



Borehole Compensated Sonic Log

Pioneer Energy Services

API No.

15-101-22,491-00-00

Company Forestar Petroleum Company

Well LCF No. 1-11

Field Unnamed

County Lane

State Kansas

Location

NW-NW-NW-SW
2260' FSL & 140' FWL

Other Services
CNL/CDL
MEL/DIL

Sec: 11

Twp: 17S

Rge: 29W

Elevation

Permanent Datum
Log Measured From
Drilling Measured From

Ground Level
Kelly Bushing
Kelly Bushing

Elevation 2789
5 Ft. Above Perm. Datum

K.B. 2794
D.F.
G.L. 2789

Date

2/12/14

Run Number

Two

Type Log

BHC Sonic

Depth Driller

4650

Depth Logger

4653

Bottom Logged Interval

4642

Top Logged Interval

250

Type Fluid In Hole

Chemical

Salinity, PPM CL

2,400

Density

9.2

Level

Full

Max. Rec. Temp. F

123

Operating Rig Time

5 Hours

Equipment -- Location

17 Hays

Recorded By

J. Henrickson

Witnessed By

Macklin Armstrong

Borehole Record

Casing Record

Run No.

Bit

From

To

Size

Wgt.

From

To

One 12.25

00

261

8.625

23#

00

261

Two 7.875

261

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.

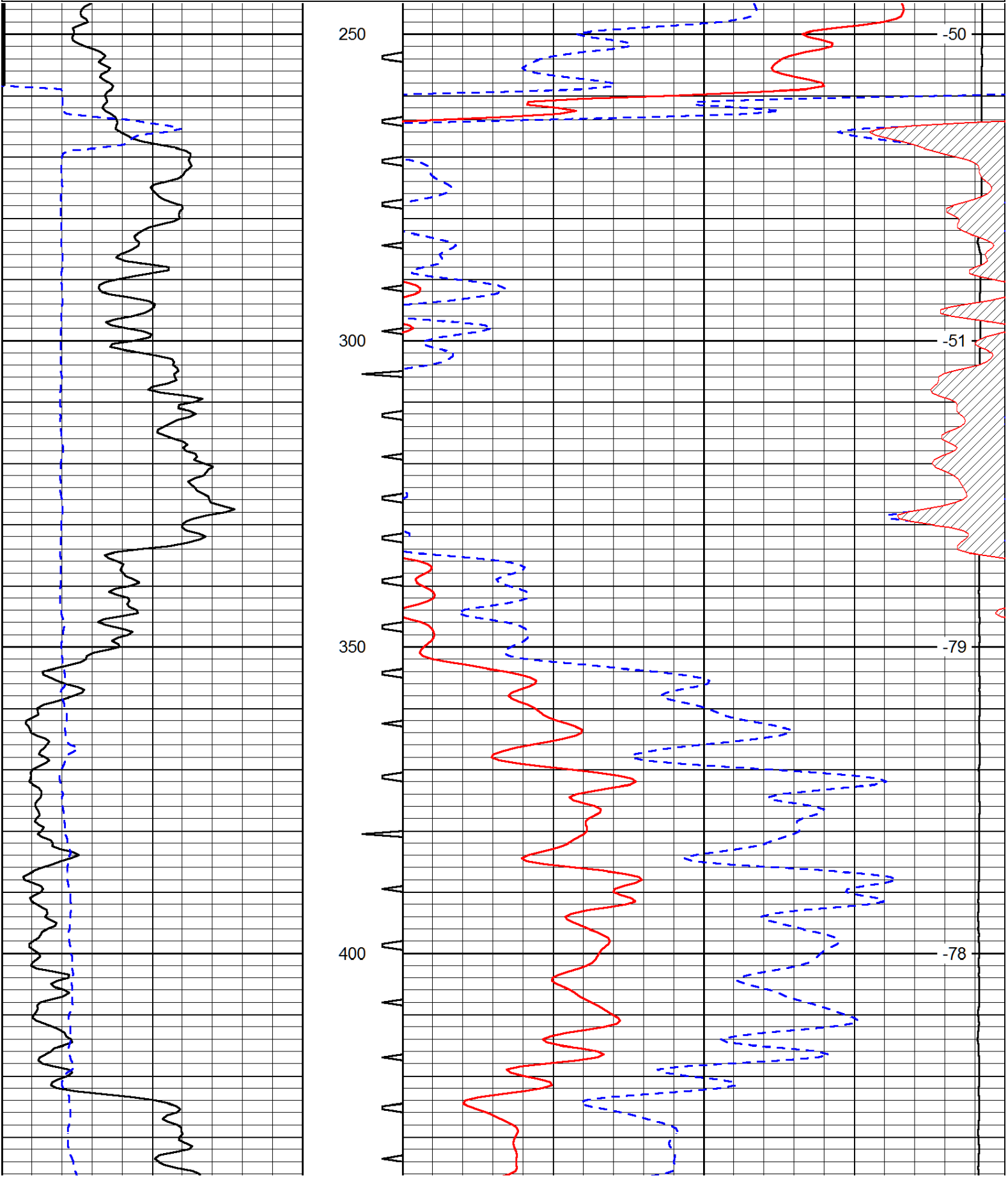
Comments

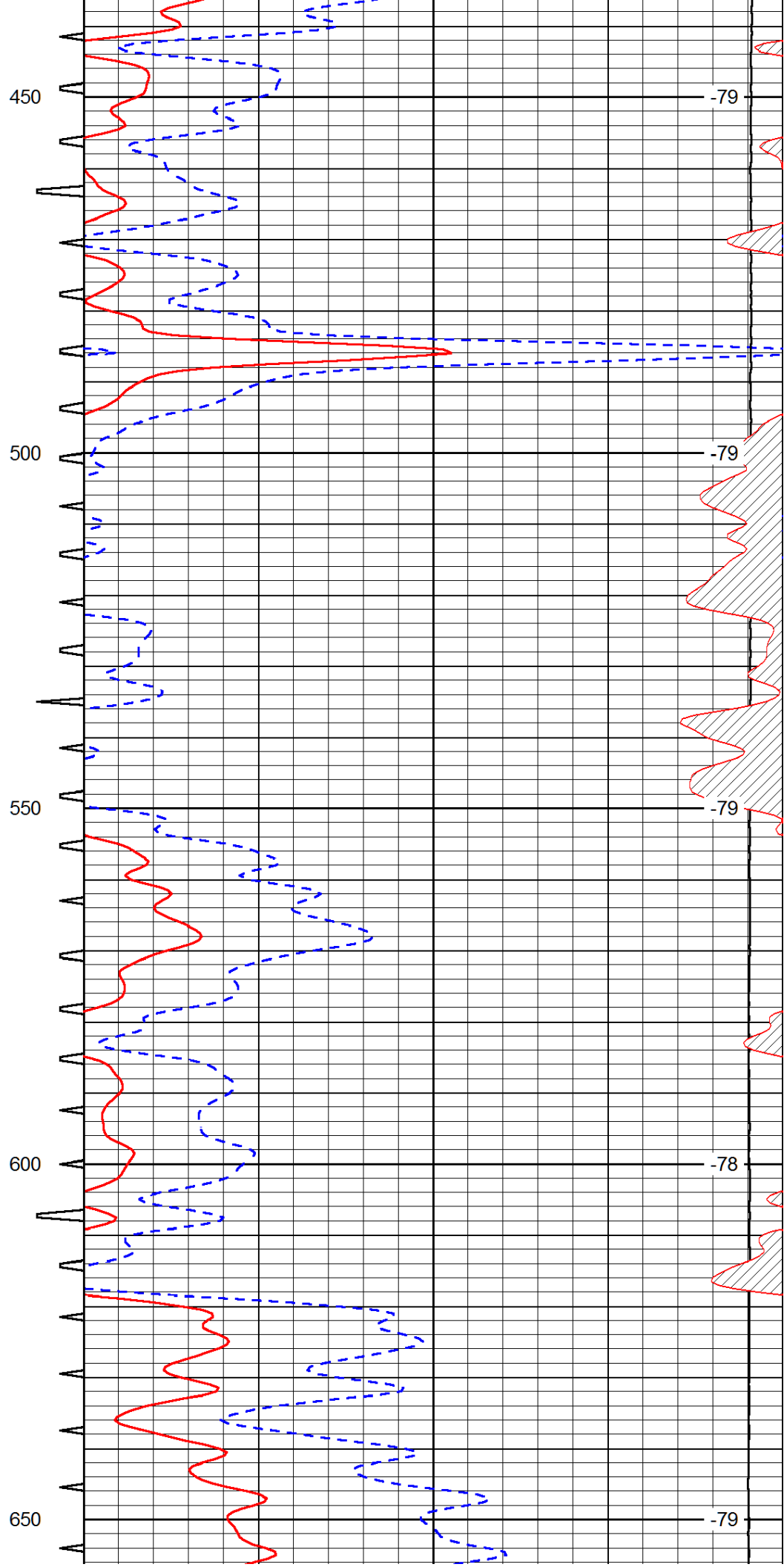
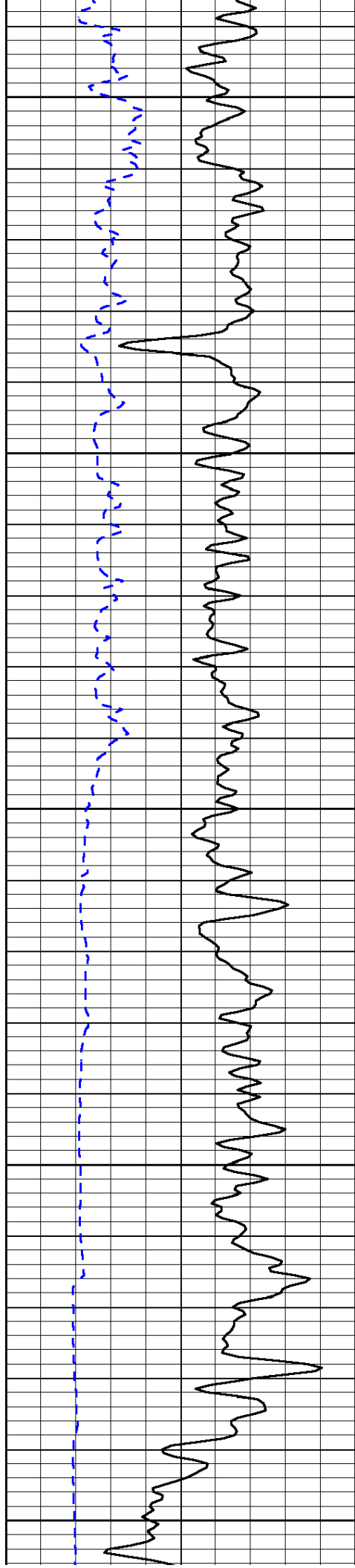
Thank you for using Log-Tech, Inc.
(785) 625-3858

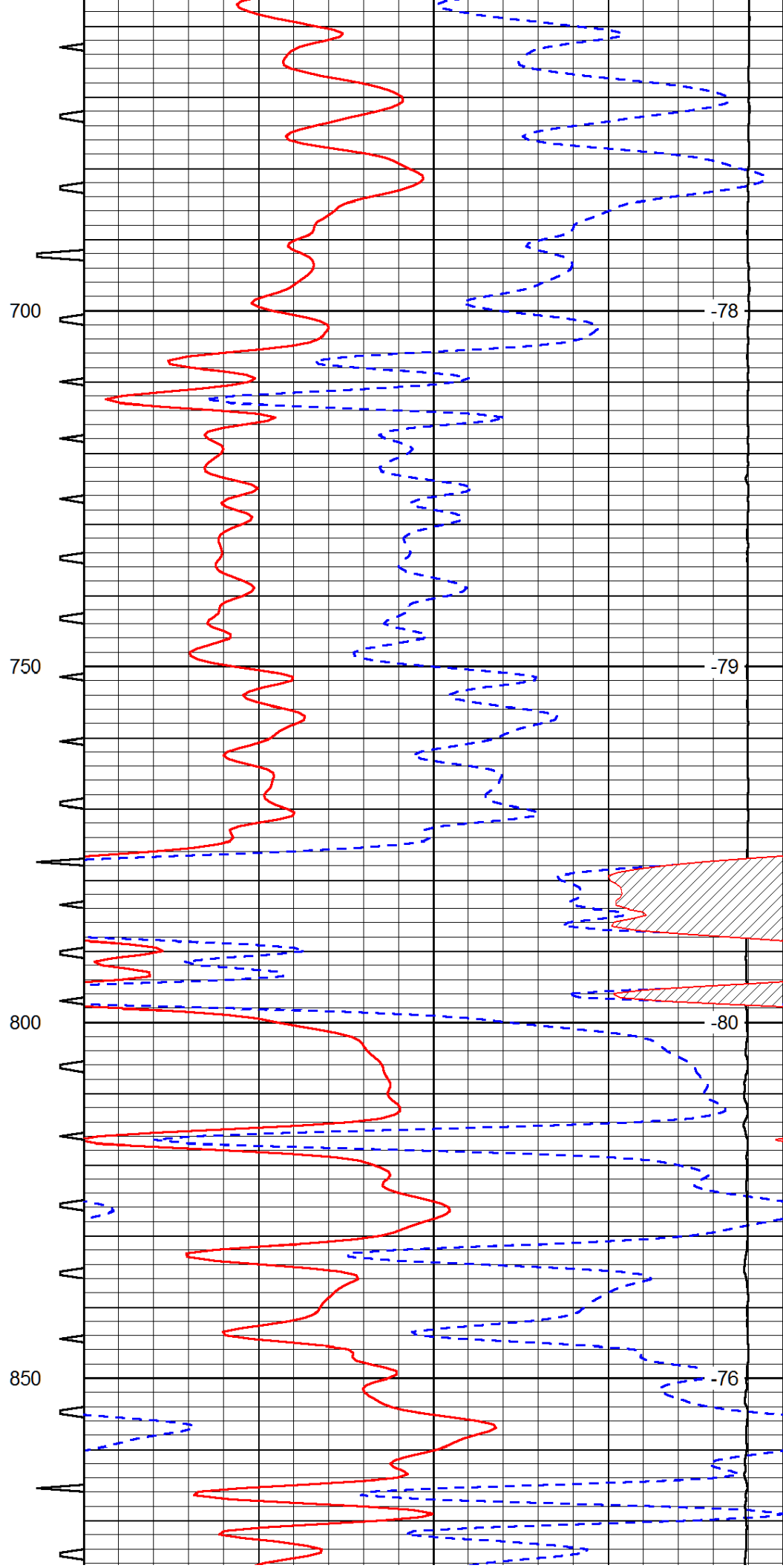
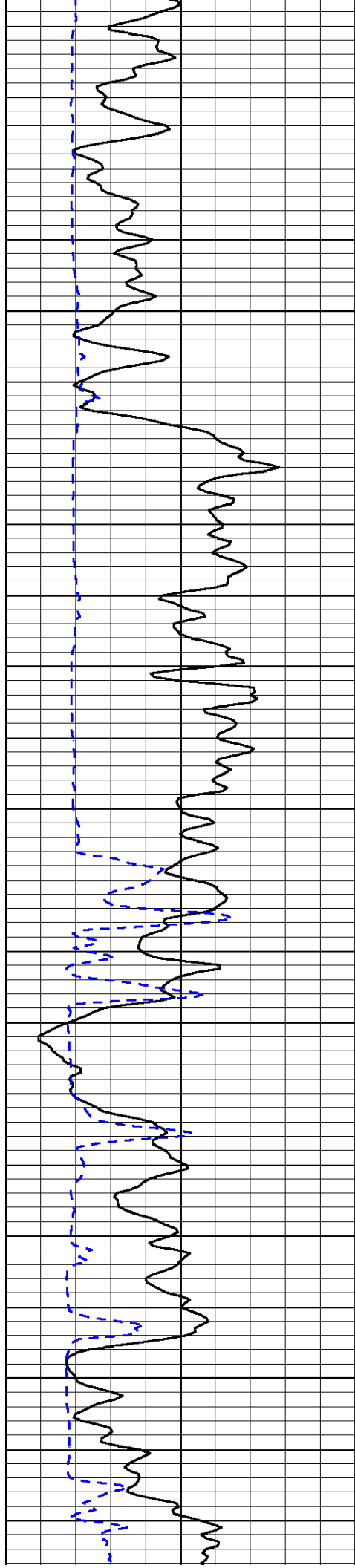
Dighton Kansas
North to CR 230, 2 West, South Into(almost a mile)

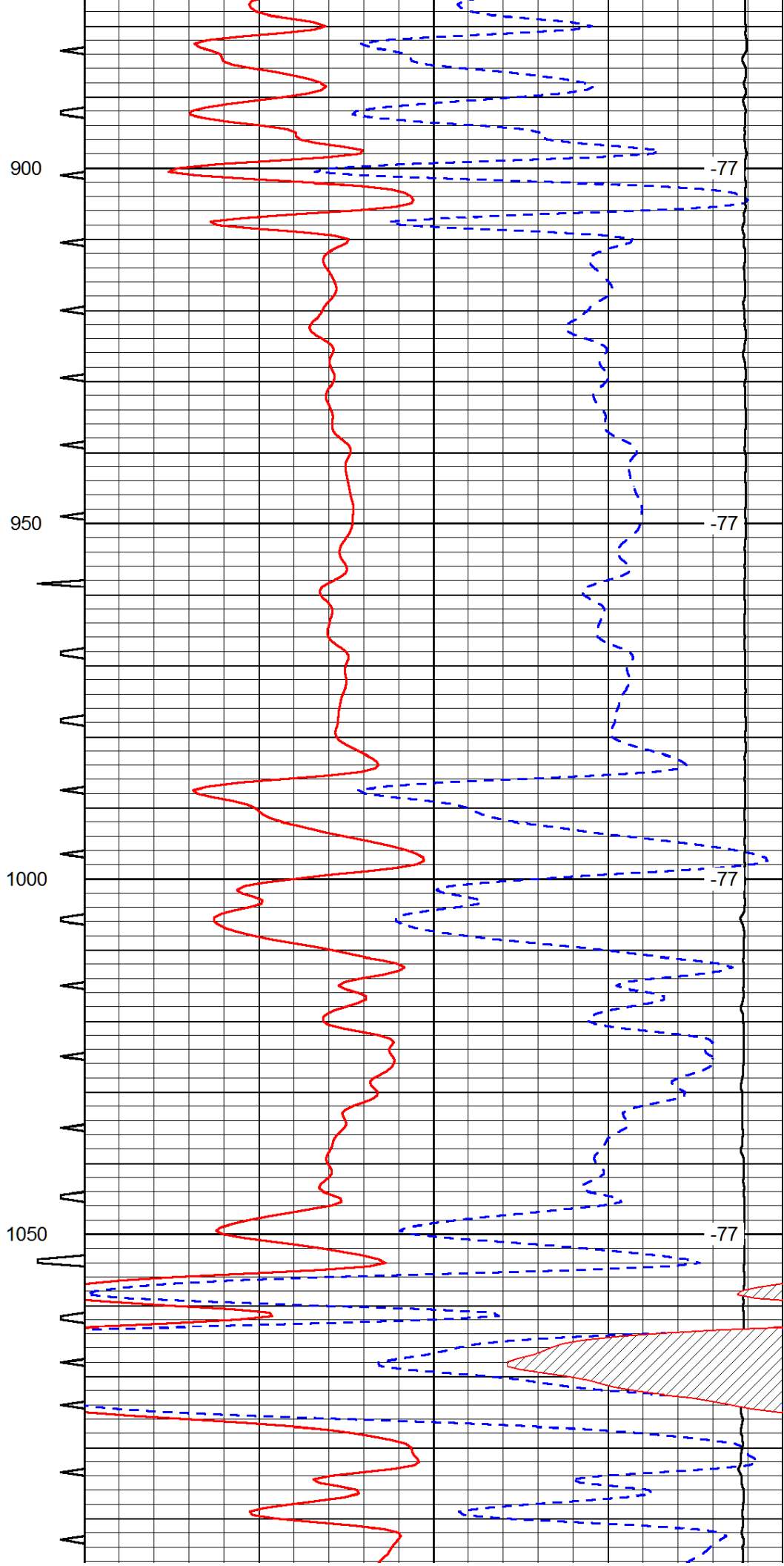
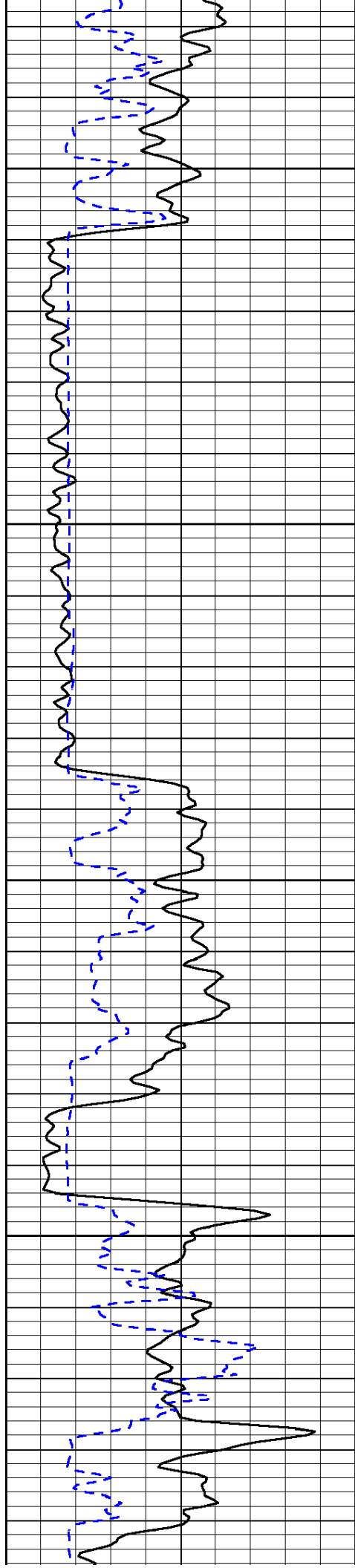
Database File: forestar_lcf_1_11hd.db
Dataset Pathname: DIL/forestk
Presentation Format: sonic
Dataset Creation: Wed Feb 12 11:48:58 2014
Charted by: Depth in Feet scaled 1:240

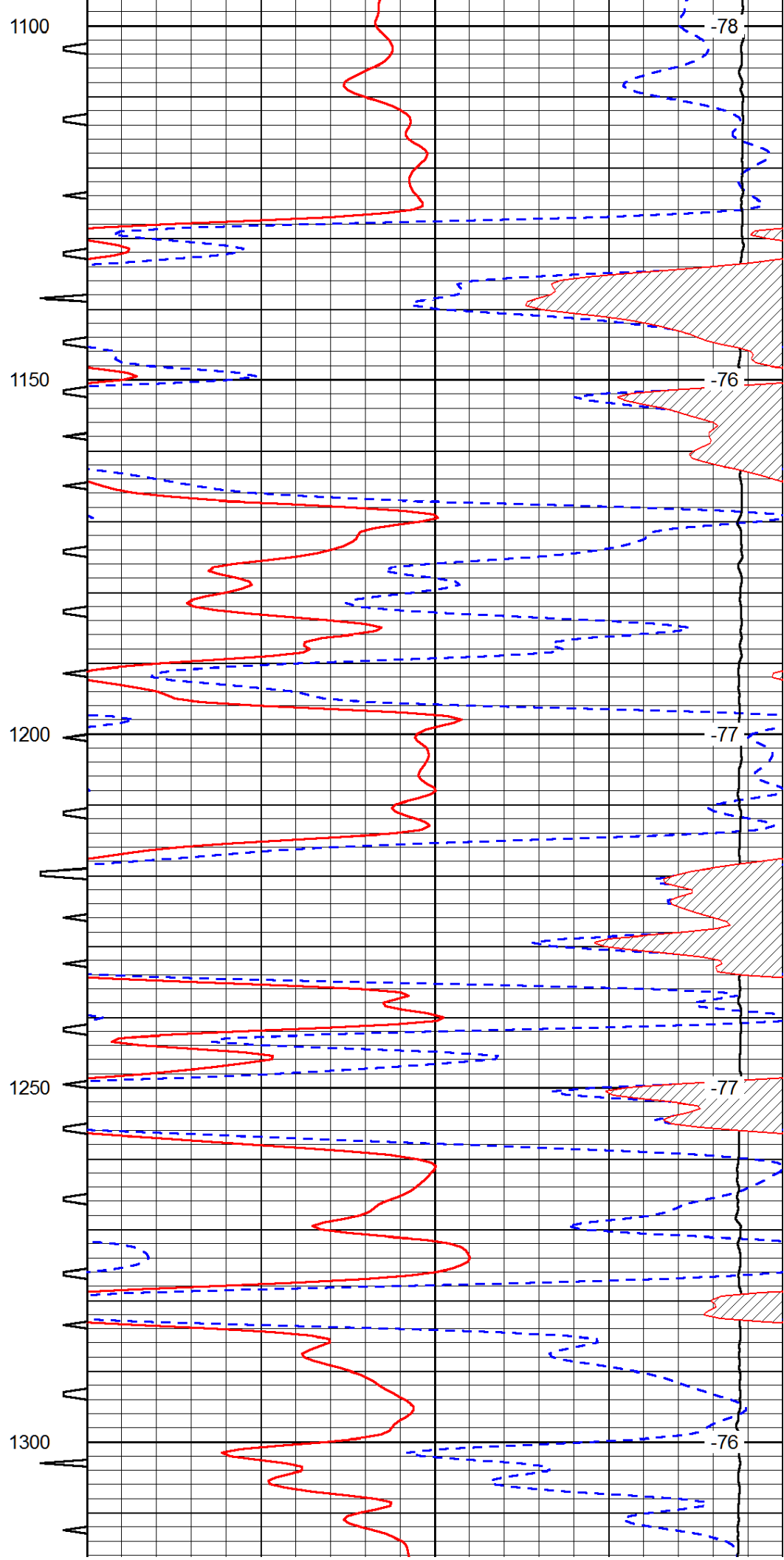
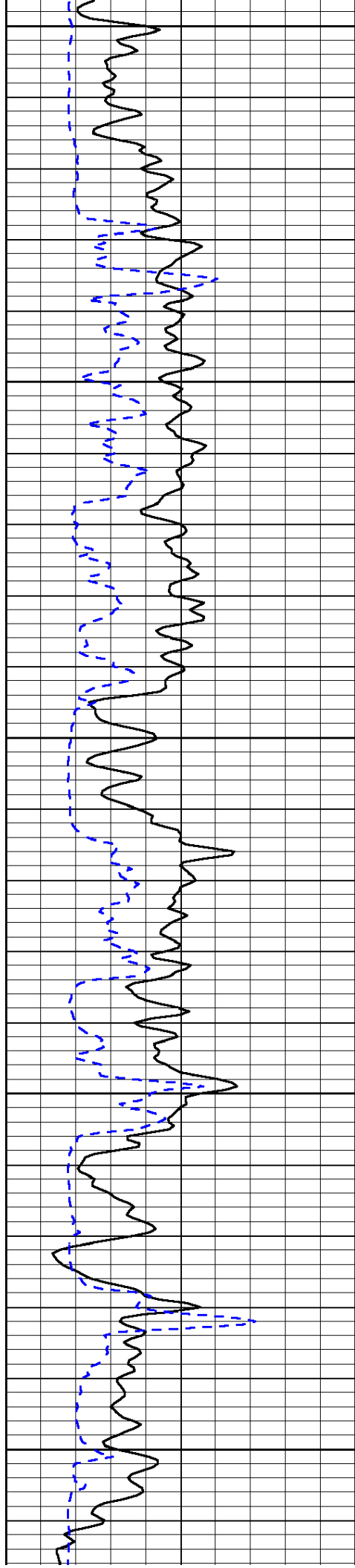
0	Gamma Ray (GAPI)	150	Sonic Int	140	Delta Time (usec/ft) (usec/ft)	40
150	Gamma Ray (GAPI)	300	5 (msec) 0	30	Sonic Porosity (pu)	-10
6	dCAL (in)	16		15000	LTEN (lb) (lb)	0
						LSPD (ft/min)

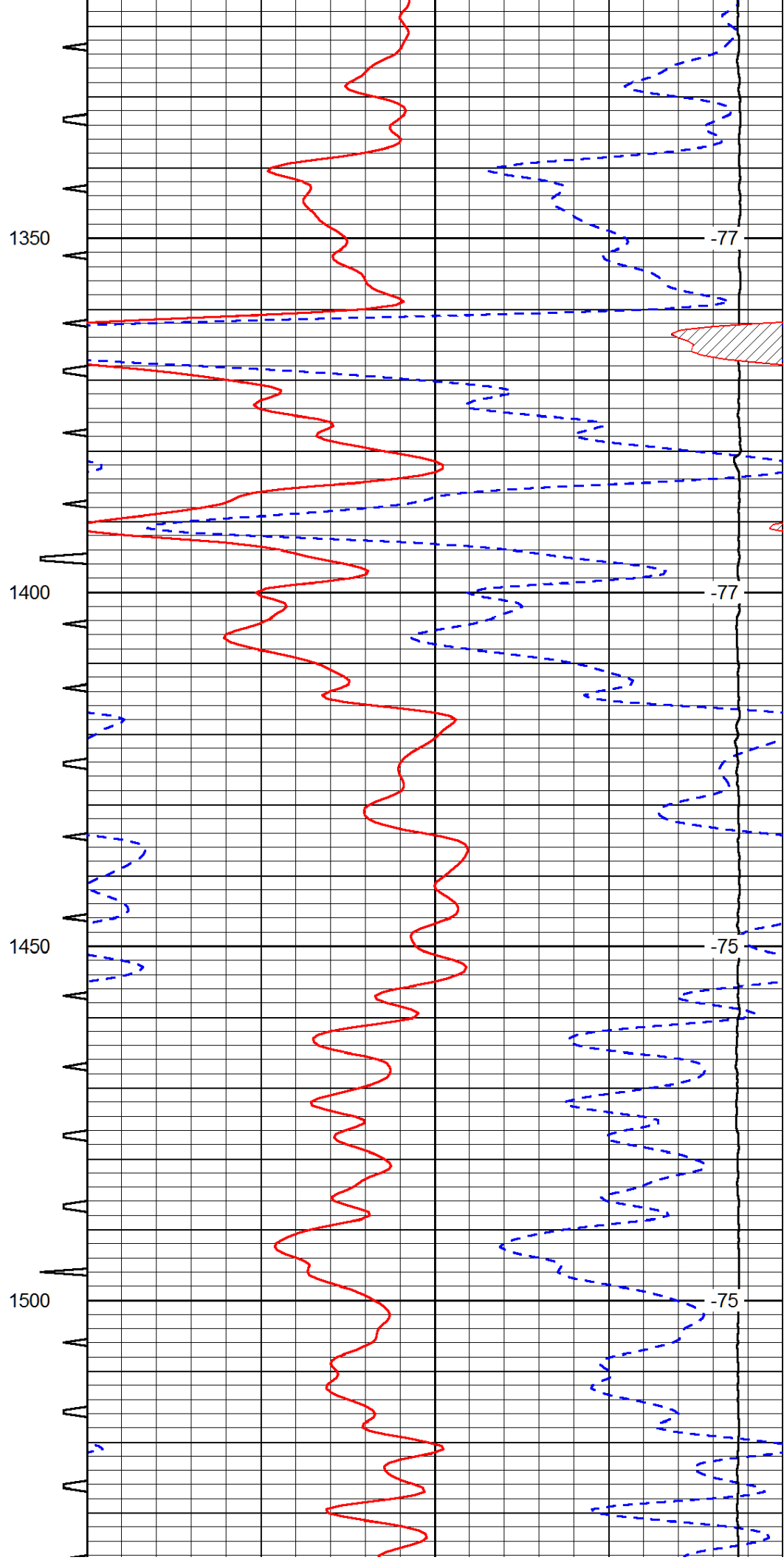
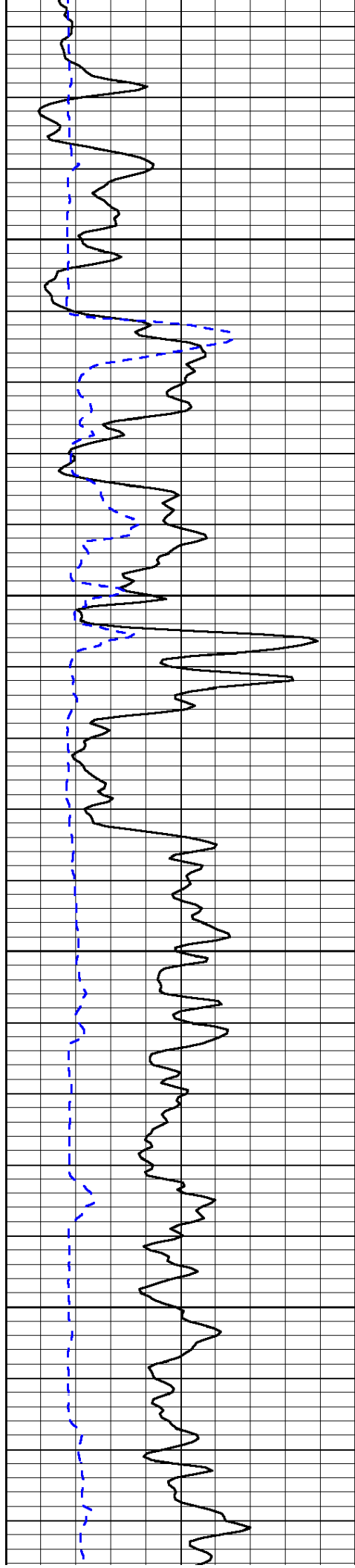


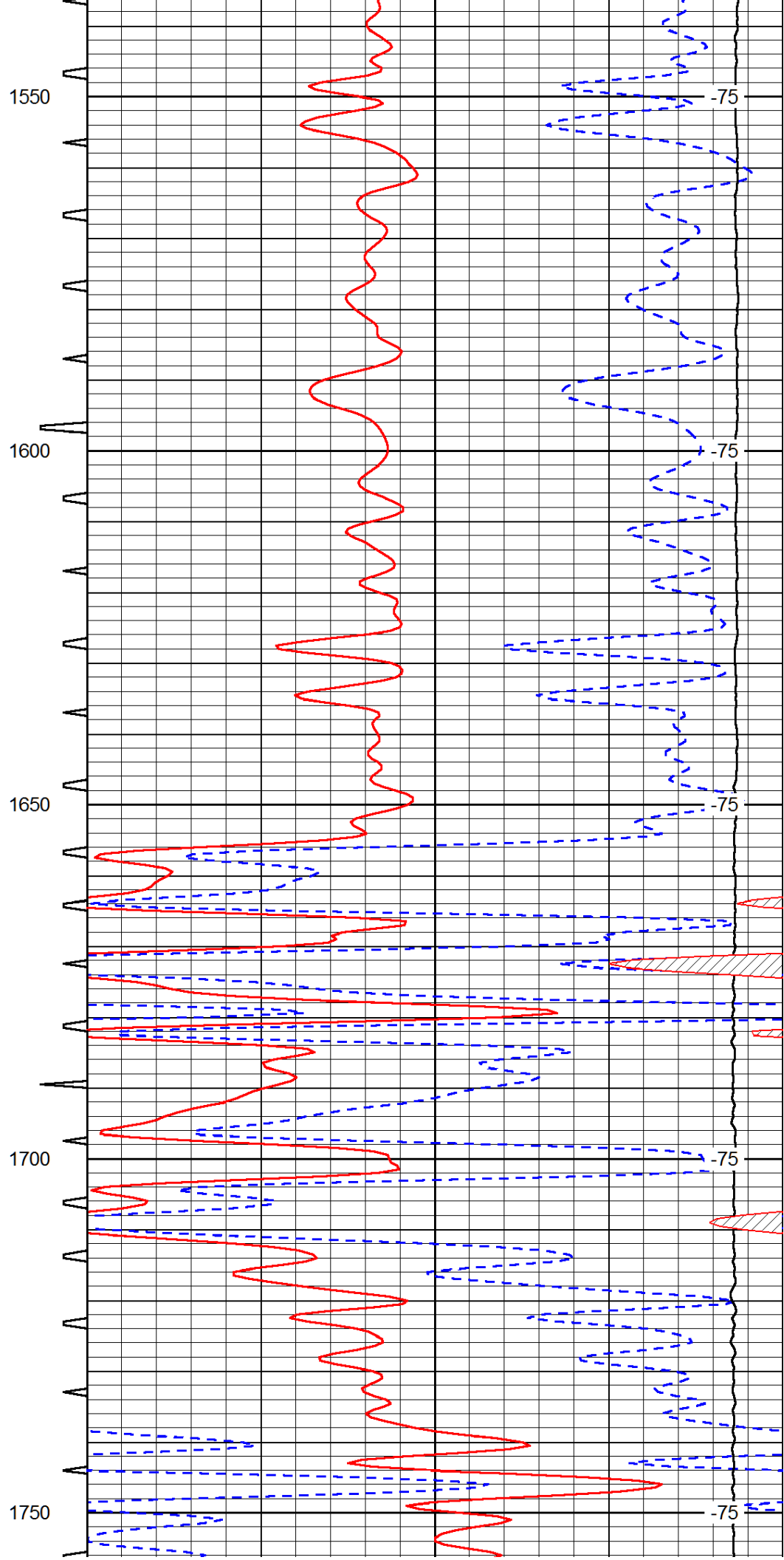
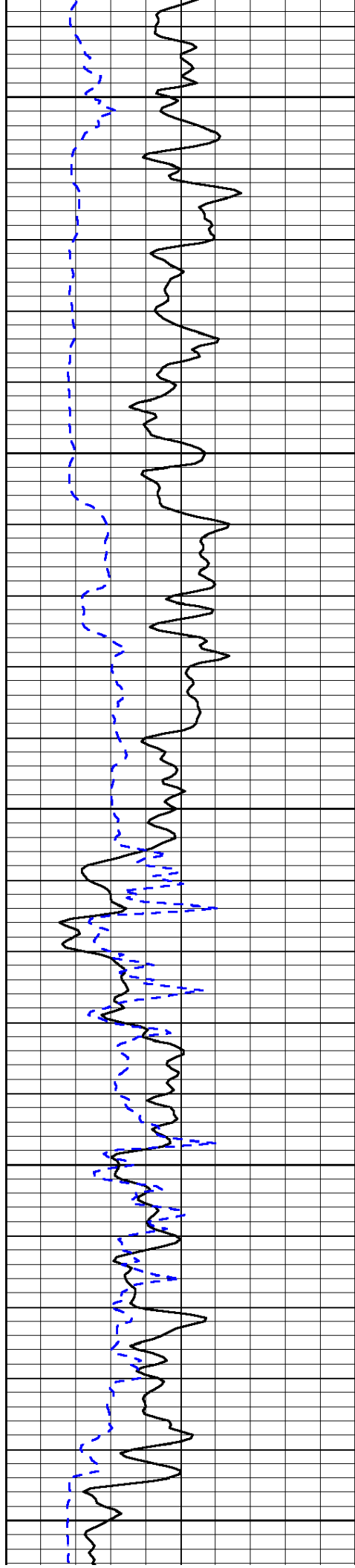


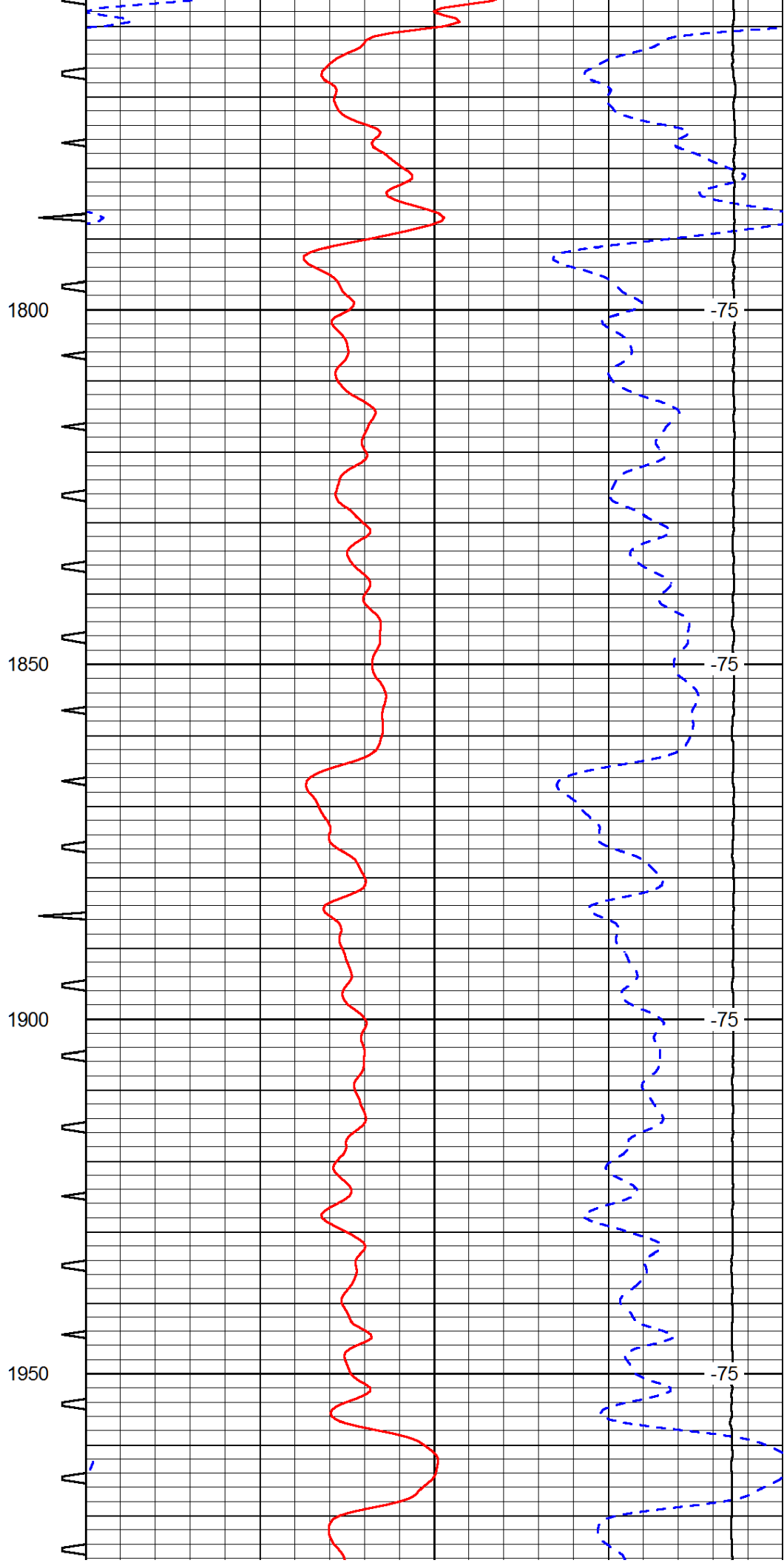
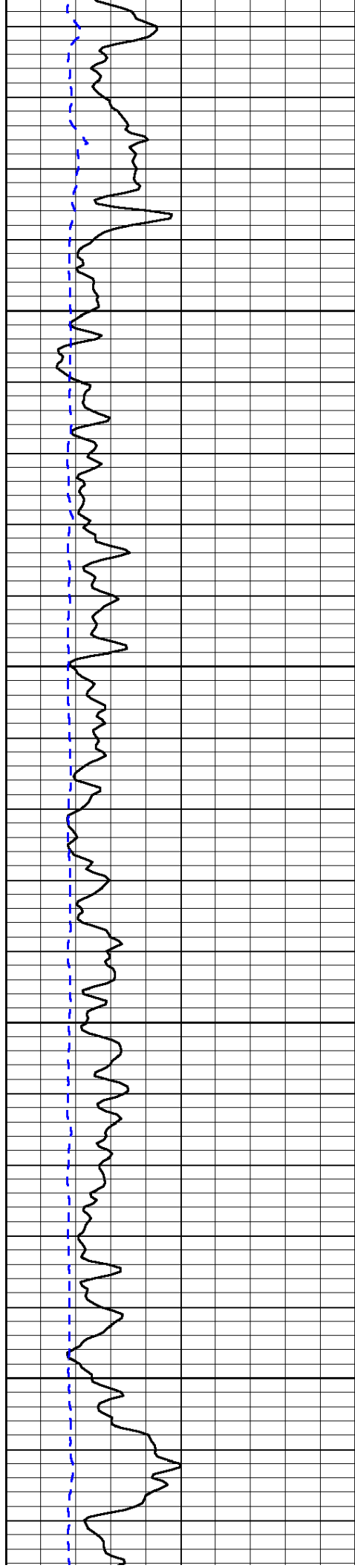


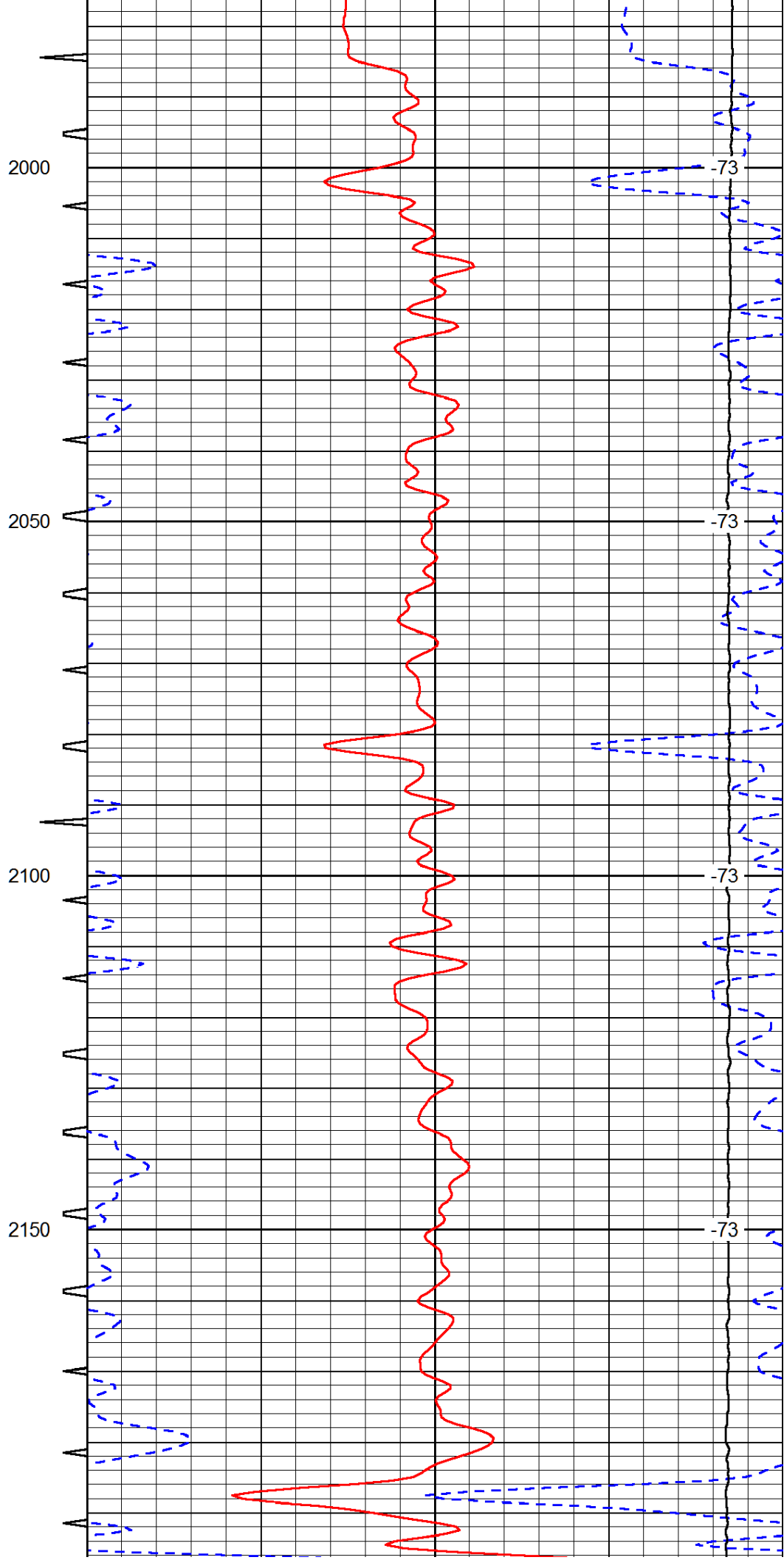
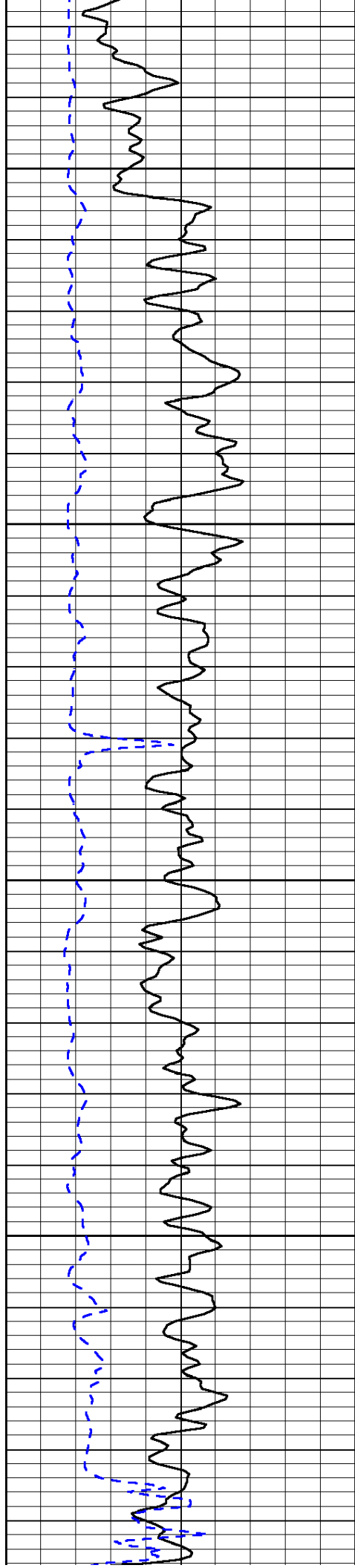


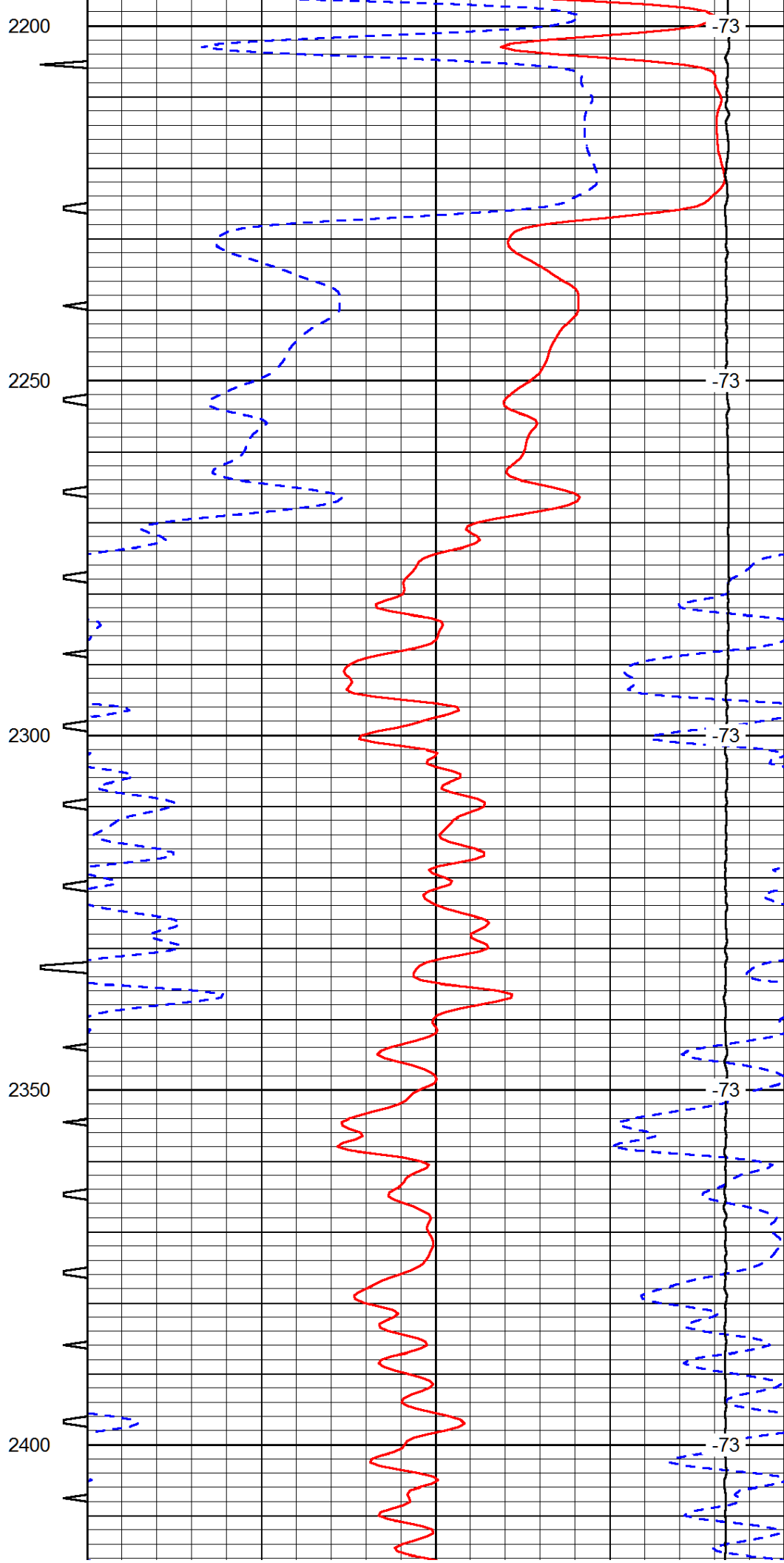
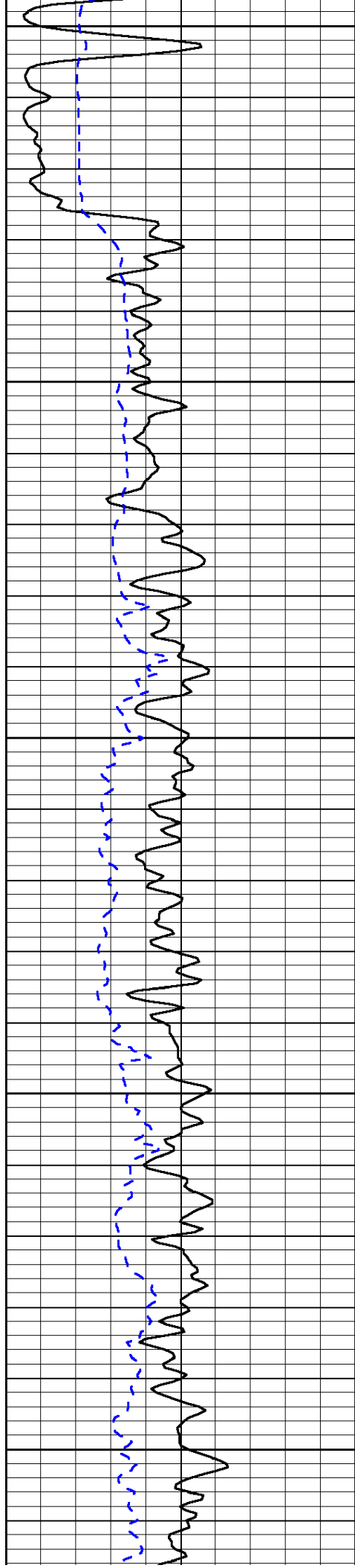


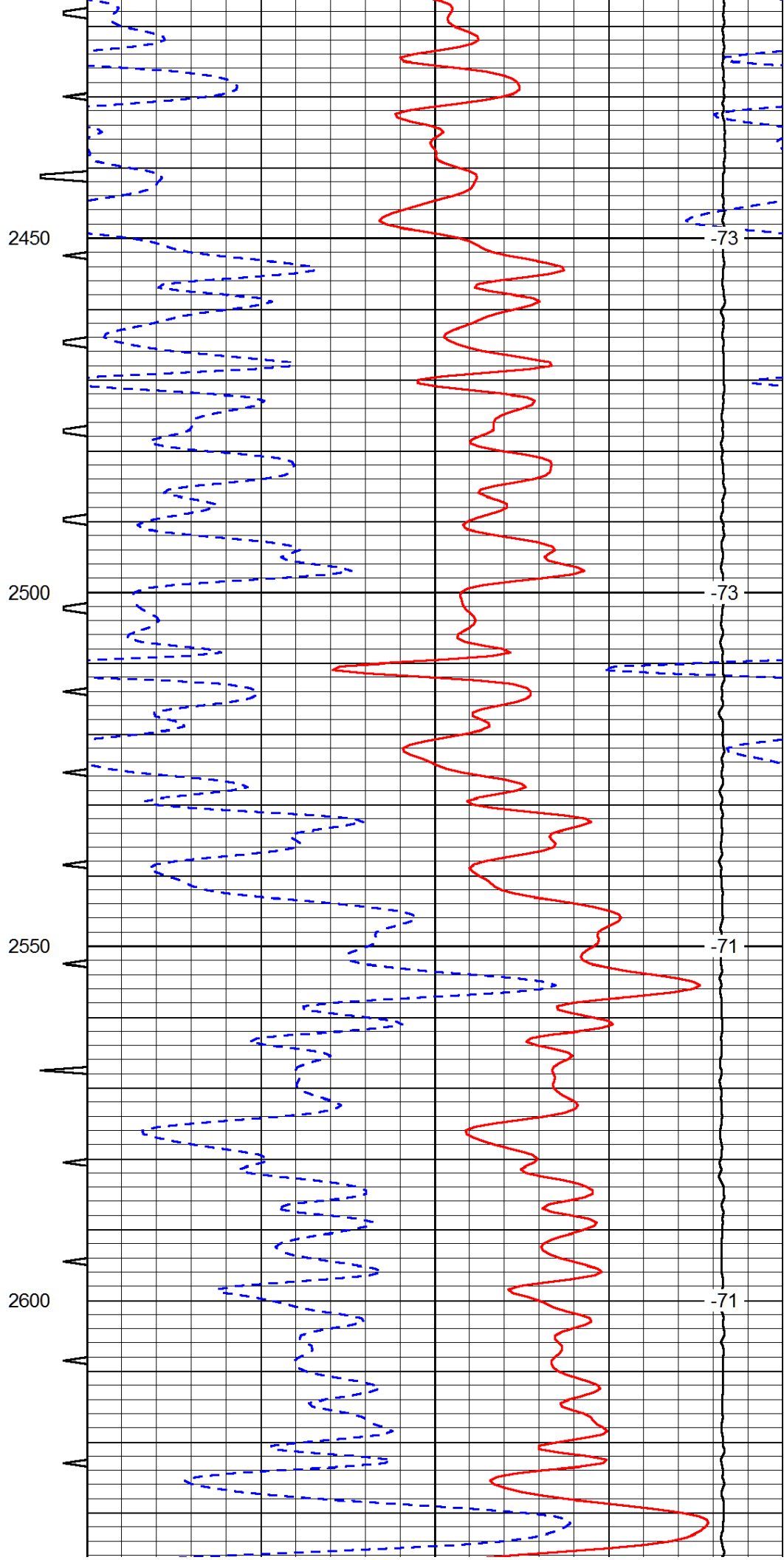
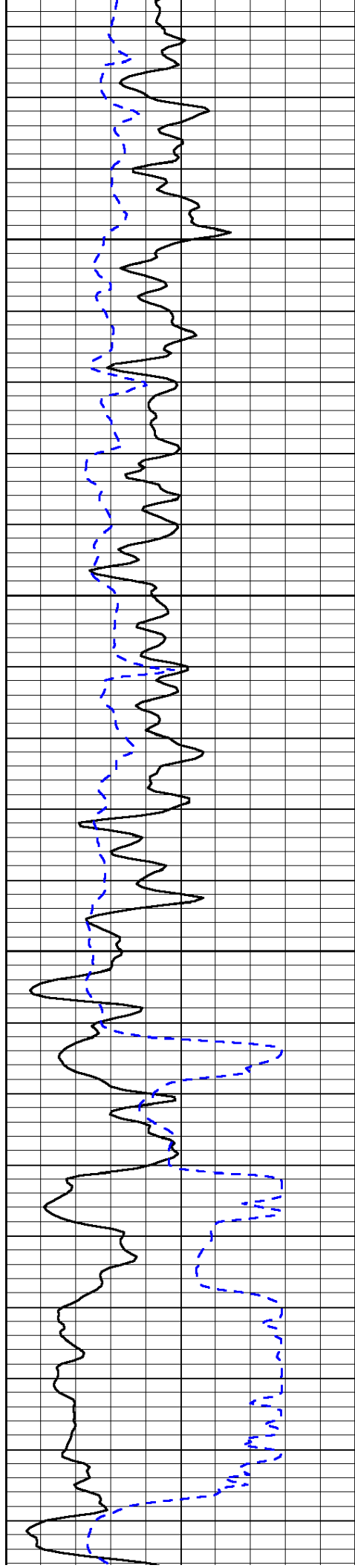


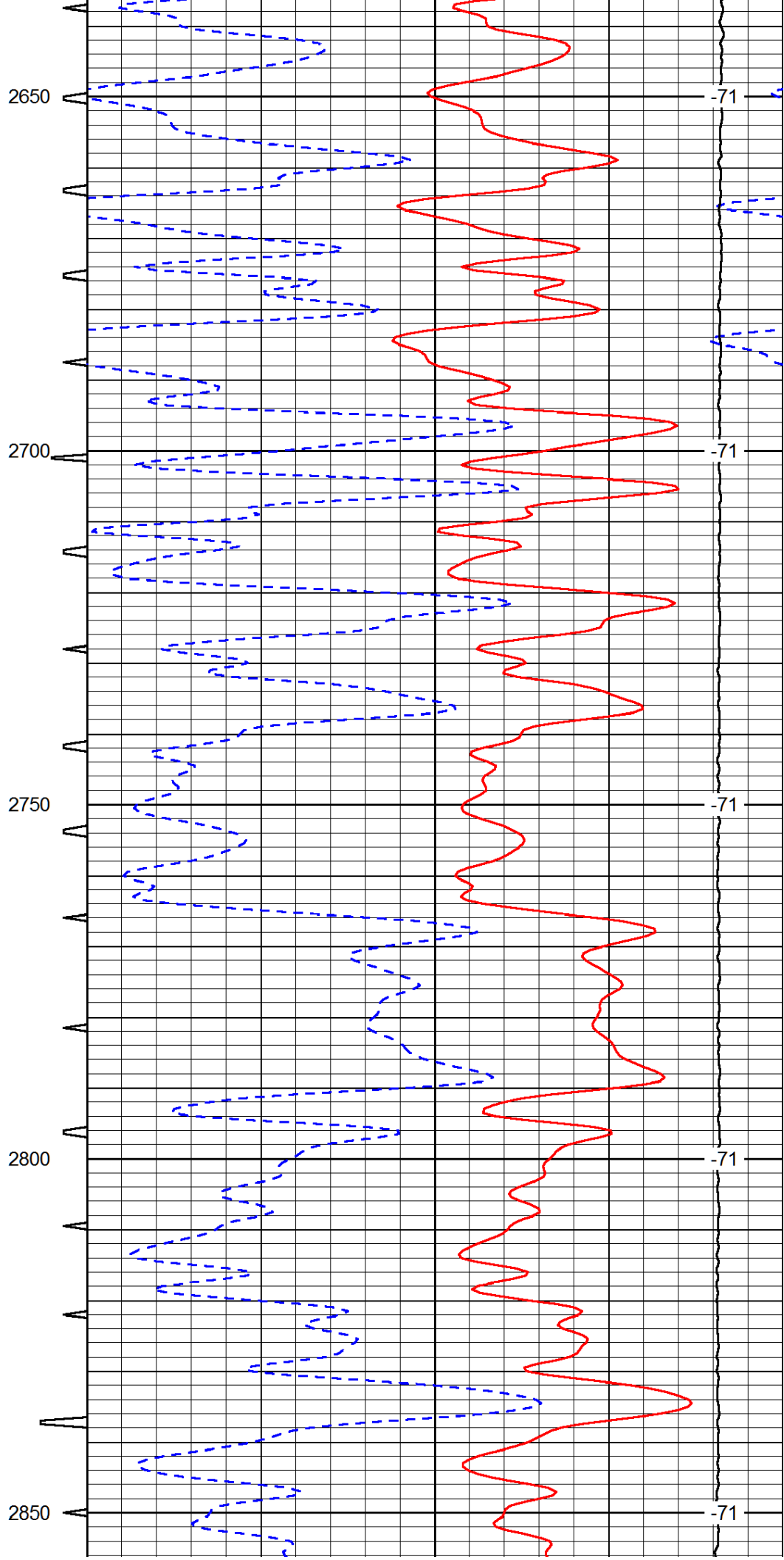
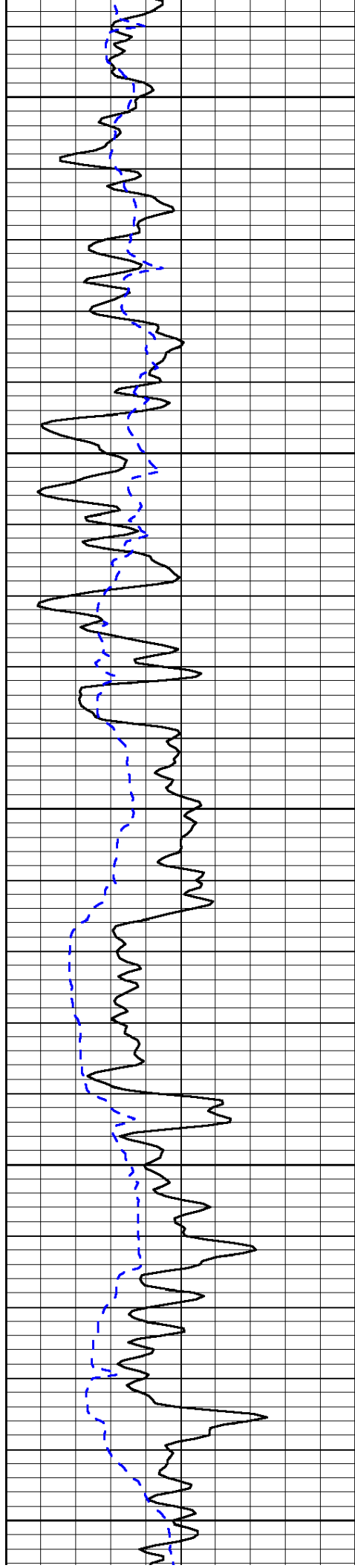


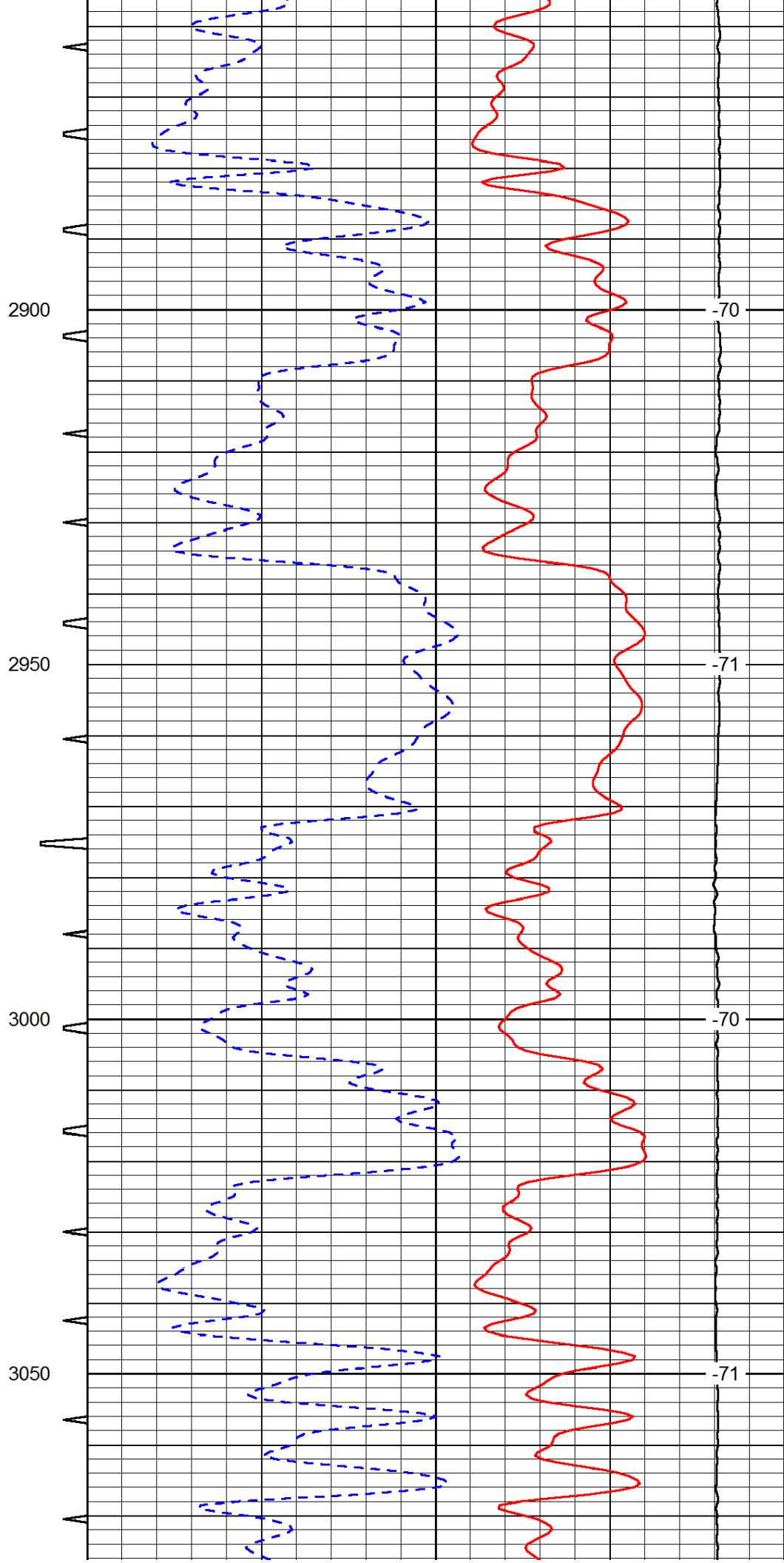
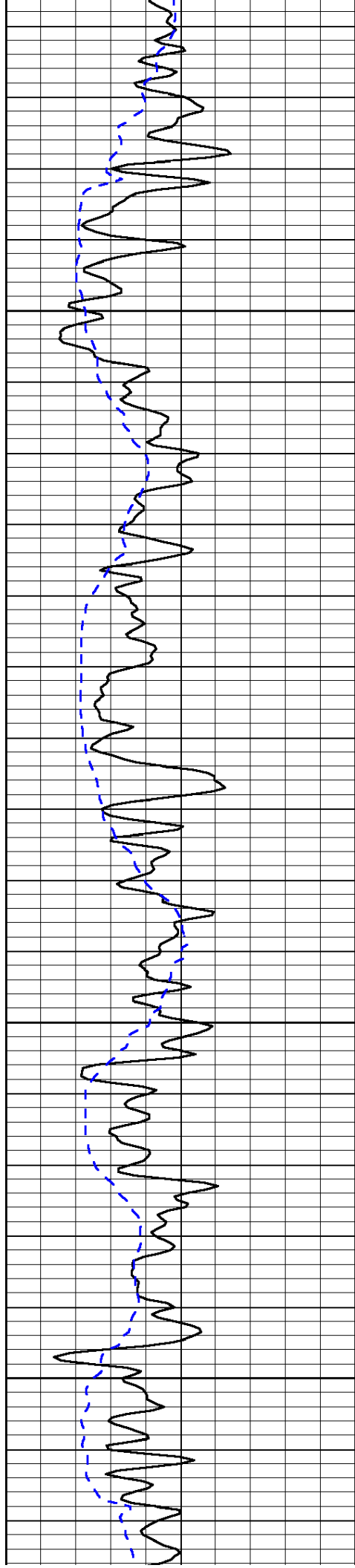


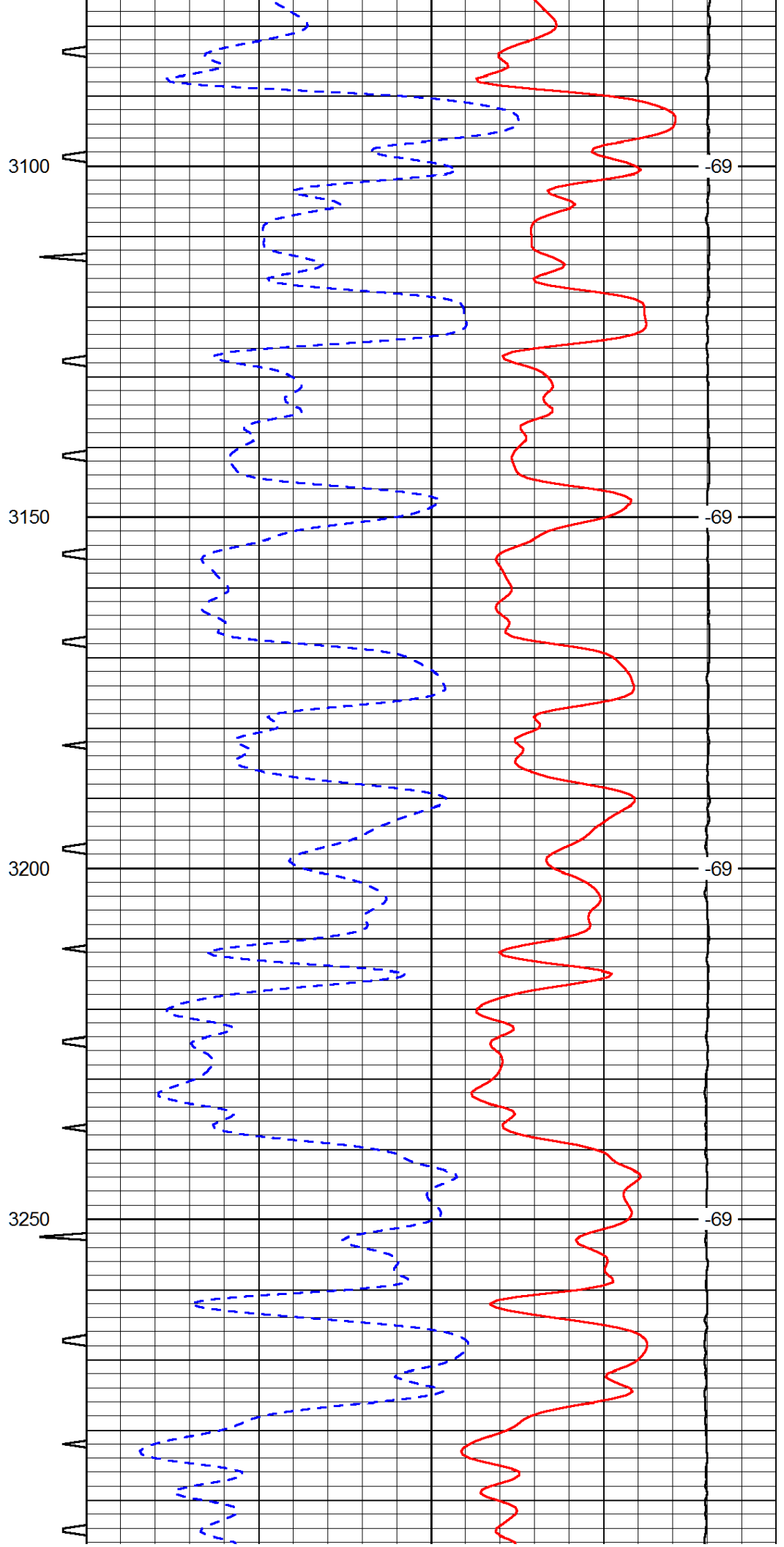
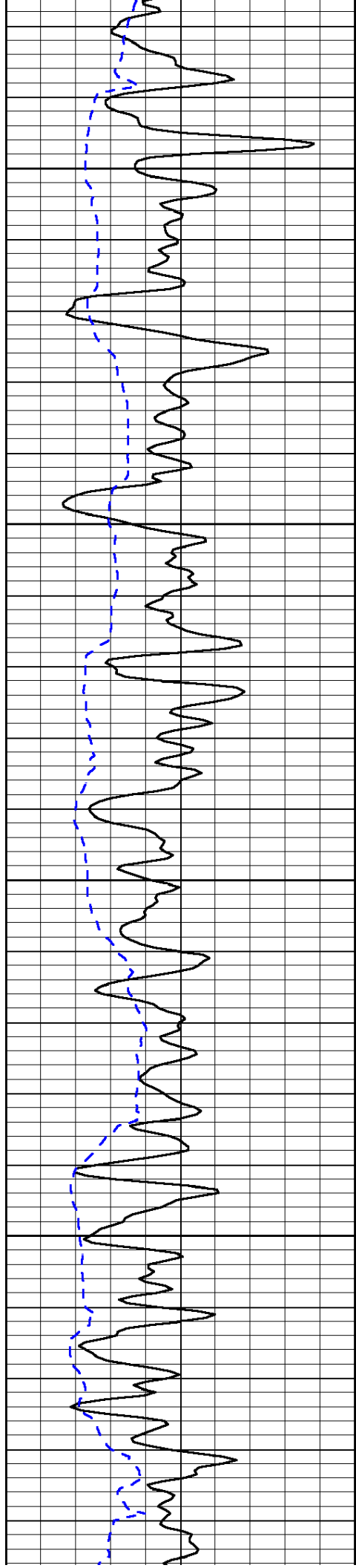


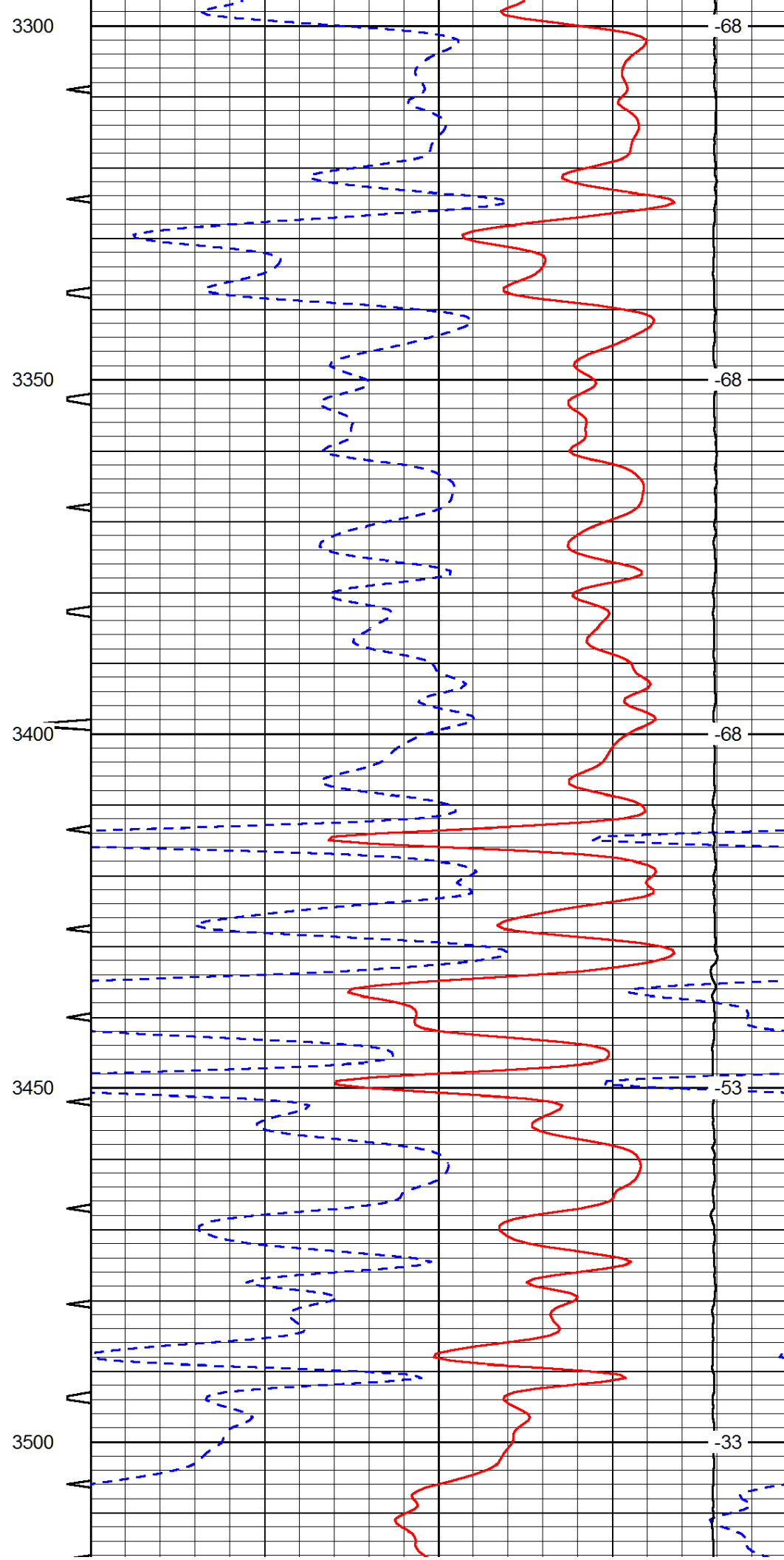
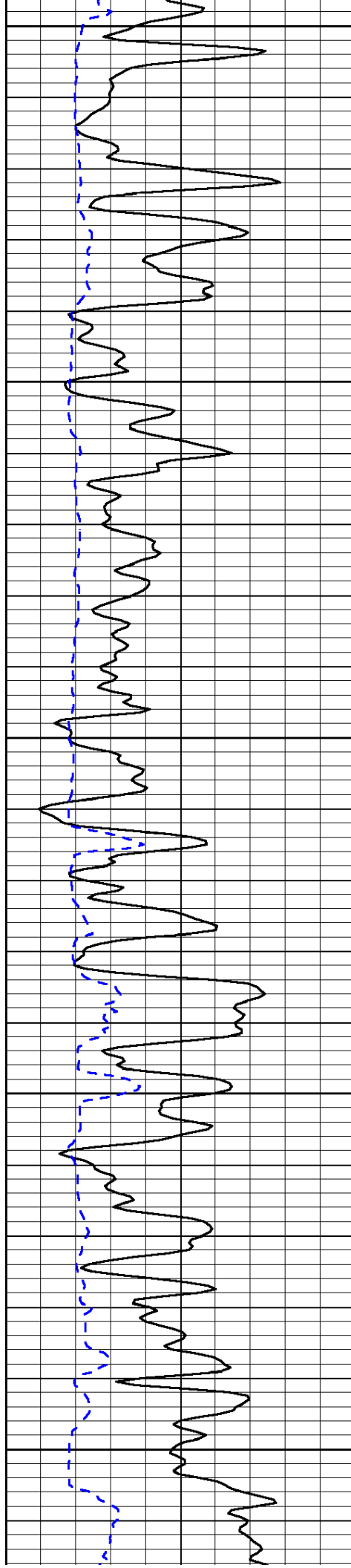


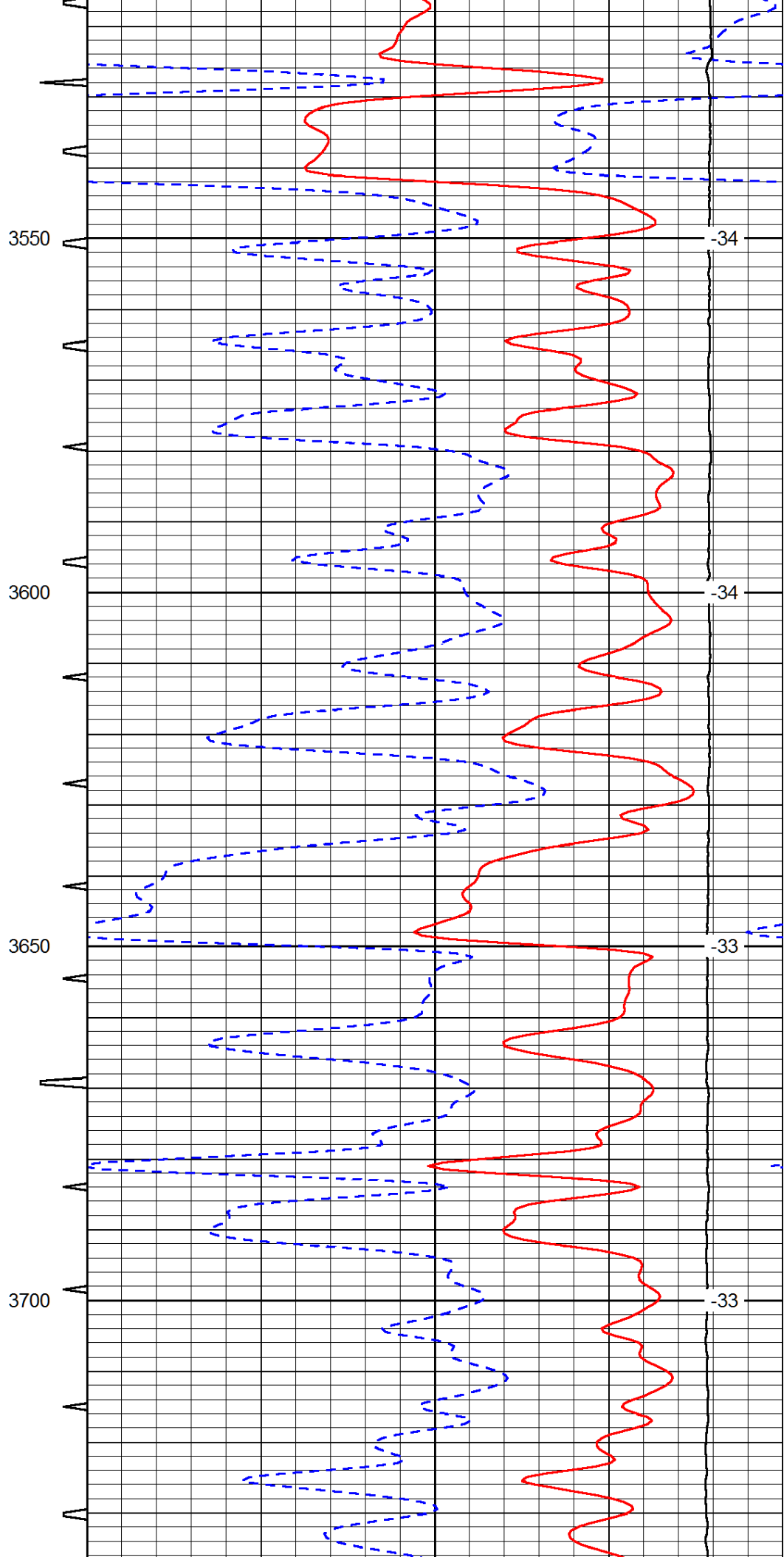
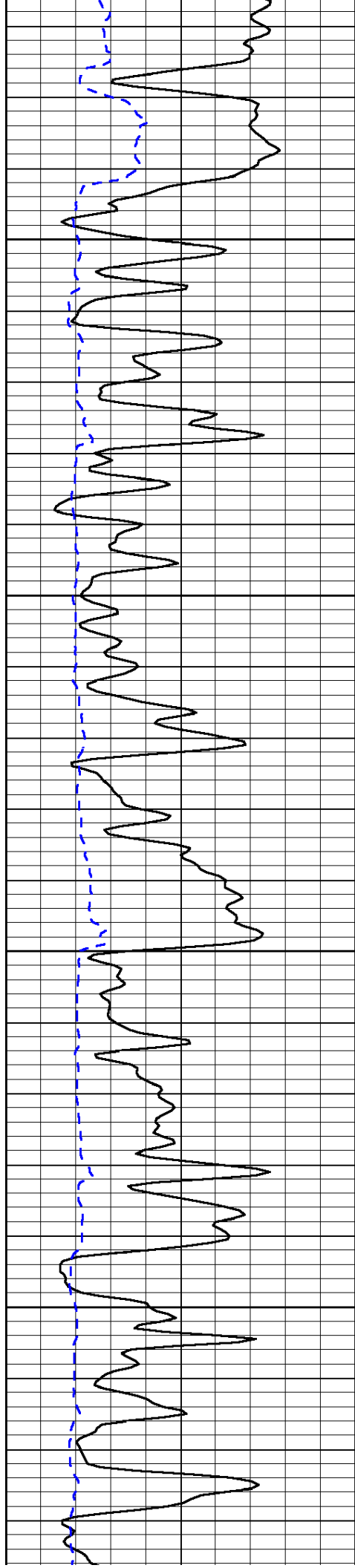


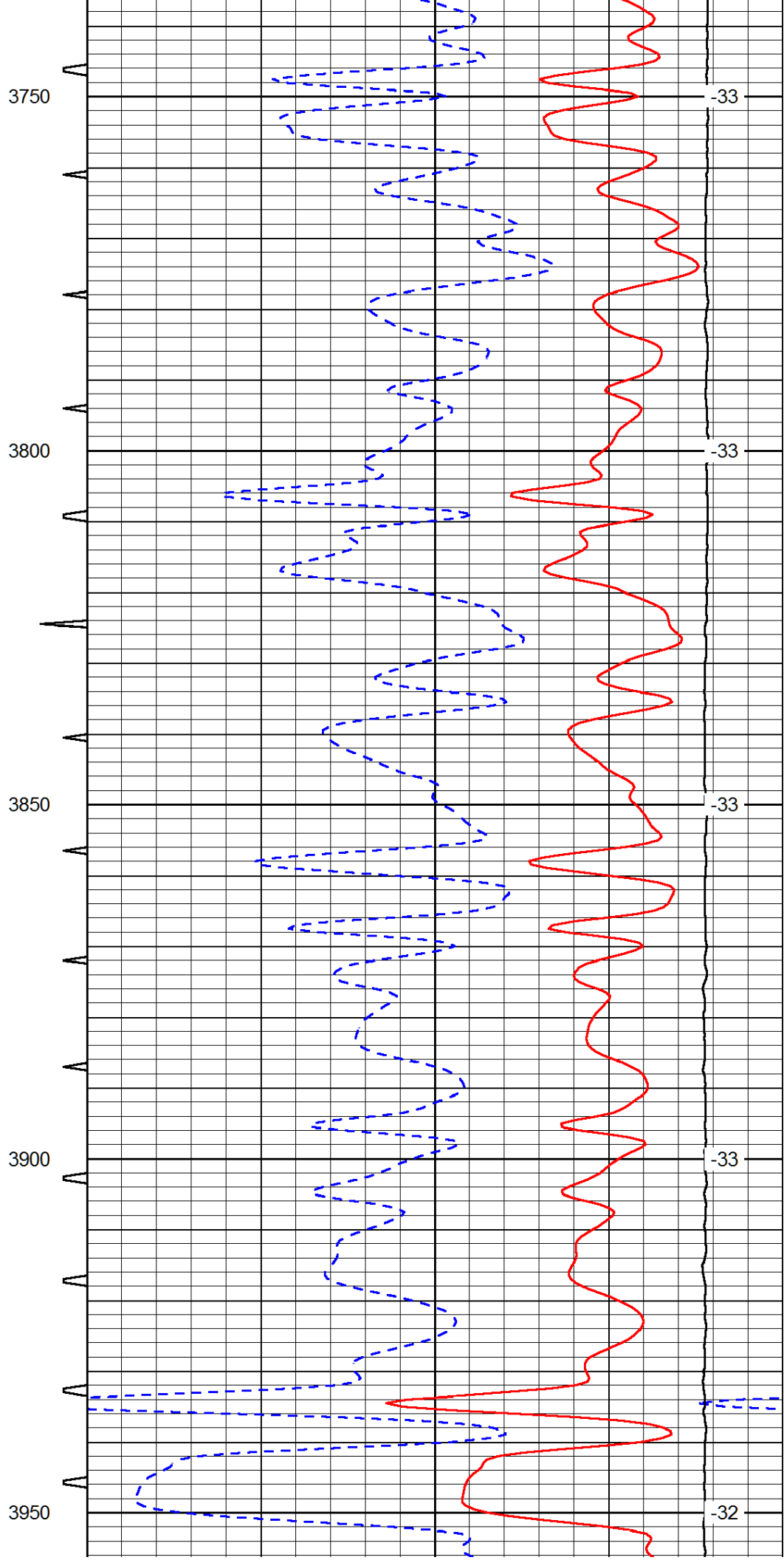
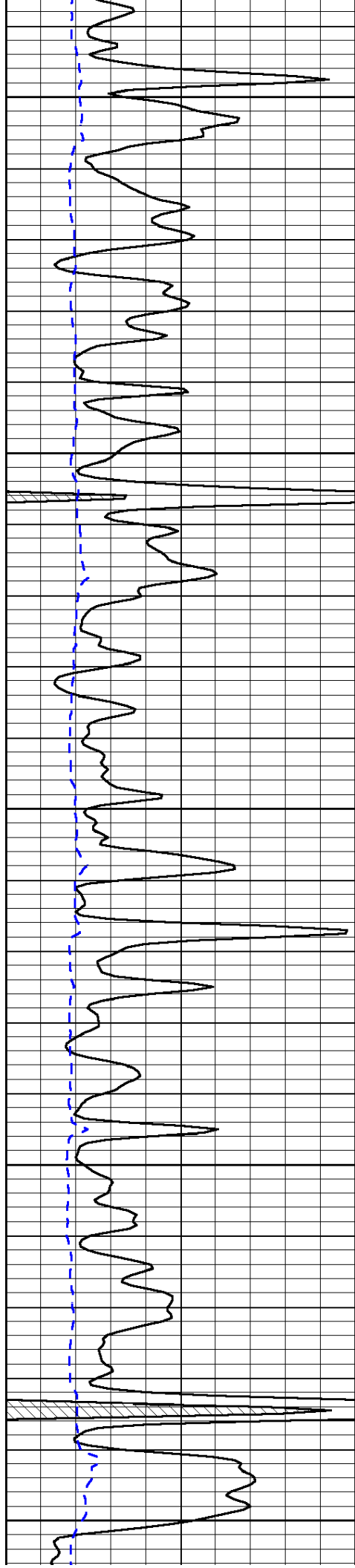


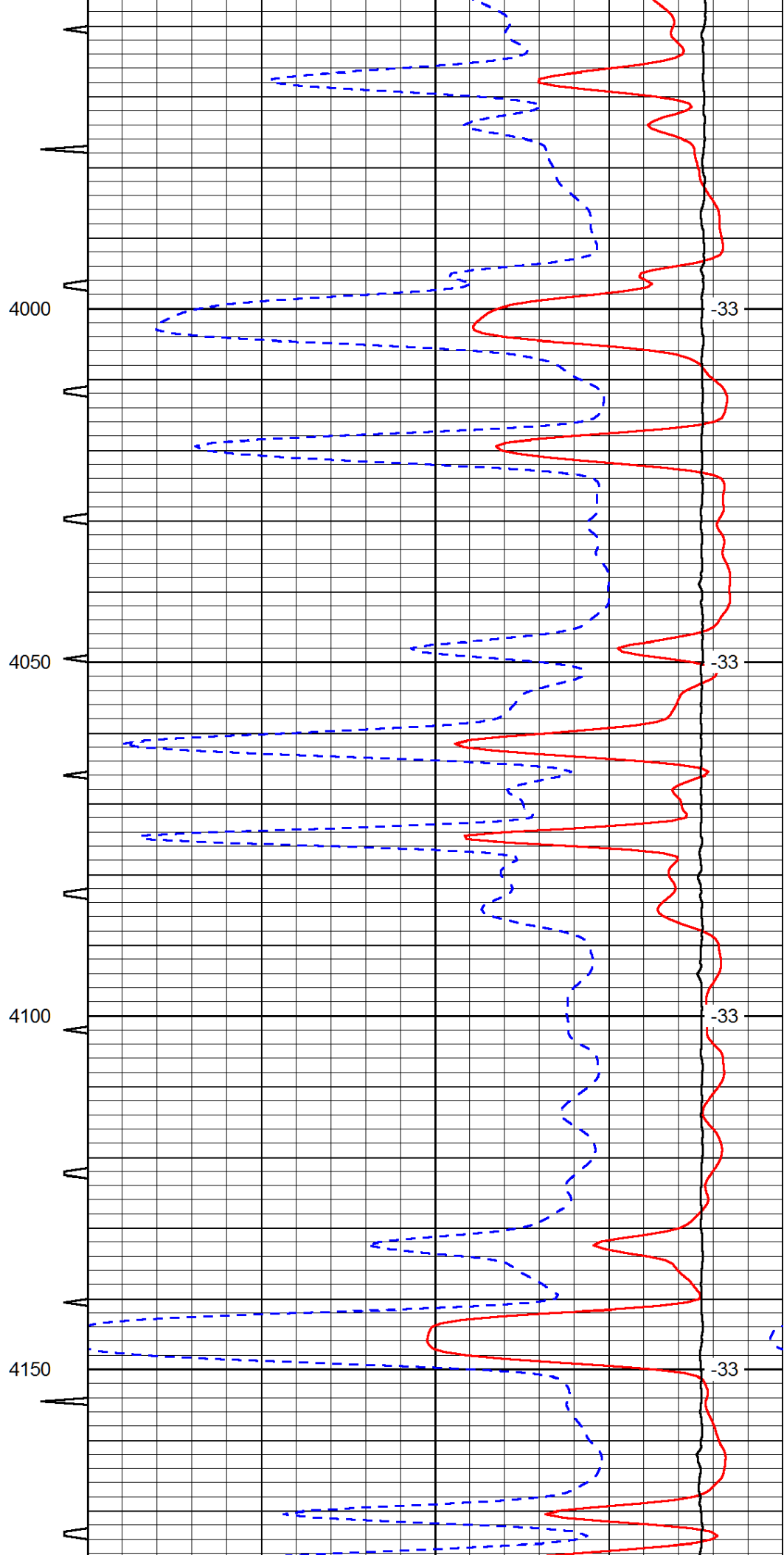
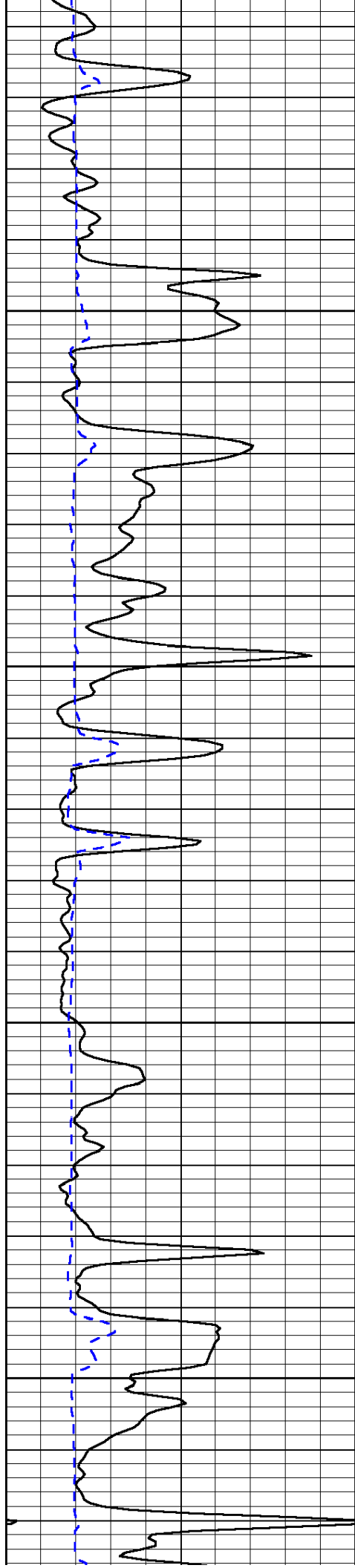


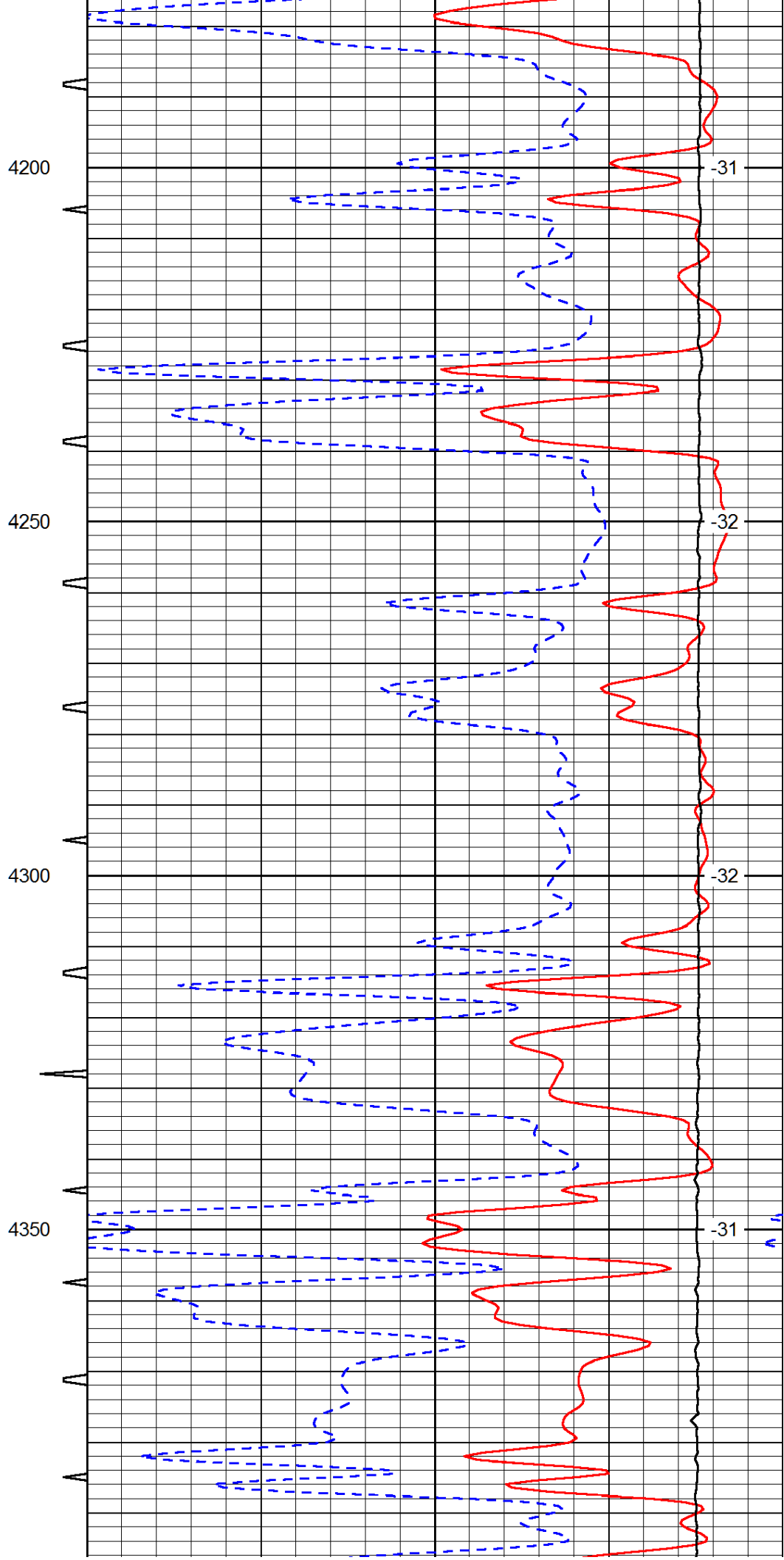
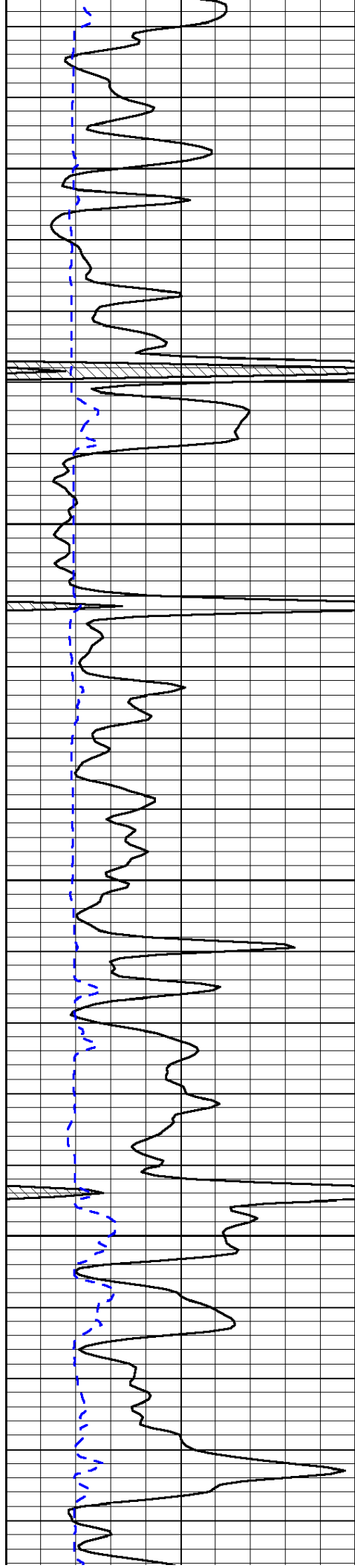


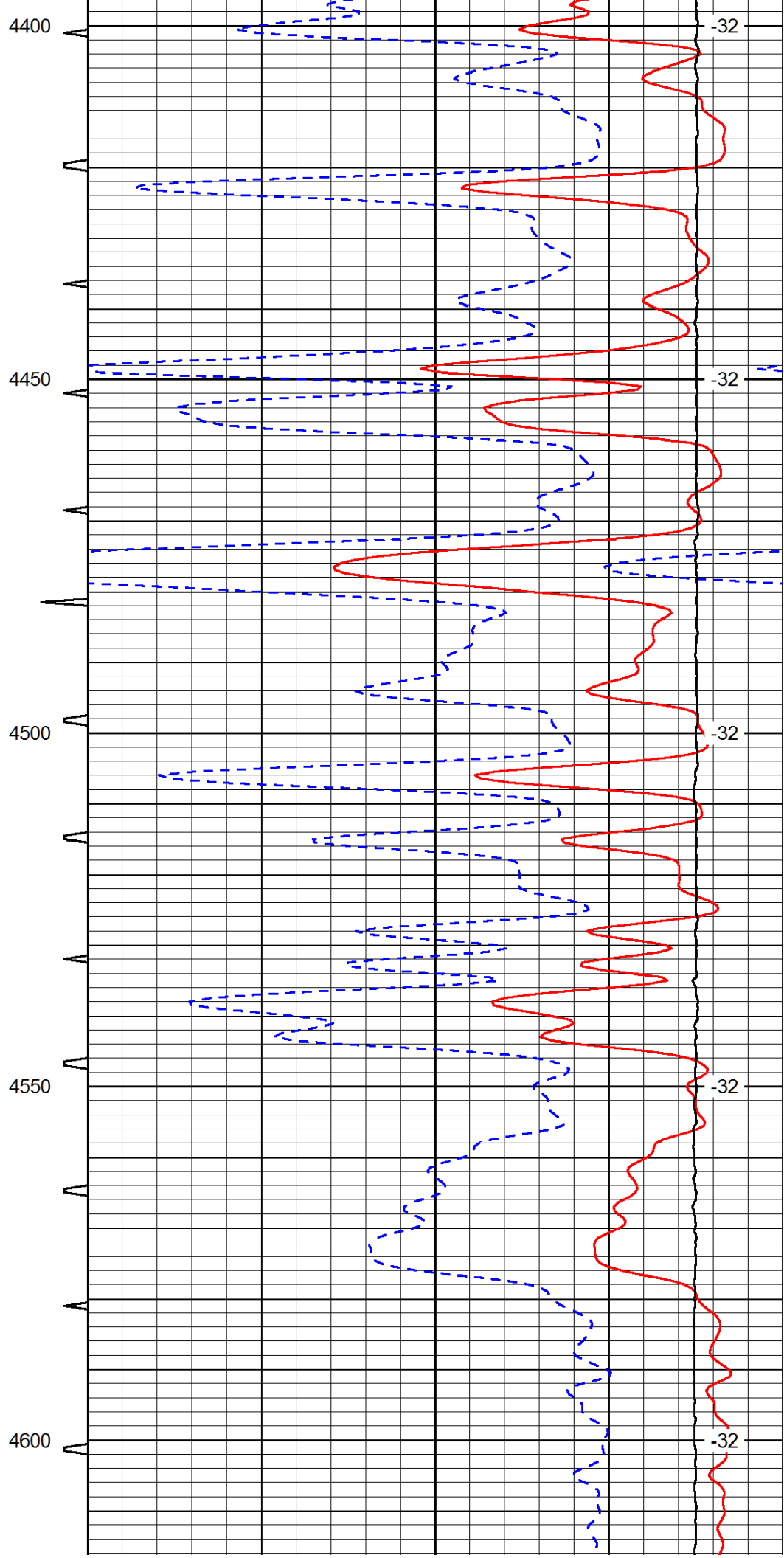
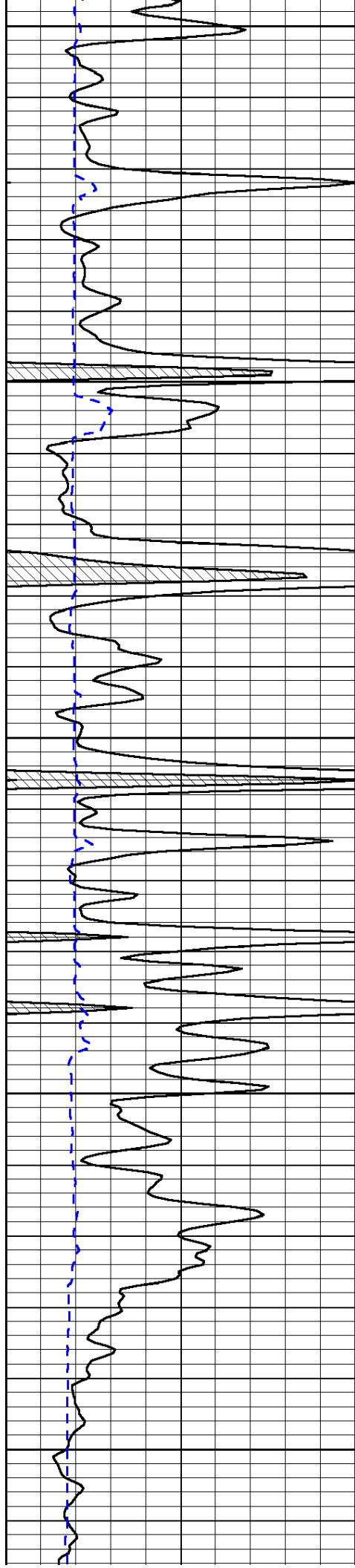


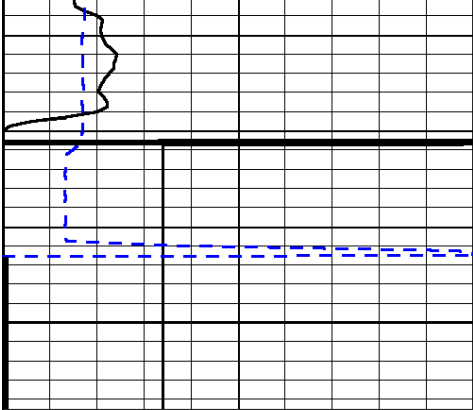






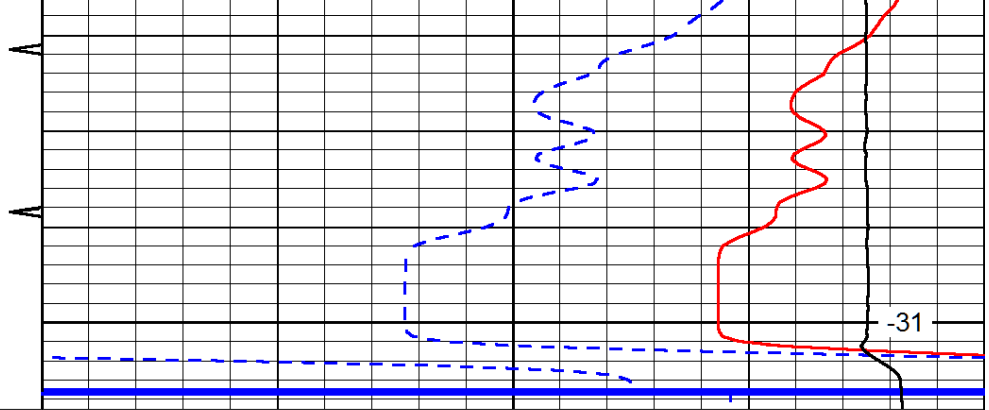






0	Gamma Ray (GAPI)	150
150	Gamma Ray (GAPI)	300
6	dCAL (in)	16

4650



Sonic Int	140	Delta Time (usec/ft) (usec/ft)	40
5 (msec) 0	30	Sonic Porosity (pu)	-10
	15000	LTEN (lb) (lb)	0

LSPD
(ft/min)