



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

# COMPENSATED DENSITY NEUTRON LOG

Company XTO Energy Inc.  
Well New Elk 25-08  
Field Purgatoire River  
County Las Animas State Colorado

Location: API # : 05 071 09496 00

2103' FNL & 737' FEL

SEC 25 TWP 33S RGE 68W

Permanent Datum Ground Level Elevation 7347'  
Log Measured From Ground Level  
Drilling Measured From Ground Level

Other Services  
DIL  
Elevation  
K.B. -----  
D.F. -----  
G.L. 7347'

Date	3-30-08		
Run Number	One		
Depth Driller	1840'		
Depth Logger	1842'		
Bottom Logged Interval	1816'		
Top Log Interval	Surface Casing		
Casing Driller	8 5/8" @ 446'		
Casing Logger	452'		
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	7:30 A.M.		
Time Logger on Bottom	9:56 A.M.		
Maximum Recorded Temperature	106 DEG F		
Equipment Number	T697		
Location	Trinidad		
Recorded By	J. Cappellucci		
Witnessed By	Mr. Dalton King		

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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

Neutron Density Porosity Presented On Sandstone Matrix.

ABHV Calculated For 5 1/2" Casing.

Neutron Porosity Invalid from 1188' to 1126' due to foam.

Well Directions:

Second Bosque Entrance, at Y stay right at Apache Canyon,  
go past Windmill, through Golden Eagle 30-03, next drive through  
location is NE 25-08.

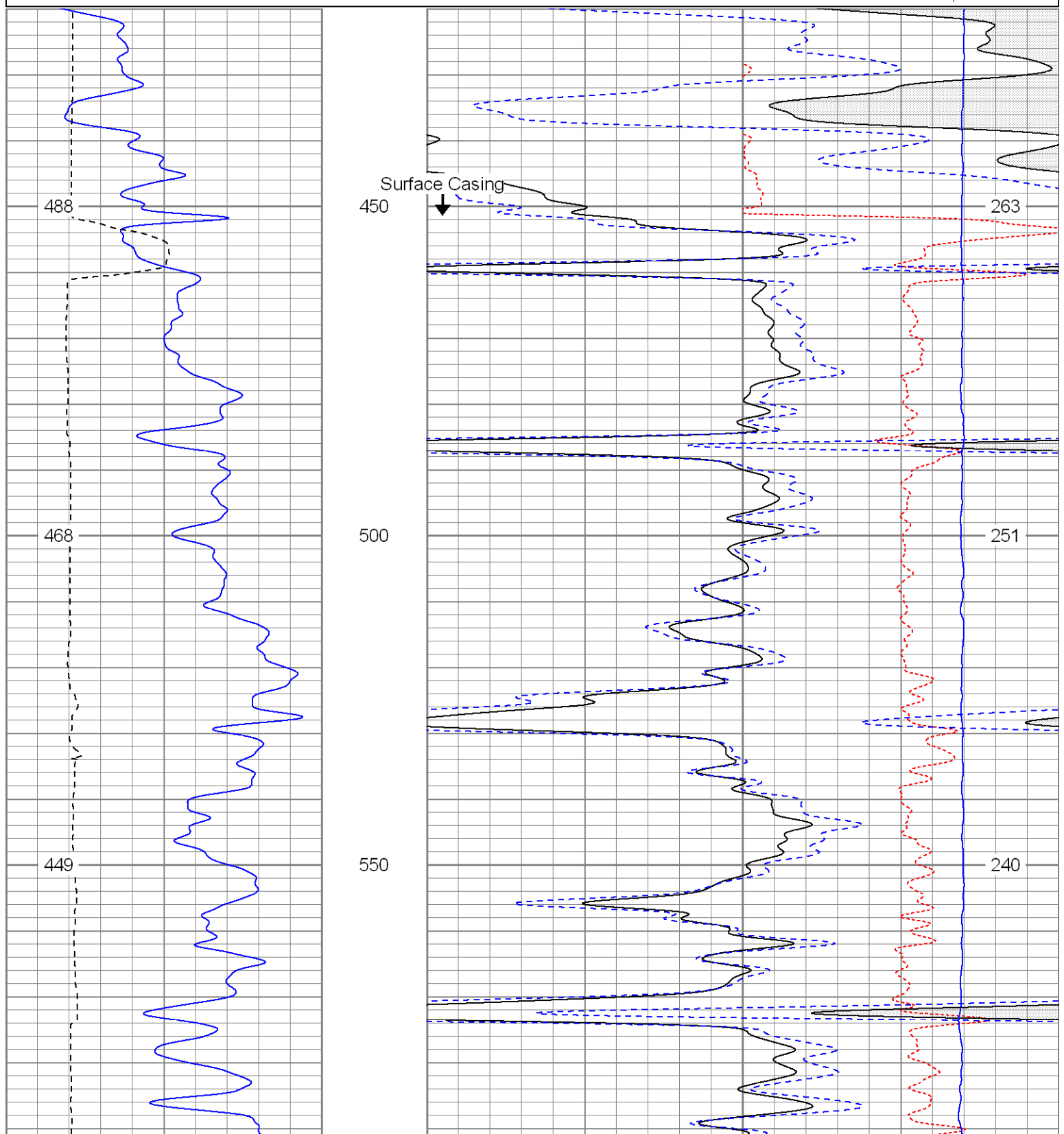


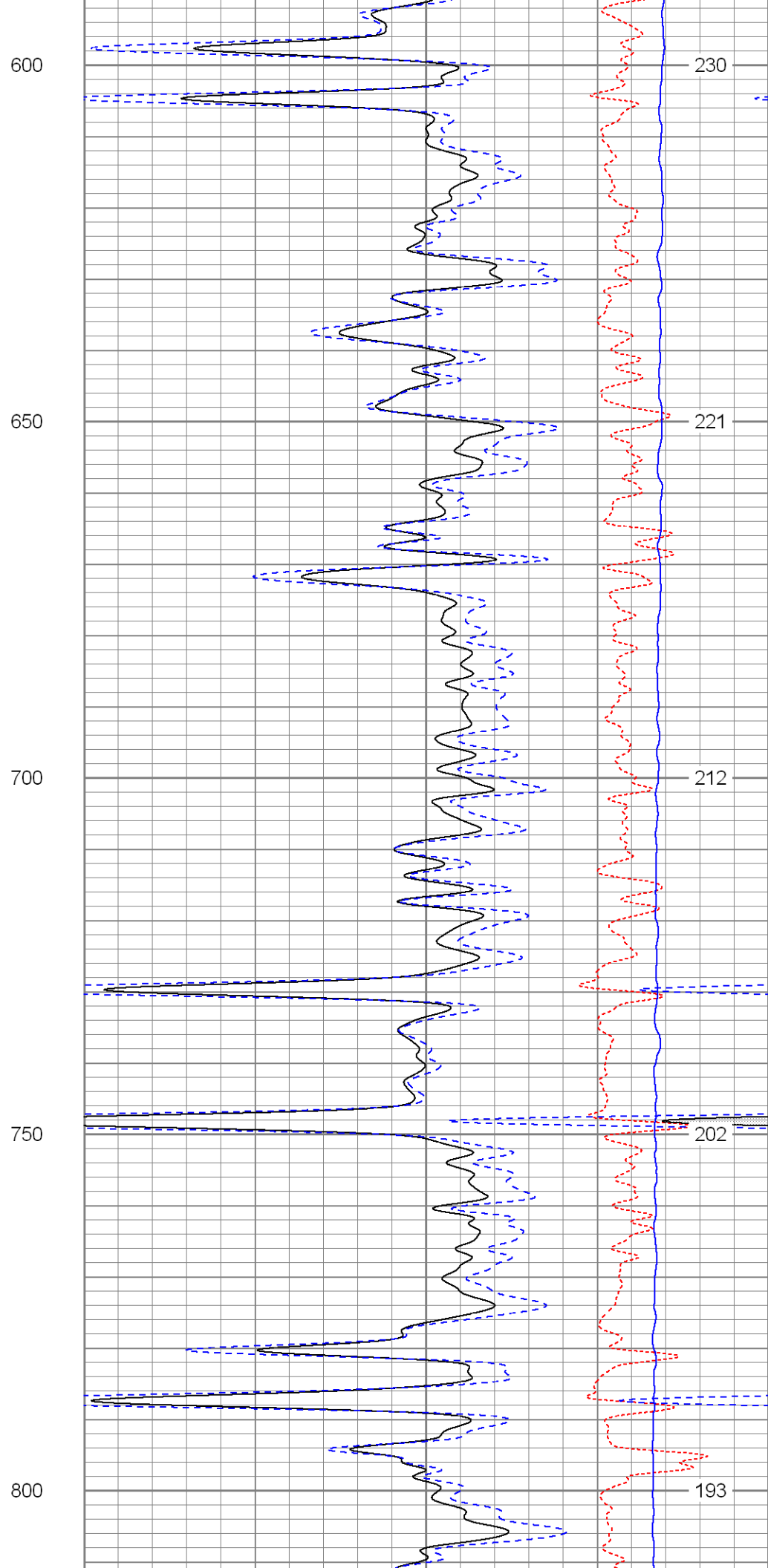
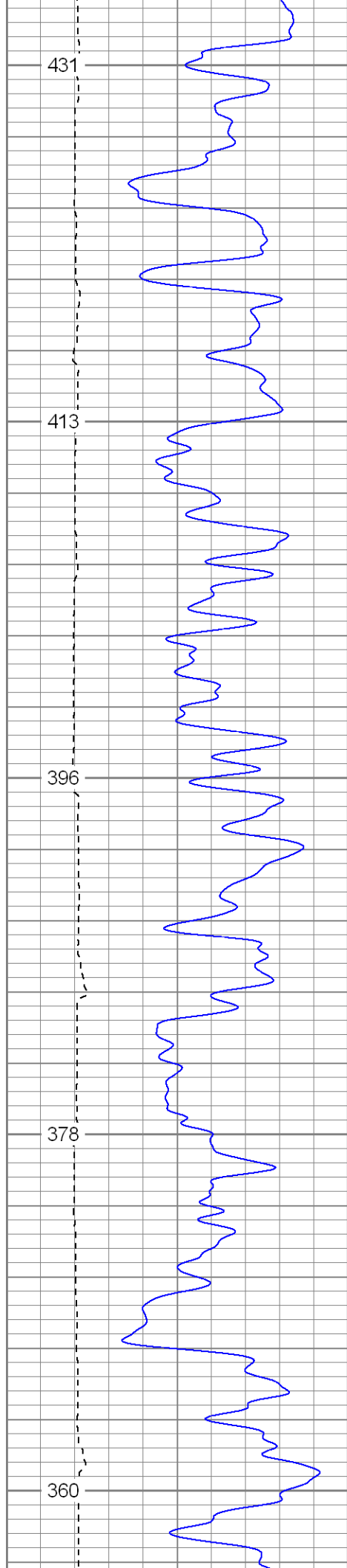
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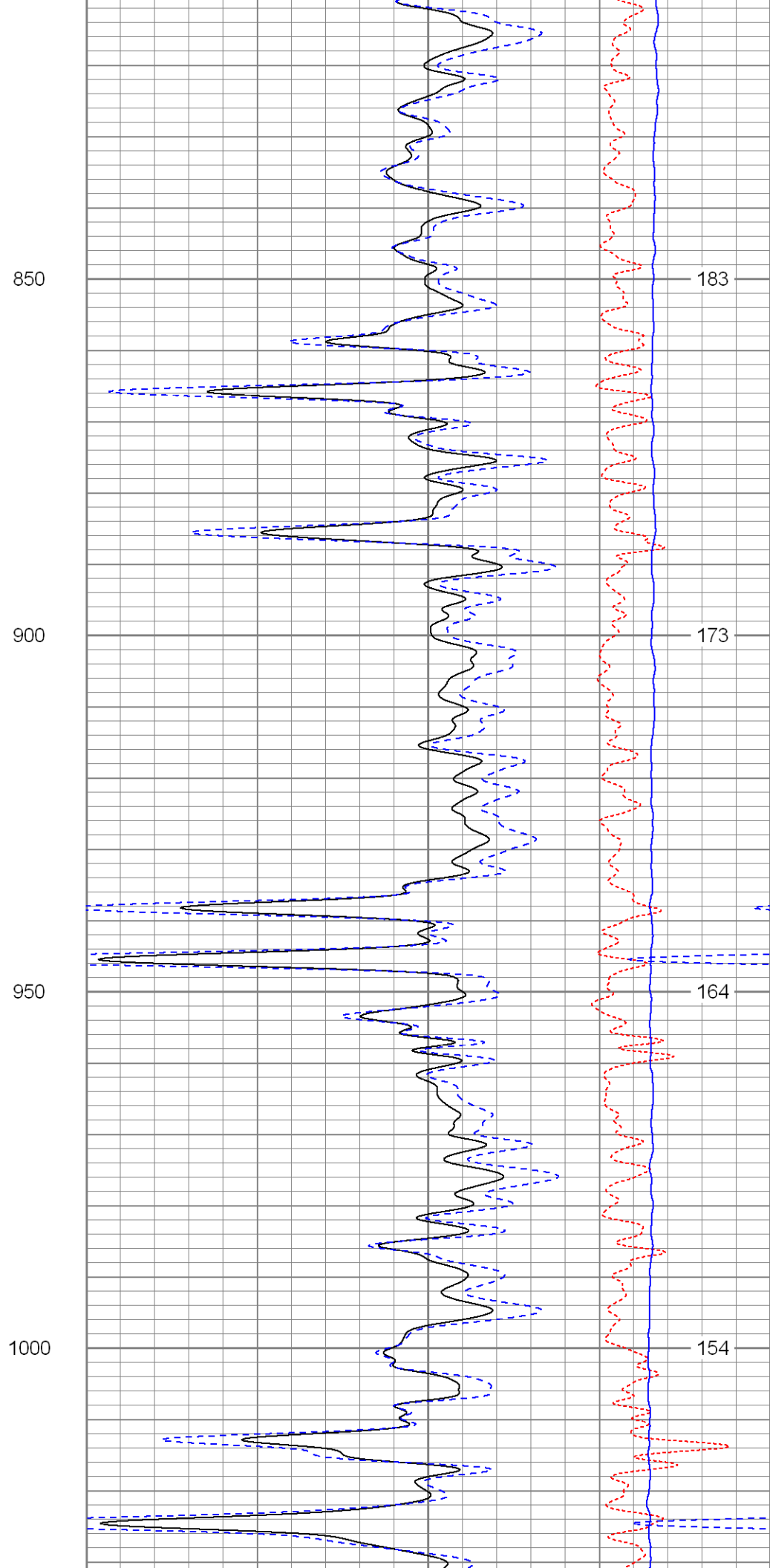
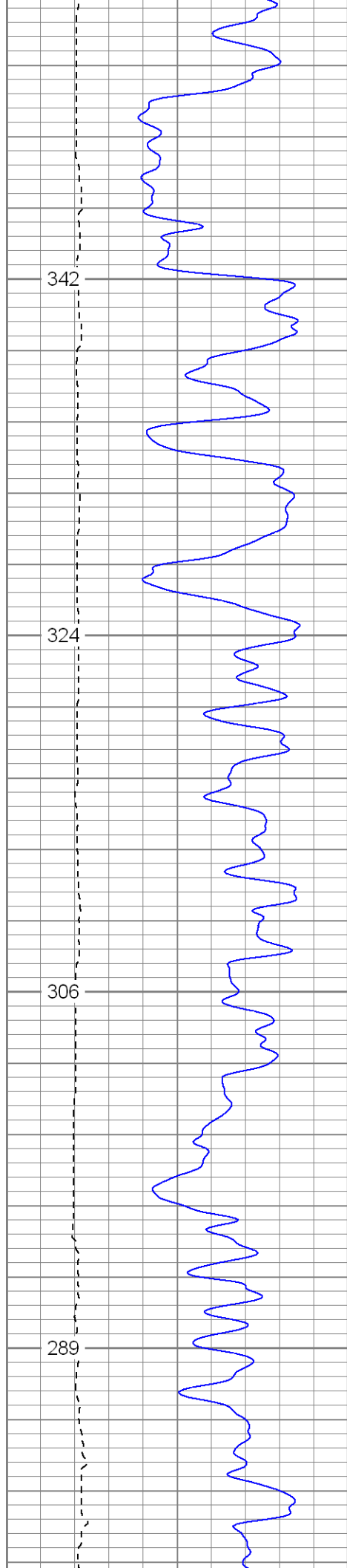
# Main Pass

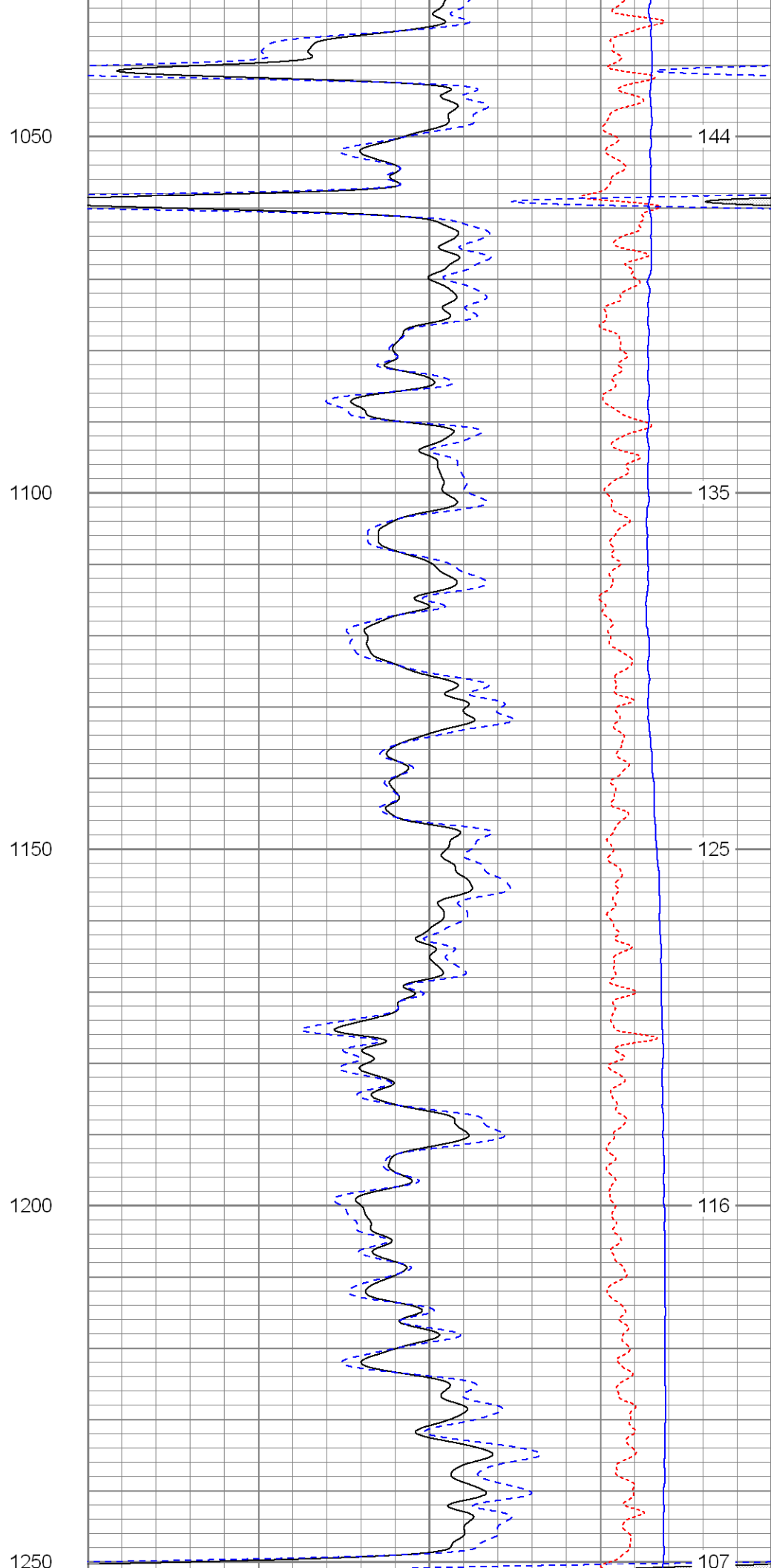
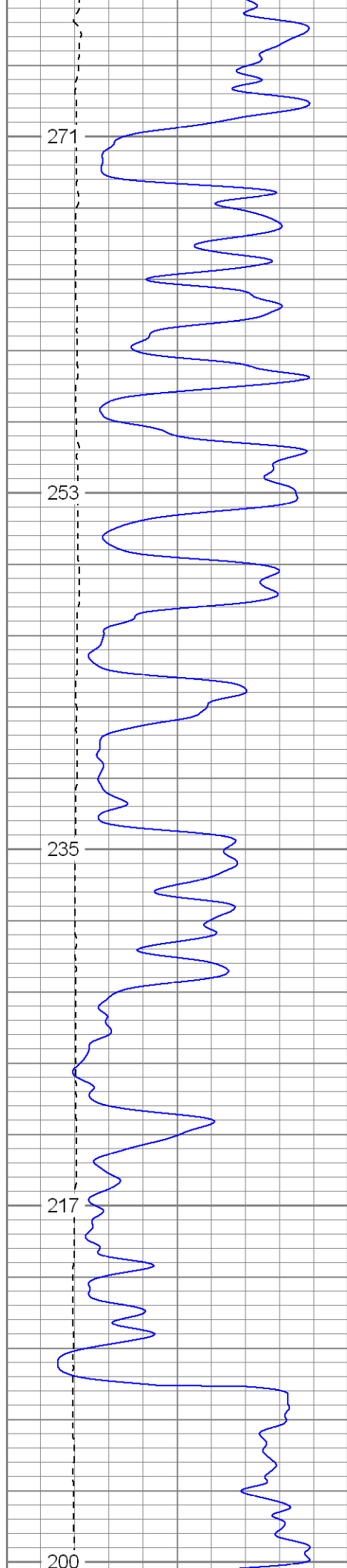
Database File: xtone2508.db  
Dataset Pathname: pass2.1  
Presentation Format: cdl  
Dataset Creation: Sun Mar 30 11:16:15 2008 by Calc Open-Cased 070814  
Charted by: Depth in Feet scaled 1:240

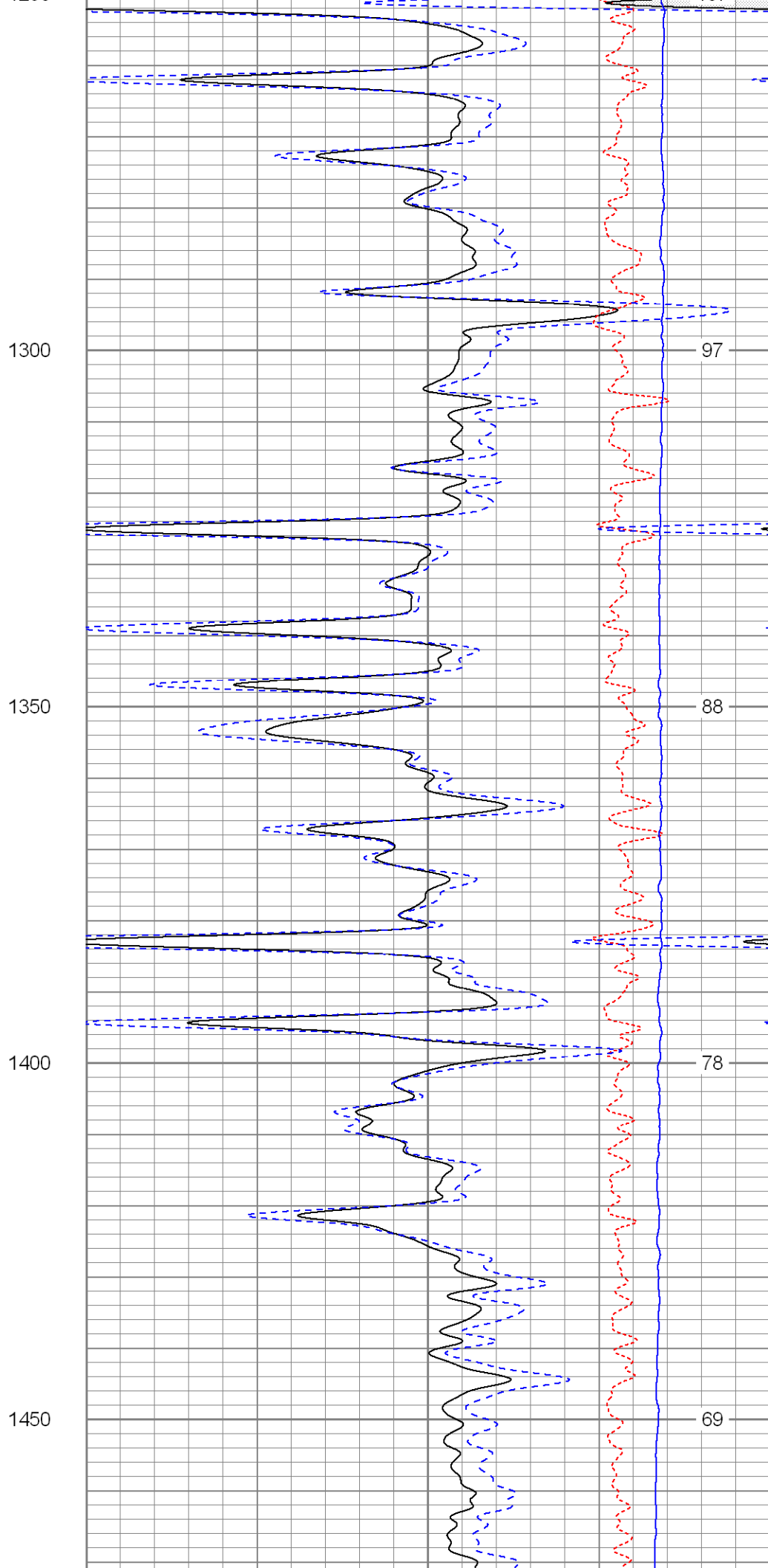
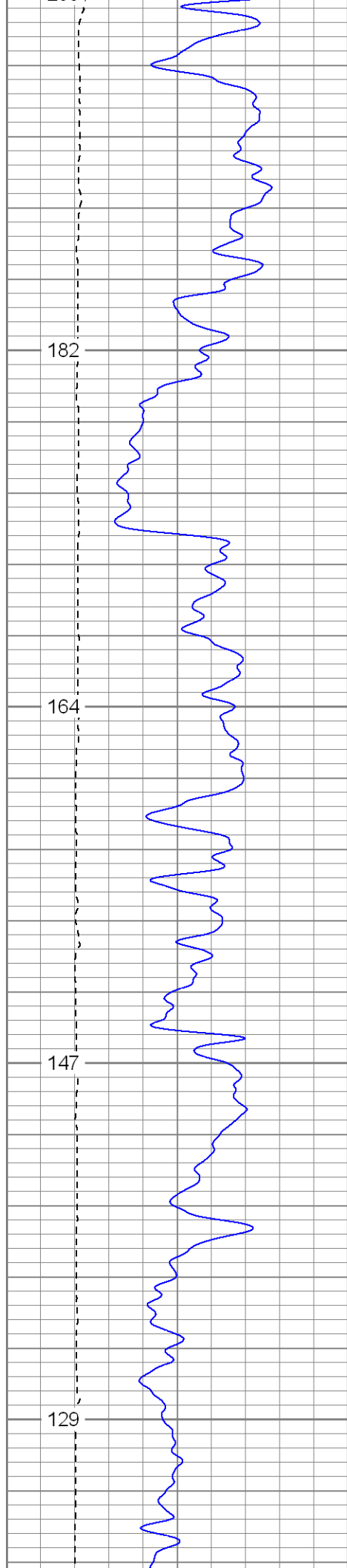
0	GR (GAPI)	200	2	RHOB (g/cc)	3
6	DCAL (in)	16	1	RHOB (g/cc)	2
TBHV (ft3)			30	DPOR (pu)	-10
			-0.5 RHOC (g/cc) 0.5		
			4000 LTEN (lb) 0		
			ABHV (ft3)		

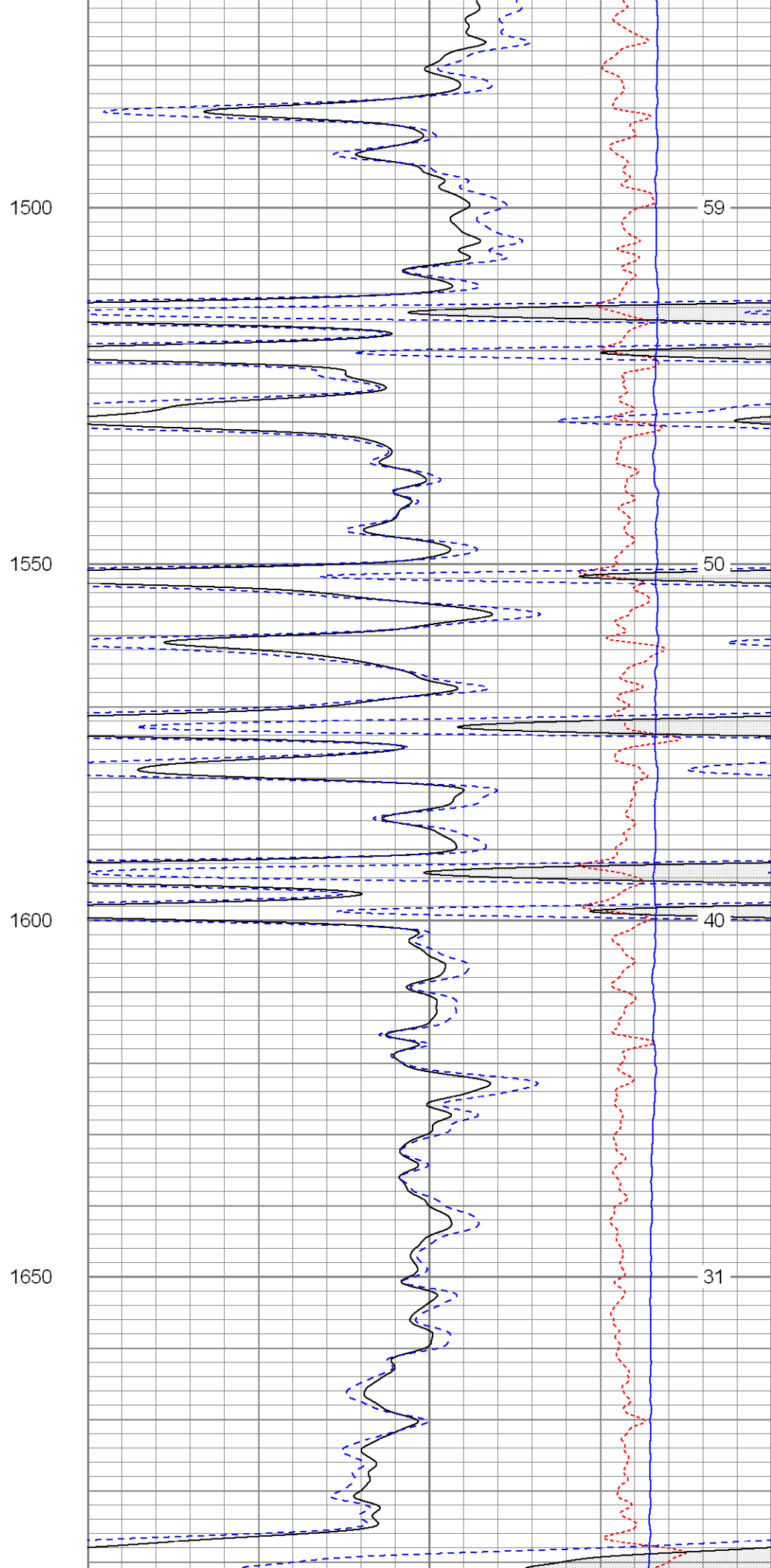
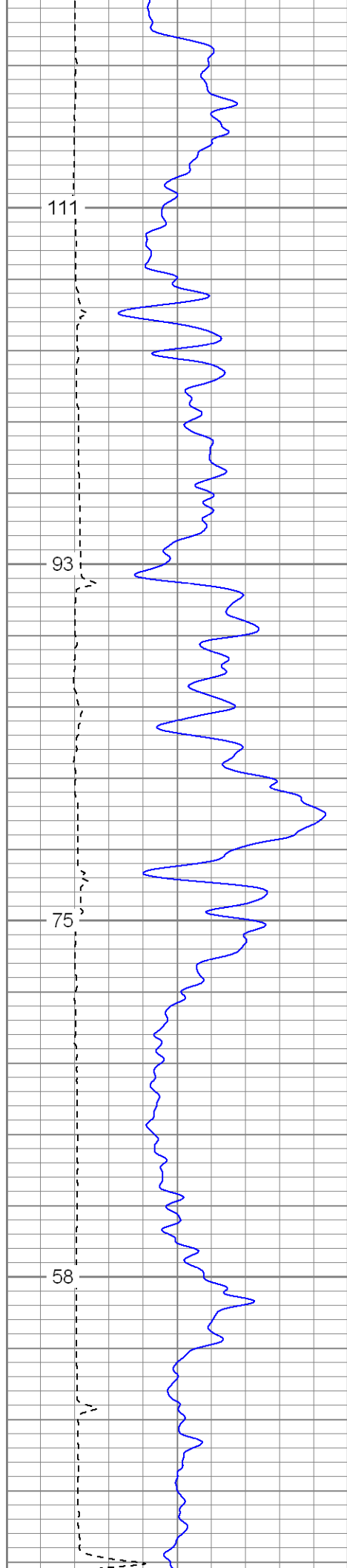


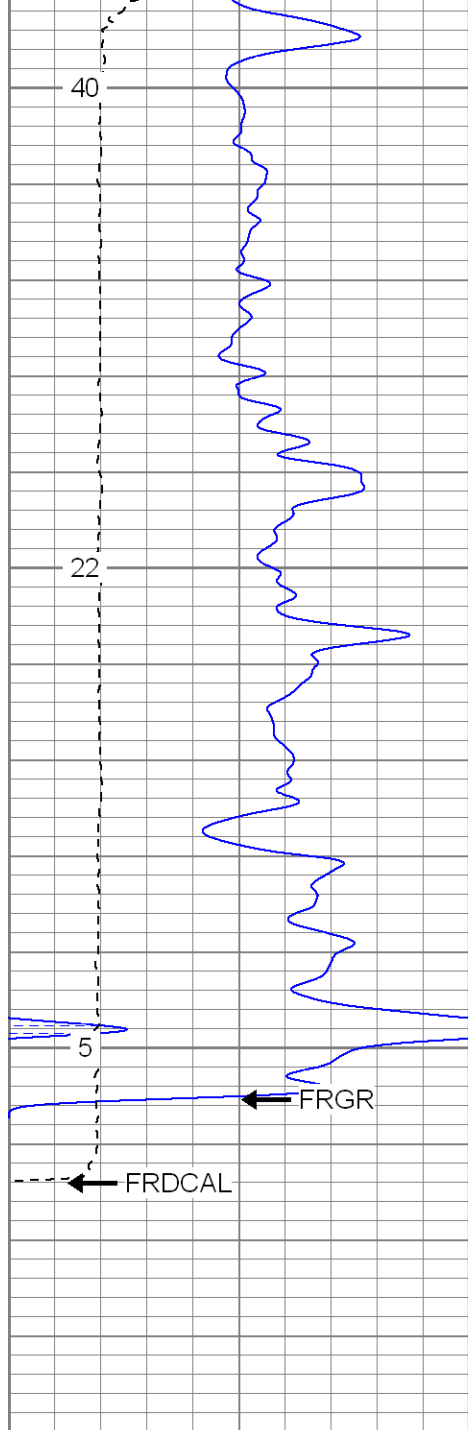




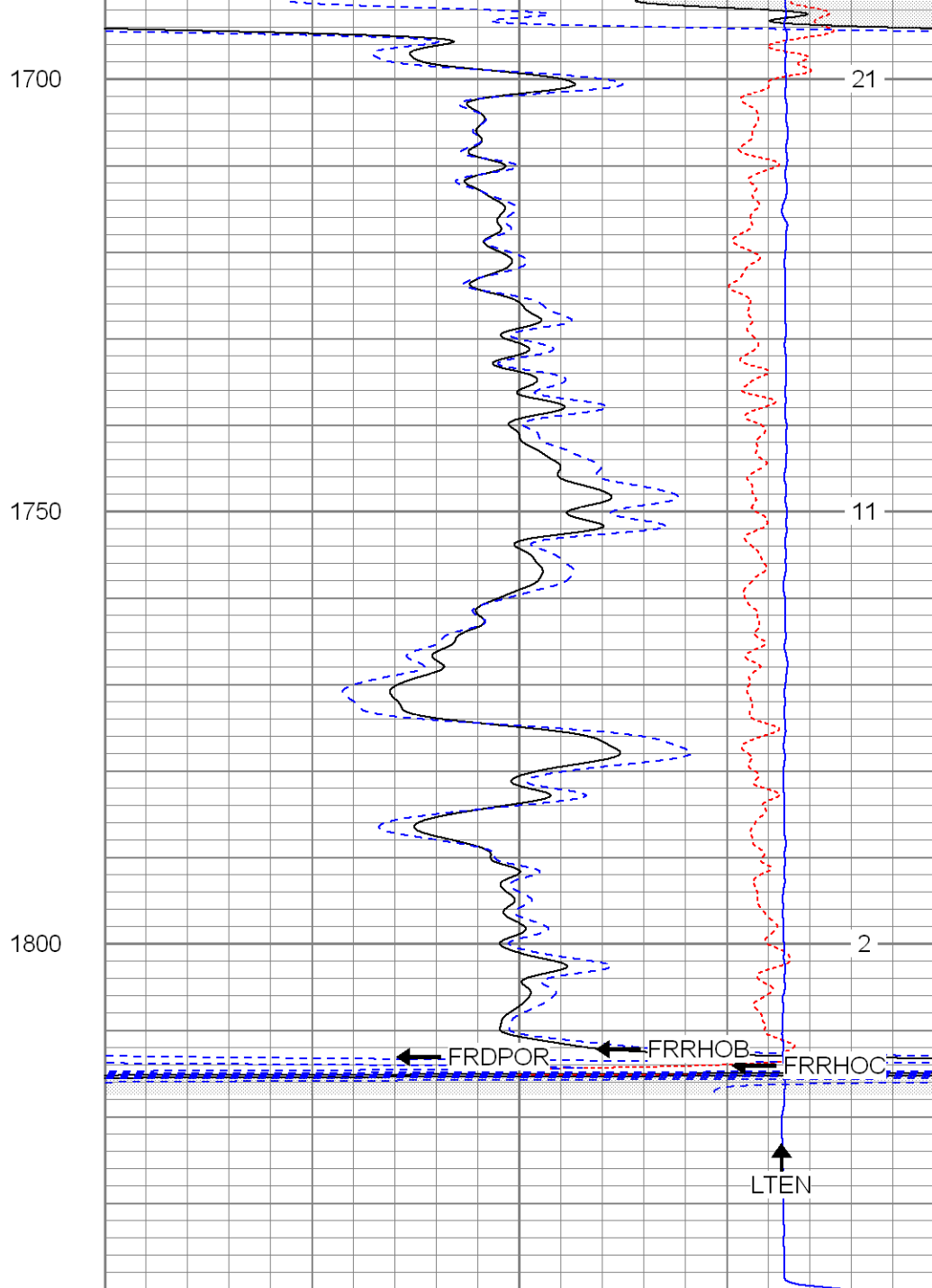








0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		



2	RHOB (g/cc)	3
1	RHOB (g/cc)	2
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
ABHV (ft3)		



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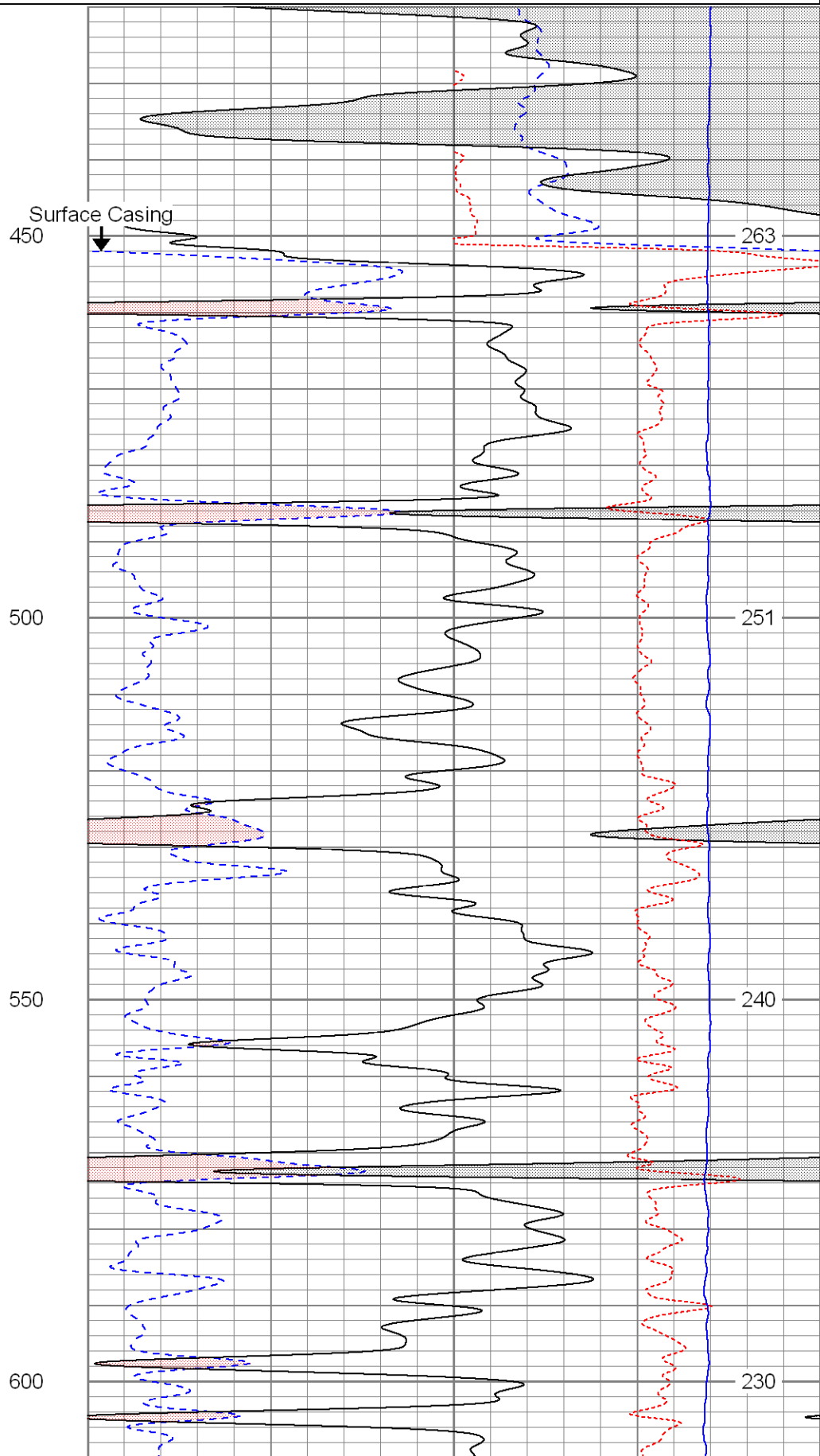
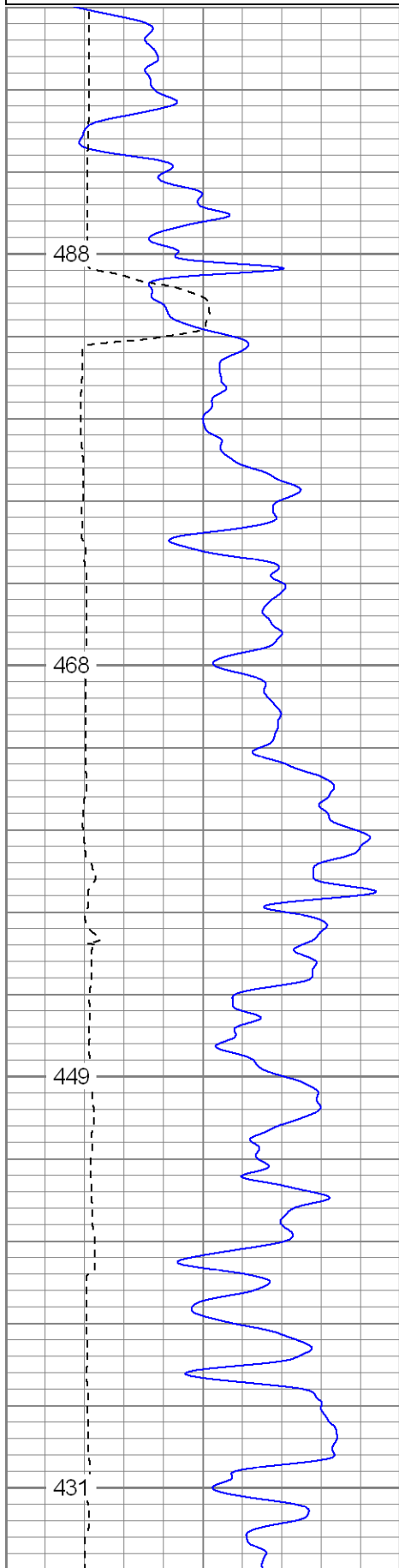
# Main Pass

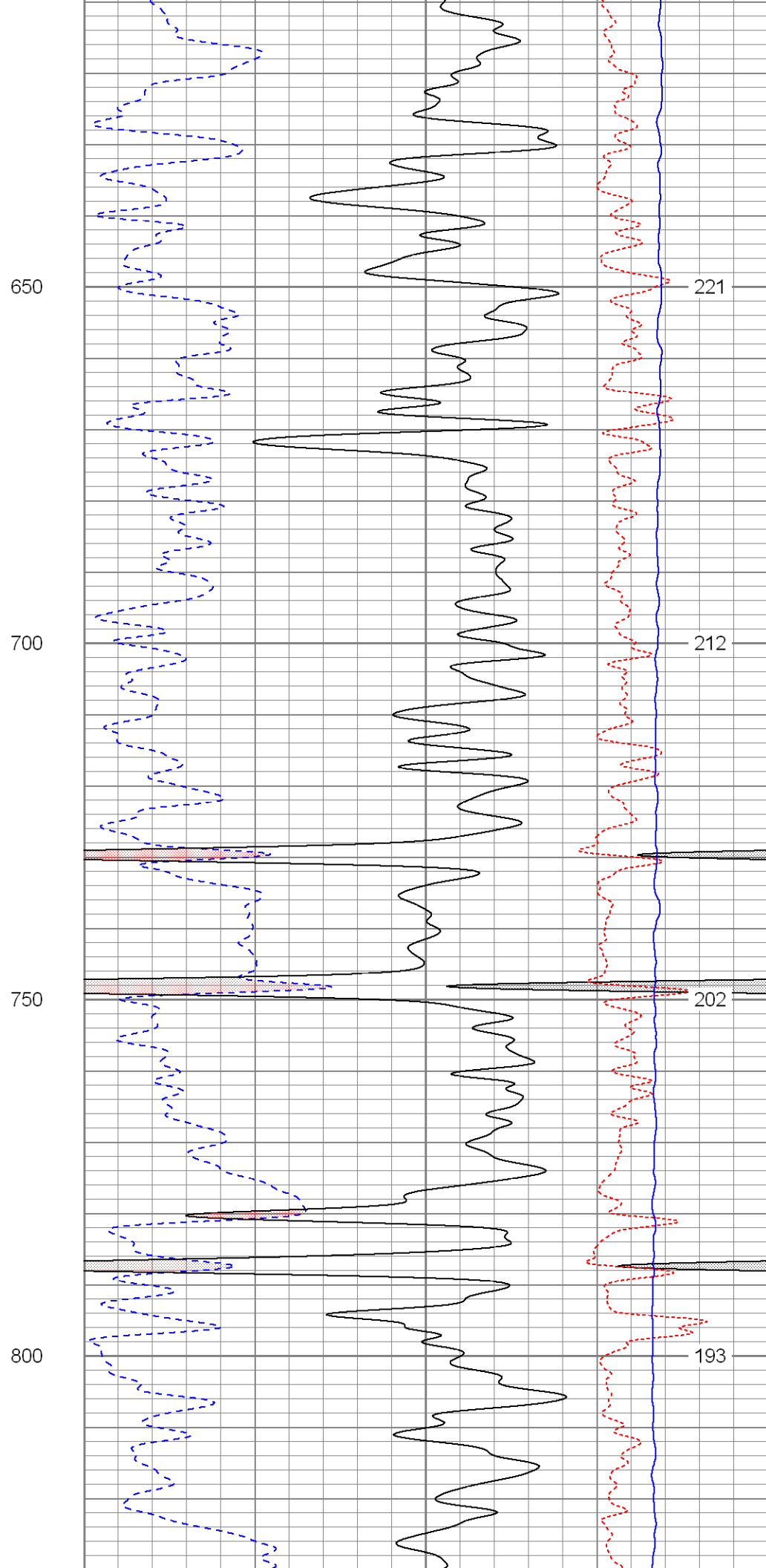
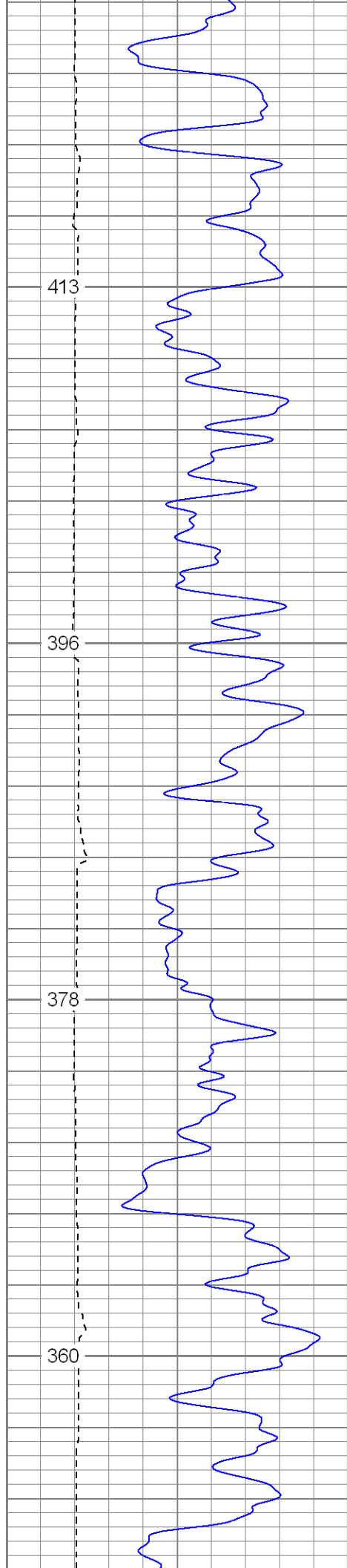
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Dataset Pathname: pass2.1  
Presentation Format: cdnl  
Dataset Creation: Sun Mar 30 11:16:15 2008 by Calc Open-Cased 070814

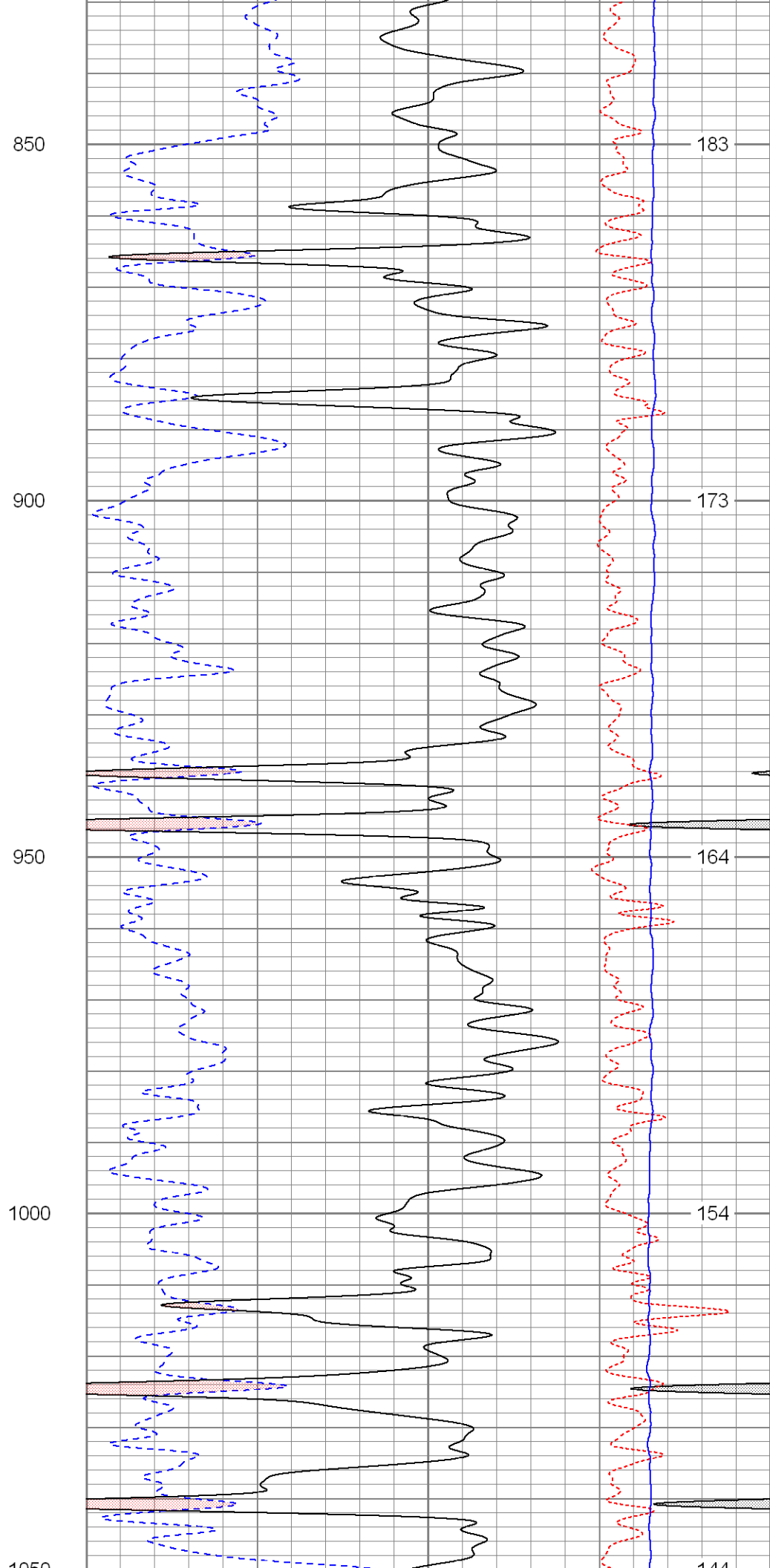
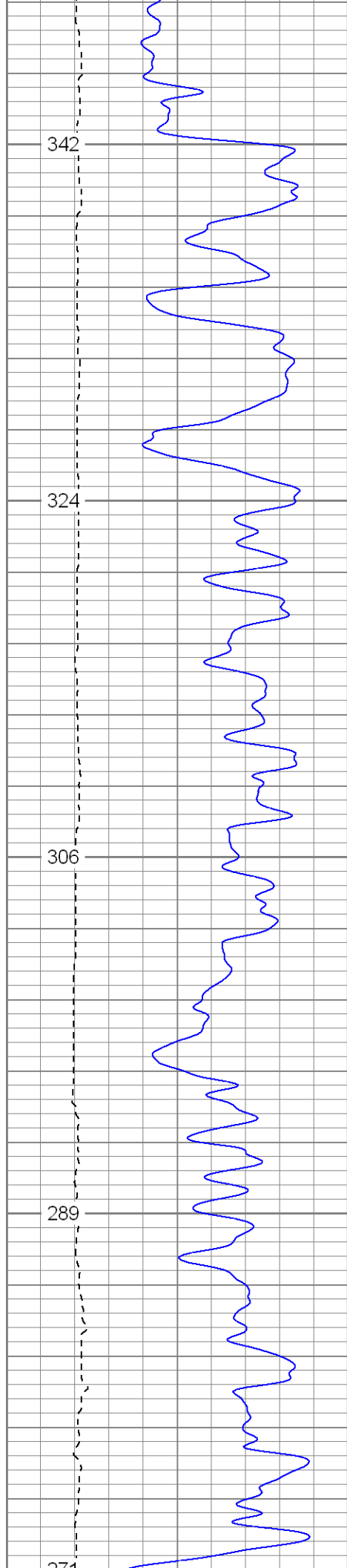


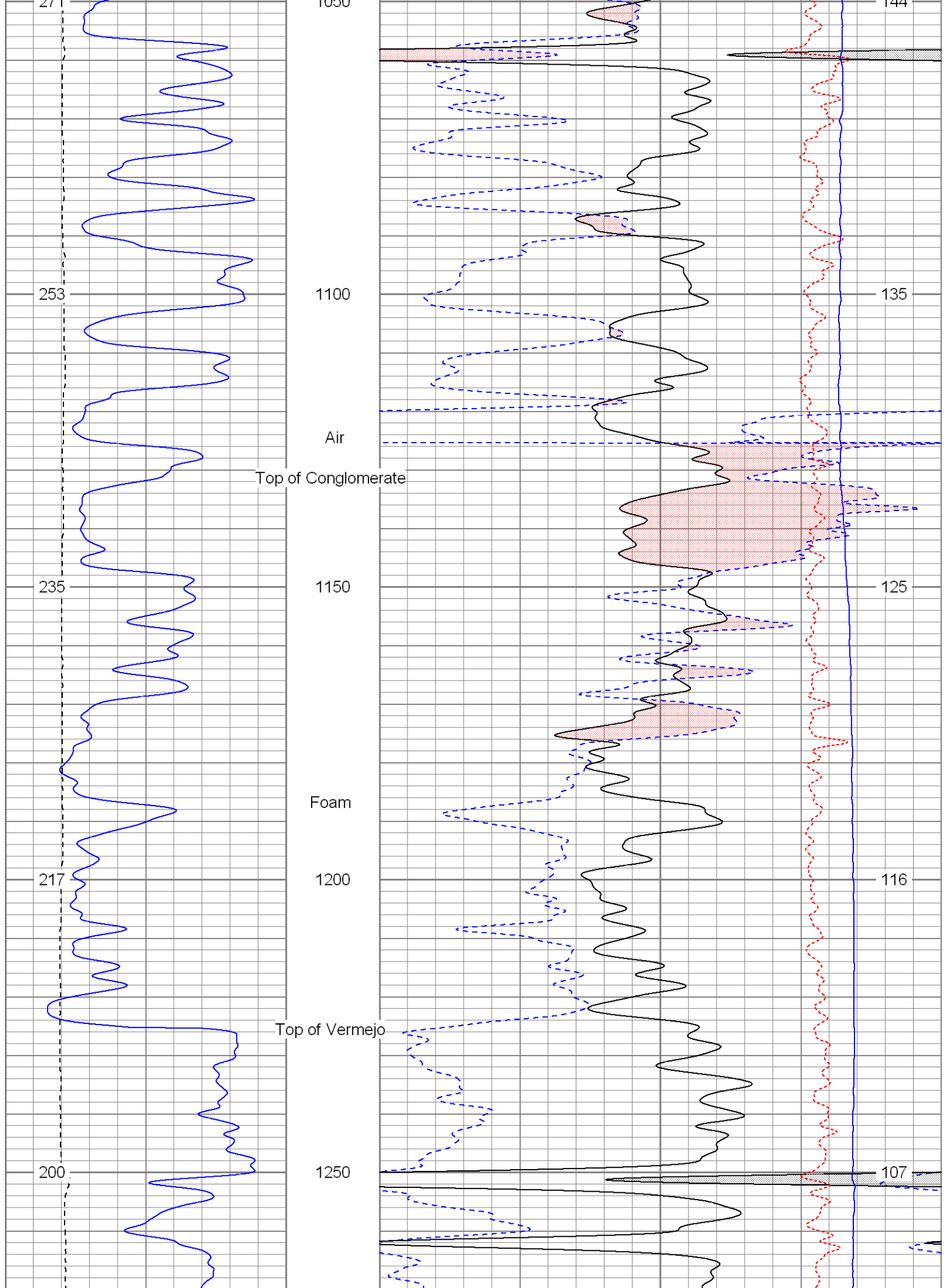
0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		

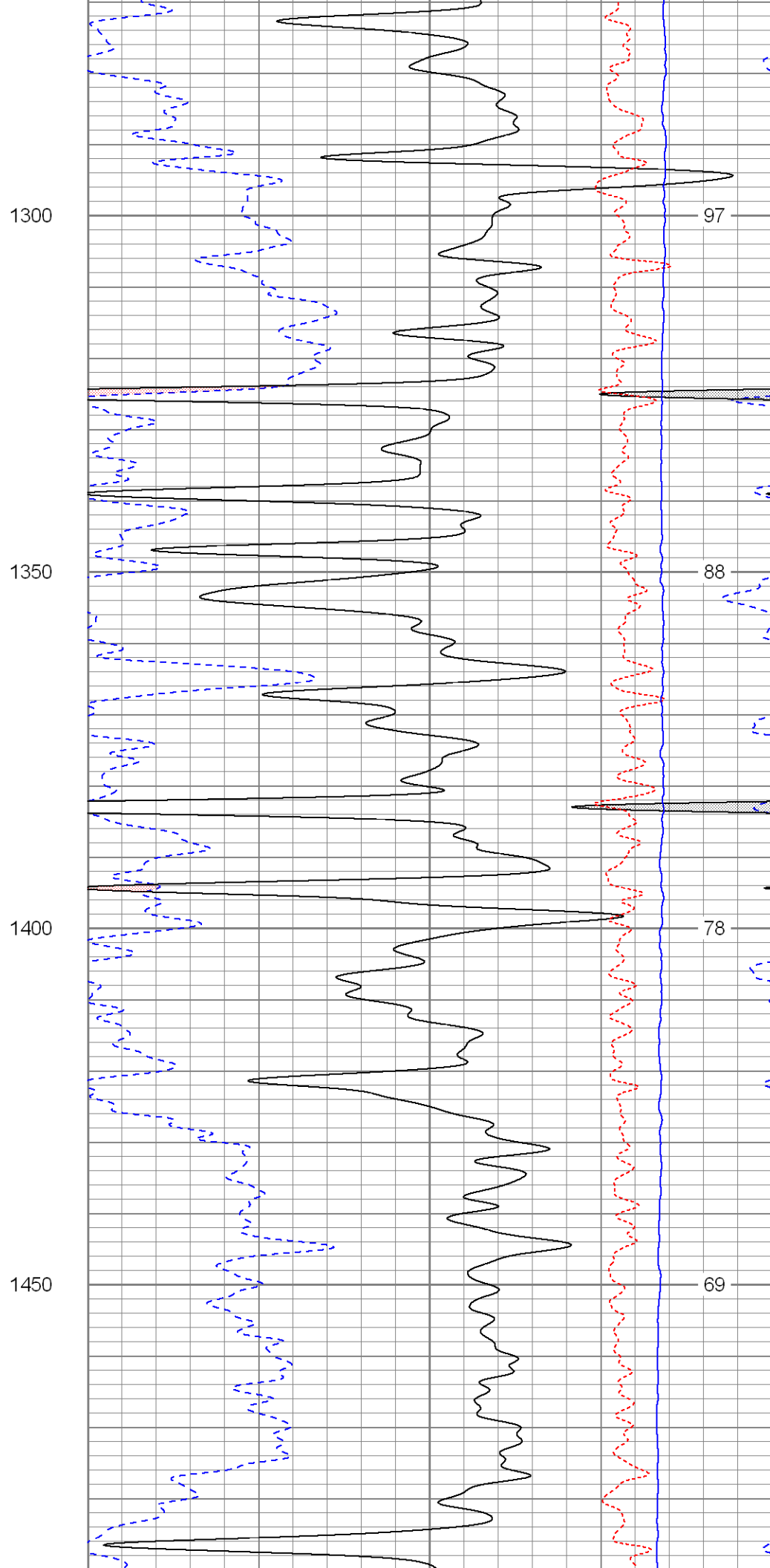
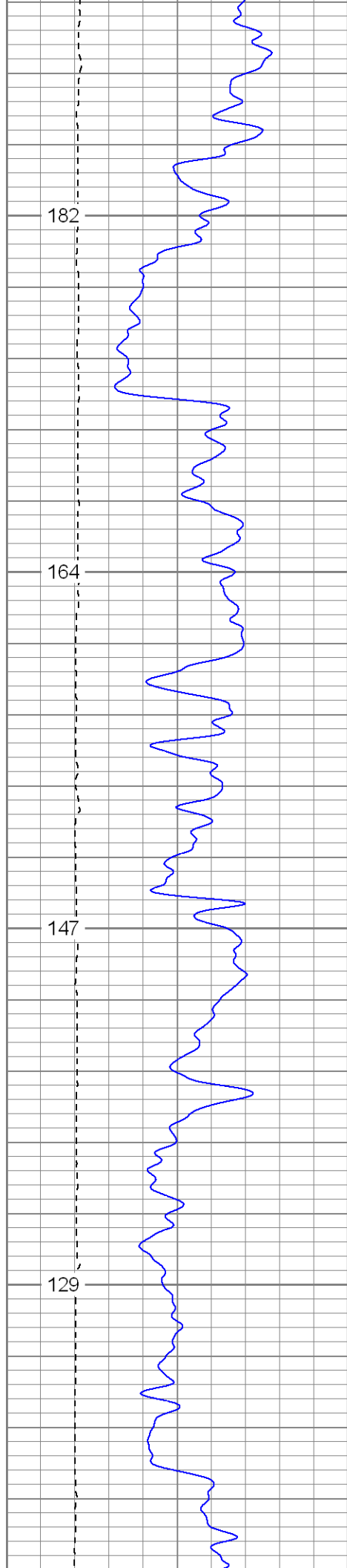
30	NPOR (pu)	-10
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
ABHV (ft3)		

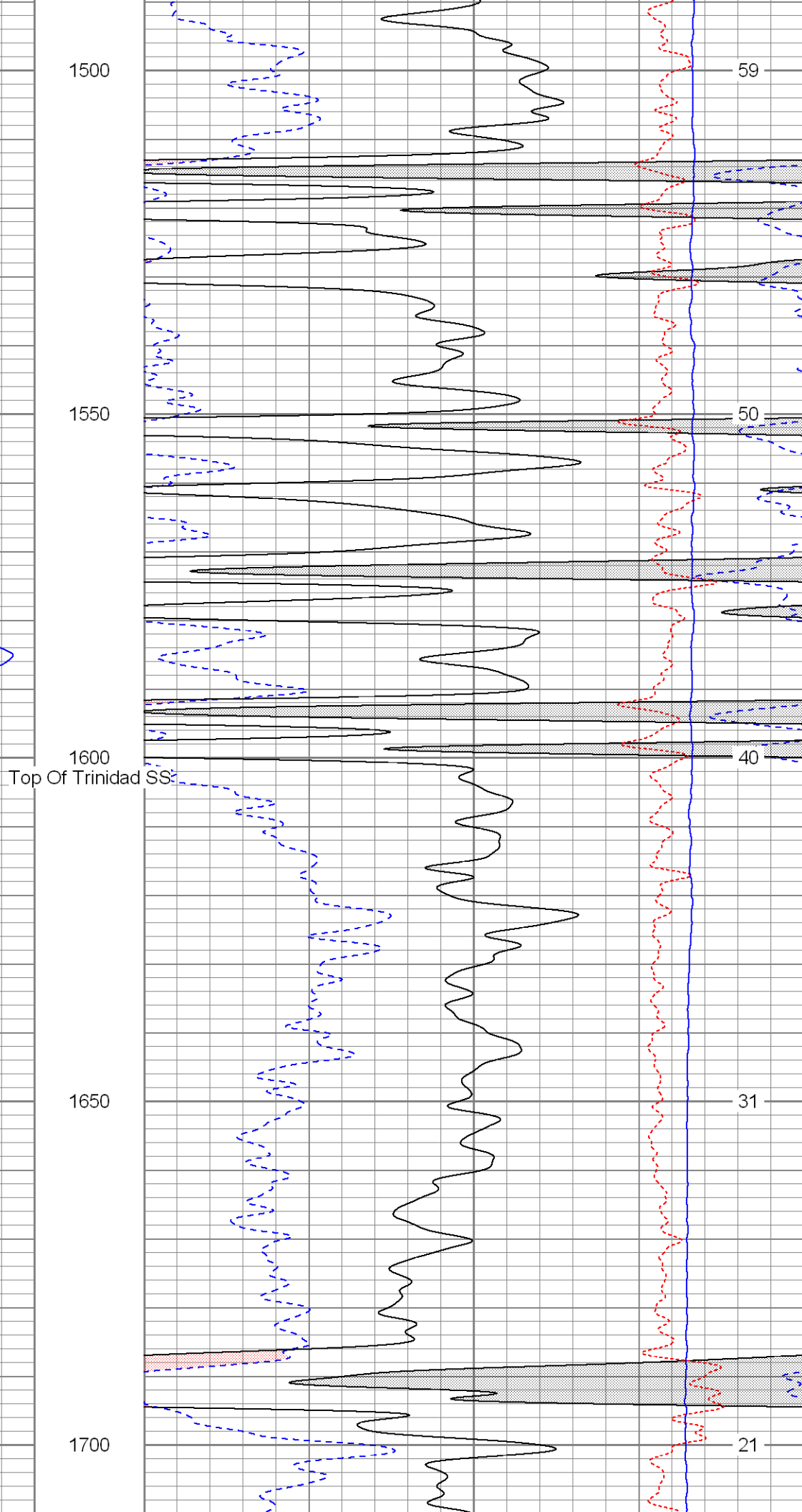
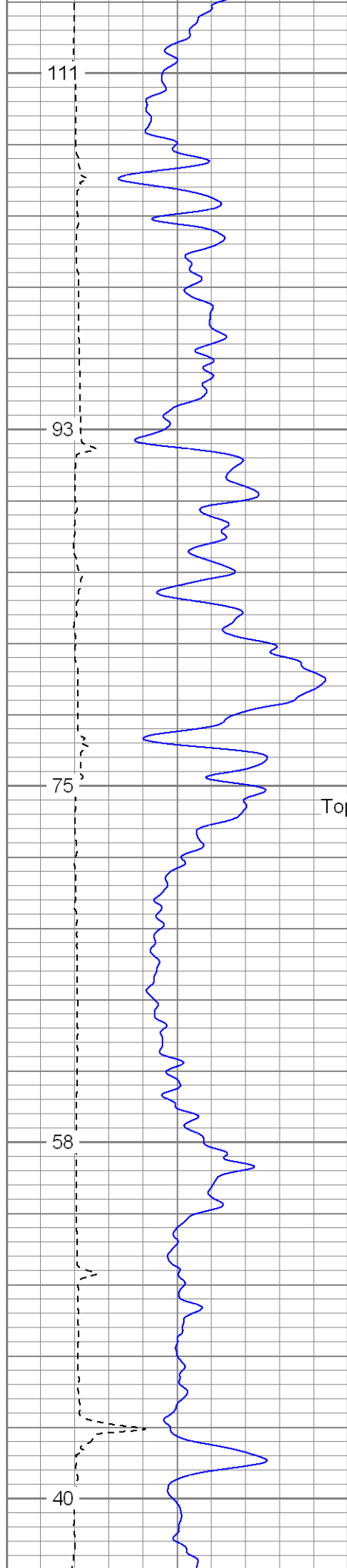


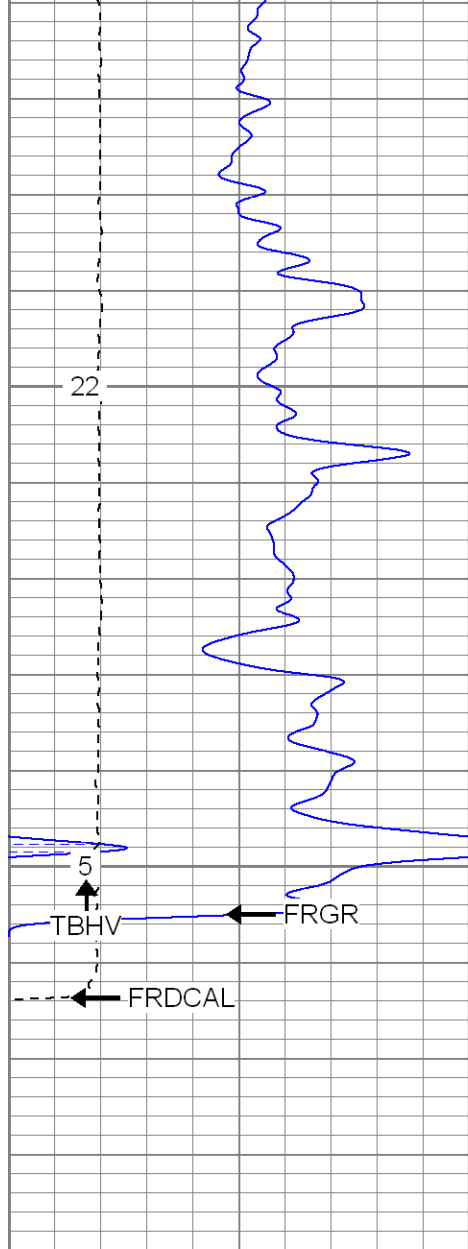




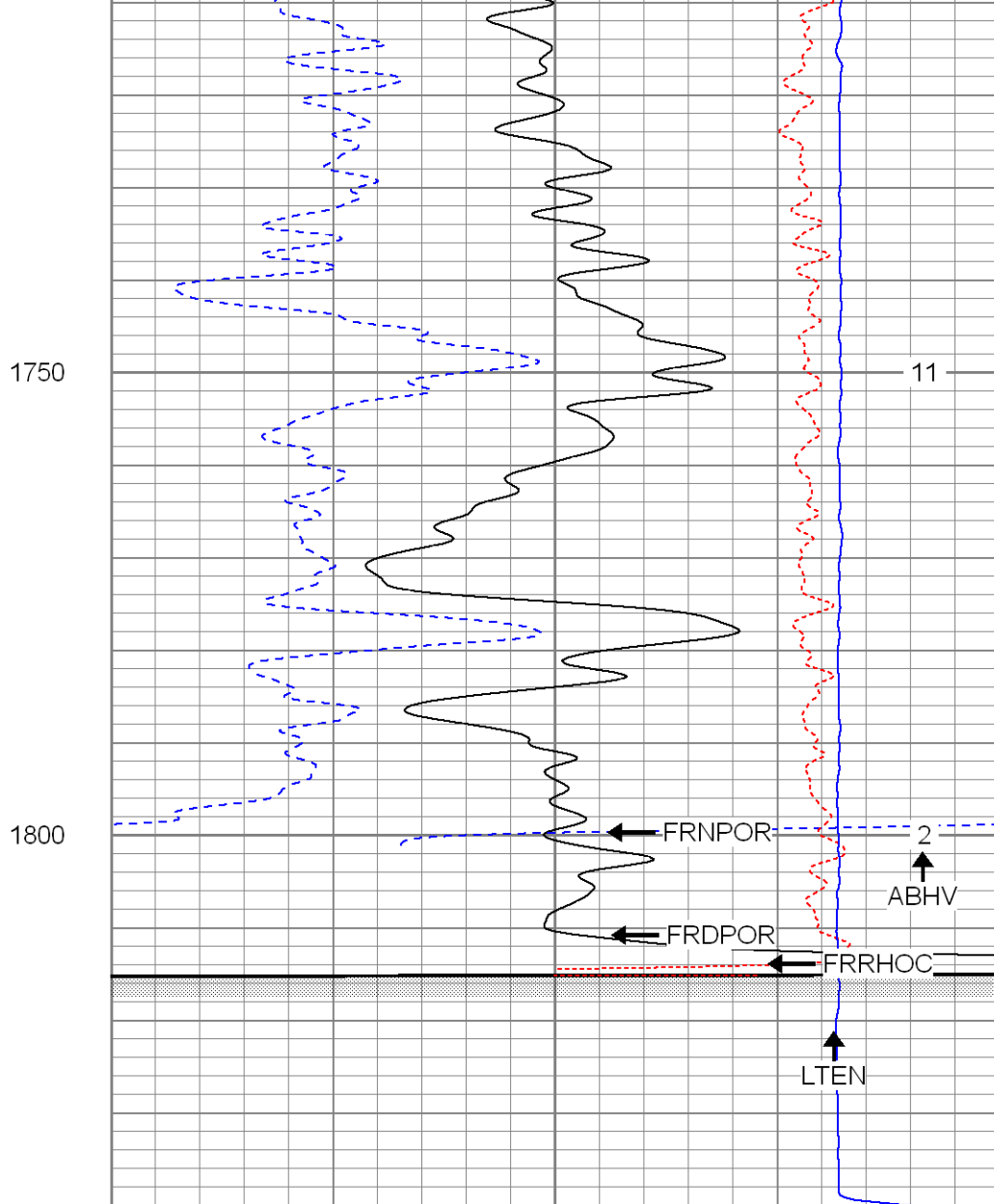








0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		



30	NPOR (pu)	-10
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
ABHV (ft3)		



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# Repeat Pass

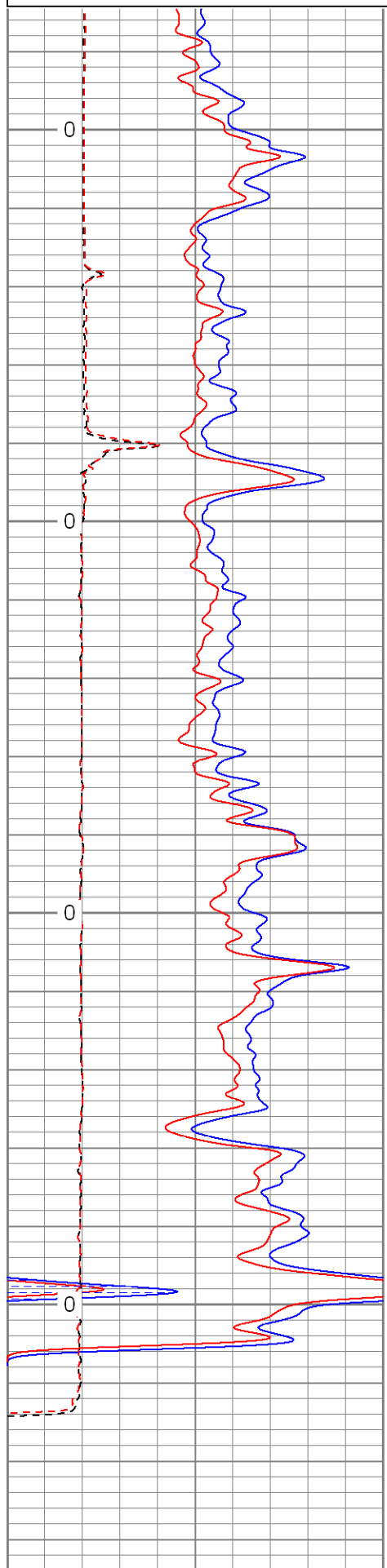
Database File: xtone2508.db  
Dataset Pathname: pass1.1  
Presentation Format: cdnl  
Dataset Creation: Sun Mar 30 10:22:10 2008 by Calc Open-Cased 070814  
Charted by: Depth in Feet scaled 1:240

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

30	NPOR (pu)	-10
30	DPOR (pu)	-10
30	NPOR-repeat (pu)	-10
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)

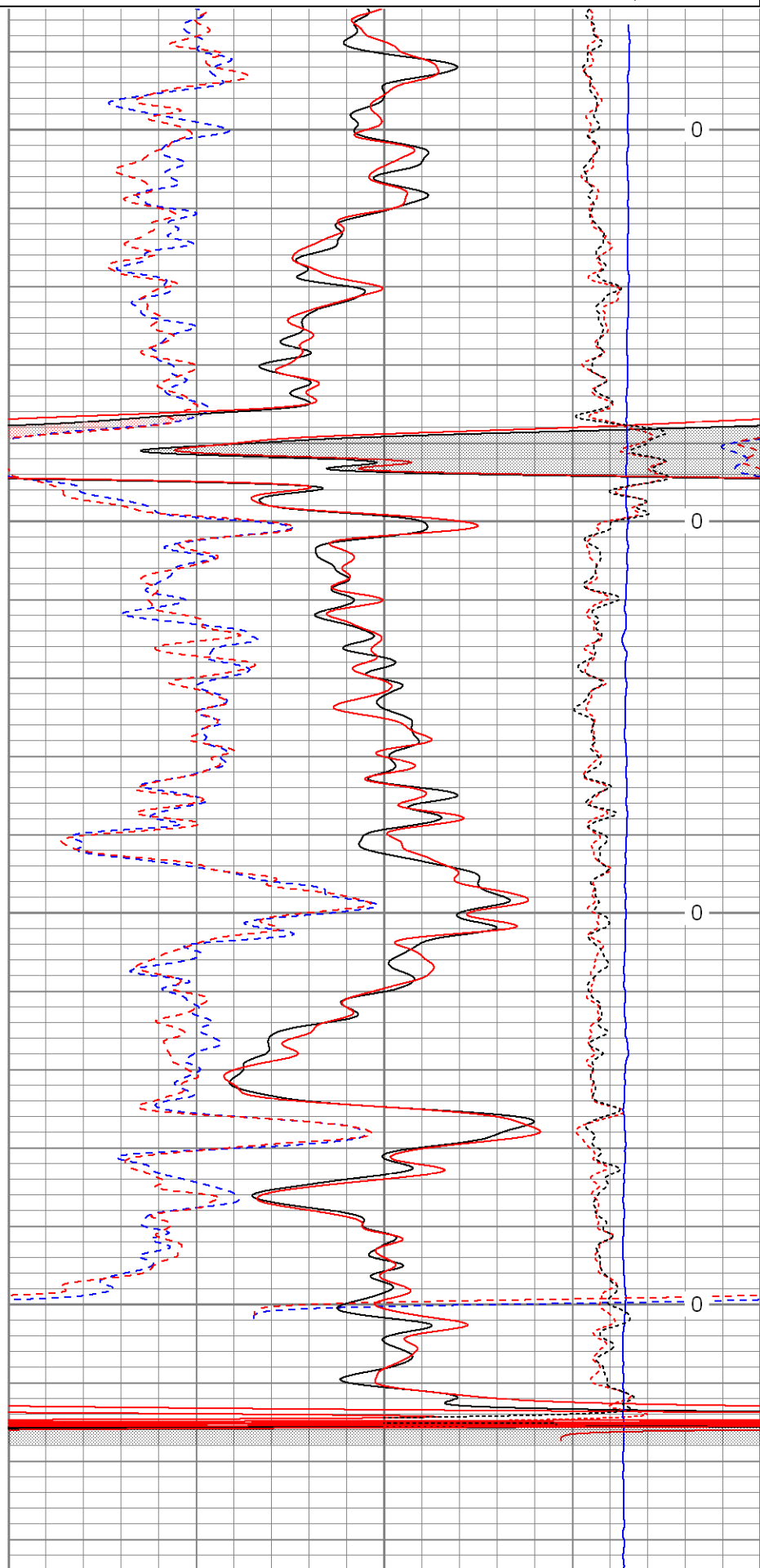


1650

1700

1750

1800



0

0

0

0



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)



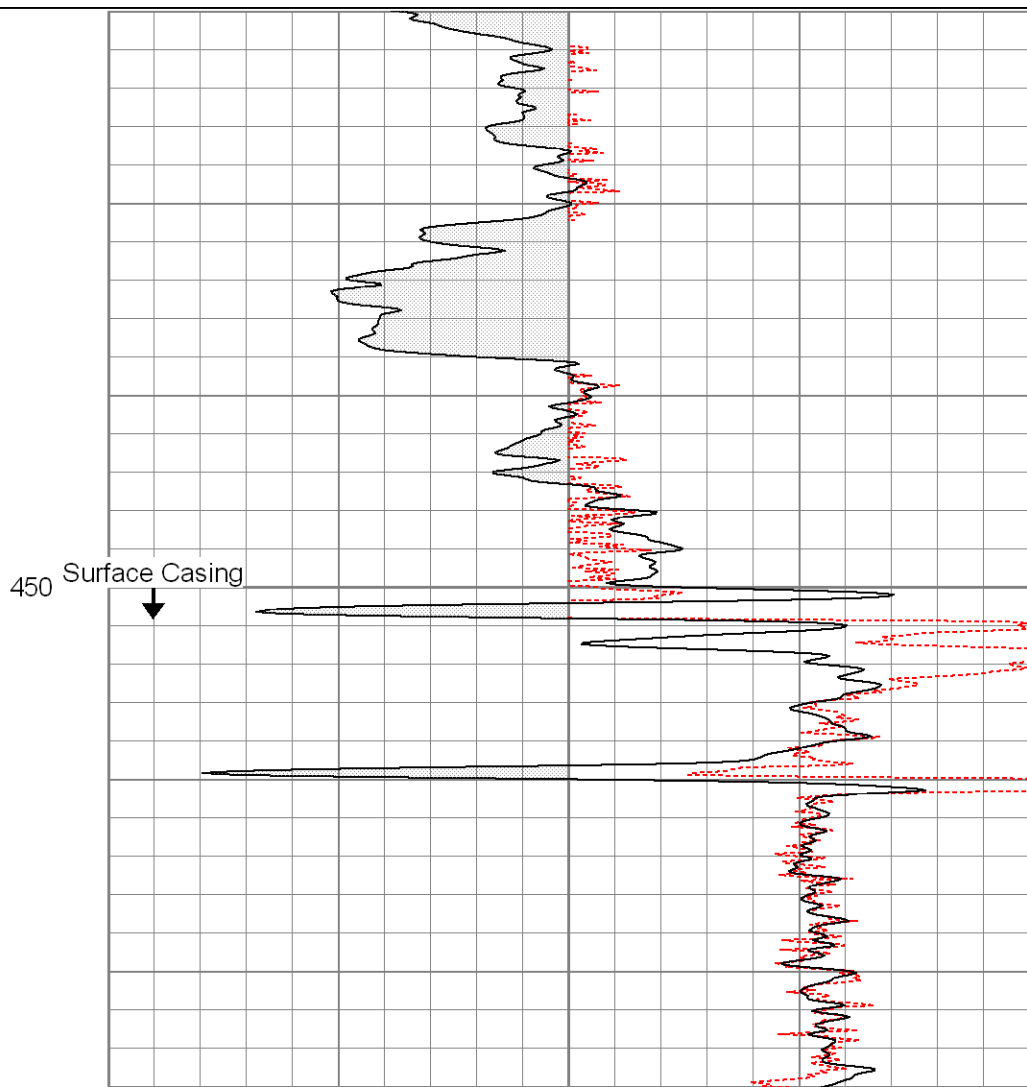
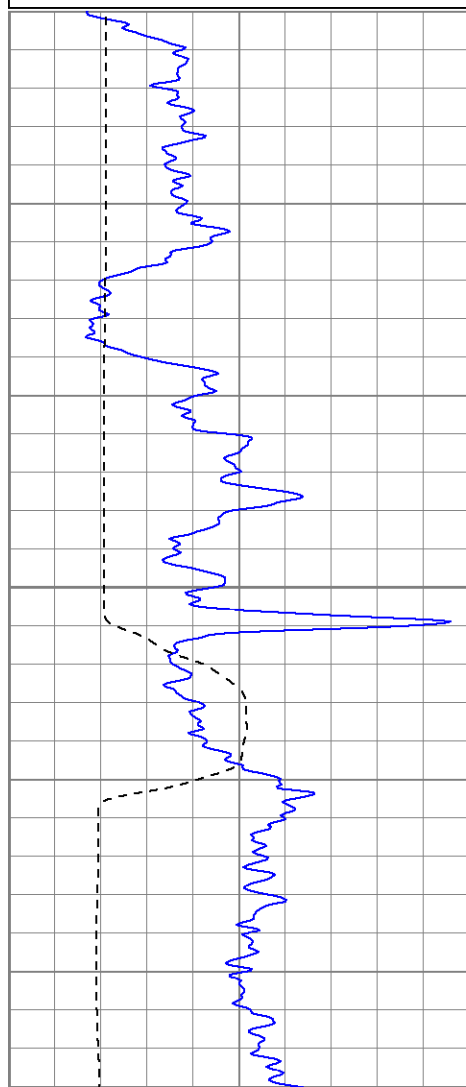
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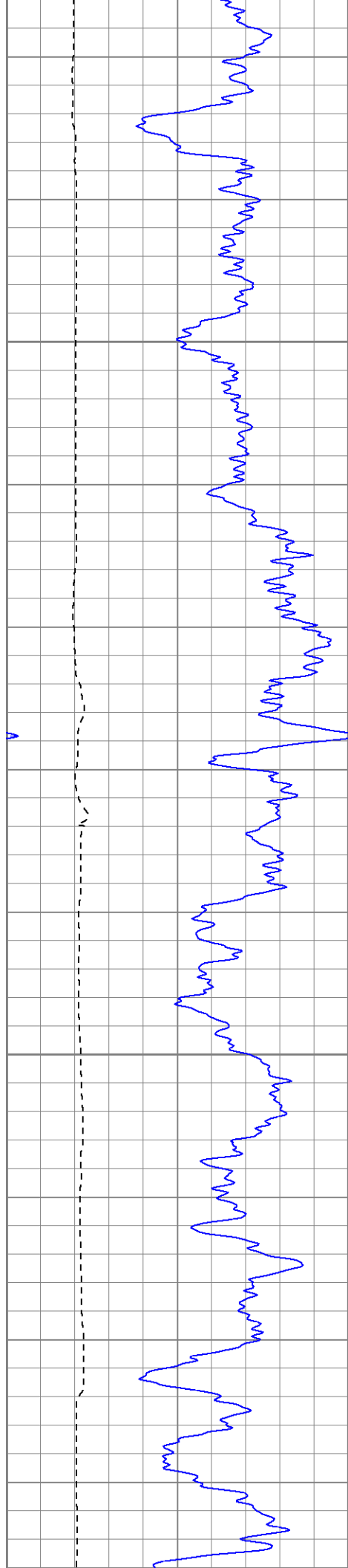
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# High Resolution Pass

Database File: xtone2508.db  
Dataset Pathname: pass2.2  
Presentation Format: cdlhr  
Dataset Creation: Mon Mar 31 09:50:31 2008 by Calc Open-Cased 070814  
Charted by: Depth in Feet scaled 1:120

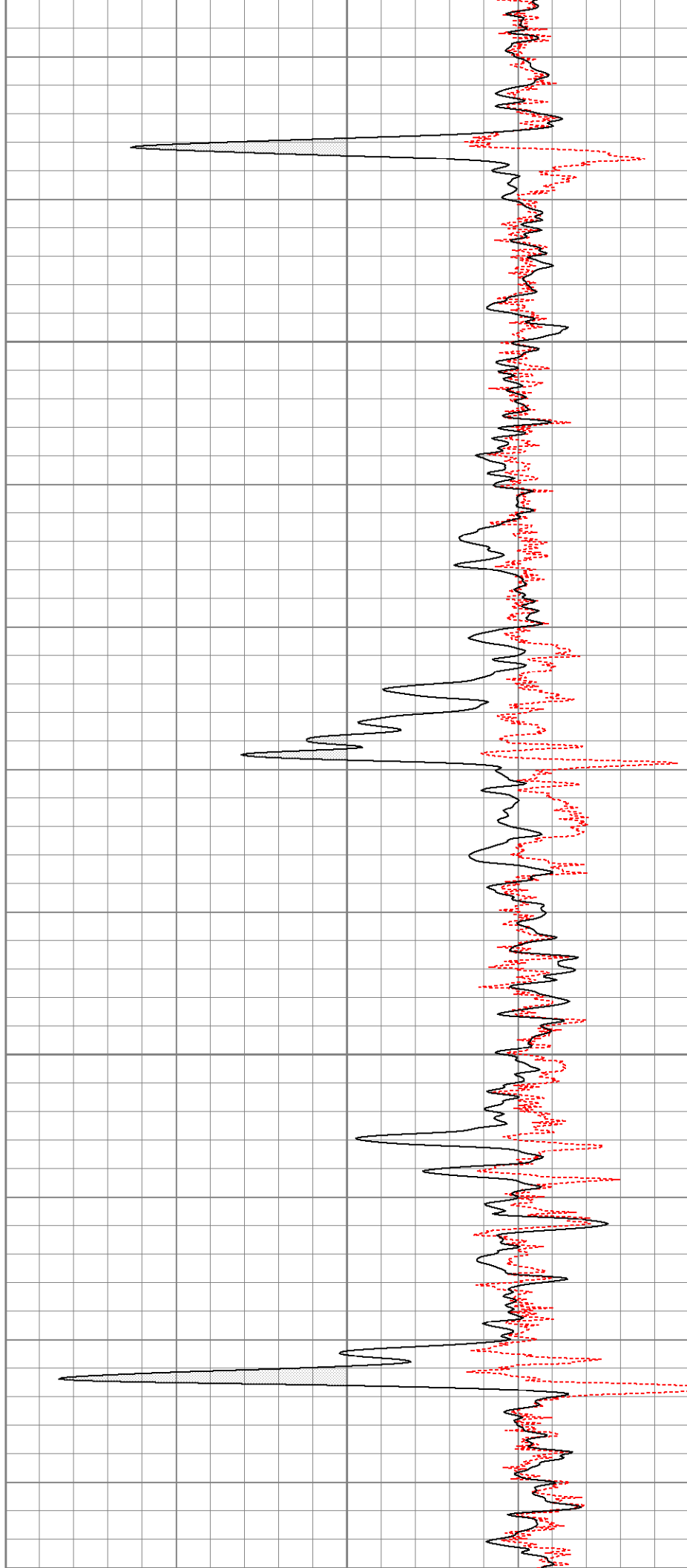
0	GR (GAPI)	200	1	RHOB (g/cc)	3
6	DCAL (in)	16		-0.5	RHOC (g/cc) 0.5

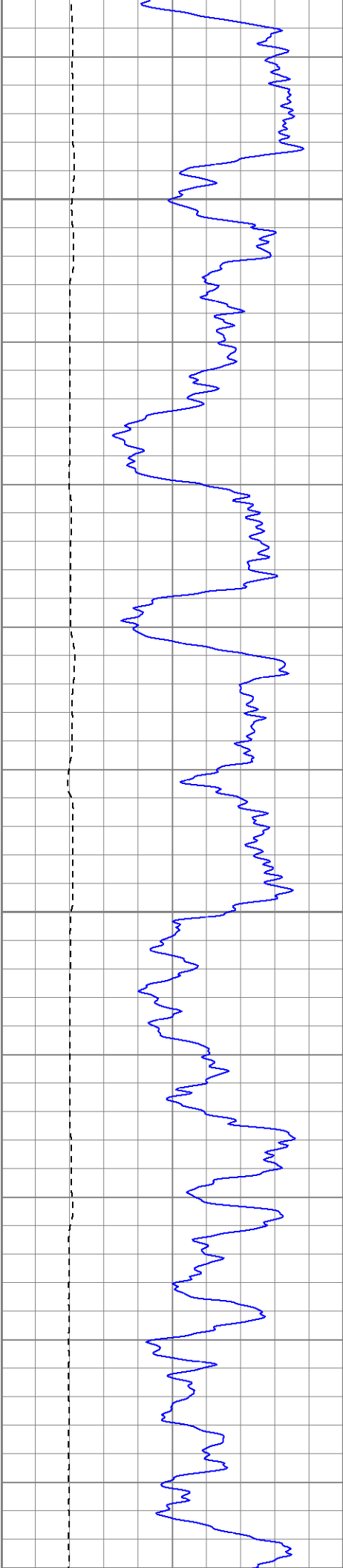




500

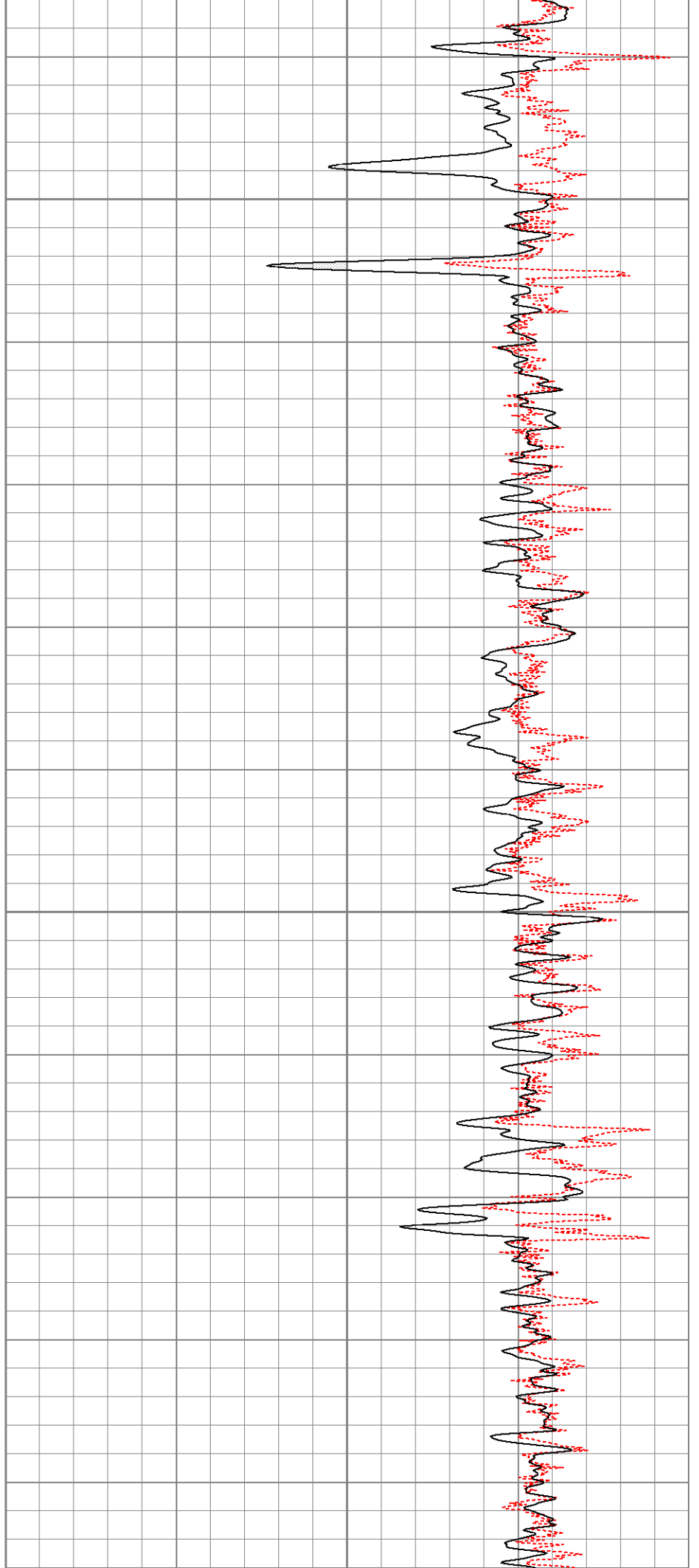
550

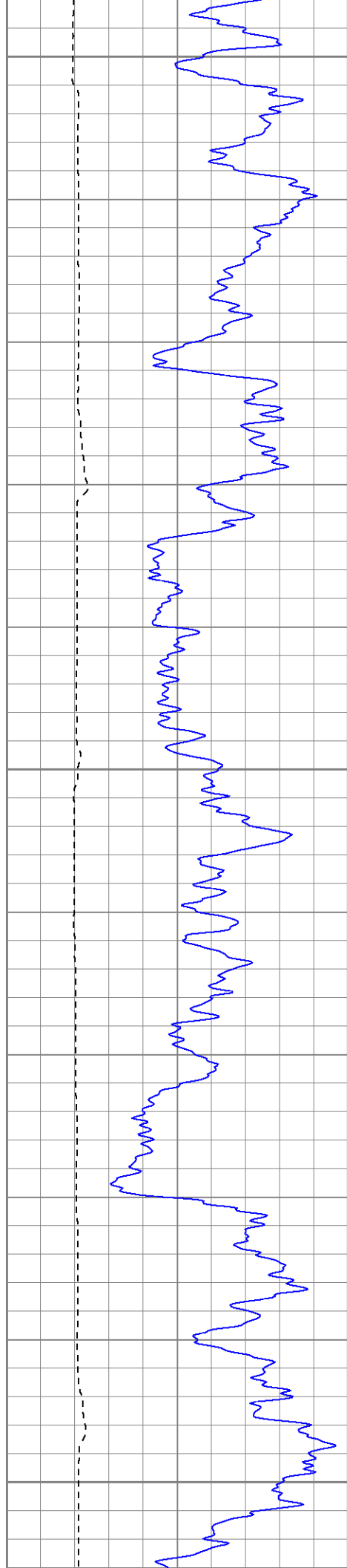




600

650

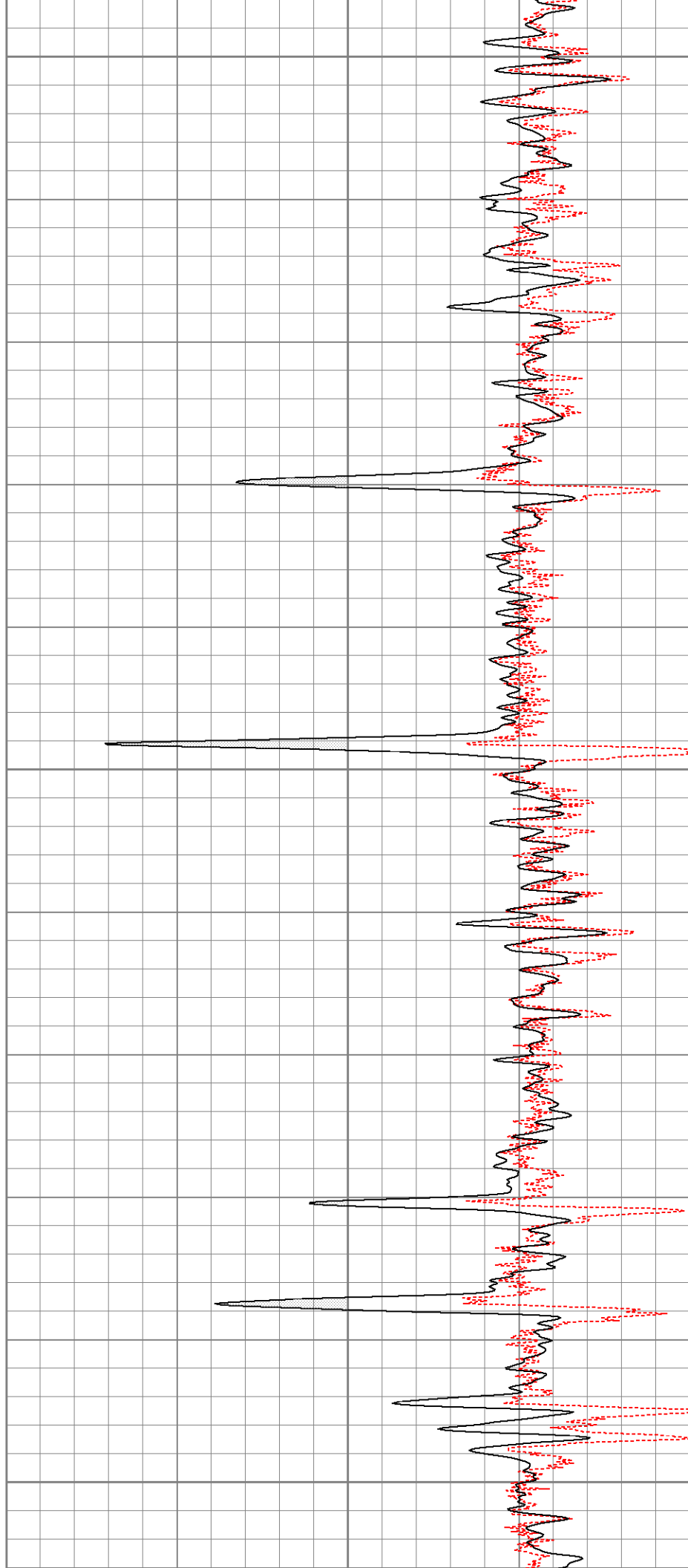


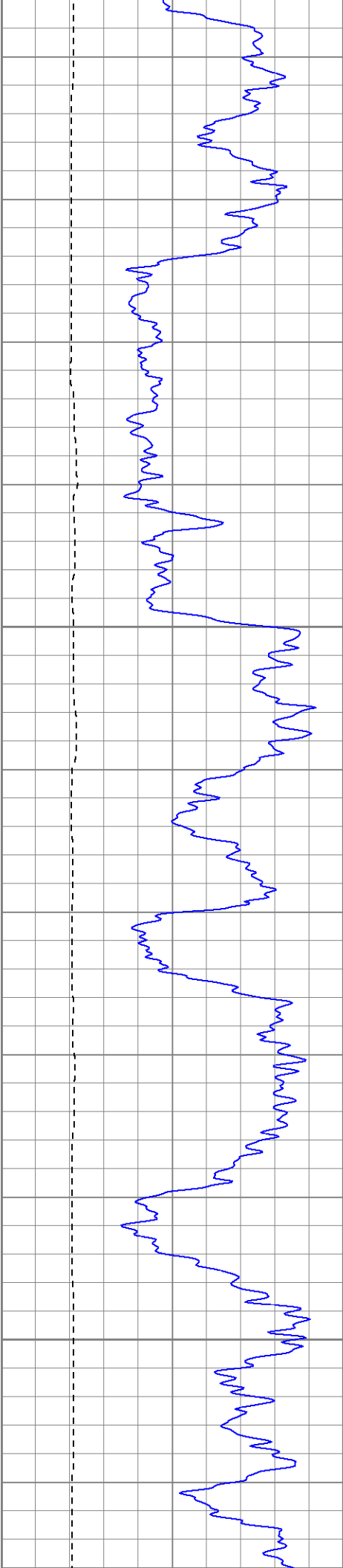


700

750

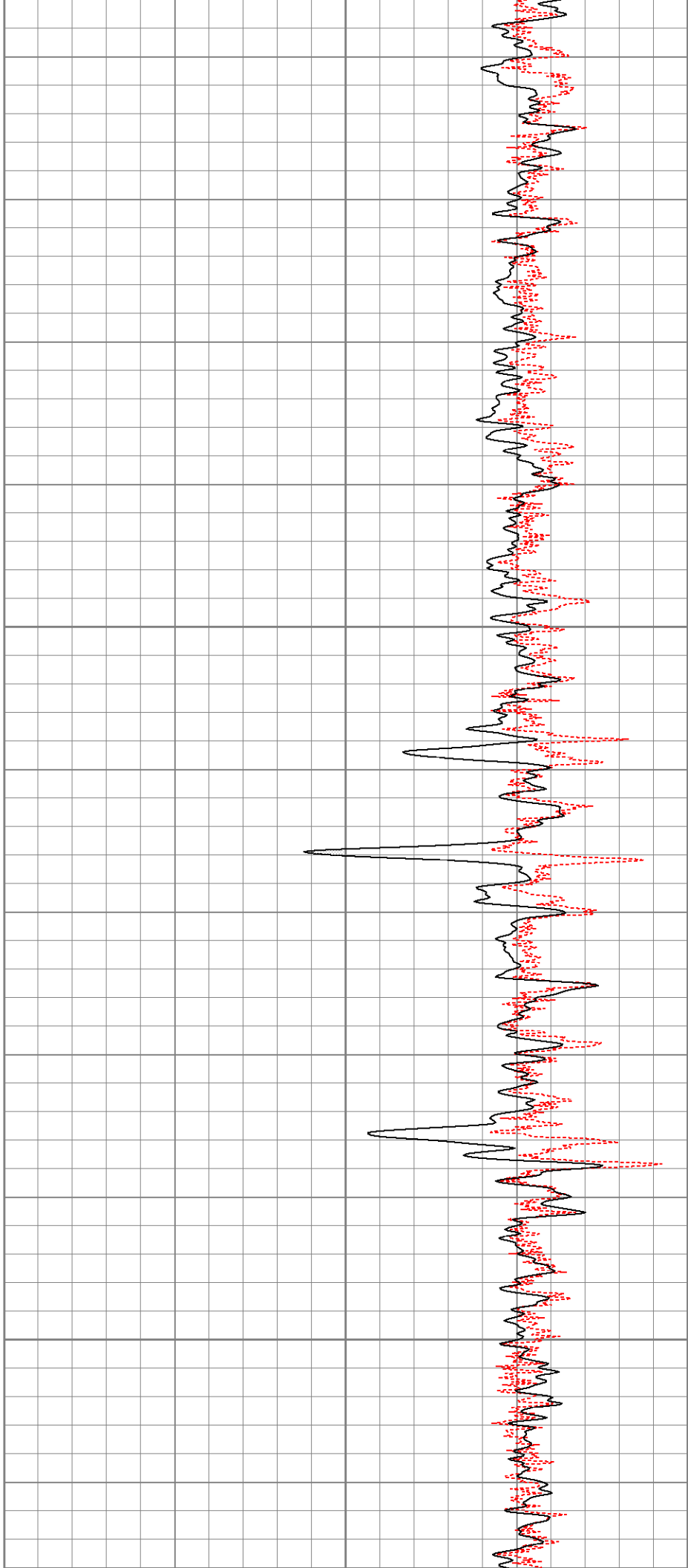
800

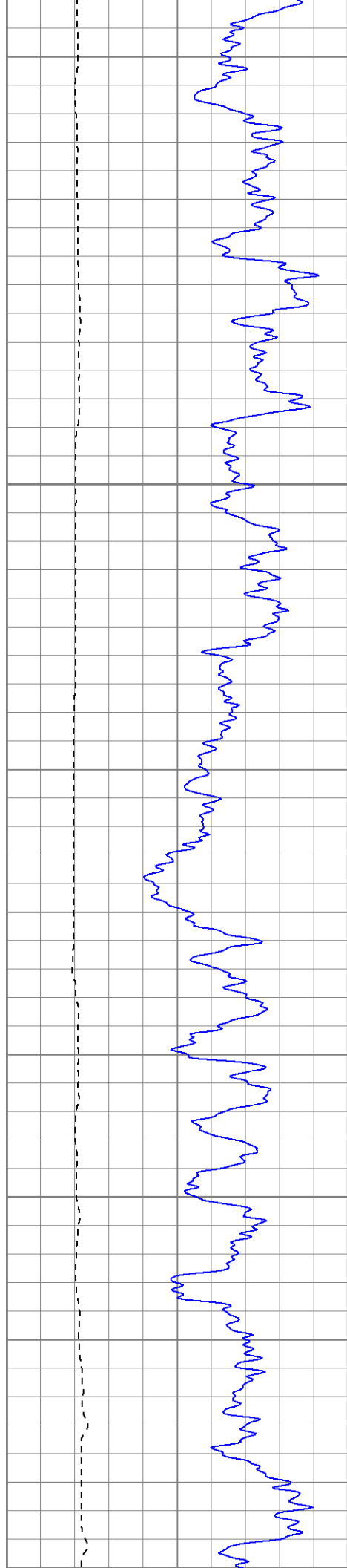




850

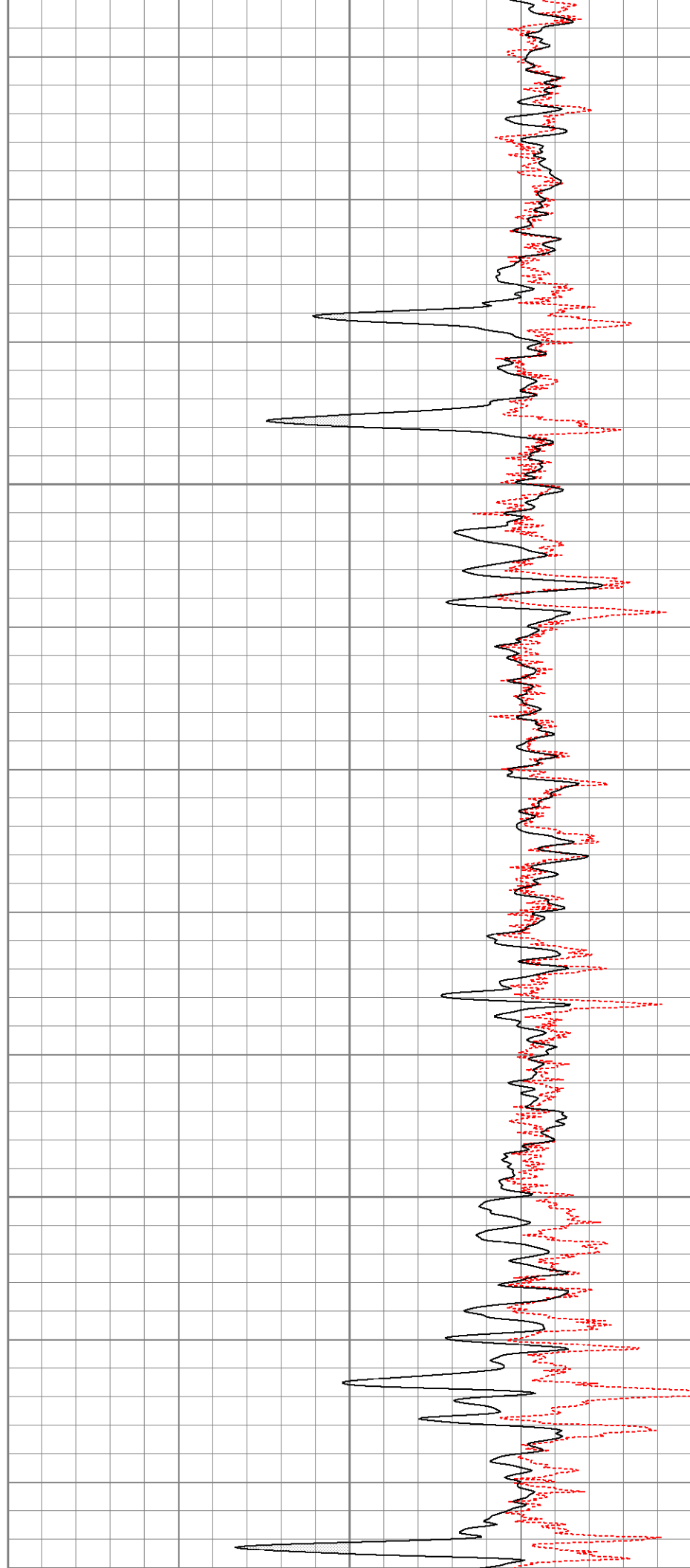
900

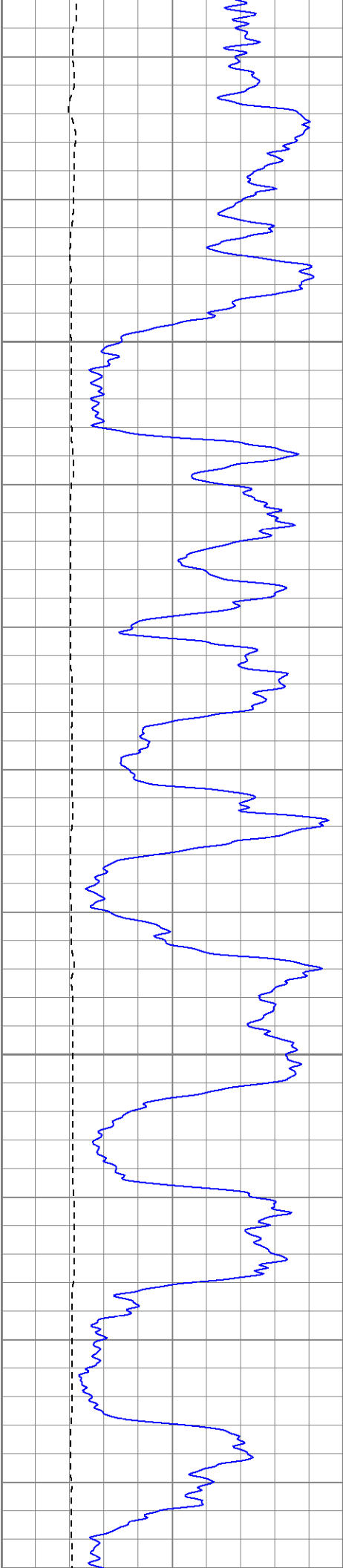




950

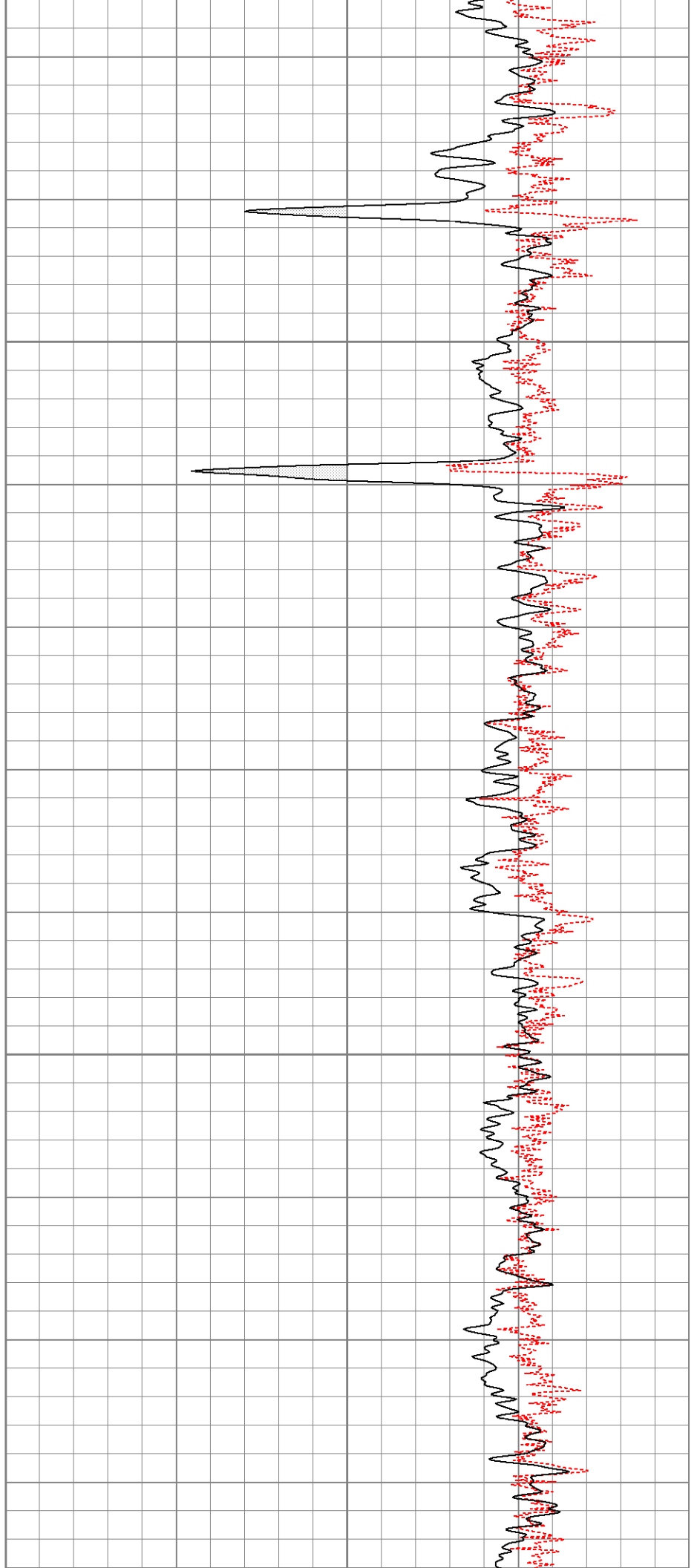
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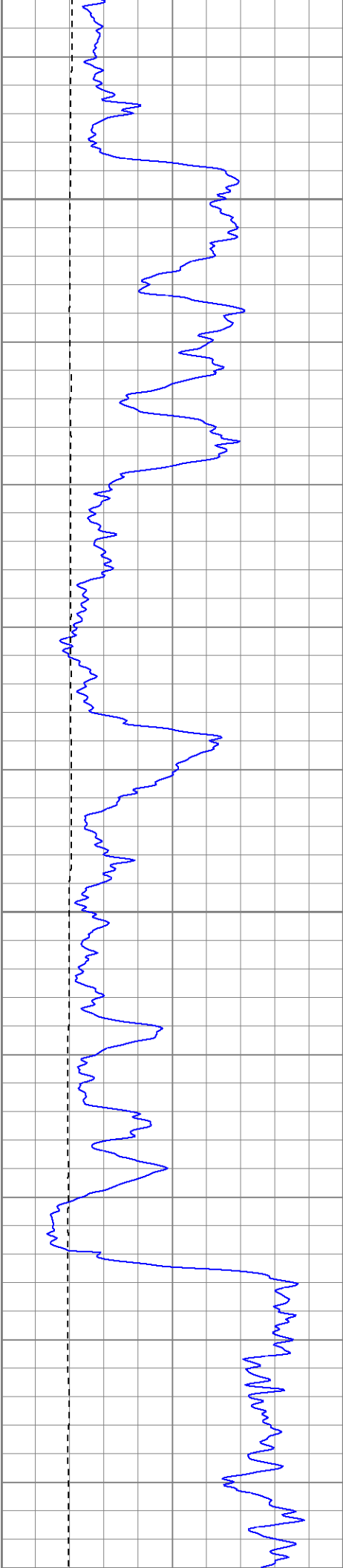




1050

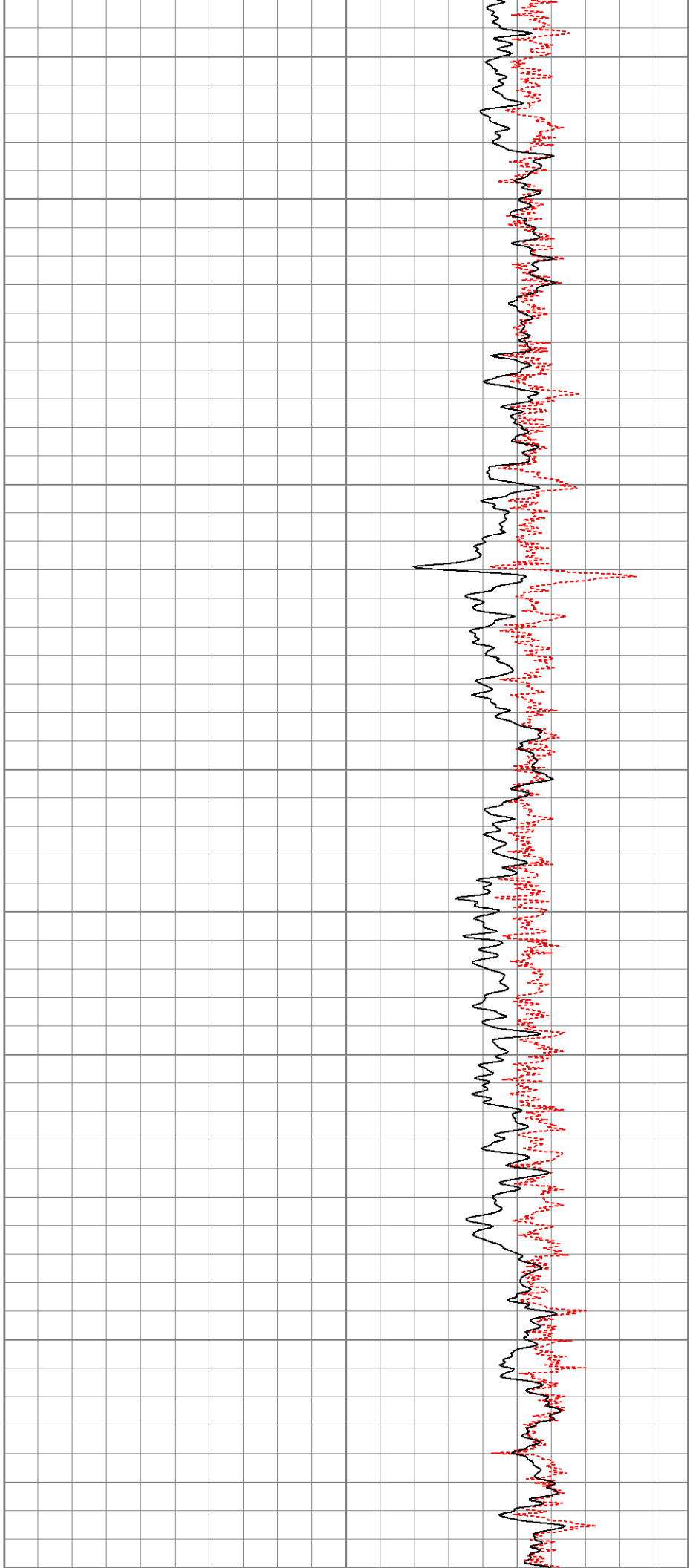
1100



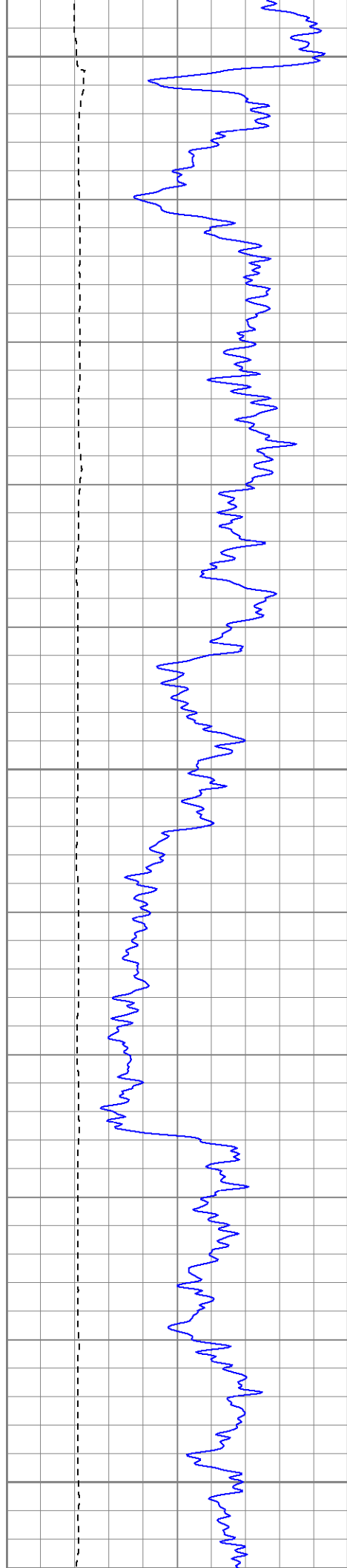


1150

1200



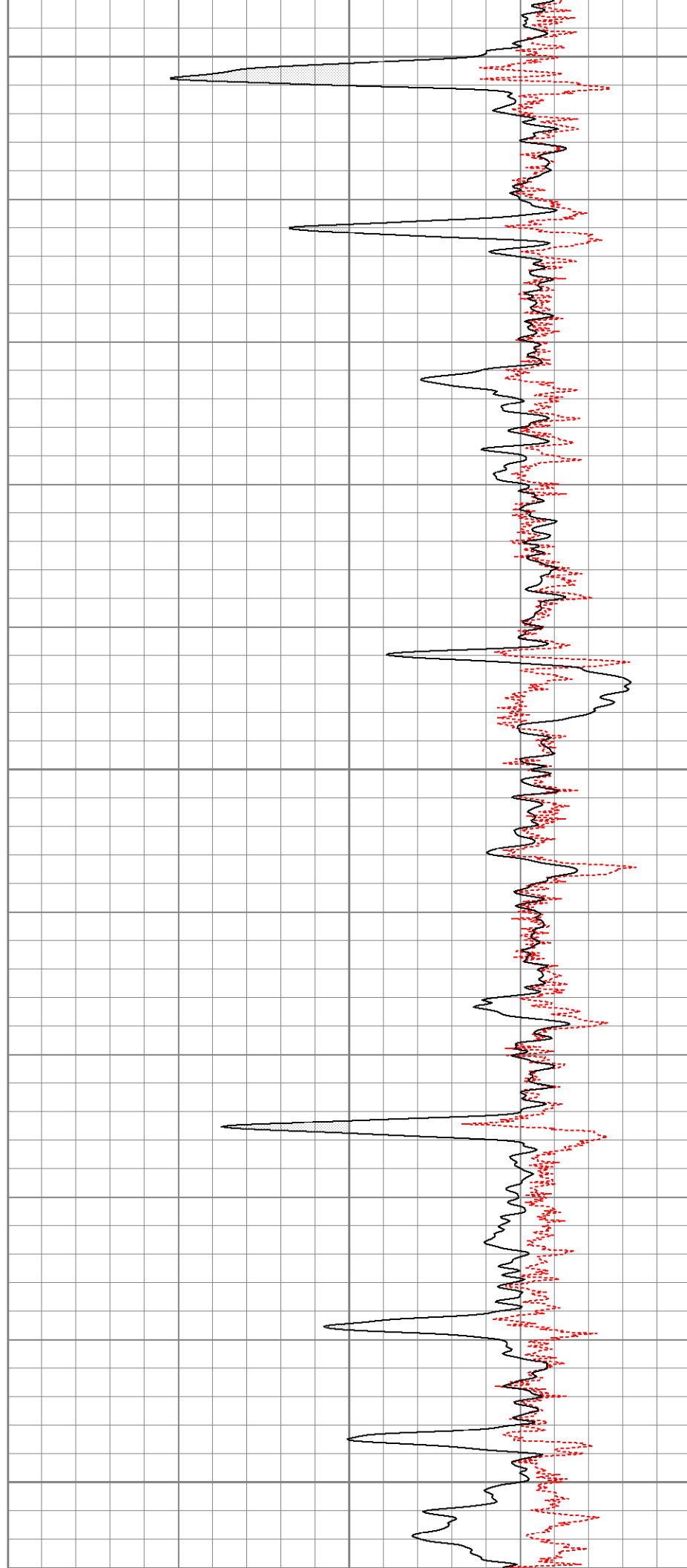


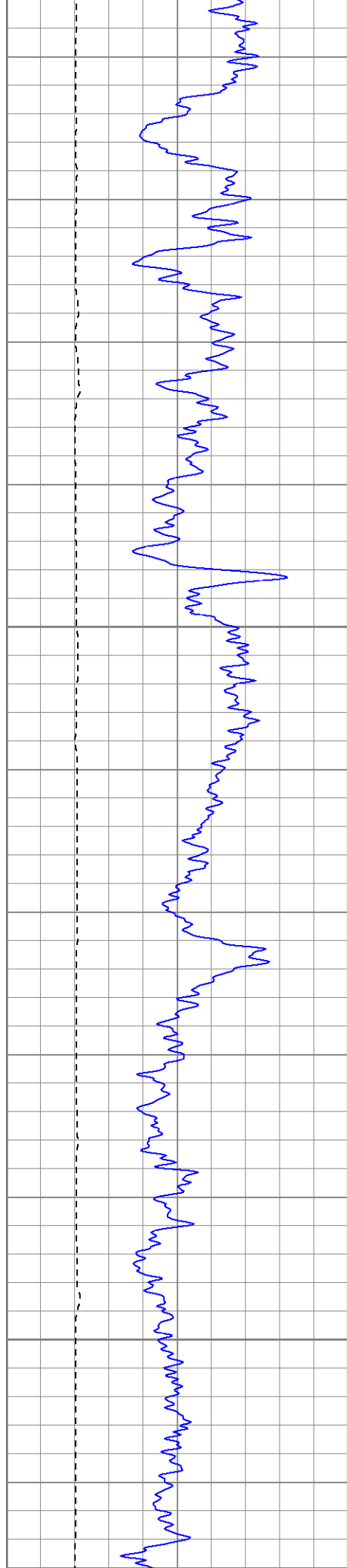


1250

1300

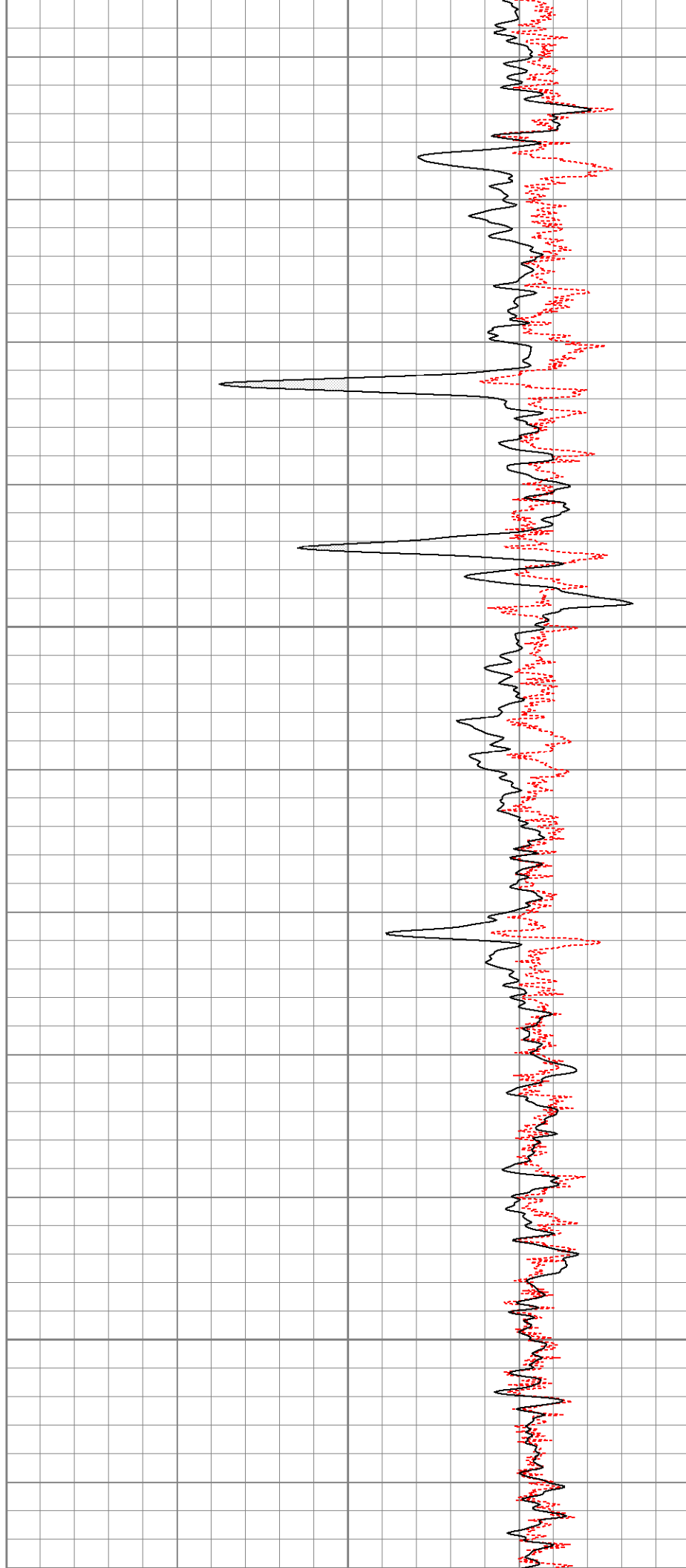
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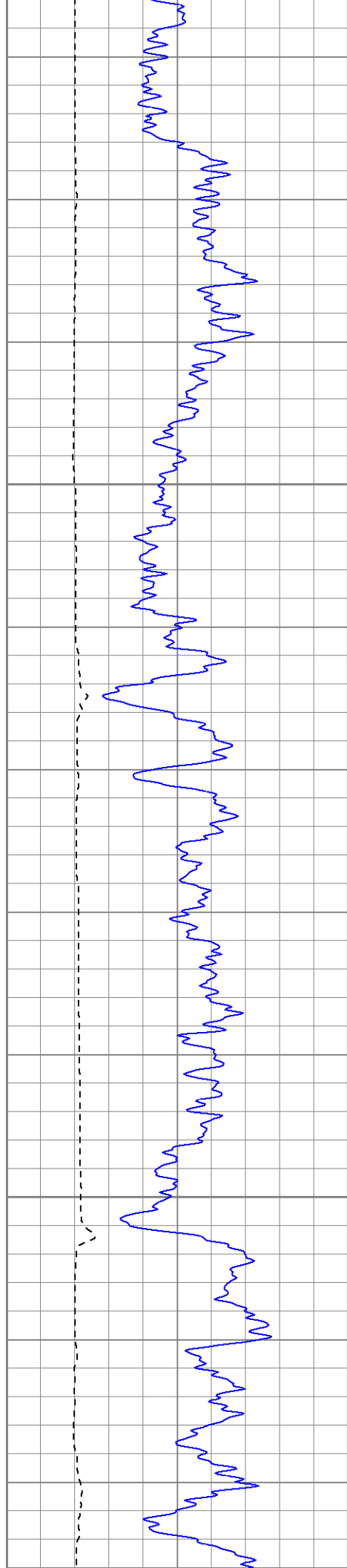




1400

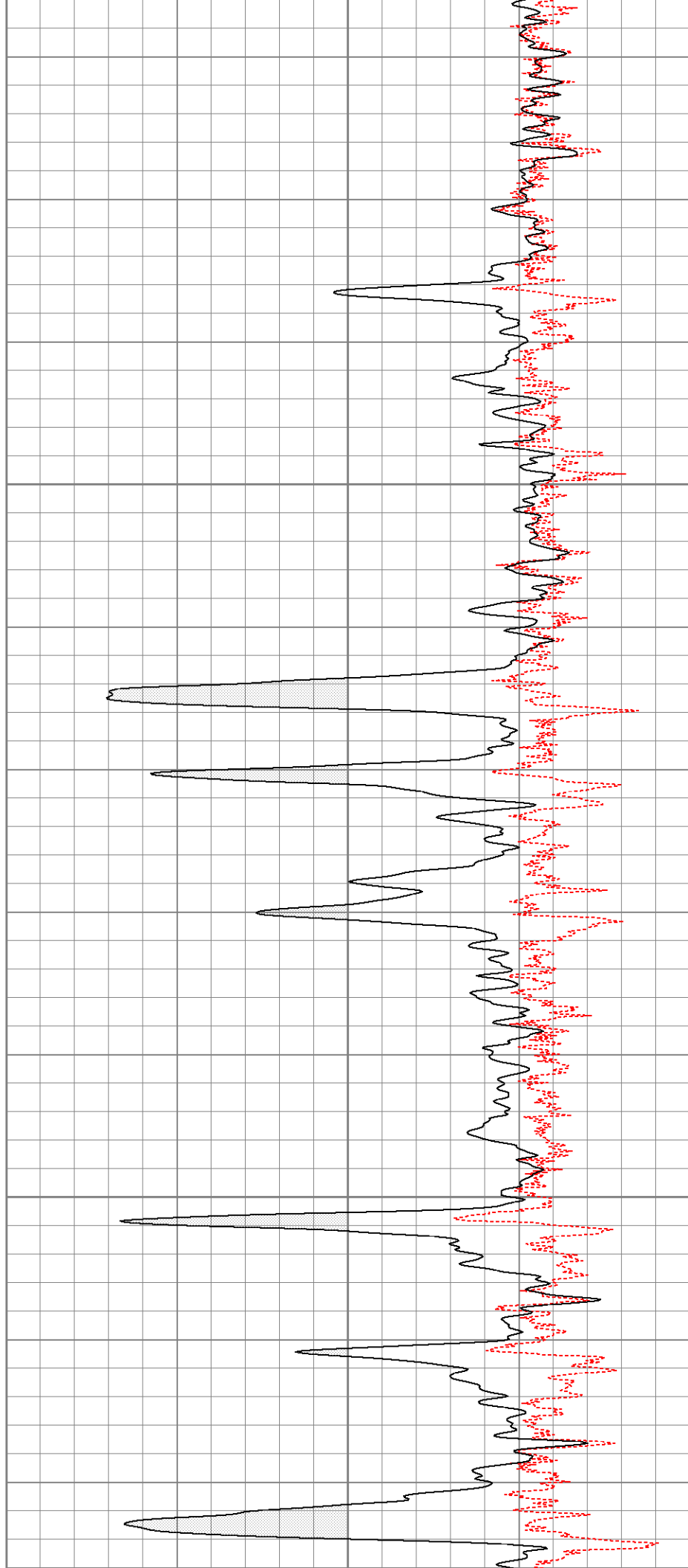
1450

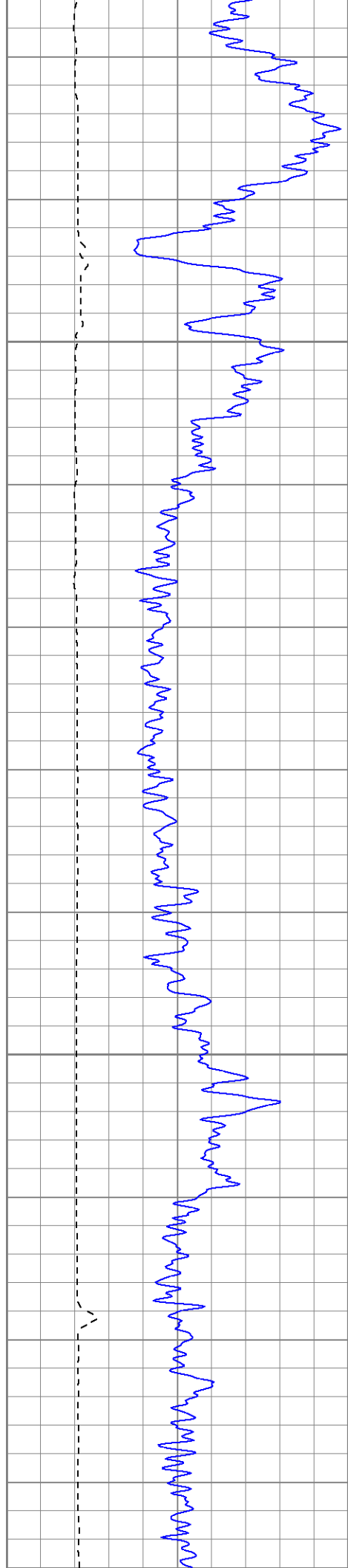




1500

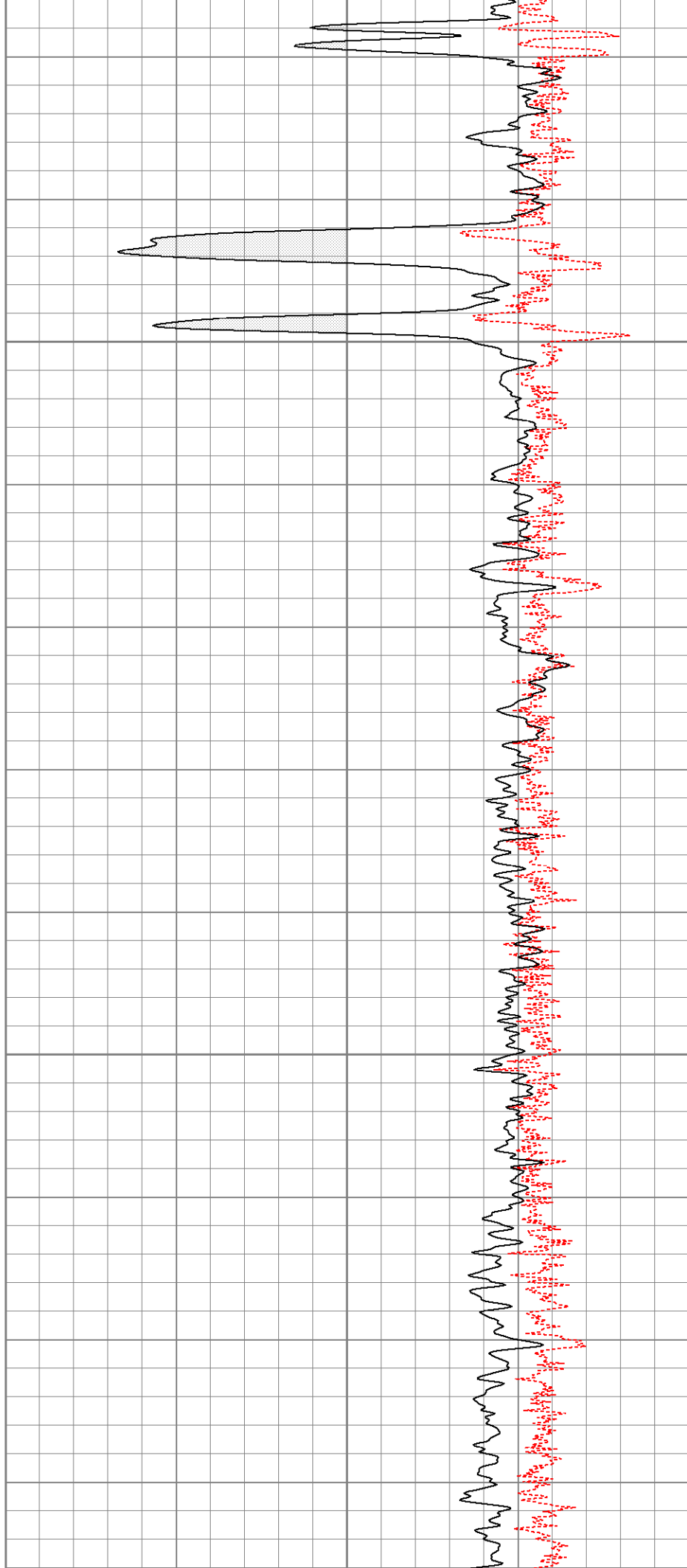
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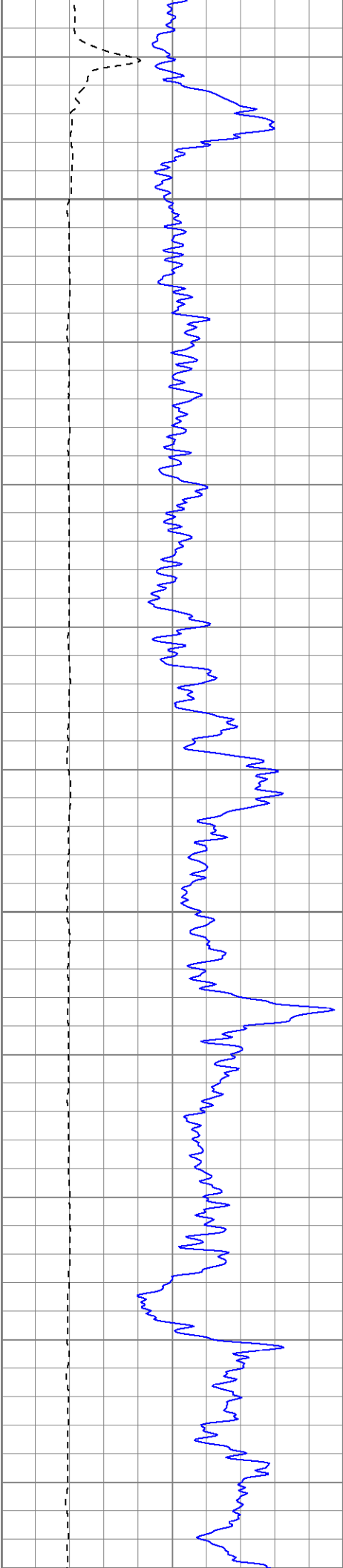




1600

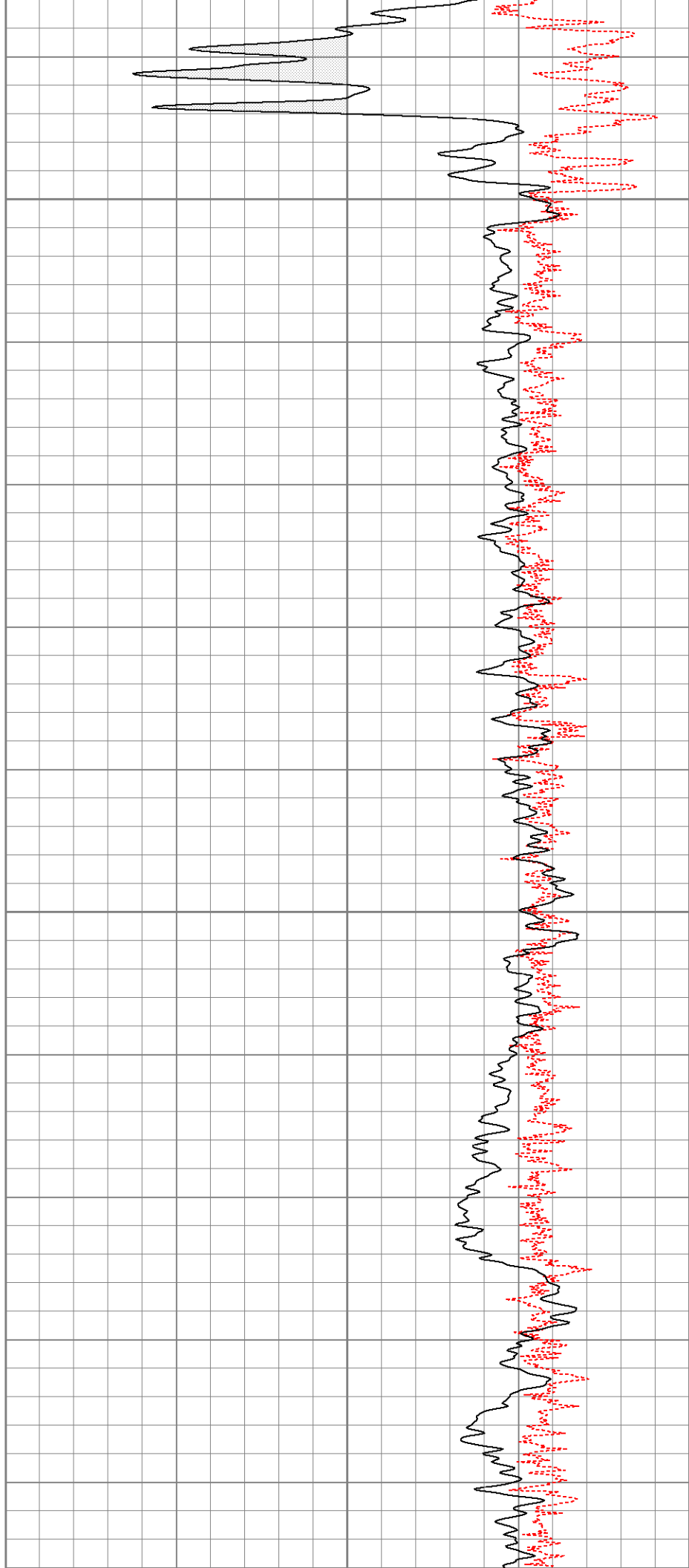
1650

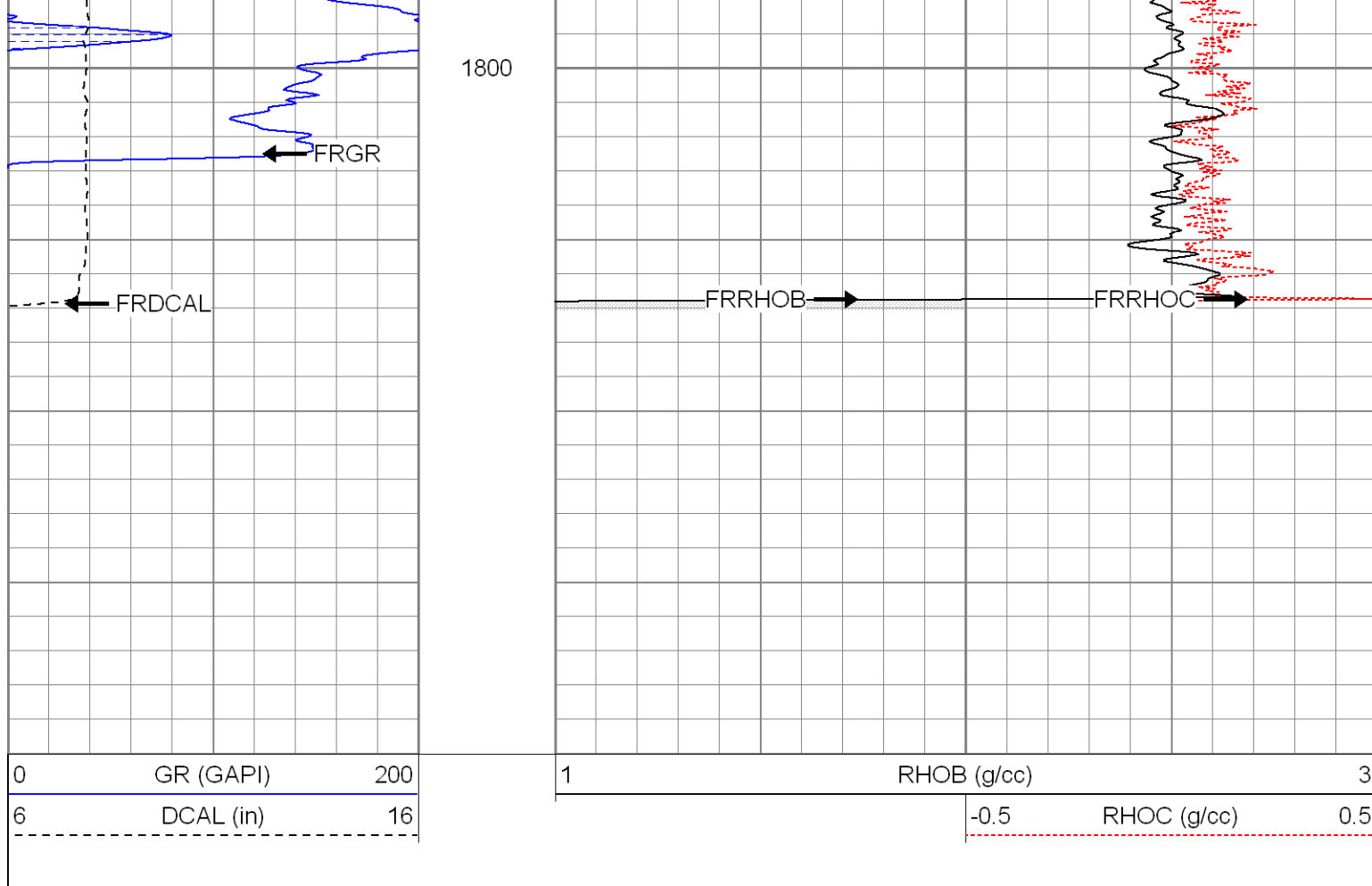




1700

1750





Calibration Report									
Database File:		xtone2508.db							
Dataset Pathname:		pass1							
Dataset Creation:		Sun Mar 30 09:58:44 2008 by Log Open-Cased 070814							
Dual Induction Calibration Report									
Serial-Model:		20017-P							
Surface Cal Performed:		Fri Mar 21 16:59:52 2008							
Downhole Cal Performed:		Fri Mar 21 17:00:29 2008							
Surface Calibration									
Readings				References			Results		
Loop:	Air	Loop		Air	Loop		m	b	
Deep	-0.002	0.657	V	0.000	500.000	mmho-m	758.526	1.560	
Medium	-0.003	0.782	V	0.000	550.000	mmho-m	700.351	2.142	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	-0.002	0.657	V	0.000	500.000	mmho-m	757.929	1.726	
Medium	-0.003	0.780	V	0.000	500.000	mmho-m	638.777	2.035	
Downhole Calibration									
Readings				References			Results		
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	-0.042	500.120	mmho-m	-0.167	500.227	mmho-m	1.000	-0.125	
Medium	-0.239	549.337	mmho-m	-0.090	548.106	mmho-m	0.997	0.149	
Shallow	0.047	4.993	V	10.000	1000.000	Ohm-m	124.000	2.000	

# Compensated Density Calibration Report

Serial-Model: 2118-poilex  
Source / Verifier: /  
Master Calibration Performed: Mon Mar 17 09:00:21 2008

## Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	689.13	662.28	cps
Aluminum	2.590	g/cc	156.84	466.09	cps
Spine Angle = 76.65			Density/Spine Ratio = 0.578		
	Size		Reading		
Small Ring	8.50	in	4.33	V	
Large Ring	14.00	in	8.24	V	

## Gamma Ray Calibration Report

Serial Number: 2001  
Tool Model: OH  
Performed: Wed Mar 05 01:30:07 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: 5145  
Tool Model: G  
Performed: Tue Mar 04 08:46:08 2008

Calibrator Value: 1200 NAPI

Calibrator Reading: 1700 cps

Sensitivity: 0.705882 NAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
NEU	40.47		None	0.75	1.50	5.00
			NEU-G (5145) Gearhart Epithermal	5.65	3.50	85.00
GR	34.63		GR-OH (2001) 2001	3.56	3.25	40.00
LSD	26.46		CDL-poilex (2118)	8.83	4.00	275.00

DCAL	26.05					
SSD	25.88					
CILD	16.29					
SP	16.29					
CILM	12.54			DIL-P (20017) Pengo	24.63	4.00
RLL3	3.21					300.00
Dataset: xtone2508.db: field/well/run1/pass1 Total Length: 43.42 ft Total Weight: 705.00 lb O.D. 4.00 in						