



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

# COMPENSATED DENSITY NEUTRON LOG

Company XTO Energy Inc.  
Well Golden Eagle 28-13  
Field Purgatoire River  
County Las Animas State Colorado

Location: API # : 05 071 09494 00

1291' FSL & 785' FWL

SEC 28 TWP 33S RGE 67W

Permanent Datum Ground Level Elevation 7240'  
Log Measured From Ground Level  
Drilling Measured From Ground Level

Other Services  
DIL  
Elevation  
K.B. -----  
D.F. -----  
G.L. 7240'

Date 3-27-08

Run Number One

Depth Driller 1880'

Depth Logger 1890'

Bottom Logged Interval 1864'

Top Log Interval Surface Casing

Casing Driller 8 5/8" @ 447'

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 9:00 A.M.

Time Logger on Bottom 10:45 A.M.

Maximum Recorded Temperature 100 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 1344' to 1294' due to foam.

Well Directions:

Second Bosque Entrance, at Railroad Tracks take left, follow road stay right up hill, take left at 3 way, dead end on location.



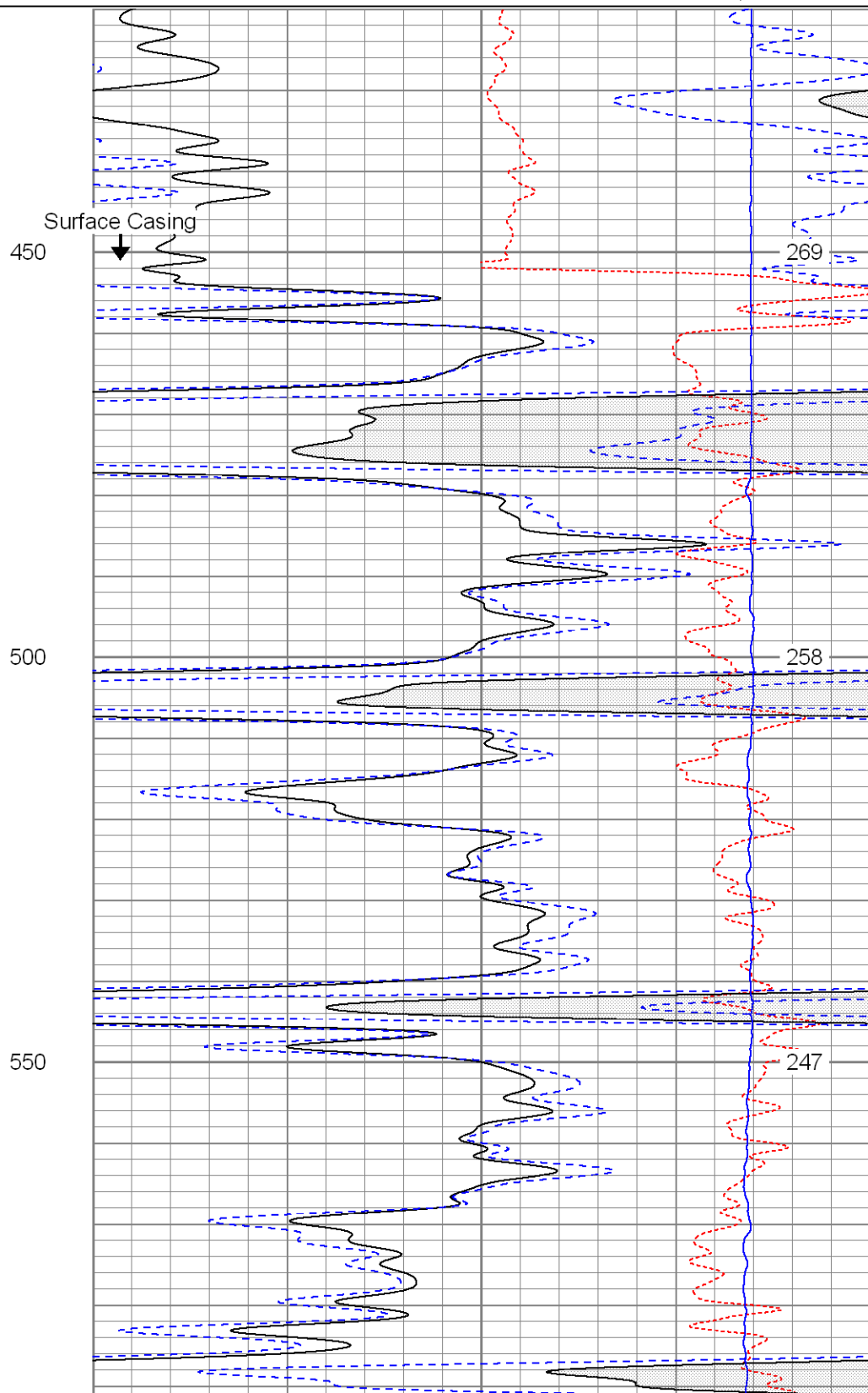
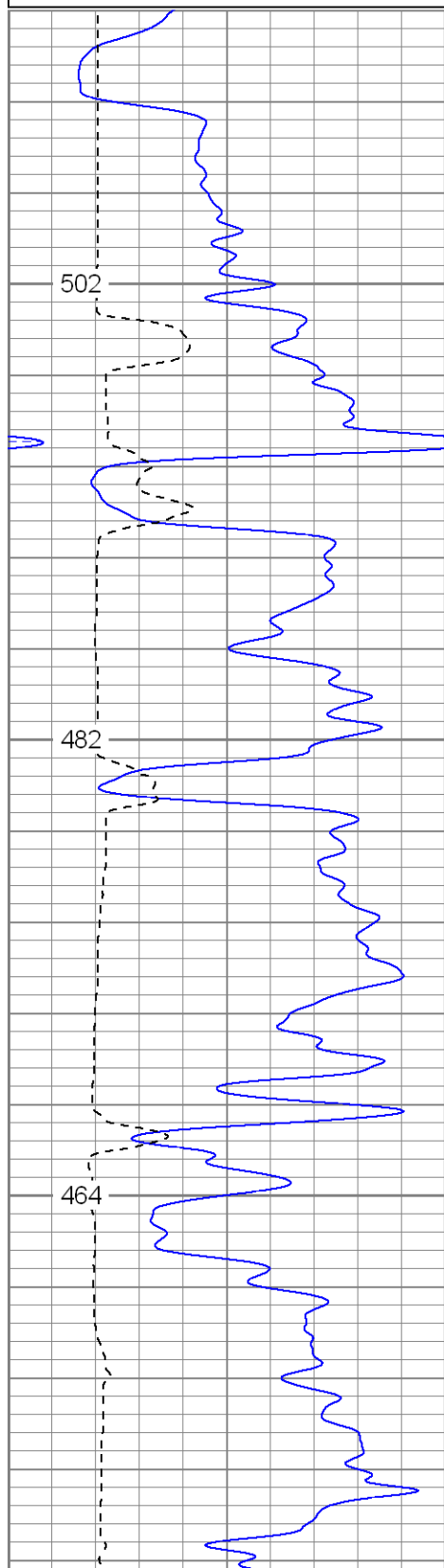
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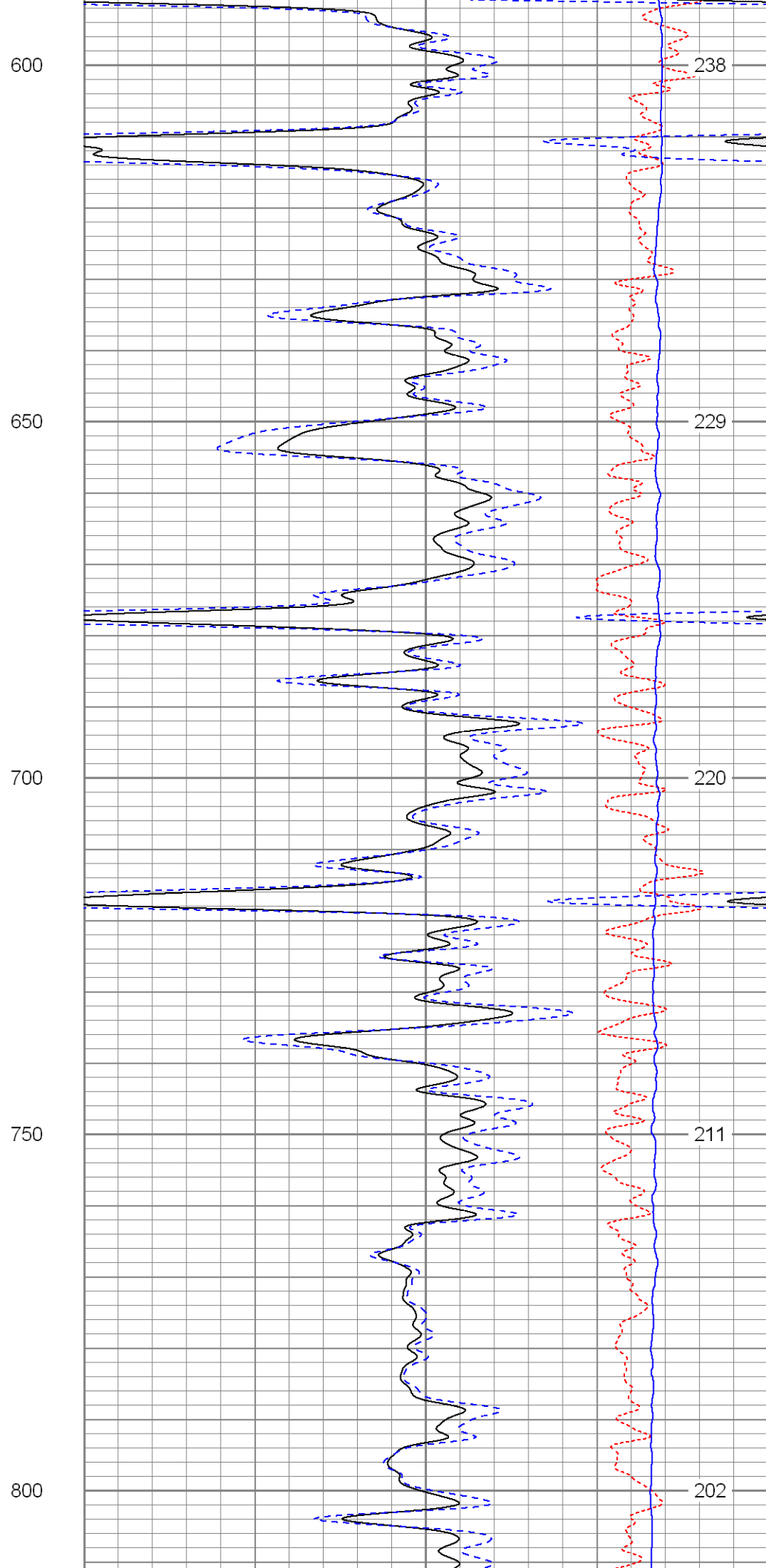
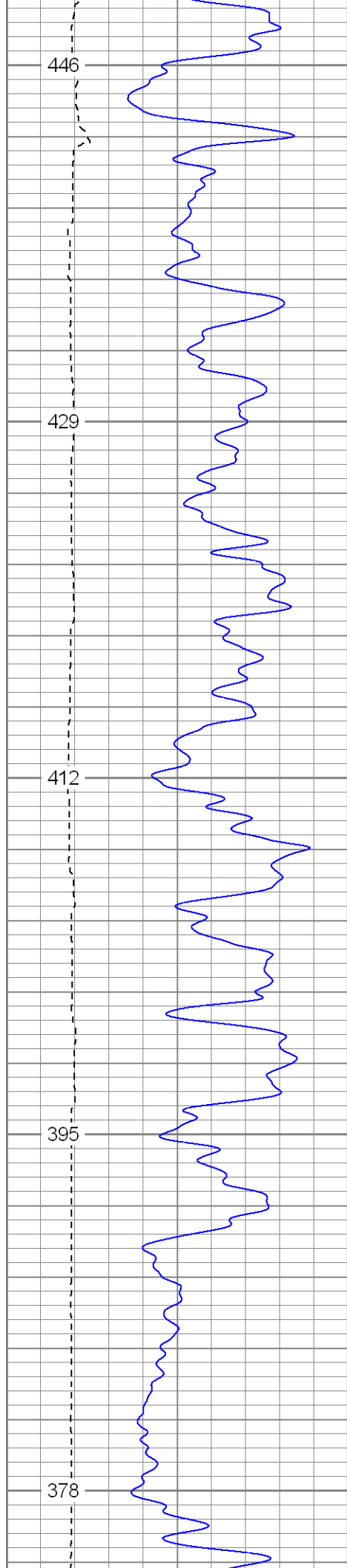
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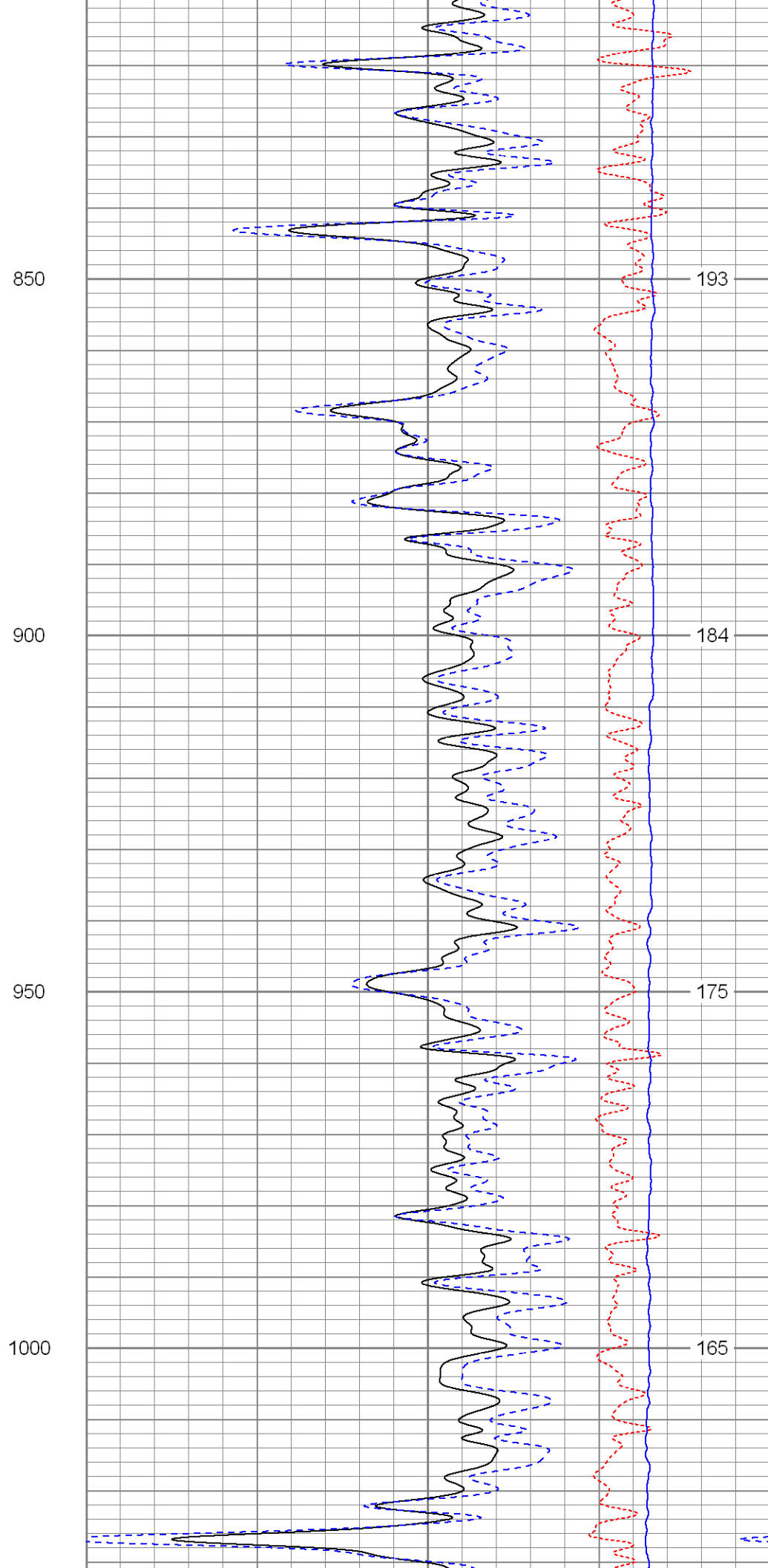
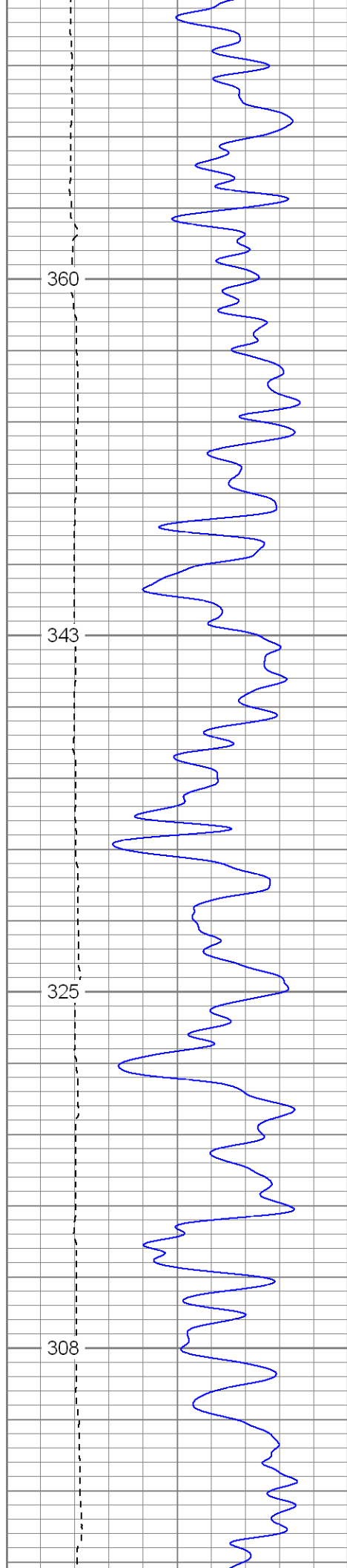
Database File: xtoge2813.db  
Dataset Pathname: pass2.1  
Presentation Format: cdl  
Dataset Creation: Thu Mar 27 12:14:54 2008 by Calc Open-Cased 070814  
Charted by: Depth in Feet scaled 1:240

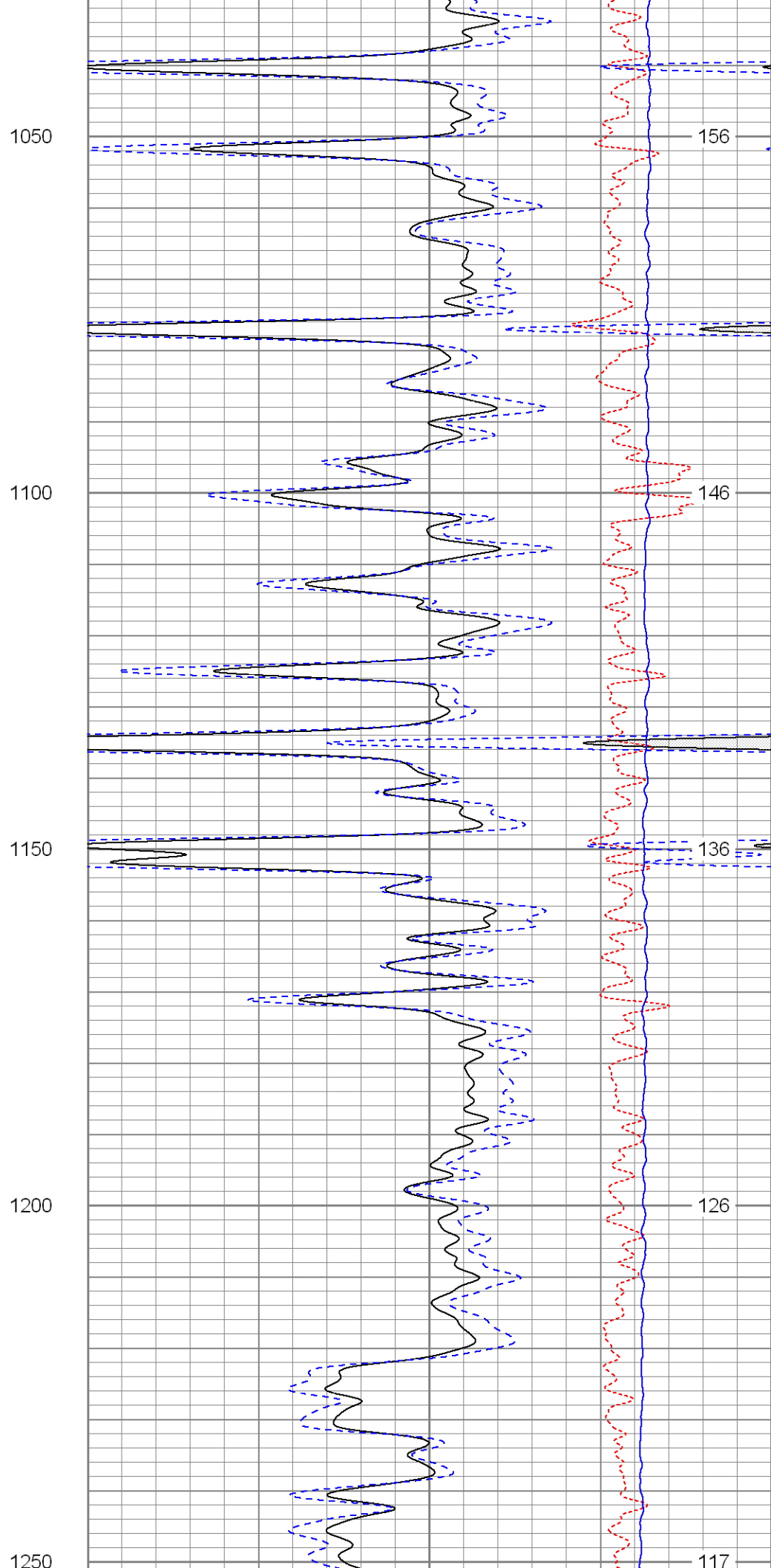
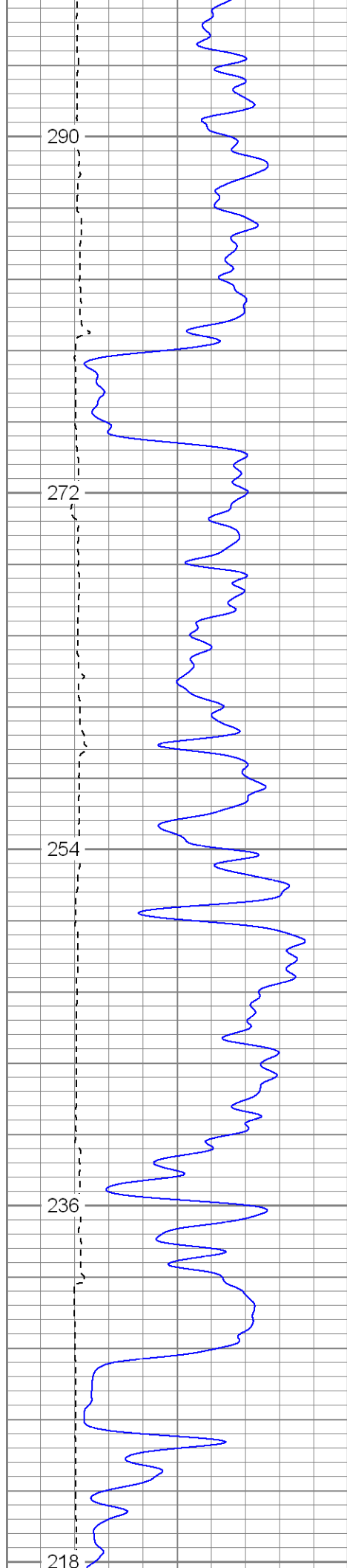
0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		

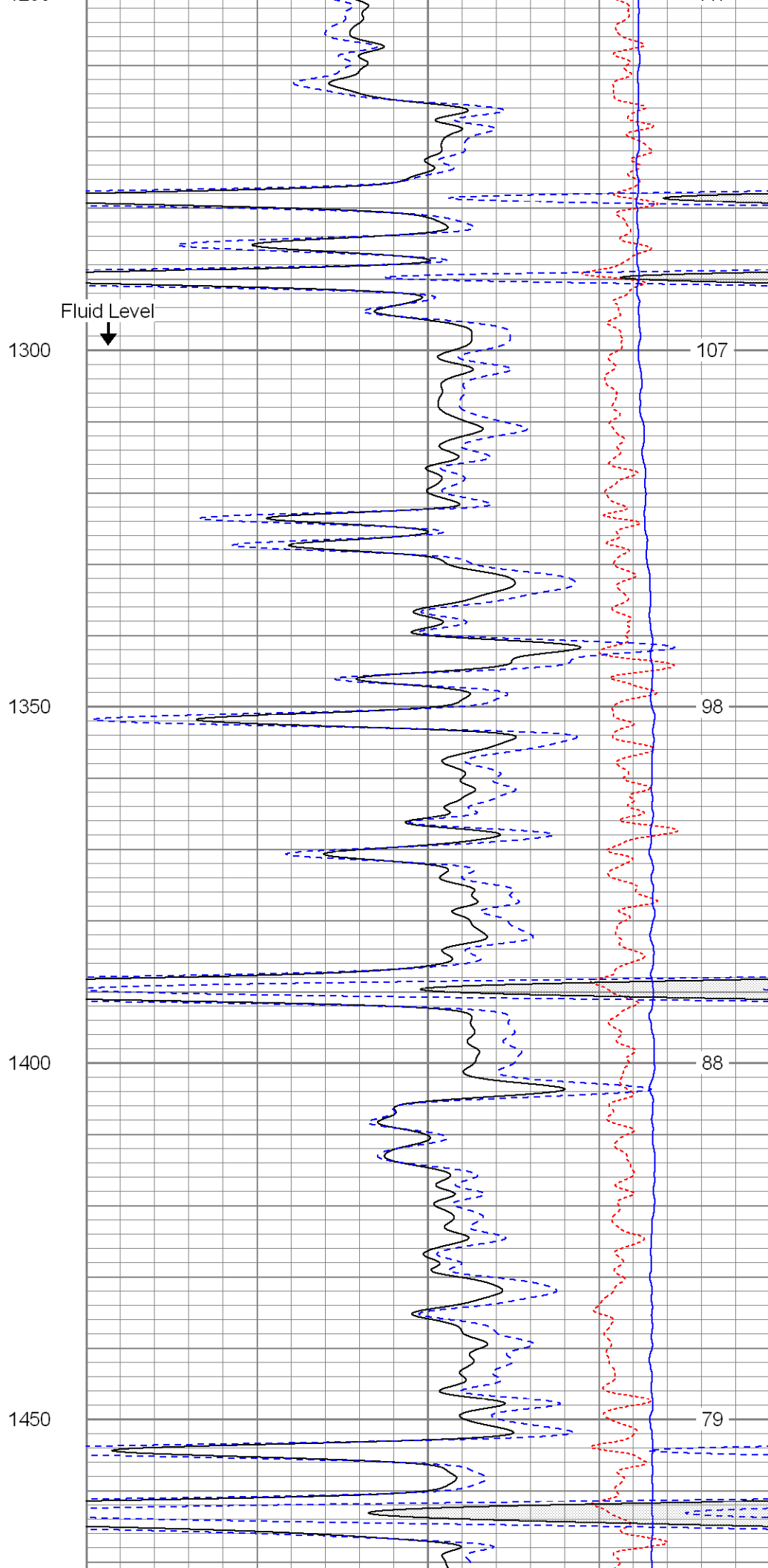
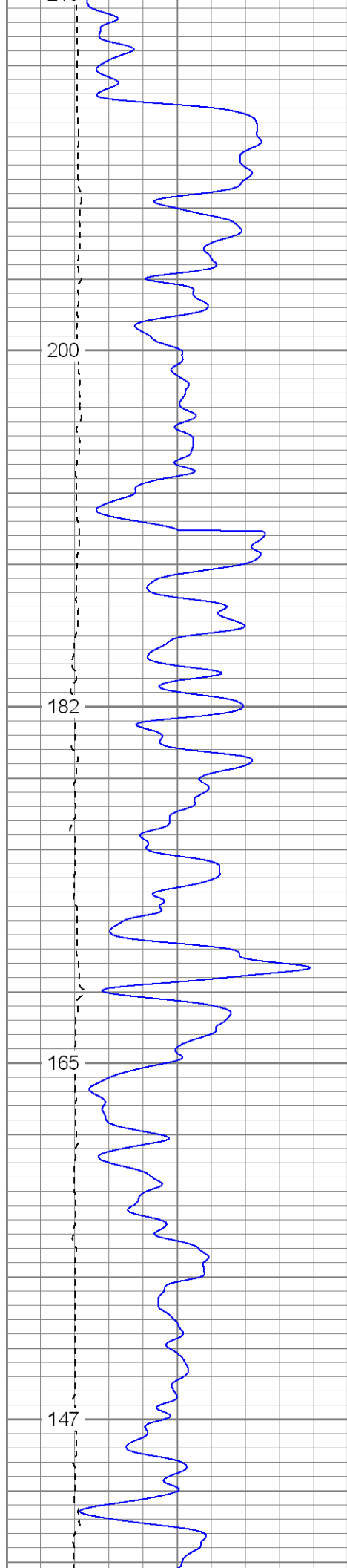
2	RHOB (g/cc)	3
1	RHOB (g/cc)	2
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
		ABHV (ft3)

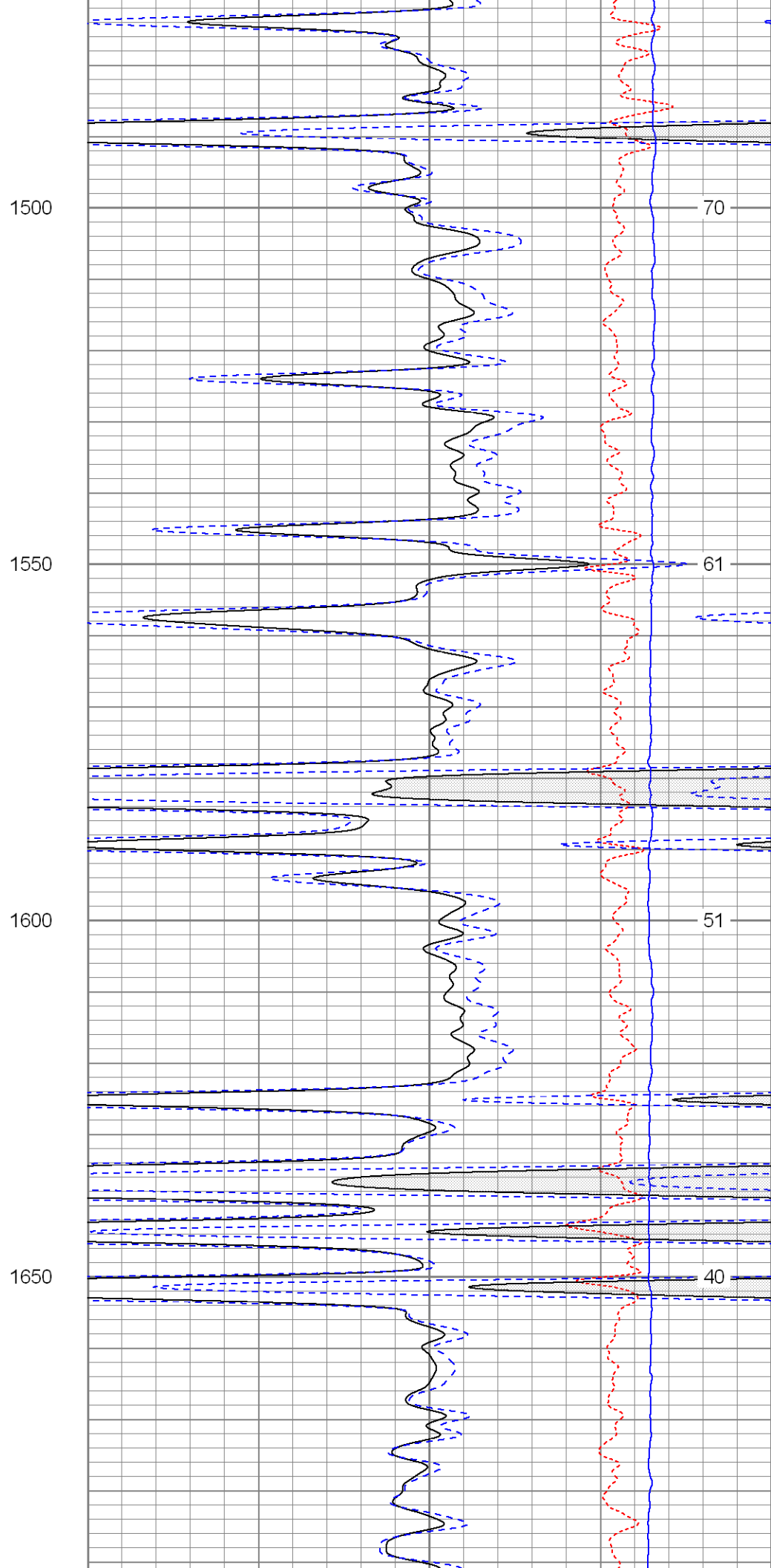
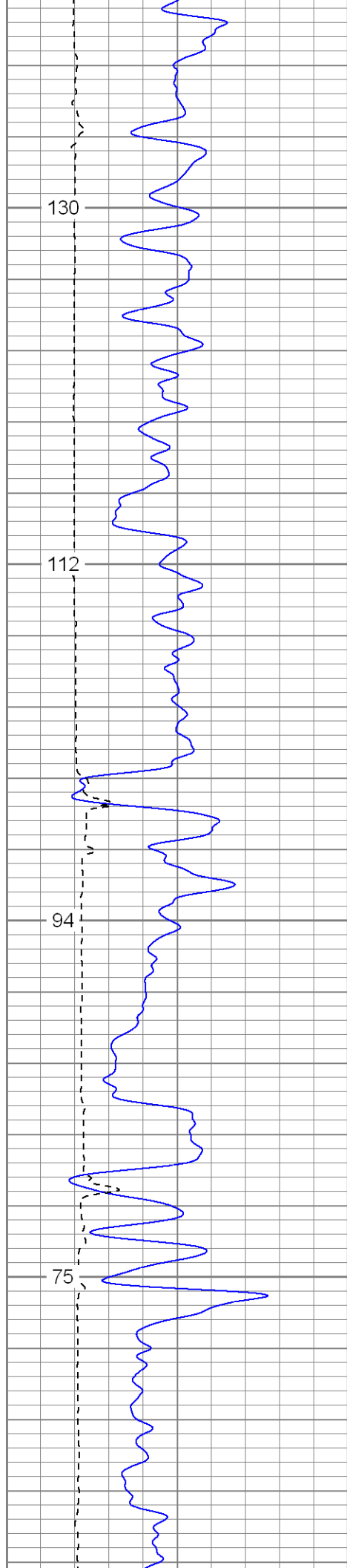


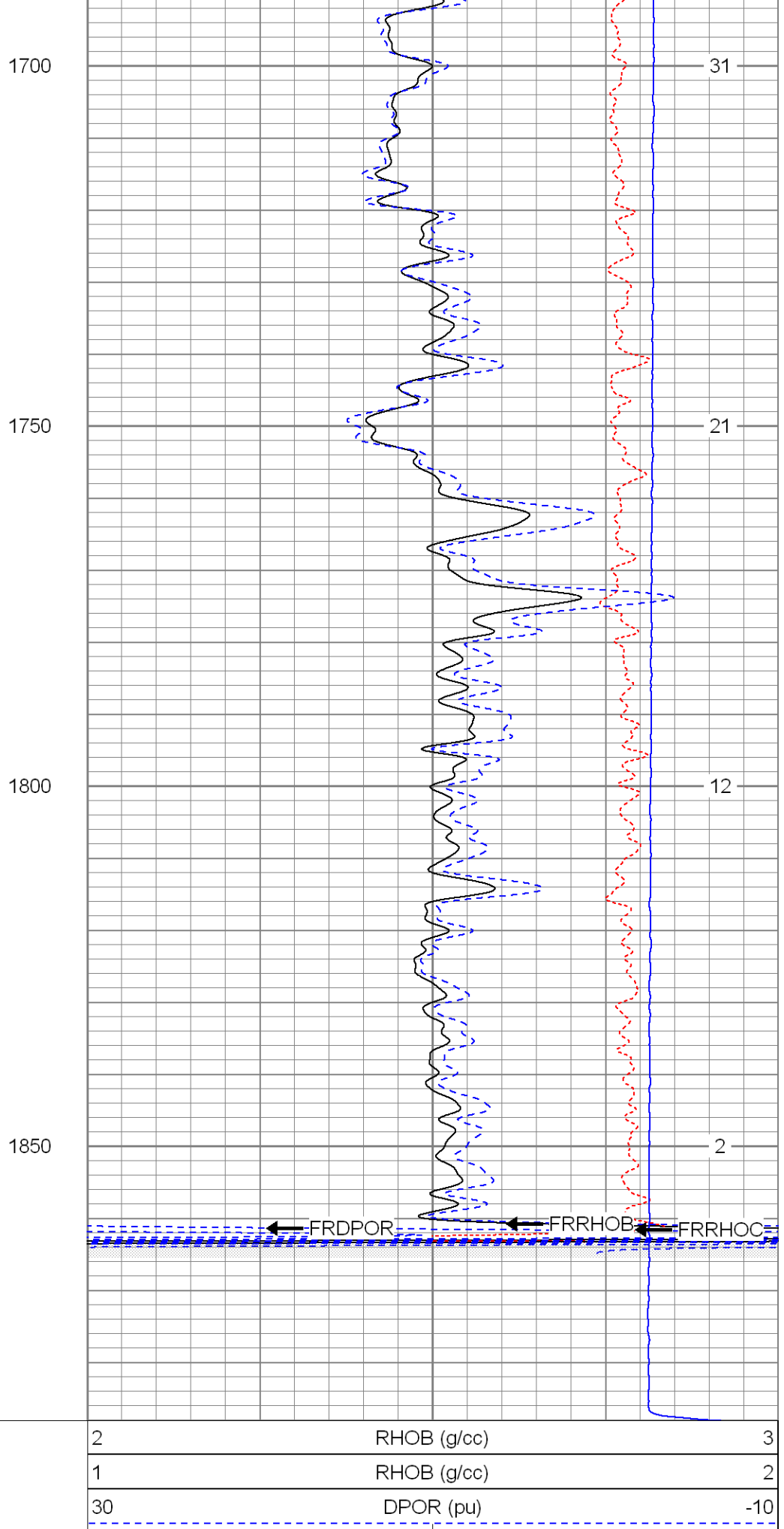
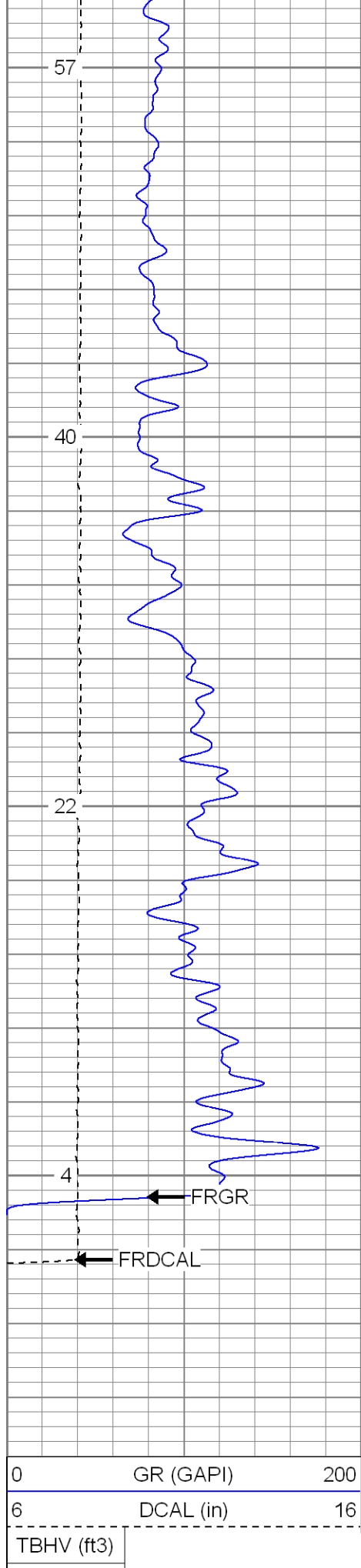
















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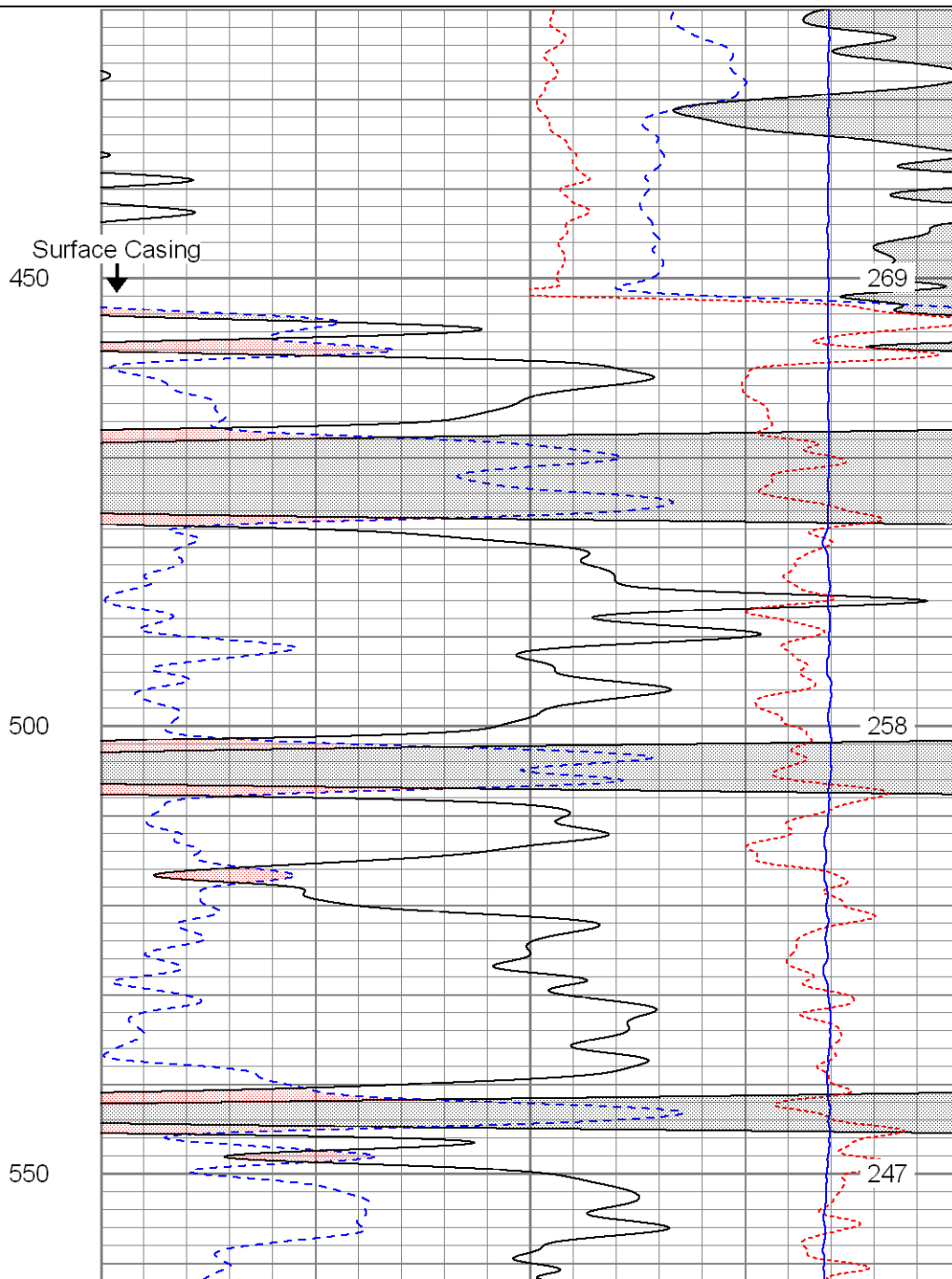
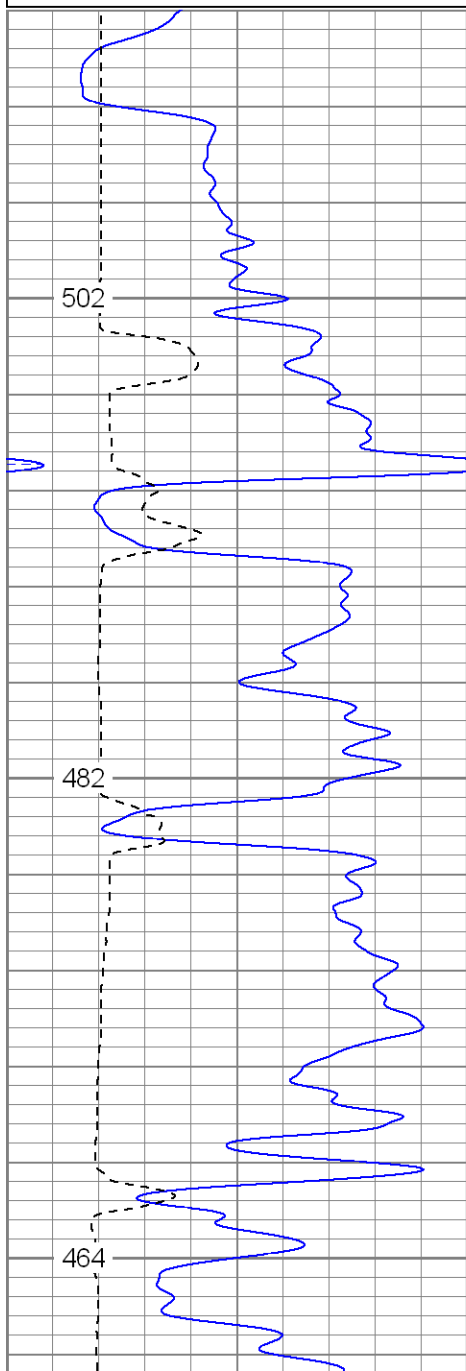
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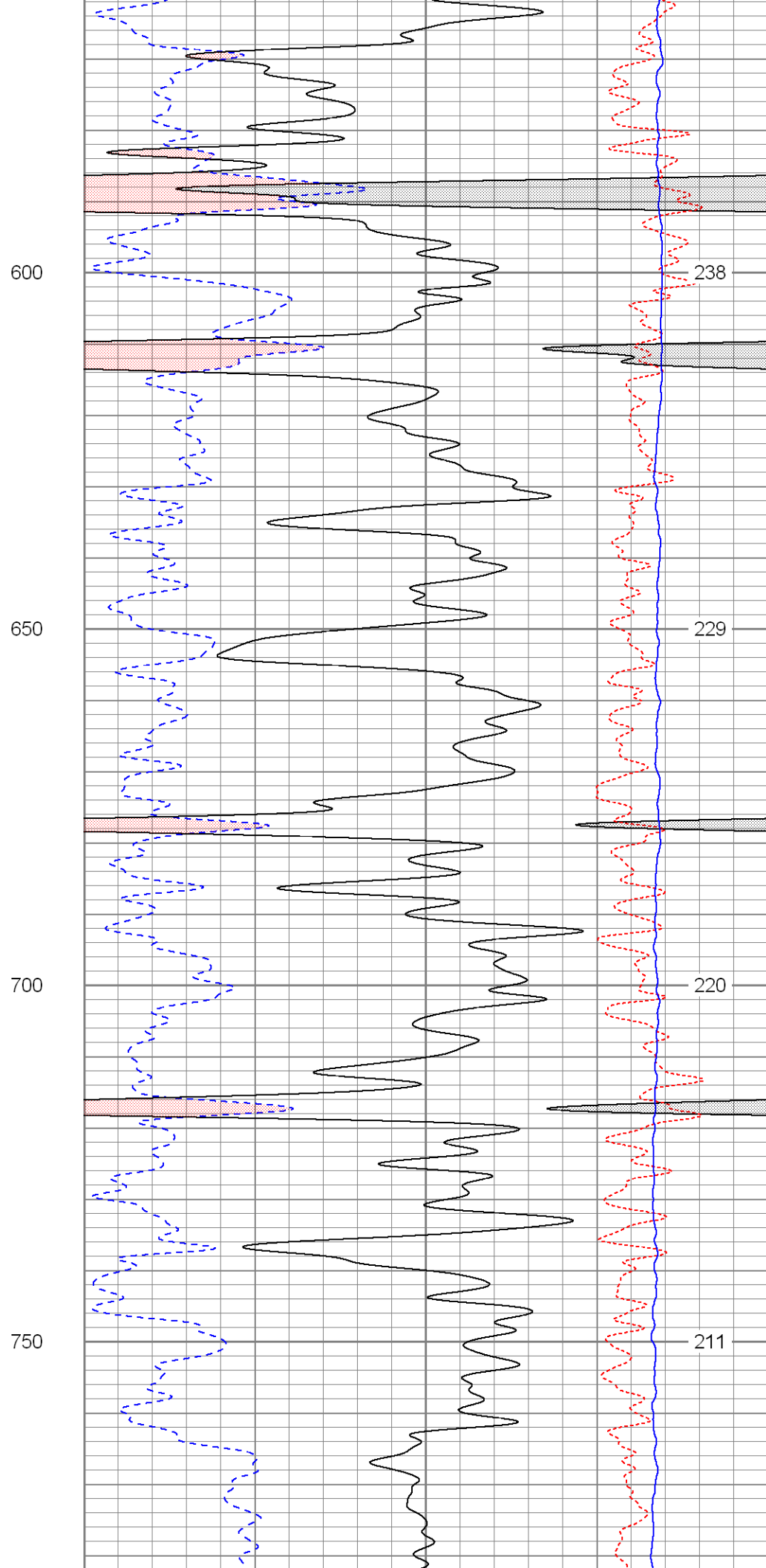
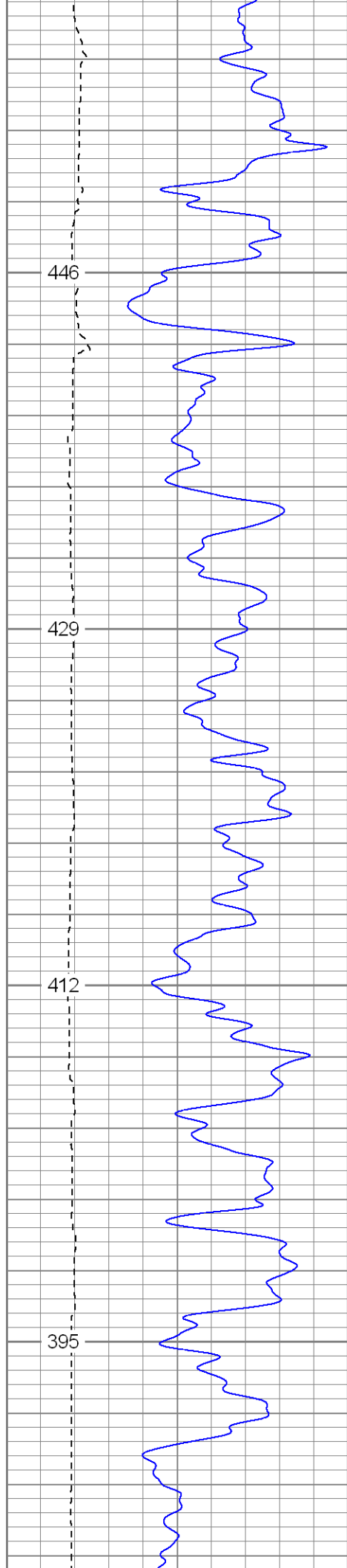
# Main Pass

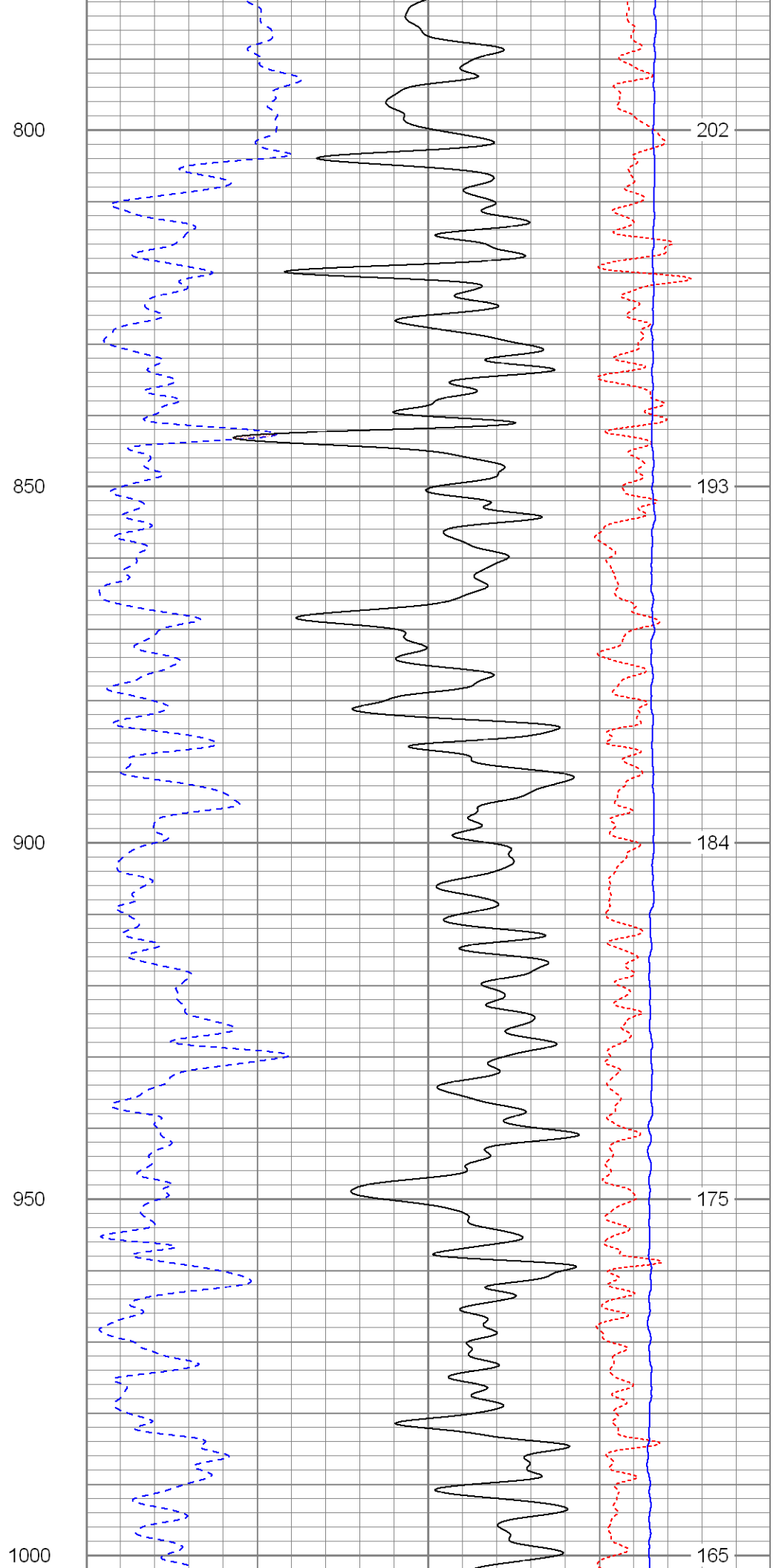
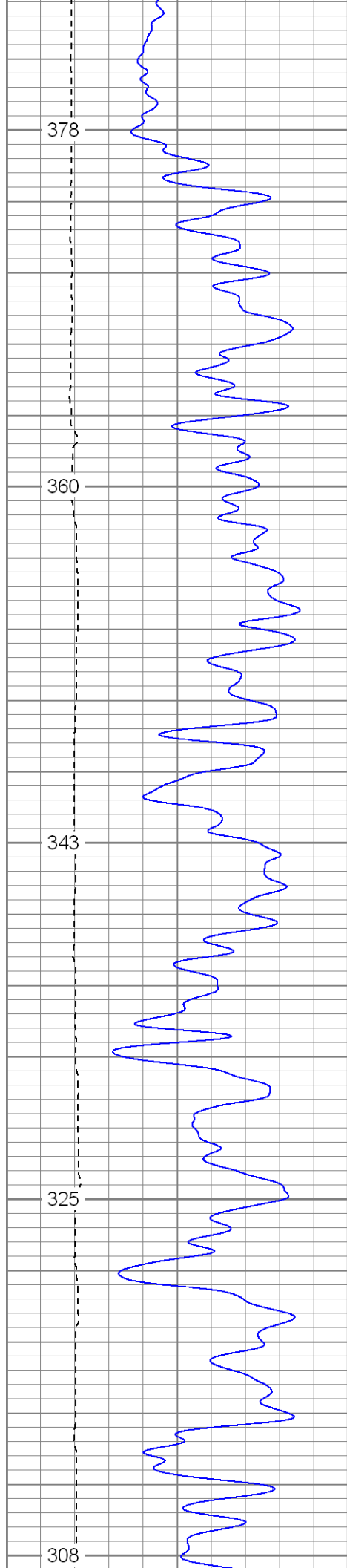
Database File: xtoge2813.db  
 Dataset Pathname: pass2.1  
 Presentation Format: cdnl  
 Dataset Creation: Thu Mar 27 12:14:54 2008 by Calc Open-Cased 070814  
 Charted by: Depth in Feet scaled 1:240

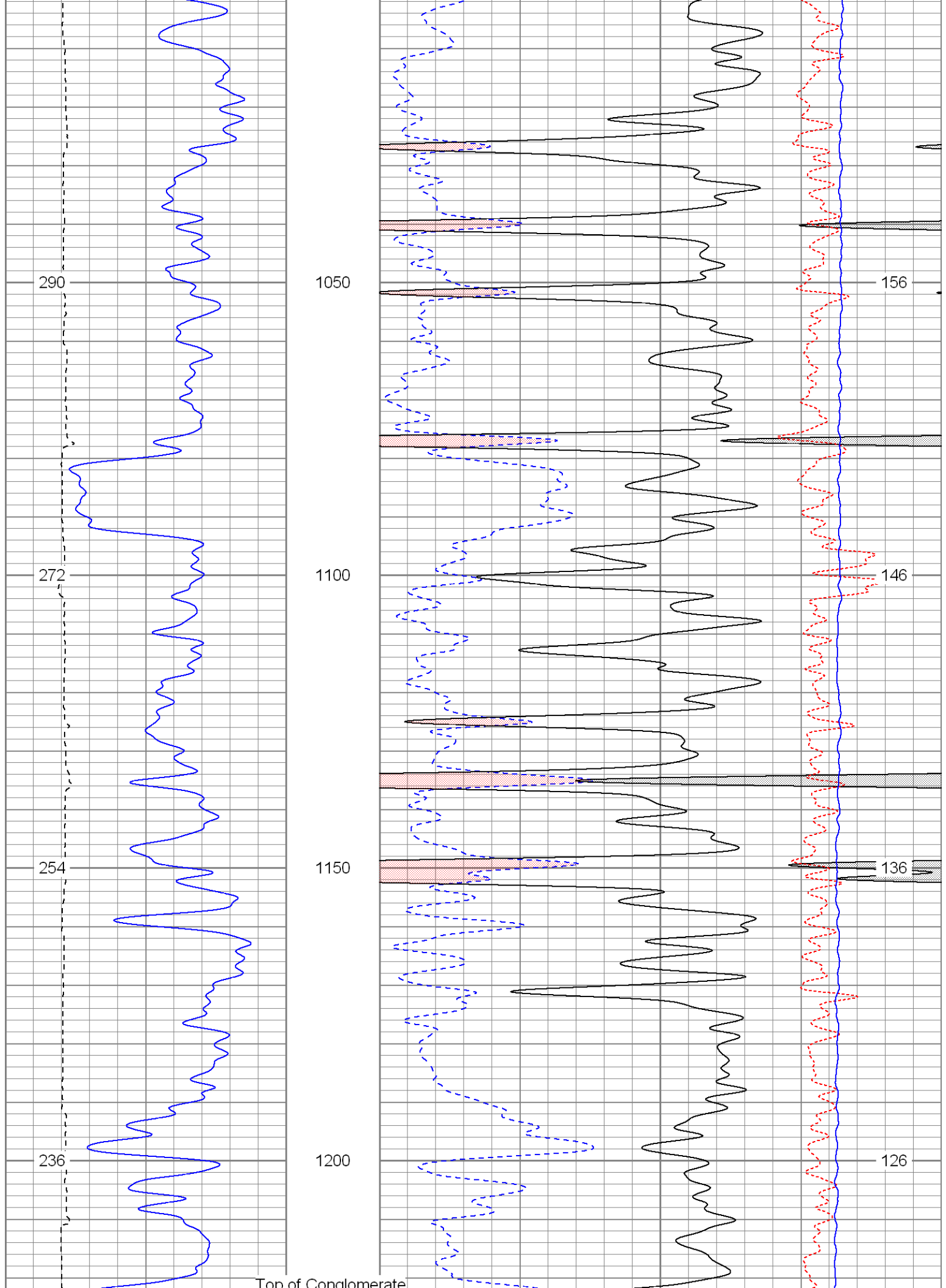
0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		

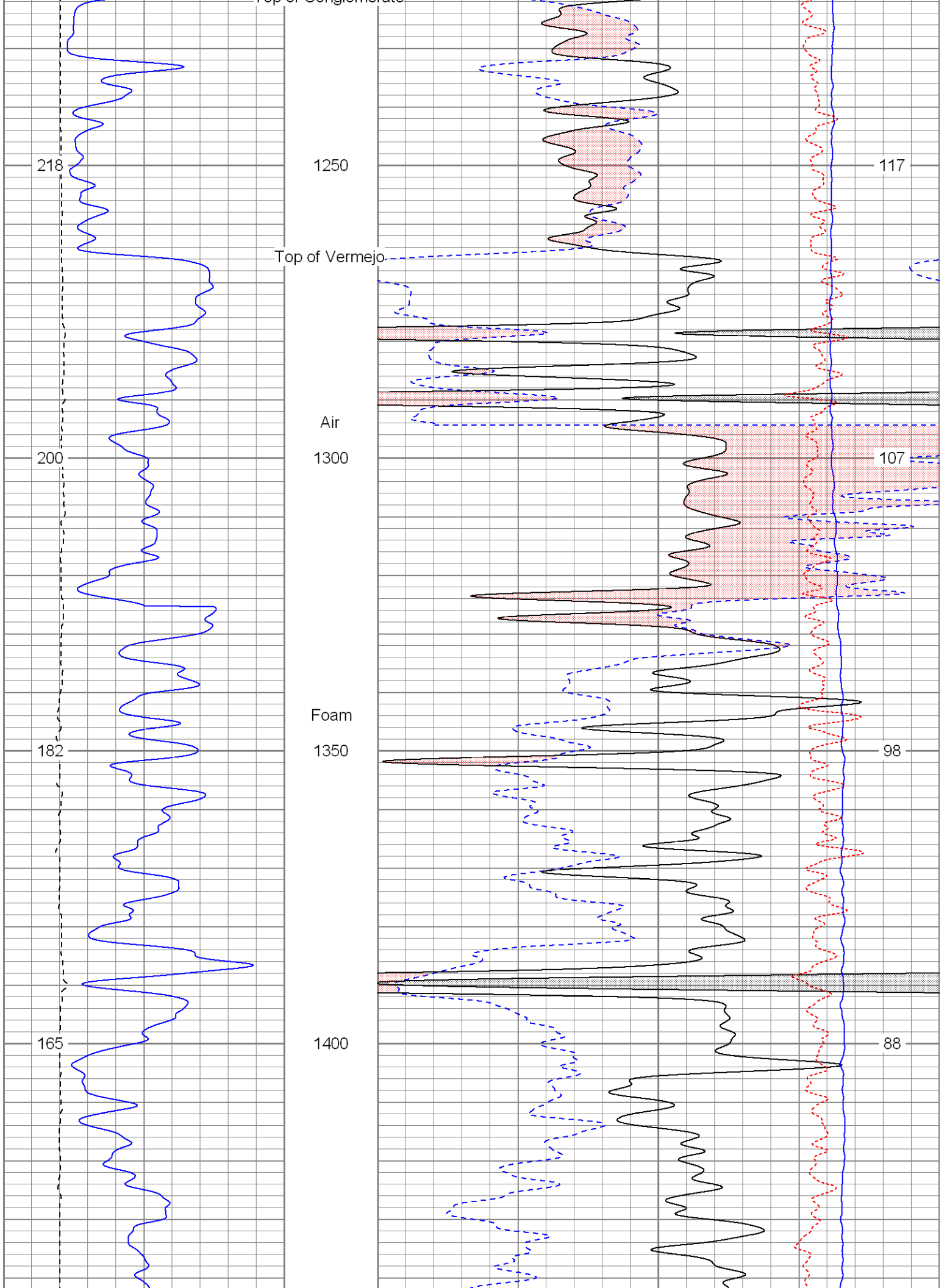
30	NPOR (pu)	-10
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
ABHV (ft3)		

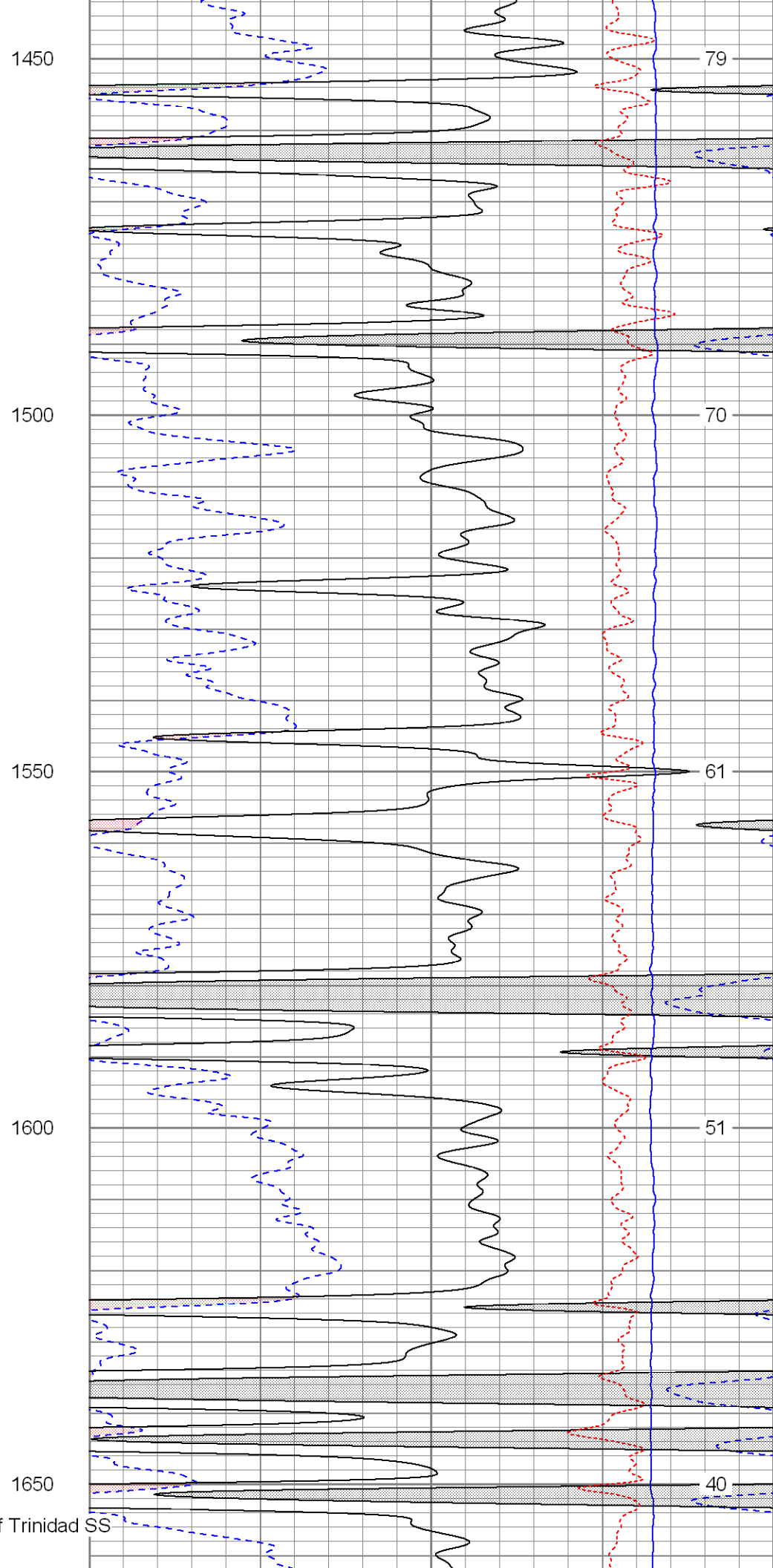
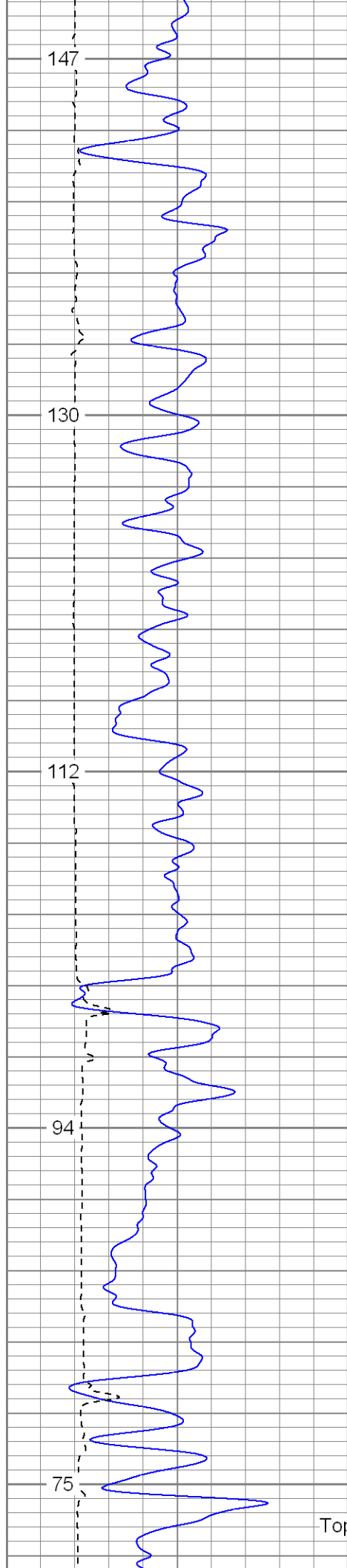


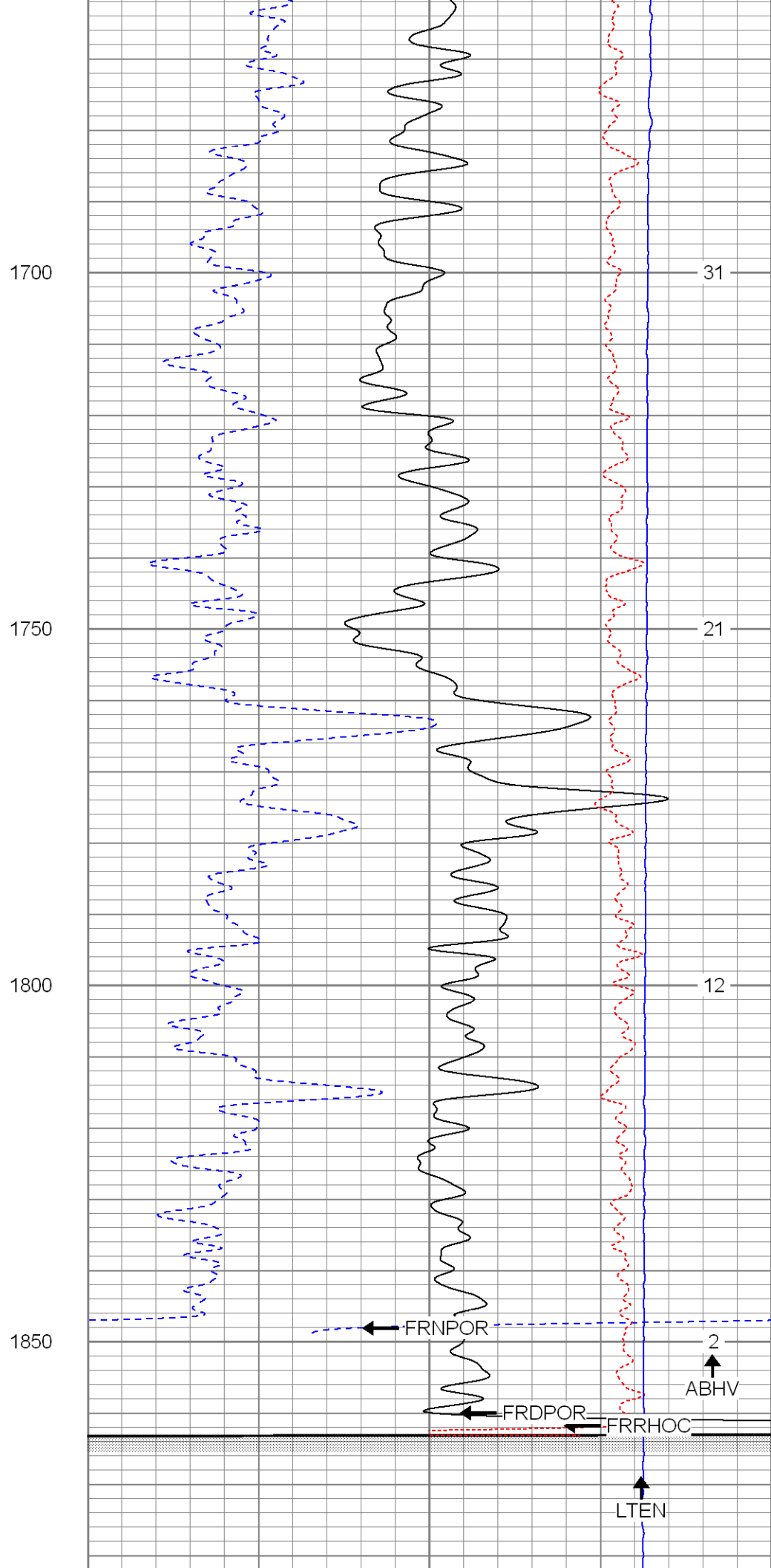
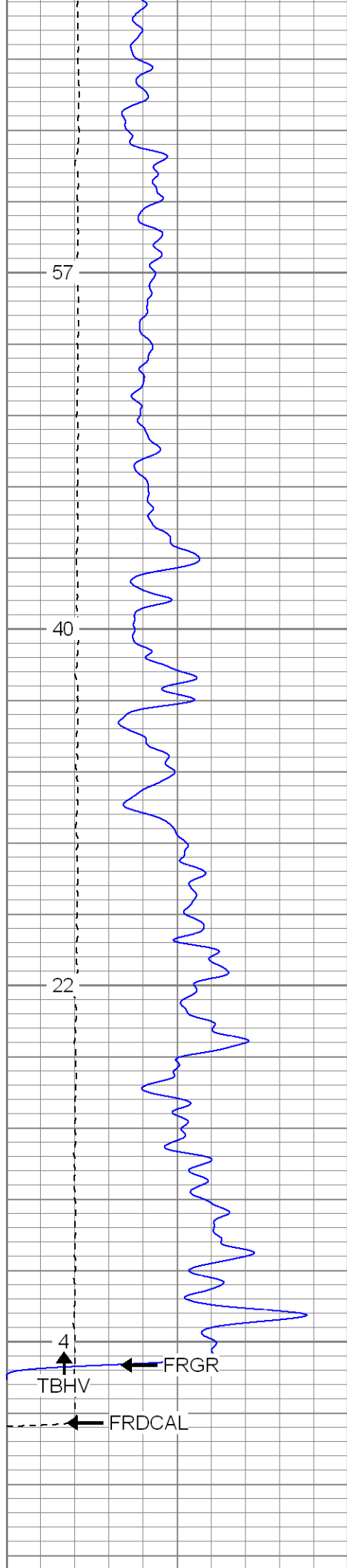












0	GR (GAPI)	200	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
TBHV (ft3)			-0.5	RHOC (g/cc)	0.5
			4000	LTEN (lb)	0
				ABHV (ft3)	



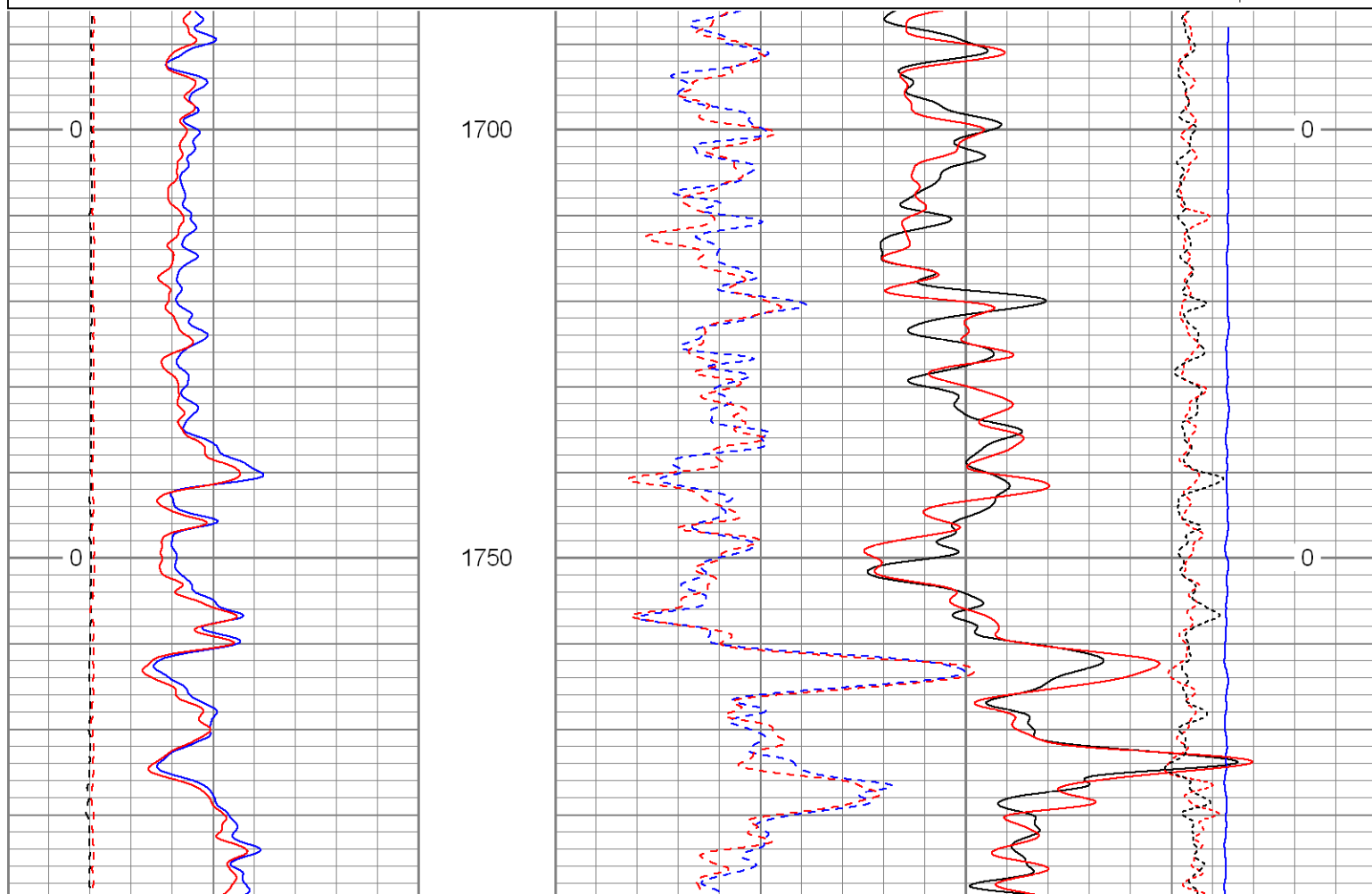
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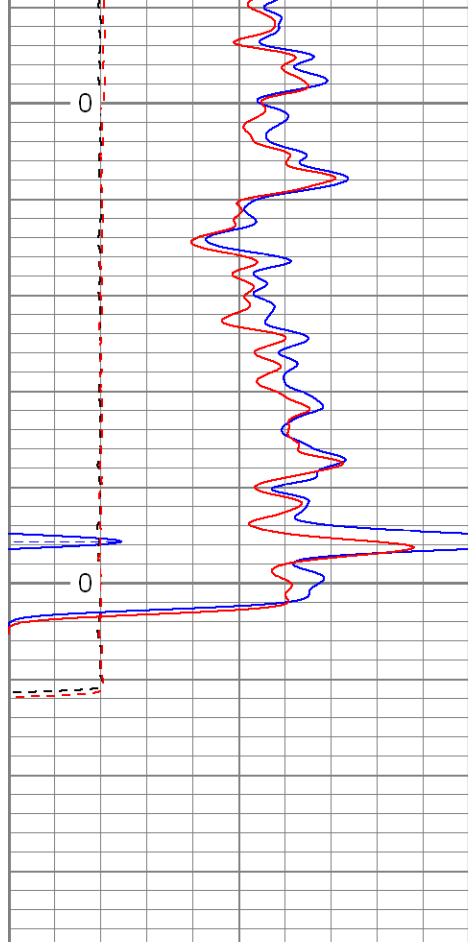
# Repeat Pass

Database File: xtoge2813.db  
Dataset Pathname: pass1.1  
Presentation Format: cdnl  
Dataset Creation: Thu Mar 27 11:34:03 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)	



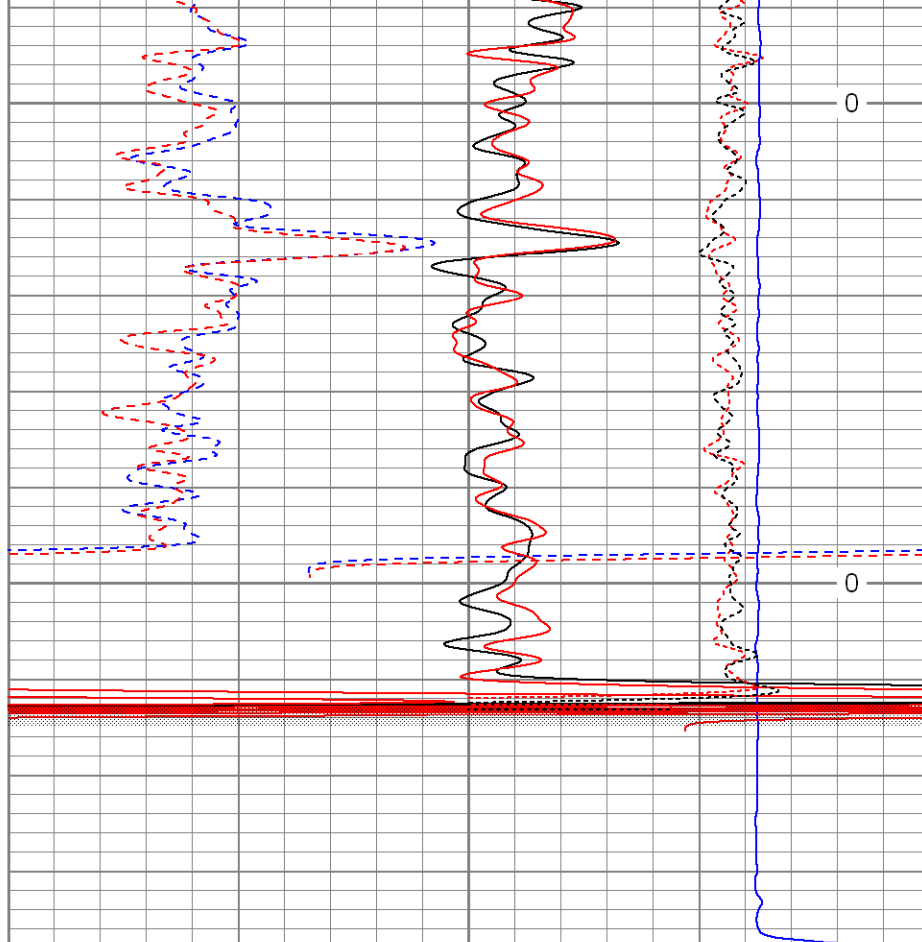




0	GR (GAPI)	200
6	DCAL (in)	16
0	GR-repeat (GAPI)	200
6	DCAL-repeat (in)	16
TBHV (ft3)		

1800

1850



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

-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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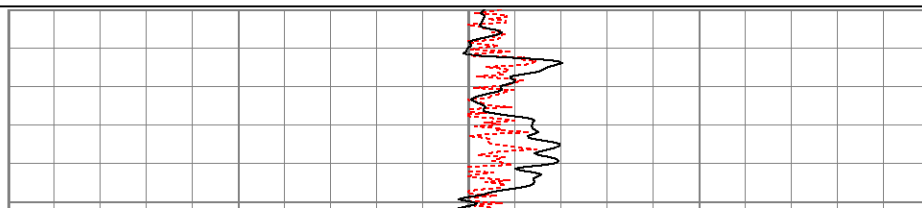
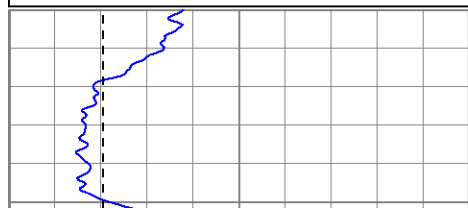
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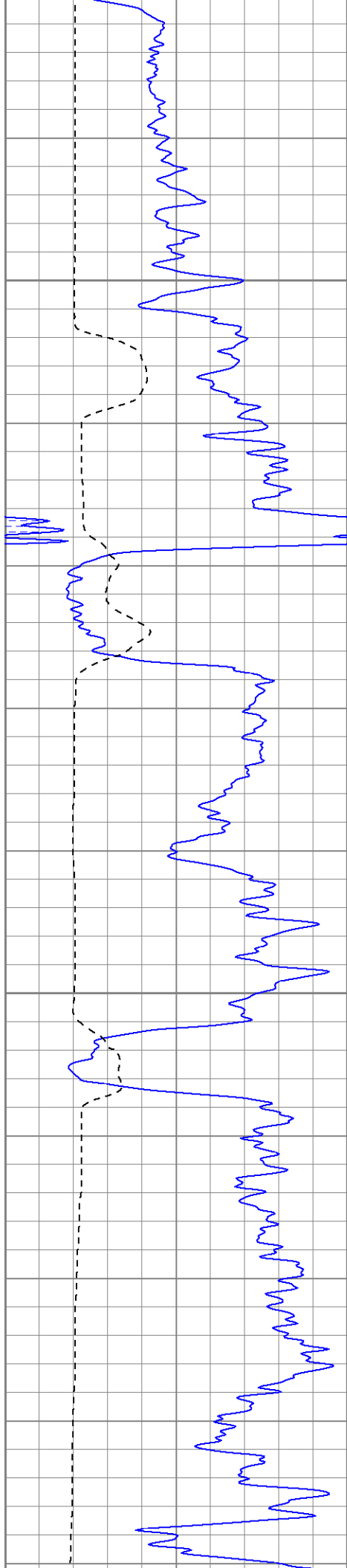
# High Resolution Pass

Database File: xtoge2813.db  
Dataset Pathname: pass2.2  
Presentation Format: cdlhr  
Dataset Creation: Thu Mar 27 14:38:02 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

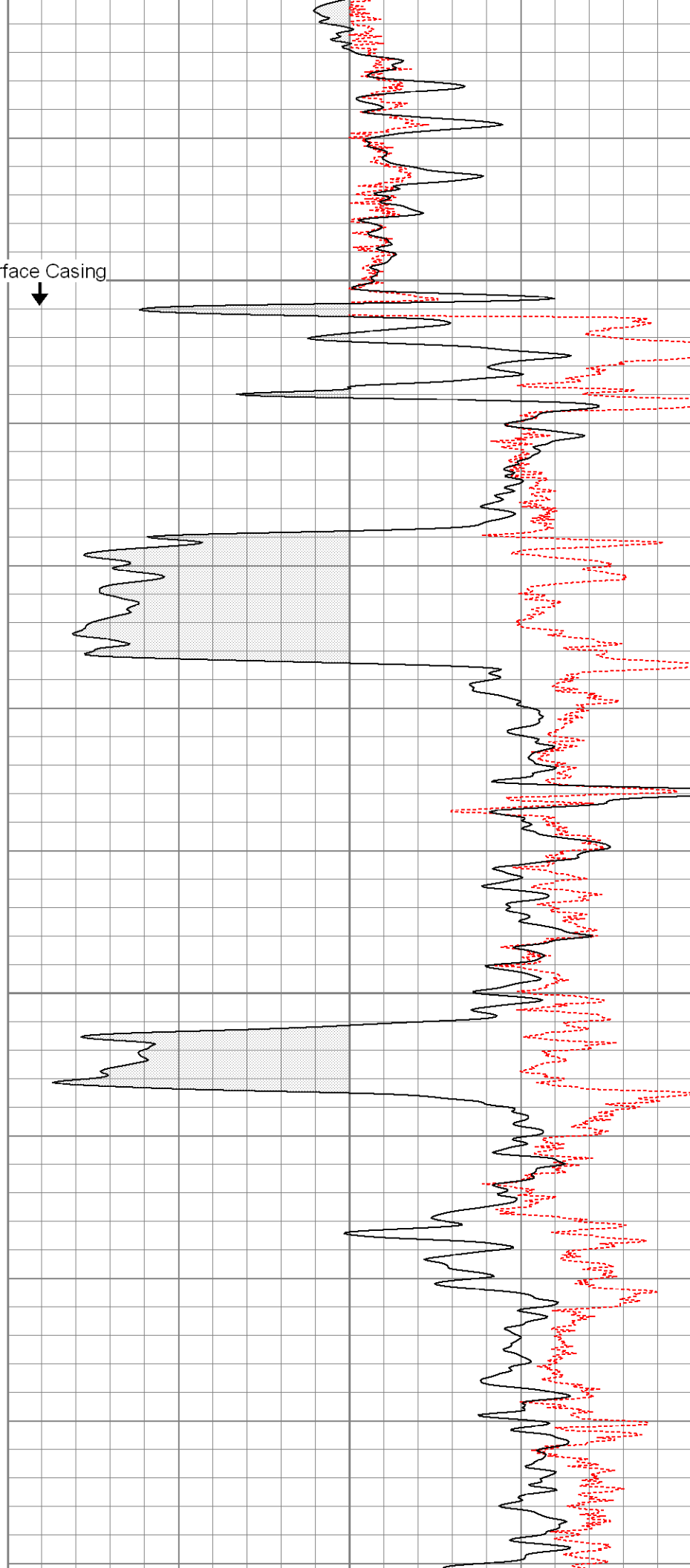


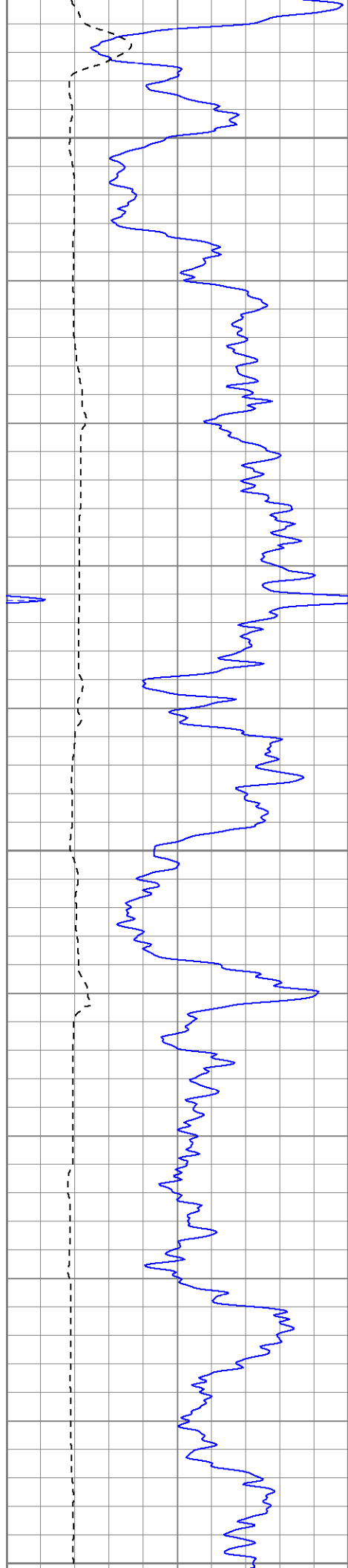


450 Surface Casing



500

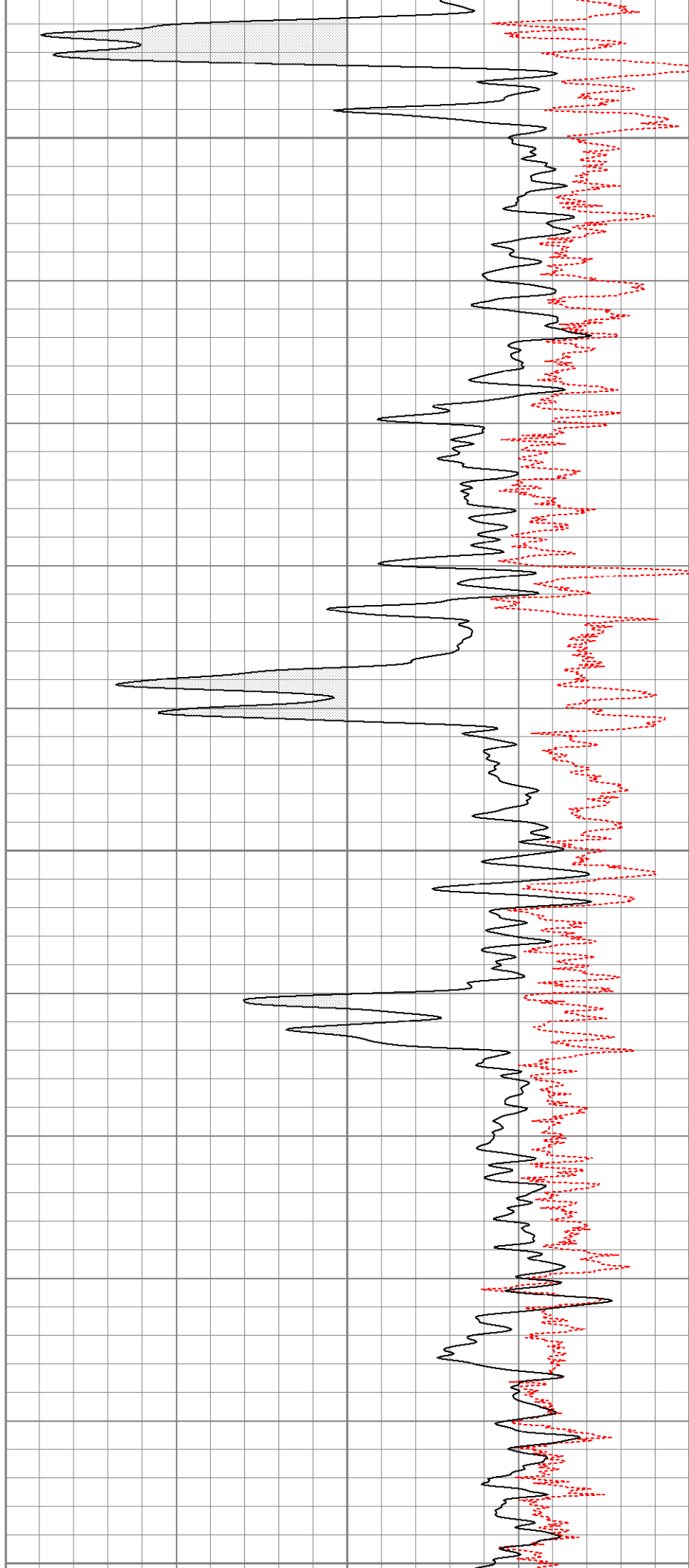




550

600

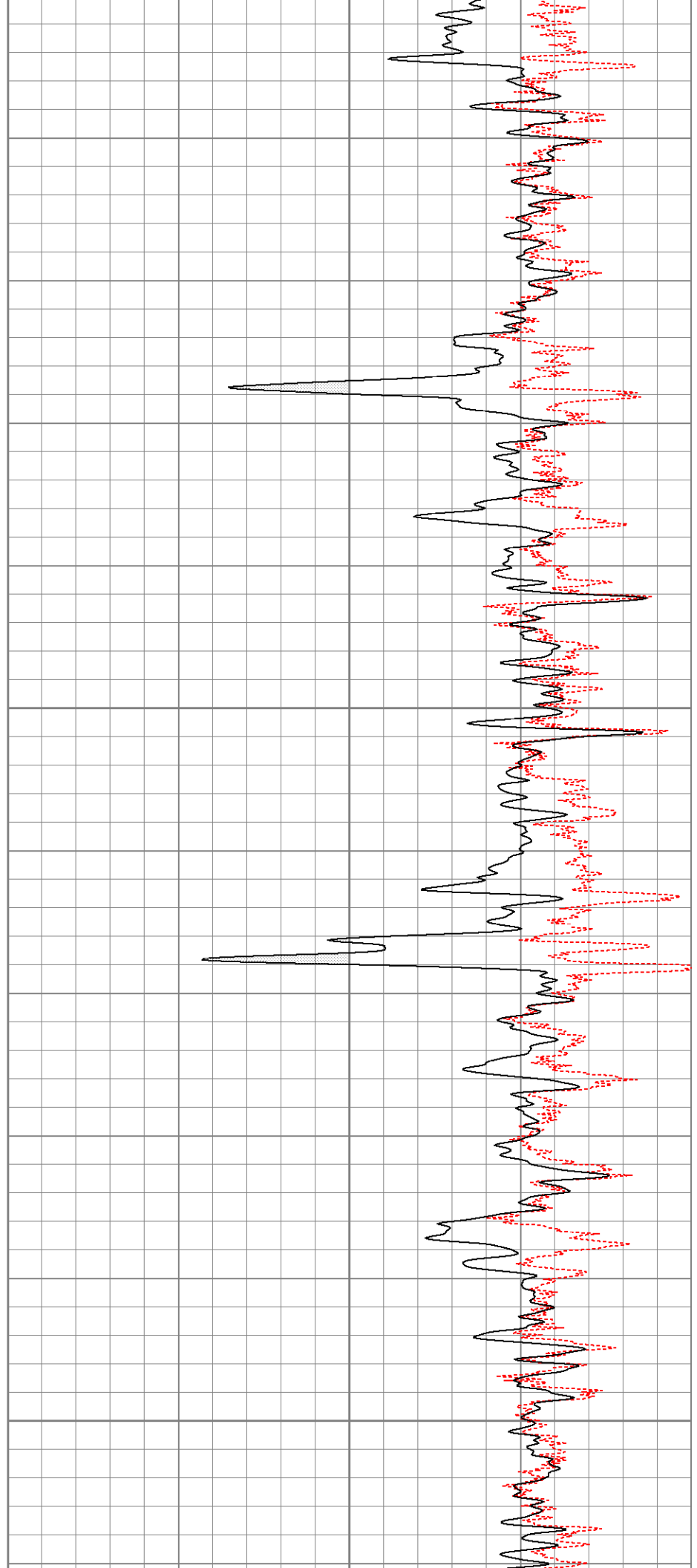
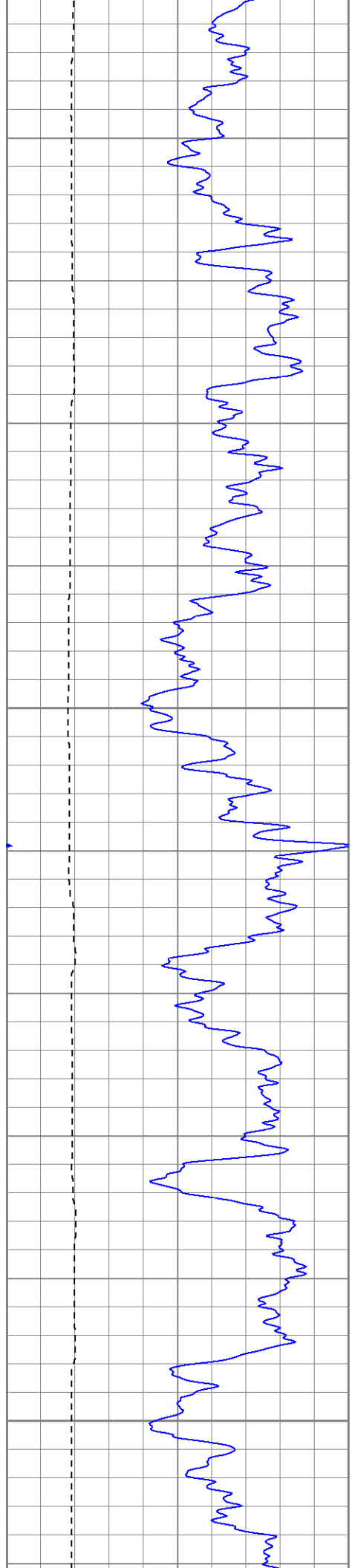
650

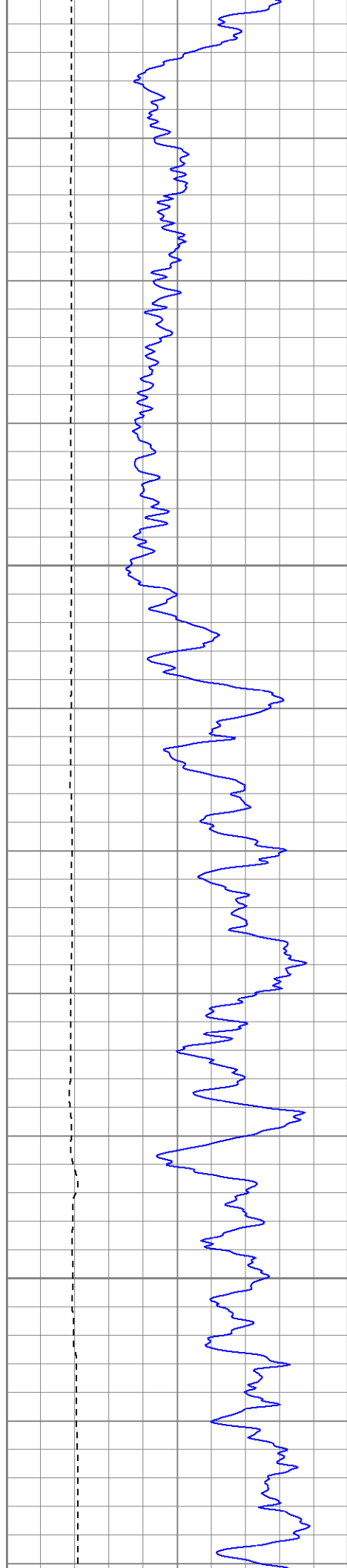


880

700

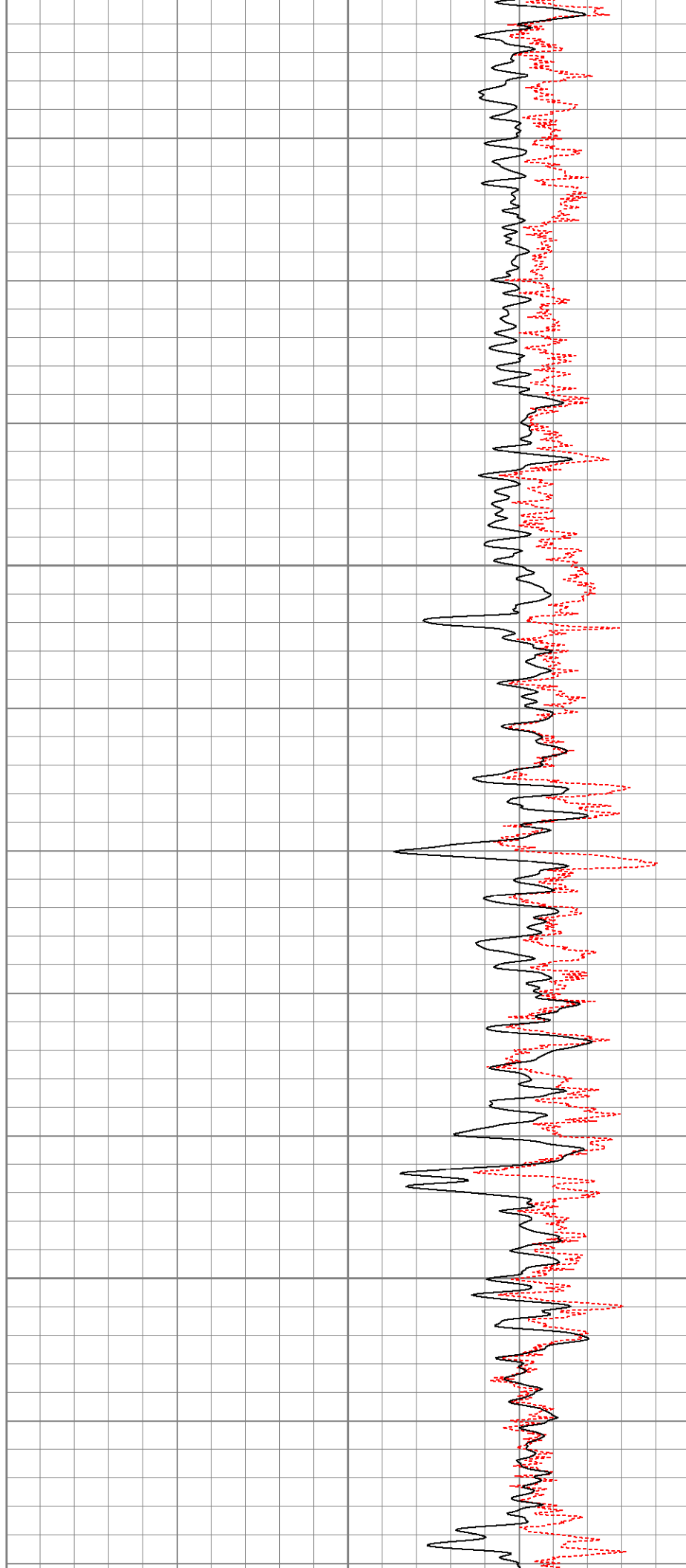
750

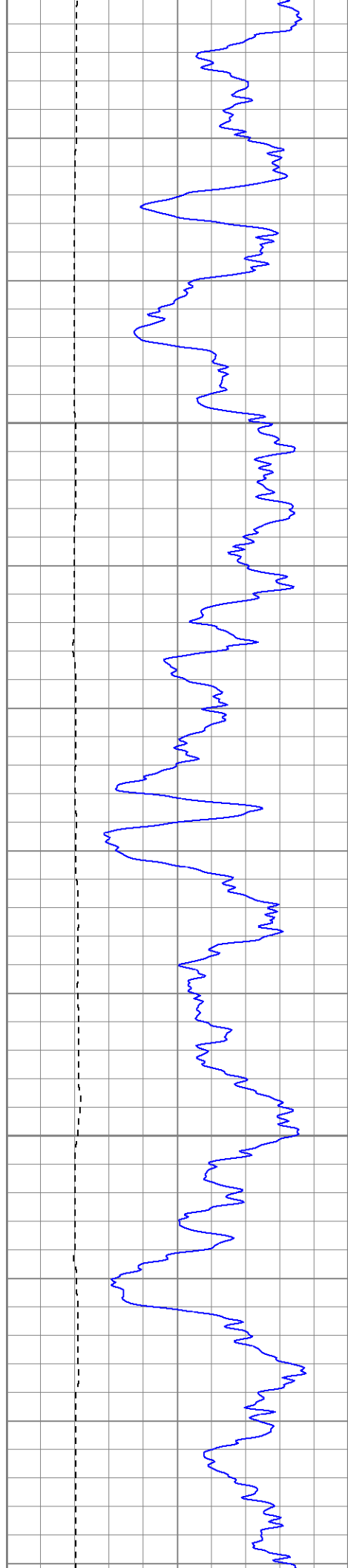




800

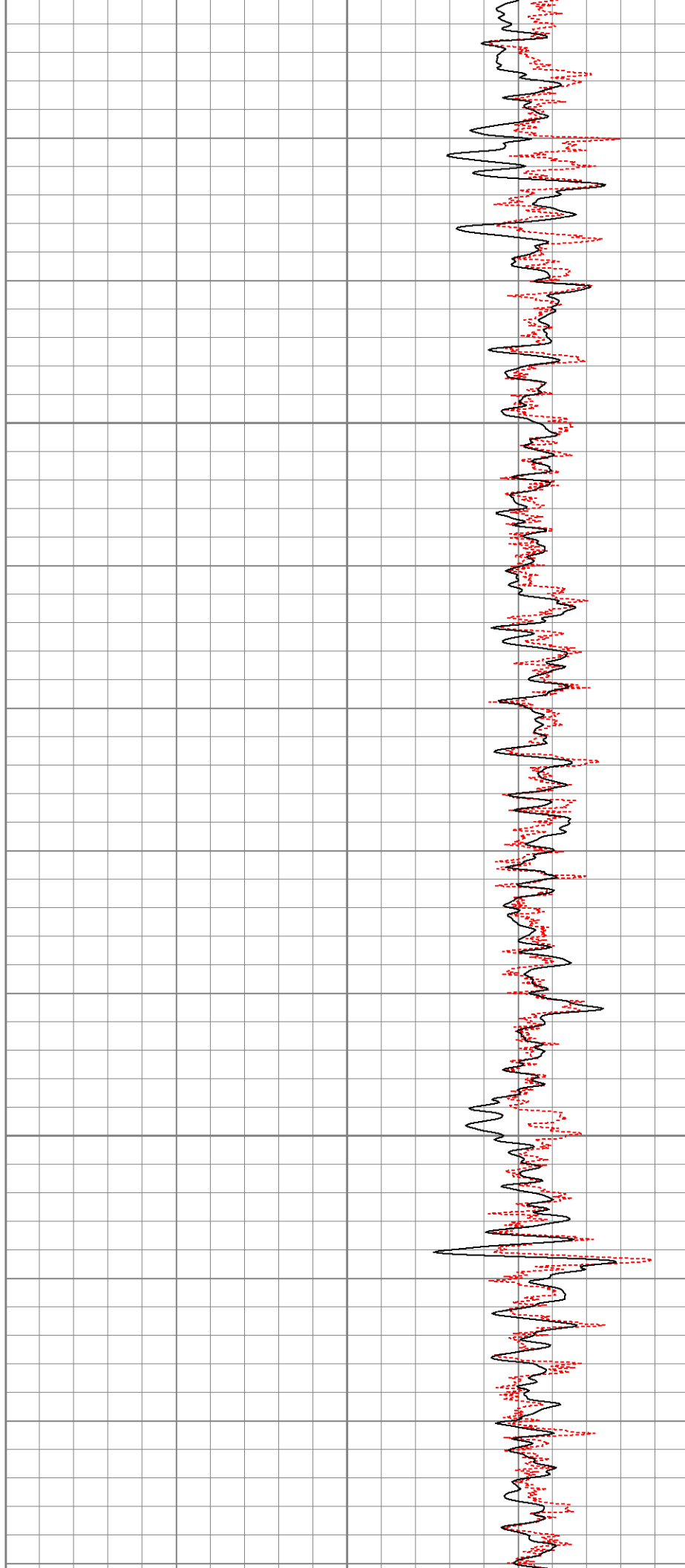
850

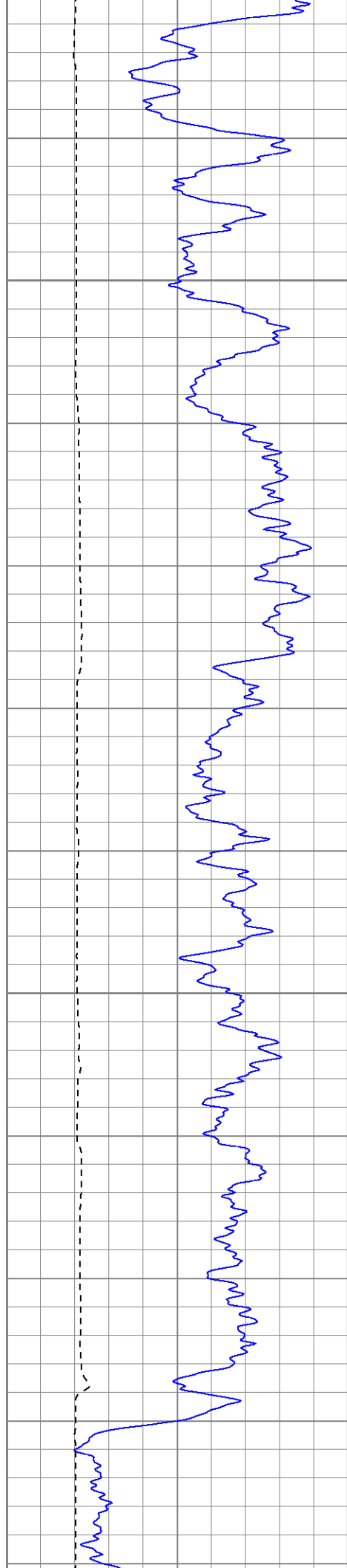




900

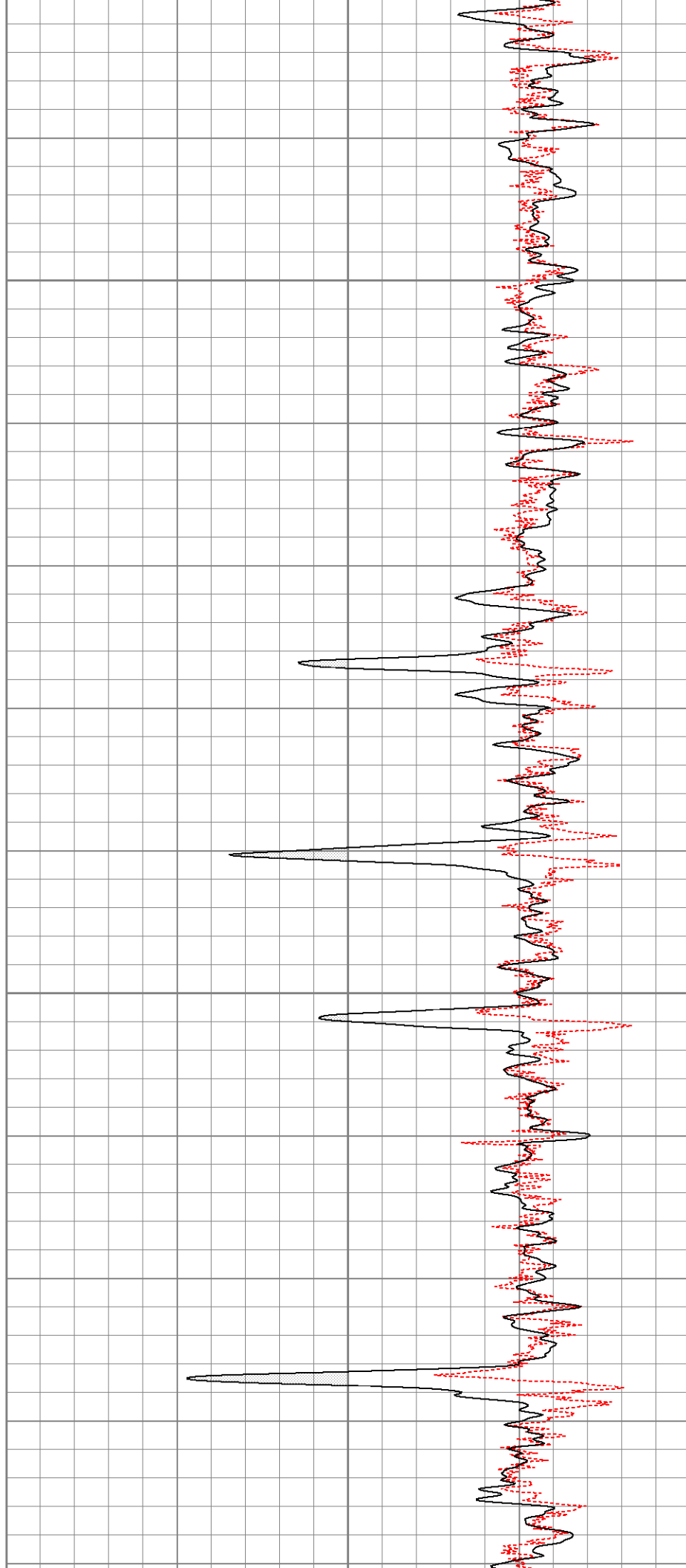
950

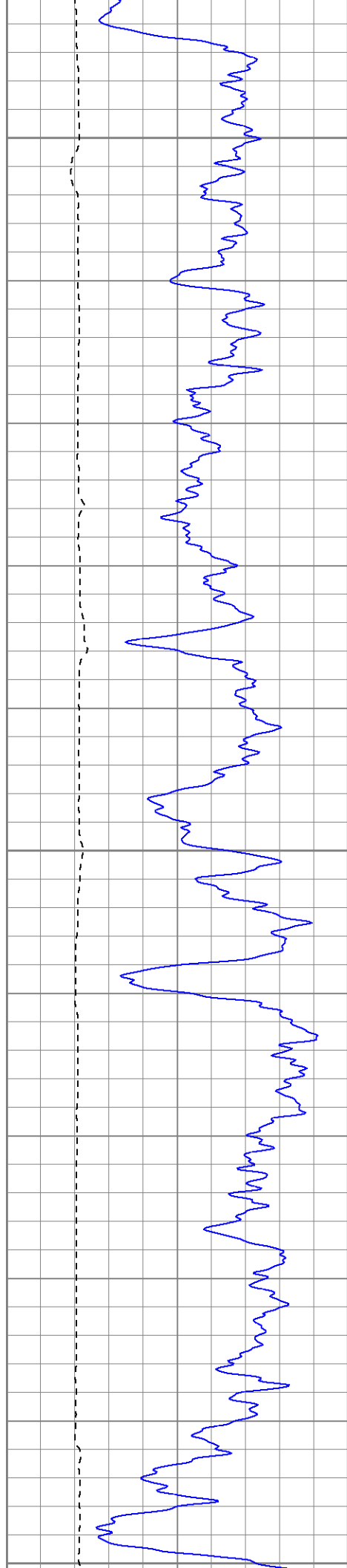




1000

1050

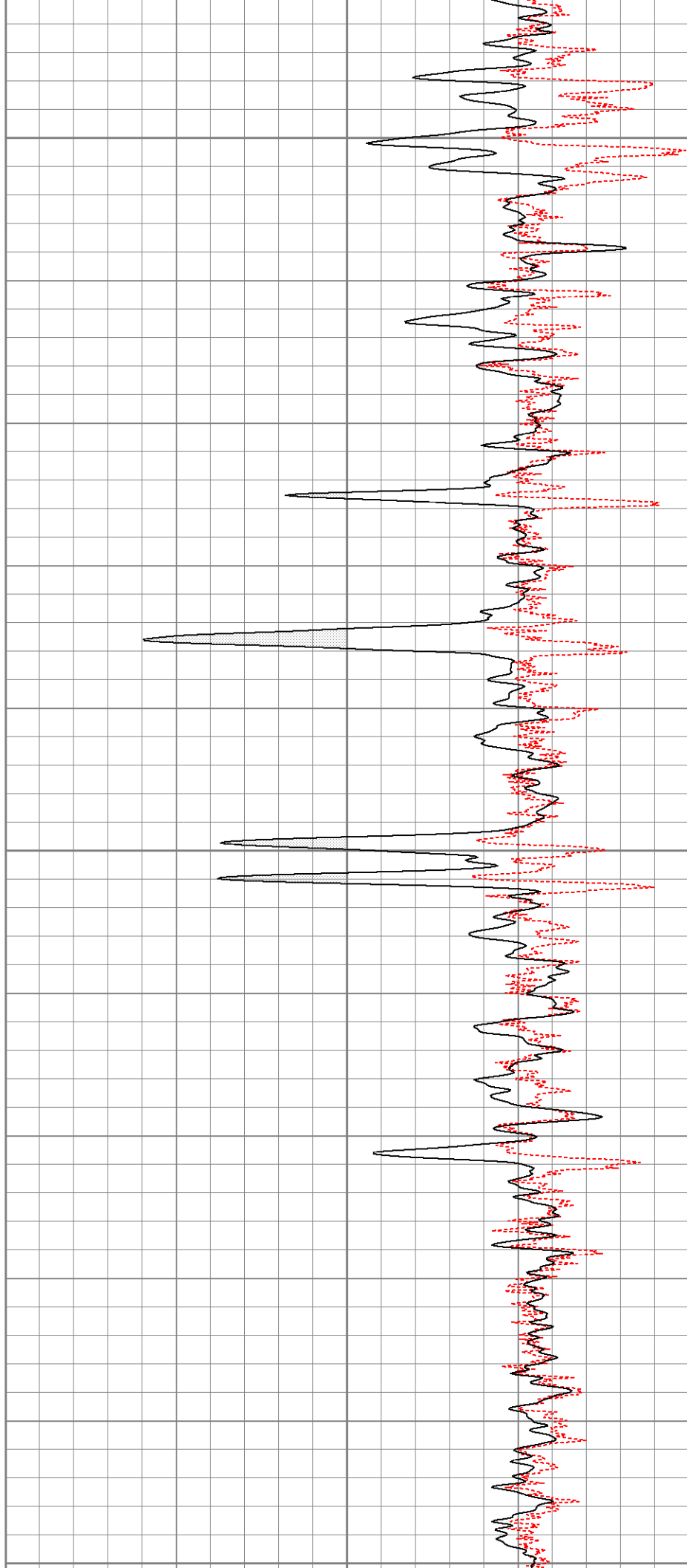




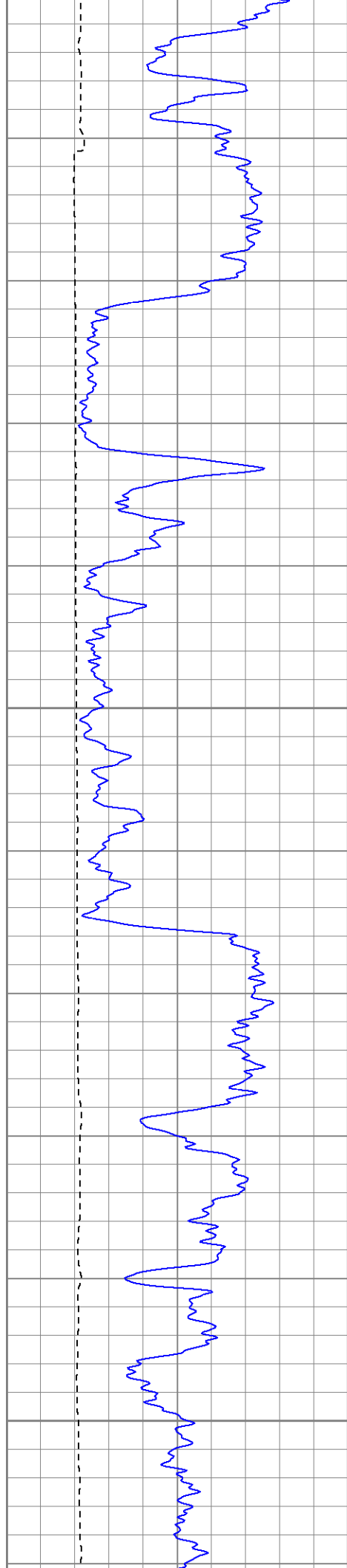
1100

1150

1200





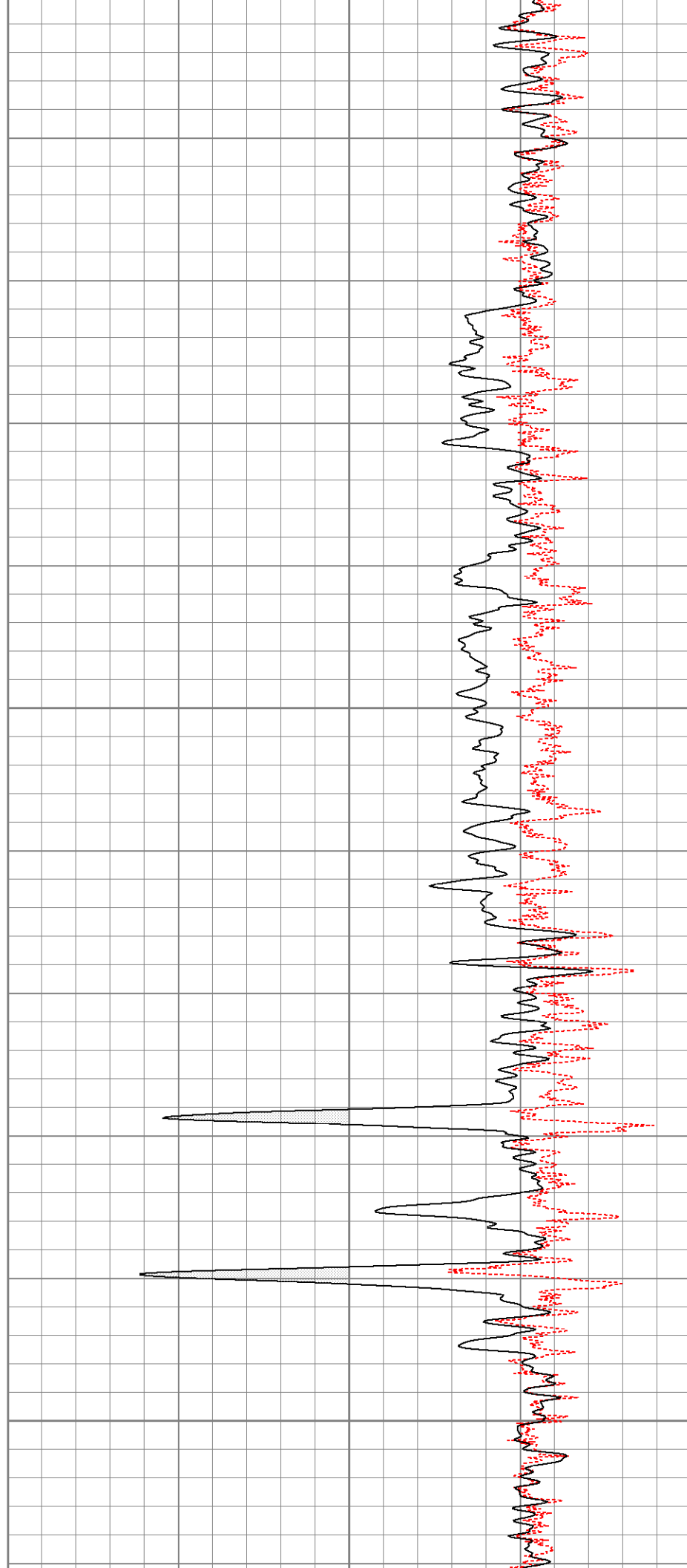


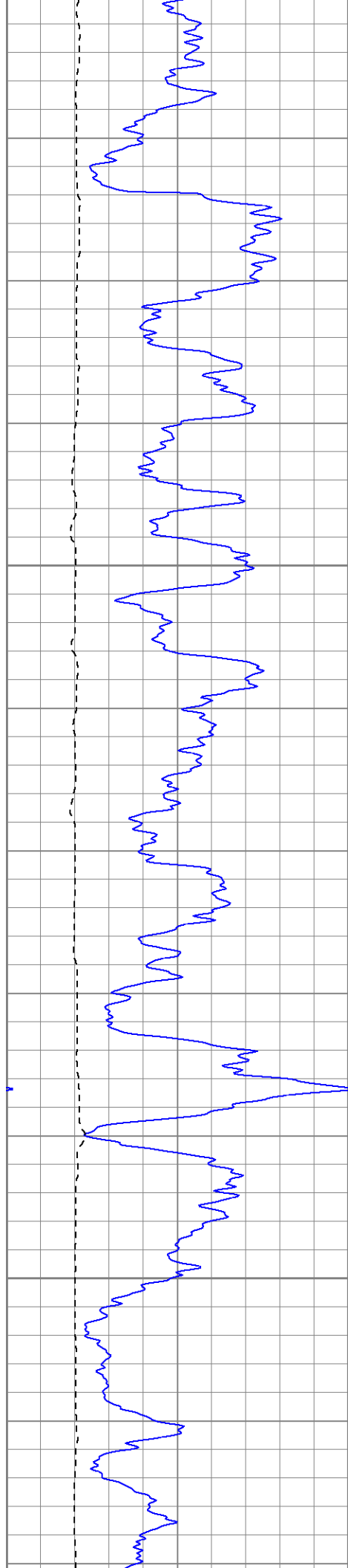
1200

1250

Fluid Level

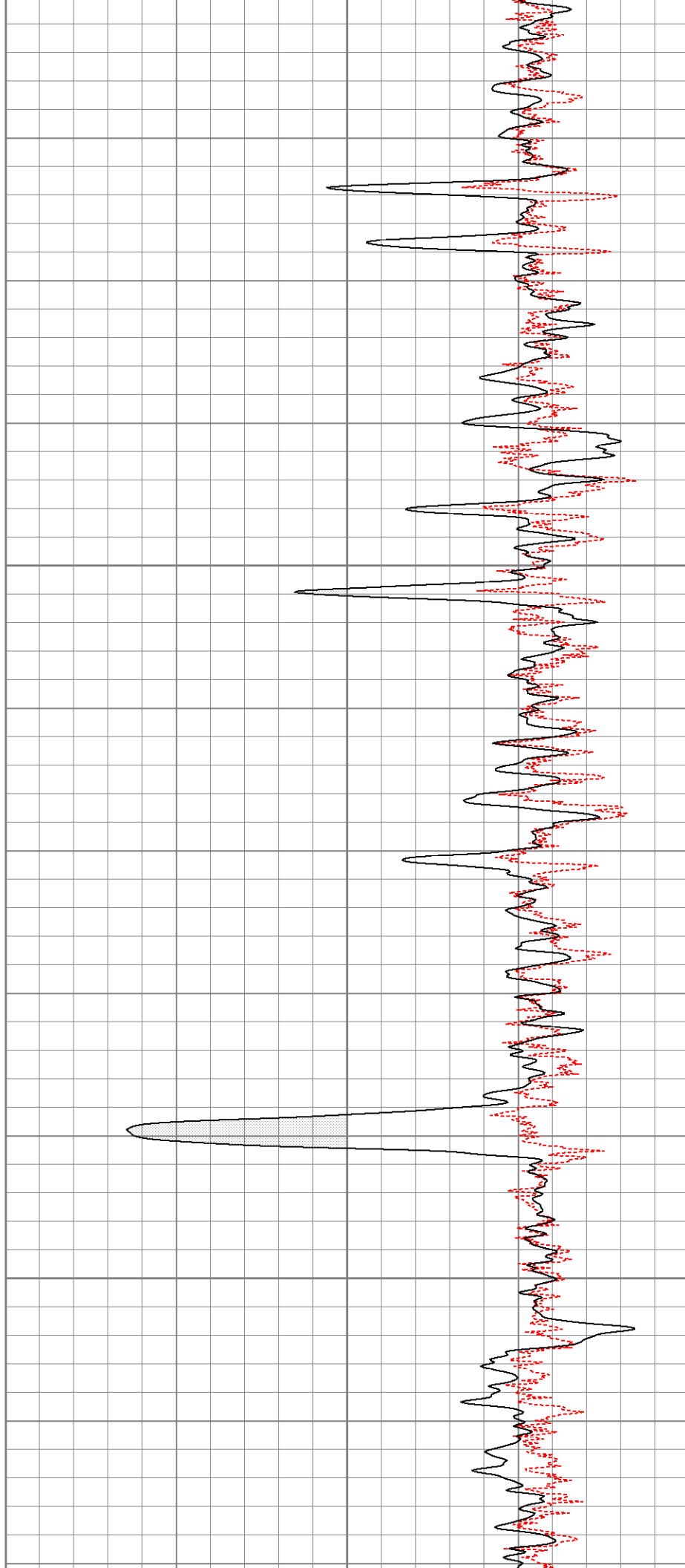
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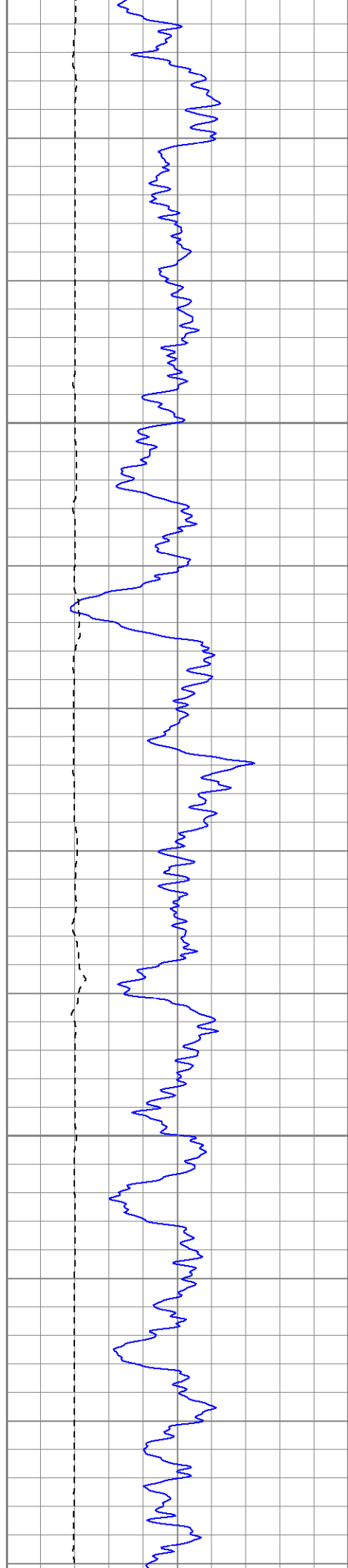




1350

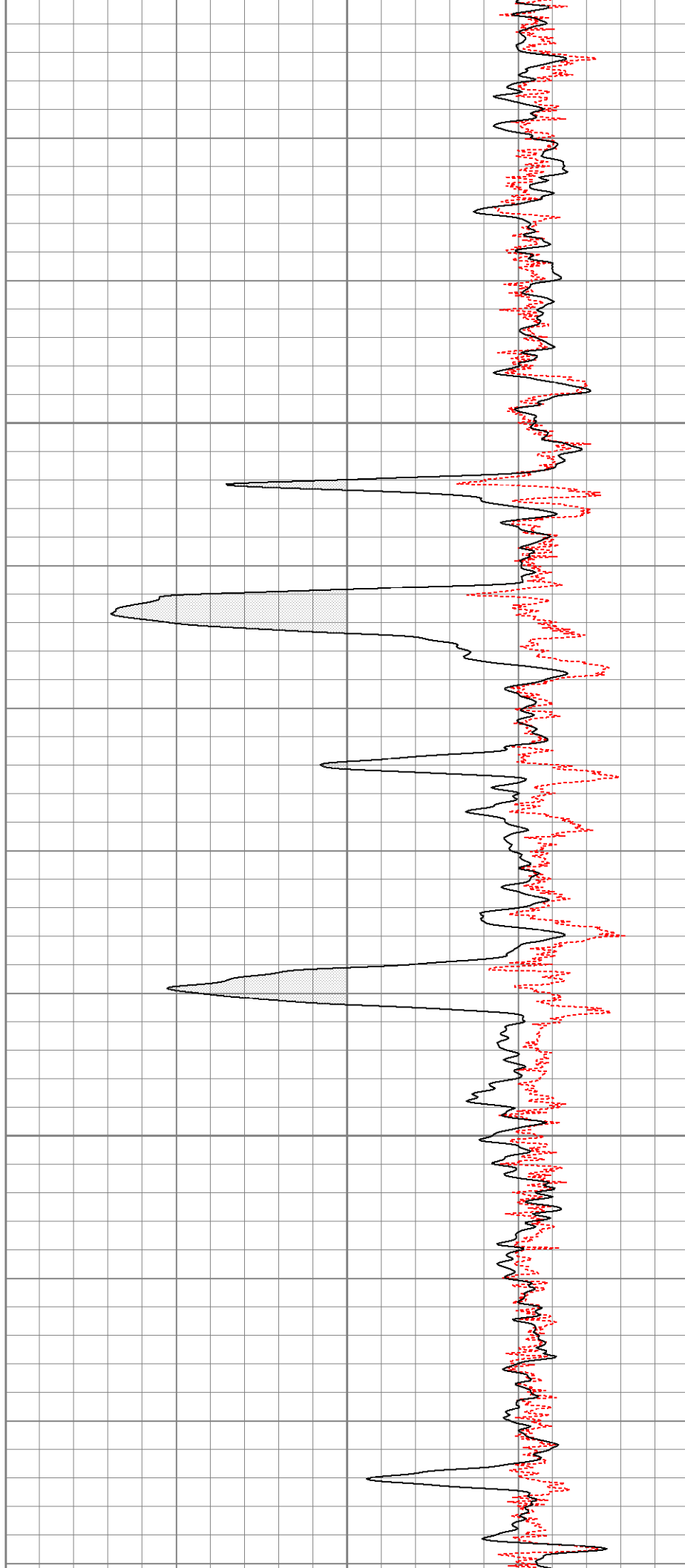
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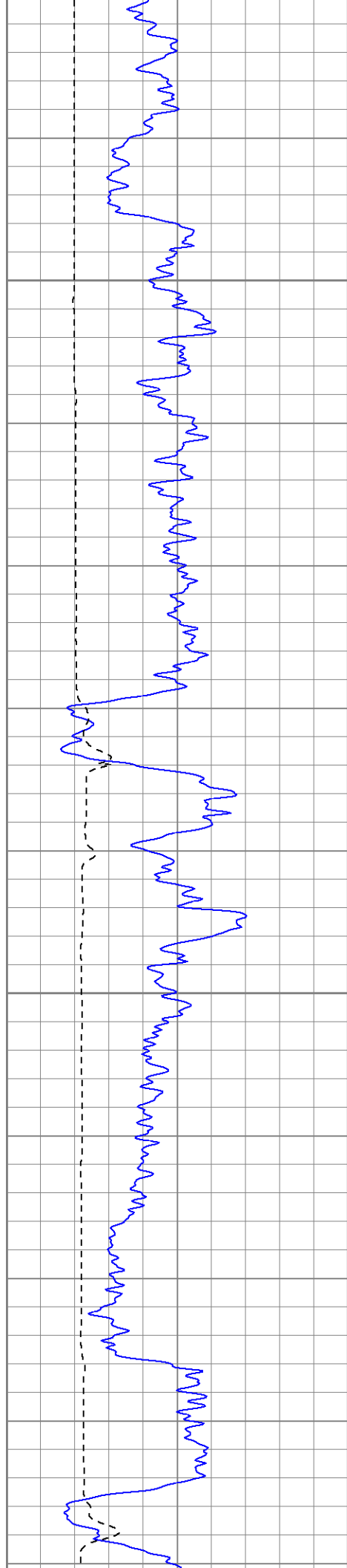




1450

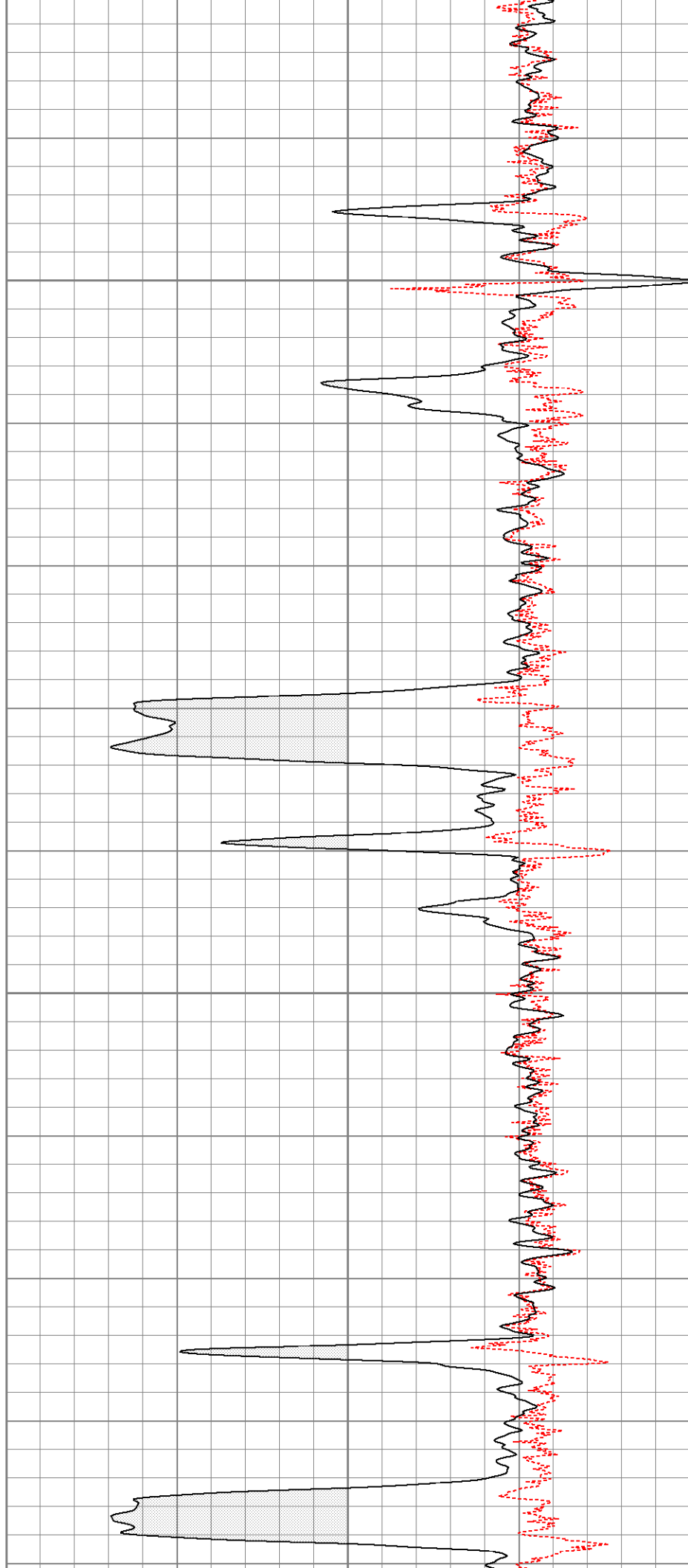
1500

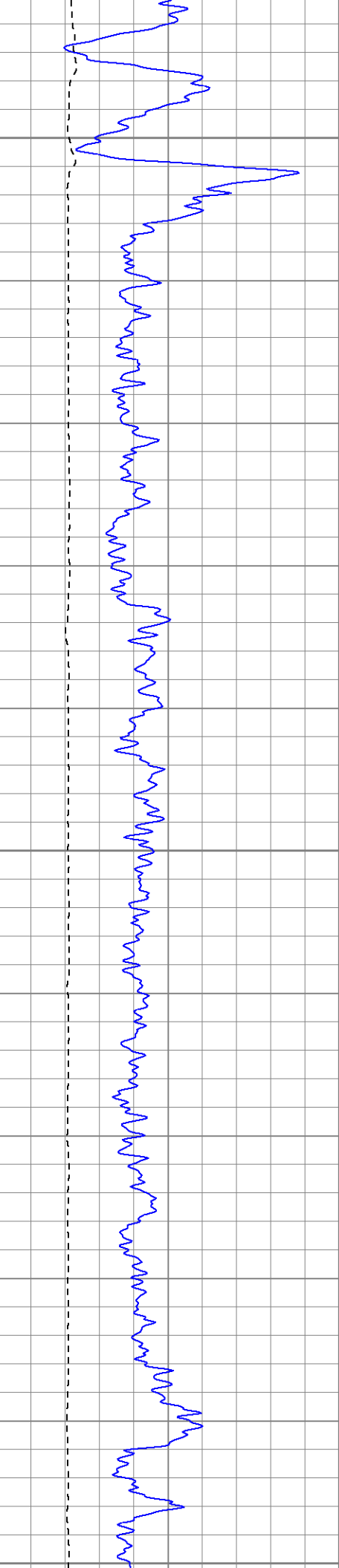




1550

1600

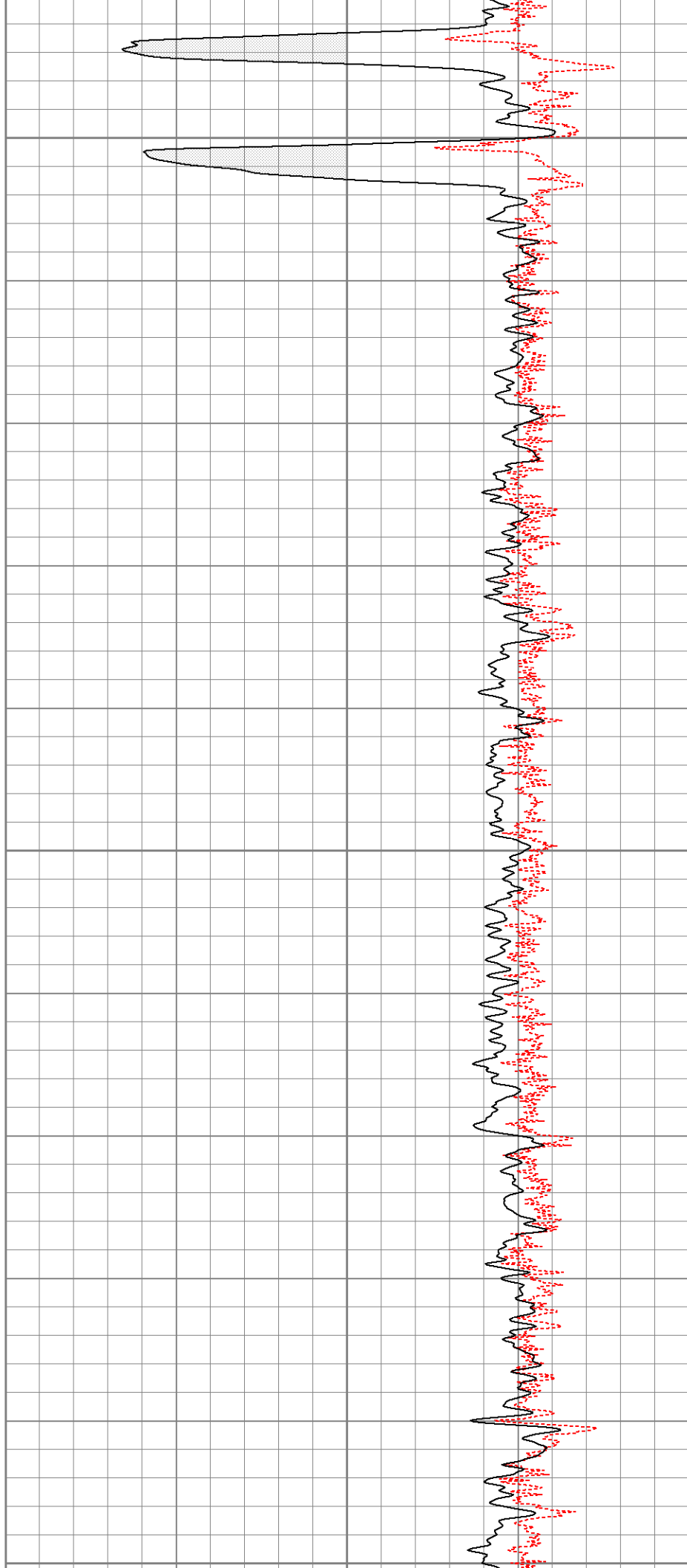


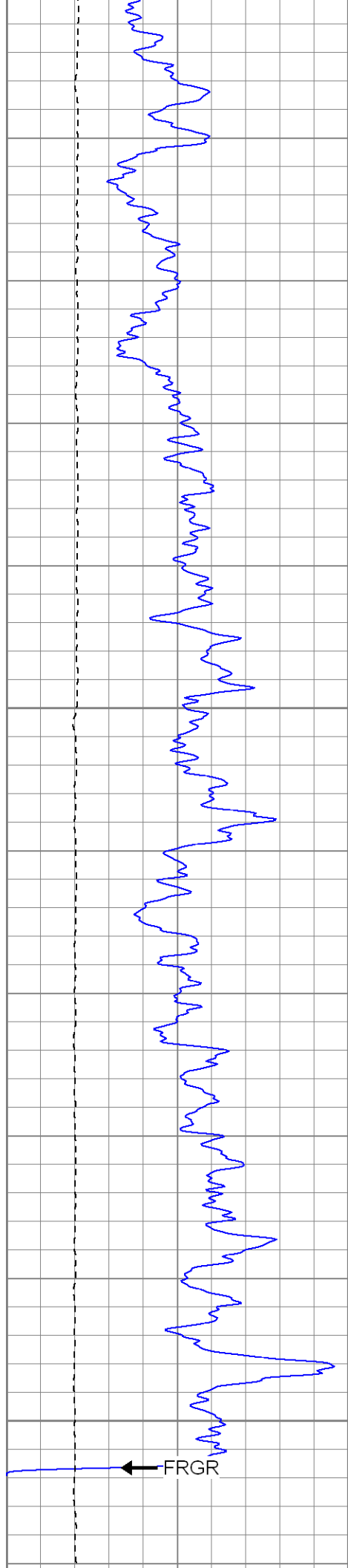


1650

1700

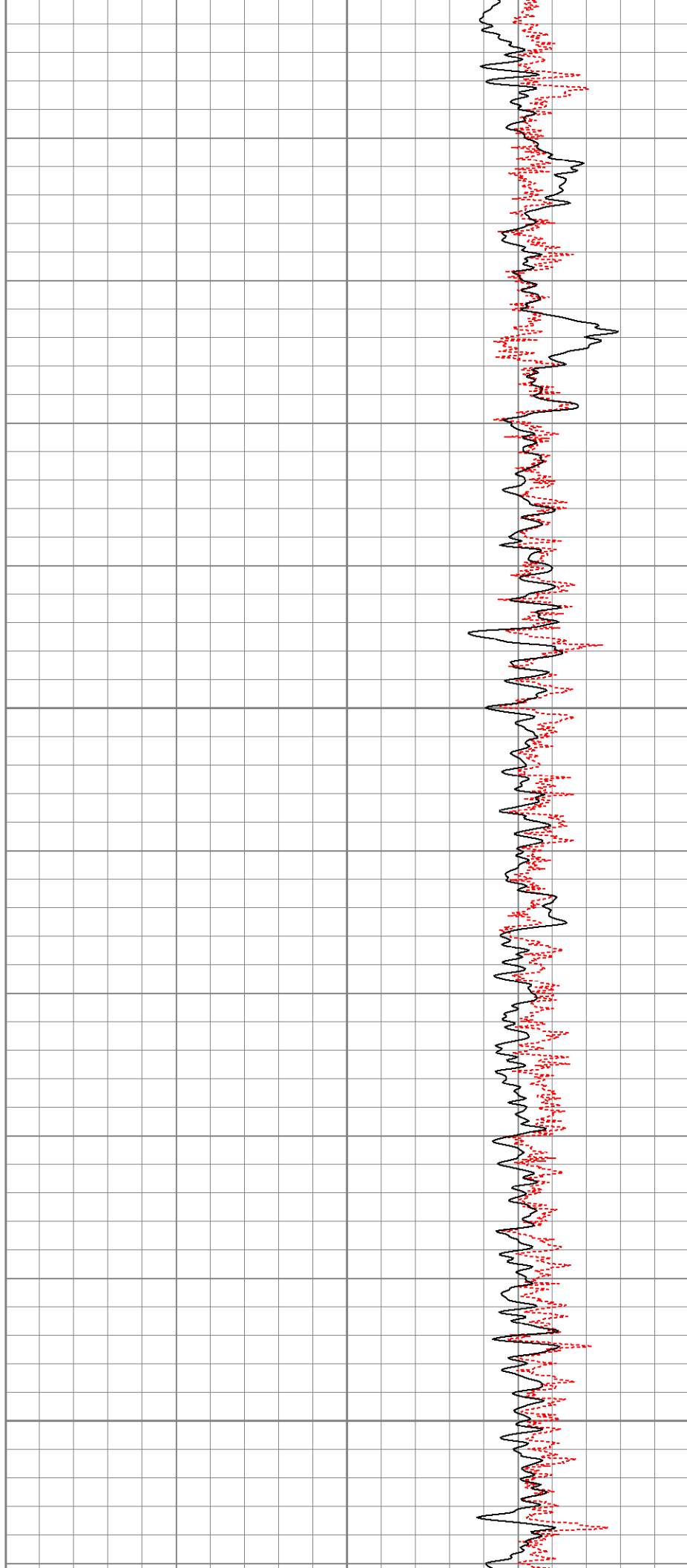
1750





1800

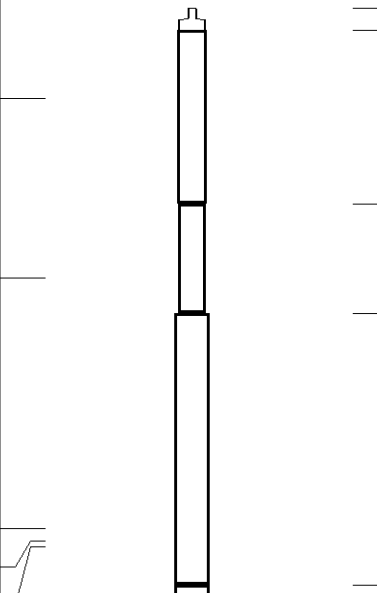
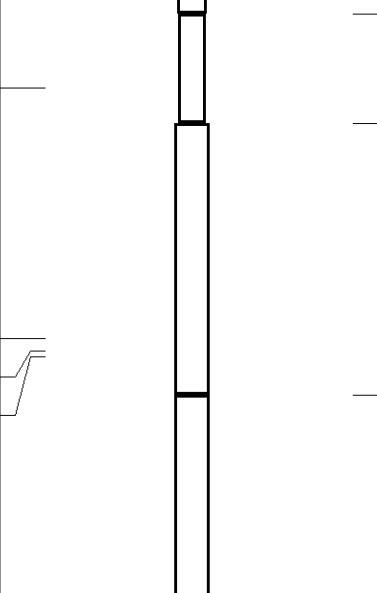
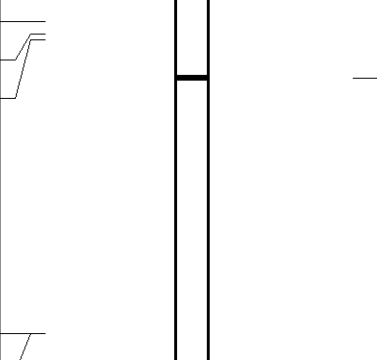
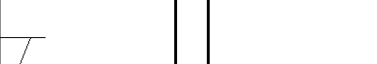
1850





	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
			CDL-poilex (2118)	8.83	4.00	275.00
LSD	26.46					
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: xtoge2813.db: field/well/run1/pass1 Total Length: 43.42 ft Total Weight: 705.00 lb O.D. 4.00 in						