



Pioneer Energy Services

**Borehole Compensated  
Sonic Log**

15-051-26,441-00-00

API No.

**Company** Murfin Drilling Company, Inc.  
**Well** Braun #1-36  
**Field** Wildcat  
**County** Ellis  
**State** Kansas

**Location** W/2 SW SE SW  
 330' FSL 1500' FWL  
**Sec:** 36 **Twp:** 15S **Rge:** 19W

Other Services  
 CNL/CDL  
 MEL/DIL

**Permanent Datum** Ground Level Elevation 1980  
**Log Measured From** Kelly Bushing 11 Ft. Above Perm. Datum  
**Drilling Measured From** Kelly Bushing

**Elevation**  
 K.B. 1991  
 D.F. 1991  
 G.L. 1980

Date	1/13/2013
Run Number	Two
Type Log	BHC Sonic
Depth Driller	3660
Depth Logger	3658
Bottom Logged Interval	3647
Top Logged Interval	1150
Type Fluid In Hole	Chemical
Salinity, PPM CL	10,000
Density	9.5
Level	Full
Max. Rec. Temp. F	113
Operating Rig Time	5 Hours
Equipment -- Location	15 Hays
Recorded By	D Kerr
Witnessed By	Robert Hendrix

Borehole Record				Casing Record			
Run No.	Bit	From	To	Size	Wgt.	From	To
1	12.25	00	1192	8.625	24#	00	1192
2	7.875	1192	3660				

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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.

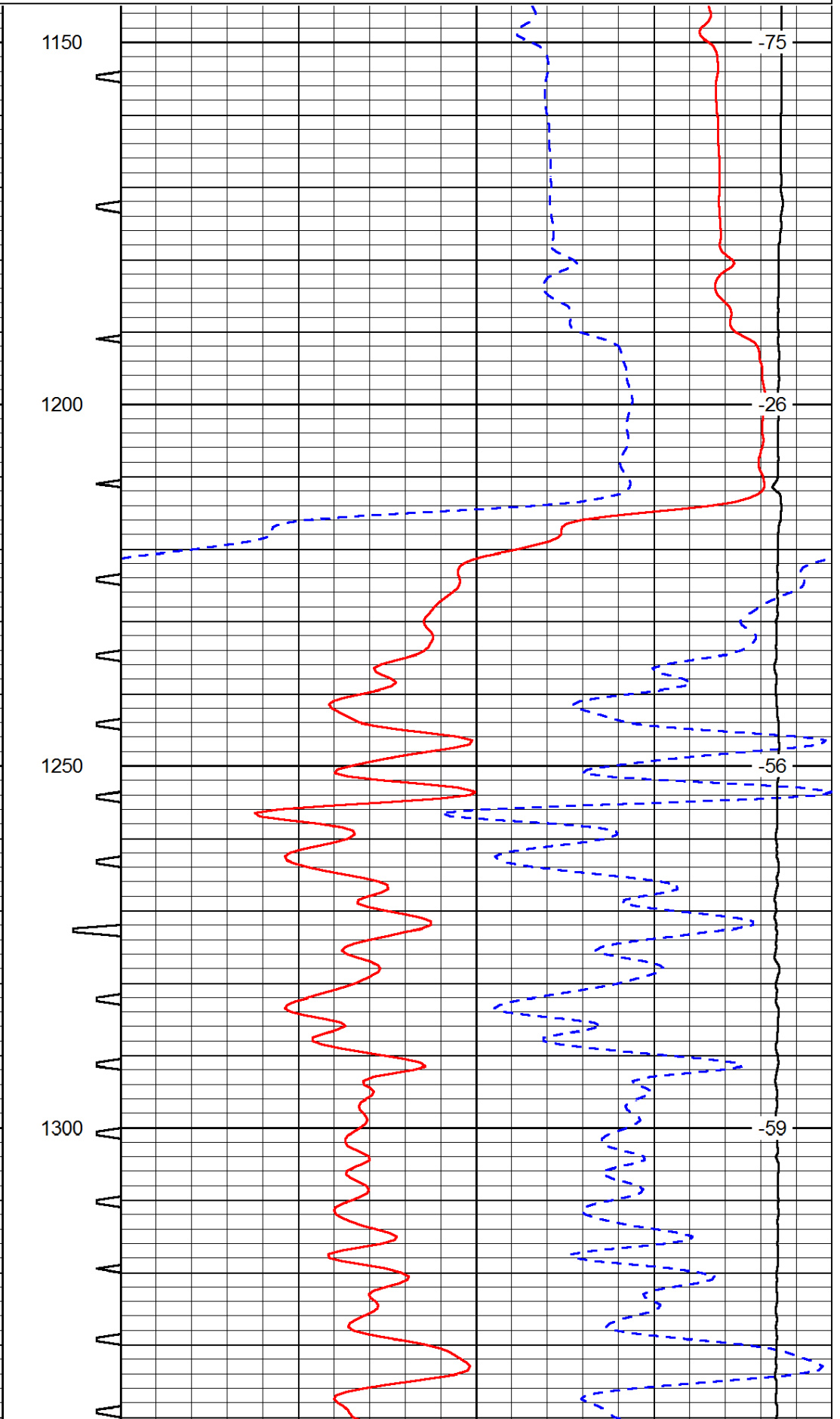
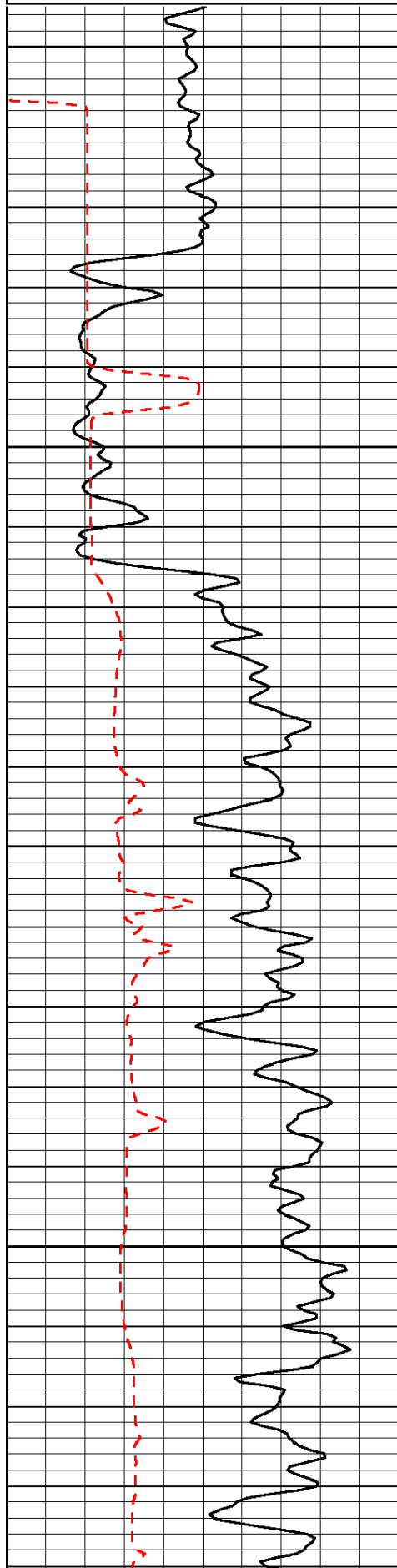
**Comments**

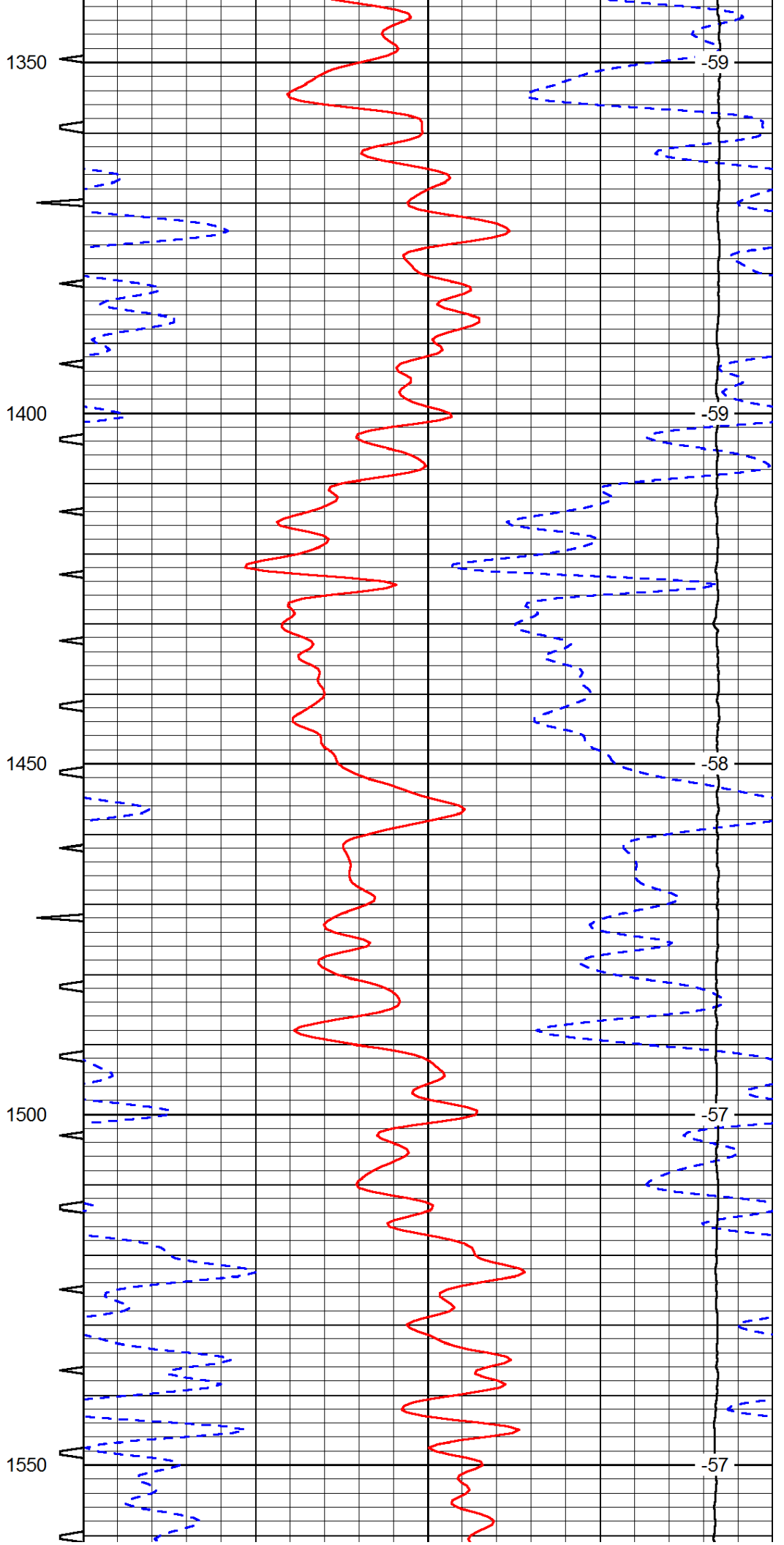
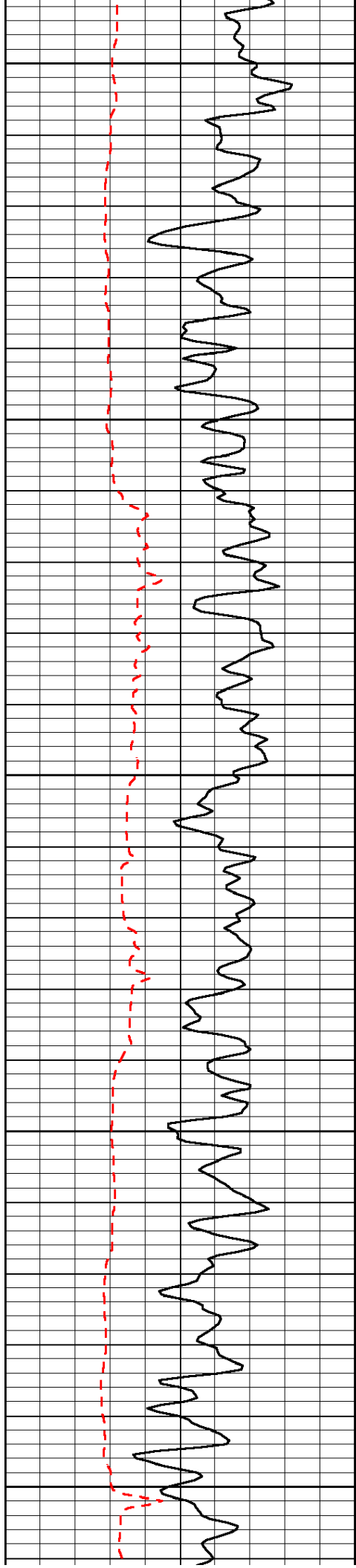
Thank you for using Pioneer Energy Services  
 www.pioneerenergy.com  
 785 625 3858

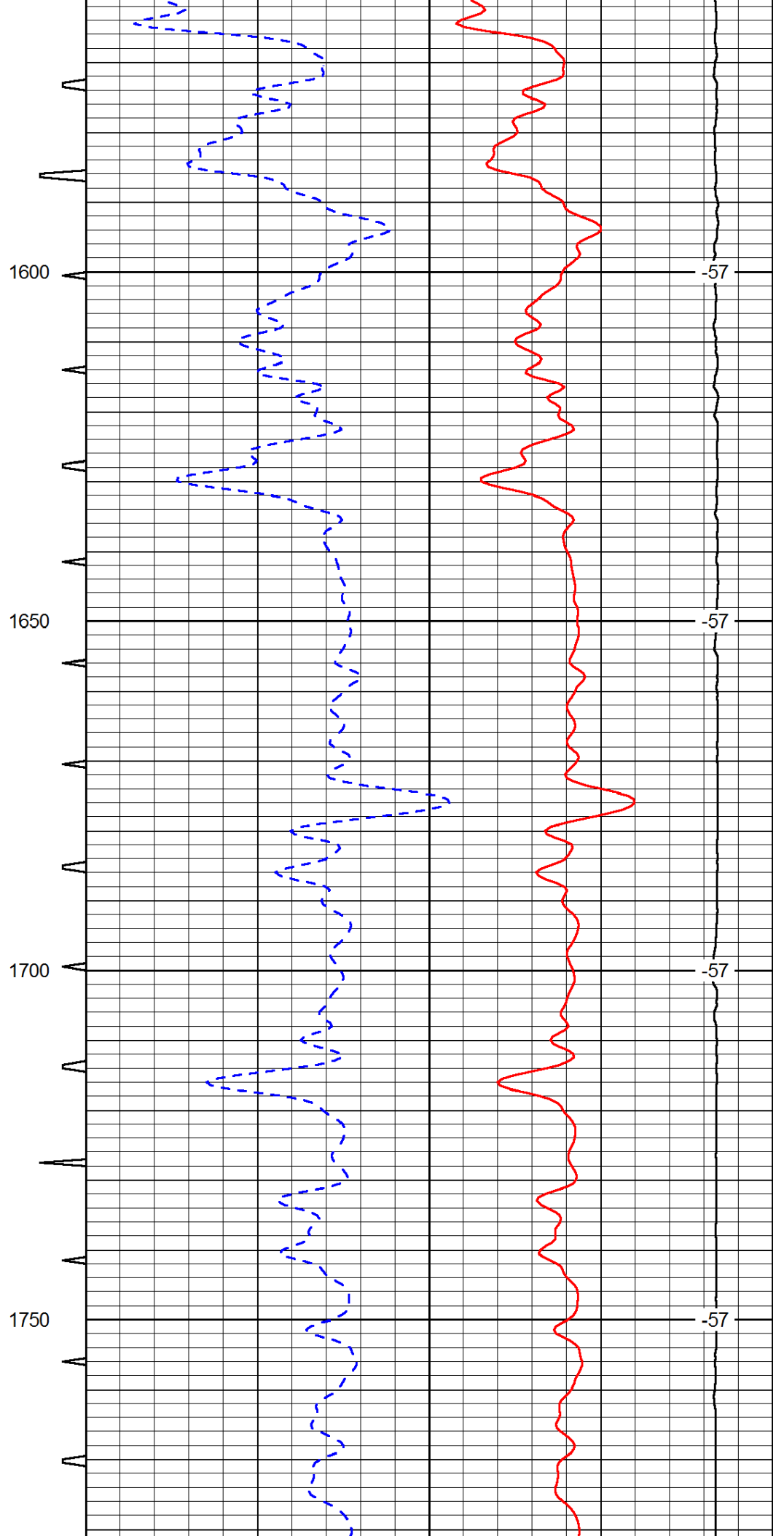
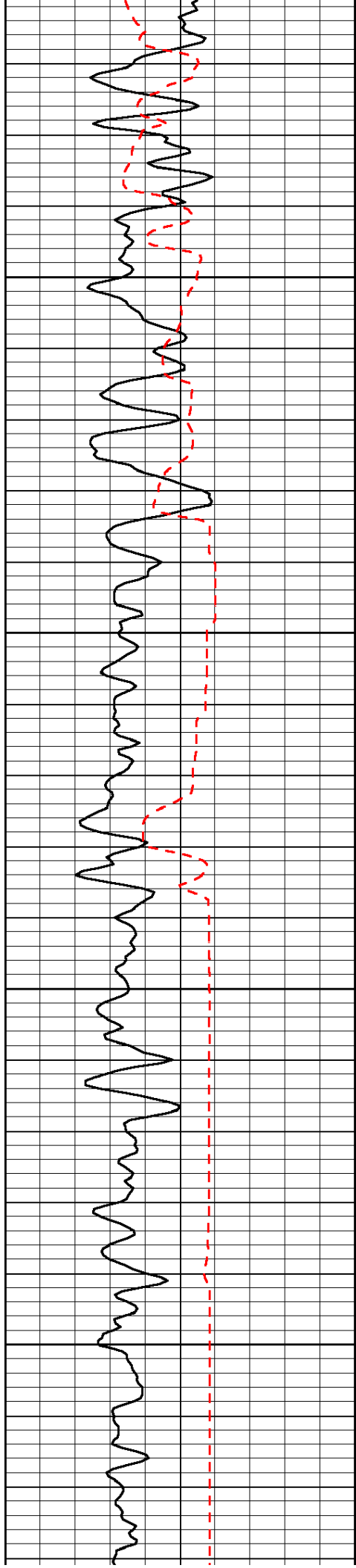
Schoenchen KS, 3 West to 210 RD,  
 1 South to County Line, East Into

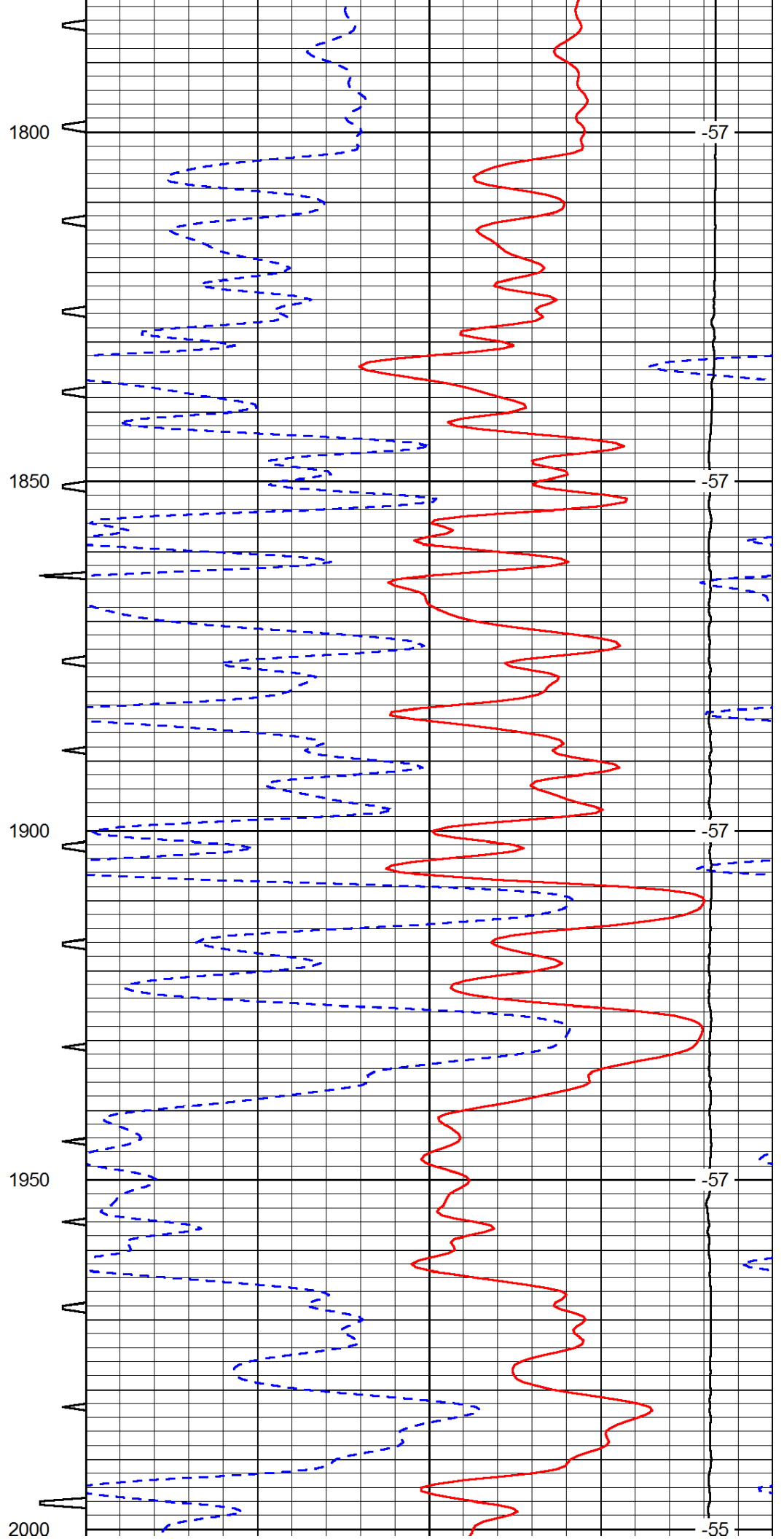
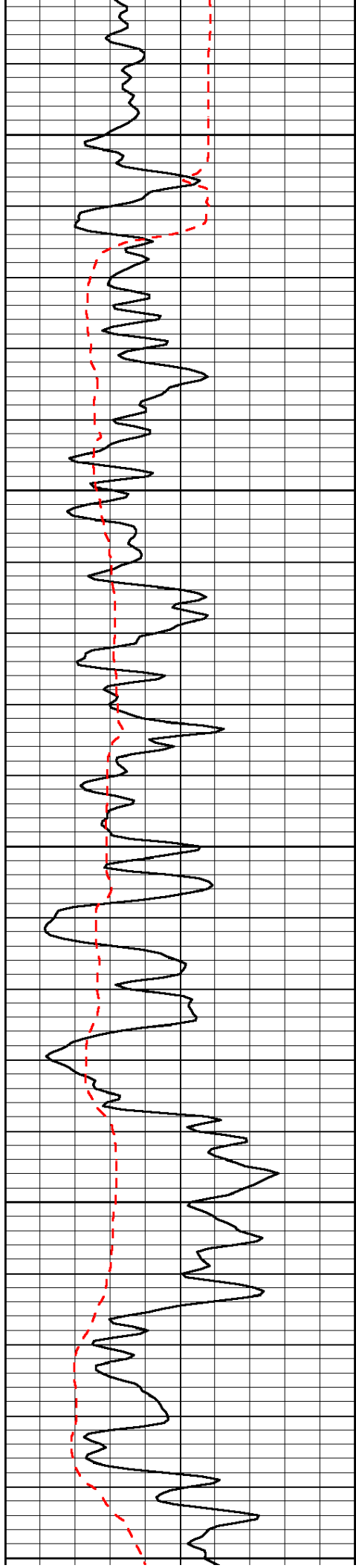
Database File: c:\warrior\data\murfin\_braun #1-36\murfin\_braun\_1\_36hd.db  
 Dataset Pathname: DIL\murfstk  
 Presentation Format: sonic  
 Dataset Creation: Sun Jan 13 03:15:05 2013  
 Charted by: Depth in Feet scaled 1:240

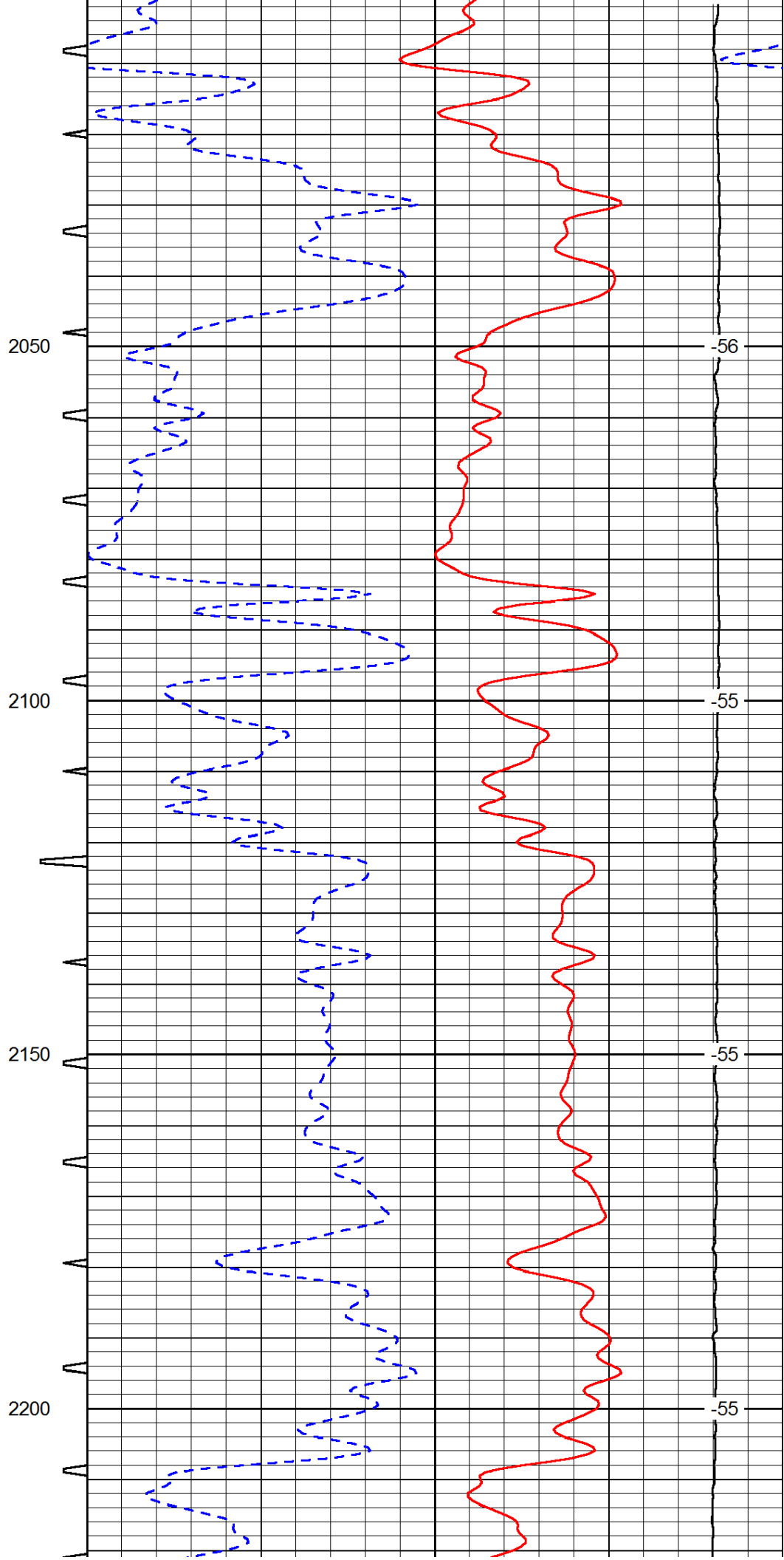
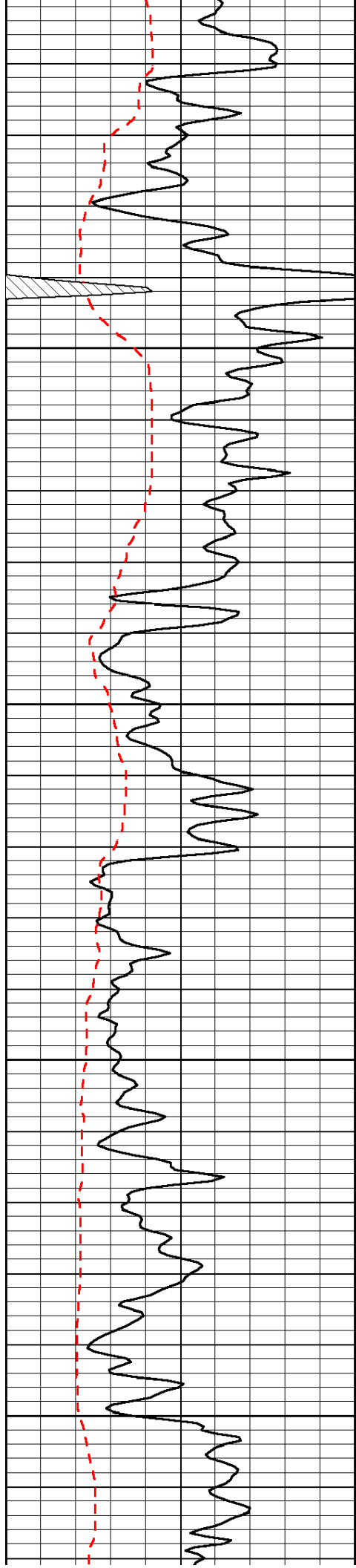
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150	Gamma Ray	300	5	0	SPOR	-10
6	Caliper (GAPI)	16		15000	LTEN (lb)	0
						LSPD

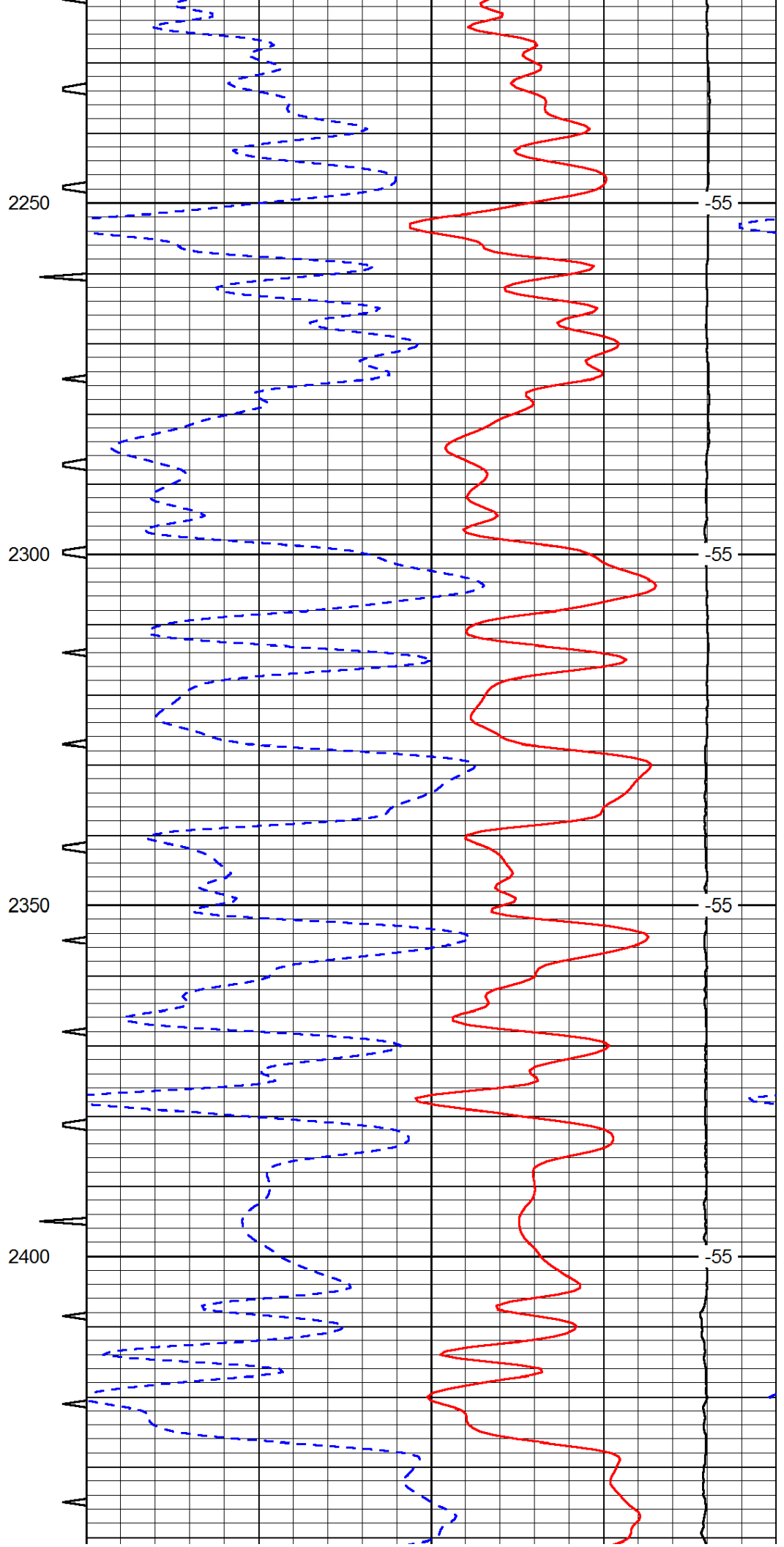
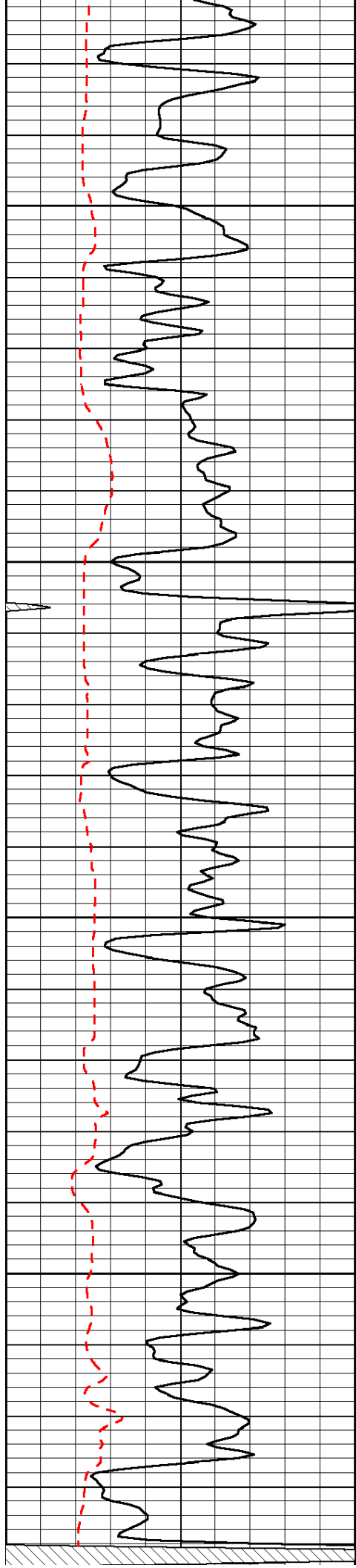


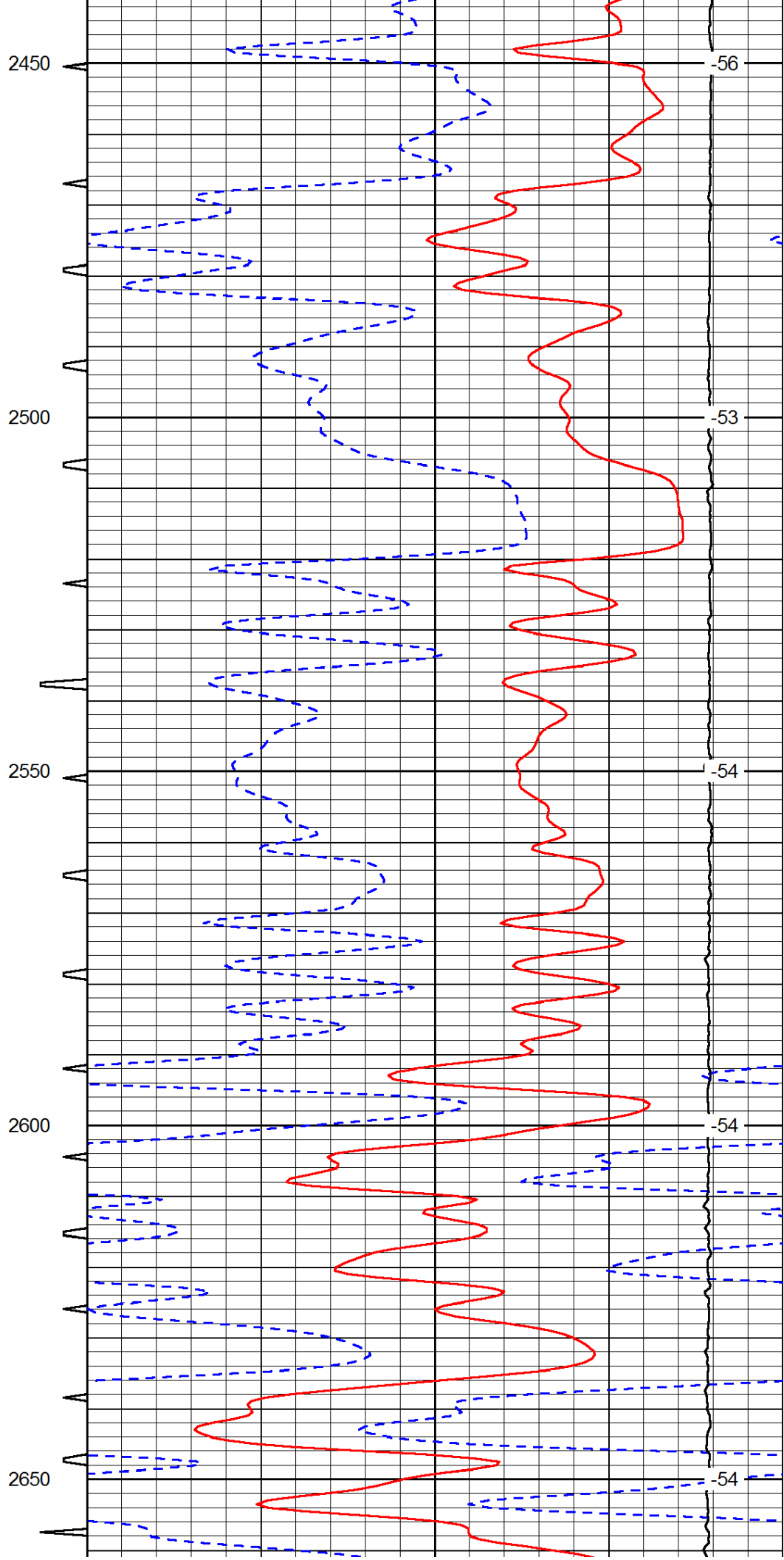
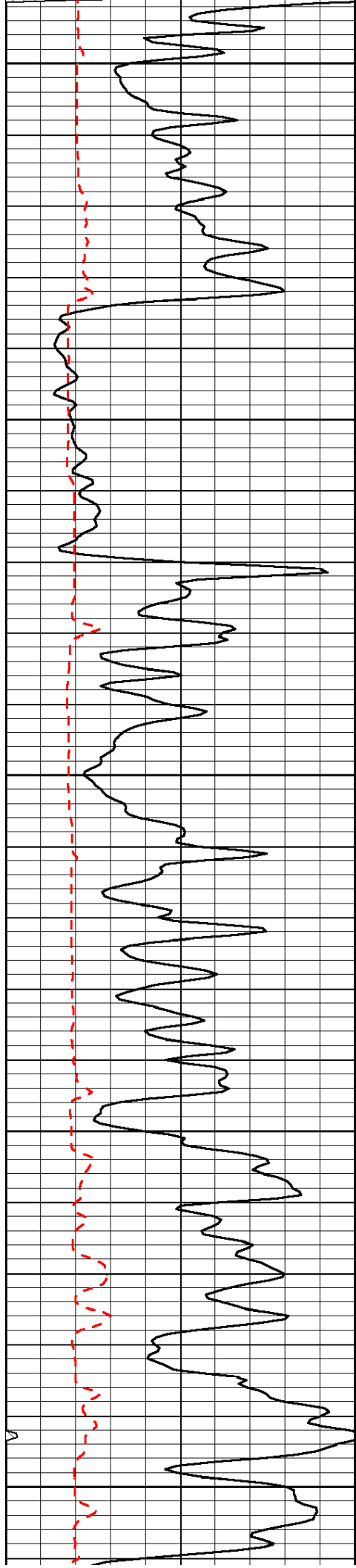


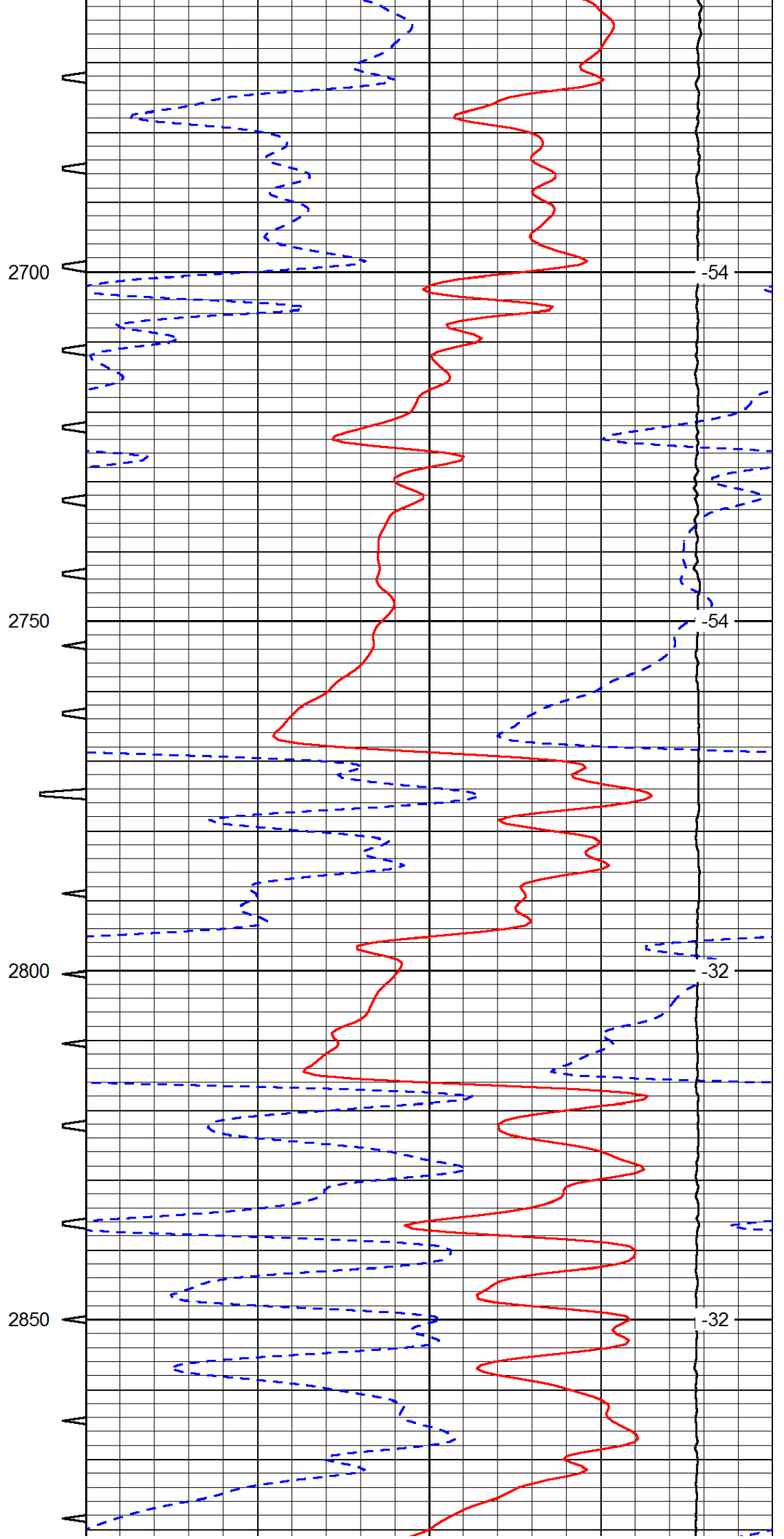
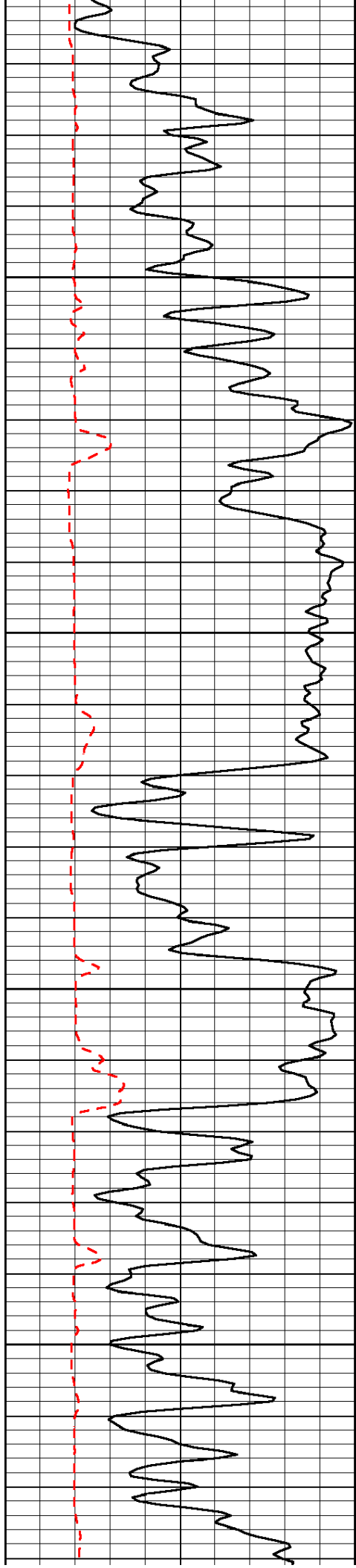


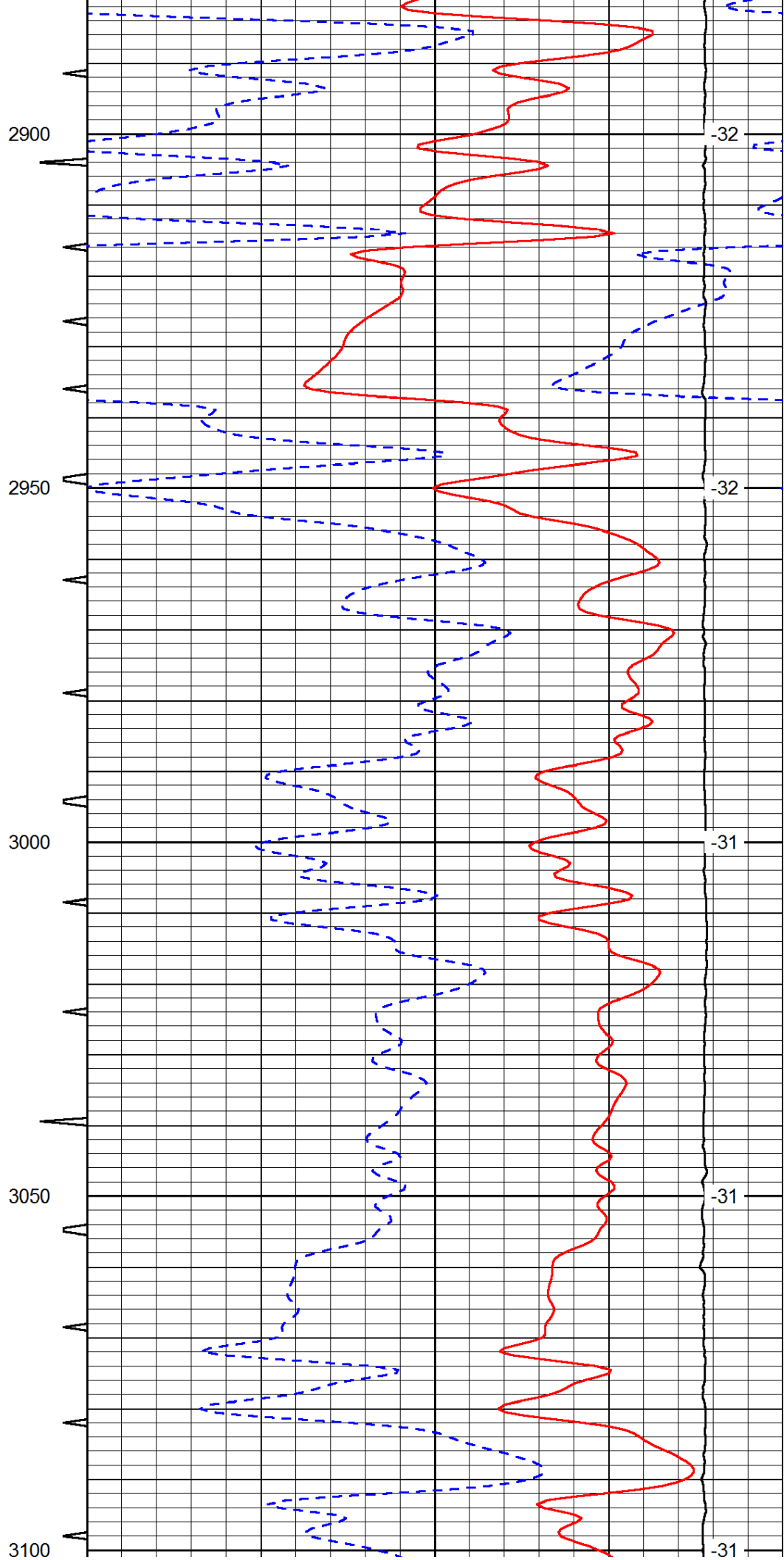
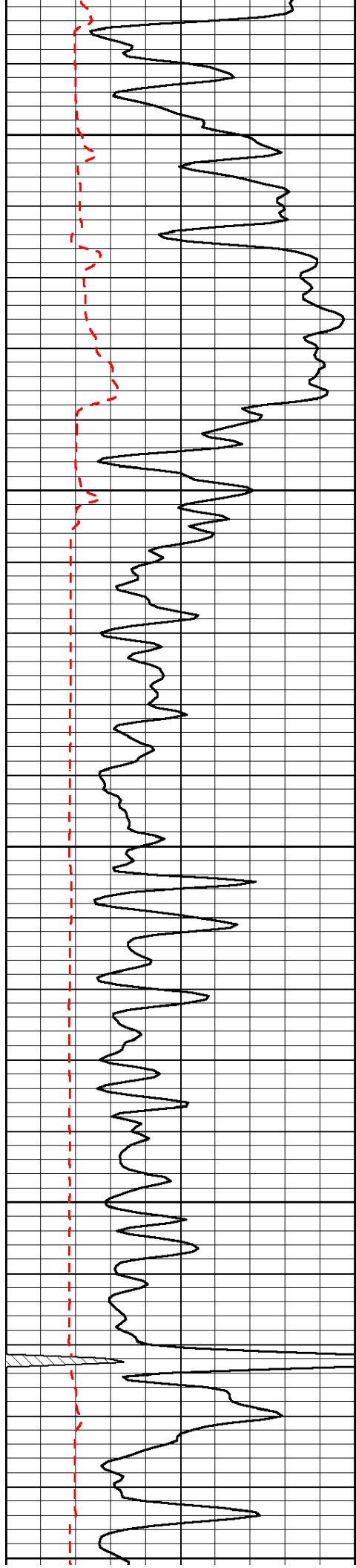


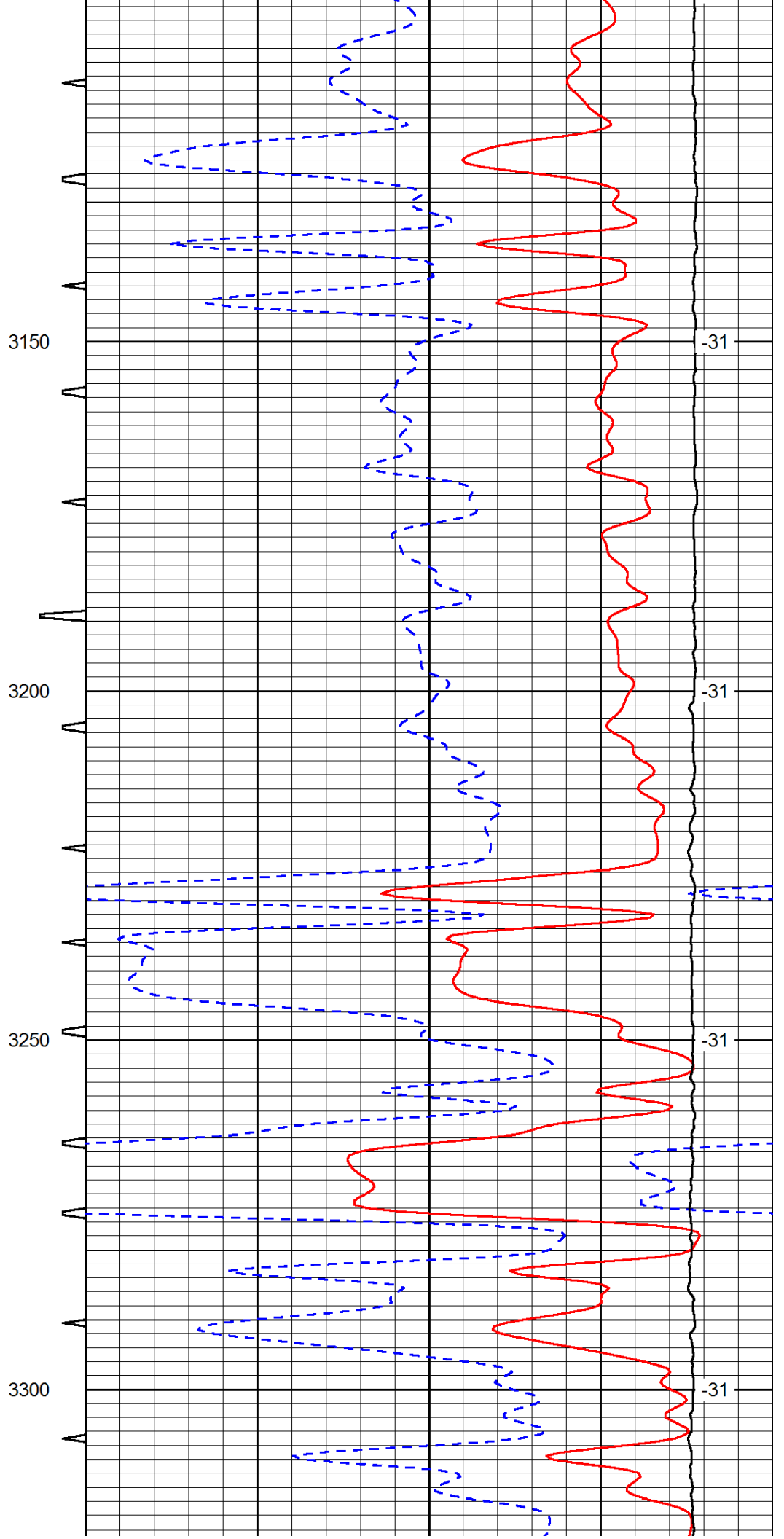
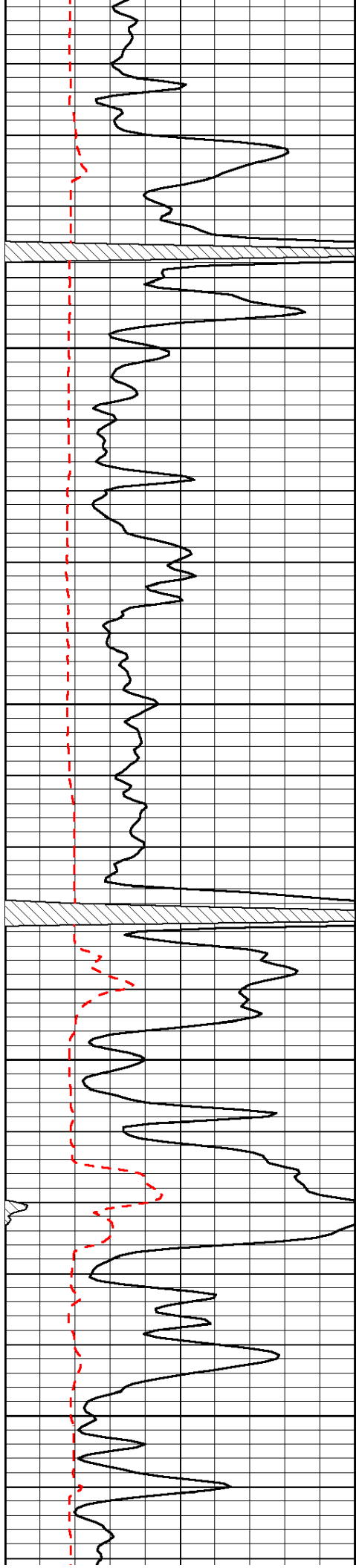


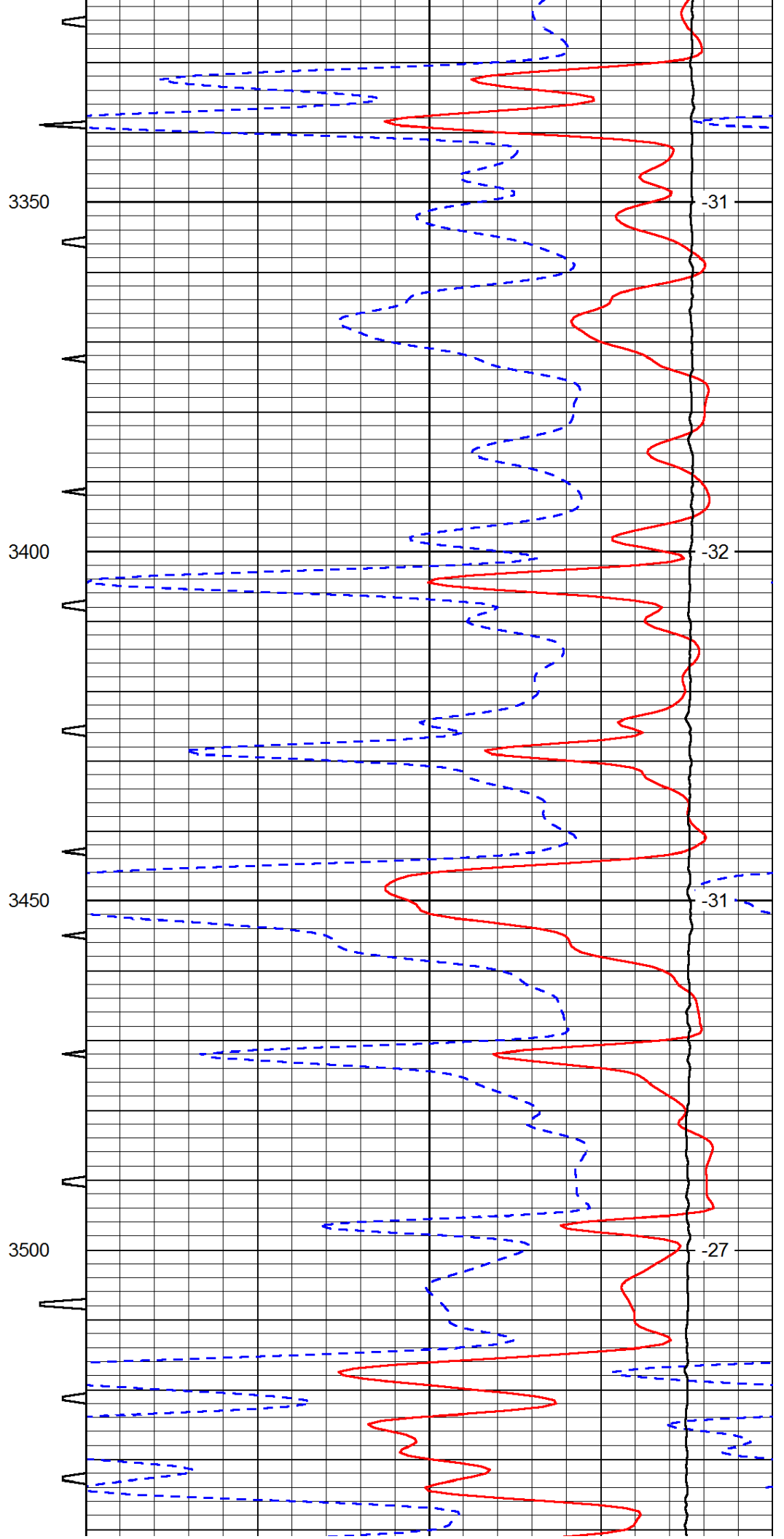
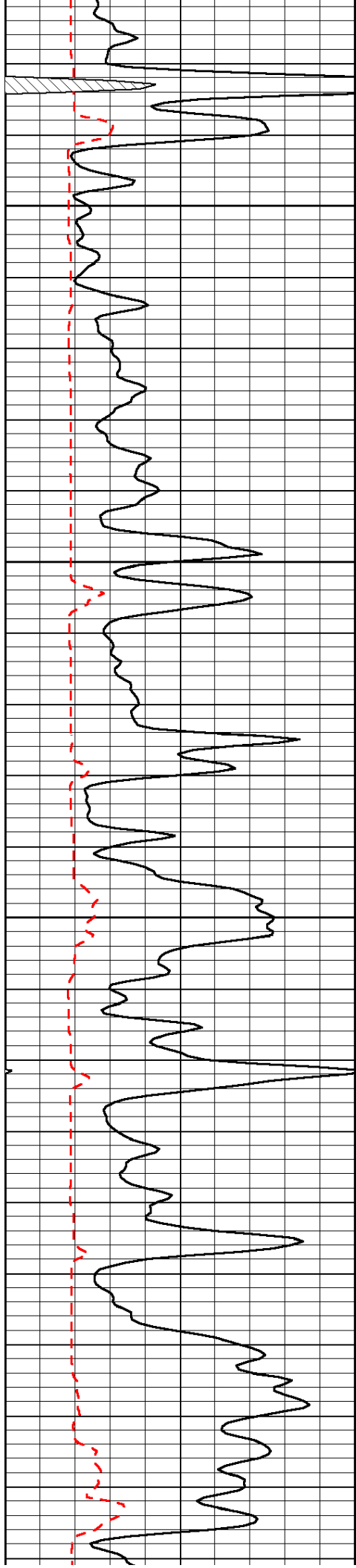


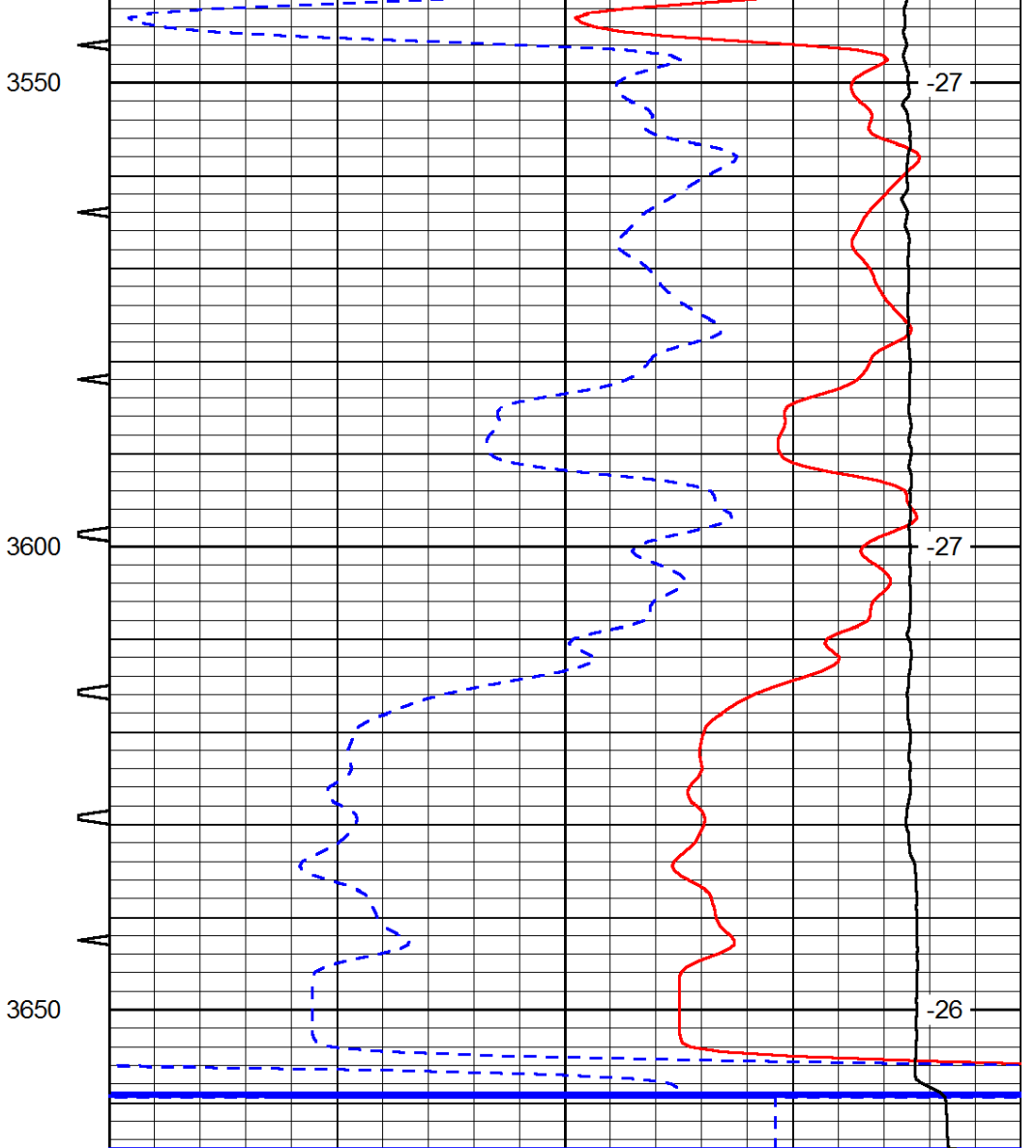
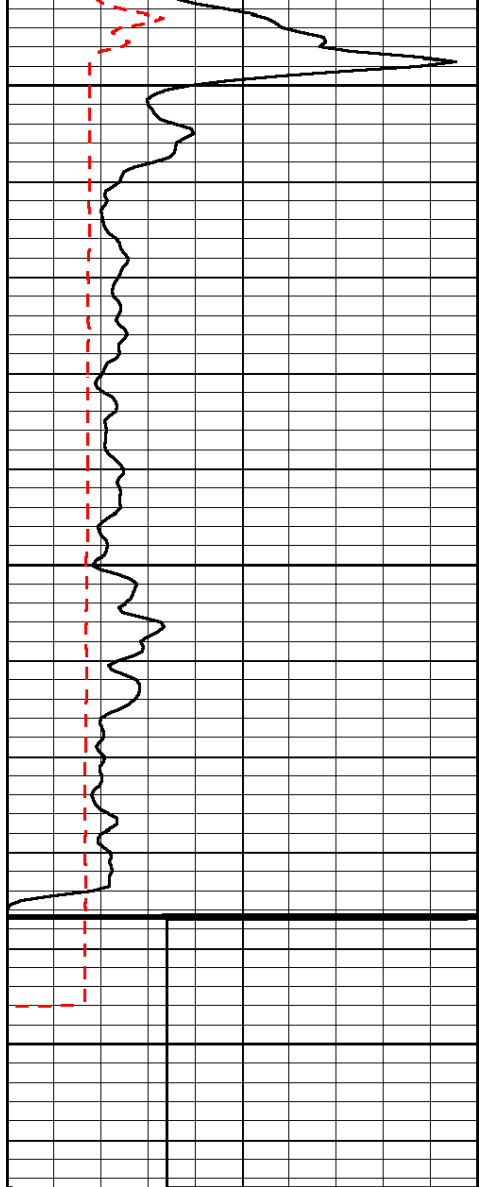












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