



Borehole Compensated Sonic Log

DIGITAL LOG (785) 625-3858

API No.

15-051-25,949-00-00

Company Murfin Drilling Co., Inc.

Well Orth Unit No. 1-4

Field Alwerth

County Ellis

State Kansas

Location

2190' FSL & 1400' FWL

Other Services
CNL/CDL
MEL/DIL

Sec: 4

Twp: 14 S

Rge: 19 W

Elevation

Permanent Datum Ground Level Elevation 2261

Log Measured From Kelly Bushing 5 Ft. Above Perm. Datum

K.B. 2266
D.F.
G.L. 2261

Date

1/28/2010

Run Number

Two

Type Log

BHC Sonic

Depth Driller

4020

Depth Logger

4021

Bottom Logged Interval

4010

Top Logged Interval

200

Type Fluid In Hole

Chemical

Salinity, PPM CL

8,300

Density

9.0

Level

Full

Max. Rec. Temp. F

118

Operating Rig Time

5 Hours

Equipment -- Location

4 Hays

Recorded By

K. Bange

Witnessed By

Tim Priest

Borehole Record

Casing Record

Run No

Bit

From

To

Size

Wgt.

From

To

1

12.25

00

219

8.625

24#

00

219

<<< 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.

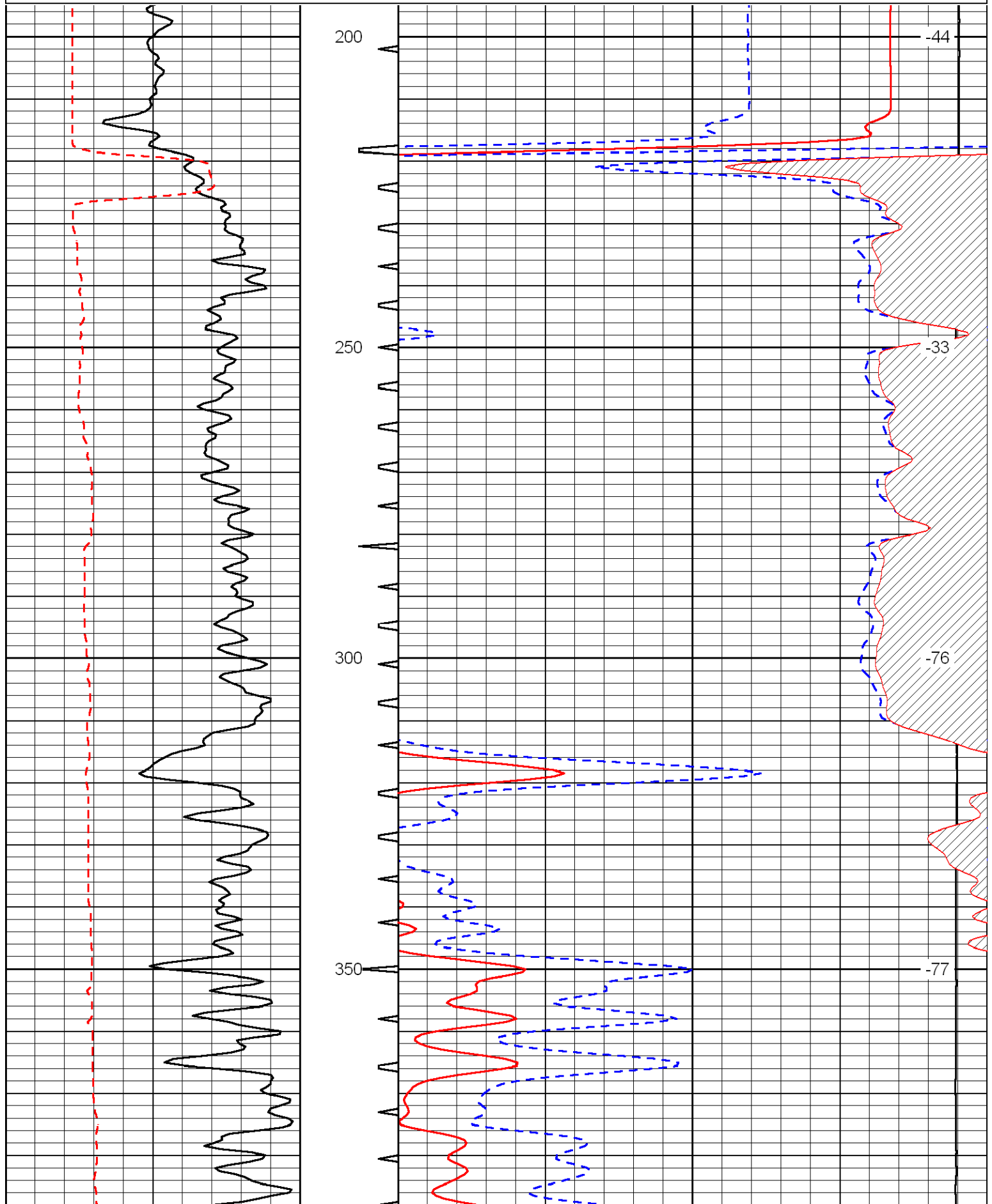
Comments

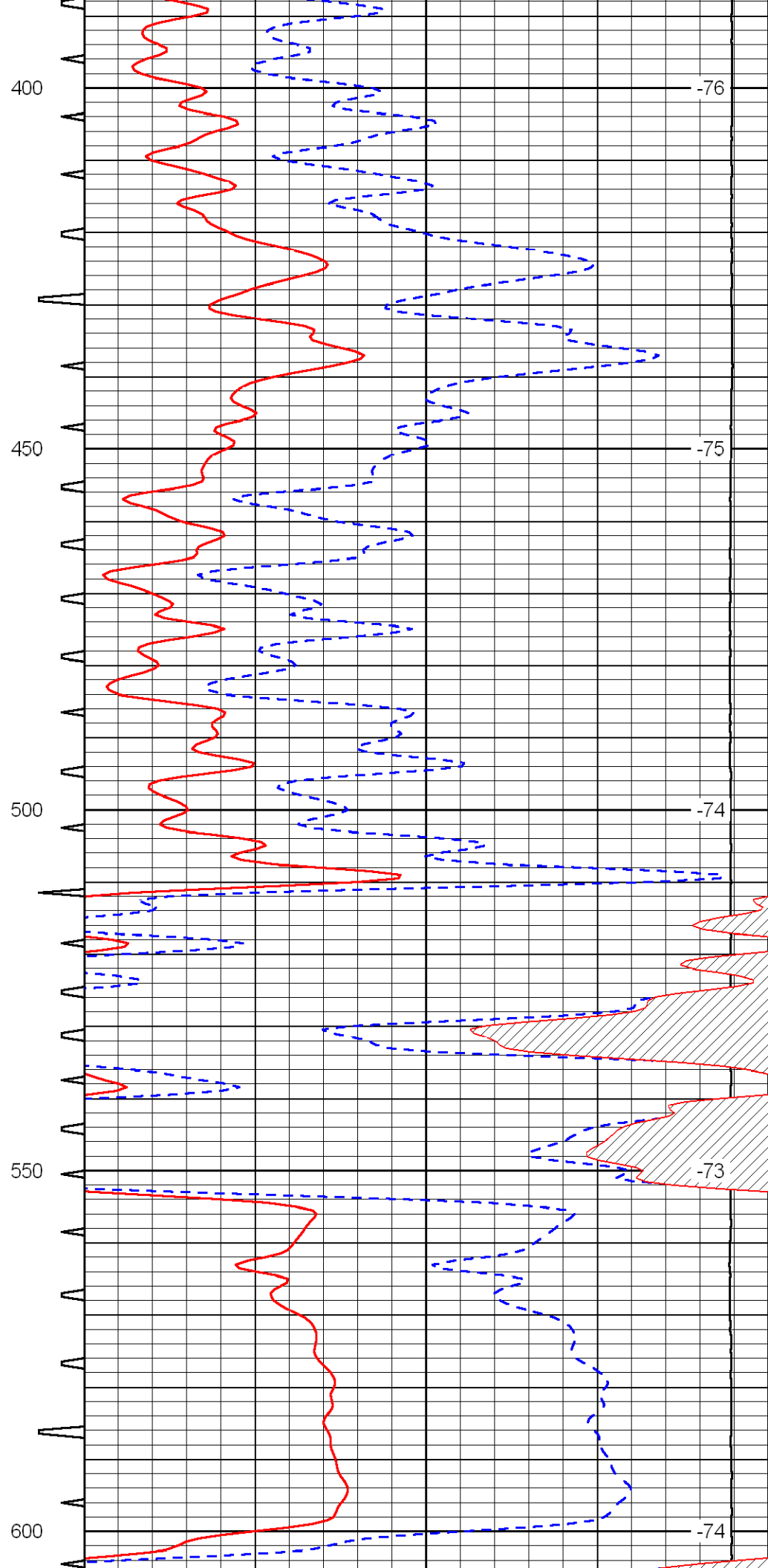
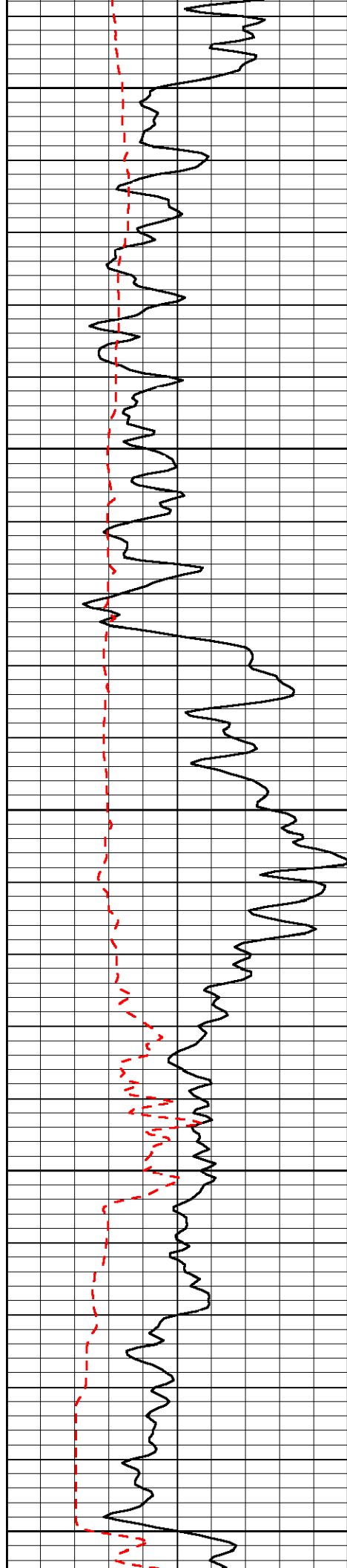
Thank you for using Log-Tech, Inc.
(785) 625-3858

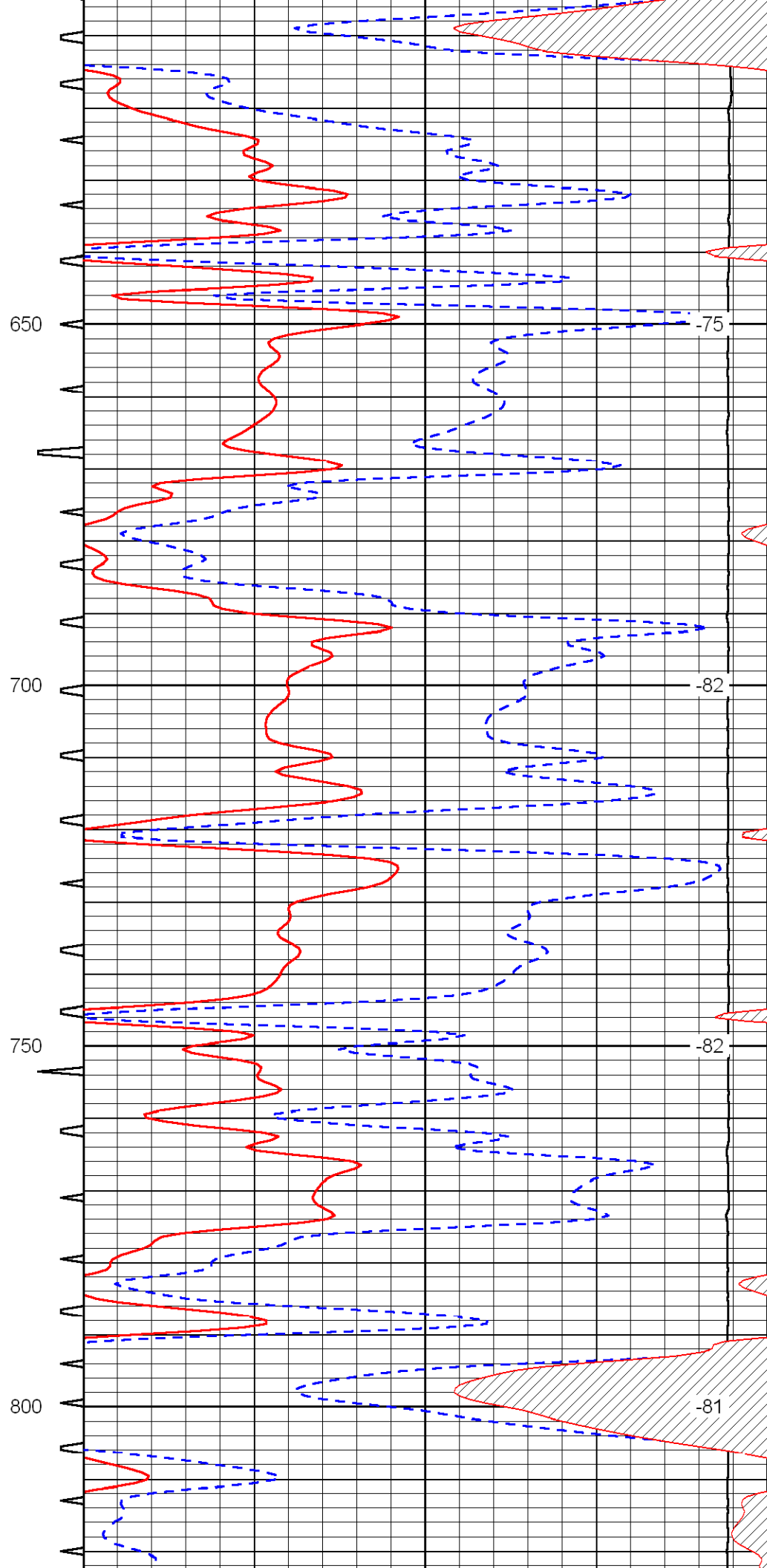
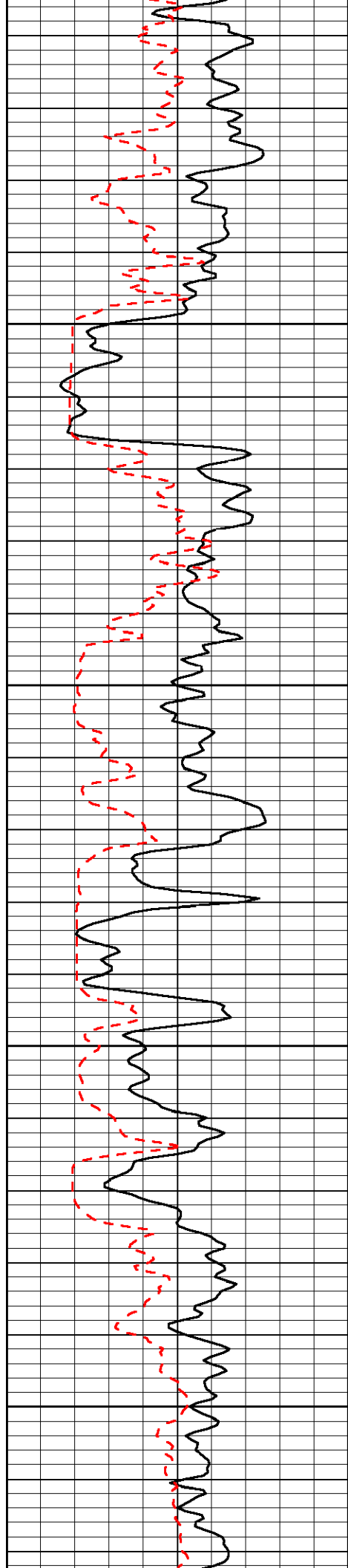
Hays, 183 Bypass to Golf Course rd, W on Golf Course to 180th rd, N 1/2, E into

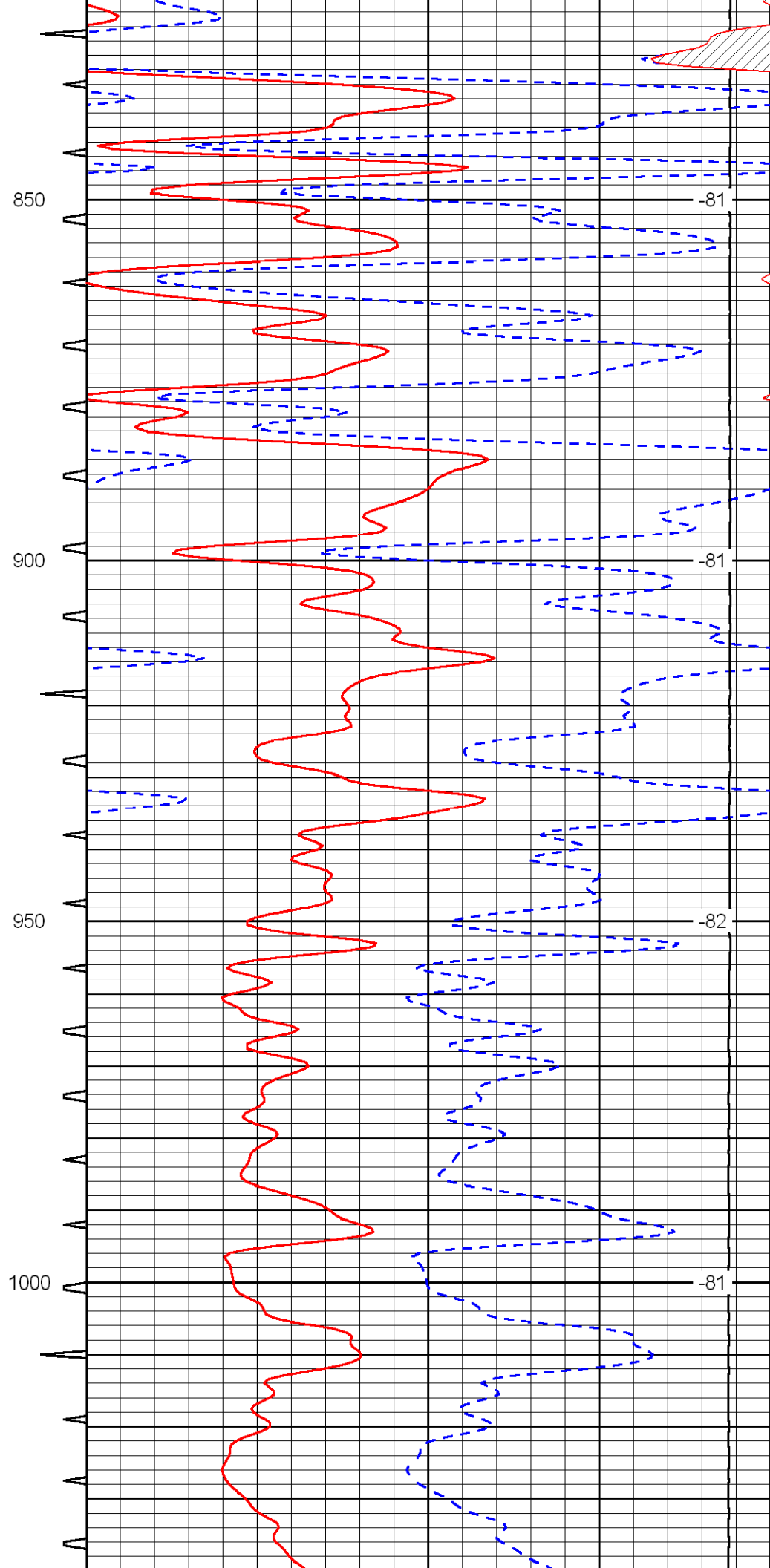
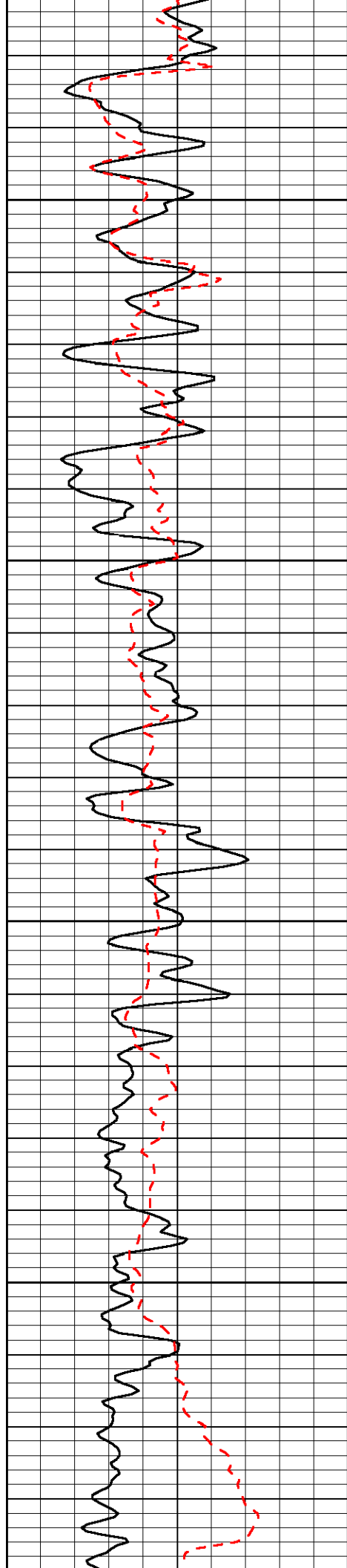
Database File: c:\warrior\data\murfin_orth unit no. 1-4\murfhd.db
Dataset Pathname: dil\murf2in
Presentation Format: sonic
Dataset Creation: Thu Jan 28 12:23:26 2010
Charted by: Depth in Feet scaled 1:240

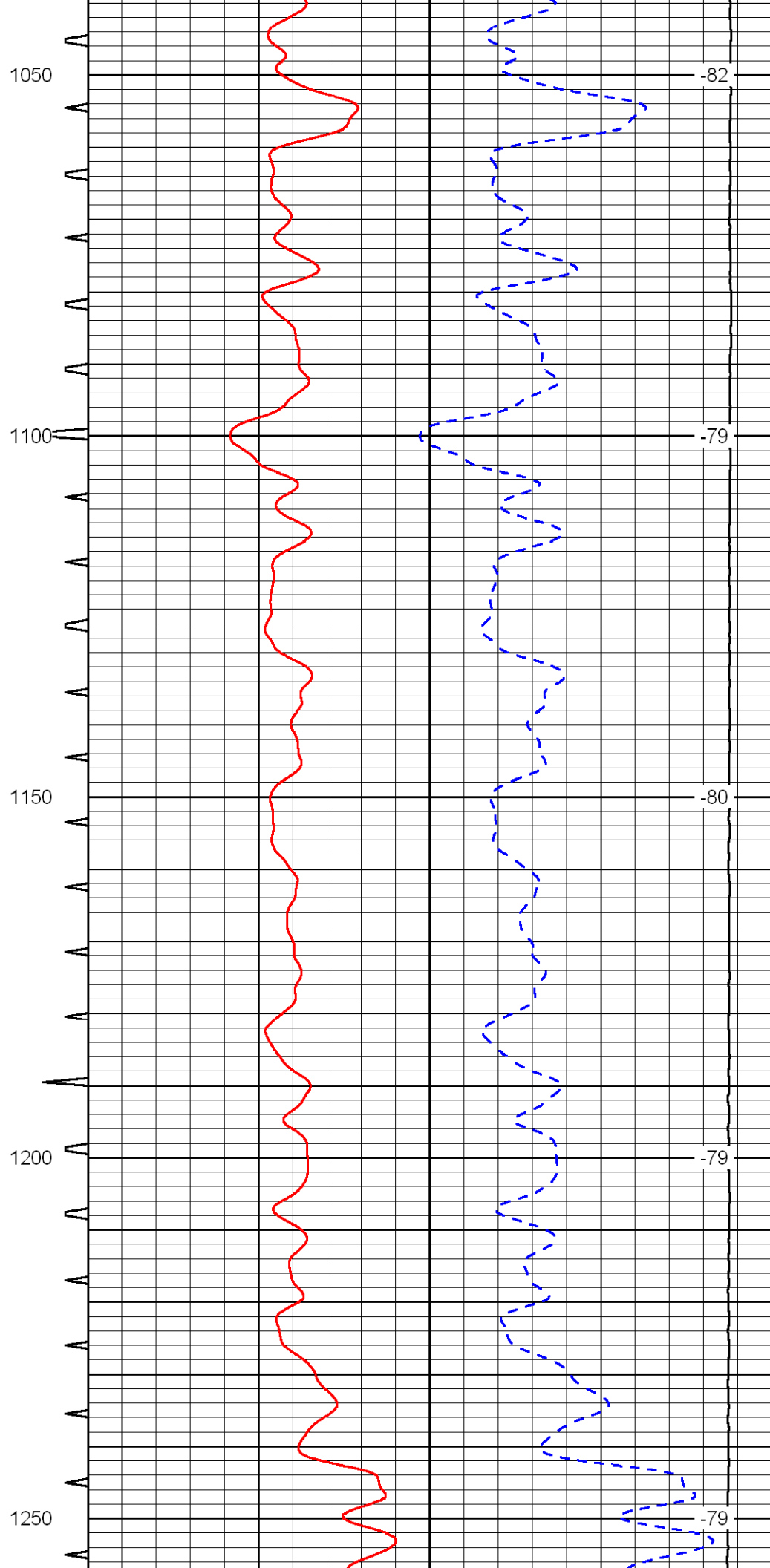
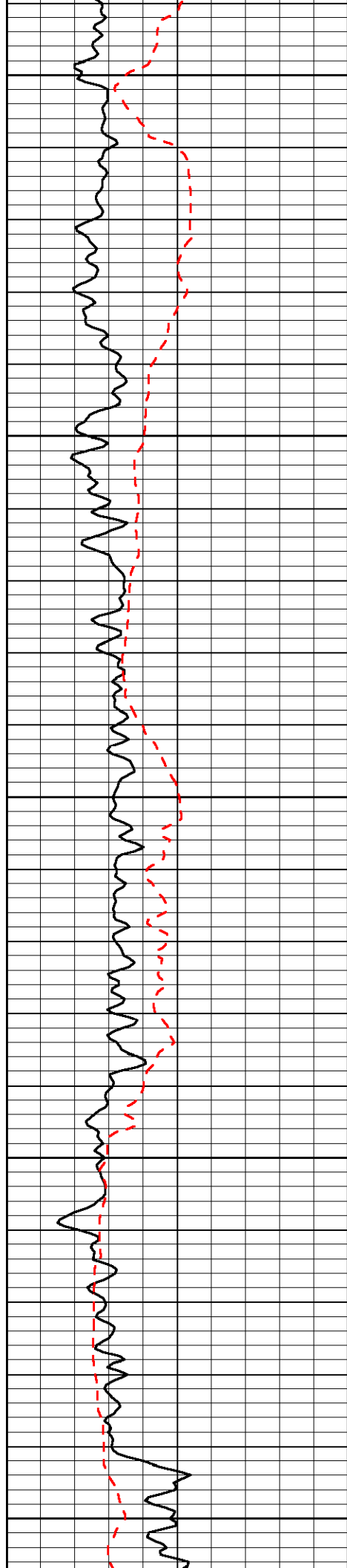
0	Gamma Ray	150	Sonic Int	140	Delta Time (usec/ft) (usec/ft)	40
150	Gamma Ray	300	5 (msec)	0	SPOR (pu)	-10
6	Caliper (in)	16		15000	LTEN (lb) (lb)	0
						LSPD (ft/min)

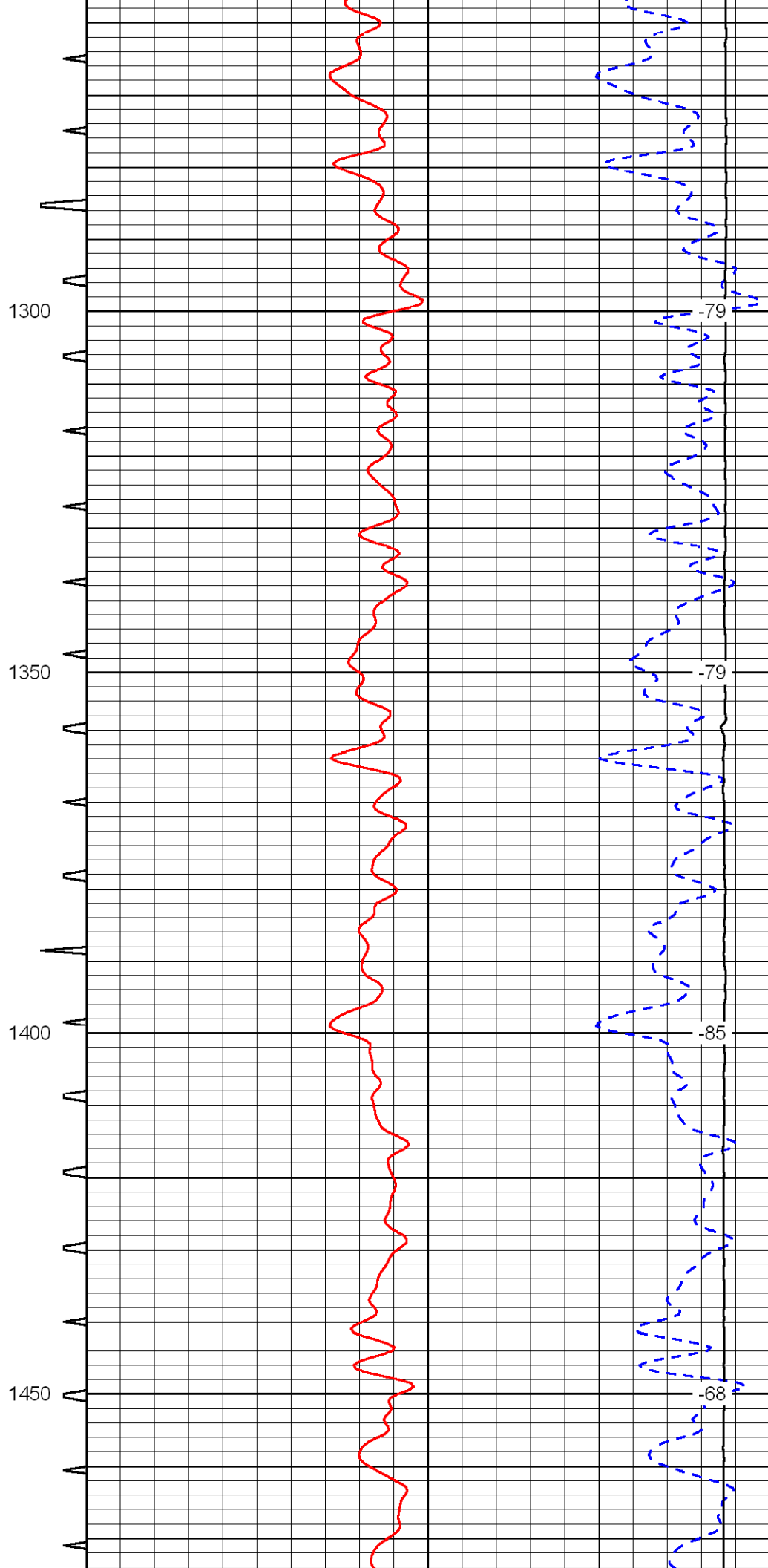
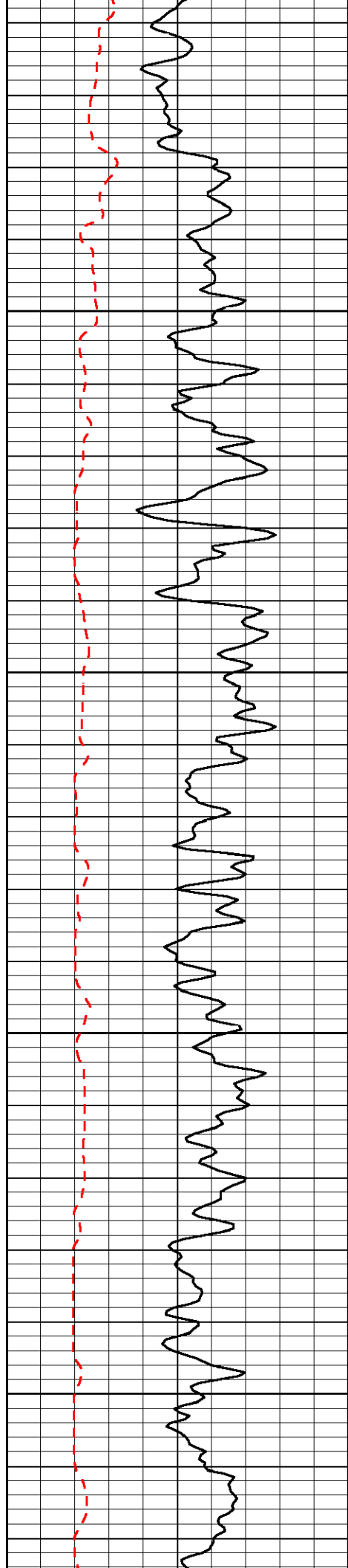


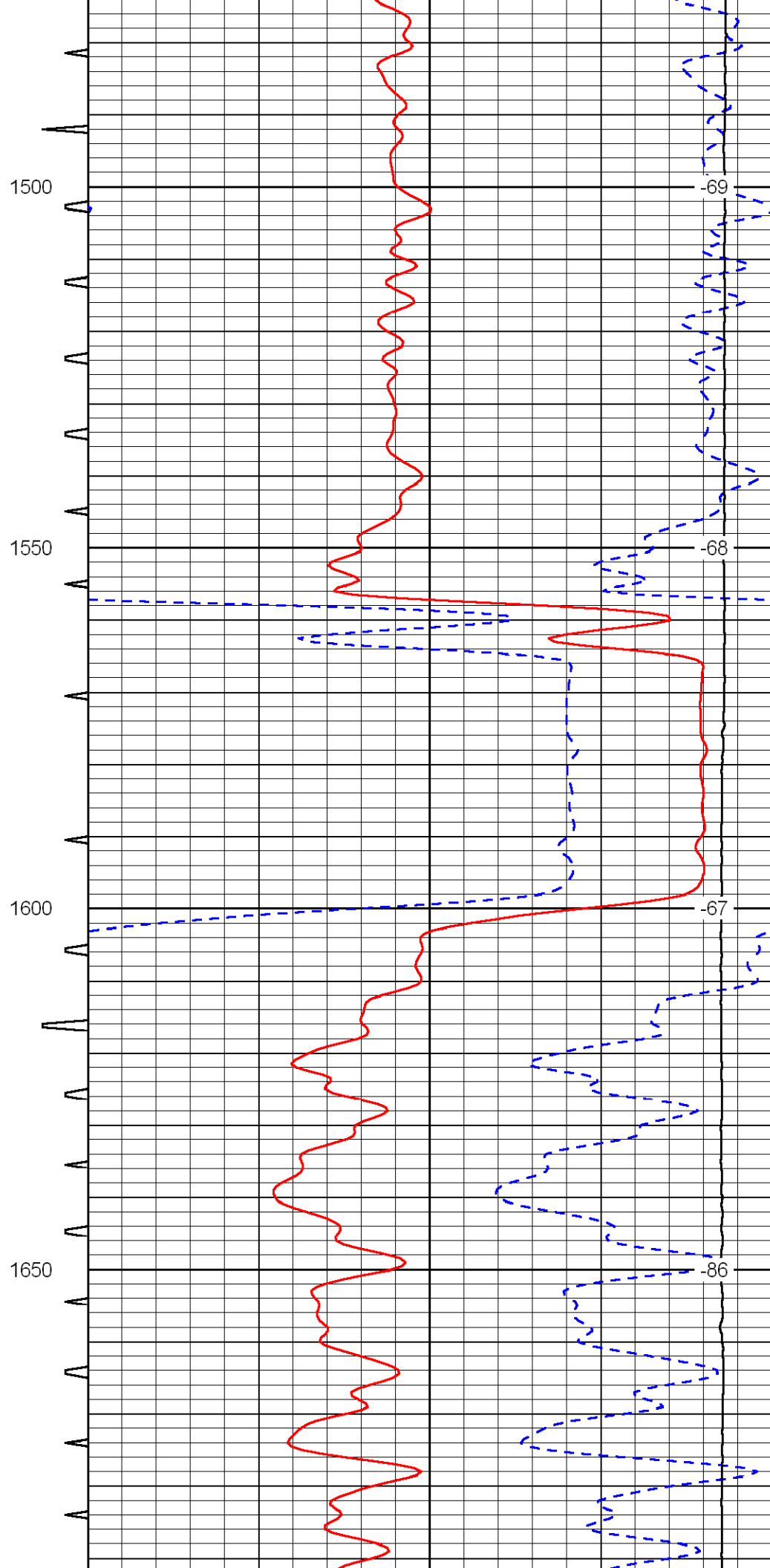
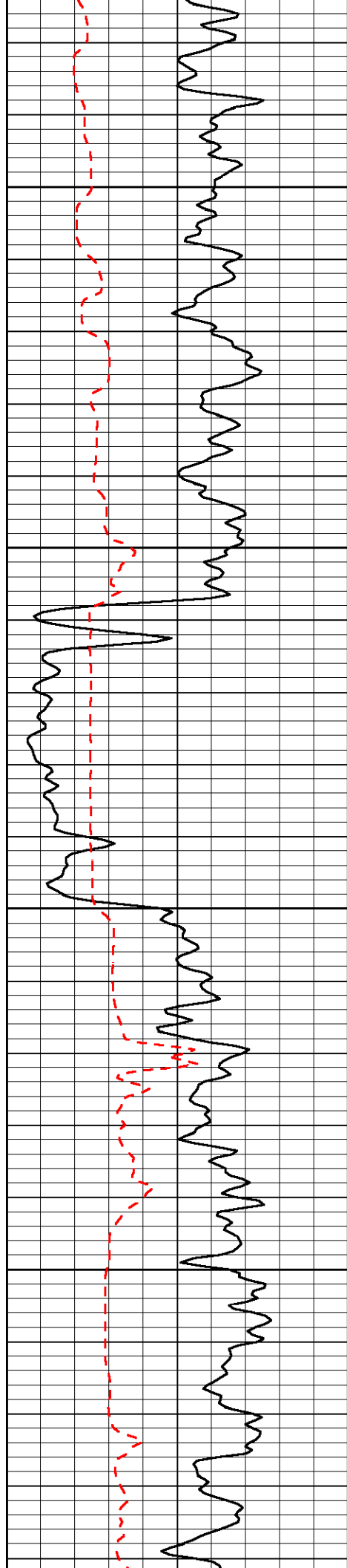


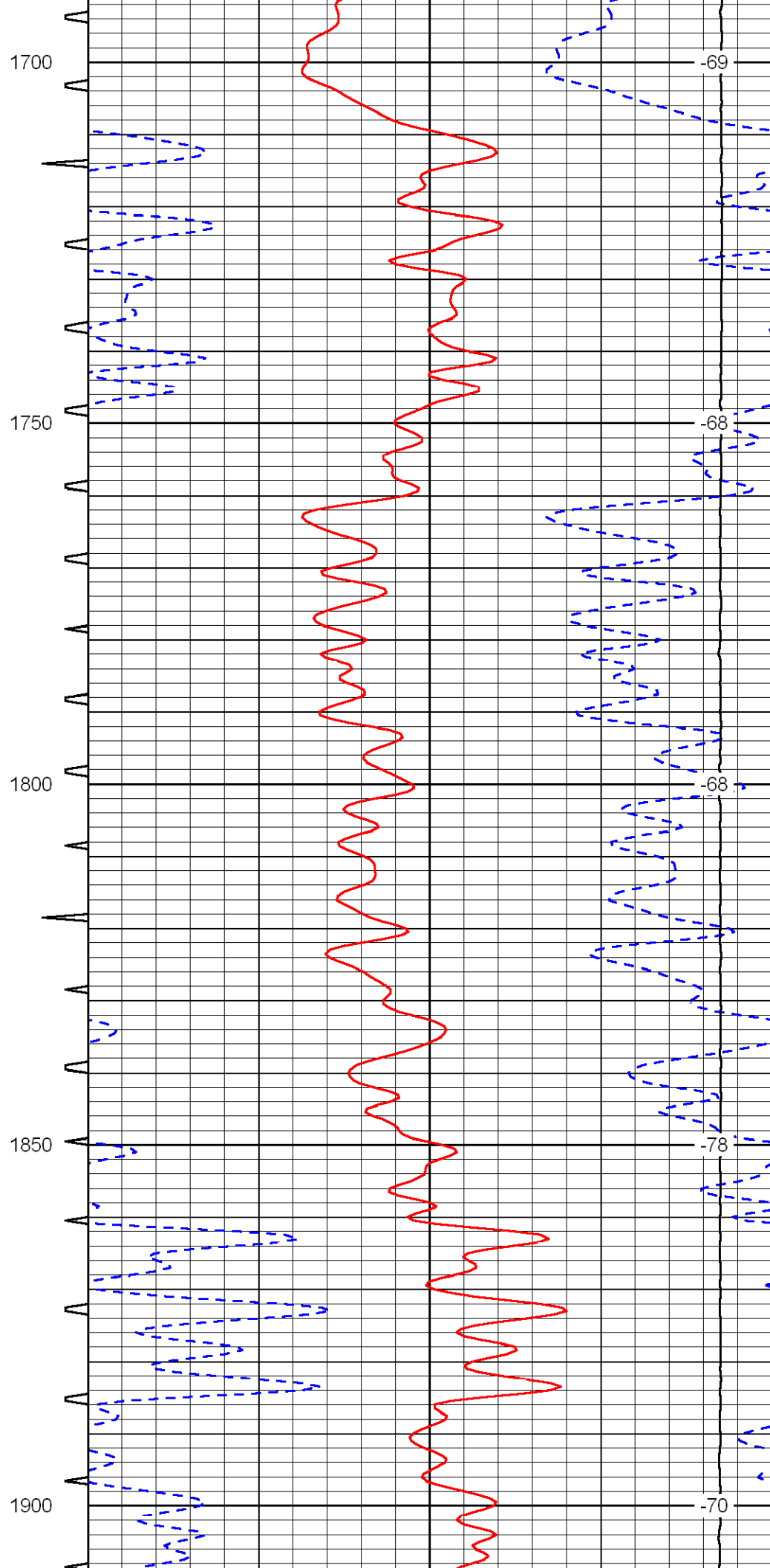
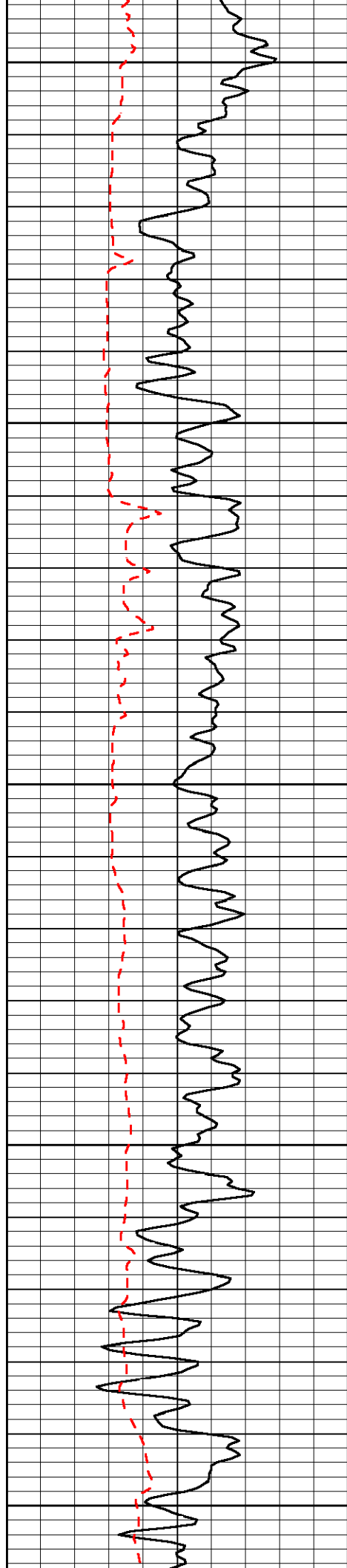


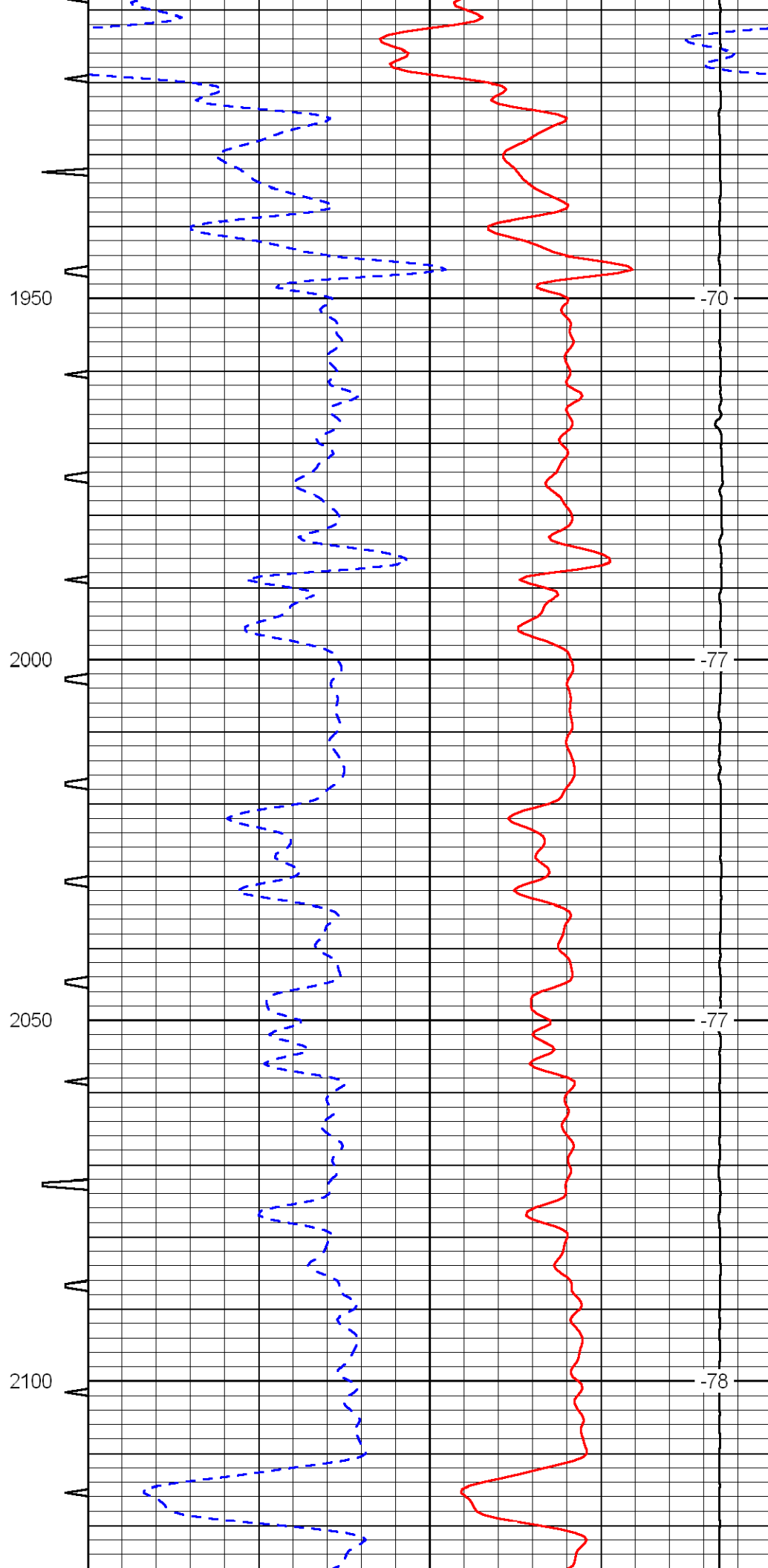
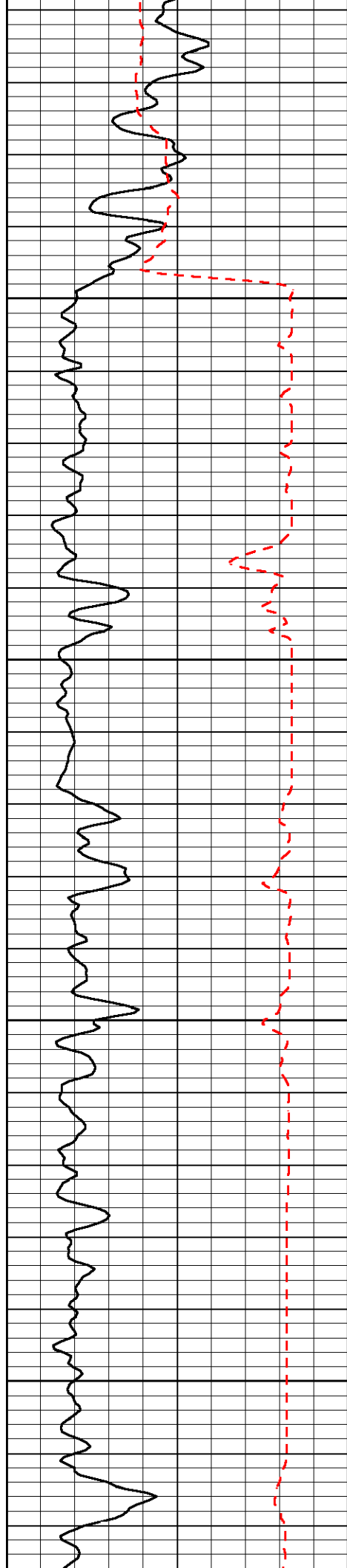


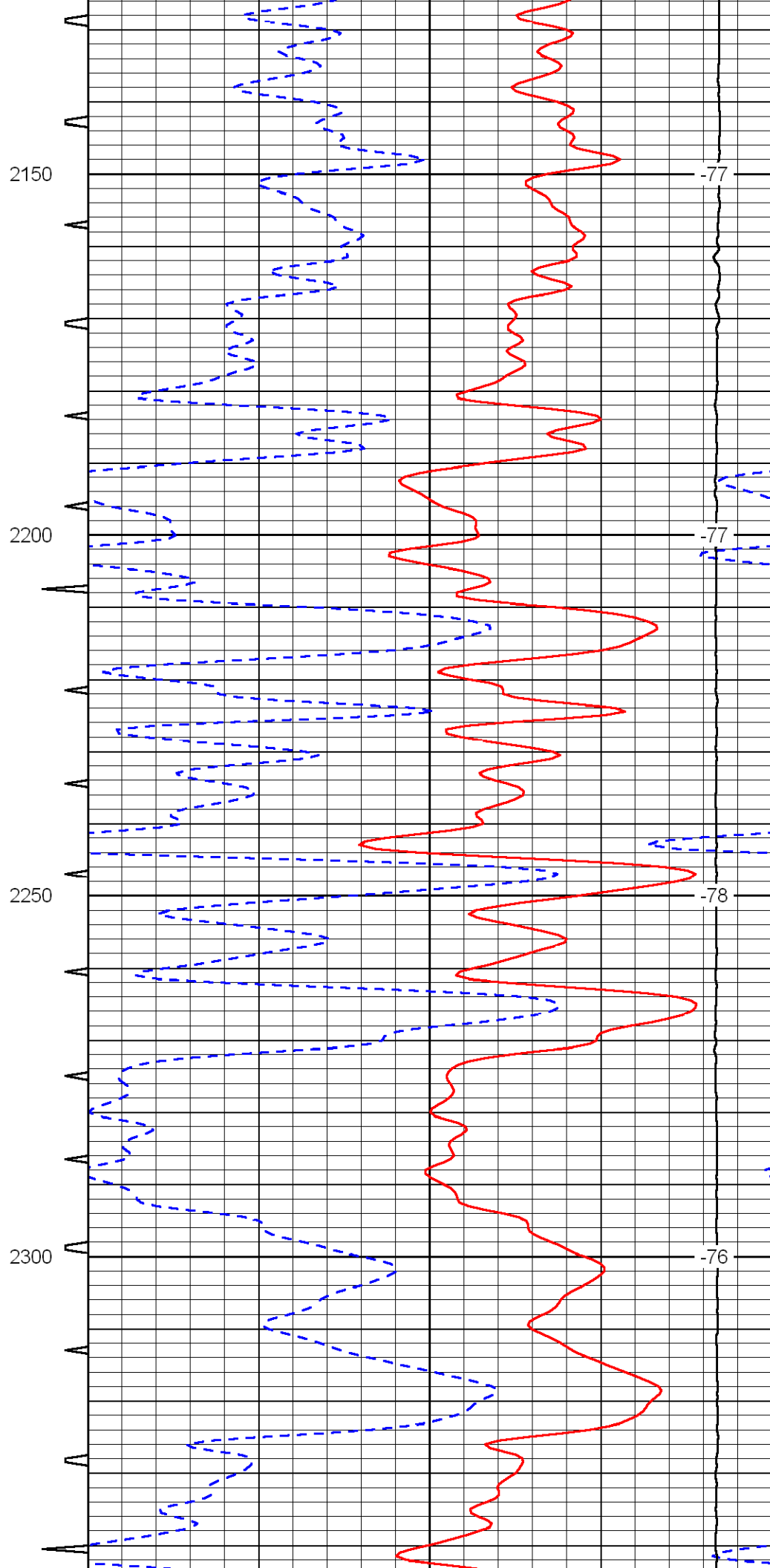
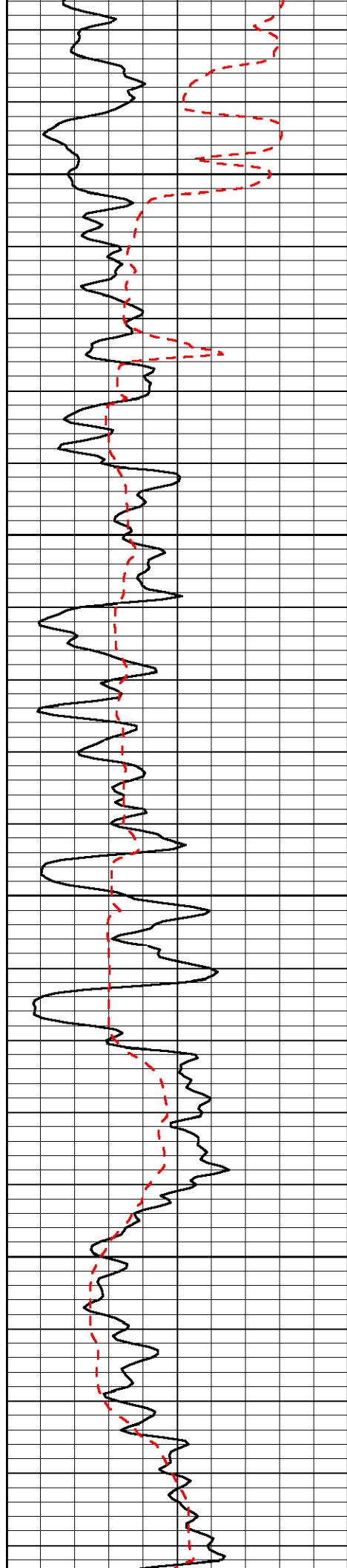


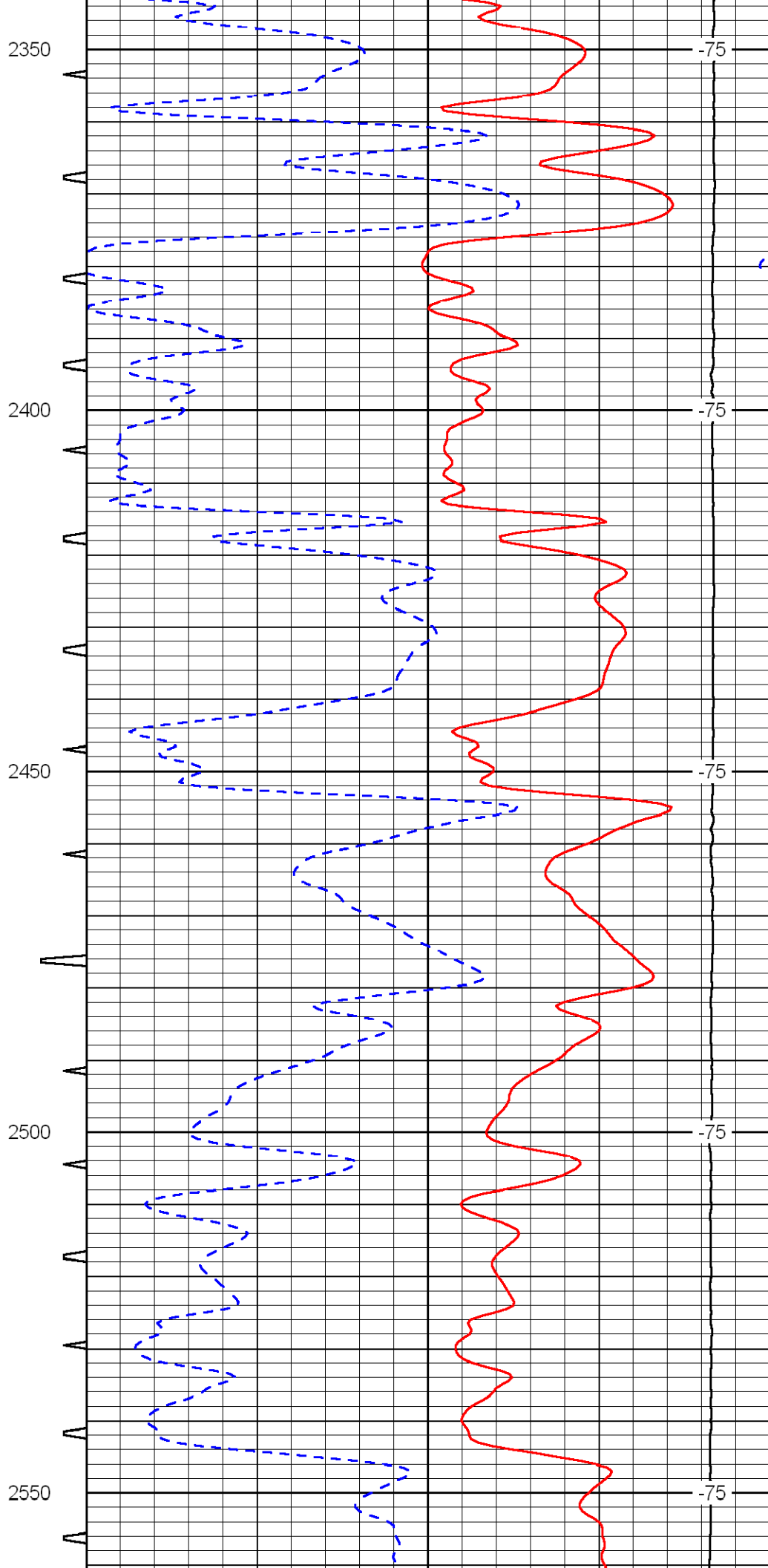
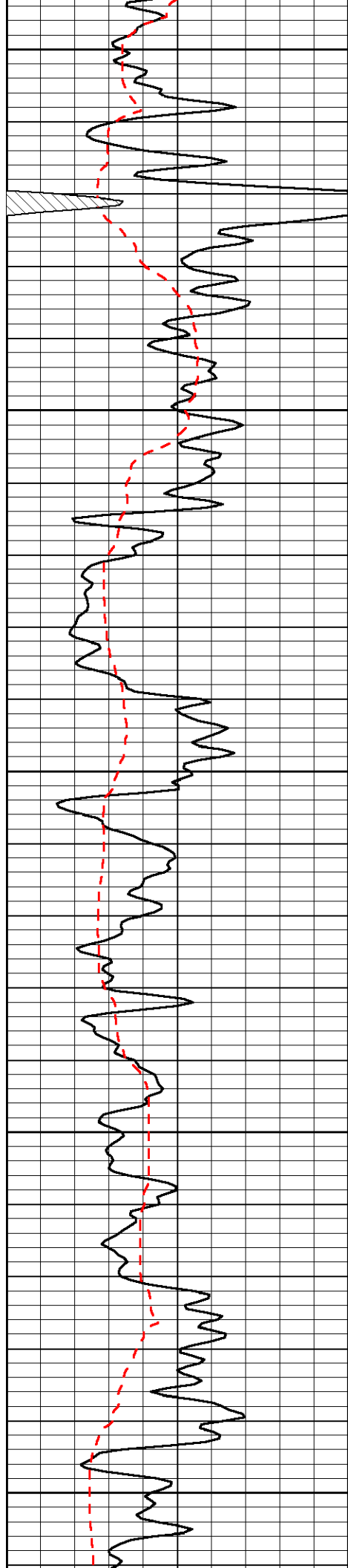


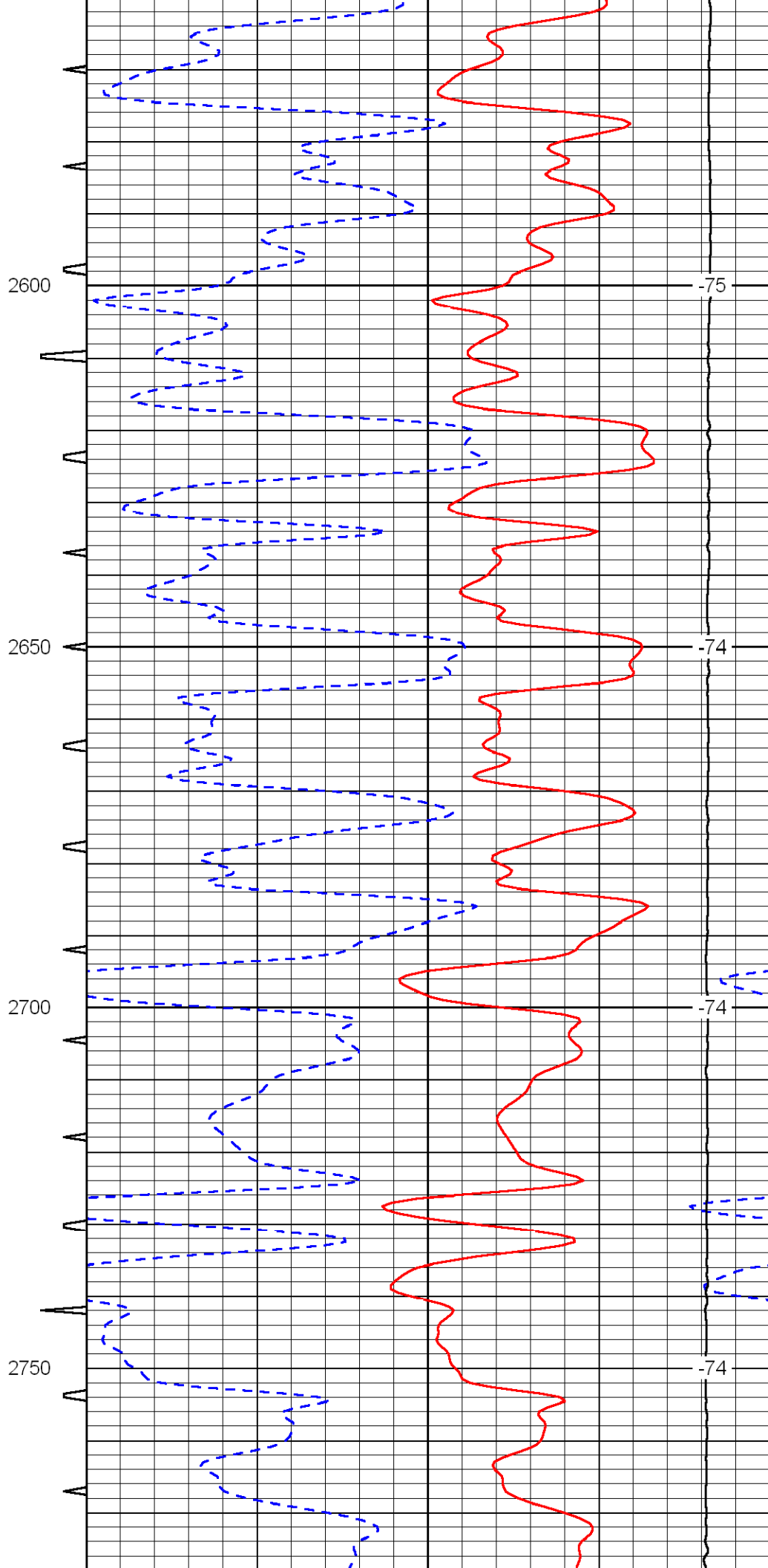
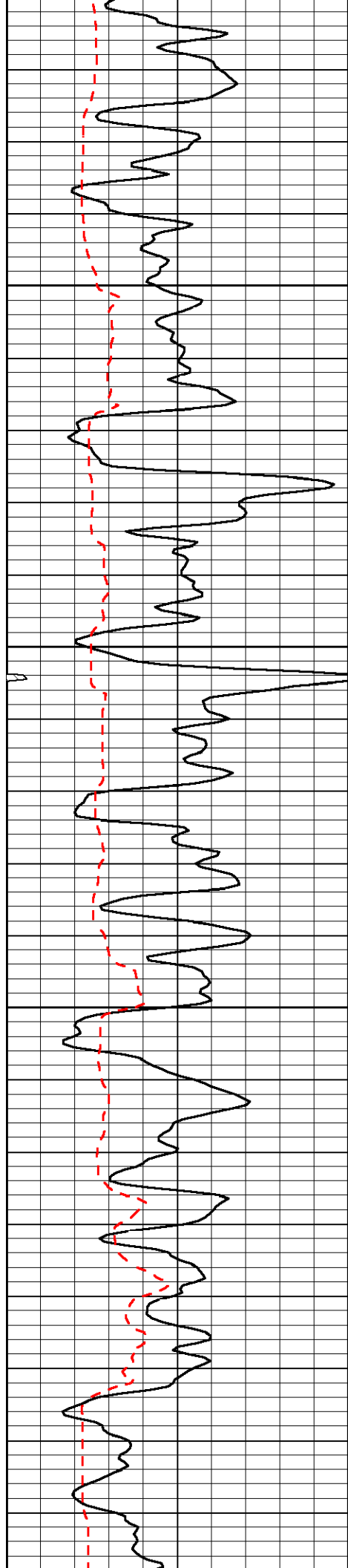


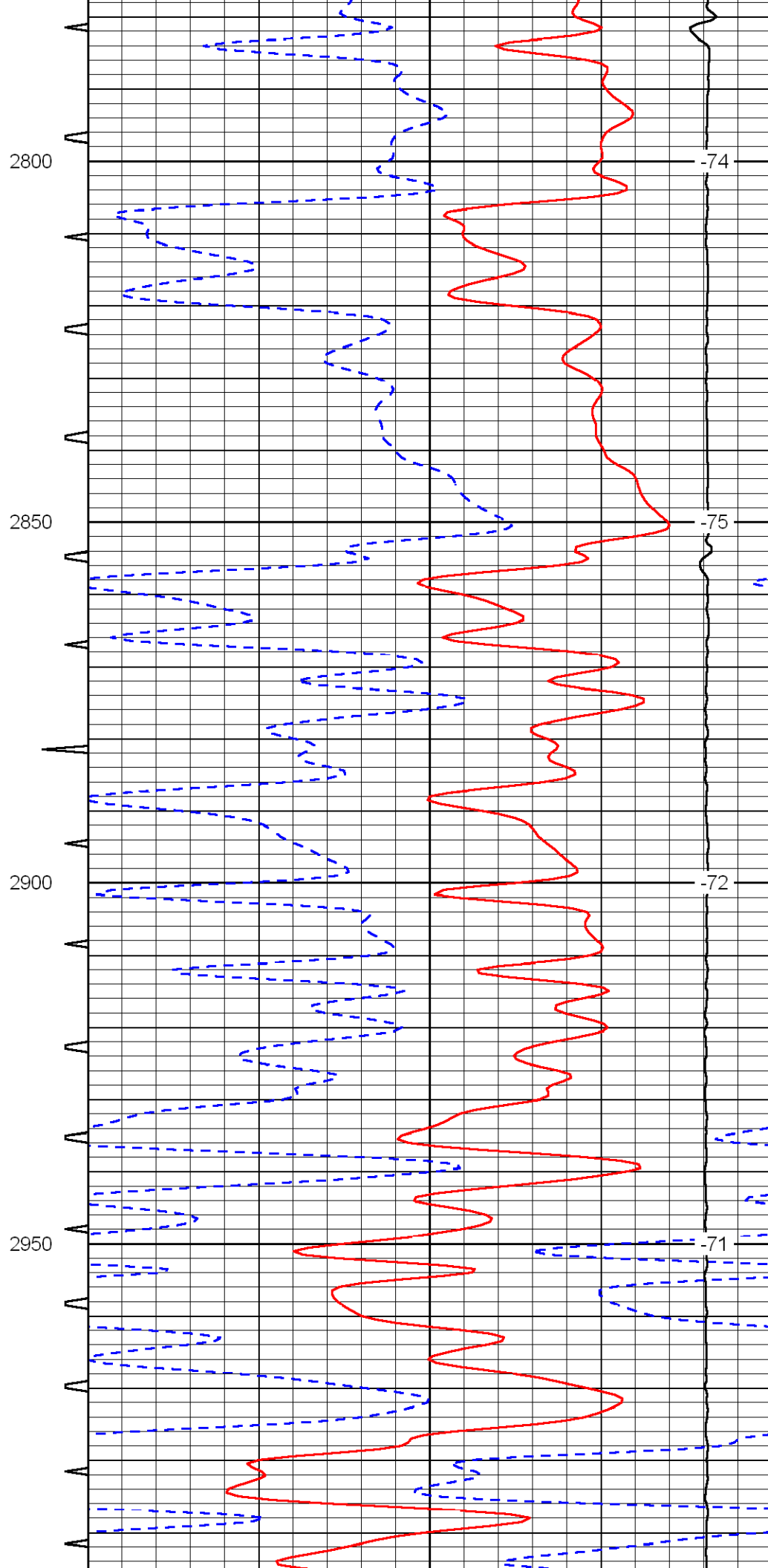
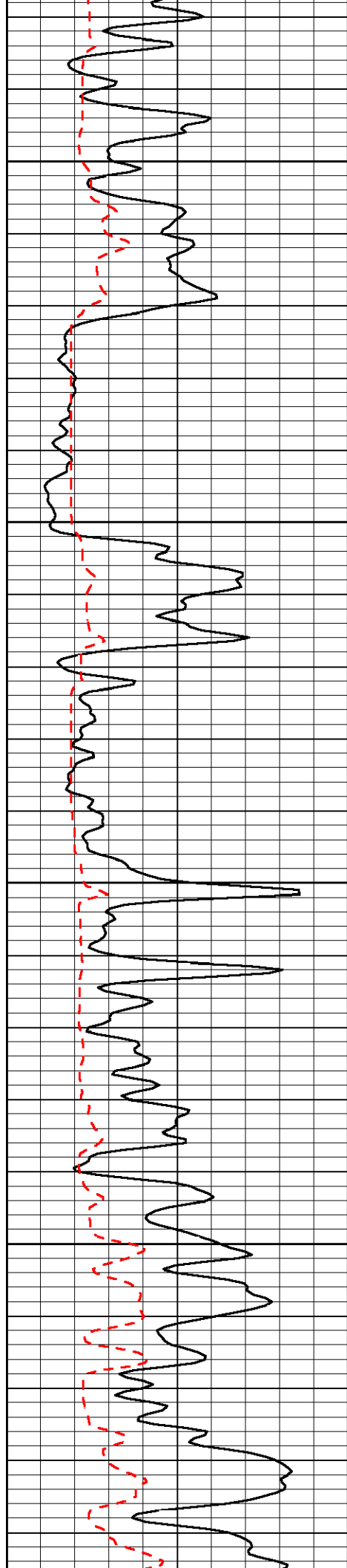


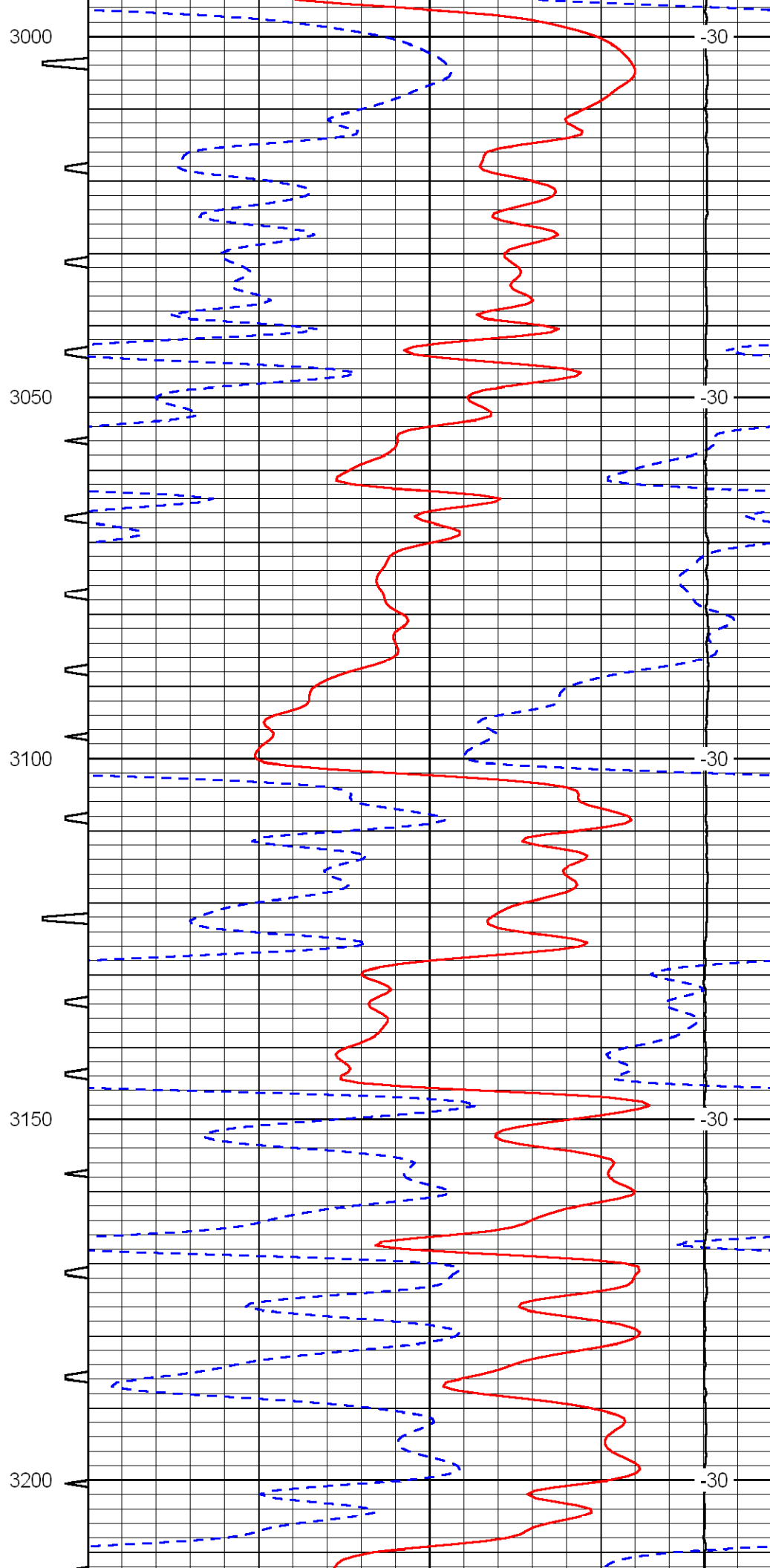
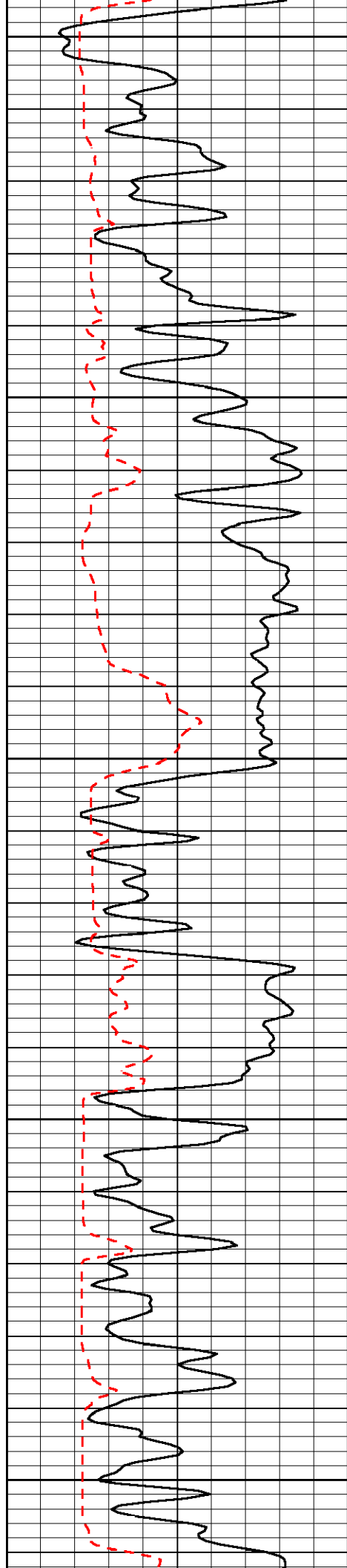


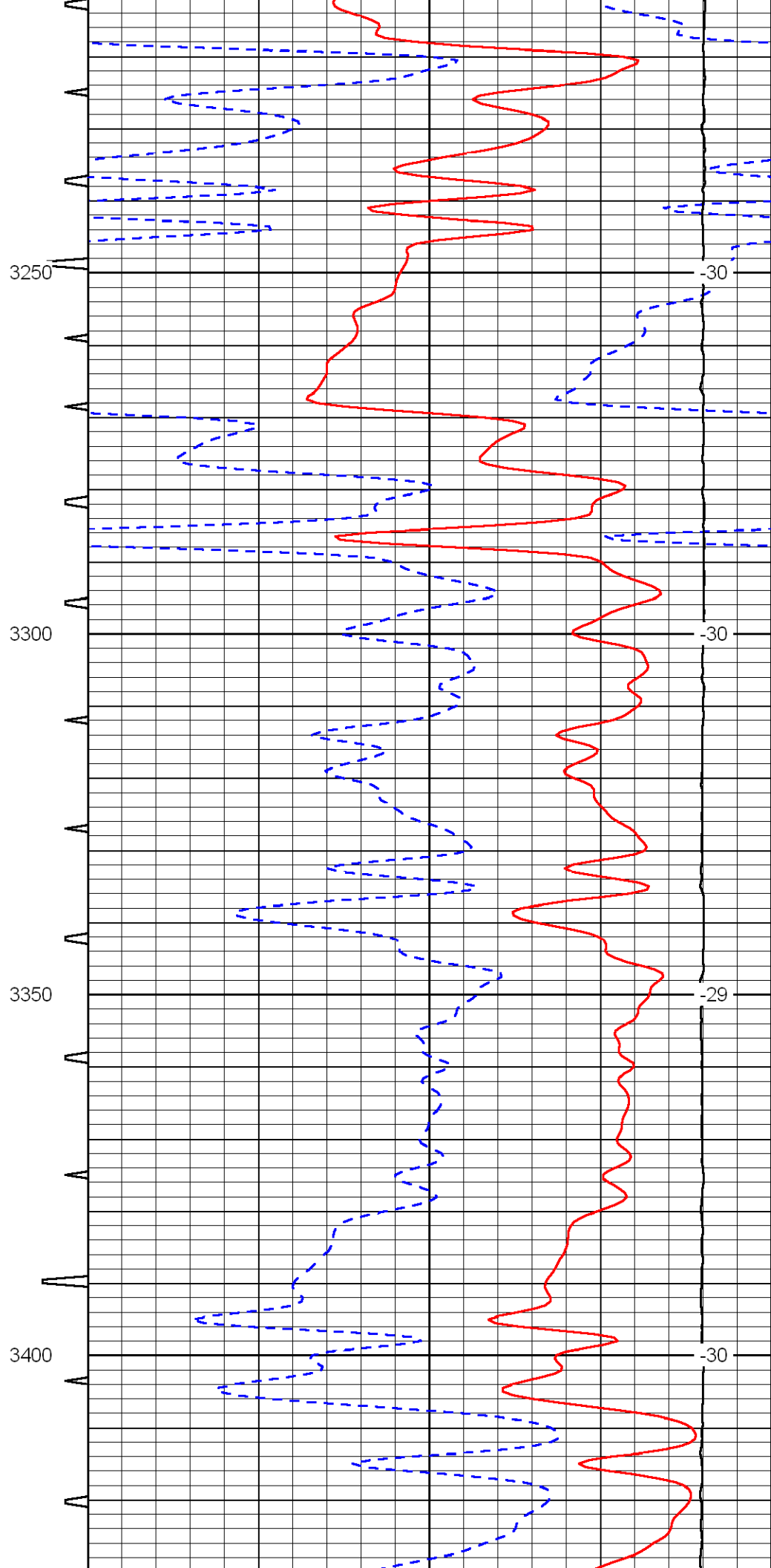
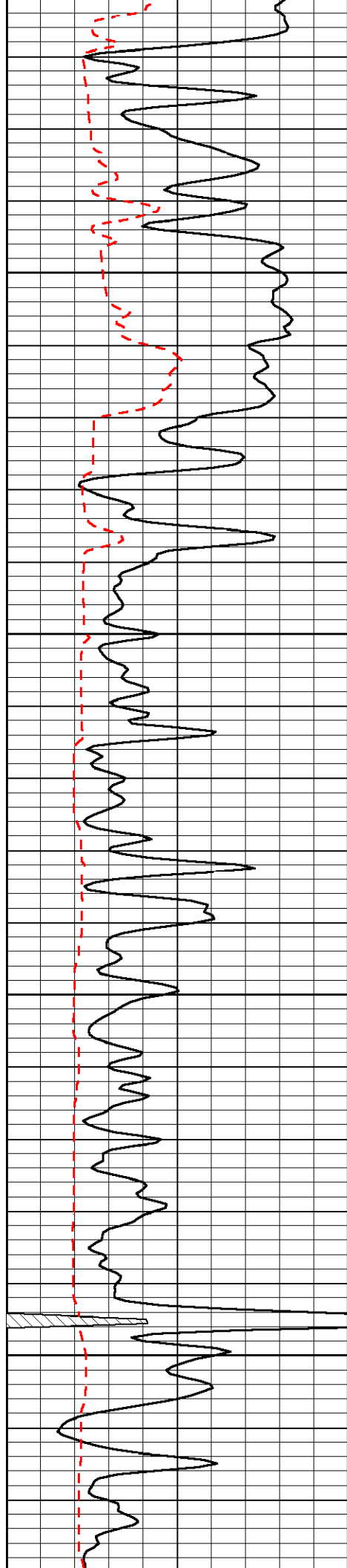


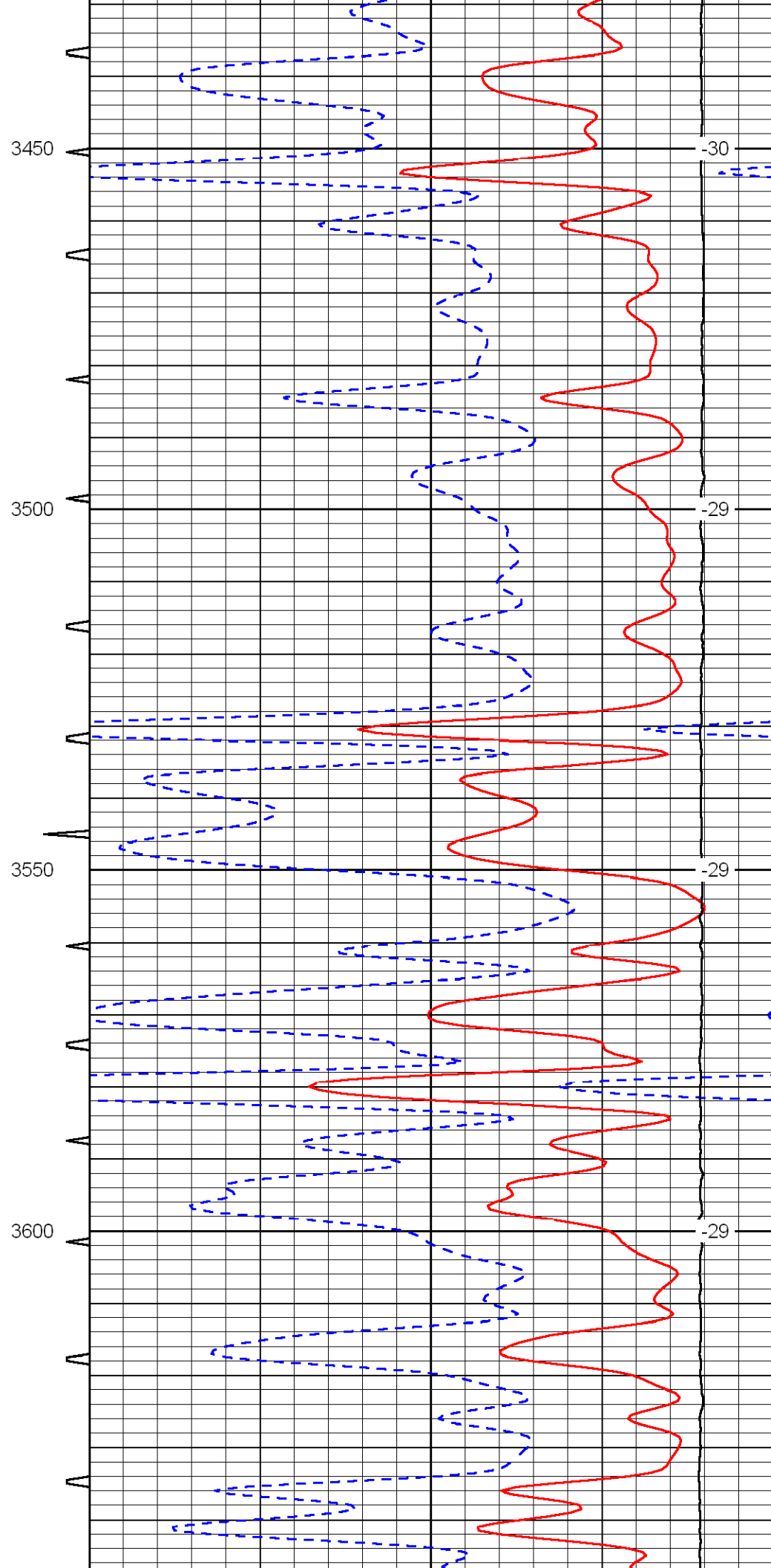
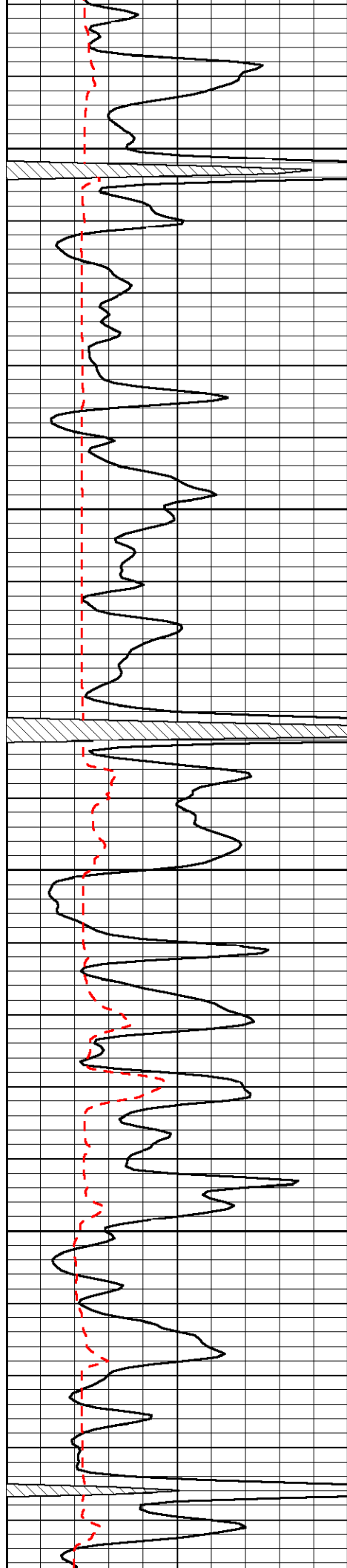


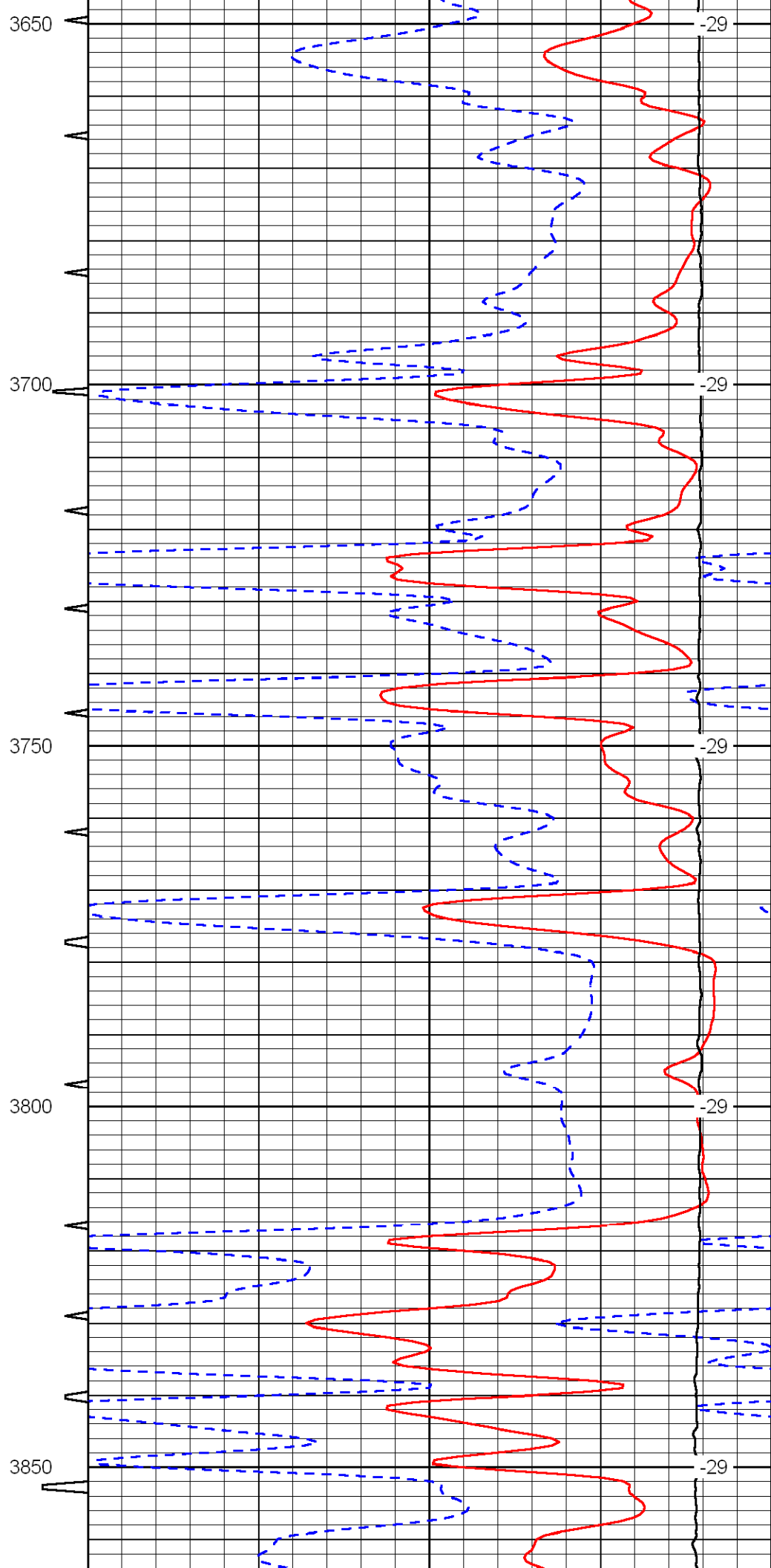
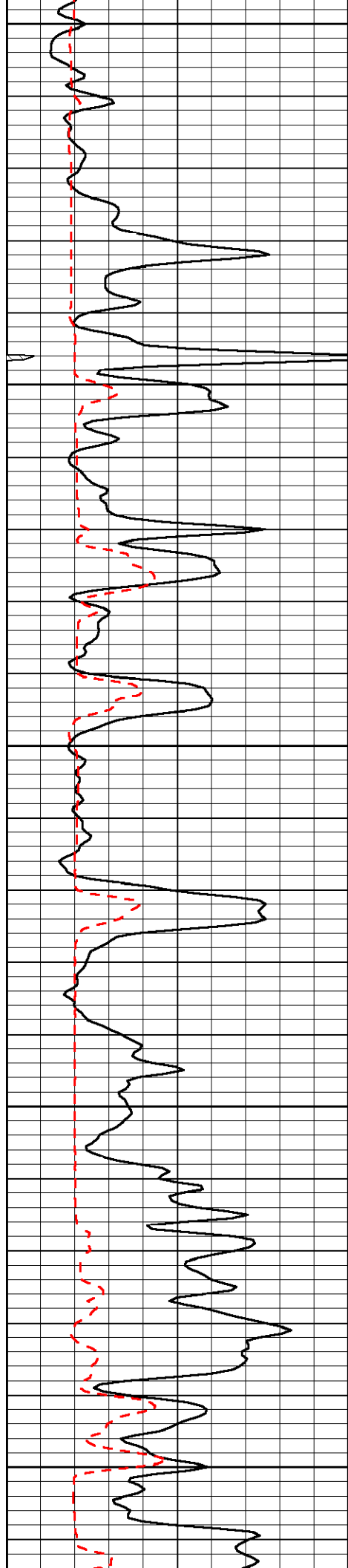


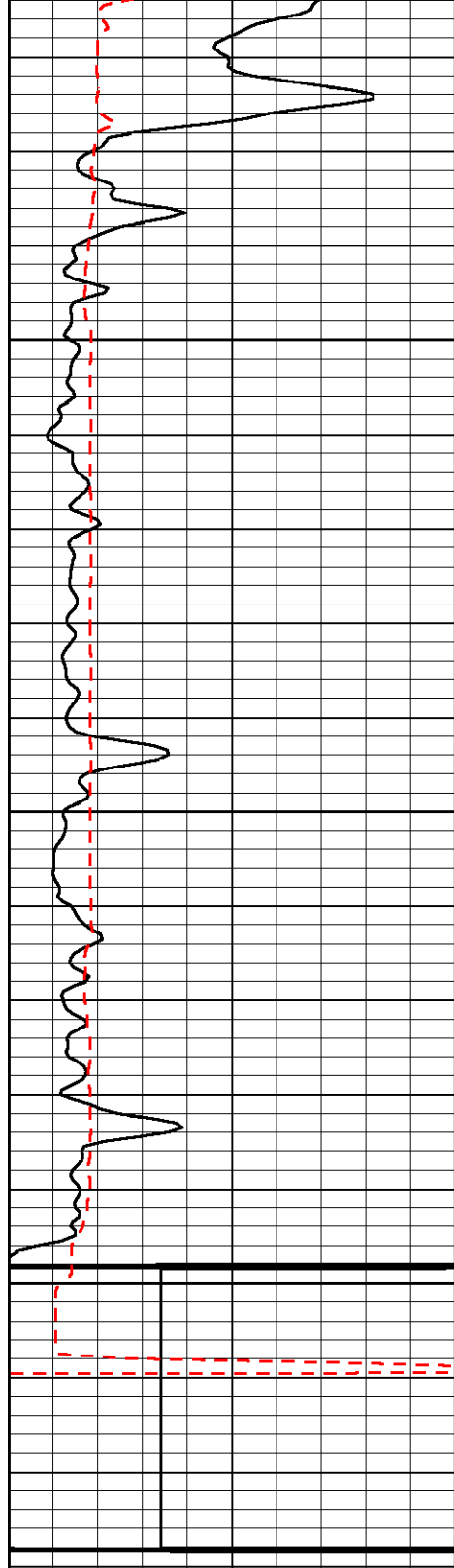




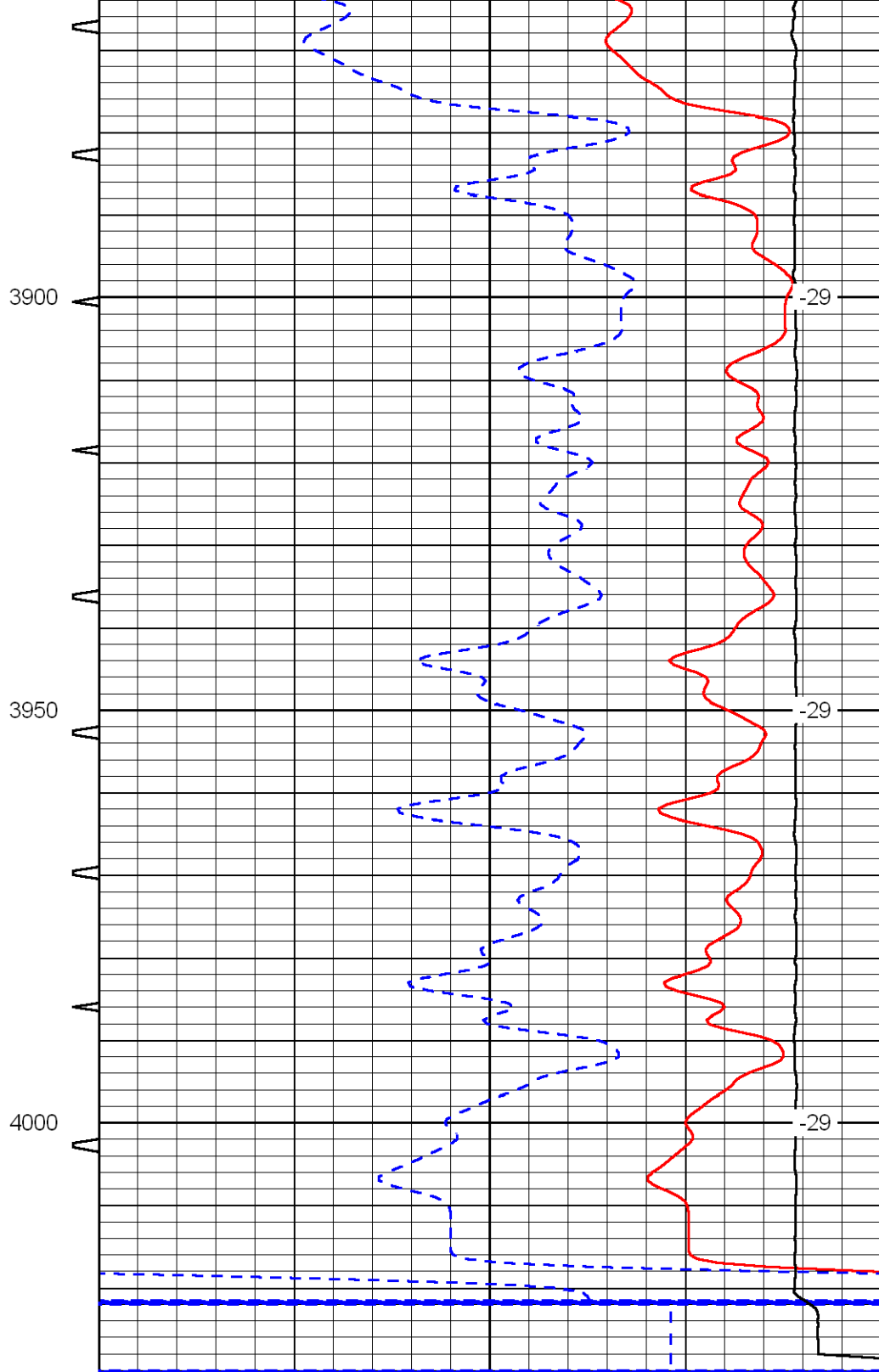








0	Gamma Ray	150
150	Gamma Ray	300
6	Caliper (in)	16



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

LSPD
(ft/min)