



Pioneer Energy Services

Borehole Compensated Sonic Log

Company Murfin Drilling Company, Inc.
Well Legleiter No. 1 - 36
Field Zimm Southeast
County Ellis **State** Kansas
Location 600' FSL & 700' FEL
Other Services CNL/CDL MEL/DIL

API No. 15-051-26,491-00-00
Sec: 36 **Twp:** 15 S **Rge:** 19 W

Permanent Datum Ground Level **Elevation** 1988
Log Measured From Kelly Bushing **5 Ft. Above Perm. Datum**
Drilling Measured From Kelly Bushing

Date 3/17/2013
Elevation K.B. 1993
 D.F. G.L. 1988

Run Number	Two
Type Log	BHC Sonic
Depth Driller	3680
Depth Logger	3680
Bottom Logged Interval	3669
Top Logged Interval	950
Type Fluid In Hole	Chemical
Salinity, PPM CL	1000
Density	9.2
Level	Full
Max. Rec. Temp. F	113
Operating Rig Time	4 1/2 Hours
Equipment -- Location	108 Hays
Recorded By	D. Martin
Witnessed By	Rocky Milford

Borehole Record		Casing Record				
Run No.	Bit From	To	Size	Wgt. 23#	From	To
One	12.25	00	965	8.625	00	965
Two	7.875	965	TD			

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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.

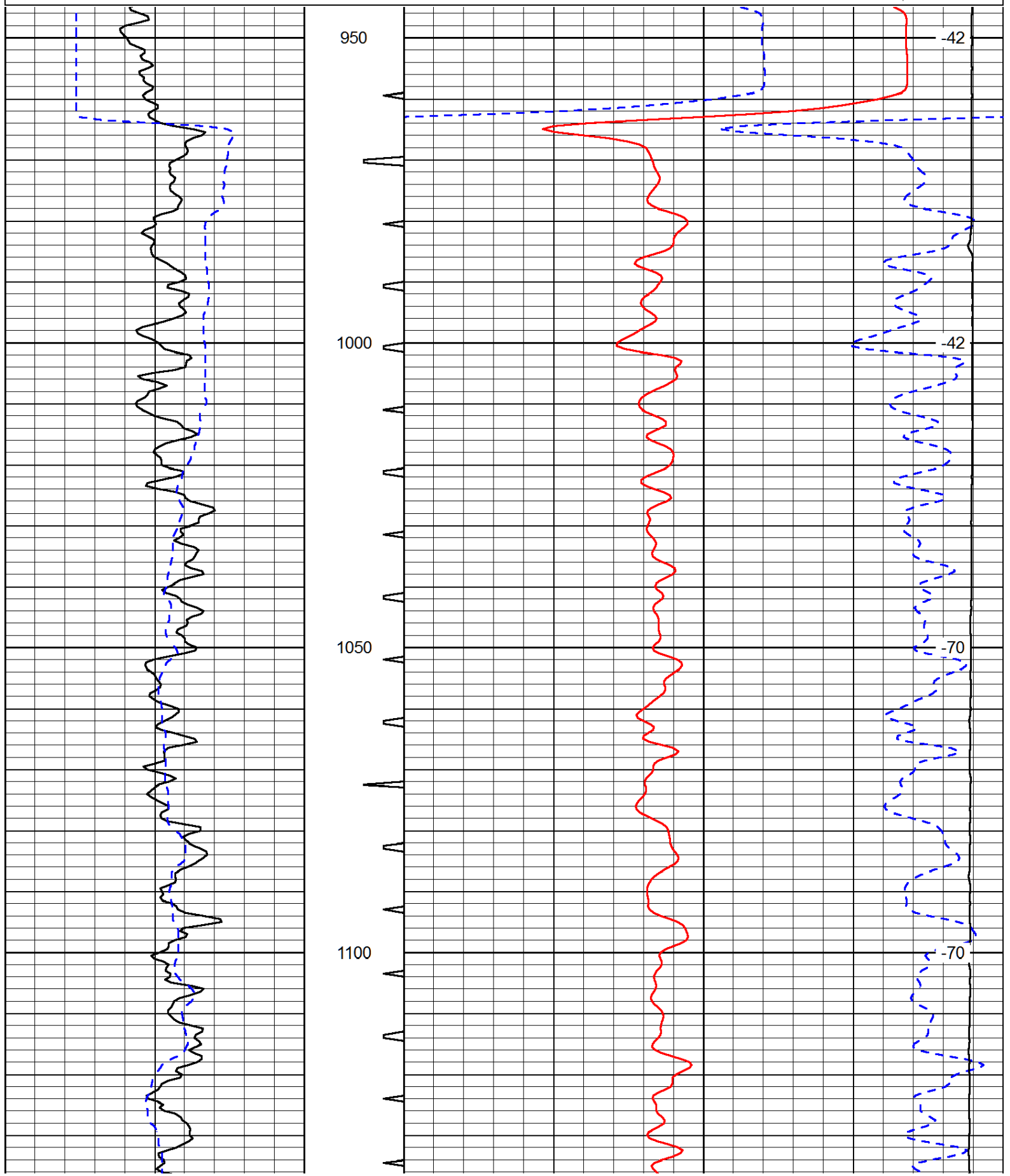
Comments

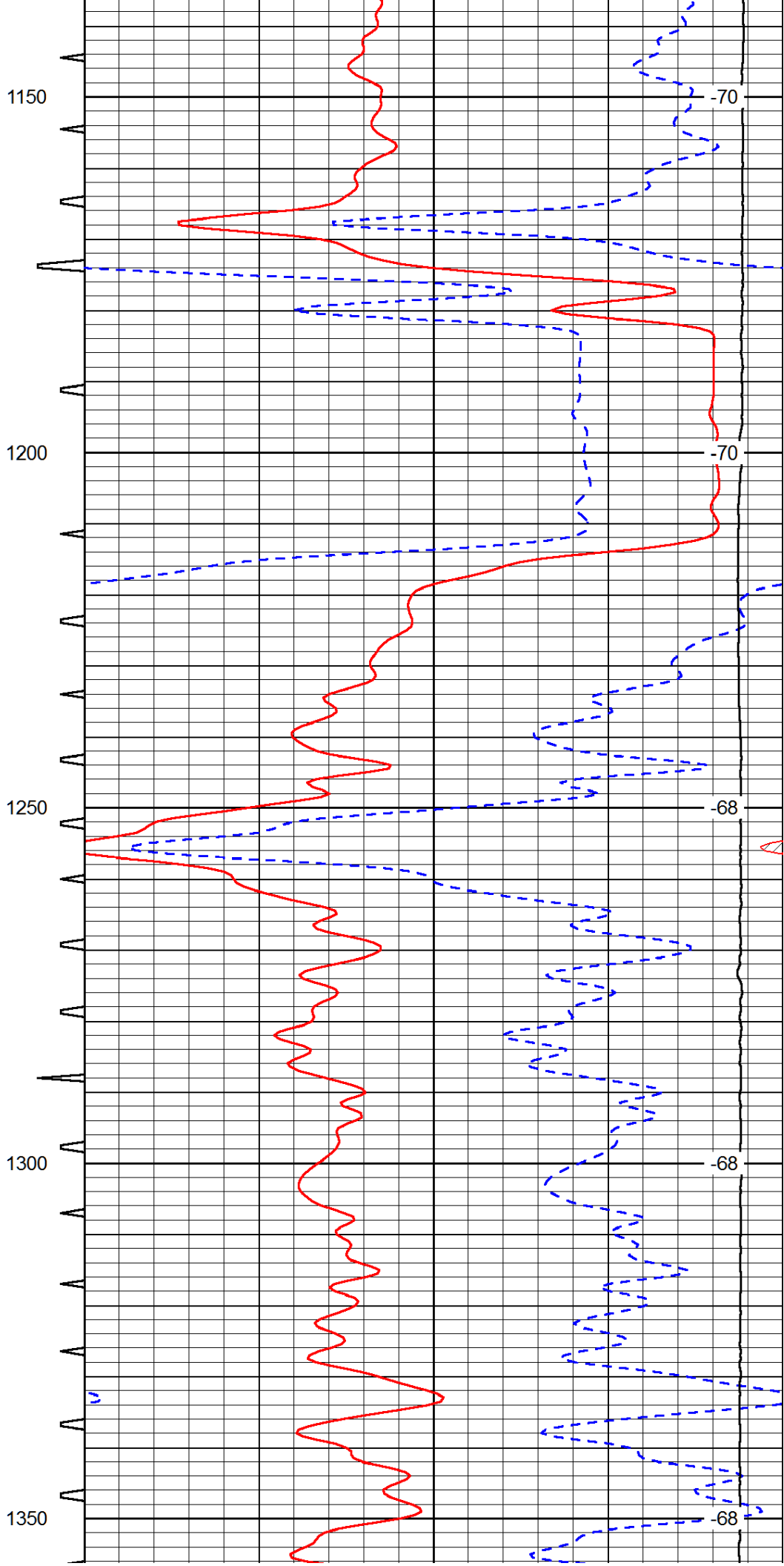
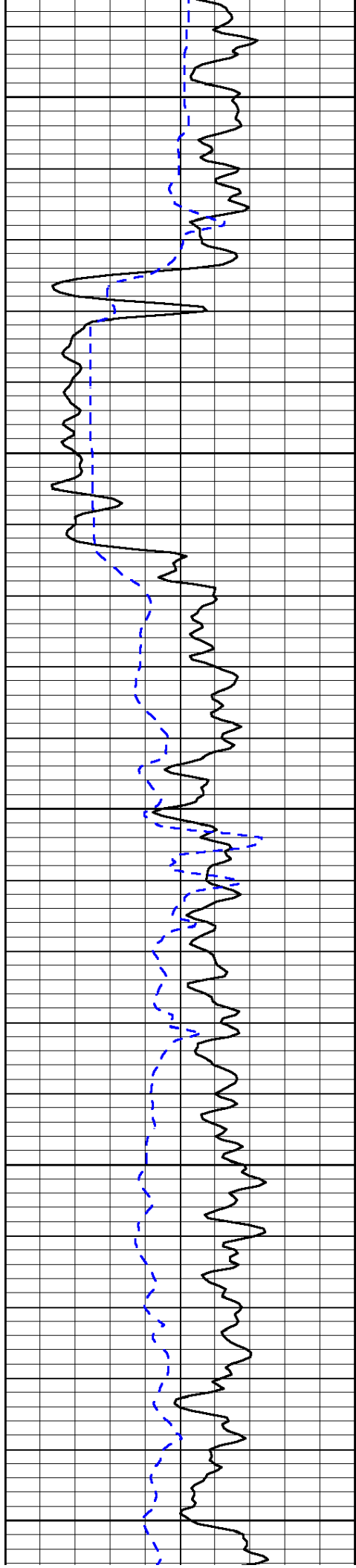
Thank you for using Log-Tech, Inc.
 (785) 625-3858
 Schoenchen, KS
 S to County Line, 3 W to dead end,
 N Into

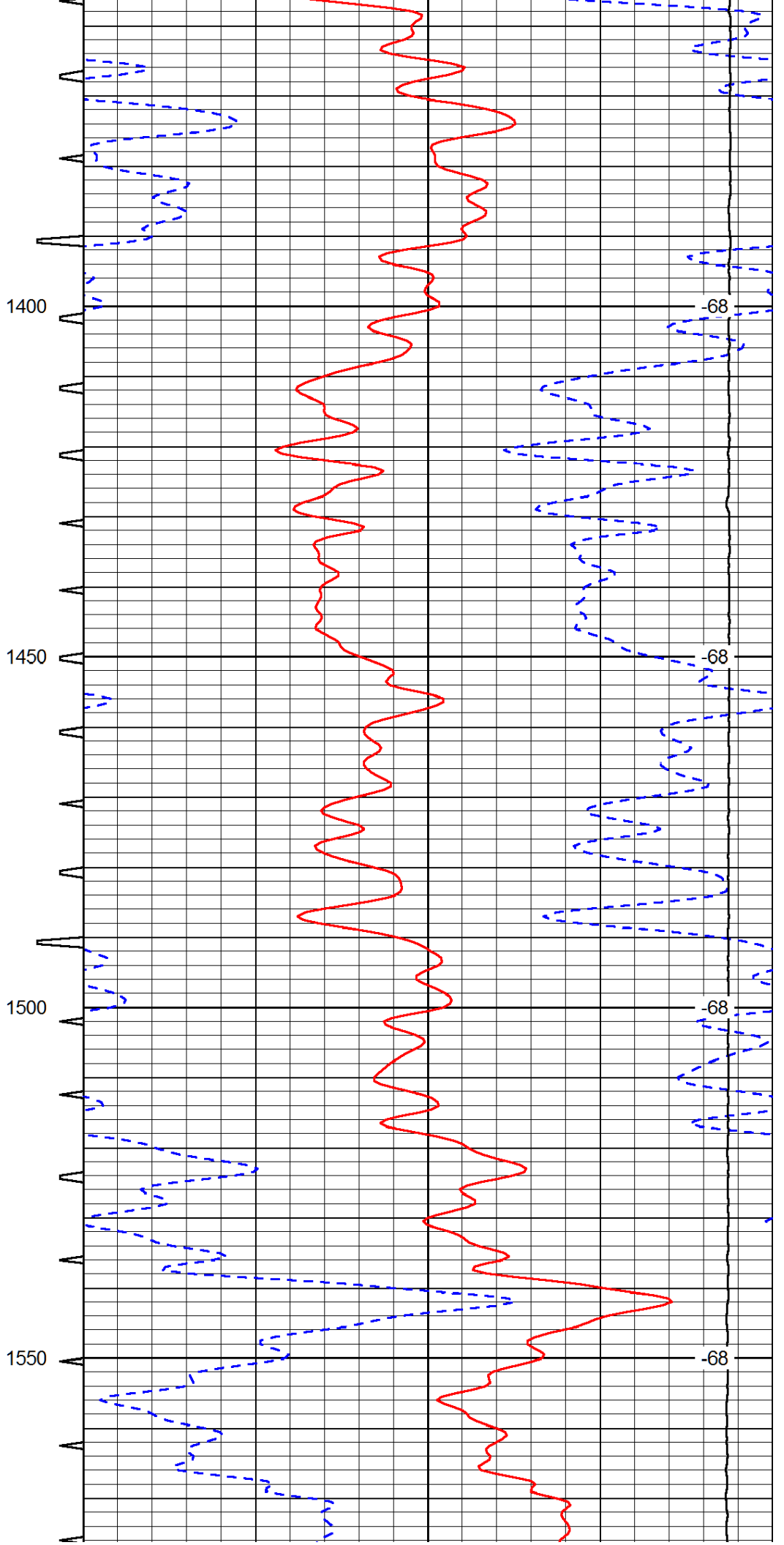
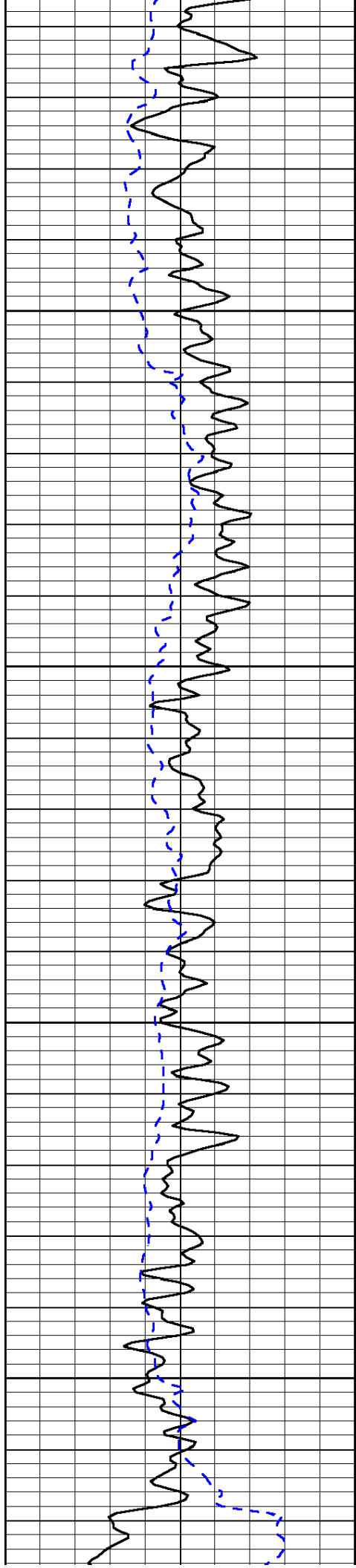
Database File: murfhd.db
 Dataset Pathname: DIL/murfstk
 Presentation Format: sonic
 Dataset Creation: Sun Mar 17 06:30:18 2013
 Charted by: Depth in Feet scaled 1:240

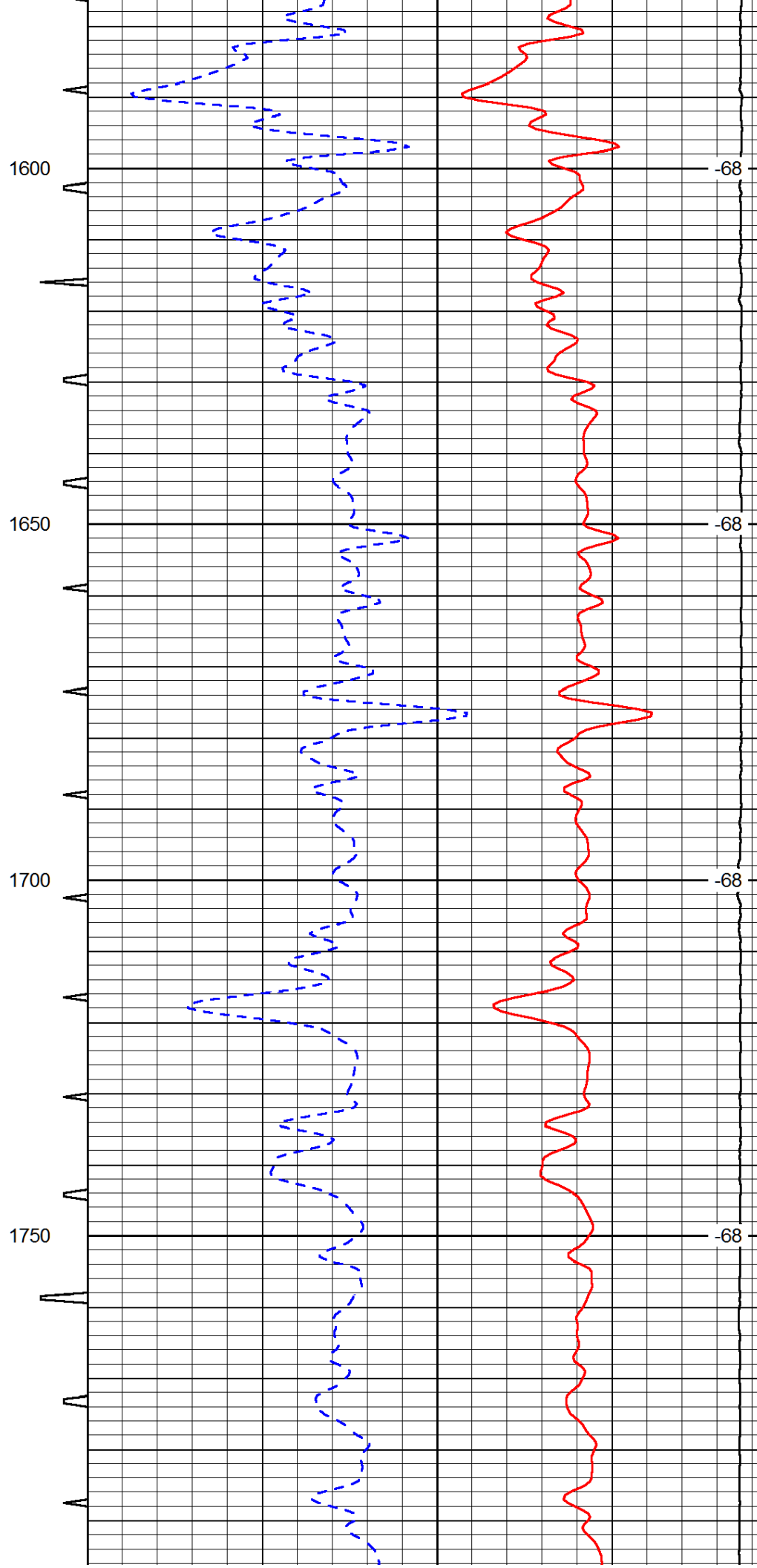
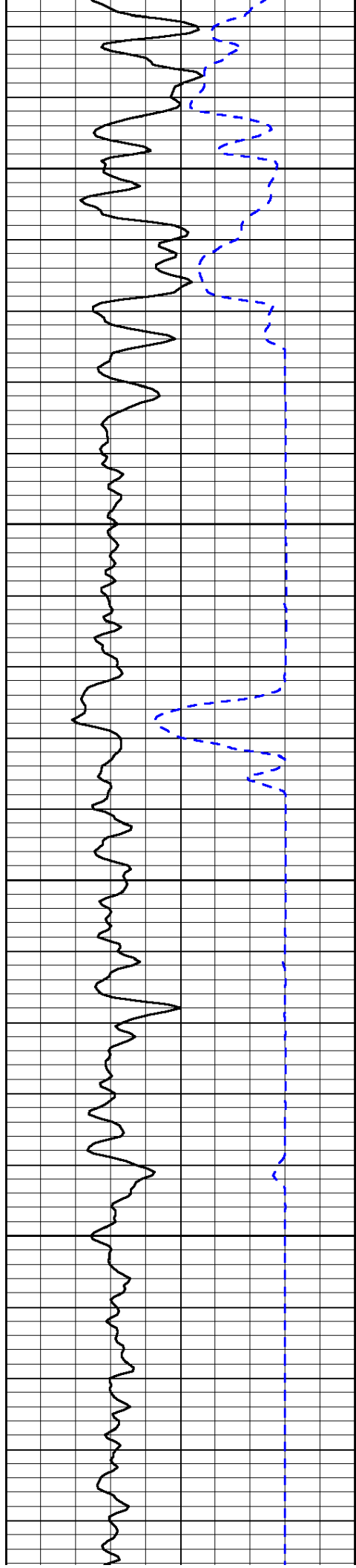
0	Gamma Ray (GAPI)	150	Sonic Int	140	Delta Time (usec/ft) (usec/ft)	40
150	Gamma Ray (GAPI)	300	5 (msec) 0	30	Sonic Porosity (pu)	-10
6	dCAL (in)	16		15000	LTEN (lb) (lb)	0

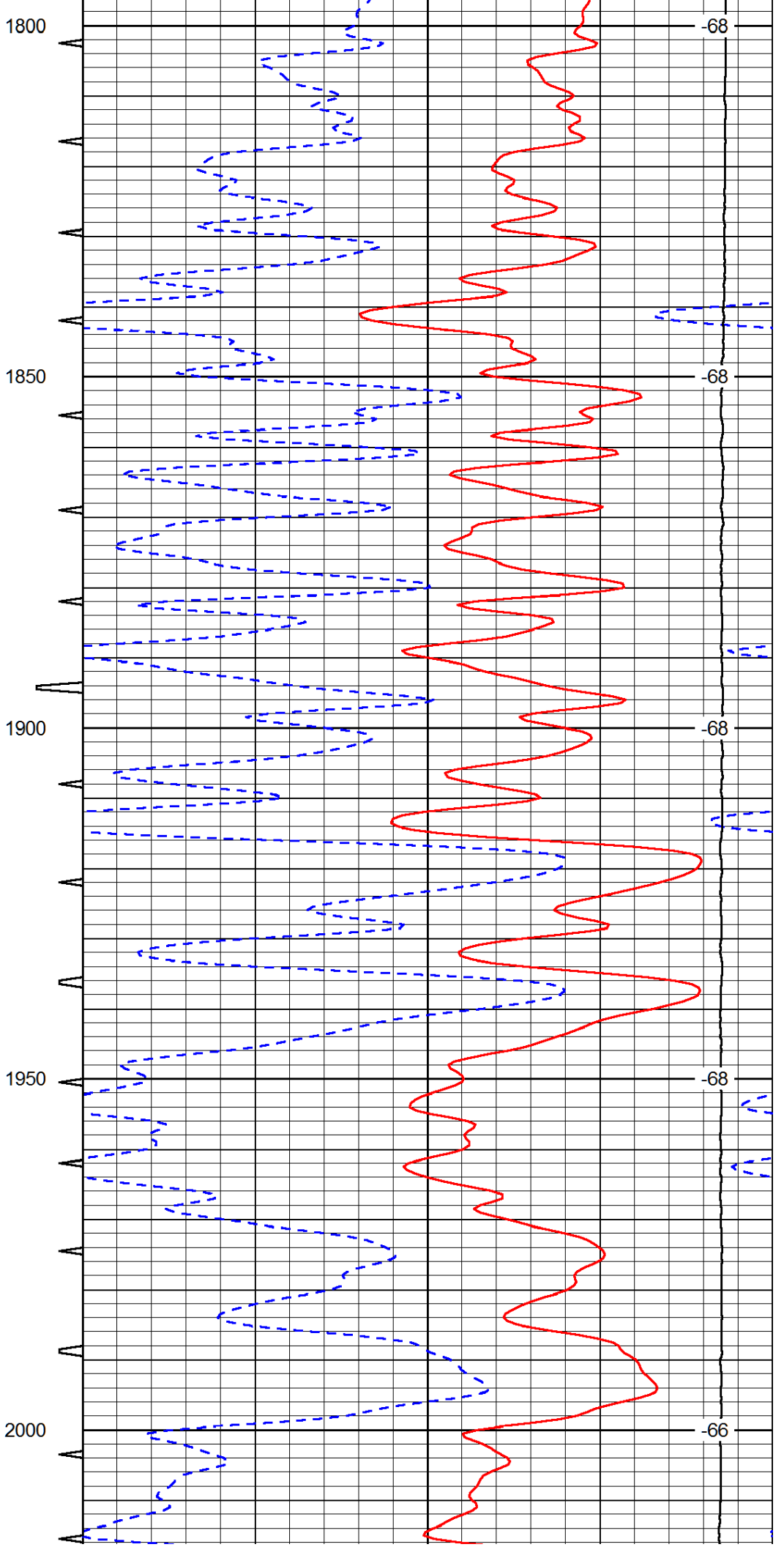
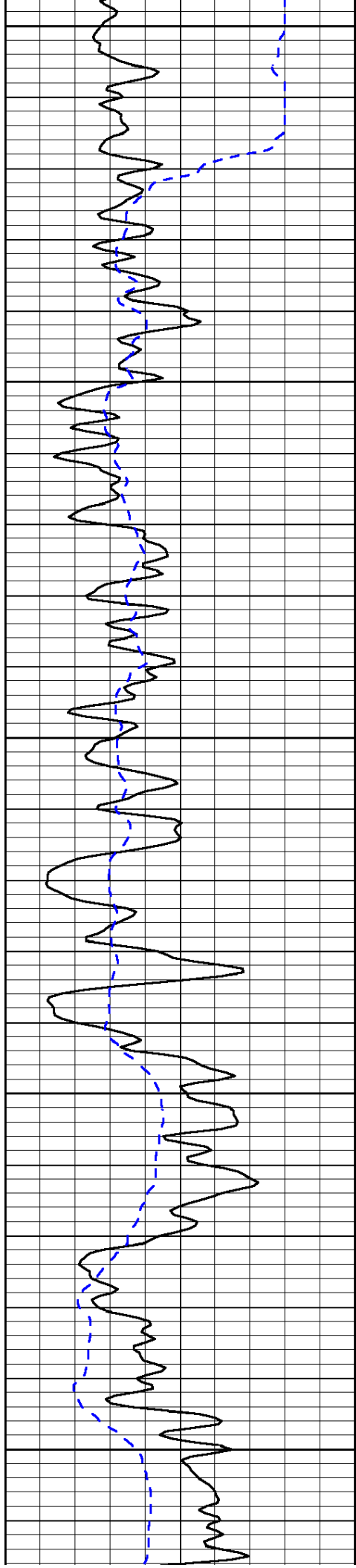
LSPD
(ft/min)

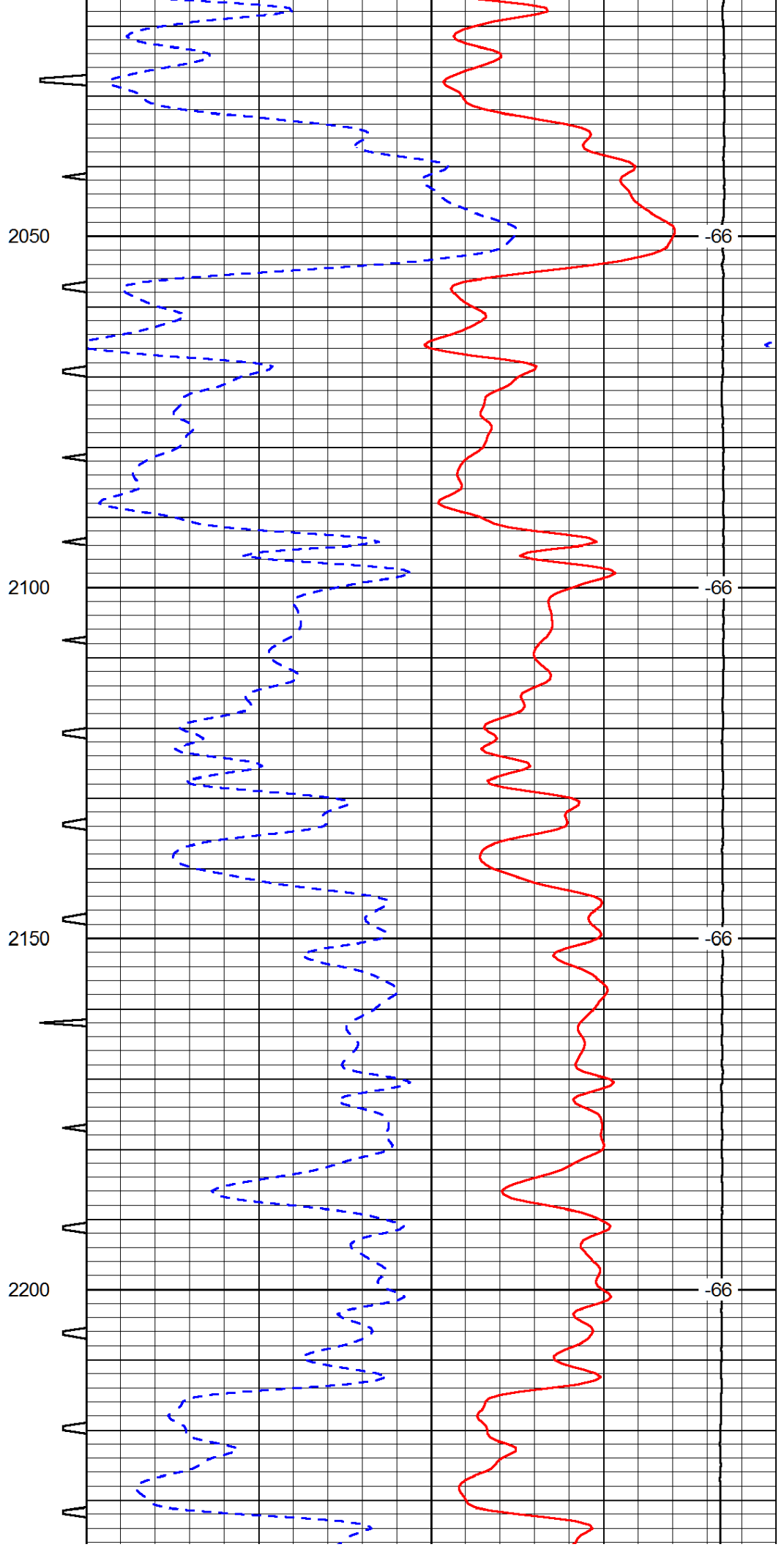
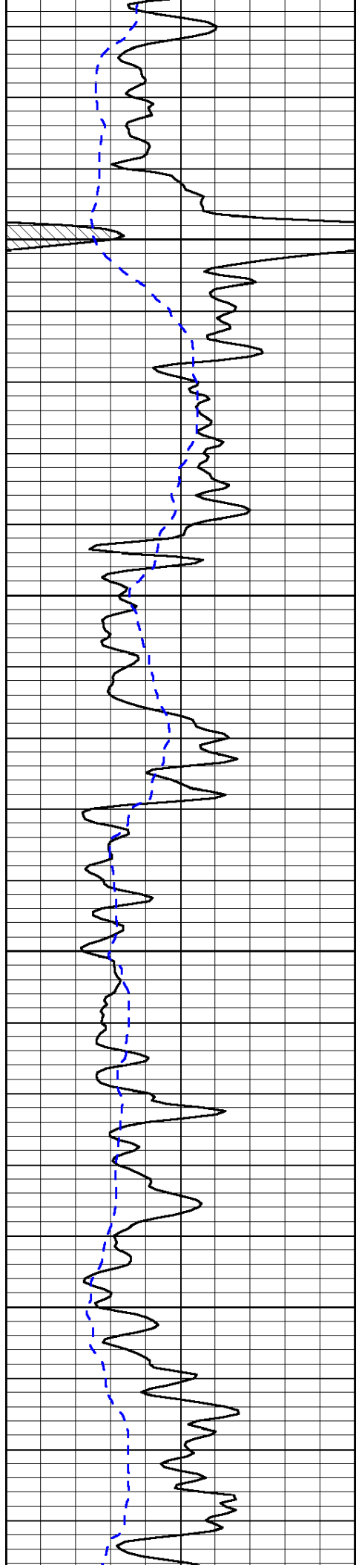


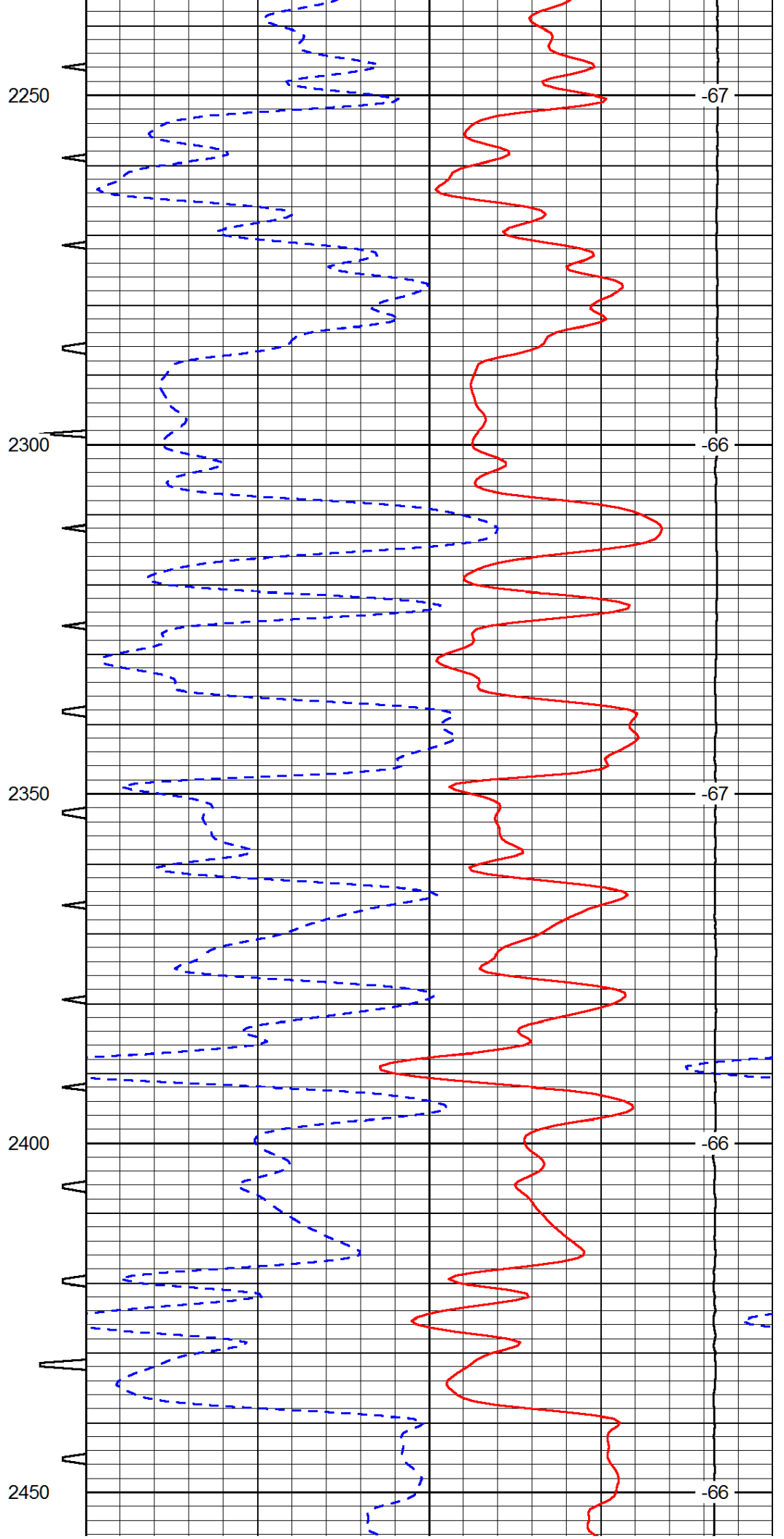
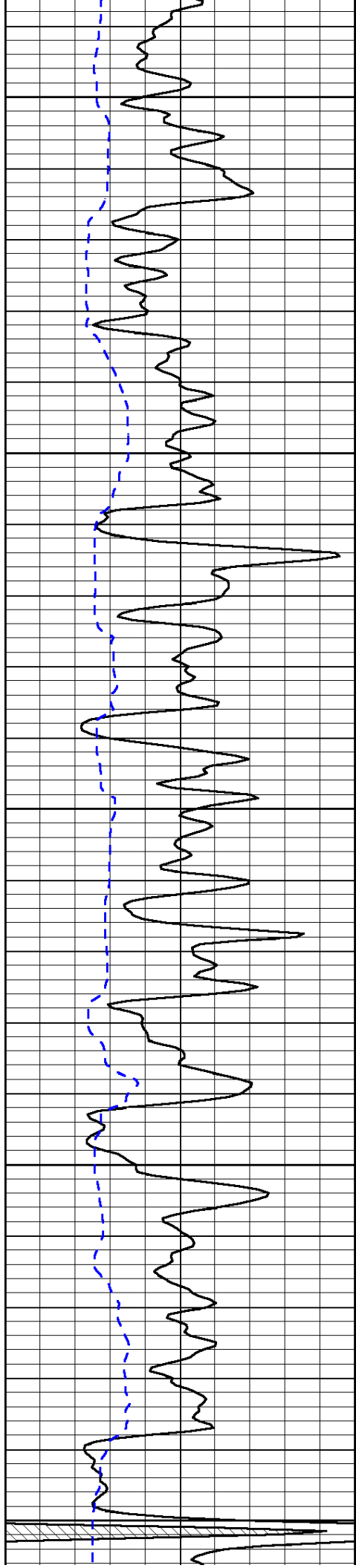


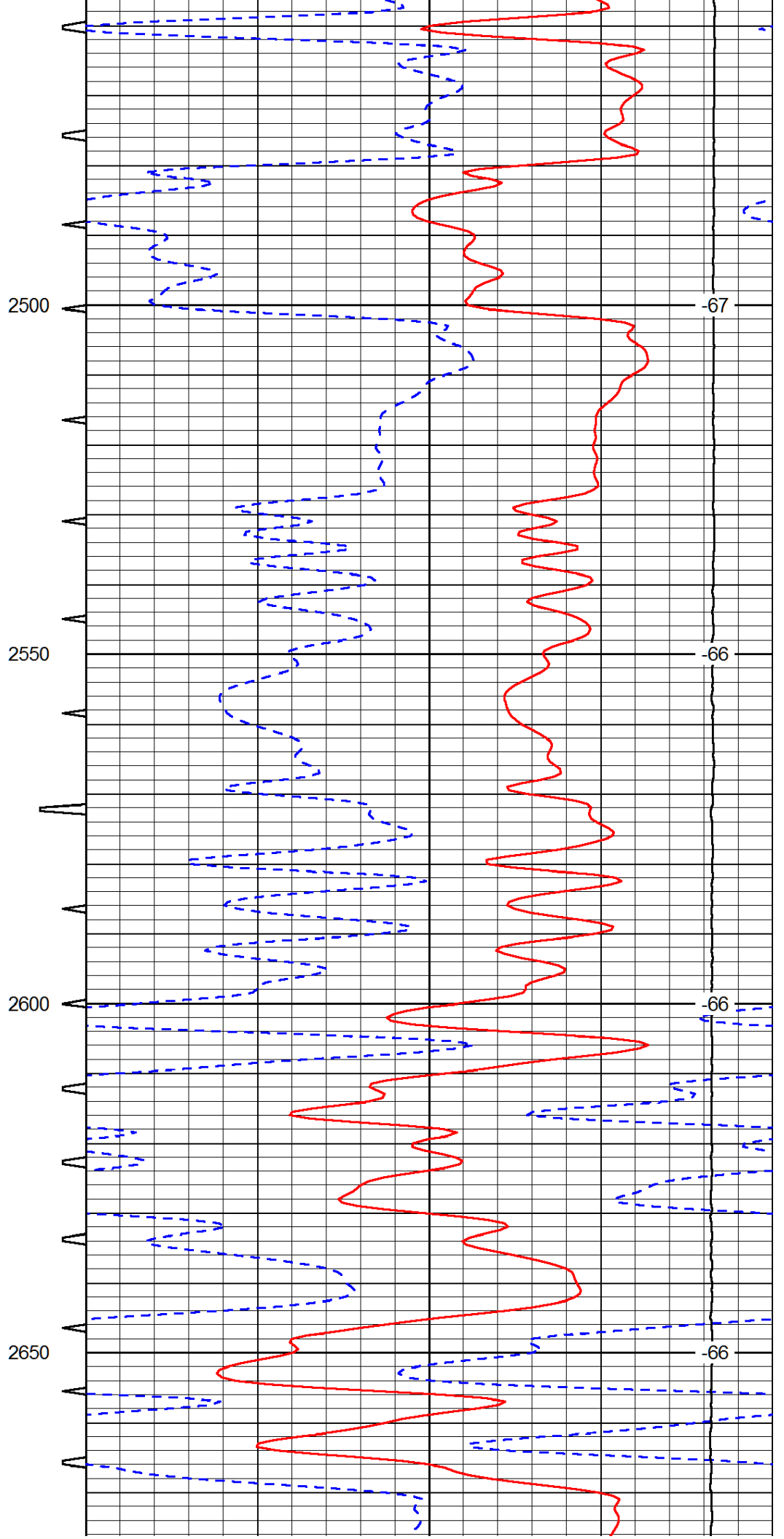
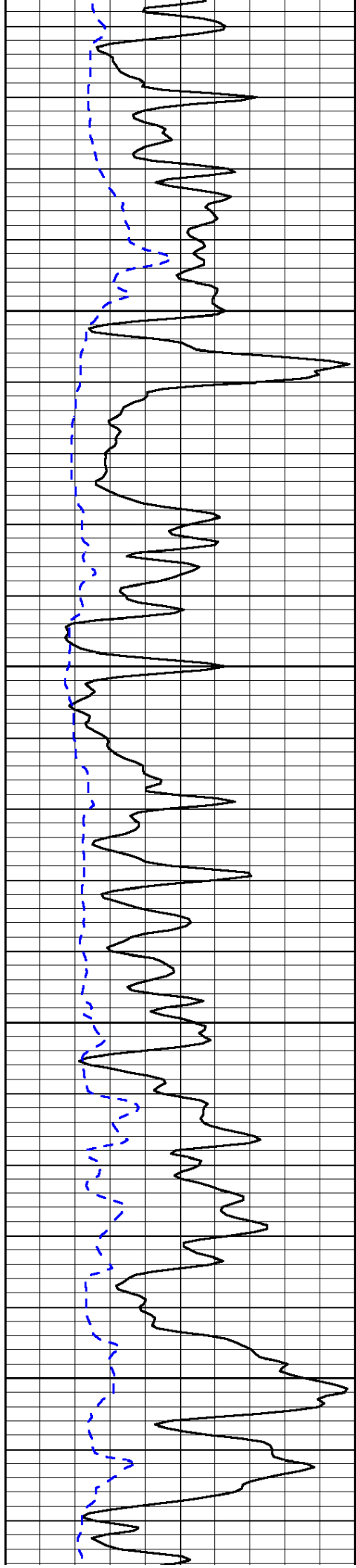


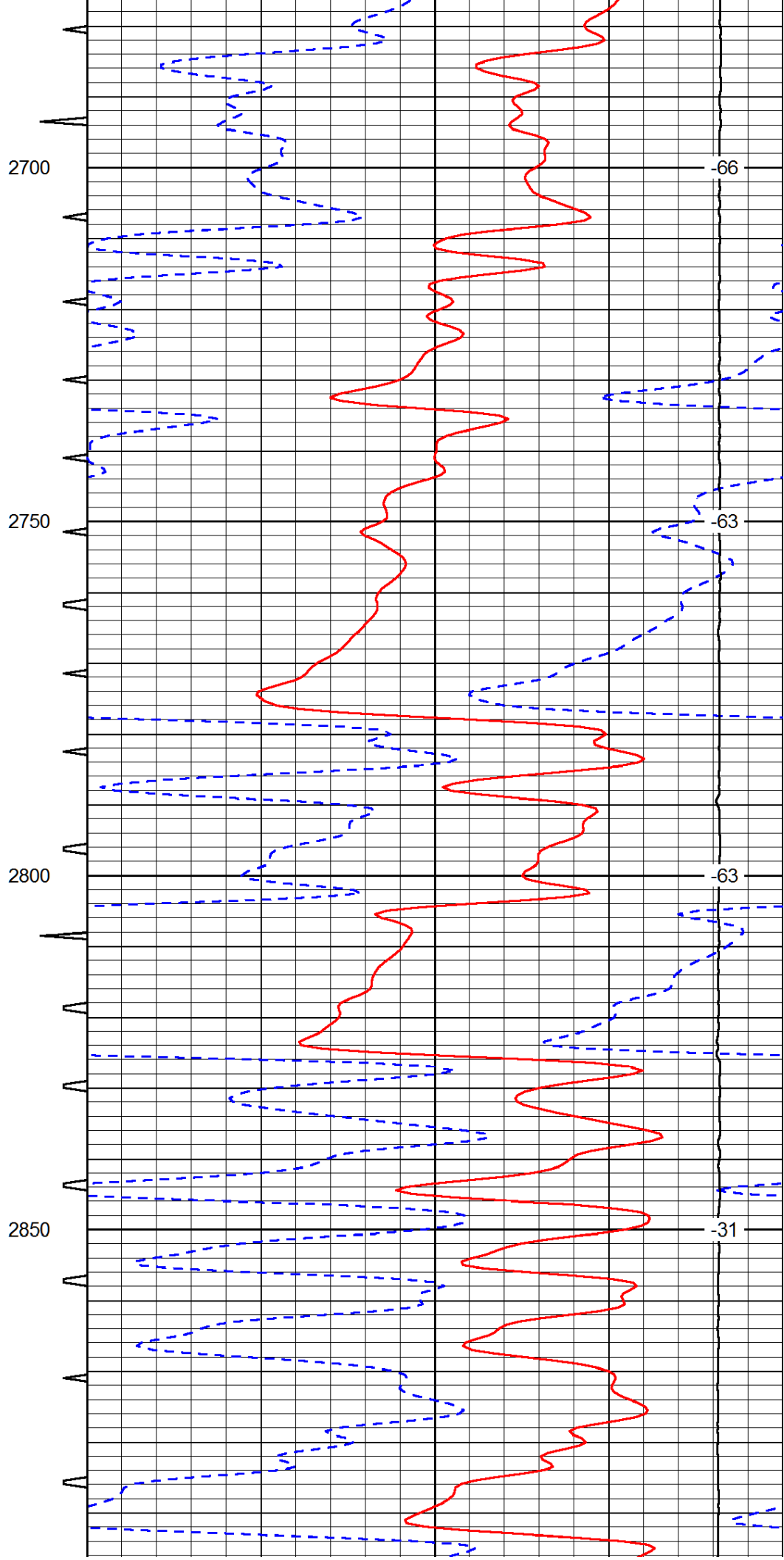
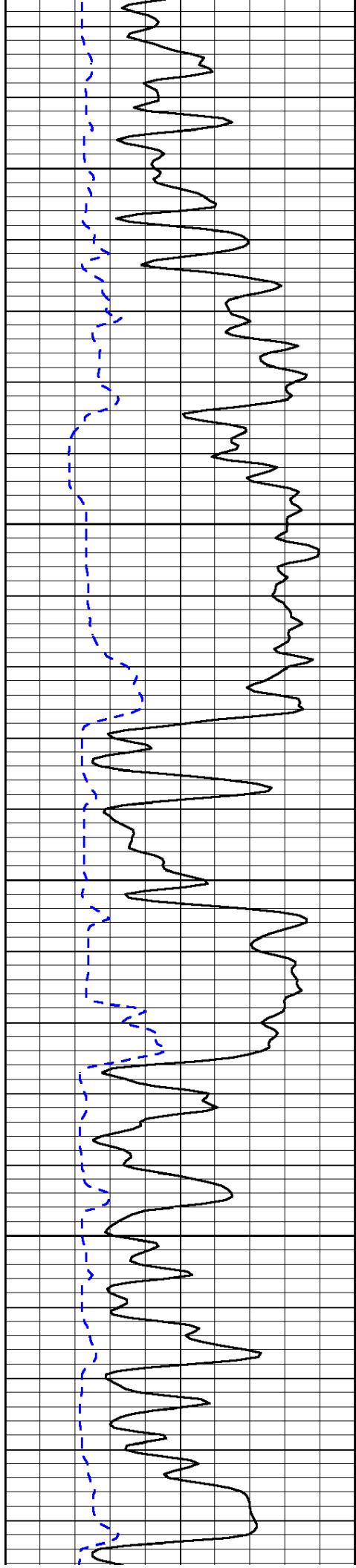


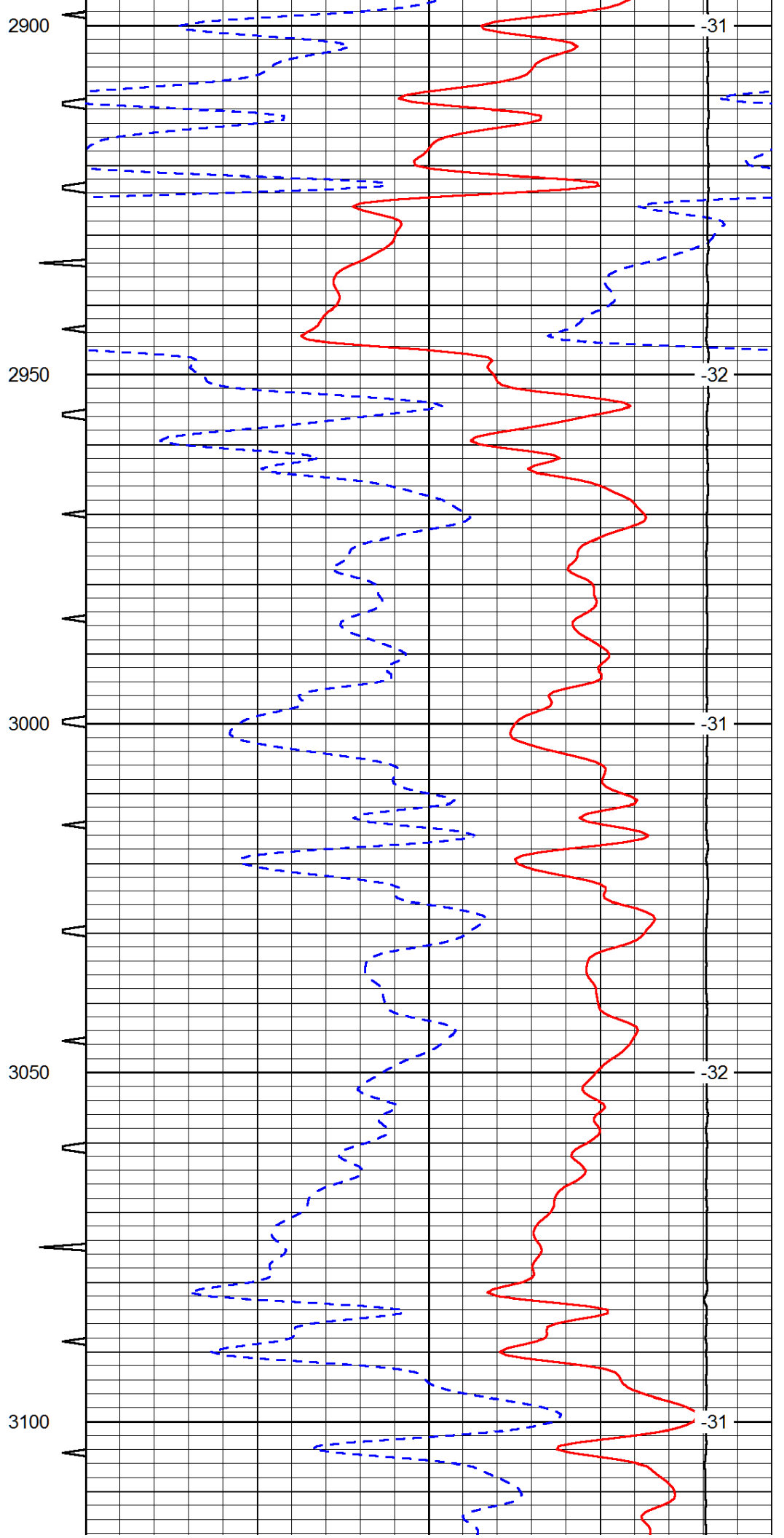
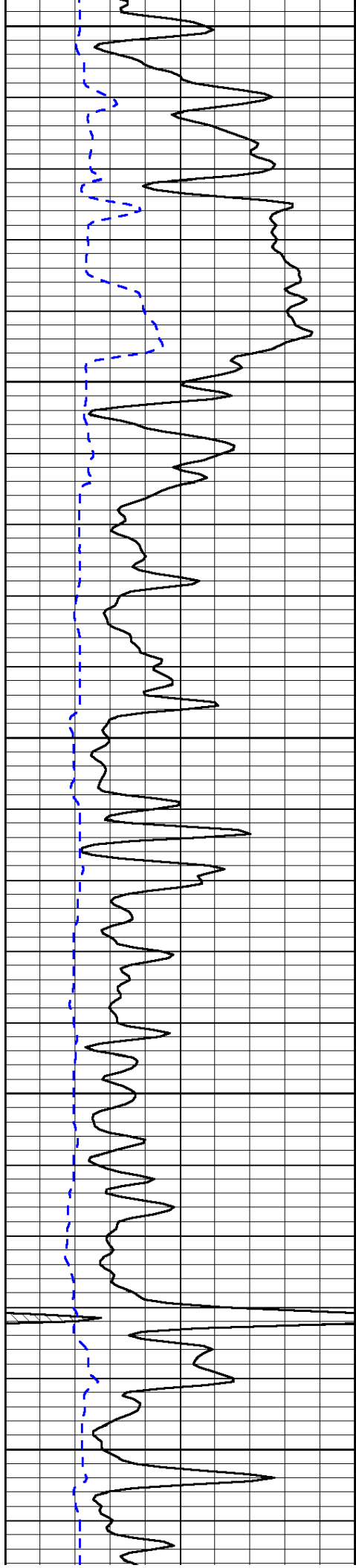


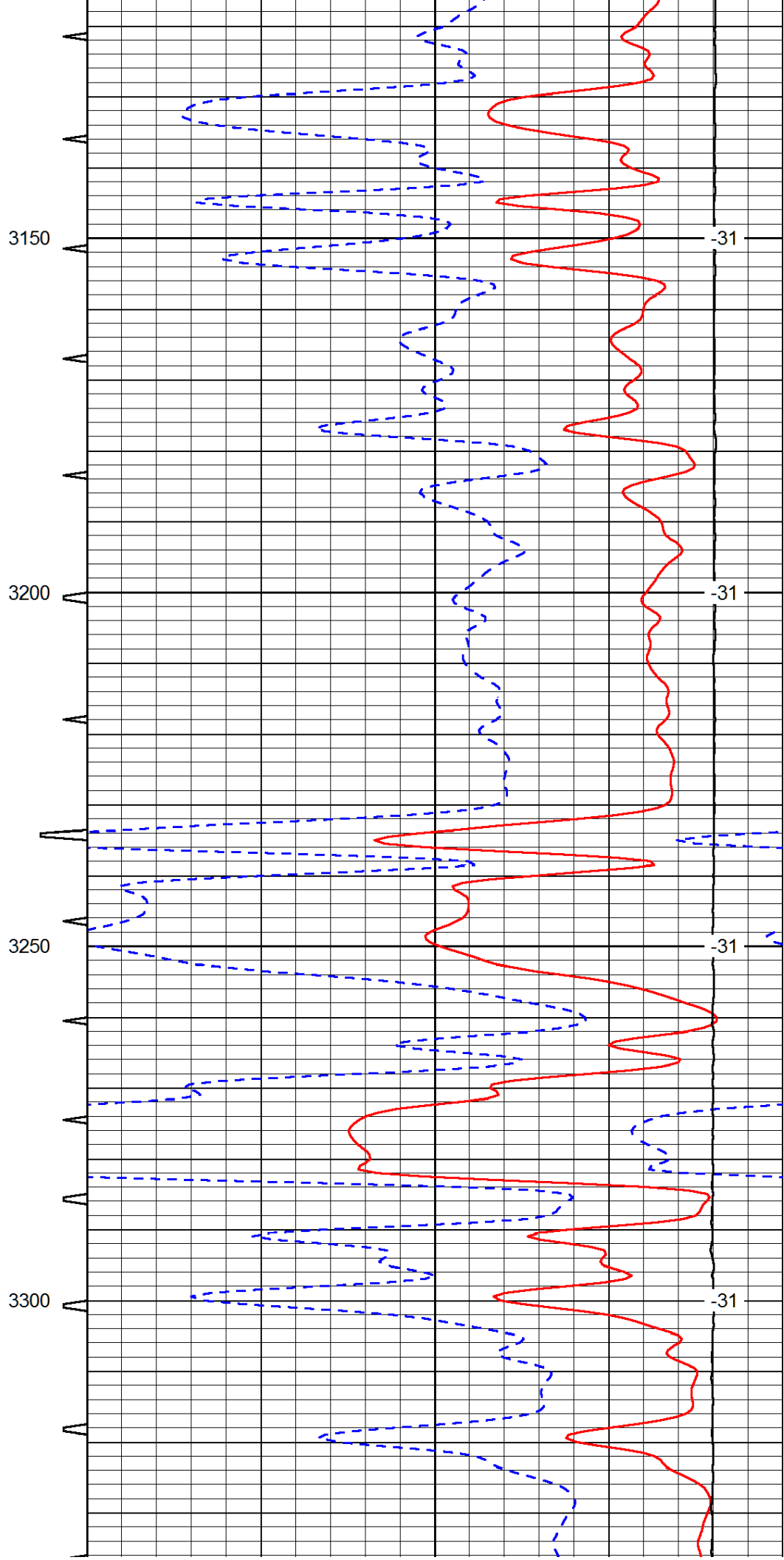
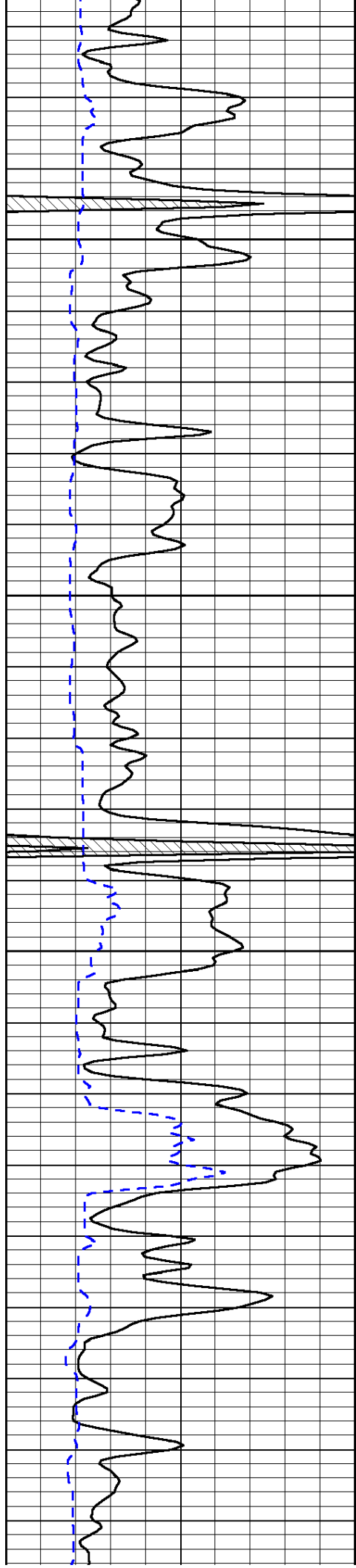


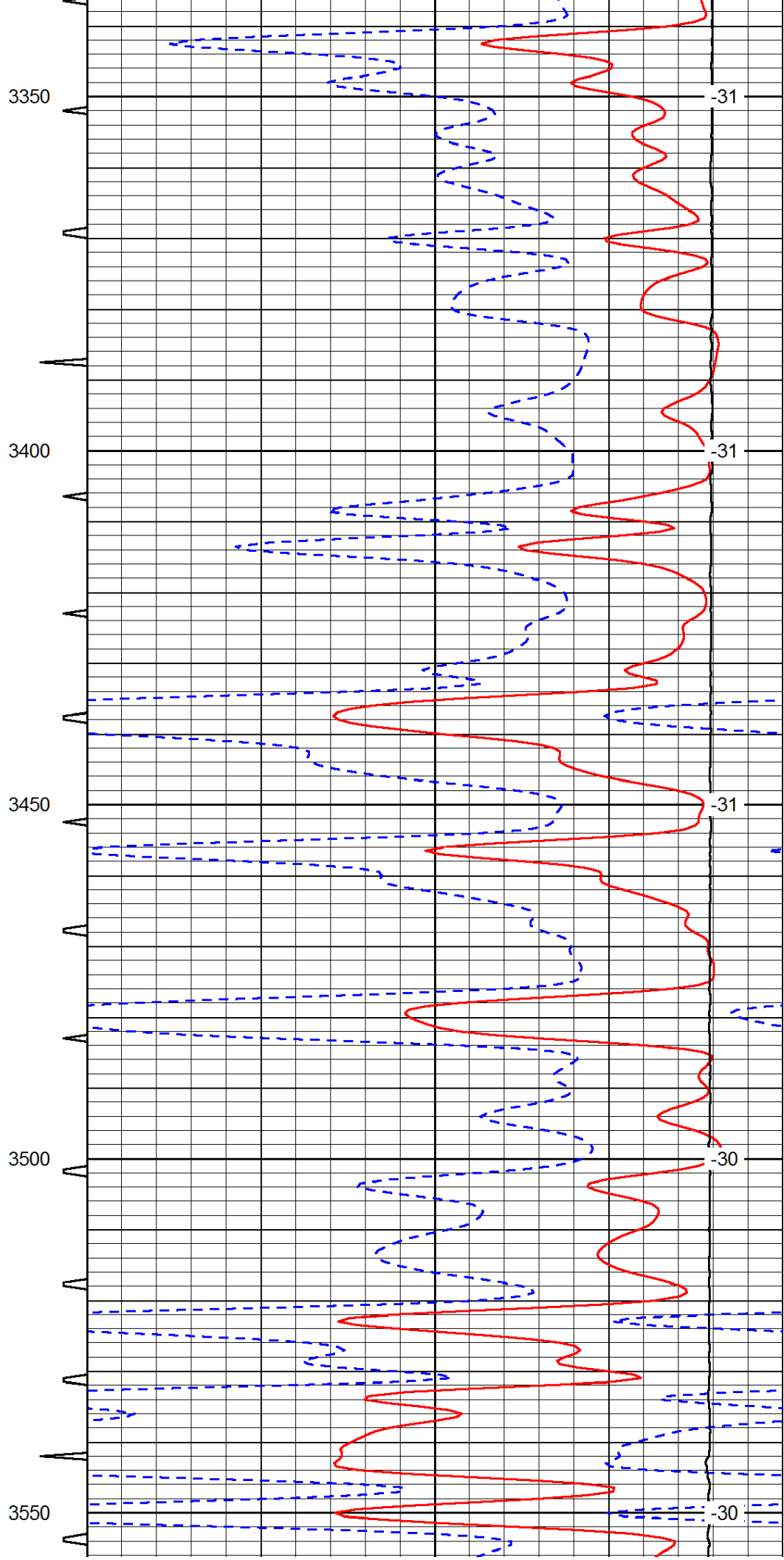
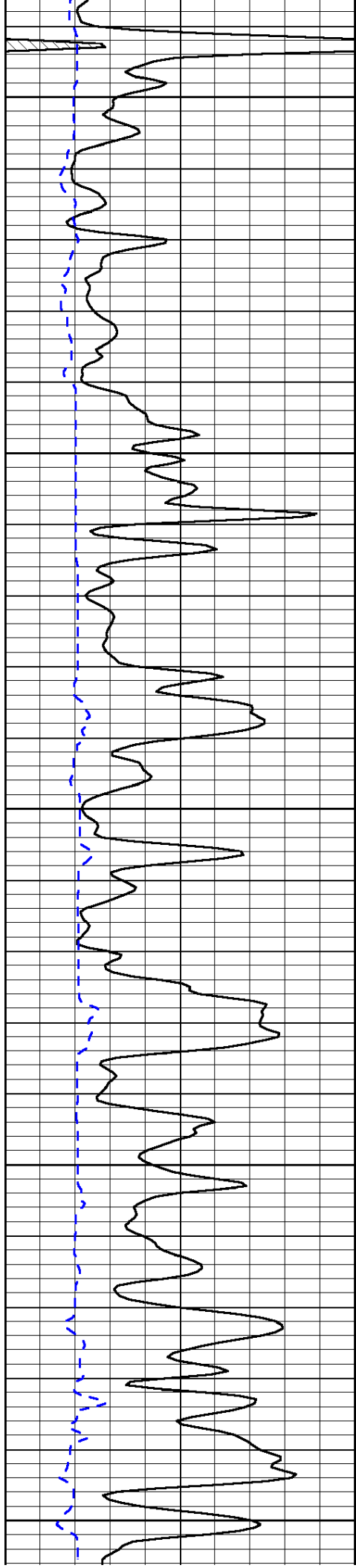


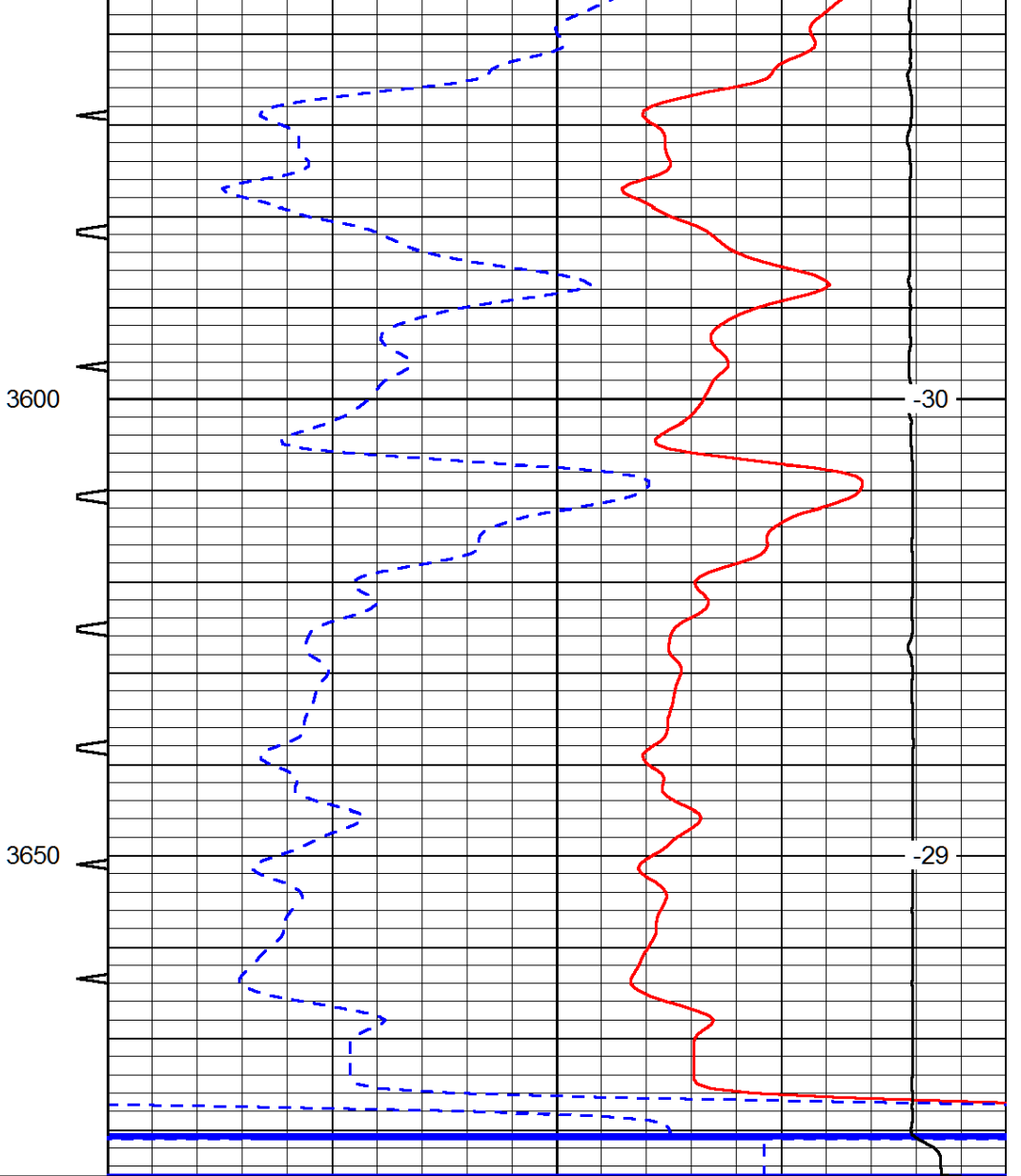
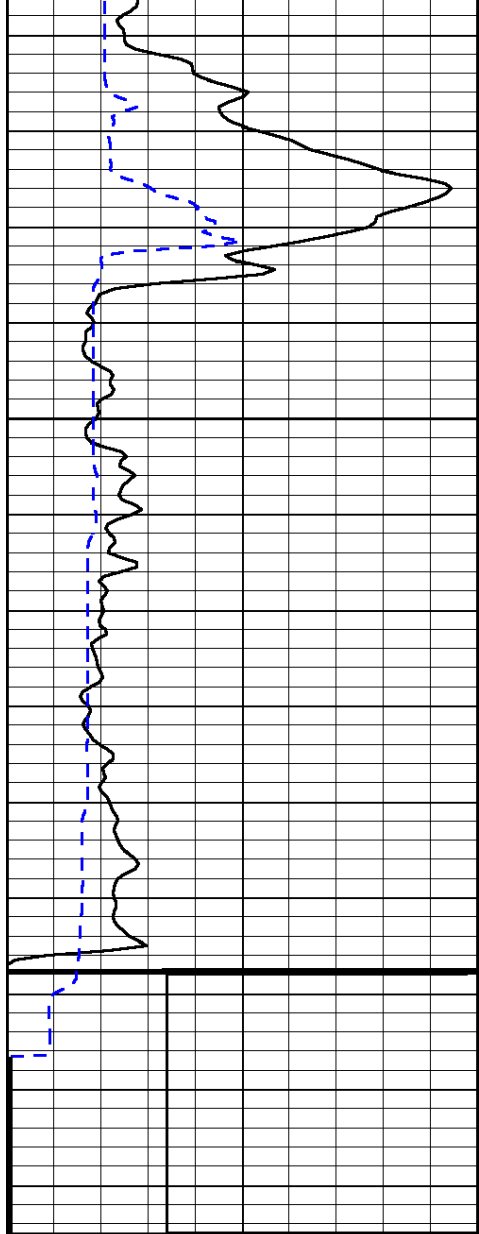












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