



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

COMPENSATED DENSITY NEUTRON LOG

Company XTO Energy Inc.

Well Apache Canyon 05-02

Field Purgatoire River

County Las Animas State Colorado

Location: API # : 05 071 09134 00

546' FNL & 1492' FEL

SEC 05 TWP 34S RGE 67W

Permanent Datum Ground Level Elevation 7870'

Log Measured From Ground Level

Drilling Measured From Ground Level

Other Services
dill

Elevation
K.B. -----
D.F. -----
G.L. 7870'

Date 6-11-07

Run Number Two

Depth Driller 2475'

Depth Logger 2472'

Bottom Logged Interval 2470'

Top Log Interval Surface Casing

Casing Driller 8 5/8" @ 496'

Casing Logger 495'

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 11:00 A.M.

Time Logger on Bottom 1:30 P.M.

Maximum Recorded Temperature 108 DEG F

Equipment Number T697

Location Trinidad

Recorded By M. Norton

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

Density Neutron Porosity Presented On Sandstone Matrix.
ABHV Calculated For 5 1/2" Casing
Well Directions:
First Bosque entrance just before Weston, first right at Cherry Canyon,
stay left at Y, stay on main road approx. four and half miles,
take road to right, second drive thru location.

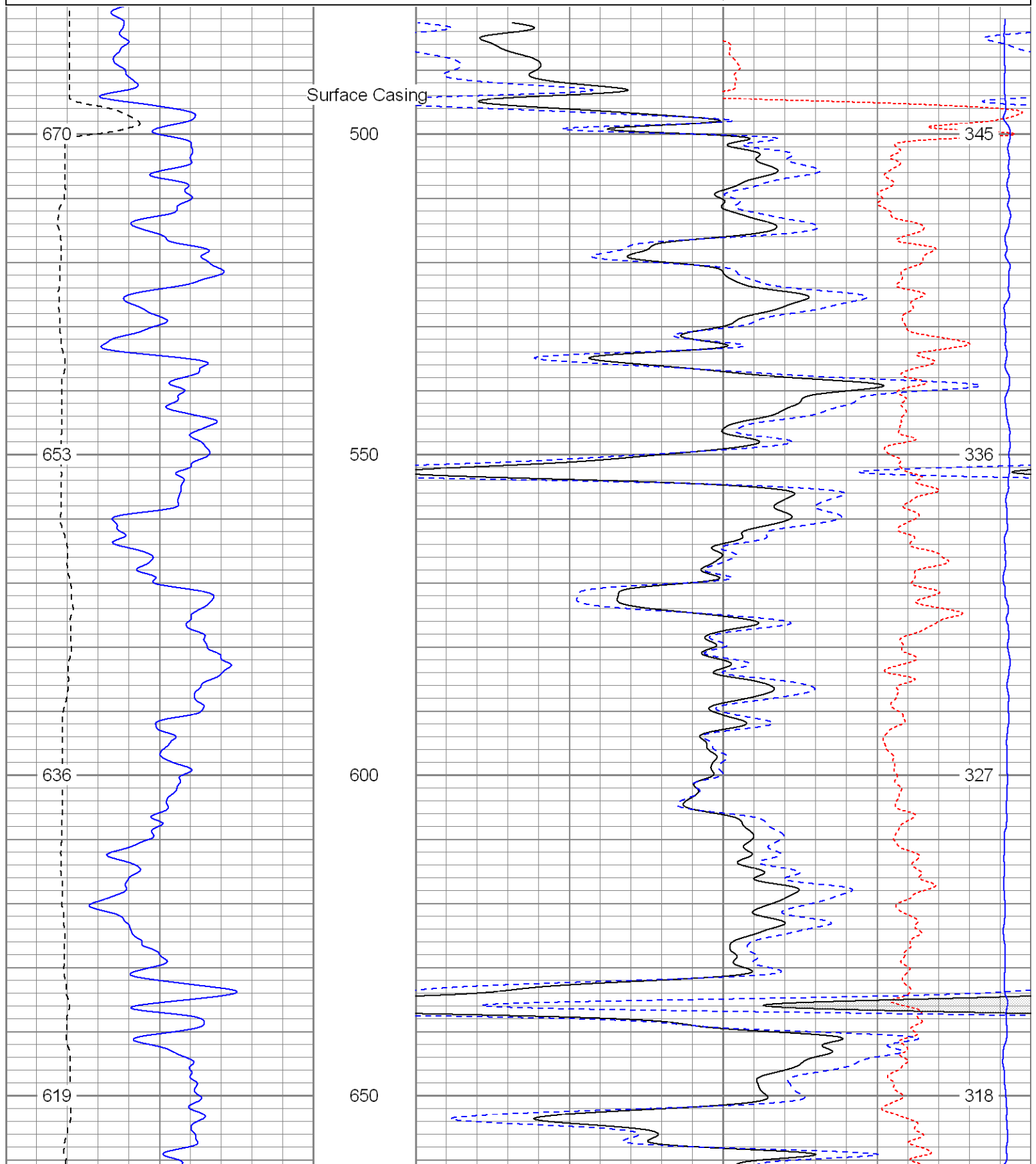


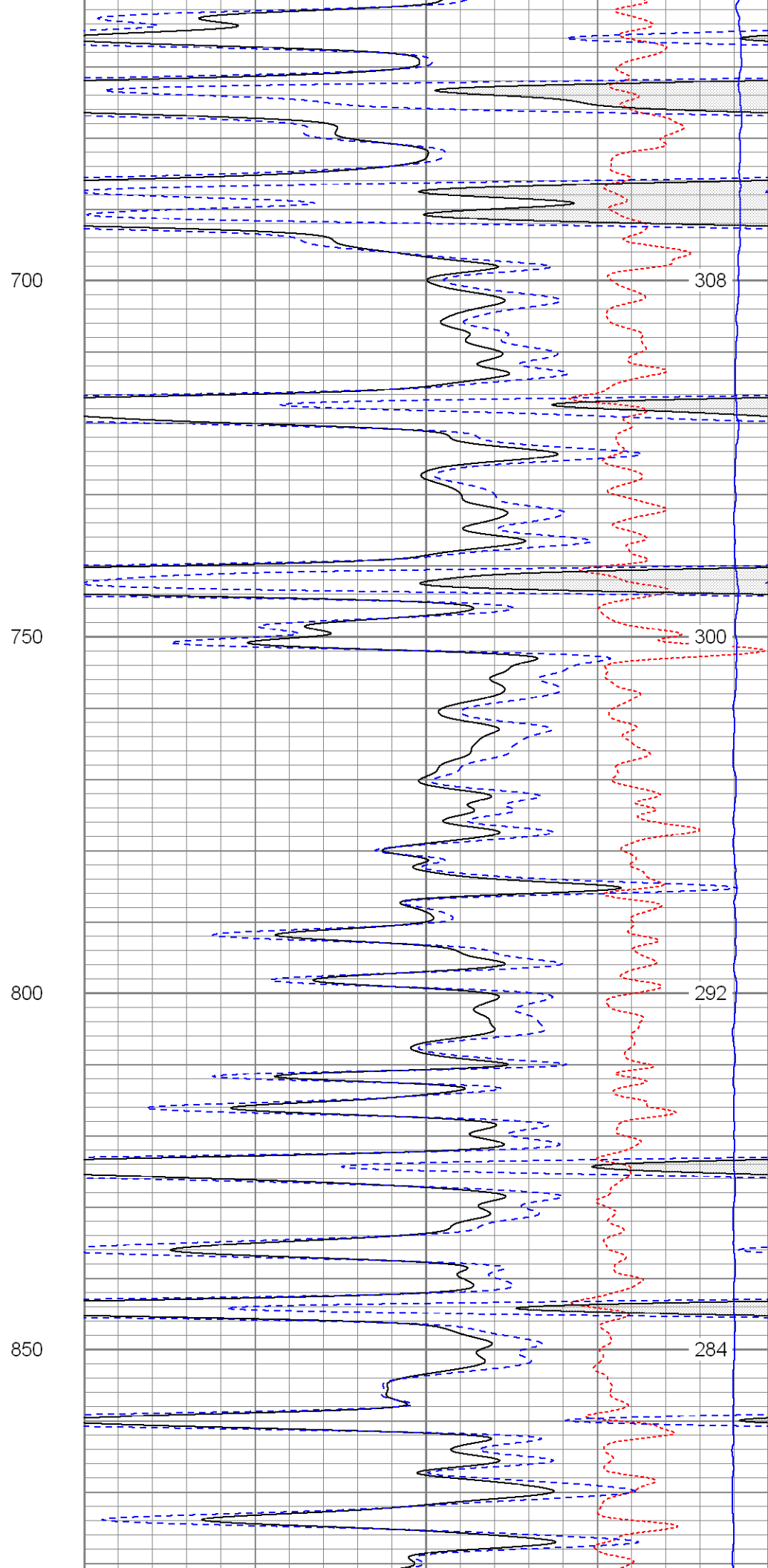
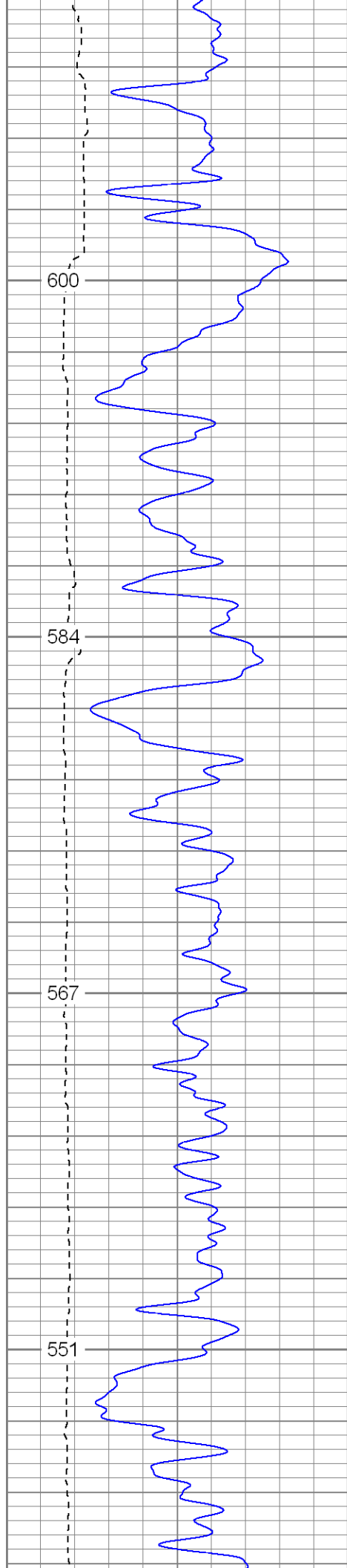
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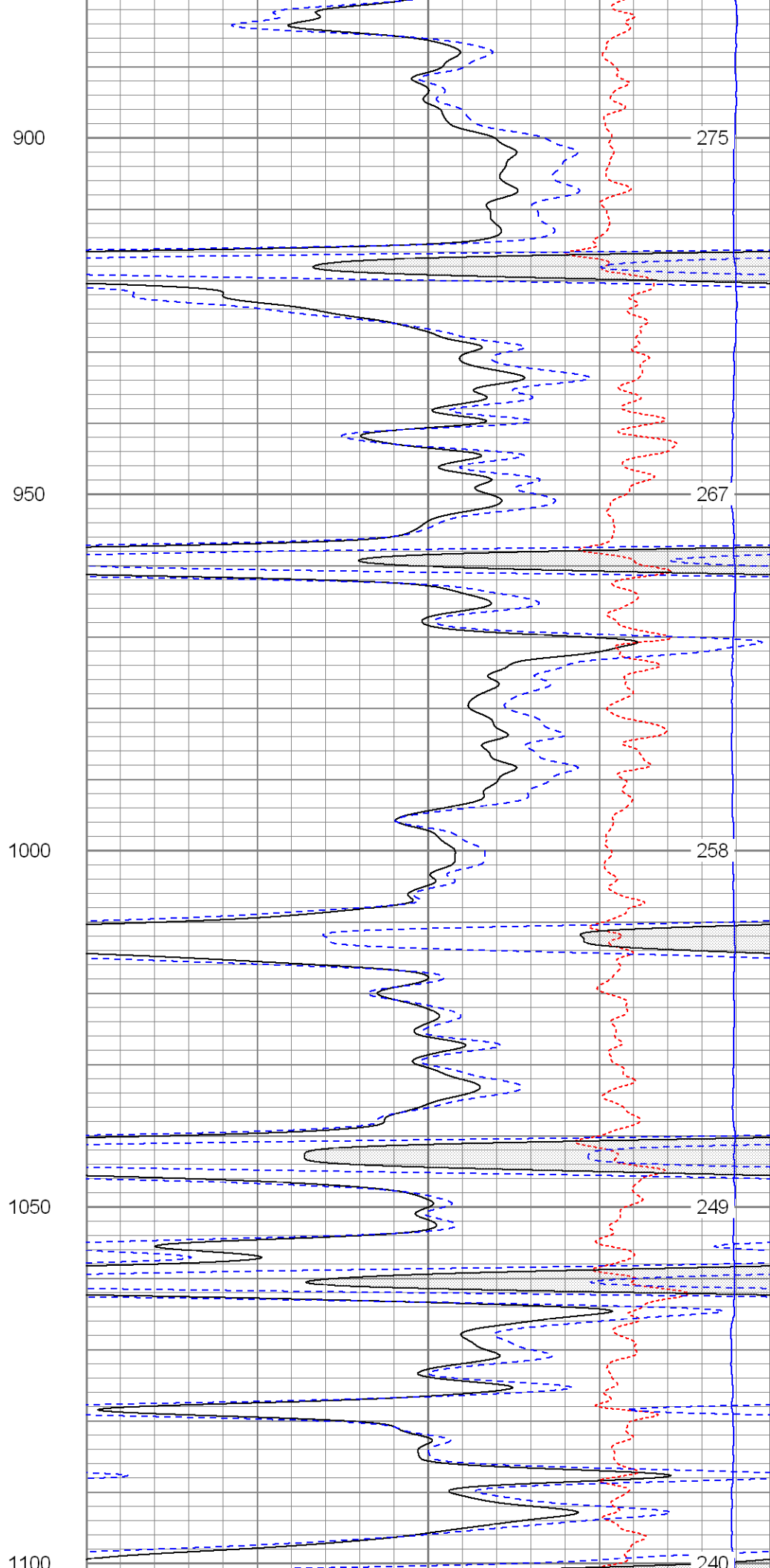
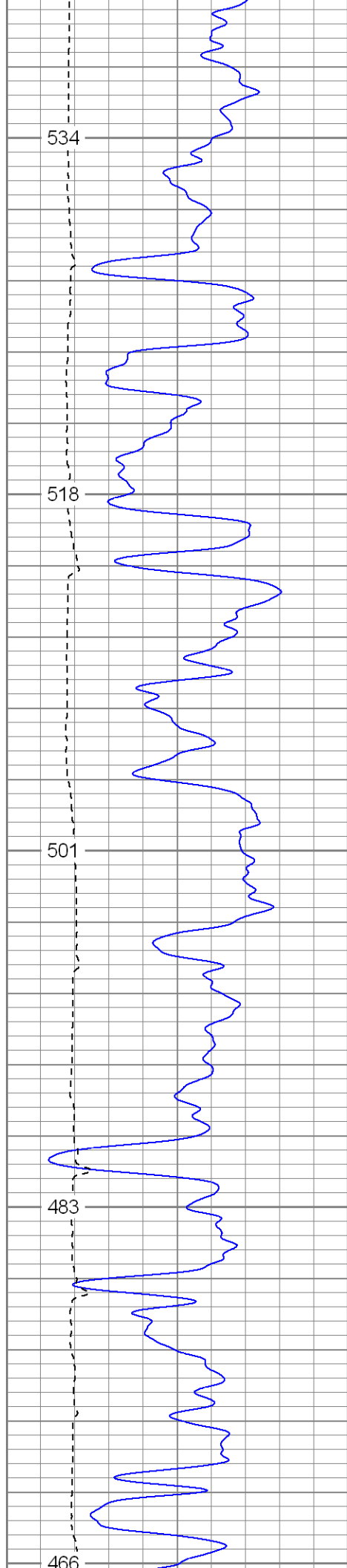
Main Pass

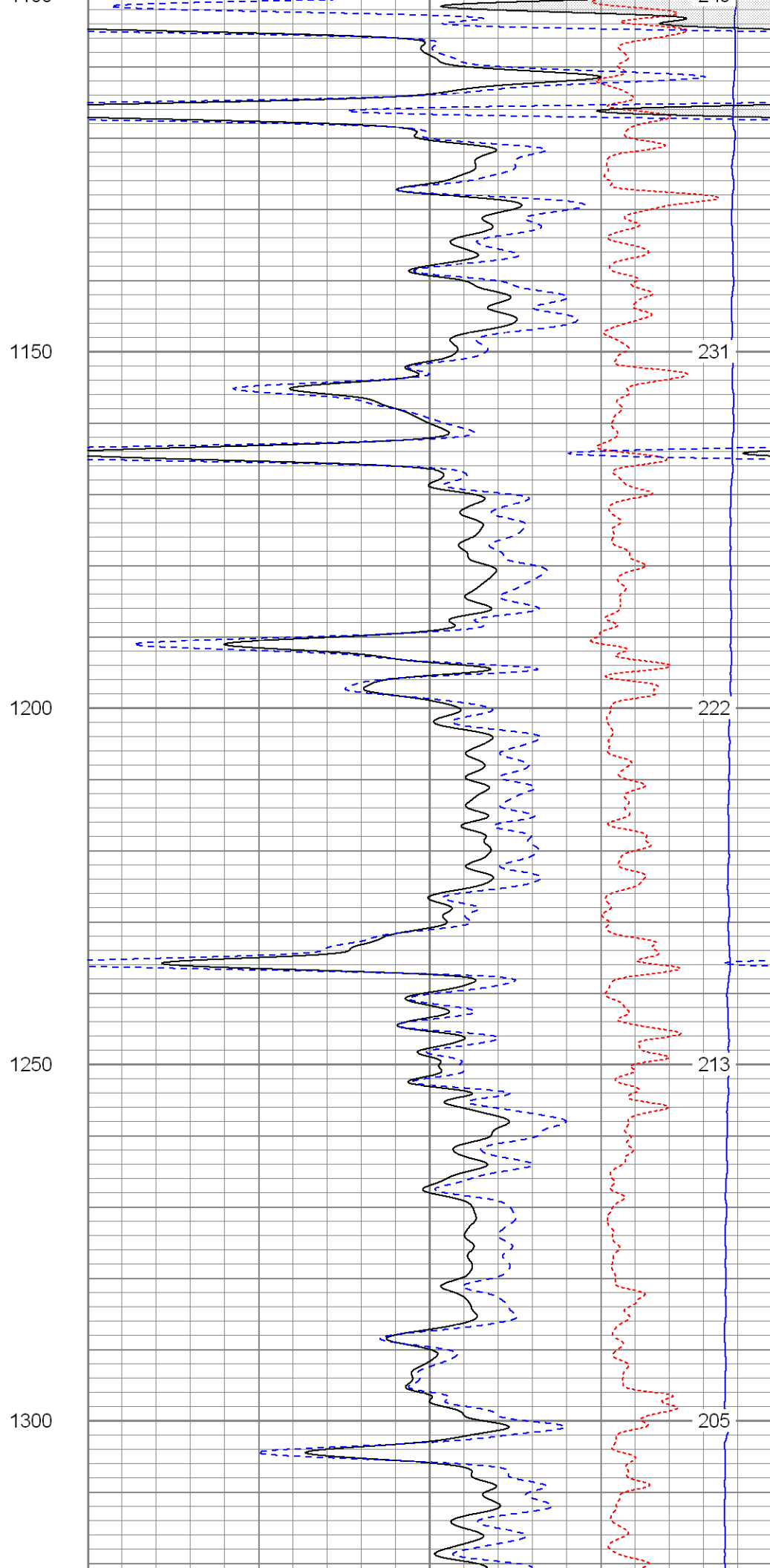
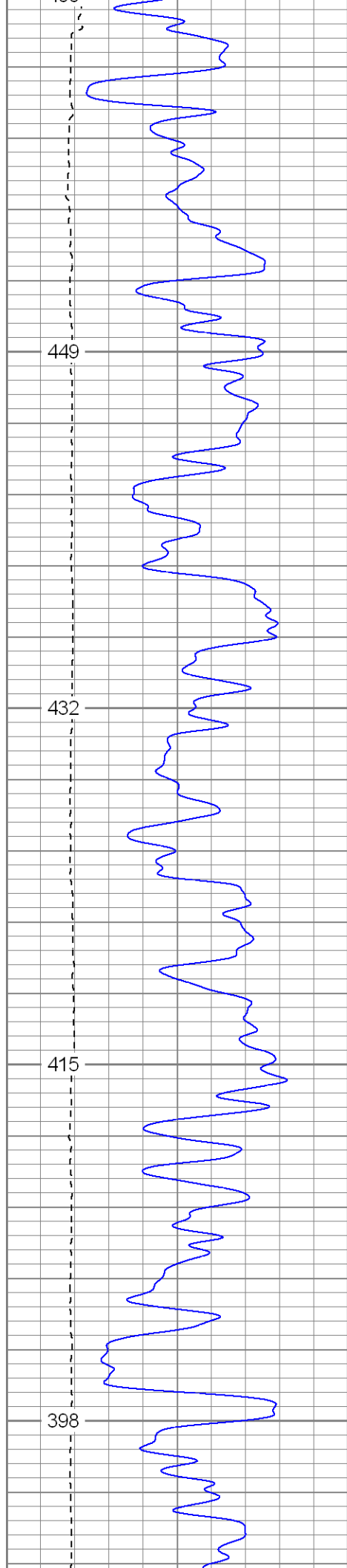
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Dataset Pathname: pass4.1
Presentation Format: cdl
Dataset Creation: Mon Jun 11 15:42:09 2007 by Calc Open-Cased 061129
Charted by: Depth in Feet scaled 1:240

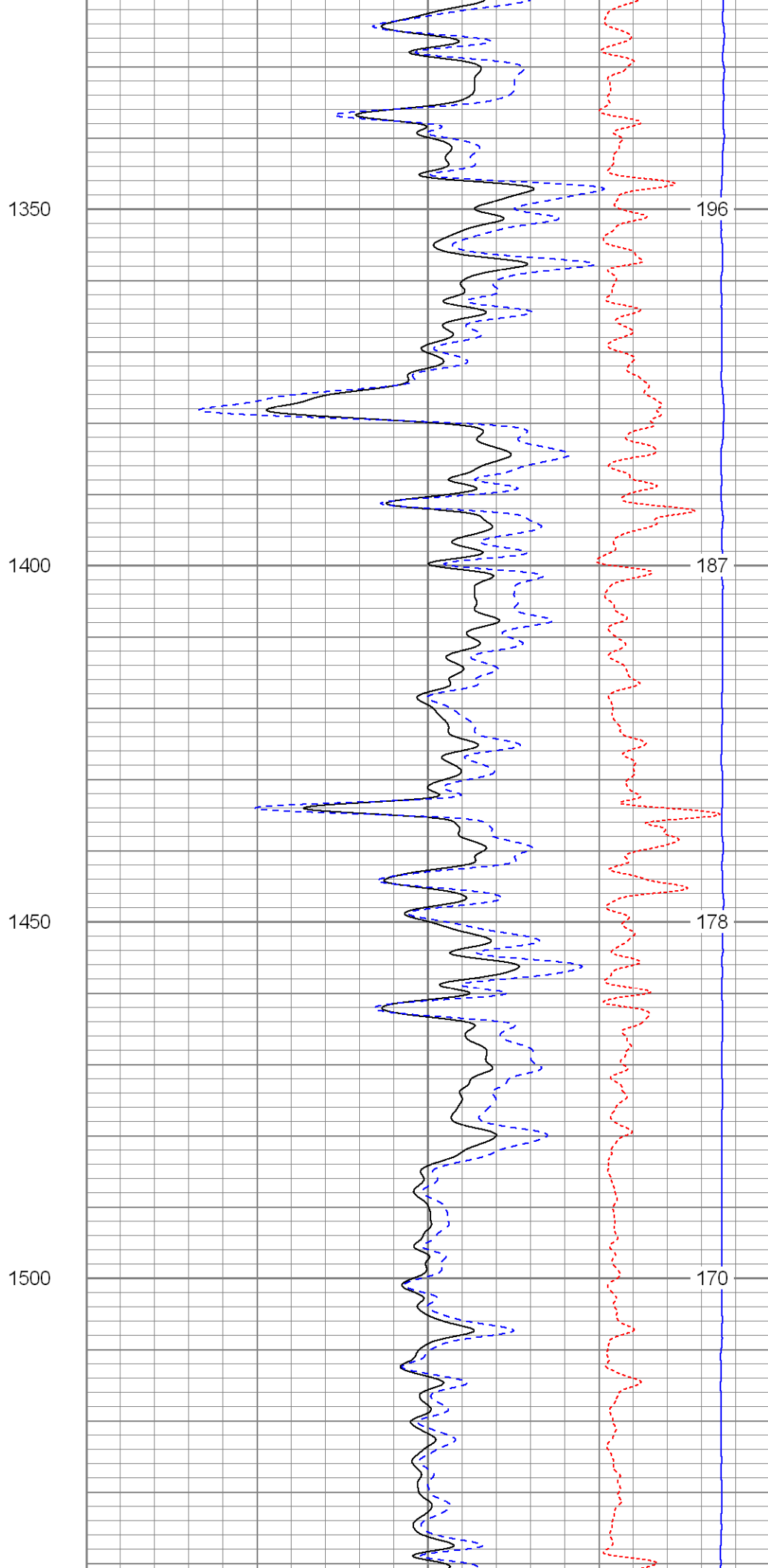
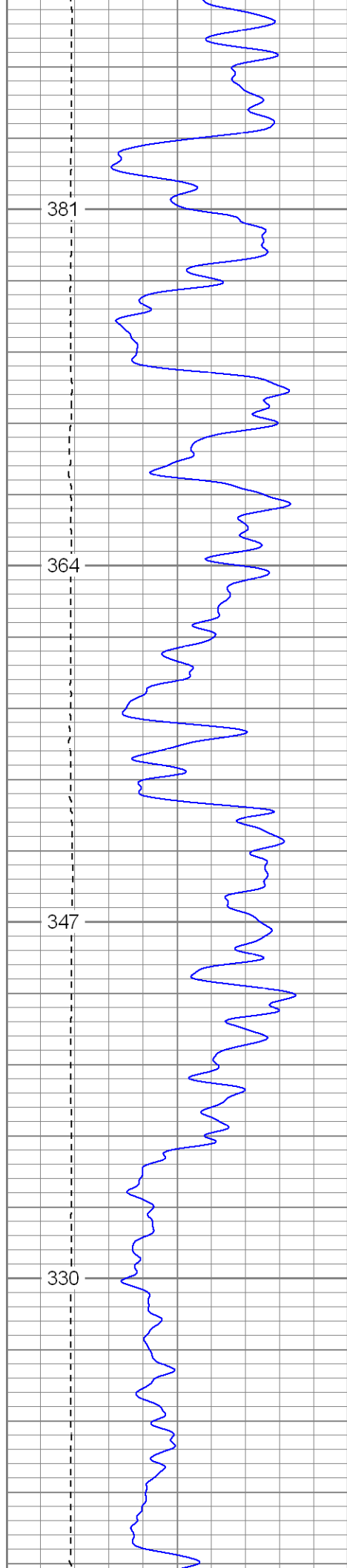
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6	DCAL (in)	16	30	DPOR (pu)	-10
			-0.5	RHOC (g/cc)	0.5
			4000	LTEN (lb)	0

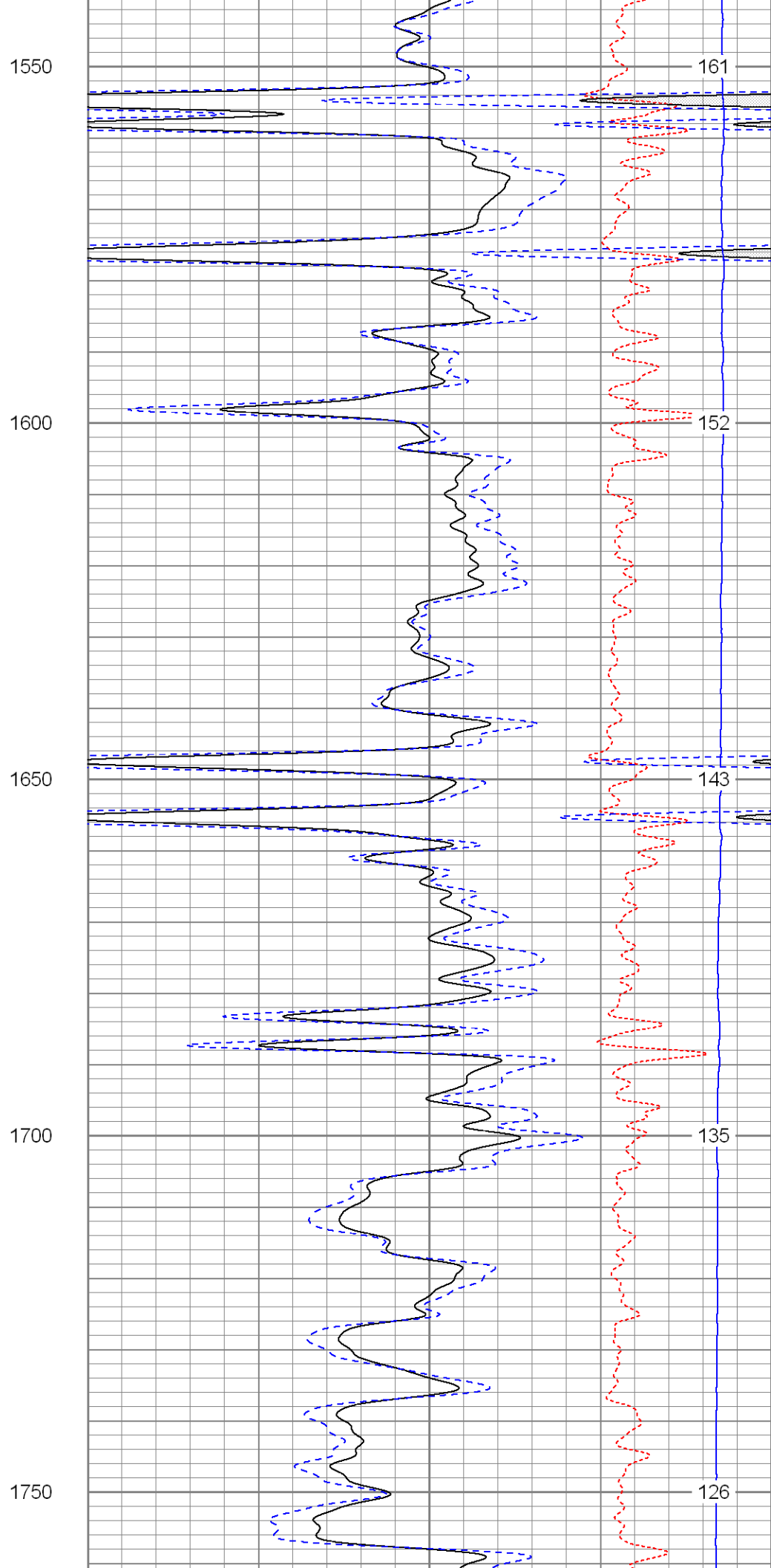
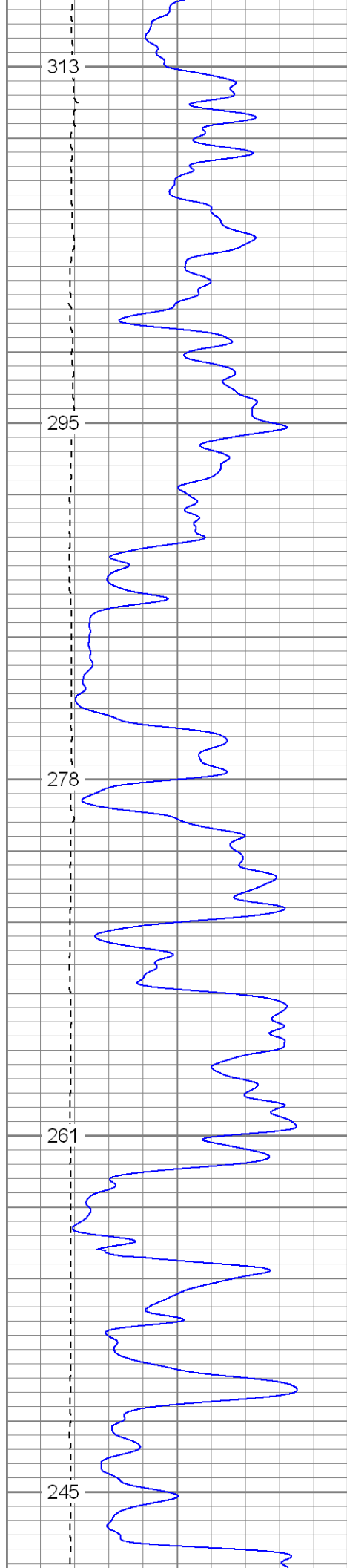


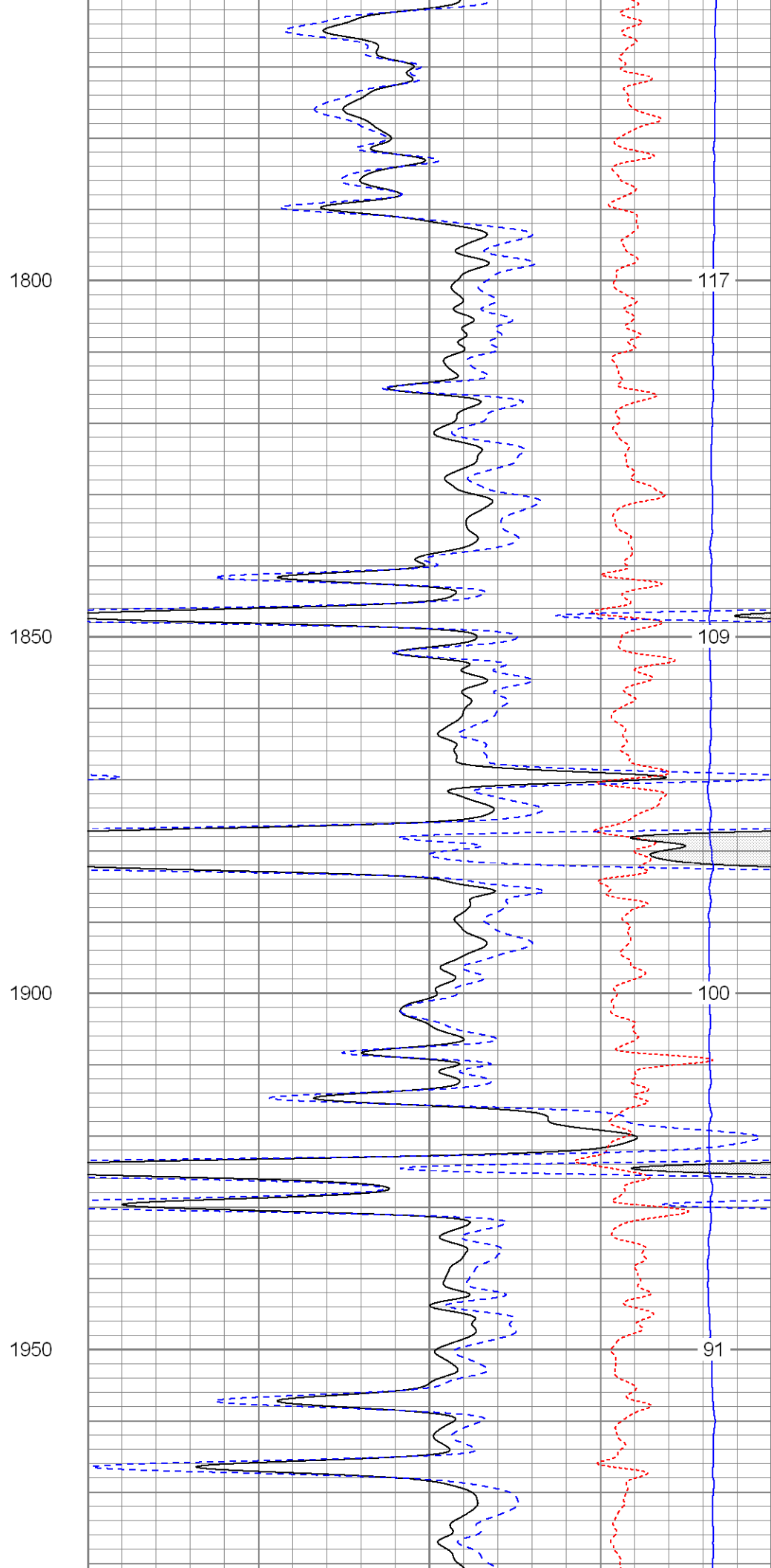
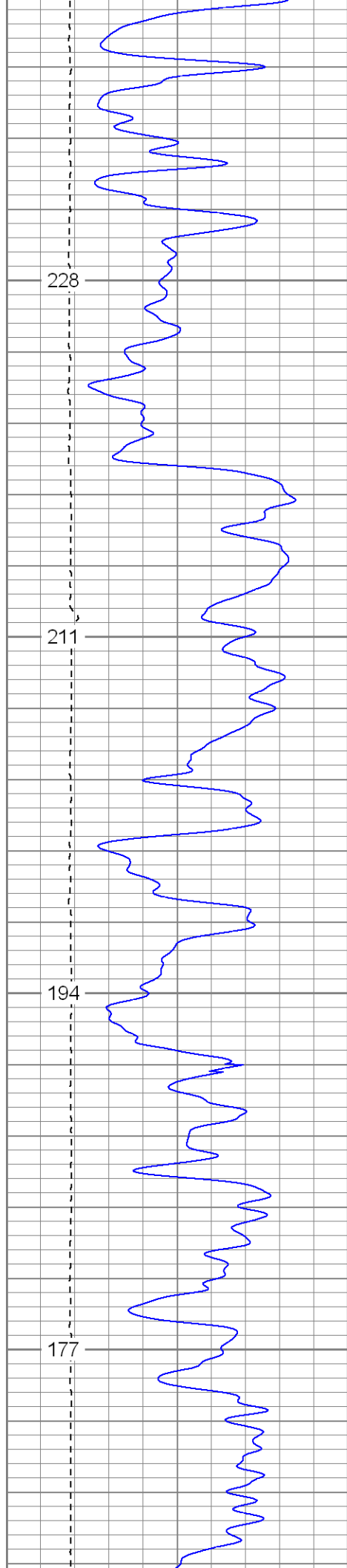


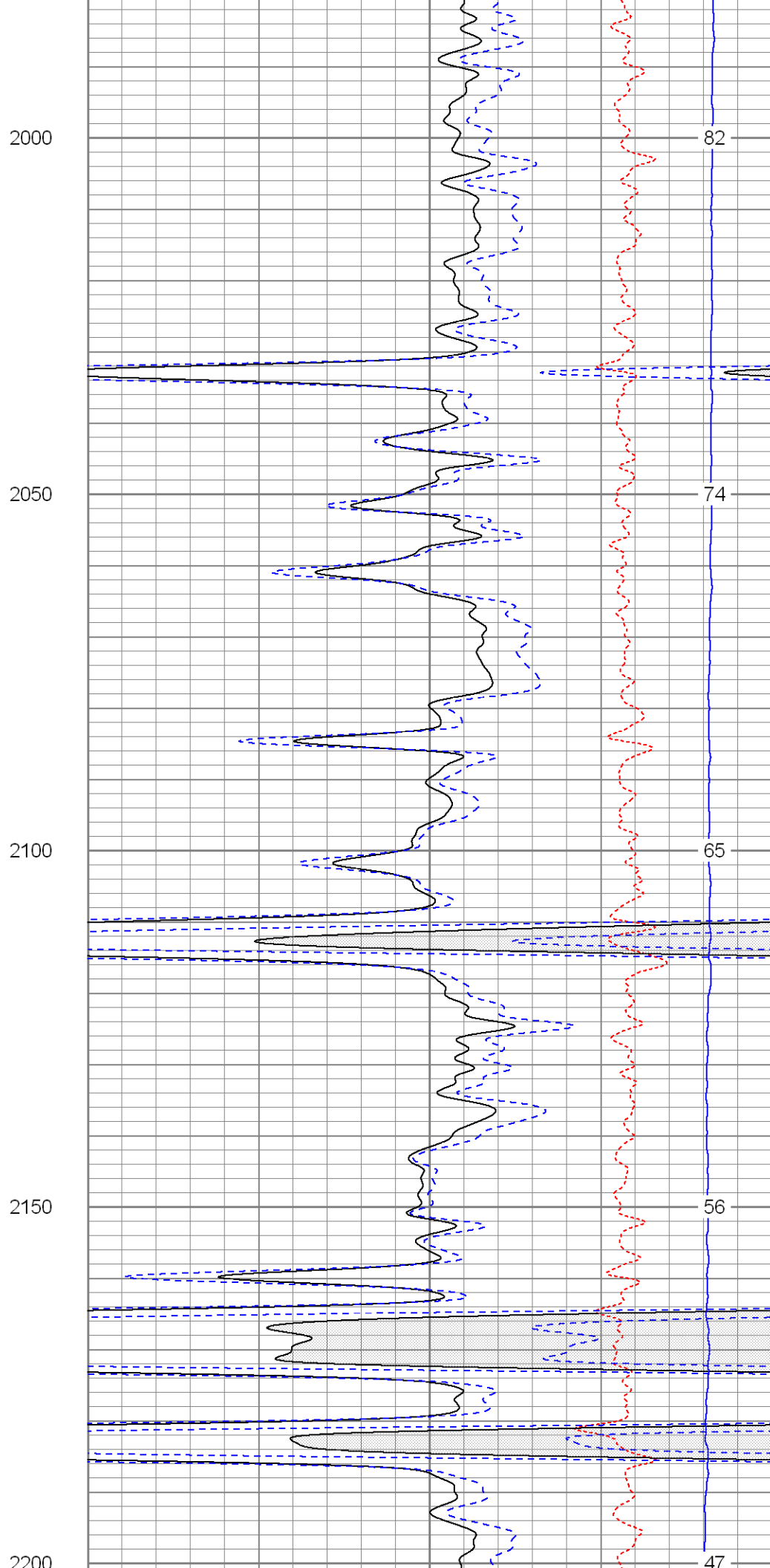
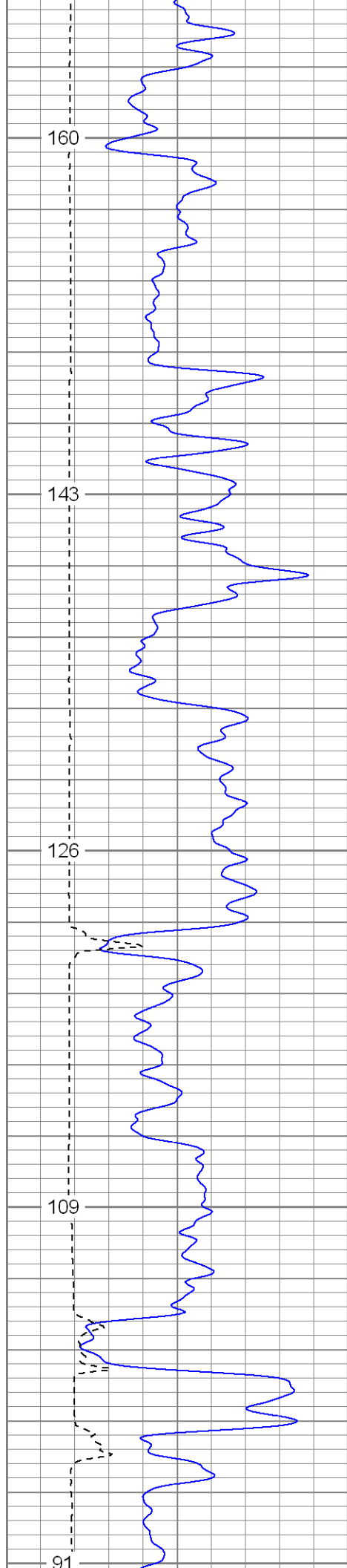


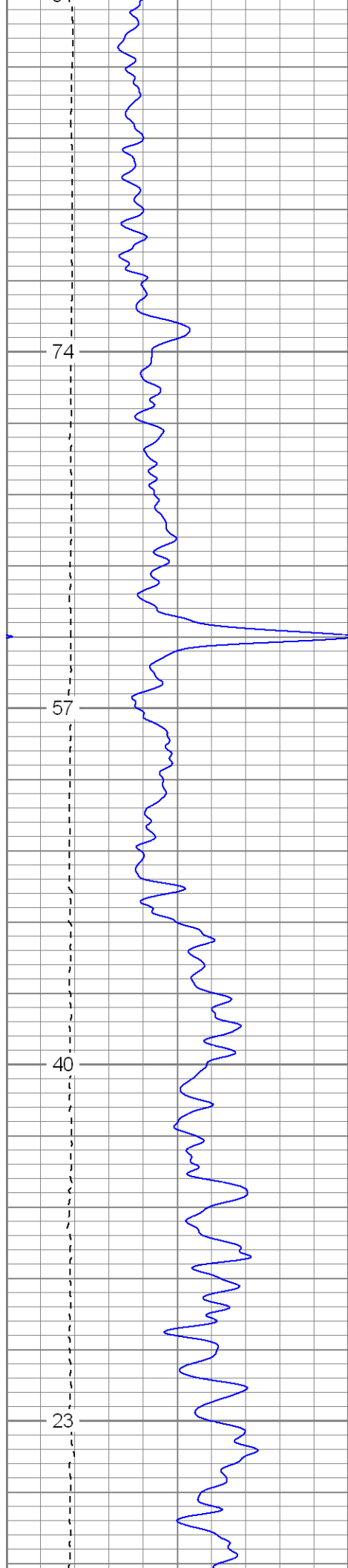




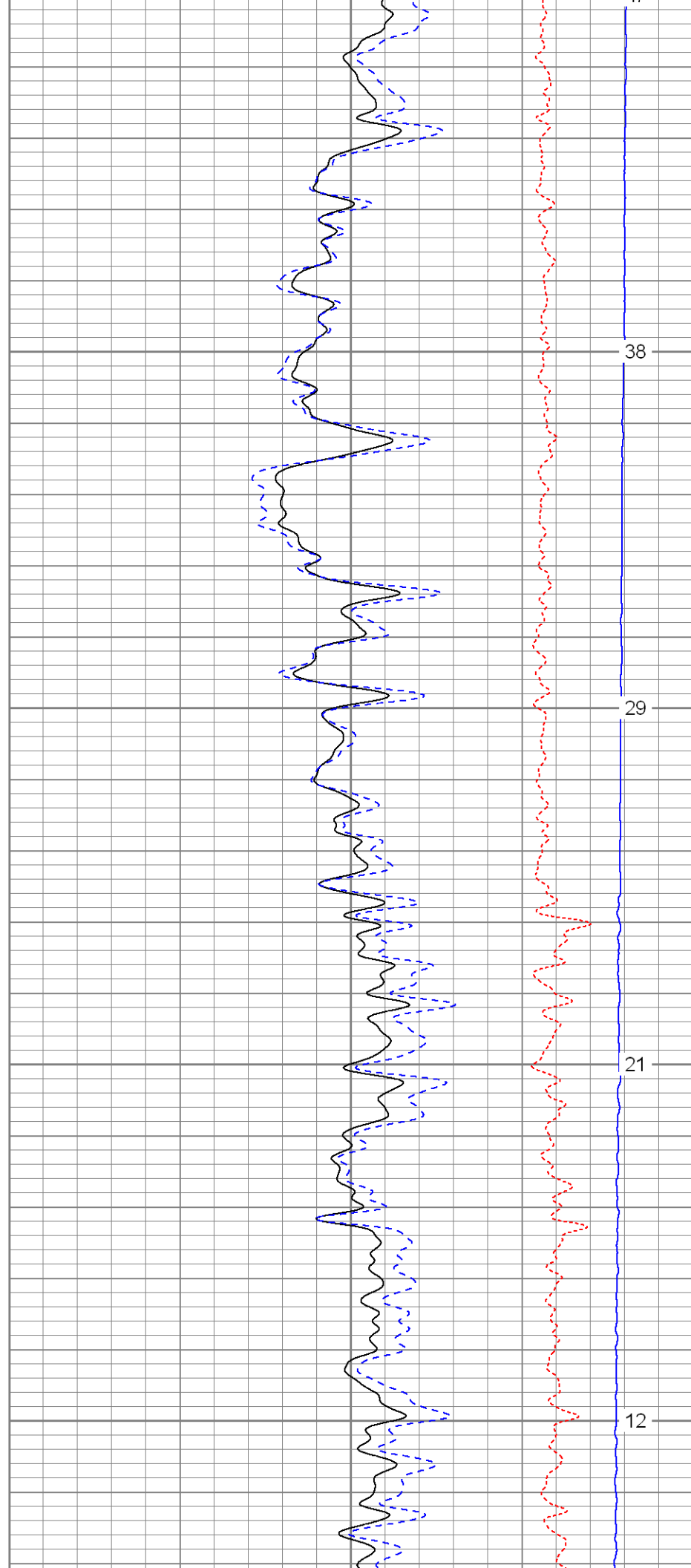


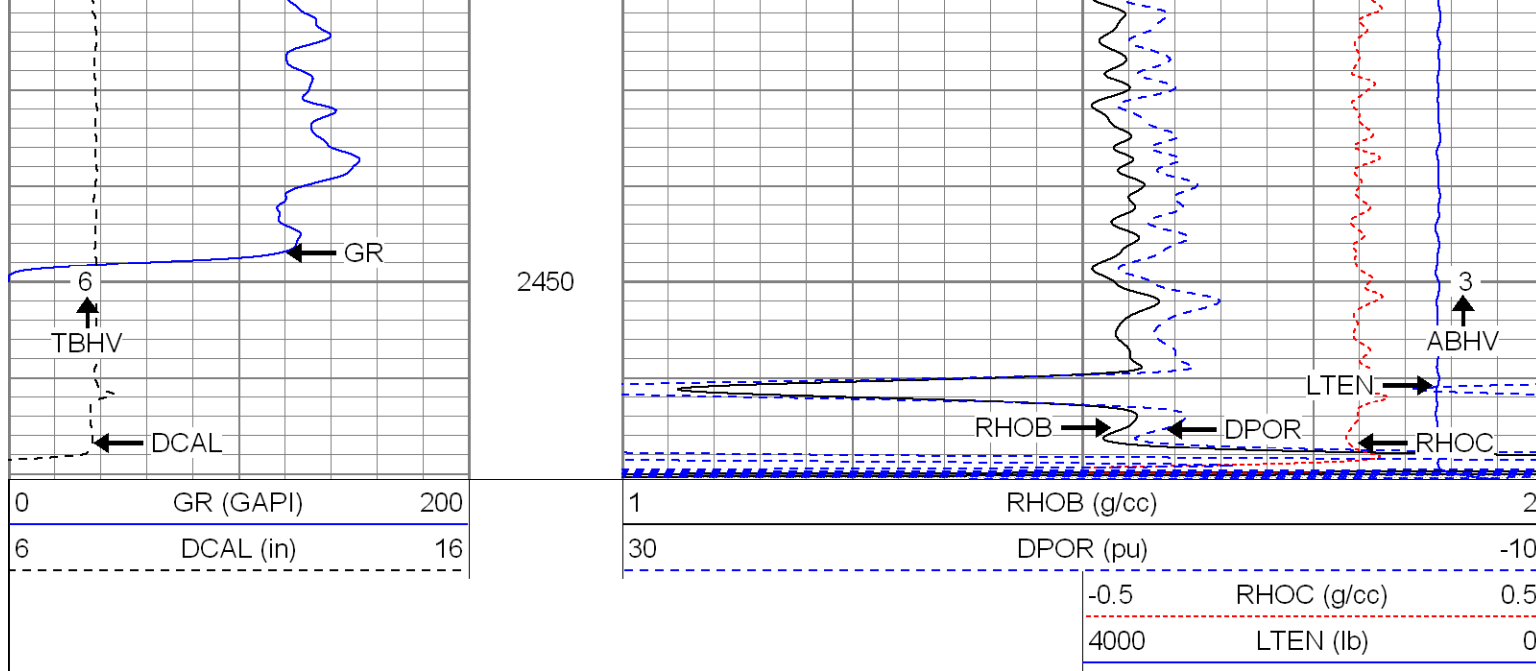






2200
2250
2300
2350
2400



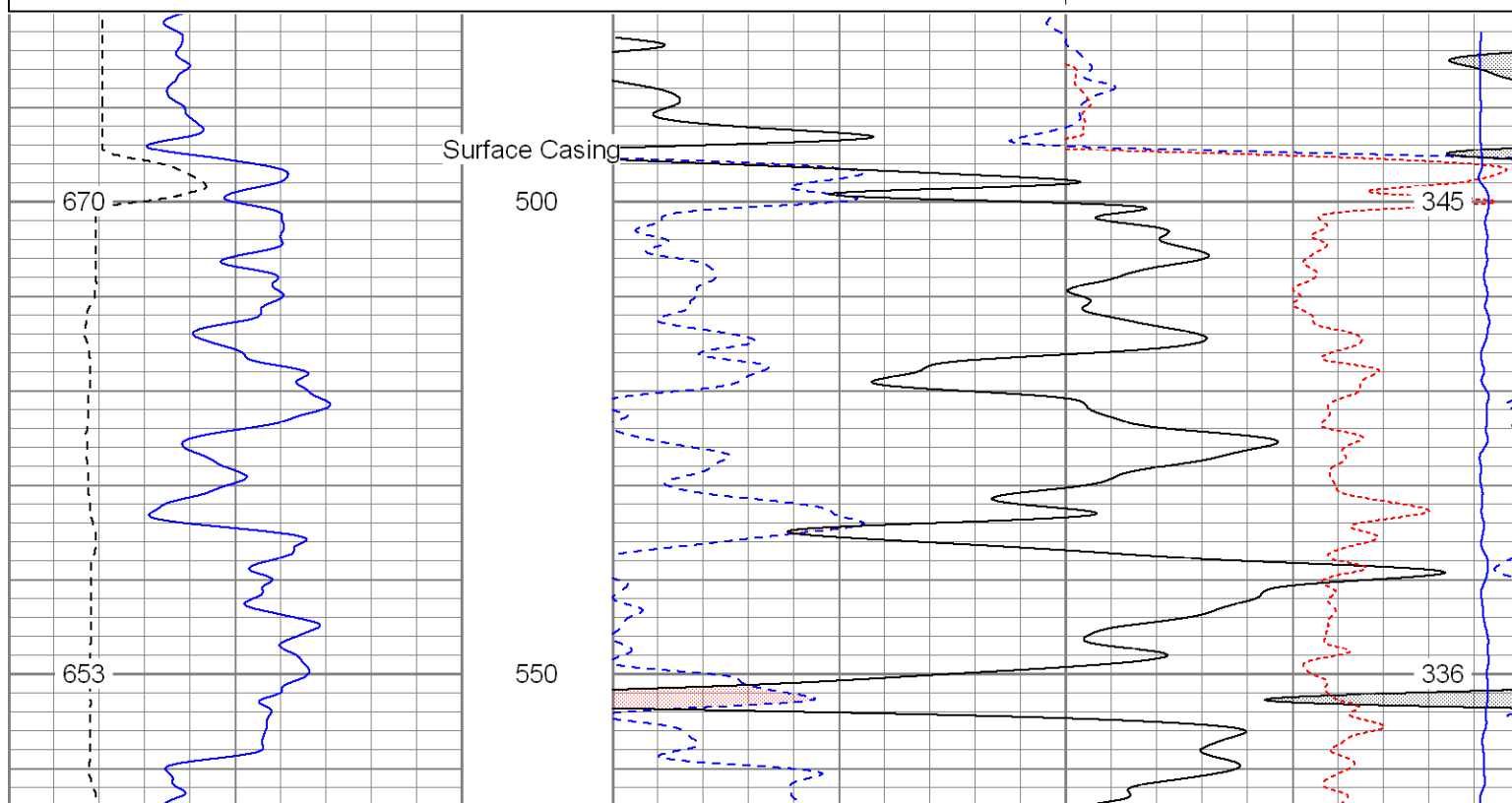
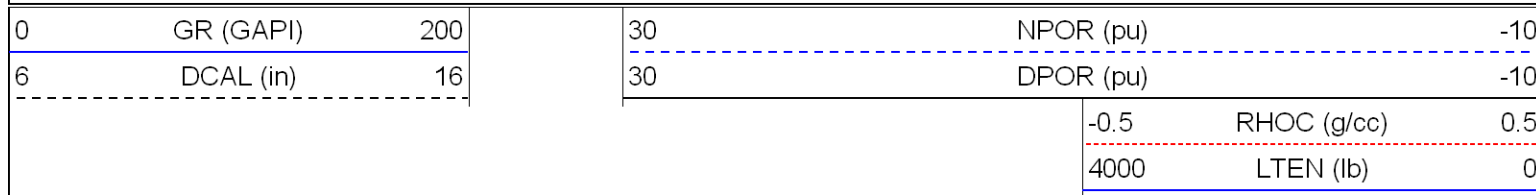


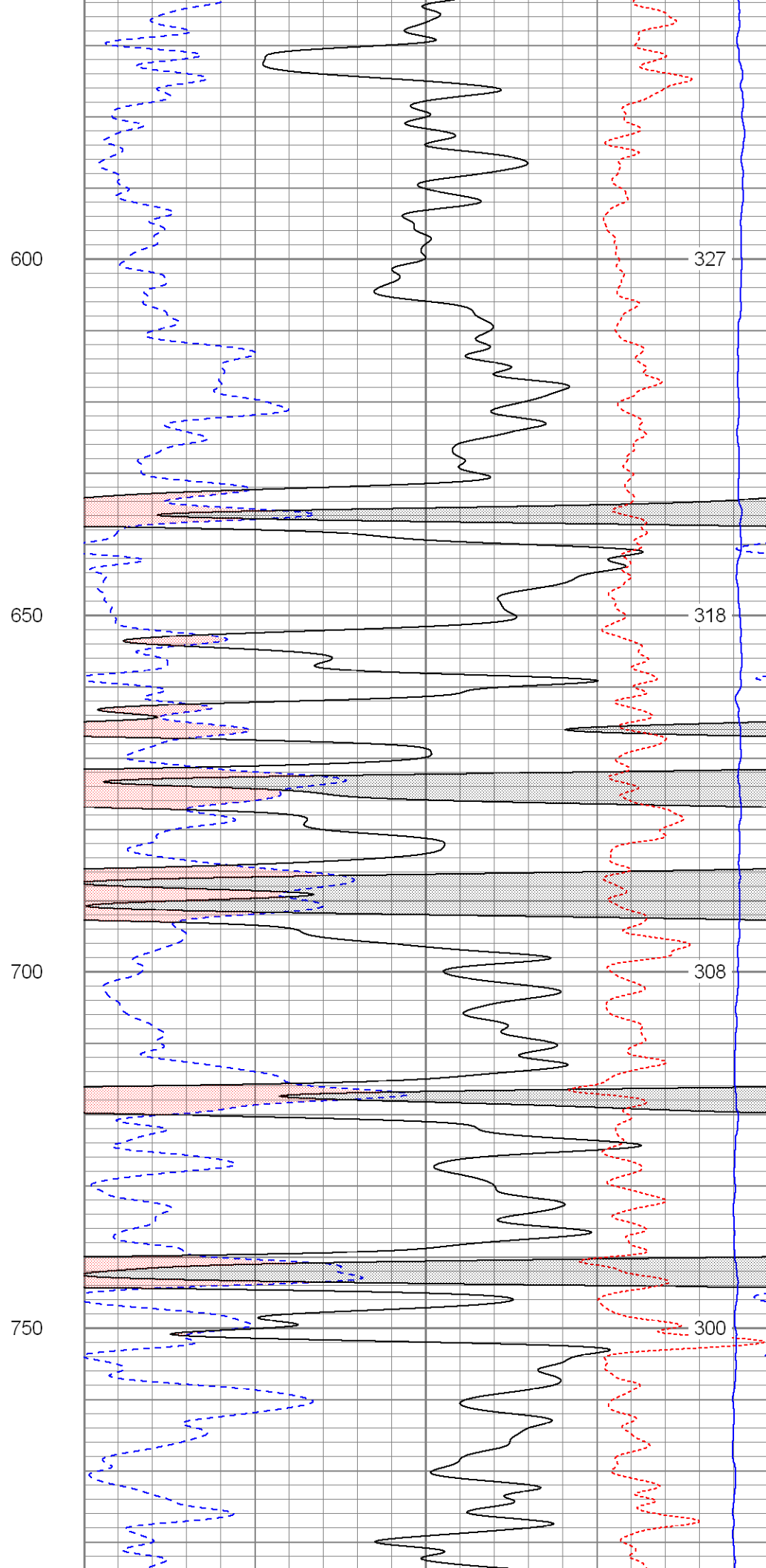
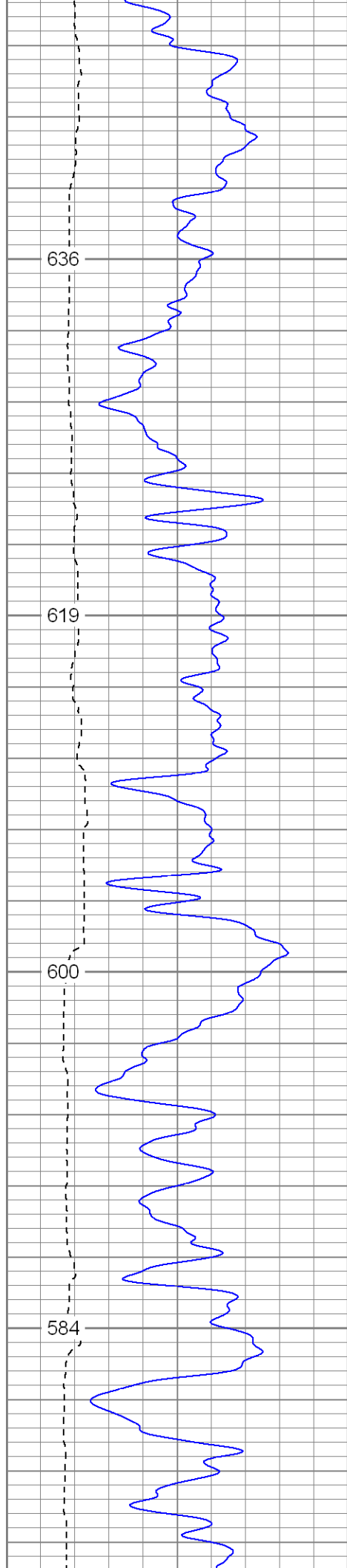
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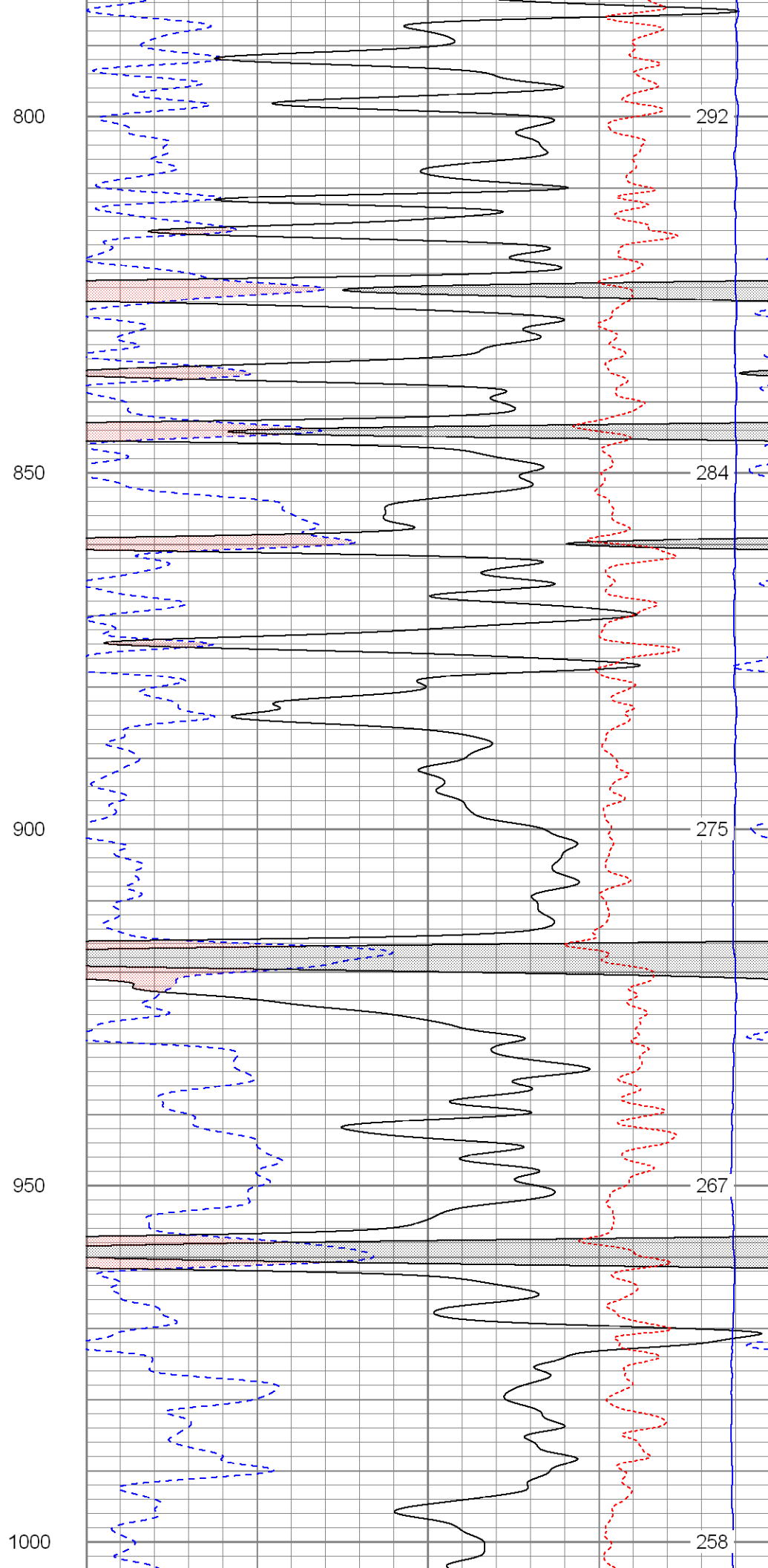
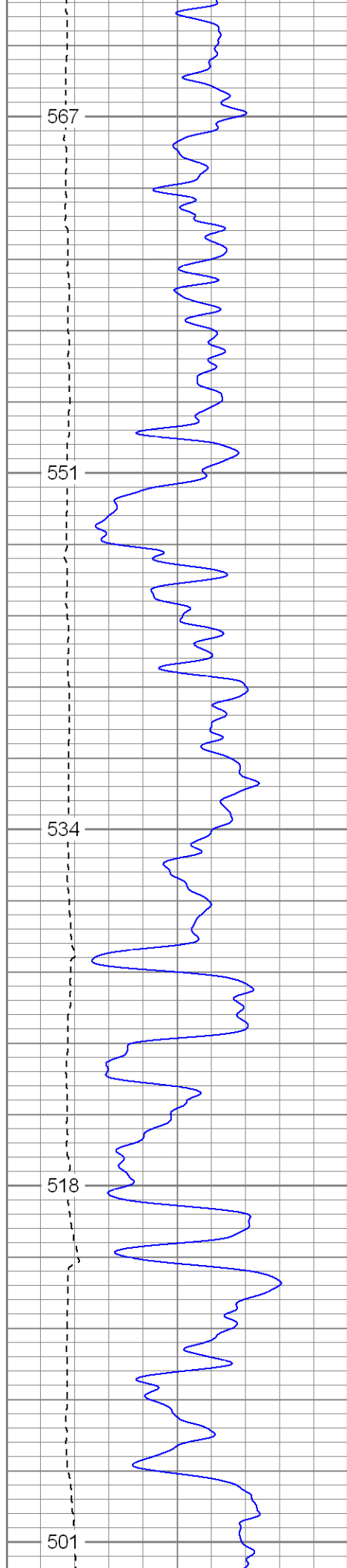
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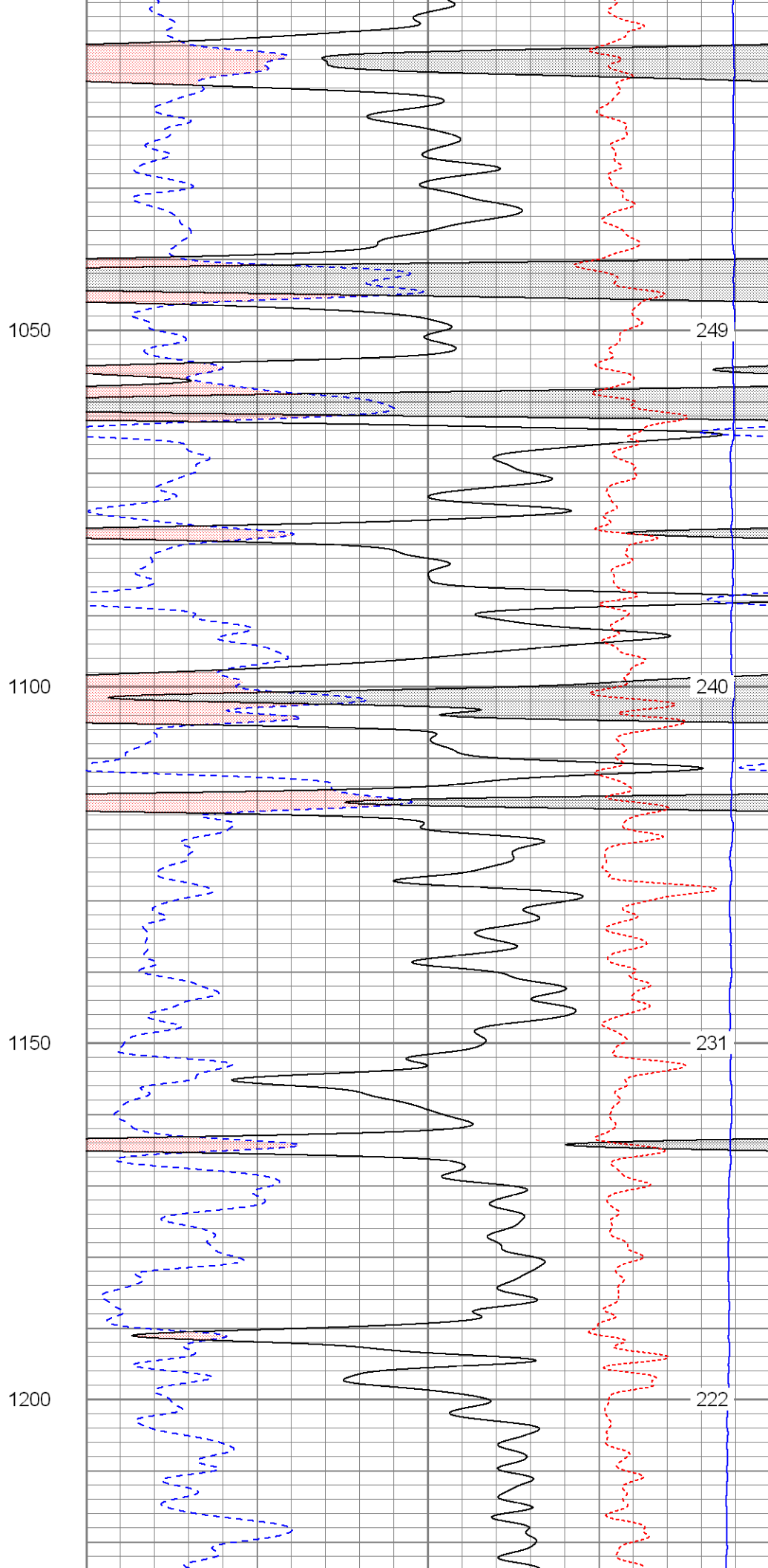
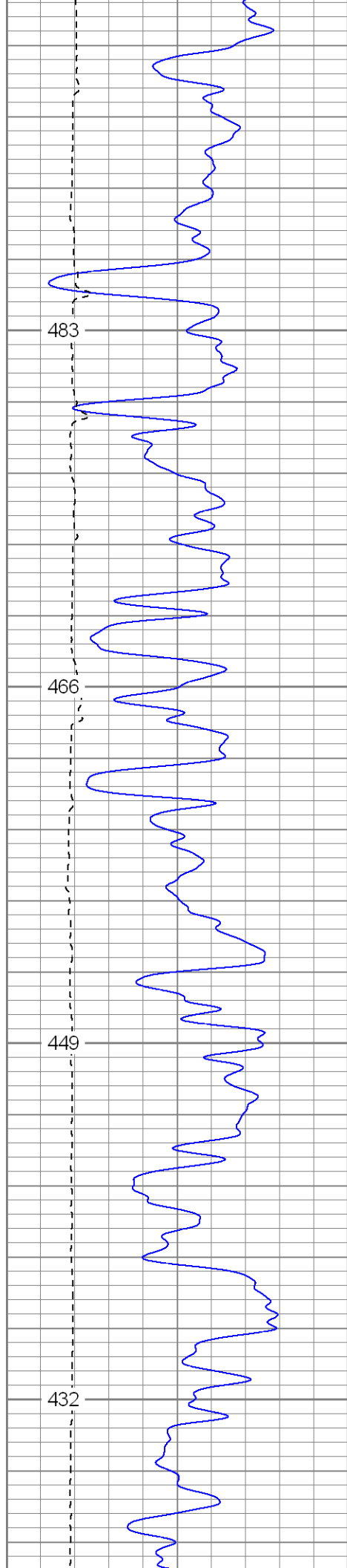
Main Pass

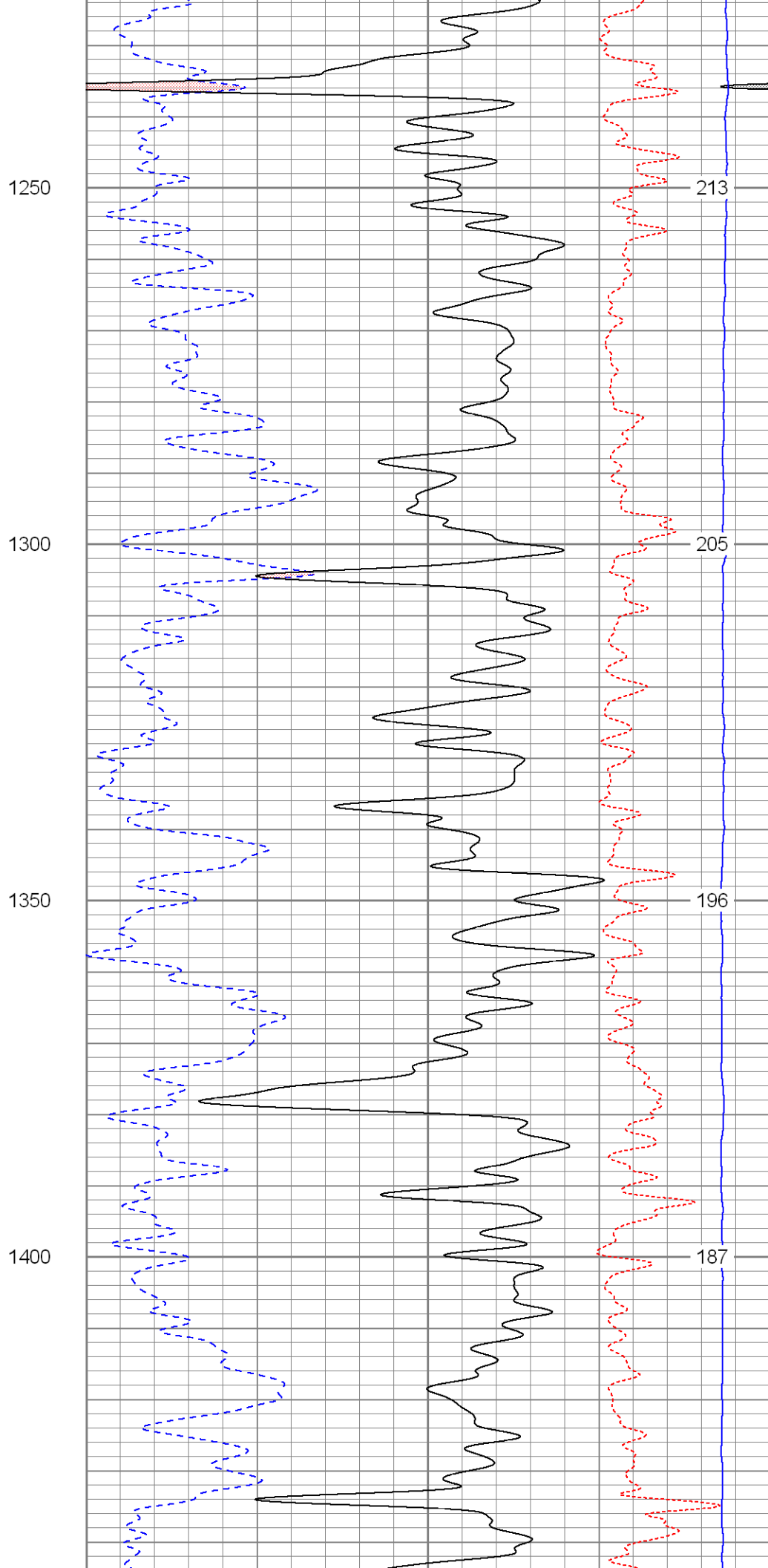
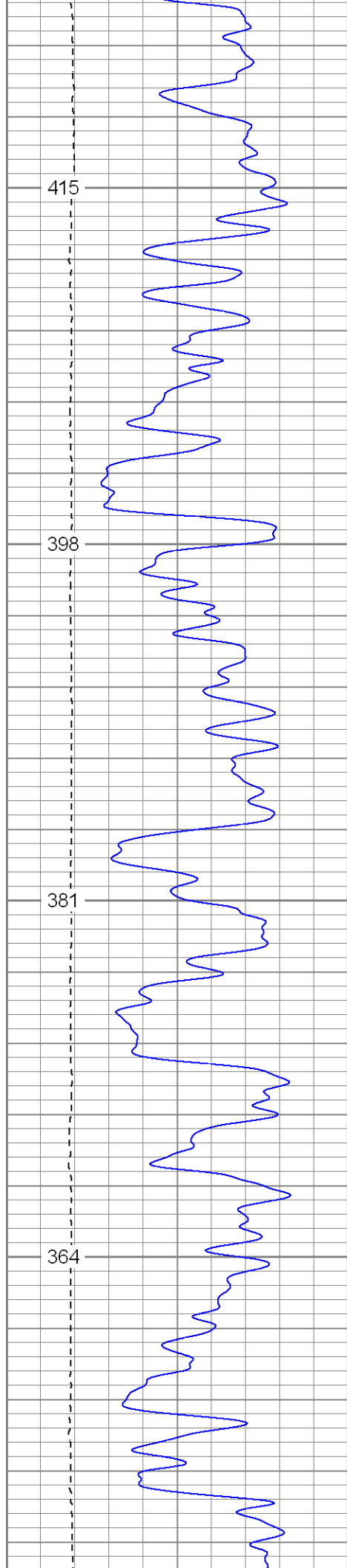
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Dataset Pathname: pass4.1
Presentation Format: cdnl
Dataset Creation: Mon Jun 11 15:42:09 2007 by Calc Open-Cased 061129
Charted by: Depth in Feet scaled 1:240

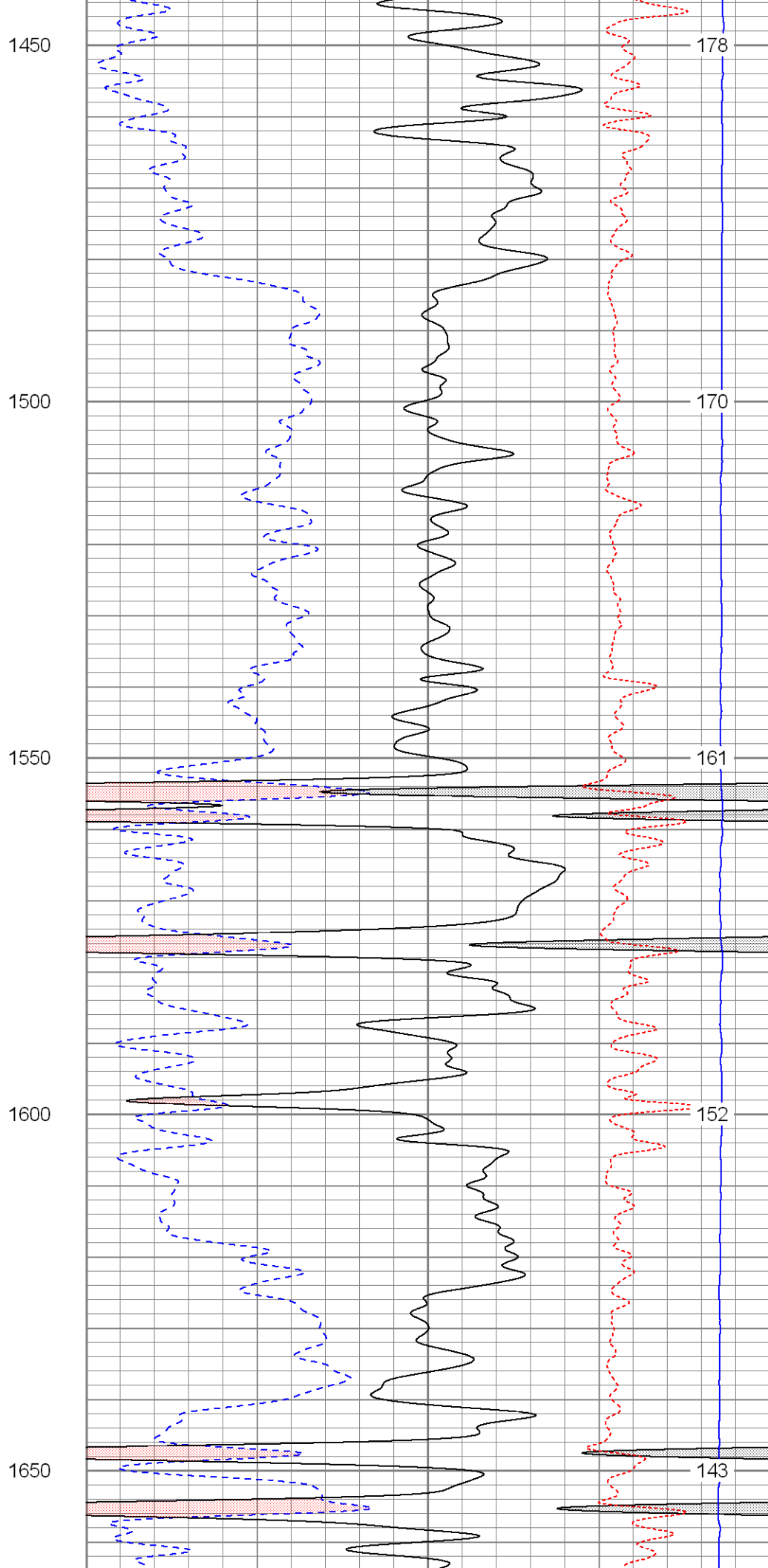
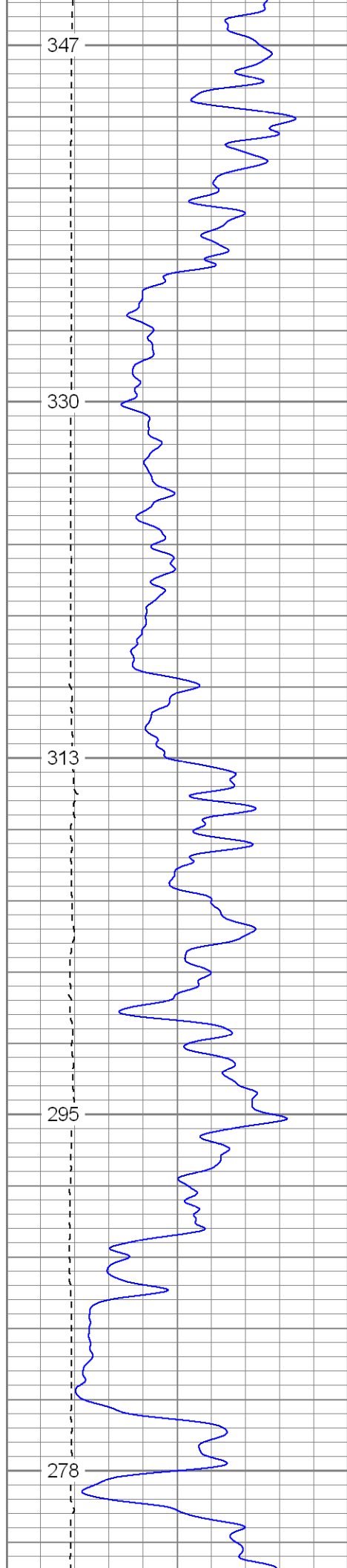


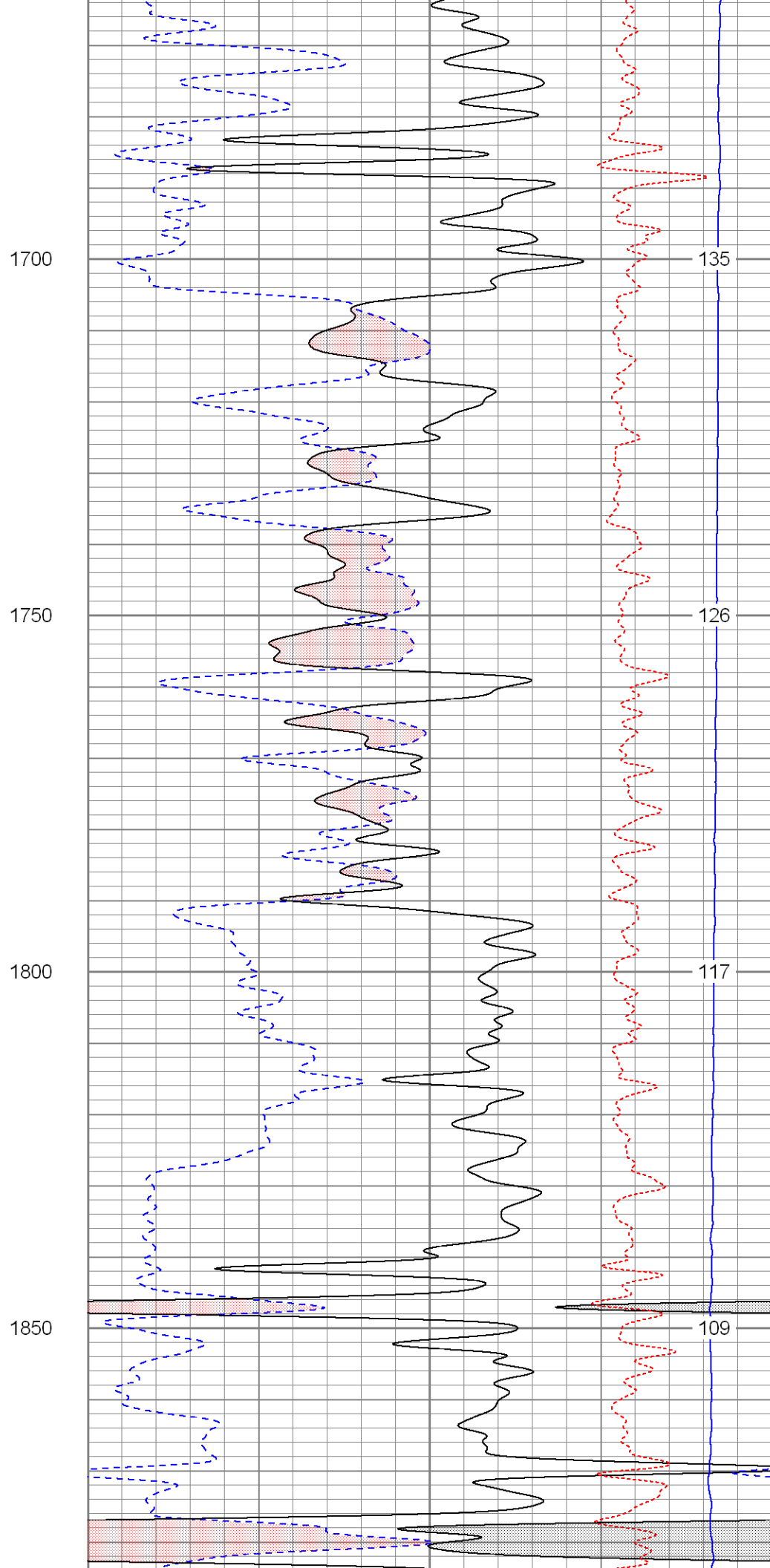
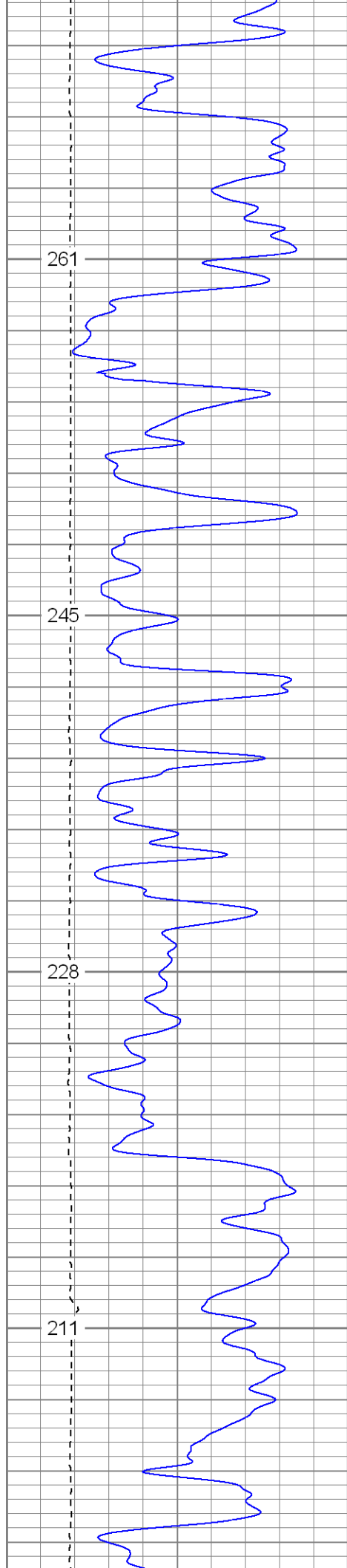


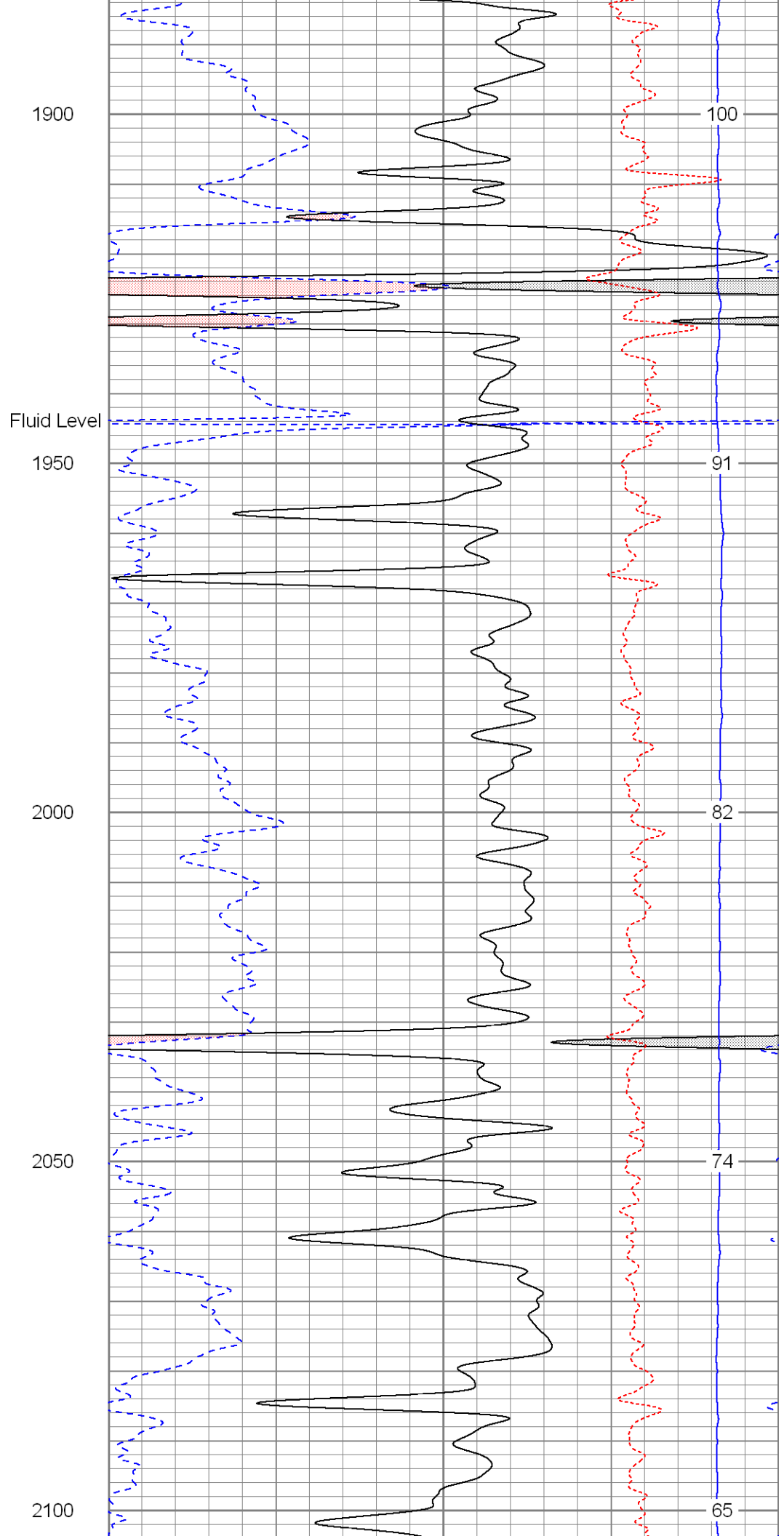
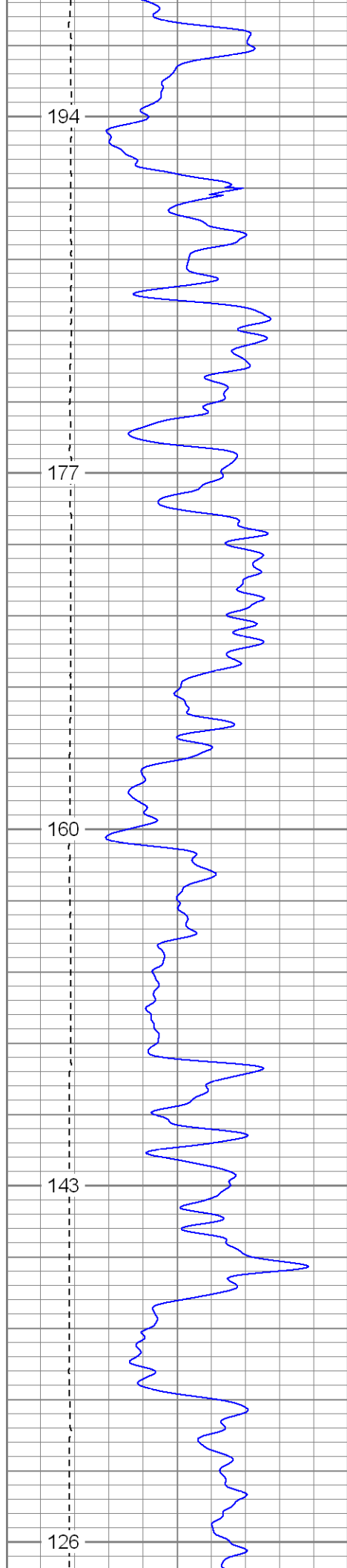


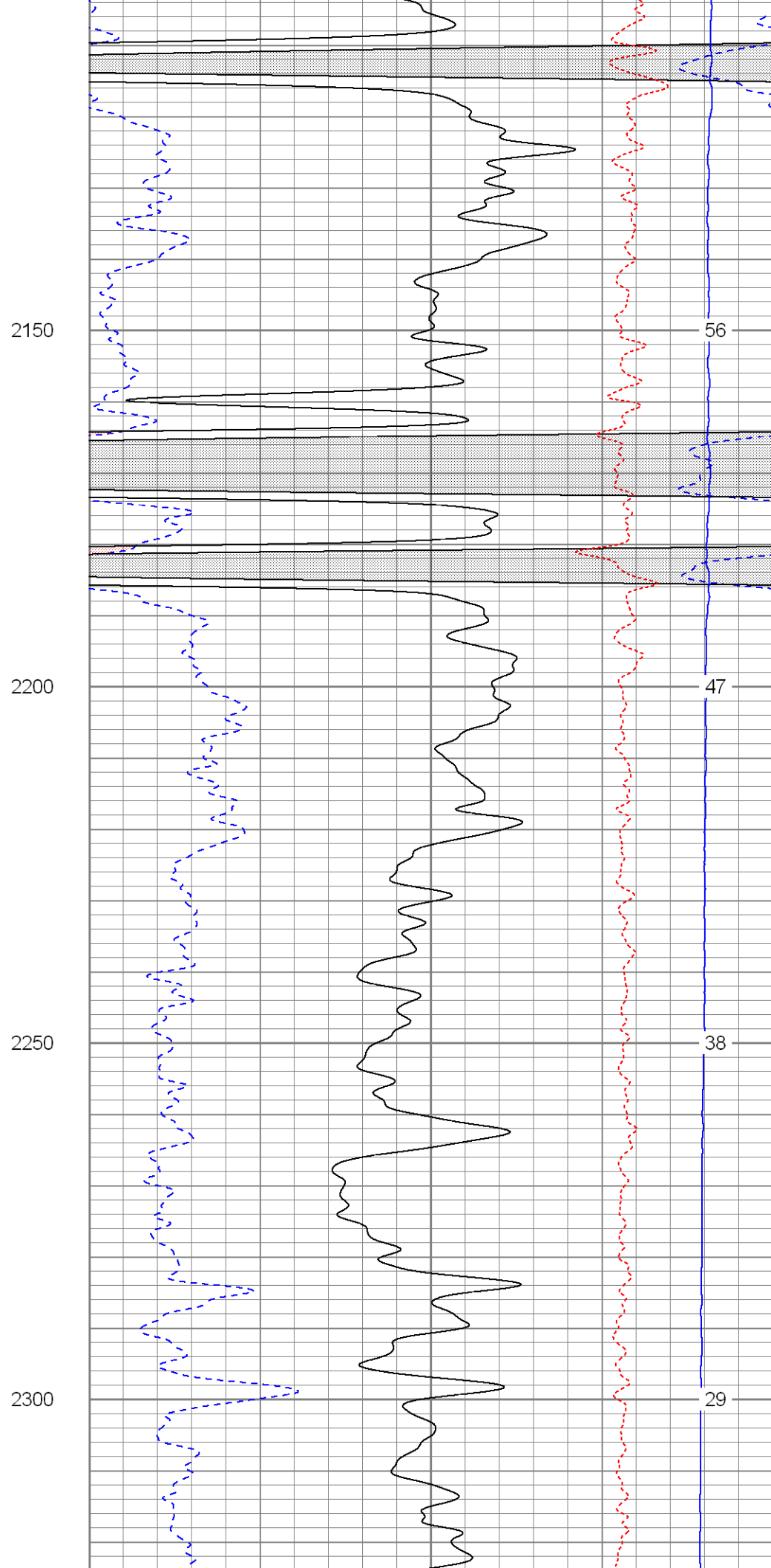
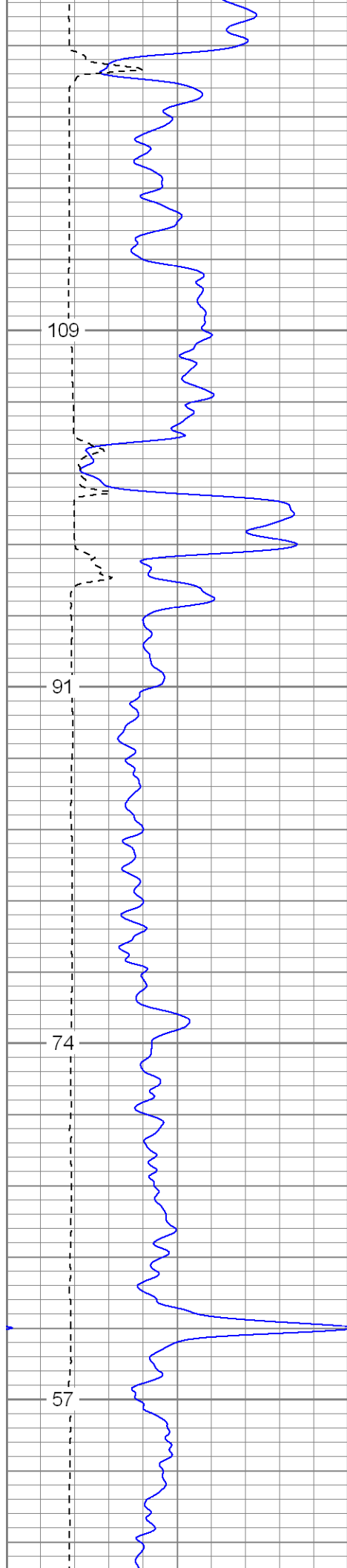


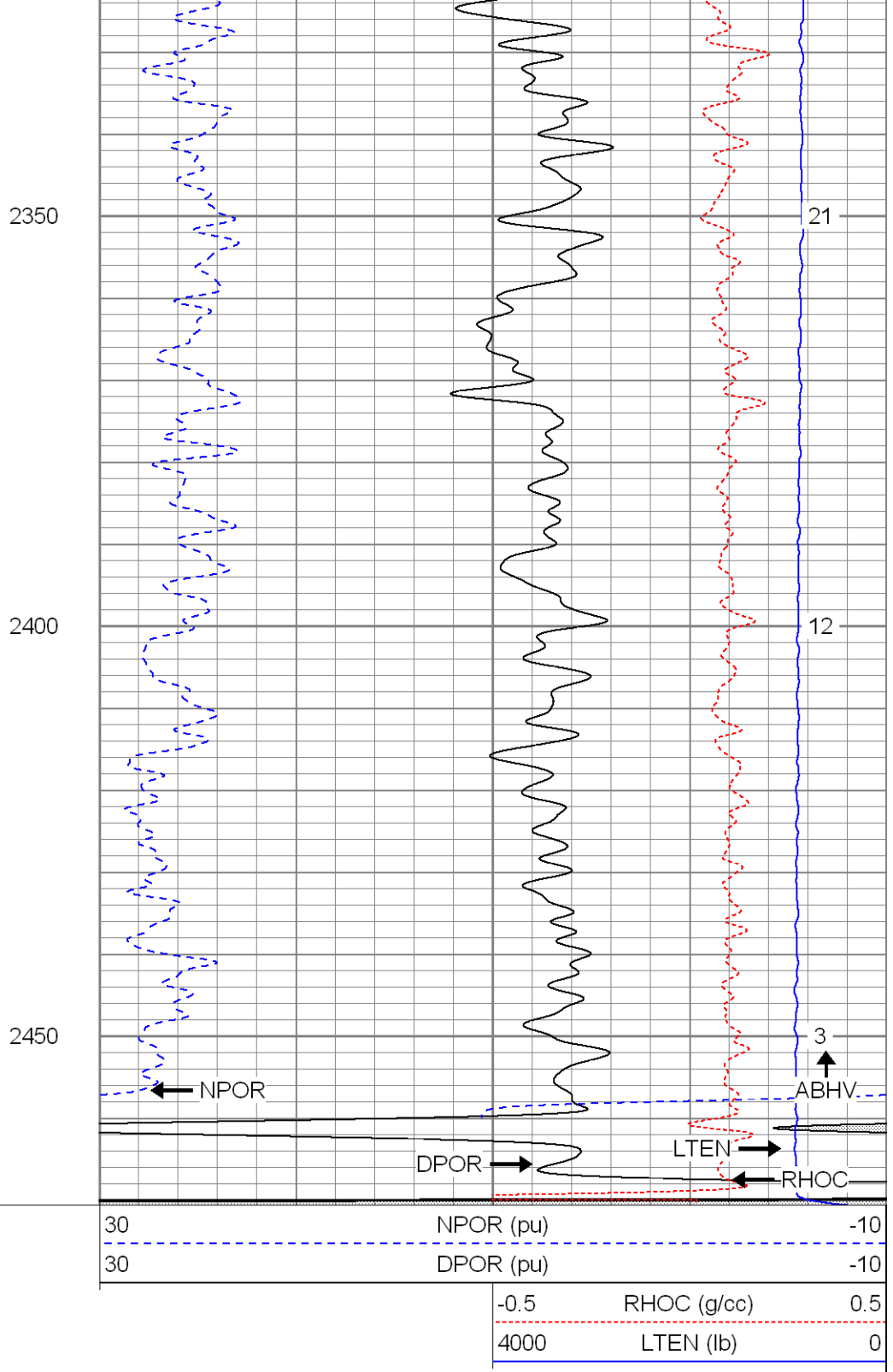
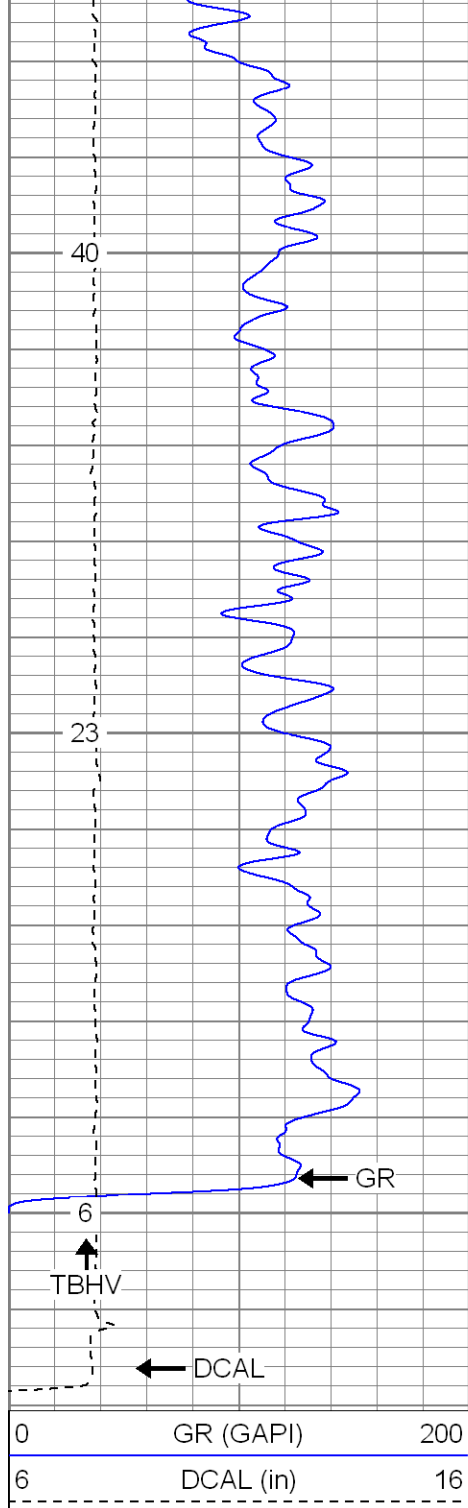












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Repeat Section

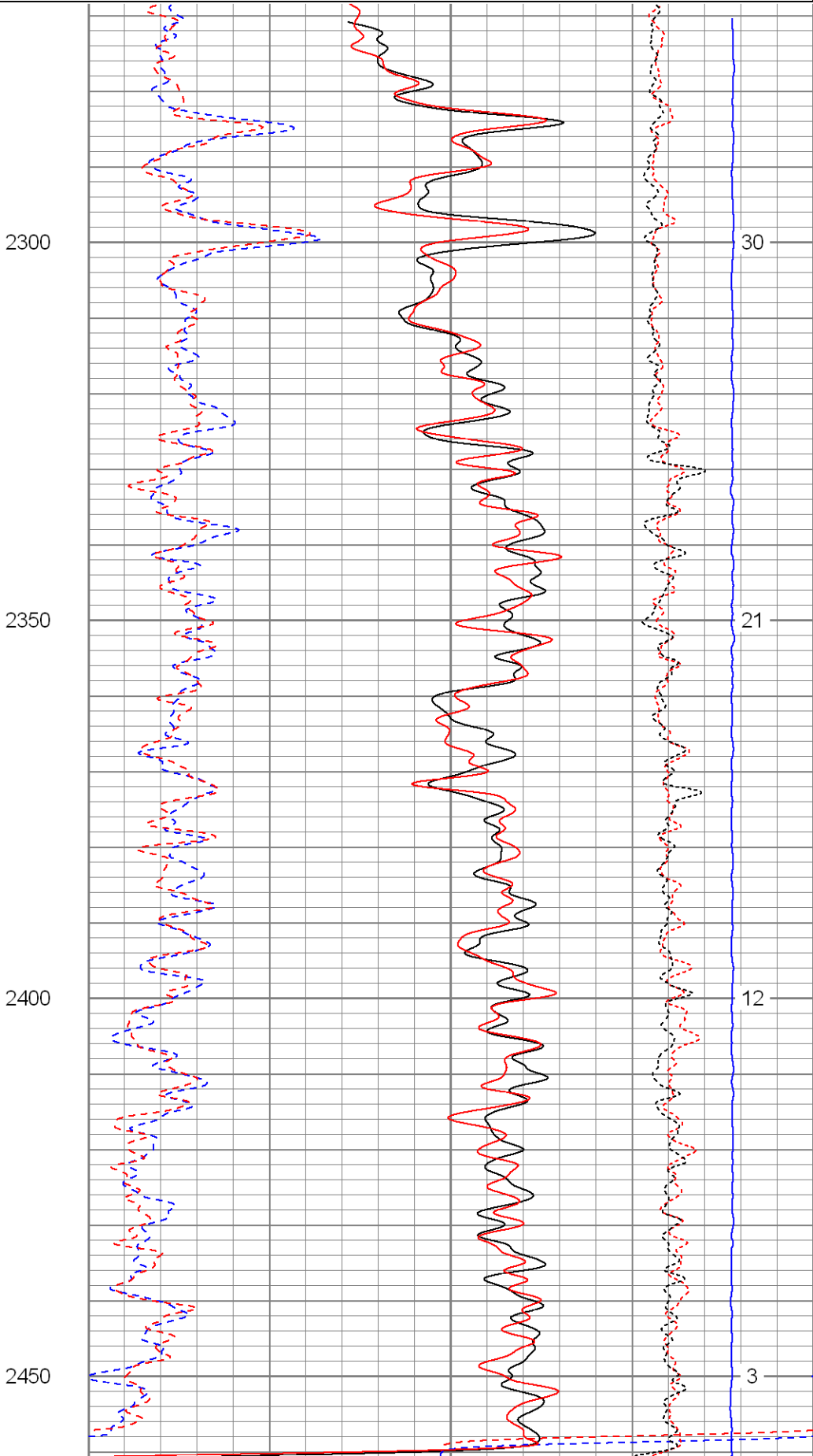
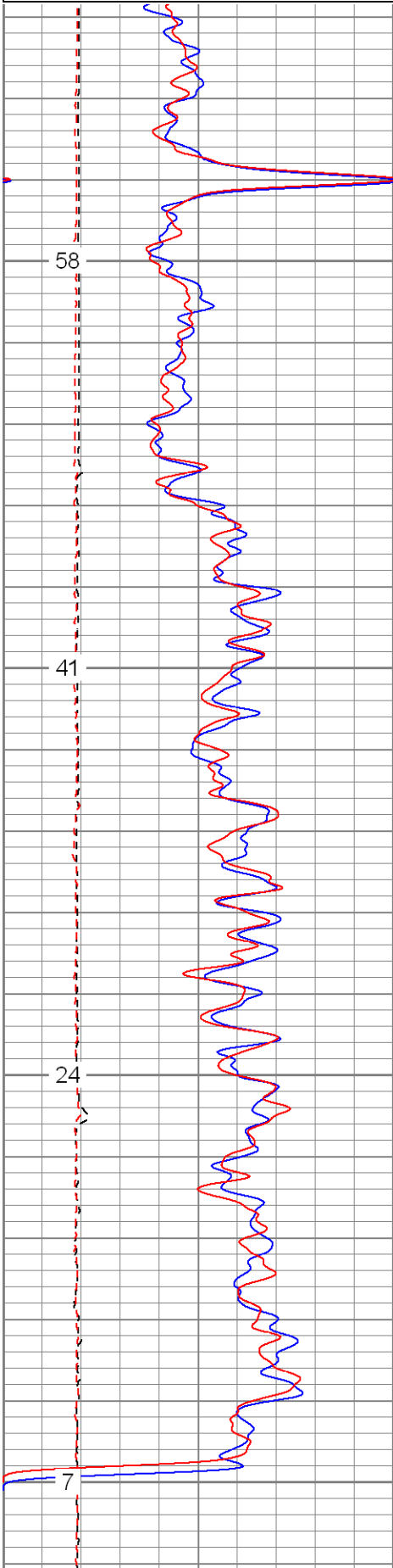
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Charted by: Depth in Feet scaled 1:240

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6	DCAL (in)	16

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

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

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



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

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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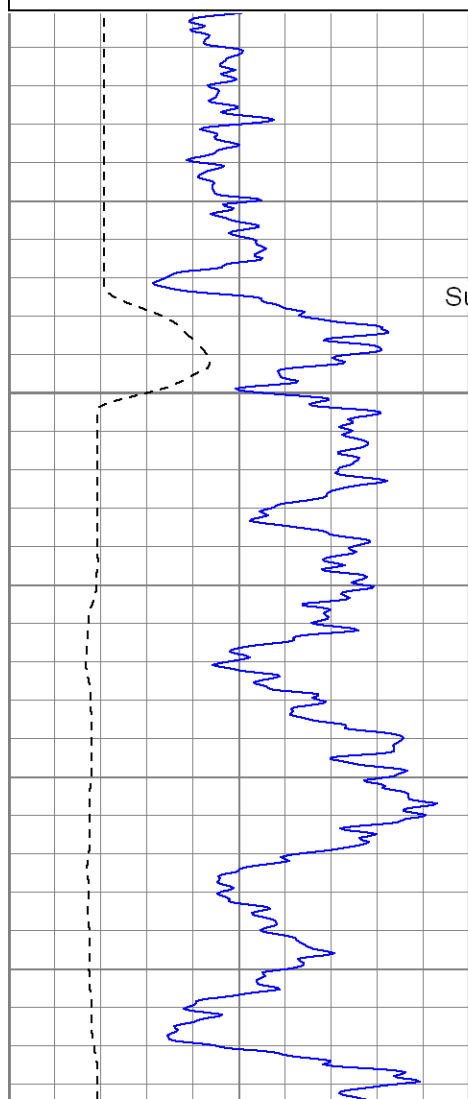
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High Resolution Pass

Database File: xtoac0502.db
Dataset Pathname: pass4.2
Presentation Format: cdlhr
Dataset Creation: Tue Jun 12 11:37:43 2007 by Calc Open-Cased 061129
Charted by: Depth in Feet scaled 1:120

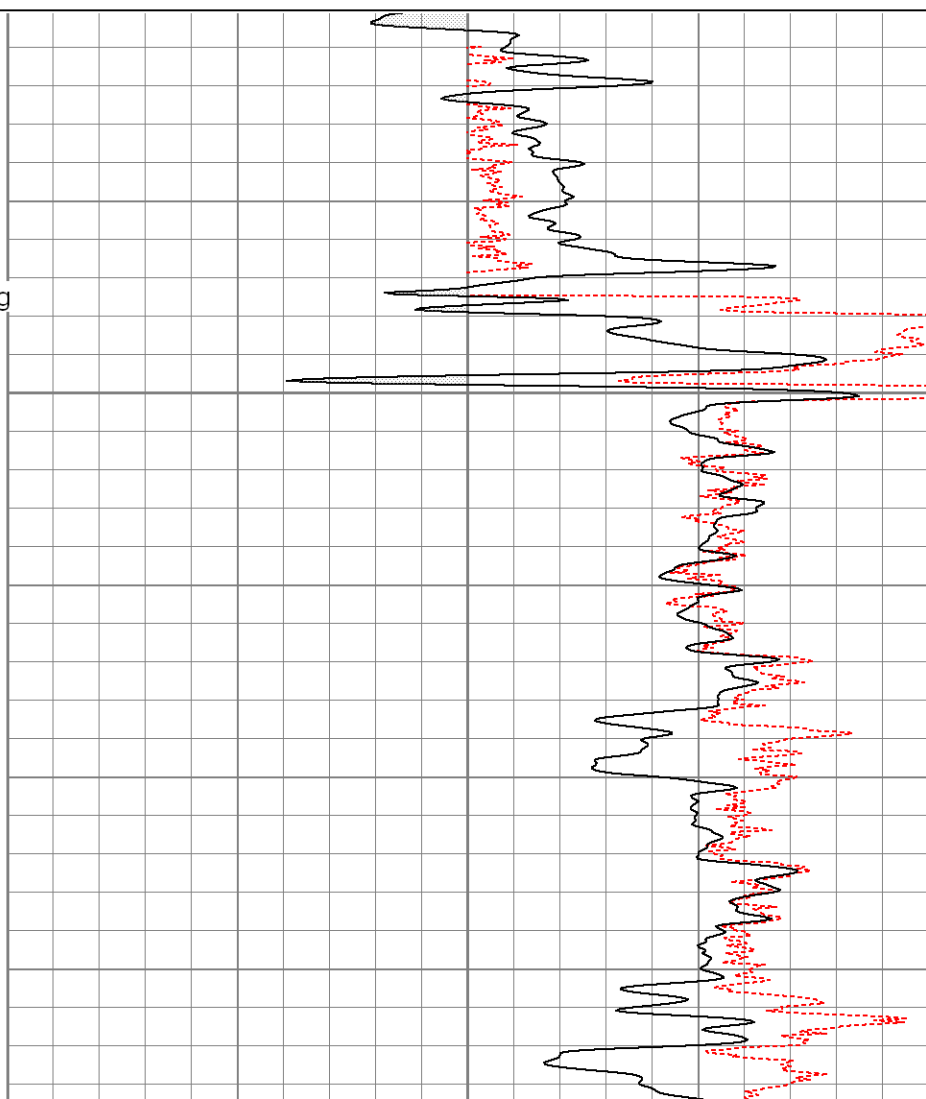
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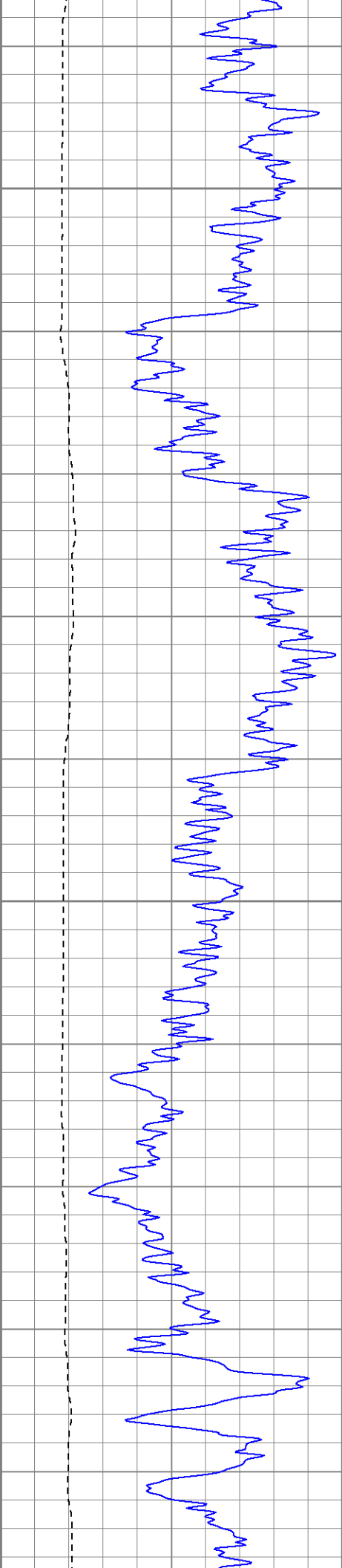
1	RHOB (g/cc)	3
-0.5	RHOC (g/cc)	0.5



Surface Casing

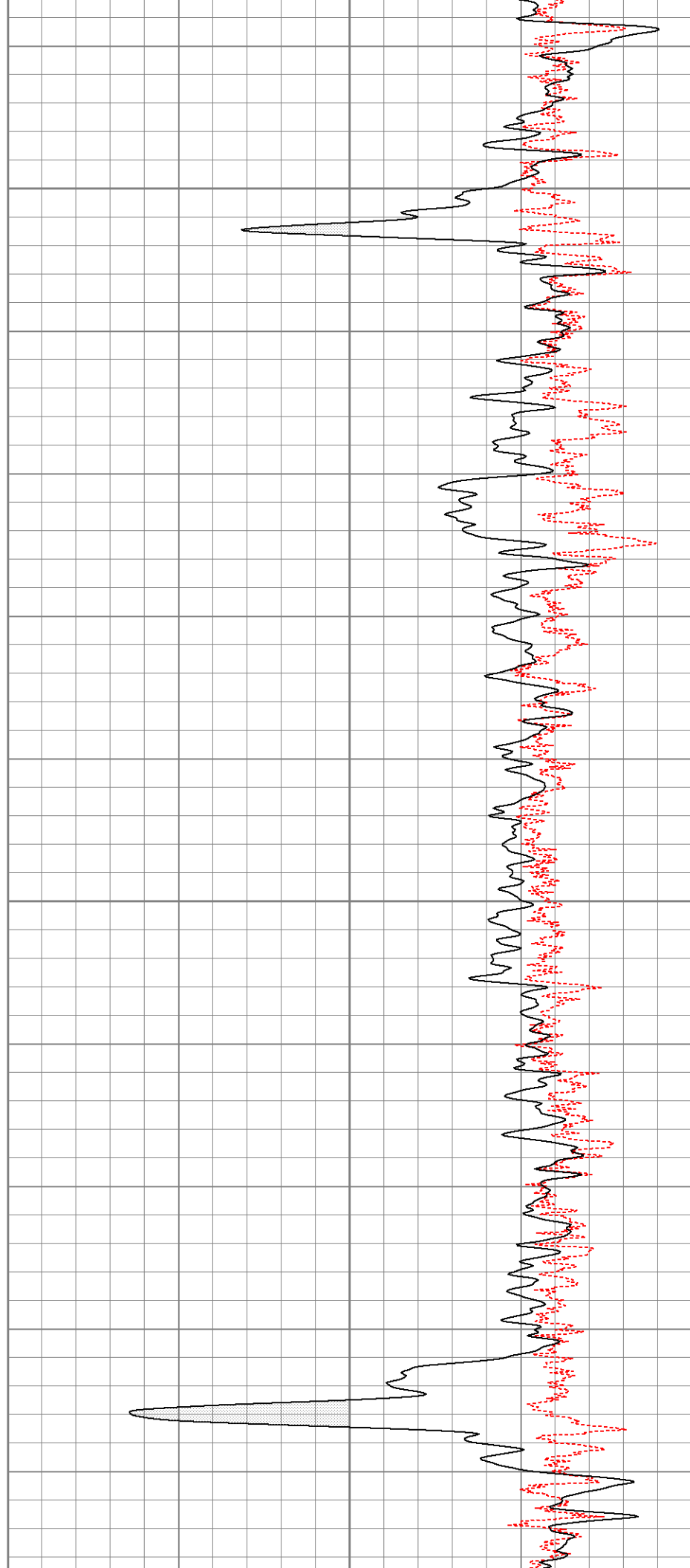
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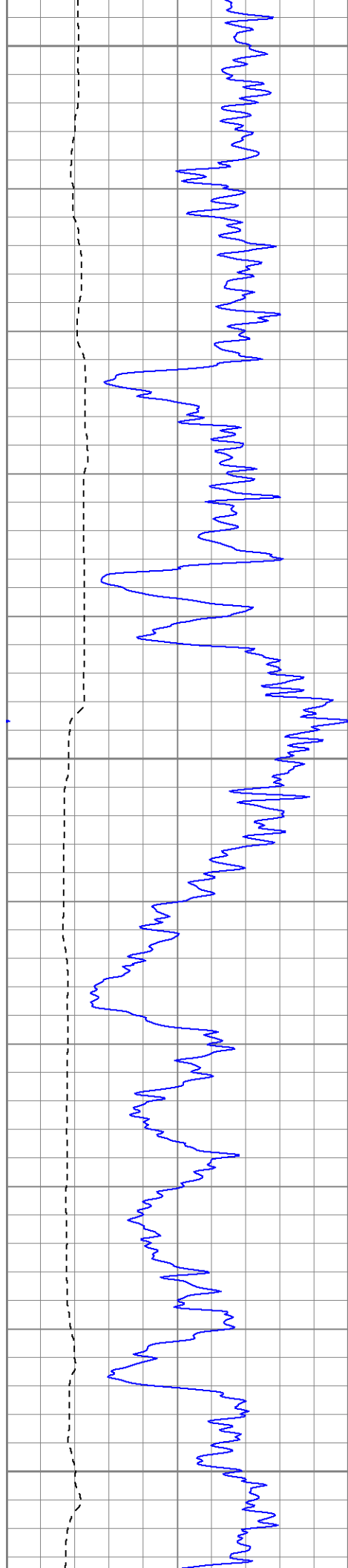




550

600

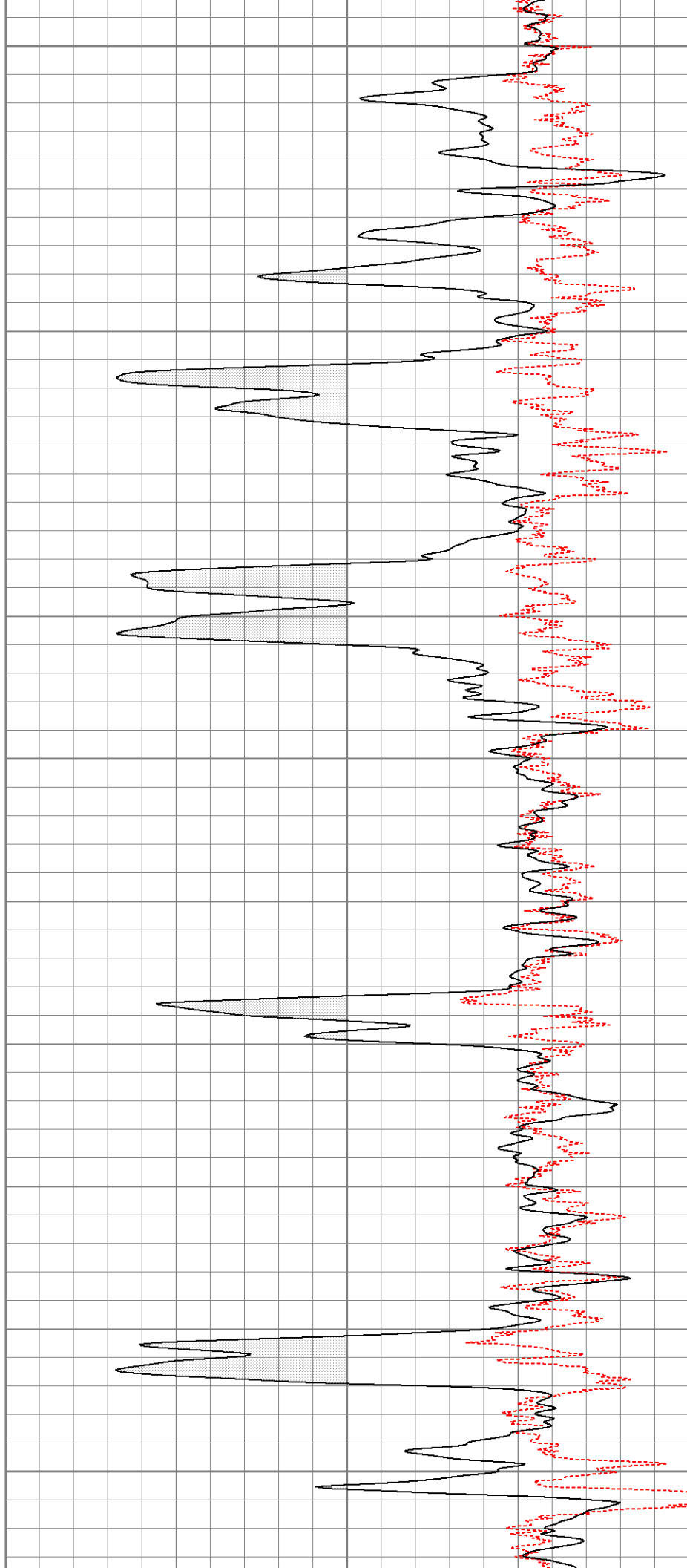


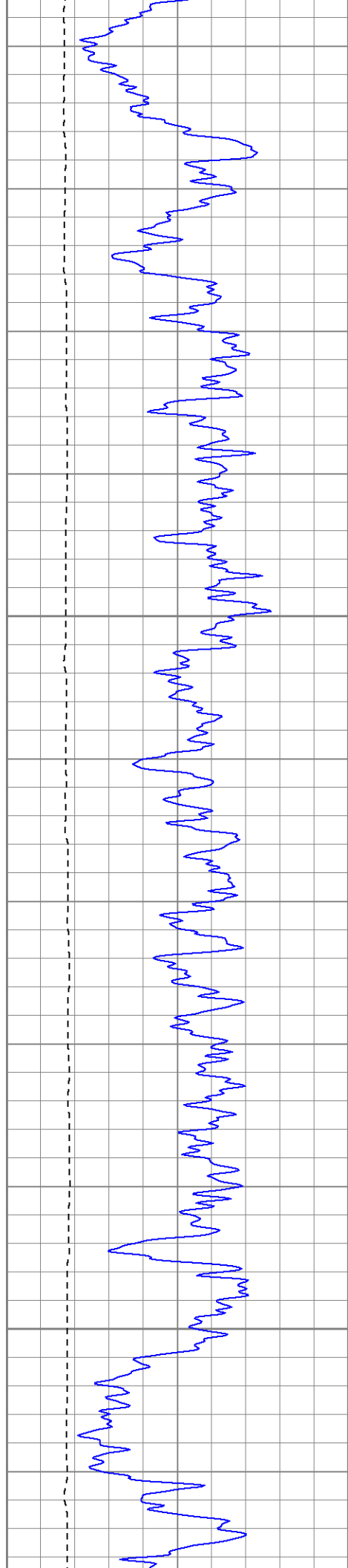


650

700

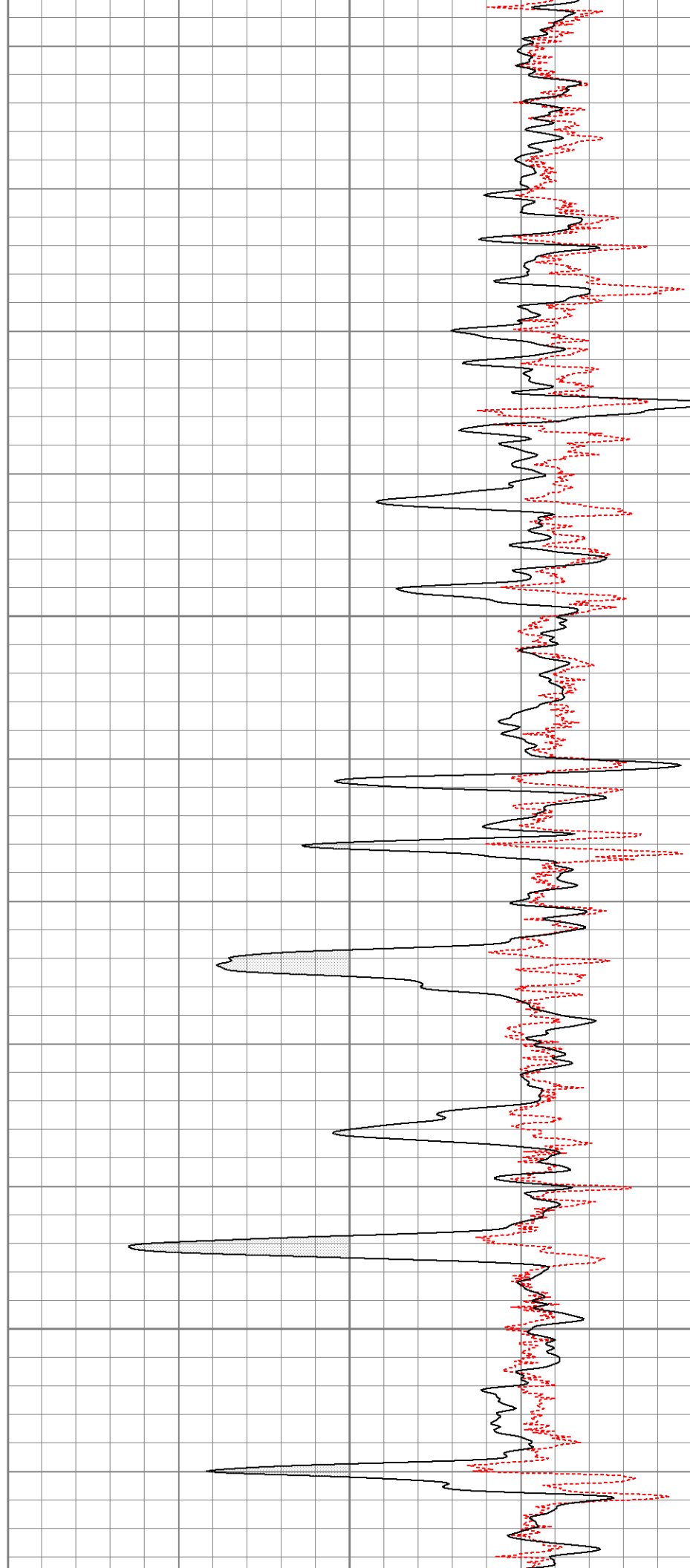
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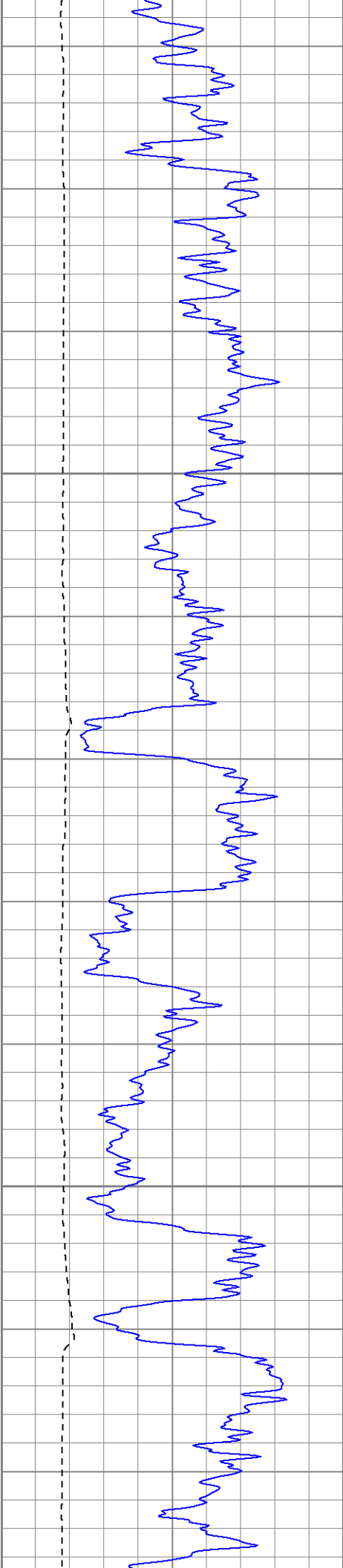




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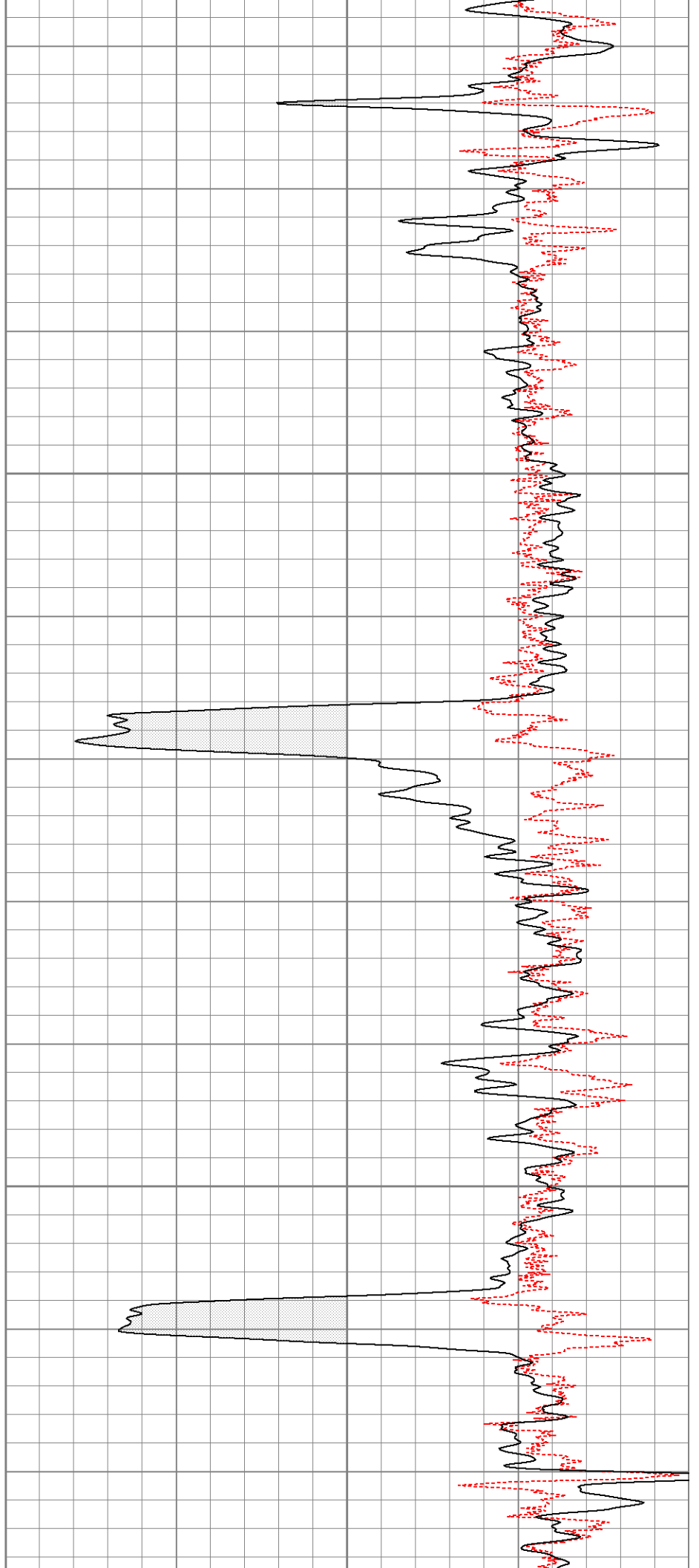
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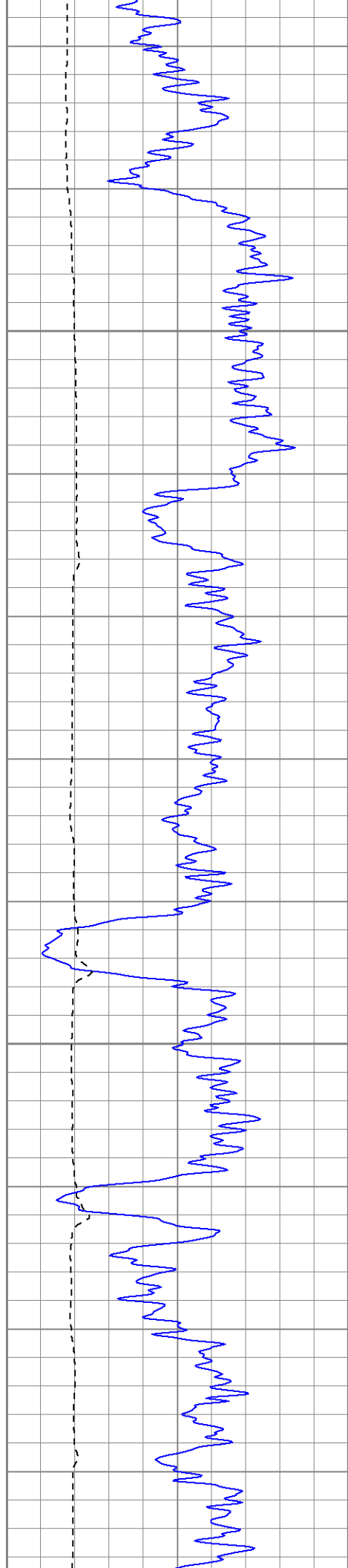




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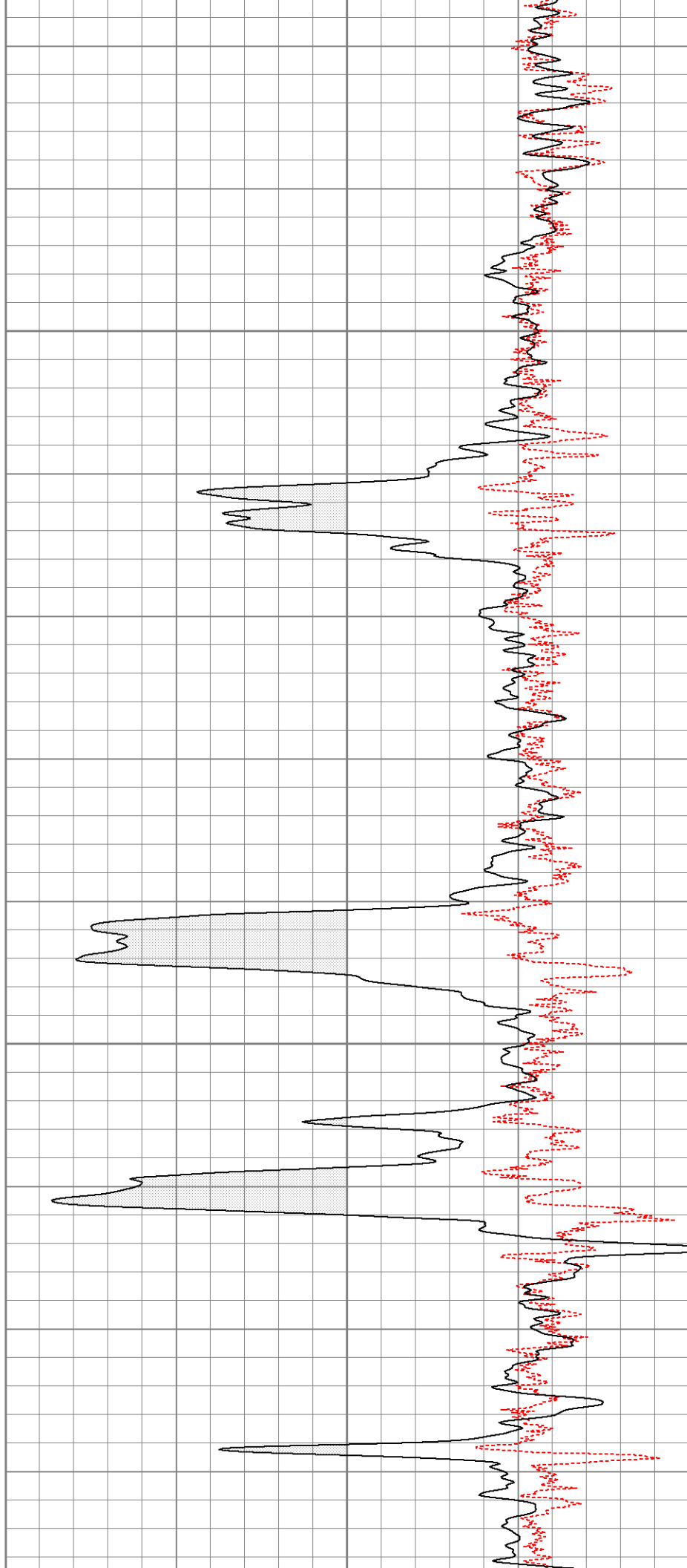
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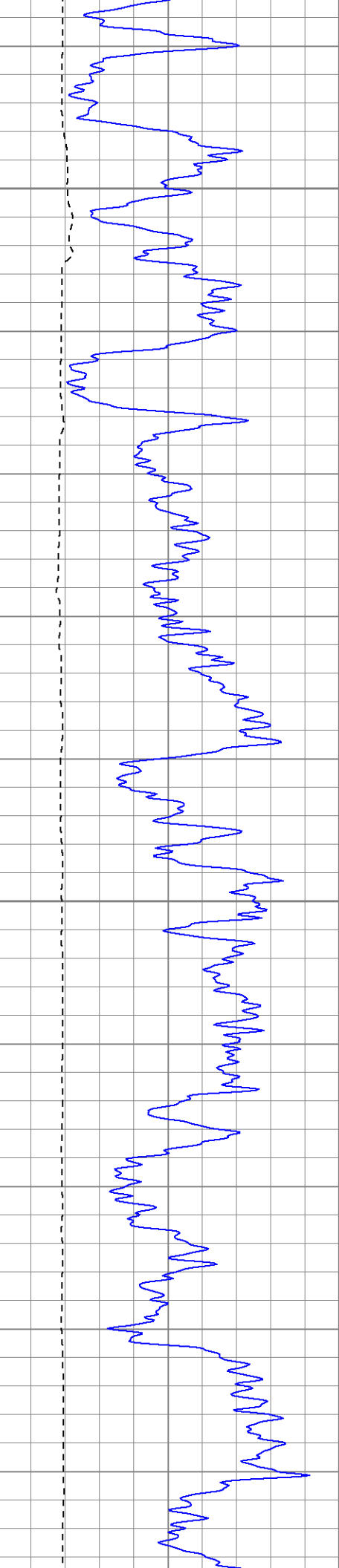




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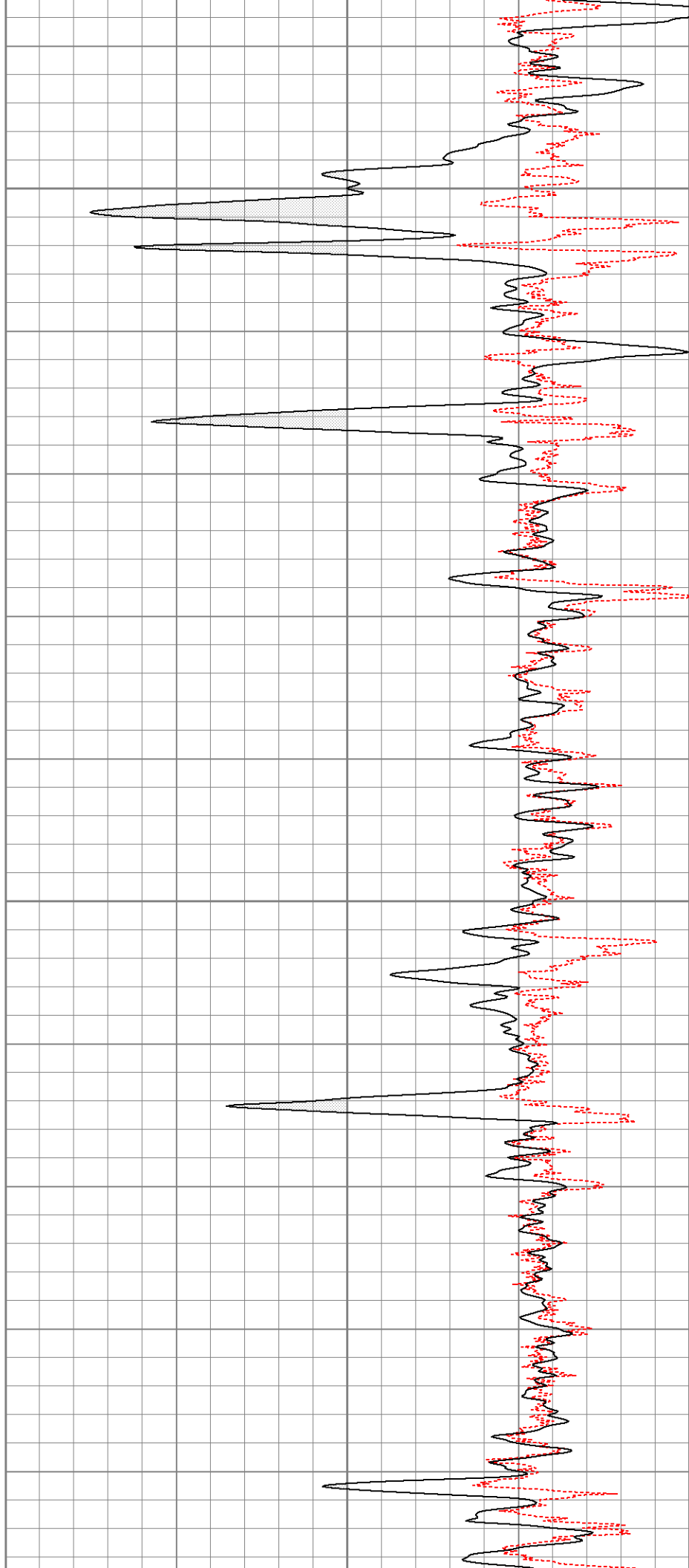
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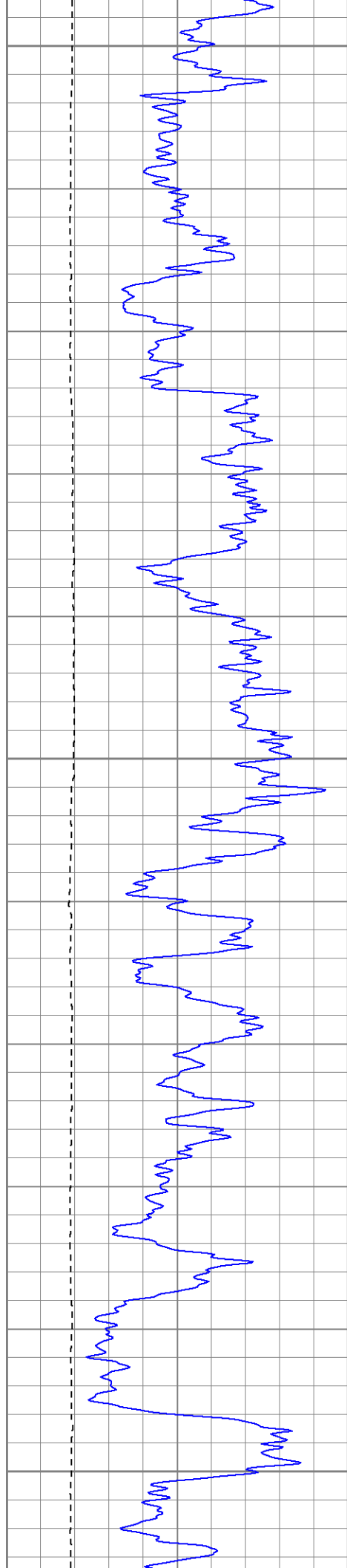




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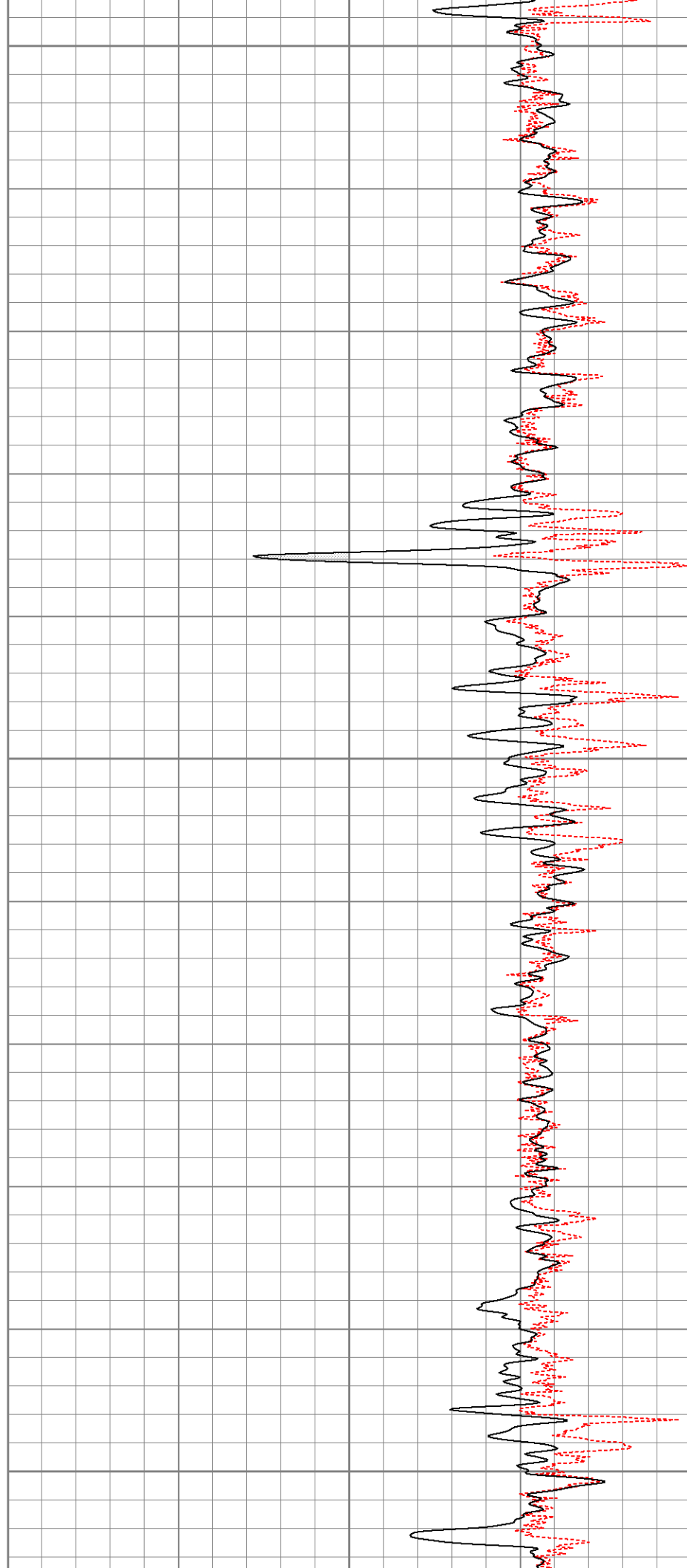


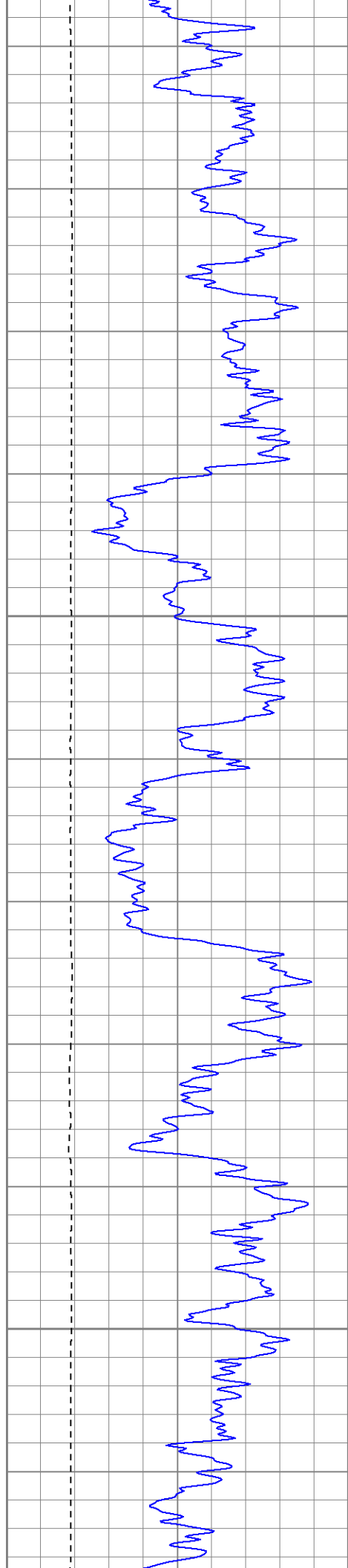


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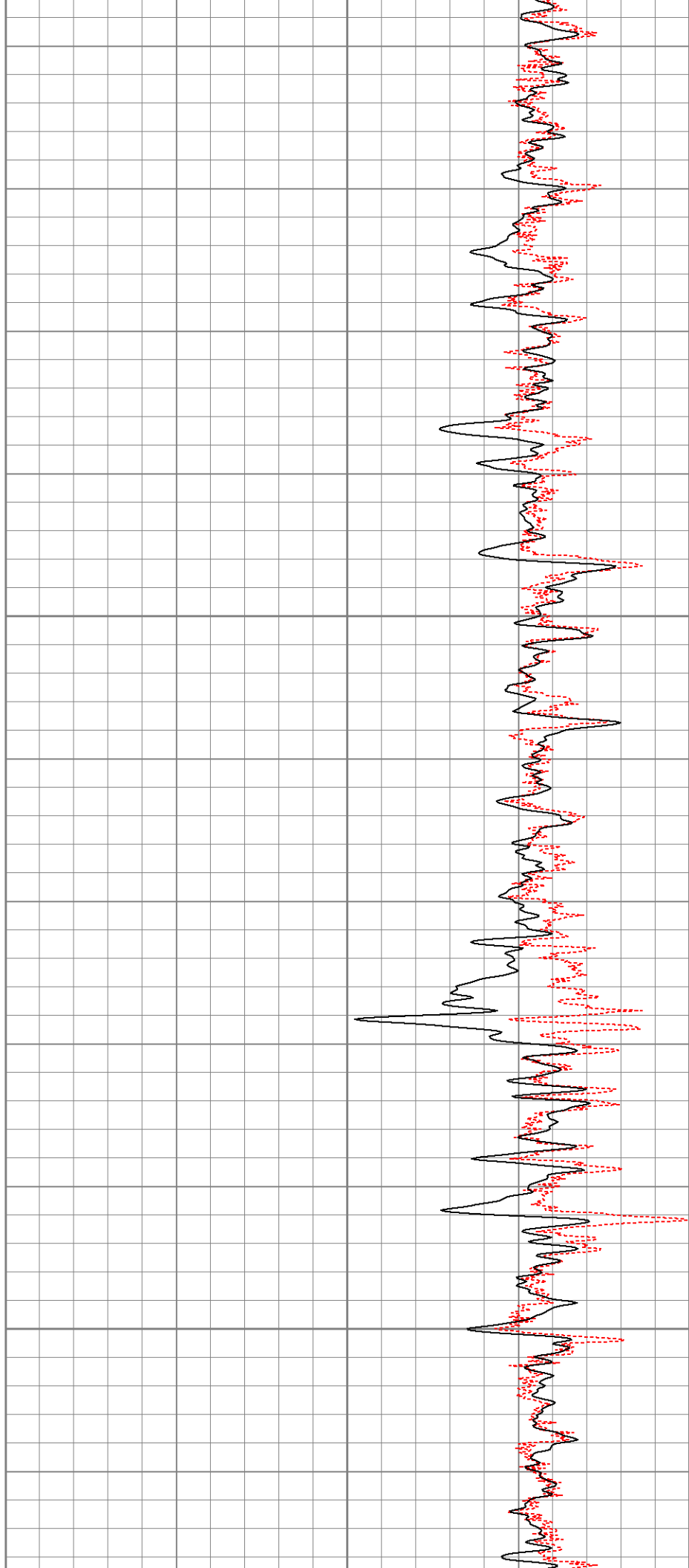
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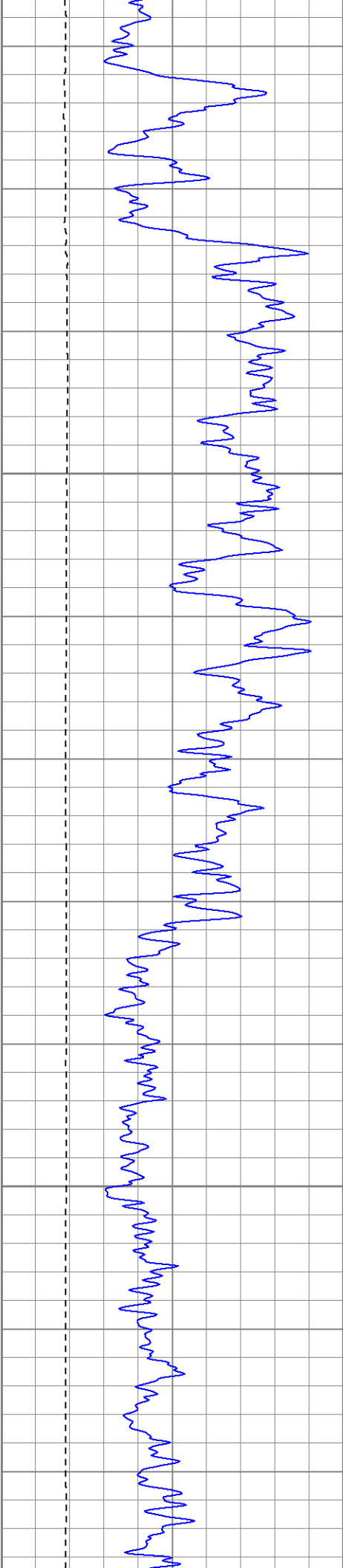




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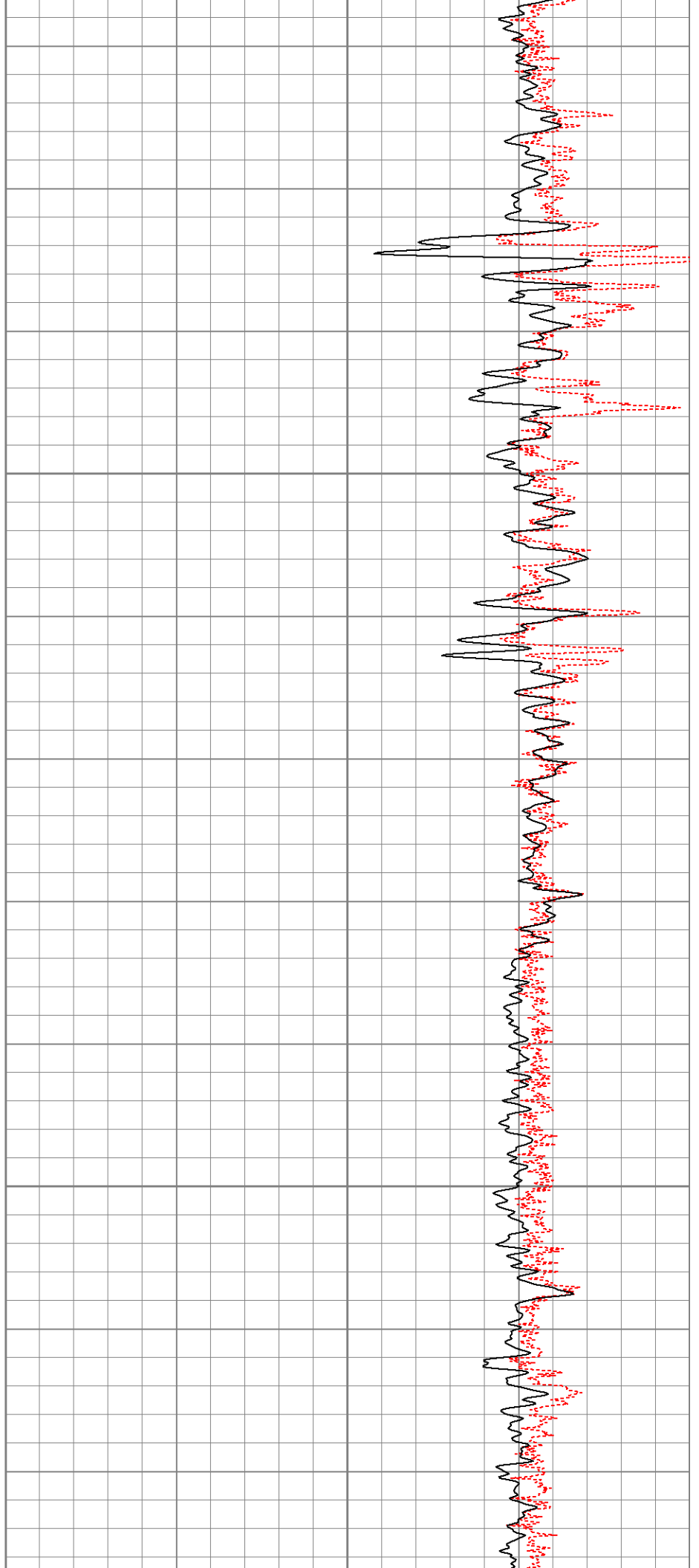
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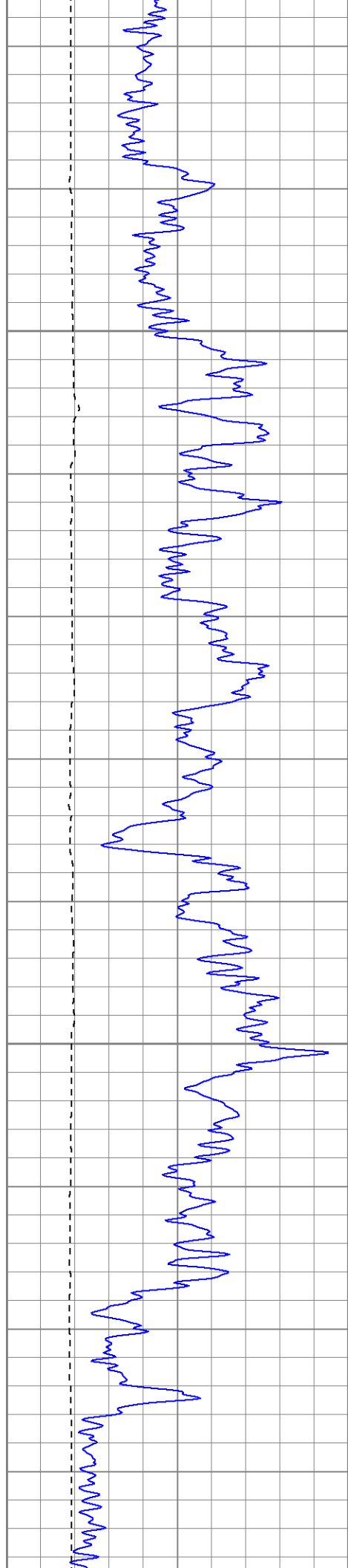




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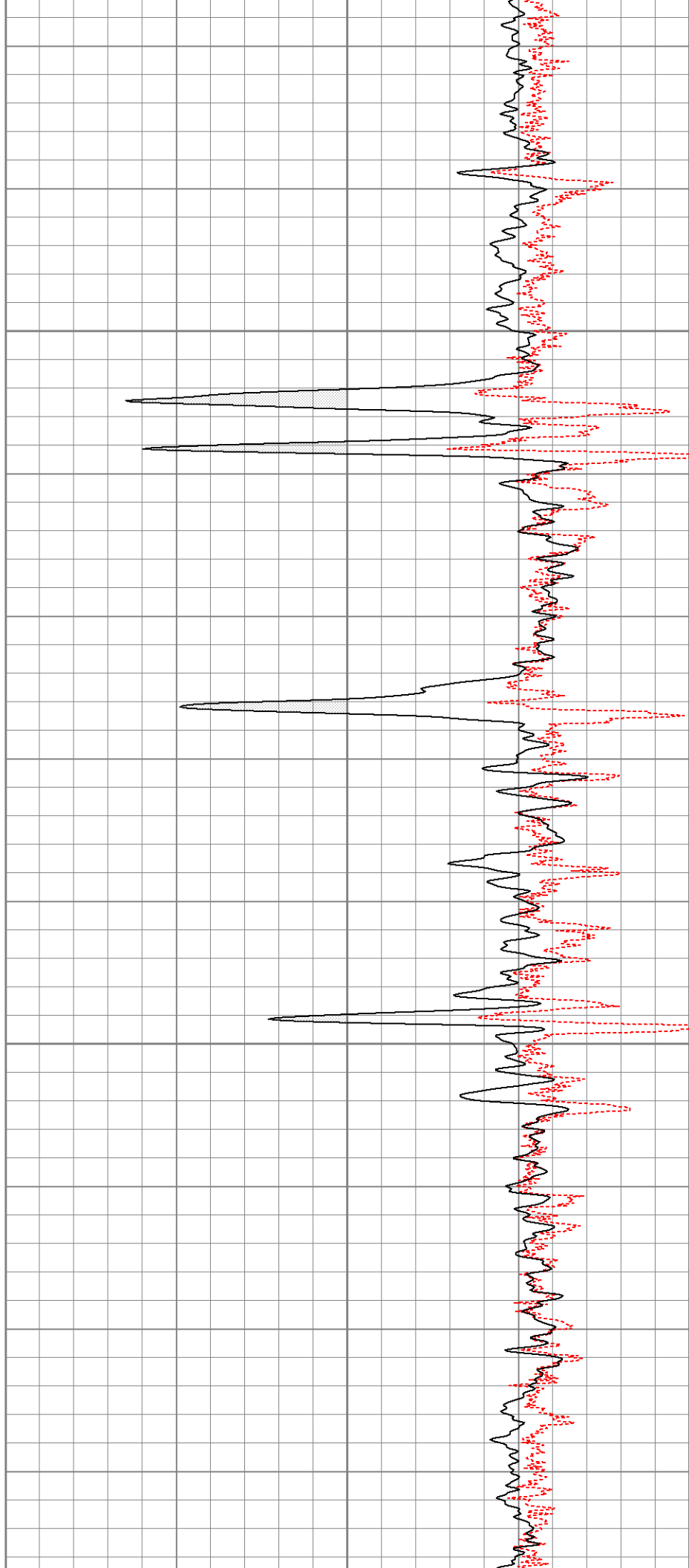
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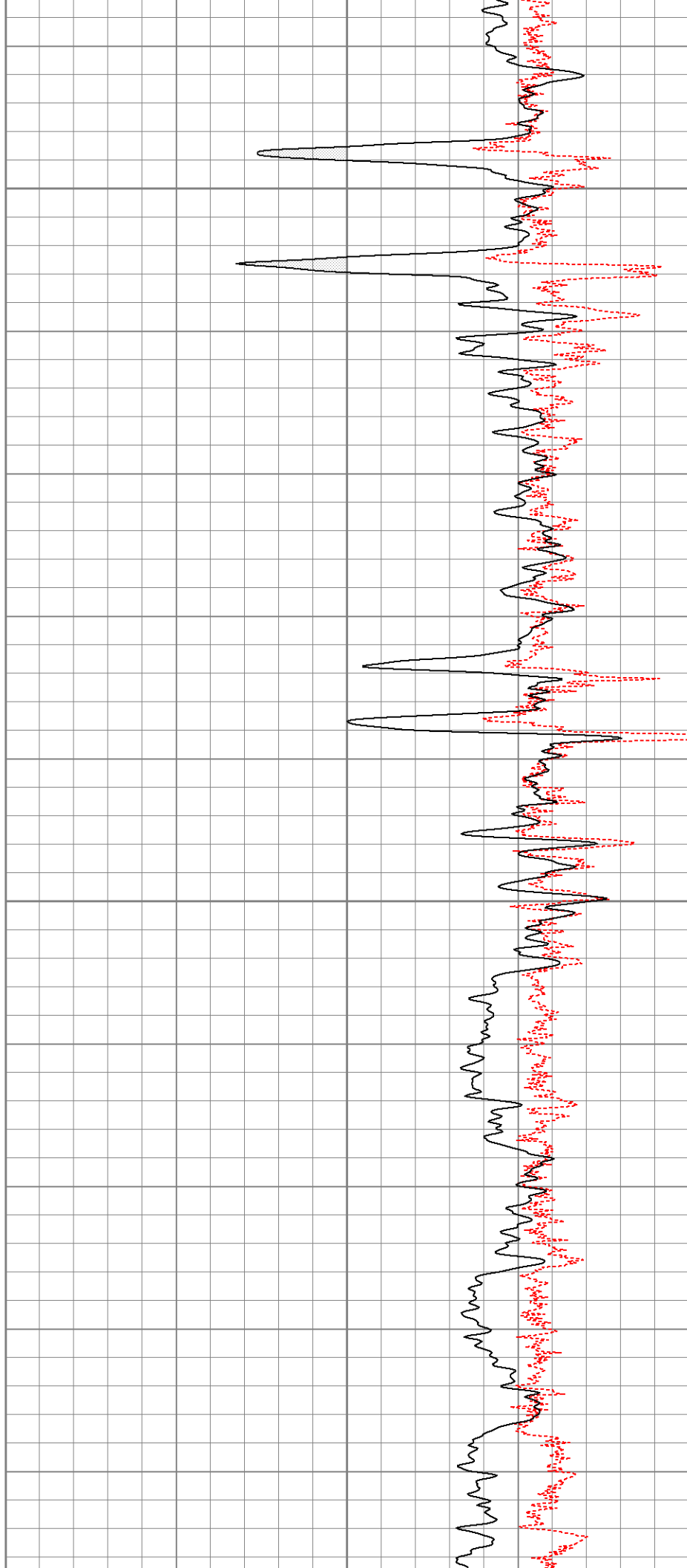
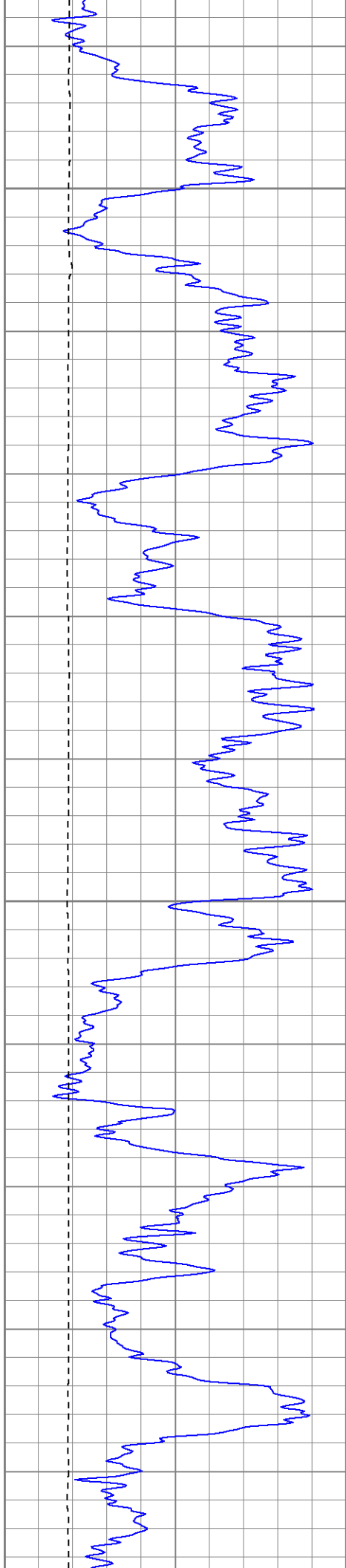
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1600



1650

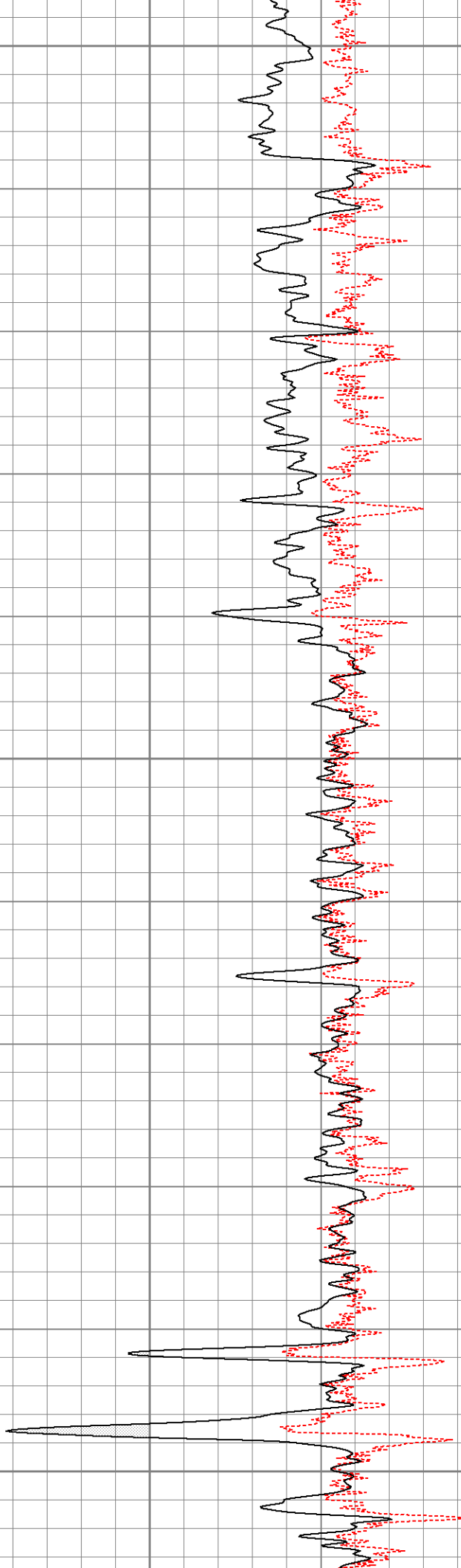
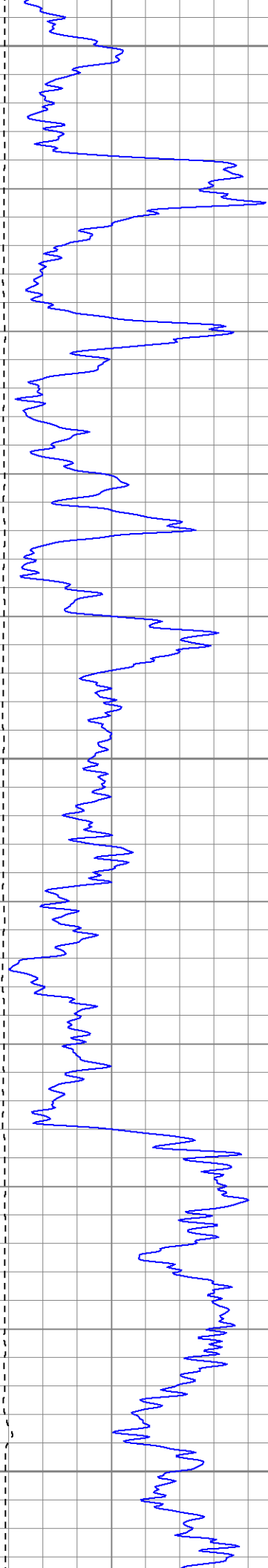
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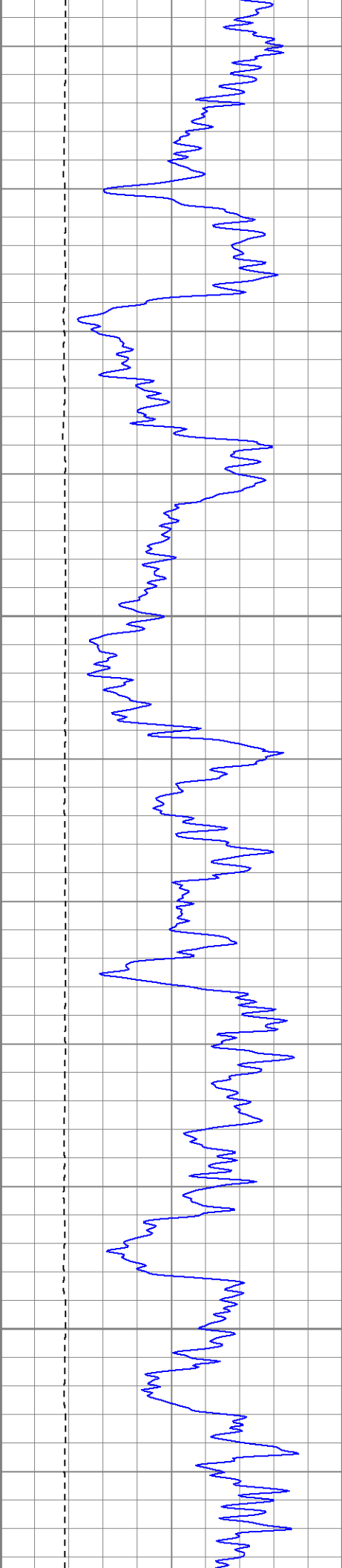


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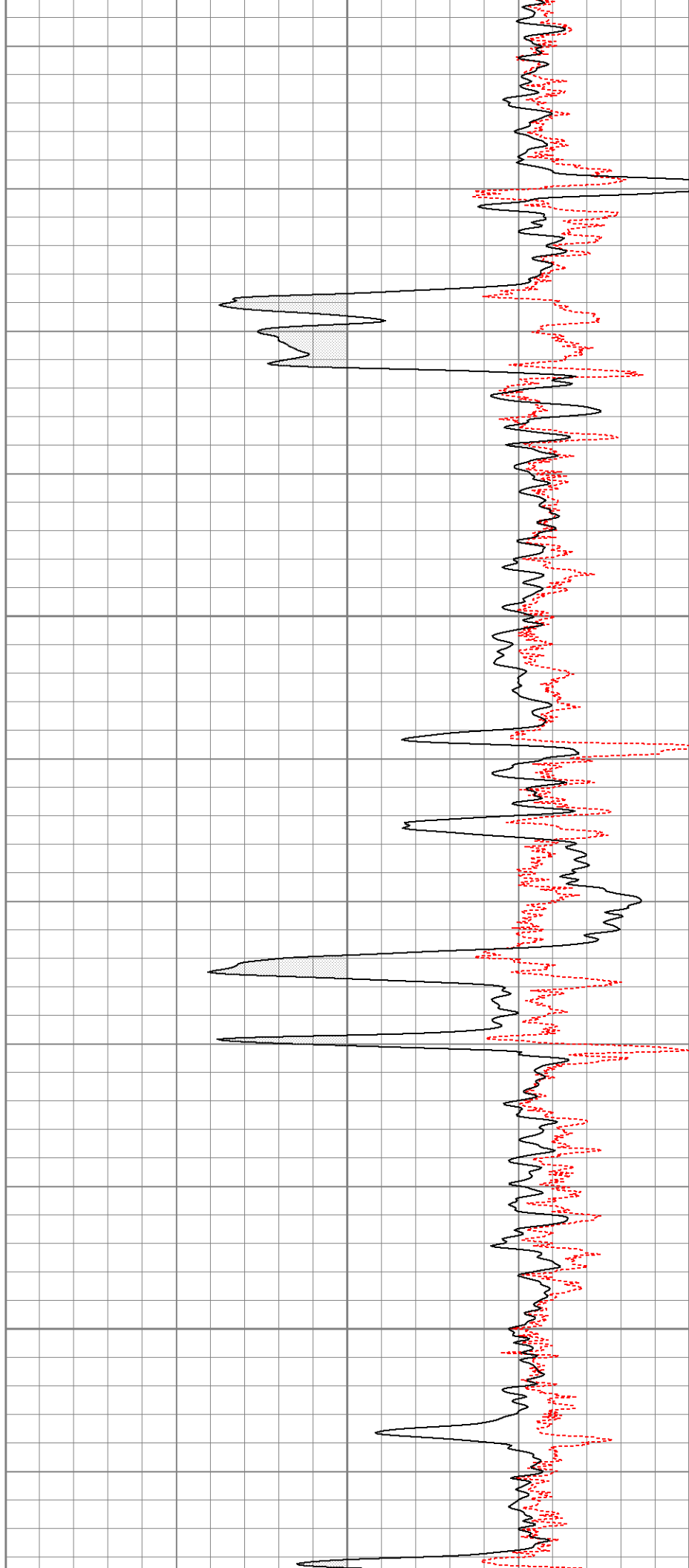
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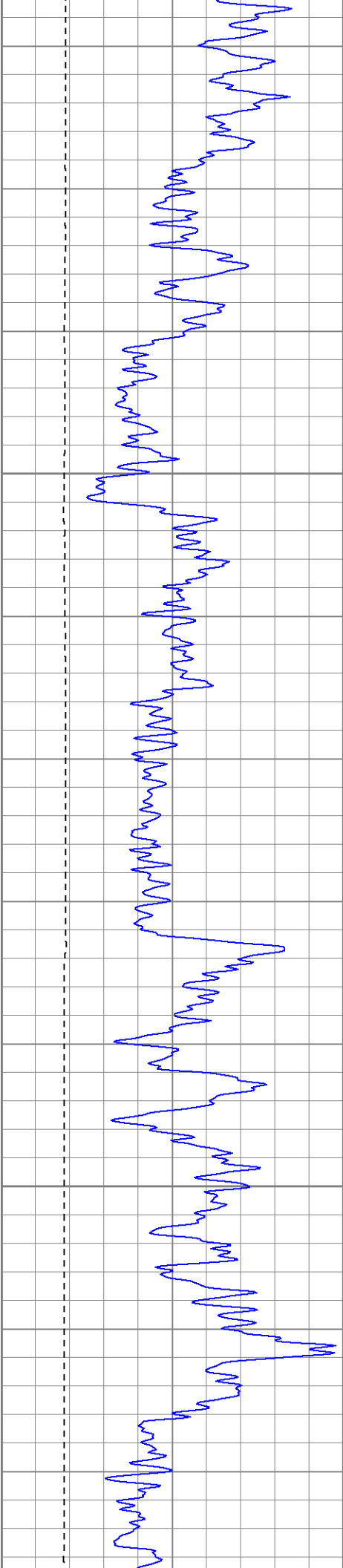




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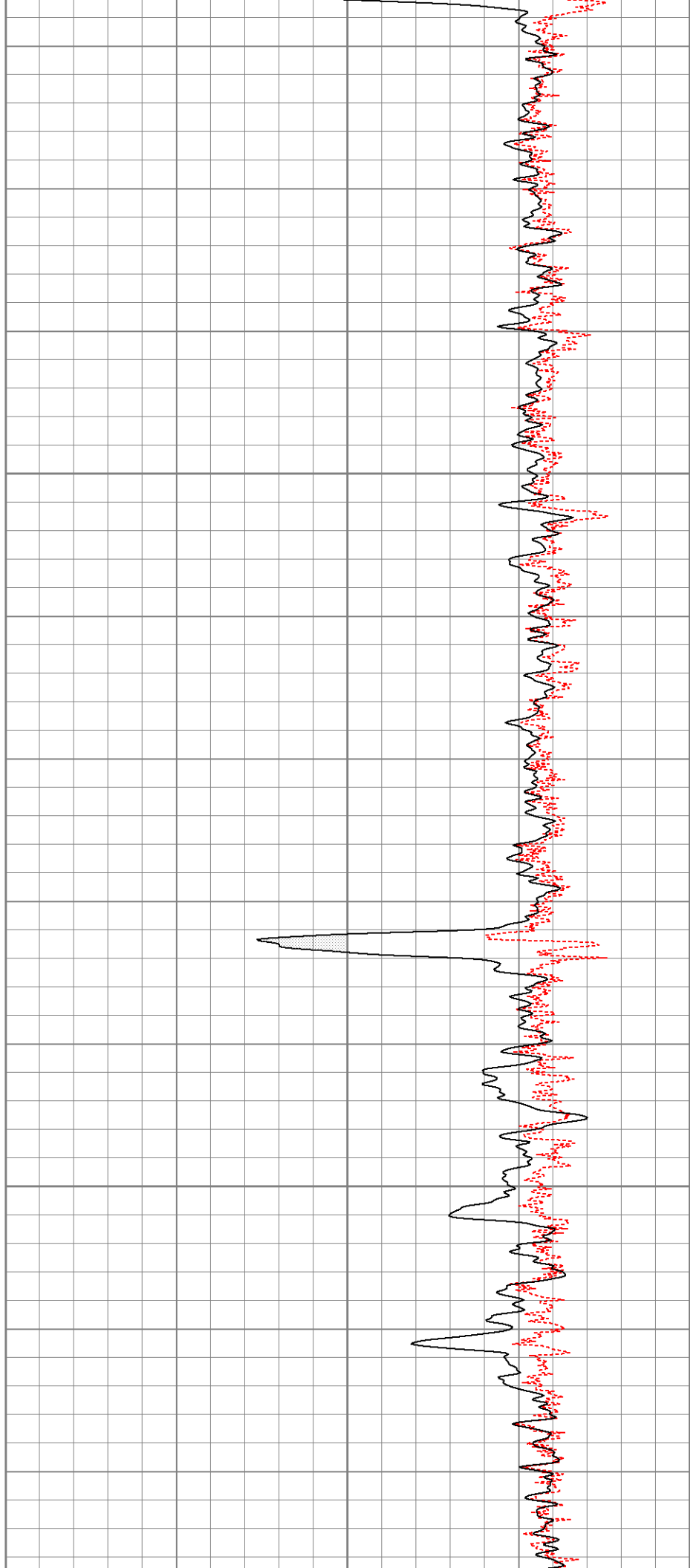
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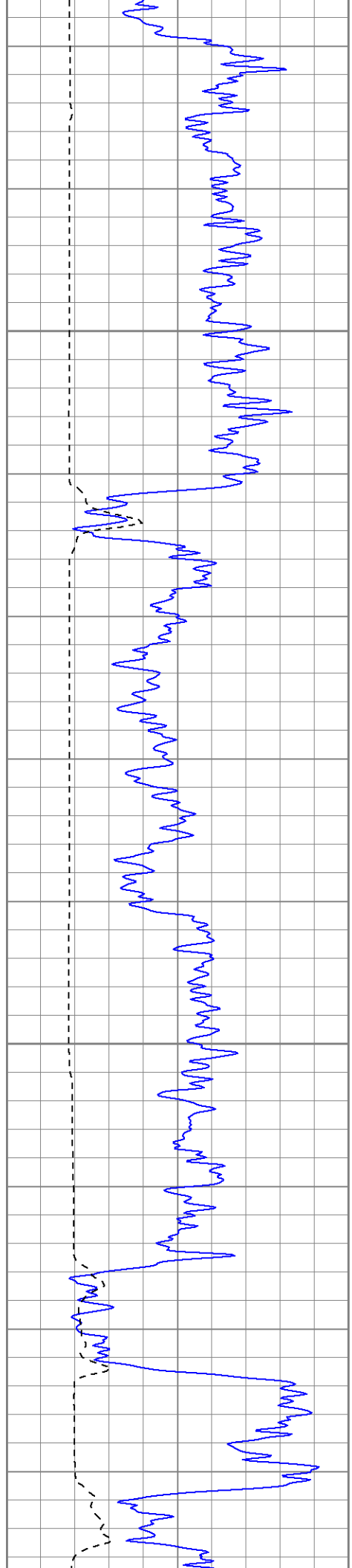
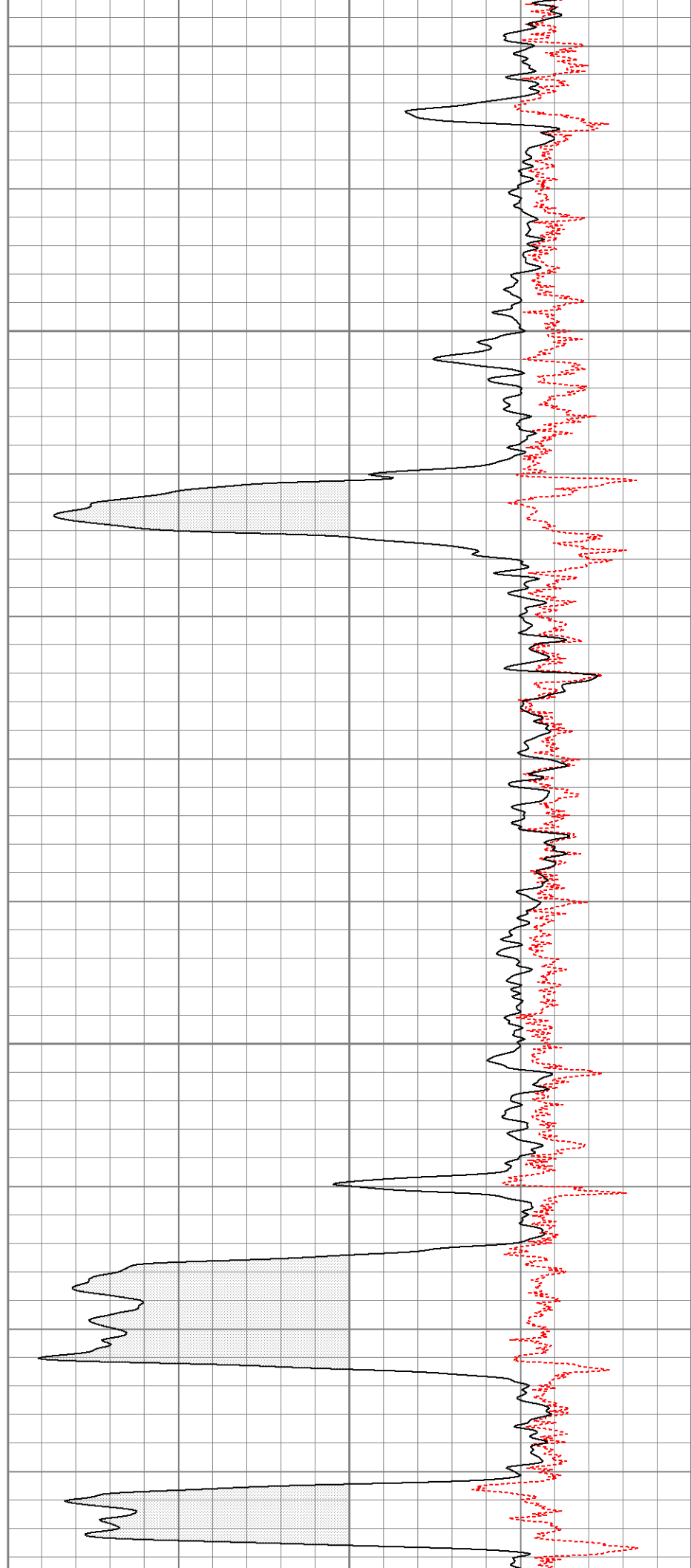
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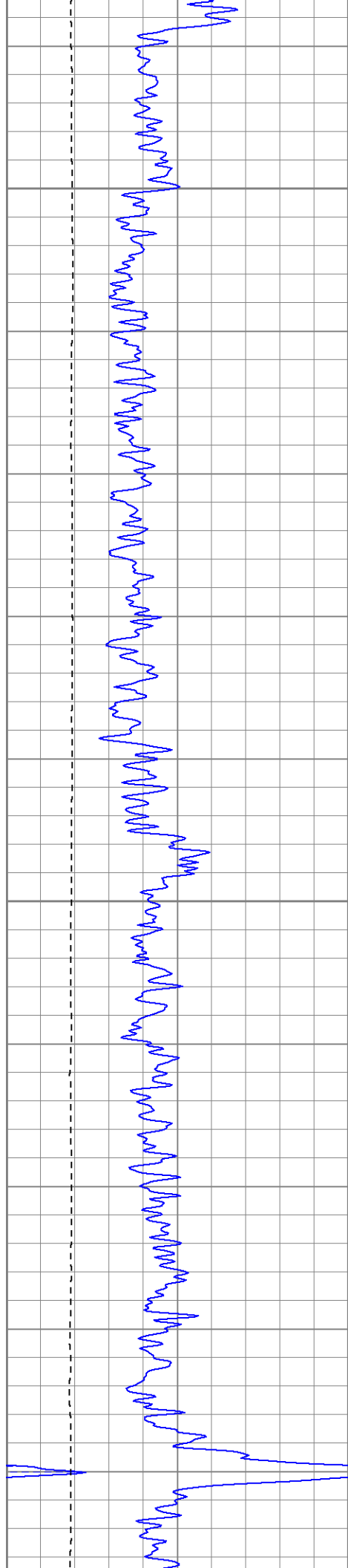
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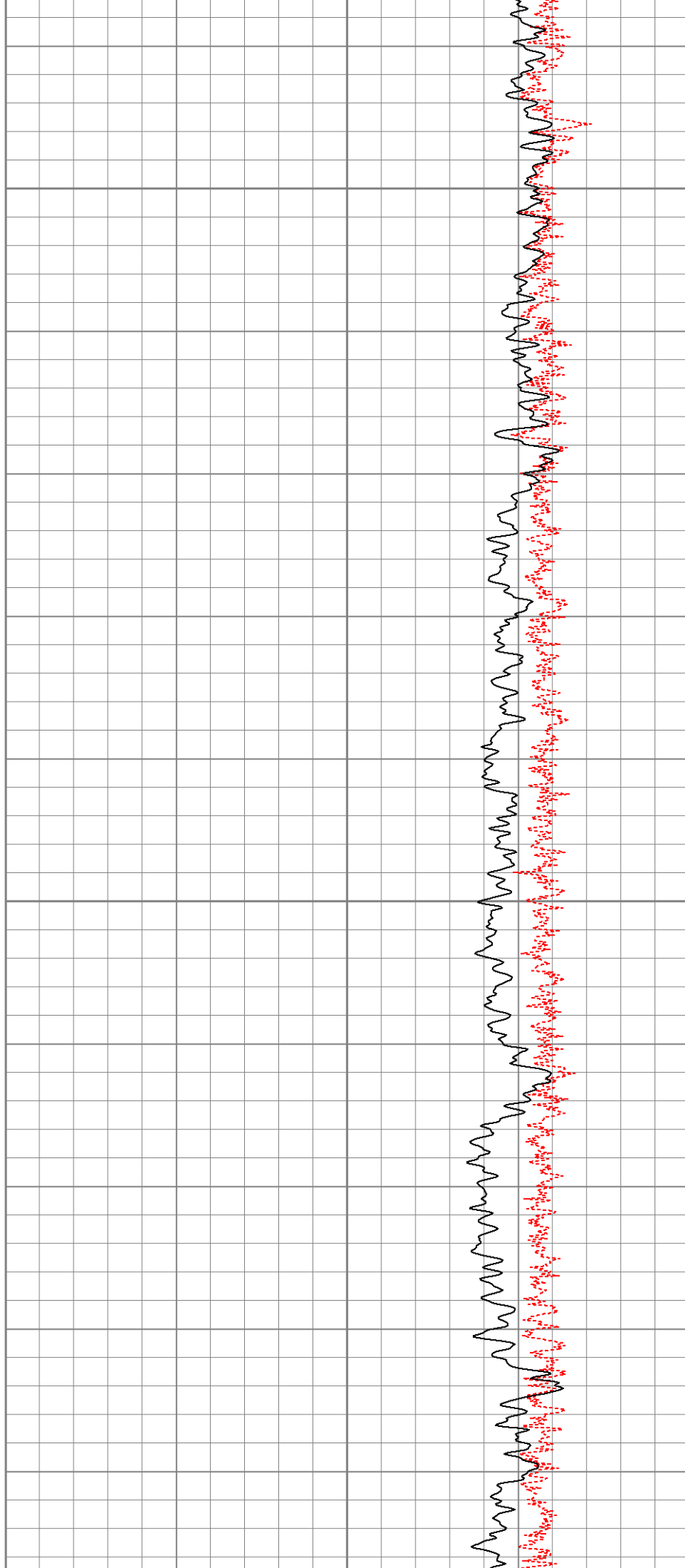
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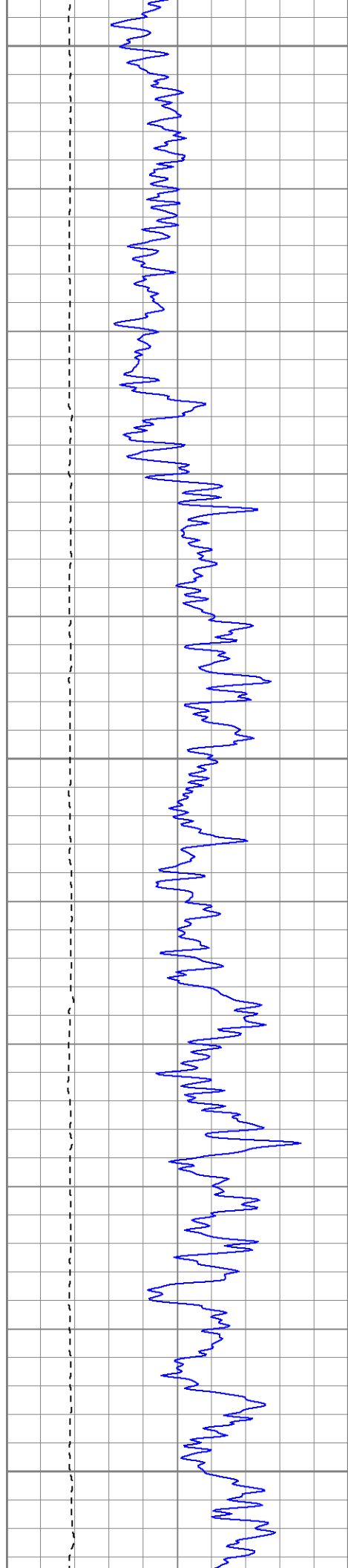




2200

2250

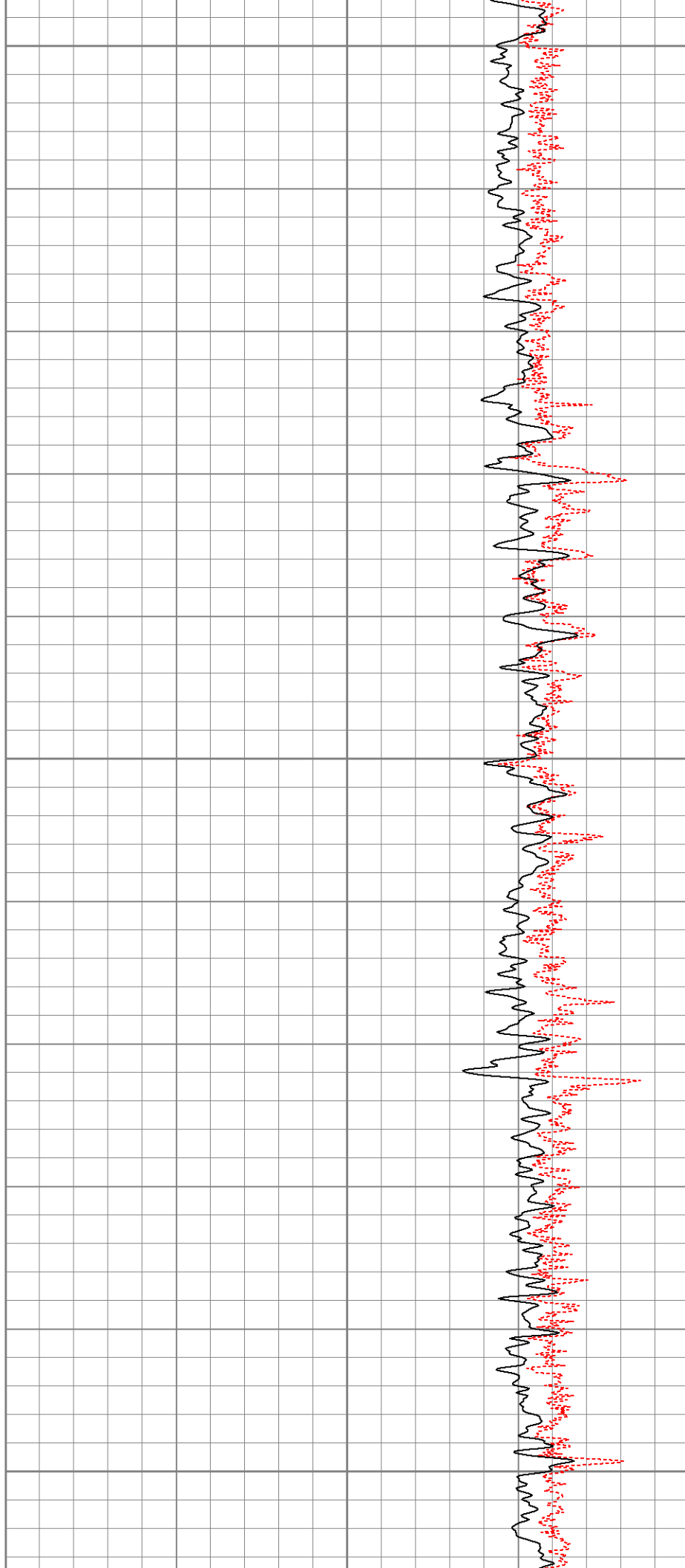


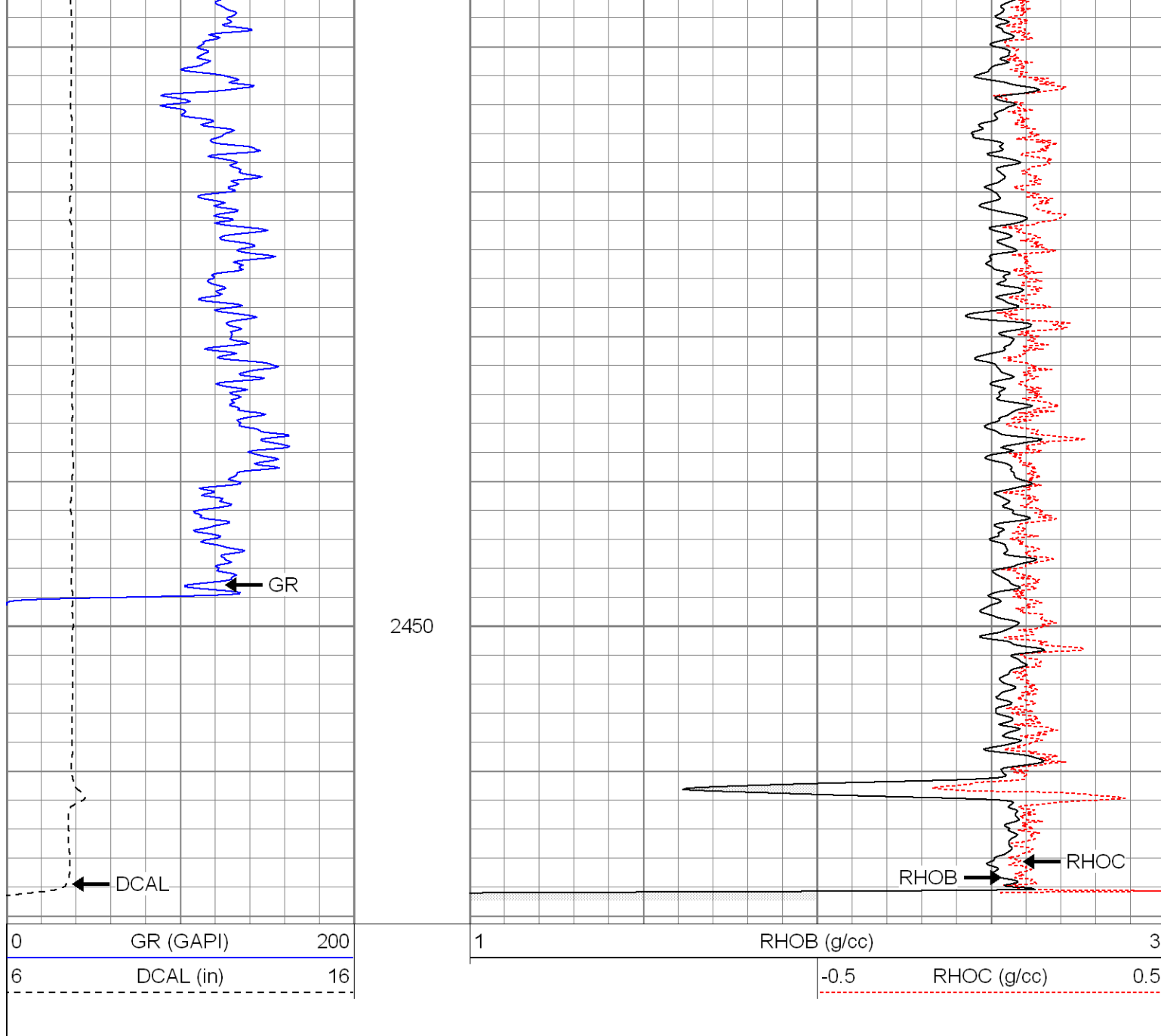


2300

2350

2400





Calibration Report

Database File: xtoac0502.db
 Dataset Pathname: pass4
 Dataset Creation: Mon Jun 11 14:26:25 2007 by Log Open-Cased 061129

Compensated Density Calibration Report

Serial-Model: 2119-O
 Source / Verifier: csv-j12 / blks
 Master Calibration Performed: Thu May 17 21:21:31 2007

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	988.49	602.41	cps
Aluminum	2.590	g/cc	220.69	404.88	cps

Spine Angle = 75.16

Density/Spine Ratio = 0.567

Size

Reading

