



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

# COMPENSATED DENSITY NEUTRON LOG

Company XTO Energy Inc.  
Well Hill Ranch 36-06  
Field Purgatoire River  
County Las Animas State Colorado

Location: API # : 05 071 09532 00

2127 FNL & 2221' FWL

SEC 36 TWP 34S RGE 67W

DIL

Permanent Datum Ground Level Elevation 7871'  
Log Measured From Ground Level  
Drilling Measured From Ground Level

Elevation  
K.B. -----  
D.F. -----  
G.L. 7871'

Date 5-1-08

Run Number One

Depth Driller 2490'

Depth Logger 2479'

Bottom Logged Interval 2456'

Top Log Interval Surface Casing

Casing Driller 8 5/8" @ 464'

Casing Logger 464'

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 2:35 P.M.

Maximum Recorded Temperature 115 DEG F

Equipment Number T697

Location Trinidad

Recorded By J. Cappellucci

Witnessed By Mr. Don Johnson

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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.

## Well Directions:

Lorencito to XTO hill, follow all the way to top, cross cattleguard,  
drive past Hill ranch 36-02, next location on right.

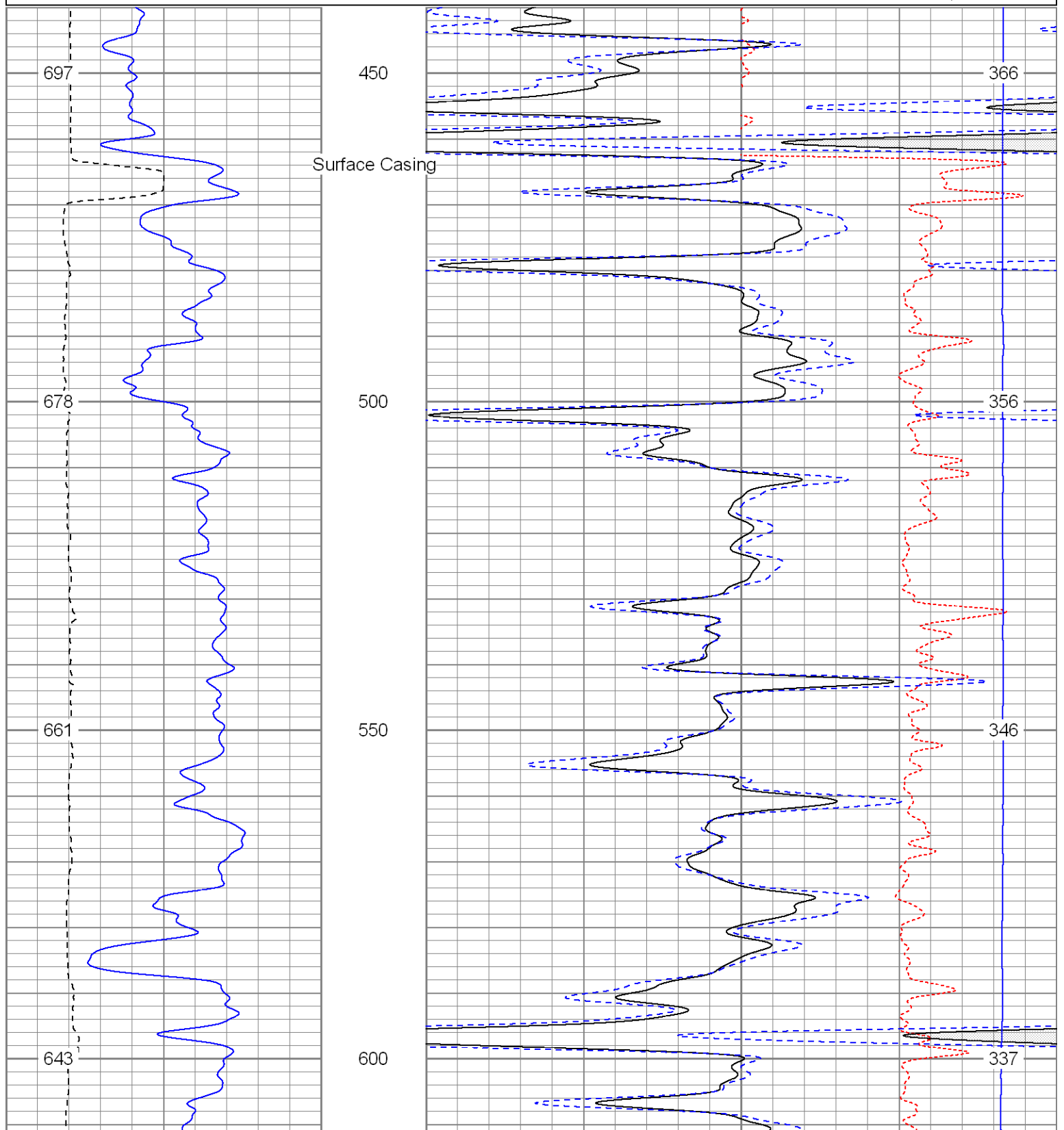


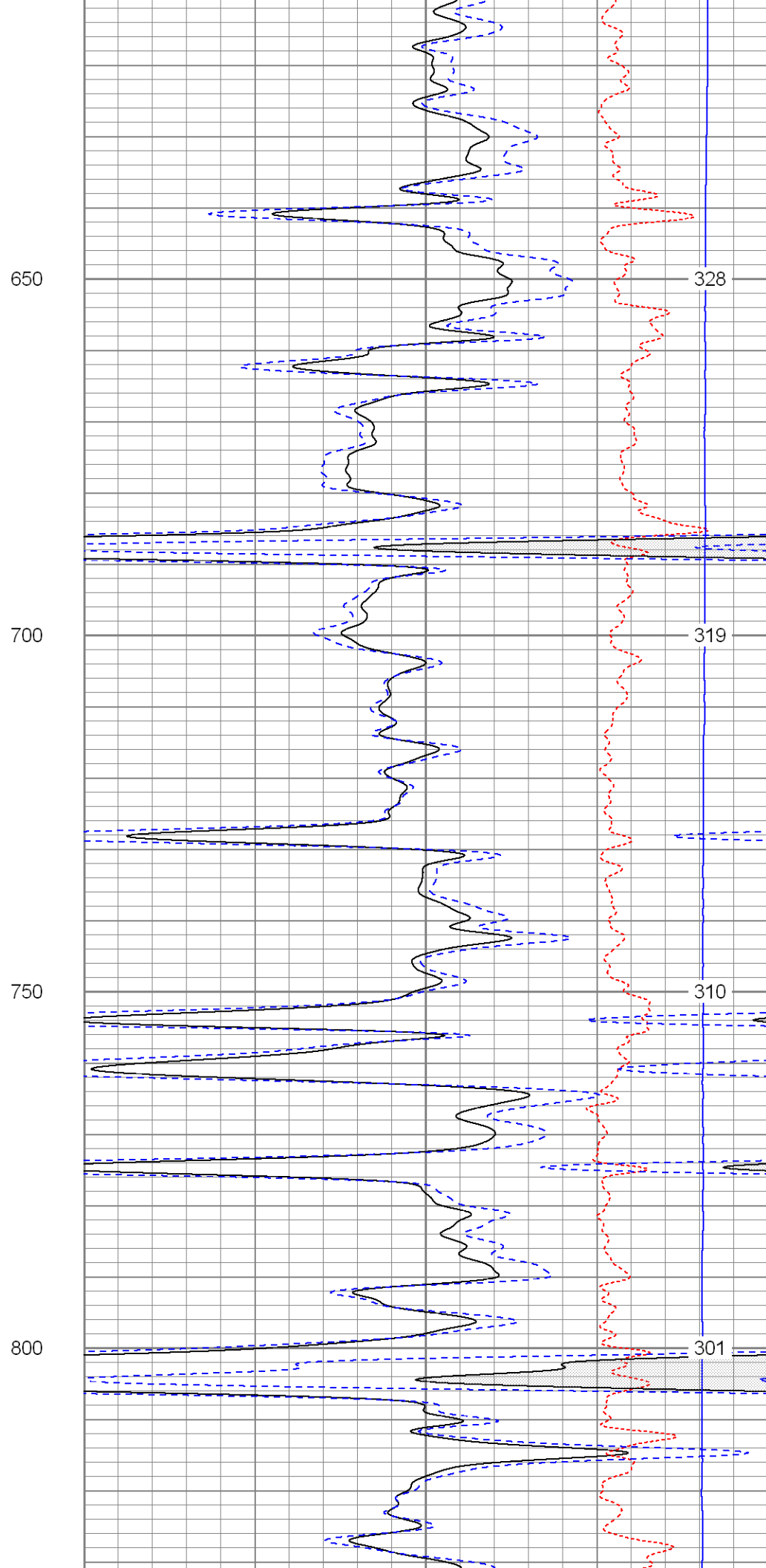
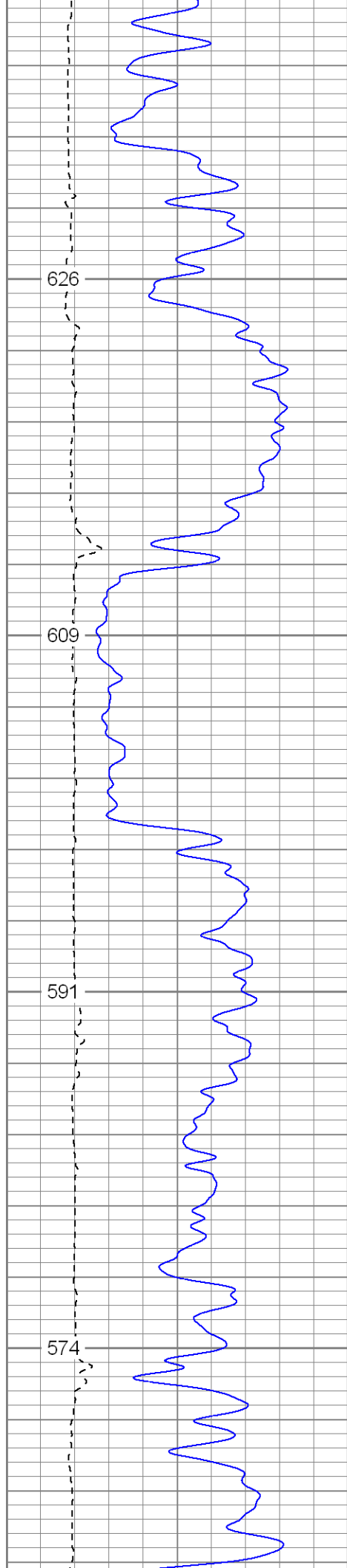
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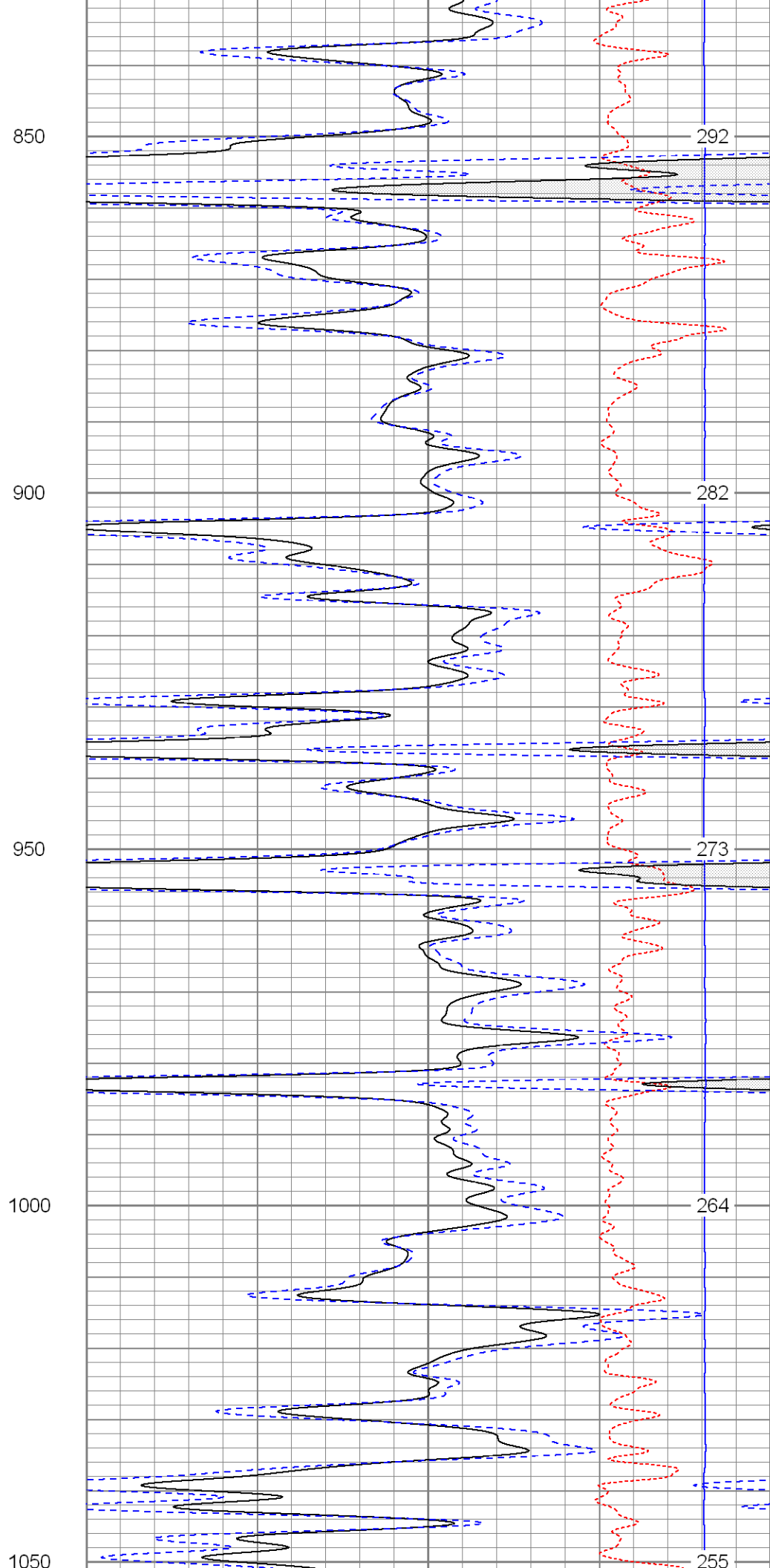
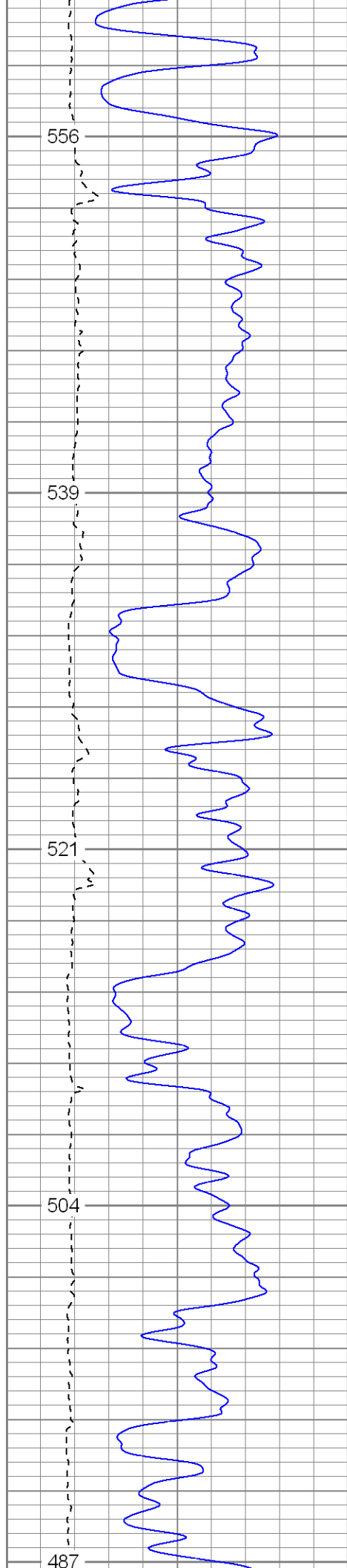
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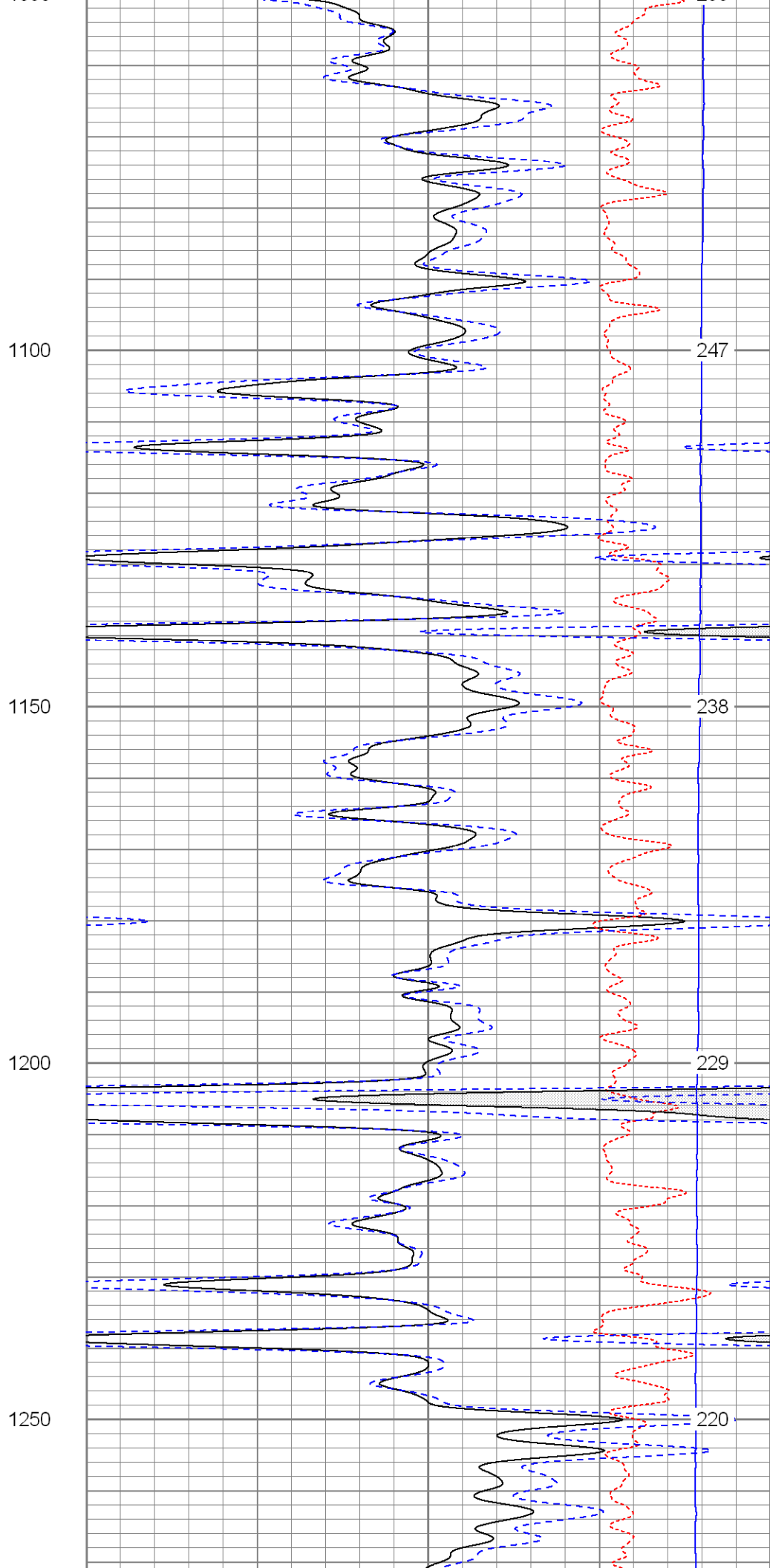
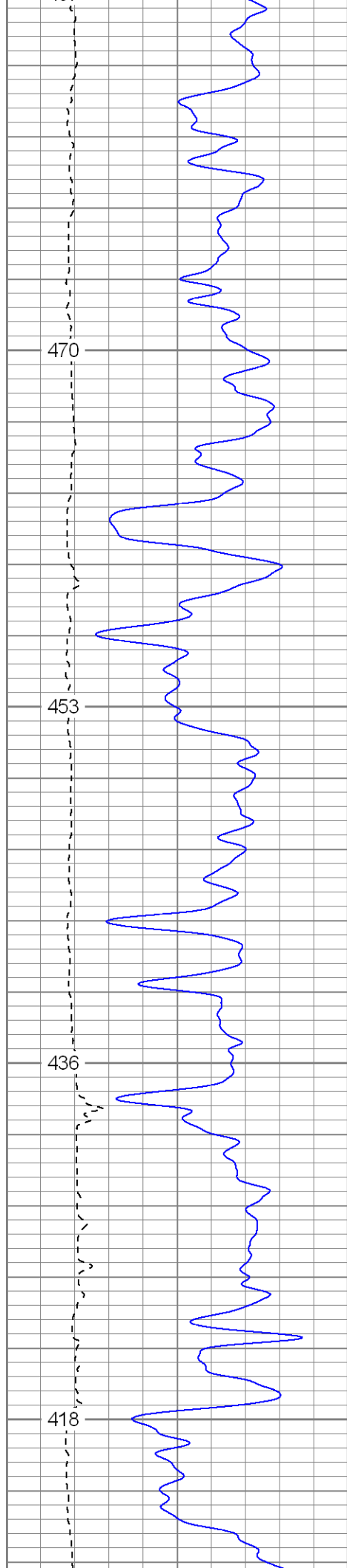
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Dataset Pathname: pass2.1  
Presentation Format: cdl  
Dataset Creation: Thu May 01 16:19:22 2008 by Calc Open-Cased 070814  
Charted by: Depth in Feet scaled 1:240

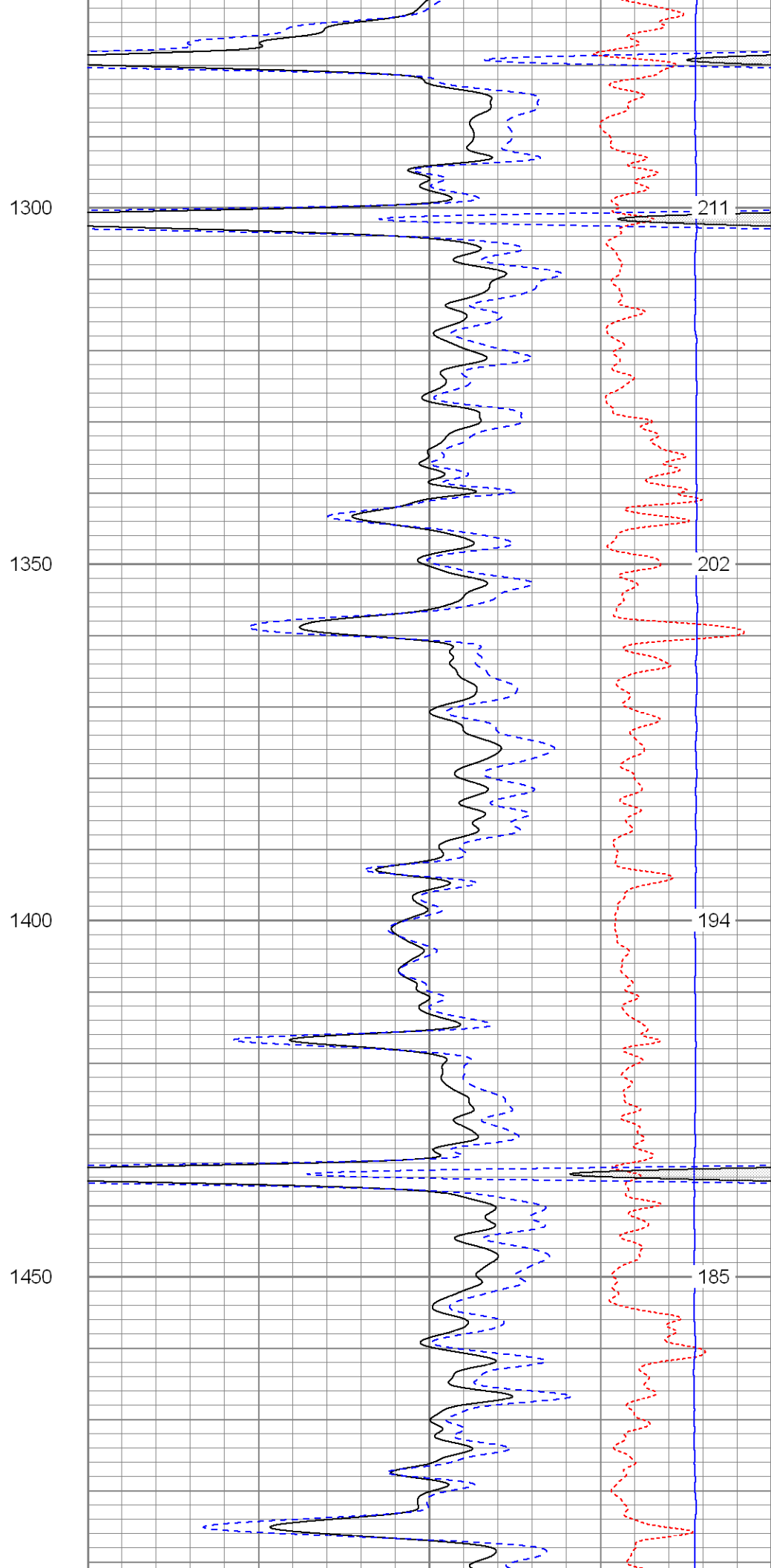
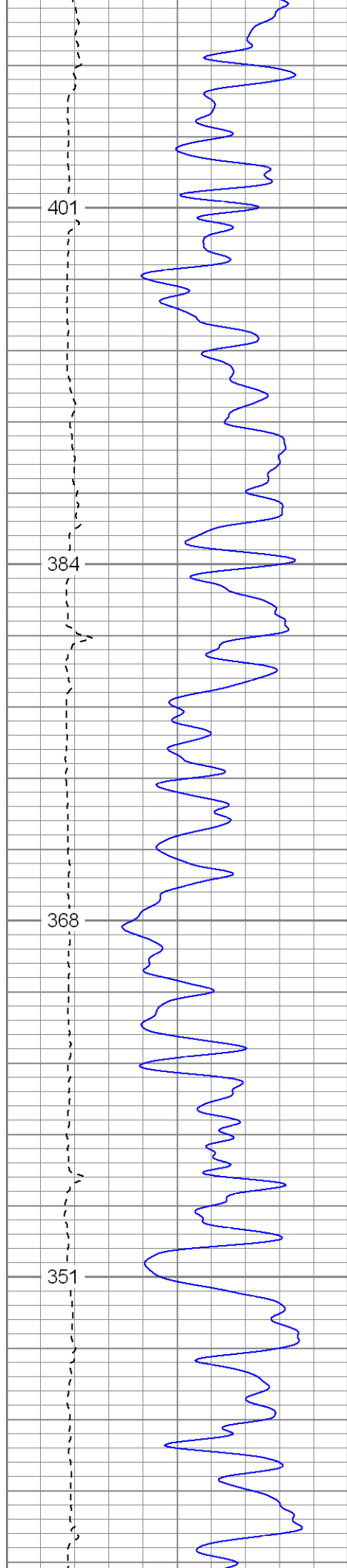
0	GR (GAPI)	200	2	RHOB (g/cc)		3
6	DCAL (in)	16	1	RHOB (g/cc)		2
TBHV (ft3)			30	DPOR (pu)		-10
				-0.5	RHOC (g/cc)	0.5
				4000	LTEN (lb)	0
						ABHV (ft3)

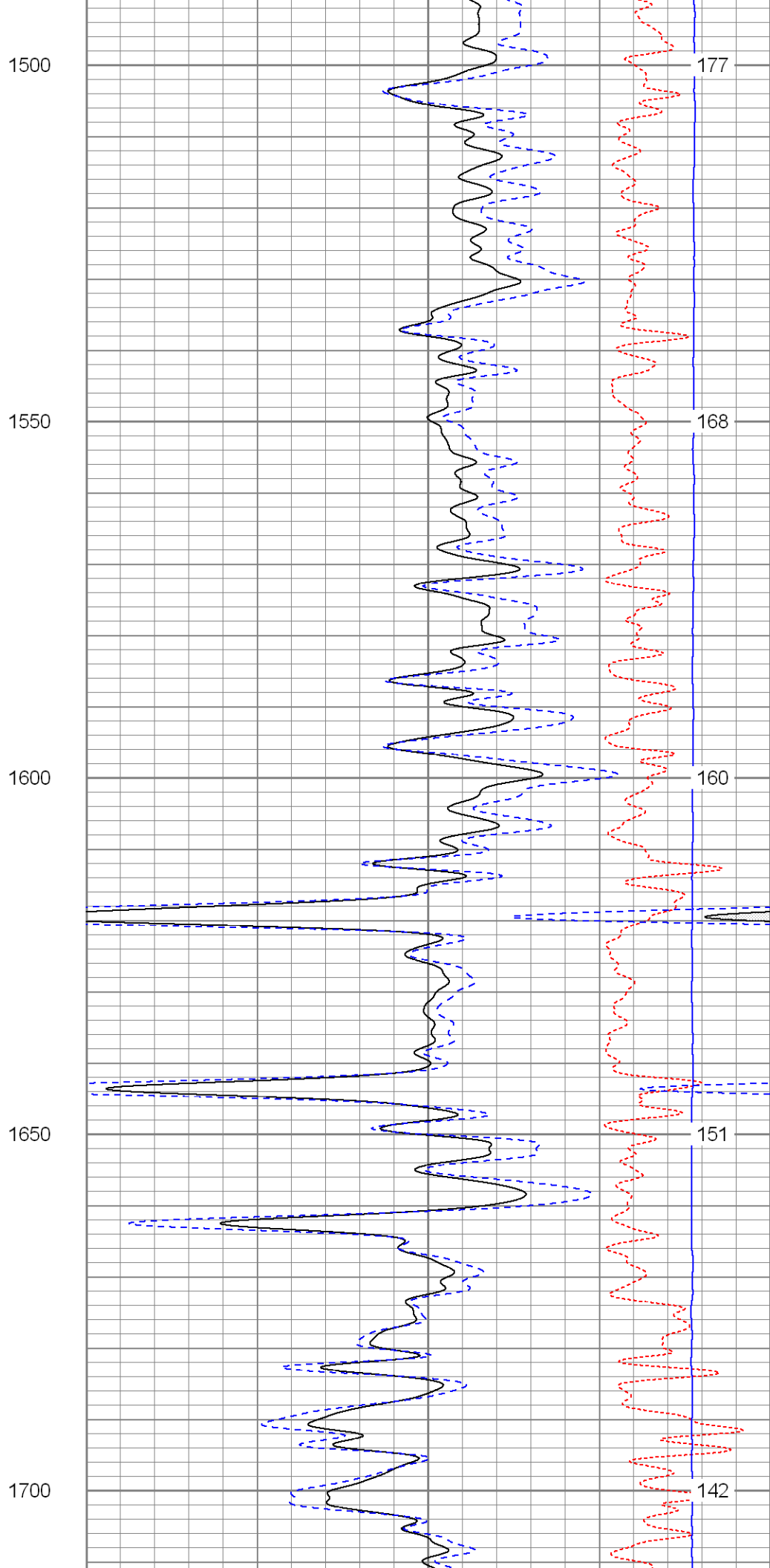
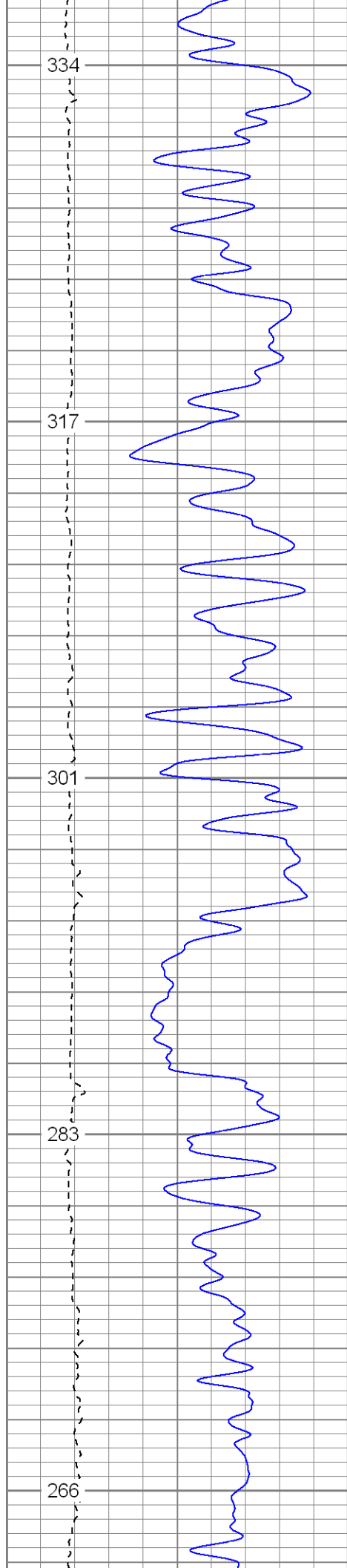


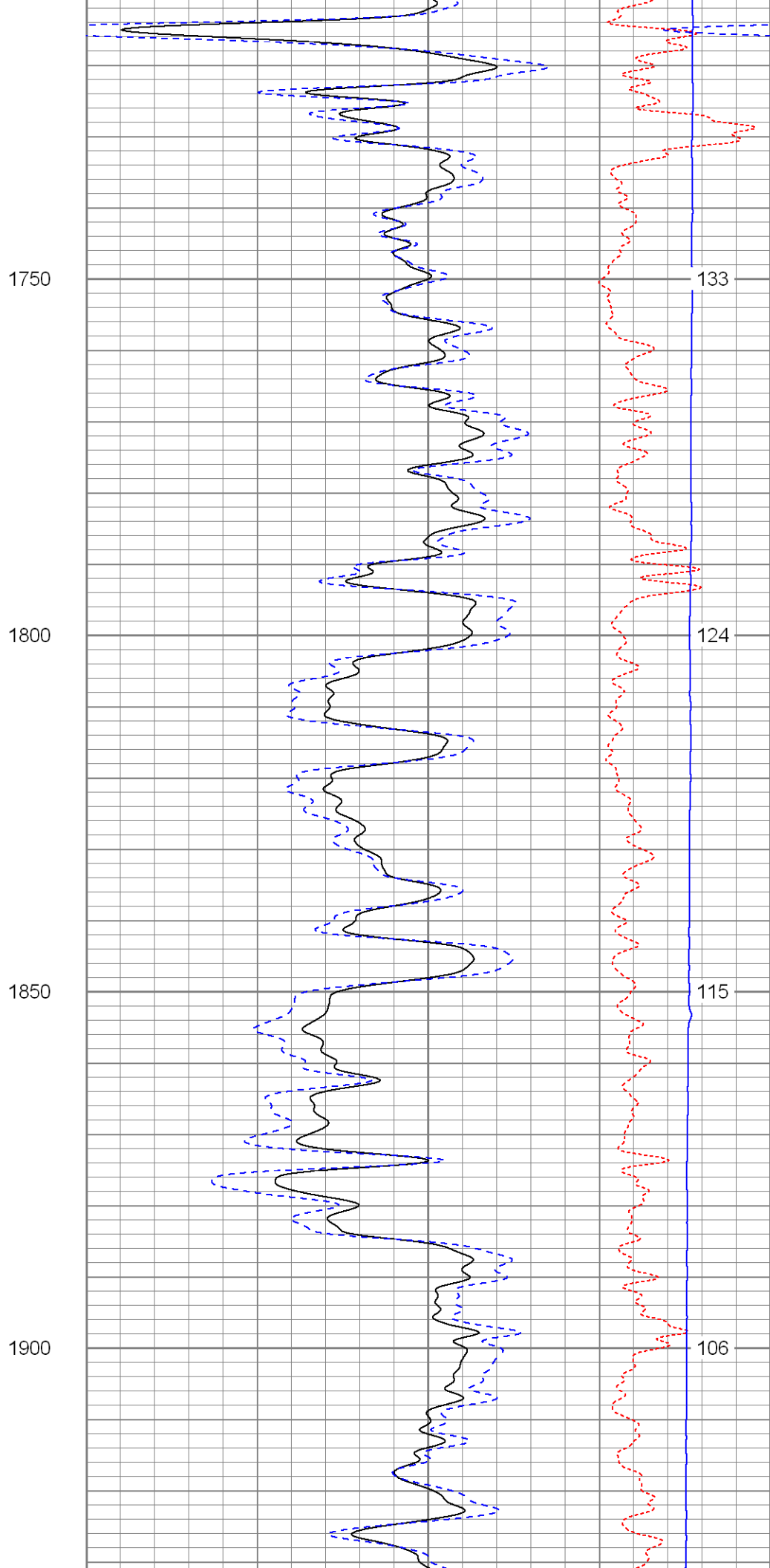
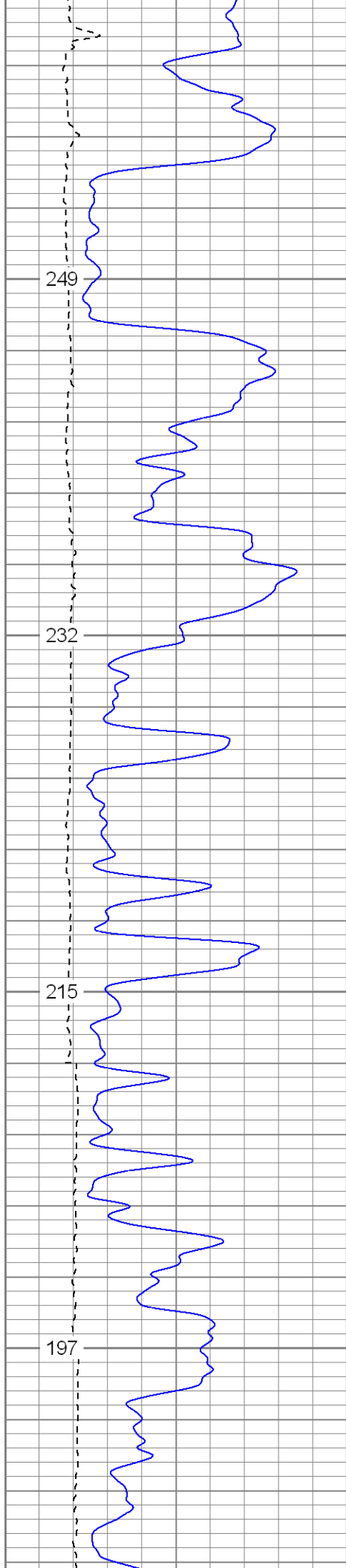




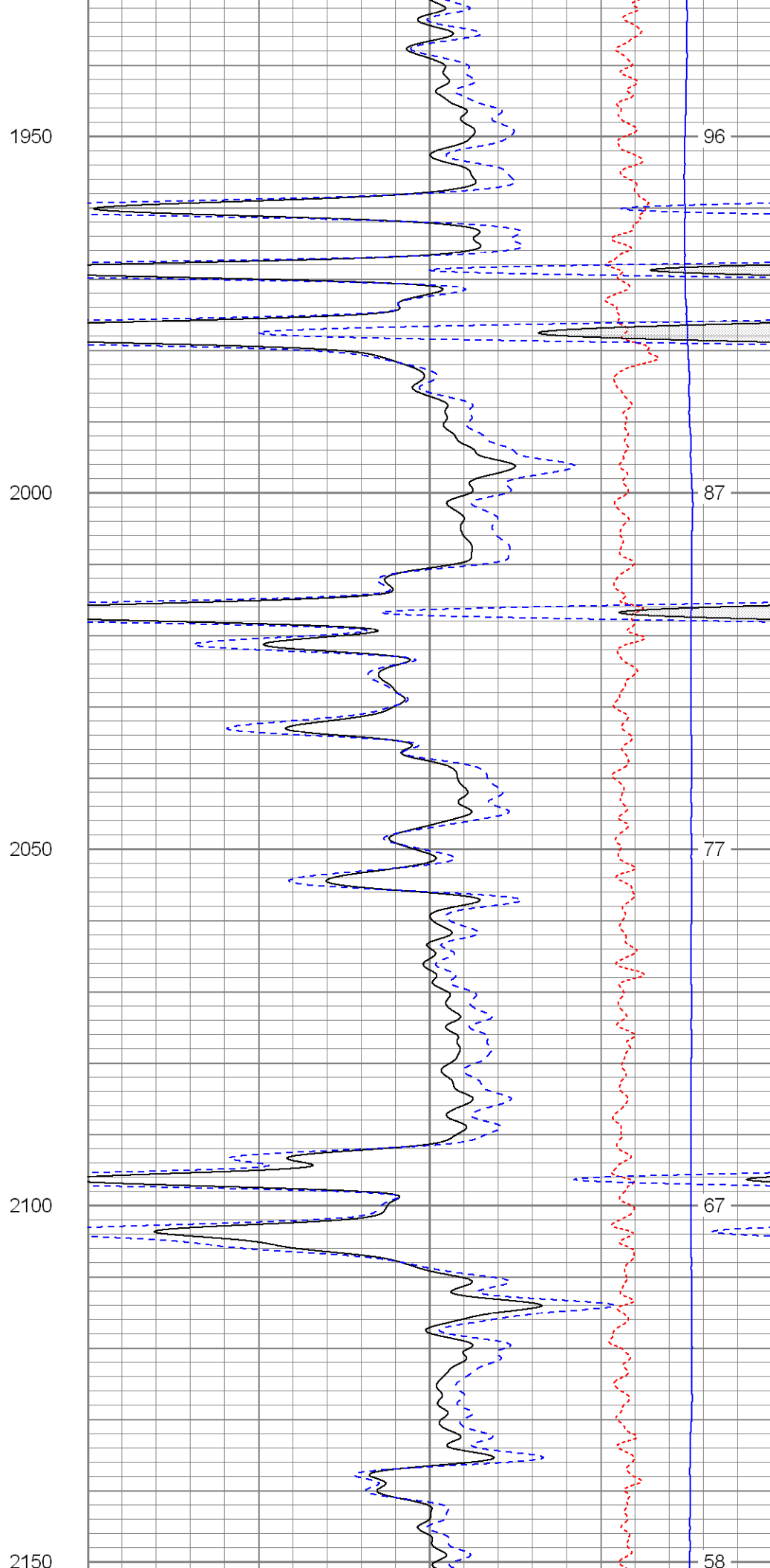
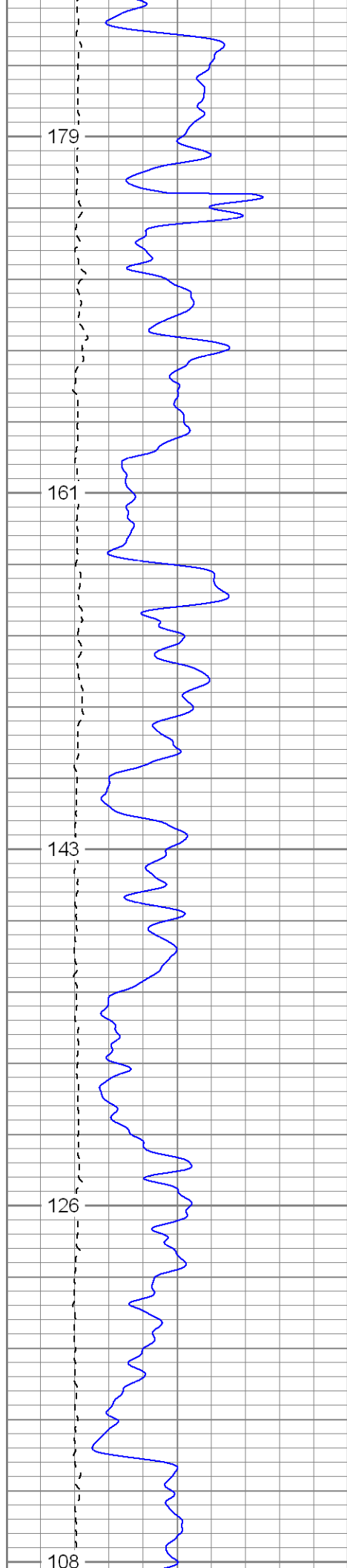


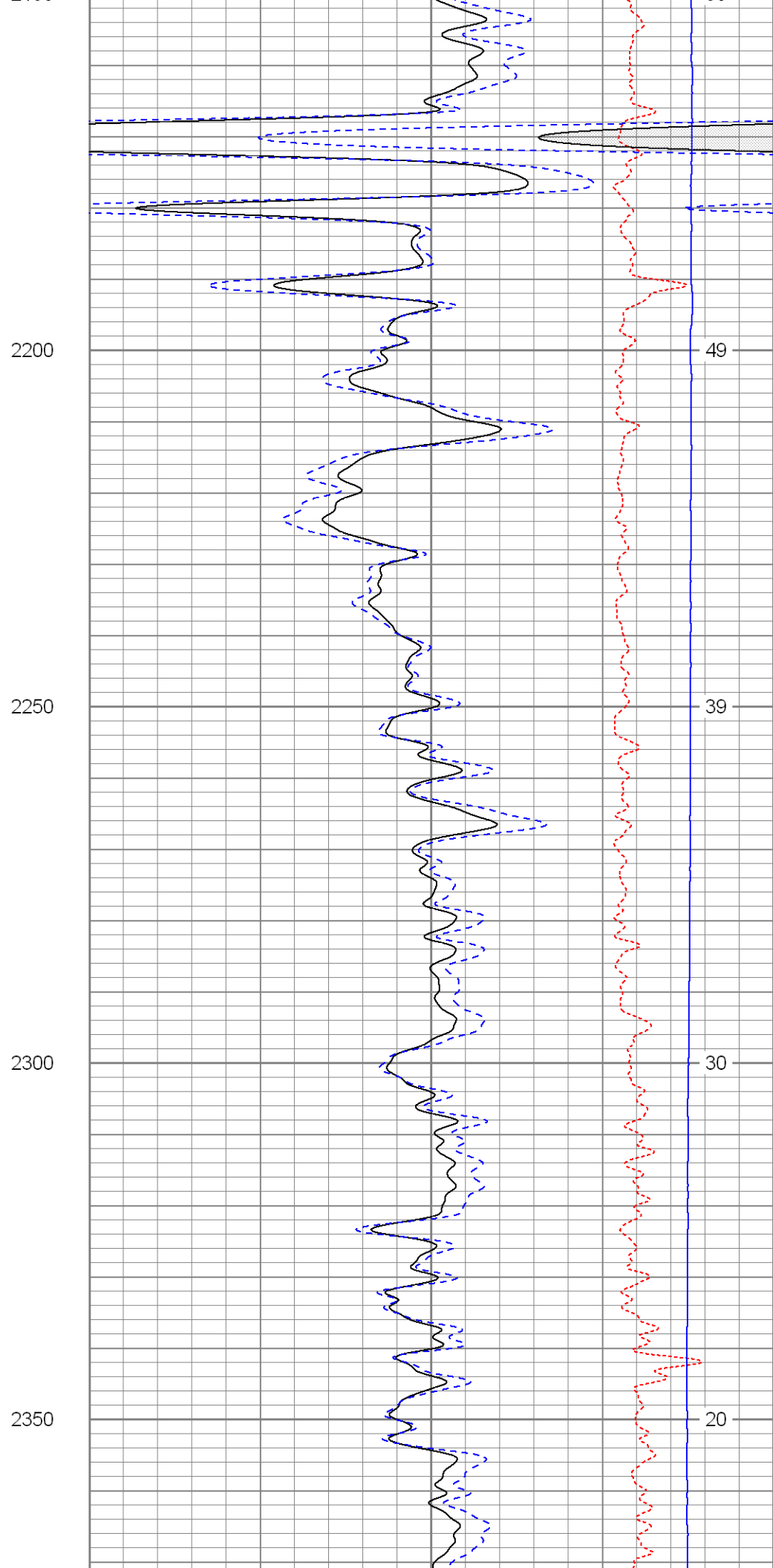
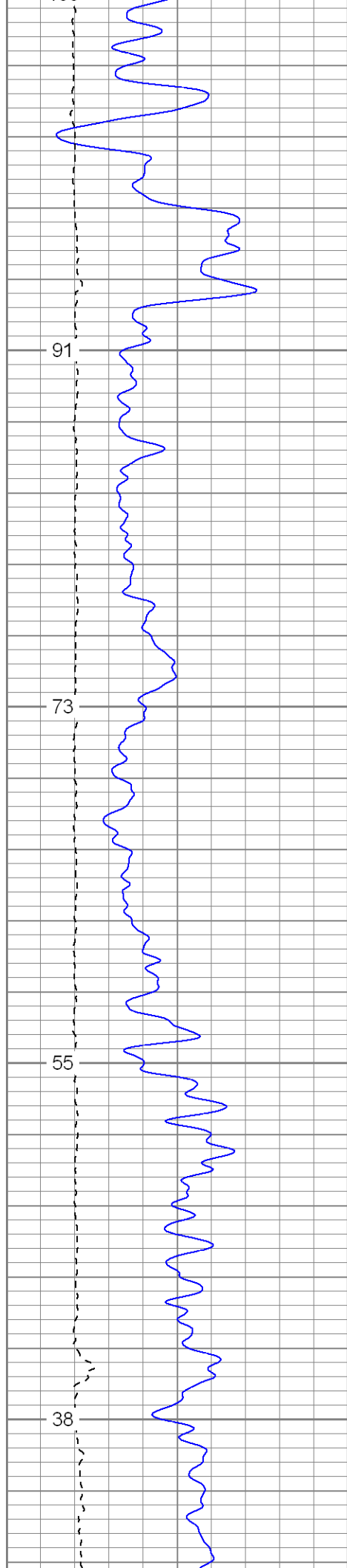


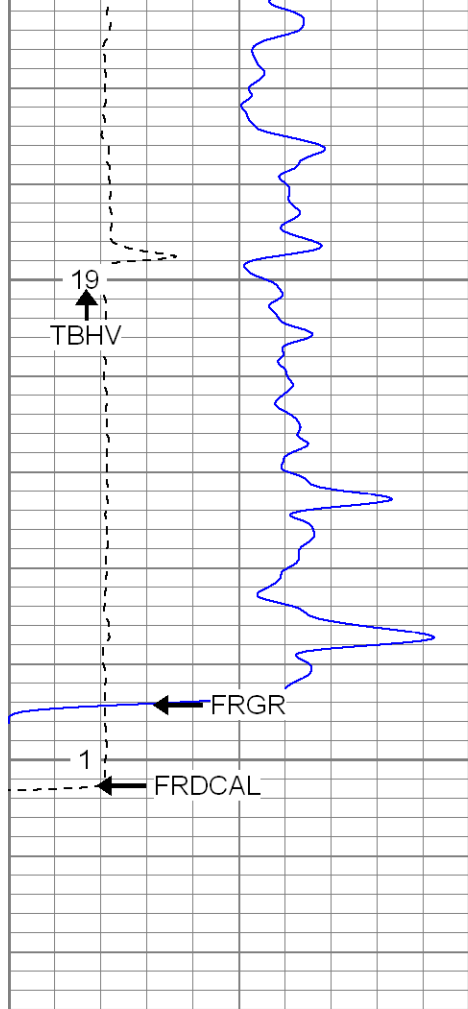




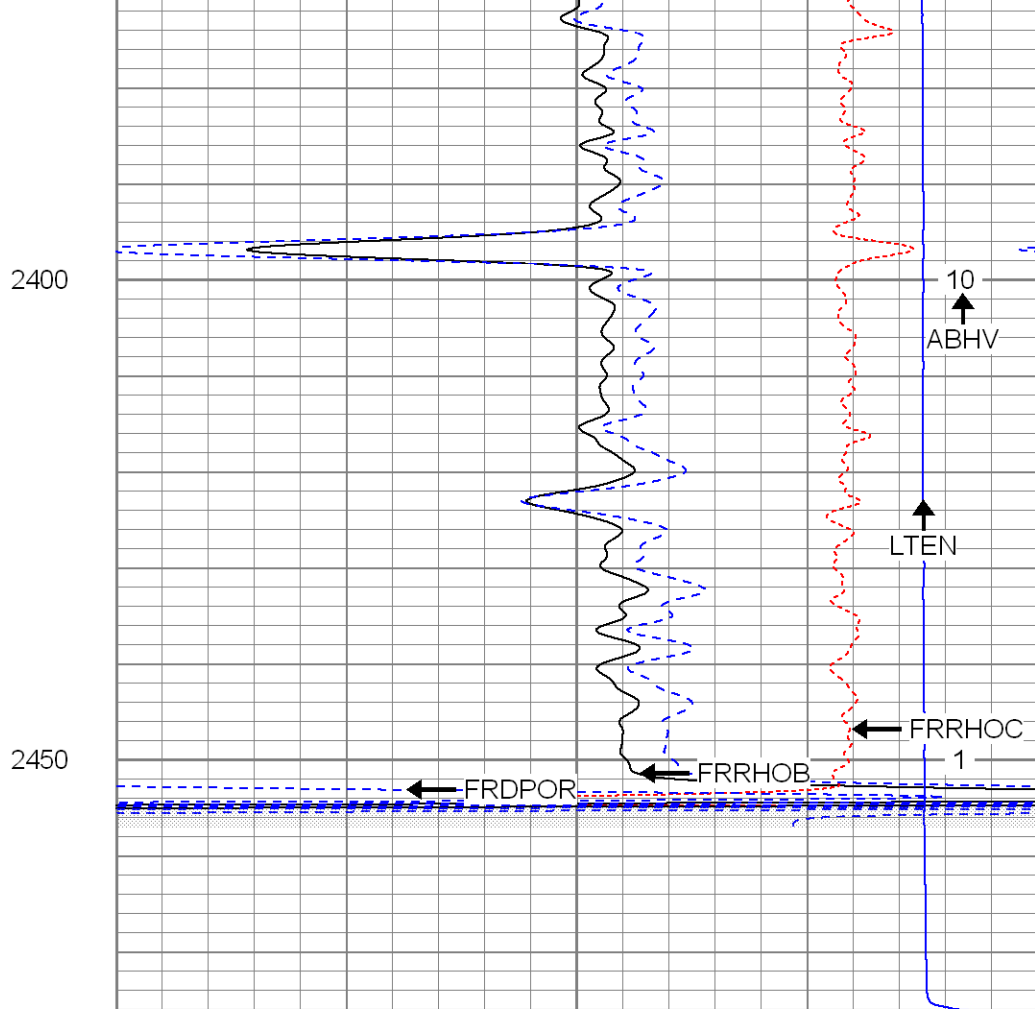








0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		



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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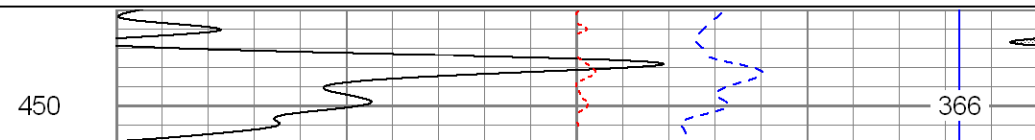
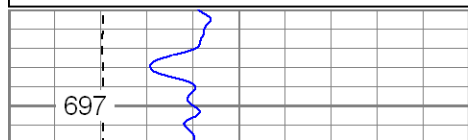
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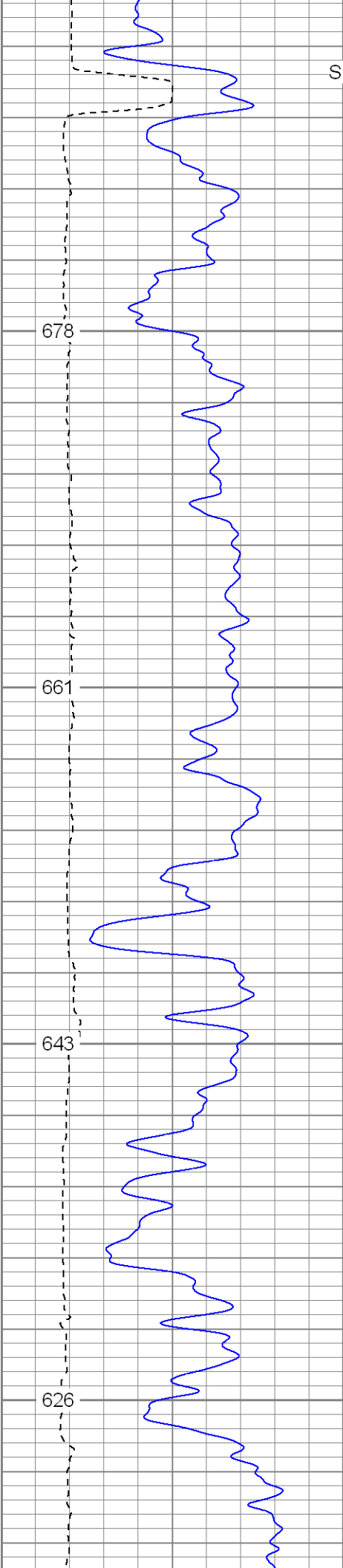
# Main Pass

Database File: xtohr3606.db  
Dataset Pathname: pass2.1  
Presentation Format: cdnl  
Dataset Creation: Thu May 01 16:19:22 2008 by Calc Open-Cased 070814  
Charted by: Depth in Feet scaled 1:240

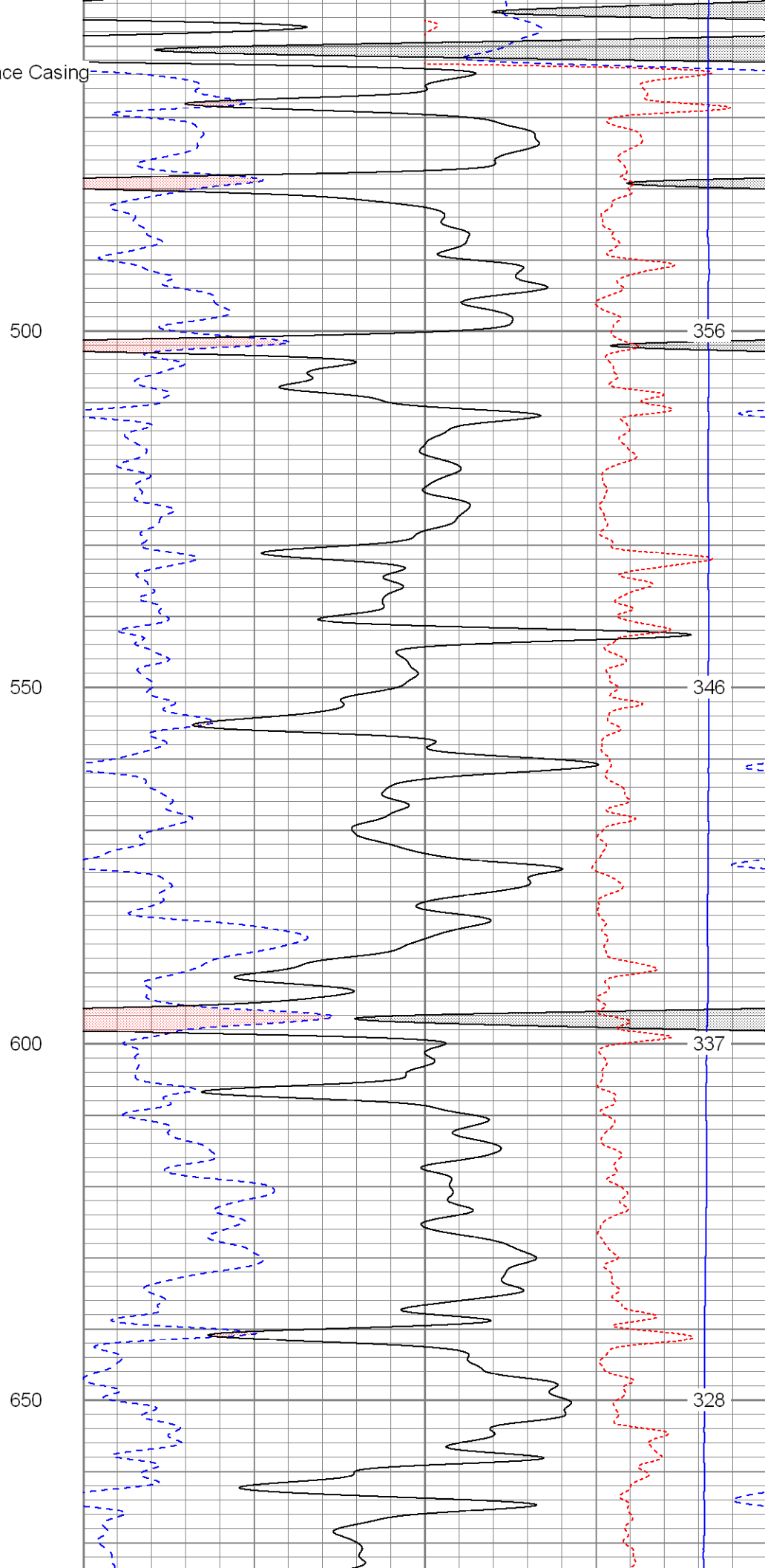
0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		

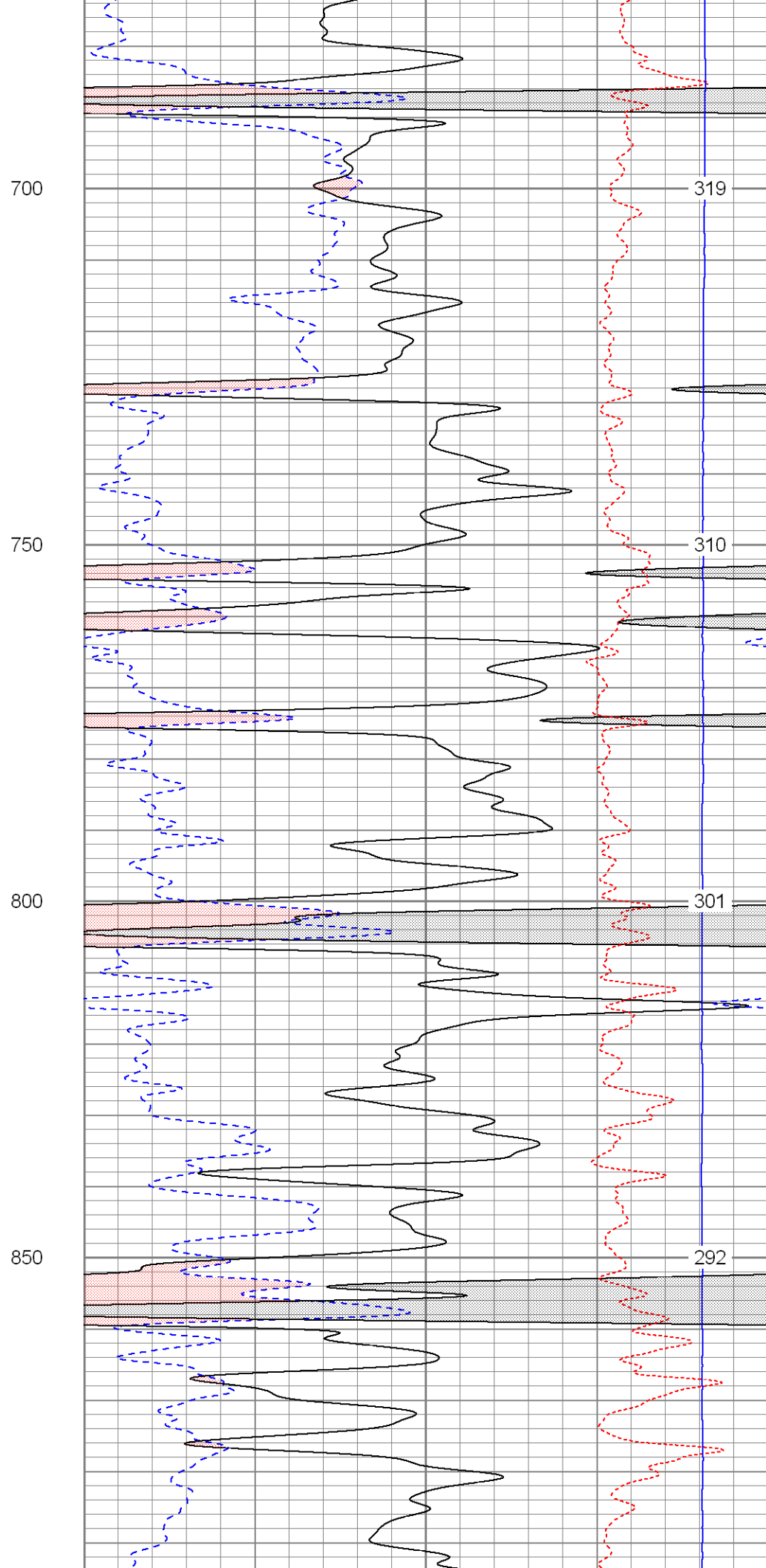
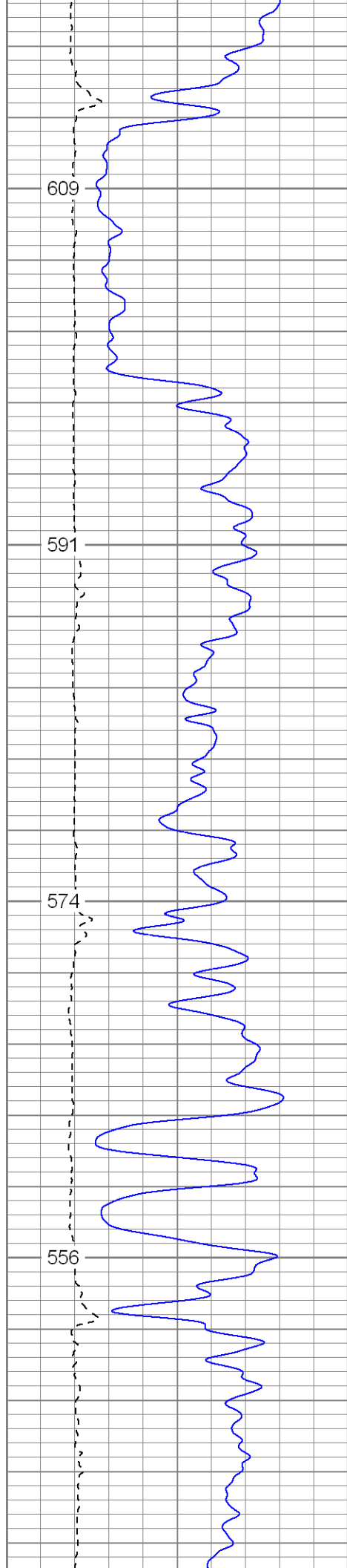
30	NPOR (pu)	-10
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
ABHV (ft3)		

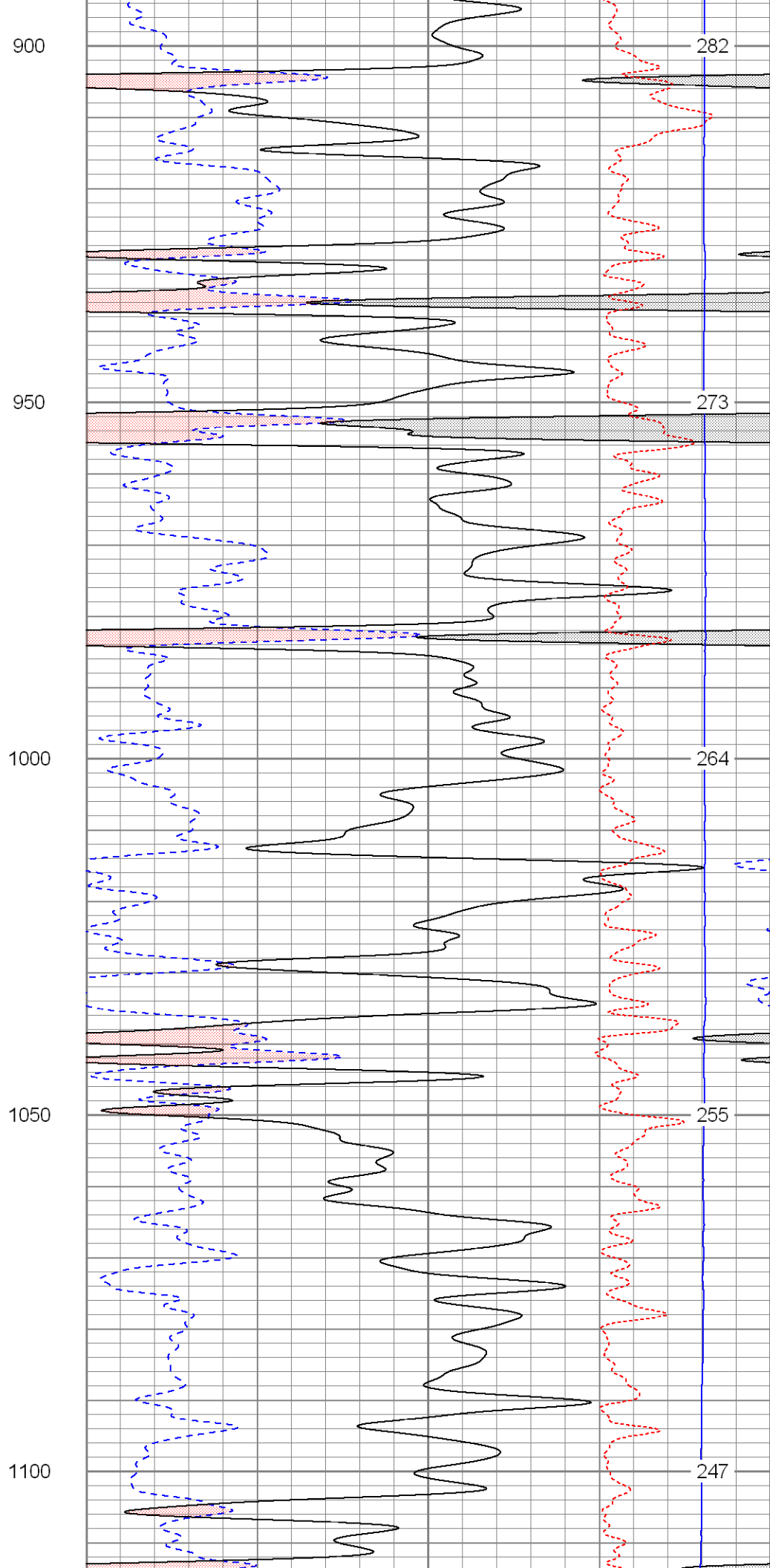
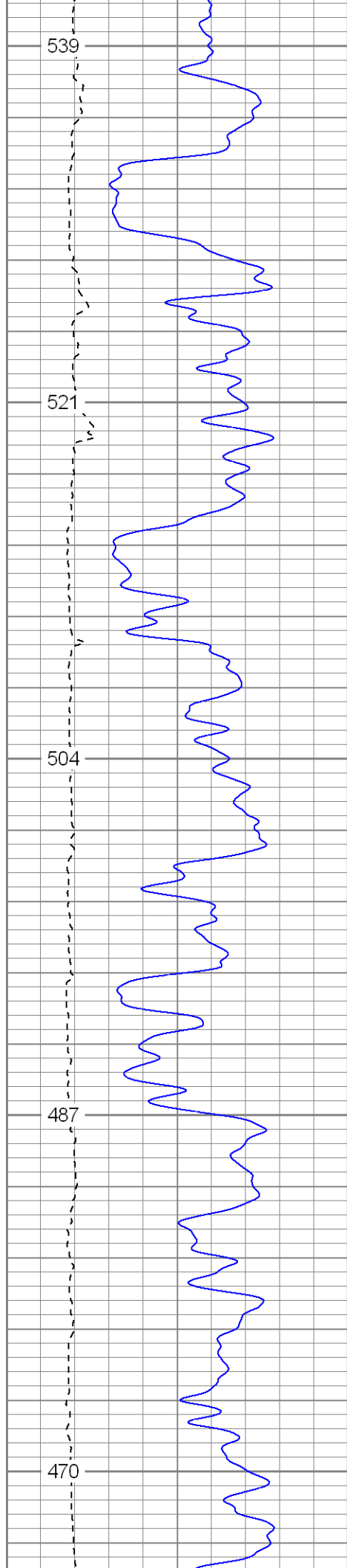


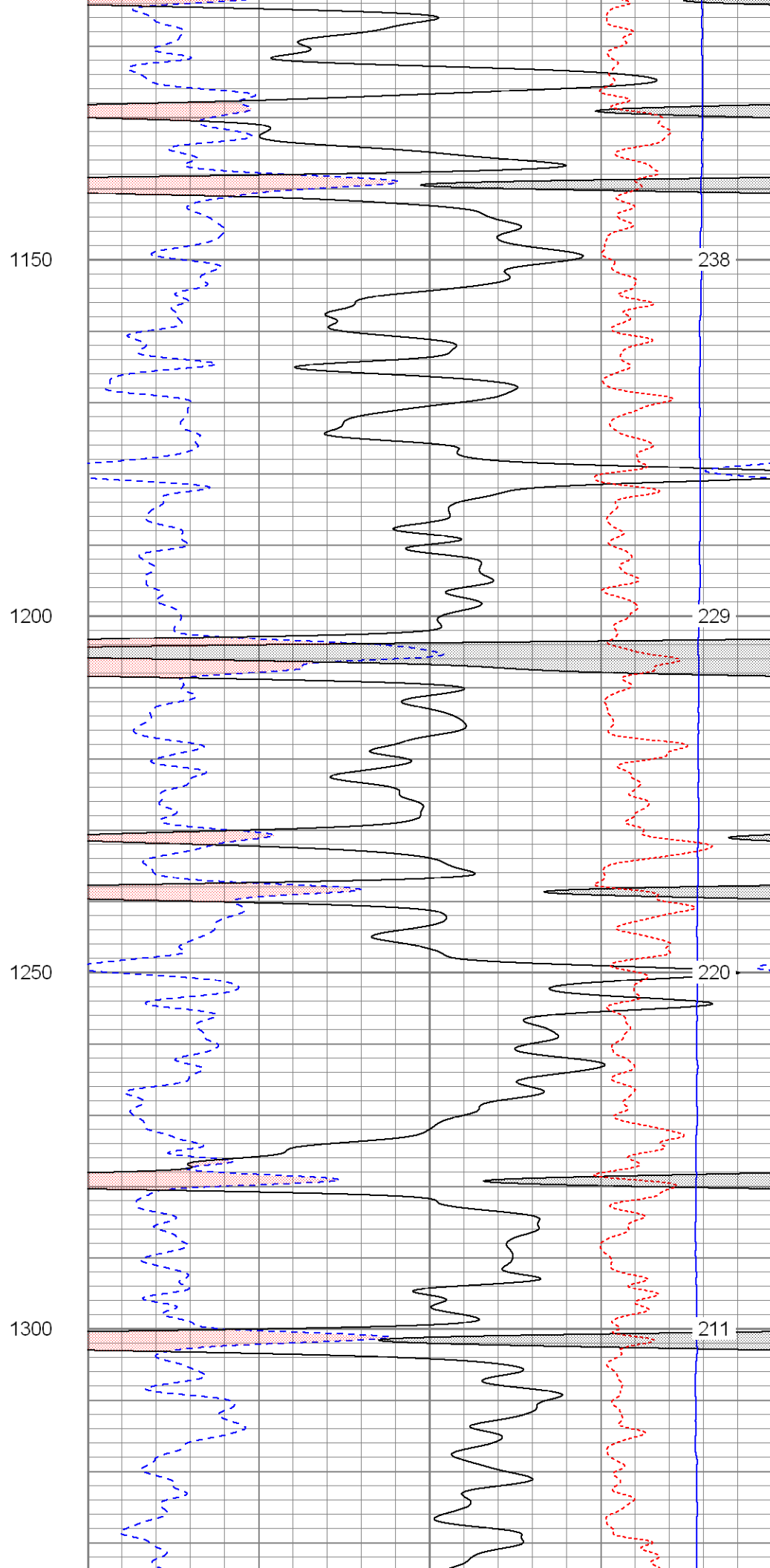
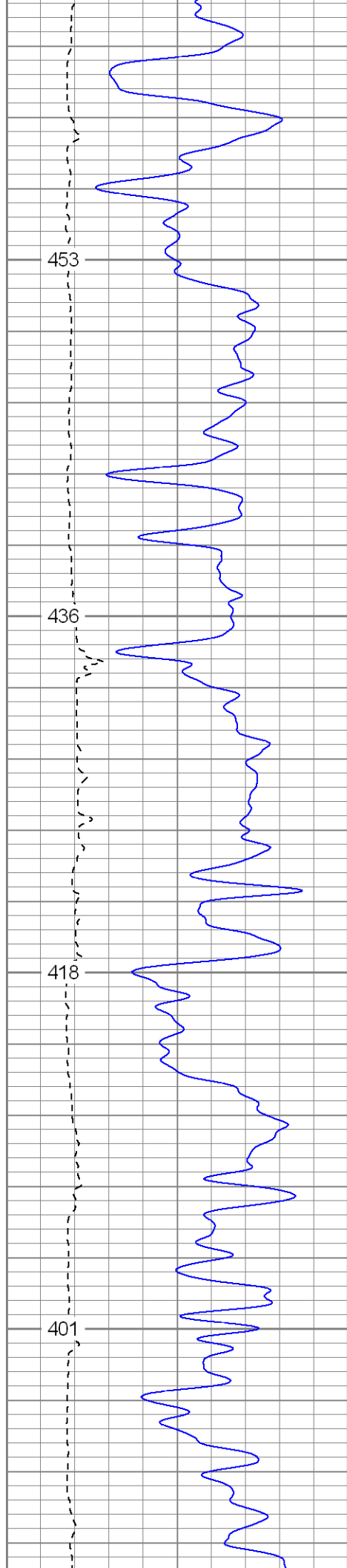


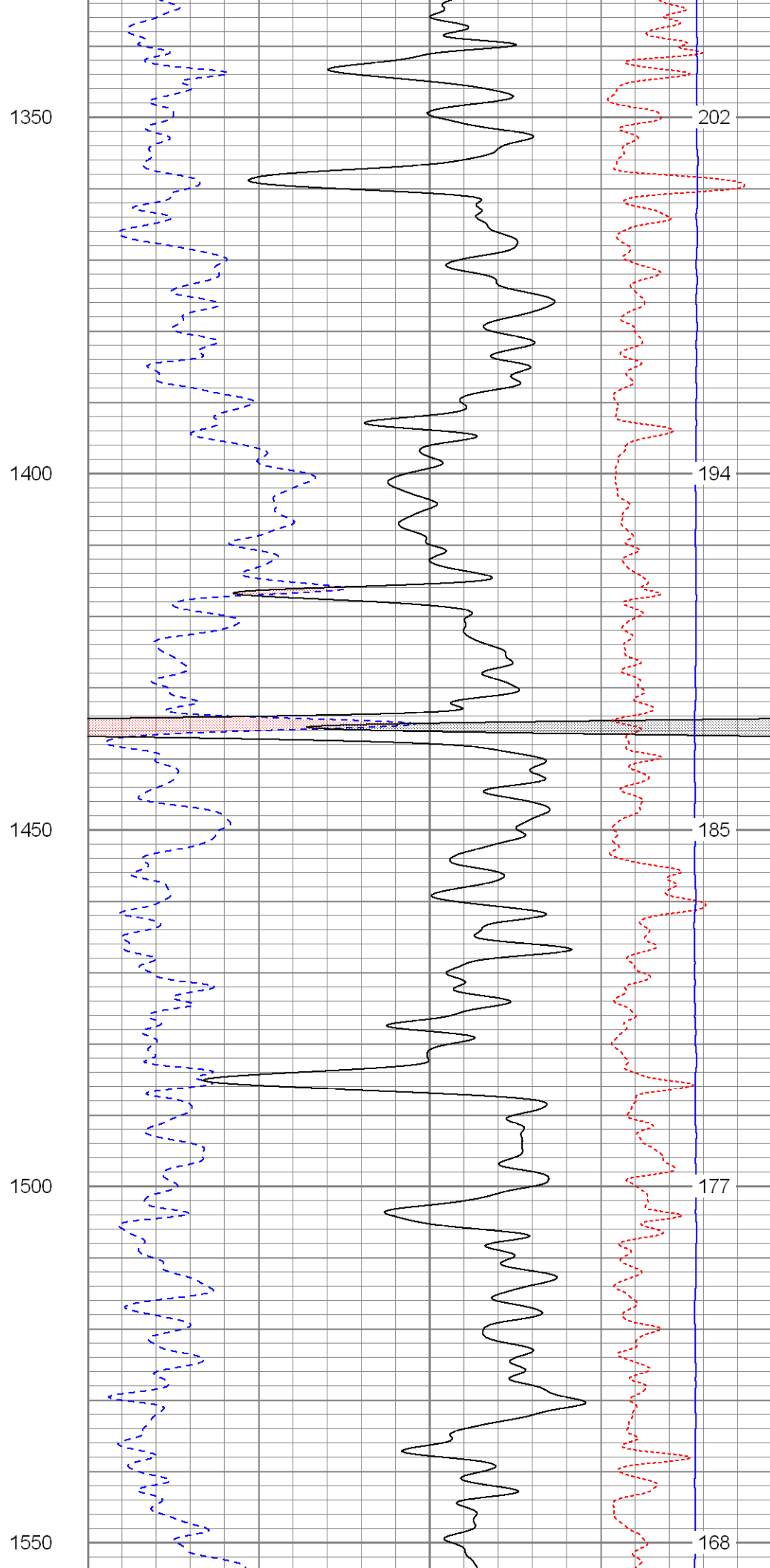
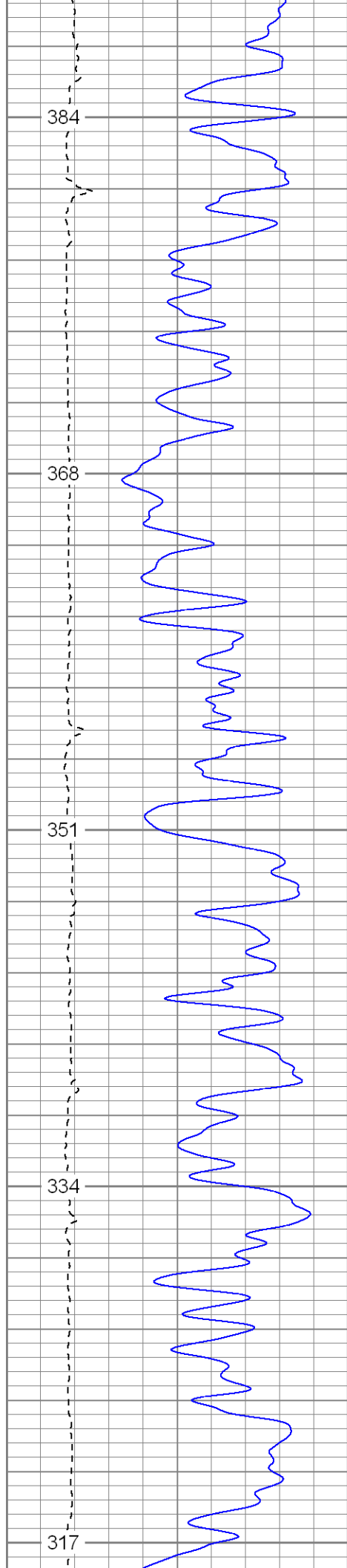
Surface Casing



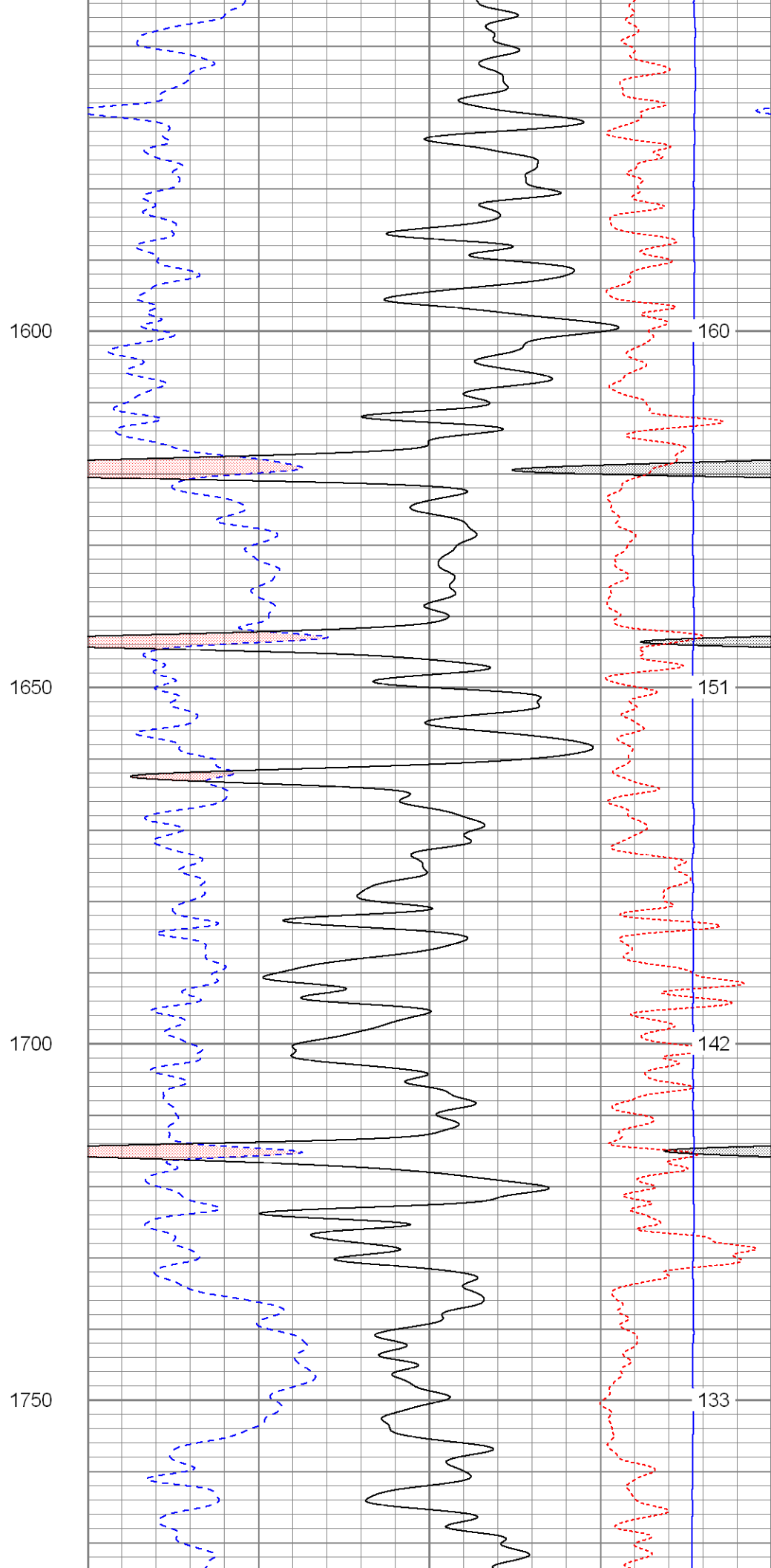
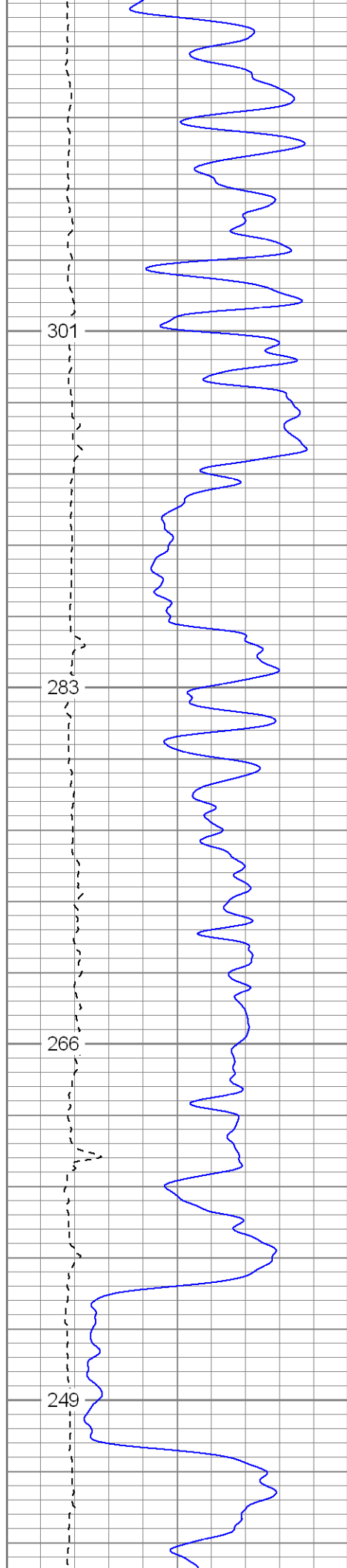


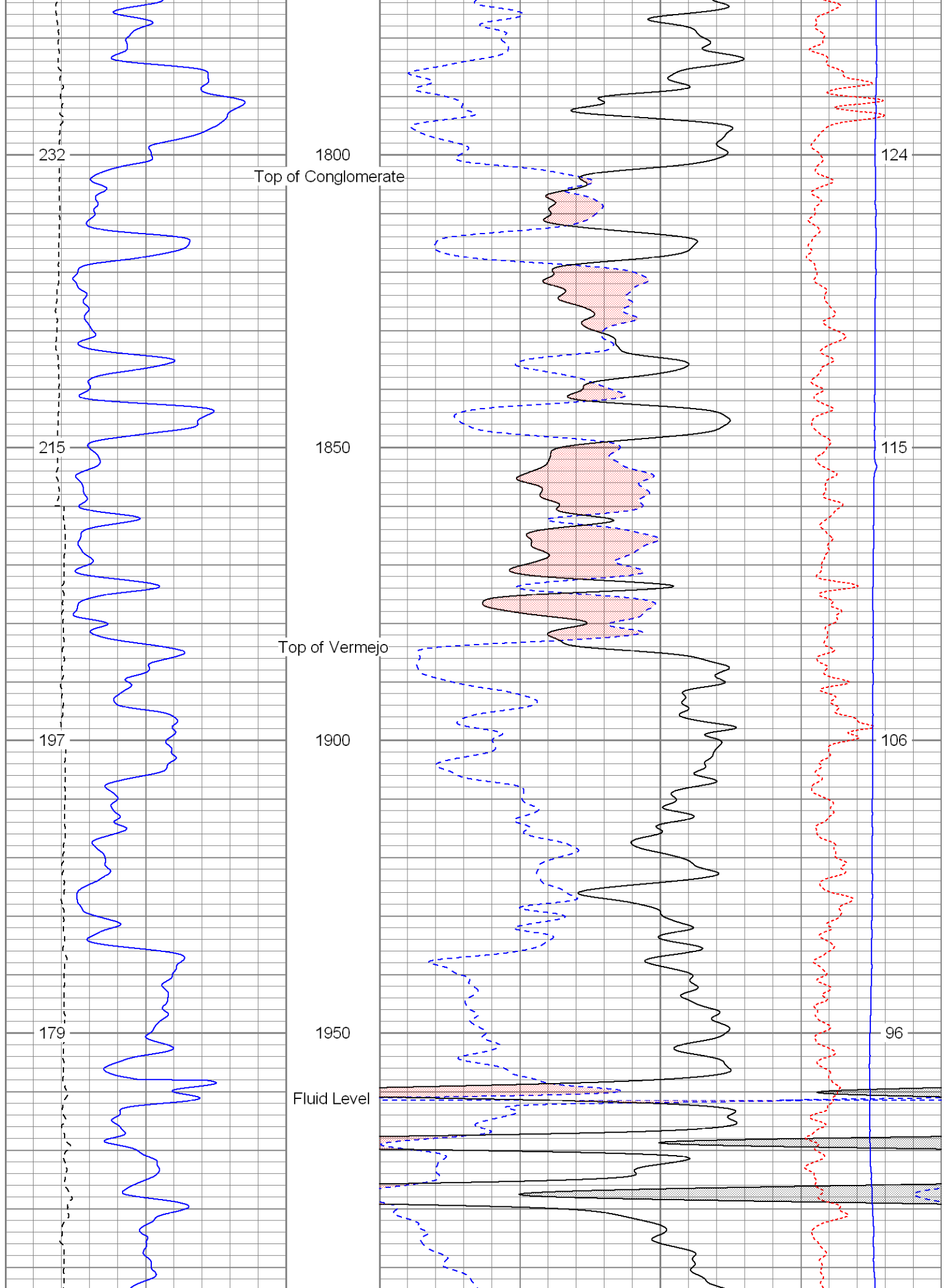


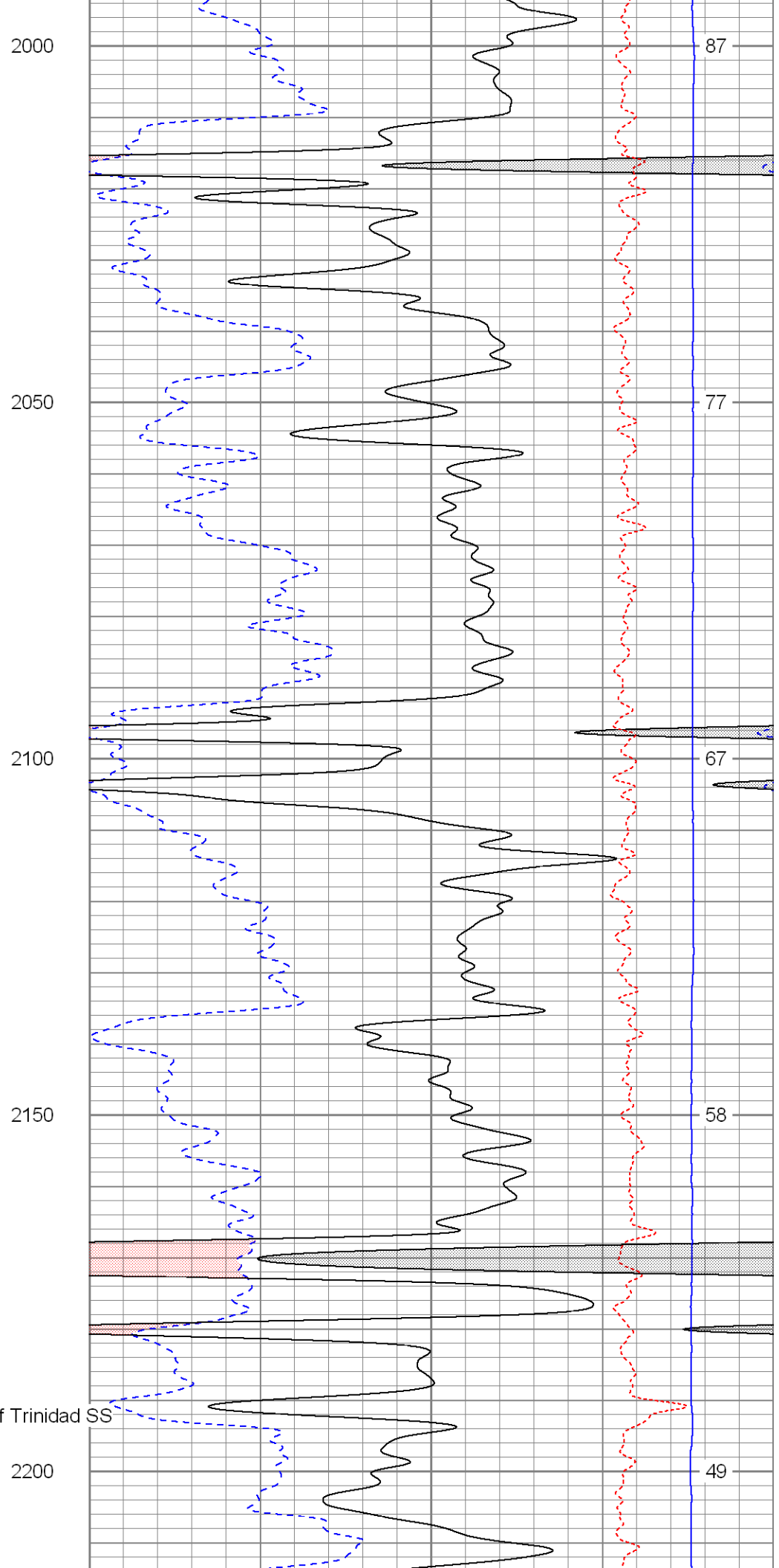
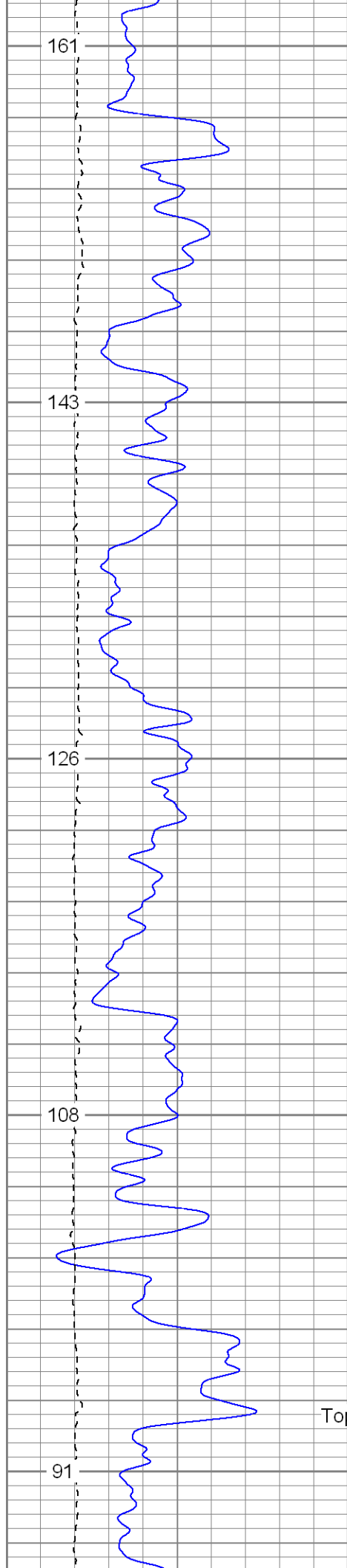


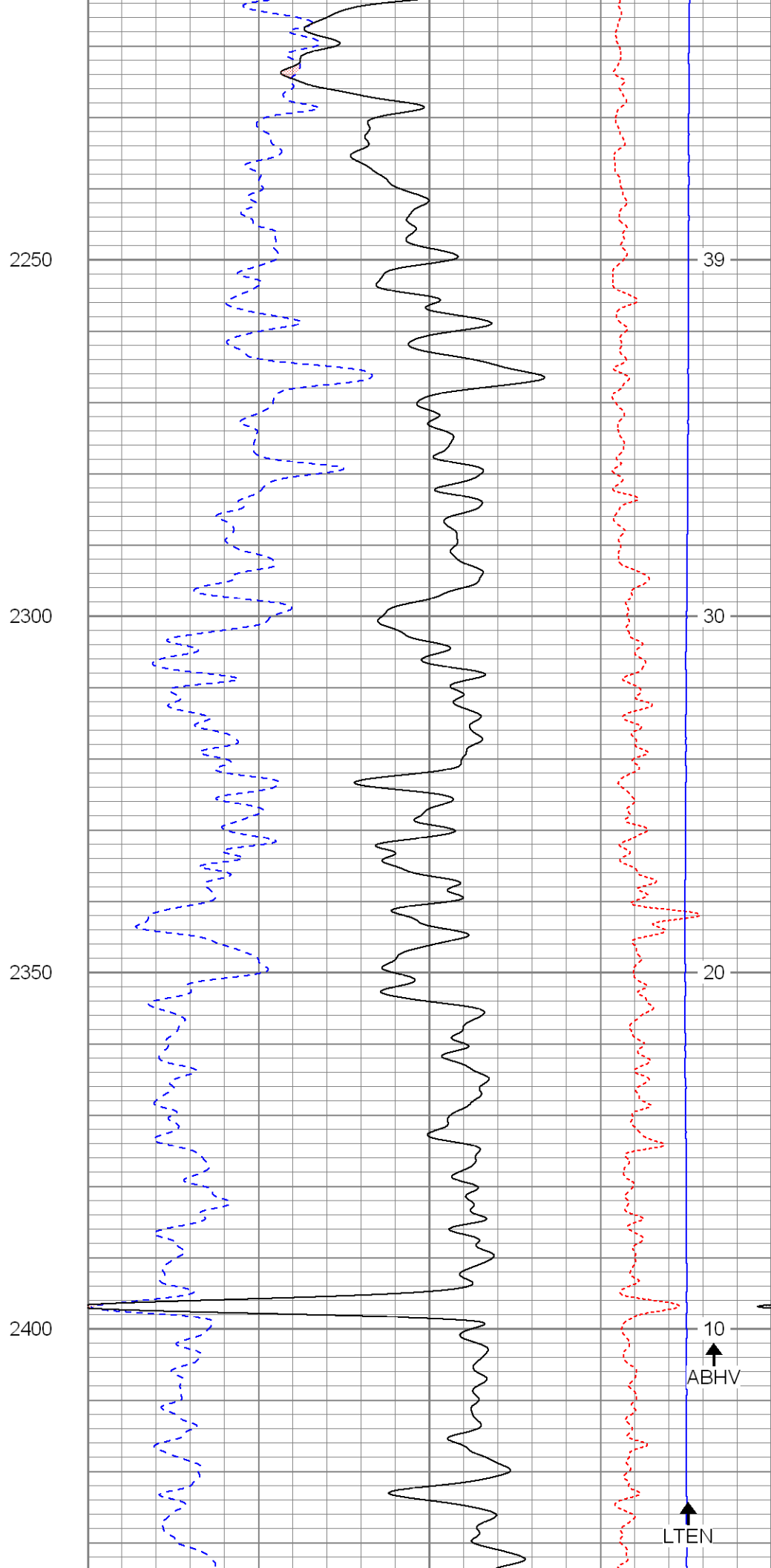
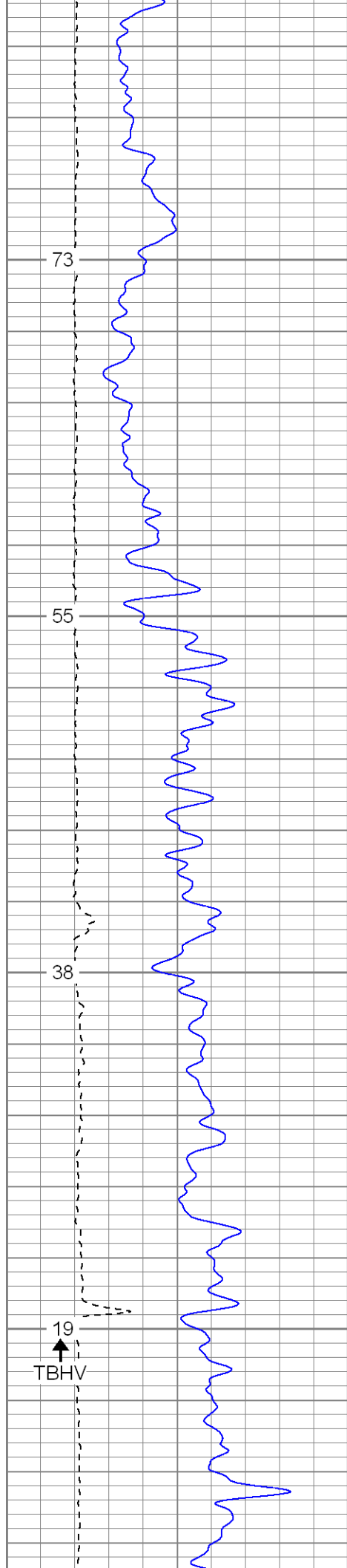


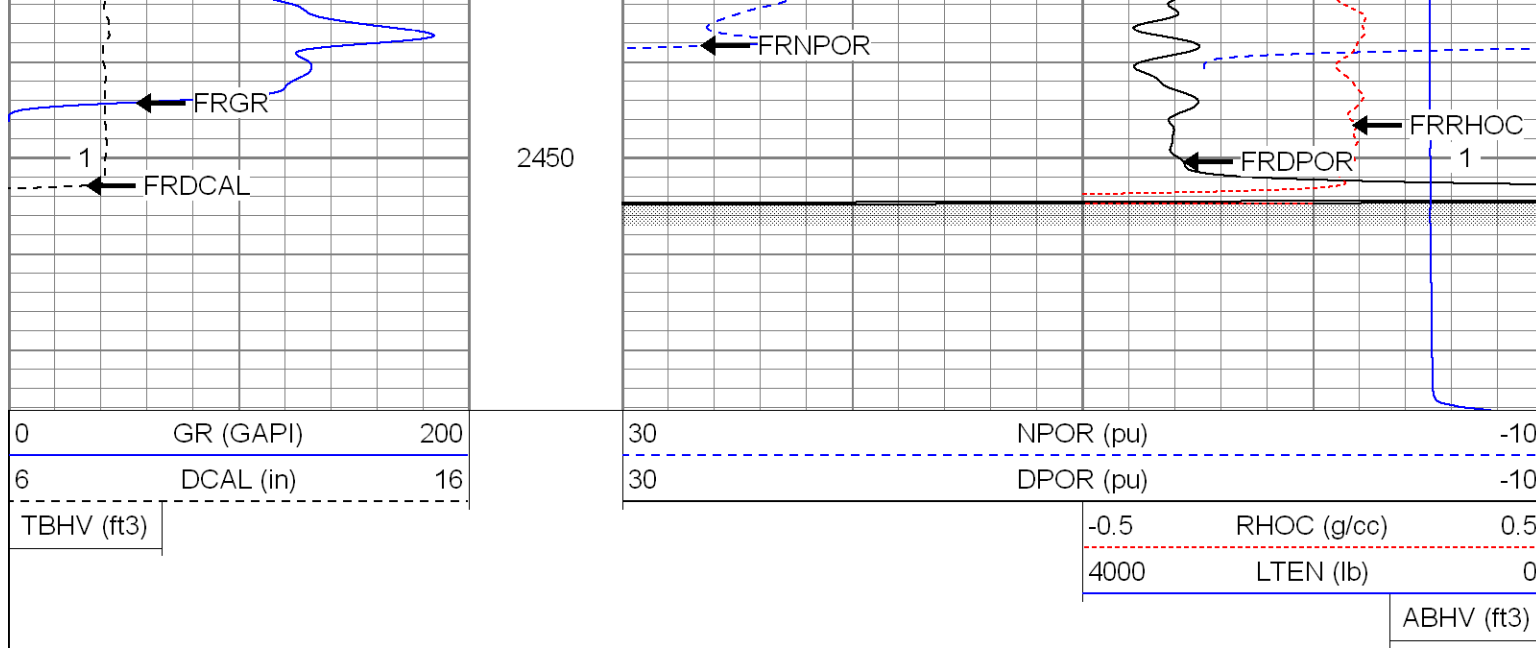










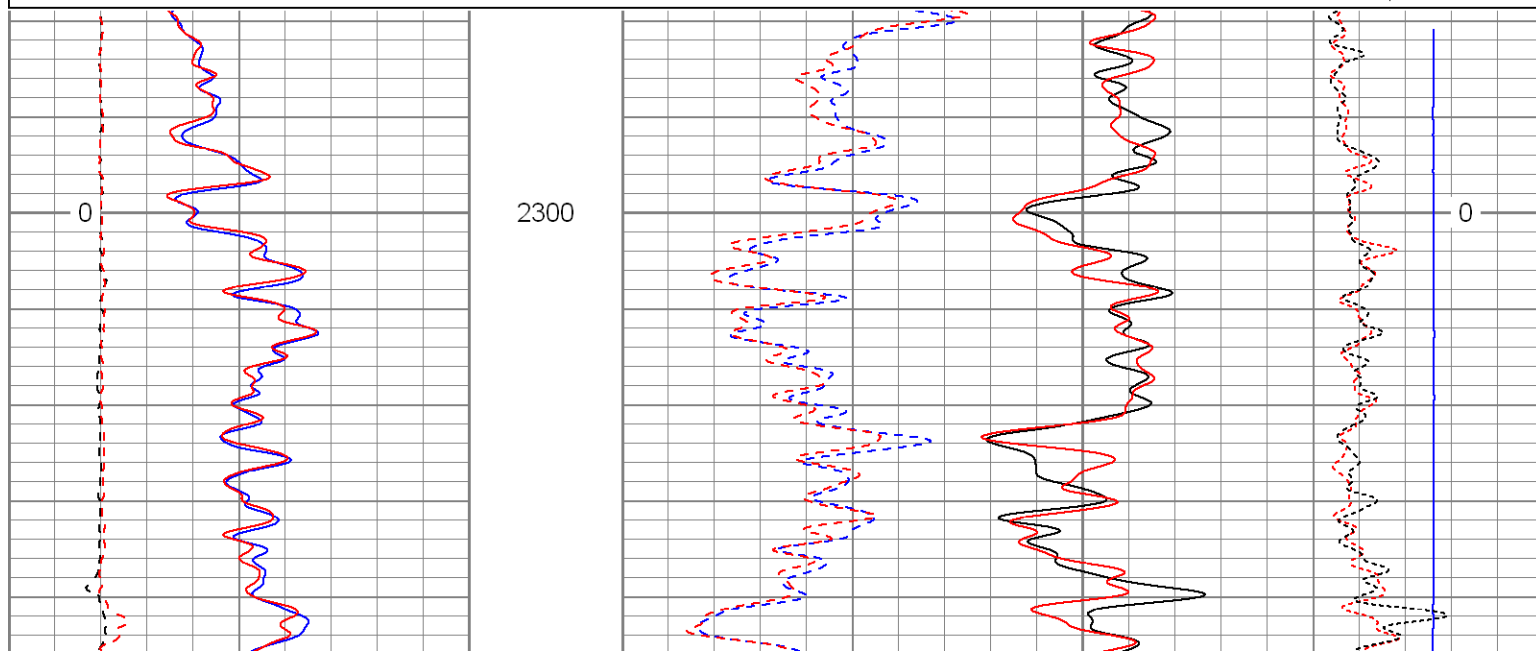
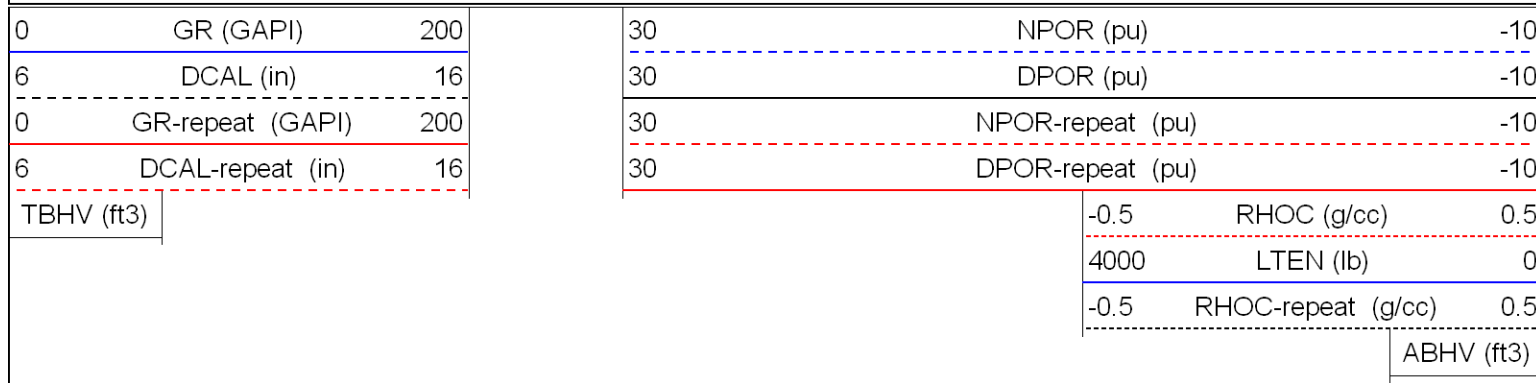


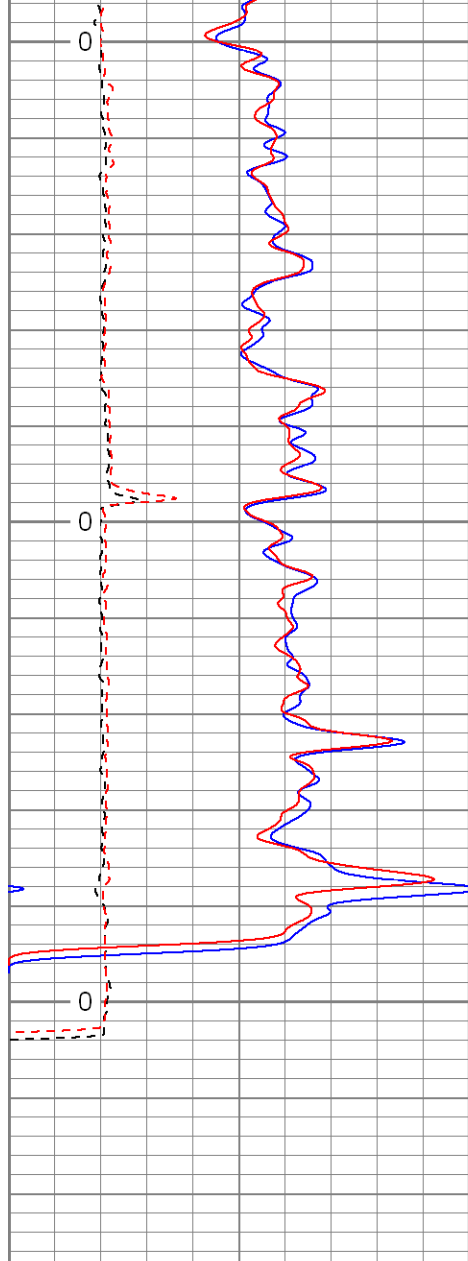
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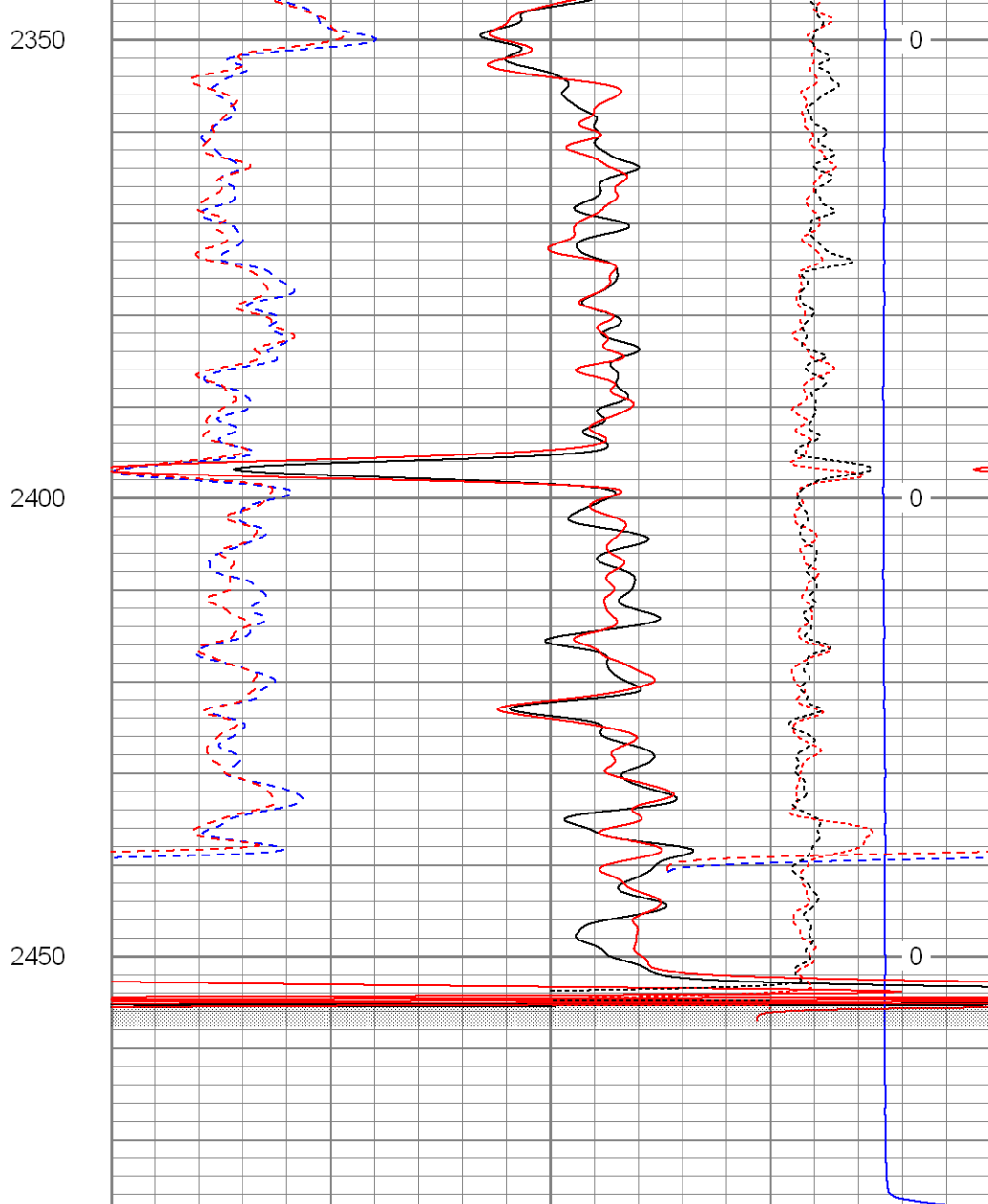
# Repeat Pass

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Dataset Pathname: pass1.1  
Presentation Format: cdnl  
Dataset Creation: Thu May 01 15:01:46 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
TBHV (ft3)		



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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# High Resolution Pass

Database File: xtobr3606.db  
Dataset Pathname: pass2.2  
Presentation Format: cdlhr  
Dataset Creation: Fri May 02 07:50:27 2008 by Calc Open-Cased 070814  
Charted by: Depth in Feet scaled 1:120

0	GR (GAPI)	200	1	RHOB (g/cc)	3
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6

DCAL (in)

16

-0.5

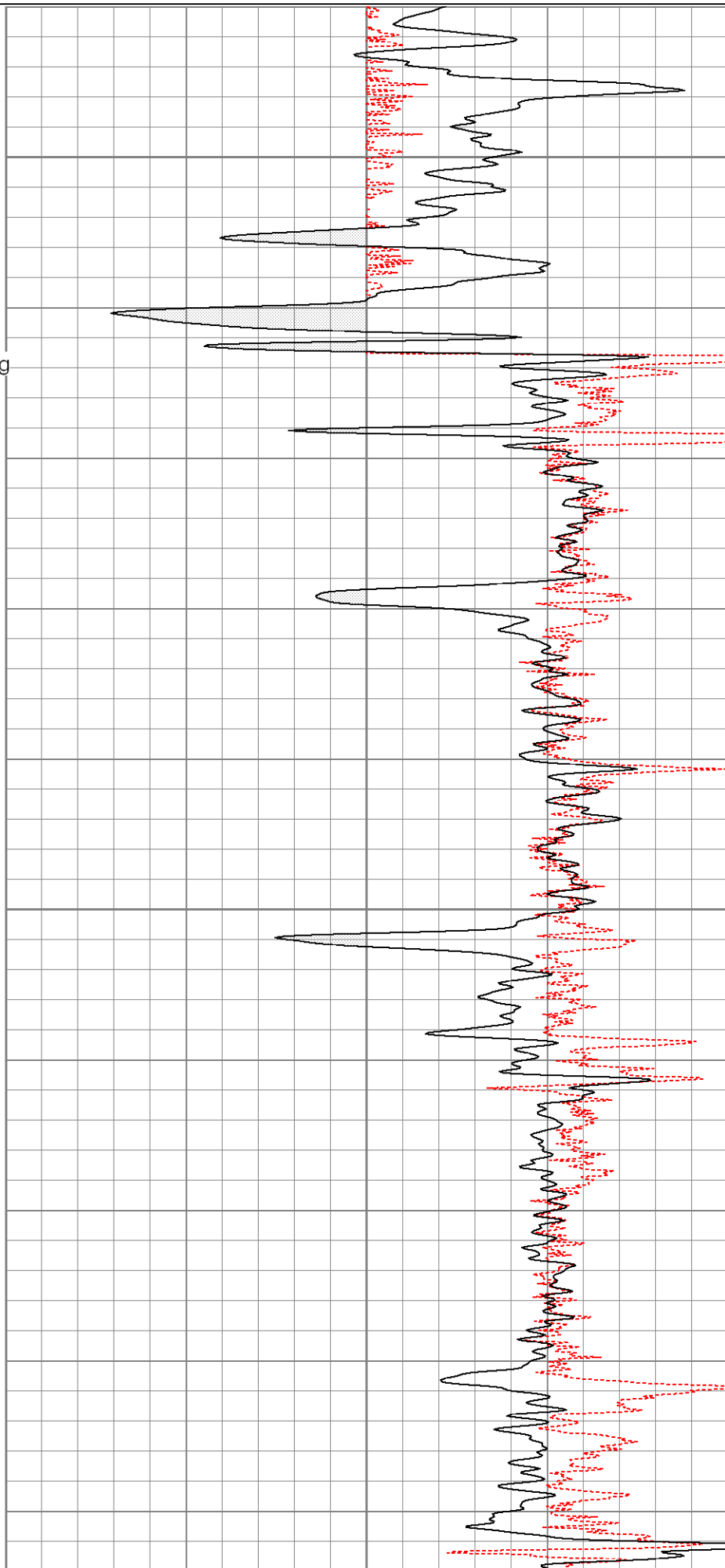
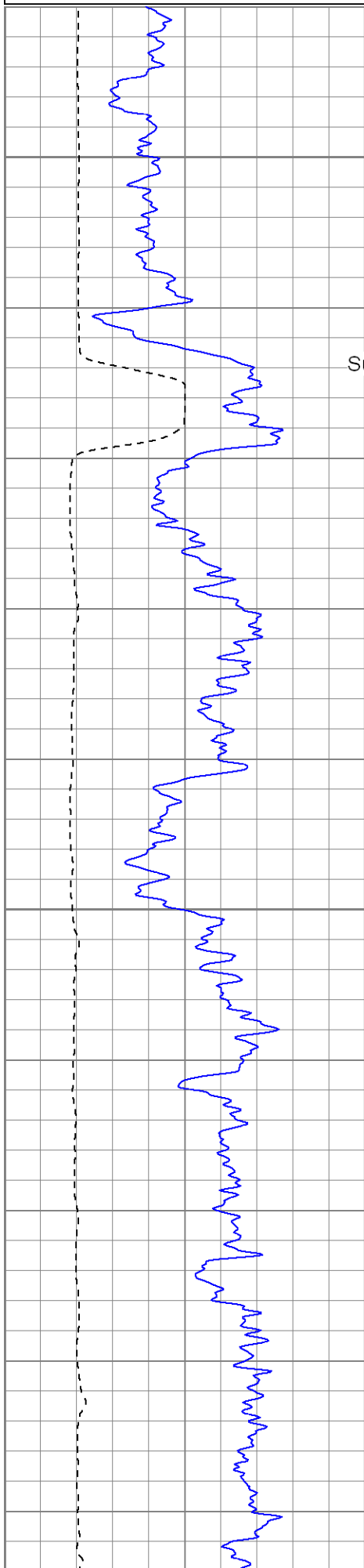
RHOC (g/cc)

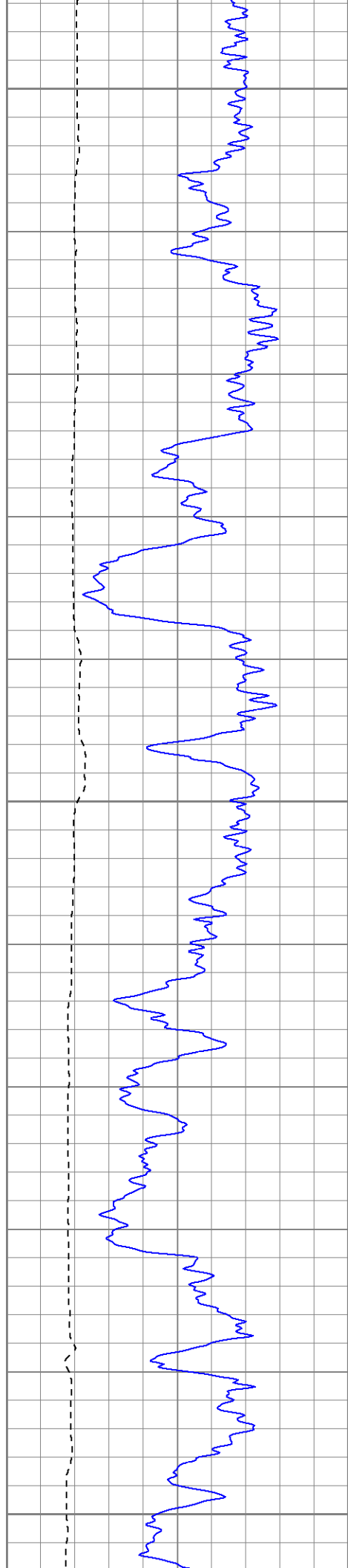
0.5

450

Surface Casing

500

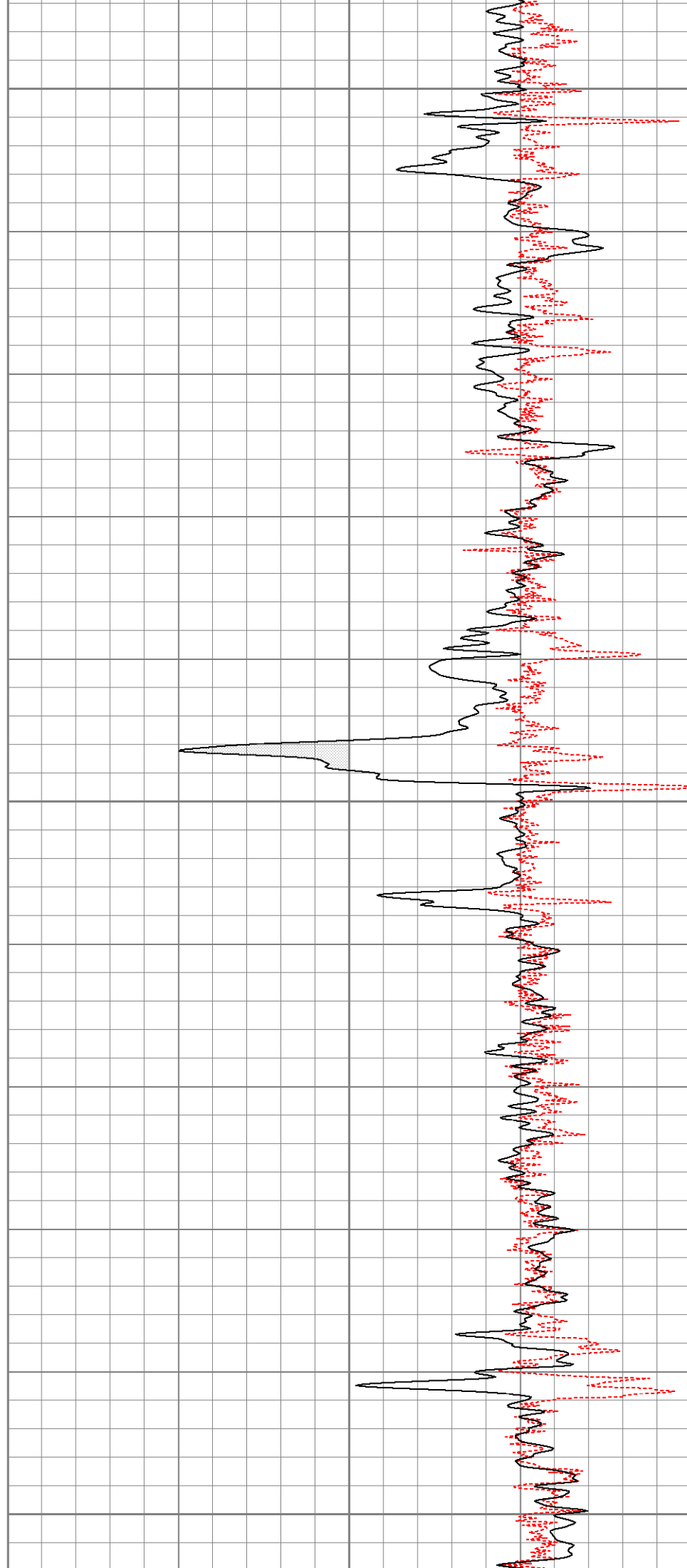




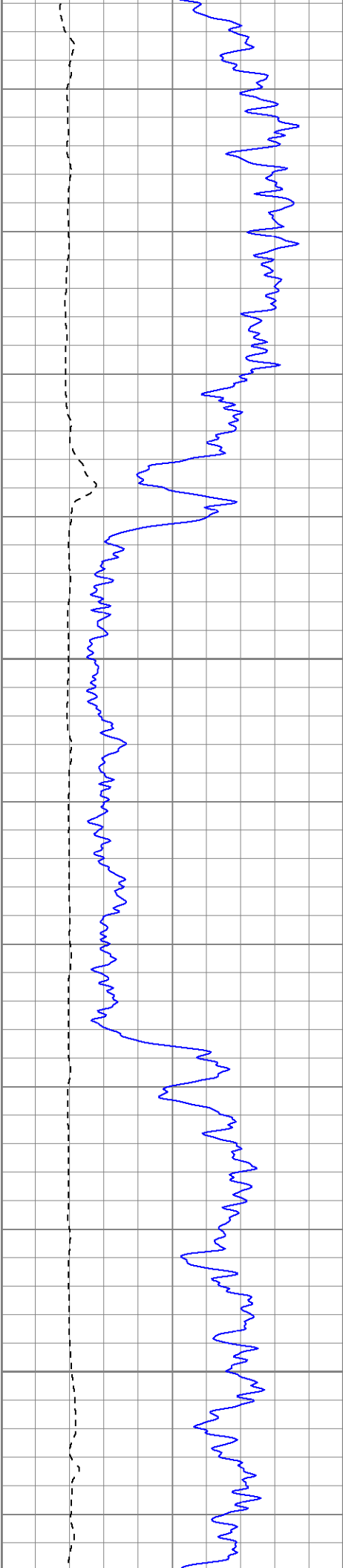
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600

650

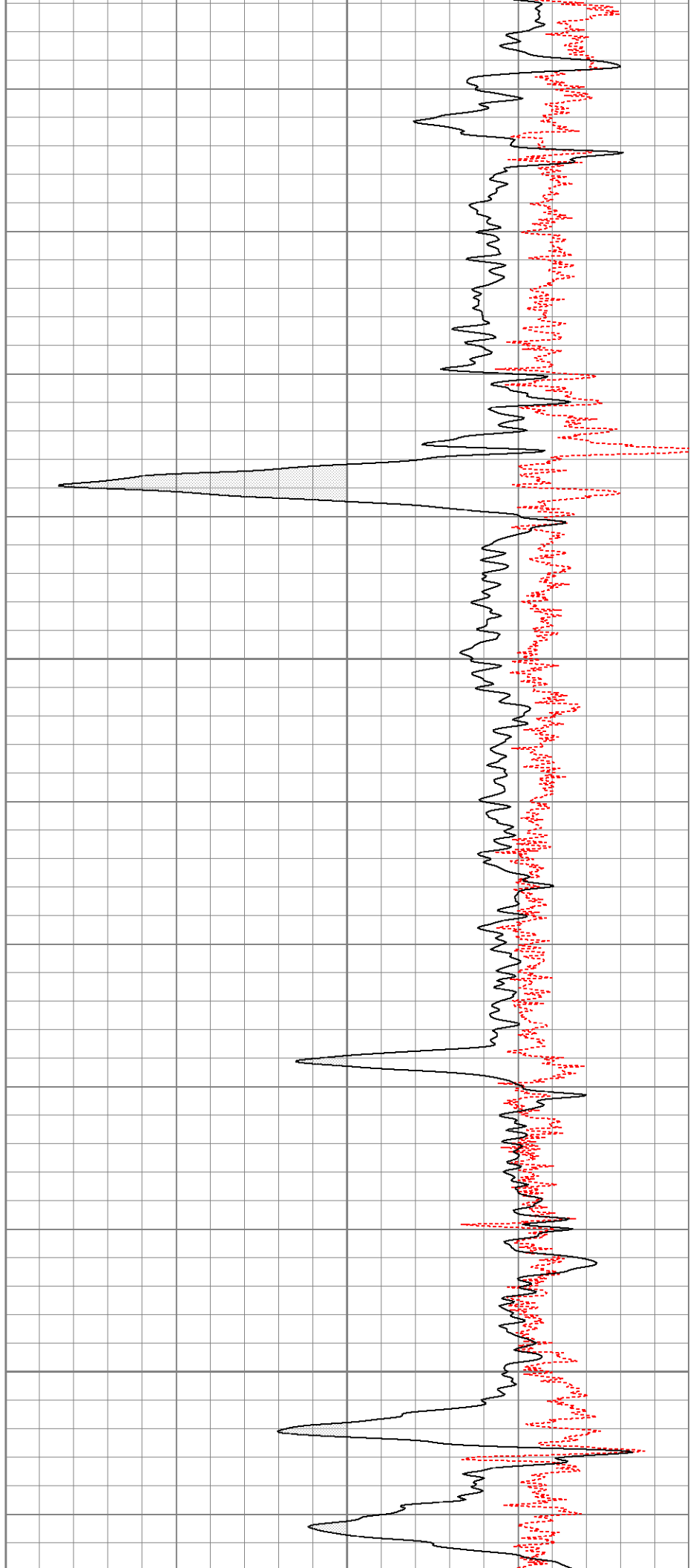


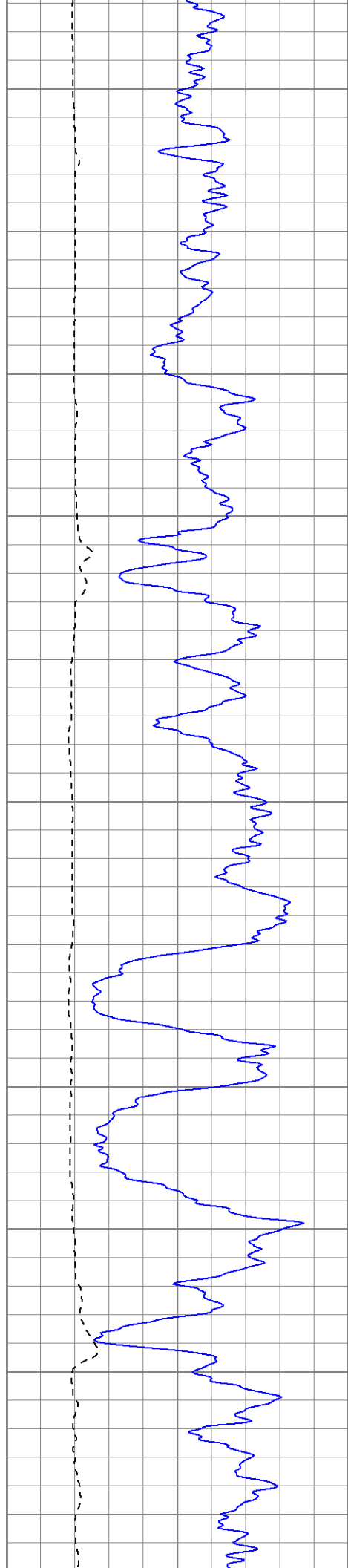




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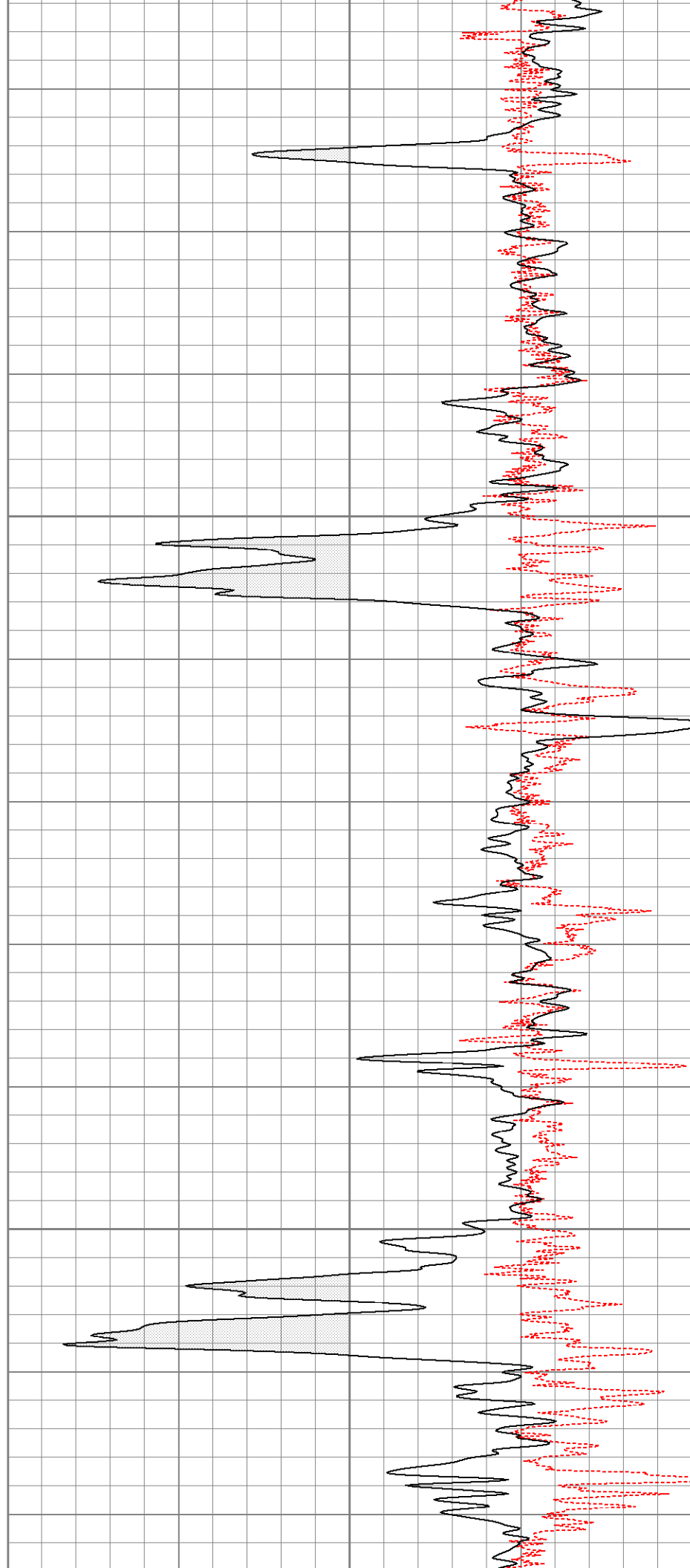
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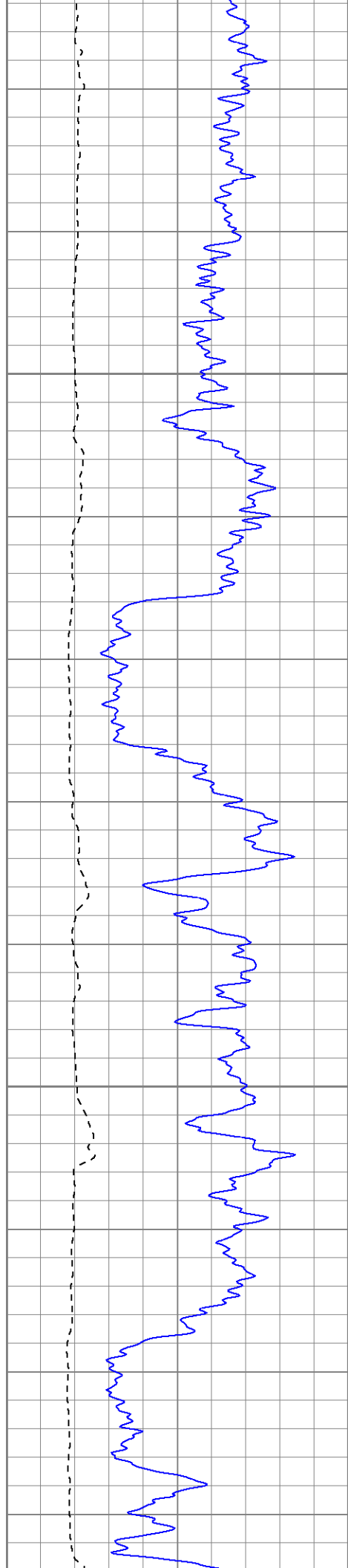




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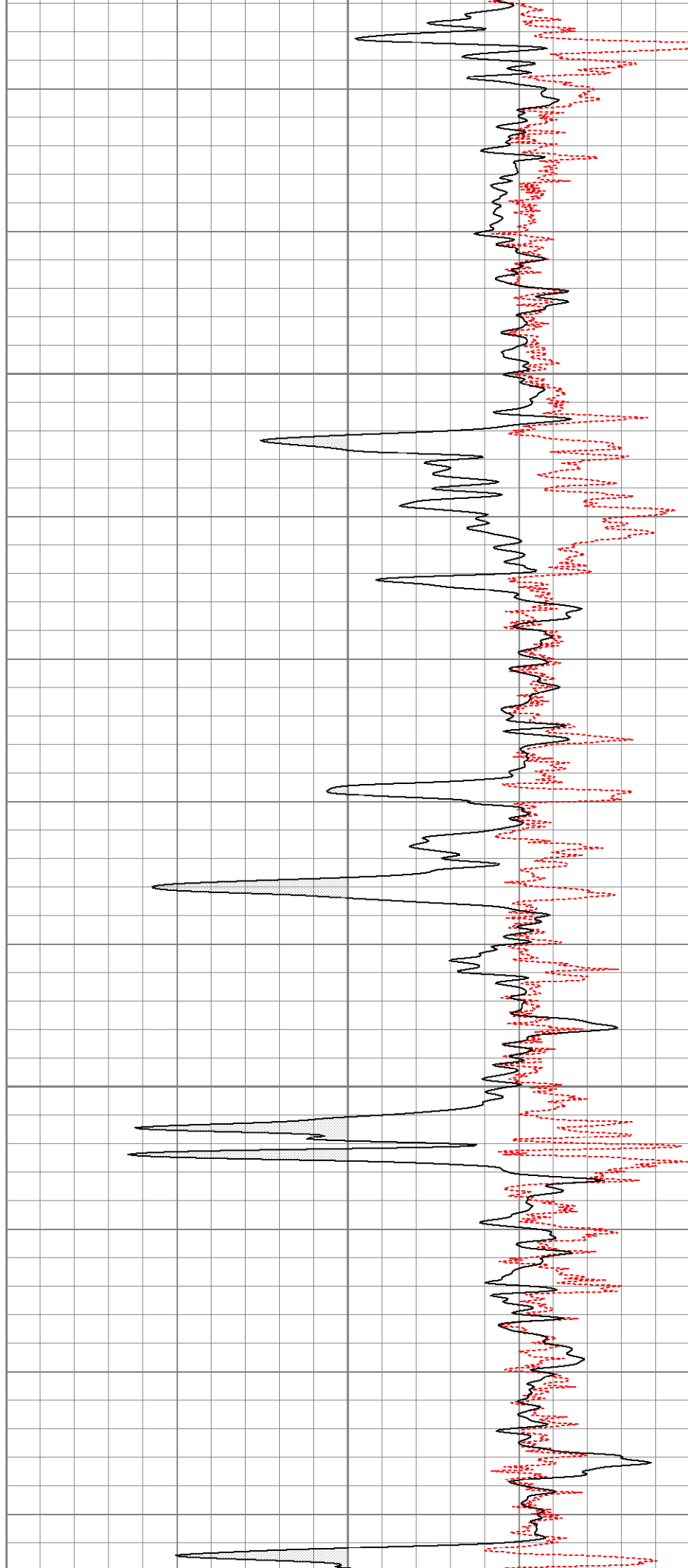
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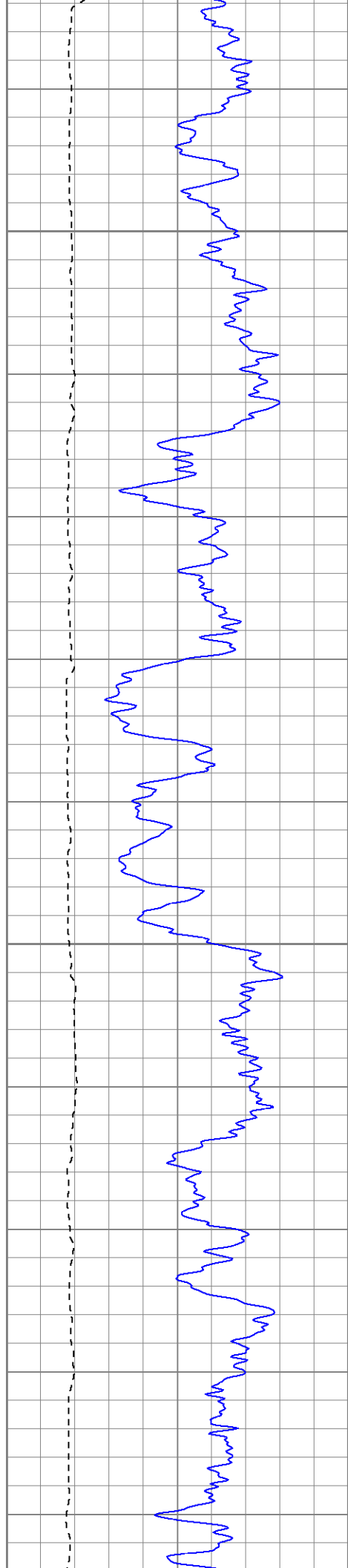




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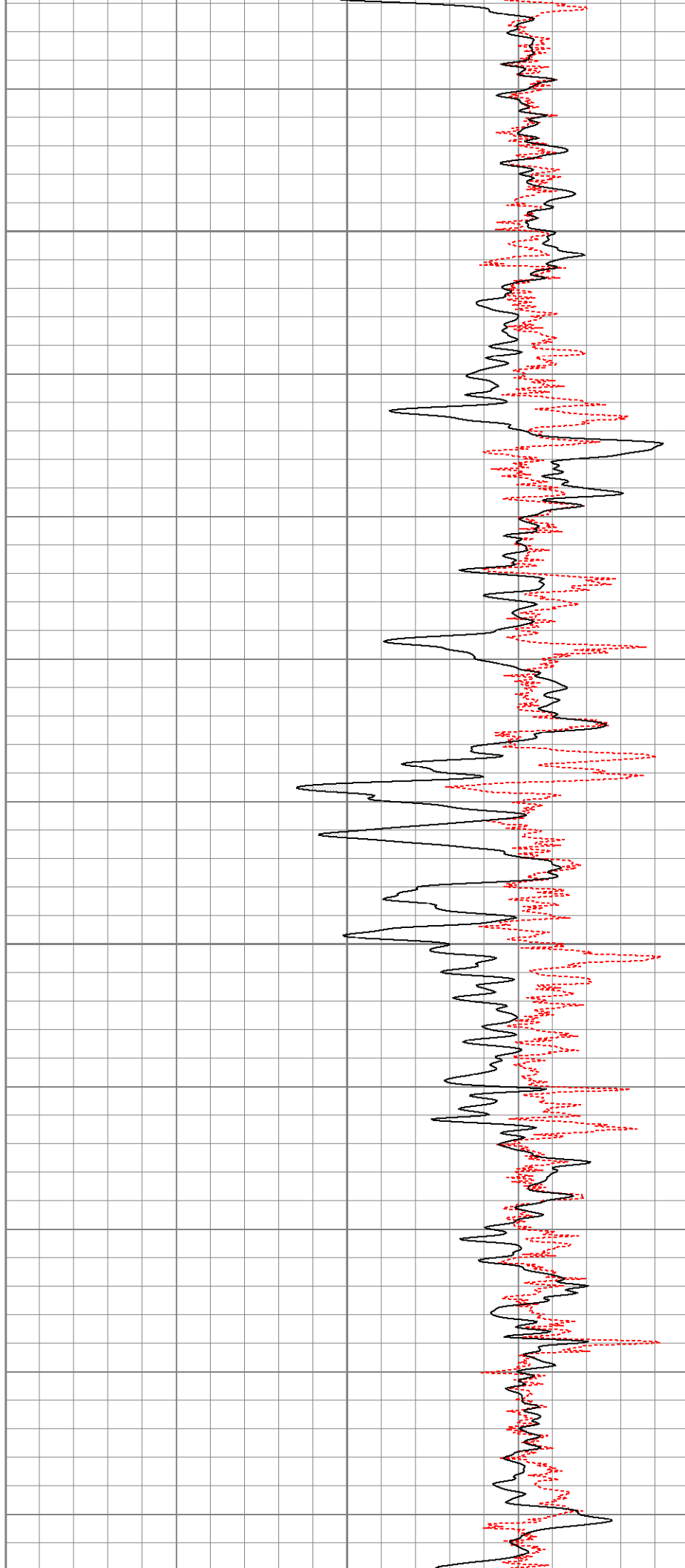
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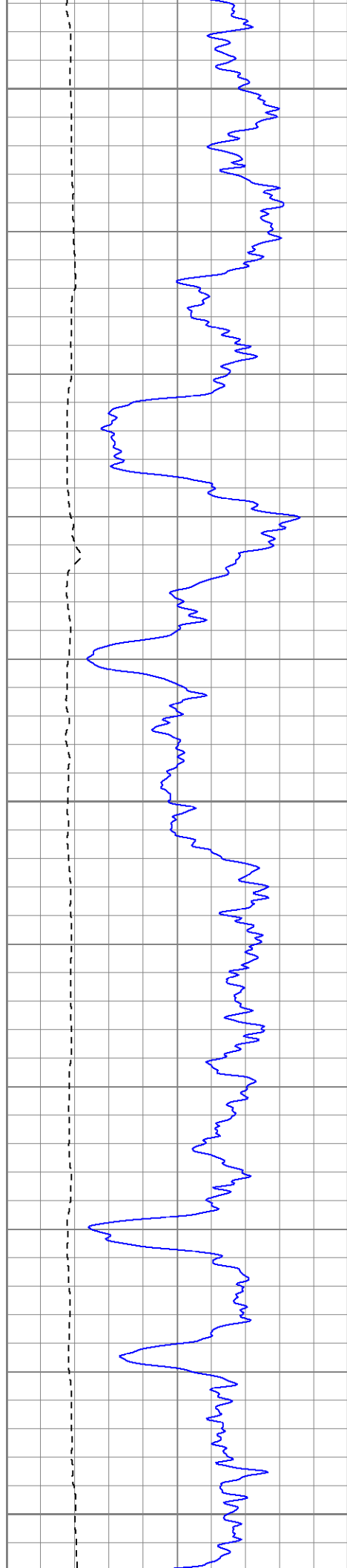




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1050

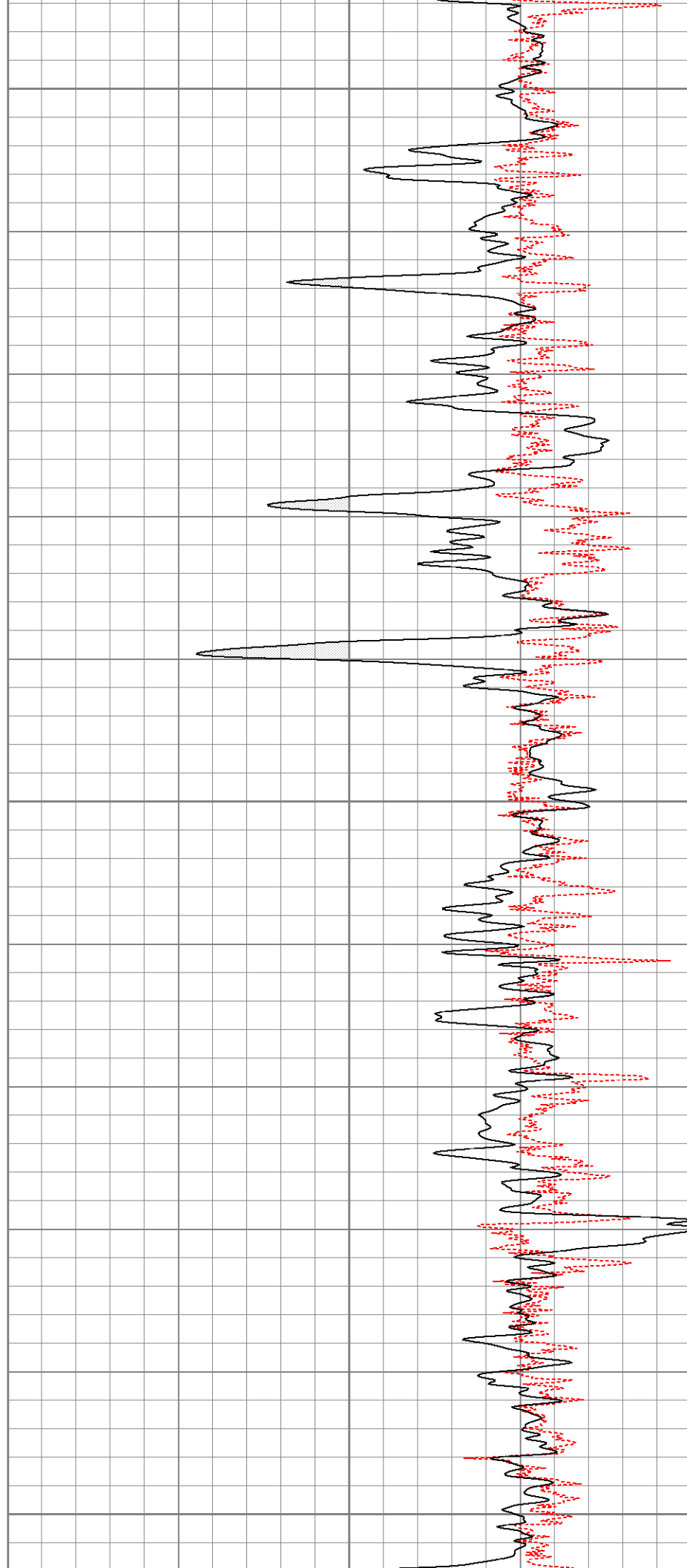


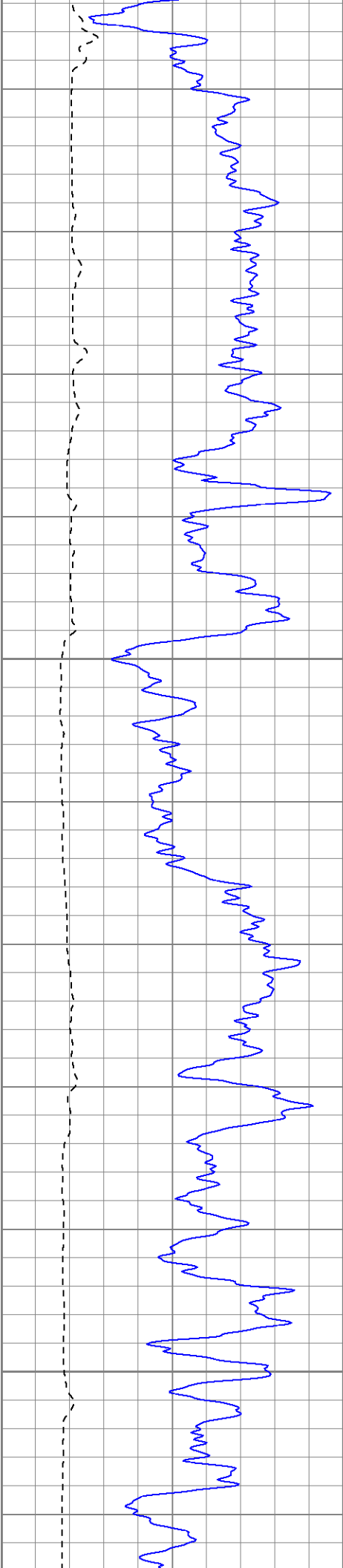


1100

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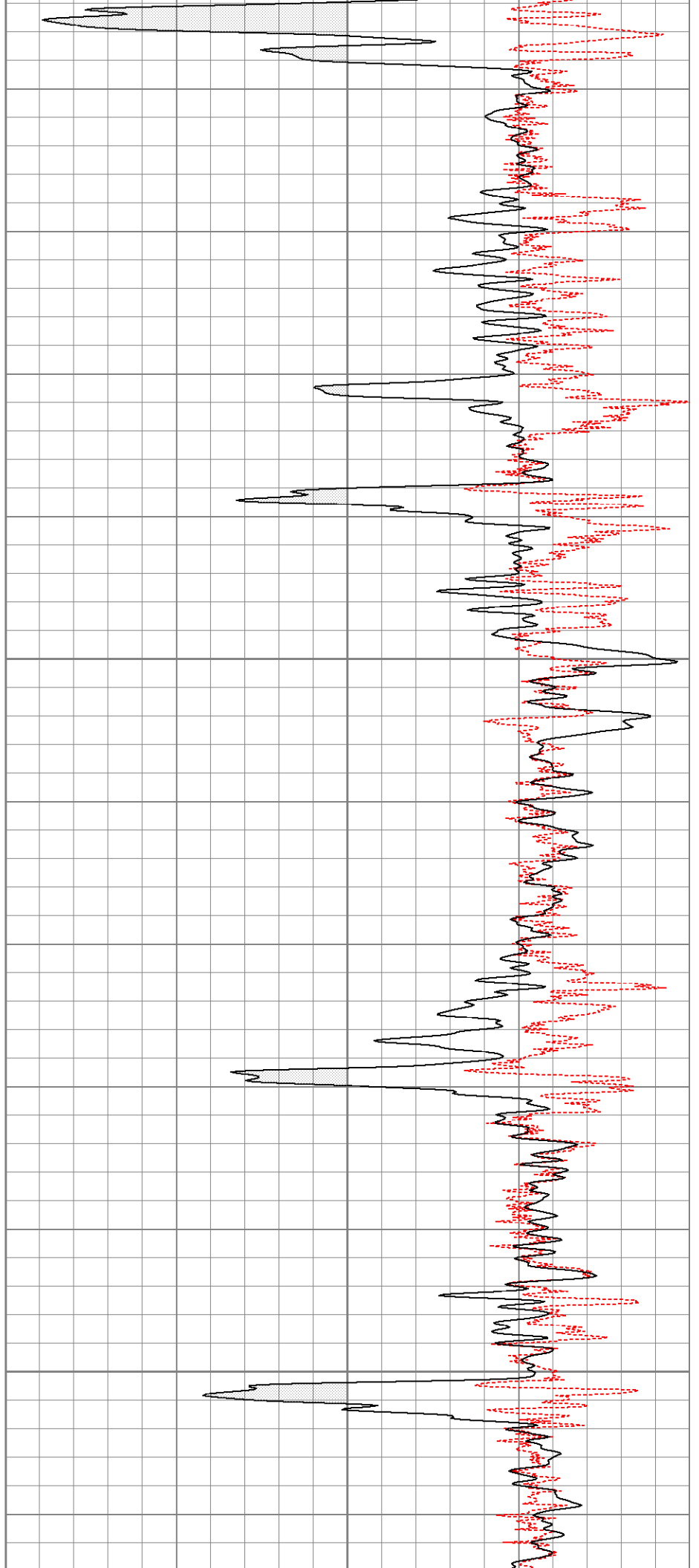
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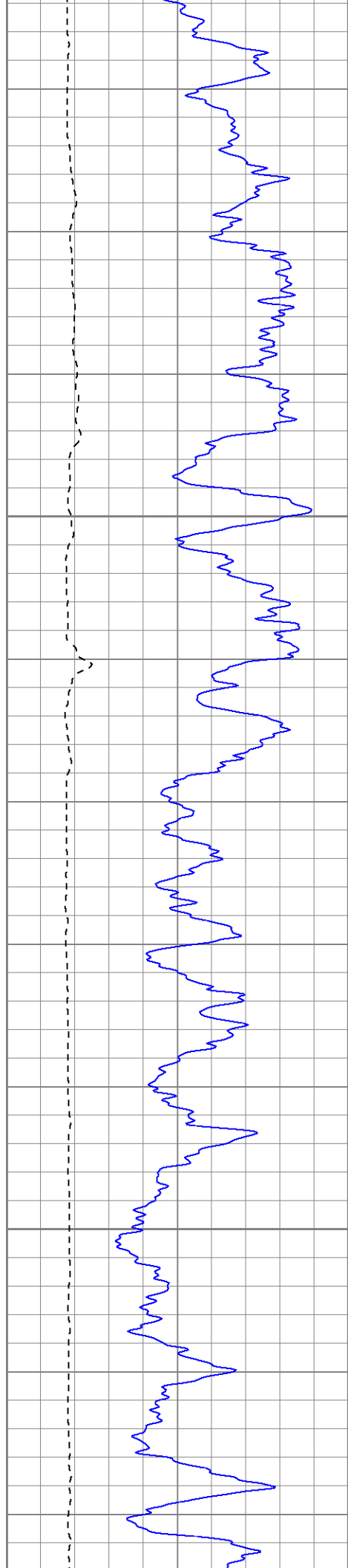




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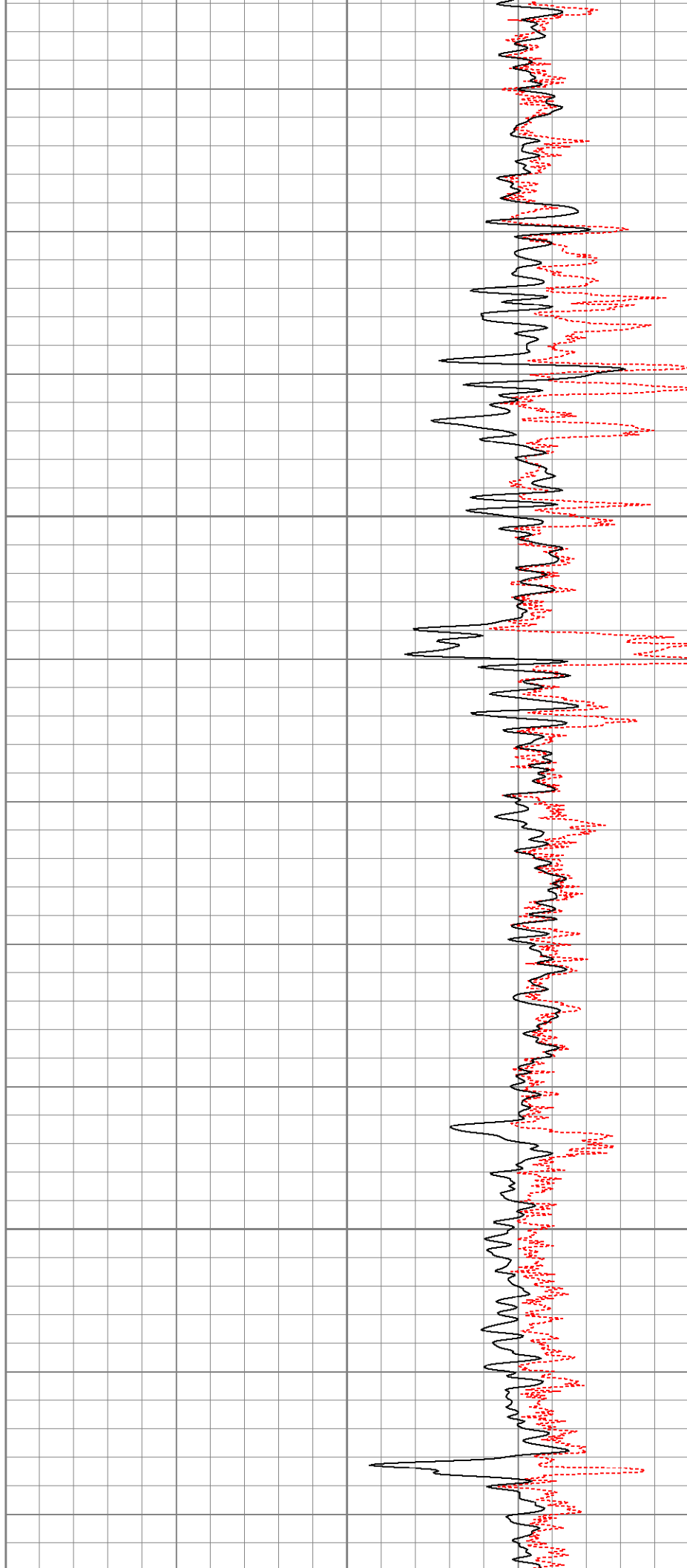
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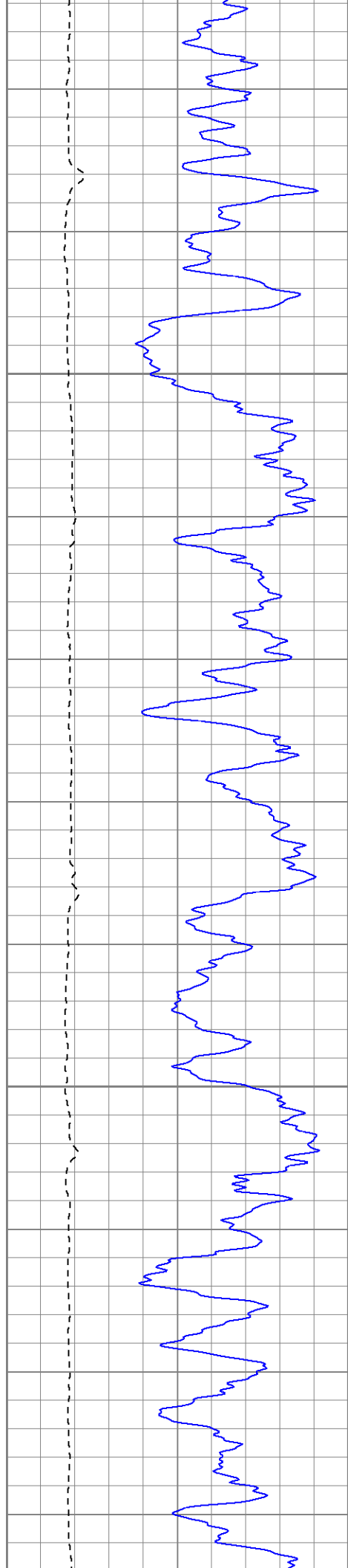




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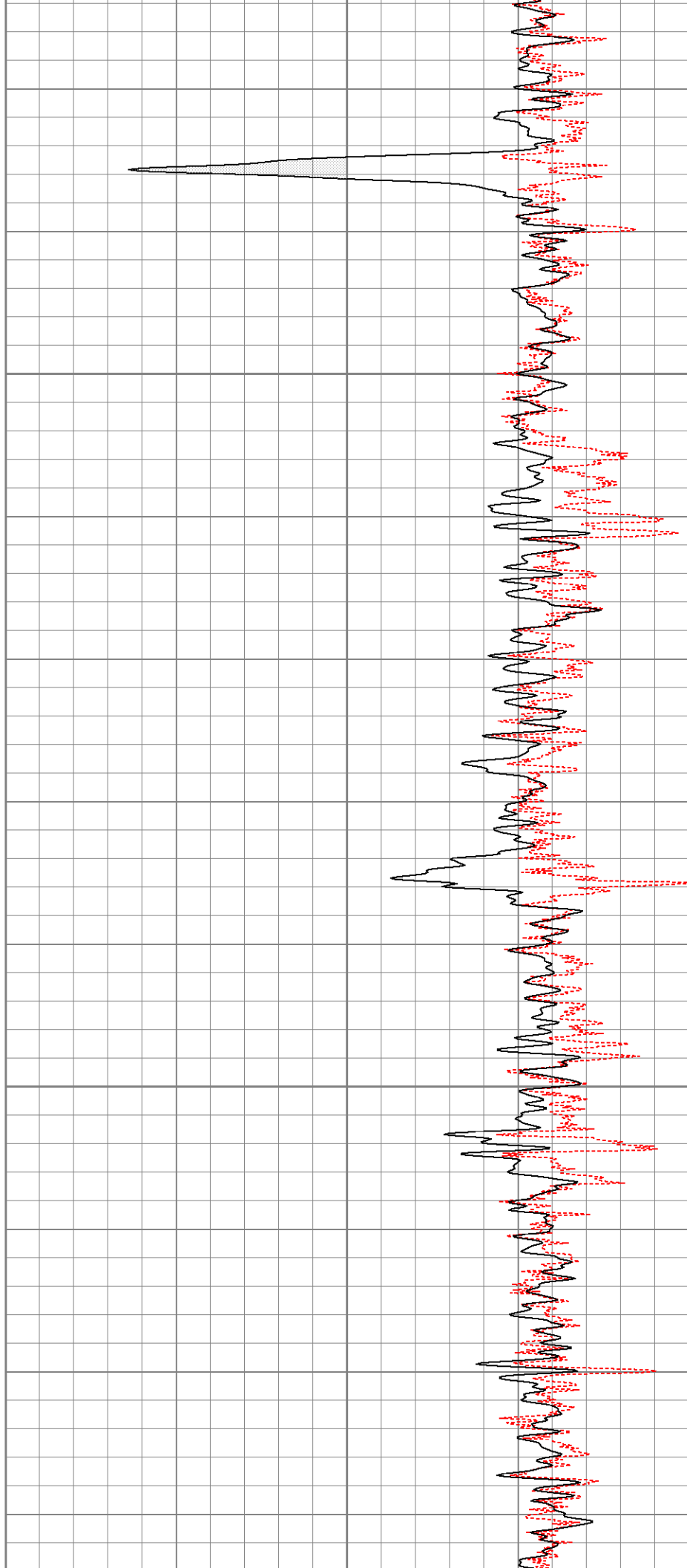
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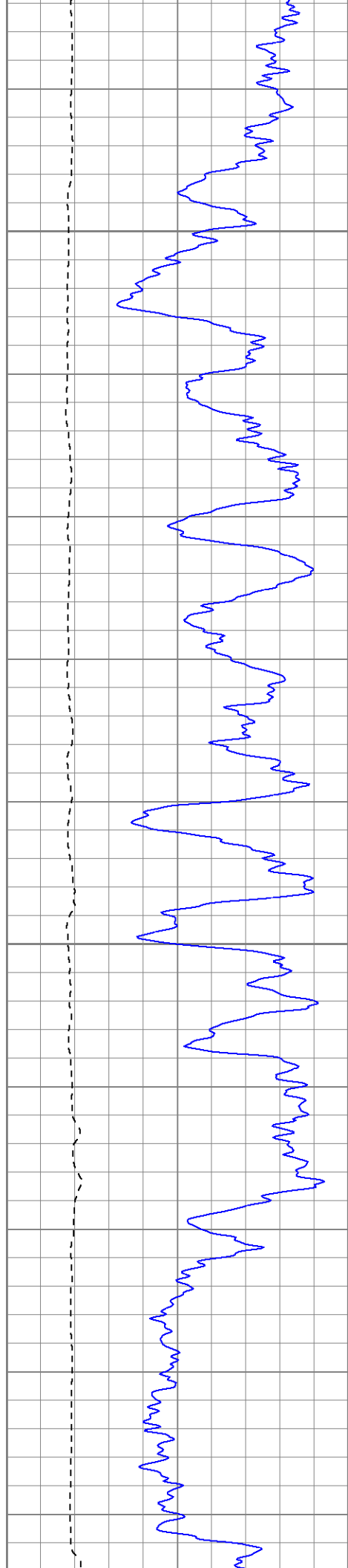


1450

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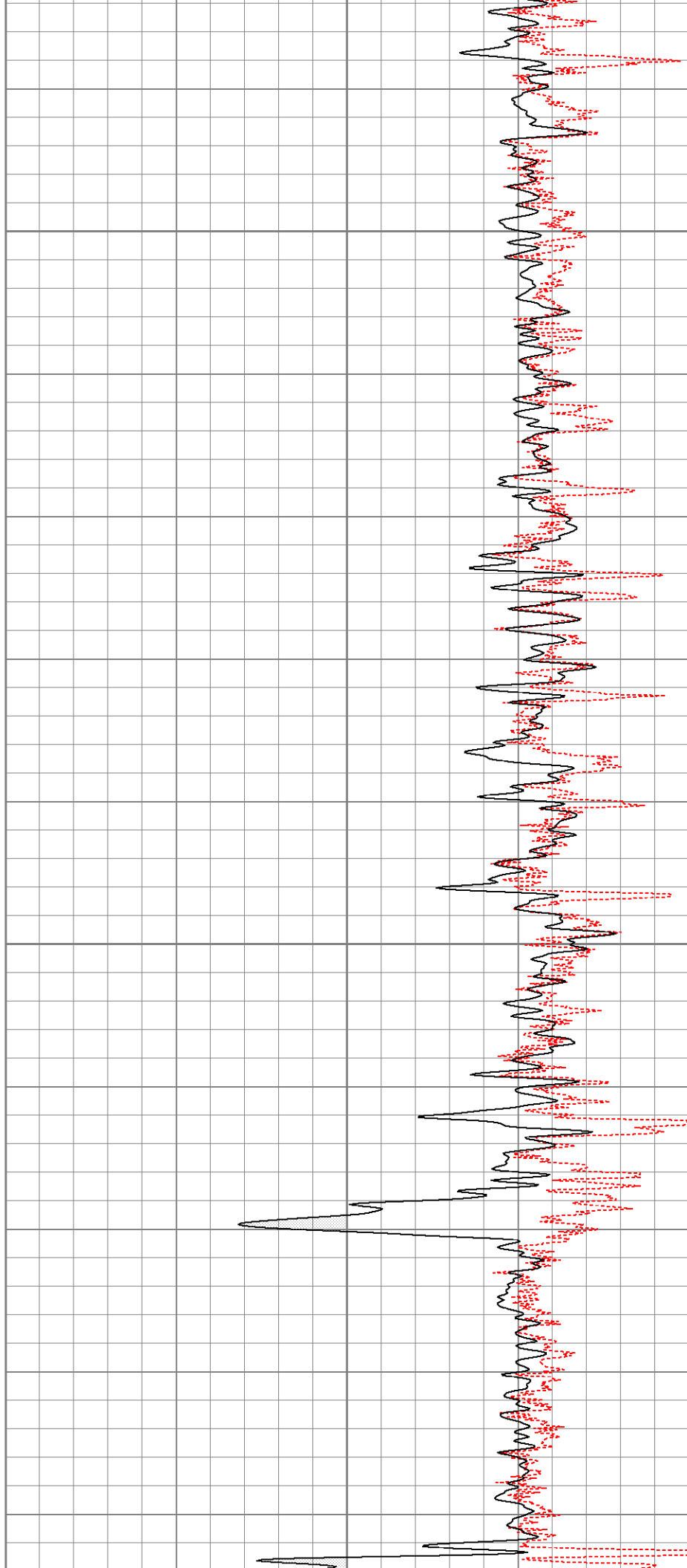


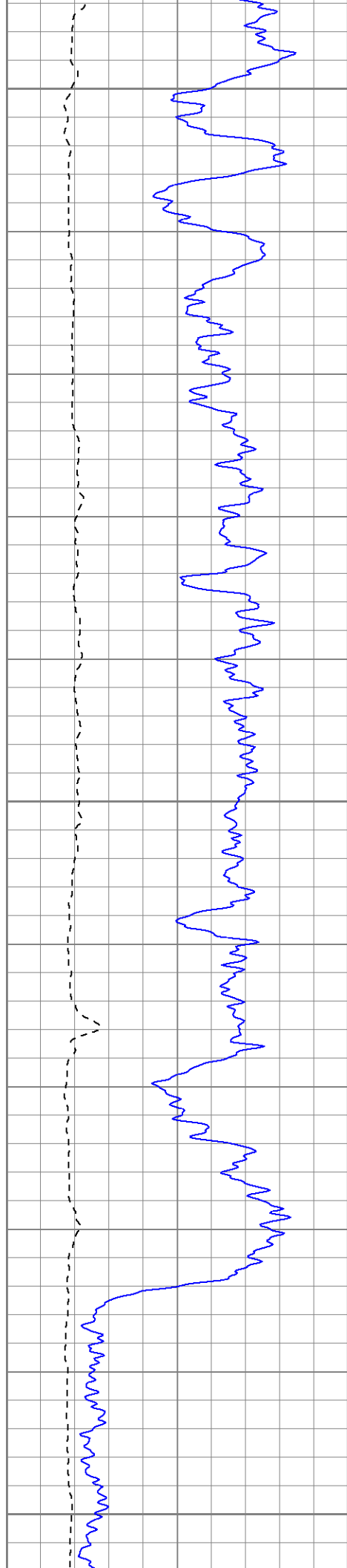




1550

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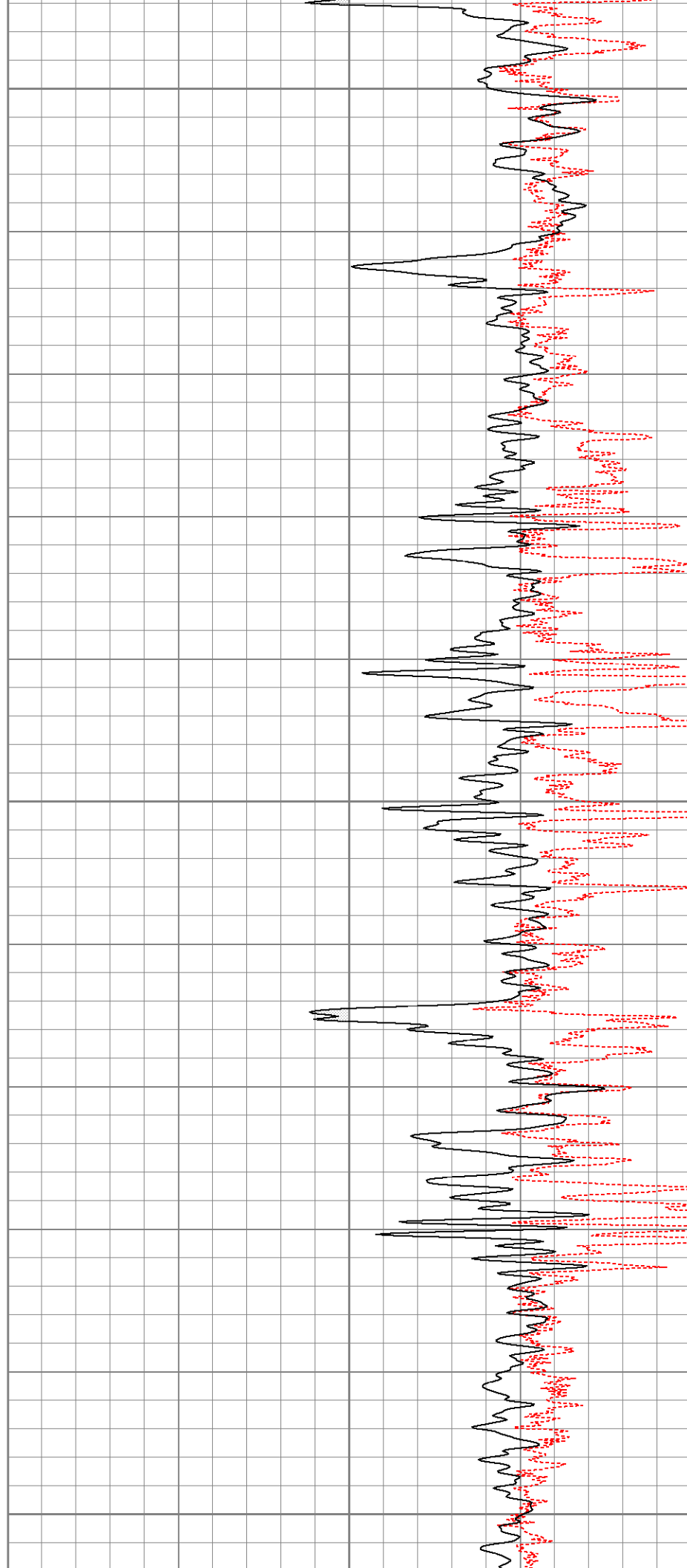


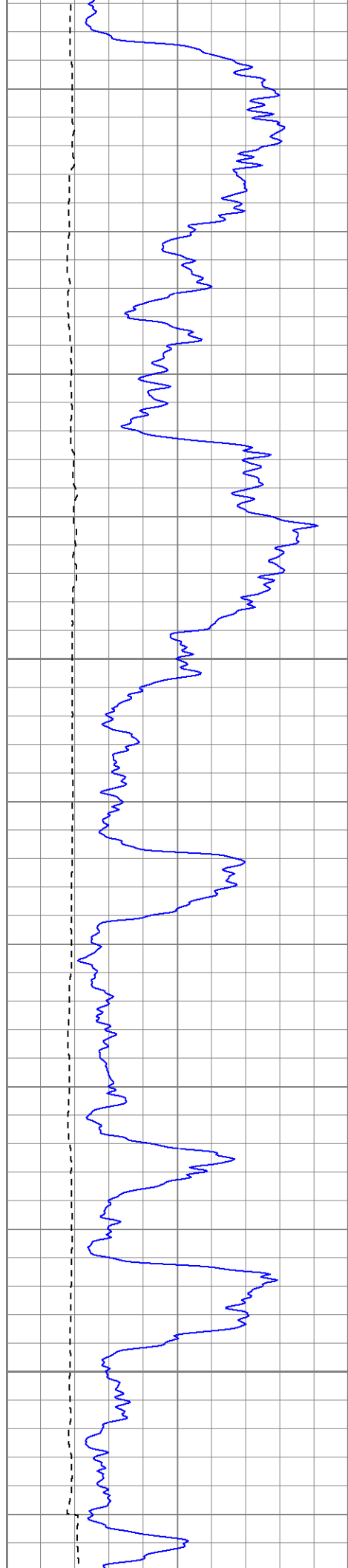


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1700

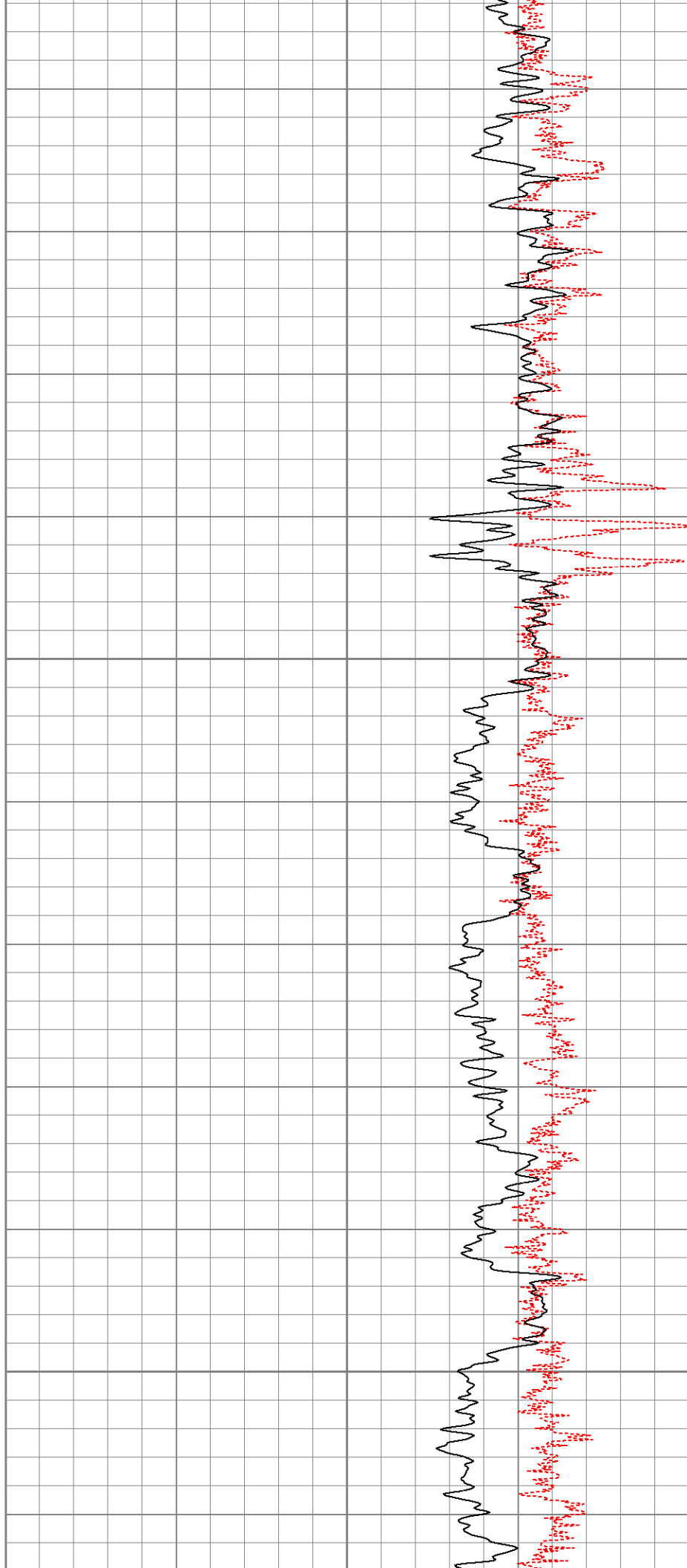
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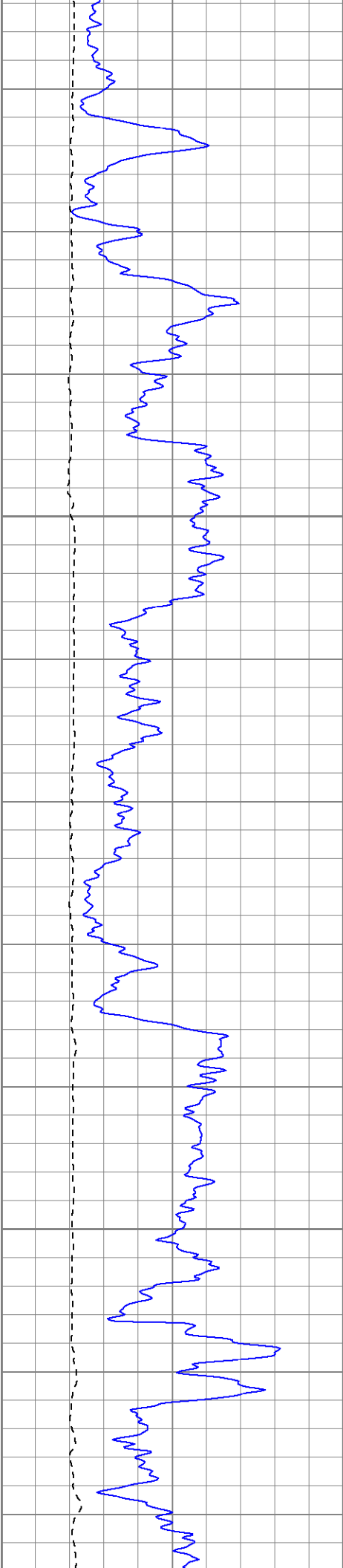




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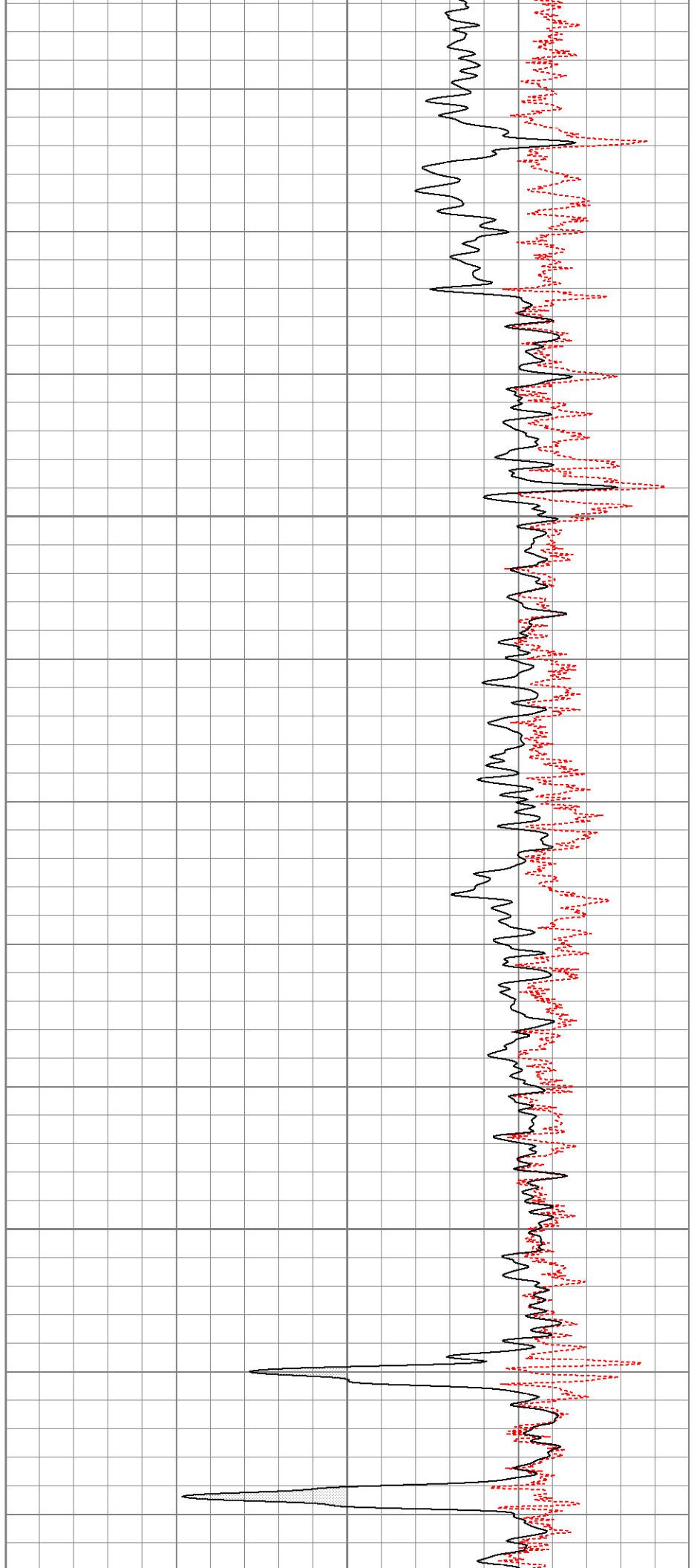
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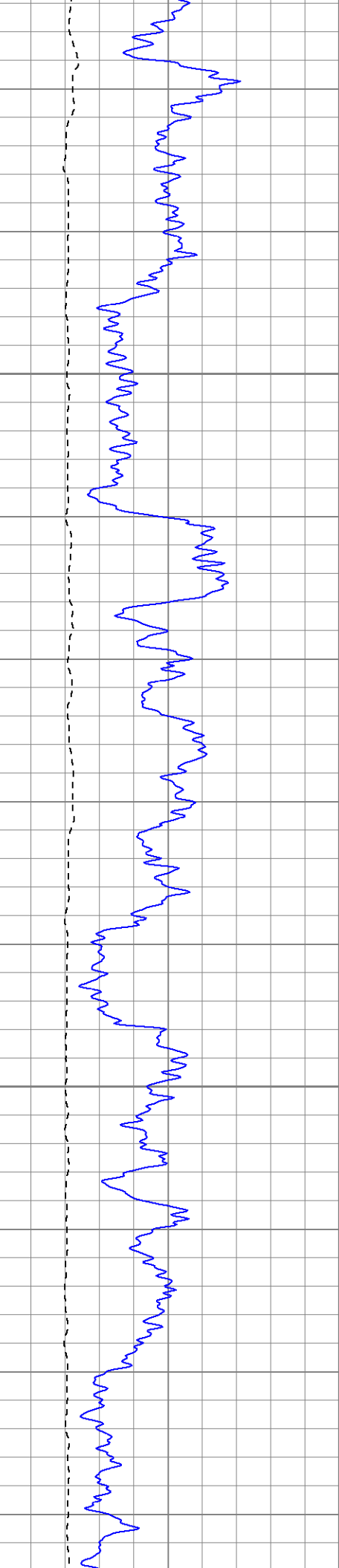




1900

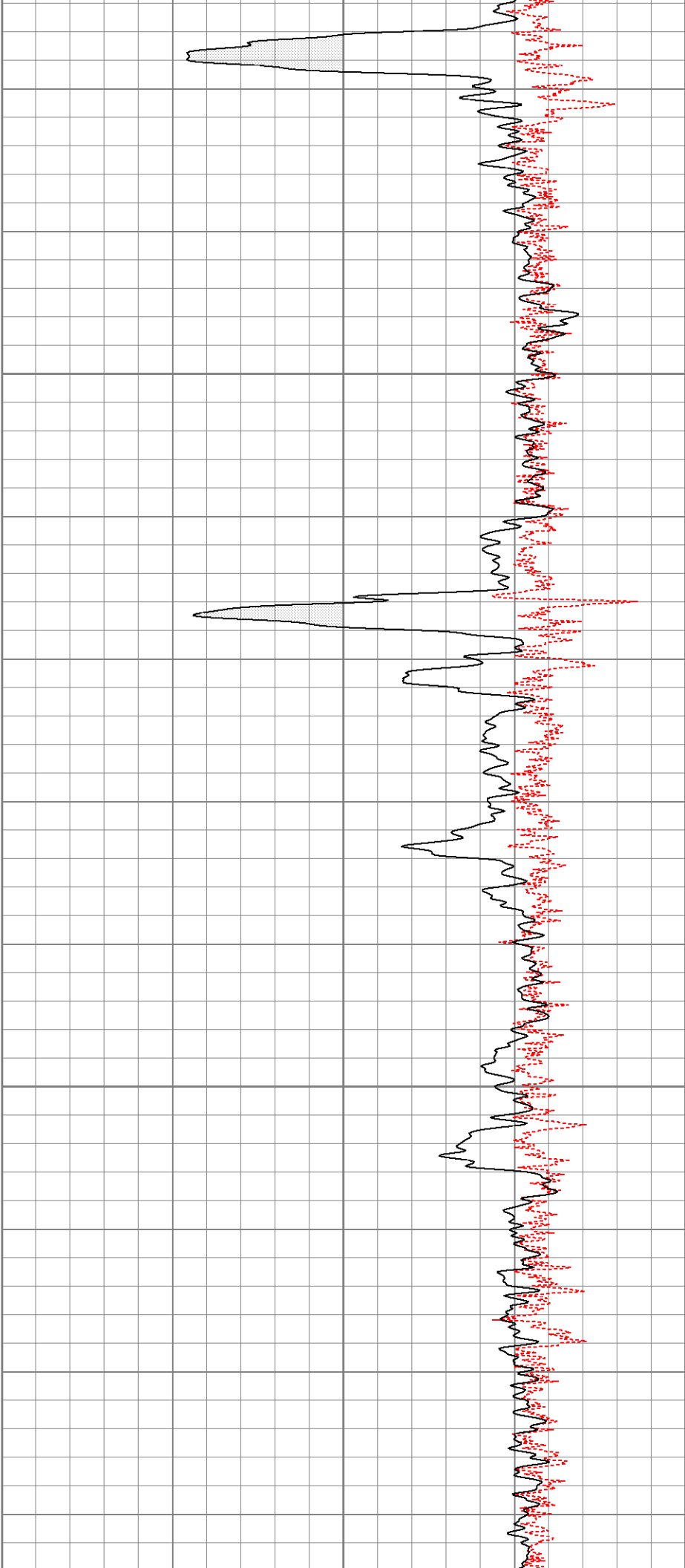
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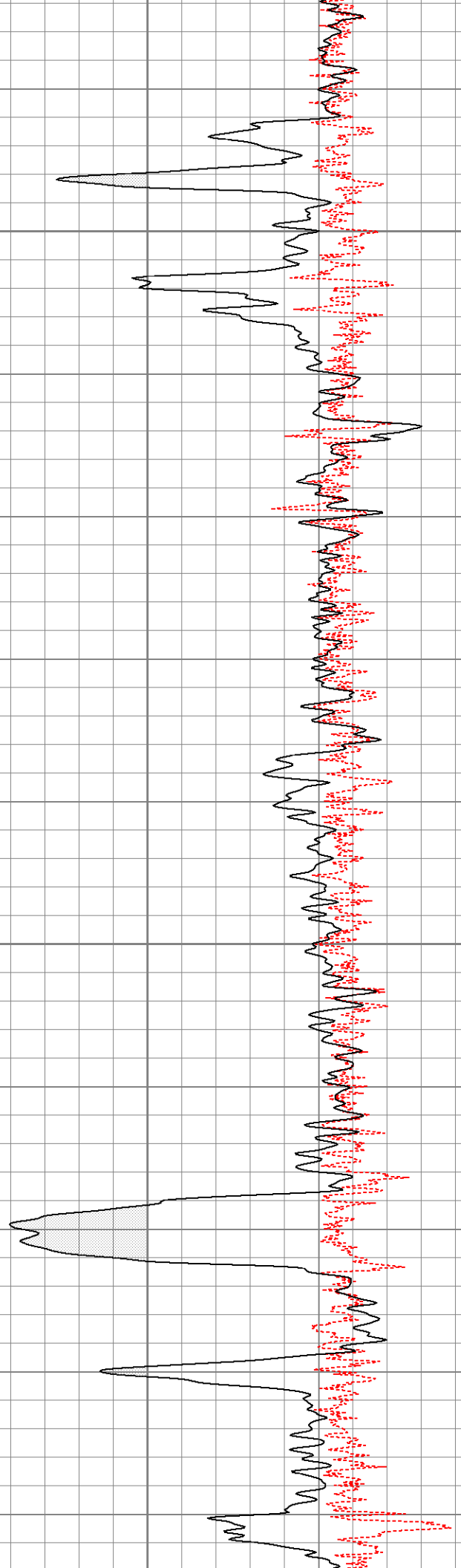
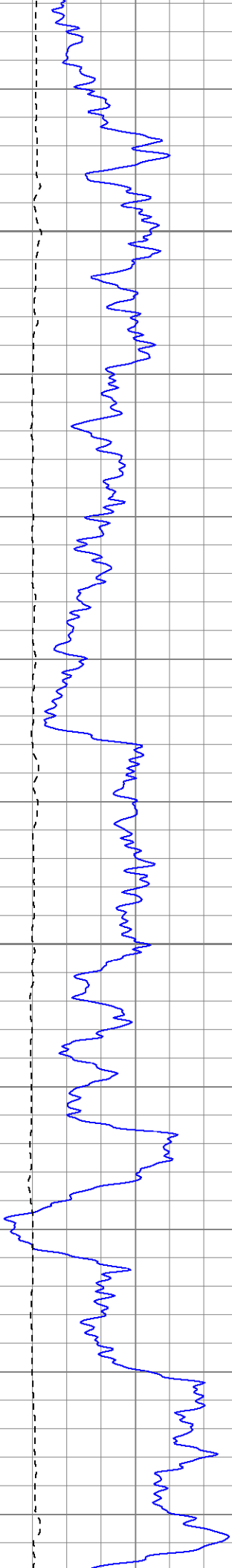
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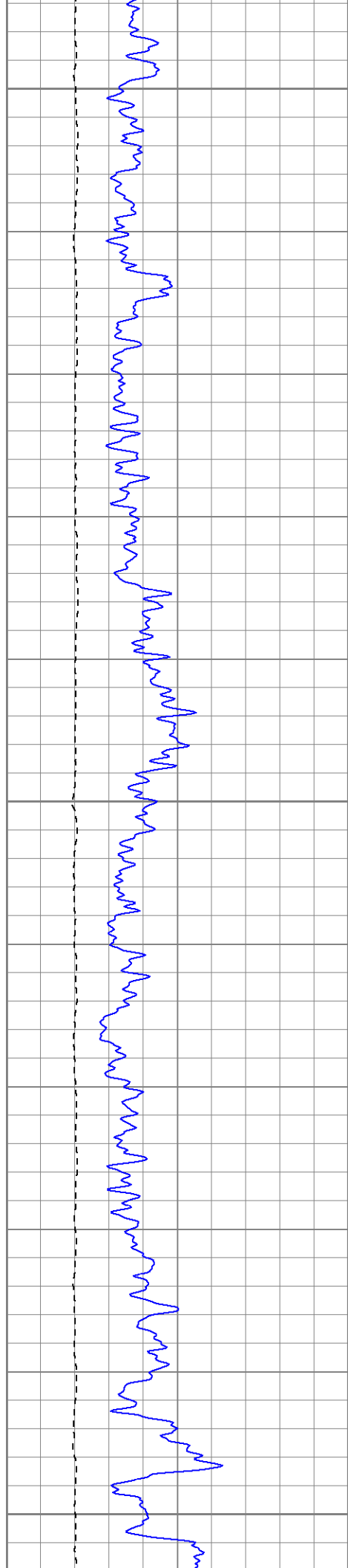
2050



2100

2150

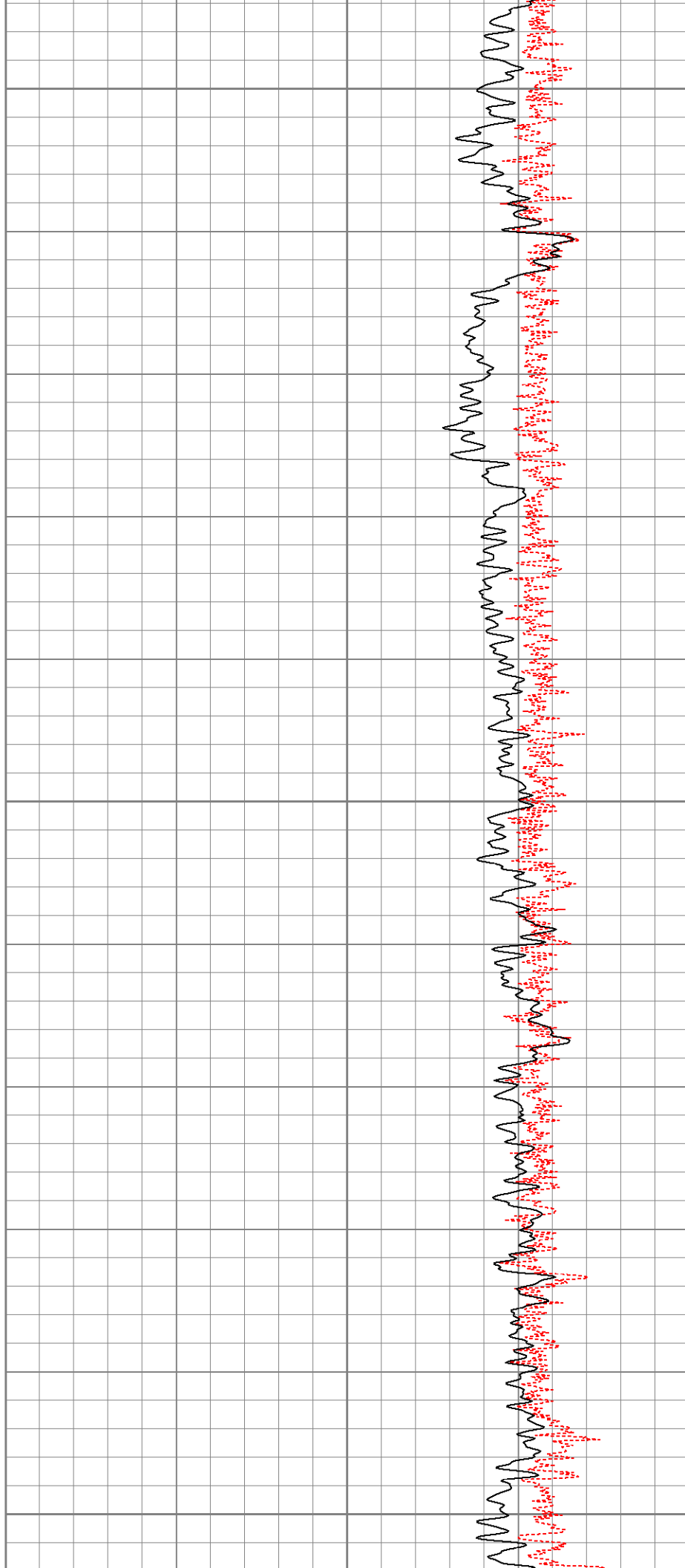


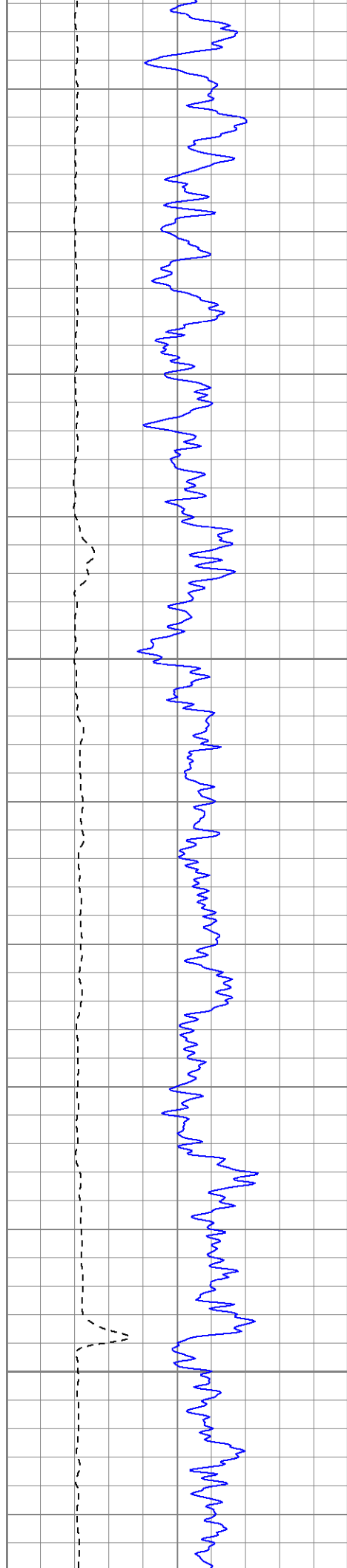


2200

2250

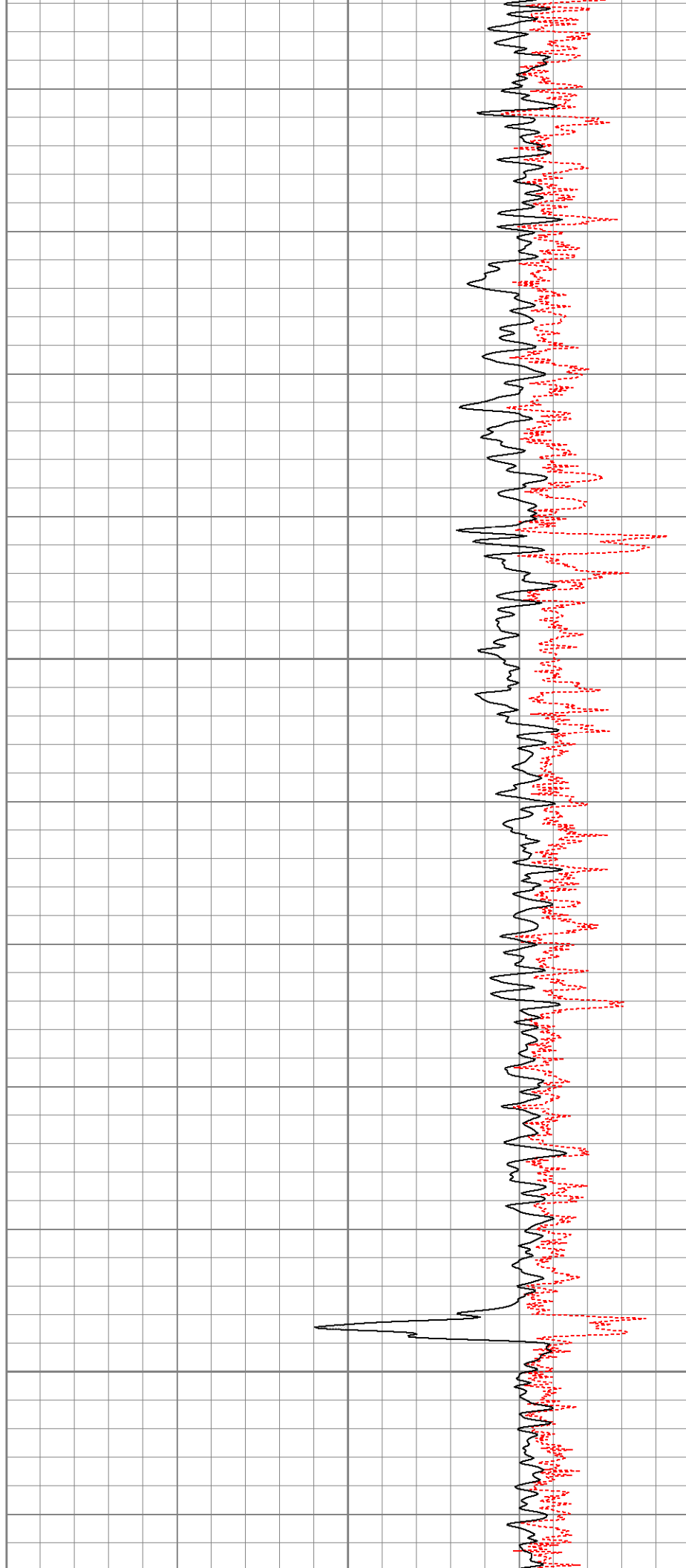
2300



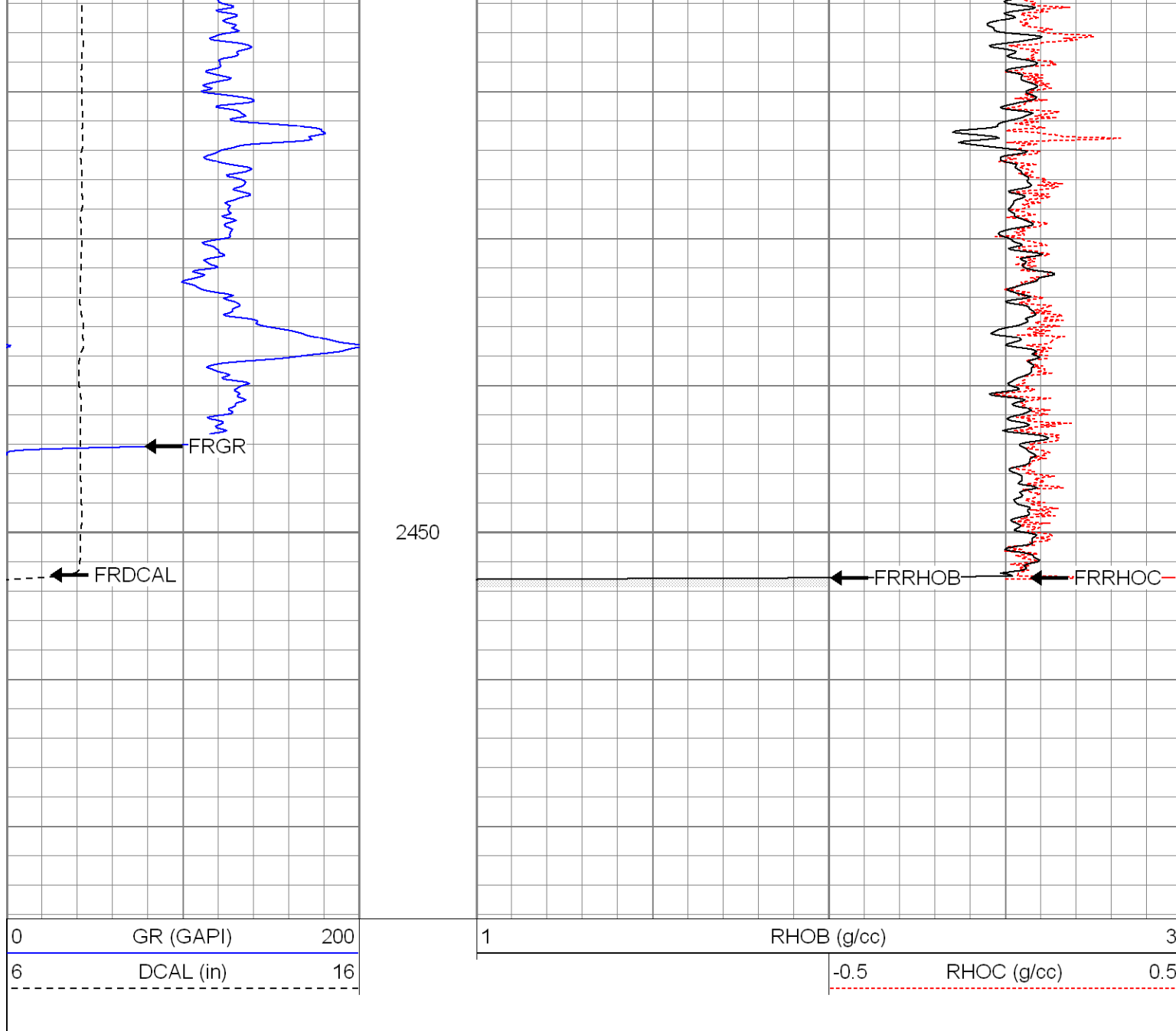


2350

2400







### Calibration Report

Database File: xtohr3606.db  
 Dataset Pathname: pass1  
 Dataset Creation: Thu May 01 14:35:51 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

Loop:	Readings			References			Results	
	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			Results	
	Zero	Cal		Zero	Cal		m	b
Deep	0.000	0.619	V	0.000	500.000	mmho-m	807.722	0.107



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: xtohr3606.db: field/well/run1/pass1 Total Length: 40.00 ft Total Weight: 677.00 lb O.D. 4.00 in						