



Pioneer Energy Services

Borehole Compensated Sonic Log

15-109-21,354-00-00

API No.

Company Black Tea Oil, LLC
Well Pahls 'E' #2
Field N/A
County Logan
State Kansas

Location 1500' FSL & 770' FWL
 Sec: 21 Twp: 13S Rge: 34W

Other Services
 CNL/CDL
 MEL/DIL

Permanent Datum Ground Level Elevation 2944
Log Measured From Kelly Bushing 12 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

K.B. 2956
D.F.
G.L. 2944

Date 10/19/2014

Run Number	Two	
Type Log	BHC Sonic	
Depth Driller	4745	
Depth Logger	4748	
Bottom Logged Interval	4737	
Top Logged Interval	250	
Type Fluid In Hole	Chemical	
Salinity, PPM CL	8000	
Density	9.2	
Level	Full	
Max. Rec. Temp. F	123	
Operating Rig Time	5 Hours	
Equipment -- Location	15 Hays	
Recorded By	D.Kerr	
Witnessed By	Richard Thomasson	

Borehole Record

Run No	Bit	From	To	Size	Wgt.
1	12.25	00	266	8.625	24#
2	7.875	266	4745		

Casing Record

From	To
00	266

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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.

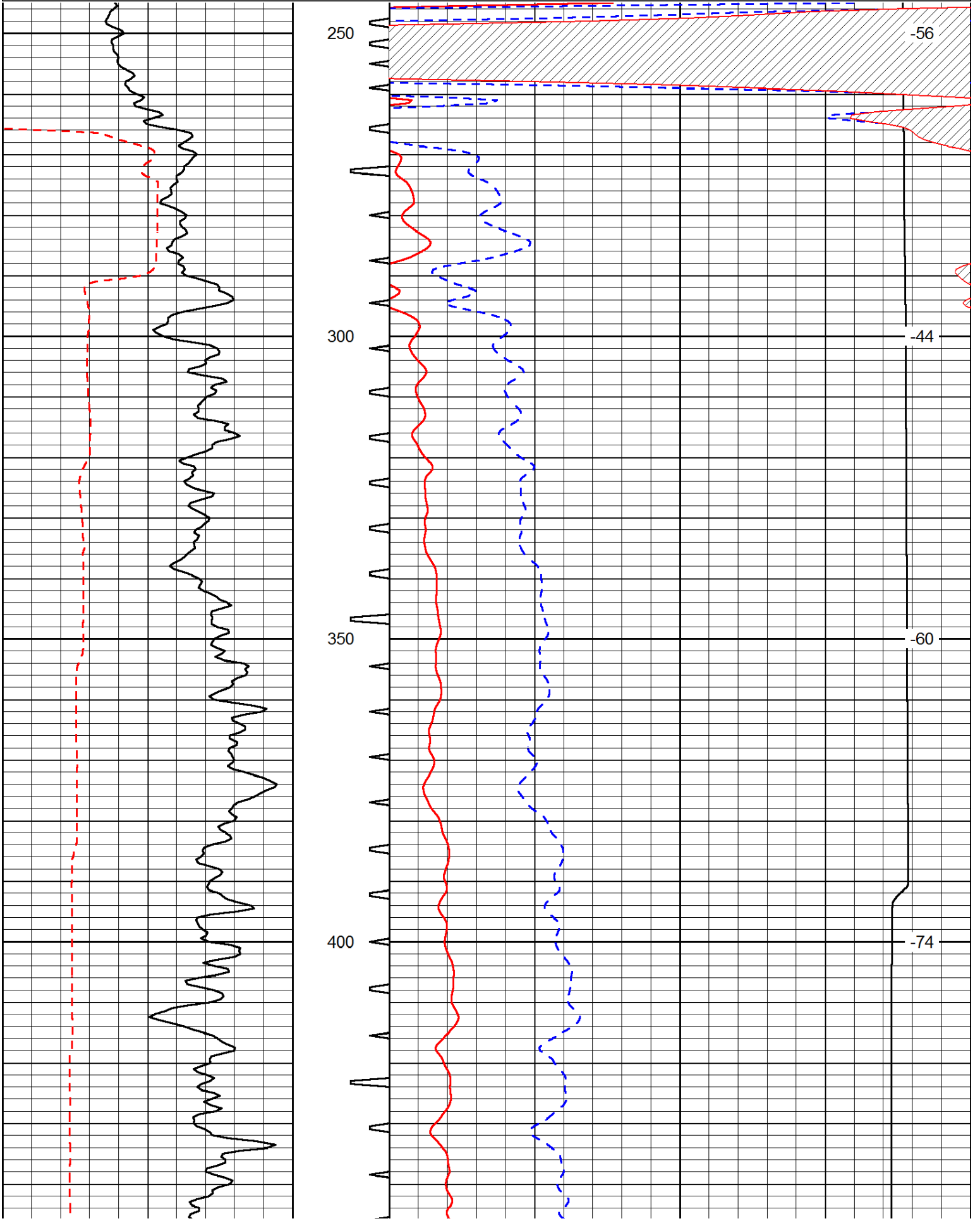
Comments

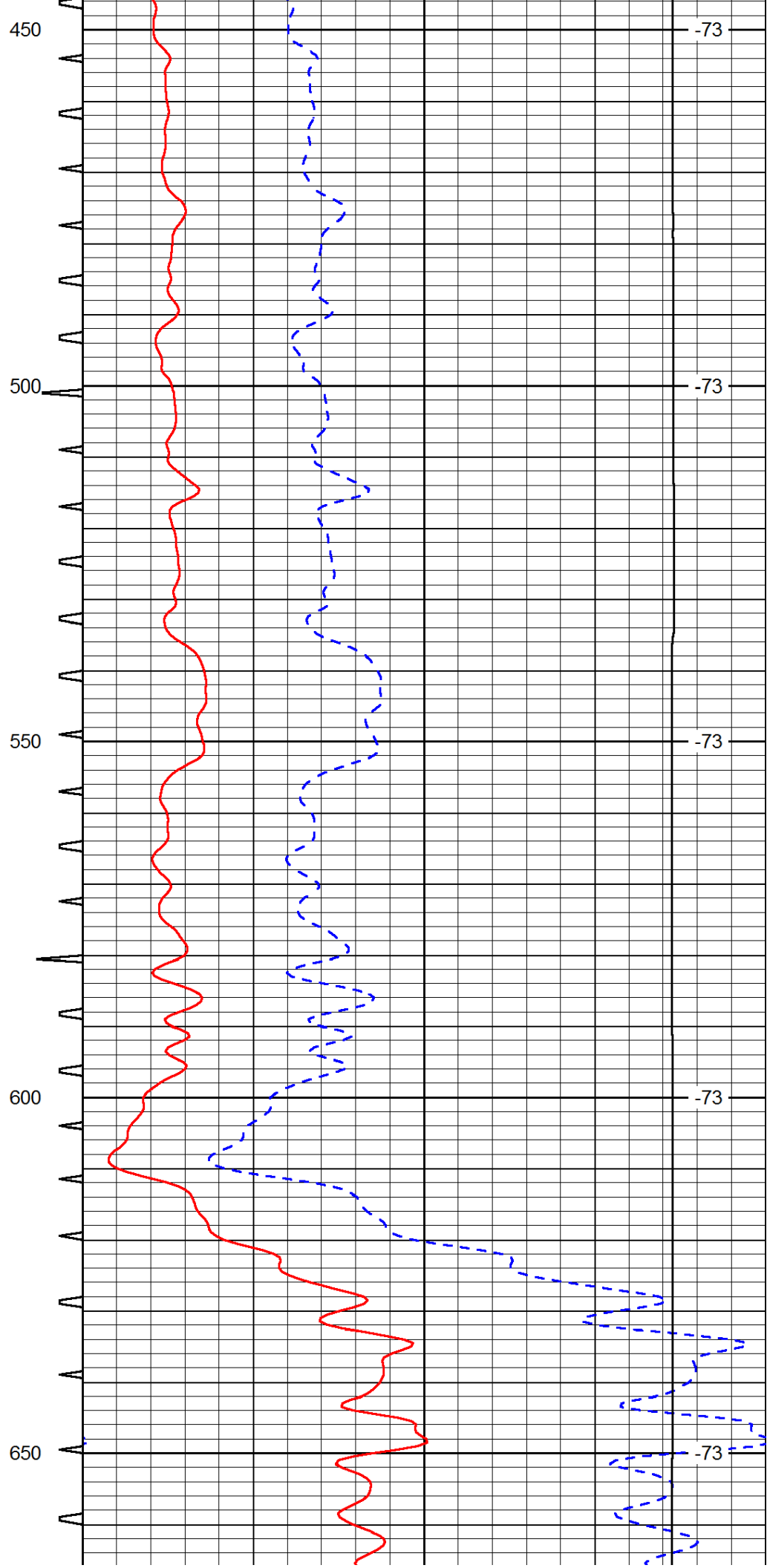
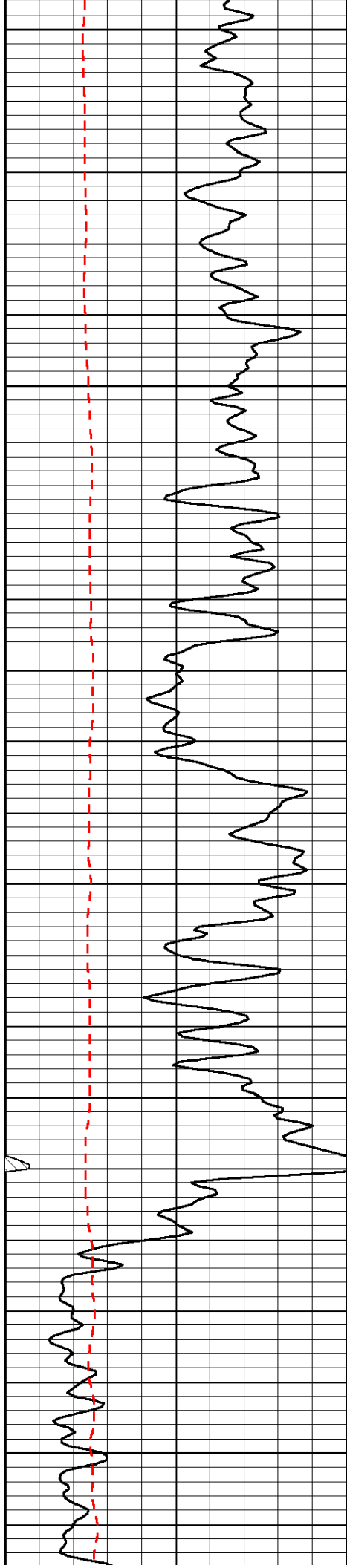
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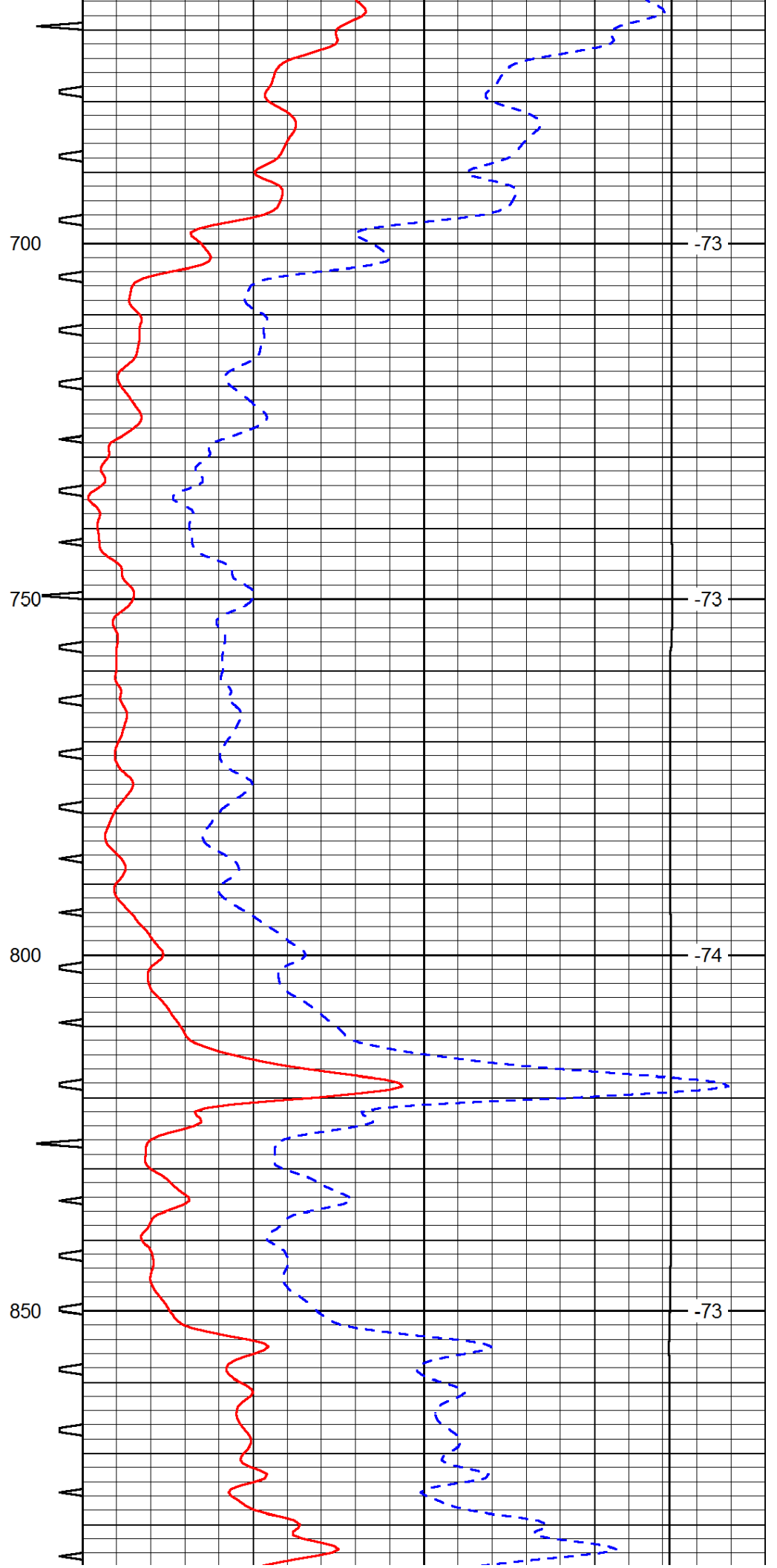
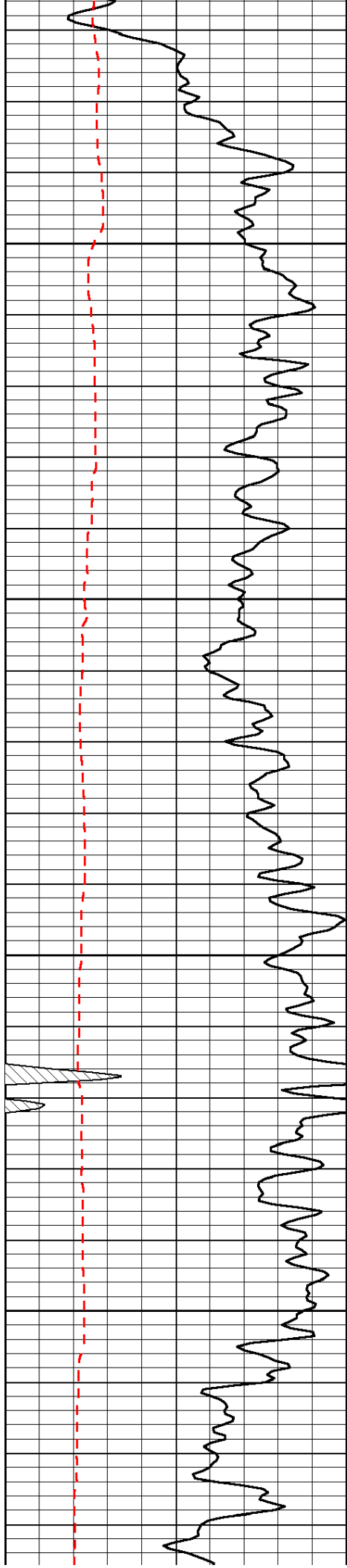
 Russell Springs KS, East to 310 RD,
 1/2 South to Tanks, 3/4 West/ 1/4 South, West and North Into

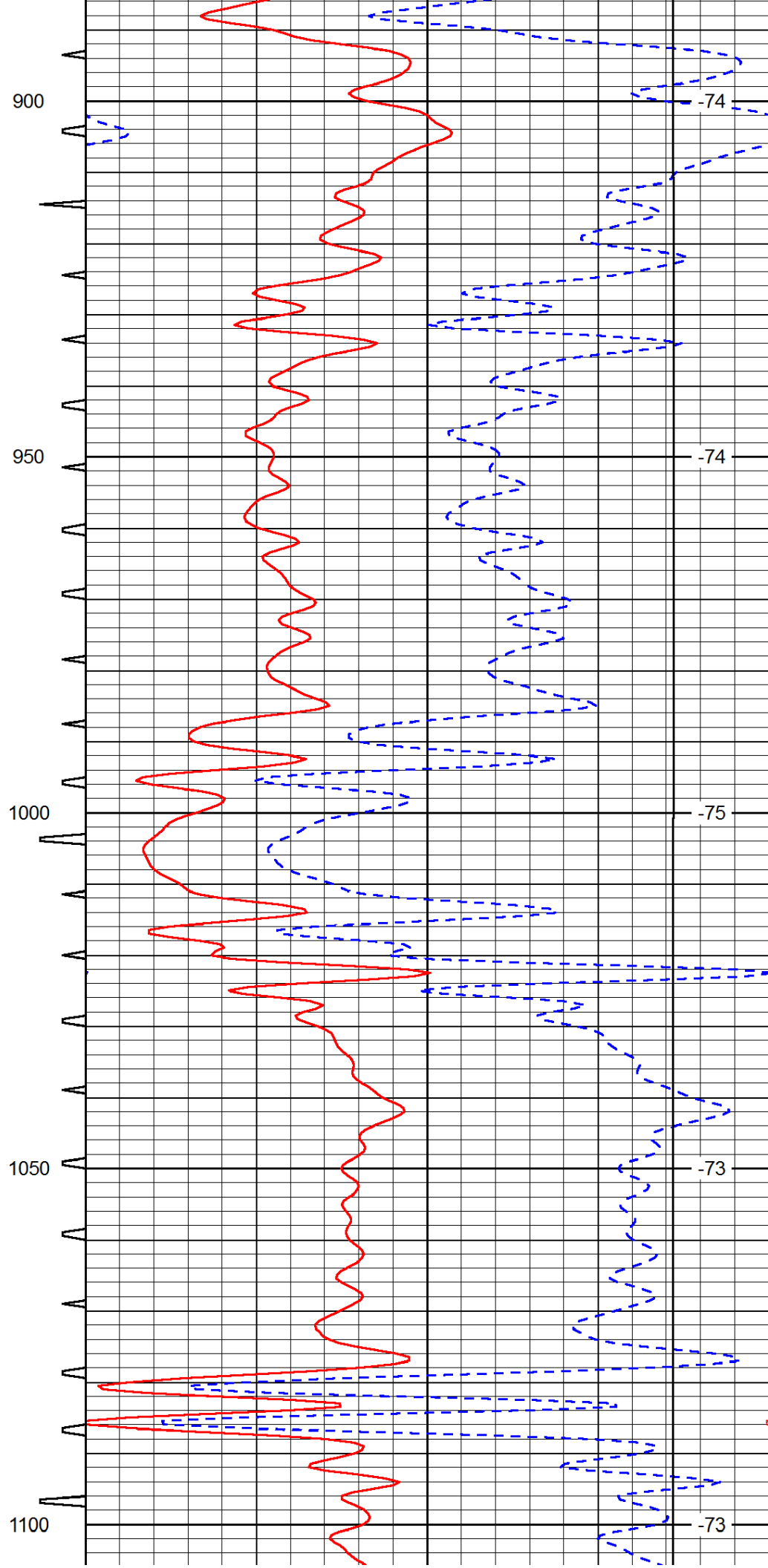
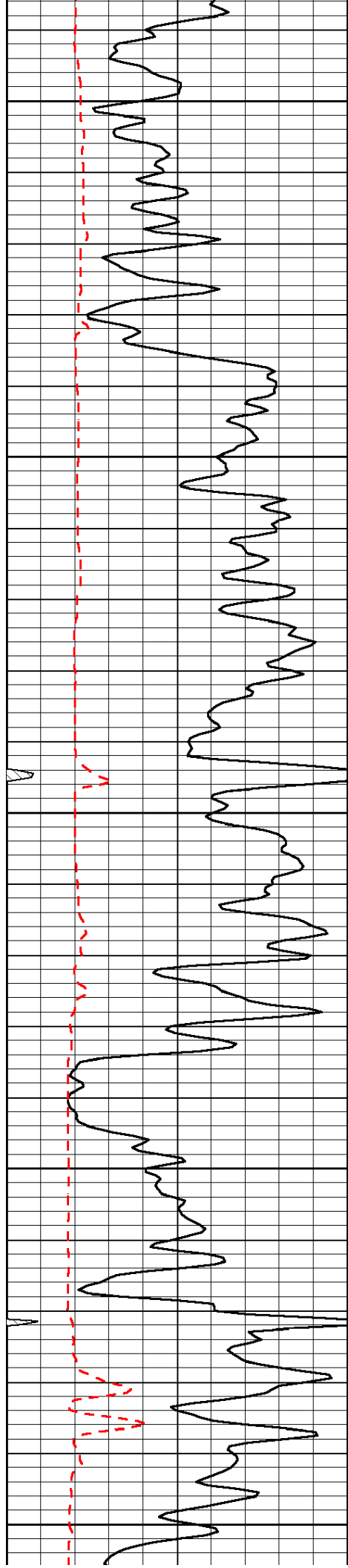
Database File: c:\warrior\data\black tea_pahls 'e' #2\blacktea_pahls_e_2hd.db
 Dataset Pathname: DIL/btstk
 Presentation Format: sonic
 Dataset Creation: Sun Oct 19 13:00:40 2014
 Charted by: Depth in Feet scaled 1:240

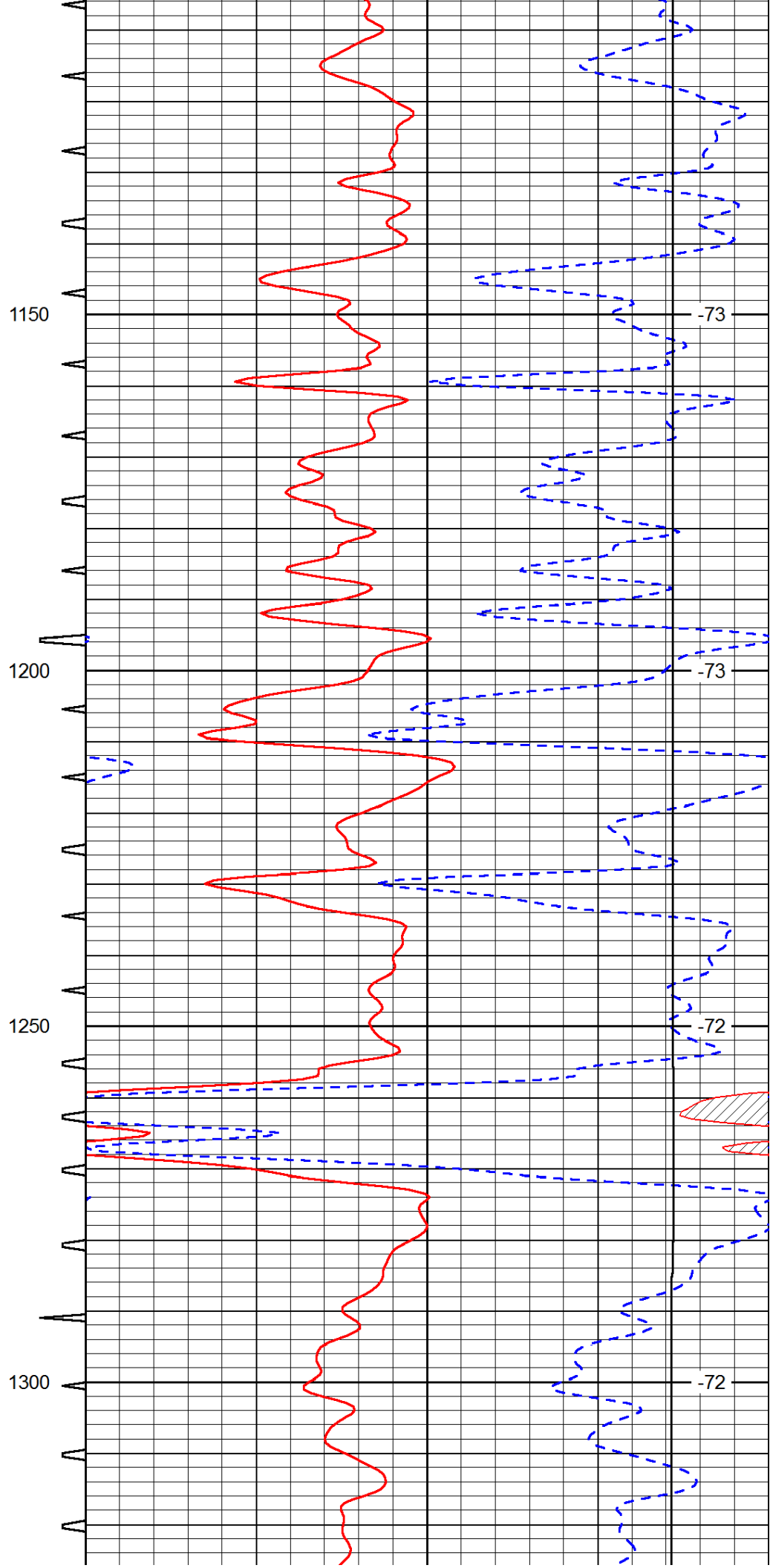
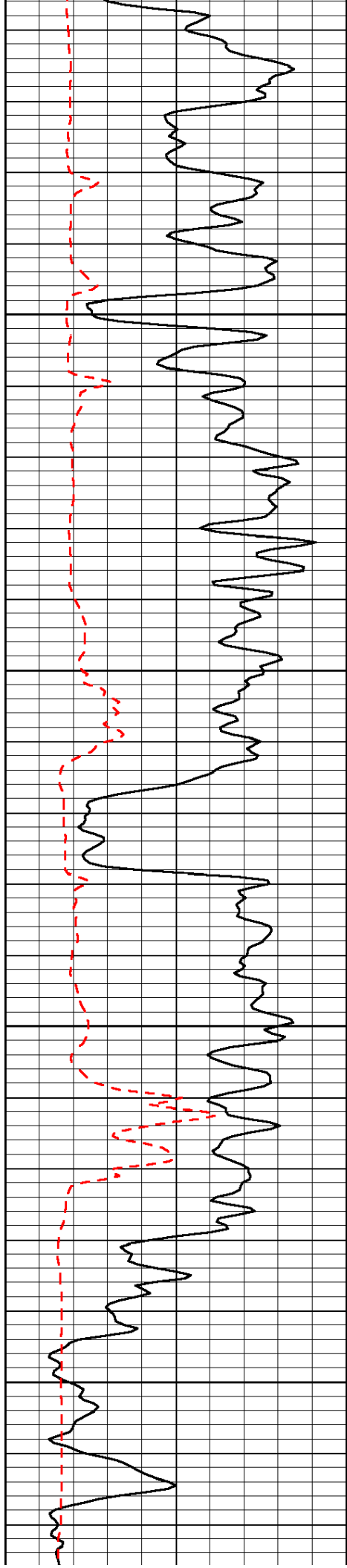
0	Gamma Ray	150	Sonic Int	140	Delta Time (usec/ft)	40
150	Gamma Ray	300	5	0	SPOR	-10
6	Caliper (GAPI)	16			LTEN (lb)	0
LSPD						

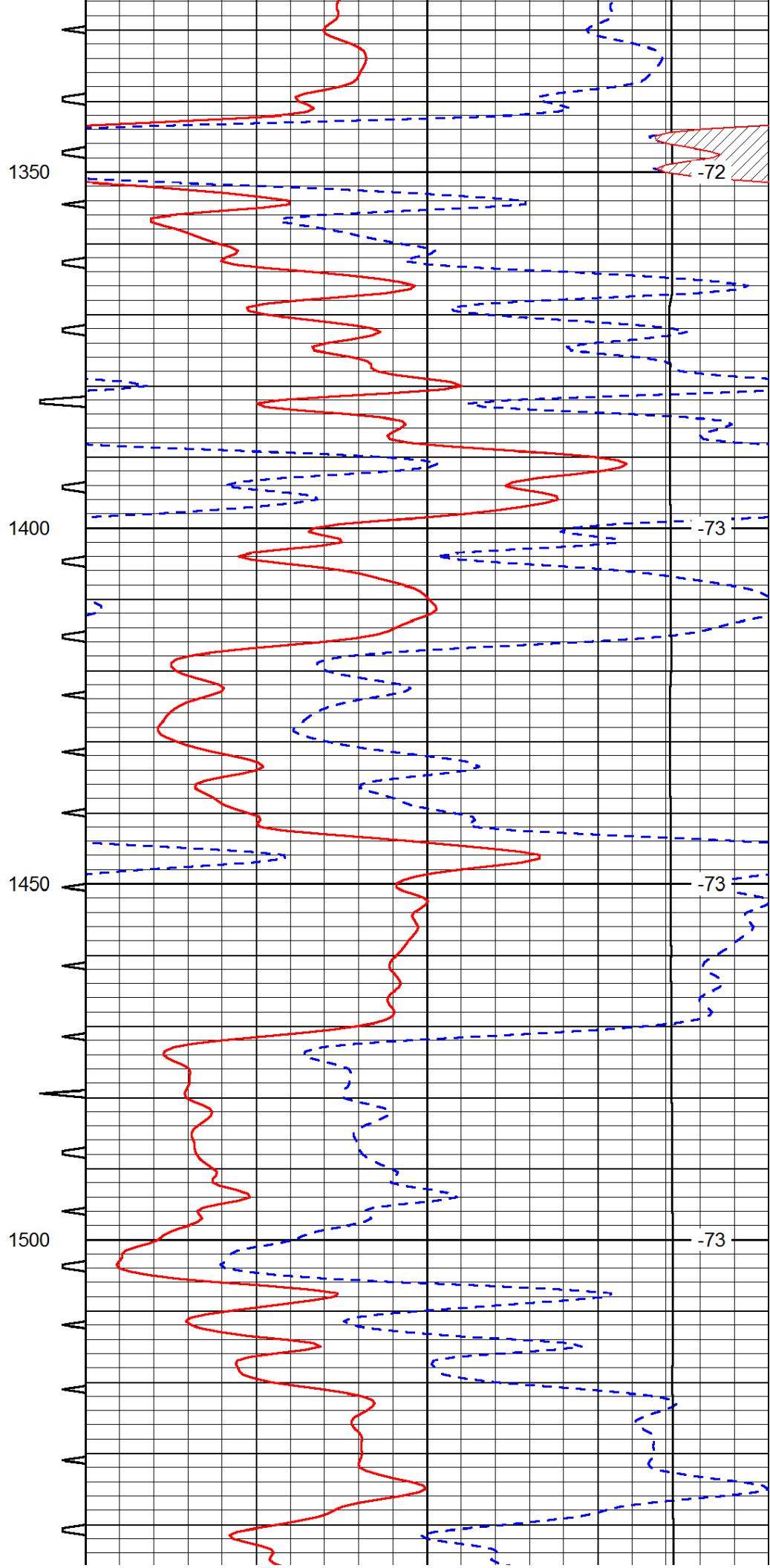
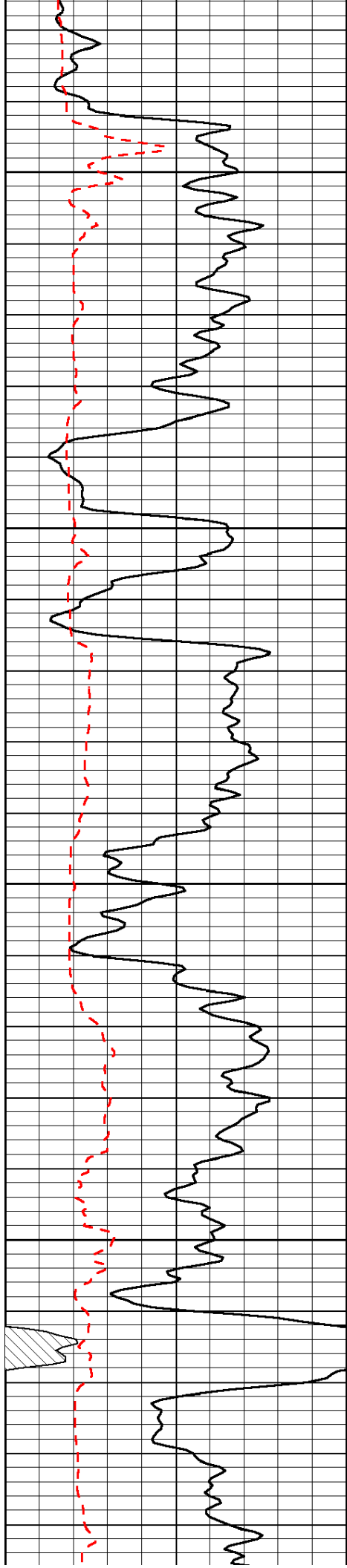


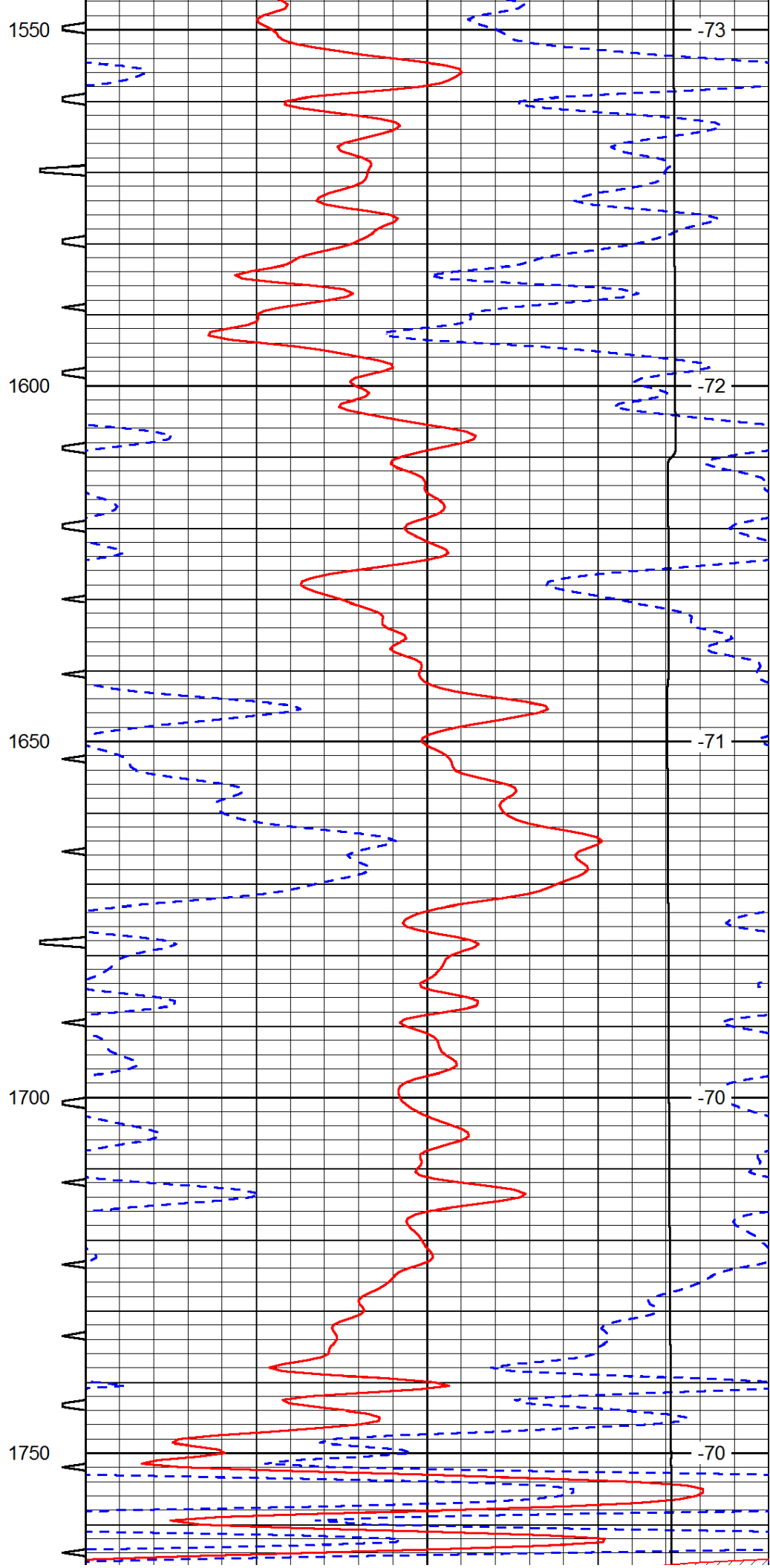
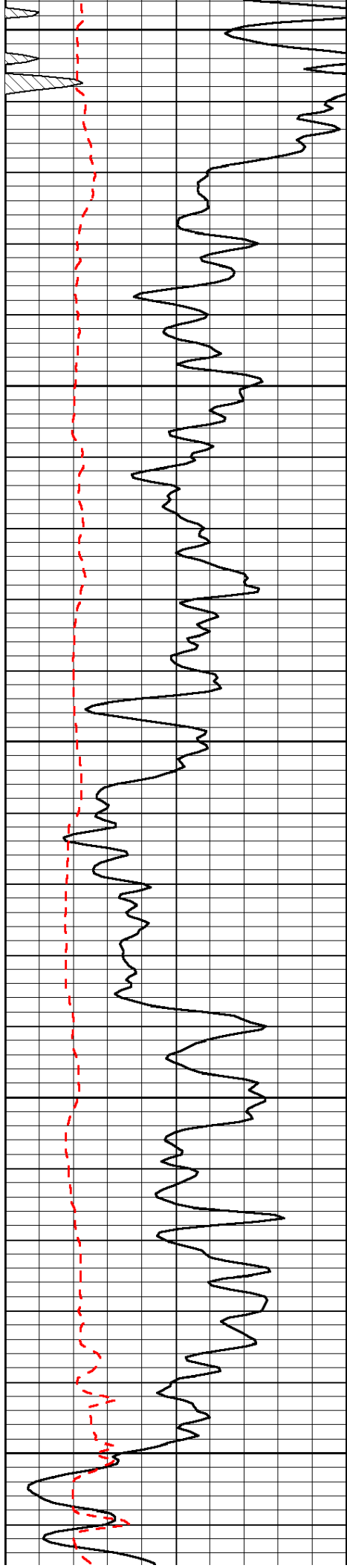


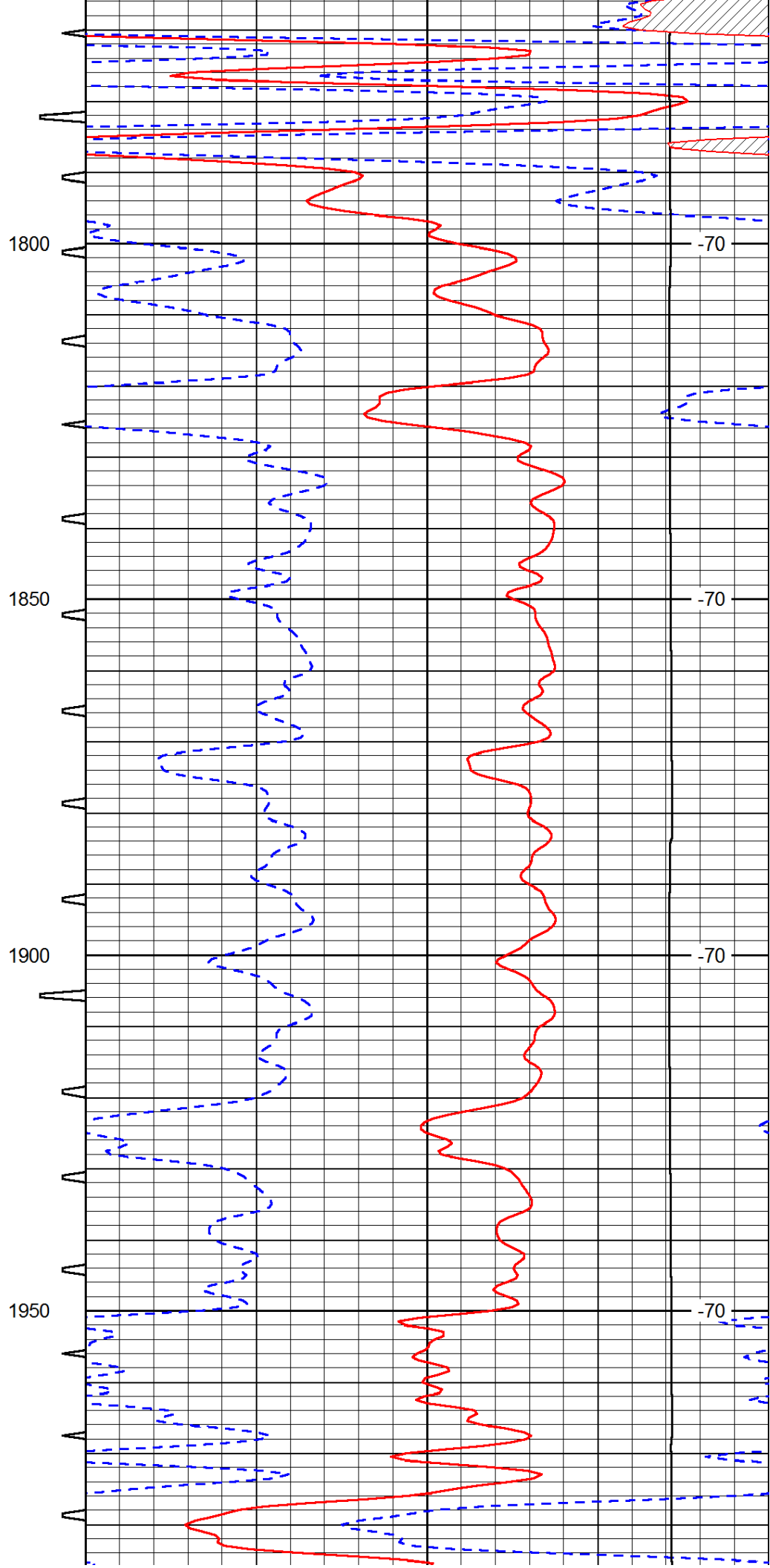
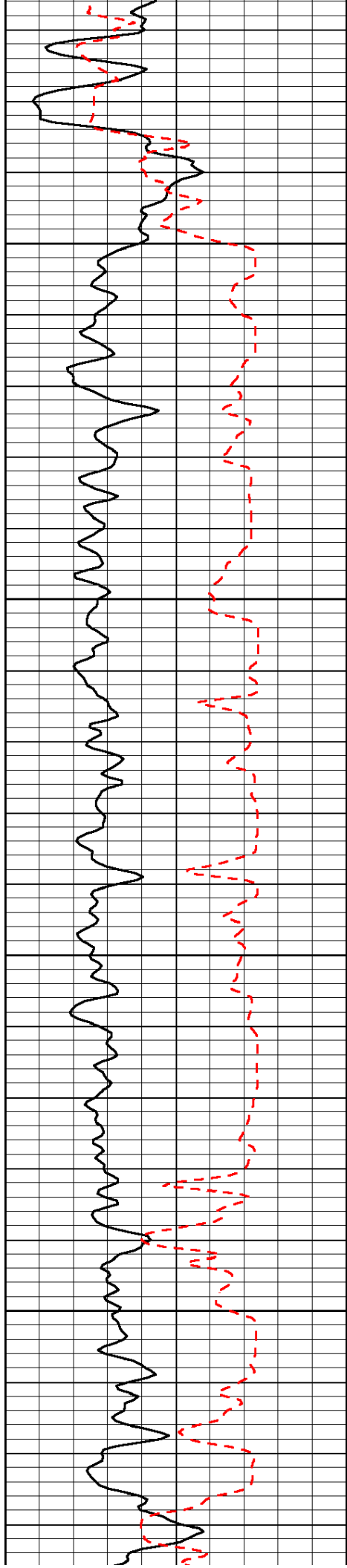


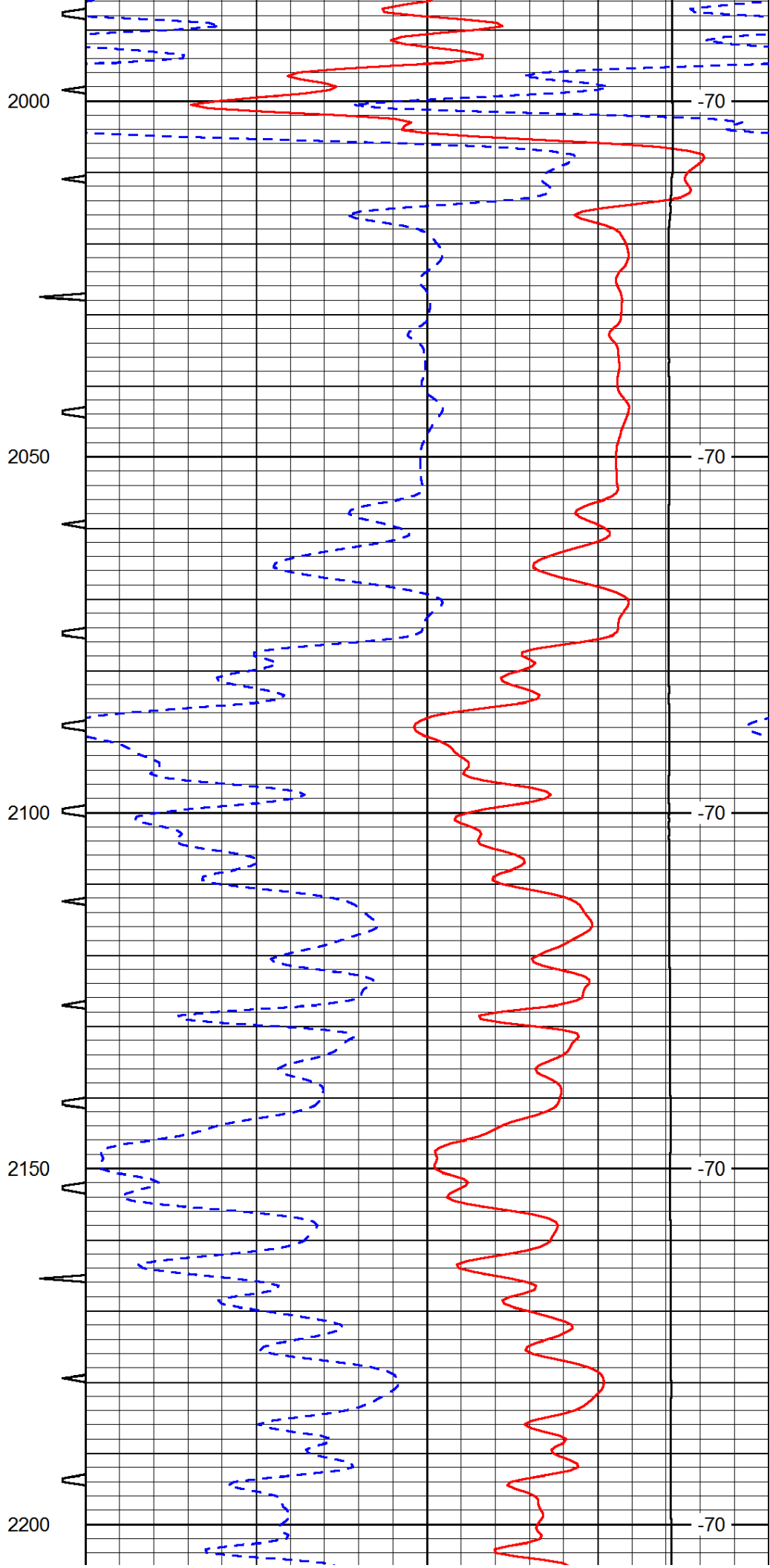
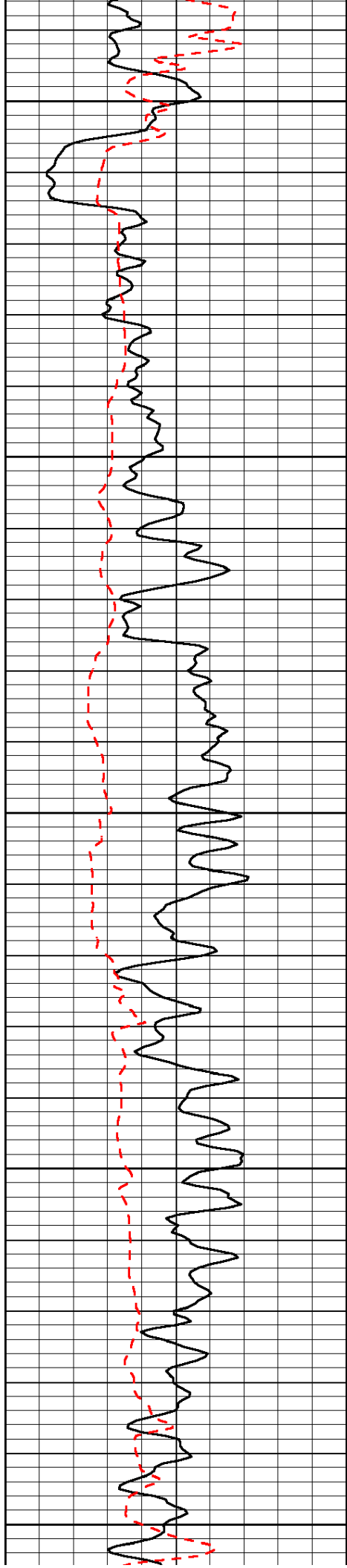


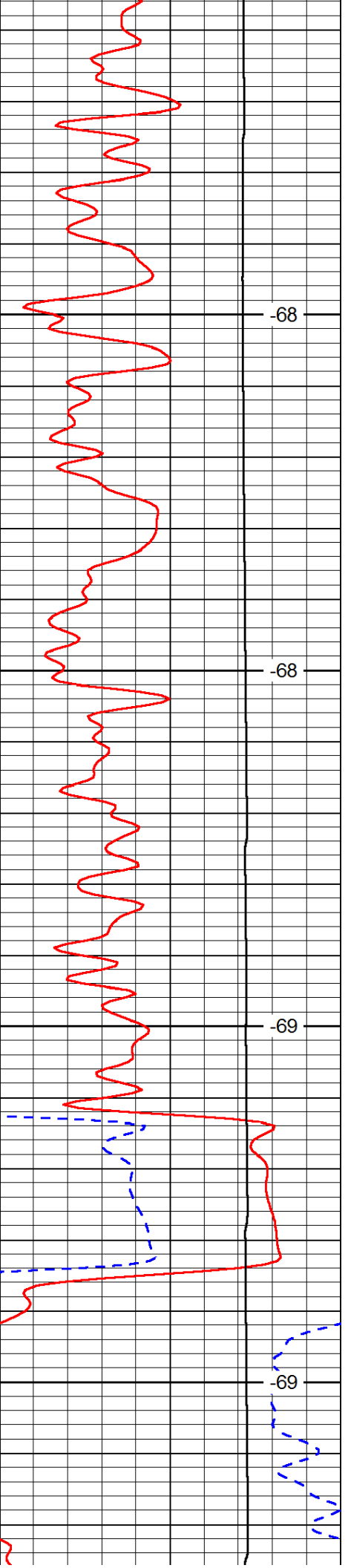
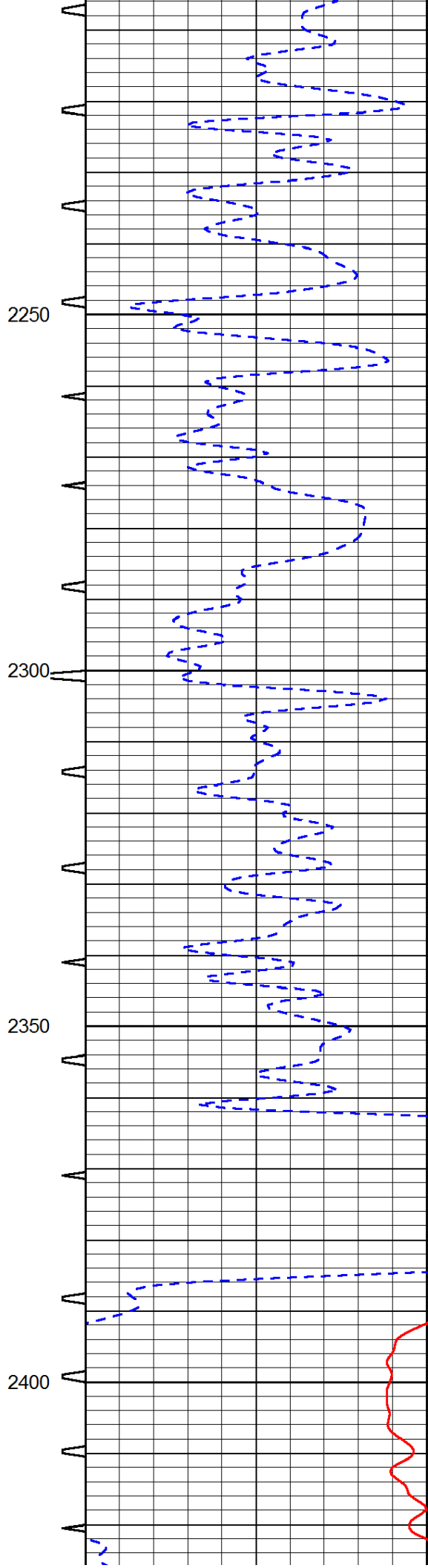
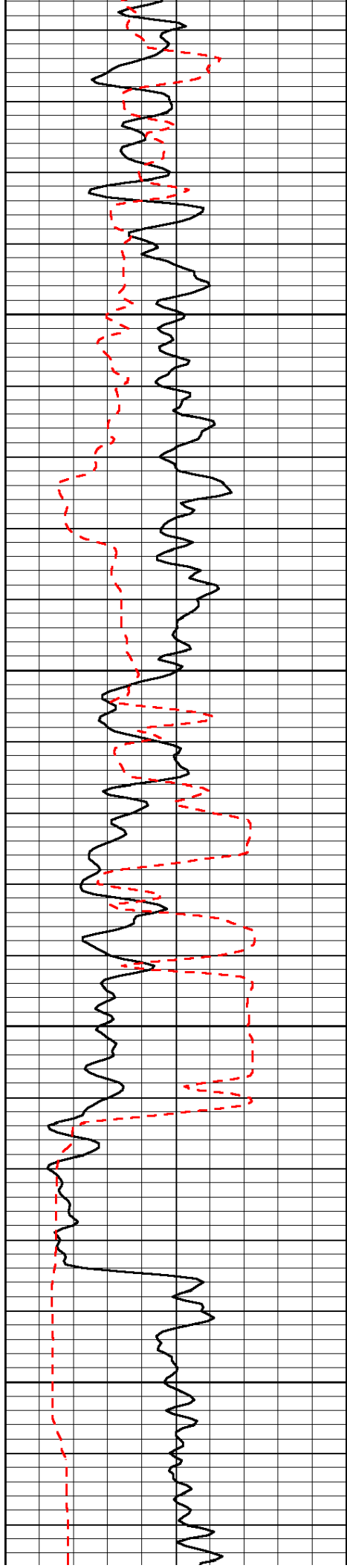












2250

-68

2300

-68

2350

-69

2400

-69

