



Pioneer Energy Services

Borehole Compensated Sonic Log

API No.

15-185-23808-00-00

Company H & D Exploration, LLC

Well Bunker #1

Field Wildcat

County Stafford

State Kansas

Location

NE SW SW SE
630' FSL / 2068' FEL

Other Services
CNL/CDL
MEL/DIL

Sec: 20

Twp: 25S

Rge: 12W

Permanent Datum

Ground Level
Kelly Bushing

Elevation 1877
10 Ft. Above Perm. Datum

Elevation

Date

7/6/2013

Run Number

Two

Type Log

BHC Sonic

Depth Driller

4260

Depth Logger

4262

Bottom Logged Interval

4251

Top Logged Interval

700

Type Fluid In Hole

Chemical

Salinity, PPM CL

3400

Density

9.6

Level

Full

Max. Rec. Temp. F

119

Operating Rig Time

5 Hours

Equipment -- Location

17 Days

Recorded By

R. Barnhart

Witnessed By

Josh Austin

Borehole Record

Casing Record

Run No.

Bit

From

To

Size

Wgt.

From

To

One 12.25

00

705

8.625

23#

00

705

Two 7.875

705

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.

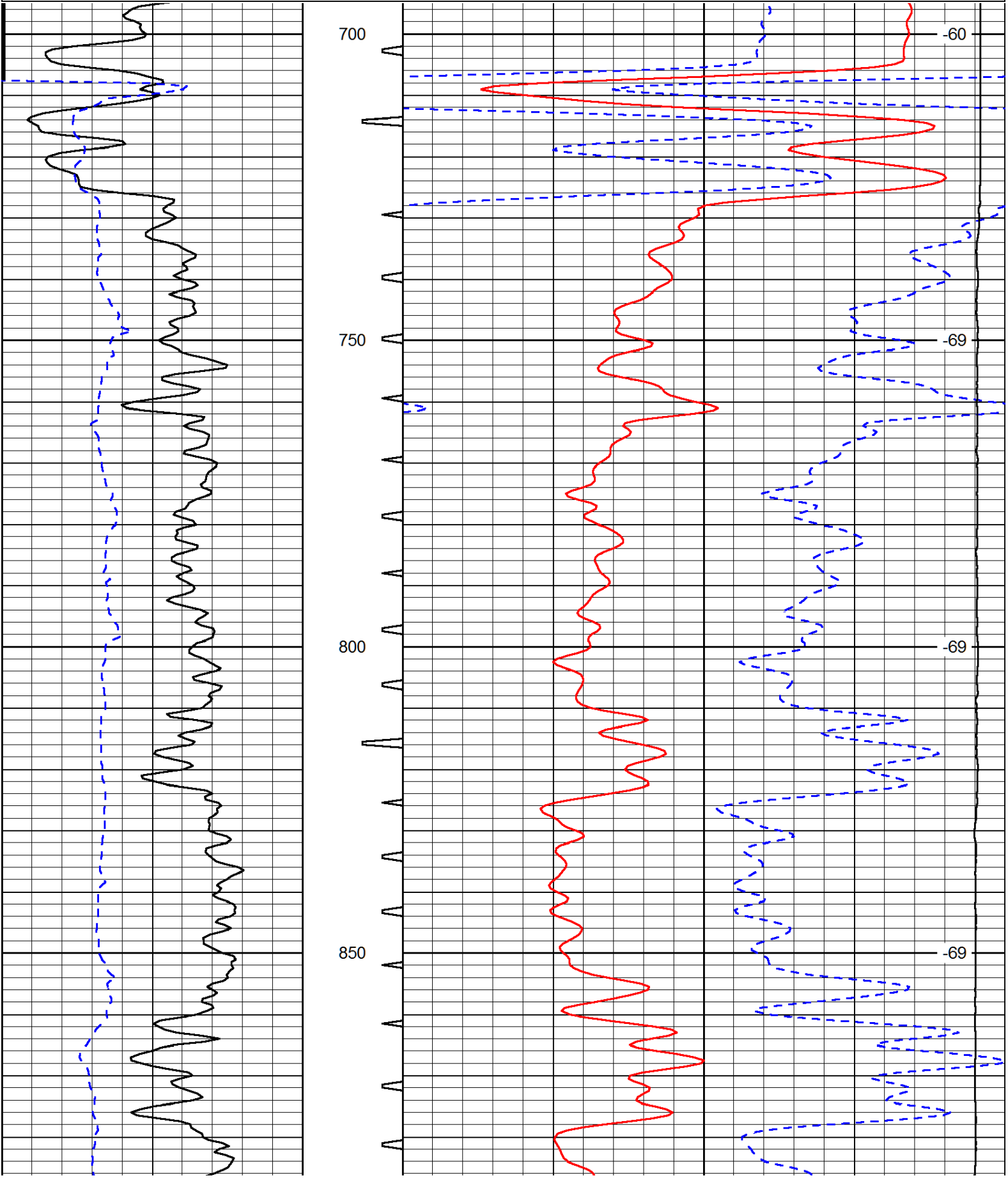
Comments

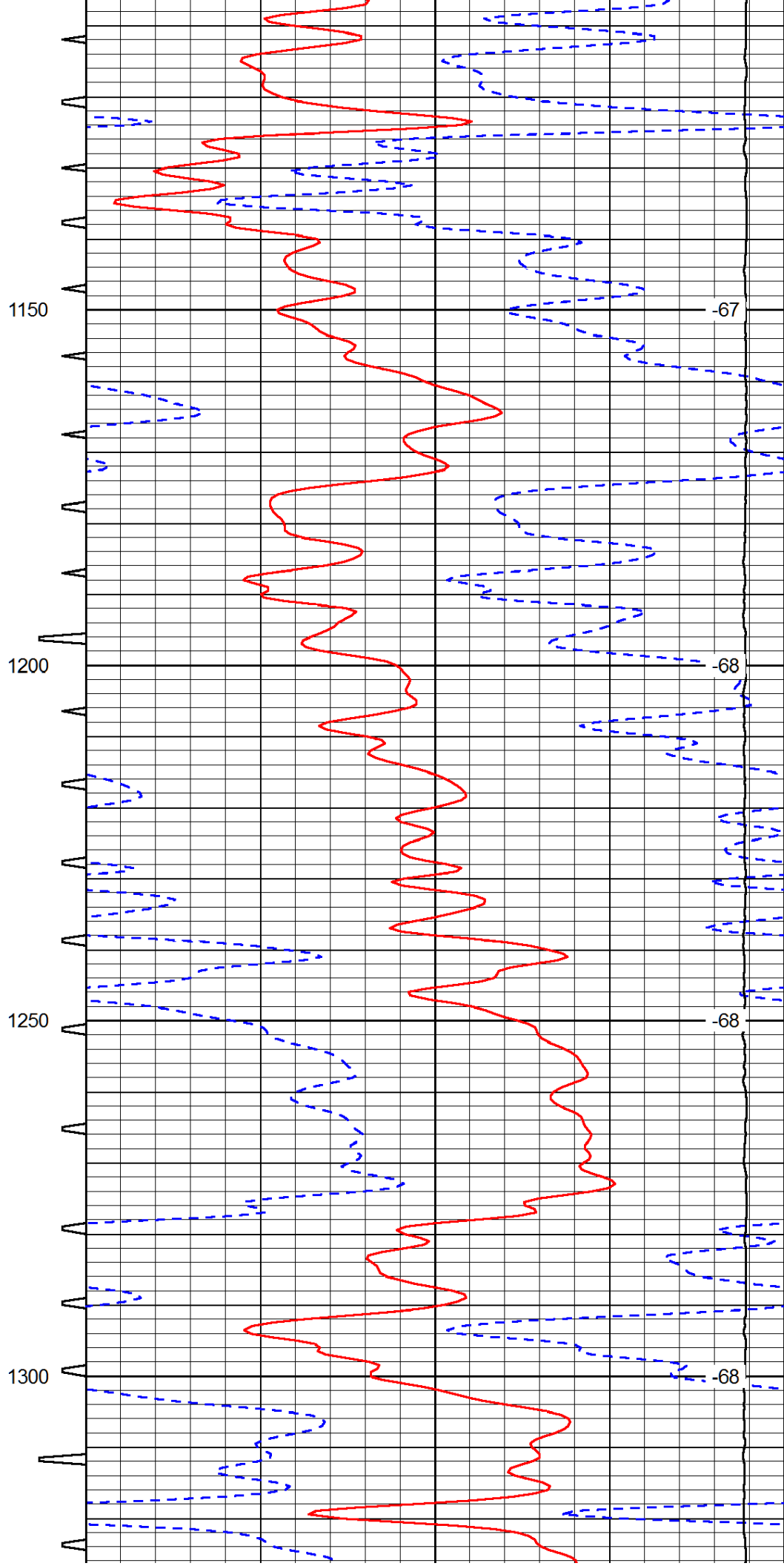
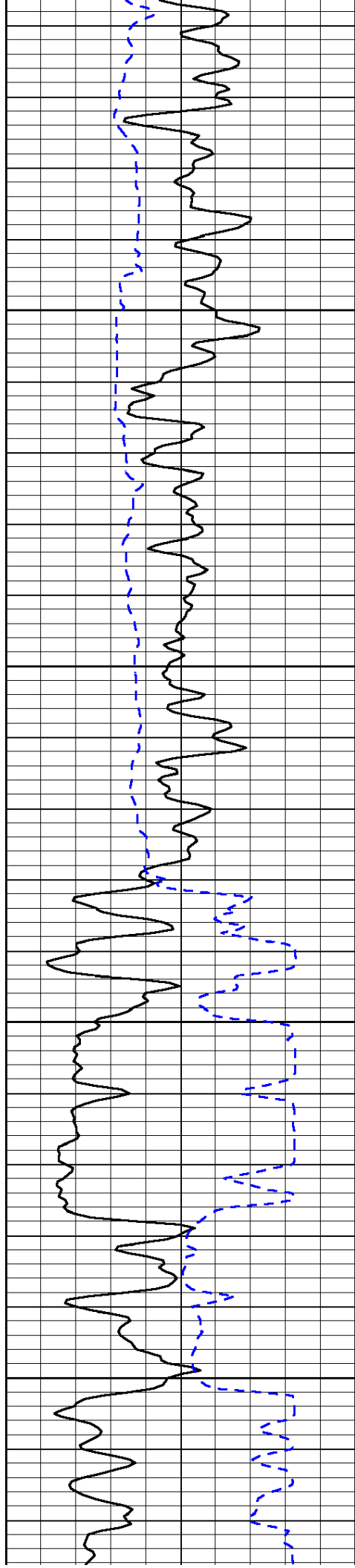
Thank you for using Log-Tech, Inc.
(785) 625-3858

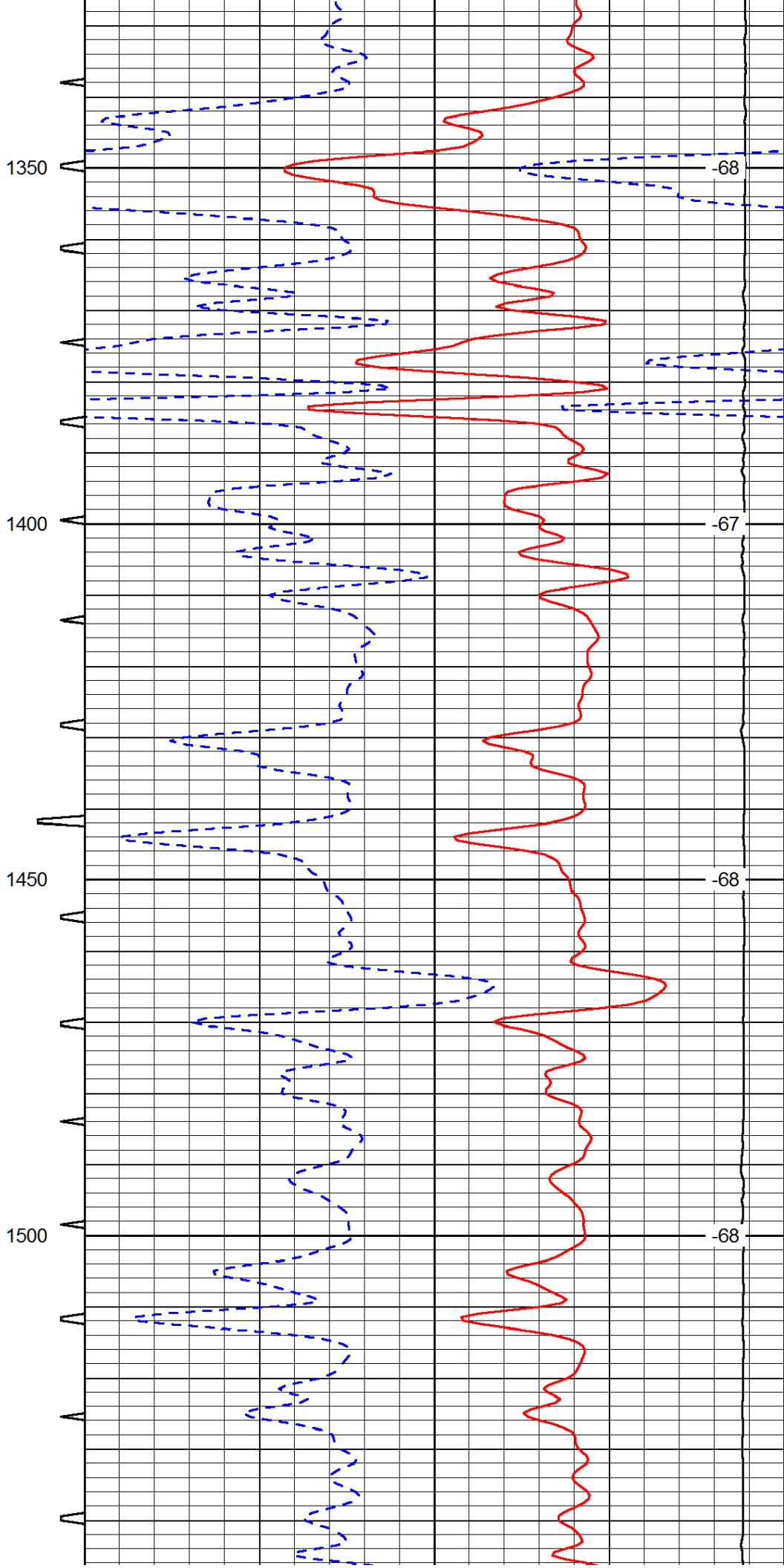
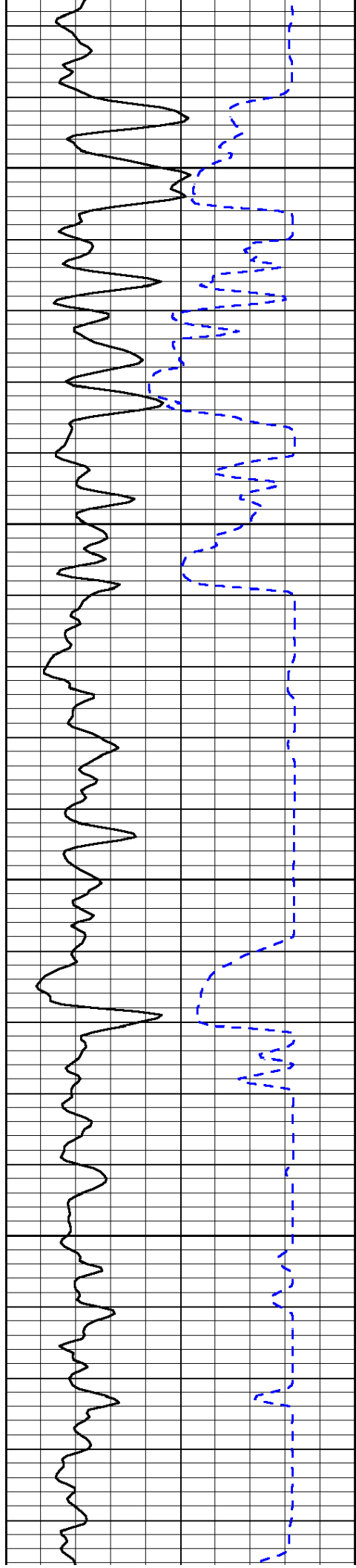
Stafford, KS:
7S, 3 1/2W, N into

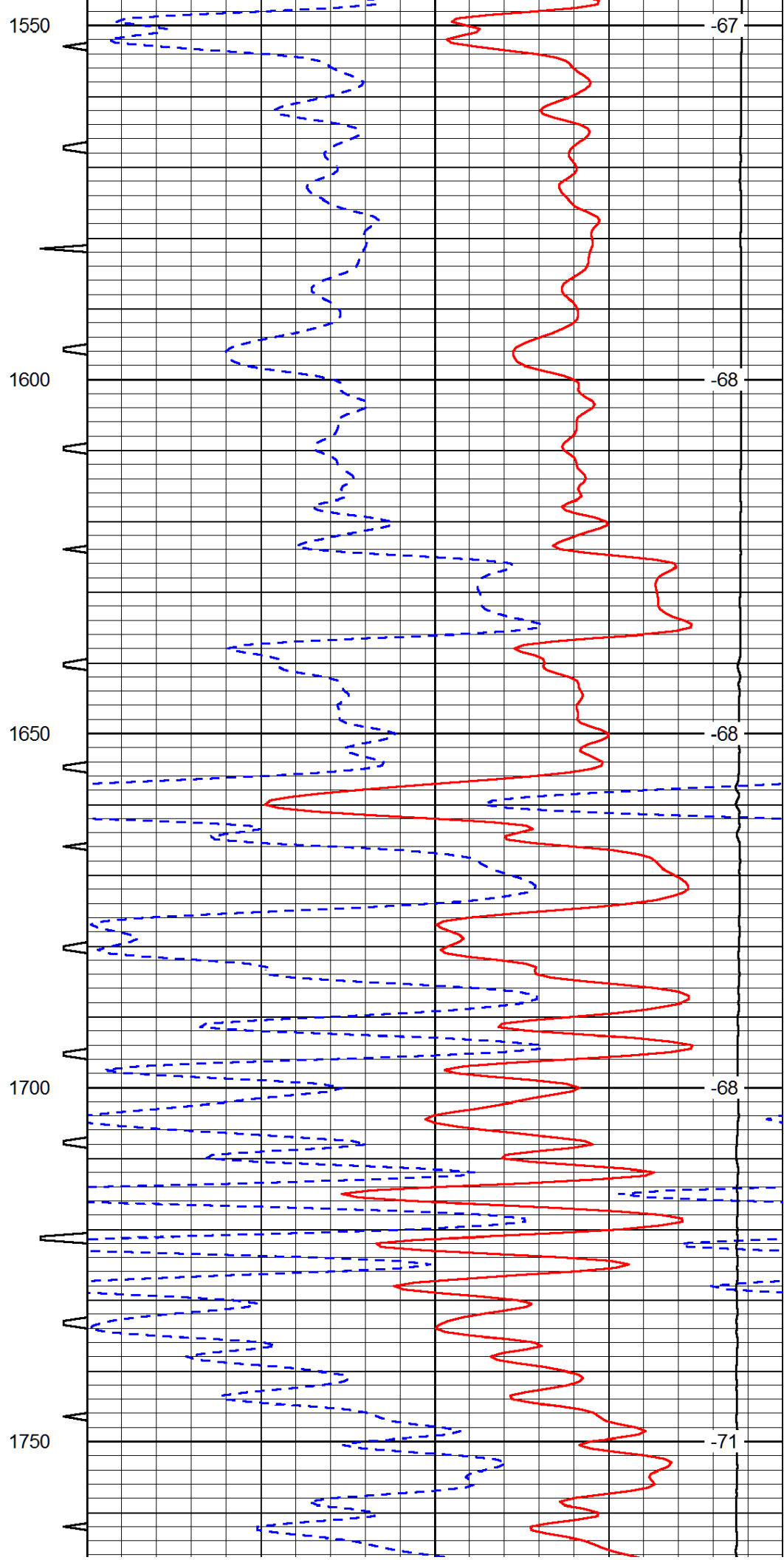
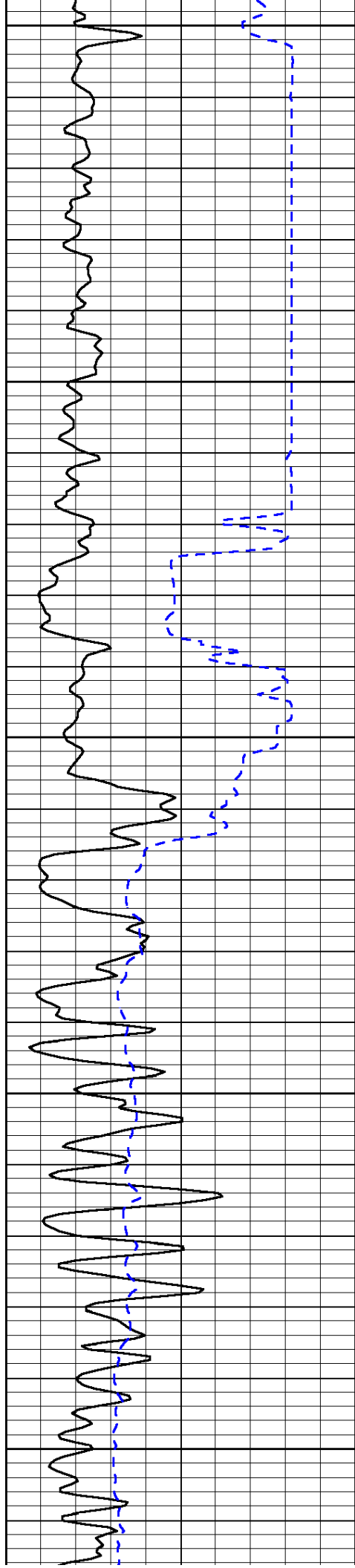
Database File: h&d_hd.db
Dataset Pathname: dil/hdmain
Presentation Format: sonic
Dataset Creation: Sat Jul 06 15:56:33 2013
Charted by: Depth in Feet scaled 1:240

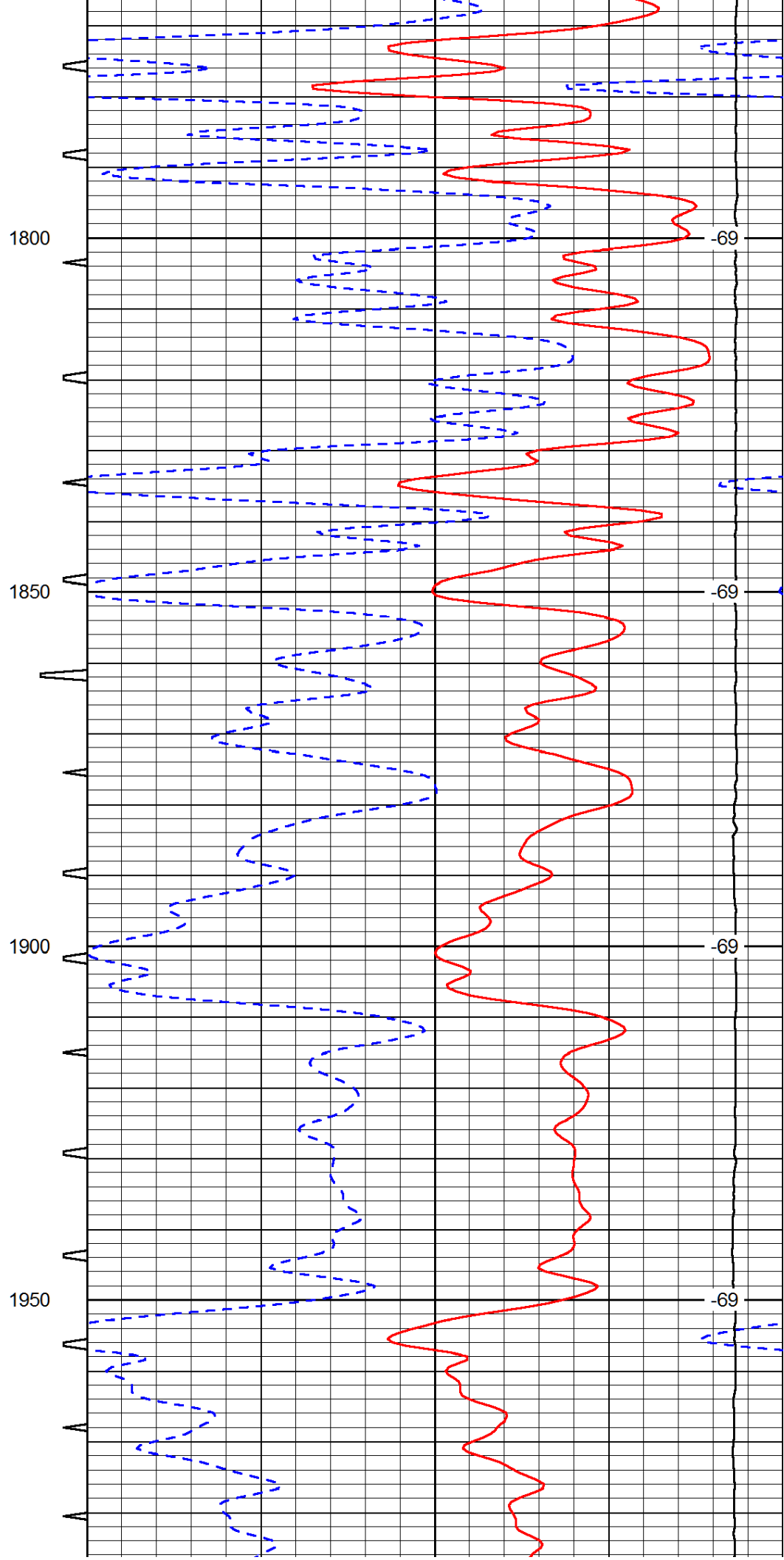
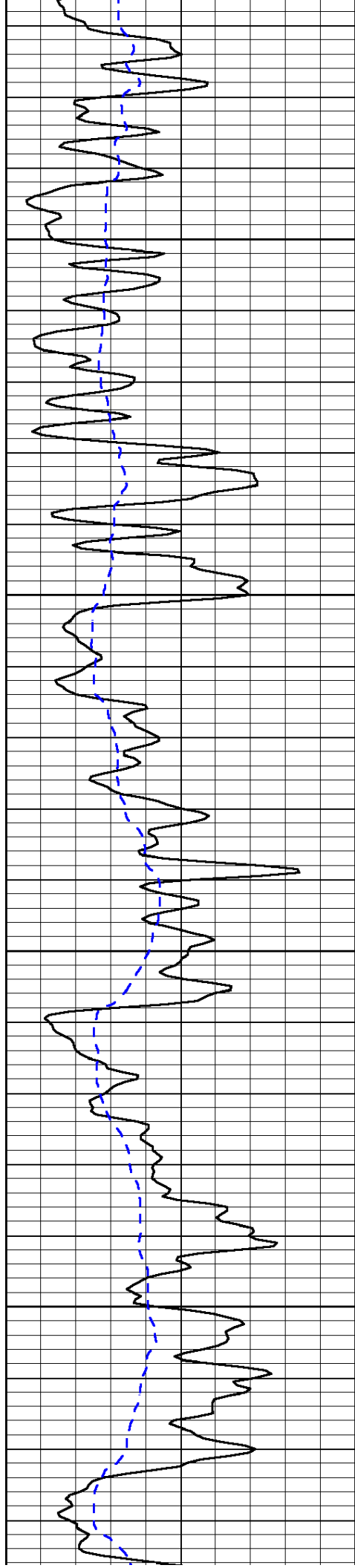
0	Gamma Ray (GAPI)	150	Sonic Int	140	Delta Time (usec/ft) (usec/ft)	40
150	Gamma Ray (GAPI)	300	5 (msec) 0	30	Sonic Porosity (pu)	-10
6	dCAL (in)	16		15000	LTEN (lb) (lb)	0
						LSPD (ft/min)

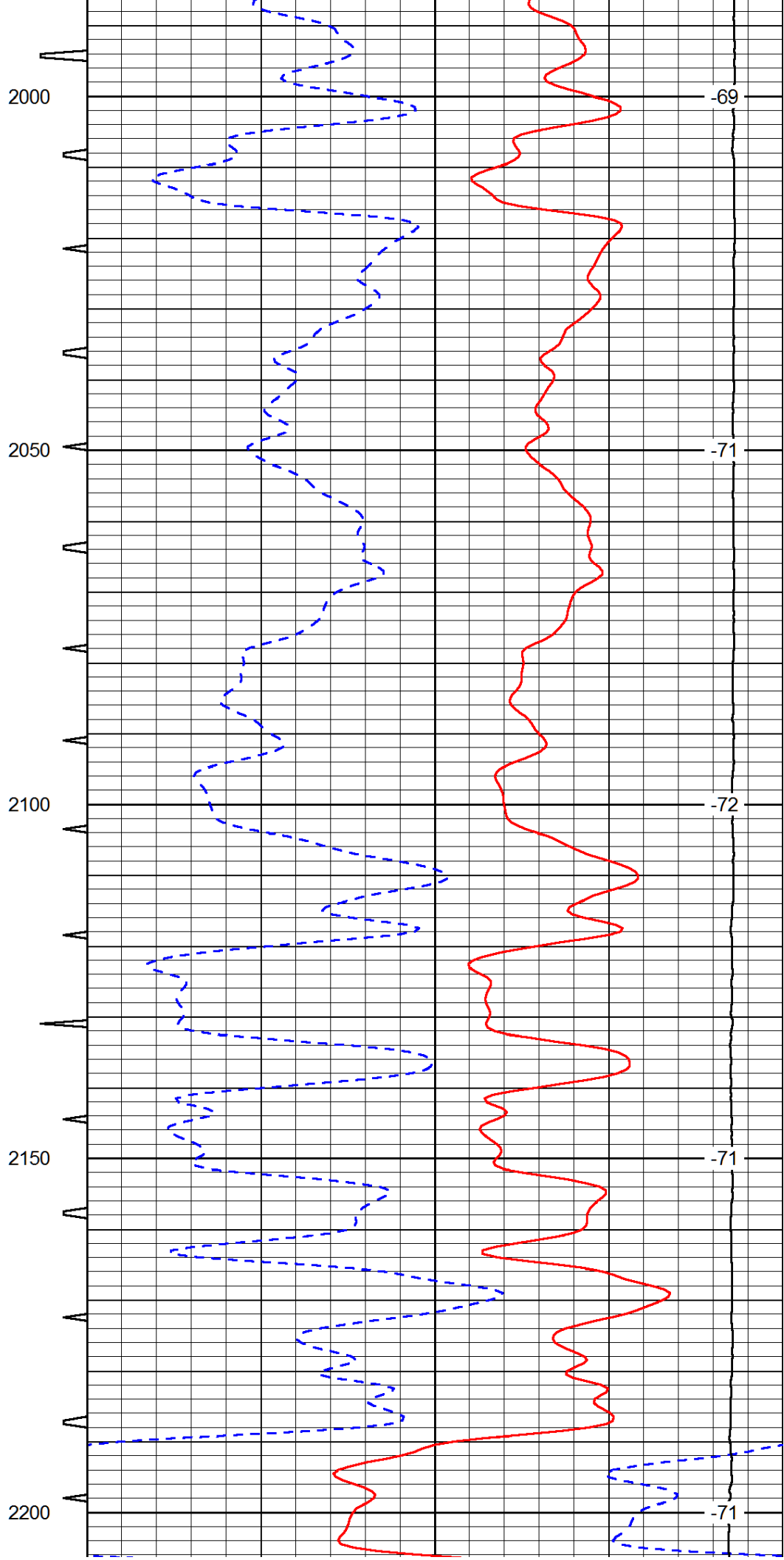
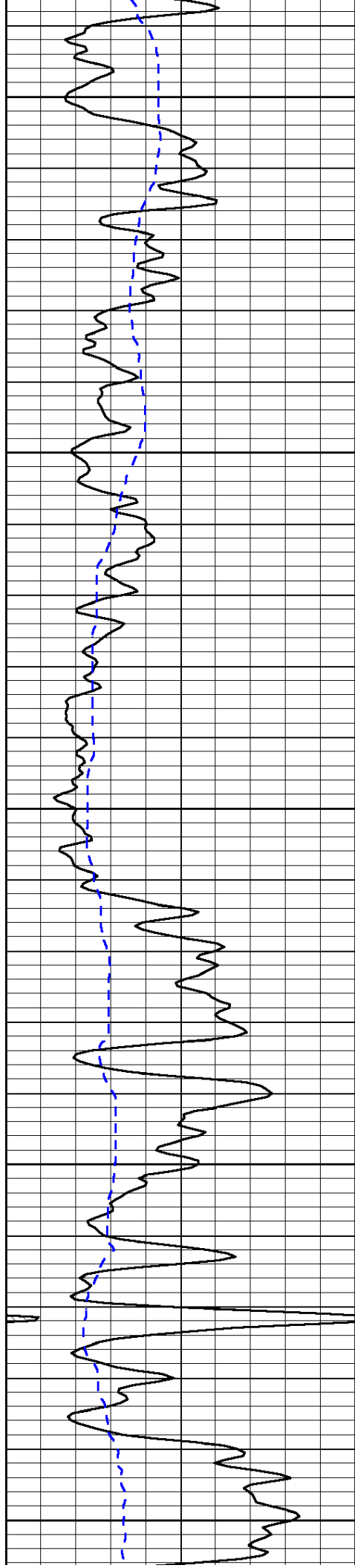


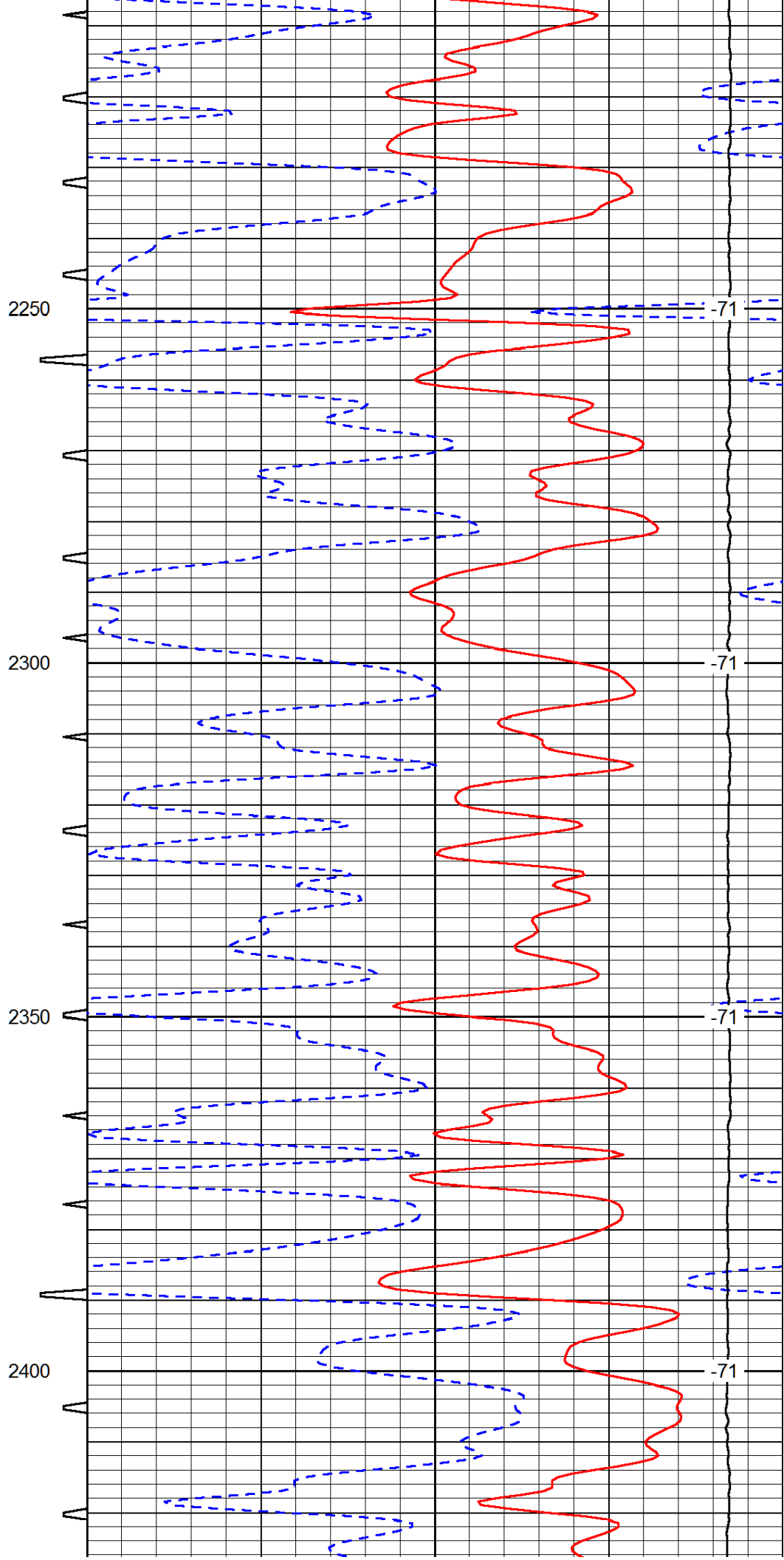
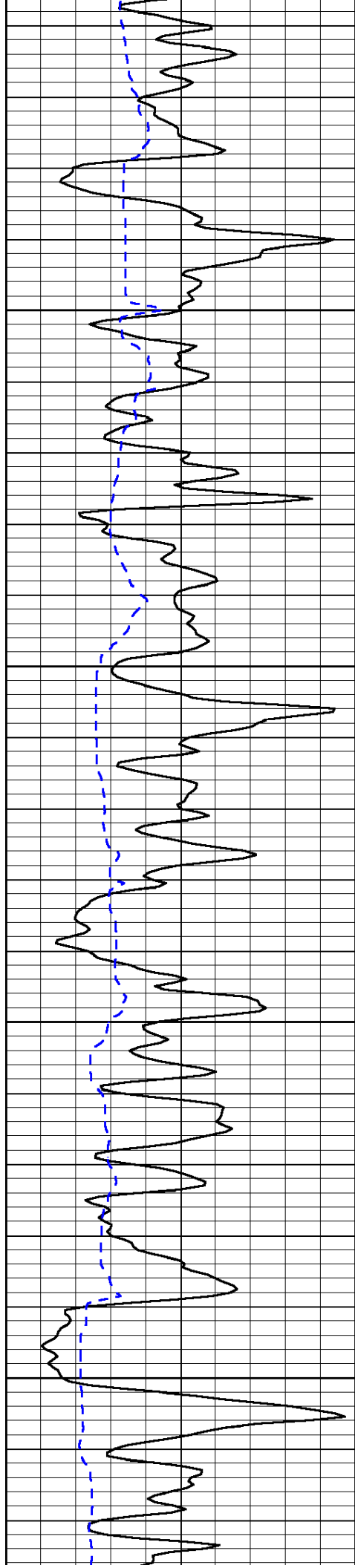


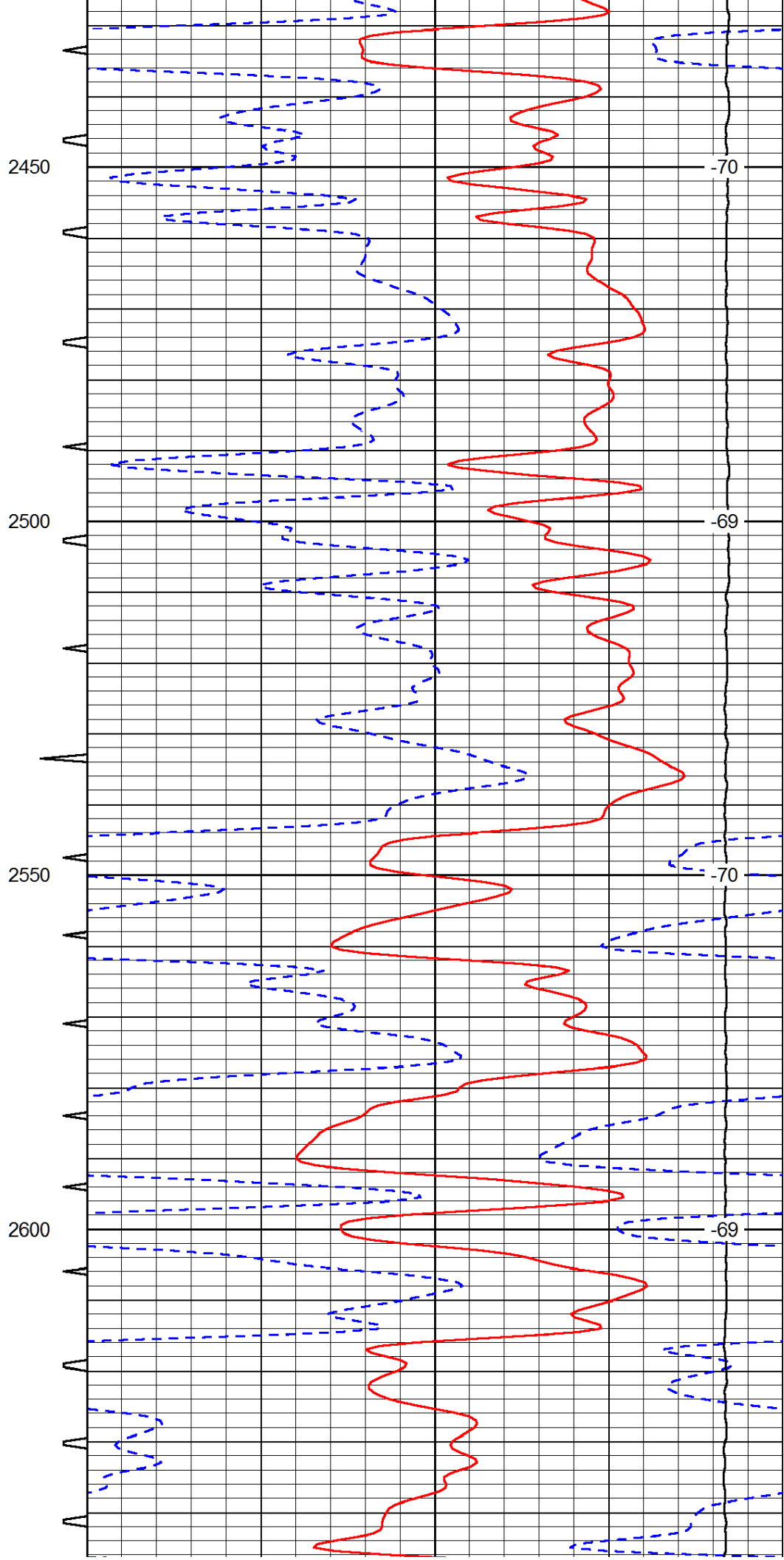
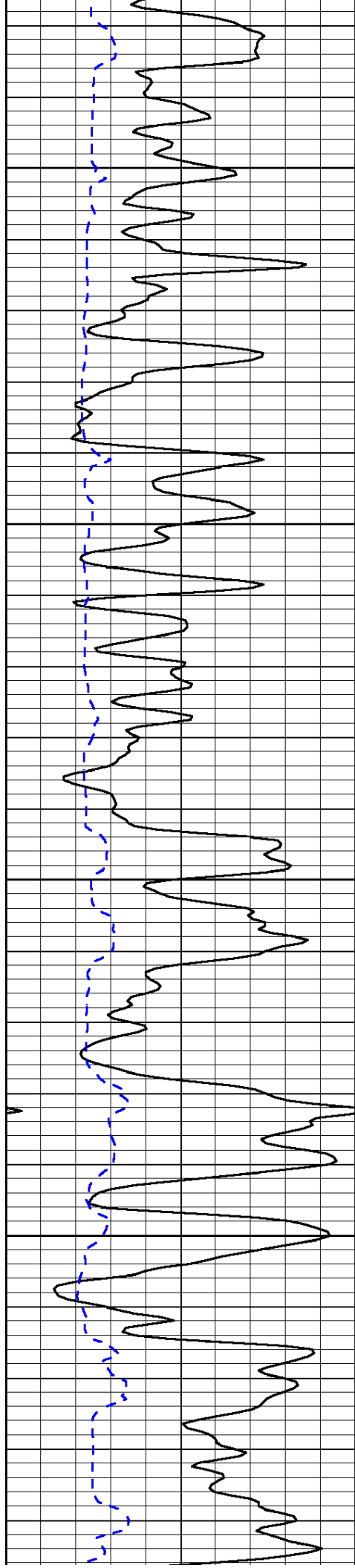


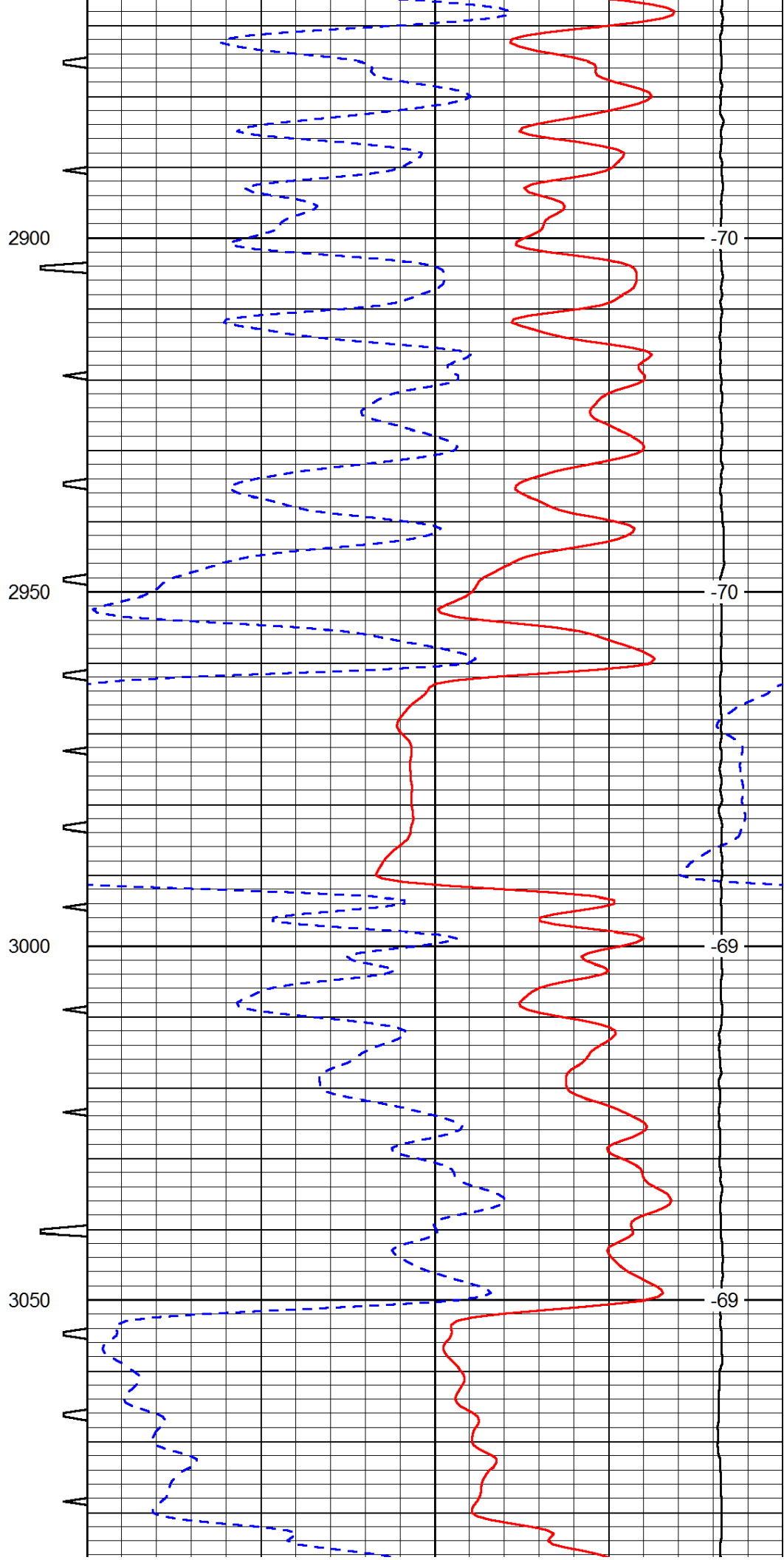
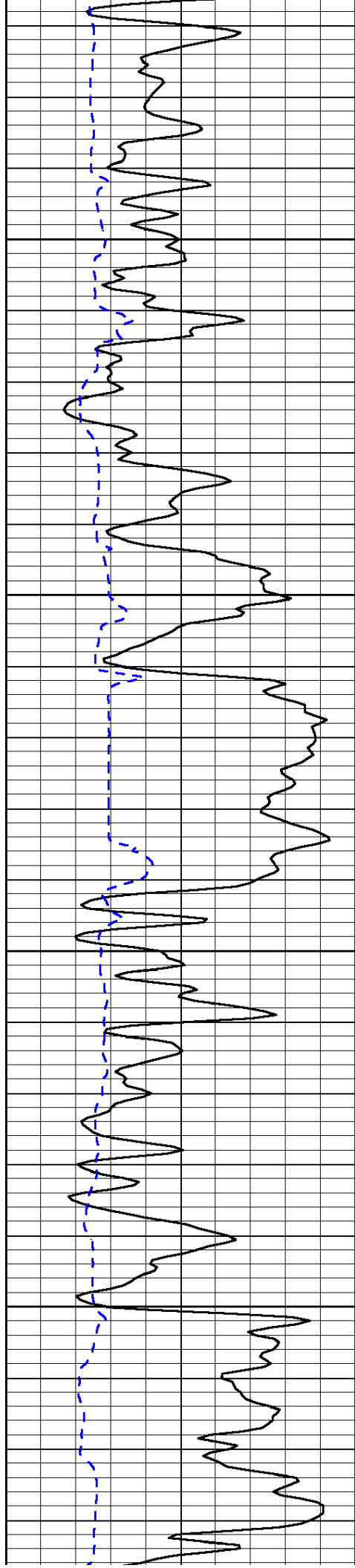


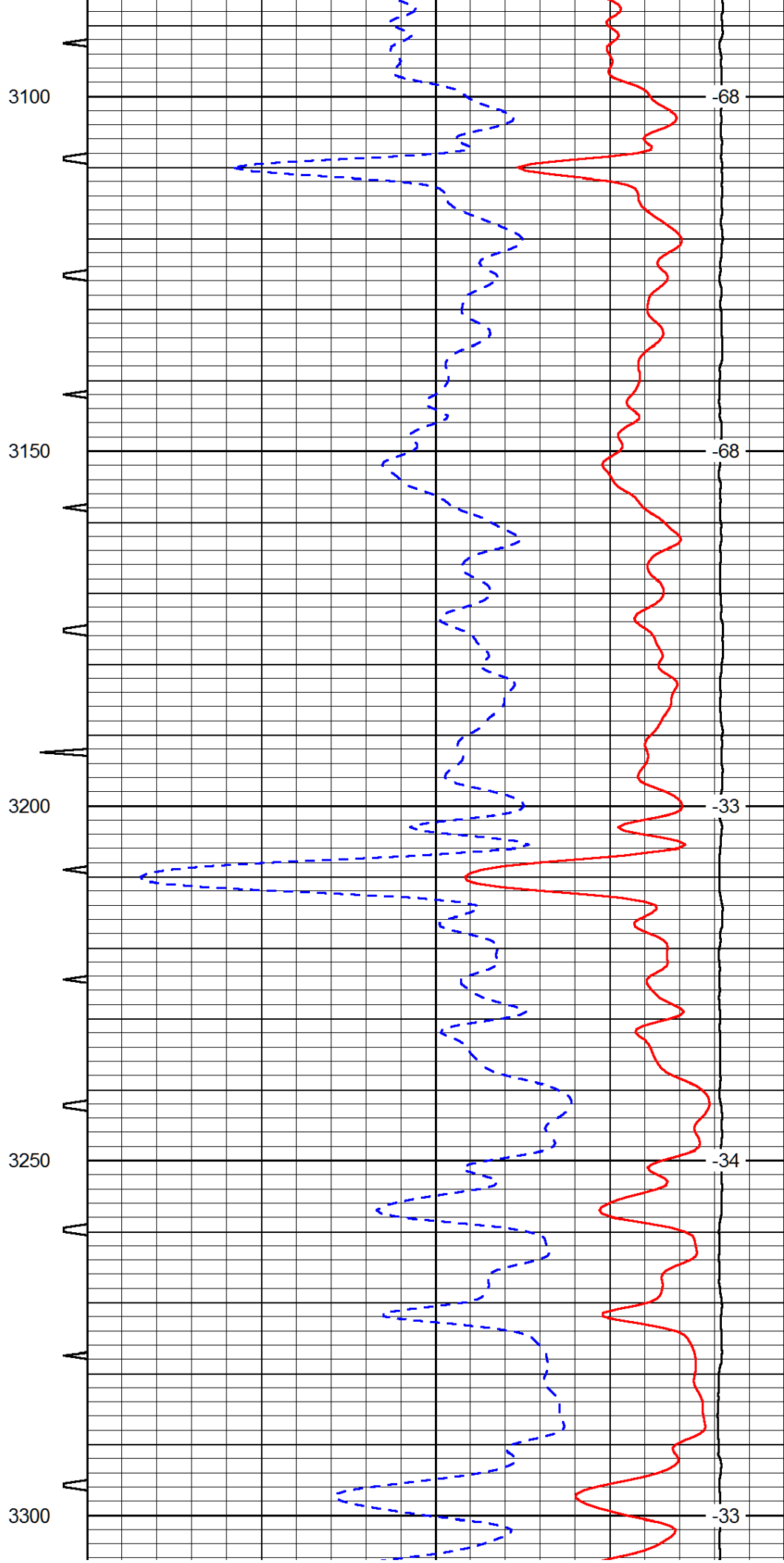
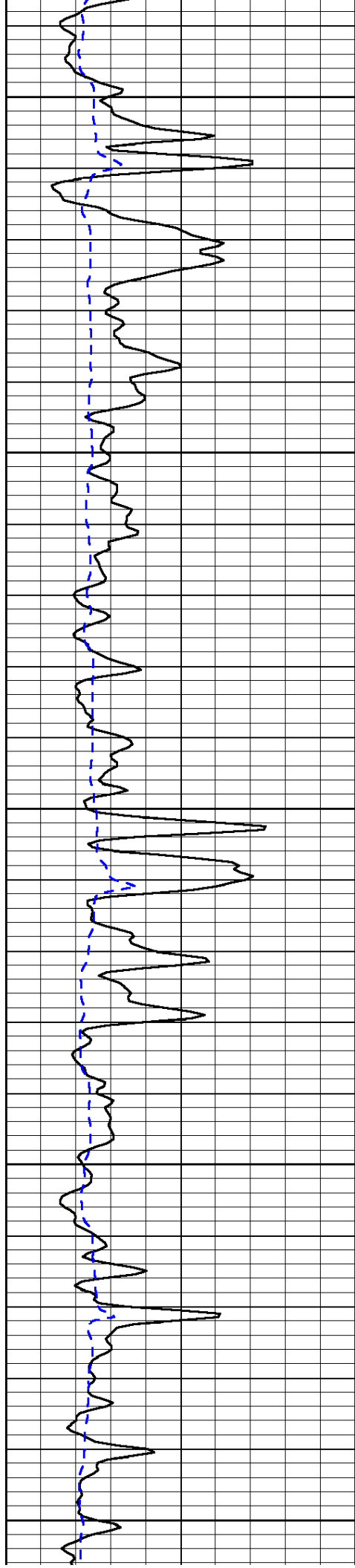


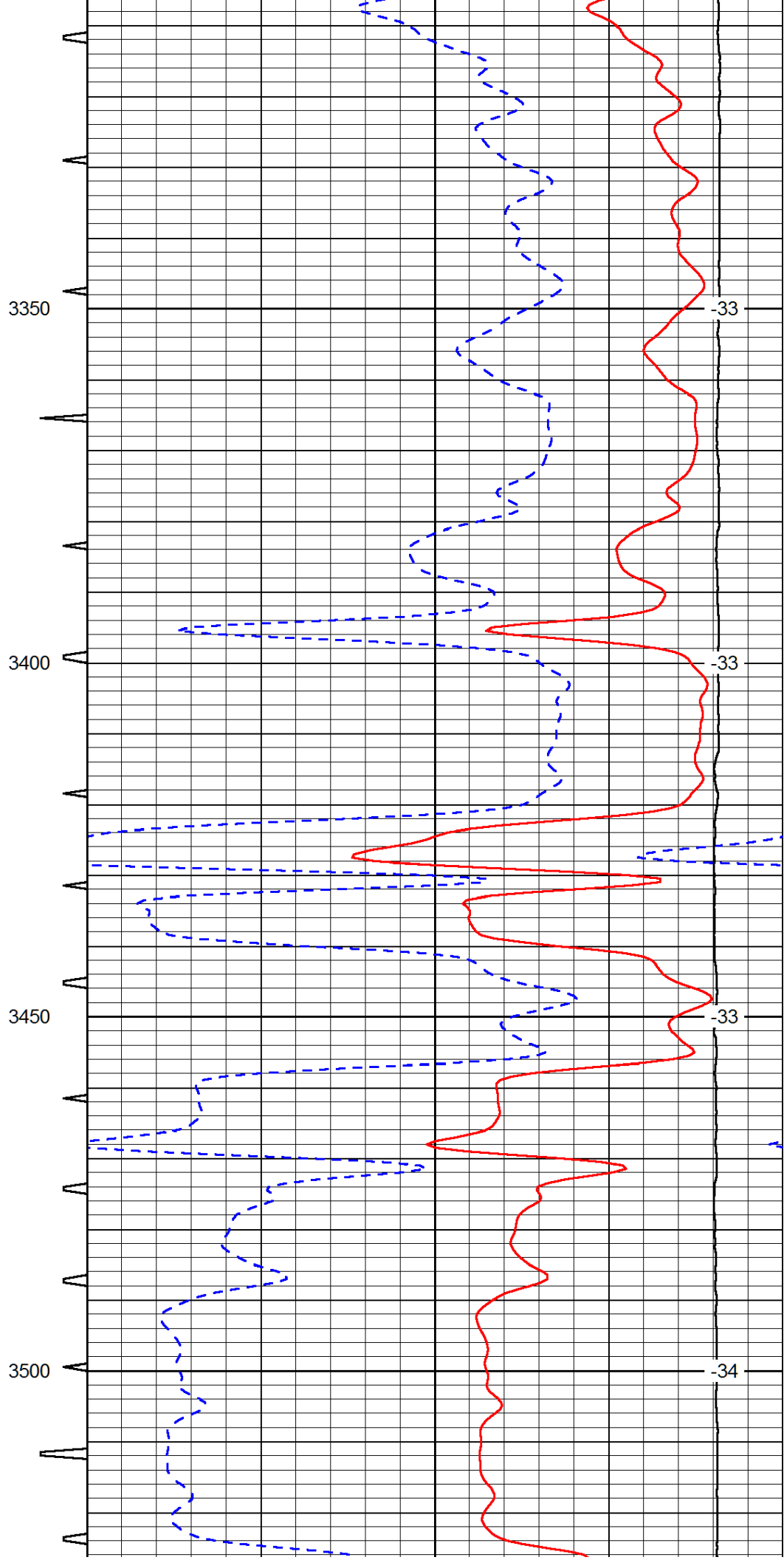
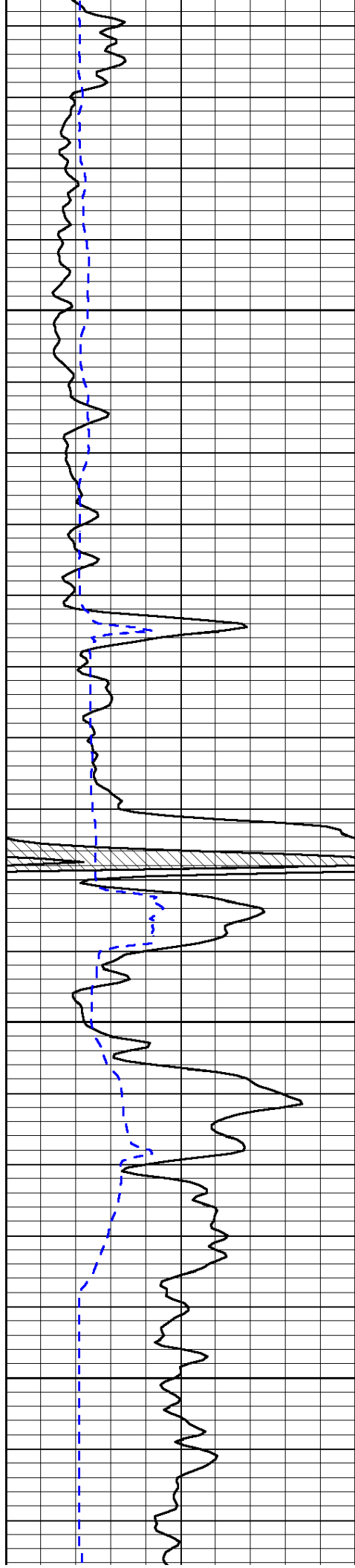


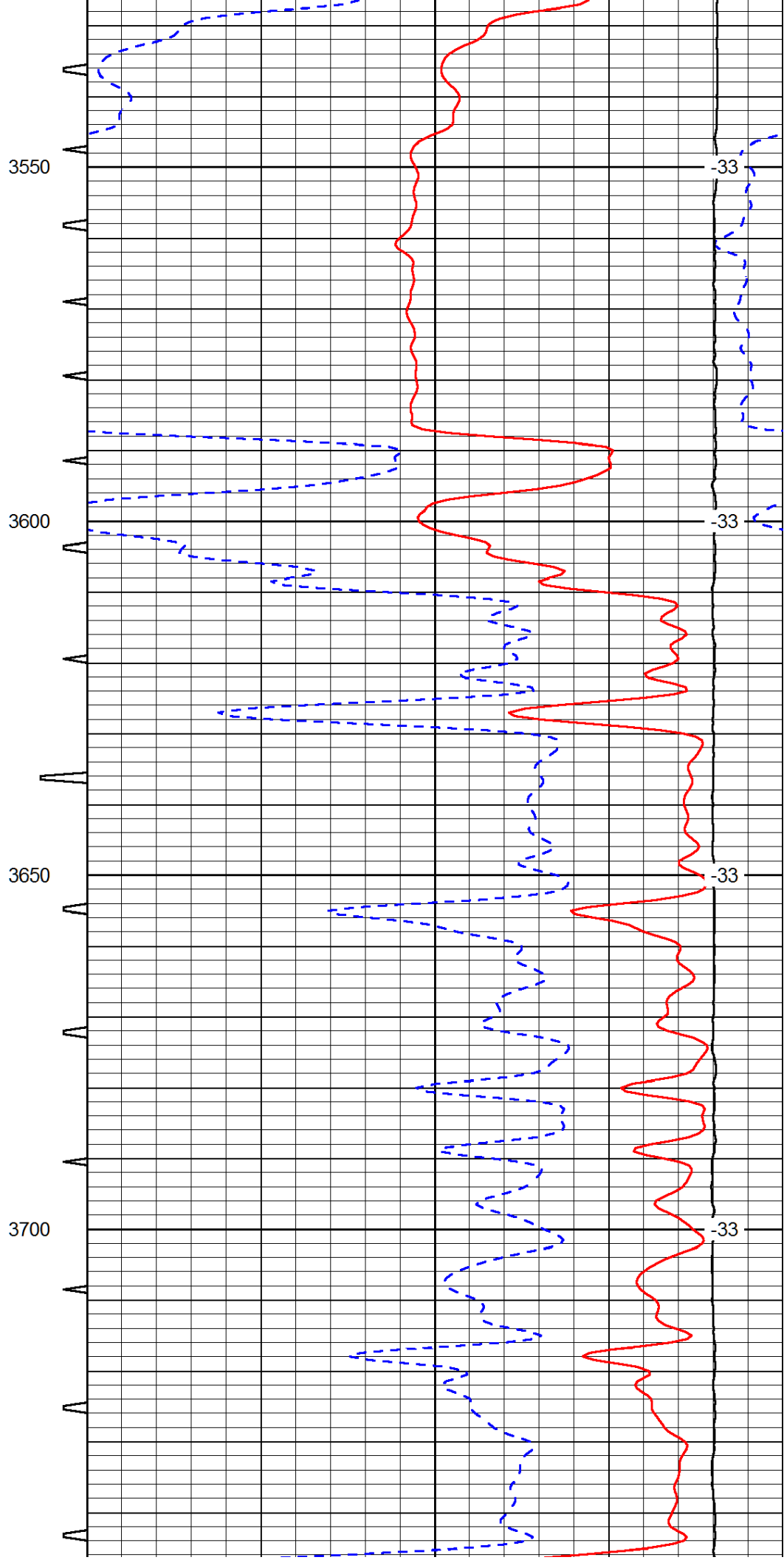
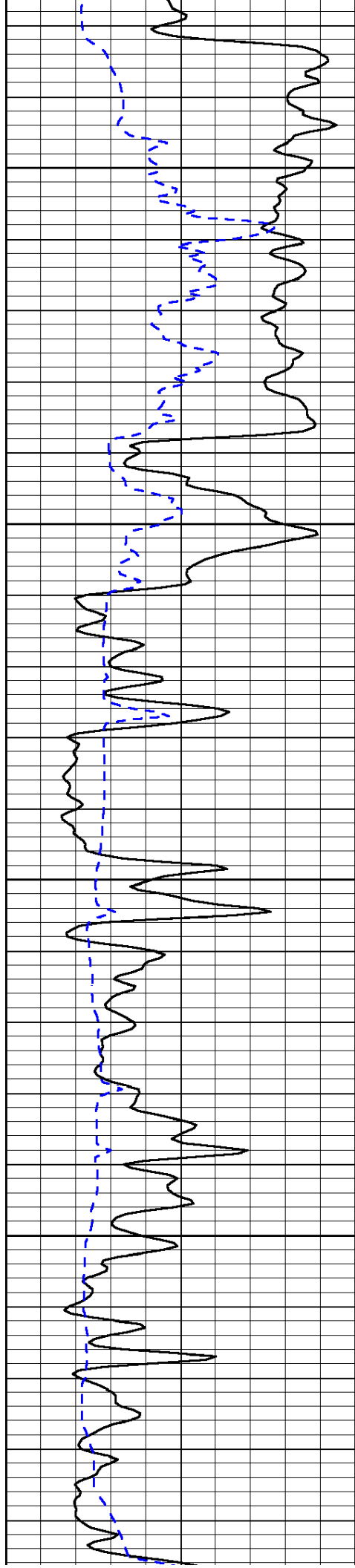


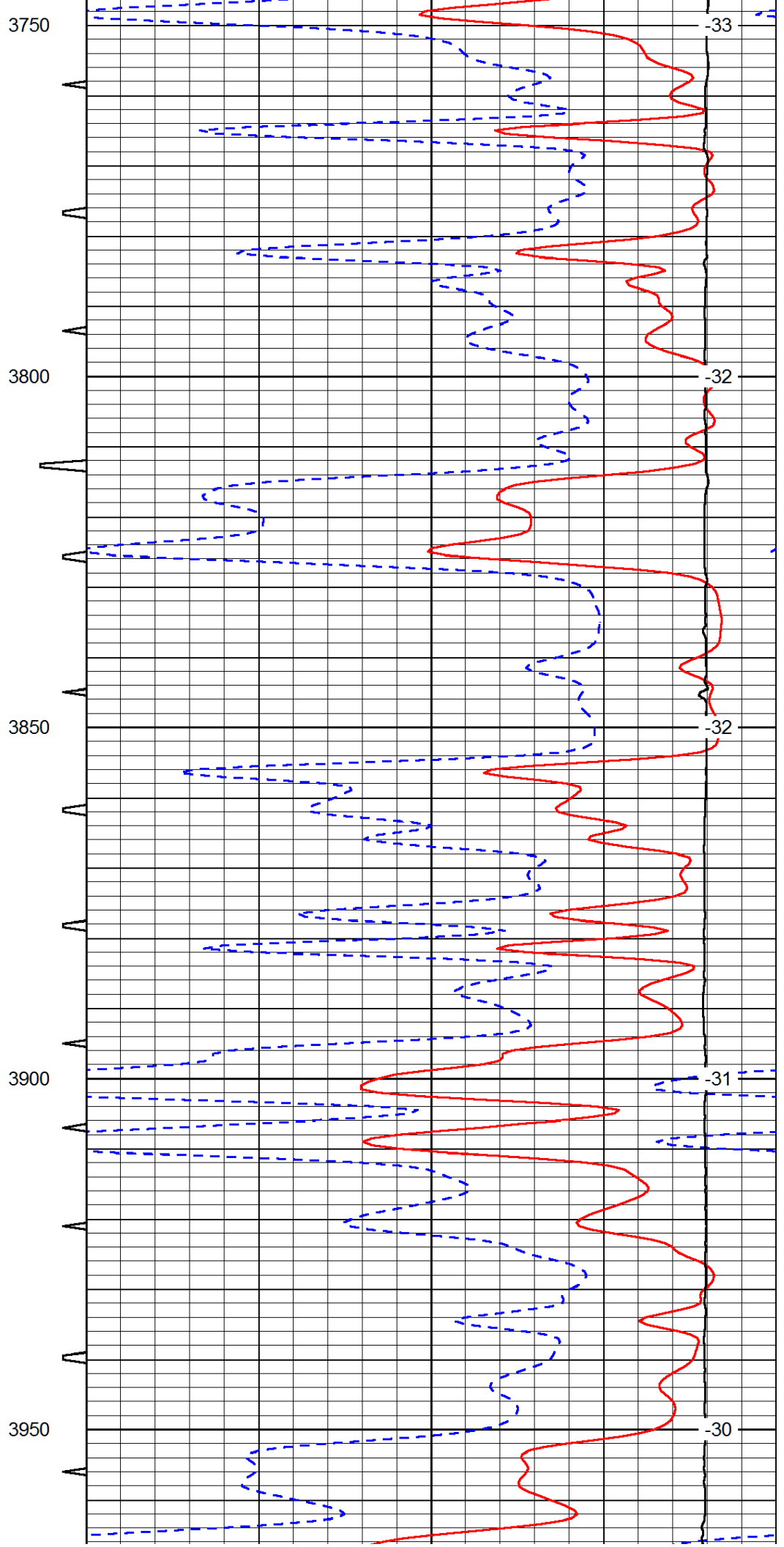
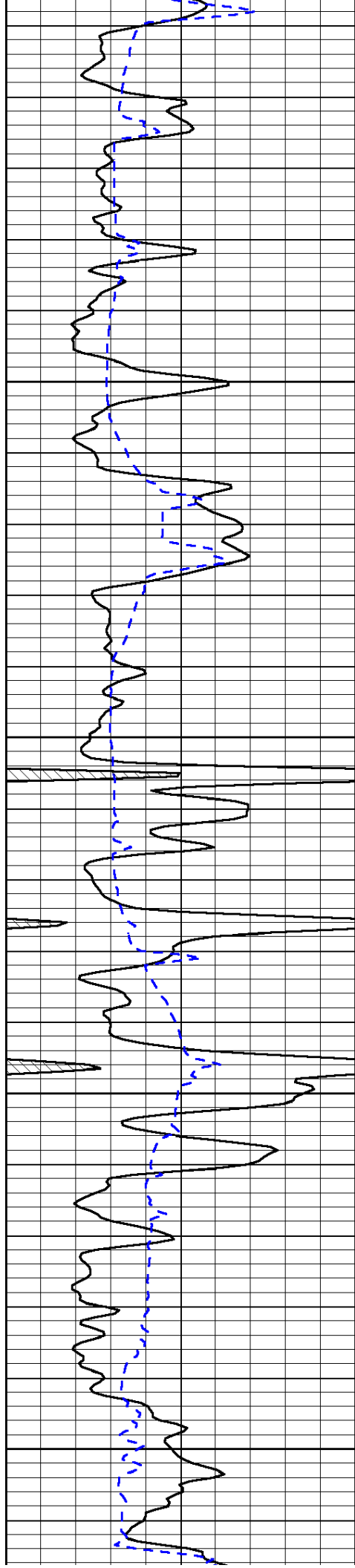


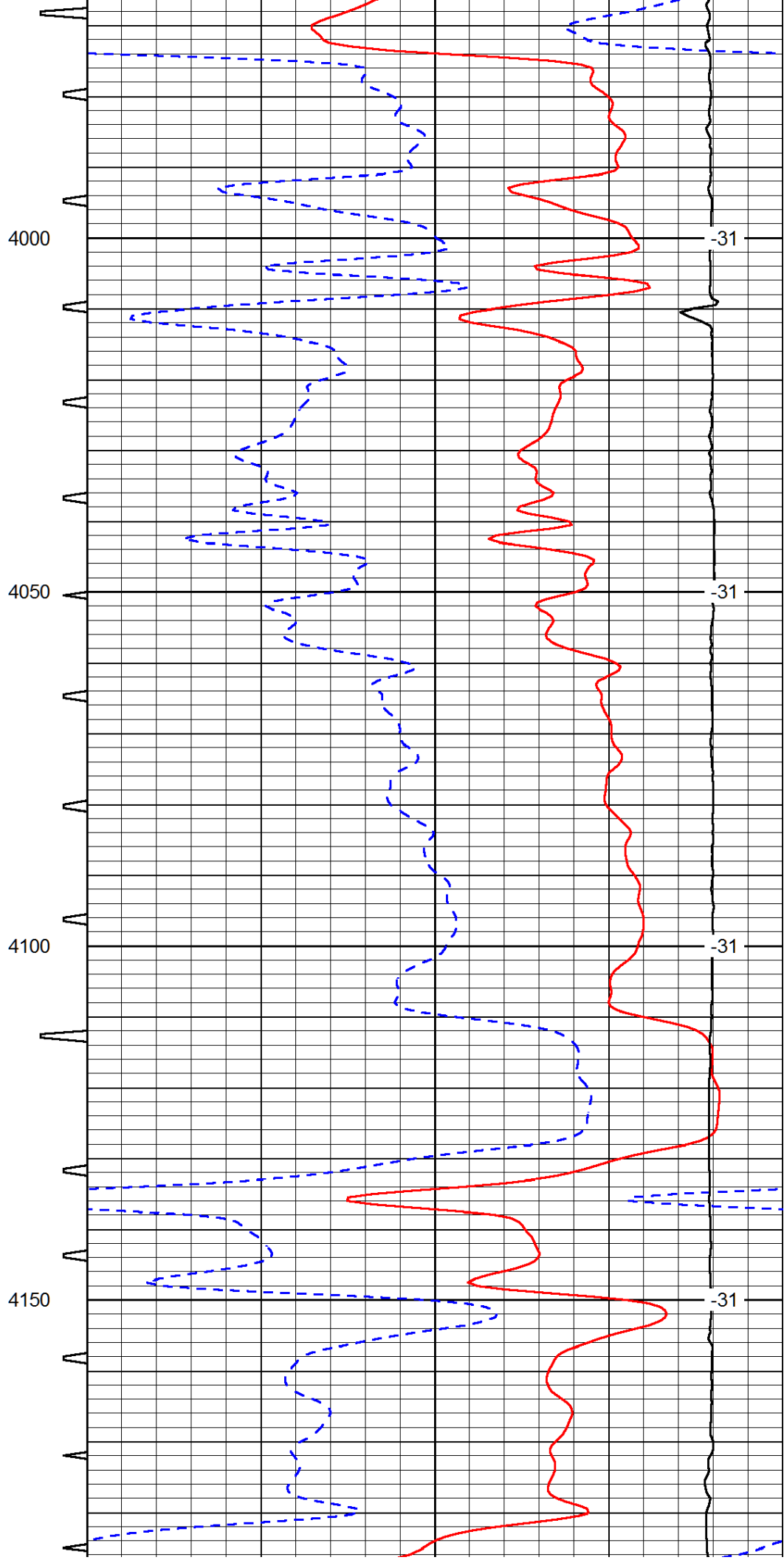
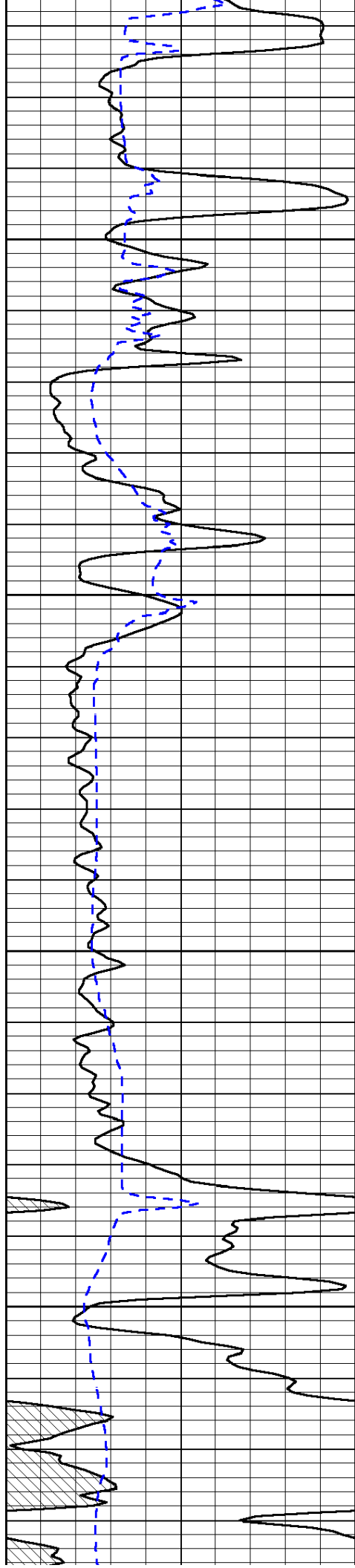


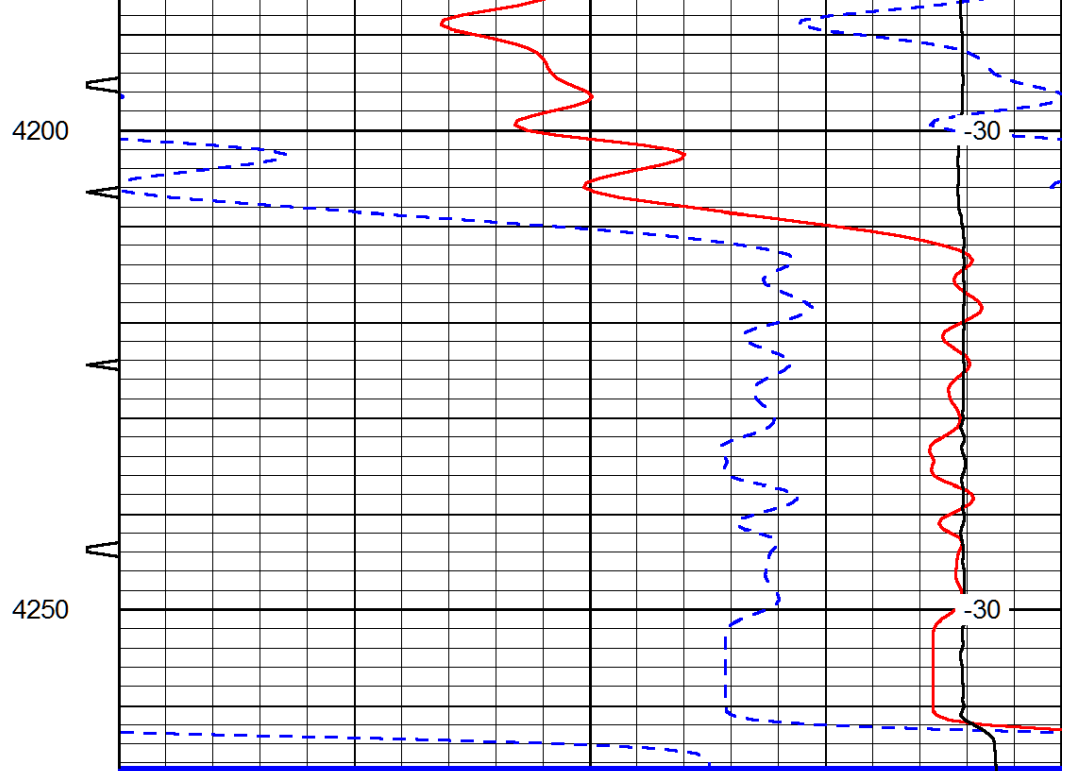












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