



Pioneer Energy Services

Dual Induction Log

API No.	Company Charles N. Griffin Well Jean #1 Field Bloom West County Barber State Kansas		
15-007-24,185-00-00	Location 1,530' FNL & 480' FEL	Other Services CNL/CDL	
	Sec: 16 Twp: 32s Rge: 12w		
Permanent Datum	Ground Level	Elevation 1637	
Log Measured From	Kelly Bushing	10 Ft. Above Perm. Datum	
Drilling Measured From	Kelly Bushing	K.B. 1647 D.F. 1637 G.L. 1637	
Date	7/9/2014		
Run Number	One		
Depth Driller	4900		
Depth Logger	4903		
Bottom Logged Interval	4902		
Top Log Interval	250		
Casing Driller	8.625 @ 259		
Casing Logger	260		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	5100		
Density / Viscosity	9.2 64		
pH / Fluid Loss	9.5 .7		
Source of Sample	Flowline		
Rm @ Meas. Temp	.48 @ 88		
Rmf @ Meas. Temp	.36 @ 88		
Rmc @ Meas. Temp	.65 @ 88		
Source of Rmf / Rmc	Charts		
Rm @ BHT	.34 @ 125		
Operating Rig Time	2.5 Hours		
Max Rec. Temp. F	125		
Equipment Number	108		
Location	Hays		
Recorded By	J. Long	D. Fischer	
Witnessed By	Bruce Reed		

<<< 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.

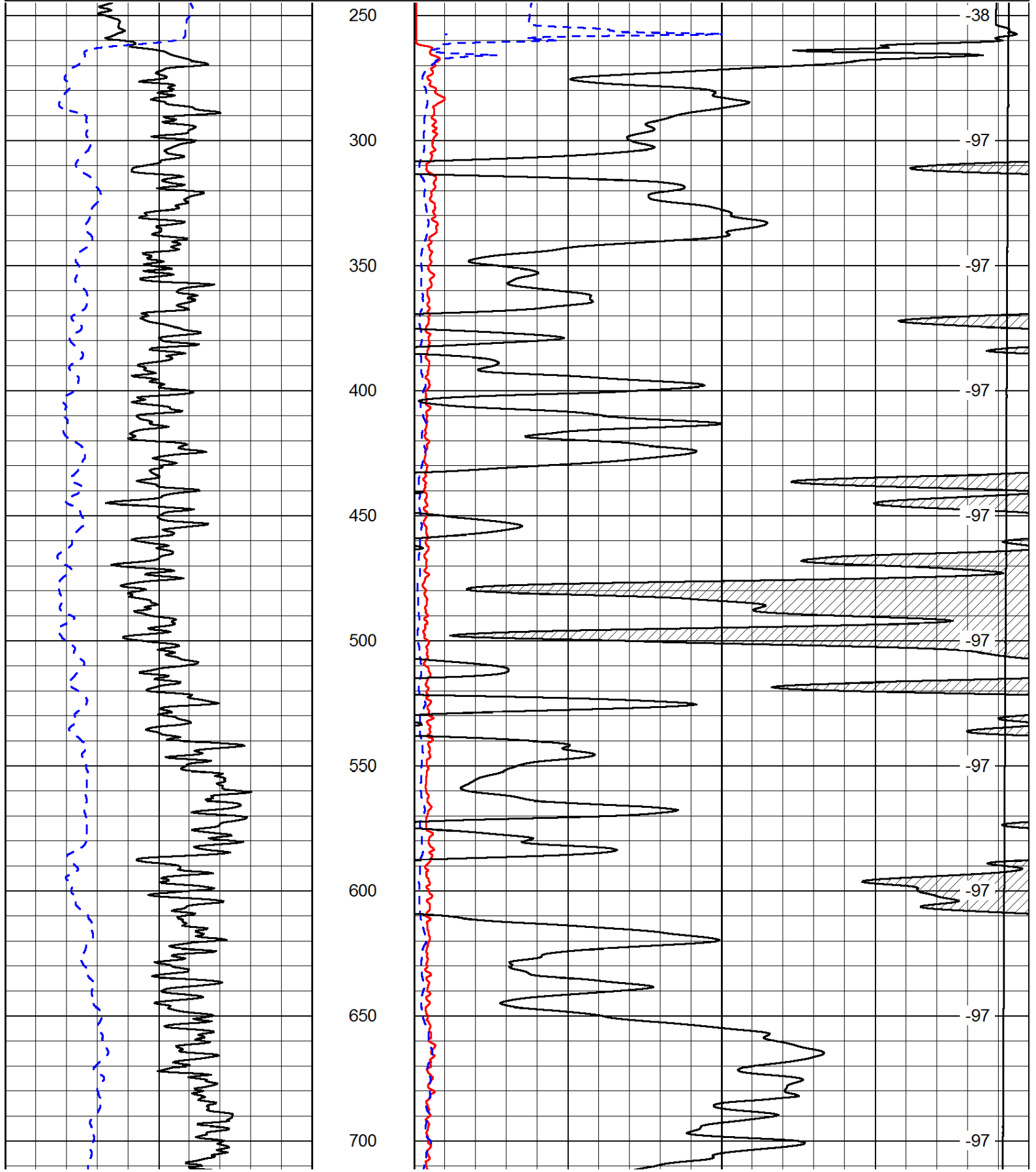
Comments

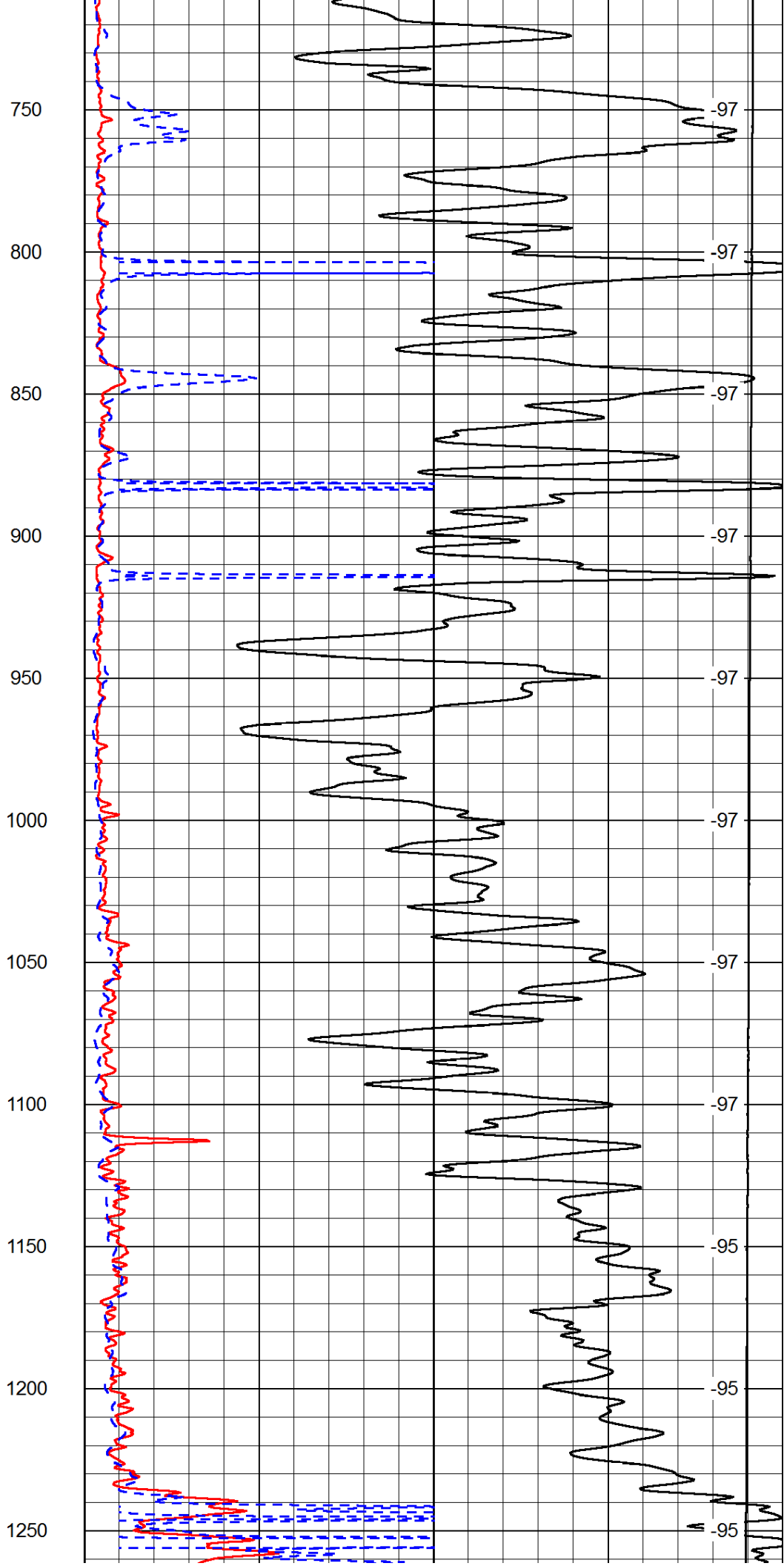
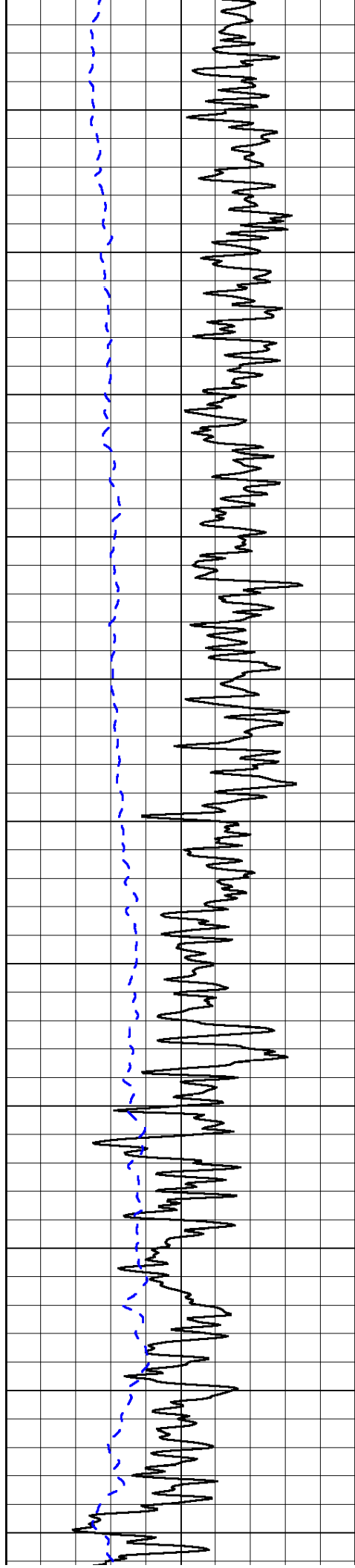
Thank you for using Pioneer Energy Services
www.pioneerres.com
785 625 3858

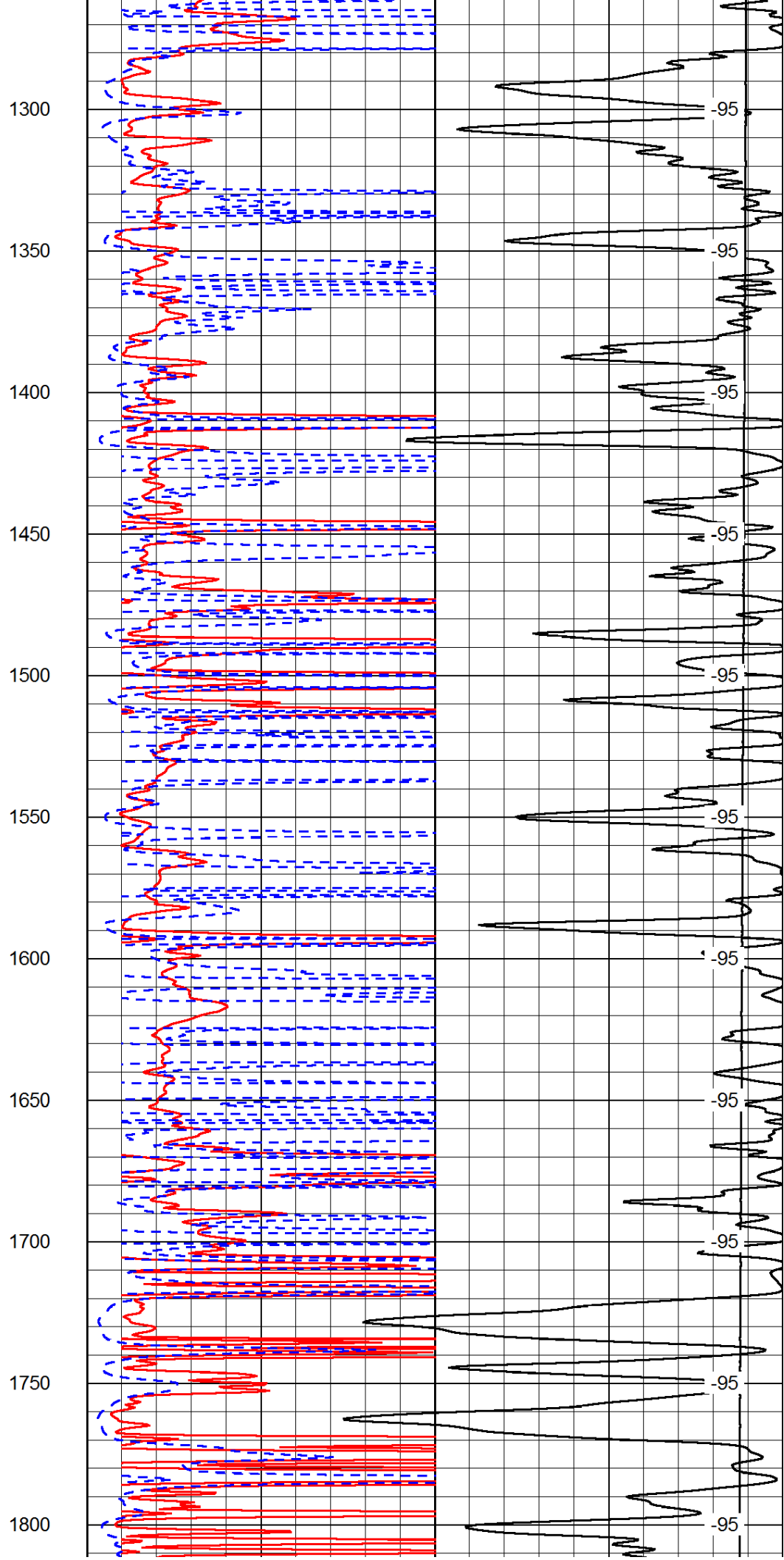
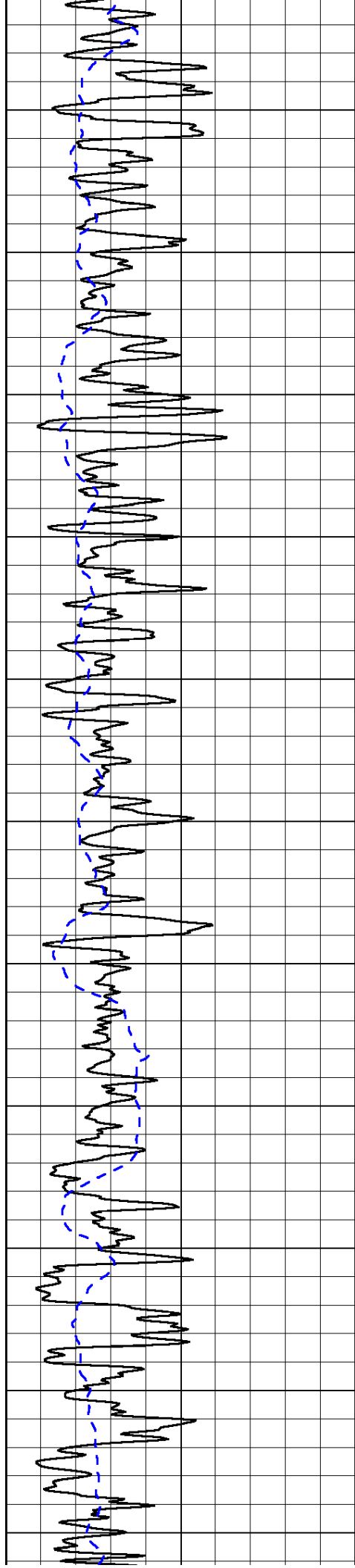
Medicine Lodge Ks., West to Woodward Rd., South to Red Rock Rd., West to Tank Battery,
North Into.

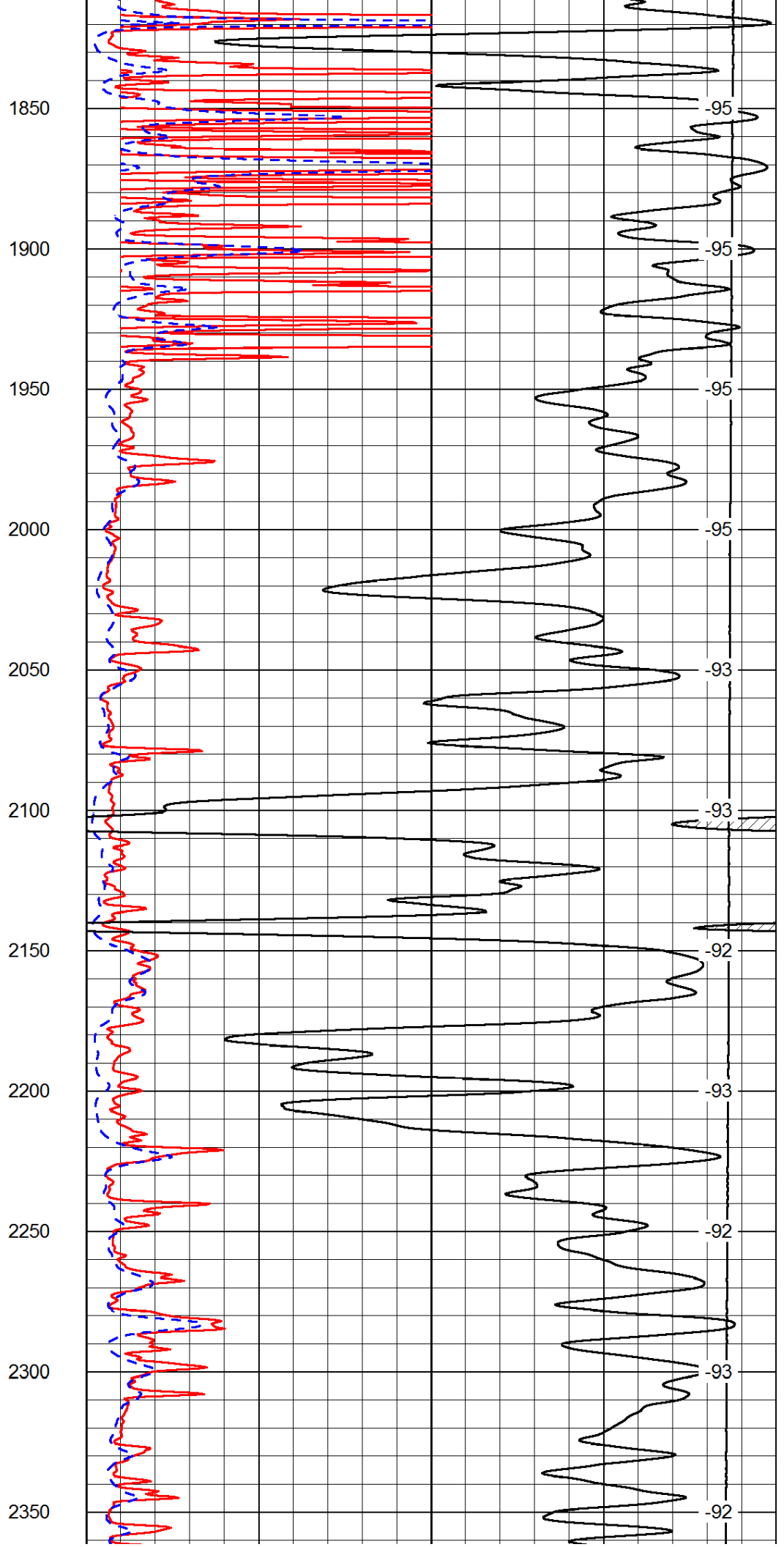
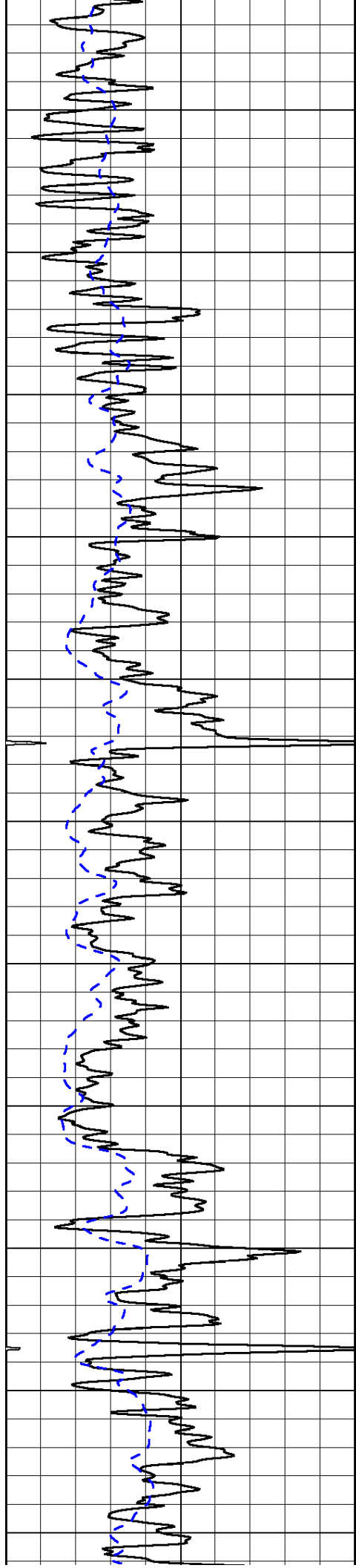
Database File: c:\warrior\data\charles n. griffin_jean #1\charles_griffin_jean_1hd.db
Dataset Pathname: DIL/grifstck
Presentation Format: dil2in
Dataset Creation: Wed Jul 09 18:18:47 2014
Charted by: Depth in Feet scaled 1:600

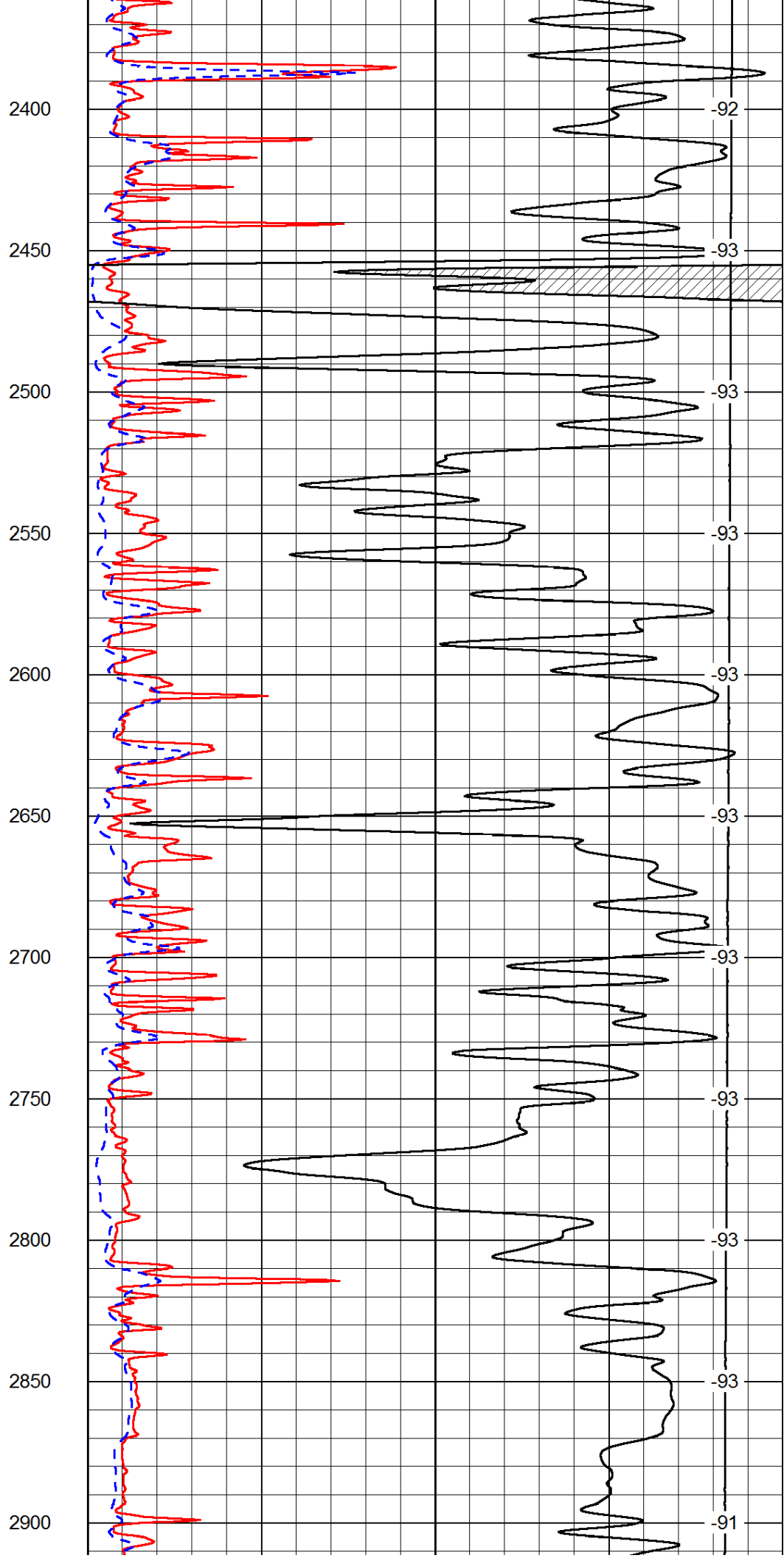
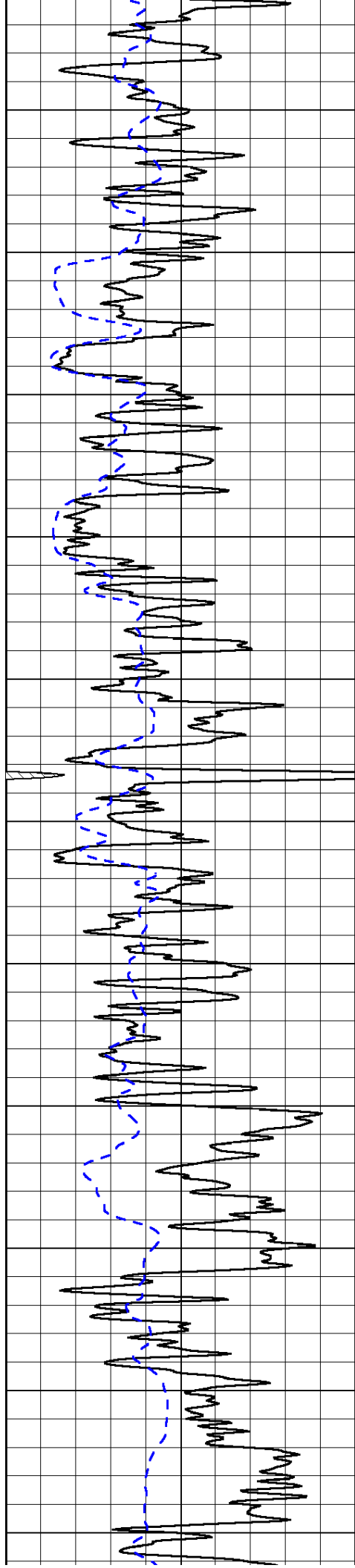
Charted by: _____ Depth in Feet scaled 1:600								
0	Gamma Ray	150	0	Shallow Resistivity	50	LSPD		
-200	SP (mV)	0	0	Deep Resistivity	50			
			1000	Conductivity		0		
			15000	Line Tension		0		
			50	Shallow Resistivity	500			
			50	Deep Resistivity	500			

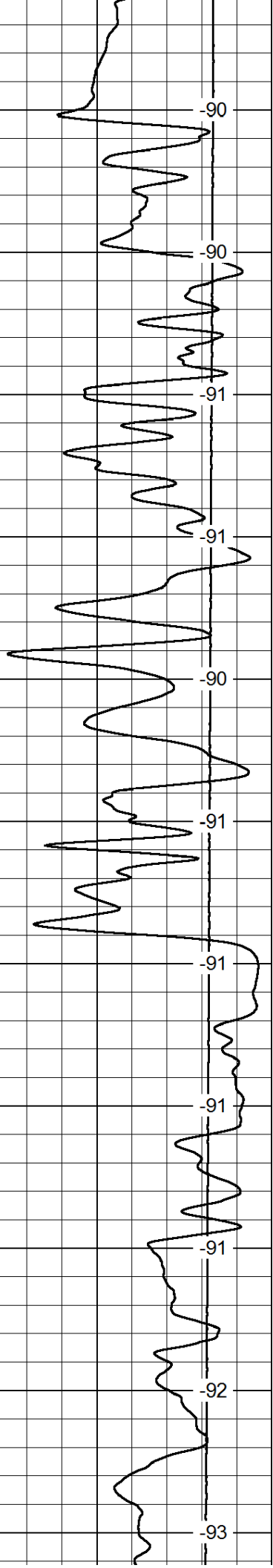
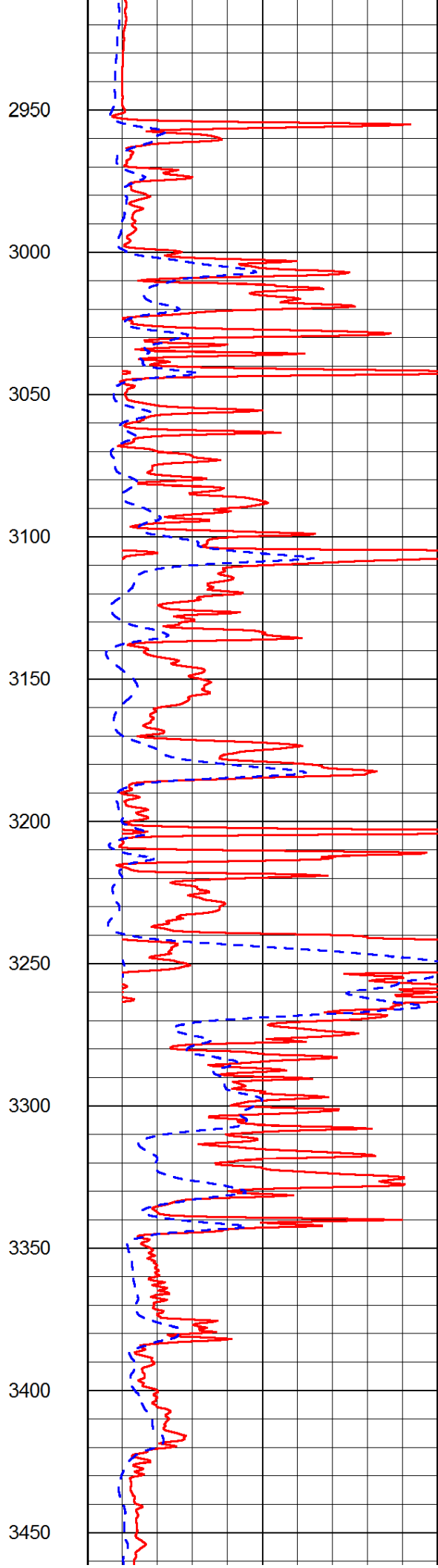
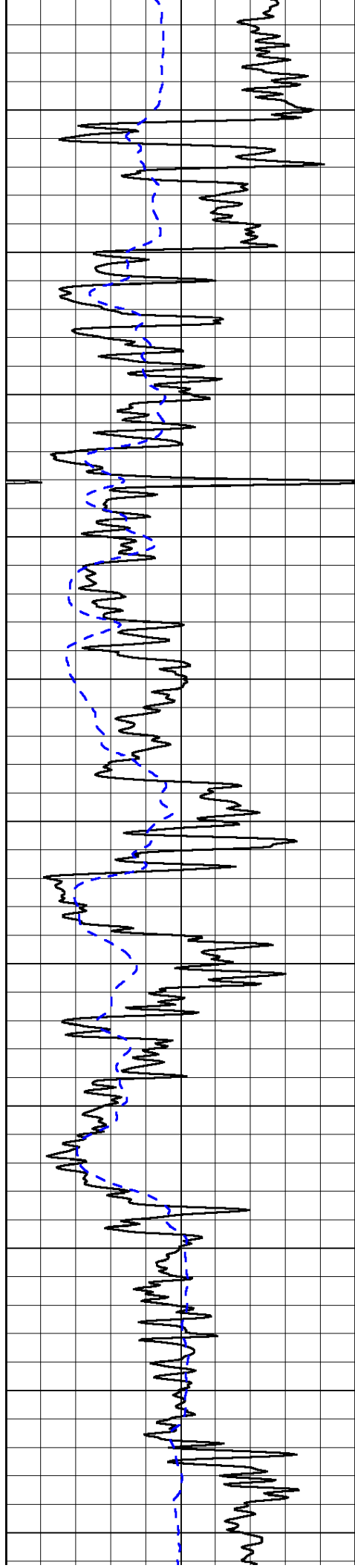


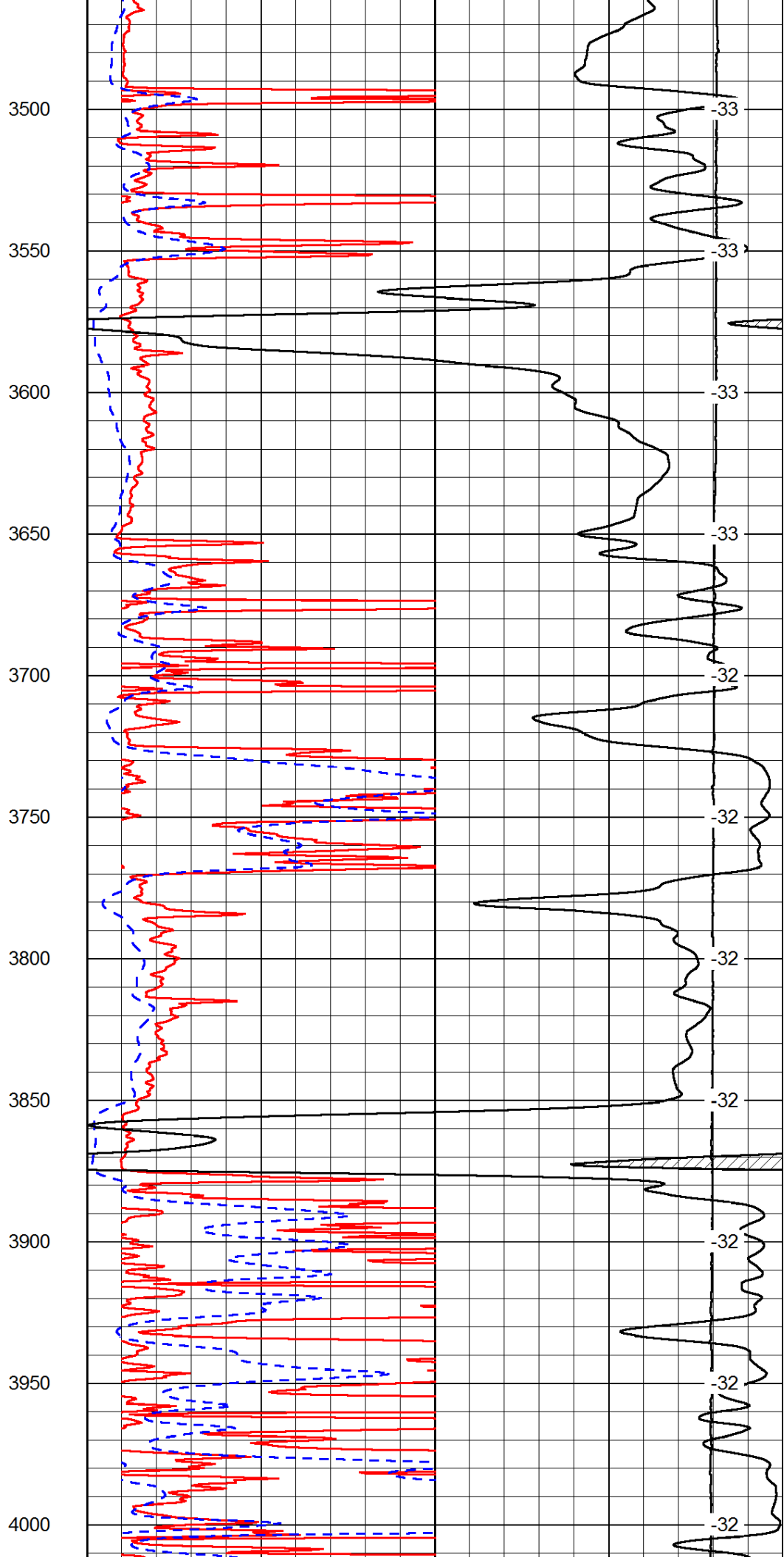
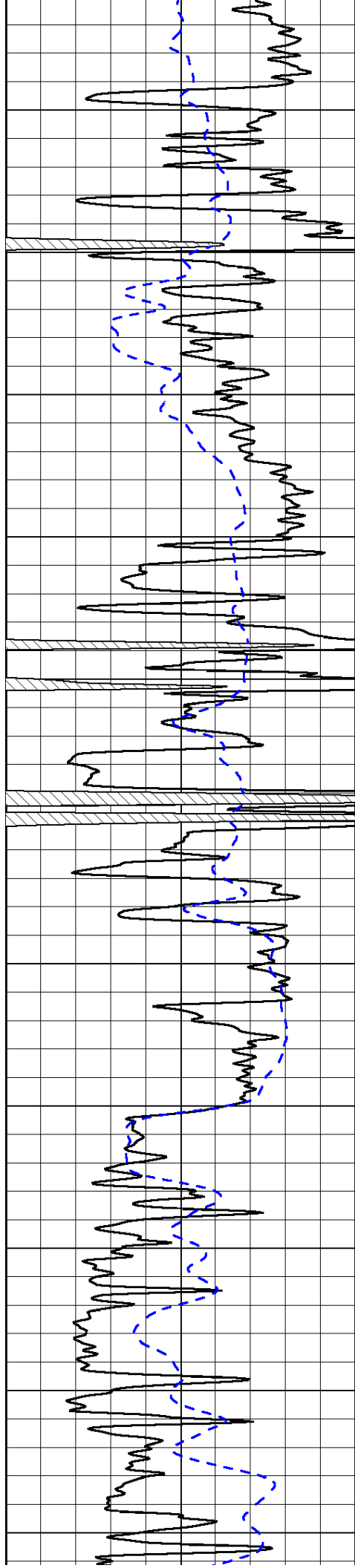


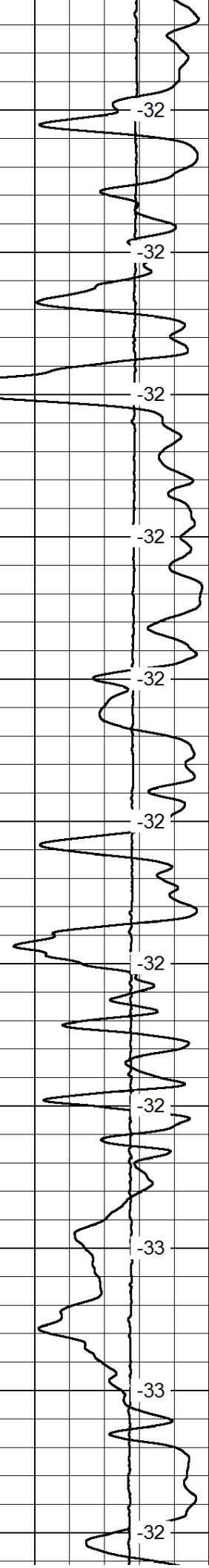
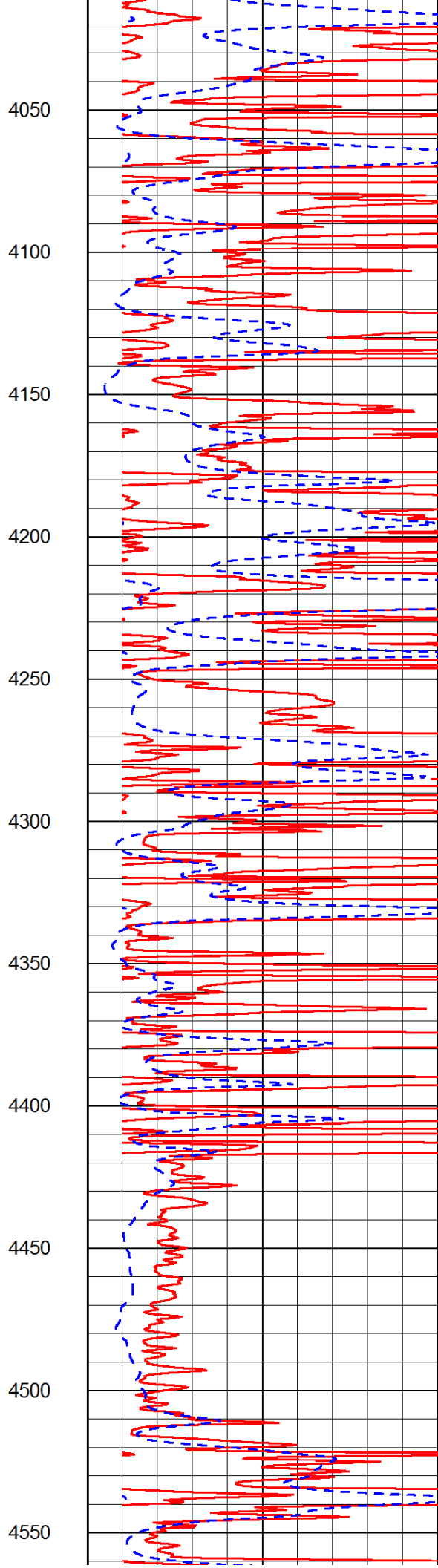
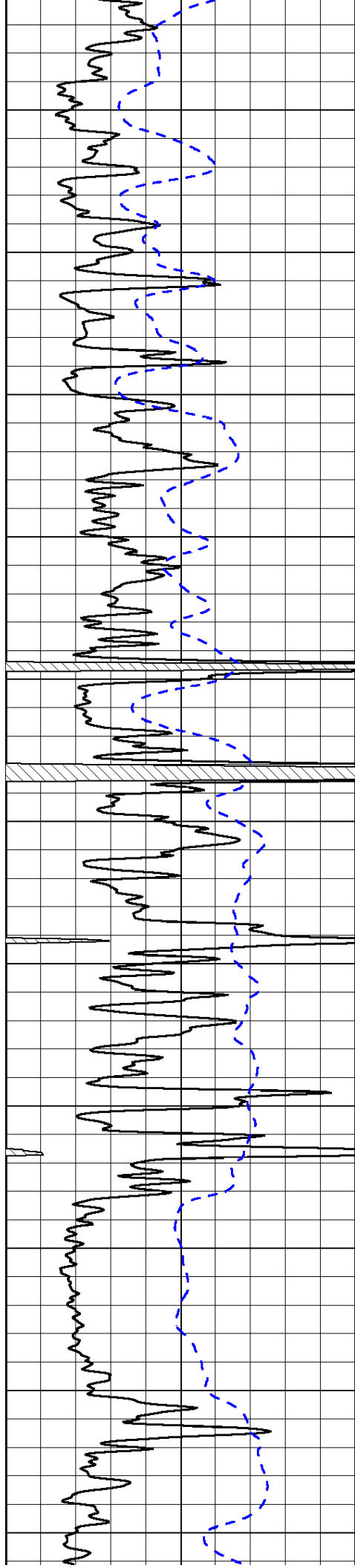


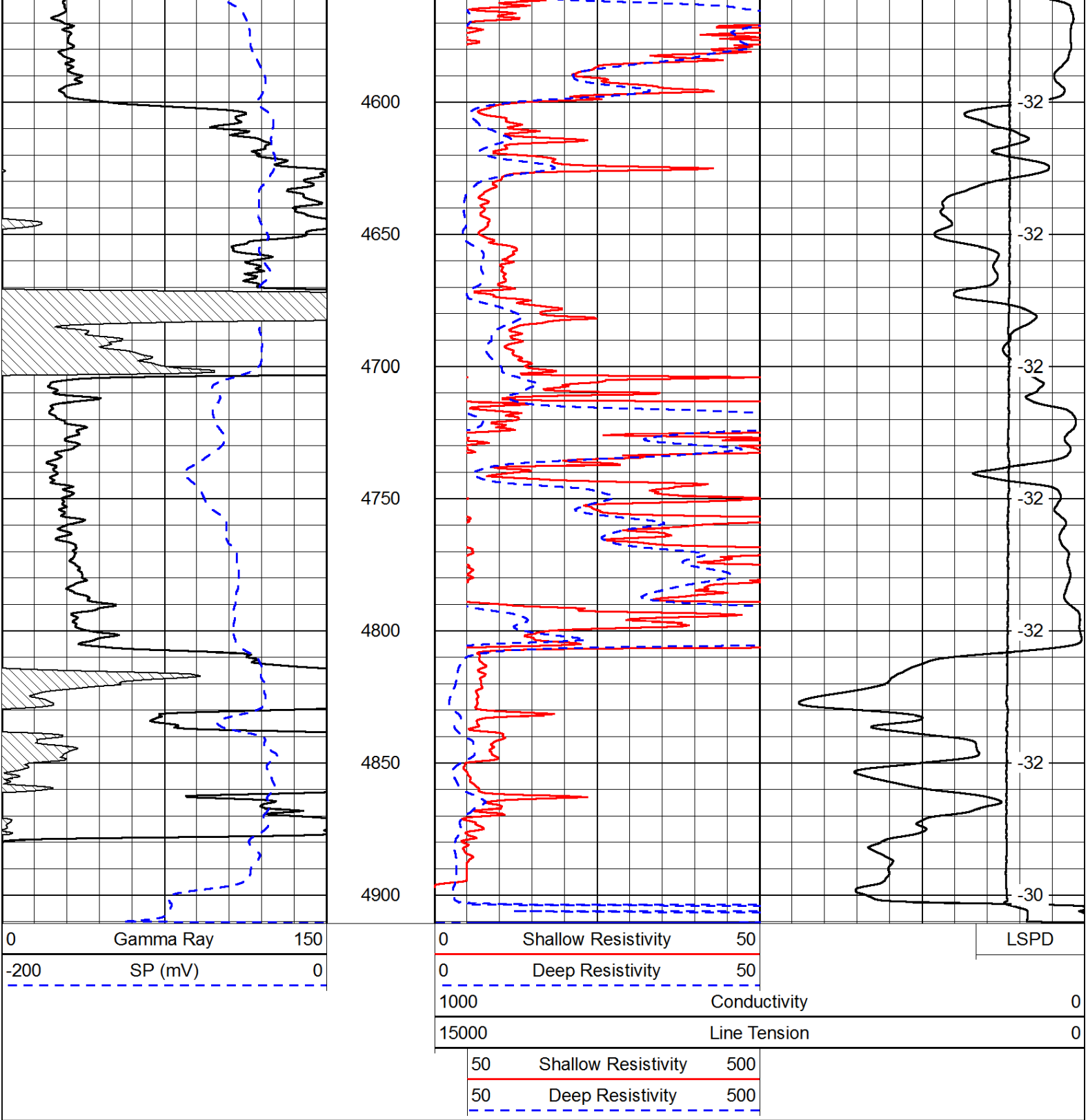




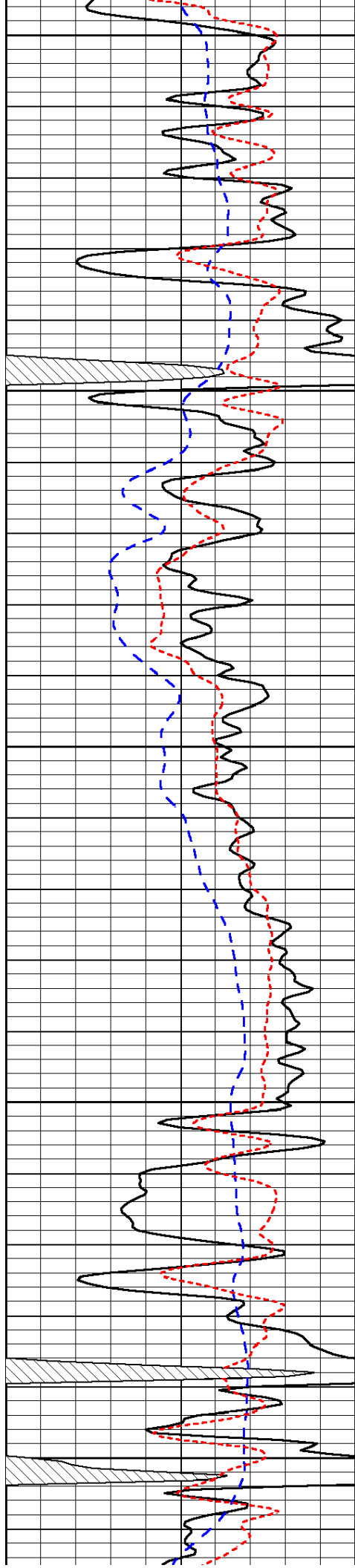








Database File: c:\warrior\data\charles n. griffin_jean #1\charles_griffin_jean_1hd.db					
Dataset Pathname: DIL/grifstck					
Presentation Format: dil					
Dataset Creation: Wed Jul 09 18:18:47 2014					
Charted by: Depth in Feet scaled 1:240					
0	Gamma Ray	150	0.2	Deep Resistivity	2000
-200	SP (mV)	0	0.2	Medium Resistivity	2000
-160	RxoRt	40	0.2	Shallow Resistivity	2000
			15000	Line Tension	0
					LSPD



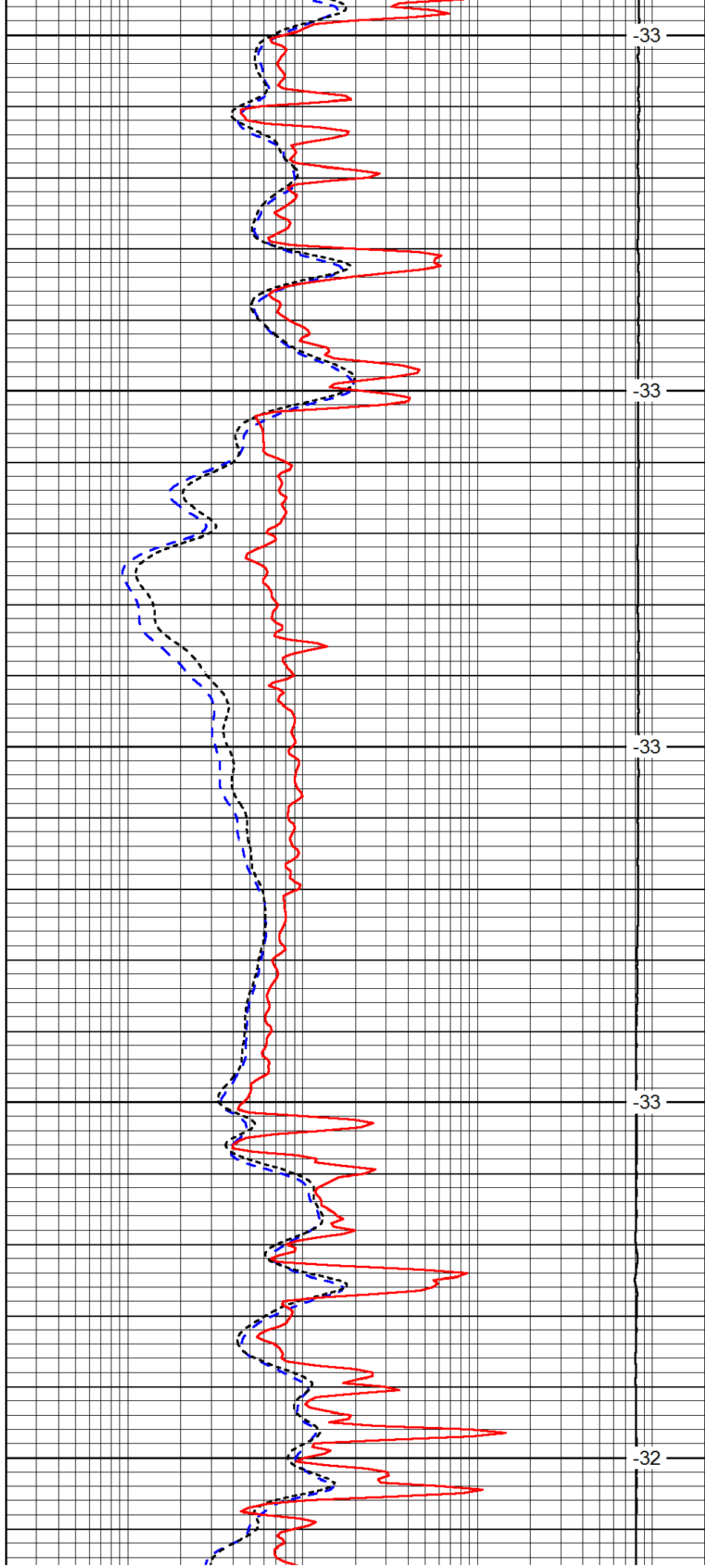
3500

3550

3600

3650

3700



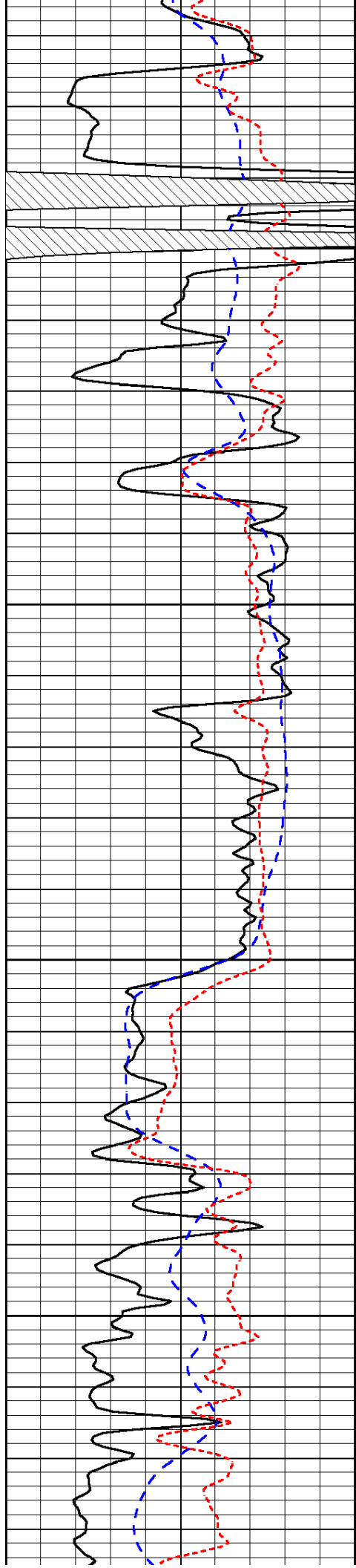
-33

-33

-33

-33

-32

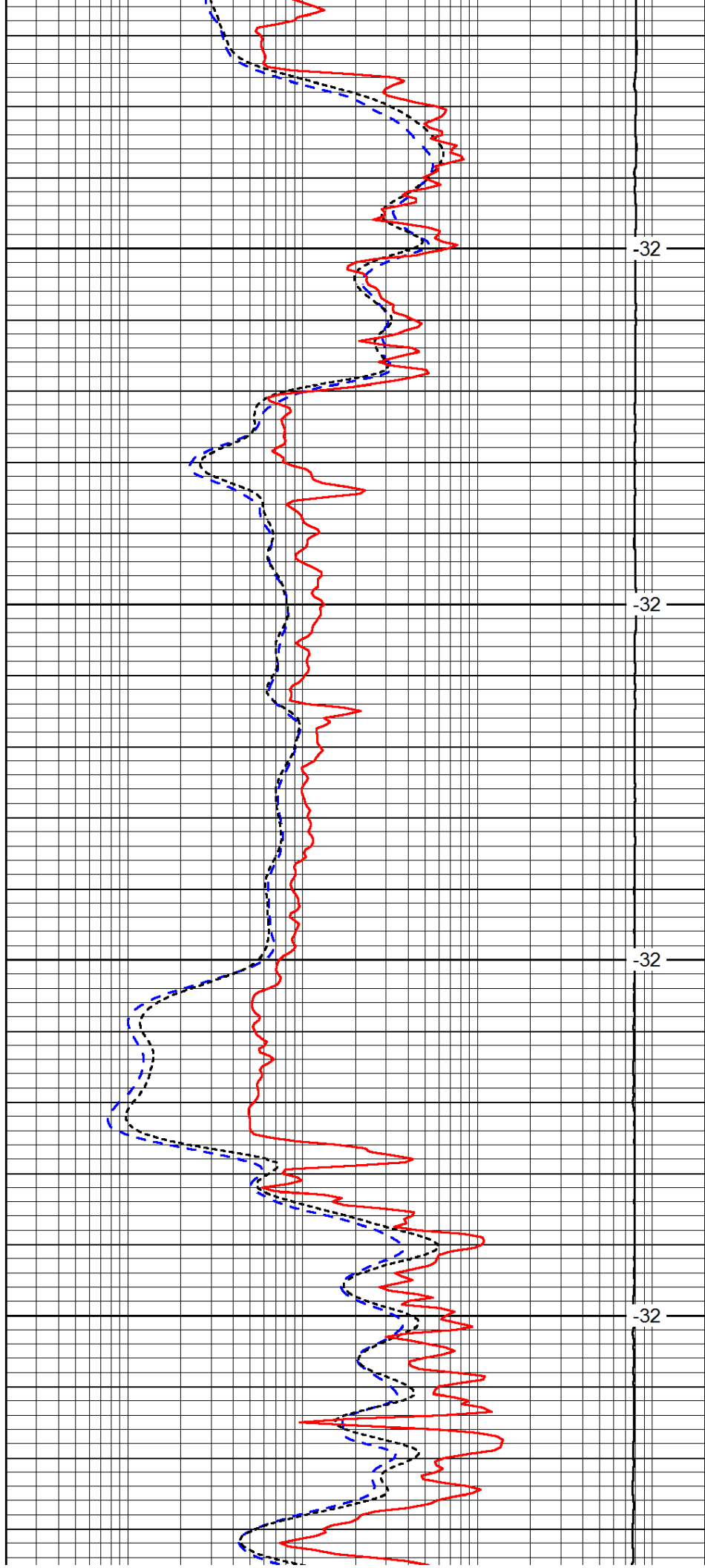


3750

3800

3850

3900

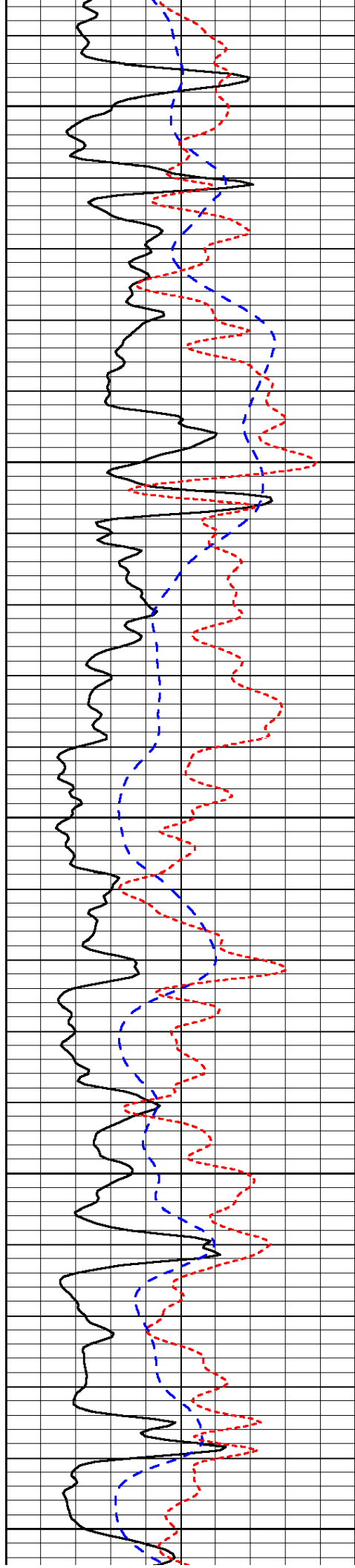


-32

-32

-32

-32



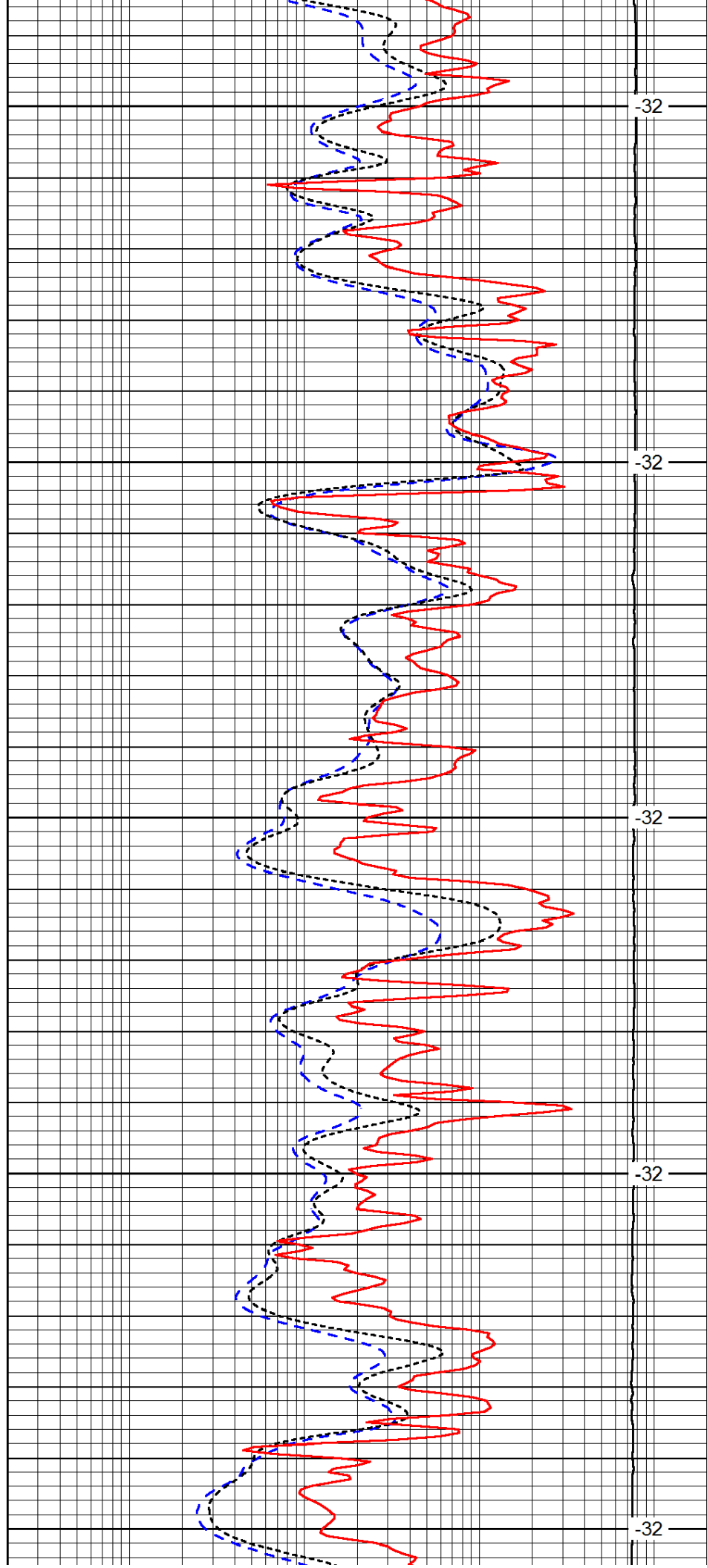
3950

4000

4050

4100

4150



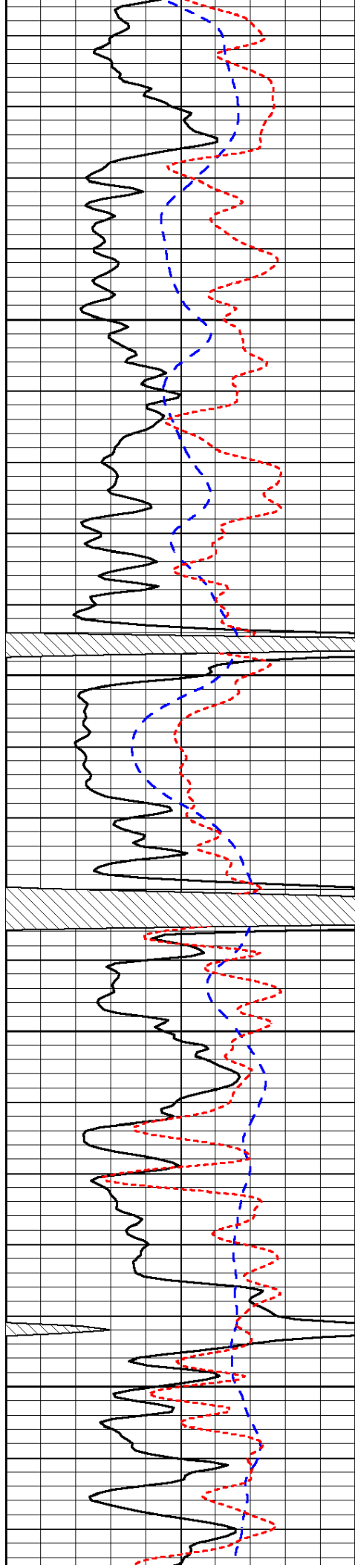
-32

-32

-32

-32

-32

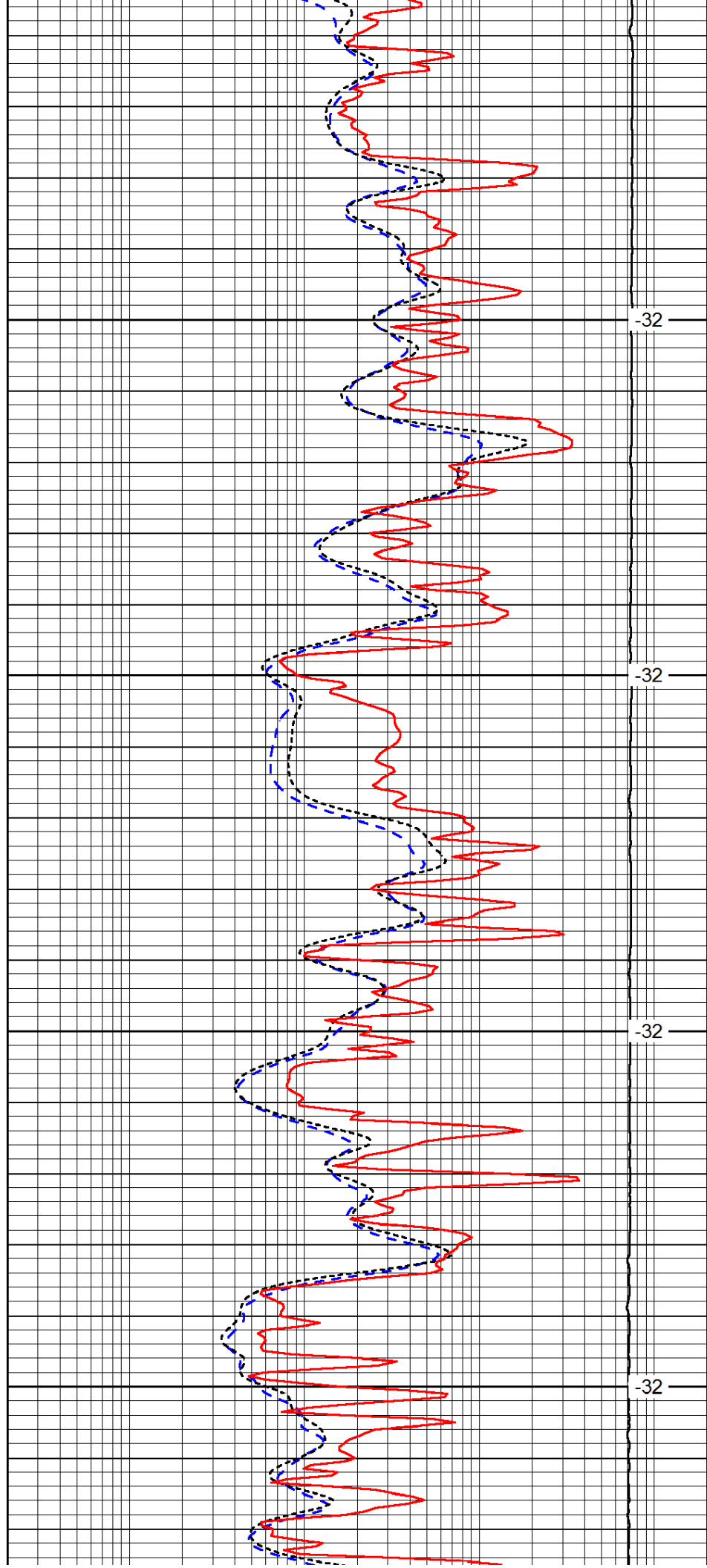


4200

4250

4300

4350

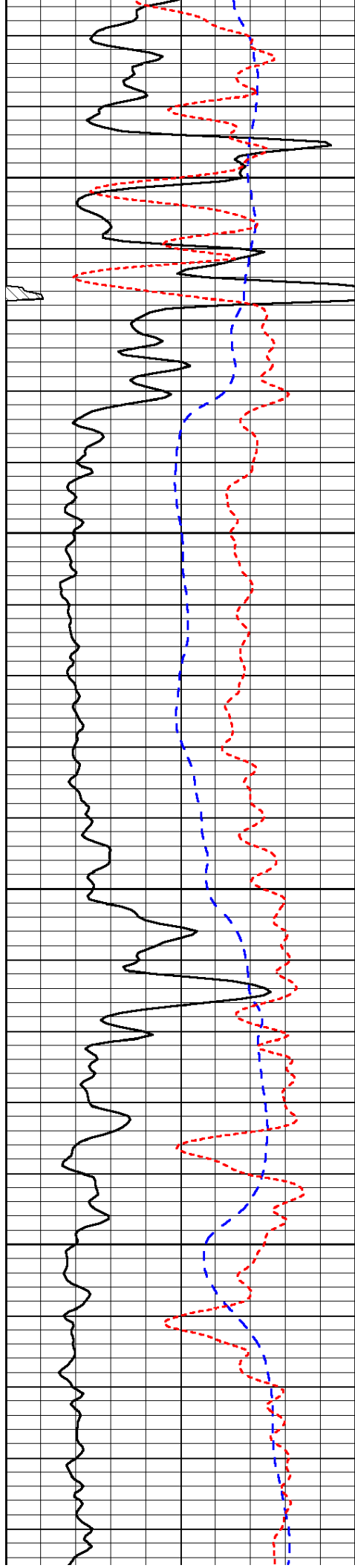


-32

-32

-32

-32

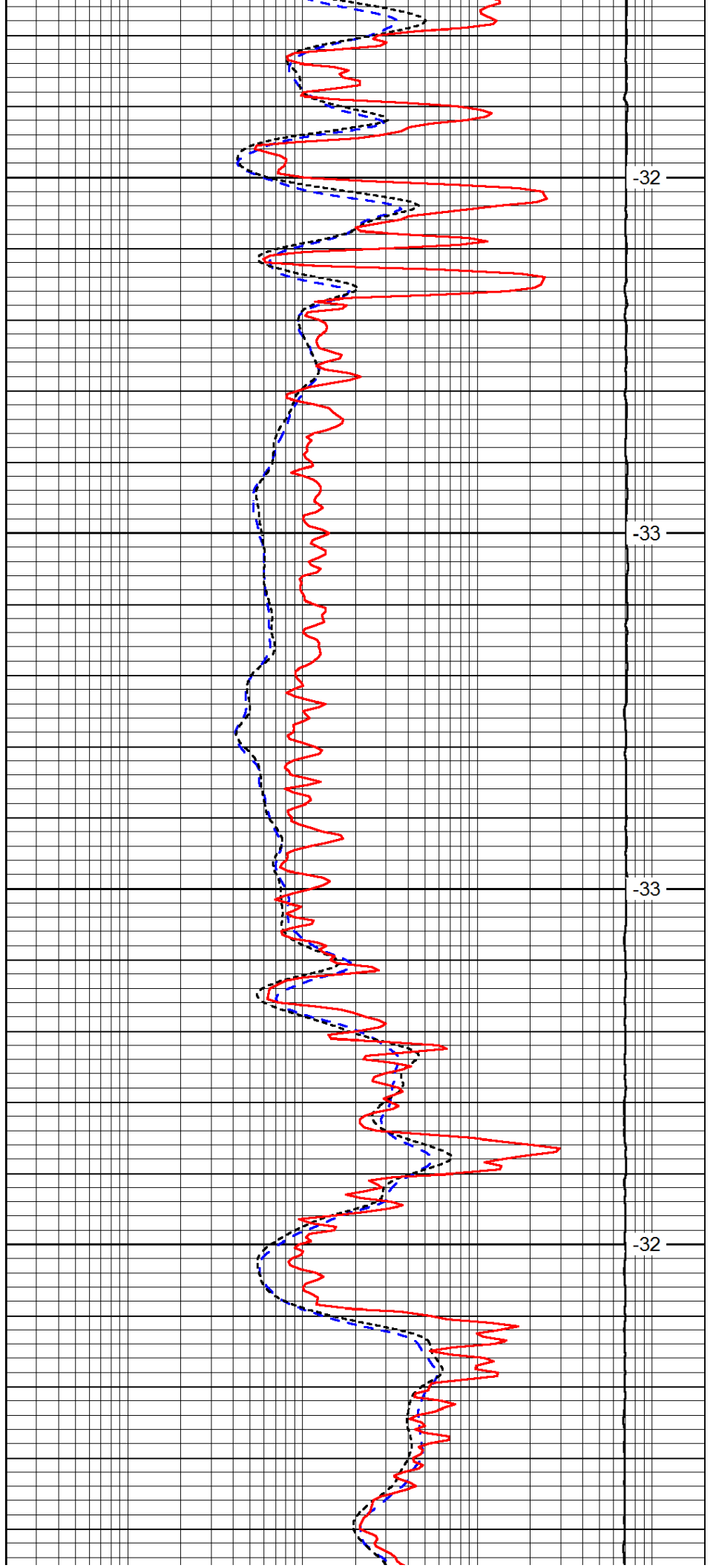


4400

4450

4500

4550

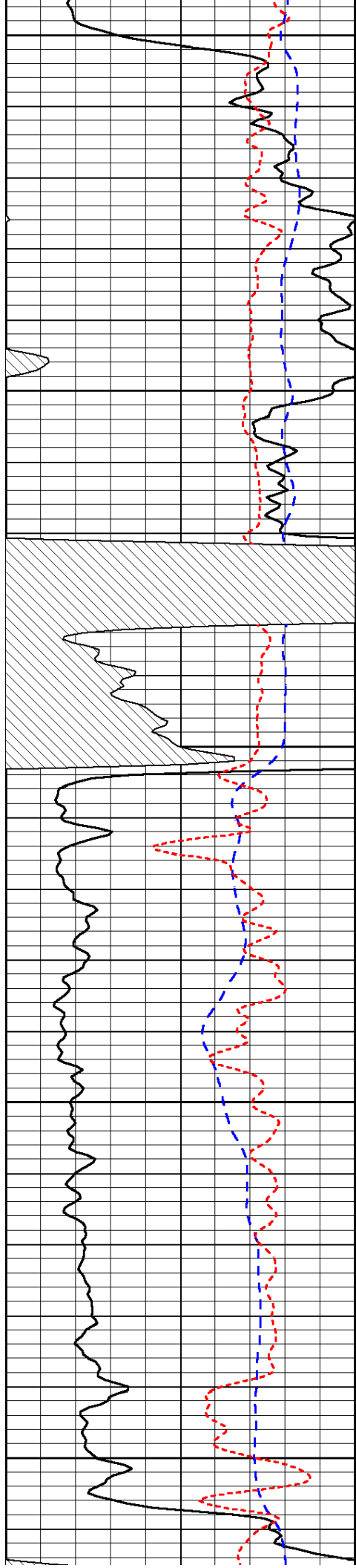


-32

-33

-33

-32



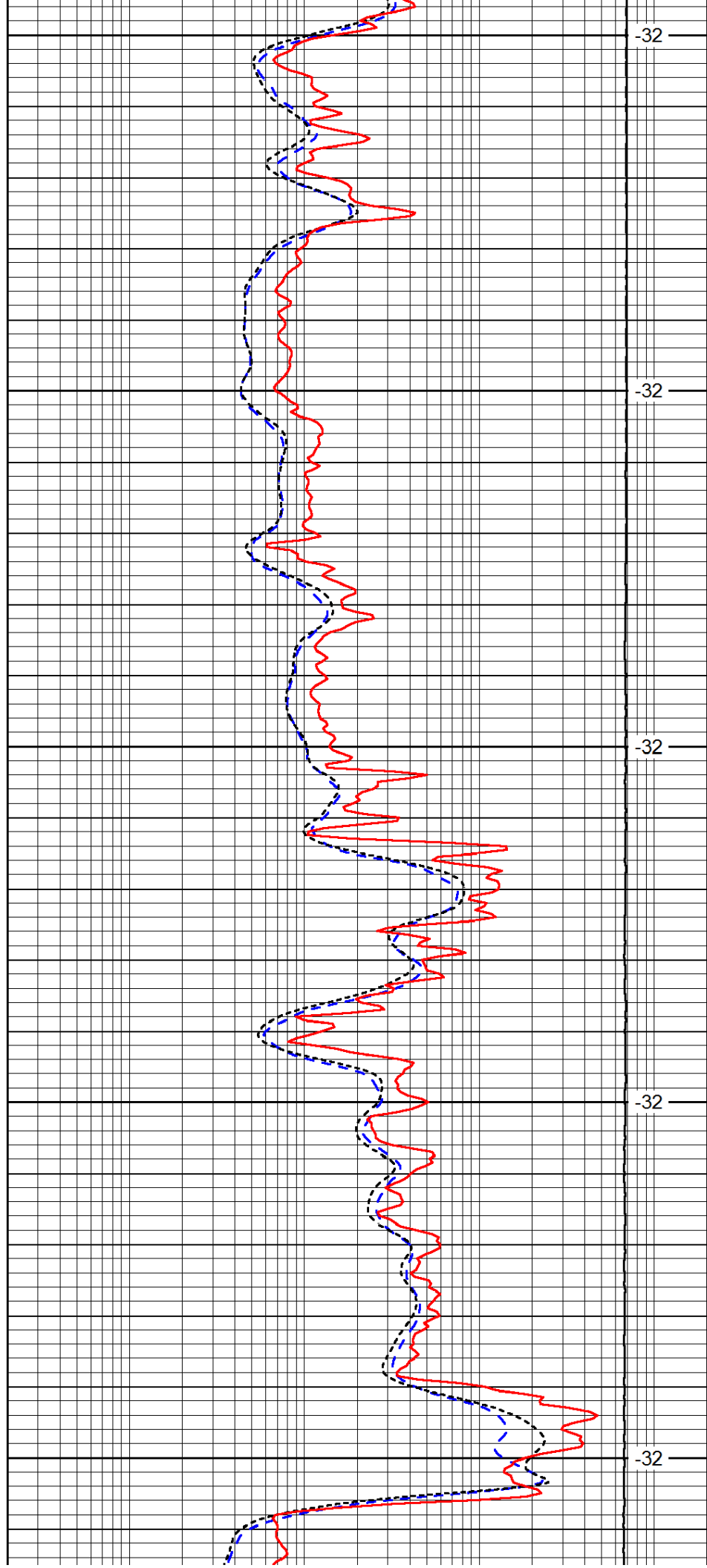
4600

4650

4700

4750

4800



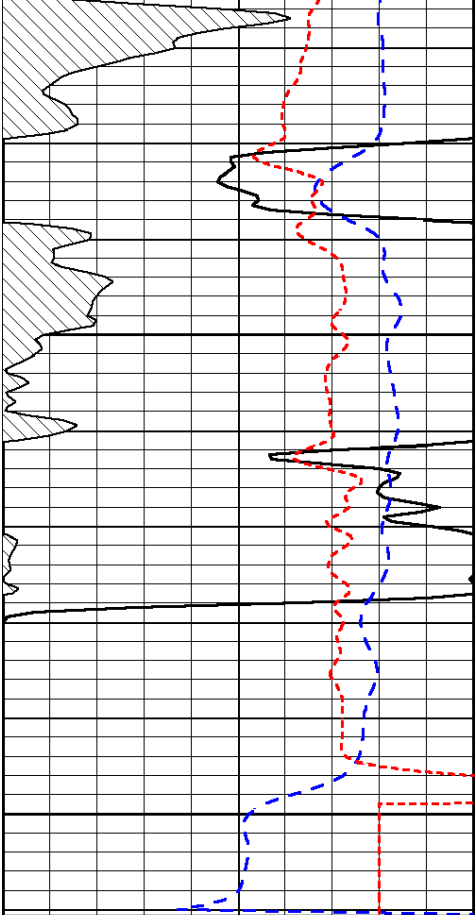
-32

-32

-32

-32

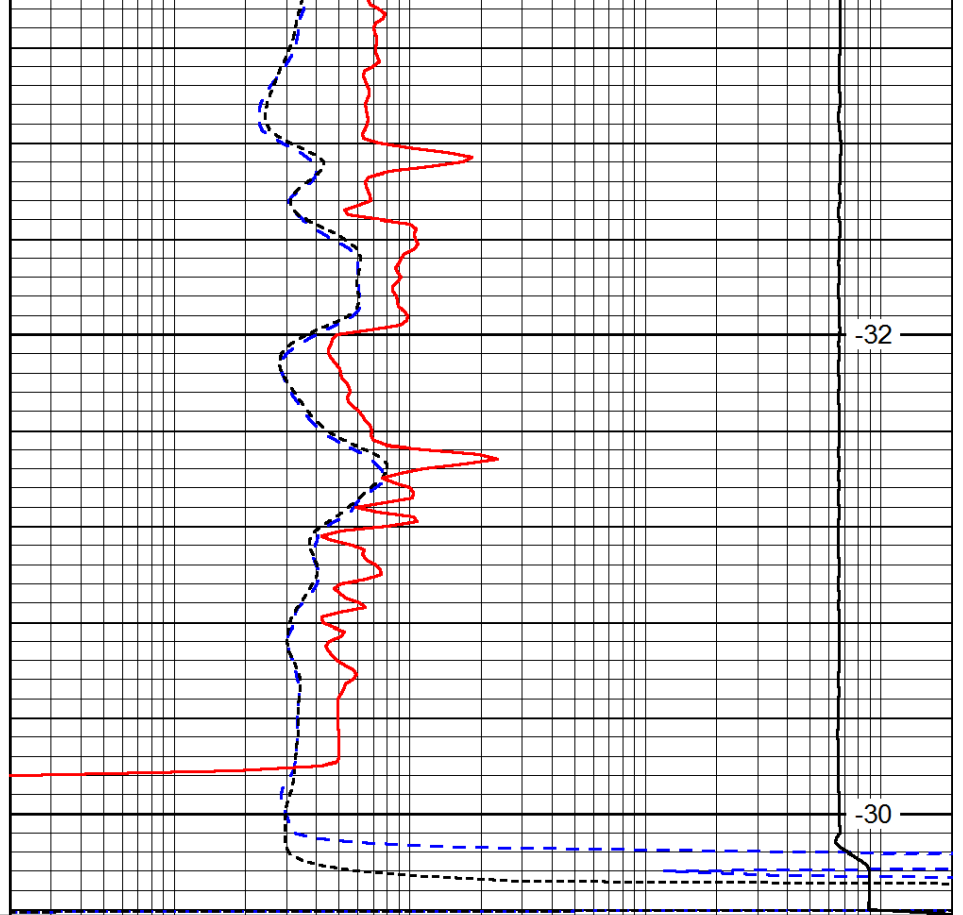
-32



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

4850

4900



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

LSPD