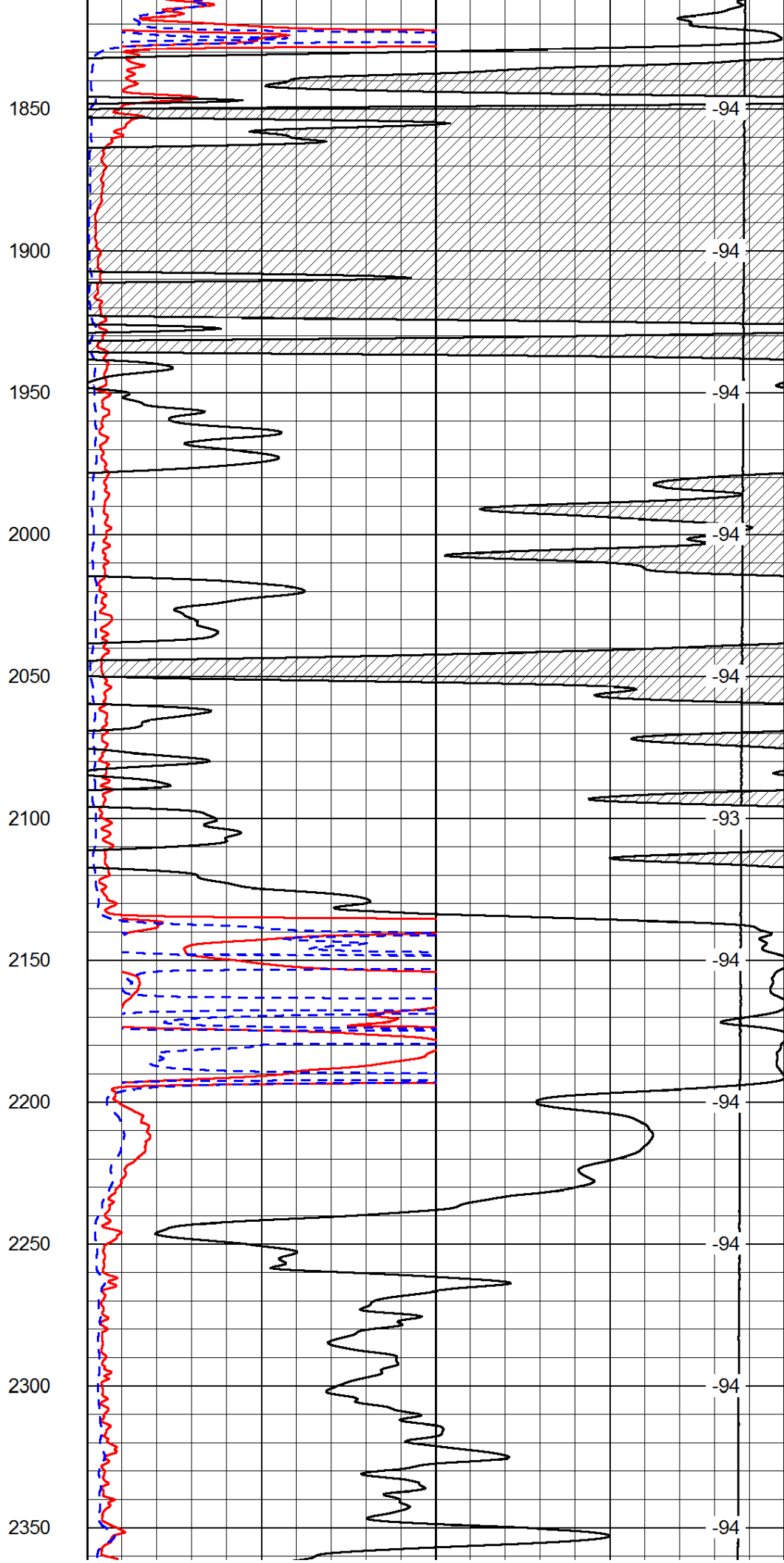
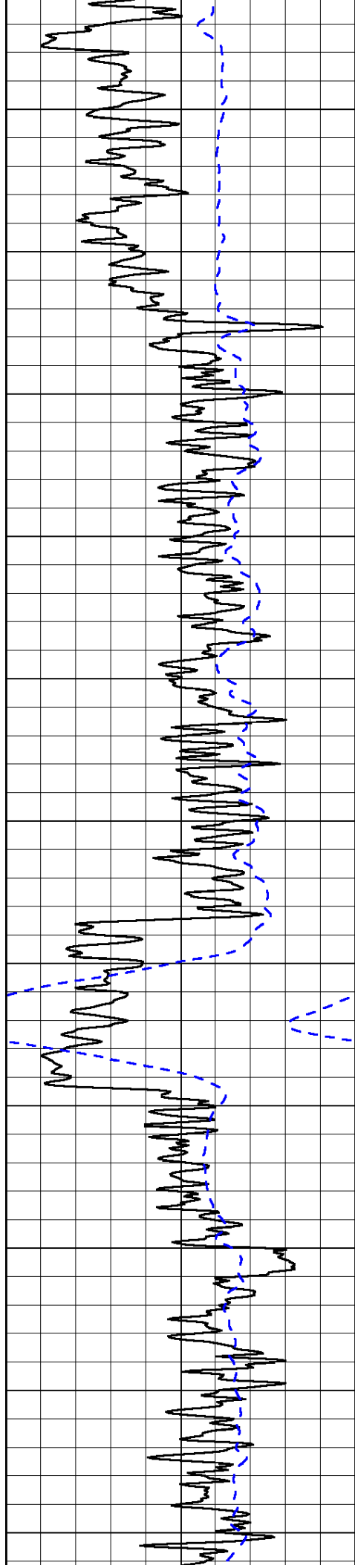
Database File: c:\warrior\data\black tea_krebs r #4\black tea_krebs r_4hd.db
Dataset Pathname: dil/btstack
Presentation Format: dil2in
Dataset Creation: Tue Jun 10 22:03:37 2014
Charted by: Depth in Feet scaled 1:600

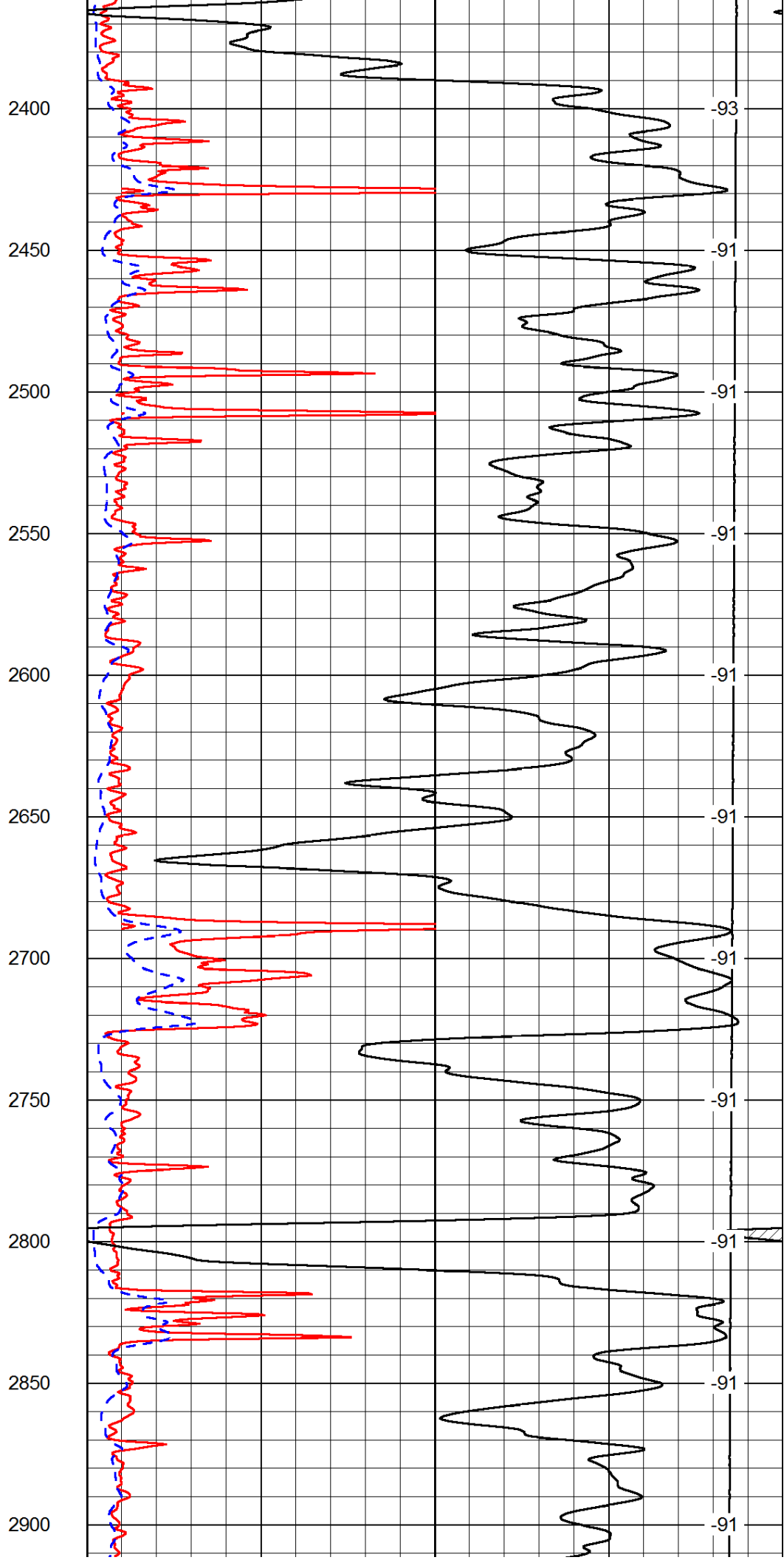
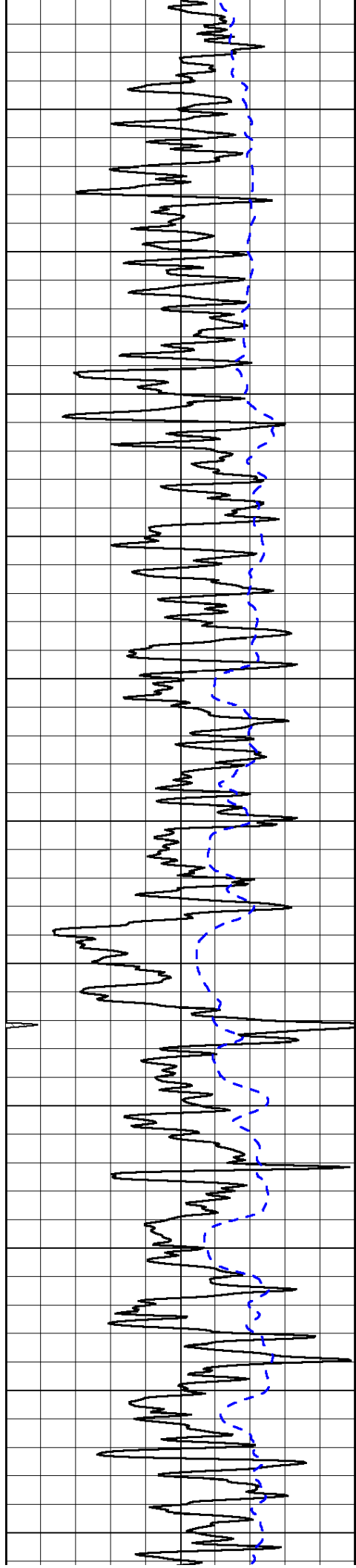
Charted by: Depth in Feet scaled 1:600								
0	Gamma Ray	150	0	Shallow Resistivity	50	LSPD		
-200	SP (mV)	0	0	Deep Resistivity	50			
			1000	Conductivity		0		
			15000	Line Tension		0		
			50	Shallow Resistivity	500			
			50	Deep Resistivity	500			

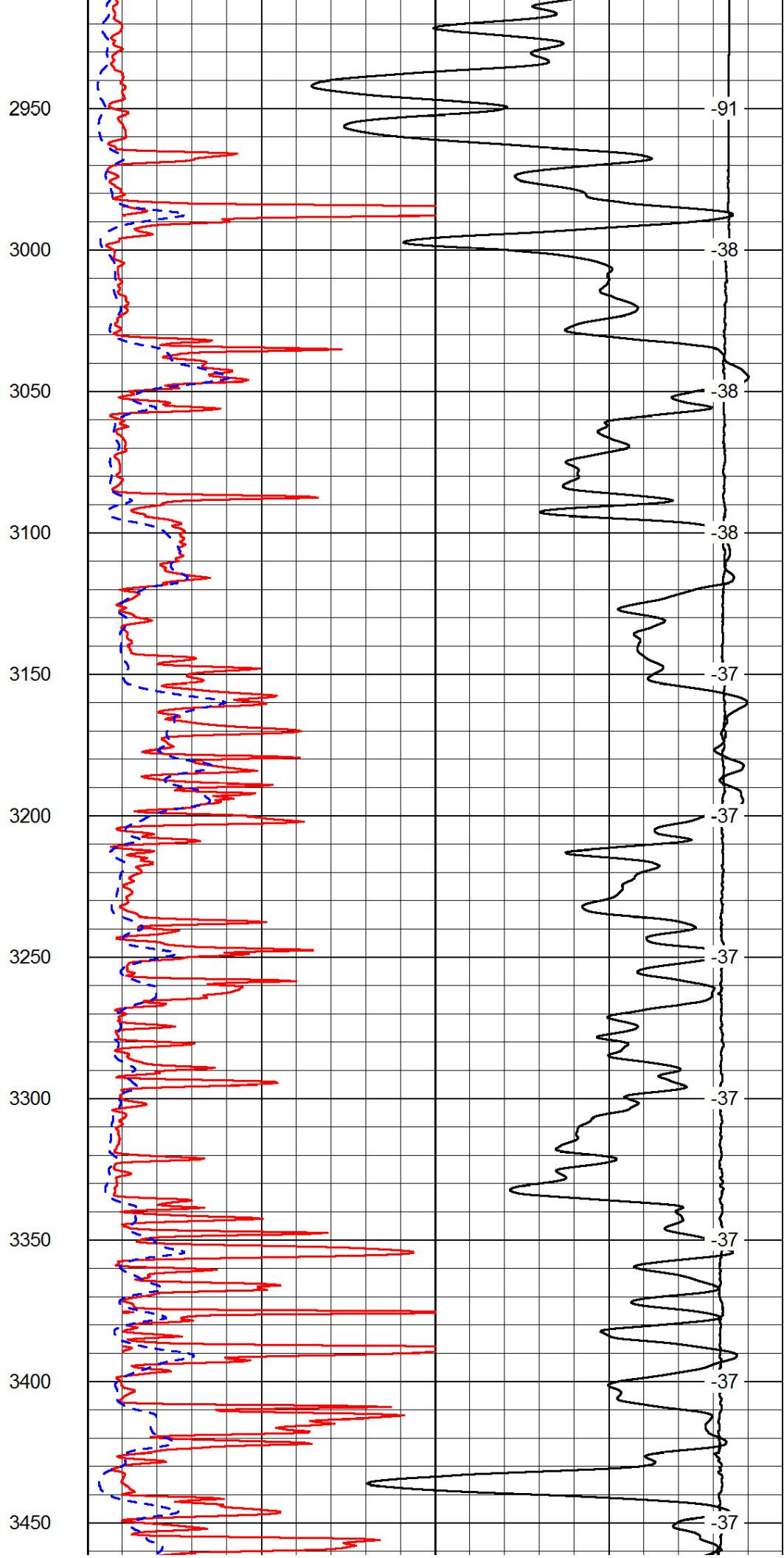
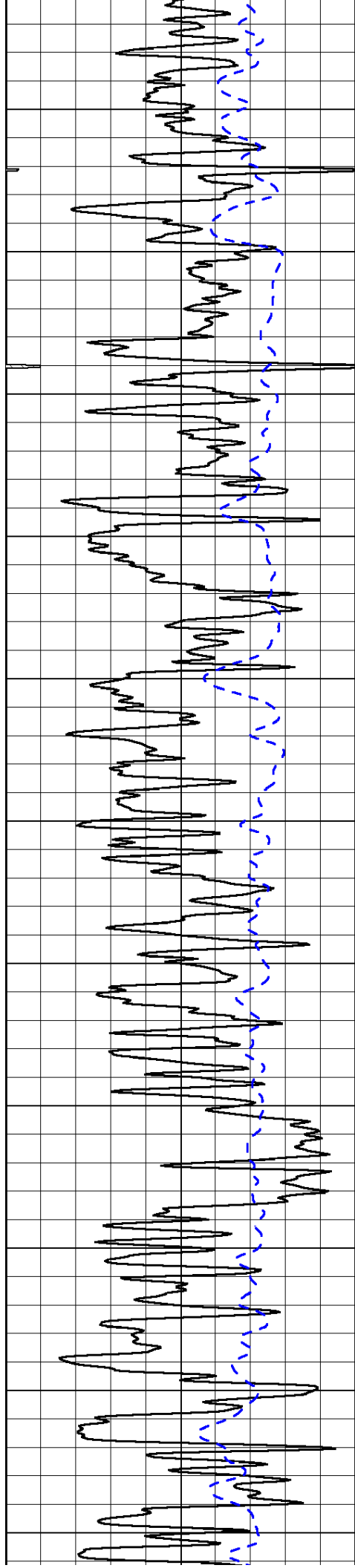


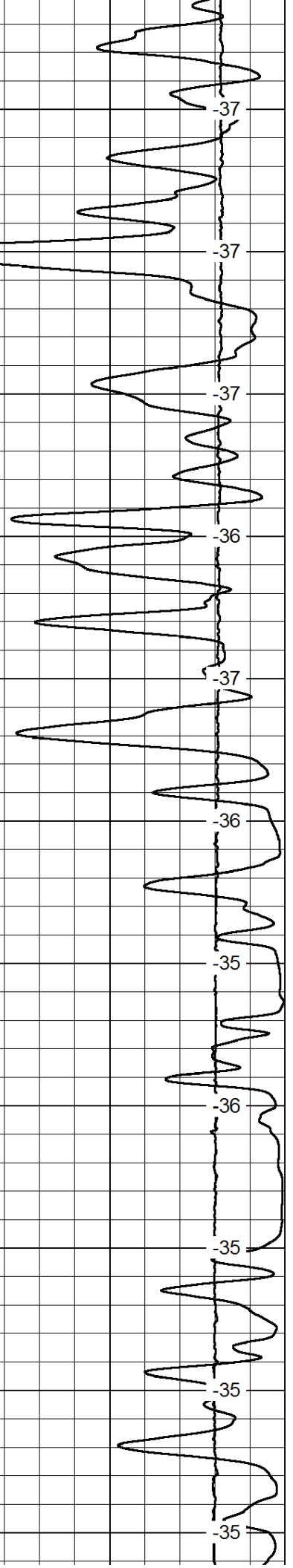
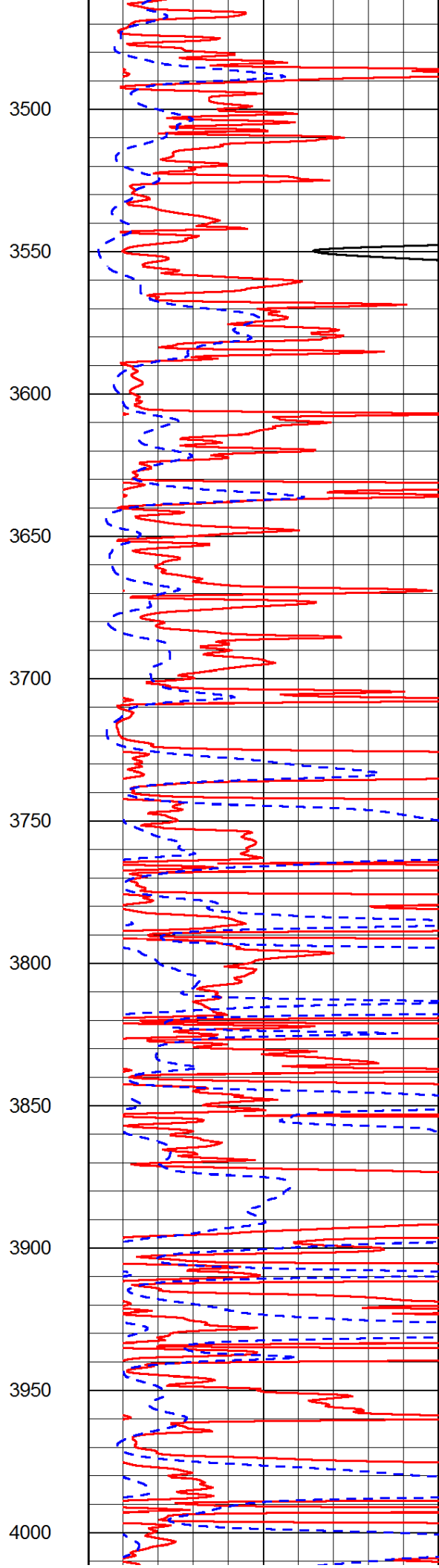
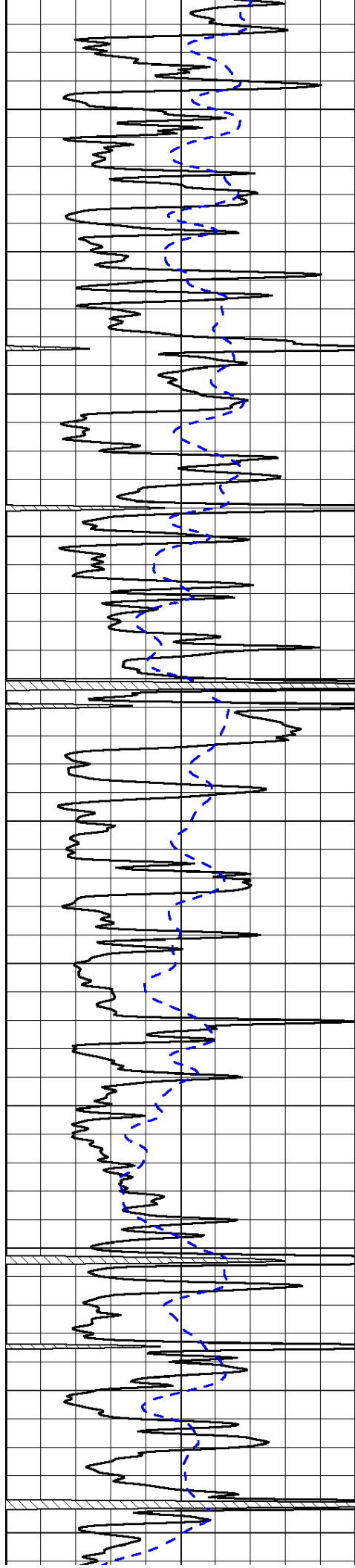


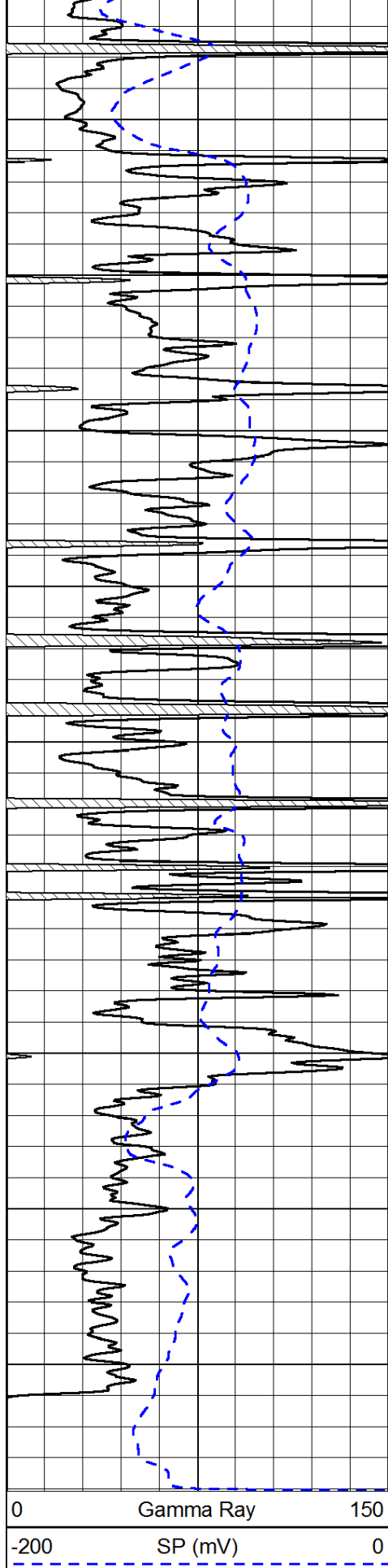




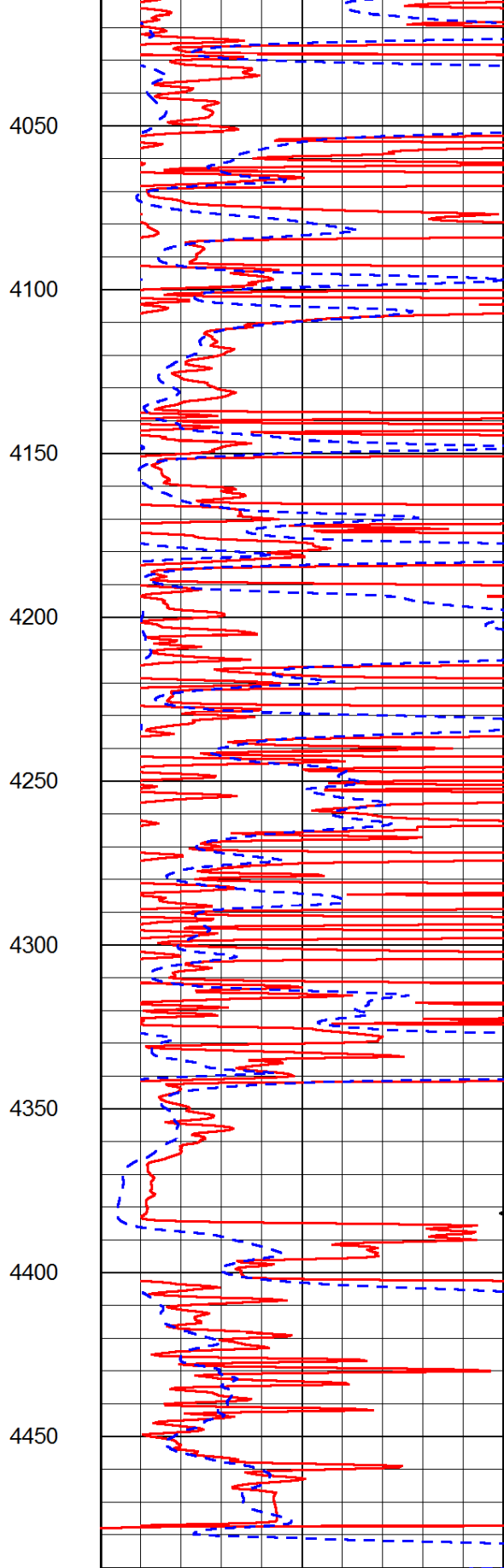








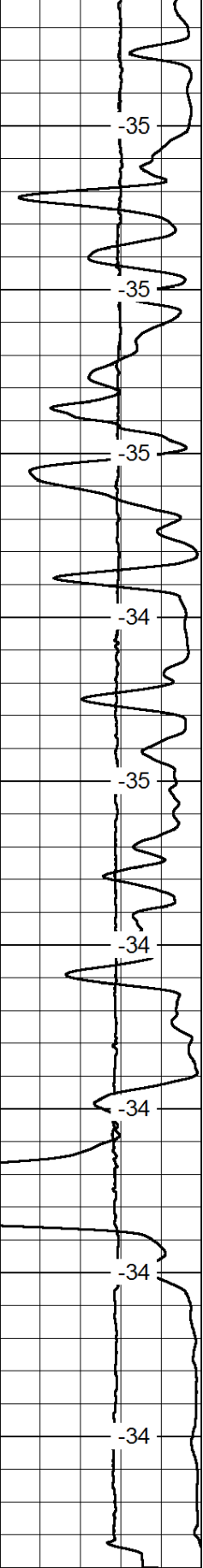
0 Gamma Ray 150
-200 SP (mV) 0



0 Shallow Resistivity 50
0 Deep Resistivity 50

1000 Conductivity 0
15000 Line Tension 0

50 Shallow Resistivity 500
50 Deep Resistivity 500



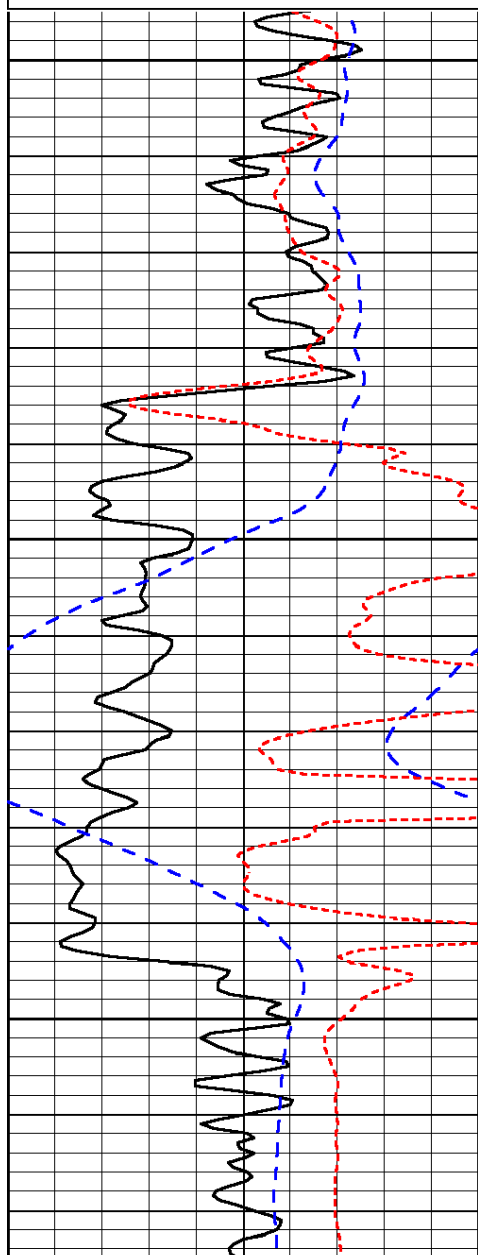
LSPD

Database File: c:\warrior\data\black tea_krebs r #4\black tea_krebs r_4hd.db
Dataset Pathname: dil/btstack
Presentation Format: dil
Dataset Creation: Tue Jun 10 22:03:37 2014
Charted by: Depth in Feet scaled 1:240

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

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

LSPD

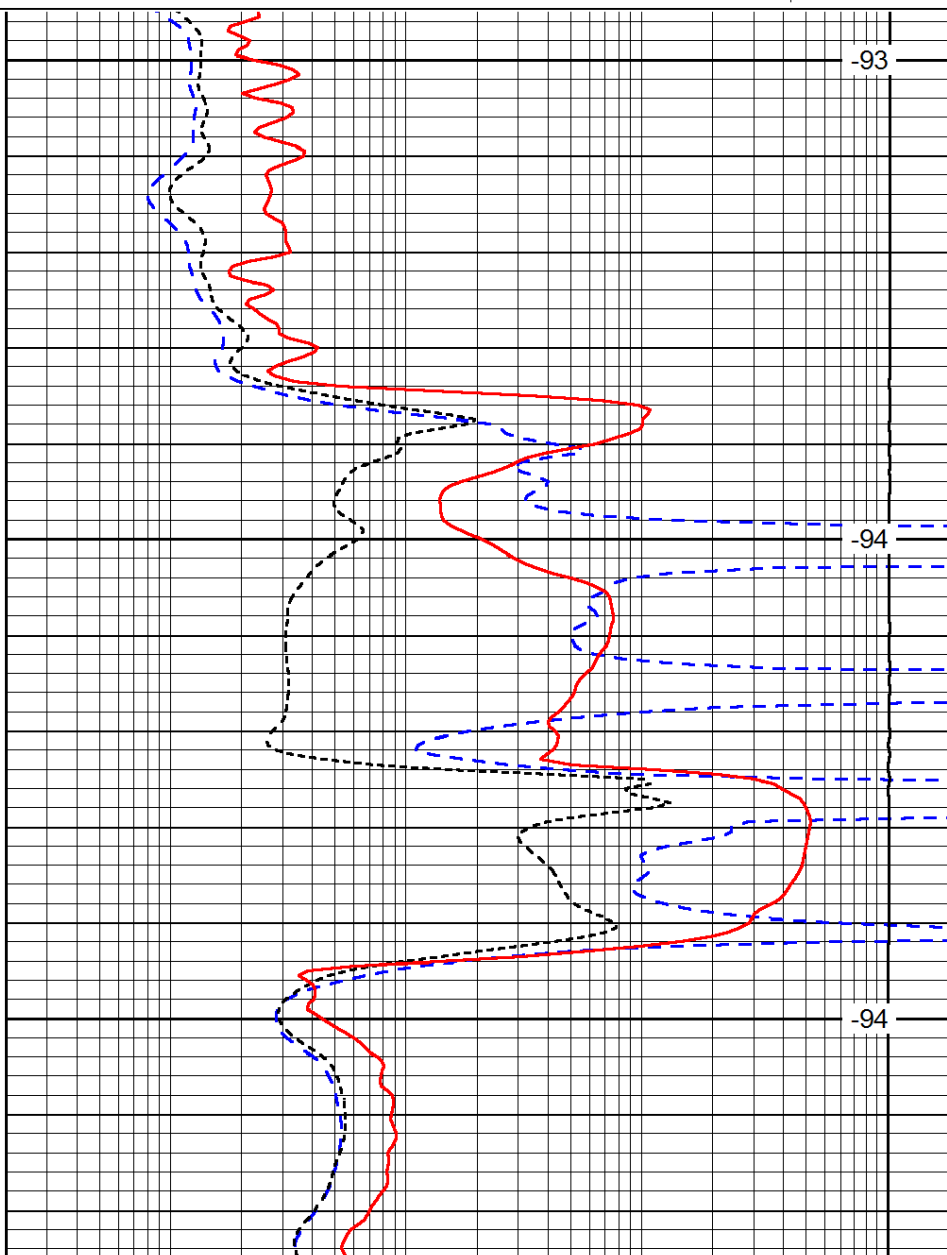


2100

2150

2200

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



-93

-94

-94

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

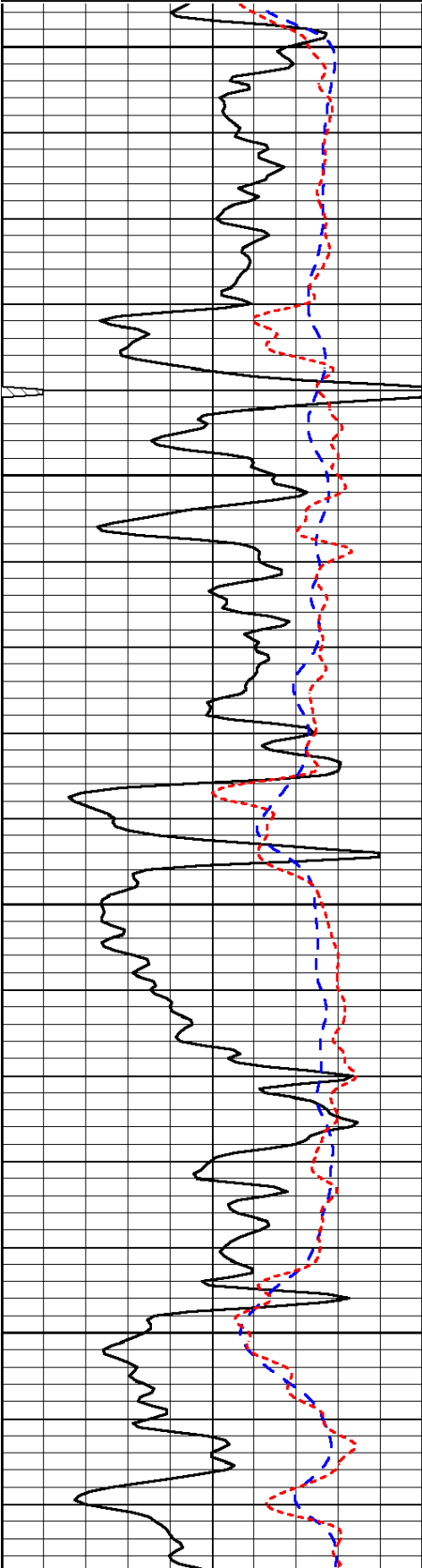
LSPD

Database File: c:\warrior\data\black tea_krebs r #4\black tea_krebs r_4hd.db
Dataset Pathname: dil/btstack

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

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

LSPD

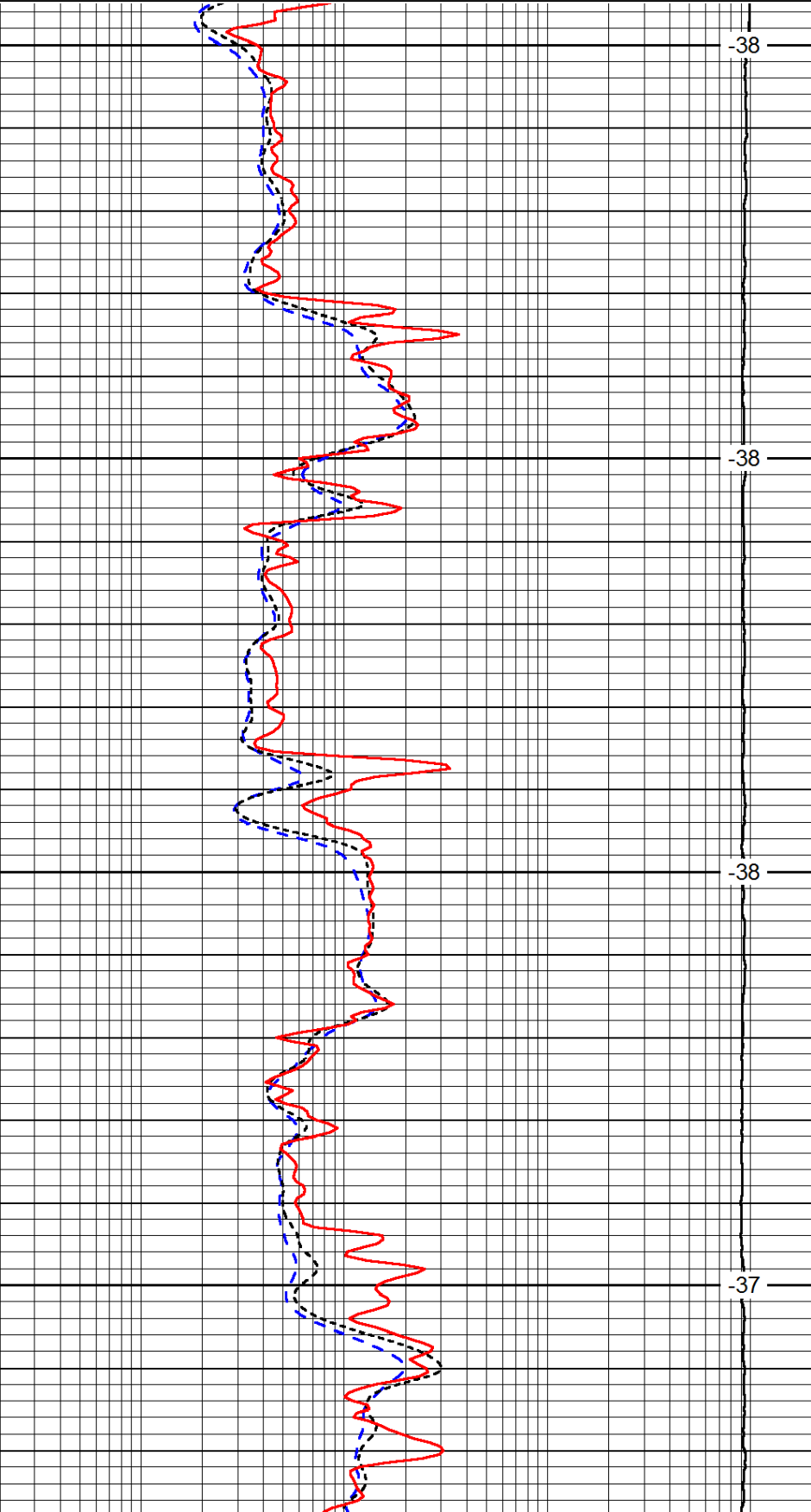


3000

3050

3100

3150

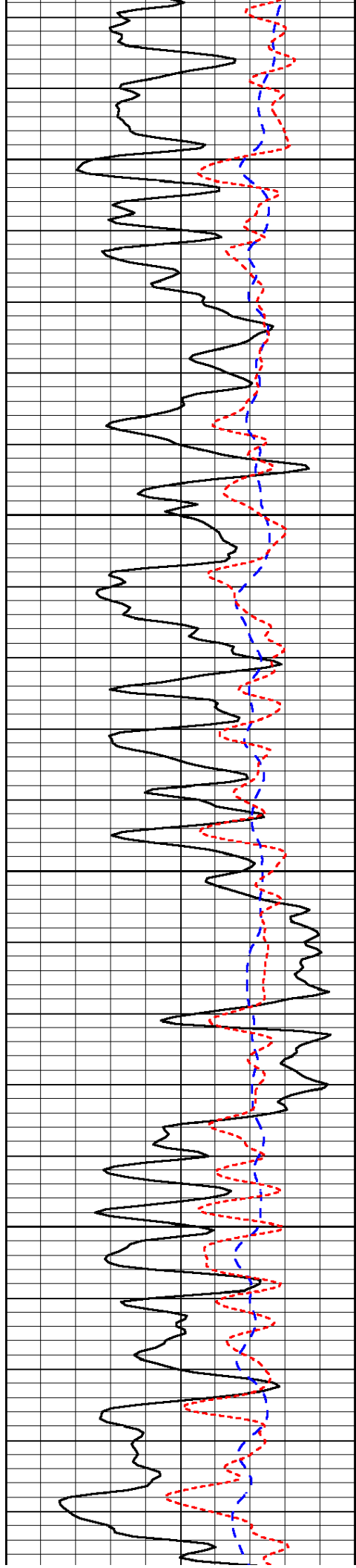


-38

-38

-38

-37

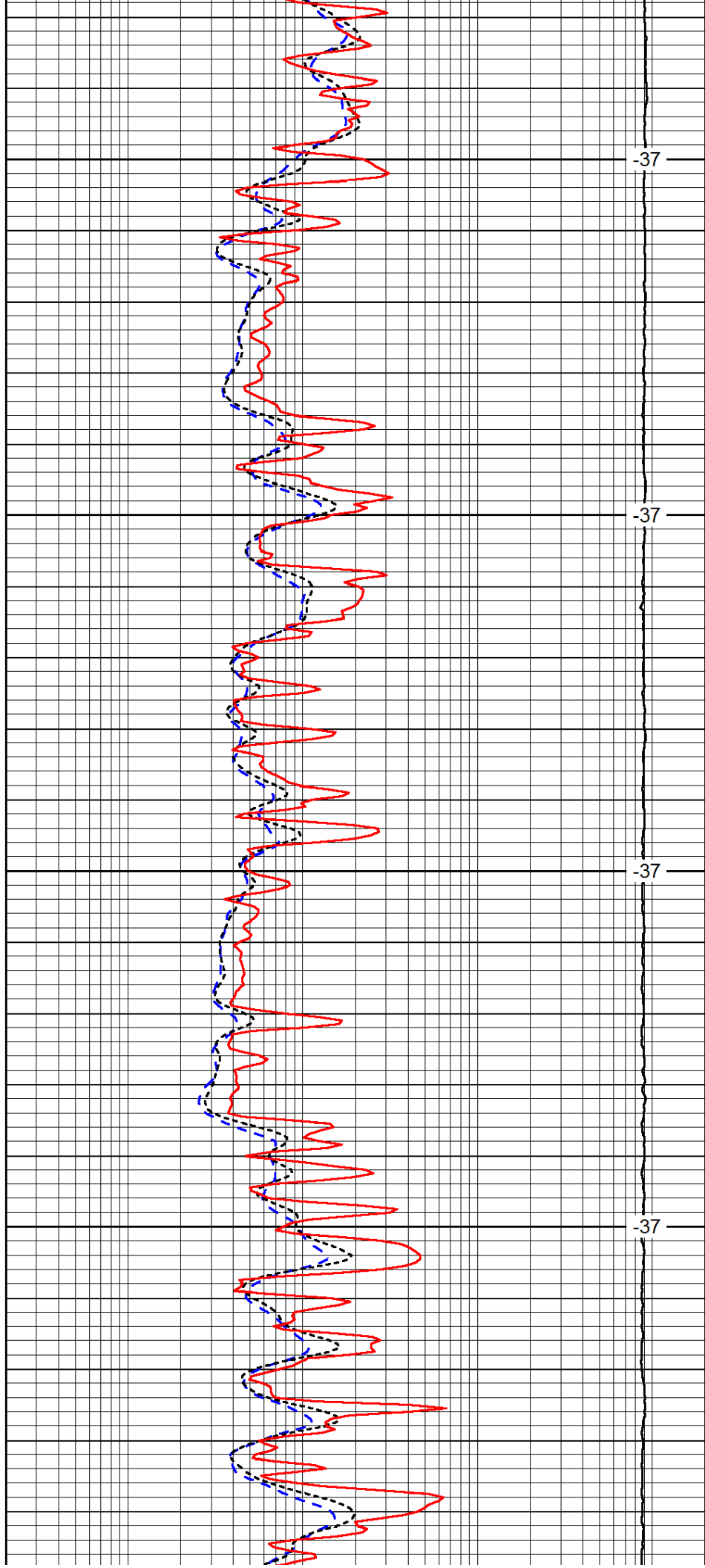


3200

3250

3300

3350

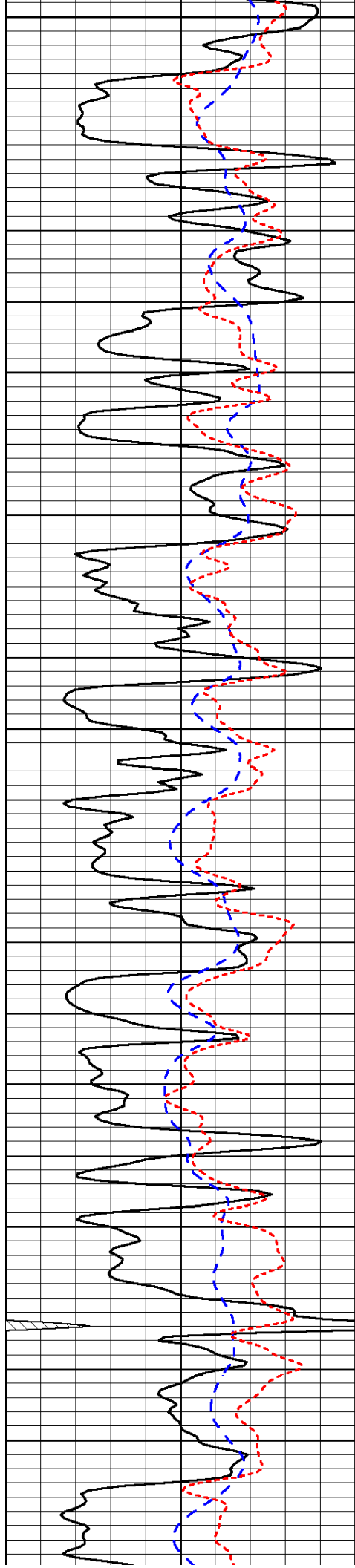


-37

-37

-37

-37



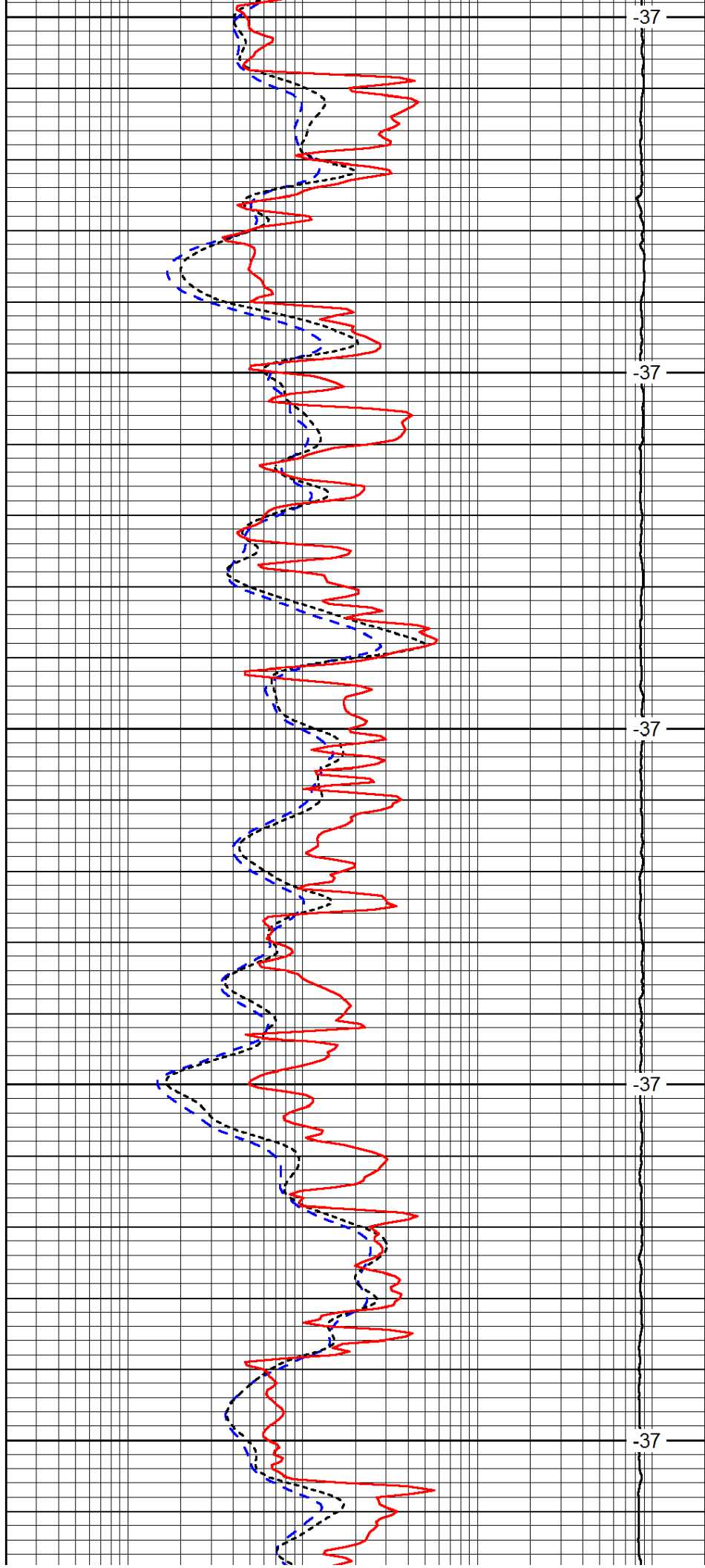
3400

3450

3500

3550

3600



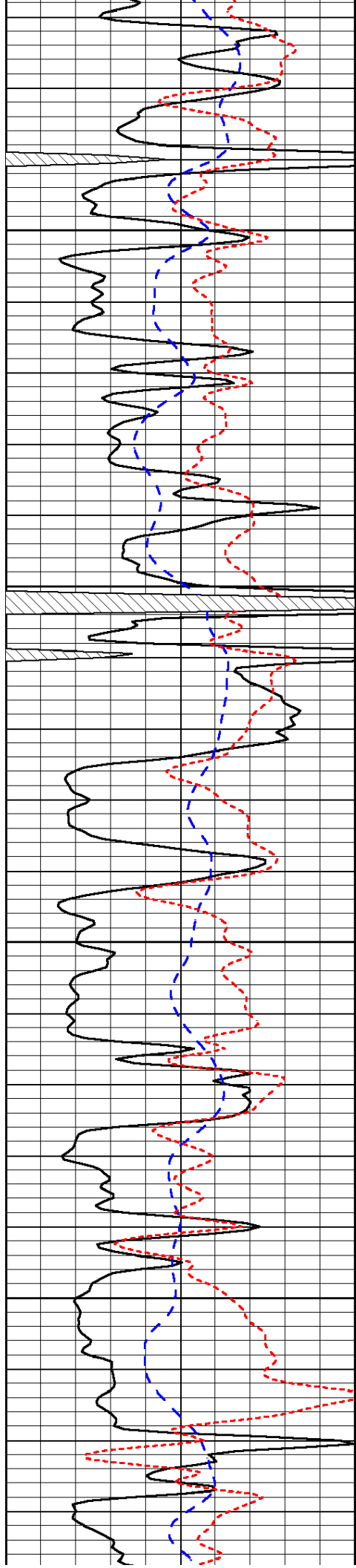
-37

-37

-37

-37

-37

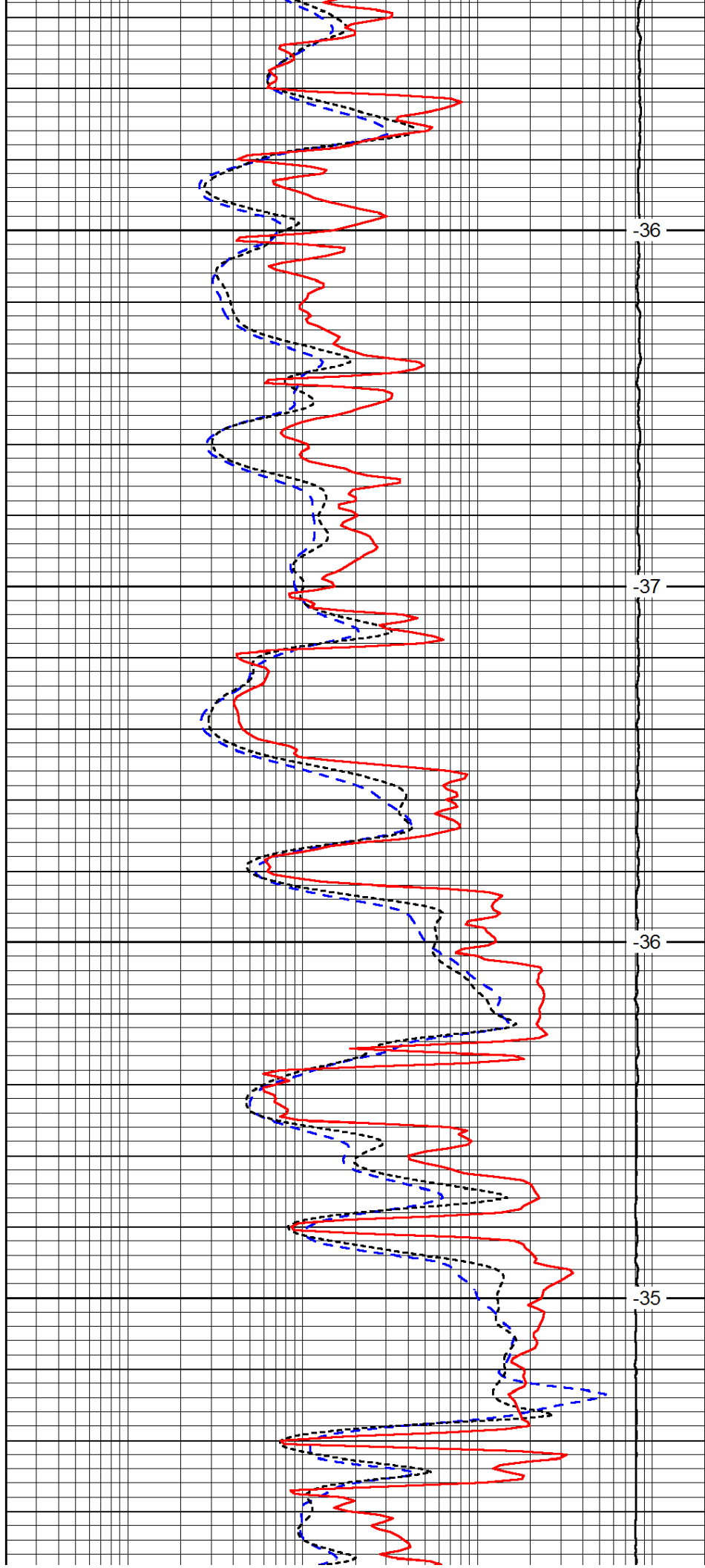


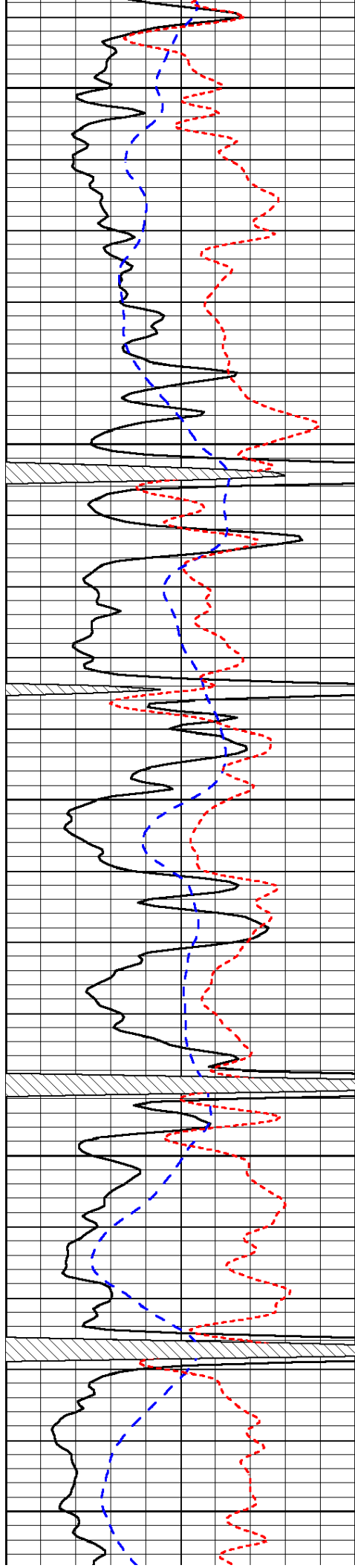
3650

3700

3750

3800





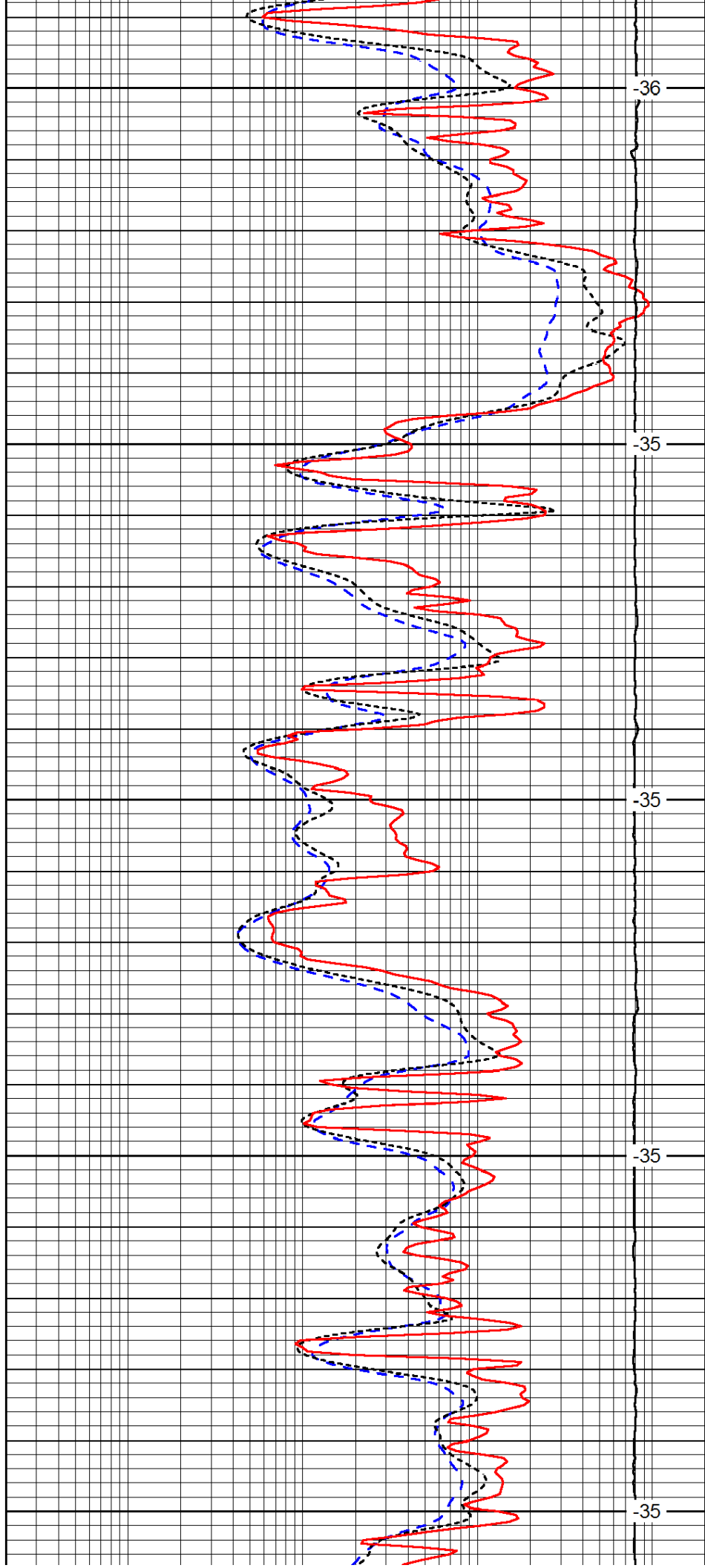
3850

3900

3950

4000

4050



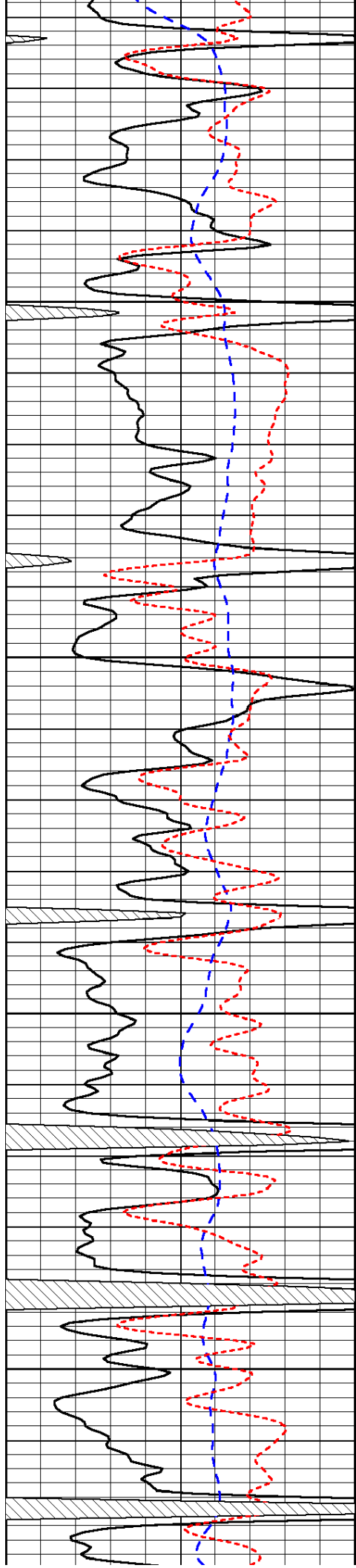
-36

-35

-35

-35

-35

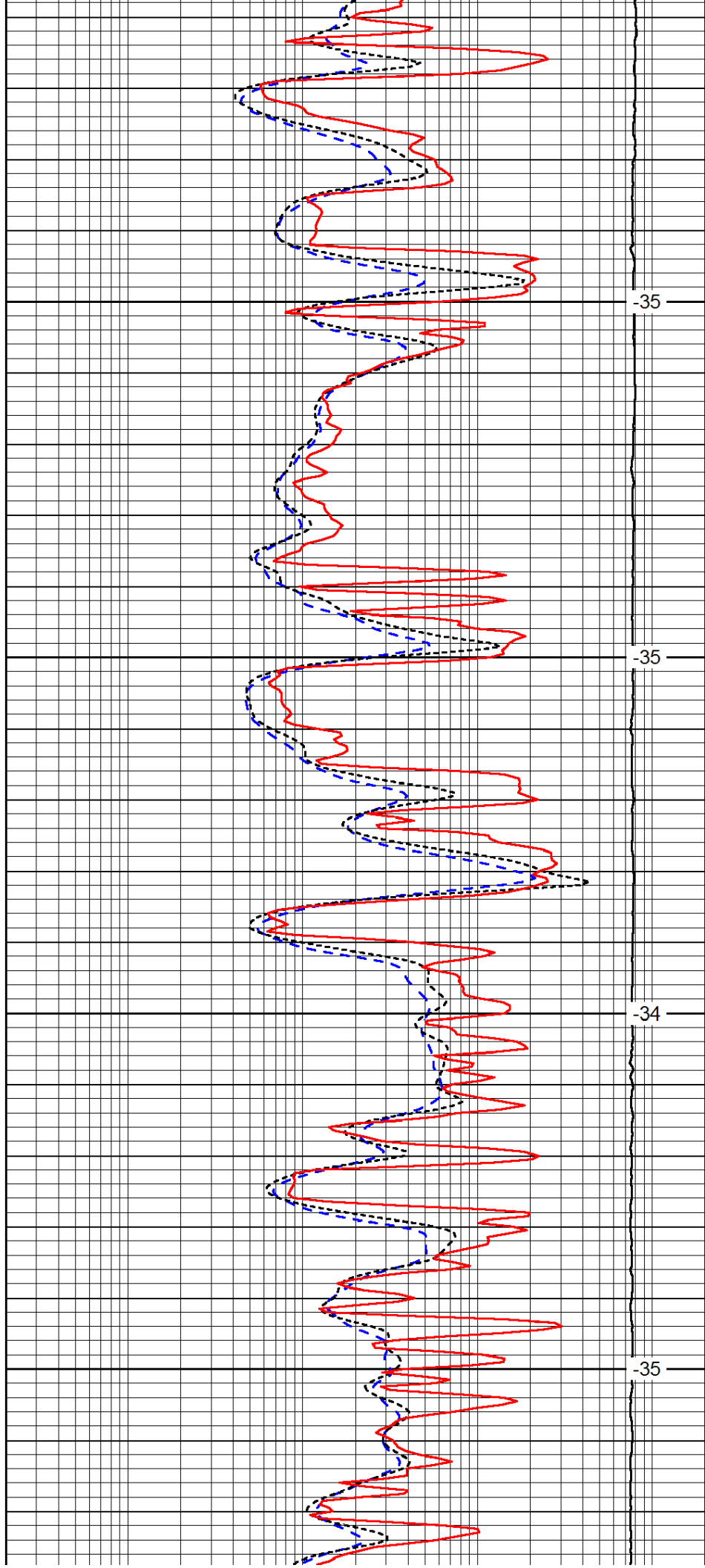


4100

4150

4200

4250

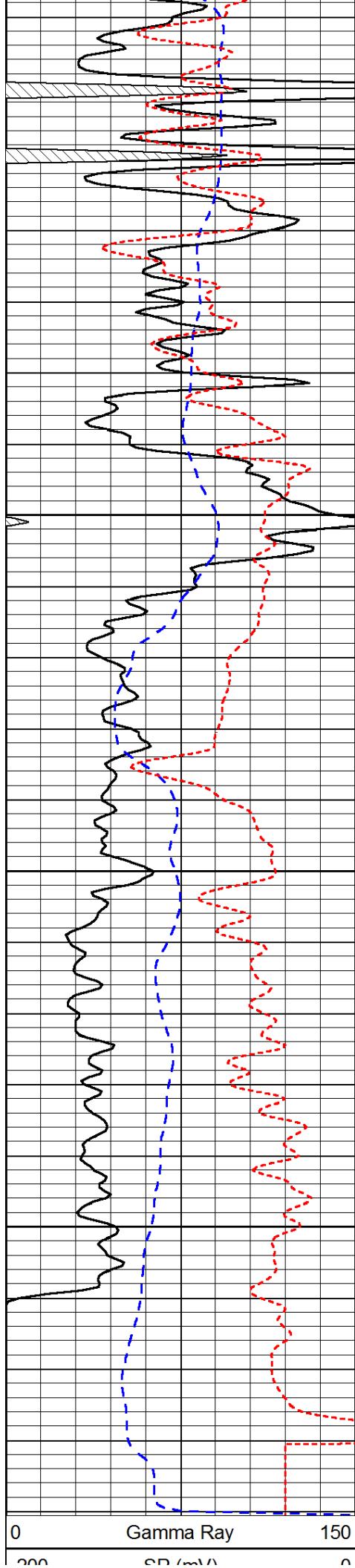


-35

-35

-34

-35



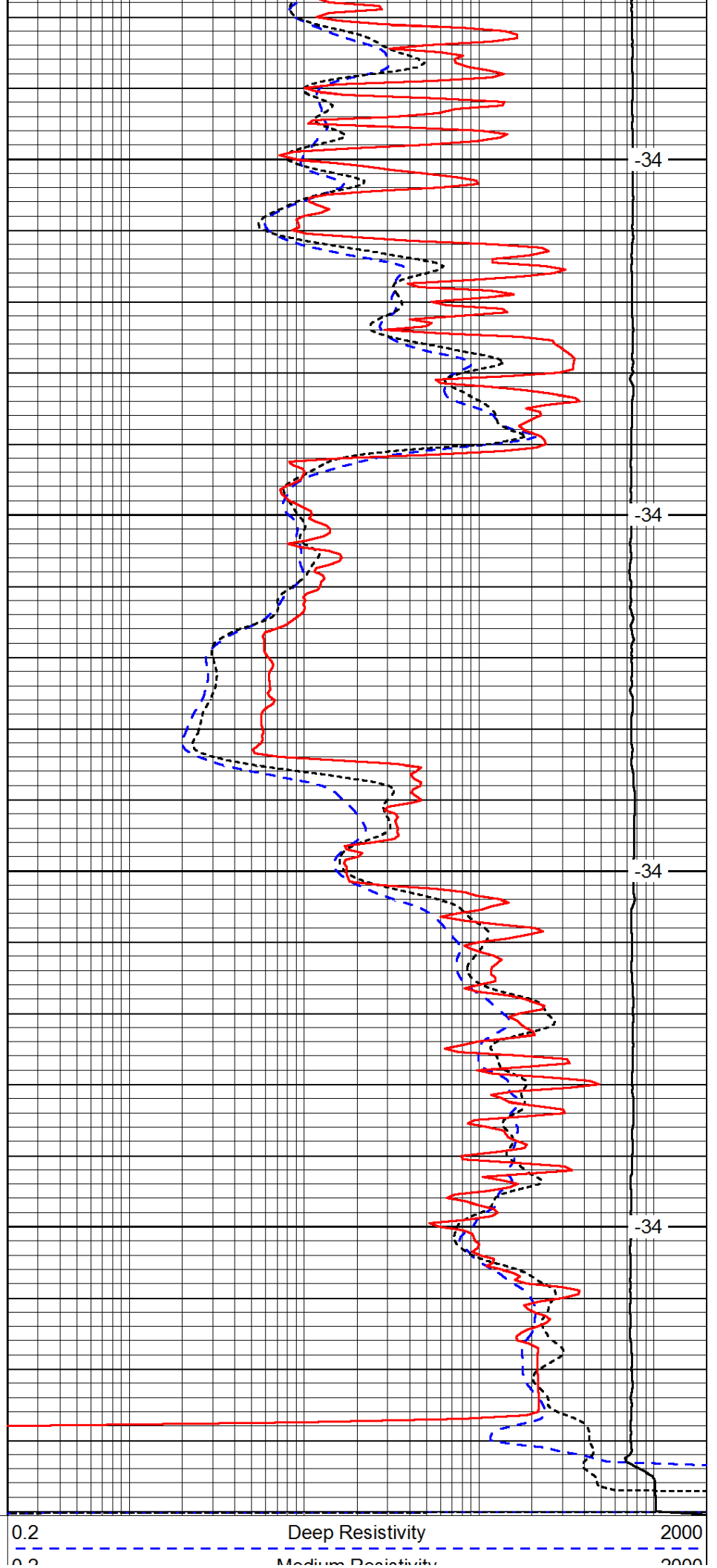
4300

4350

4400

4450

0 Gamma Ray 150



-34

-34

-34

-34

0.2 Deep Resistivity 2000

Medium Resistivity

-200	SP (mV)	0
-160	RxoRt	40

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