



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

COMPENSATED DENSITY NEUTRON LOG

Company XTO Energy Inc.
Well New Elk 36-03
Field Purgatoire River
County Las Animas State Colorado

Location: API # : 05 071 09135 00

368' FNL & 1876' FWL

SEC 36 TWP 33S RGE 68W

Permanent Datum Ground Level Elevation 7588'
Log Measured From Ground Level
Drilling Measured From Ground Level

Other Services
dill
Elevation
K.B. -----
D.F. -----
G.L. 7588'

Date 3-15-07

Run Number One

Depth Driller 1900'

Depth Logger 1900'

Bottom Logged Interval 1876'

Top Log Interval Surface Casing

Casing Driller 8 5/8" @ 688'

Casing Logger 688'

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 1:00 P.M.

Time Logger on Bottom 3:15 P.M.

Maximum Recorded Temperature

Equipment Number T701

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

Compensated Density Neutron Porosity Presented On Sandstone Matrix.

ABHV Calculated For 5 1/2" Casing

Well Directions:

Second Bosque entrance four miles past weston turn left, at Y stay right on Apache Canbyon,
drive to camp ground stay left thru gate, first left end on location.

Neutron Porosity Invalid from 1510' to due to Foam.

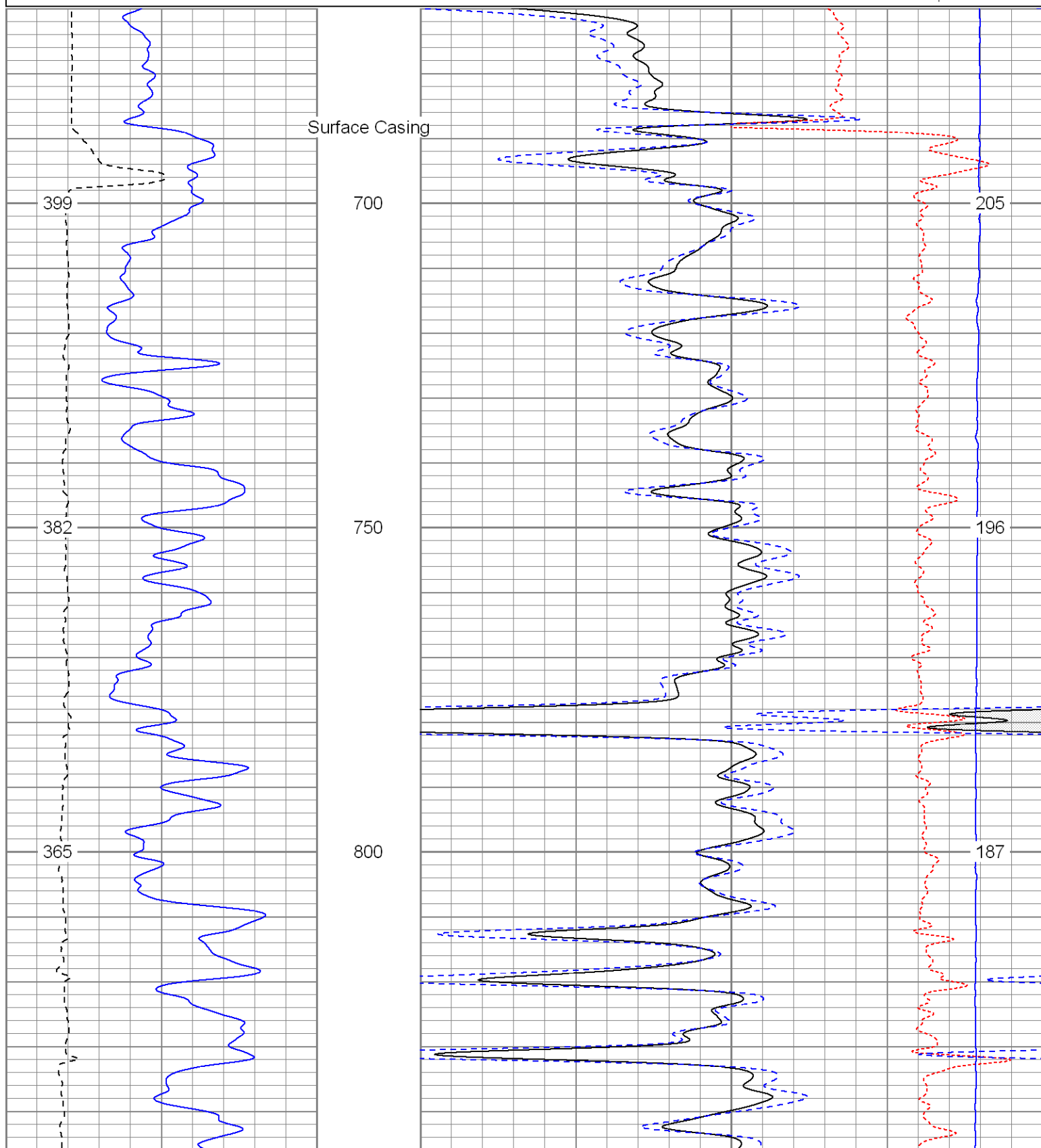


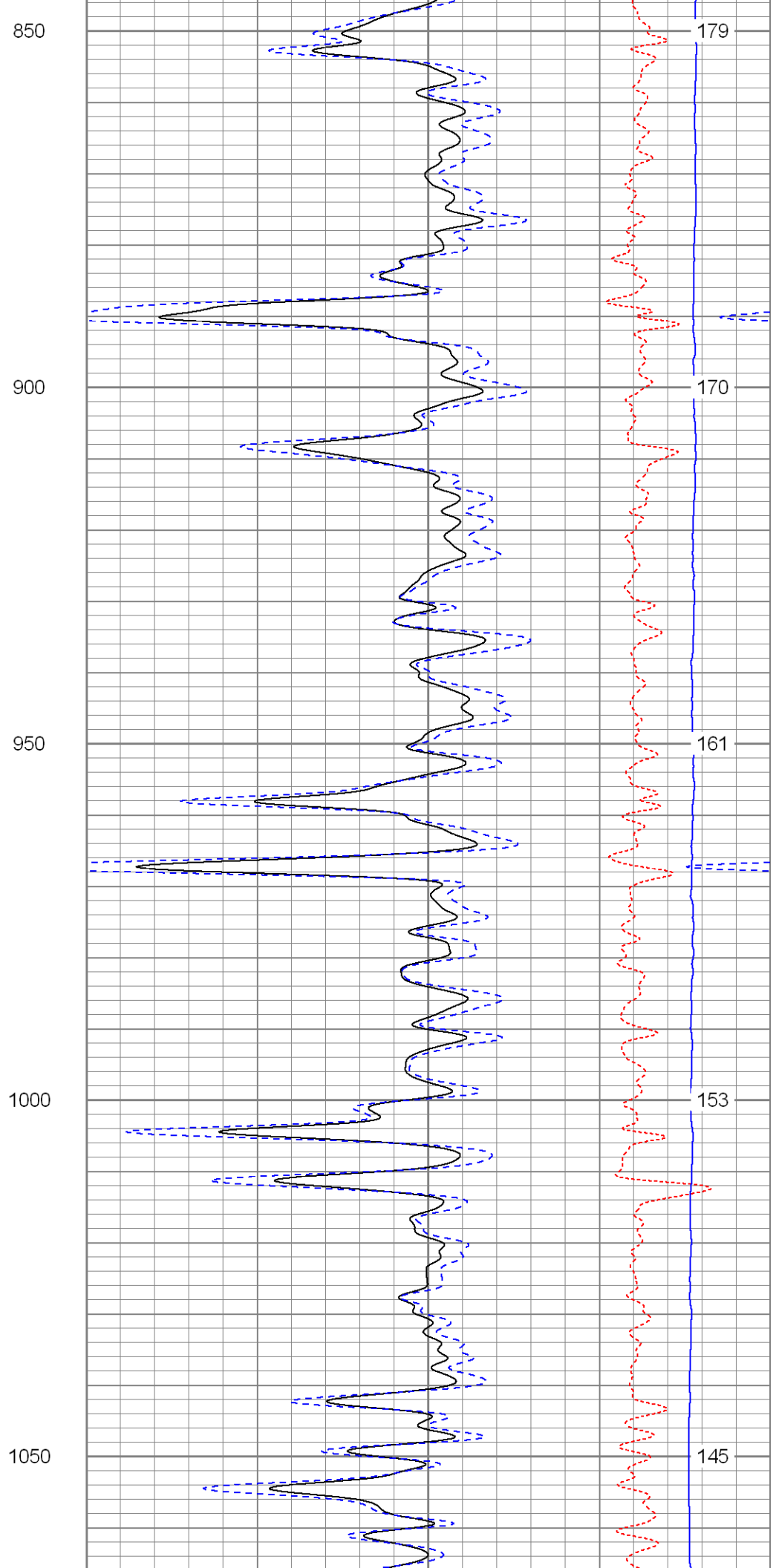
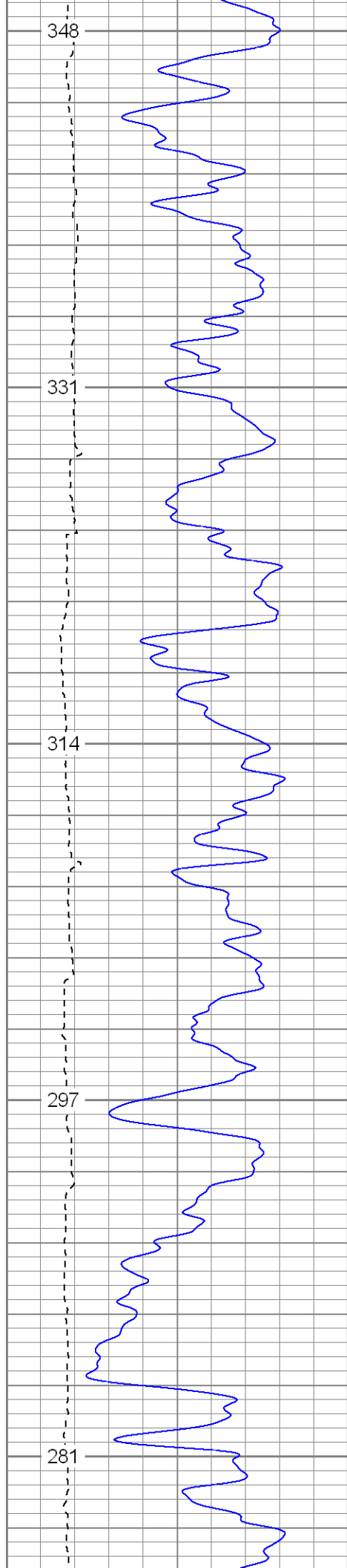
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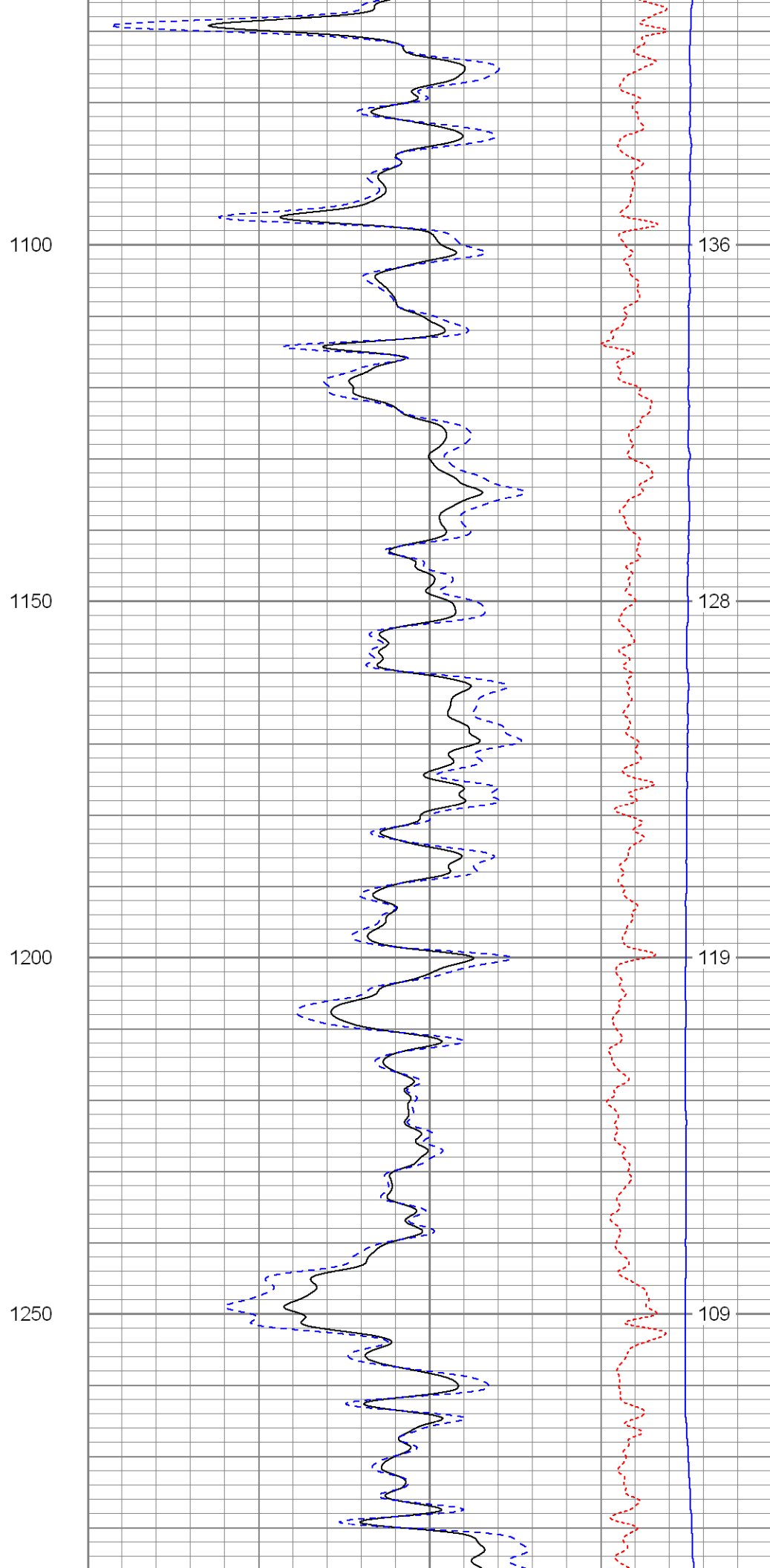
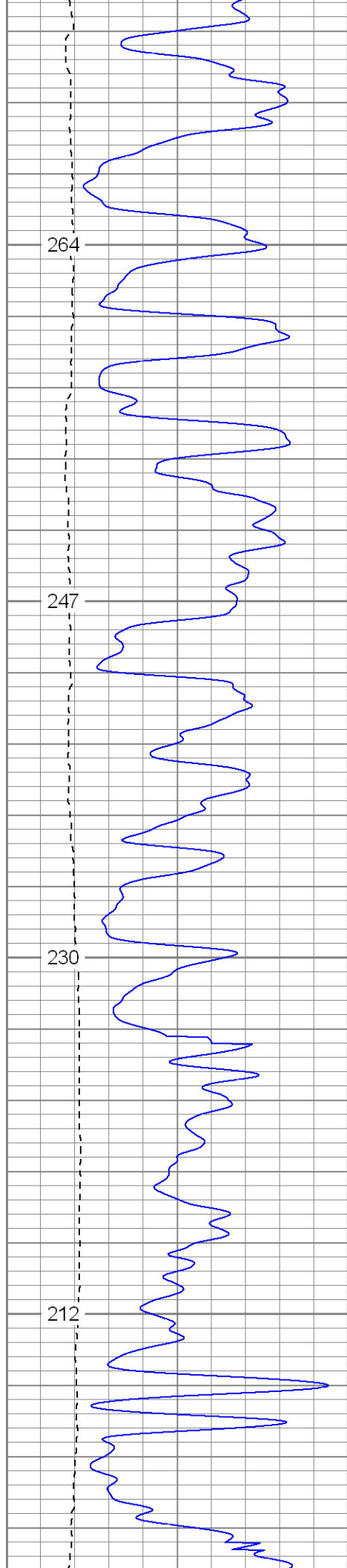
Main Pass

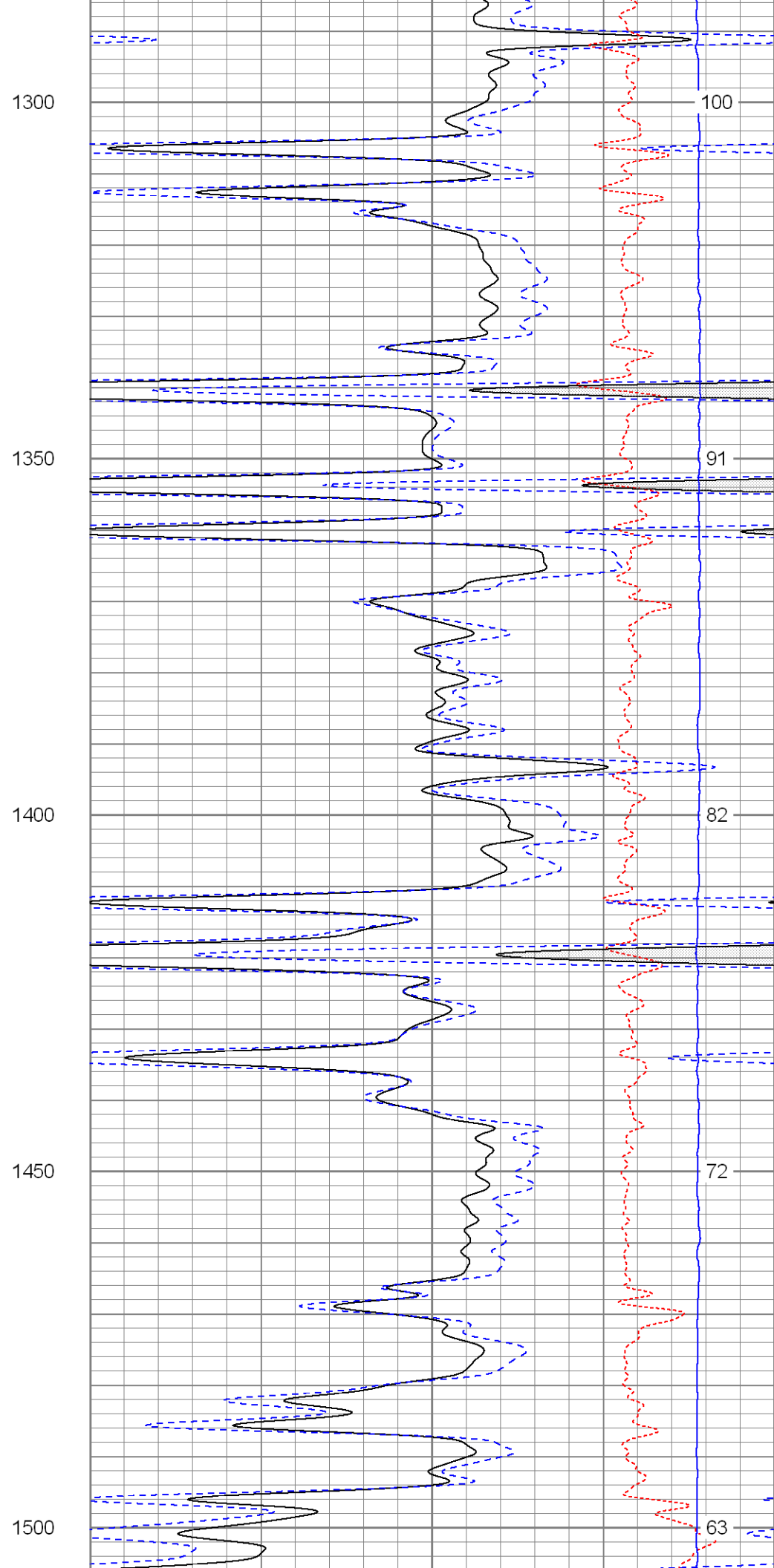
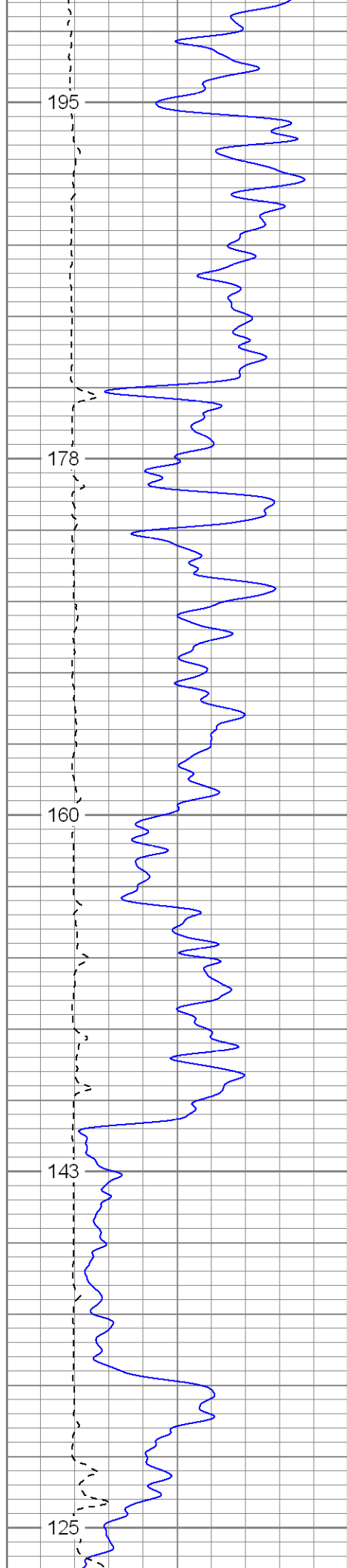
Database File: xtone3603.db
Dataset Pathname: pass2.1
Presentation Format: cdl
Dataset Creation: Thu Mar 15 16:27:20 2007 by Calc Open-Cased 061129
Charted by: Depth in Feet scaled 1:240

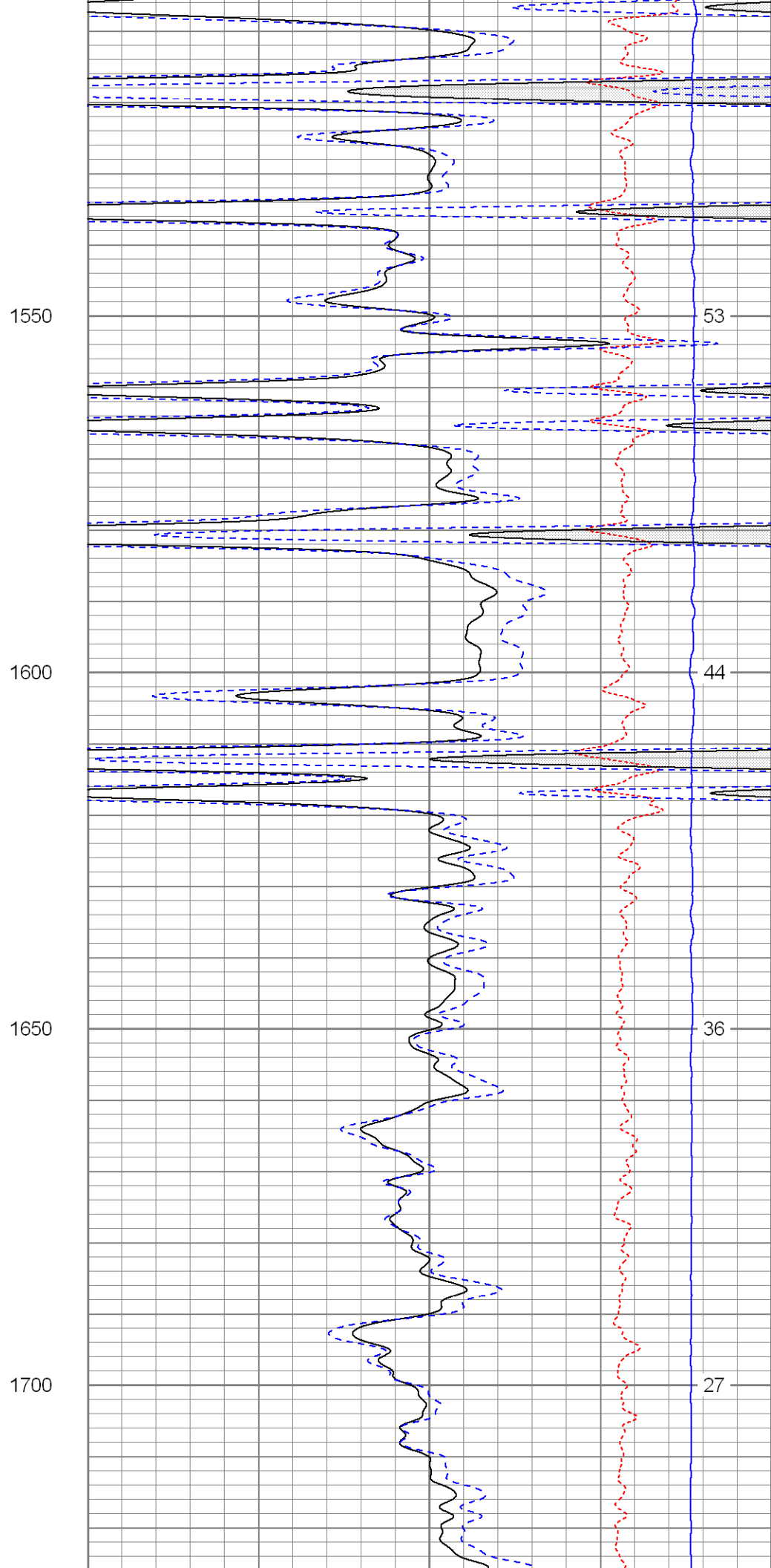
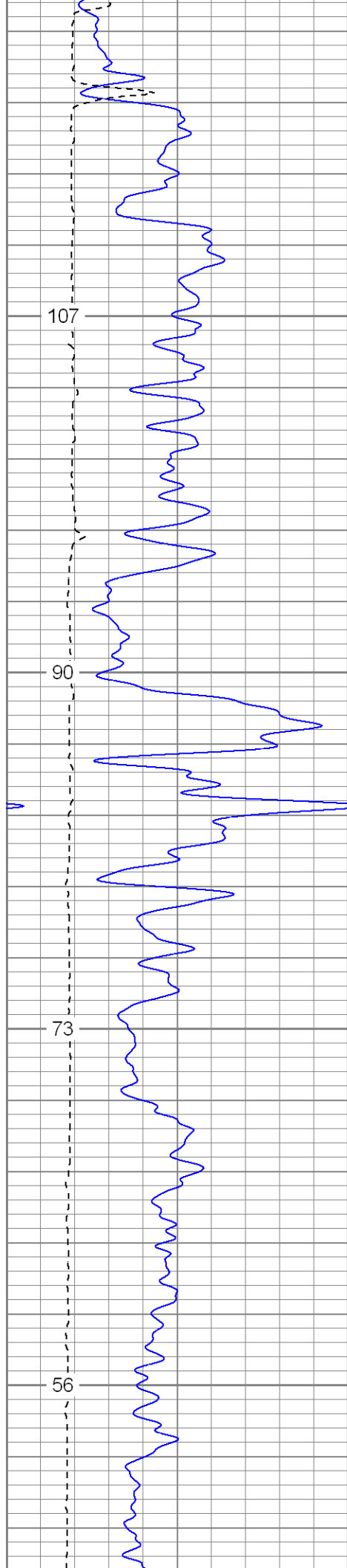
0	GR (GAPI)	200	1	RHOB (g/cc)	2
6	DCAL (in)	16	30	DPOR (pu)	-10
TBHV (ft3)			-0.5 RHOC (g/cc) 0.5		
			4000 LTEN (lb) 0		
			ABHV (ft3)		

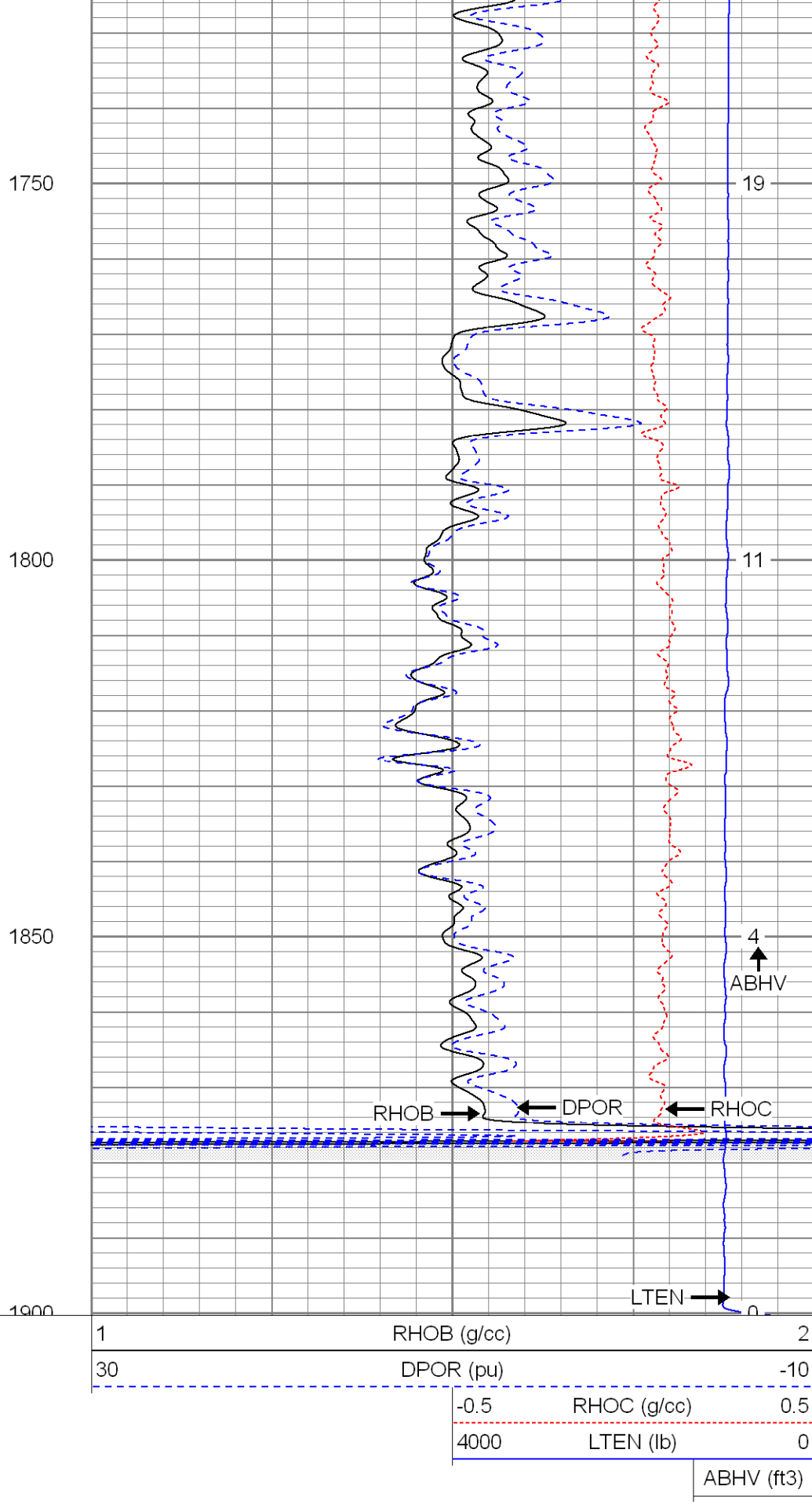
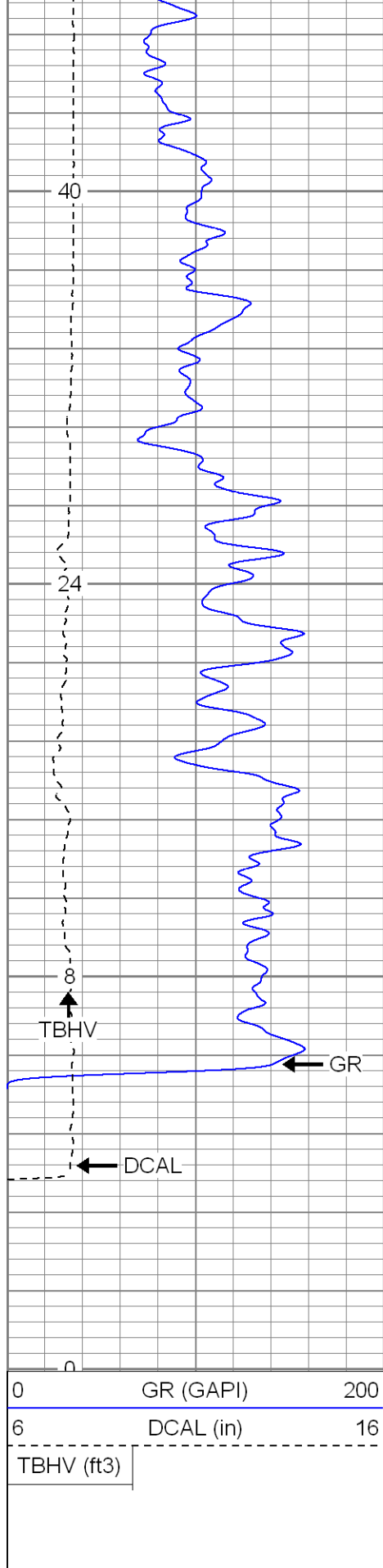












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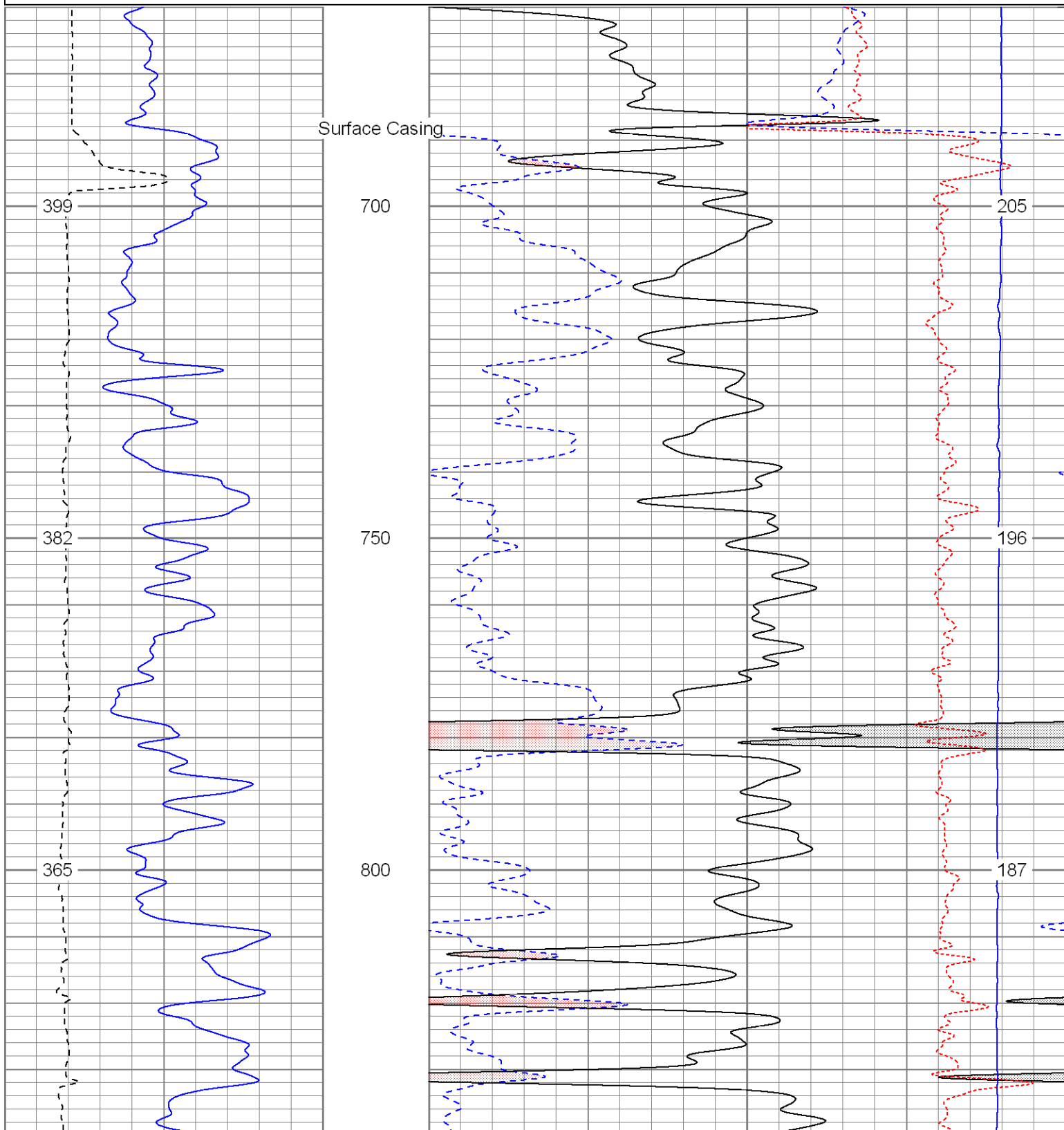
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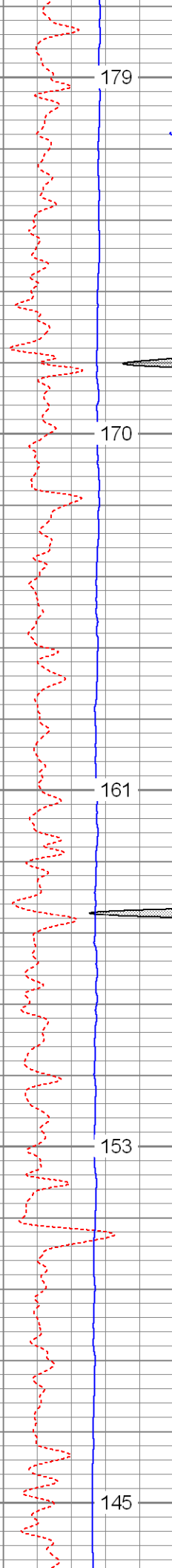
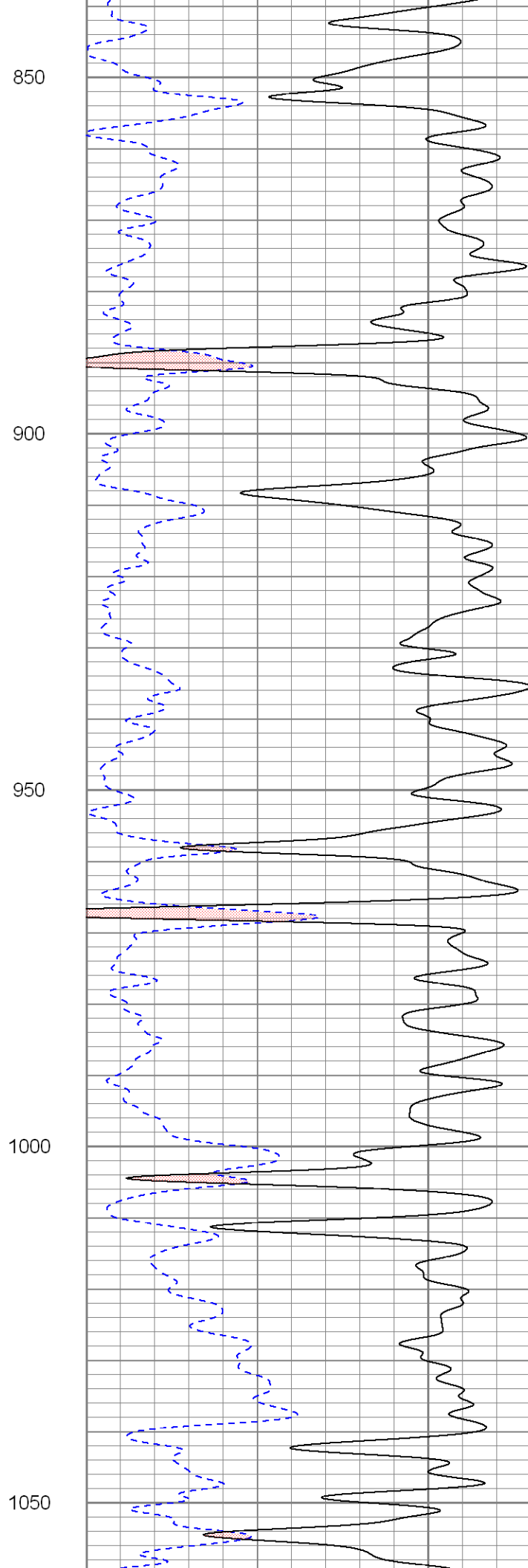
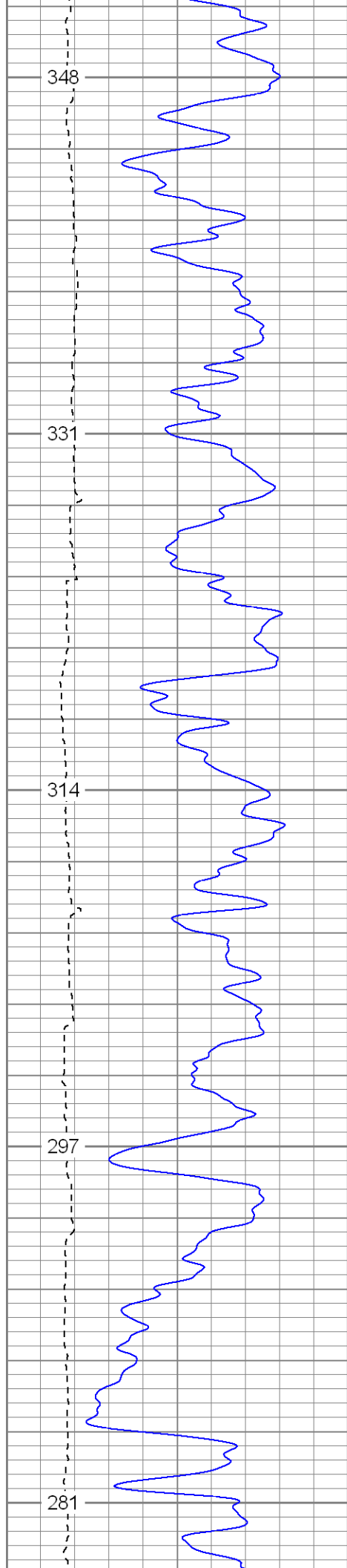
Main Pass

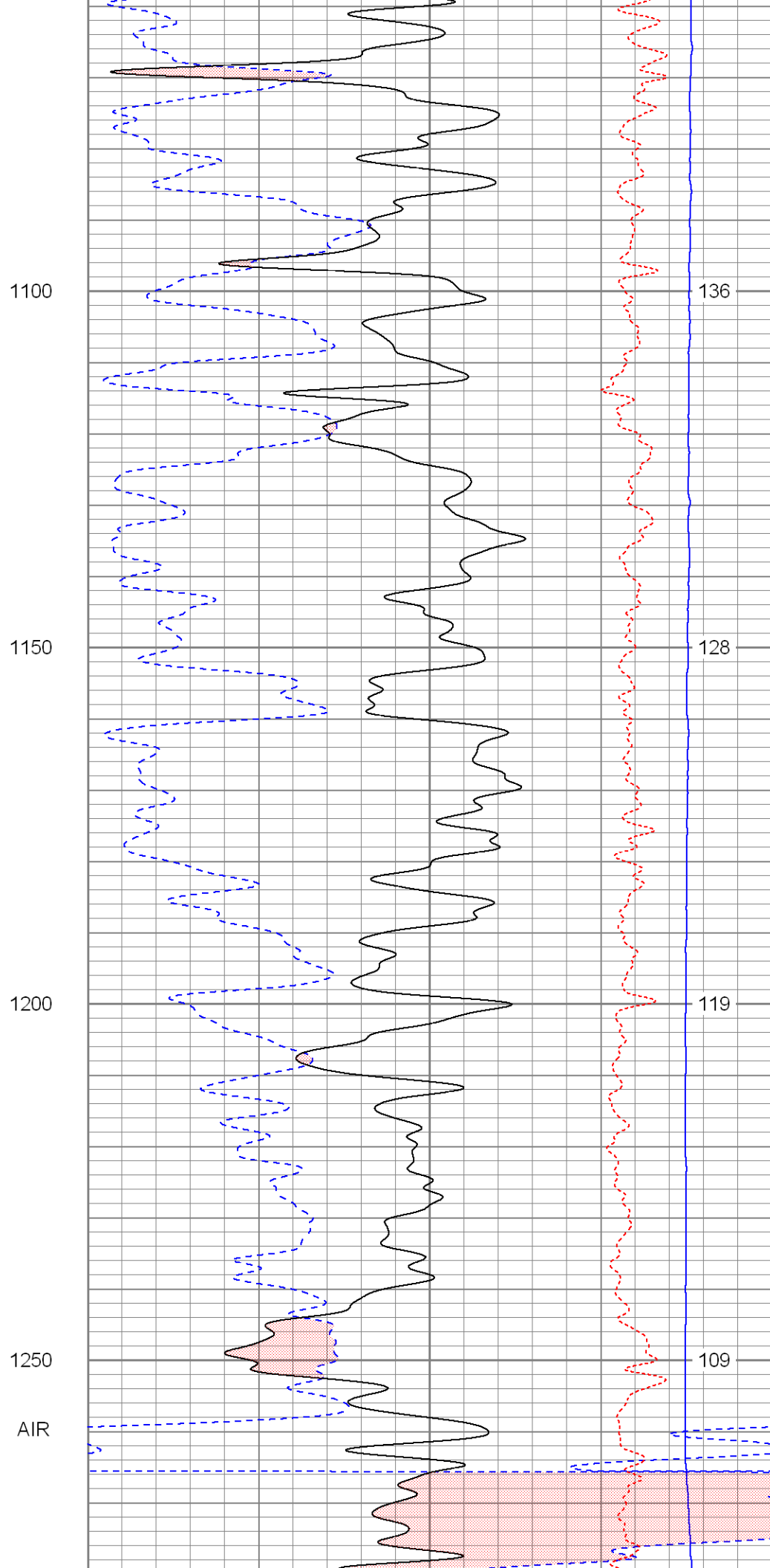
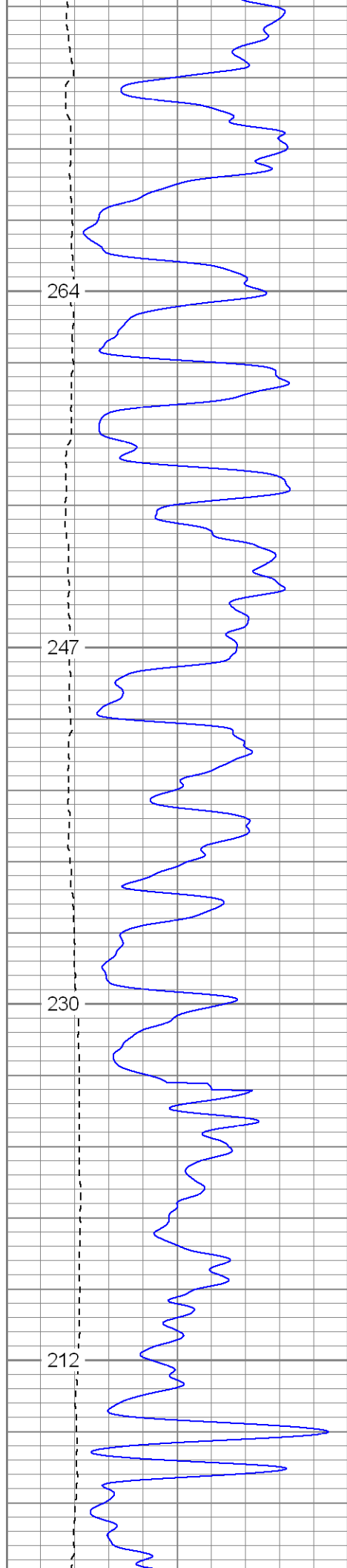
Database File: xtone3603.db
 Dataset Pathname: pass2.1
 Presentation Format: cdnl
 Dataset Creation: Thu Mar 15 16:27:20 2007 by Calc Open-Cased 061129
 Charted by: Depth in Feet scaled 1:240

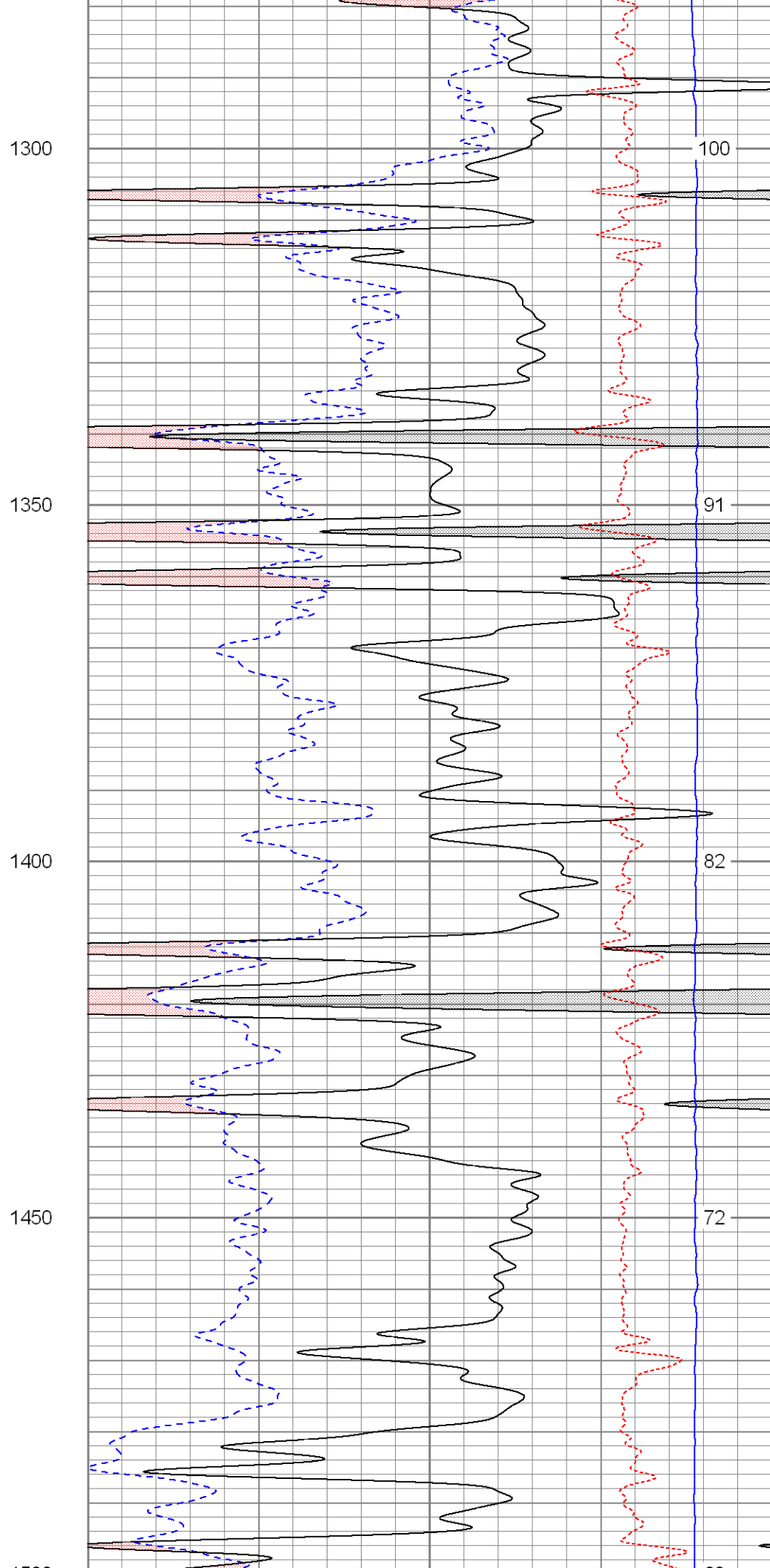
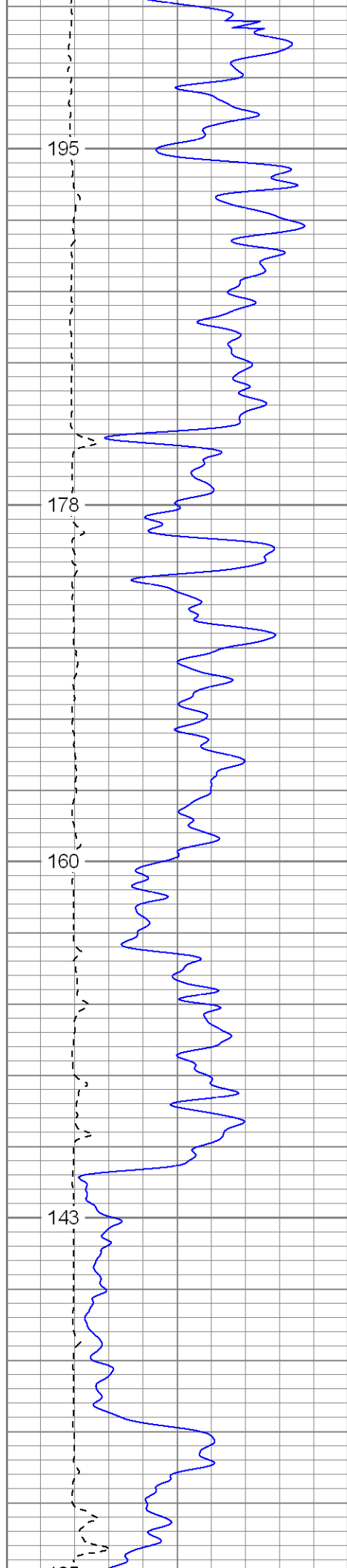
0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		

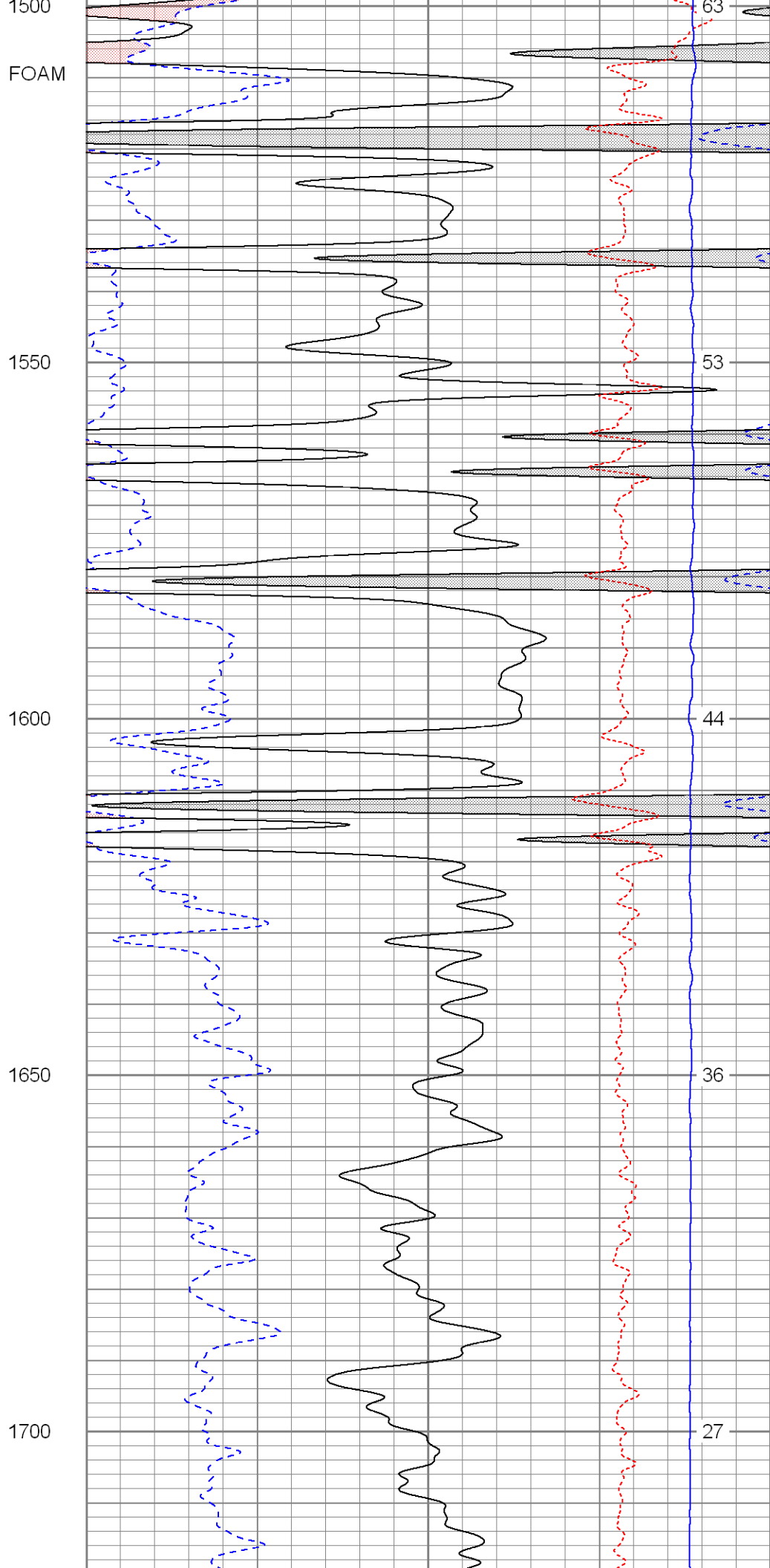
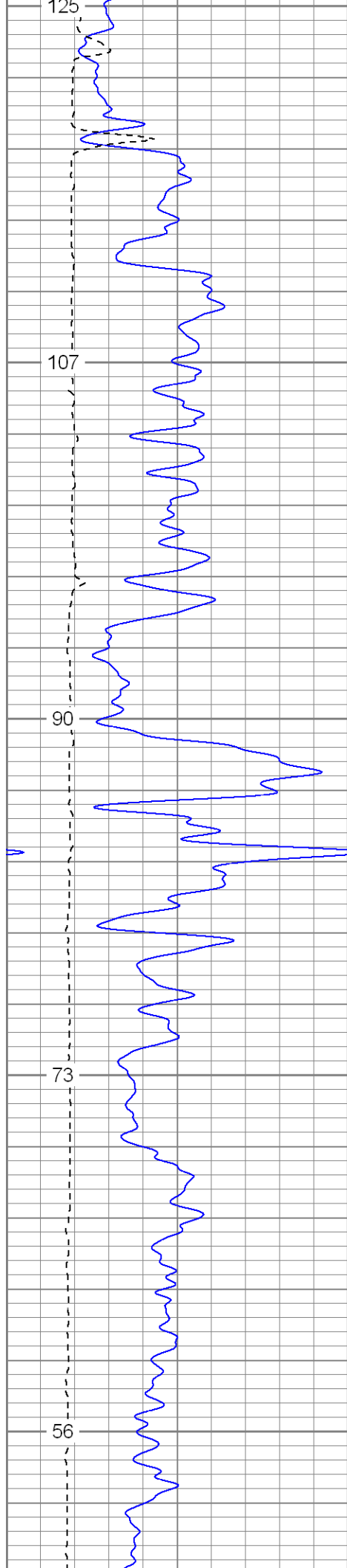
30	NPOR (pu)	-10
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
		ABHV (ft3)

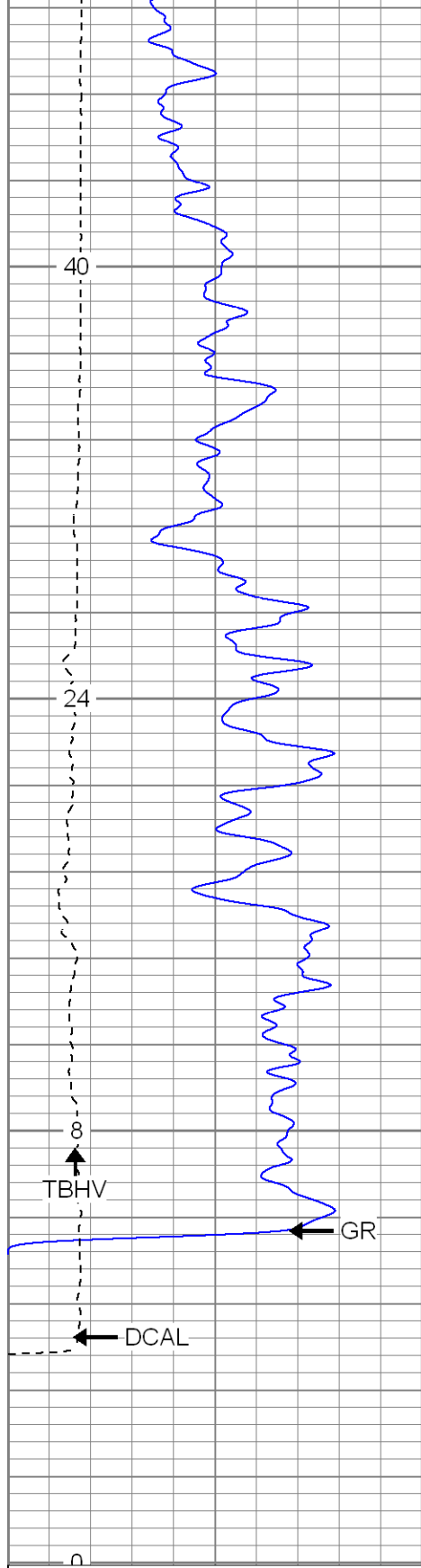






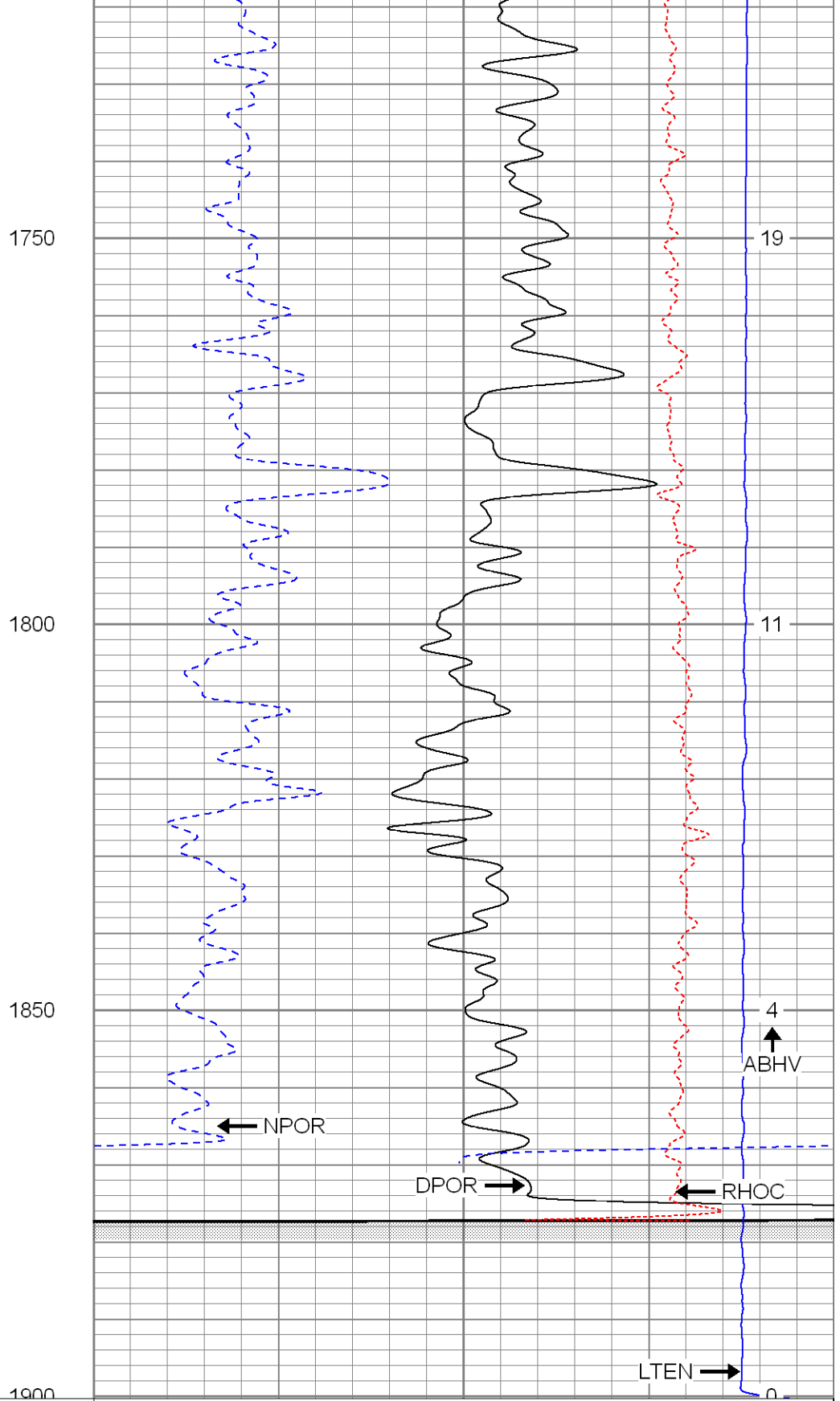






0	GR (GAPI)	200
6	DCAL (in)	16

TBHV (ft3)



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

-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0

ABHV (ft3)



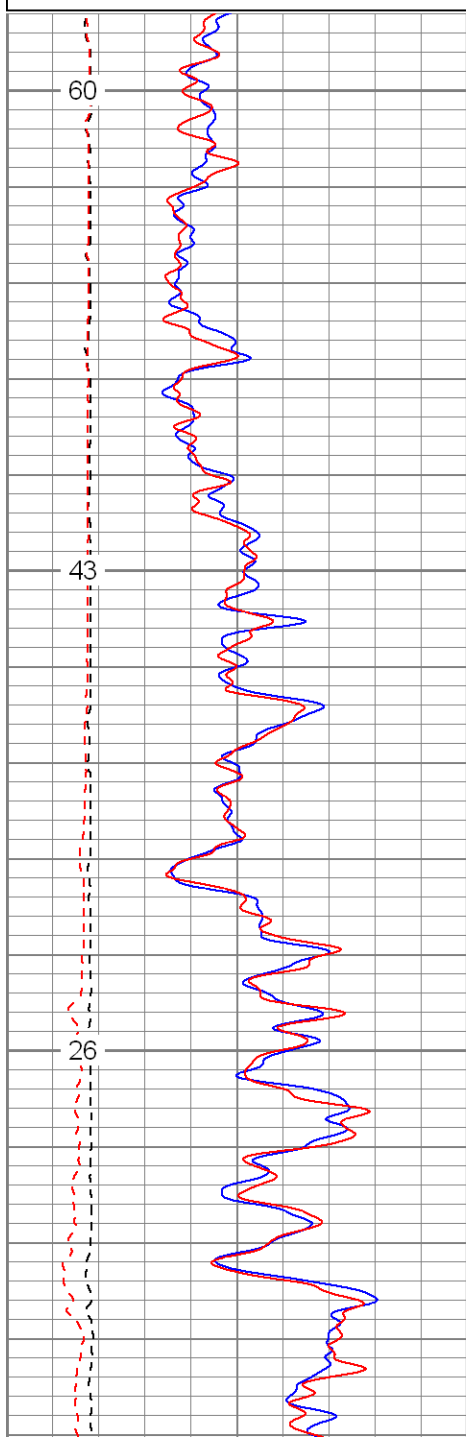
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Repeat Section

Database File: xtone3603.db
Dataset Pathname: pass1.1
Presentation Format: cdnl
Dataset Creation: Thu Mar 15 15:45:14 2007 by Calc Open-Cased 061129
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)		

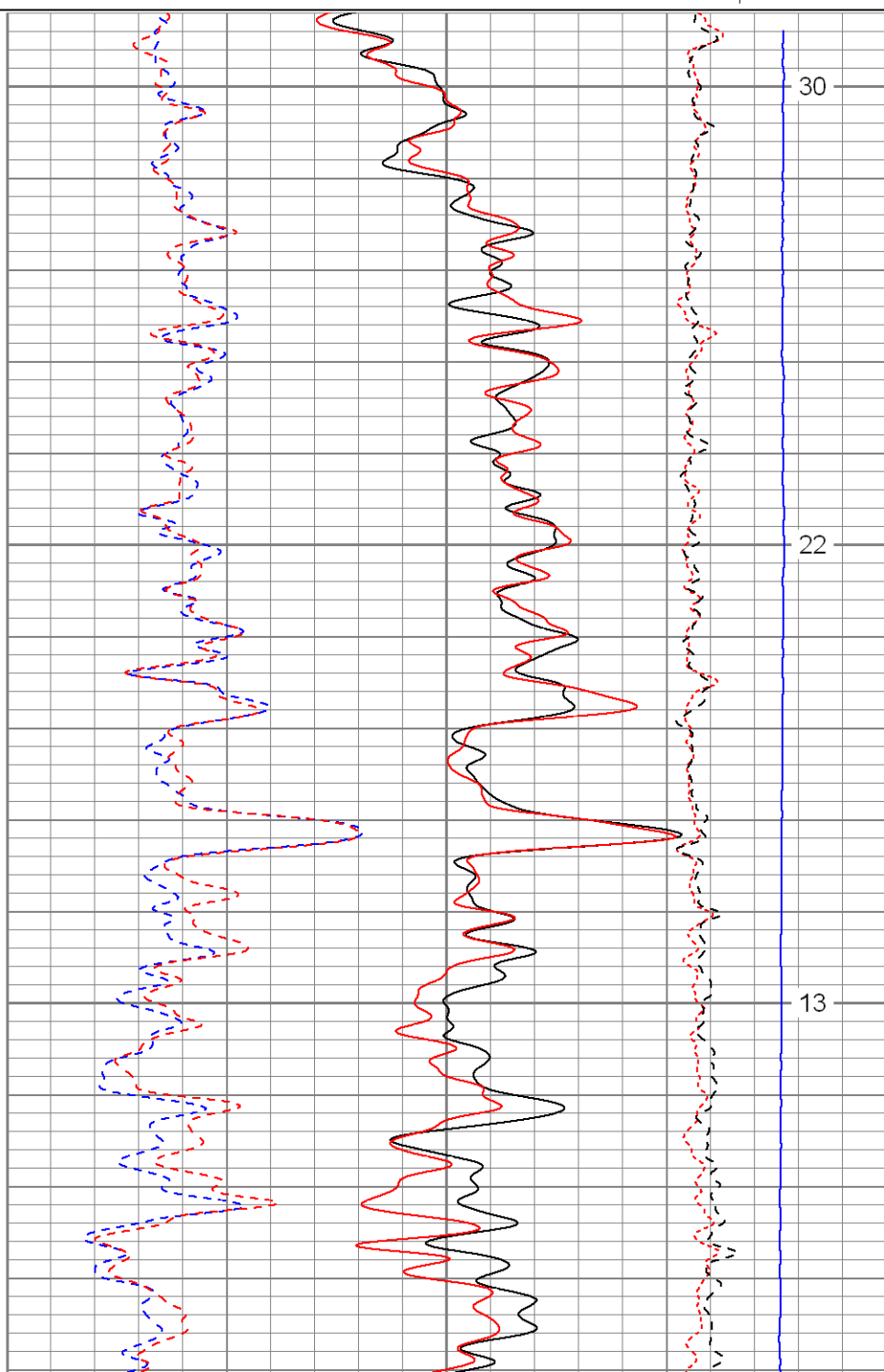
30	NPOR (pu)	-10
30	DPOR (pu)	-10
30	NPOR-repeat (pu)	-10
30	DPOR-repeat (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
-0.5	RHOC-repeat (g/cc)	0.5
ABHV (ft3)		

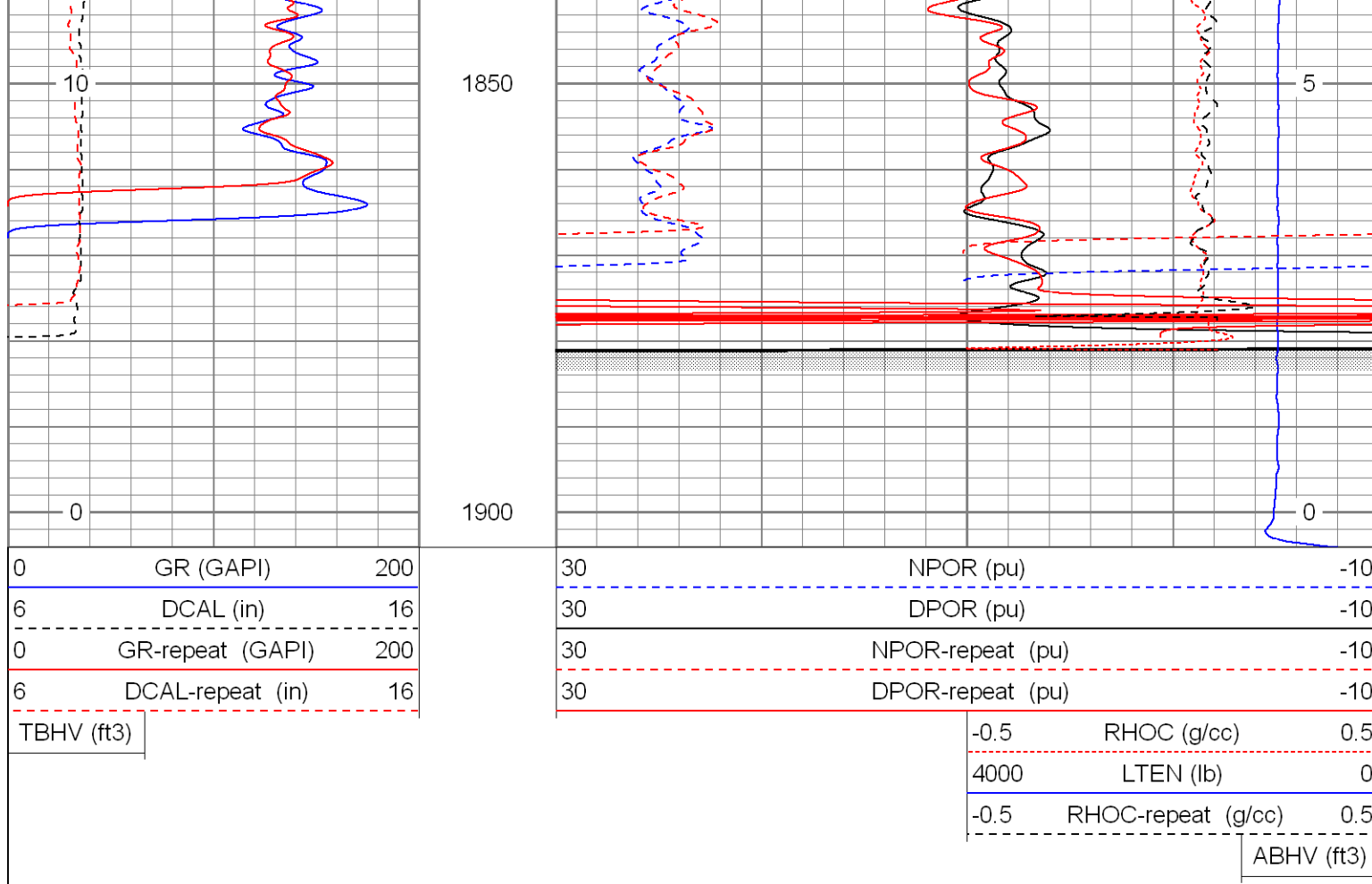


1700

1750

1800





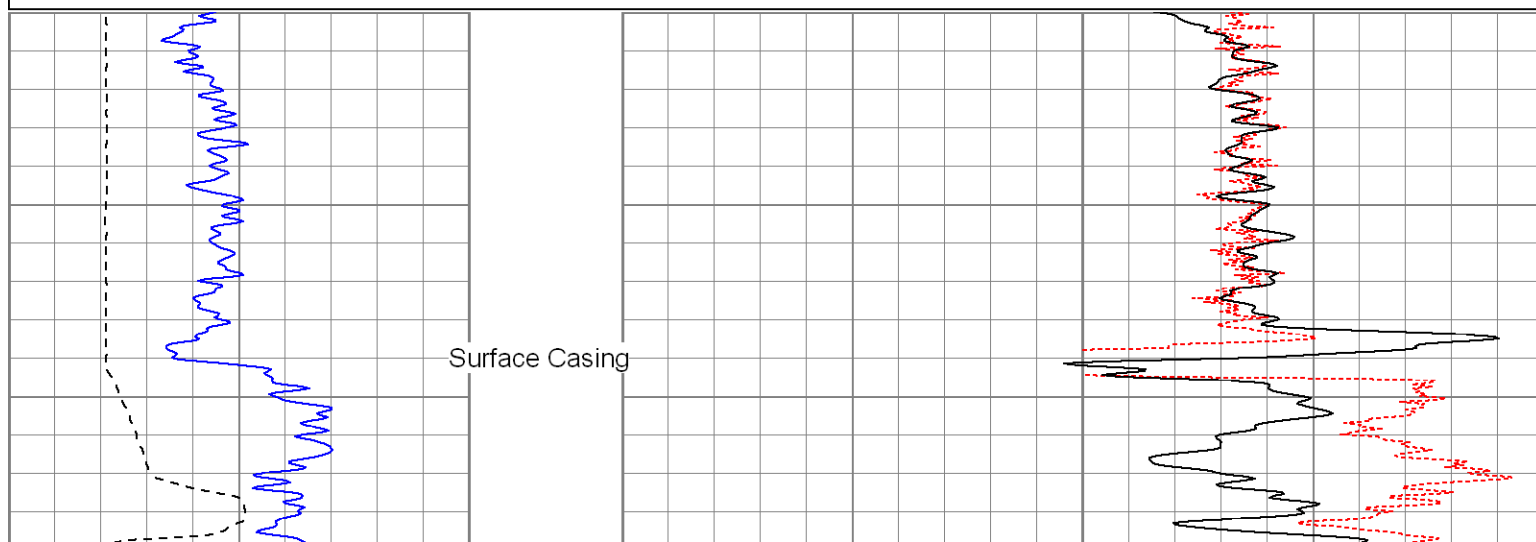
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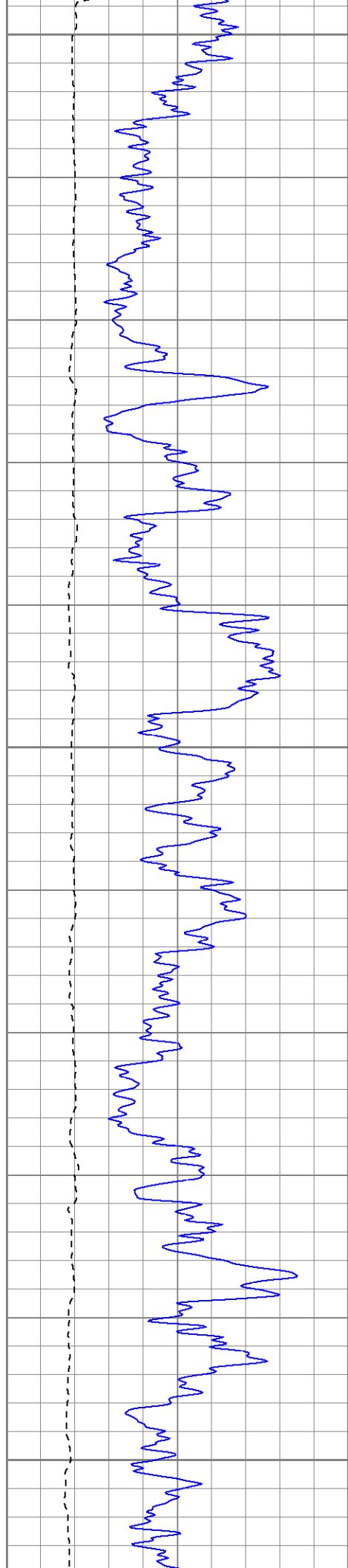
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High Resolution Pass

Database File: xtone3603.db
Dataset Pathname: pass2.2
Presentation Format: cdlhr
Dataset Creation: Fri Mar 16 12:48:23 2007 by Calc Open-Cased 061129
Charted by: Depth in Feet scaled 1:120

0	GR (GAPI)	200	1	RHOB (g/cc)	3
6	DCAL (in)	16	-0.5	RHOC (g/cc)	0.5

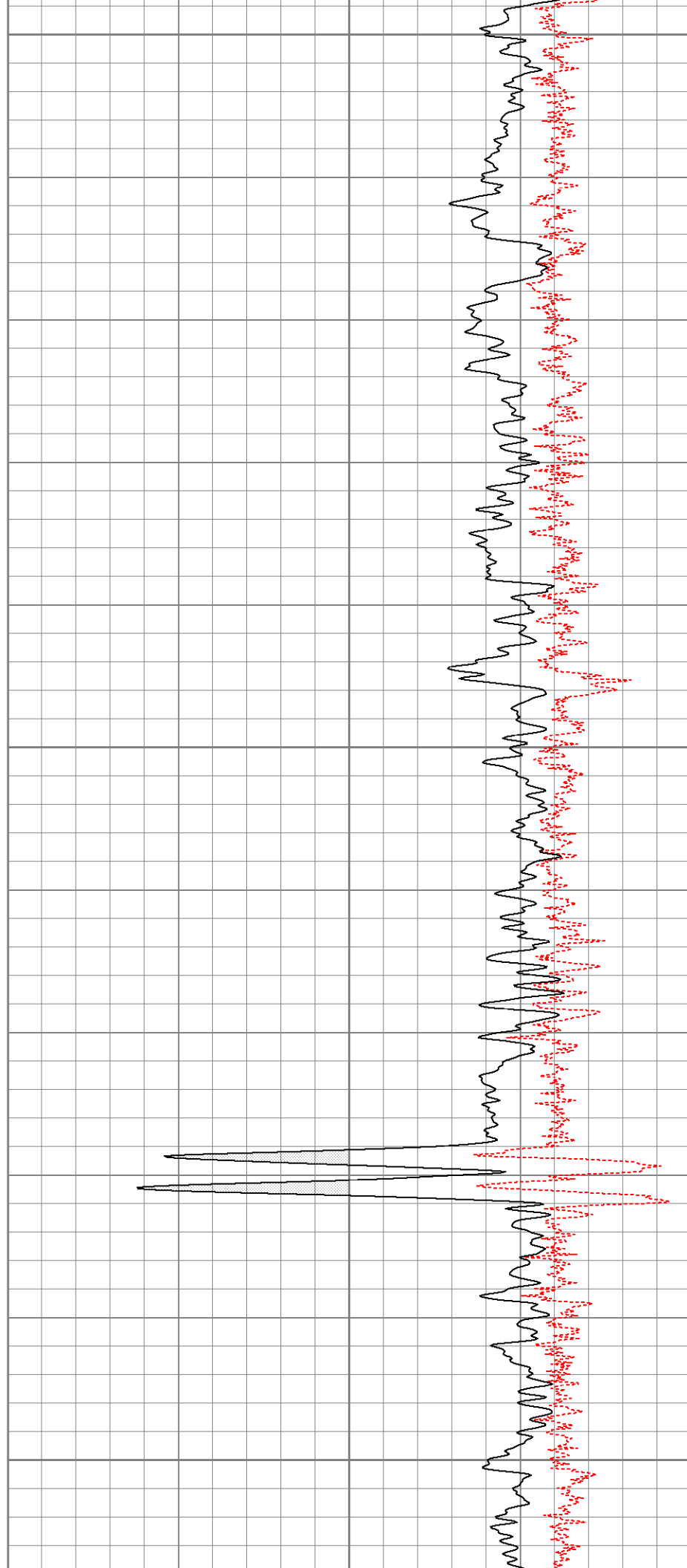


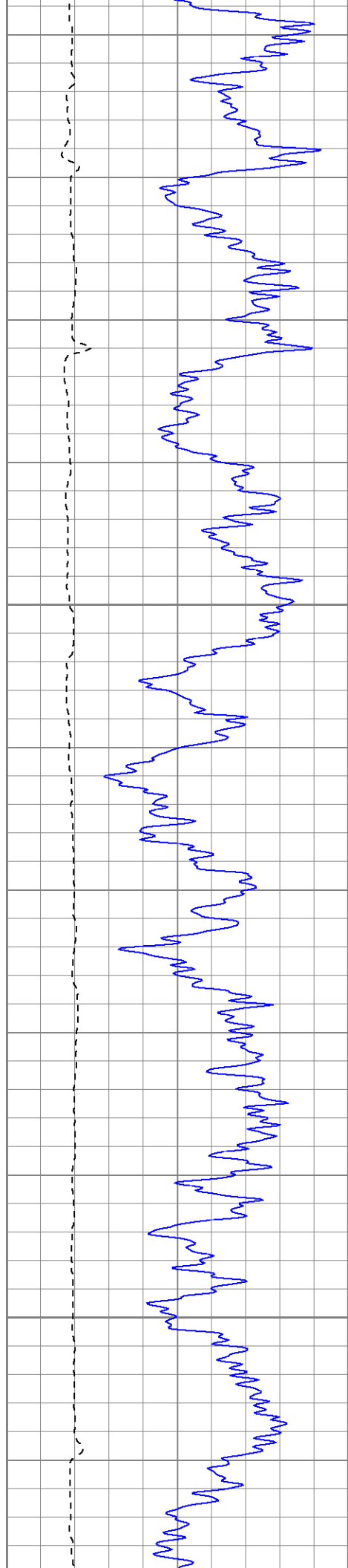


700

750

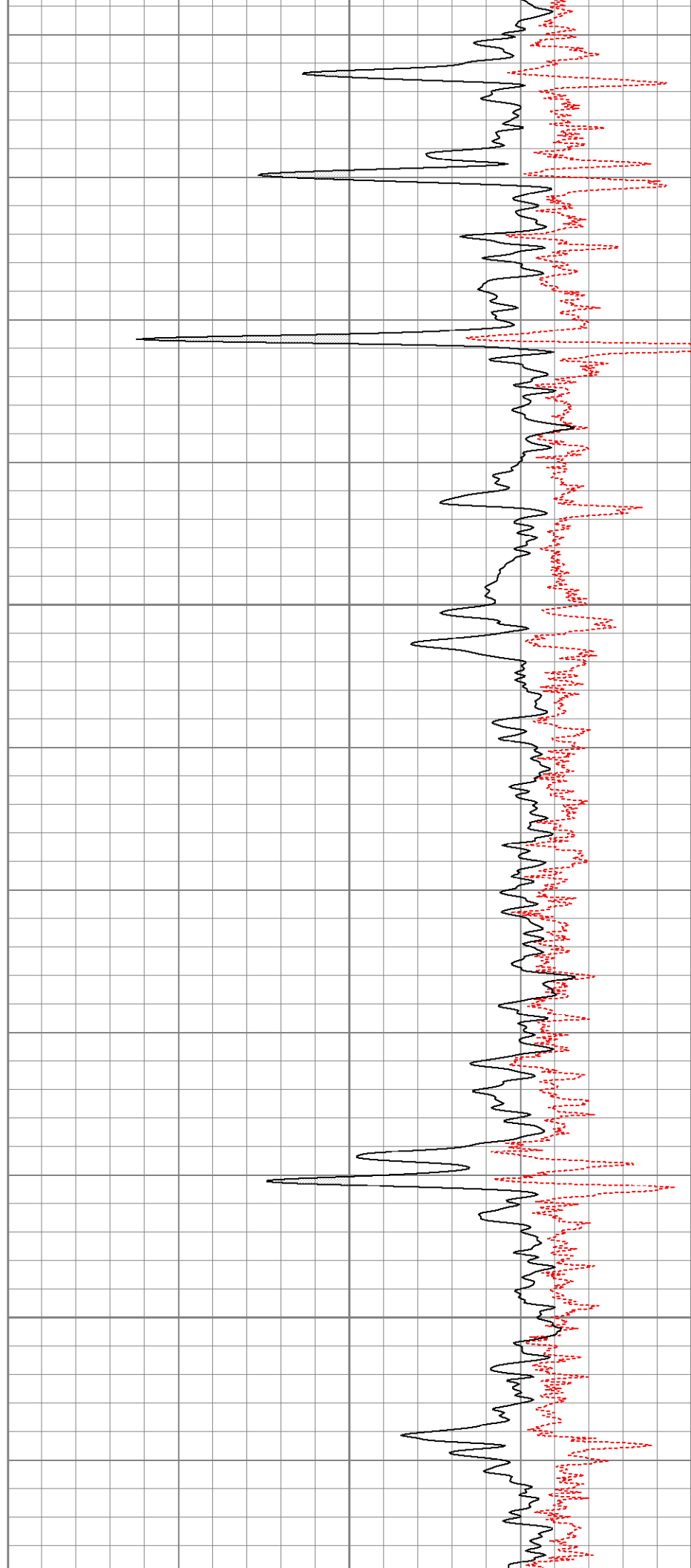
800

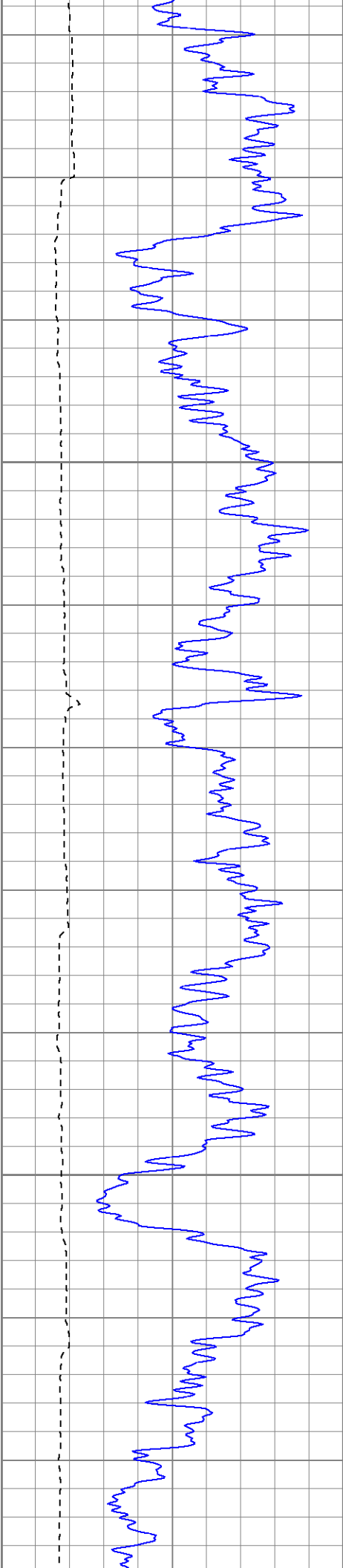




850

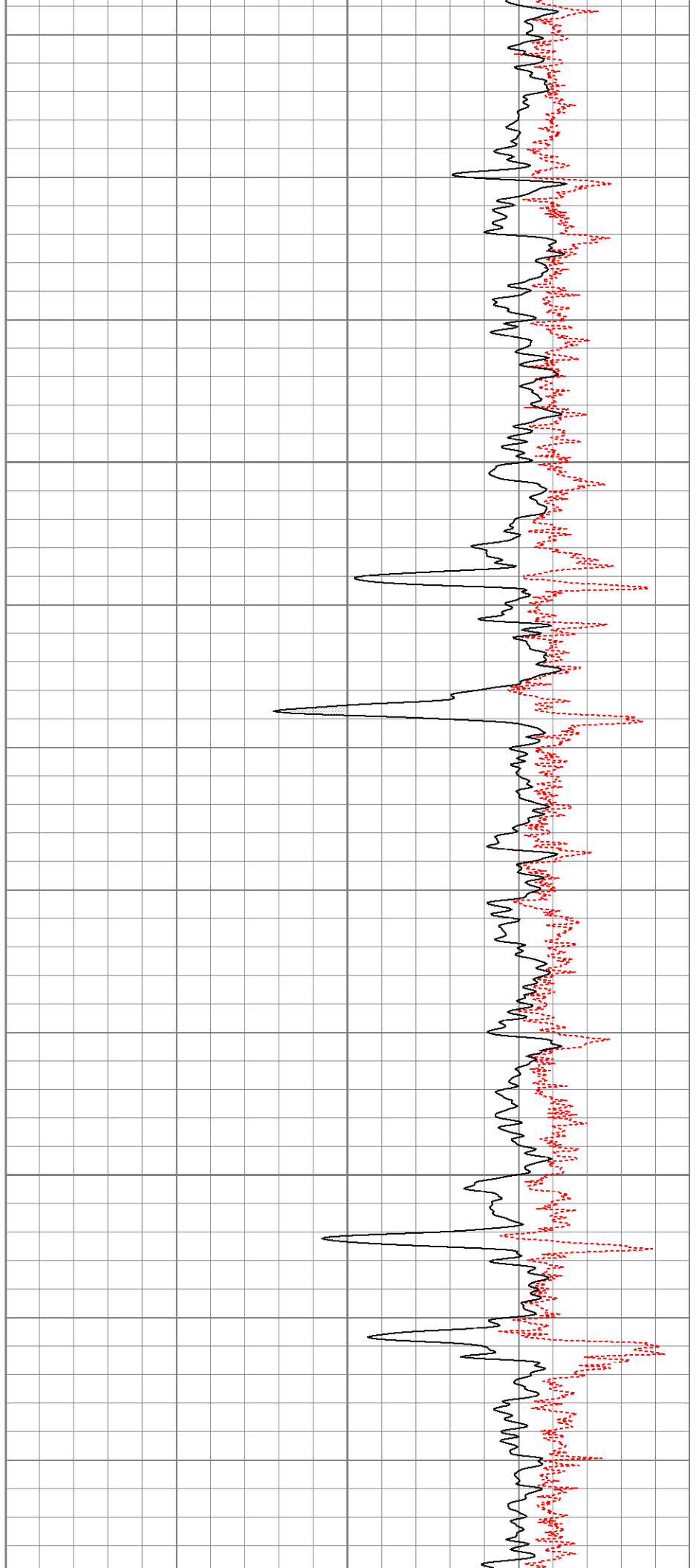
900

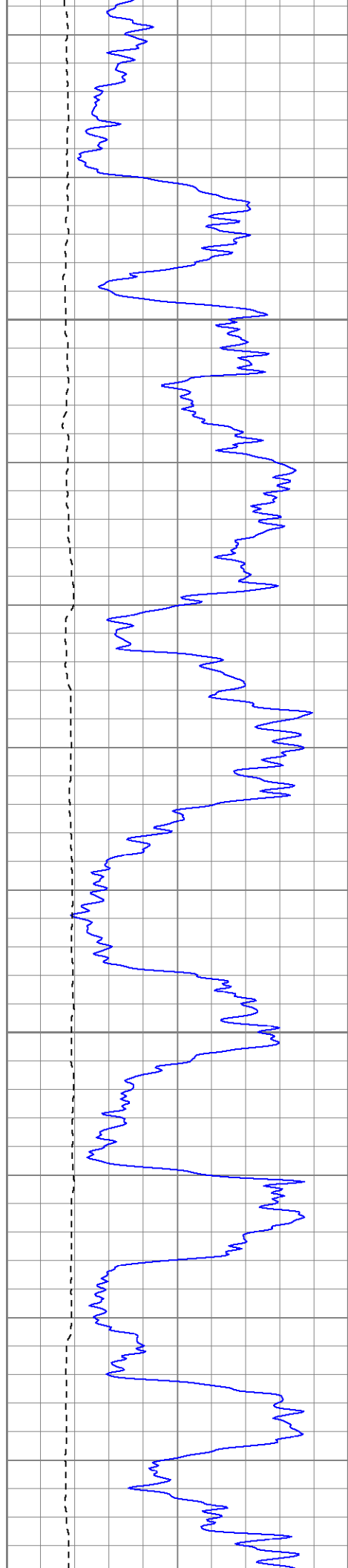




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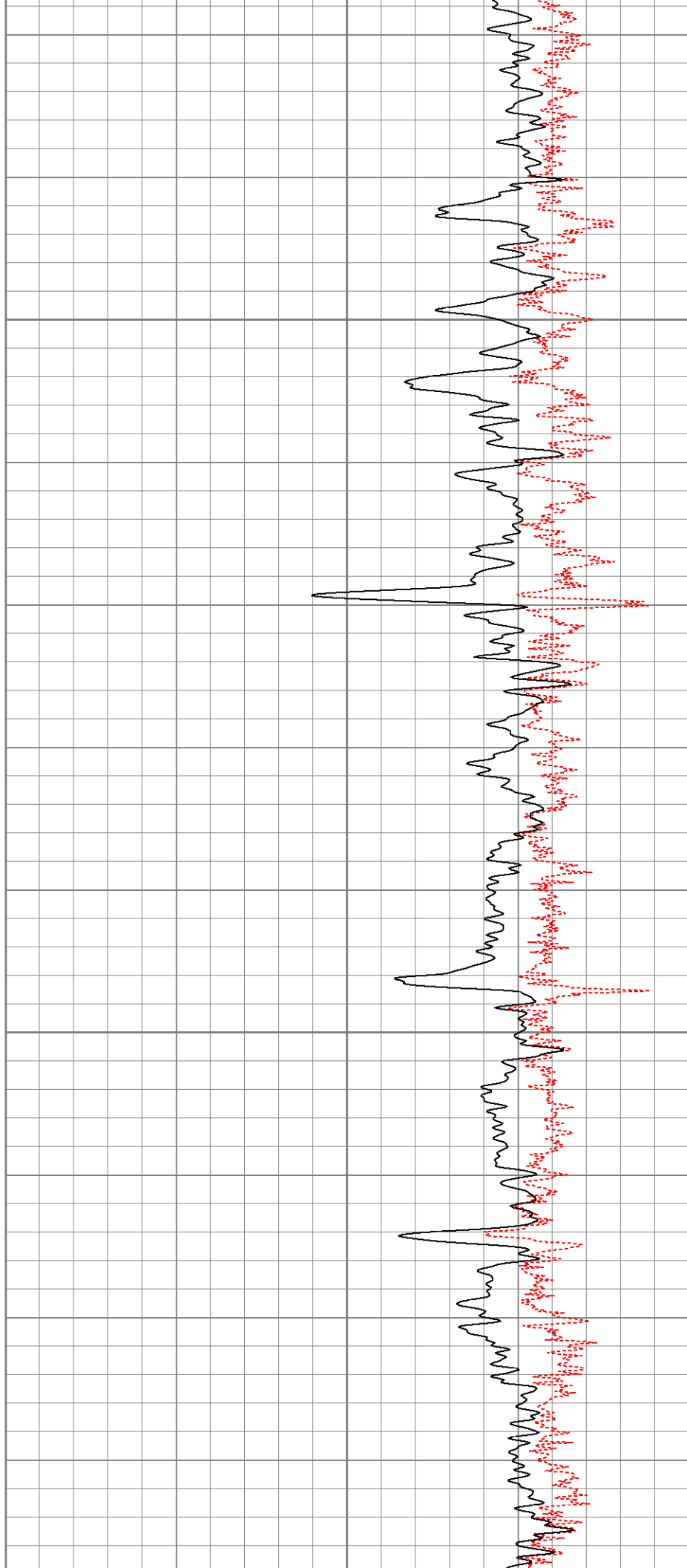
1000

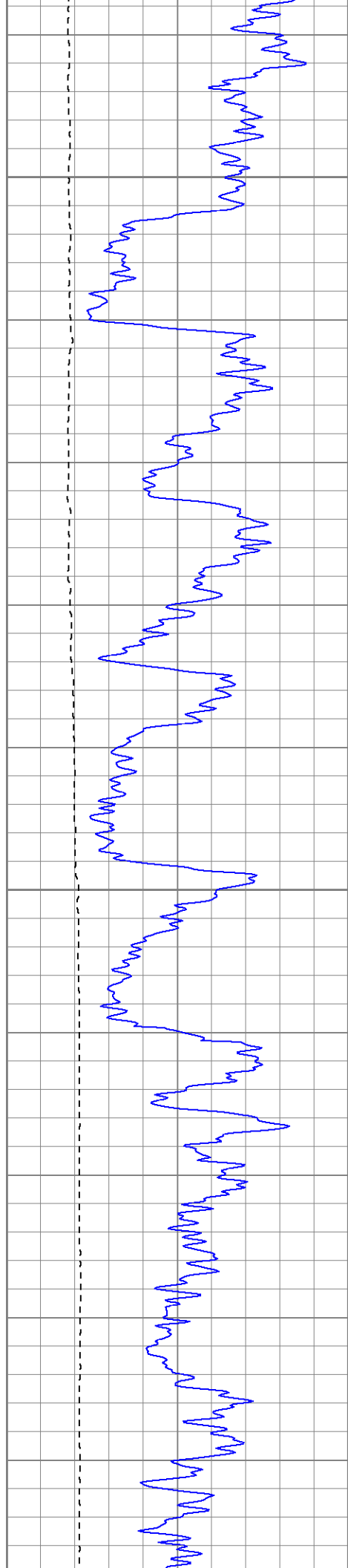




1050

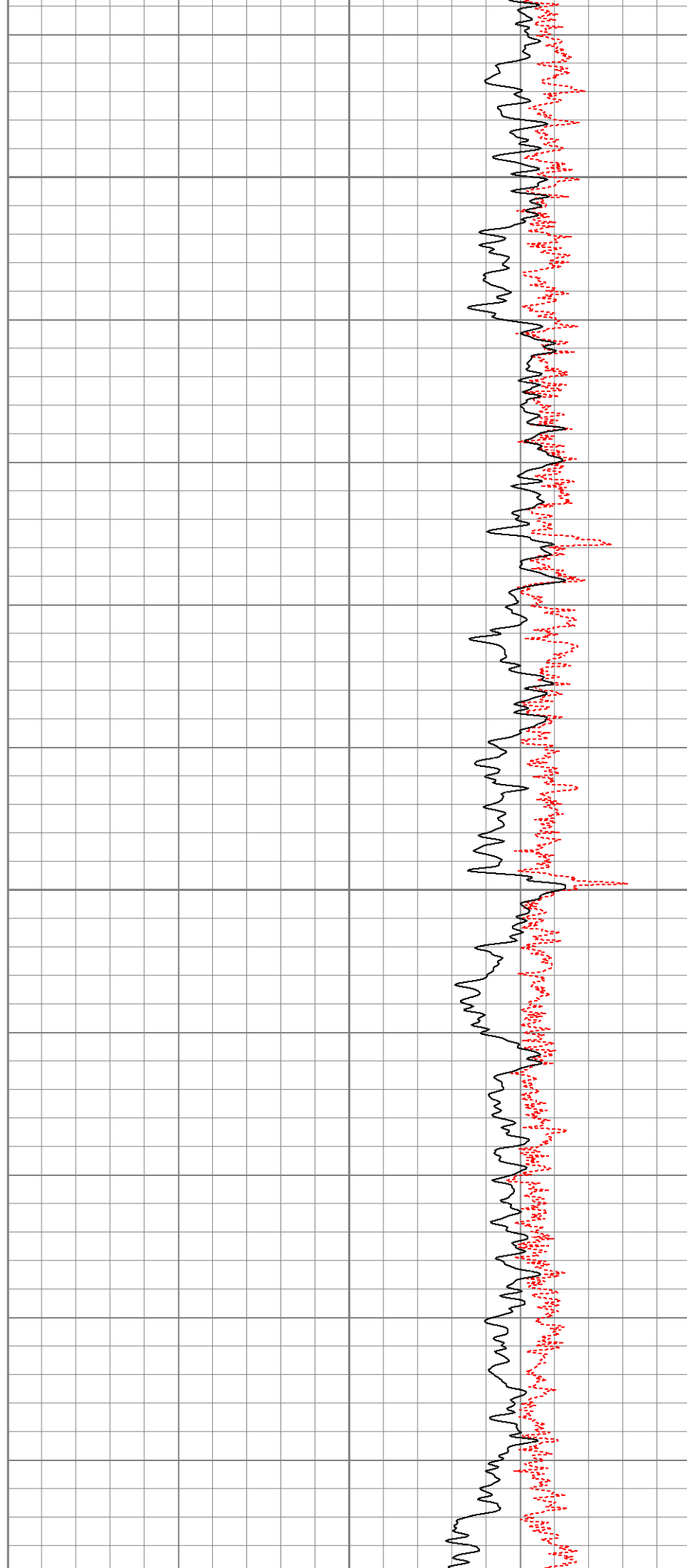
1100

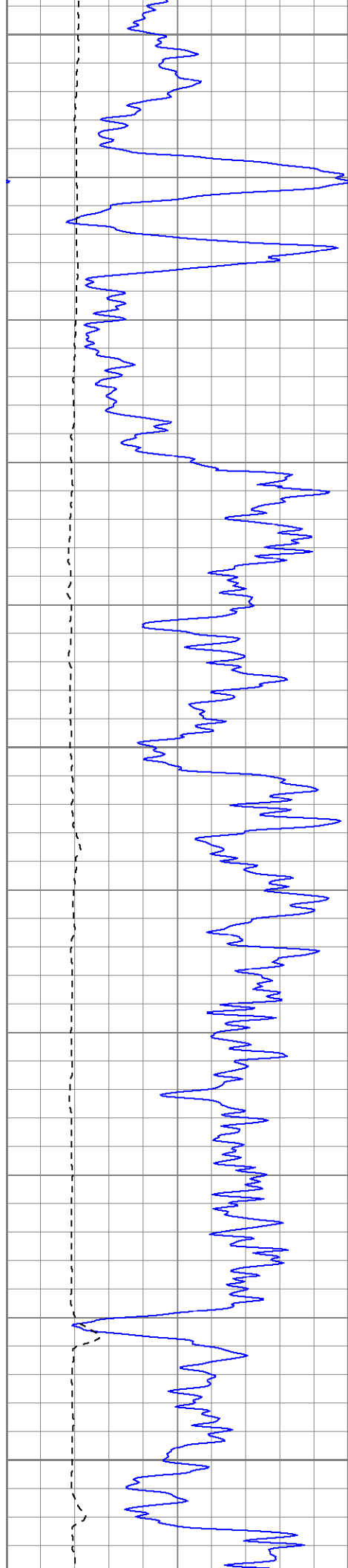




1150

1200

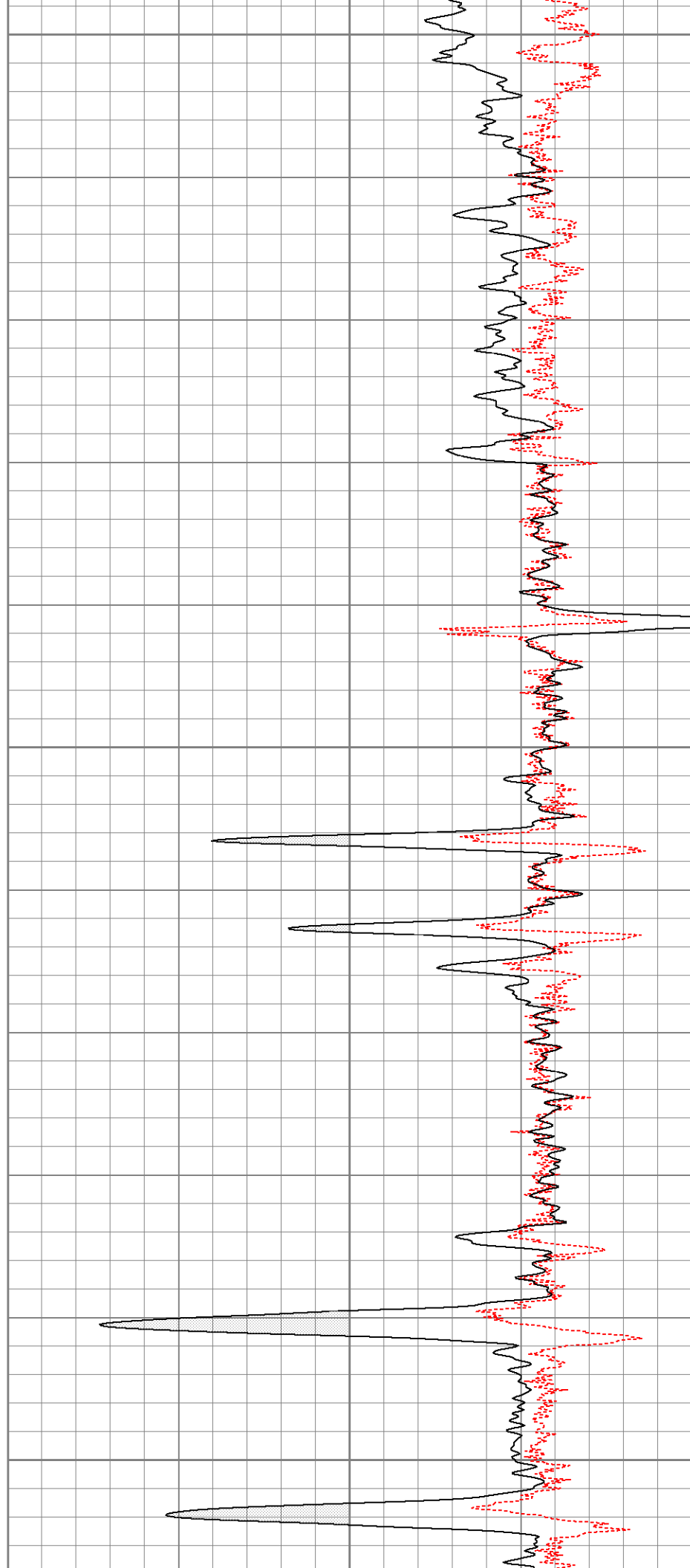


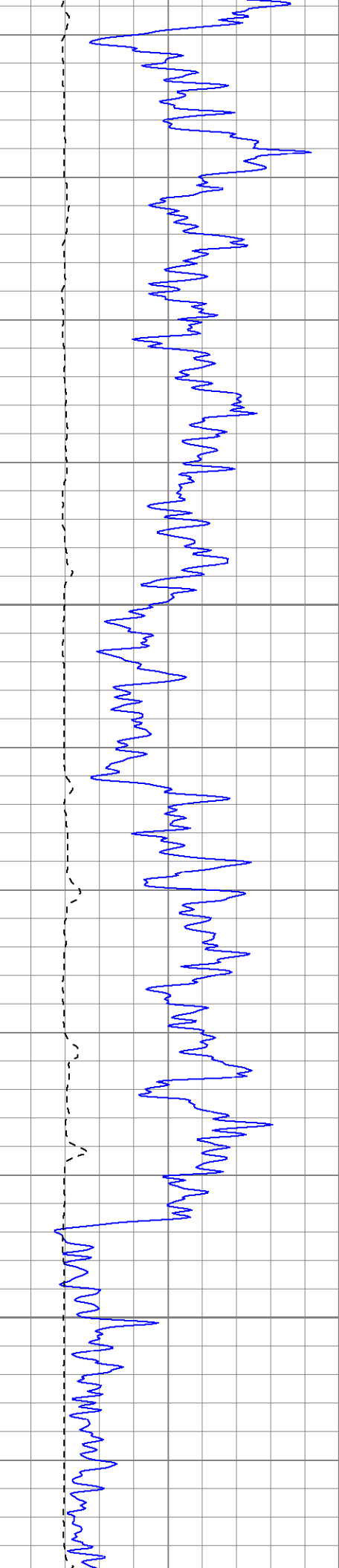


1250

1300

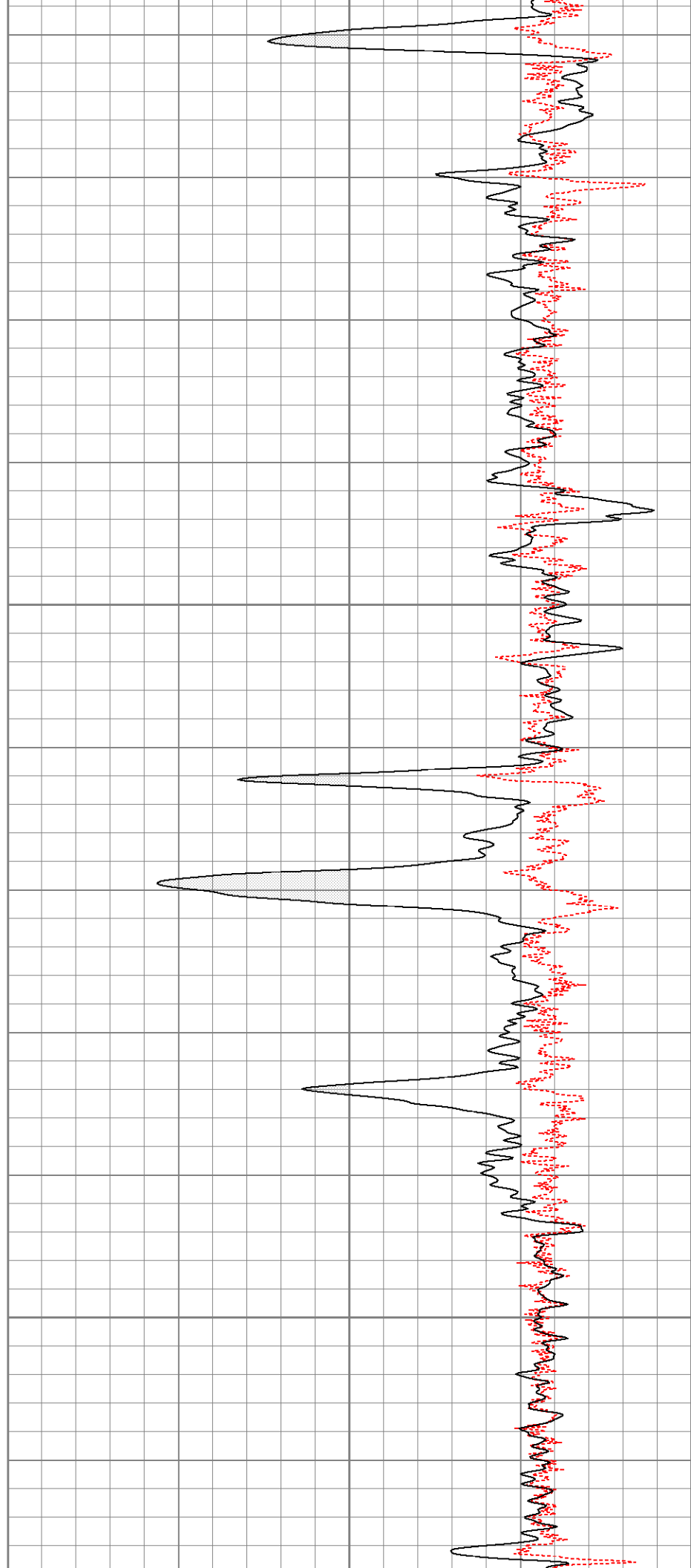
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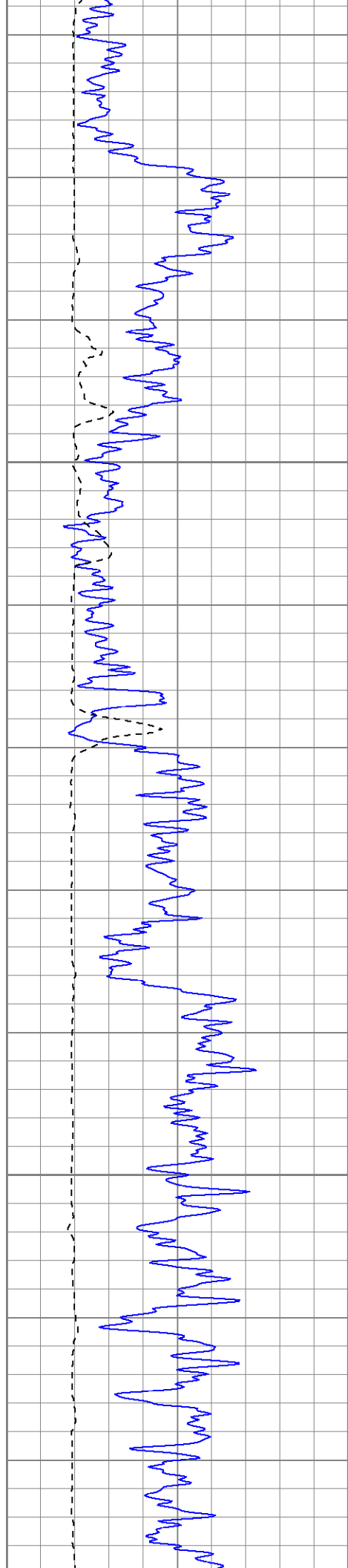




1400

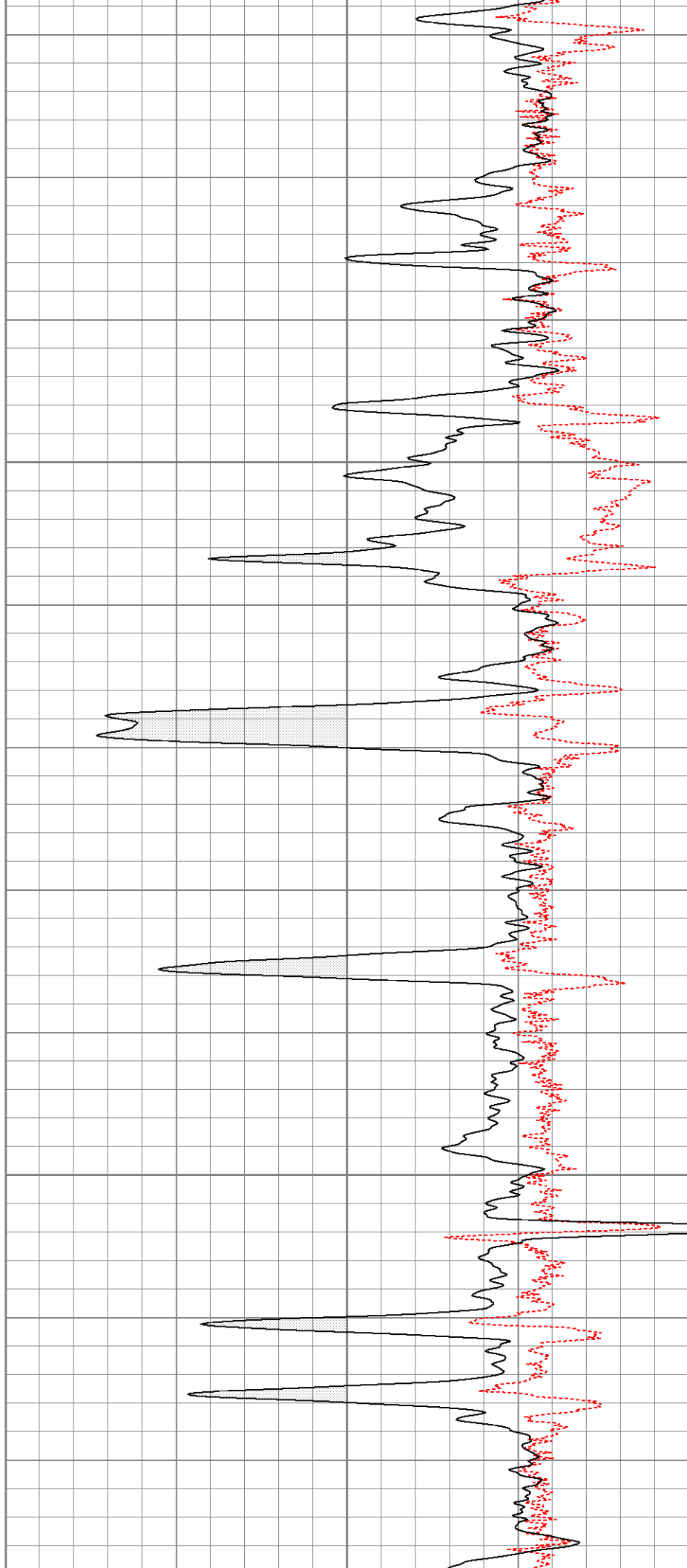
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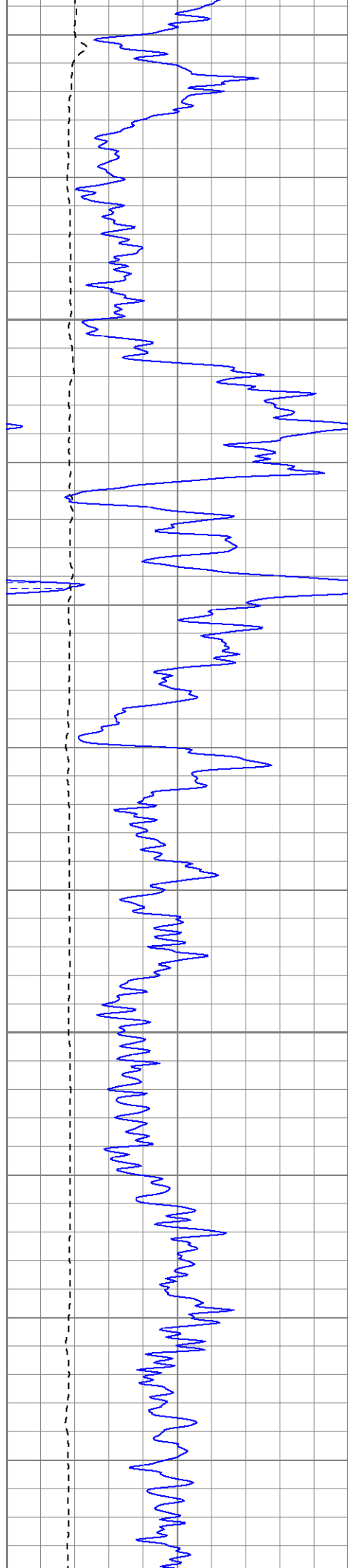




1500

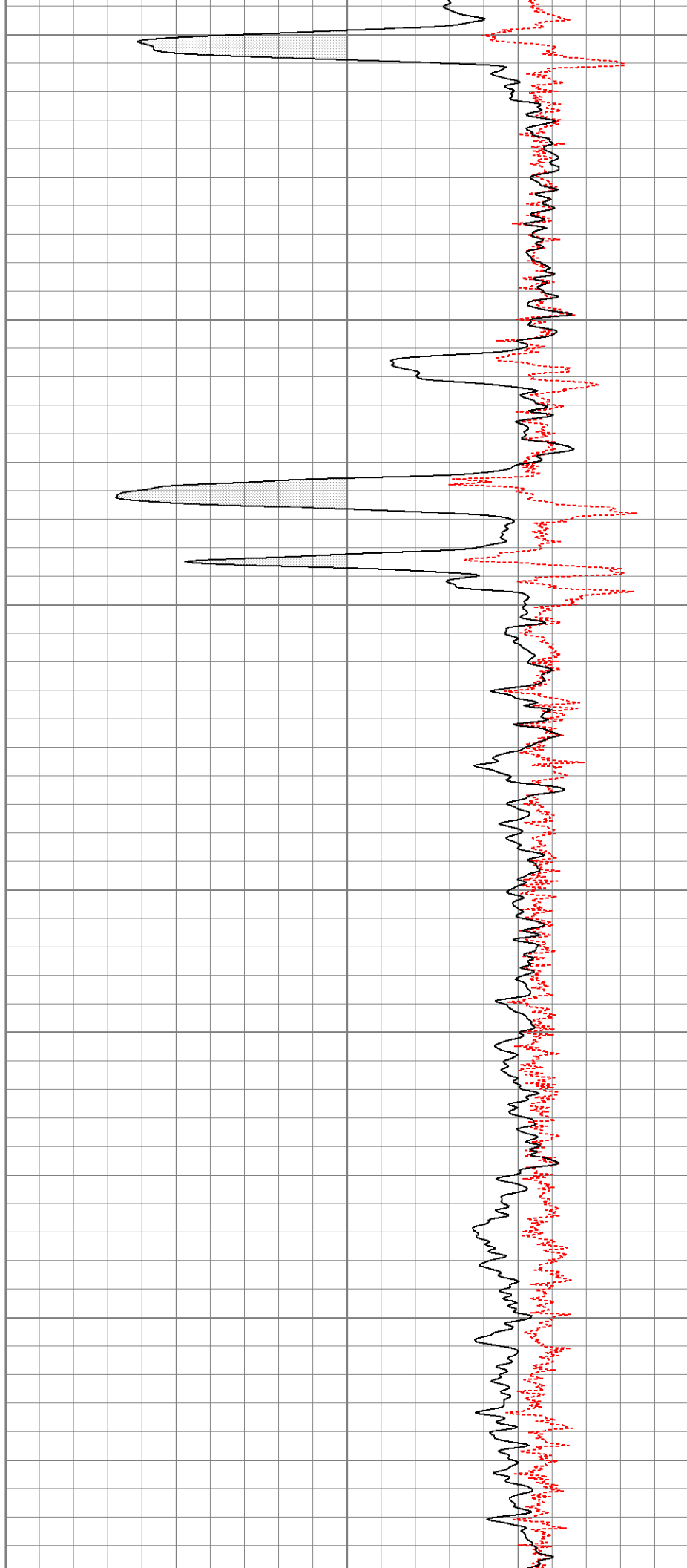
1550

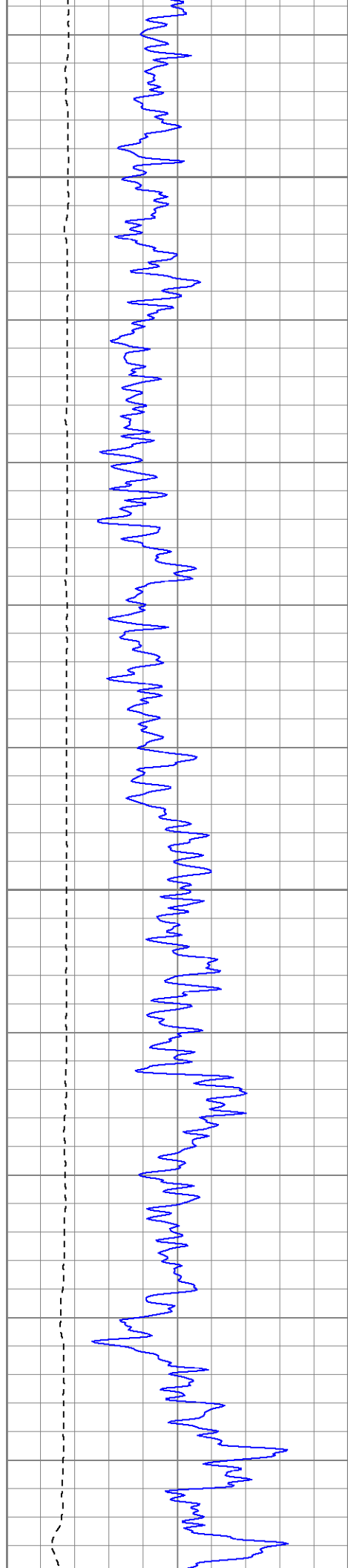




1600

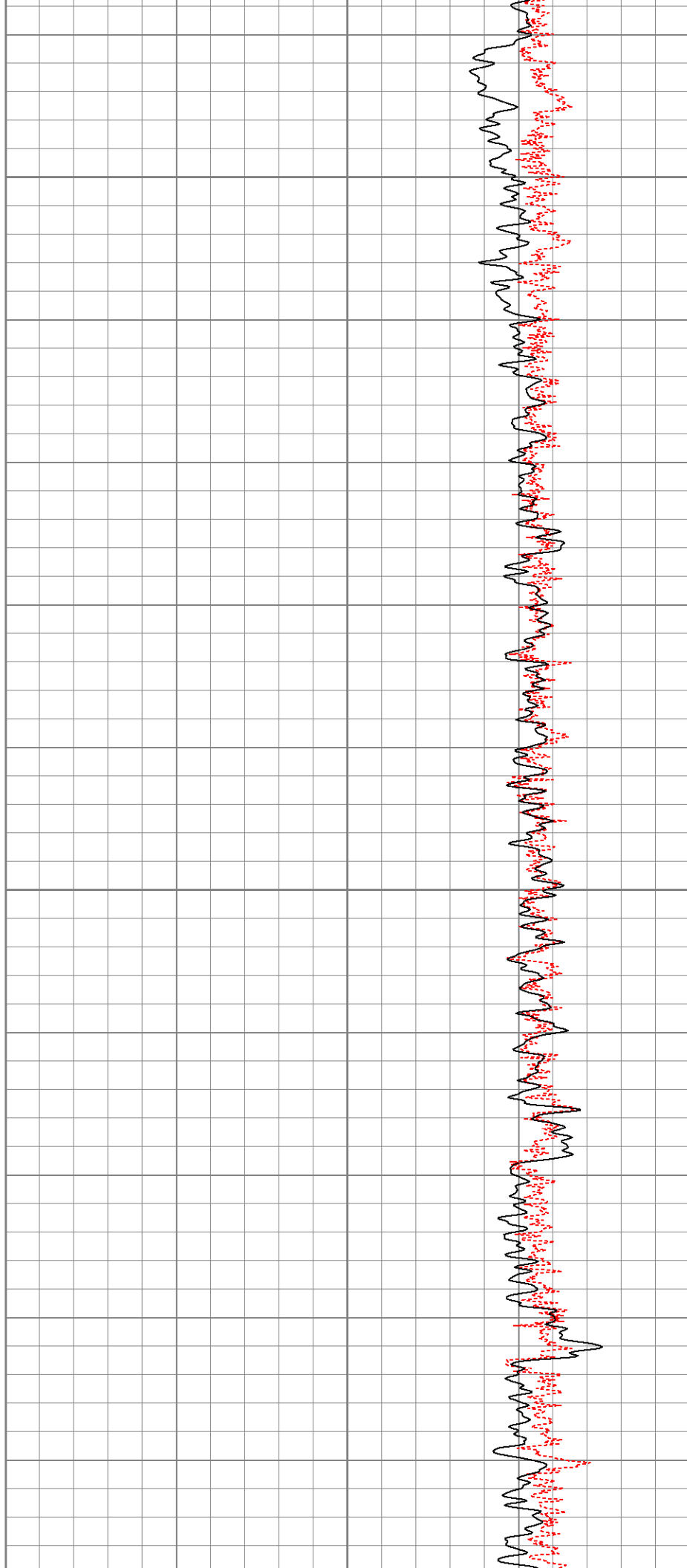
1650

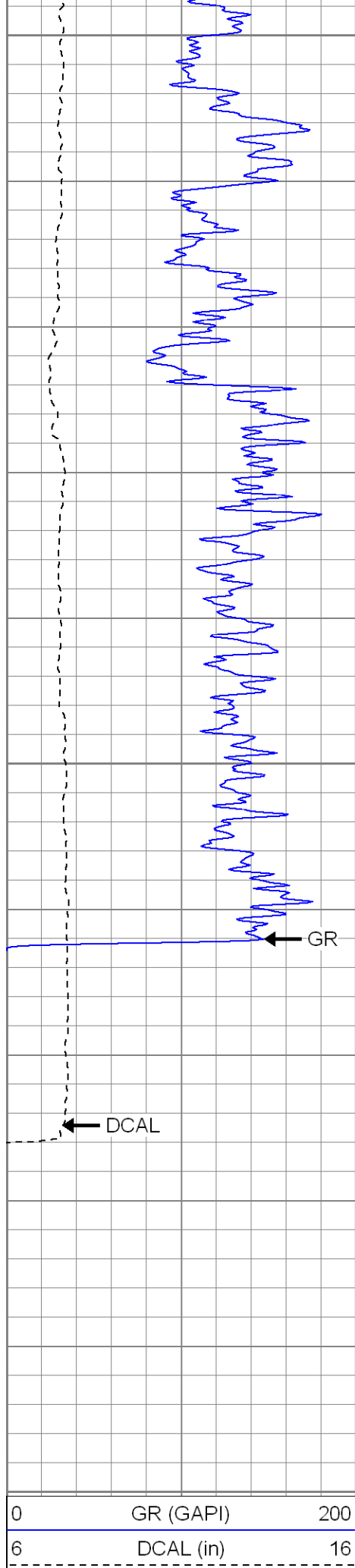




1700

1750

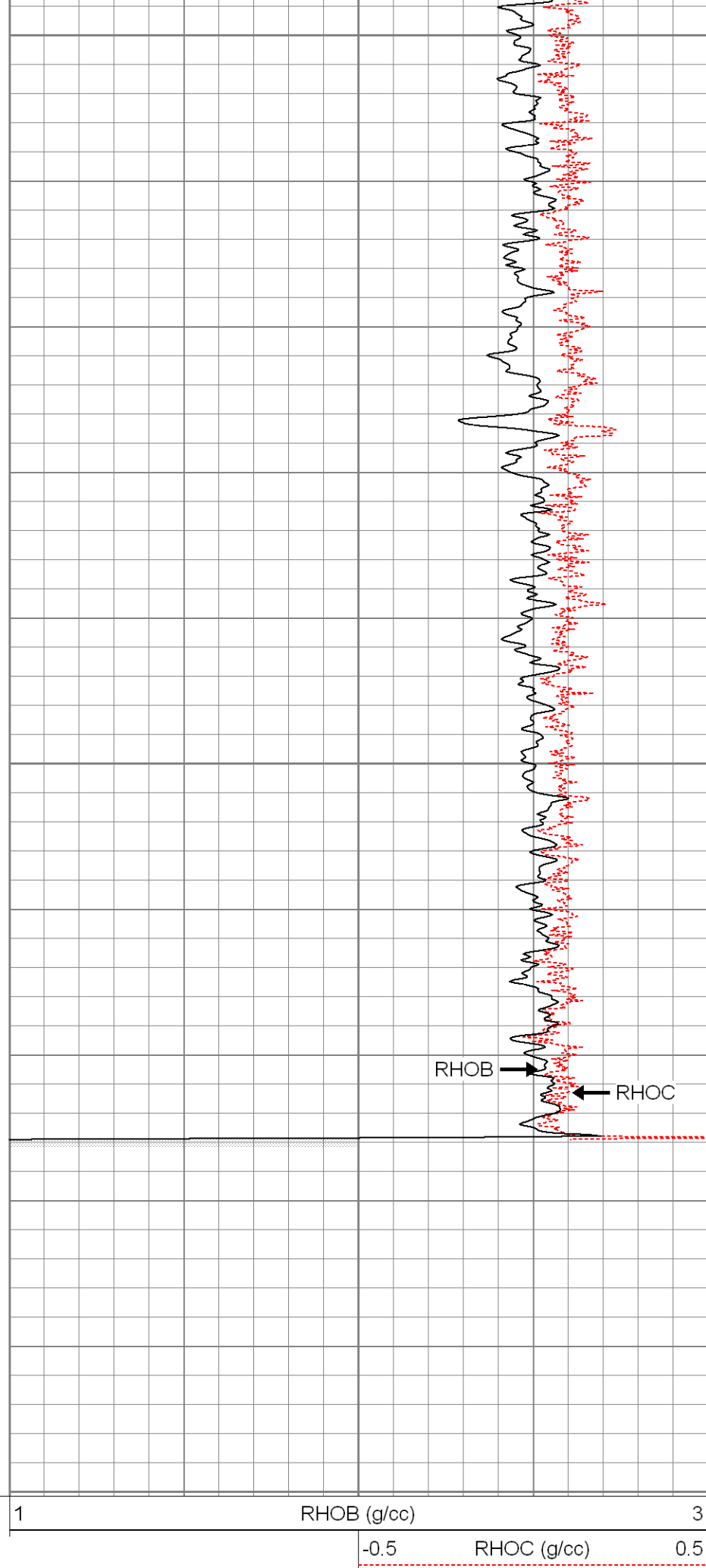




1800

1850

1900



RHOB (g/cc)

RHOC (g/cc)

Calibration Report

Database File: xtone3603.db
 Dataset Pathname: pass1
 Dataset Creation: Thu Mar 15 15:23:06 2007 by Log Open-Cased 061129

Dual Induction Calibration Report

Serial-Model: 5375-G
 Surface Cal Performed: Sun Feb 18 13:17:13 2007
 Downhole Cal Performed: Sun Feb 18 13:17:56 2007

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.008	0.626	V	0.000	500.000	mmho-m	809.126	-6.267
Medium	0.010	0.748	V	0.000	550.000	mmho-m	745.979	-7.704
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.008	0.626	V	0.000	500.000	mmho-m	809.454	-6.433
Medium	0.011	0.748	V	0.000	550.000	mmho-m	746.838	-8.278

Downhole Calibration

Internal:	Readings			References			Results	
	Zero	Cal		Zero	Cal		m	b
Deep	-0.588	499.807	mmho-m	0.163	499.960	mmho-m	0.999	0.750
Medium	-0.423	549.681	mmho-m	0.565	549.932	mmho-m	0.999	0.987
Shallow	2.508	0.017	V	500.000	2.000	Ohm-m	125.000	-3.000

Compensated Density Calibration Report

Serial-Model: 901-2.75POH
 Source / Verifier: /
 Master Calibration Performed: Fri Mar 09 13:09:49 2007

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	966.13	494.39	cps
Aluminum	2.590	g/cc	173.30	243.84	cps
Spine Angle = 67.64			Density/Spine Ratio = 0.474		
	Size		Reading		
Small Ring	7.95	in	1.92	V	
Large Ring	17.00	in	4.15	V	

Neutron Calibration Report

Serial Number: 802
 Tool Model: 2.75POH
 Performed: Fri Feb 09 08:32:01 2007

Calibrator Value: 1 NAPI

Calibrator Reading: 1 cps

Sensitivity:

1

NAPI/cps

Gamma Ray Calibration Report

Serial Number: 804
 Tool Model: 2.75POH
 Performed: Fri Feb 09 00:46:24 2007

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

Sensitivity: 0.8100 GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	37.84		None	0.75	1.50	5.00
			GR-2.75POH (804) Probe	3.73	2.75	43.00
NEU	32.30		NEU-2.75POH (802) Probe Epithermal	4.75	2.75	58.00
LSD	24.47		CDL-2.75POH (901) Probe	8.43	2.75	106.00
DCAL	24.19					
SSD	23.95		Probe	0.89	3.50	20.00
CILD	10.60		DIL-G (5375) Gearhart	20.83	4.00	345.00
SP	10.60					
CILM	6.89					
RLL3	1.70					

Dataset: xtone3603.db: field/well/run1/pass2
 Total Length: 39.37 ft
 Total Weight: 577.00 lb
 O.D. 4.00 in