



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

# COMPENSATED DENSITY NEUTRON LOG

Company XTO Energy Inc.  
Well Apache Canyon 05-11  
Field Purgatoire River  
County Las Animas State Colorado

Location: API # : 05 071 09132 00

2517' FSL & 2402' FWL

SEC 6 TWP 34S RGE 67W

Permanent Datum Ground Level Elevation 7490'  
Log Measured From Ground Level  
Drilling Measured From Ground Level

Other Services  
dill  
Elevation  
K.B. -----  
D.F. -----  
G.L. 7490'

Date 07-07-07

Run Number	One		
Depth Driller	2110'		
Depth Logger	2109'		
Bottom Logged Interval	2085'		
Top Log Interval	Surface Casing		
Casing Driller	8 5/8" @ 496'		
Casing Logger	496'		
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	10:00 a.m.		
Maximum Recorded Temperature	112		
Equipment Number	T697		
Location	Trinidad		
Recorded By	L. Smith		
Witnessed By	Mr. Joe Smith		

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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 Neutron Porosity Presented On Sandstone Matrix.  
ABHV Calculated For 5 1/2" Casing  
Well Directions:  
First Bosque entrance just before Weston, turn right on Almasito canyon,  
turn right at windmill, approx. 1 mile drive thru location on right.

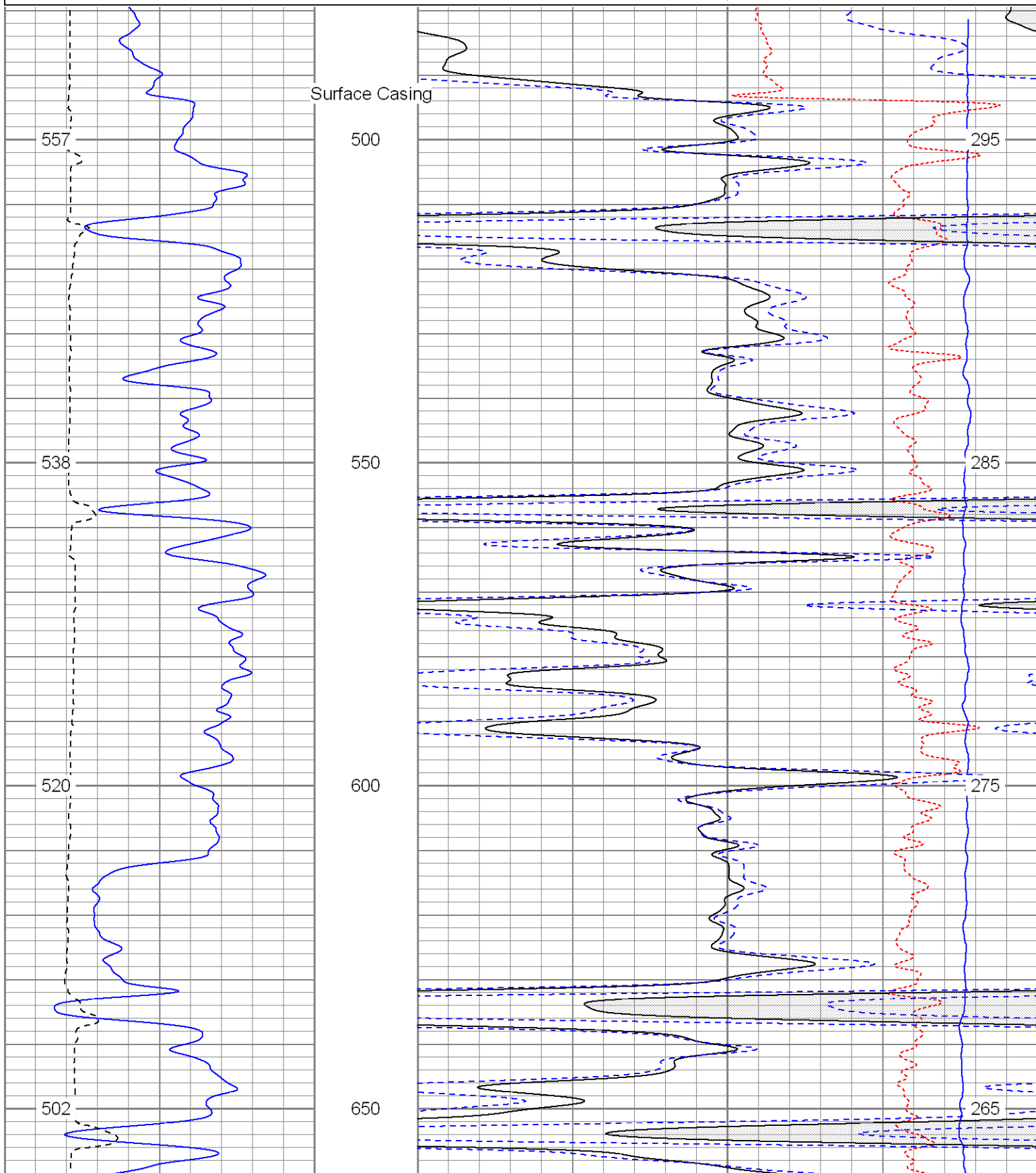


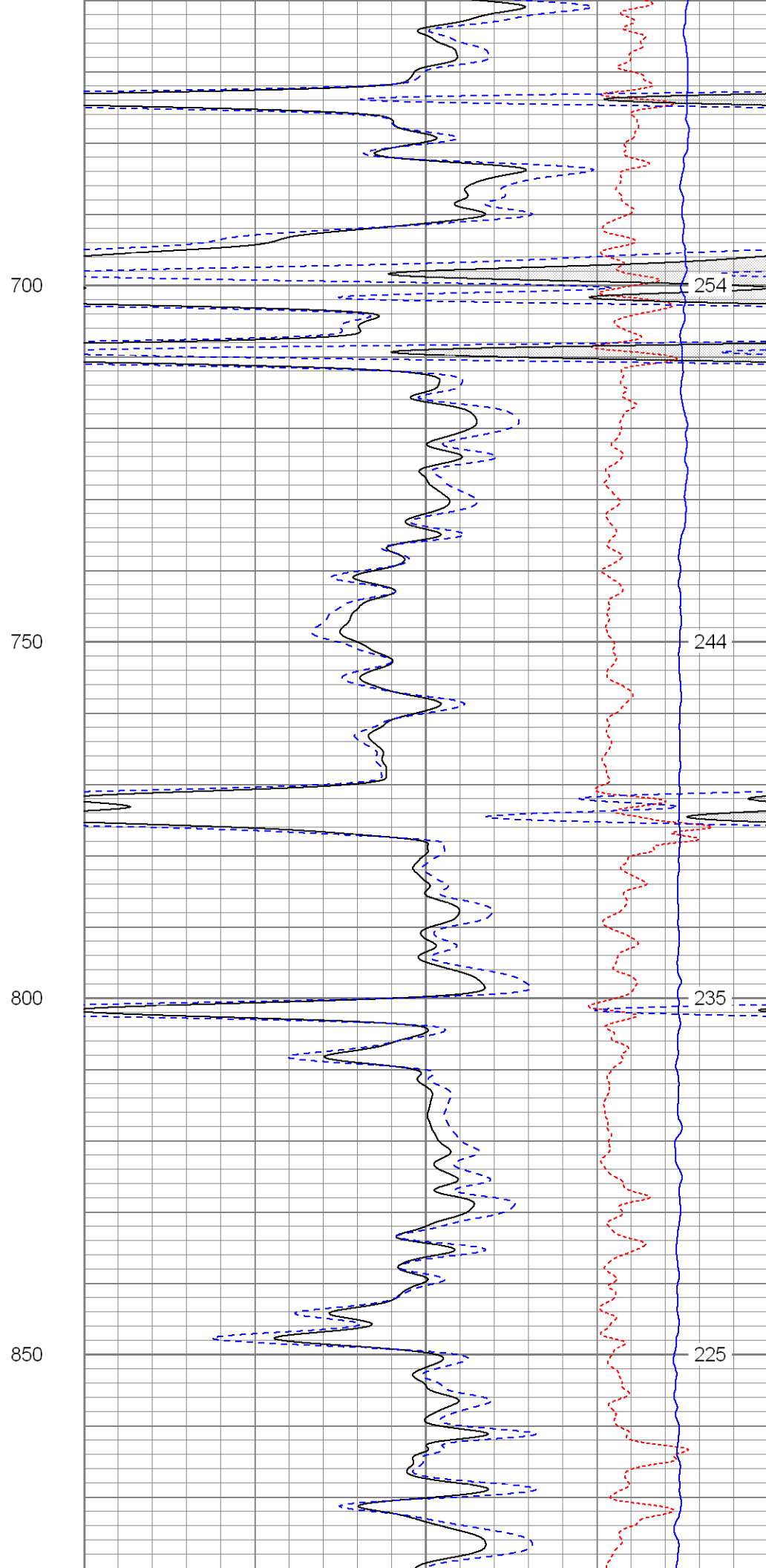
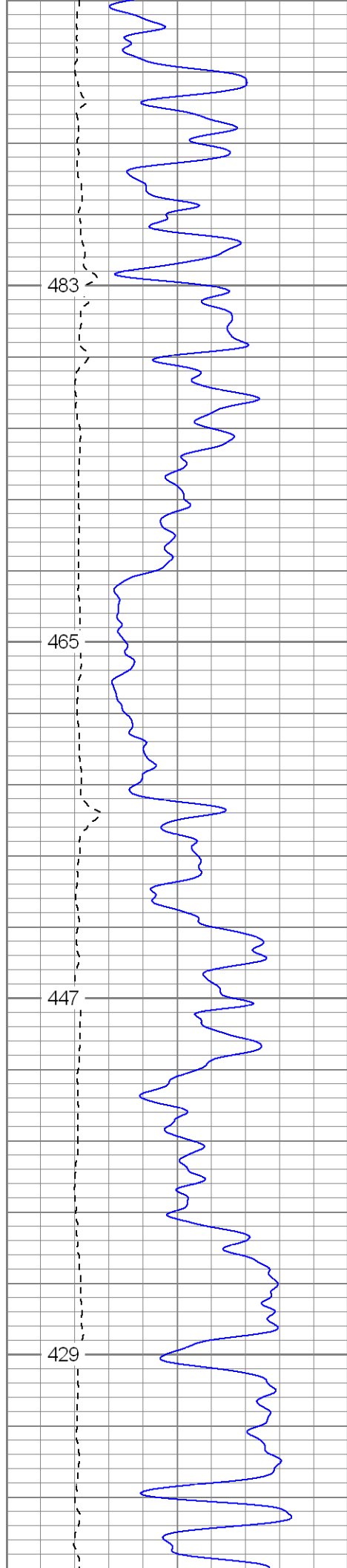
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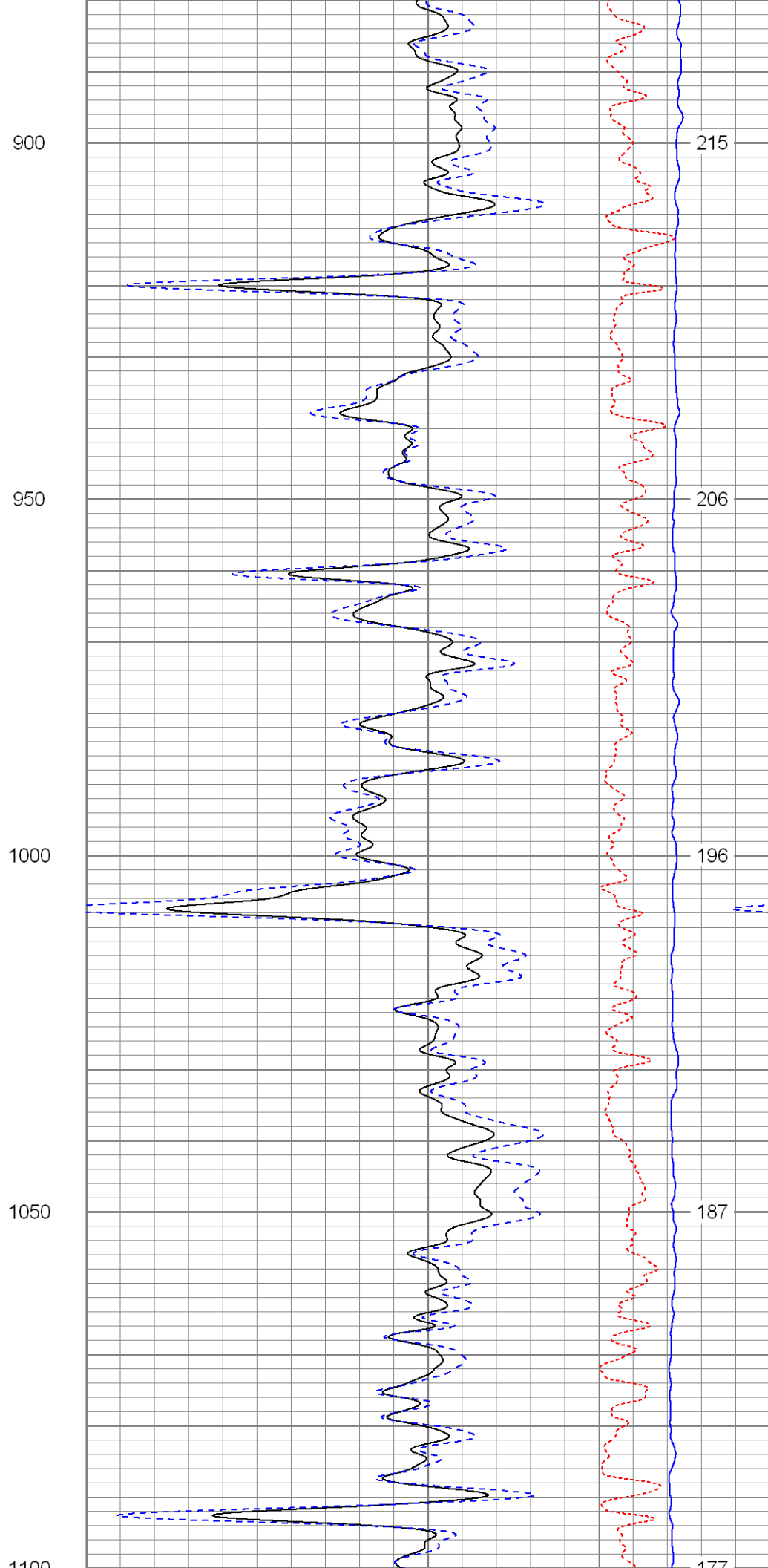
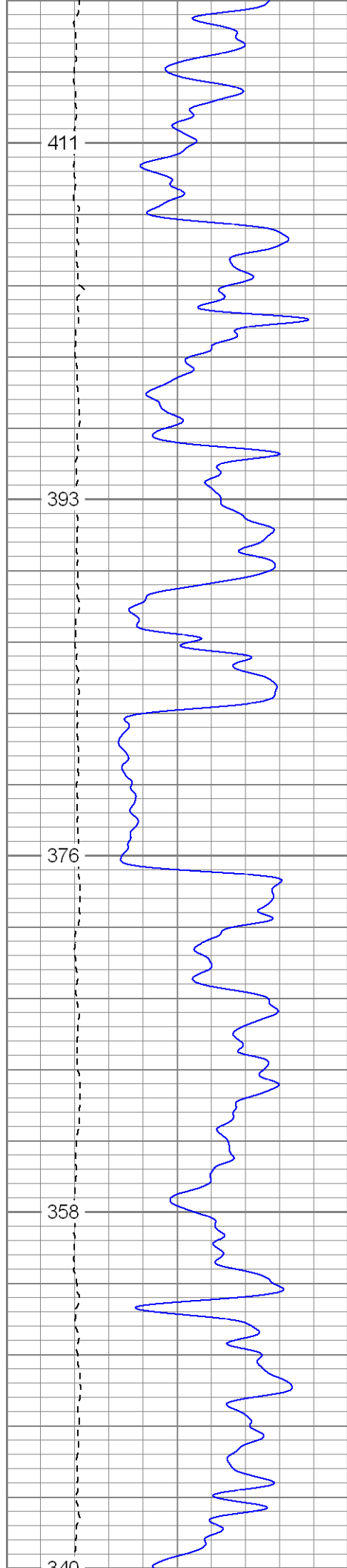
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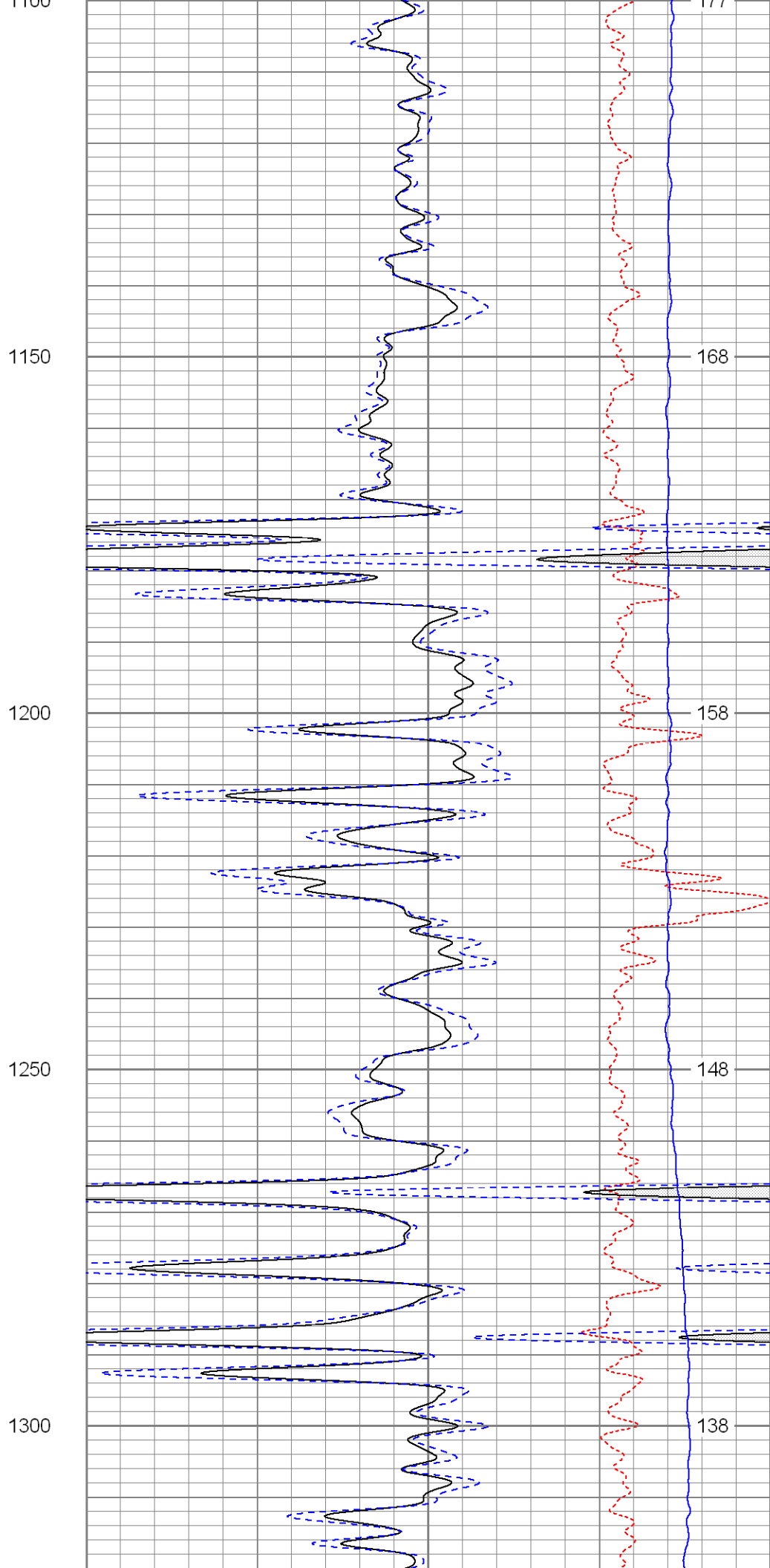
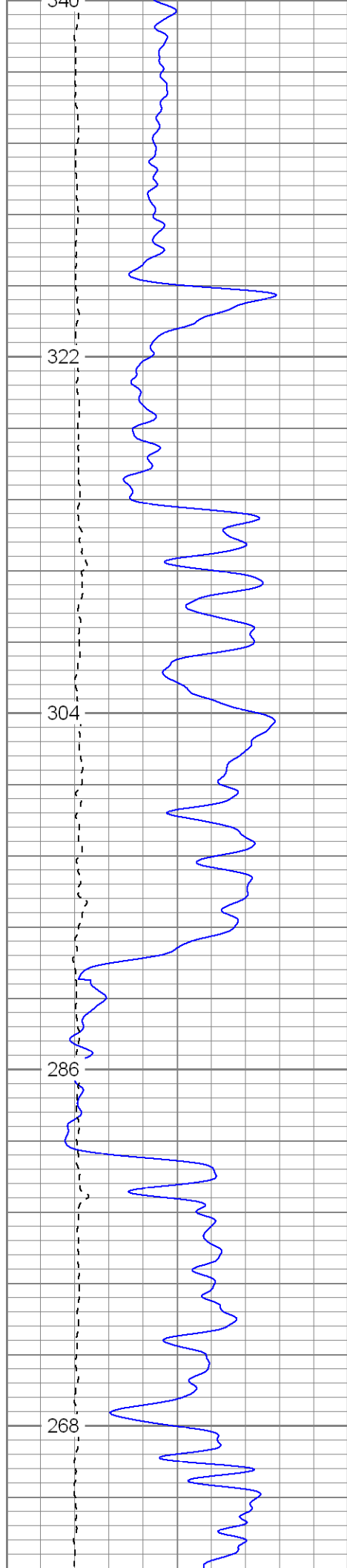
Database File: xtoac0511.db  
Dataset Pathname: pass2.1  
Presentation Format: cdl  
Dataset Creation: Sat Jul 07 11:40:20 2007 by Calc Open-Cased 061129  
Charted by: Depth in Feet scaled 1:240

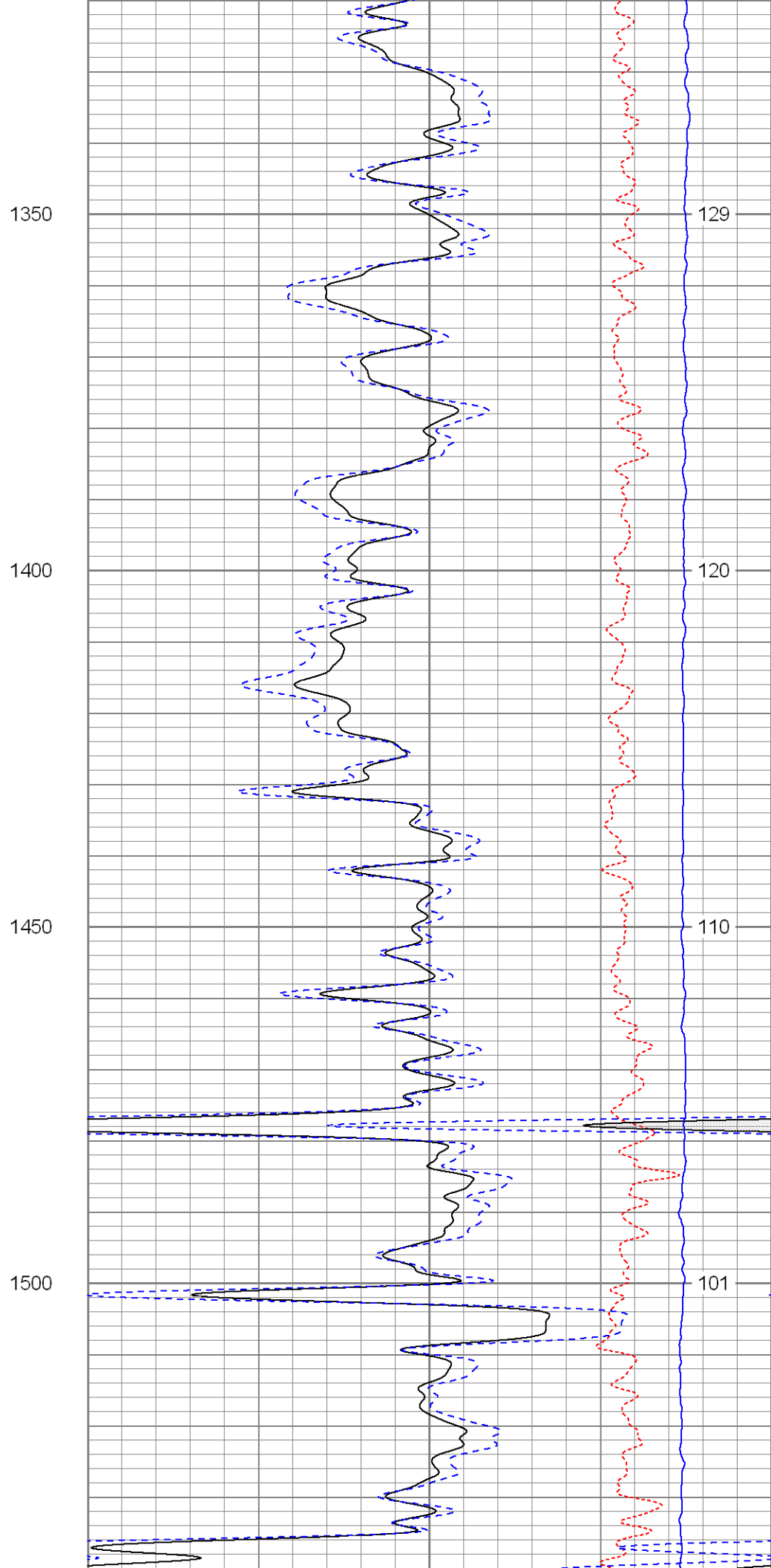
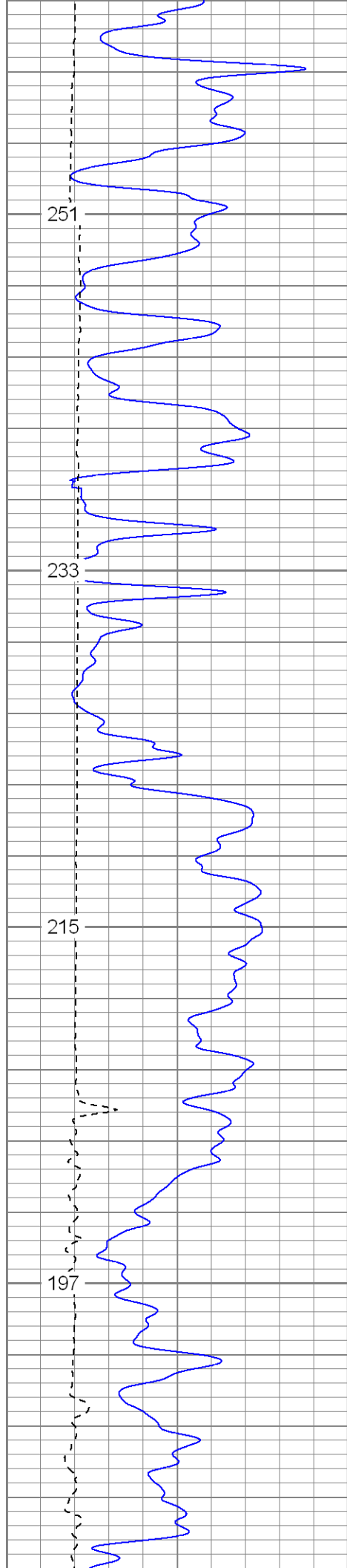
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6	DCAL (in)	16	30	DPOR (pu)	-10
			-0.5	RHOC (g/cc)	0.5
			4000	LTEN (lb)	0

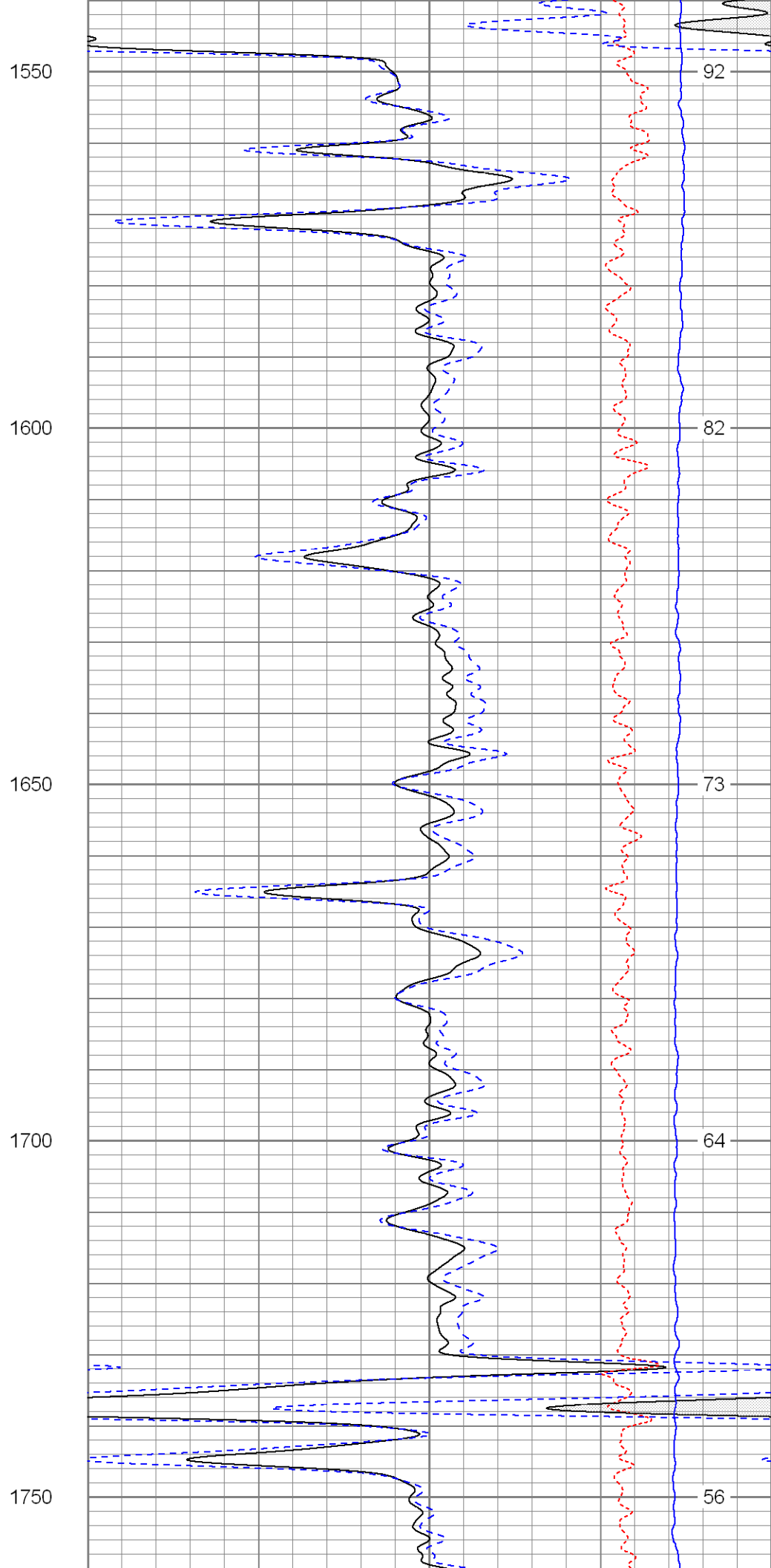
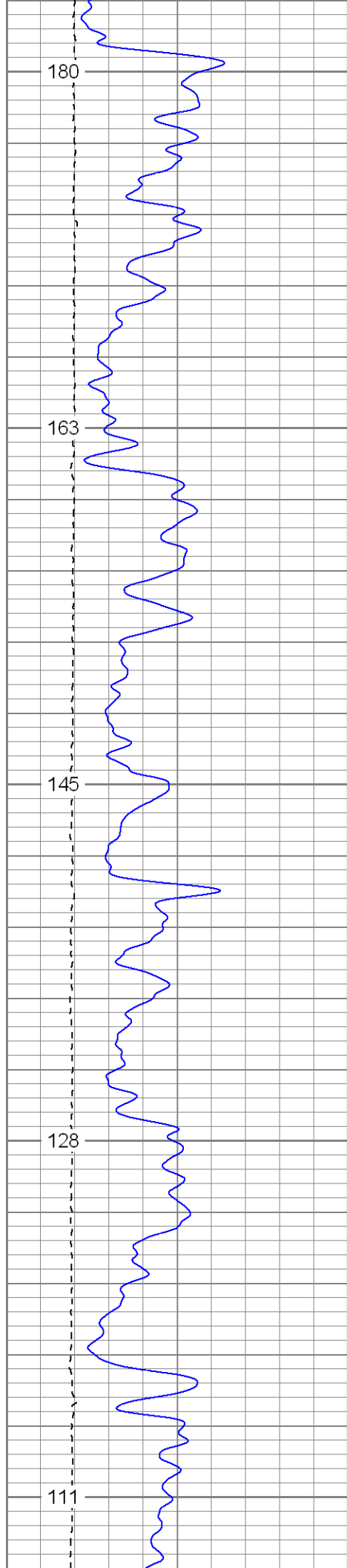


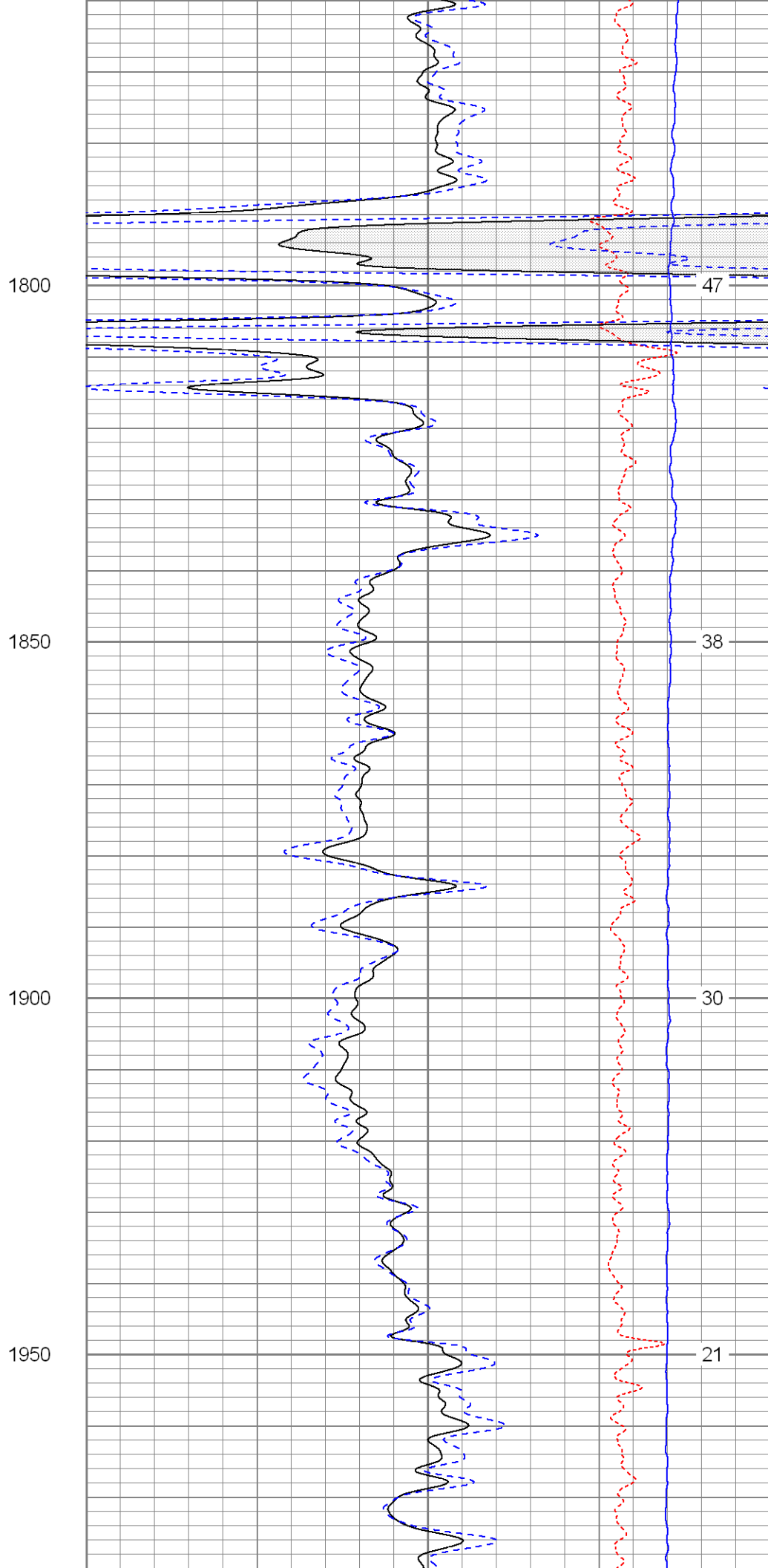
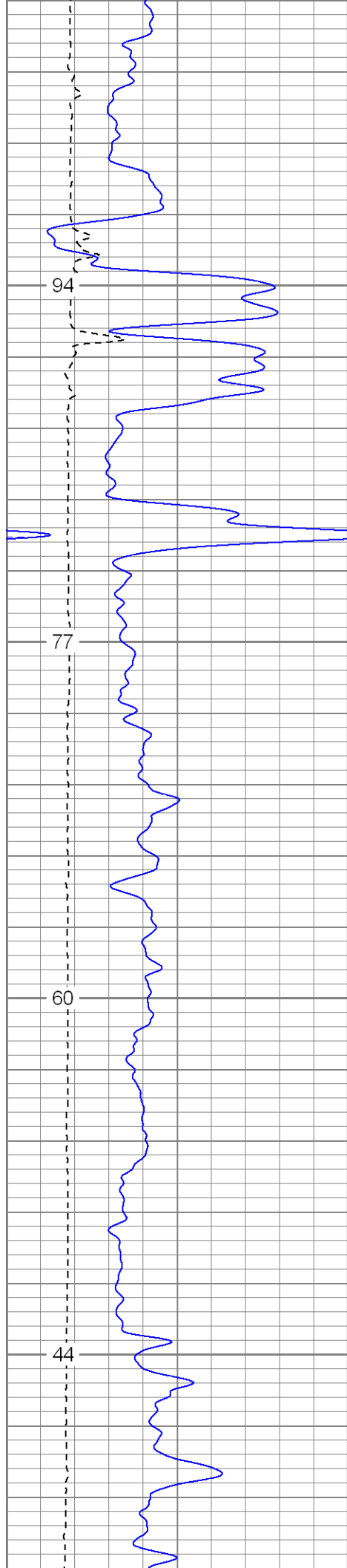




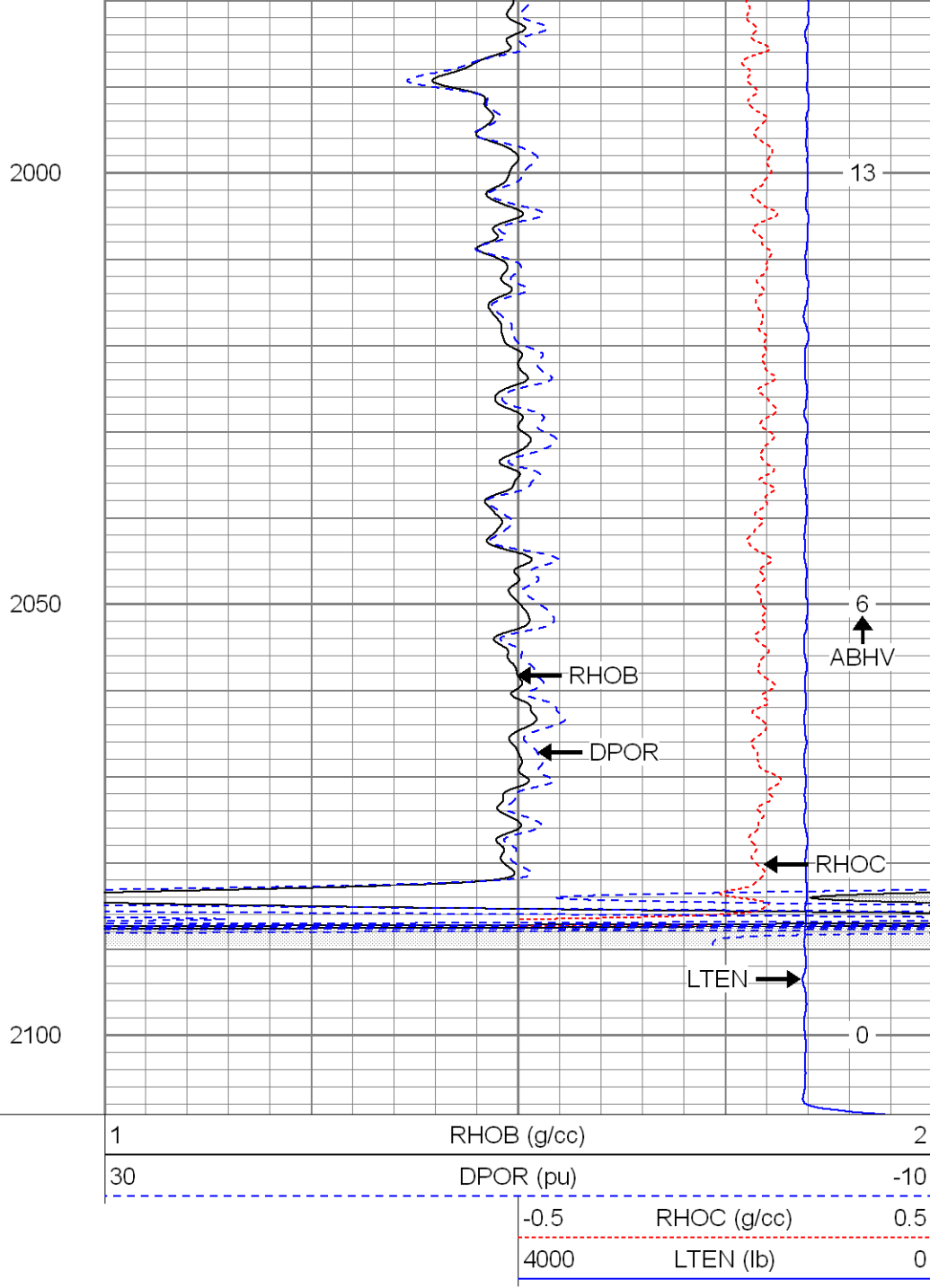
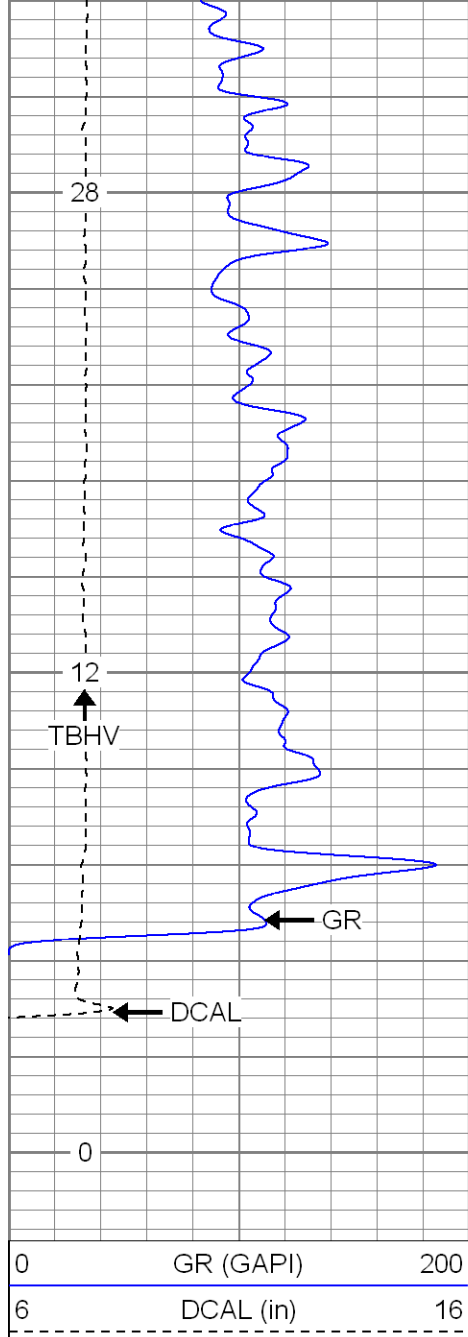












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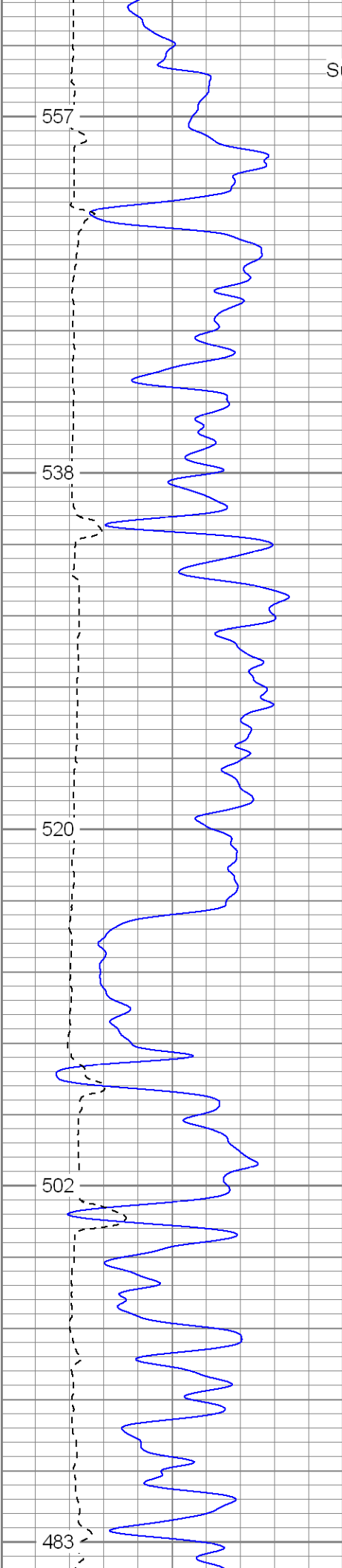
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# Main Pass

Database File: xtoac0511.db  
Dataset Pathname: pass2.1  
Presentation Format: cdnl  
Dataset Creation: Sat Jul 07 11:40:20 2007 by Calc Open-Cased 061129  
Charted by: Depth in Feet scaled 1:240

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

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



Surface Casing

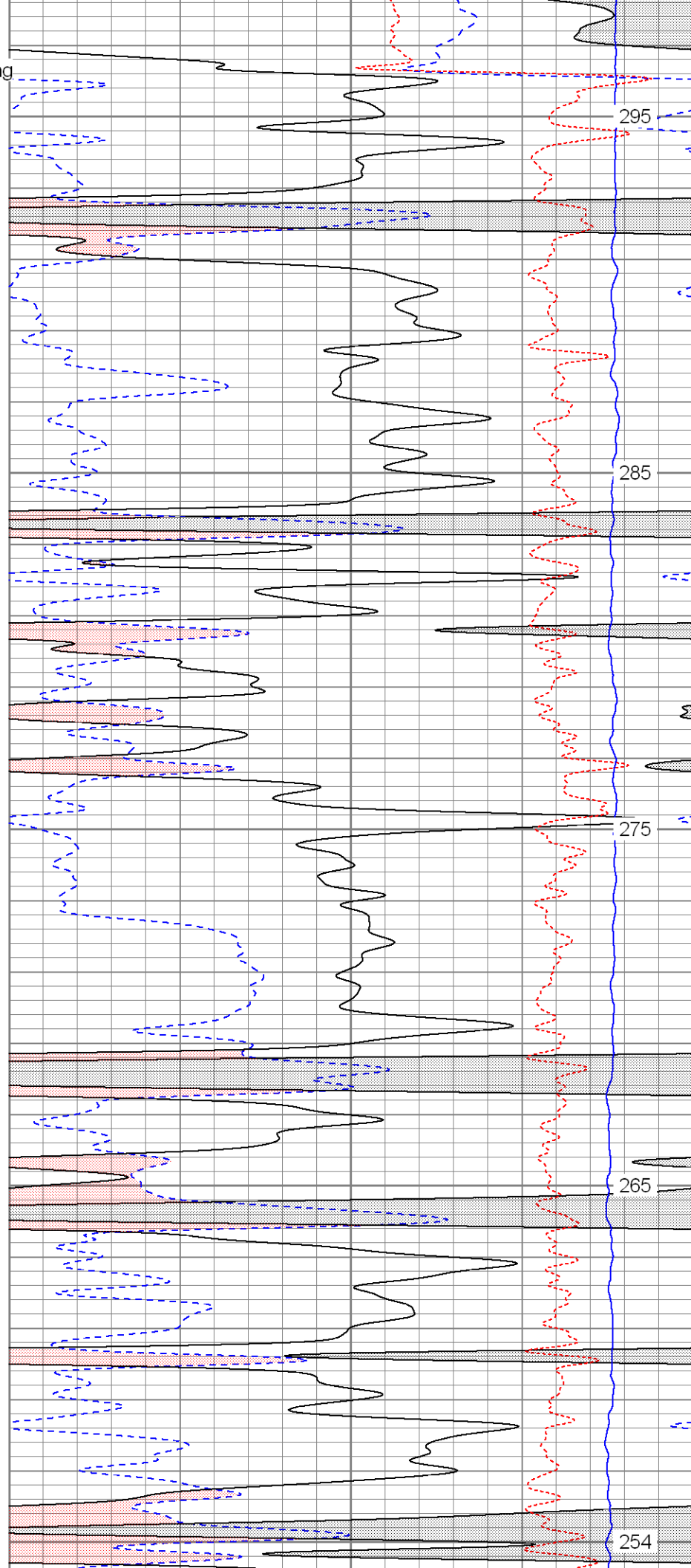
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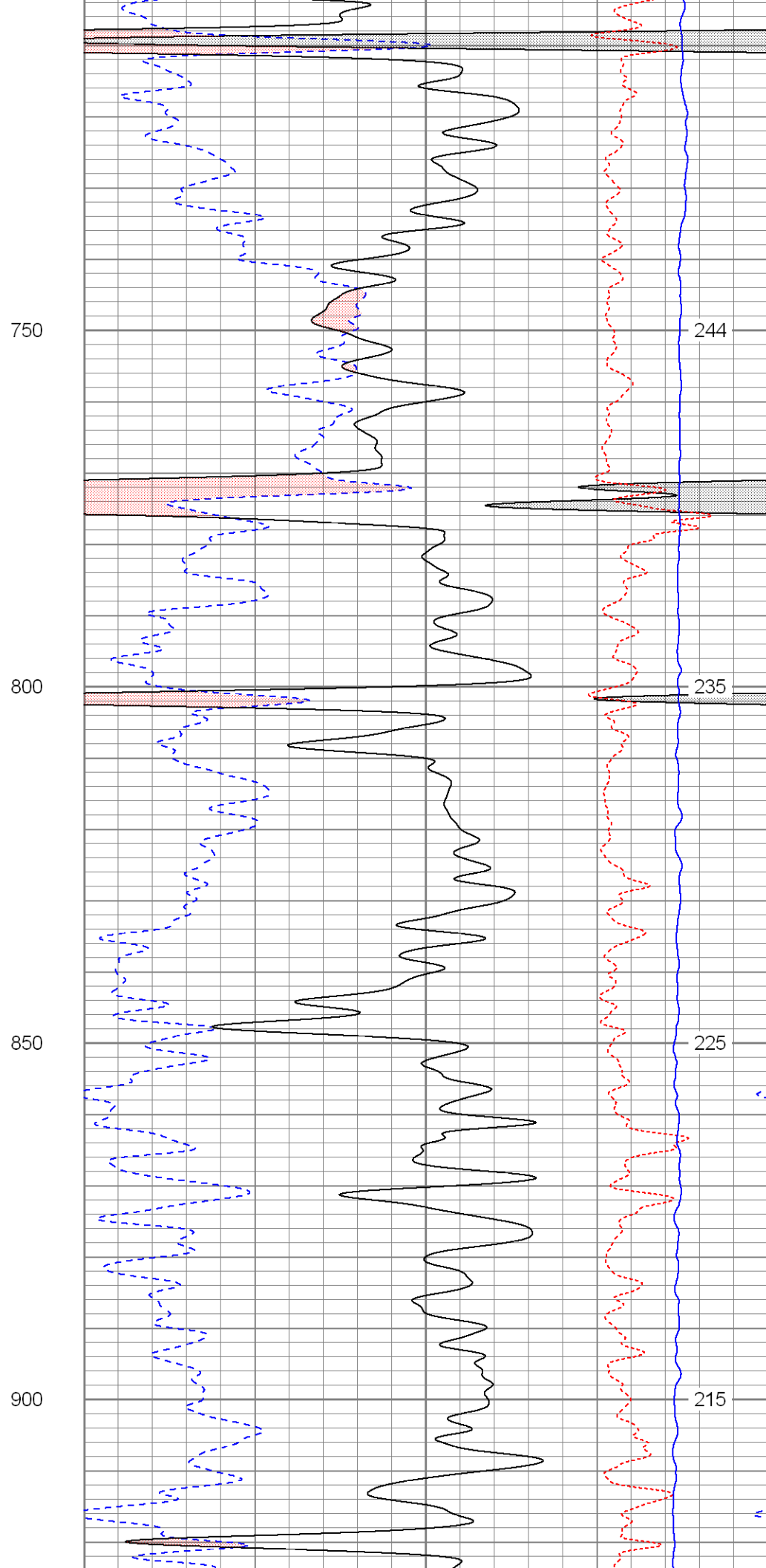
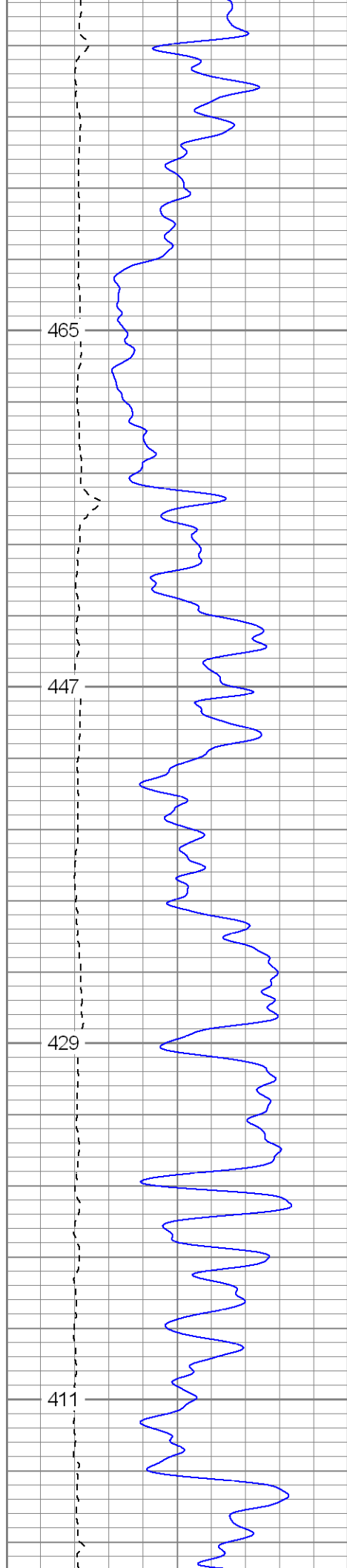
550

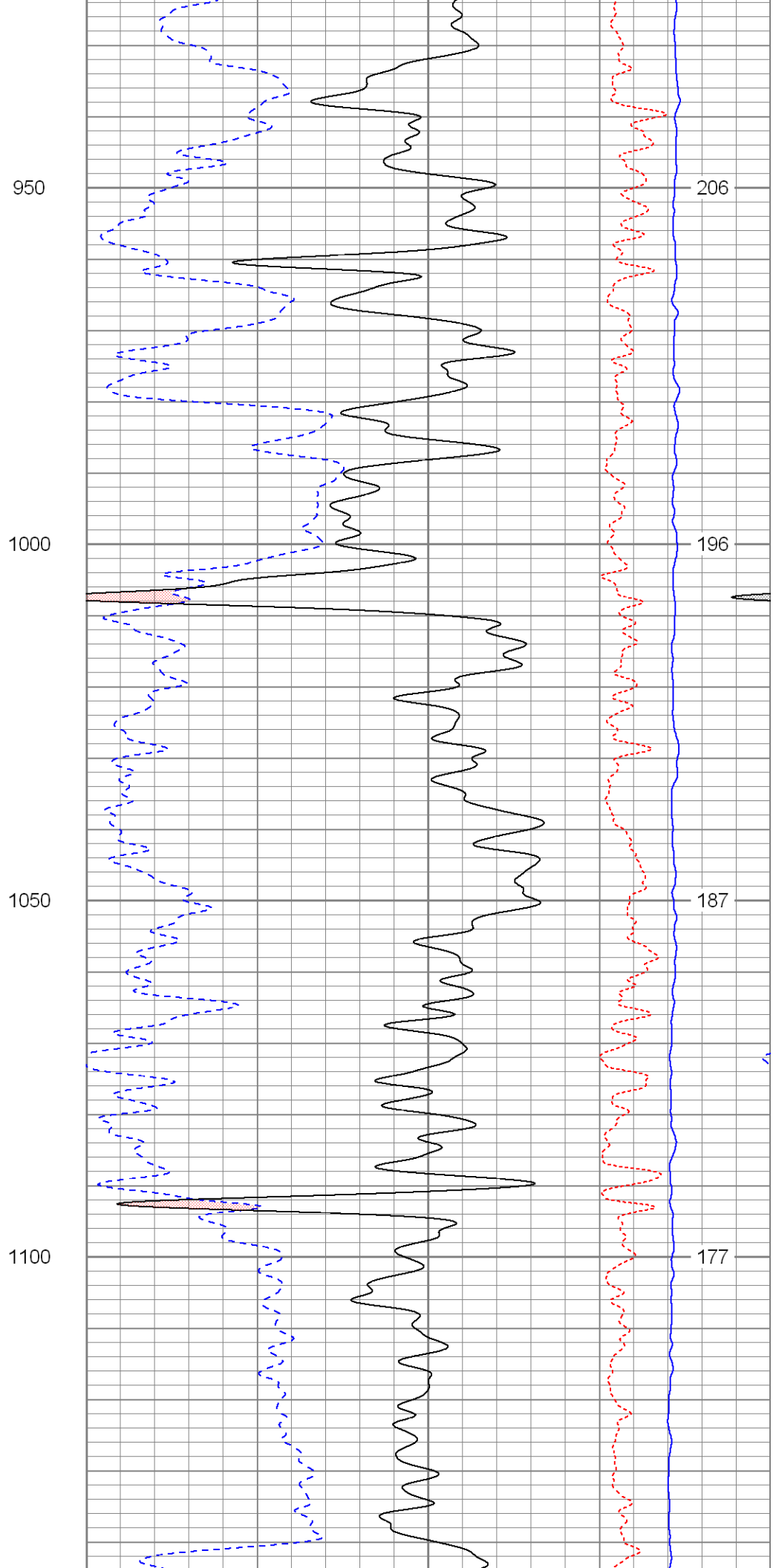
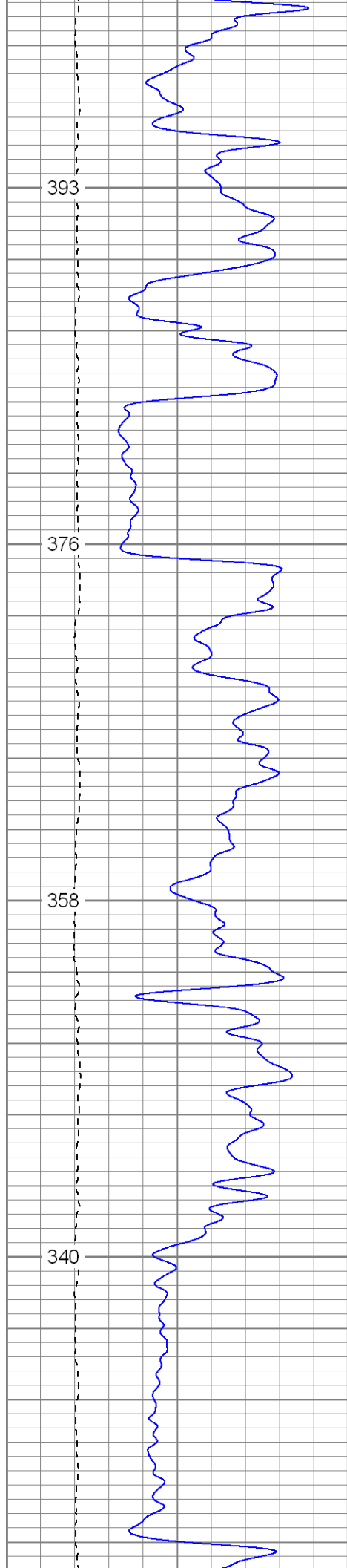
600

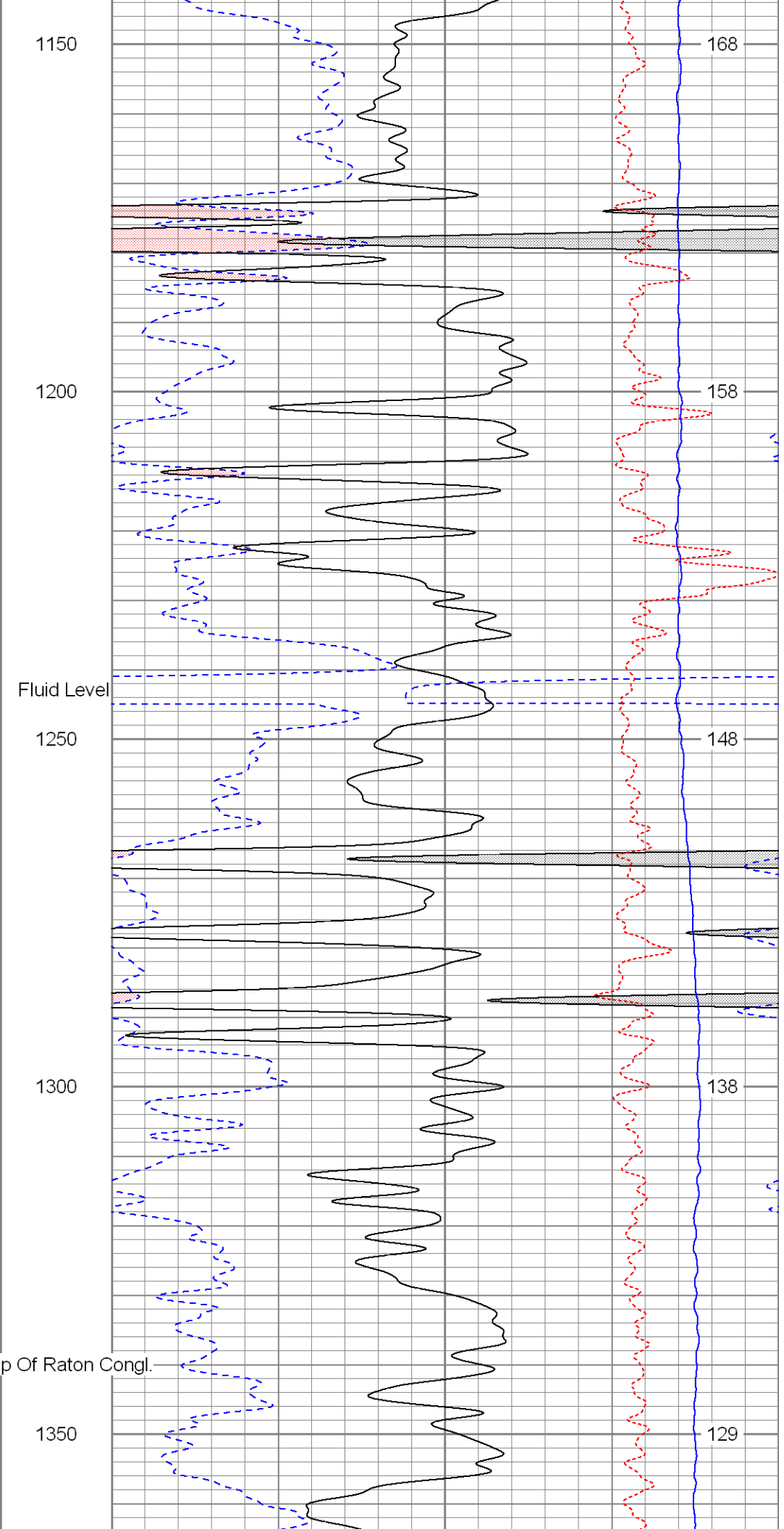
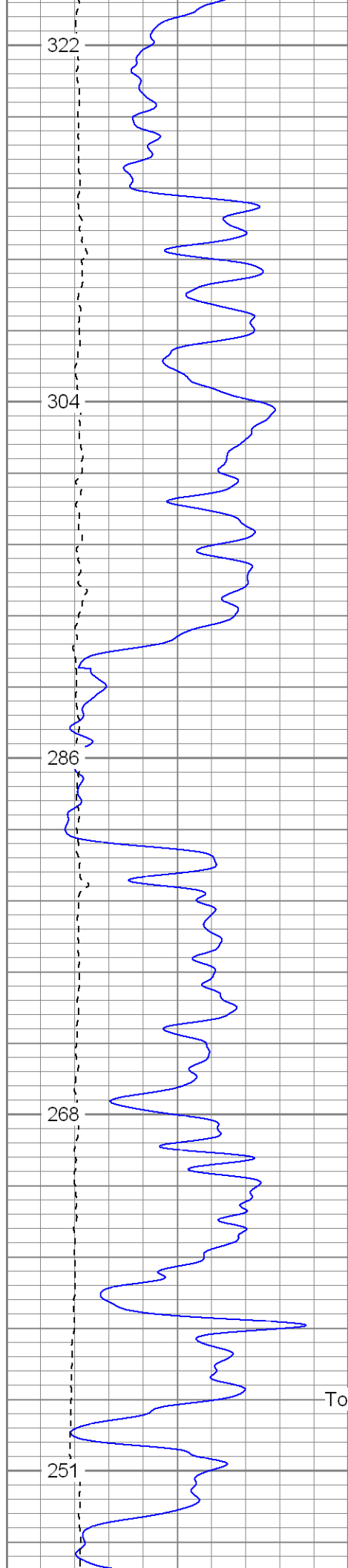
650

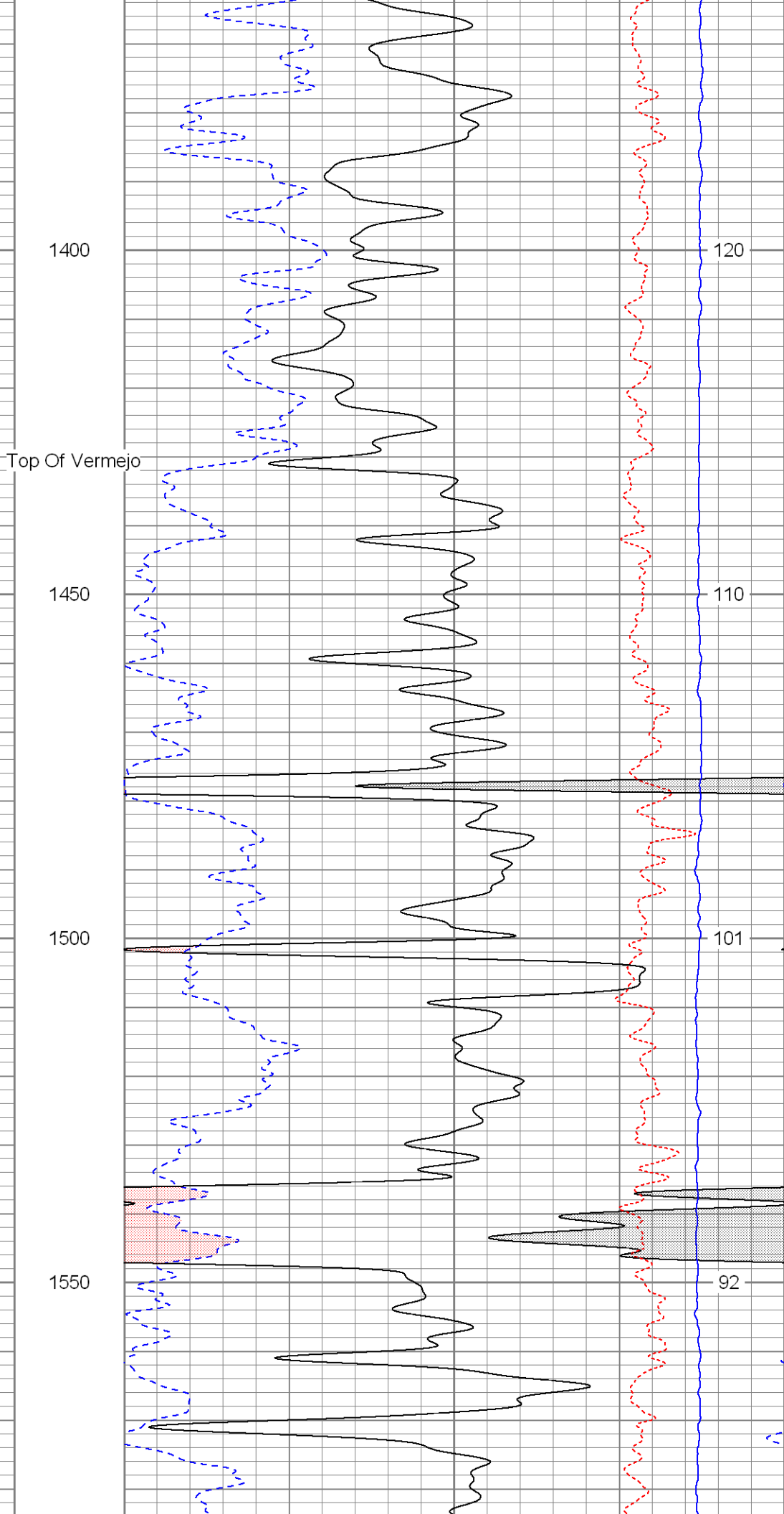
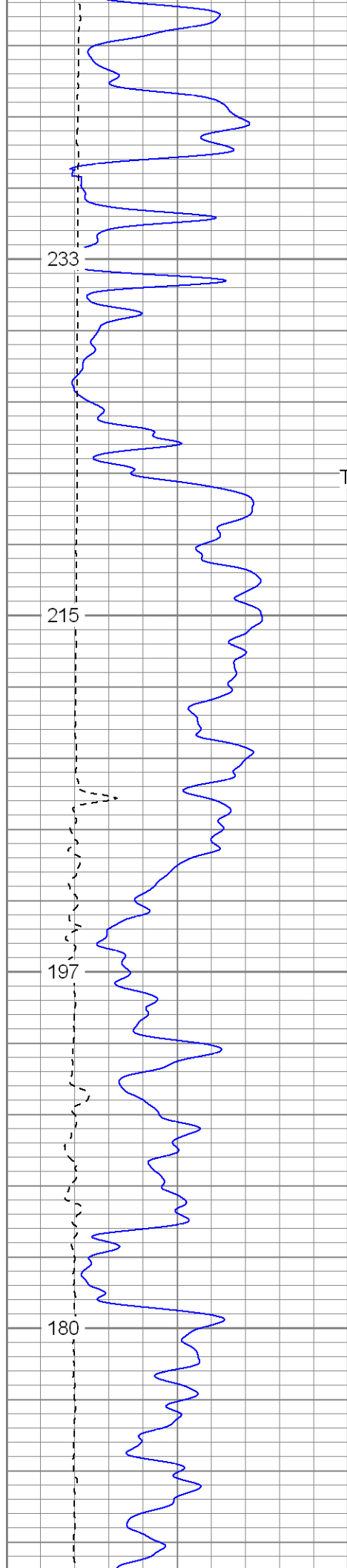
700

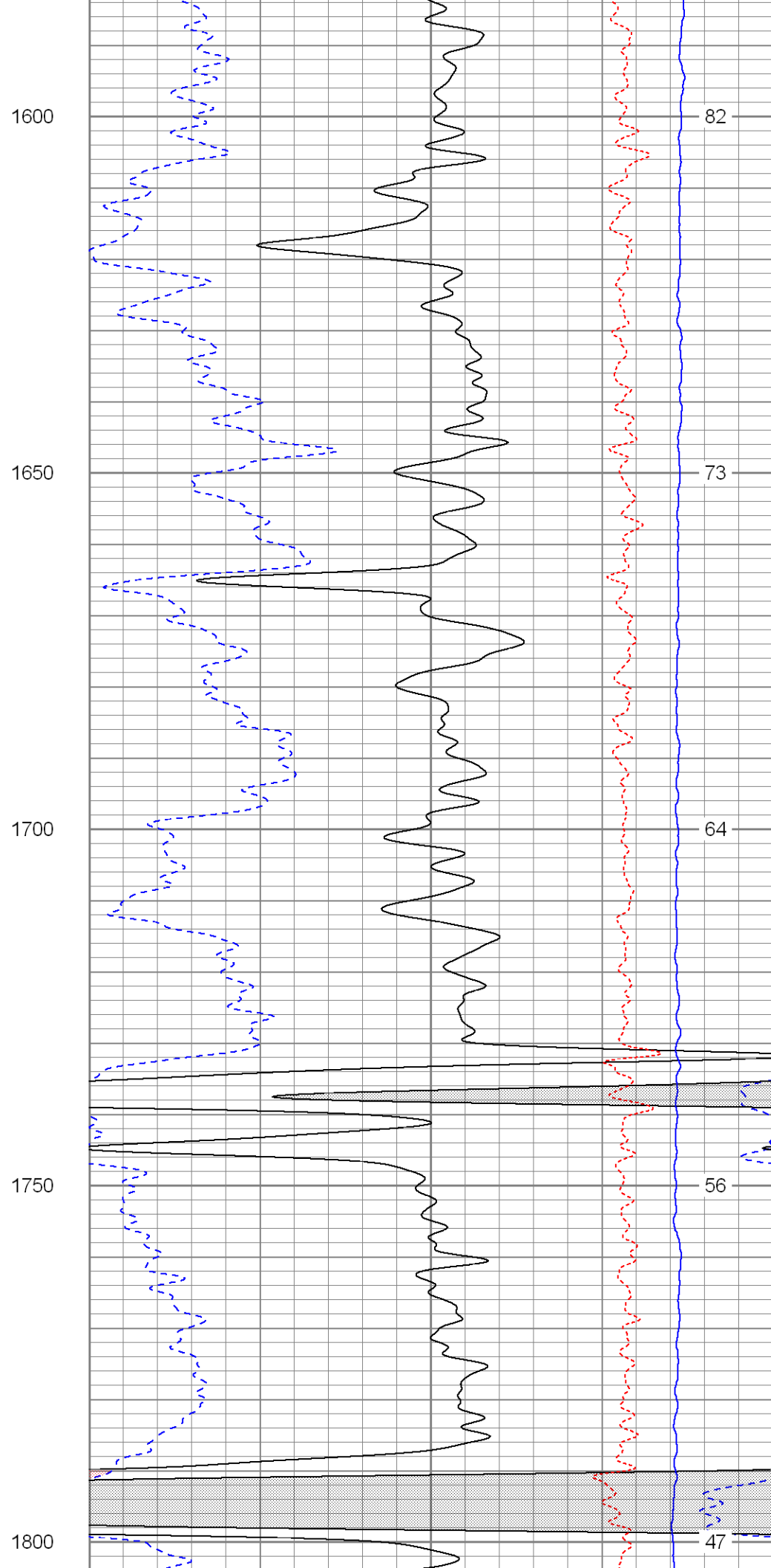
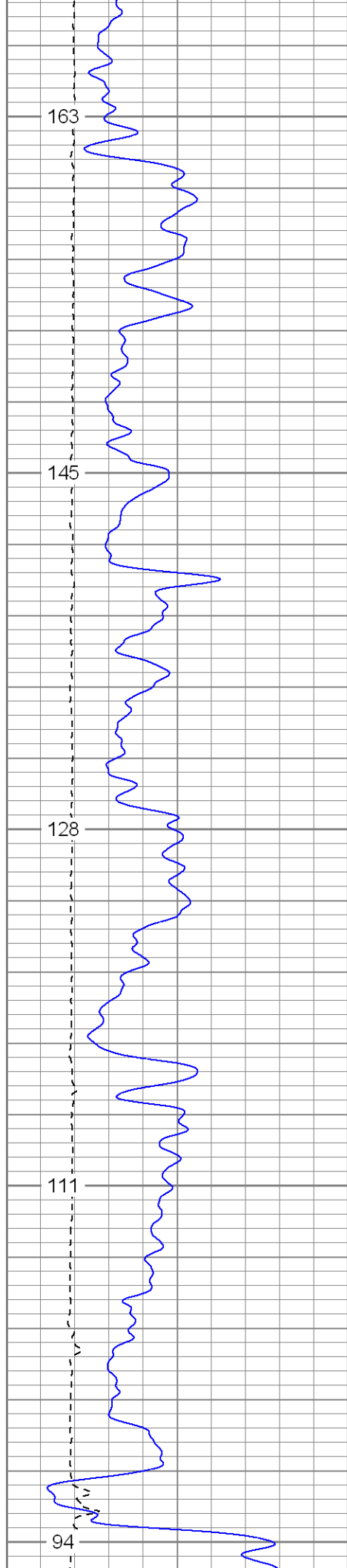


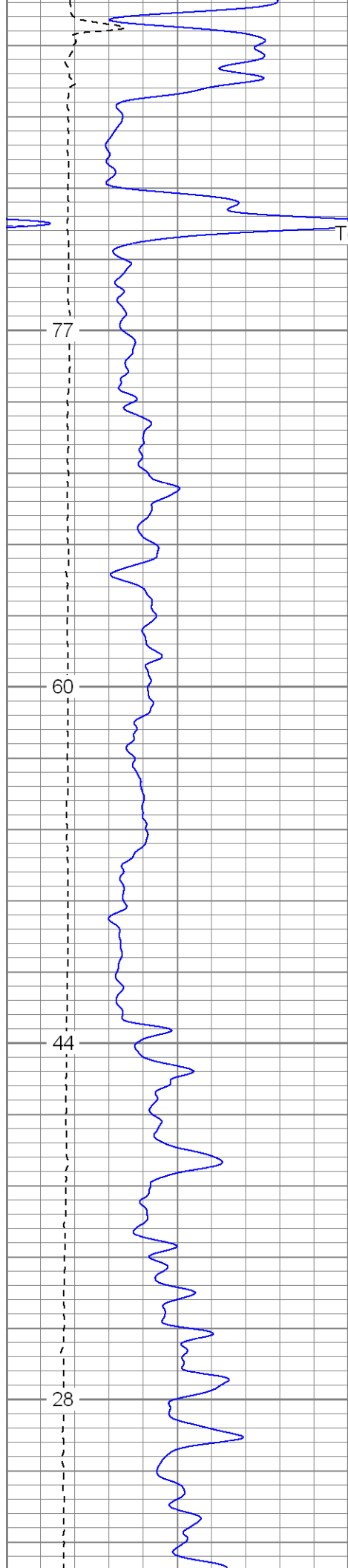












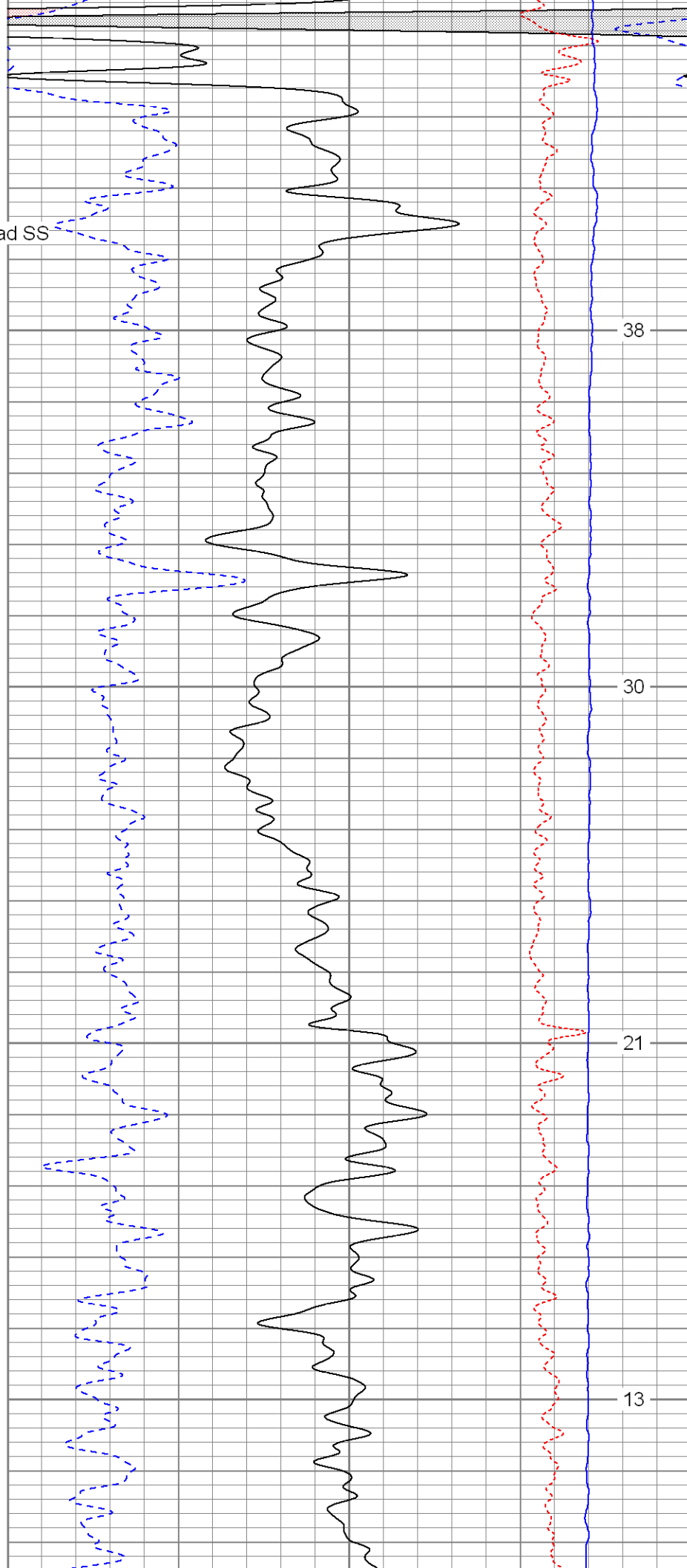
Top Of Trinidad SS

1850

1900

1950

2000



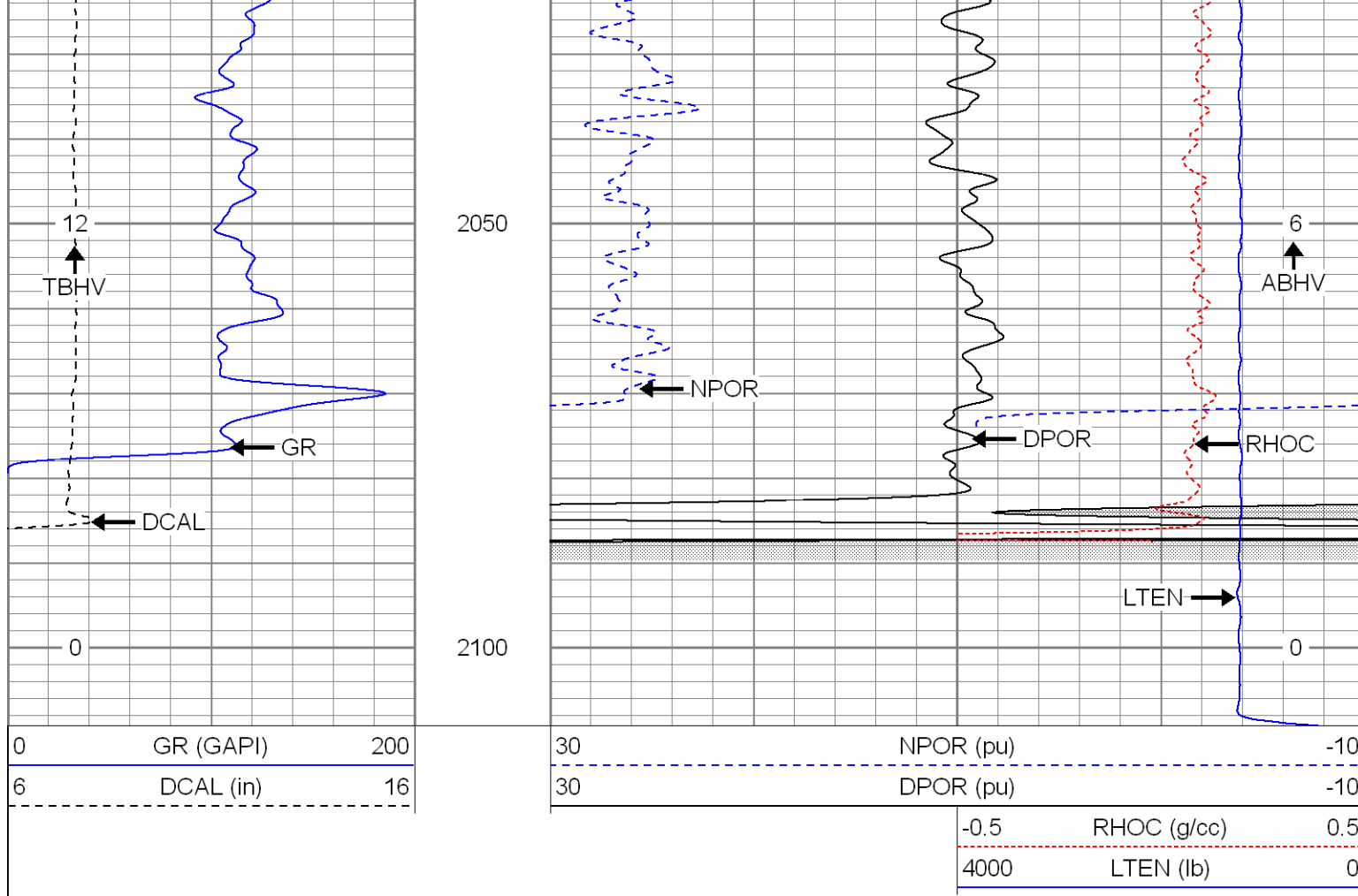
38

30

21

13





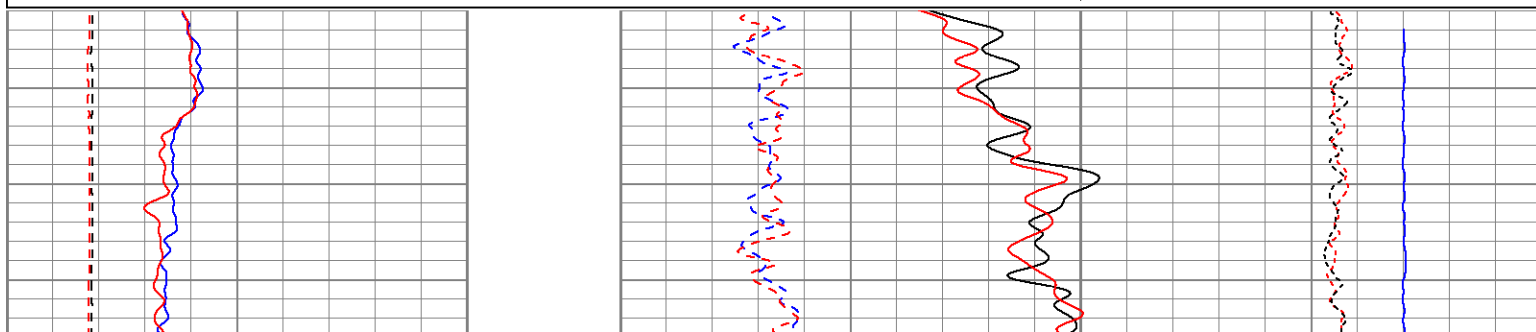
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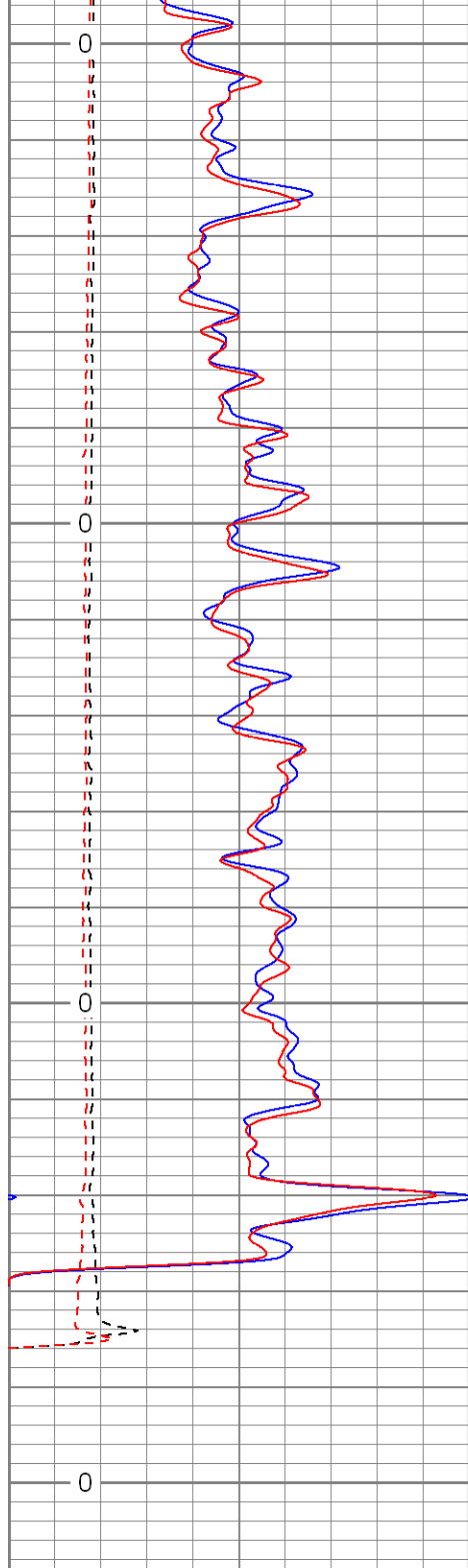
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# Repeat Pass

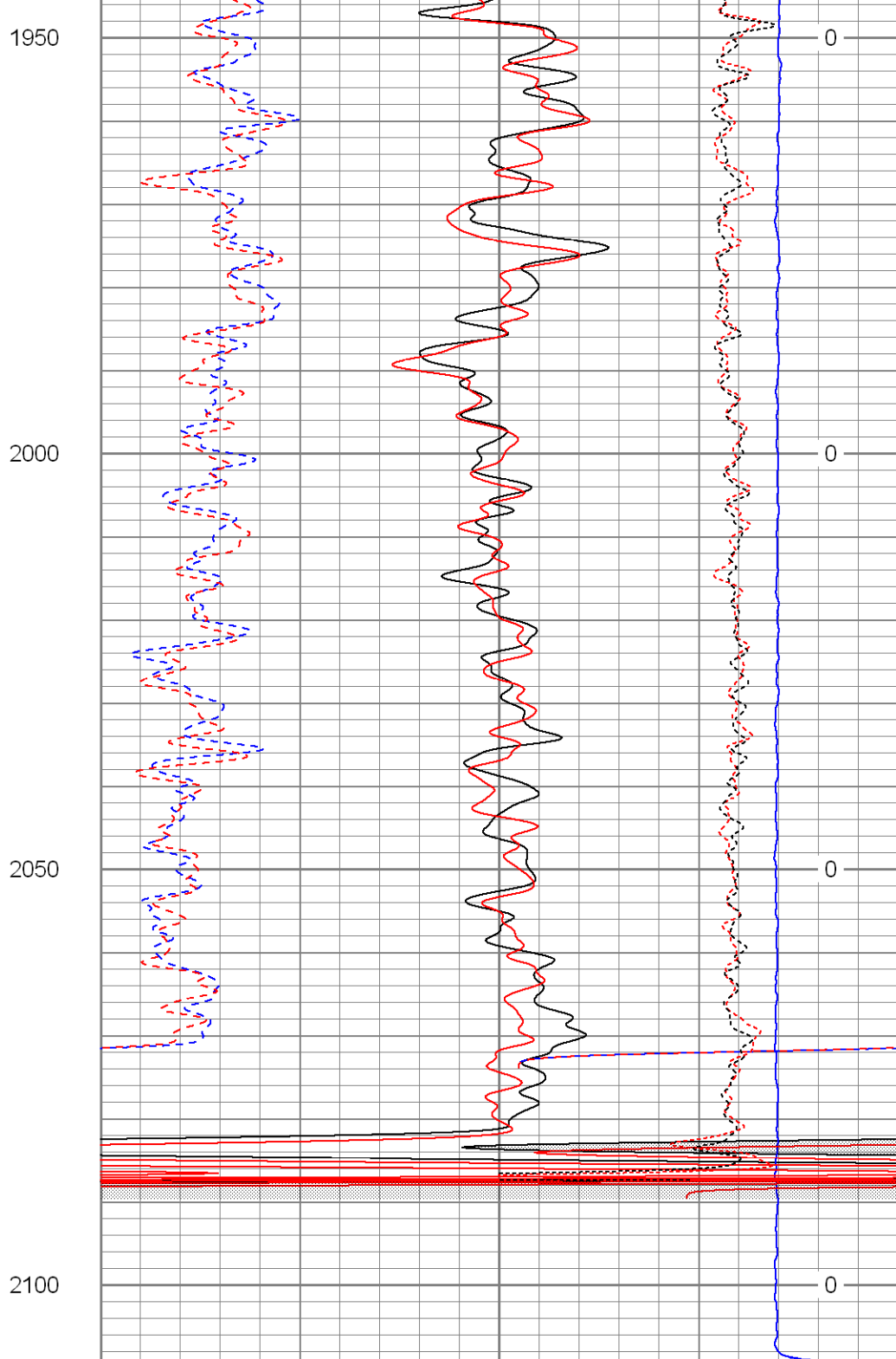
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Dataset Pathname: pass1.1  
Presentation Format: cdnl  
Dataset Creation: Sat Jul 07 11:06:42 2007 by Calc Open-Cased 061129  
Charted by: Depth in Feet scaled 1:240

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
			-0.5	RHOC (g/cc)	0.5
			4000	LTEN (lb)	0
			-0.5	RHOC-repeat (g/cc)	0.5





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

-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
-0.5	RHOC-repeat (g/cc)	0.5



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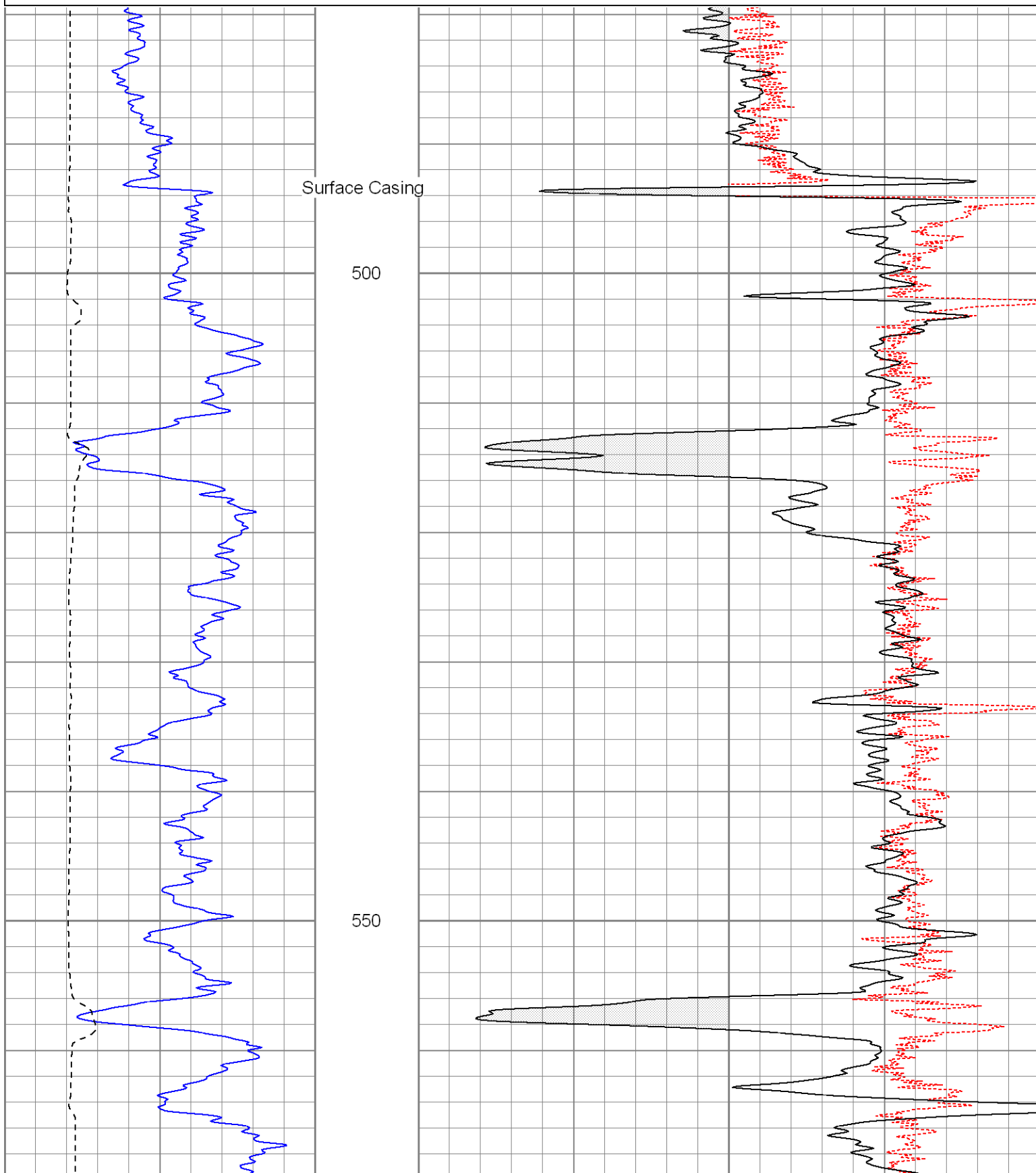
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# High Resolution Pass

Database File: xtoac0511.db  
Dataset Pathname: pass2.3  
Presentation Format: cdlhr  
Dataset Creation: Mon Jul 09 06:59:17 2007 by Calc Open-Cased 061129  
Charted by: Depth in Feet scaled 1:120

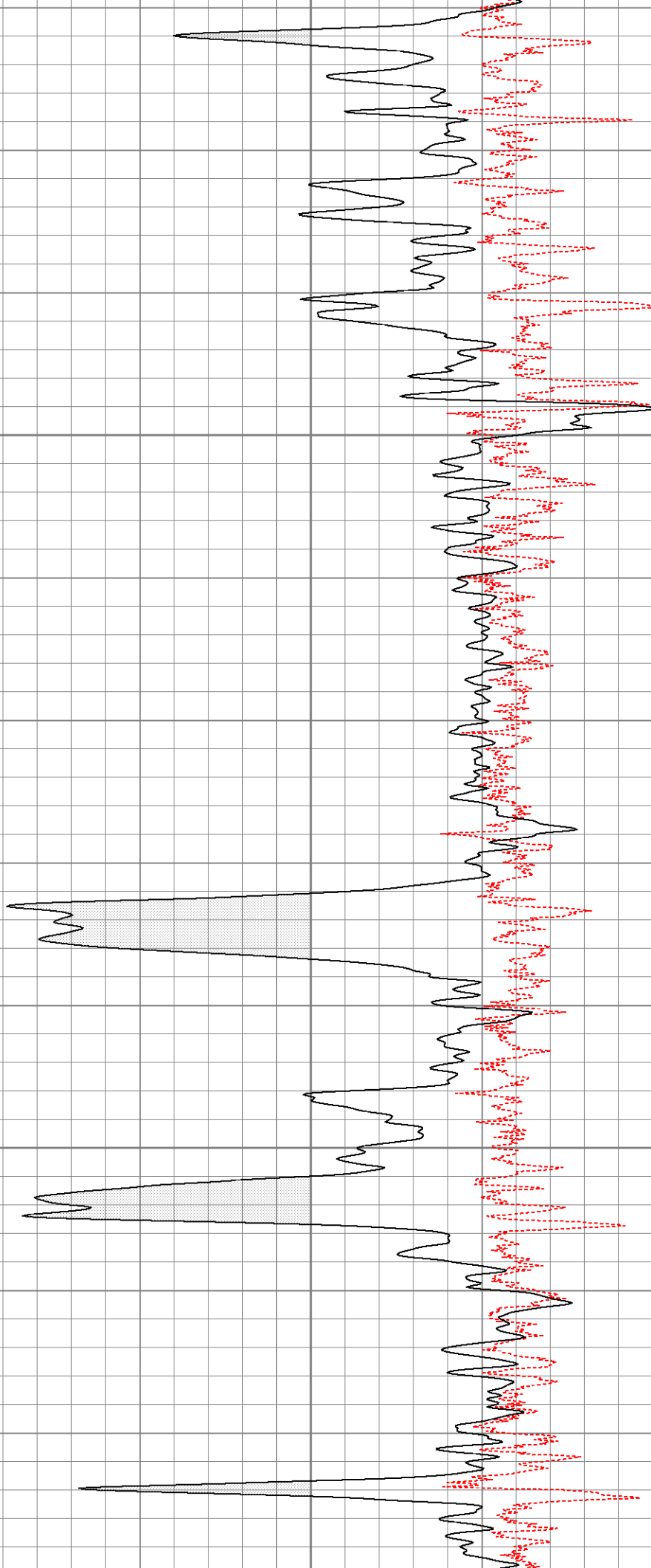
0	GR (GAPI)	200
6	DCAL (in)	16

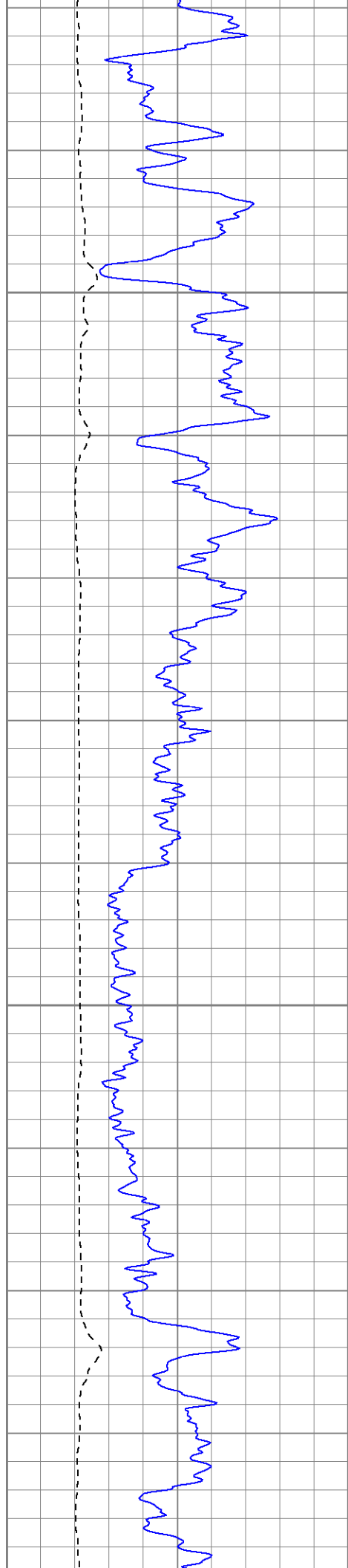
1	RHOB (g/cc)	3
-0.5	RHOC (g/cc)	0.5



600

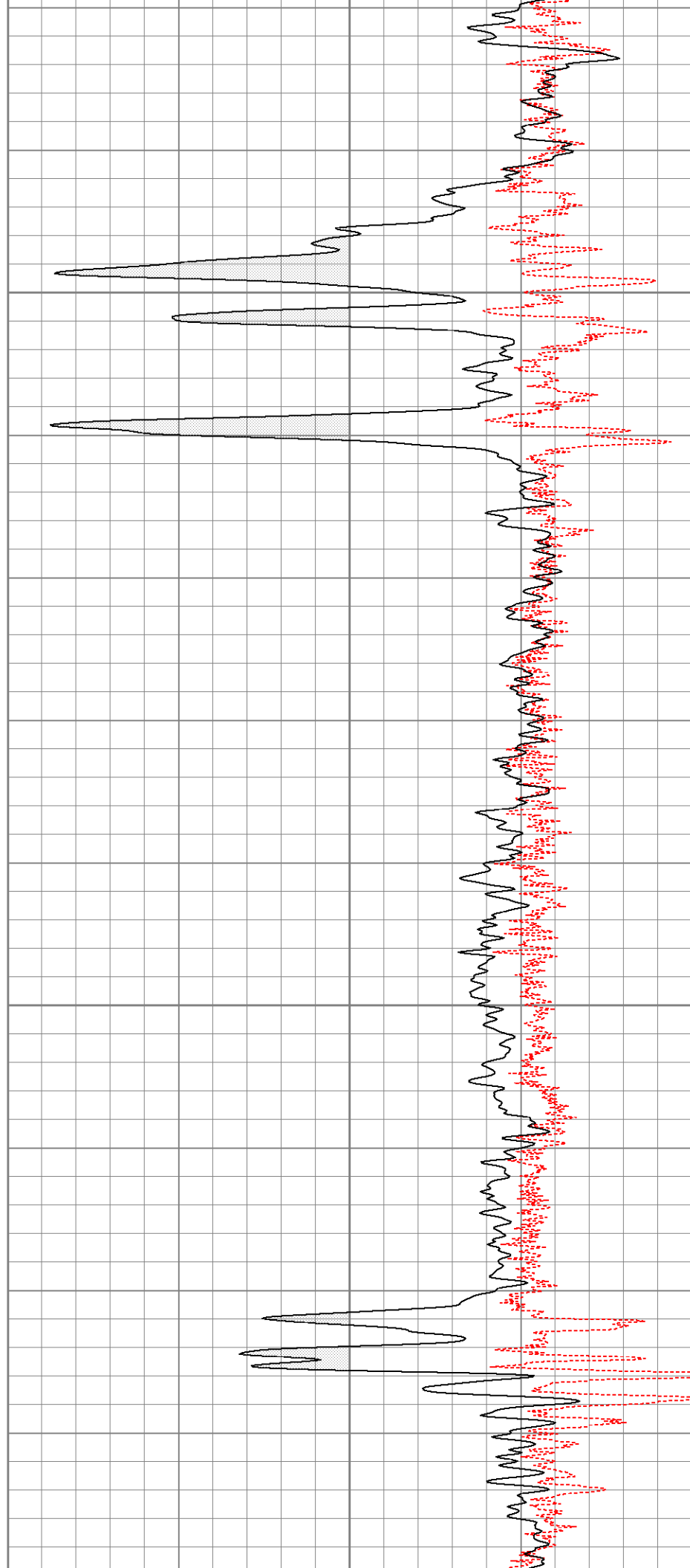
650

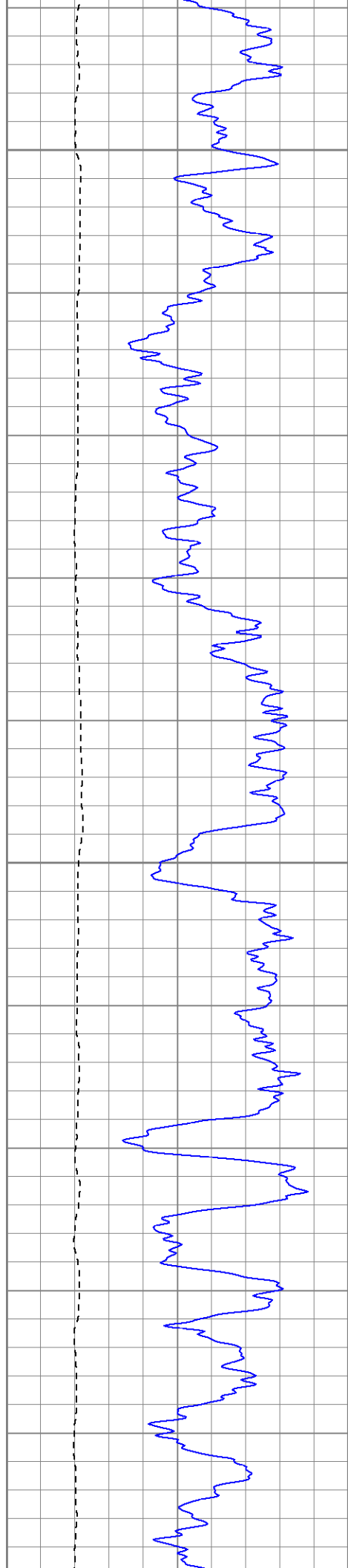




700

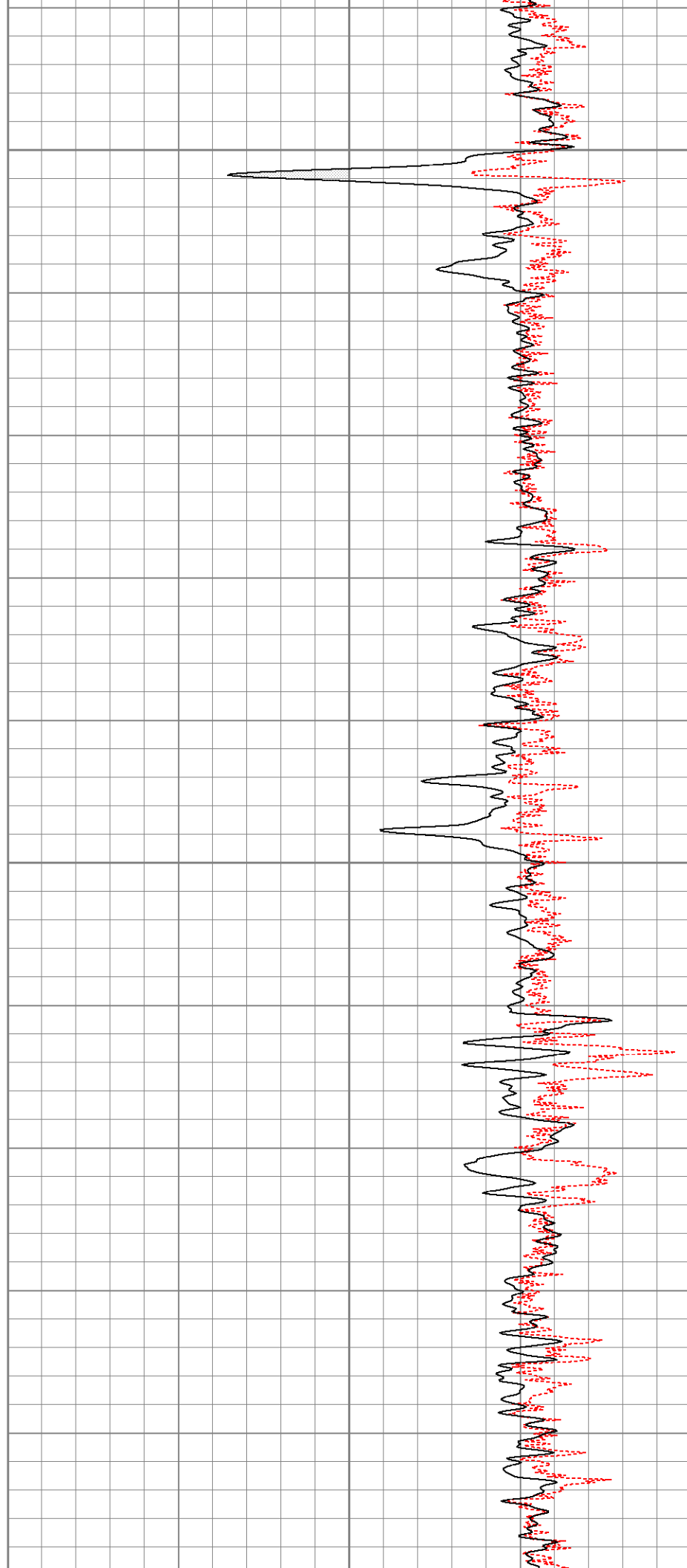
750

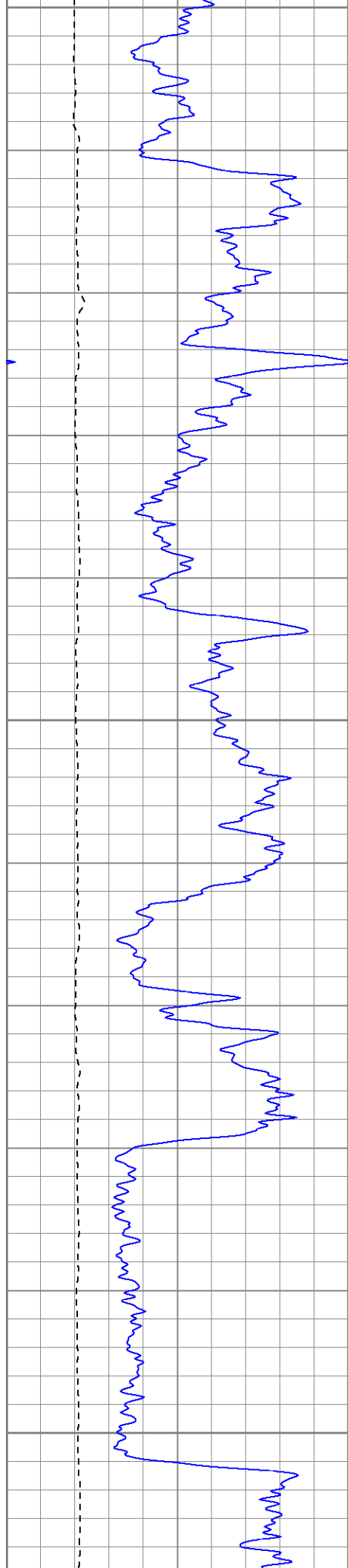




800

850

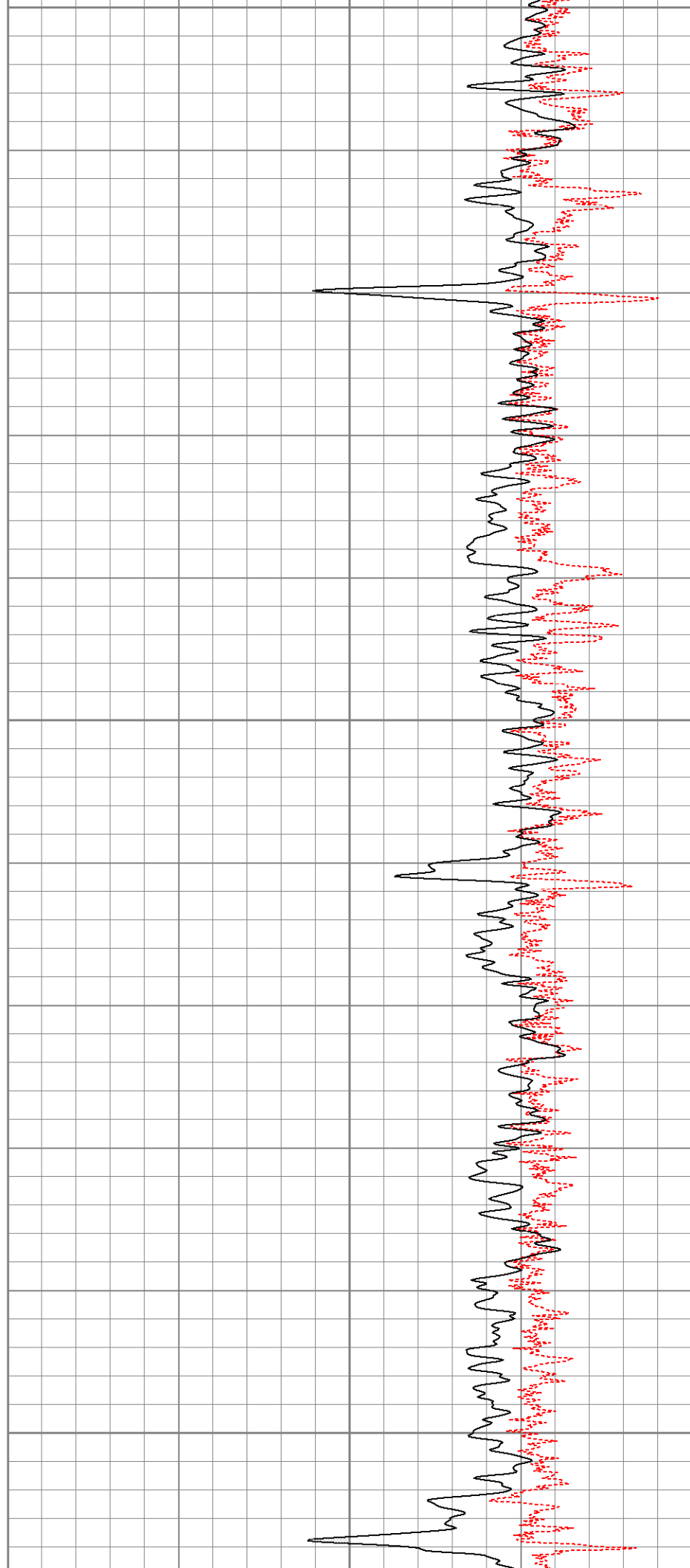


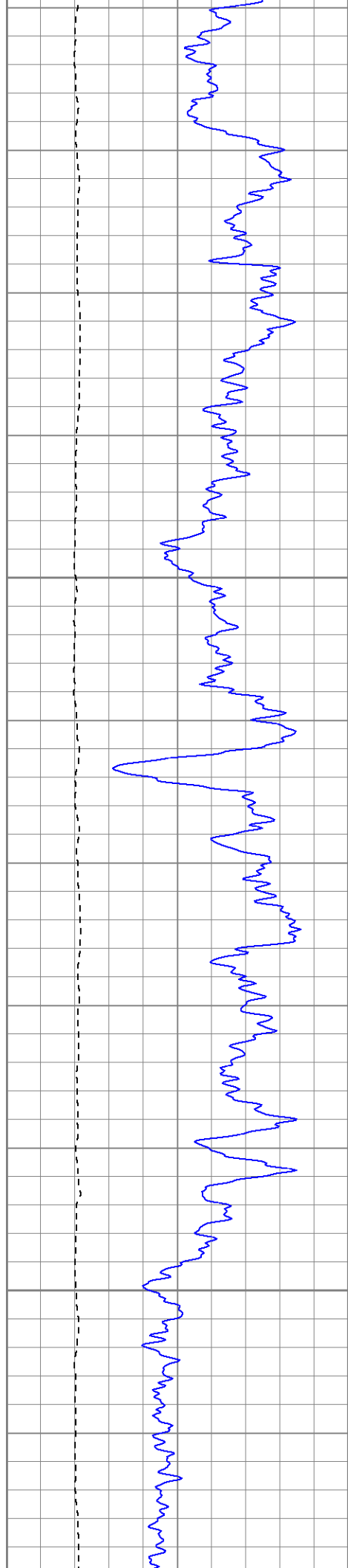


900

950

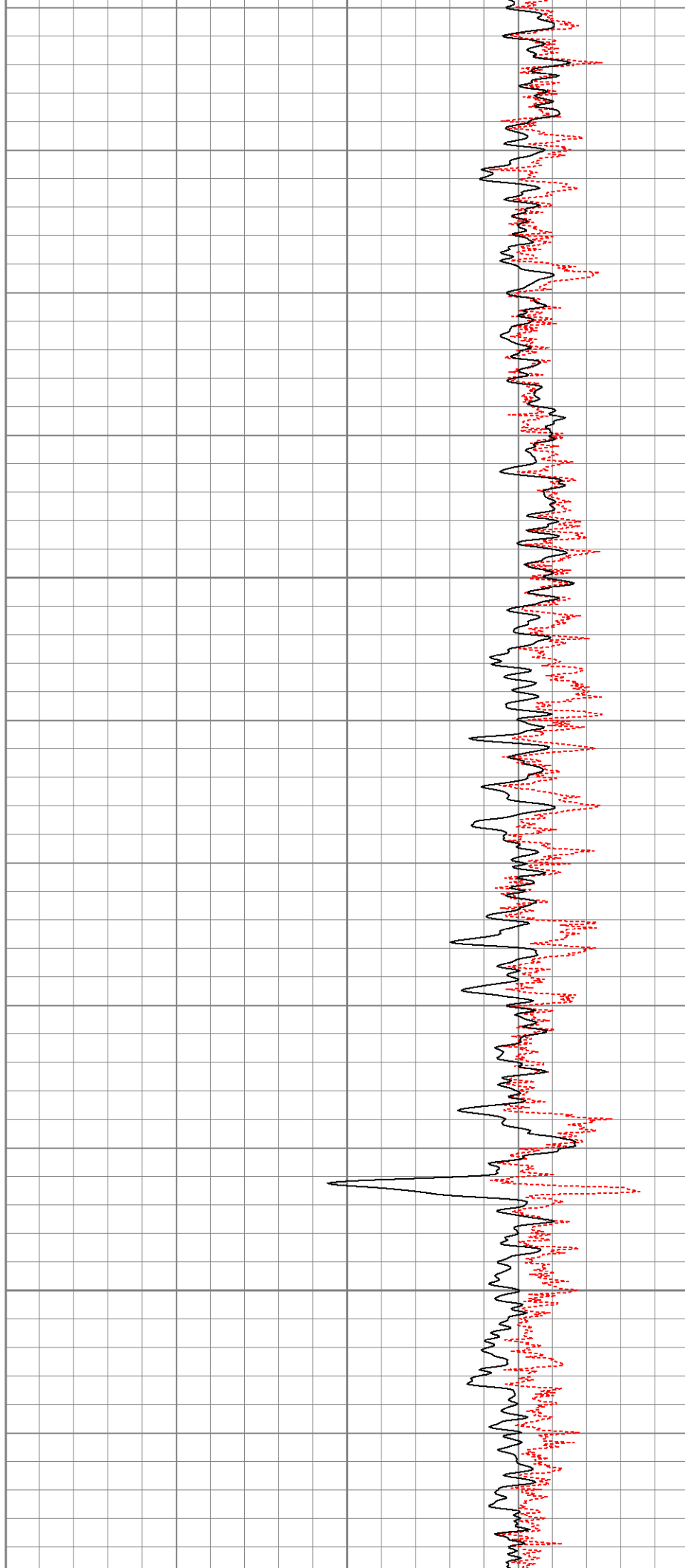
1000



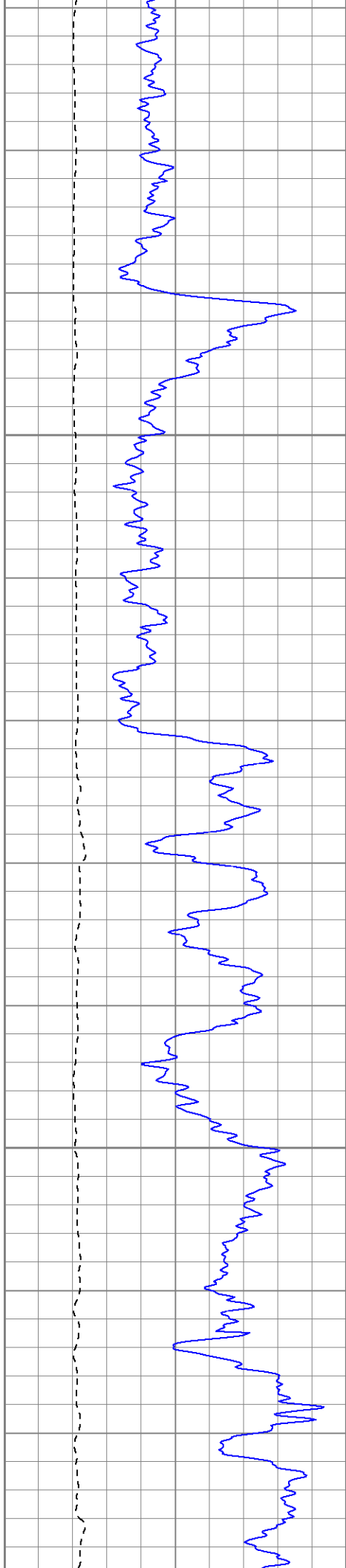


1050

1100

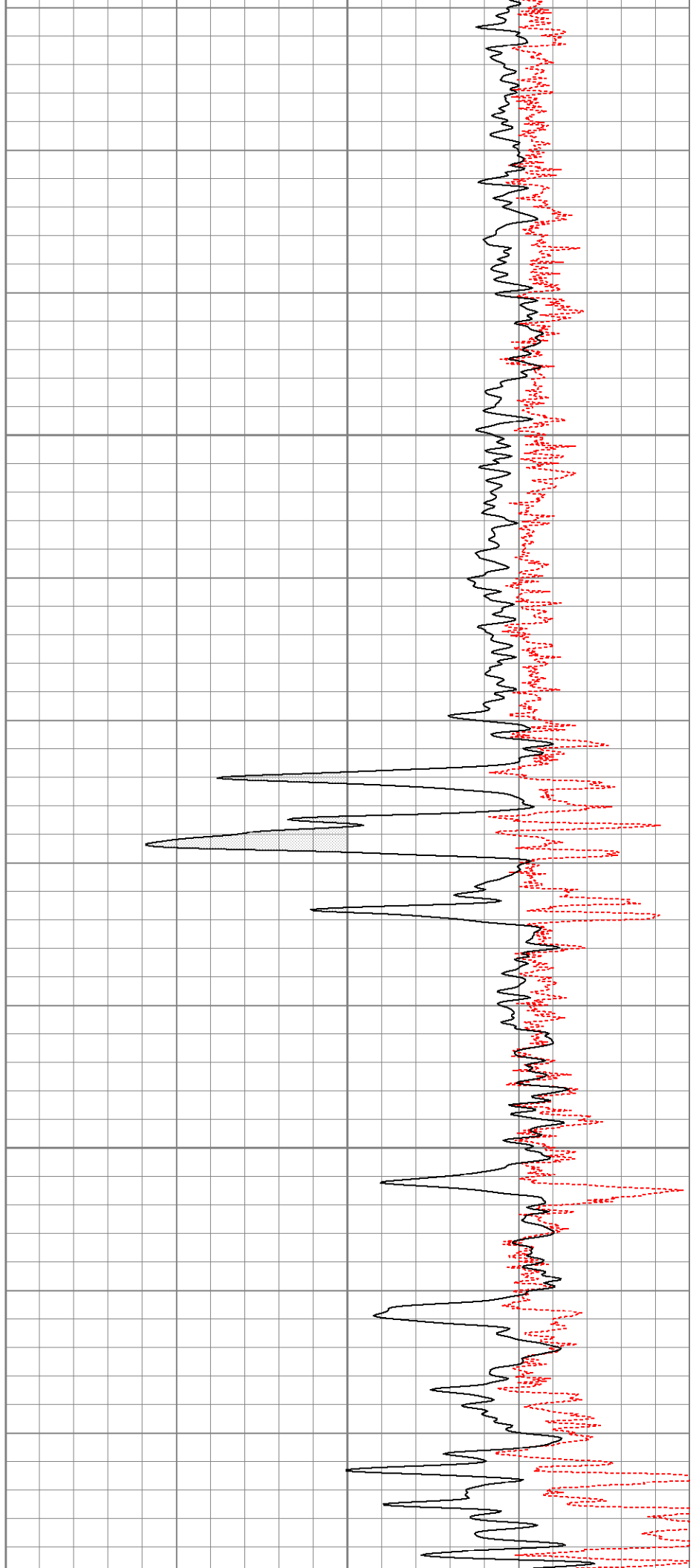


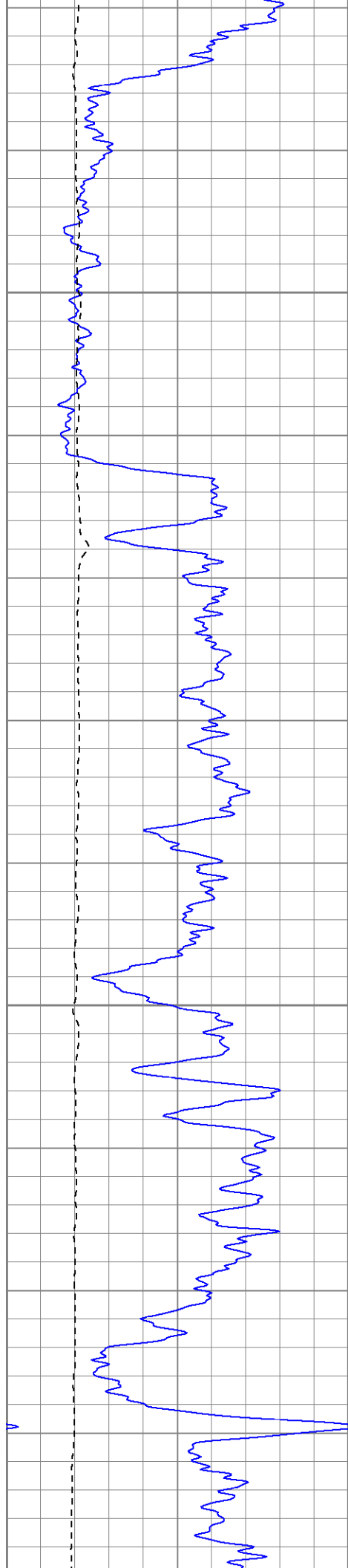




1150

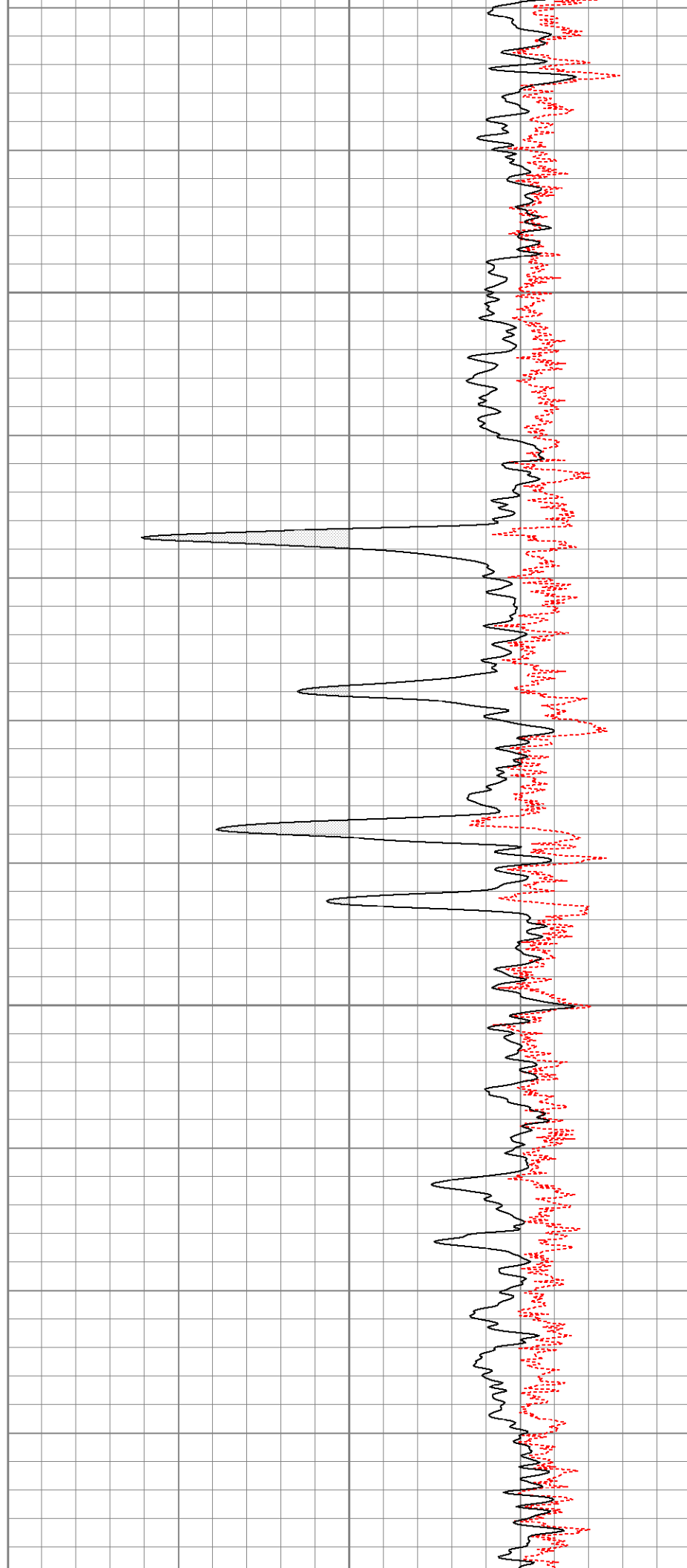
1200

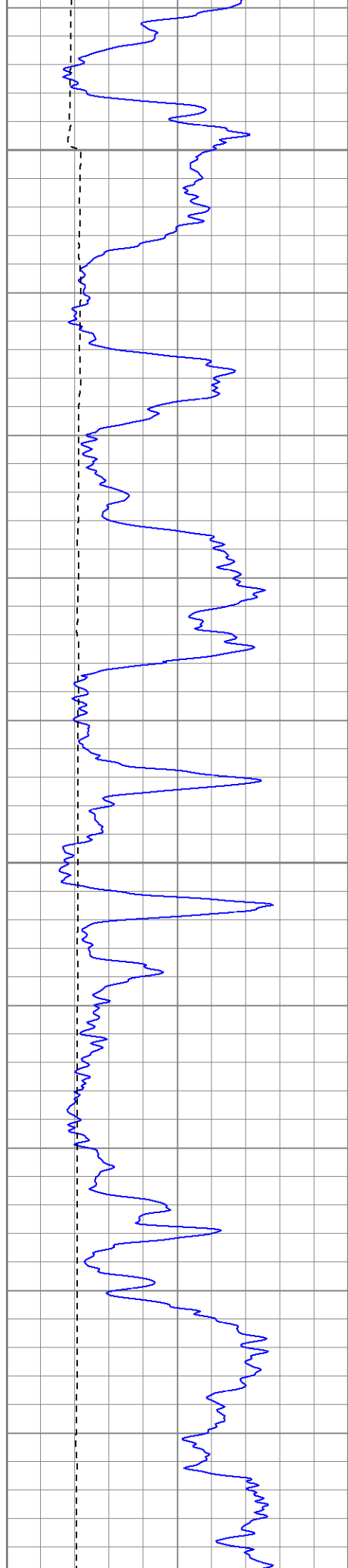




1250

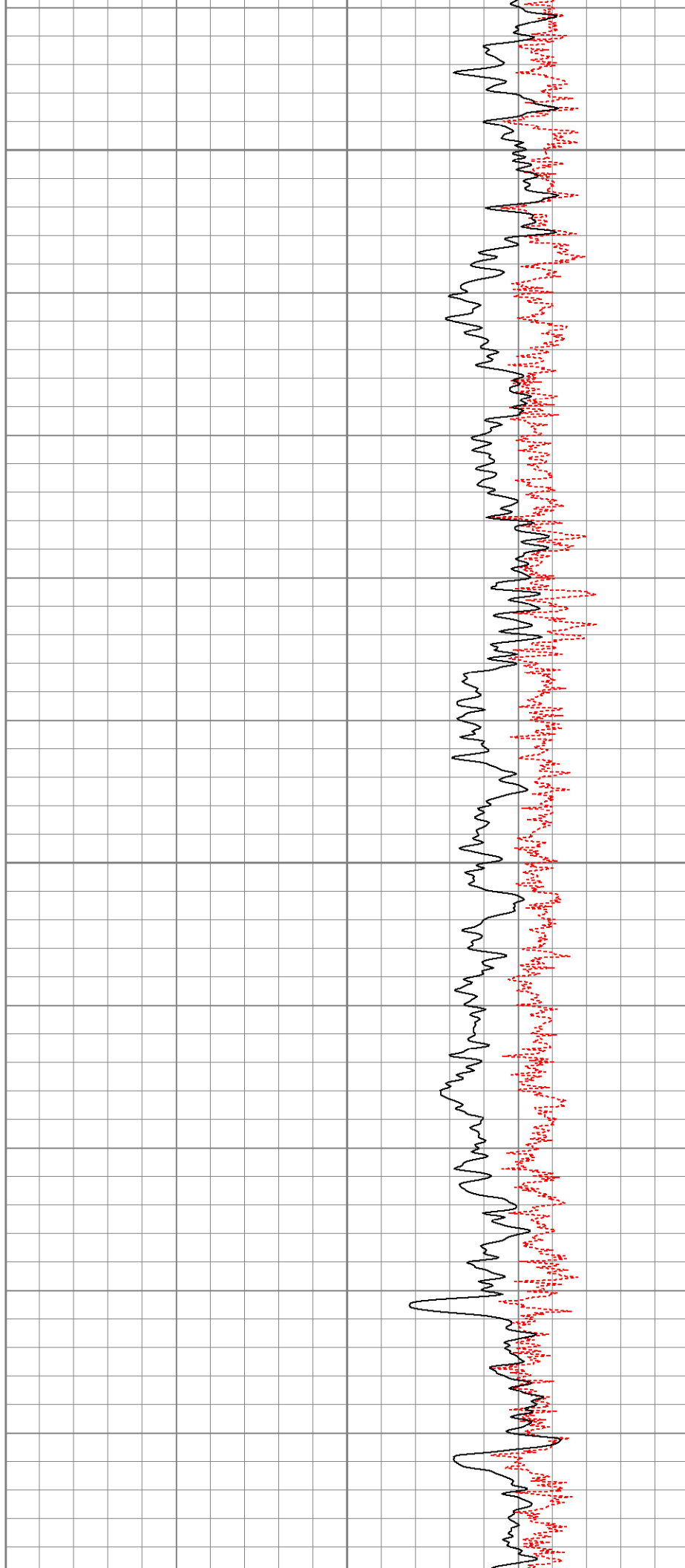
1300





1350

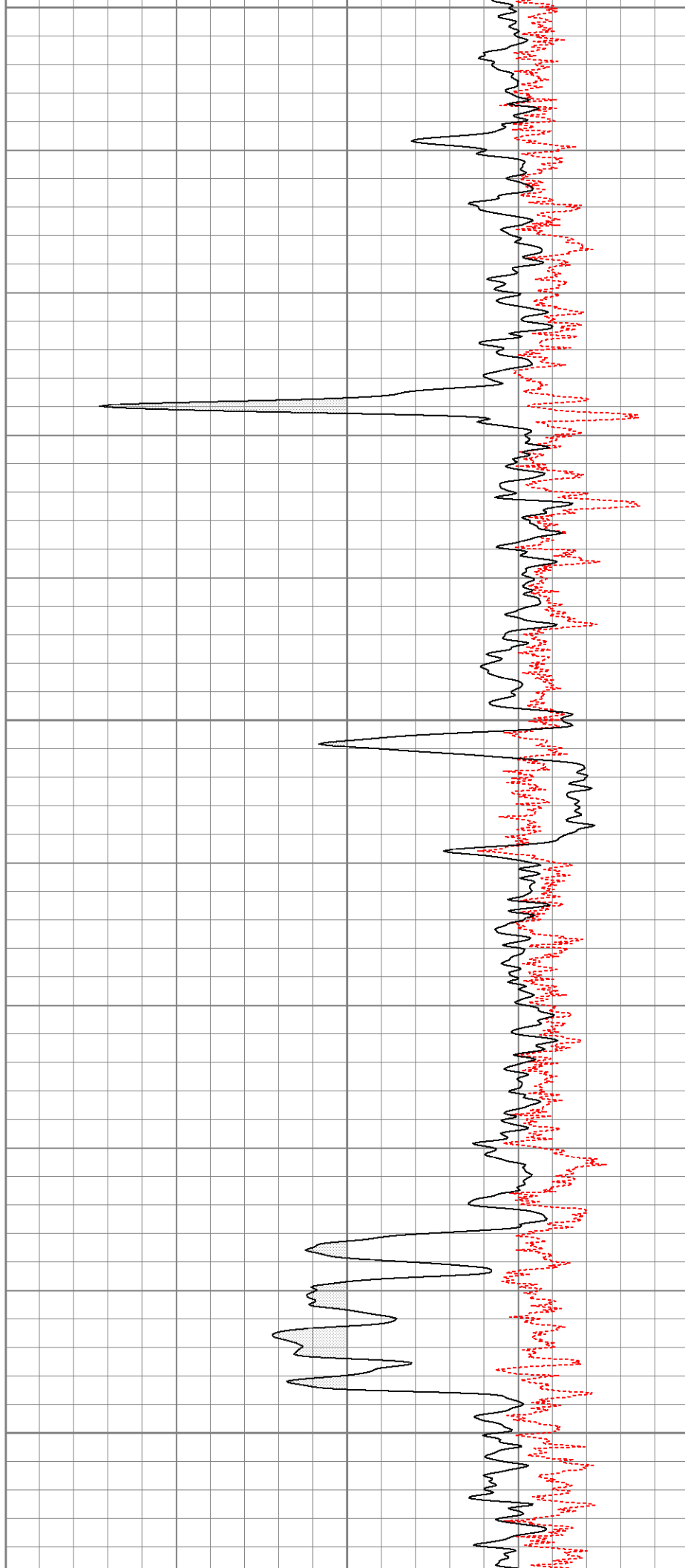
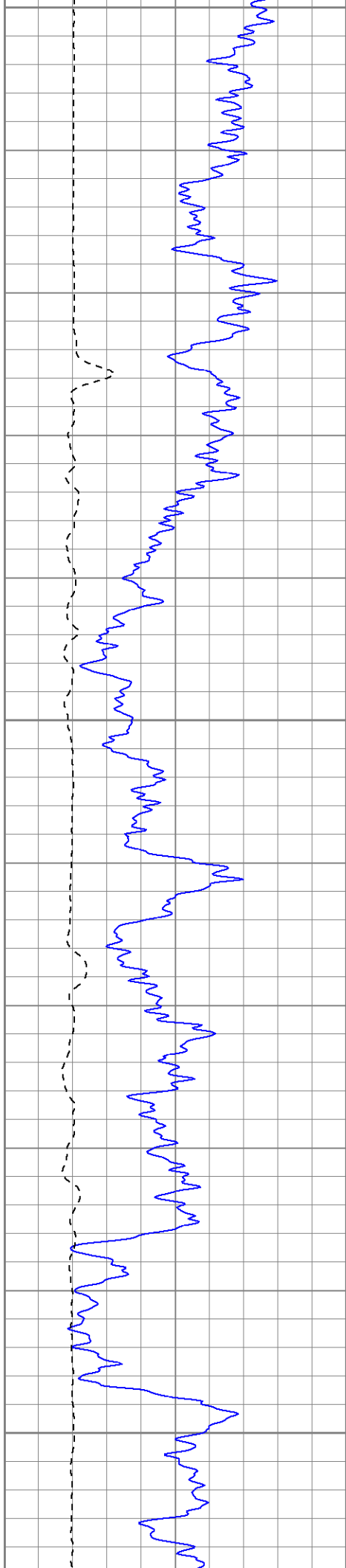
1400

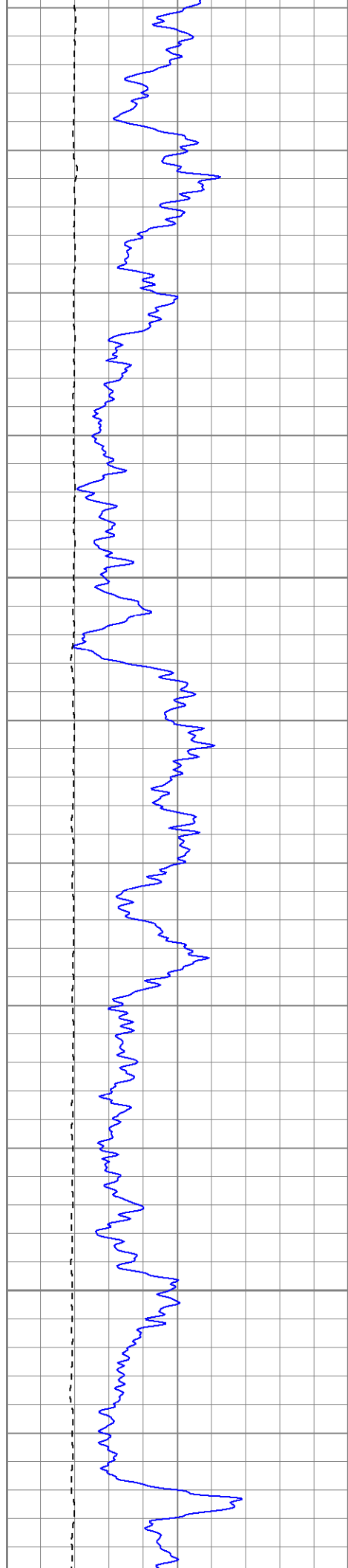


1450

1500

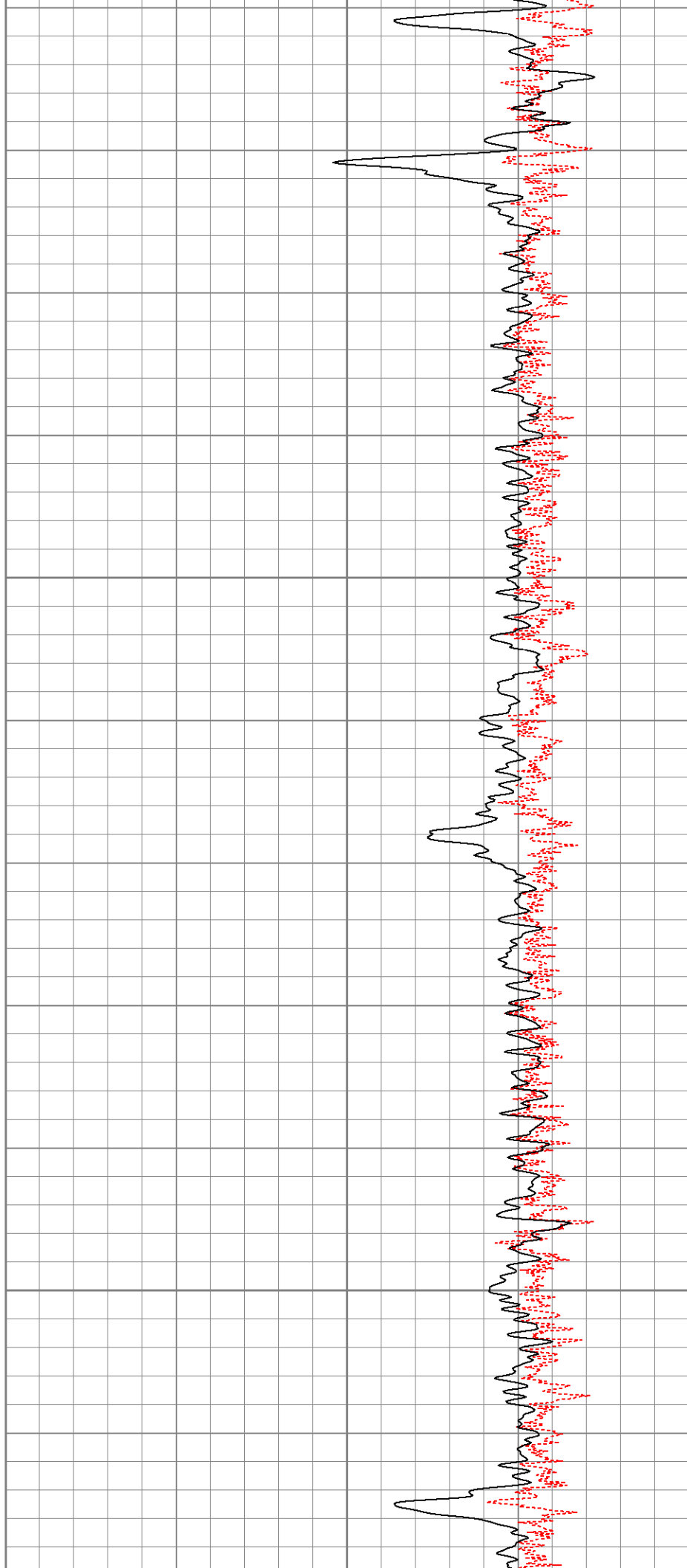
1550

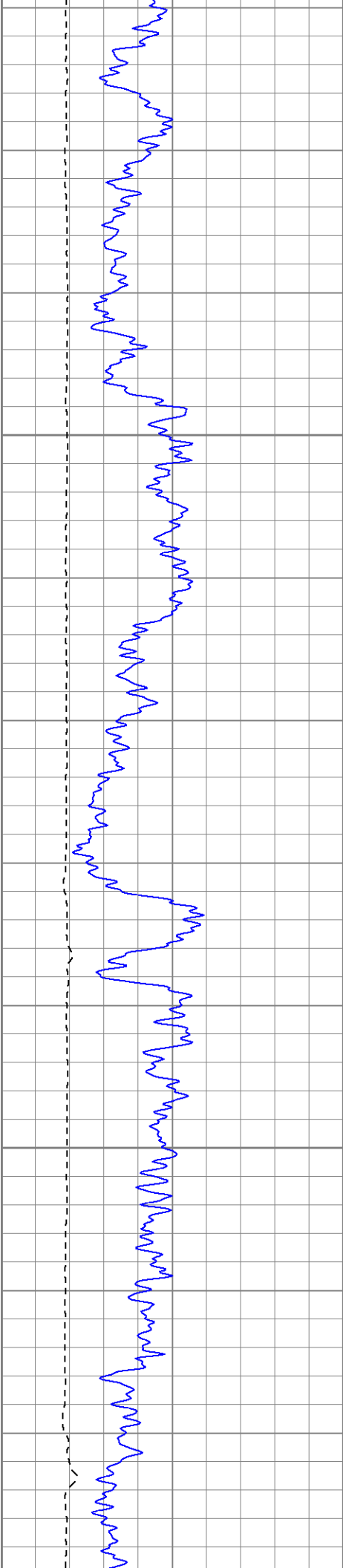




1600

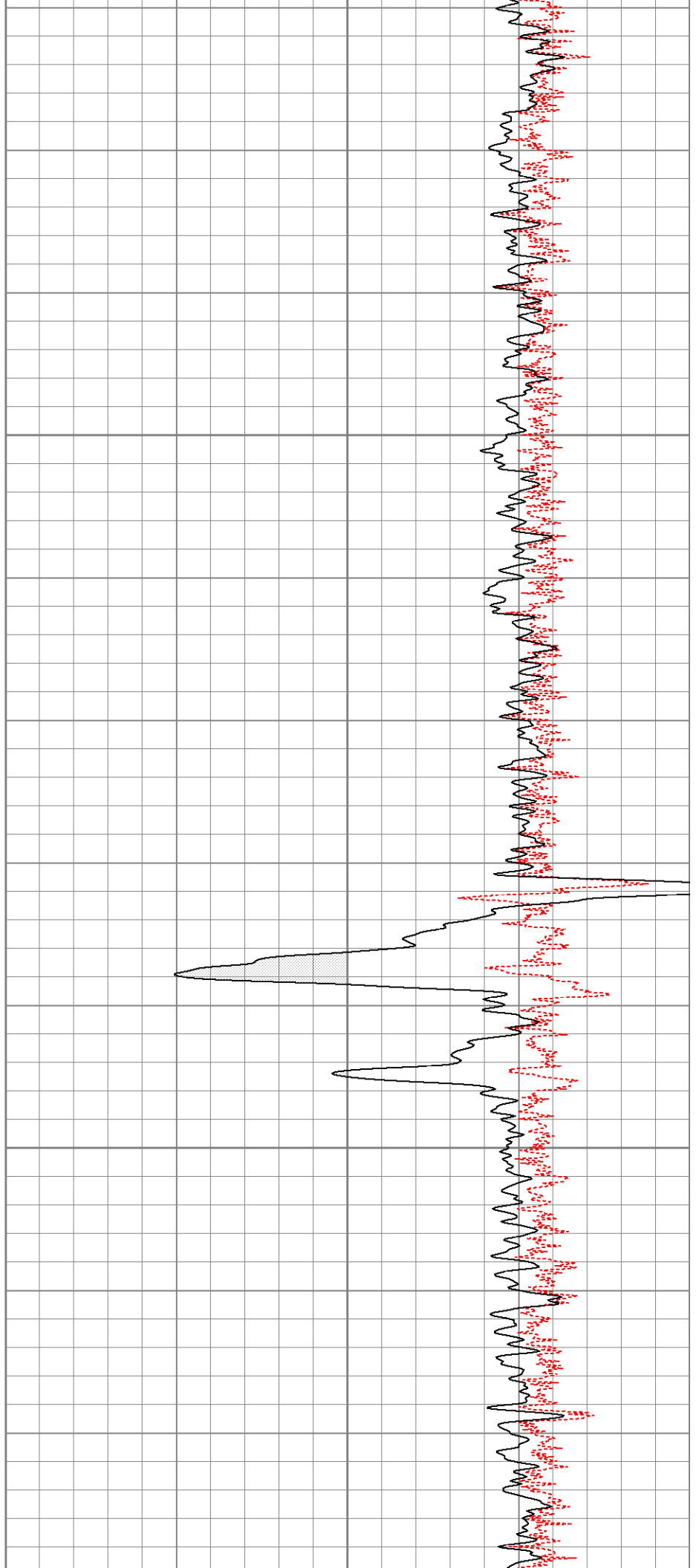
1650

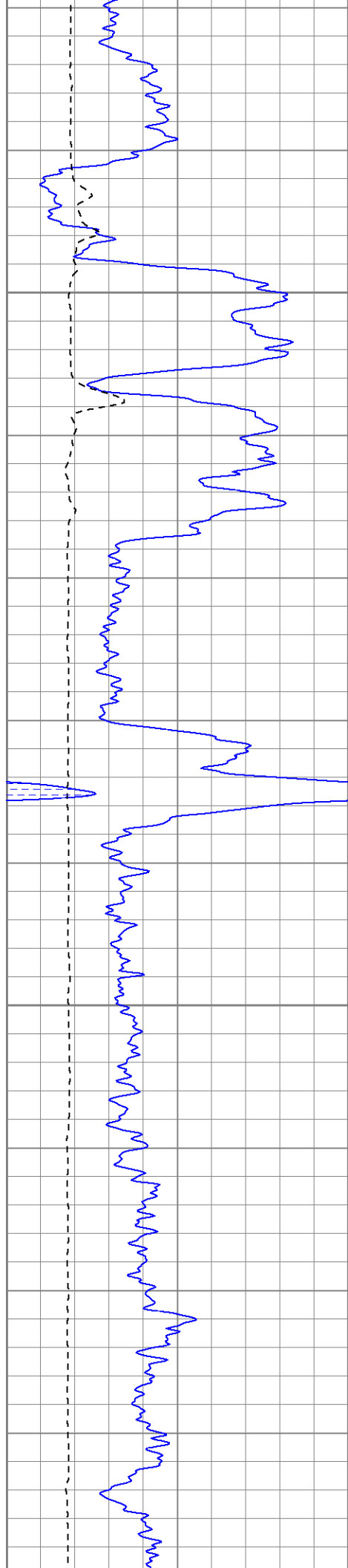




1700

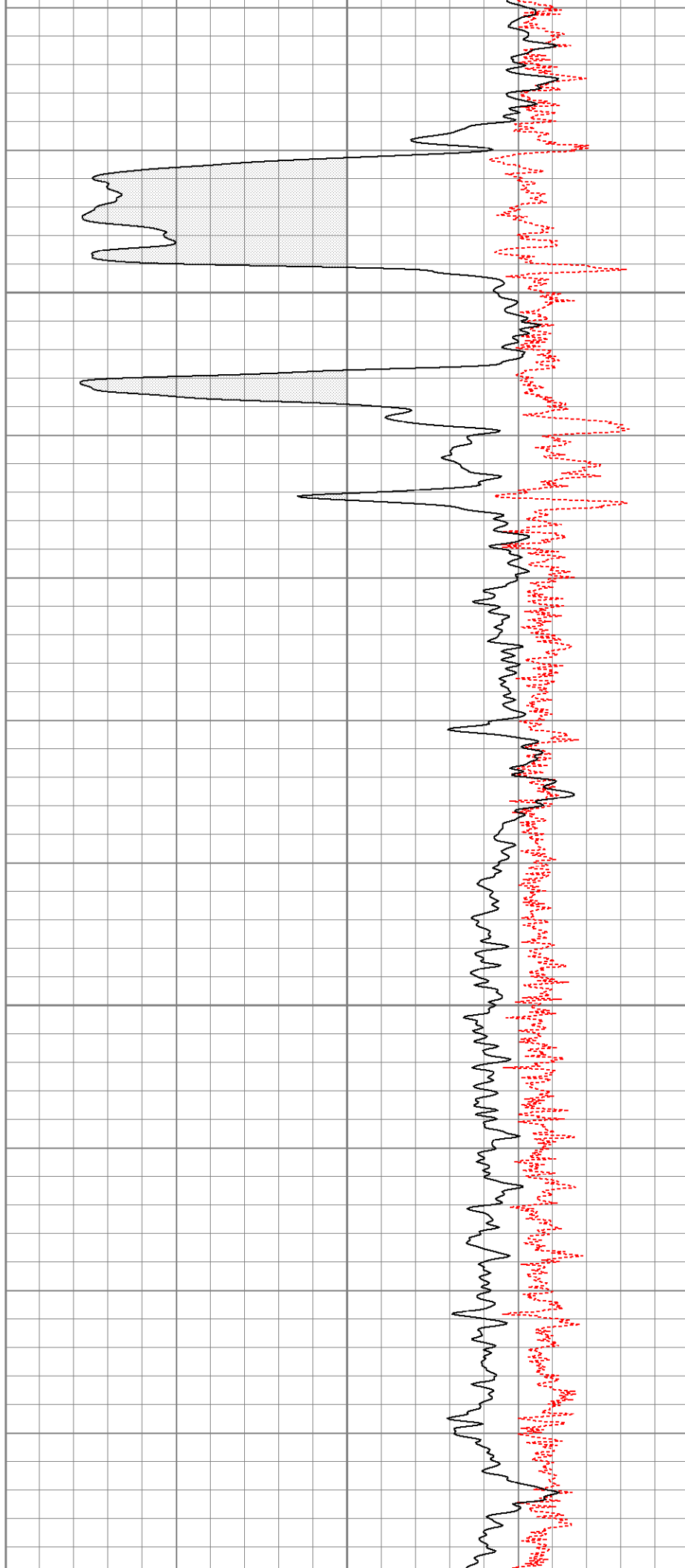
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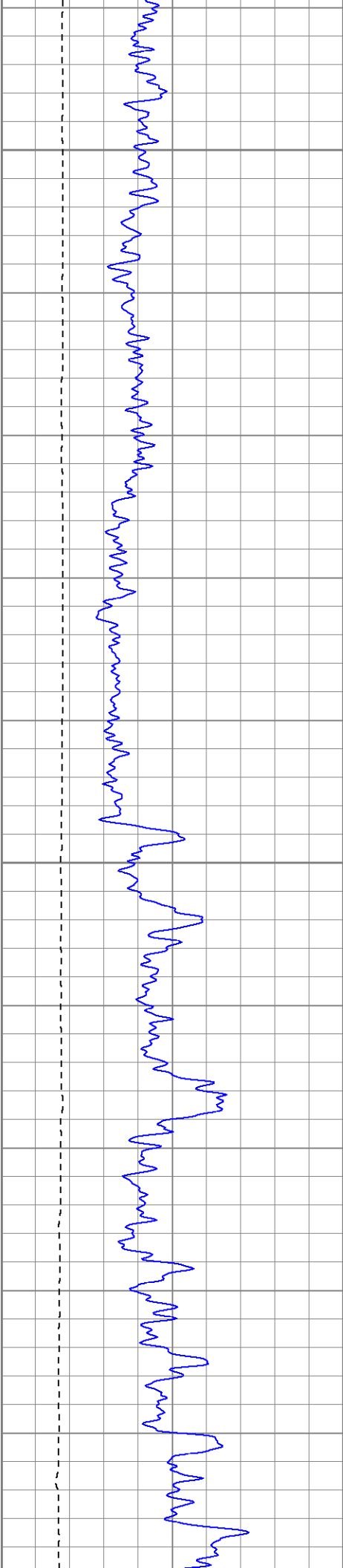




1800

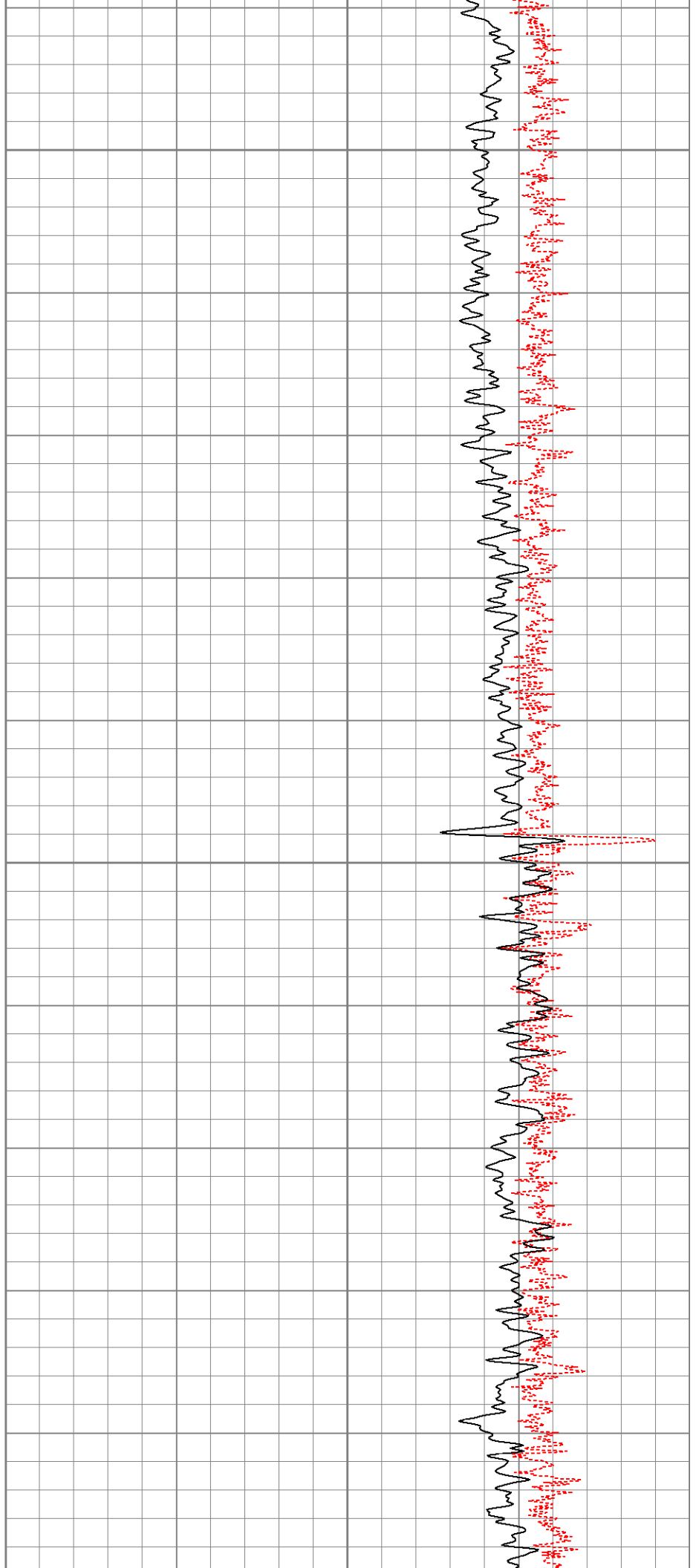
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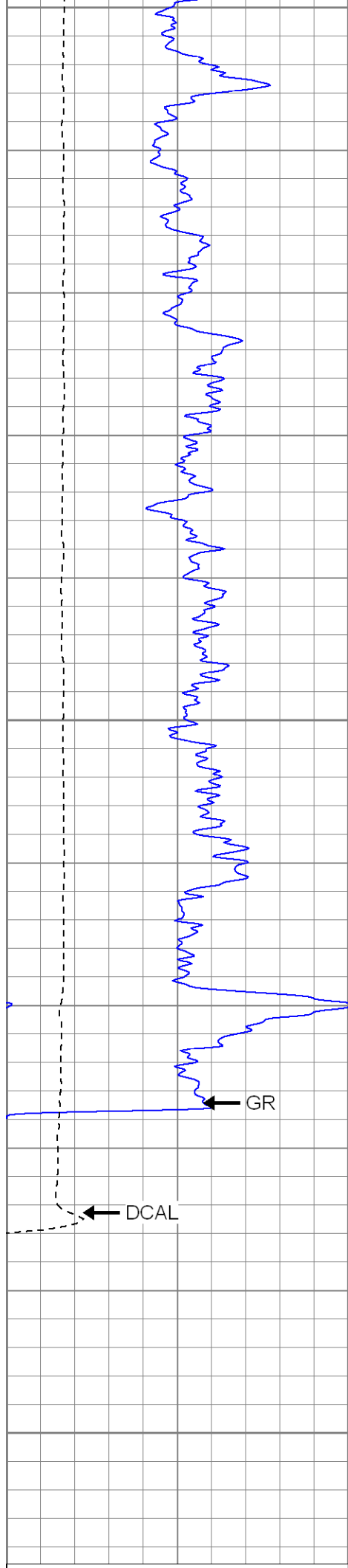


1900

1950



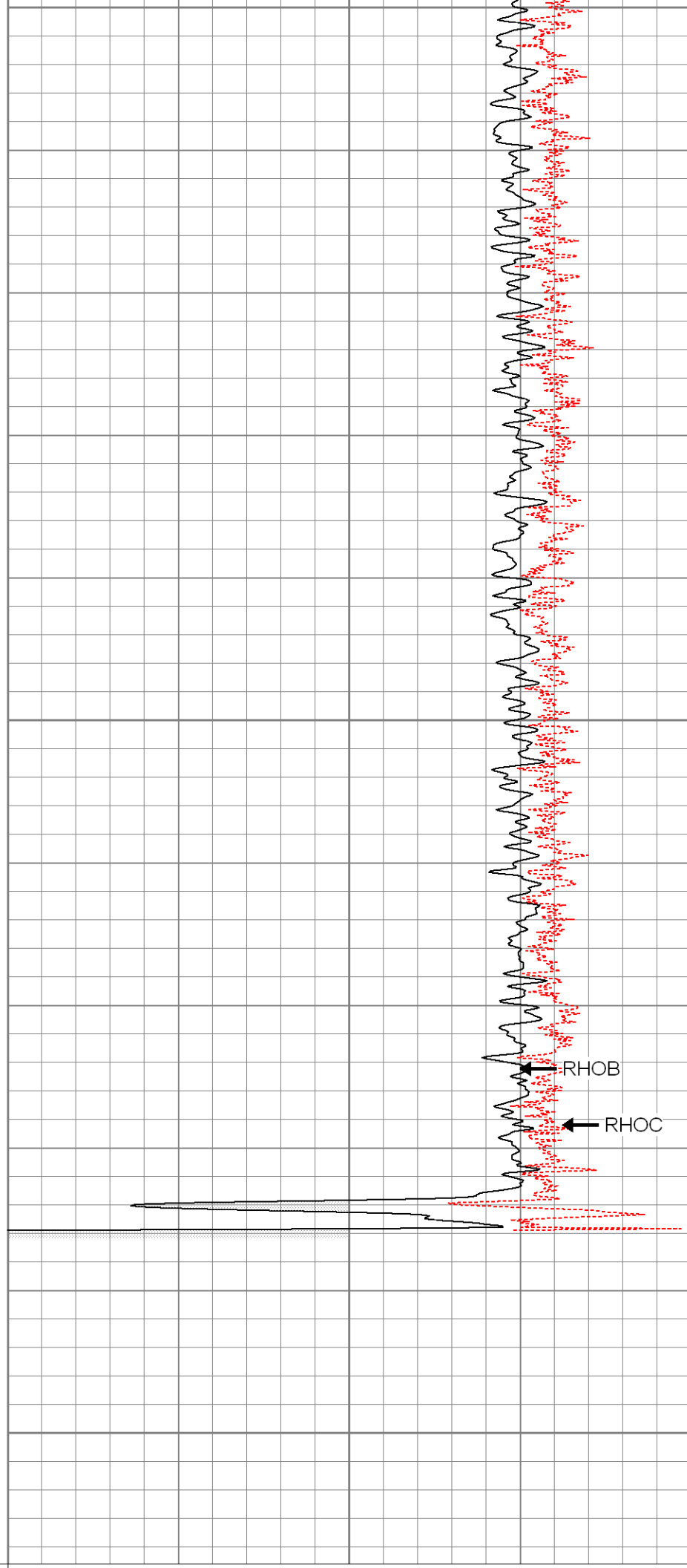




2000

2050

2100









Serial Number:	2001
Tool Model:	OH
Performed:	Tue May 29 19:51:06 2007

Performed: Tue May 29 19:51:00 2007

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:	Mon Apr 23 18:30:25 2007
Calibrator Value:	1200 NAPI
Calibrator Reading:	1700 cps
Sensitivity:	1 NAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
NEU	37.19		None	0.75	1.50	5.00
			NEU-G (5145) Gearhart Epithermal	5.75	3.50	85.00
GR	31.62		GR-OH (2001) SIE	3.50	3.25	40.00
LSD	23.45		CDL-poilex (2118)	8.79	4.00	275.00
DCAL	23.04					
SSD	22.91					
CILD SP	10.60 10.60		DIL-G (5375) Gearhart	20.83	4.00	345.00
CILM	6.89					
RLL3	1.70					

Dataset:	xtoac0511.db: field/well/run1/pass1
Total Length:	39.62 ft
Total Weight:	750.00 lb
O.D.	4.00 in

