



Pioneer Energy Services

Borehole Compensated Sonic Log

15-171-21,050-00-00

API No.

Company **Landmark Resources, Inc.**

Well **Frick #1-5**

Field **Wildcat**

County **Scott**

State **Kansas**

Location **2280' FNL & 1469' FWL**

Sec: **5** Twp: **17S** Rge: **33W**

Other Services
CNL/CDL
MEL/DIL

Elevation

Permanent Datum **Ground Level** Elevation **3080**
Log Measured From **Kelly Bushing** 11 Ft. Above Perm. Datum
Drilling Measured From **Kelly Bushing**

K.B. 3091
D.F.
G.L. 3080

Date **4/17/2014**

Run Number **Two**

Type Log **BHC Sonic**

Depth Driller **4820**

Depth Logger **4820**

Bottom Logged Interval **4809**

Top Logged Interval **250**

Type Fluid In Hole **Chemical**

Salinity, PPM CL **4,500**

Density **9.5**

Level **Full**

Max. Rec. Temp. F **124**

Operating Rig Time **5 Hours**

Equipment -- Location **17 Hays**

Recorded By **C. Desaire**

Witnessed By **Terry McLeod**

Borehole Record

Casing Record

Run No. Bit From To Size Wgt. From To

1 12.25 00 264 8.625 24# 00 264

2 7.875 264 4820

<<< 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.

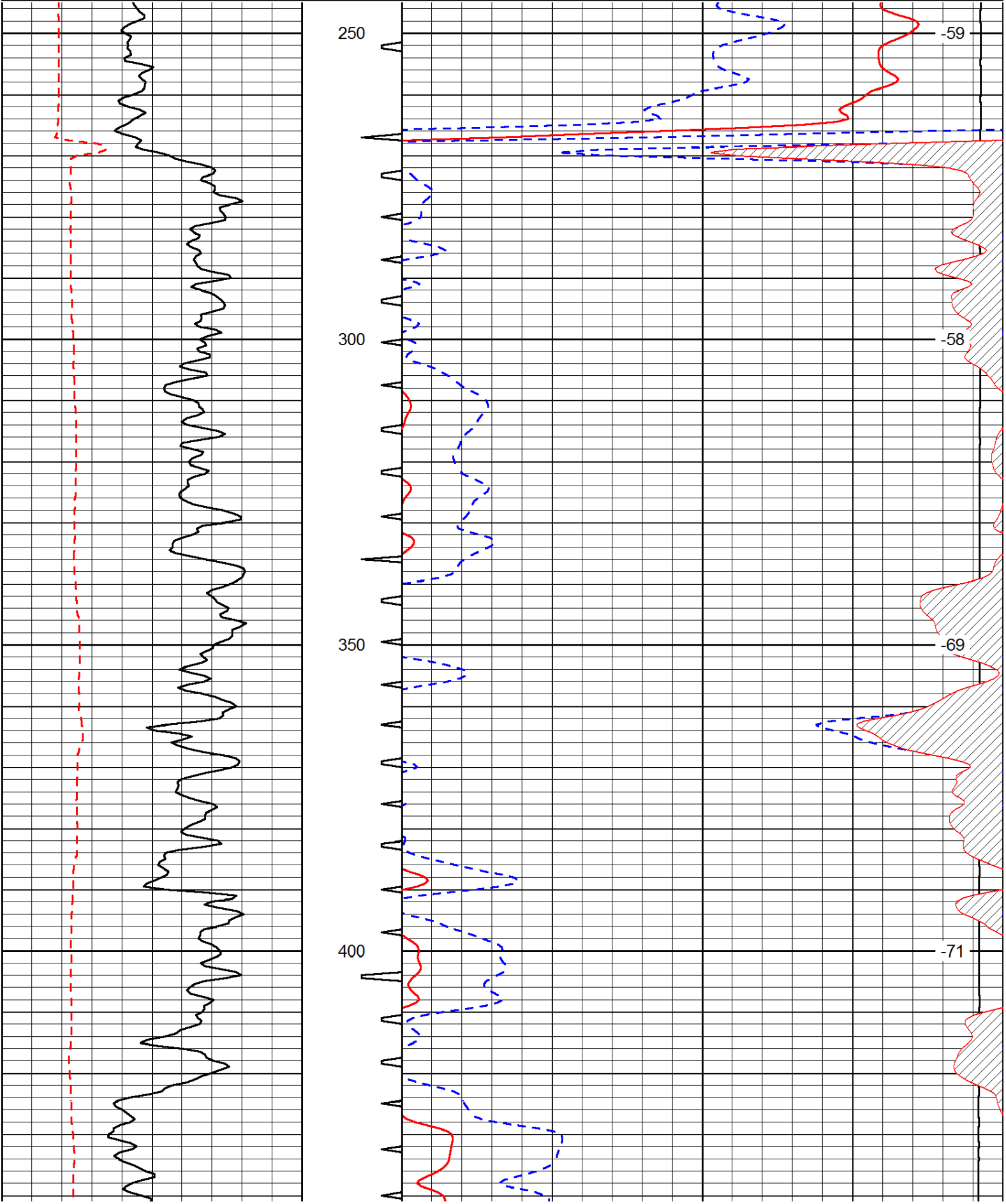
Comments

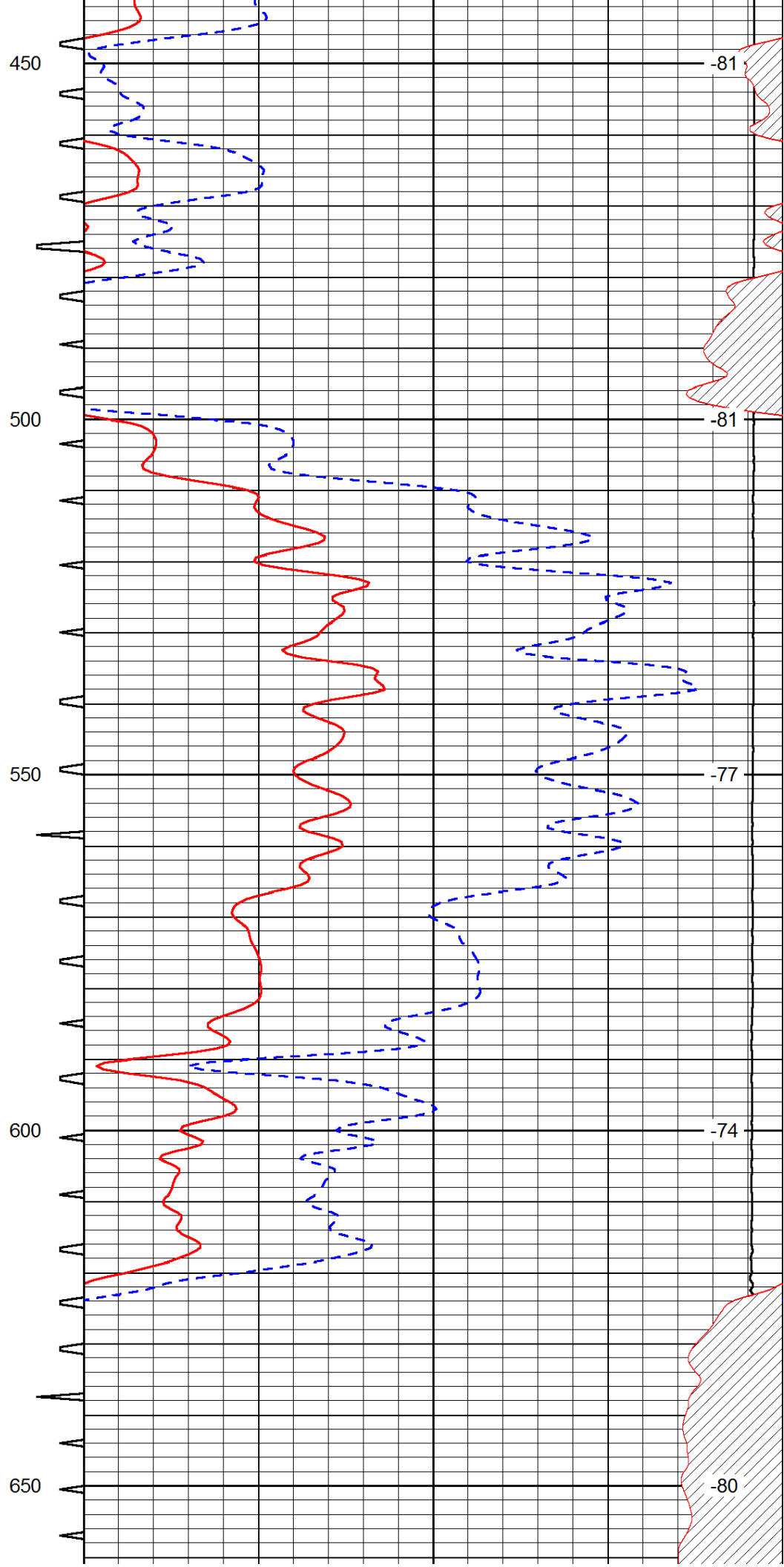
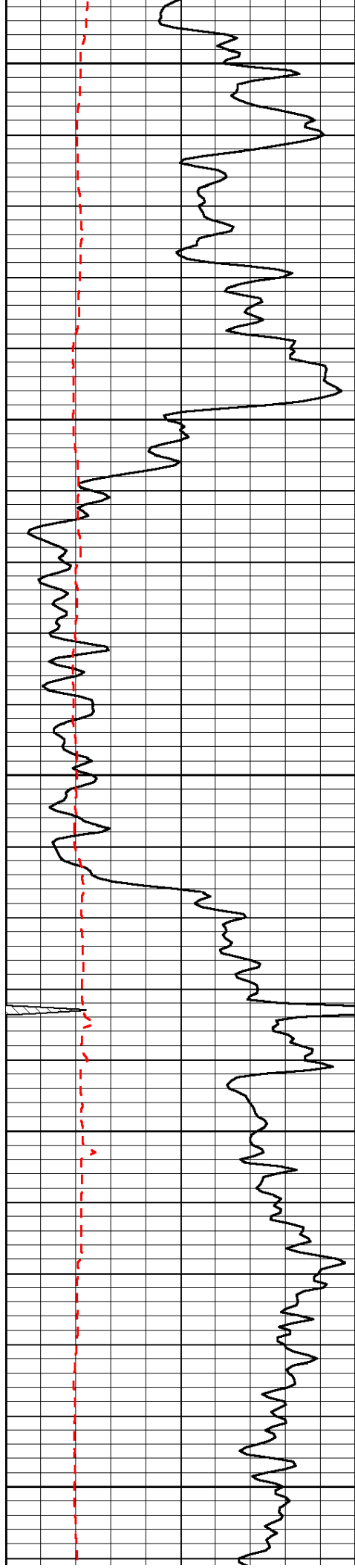
Thank you for using Pioneer Energy Services
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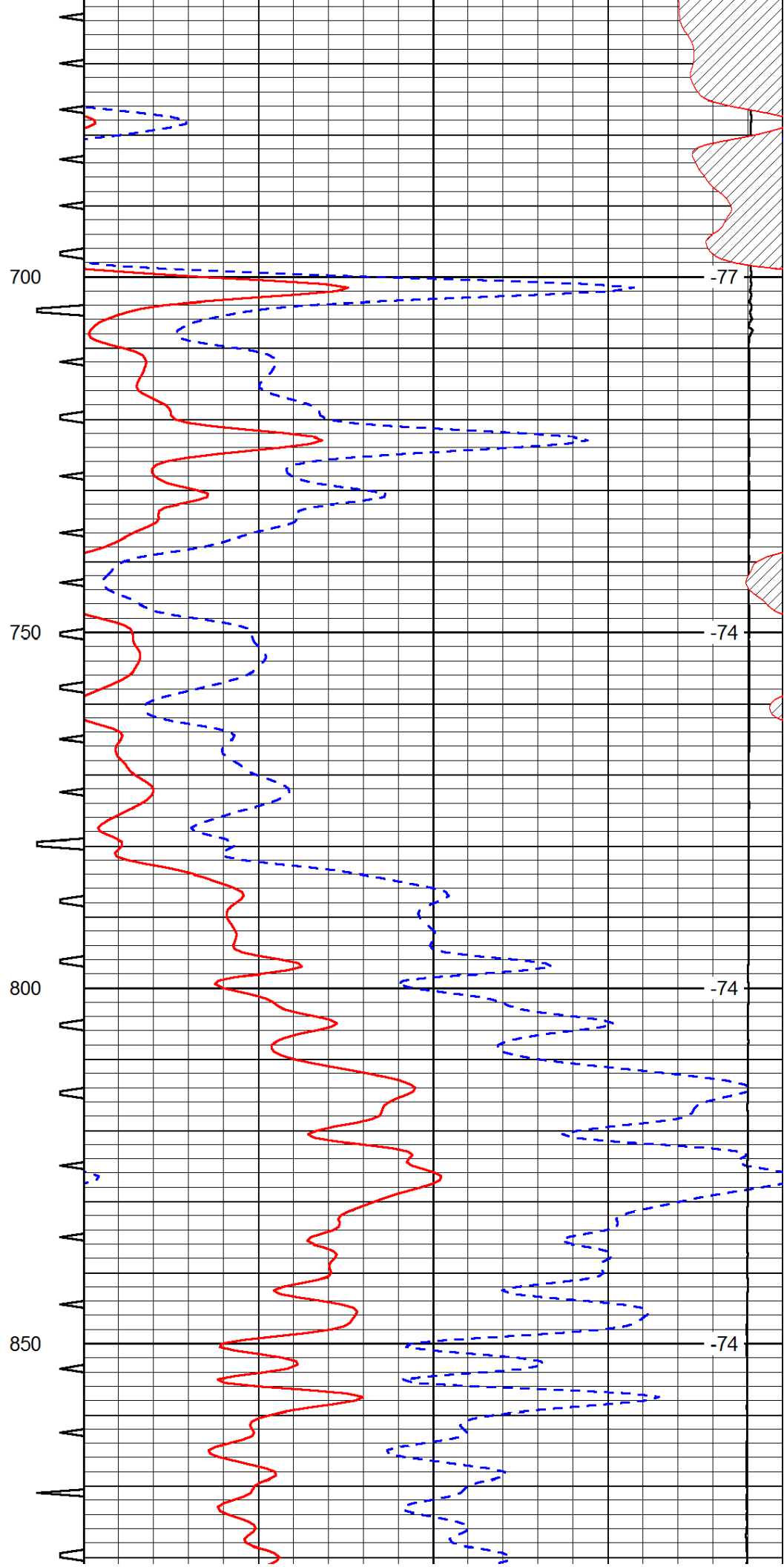
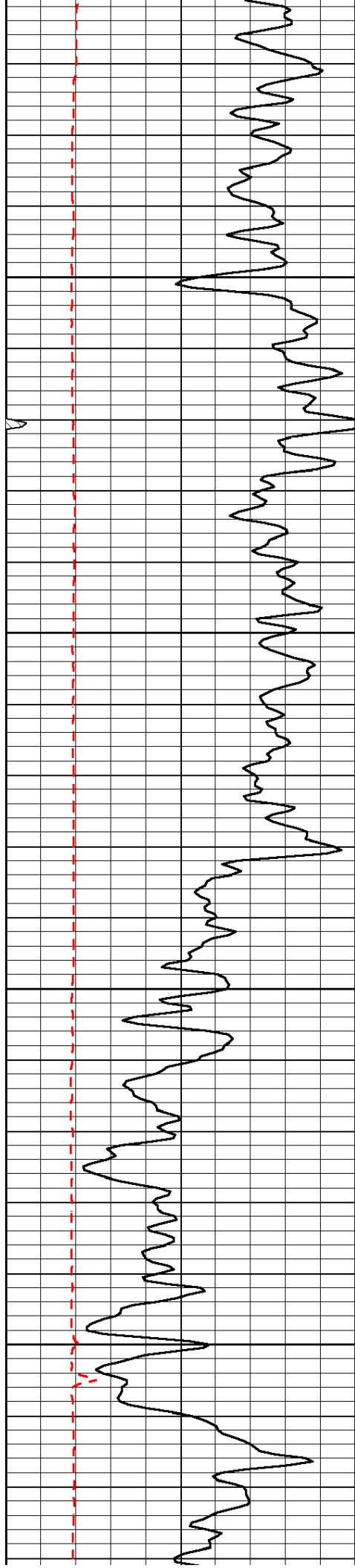
Oakley KS, S on Hwy 183 to Hwy 4,
4 W, 1 N, 3/4 W, S Into

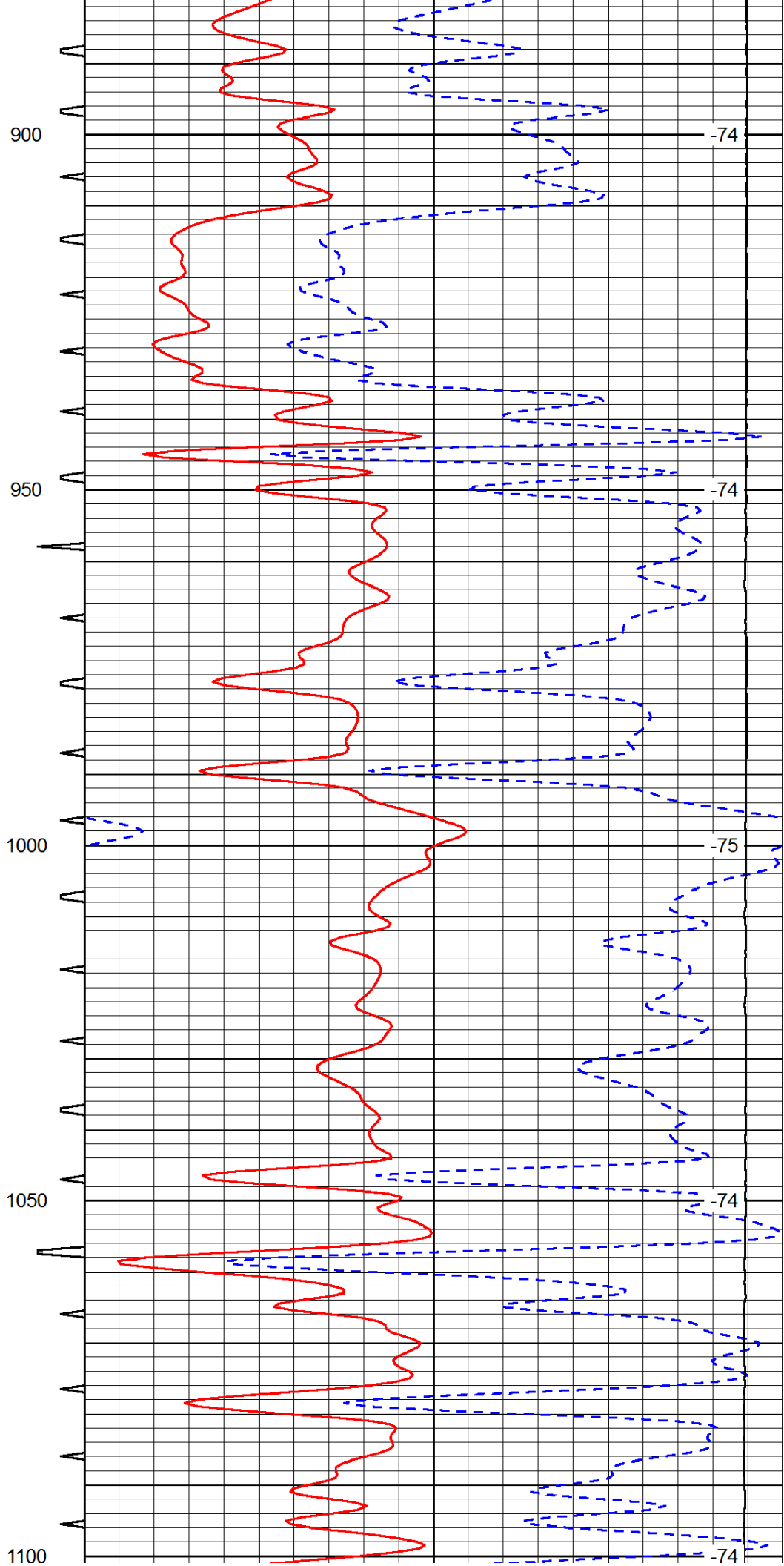
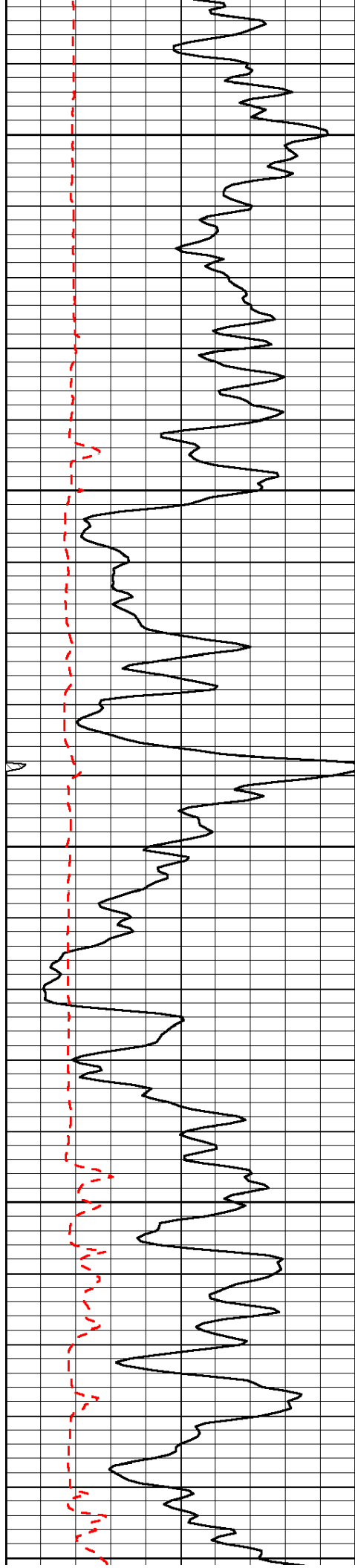
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Dataset Pathname: dil\lmstk
Presentation Format: sonic
Dataset Creation: Thu Apr 17 08:47:06 2014
Charted by: Depth in Feet scaled 1:240

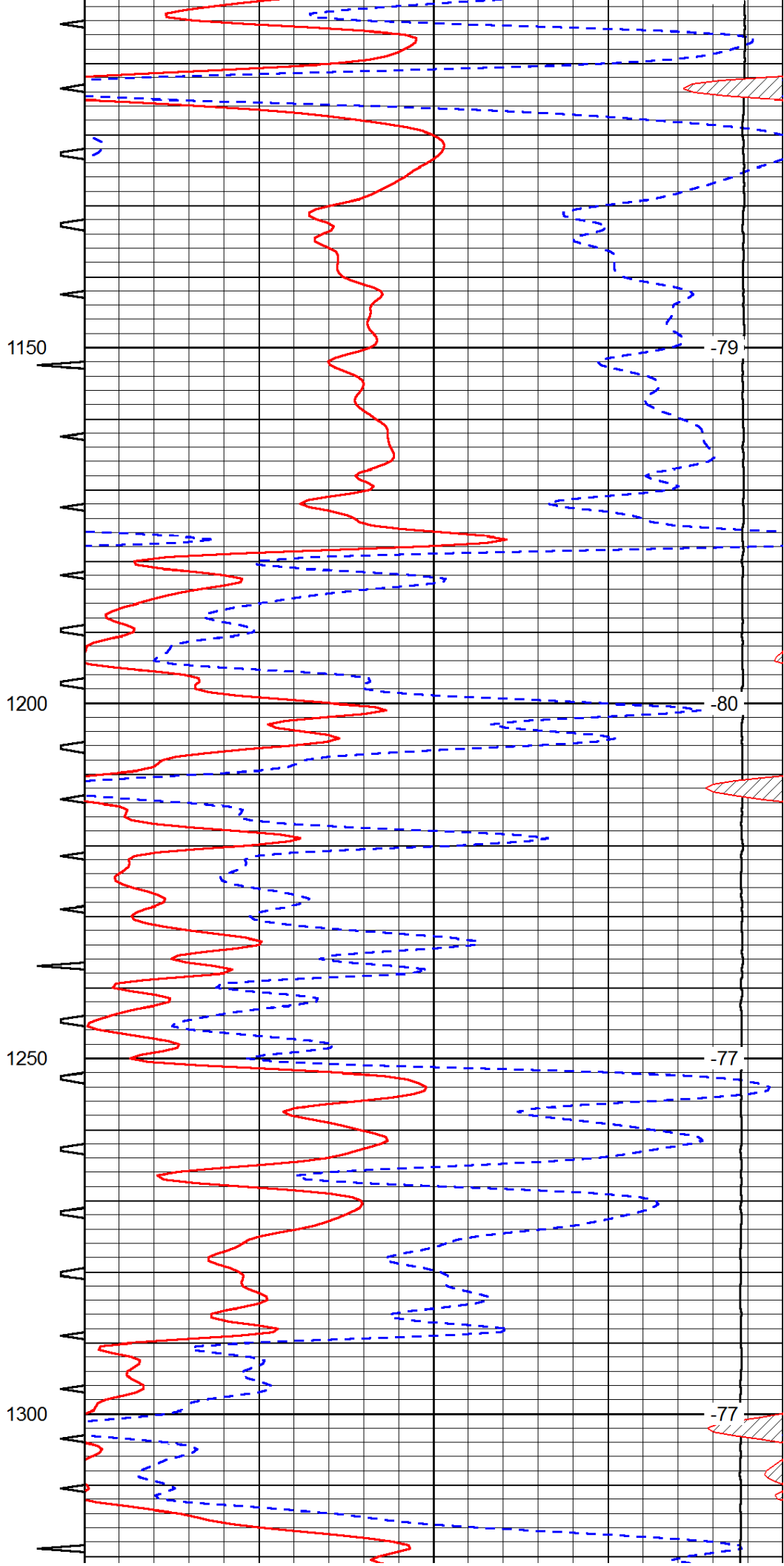
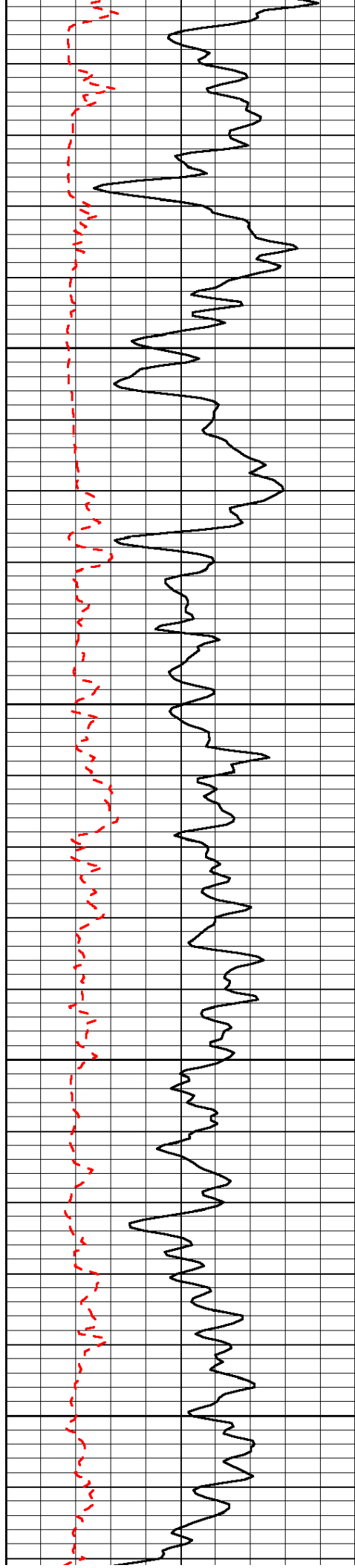
Charted by:		Depth in Feet scaled 1:2.16					
0	Gamma Ray	150	5	Sonic Int	140	Delta Time (usec/ft)	40
150	Gamma Ray	300		0	30	SPOR	-10
6	Caliper (GAPI)	16			15000	LTEN (lb)	0
							LSPD

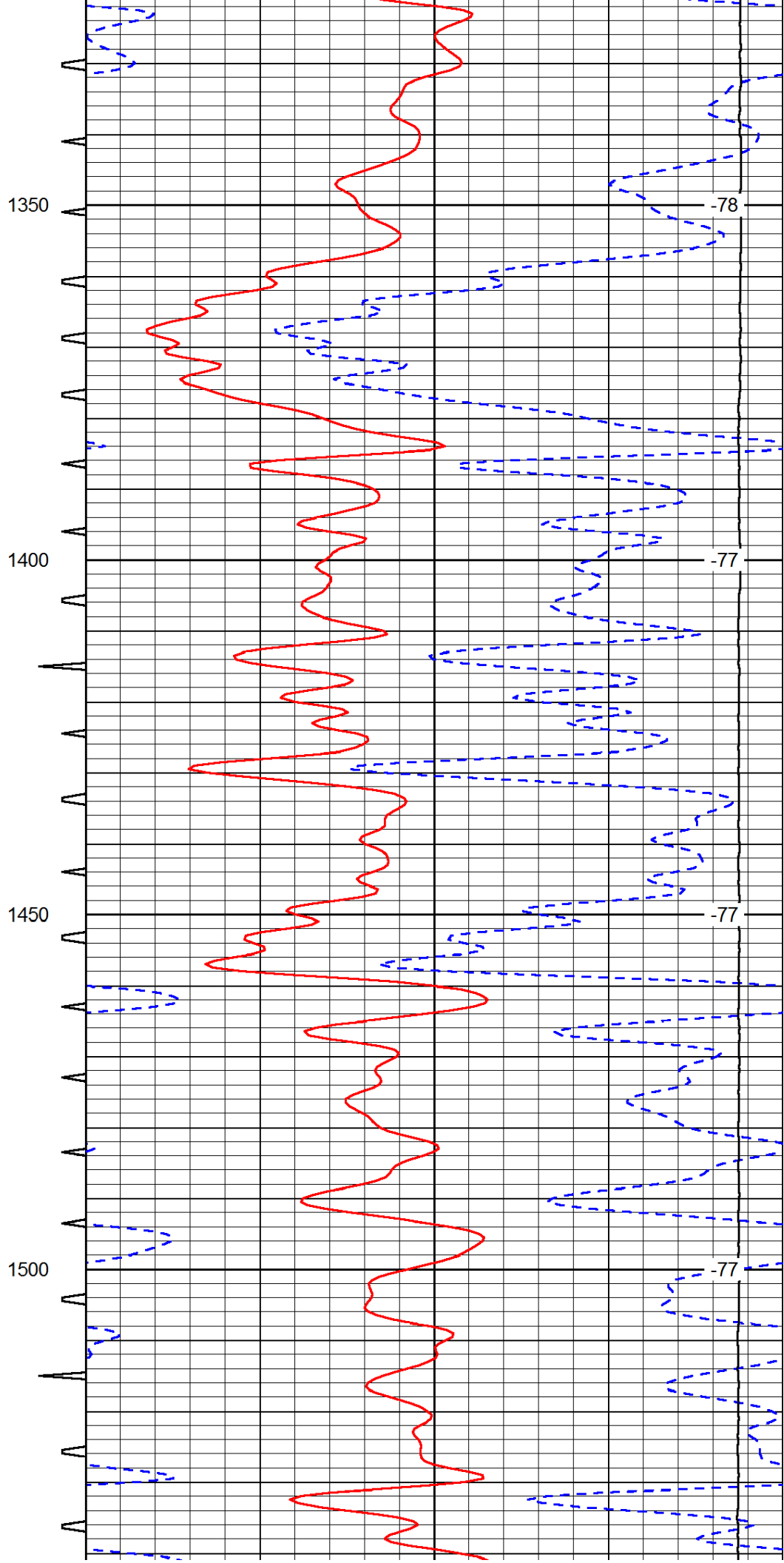
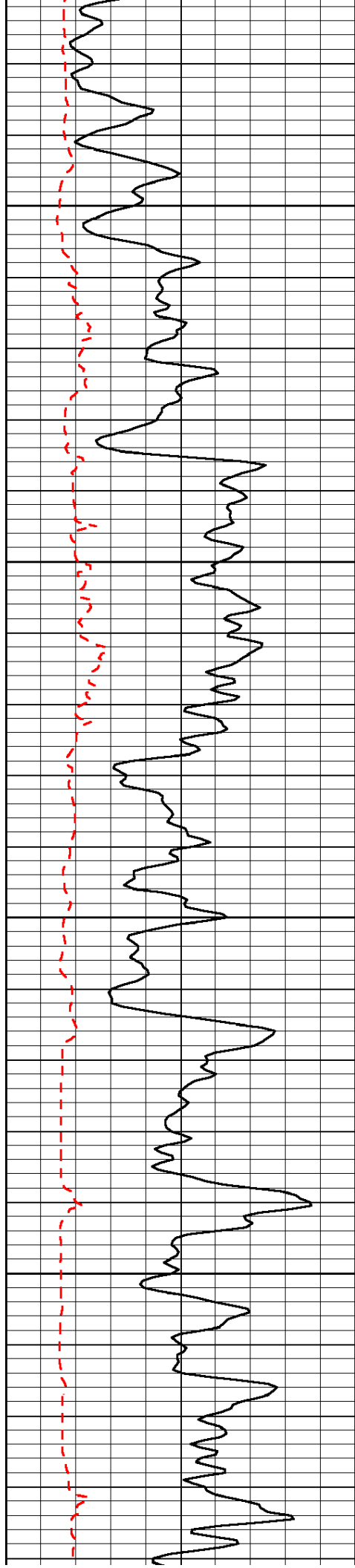


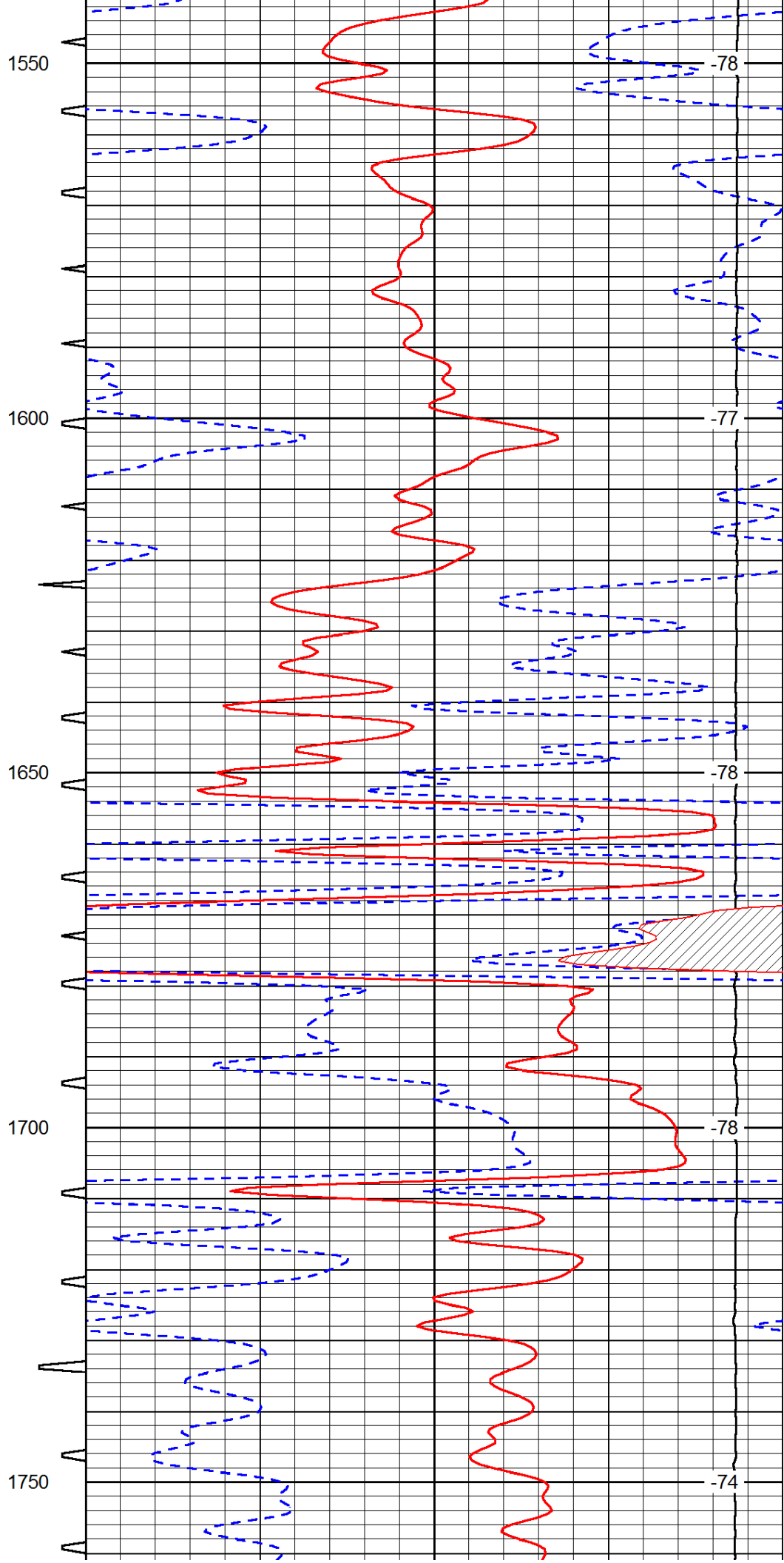
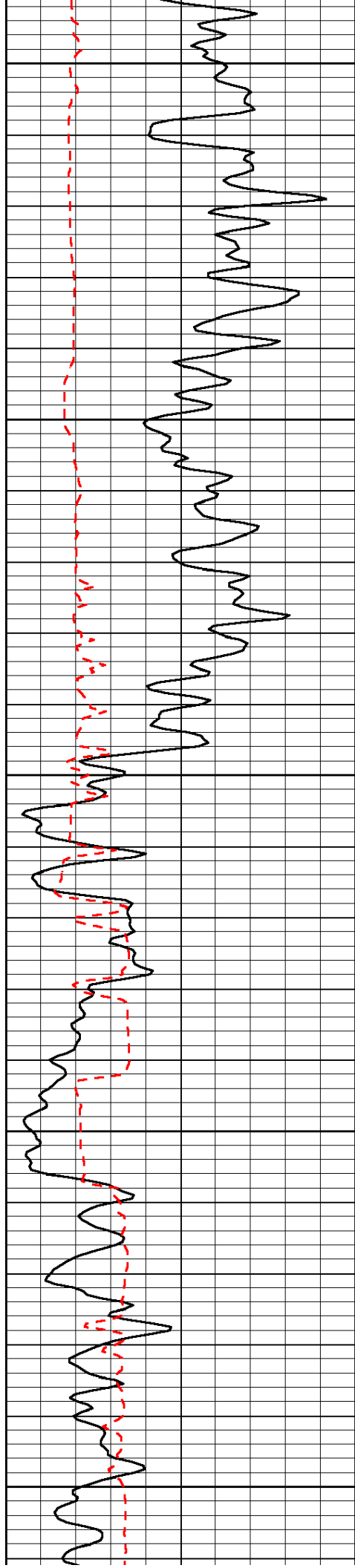


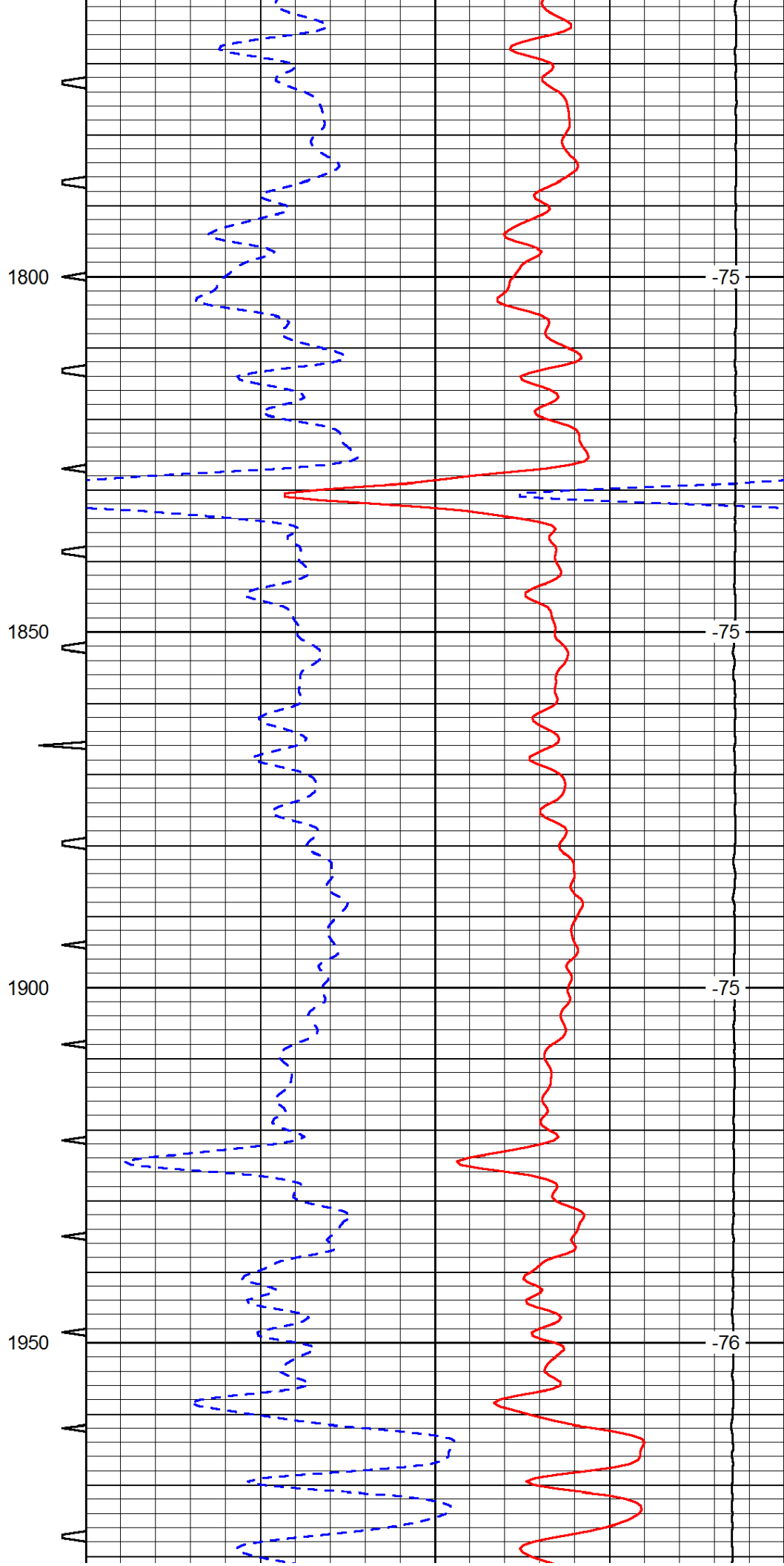
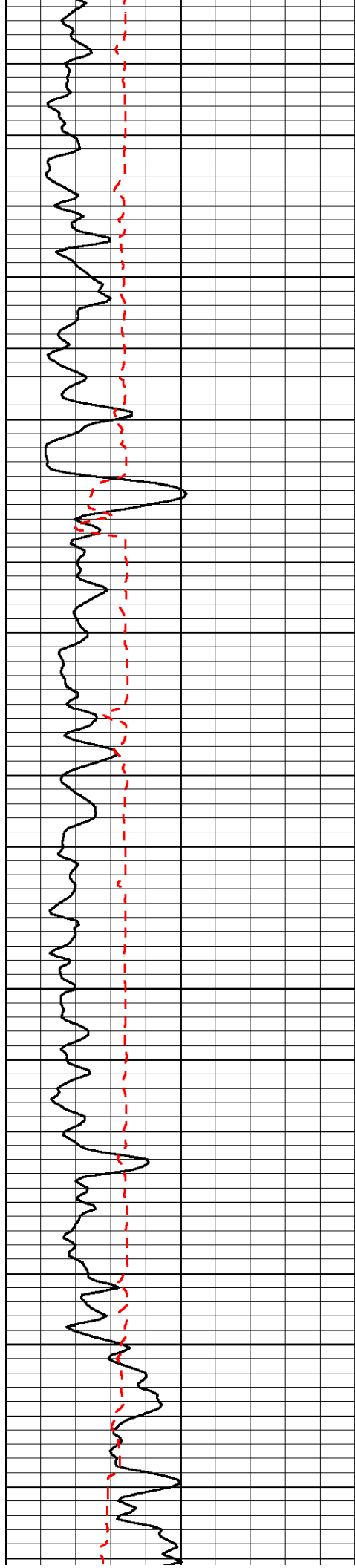


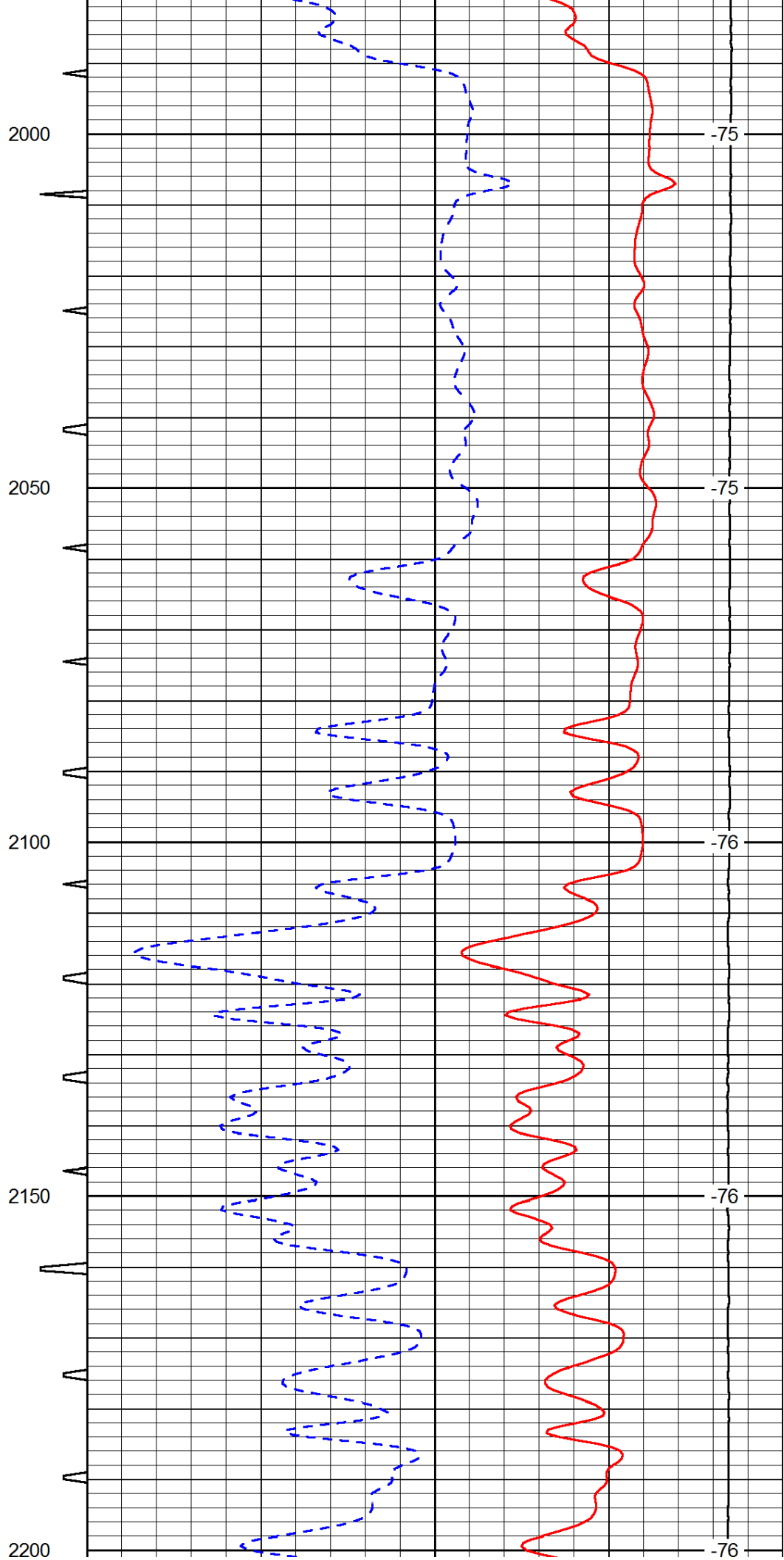
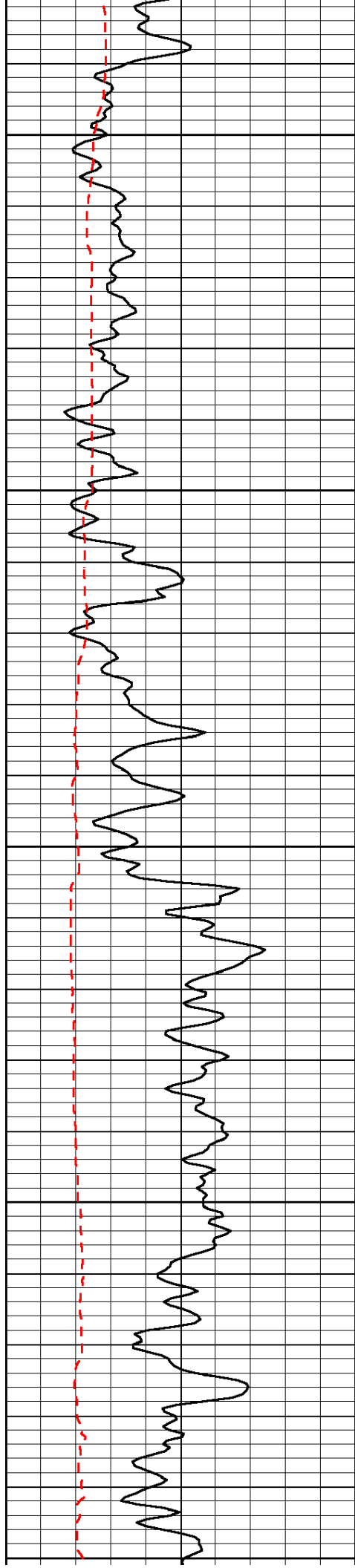


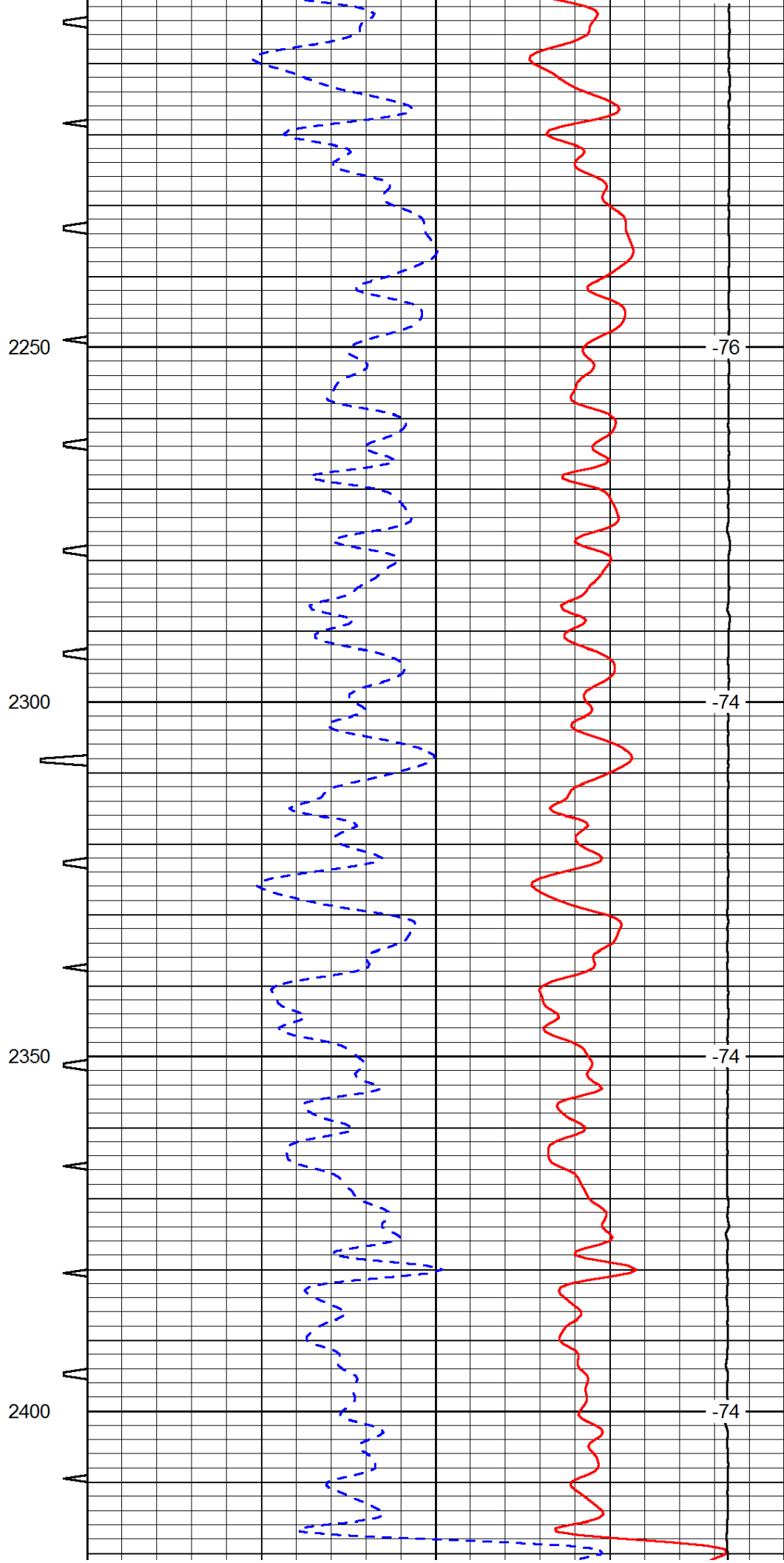
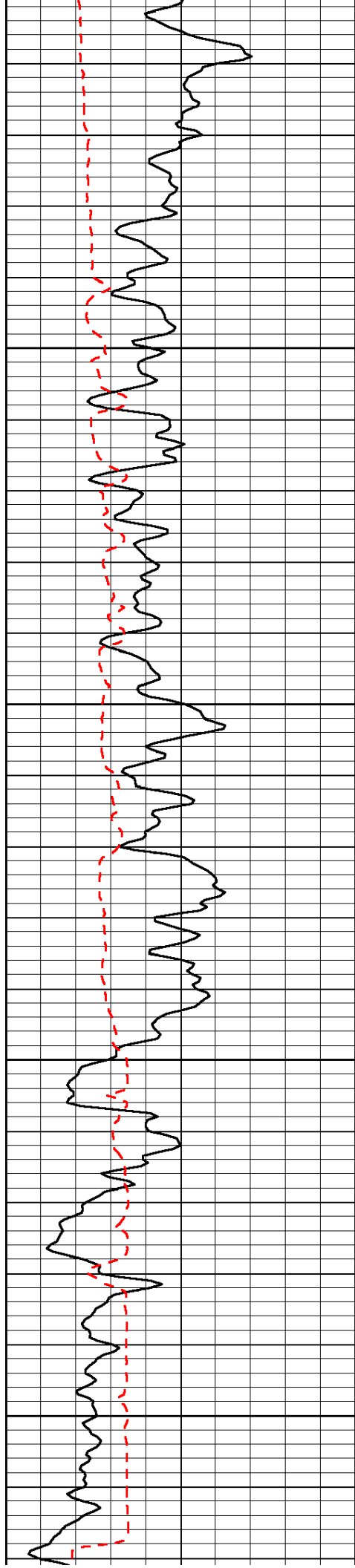


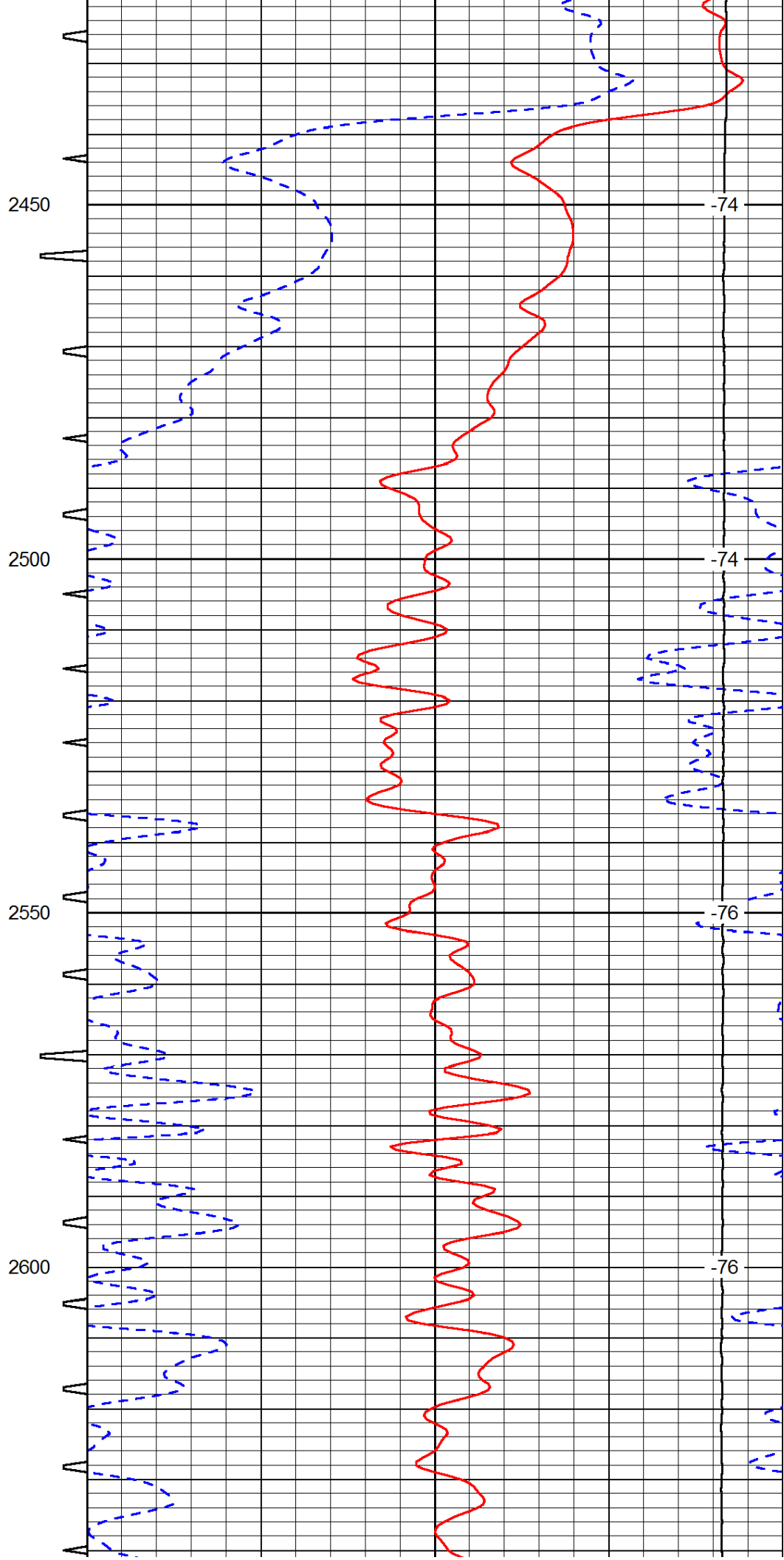
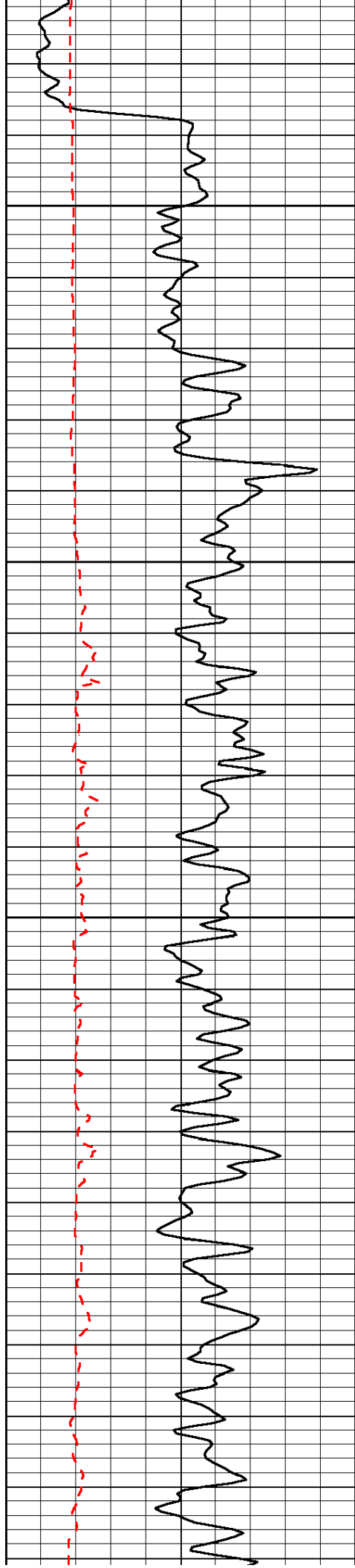


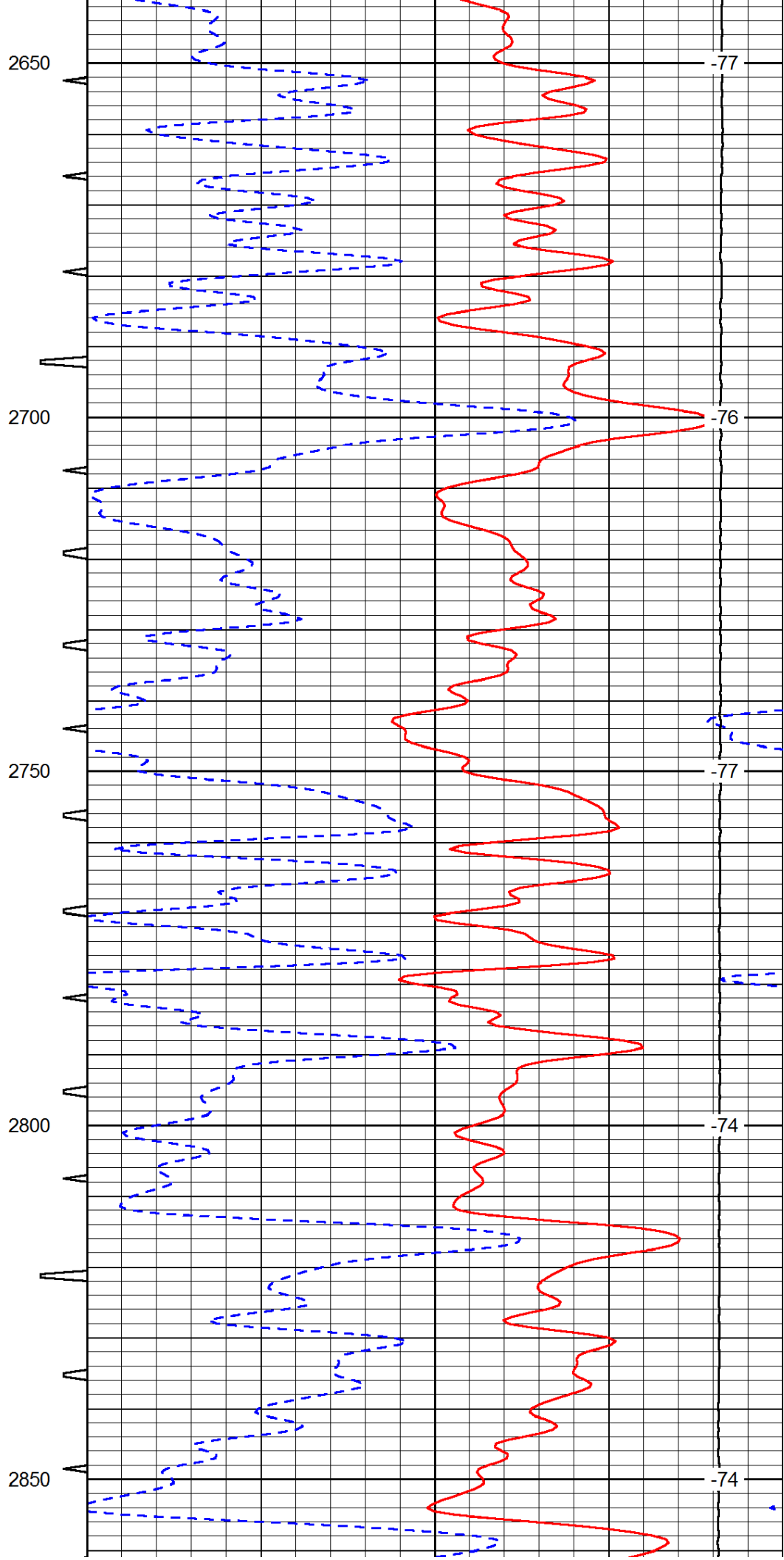
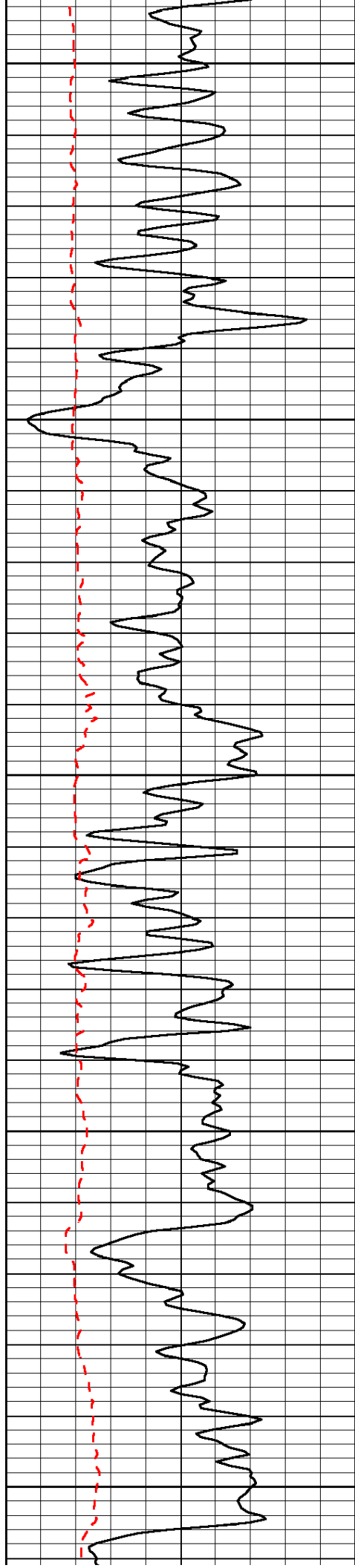


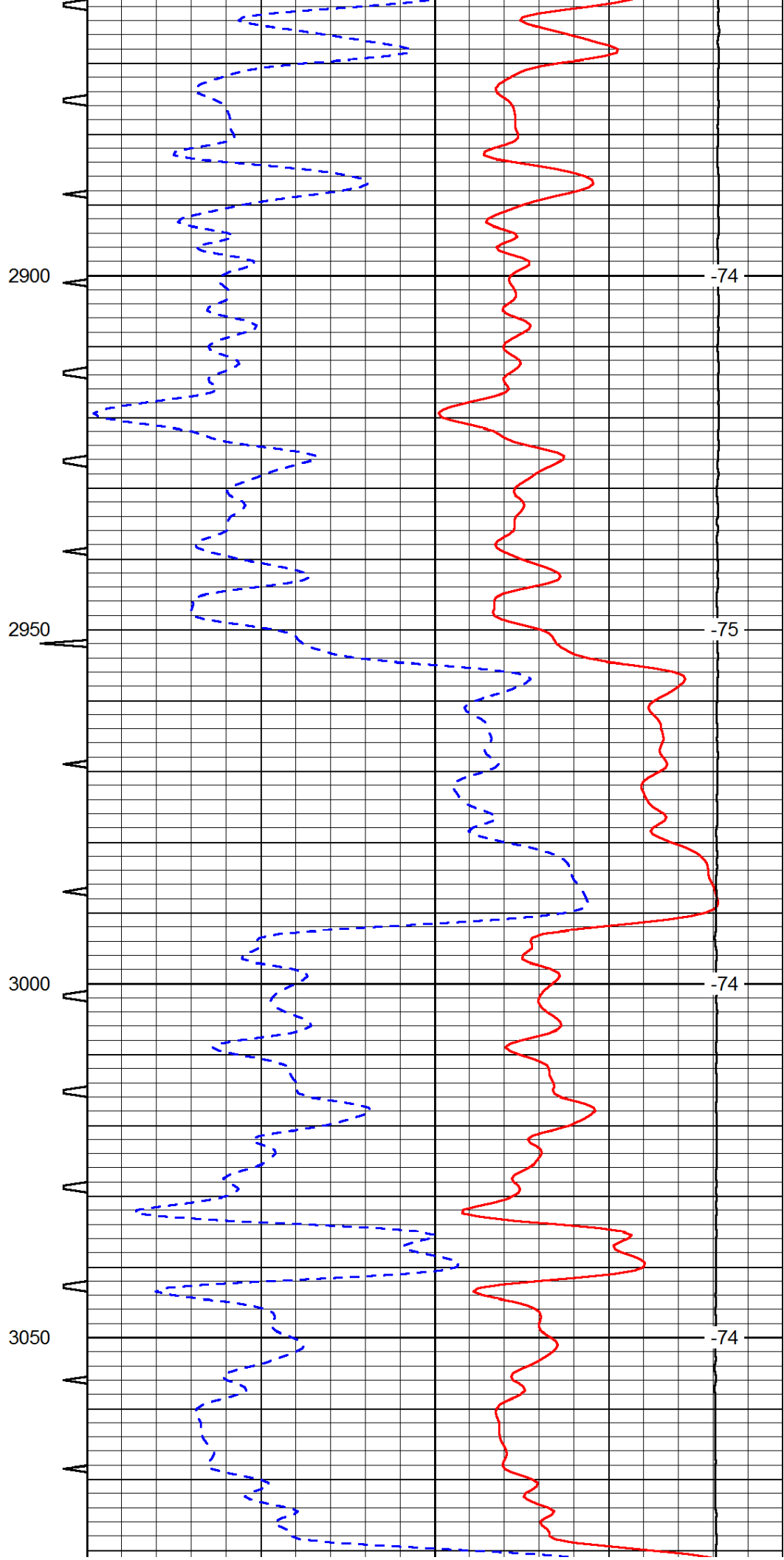
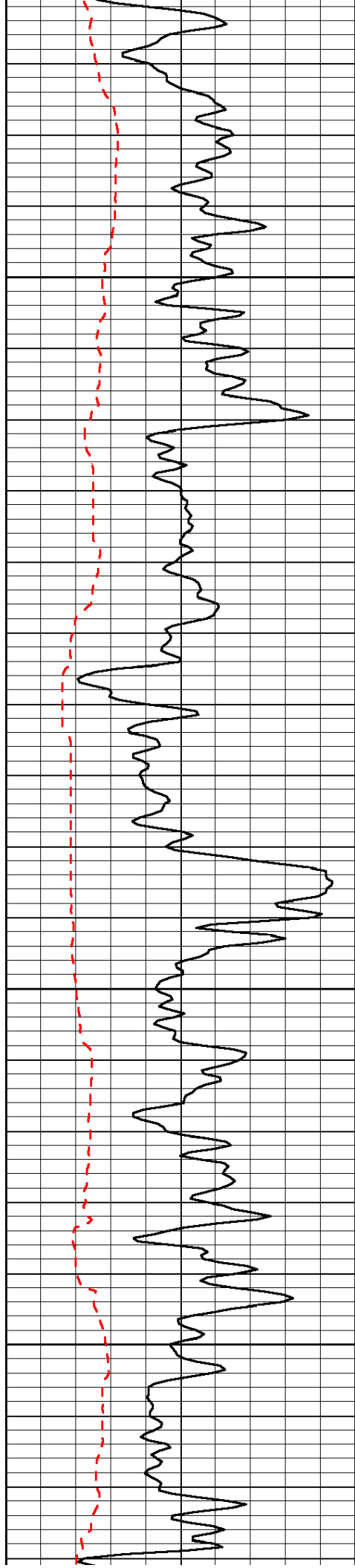


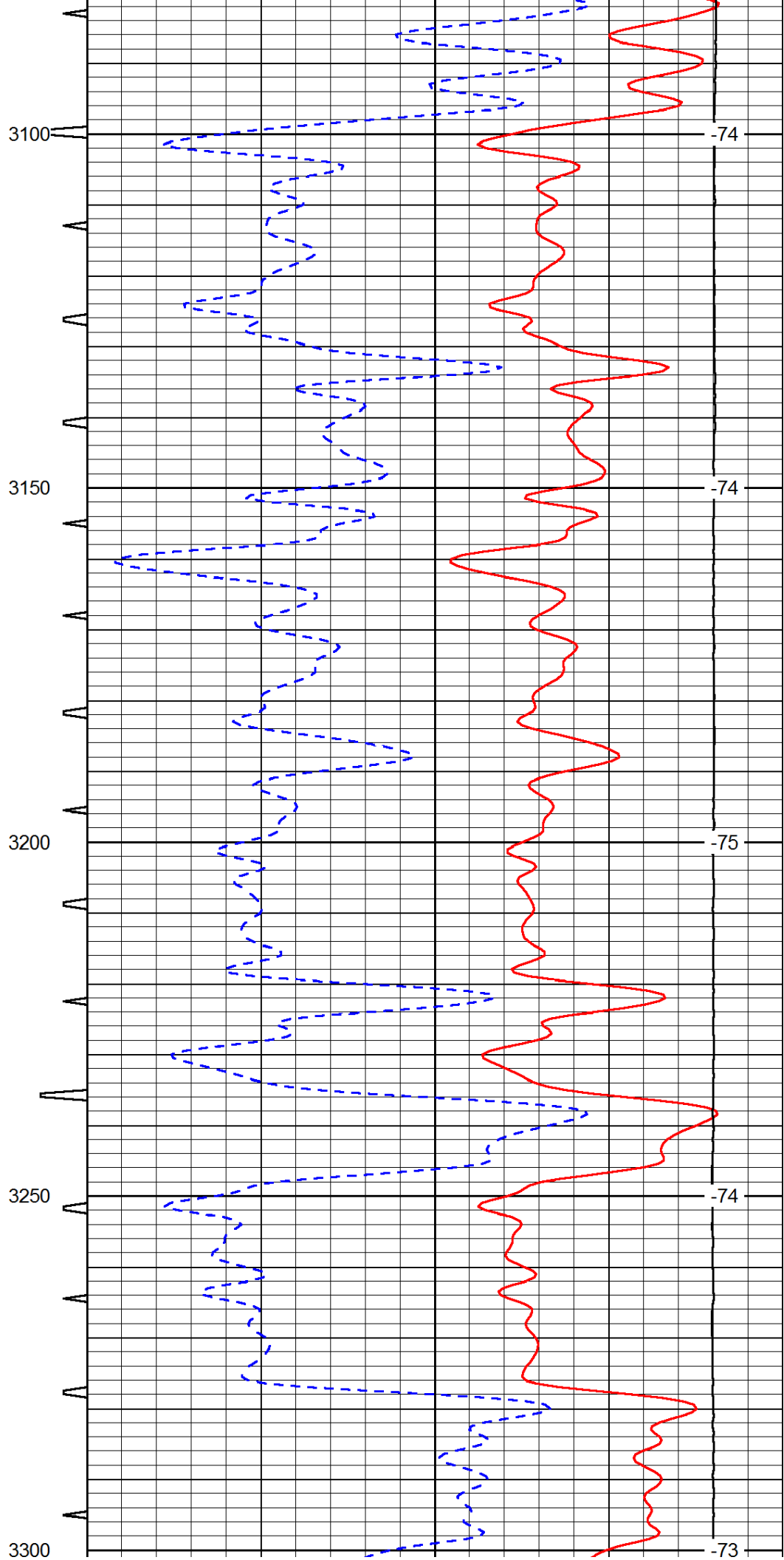
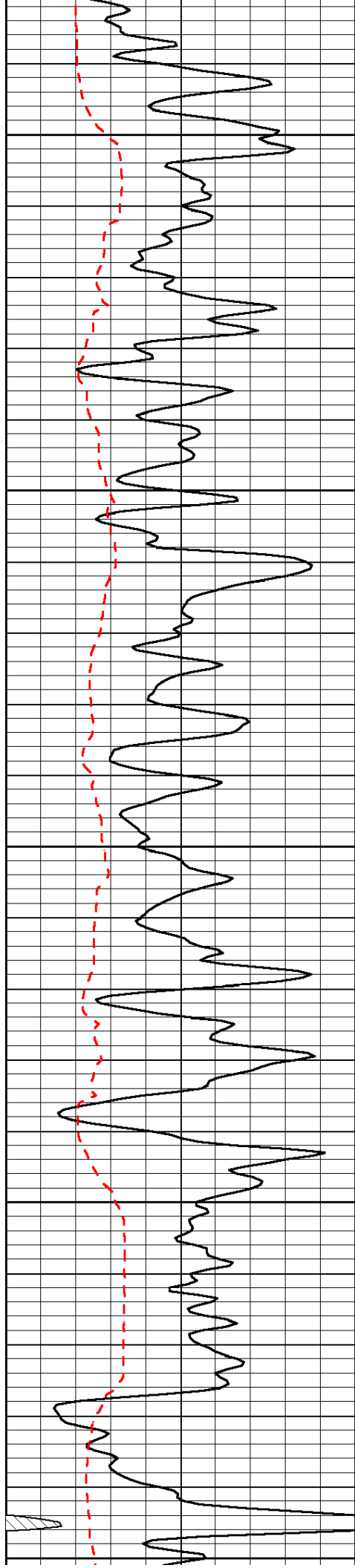


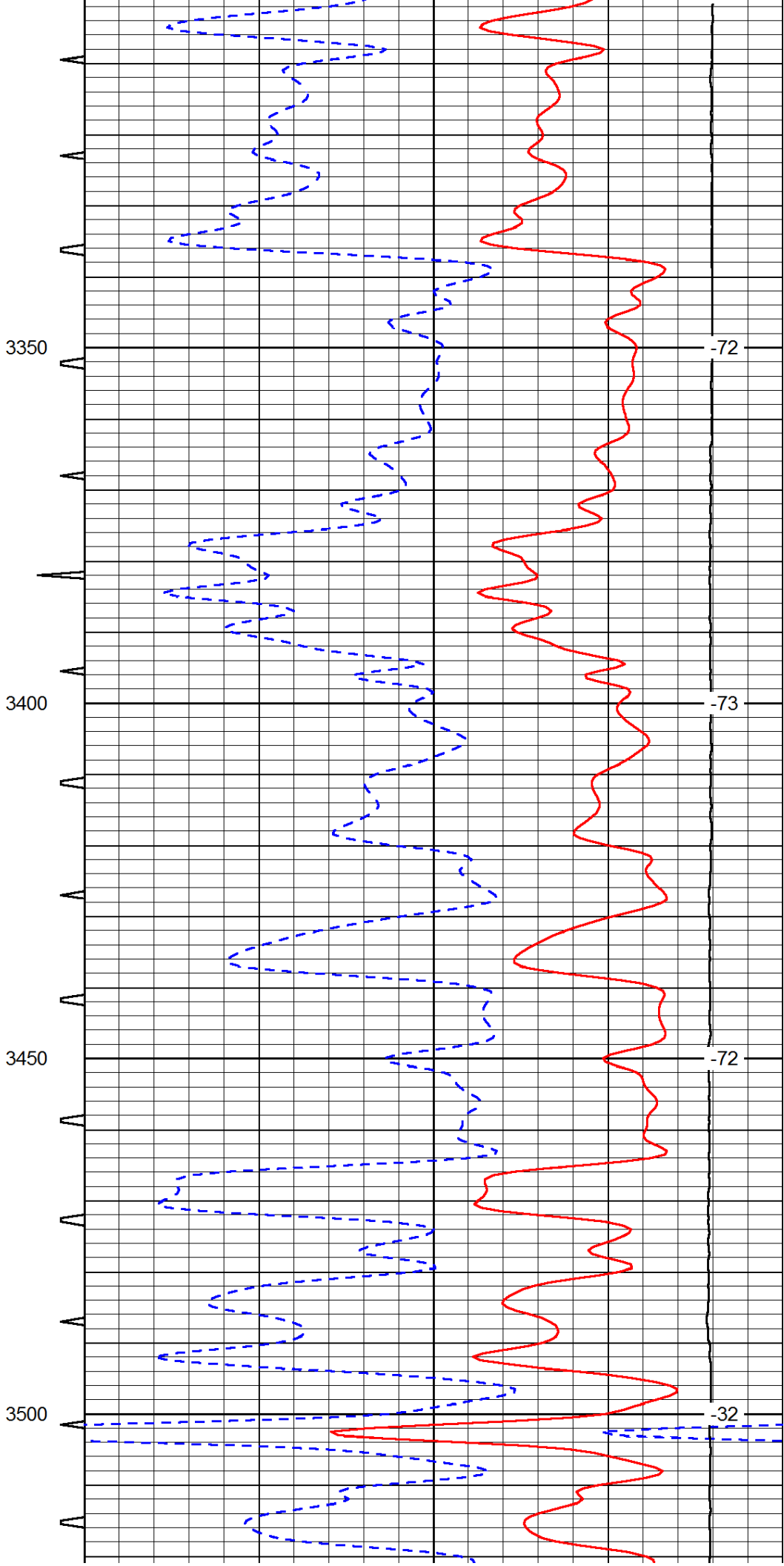
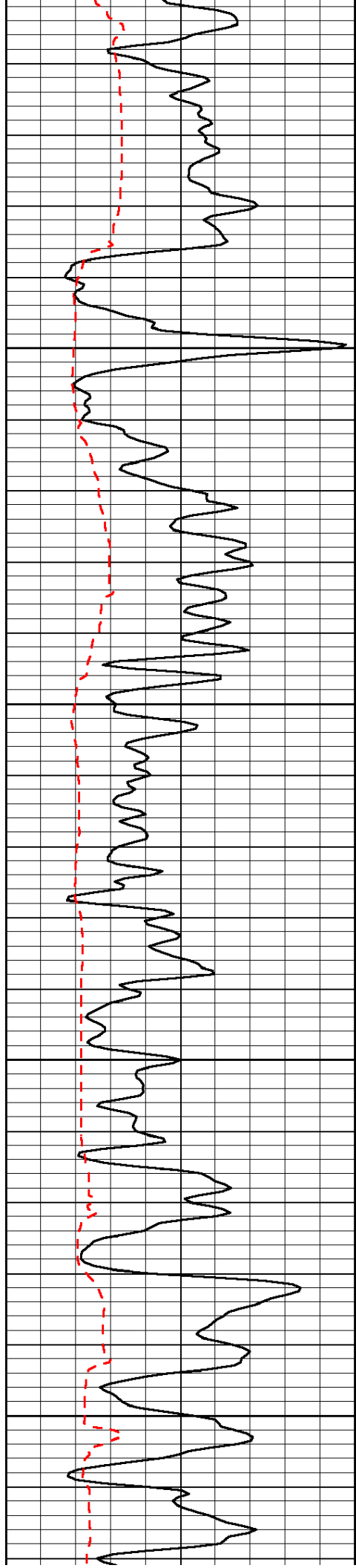


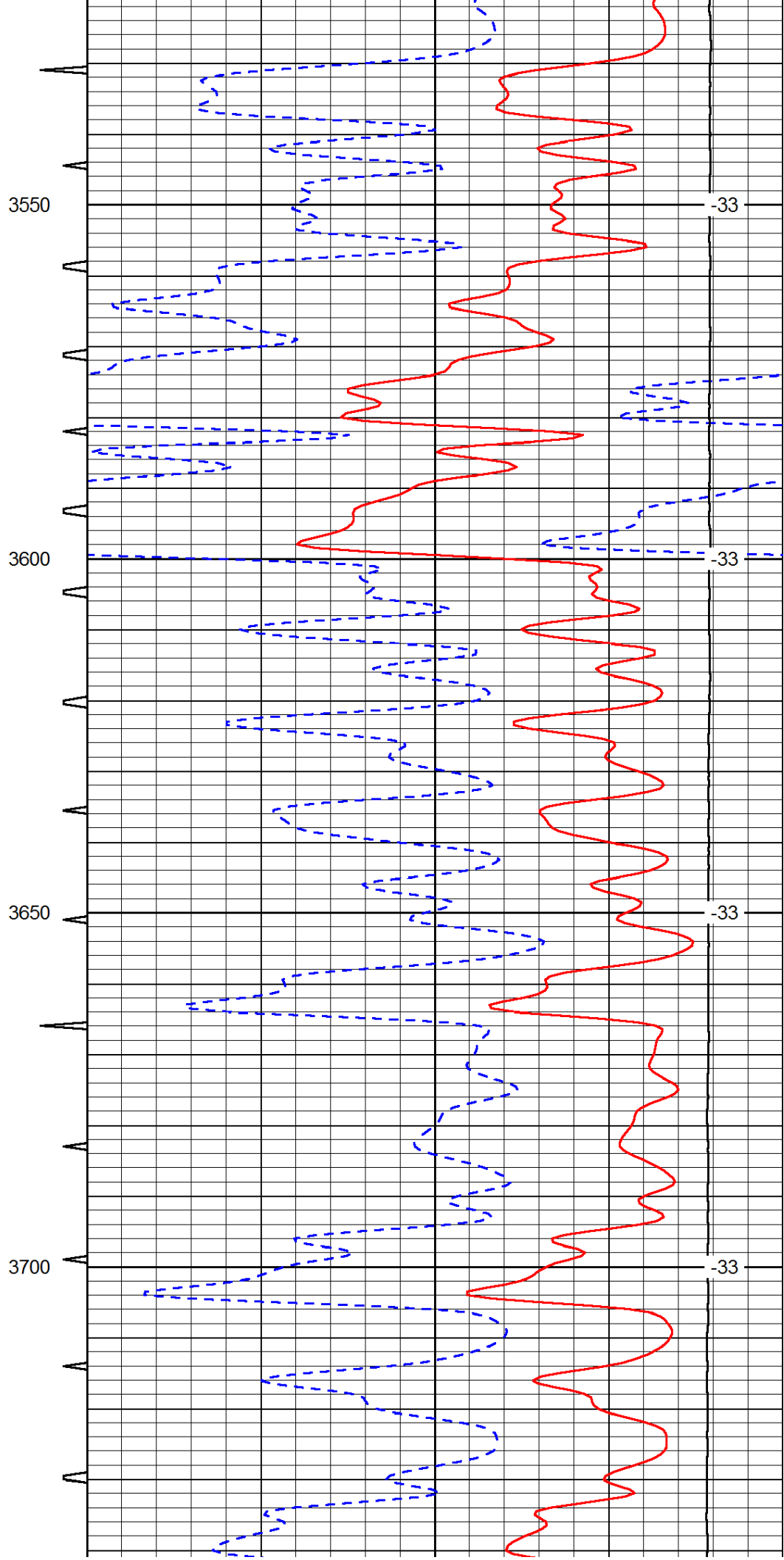
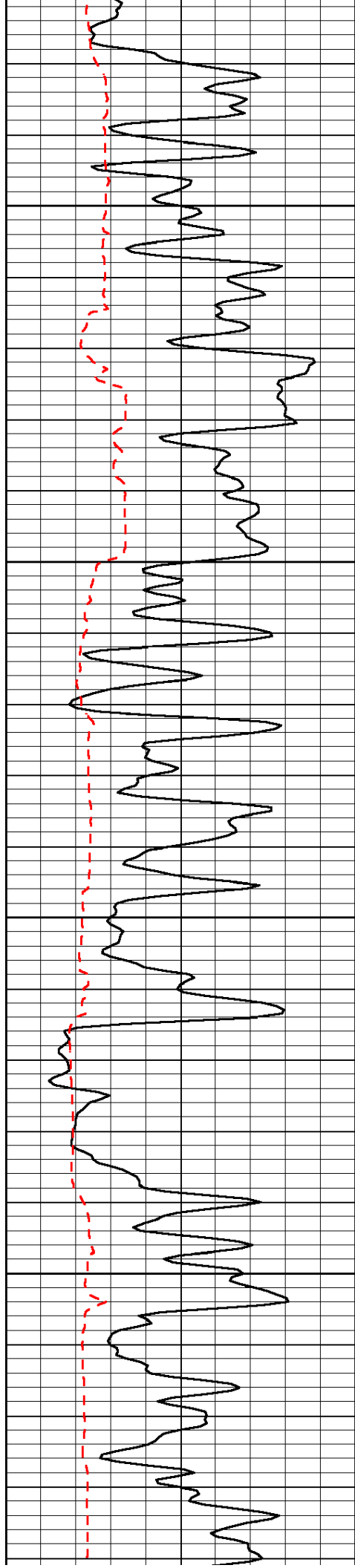


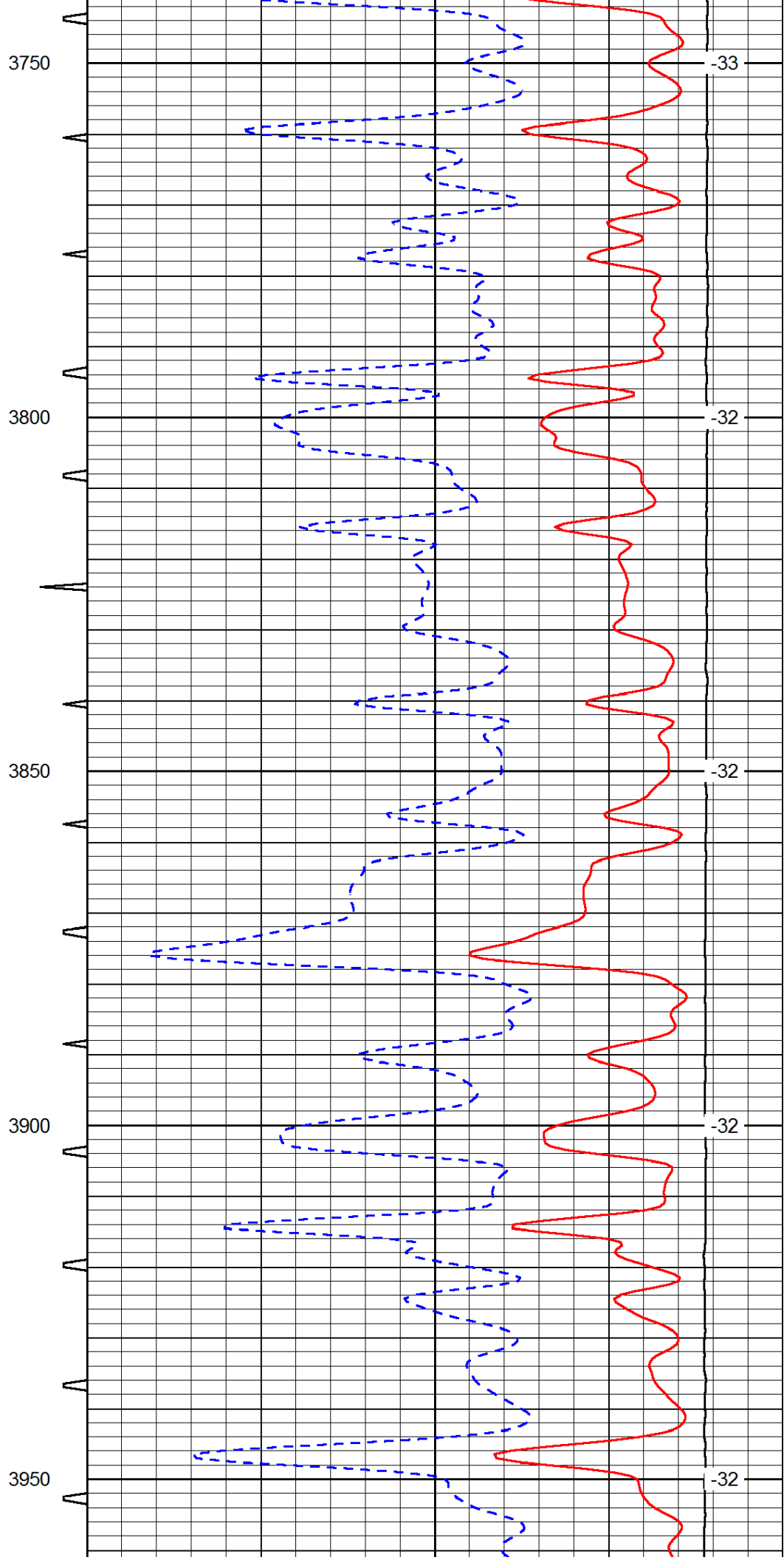
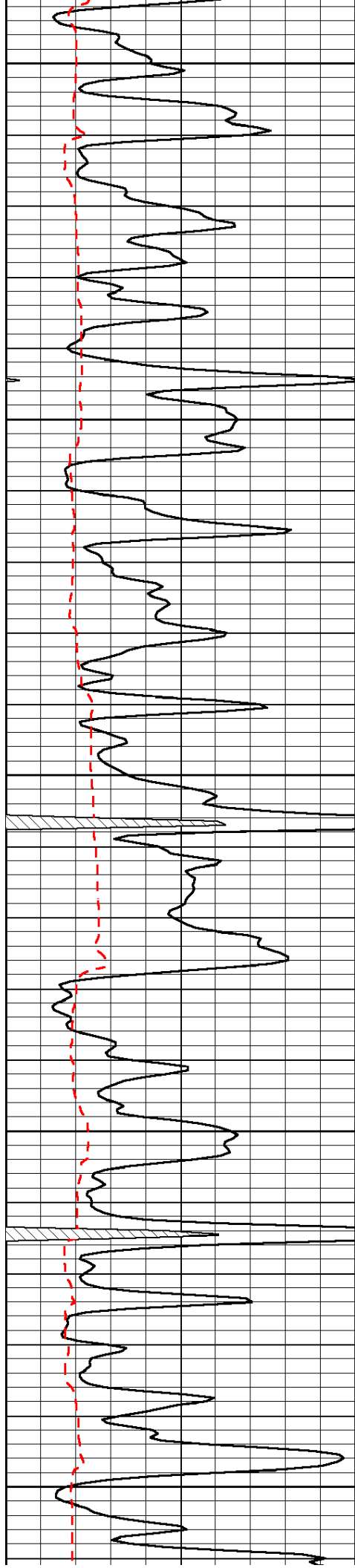


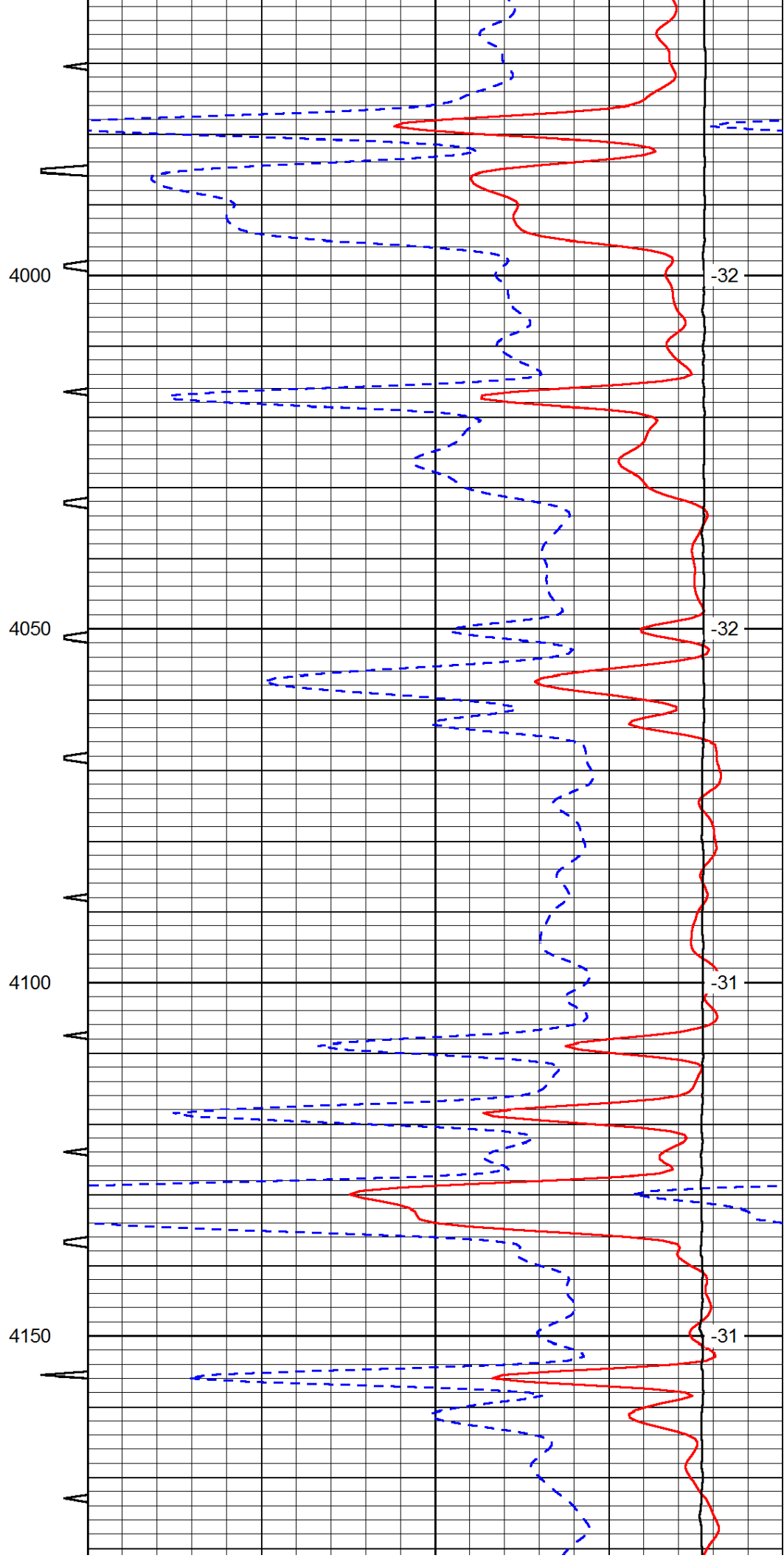
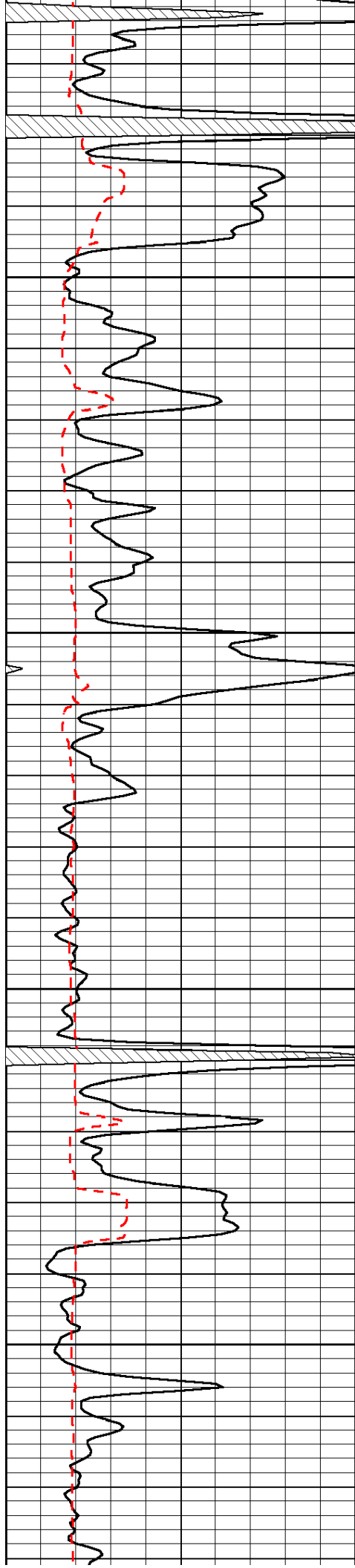


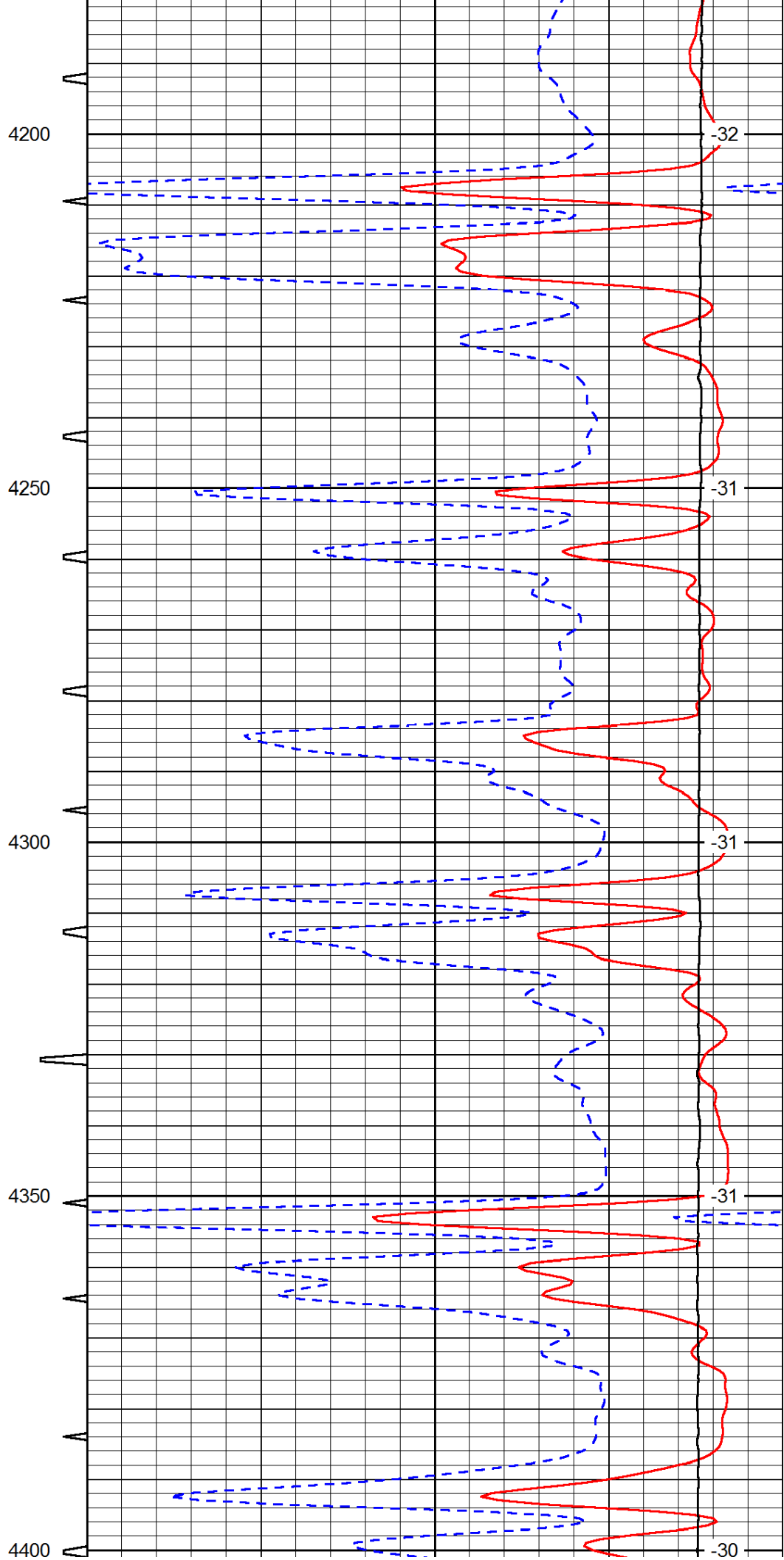
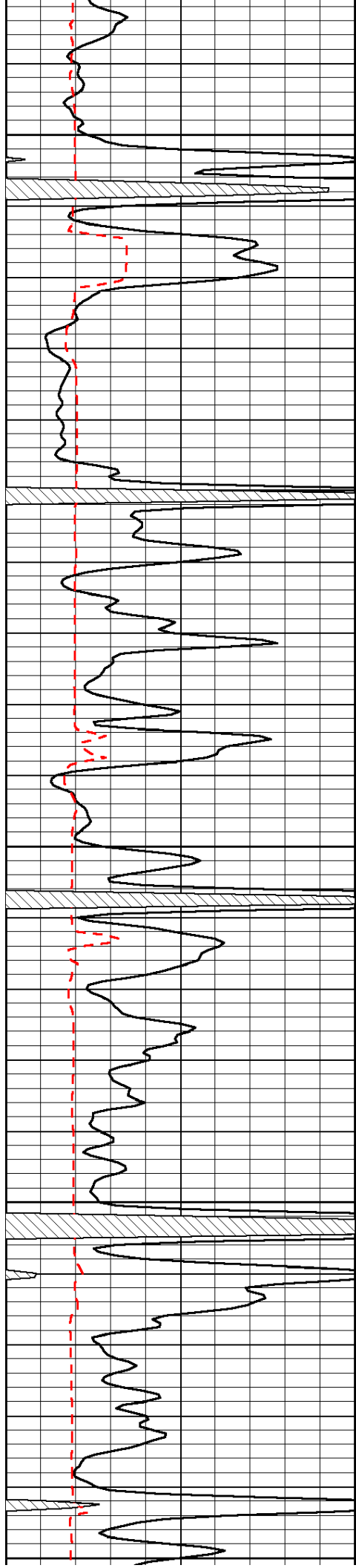


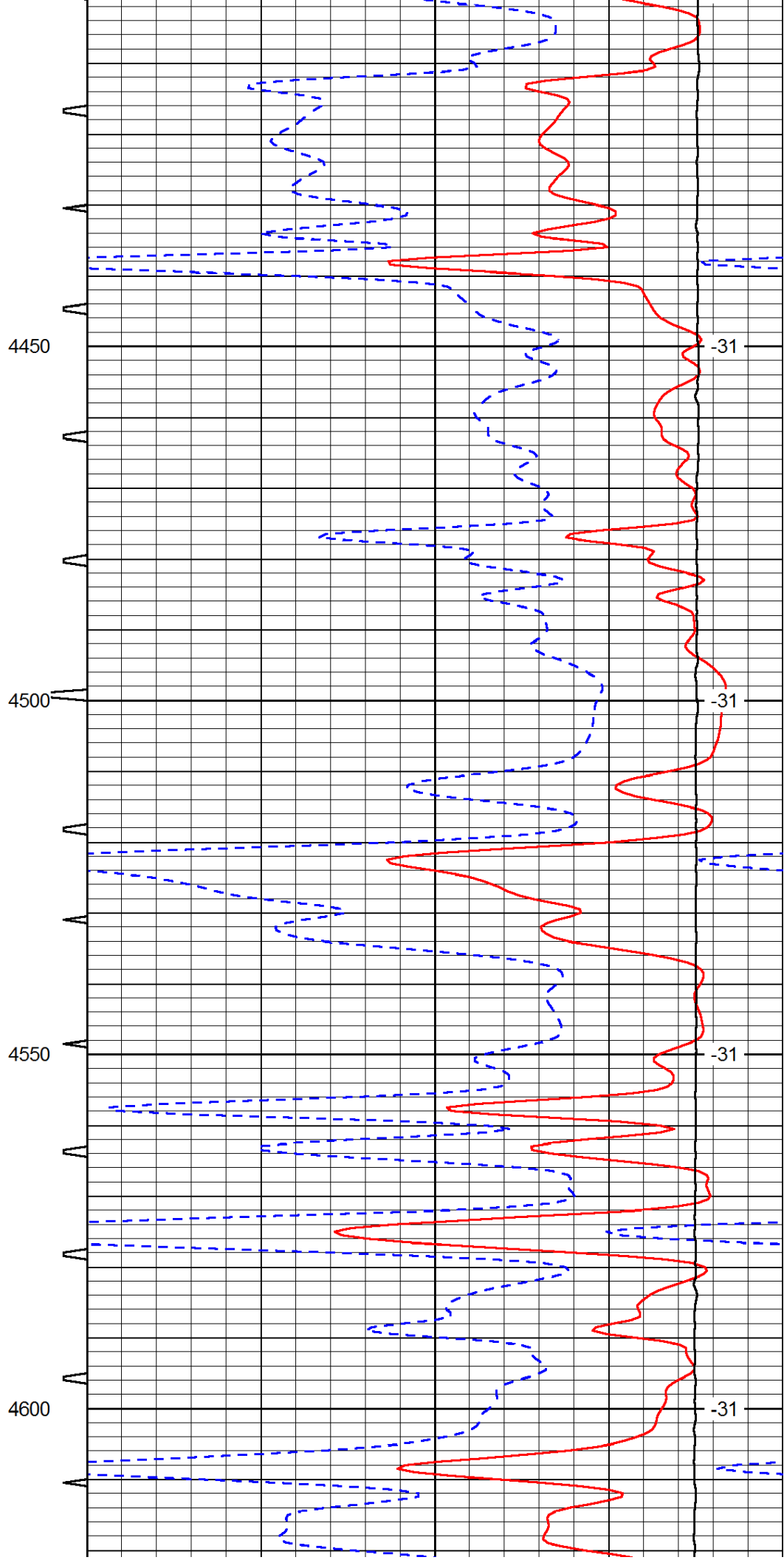
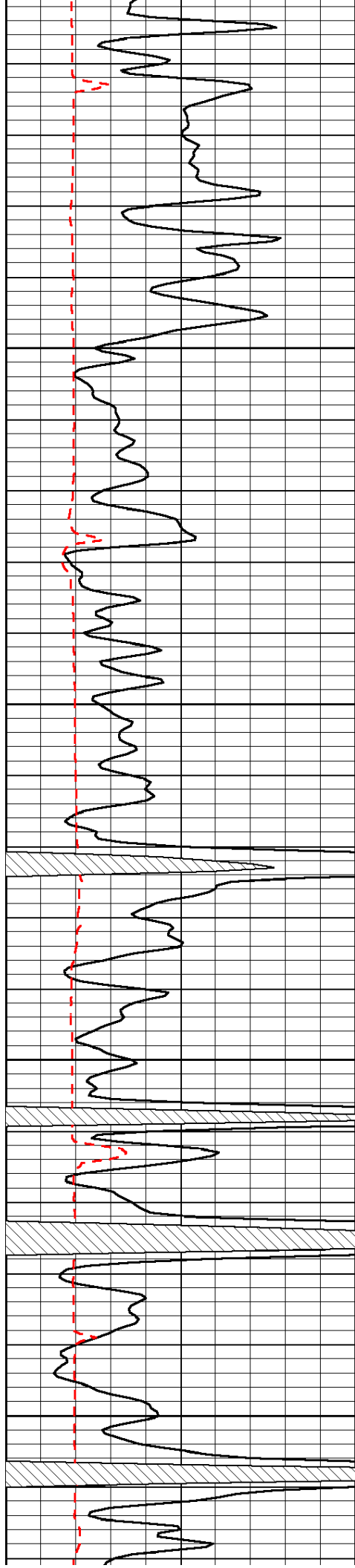


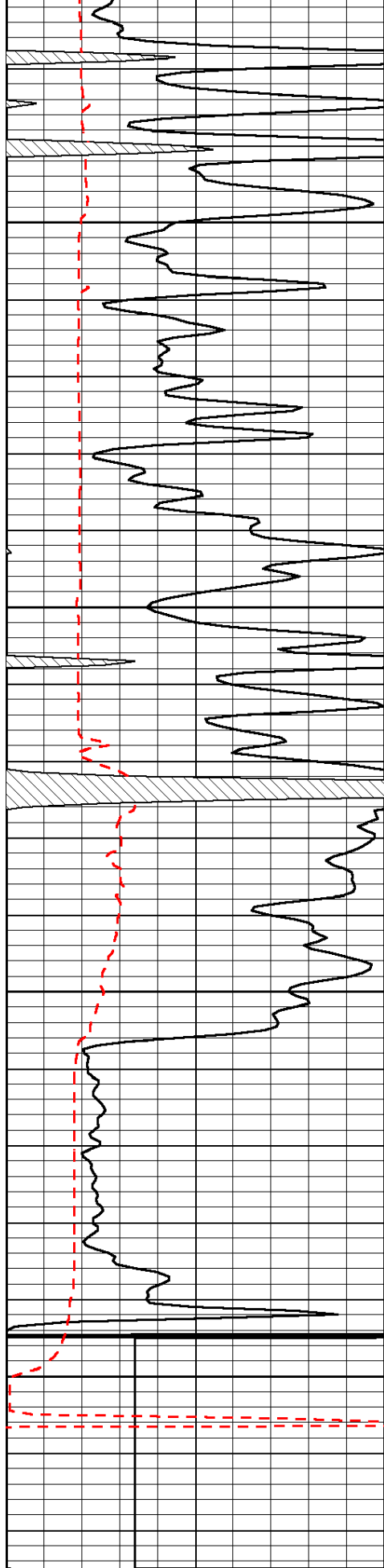




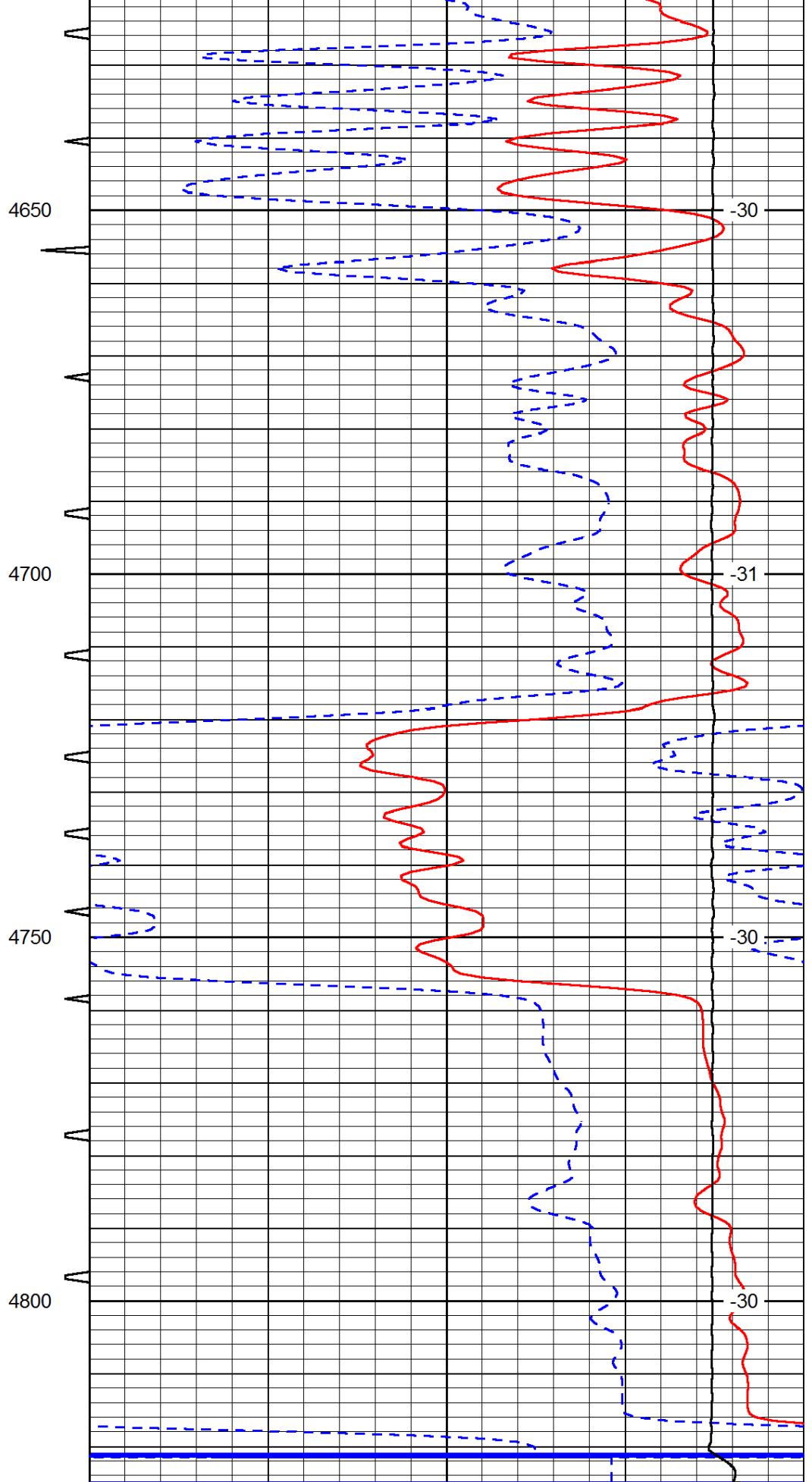








0	Gamma Ray	150
150	Gamma Ray	300
6	Caliper (GAPI)	16



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

