



Pioneer Energy Services

Borehole Compensated Sonic Log

API No.

15-171-20984-00-00

Company **Landmark Resources, Inc.**

Well **Rose #1-3**

Field **Wildcat**

County

Scott

State **Kansas**

Location

**NW NE NW SW
2322' FSL / 985' FWL**

Other Services
CNL/CDL
MEL / DIL

Sec: 3

Twp: 17S

Rge: 34W

Elevation

Permanent Datum Ground Level Elevation 3125
Log Measured From Kelly Bushing 5 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Date 9/29/2013

Run Number Two

Type Log BHC Sonic

Depth Driller 4880

Depth Logger 4883

Bottom Logged Interval 4872

Top Logged Interval 250

Type Fluid In Hole Chemical

Salinity, PPM CL 8500

Density 9.3

Level Full

Max. Rec. Temp. F 125

Operating Rig Time 5 Hours

Equipment -- Location 15 Days

Recorded By R. Barnhart

Witnessed By Terry McLeod

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.

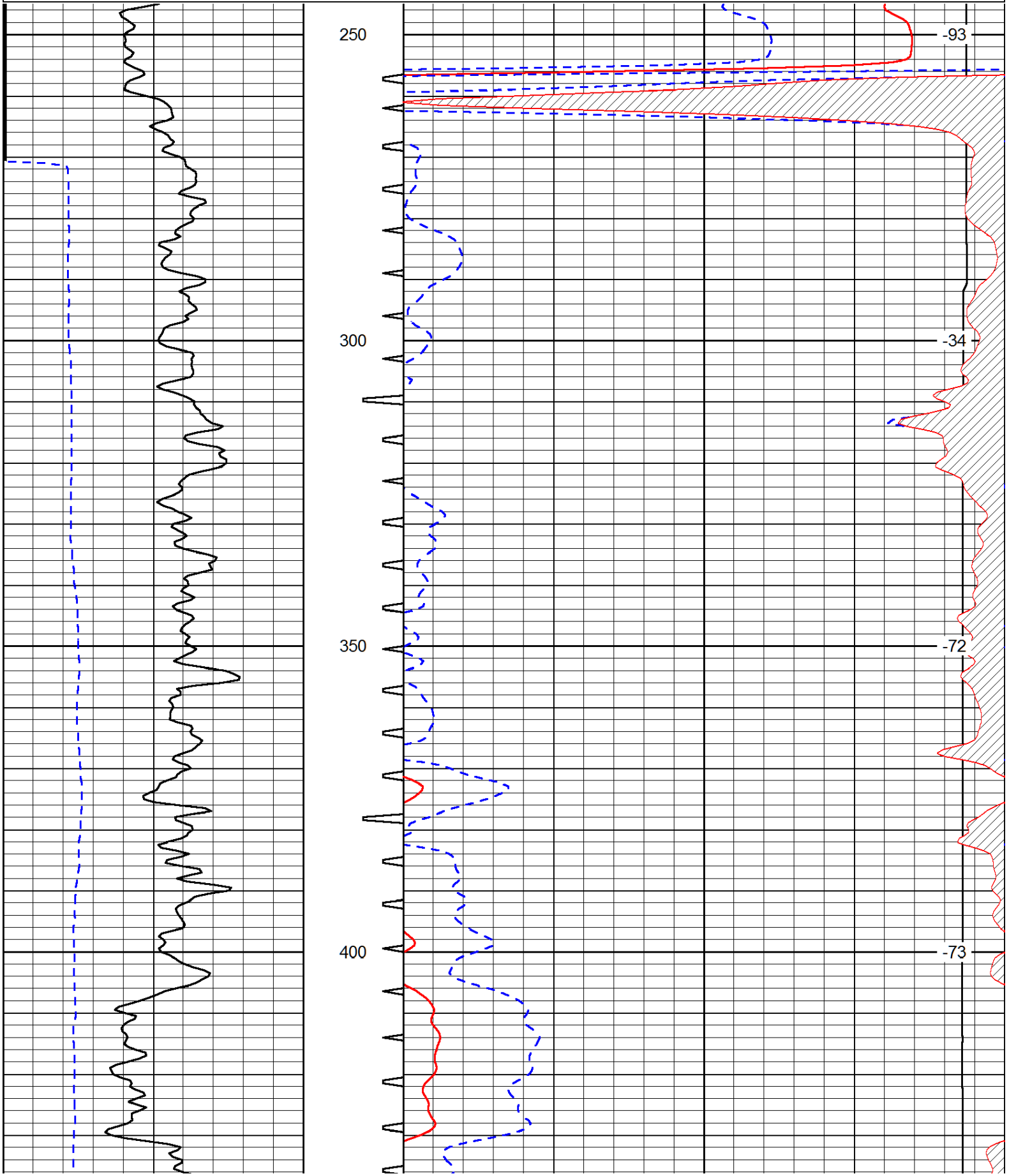
Comments

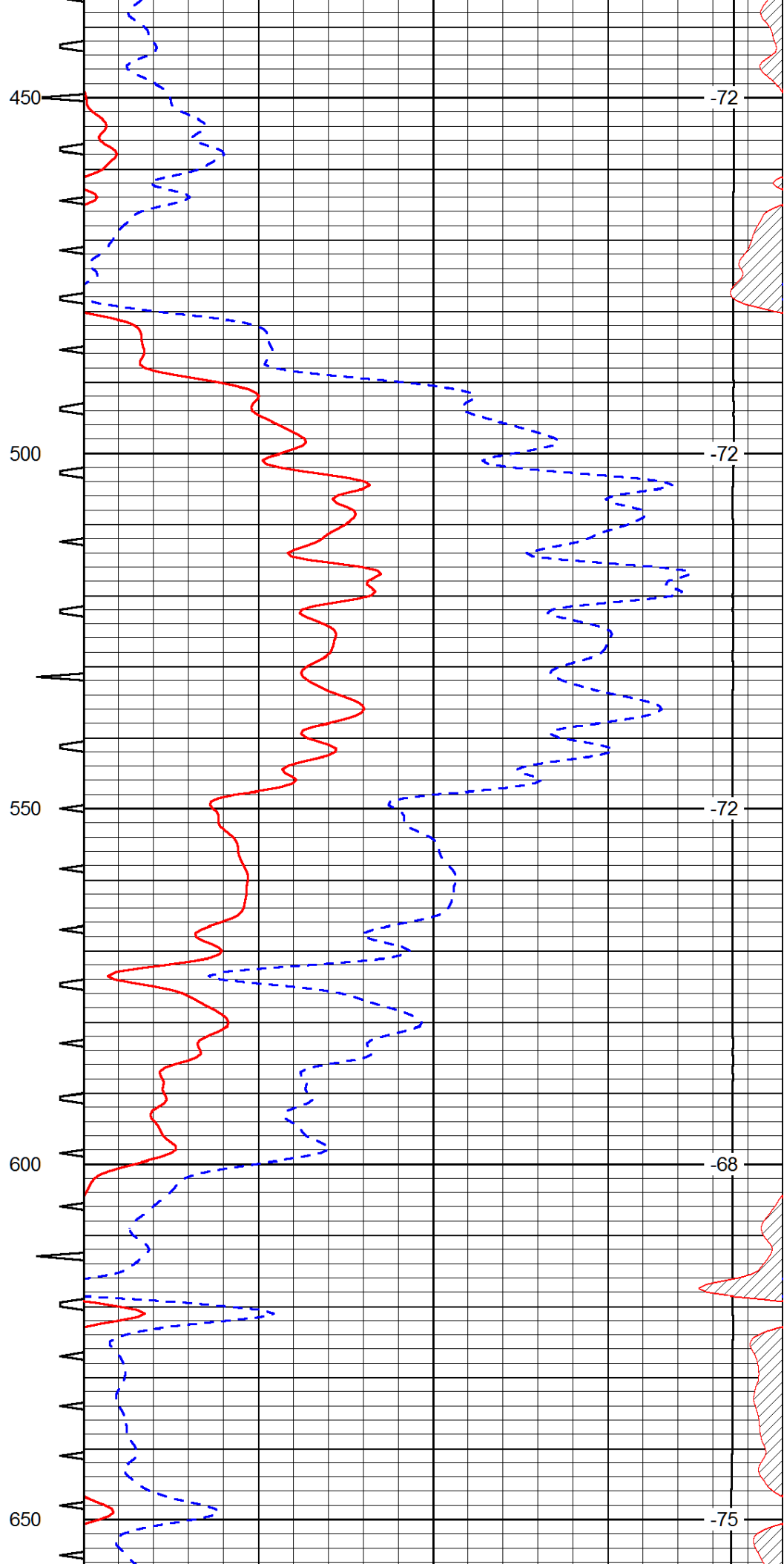
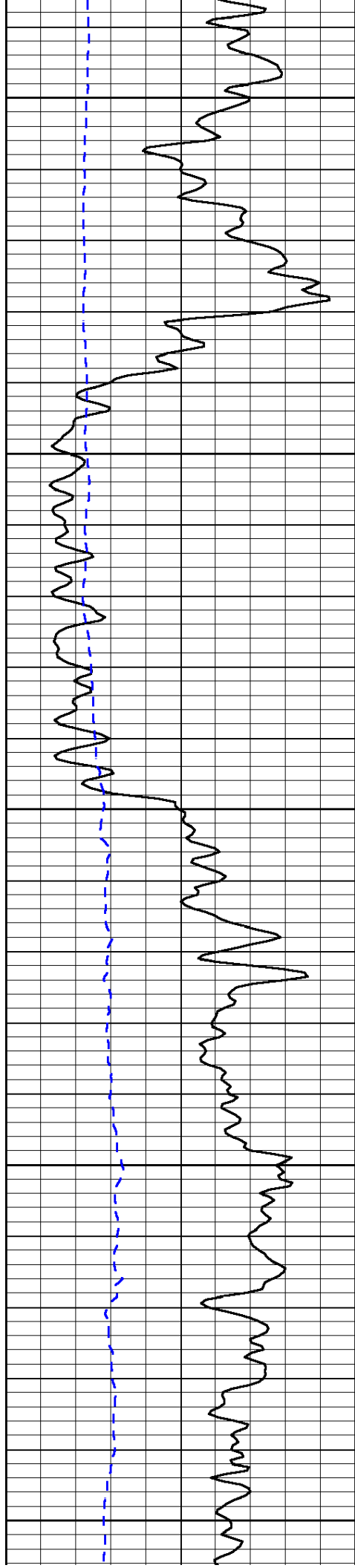
Thank you for using Log-Tech, Inc.
(785) 625-3858

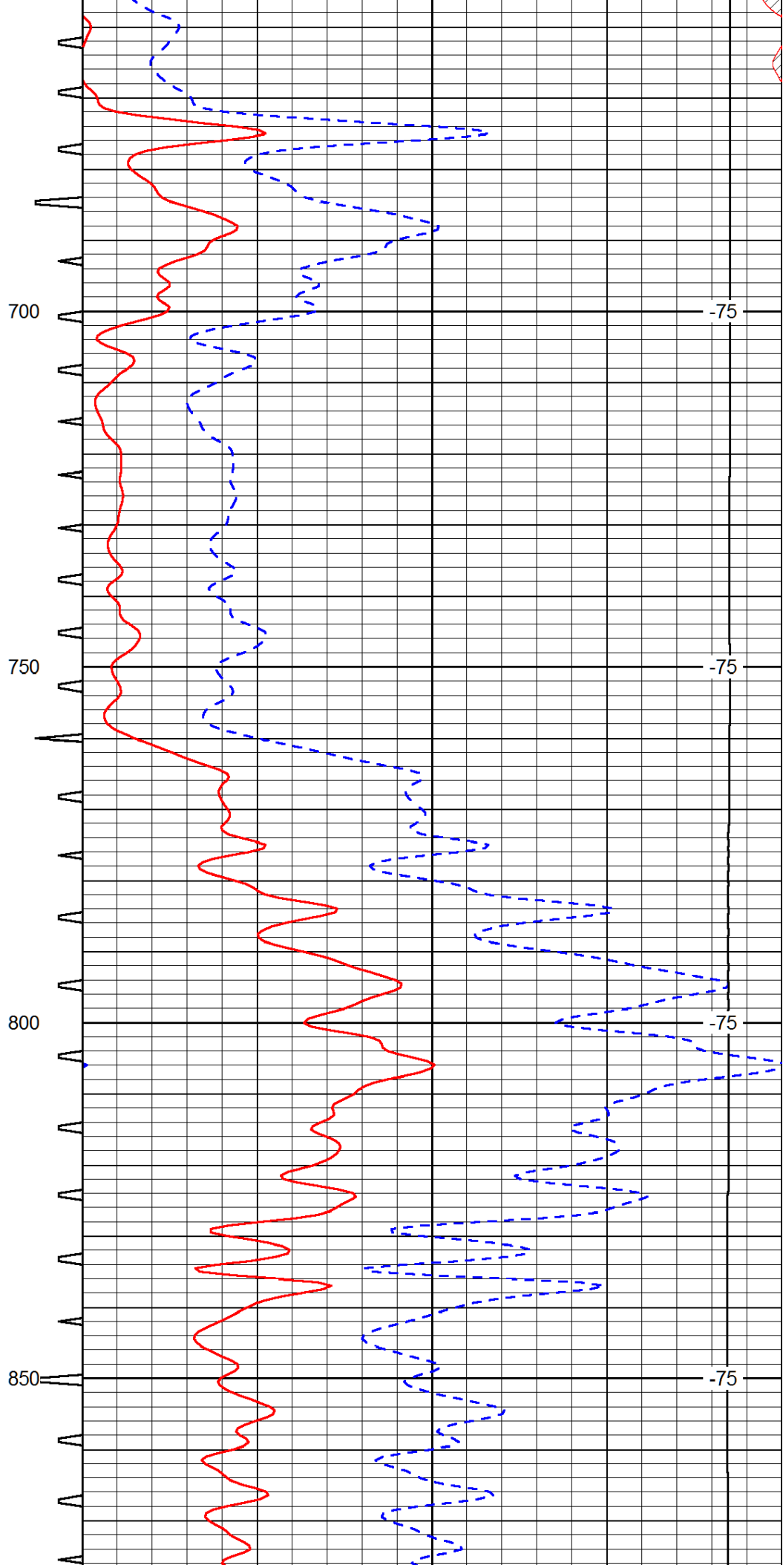
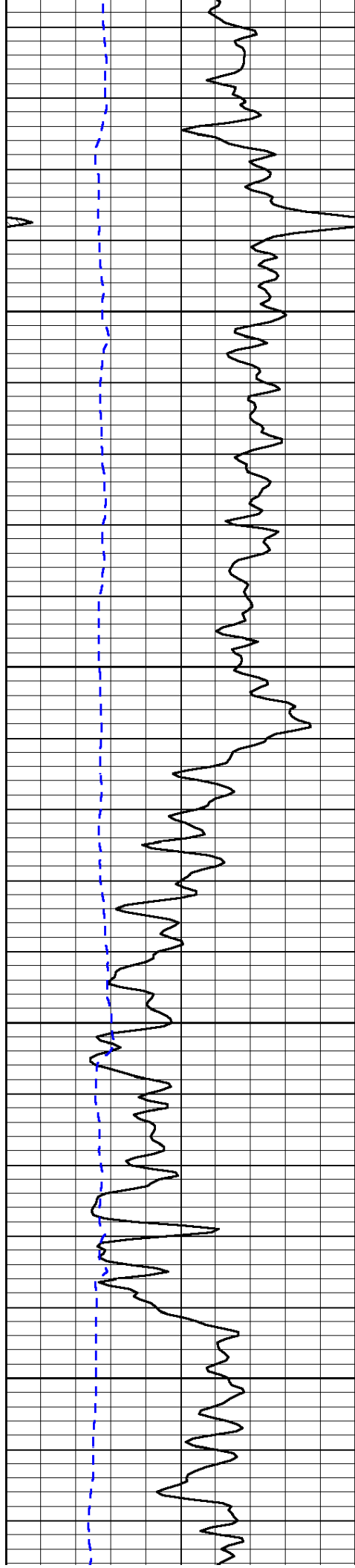
Scott City, KS:
N to Hwy 83 & Hwy 4: 4W, 1N, 5W, 1/2S, E into

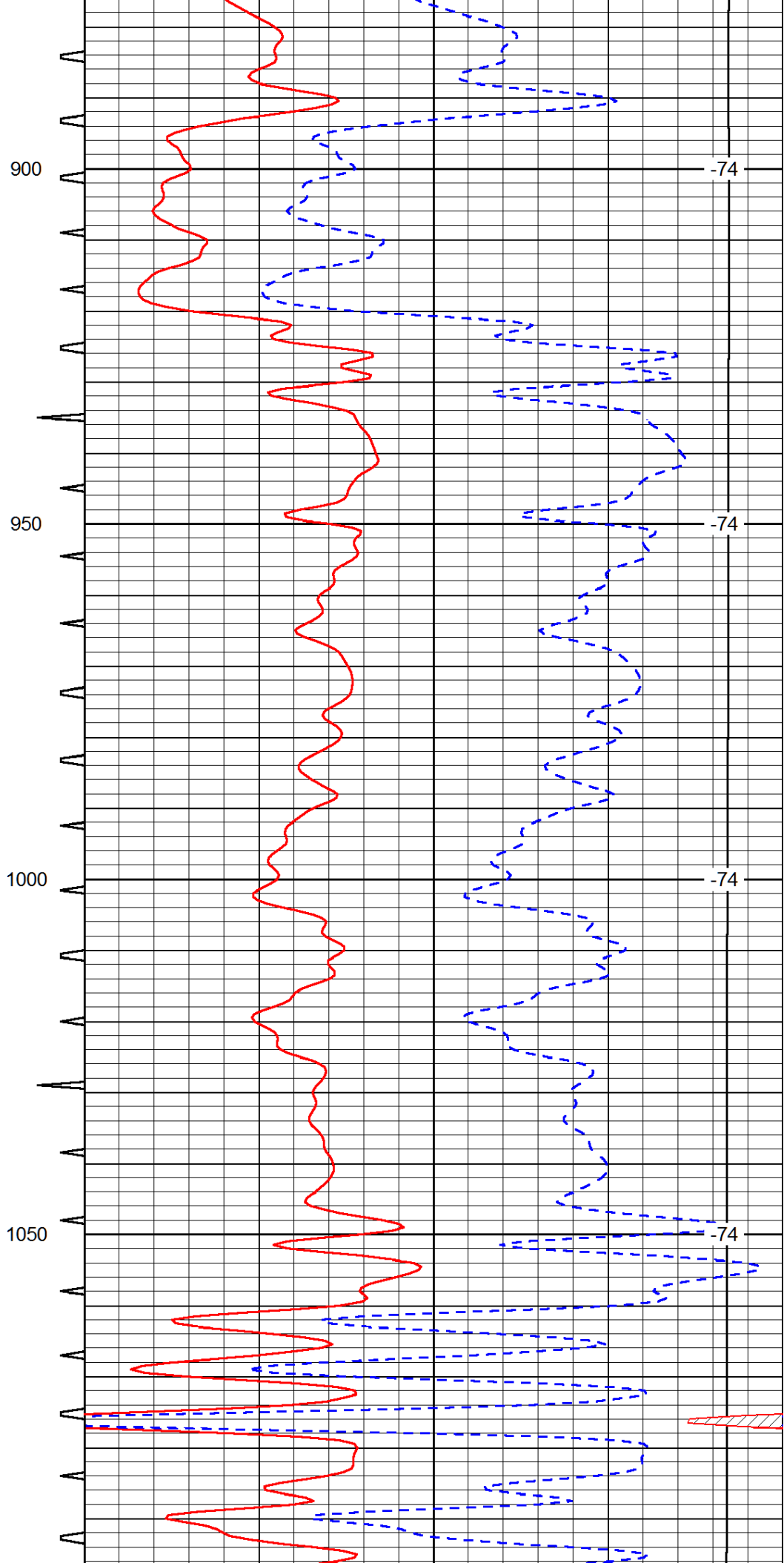
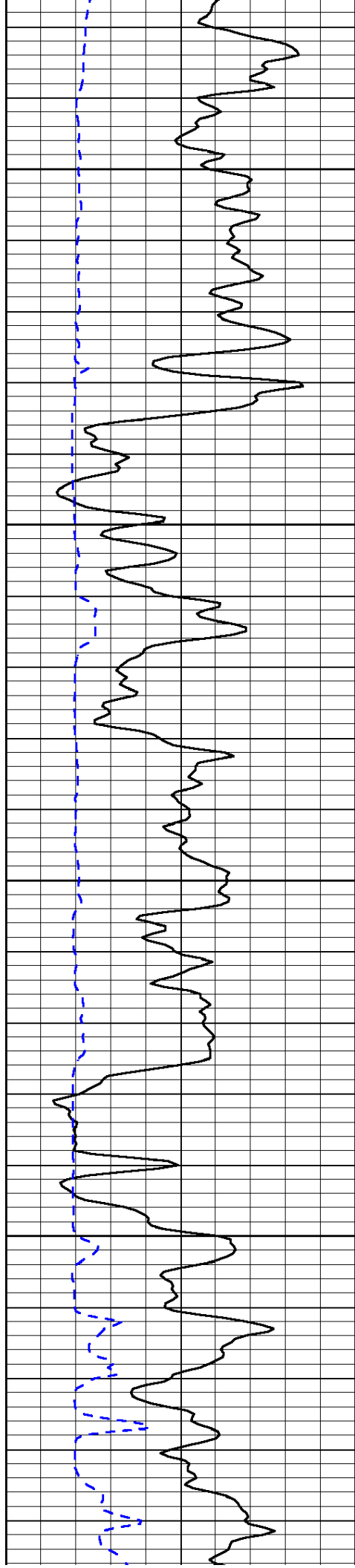
Database File: landmark_hd.db
Dataset Pathname: dil/Indmain
Presentation Format: sonic
Dataset Creation: Sun Sep 29 12:59:30 2013
Charted by: Depth in Feet scaled 1:240

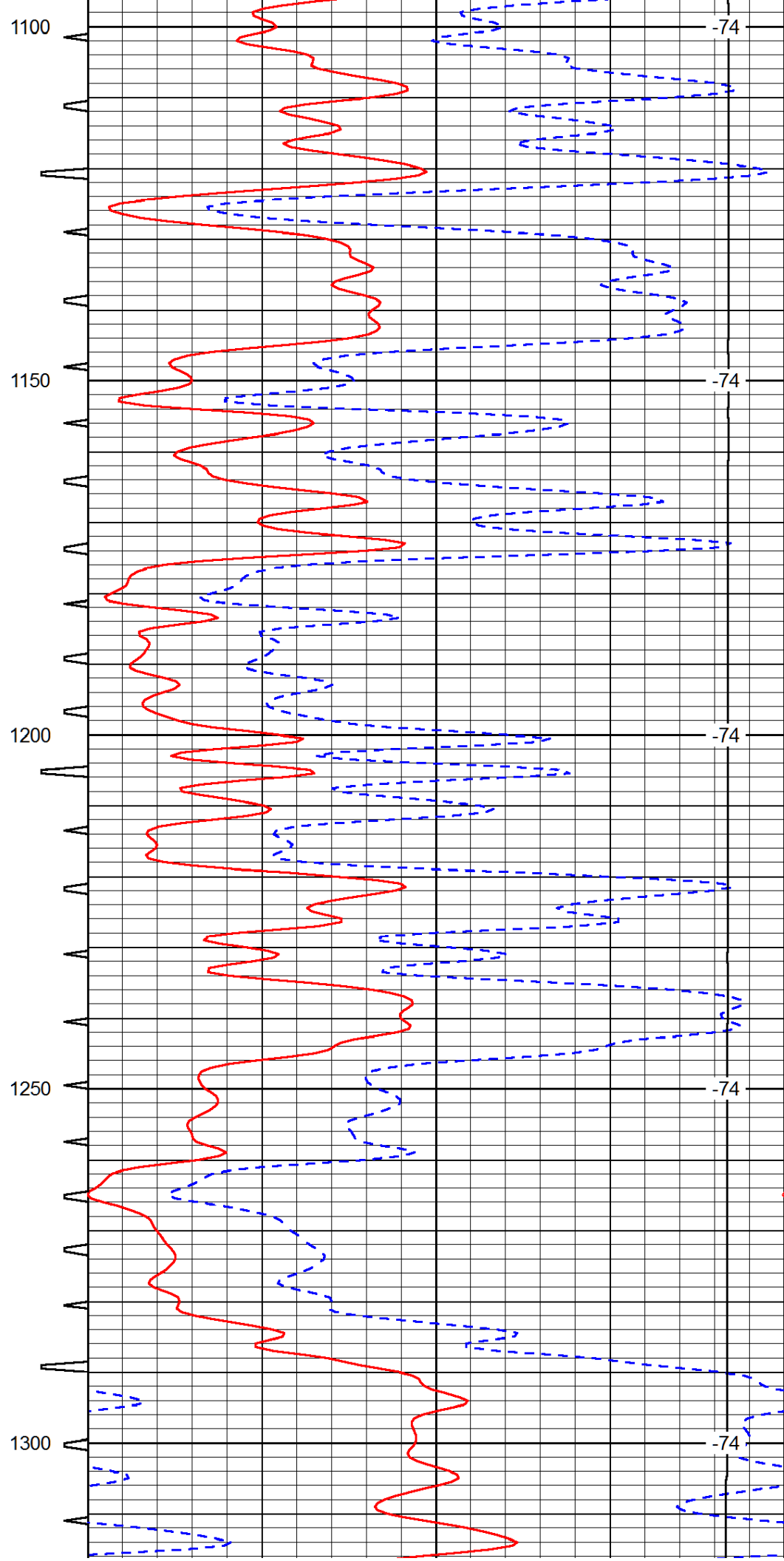
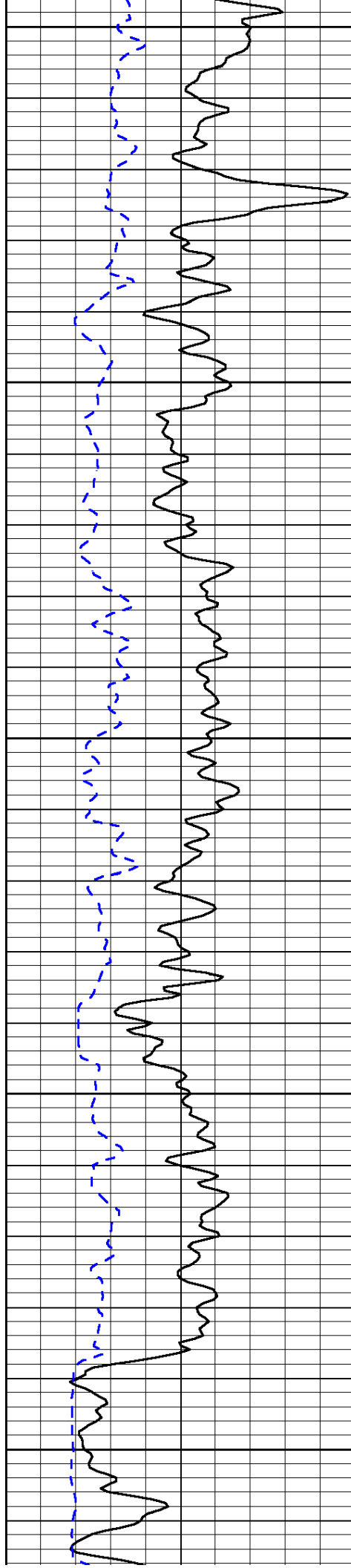
Charted by:			Depth in Feet scaled 1:210			
0	Gamma Ray (GAPI)	150	Sonic Int	140	Delta Time (usec/ft) (usec/ft)	40
150	Gamma Ray (GAPI)	300	5 (msec) 0	30	Sonic Porosity (pu)	-10
6	dCAL (in)	16		15000	LTEN (lb) (lb)	0
						LSPD (ft/min)

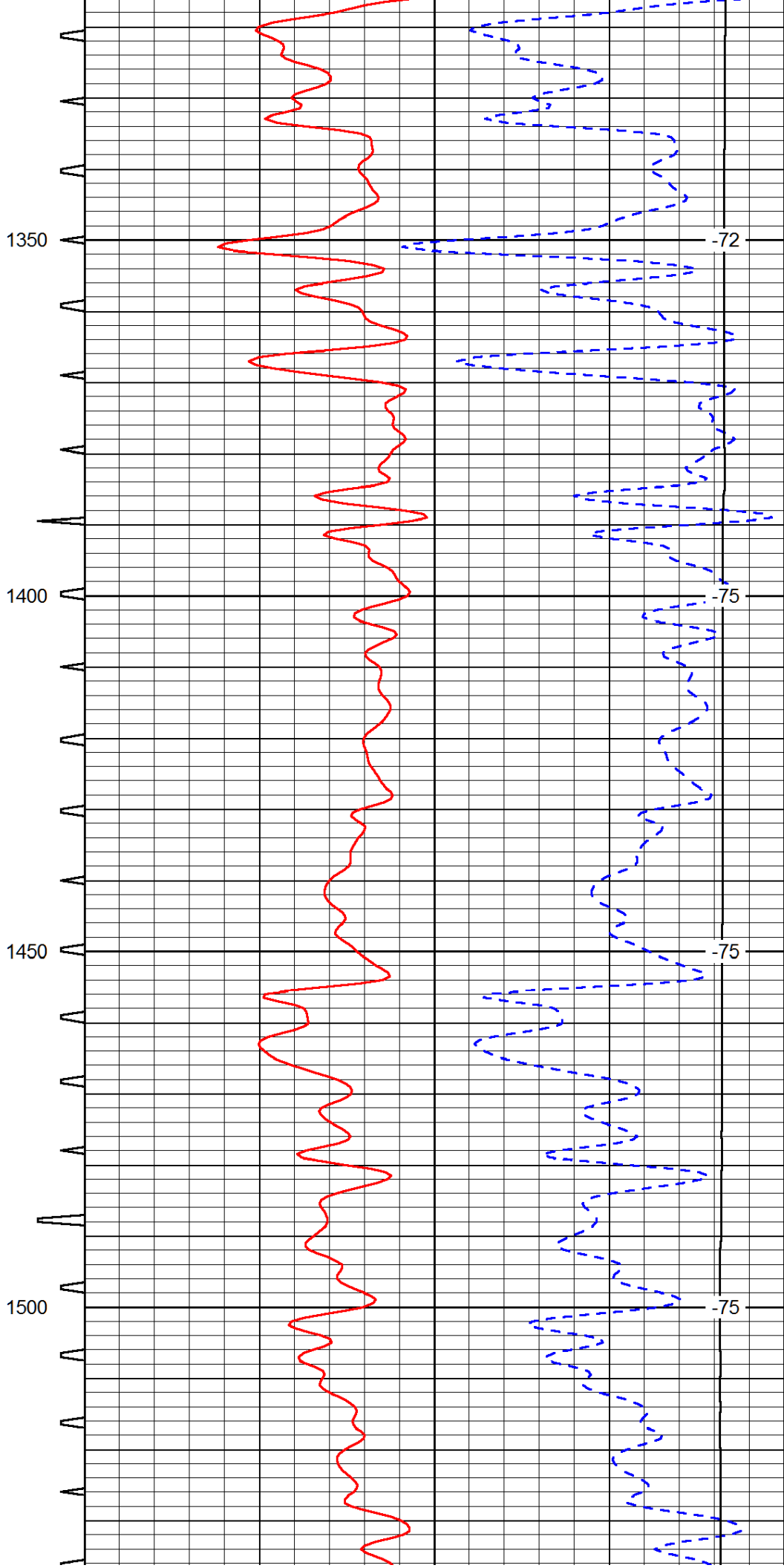
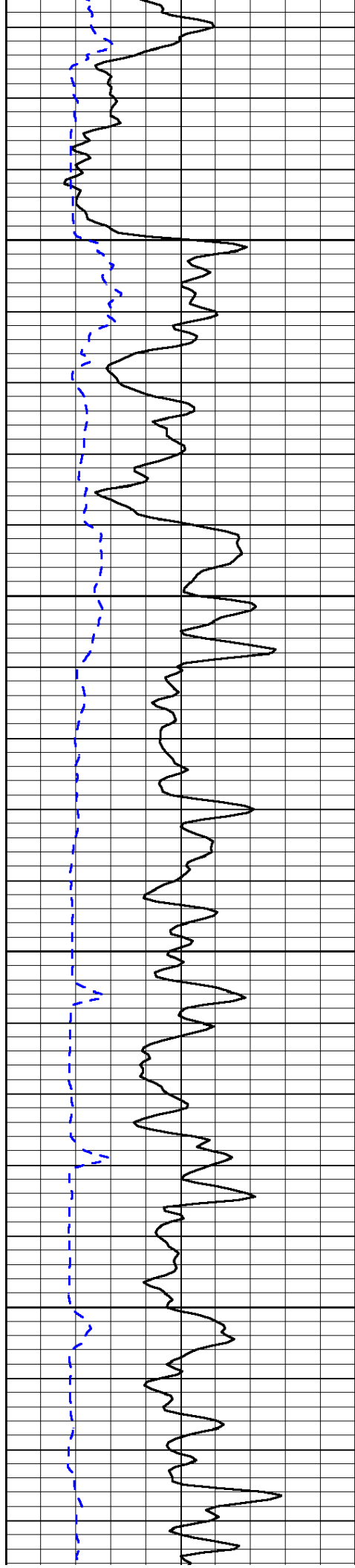


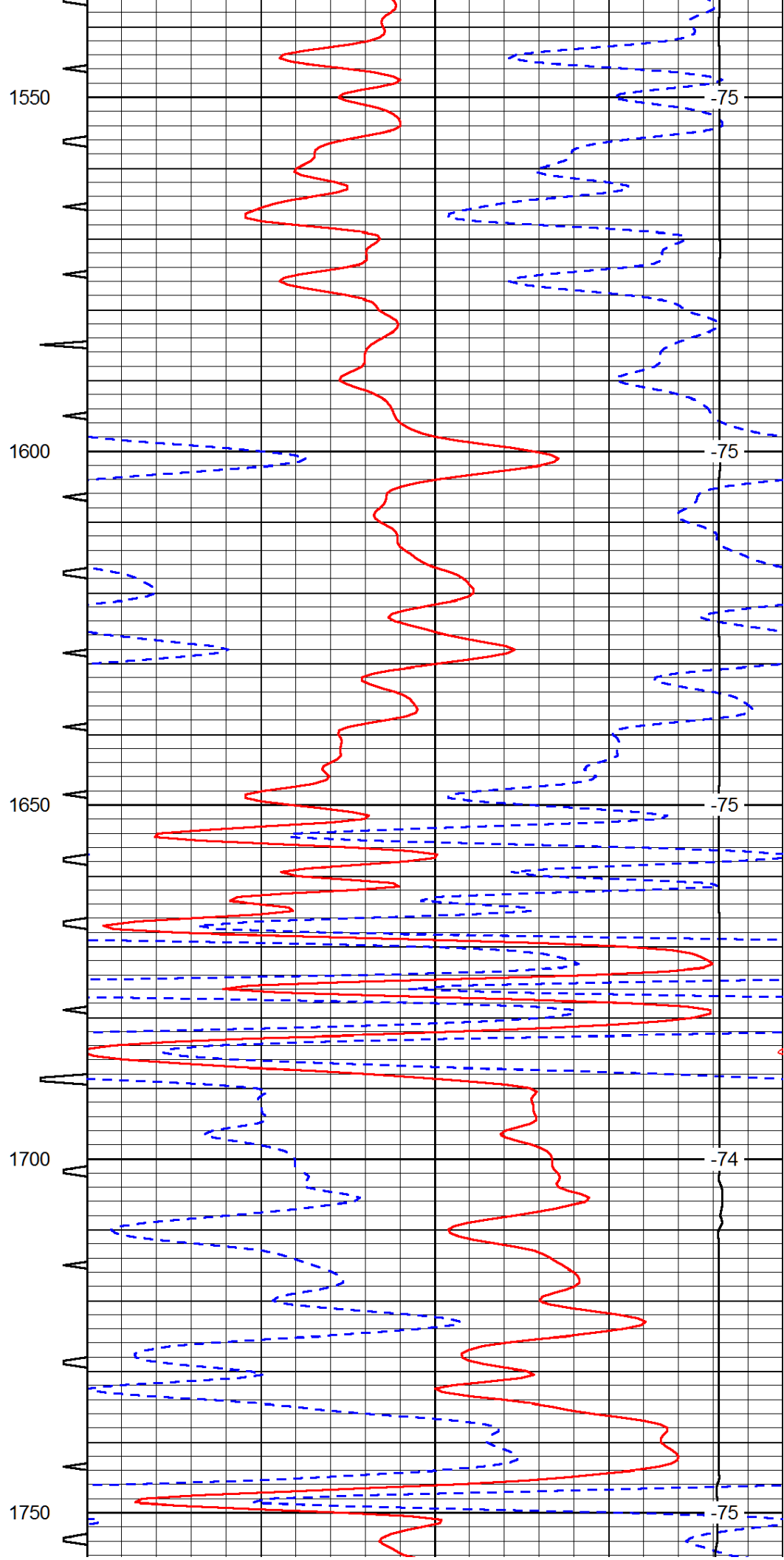
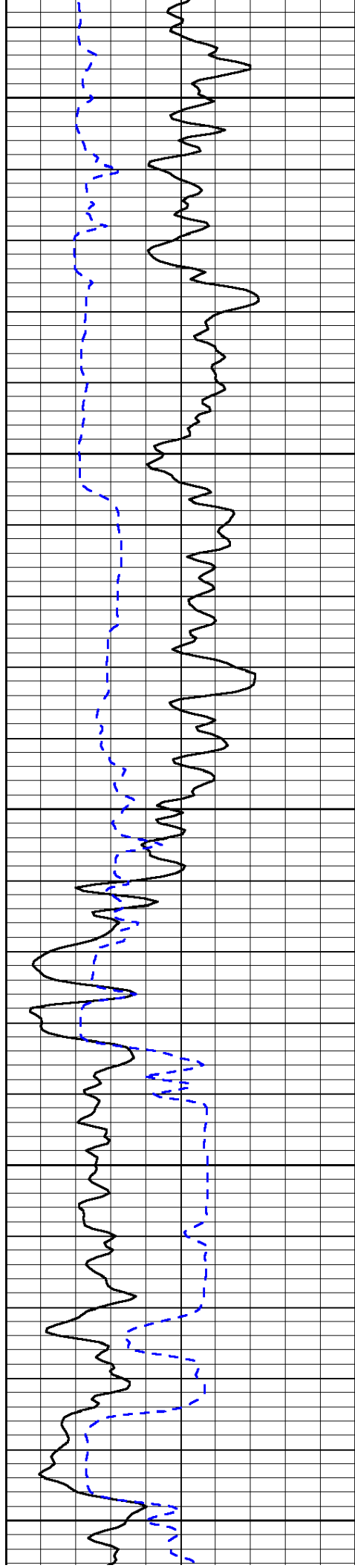


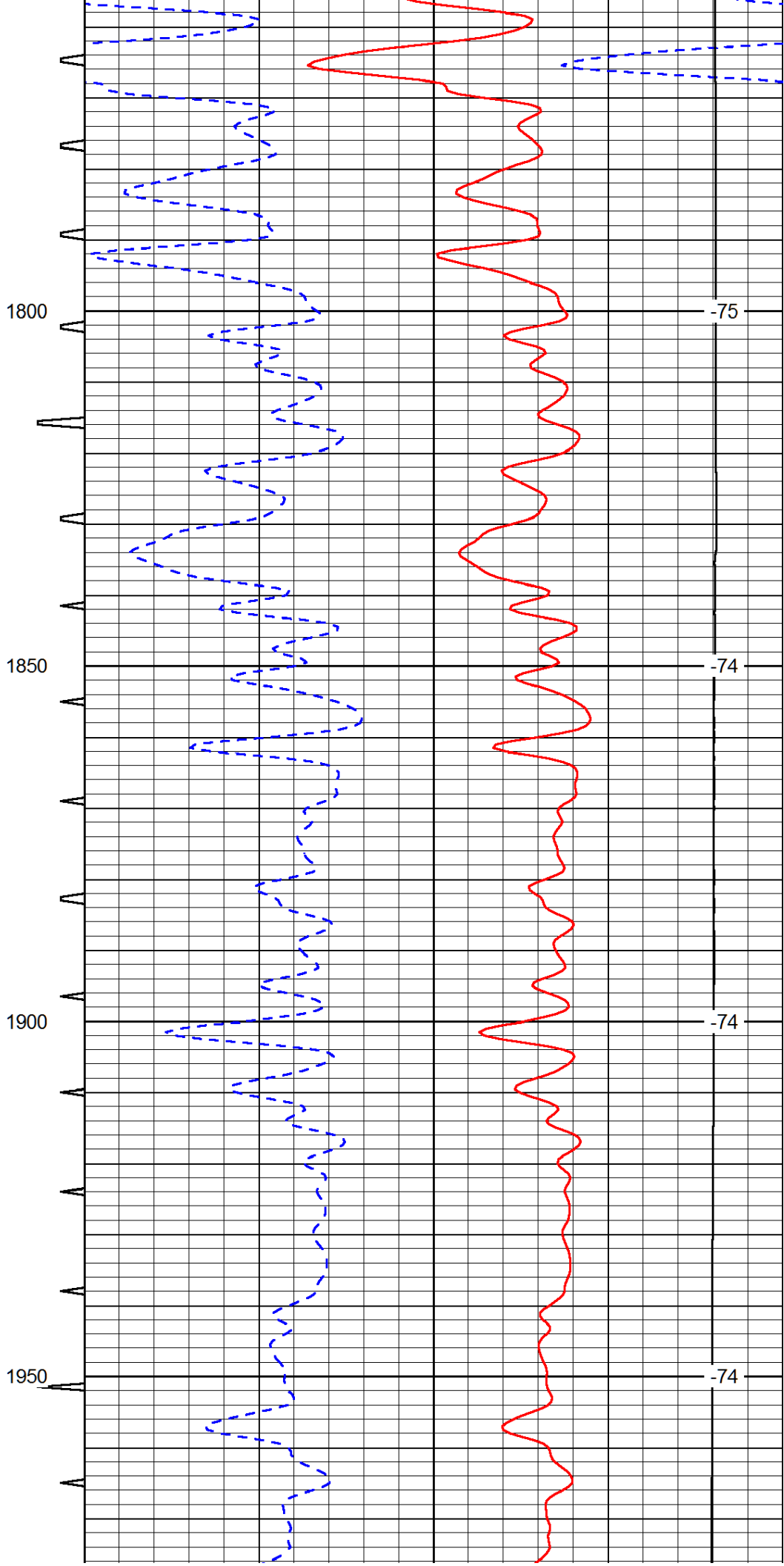
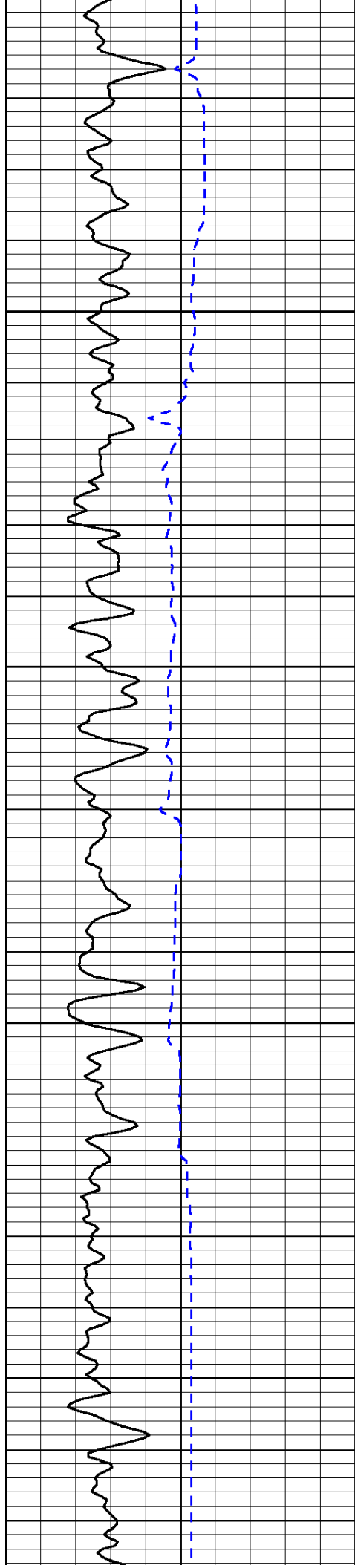


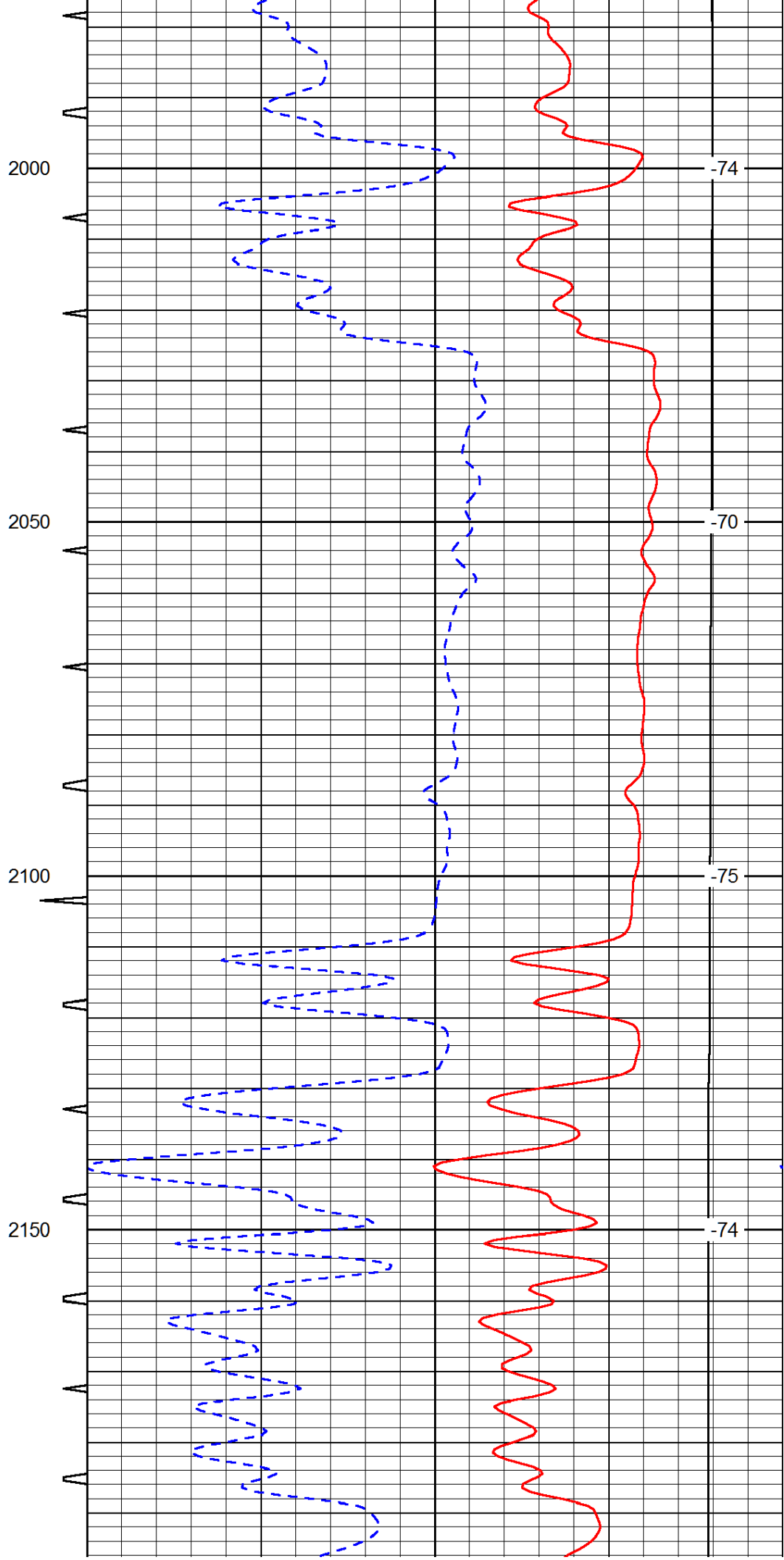
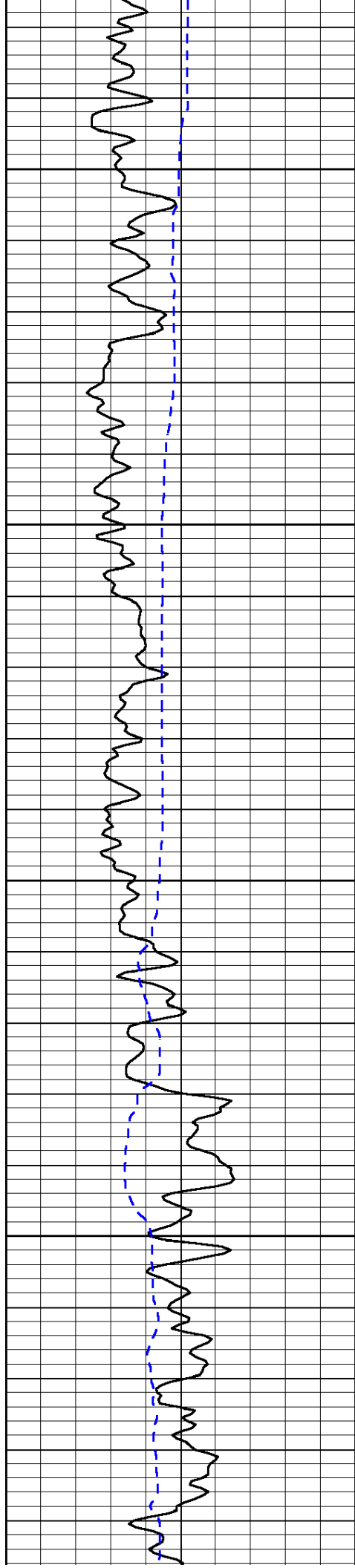


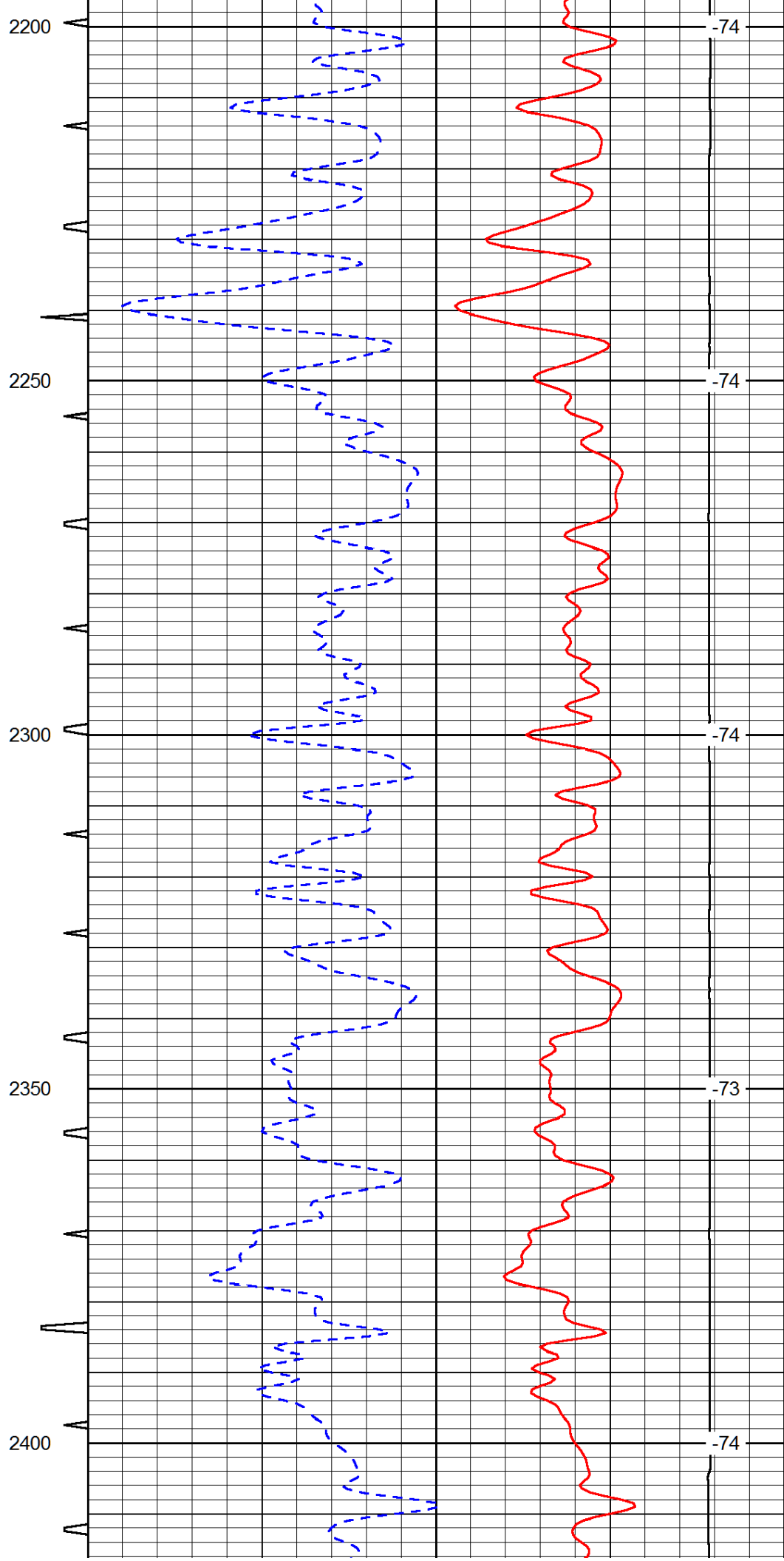
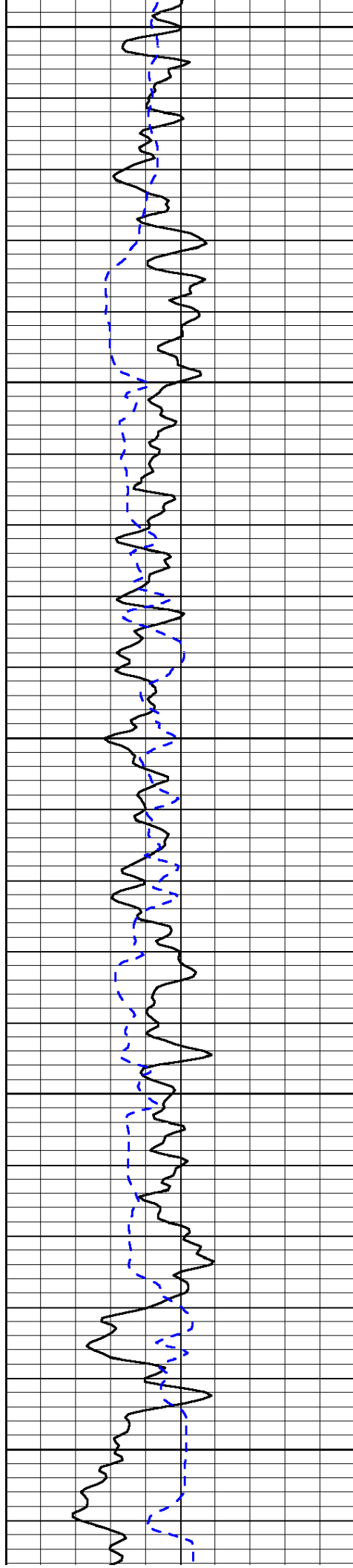


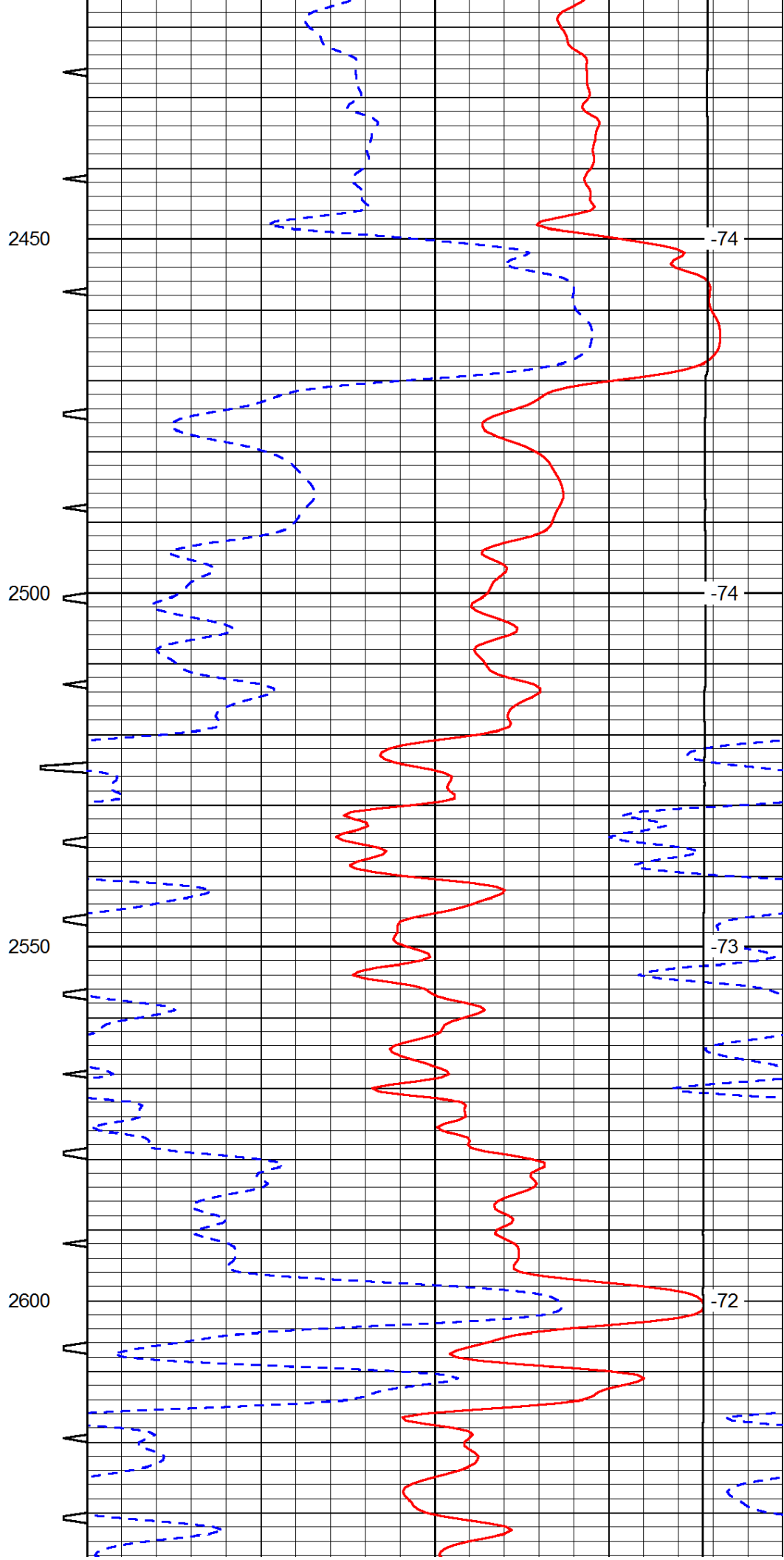
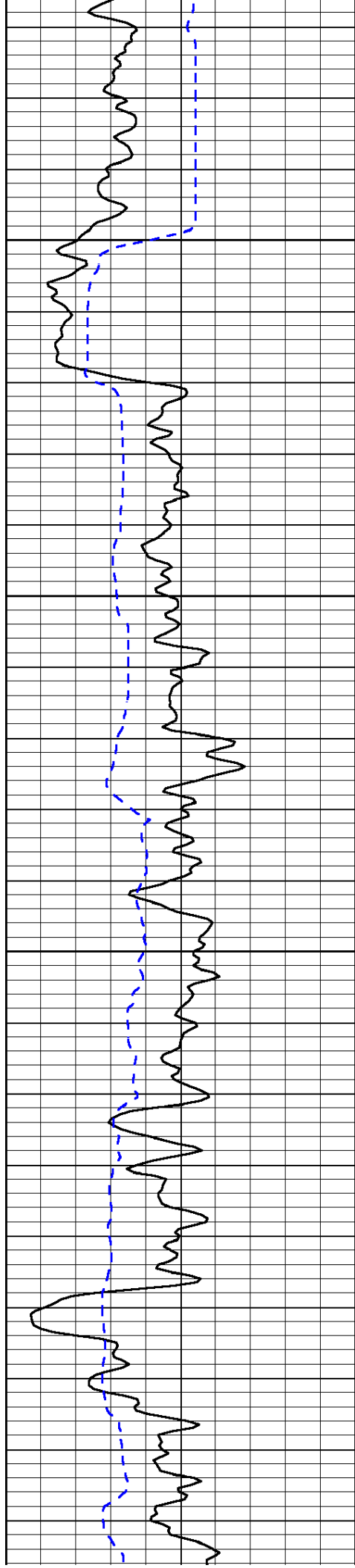


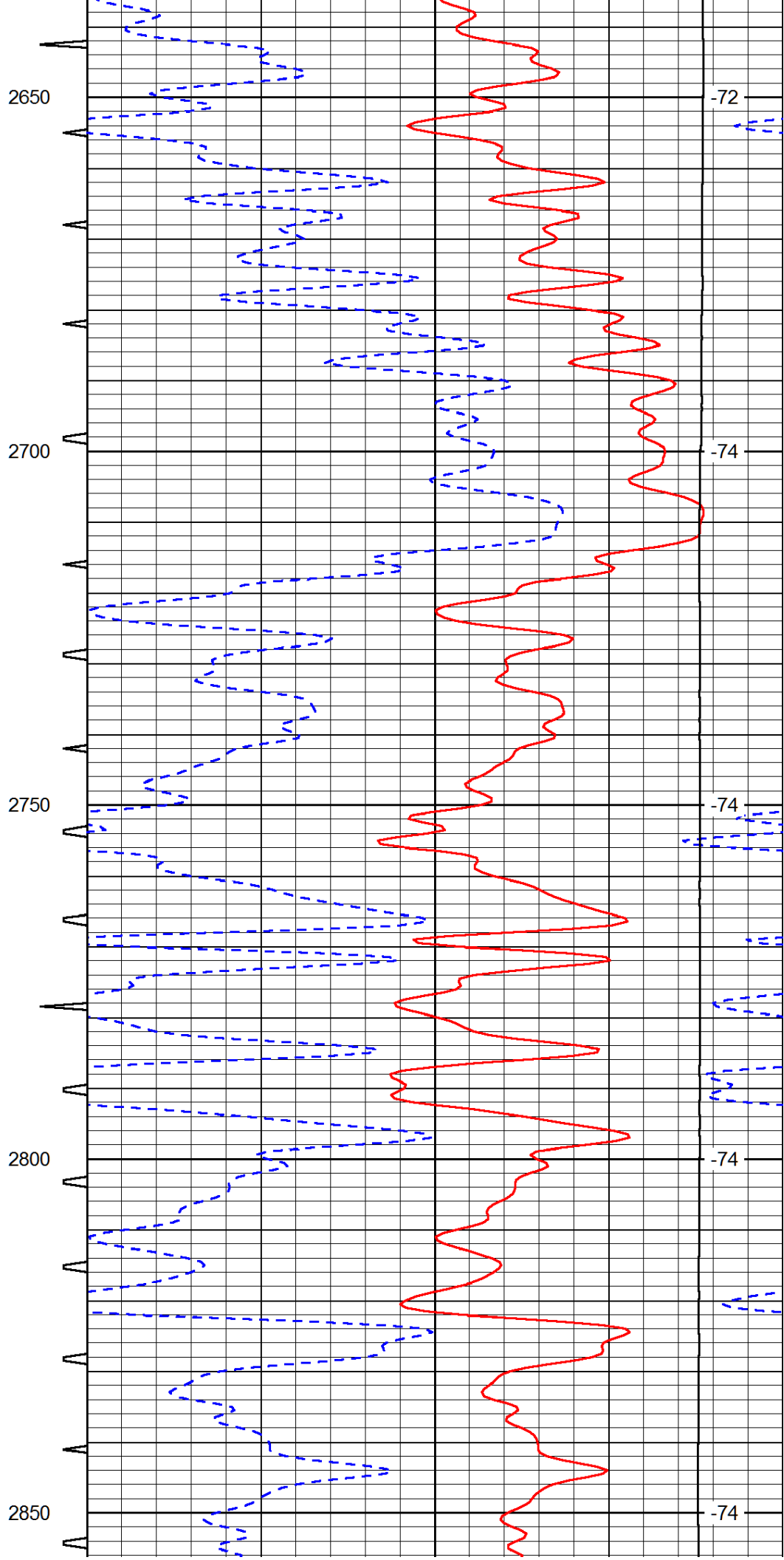
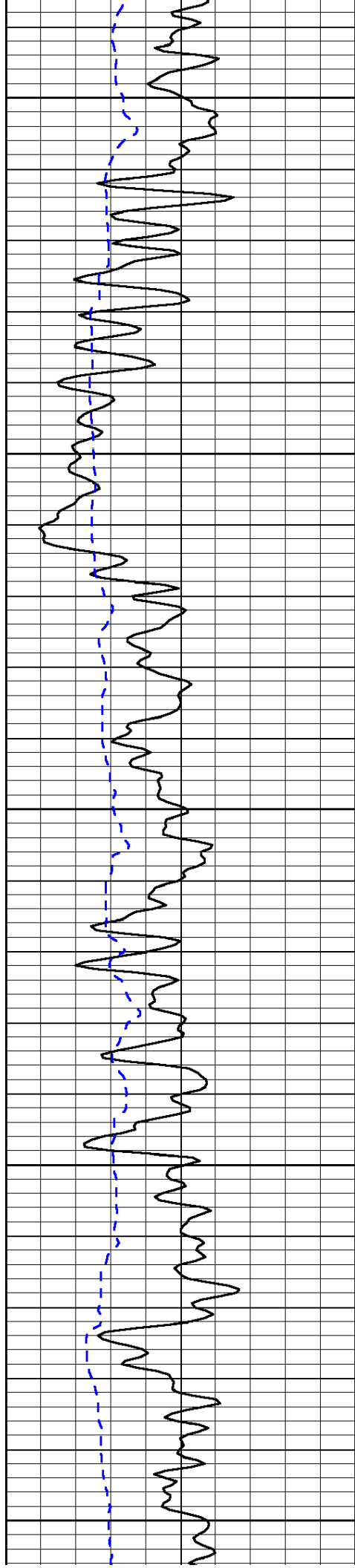


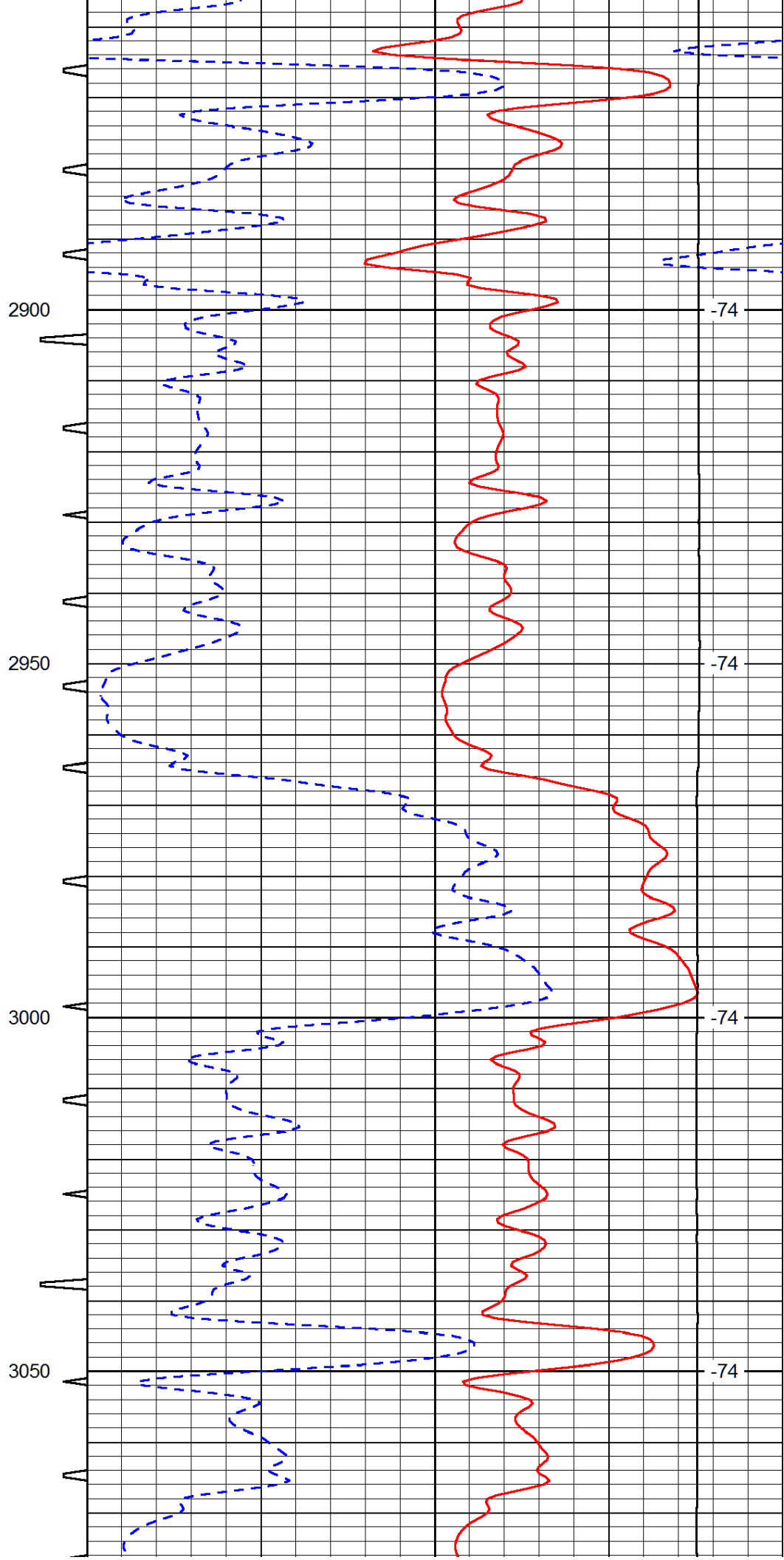
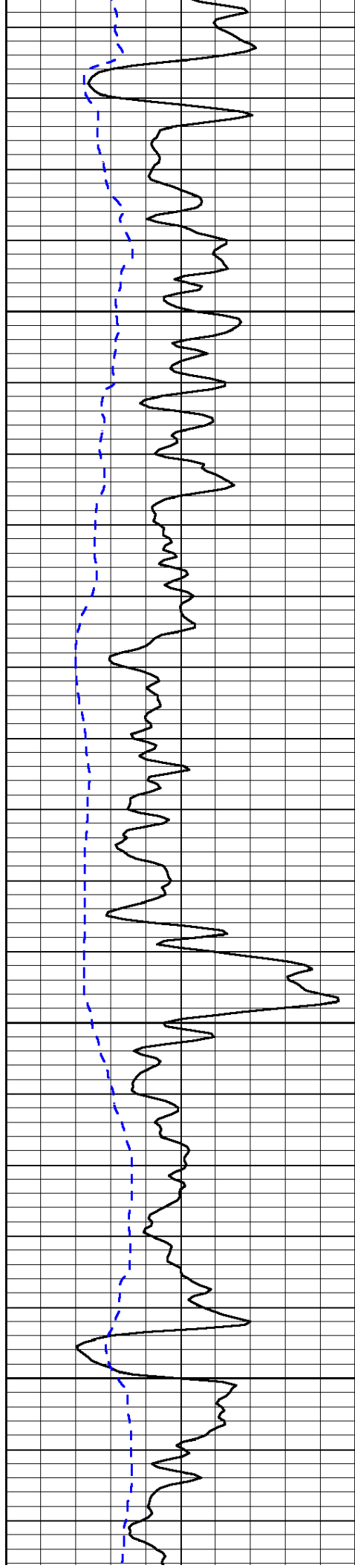


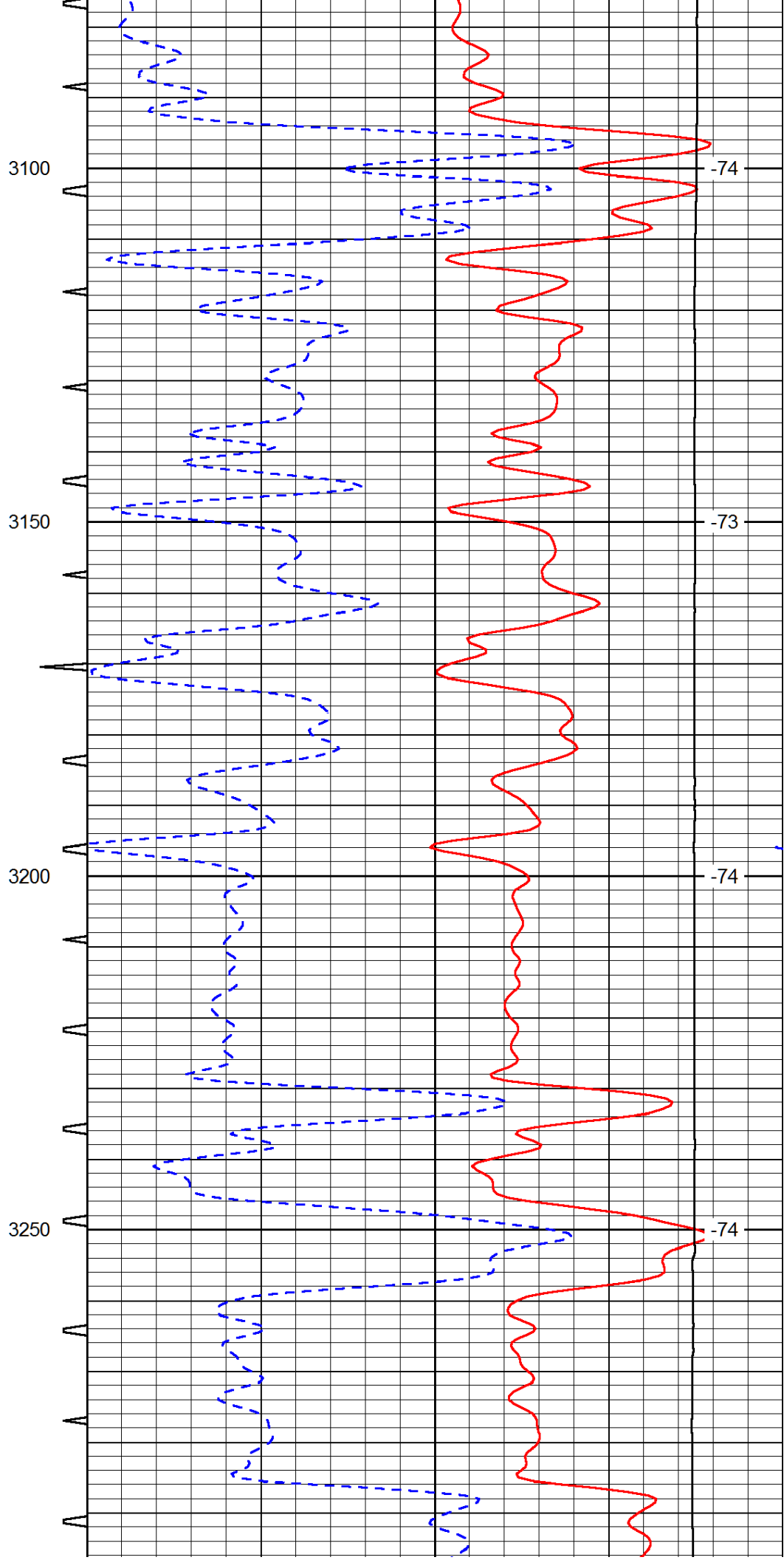
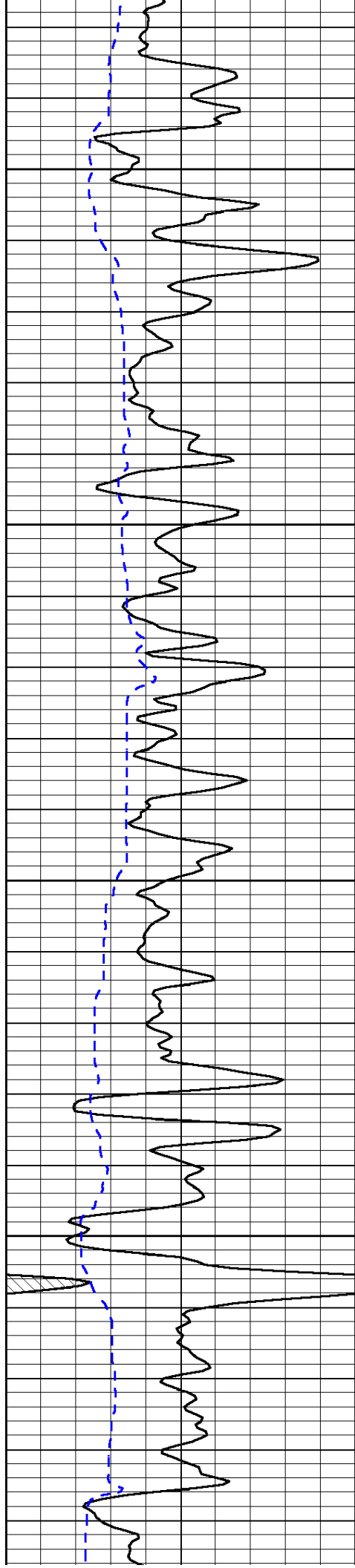


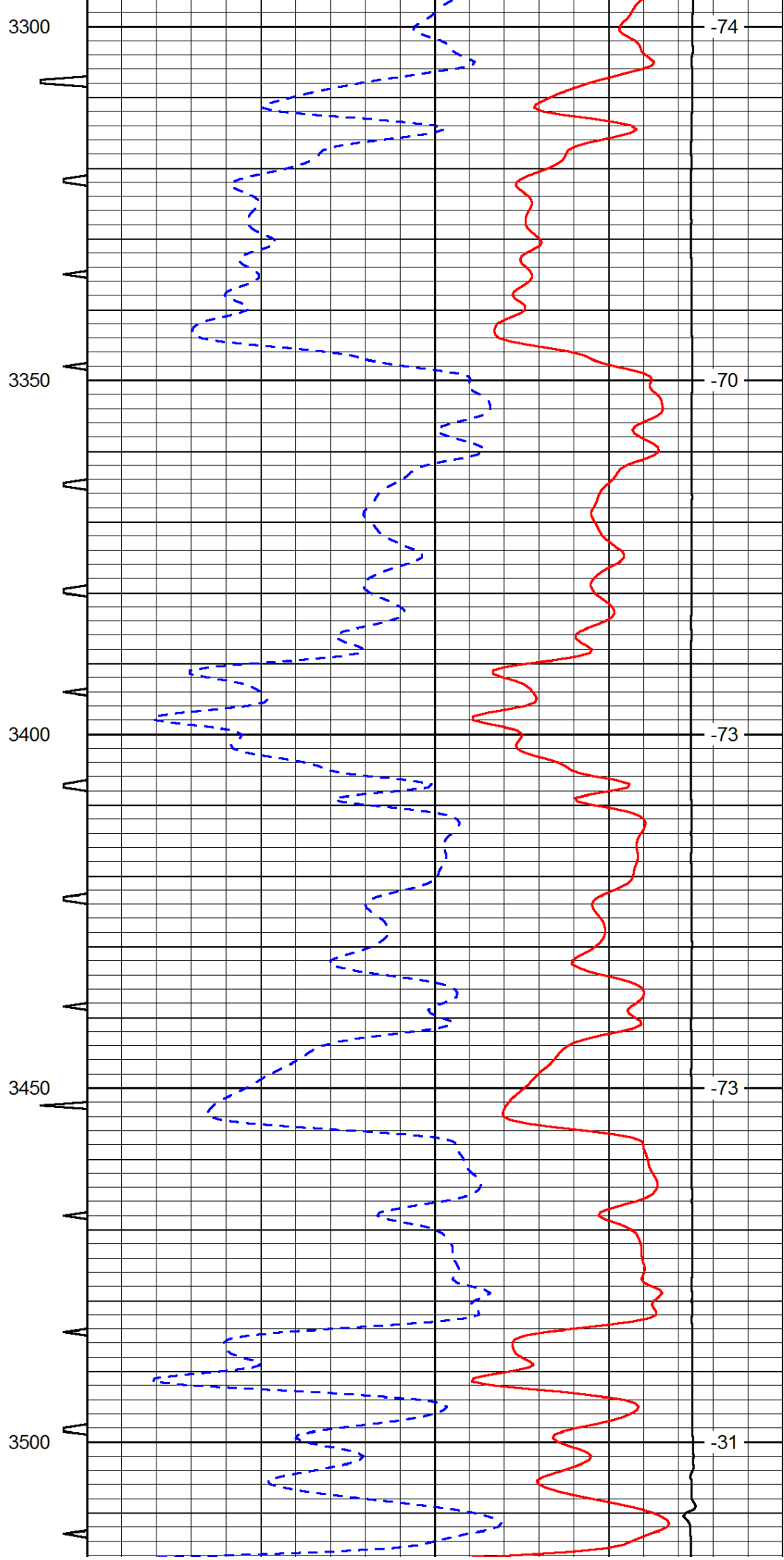
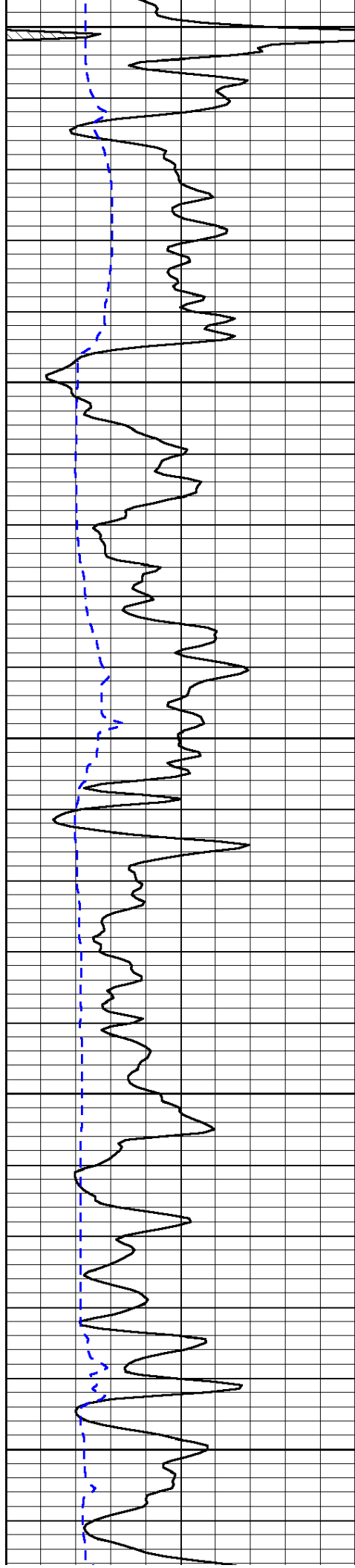


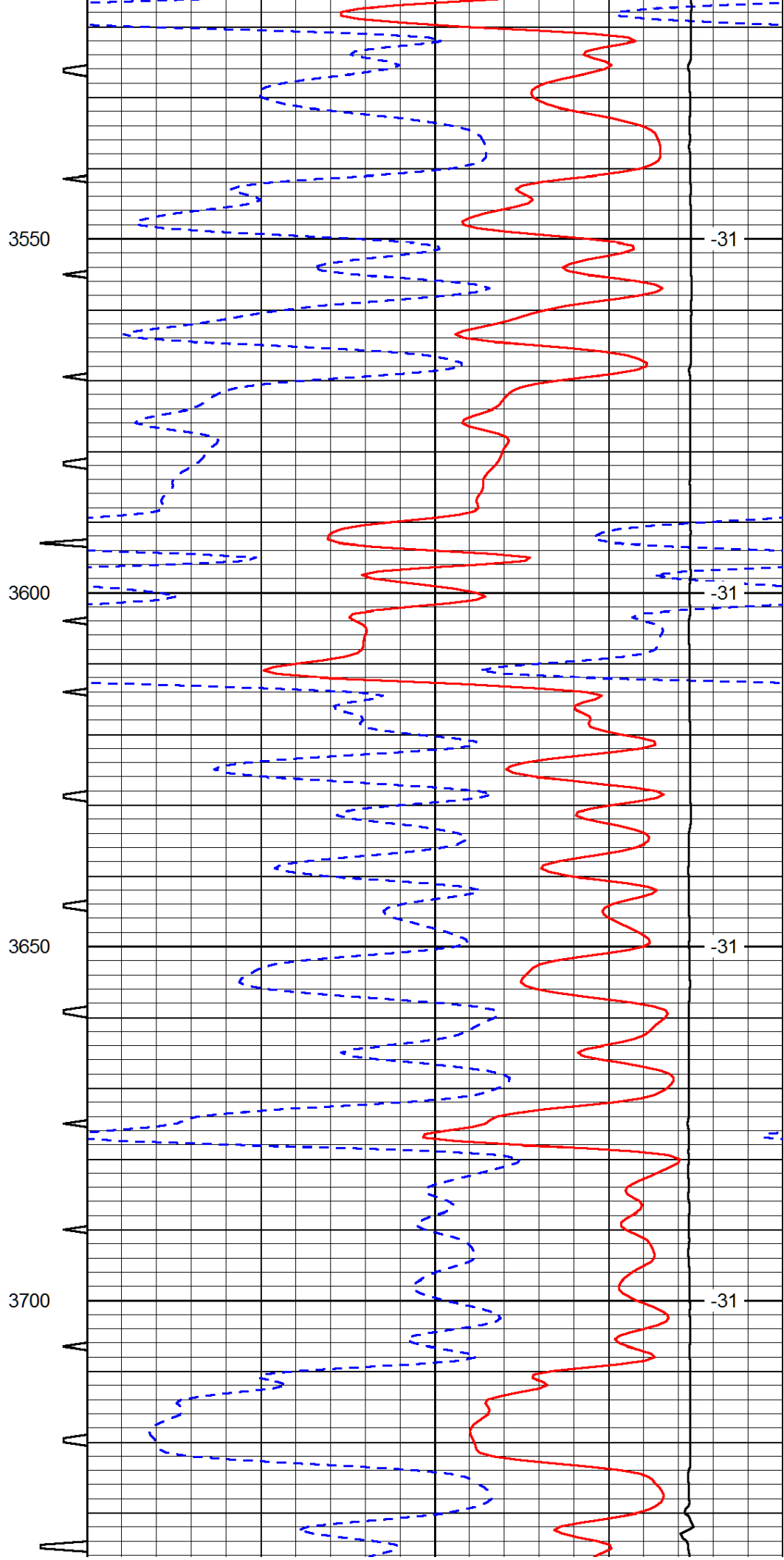
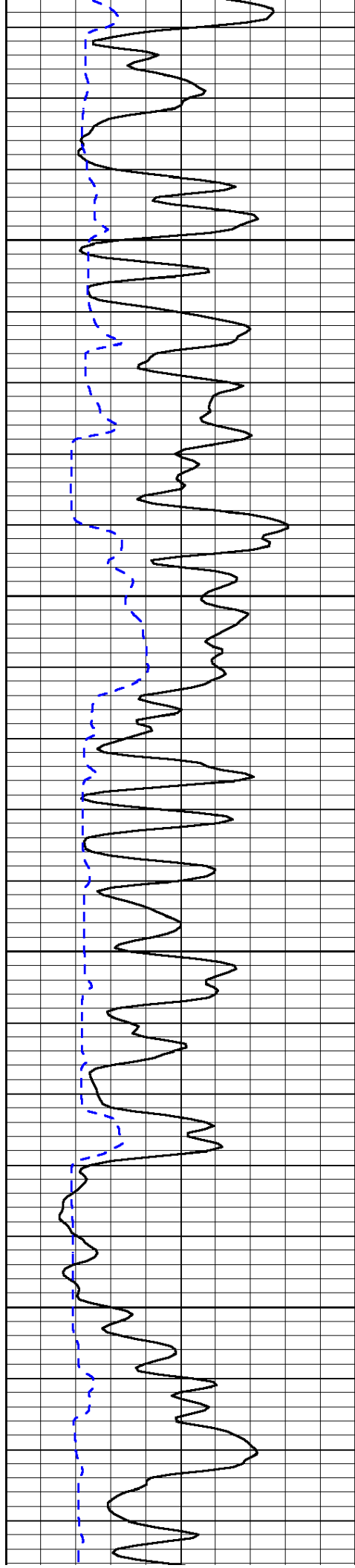


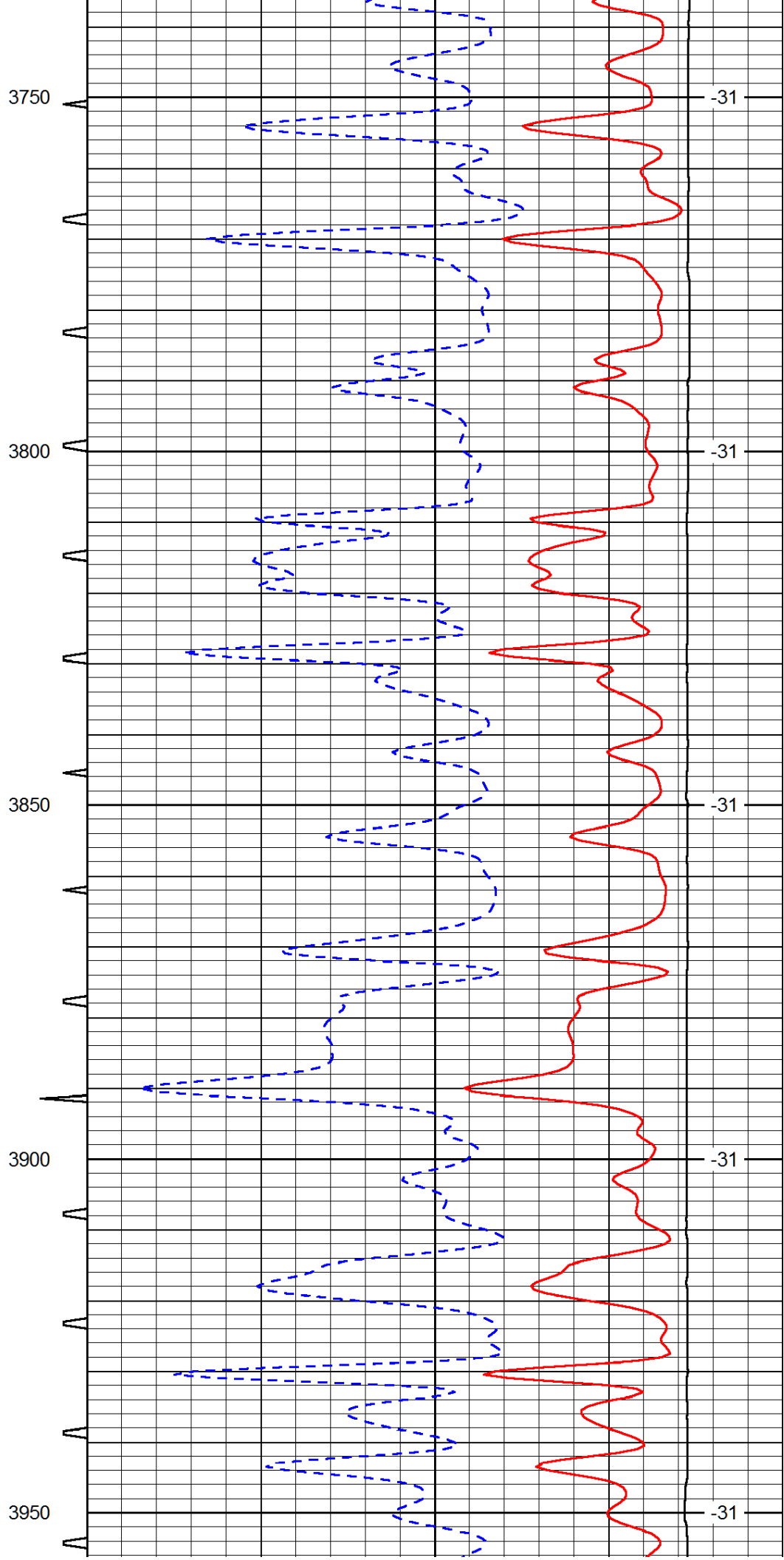
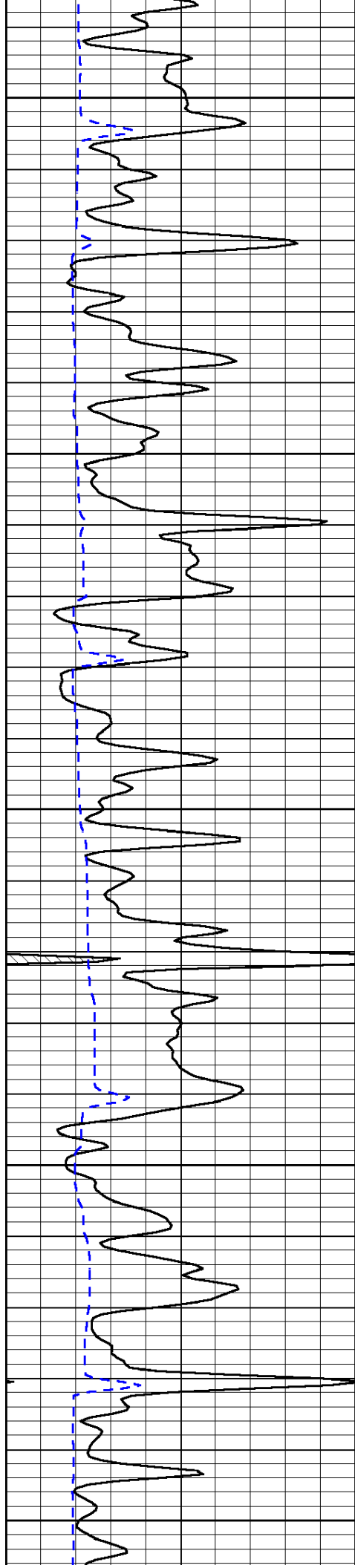


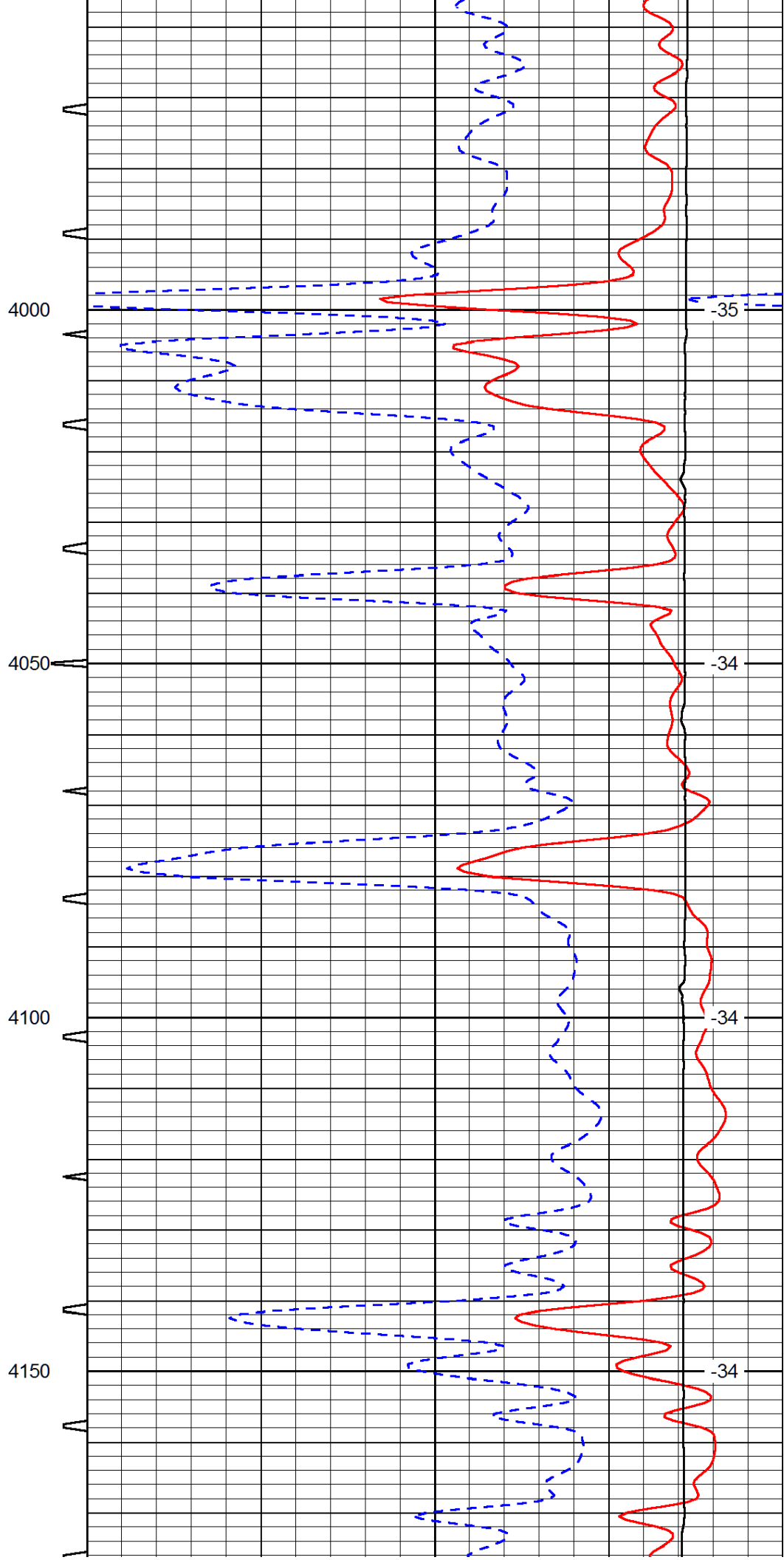
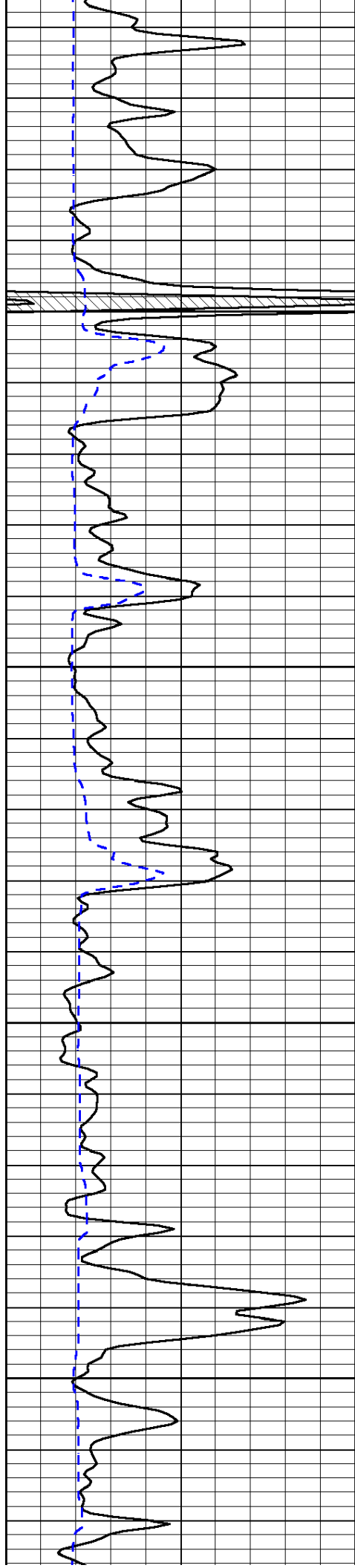


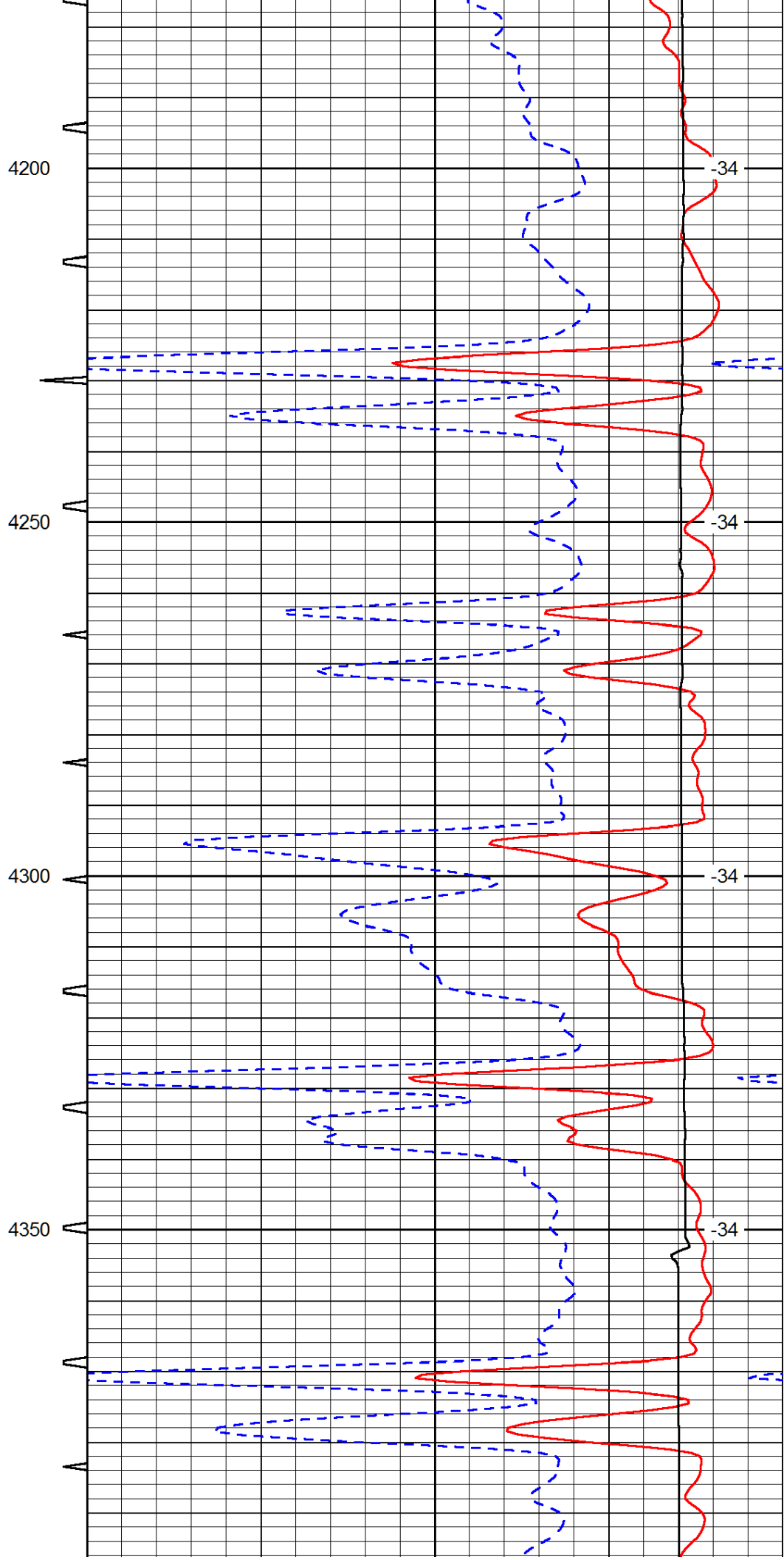
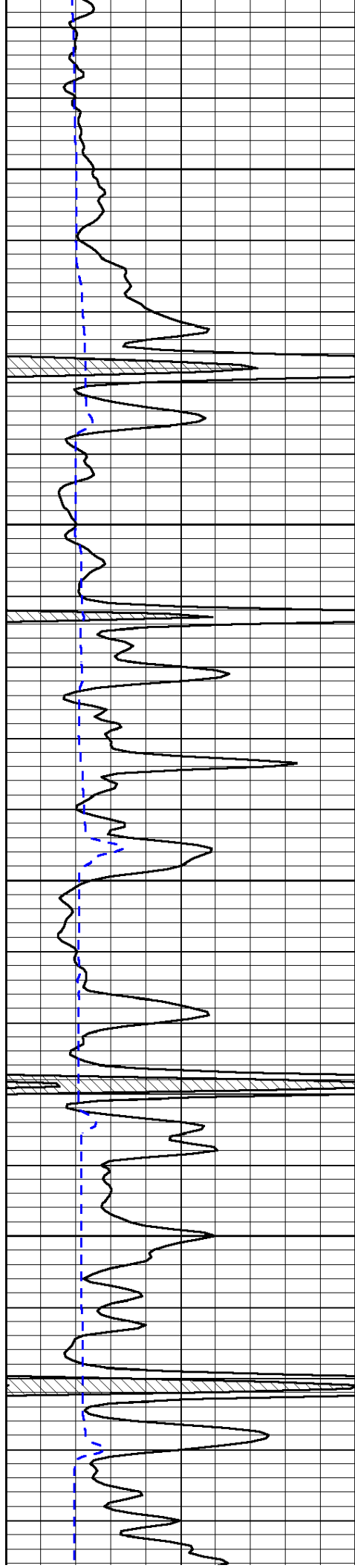


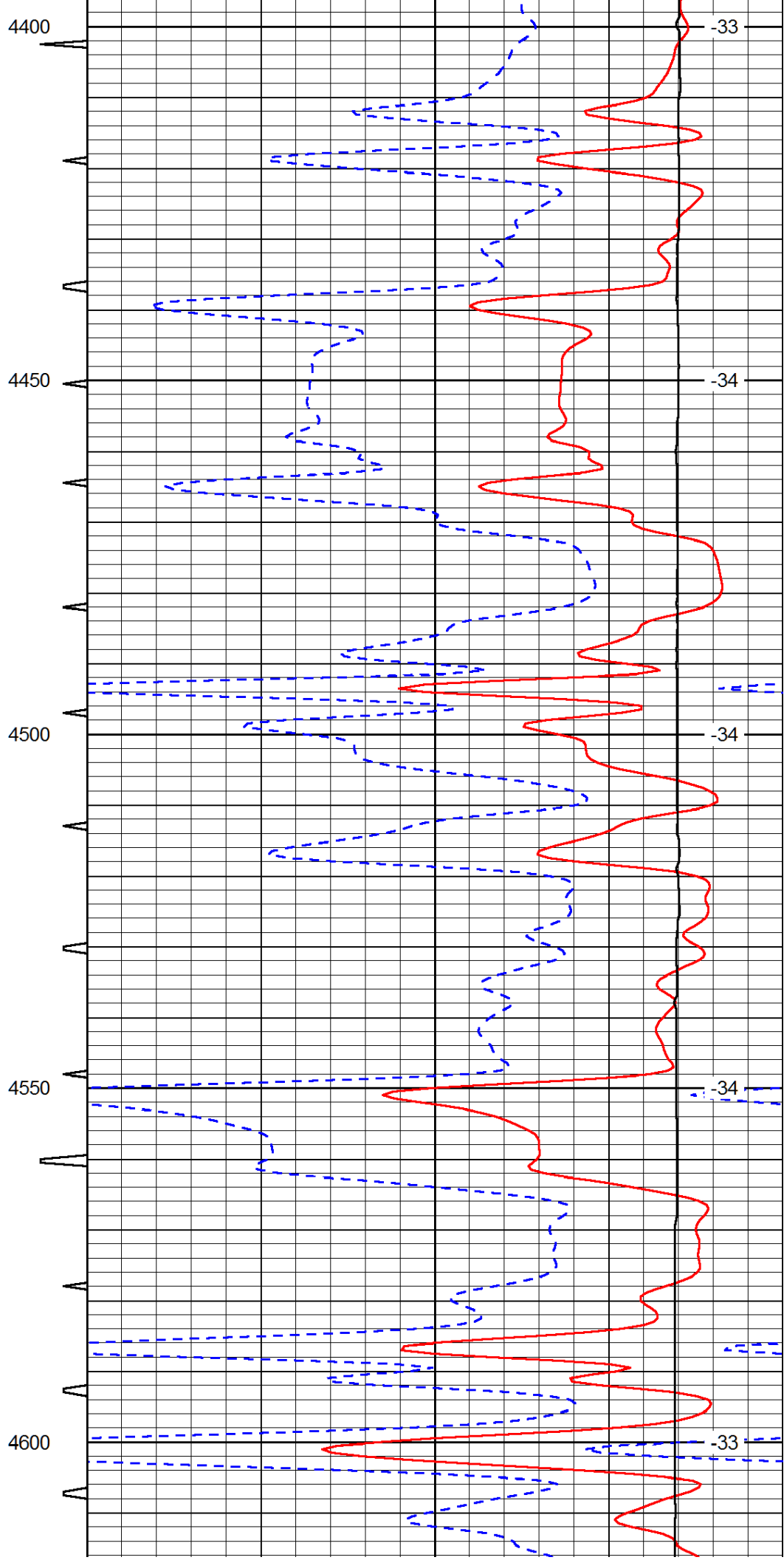
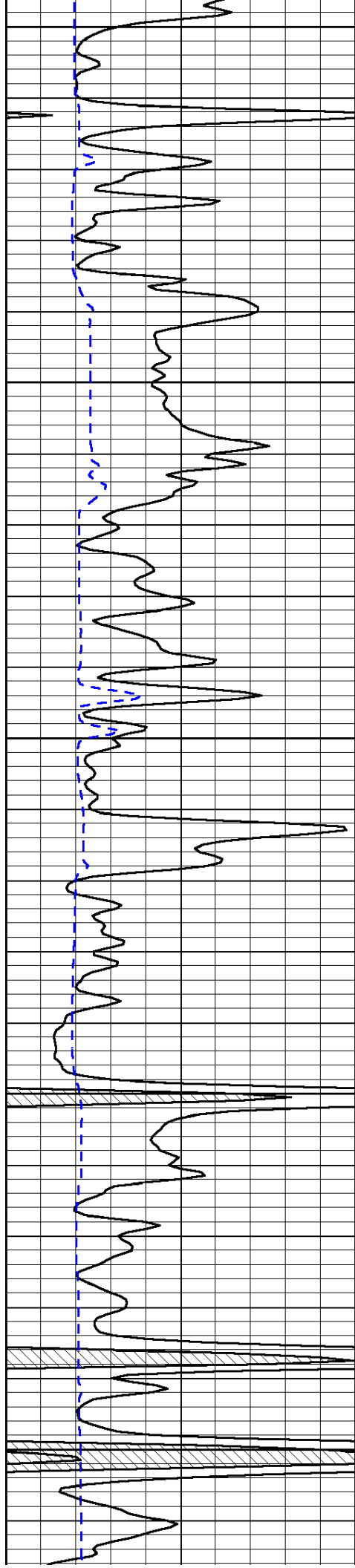


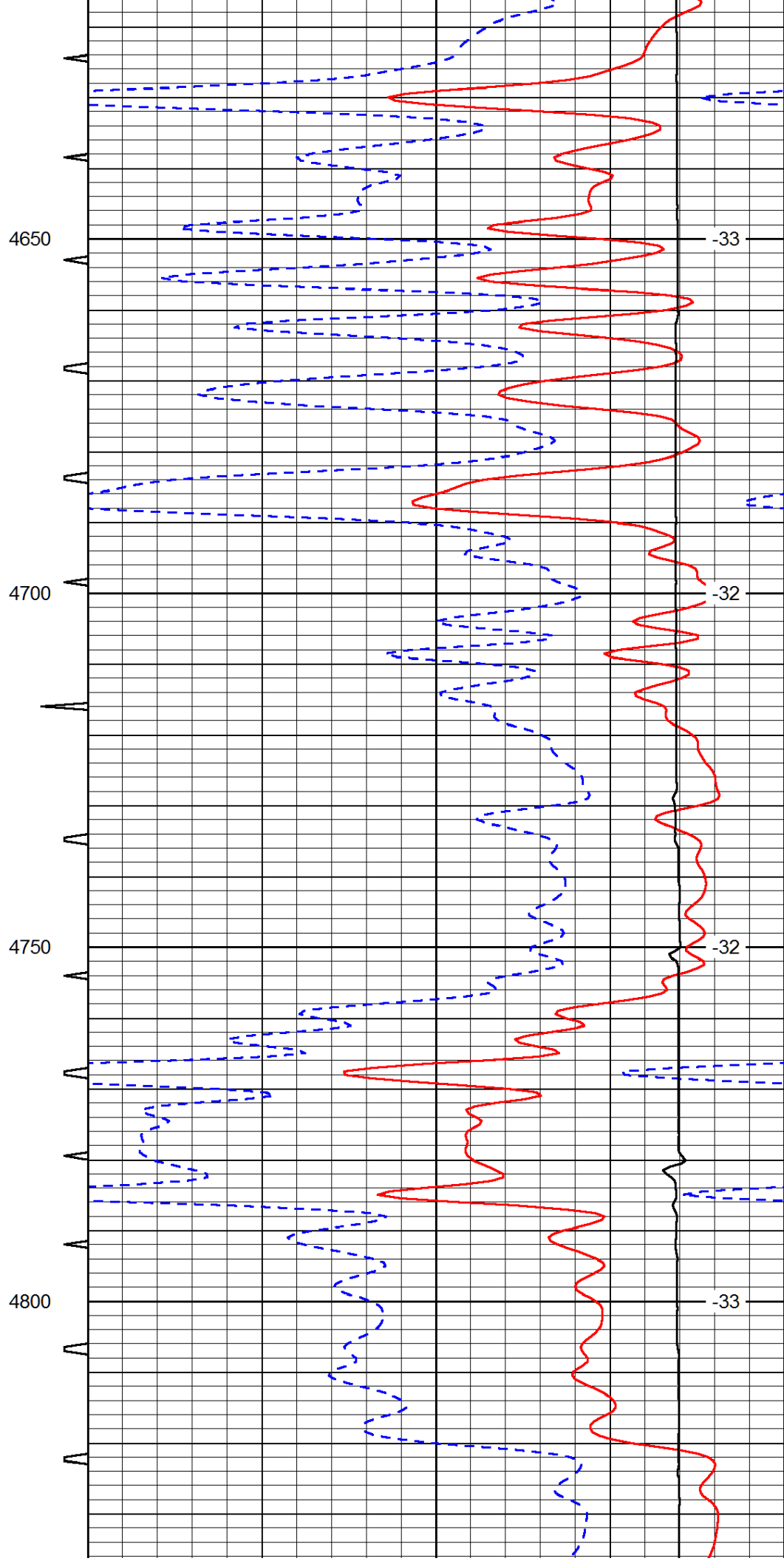
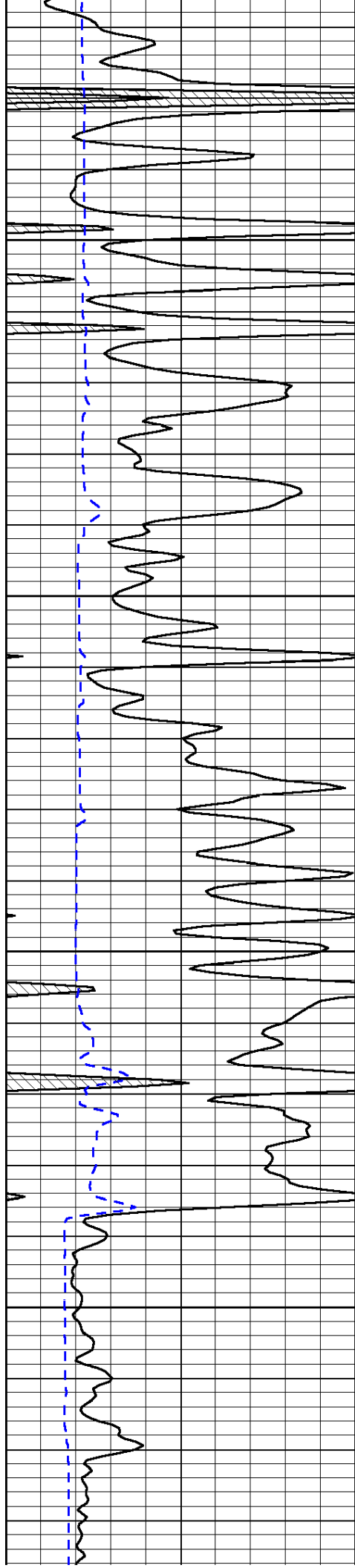








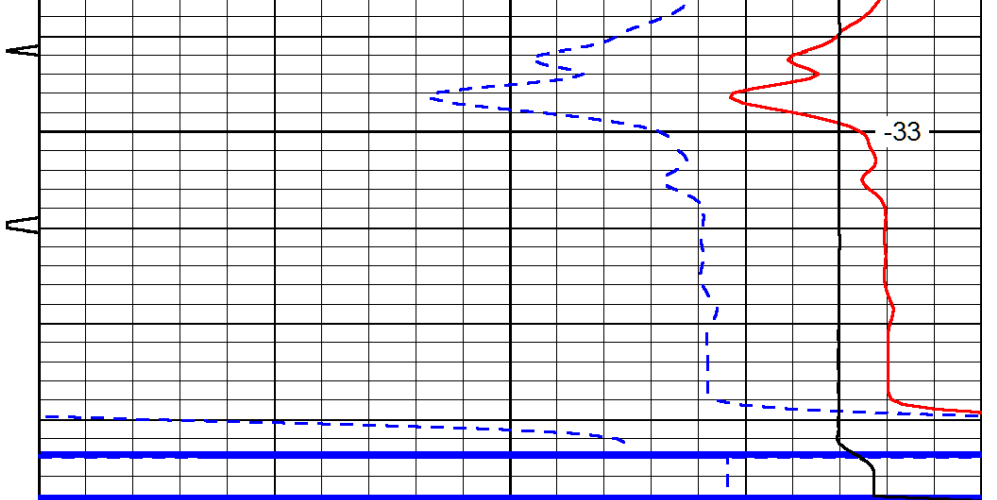






0	Gamma Ray (GAPI)	150
150	Gamma Ray (GAPI)	300
6	dCAL (in)	16

4850



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)