



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

COMPENSATED DENSITY NEUTRON LOG

Company XTO Energy Inc.
Well Golden Eagle 19-13
Field Purgatoire River
County Las Animas State Colorado

Location: API # : 05 071 09479 00

586' FSL & 1243' FWL

SEC 19 TWP 33S RGE 67W

Permanent Datum Ground Level Elevation 7779'
Log Measured From Ground Level
Drilling Measured From Ground Level

Other Services
DIL
Elevation
K.B. -----
D.F. -----
G.L. 7779'

Date 3-25-08

Run Number One

Depth Driller 2400'

Depth Logger 2404'

Bottom Logged Interval 2378'

Top Log Interval Surface Casing

Casing Driller 8 5/8" @ 767'

Casing Logger 767'

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 2:00 A.M.

Time Logger on Bottom 4:30 A.M.

Maximum Recorded Temperature 102 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 1823' to 1786' due to foam.

Well Directions:

Second Bosque Entrance, straight across railroad tracks, at Y stay left to Apache canyon, take first right past windmill, follow up the hill, through one location, at fork stay left, take first hard right up hill, drive through one location, stay to right, follow road to location.

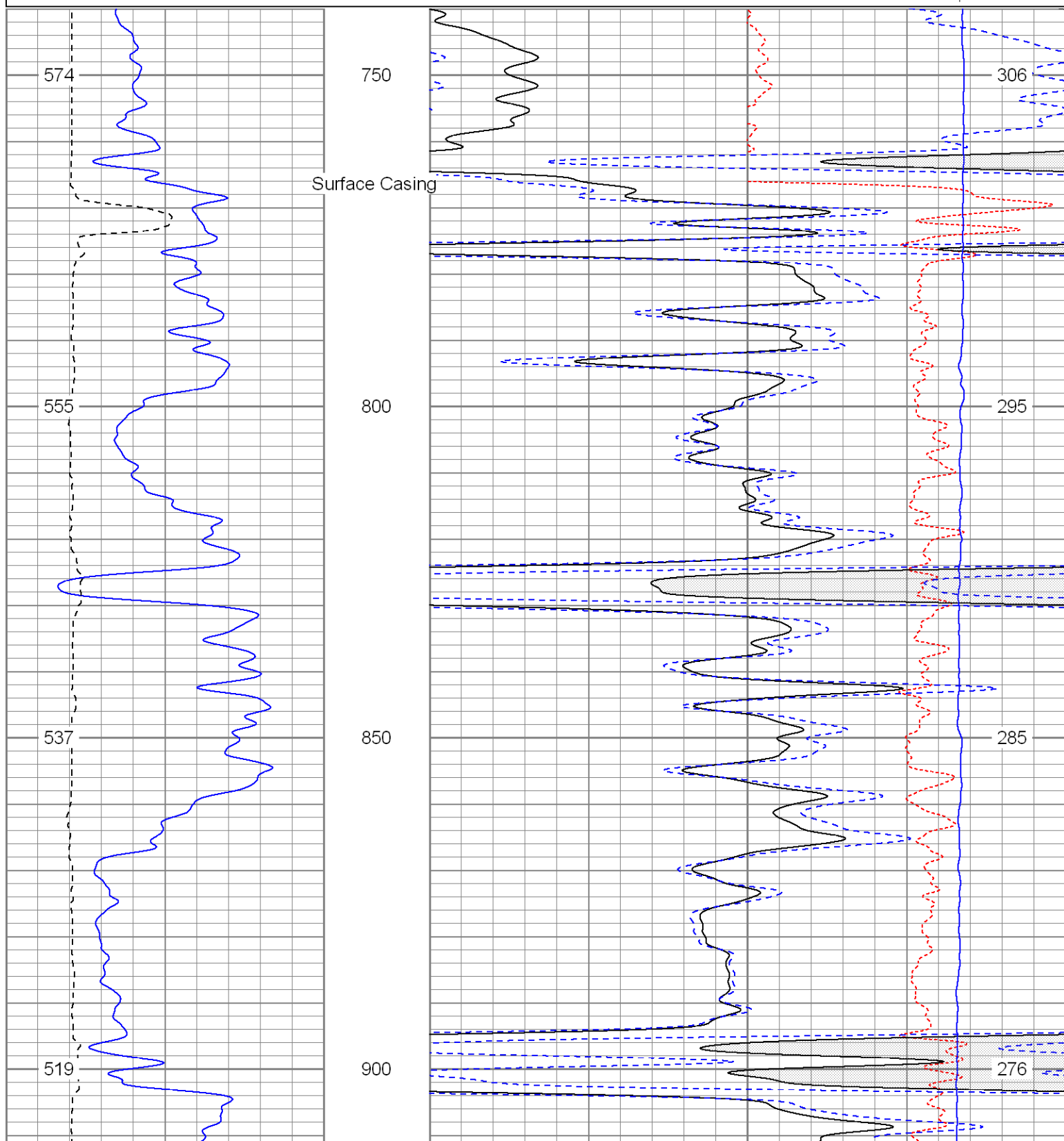


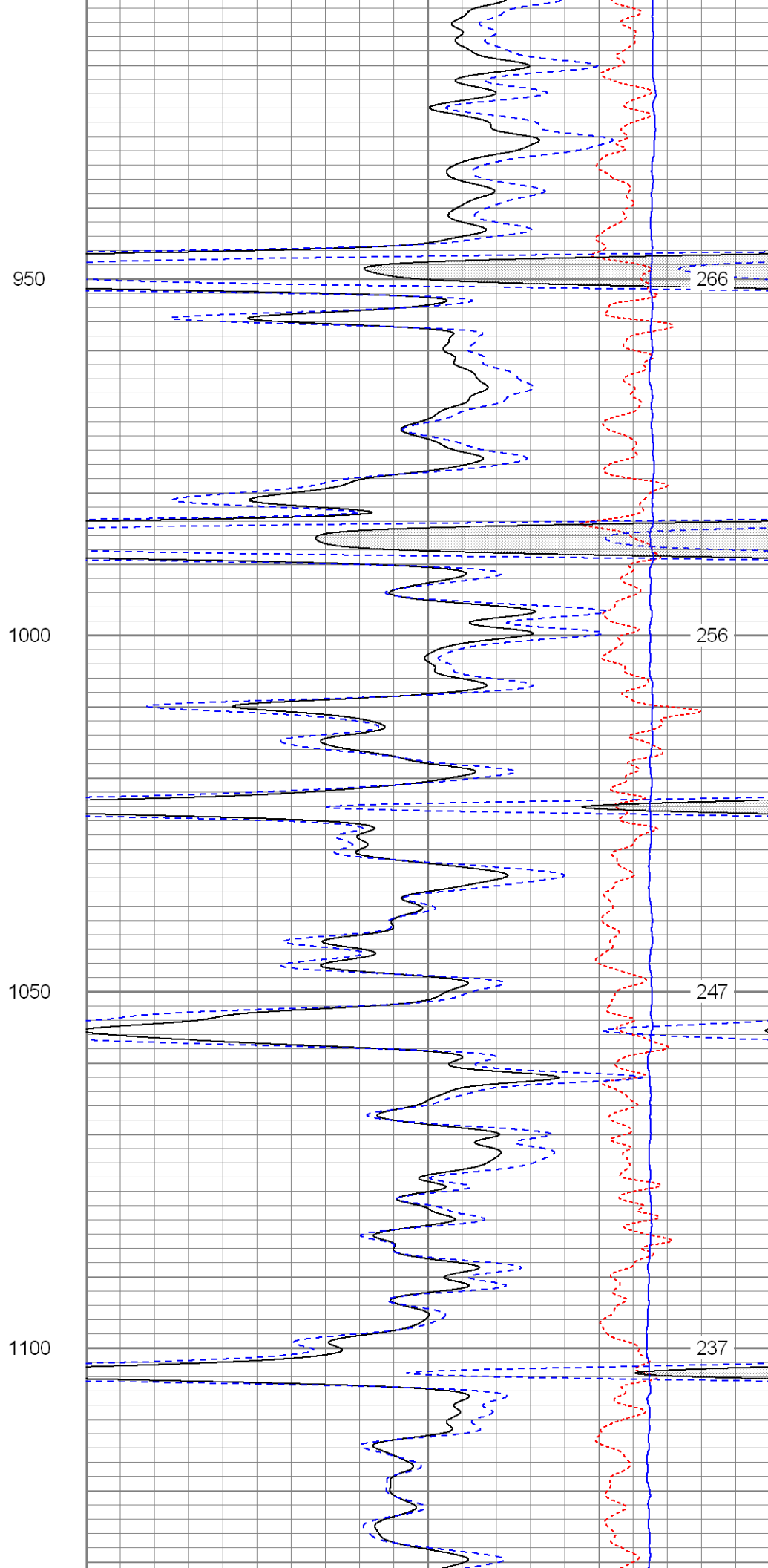
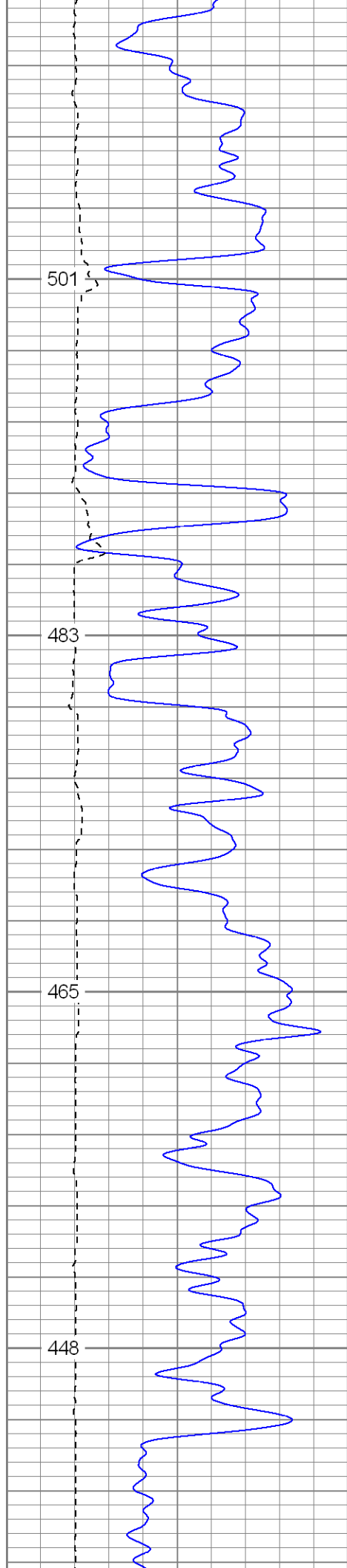
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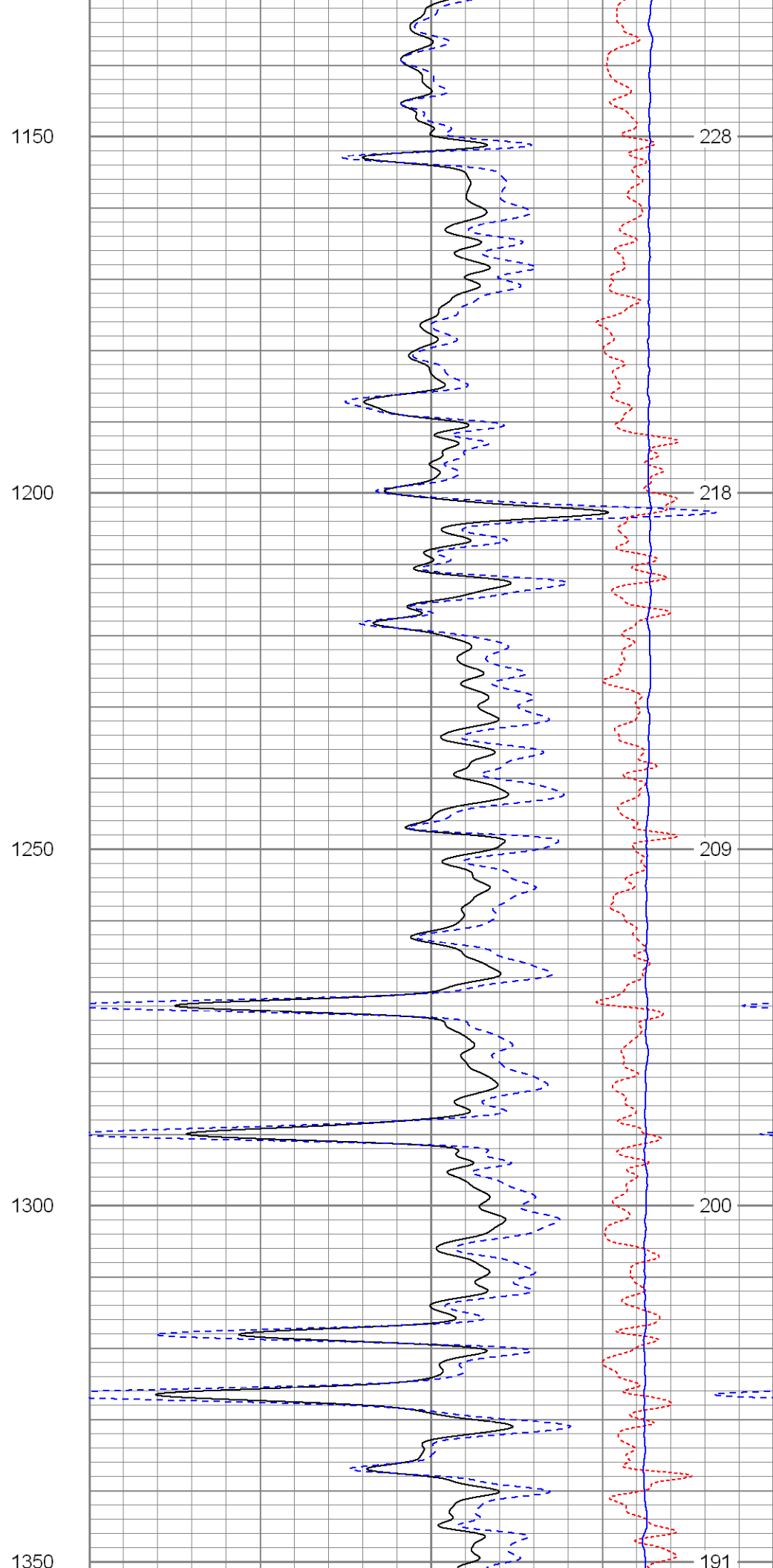
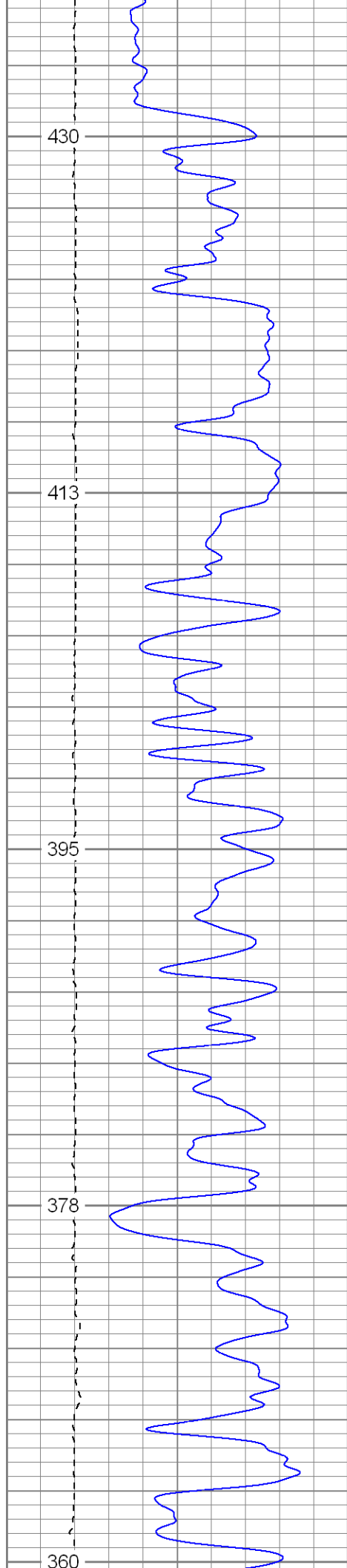
Main Pass

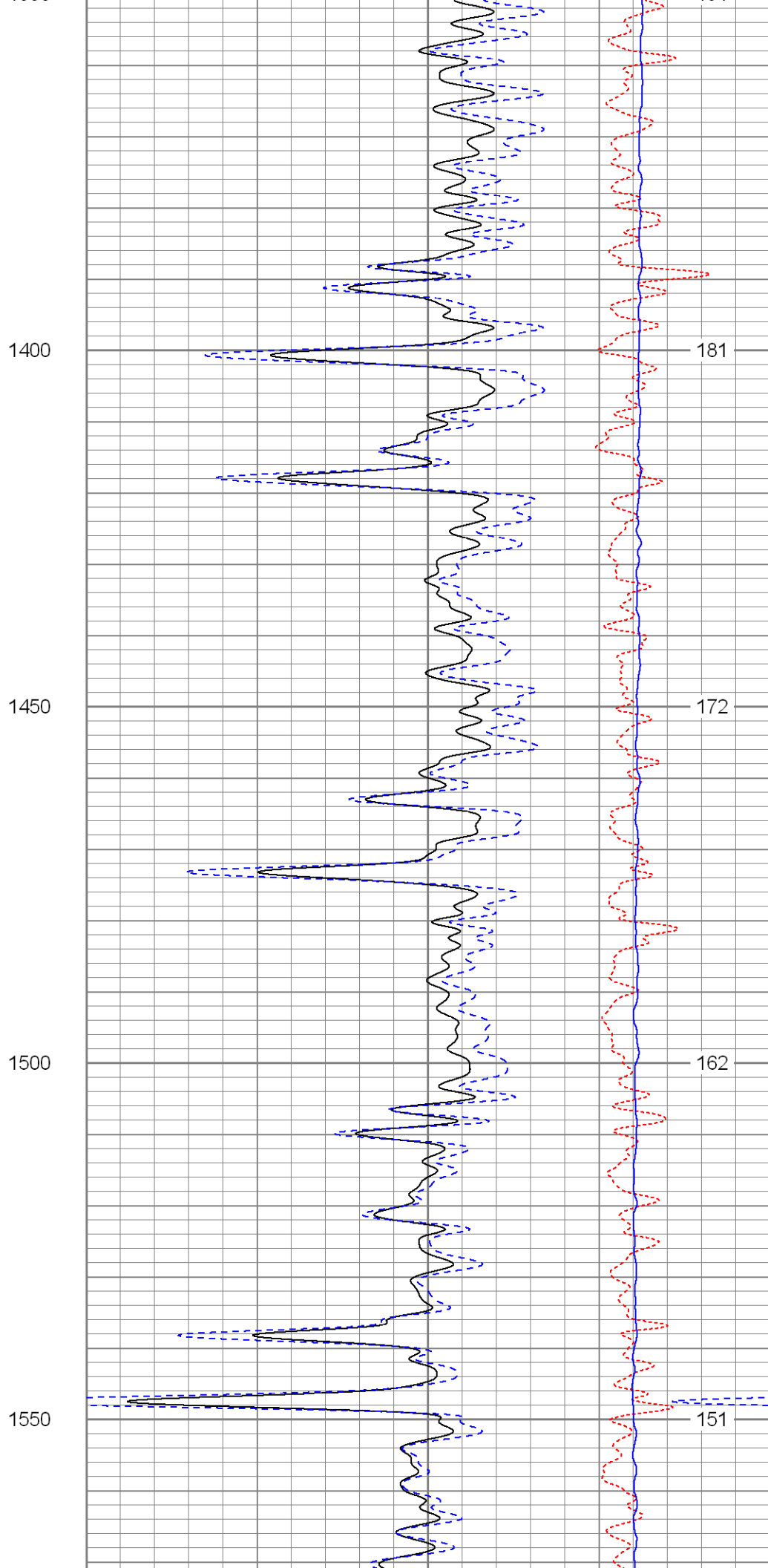
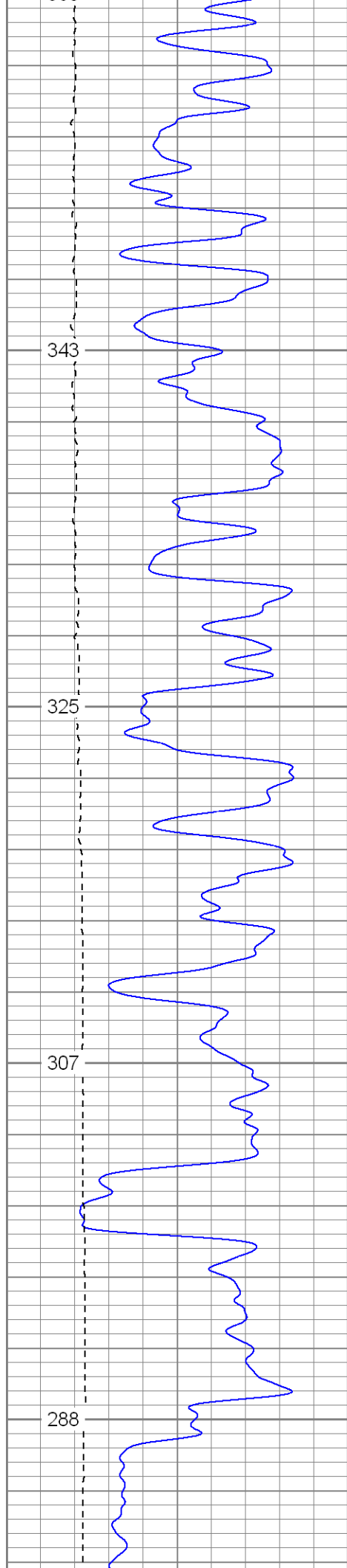
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Dataset Pathname: pass2.1
Presentation Format: cdl
Dataset Creation: Tue Mar 25 06:11:16 2008 by Calc Open-Cased 070814
Charted by: Depth in Feet scaled 1:240

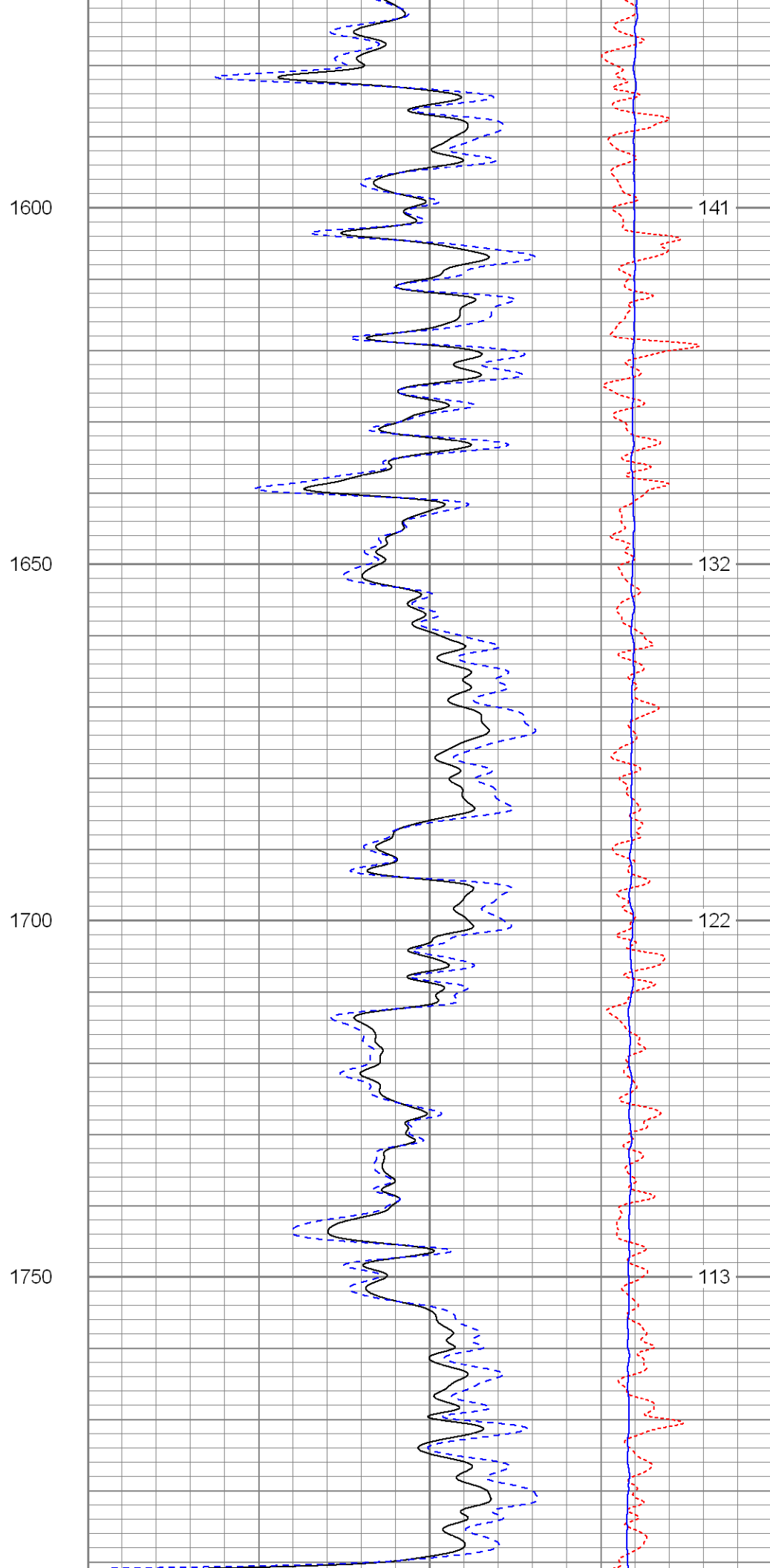
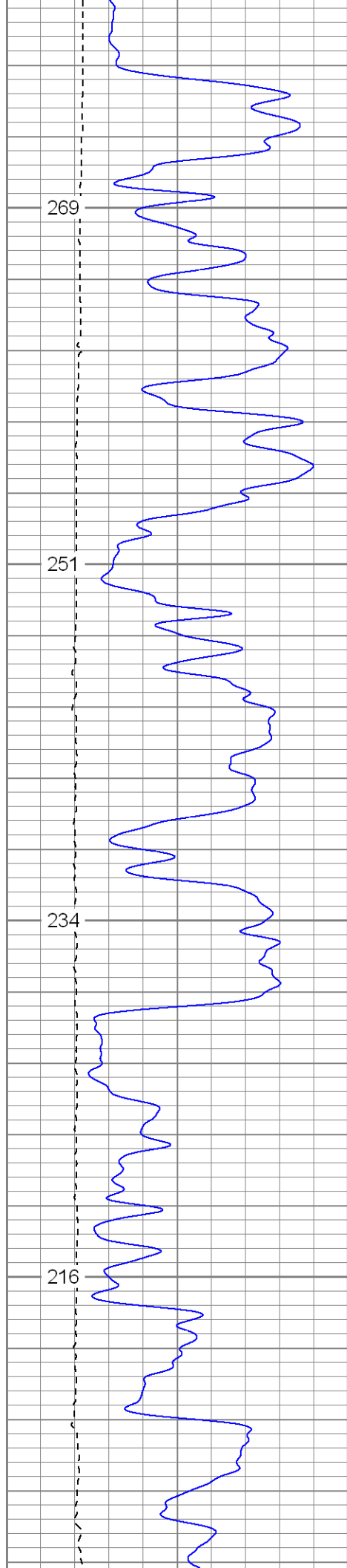
0	GR (GAPI)	200	2	RHOB (g/cc)	3
6	DCAL (in)	16	1	RHOB (g/cc)	2
TBHV (ft3)			30	DPOR (pu)	-10
			-0.5 RHOC (g/cc) 0.5		
			4000 LTEN (lb) 0		
			ABHV (ft3)		

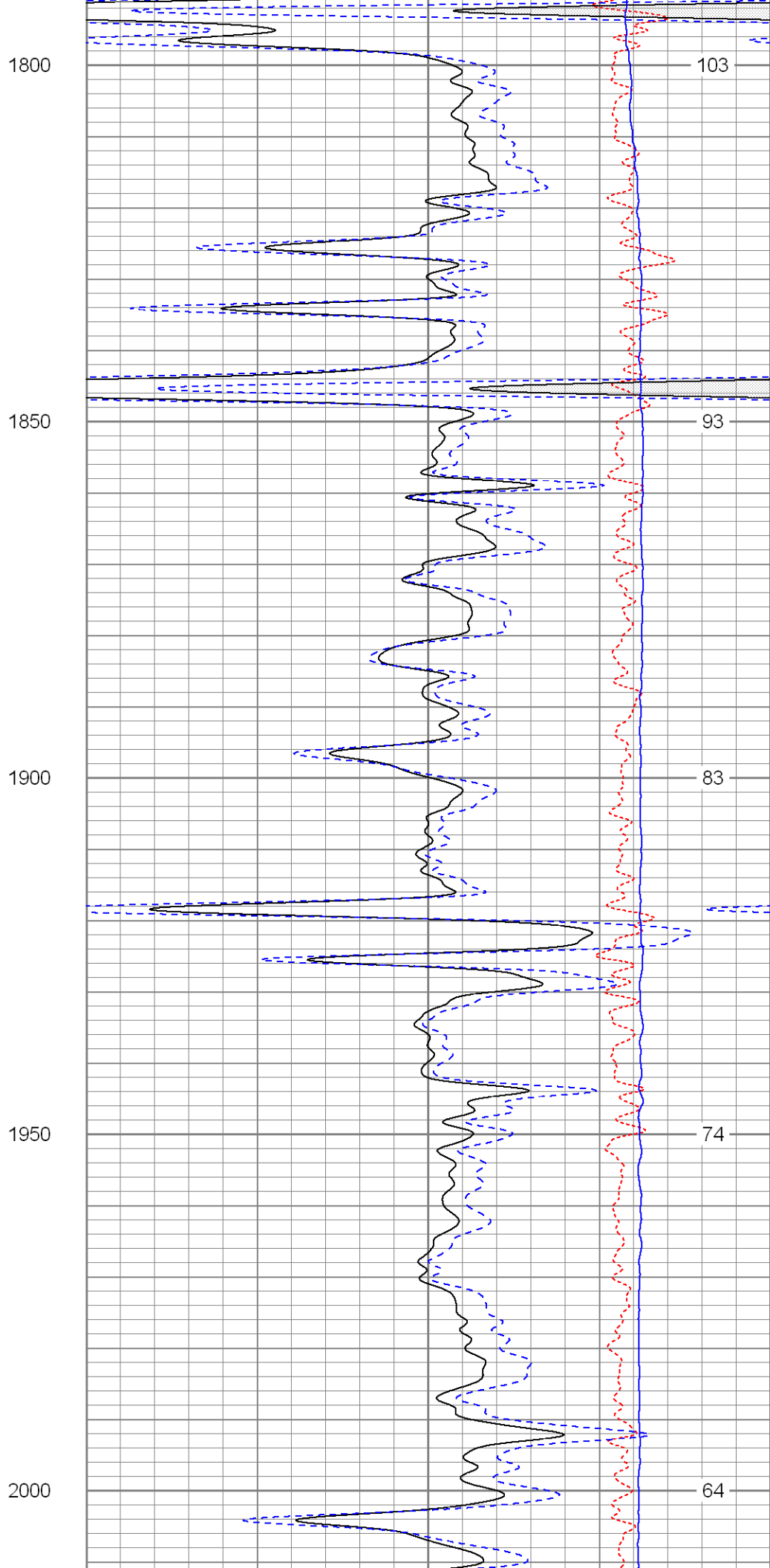
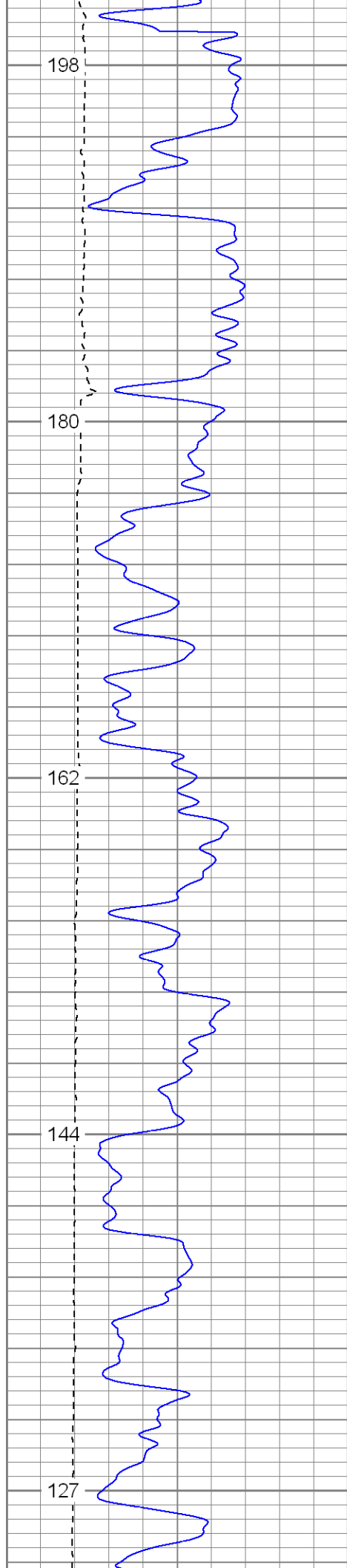


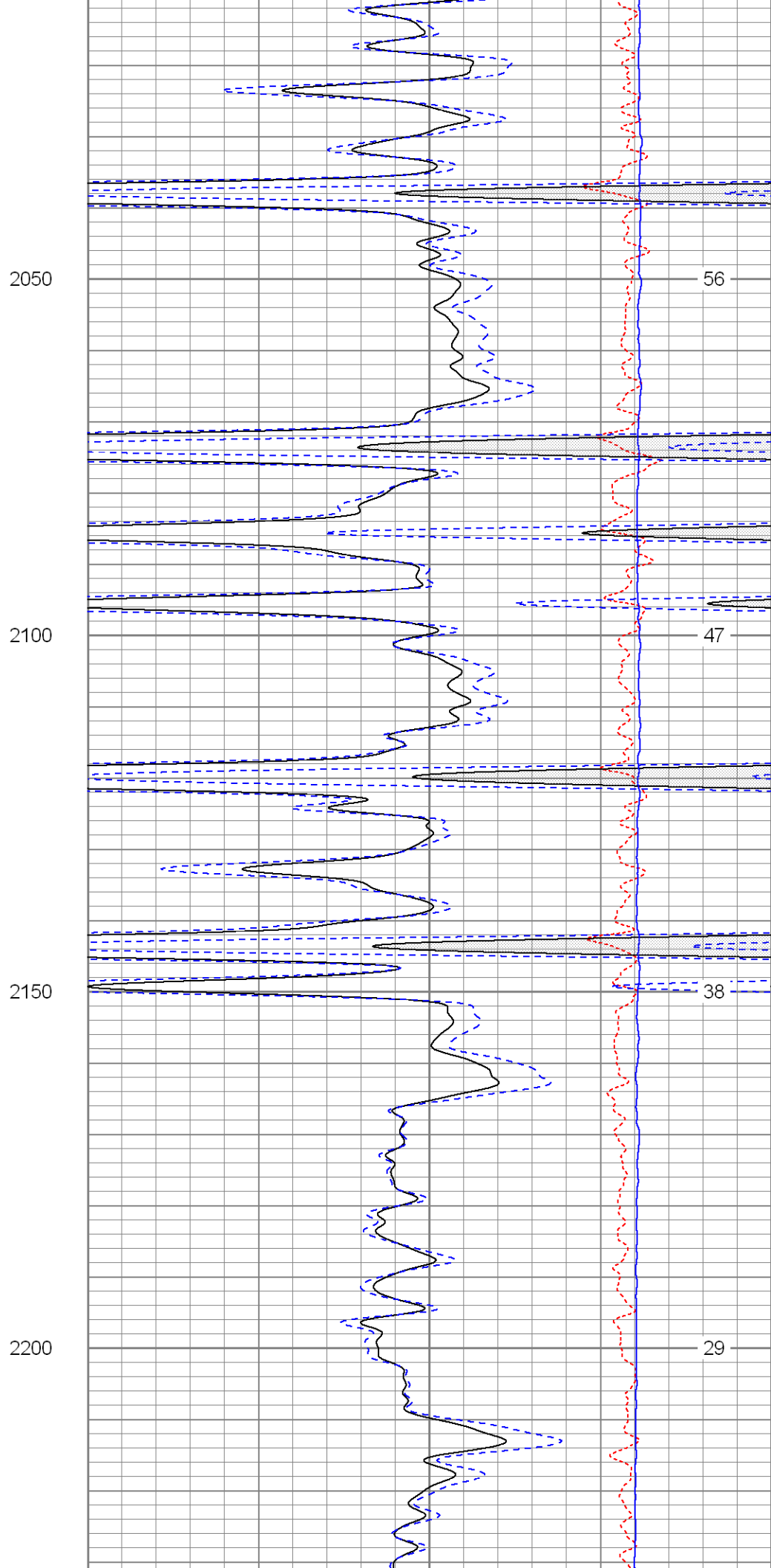
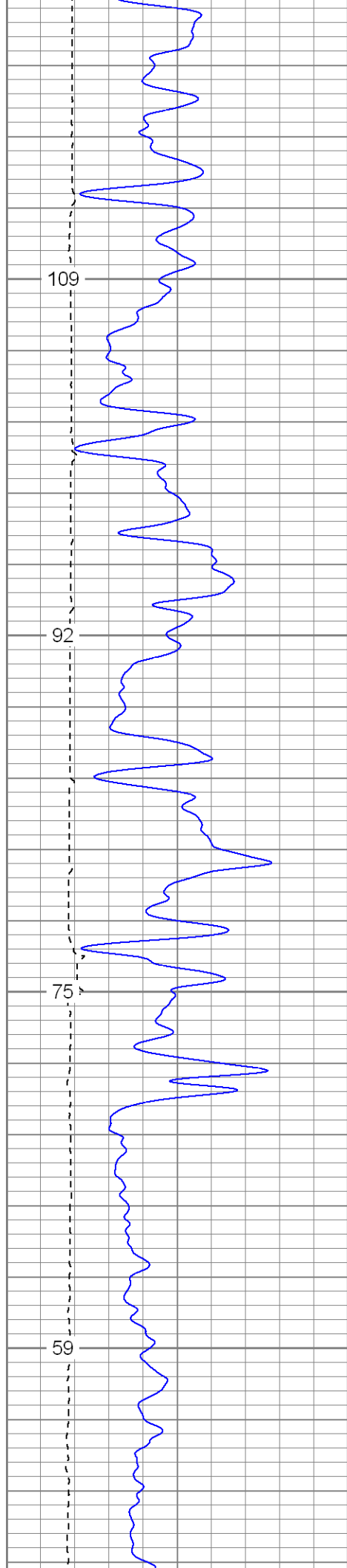


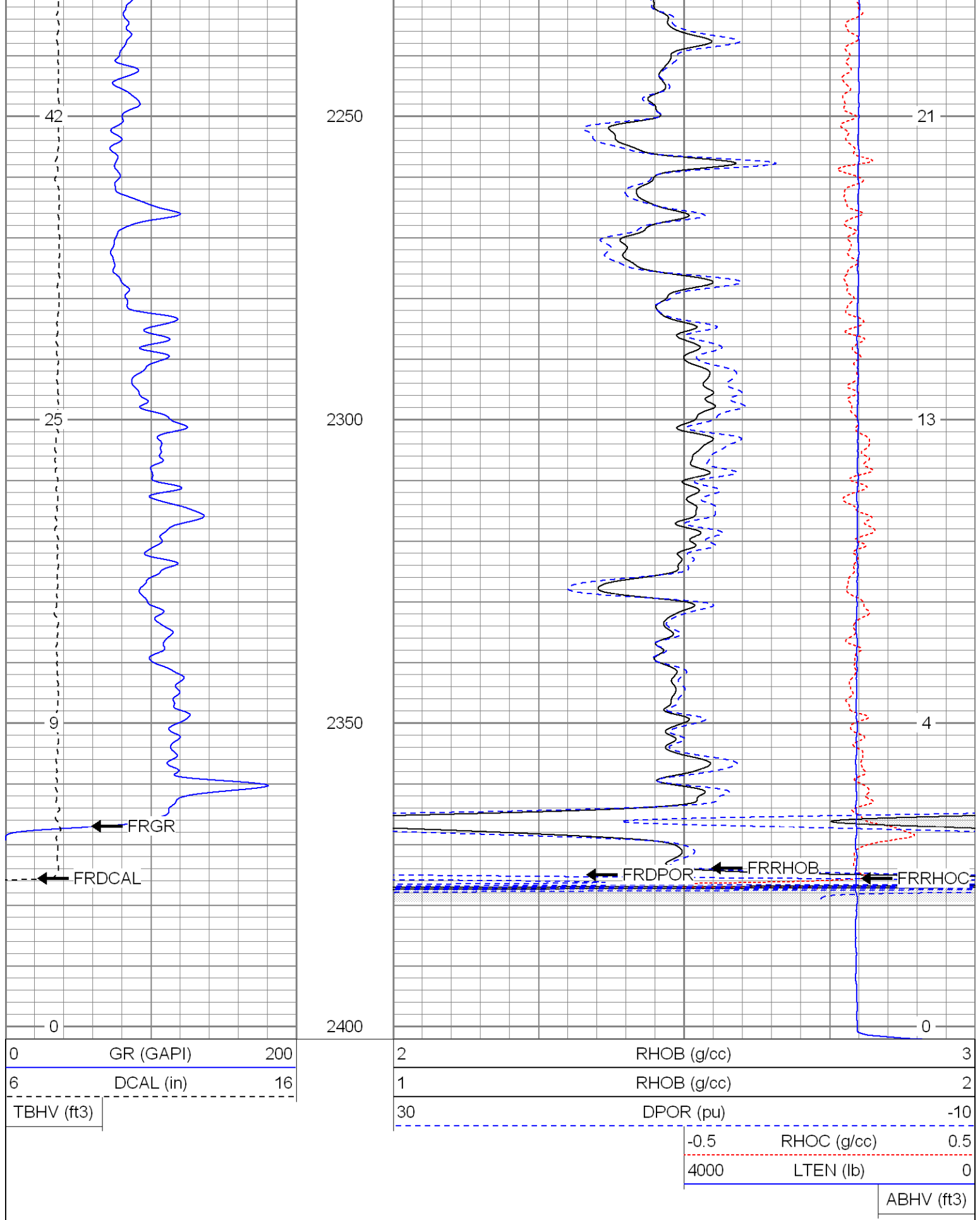












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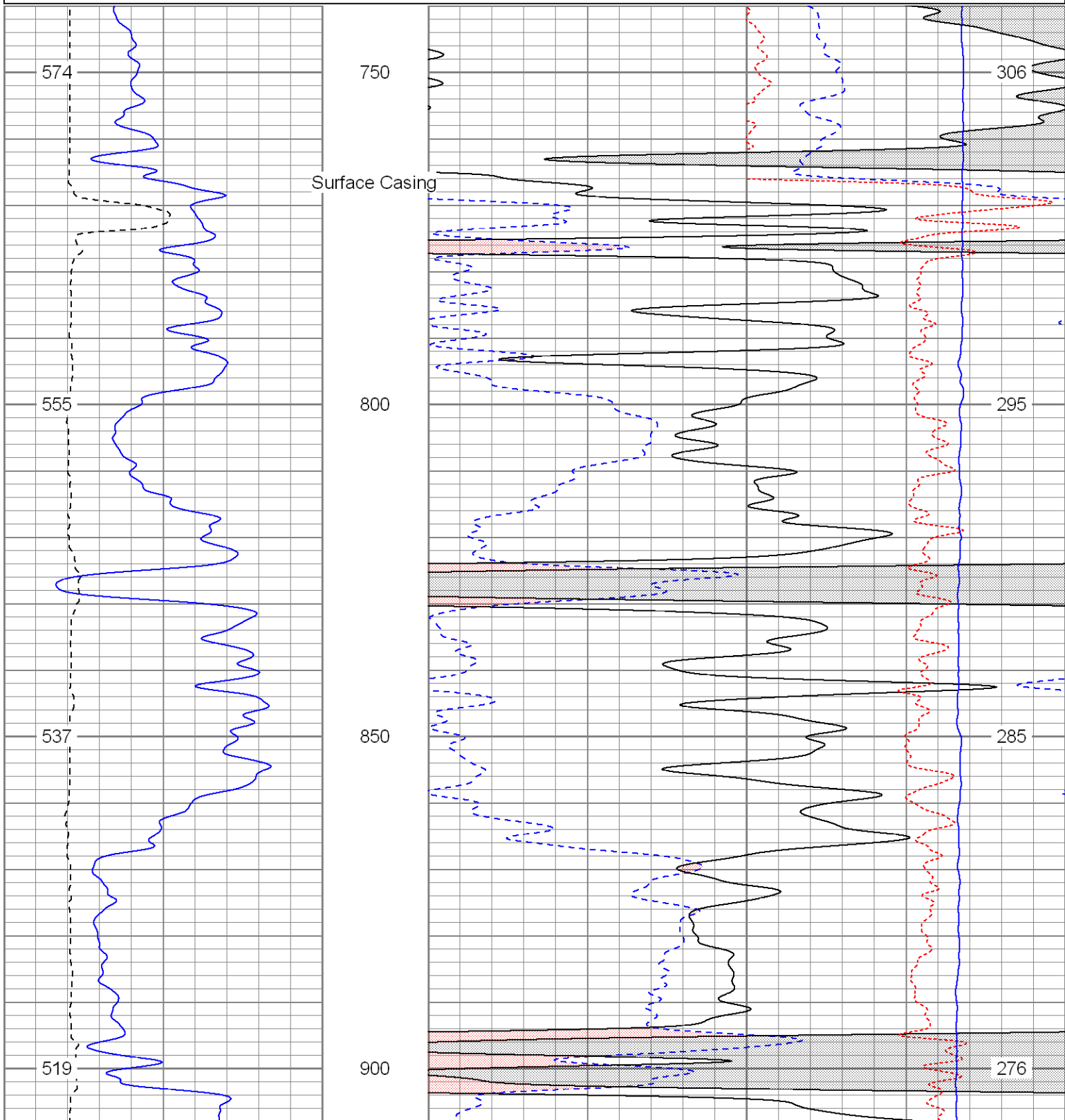
Main Pass

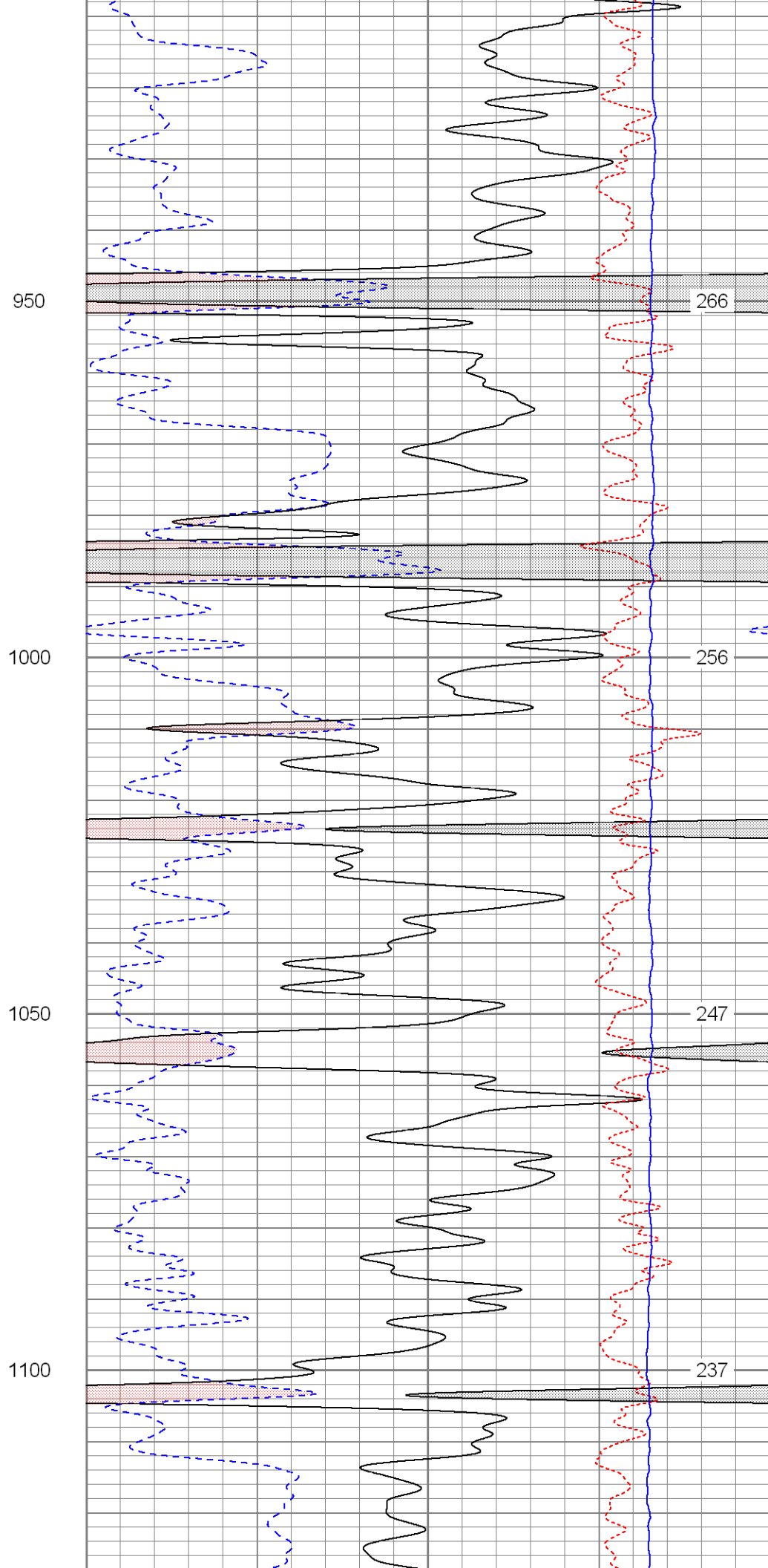
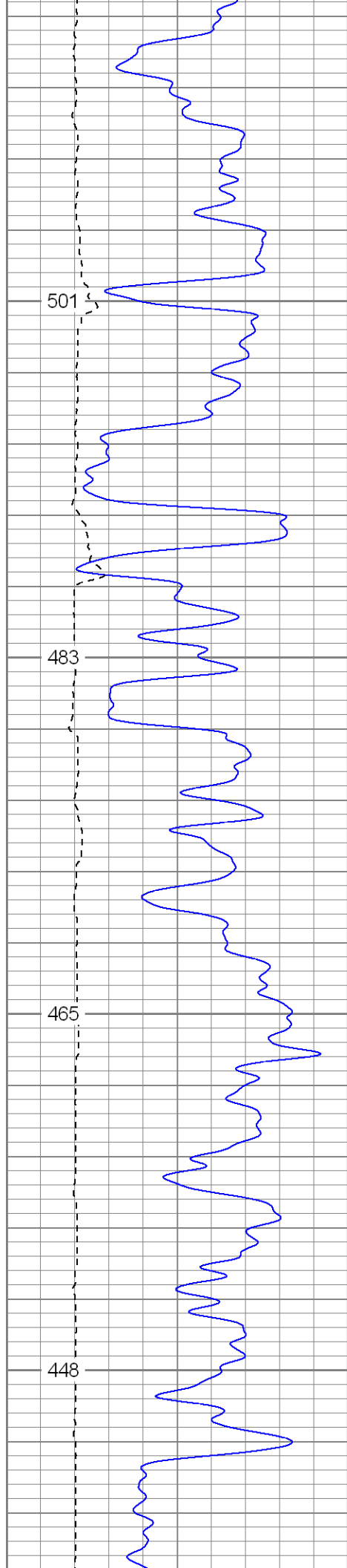


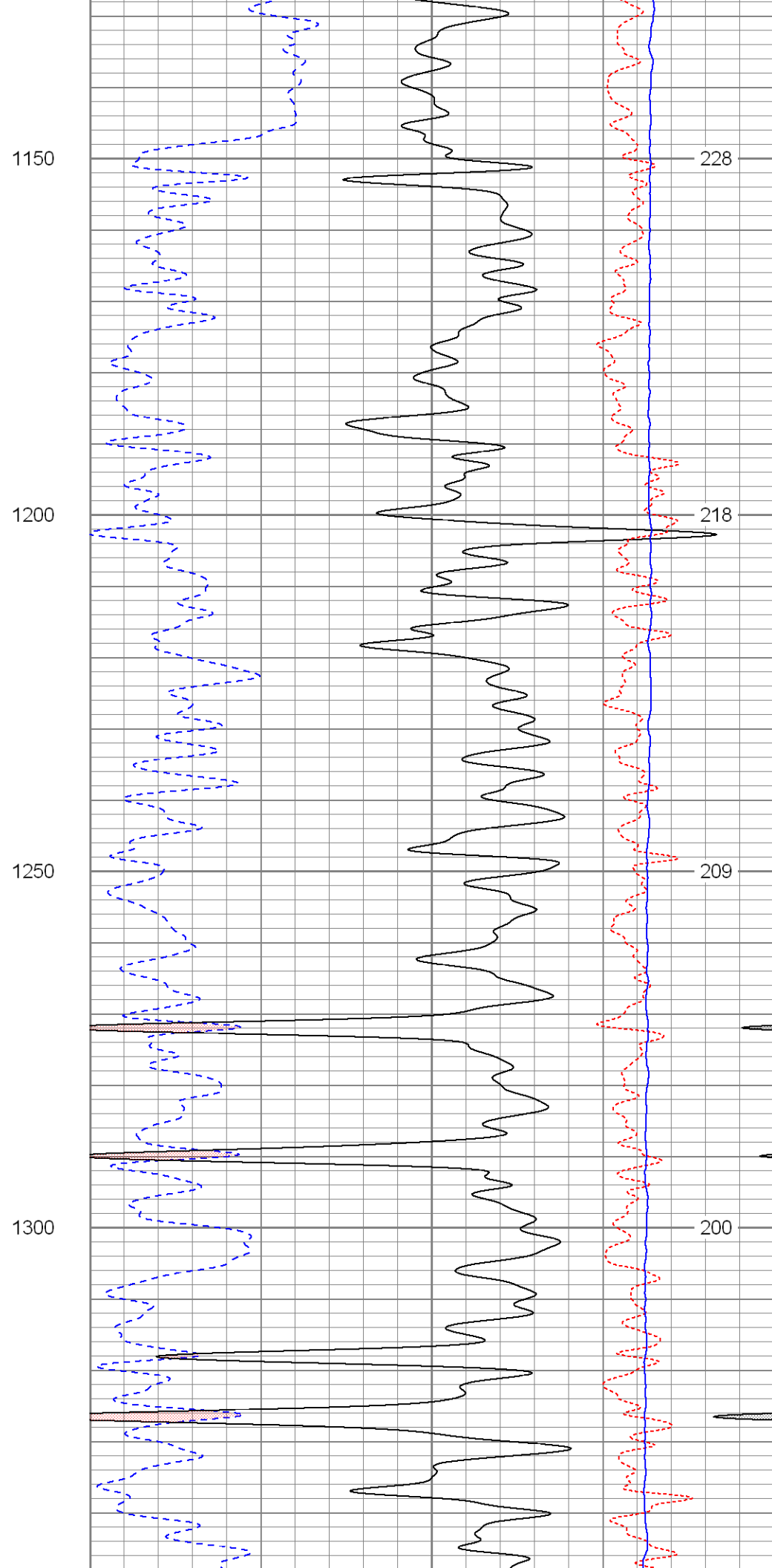
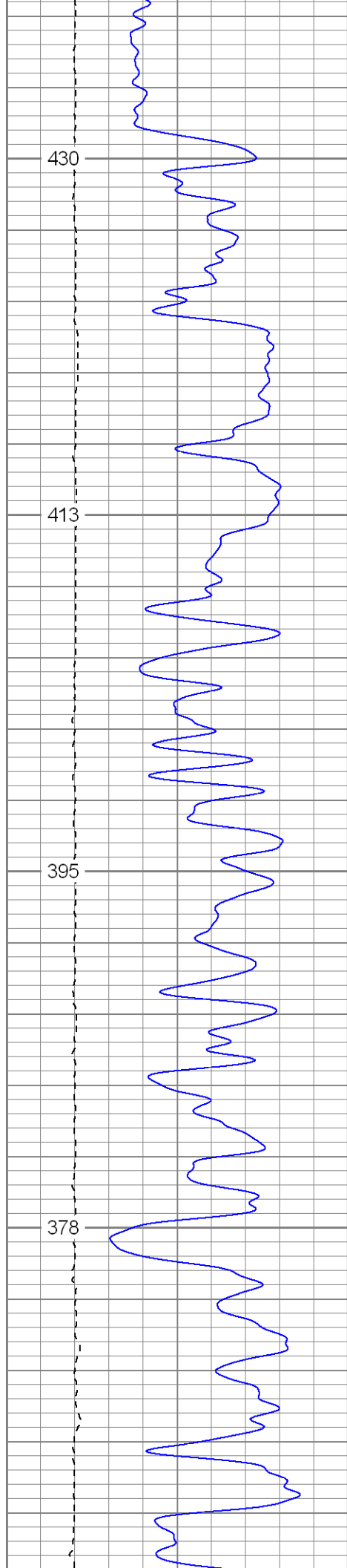
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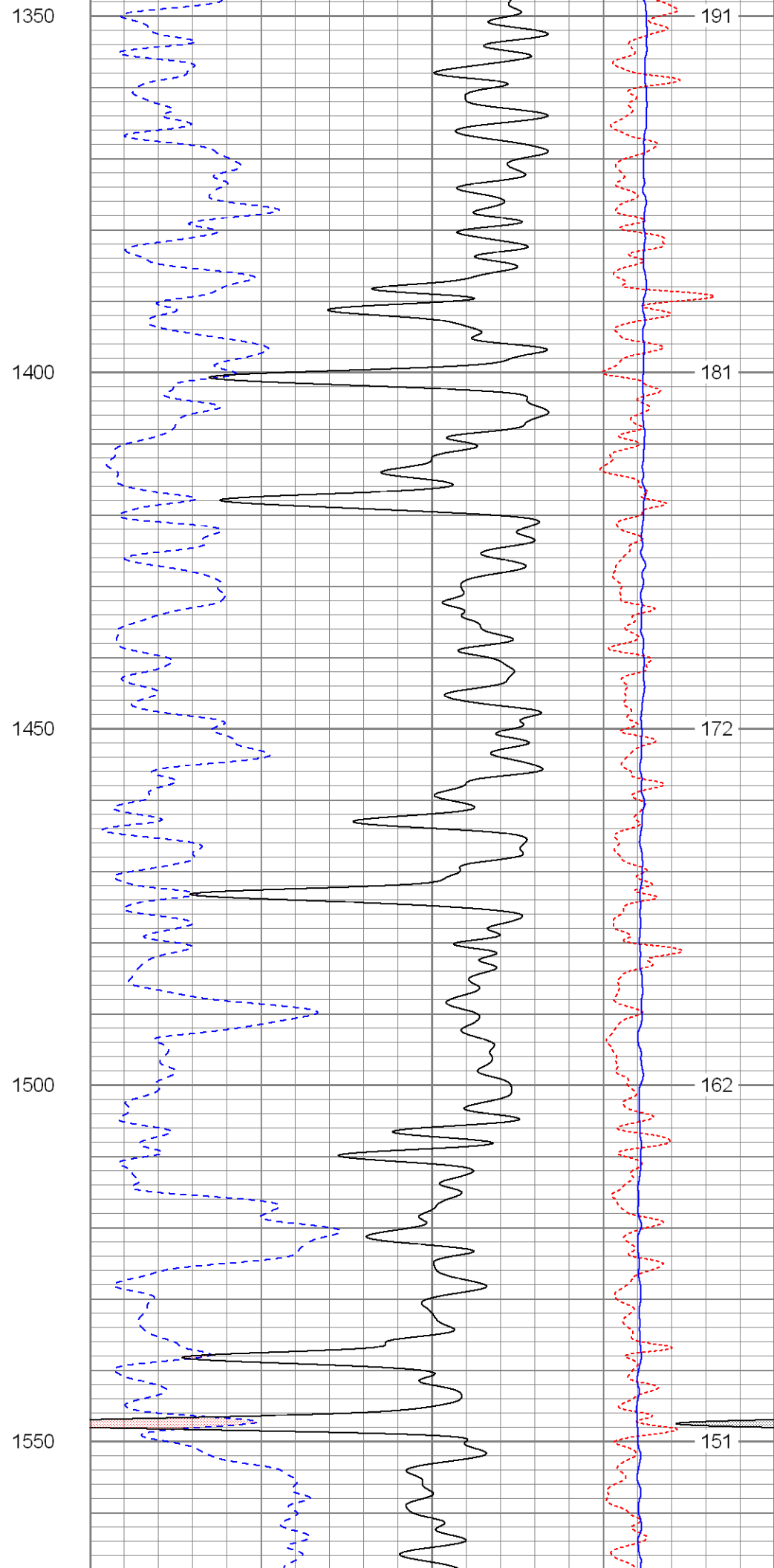
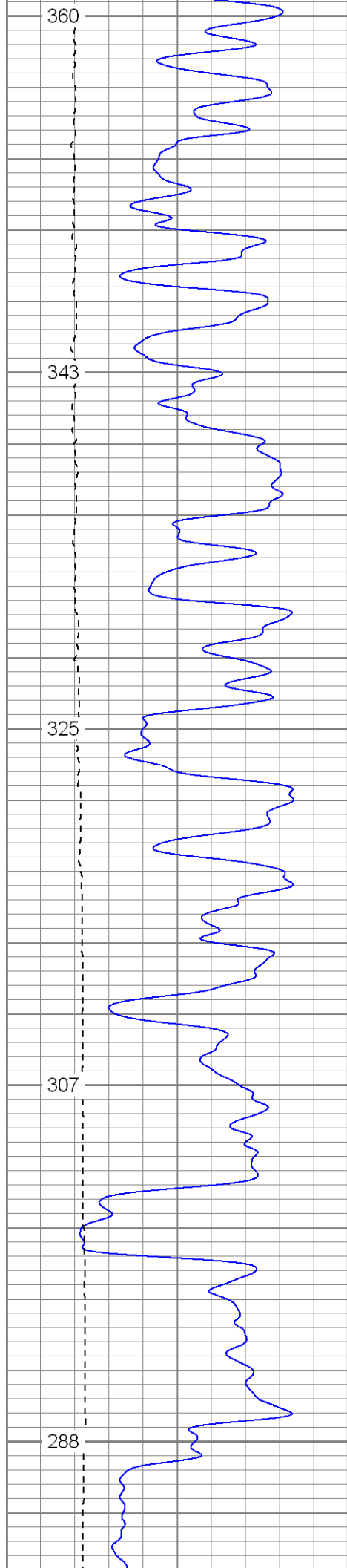
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Dataset Pathname: pass2.1
Presentation Format: cdnl
Dataset Creation: Tue Mar 25 06:11:16 2008 by Calc Open-Cased 070814
Charted by: Depth in Feet scaled 1:240

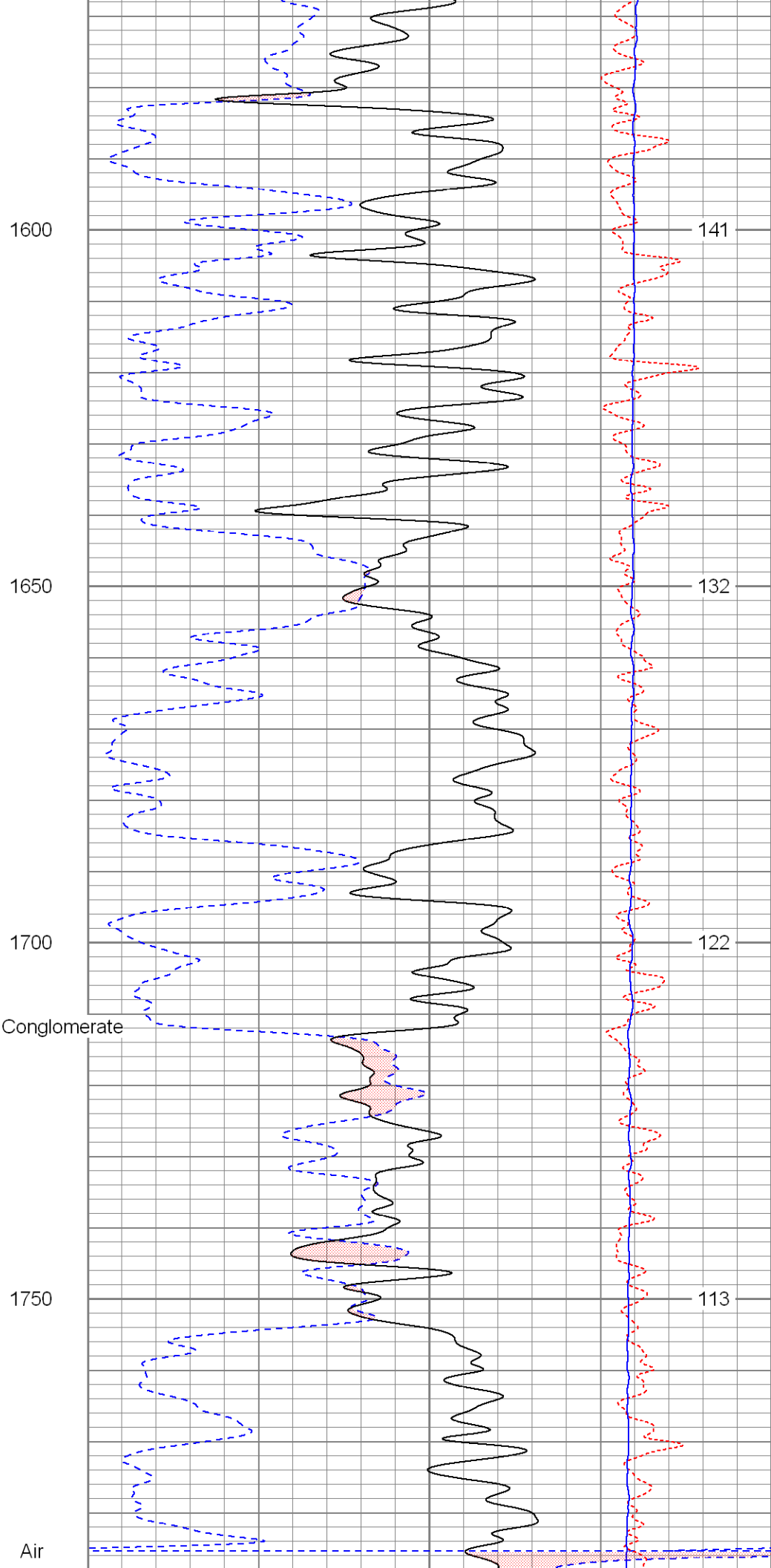
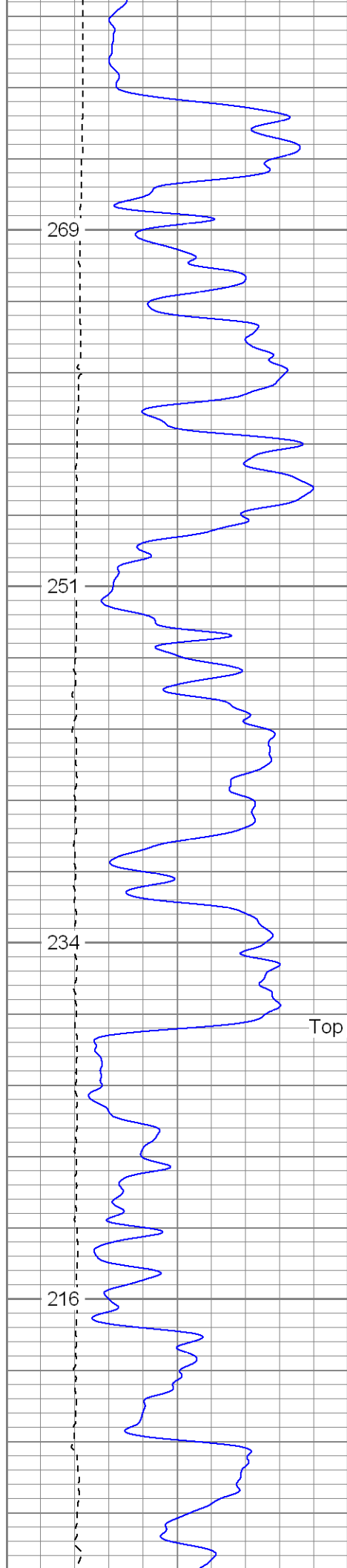
0	GR (GAPI)	200	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
TBHV (ft3)				-0.5	RHOC (g/cc) 0.5
				4000	LTEN (lb) 0
					ABHV (ft3)

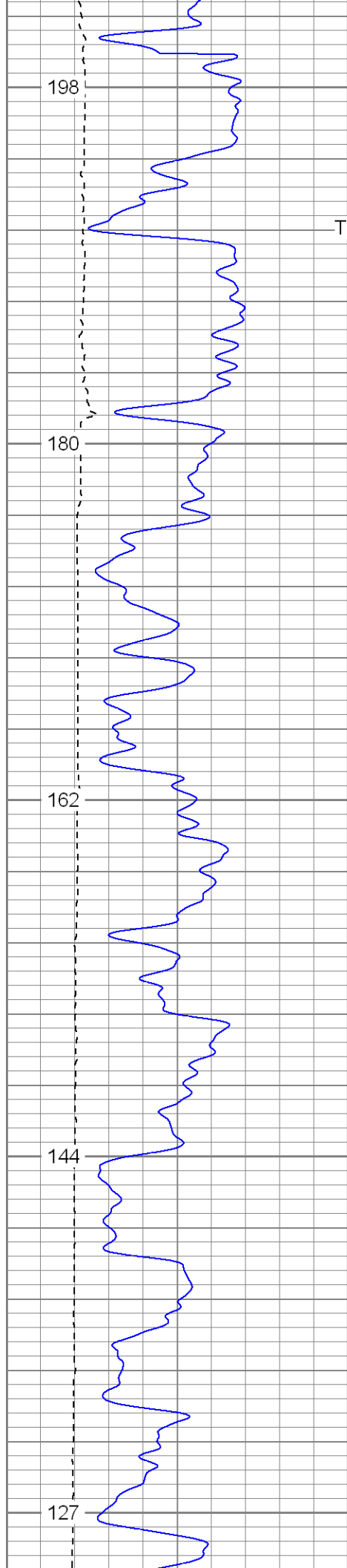




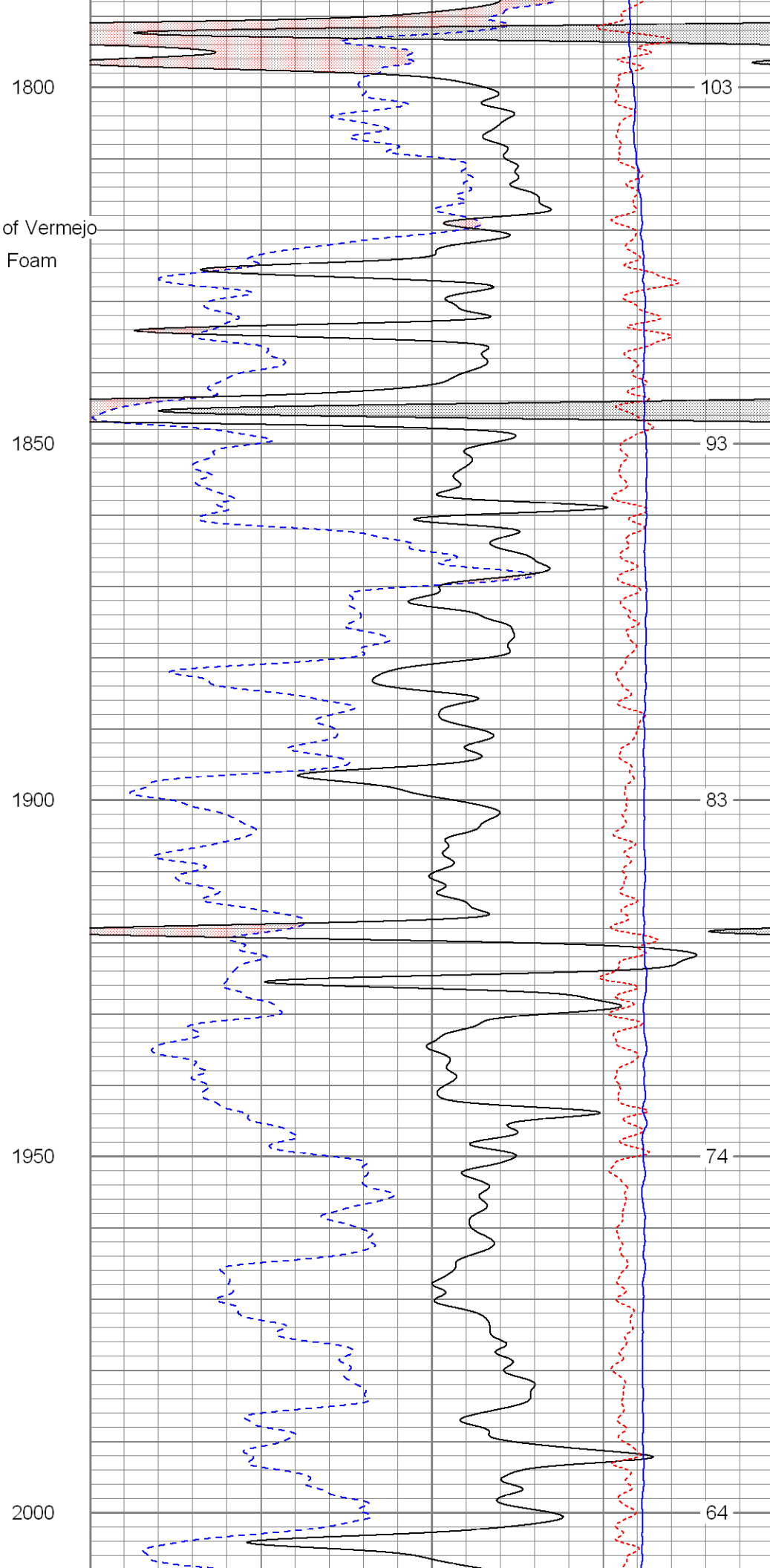


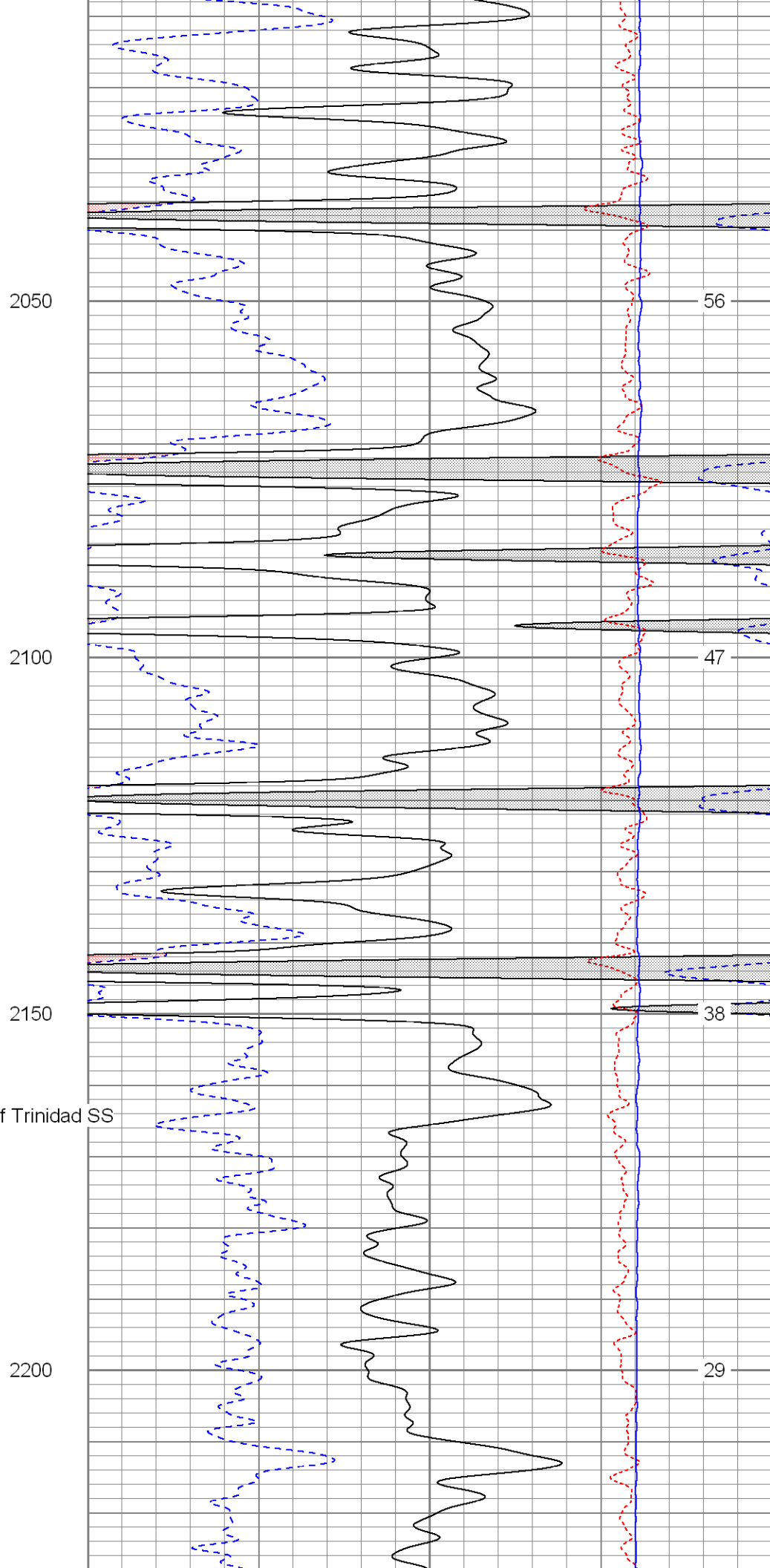
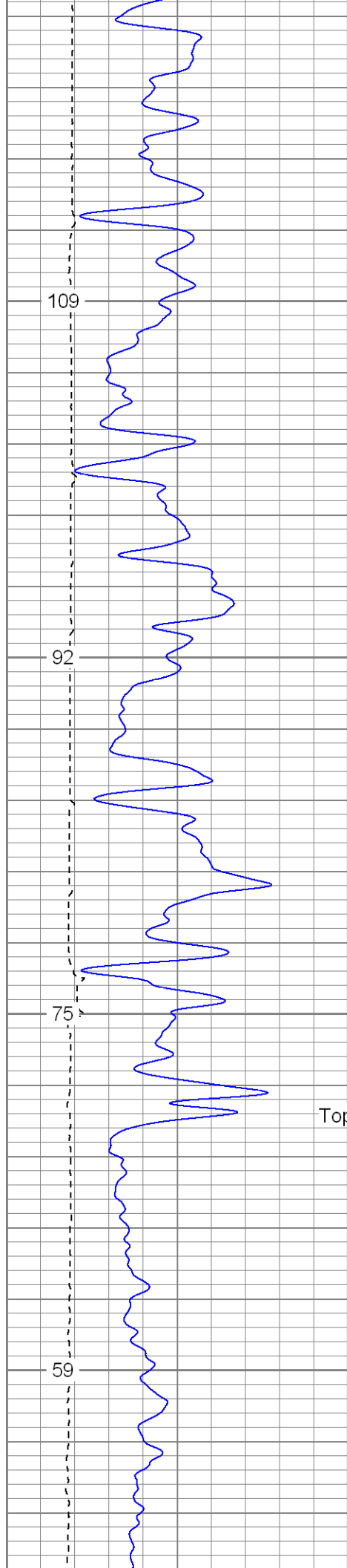


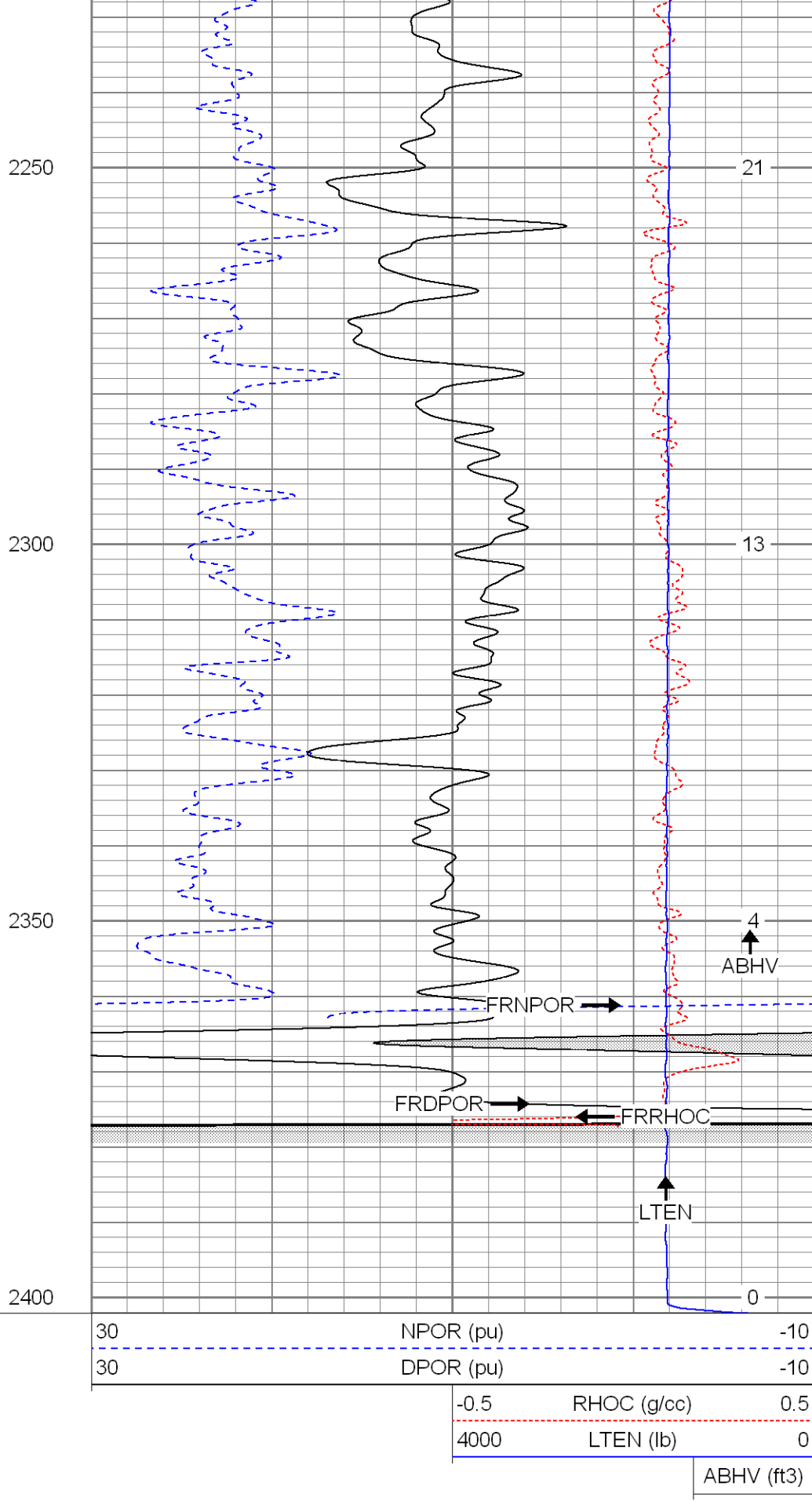
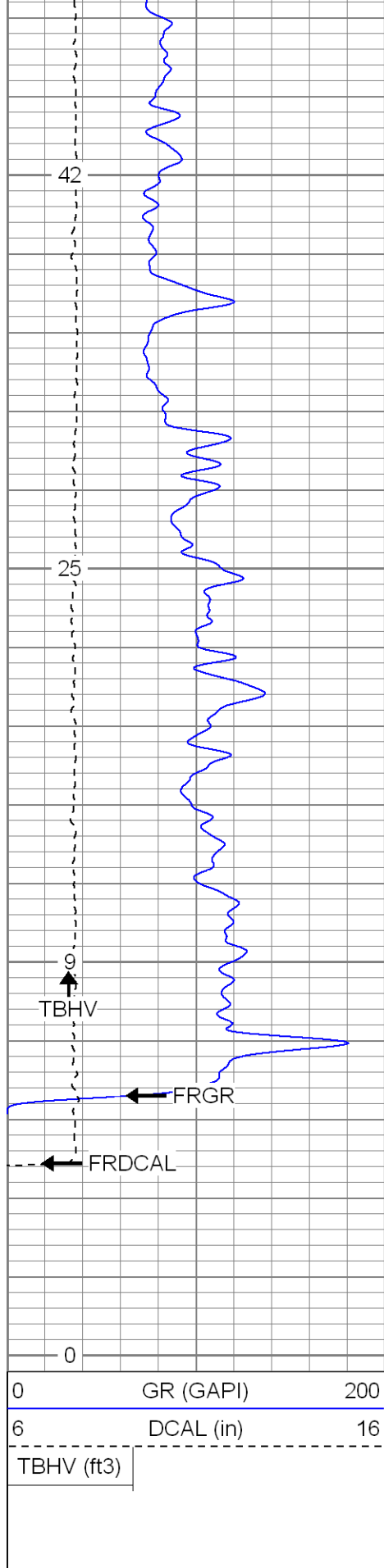




Top of Vermejo
Foam







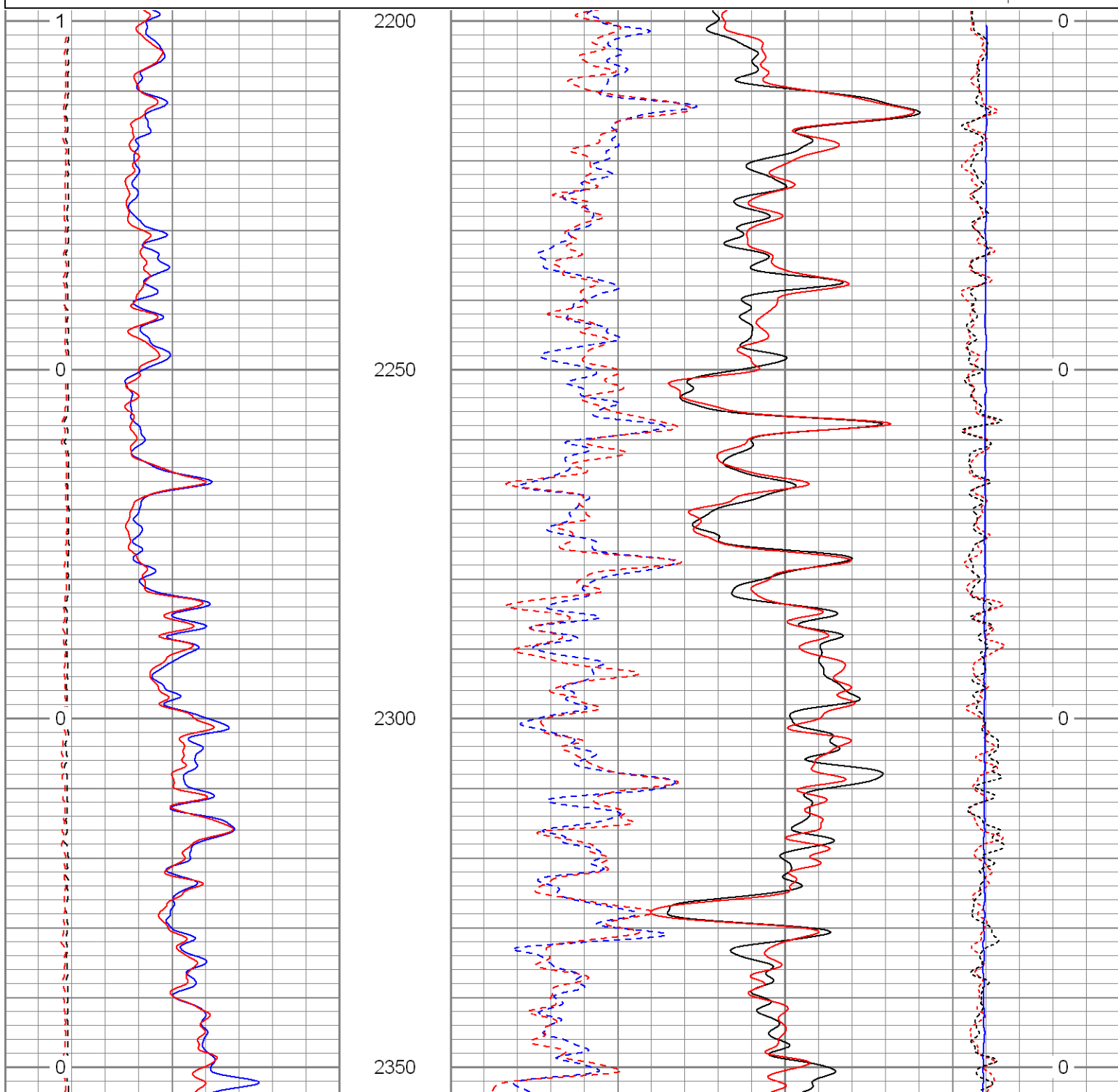
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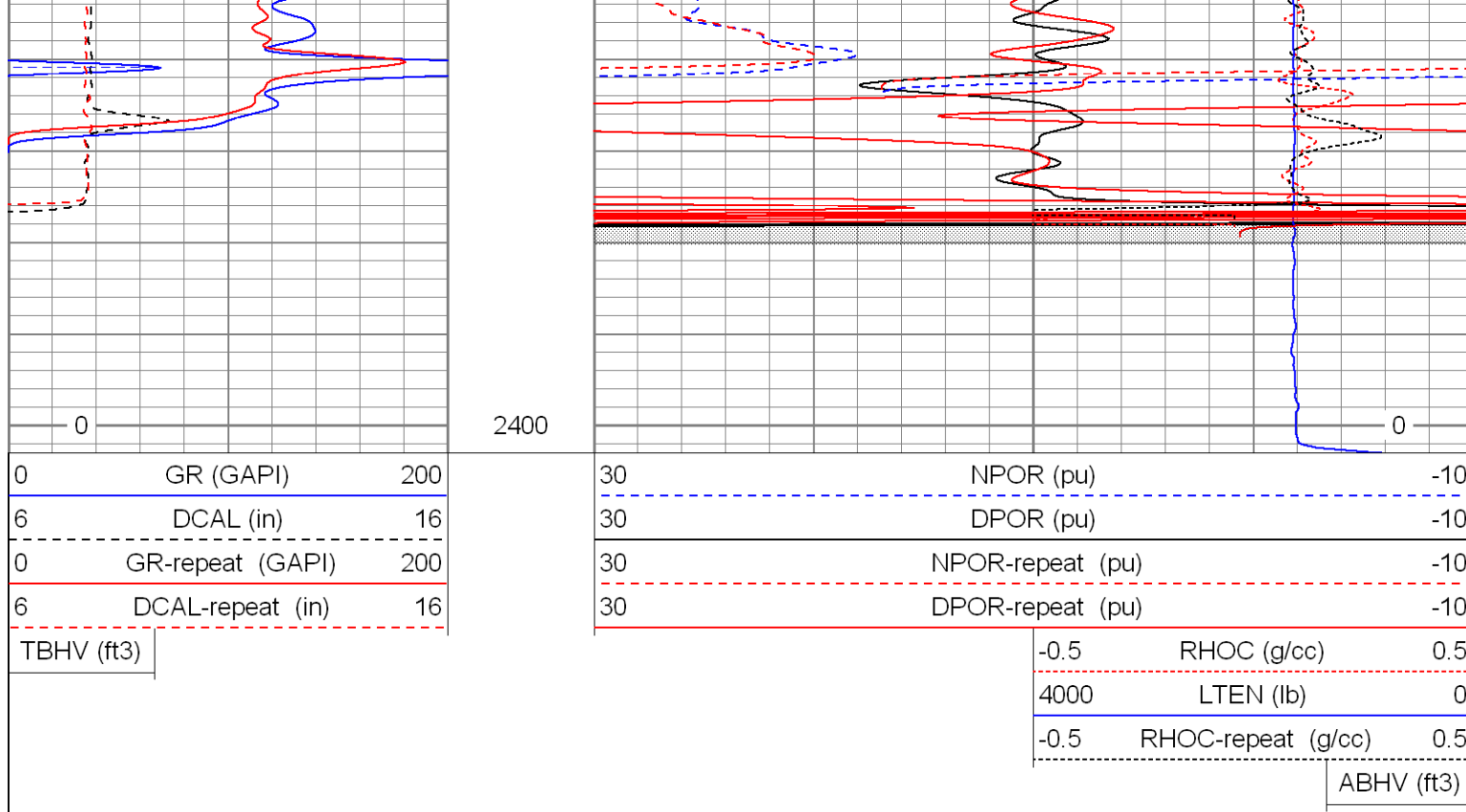
Repeat Pass

Database File: xtoge1913.db
 Dataset Pathname: pass1.1
 Presentation Format: cdnl
 Dataset Creation: Tue Mar 25 05:03:05 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)		





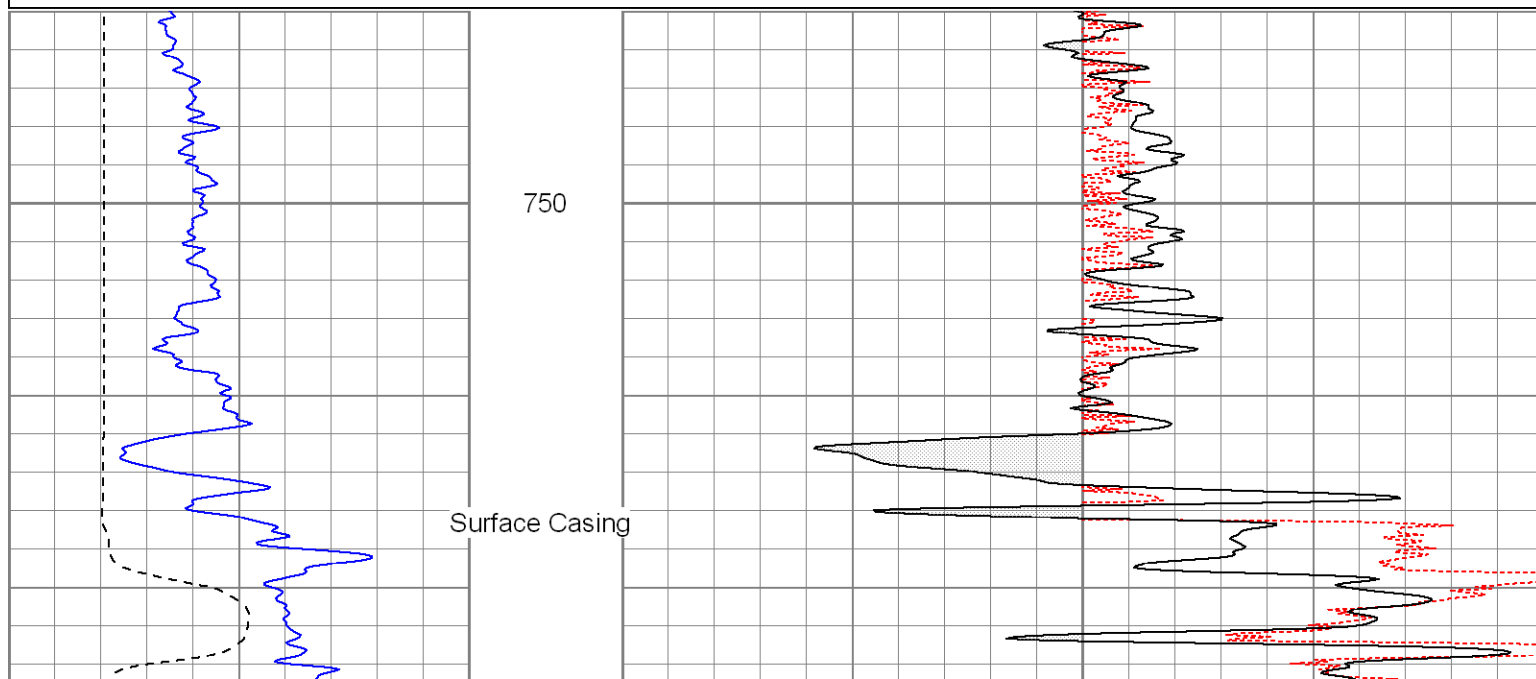
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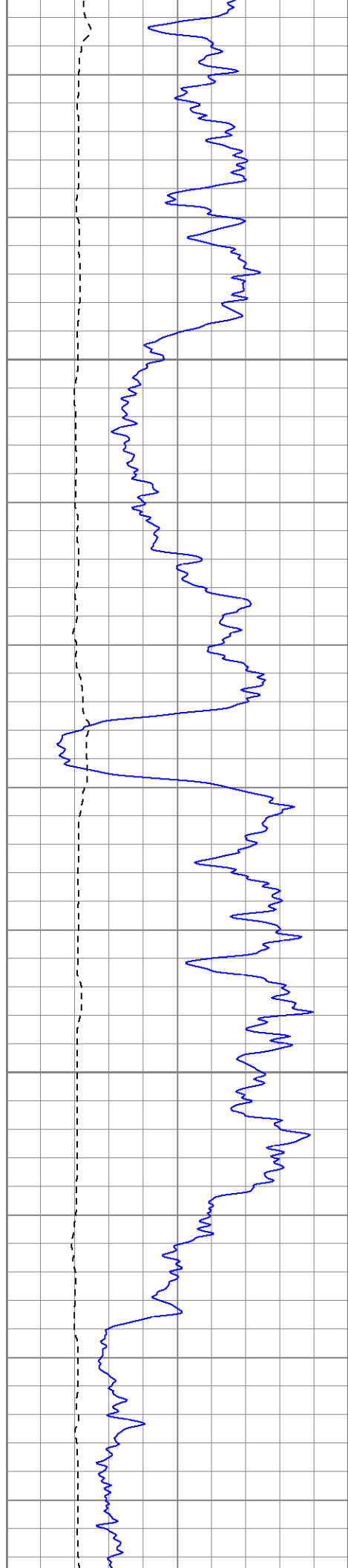
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High Resolution Pass

Database File: xtoge1913.db
Dataset Pathname: pass2.2
Presentation Format: cdlhr
Dataset Creation: Tue Mar 25 09:29:46 2008 by Calc Open-Cased 070814
Charted by: Depth in Feet scaled 1:120

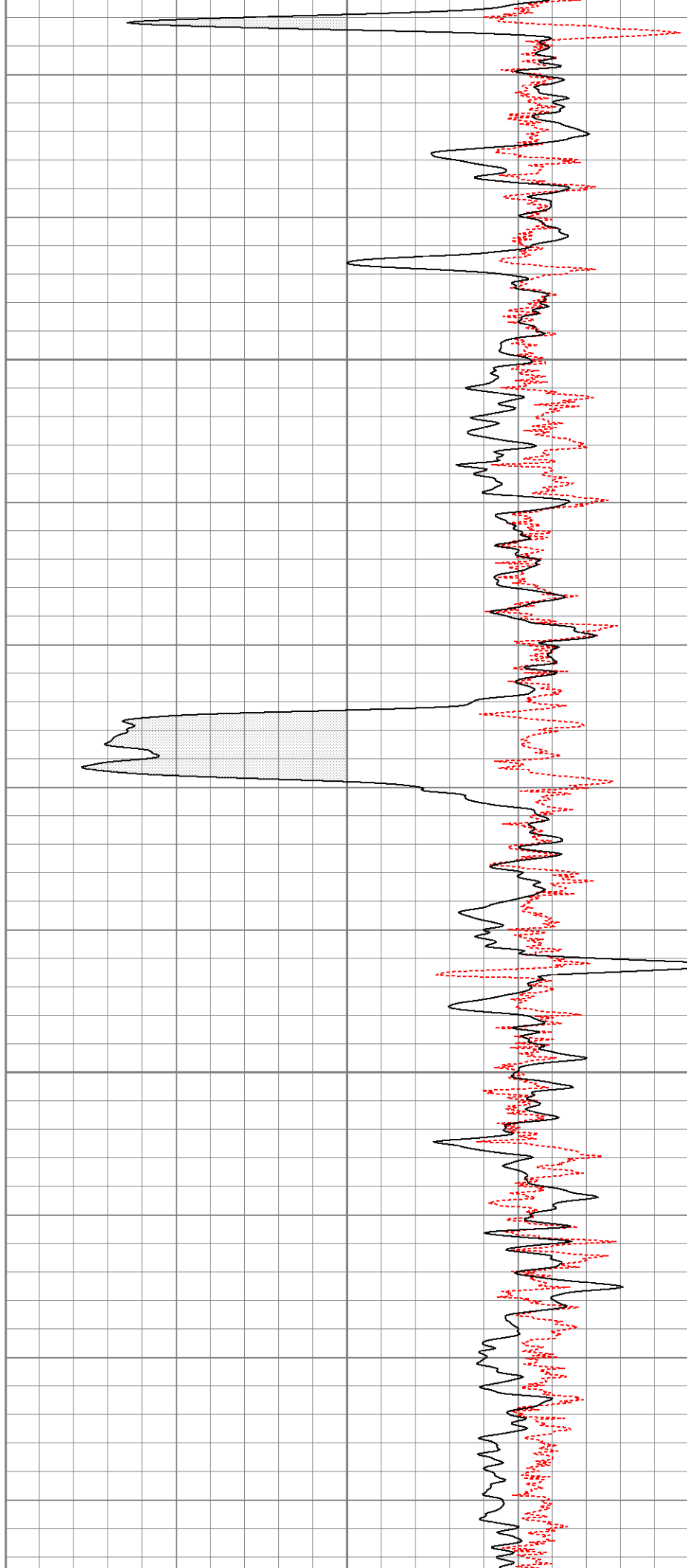
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6	DCAL (in)	16		-0.5	RHOC (g/cc) 0.5

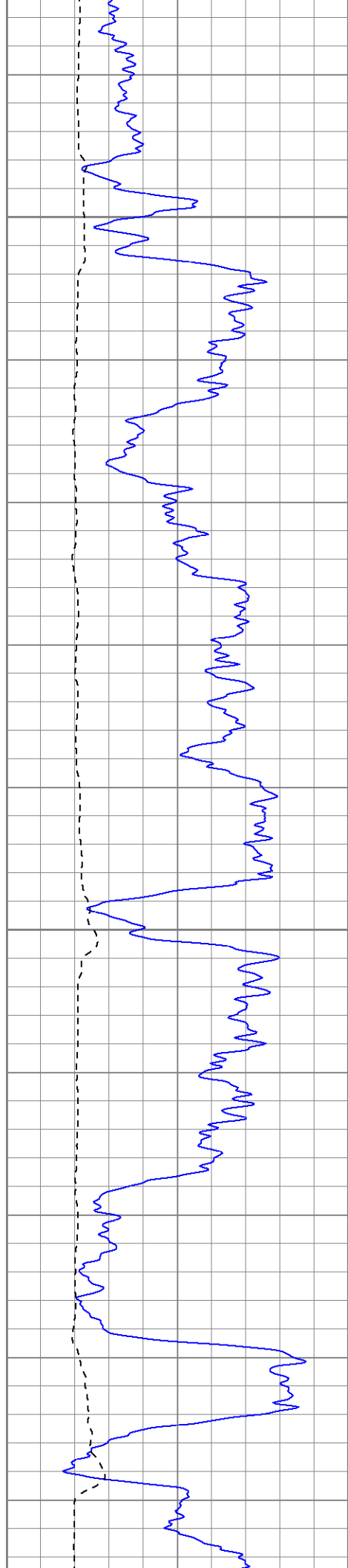




800

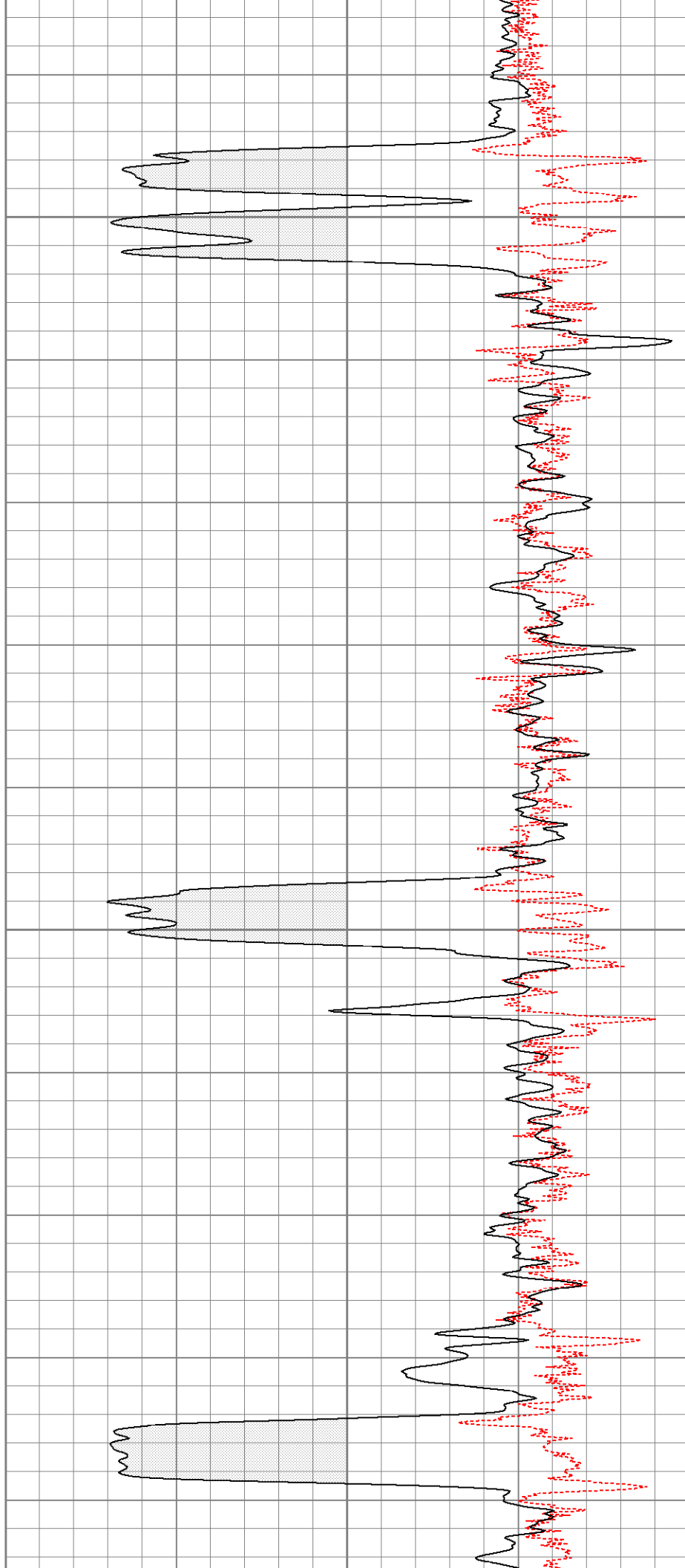
850

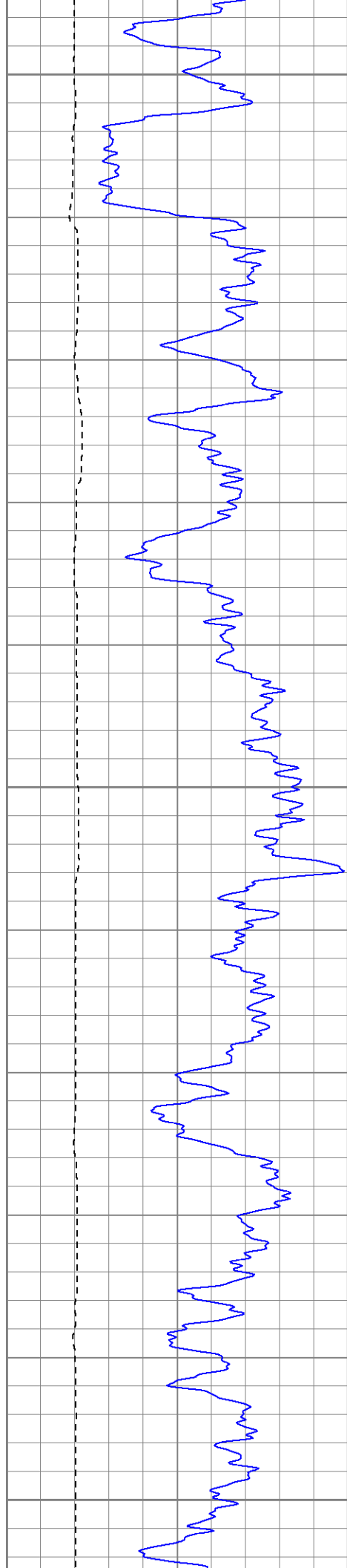




900

950

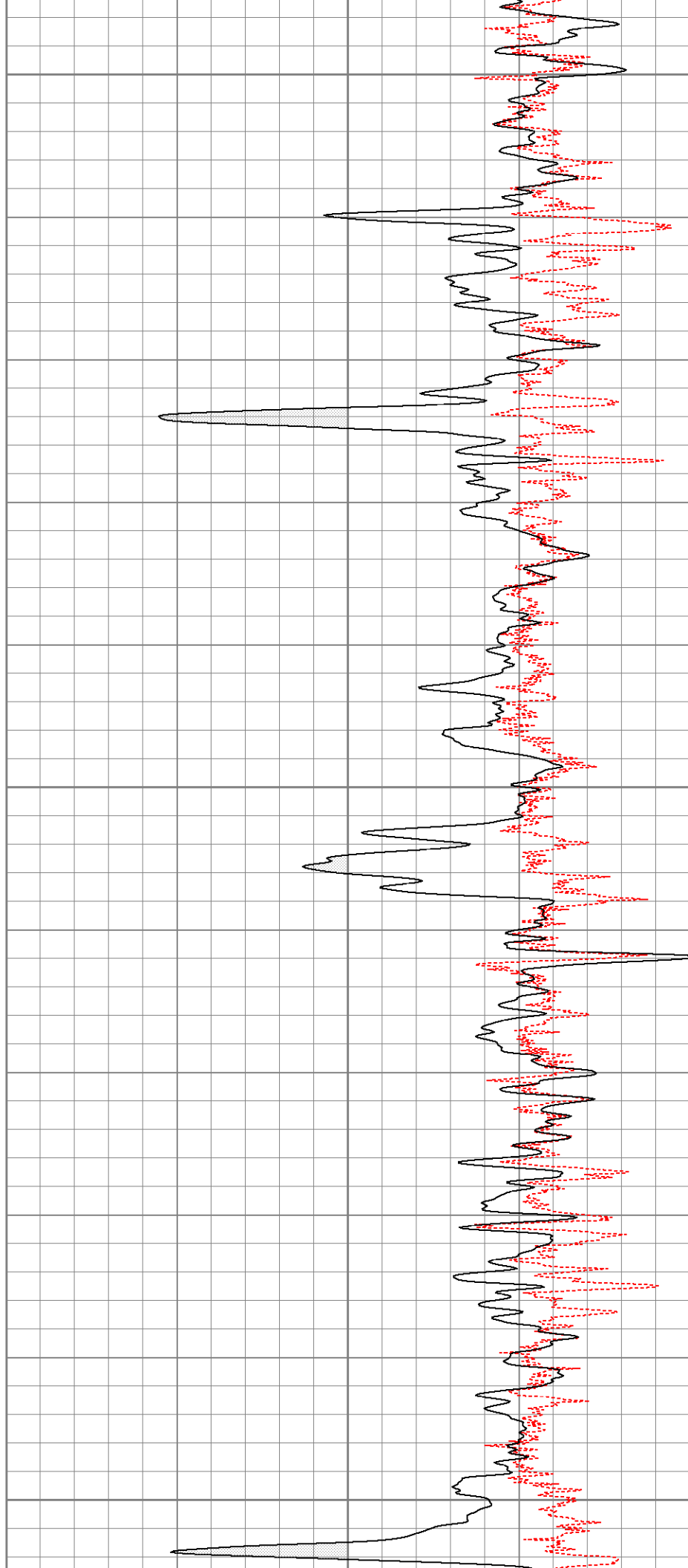


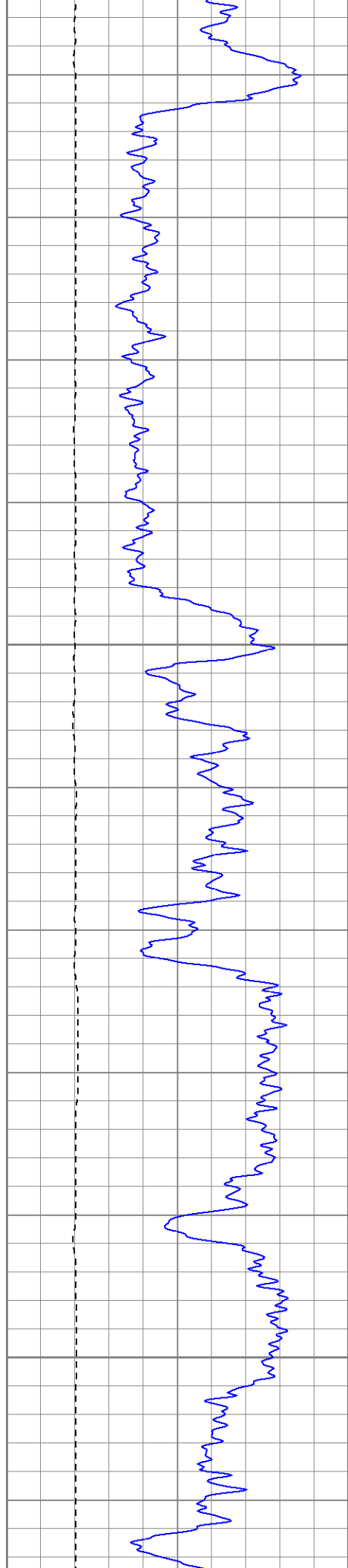


1000

1050

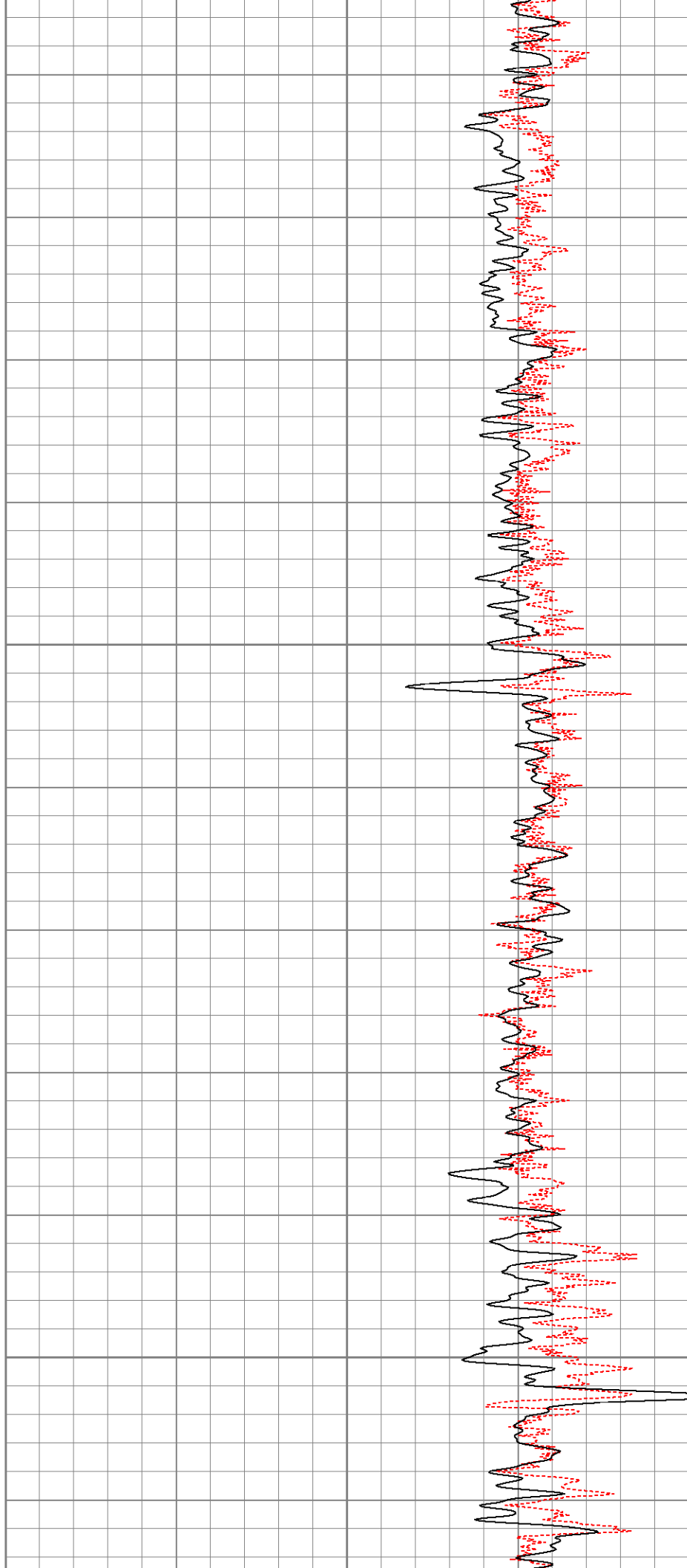
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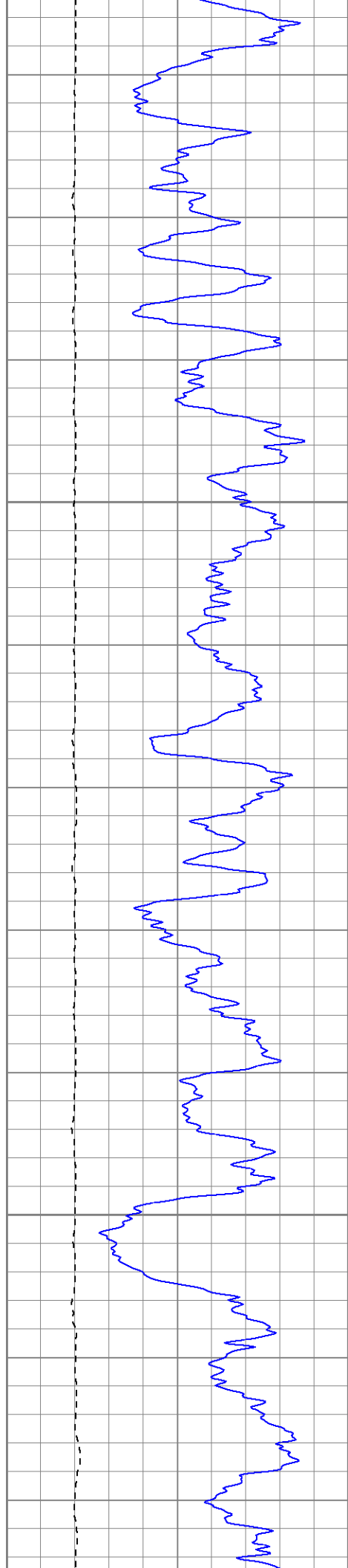




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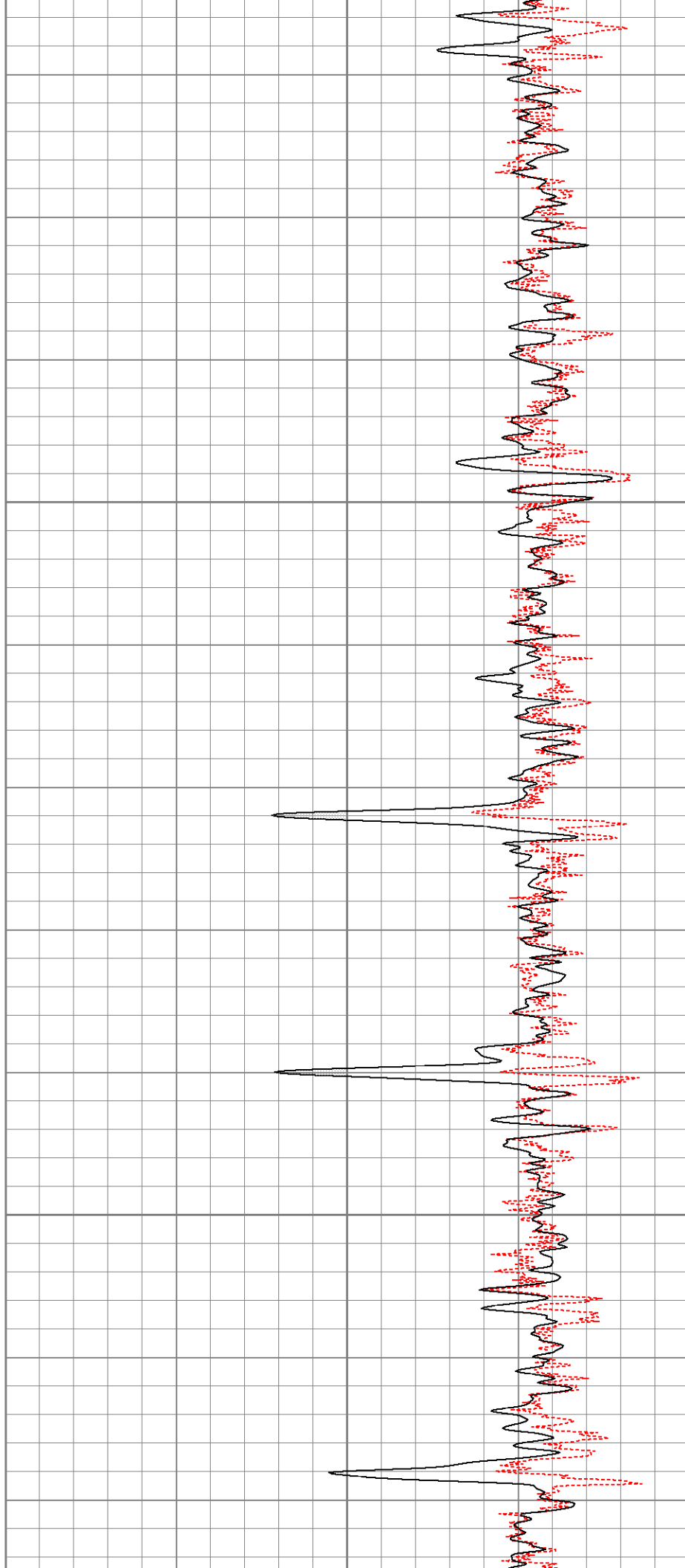
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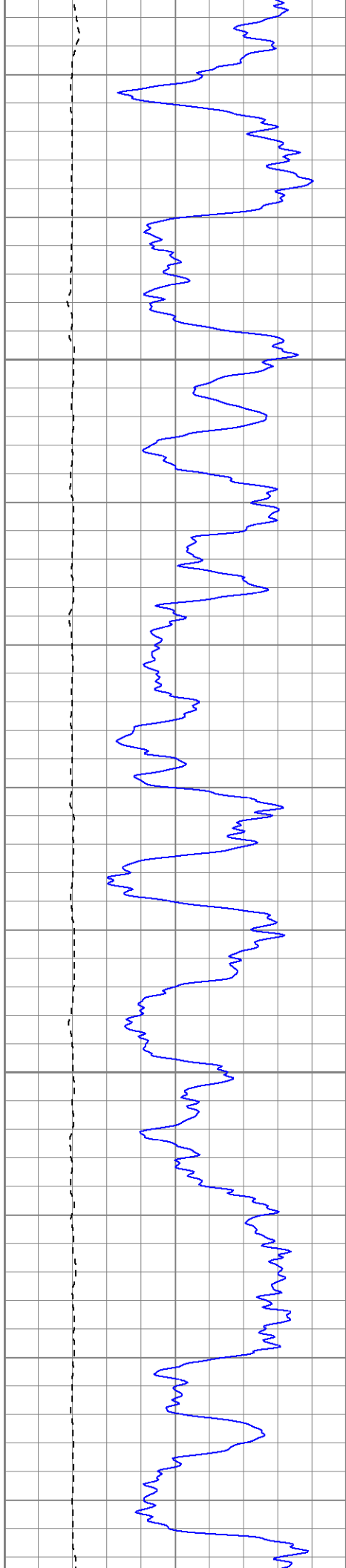




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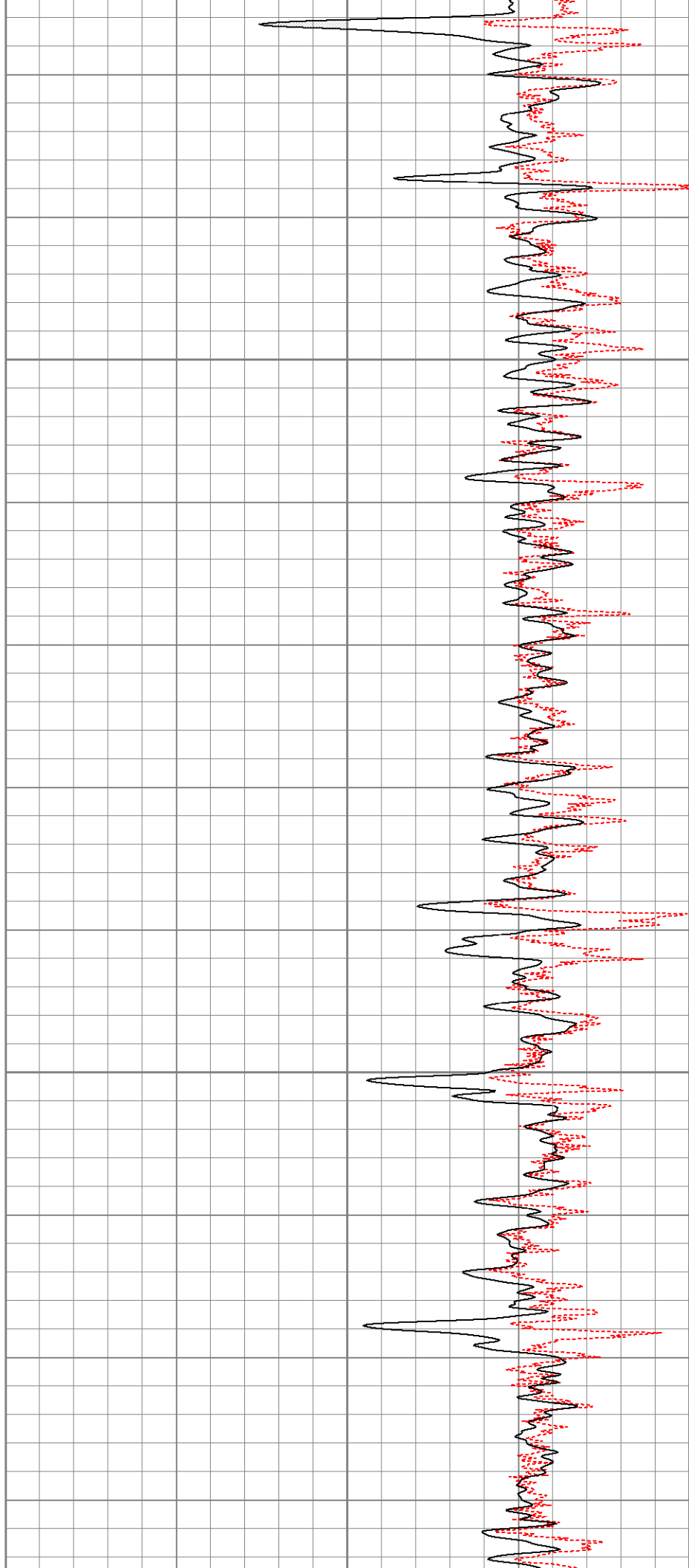
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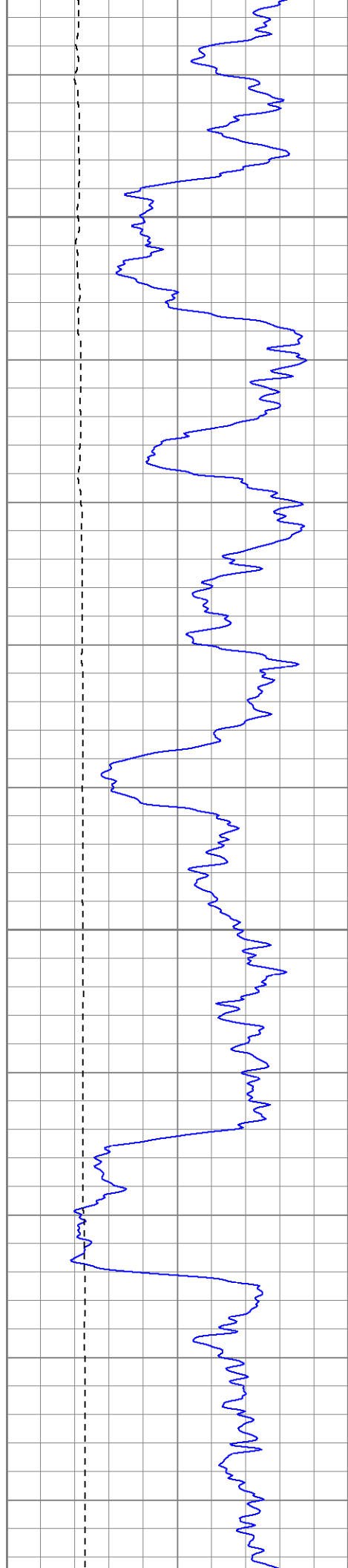




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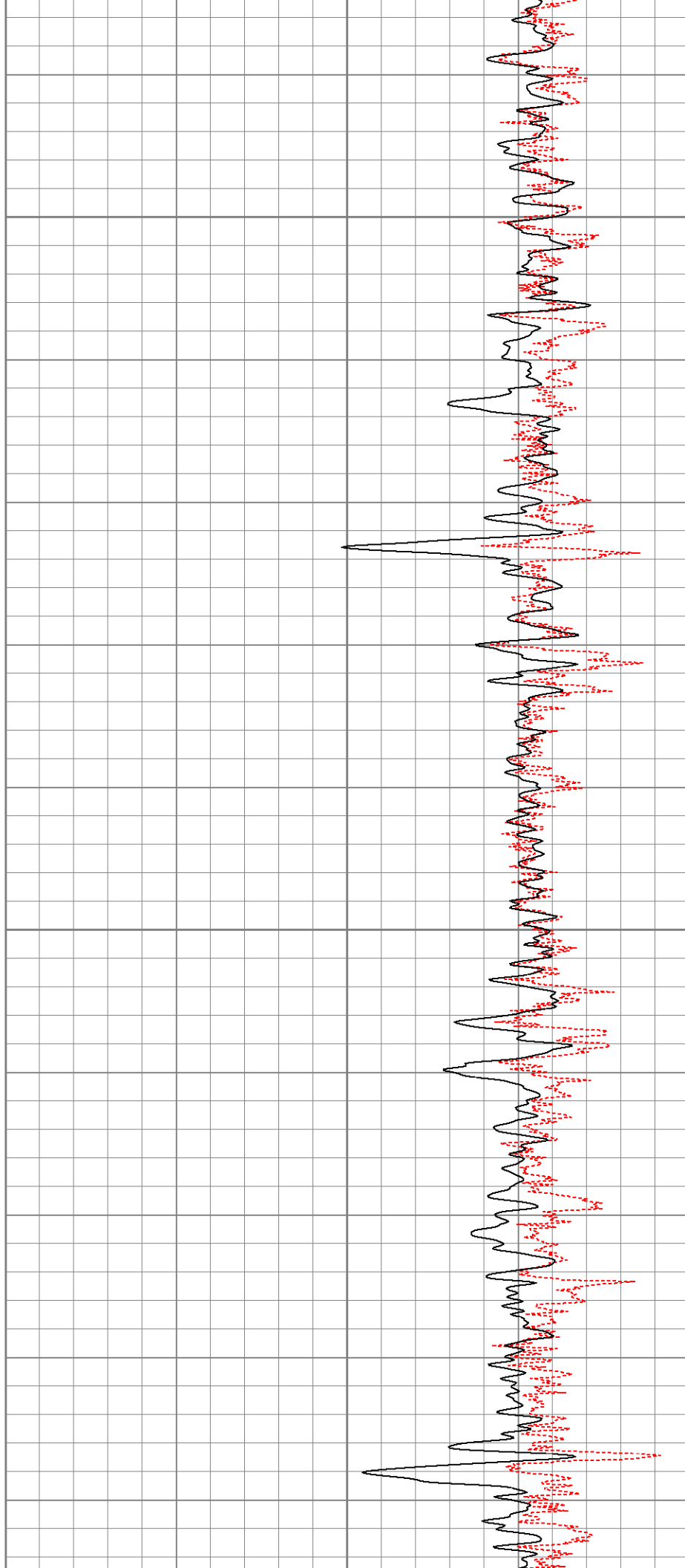
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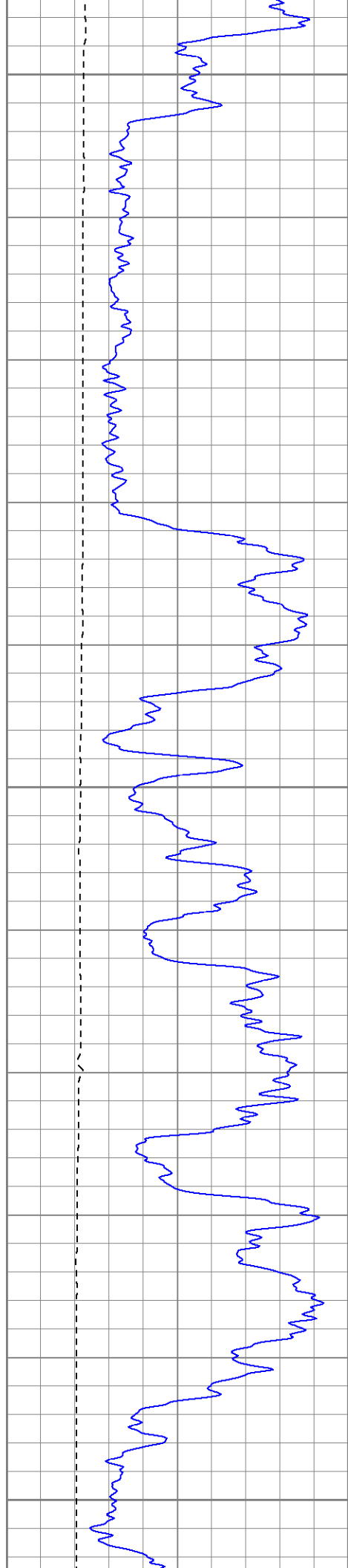




1450

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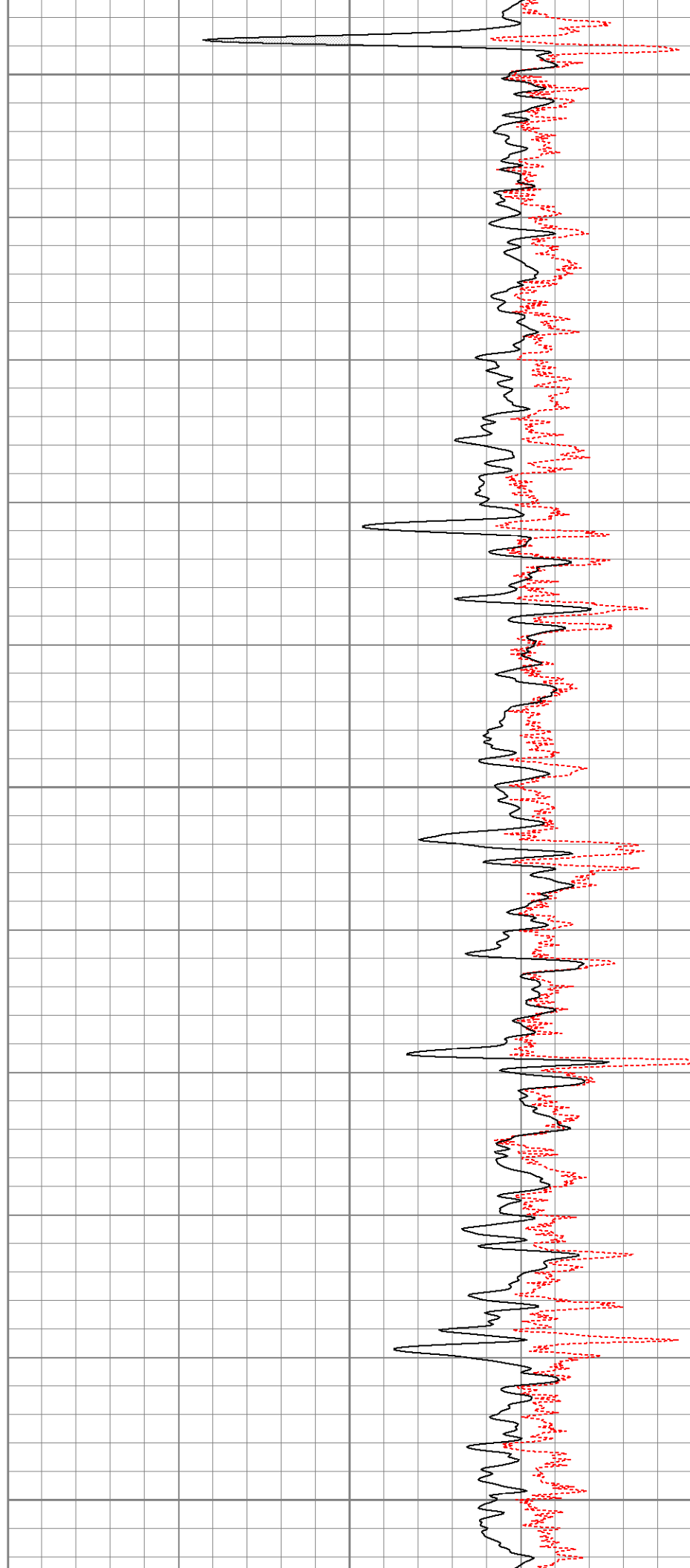


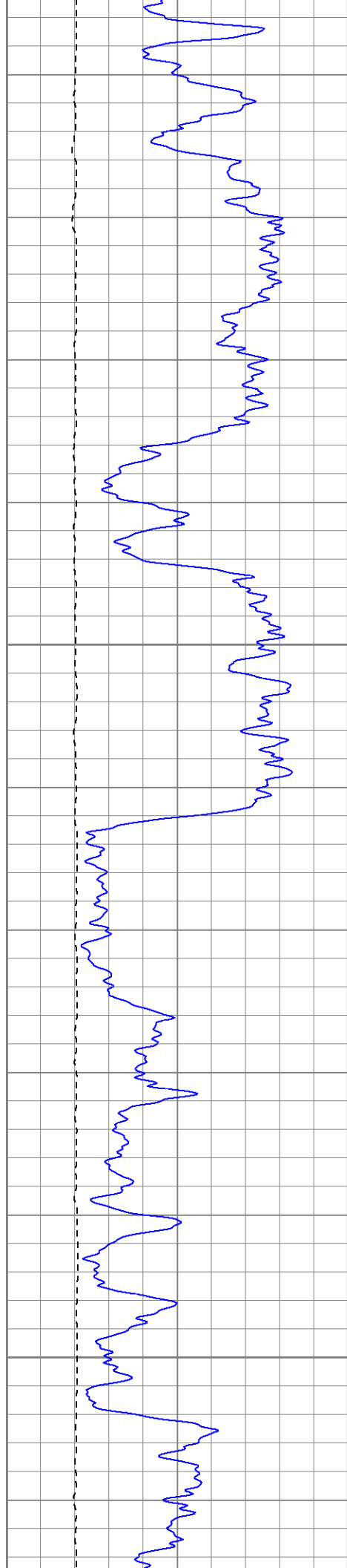


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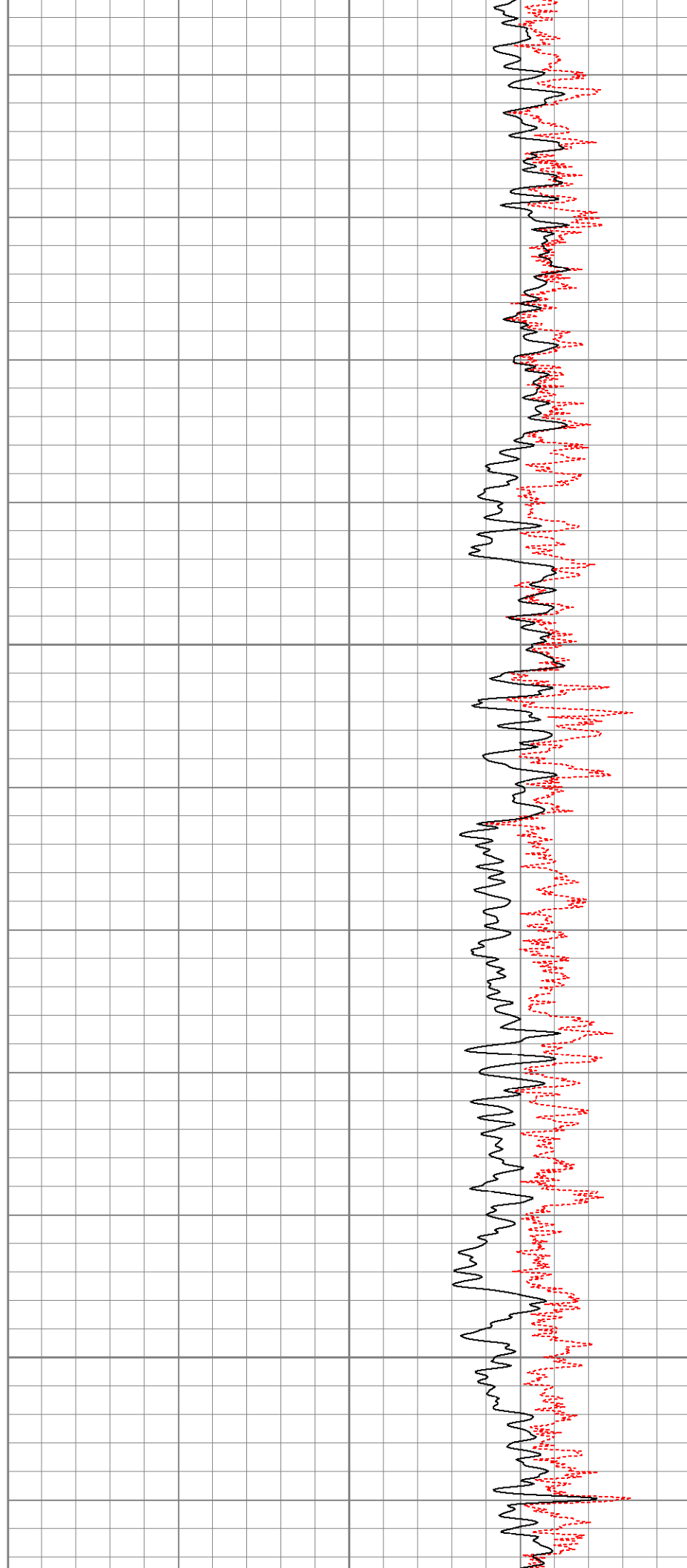
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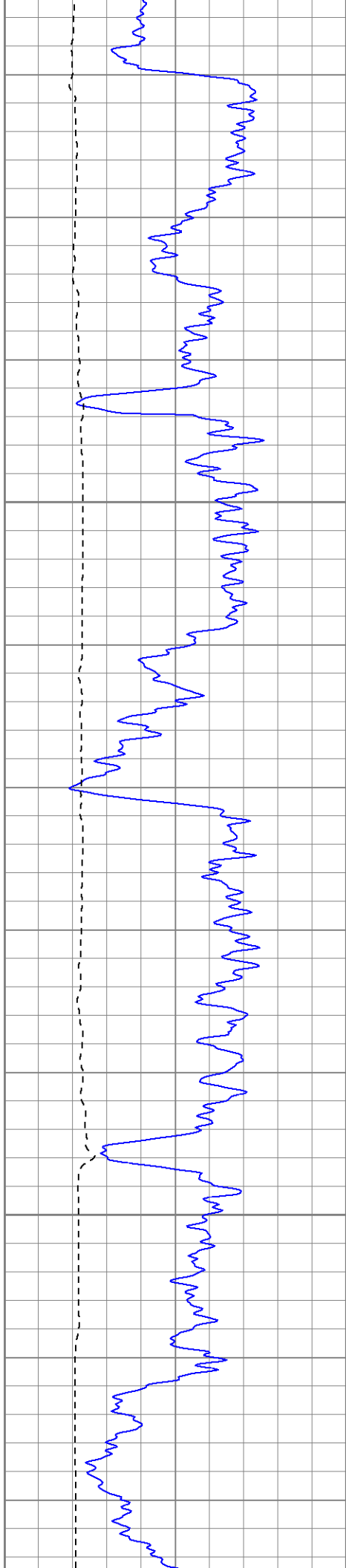




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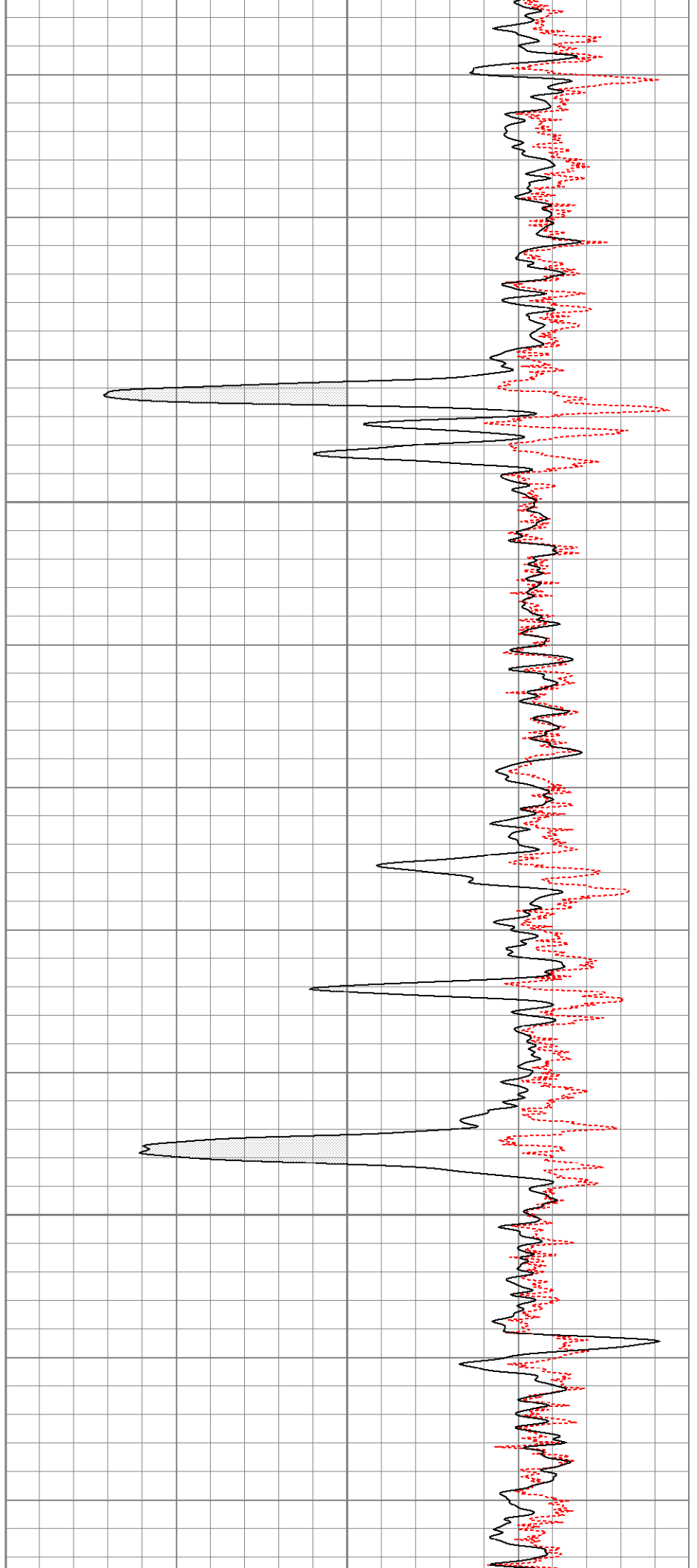
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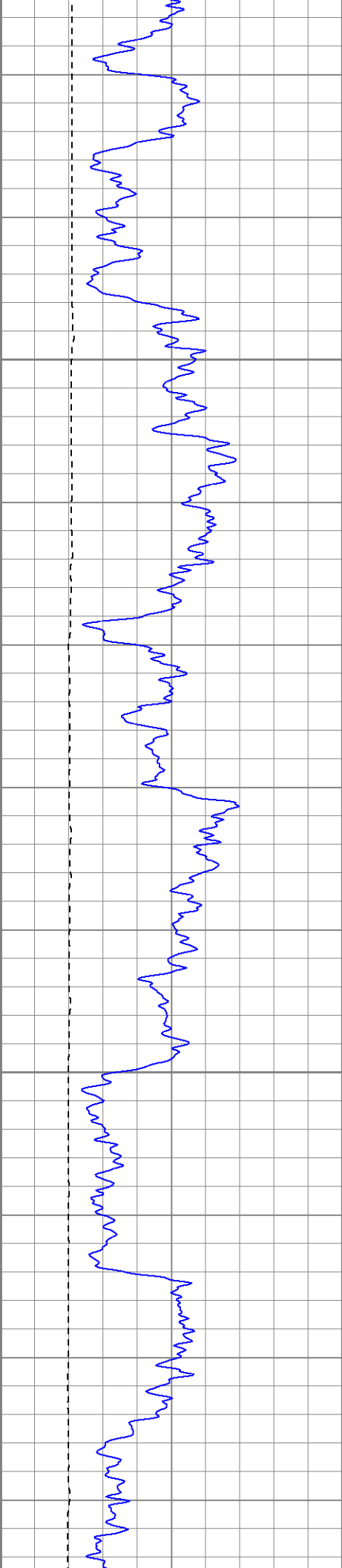




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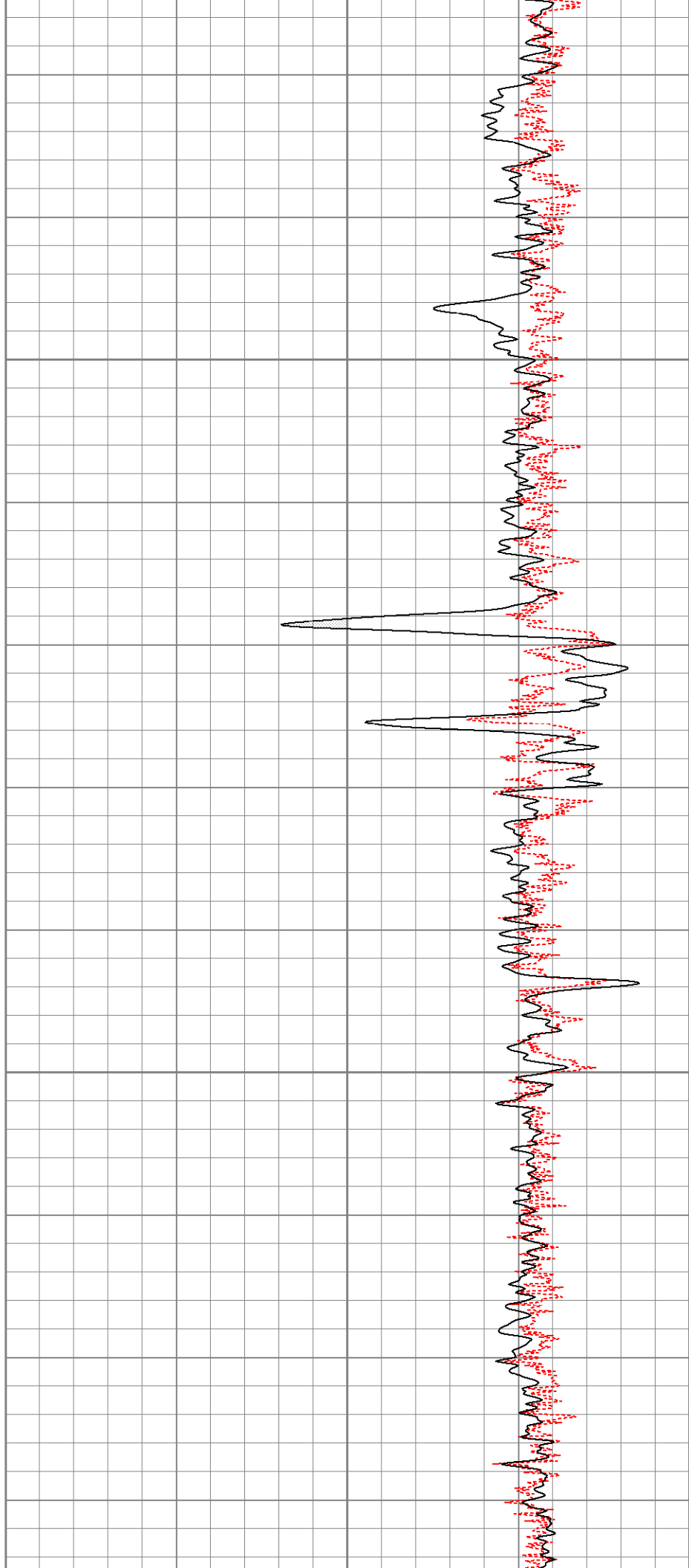
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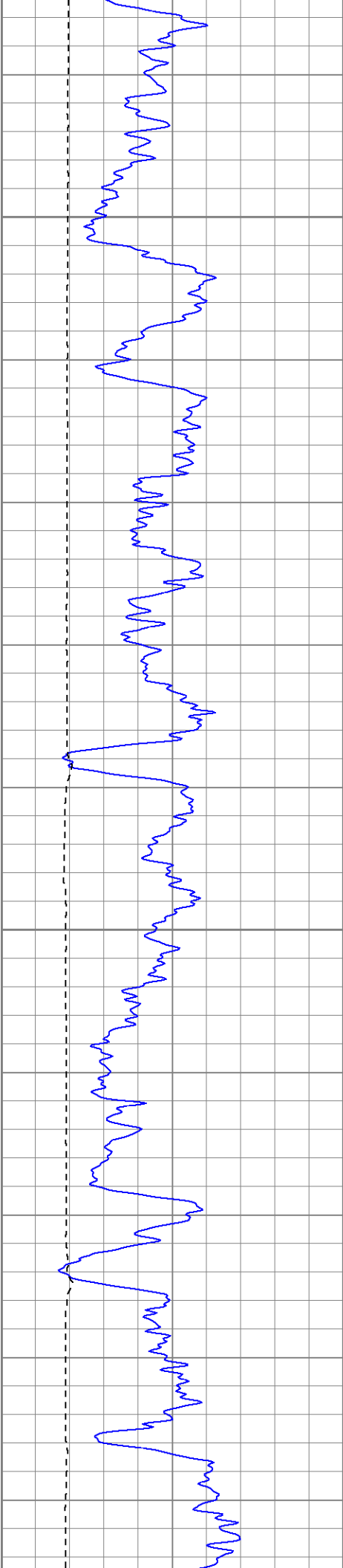




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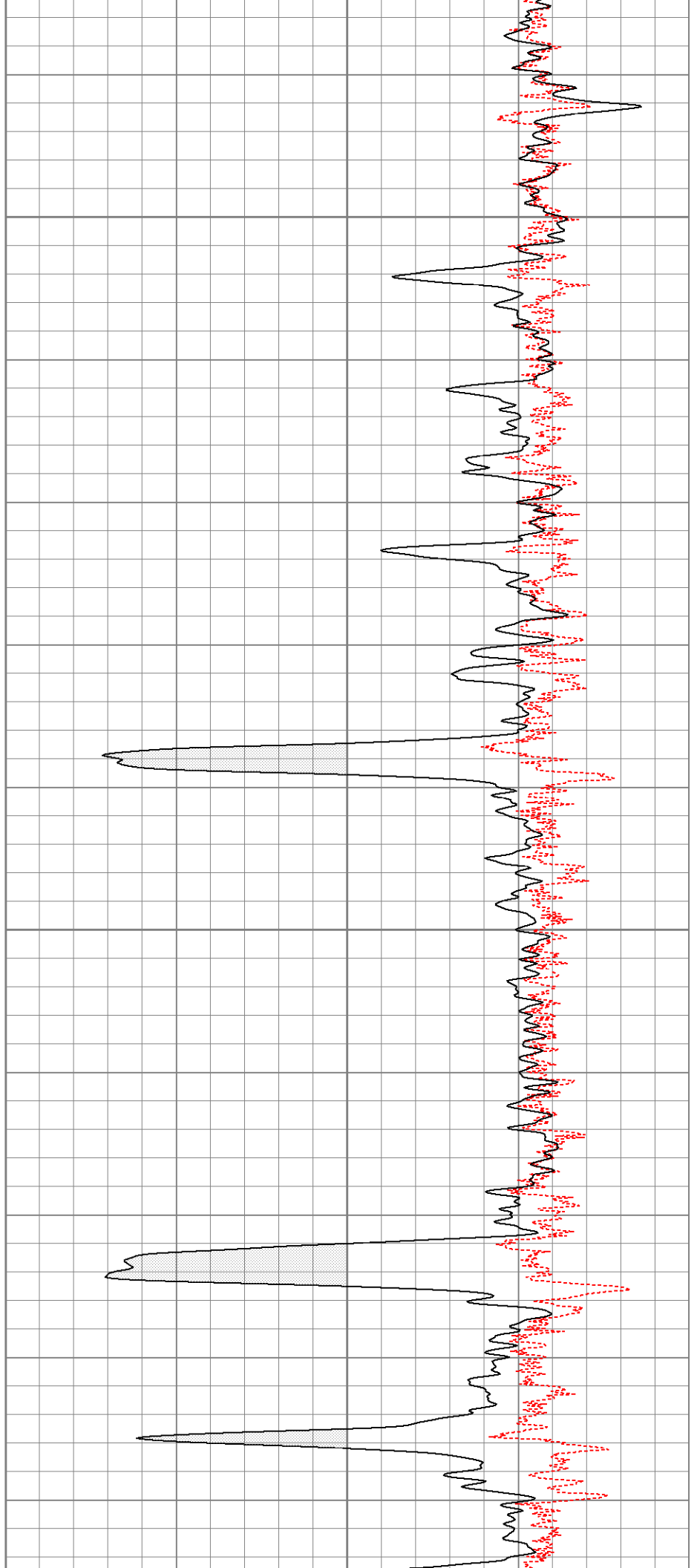
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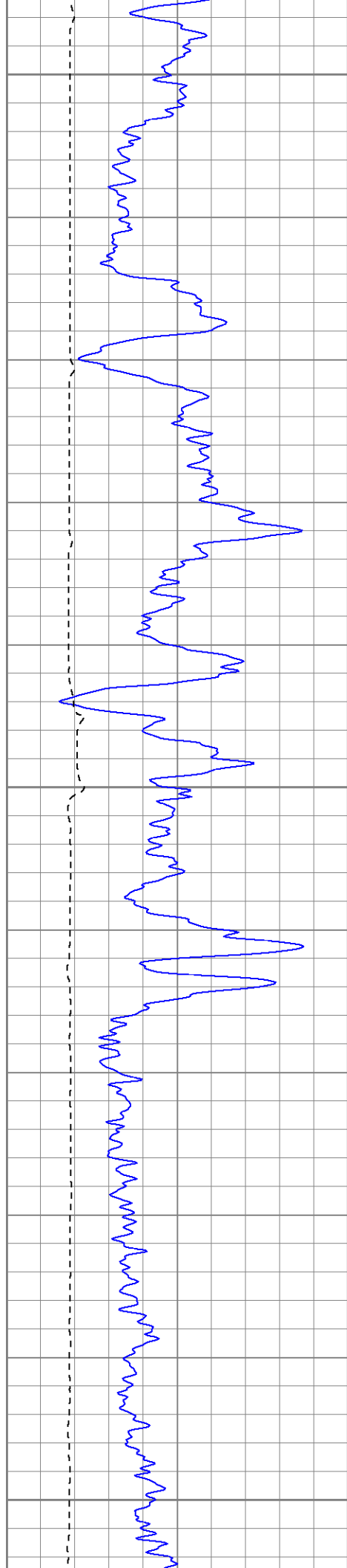




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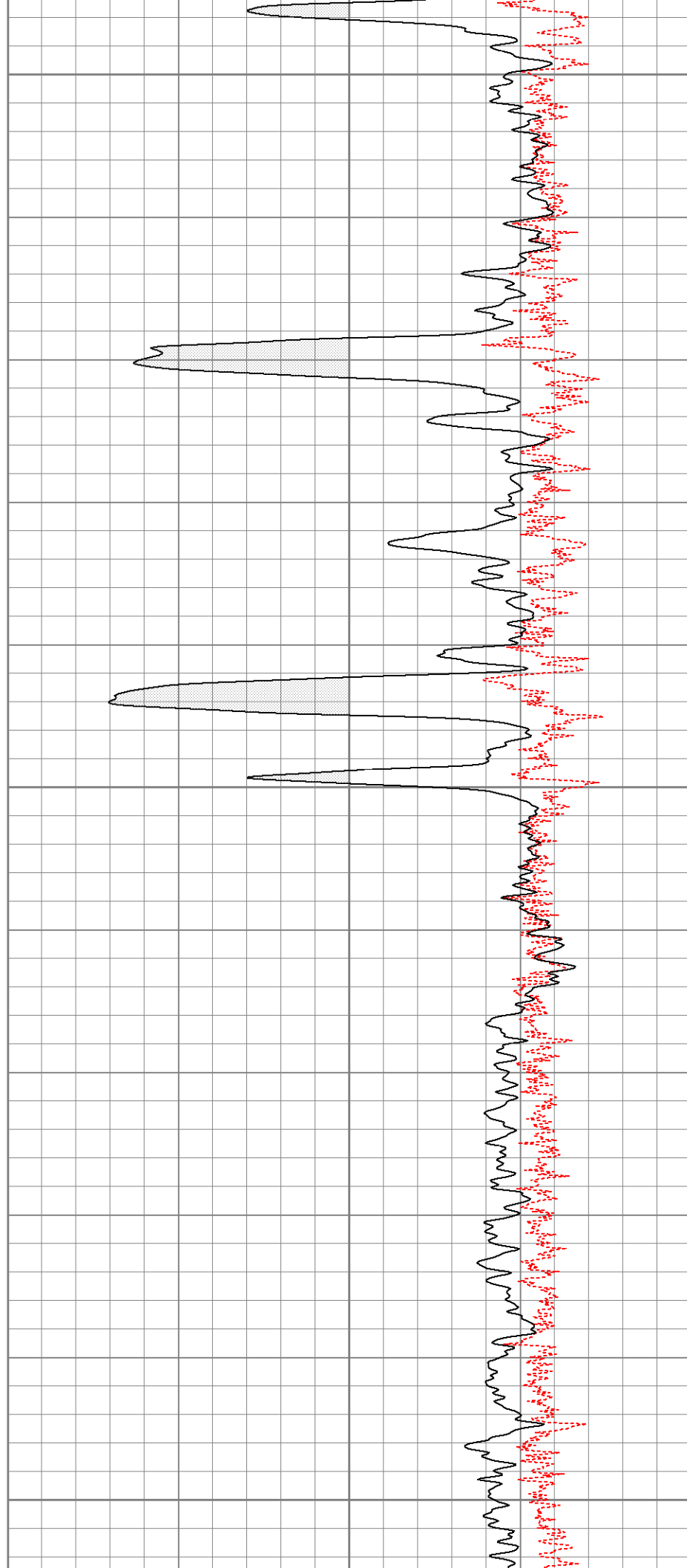


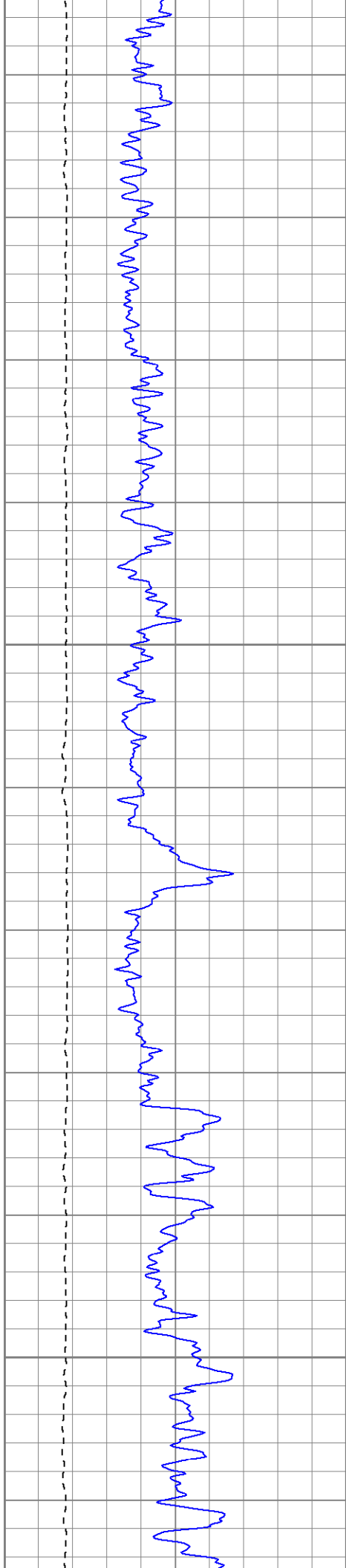


2100

2150

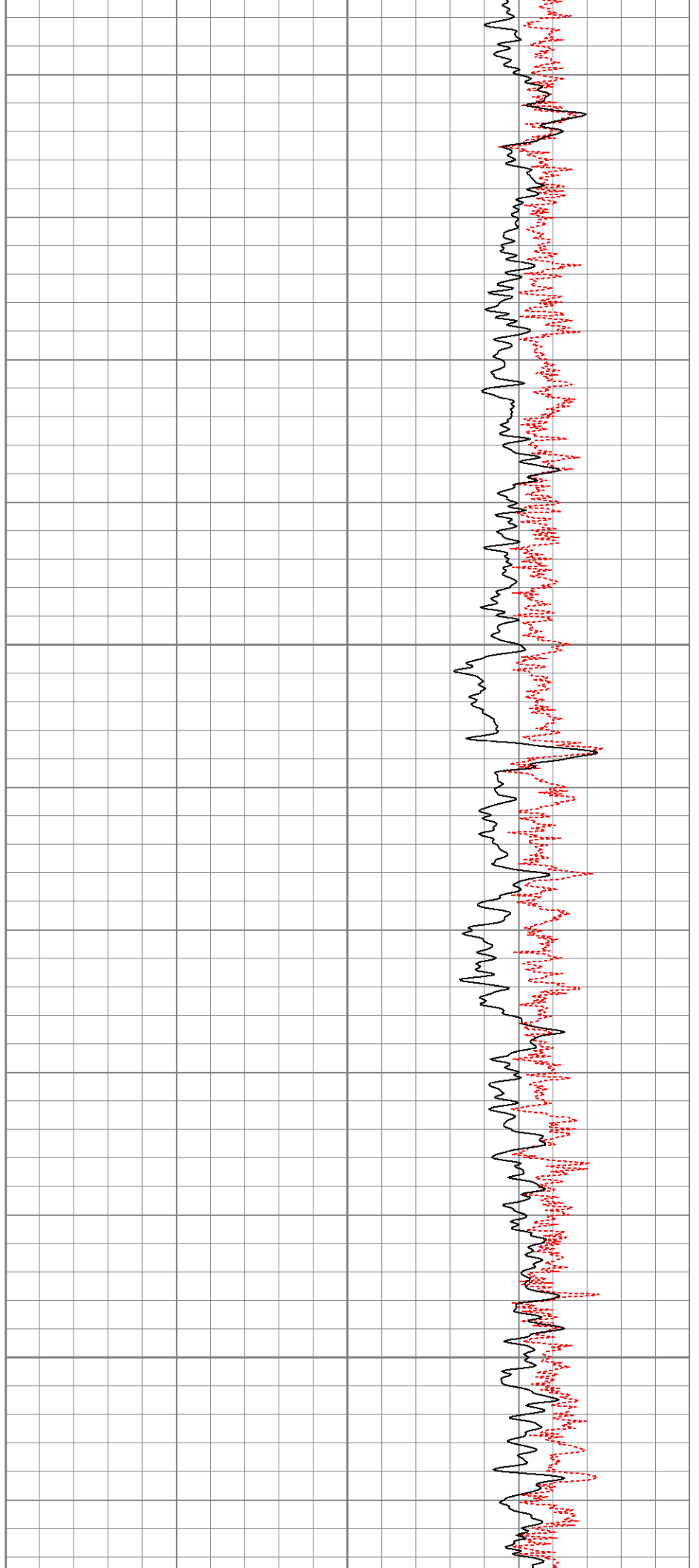
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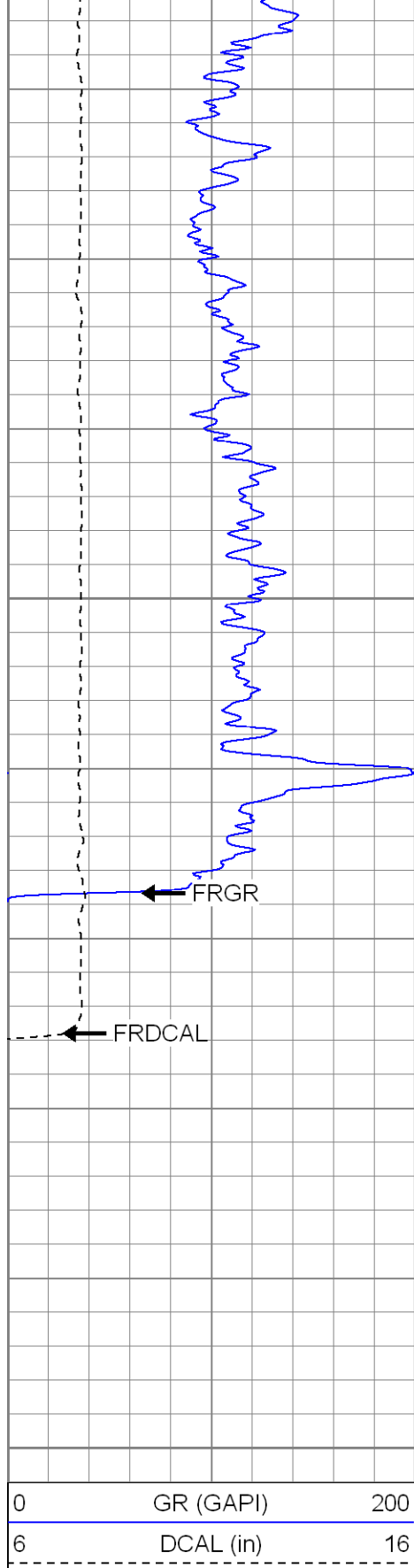




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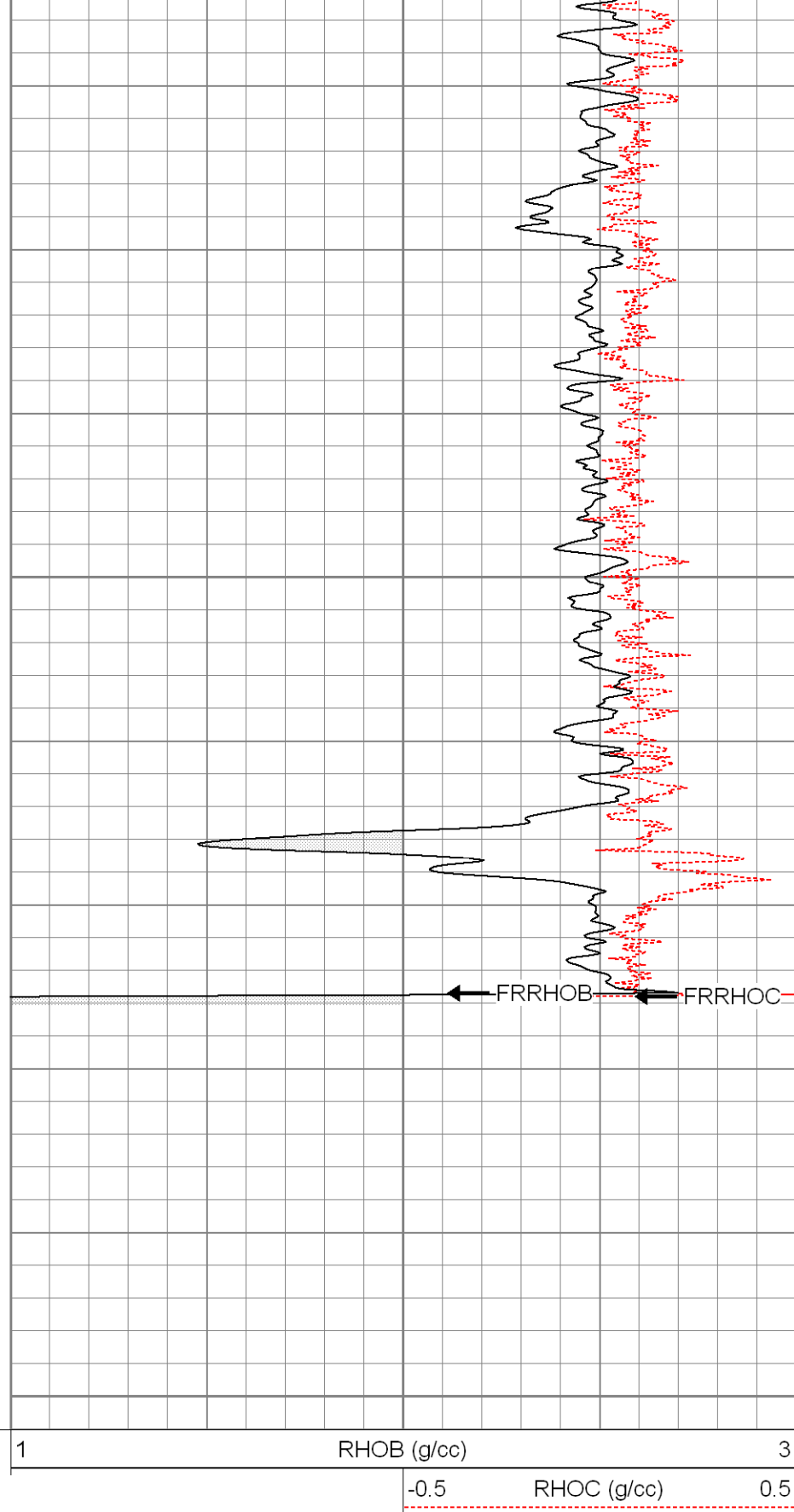
2300





2350

2400



Calibration Report

Database File: xtoge1913.db
Dataset Pathname: pass1
Dataset Creation: Tue Mar 25 04:27:25 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 DCAL SSD	26.46		CDL-poilex (2118)	8.83	4.00	275.00
	26.05					
	25.88					
CILD SP	16.29 16.29					
CILM	12.54		DIL-P (20017) Pengo	24.63	4.00	300.00
RLL3	3.21					
Dataset: xtoge1913.db: field/well/run1/pass1 Total Length: 43.42 ft Total Weight: 705.00 lb O.D. 4.00 in						