



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

COMPENSATED DENSITY NEUTRON LOG

Company XTO Energy Inc.
Well Apache Canyon 04-13
Field Purgatoire River
County Las Animas State Colorado

Location: API # : 05 071 09582 00

704' FSL & 1245' FWL

Other Services
dill

SEC 04 TWP 34S RGE 67W

Permanent Datum Ground Level Elevation 7359'
Log Measured From Ground Level
Drilling Measured From Ground Level

Elevation
K.B. -----
D.F. -----
G.L. 7359'

Date 7-20-08

Run Number	One		
Depth Driller	2000'		
Depth Logger	2007'		
Bottom Logged Interval	1991'		
Top Log Interval	Surface Casing		
Casing Driller	8 5/8" @ 467'		
Casing Logger	469'		
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	1:30 P.M.		
Time Logger on Bottom	5:00 P.M.		
Maximum Recorded Temperature	120 DEG F		
Equipment Number	T0701		
Location	Trinidad		
Recorded By	C. Sisneros		
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

Compensated Density Neutron Porosity Presented On Sandstone Matrix.
ABHV Calculated For 5 1/2" Casing.

Well Directions:

First Bosque Entrance, turn right up Alamacito Canyon, got thru gate after first one way,
take immediate left after second one way, dead end on location.



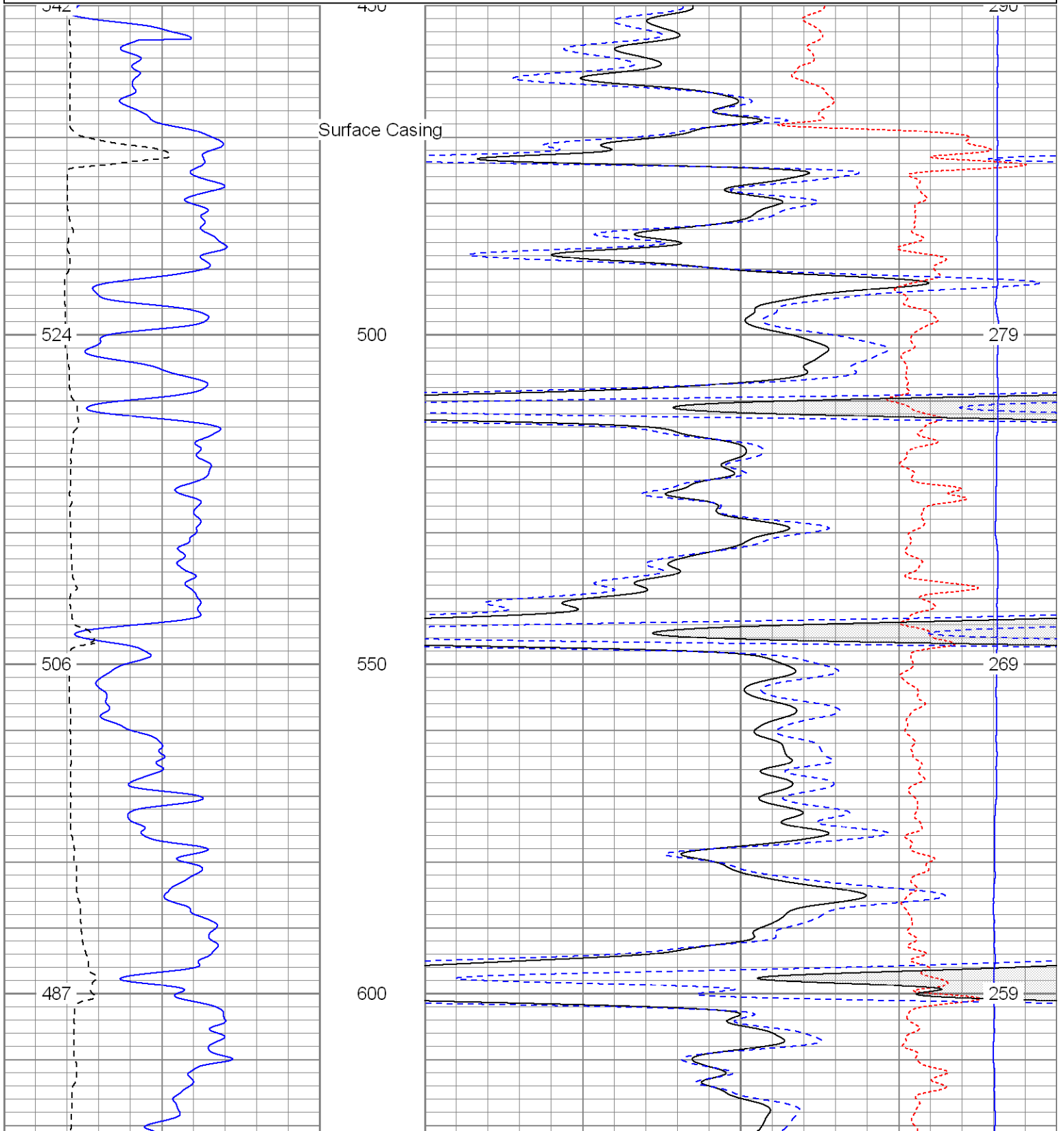
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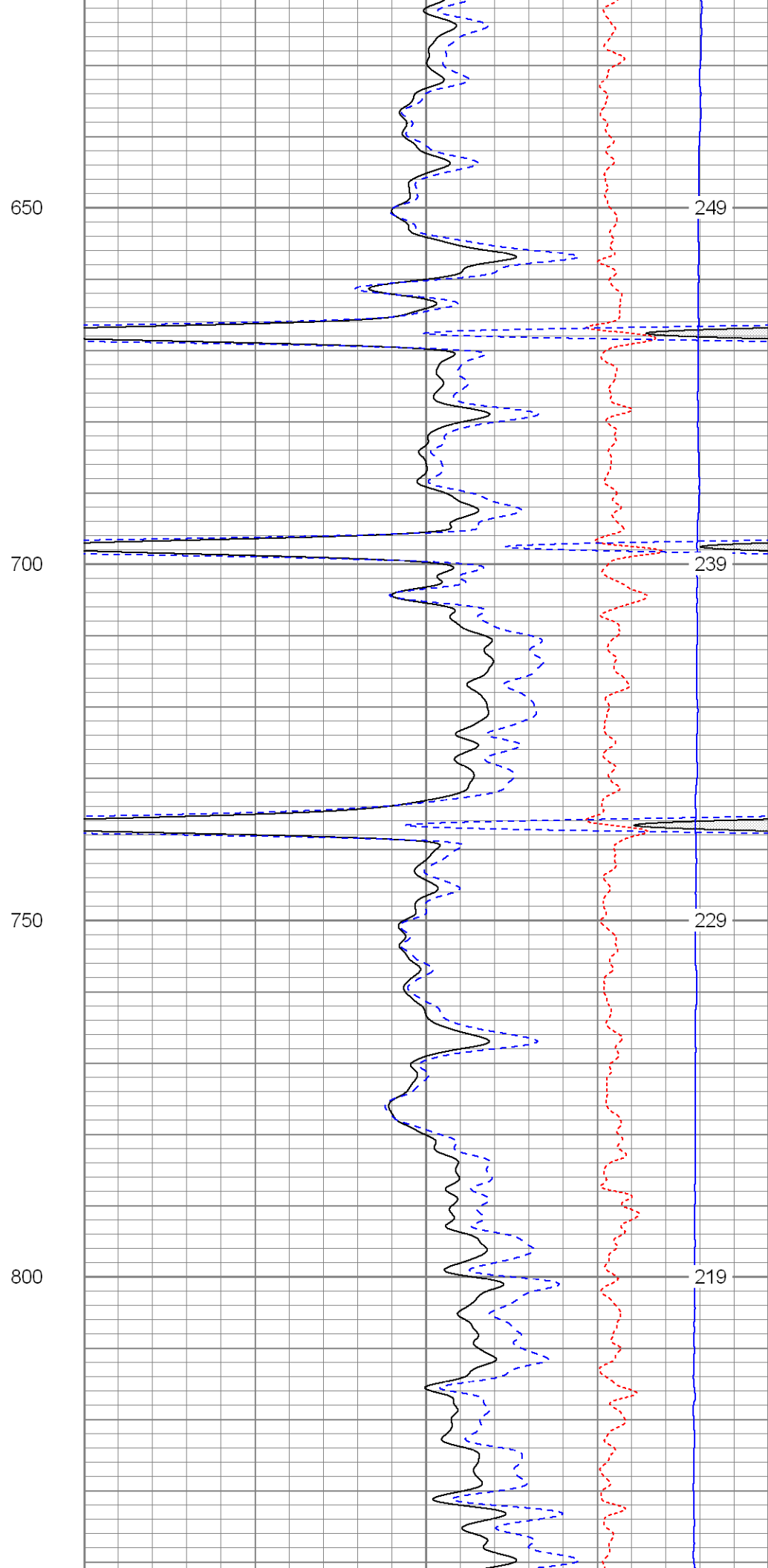
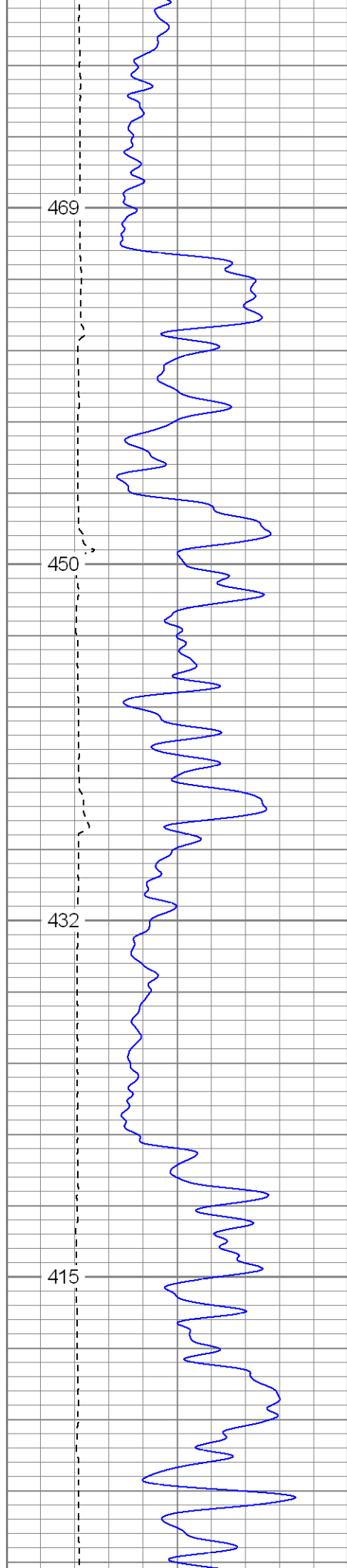
Main Pass

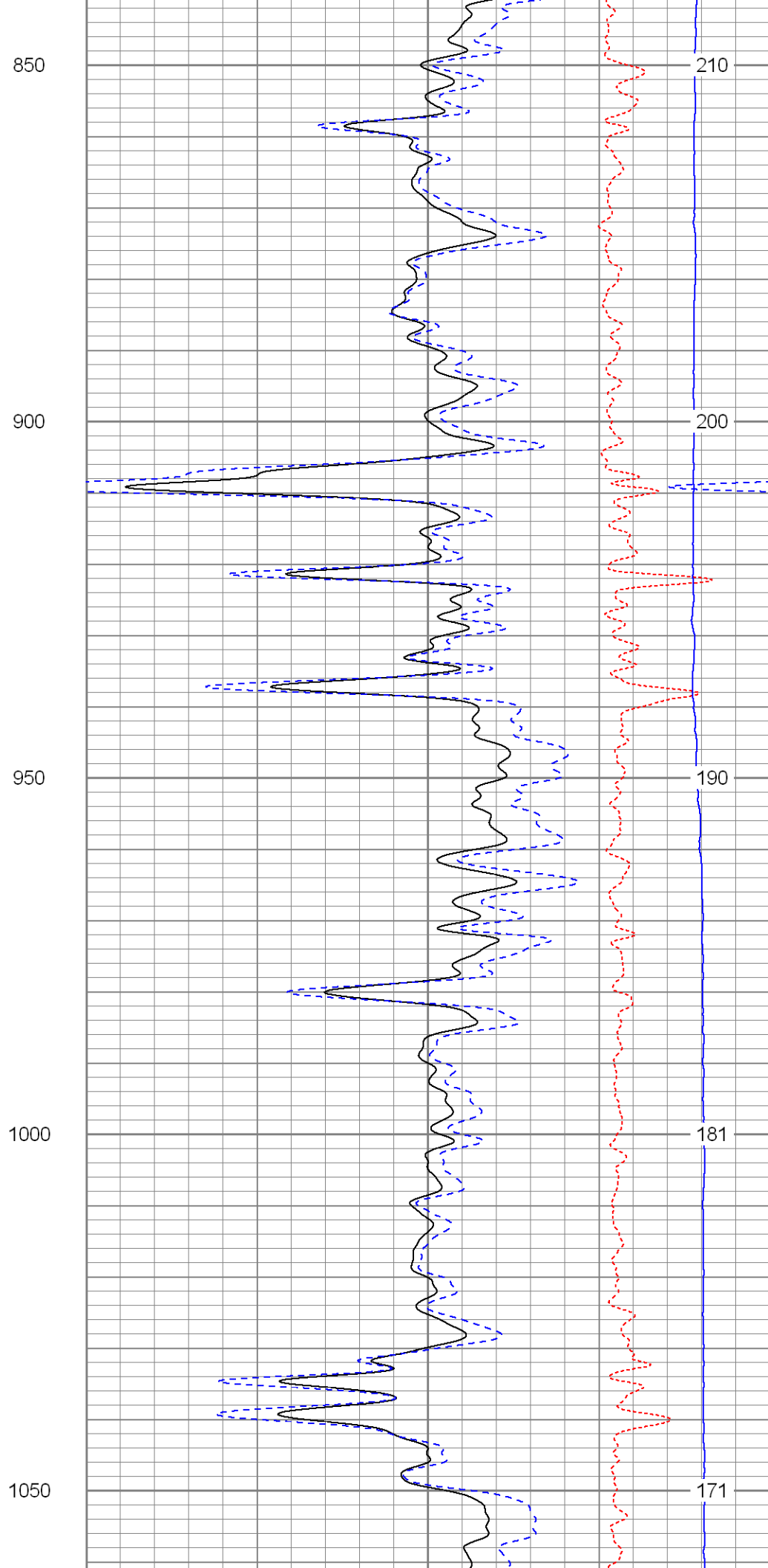
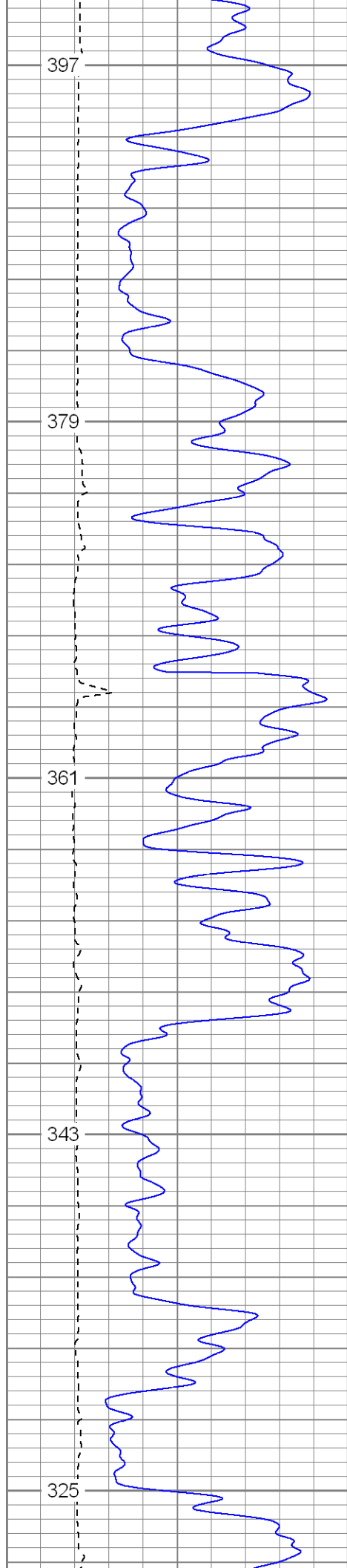
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Dataset Pathname: pass2.1
Presentation Format: cdl
Dataset Creation: Sun Jul 20 18:36:04 2008 by Calc Open-Cased 070814
Charted by: Depth in Feet scaled 1:240

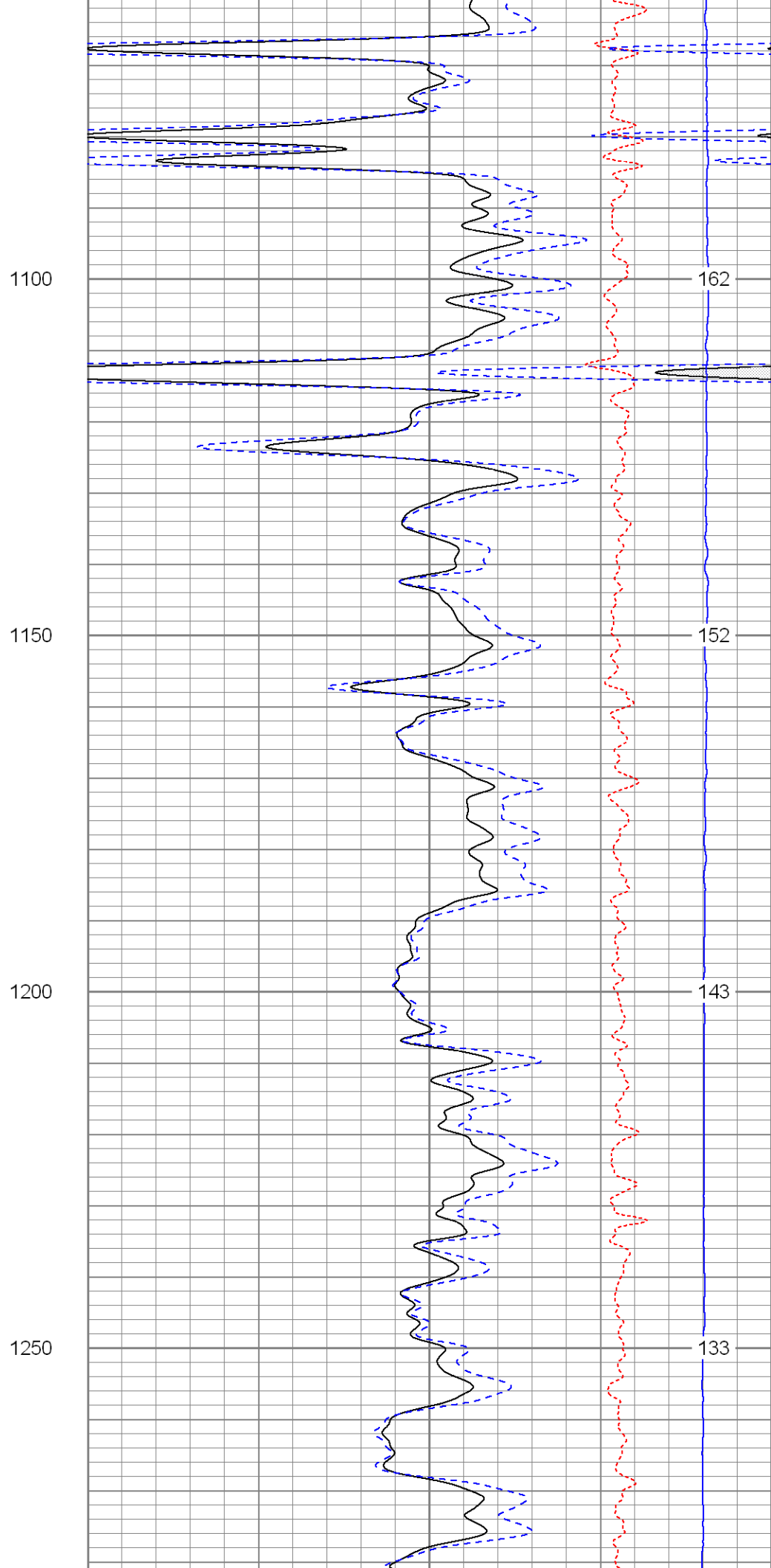
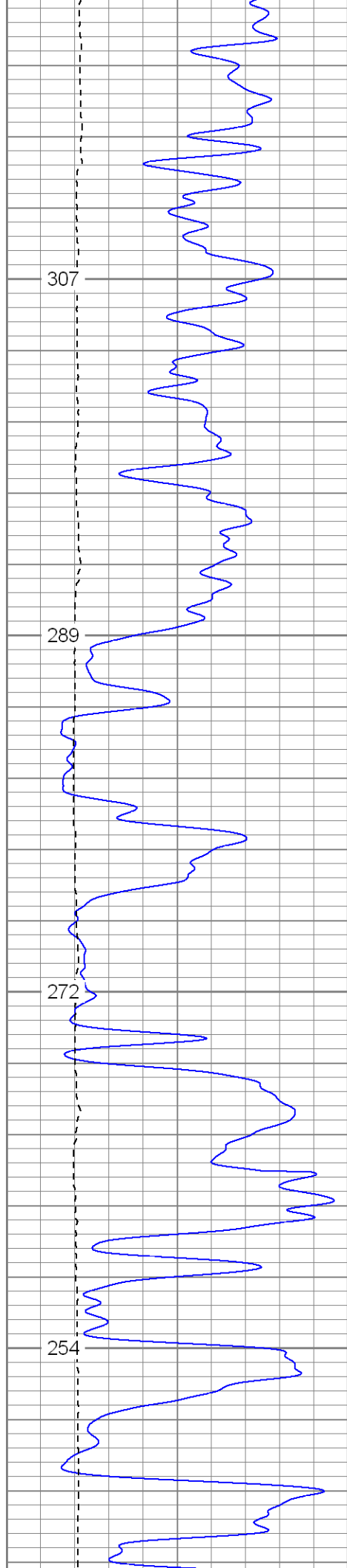
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6	DCAL (in)	16
TBHV (ft3)		

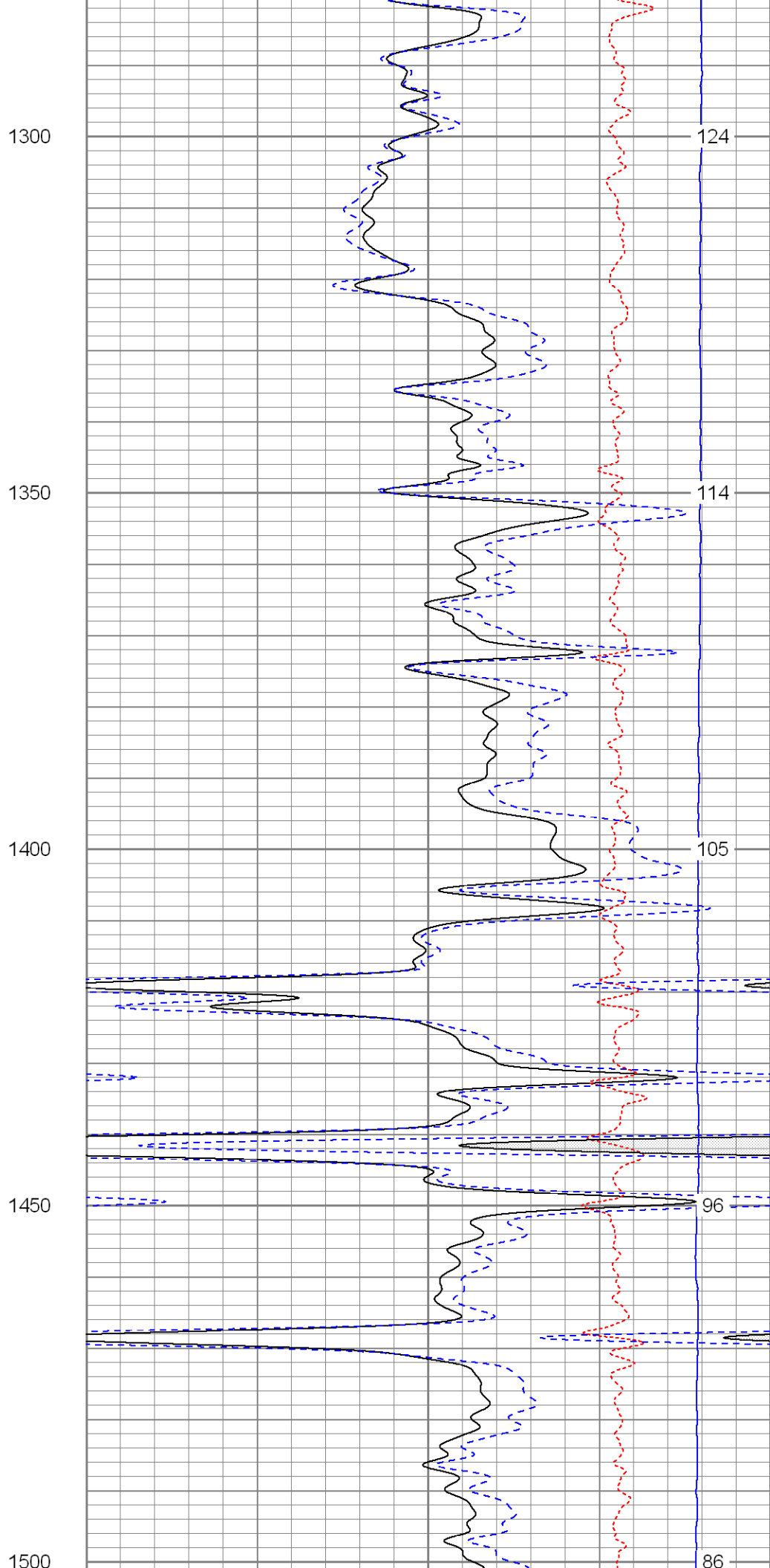
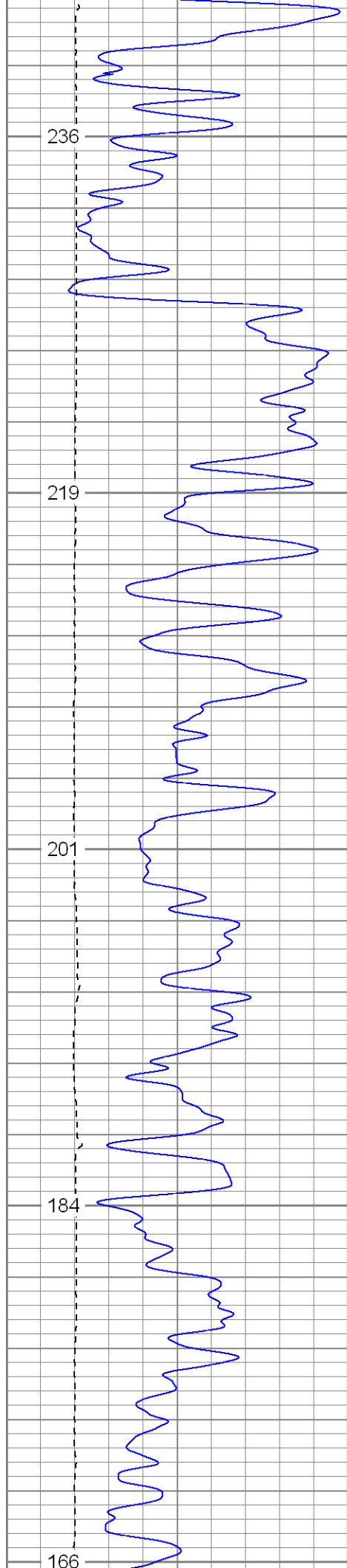
2	RHOB (g/cc)	3
1	RHOB (g/cc)	2
30	DPOR (pu)	-10
-0.5 RHOC (g/cc) 0.5		
4000 LTEN (lb) 0		
ABHV (ft3)		

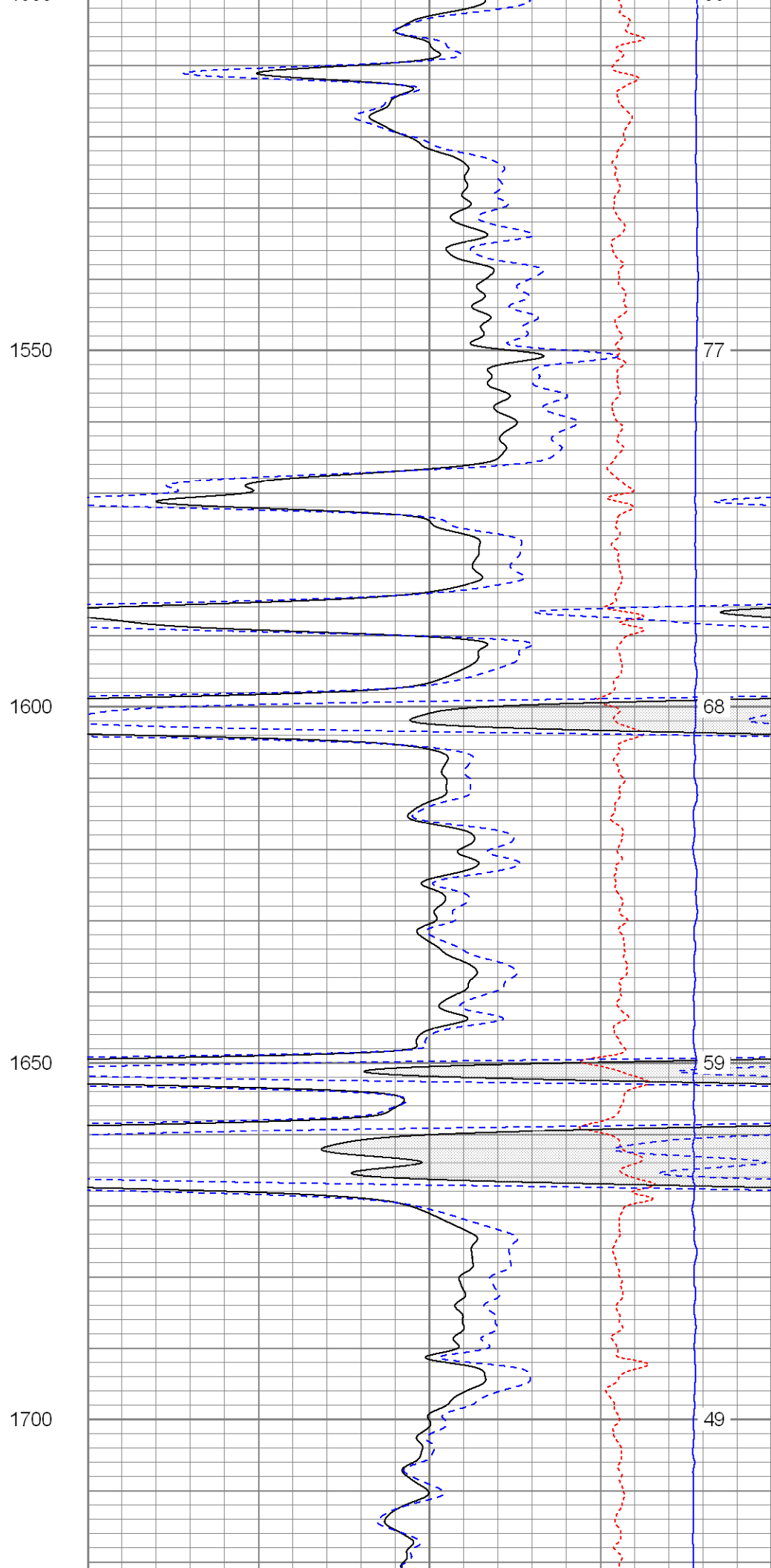
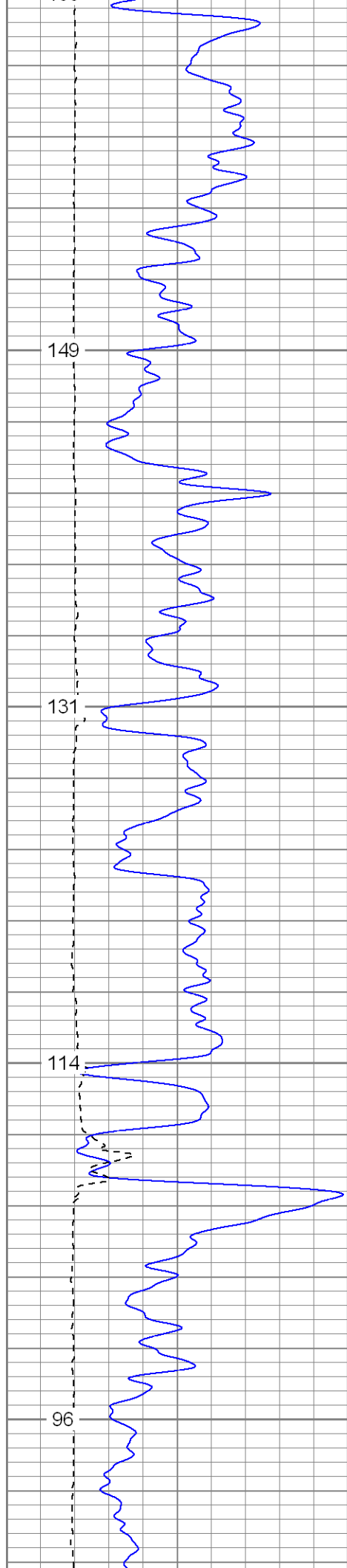


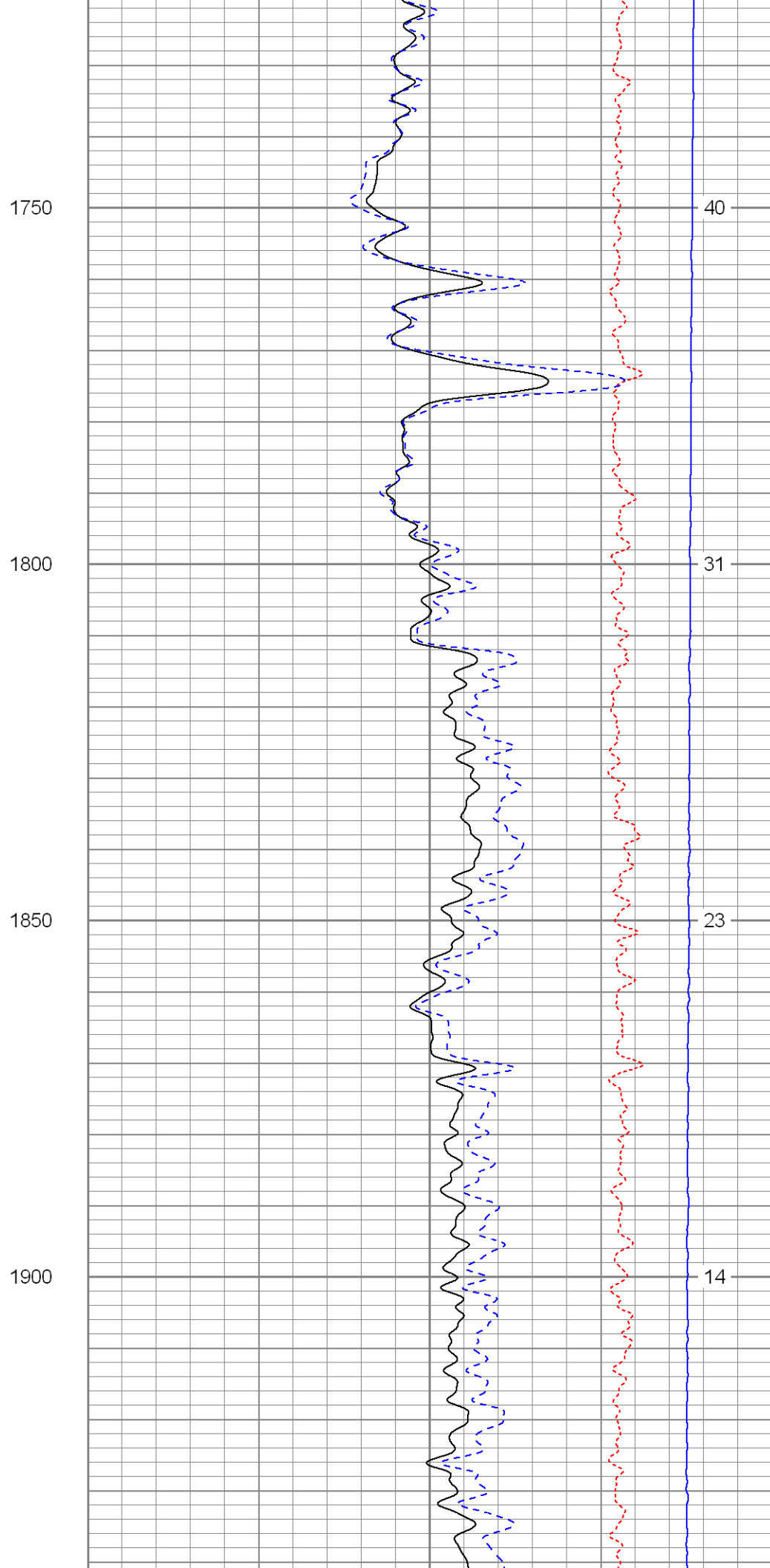
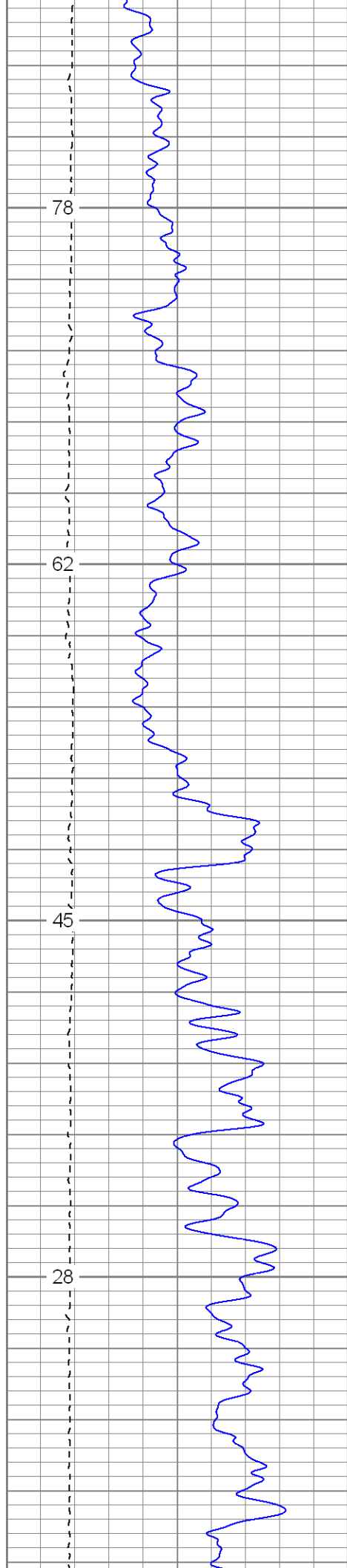


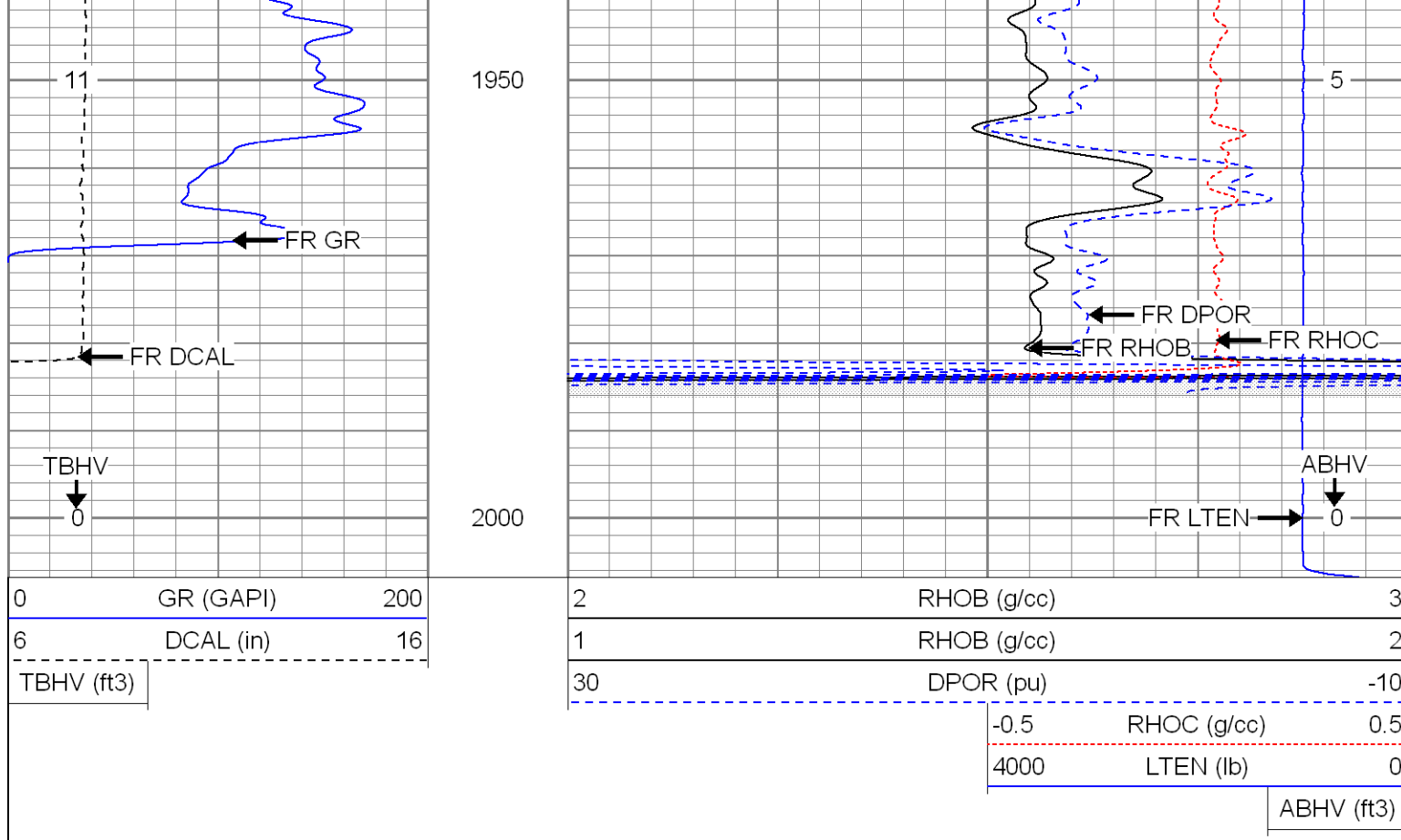












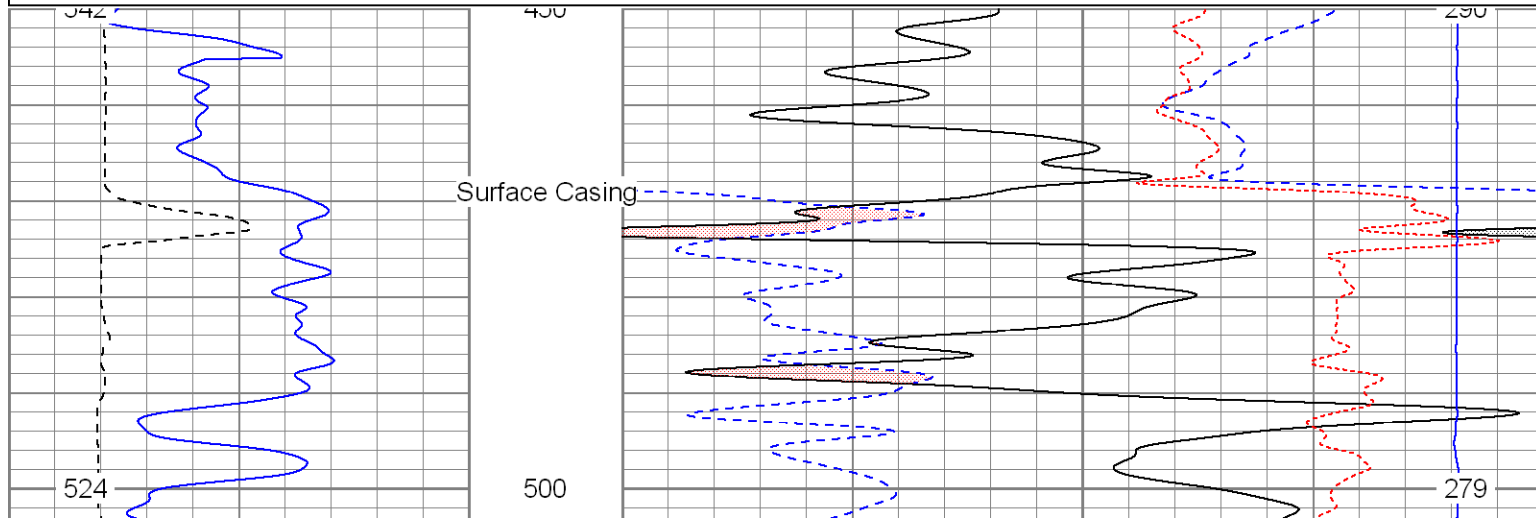
SUPERIOR

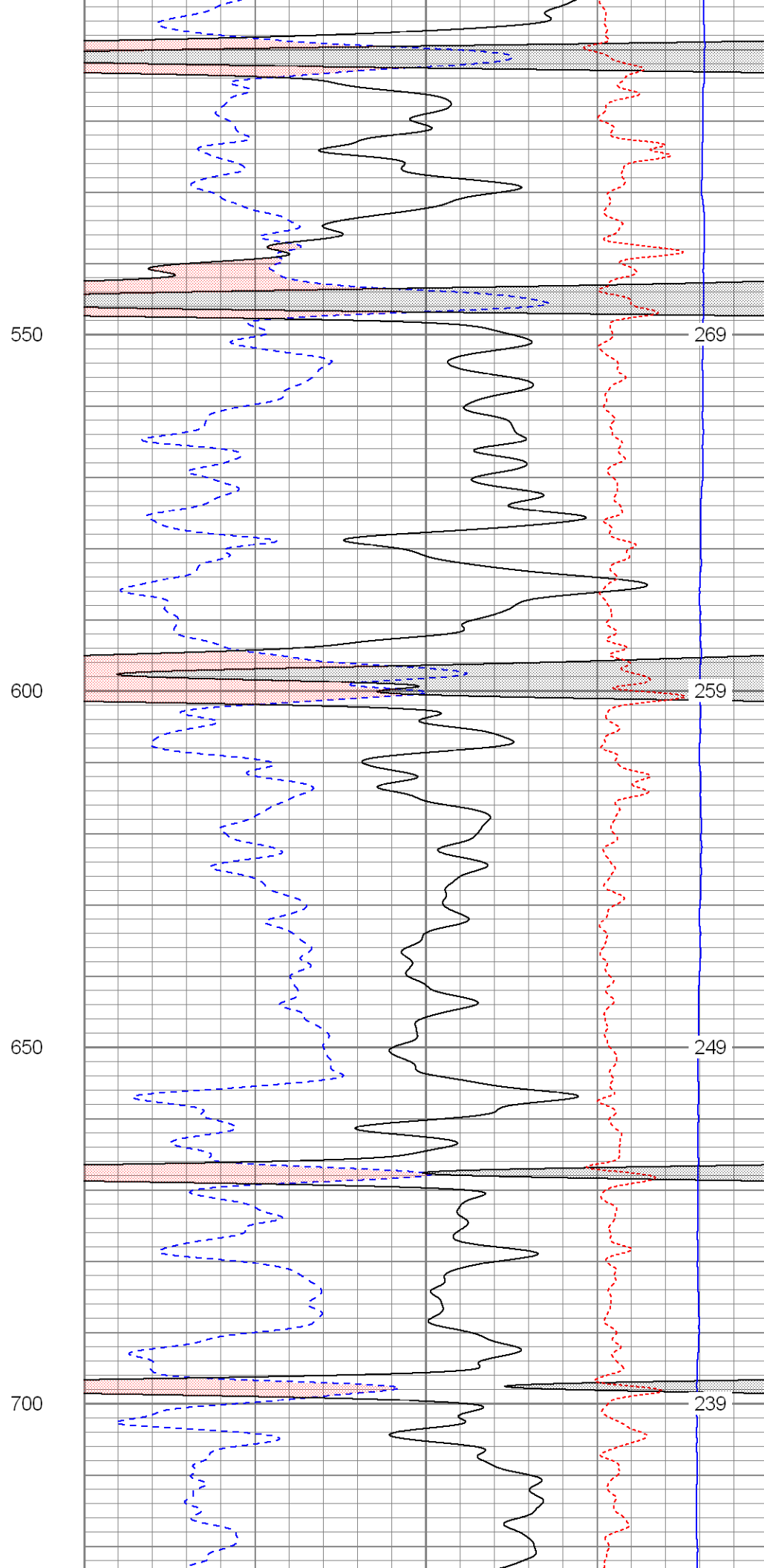
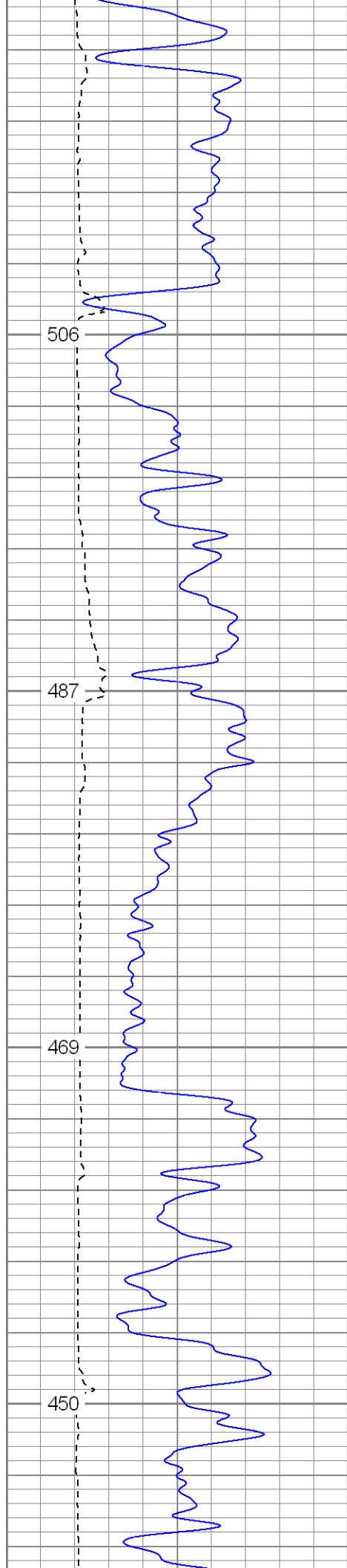
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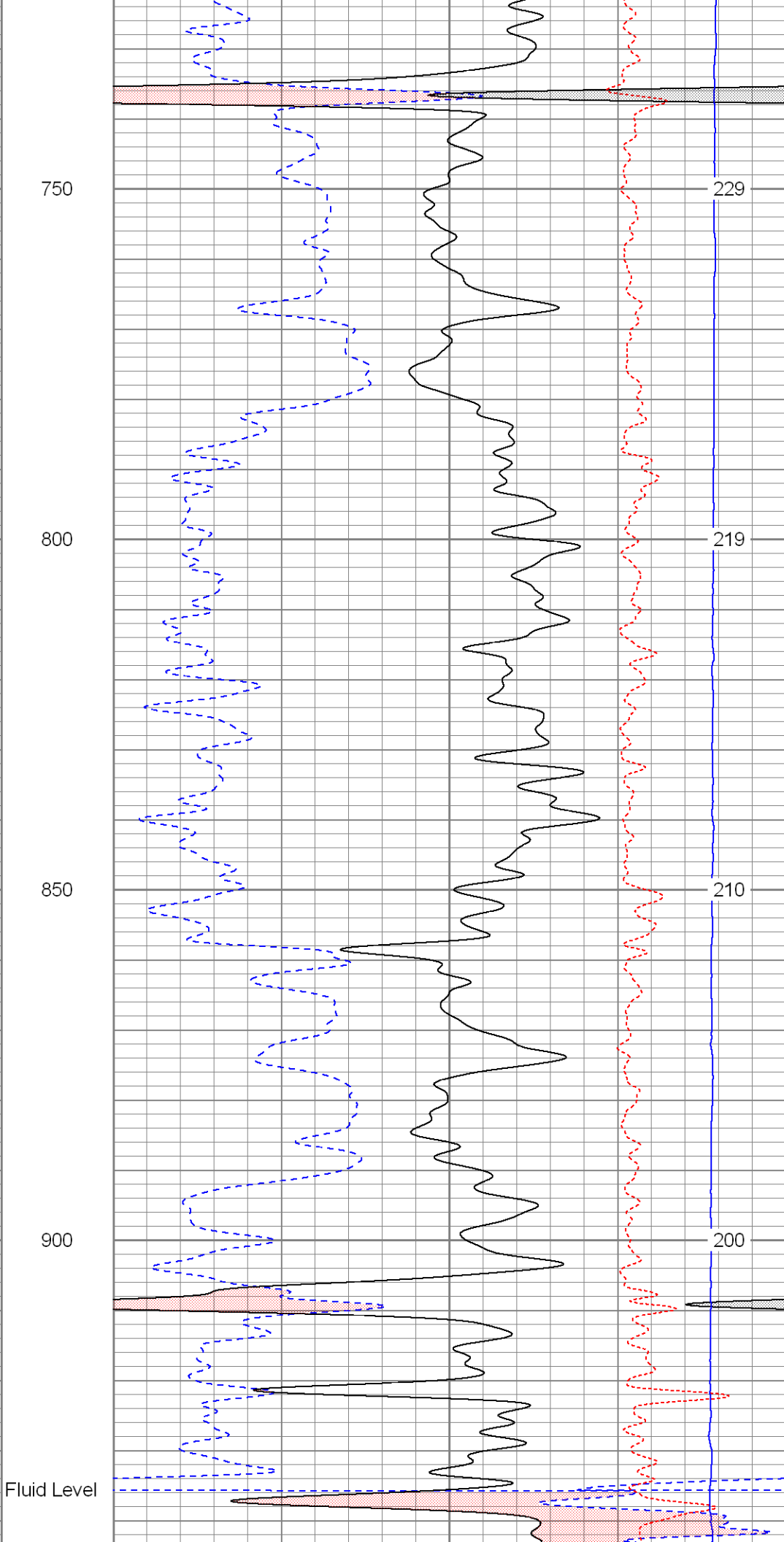
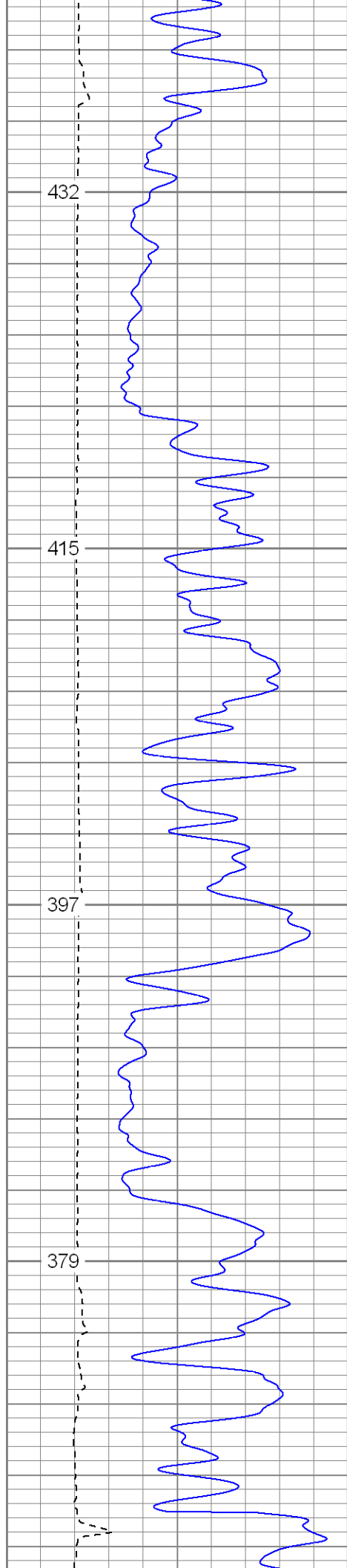
Main Pass

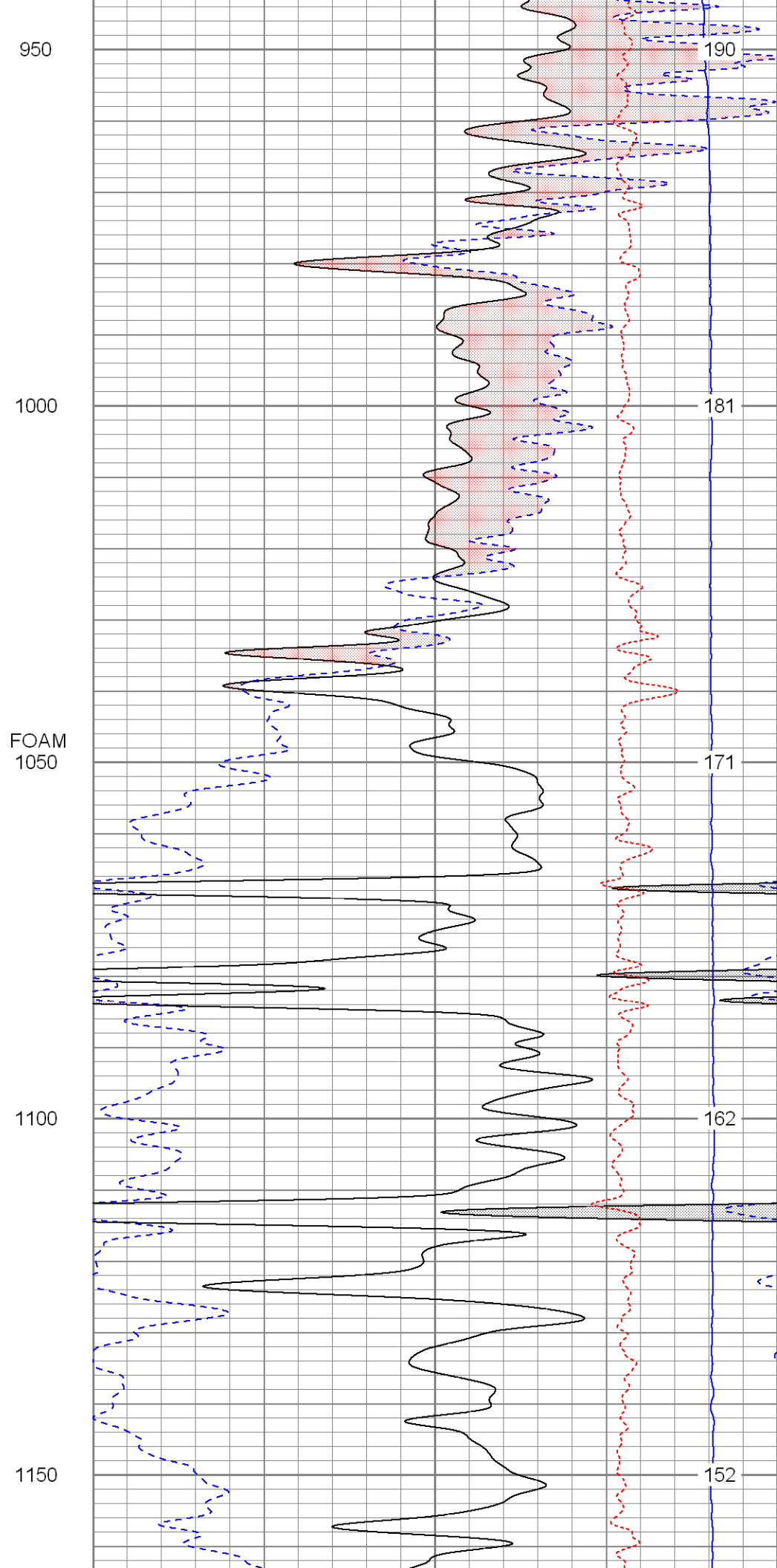
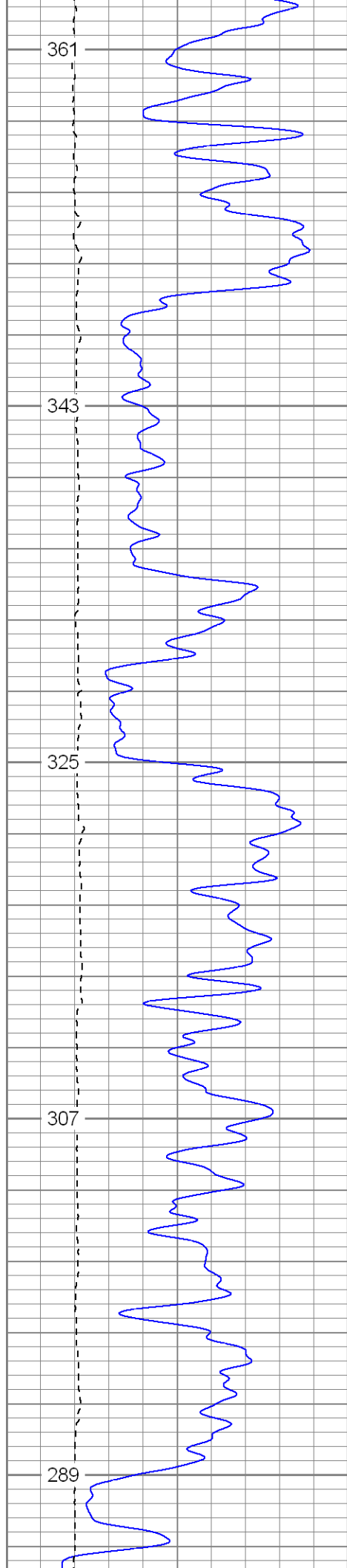
Database File: xtoac0413.db
Dataset Pathname: pass2.1
Presentation Format: cdnl
Dataset Creation: Sun Jul 20 18:36:04 2008 by Calc Open-Cased 070814
Charted by: Depth in Feet scaled 1:240

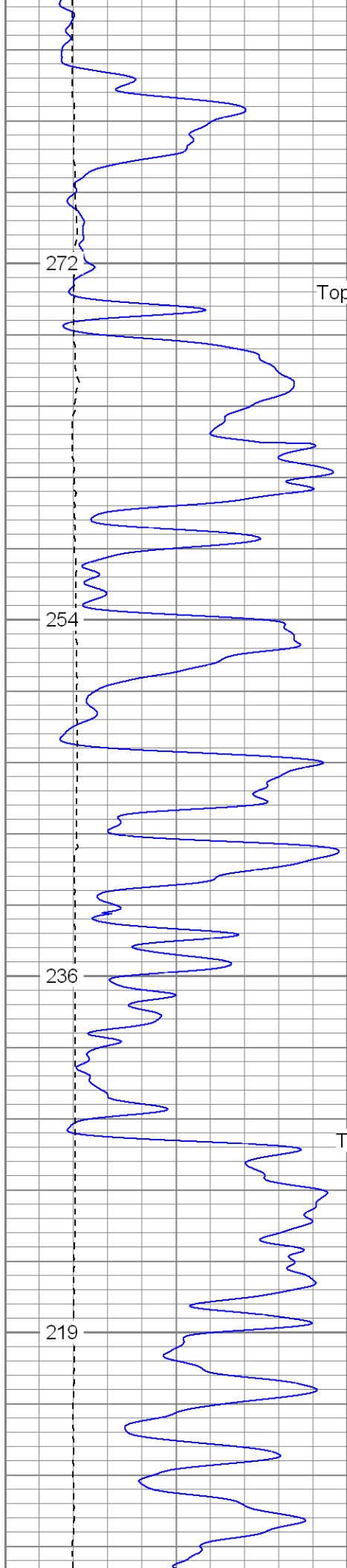
0	GR (GAPI)	200	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
TBHV (ft3)			-0.5 RHOC (g/cc) 0.5		
			4000 LTEN (lb) 0		
			ABHV (ft3)		











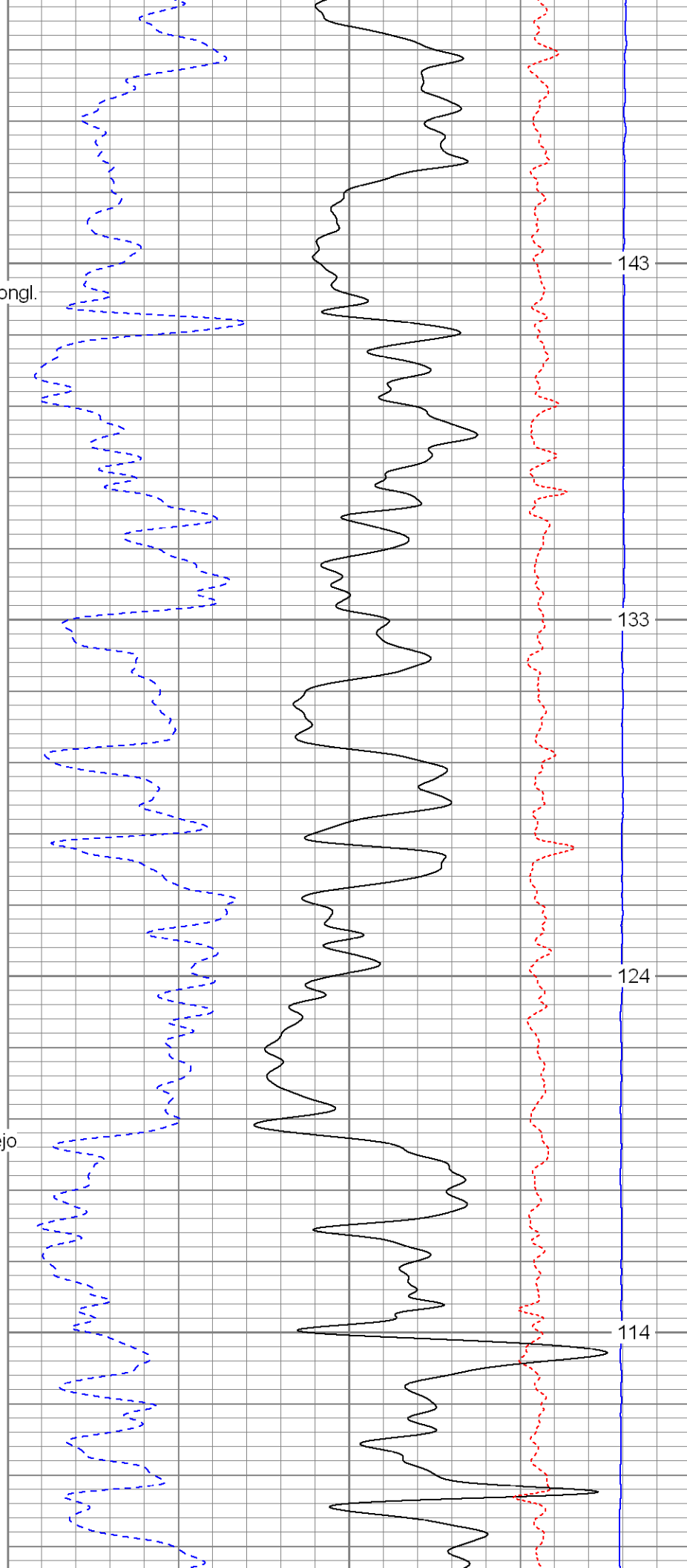
1200
Top of Raton Congl.

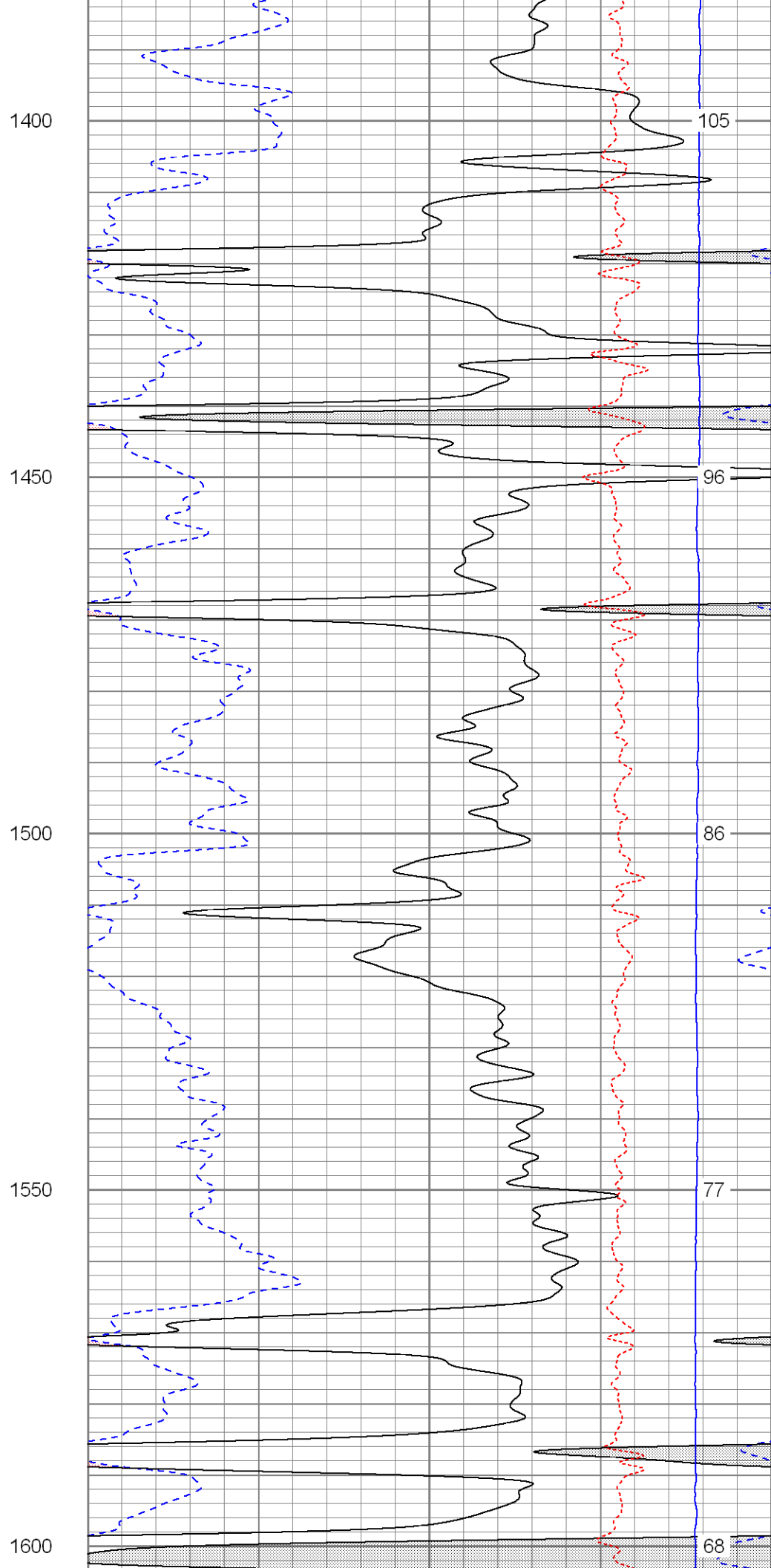
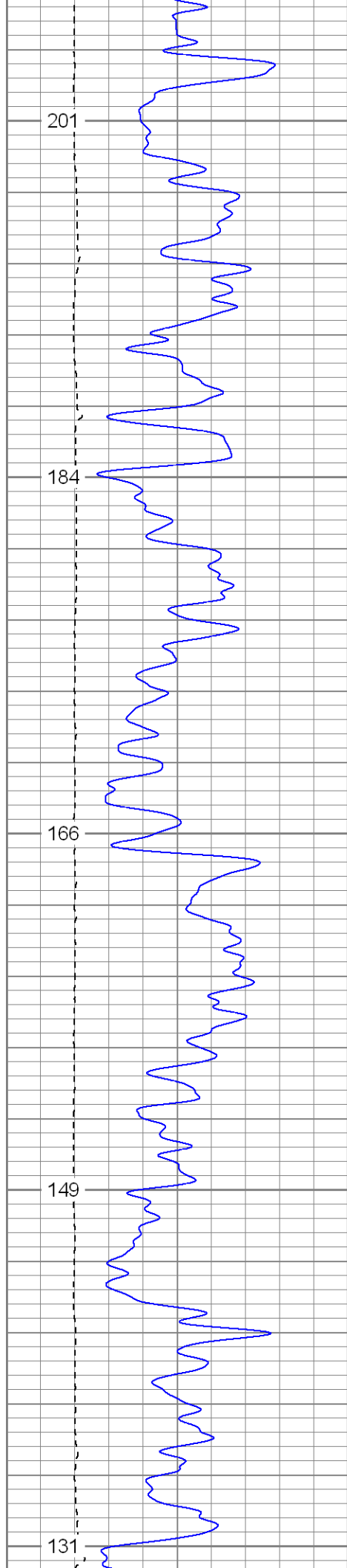
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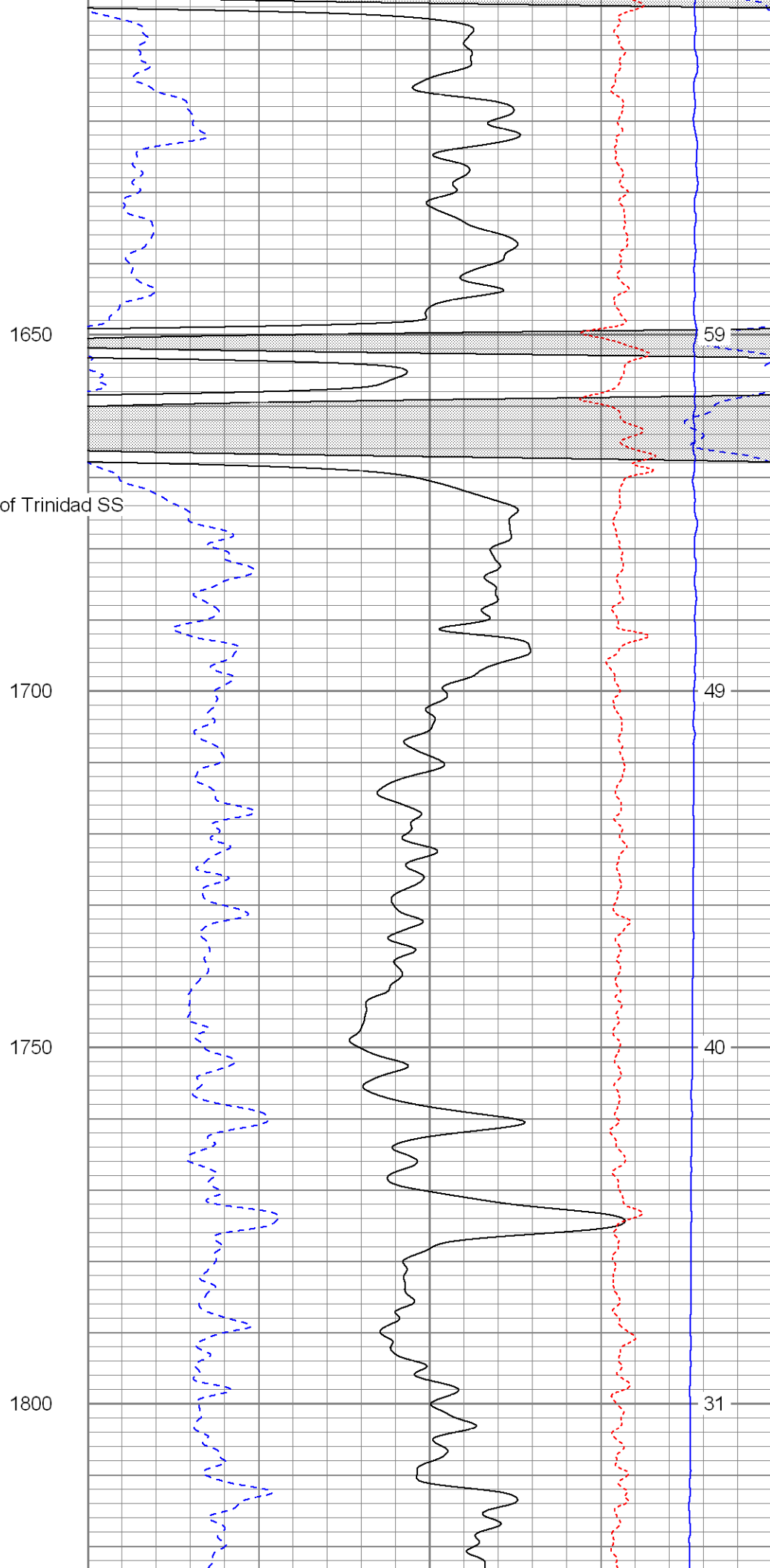
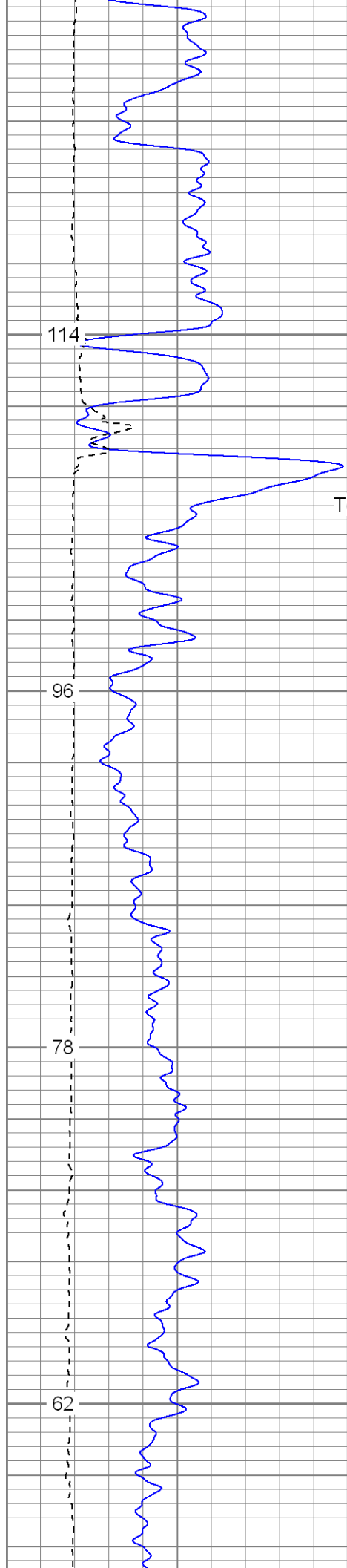
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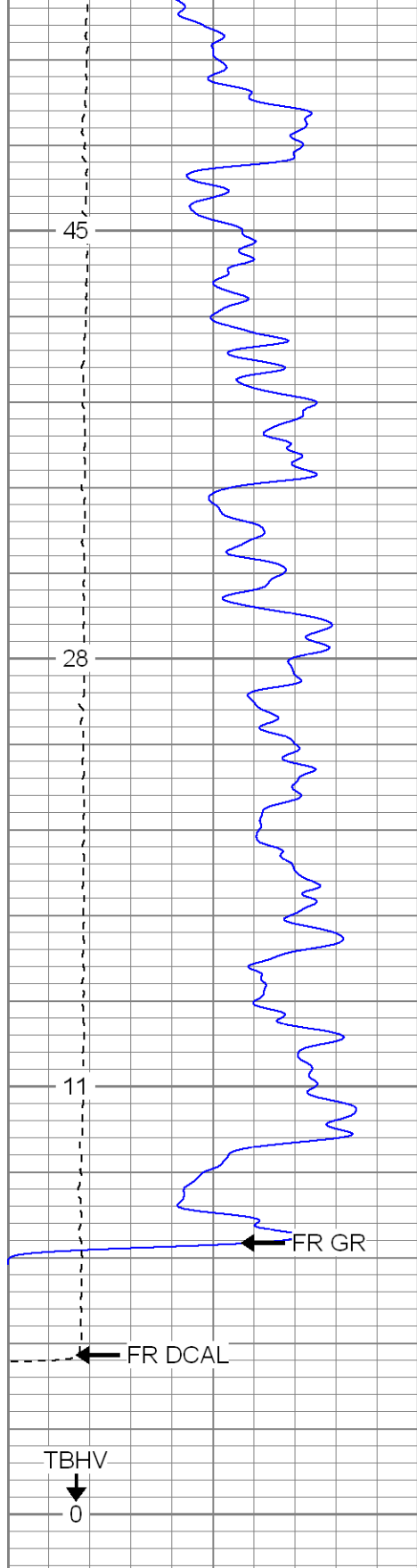
Top of Vermejo

1350

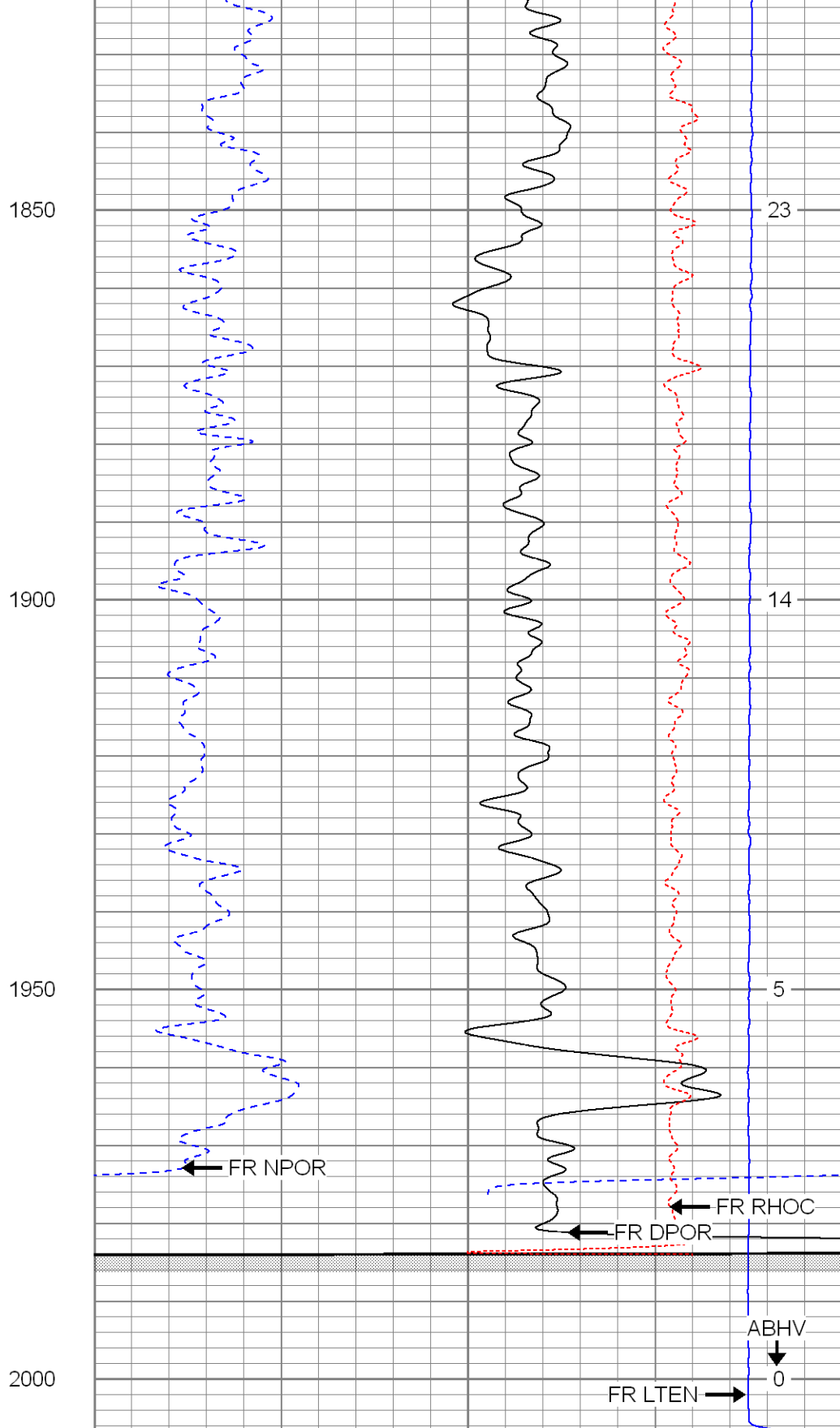








0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		



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



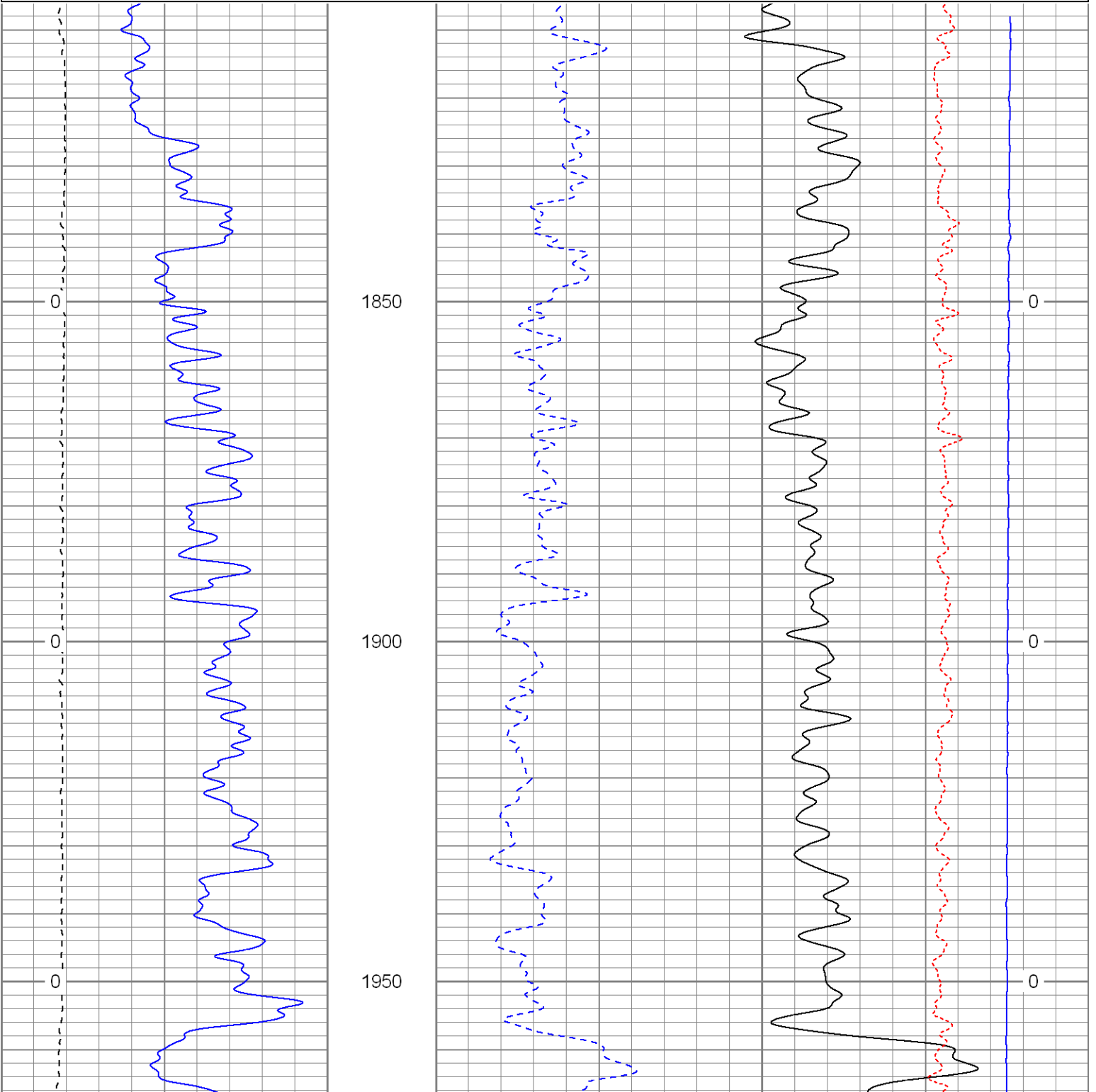
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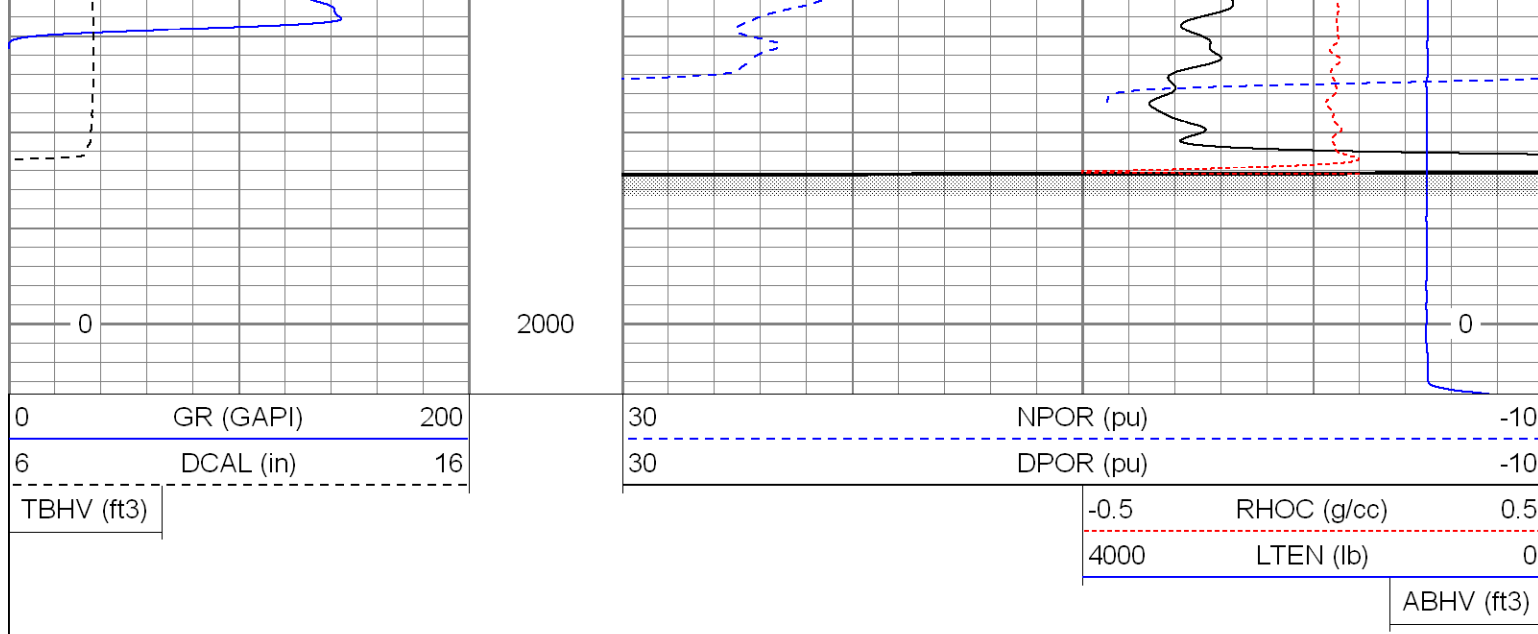
Repeat Pass

Database File: xtoac0413.db
Dataset Pathname: pass1.1
Presentation Format: cdnl
Dataset Creation: Sun Jul 20 18:45:47 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)



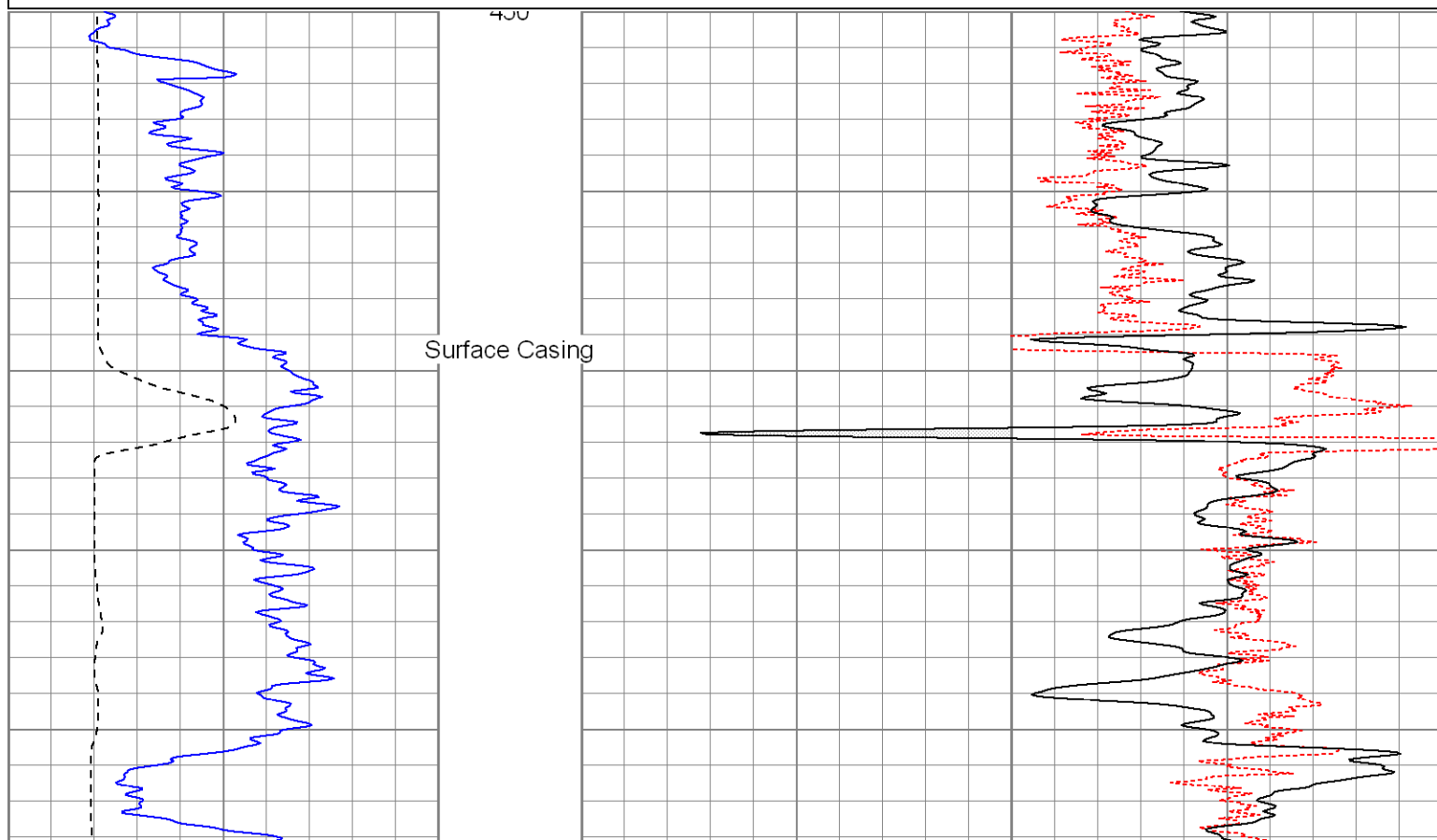
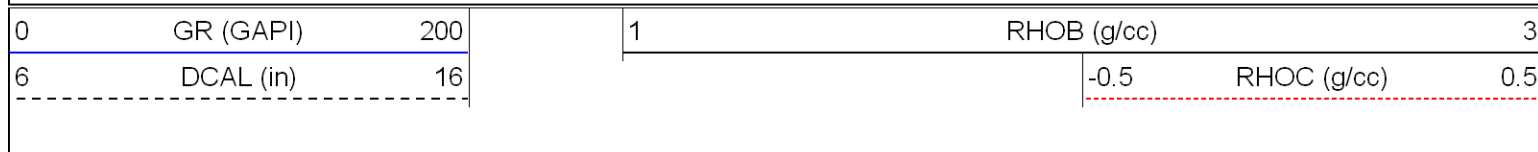


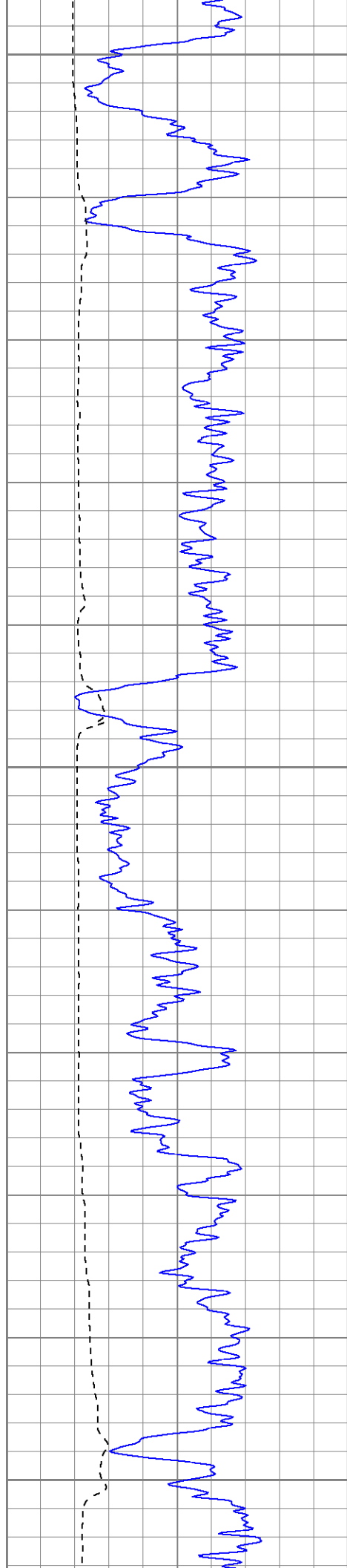
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High Resolution Pass

Database File: xtoac0413.db
 Dataset Pathname: pass2.2
 Presentation Format: cdlhr
 Dataset Creation: Mon Jul 21 08:15:28 2008 by Calc Open-Cased 070814
 Charted by: Depth in Feet scaled 1:120

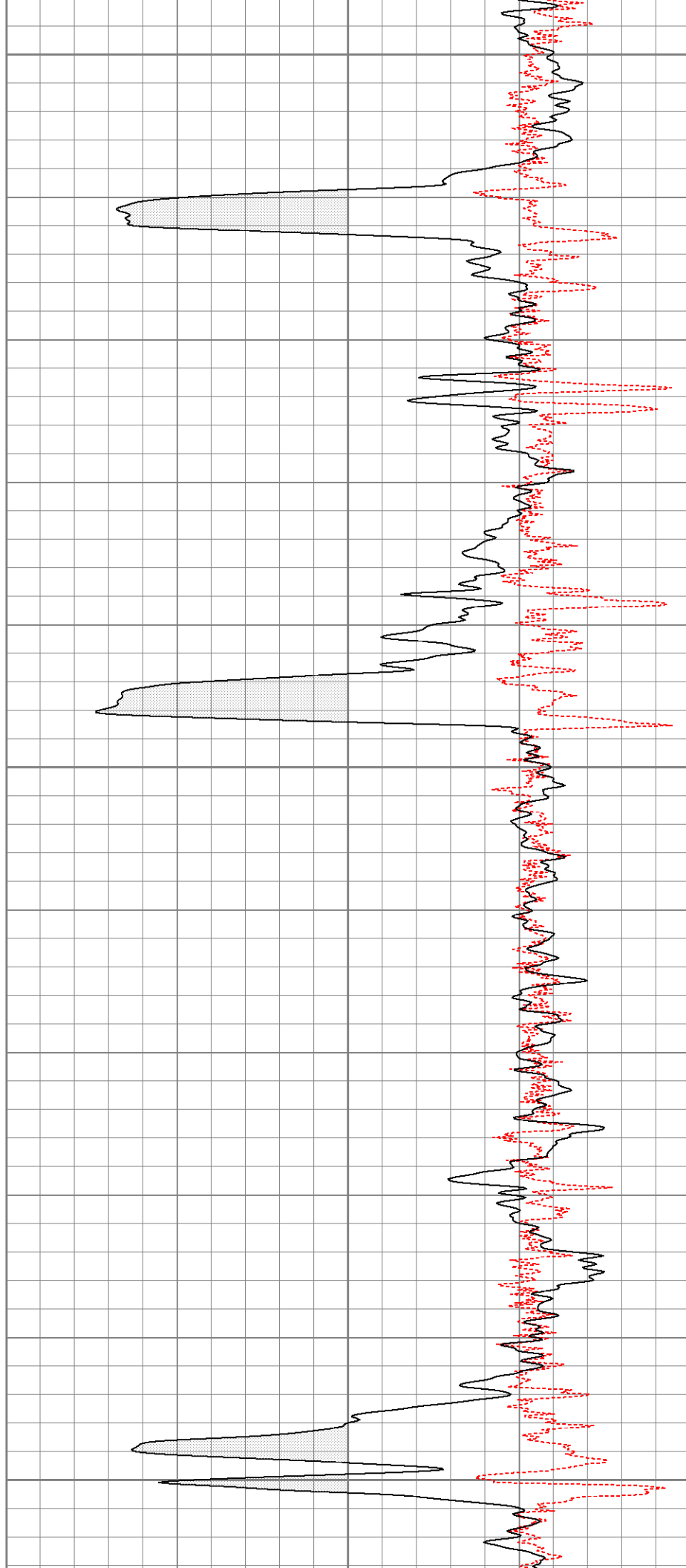


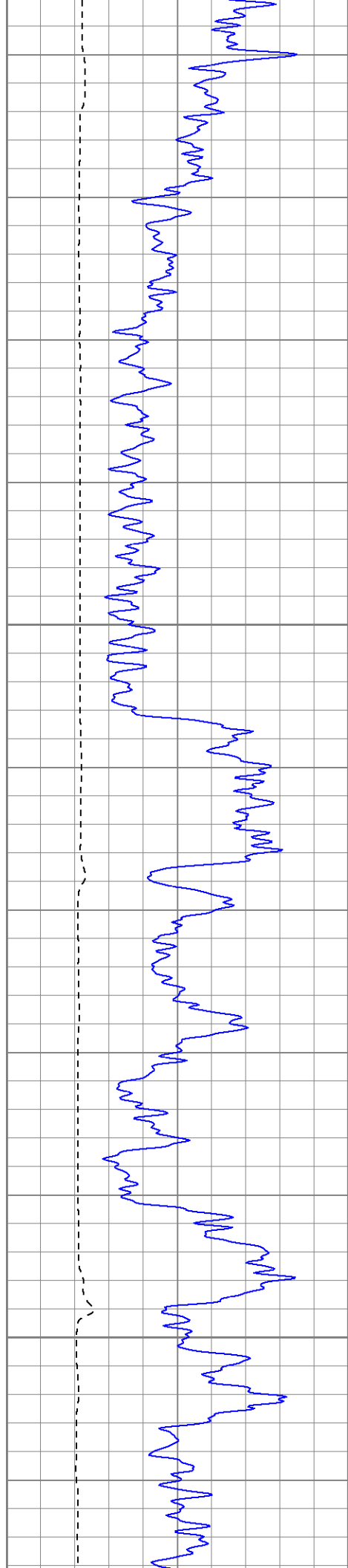


500

550

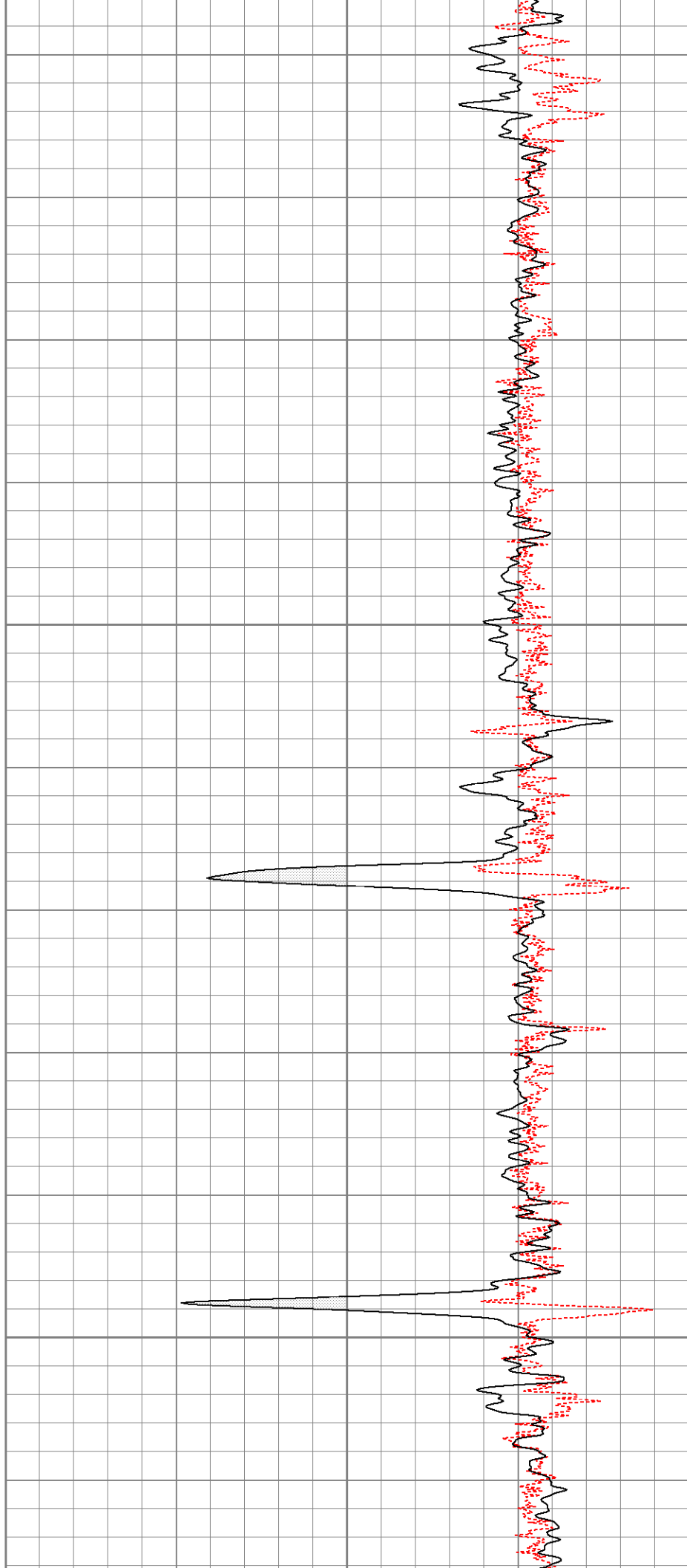
600

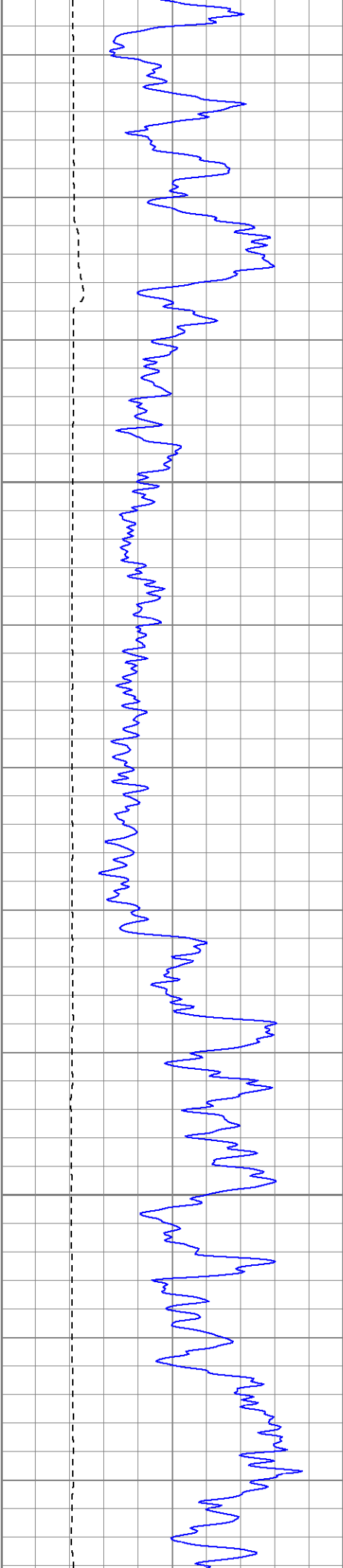




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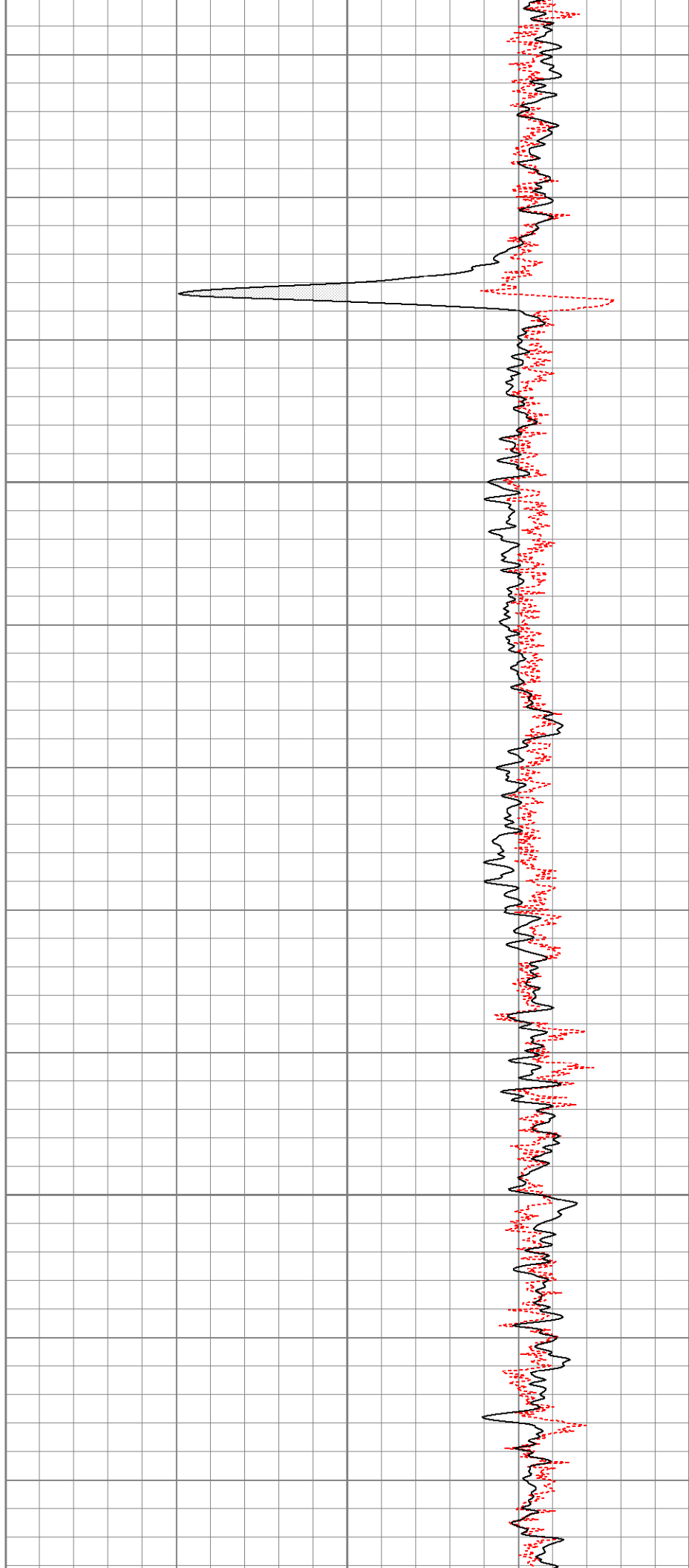
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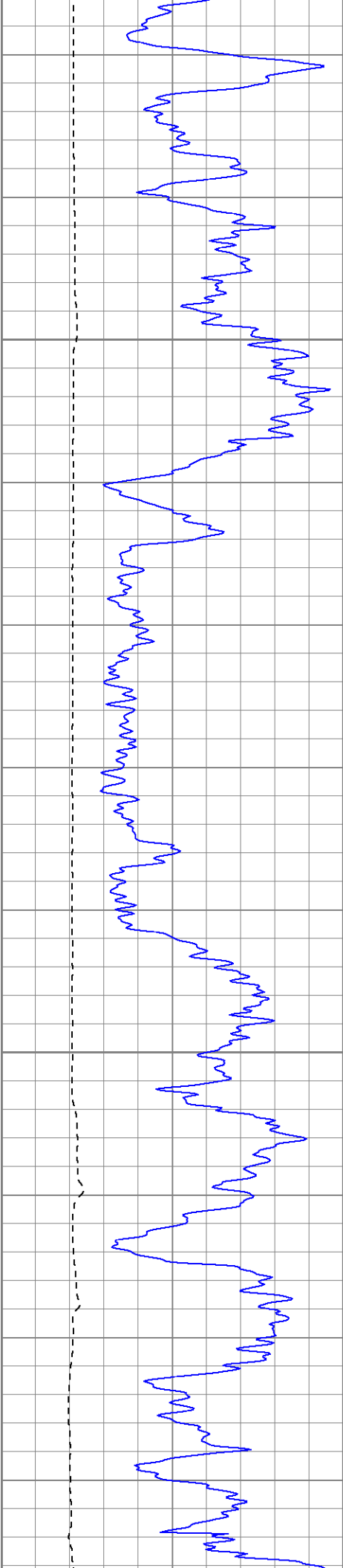




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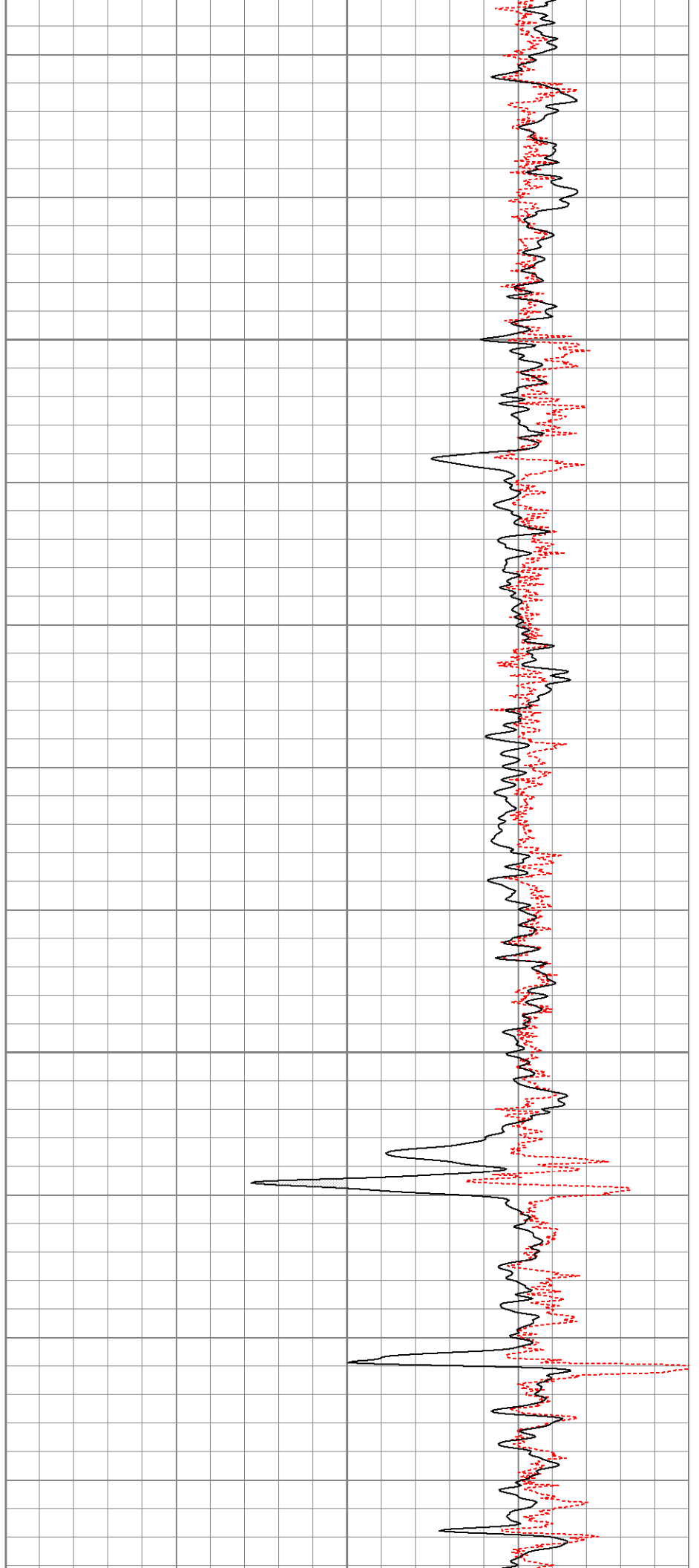
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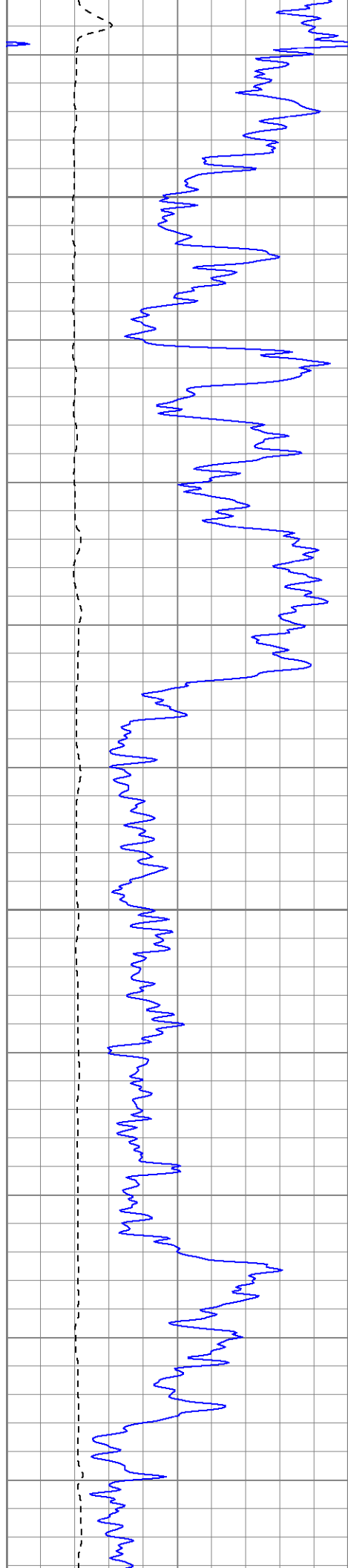




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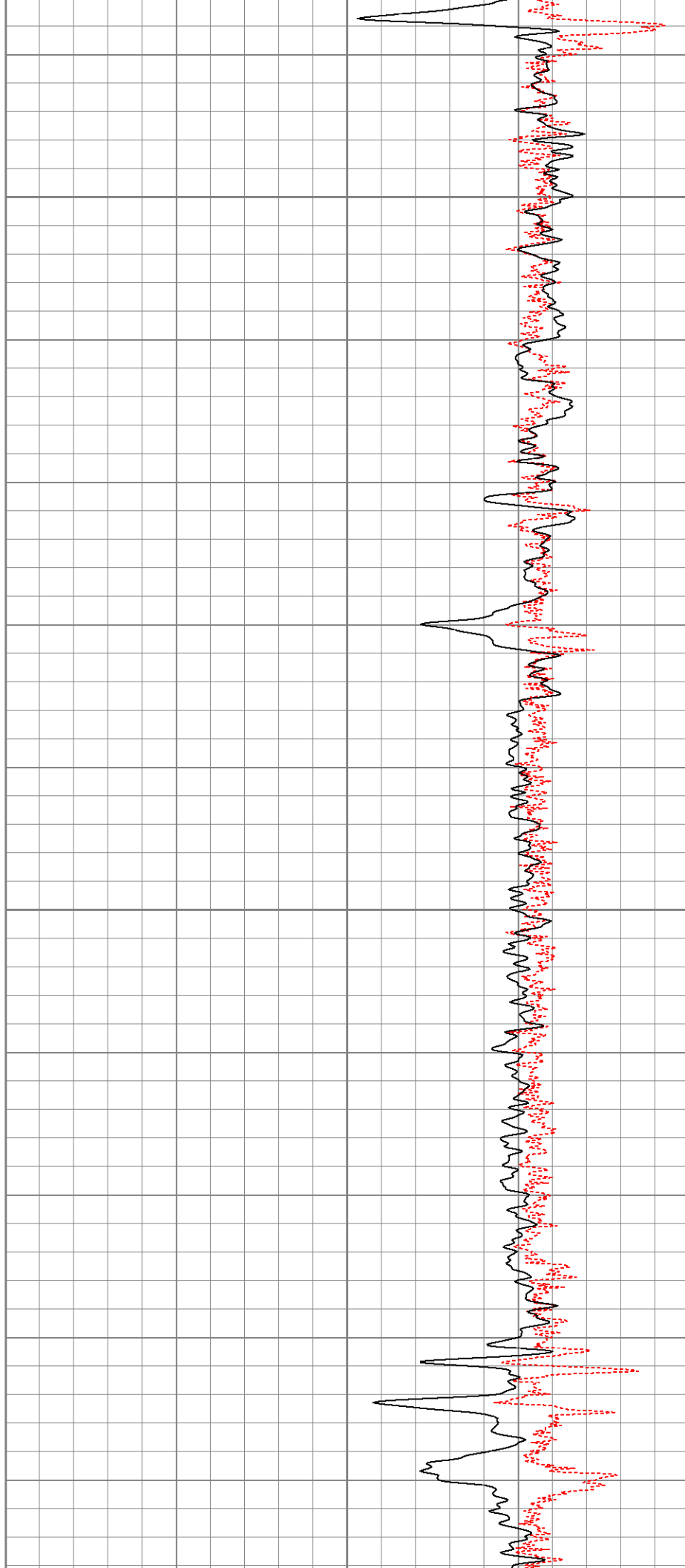
900





950

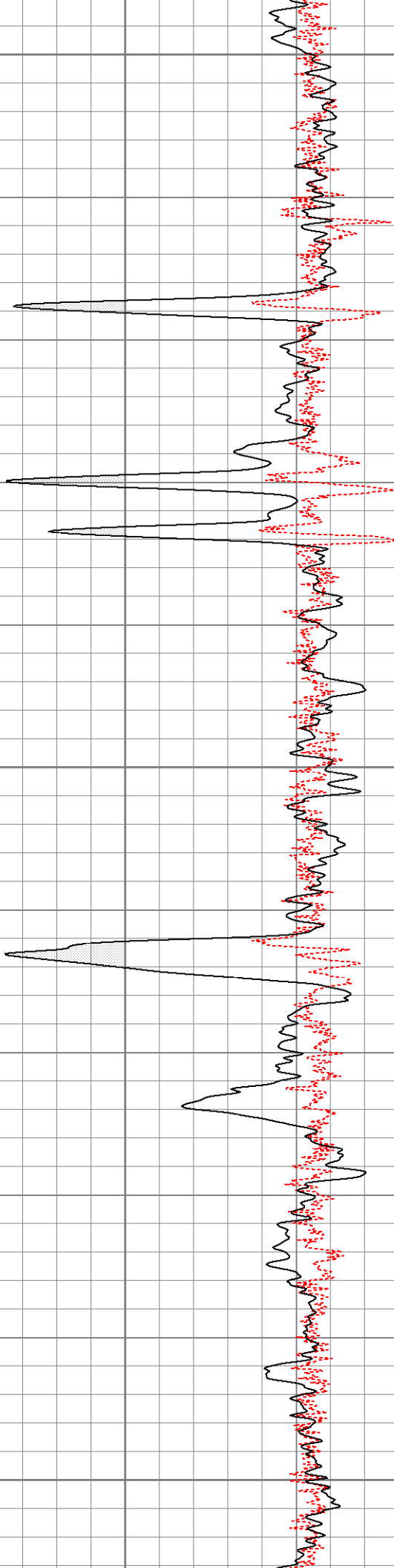
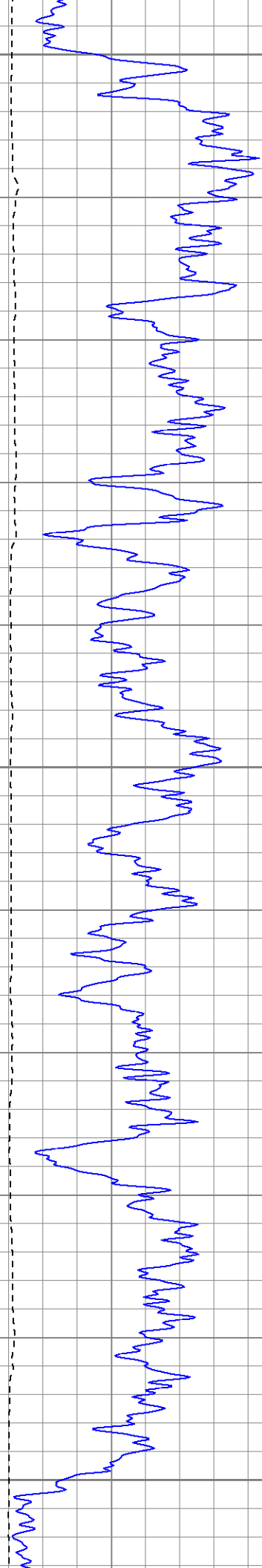
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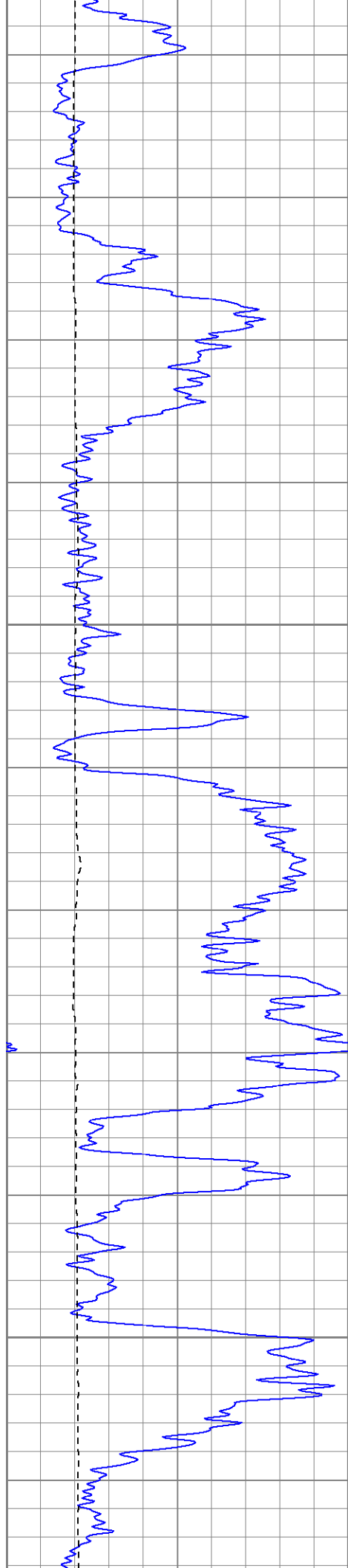


1050

1100

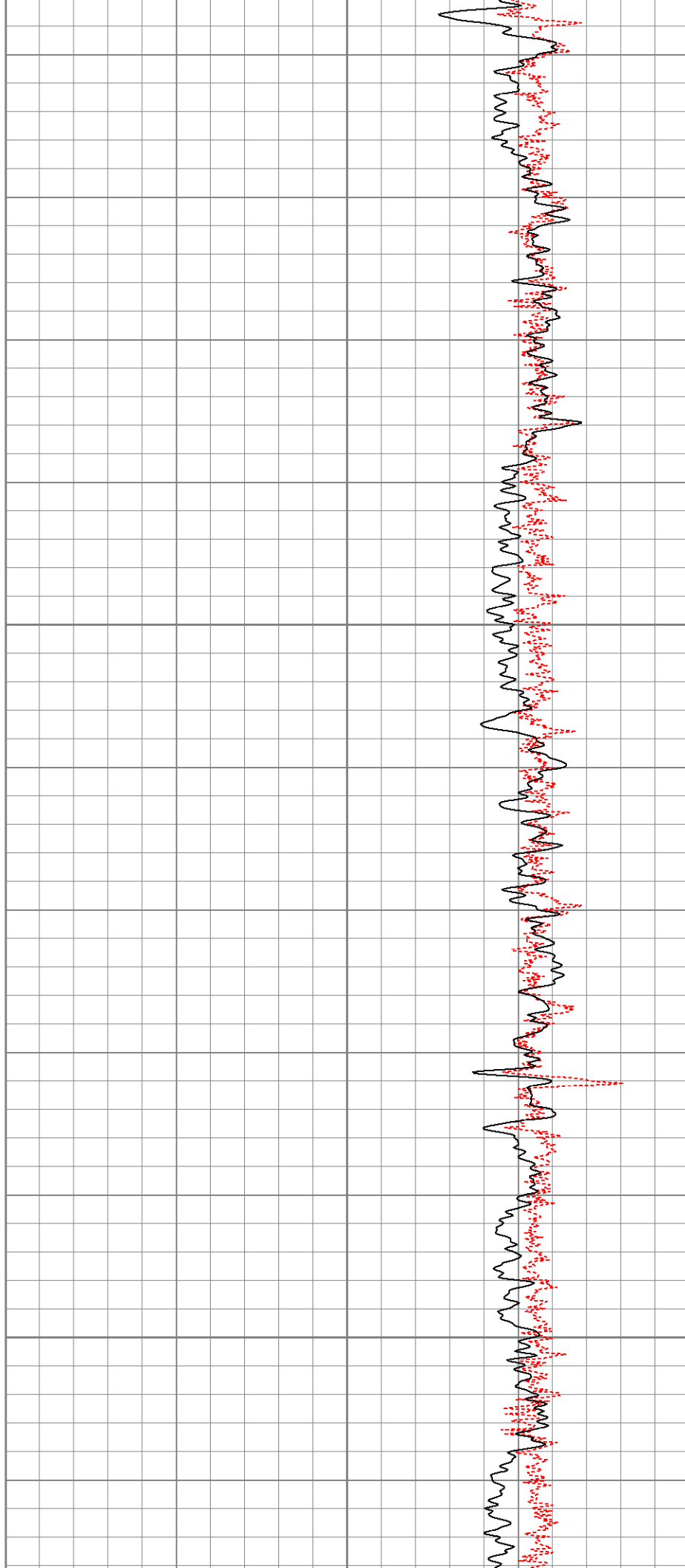
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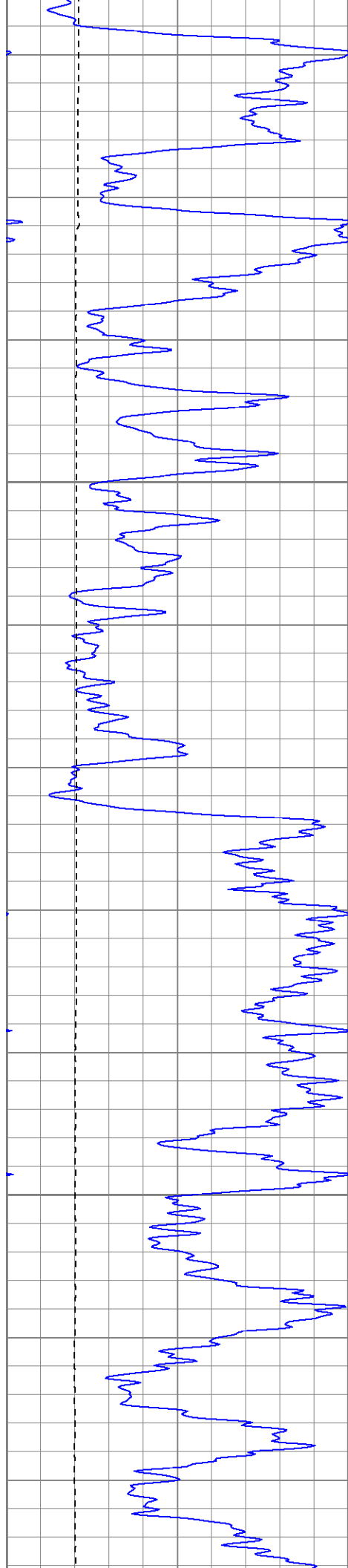




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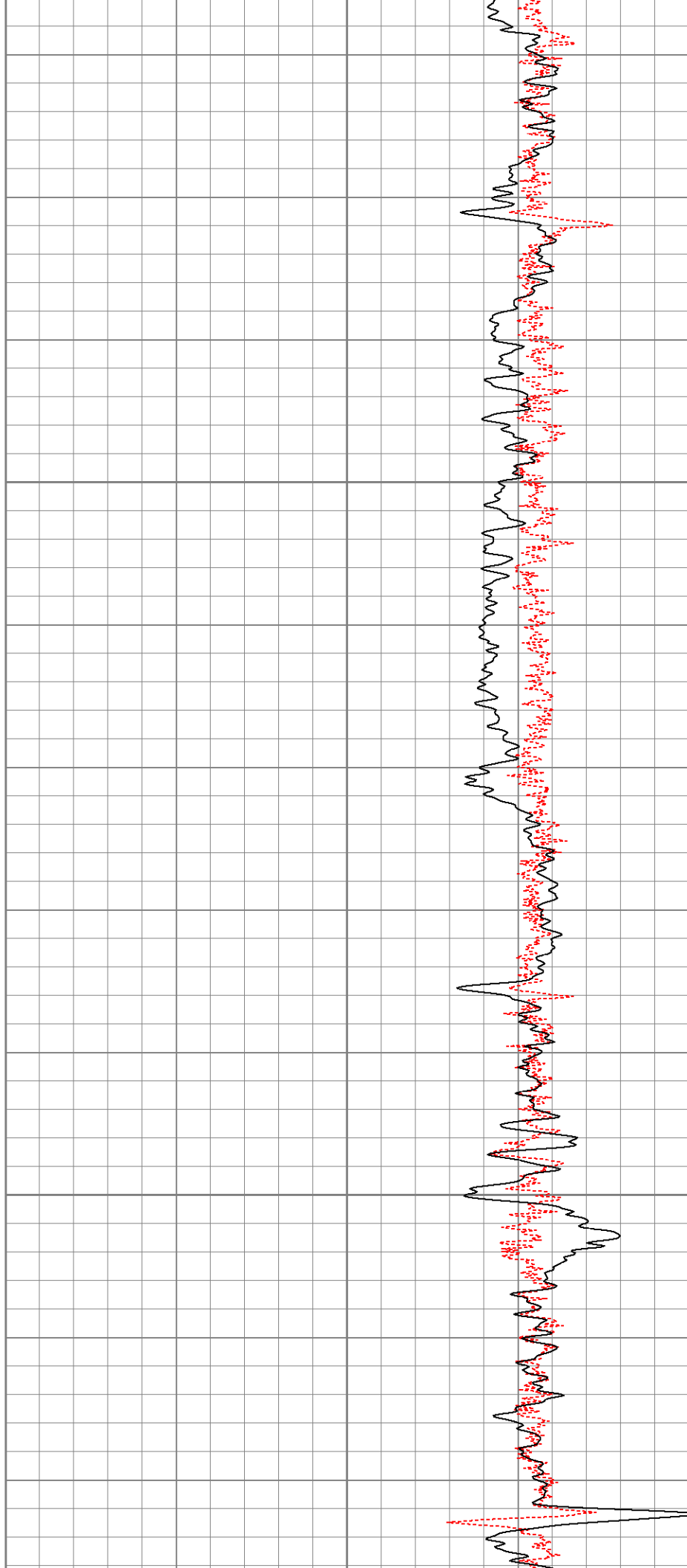
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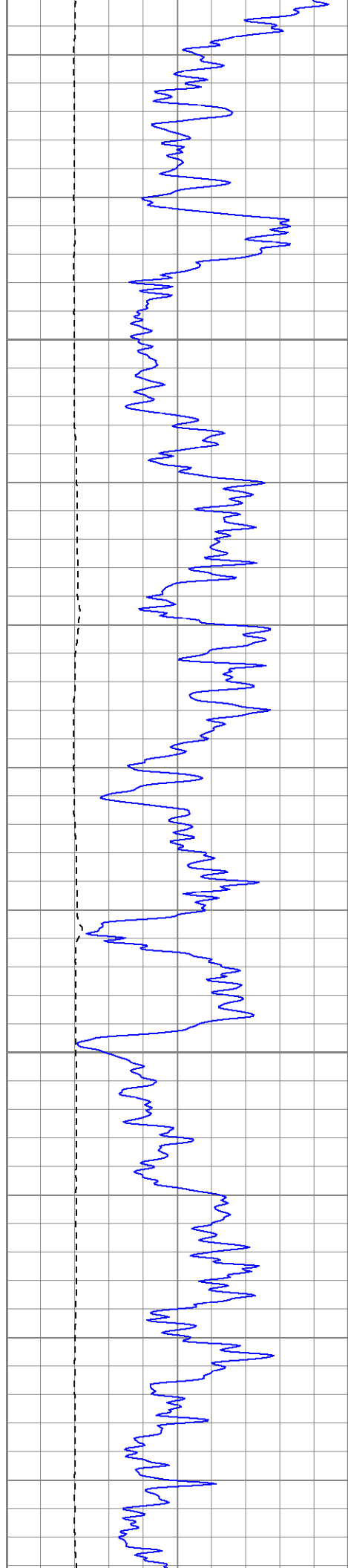




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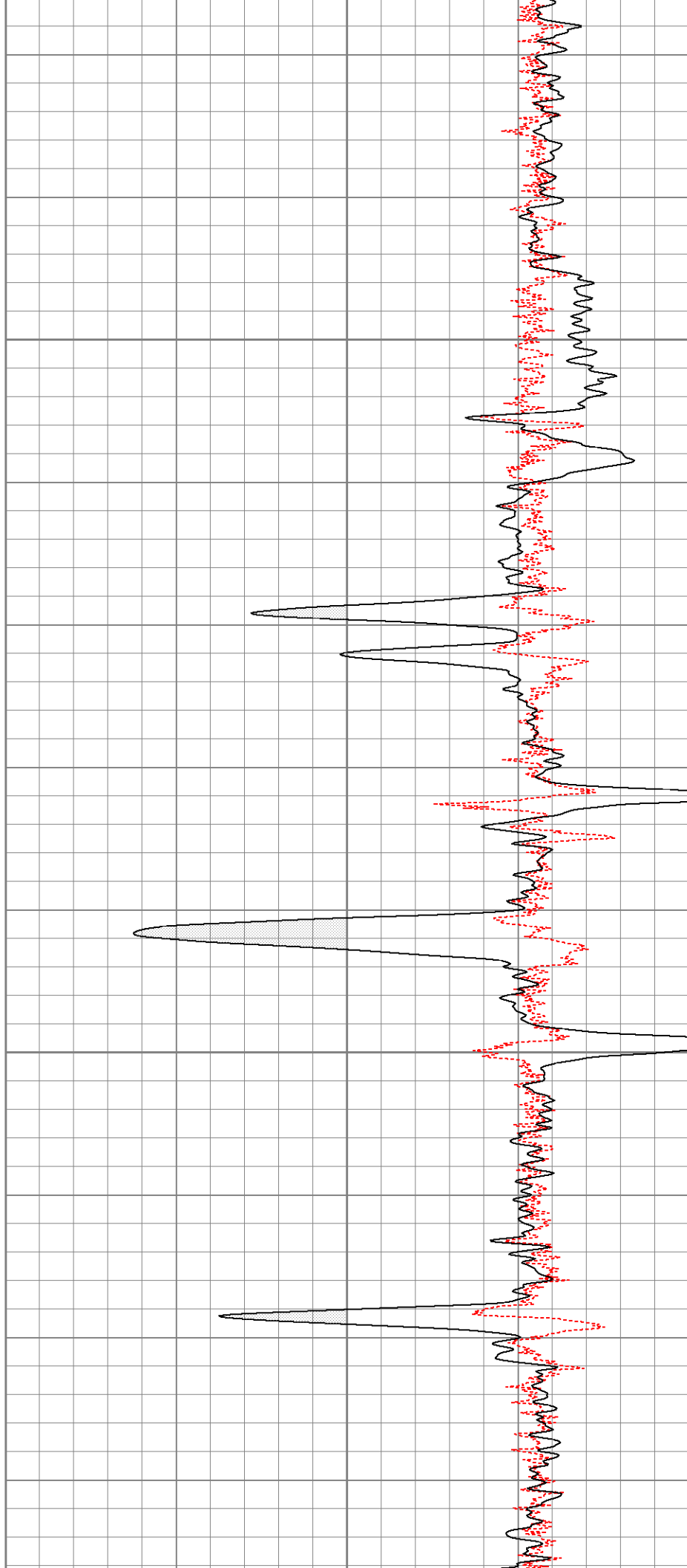
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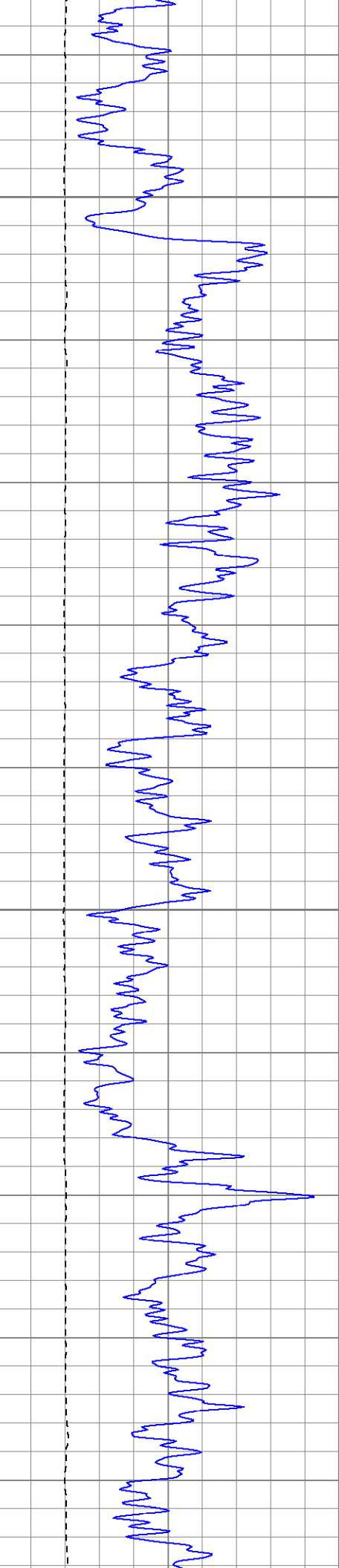




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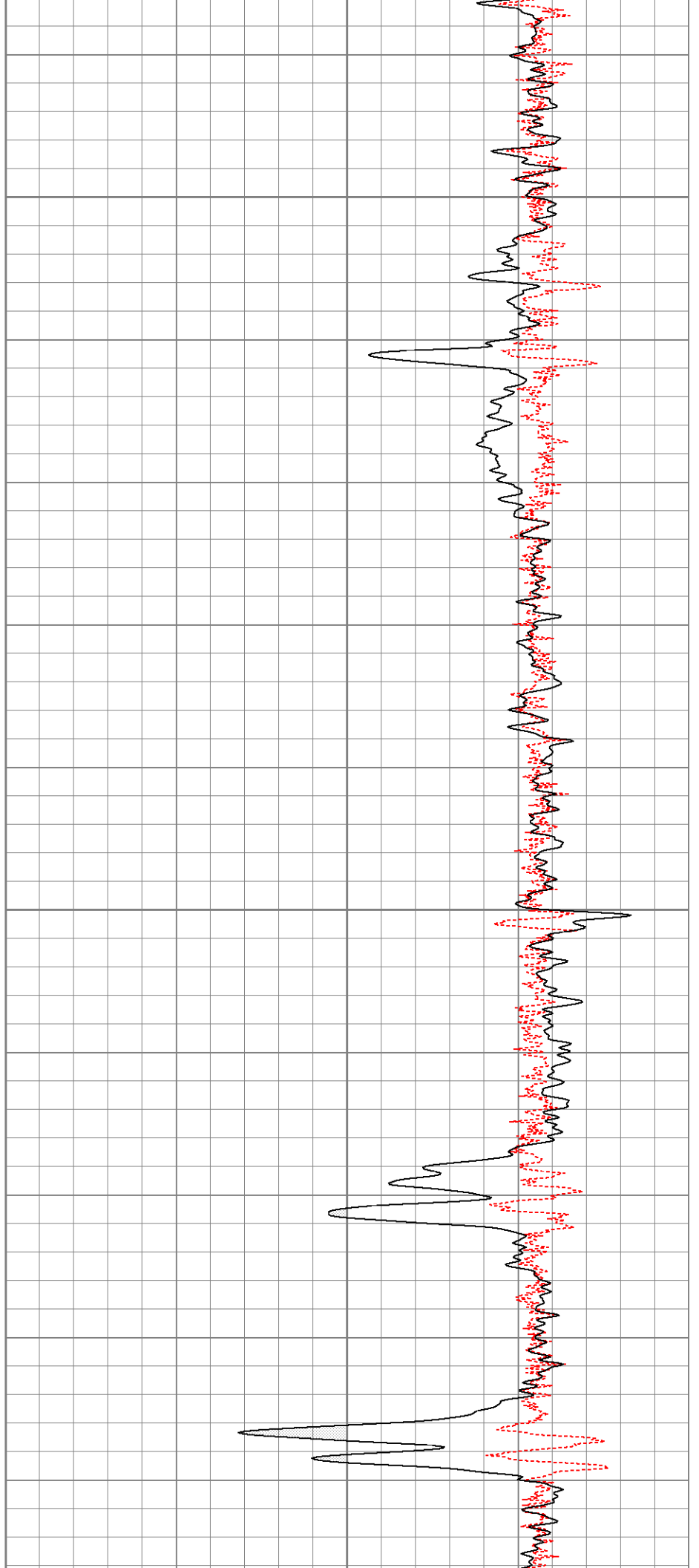
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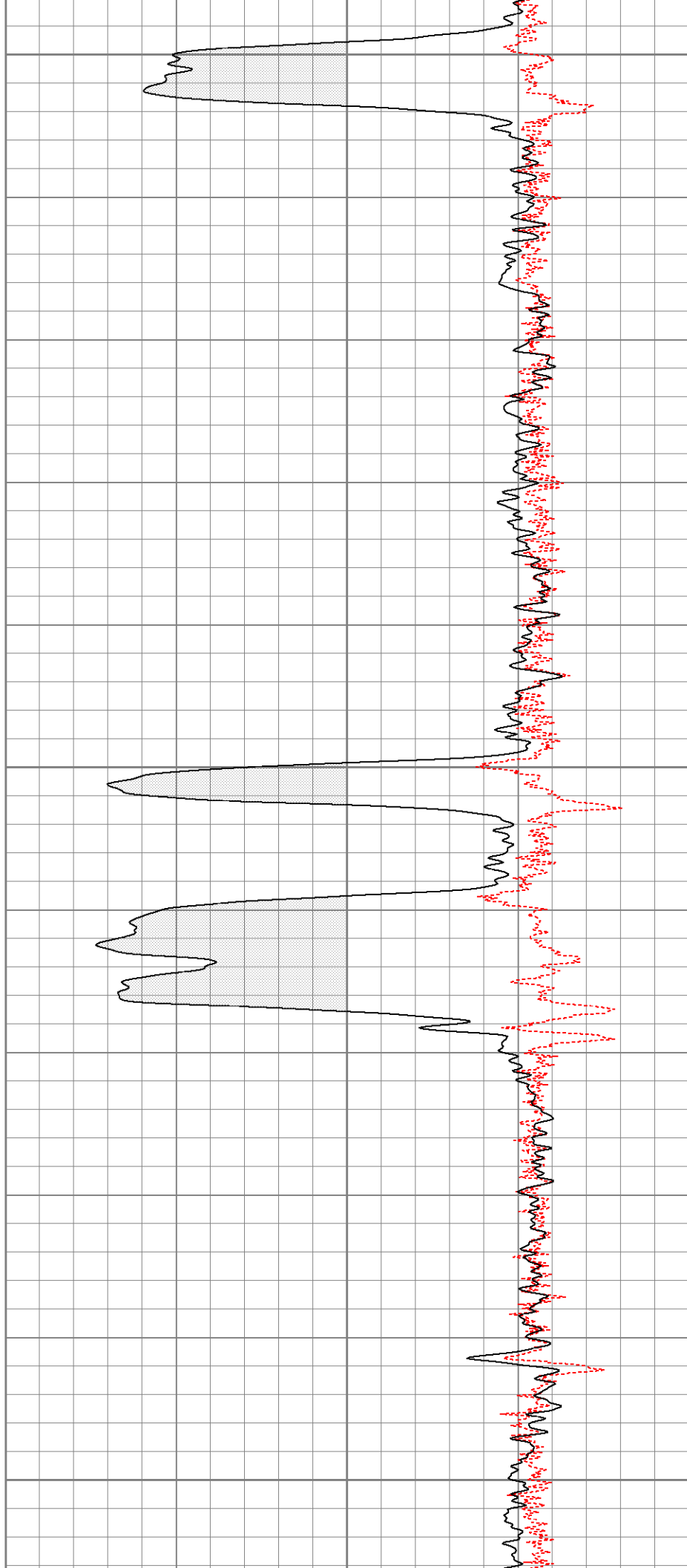
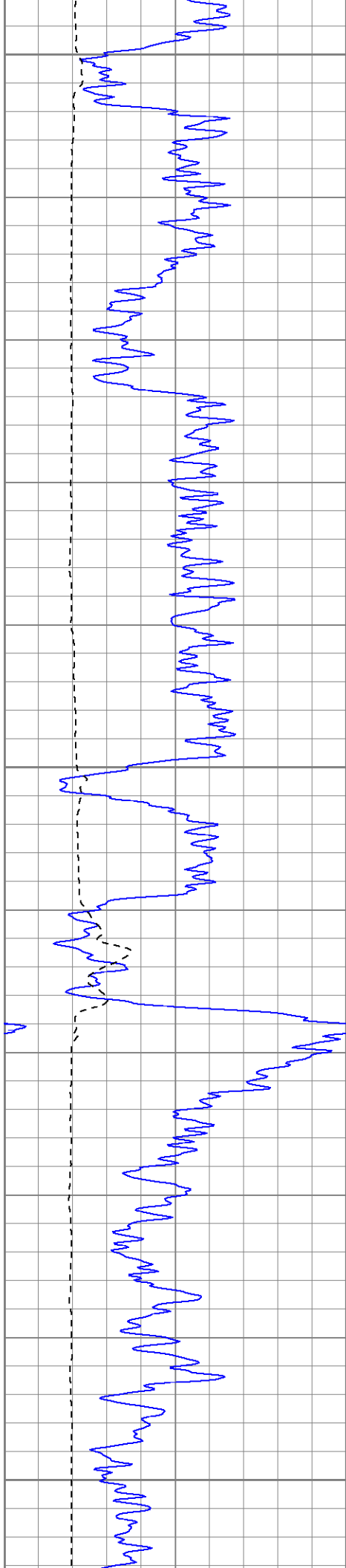
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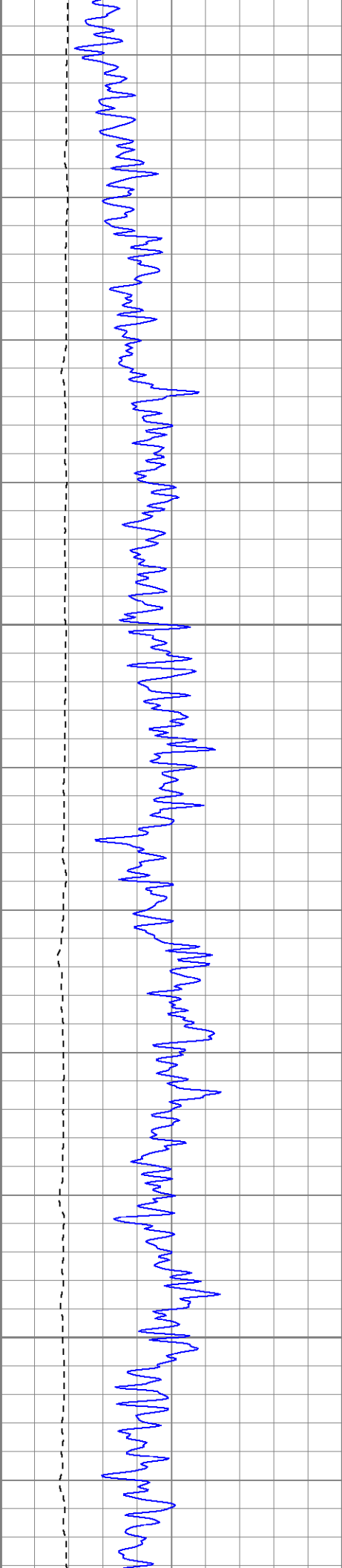


1600

1650

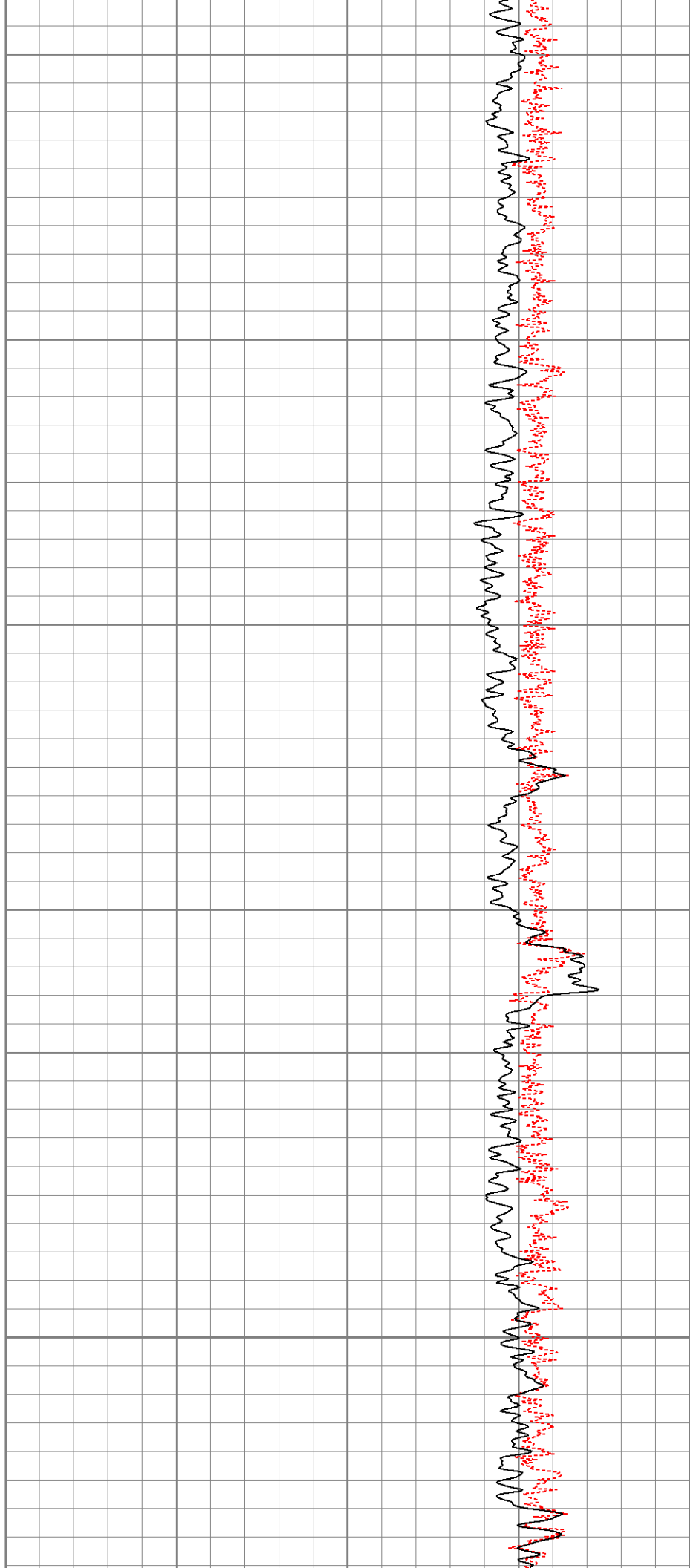
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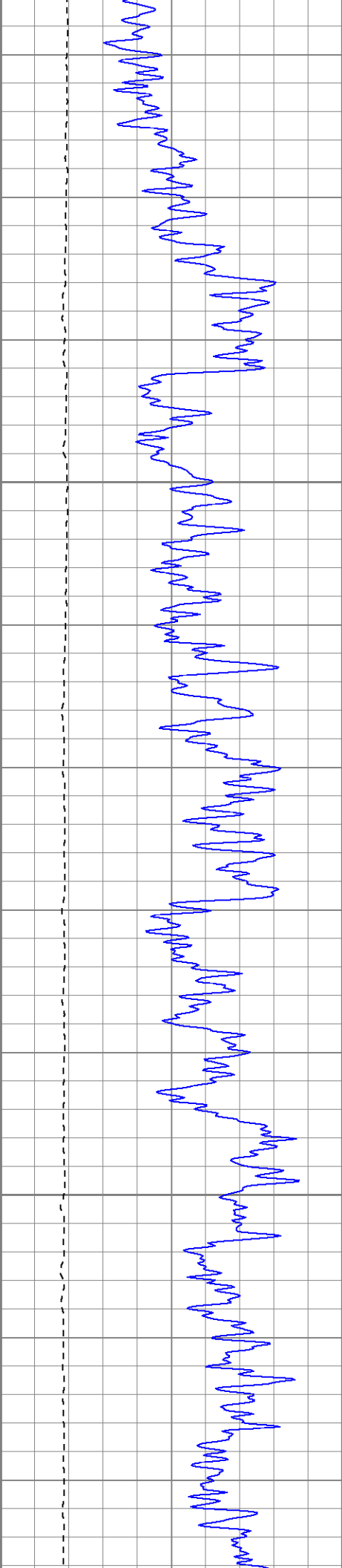




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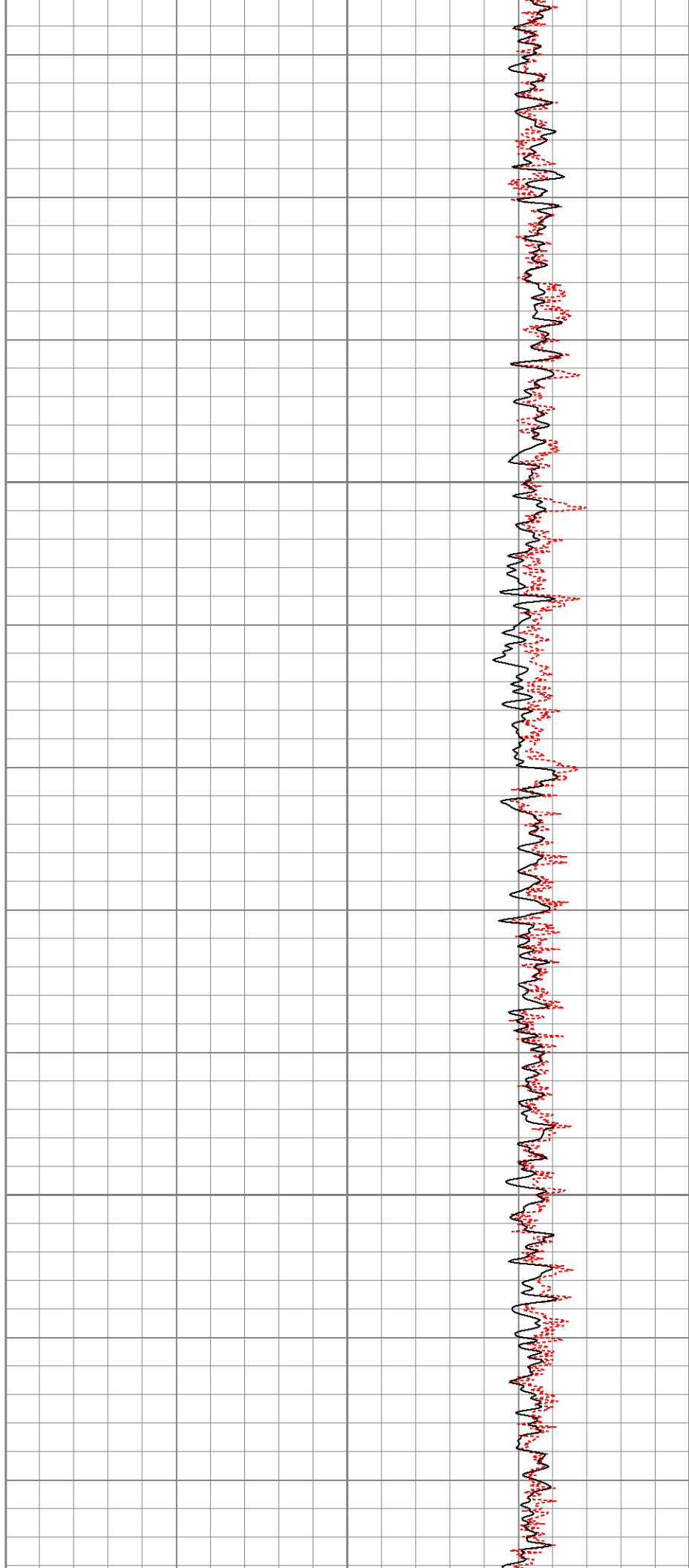
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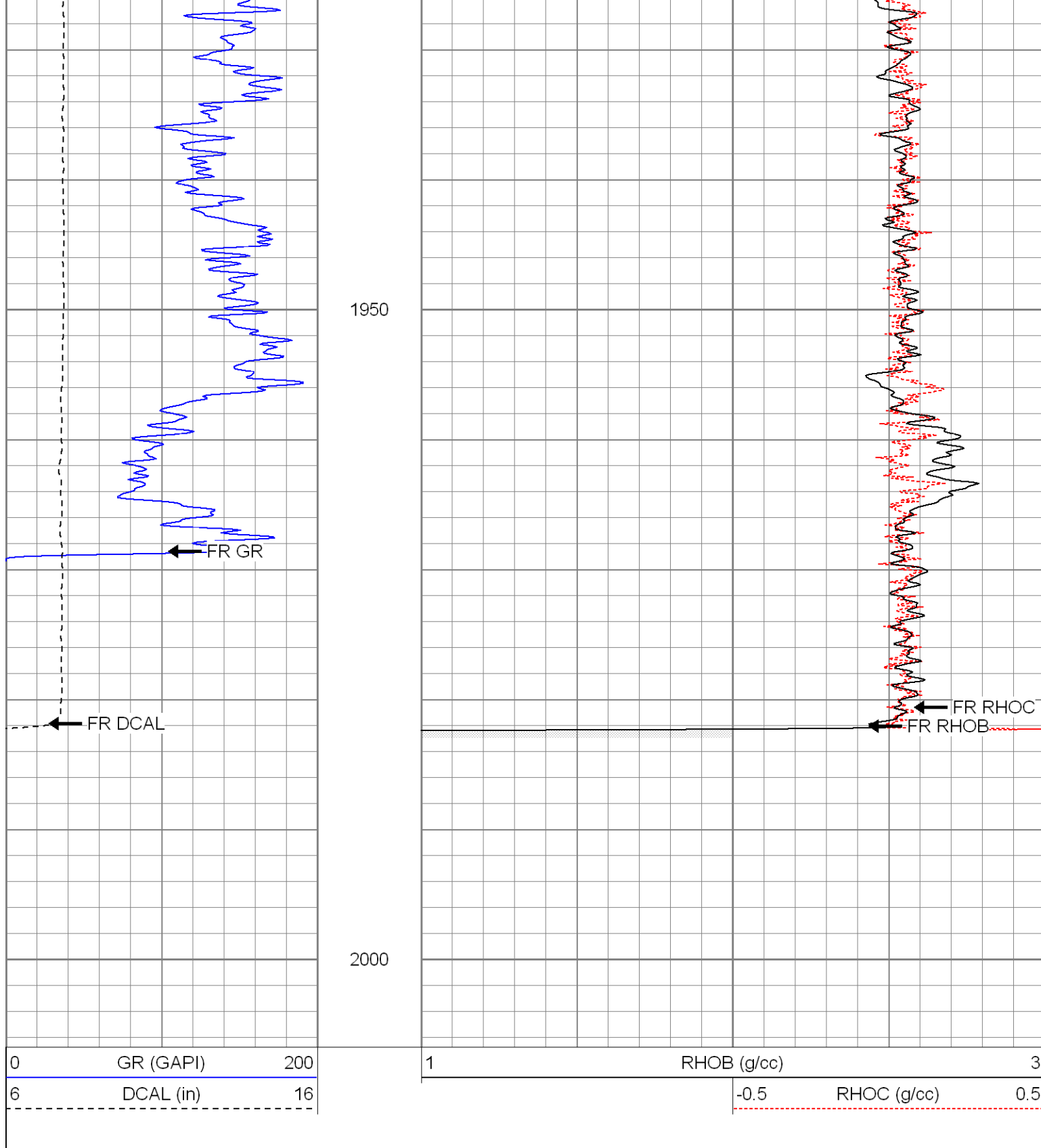




1850

1900





Calibration Report

Database File: xtoac0413.db
Dataset Pathname: pass1
Dataset Creation: Sun Jul 20 17:00:27 2008 by Log Open-Cased 070814

Dual Induction Calibration Report

Serial-Model: 5375-G
Surface Cal Performed: Thu Jun 19 14:00:16 2008
Downhole Cal Performed: Thu Jun 19 14:11:38 2008

Surface Calibration								
Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.008	0.627	V	0.000	500.000	mmho-m	807.269	-6.223
Medium	0.010	0.749	V	0.000	550.000	mmho-m	744.131	-7.221
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.008	0.628	V	0.000	500.000	mmho-m	806.482	-6.237
Medium	0.010	0.749	V	0.000	550.000	mmho-m	744.204	-7.127

Downhole Calibration								
Internal:	Readings			References			Results	
	Zero	Cal		Zero	Cal		m	b
Deep	0.256	500.305	mmho-m	0.020	500.507	mmho-m	1.001	-0.237
Medium	0.259	549.900	mmho-m	-0.095	549.850	mmho-m	1.001	-0.354
Shallow	2.515	0.018	V	500.000	2.000	Ohm-m	125.000	-4.300

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Compensated Density Calibration Report

Serial-Model:	901-2.75POH
Source / Verifier:	/
Master Calibration Performed:	Tue Jul 08 09:03:23 2008

Master Calibration						
	Density			Far Detector	Near Detector	
Magnesium	1.710	g/cc		1044.92	534.39	cps
Aluminum	2.590	g/cc		190.27	268.70	cps
Spine Angle = 68.02				Density/Spine Ratio = 0.479		
	Size			Reading		
Small Ring	8.00	in		2.48	V	
Large Ring	17.00	in		4.28	V	

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Neutron Calibration Report

Serial Number:	803	
Tool Model:	2.75POH	
Performed:	Tue Jul 08 09:12:41 2008	
Calibrator Value:	1	NAPI
Calibrator Reading:	1	cps
Sensitivity:	1	NAPI/cps

Gamma Ray Calibration Report

Serial Number:	801	
Tool Model:	2.75POH	
Performed:	Wed Jul 09 11:00:40 2008	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps

Calibrator Reading.

1.0

ops

Sensitivity:

0.8000

GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)	
GR	37.81		None	0.75	1.50	5.00	
			GR-2.75POH (801) Probe	3.73	2.75	43.00	
NEU	32.27		NEU-2.75POH (803) Probe Epithermal	4.75	2.75	58.00	
LSD DCAL SSD	24.44		CDL-2.75POH (901) Probe	8.43	2.75	106.00	
	24.16						
	23.91			Probe	0.89	3.50	20.00
CILD SP	10.60		DIL-G (5375) Gearhart	20.80	4.00	345.00	
	10.60						
CILM	6.89						
RLL3	1.70						
Dataset: xtoac0413.db: field/well/run1/pass1 Total Length: 39.34 ft Total Weight: 577.00 lb O.D. 4.00 in							