



Dual Induction Log

Pioneer Energy Services

API No.	Company MTM Petroleum, Inc.		
	Well Garrison #4		
	Field Settle		
	County Kingman	State	Kansas
	Location 1320' FSL & 1980' FWL		Other Services CNL/CDL
	Sec: 20	Twp: 29S	Rge: 7W
Permanent Datum	Ground Level	Elevation 1543	Elevation K.B. 1553 D.F. 1543 G.L. 1543
Log Measured From	Kelly Bushing	10 Ft. Above Perm. Datum	
Drilling Measured From	From Kelly Bushing		
Date	11/27/2013		
Run Number	One		
Depth Driller	4515		
Depth Logger	4517		
Bottom Logged Interval	4516		
Top Log Interval	250		
Casing Driller	8.625 @ 265		
Casing Logger	266		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	2000		
Density / Viscosity	9.3	60	
pH / Fluid Loss	10.5	8.0	
Source of Sample	Flowline		
Rm @ Meas. Temp	1.90 @ 36		
Rmf @ Meas. Temp	1.43 @ 36		
Rmc @ Meas. Temp	2.57 @ 36		
Source of Rmf / Rmc	Charts		
Rm @ BHT	0.56 @ 123		
Operating Rig Time	3 Hours		
Max Rec. Temp. F	123		
Equipment Number	91		
Location	Hays		
Recorded By	D. Schmidt		
Witnessed By	Marvin Miller		
	Jerry Smith		

<<< 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
Kingman,
South to 100 Ave, 1 1/2 West,
North into

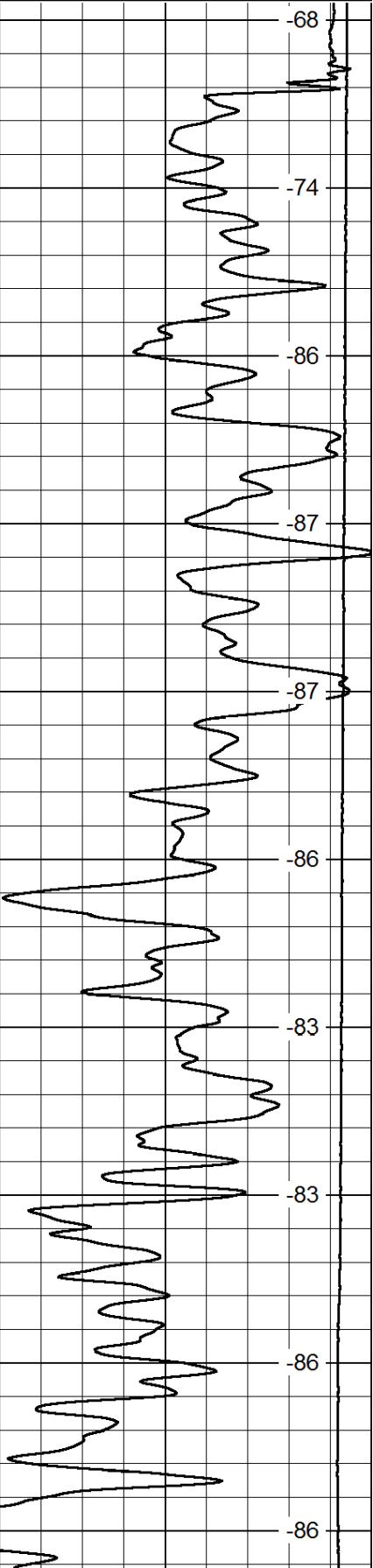
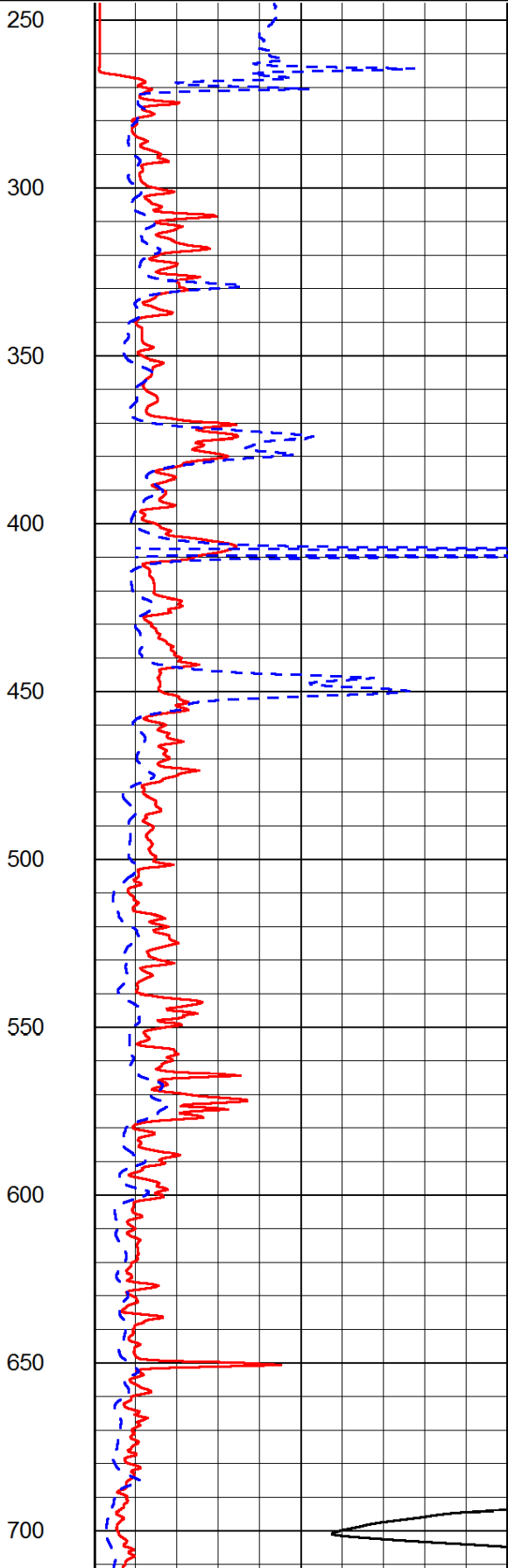
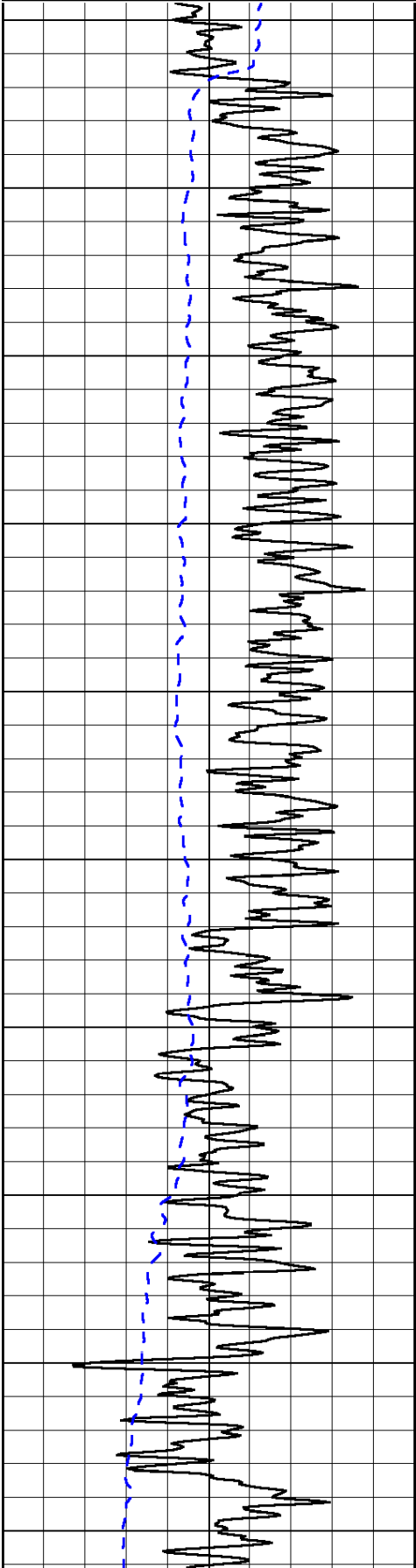
Database File: c:\warrior\data\mtm_garrison #4\mtm_112713hd.db
Dataset Pathname: dil\mtmstck
Presentation Format: dil2in
Dataset Creation: Wed Nov 27 09:37:44 2013
Charted by: Depth in Feet scaled 1:600

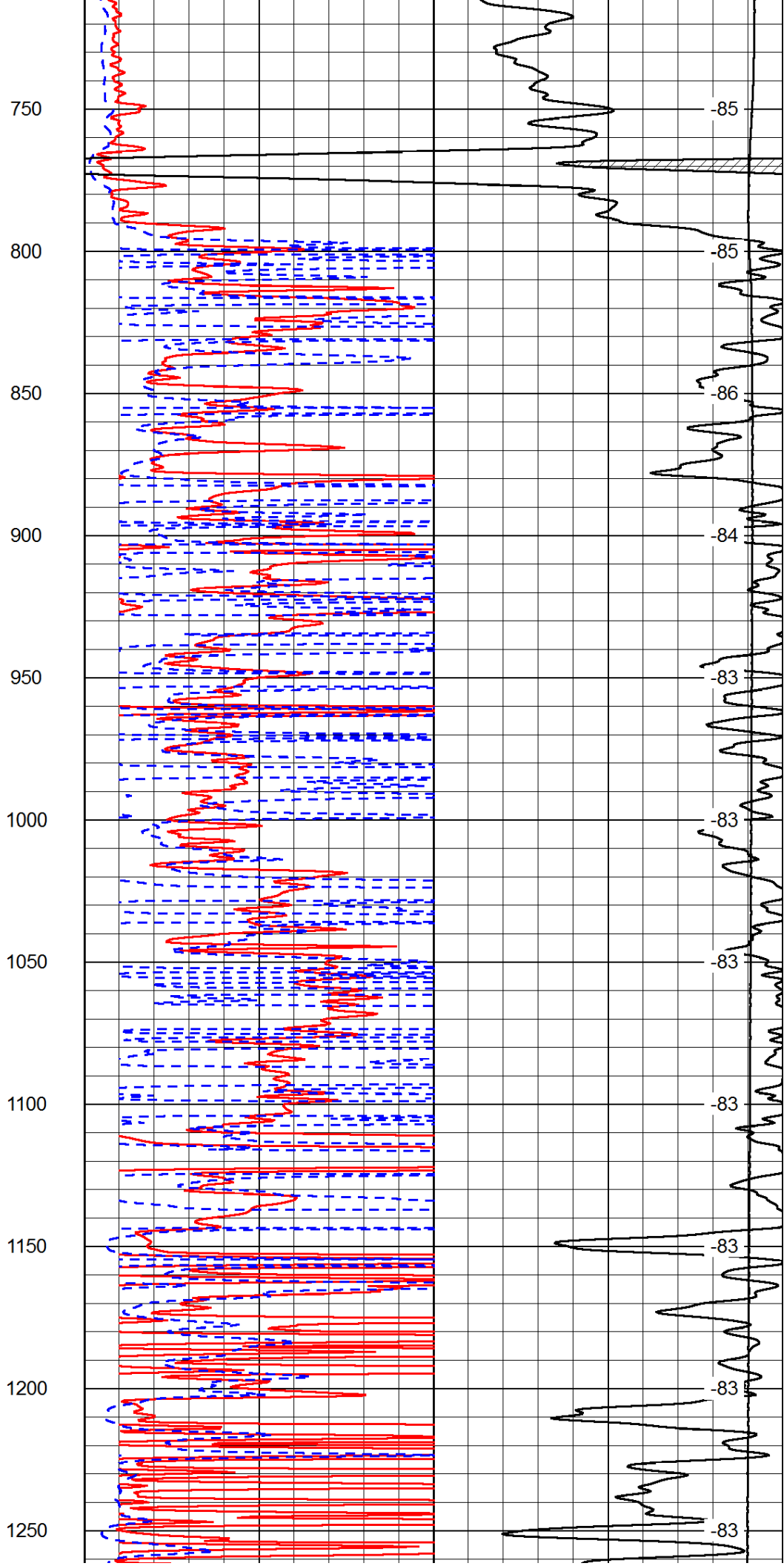
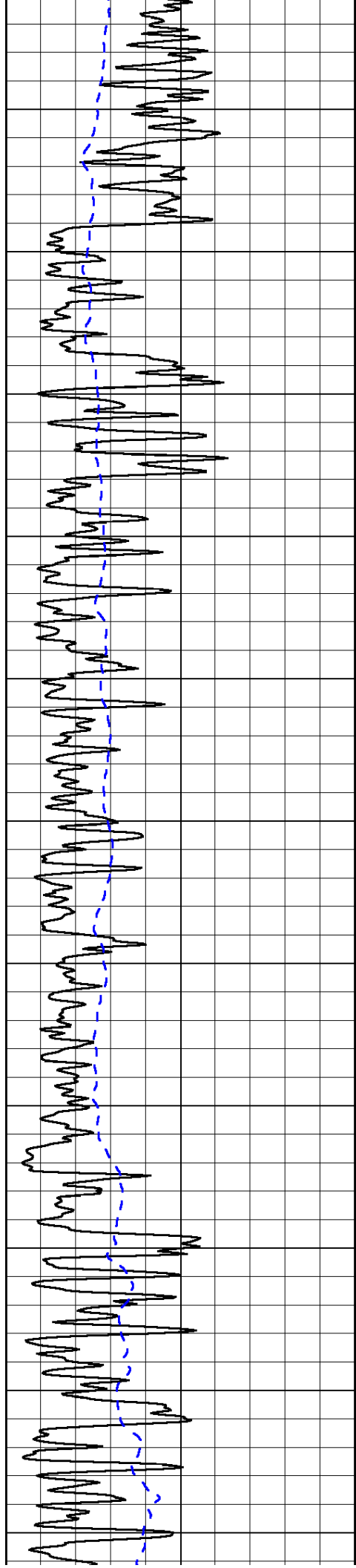
Charted by: Depth in Feet scaled 1:600

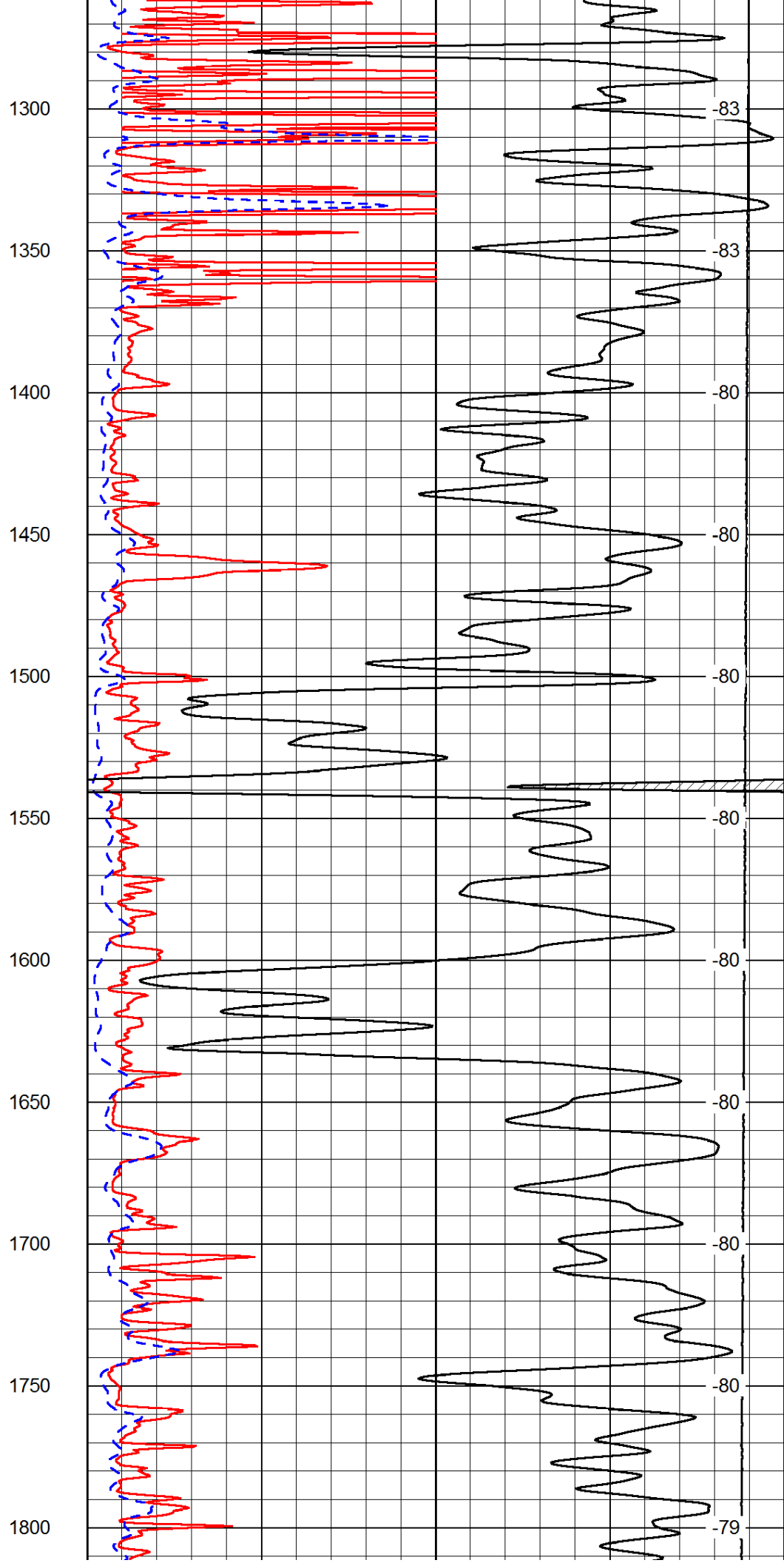
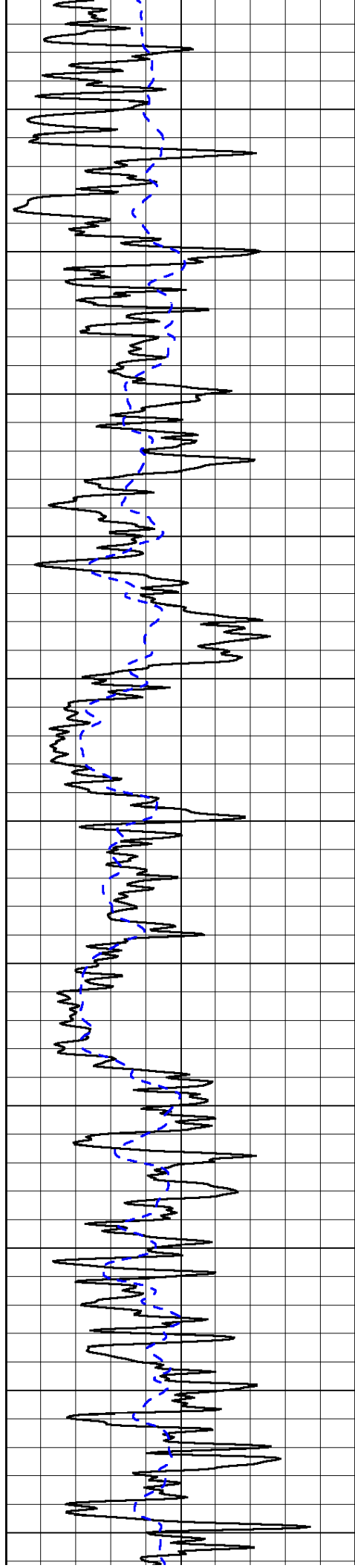
0	Gamma Ray	150
-200	SP (mV)	0

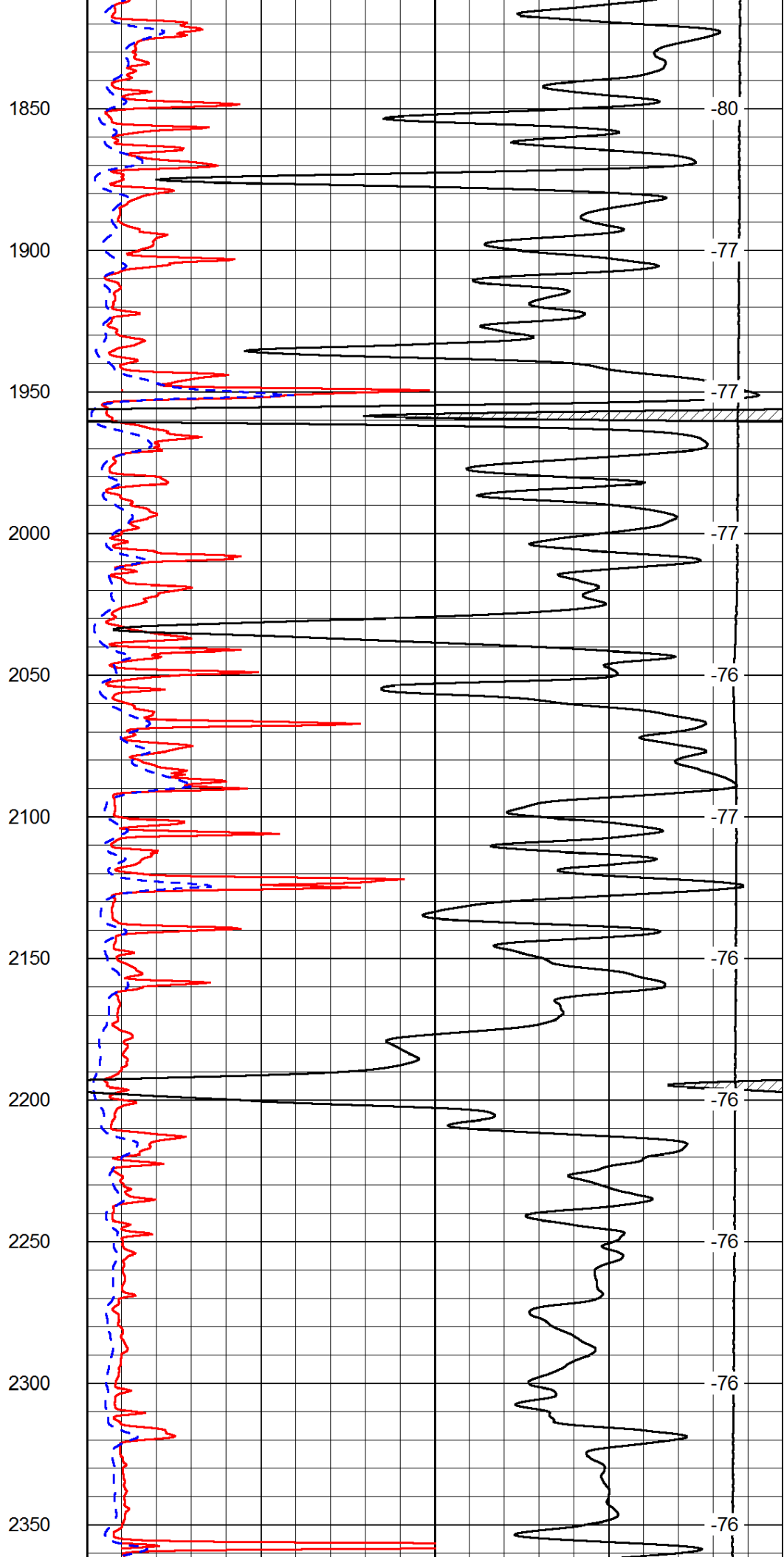
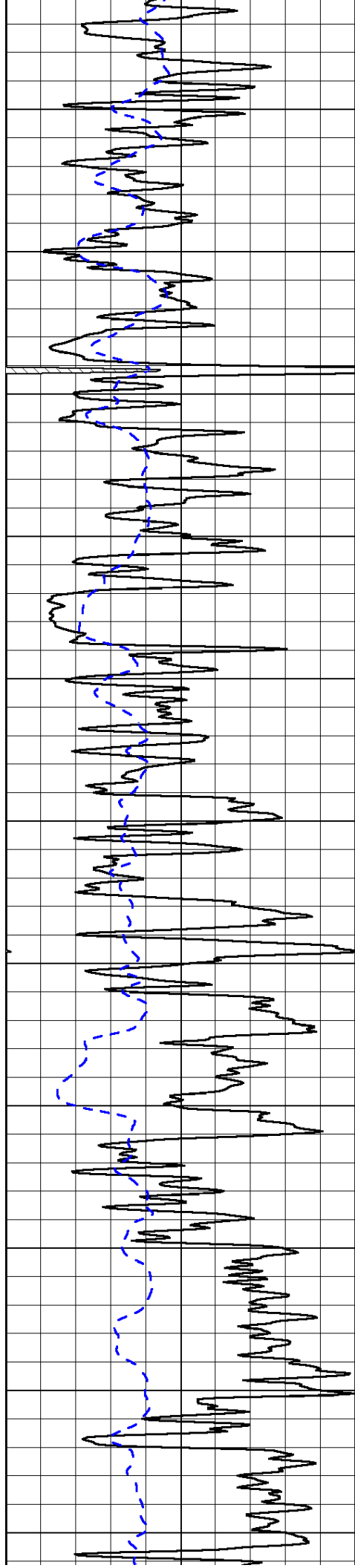
0	Shallow Resistivity	50
0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

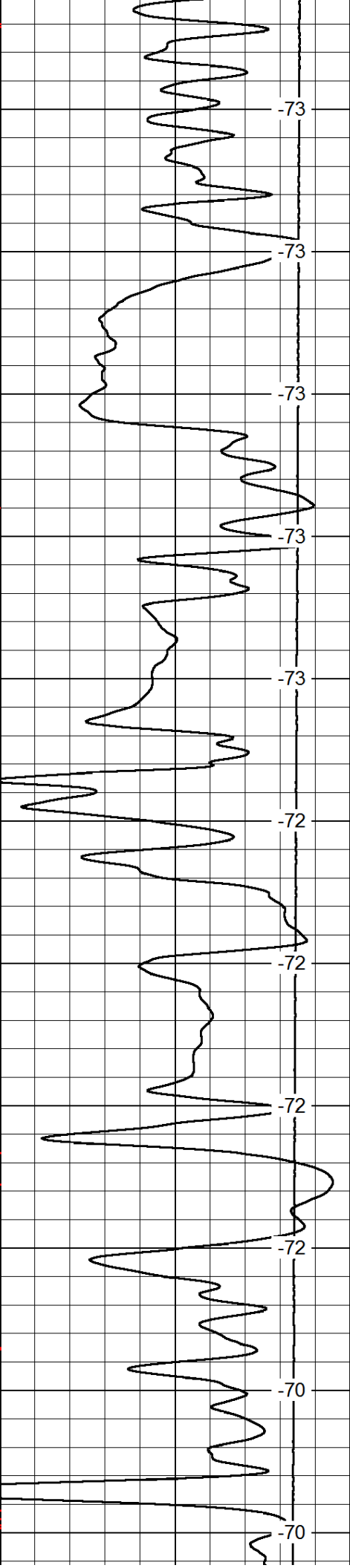
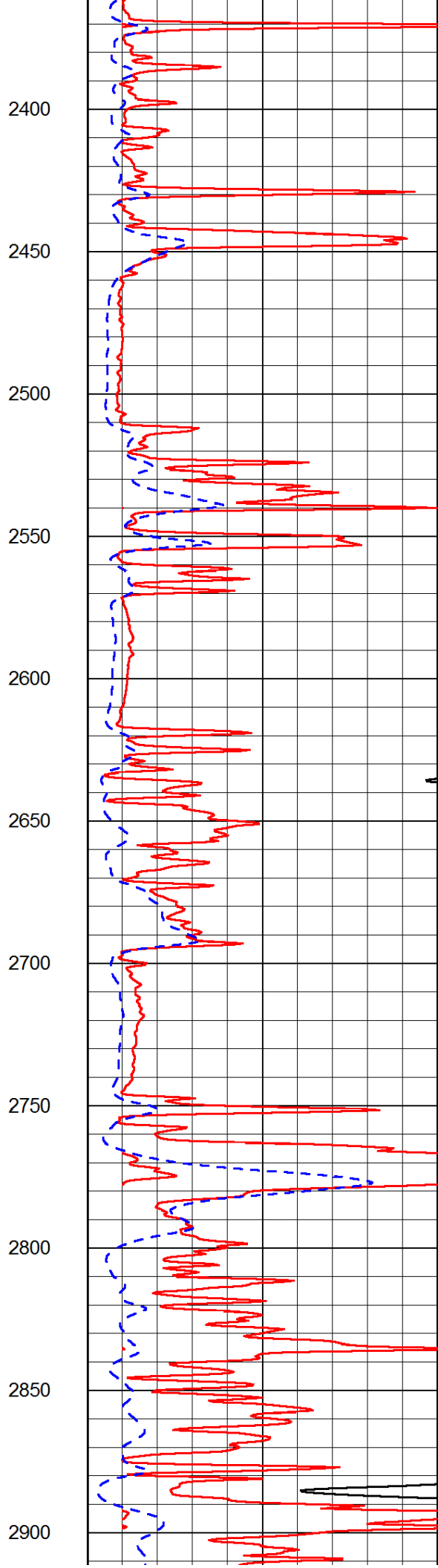
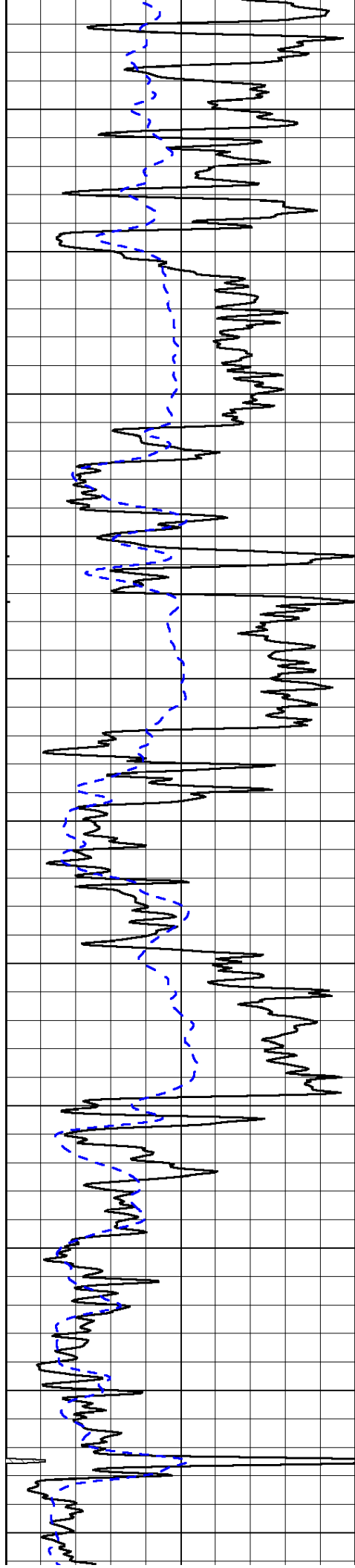
LSPD
0
0

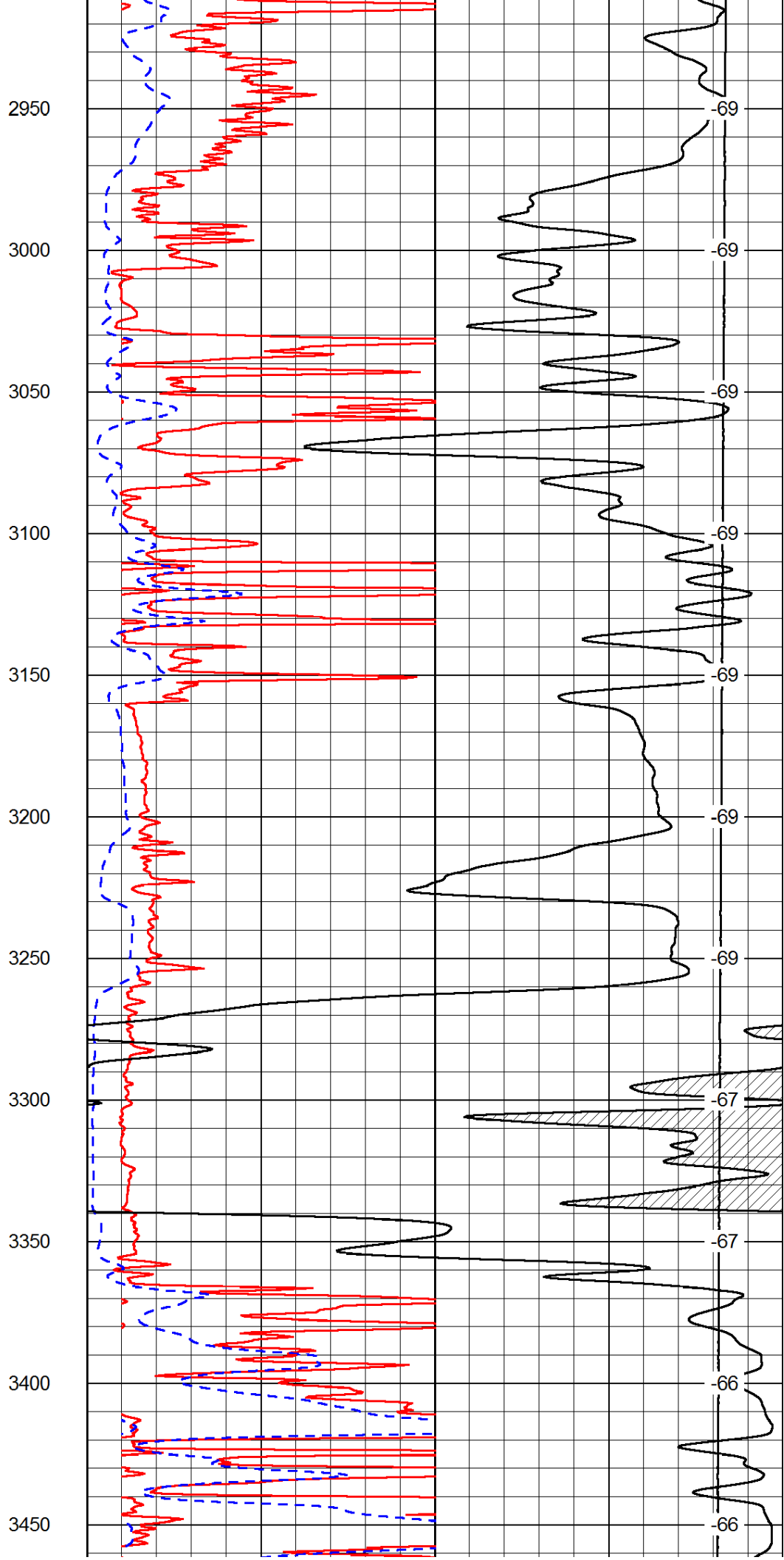
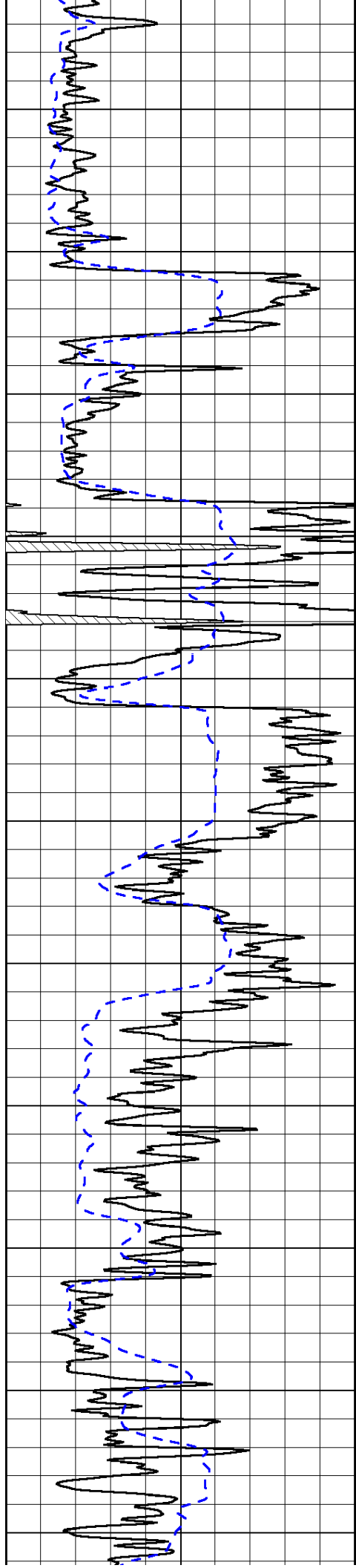


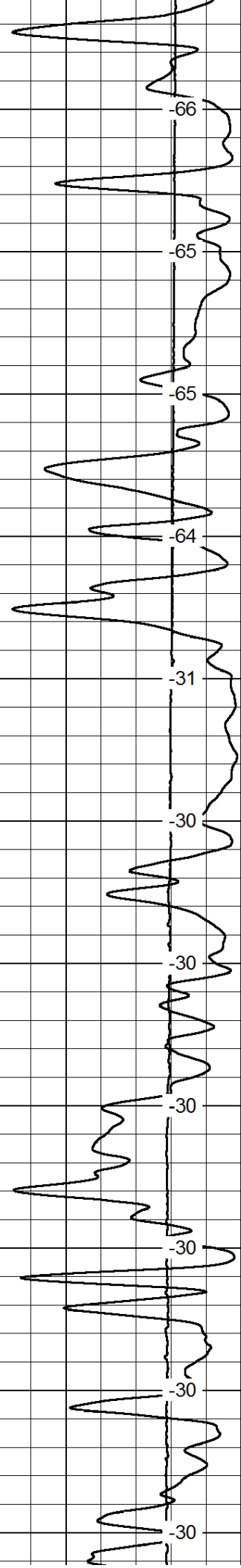
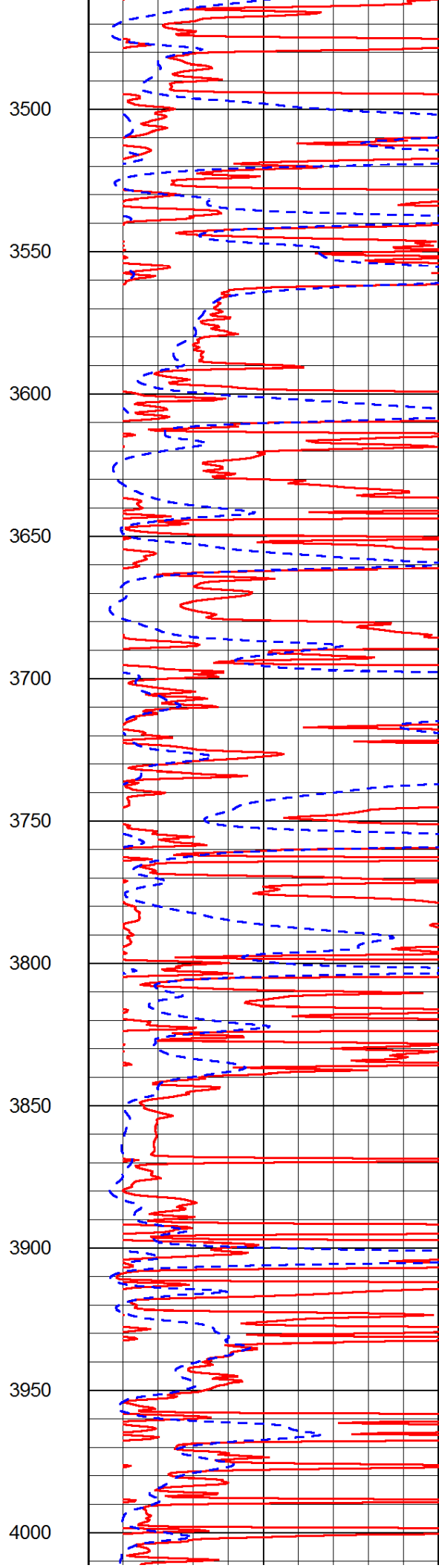
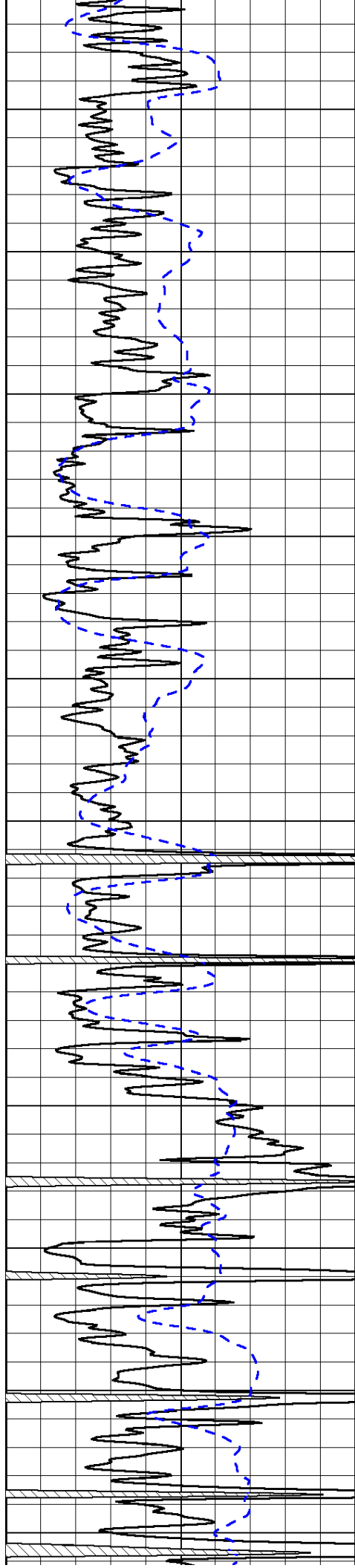


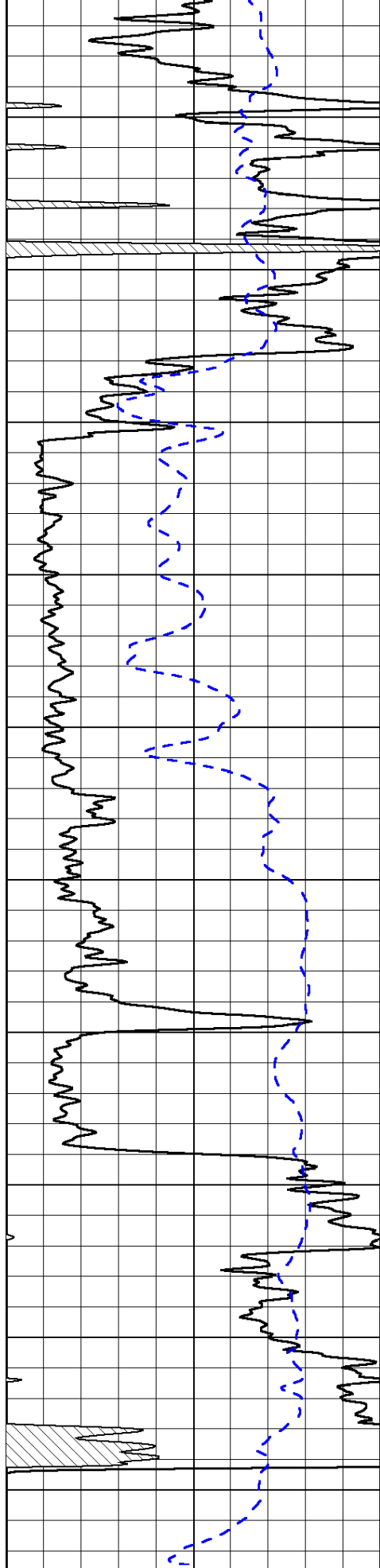




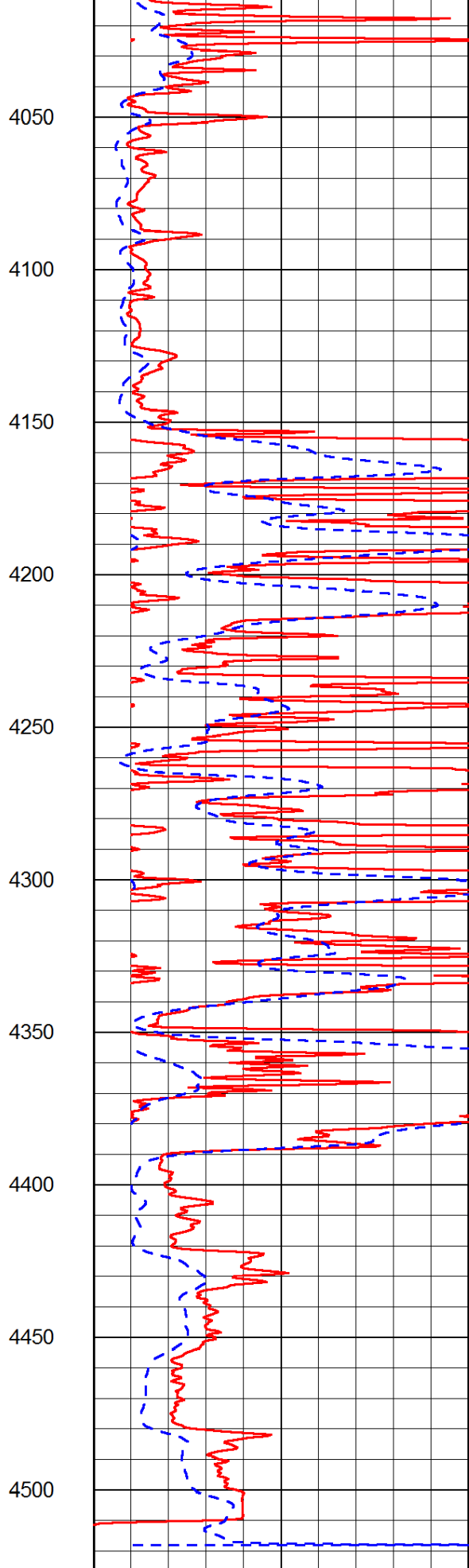




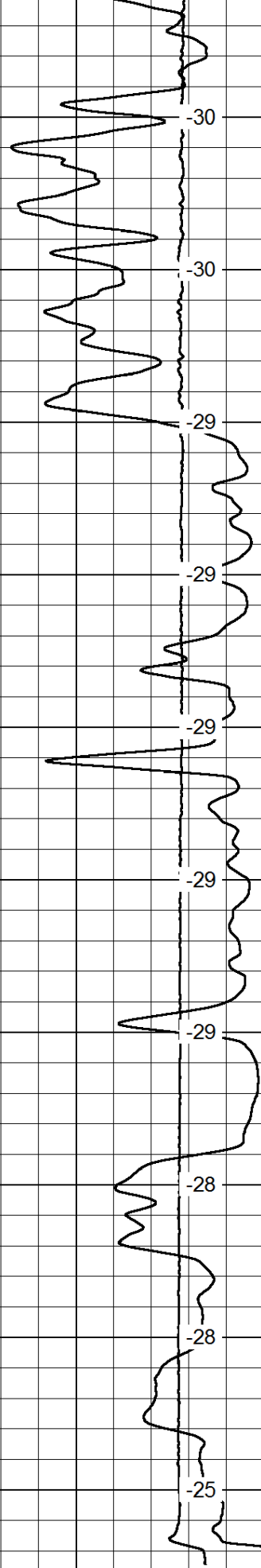




0 Gamma Ray 150
-200 SP (mV) 0



0 Shallow Resistivity 50
0 Deep Resistivity 50
1000 Conductivity

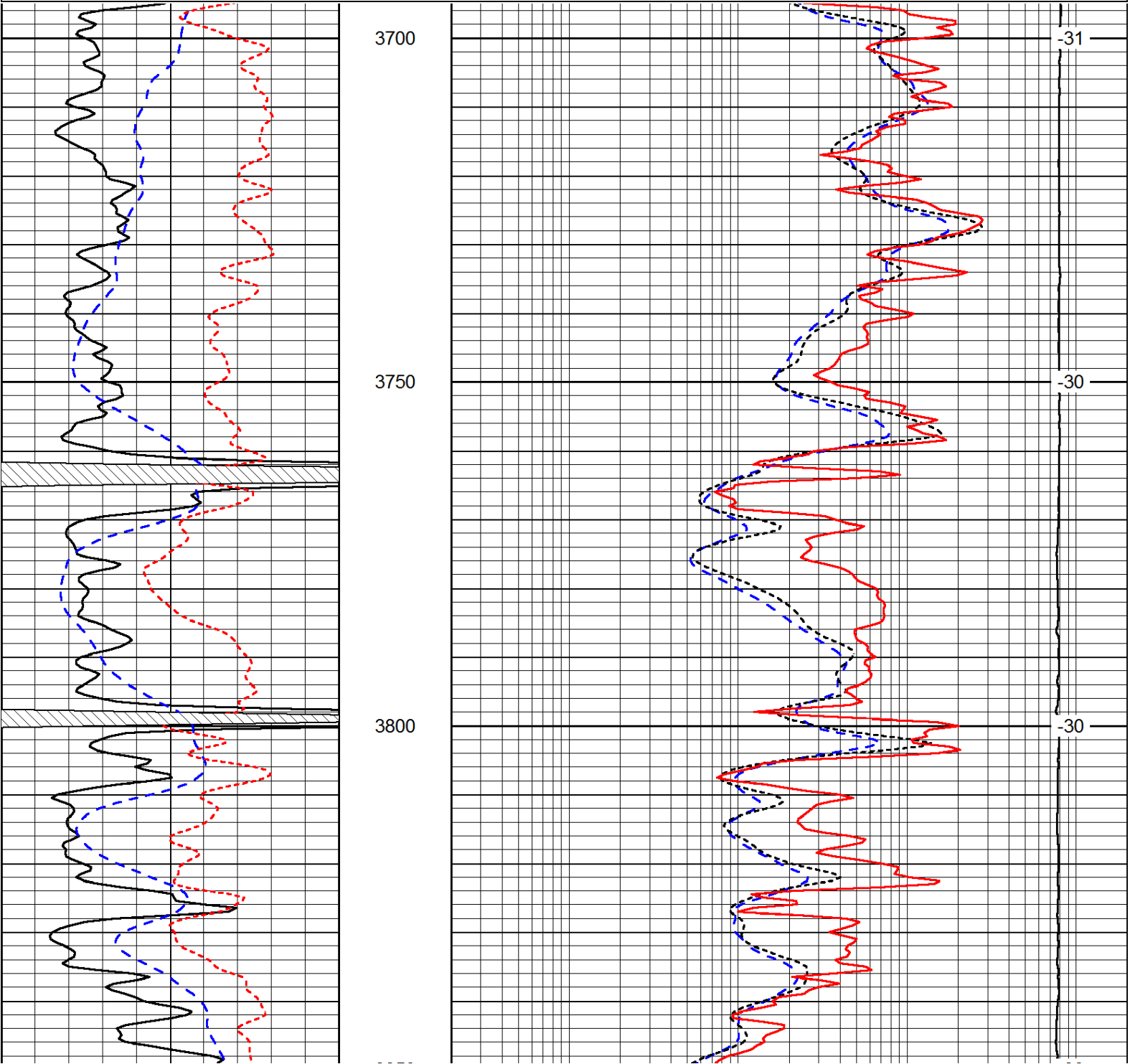


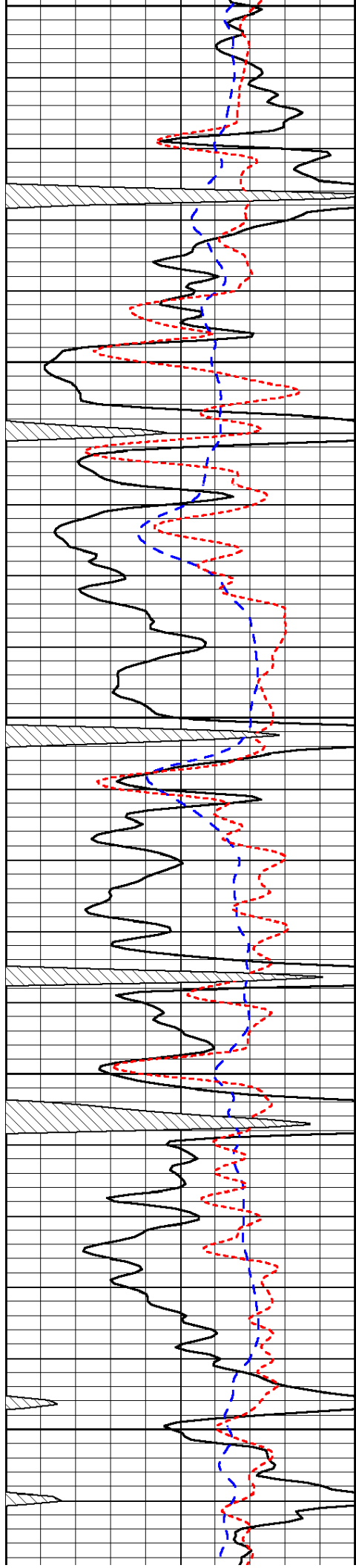
LSPD
-30
-29
-28
-25

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

Database File:	c:\warrior\data\mtm_garrison #4\mtm_112713hd.db				
Dataset Pathname:	dil/mtmstck				
Presentation Format:	dil				
Dataset Creation:	Wed Nov 27 09:37:44 2013				
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





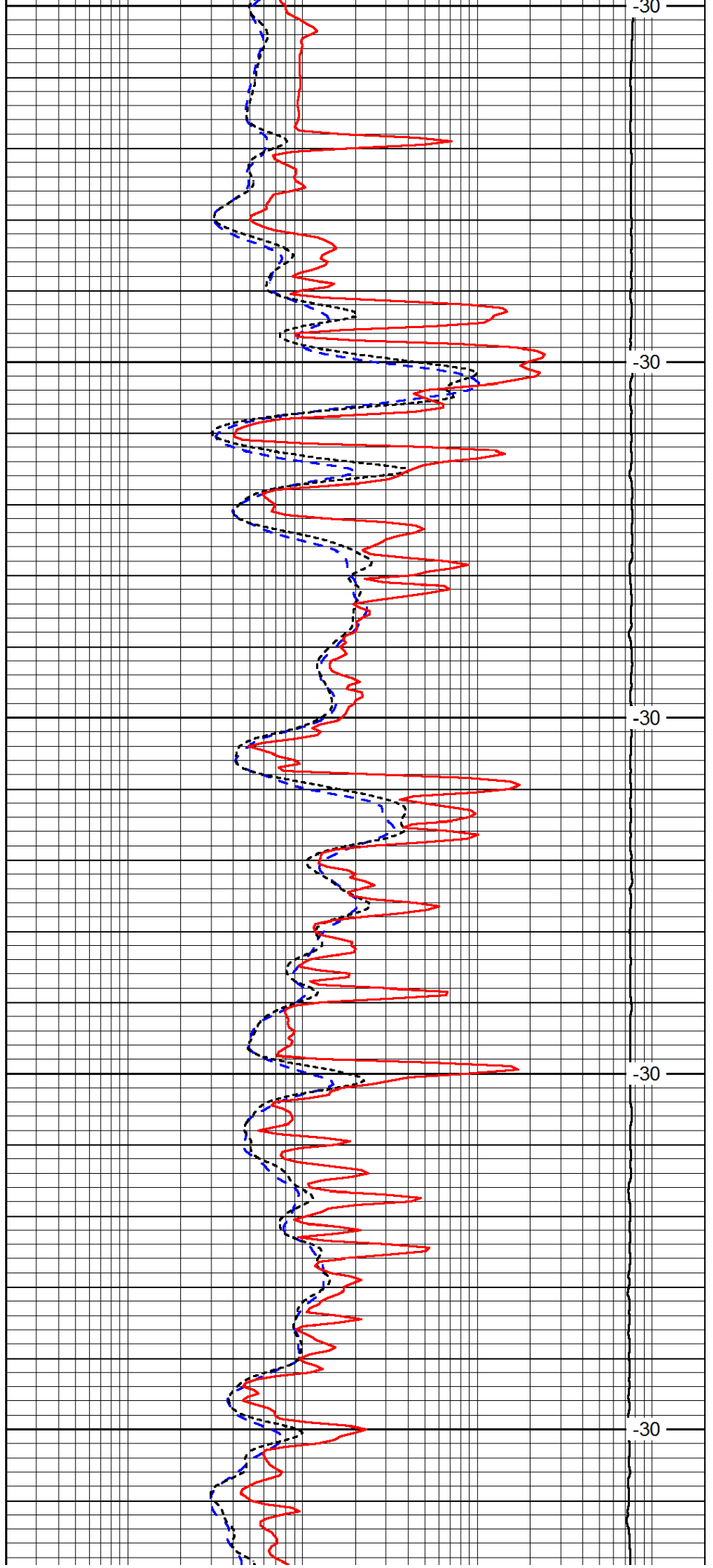
3850

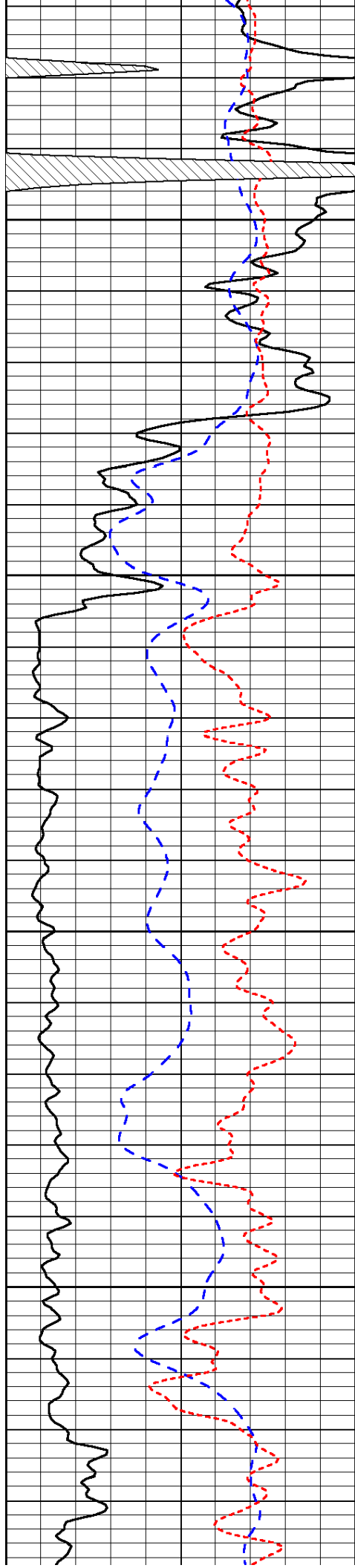
3900

3950

4000

4050



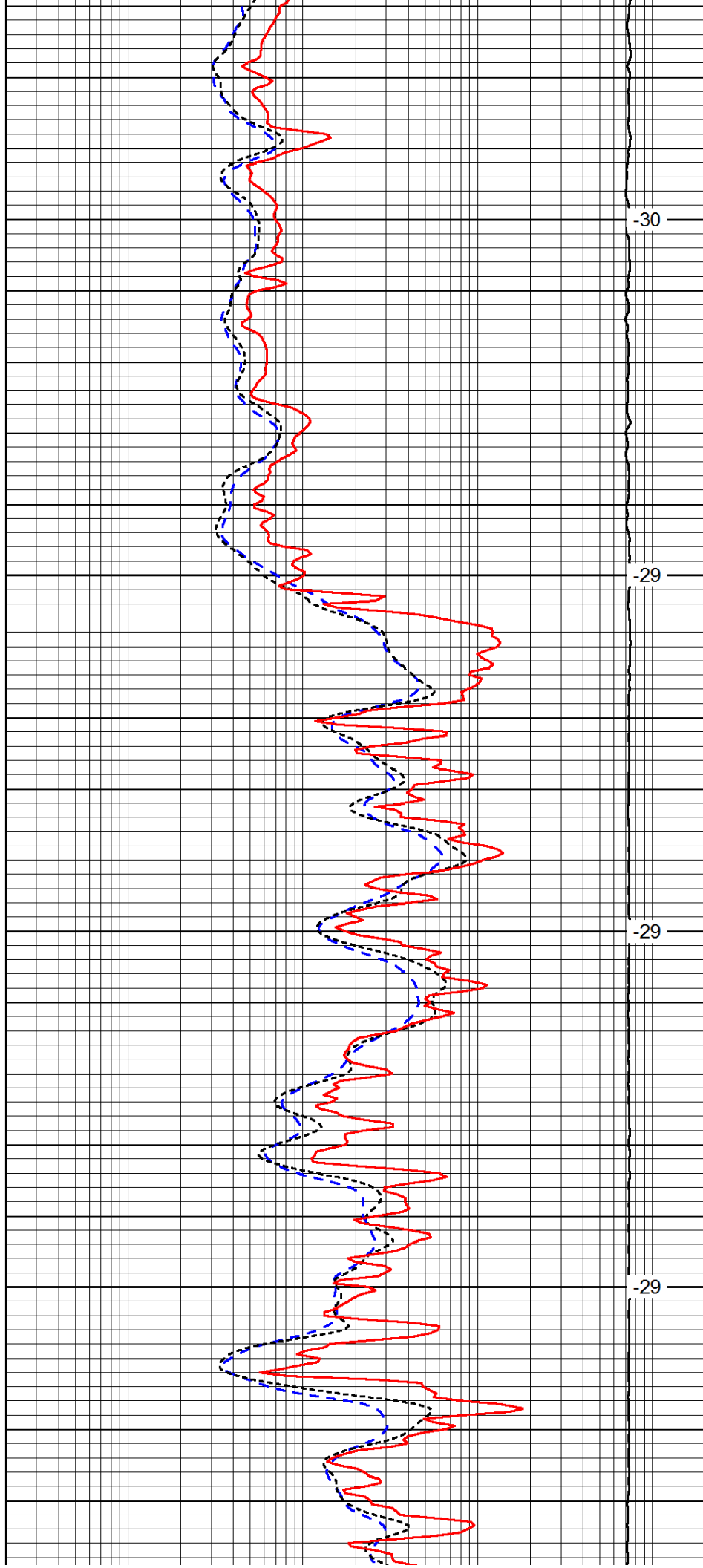


4100

4150

4200

4250

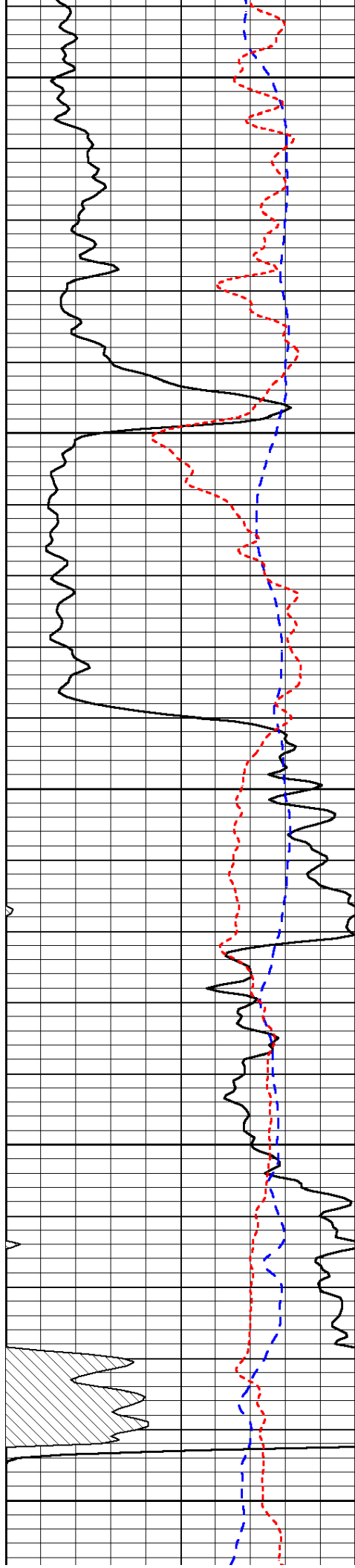


-30

-29

-29

-29



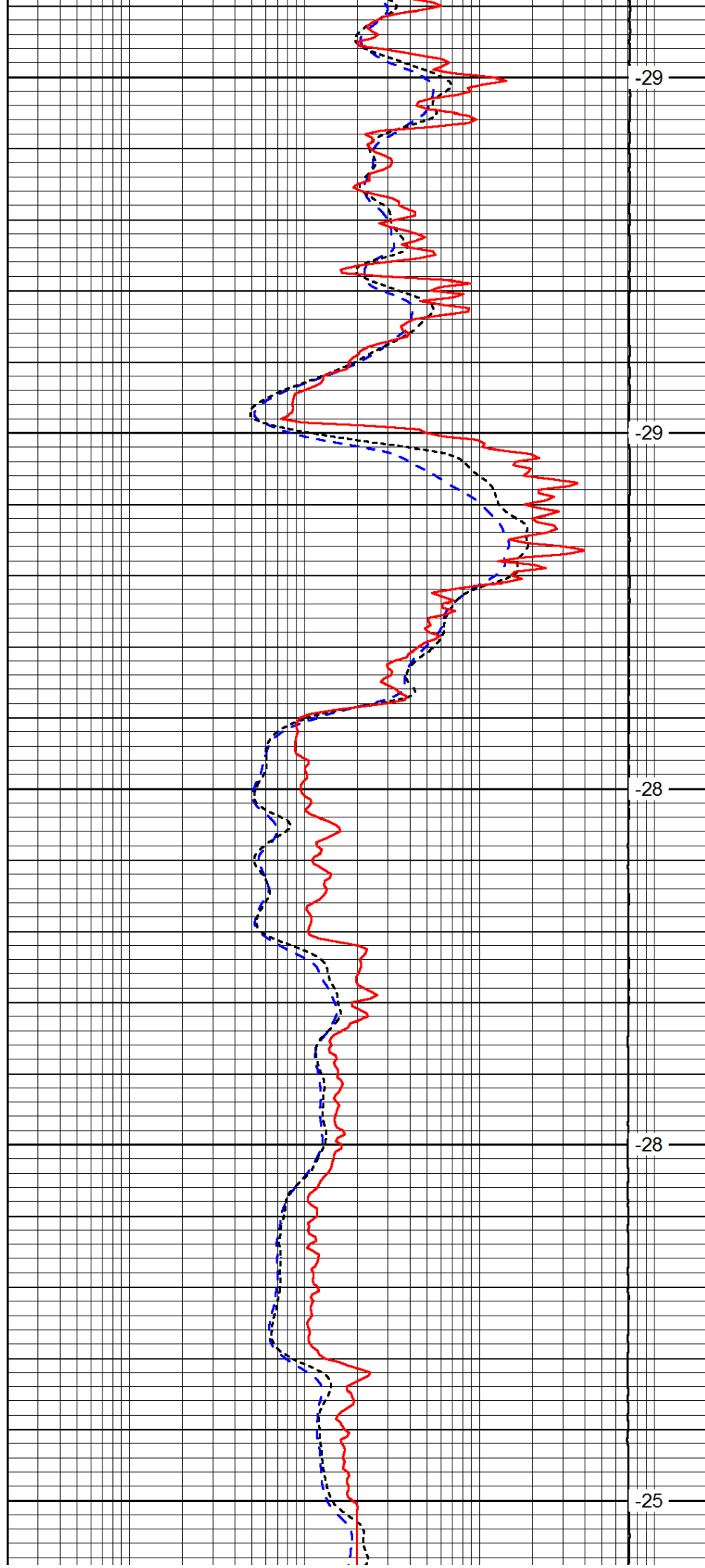
4300

4350

4400

4450

4500



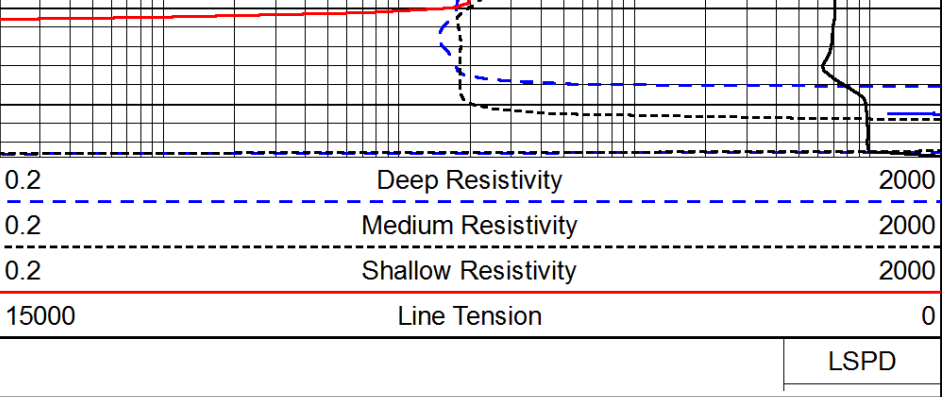
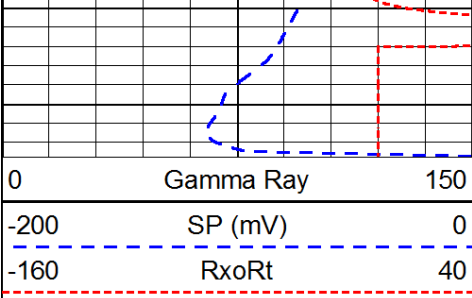
-29

-29

-28

-28

-25



LSPD