



SUPERIOR
WELL SERVICES
Black Lick, Pa.
Mercer, Pa.
Wooster, Oh.
Cleveland, Ok.
Trinidad, Co.

COMPENSATED DENSITY NEUTRON LOG

Company XTO Energy Inc.
Well Hill Ranch 36-11
Field Purgatoire River
County Las Animas State Colorado

Location: API #: 05 071 09531 00

1564' FSL & 2390' FWL

SEC 36 TWP 34S RGE 67W

DIL

Permanent Datum Ground Level Elevation 7788'
Log Measured From Ground Level
Drilling Measured From Ground Level

Elevation
K.B. -----
D.F. -----
G.L. 7788'

Date	5-4-08		
Run Number	One		
Depth Driller	2400'		
Depth Logger	2386'		
Bottom Logged Interval	2363'		
Top Log Interval	Surface Casing		
Casing Driller	8 5/8" @ 470'		
Casing Logger	466'		
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	9:00 A.M.		
Time Logger on Bottom	11:15 A.M.		
Maximum Recorded Temperature	116 DEG F		
Equipment Number	T697		
Location	Trinidad		
Recorded By	J. Cappellucci		
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

Neutron Density Porosity Presented On Sandstone Matrix.
ABHV Calculated For 5 1/2" Casing.

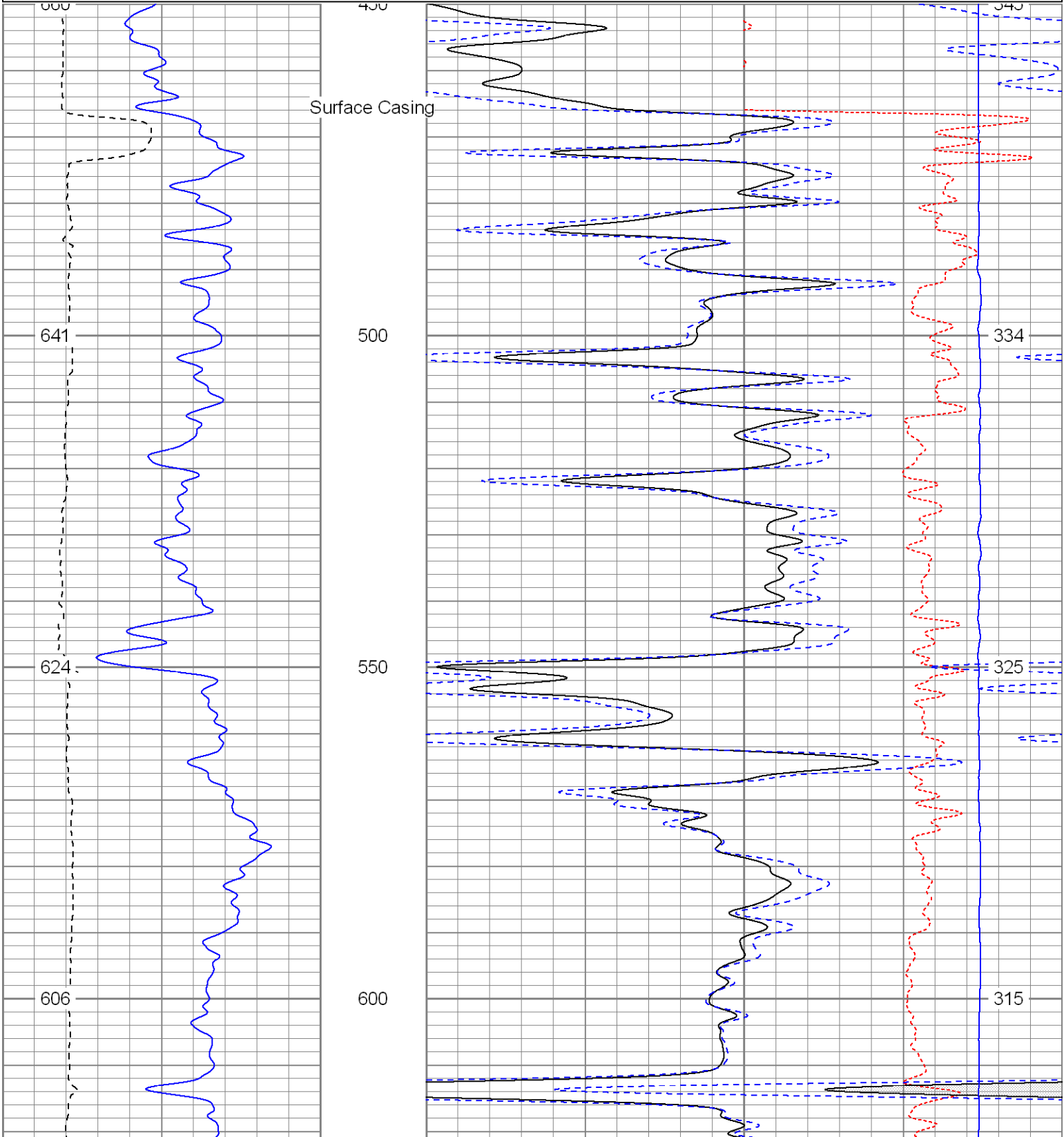
Well Directions:
Lorencito to XTO hill, follow all the way to top, cross cattleguard,
second left dead ends on location.

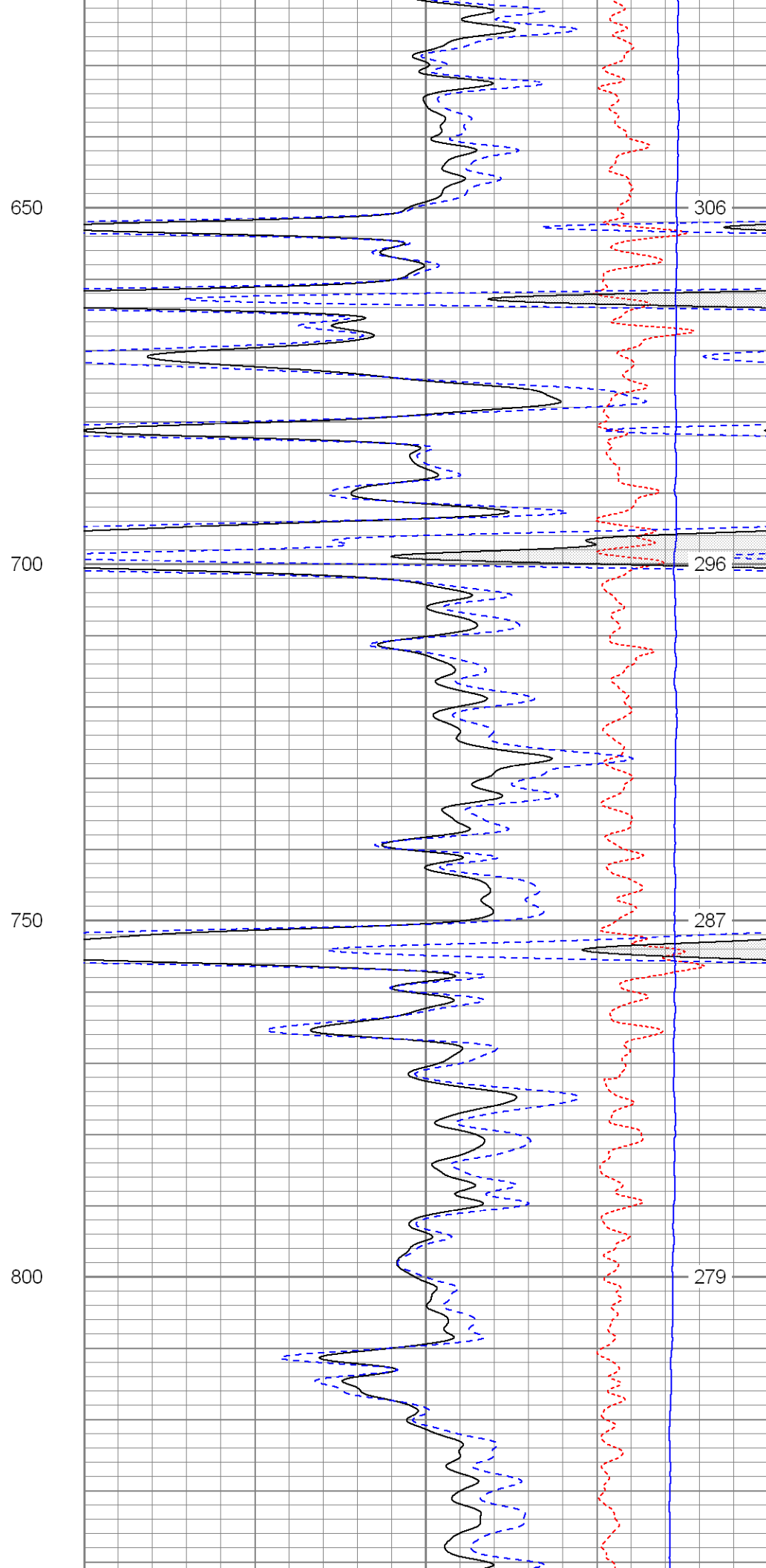
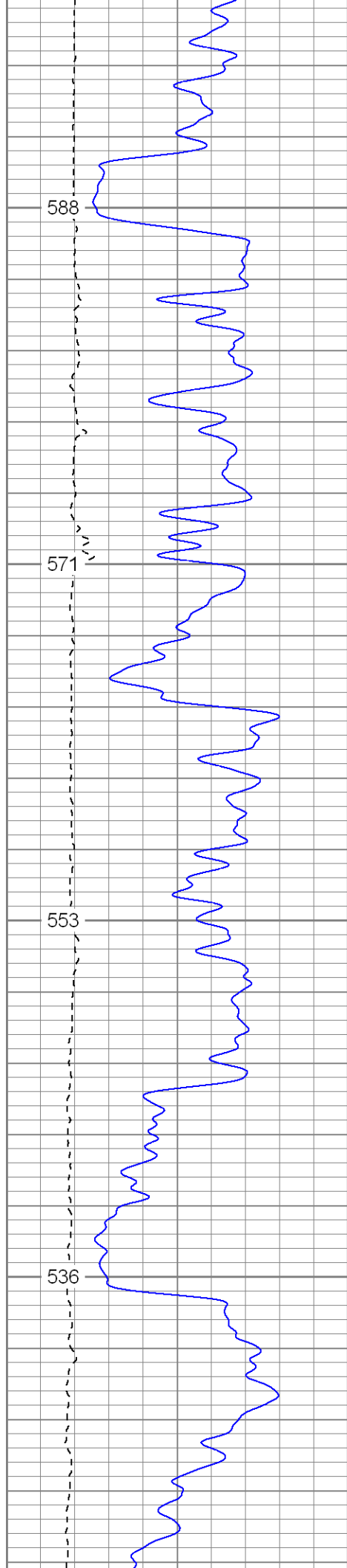


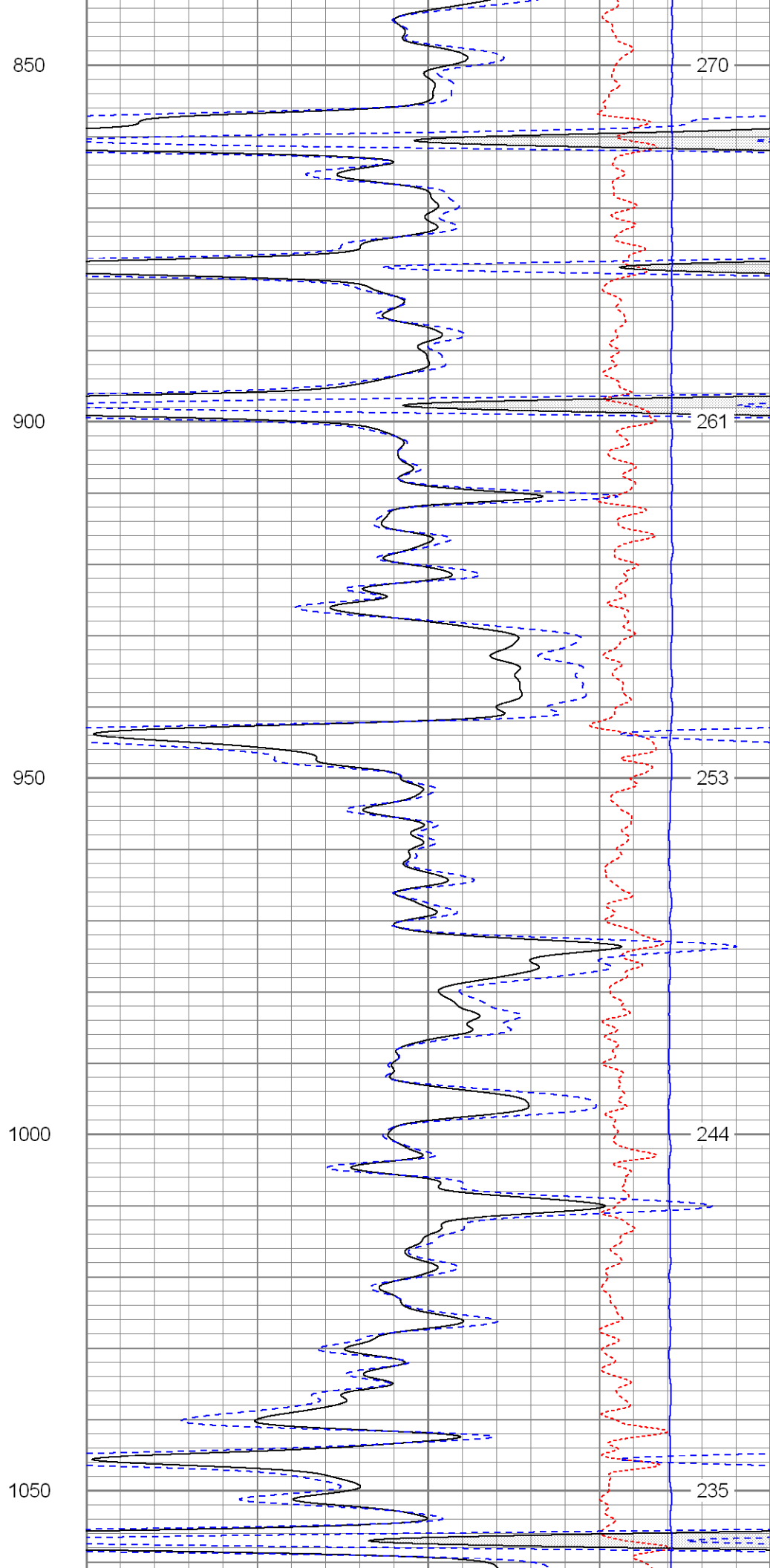
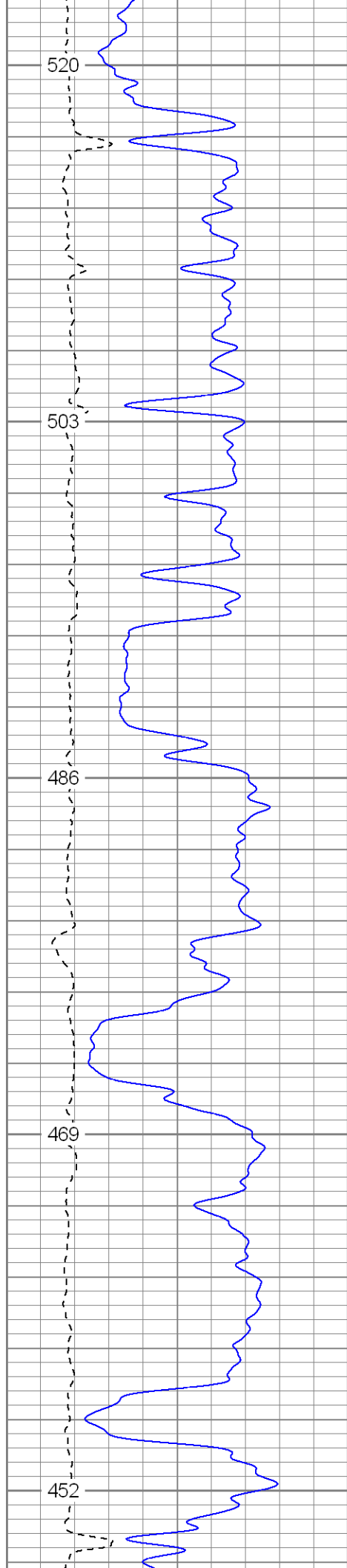
SUPERIOR
Black Lick, Pa.
Mercer, Pa.
Wooster, Oh.
Cleveland, Ok.
Trinidad, Co.

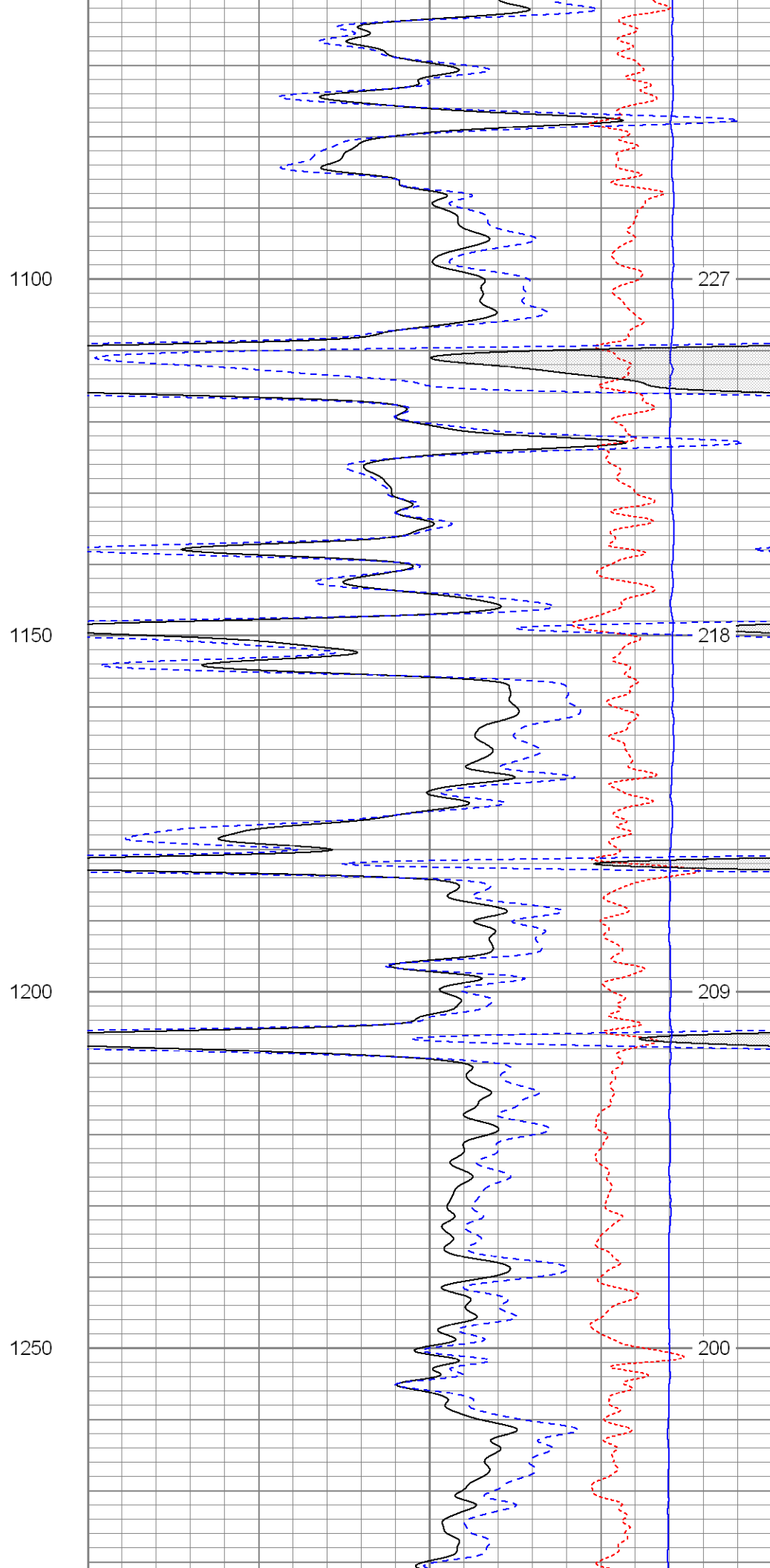
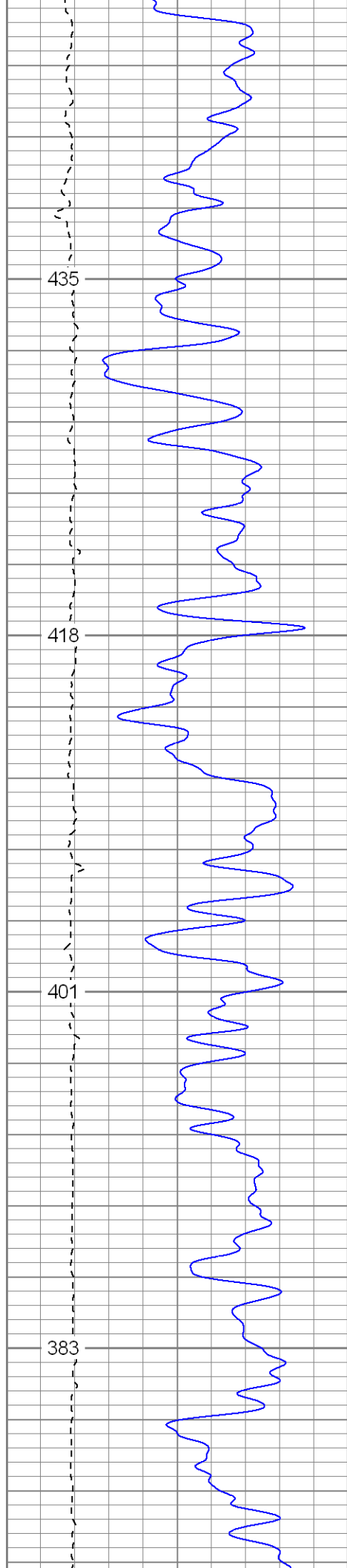
Main Pass

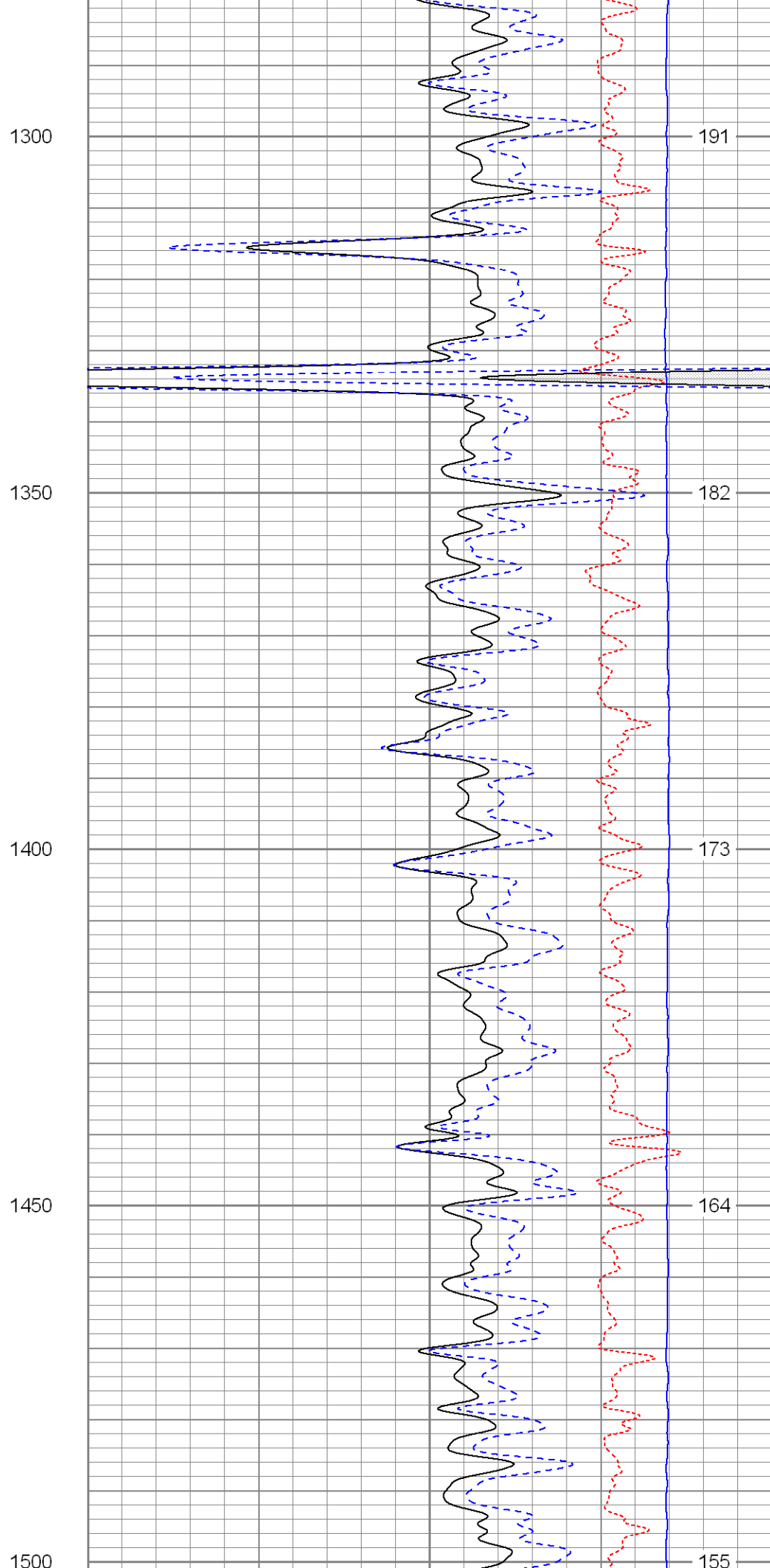
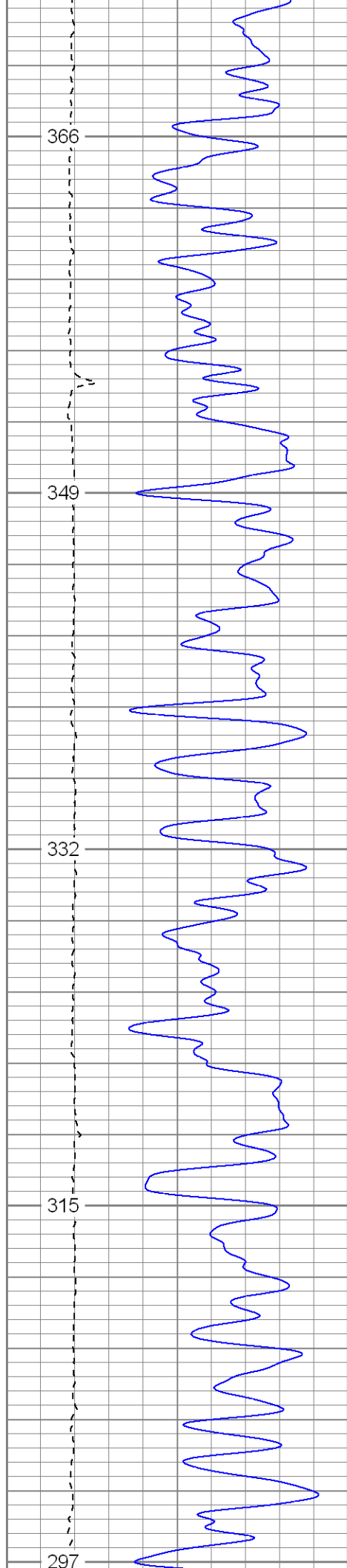
0	GR (GAPI)	200	2	RHOB (g/cc)	3
6	DCAL (in)	16	1	RHOB (g/cc)	2
TBHV (ft3)			30	DPOR (pu)	-10
			-0.5 RHOC (g/cc) 0.5		
			4000 LTEN (lb) 0		
			ABHV (ft3)		

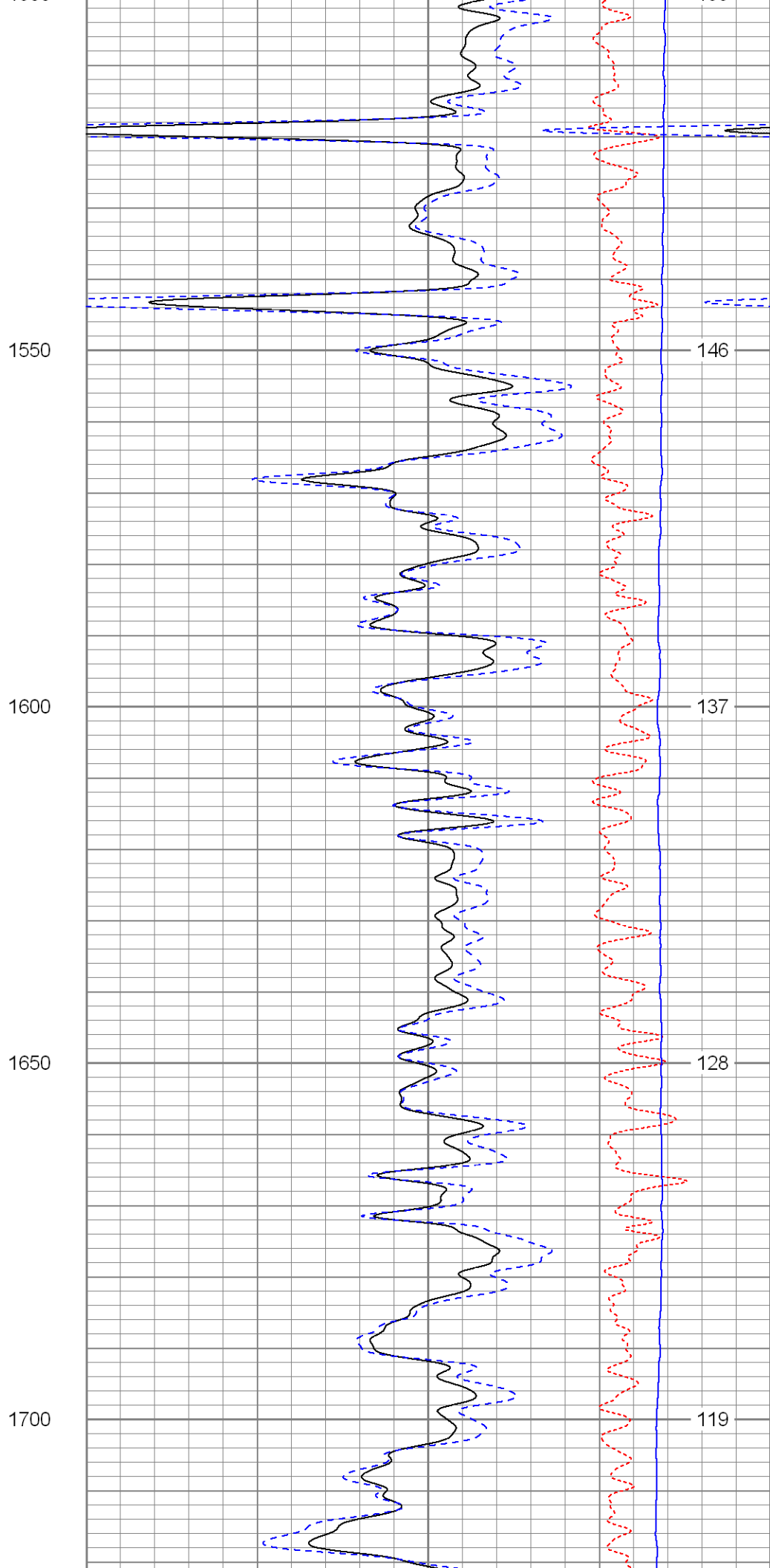
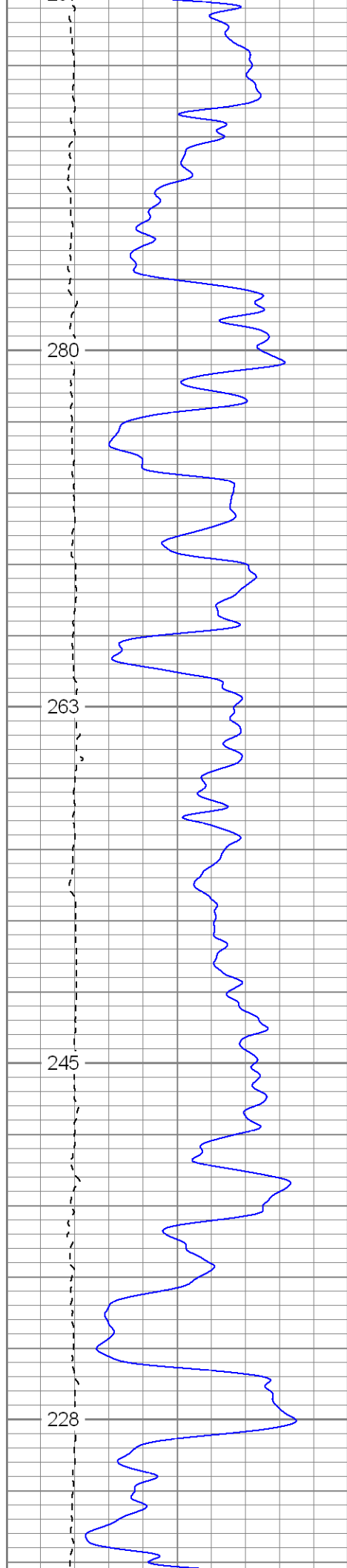


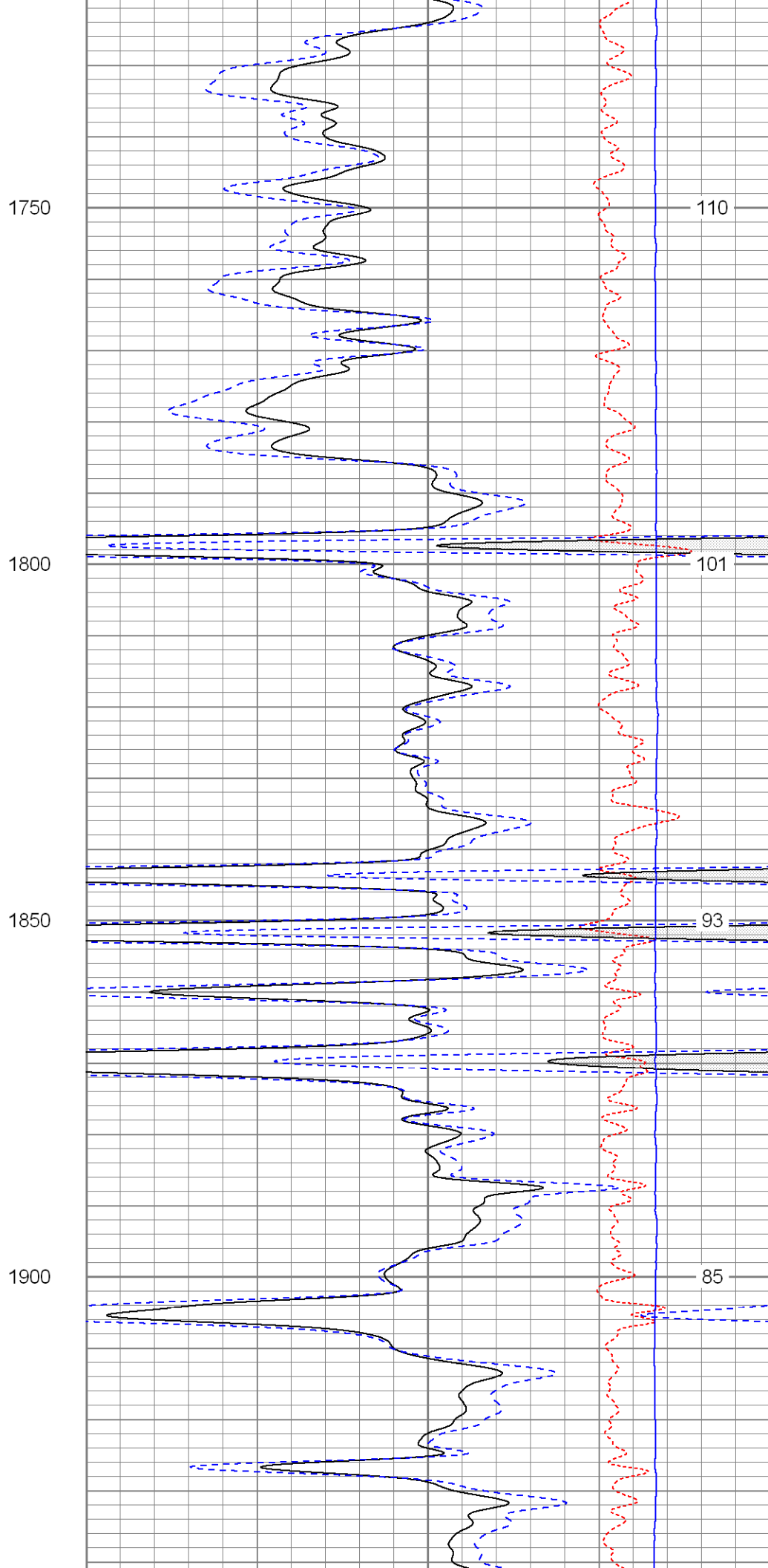
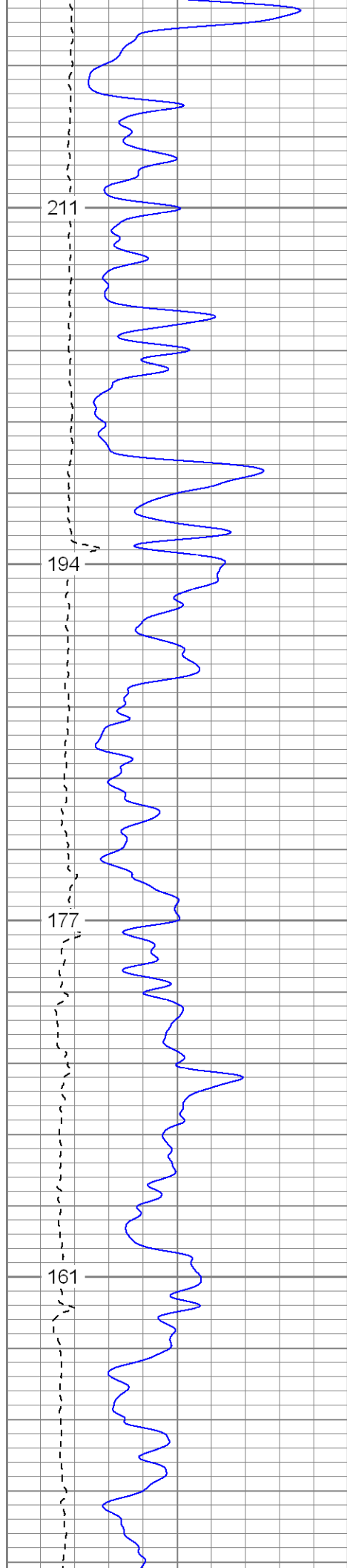


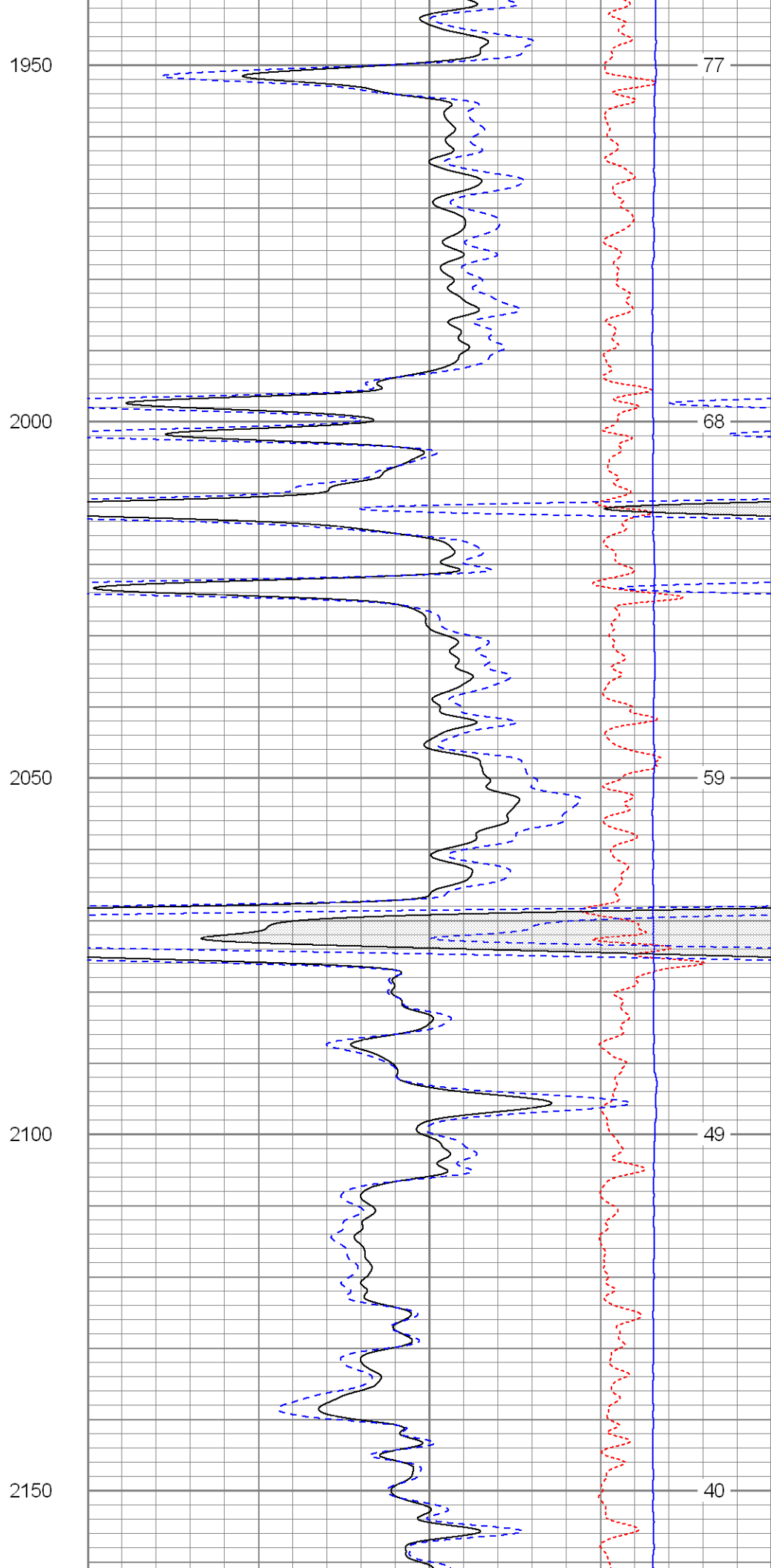
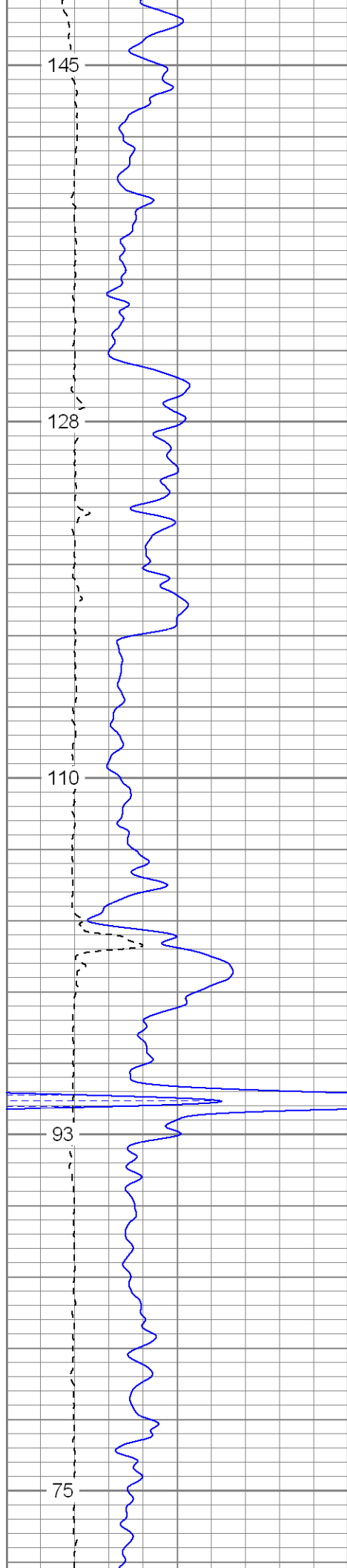


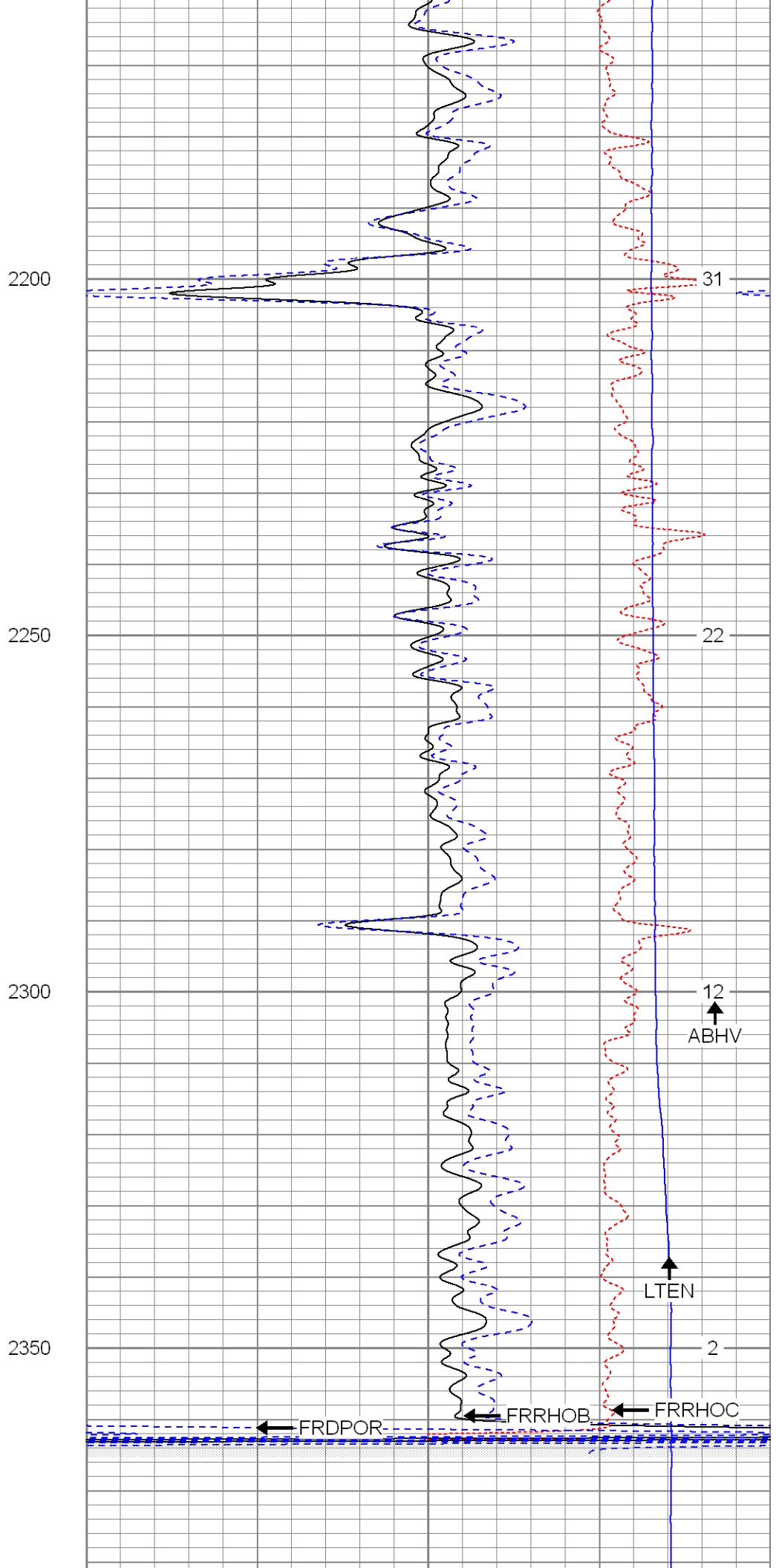
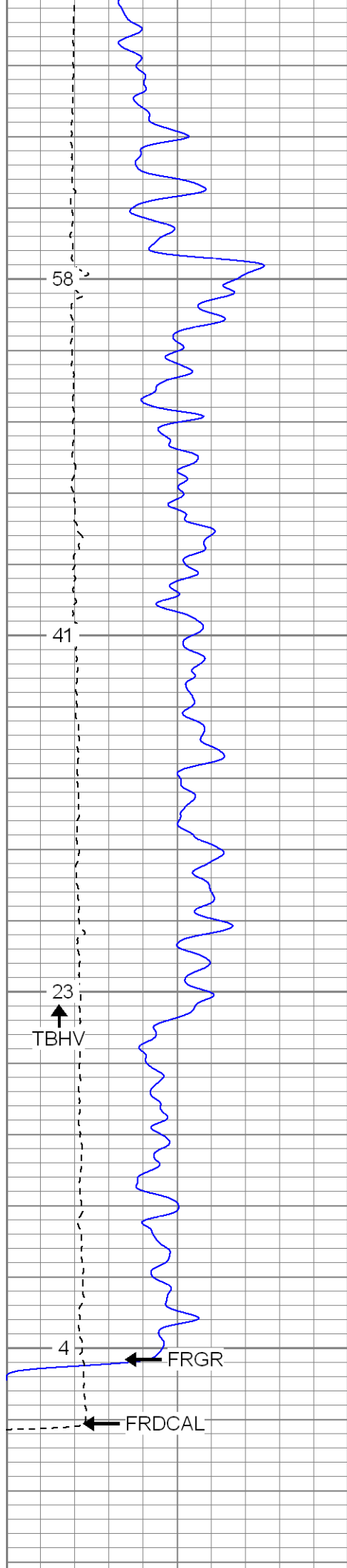












0	GR (GAPI)	200	2	RHOB (g/cc)	3
6	DCAL (in)	16	1	RHOB (g/cc)	2
TBHV (ft3)			30	DPOR (pu)	-10
				-0.5	RHOC (g/cc) 0.5
				4000	LTEN (lb) 0
					ABHV (ft3)



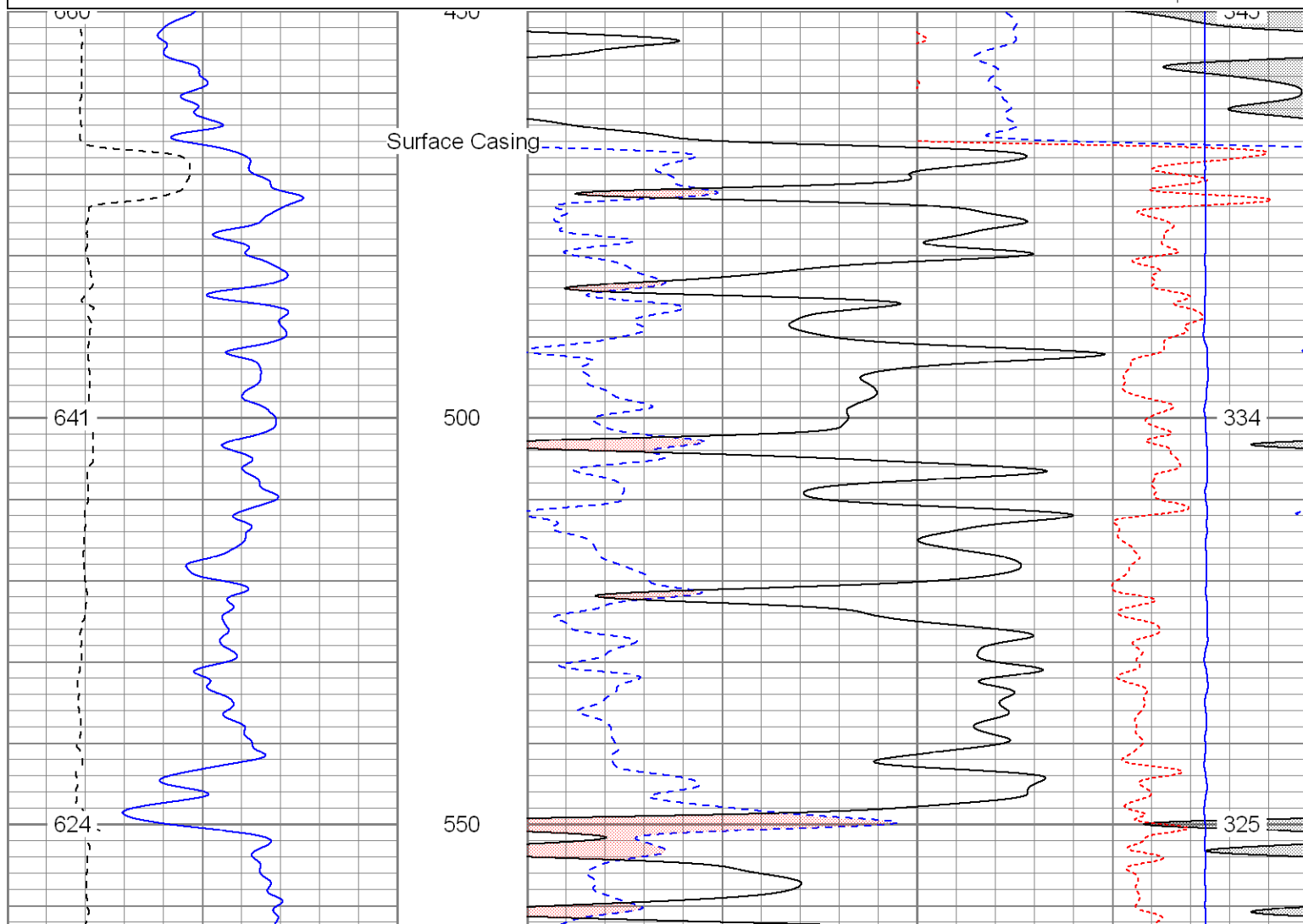
SUPERIOR

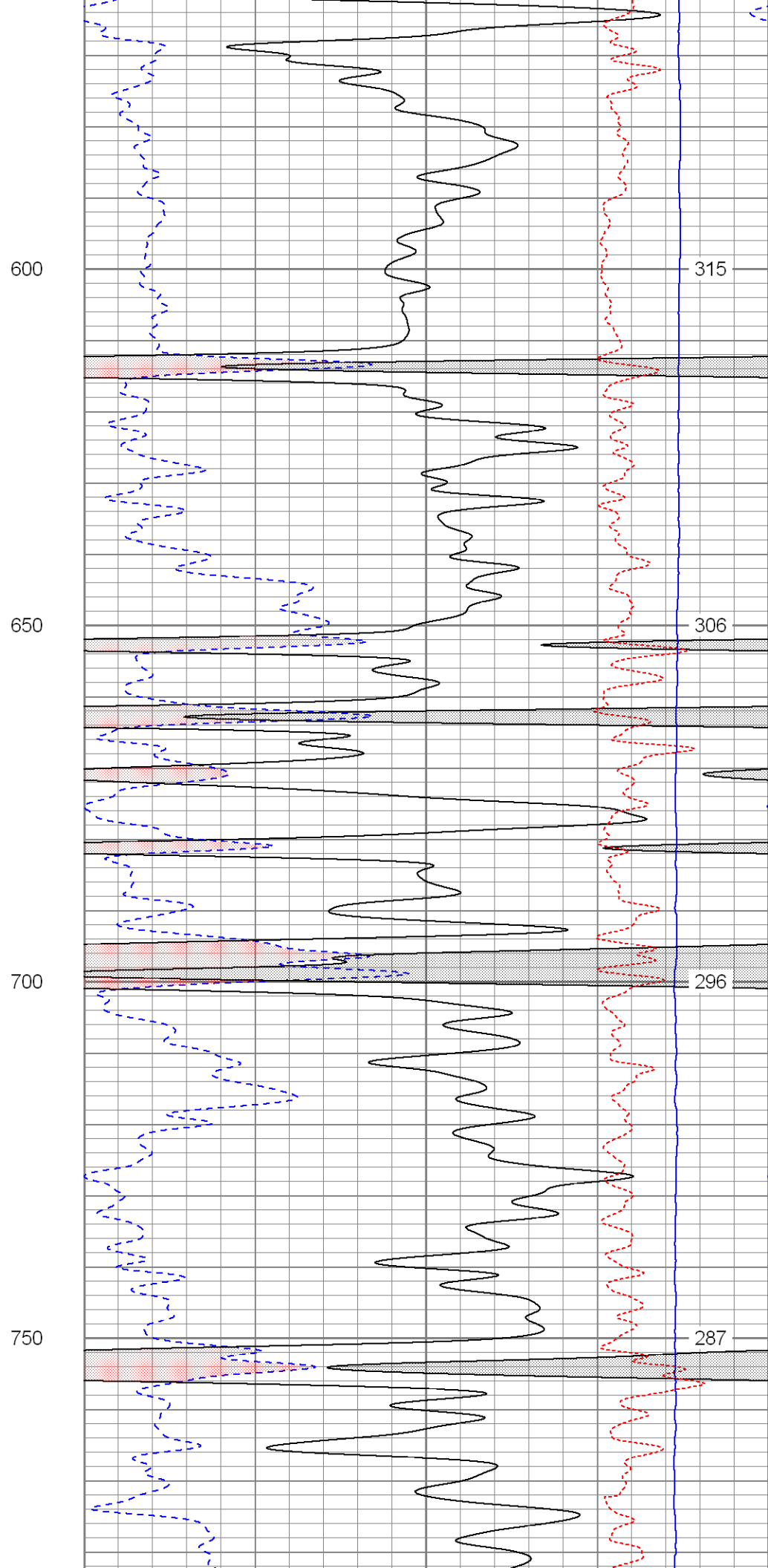
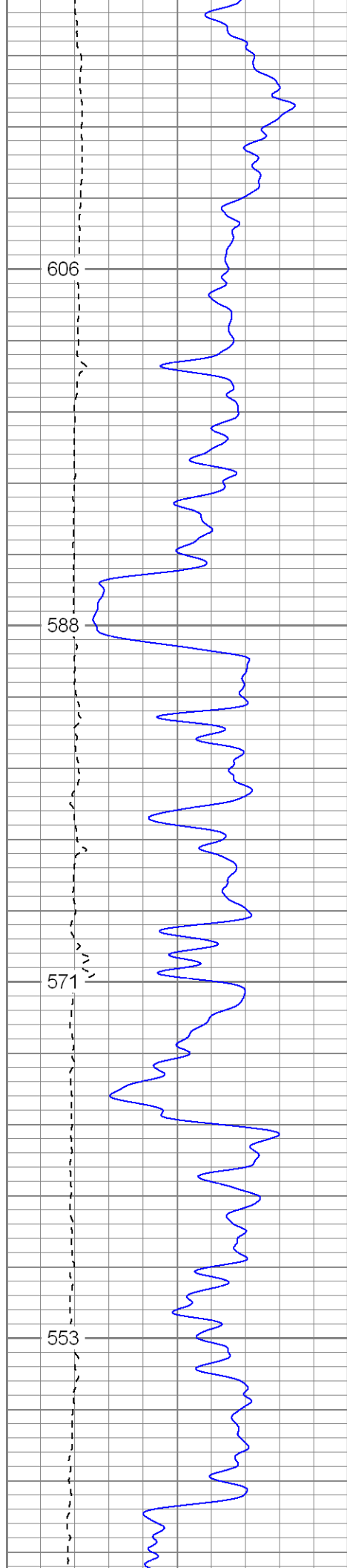
Black Lick, Pa.
Mercer, Pa.
Wooster, Oh.
Cleveland, Ok.
Trinidad, Co.

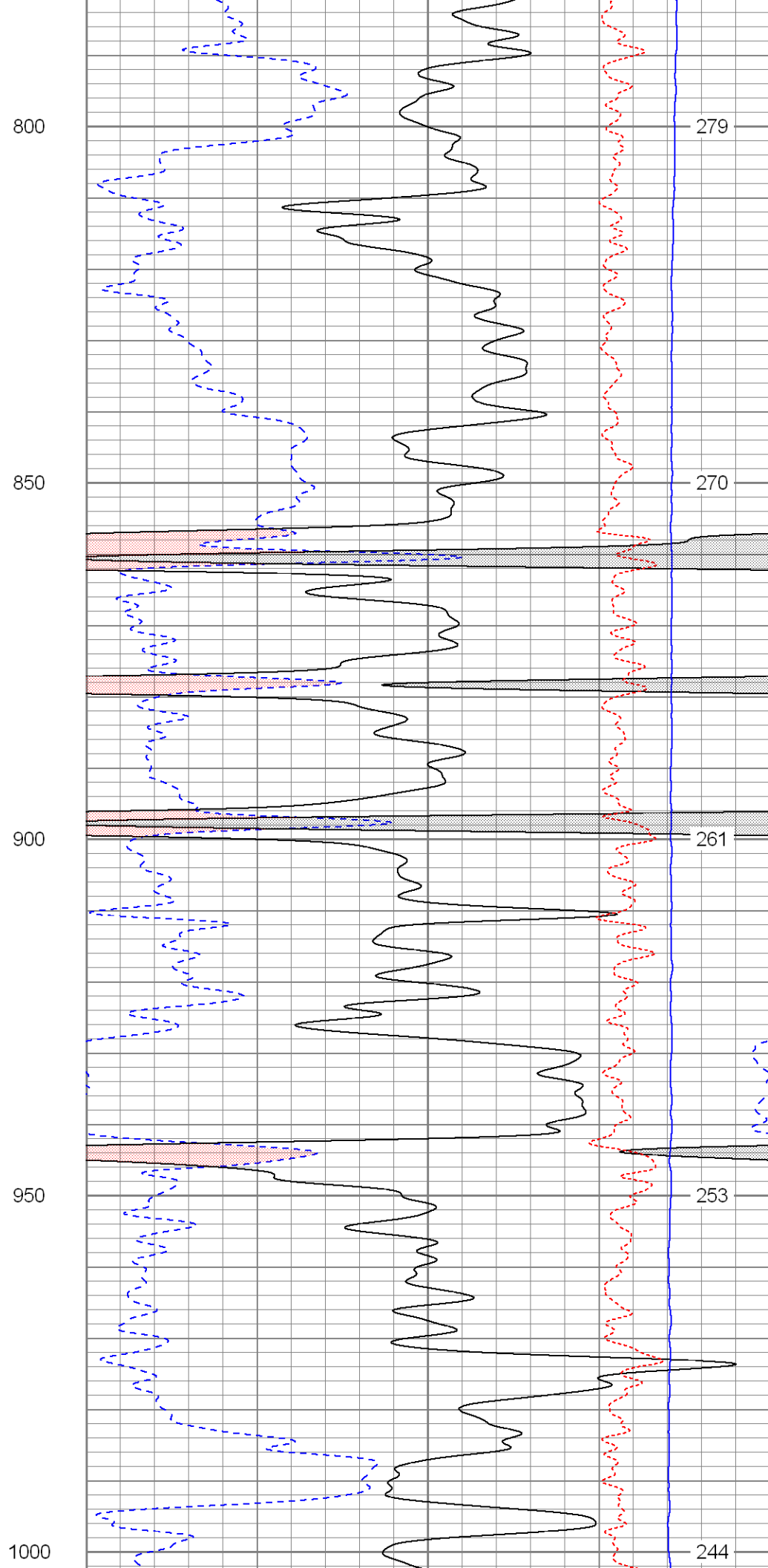
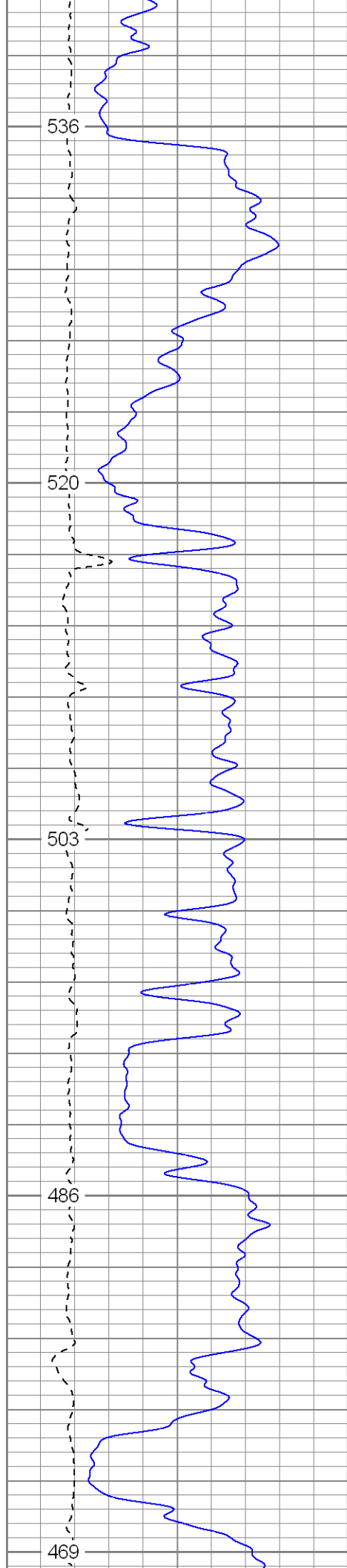
Main Pass

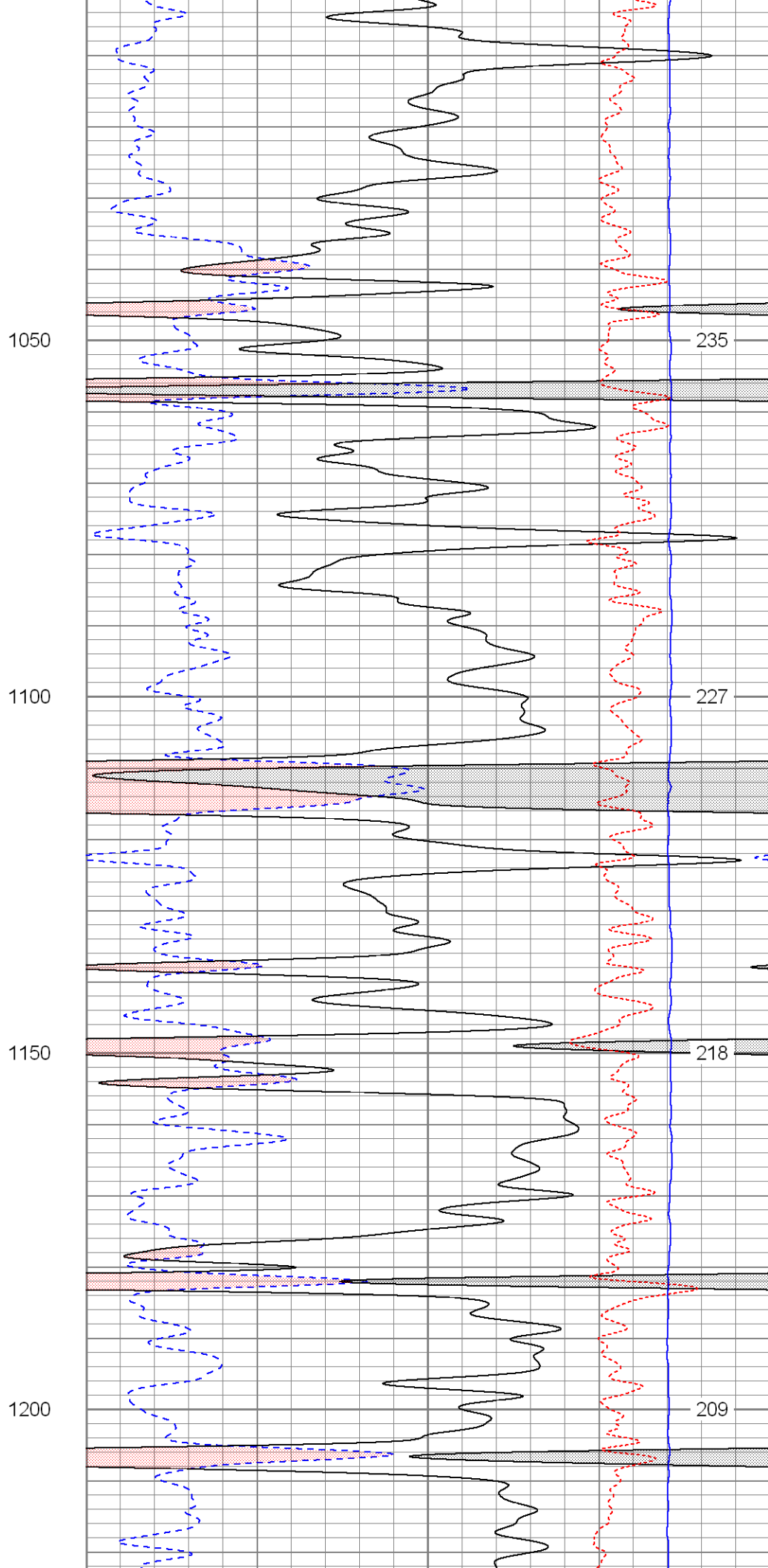
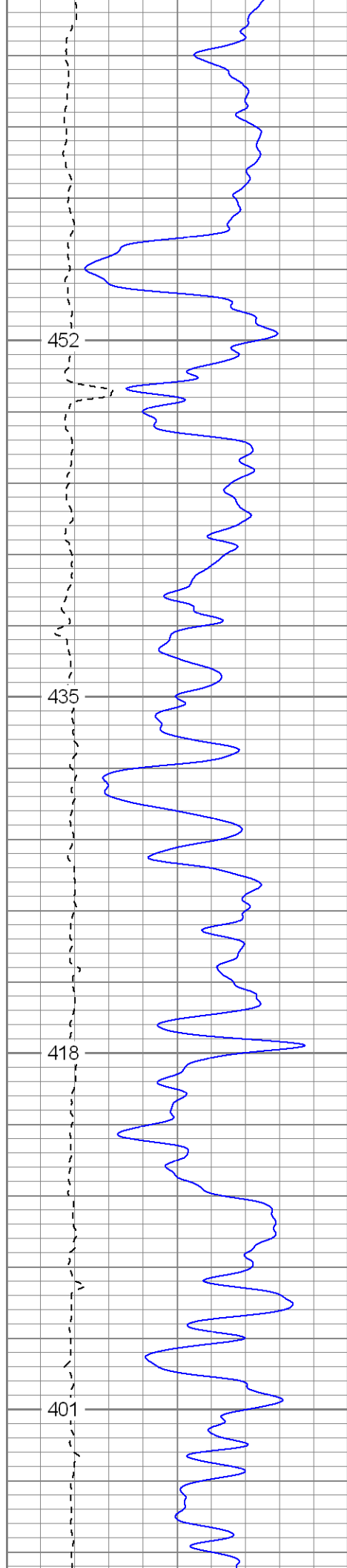
Database File: xtohr3611.db
Dataset Pathname: pass2.1
Presentation Format: cdnl
Dataset Creation: Sun May 04 12:55:11 2008 by Calc Open-Cased 070814
Charted by: Depth in Feet scaled 1:240

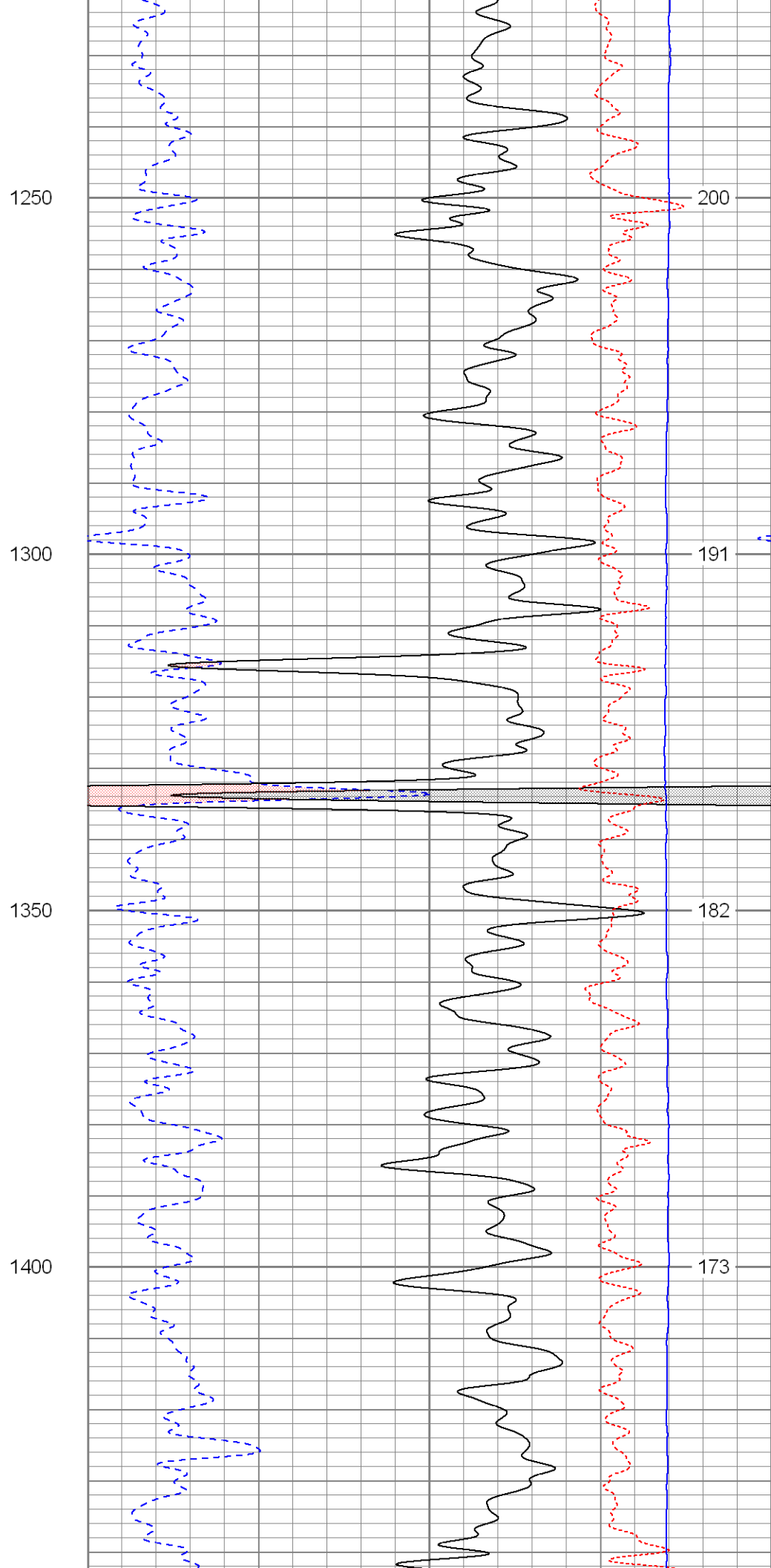
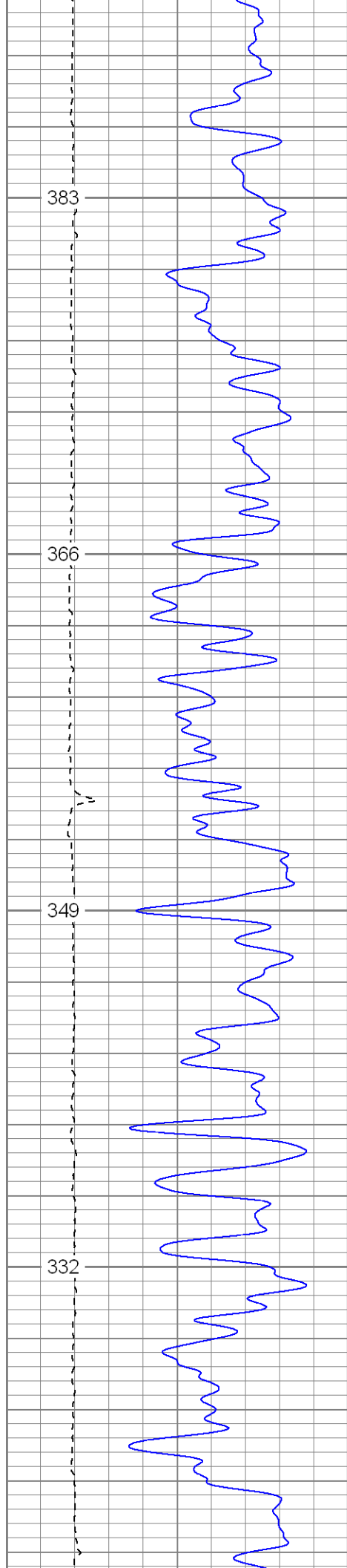
0	GR (GAPI)	200	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
TBHV (ft3)				-0.5	RHOC (g/cc) 0.5
				4000	LTEN (lb) 0
					ABHV (ft3)

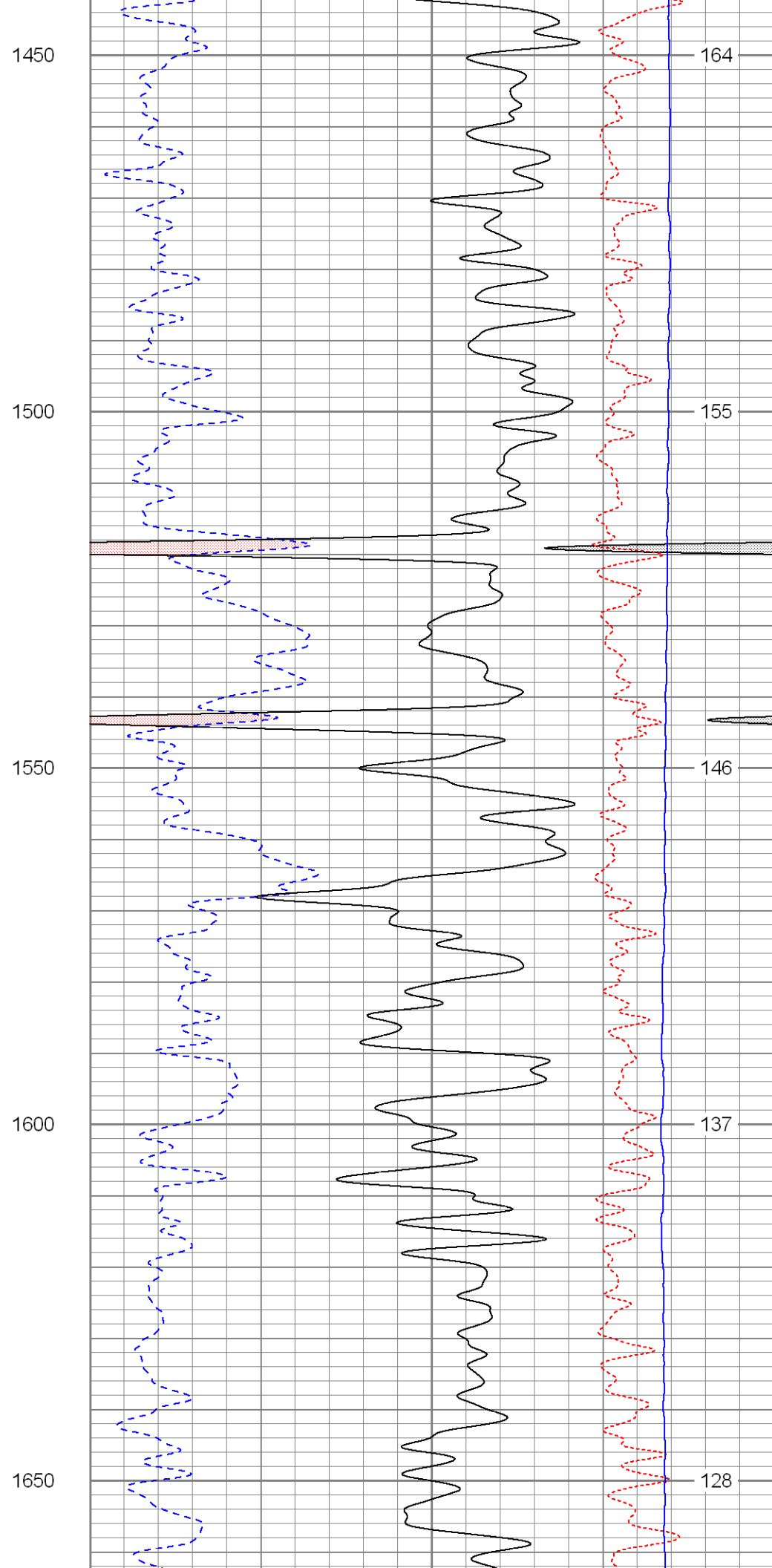
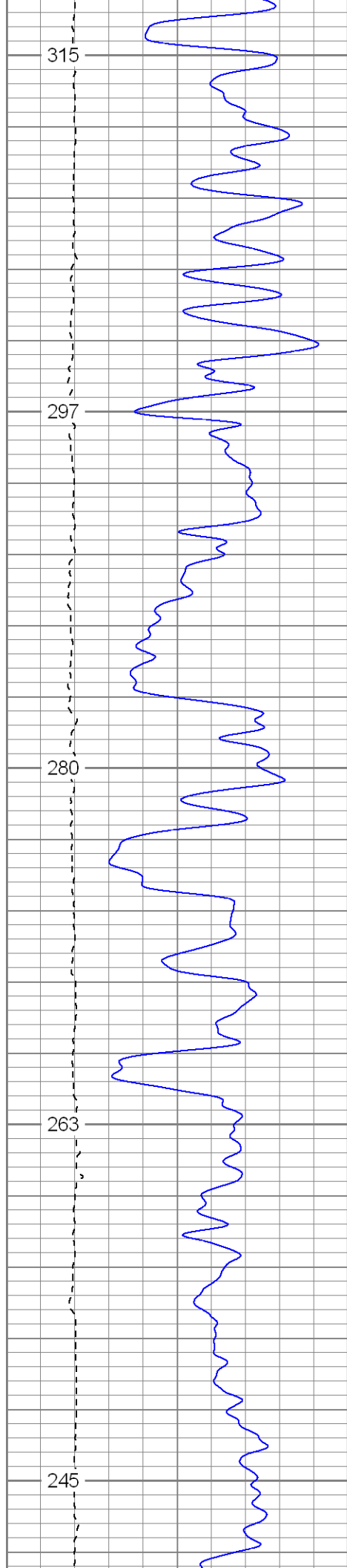


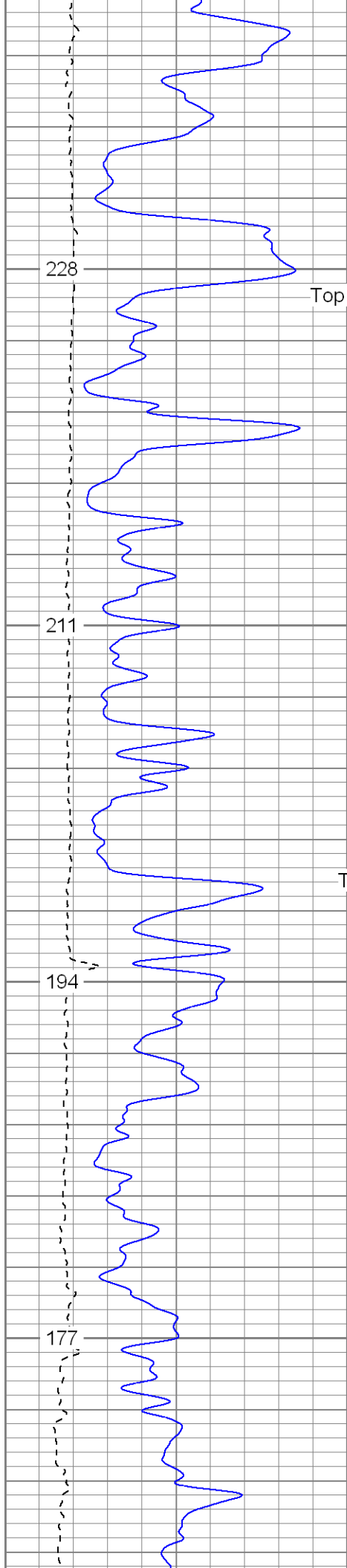












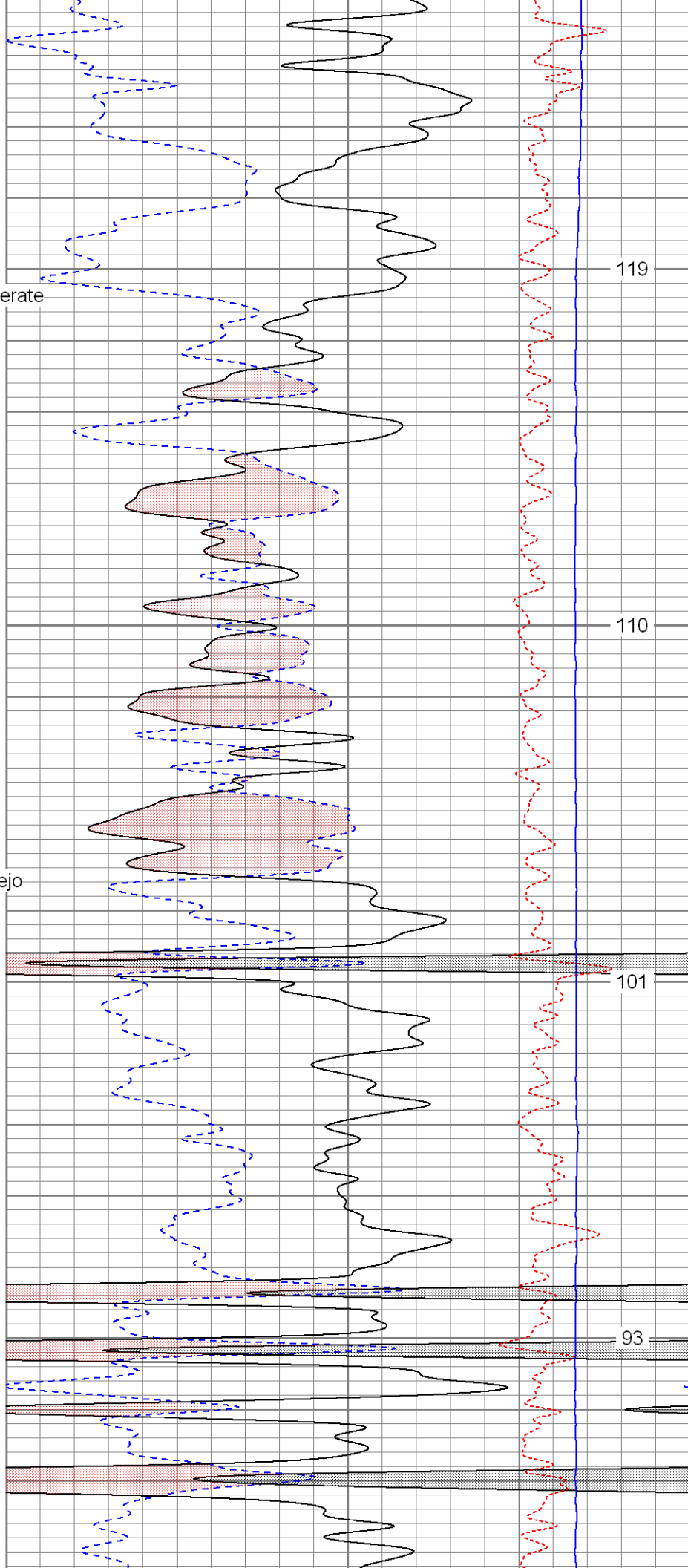
1700
Top Of Conglomerate

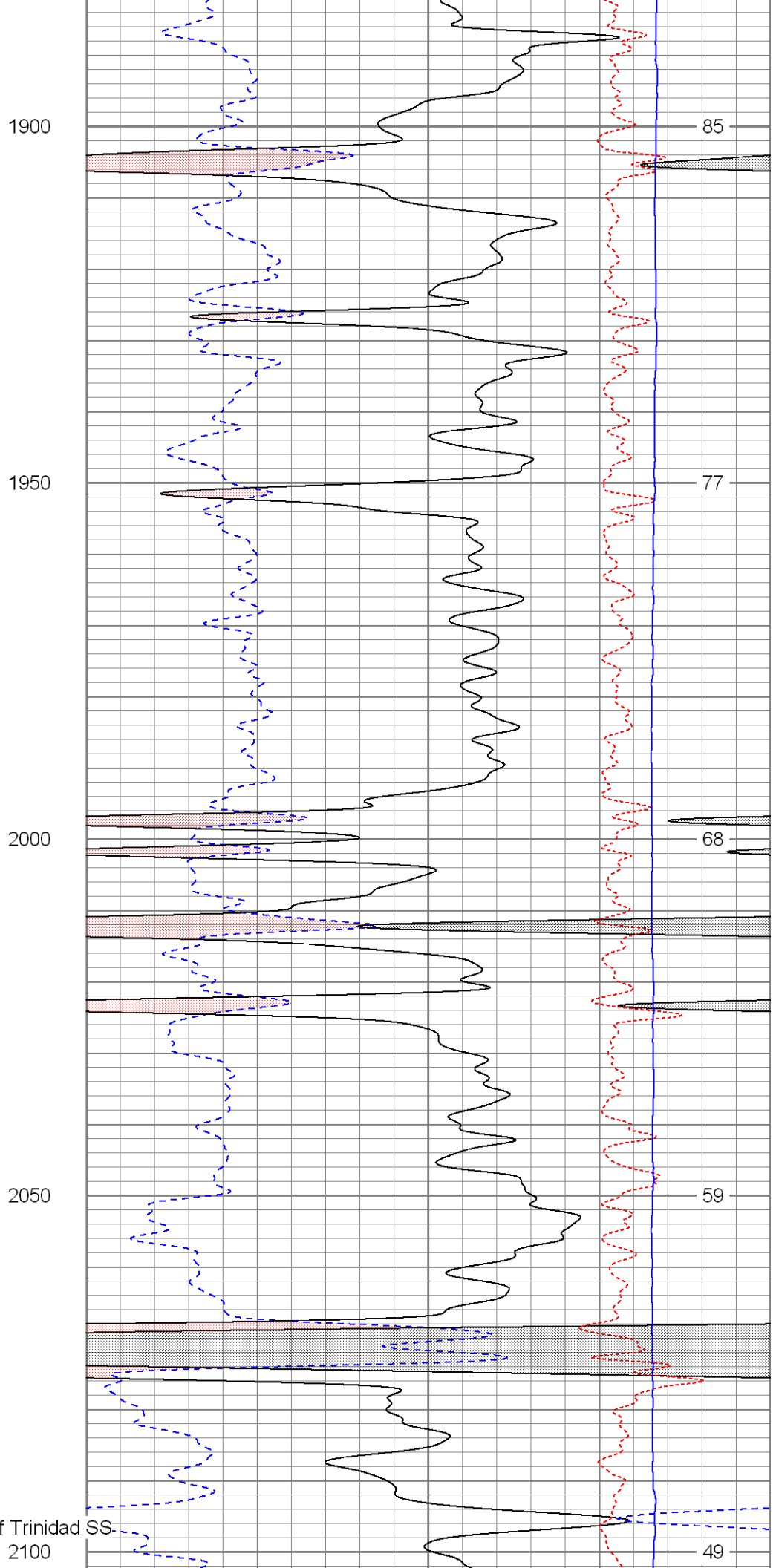
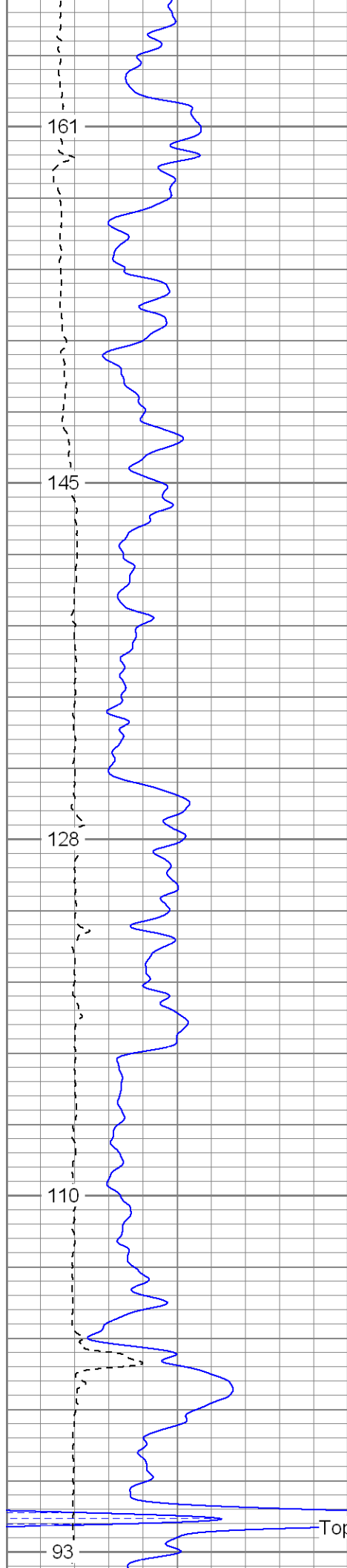
1750

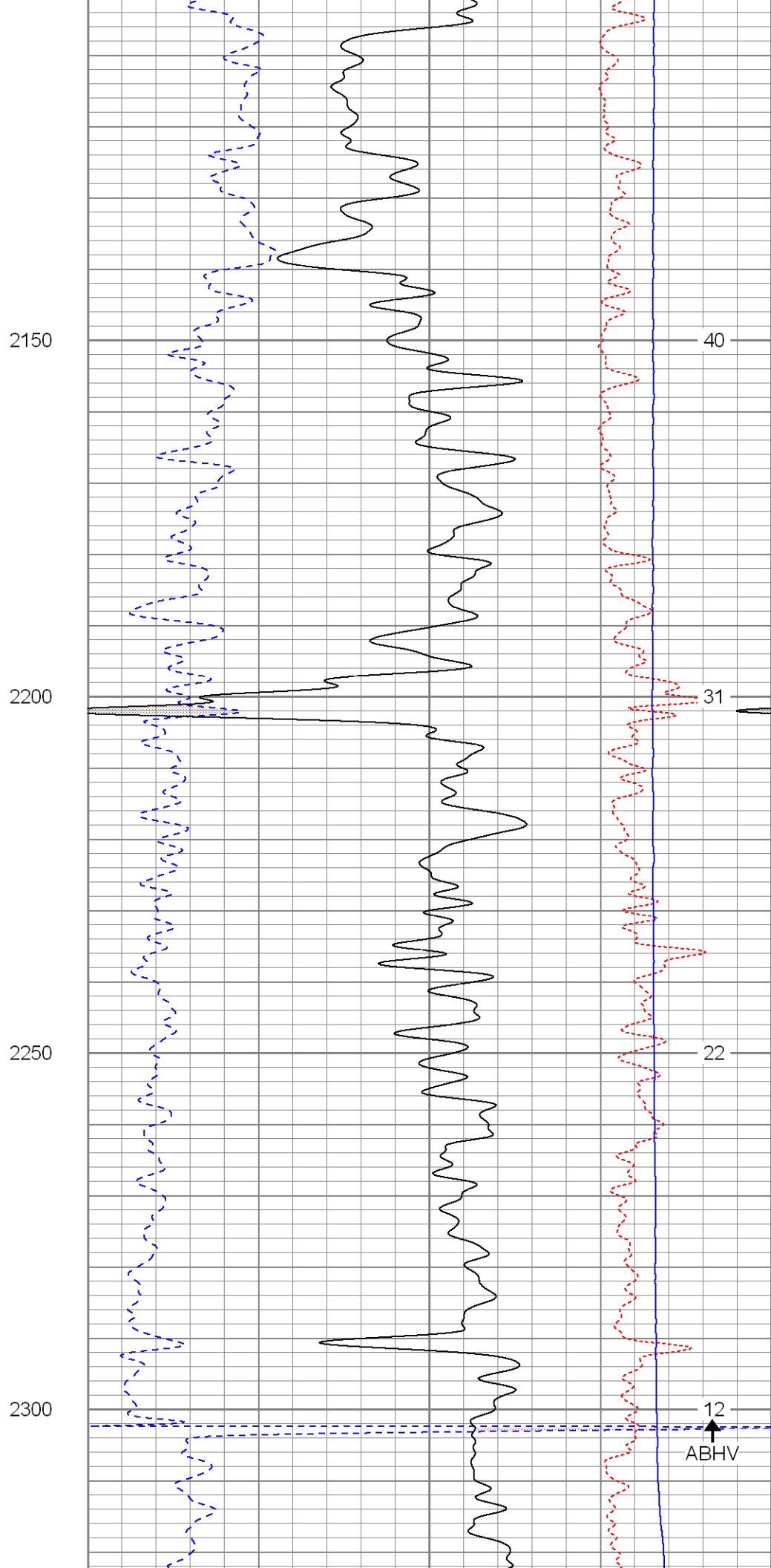
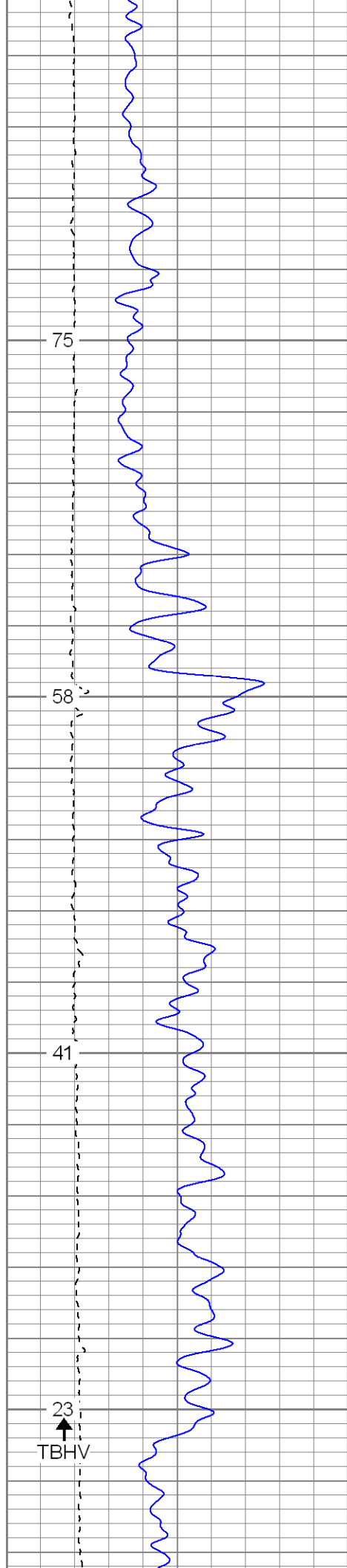
Top Of Vermejo

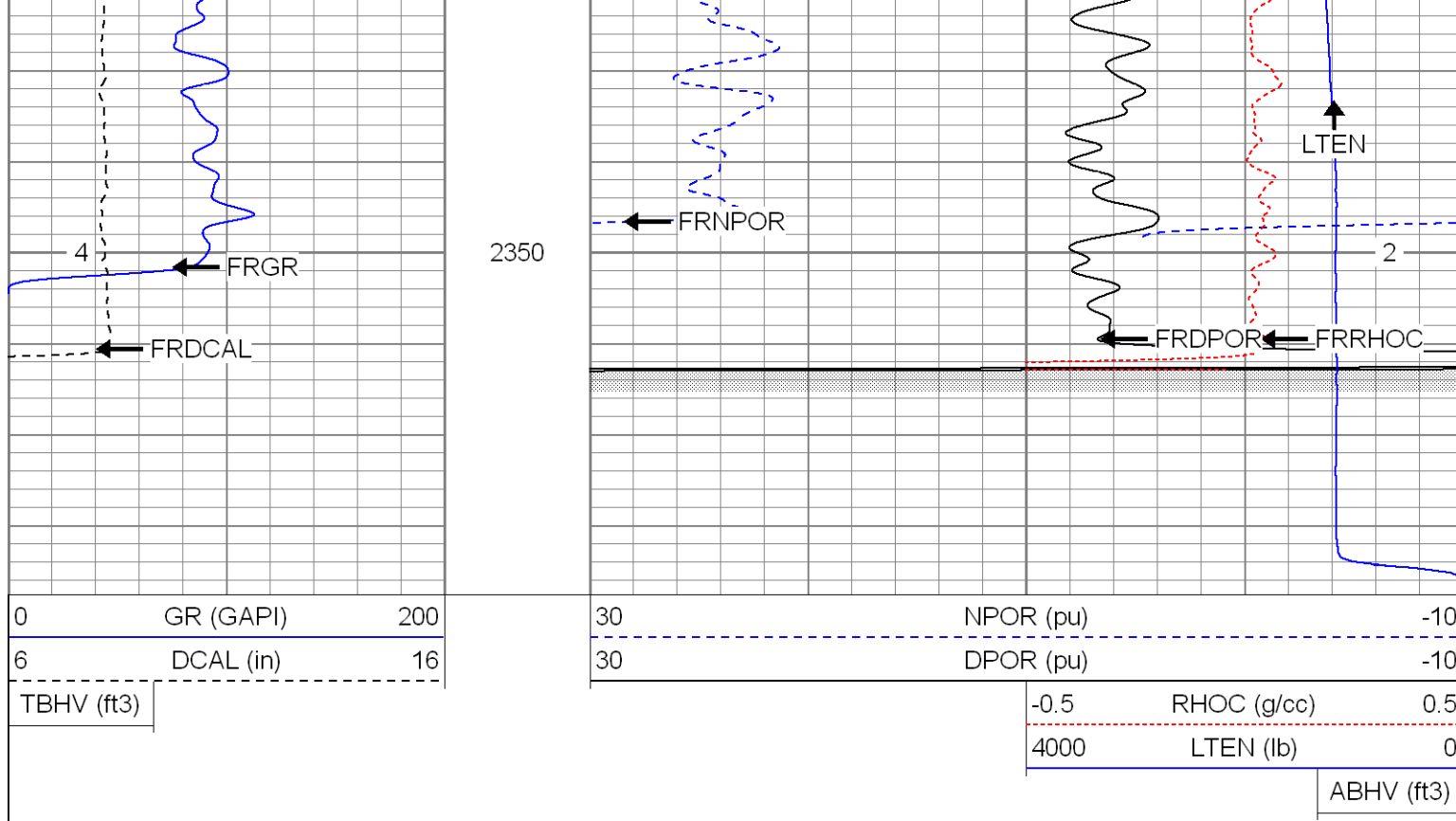
1800

1850









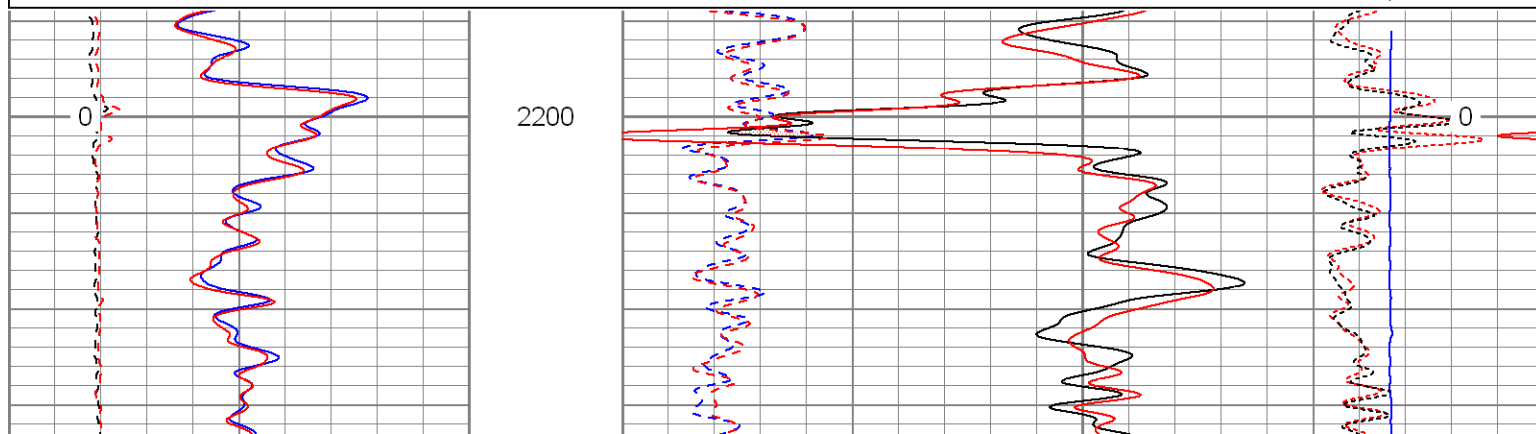
SUPERIOR

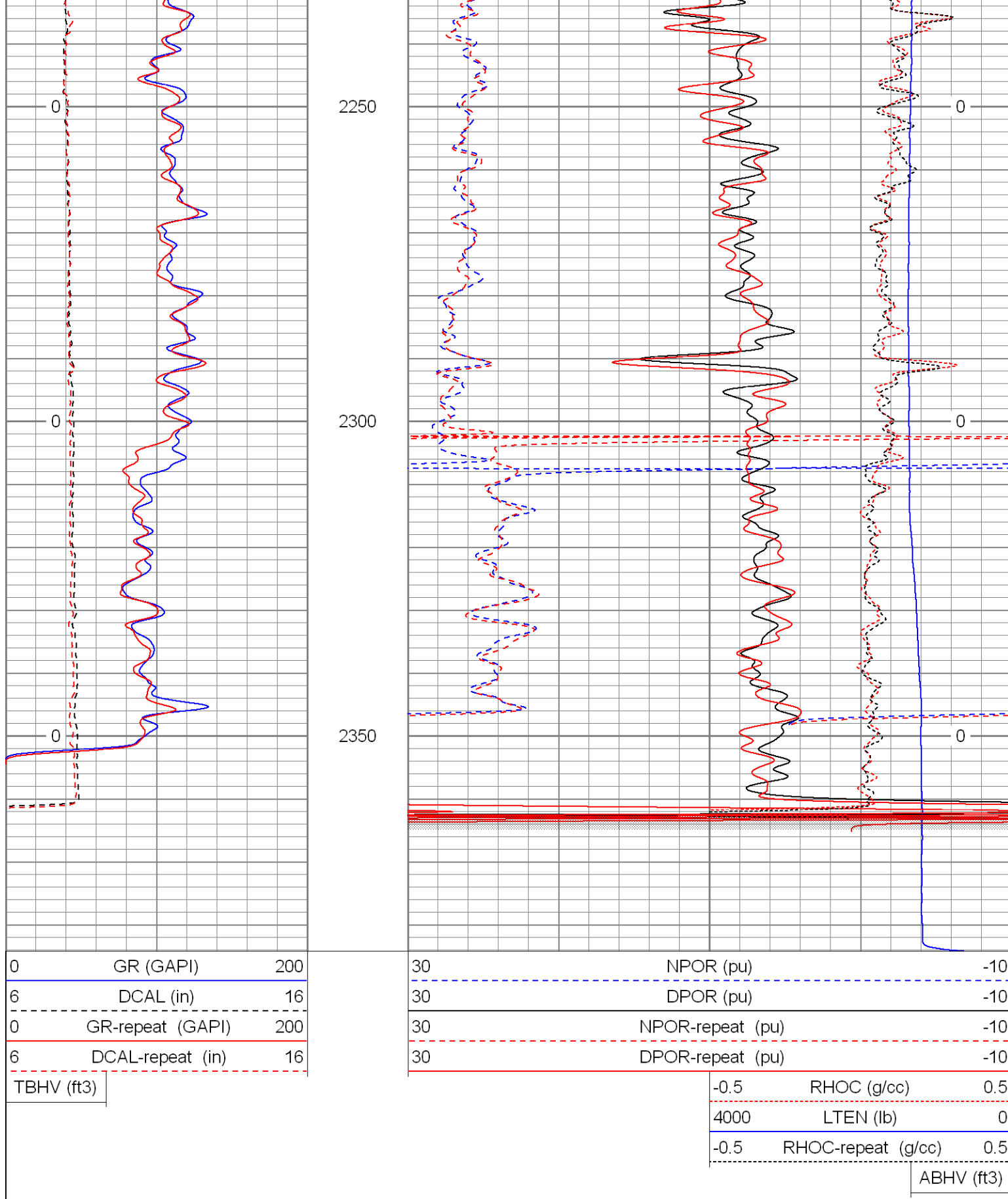
Black Lick, Pa.
Mercer, Pa.
Wooster, Oh.
Cleveland, Ok.
Trinidad, Co.

Repeat Pass

Database File: xtohr3611.db
Dataset Pathname: pass1.1
Presentation Format: cdnl
Dataset Creation: Sun May 04 11:52:25 2008 by Calc Open-Cased 070814
Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	200	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
0	GR-repeat (GAPI)	200	30	NPOR-repeat (pu)	-10
6	DCAL-repeat (in)	16	30	DPOR-repeat (pu)	-10
TBHV (ft3)			-0.5	RHOC (g/cc)	0.5
			4000	LTEN (lb)	0
			-0.5	RHOC-repeat (g/cc)	0.5
			ABHV (ft3)		





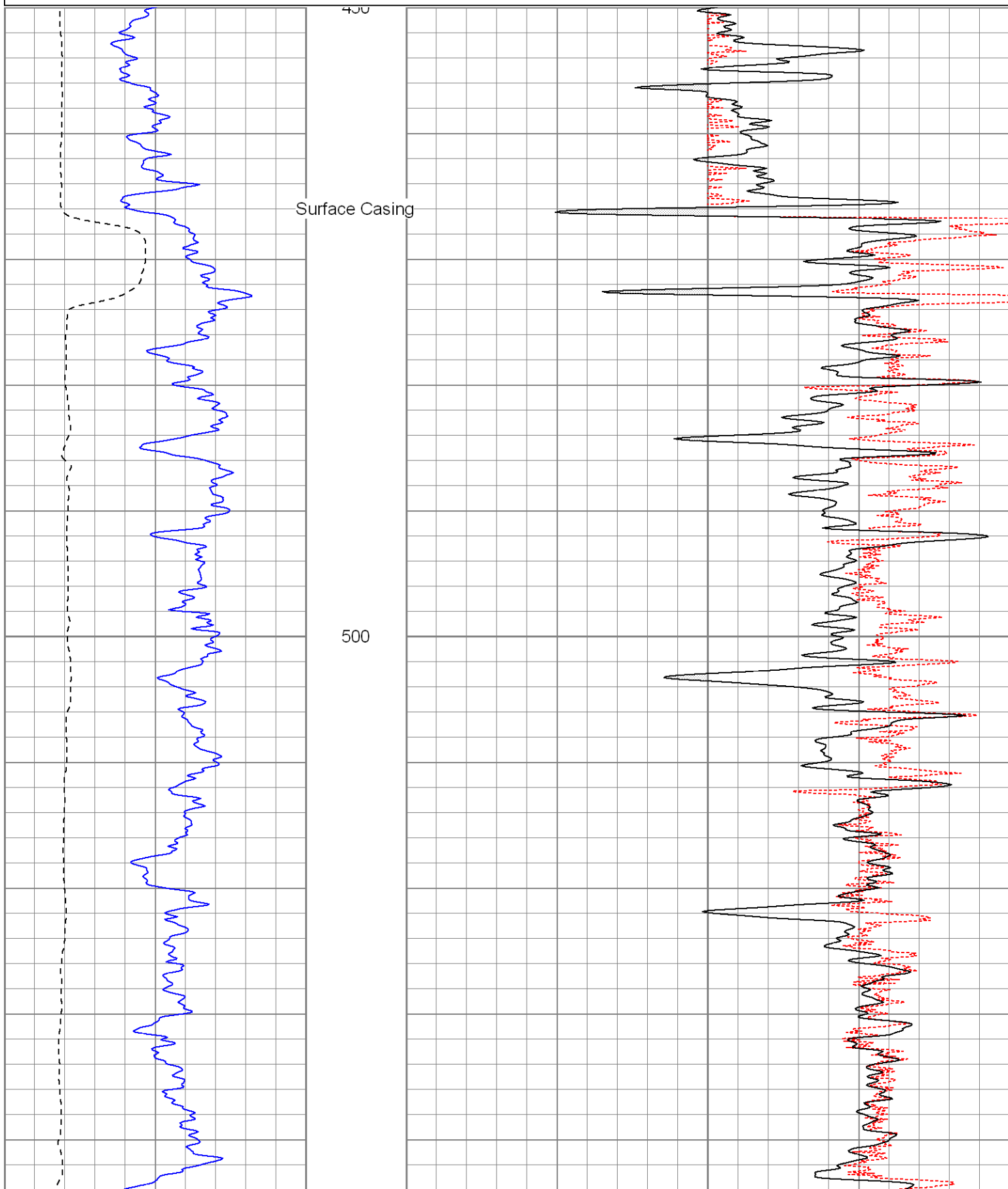
SUPERIOR
Black Lick, Pa.
Mercer, Pa.
Wooster, Oh.
Cleveland, Ok.
Trinidad, Co.

High Resolution Pass

Dataset Pathname: pass2.2
Presentation Format: cdlhr
Dataset Creation: Mon May 05 08:00:39 2008 by Calc Open-Cased 070814
Charted by: Depth in Feet scaled 1:120

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

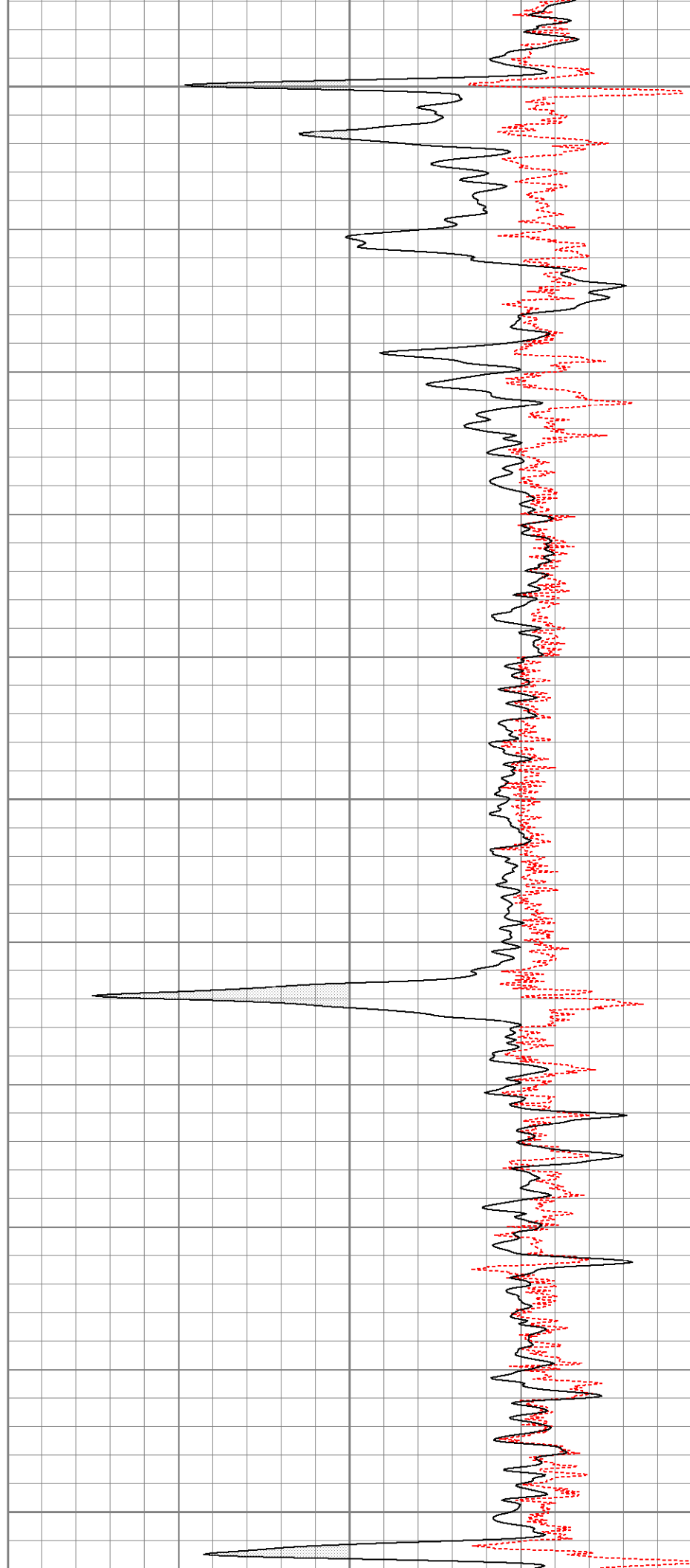
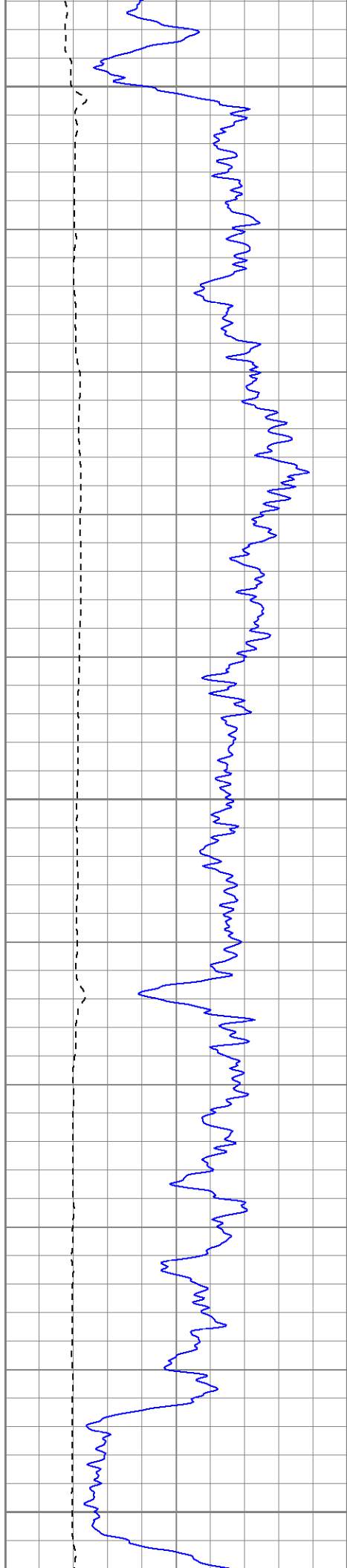
1	RHOB (g/cc)	3
-0.5	RHOC (g/cc)	0.5

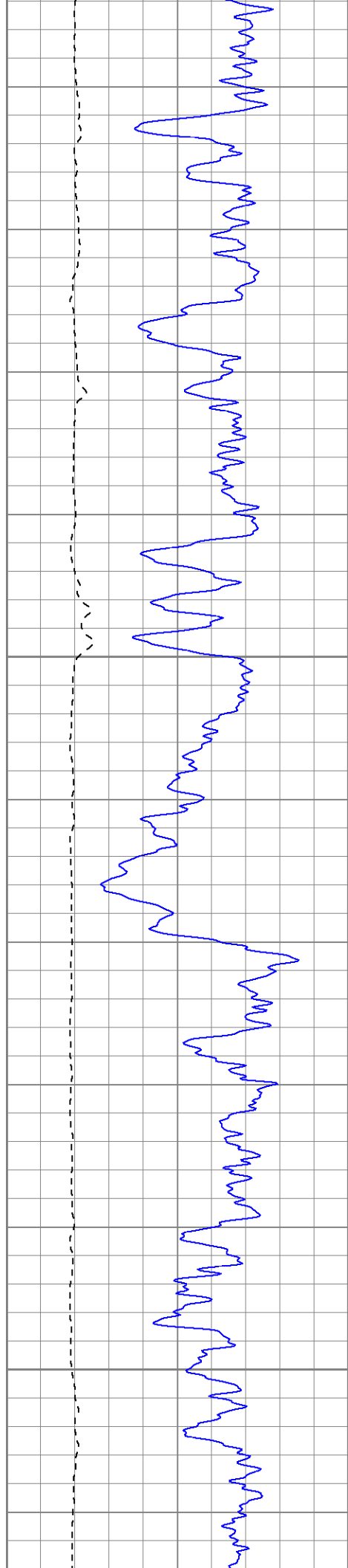


550

600

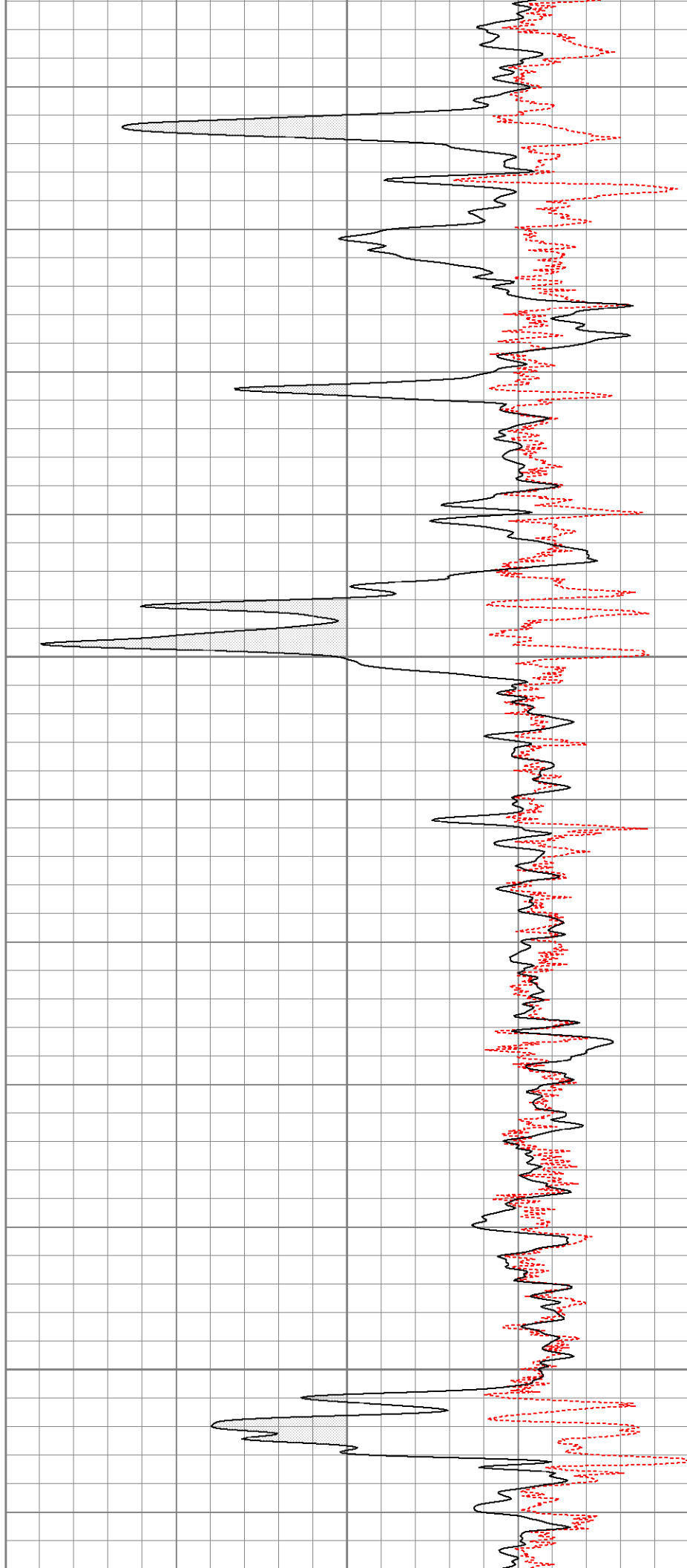
650

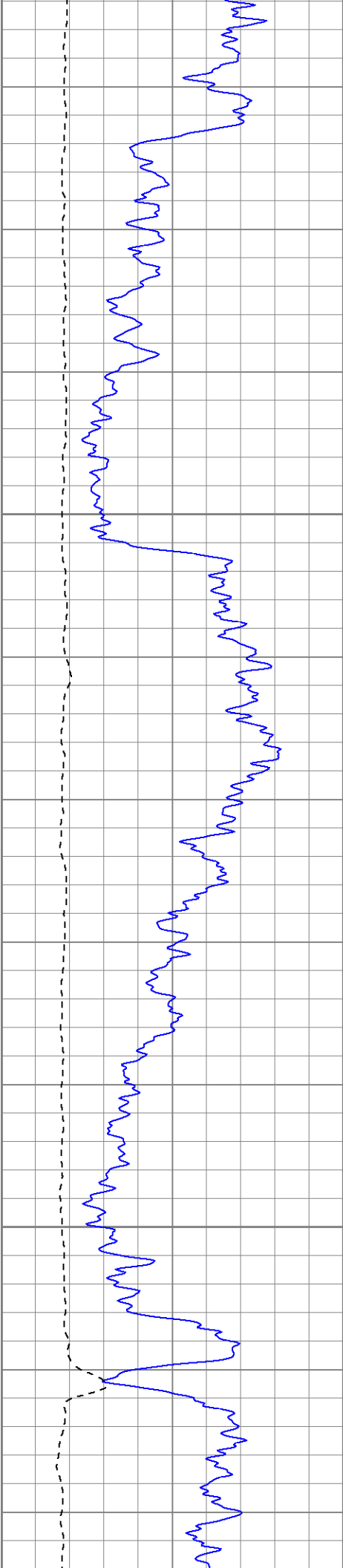




700

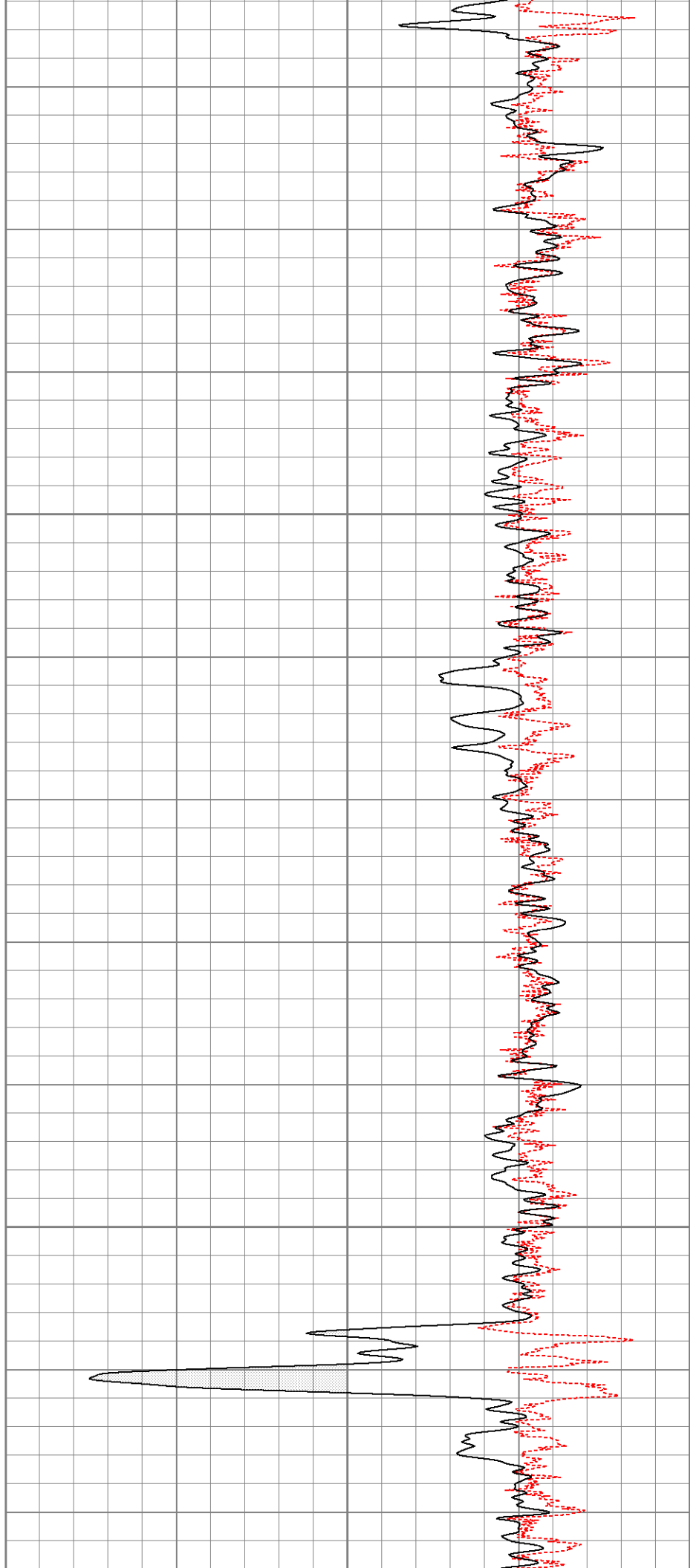
750





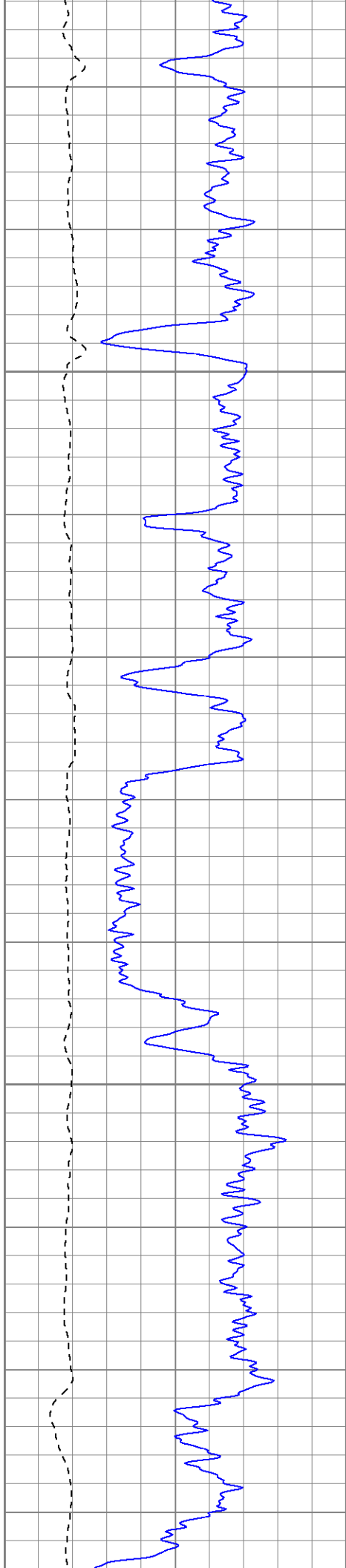
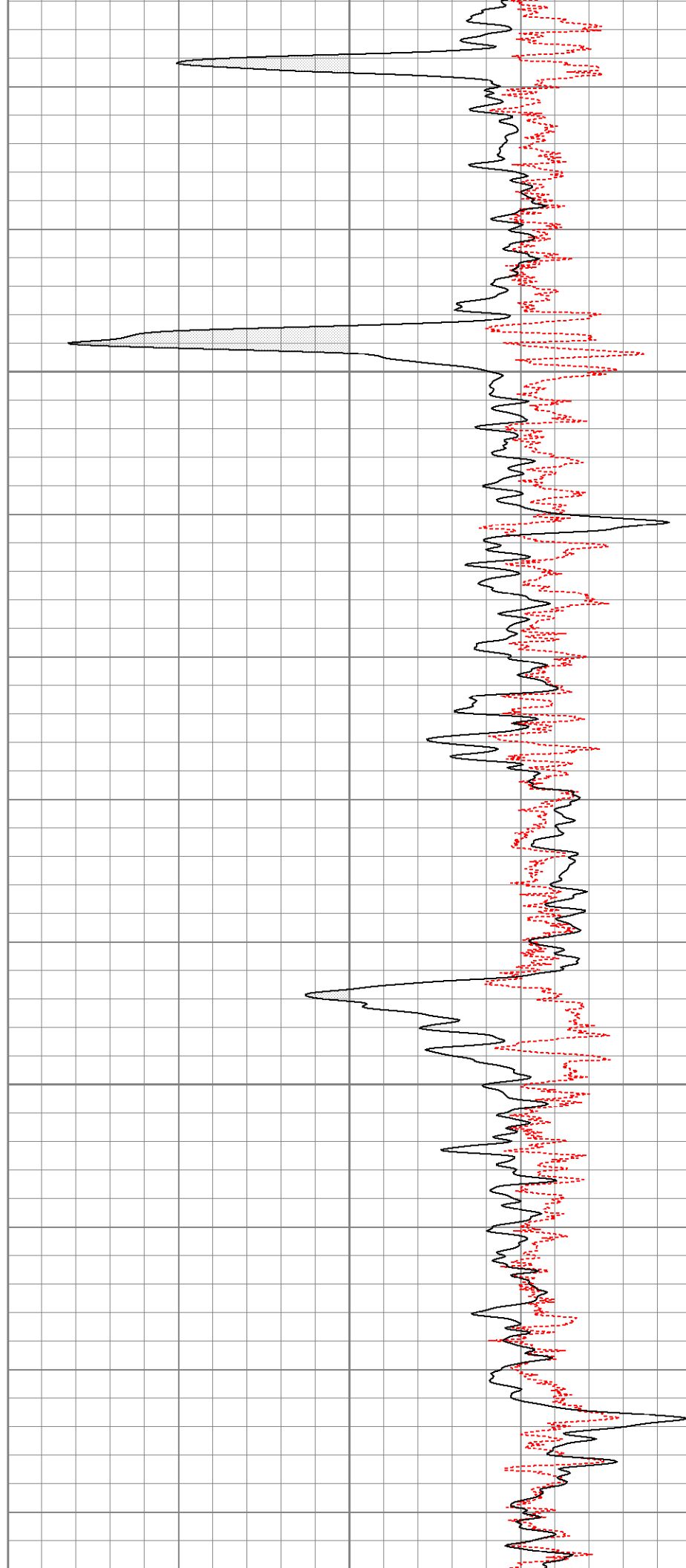
800

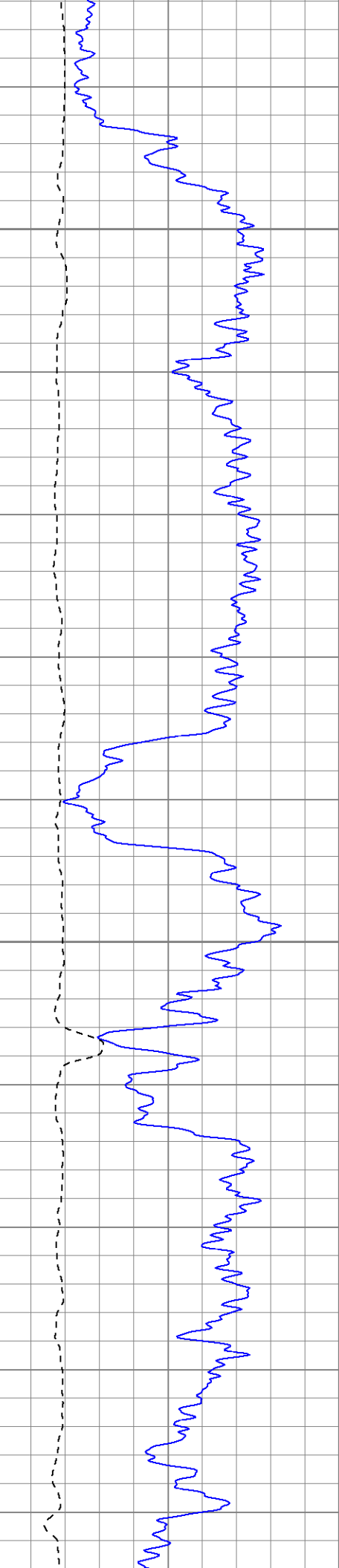
850



900

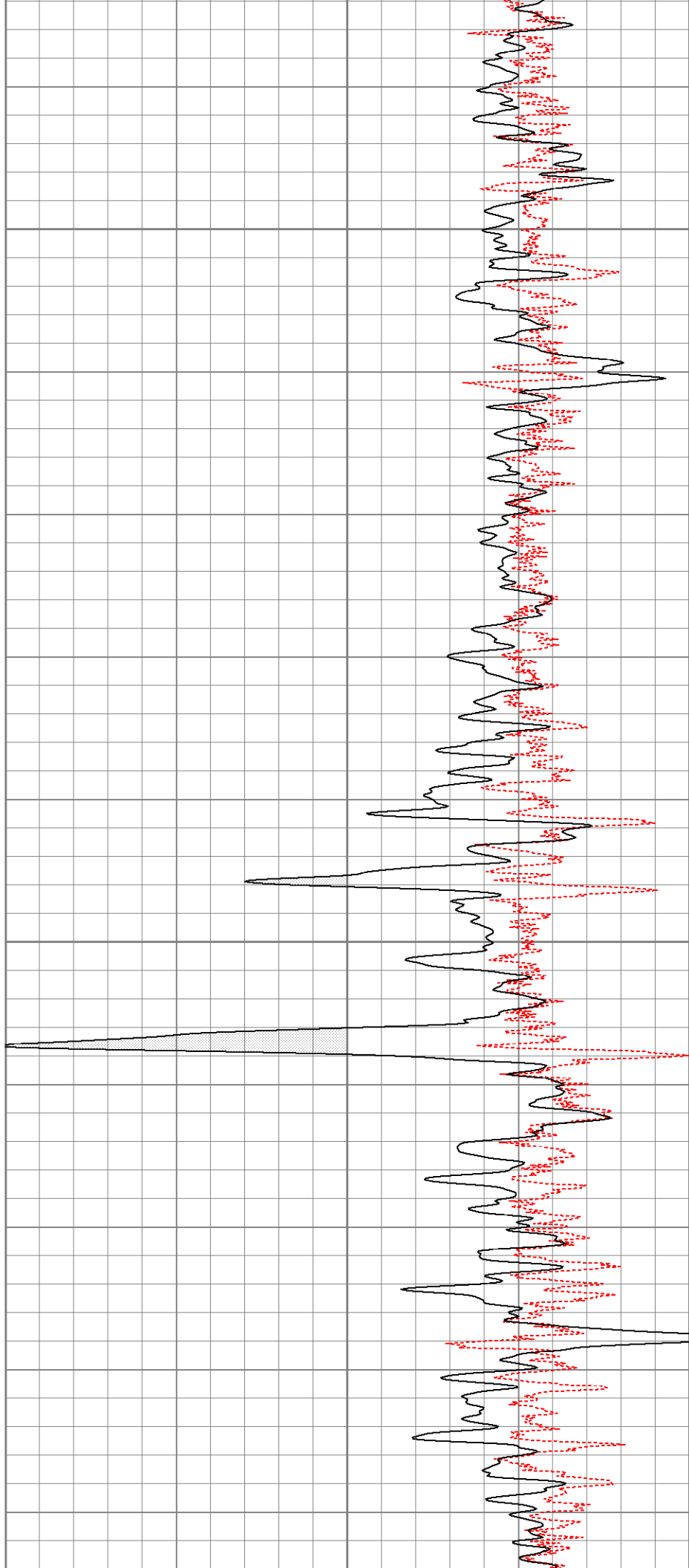
950

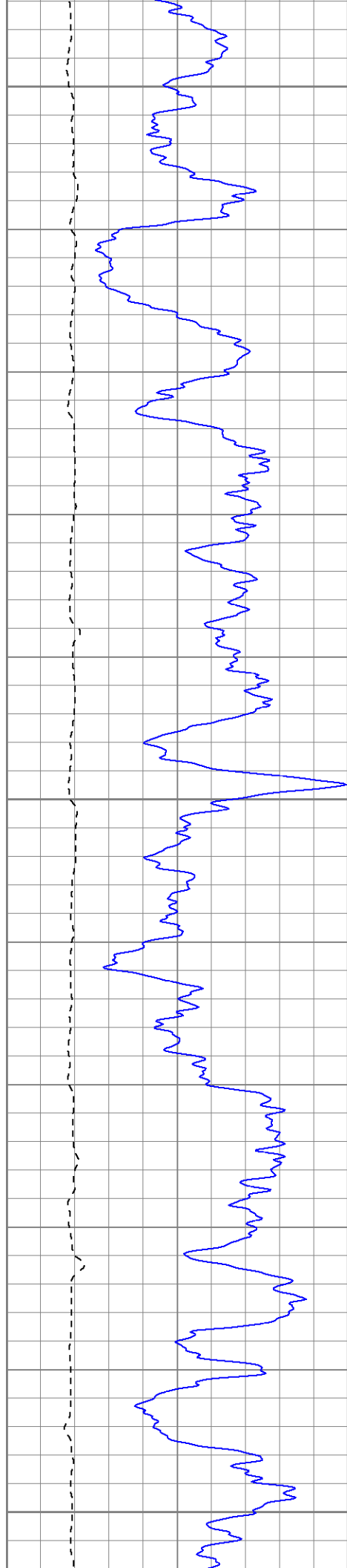




1000

1050

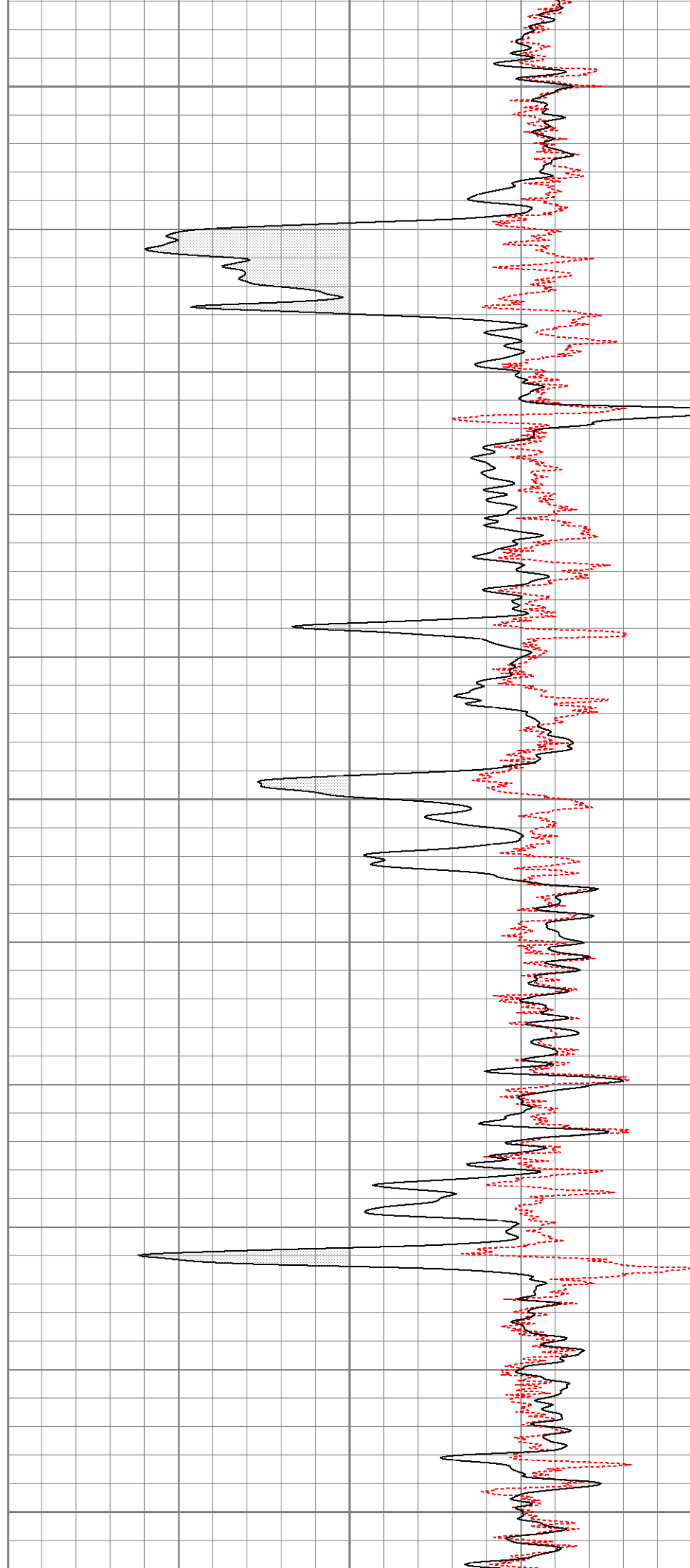


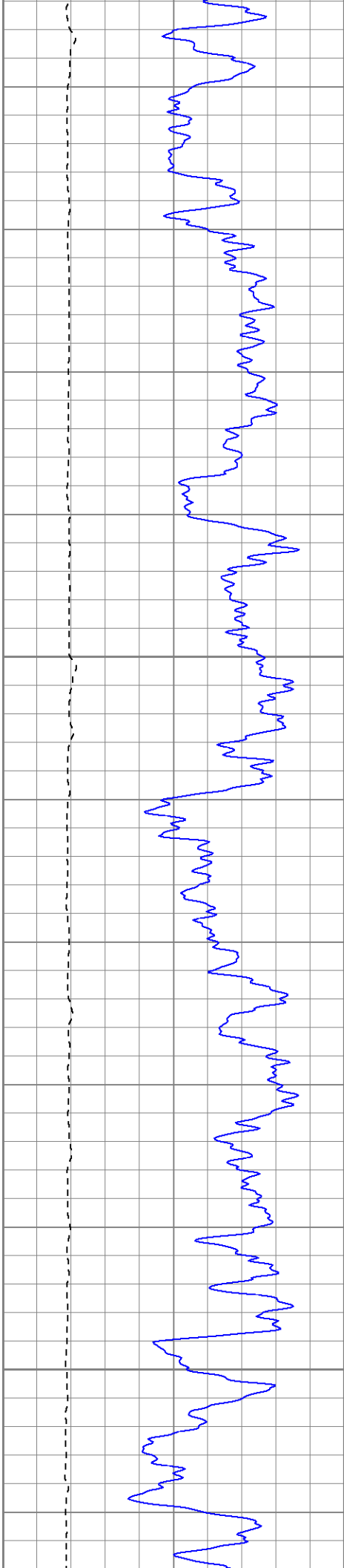


1100

1150

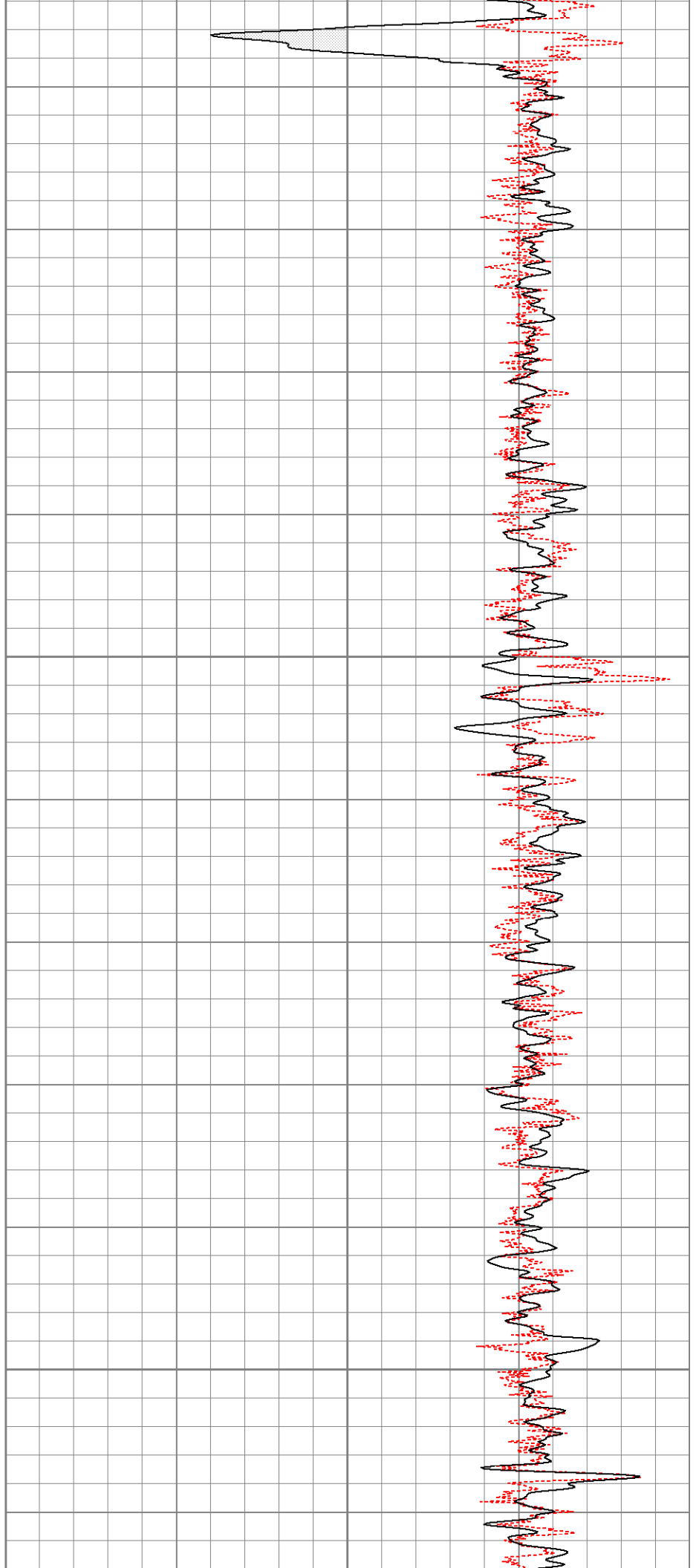
1200

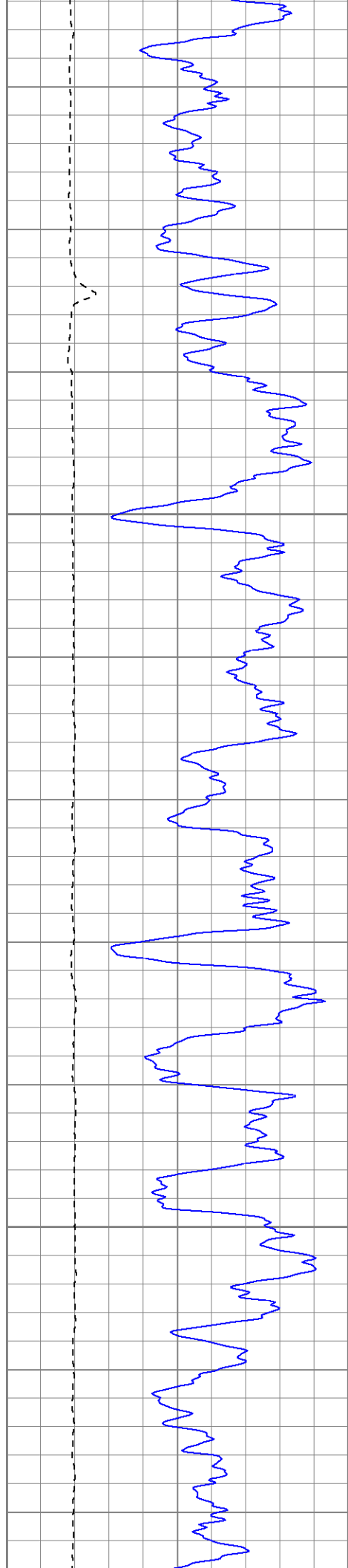




1250

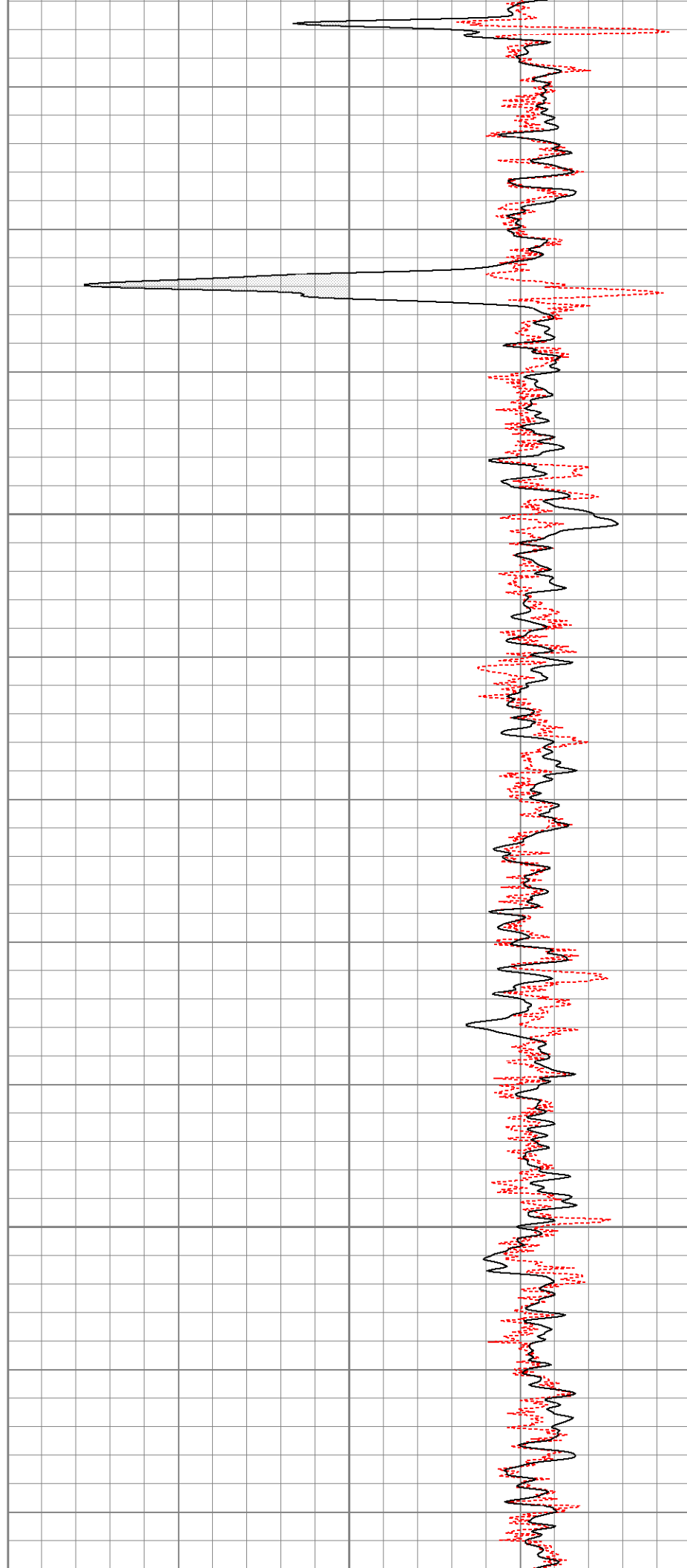
1300

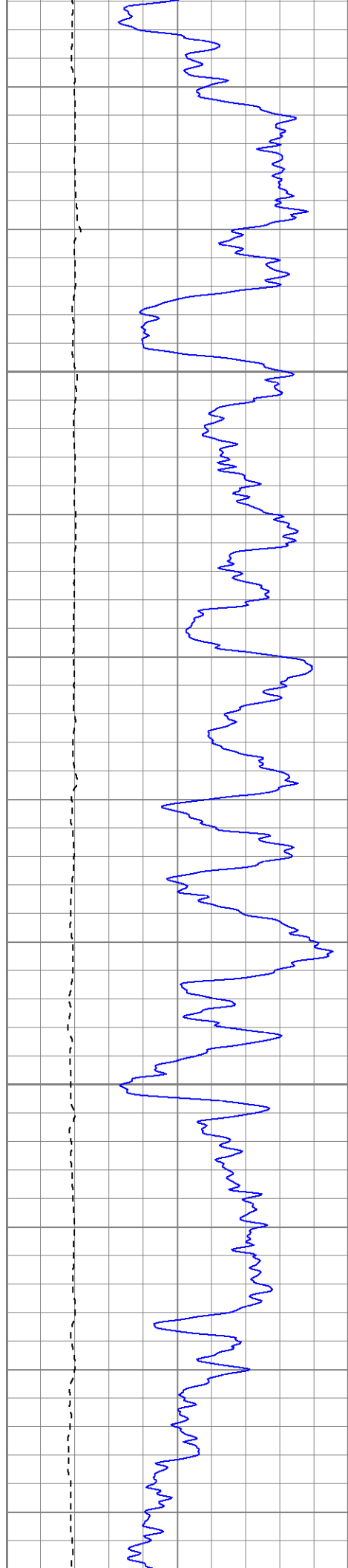




1350

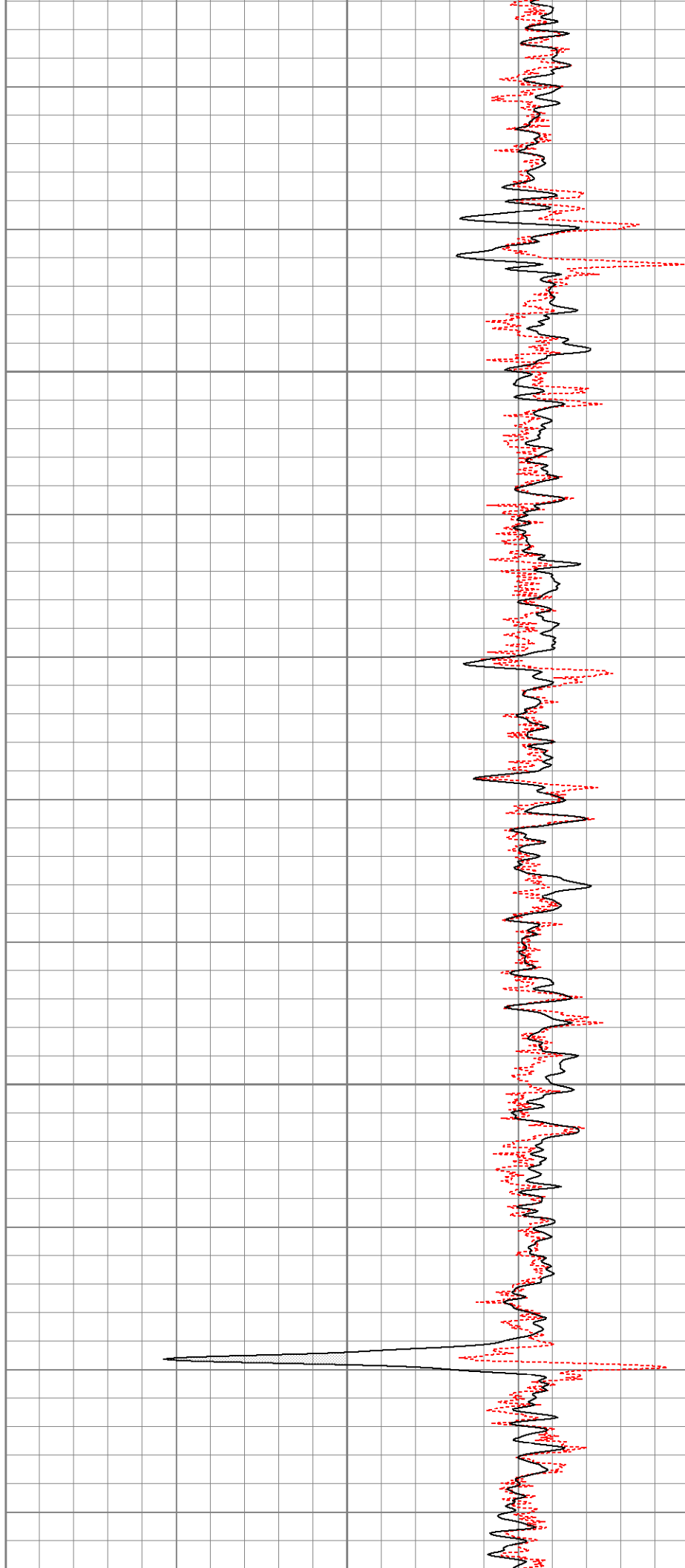
1400

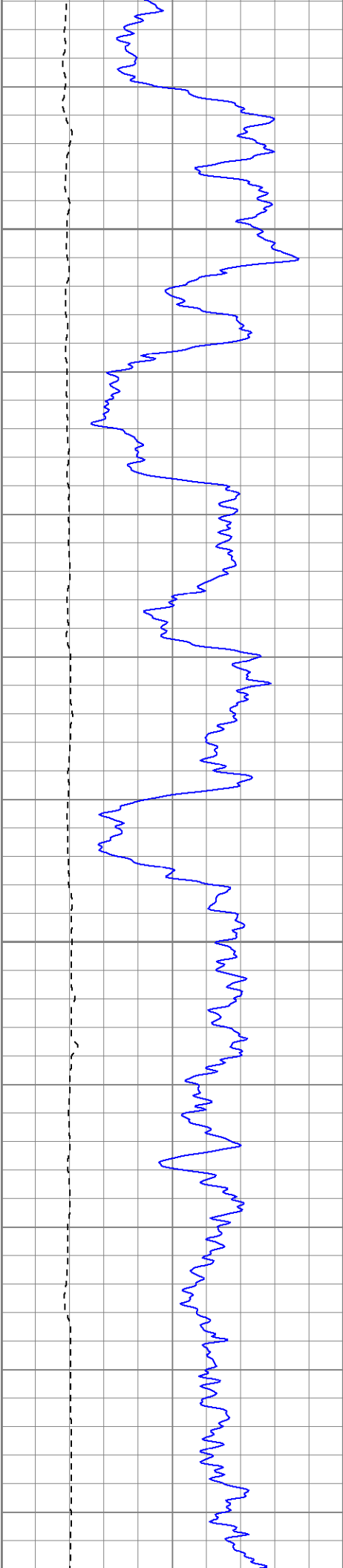




1450

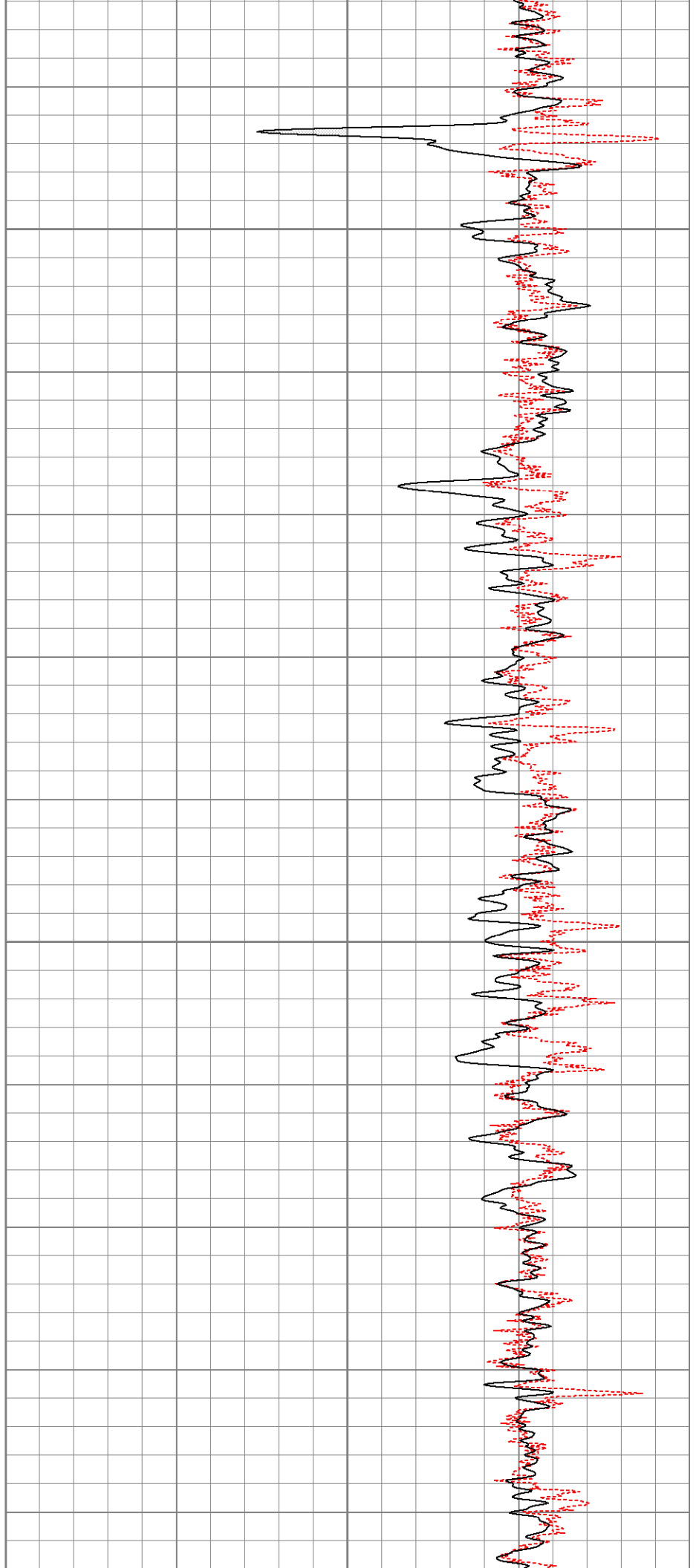
1500

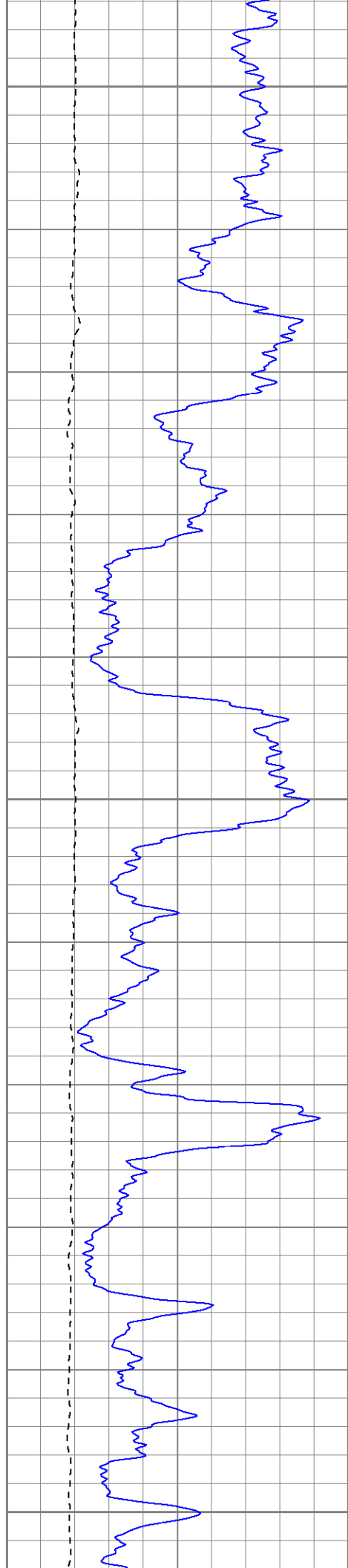




1550

1600

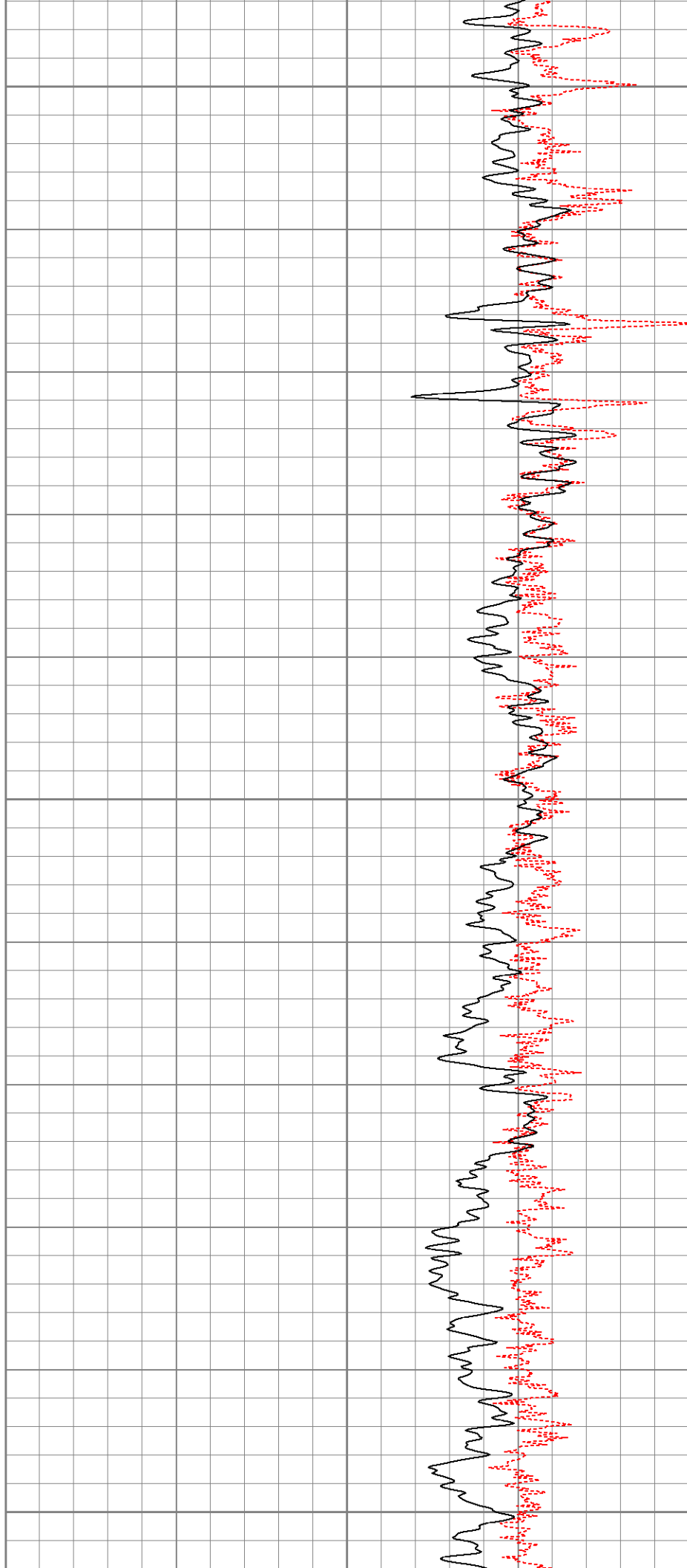


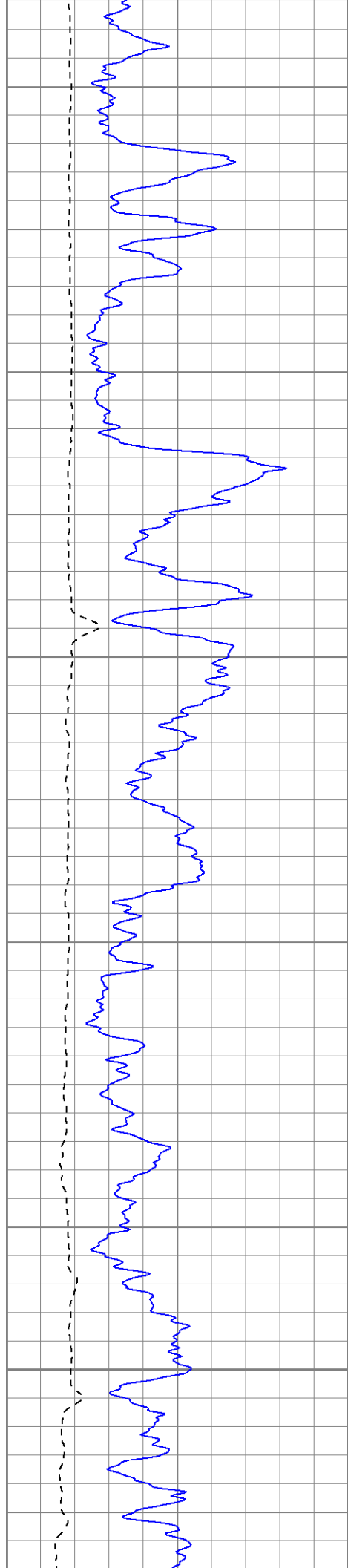


1650

1700

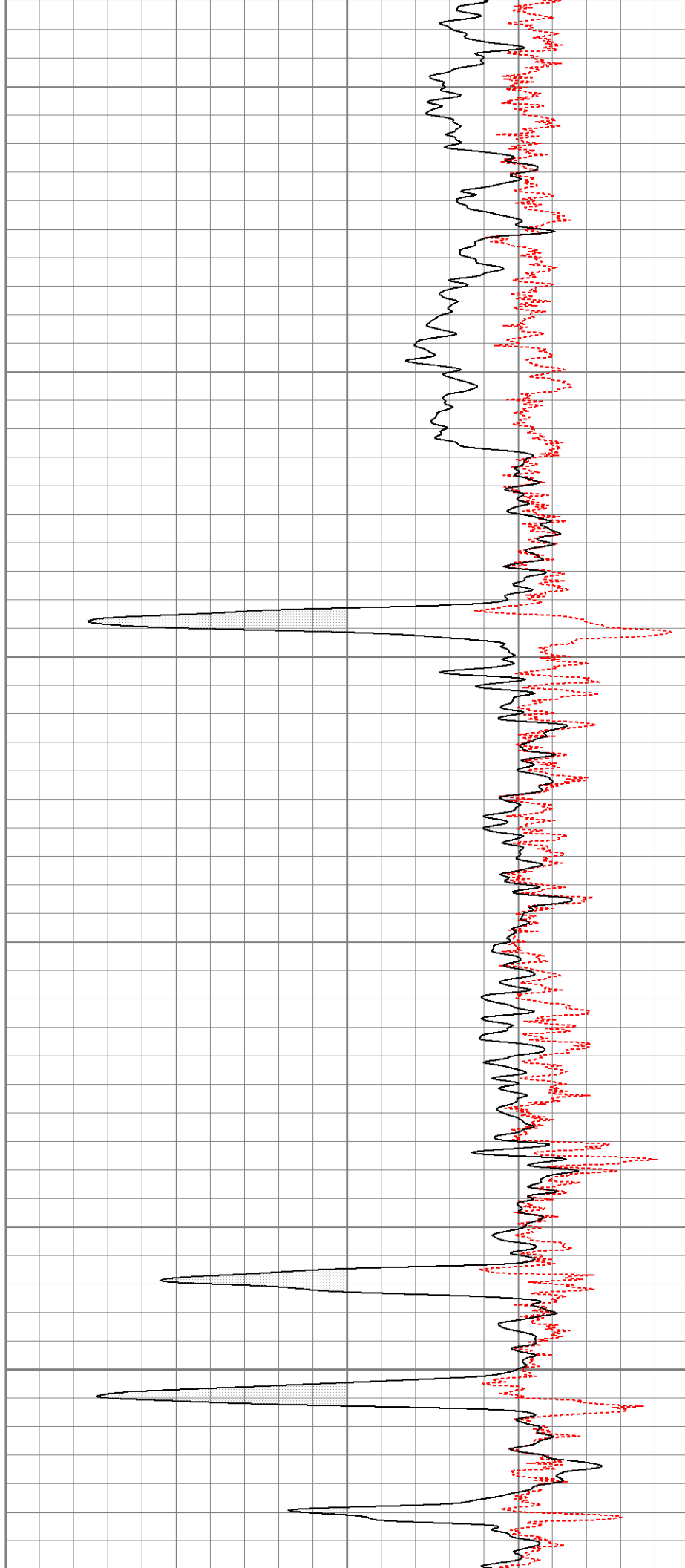
1750

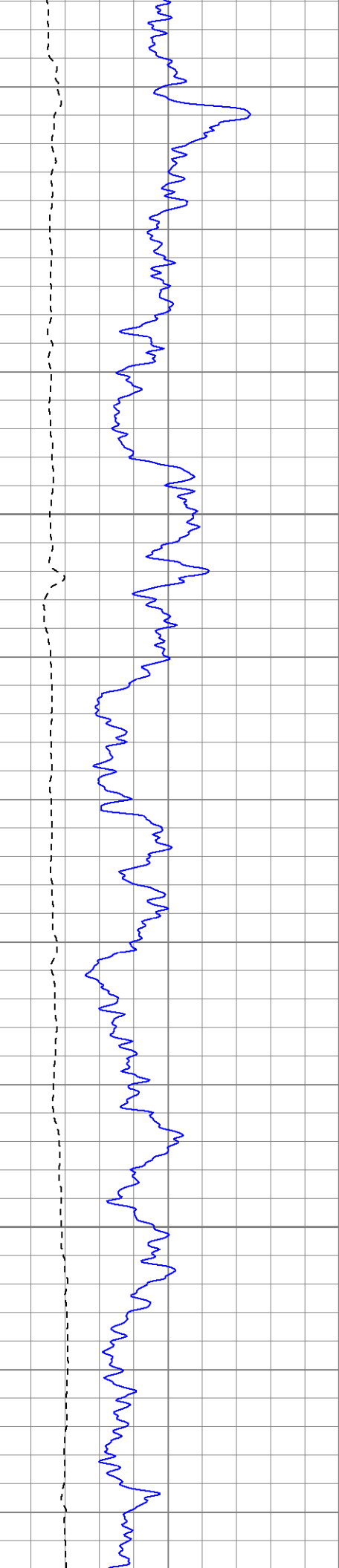




1800

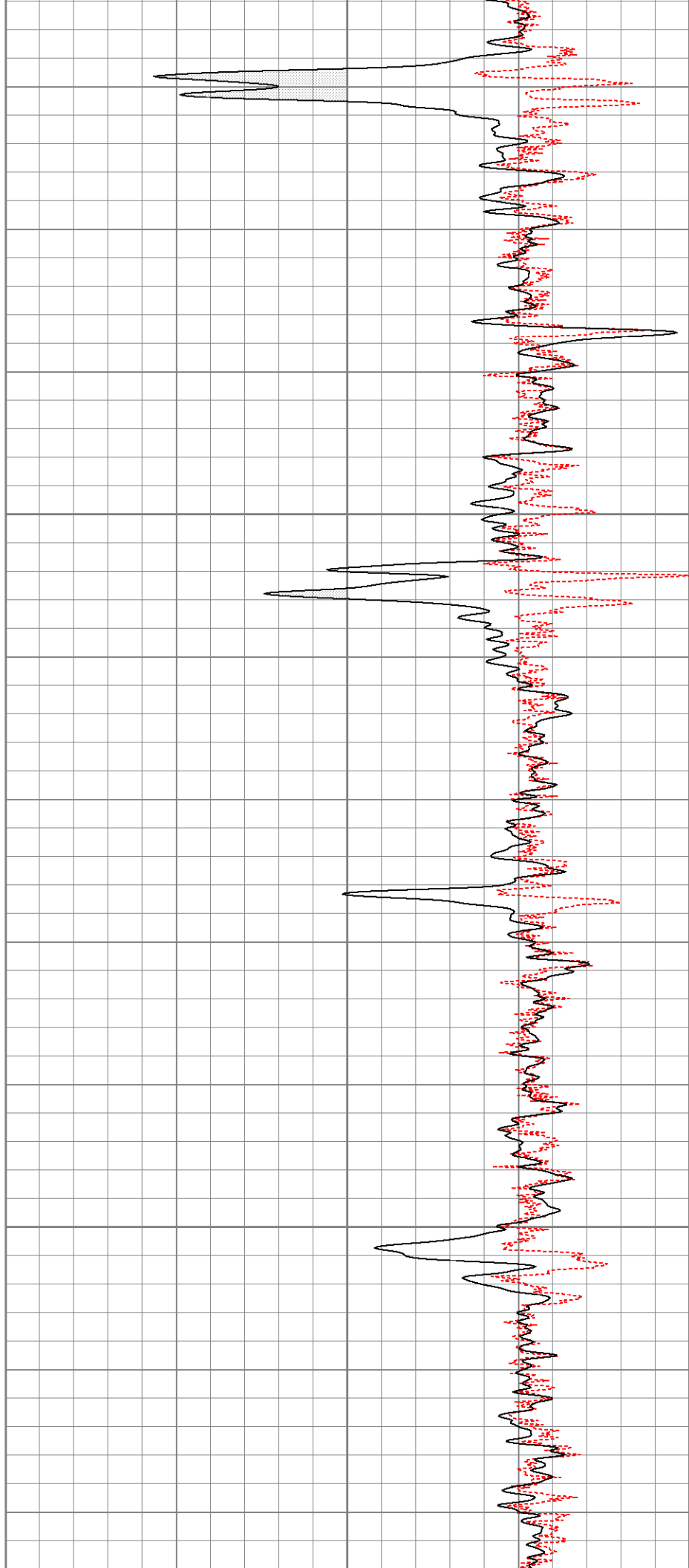
1850

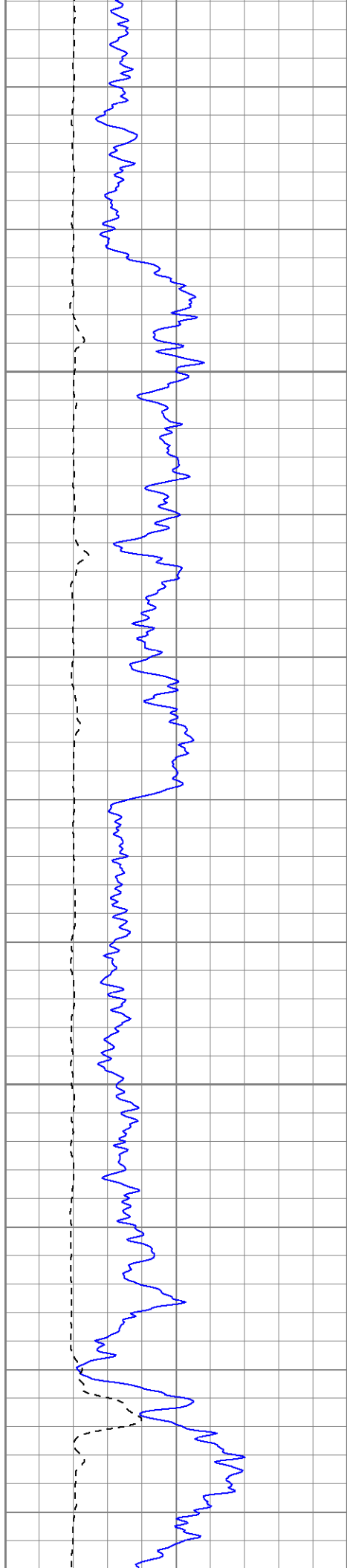




1900

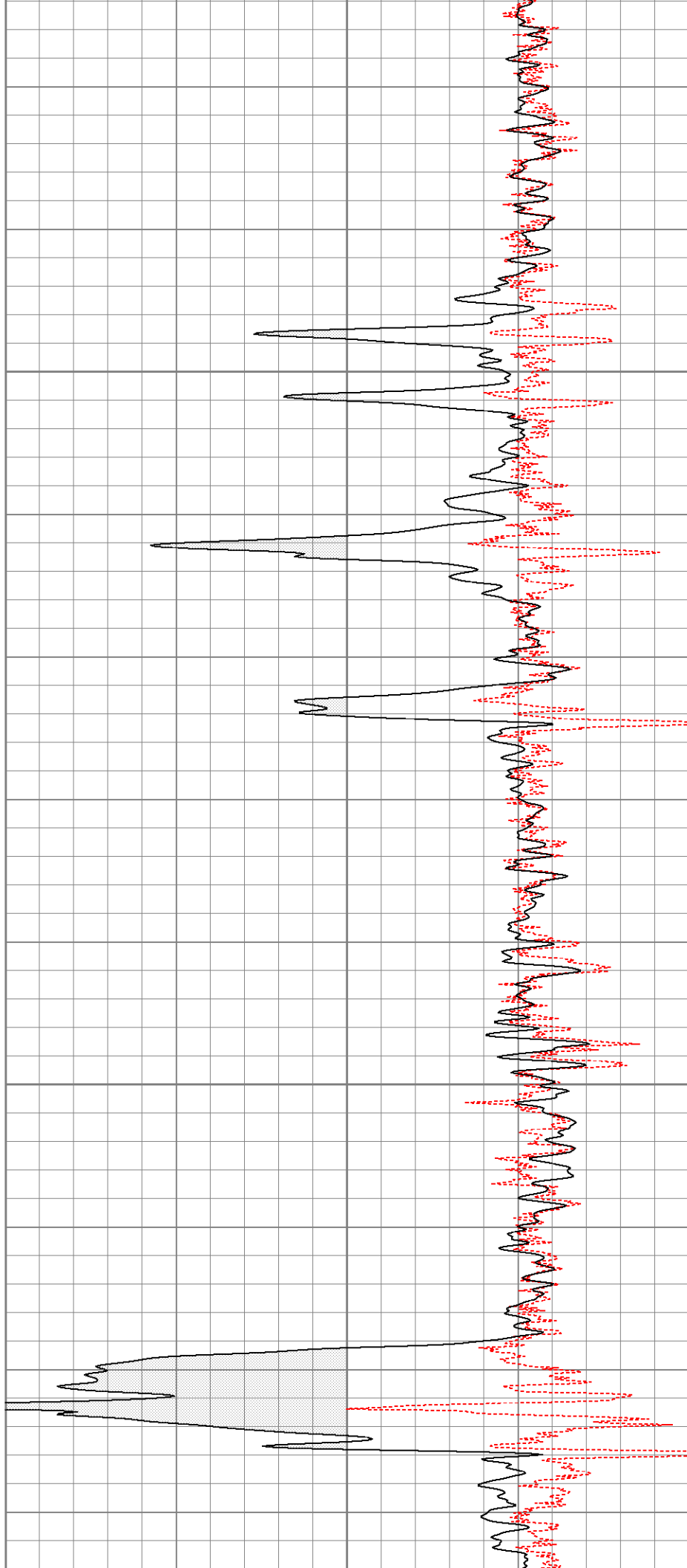
1950

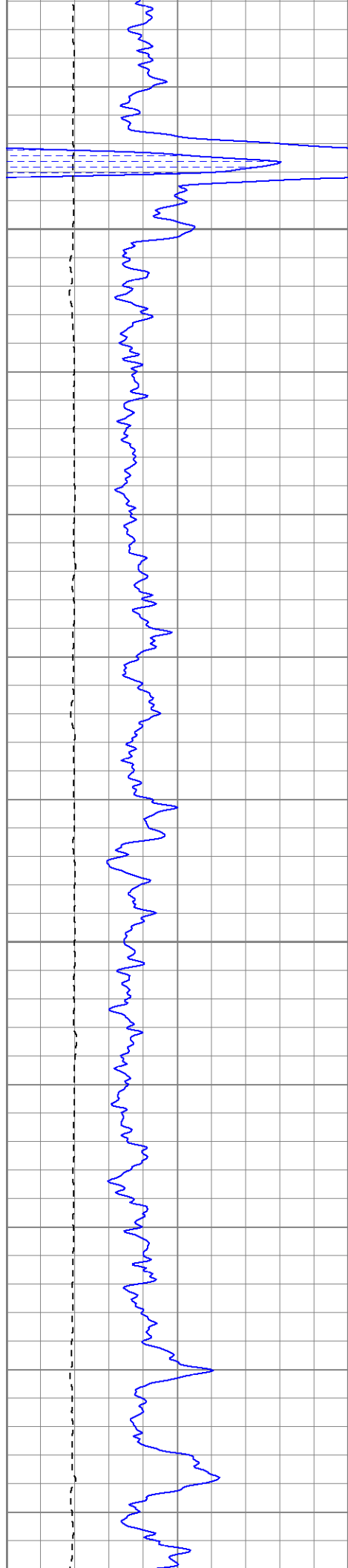




2000

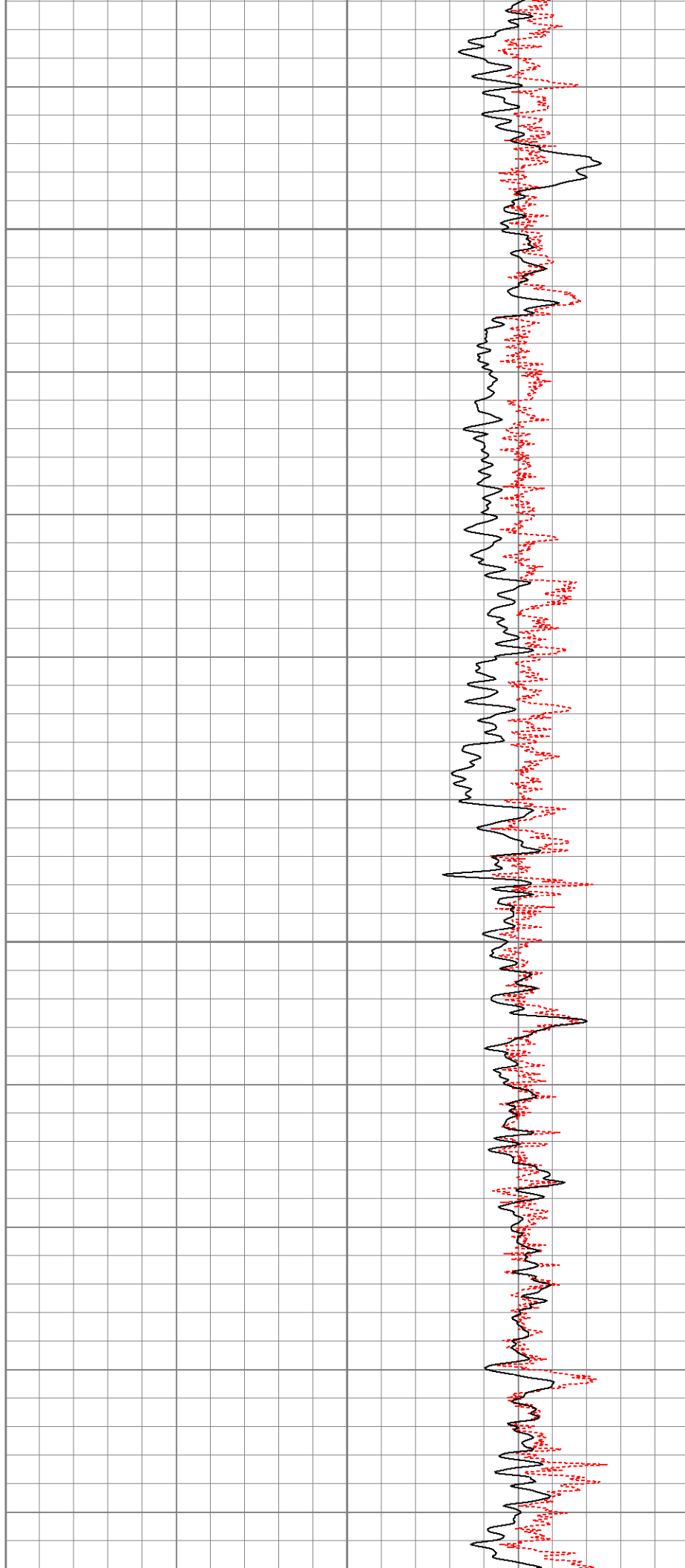
2050

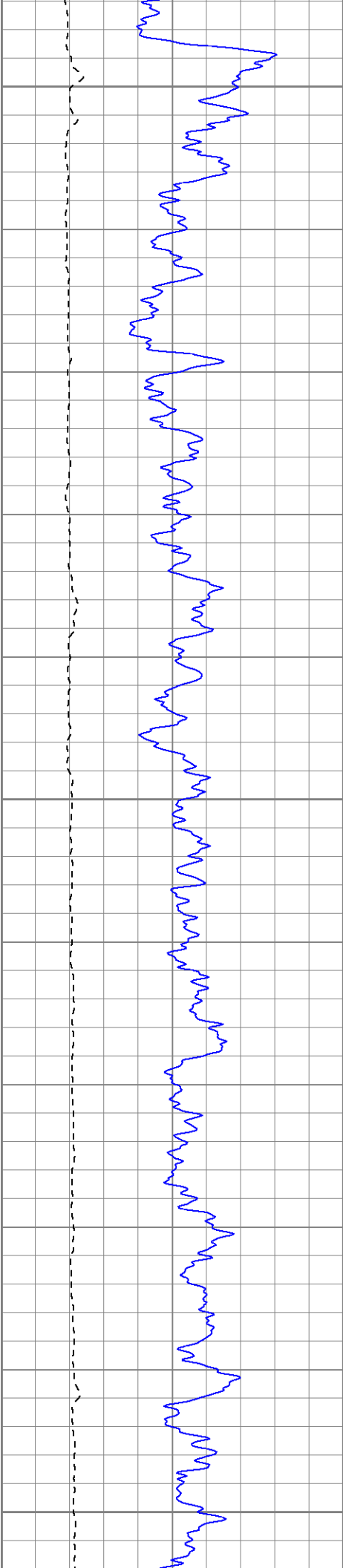




2100

2150

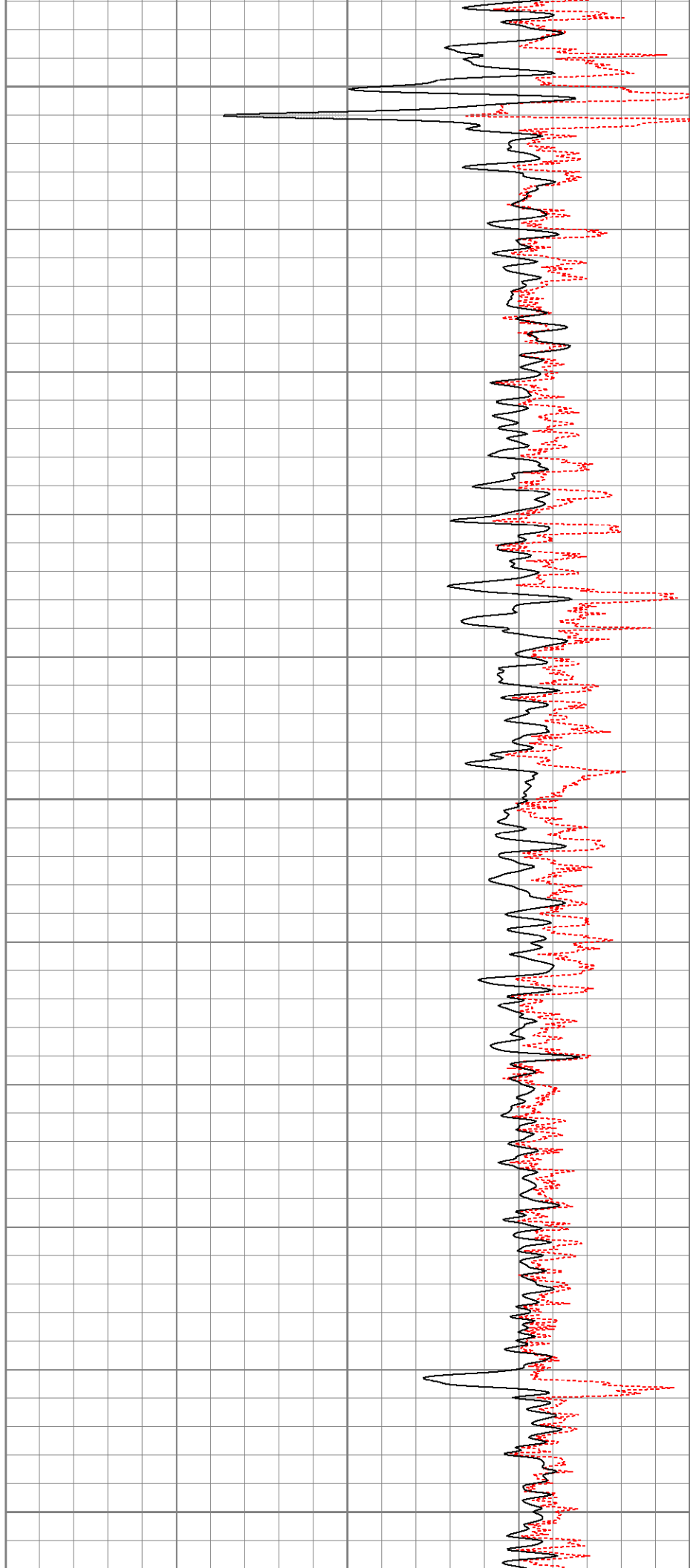


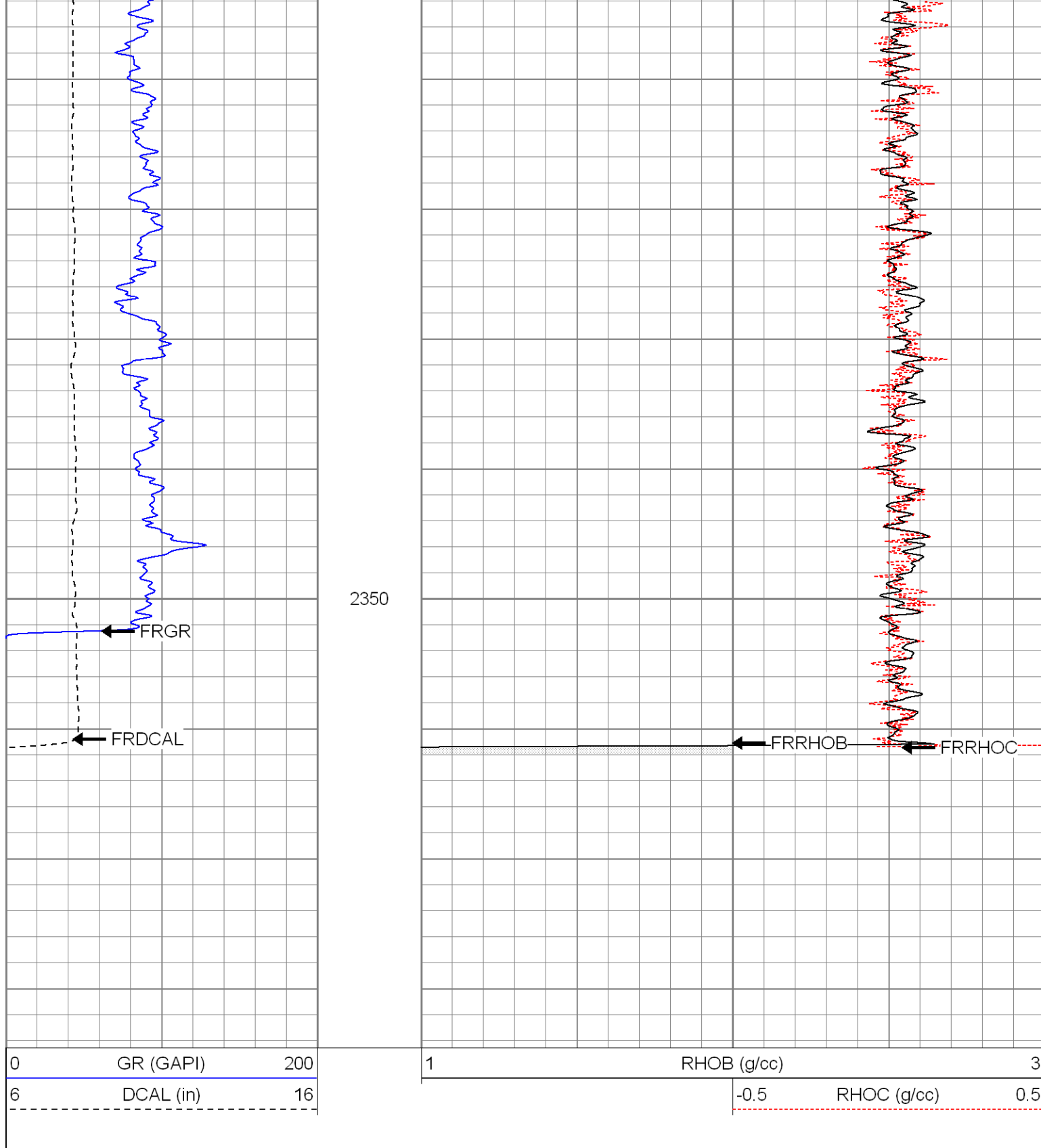


2200

2250

2300





Calibration Report

Database File: xtohr3611.db
Dataset Pathname: pass1
Dataset Creation: Sun May 04 11:16:29 2008 by Log Open-Cased 070814

Dual Induction Calibration Report

Serial-Model: 5375-G
Surface Cal Performed: Thu May 01 13:51:22 2008
Downhole Cal Performed: Thu May 01 13:52:23 2008

Surface Calibration								
Readings			References			Results		
Loop:	Air	Loop		Air	Loop		m	b
Deep	-0.000	0.619	V	0.000	500.000	mmho-m	807.189	0.335
Medium	0.003	0.743	V	0.000	550.000	mmho-m	743.658	-2.260
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.000	0.619	V	0.000	500.000	mmho-m	807.722	-0.197
Medium	0.004	0.742	V	0.000	550.000	mmho-m	744.857	-2.782

Downhole Calibration								
Readings			References			Results		
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.276	500.616	mmho-m	0.532	500.202	mmho-m	0.999	0.257
Medium	0.254	550.254	mmho-m	0.517	549.632	mmho-m	0.998	0.264
Shallow	2.504	0.008	V	500.000	2.000	Ohm-m	124.000	-3.000

--

Temperature Calibration Report								
--------------------------------	--	--	--	--	--	--	--	--

Serial Number:	2542T				
Tool Model:	CDLP				
Performed:	Wed Apr 09 15:14:20 2008				
	Reference		Reading		
Low Reference:	55.00	degF	3.11	V	
High Reference:	160.00	degF	5.35	V	
Gain:	46.88				
Offset:	-90.78				
Delta Spacing	1				

Compensated Density Calibration Report								
--	--	--	--	--	--	--	--	--

Serial-Model:	2542-T2							
Source / Verifier:	/							
Master Calibration Performed:	Fri Apr 04 08:43:29 2008							

Master Calibration					
	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	725.64	339.44	cps
Aluminum	2.590	g/cc	162.65	232.88	cps
Spine Angle = 75.86			Density/Spine Ratio = 0.571		
	Size		Reading		
Small Ring	8.00	in	1.33	V	
Large Ring	14.00	in	2.67	V	

--

Gamma Ray Calibration Report								
------------------------------	--	--	--	--	--	--	--	--

Serial Number:	2001							
Tool Model:	OH							
Performed:	Thu May 01 08:11:30 2008							
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:	Thu May 01 08:17:16 2008
Calibrator Value:	1 NAPI
Calibrator Reading:	1 cps
Sensitivity:	1 NAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
NEU	37.47		None	0.75	1.50	5.00
			NEU-PROBE (5108) Probe Epithermal	4.92	3.63	85.00
GR	31.94		GR-OH (2001) 2001	3.56	3.25	40.00
			CDL-T2 (2542) Gearhart	9.29	4.00	201.00
LSD	23.19		TEMP-CDLP (2542T) Probe Density/Temp	0.01	1.00	1.00
DCAL	22.98					
SSD	22.73					
TEMP	22.55					
CILD	10.60		DIL-G (5375) Gearhart	21.47	4.00	345.00
SP	10.60					
CILM	6.89					
RLL3	1.70					

Dataset:	xtohr3611.db: field/well/run1/pass1
Total Length:	40.00 ft
Total Weight:	677.00 lb
O.D.	4.00 in