



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

COMPENSATED DENSITY NEUTRON LOG

Company	XTO Energy Inc.		
Well	Apache Canyon 35-12		
Field	Purgatoire River		
County	Las Animas	State	Colorado
Location:	API # : 05 071 09325 00 1991' FSL & 1072' FWL		Other Services DIL
Permanent Datum	SEC 35 TWP 33S RGE 67W	Ground Level	Elevation 7080'
Log Measured From		Ground Level	
Drilling Measured From		Ground Level	
Date	9-04-07		
Run Number	One		
Depth Driller	1850'		
Depth Logger	1852'		
Bottom Logged Interval	1835'		
Top Log Interval	Surface Casing		
Casing Driller	8 5/8" @ 498'		
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	10:30 A.M.		
Time Logger on Bottom	1:15 P.M.		
Maximum Recorded Temperature	96 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, right on Cherry Canyon,
at Y stay right, first left to location.

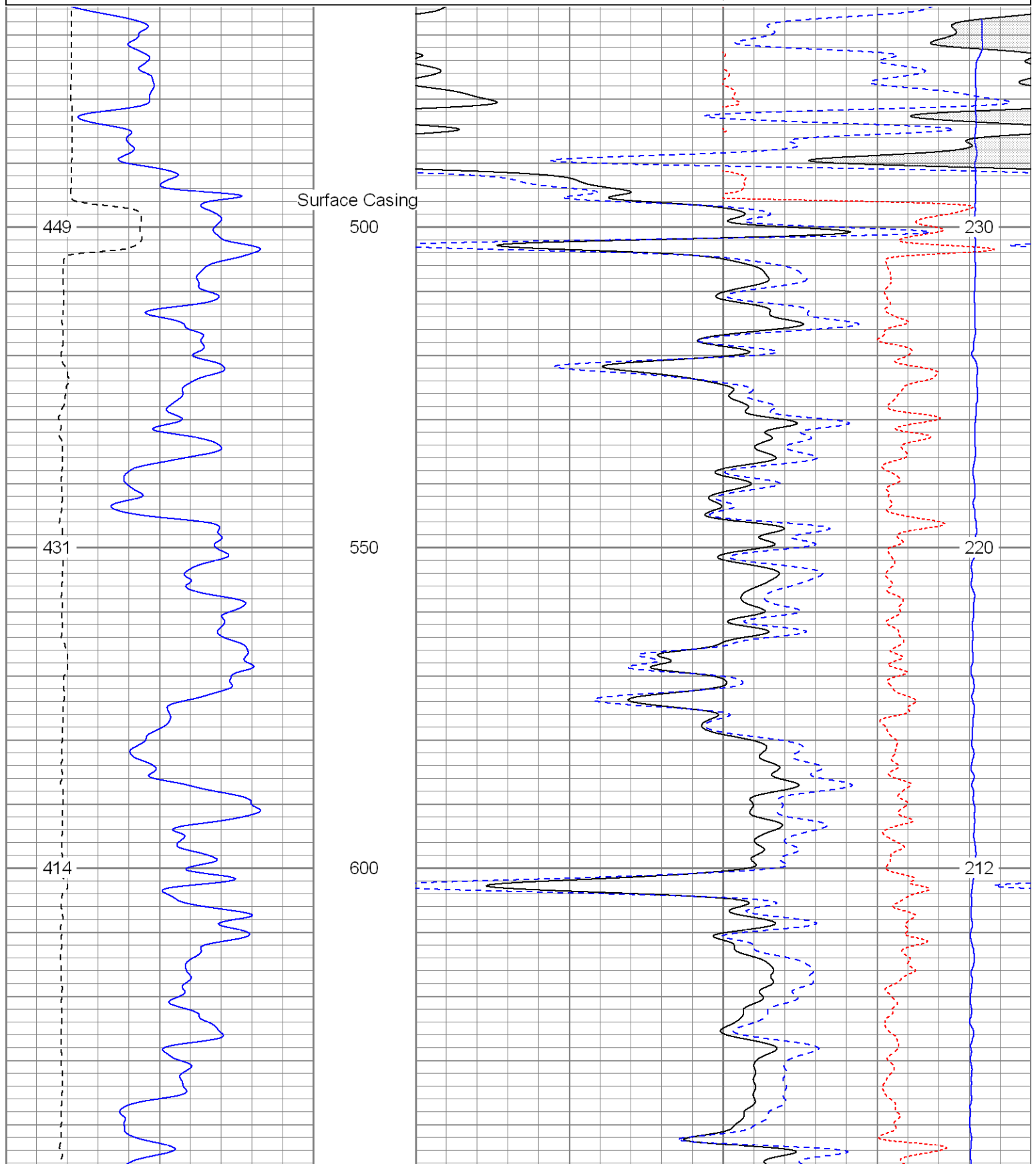


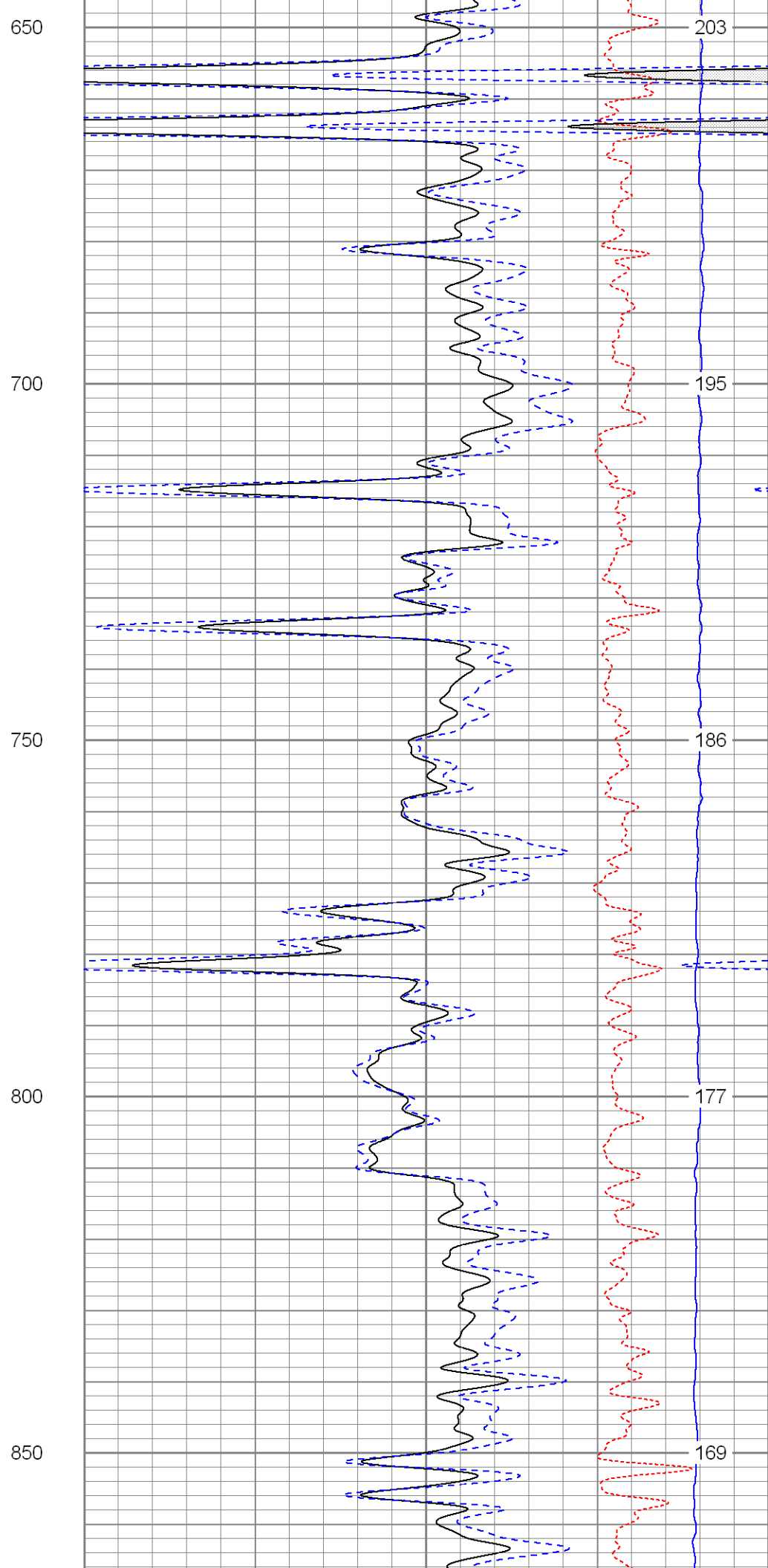
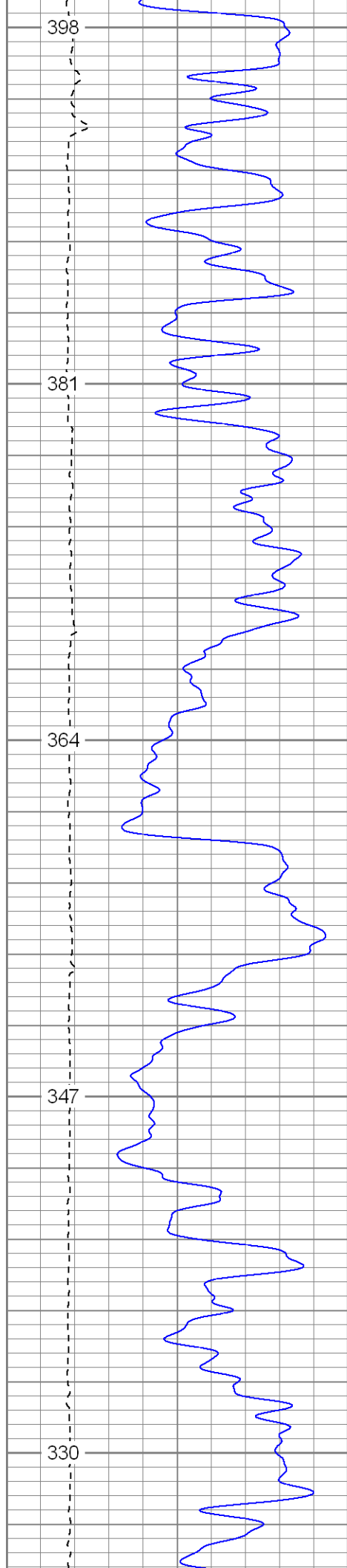
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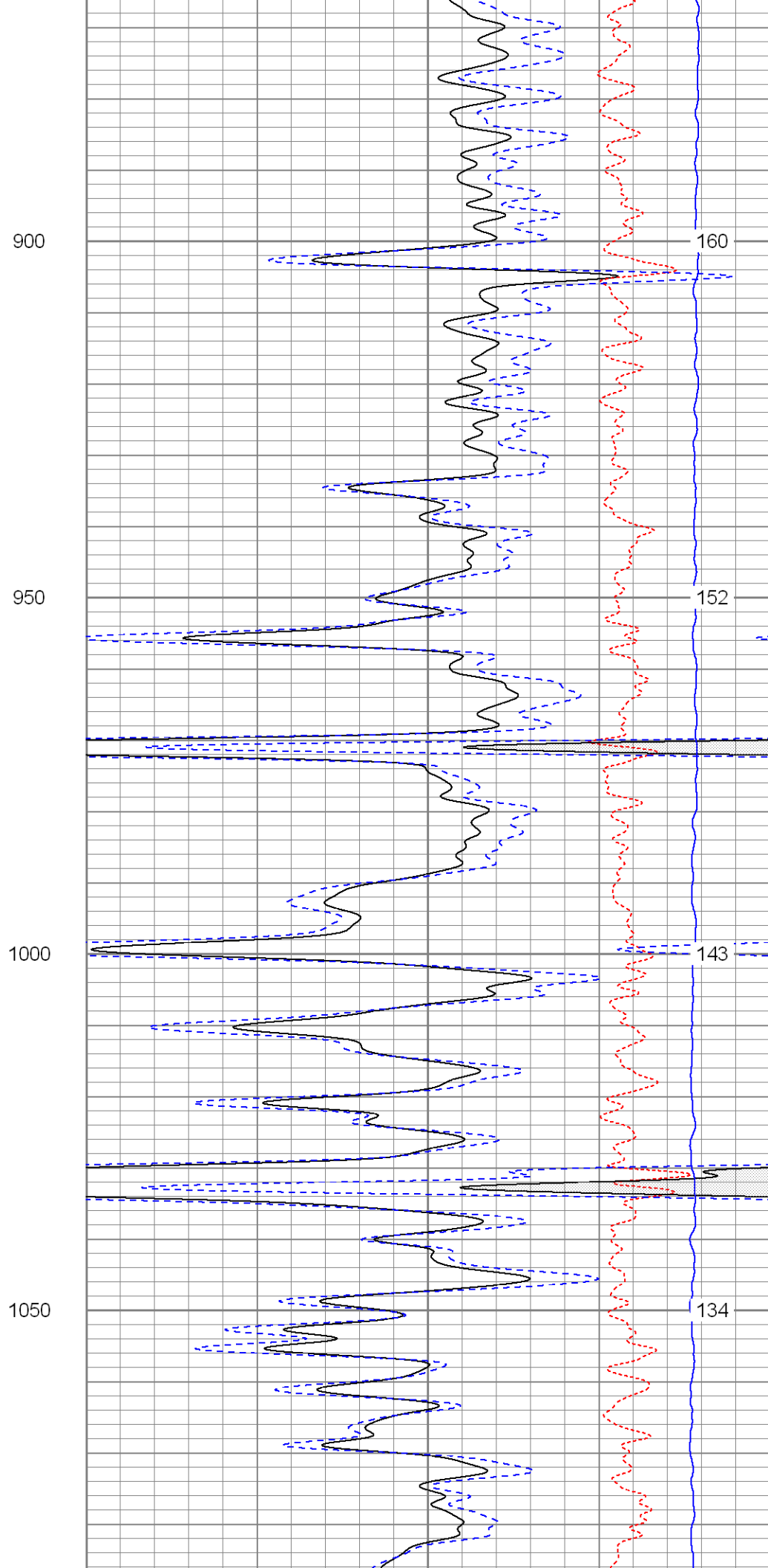
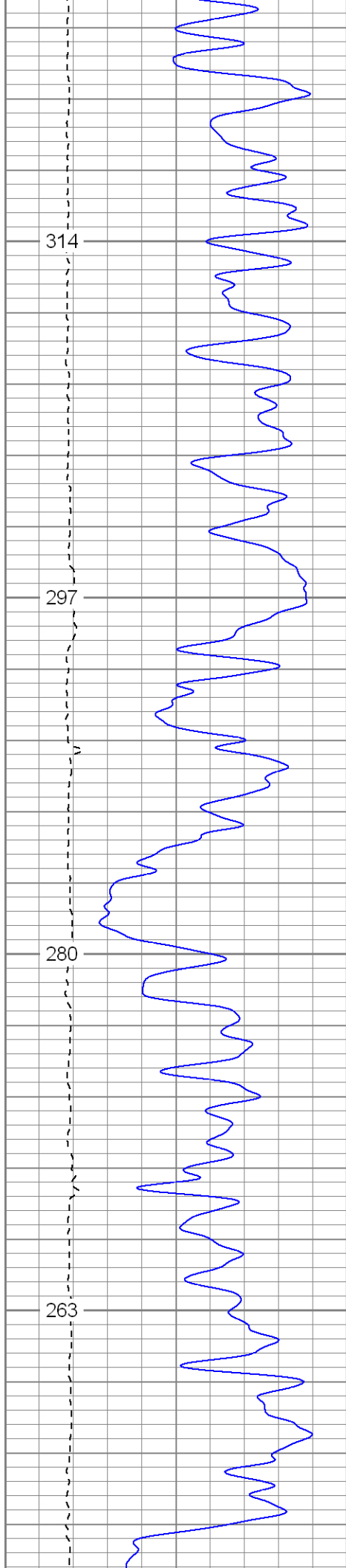
Main Pass

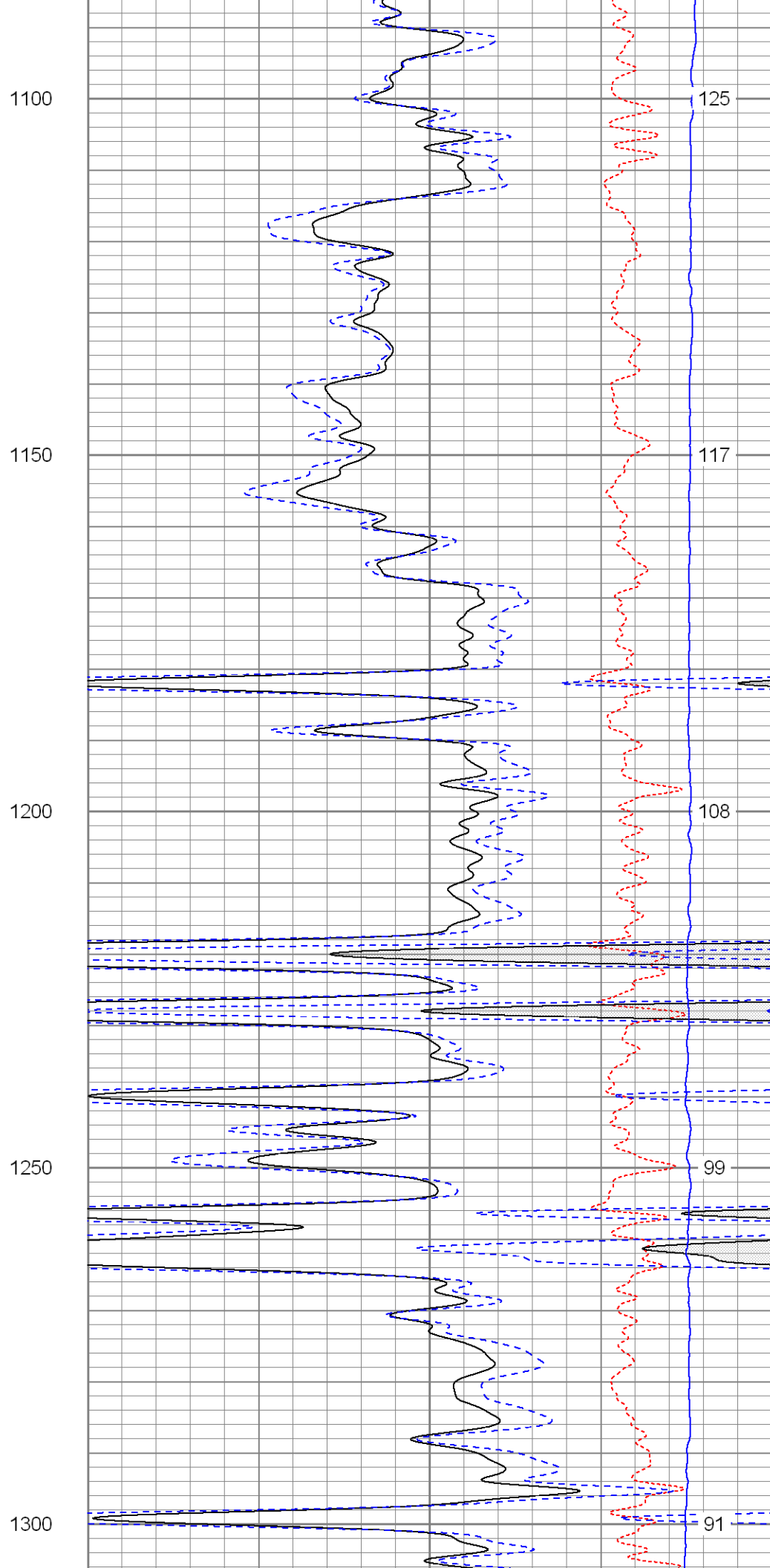
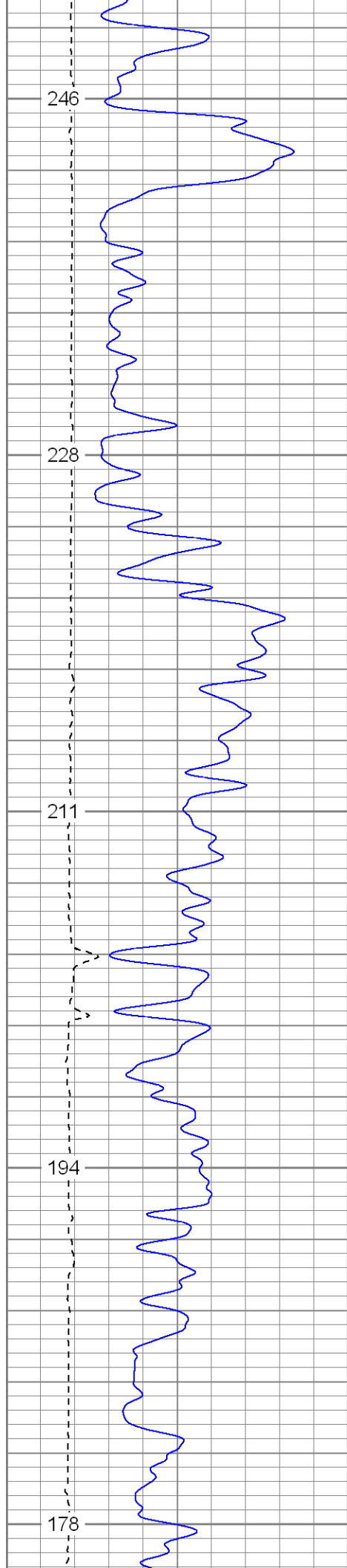
Database File: xtoac3512.db
Dataset Pathname: pass2.1
Presentation Format: cdl
Dataset Creation: Tue Sep 04 14:21:26 2007 by Calc Open-Cased 061129
Charted by: Depth in Feet scaled 1:240

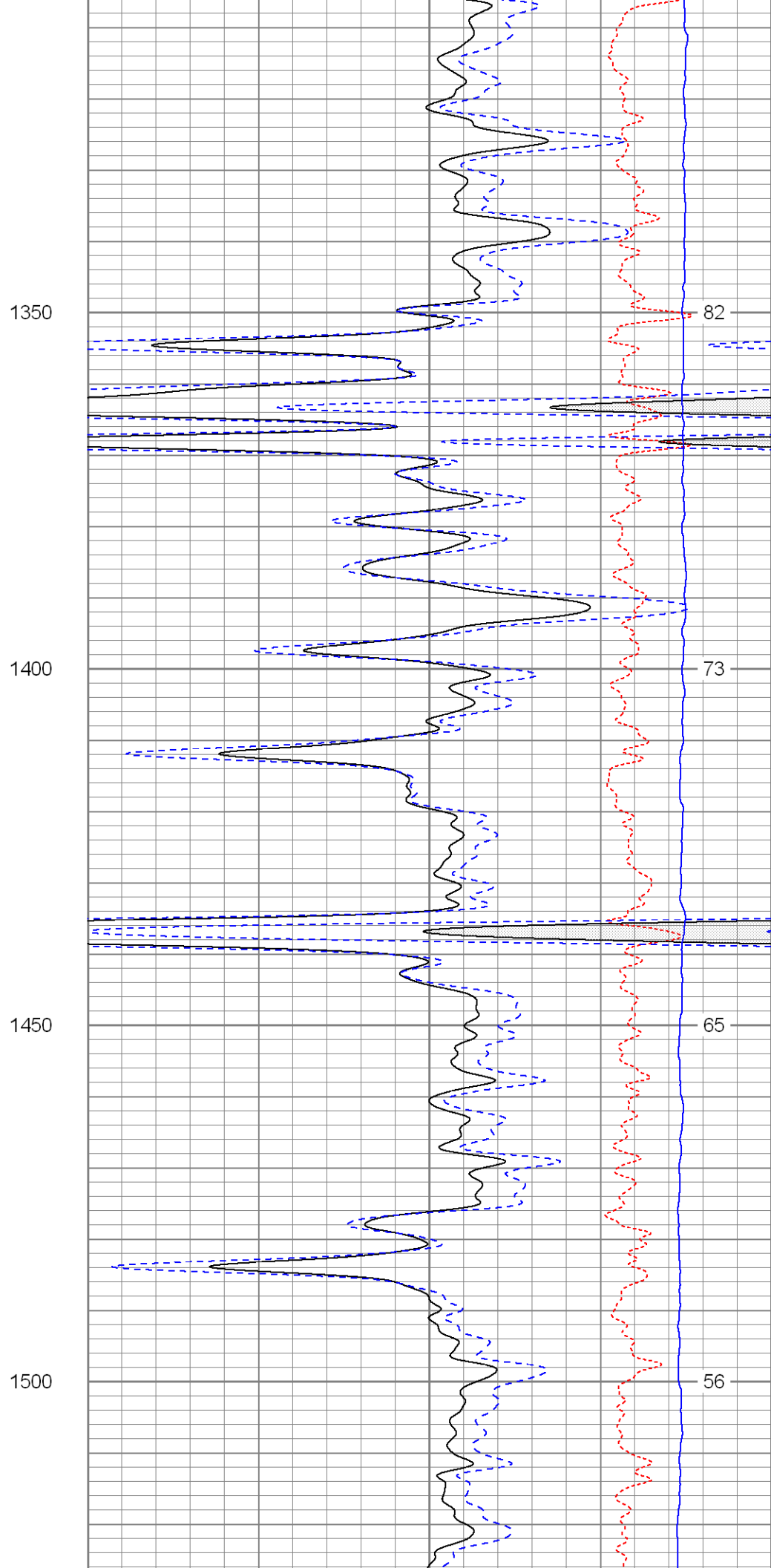
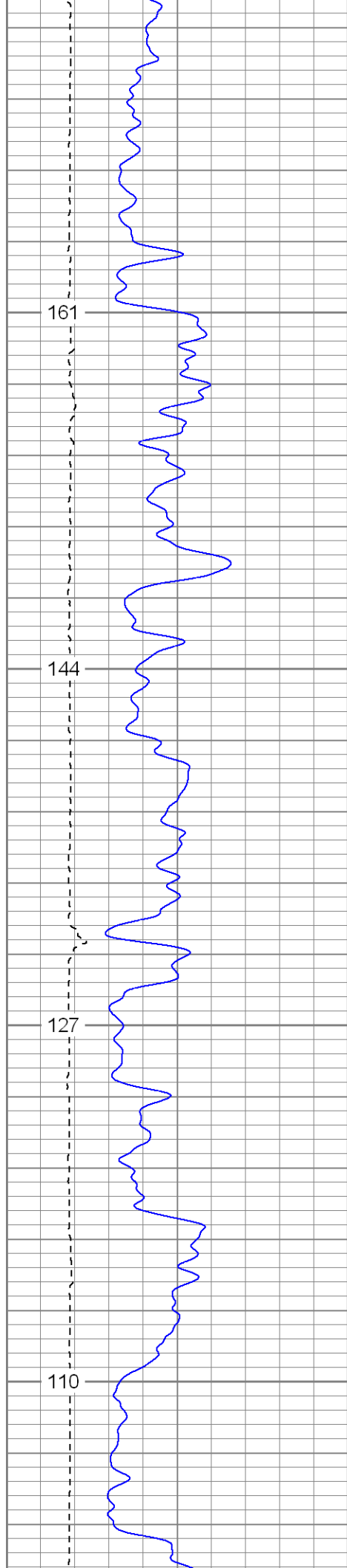
0	GR (GAPI)	200	1	RHOB (g/cc)	2
6	DCAL (in)	16	30	DPOR (pu)	-10
			-0.5	RHOC (g/cc)	0.5
			4000	LTEN (lb)	0

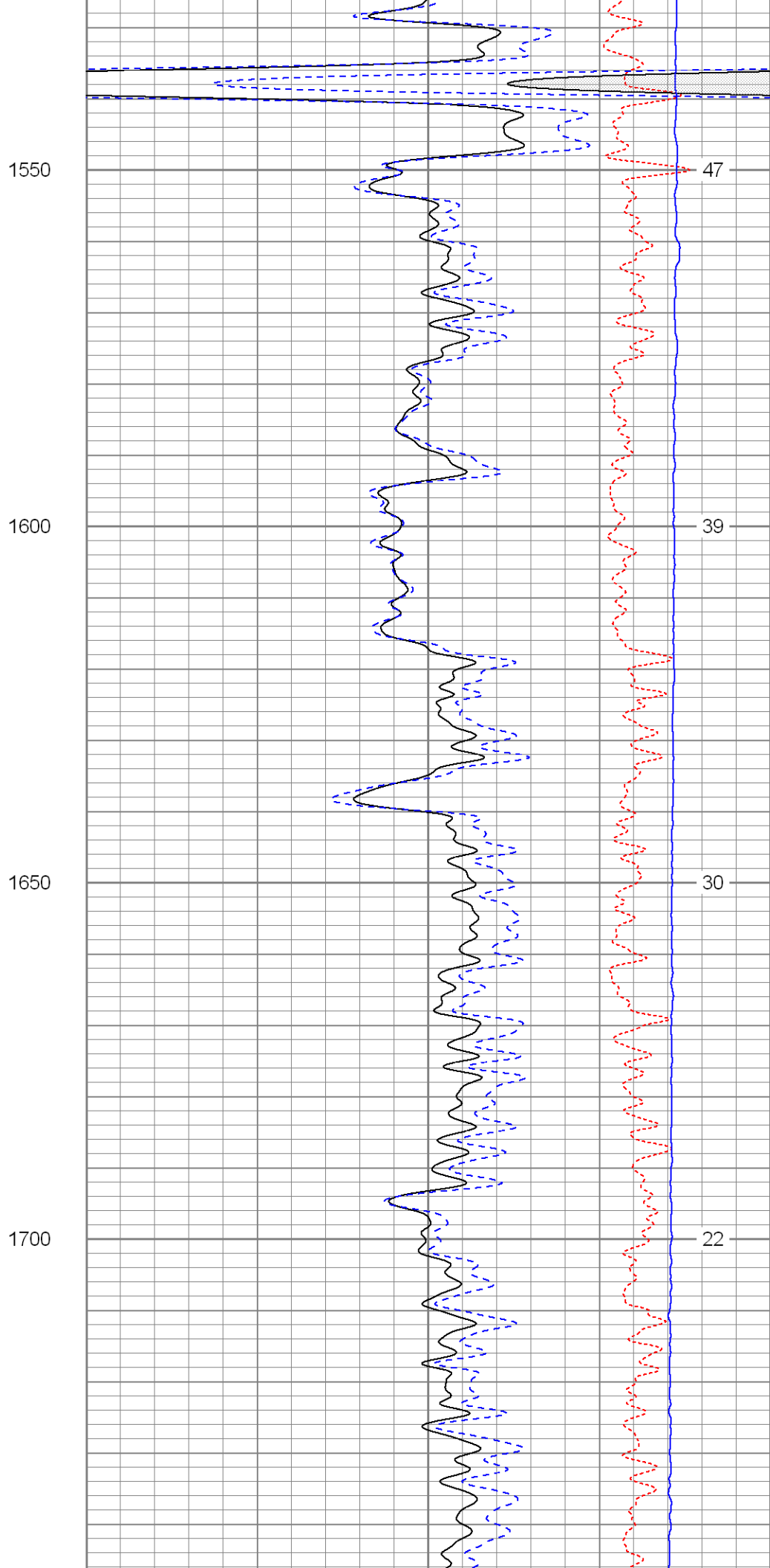
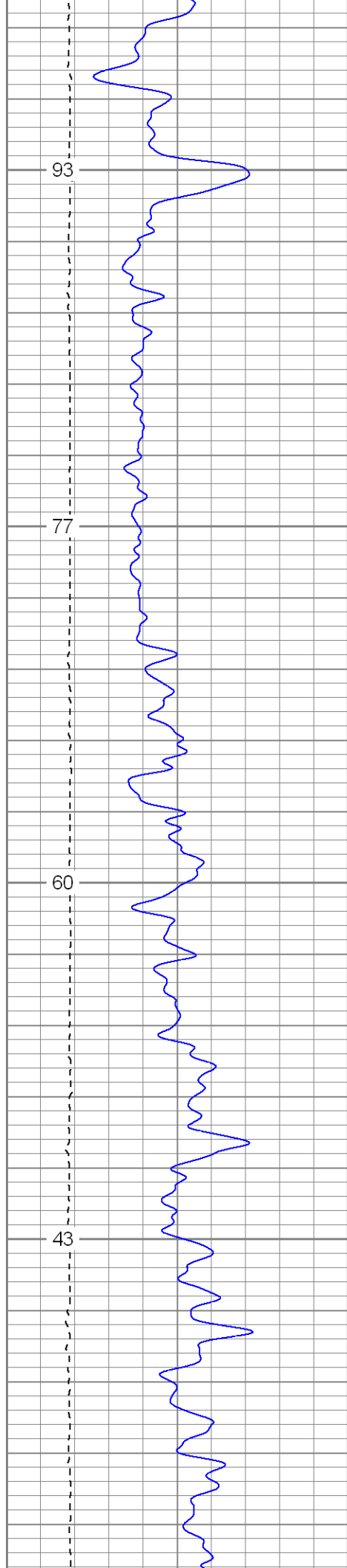


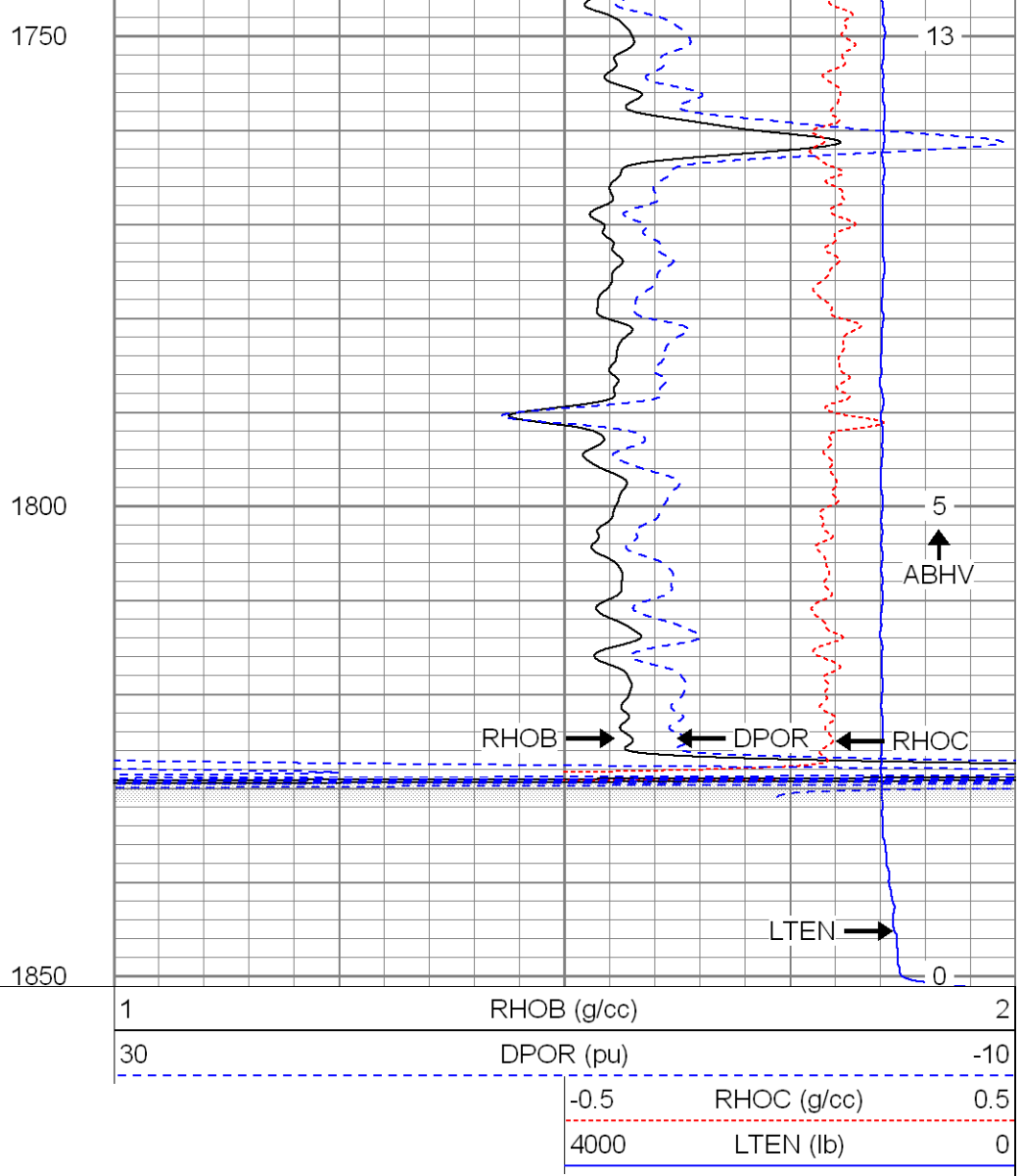
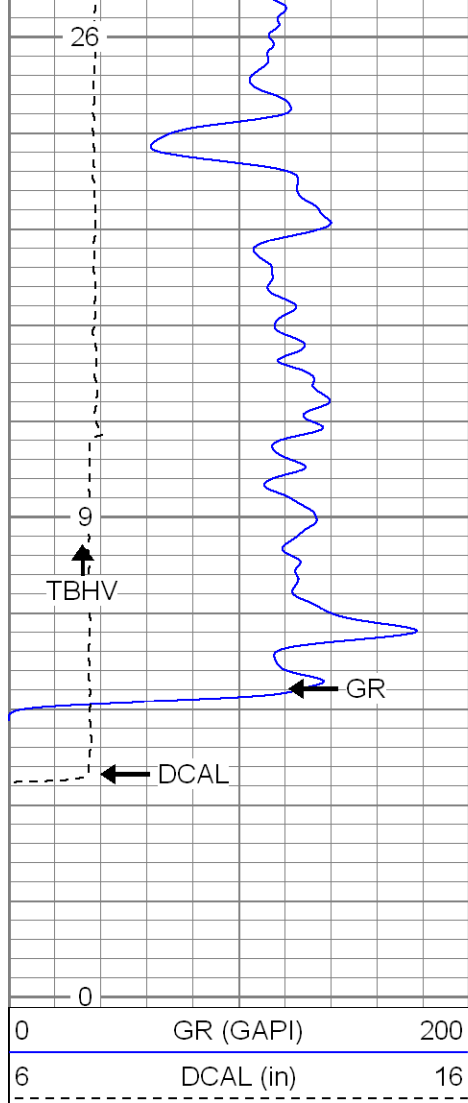












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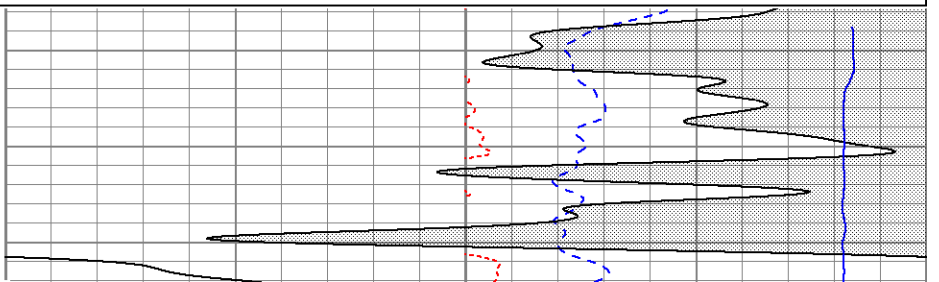
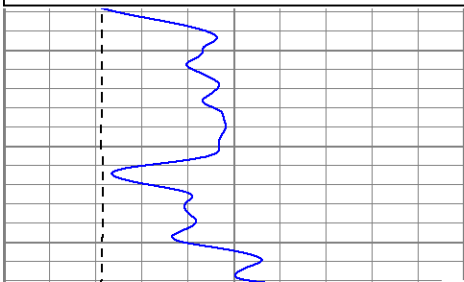
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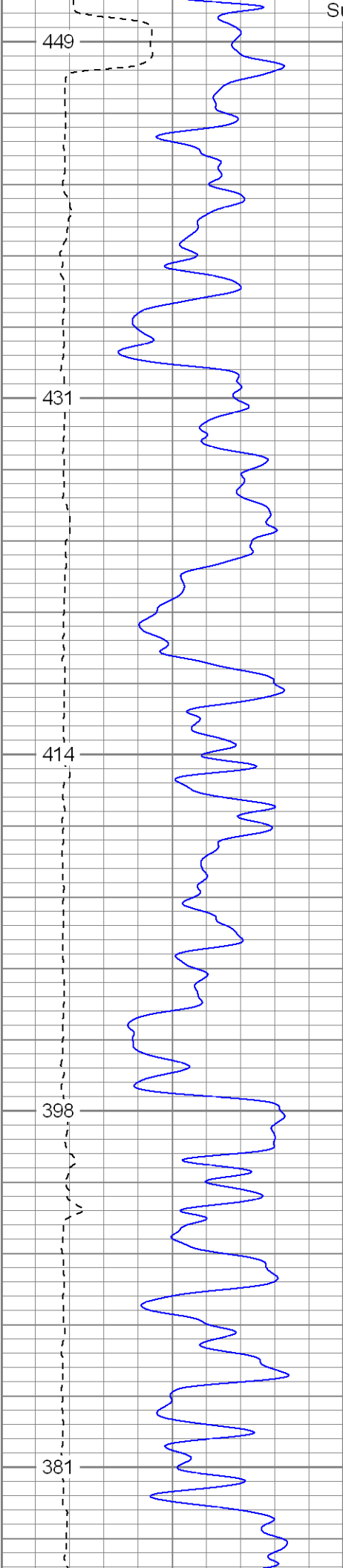
Main Pass

Database File: xtoac3512.db
Dataset Pathname: pass2.1
Presentation Format: cdnl
Dataset Creation: Tue Sep 04 14:21:26 2007 by Calc Open-Cased 061129
Charted by: Depth in Feet scaled 1:240

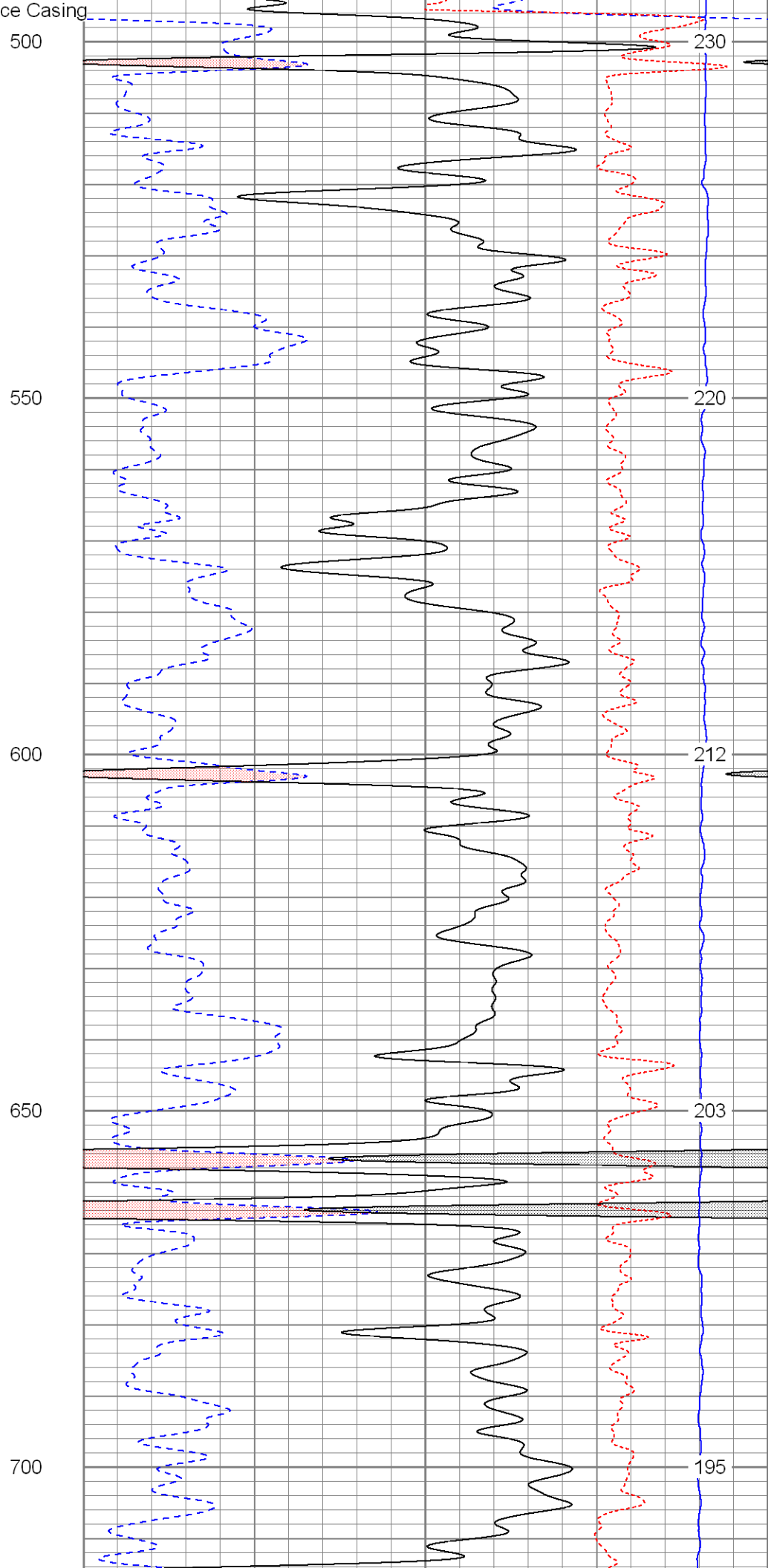
0	GR (GAPI)	200
6	DCAL (in)	16

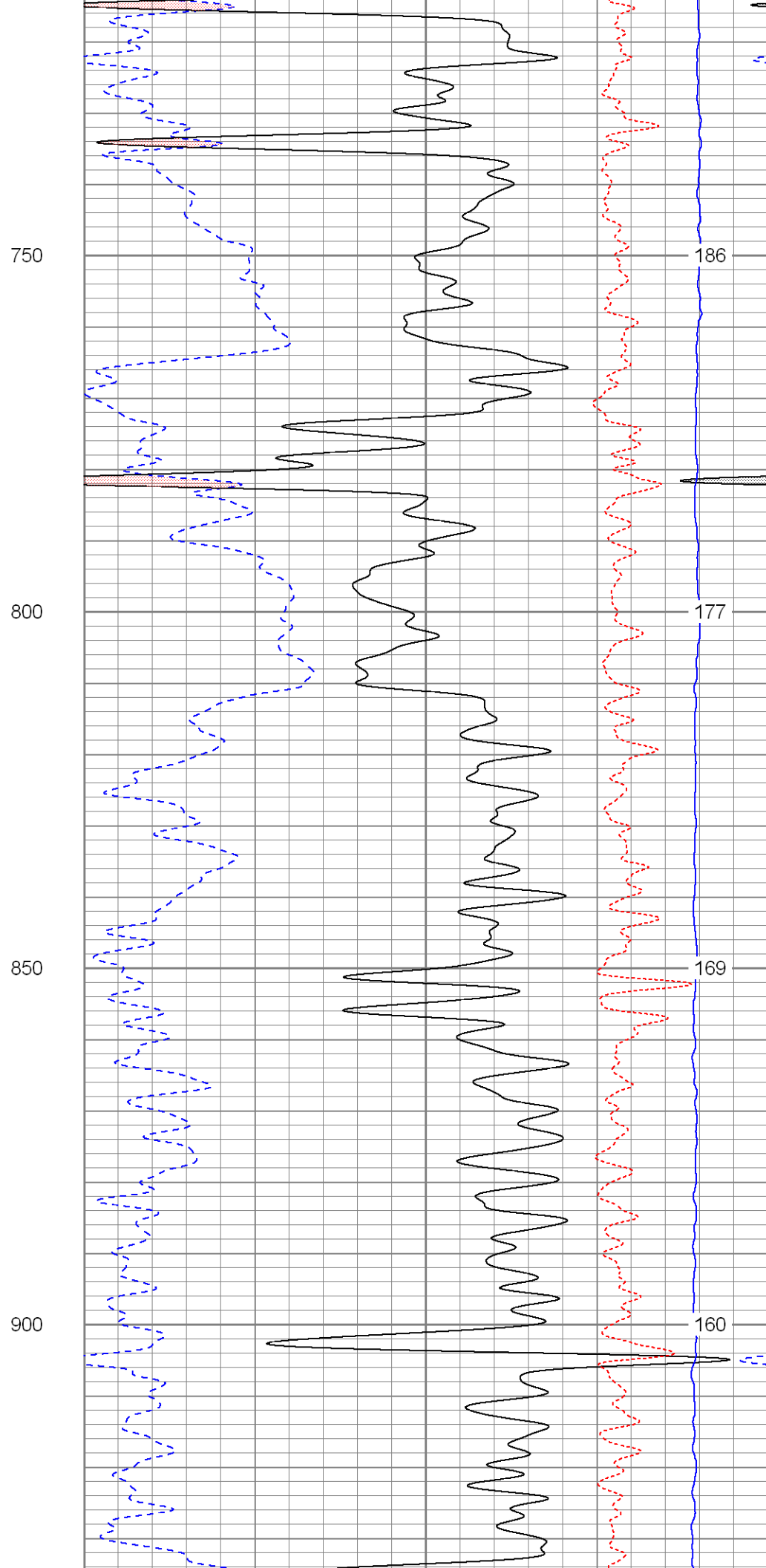
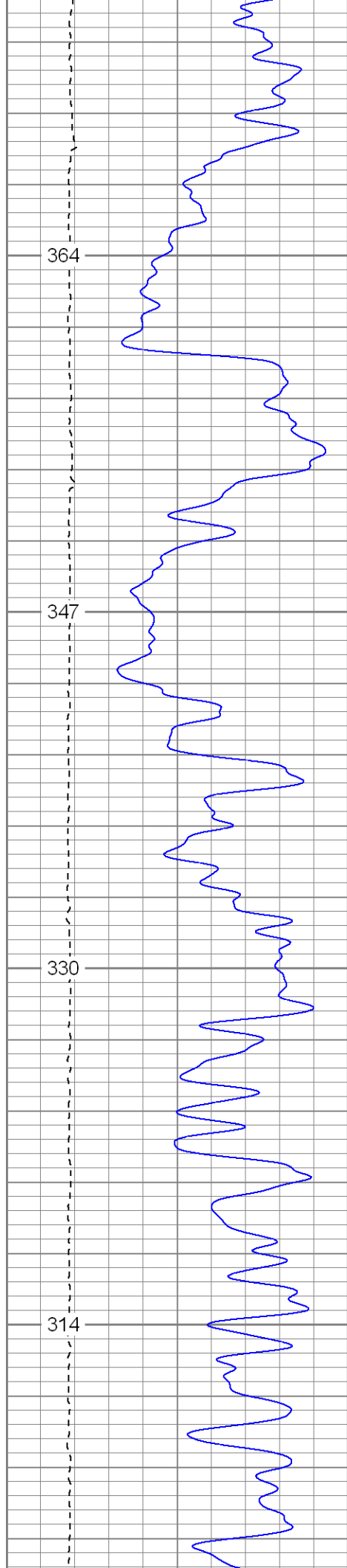
30	NPOR (pu)	-10
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0

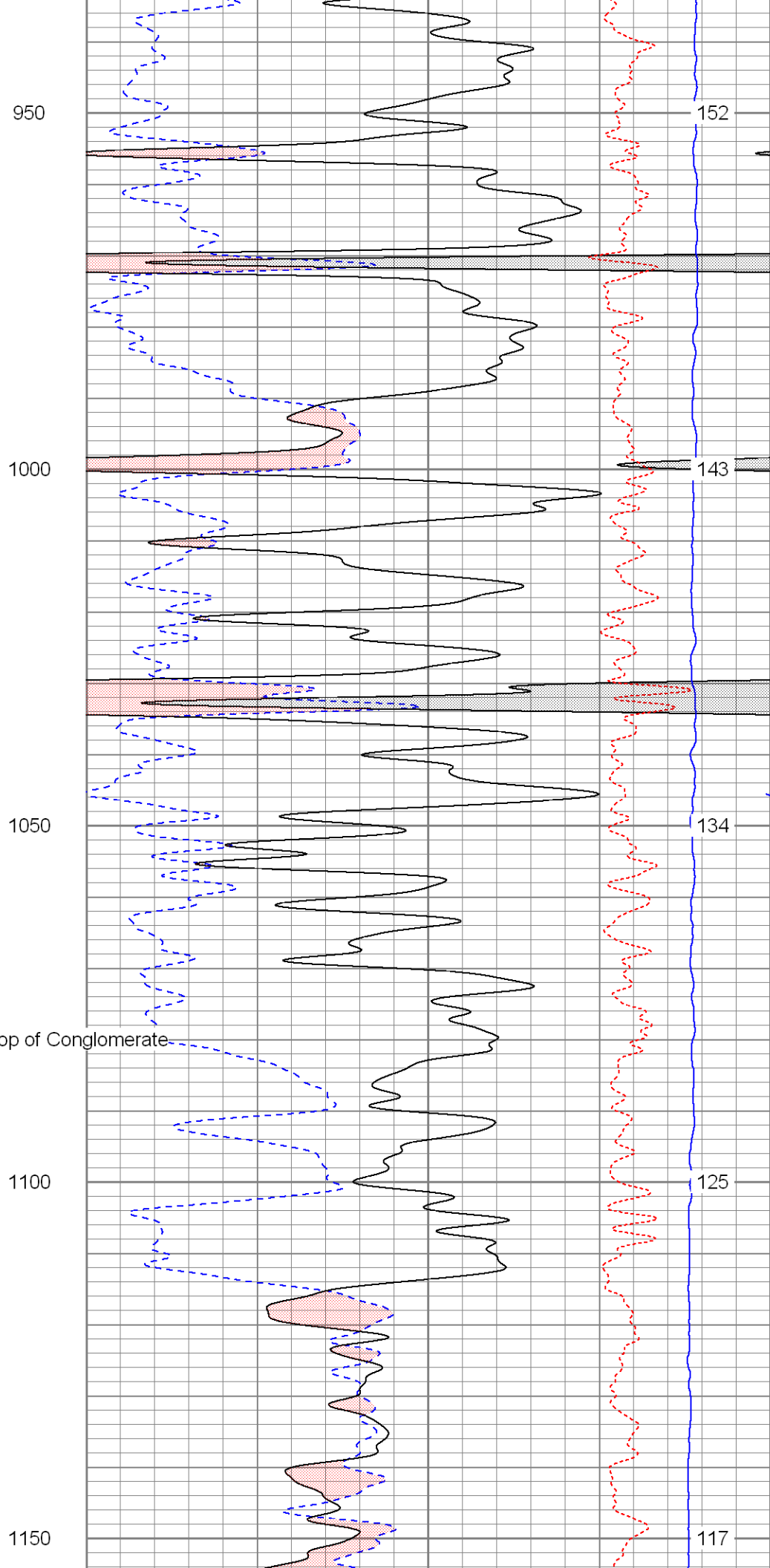
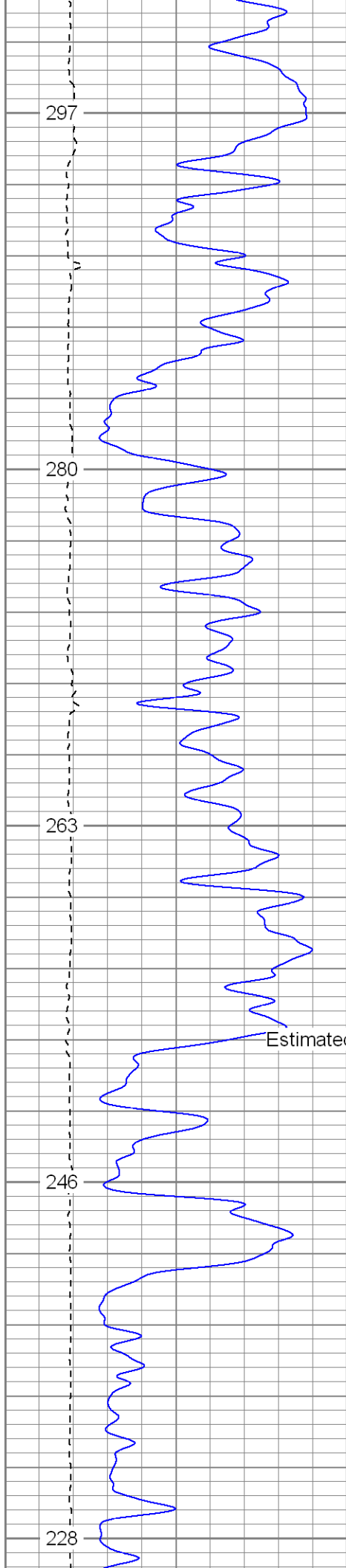




Surface Casing







Estimated Top of Vermijo

211

194

178

161

1200

1250

1300

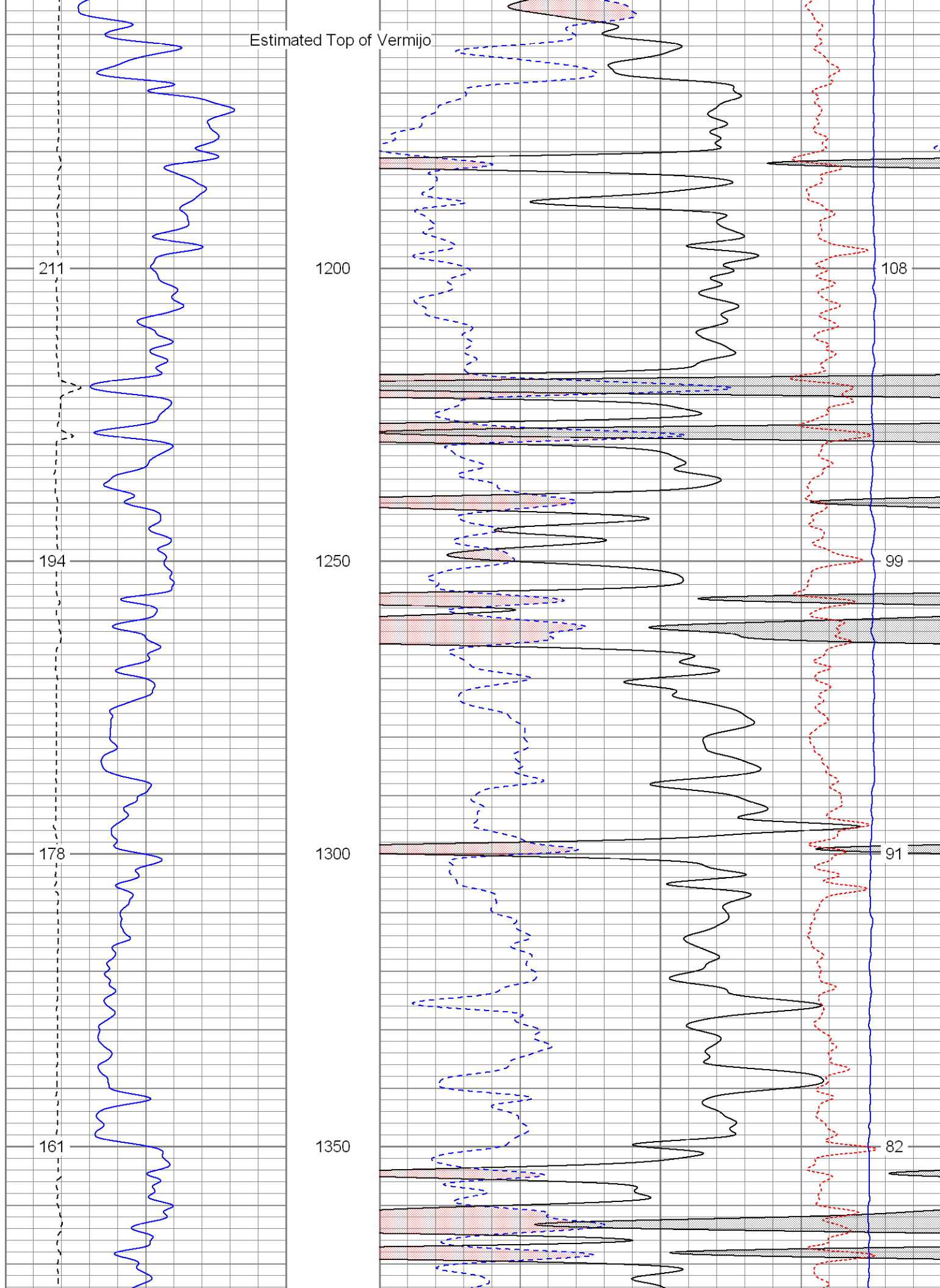
1350

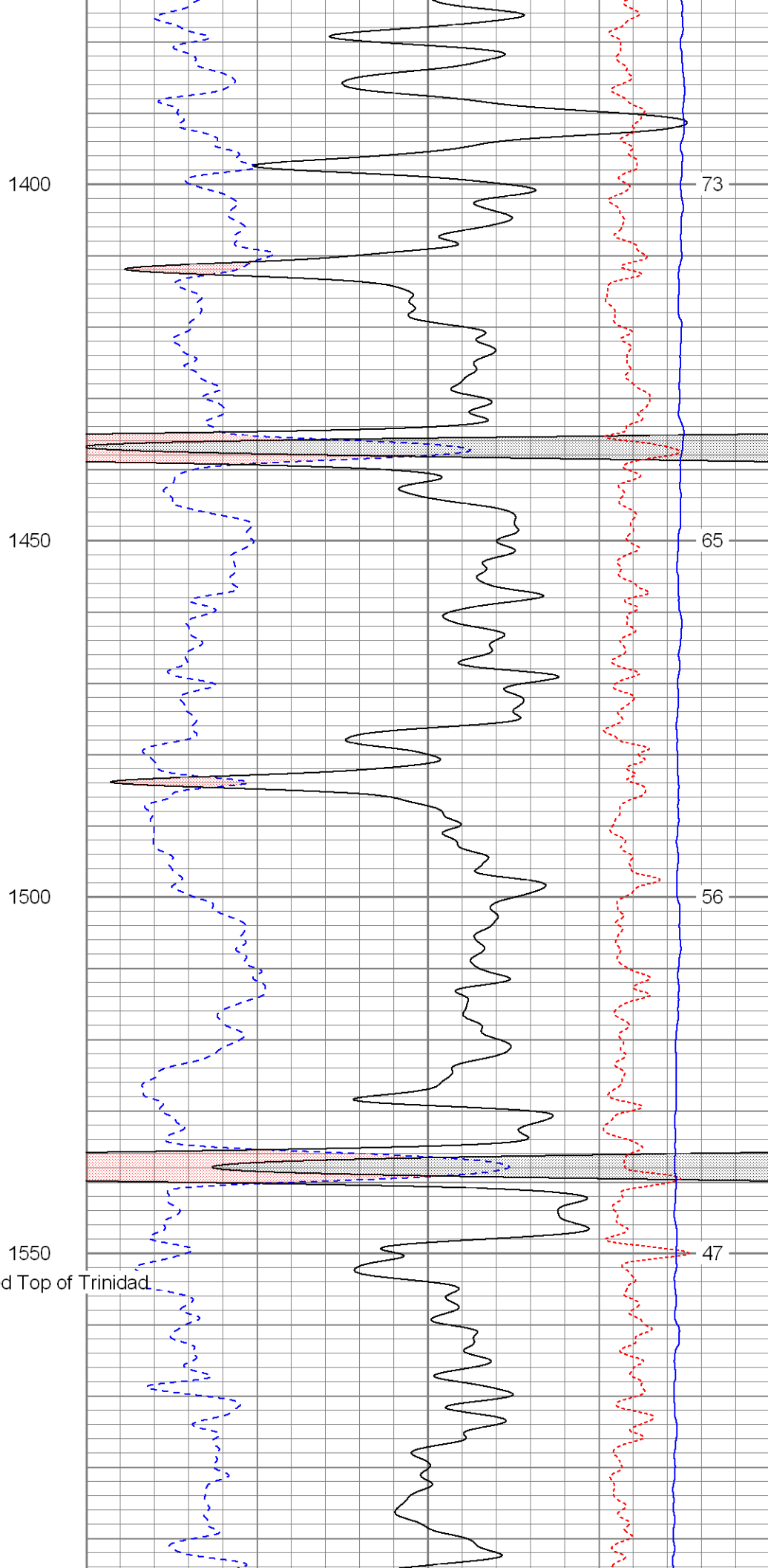
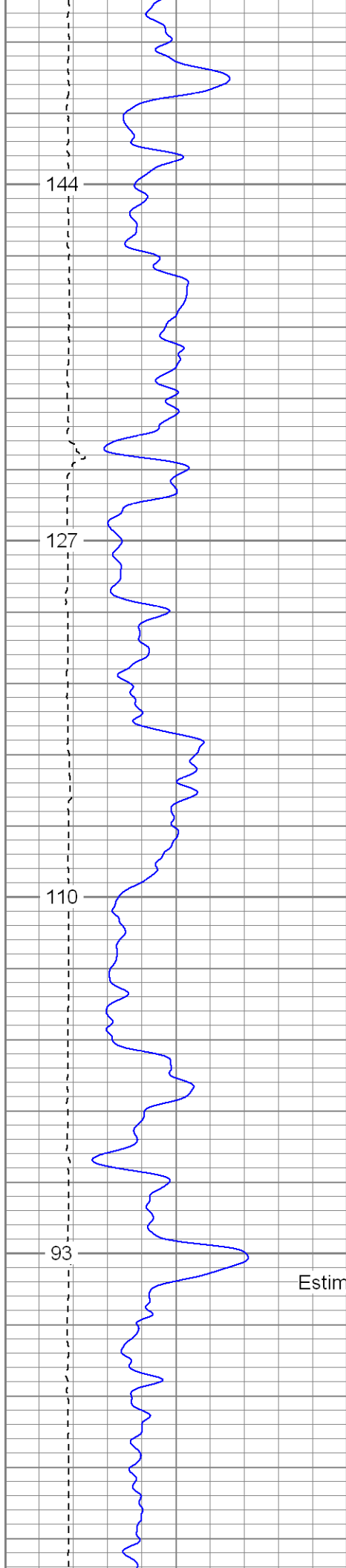
108

99

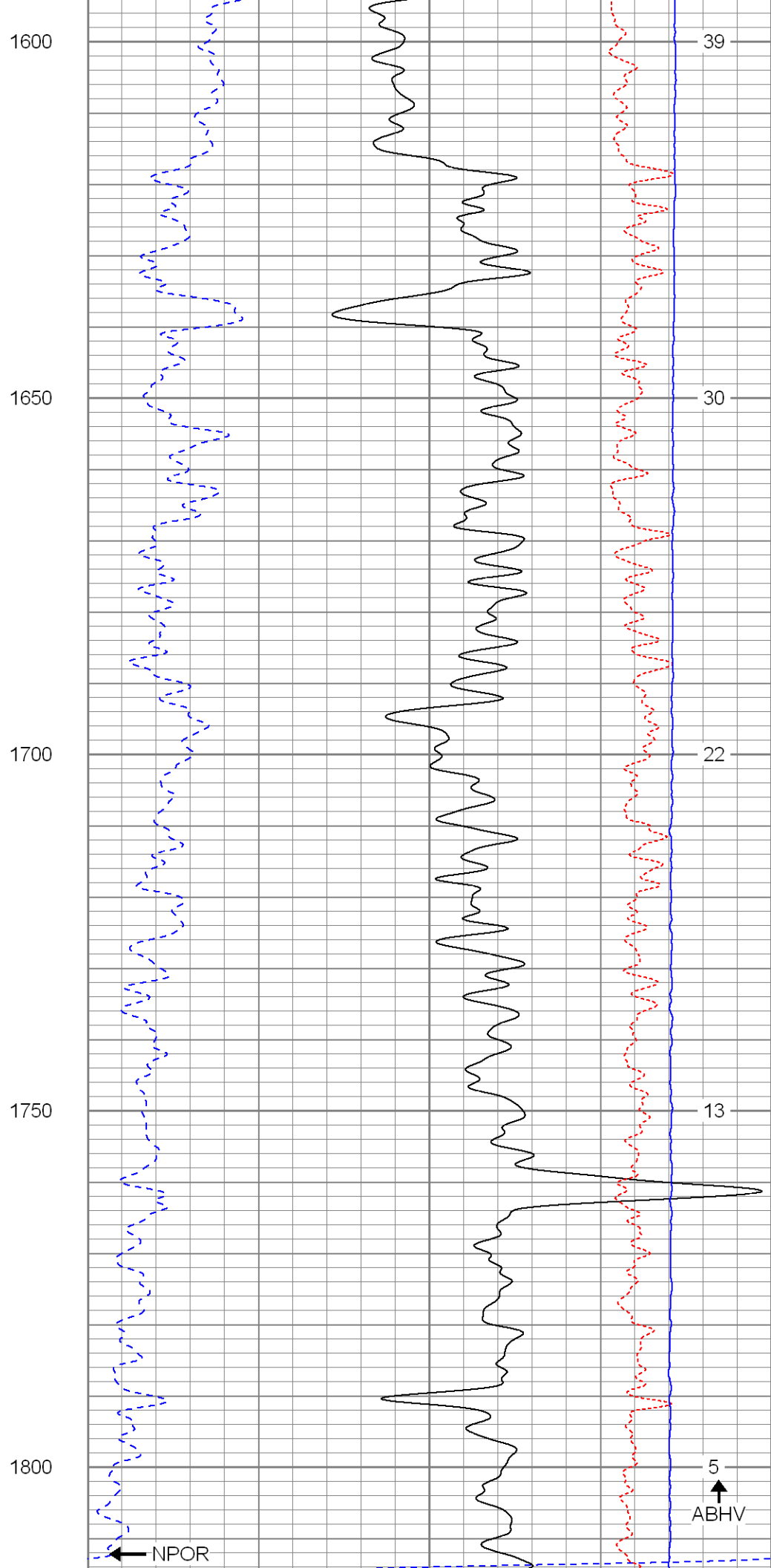
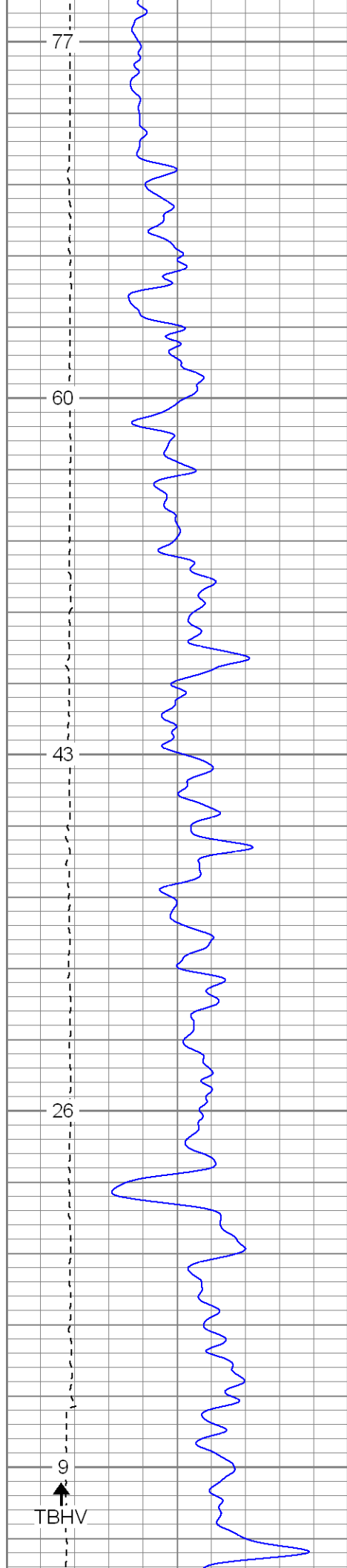
91

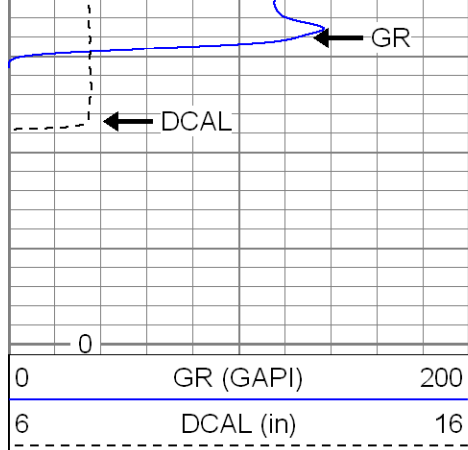
82



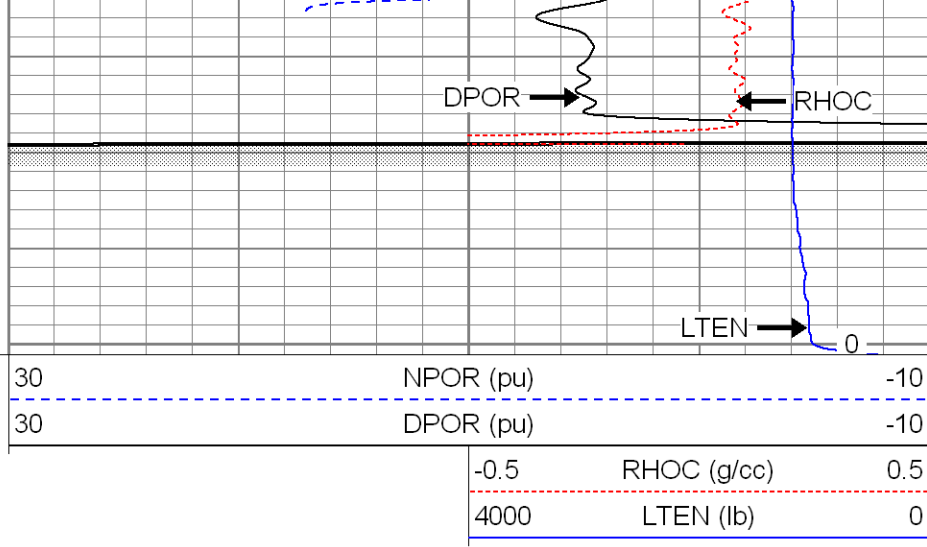


Estimated Top of Trinidad.





1850



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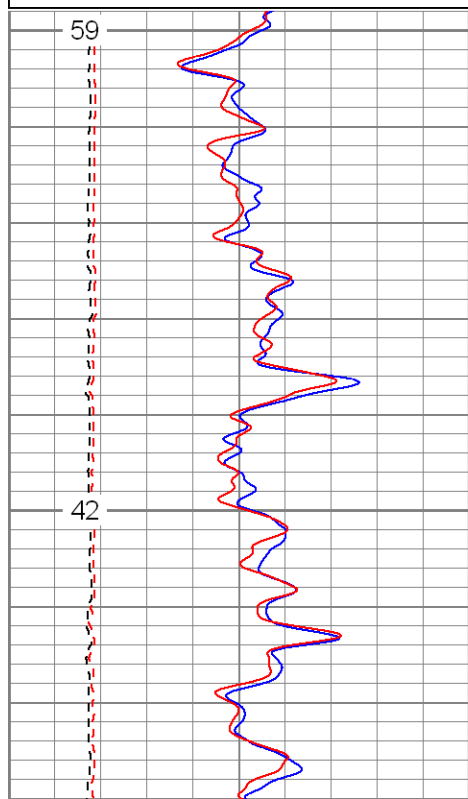
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Repeat Section

Database File: xtoac3512.db
Dataset Pathname: pass1.1
Presentation Format: cdnl
Dataset Creation: Tue Sep 04 14:15:37 2007 by Calc Open-Cased 061129
Charted by: Depth in Feet scaled 1:240

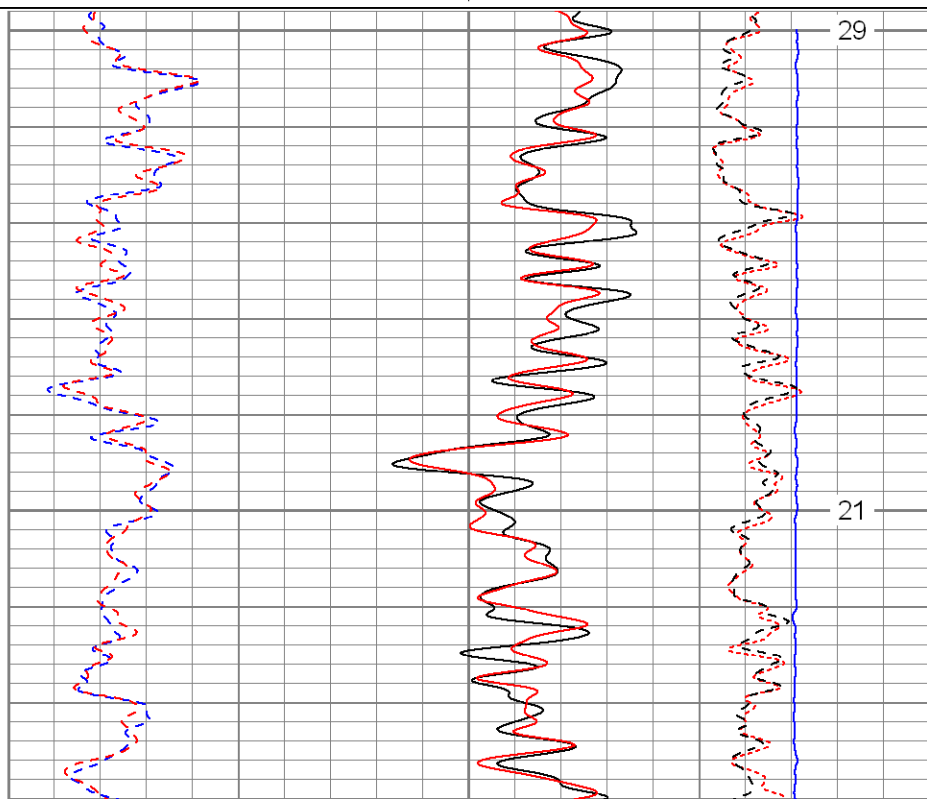
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6	DCAL (in)	16
0	GR-repeat (GAPI)	200
6	DCAL-repeat (in)	16

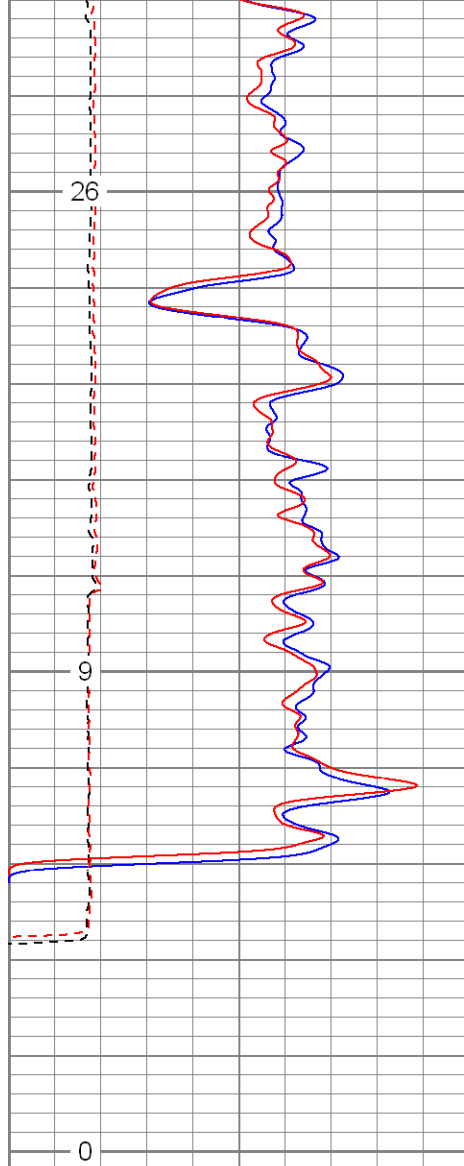
30	NPOR (pu)	-10
30	DPOR (pu)	-10
30	NPOR-repeat (pu)	-10
30	DPOR-repeat (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
-0.5	RHOC-repeat (g/cc)	0.5



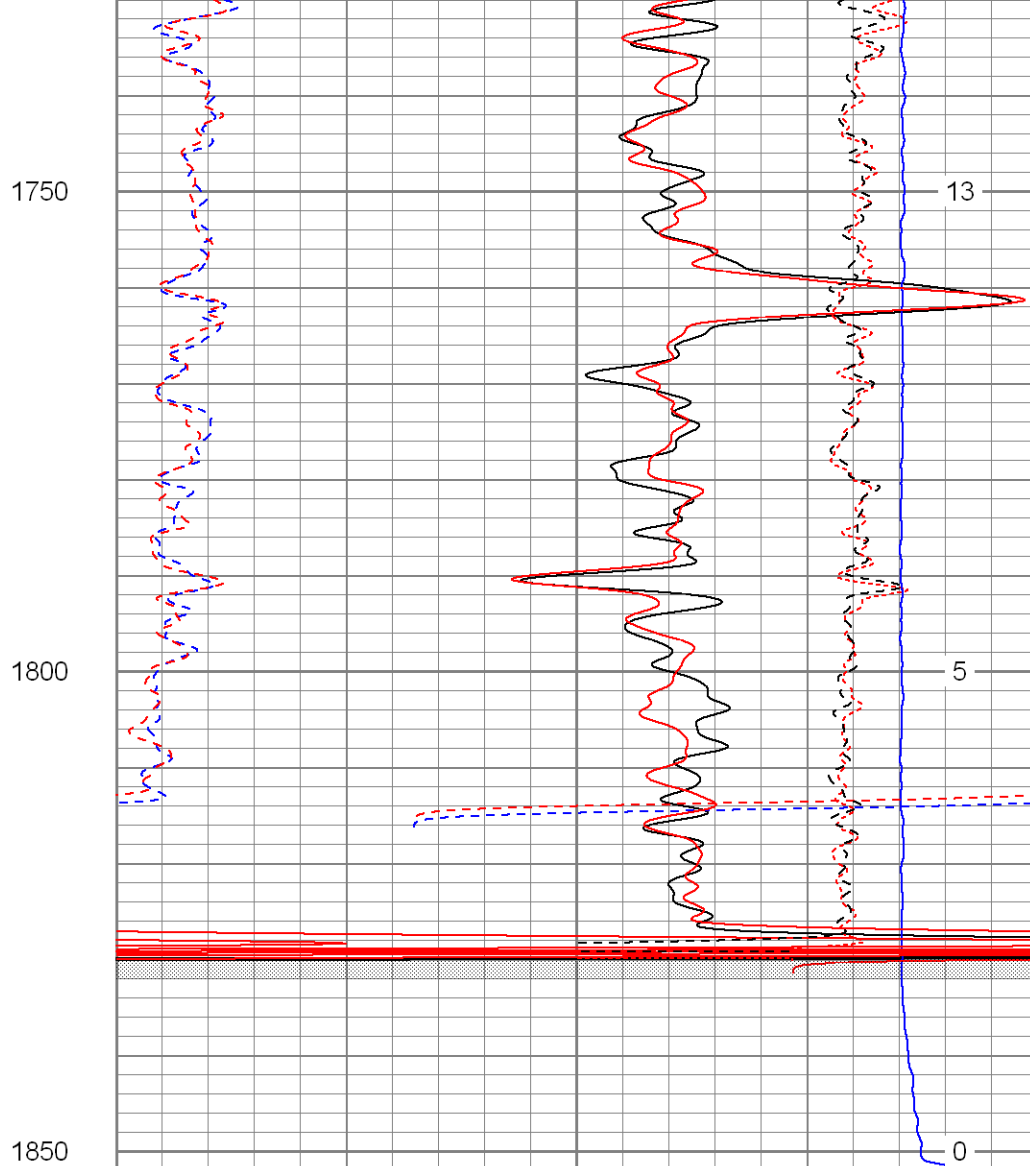
1650

1700





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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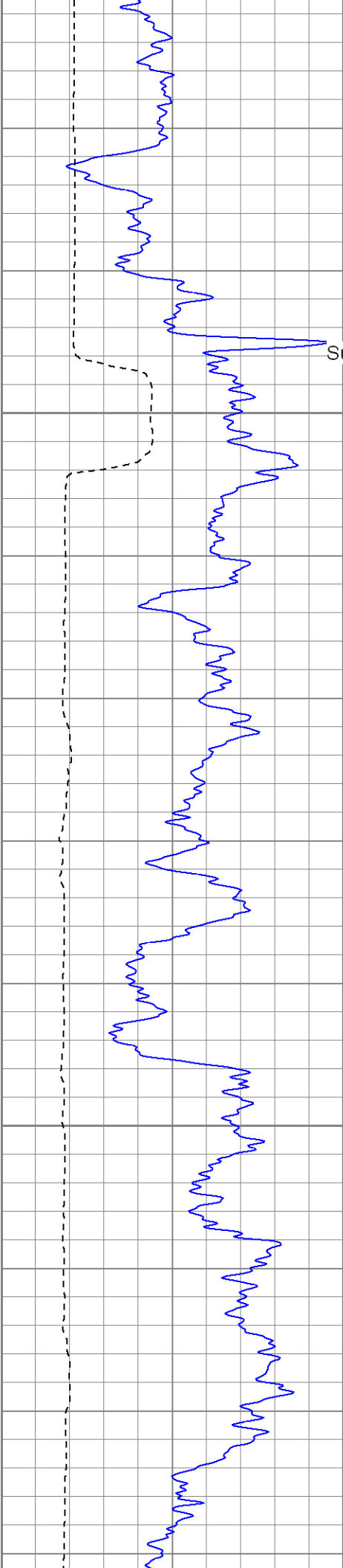
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High Resolution Pass

Database File: xtoac3512.db
Dataset Pathname: pass2.2
Presentation Format: cdlhr
Dataset Creation: Tue Sep 04 14:26:06 2007 by Calc Open-Cased 061129
Charted by: Depth in Feet scaled 1:120

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

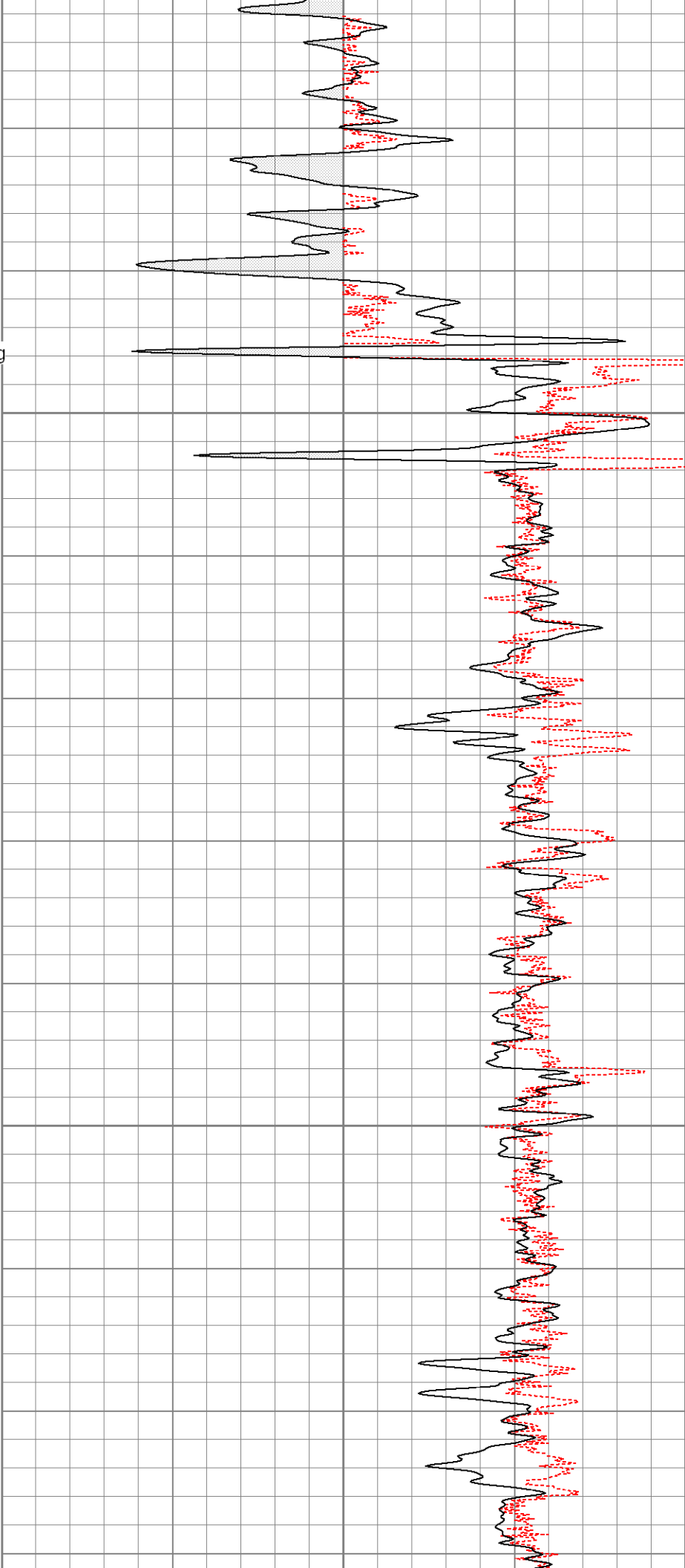
1	RHOB (g/cc)	3
-0.5	RHOC (g/cc)	0.5

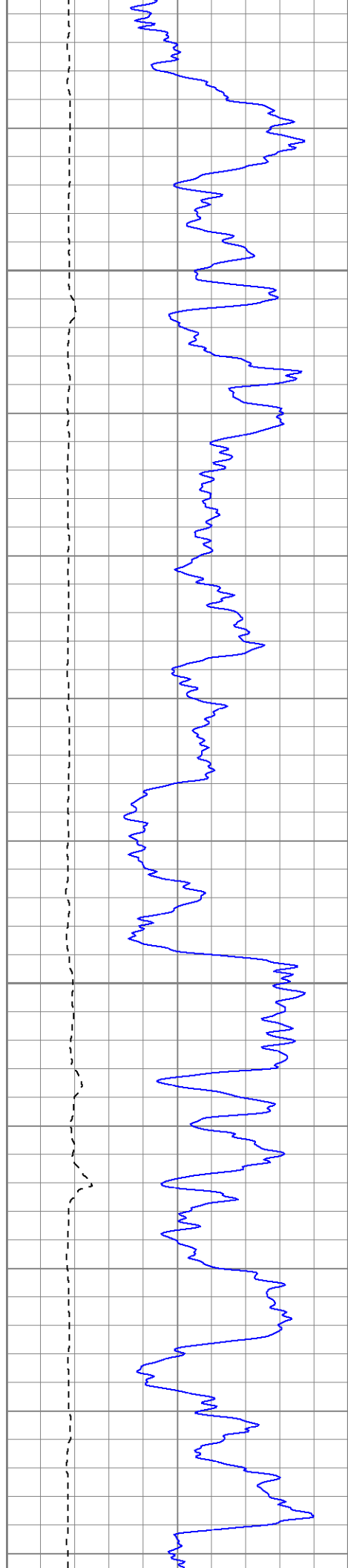


Surface Casing

500

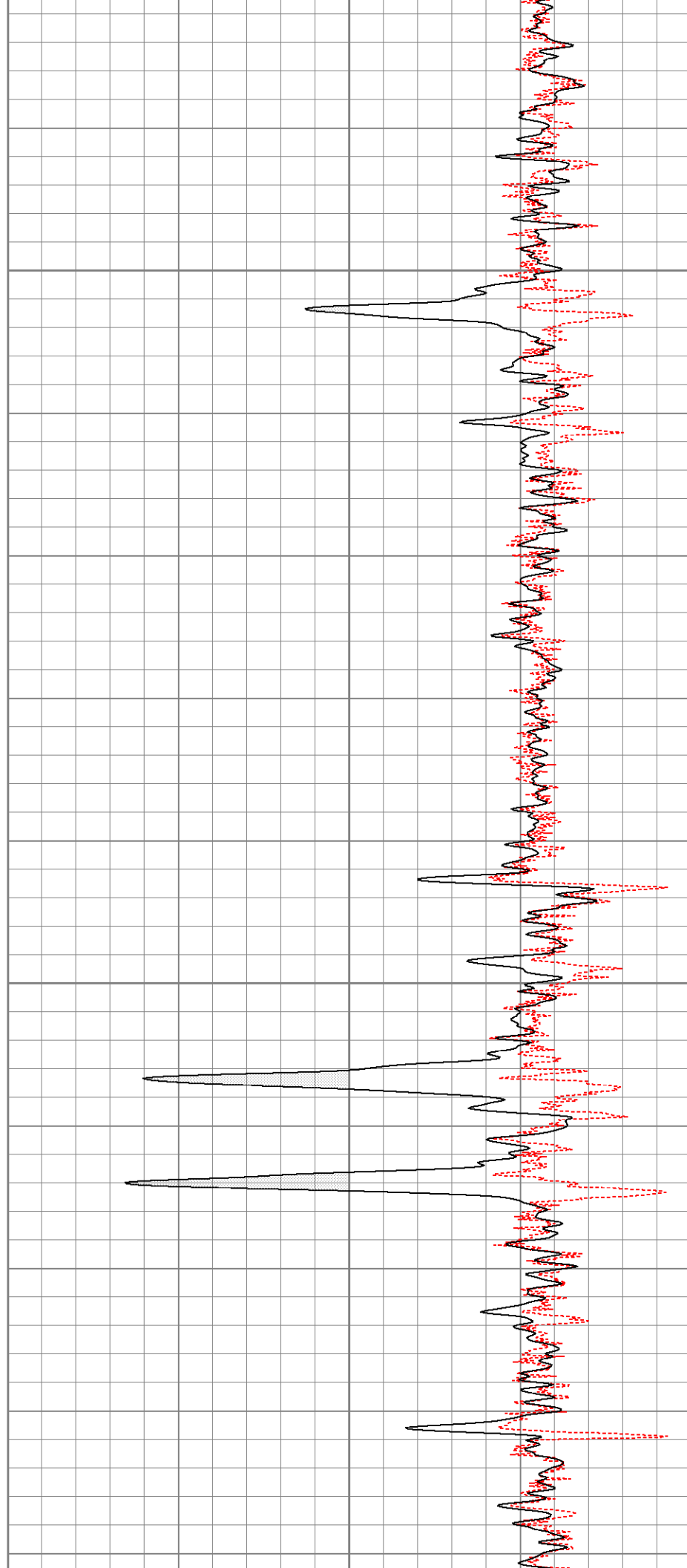
550

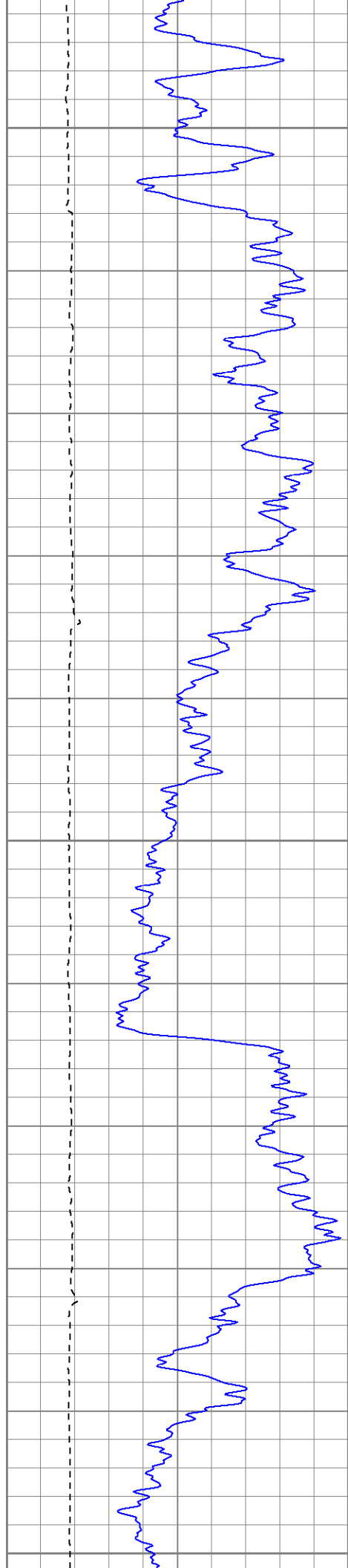




600

650

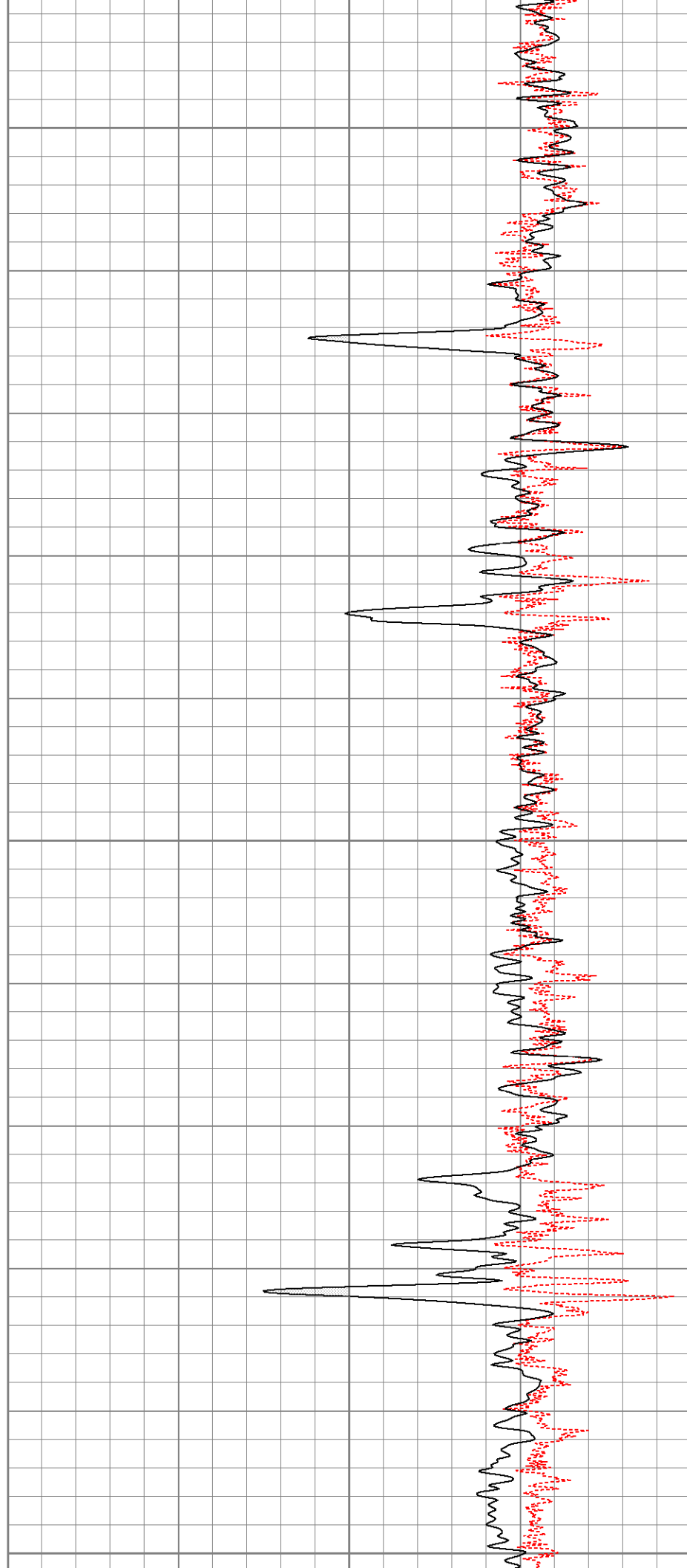


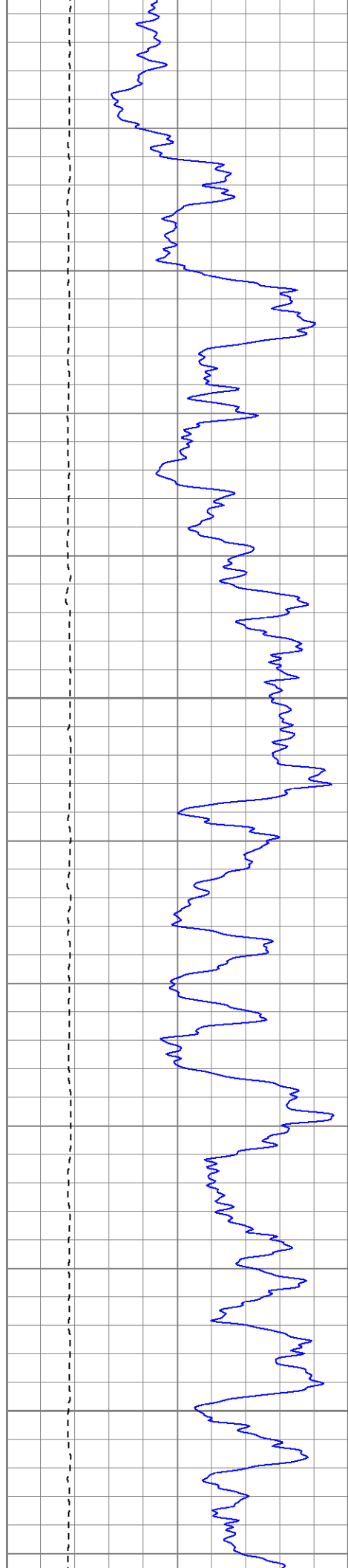


700

750

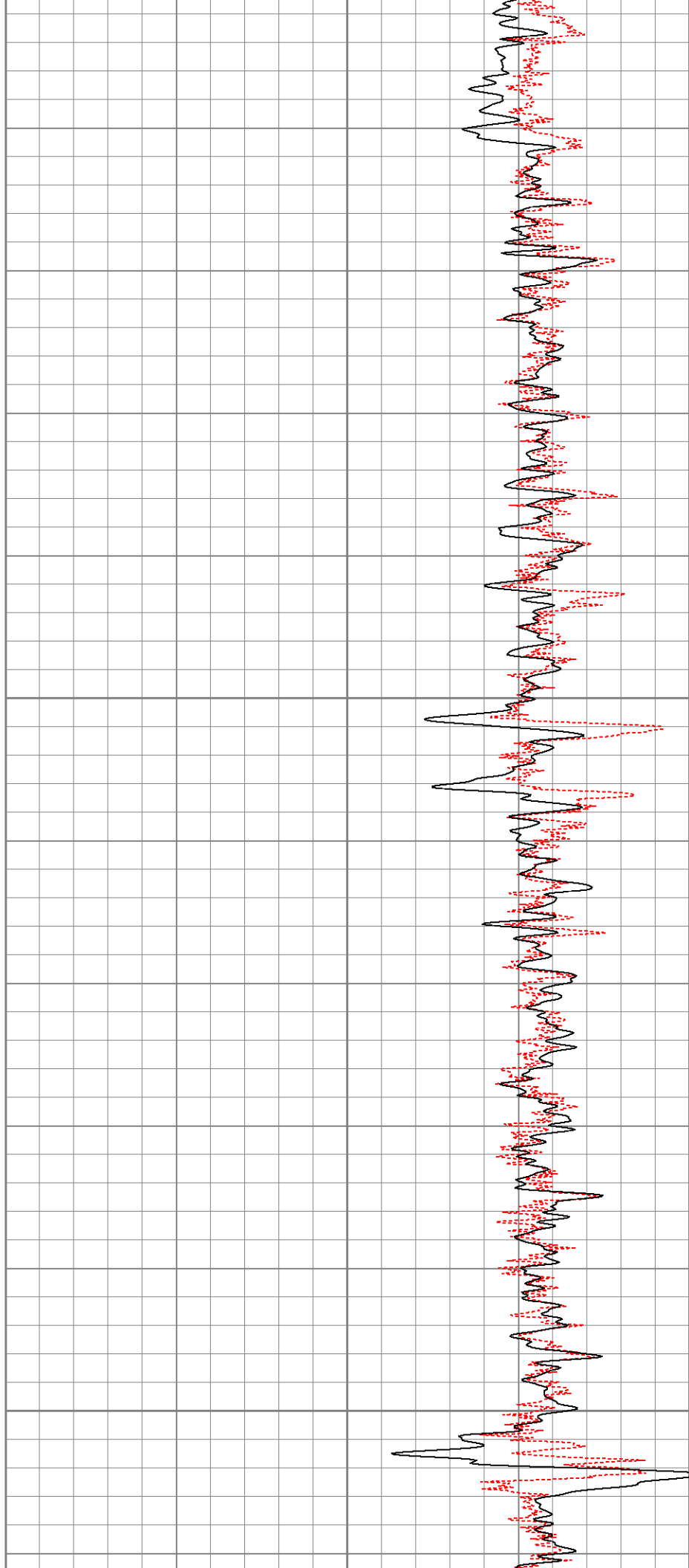
800

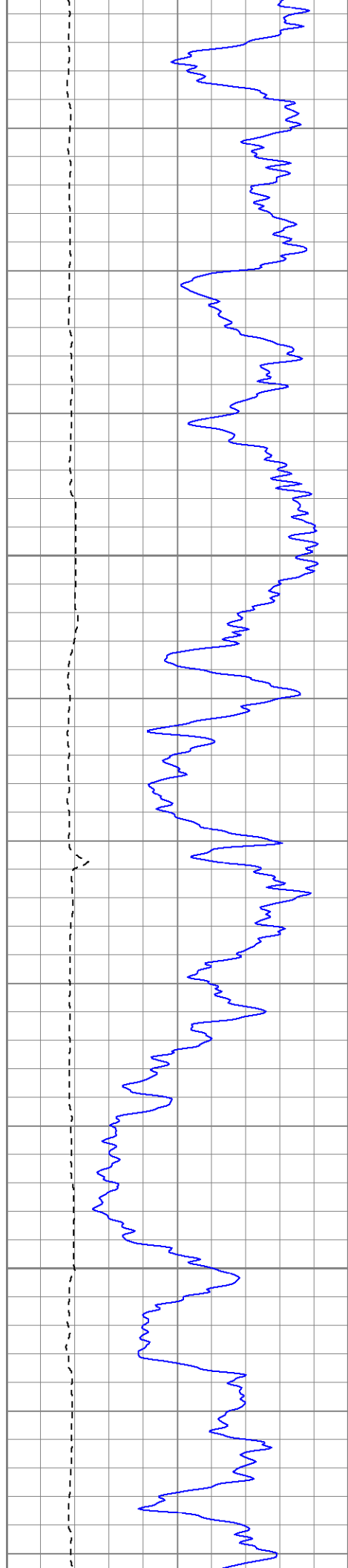




850

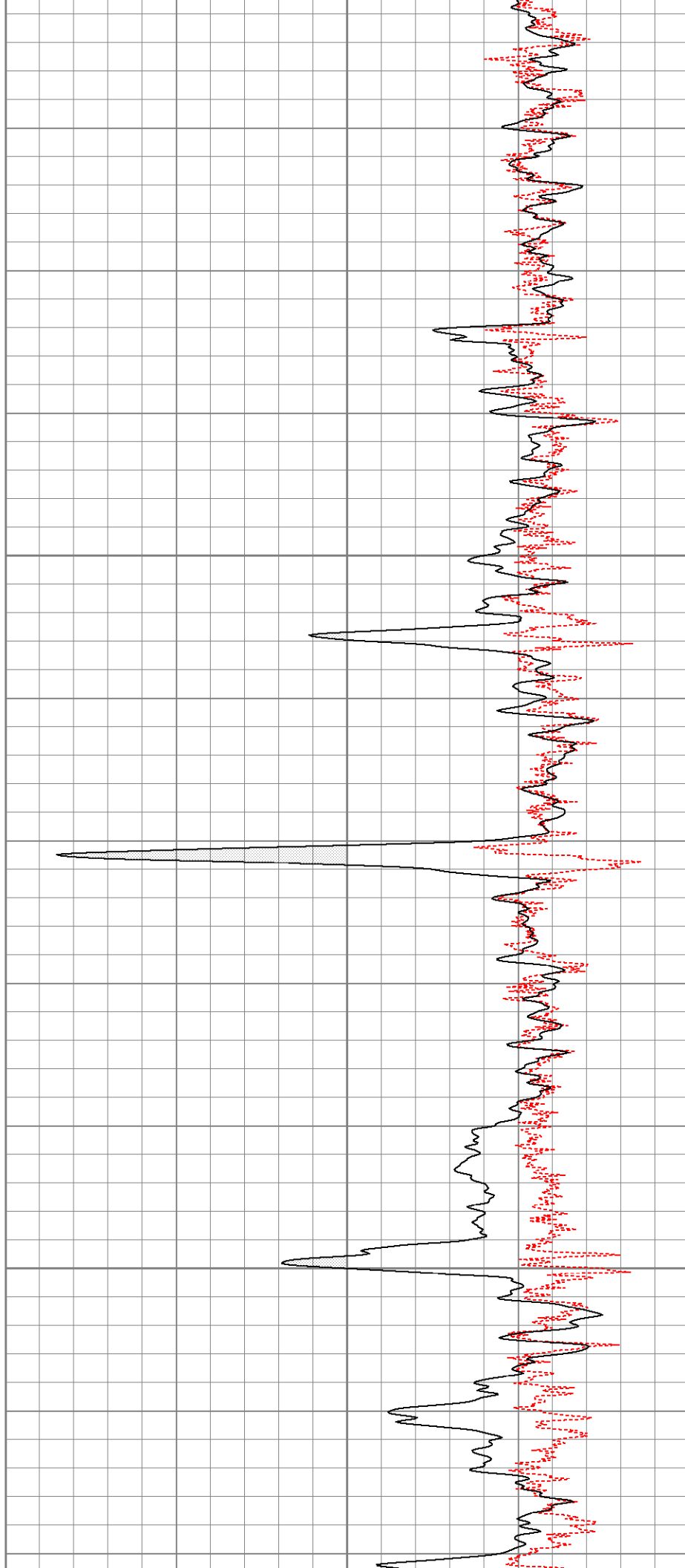
900

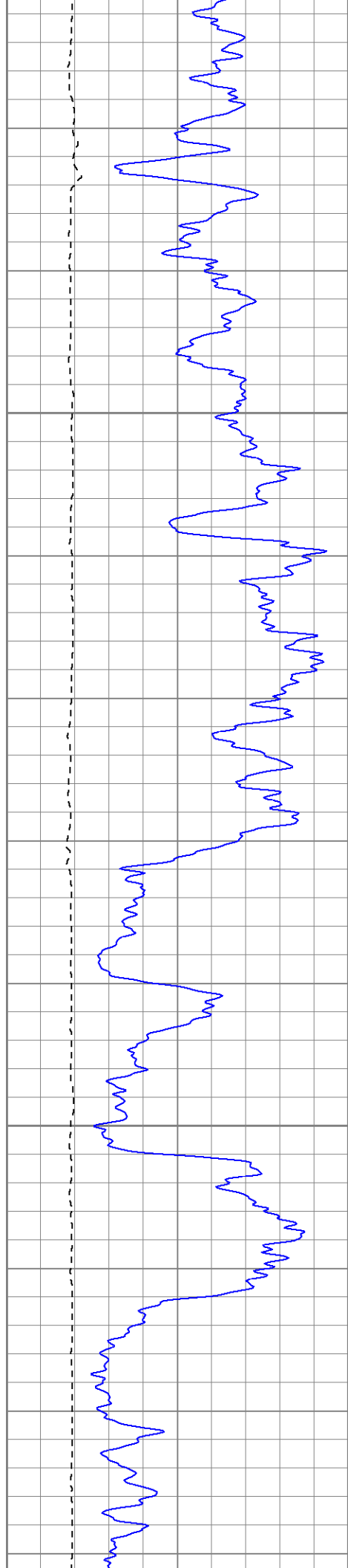




950

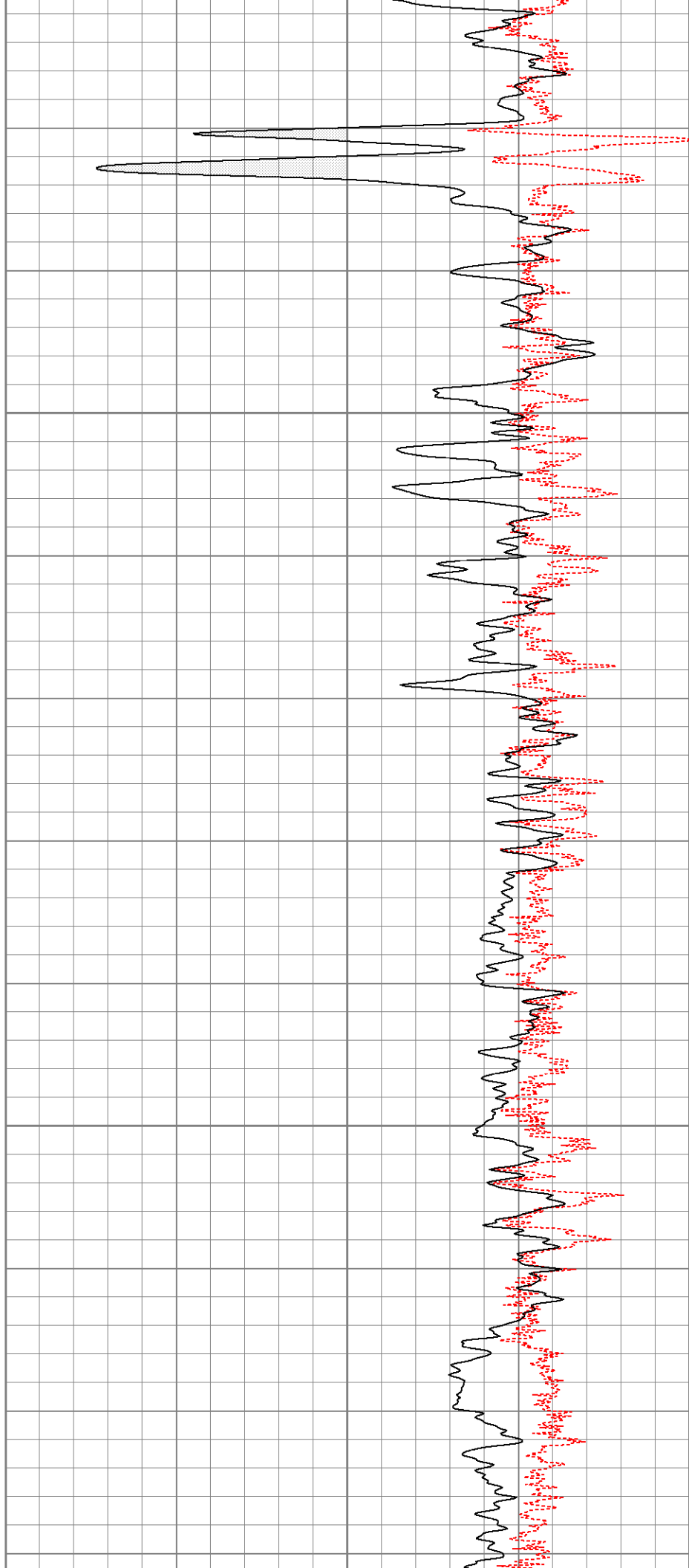
1000

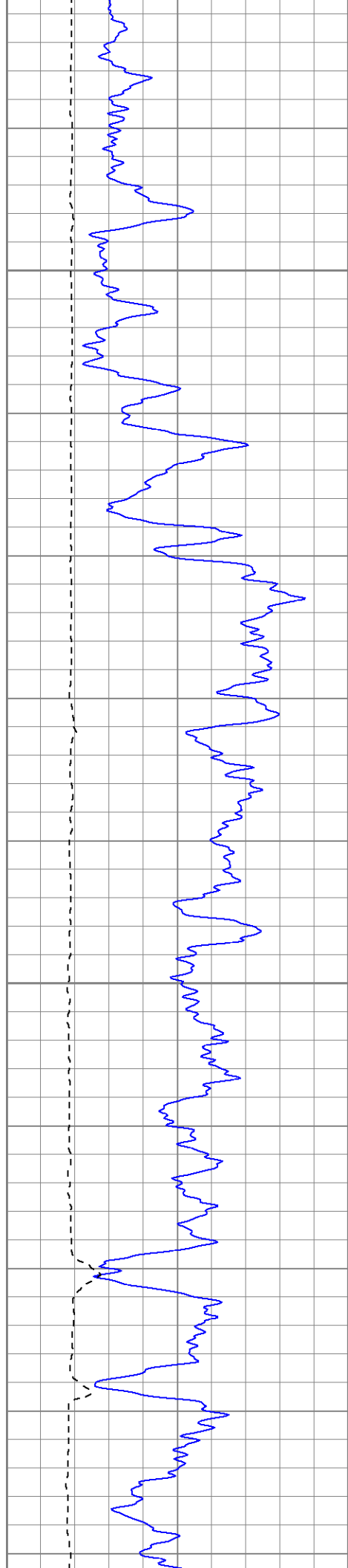




1050

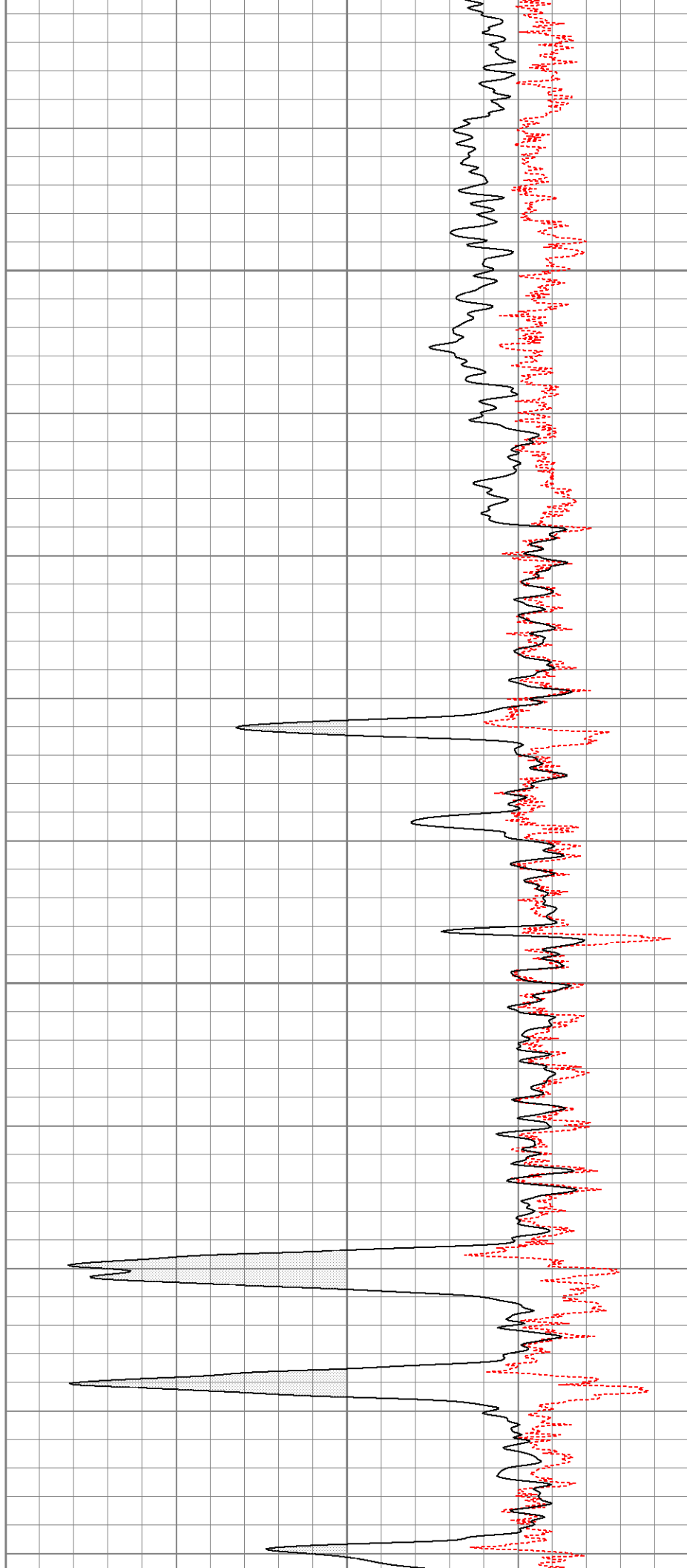
1100

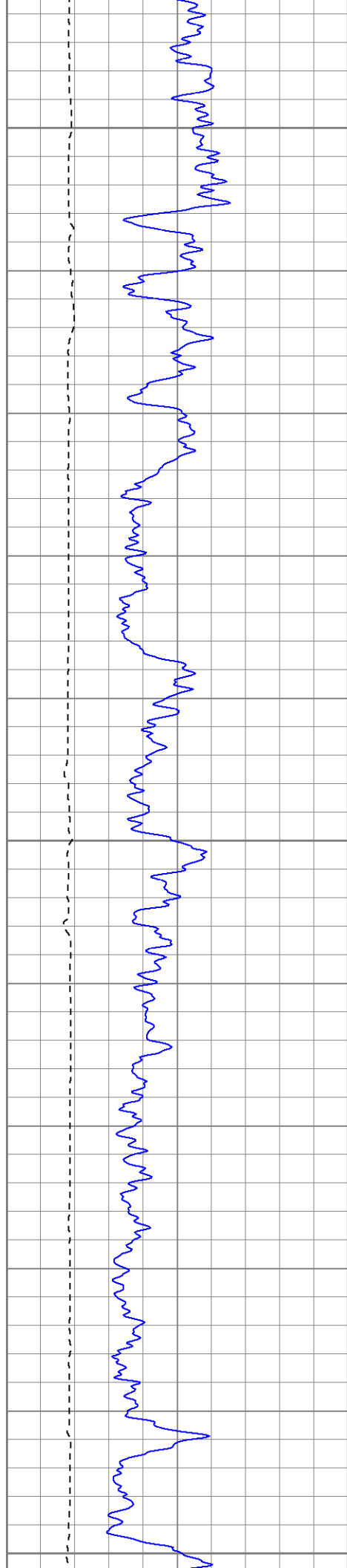




1150

1200

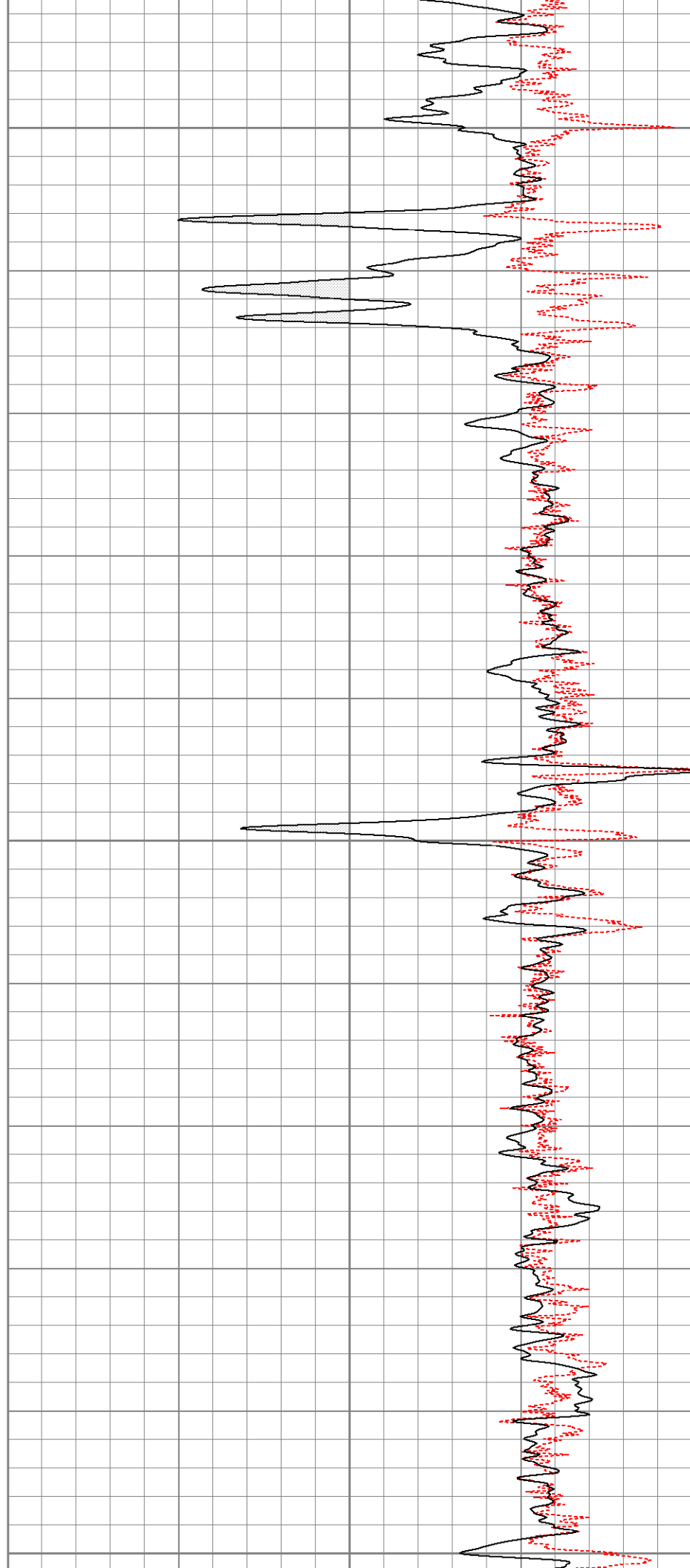


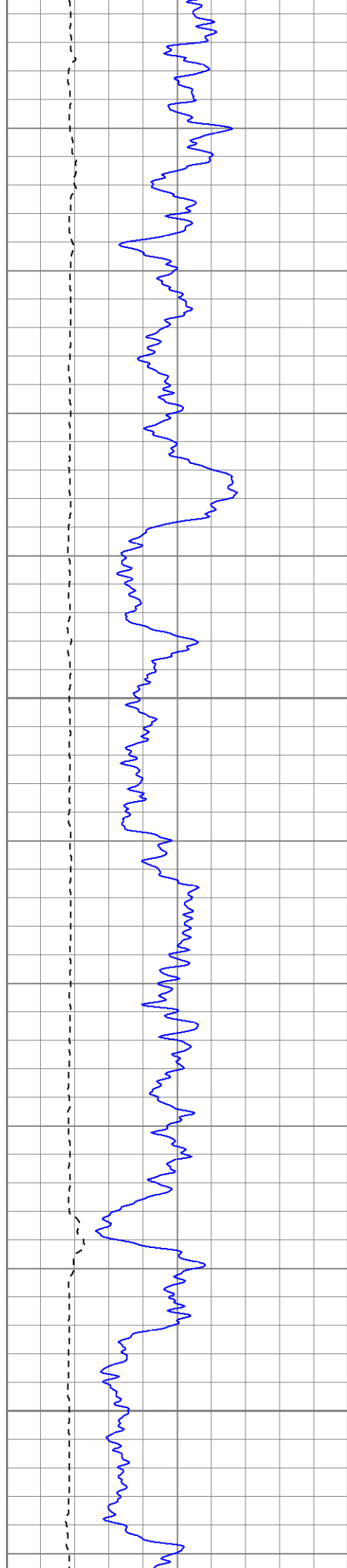


1250

1300

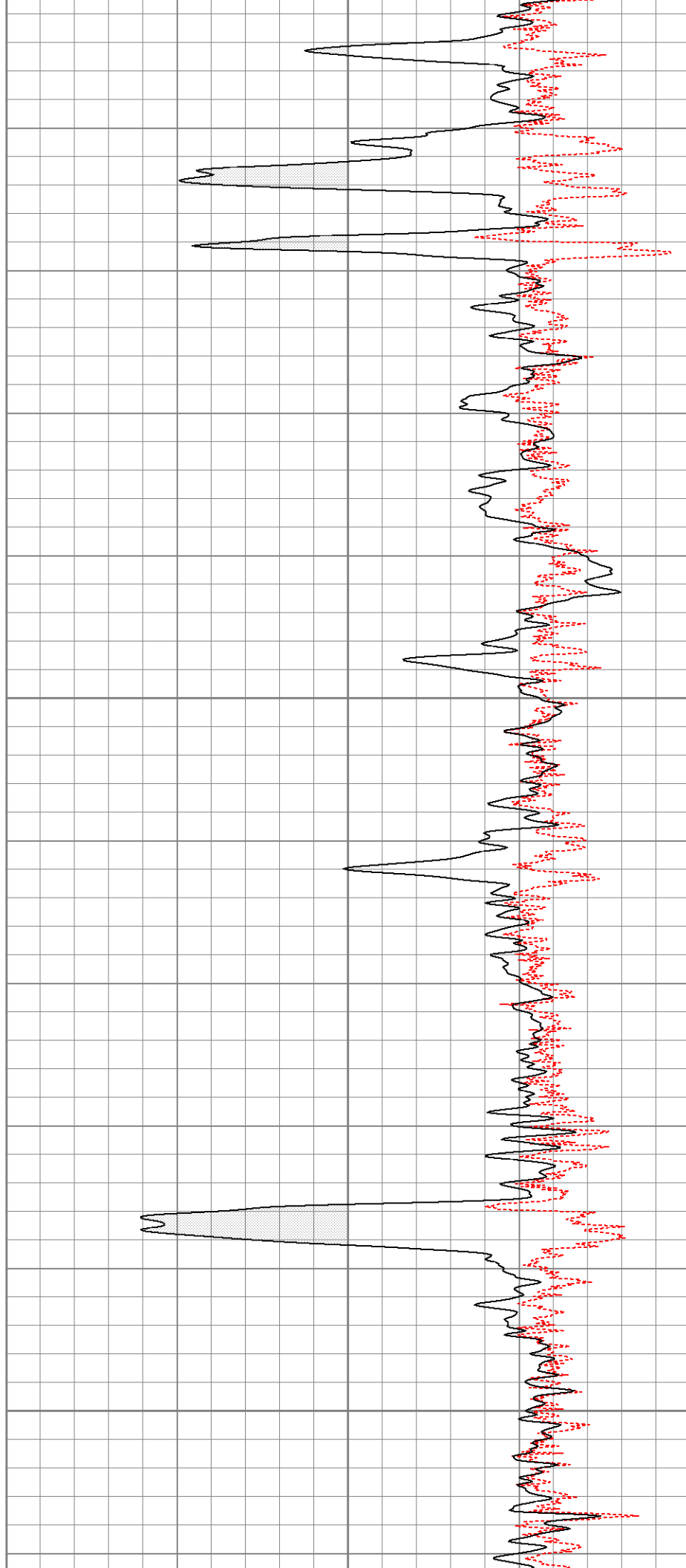
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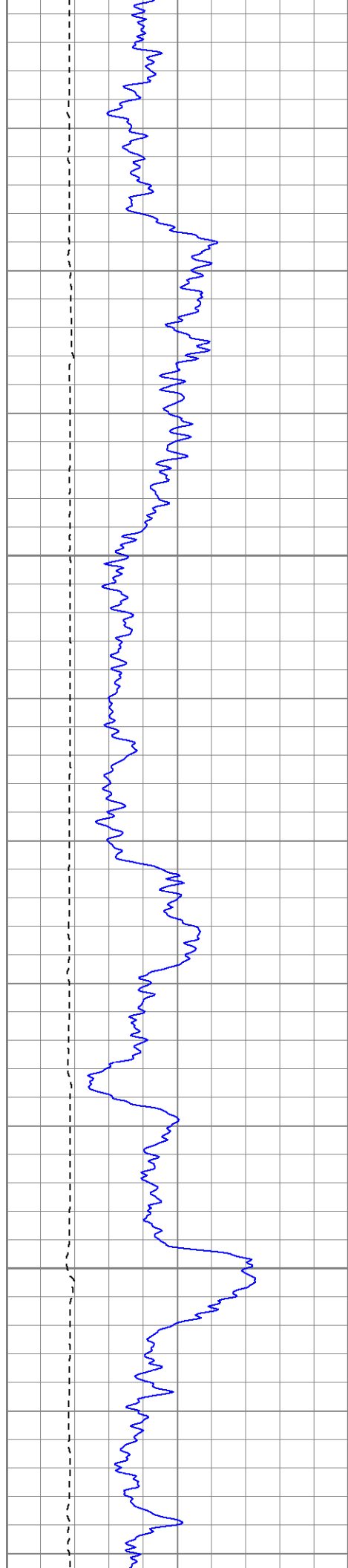




1400

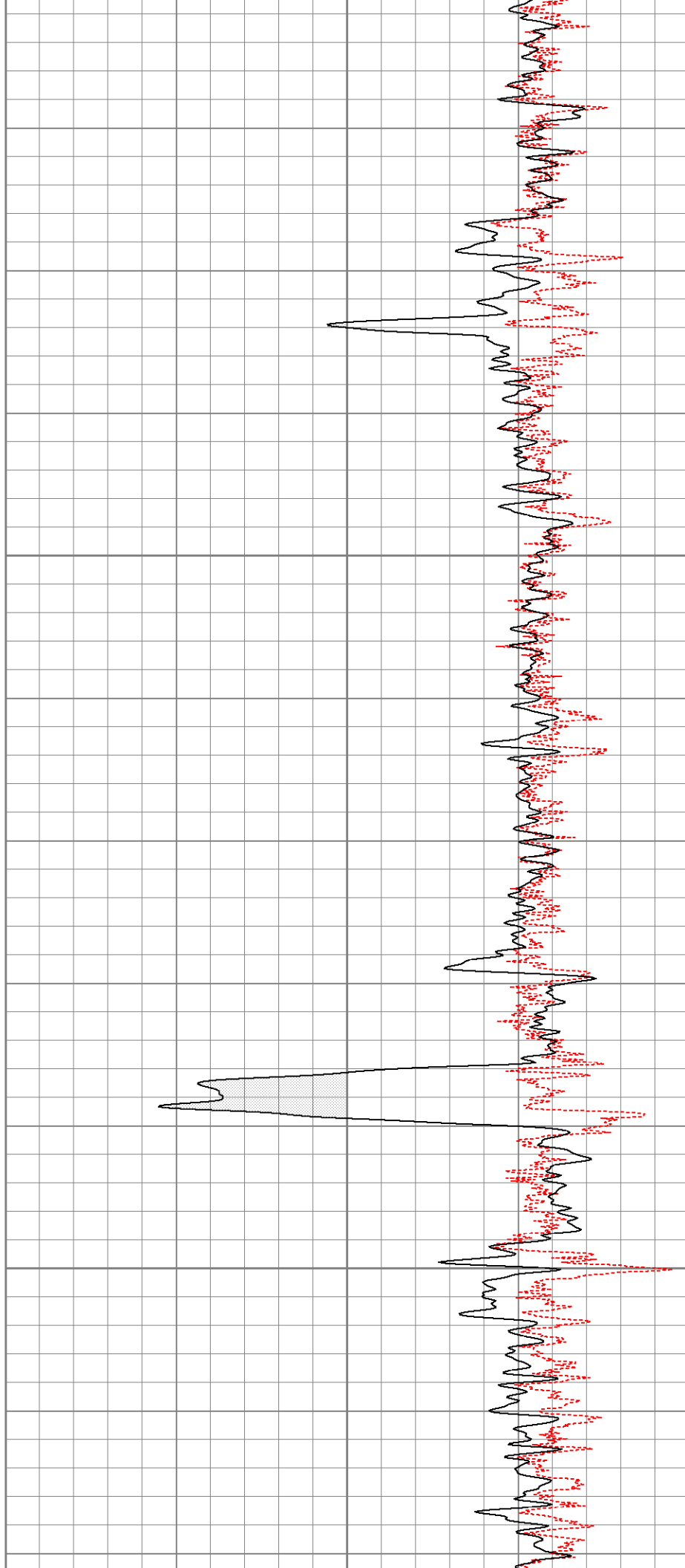
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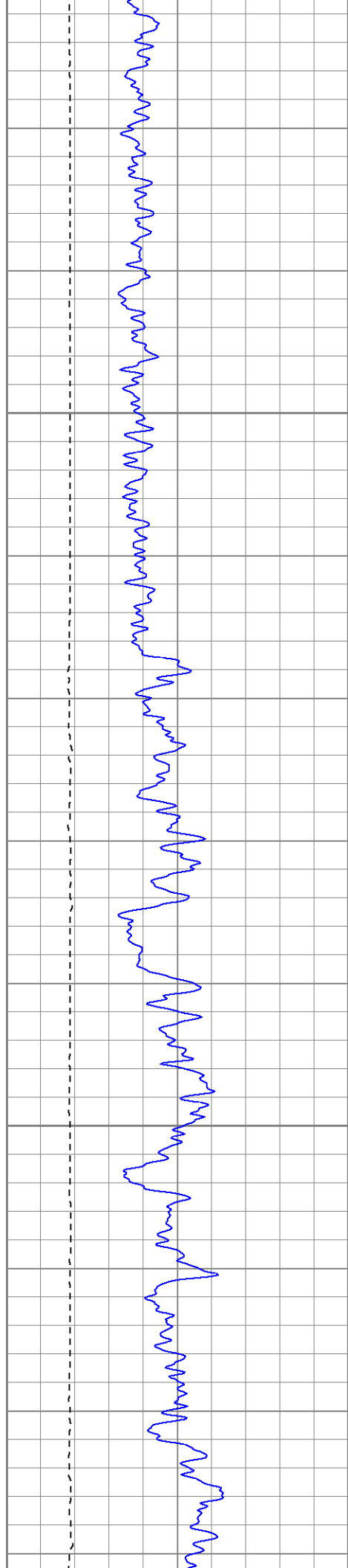




1500

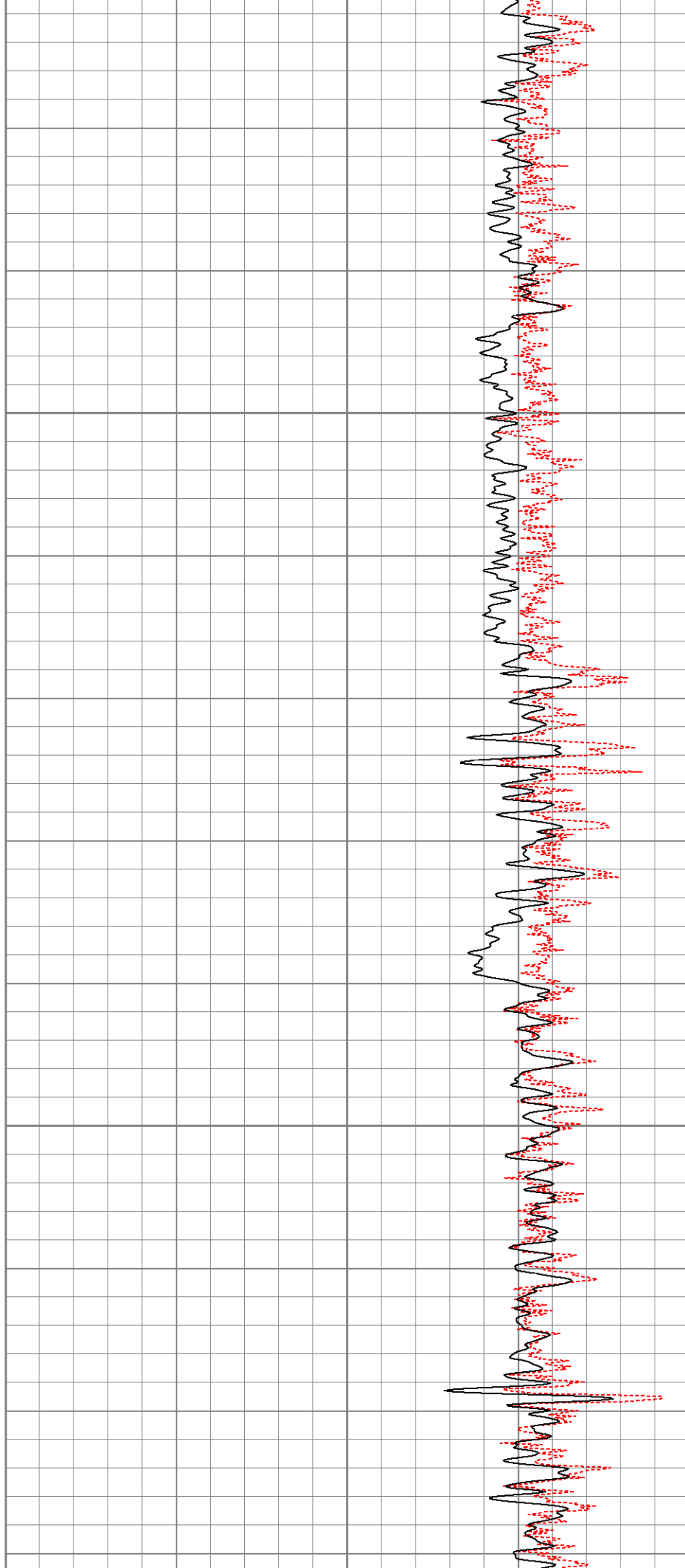
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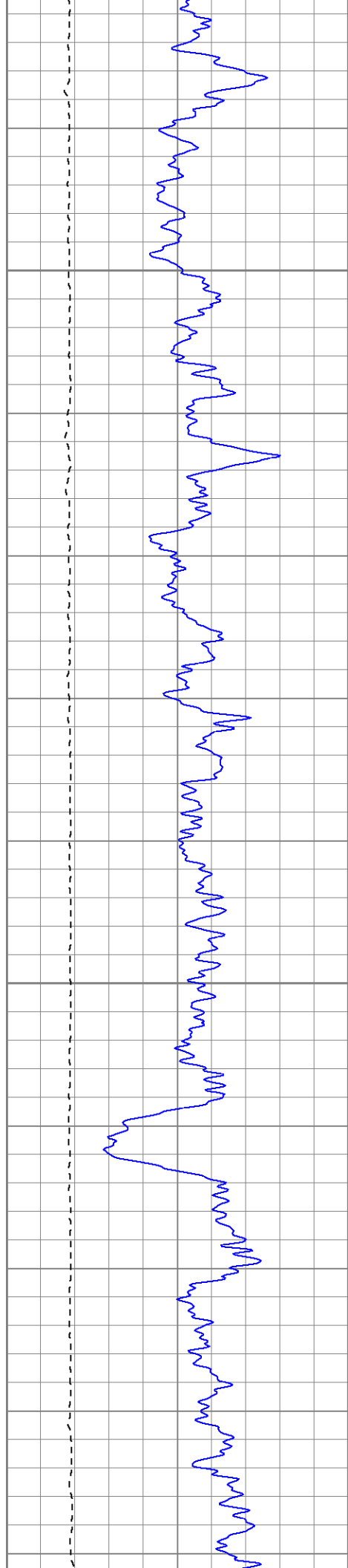




1600

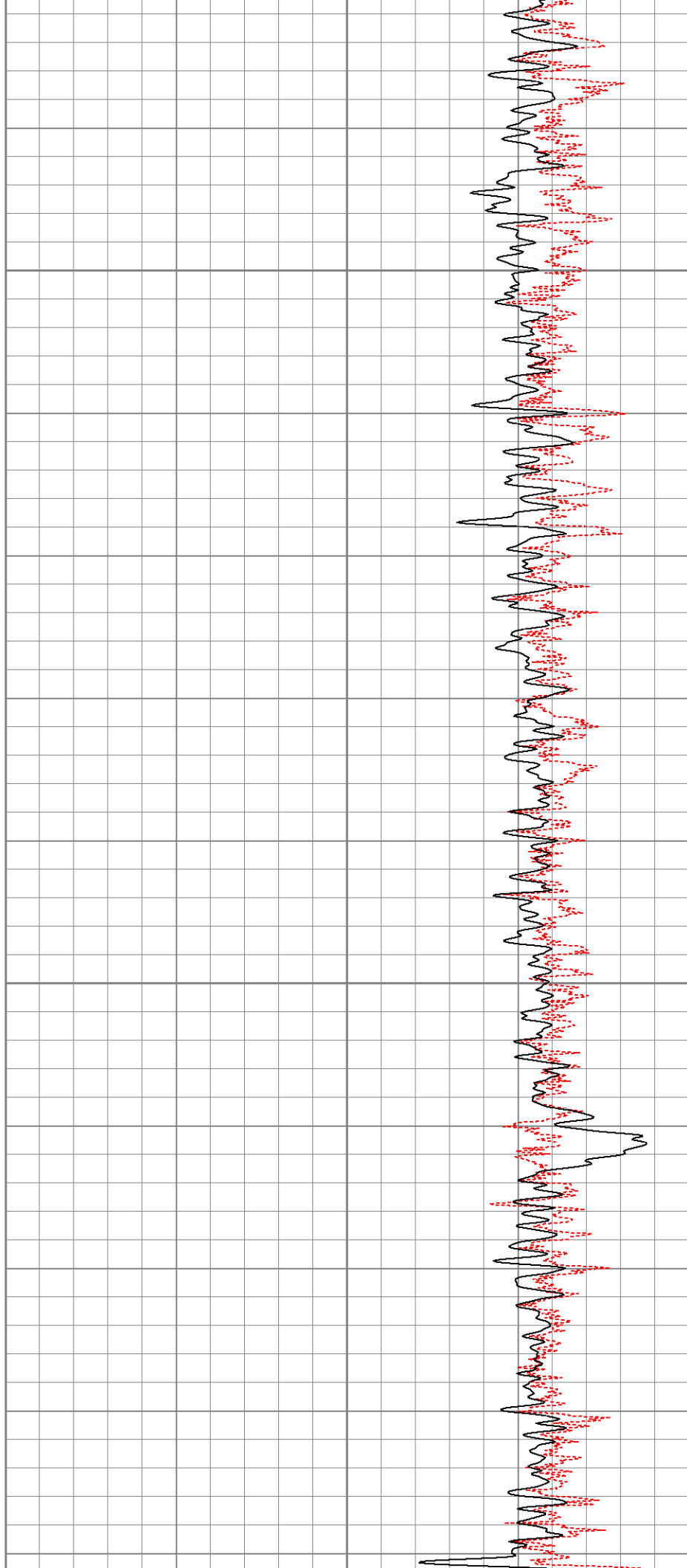
1650

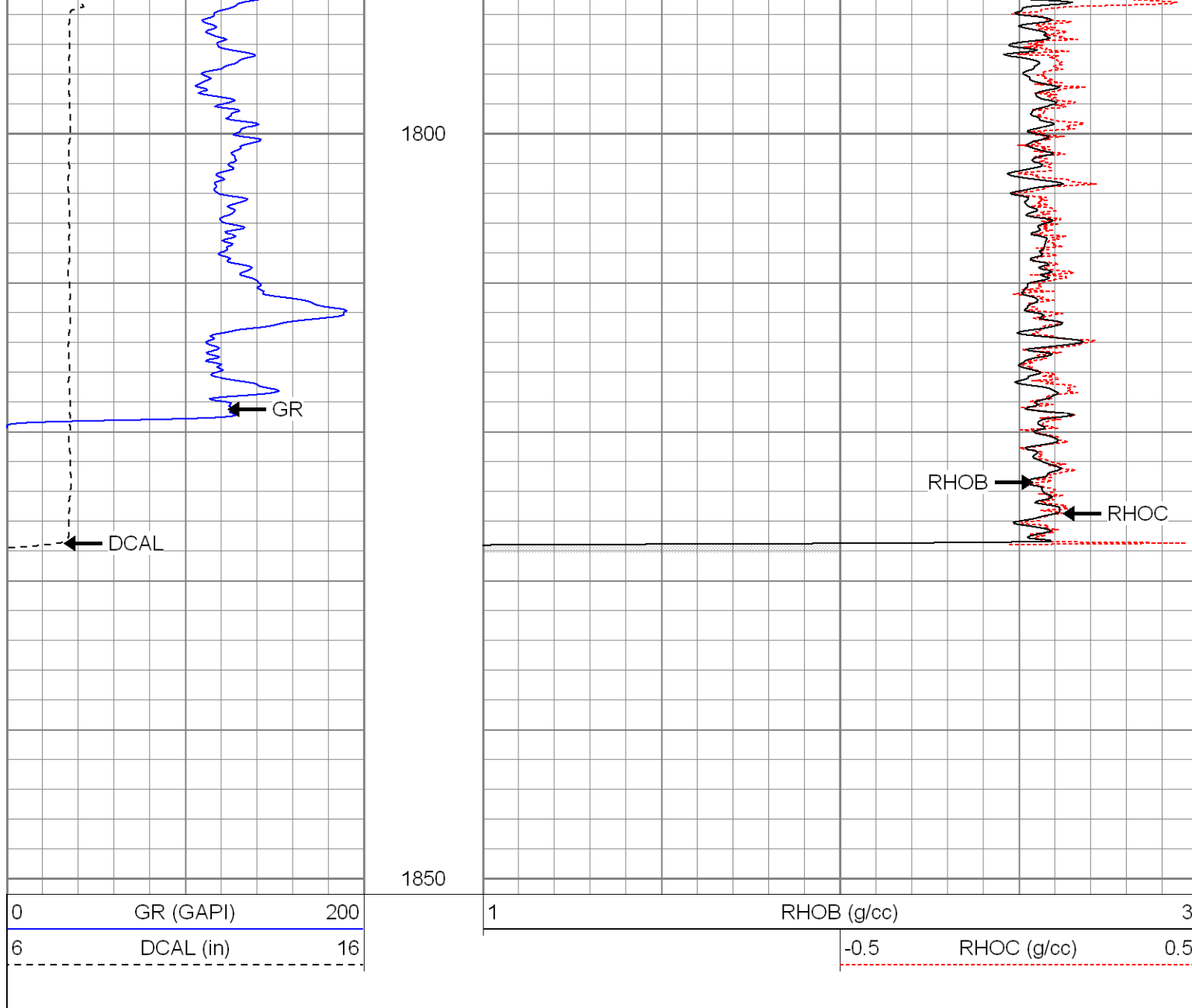




1700

1750





Calibration Report

Database File: xtoac3512.db
 Dataset Pathname: pass1
 Dataset Creation: Tue Sep 04 13:17:31 2007 by Log Open-Cased 061129

Dual Induction Calibration Report

Serial-Model: 5375-G
 Surface Cal Performed: Tue Sep 04 13:04:50 2007
 Downhole Cal Performed: Thu Aug 09 09:45:00 2007

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.002	0.622	V	0.000	500.000	mmho-m	500.000	2.000
Medium	0.004	0.745	V	0.000	550.000	mmho-m	450.000	2.000
Internal:	Zero			Cal			Results	
	Zero	Cal		Zero	Cal		m	b
Deep	0.002	0.621	V	0.000	500.000	mmho-m	500.000	2.000
Medium	0.004	0.745	V	0.000	550.000	mmho-m	450.000	2.000

Downhole Calibration								
Internal:	Readings			References			Results	
	Zero	Cal		Zero	Cal		m	b
Deep	0.000	0.000	mmho-m	-0.227	499.739	mmho-m	1.000	0.000
Medium	0.000	0.000	mmho-m	-0.131	549.624	mmho-m	1.000	0.000
Shallow	2.506	0.009	V	500.000	2.000	Ohm-m	0.000	2000.000

Compensated Density Calibration Report

Serial-Model:	2118-poilex
Source / Verifier:	/
Master Calibration Performed:	Fri Aug 17 09:14:33 2007


Master Calibration						
	Density			Far Detector		
					Near Detector	
Magnesium	1.710	g/cc		698.03	691.84	cps
Aluminum	2.590	g/cc		159.73	473.01	cps
Spine Angle = 75.54			Density/Spine Ratio = 0.578			
	Size			Reading		
Small Ring	7.85	in		4.25	V	
Large Ring	14.00	in		9.25	V	

Gamma Ray Calibration Report

Serial Number:	2001	
Tool Model:	OH	
Performed:	Wed Aug 08 12:47:02 2007	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.1700	GAPI/cps

Neutron Calibration Report

Serial Number:	5145	
Tool Model:	G	
Performed:	Wed Aug 08 10:32:23 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
GP	34.00					

