



Pioneer Energy Services

Borehole Compensated Sonic Log

API No.

15-055-22,263-00-00

Company American Warrior, Inc.

Well Congdon No. 9-28

Field Congdon

County Finney

State Kansas

Location 1616' FSL & 1137' FEL

Sec: 28

Twp: 23S

Rge: 32W

Other Services
CNL/CDL
MEI/BHCS

Permanent Datum Ground Level Elevation 2845

Log Measured From Kelly Bushing 11 Ft. Above Perm. Datum

Elevation
K.B. 2856
D.F. 2845
G.L. 2845

Date 1/19/13

Run Number Two

Type Log BHC Sonic

Depth Driller 4875

Depth Logger 4875

Bottom Logged Interval 4864

Top Logged Interval 1150

Type Fluid In Hole Chemical

Salinity, PPM CL 3,200

Density 9.3

Level Full

Max. Rec. Temp. F 125

Operating Rig Time 5 Hours

Equipment -- Location 108 Hays

Recorded By J. Henrickson

Witnessed By Kevin Timson

Borehole Record

Casing Record

Run No. Bit From To Size Wgt. From To

One 12.25 00 1156 8.625 23# 00 1156

Two 7.875 1156 TD 1156

<<< 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.

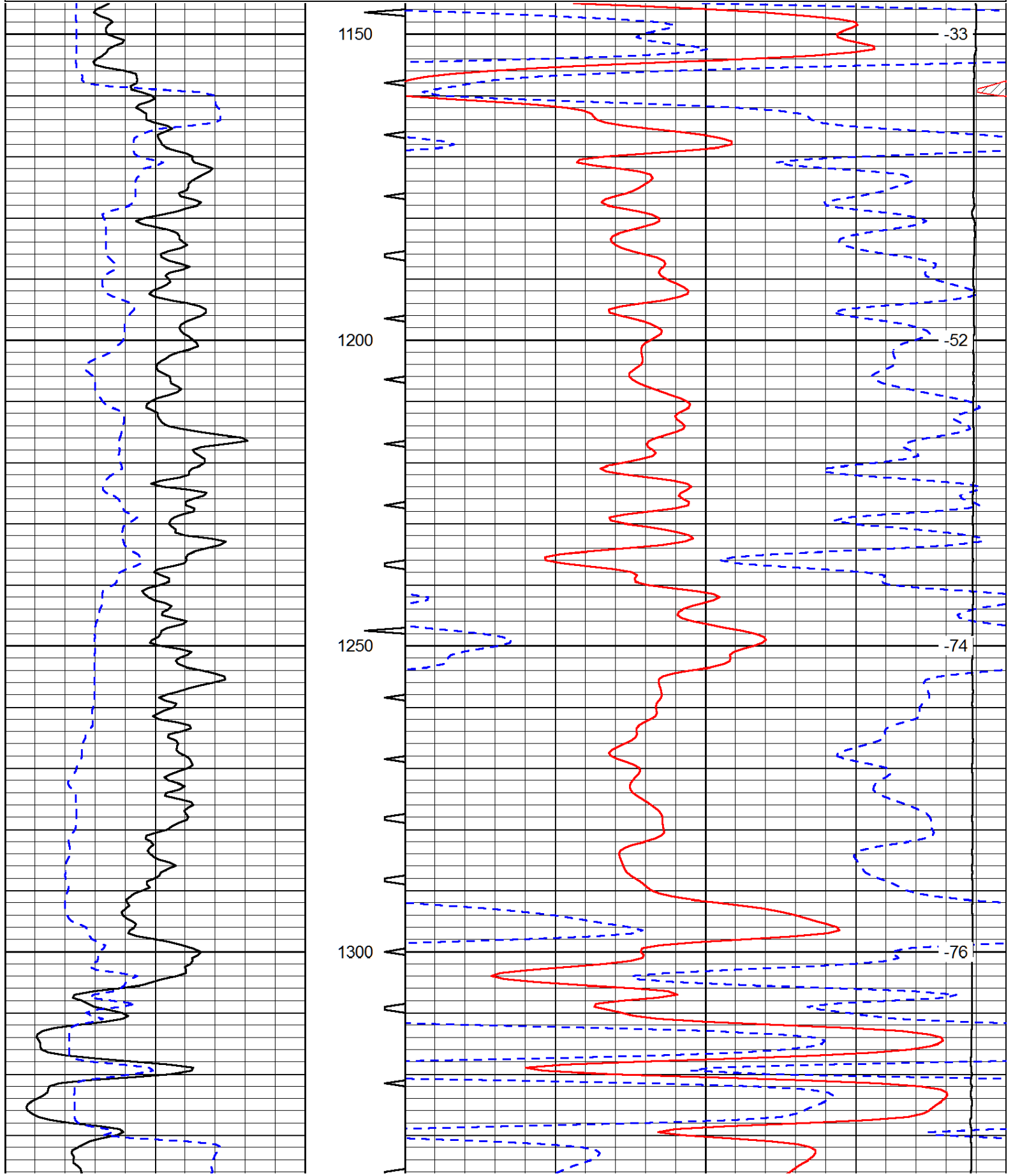
Comments

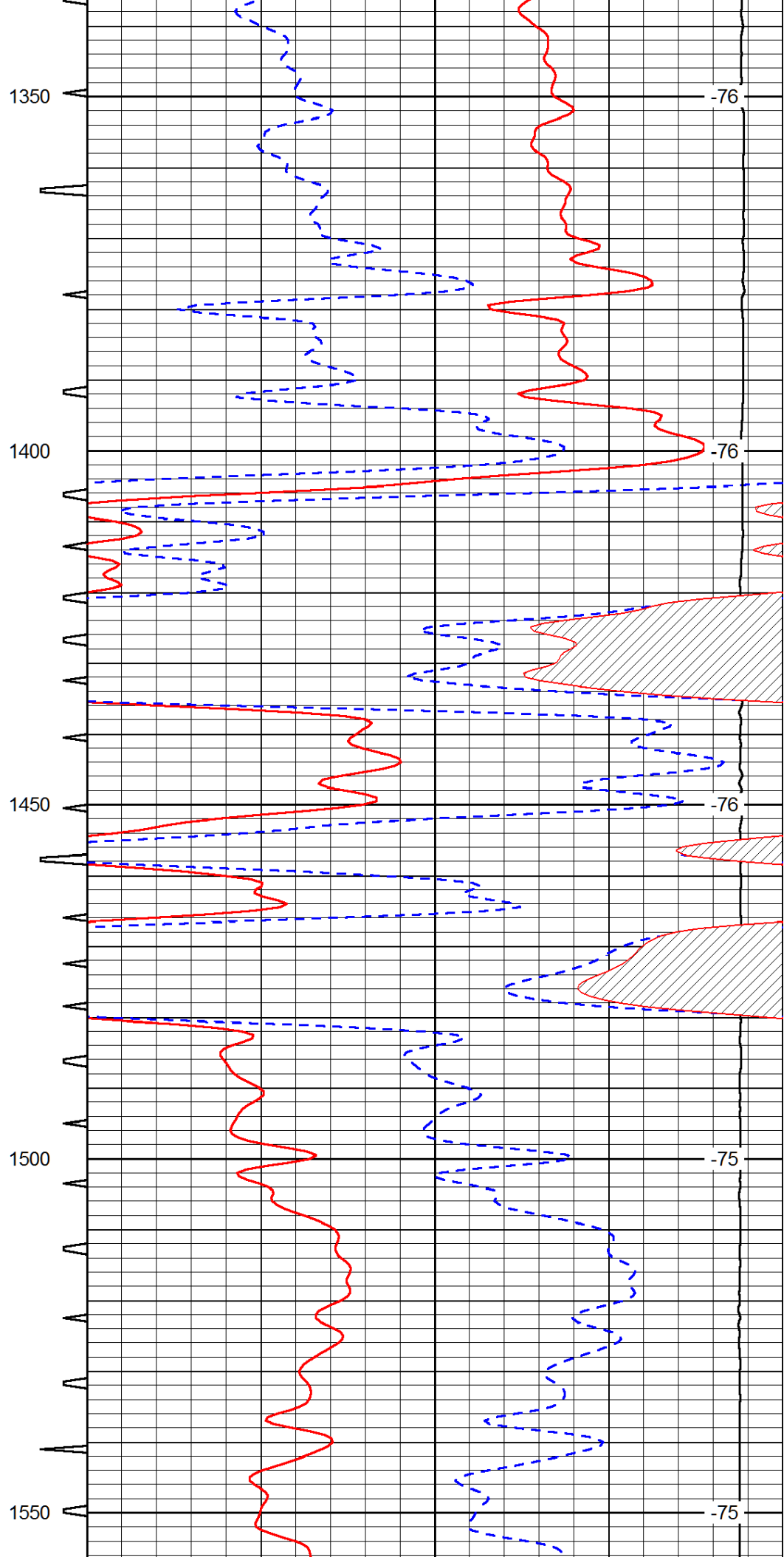
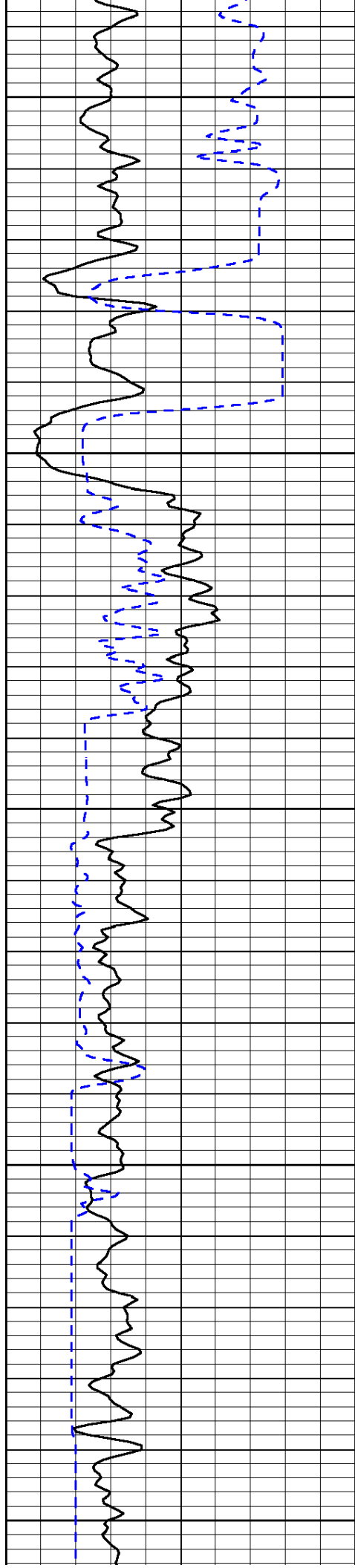
Thank you for using Log-Tech, Inc.
(785) 625-3858

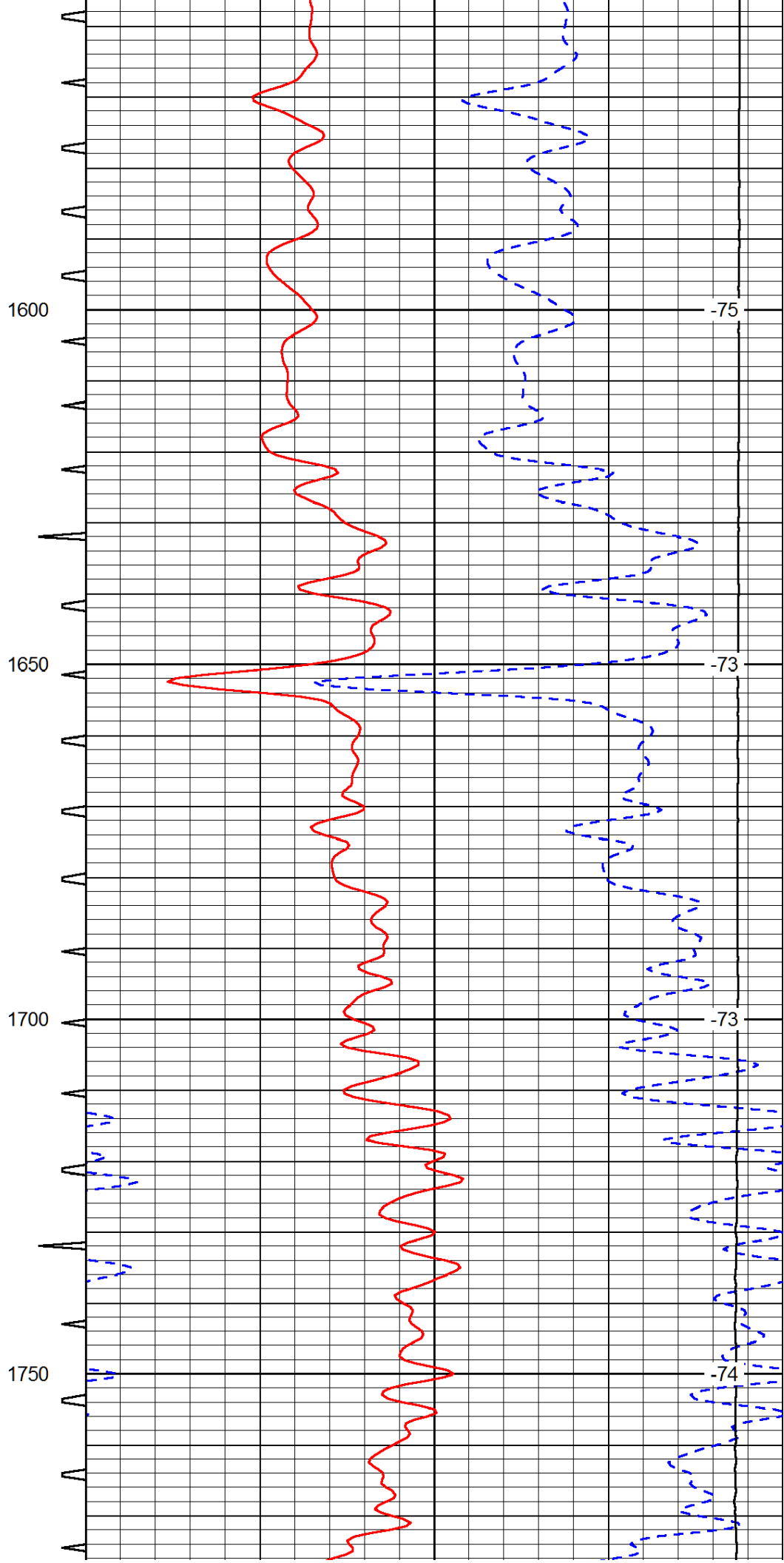
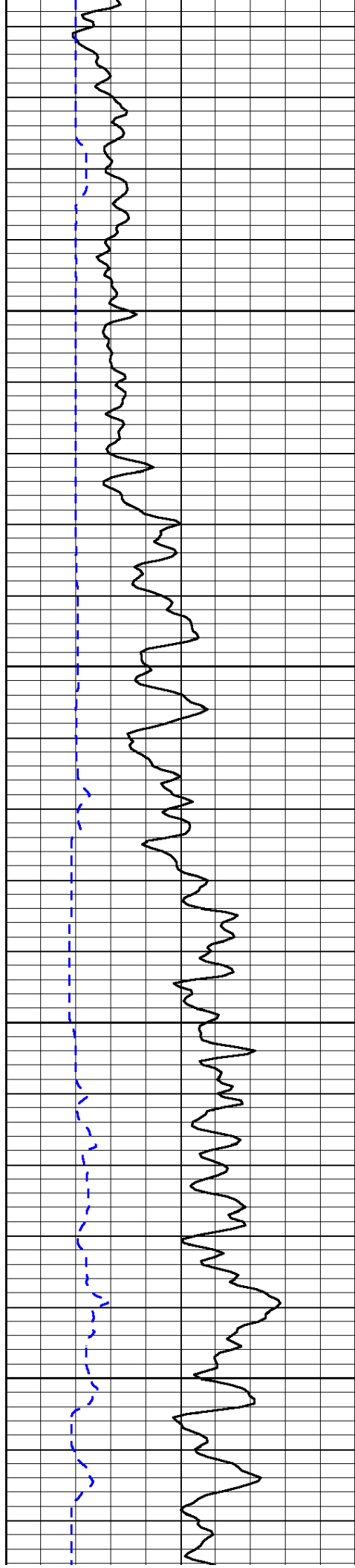
Garden City Kansas
North to Rodkey Rd, 5 1/2 East, North Into

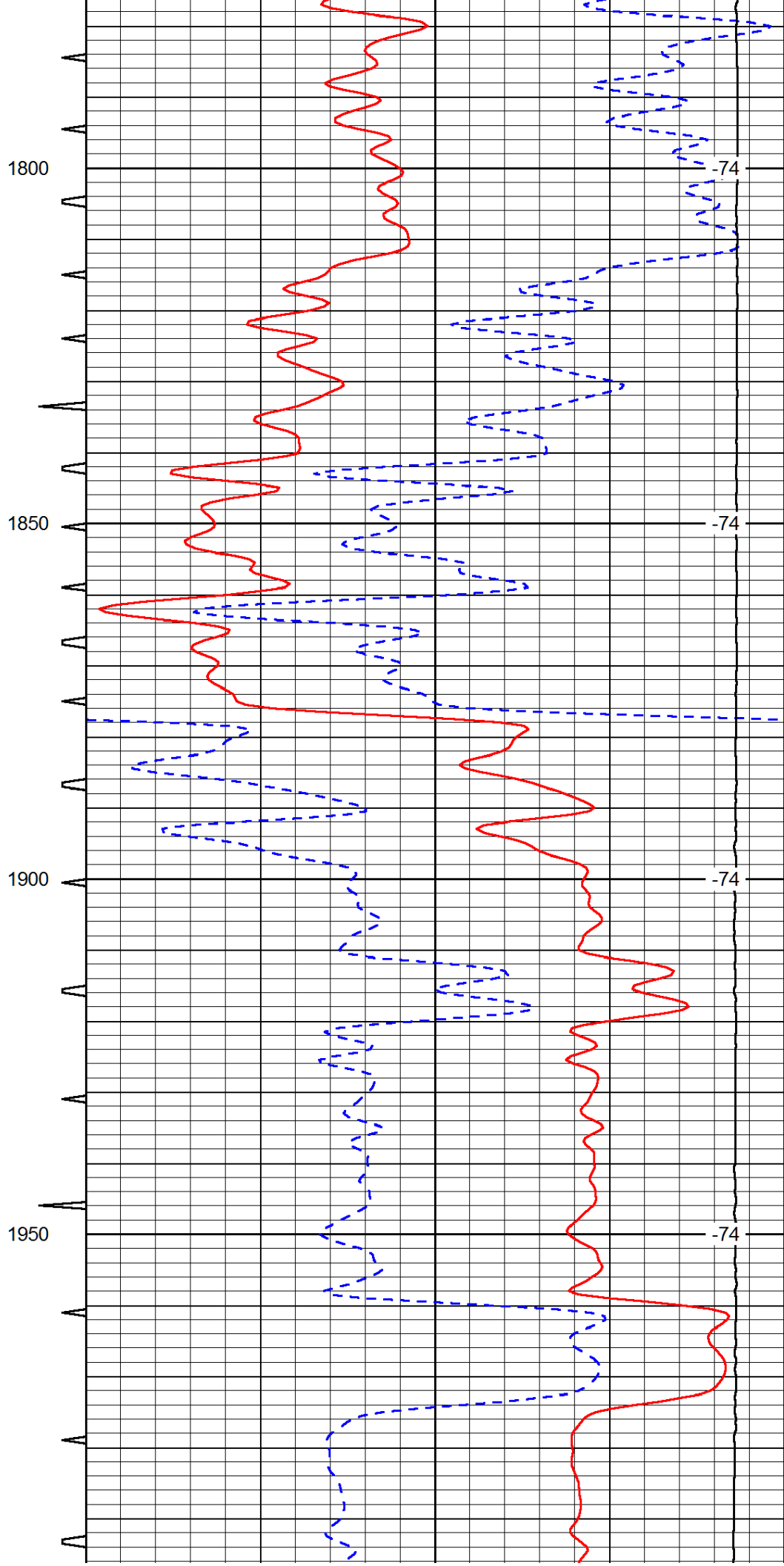
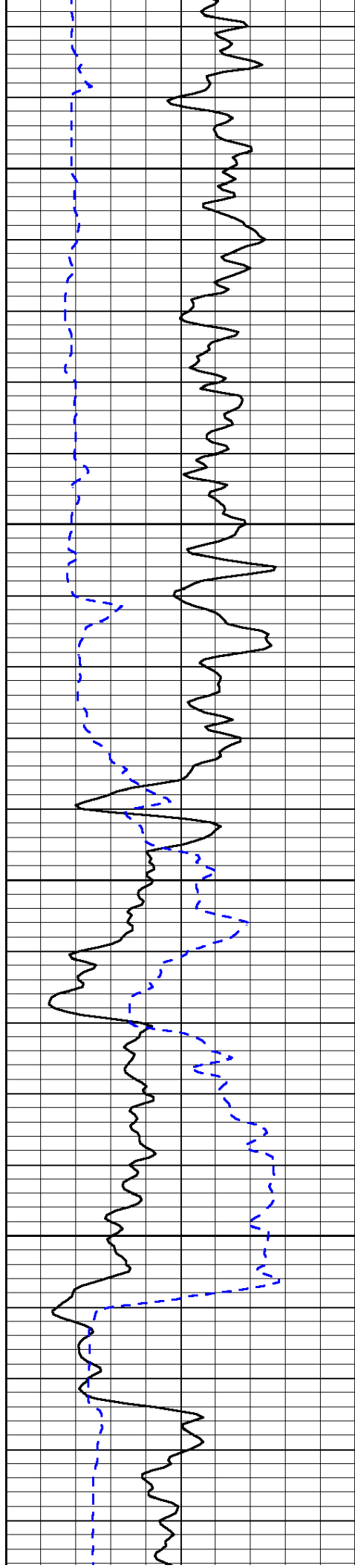
Database File: american_warrior_congdon_9_28hd.db
Dataset Pathname: DIL/amwar
Presentation Format: sonic
Dataset Creation: Sun Jan 19 20:37:58 2014
Charted by: Depth in Feet scaled 1:240

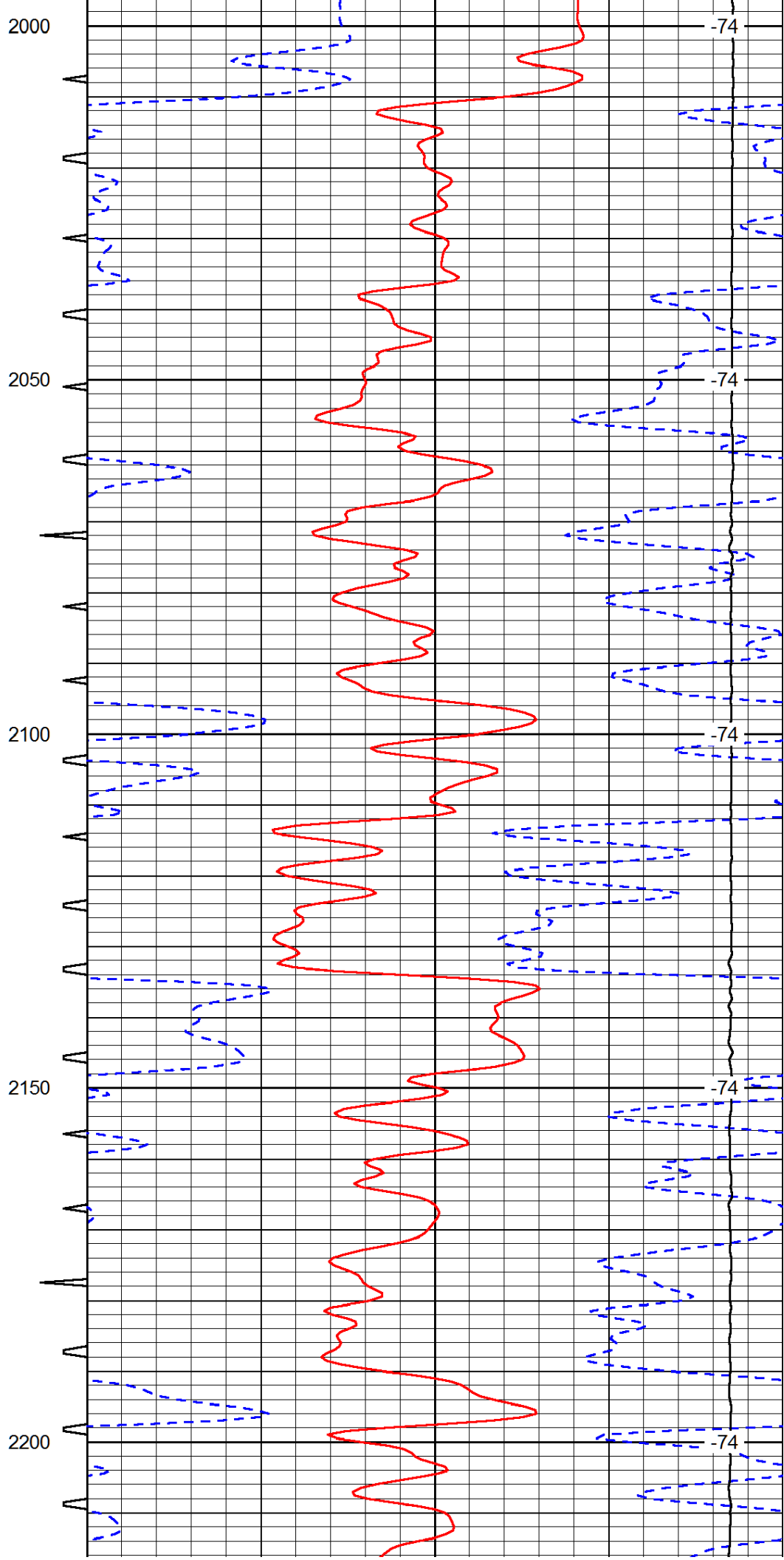
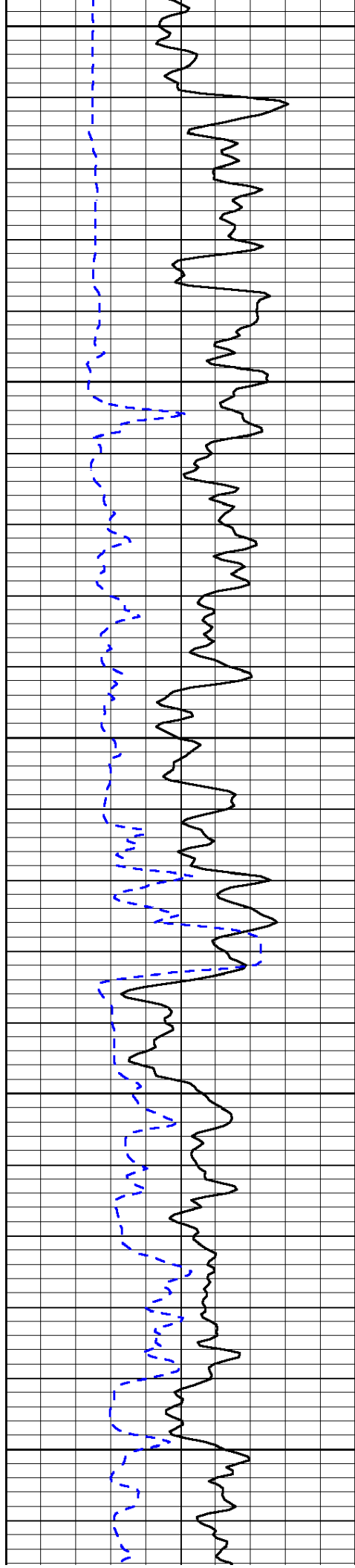
Charted by:			Depth in Feet scaled 1:2.16			
0	Gamma Ray (GAPI)	150	Sonic Int	140	Delta Time (usec/ft) (usec/ft)	40
150	Gamma Ray (GAPI)	300	5 (msec) 0	30	Sonic Porosity (pu)	-10
6	dCAL (in)	16		15000	LTEN (lb) (lb)	0
						LSPD (ft/min)

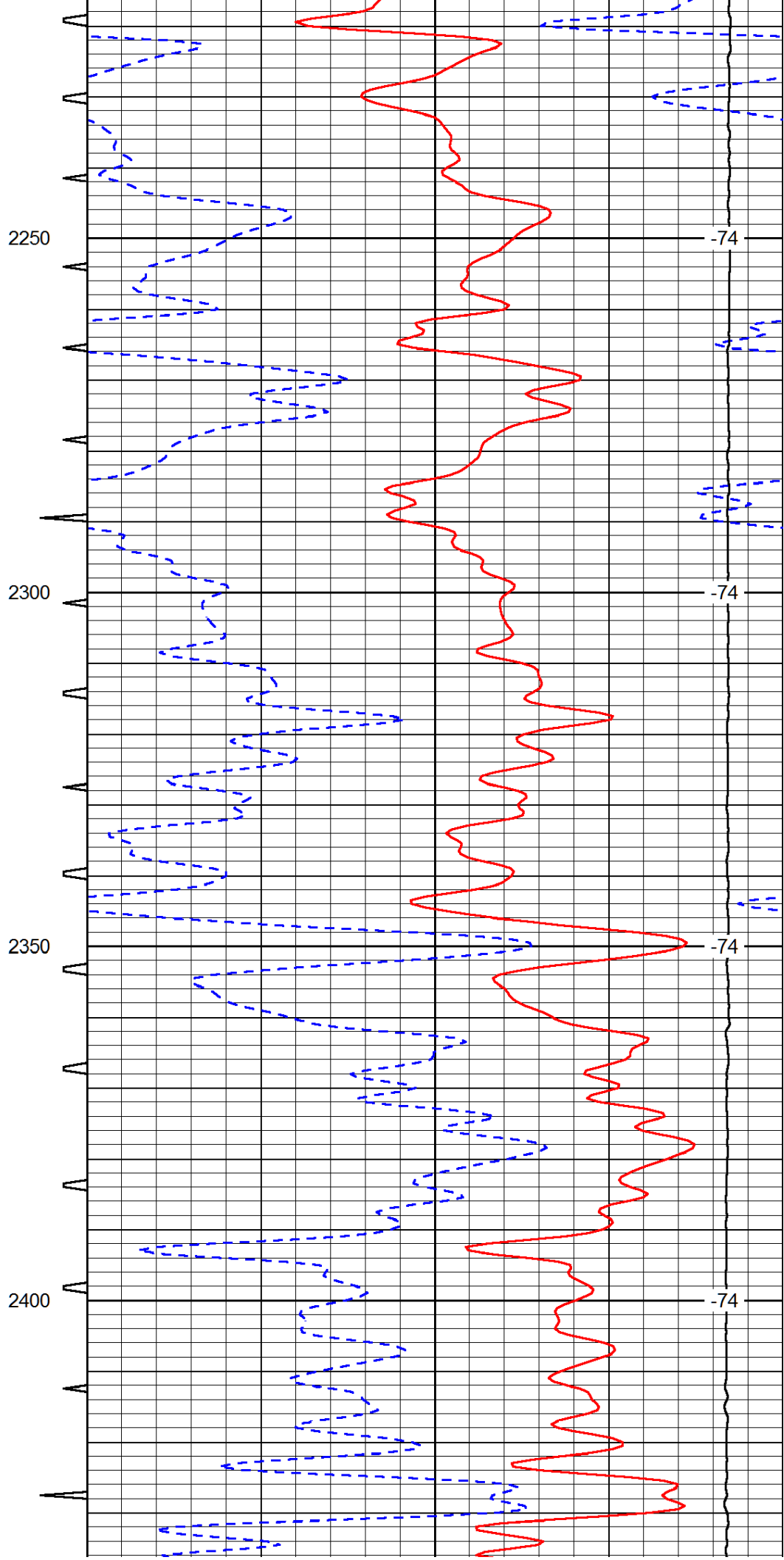
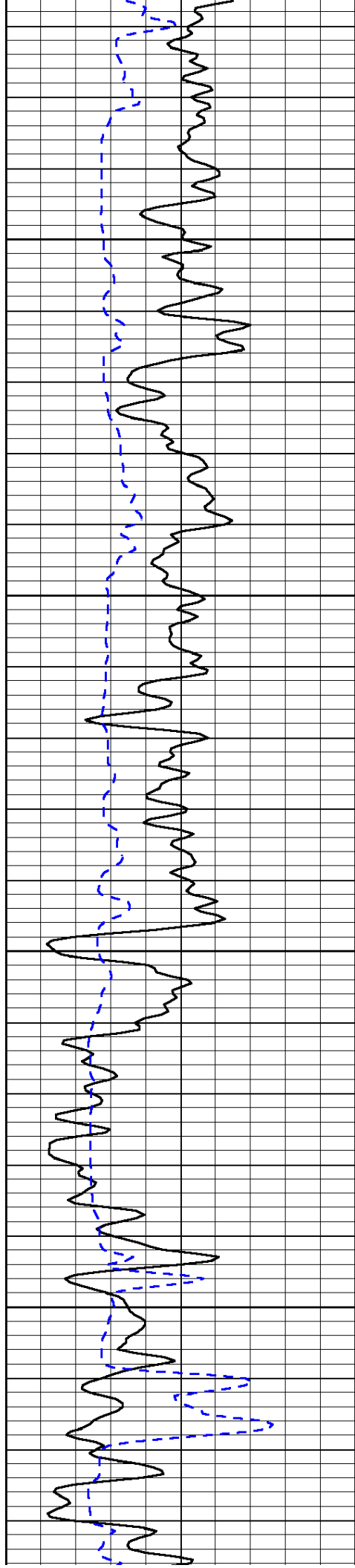


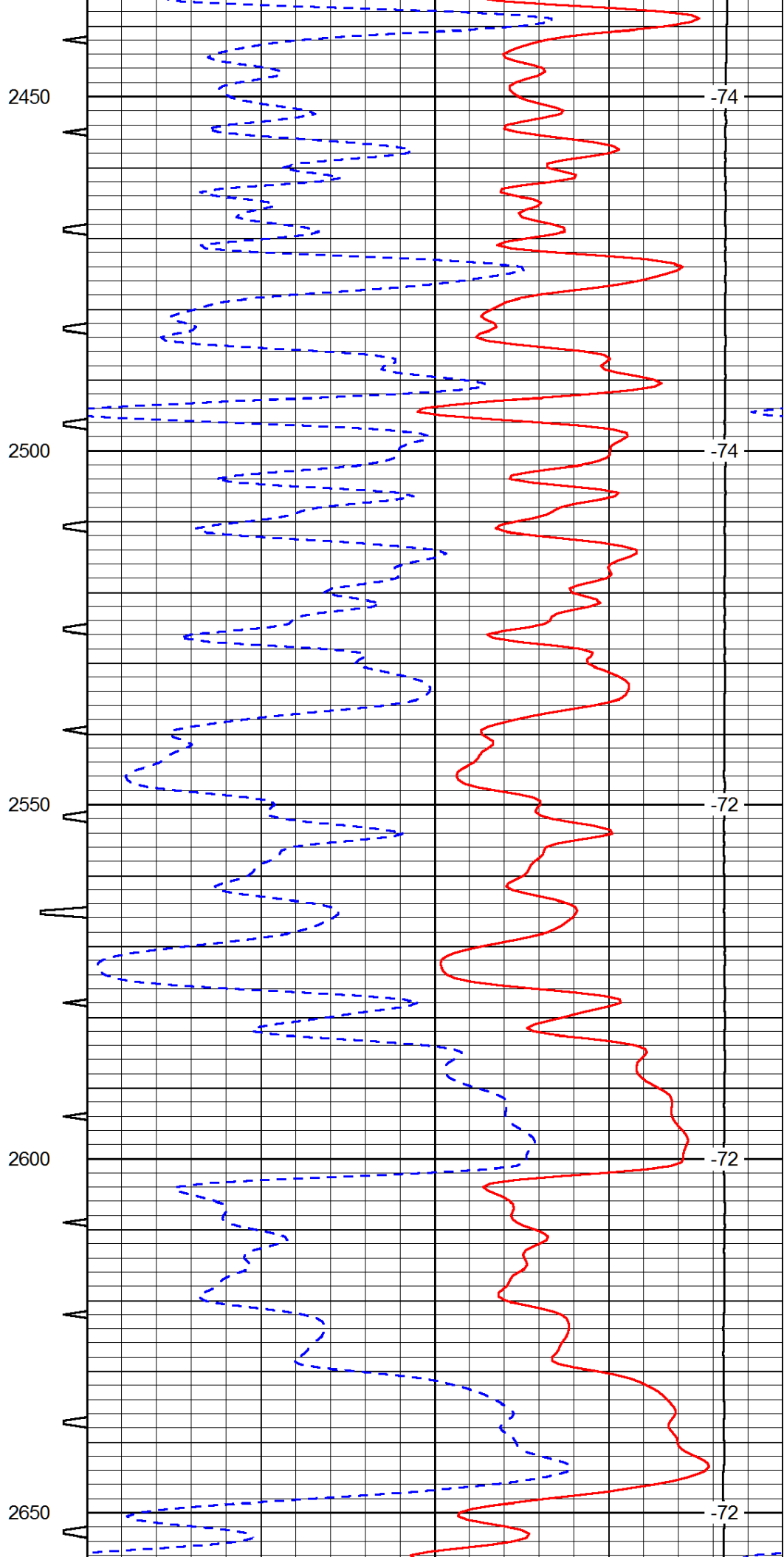
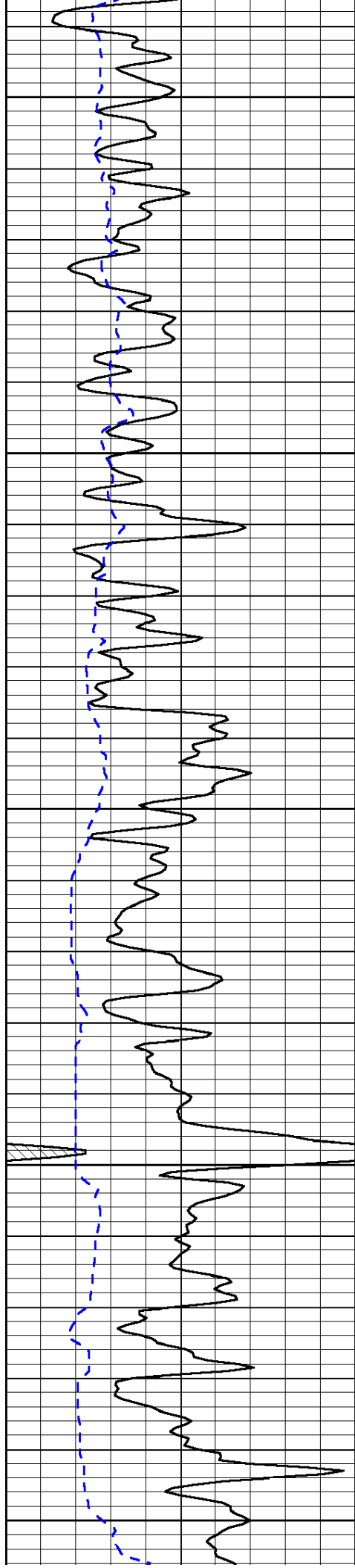


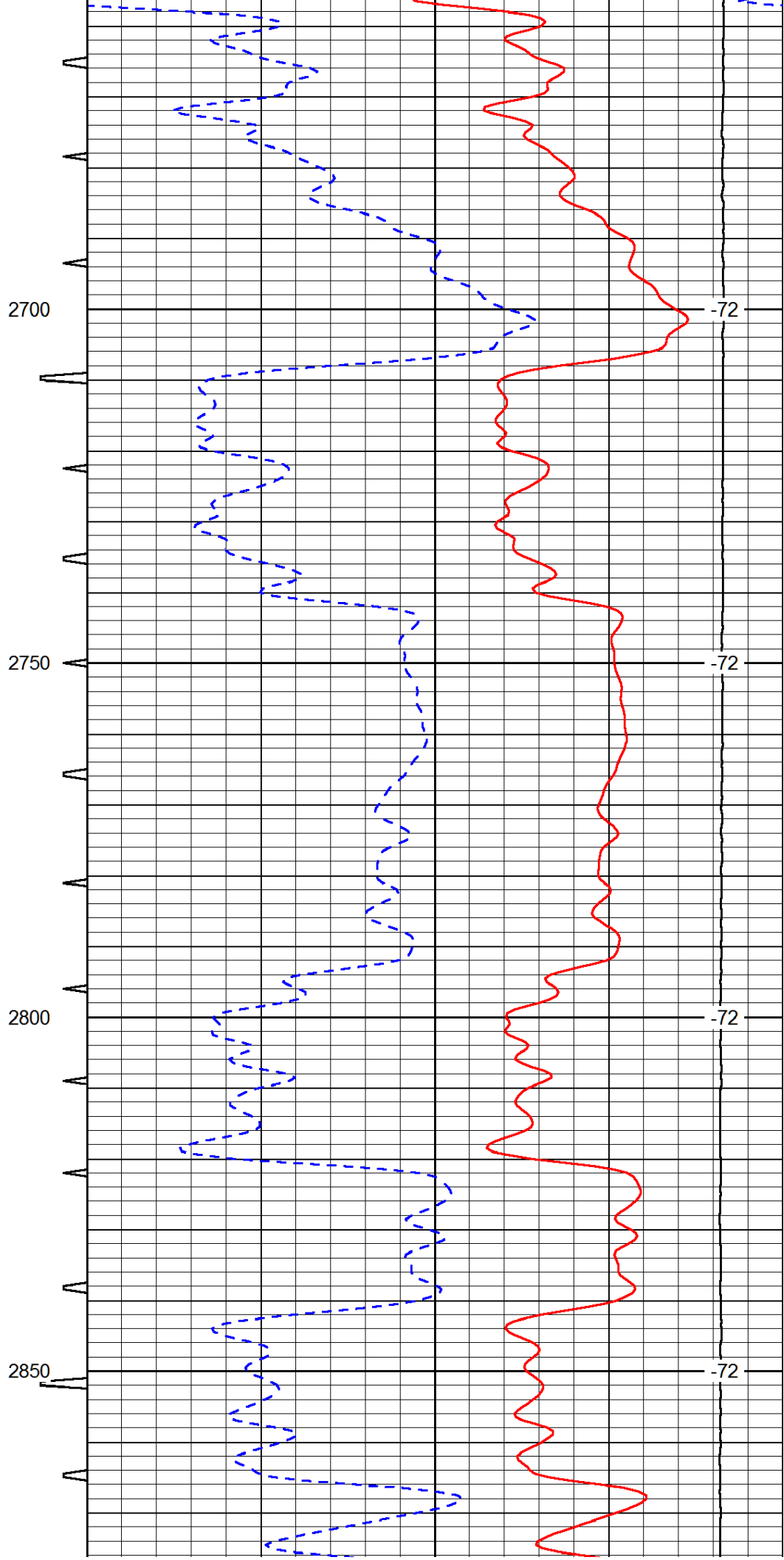
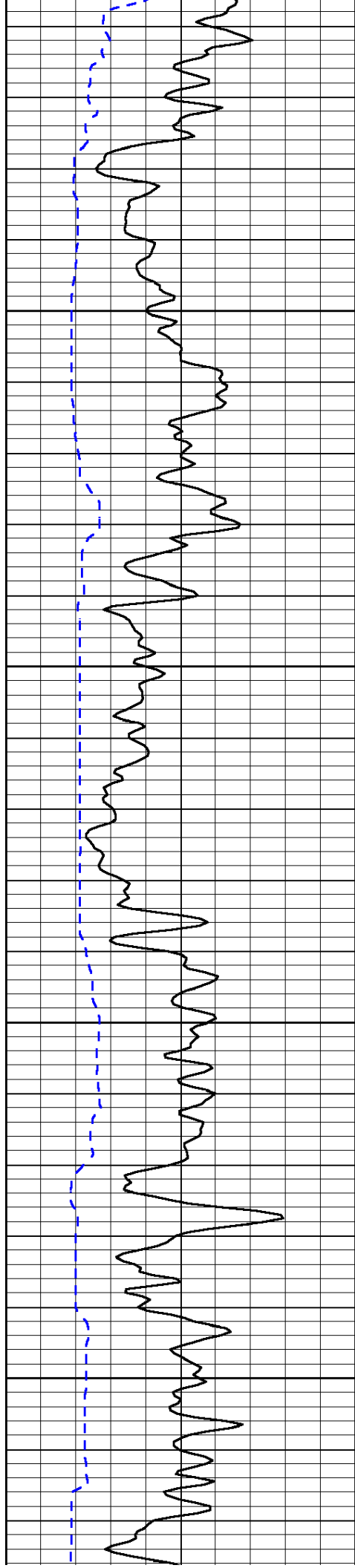


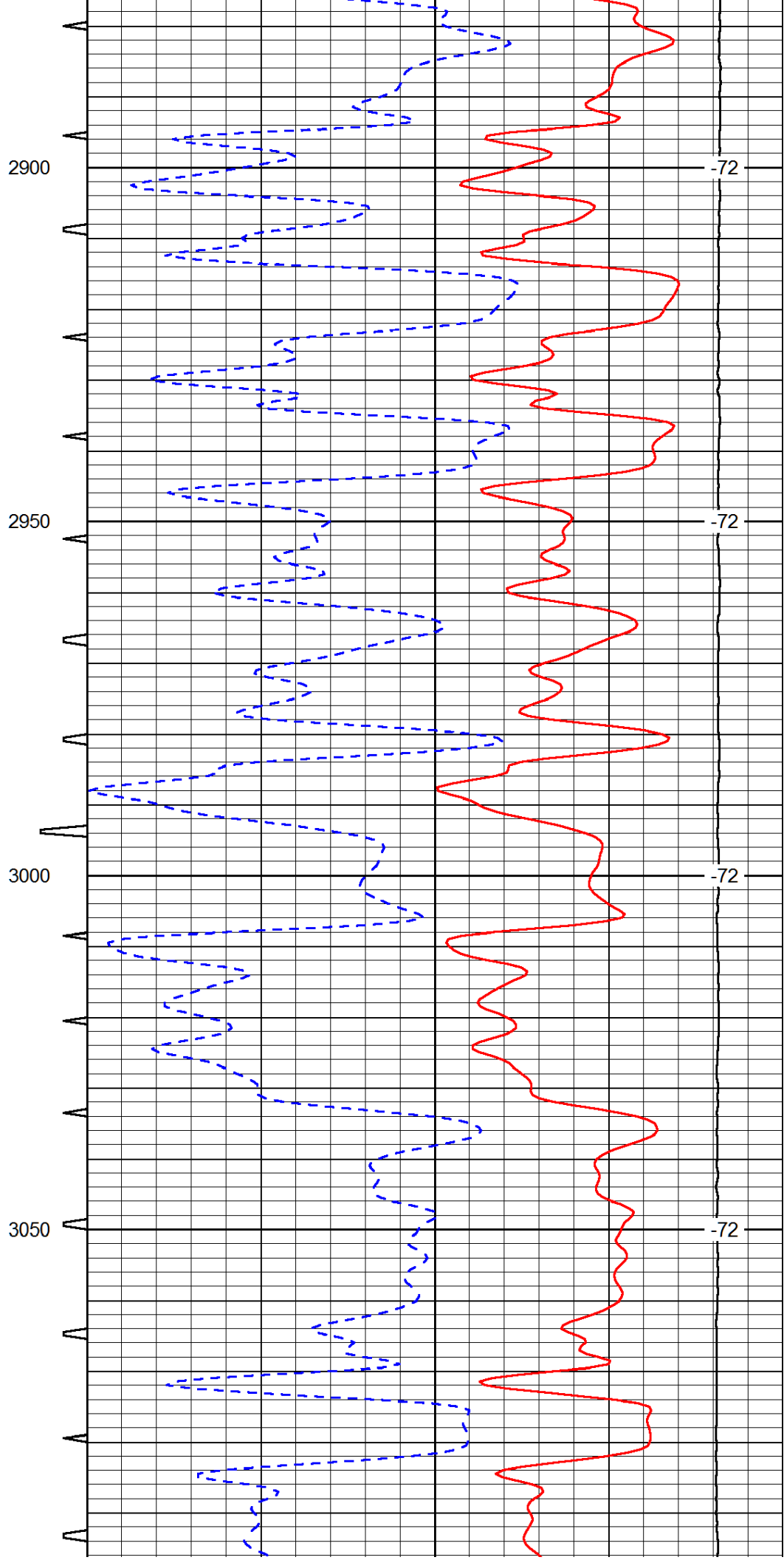
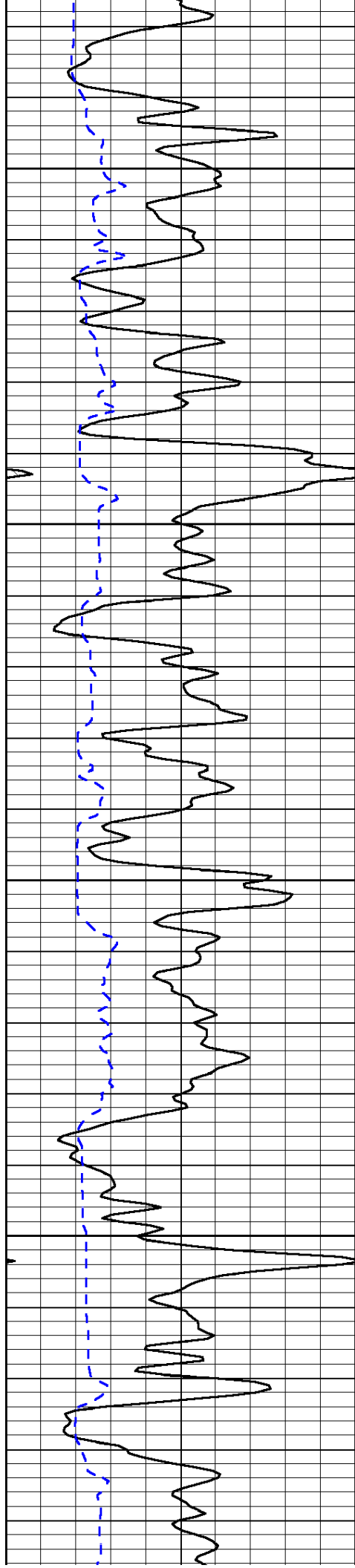


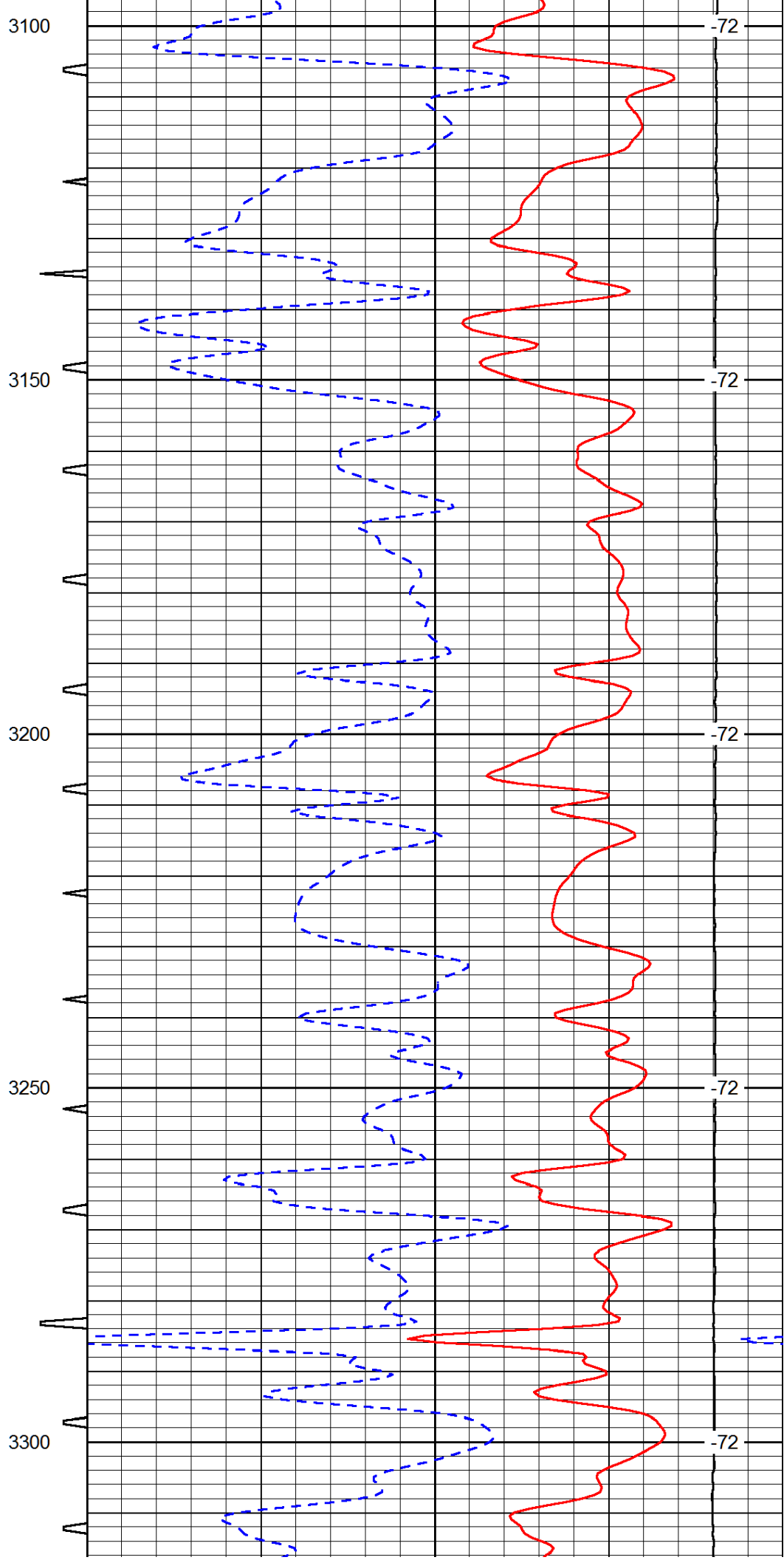
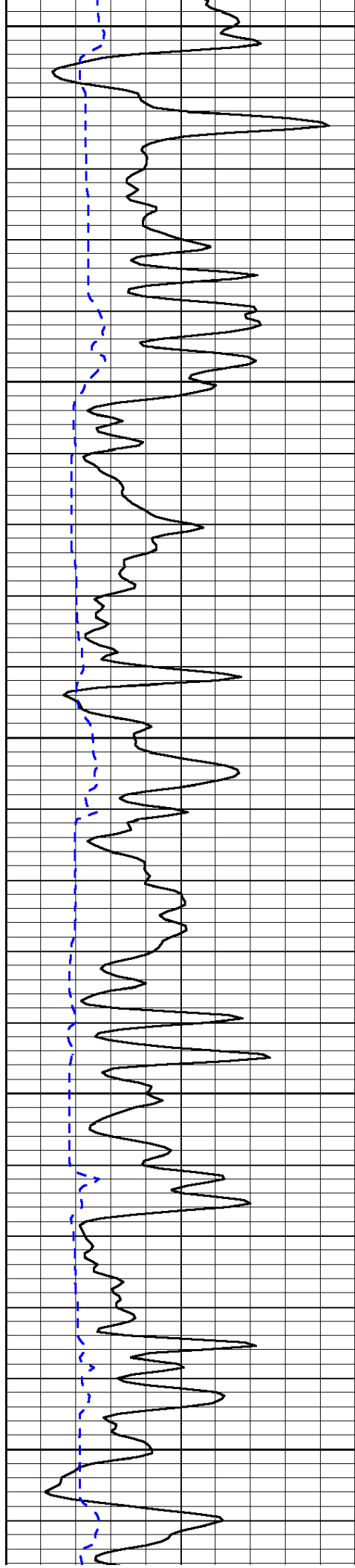


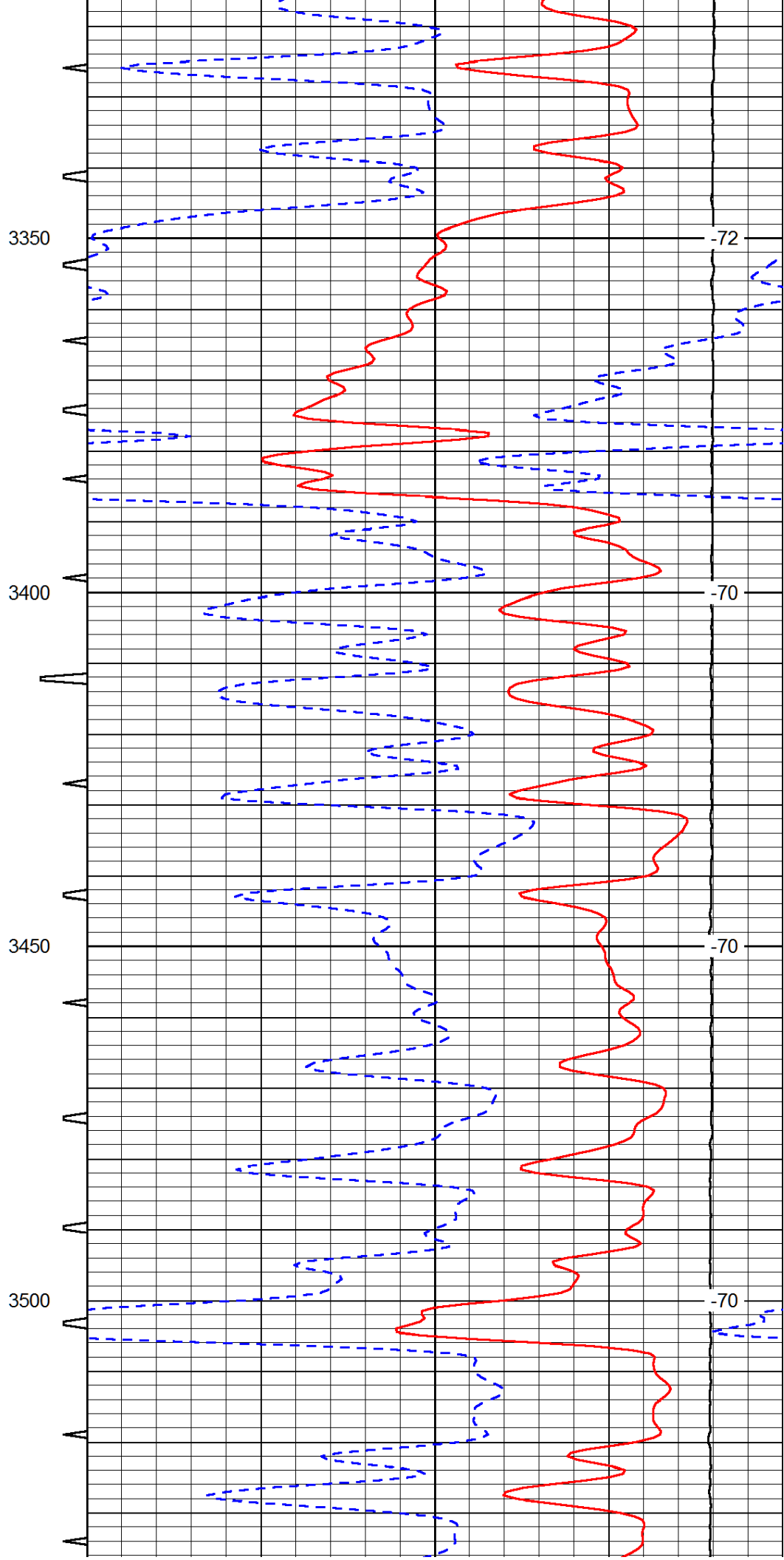
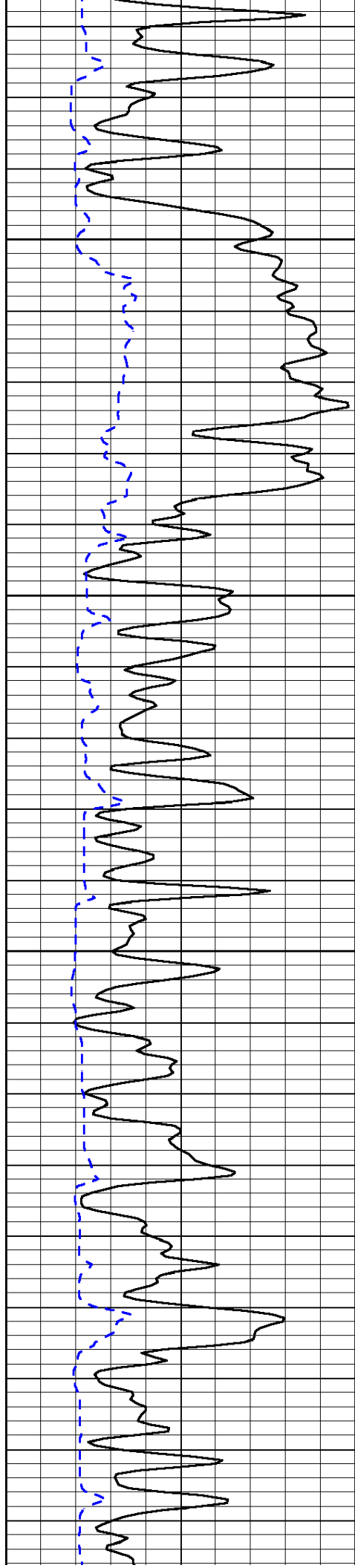


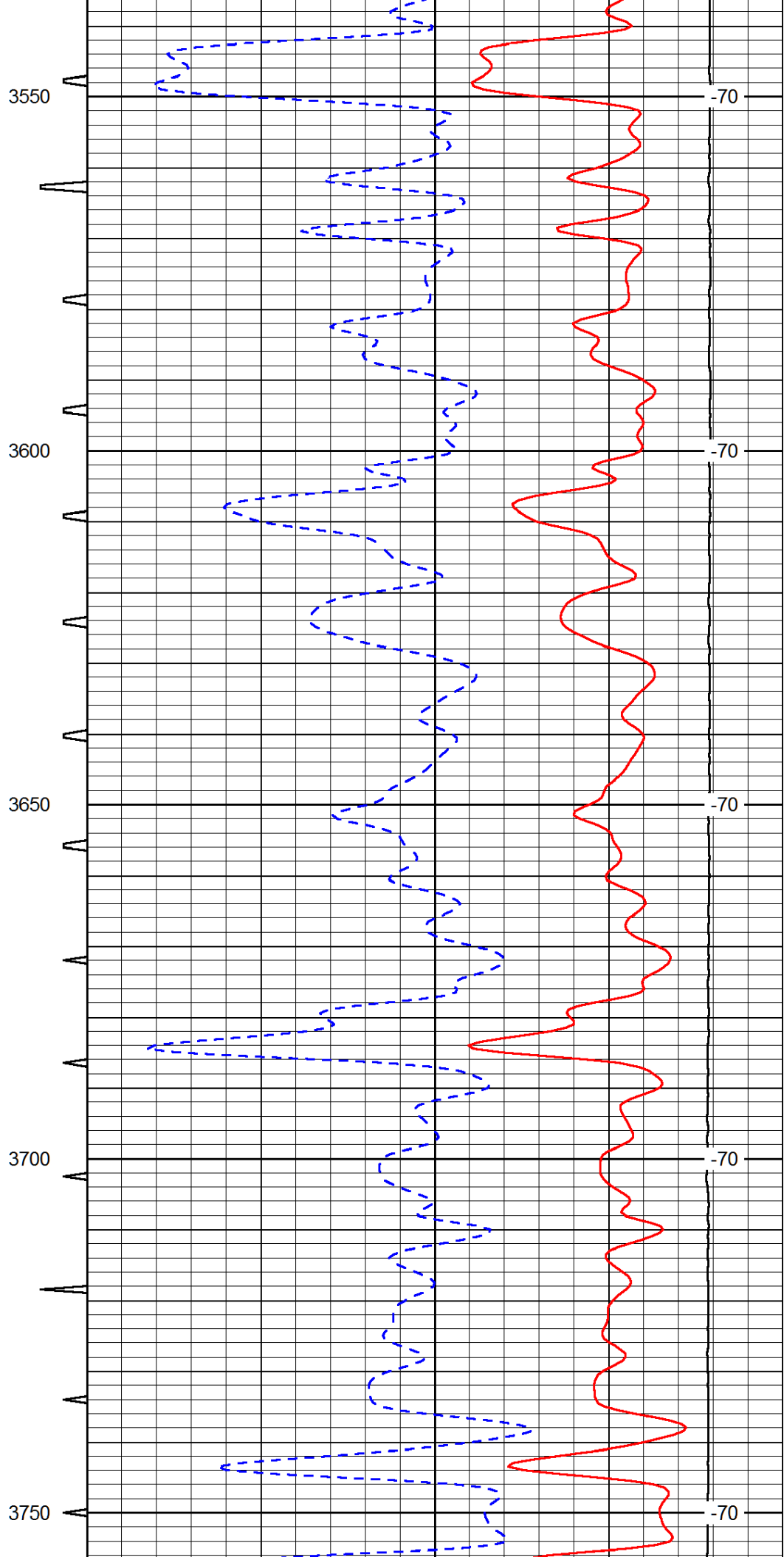
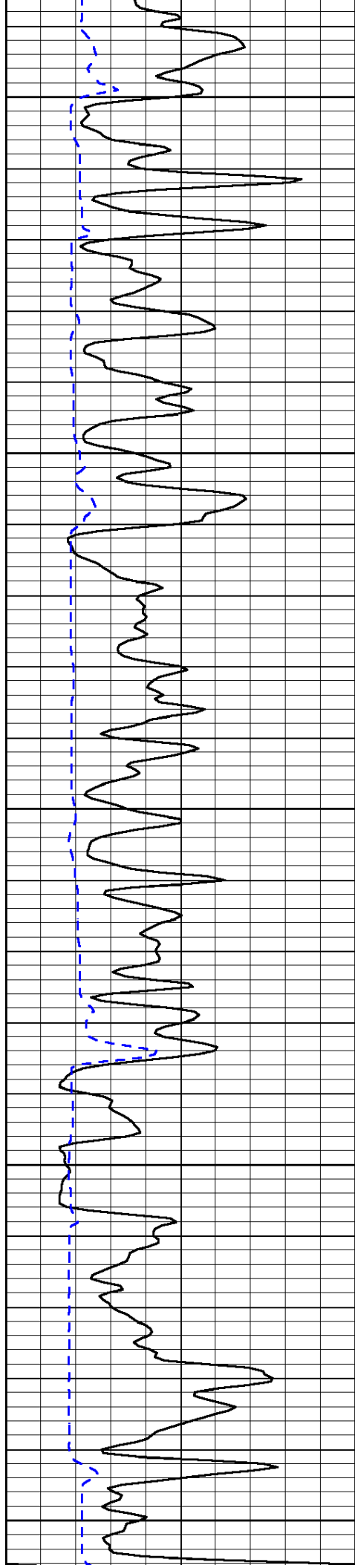


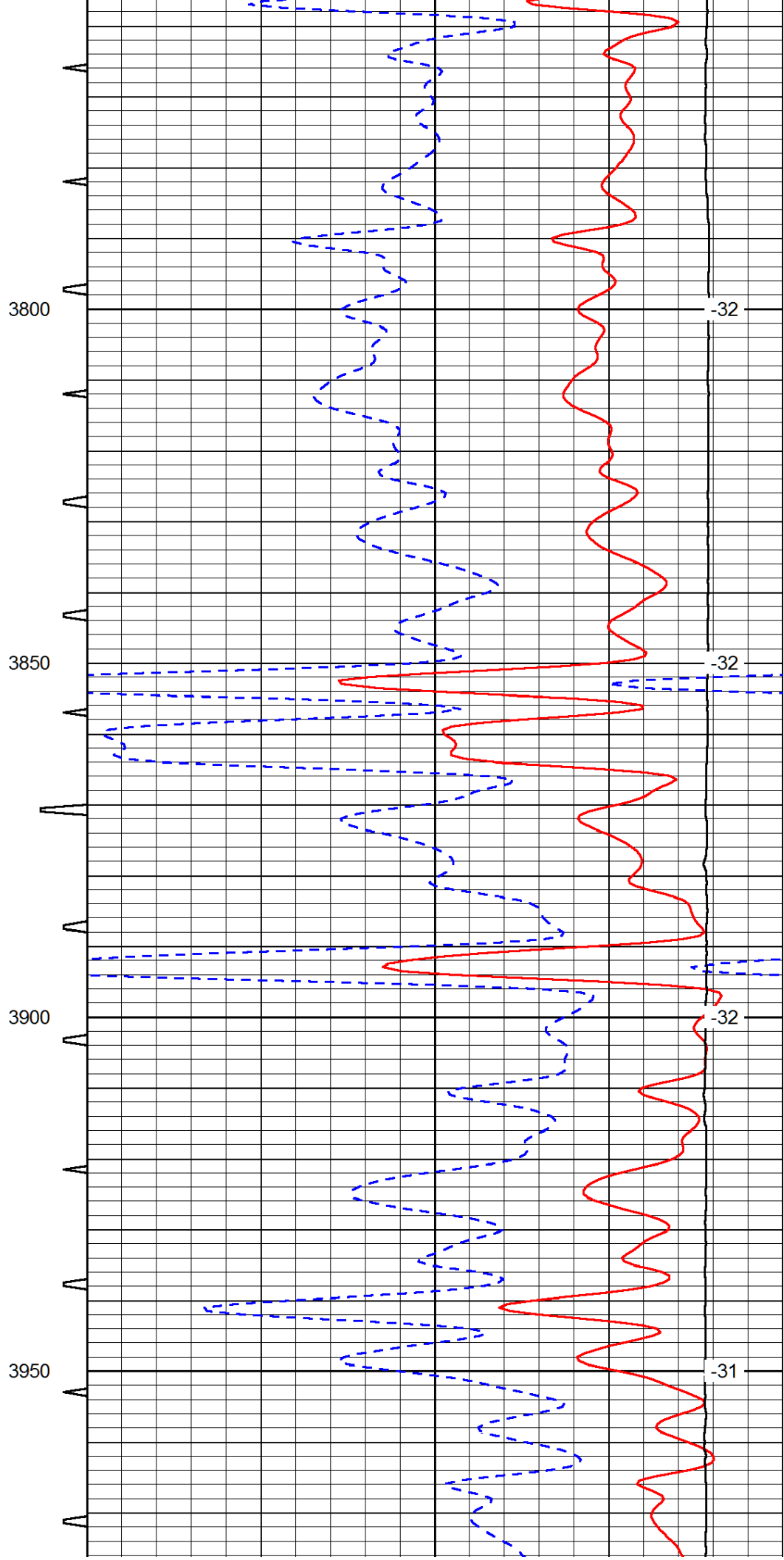
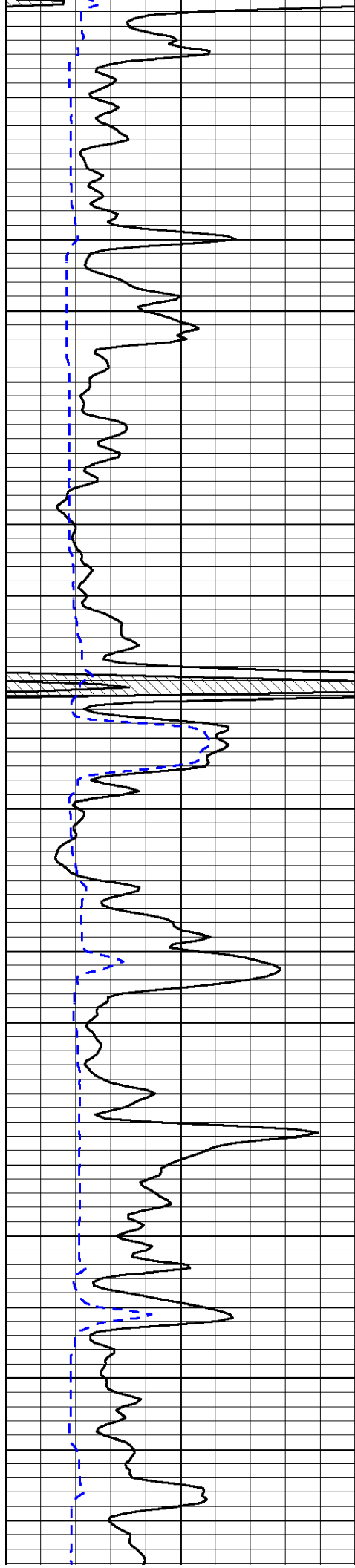


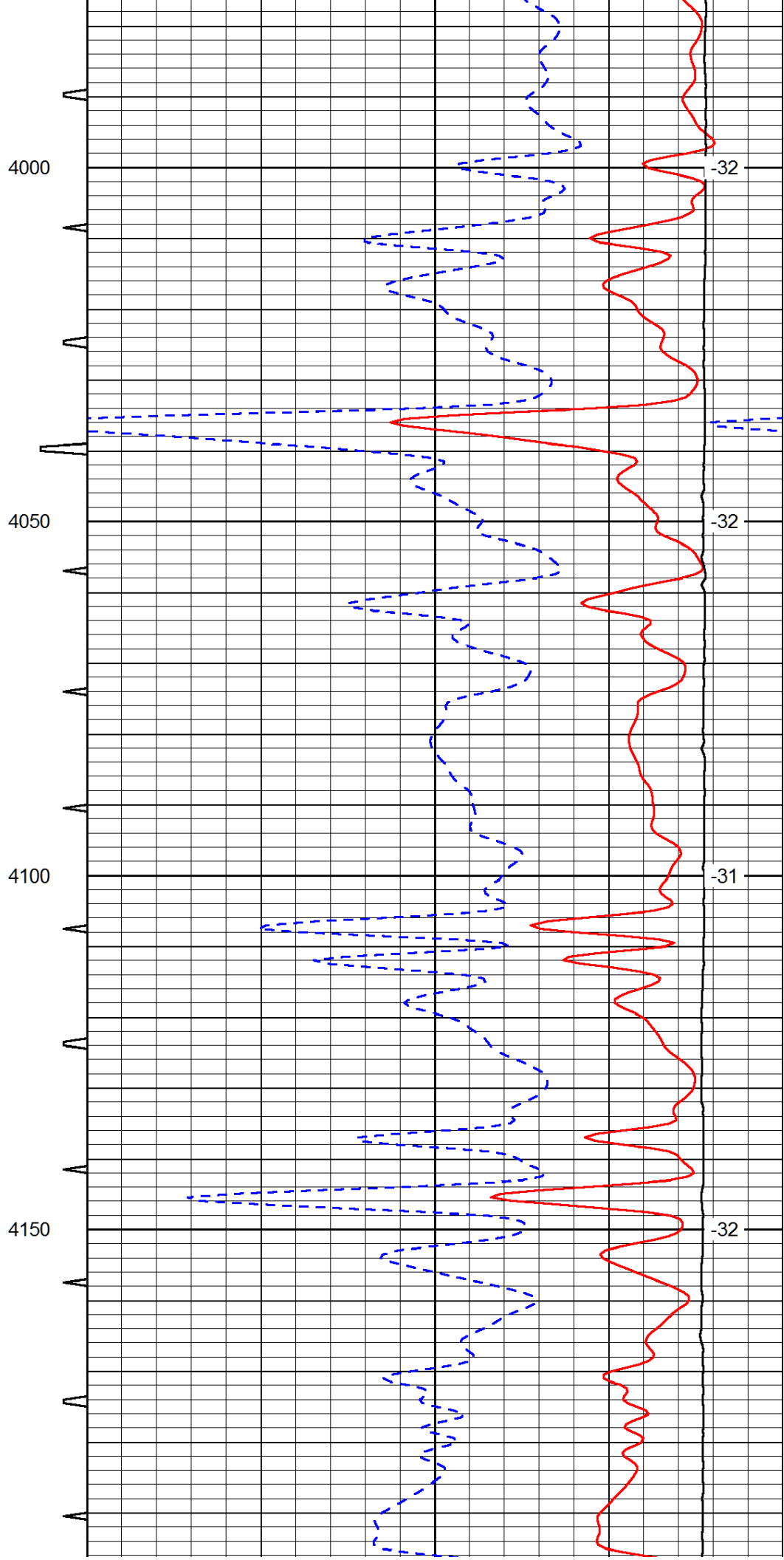
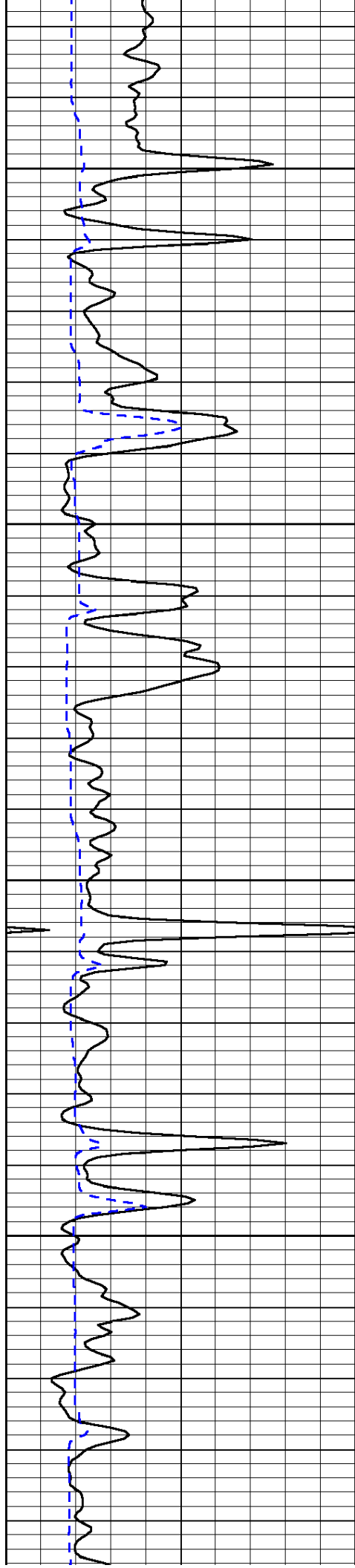


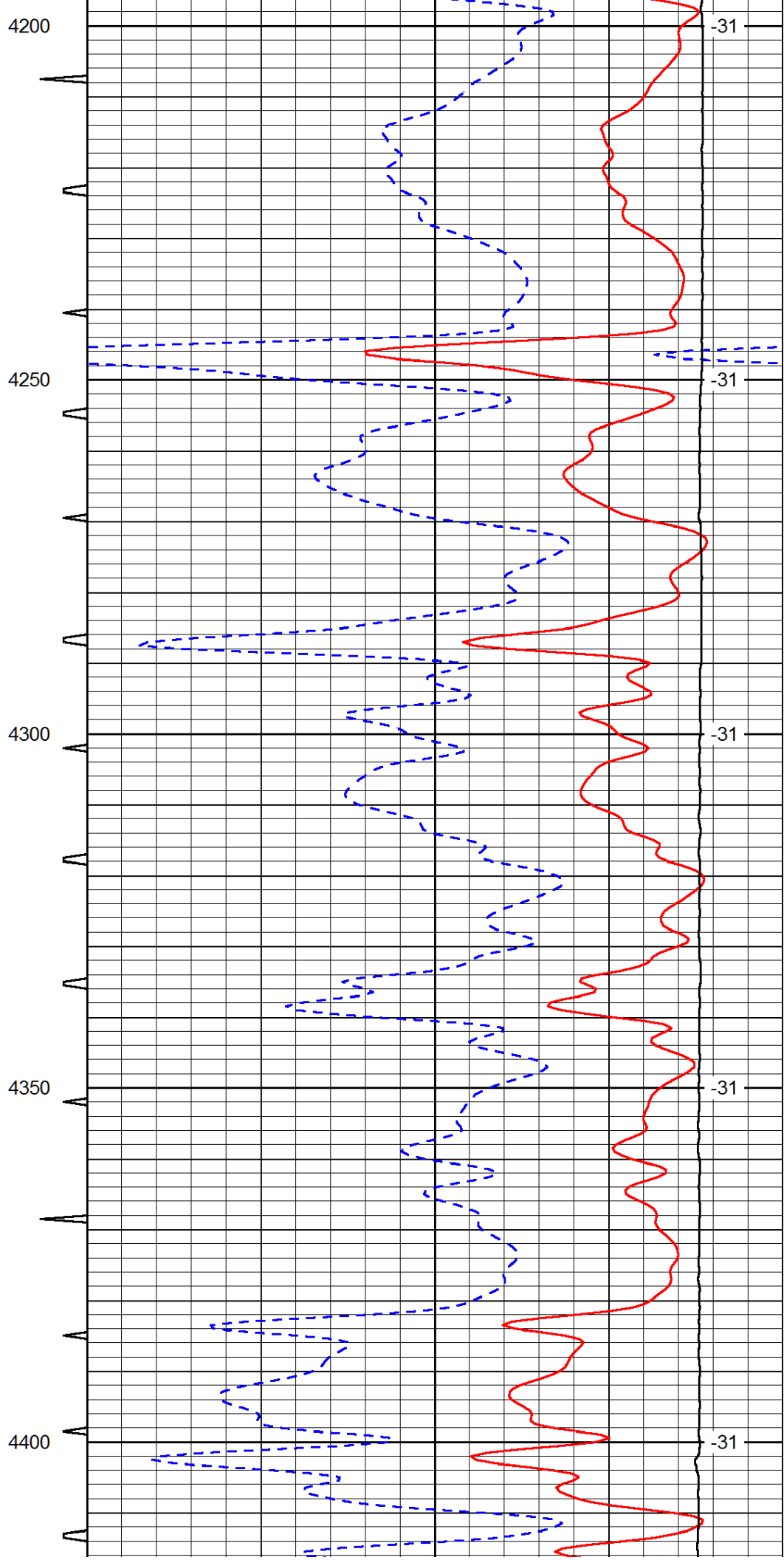
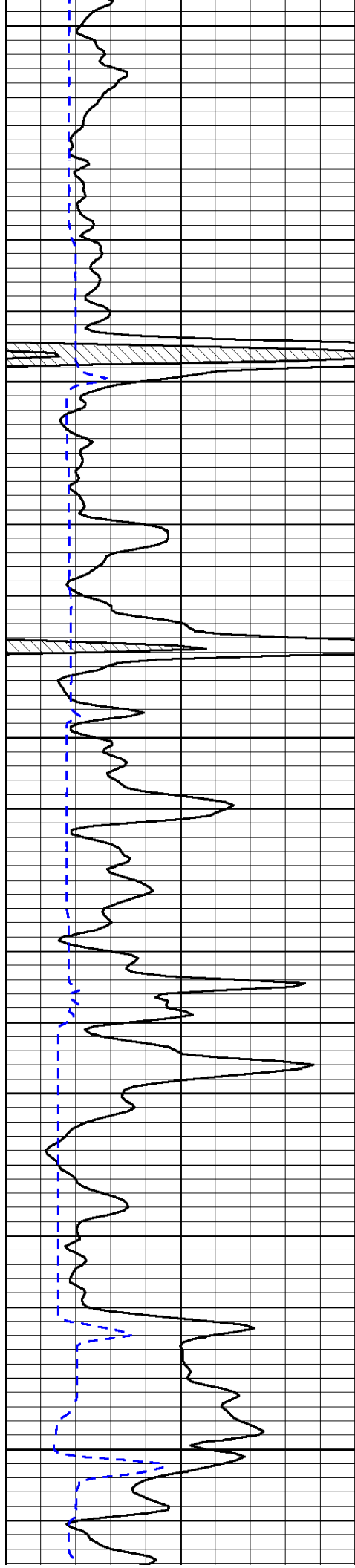


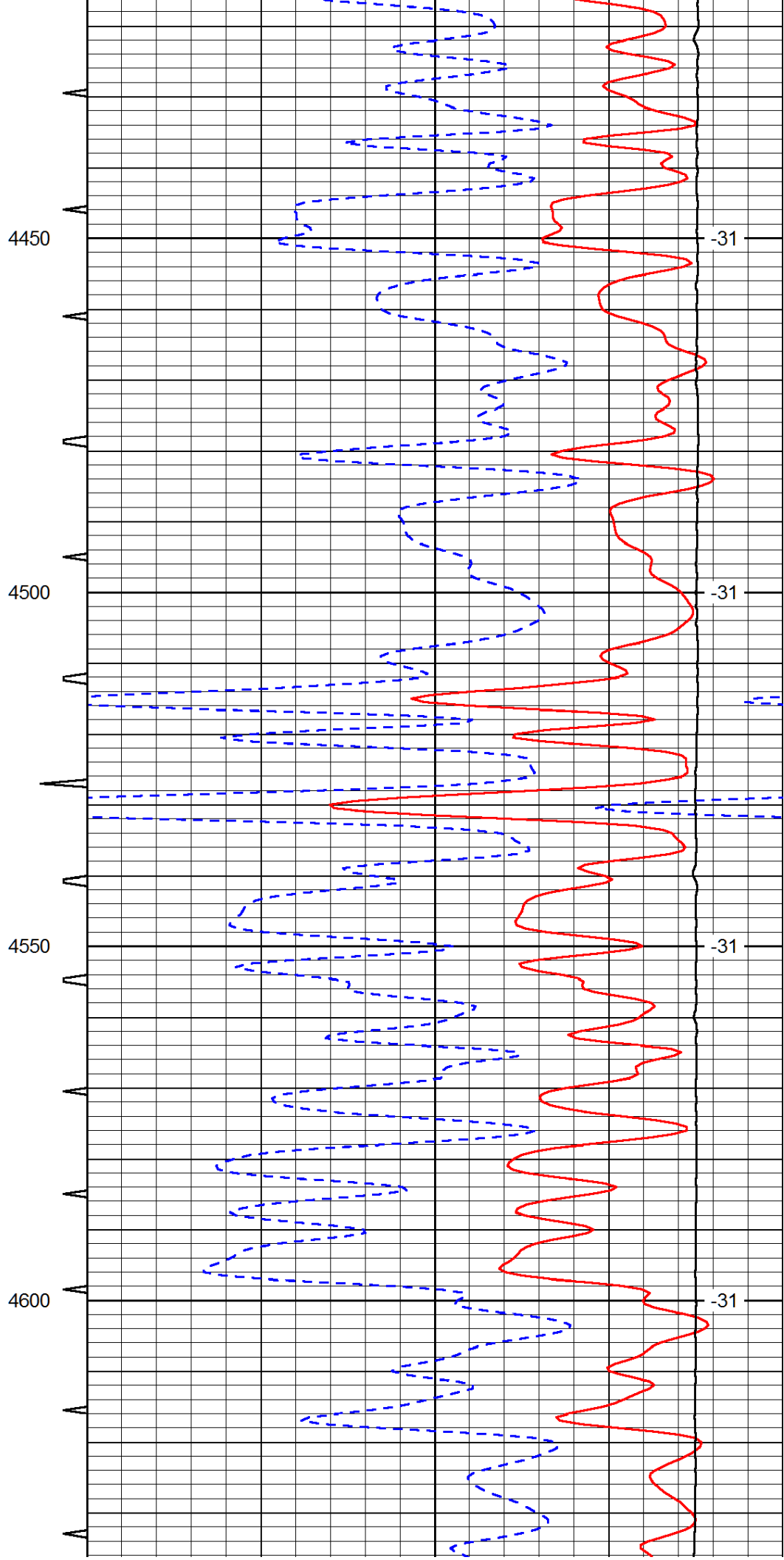
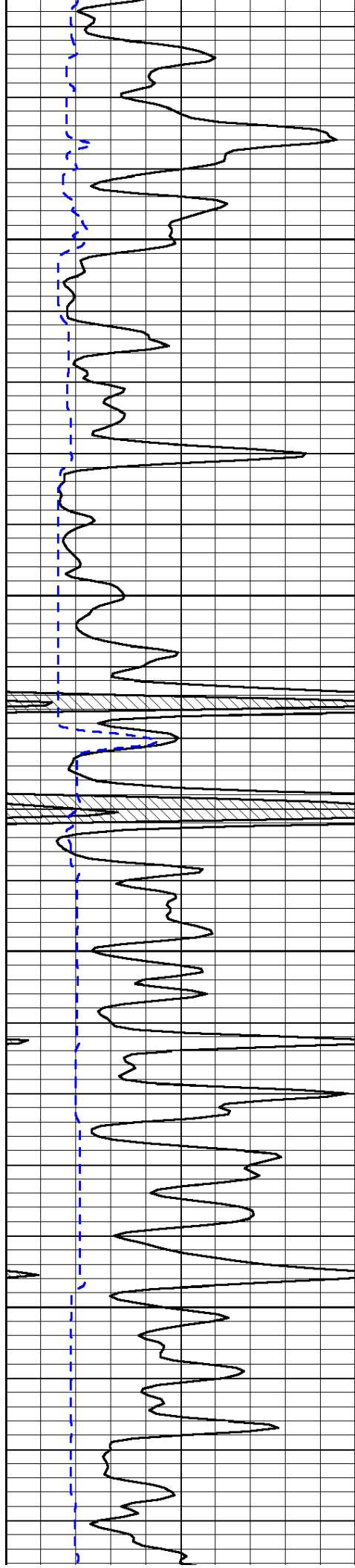


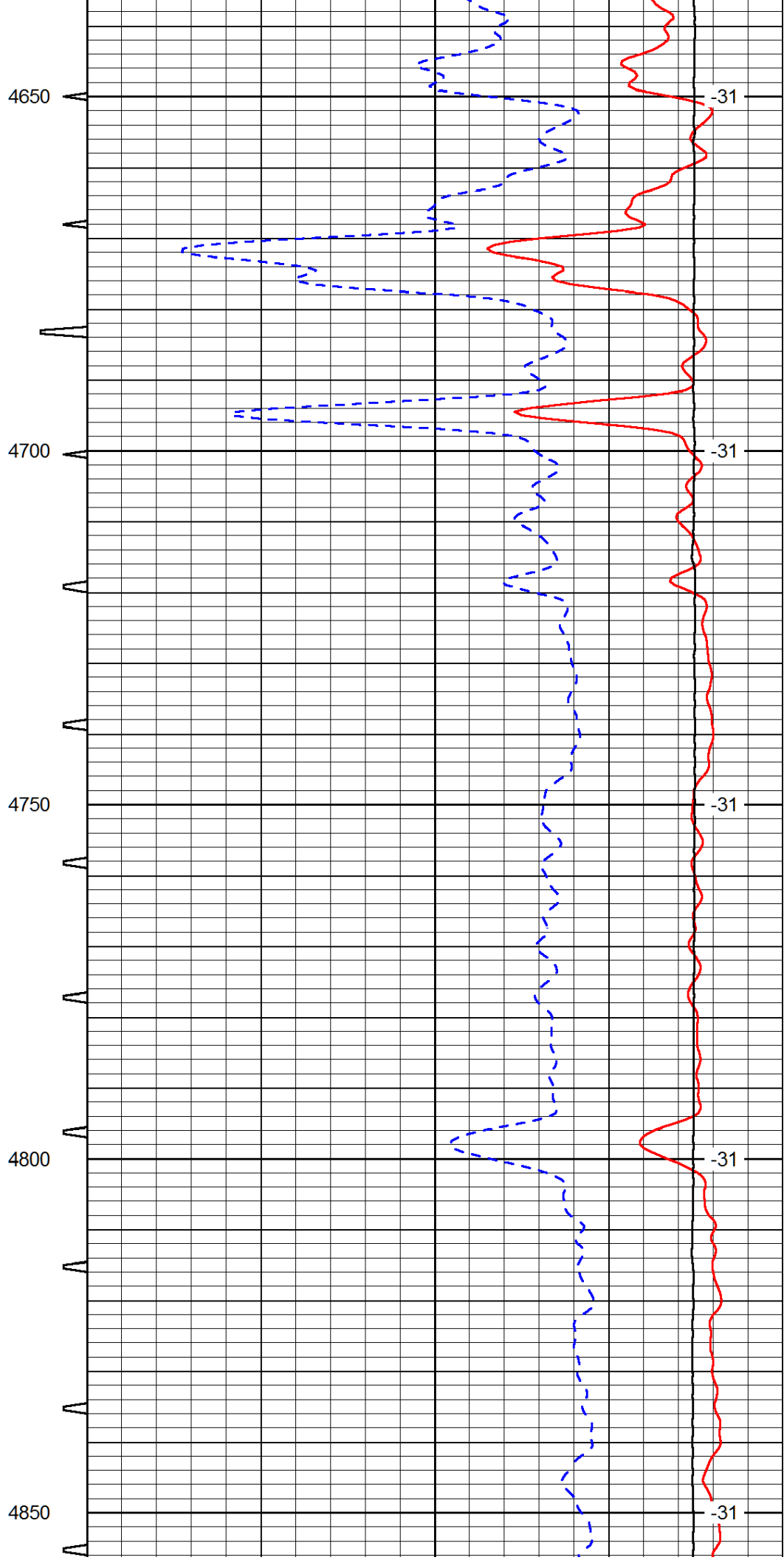
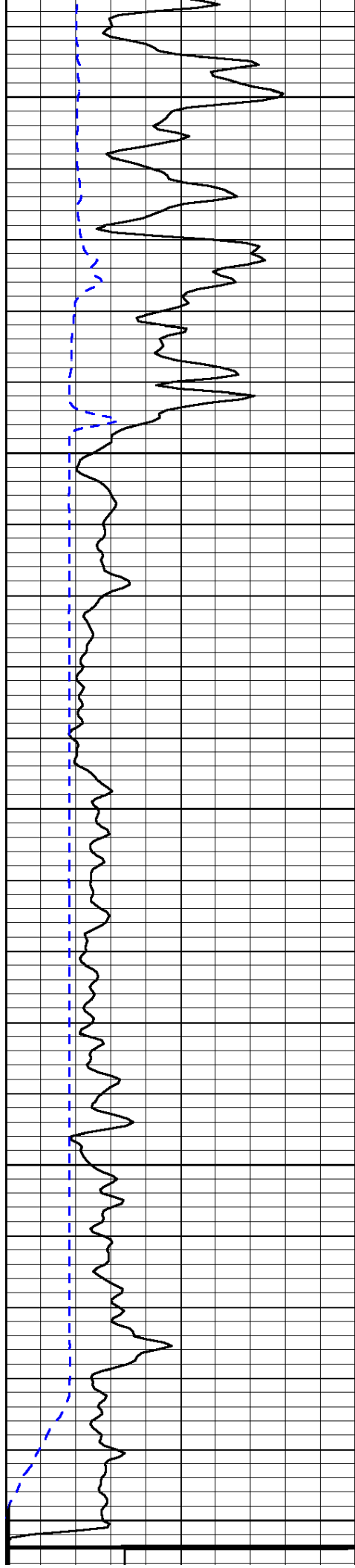


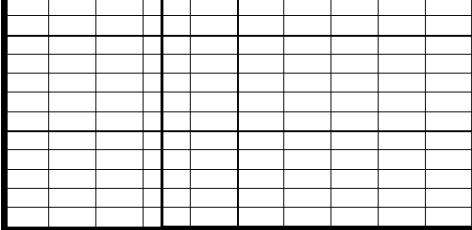






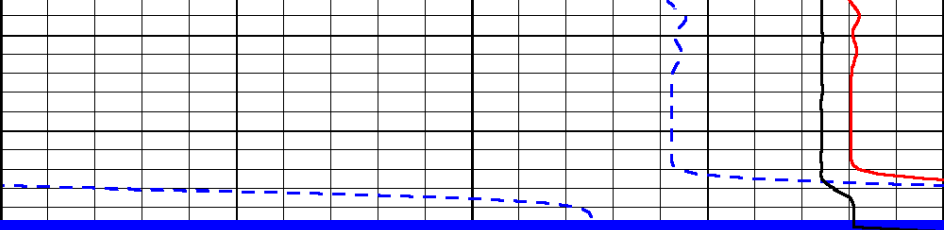






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150	Gamma Ray (GAPI)	300
6	dCAL (in)	16

Sonic Int
5 (msec) 0



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30	Sonic Porosity (pu)	-10
15000	LTEN (lb) (lb)	0

LSPD
(ft/min)