



Pioneer Energy Services

# Borehole Compensated Sonic Log

**Company** Wausau Development Corporation  
**Well** Holoperik # 1  
**Field** Rush Center SE  
**County** Rush  
**State** Kansas

**Location** 1080' FNL & 1980' FEL  
**Sec:** 36 **Twp:** 18 S **Rge:** 18 W

Other Services  
 CNL/CDL  
 MEL/DIL

API No. 15-165-22084-00-00  
 Permanent Datum Ground Level Elevation 2023  
 Log Measured From Kelly Bushing 7 Ft. Above Perm. Datum  
 Drilling Measured From Kelly Bushing  
 Date 07-20-2014

Run Number	Two
Type Log	BHC Sonic
Depth Driller	3823
Depth Logger	3826
Bottom Logged Interval	3815
Top Logged Interval	1150
Type Fluid In Hole	Chemical
Salinity, PPM CL	4600
Density	9.2
Level	Full
Max. Rec. Temp. F	114
Operating Rig Time	4 Hours
Equipment -- Location	17 Hays
Recorded By	Y. Ruiz
Witnessed By	Steve VanBuskirk

Borehole Record		Casing Record					
Run No	Bit	From	To	Size	Wgt.	From	To
One	12.25	00	1163	8.625	23#	00	1163
Two	7.875	1163					

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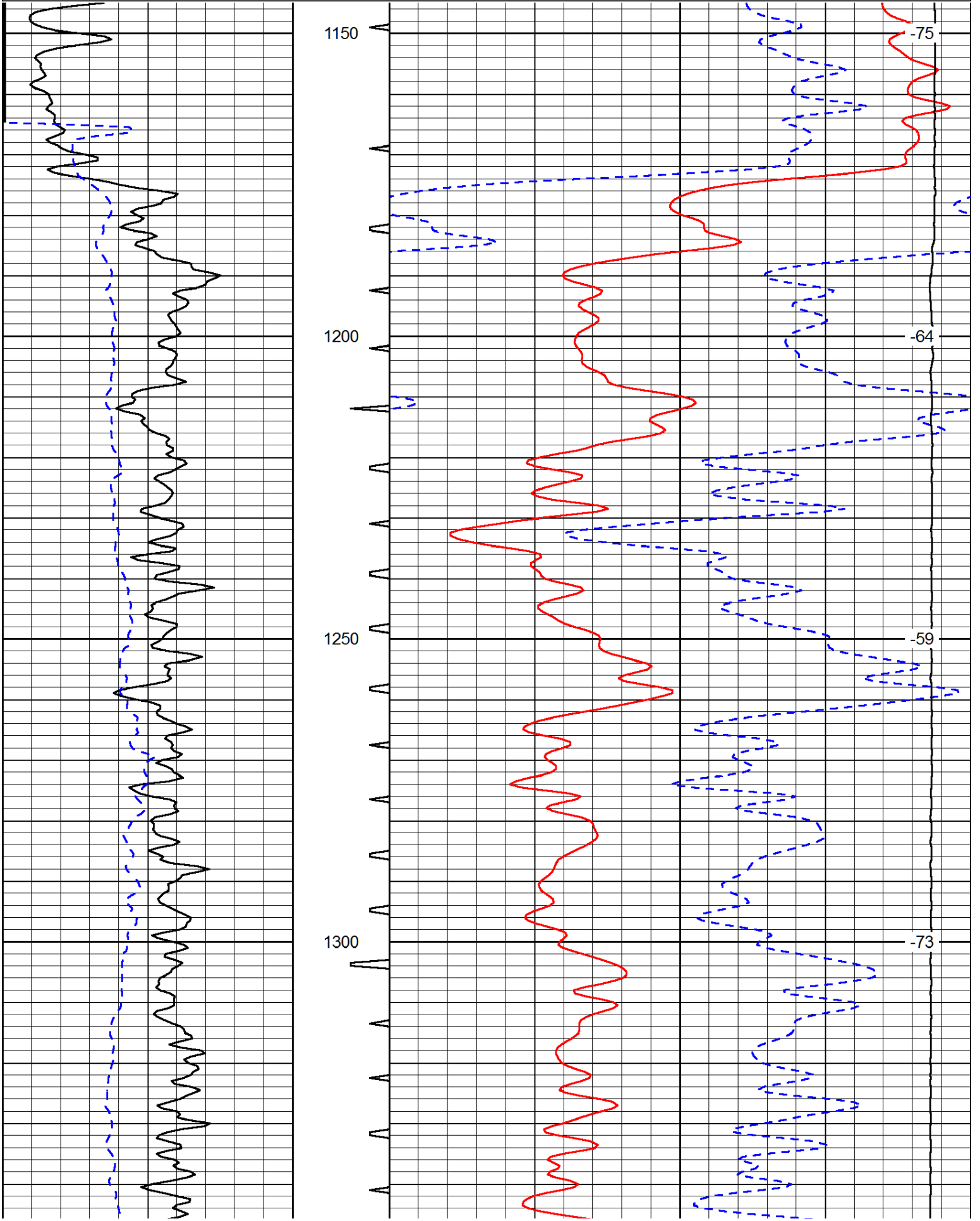
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

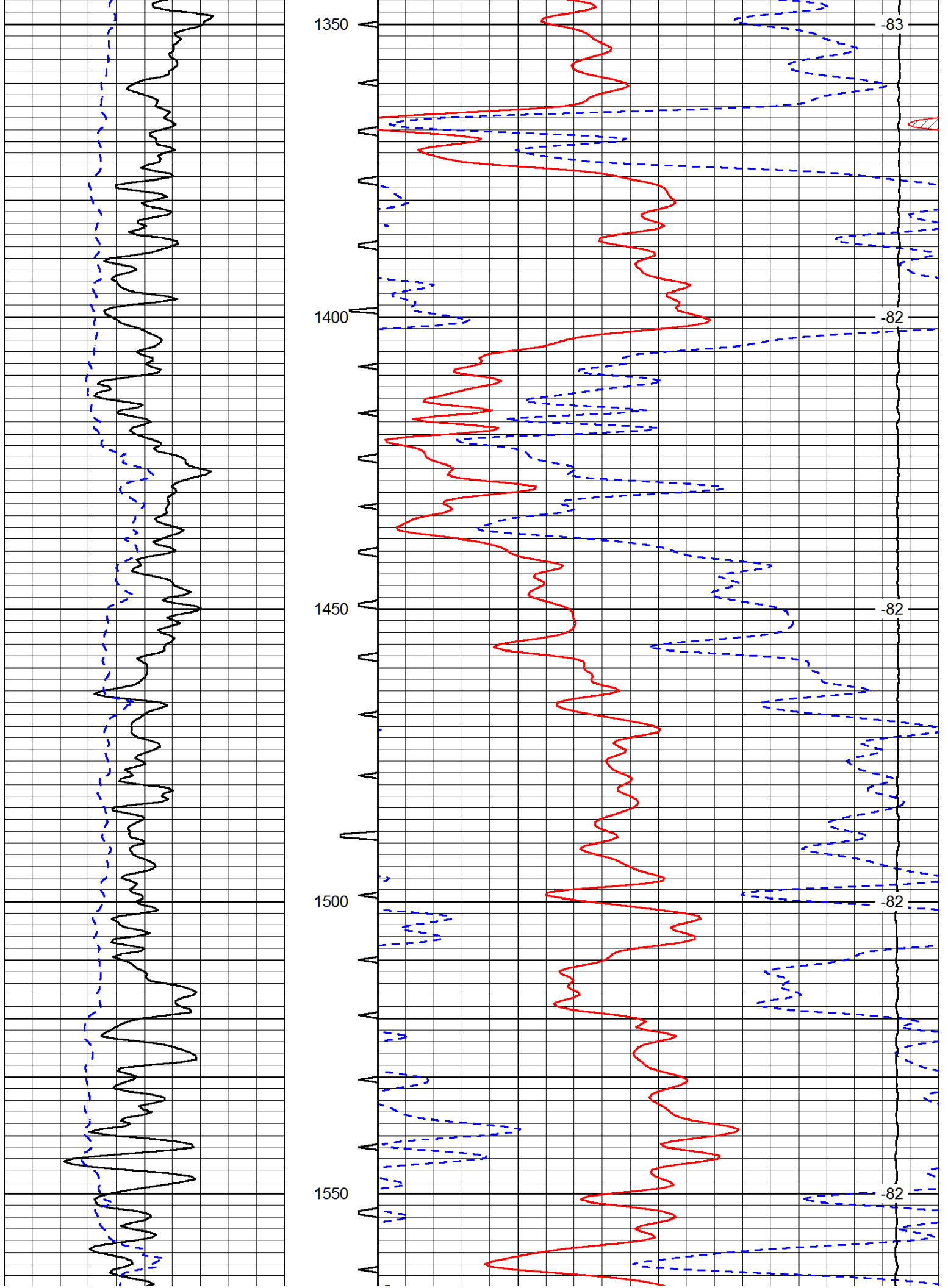
**Comments**

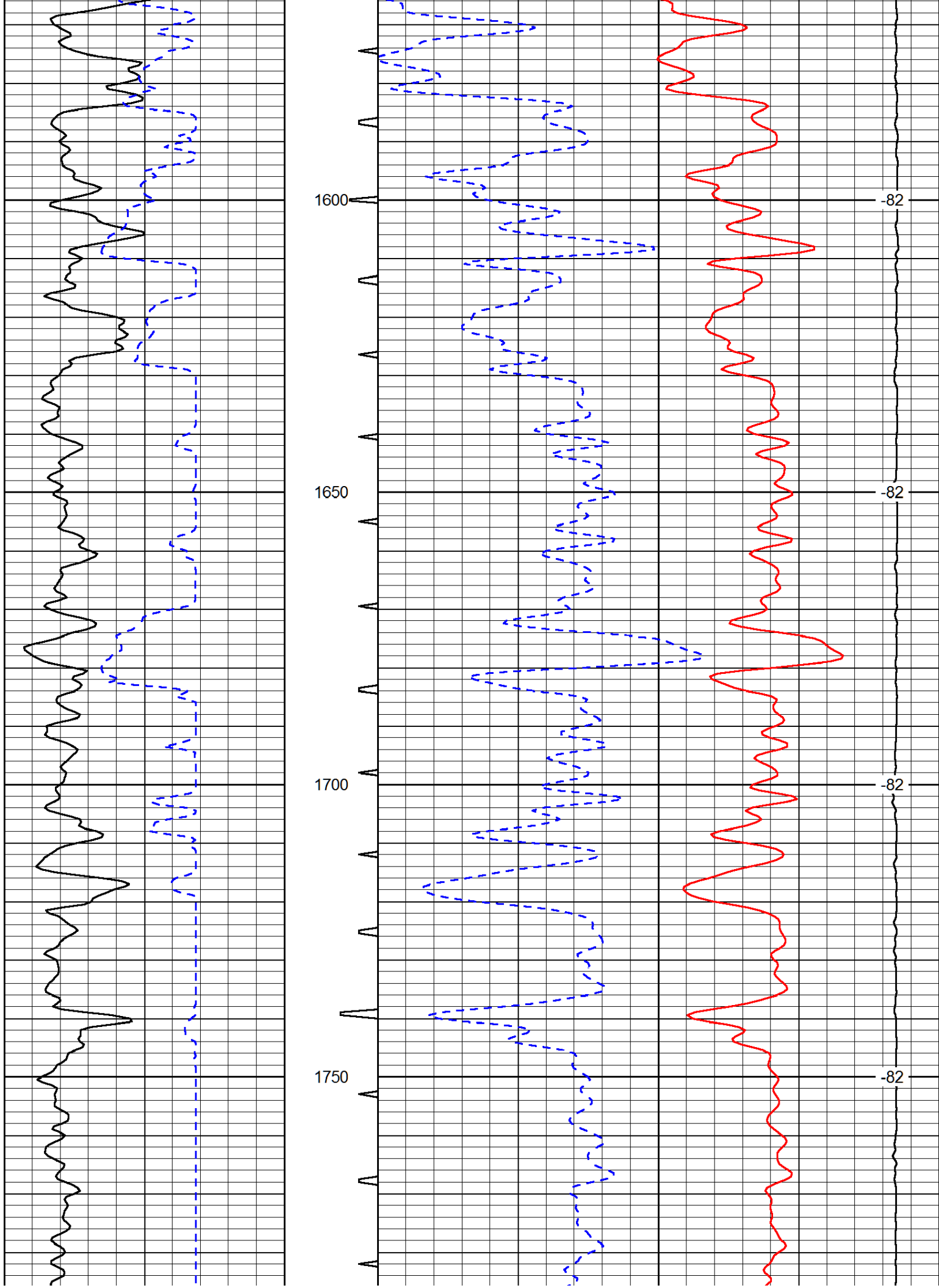
Thank you for using Log-Tech, Inc.  
 (785) 625-3858  
 Rush Center,  
 3 East, 1 South, 1/2 West,  
 South into

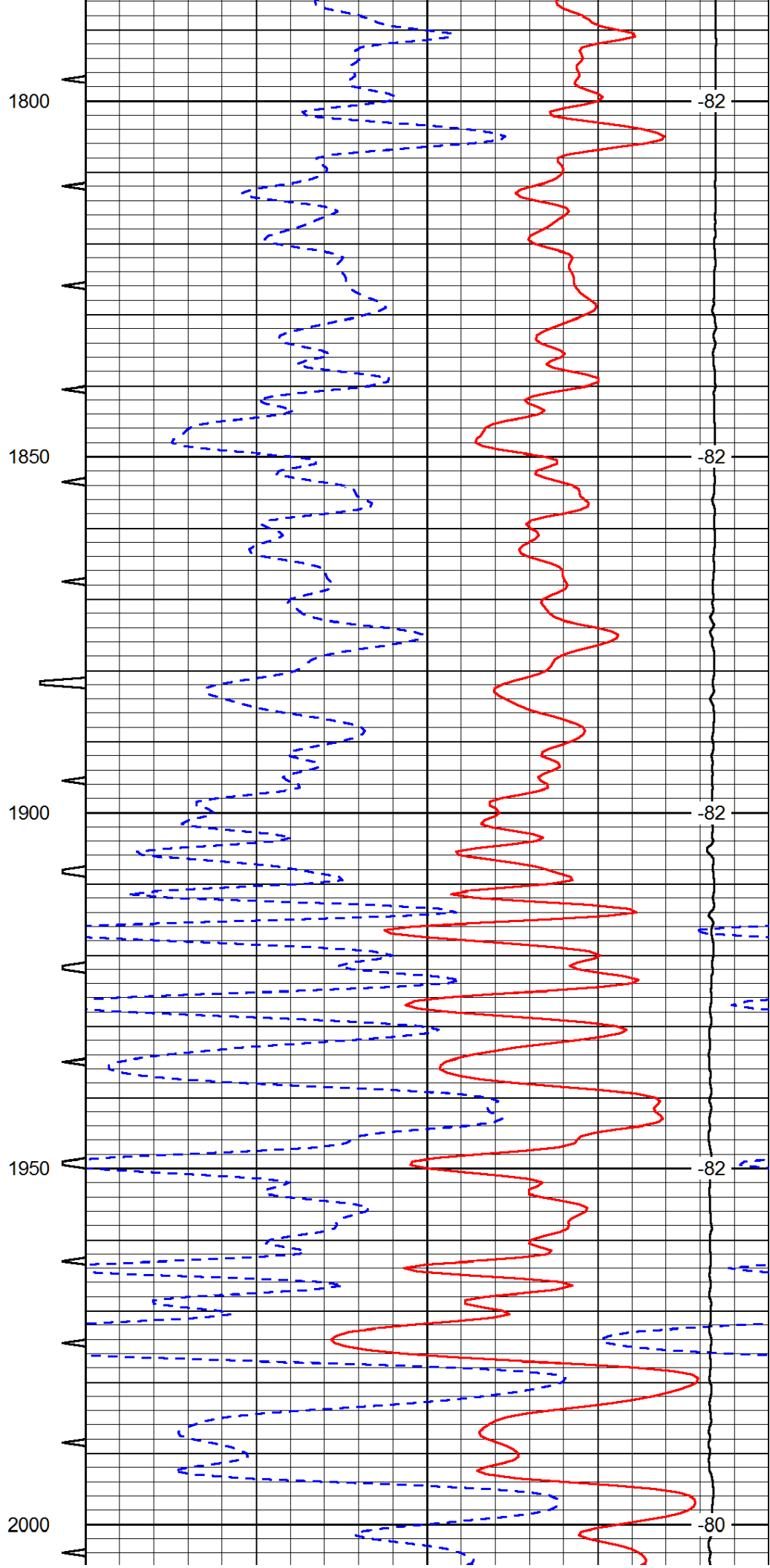
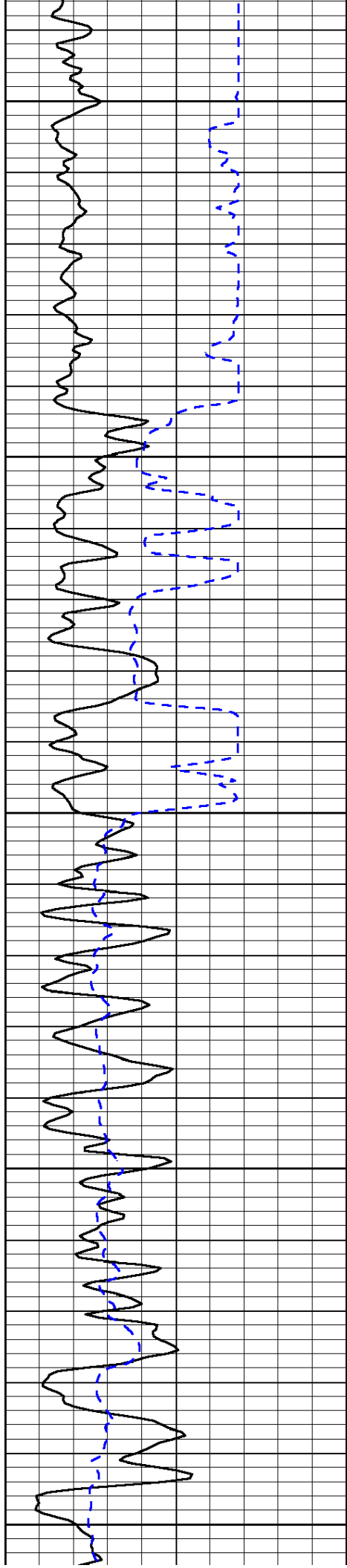
Database File: wausau\_holoperik\_1\_hd.db  
 Dataset Pathname: DIL/waustk  
 Presentation Format: sonic  
 Dataset Creation: Sun Jul 20 20:34:35 2014  
 Charted by: Depth in Feet scaled 1:240

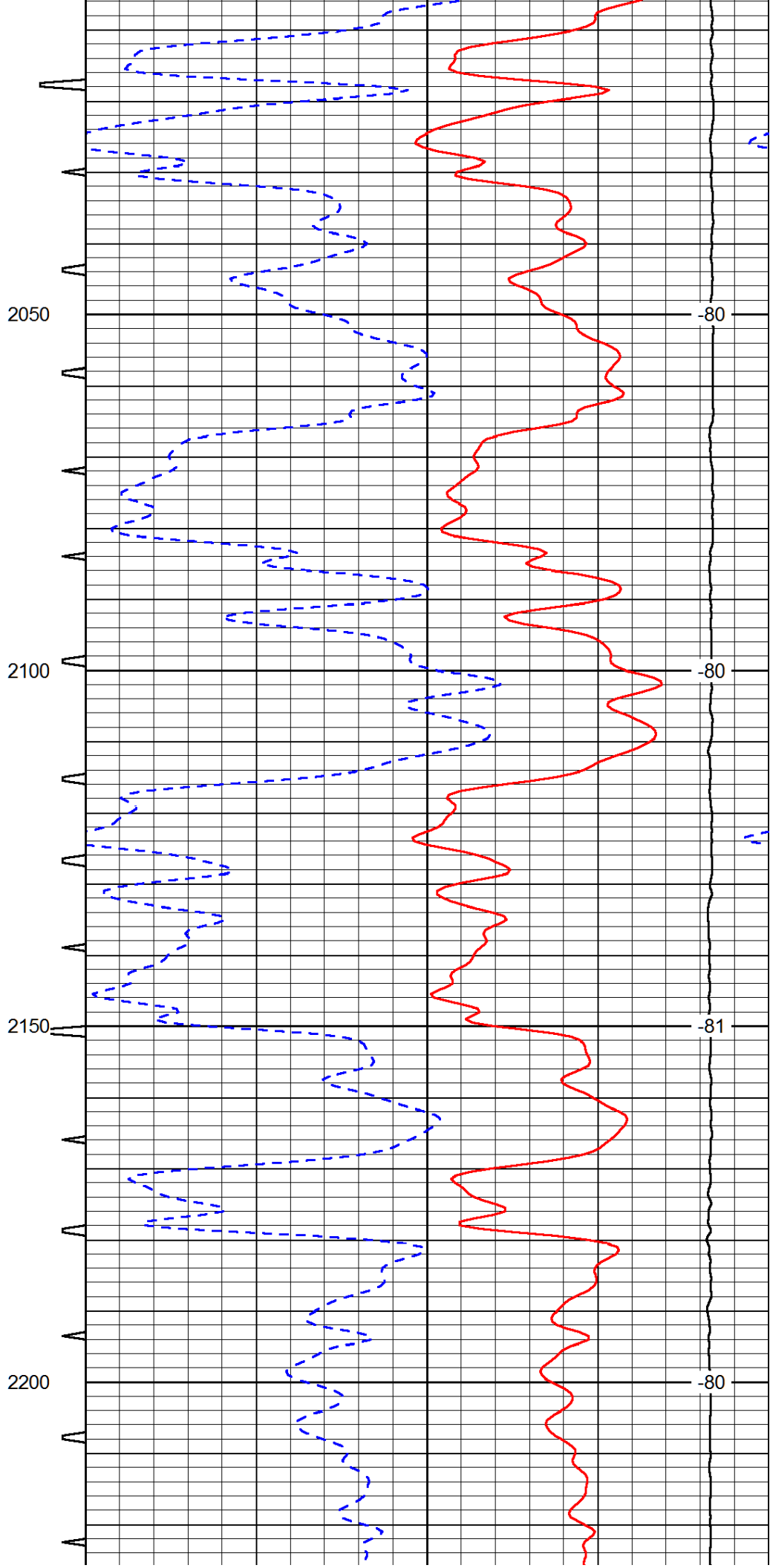
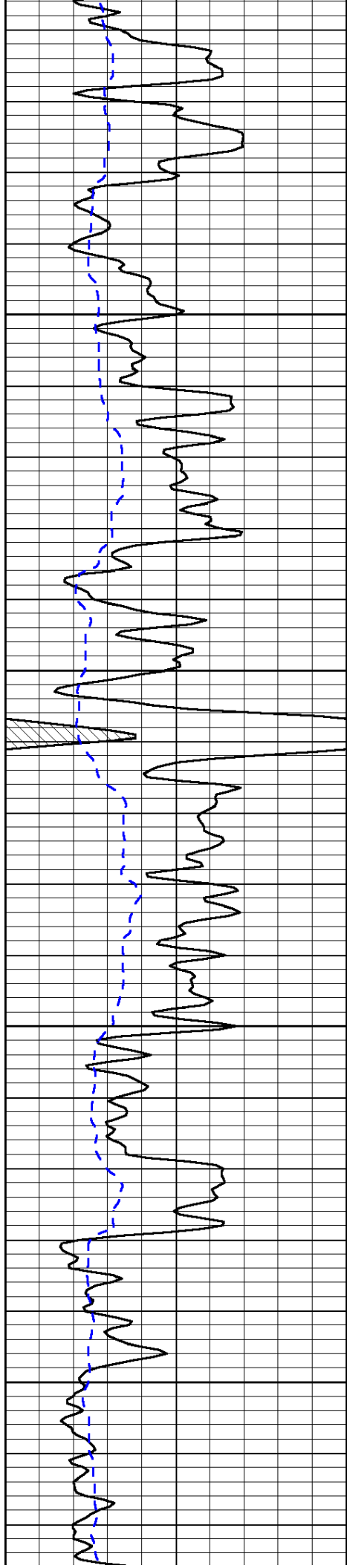
0	Gamma Ray	150	Sonic Int	140	Delta Time (usec/ft)	40
150	Gamma Ray	300	5	0	Sonic Porosity	-10
6	dCAL (GAPI)	16		15000	LTEN (lb)	0
LSPD						

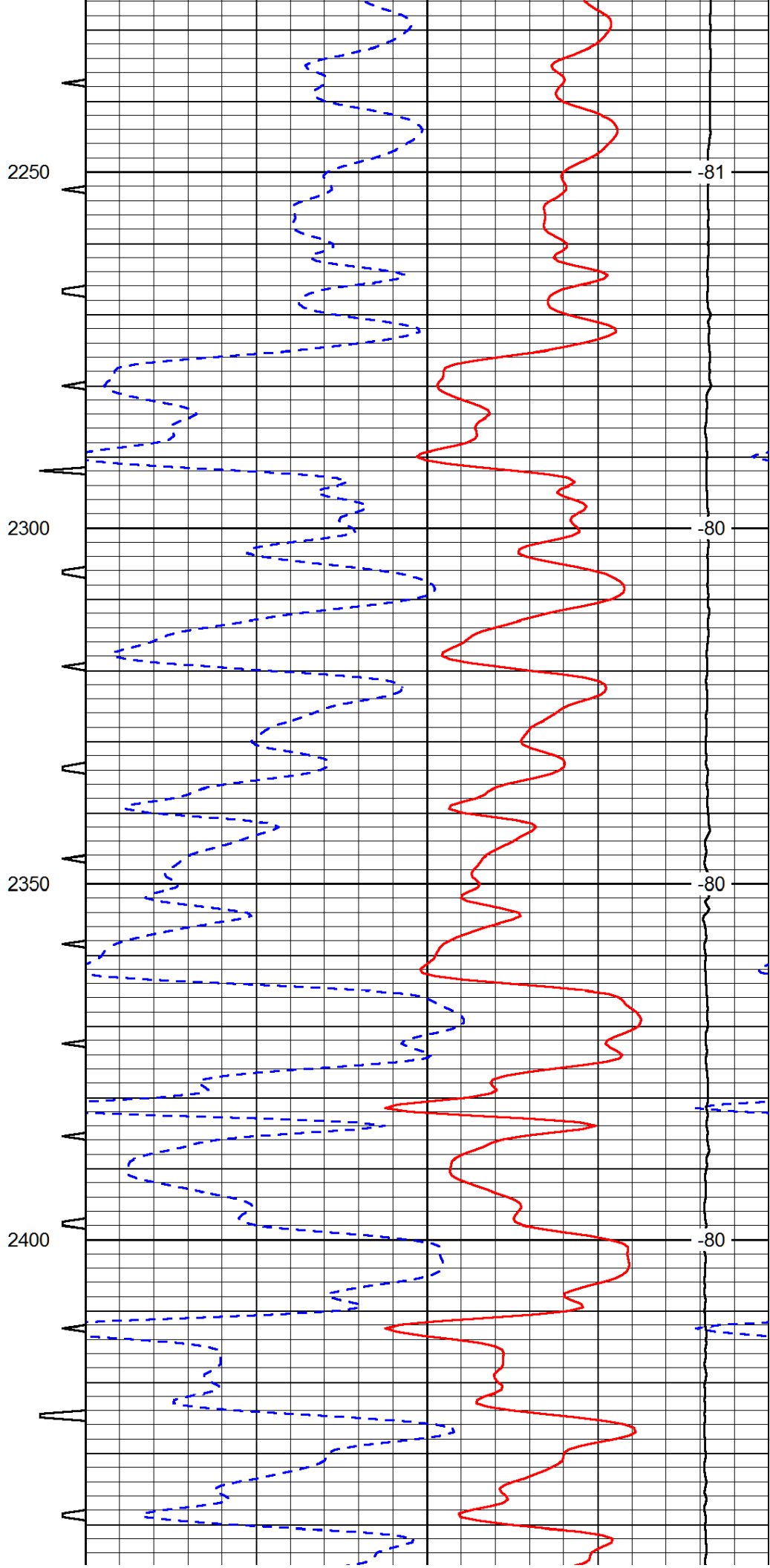
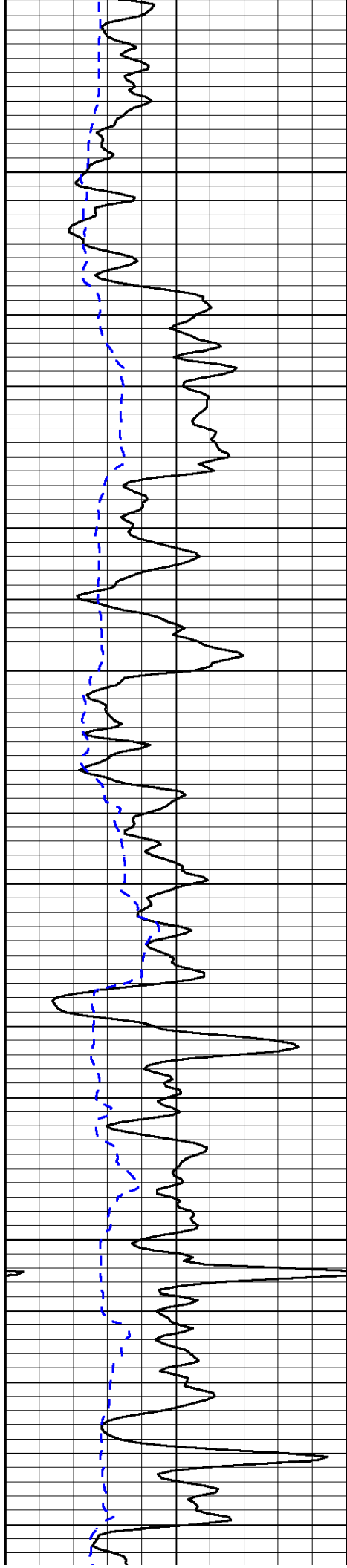


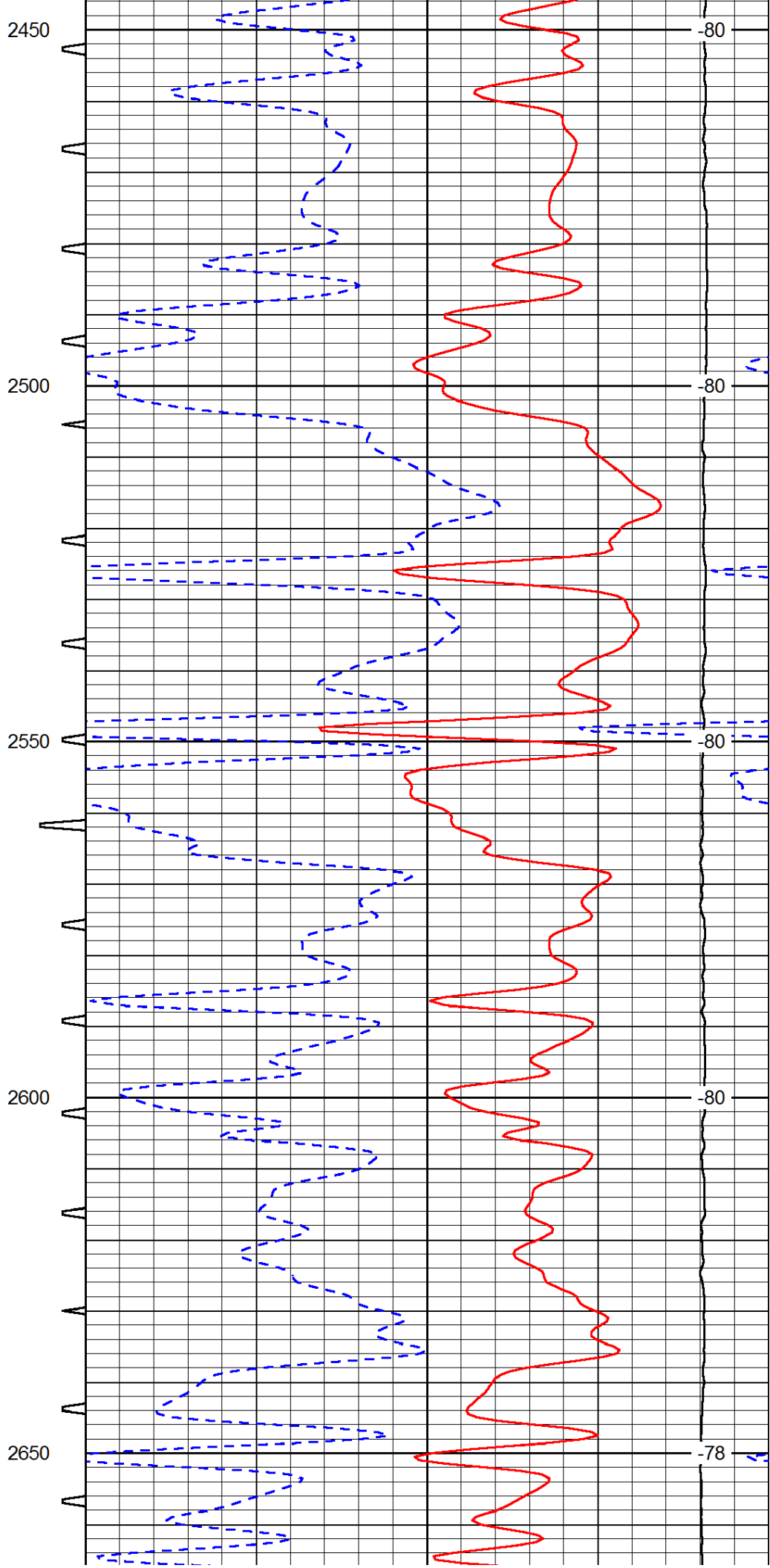
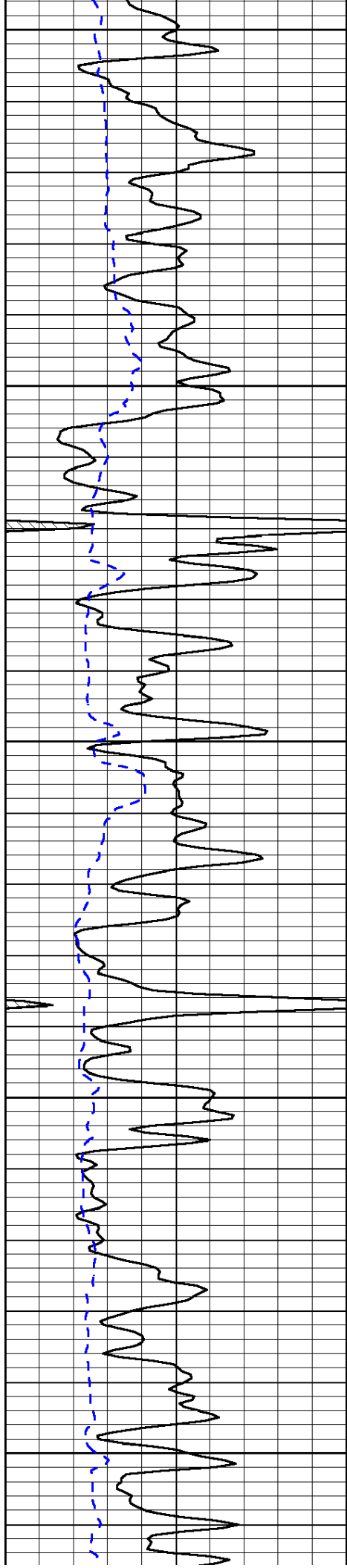


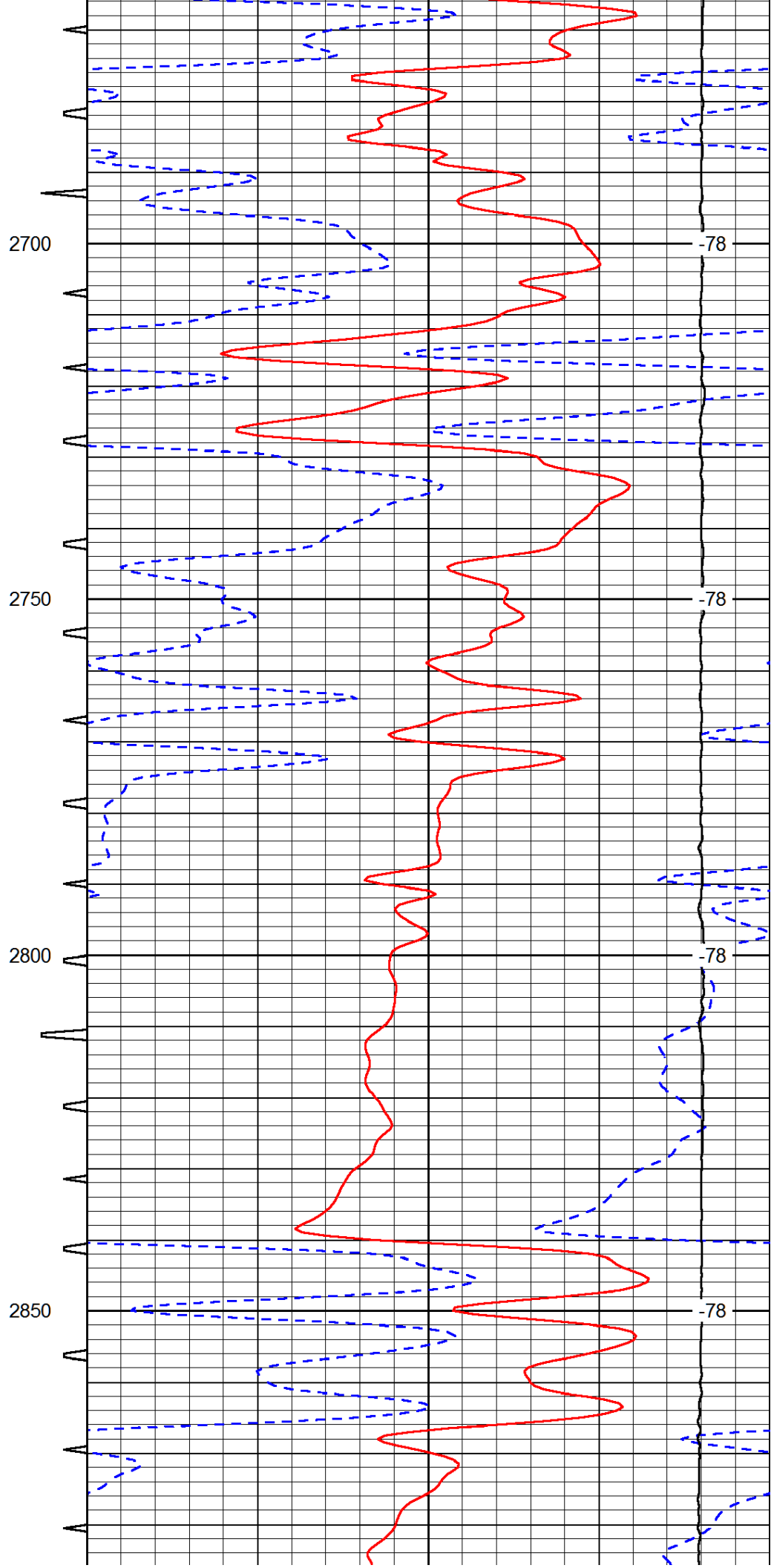
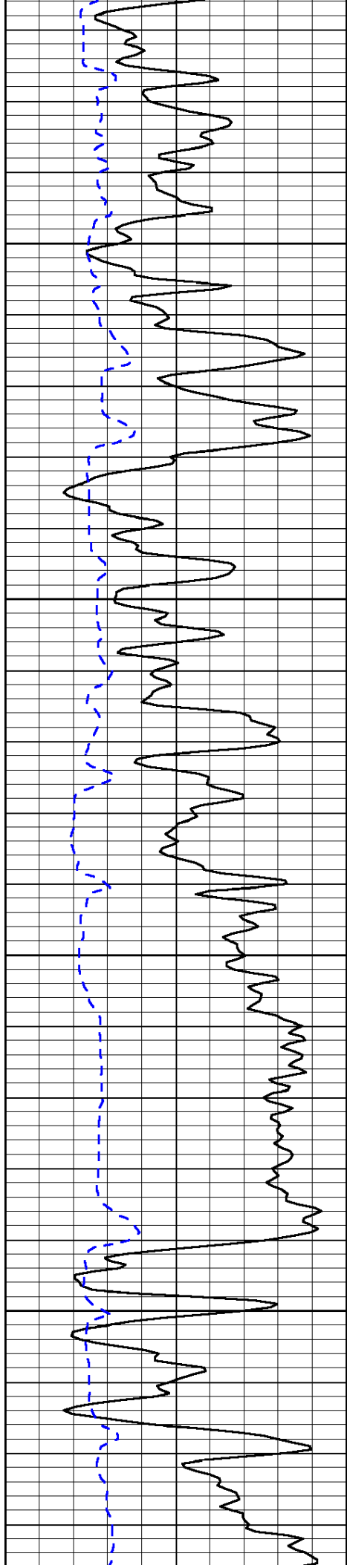


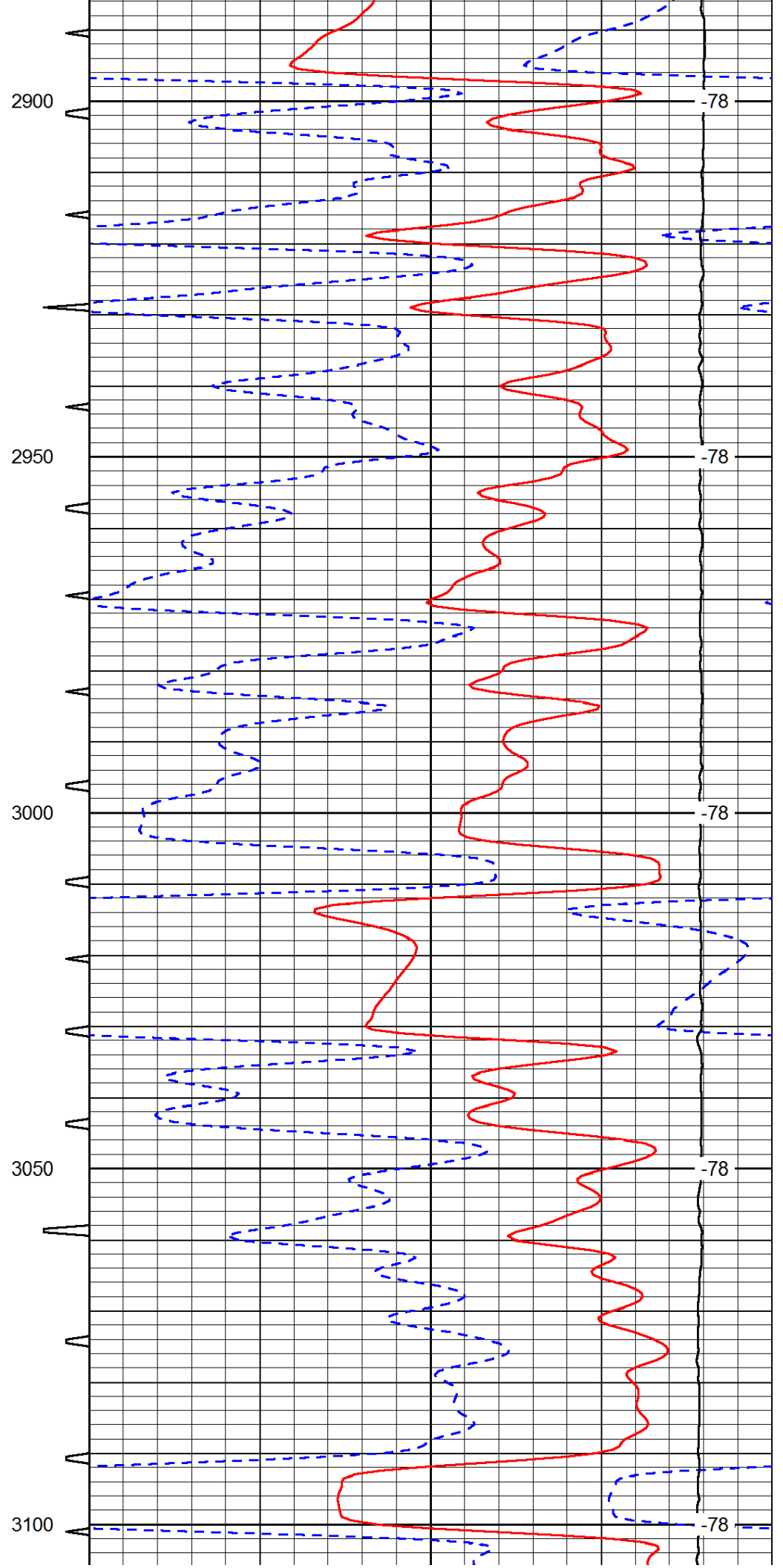
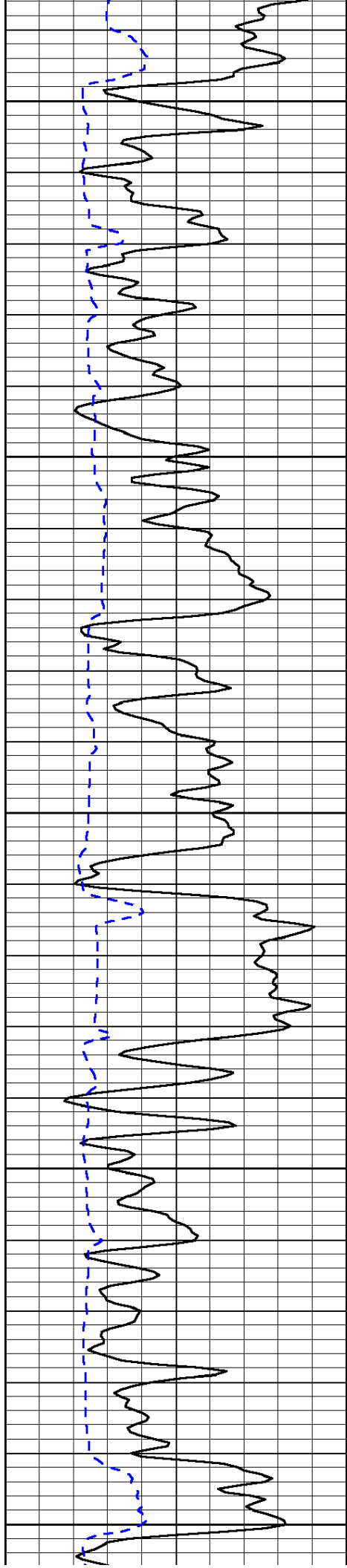


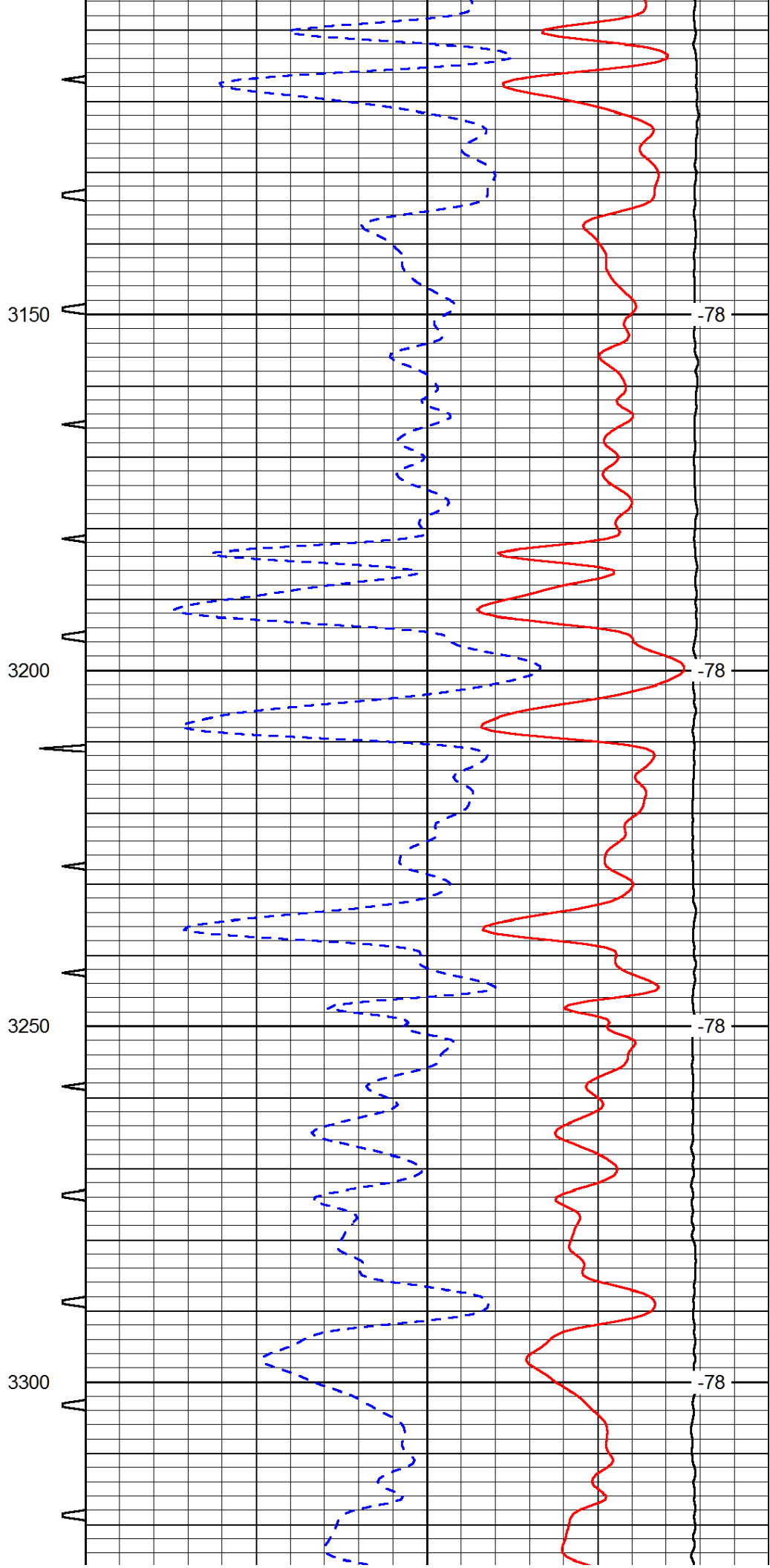
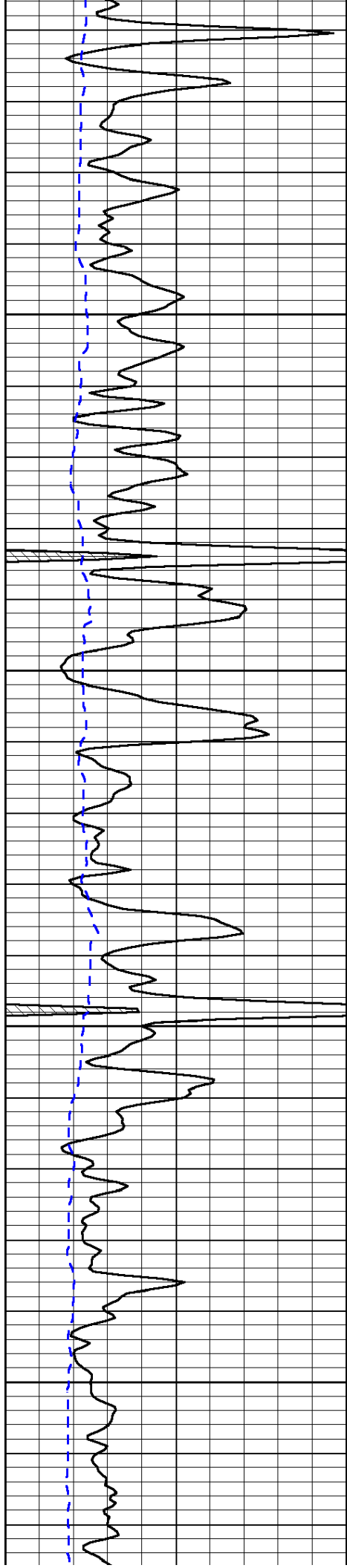


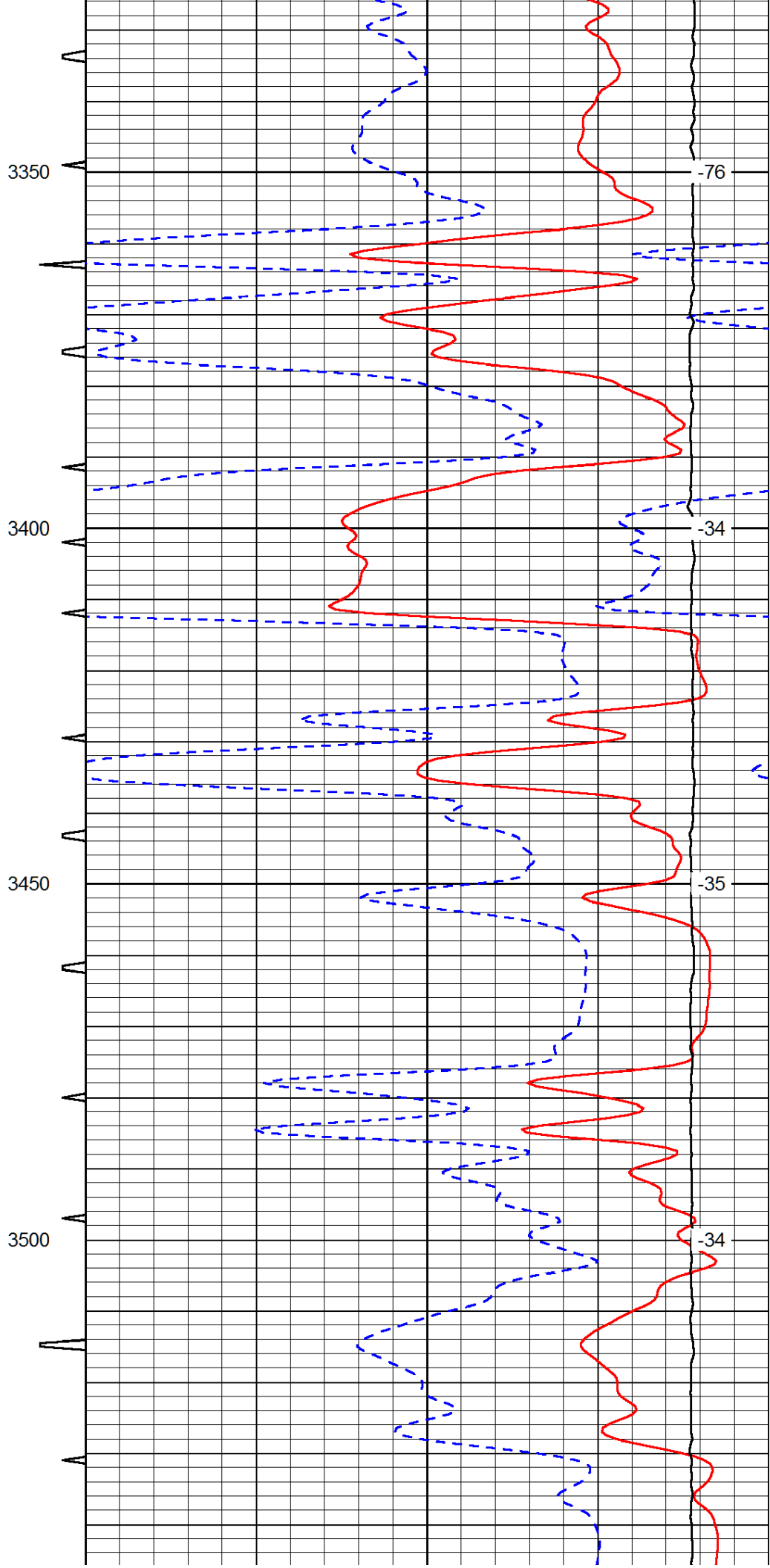
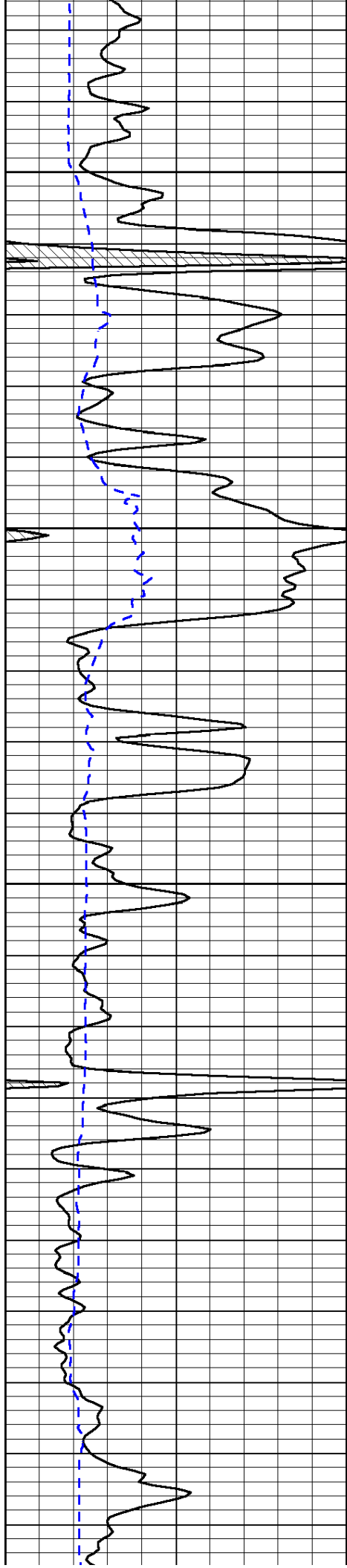


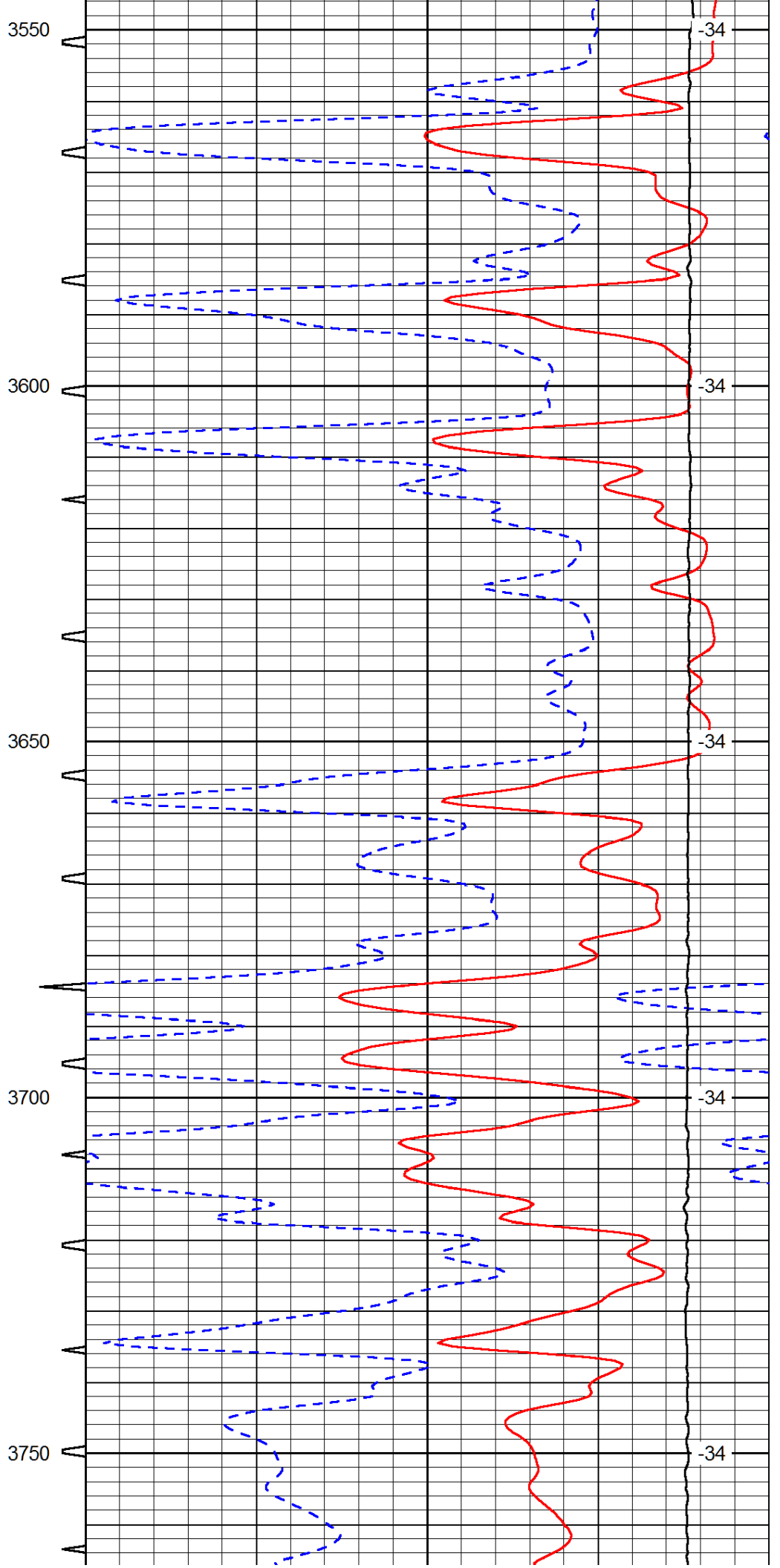
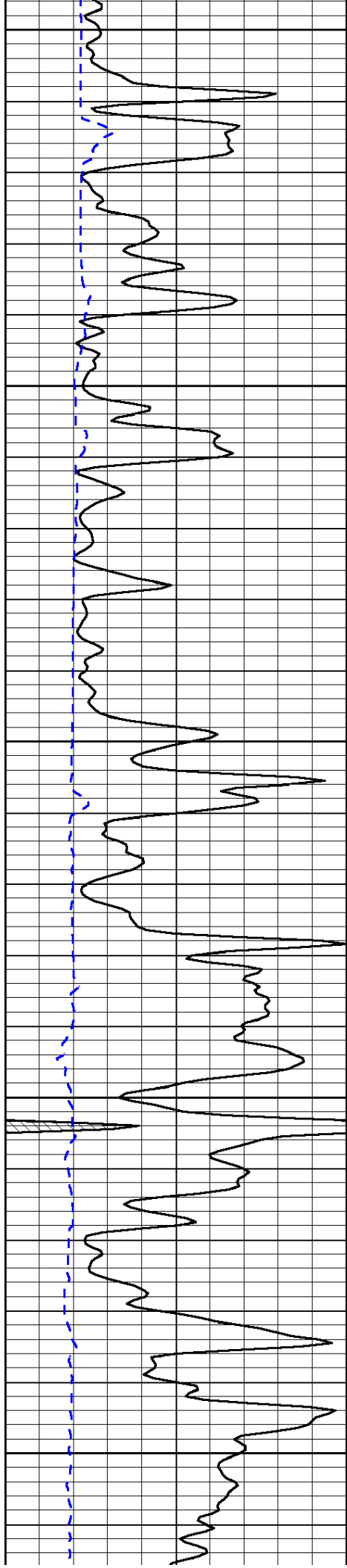


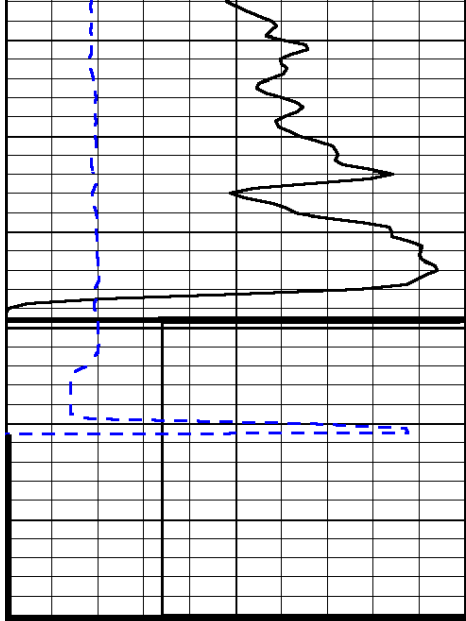




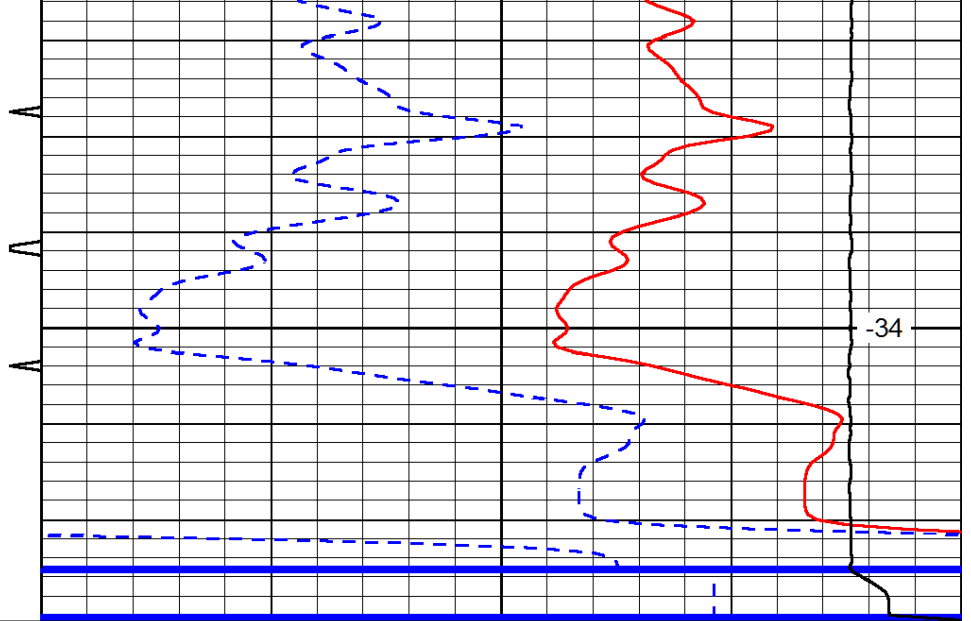








3800



-34

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