



Borehole Compensated Sonic Log

Pioneer Energy Services

API No.

15-185-23823-00-00

Company Vamco Operations

Well MGT A-1 #1

Field Dell East

County Stafford

State Kansas

Location 1590' FNL & 770' FEL

Other Services
CNL/CDL
MEL/DIL

Sec: 8 Twp: 21S Rge: 13W

Permanent Datum Ground Level Elevation 1893
Log Measured From Kelly Bushing 9 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Elevation
K.B. 1902
D.F. 1893
G.L. 1893

Date

8/28/2013

Run Number Two

Type Log BHC Sonic

Depth Driller 3650

Depth Logger 3650

Bottom Logged Interval 3639

Top Logged Interval 250

Type Fluid In Hole Chemical

Salinity, PPM CL 12000

Density 9.3

Level Full

Max. Rec. Temp. F 115

Operating Rig Time 5 Hours

Equipment -- Location 91 Days

Recorded By D. Schmidt

Witnessed By Jeff Burk

Eli Felts

Borehole Record

Casing Record

Run No.

Bit

From

To

Size

Wgt.

From

To

One 12.25 00 263 8.625 23# 00 263

Two 7.875 263 TD

<<< Fold Here >>>

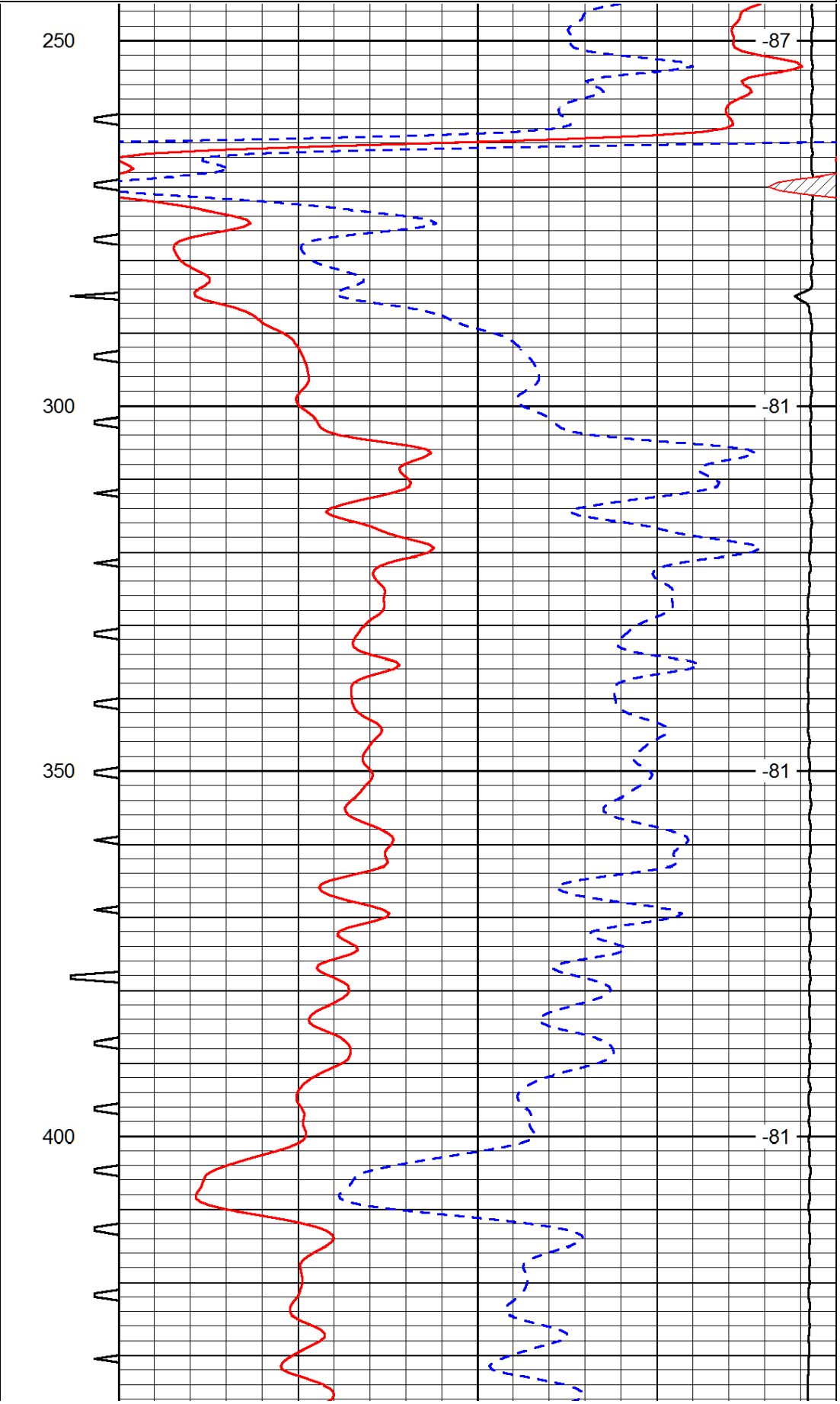
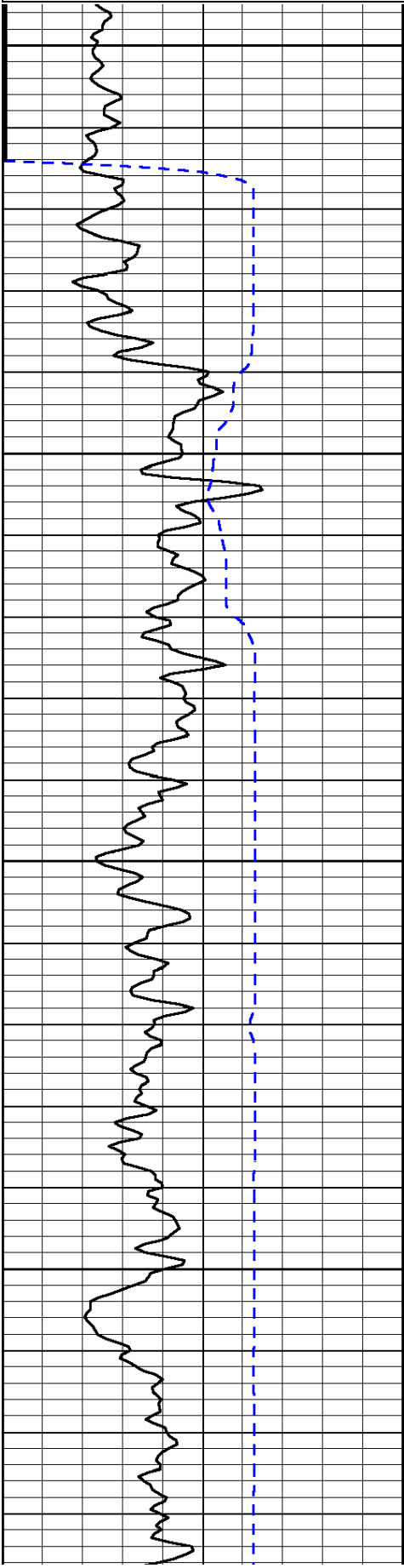
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

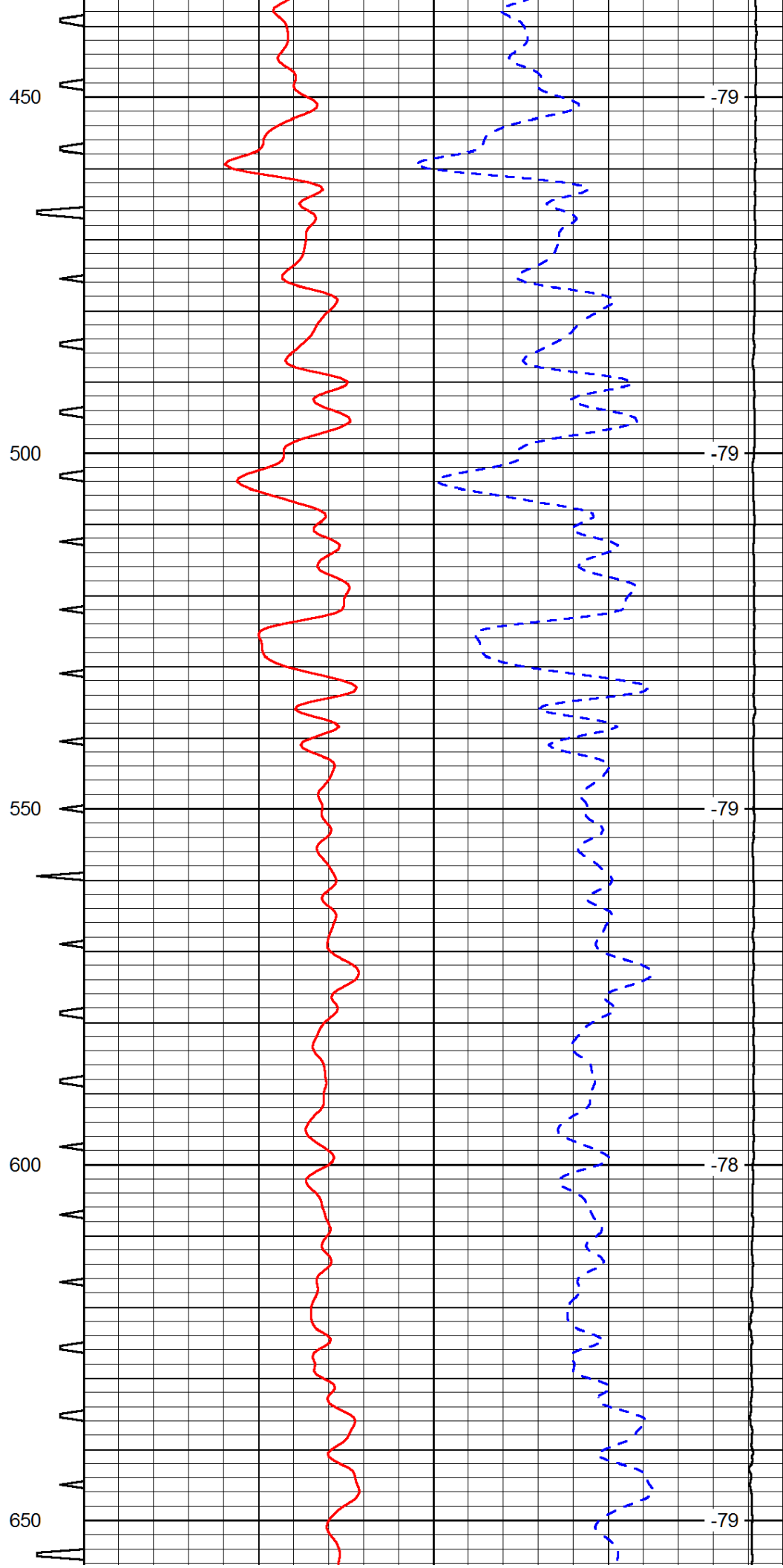
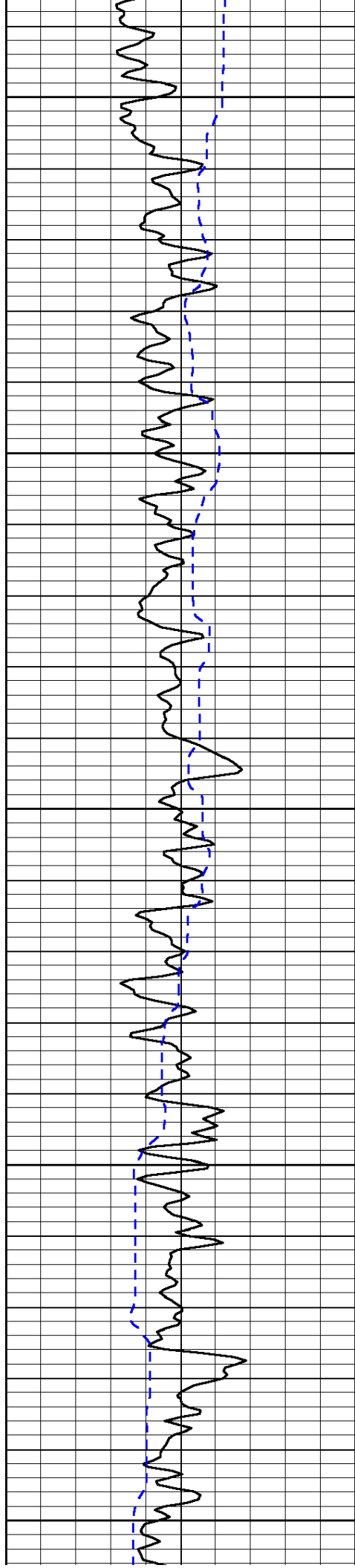
Comments

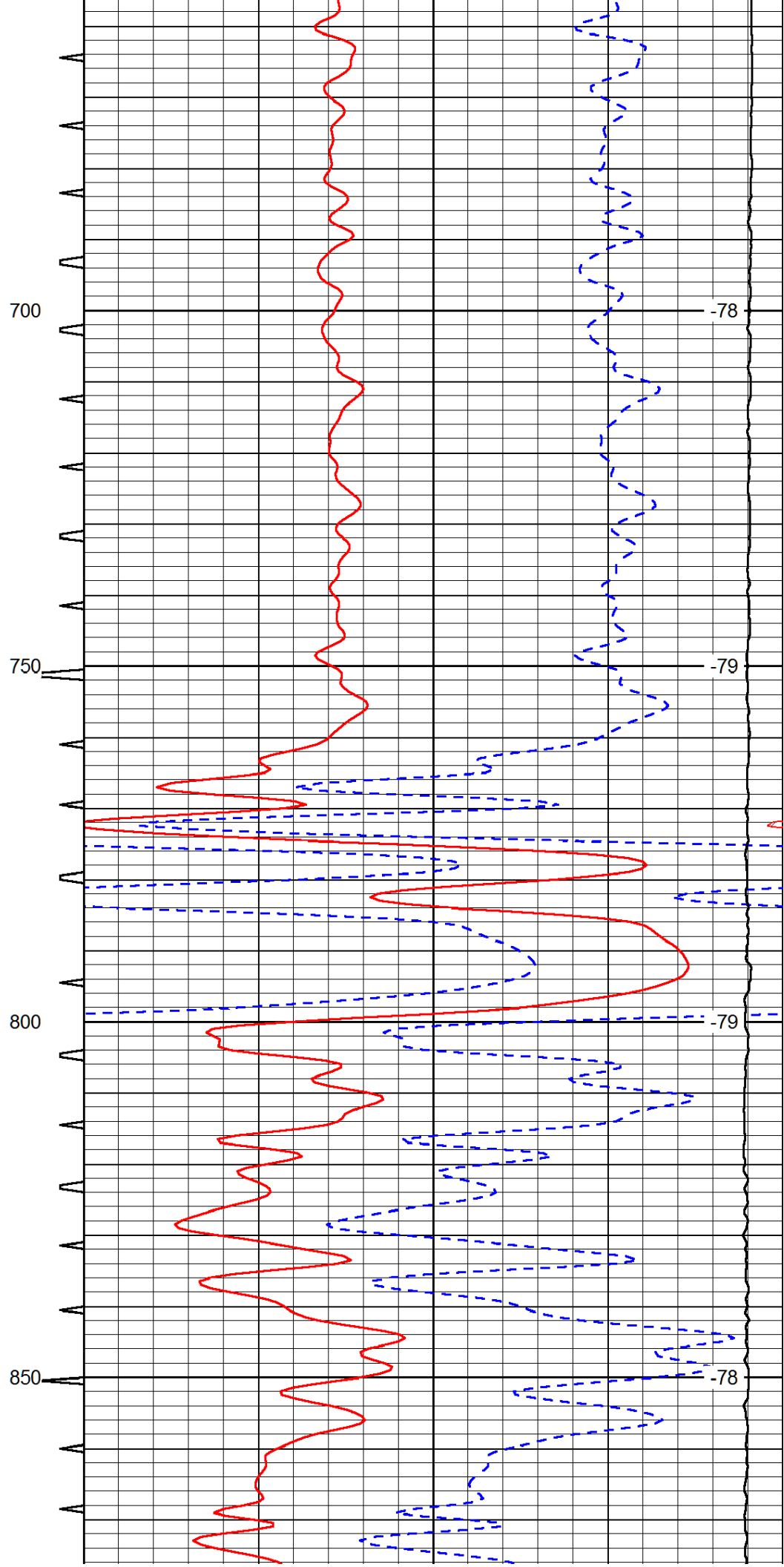
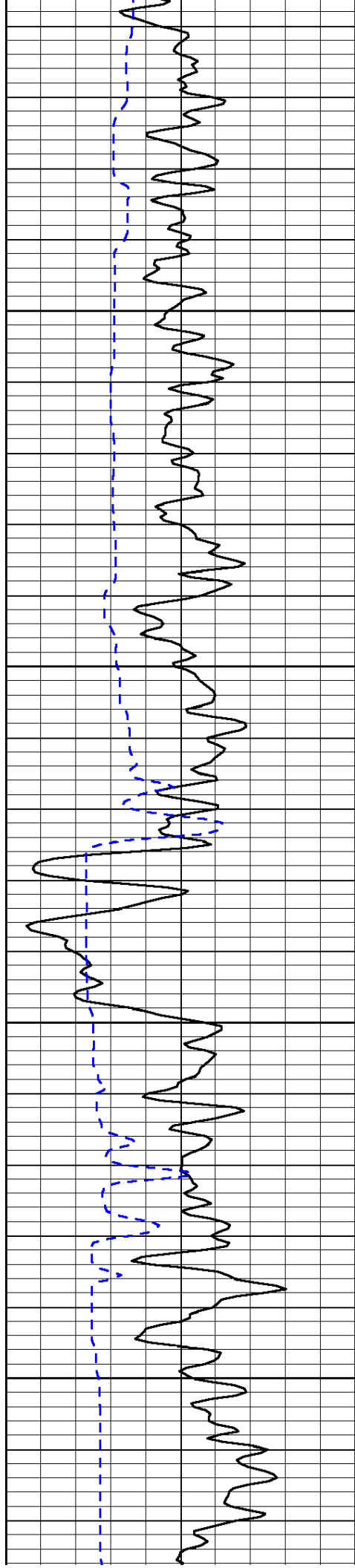
Thank you for using Log-Tech, Inc.
(785) 625-3858
Great Bend,
South on 281 to county line, 1 South, 1 West, 1/8 South,
West into

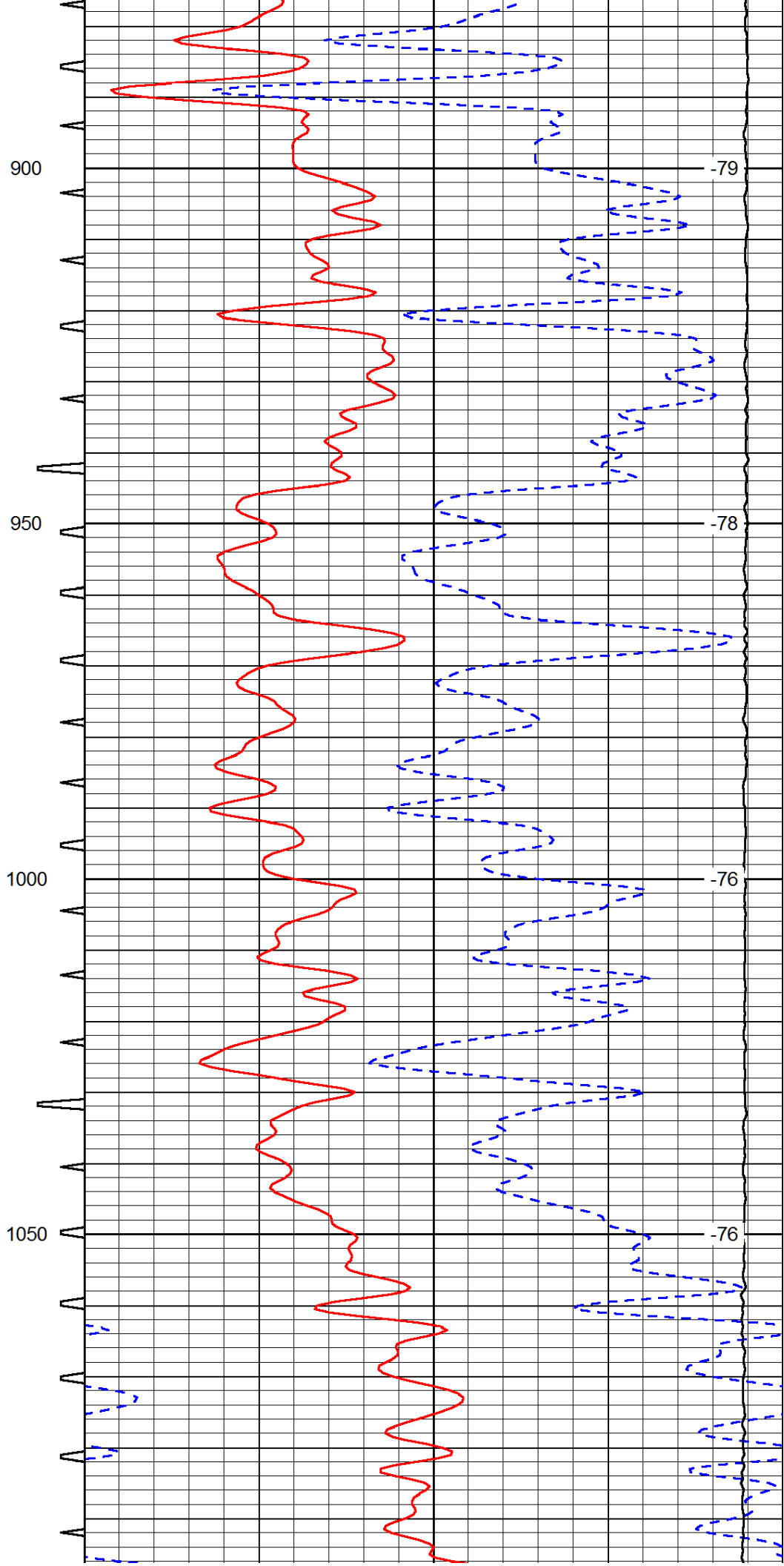
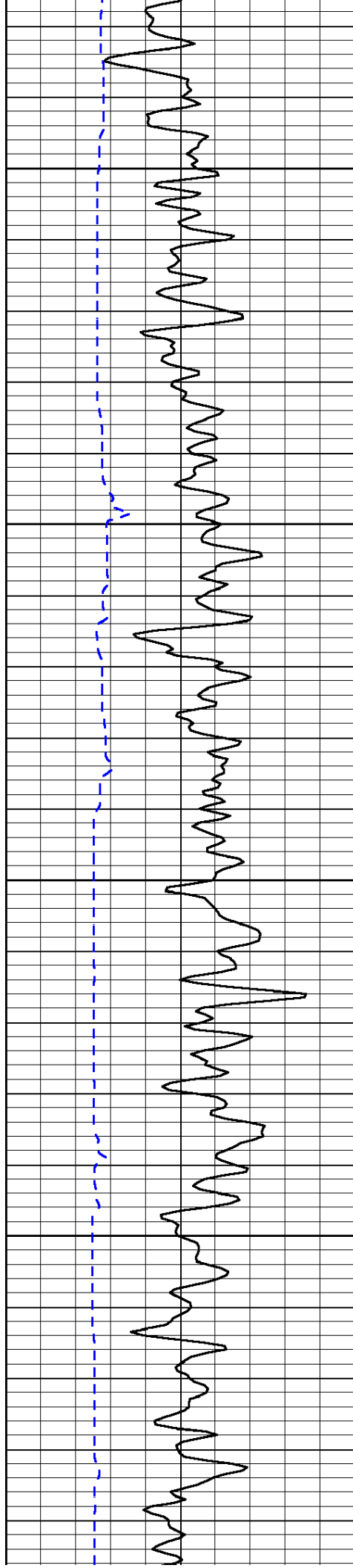
Database File: vamco_082813hd.db
Dataset Pathname: dil/vamstck
Presentation Format: sonic
Dataset Creation: Wed Aug 28 17:36:49 2013
Charted by: Depth in Feet scaled 1:240

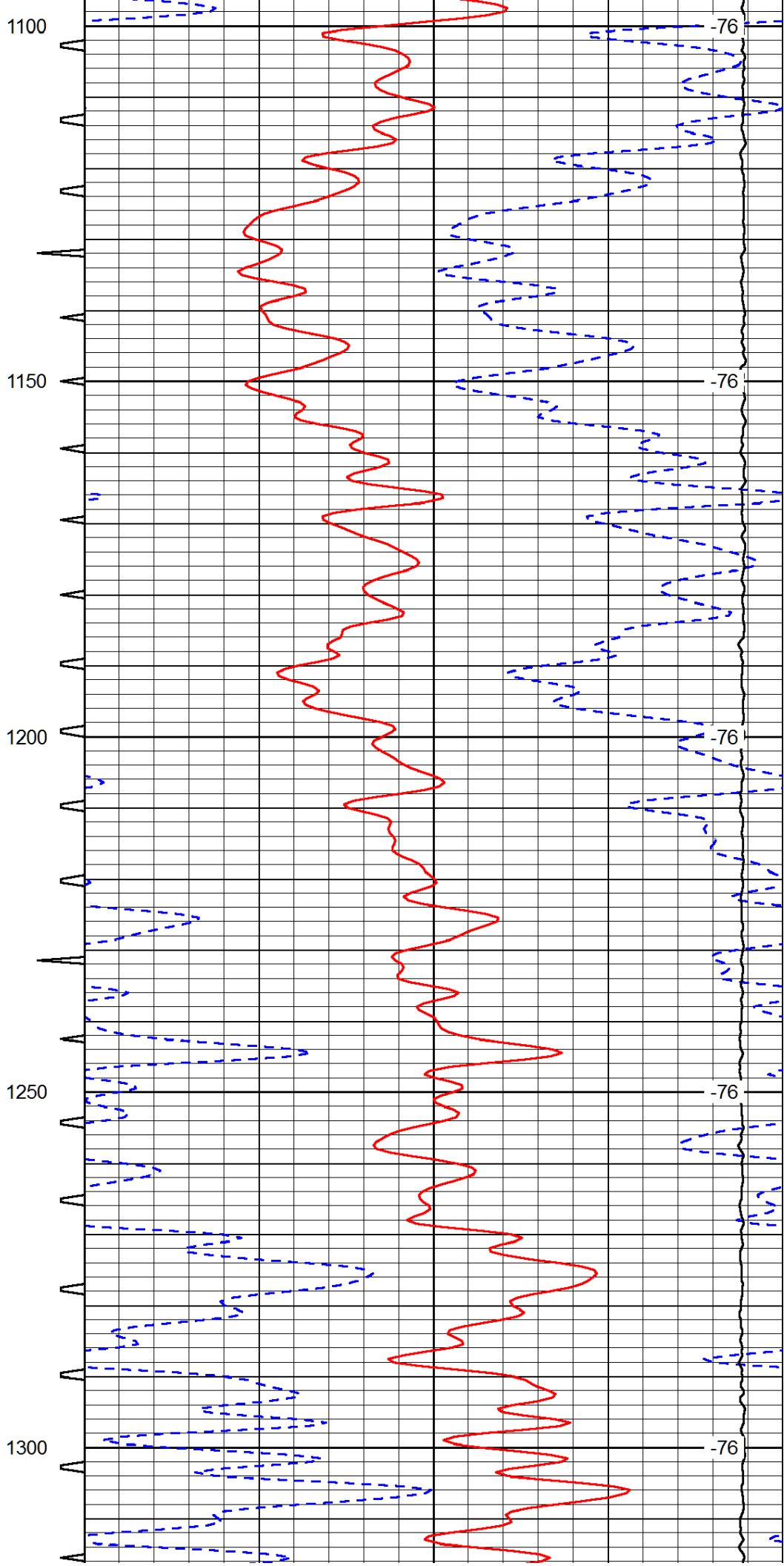
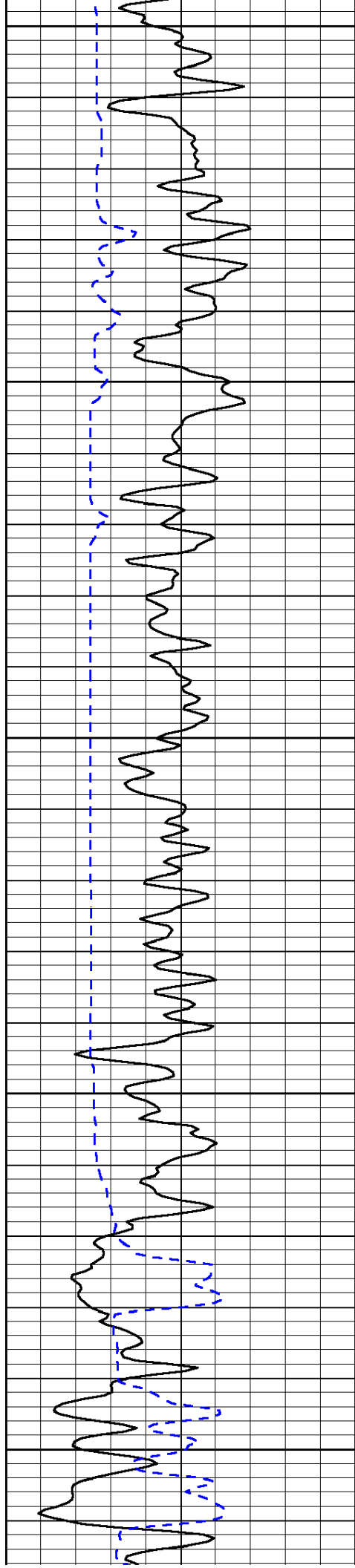
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150	Gamma Ray (GAPI)	300	5 (msec) 0	30	Sonic Porosity (pu)	-10
6	dCAL (in)	16		15000	LTEN (lb) (lb)	0
						LSPD (ft/min)

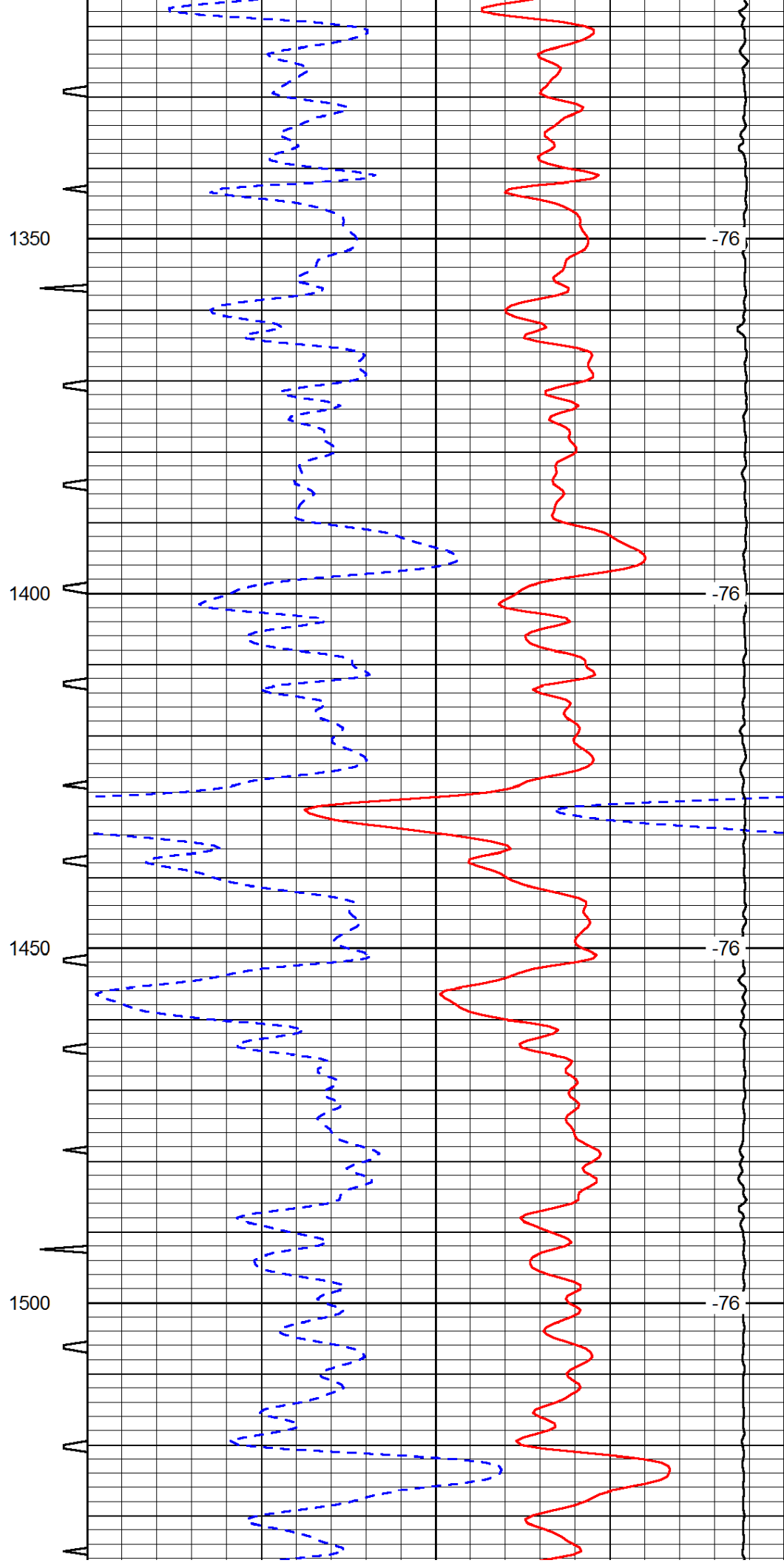
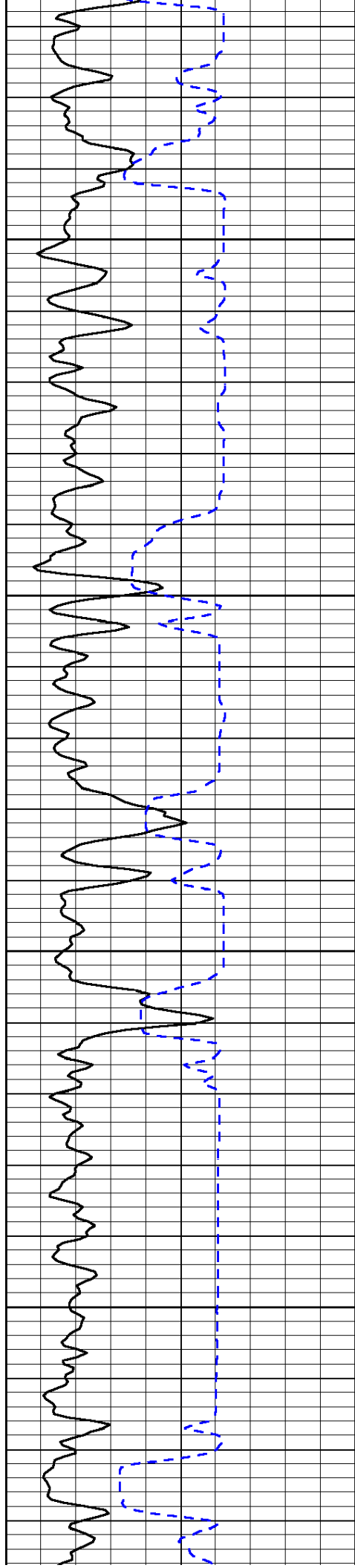


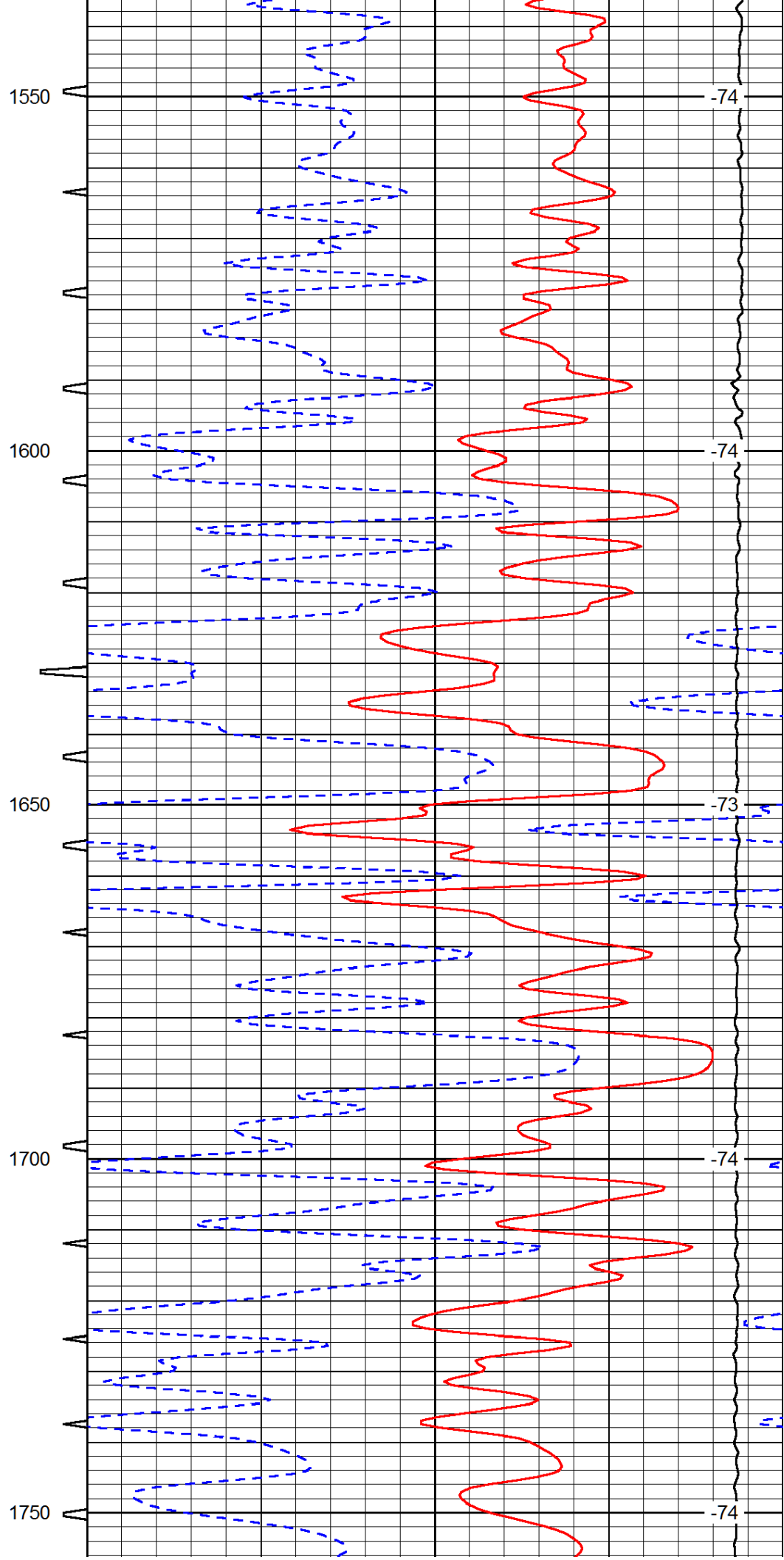
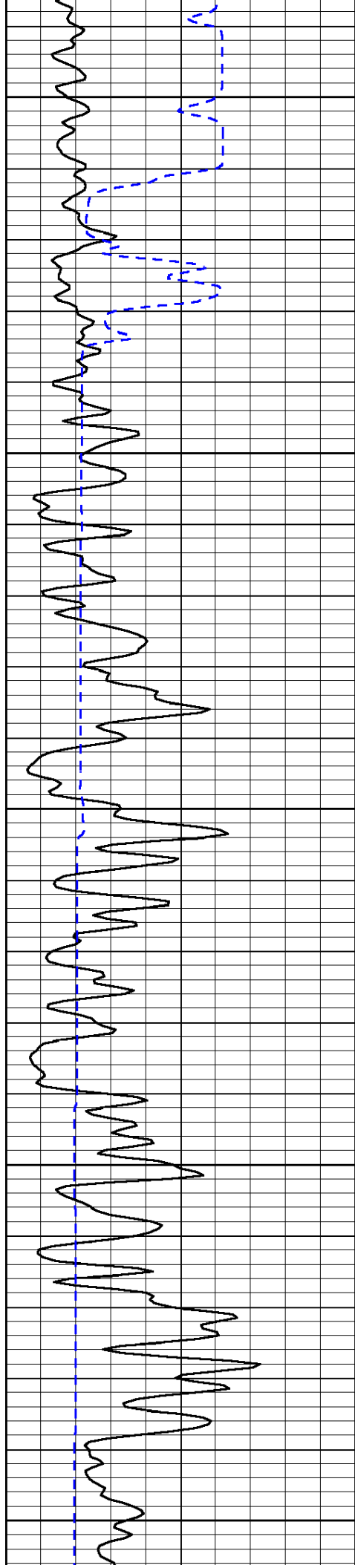


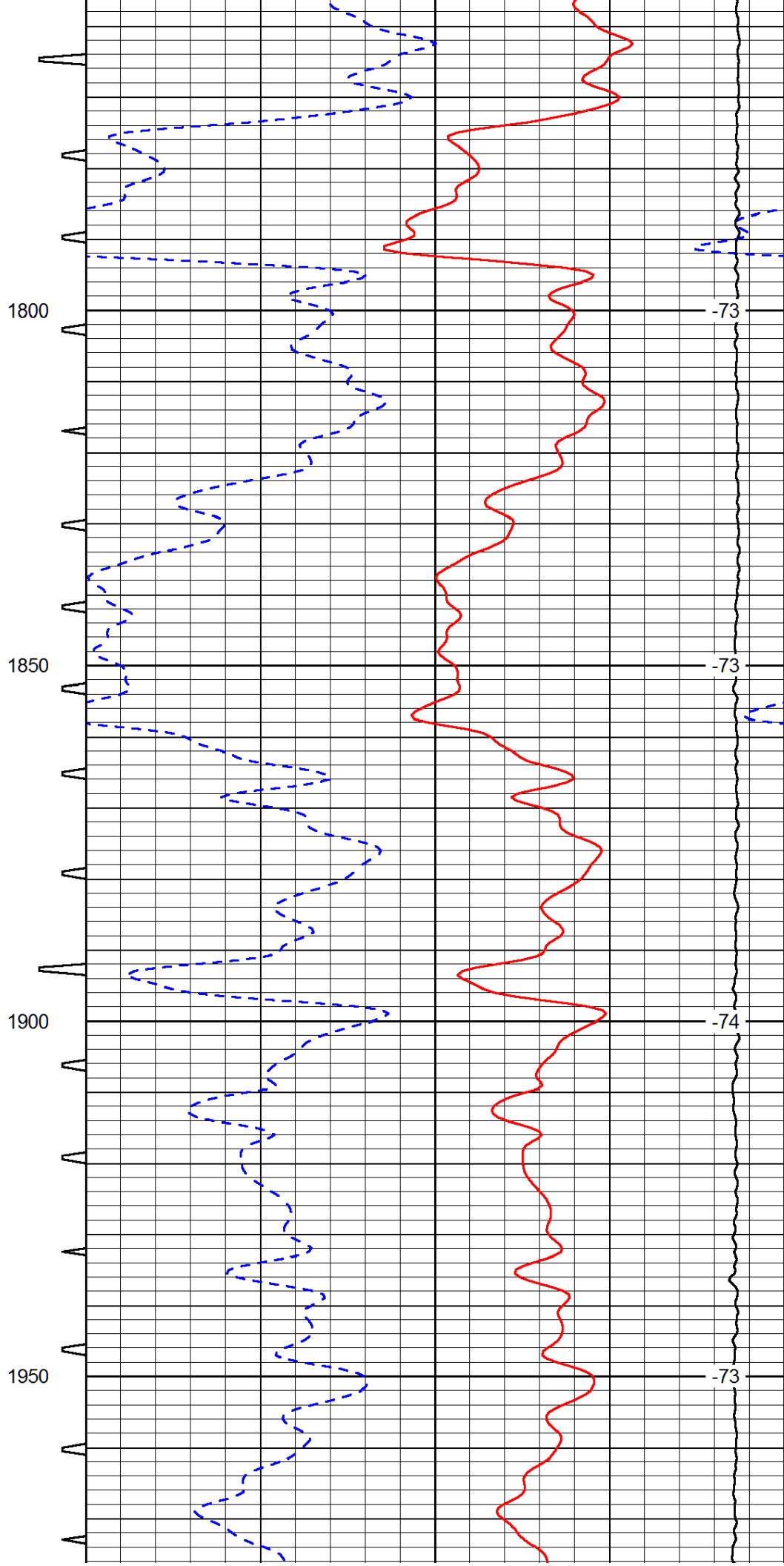
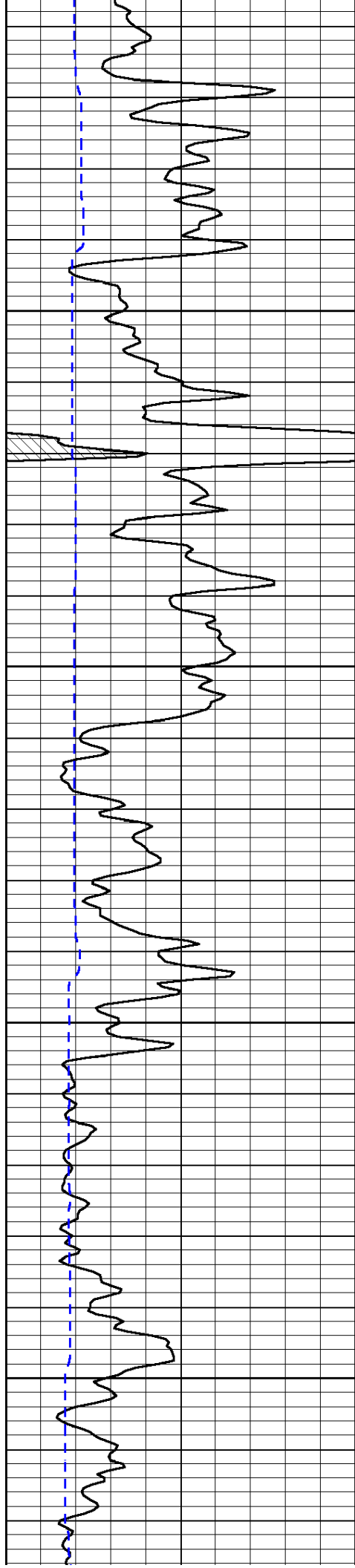


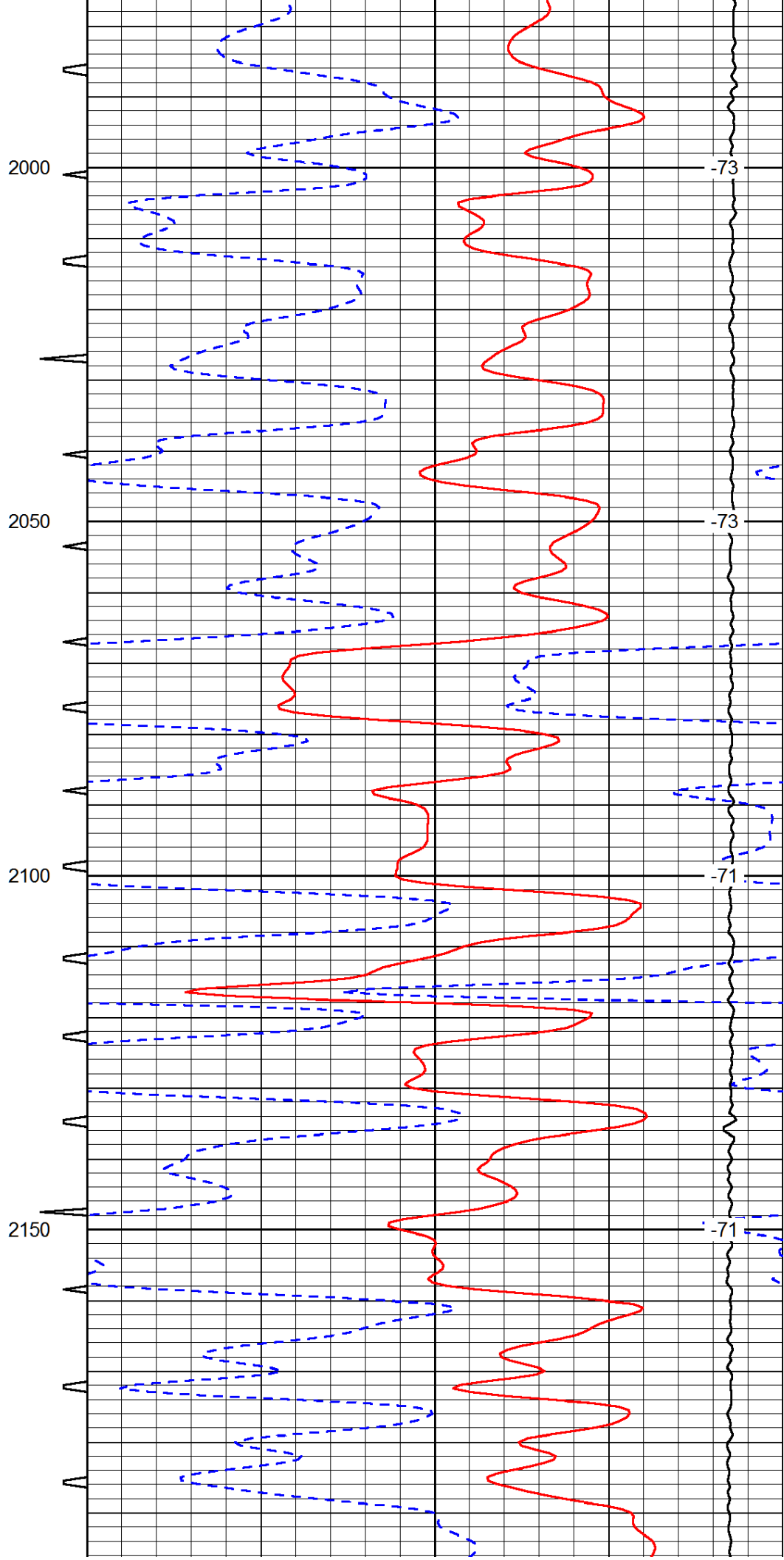
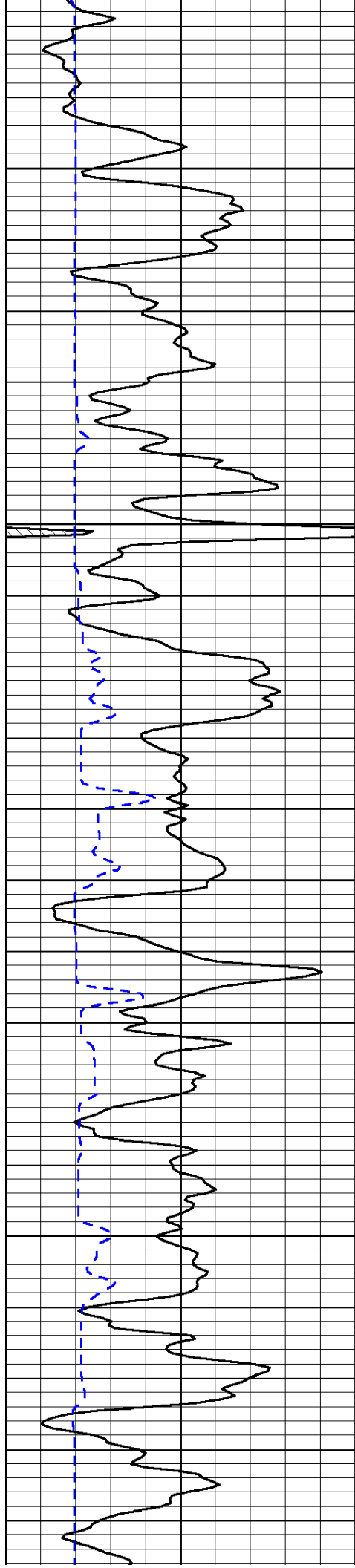


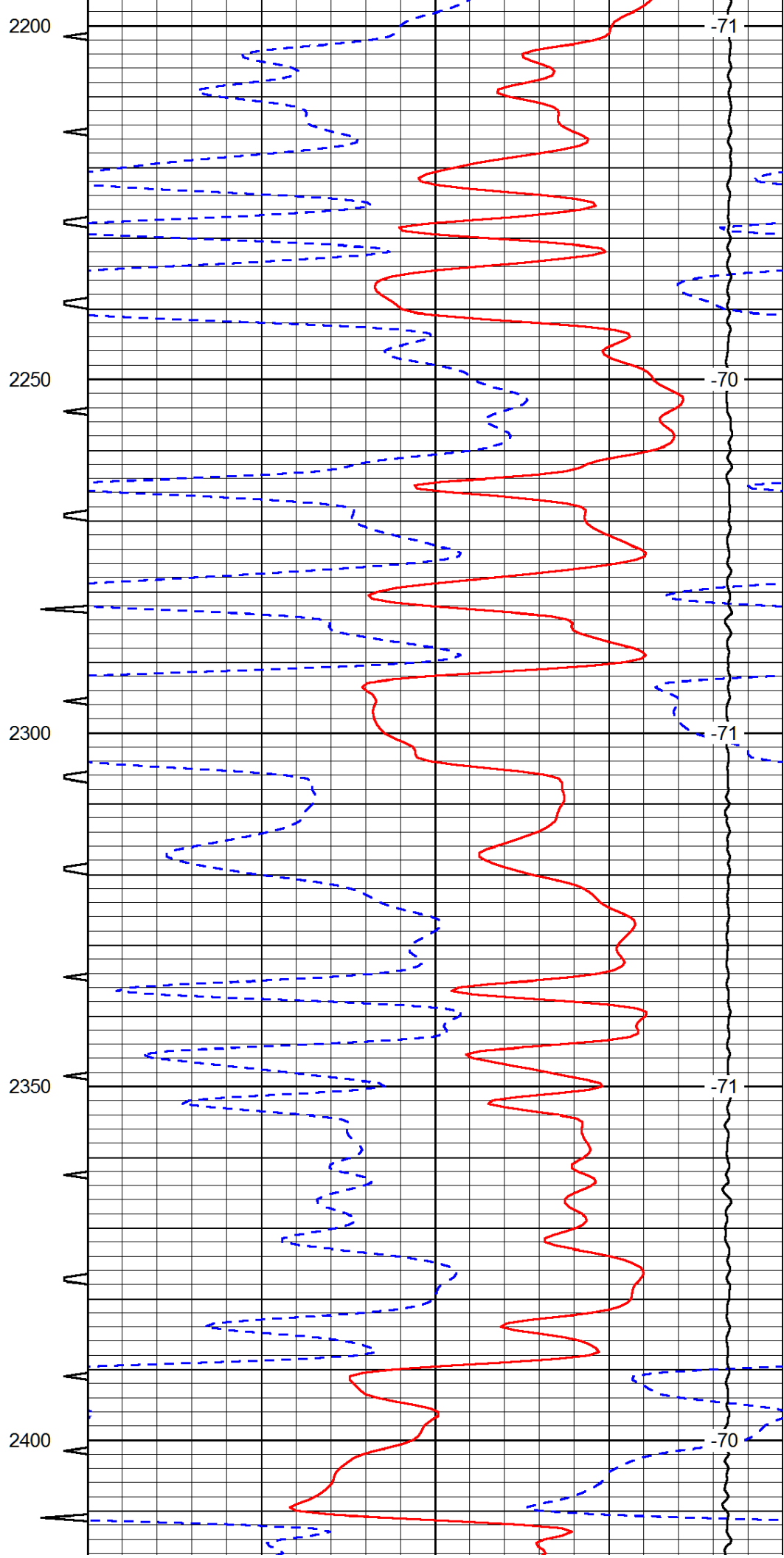
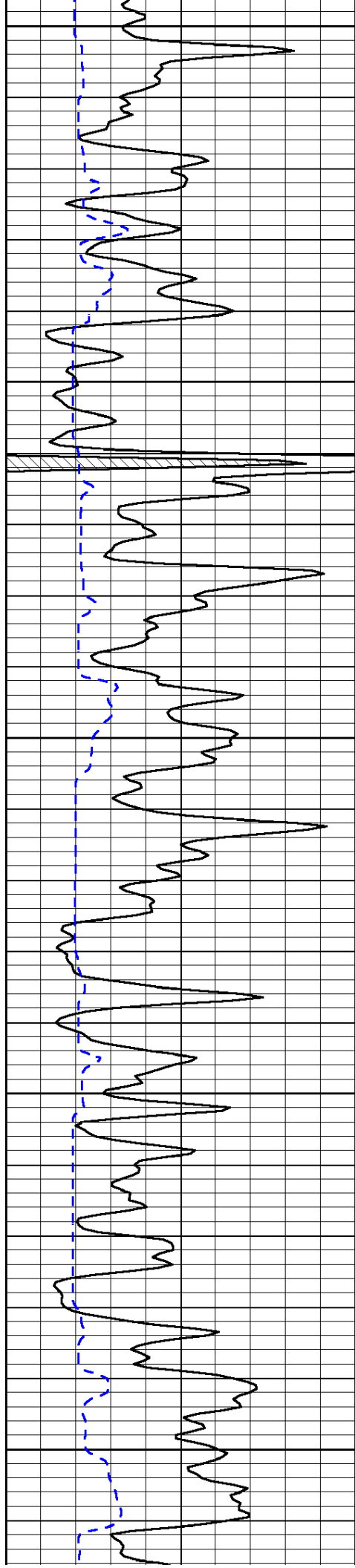


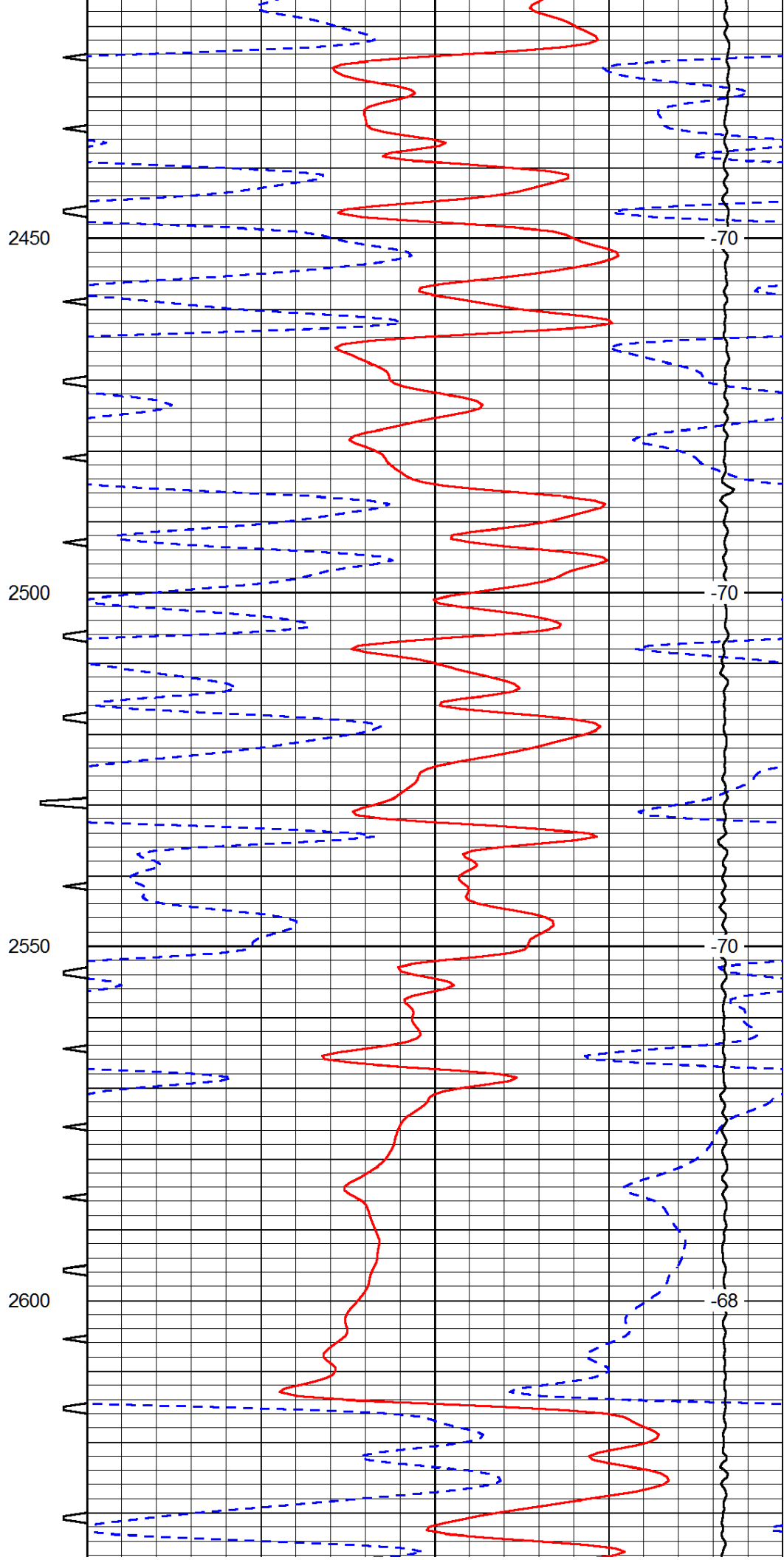
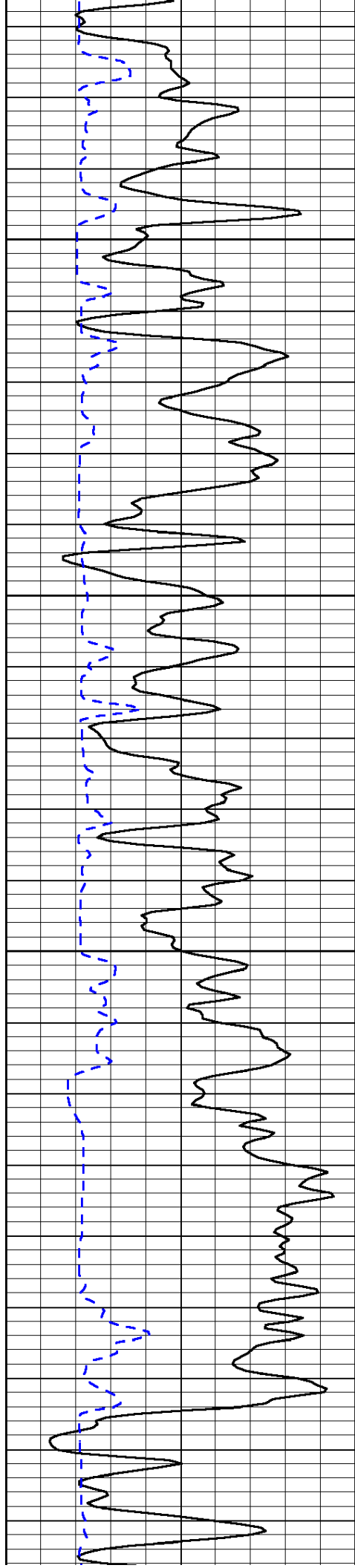


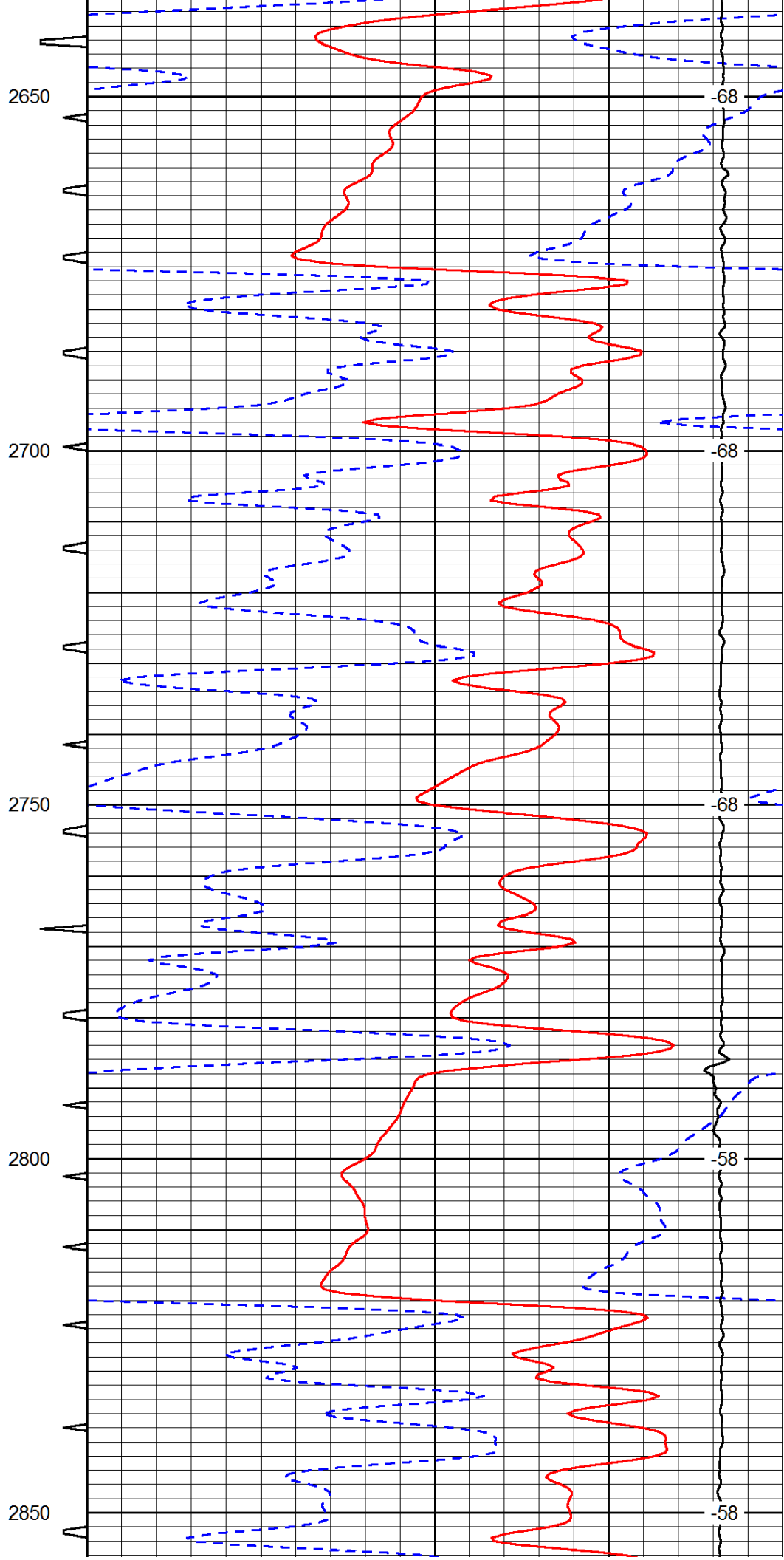
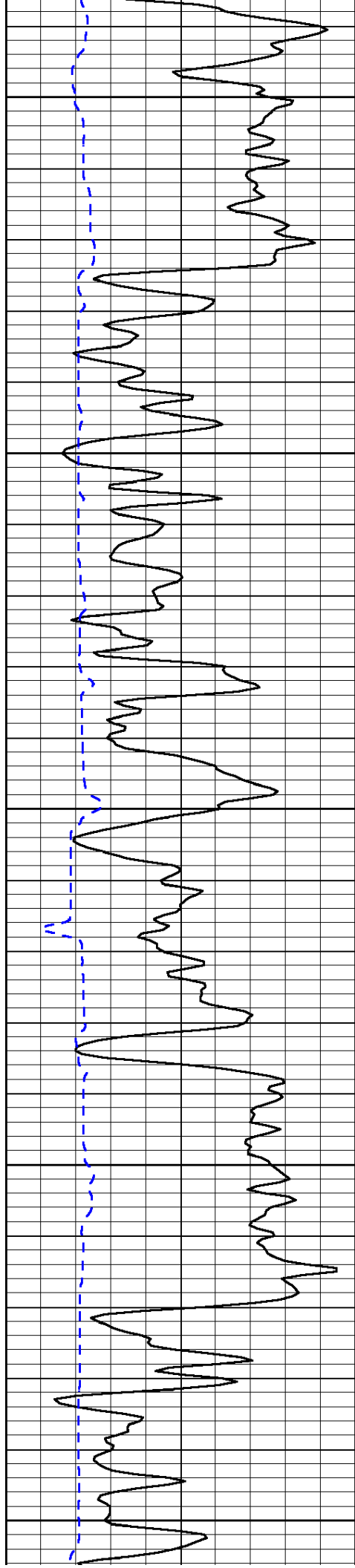


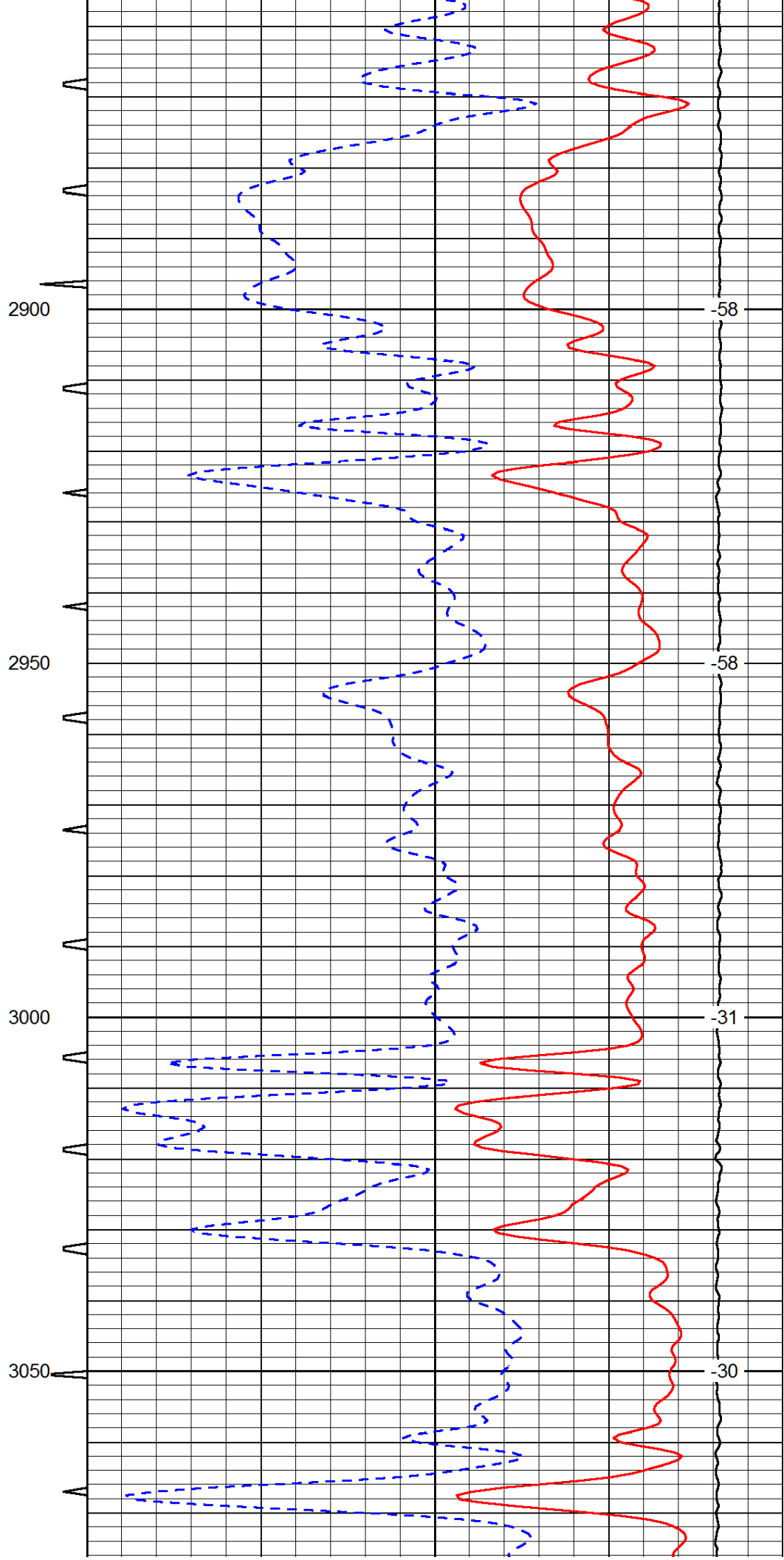
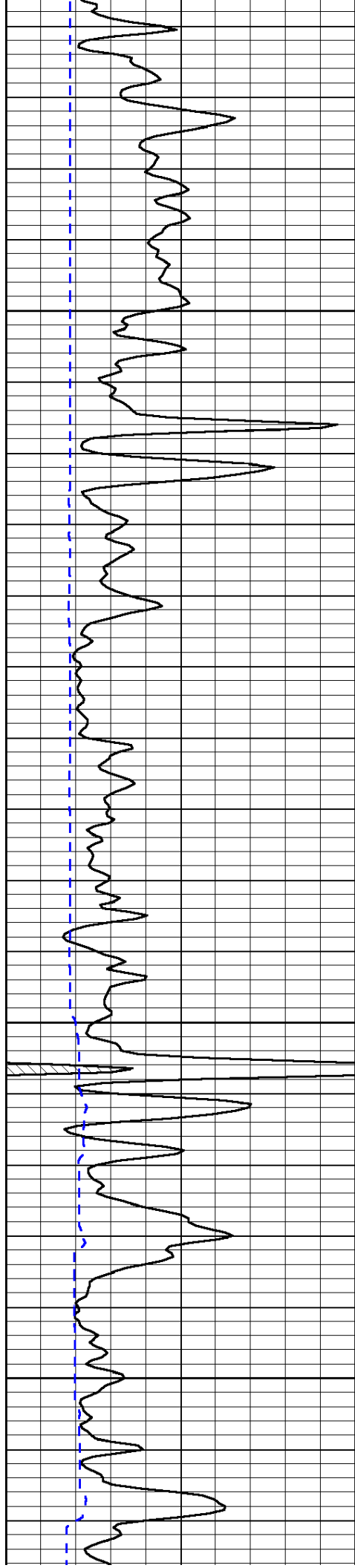


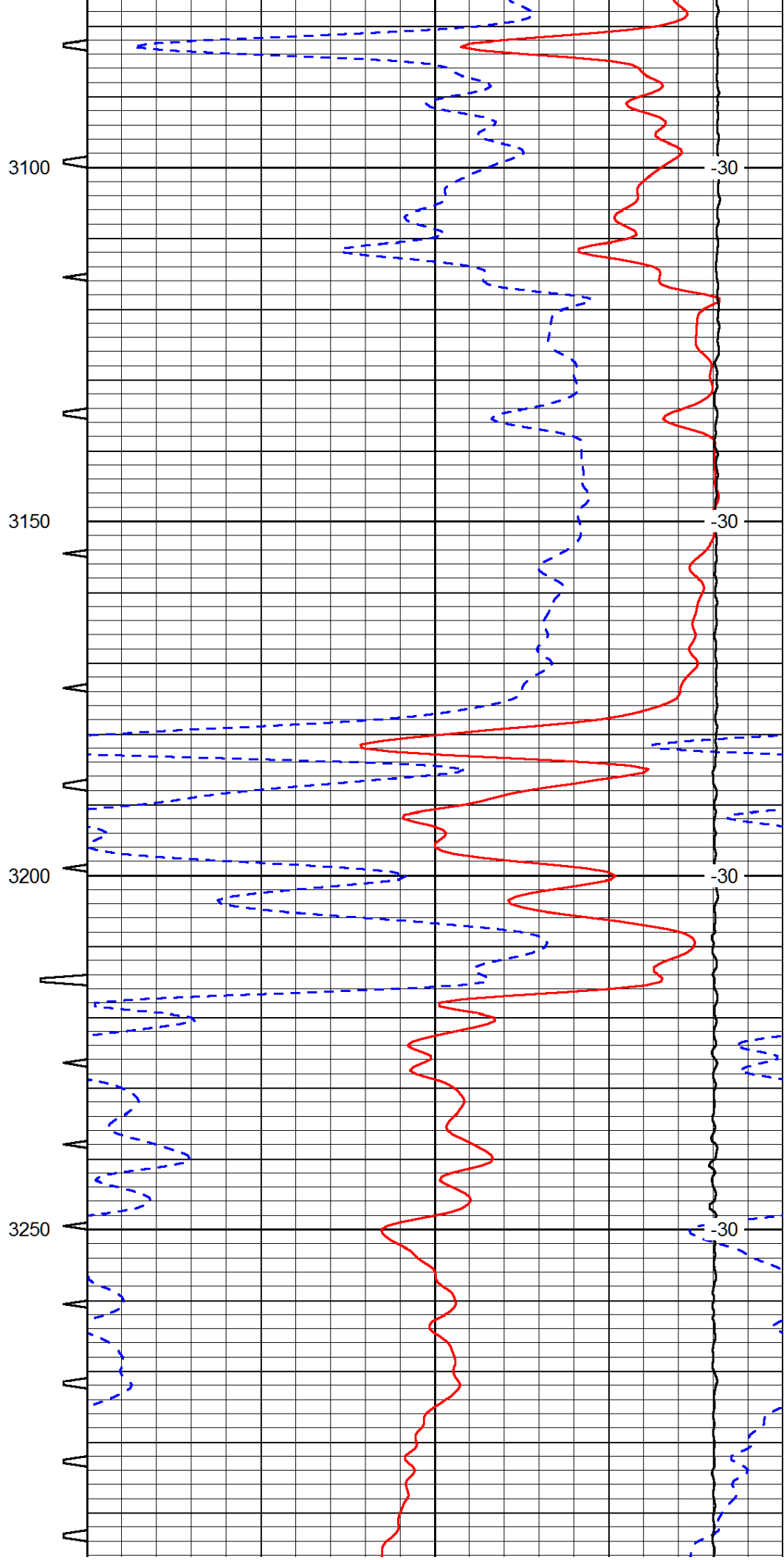
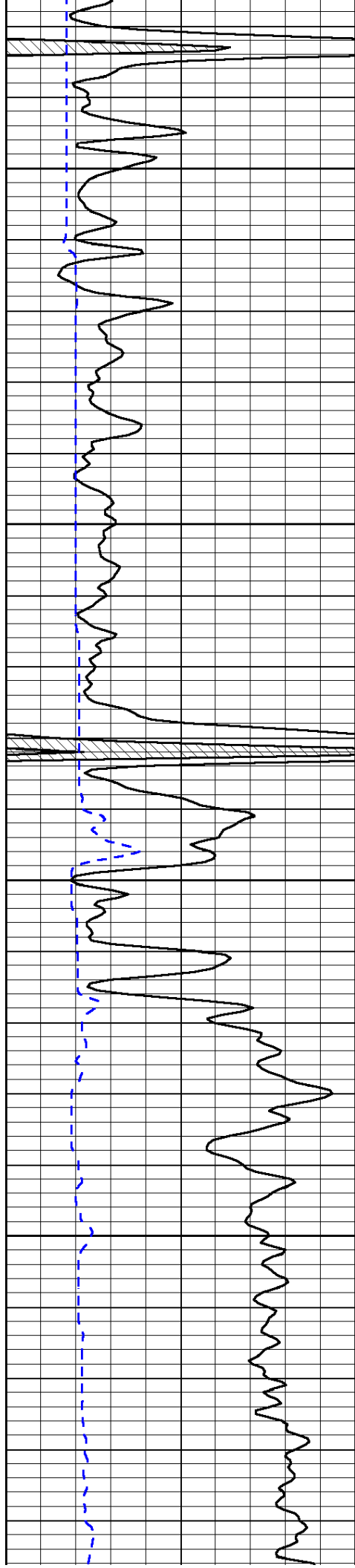


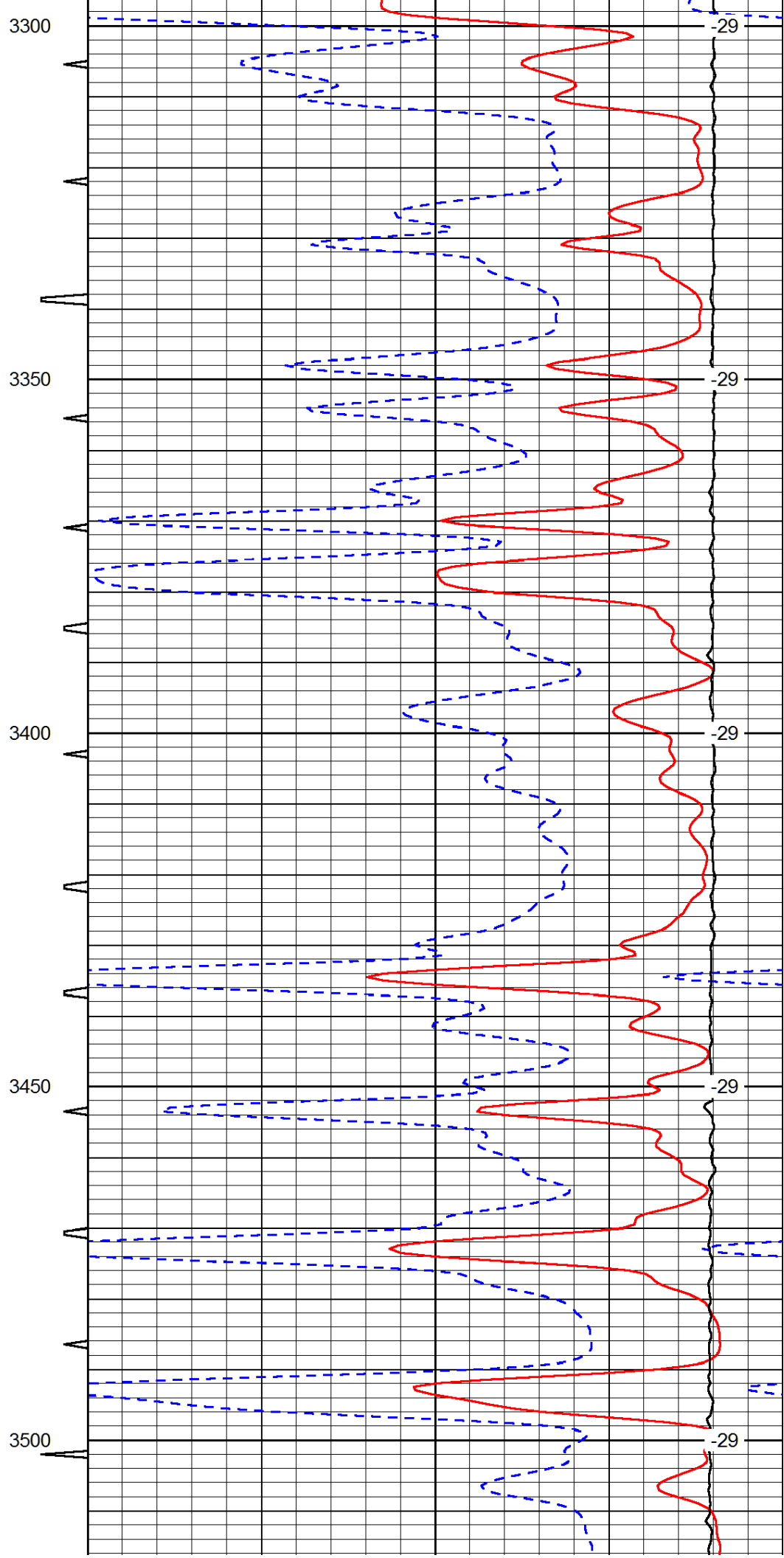
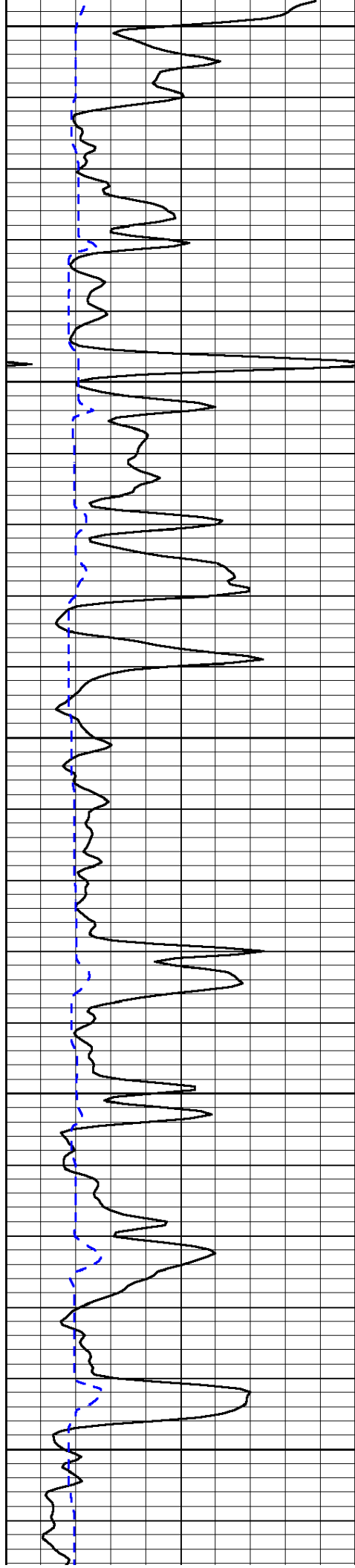


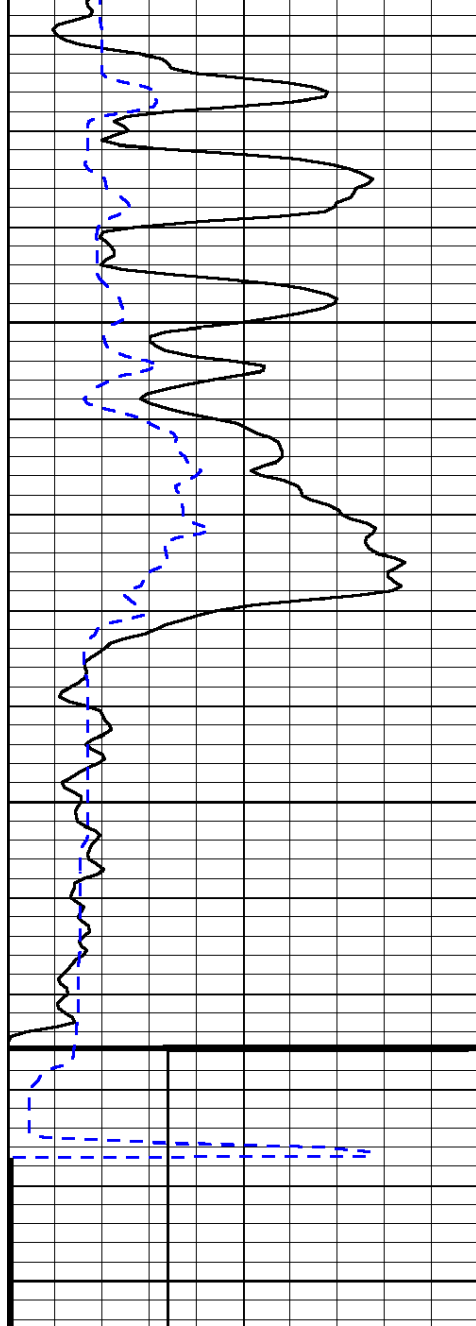




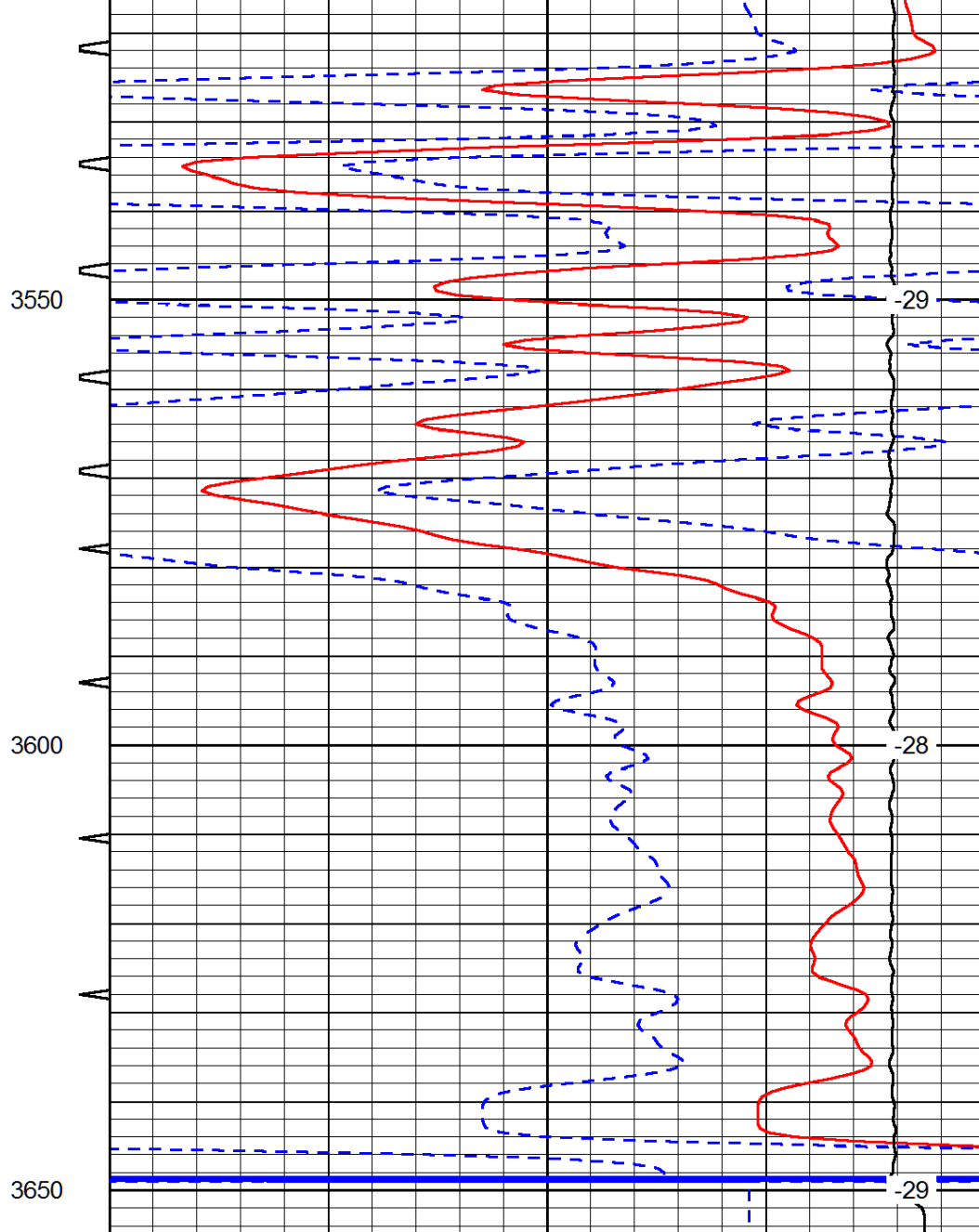








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(ft/min)