

**COMPENSATED DENSITY  
NEUTRON  
LOG**

Company	Pioneer Natural Resources	Company	Pioneer Natural Resources
Well	Lynn 32-4 Tr	Well	Lynn 32-4 Tr
Field	Purgatoire River	Field	Purgatoire River
County	Las Animas	County	Las Animas
State	Colorado	State	Colorado
Location:	API #: 05 071 09712 00 2128' FNL & 1614' FEL	Other Services	SIL
Permanent Datum	SEC 4 TWP 33S RGE 67W	Elevation	
Log Measured From	Ground Level	K.B. 7535'	
Drilling Measured From	Kelly Bushing 4' AGL Kelly Bushing	D.F. -----	
		G.L. 7531'	
Date	6-12-11		
Run Number	One		
Depth Driller	1935'		
Depth Logger	1902'		
Bottom Logged Interval	1886'		
Top Log Interval	Surface Casing		
Casing Driller	8 5/8" @ 536'		
Casing Logger	535'		
Bit Size	7 7/8"		
Type Fluid in Hole	Airated 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	1:00 A.M.		
Time Logger on Bottom	3:30 A.M.		
Maximum Recorded Temperature	102 DEG F		
Equipment Number	T590		
Location	Trinidad		
Recorded By	C. Sisneros		
Witnessed By	Mr. Derrick Berry		

<<< Fold Here >>>

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**

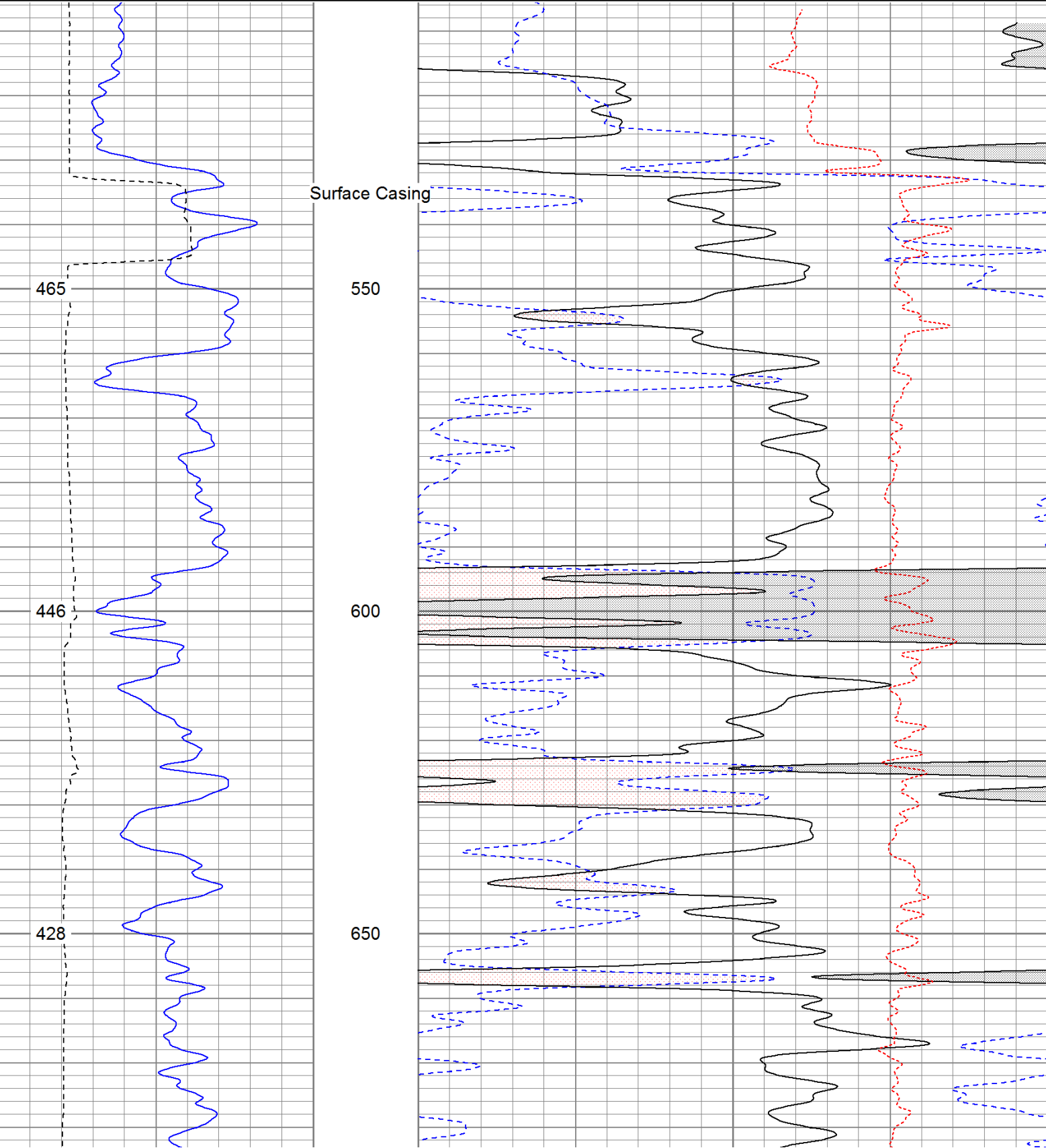
Density Porosity Presented On Sandstone Matrix.  
ABHV Calculated For 4.5" Casing.

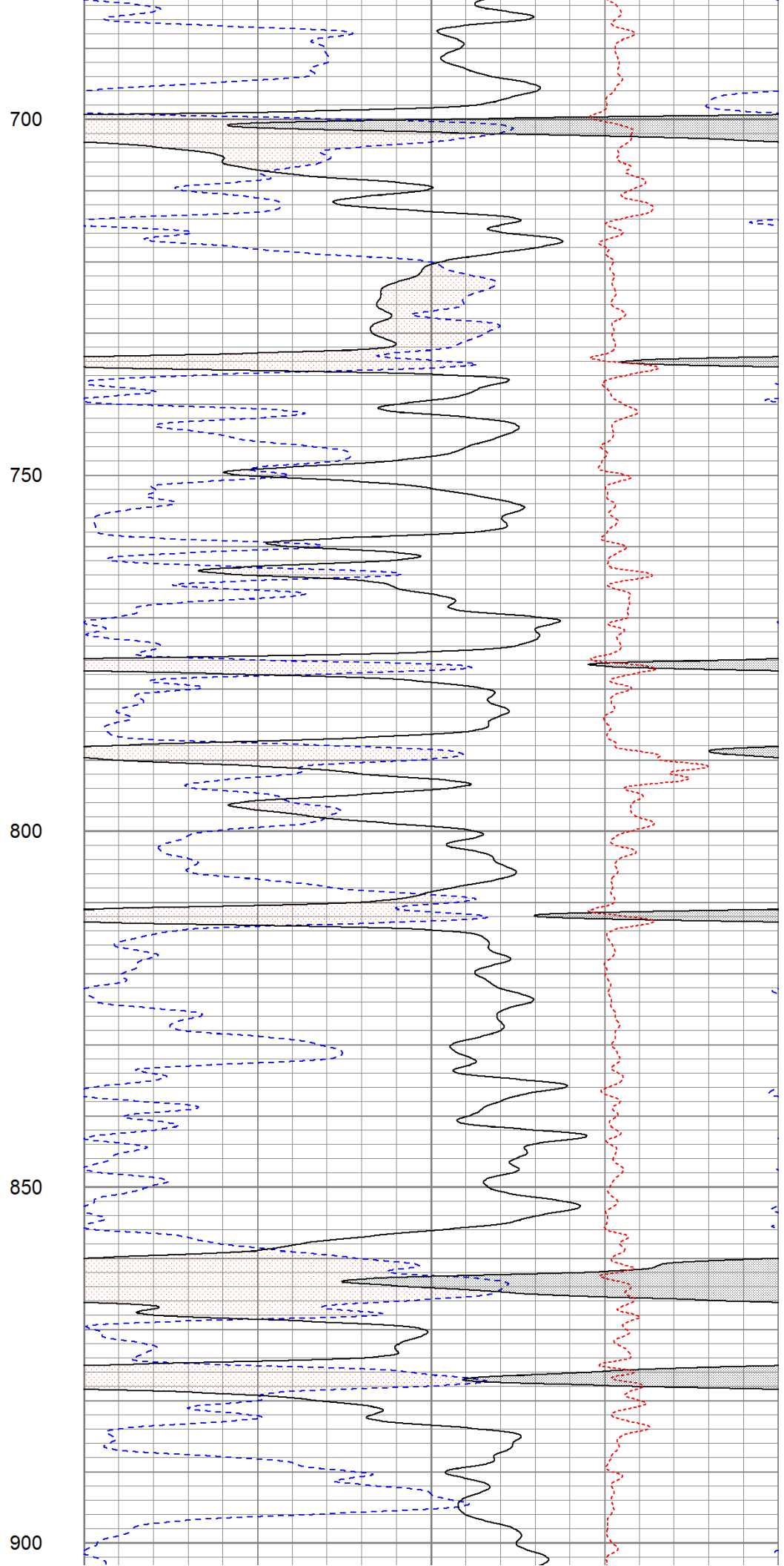
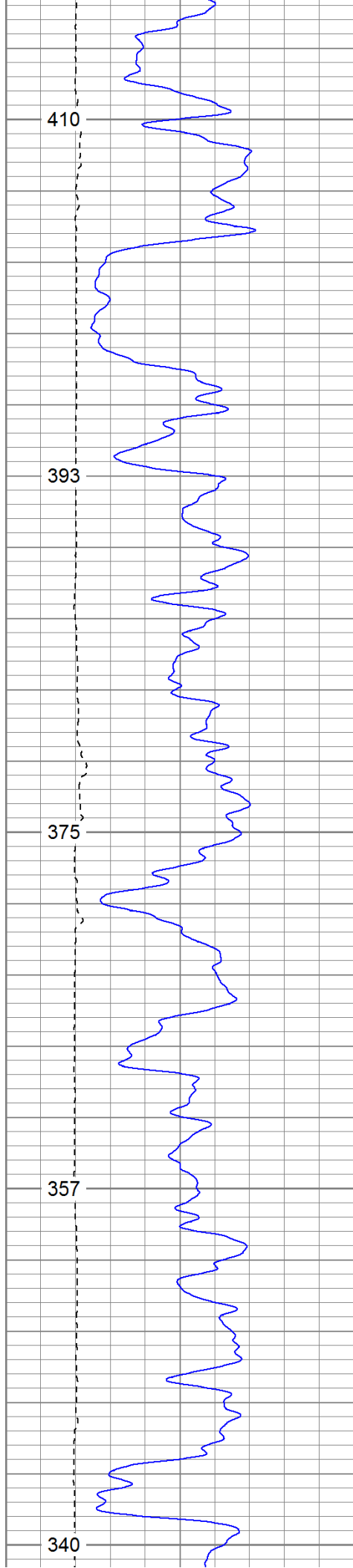
Directions:  
Wet Canyon, turn left up Cougar Ridge, 2nd left to location.

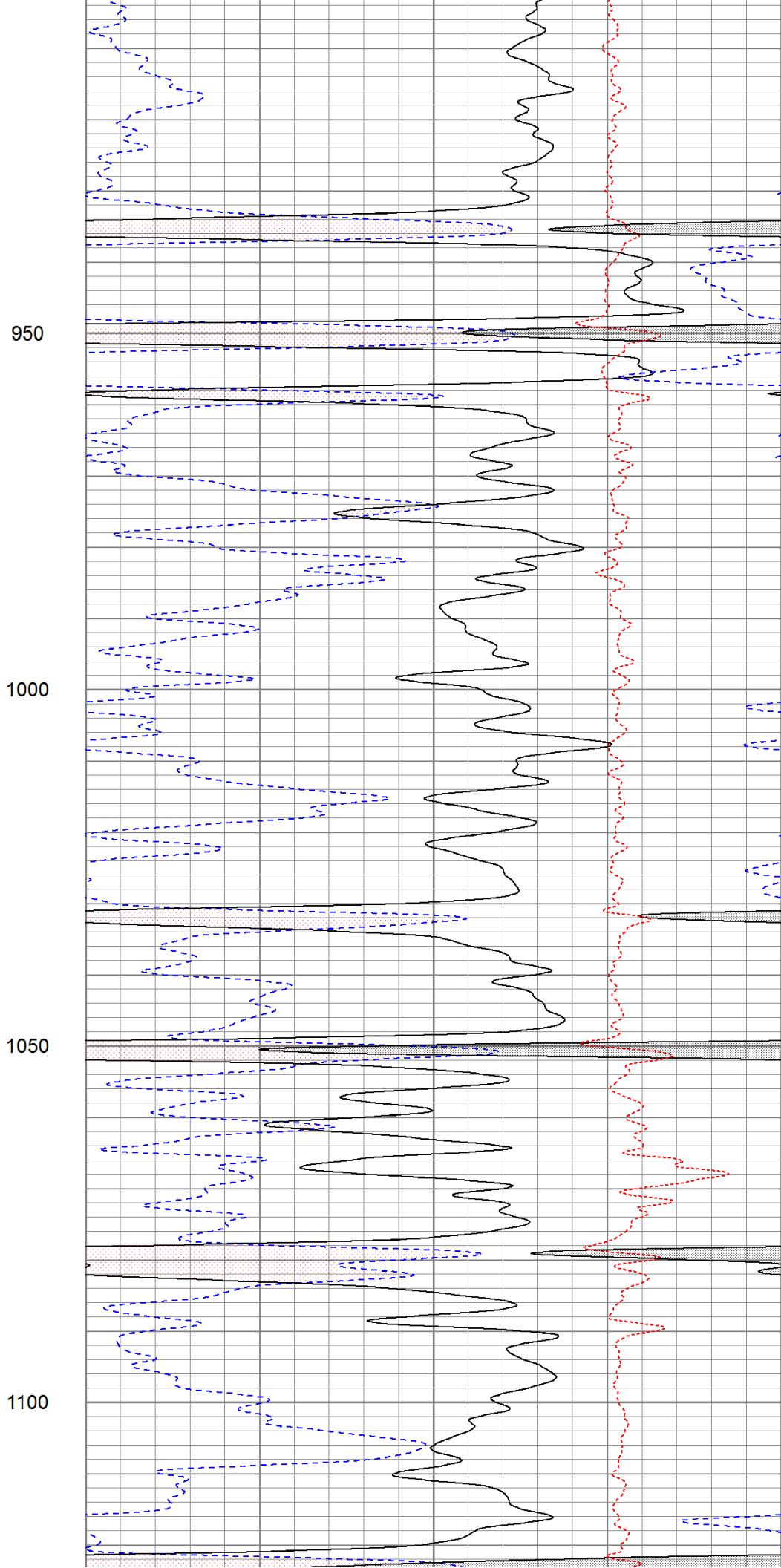
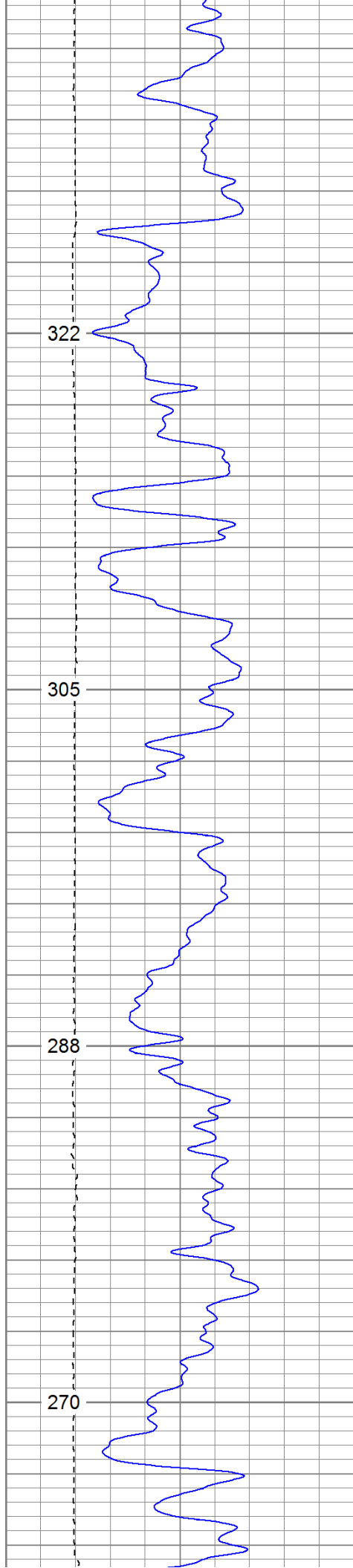
Database File: lynntr.db  
Dataset Pathname: pass2.1  
Presentation Format: cdnl  
Dataset Creation: Sun Jun 12 20:02:34 2011 by Calc Open-Cased 110302  
Charted by: Depth in Feet scaled 1:240

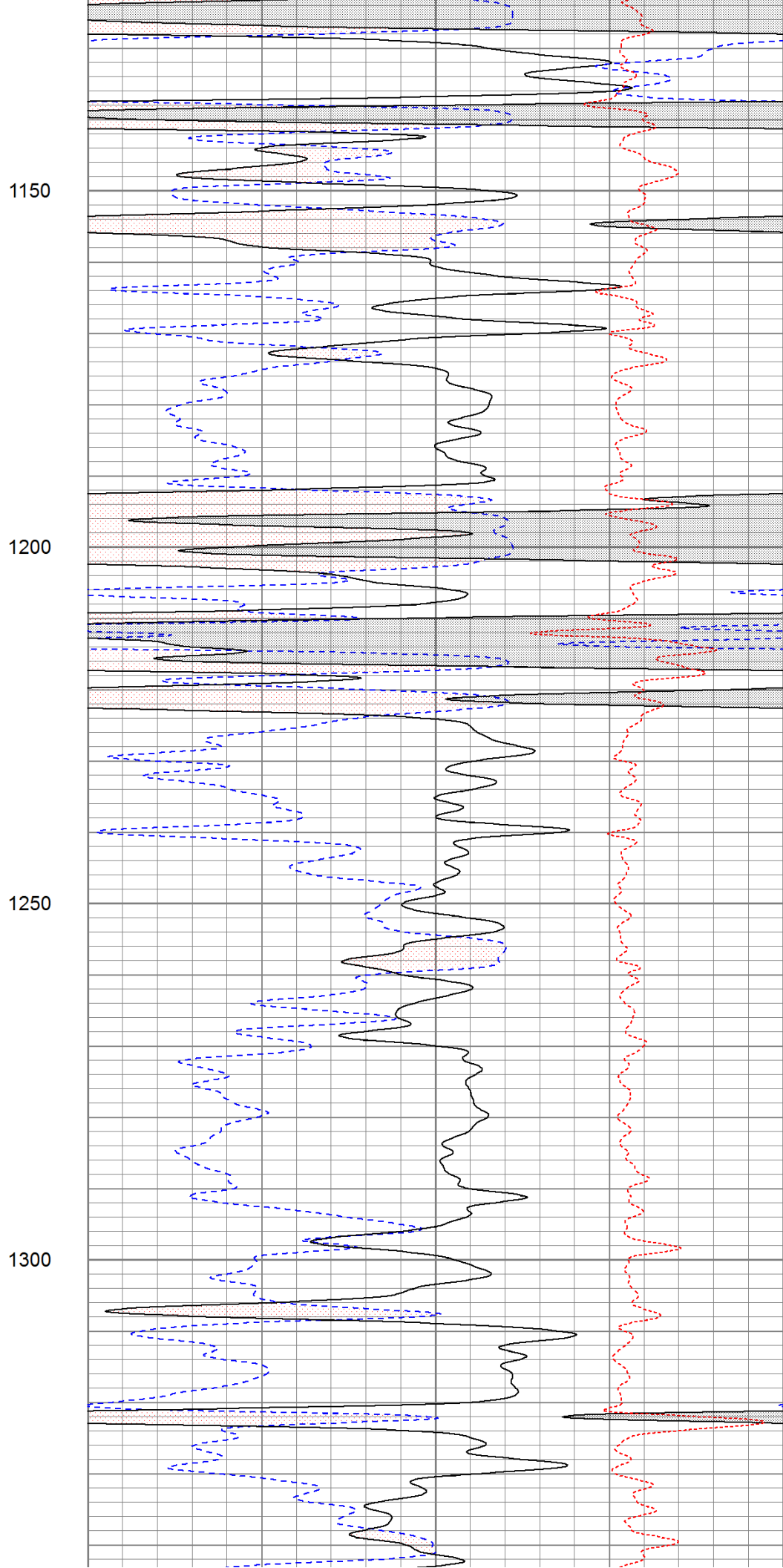
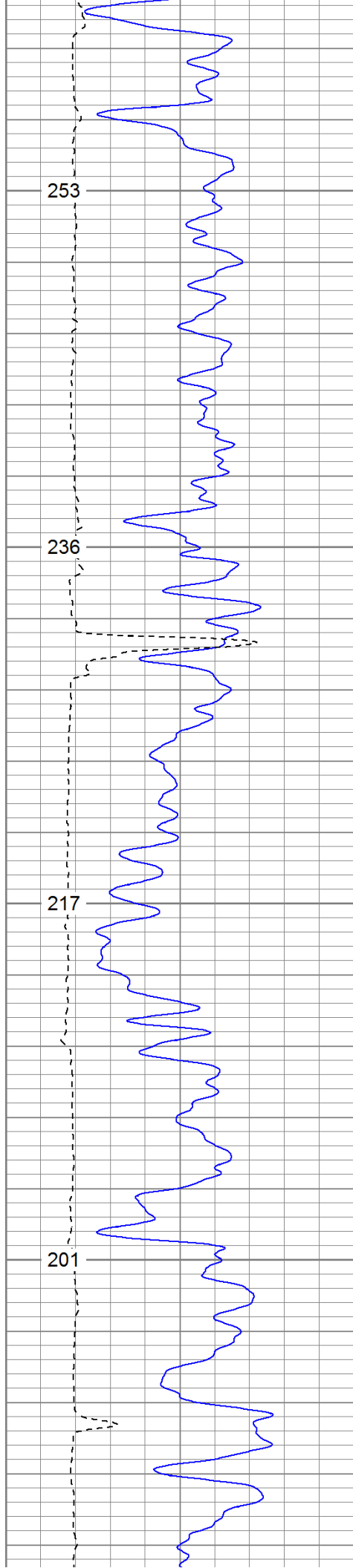
0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		

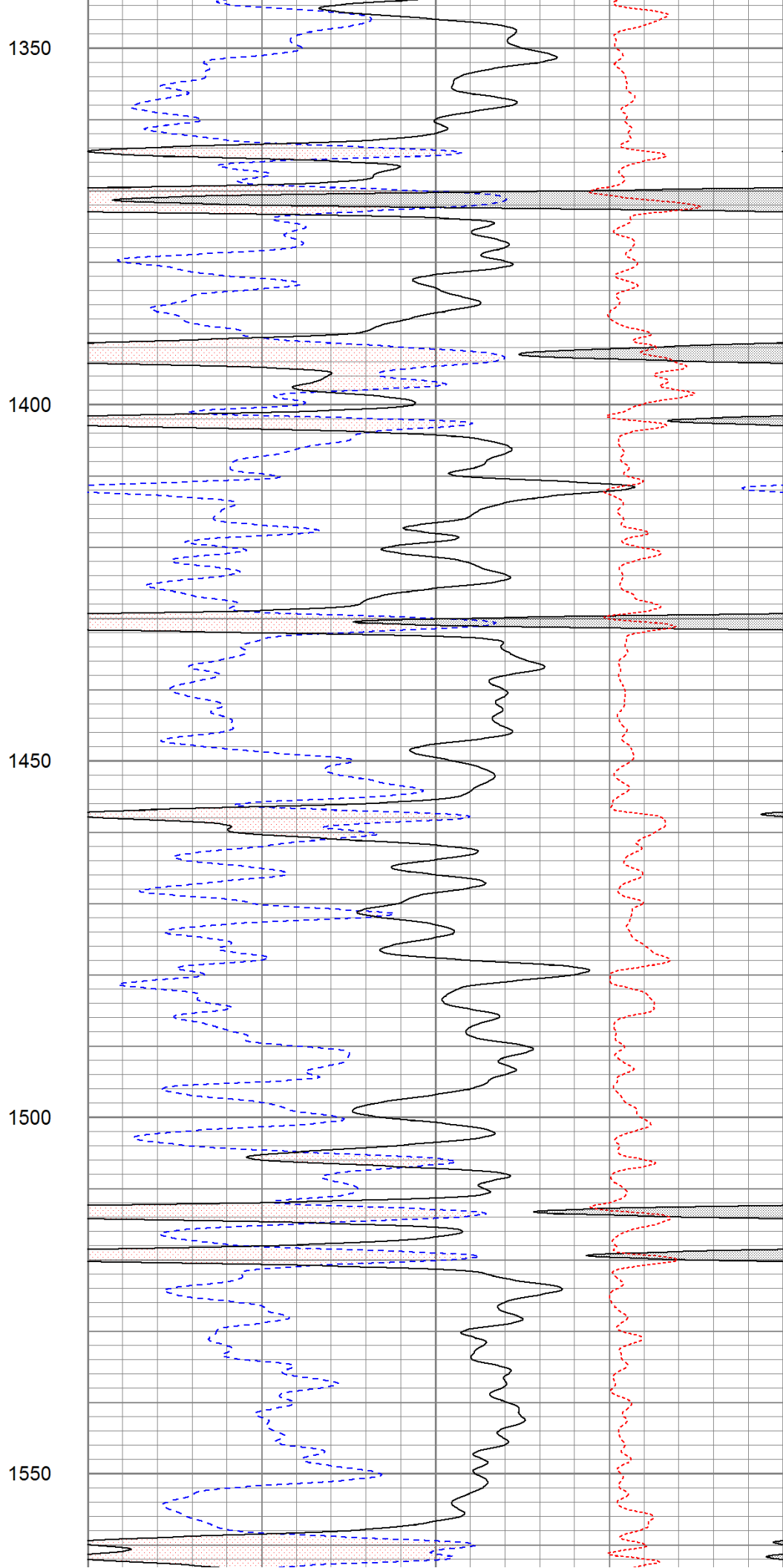
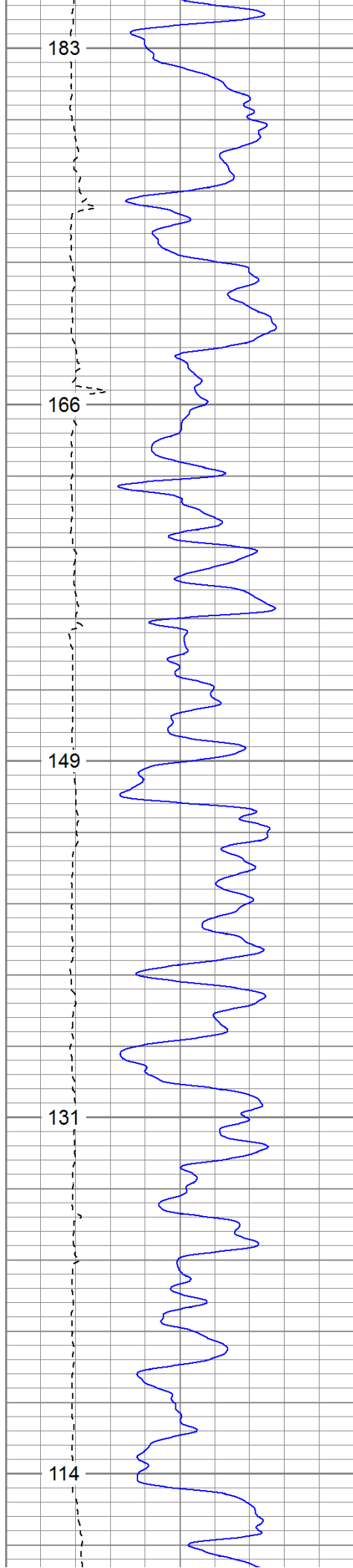
30	NPOR (pu)	-10
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5

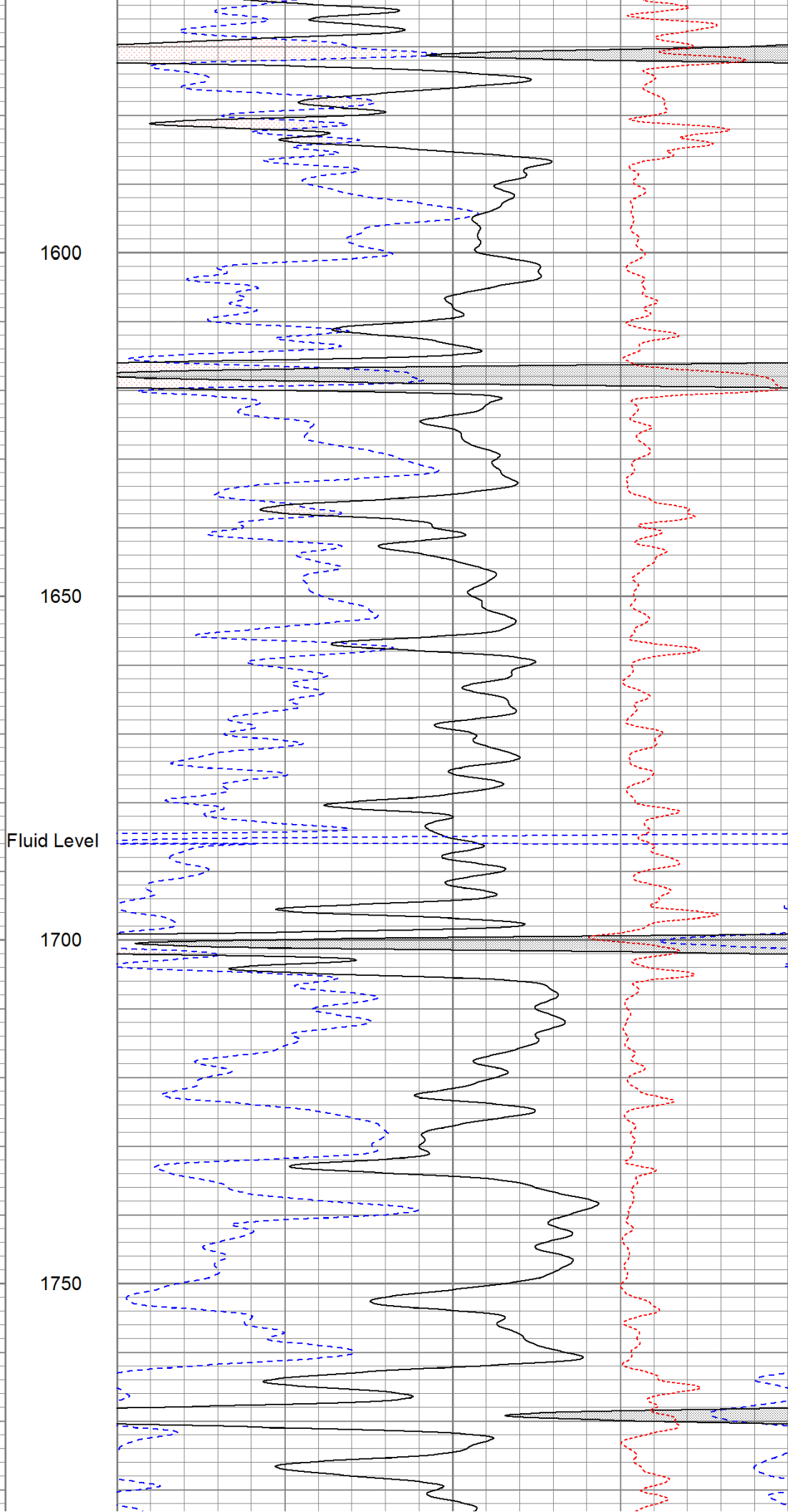
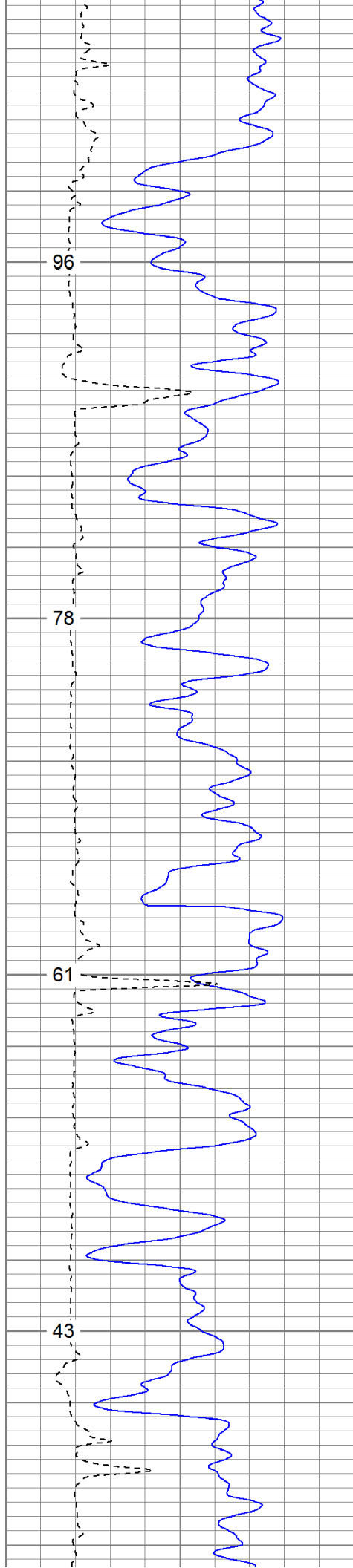


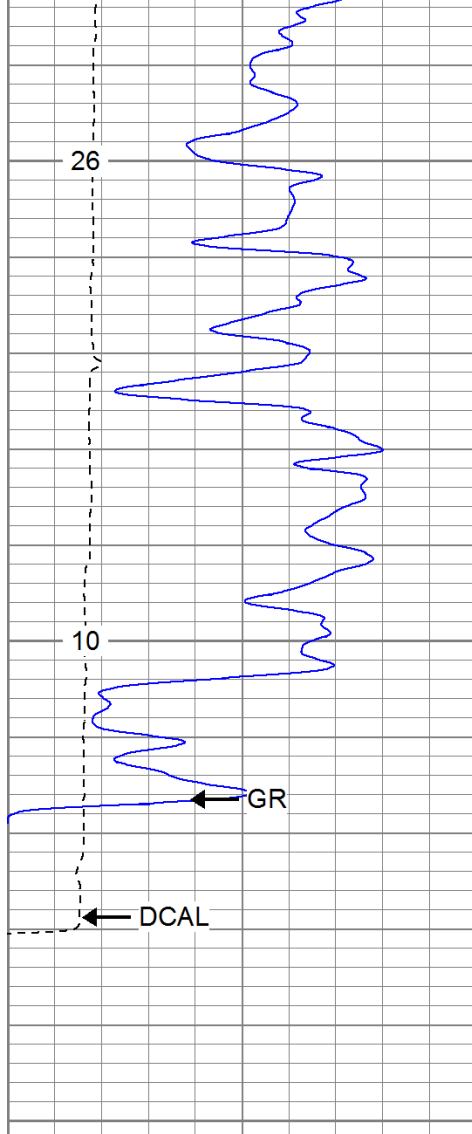




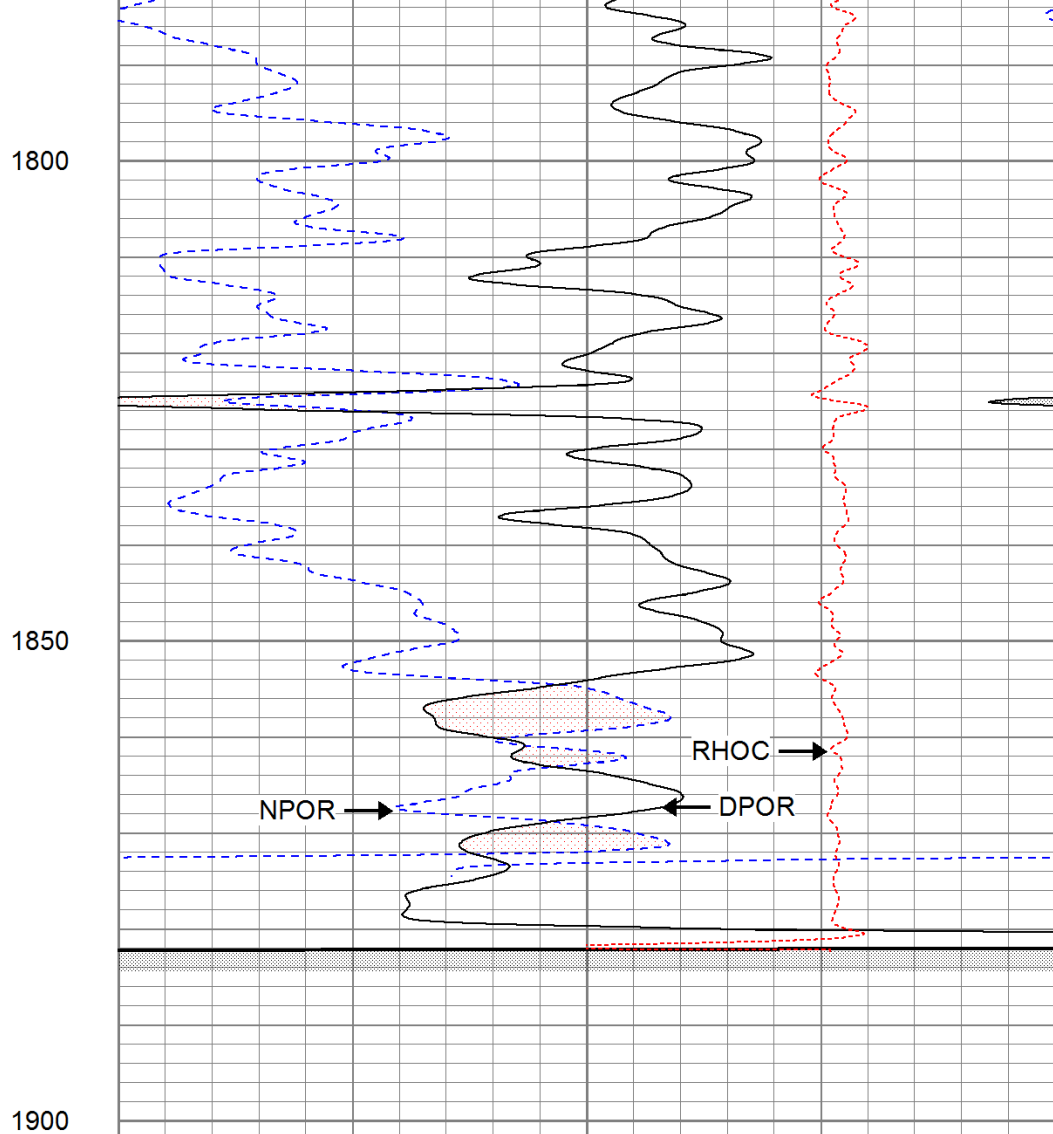








0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		



30	NPOR (pu)	-10
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5

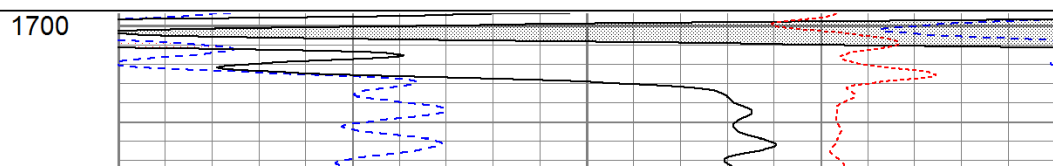
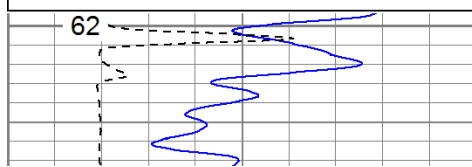


# Repeat Pass

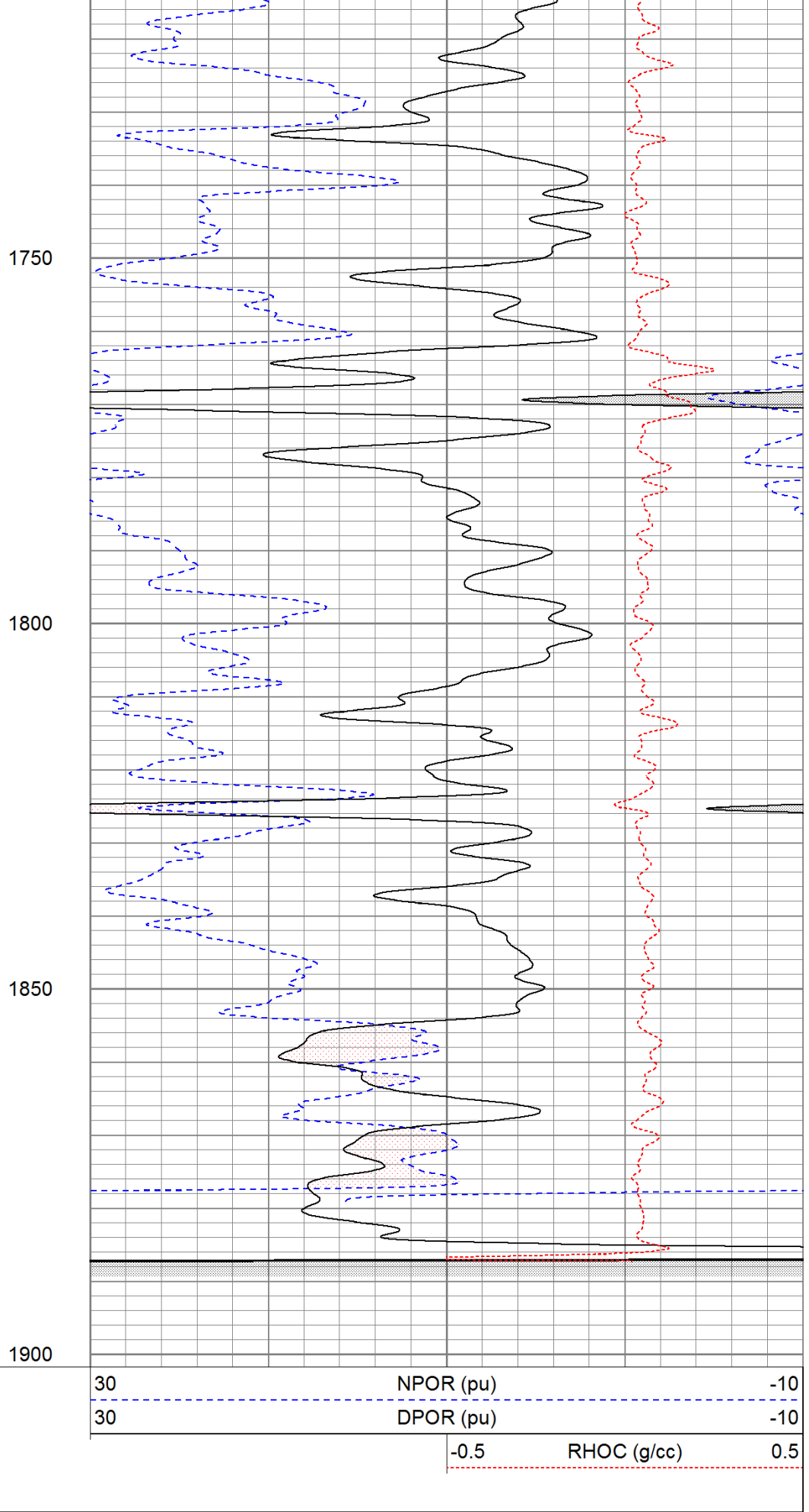
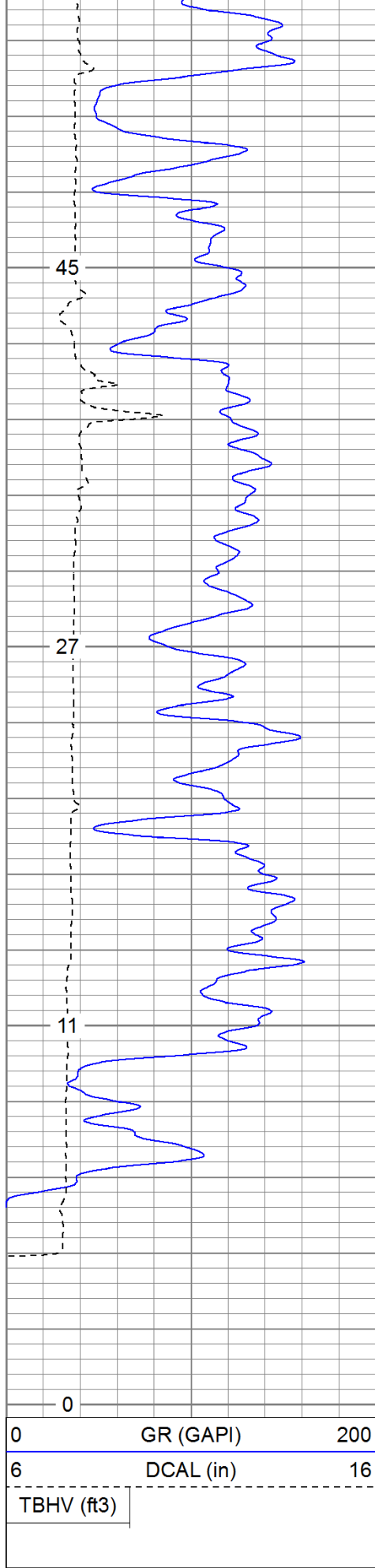
Database File: lynntr.db  
 Dataset Pathname: pass1.1  
 Presentation Format: cdnl  
 Dataset Creation: Sun Jun 12 20:16:22 2011 by Calc Open-Cased 110302  
 Charted by: Depth in Feet scaled 1:240

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



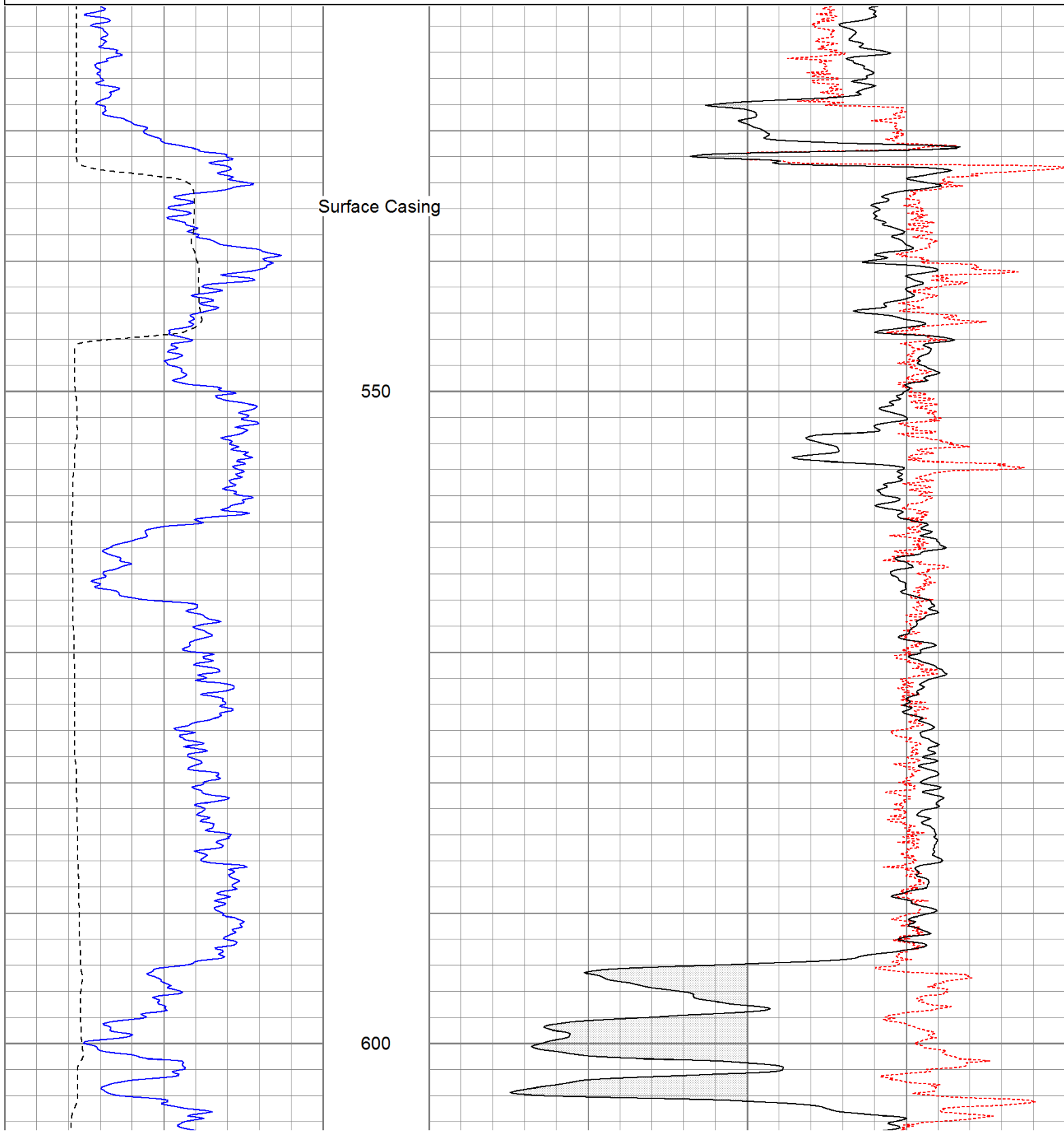


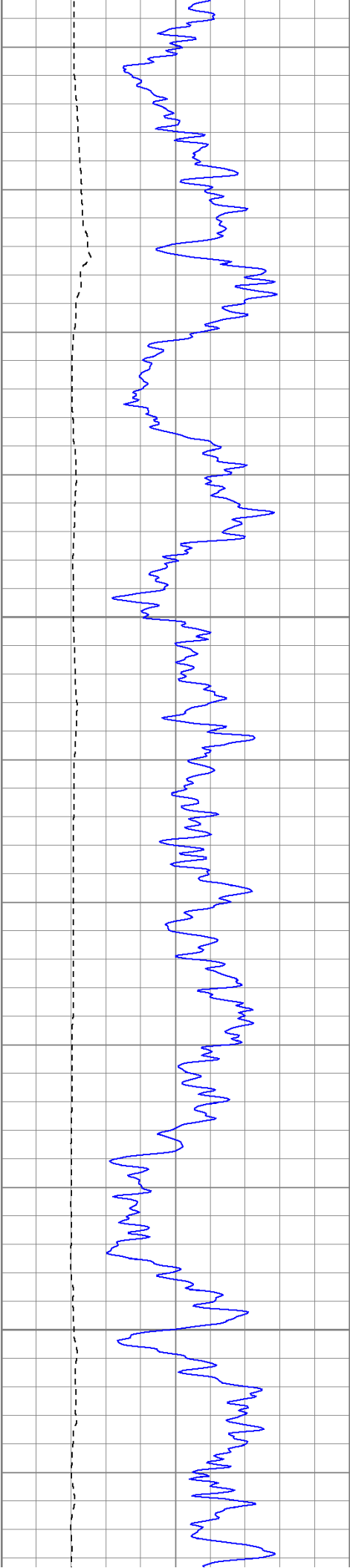


Database File: lynntr.db  
 Dataset Pathname: pass2.2  
 Presentation Format: cdlhr  
 Dataset Creation: Sun Jun 12 20:12:12 2011 by Calc Open-Cased 110302  
 Charted by: Depth in Feet scaled 1:120

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

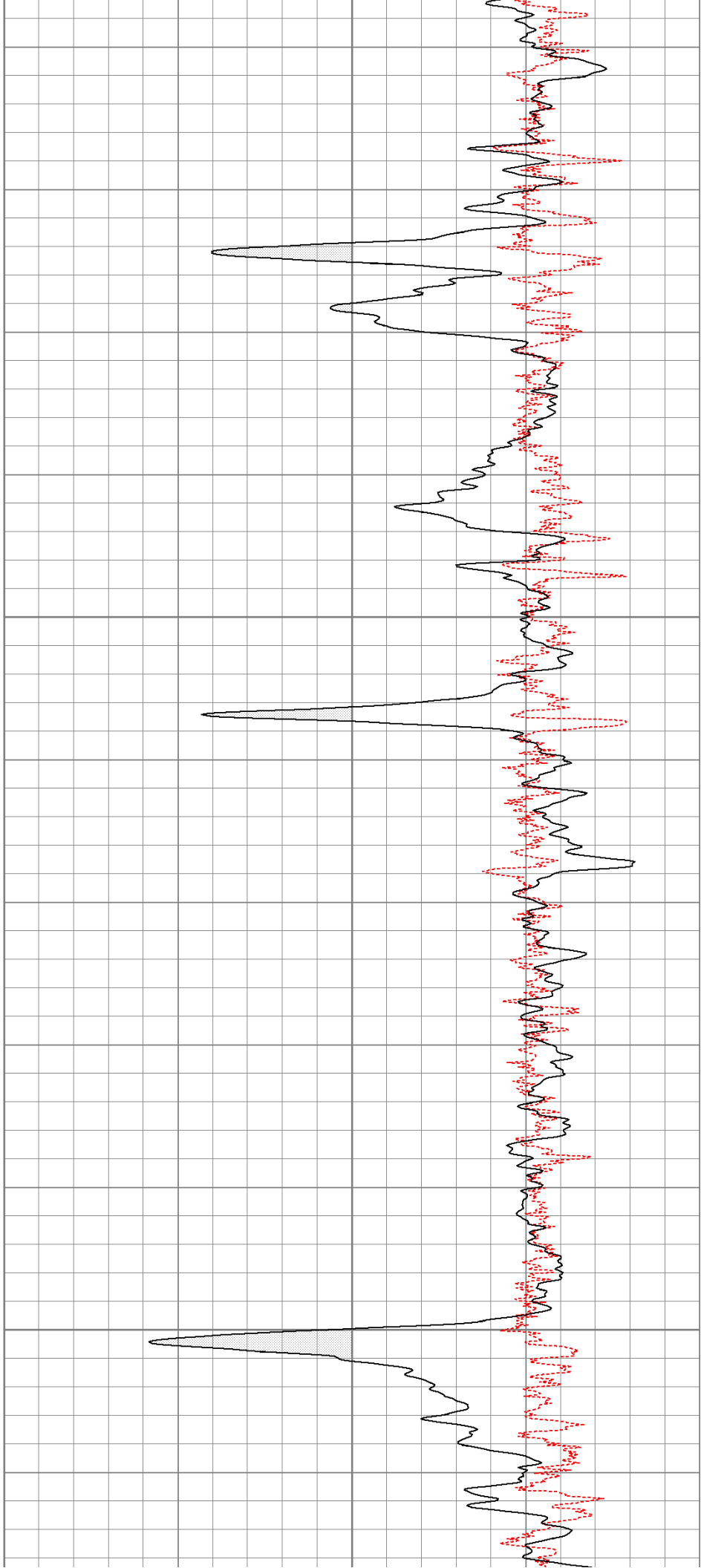
1	RHOB (g/cc)	3
-0.5	RHOC (g/cc)	0.5

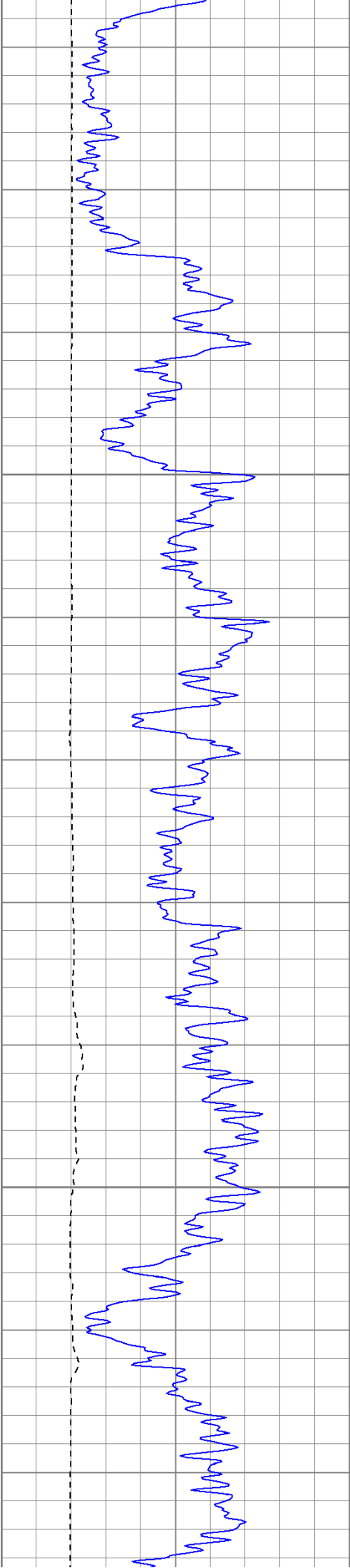




650

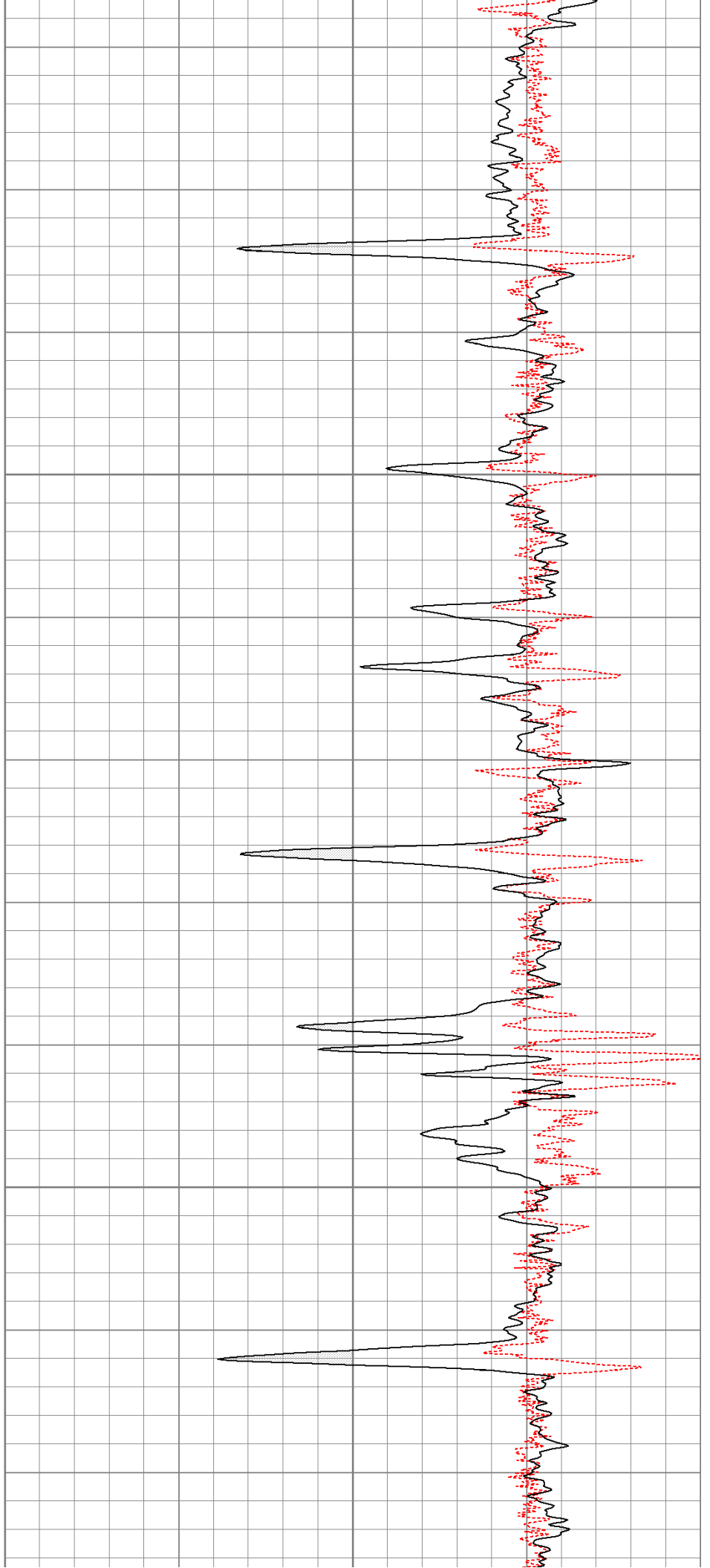
700

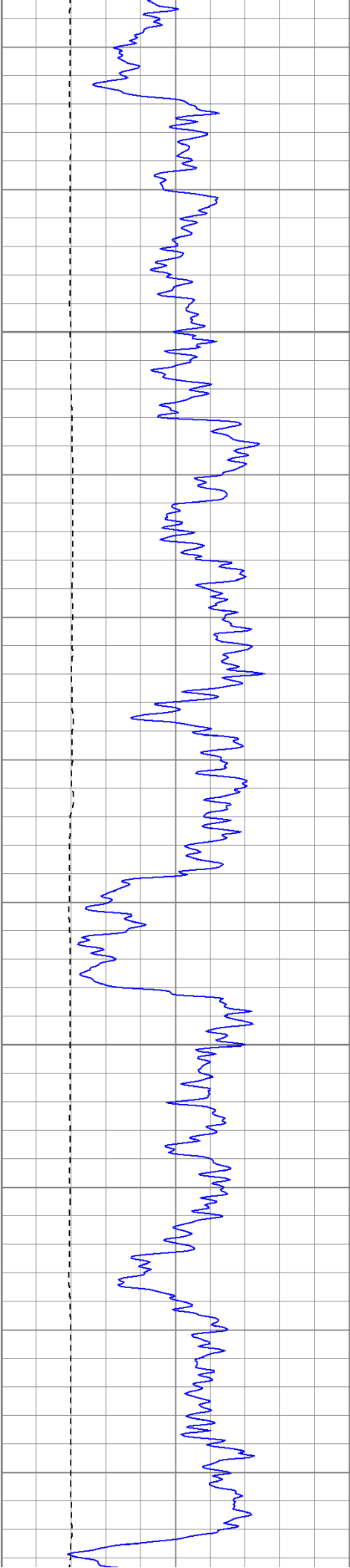




750

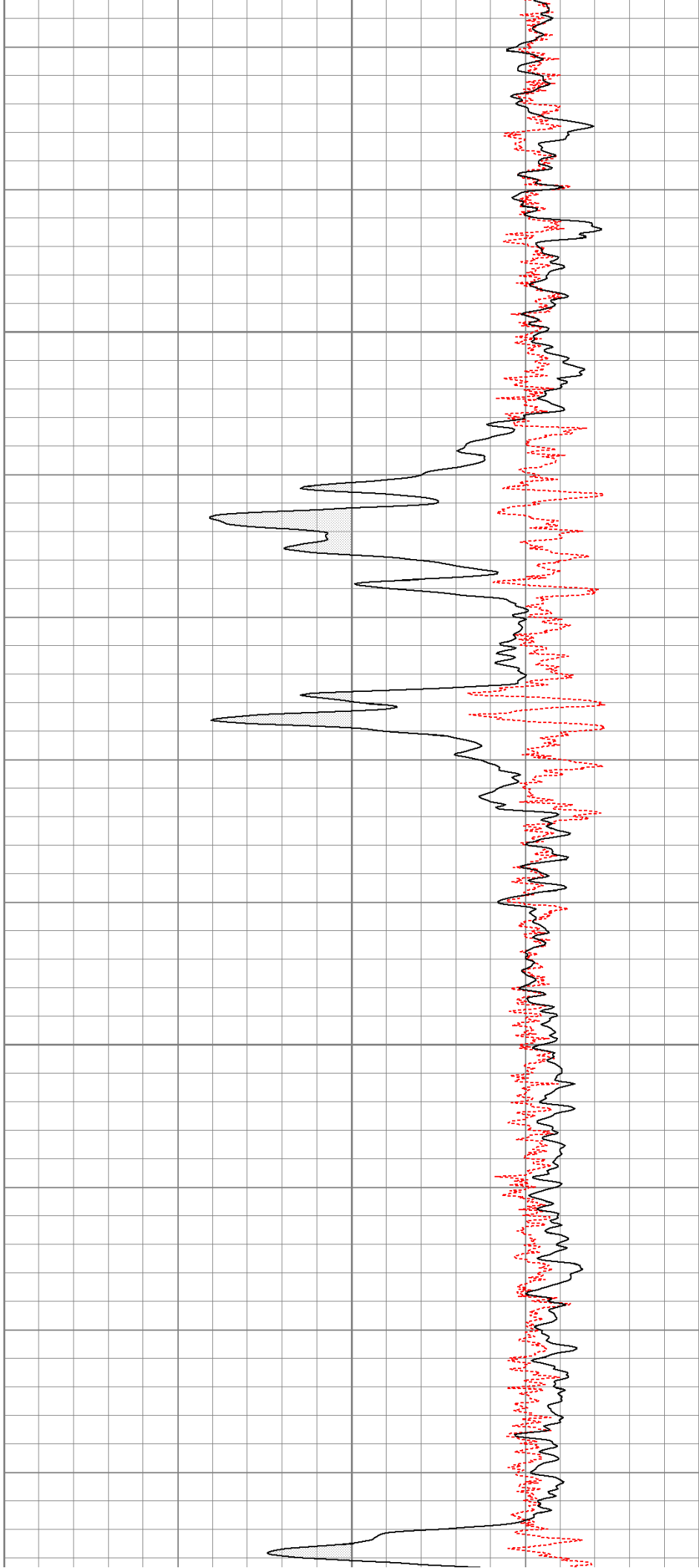
800

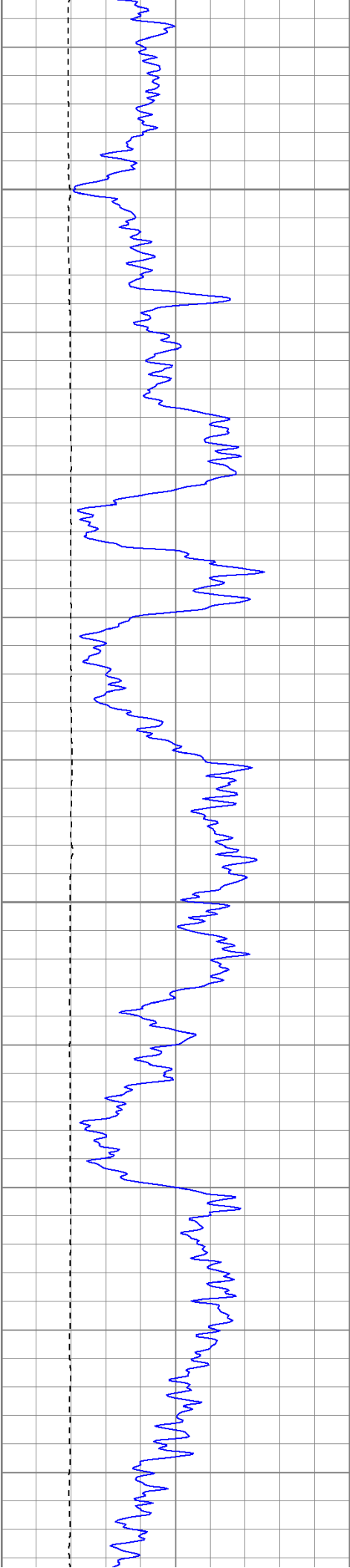




850

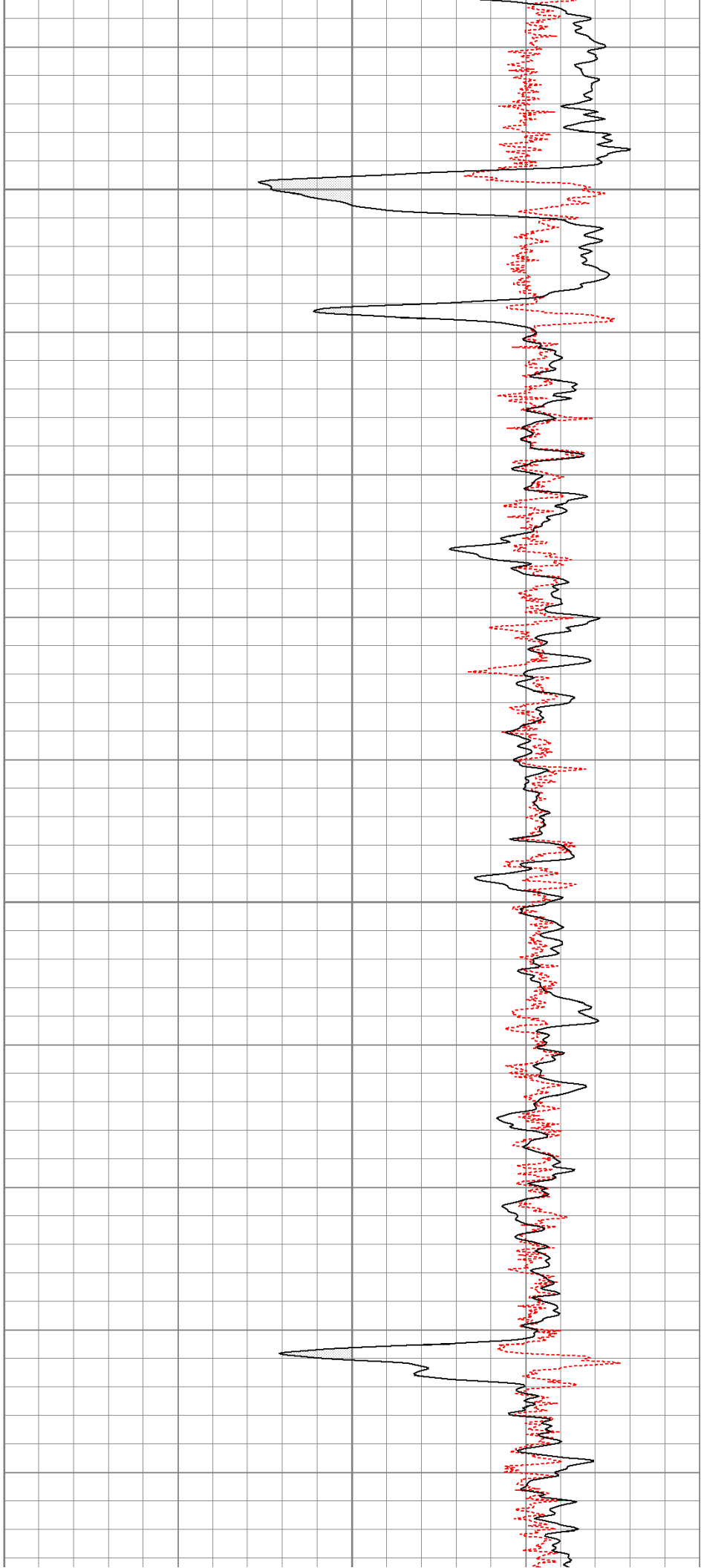
900





950

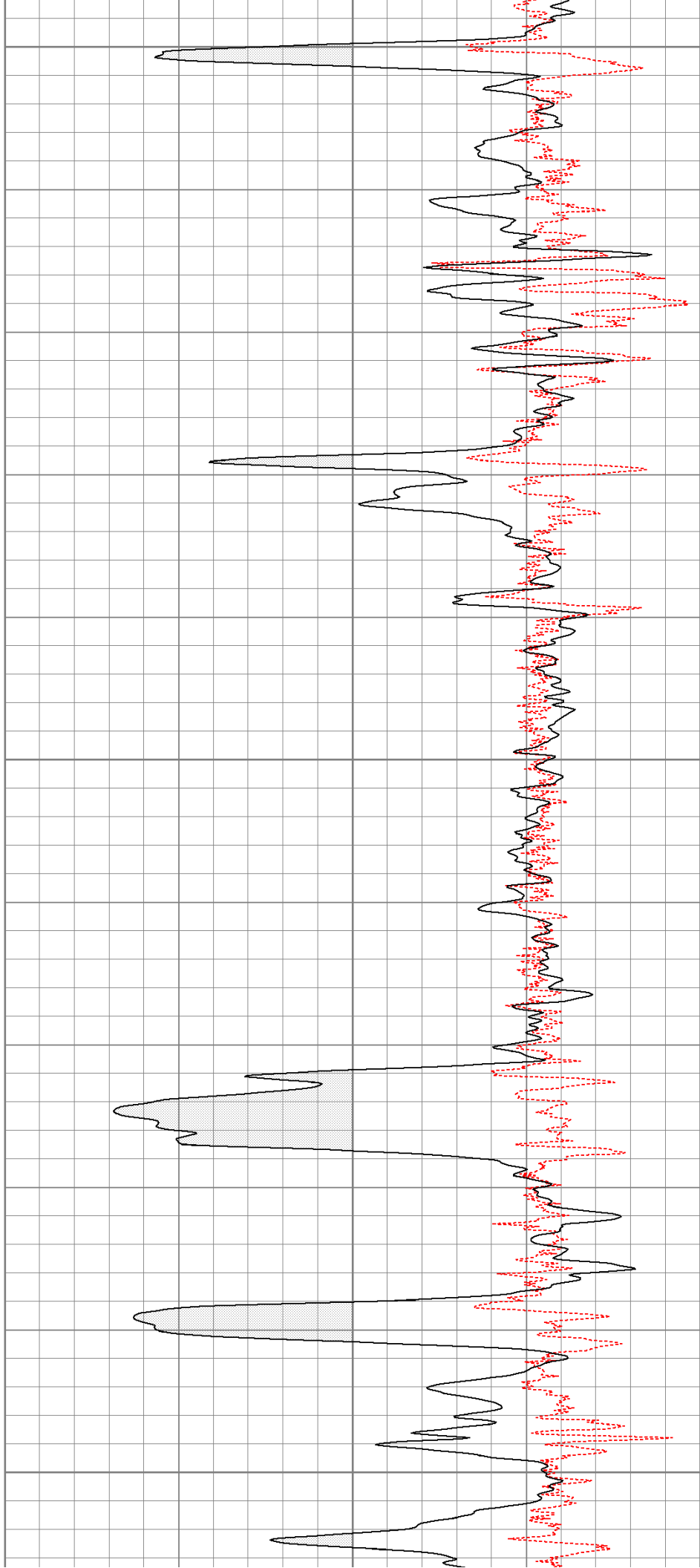
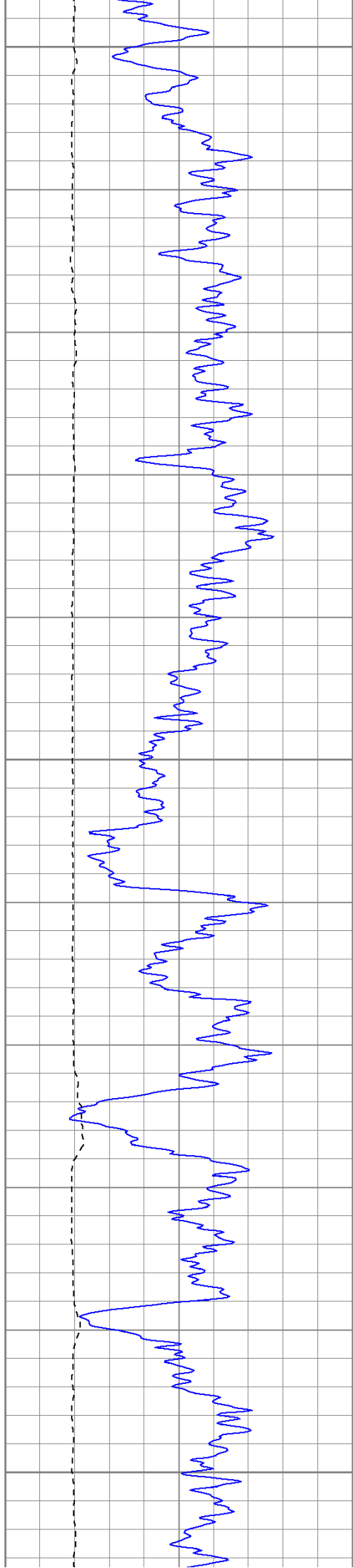
1000

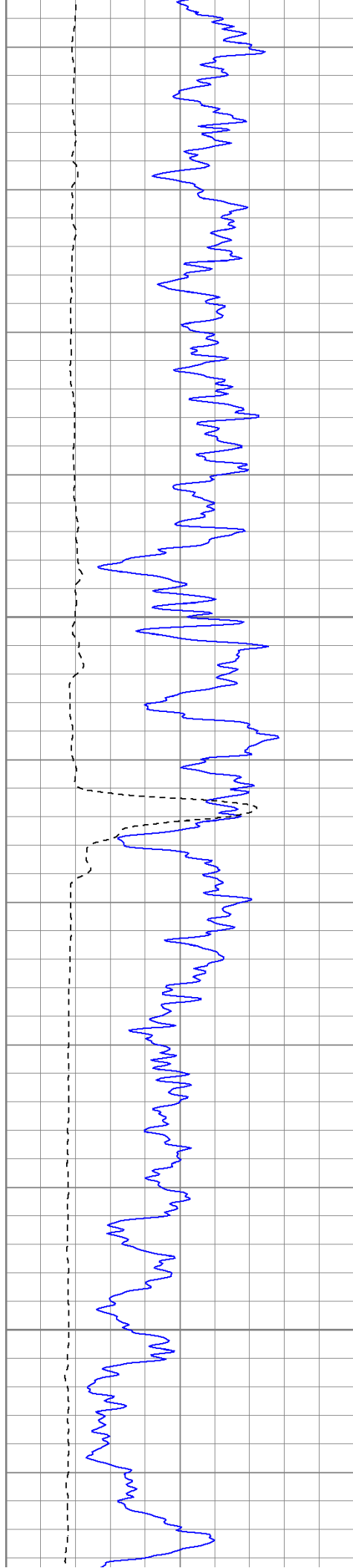


1050

1100

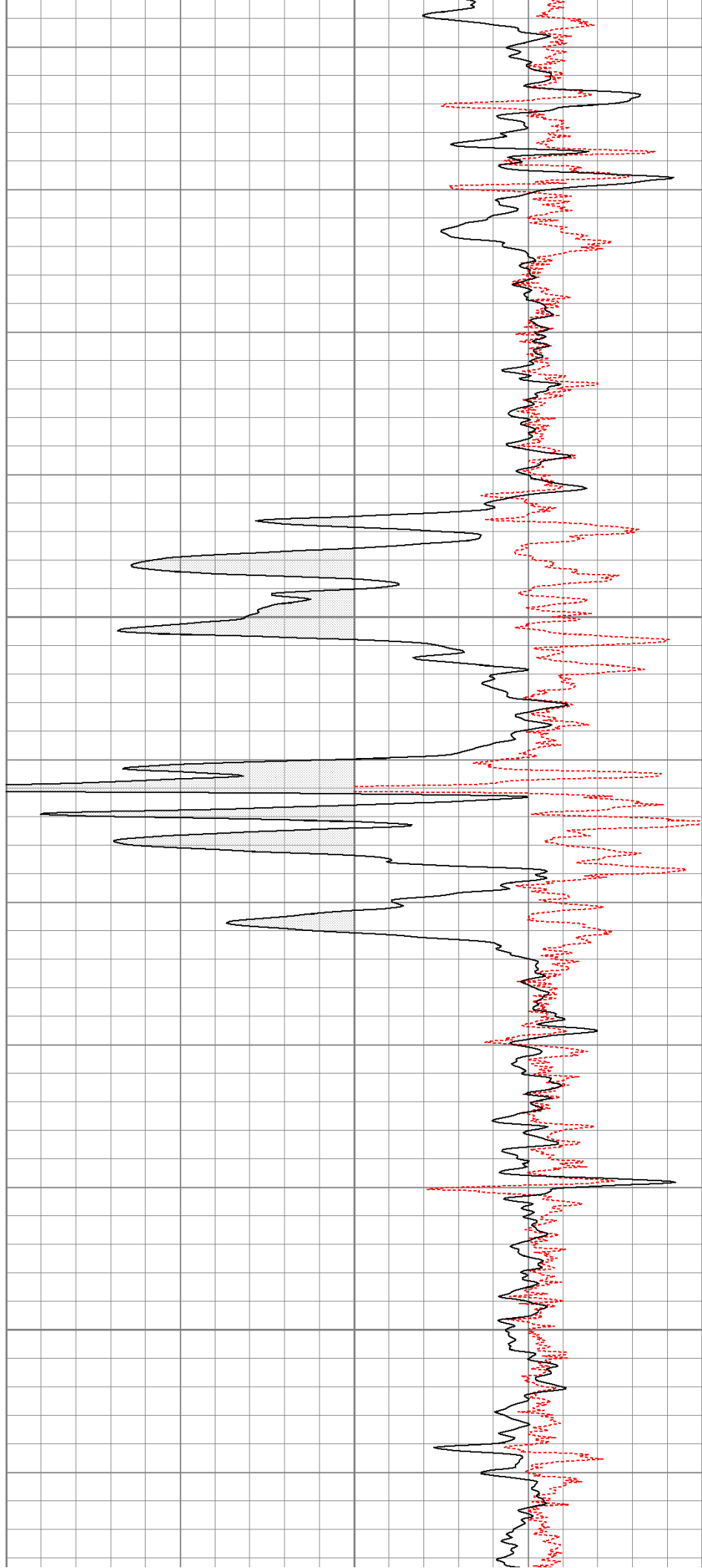
1150



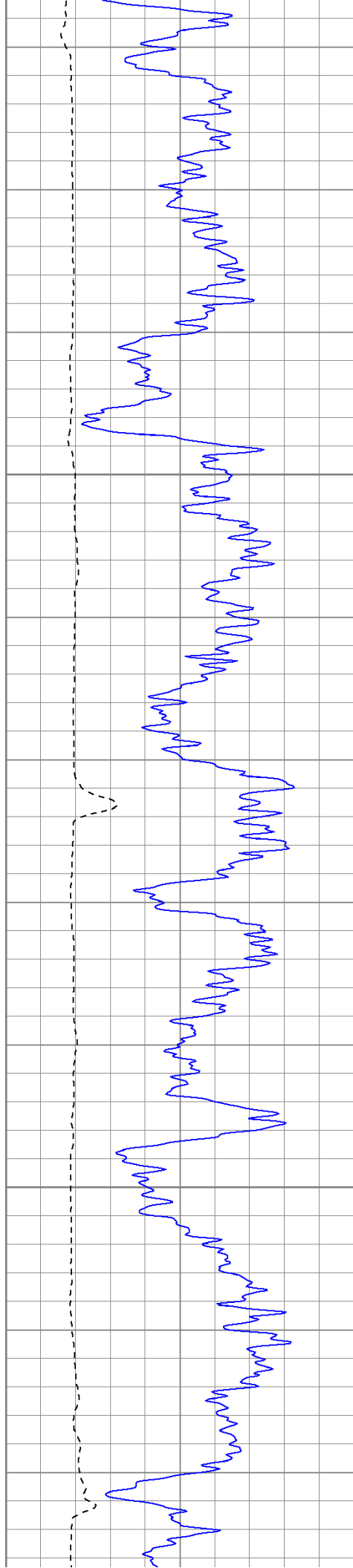


1200

1250

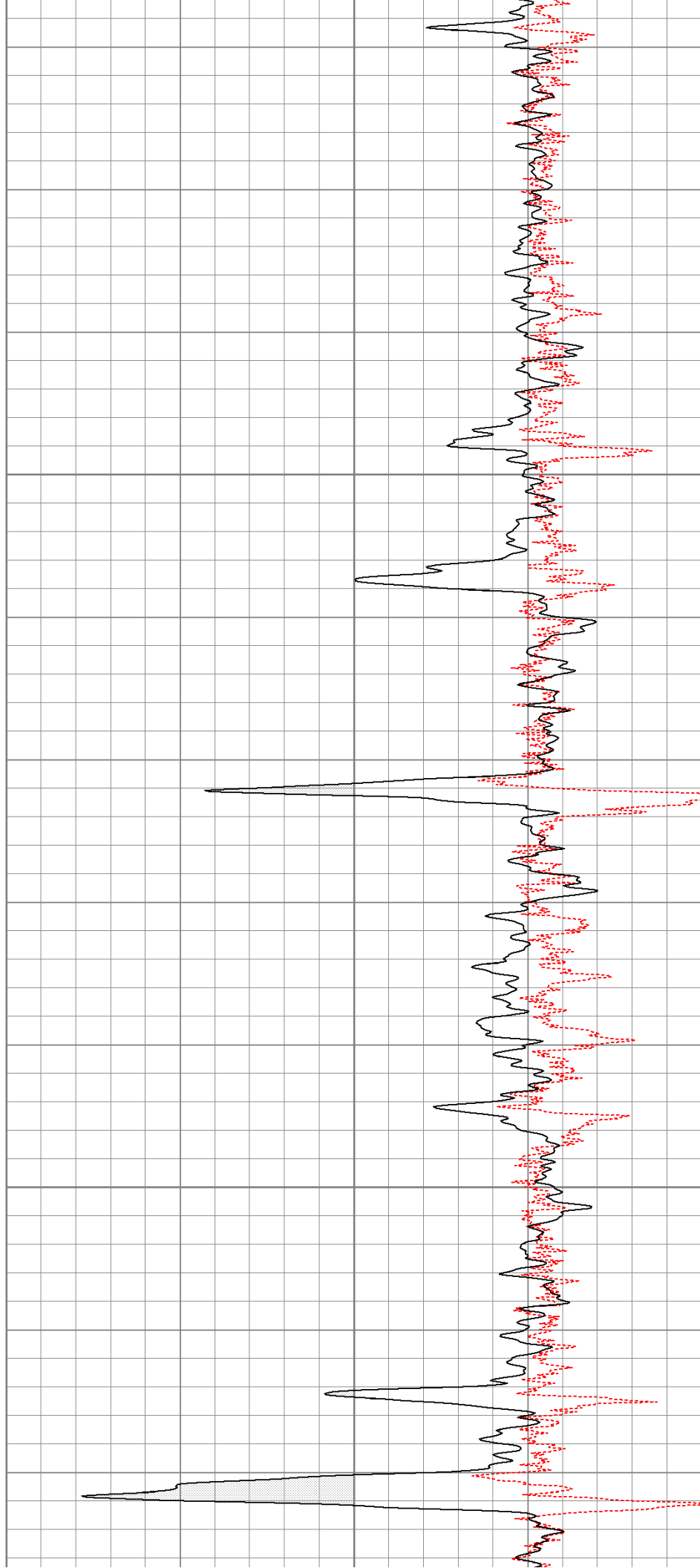


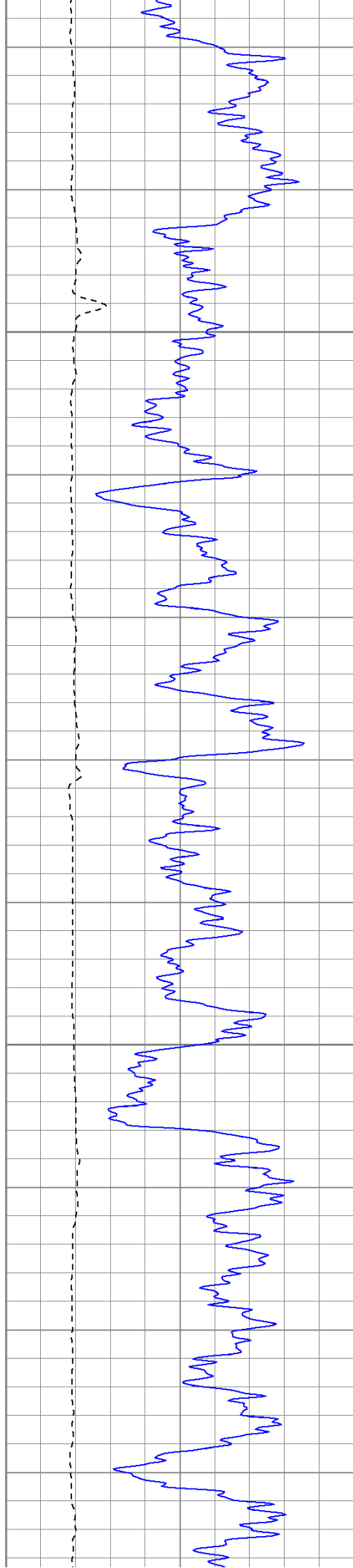




1300

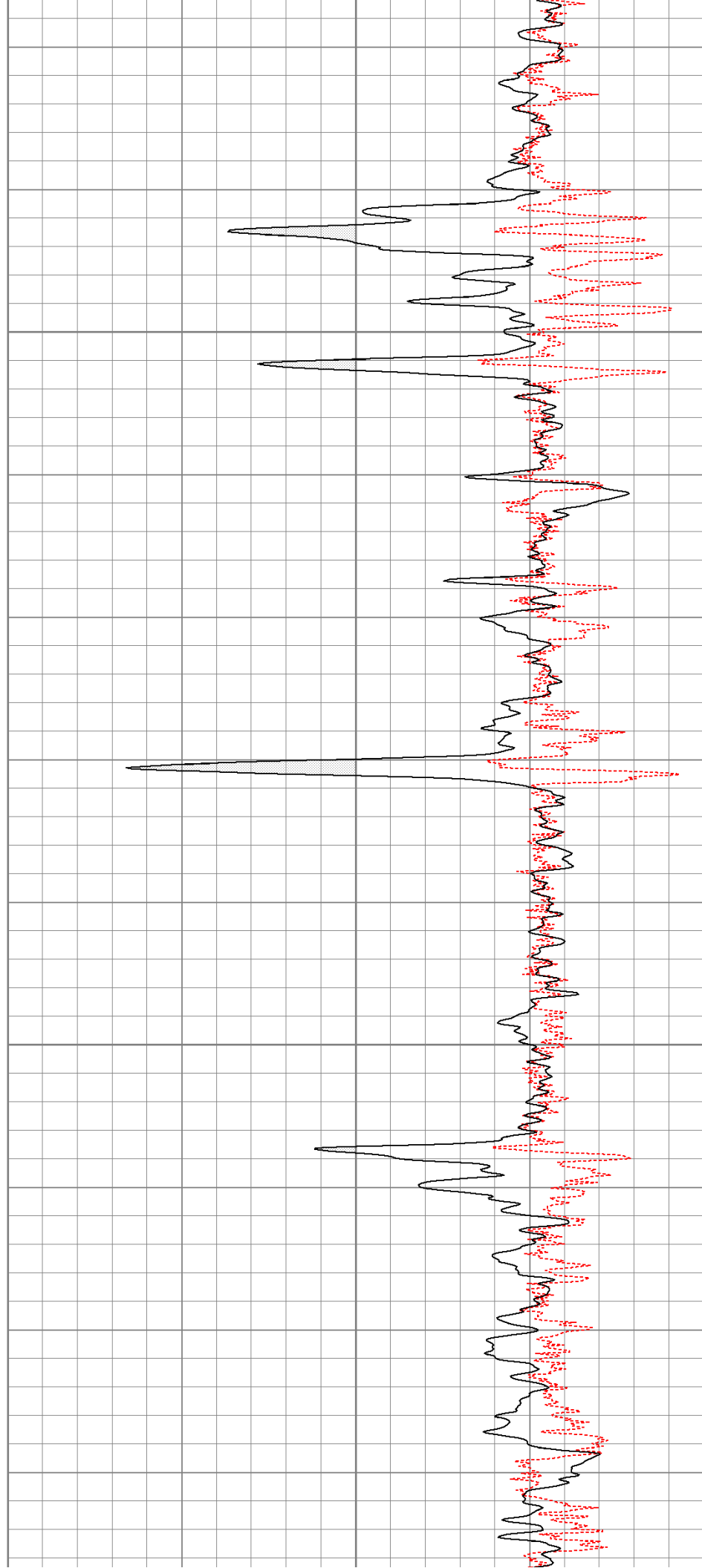
1350

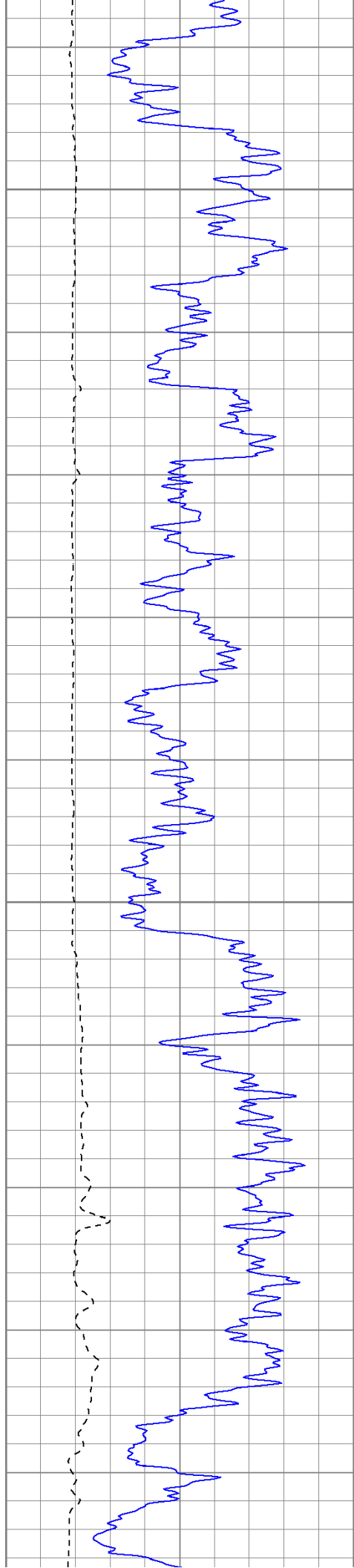




1400

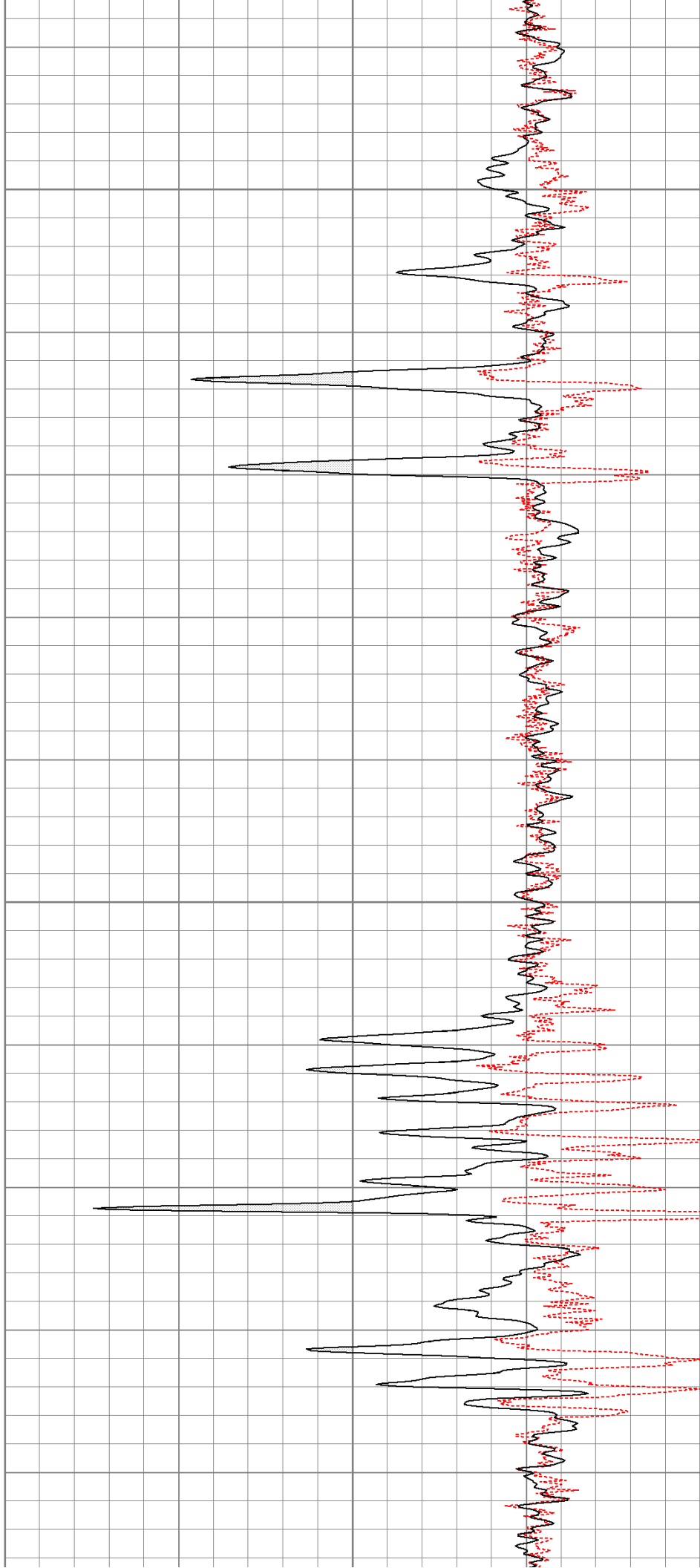
1450

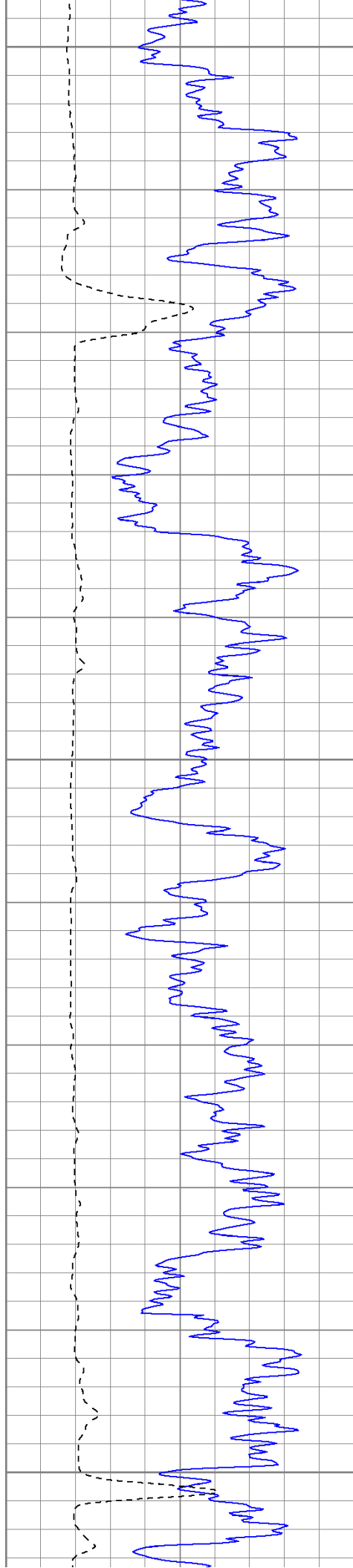




1500

1550

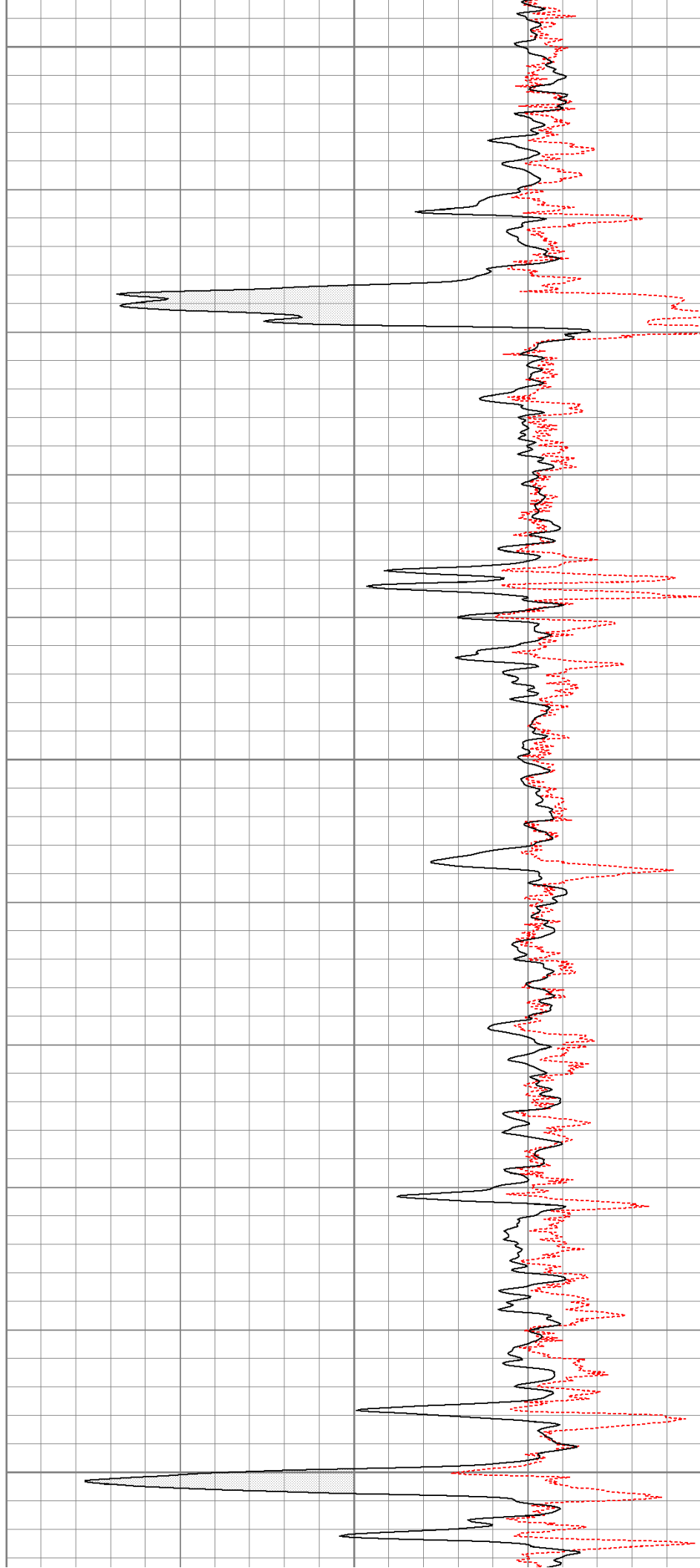


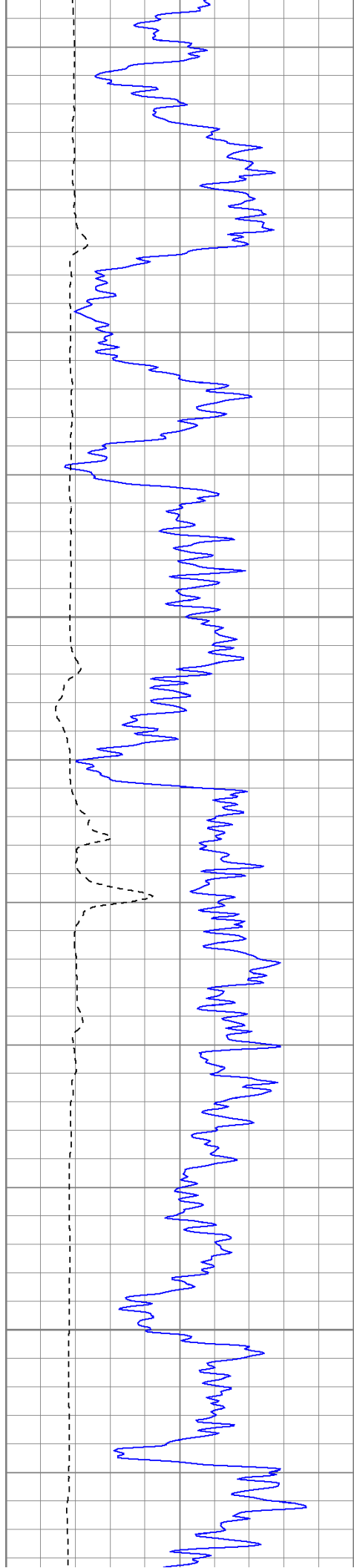


1600

1650

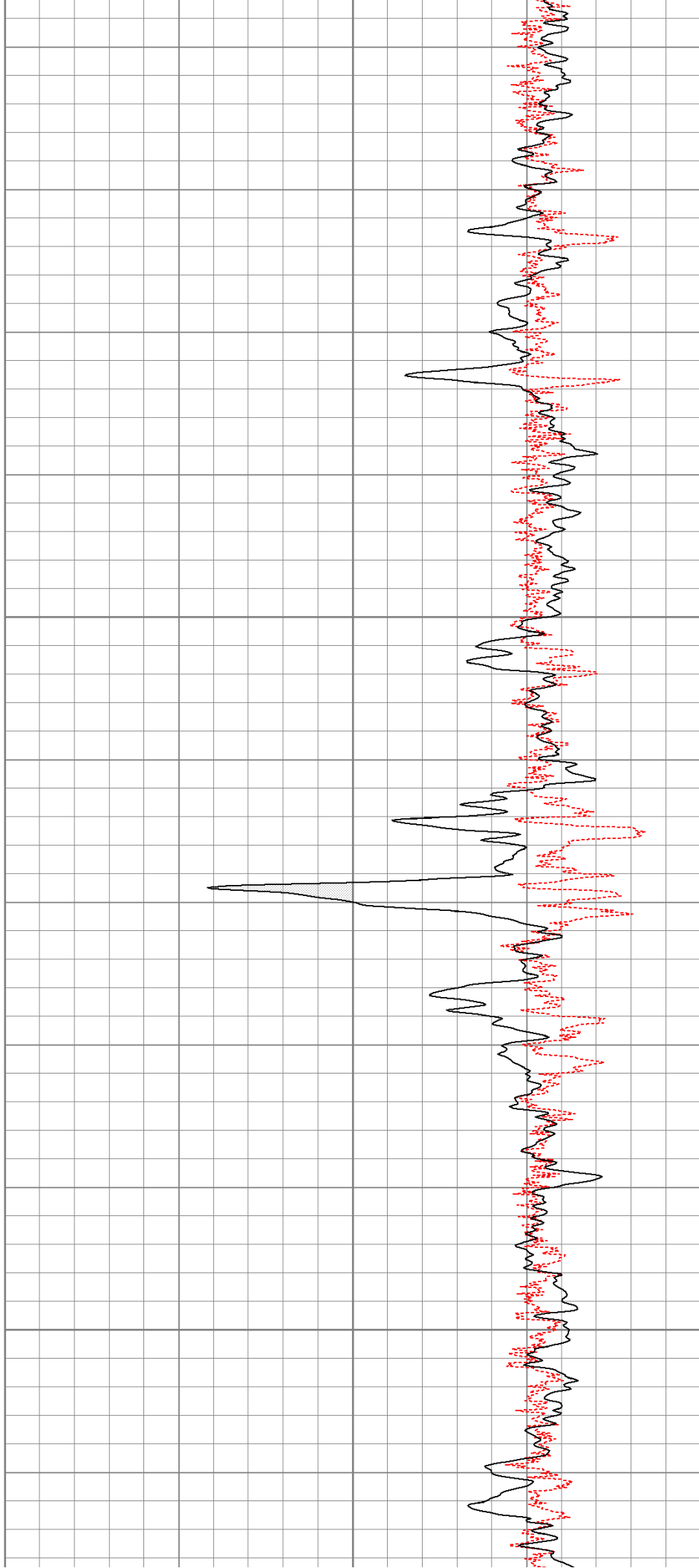
1700

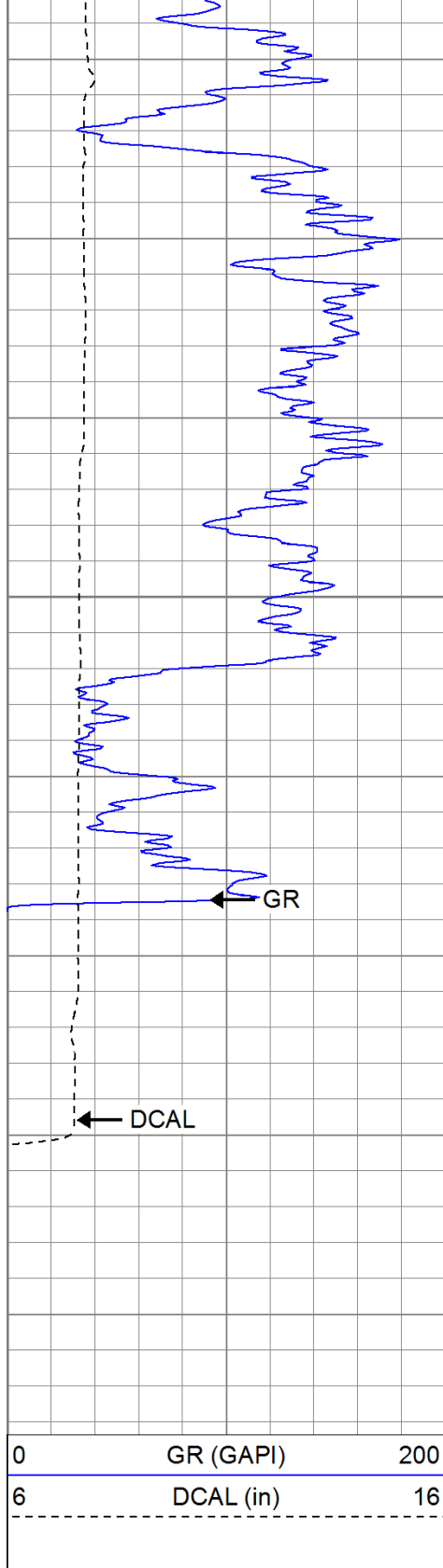




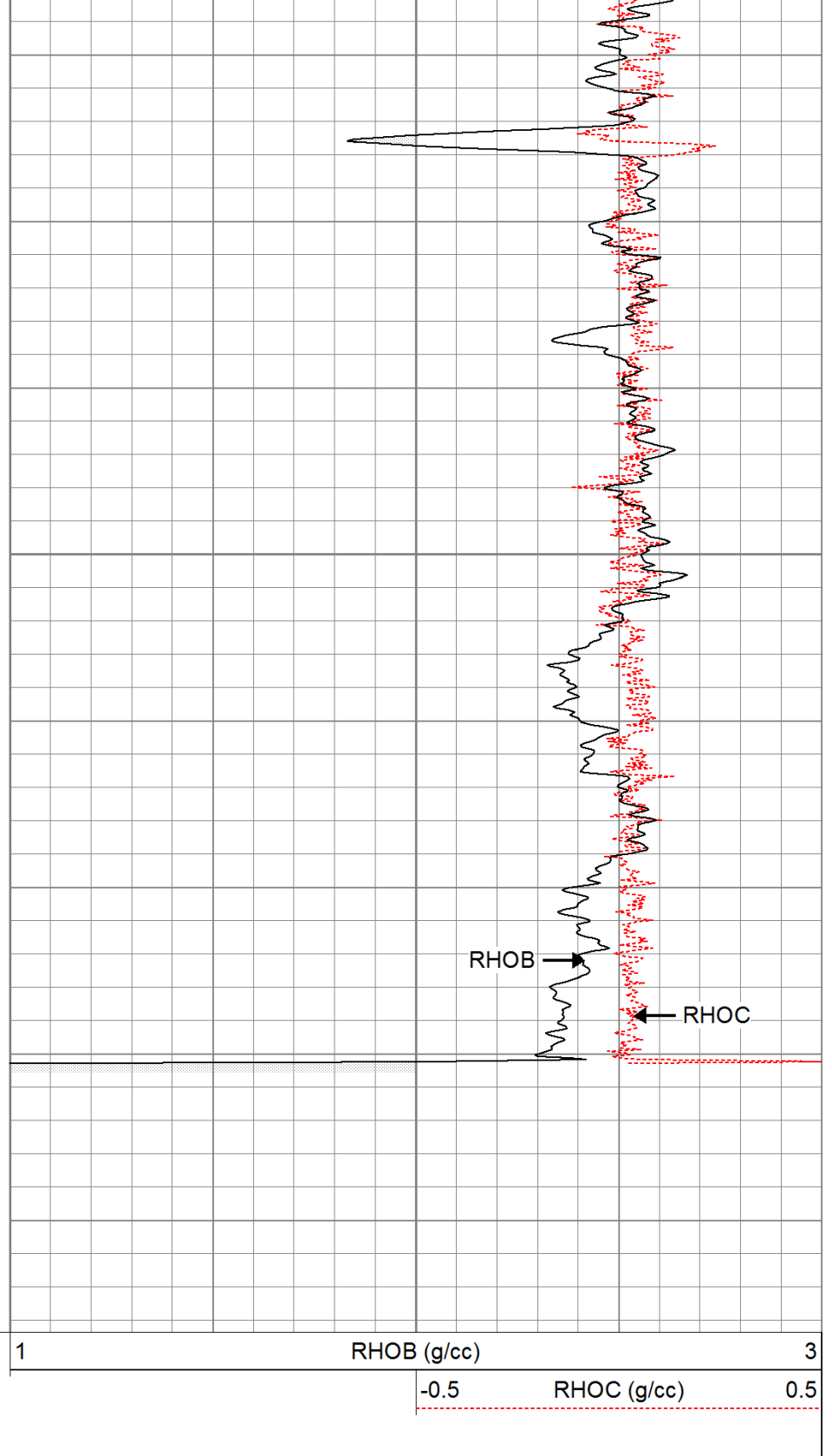
1750

1800





1850



### Calibration Report

Database File: lynntr.db  
 Dataset Pathname: pass1  
 Dataset Creation: Sun Jun 12 03:41:05 2011 by Log Open-Cased 110302

### Induction Tool Calibration Report

Serial Number: 701  
 Tool Model: Probe  
 Downhole Cal Performed: Wed Jun 08 22:14:25 2011  
 Surface Cal Performed: Wed Jun 08 22:14:40 2011  
 After Survey Verification Performed:

Surface Calibration:	Air	Loop	
Conductivity Reference:	0.000	500.000	mmho
Conductivity Reading:	0.006	0.644	V
Internal Reference:	Zero	Cal	
Conductivity Reference:	0.000	500.000	mmho
Conductivity Reading:	0.007	0.643	V
Downhole Calibration:	Internal Zero	Internal Cal	
Conductivity Reference:	0.703	499.163	mmho
Conductivity Reading:	0.000	0.000	V
Short Normal Reference:	0.000	20.000	Ohm-m
Short Normal Reading:	0.005	0.214	V
Results:	Gain	Offset	
Loop Conductivity:	783.886	-4.674	
Downhole Correction:	1.000	0.000	
Short Normal Resistivity:	95.281	-0.432	
After Survey Verification	Internal Zero	Internal Cal	
Conductivity Reading:	0.000	0.000	V
Conductivity Result:	0.000	0.000	mmho
Short Normal Reading:	0.000	0.000	V
Short Normal Result:	0.000	0.000	Ohm-m

Compensated Density Calibration Report

Serial-Model:	901-2.75POH
Source / Verifier:	/
Master Calibration Performed:	Wed Jun 08 09:11:26 2011
Before Survey Verification Performed:	
After Survey Verification Performed:	

Master Calibration					
	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1001.79	578.48	cps
Aluminum	2.590	g/cc	180.36	300.39	cps
Spine Angle = 69.08			Density/Spine Ratio = 0.479		
	Size		Reading		
Small Ring	8.00	in	2.50	V	
Large Ring	16.00	in	4.57	V	






Before Survey Verification					
	Target		Measured		
		g/cc			g/cc
		g/cc			g/cc
		g/cc			g/cc

After Survey Verification					
	Target		Measured		
		g/cc			g/cc
		g/cc			g/cc
		g/cc			g/cc

Neutron Calibration Report

Serial Number:	802
Tool Model:	2.75POH
Performed:	Tue May 03 12:28:21 2011

Calibrator Value:	700	NAPI
Calibrator Reading:	1000	cps
Sensitivity:	0.7	NAPI/cps
Gamma Ray Calibration Report		
Serial Number:	801	
Tool Model:	2.75POH	
Performed:	Thu May 05 13:29:10 2011	
Calibrator Value:	200.0	GAPI
Background Reading:	8.0	cps
Calibrator Reading:	264.7	cps
Sensitivity:	0.6000	GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	29.58		None	0.75	1.50	5.00
			GR-2.75POH (801) Probe 2.75" Probe Open Hole Gamma Ray	3.73	2.75	43.00
NEU	24.04		NEU-2.75POH (802) Probe Epithermal	4.75	2.75	58.00
			CDL-2.75POH (901) Probe	8.43	2.75	106.00
LSD	16.21					
DCAL	15.94					
SSD	15.69					
DIC	6.24		IEL-Probe (701)	13.46	2.75	93.00
SP	2.25					
SN	1.71					



			Dataset:	lynntr.db: field/well/run1/pass1	
			Total Length:	31.11 ft	
			Total Weight:	305.00 lb	
			O.D.	2.75 in	