



Borehole Compensated Sonic Log

Pioneer Energy Services

API No.

15-009-25863-00-00

Company K&N Petroleum, Inc.

Well Betty Mae #1

Field Klepper

County Barton

State Kansas

Location 943' FSL & 1875' FEL

Sec: 3

Twp: 19 S

Rge: 11 W

Other Services
CNL/CDL
MEL/DIL

Permanent Datum Ground Level Elevation 1780
Log Measured From Kelly Bushing 7 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Date 08-17-2013

Run Number Two

Type Log BHC Sonic

Depth Driller 3460

Depth Logger 3460

Bottom Logged Interval 3449

Top Logged Interval 350

Type Fluid In Hole Chemical

Salinity, PPM CL 7000

Density 9.3

Level Full

Max. Rec. Temp. F 113

Operating Rig Time 4 Hours

Equipment -- Location 91 Days

Recorded By Y. Ruiz

Witnessed By Wyatt Urban

Borehole Record

Casing Record

Run No. Bit From To Size Wgt. From To

One 12.25 00 390 8.625 23# 00 390

Two 7.875 390 TD 390

<<< 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.

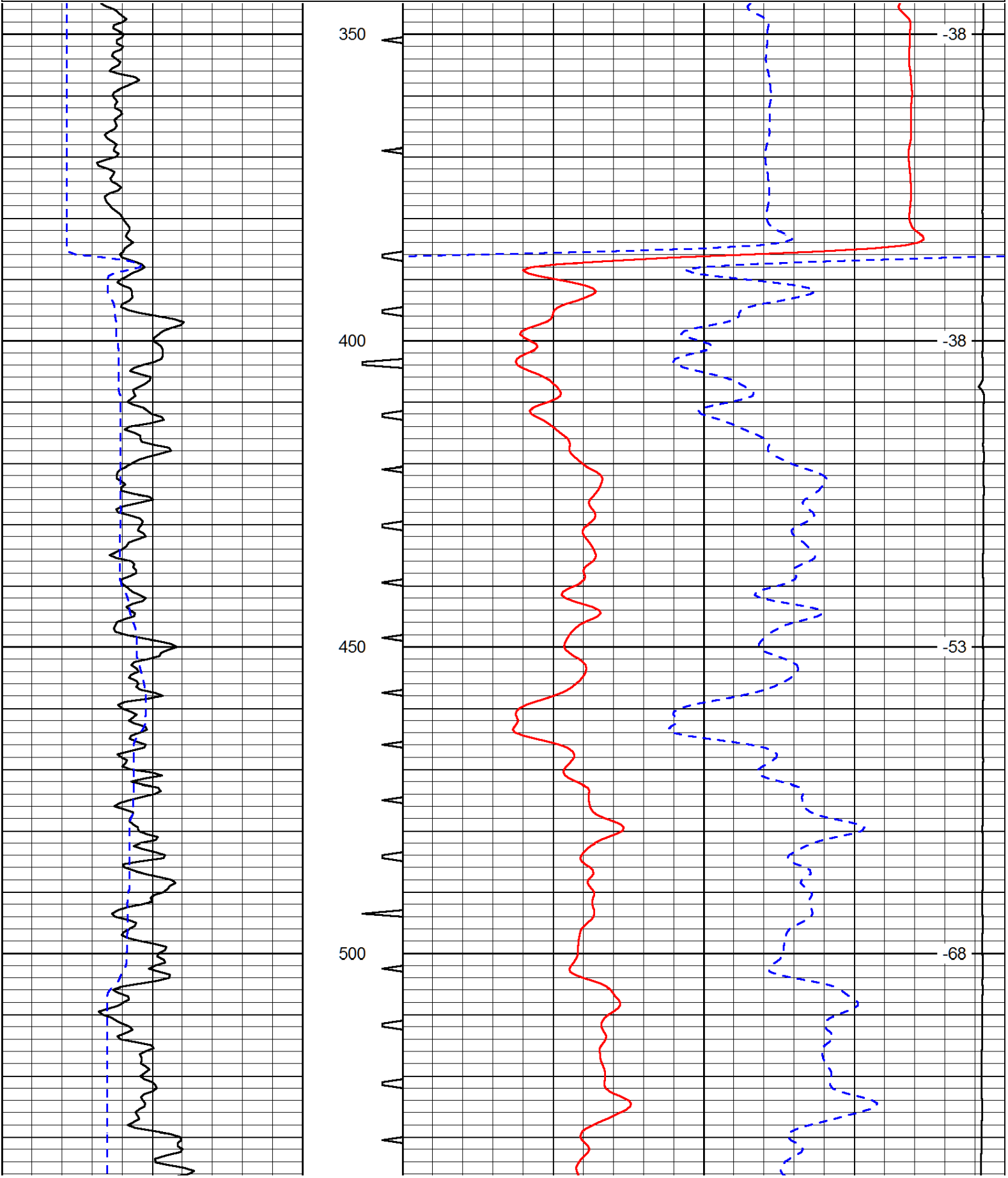
Comments

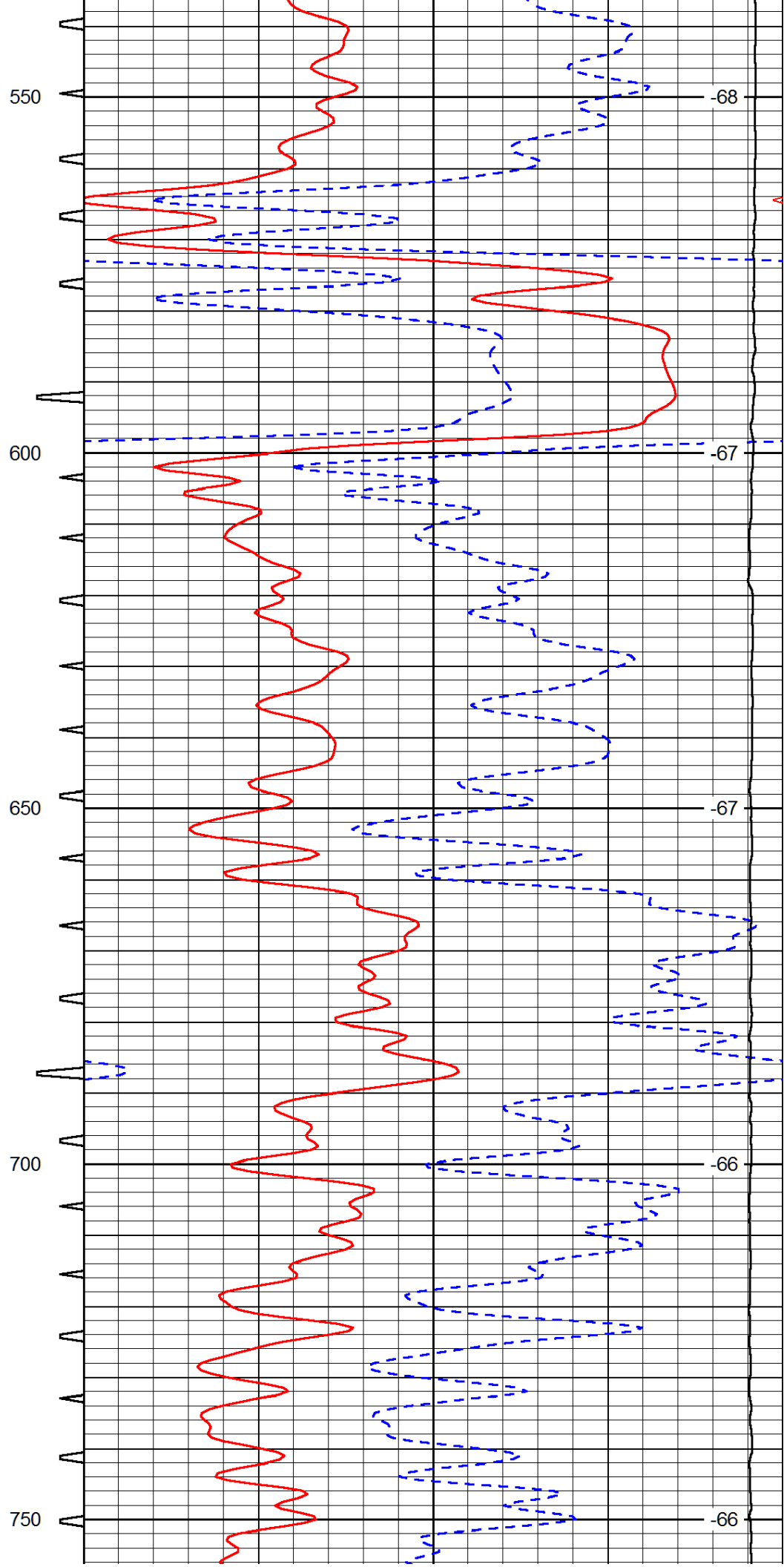
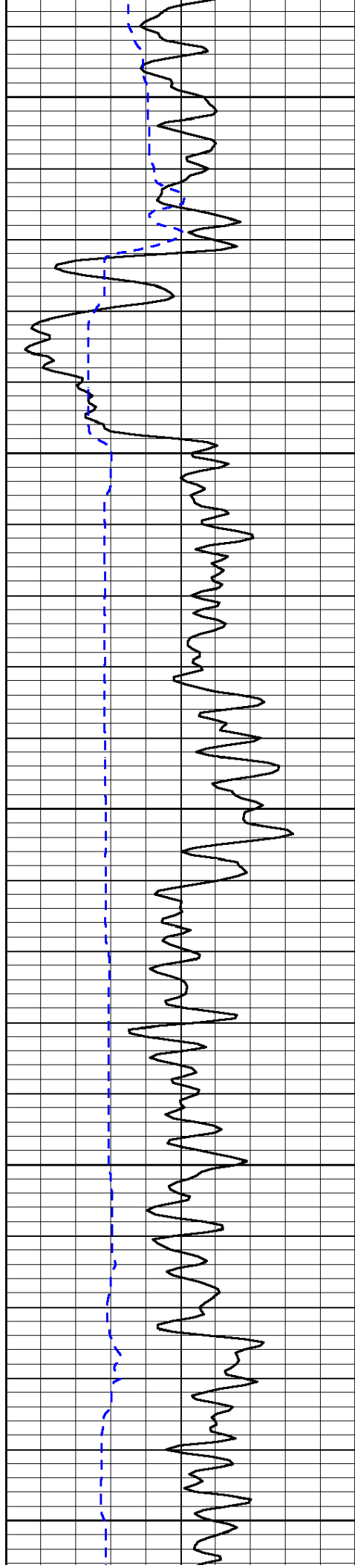
Thank you for using Log-Tech, Inc.
(785) 625-3858

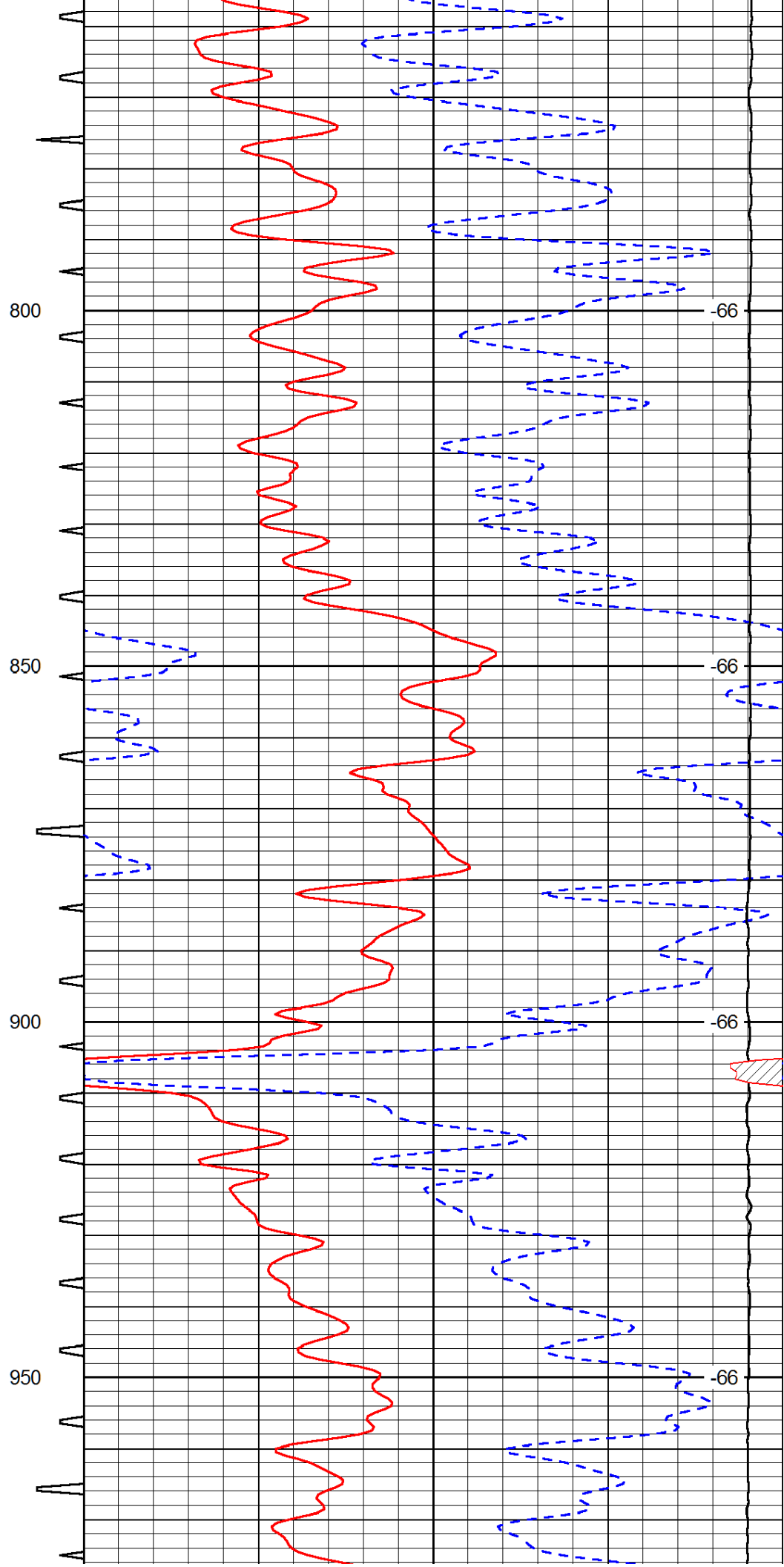
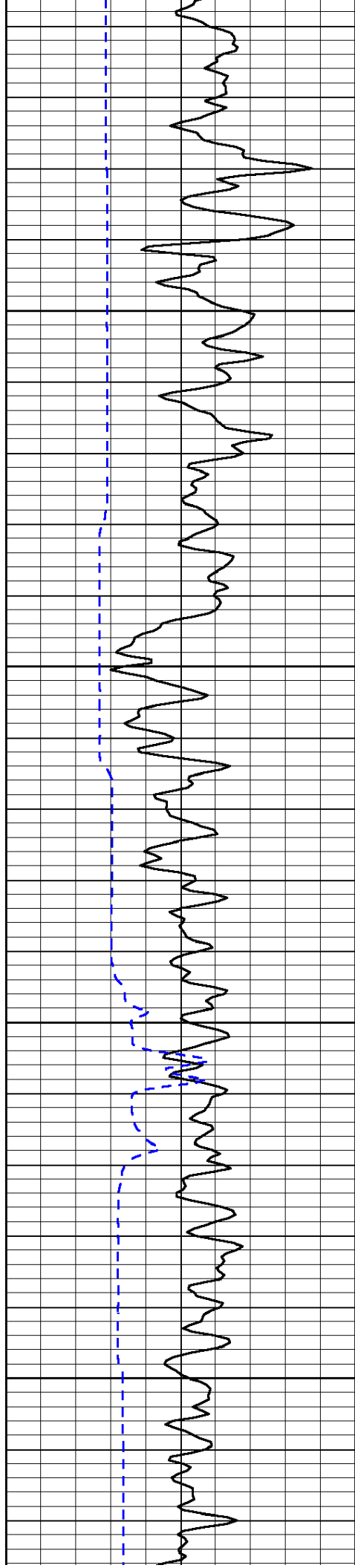
Ellinwood,
4 1/2 North, 3 1/2 East,
North into

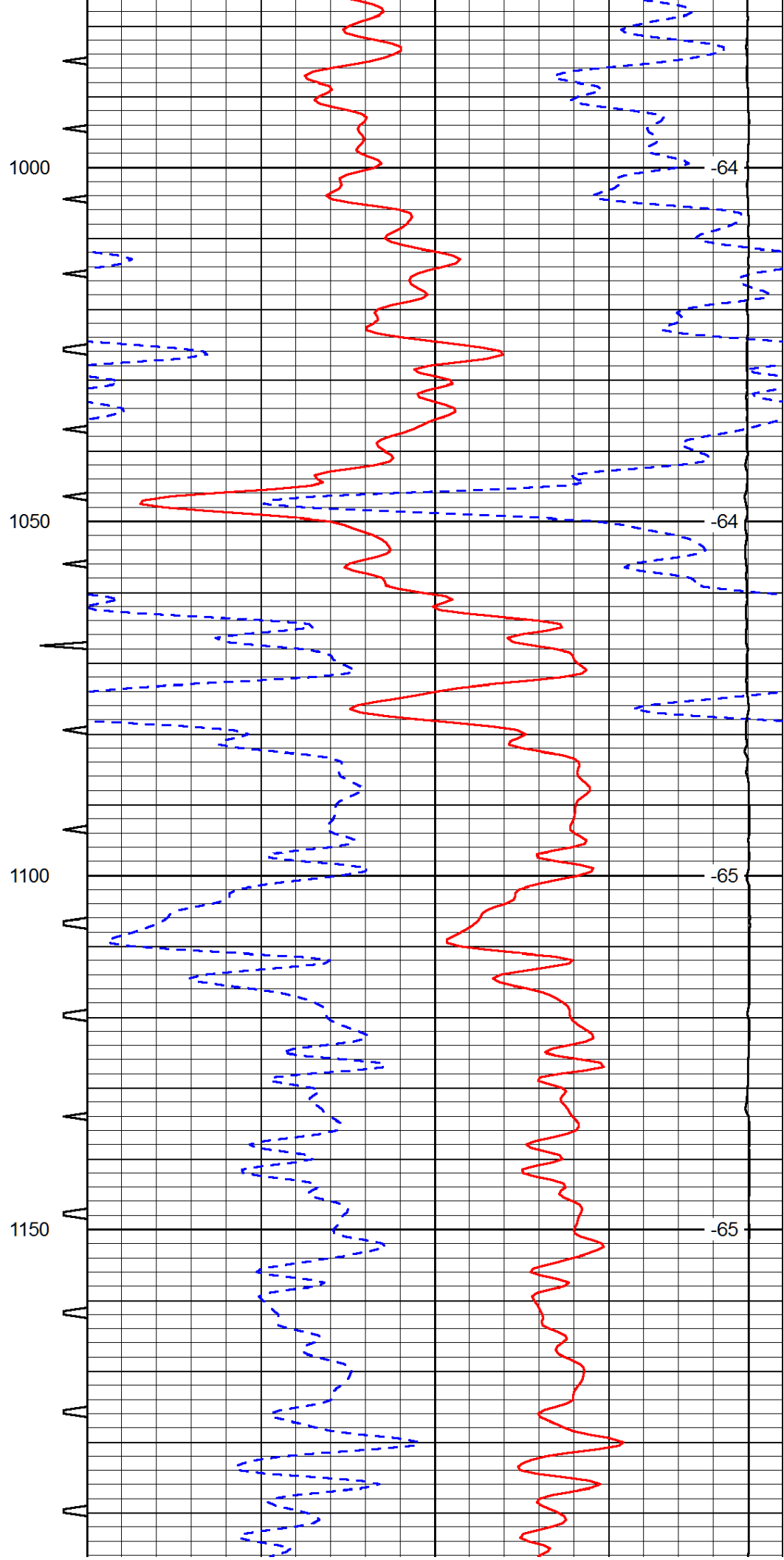
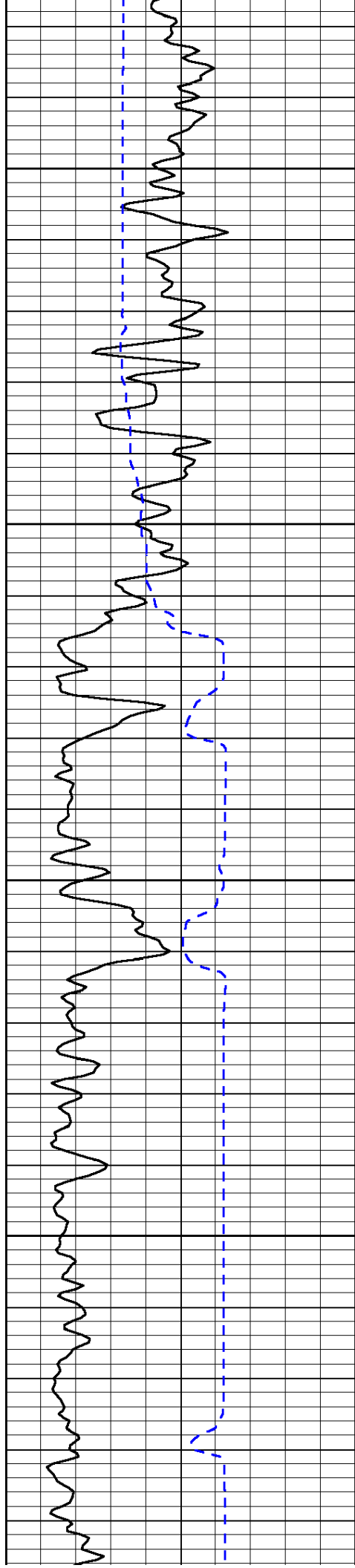
Database File: k&n081713hd.db
Dataset Pathname: dil/knstck
Presentation Format: sonic
Dataset Creation: Sat Aug 17 23:11:04 2013
Charted by: Depth in Feet scaled 1:240

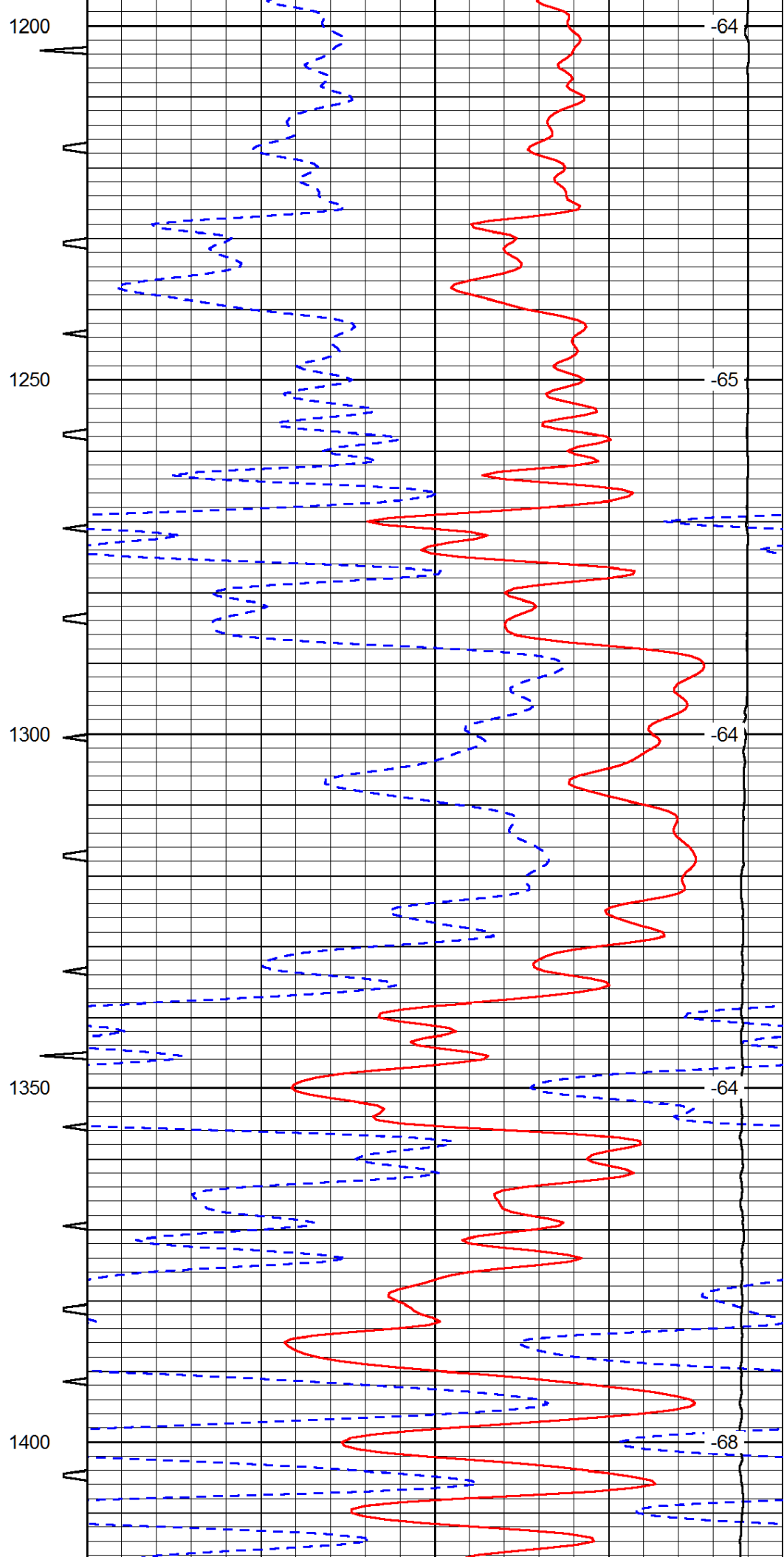
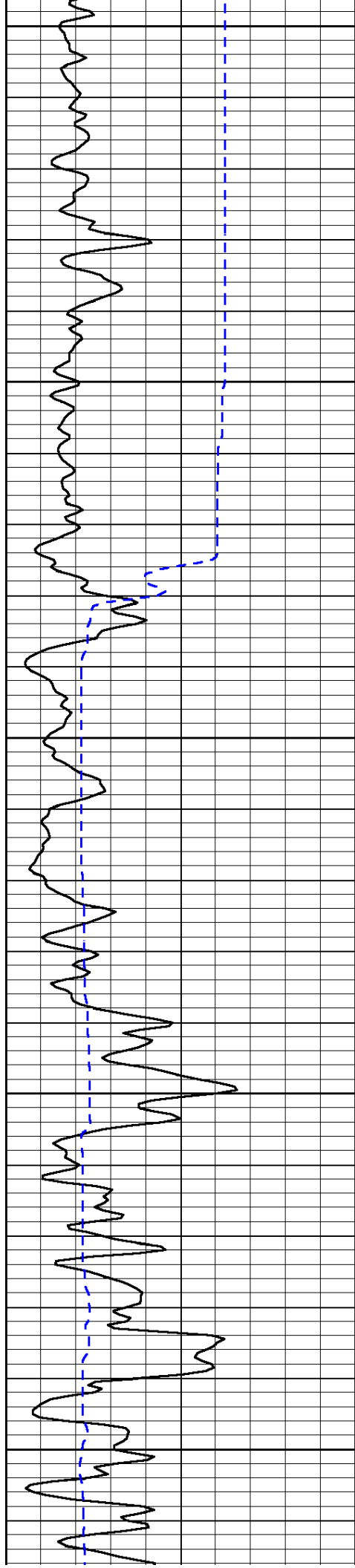
0	Gamma Ray (GAPI)	150	Sonic Int	140	Delta Time (usec/ft) (usec/ft)	40
150	Gamma Ray (GAPI)	300	5 (msec) 0	30	Sonic Porosity (pu)	-10
6	dCAL (in)	16		15000	LTEN (lb) (lb)	0
						LSPD (ft/min)

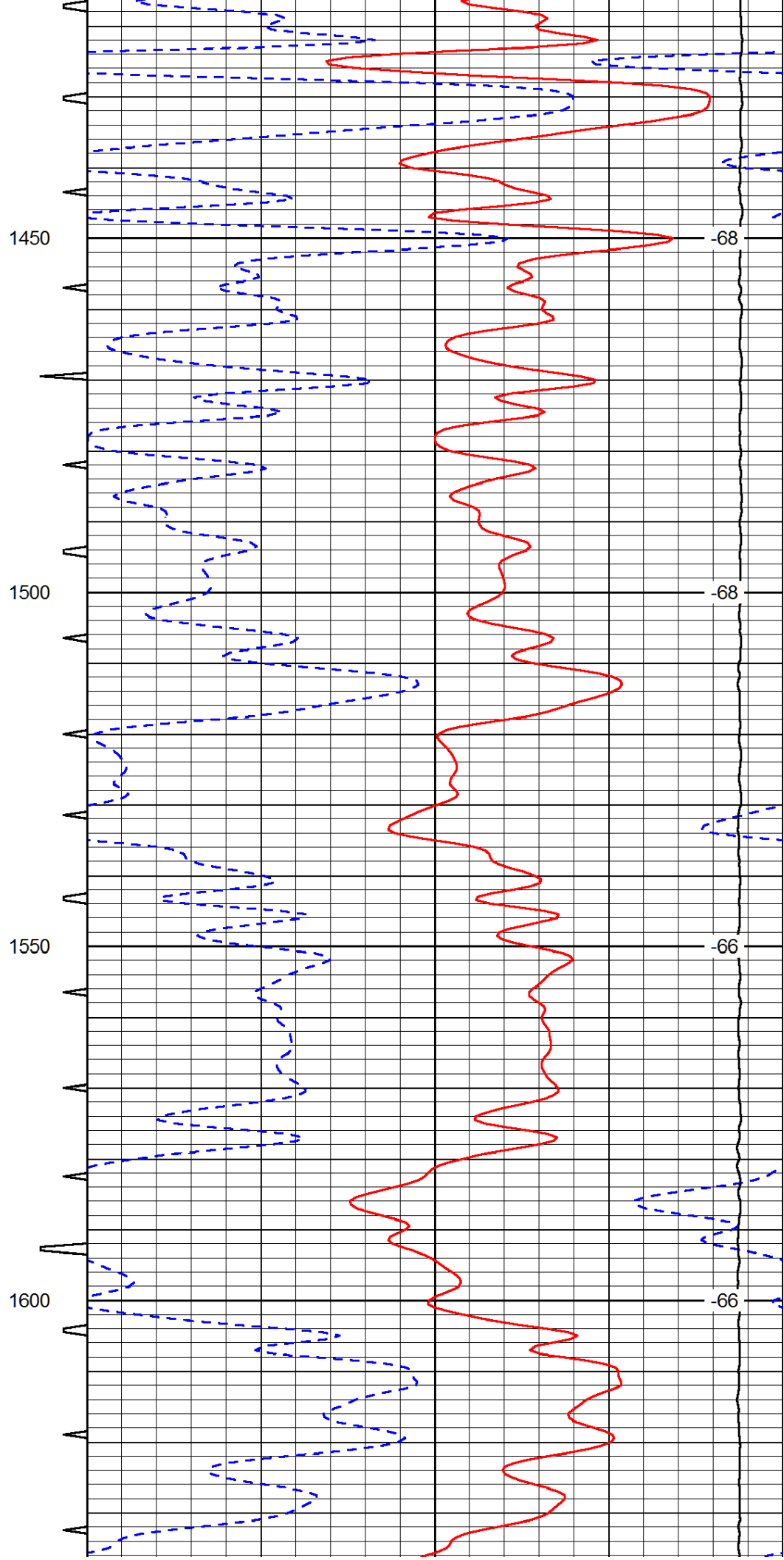
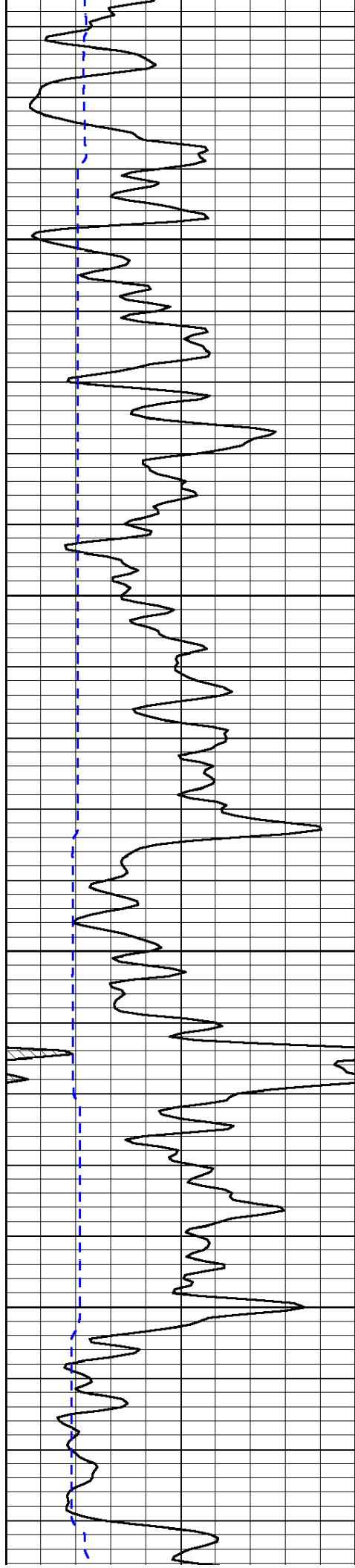


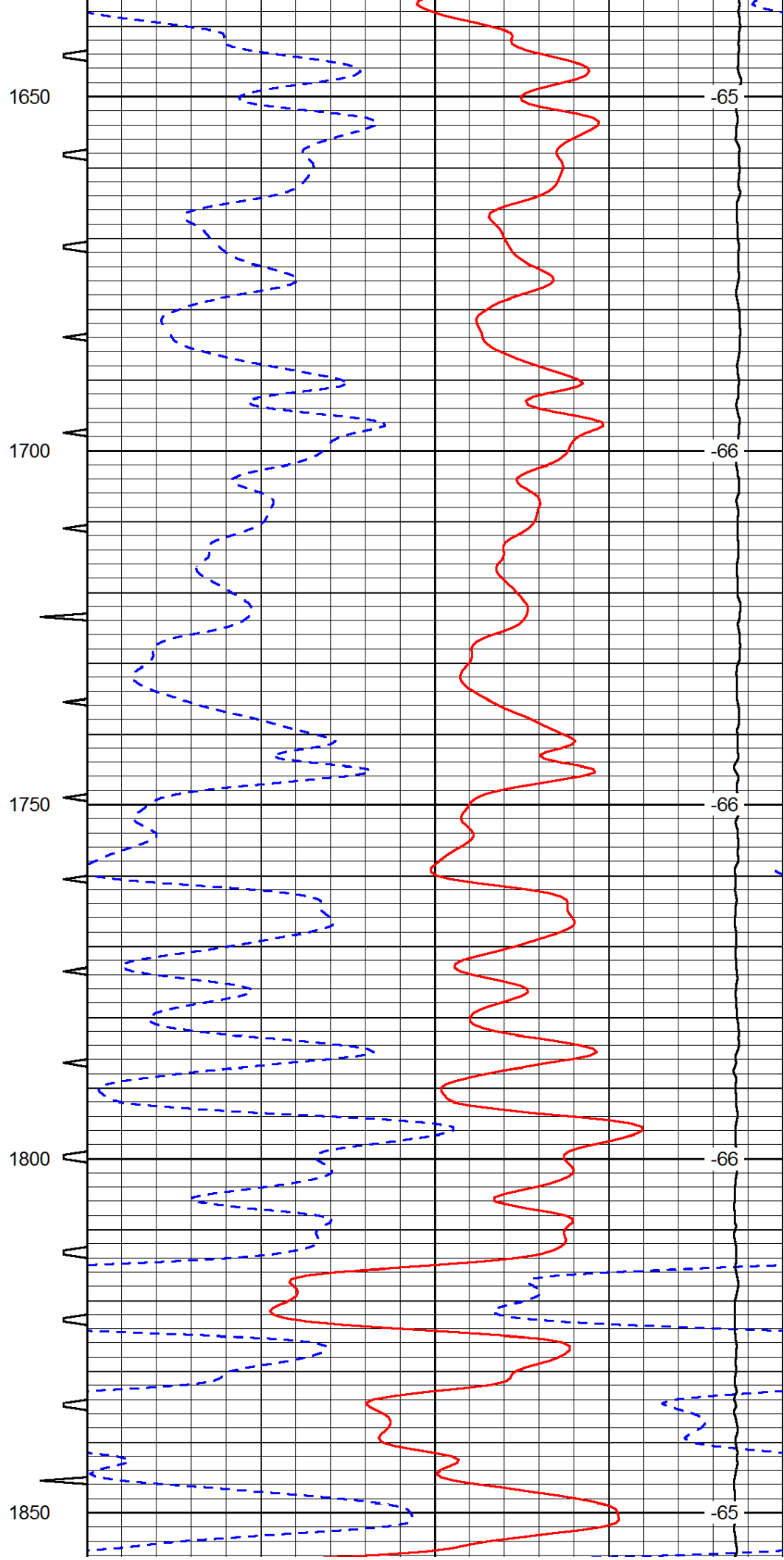
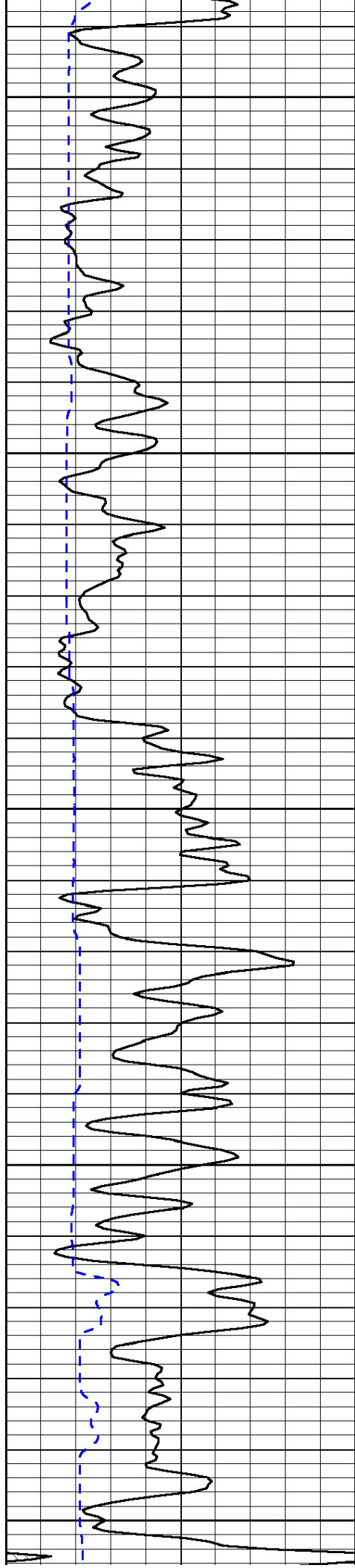


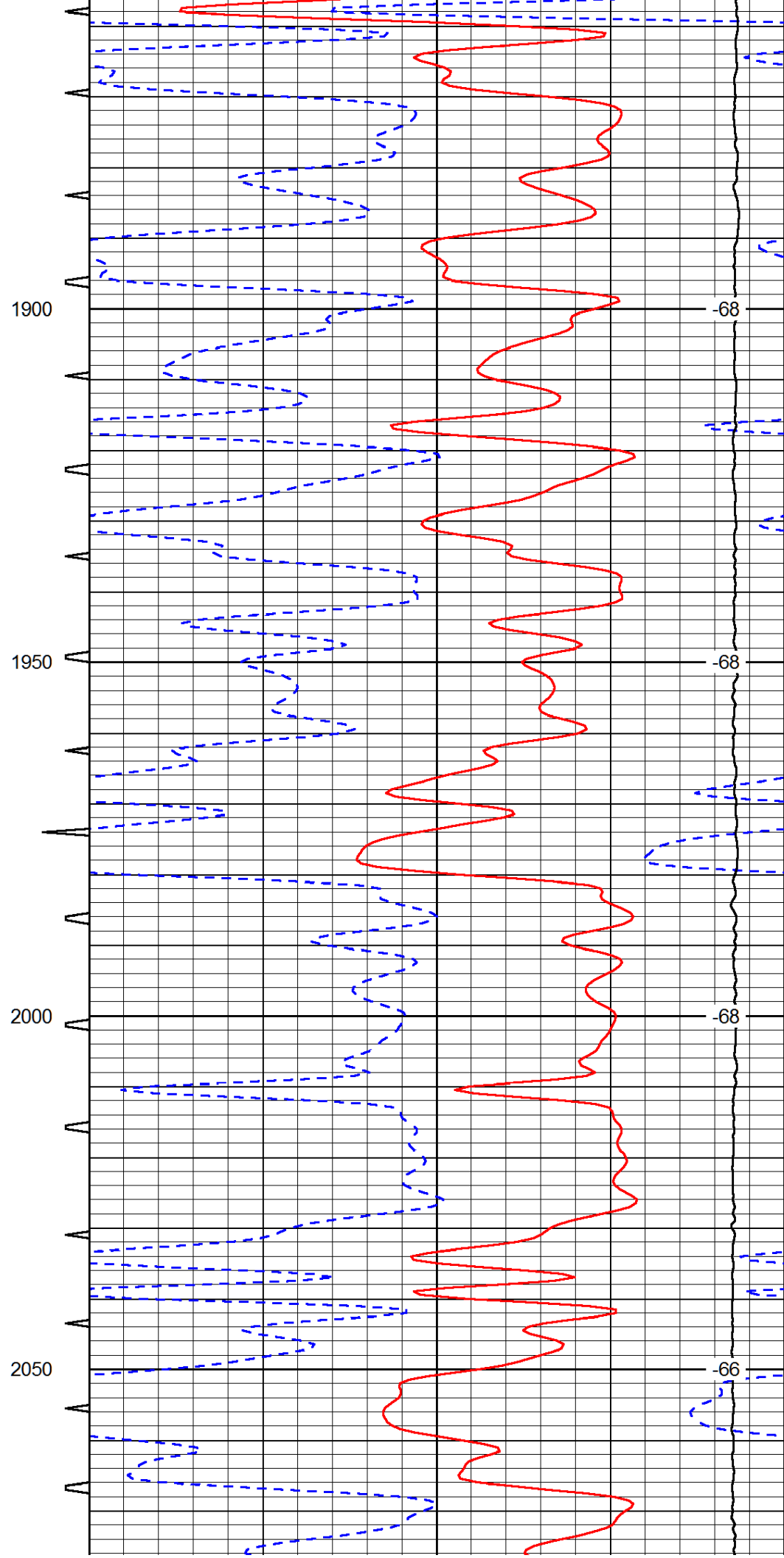
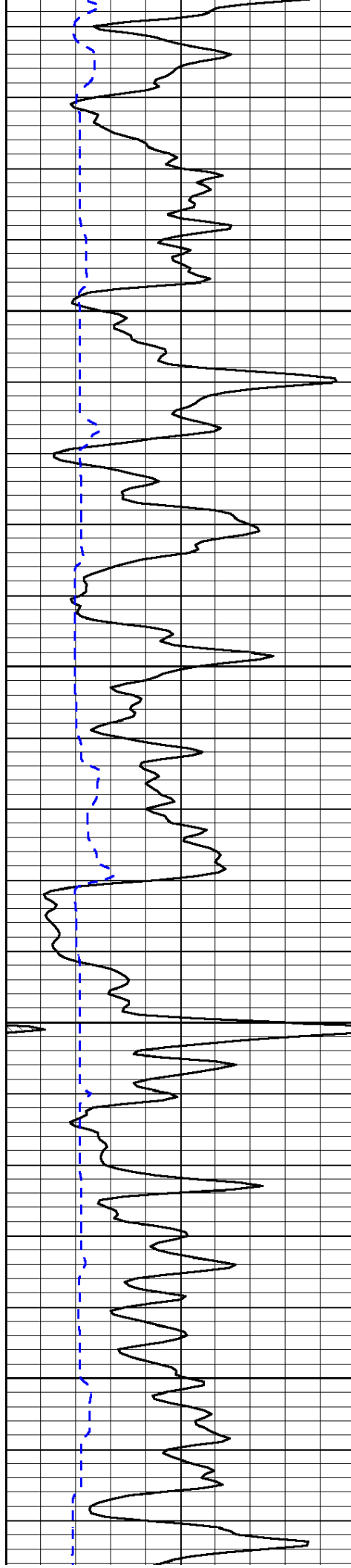


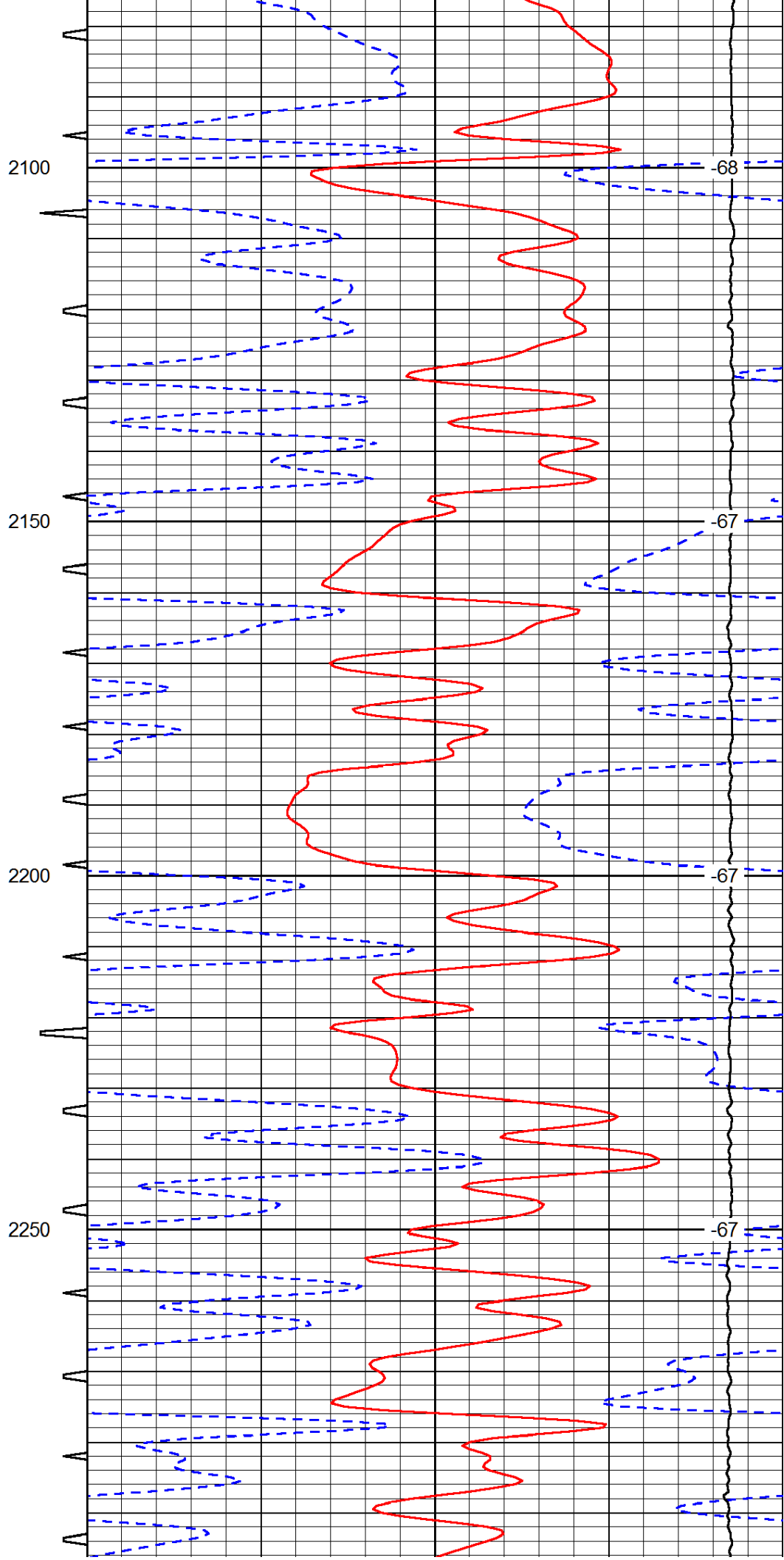
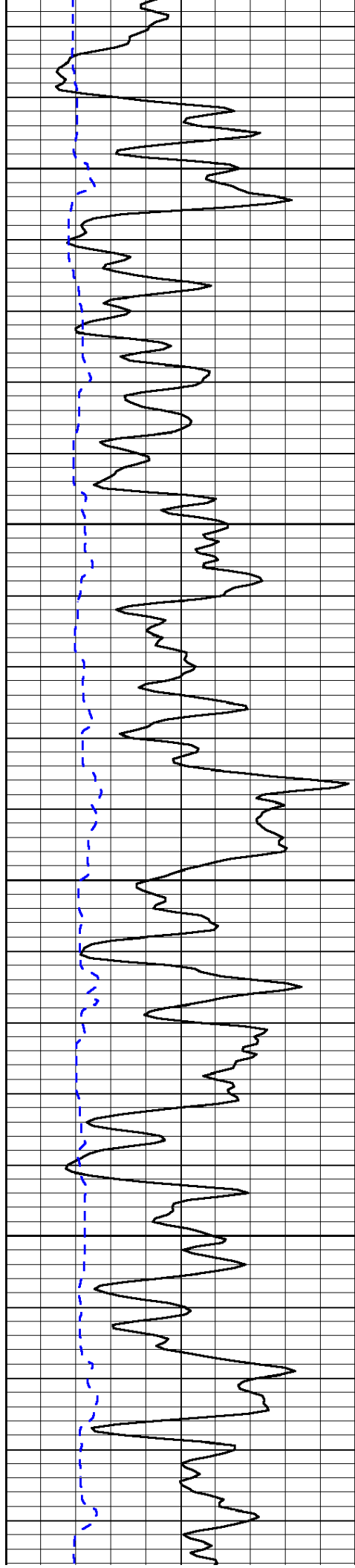


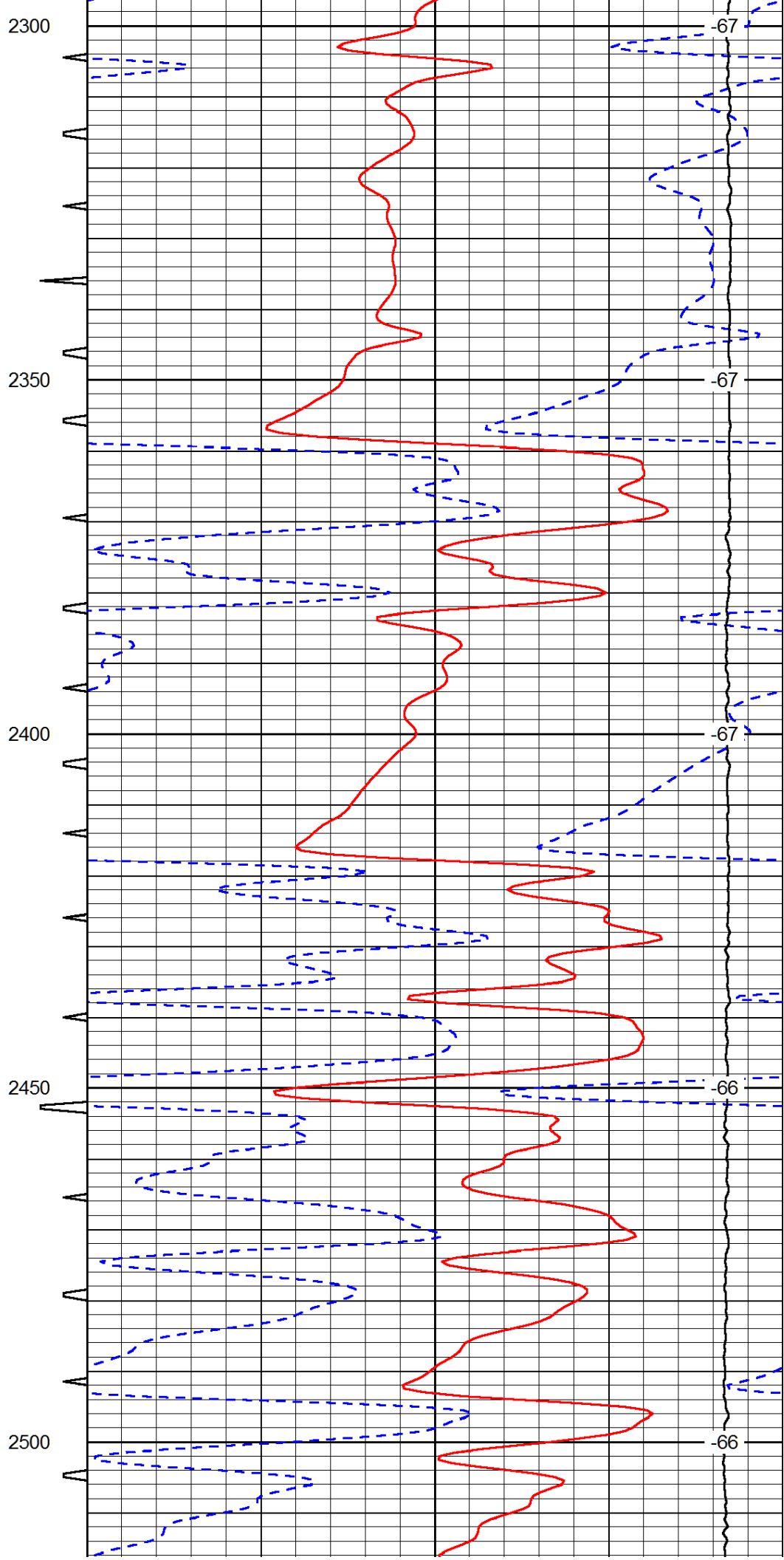
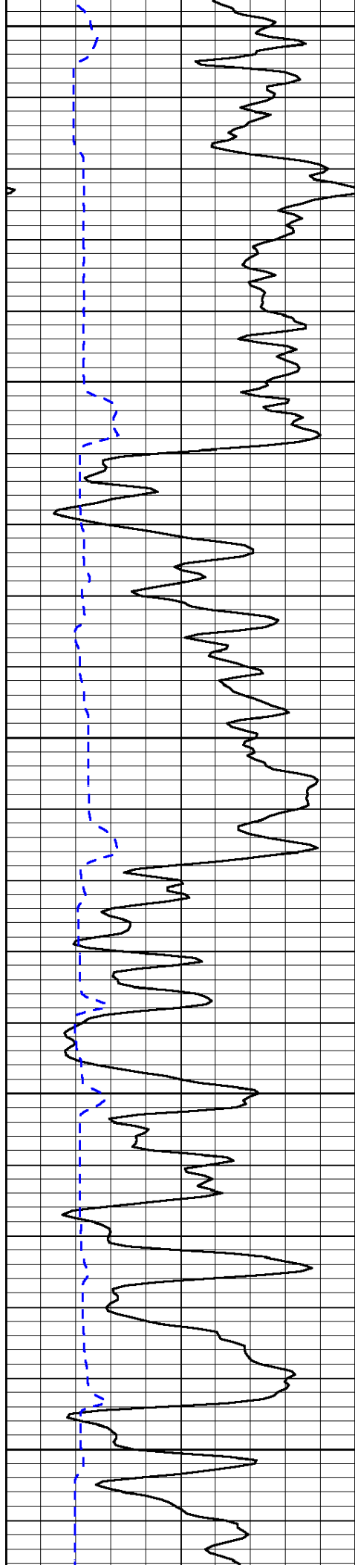


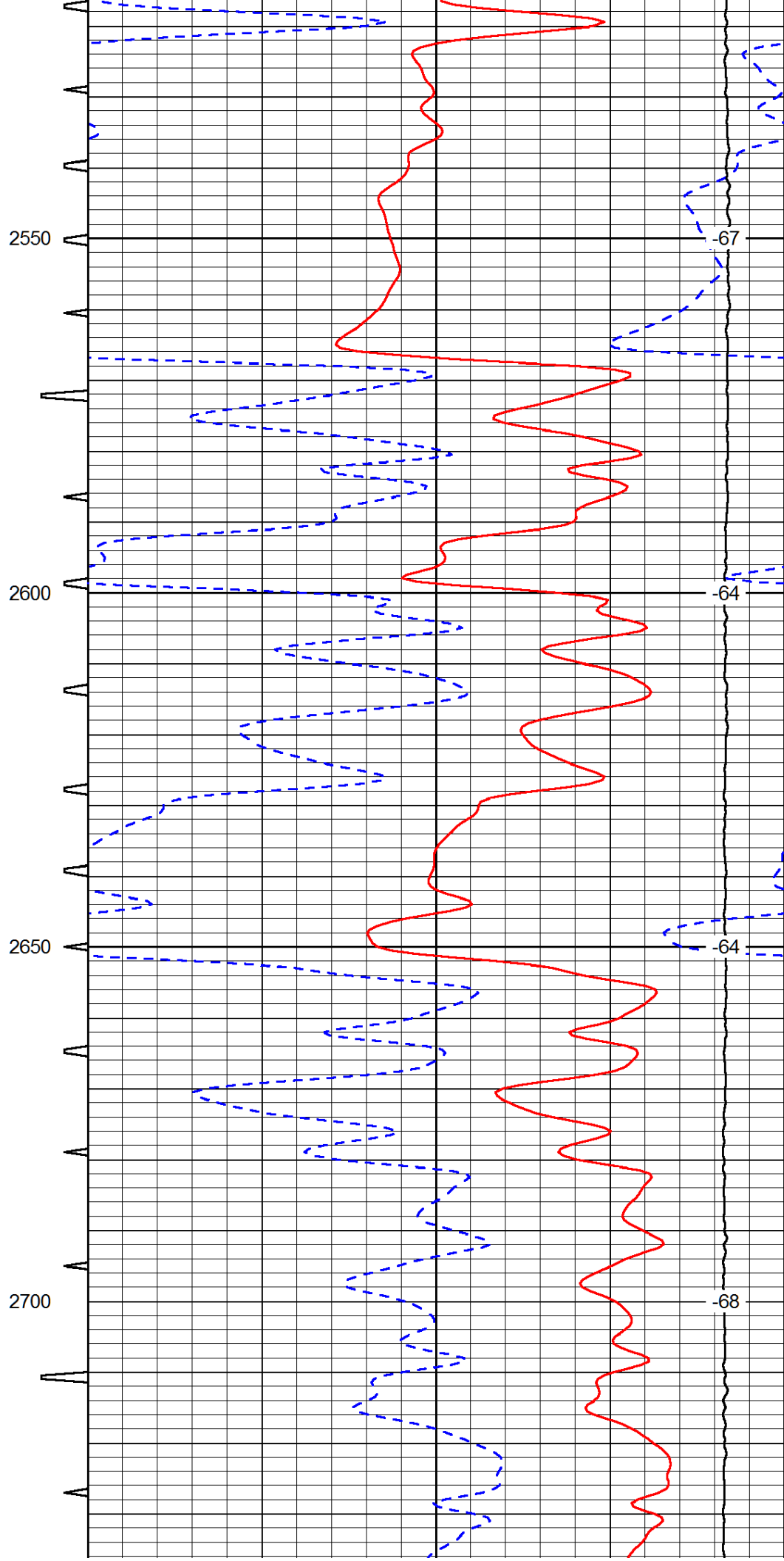
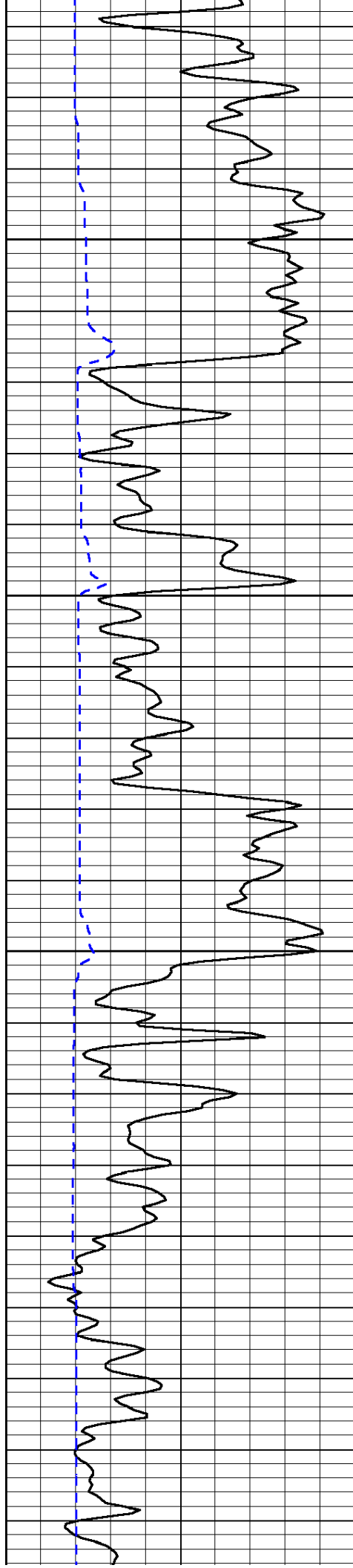


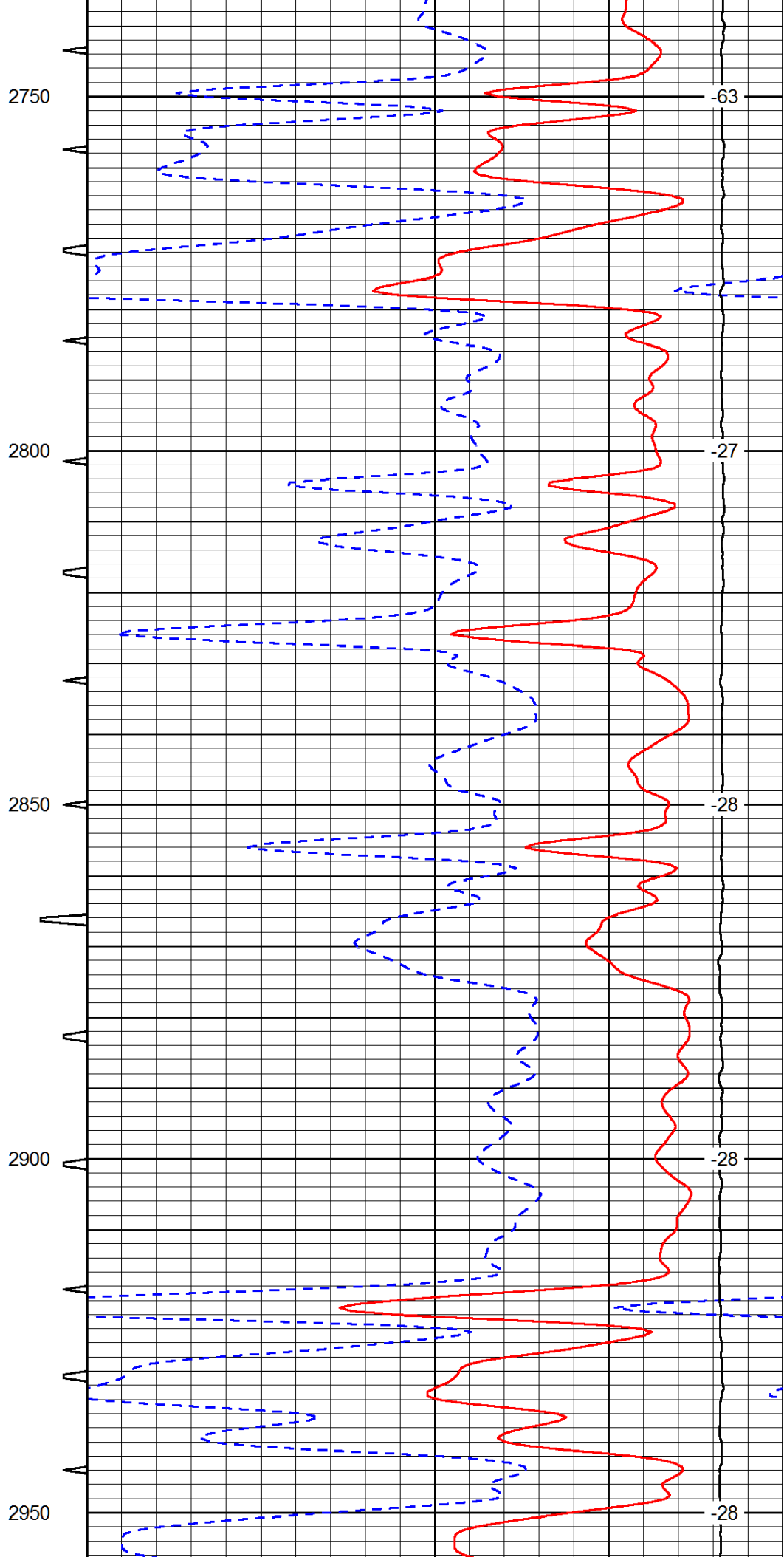
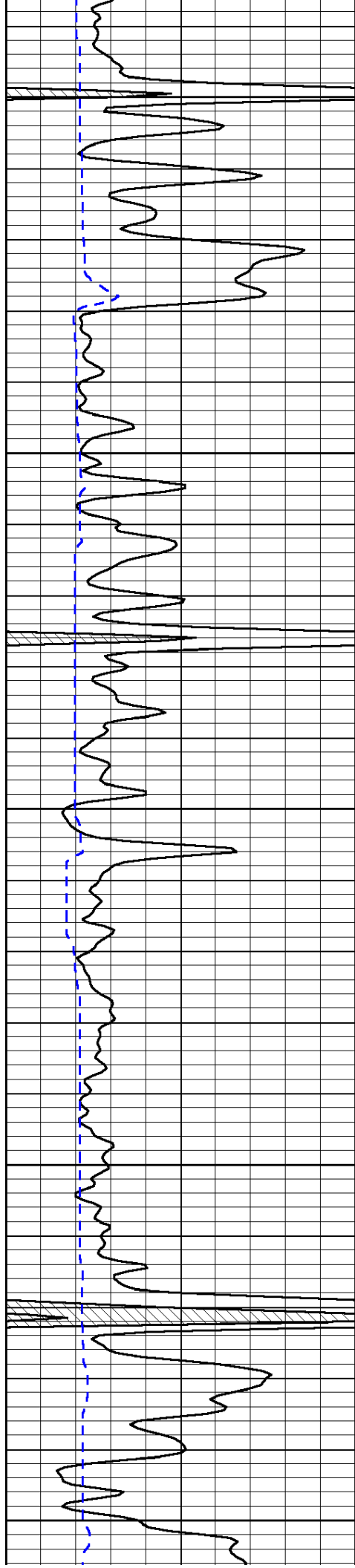


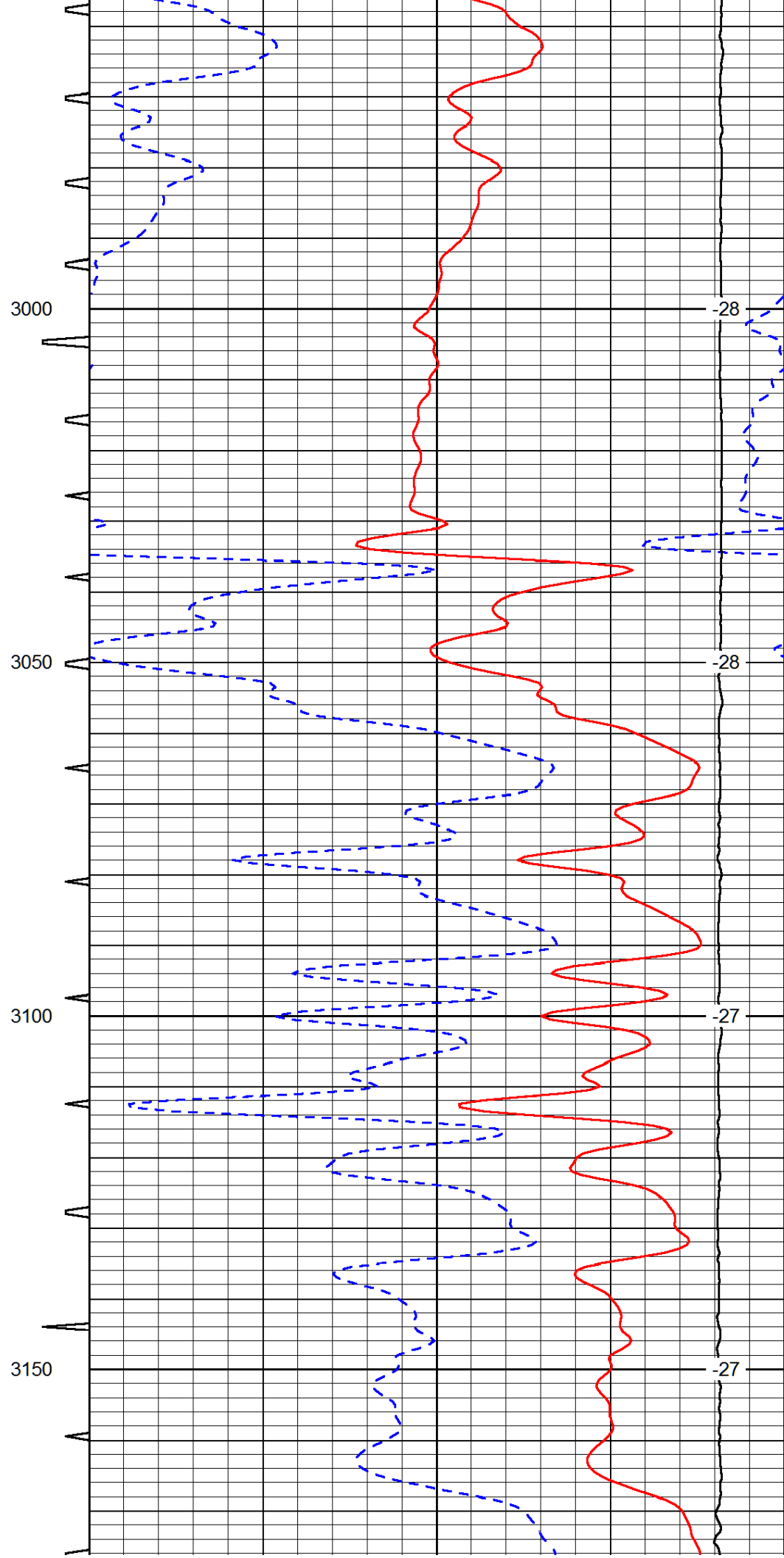
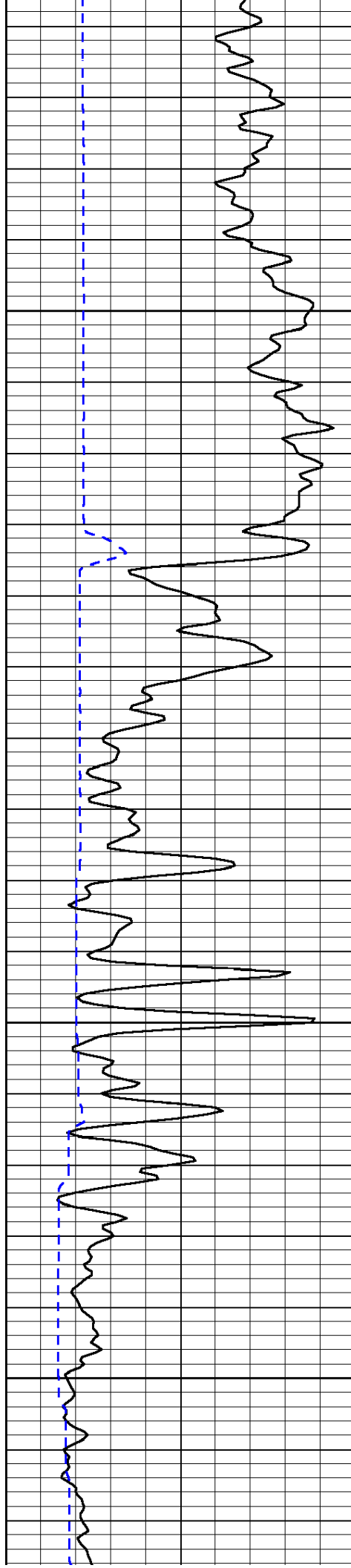


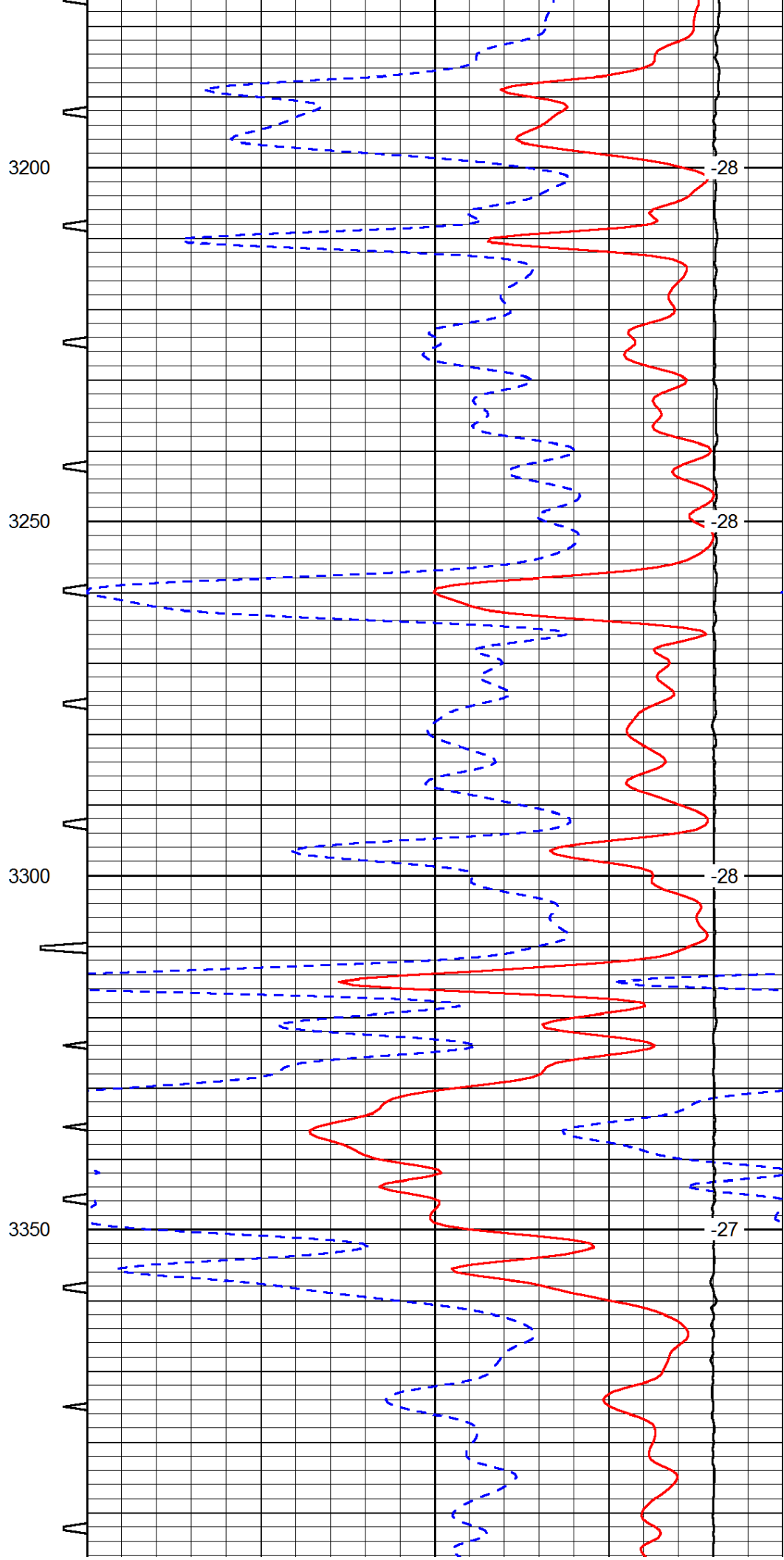
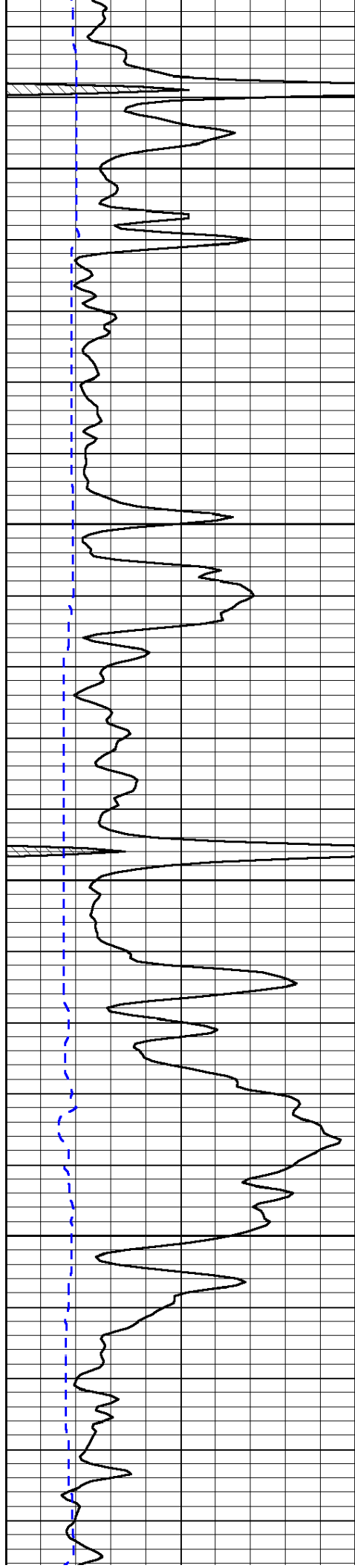


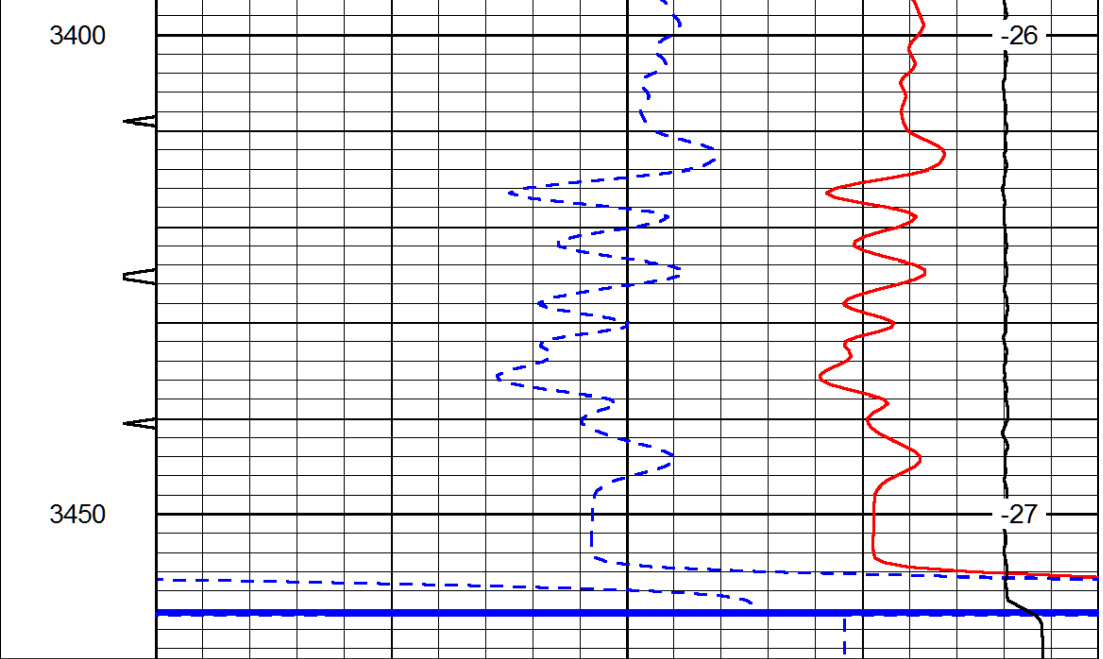
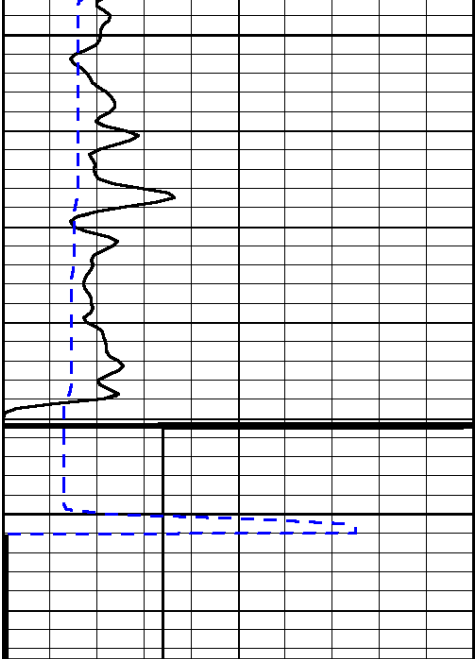












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