



# COMPENSATED DENSITY NEUTRON LOG

WIRELINE

Company	XTO Energy Inc.	Company	XTO Energy Inc.
Well	Hill Ranch 31-16	Well	Hill Ranch 31-16
Field	Purgatorie River	Field	Purgatorie River
County	Las Animas	County	Las Animas
State	CO	State	CO
Location:	API # : 05 071 09568 00 1213' FSL & 381' FEL	Other Services	DIL
Permanent Datum	SEC 31 TWP 34S RGE 67W	Elevation	
Log Measured From	Ground Level	K.B. -----	
Drilling Measured From	Ground Level	D.F. -----	
	Ground Level	G.L. 8228'	
Date	2/1/10		
Run Number	One		
Depth Driller	2758'		
Depth Logger	2755'		
Bottom Logged Interval	2753'		
Top Log Interval	Surface Casing		
Casing Driller	451'		
Casing Logger	454'		
Bit Size	7 7/8"		
Type Fluid in Hole	water		
Density / Viscosity	///		
pH / Fluid Loss	///		
Source of Sample	///		
Rm @ Meas. Temp	///		
Rmf @ Meas. Temp	///		
Rmc @ Meas. Temp	///		
Source of Rmf / Rmc	///		
Rm @ BHT	///		
Time Circulation Stopped	6:30 p.m.		
Time Logger on Bottom	9:30 p.m.		
Maximum Recorded Temperature	116F		
Equipment Number	M5		
Location	Trinidad		
Recorded By	Worley		
Witnessed By	Mr. Dalton King		

<<< 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

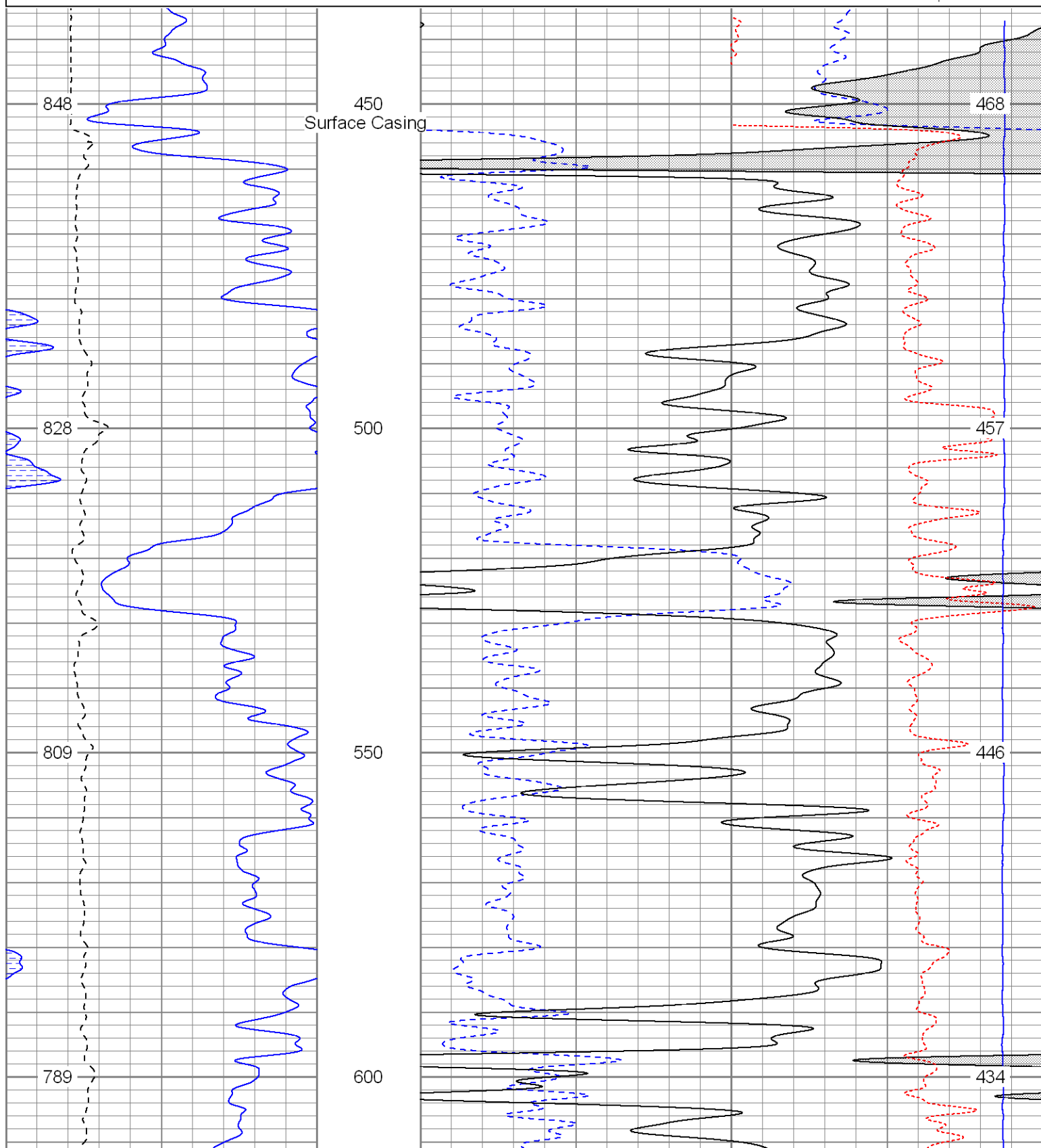
XTO Hill stay on main road past Dead Horse, stay on main road past Beige Tanks, down thru Alamosa Canyon,take hard left before Big Rocks.

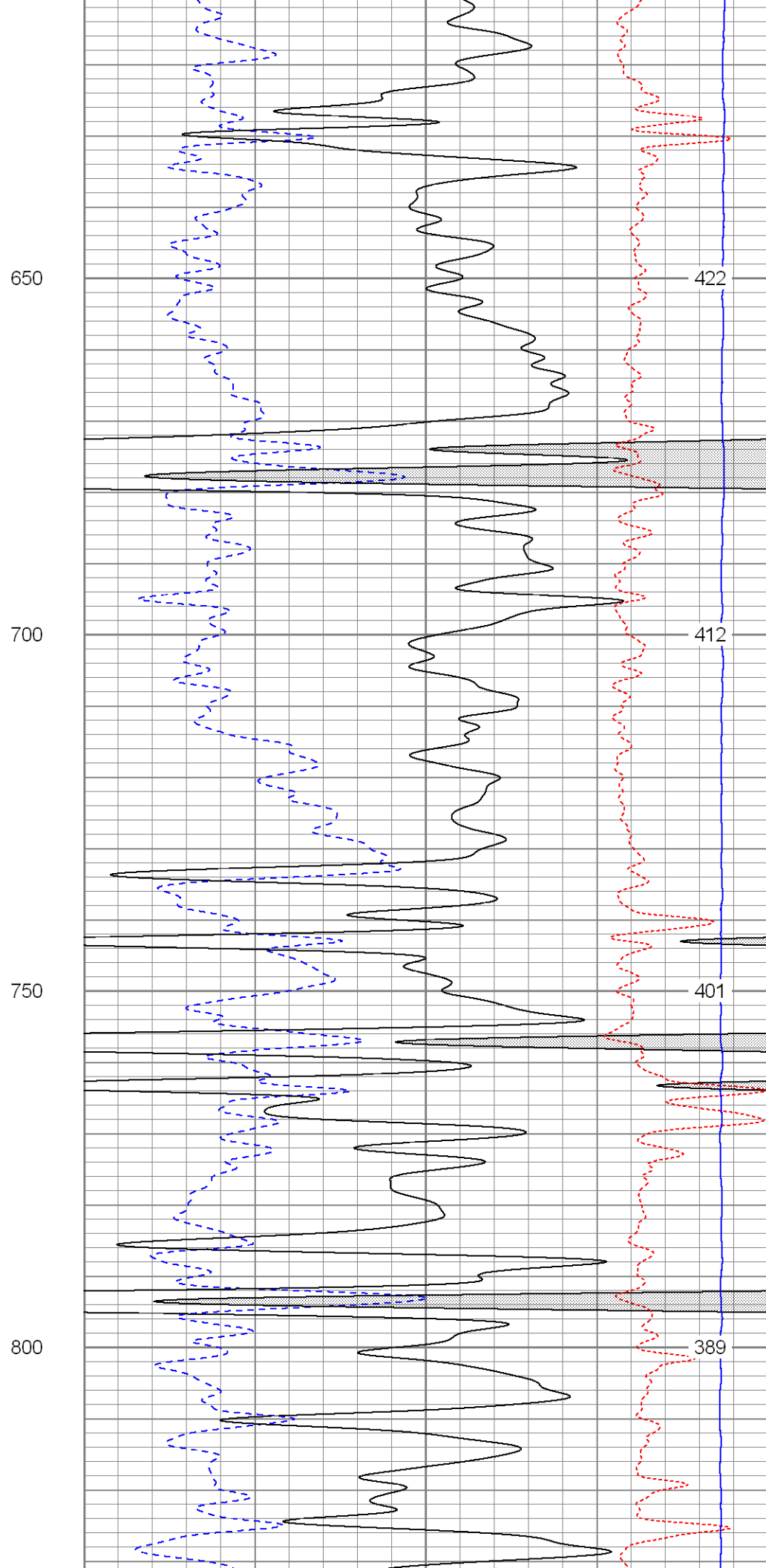
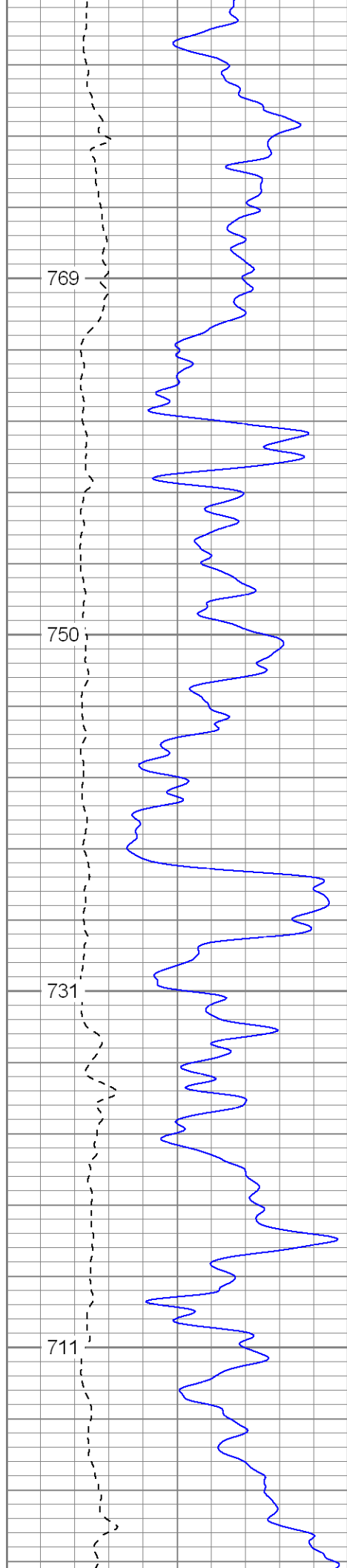


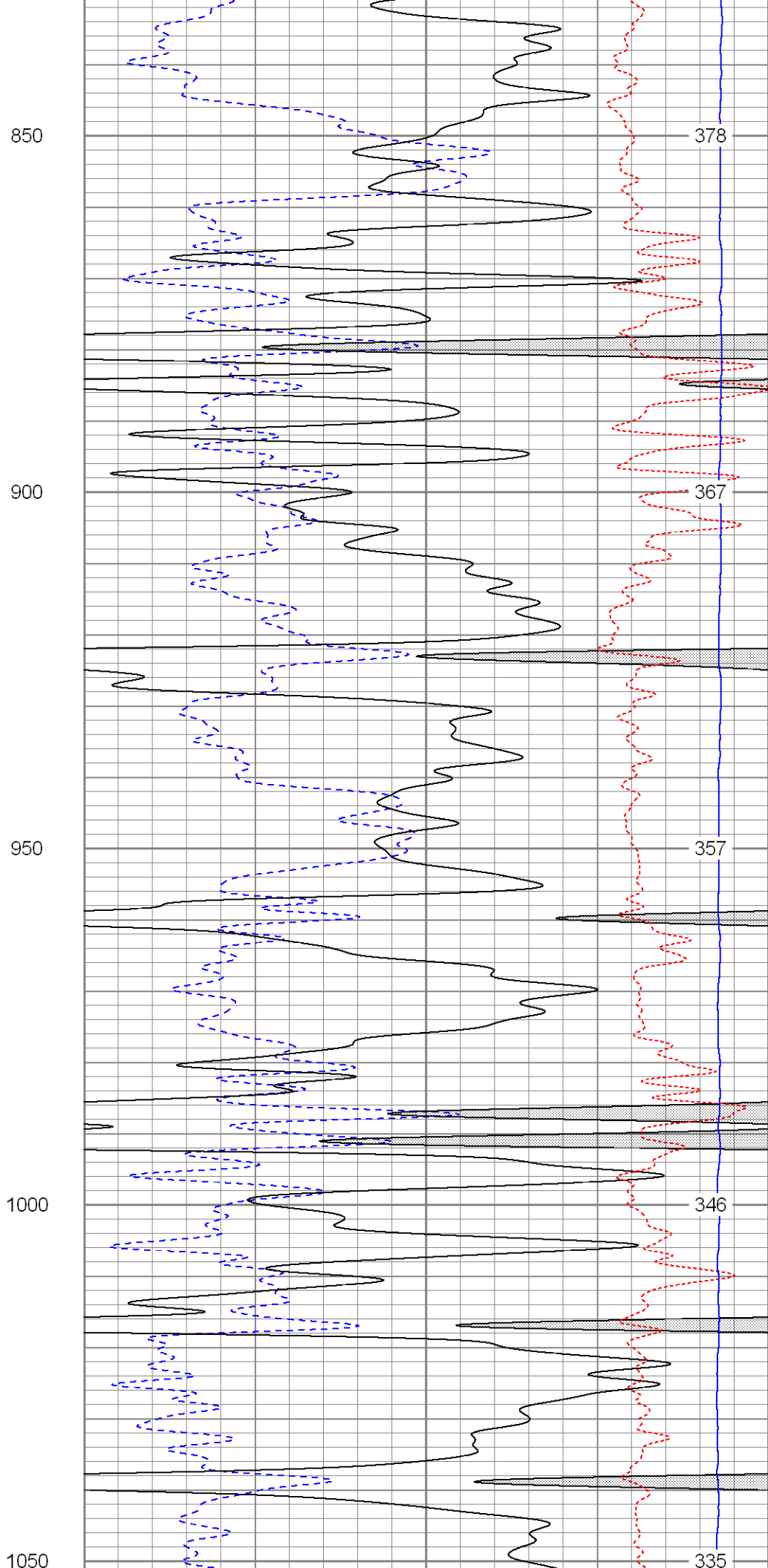
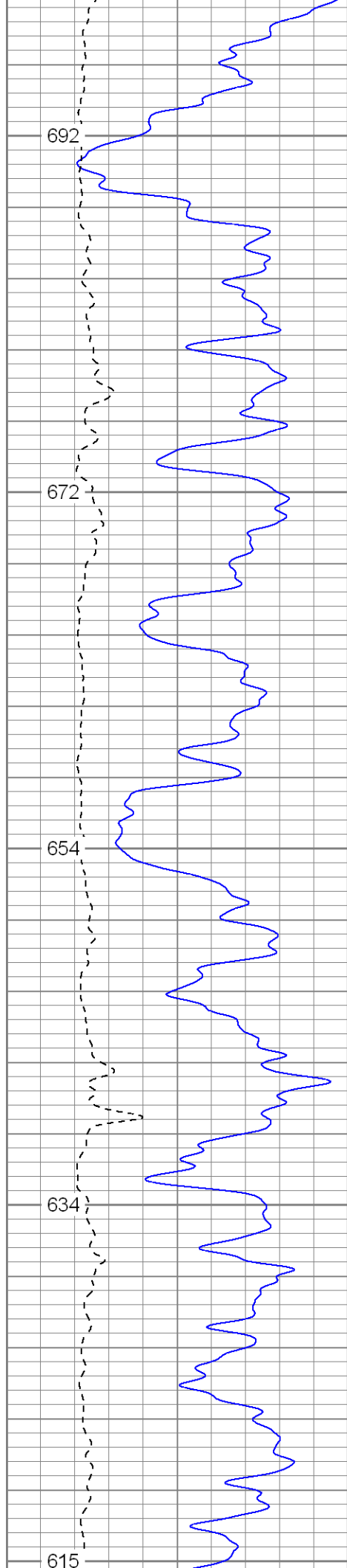
# Main Pass

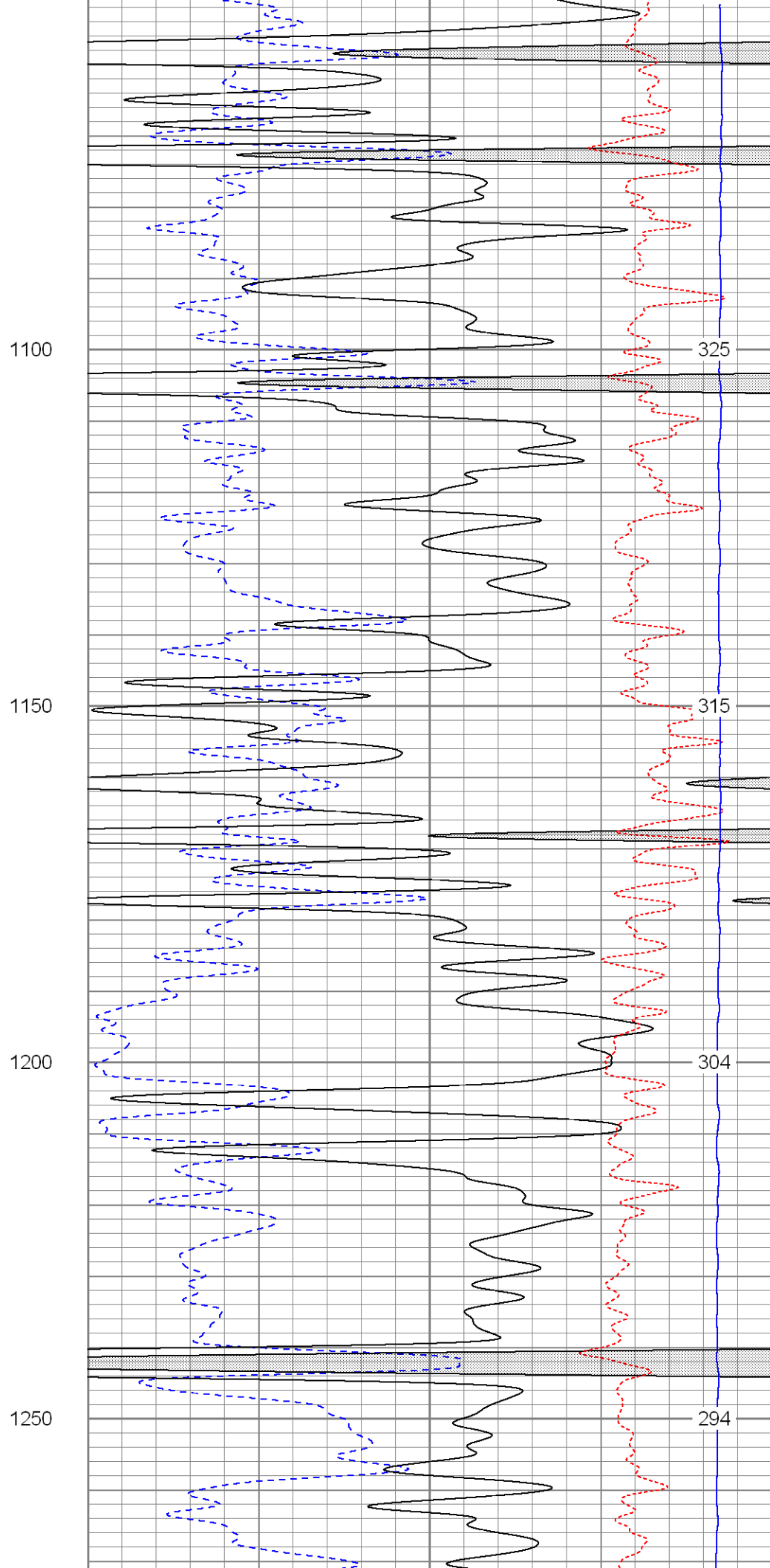
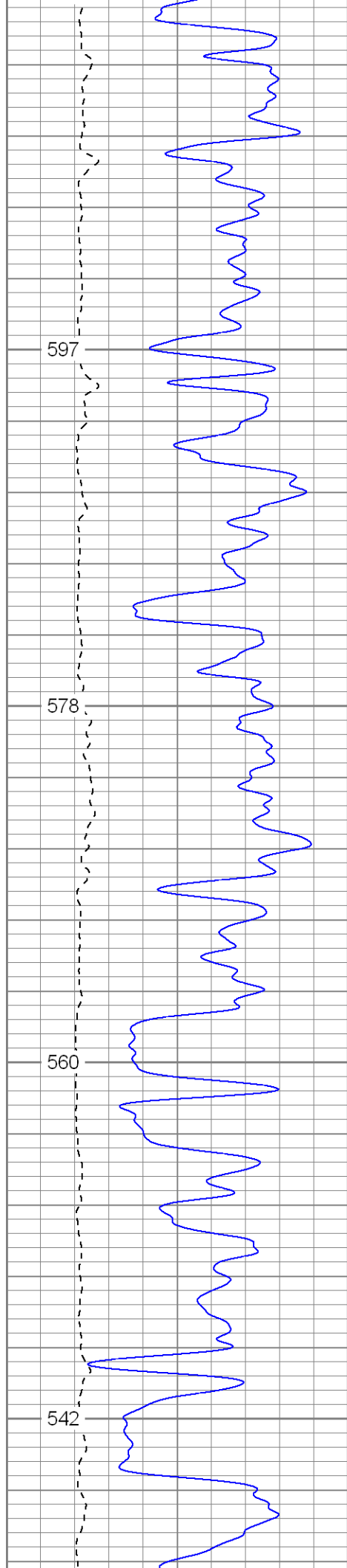
Database File: hillranch31-16.db  
Dataset Pathname: pass4.1  
Presentation Format: cdnl  
Dataset Creation: Tue Feb 02 00:08:45 2010 by Calc Open-Cased 071220  
Charted by: Depth in Feet scaled 1:240

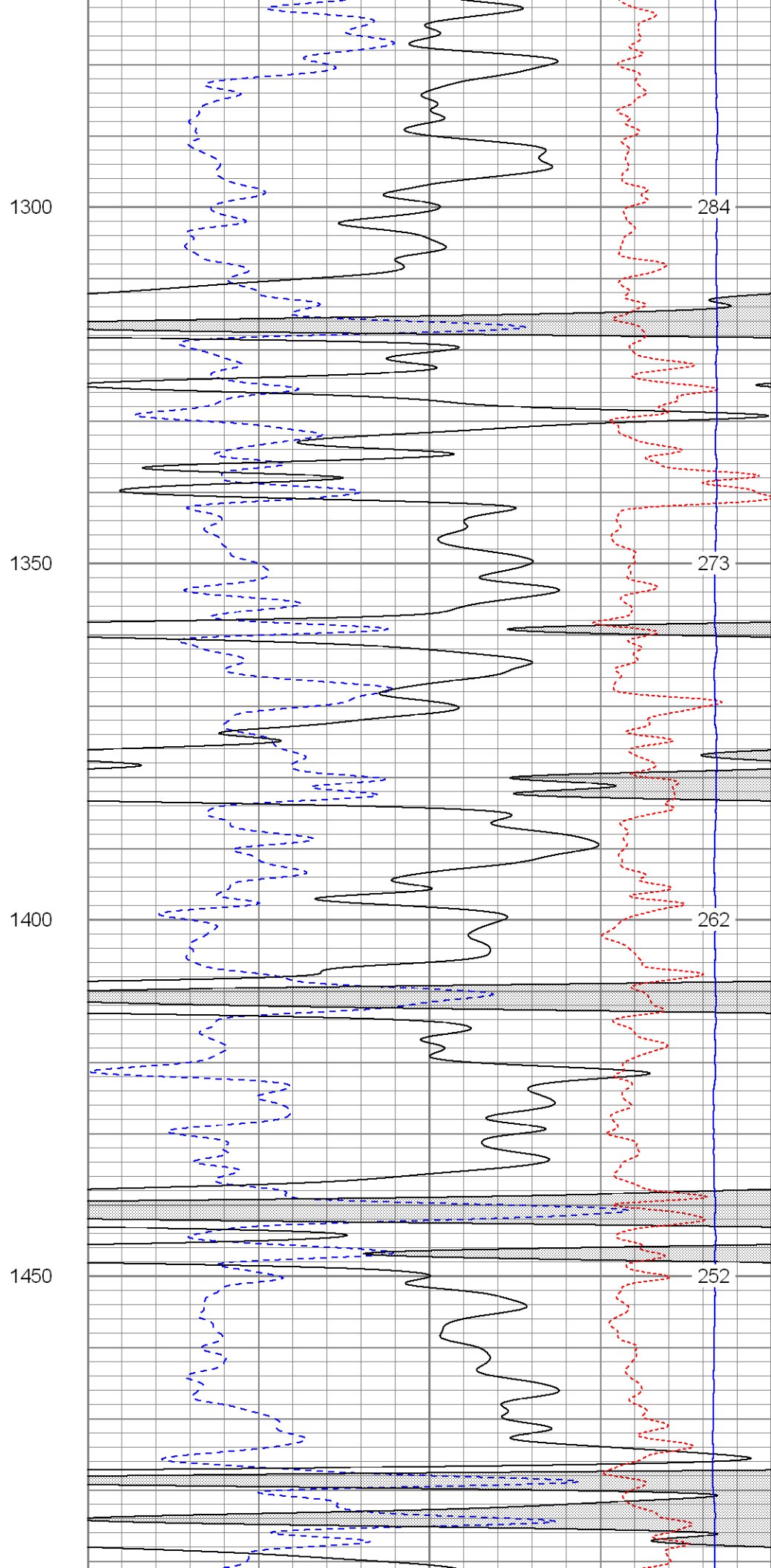
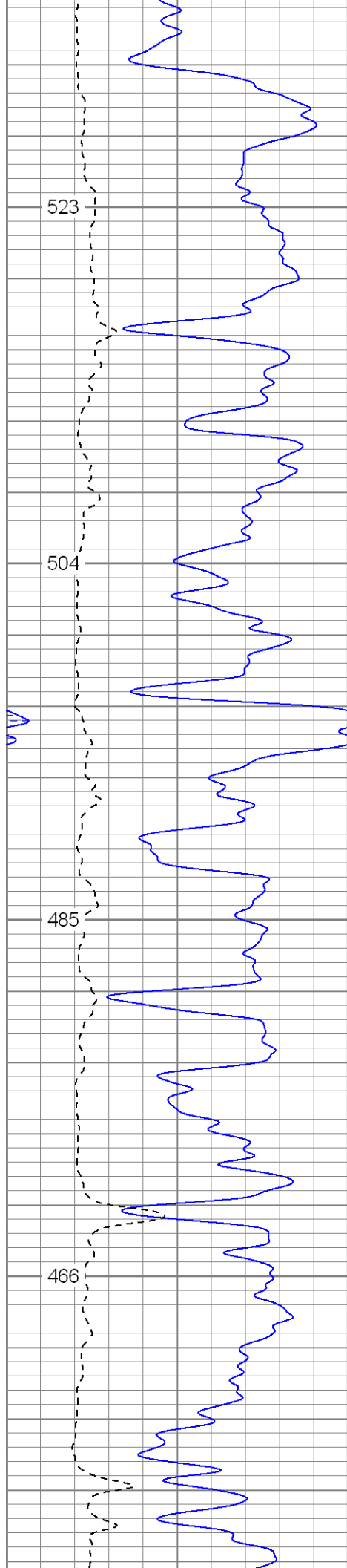
0	GR (GAPI)	200	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
TBHV (ft3)			-0.5 RHOC (g/cc) 0.5		
			7000 LTEN (lb) 0		
			ABHV (ft3)		

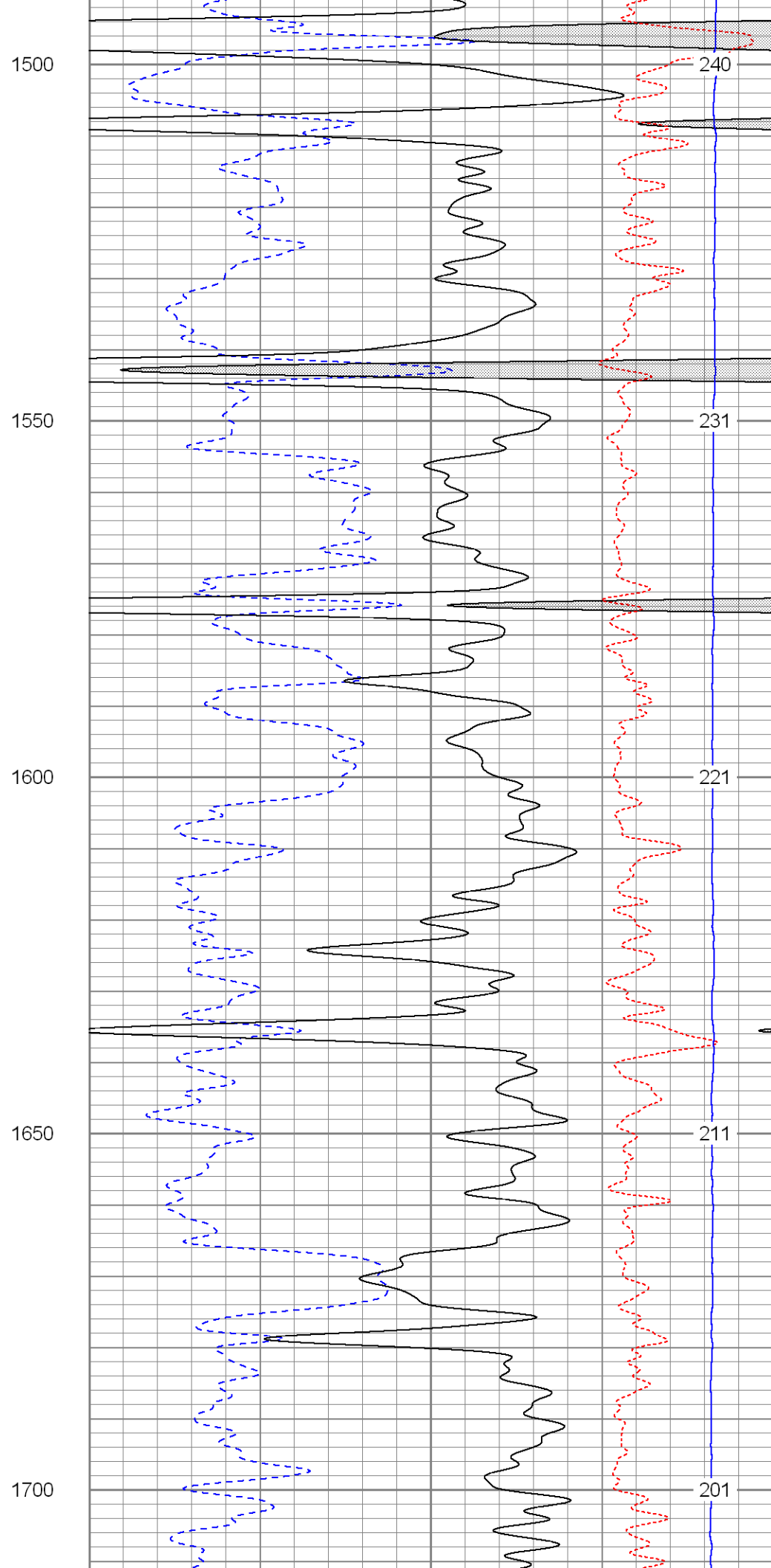
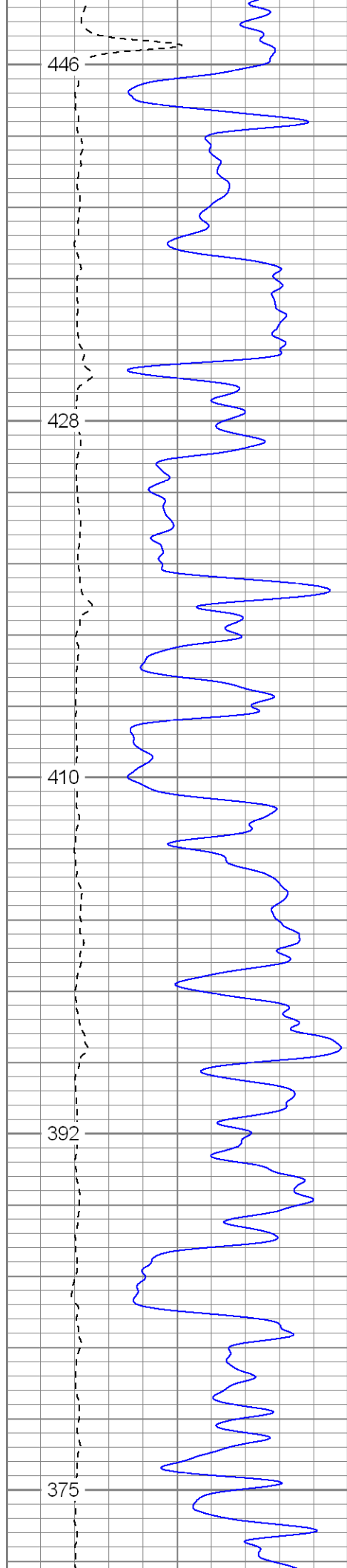


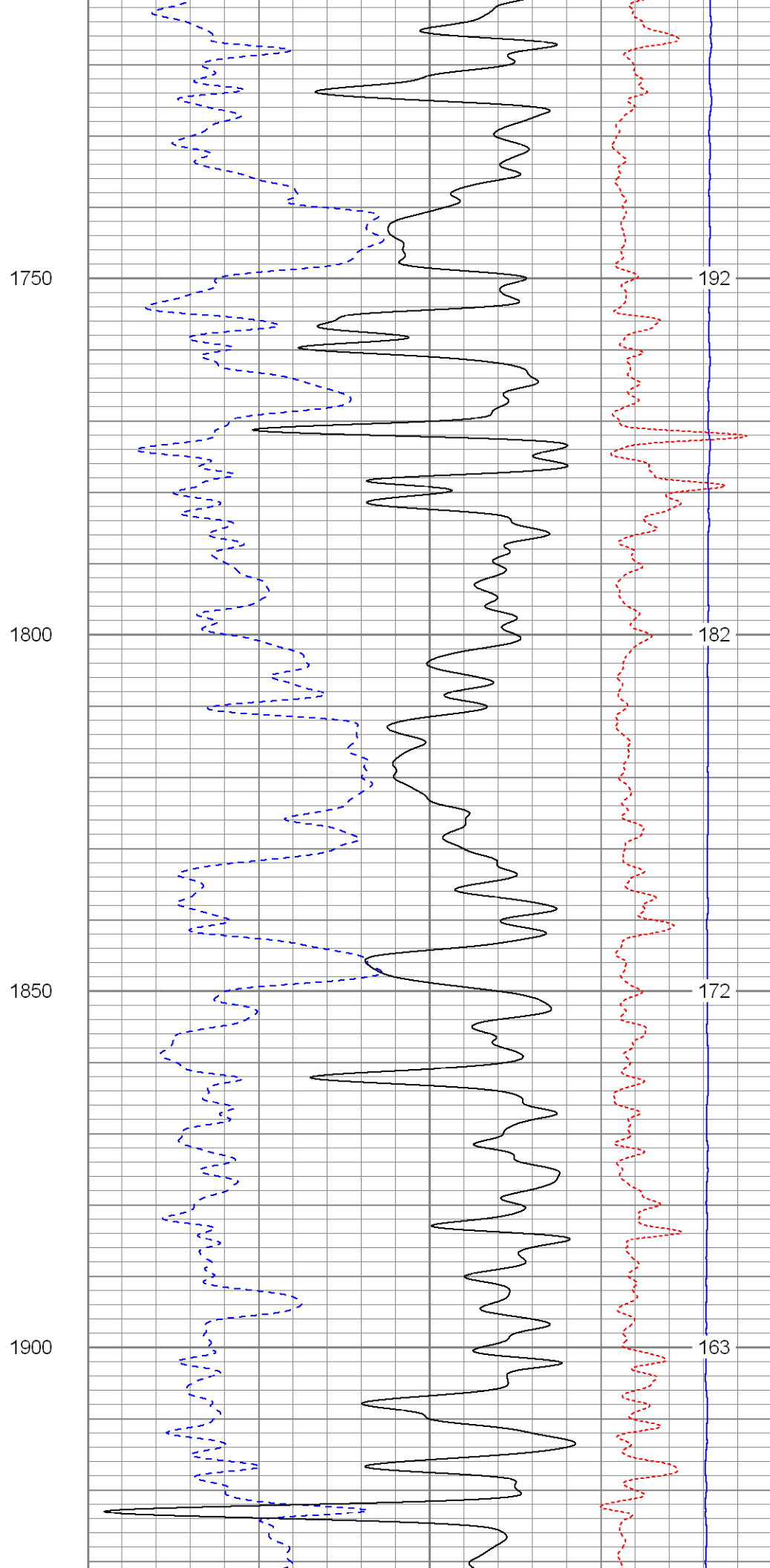
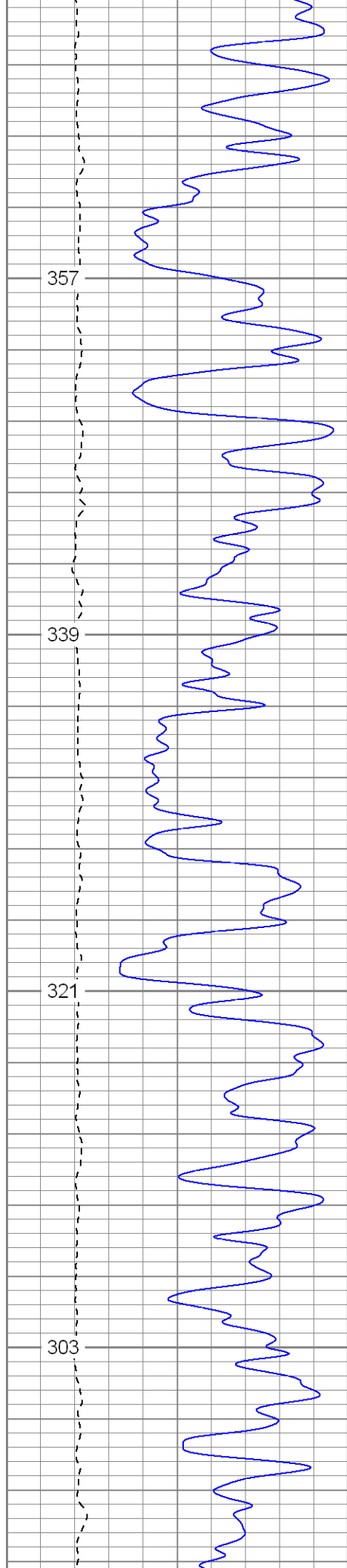




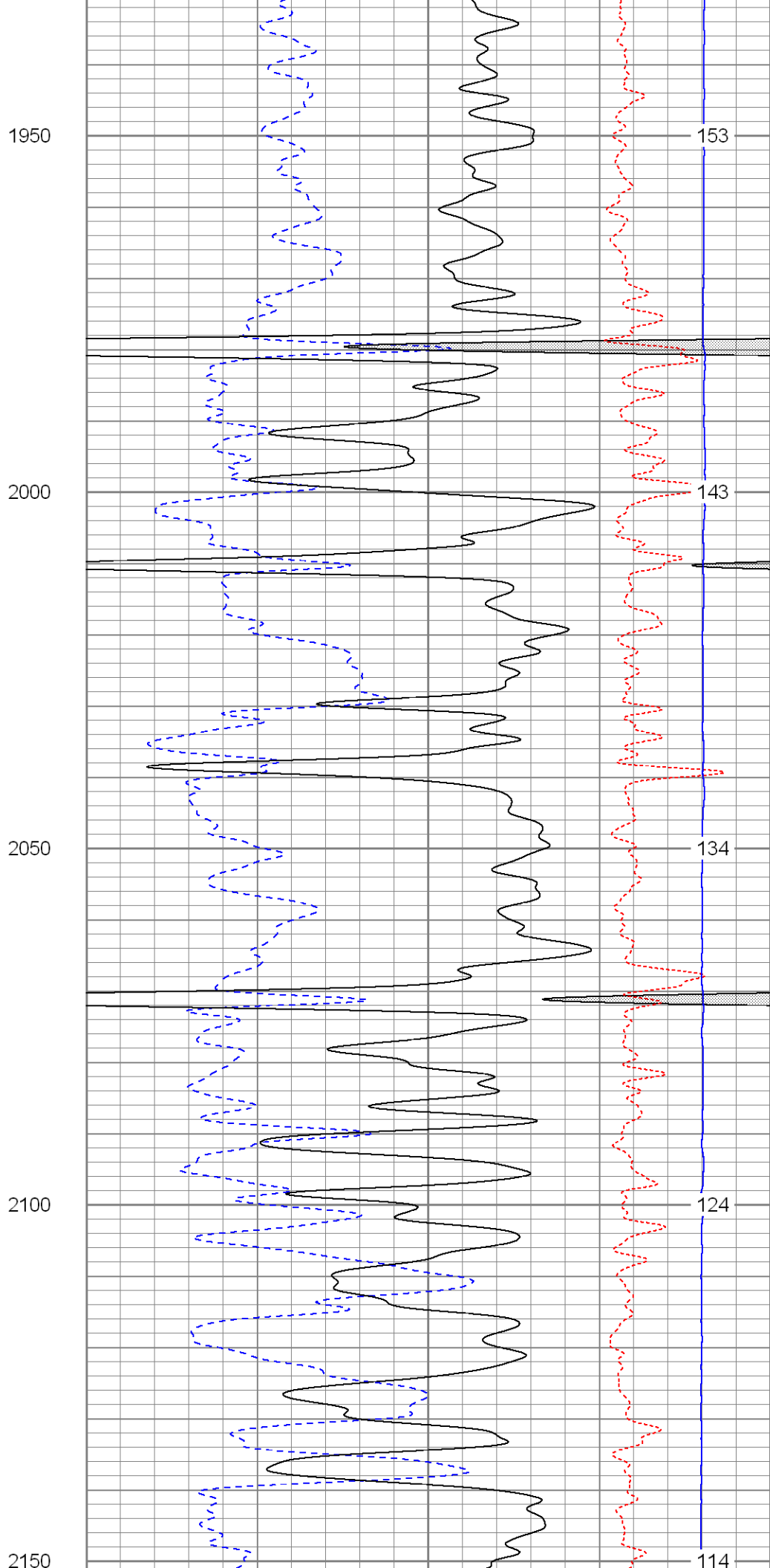
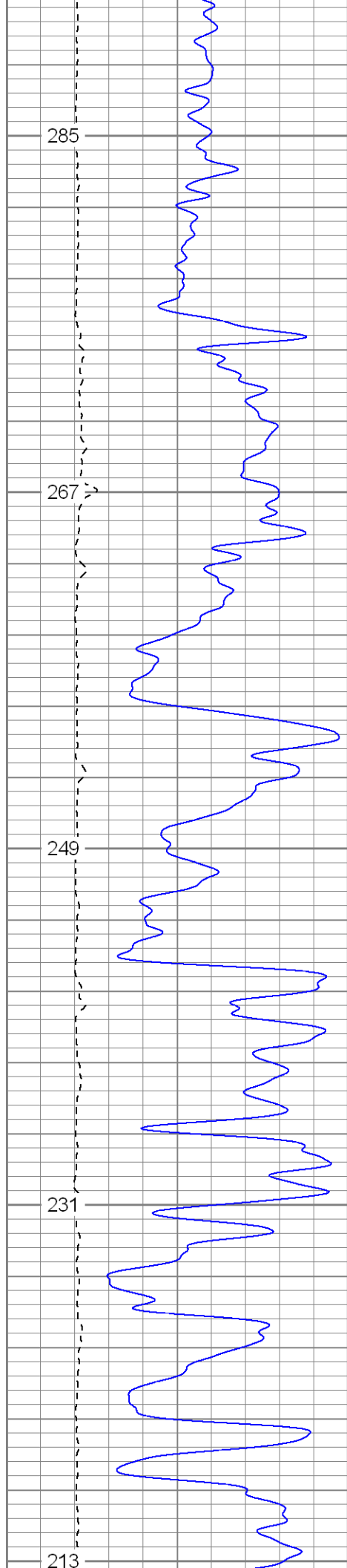


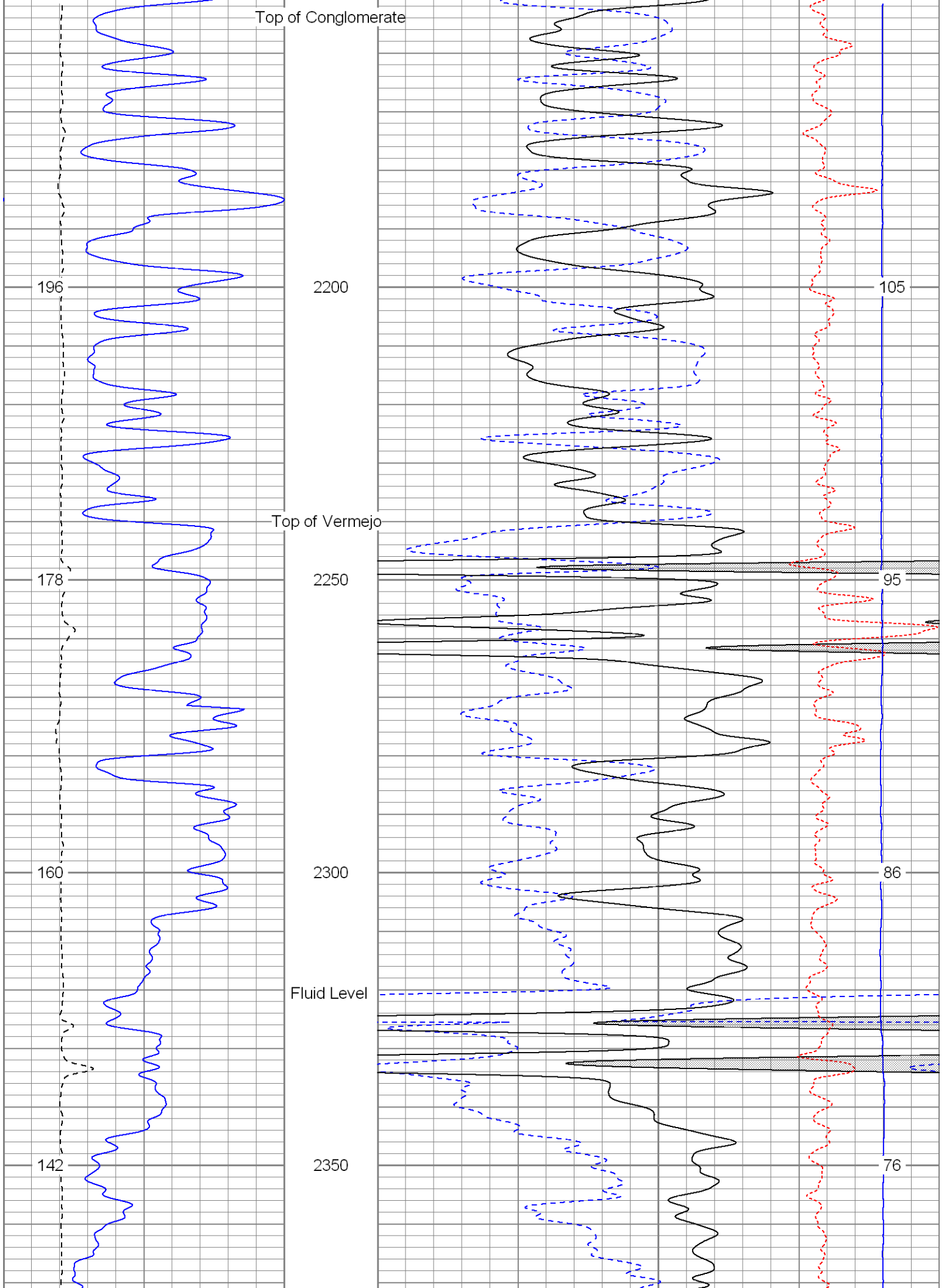


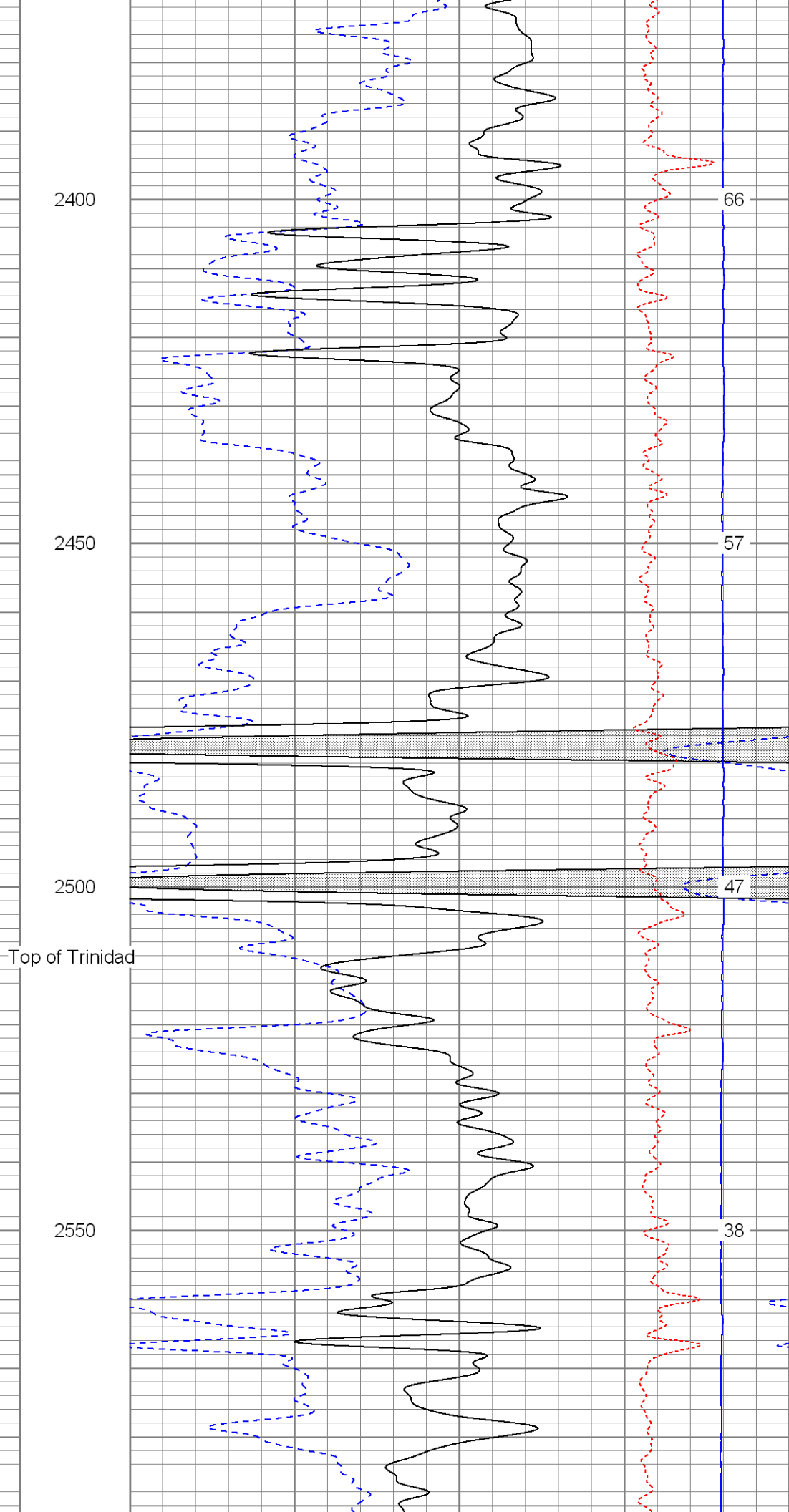
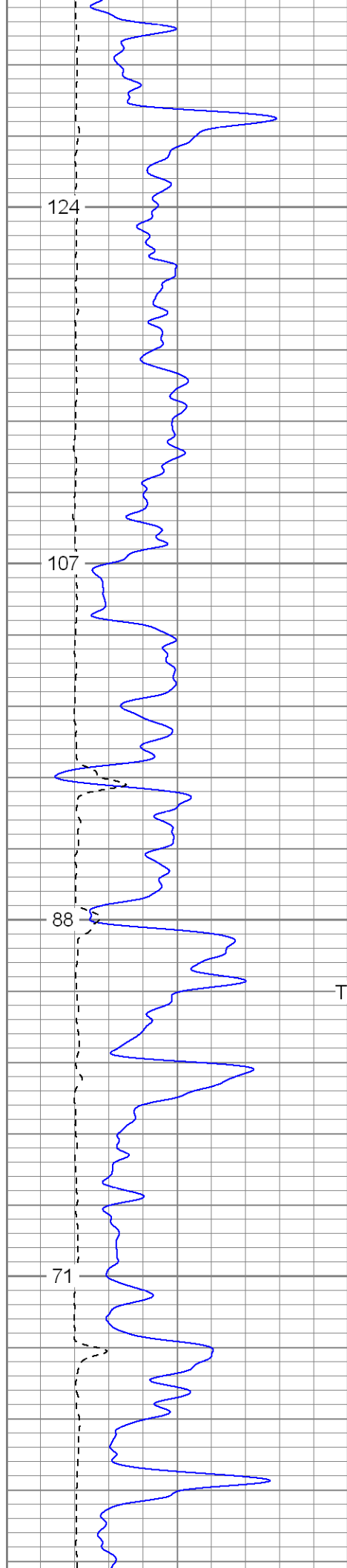


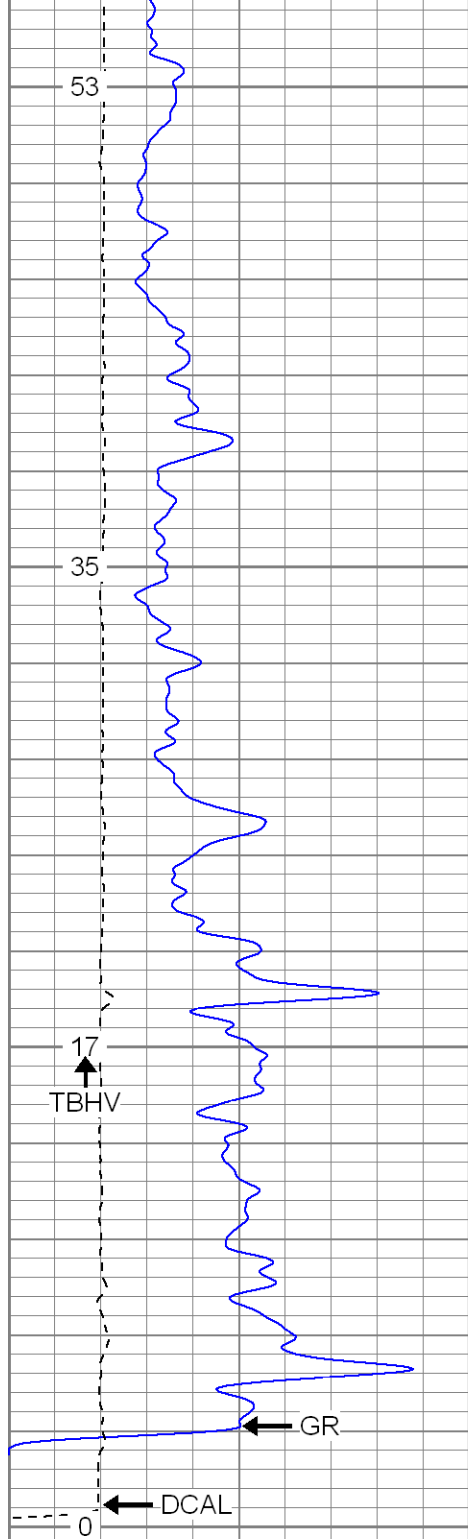




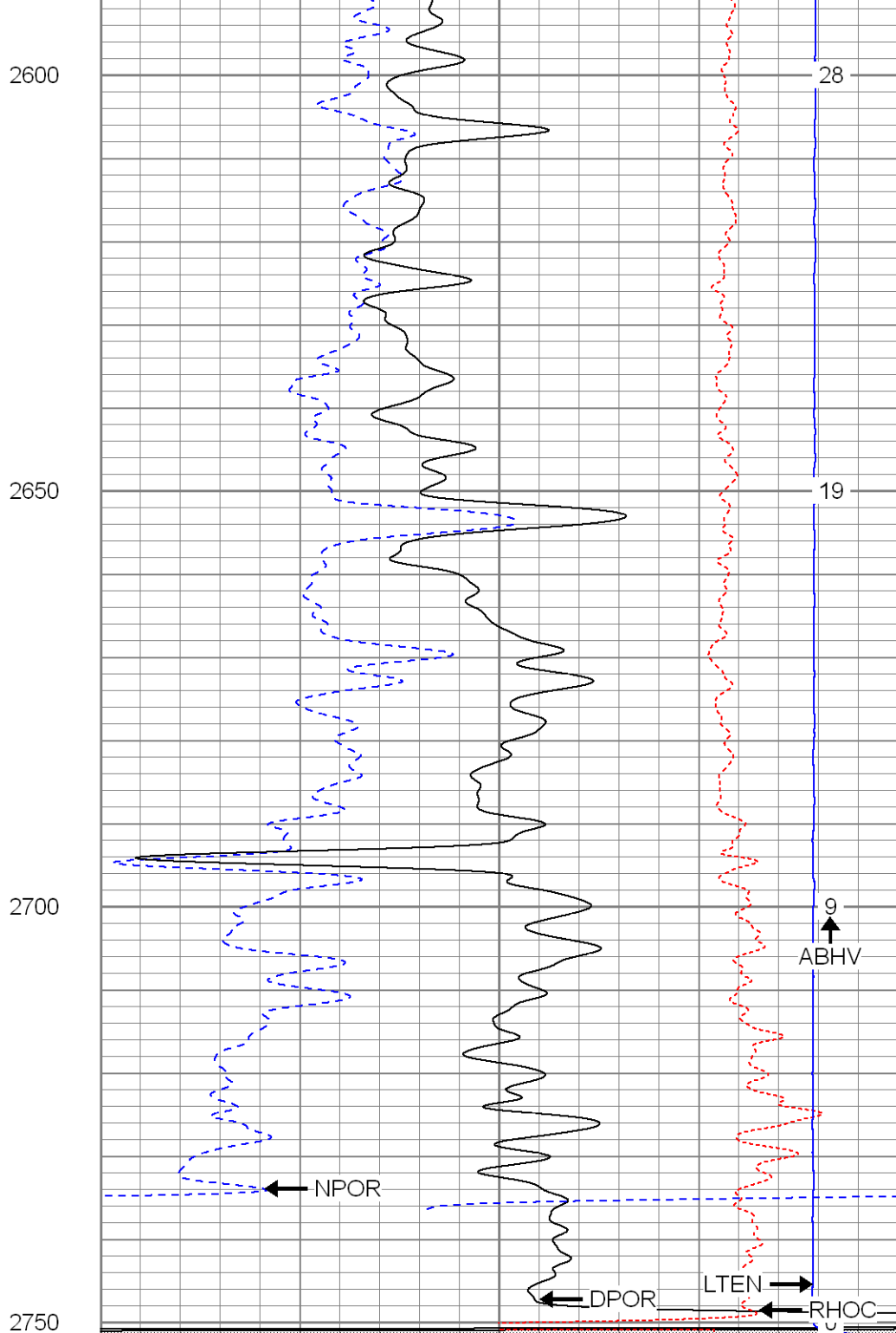








0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		



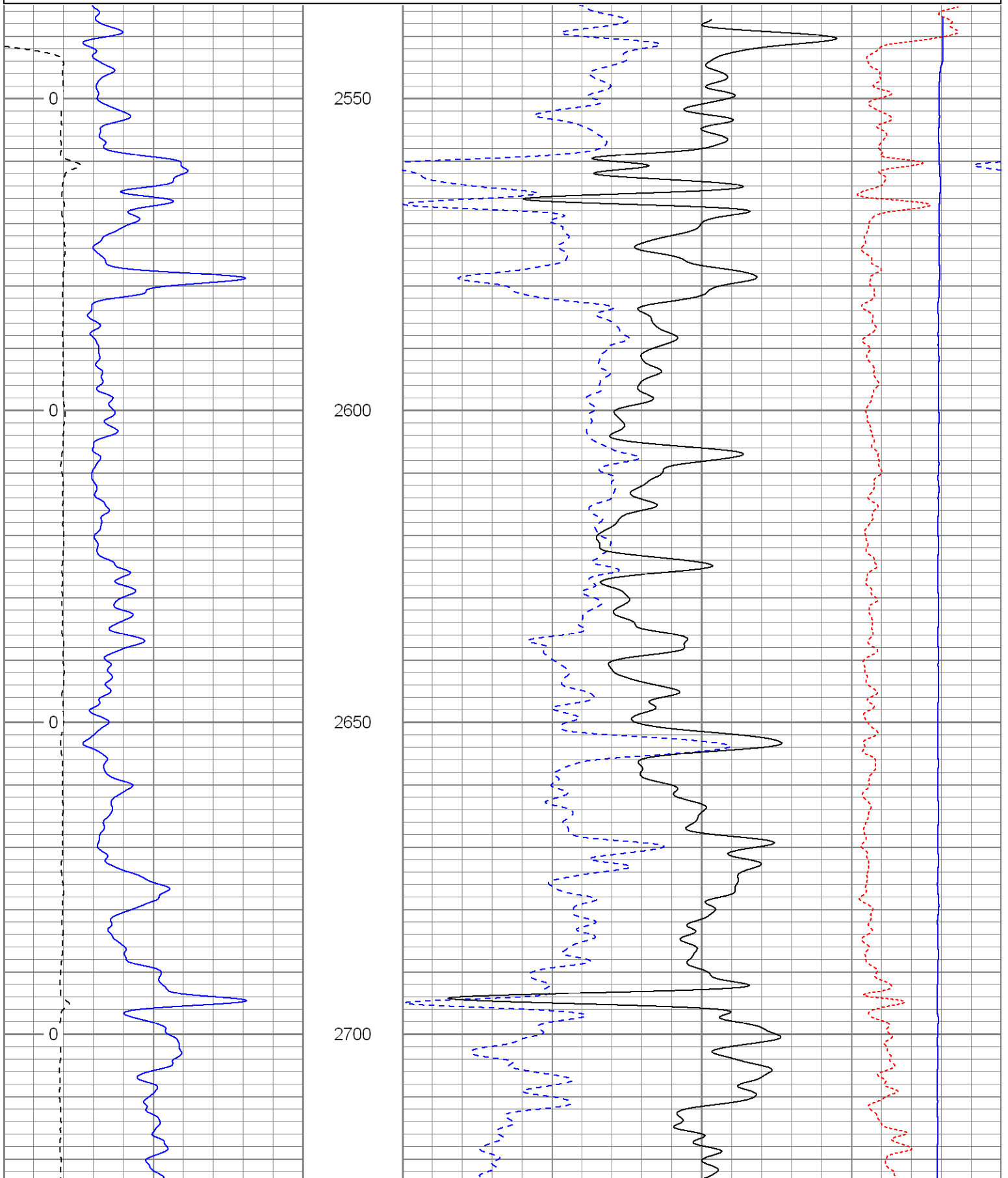
30	NPOR (pu)	-10
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
7000	LTEN (lb)	0
ABHV (ft3)		

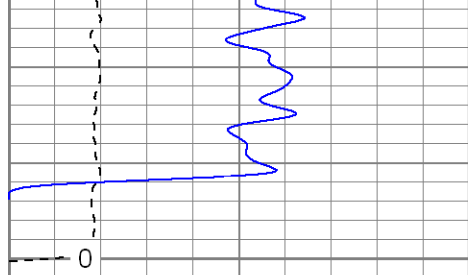


## Repeat Section

0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		

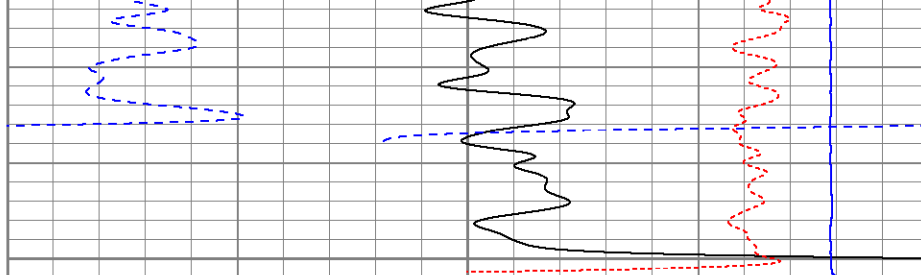
30	NPOR (pu)	-10
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
7000	LTEN (lb)	0





0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		

2750



30	NPOR (pu)	-10
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
7000	LTEN (lb)	0

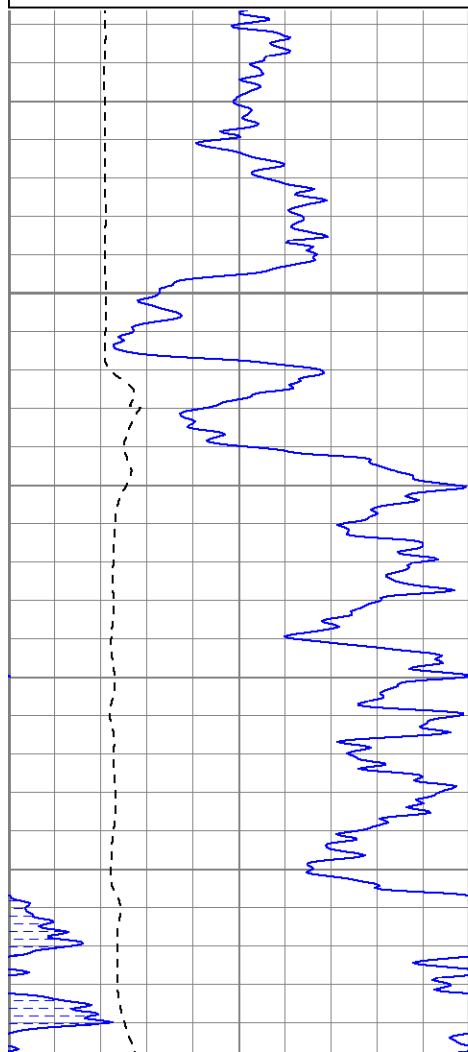


# High Resolution Pass

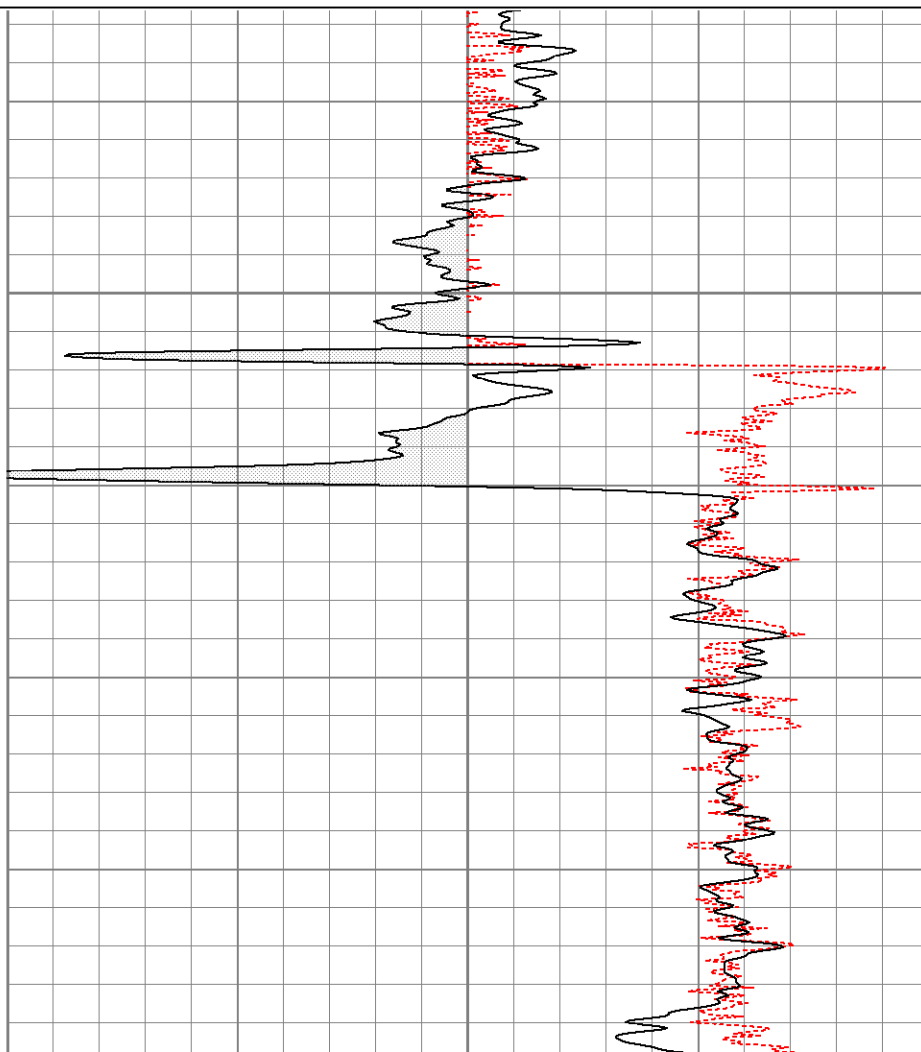
Database File: hillranch31-16.db  
 Dataset Pathname: pass4.1hr  
 Presentation Format: cdlhr  
 Dataset Creation: Tue Feb 02 00:27:41 2010 by Calc Open-Cased 071220  
 Charted by: Depth in Feet scaled 1:120

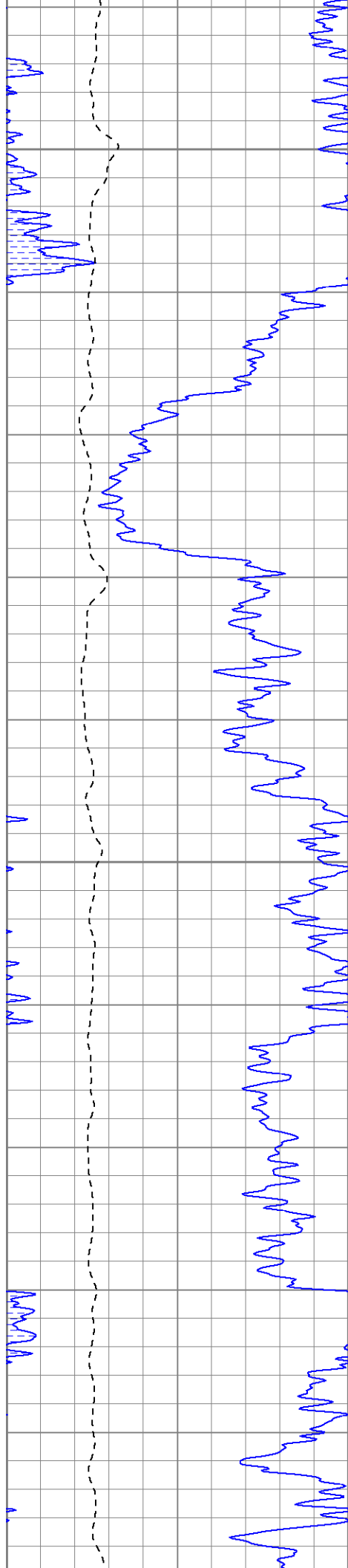
0	GR (GAPI)	200
6	DCAL (in)	16

1	RHOB (g/cc)	3
-0.5	RHOC (g/cc)	0.5



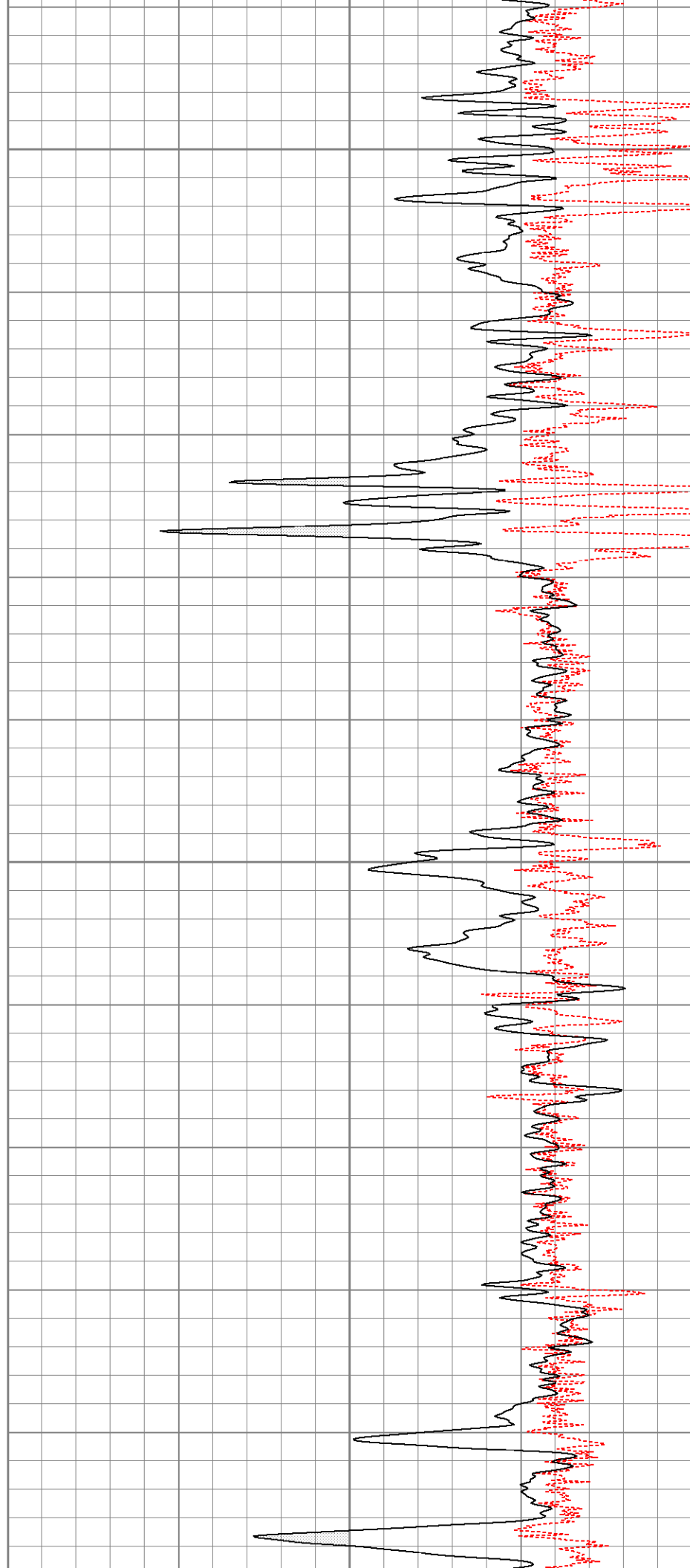
450





500

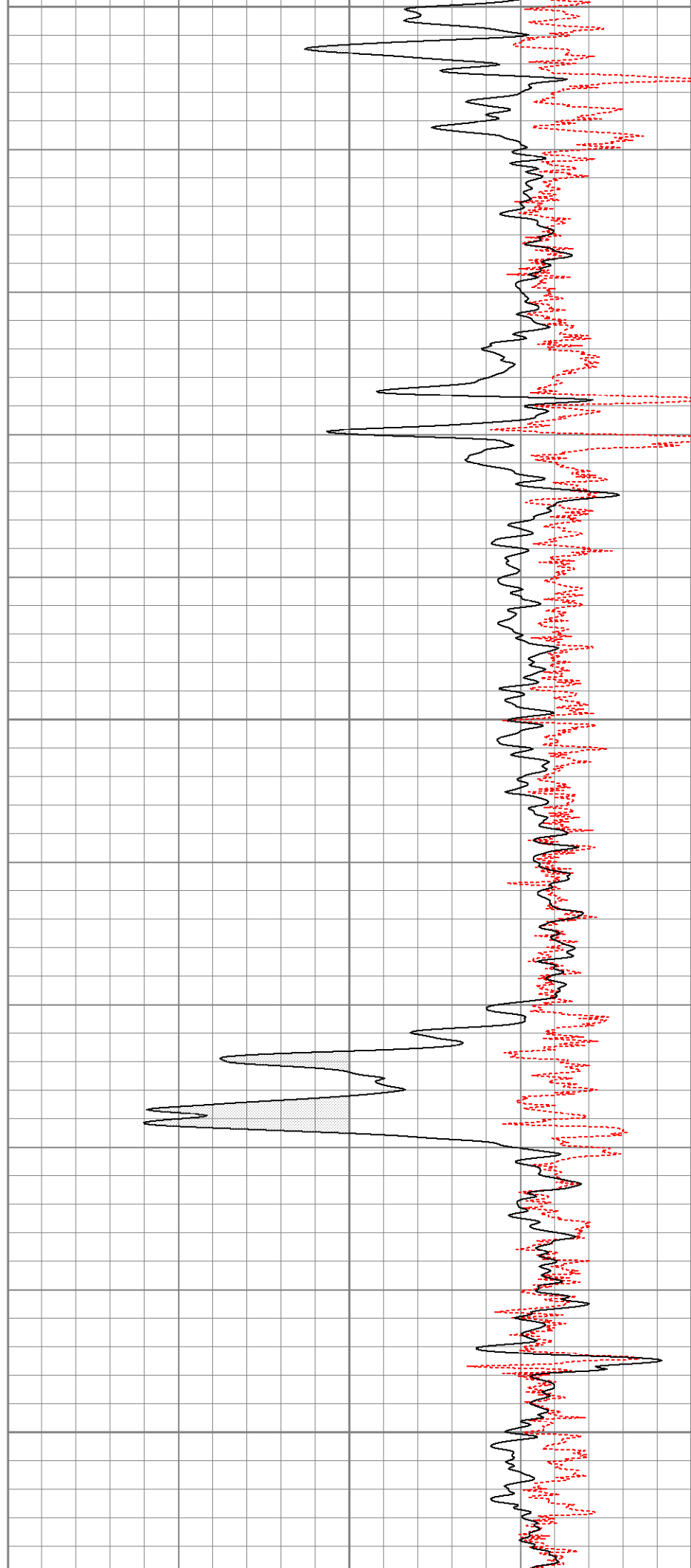
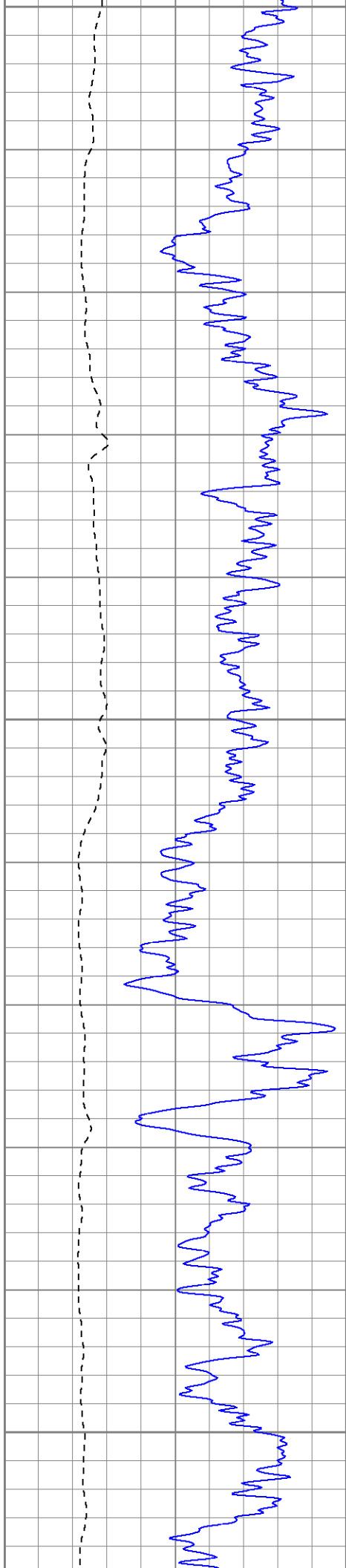
550



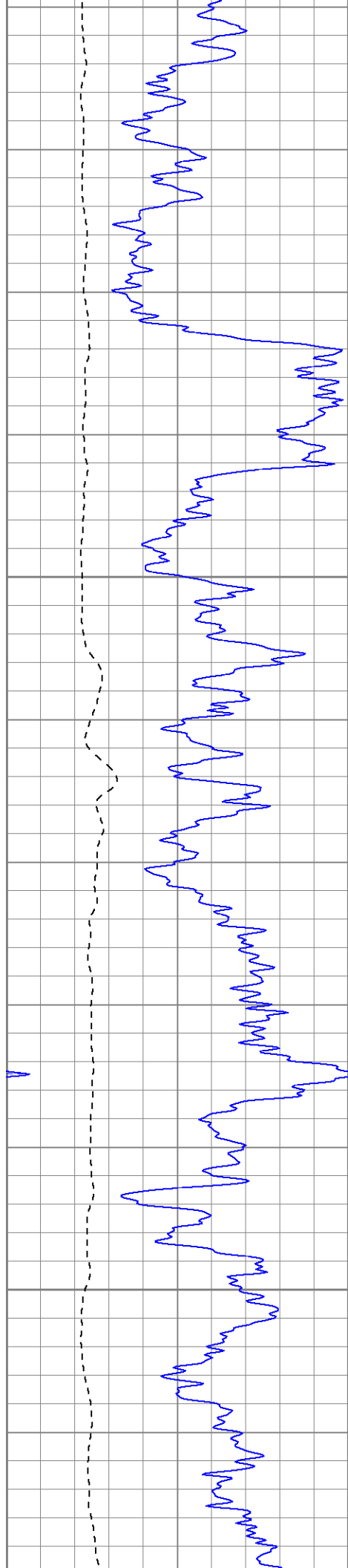
600

650

700

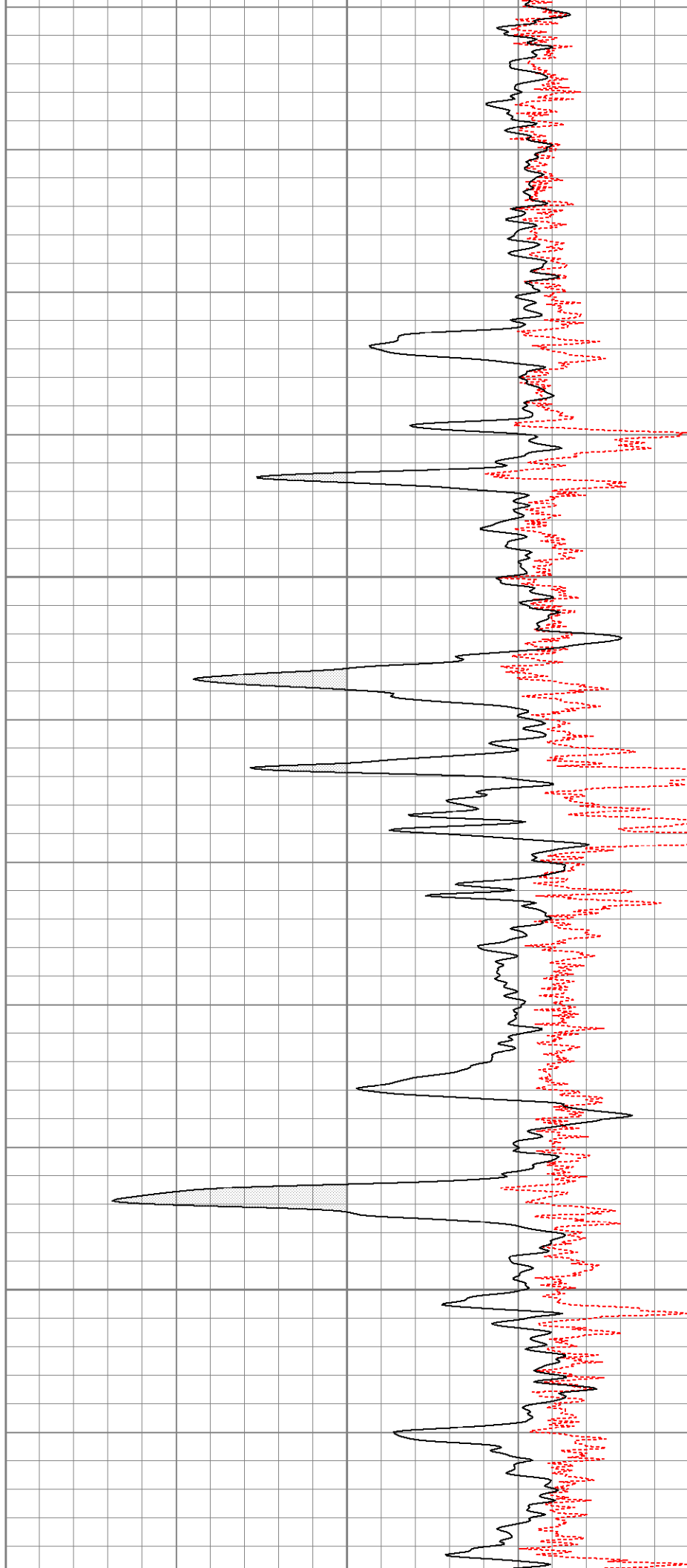


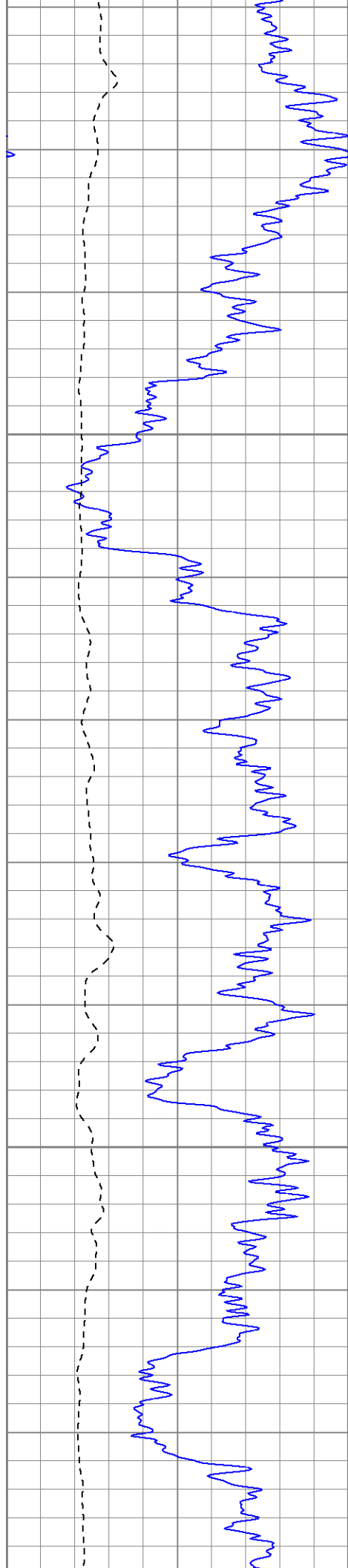




750

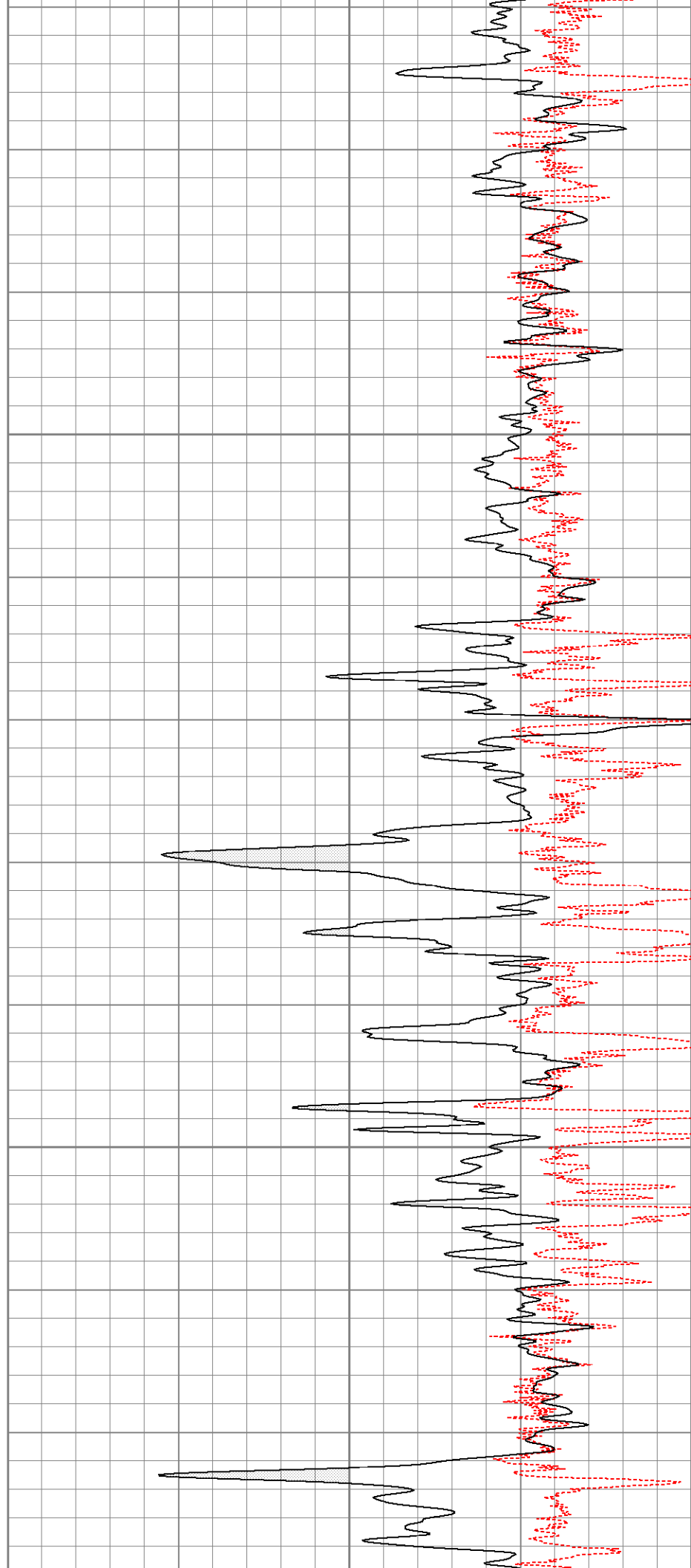
800

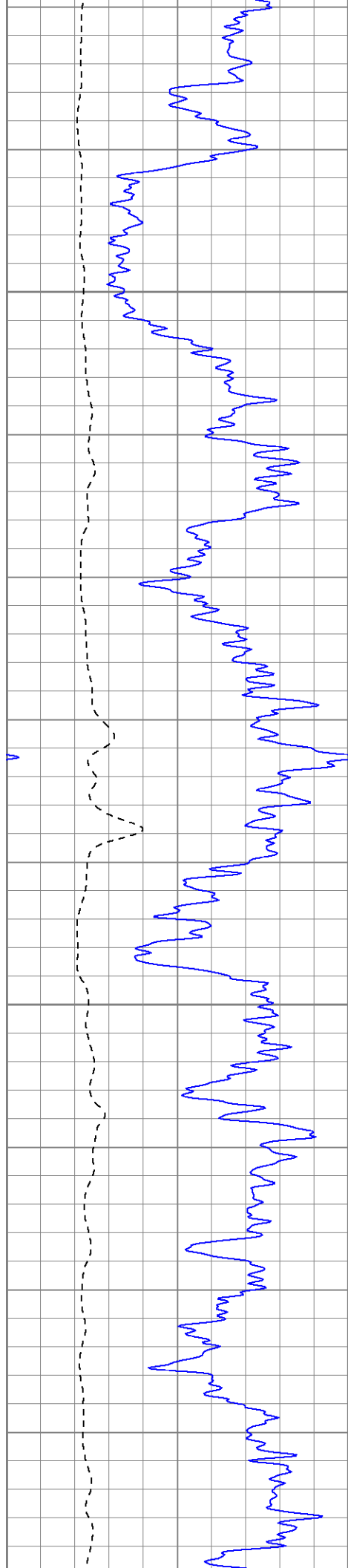




850

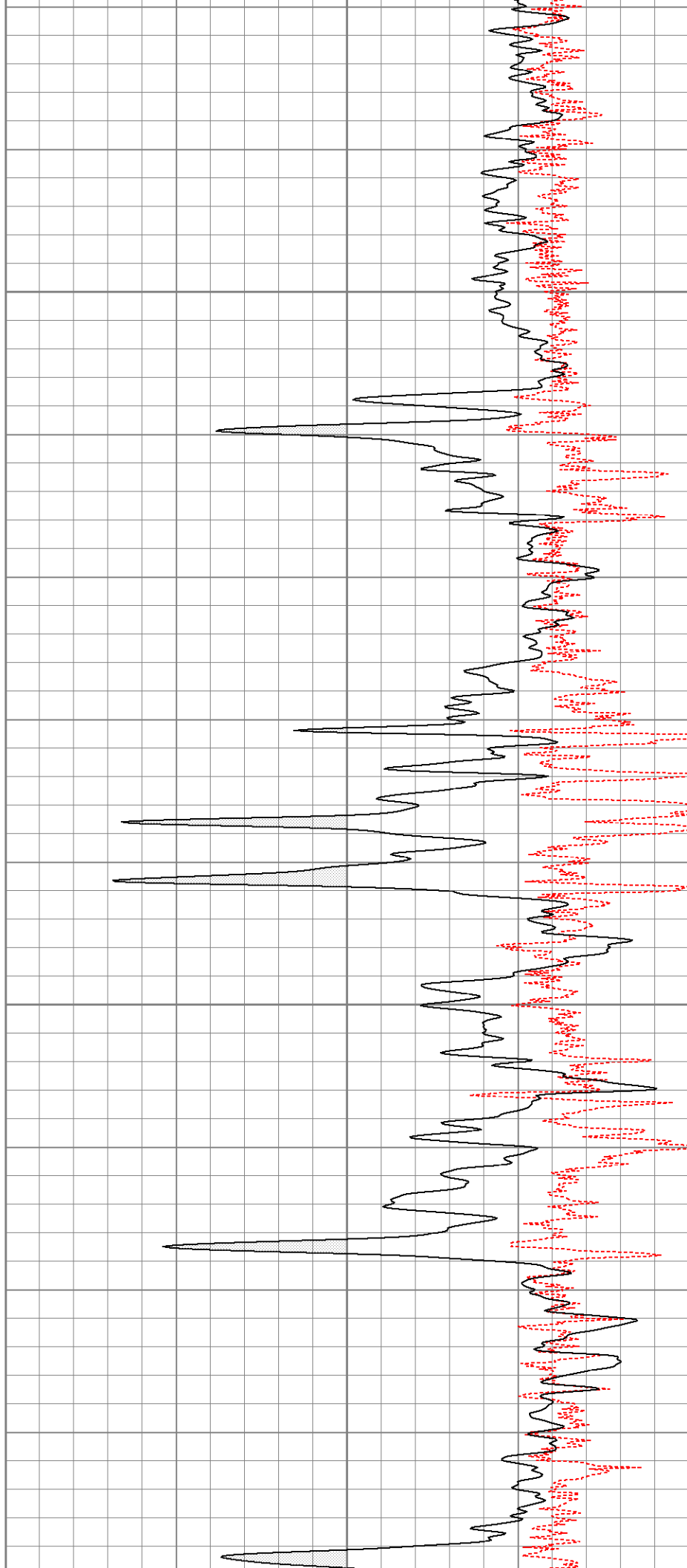
900

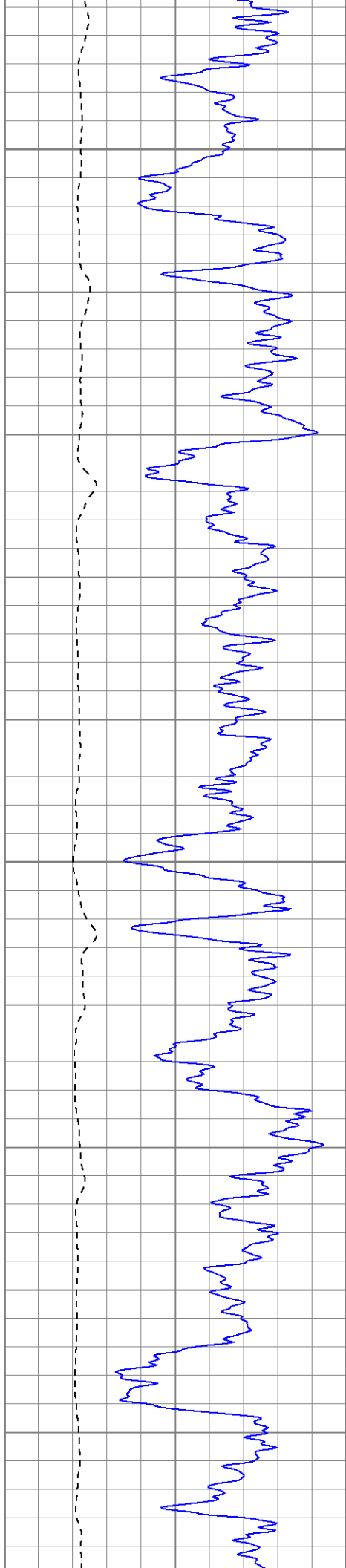




950

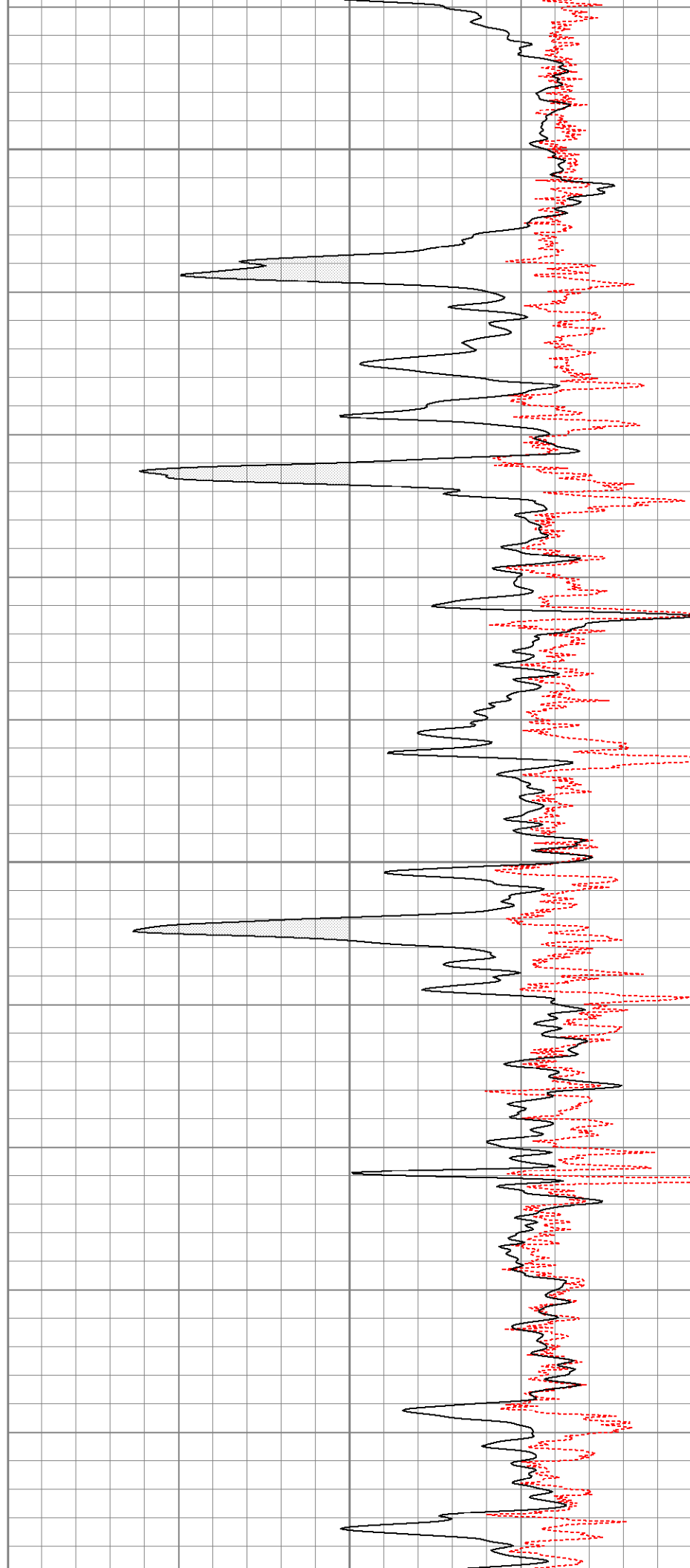
1000

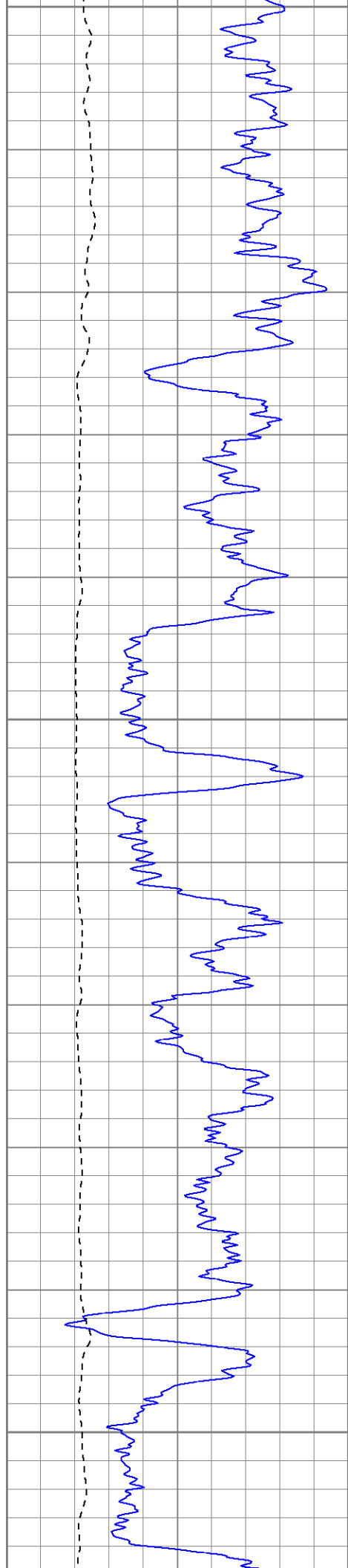




1050

1100

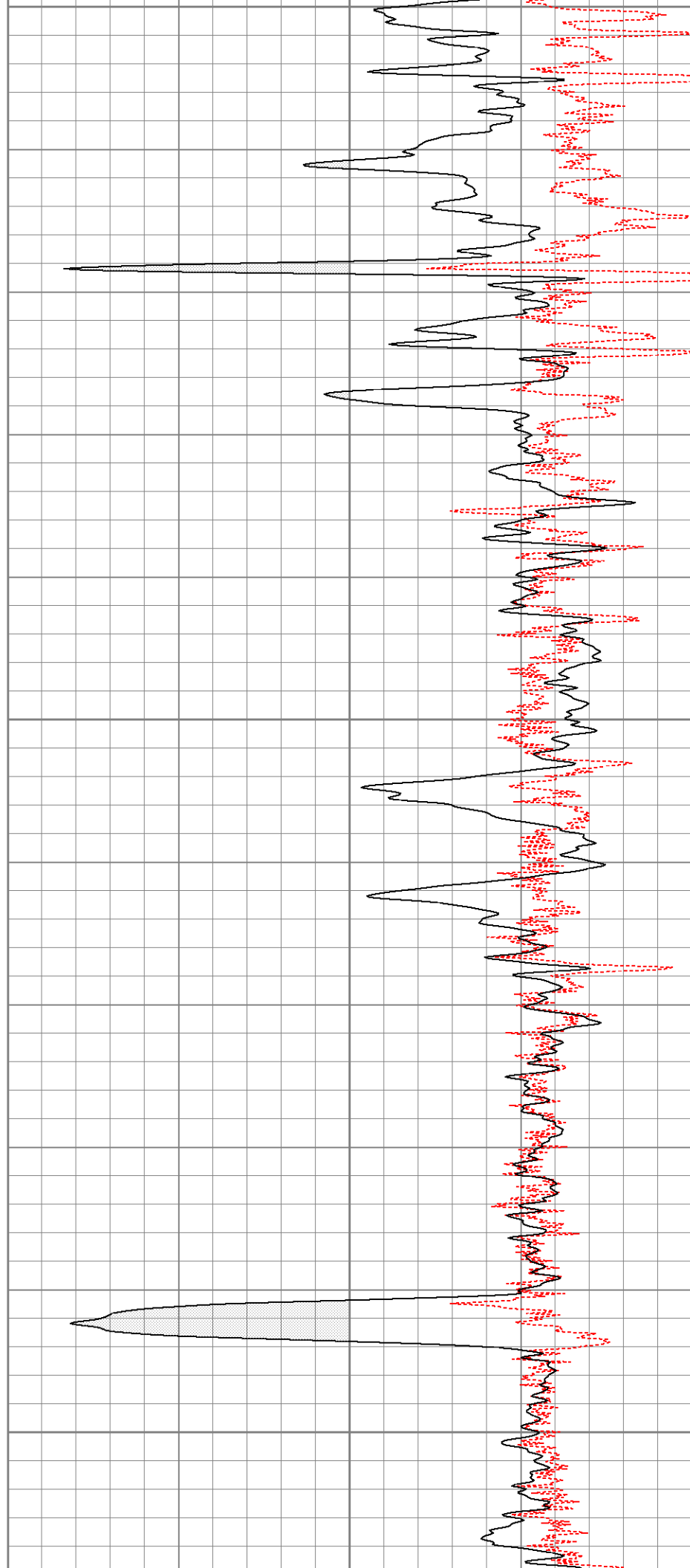


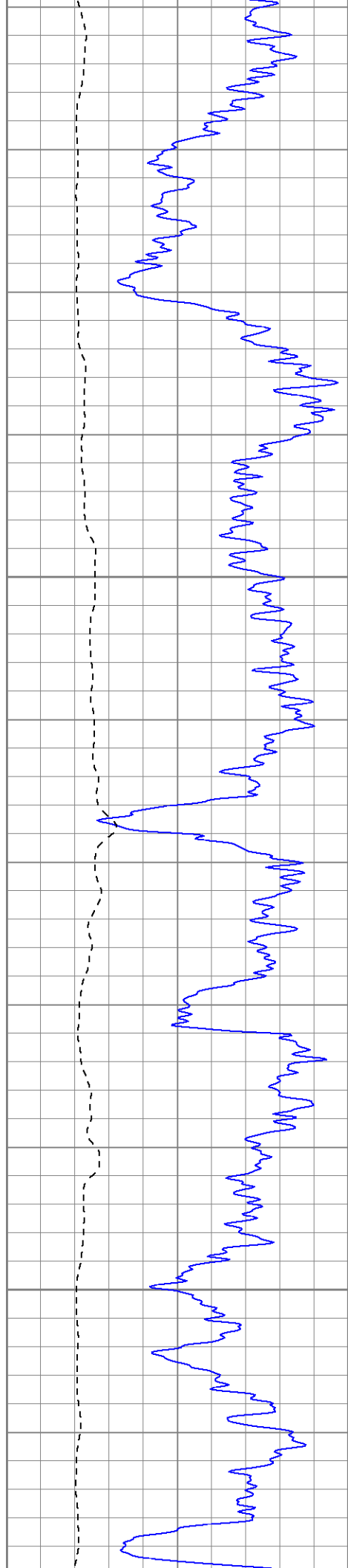


1150

1200

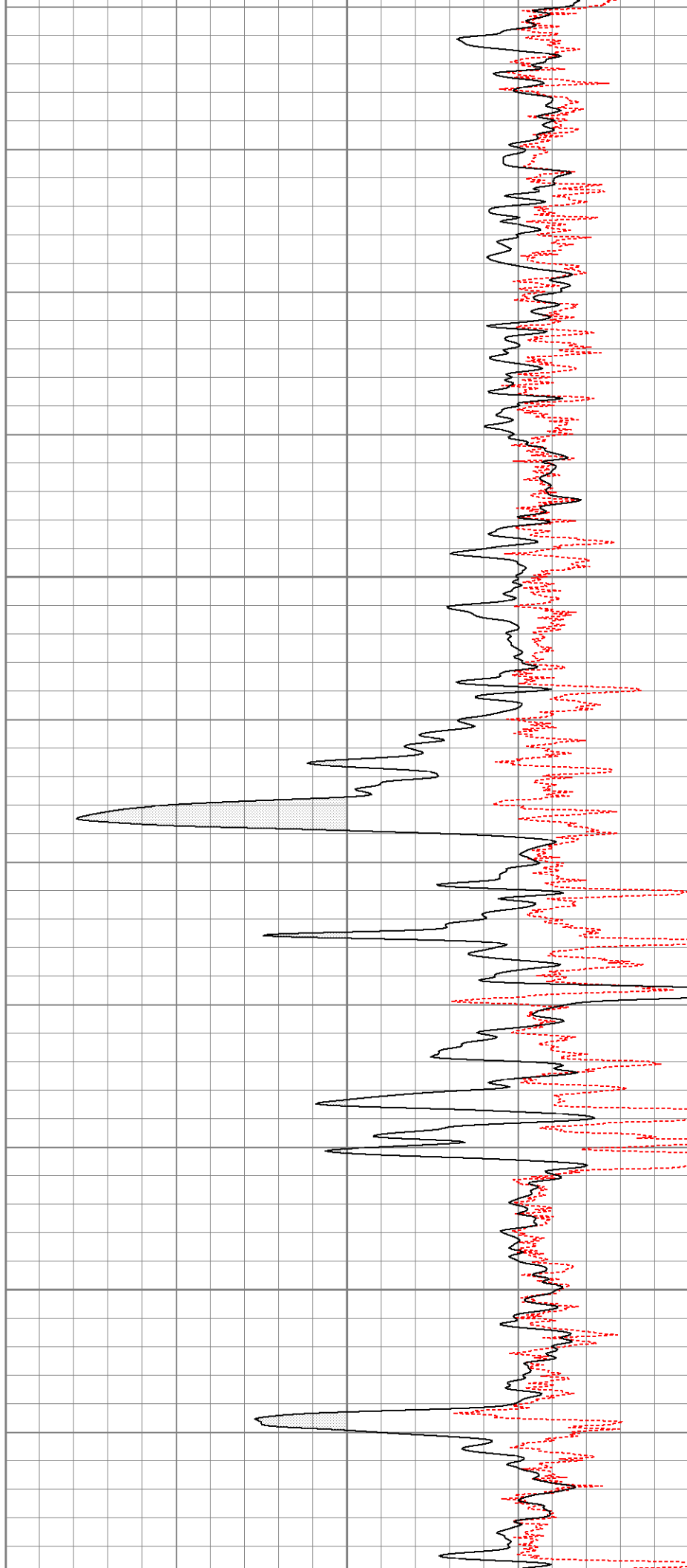
1250

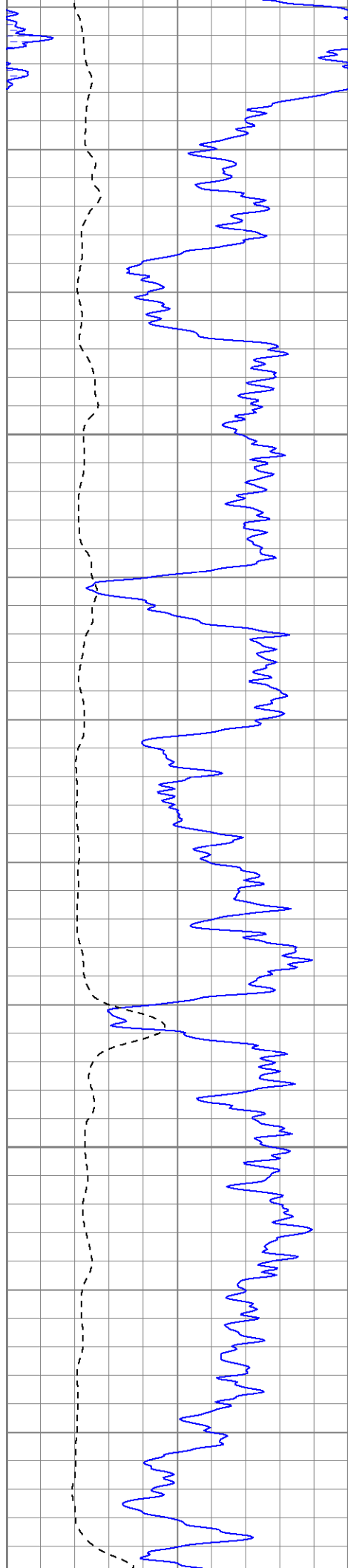




1300

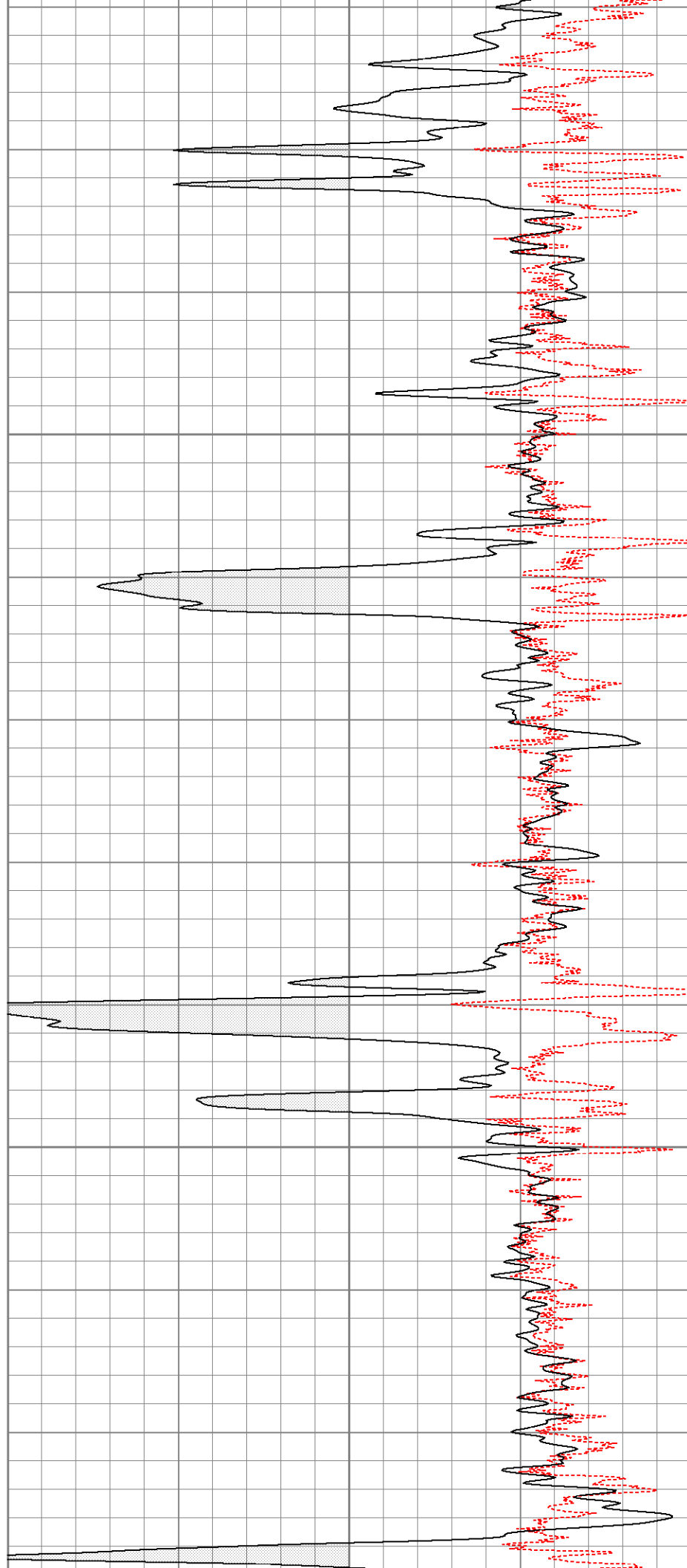
1350

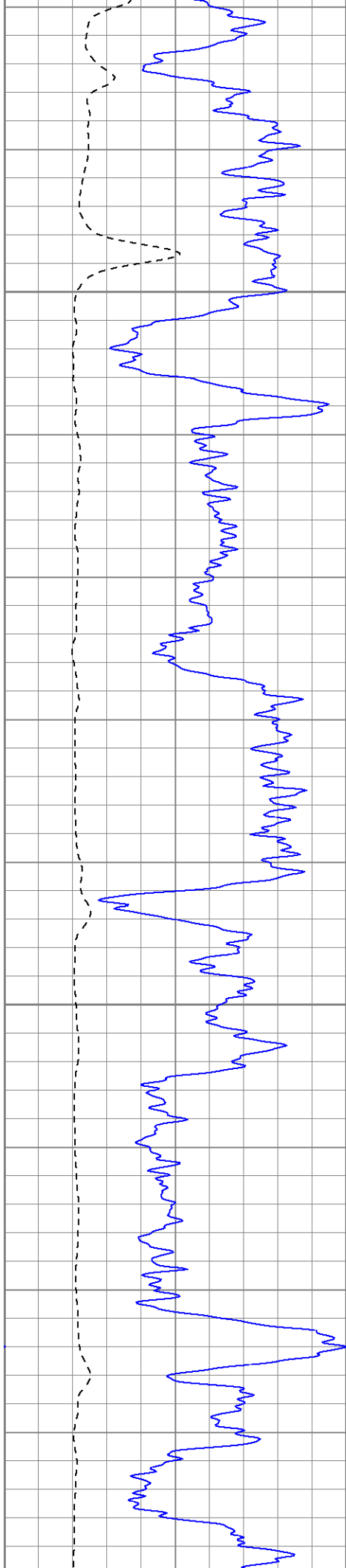




1400

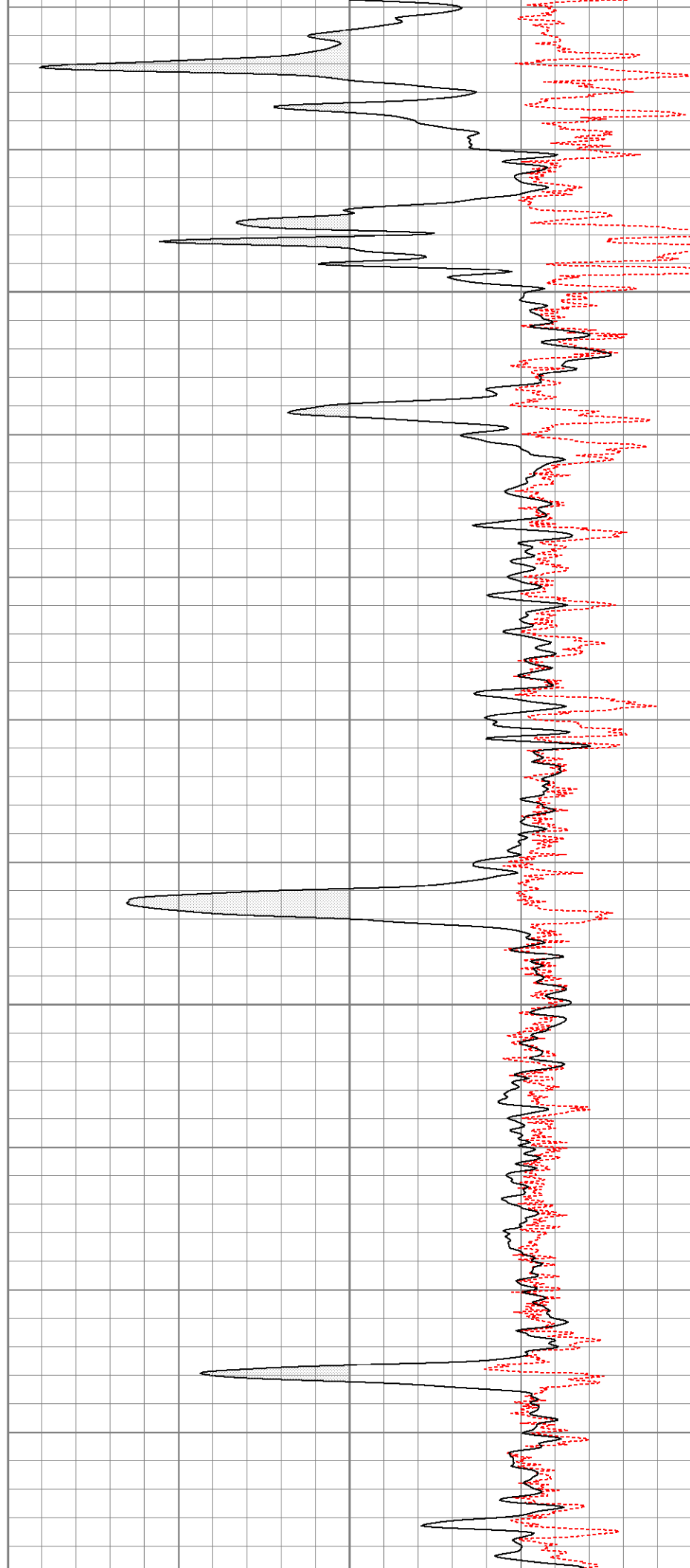
1450



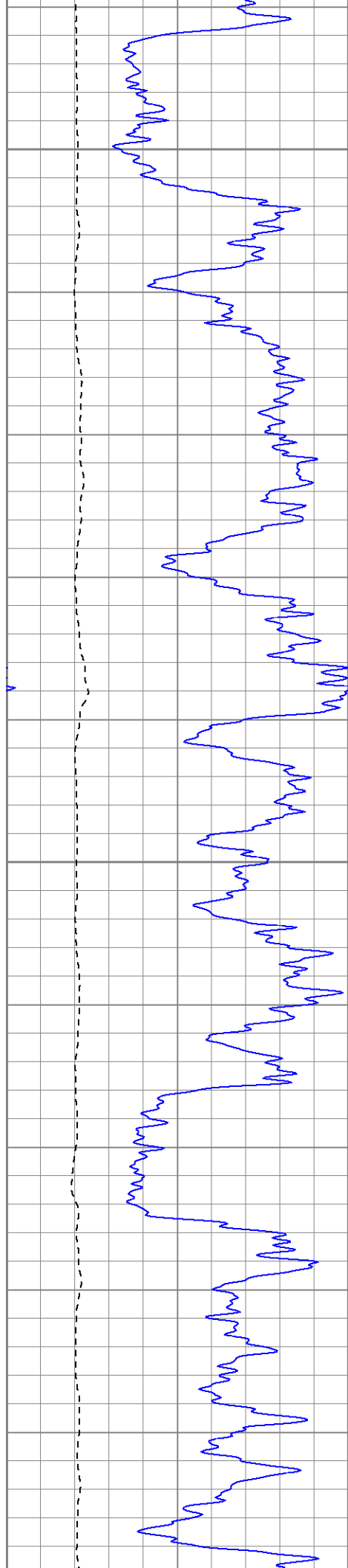


1500

1550

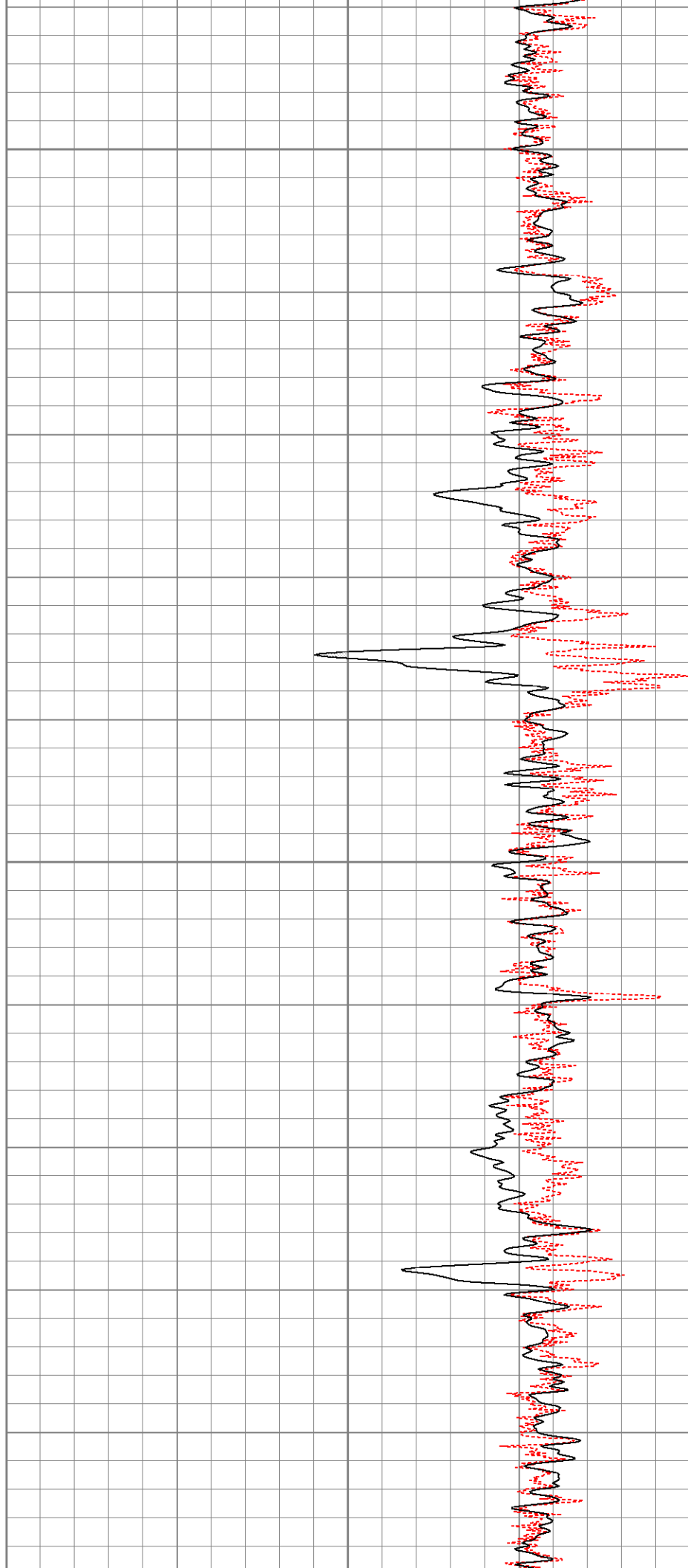






1600

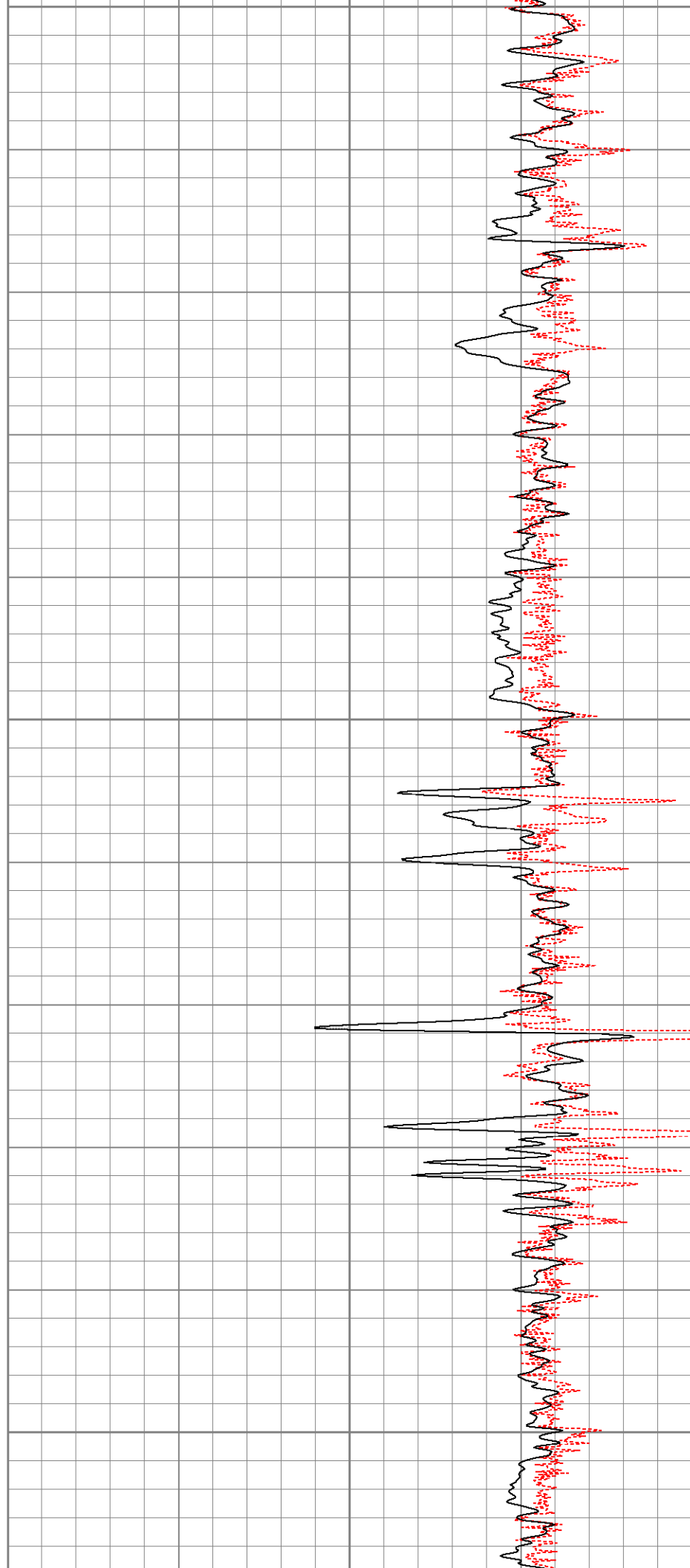
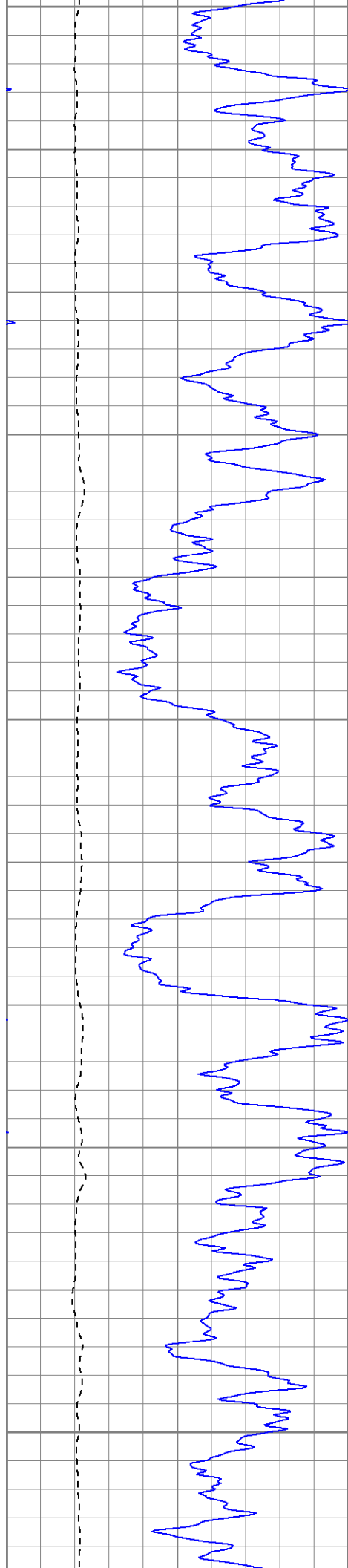
1650

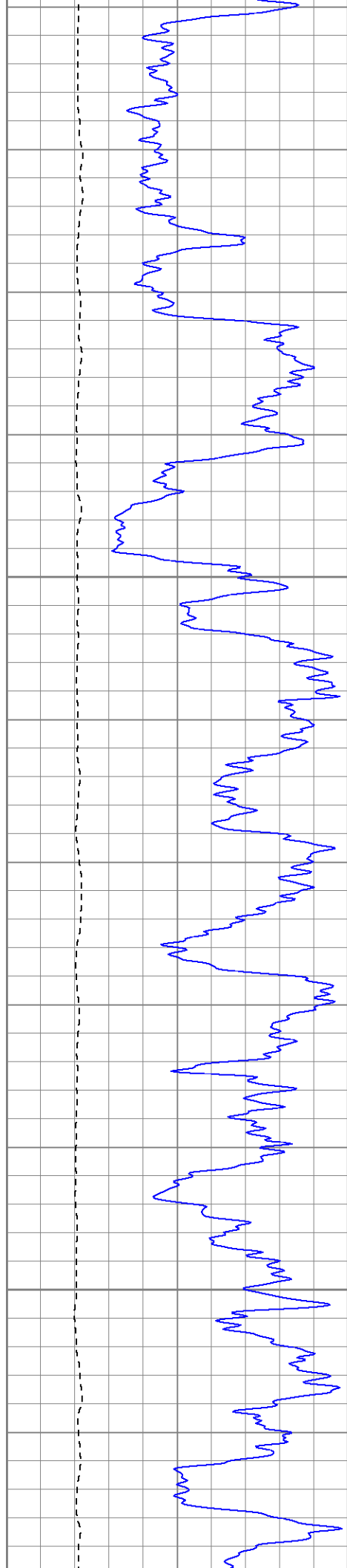


1700

1750

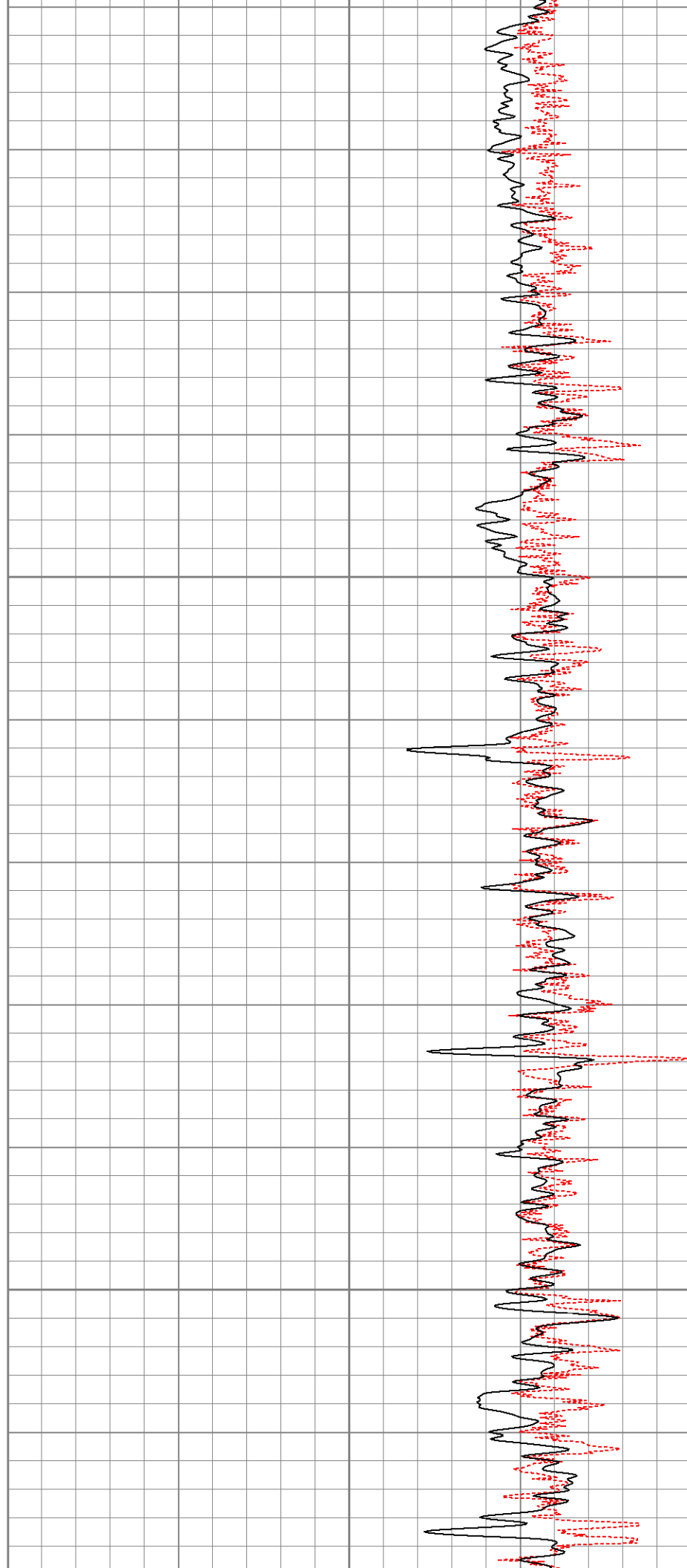
1800

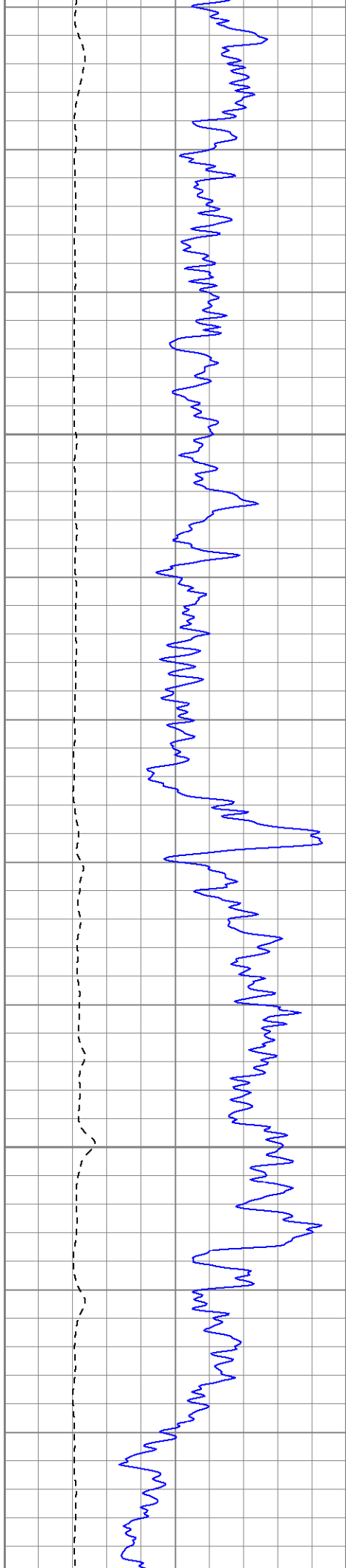




1850

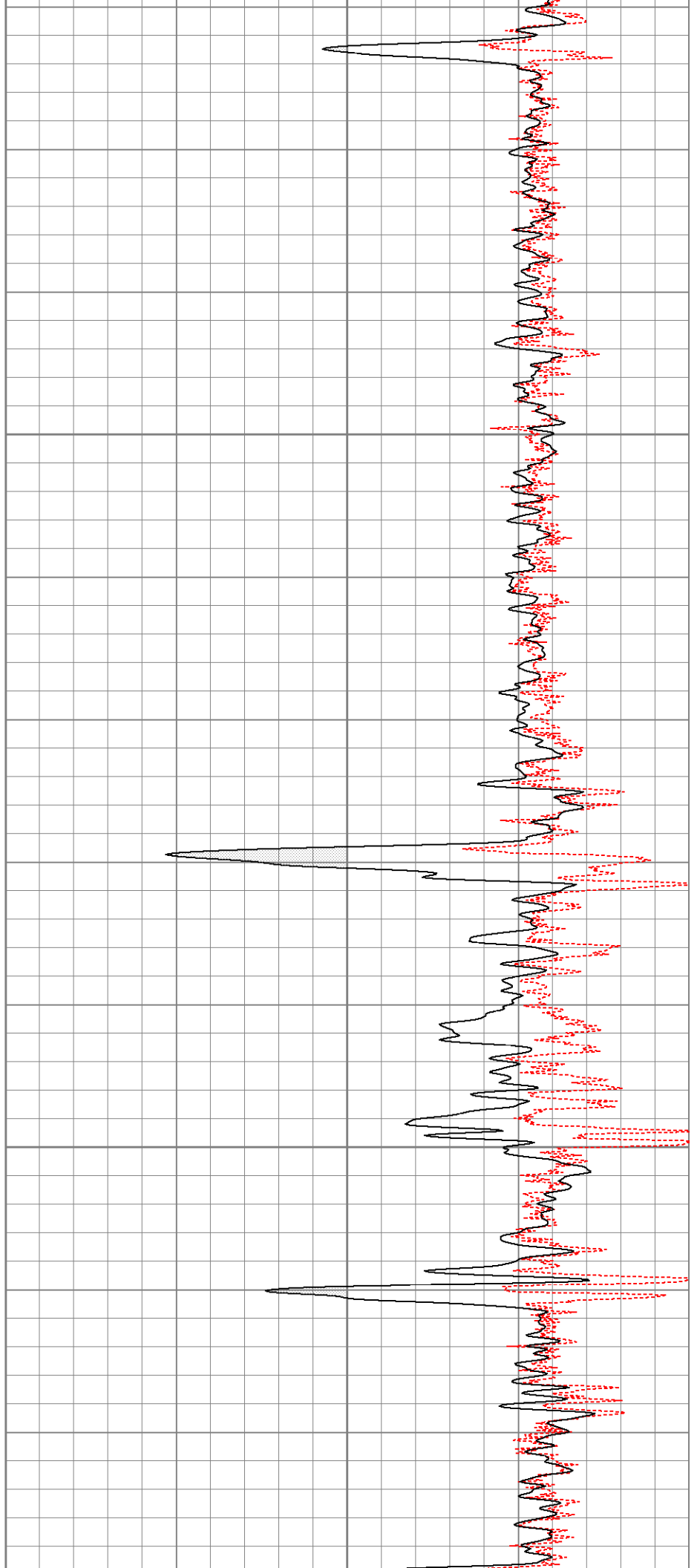
1900

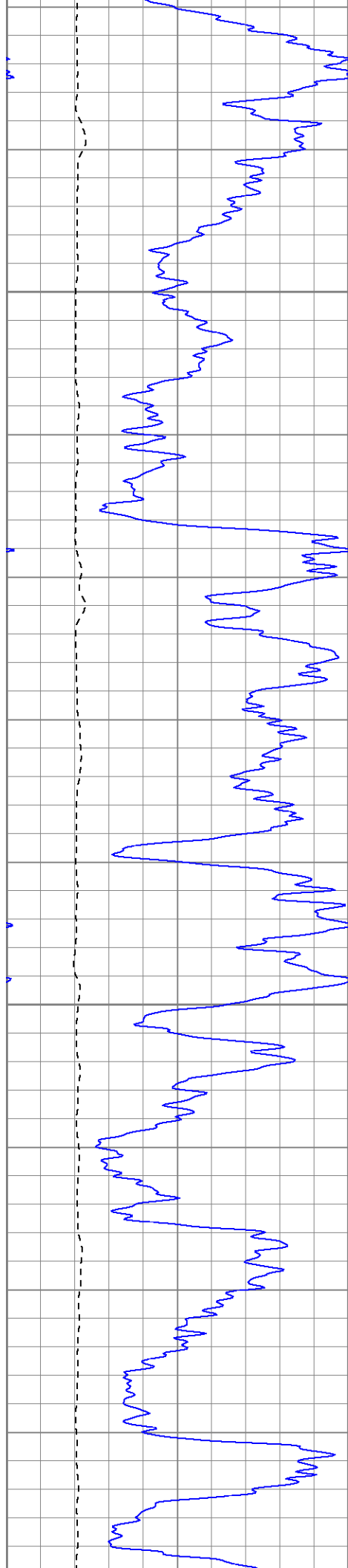




1950

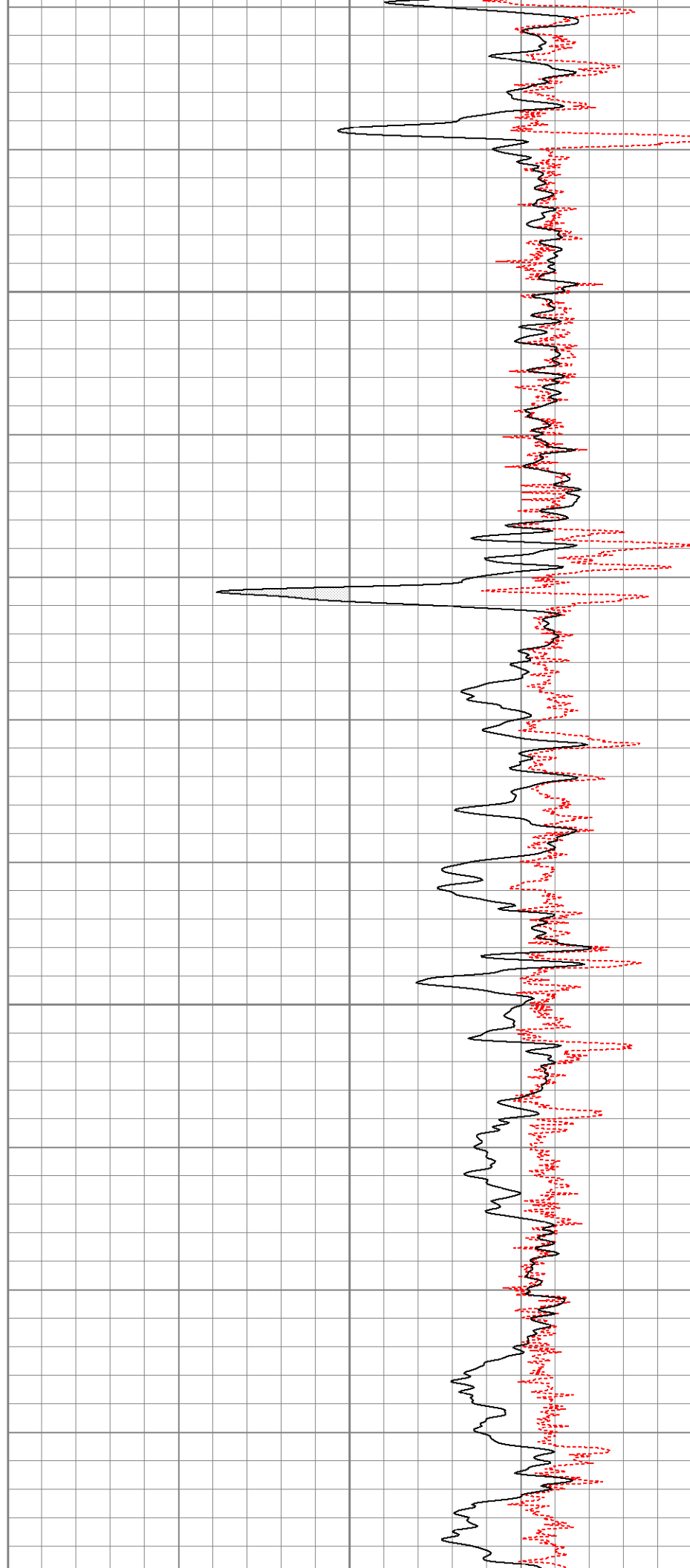
2000

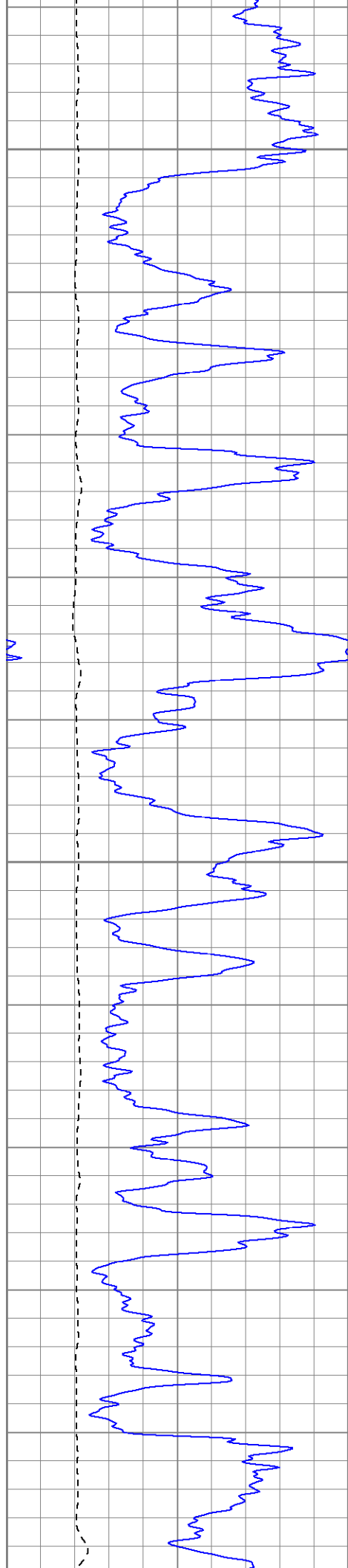




2050

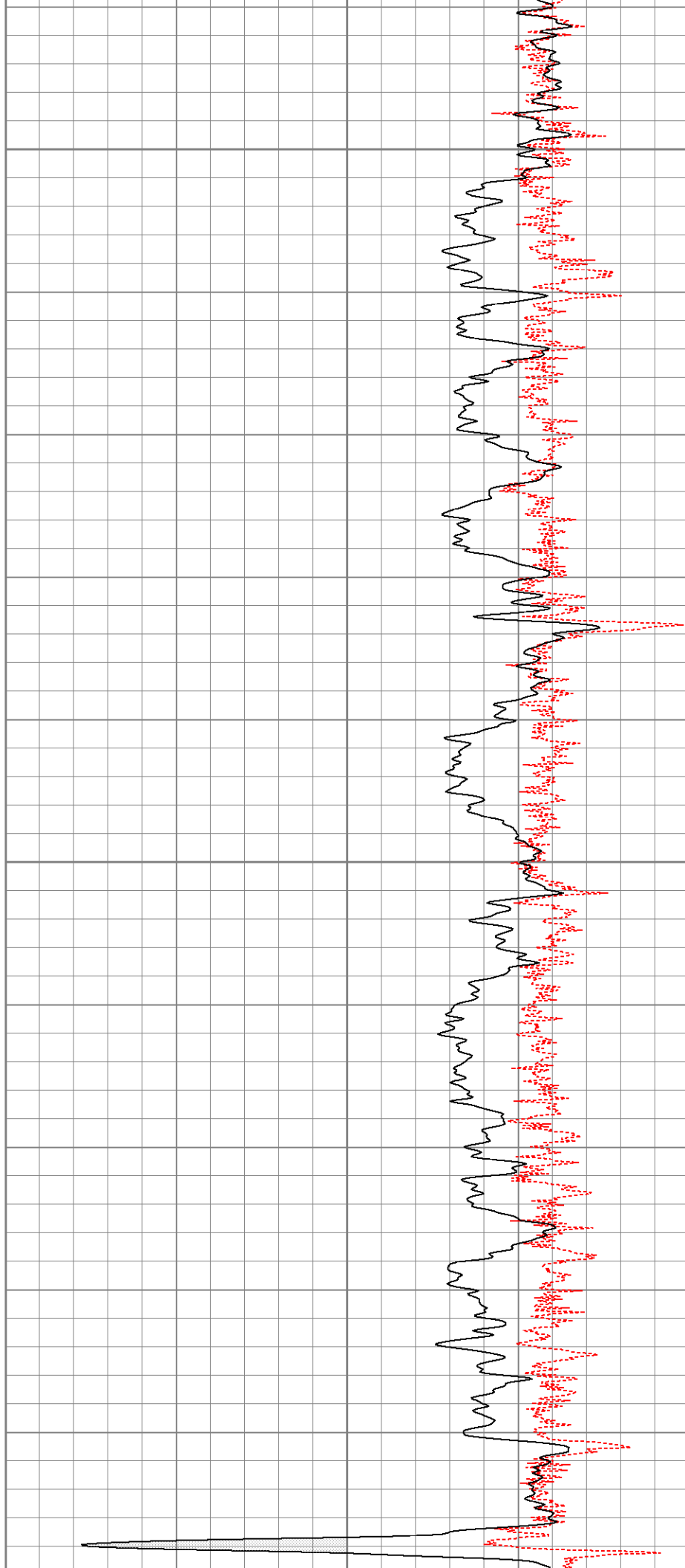
2100



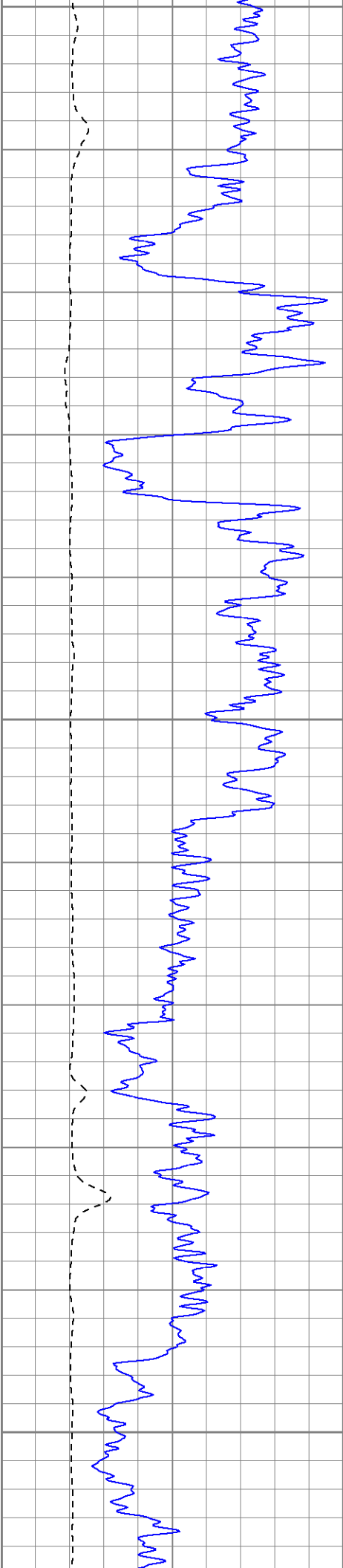


2150

2200

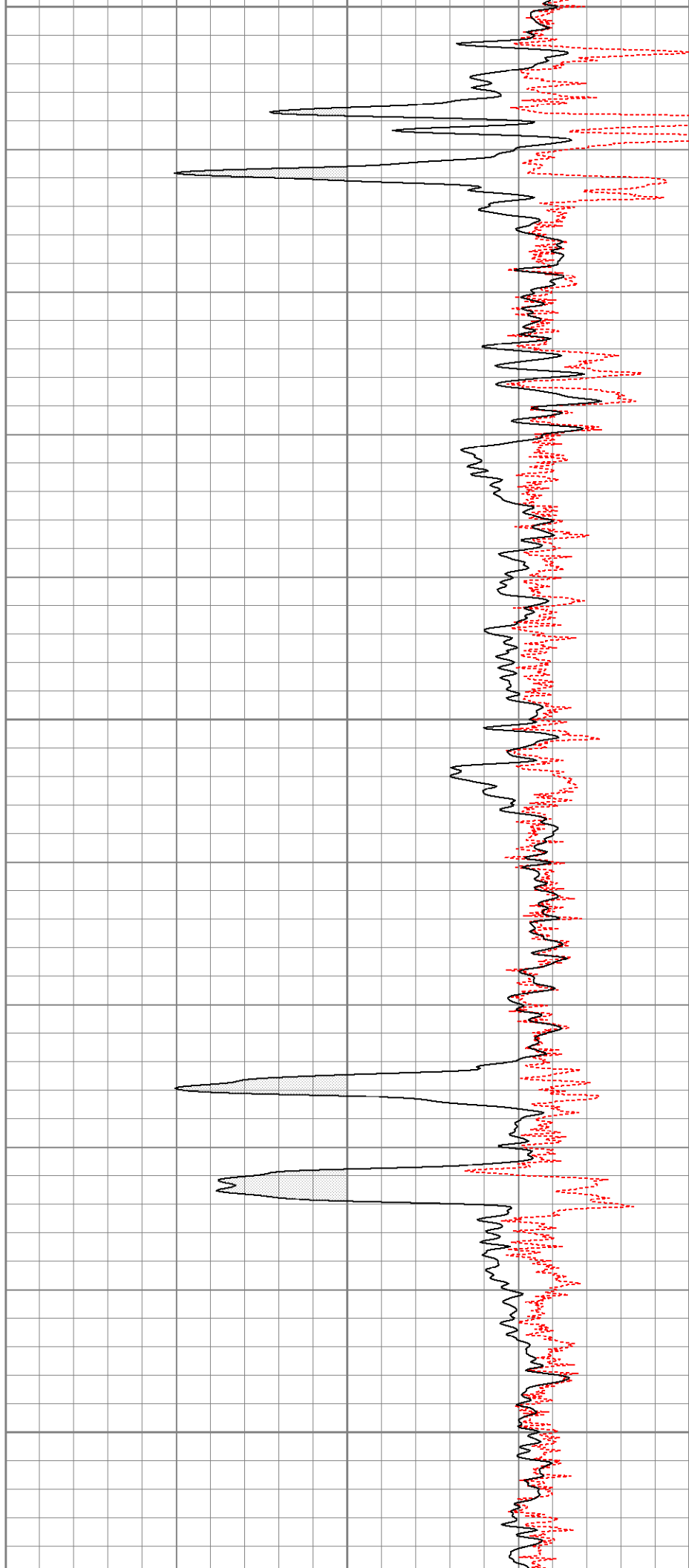


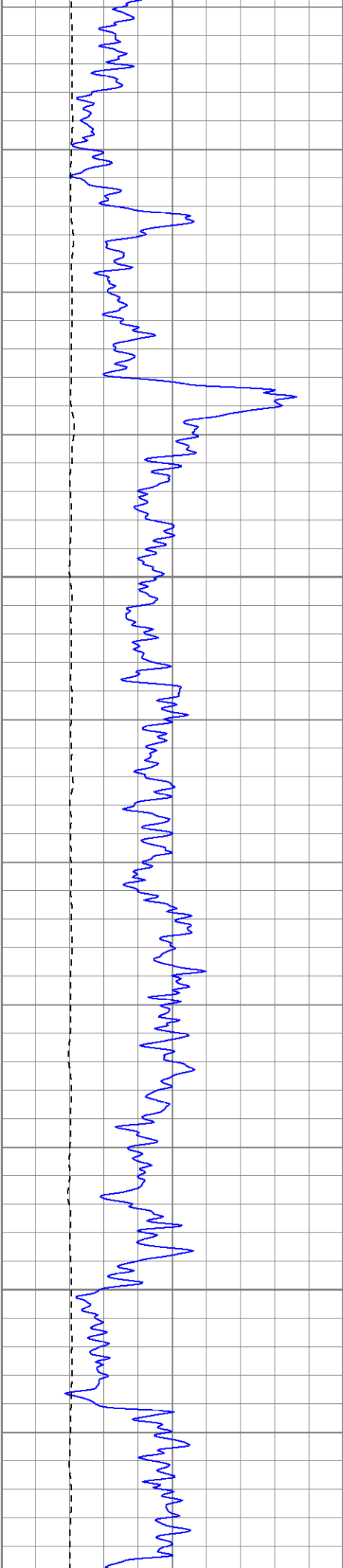
2250



2300

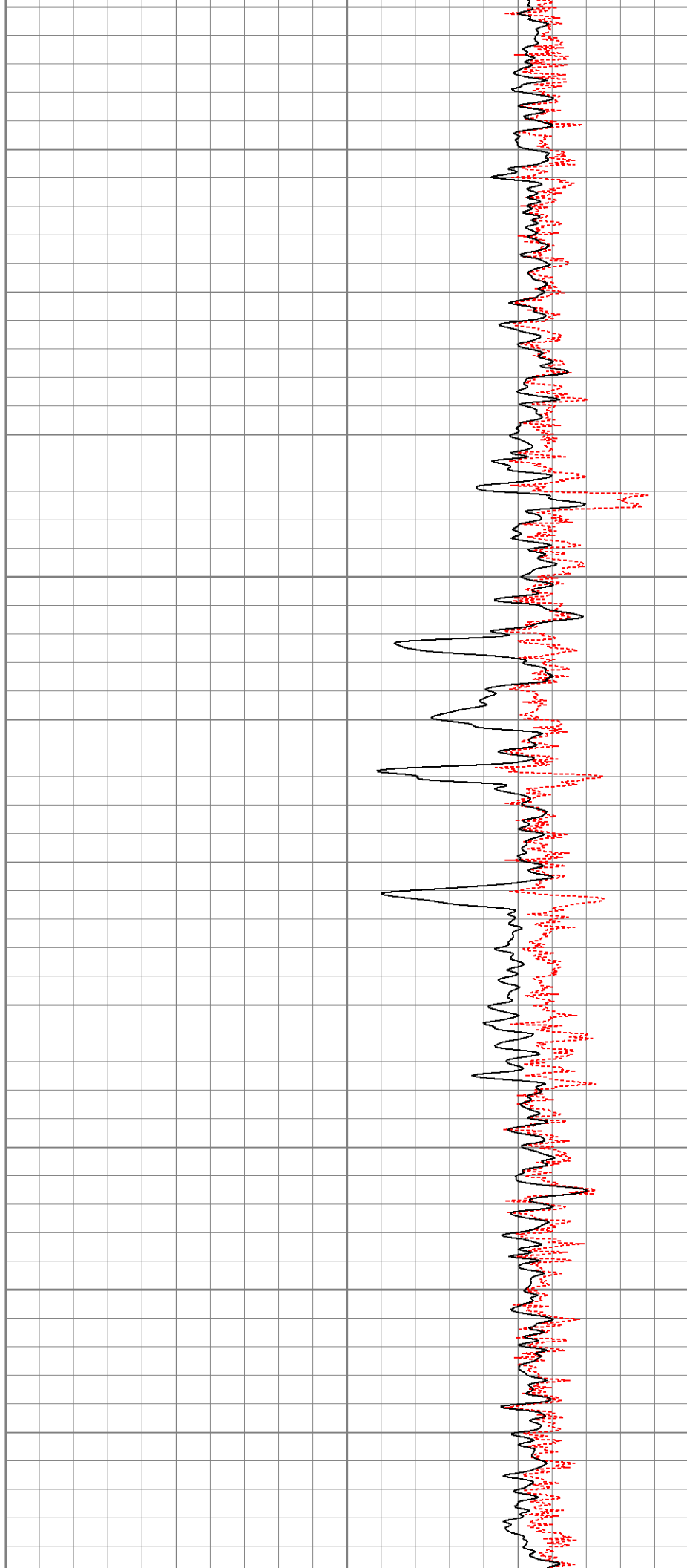
2350



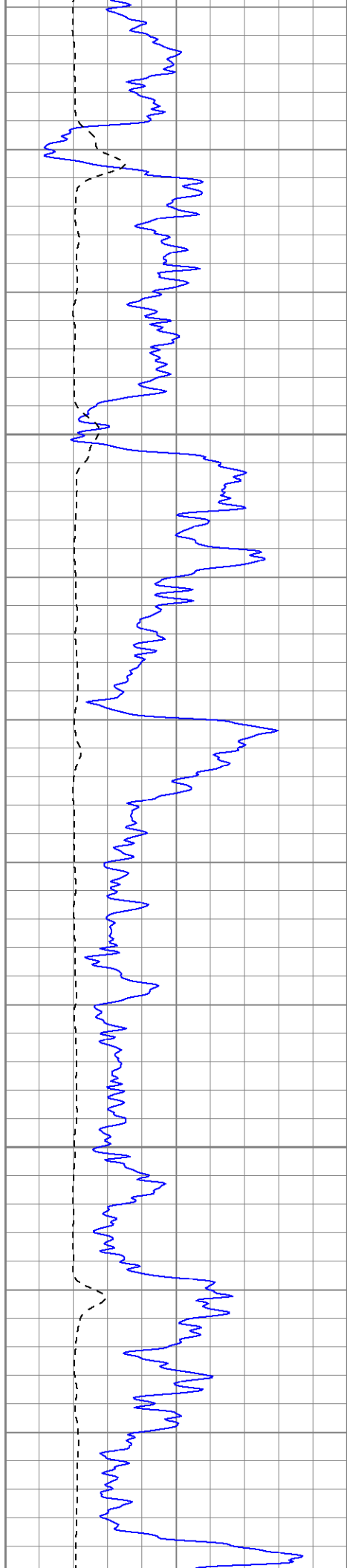


2400

2450

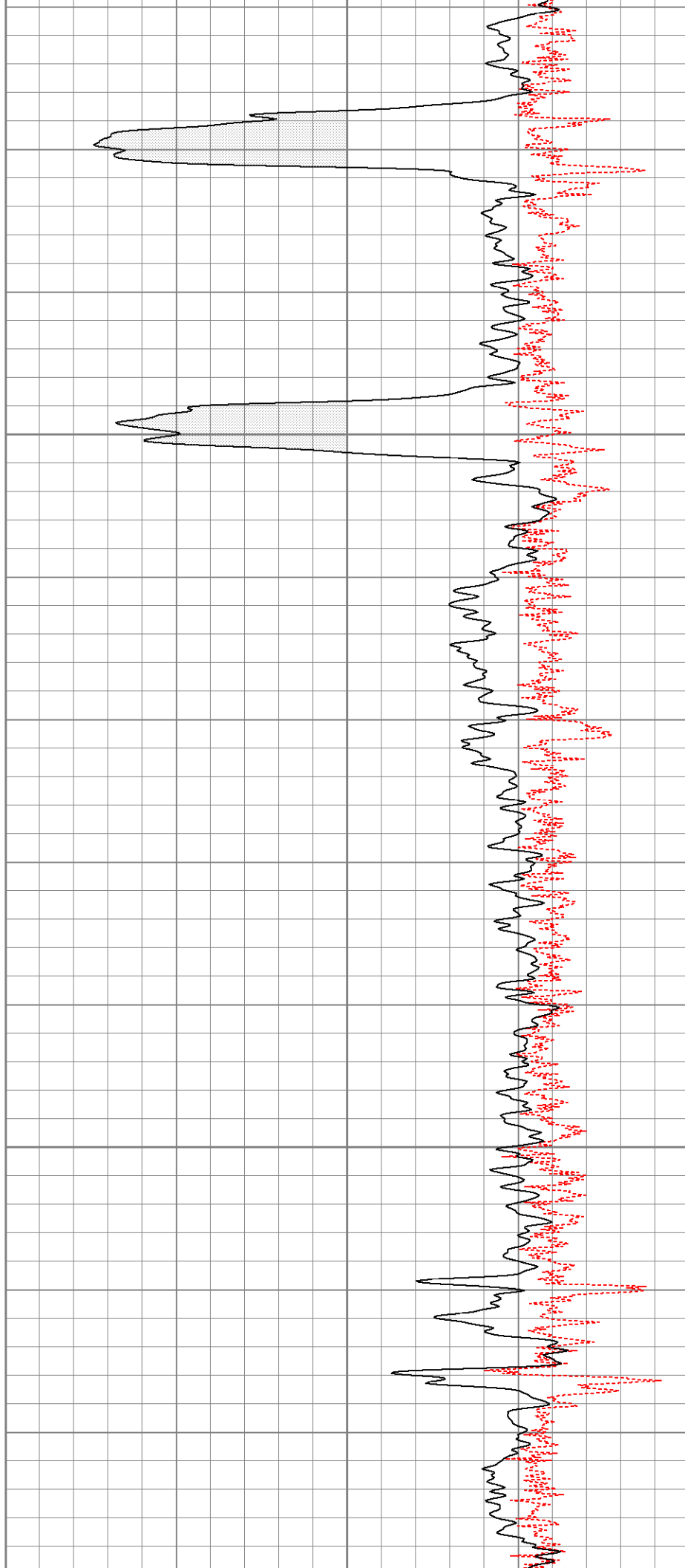






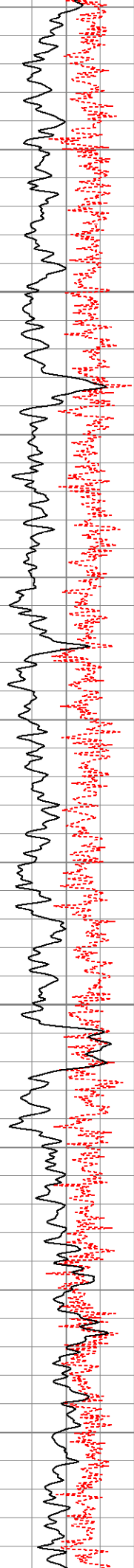
2500

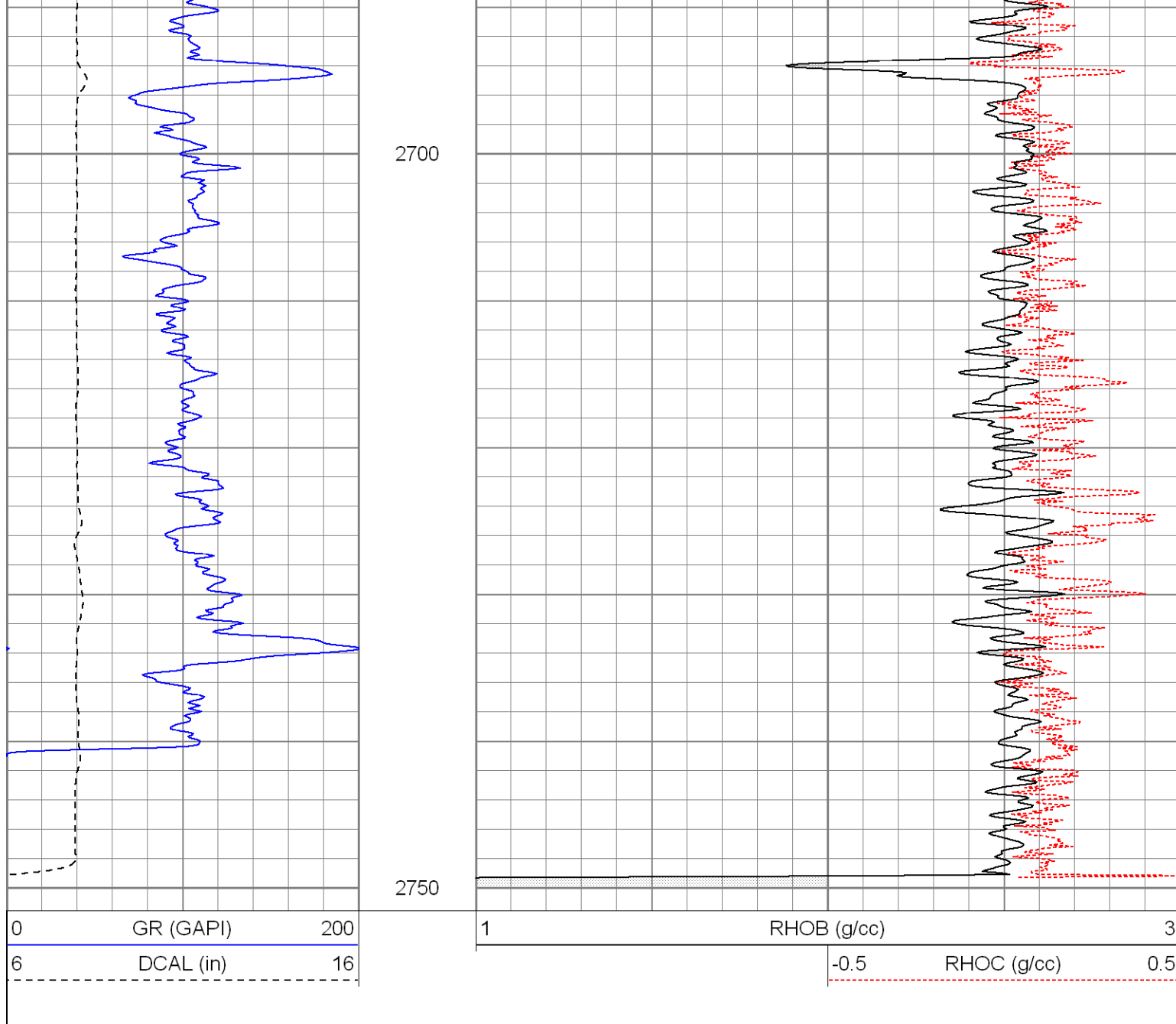
2550



2600

2650





### Calibration Report

Database File: hillranch31-16.db  
 Dataset Pathname: pass4  
 Dataset Creation: Mon Feb 01 22:04:30 2010 by Log Open-Cased 071220

### Compensated Density Calibration Report

Serial-Model: 2501DHT-DHT  
 Source / Verifier: /  
 Master Calibration Performed: Mon Jan 25 10:13:39 2010

#### Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	767.26	303.43	cps
Aluminum	2.590	g/cc	171.91	210.81	cps

Spine Angle = 76.32

Density/Spine Ratio = 0.572

	Size		Reading
Small Ring	8.00	in	6196.63

Small Ring	14.00	in	10494.70
Gamma Ray Calibration Report			
Serial Number:	2001		
Tool Model:	OH		
Performed:	Mon Jan 25 10:14:15 2010		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.2500	GAPI/cps	
Neutron Calibration Report			
Serial Number:	5108		
Tool Model:	PROBE		
Performed:	Mon Jan 25 10:14:18 2010		
Calibrator Value:	1	NAPI	
Calibrator Reading:	1	cps	
Sensitivity:	1	NAPI/cps	