

**COMPENSATED DENSITY
NEUTRON
LOG**

Company	Pioneer Natural Resources	Company	Pioneer Natural Resources
Well	Beta 14-10 Tr	Well	Beta 14-10 Tr
Field	Purgatoire River	Field	Purgatoire River
County	Las Animas	County	Las Animas
State	Colorado	State	Colorado
Location:	API #: 05 071 09846 00	Other Services	SIL
Permanent Datum	1061' FSL & 1286' FWL	Elevation	
Log Measured From	SEC 10 TWP 33S RGE 67W	K.B. 7208'	
Drilling Measured From	Ground Level	D.F. -----	
	Kelly Bushing 4' AGL	G.L. 7204'	
	Kelly Bushing		
Date	7-27-11		
Run Number	One		
Depth Driller	1615'		
Depth Logger	1610'		
Bottom Logged Interval	1594'		
Top Log Interval	Surface Casing		
Casing Driller	8 5/8" @ 470'		
Casing Logger	468'		
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	11:00 P.M.		
Time Logger on Bottom	2:15 A.M.		
Maximum Recorded Temperature	90 DEG F		
Equipment Number	T590		
Location	Trinidad		
Recorded By	C. Sisneros		
Witnessed By	Mr. Billy Vigil		

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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

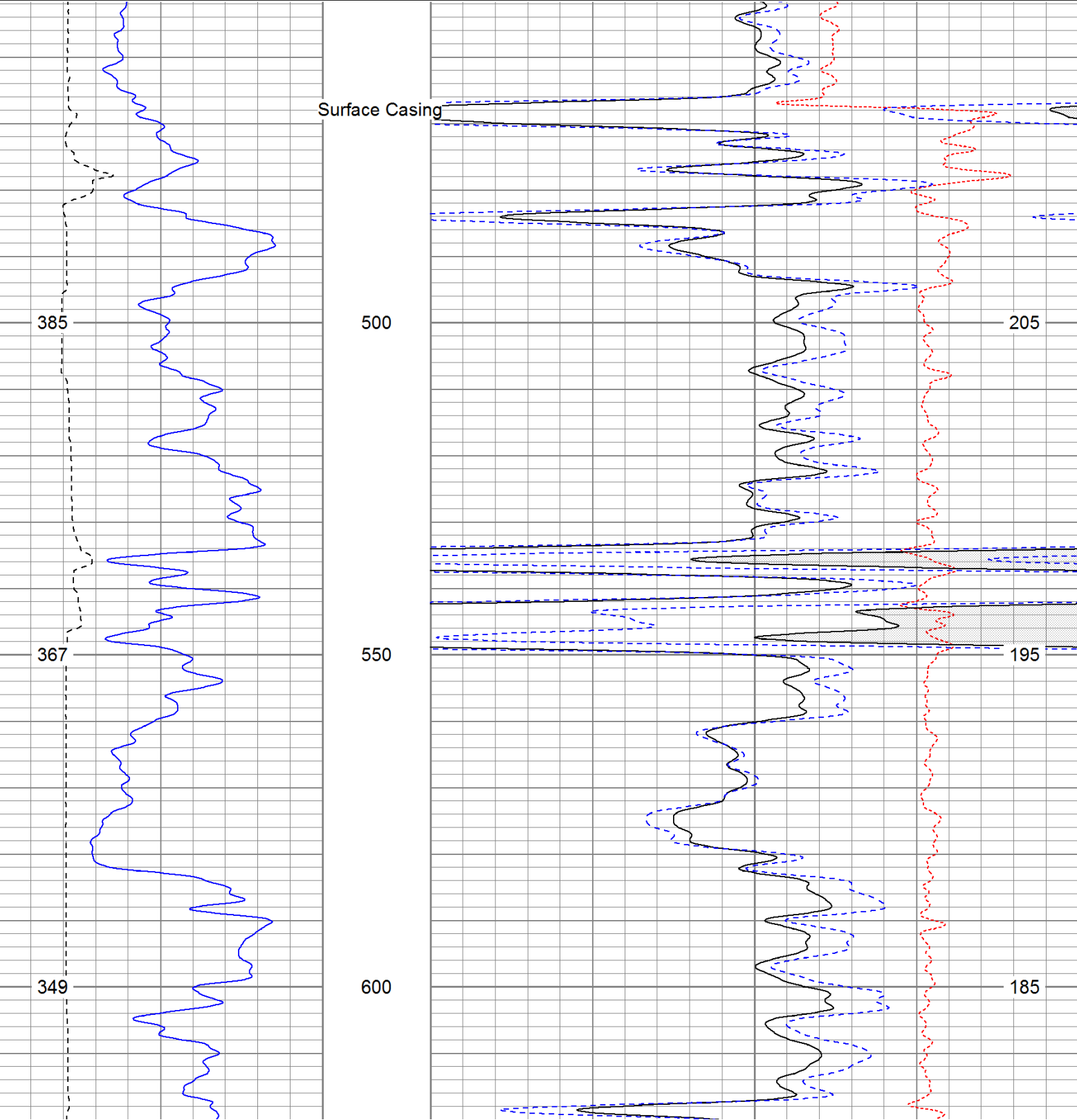
Density Porosity Presented On Sandstone Matrix.
ABHV Calculated For 5.5" Casing.

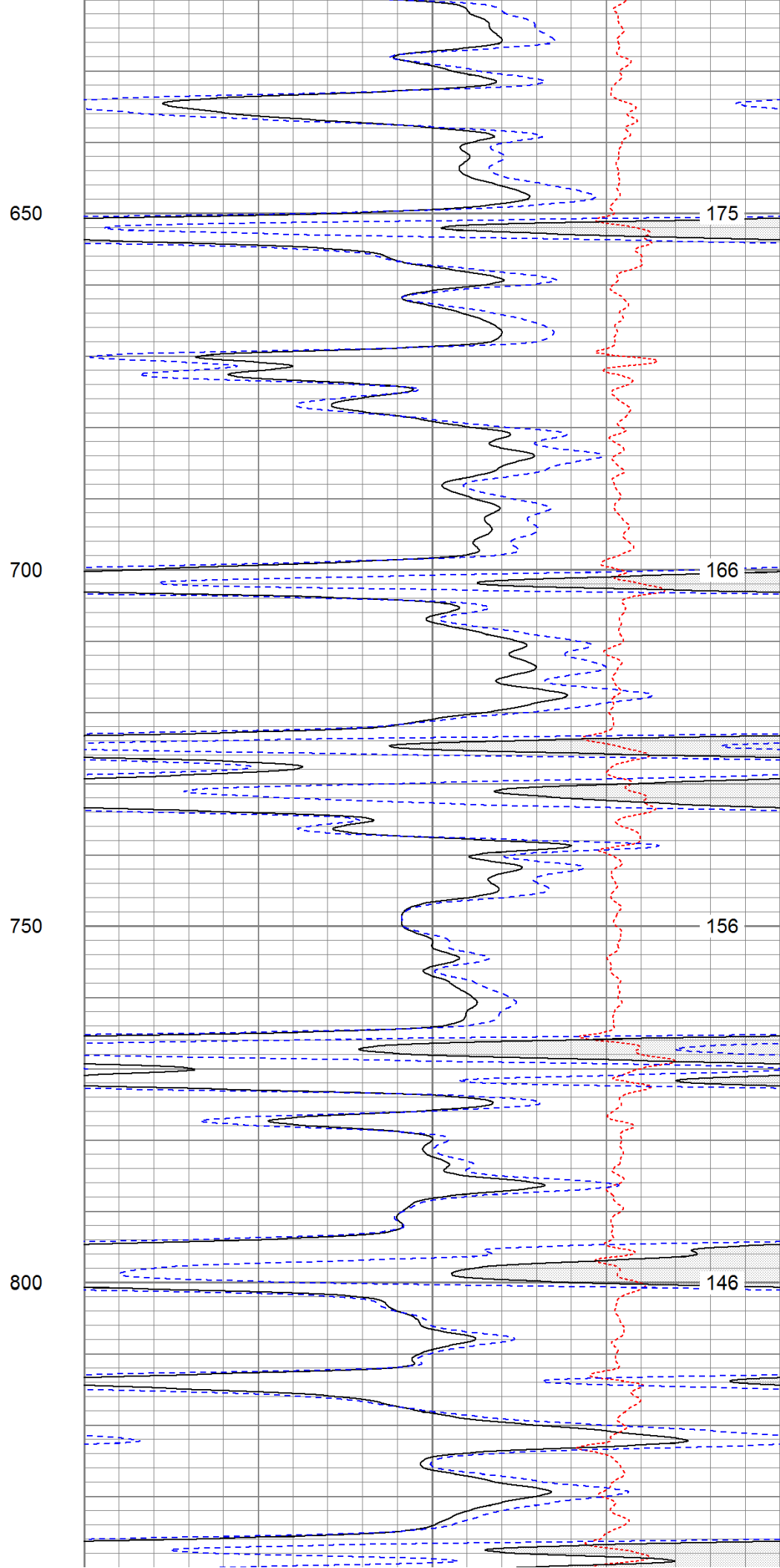
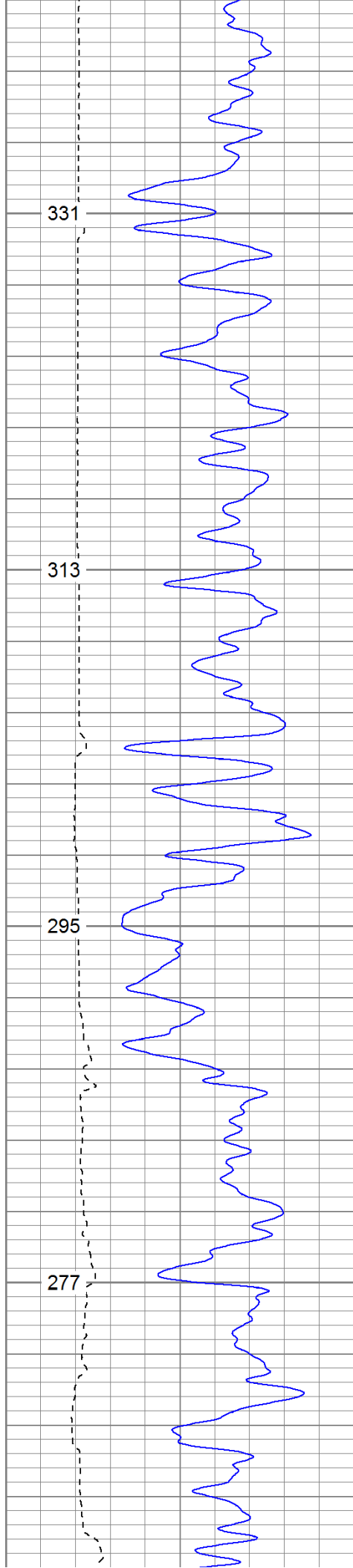
Directions:
Wet Canyon, first left after Robinson Sawmill.

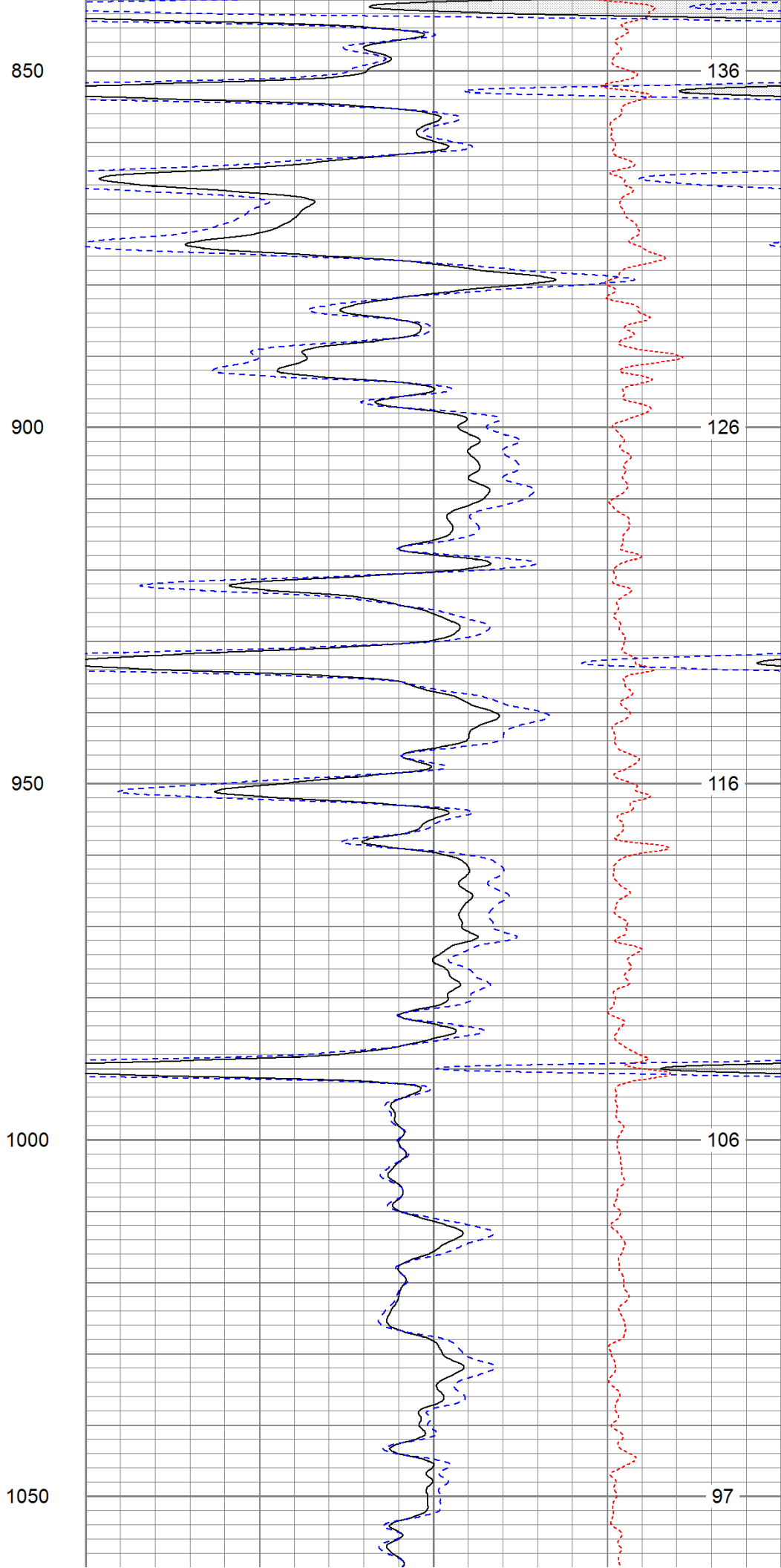
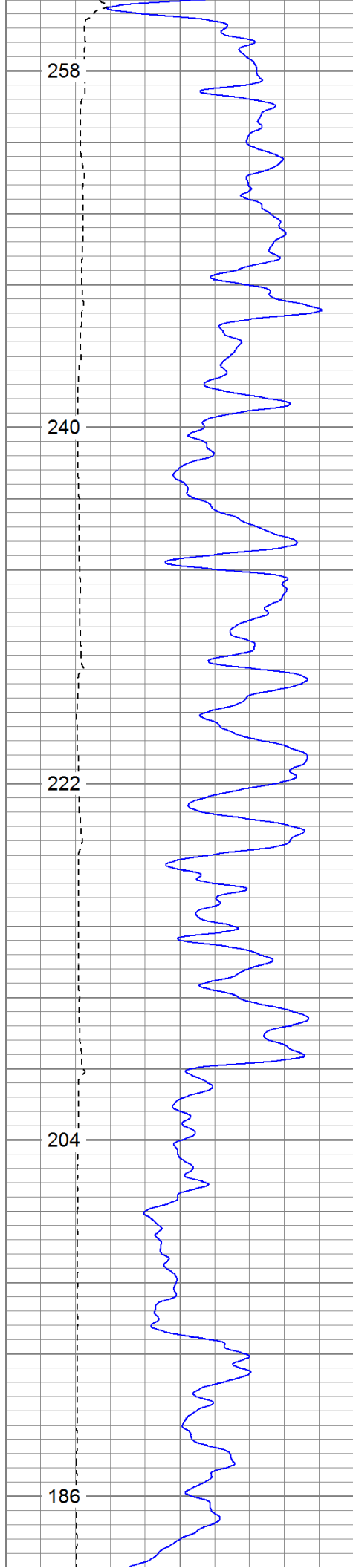
Database File: betatr.db
Dataset Pathname: pass2.1
Presentation Format: cdl
Dataset Creation: Wed Jul 27 03:18:16 2011 by Calc Open-Cased 110302
Charted by: Depth in Feet scaled 1:240

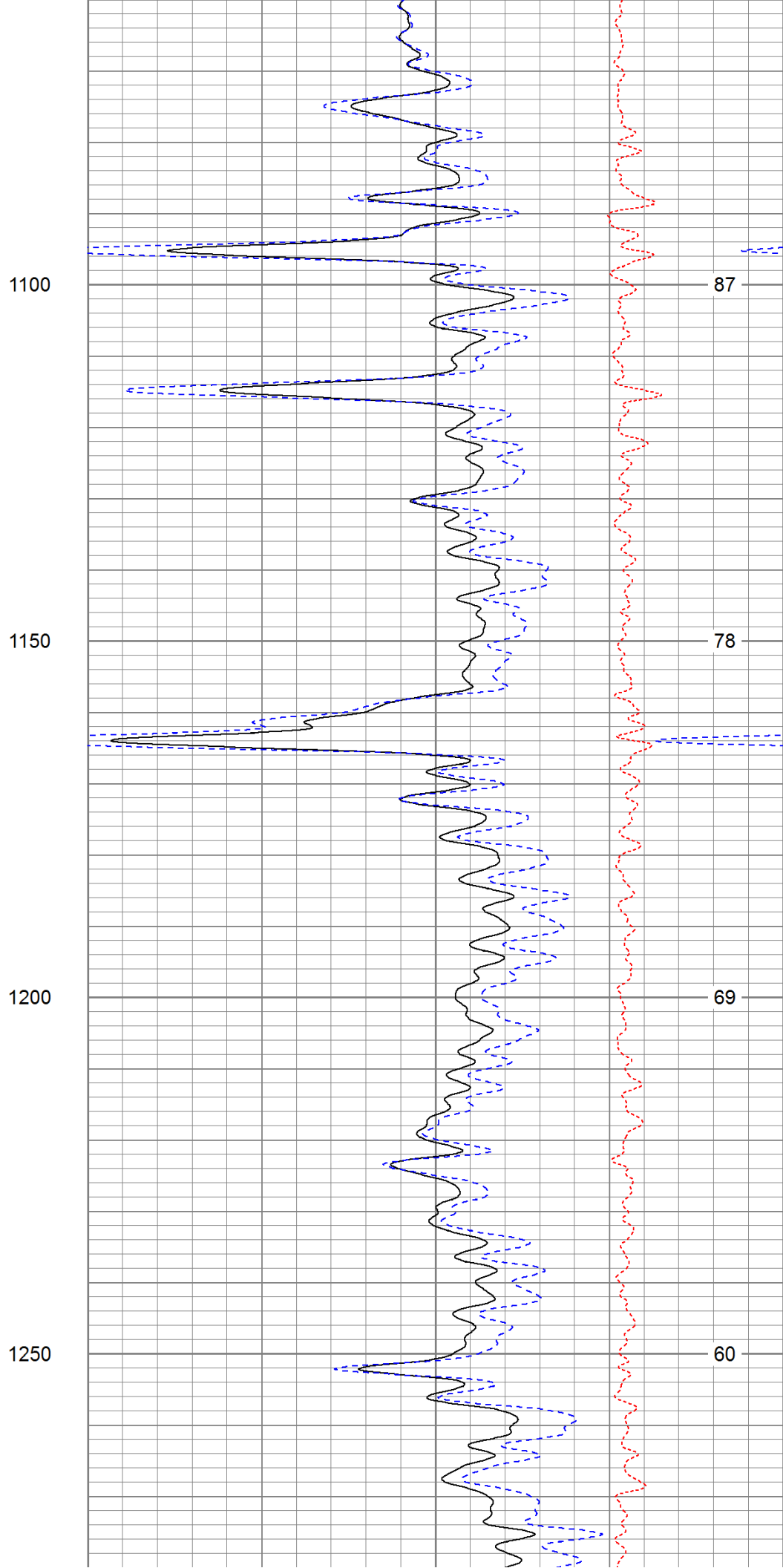
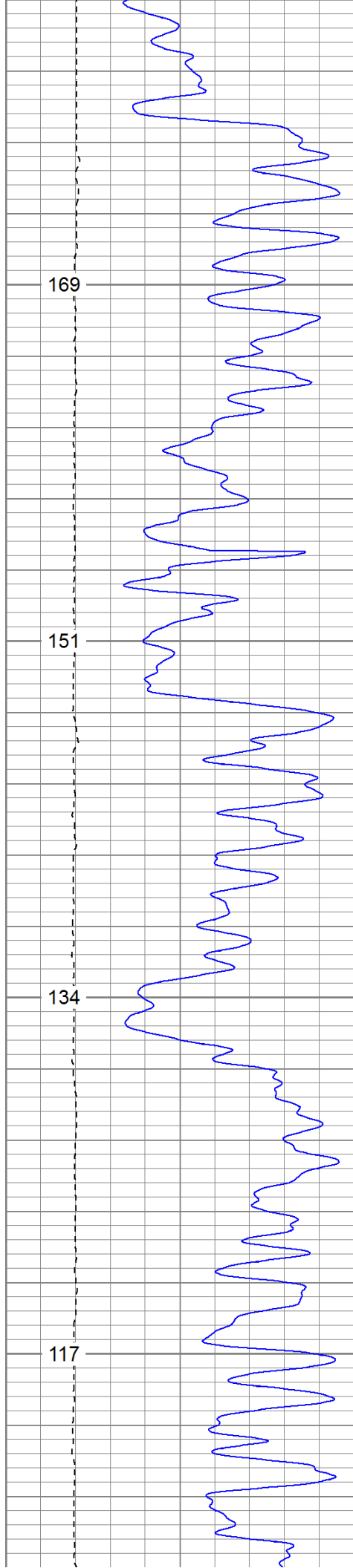
0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		

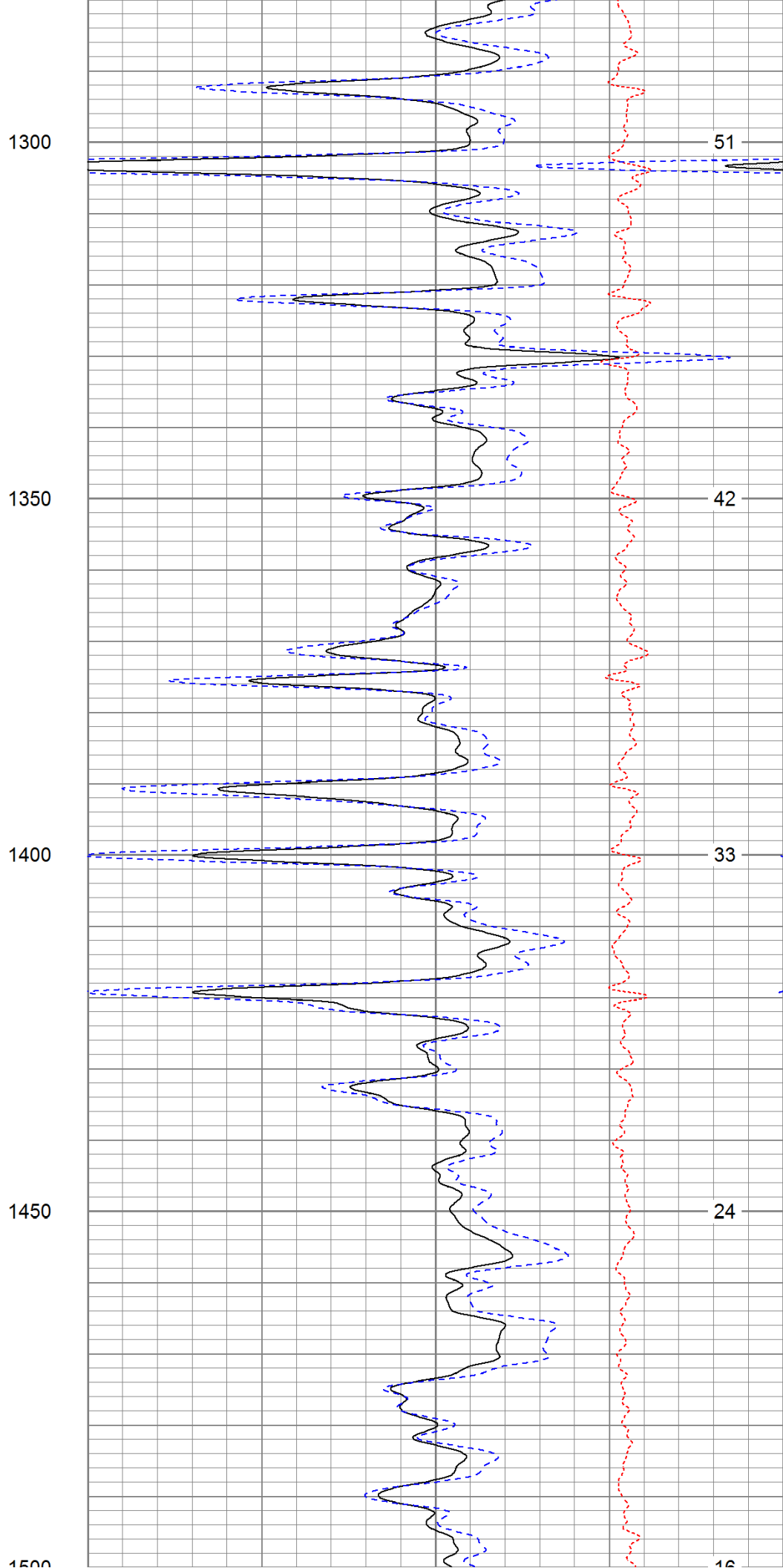
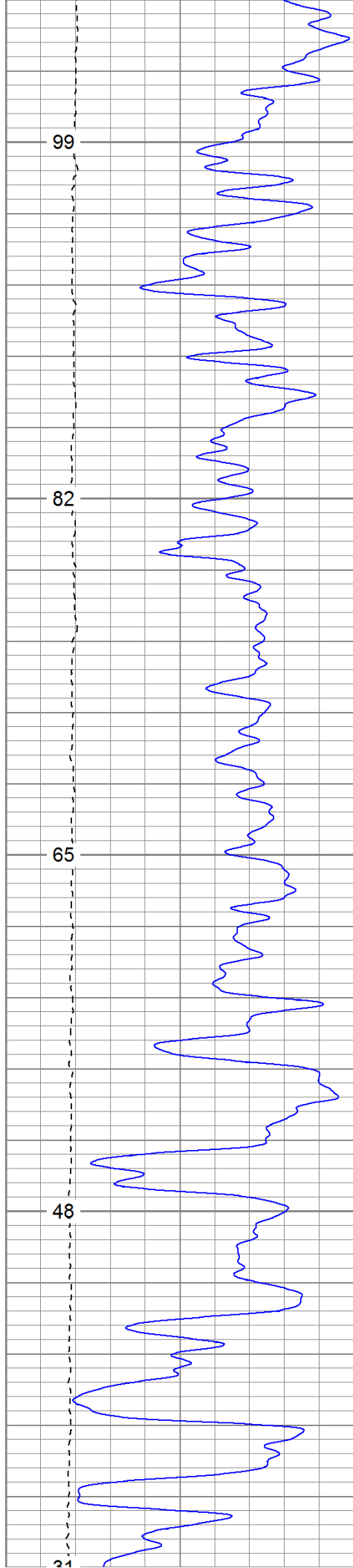
2	RHOB (g/cc)		3
1	RHOB (g/cc)		2
30	DPOR (pu)		-10
-0.5		RHOC (g/cc)	0.5
7000		LTEN (lb)	0
			ABHV (ft3)

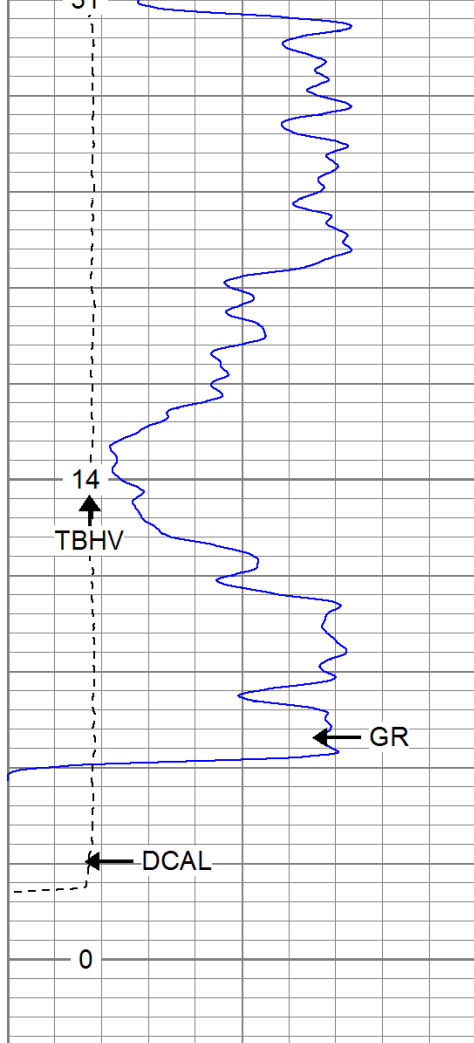




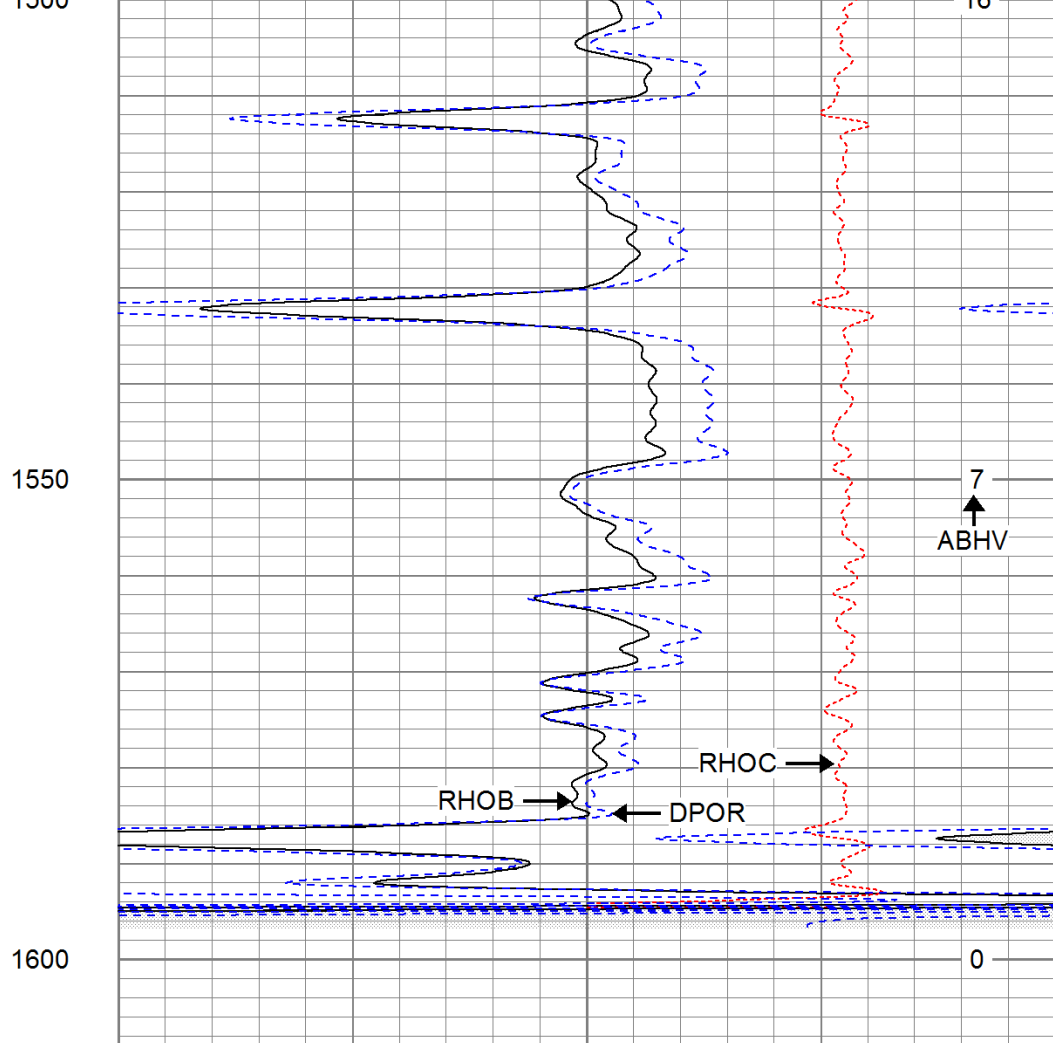








0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		



2	RHOB (g/cc)	3
1	RHOB (g/cc)	2
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
7000	LTEN (lb)	0
ABHV (ft3)		

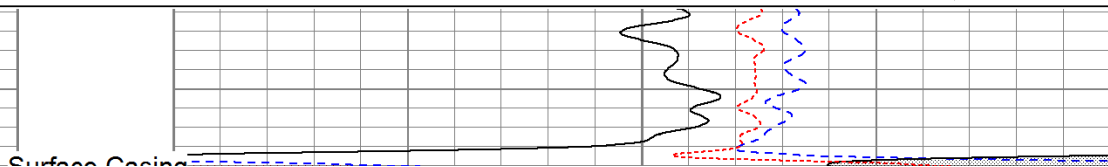
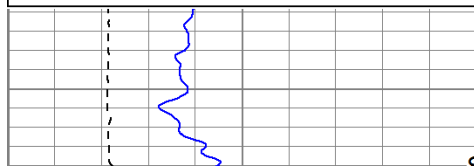


Main Pass

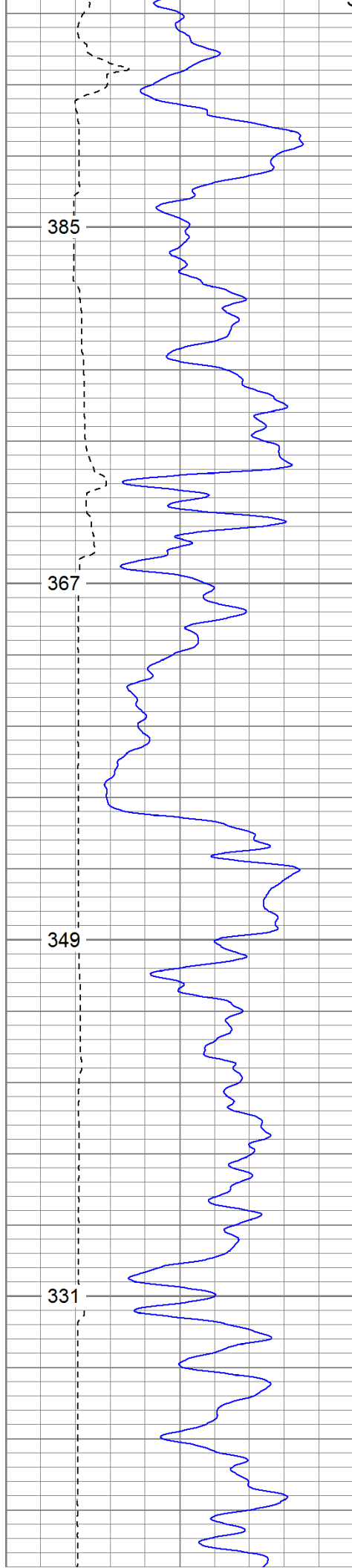
Database File: betatr.db
 Dataset Pathname: pass2.1
 Presentation Format: cdnl
 Dataset Creation: Wed Jul 27 03:18:16 2011 by Calc Open-Cased 110302
 Charted by: Depth in Feet scaled 1:240

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
ABHV (ft3)		



Sunace Casing

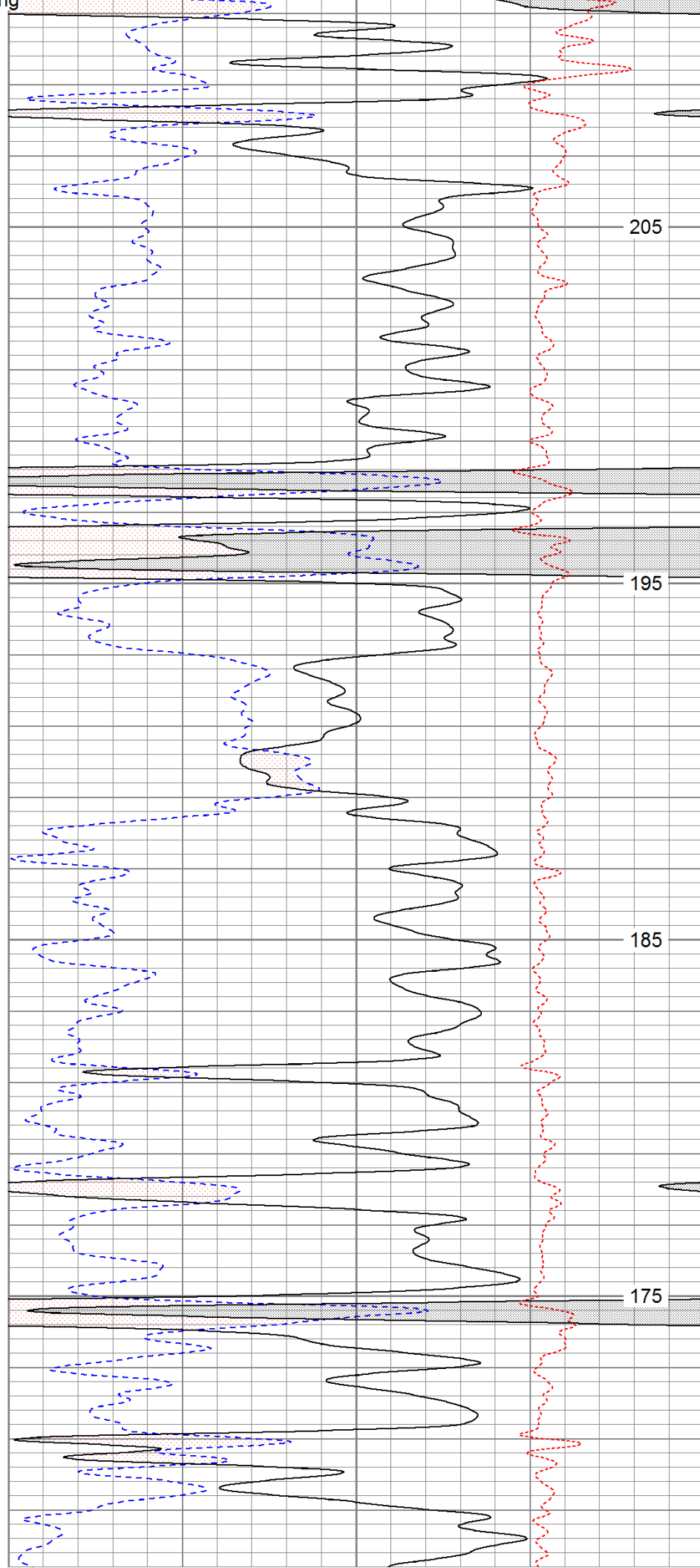


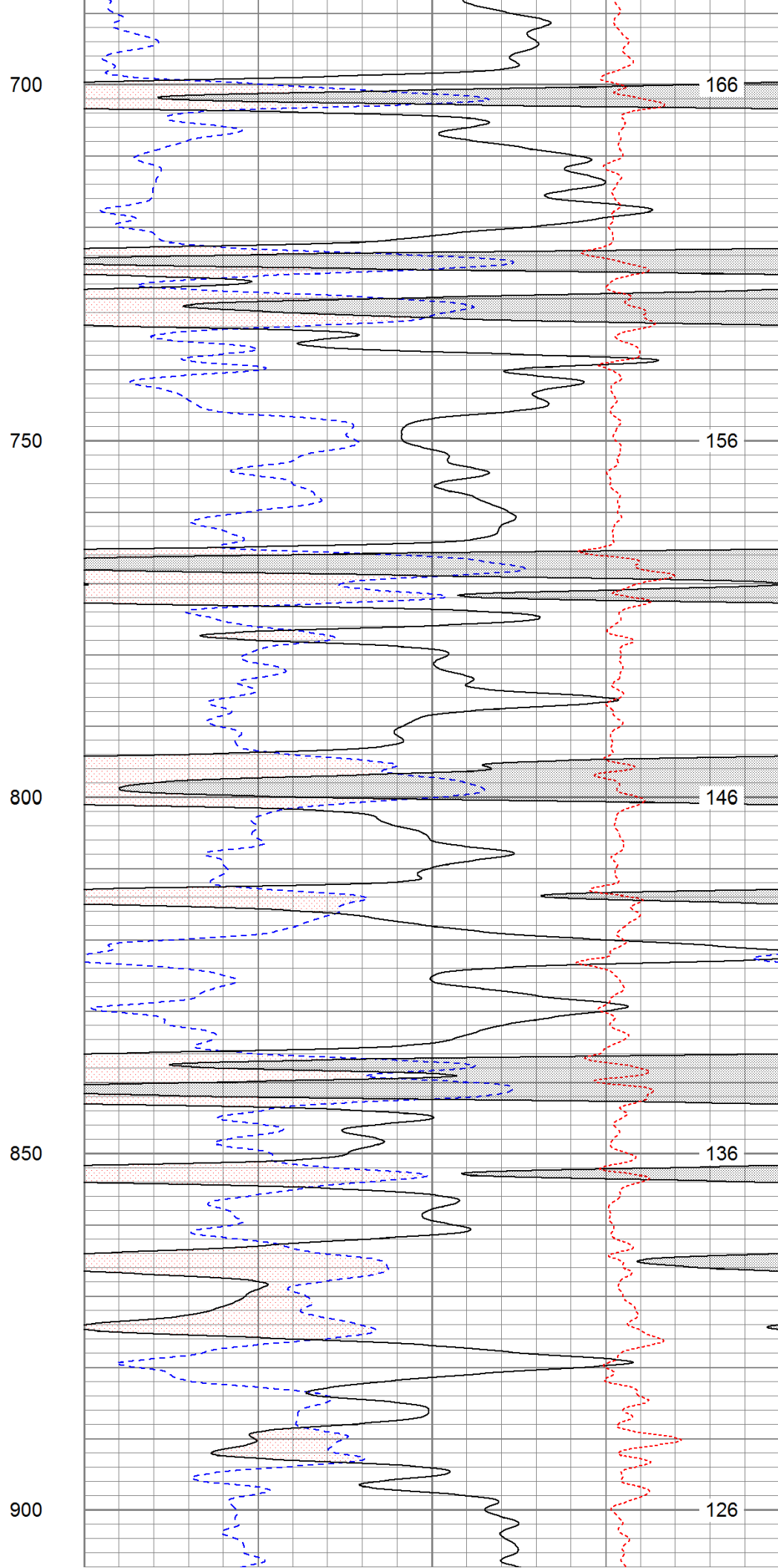
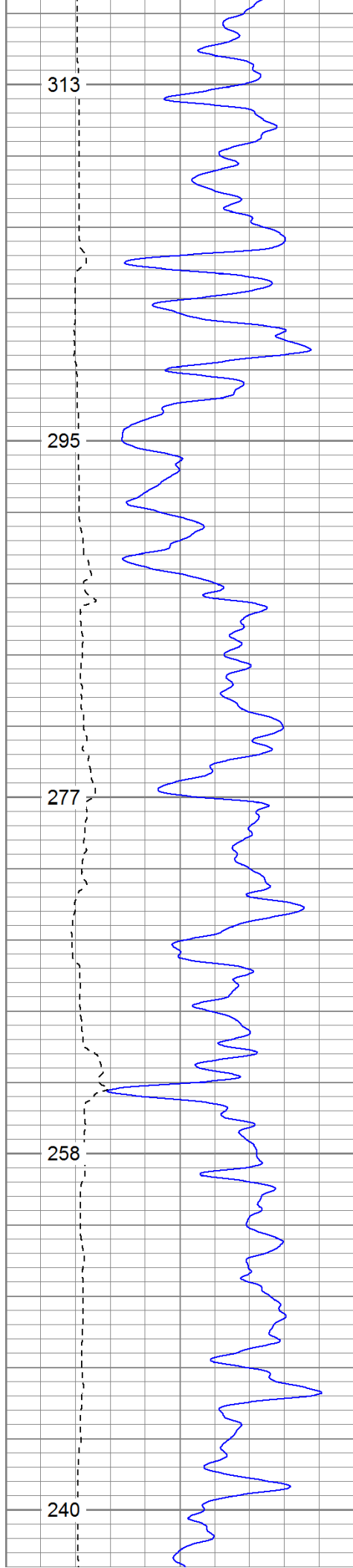
500

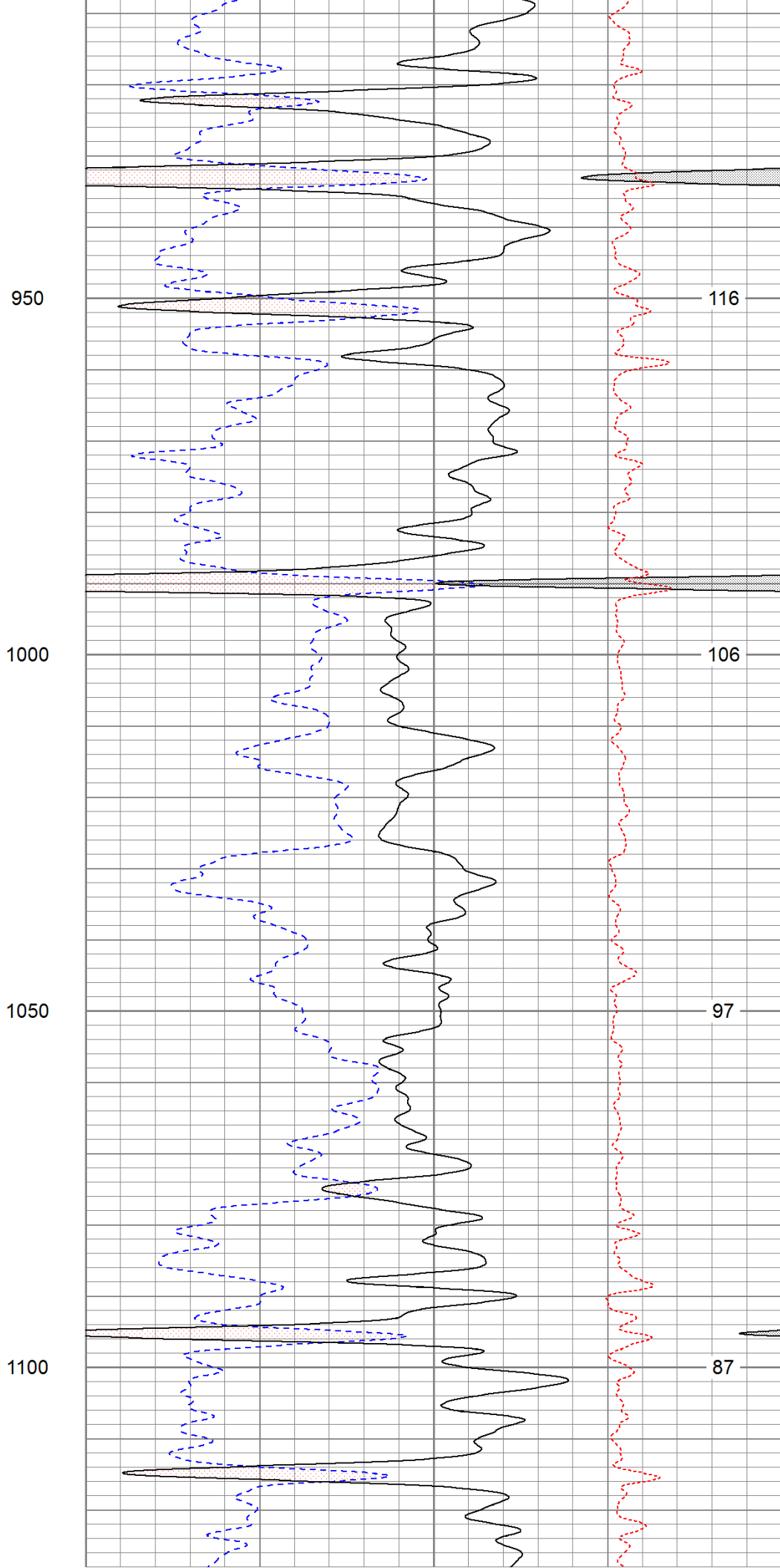
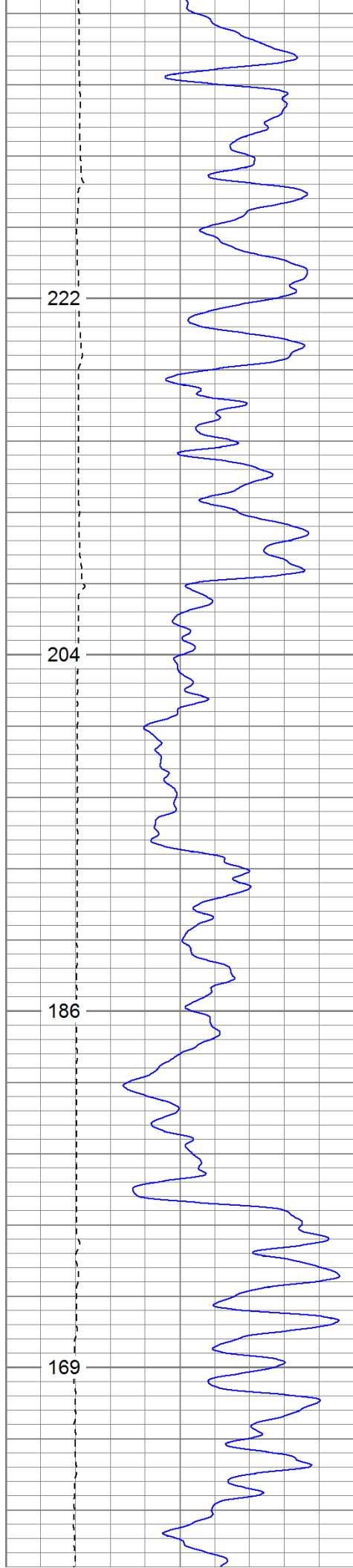
550

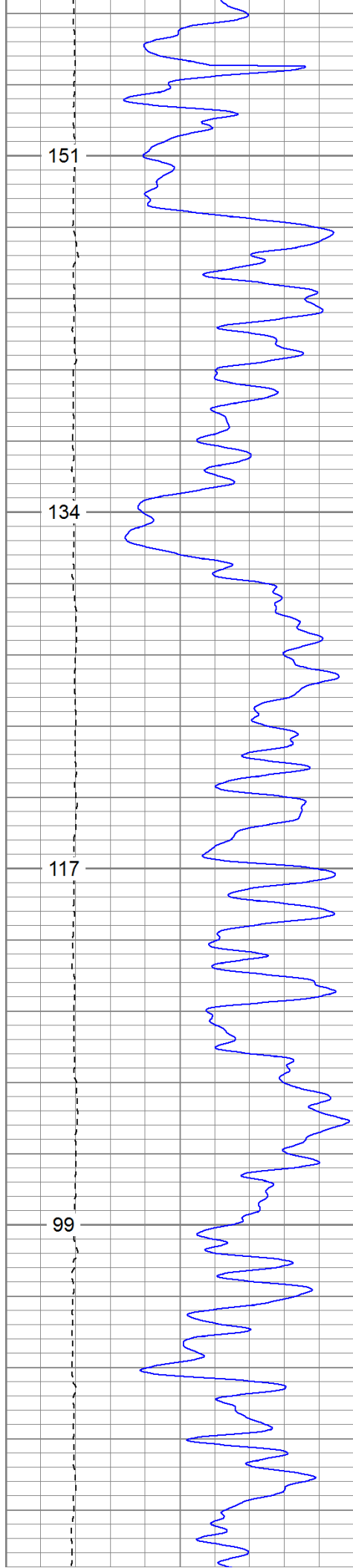
600

650









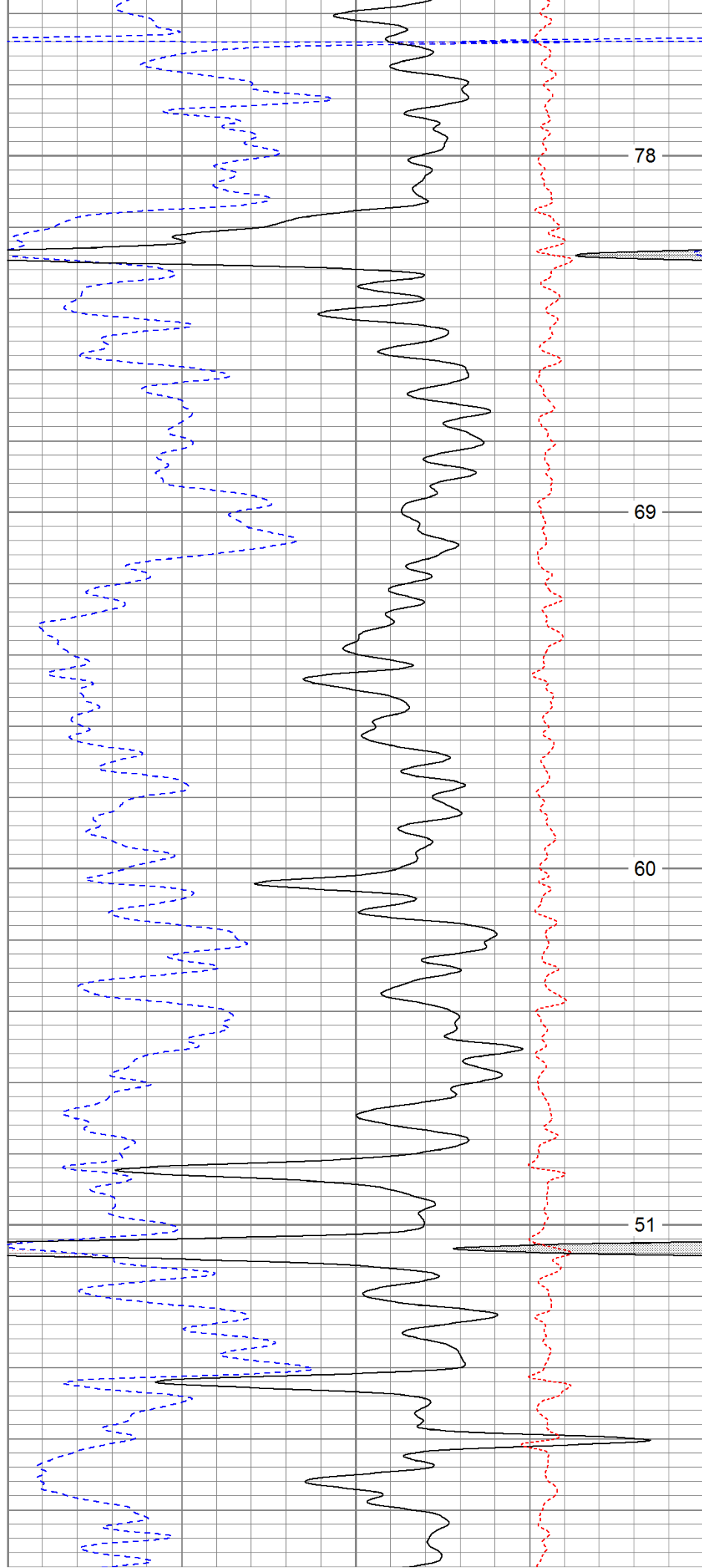
Fluid Level

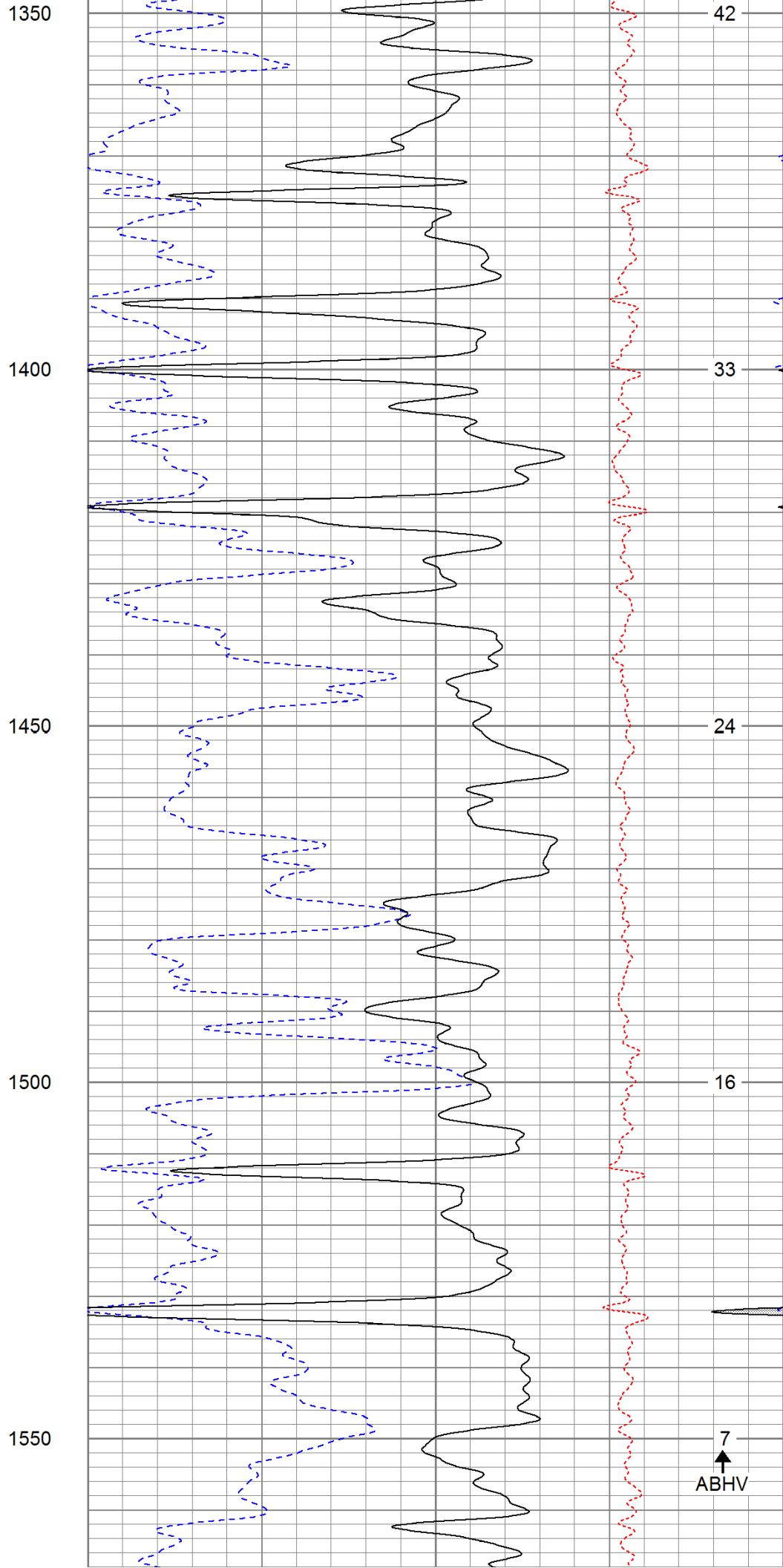
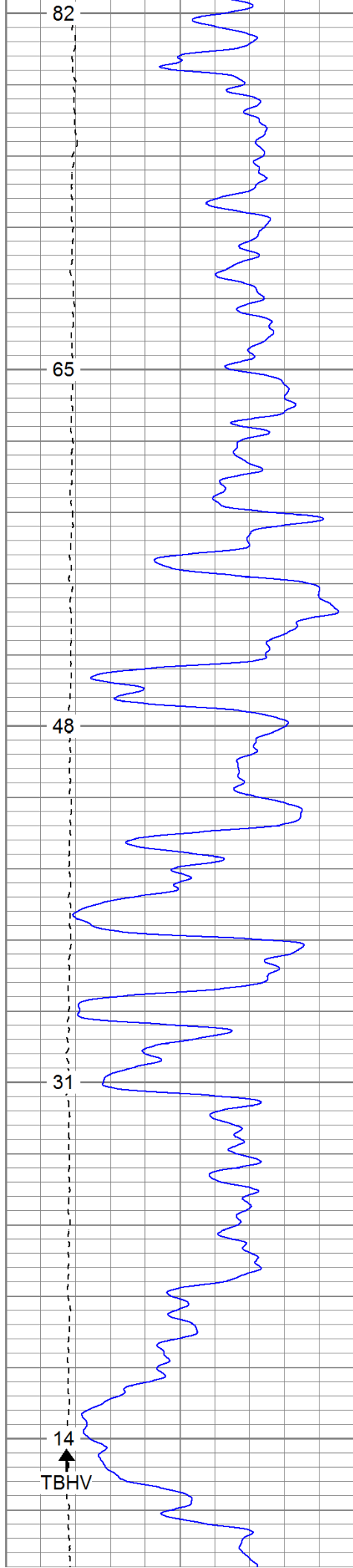
1150

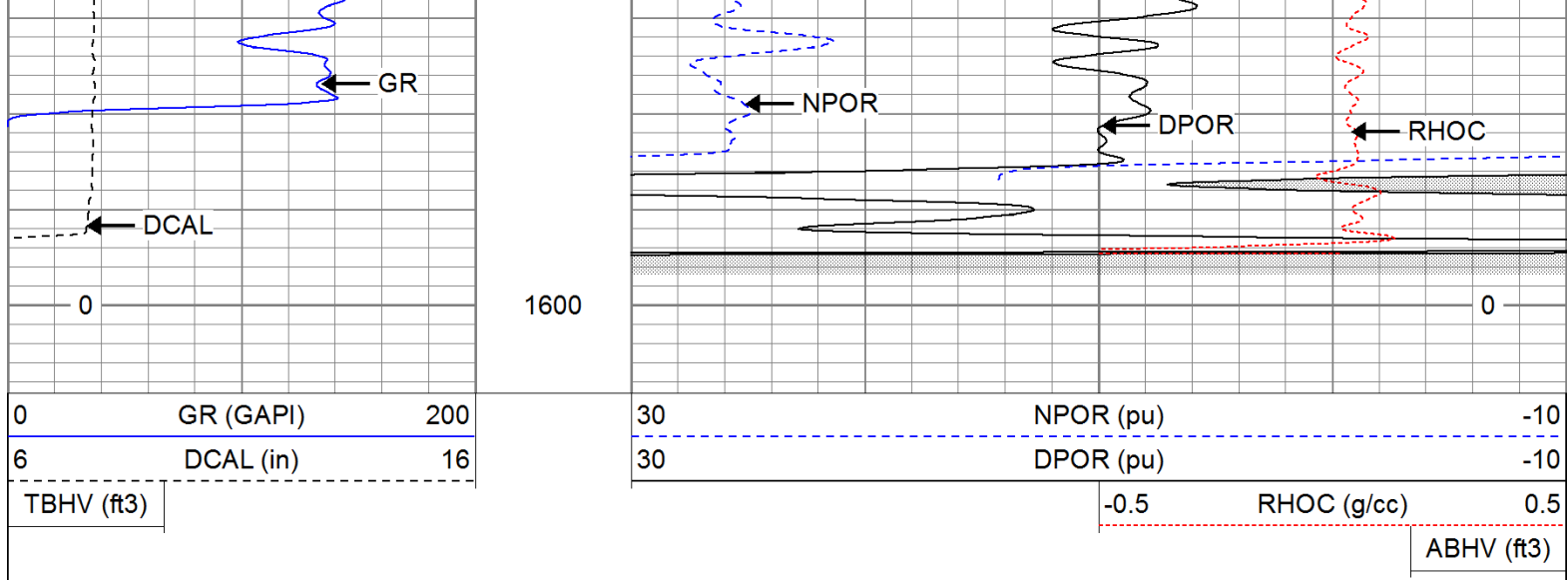
1200

1250

1300

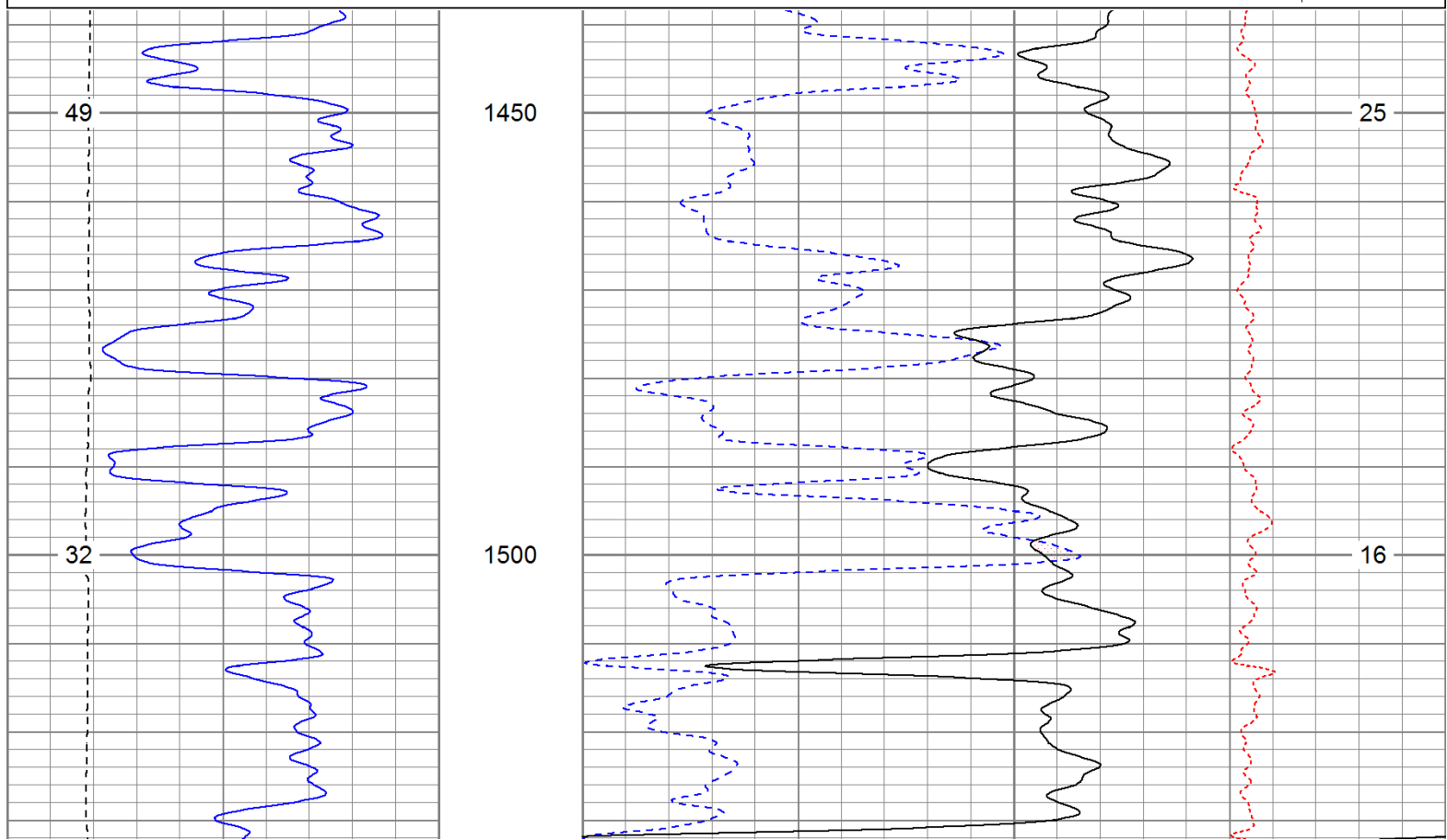
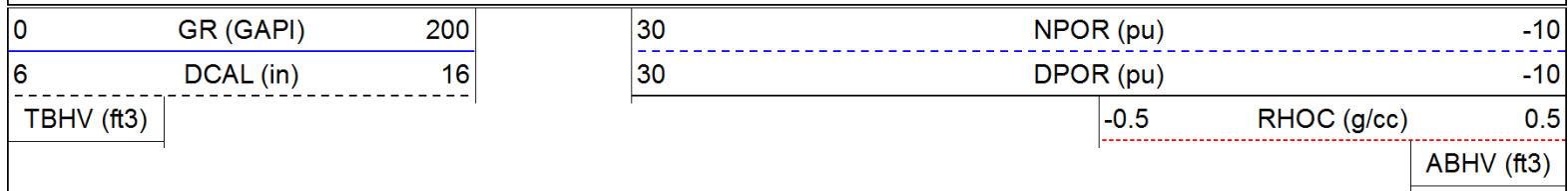


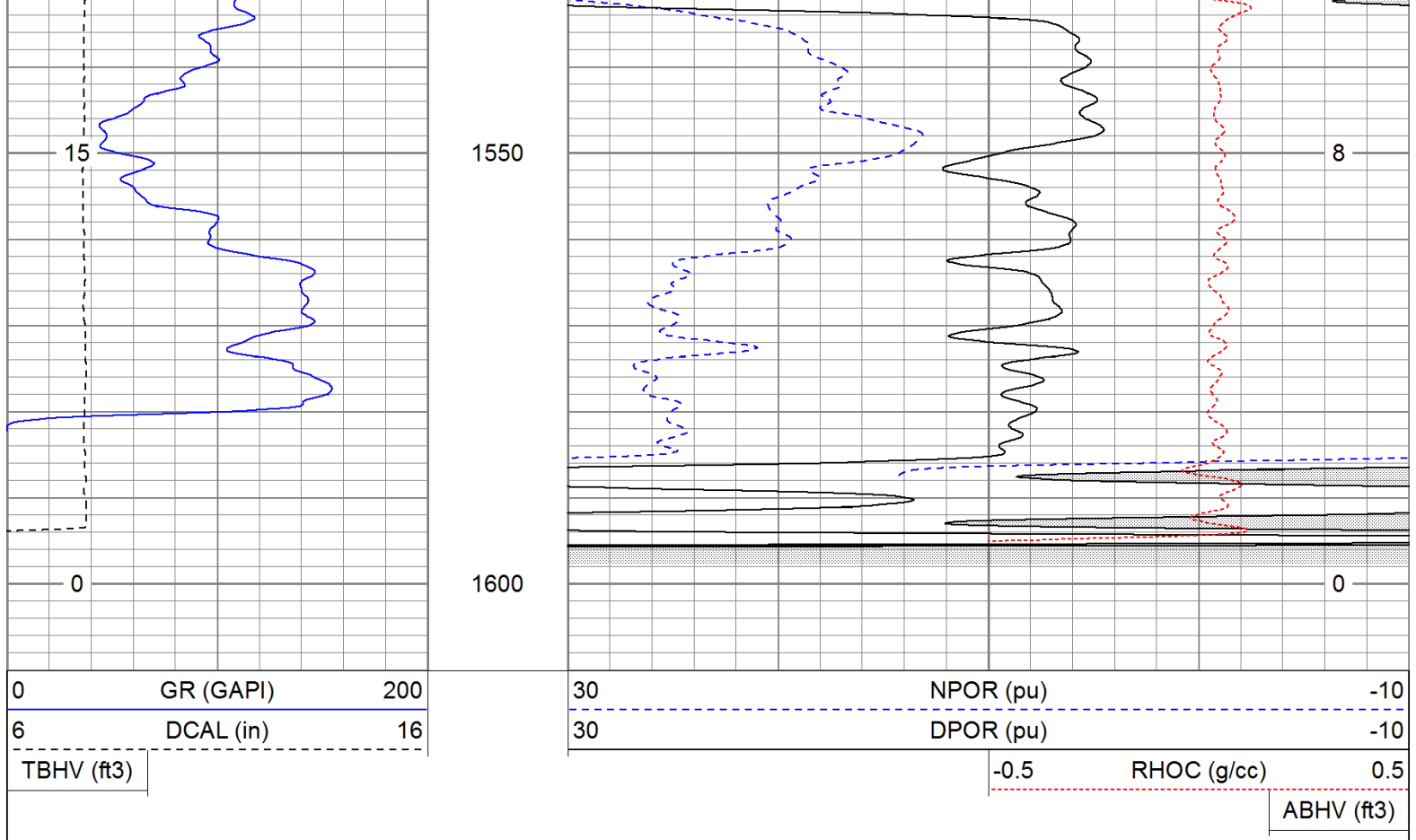




Repeat Pass

Database File: betatr.db
 Dataset Pathname: pass1.1
 Presentation Format: cdnl
 Dataset Creation: Wed Jul 27 02:55:59 2011 by Calc Open-Cased 110302
 Charted by: Depth in Feet scaled 1:240

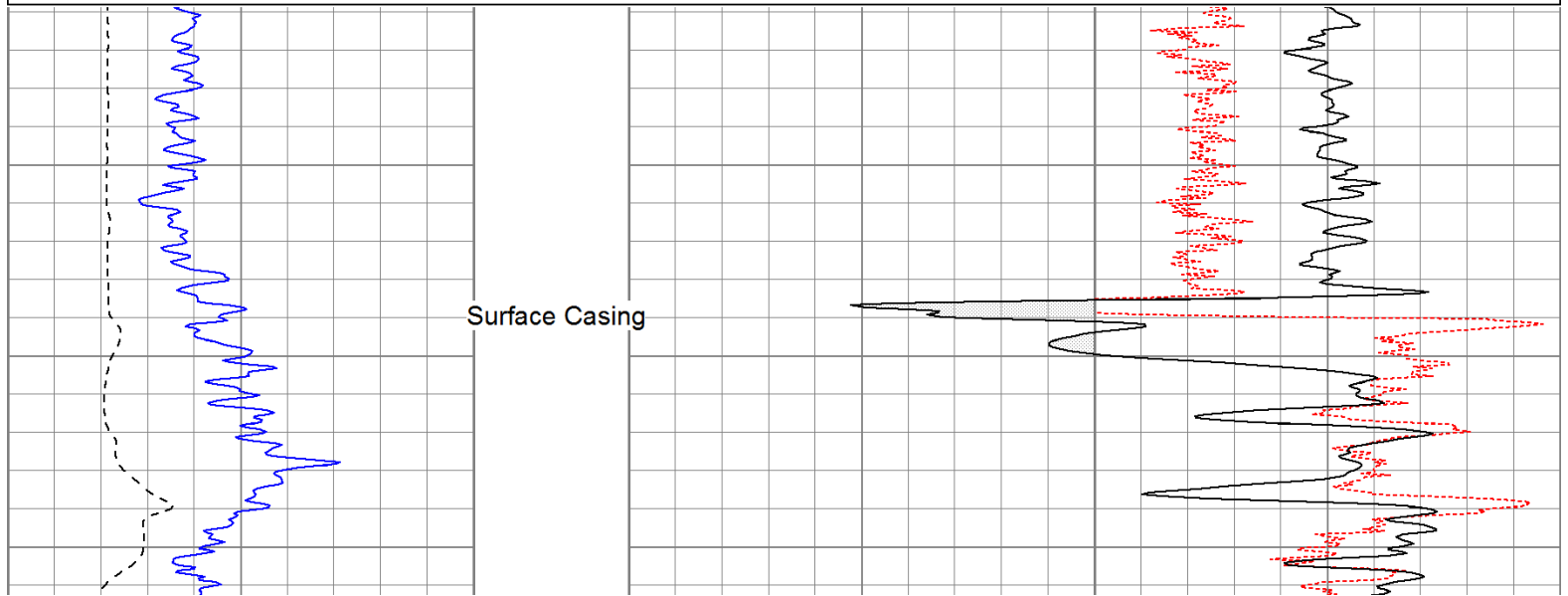


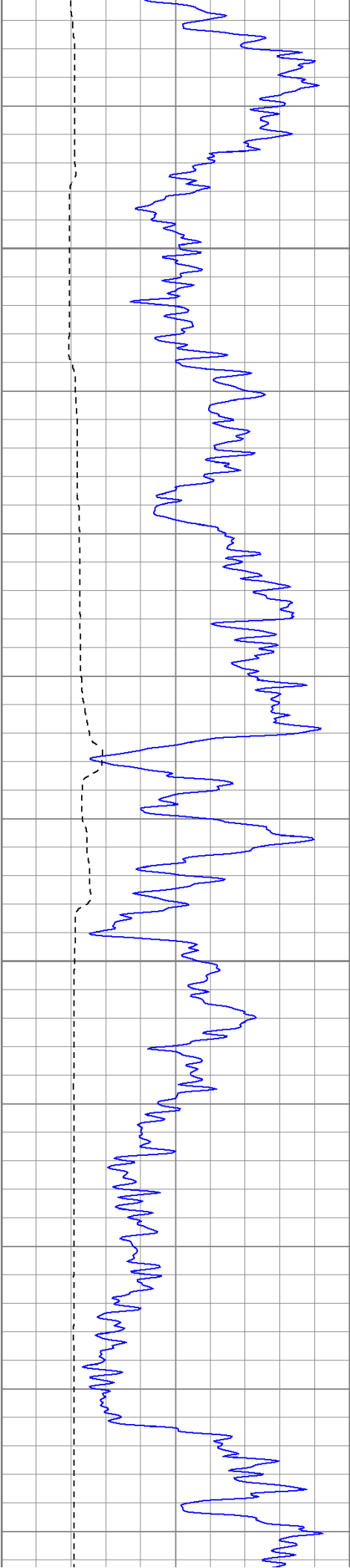


High Resolution Pass

Database File: betatr.db
 Dataset Pathname: pass2.2
 Presentation Format: cdlhr
 Dataset Creation: Fri Jul 29 07:13:07 2011 by Calc Open-Cased 110302
 Charted by: Depth in Feet scaled 1:120

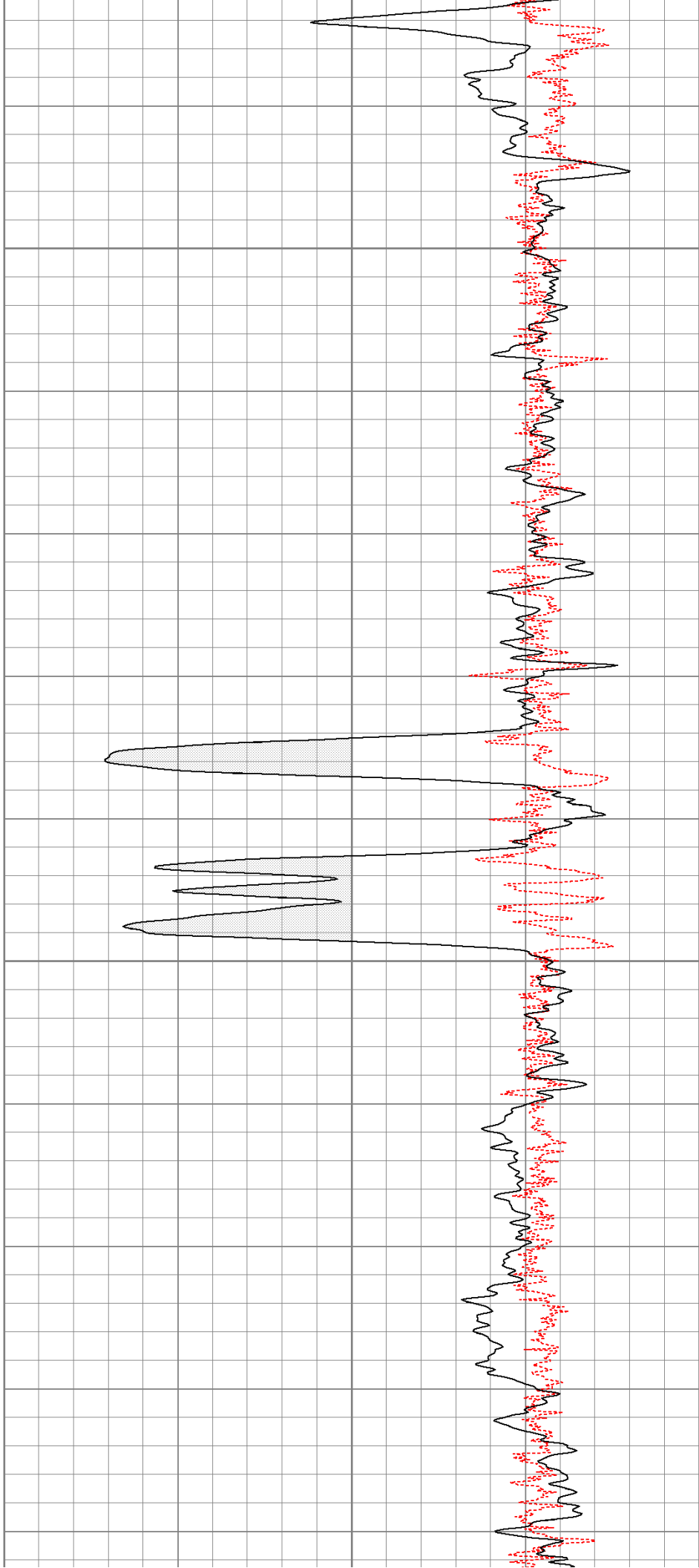
0	GR (GAPI)	200	1	RHOB (g/cc)	3
6	DCAL (in)	16		-0.5	RHOC (g/cc) 0.5

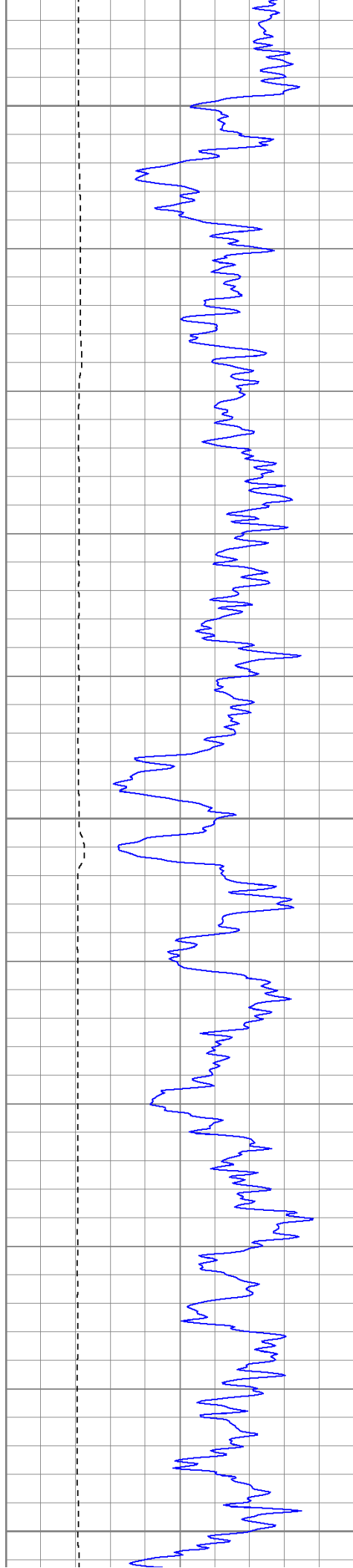




500

550

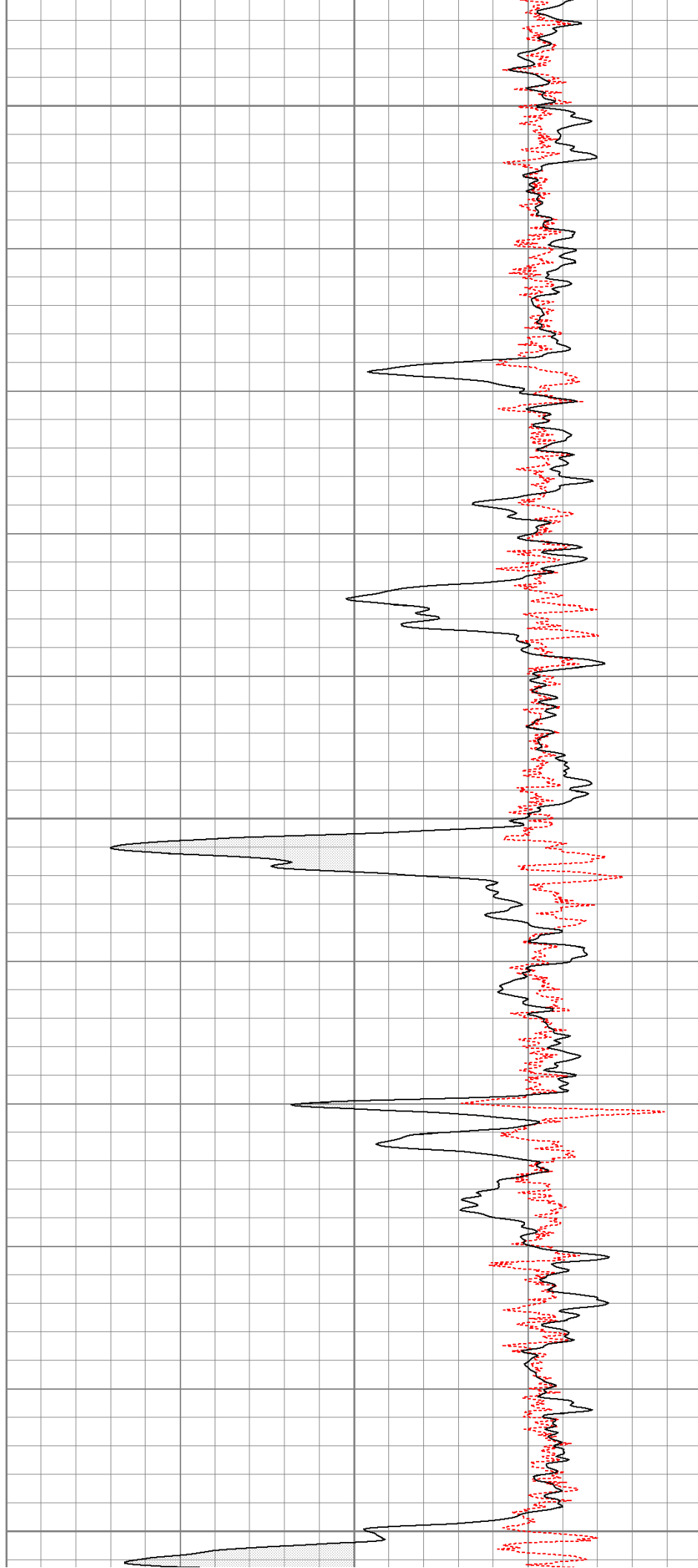


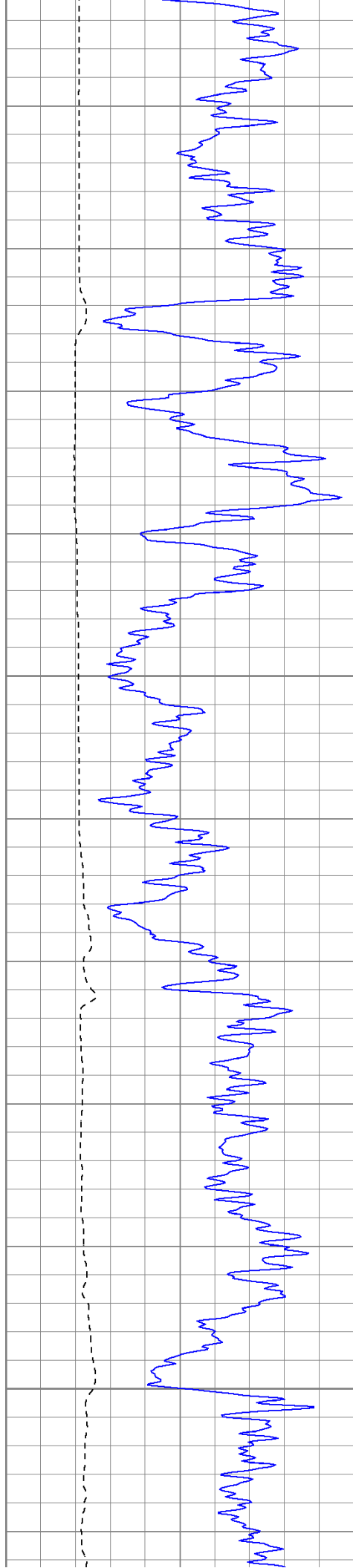


600

650

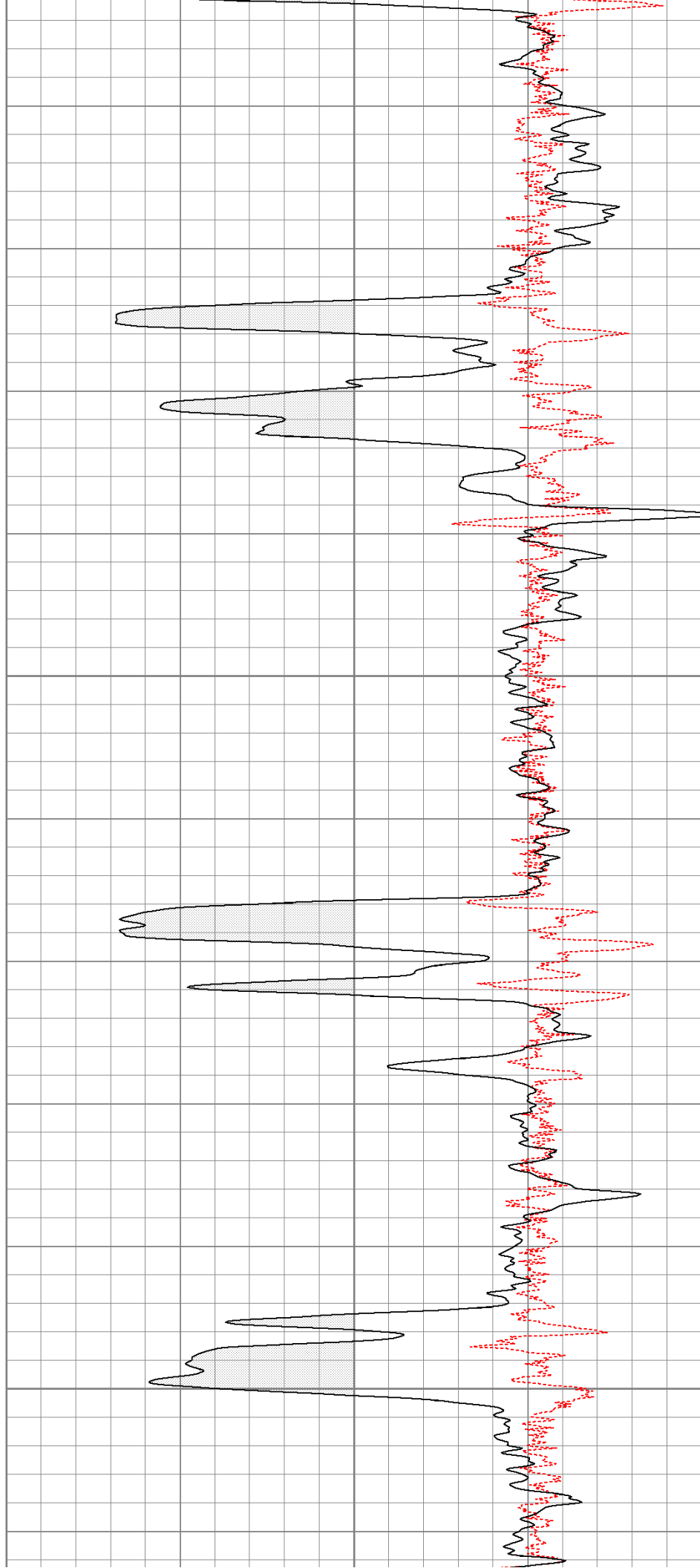
700

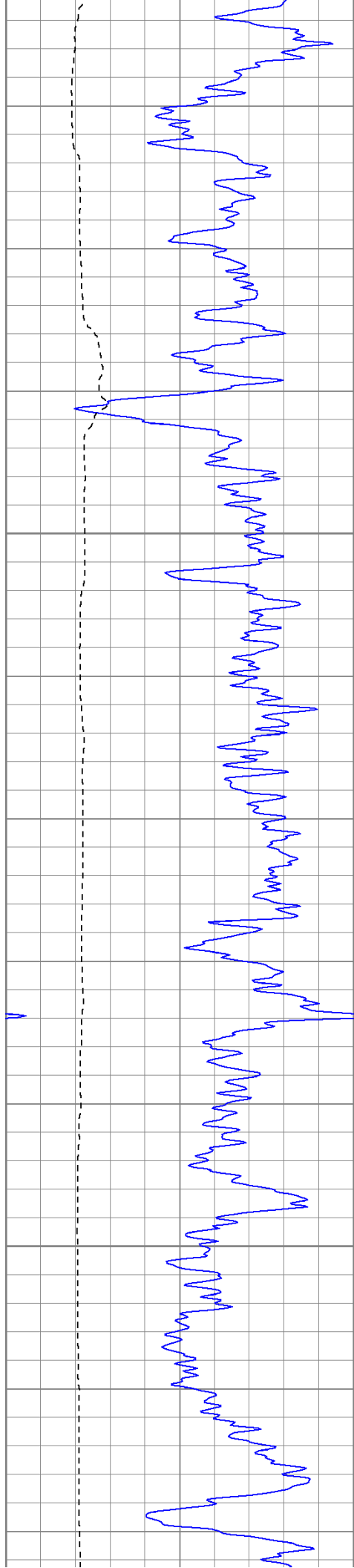




750

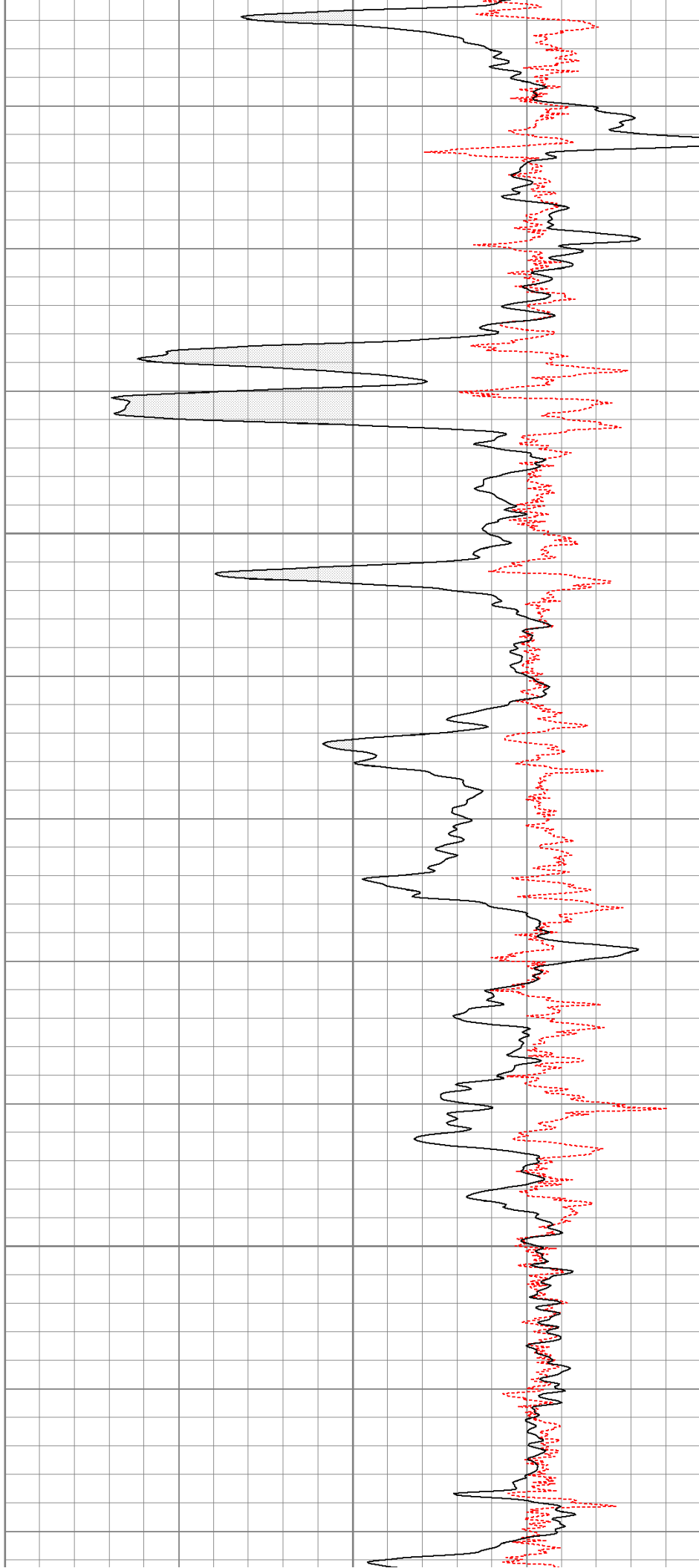
800

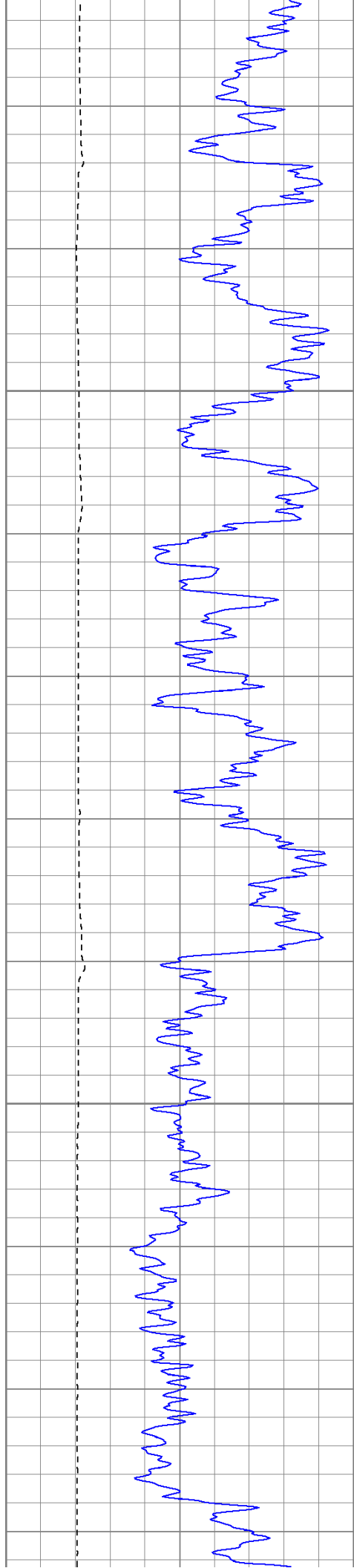




850

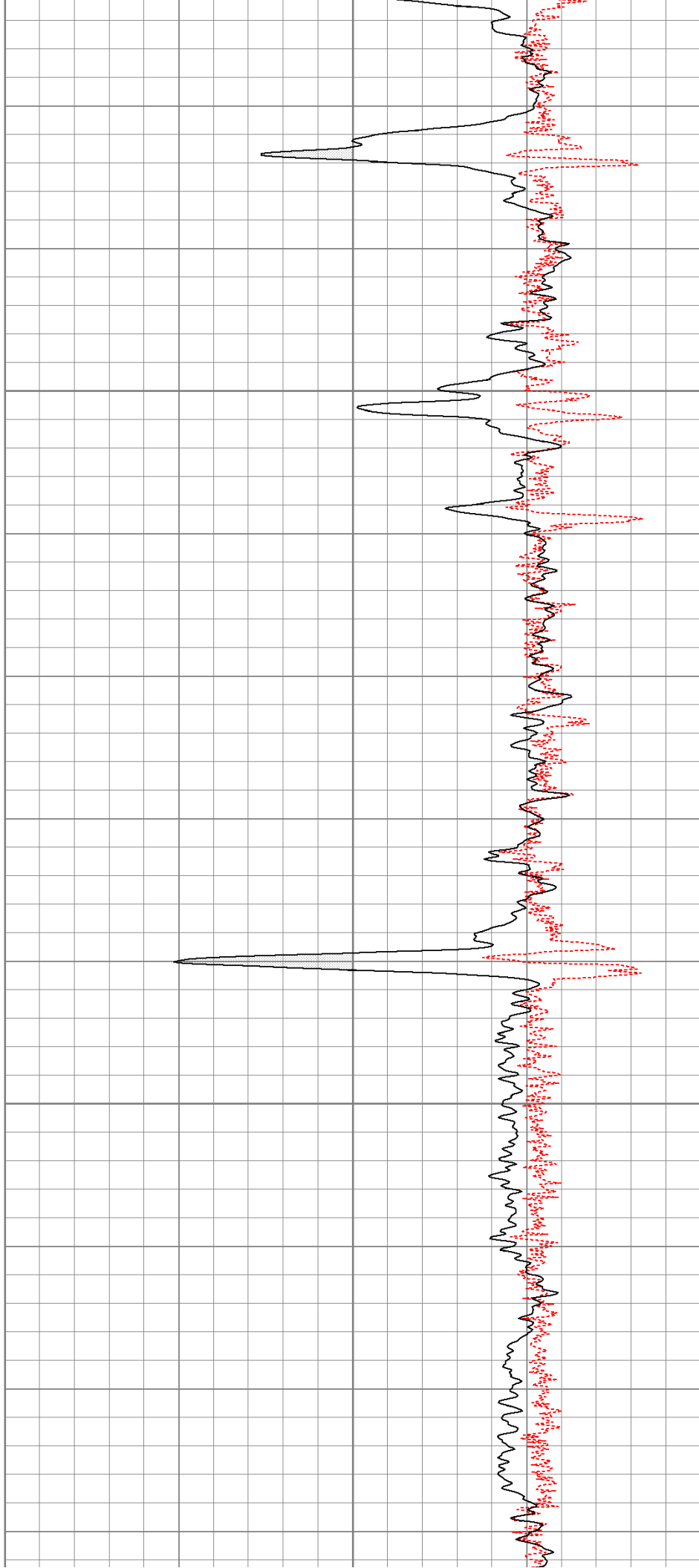
900

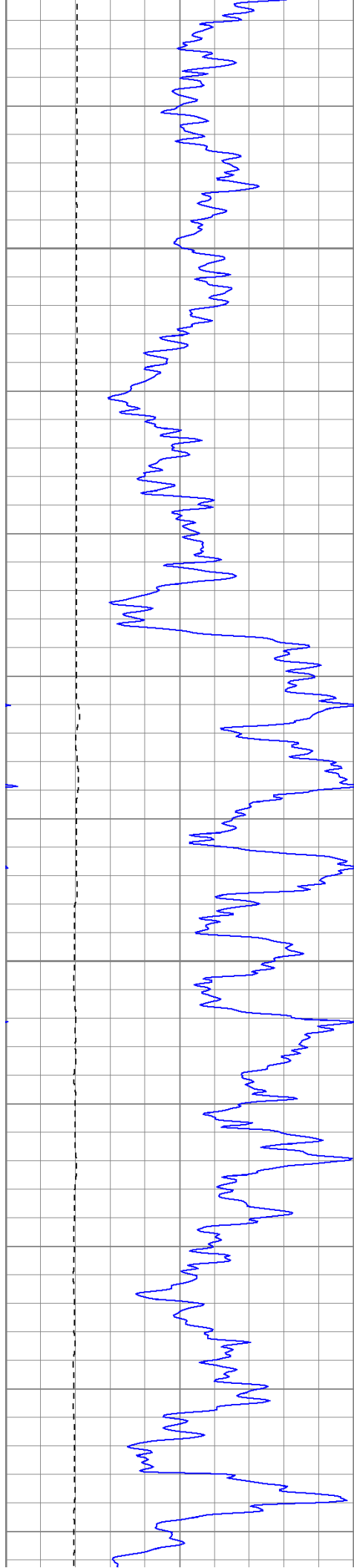




950

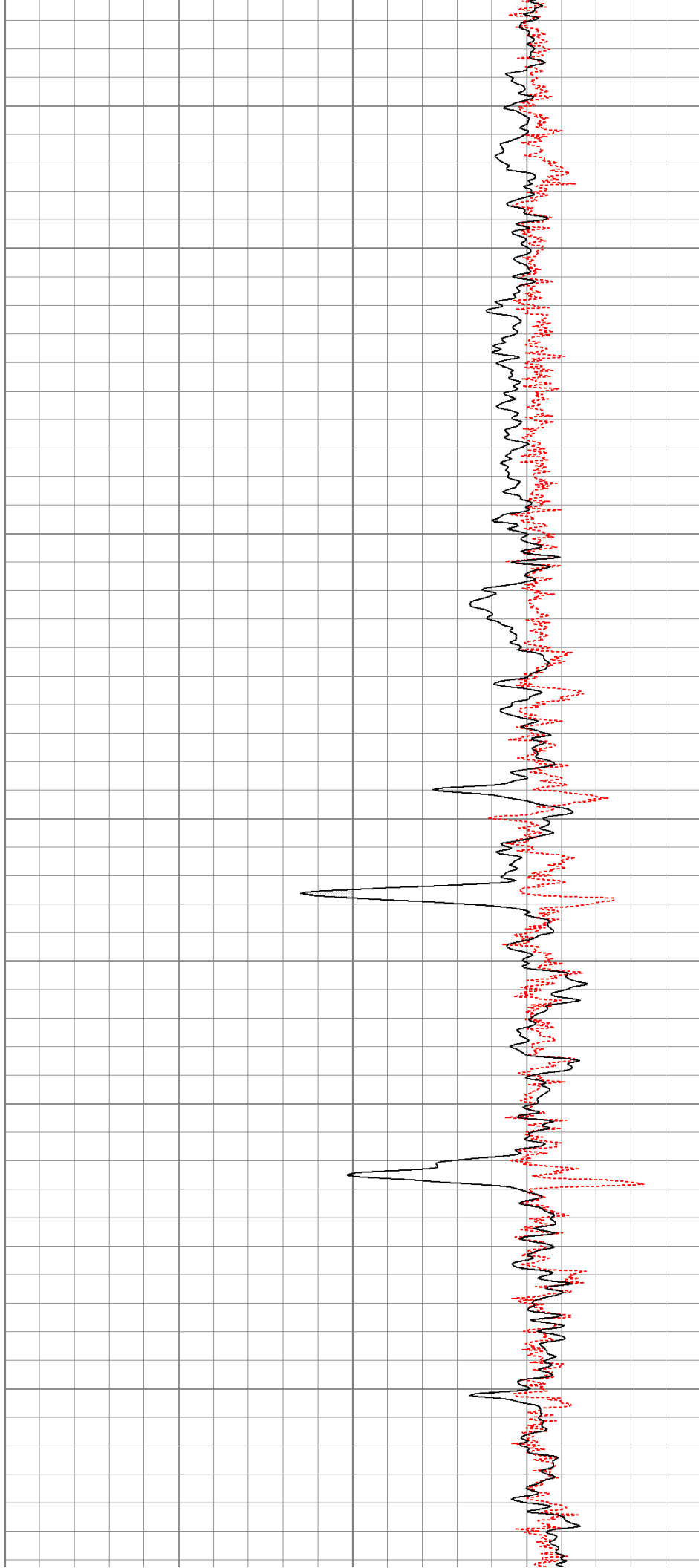
1000

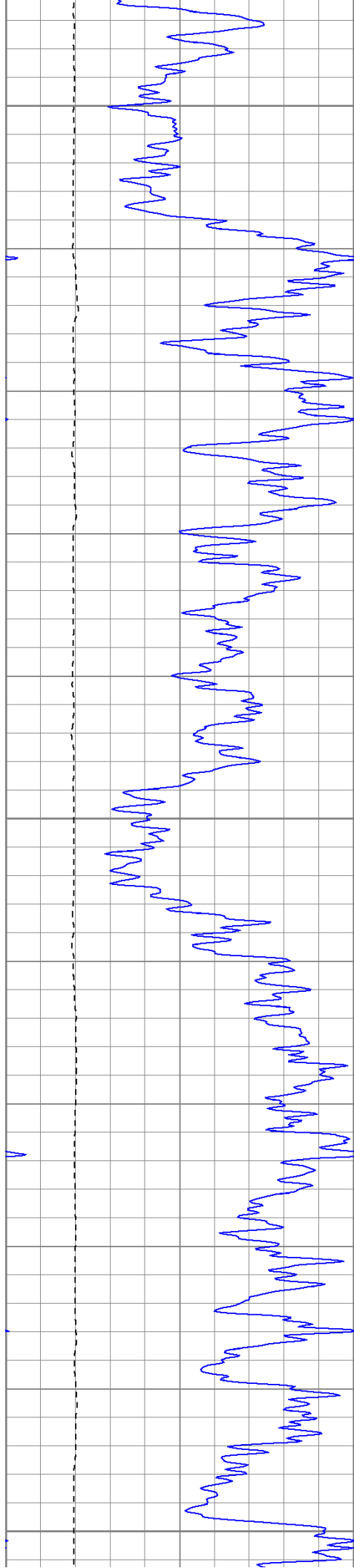




1050

1100

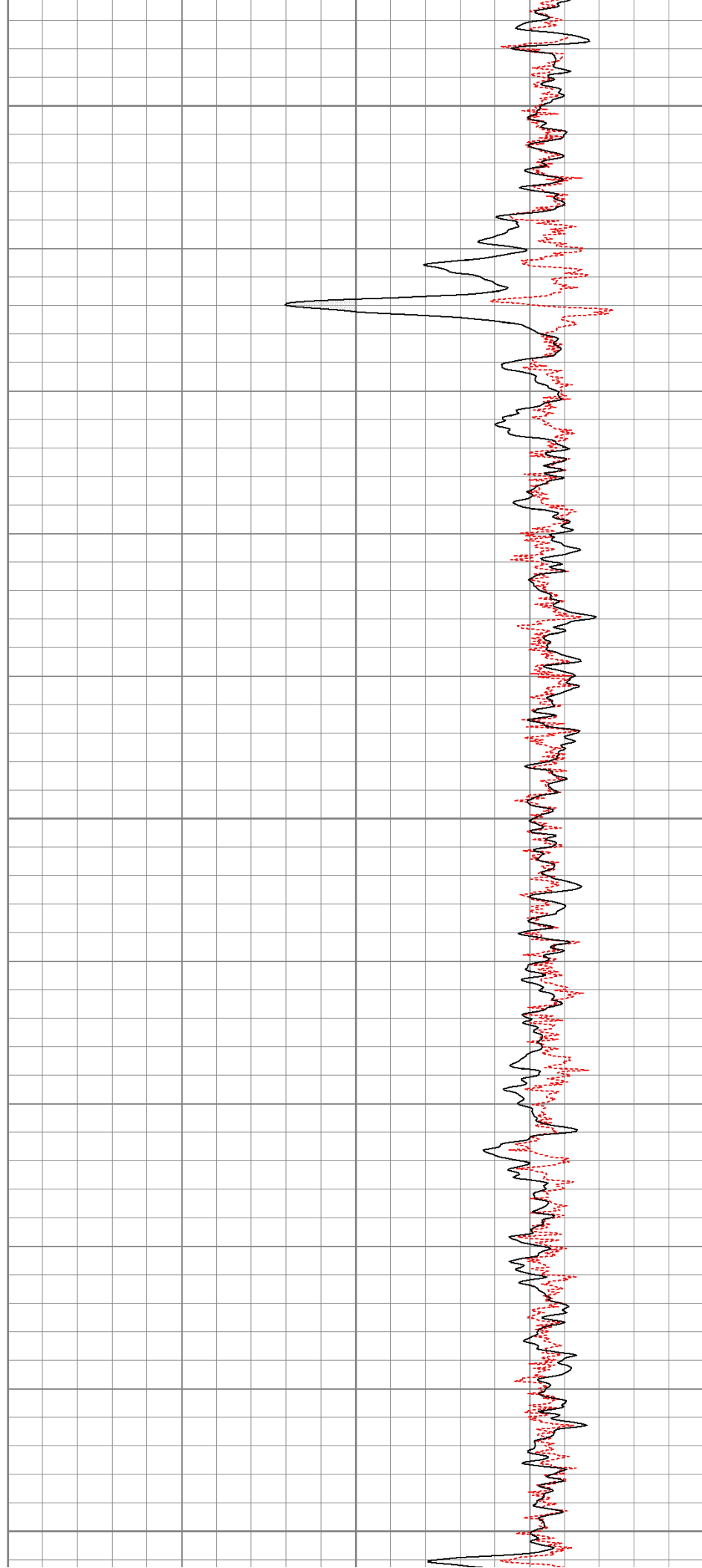


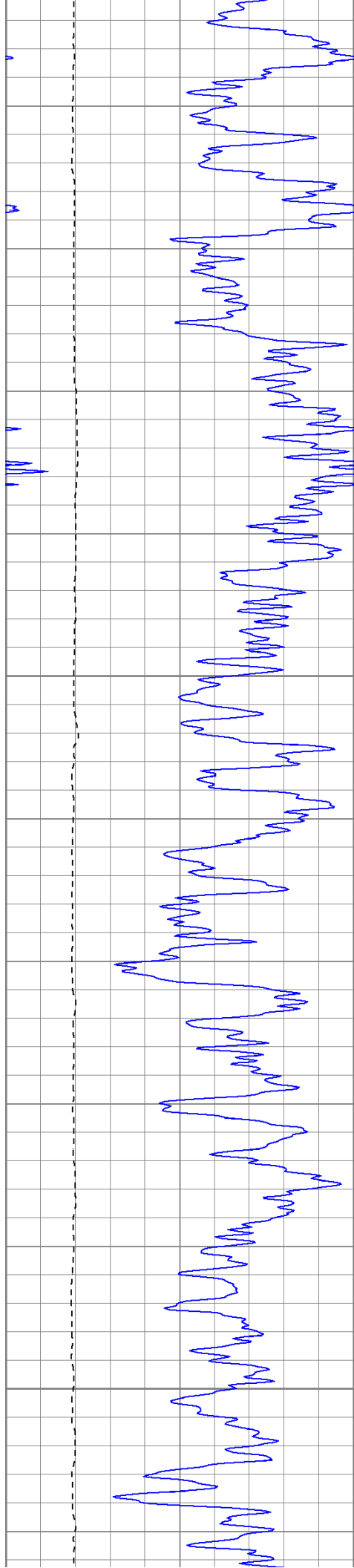


1150

1200

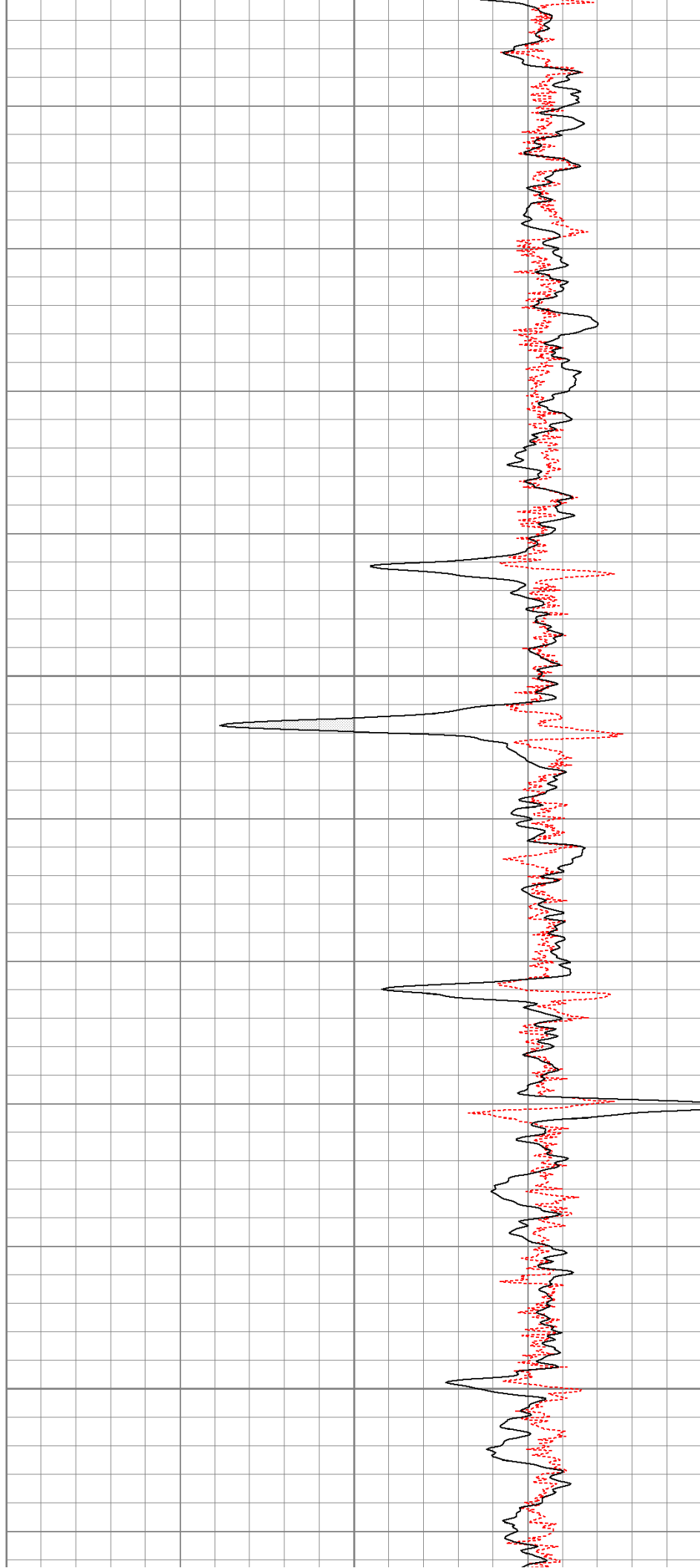
1250

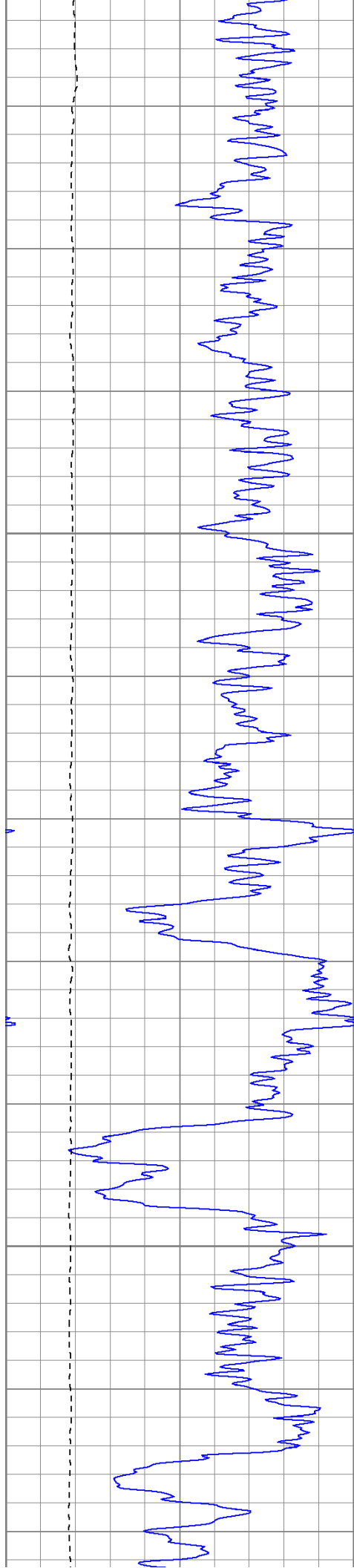




1300

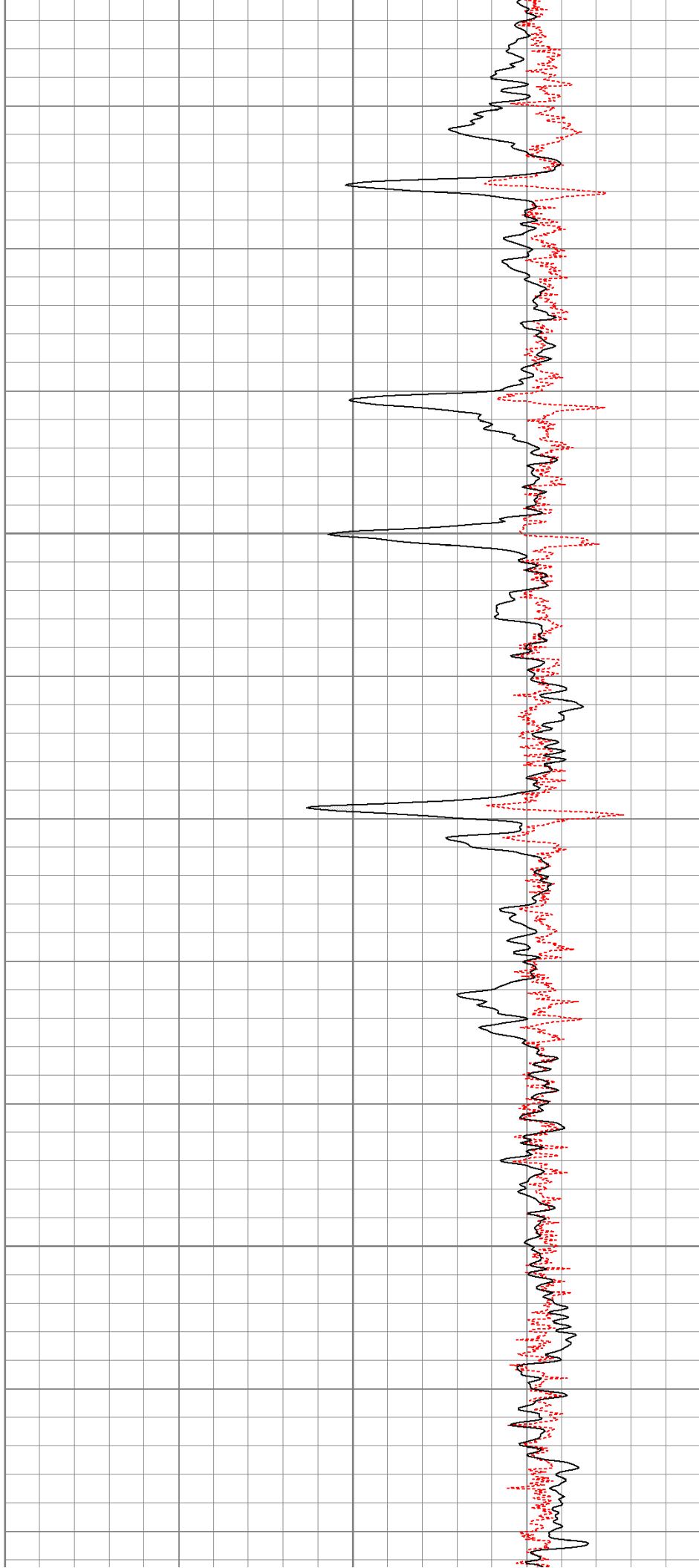
1350

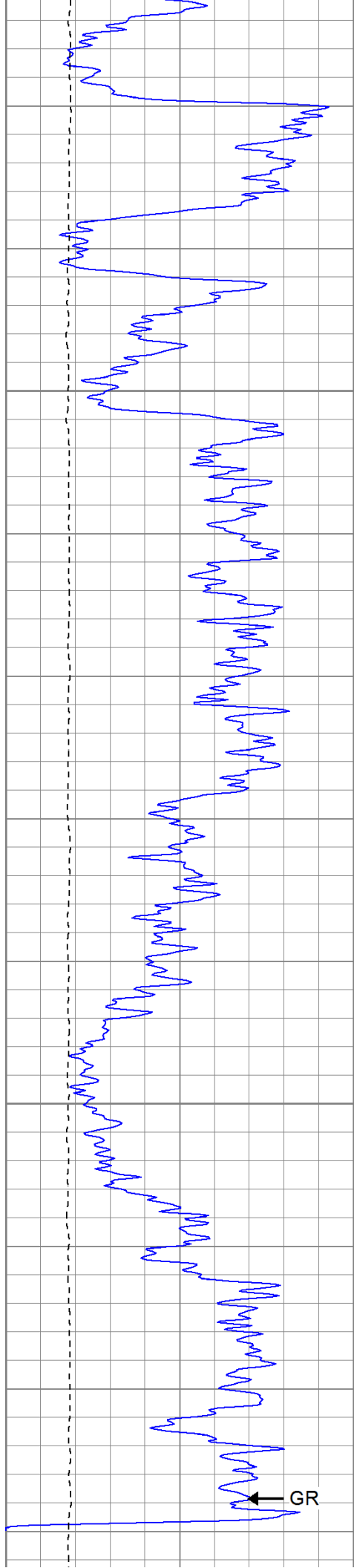




1400

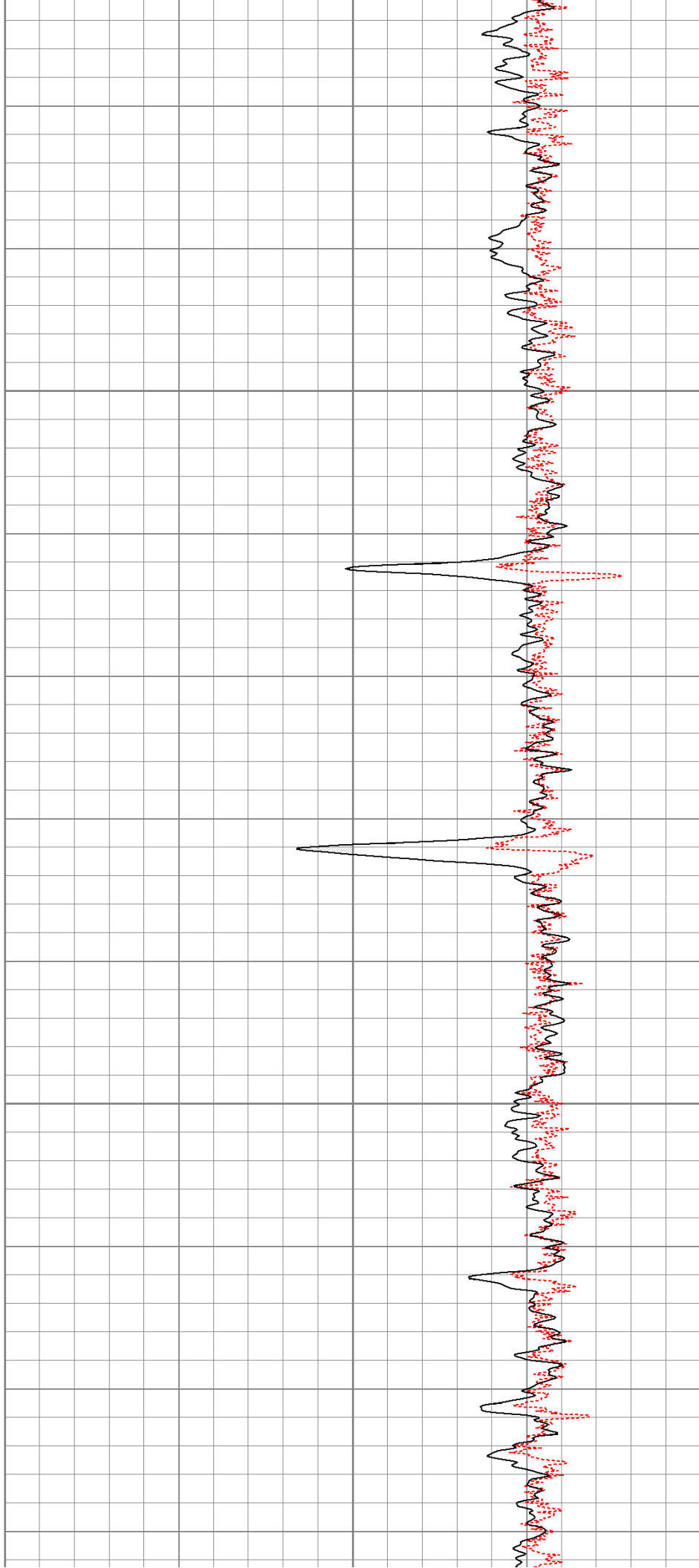
1450

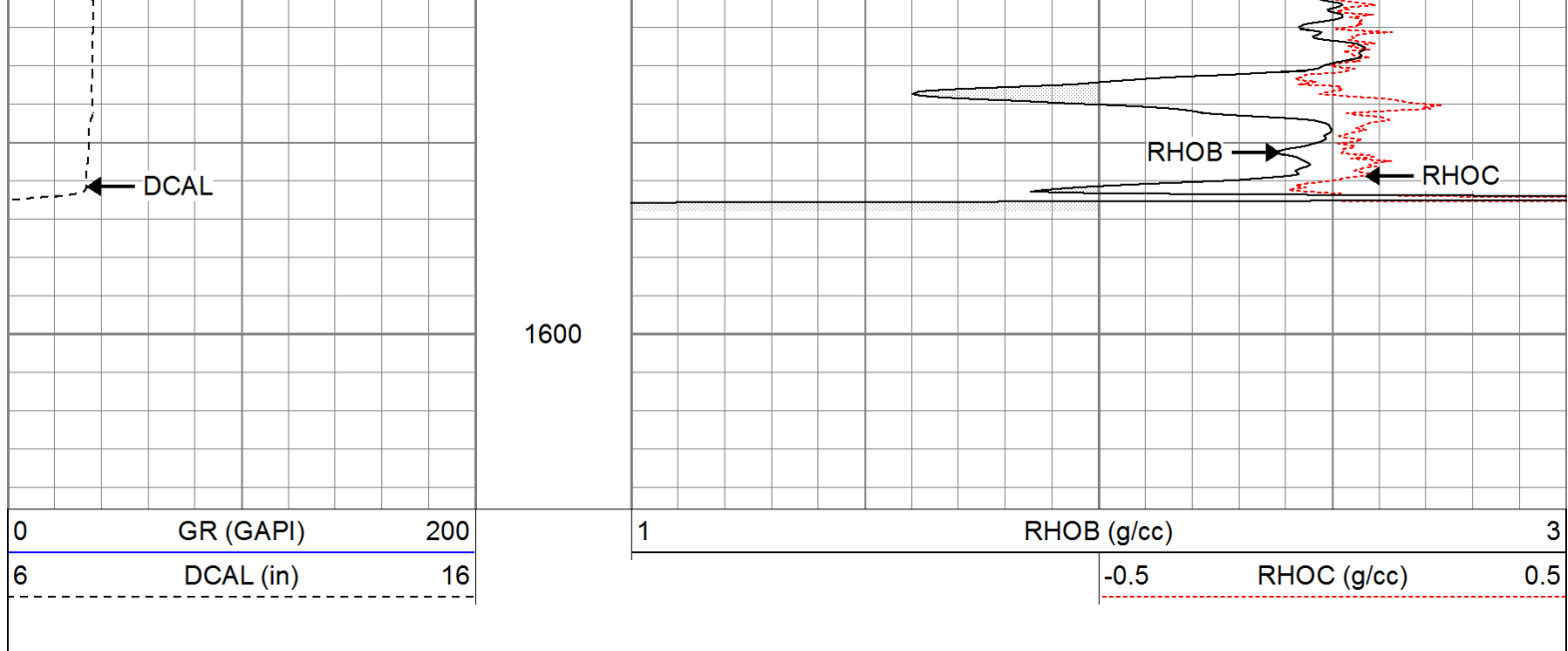




1500



1550





Calibration Report				
Database File:	betatr.db			
Dataset Pathname:	pass1			
Dataset Creation:	Wed Jul 27 02:27:54 2011 by Log Open-Cased 110302			
Induction Tool Calibration Report				
Serial Number:	903			
Tool Model:	Probe			
Downhole Cal Performed:	Sat Jun 18 15:02:12 2011			
Surface Cal Performed:	Sat Jun 18 17:40:00 2011			
After Survey Verification Performed:				
Surface Calibration:	Air	Loop		
Conductivity Reference:	0.000	500.000	mmho	
Conductivity Reading:	-0.045	0.642	V	
Internal Reference:	Zero	Cal		
Conductivity Reference:	0.000	500.000	mmho	
Conductivity Reading:	0.006	0.641	V	
Downhole Calibration:	Internal Zero	Internal Cal		
Conductivity Reference:	-0.702	499.904	mmho	
Conductivity Reading:	-0.082	503.319	V	
Short Normal Reference:	0.000	20.000	Ohm-m	
Short Normal Reading:	0.006	0.233	V	
Results:	Gain	Offset		
Loop Conductivity:	728.211	32.770		
Downhole Correction:	0.994	-0.621		
Short Normal Resistivity:	88.245	-2.000		
After Survey Verification	Internal Zero	Internal Cal		
Conductivity Reading:	0.000	0.000	V	
Conductivity Result:	0.000	0.000	mmho	
Short Normal Reading:	0.000	0.000	V	
Short Normal Result:	0.000	0.000	Ohm-m	
Compensated Density Calibration Report				
Serial-Model:	901-2.75POH			
Source / Verifier:	/			
Master Calibration Performed:	Wed Jun 08 09:11:26 2011			
Before Survey Verification Performed:				
After Survey Verification Performed:				

Master Calibration					
	<u>Density</u>		<u>Far Detector</u>	<u>Near Detector</u>	
Magnesium	1.710	g/cc	1001.79	578.48	cps
Aluminum	2.590	g/cc	180.36	300.39	cps
Spine Angle = 69.08			Density/Spine Ratio = 0.479		
	<u>Size</u>		<u>Reading</u>		
Small Ring	8.00	in	2.50	V	
Large Ring	16.00	in	4.57	V	
Before Survey Verification					
	<u>Target</u>		<u>Measured</u>		
		g/cc			g/cc
		g/cc			g/cc
		g/cc			g/cc
After Survey Verification					
	<u>Target</u>		<u>Measured</u>		
		g/cc			g/cc
		g/cc			g/cc
		g/cc			g/cc
Neutron Calibration Report					
Serial Number:	803				
Tool Model:	2.75POH				
Performed:	Wed Jun 08 13:12:55 2011				
Calibrator Value:	1		NAPI		
Calibrator Reading:	1		cps		
Sensitivity:	1		NAPI/cps		
Gamma Ray Calibration Report					
Serial Number:	804				
Tool Model:	2.75POH				
Performed:	Tue Jun 14 18:09:29 2011				
Calibrator Value:	1.0		GAPI		
Background Reading:	0.0		cps		
Calibrator Reading:	1.0		cps		
Sensitivity:	0.6500		GAPI/cps		

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	29.58		None	0.75	1.50	5.00
			GR-2.75POH (804) Probe 2.75" Probe Open Hole Gamma Ray	3.73	2.75	43.00
NEU	24.04		NEU-2.75POH (803) Probe Epithermal	4.75	2.75	58.00

