



Pioneer Energy Services

# Borehole Compensated Sonic Log

15-185-23,816-00-00

API No.

Company **H&D Exploration, LLC**  
 Well **Fritzemeier #1**  
 Field **Wildcat**  
 County **Stafford** State **Kansas**

Location **W2 NE NE NE  
330' FNL & 425' FEL**  
 Sec: **20** Twp: **25S** Rge: **12W**

Other Services  
CNL/CDL  
MEL/DIL

Permanent Datum **Ground Level** Elevation **1874**  
 Log Measured From **Kelly Bushing** 10 Ft. Above Perm. Datum  
 Drilling Measured From **Kelly Bushing**

Elevation  
K.B. 1884  
D.F. 1874  
G.L. 1874

Date	7/1/2013	
Run Number	Two	
Type Log	BHC Sonic	
Depth Driller	4240	
Depth Logger	4239	
Bottom Logged Interval	4228	
Top Logged Interval	700	
Type Fluid In Hole	Chemical	
Salinity, PPM CL	8000	
Density	9.4	
Level	Full	
Max. Rec. Temp. F	118	
Operating Rig Time	4 Hours	
Equipment -- Location	108 Hays	
Recorded By	J. Long	
Witnessed By	Josh Austin	

**Borehole Record**

**Casing Record**

Run No.	Bit	From	To	Size	Wgt.	From	To
1	12.25	00	717	8.625	24#	00	717
2	7.875	717	4240				

<<< Fold Here >>>

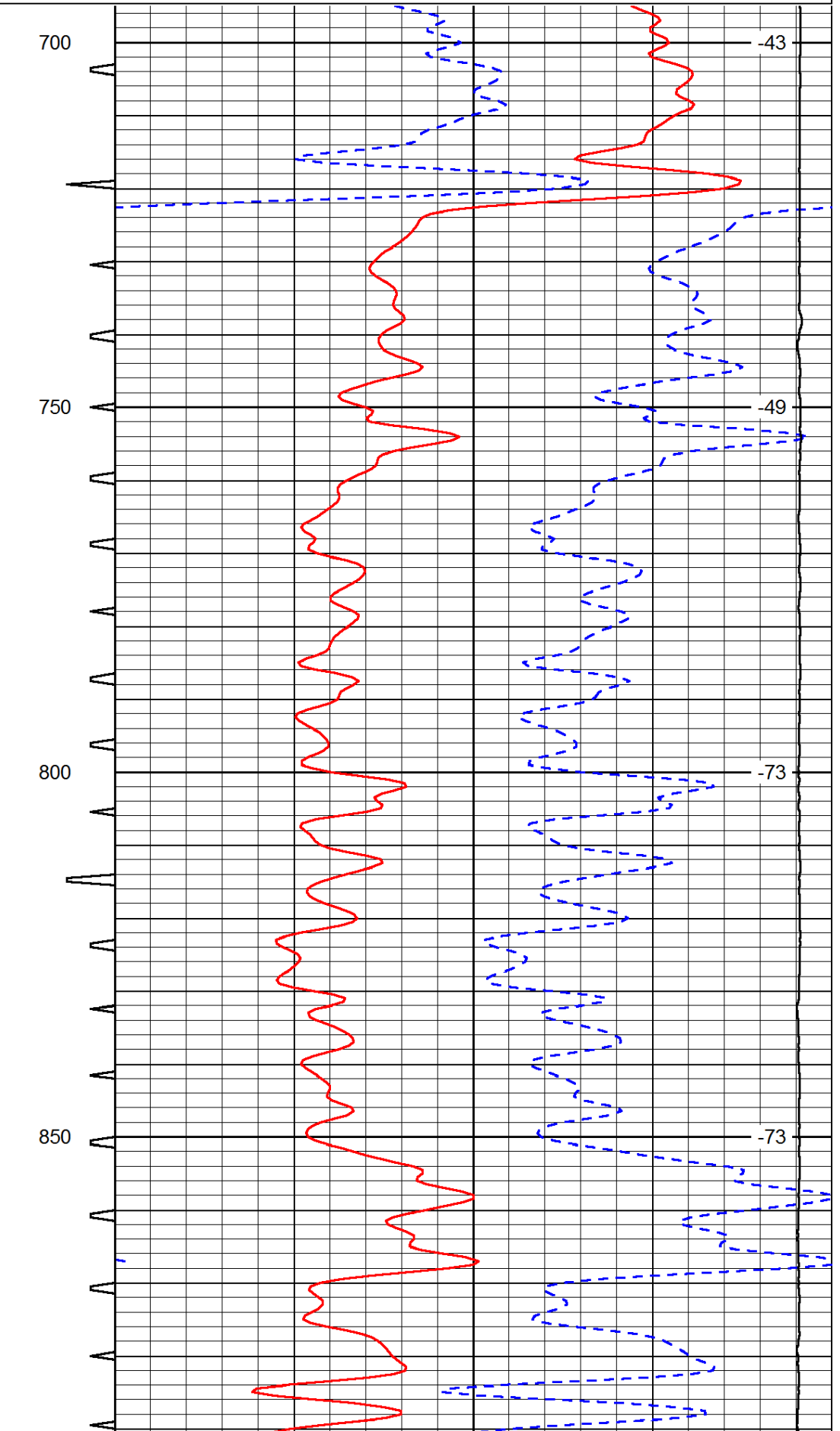
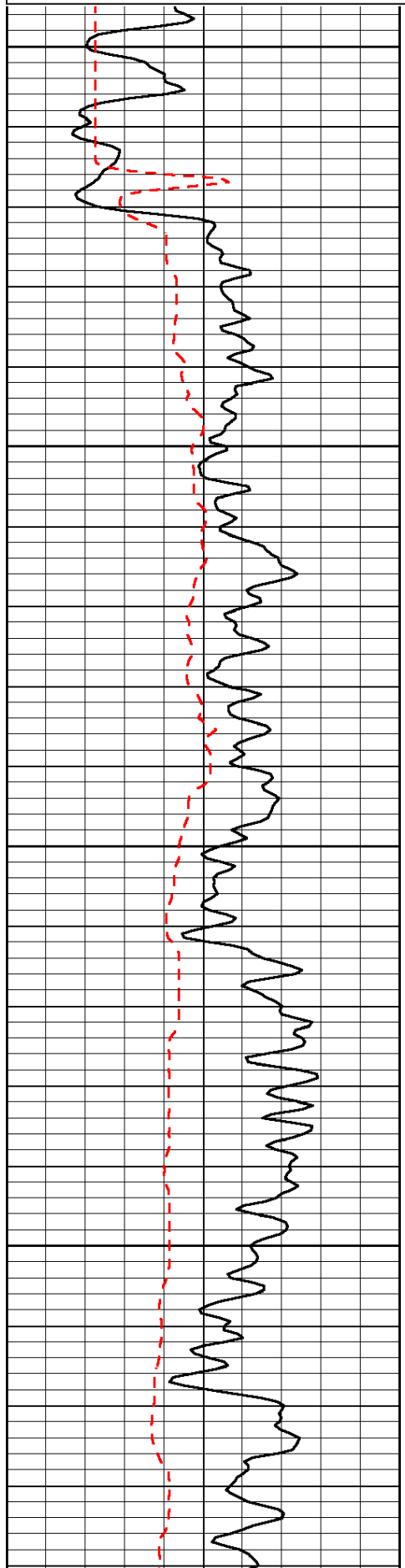
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

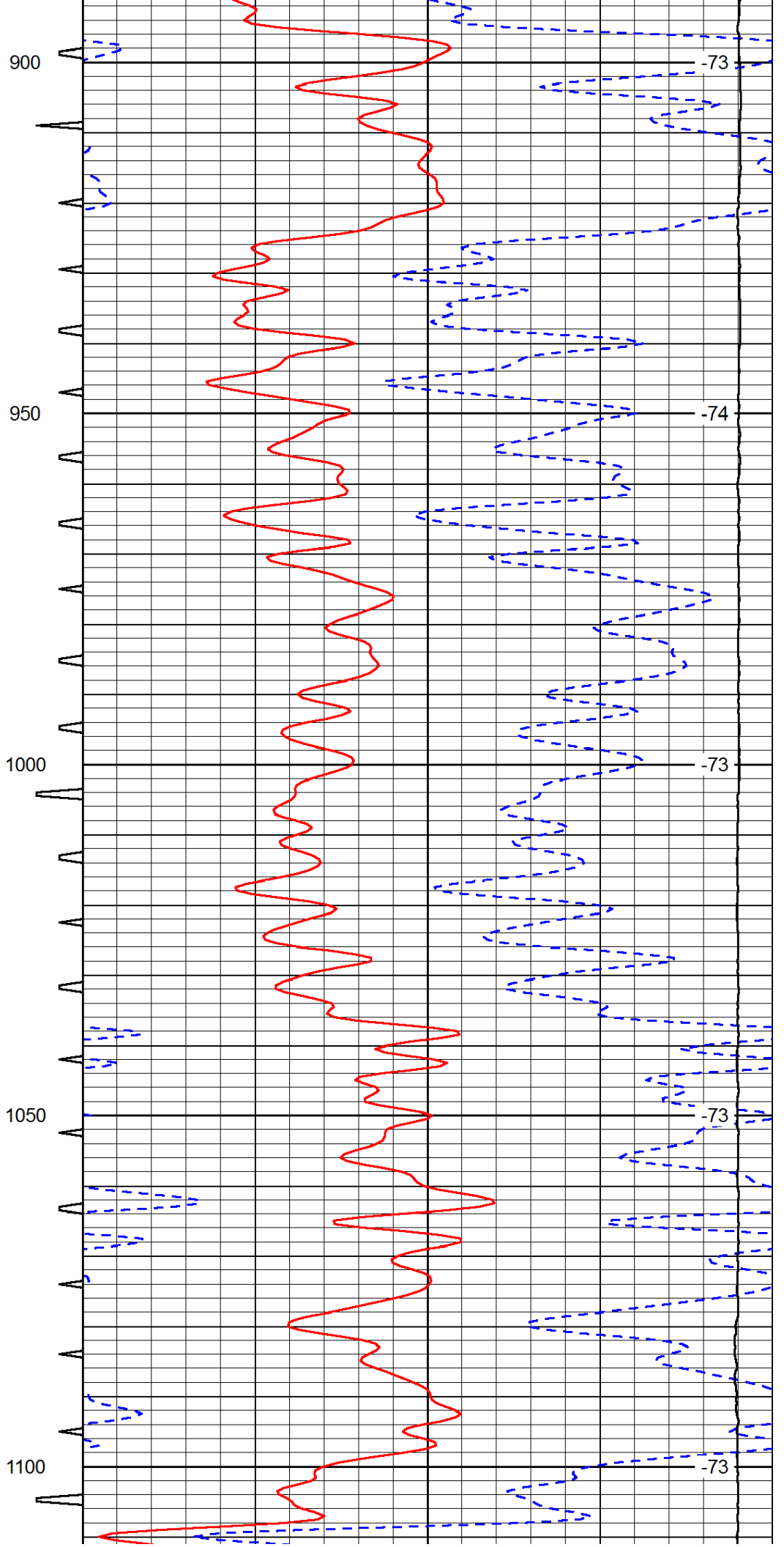
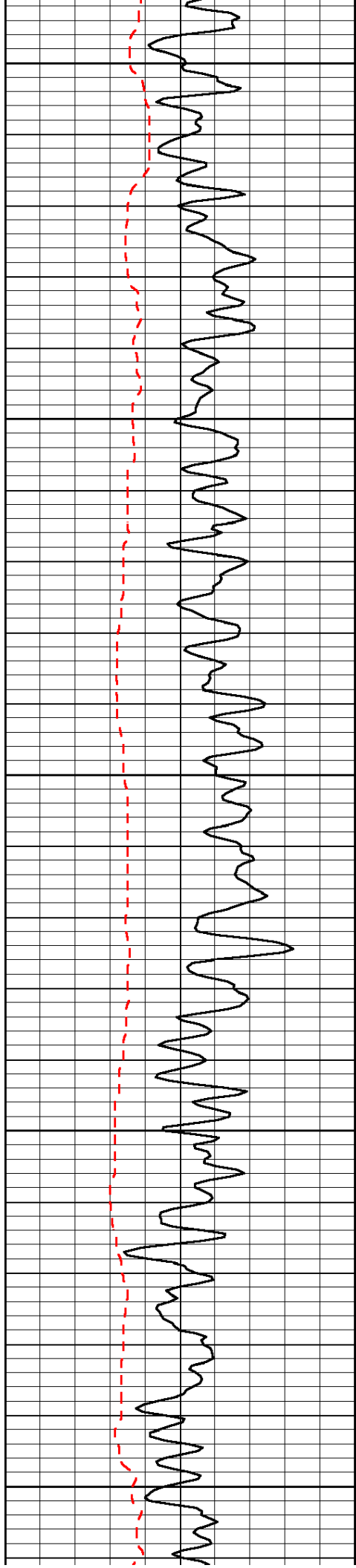
**Comments**

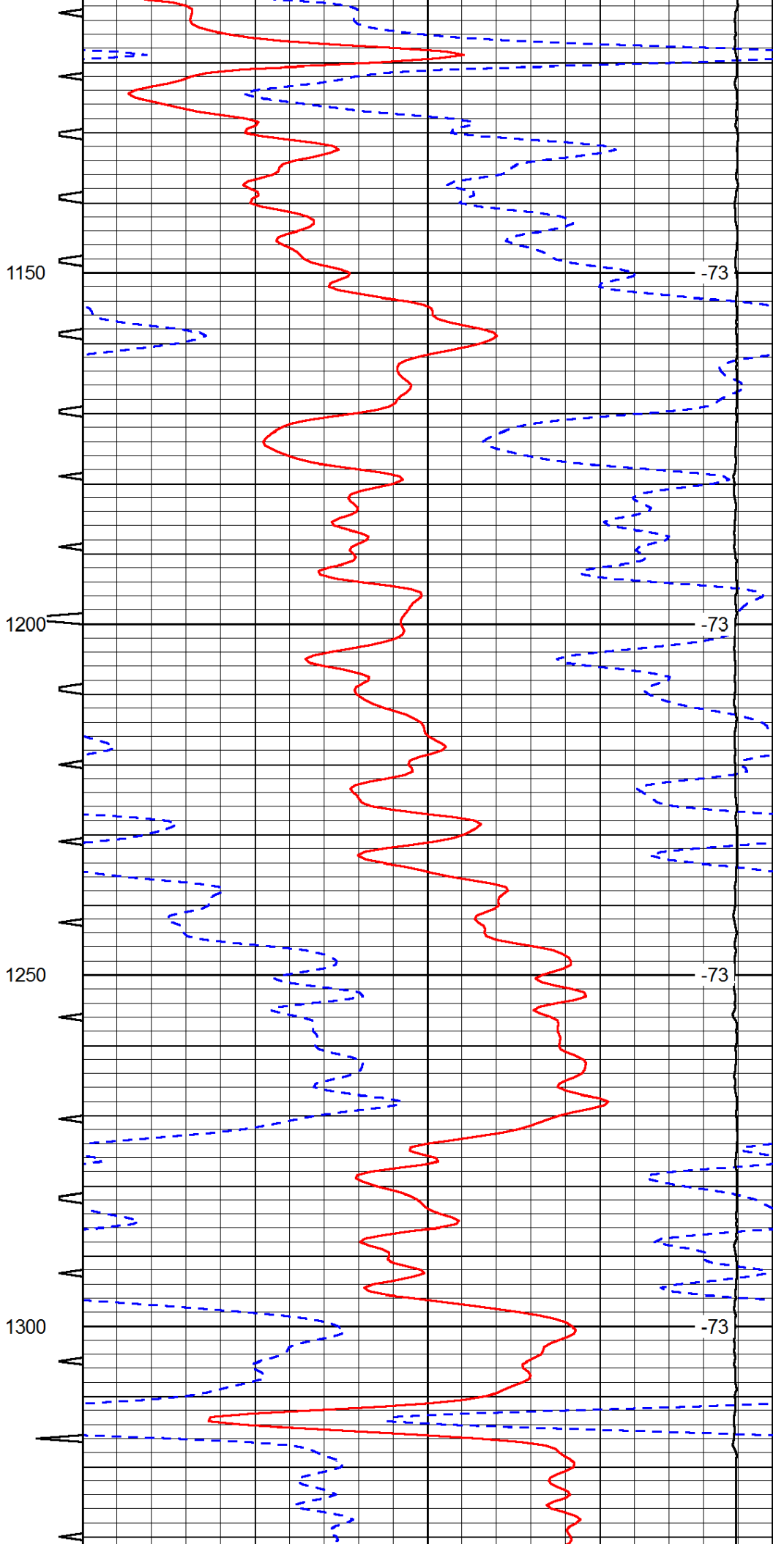
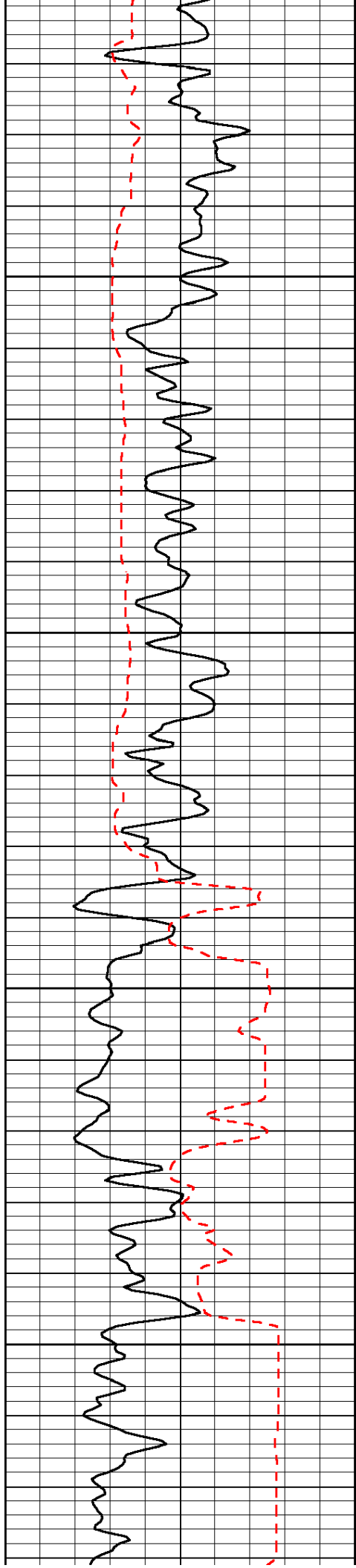
Thank you for using Pioneer Energy Services  
[www.pioneerenergy.com](http://www.pioneerenergy.com)  
 785 625 3858  
 Stafford, 6 South to 60 Road, 3 West, South Into

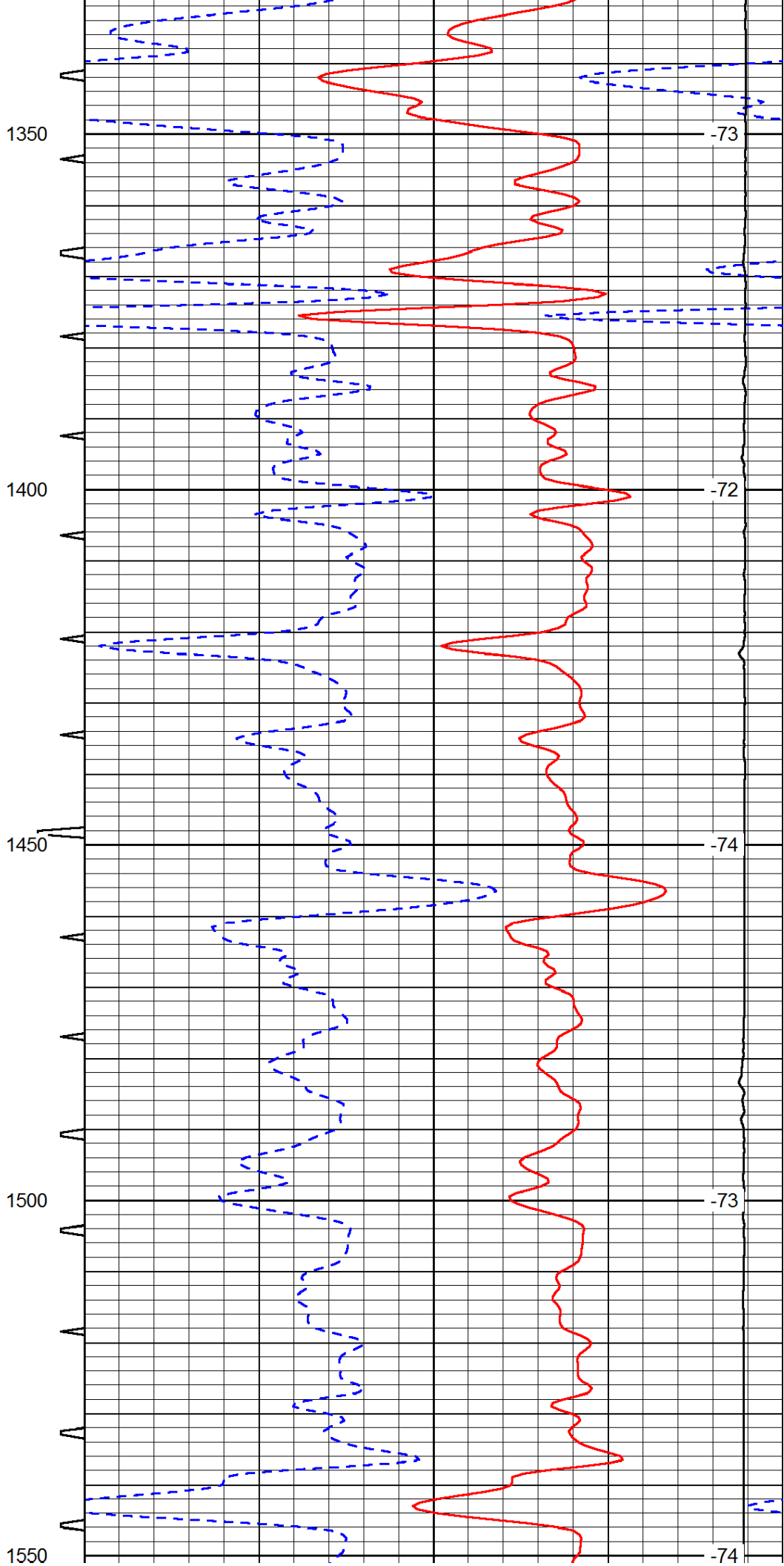
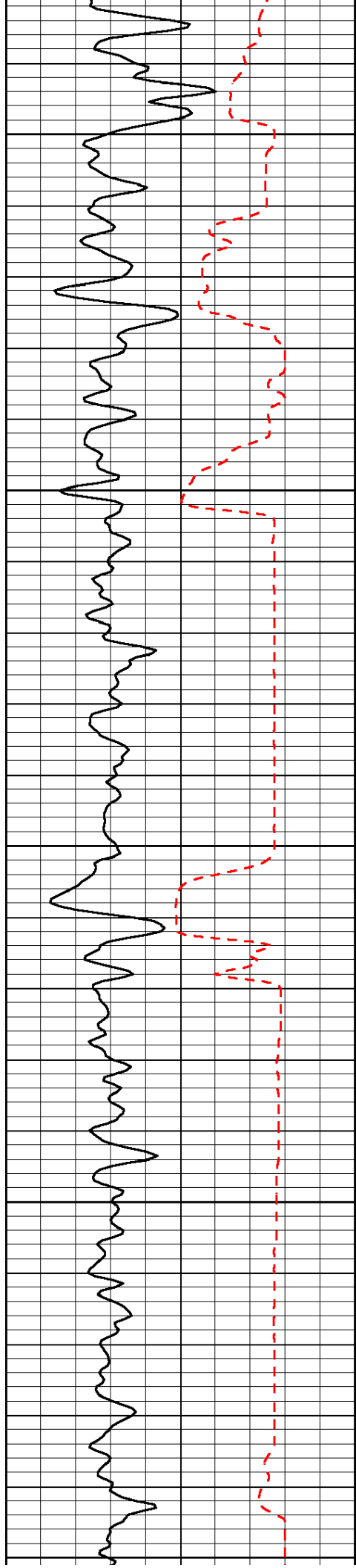
0	Gamma Ray	150	Sonic Int	140	Delta Time (usec/ft)	40
150	Gamma Ray	300	5	0	SPOR	-10
6	Caliper (GAPI)	16		15000	LTEN (lb)	0

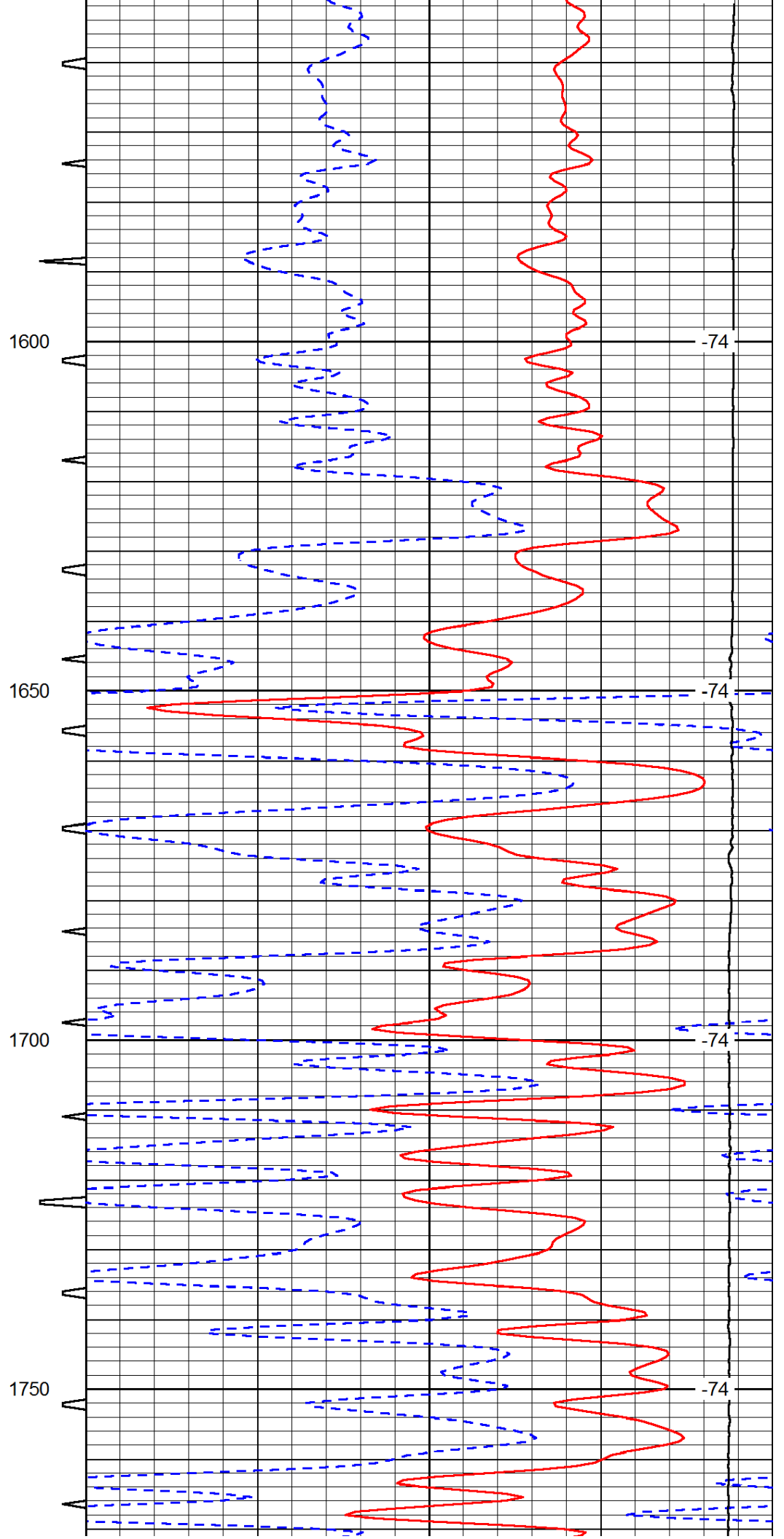
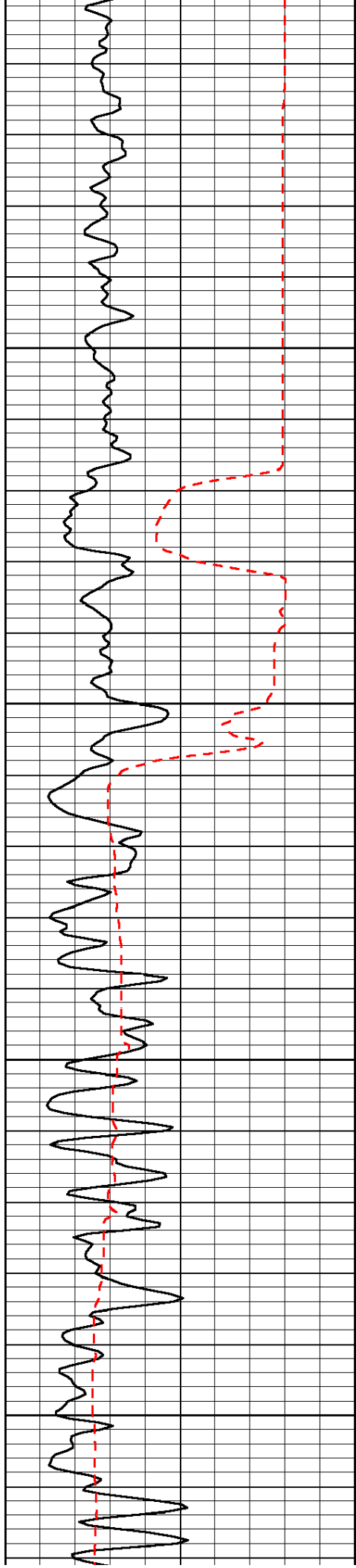
LSPD

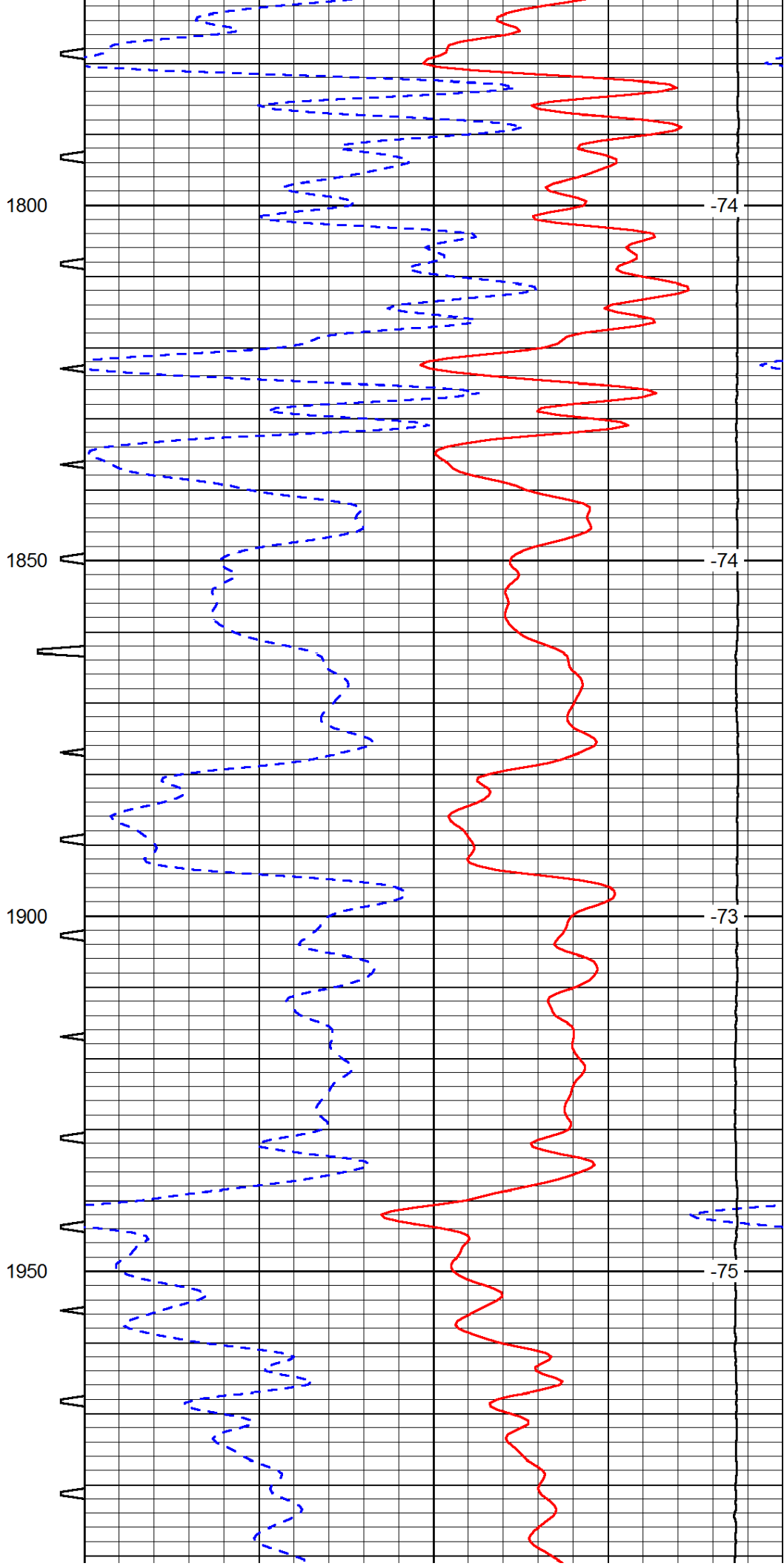
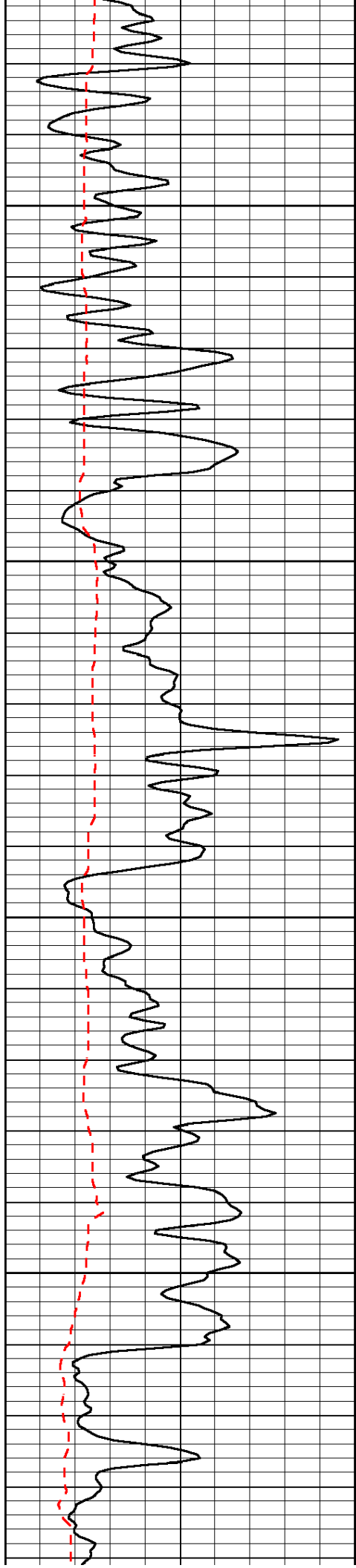


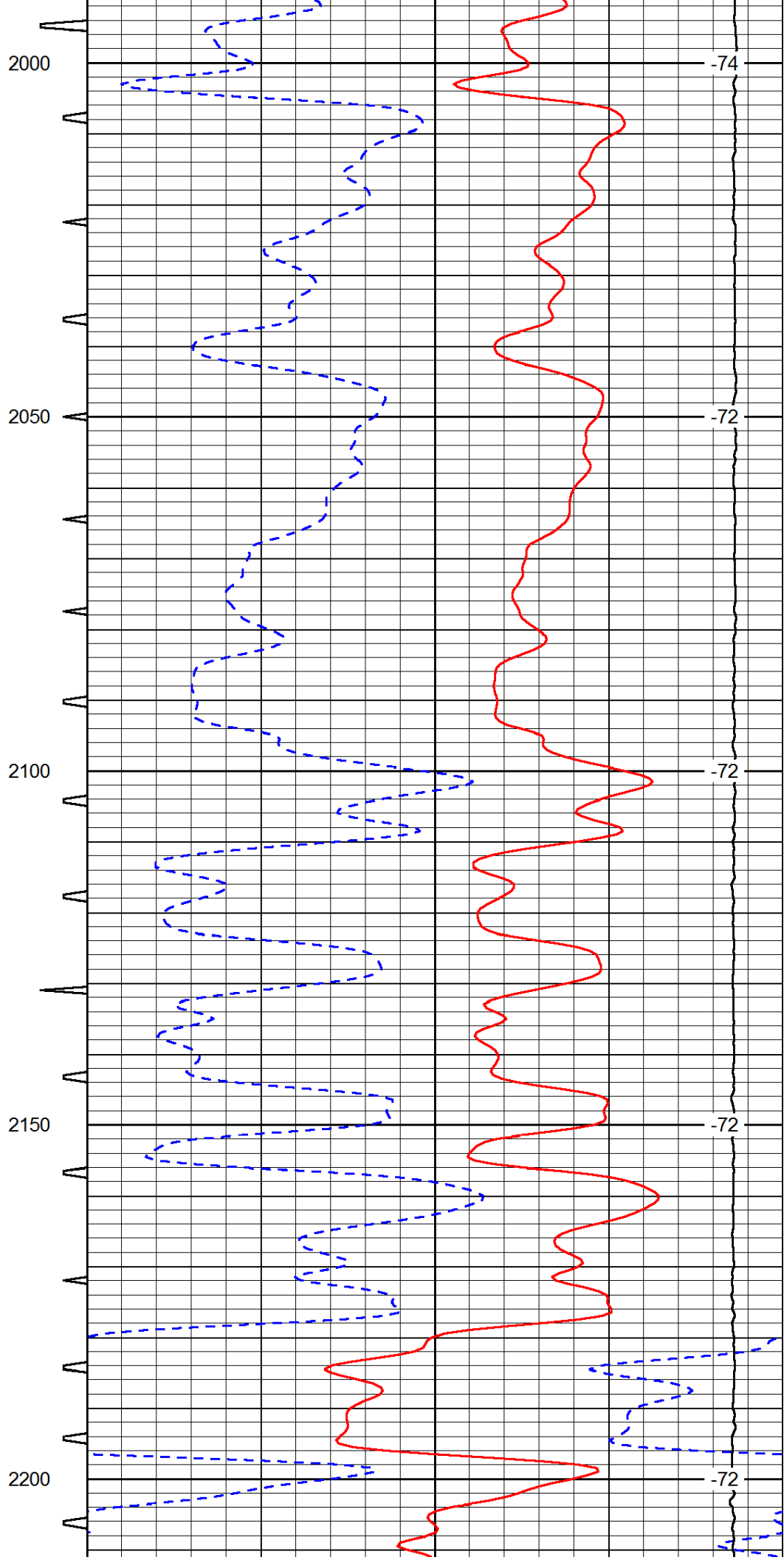
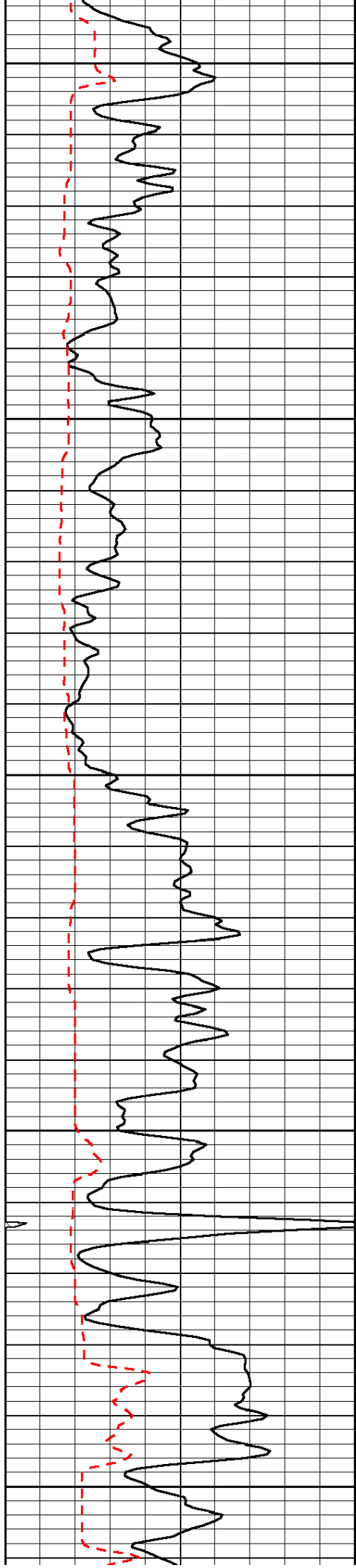




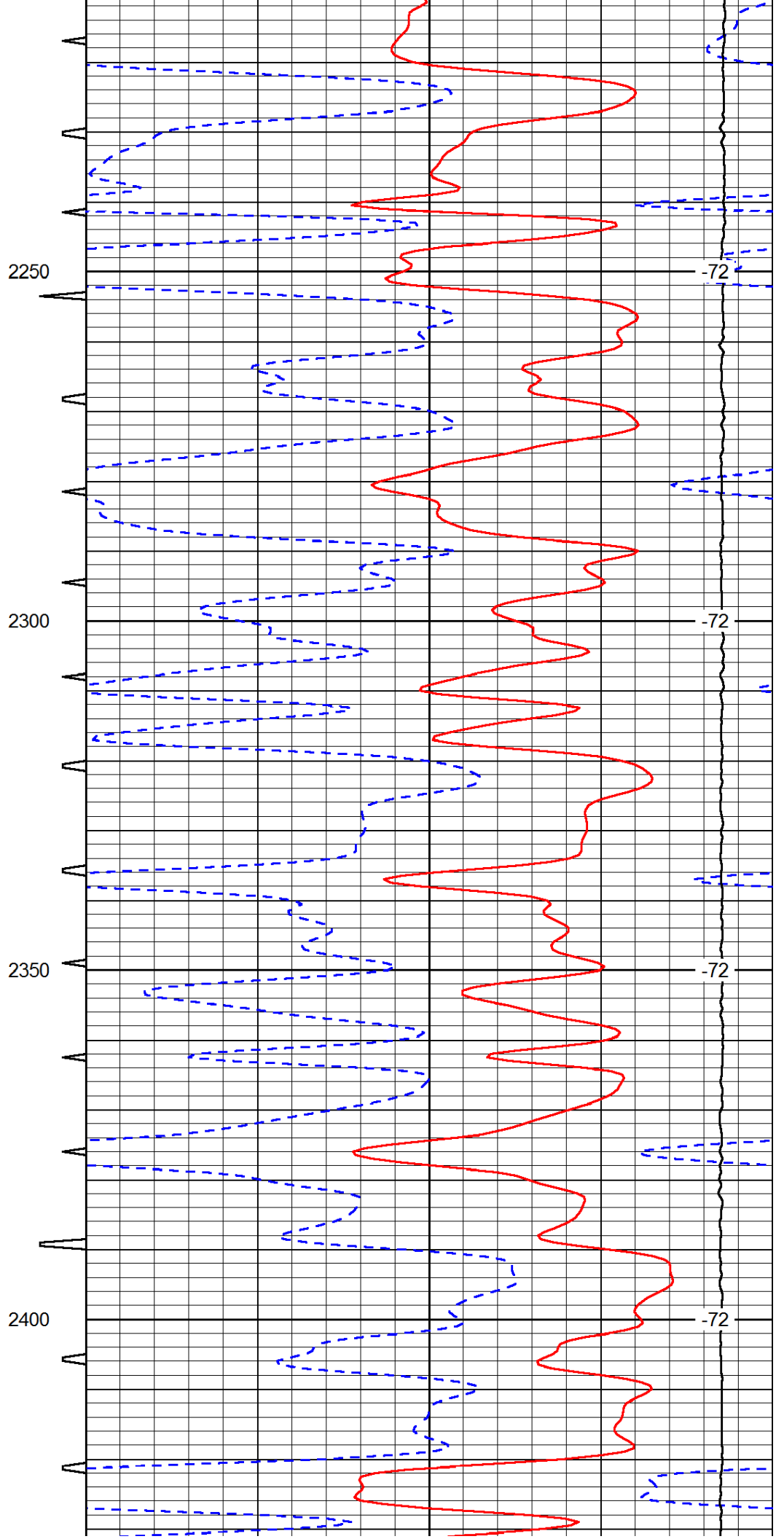
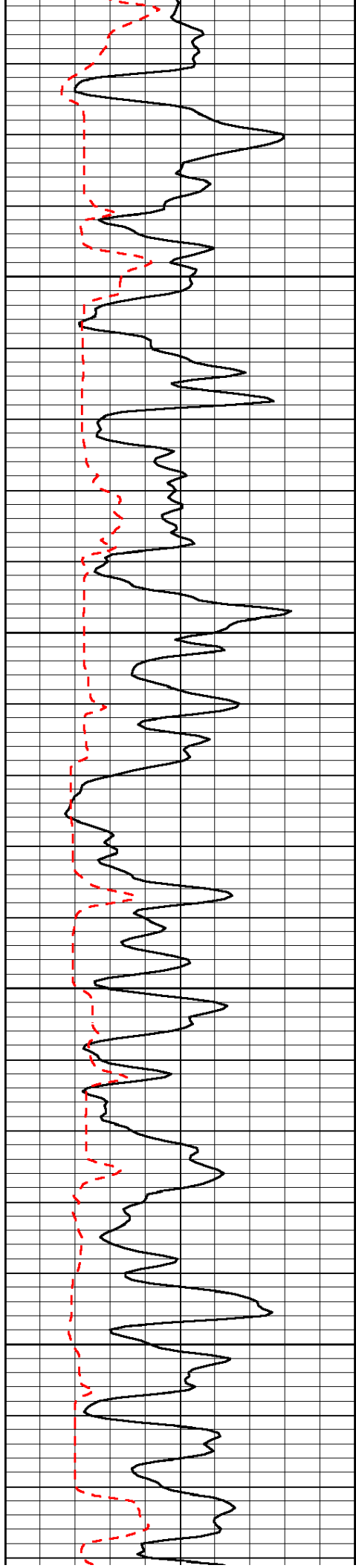


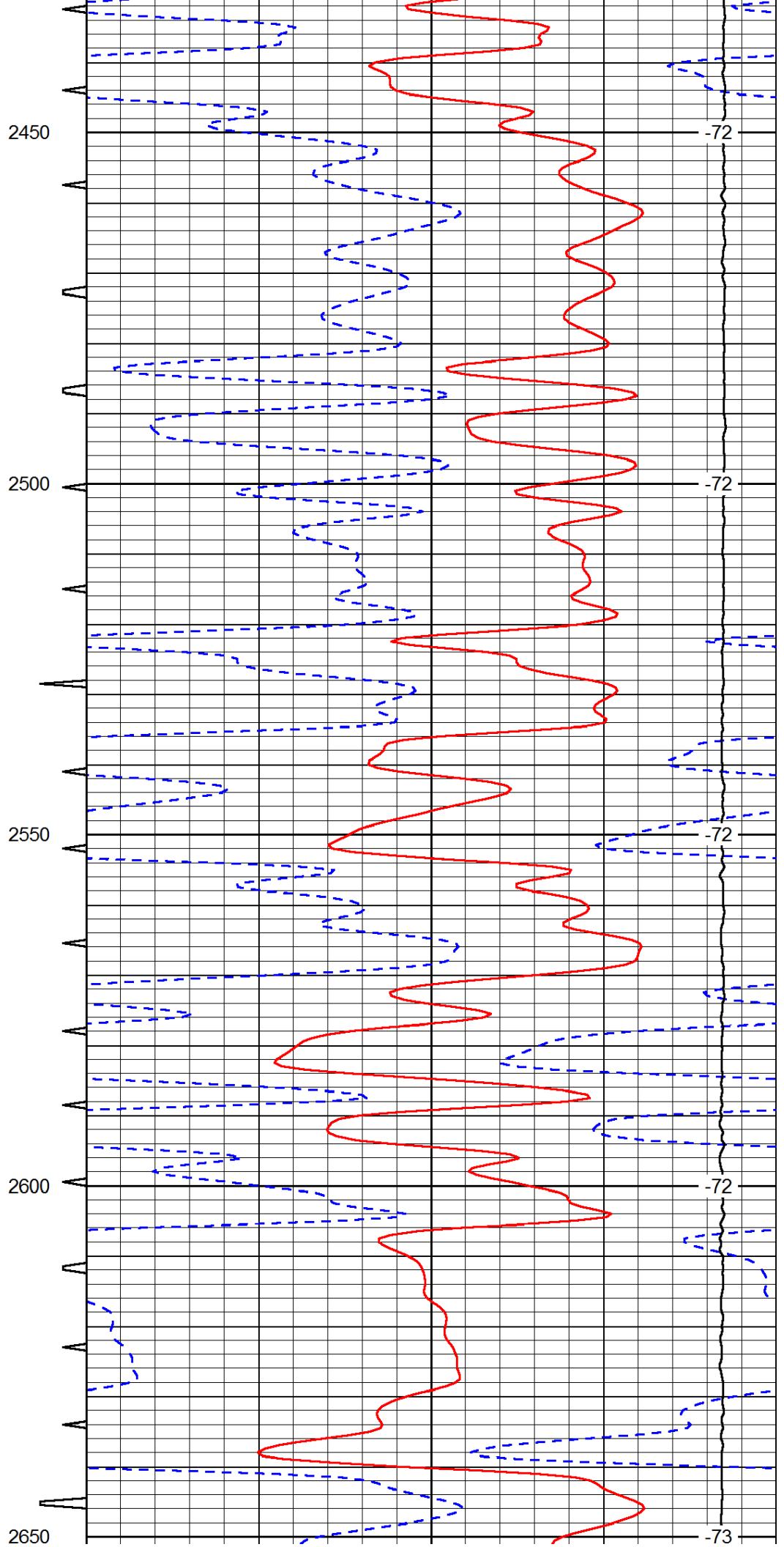
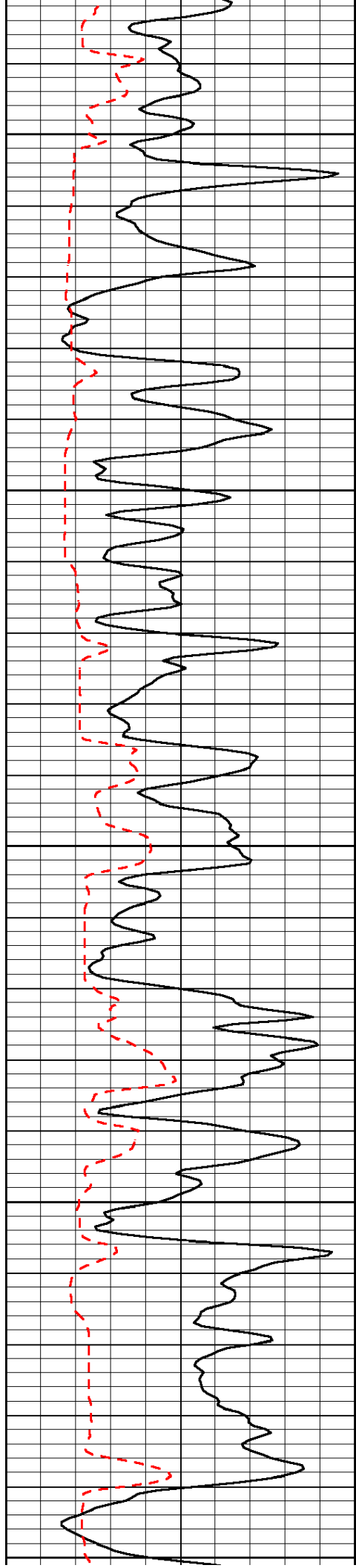


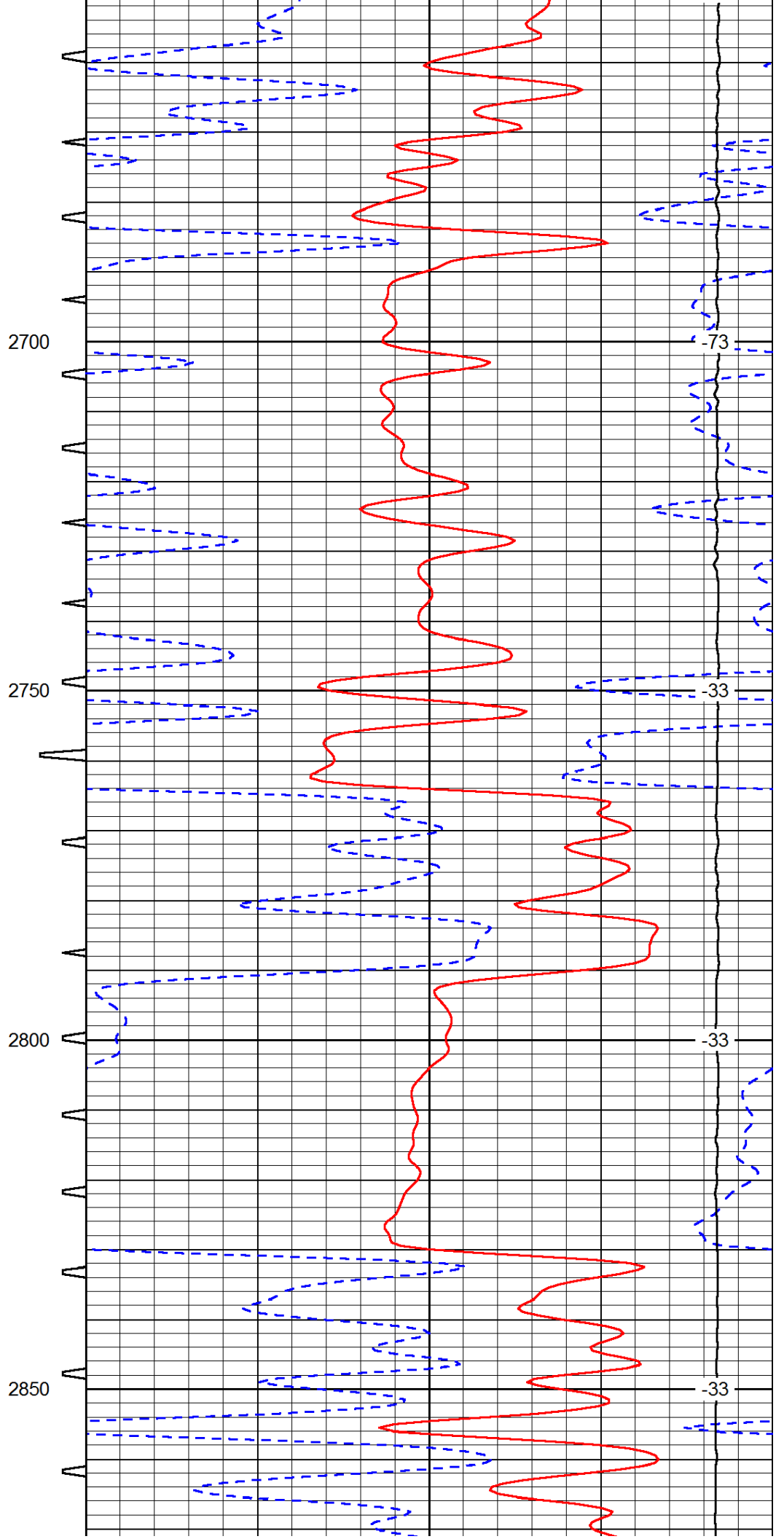
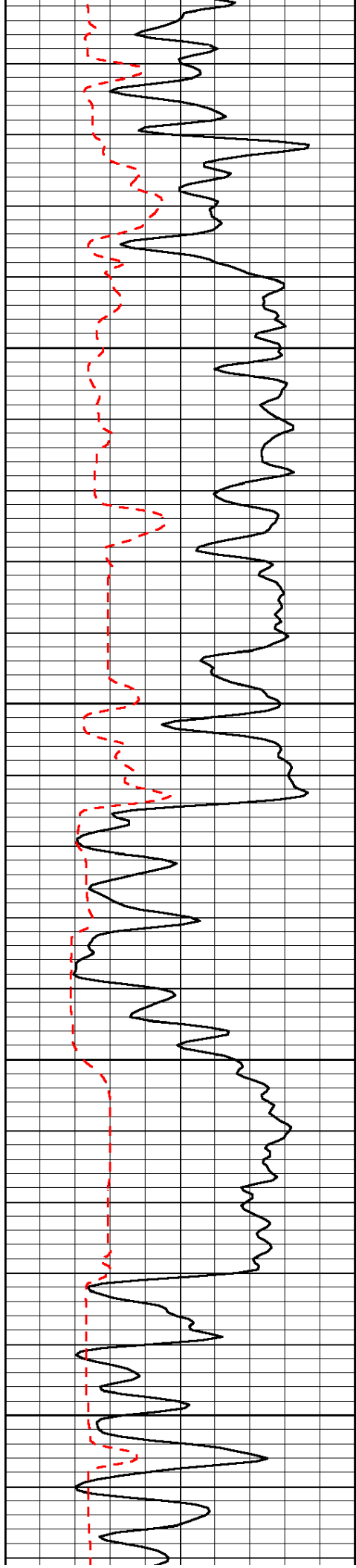


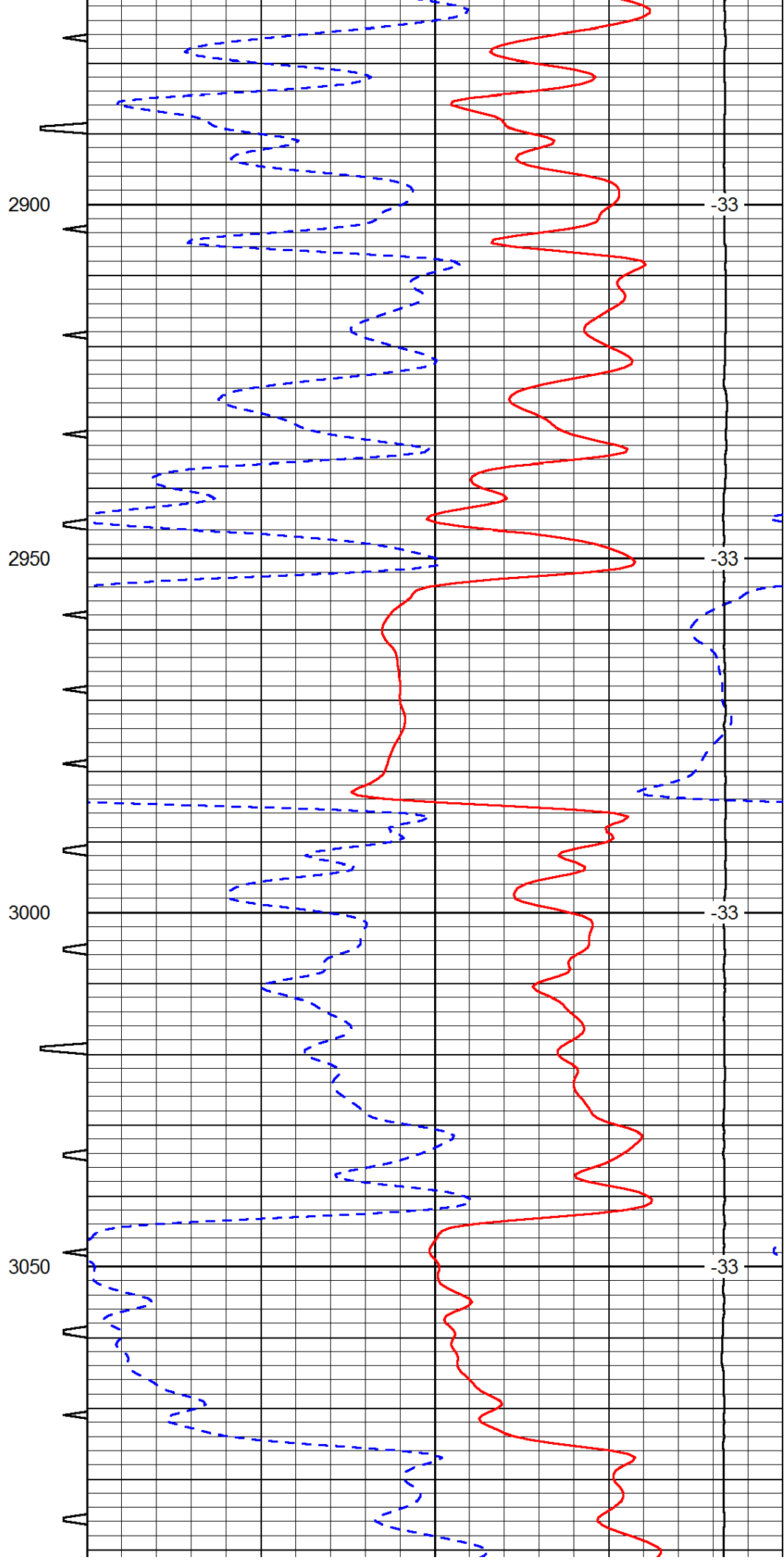
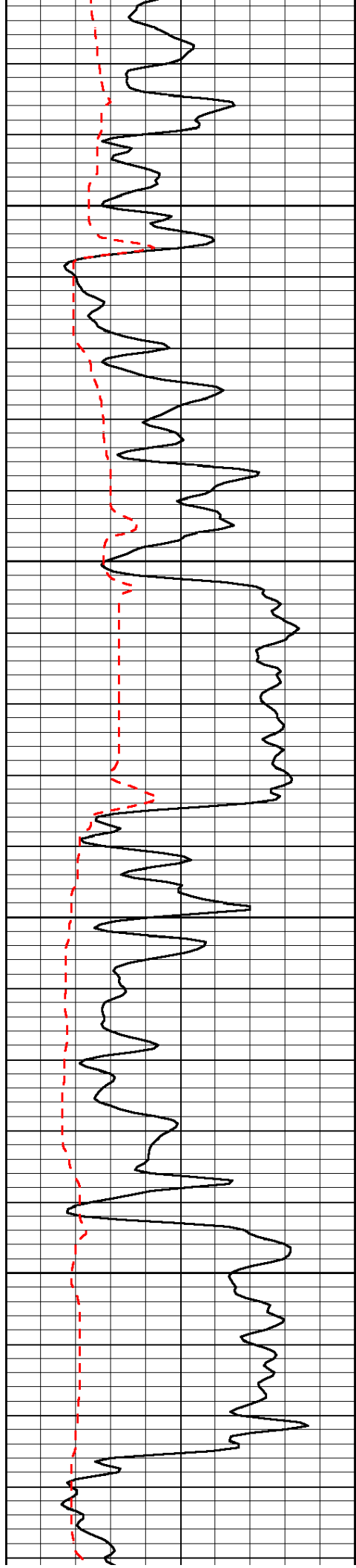


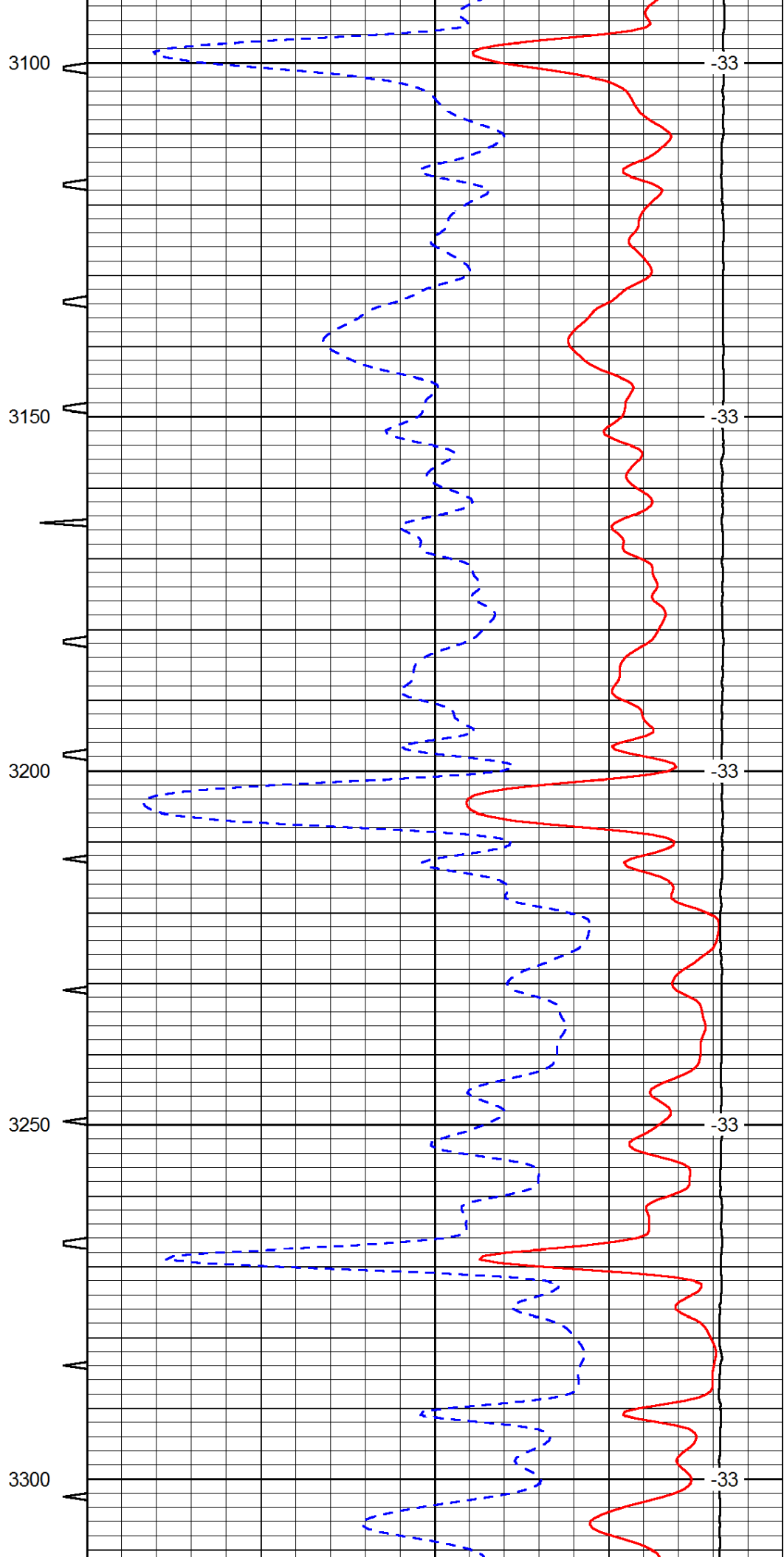
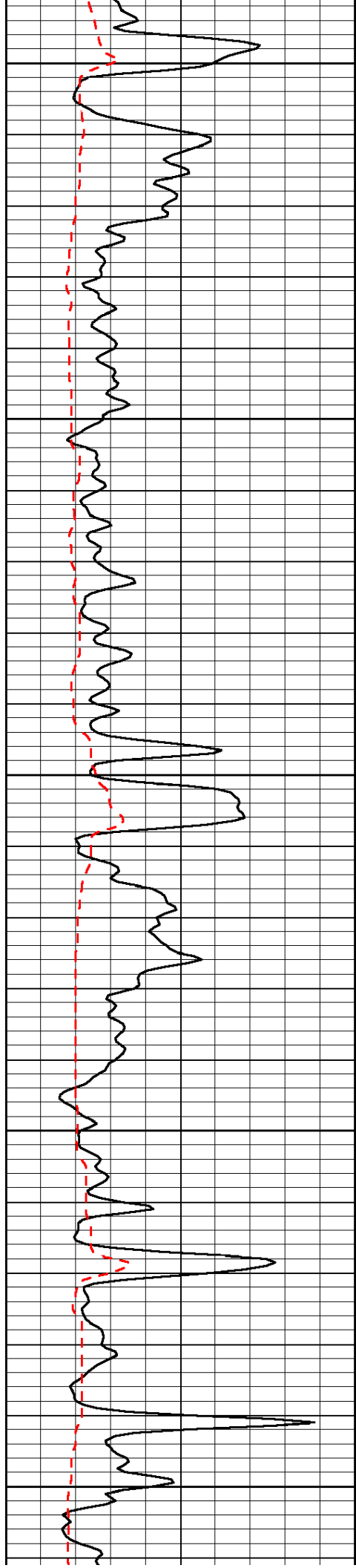


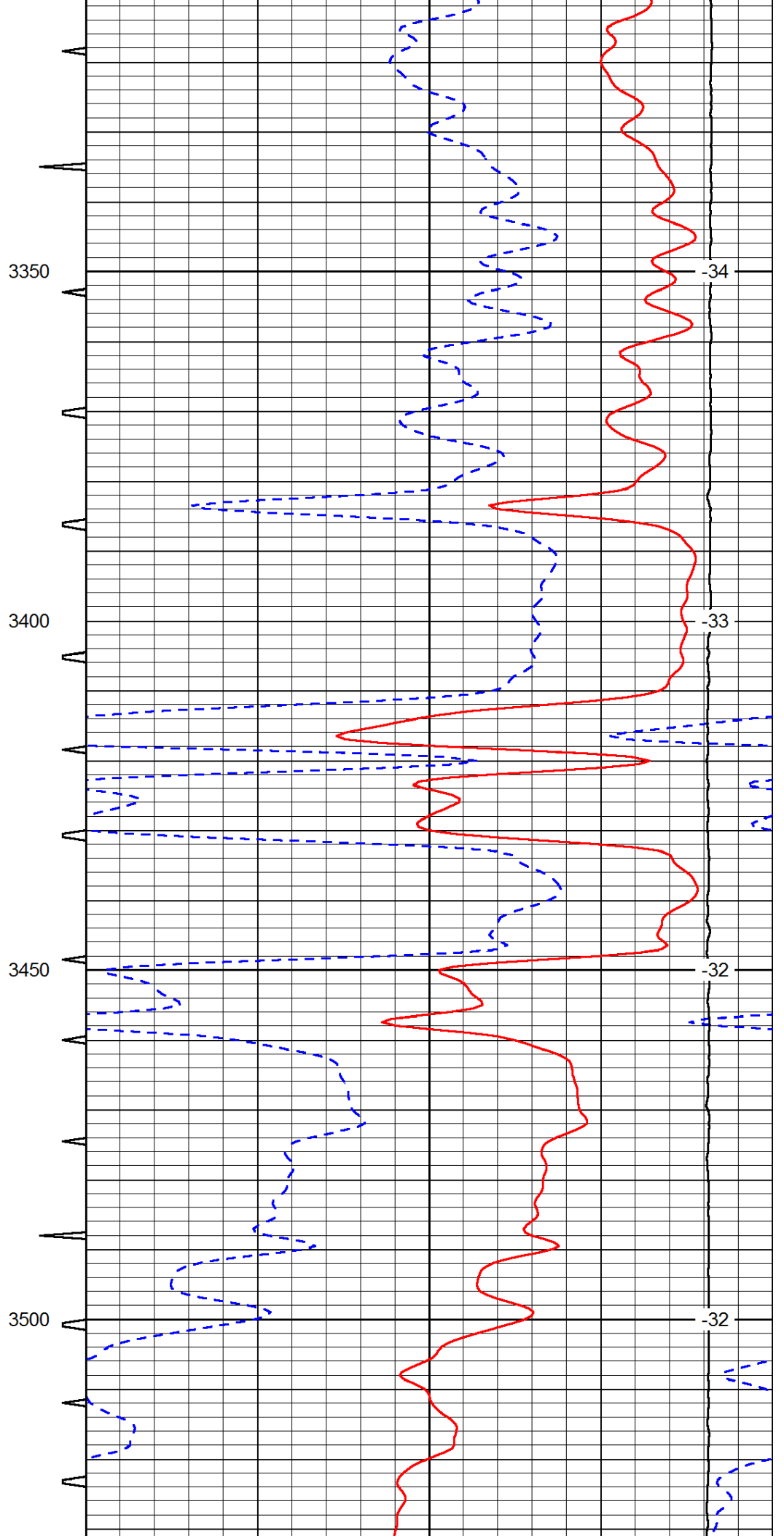
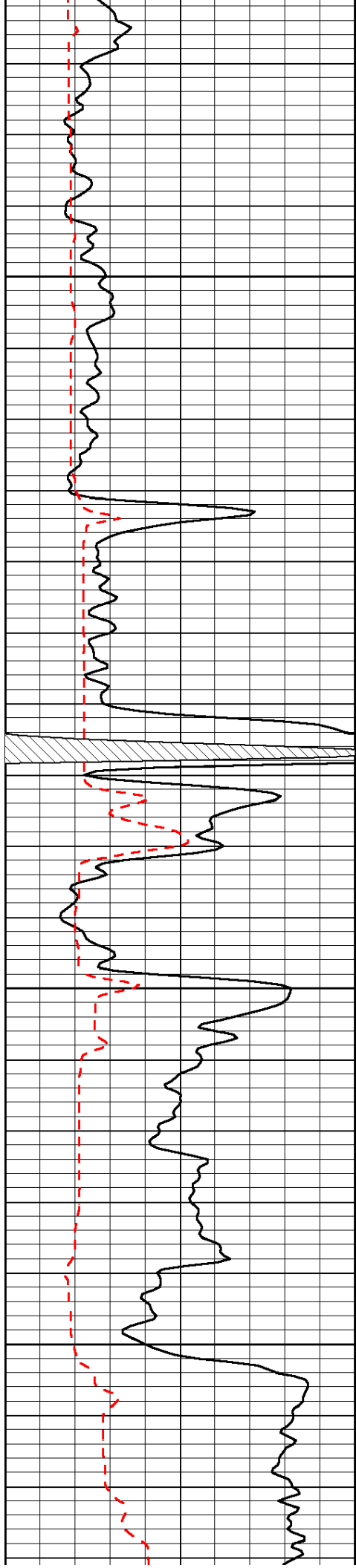


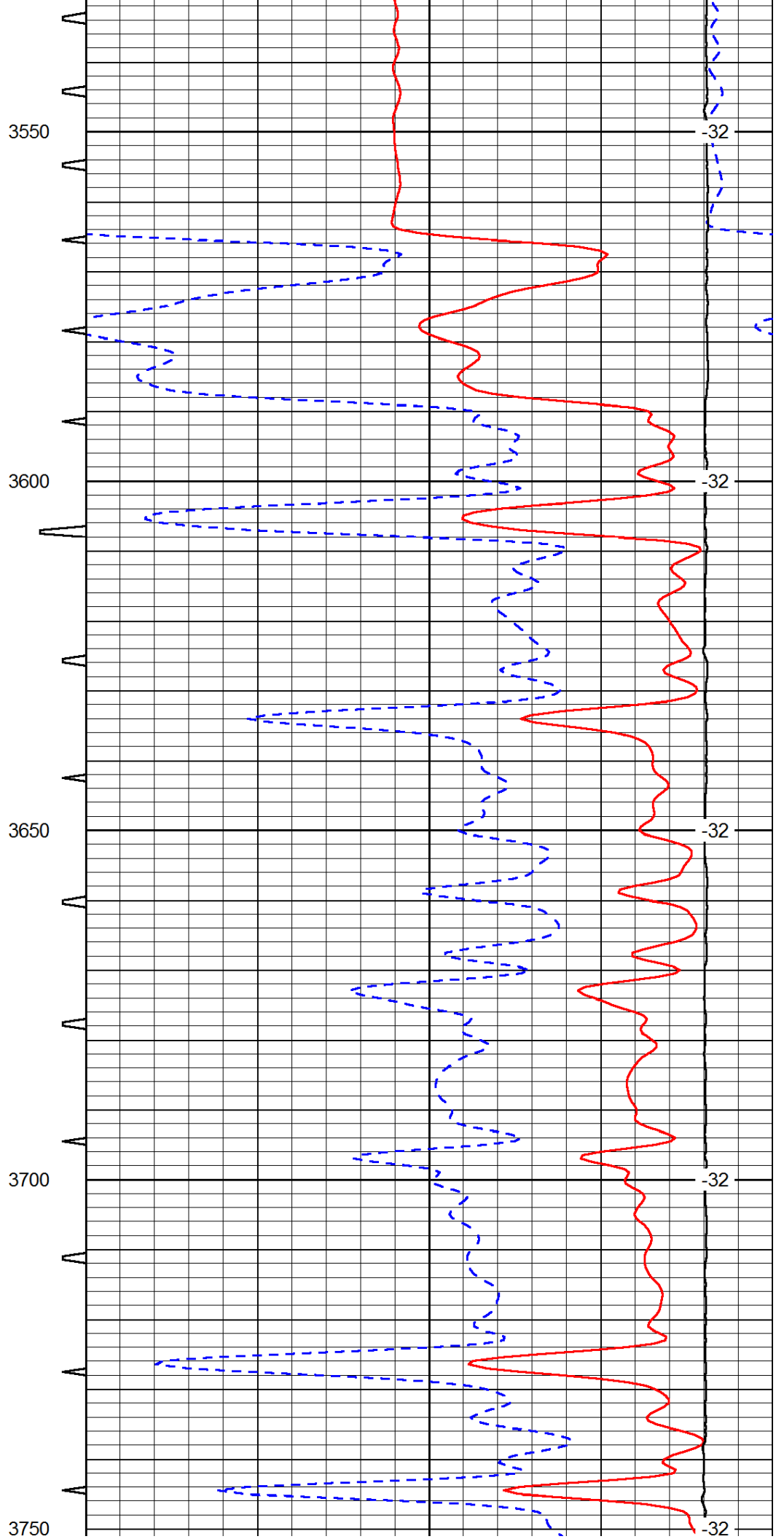
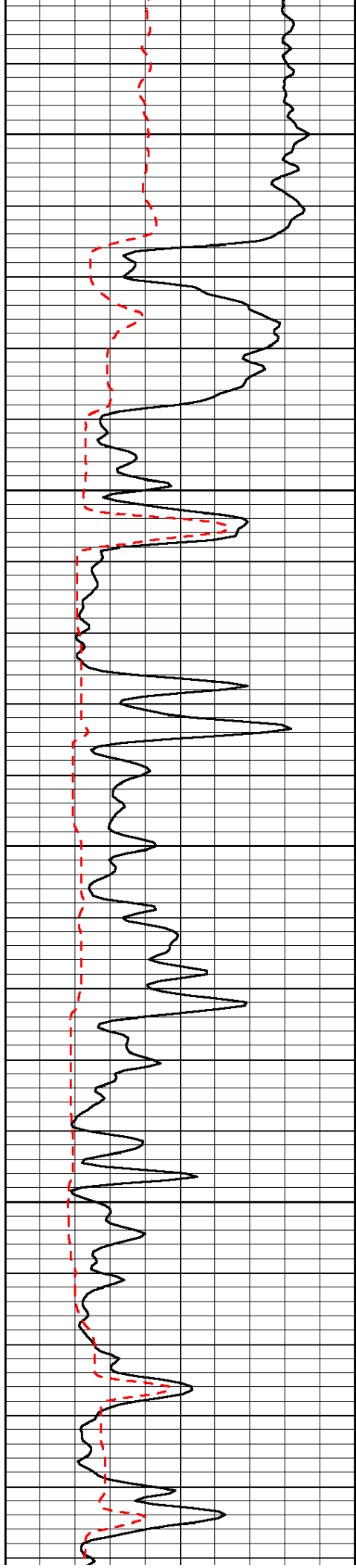


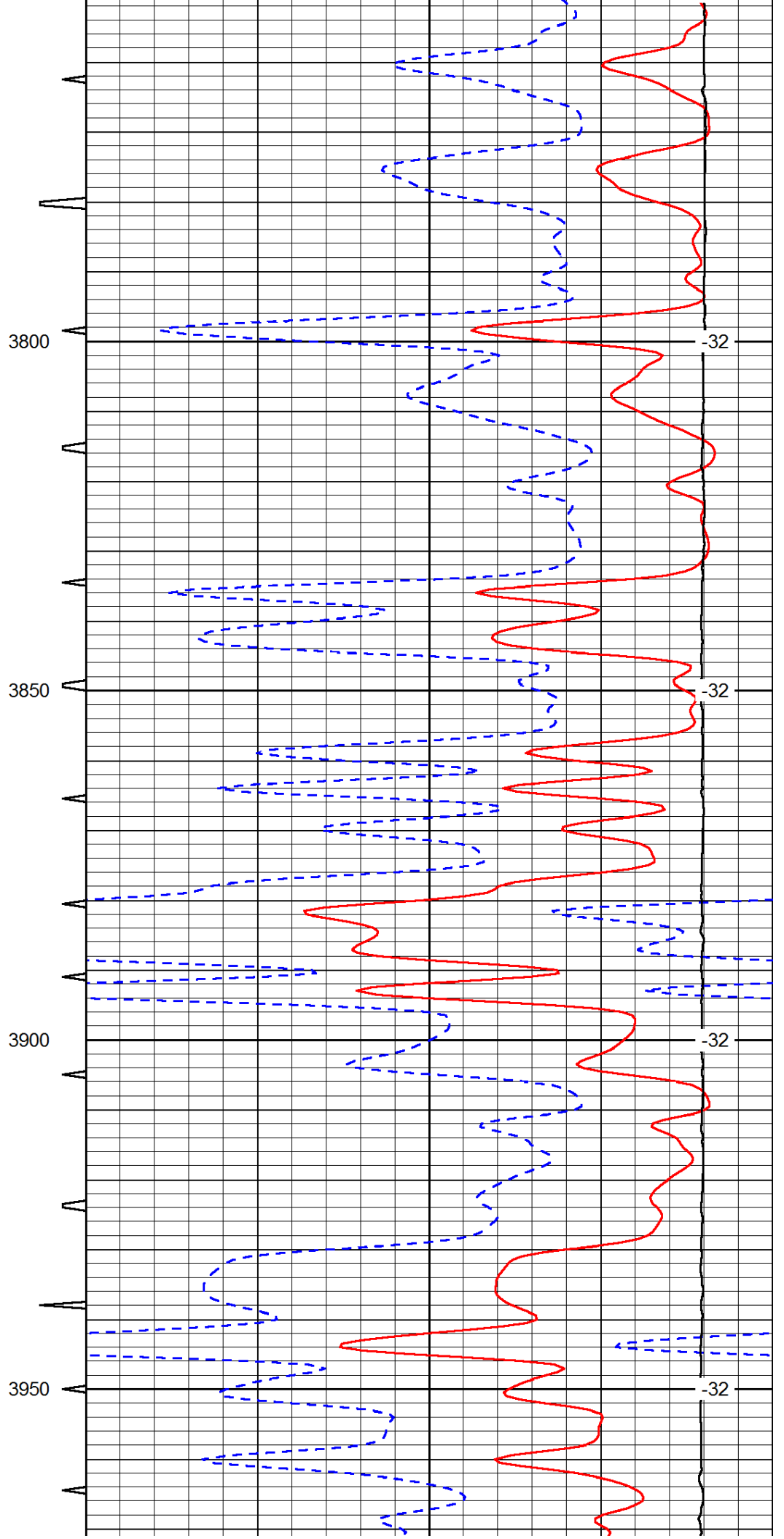
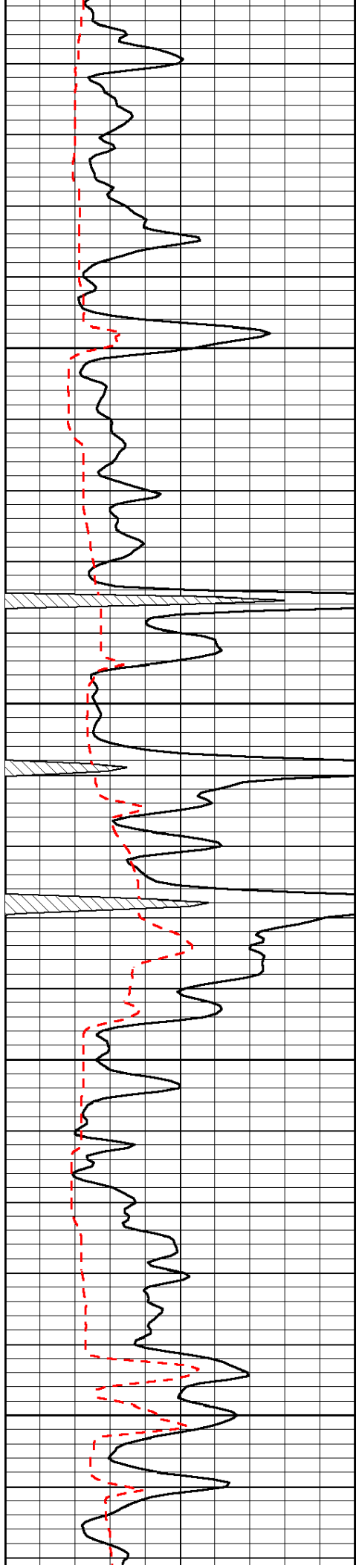




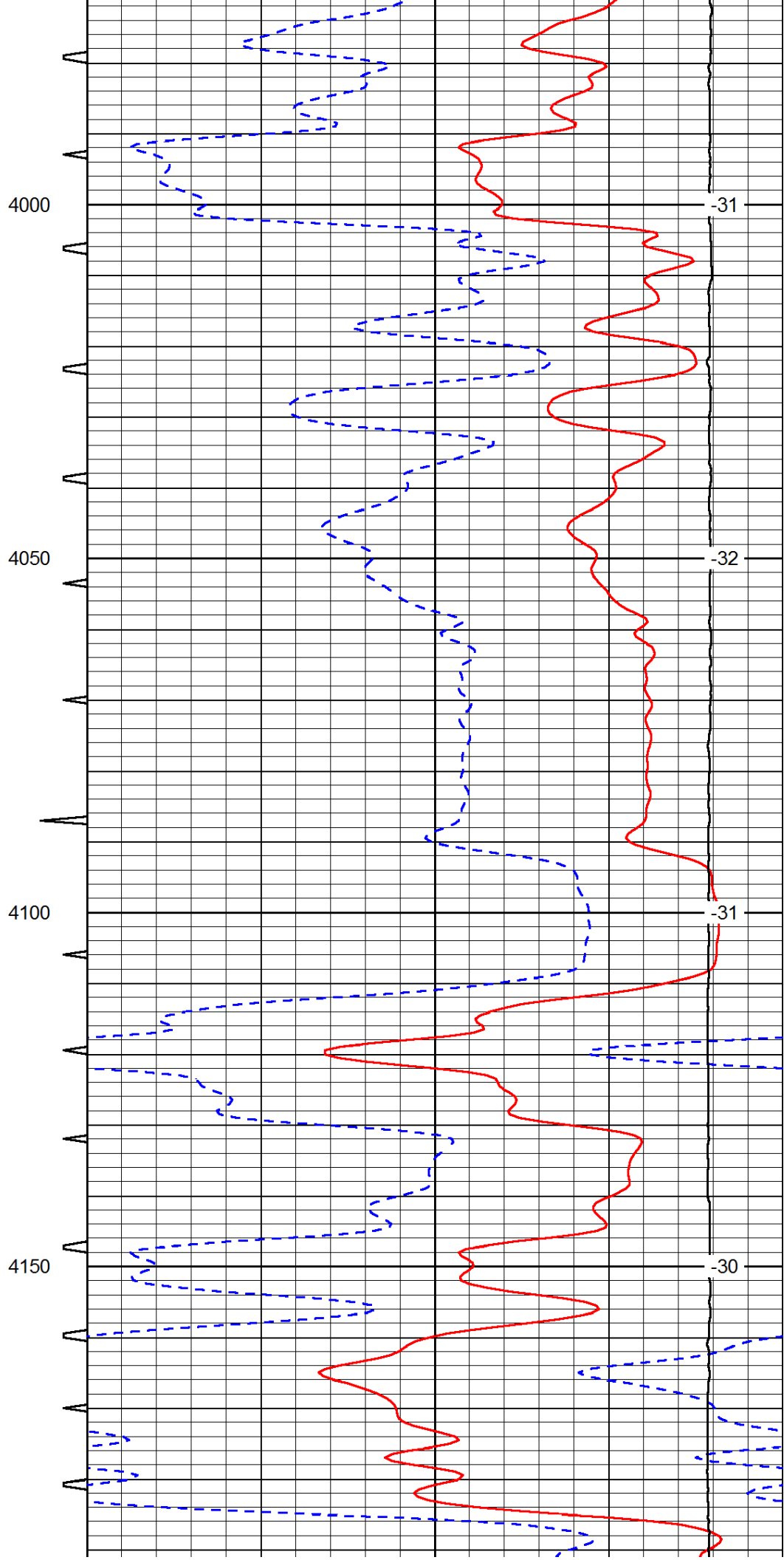
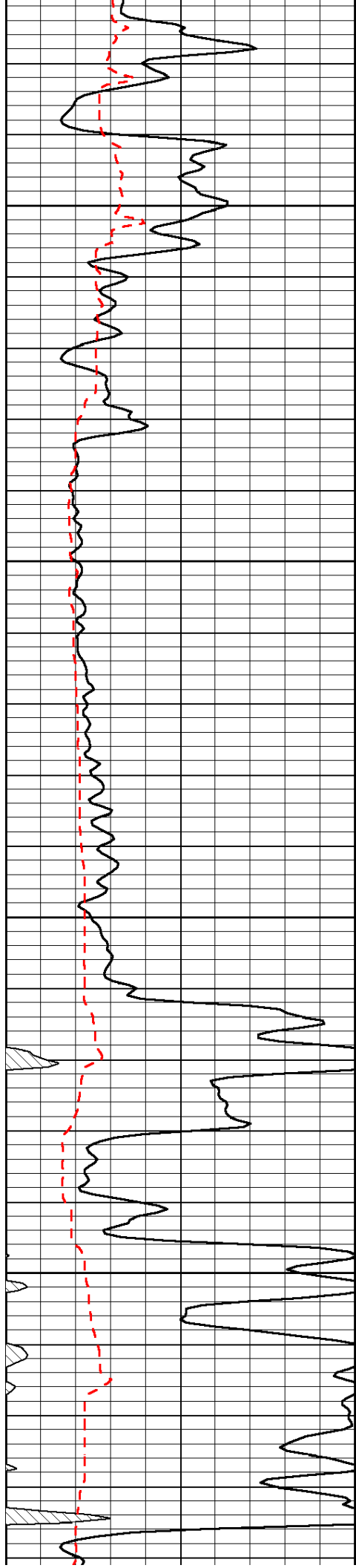


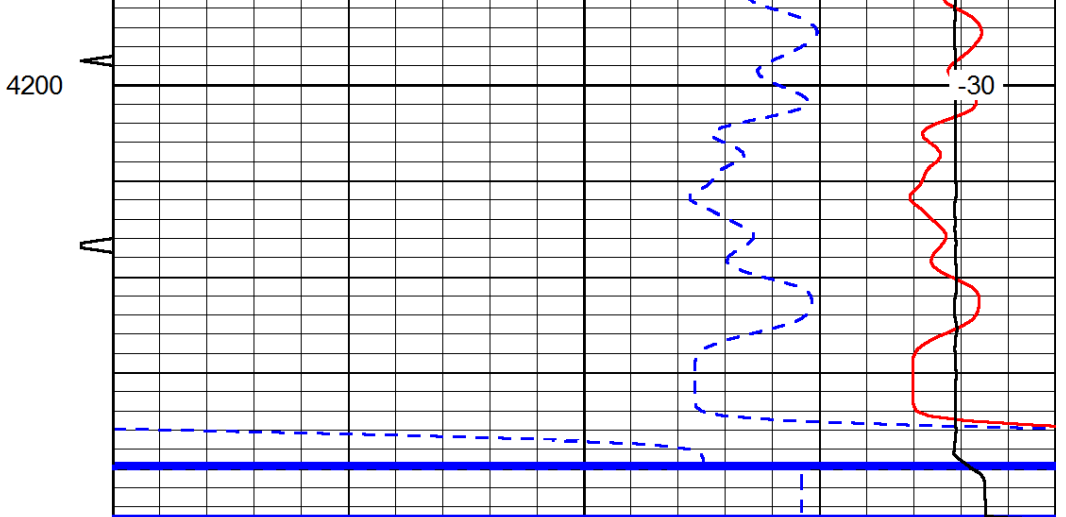












0	Gamma Ray	150	Sonic Int	140	Delta Time (usec/ft)	40
150	Gamma Ray	300	5	0	SPOR	-10
6	Caliper (GAPI)	16		15000	LTEN (lb)	0

LSPD