



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

COMPENSATED DENSITY NEUTRON LOG

Company XTO Energy Inc.
Well Apache Canyon 35-07
Field Purgatoire River
County Las Animas State Colorado

Location: API # : 05 071 09320 00

2561' FNL & 1466' FEL

SEC 35 TWP 33S RGE 67W

DIL

Permanent Datum Ground Level Elevation 6953'
Log Measured From Ground Level
Drilling Measured From Ground Level

Elevation
K.B. -----
D.F. -----
G.L. 6953'

Date 9-02-07

Run Number One

Depth Driller 1980'

Depth Logger 1974'

Bottom Logged Interval 1957'

Top Log Interval Surface Casing

Casing Driller 8 5/8" @ 496'

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 1:30 A.M.

Time Logger on Bottom 4:30 A.M.

Maximum Recorded Temperature 98 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, second right to location.

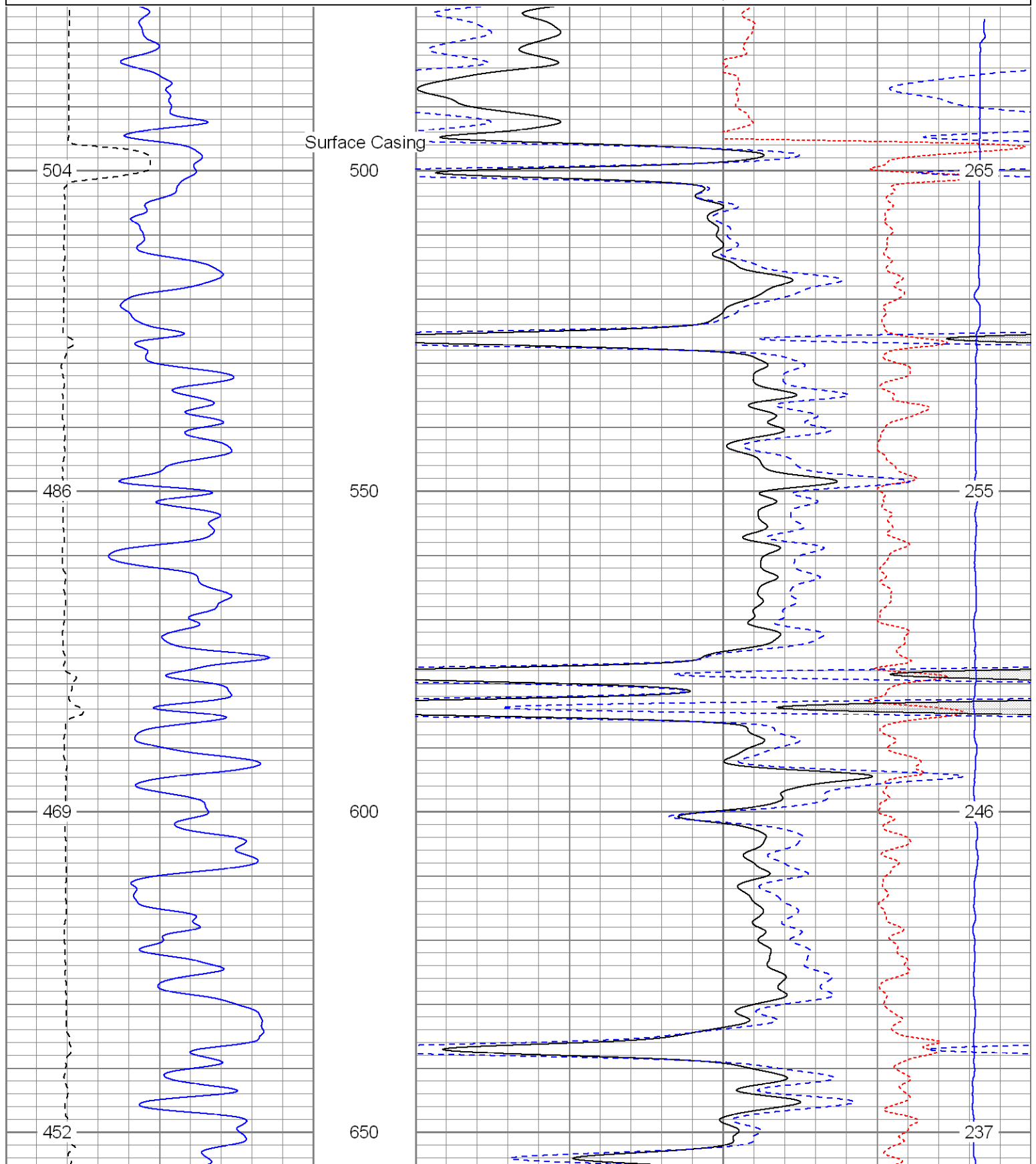


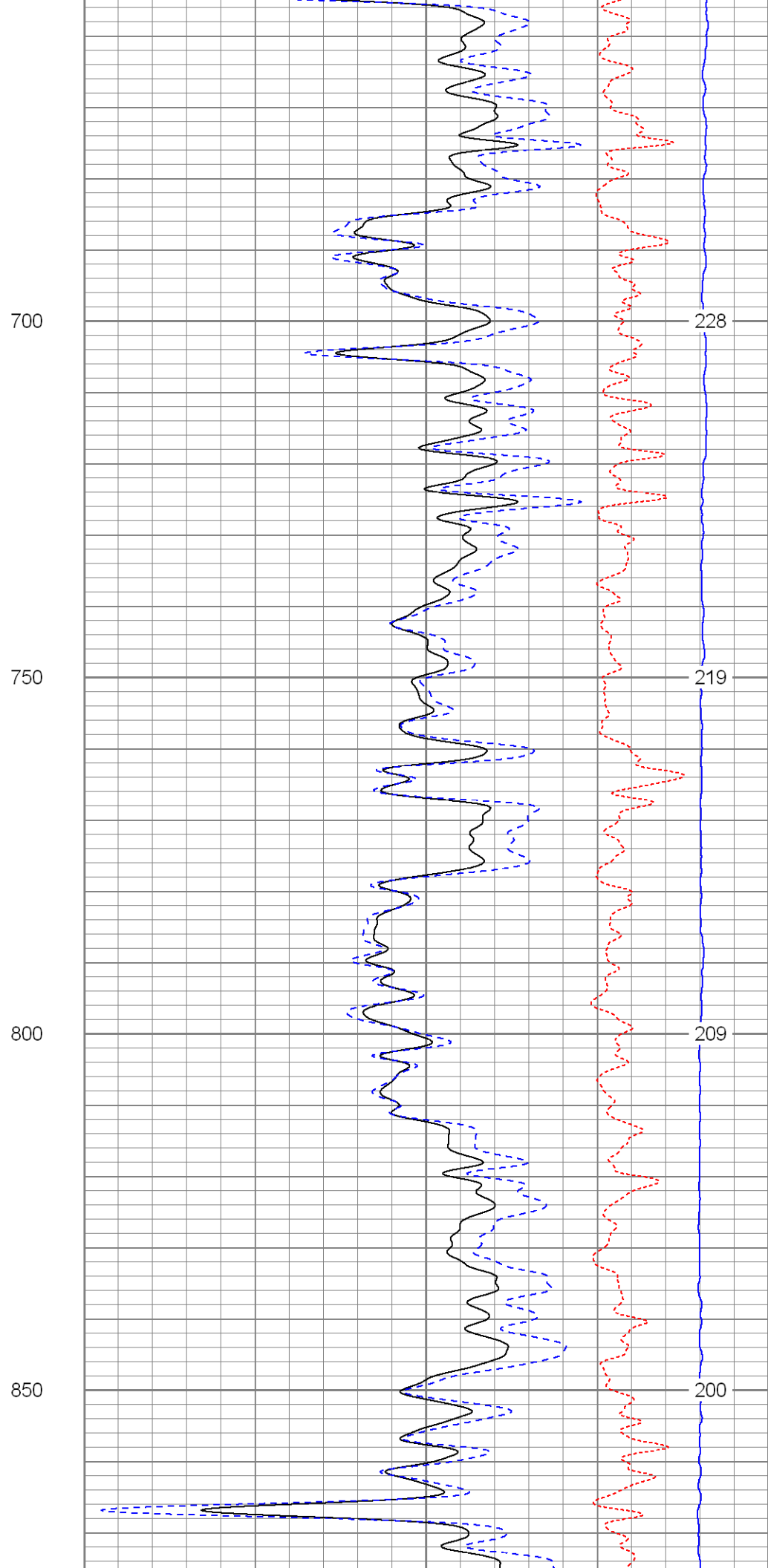
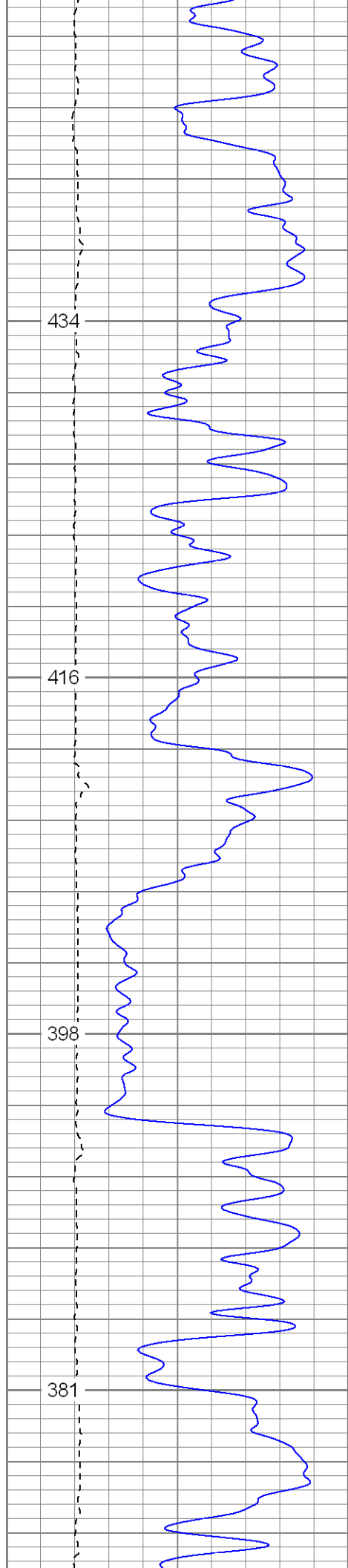
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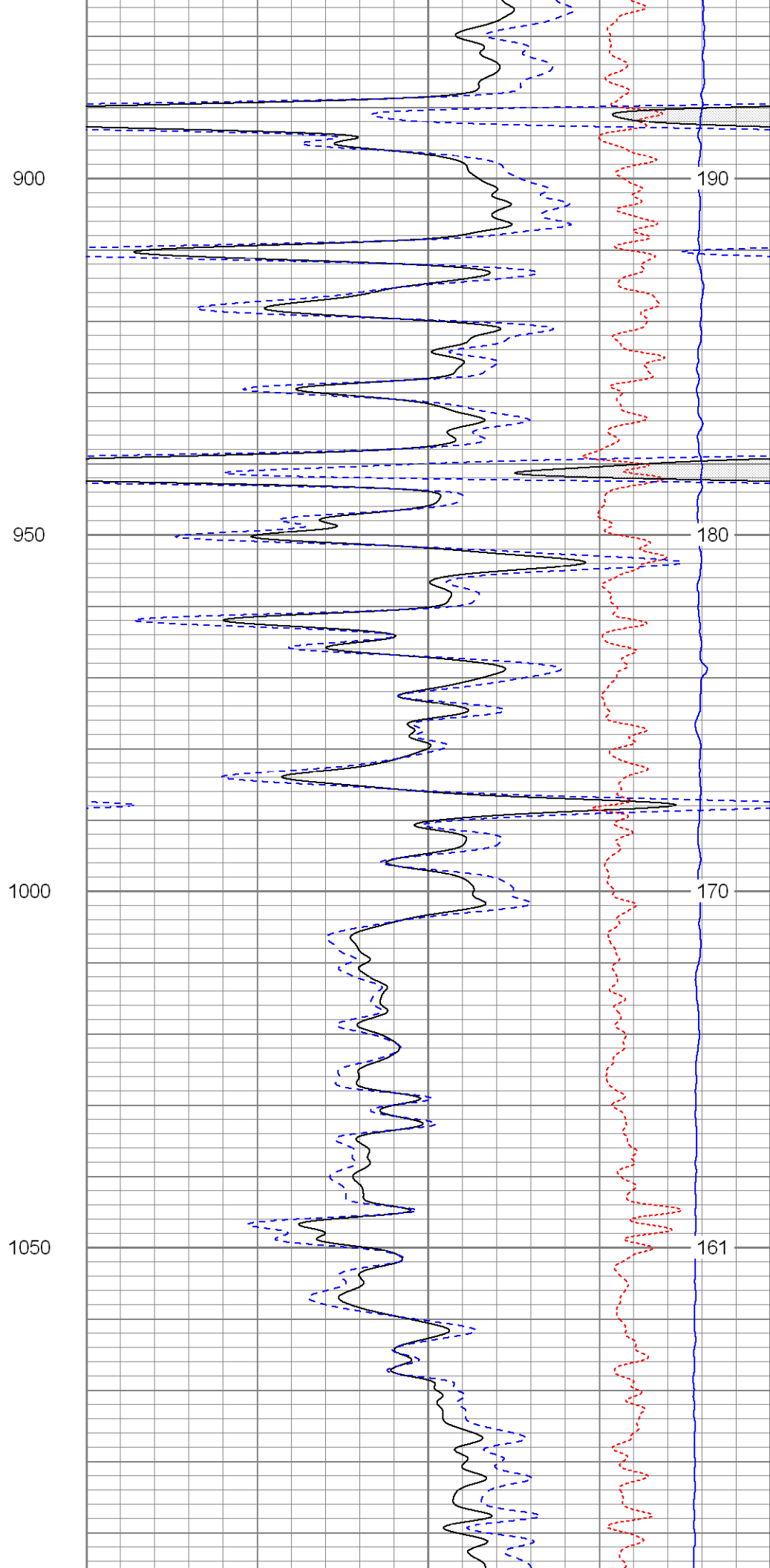
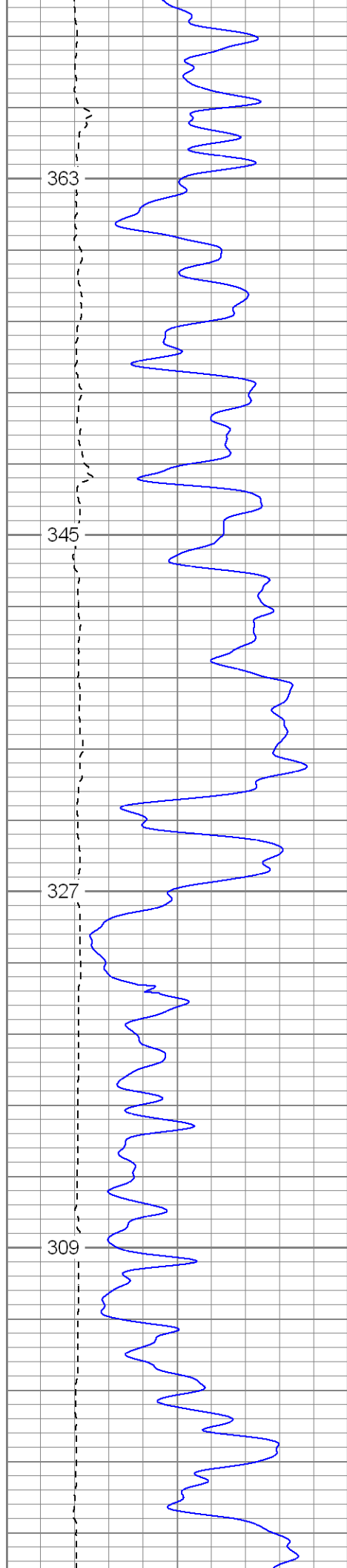
Main Pass

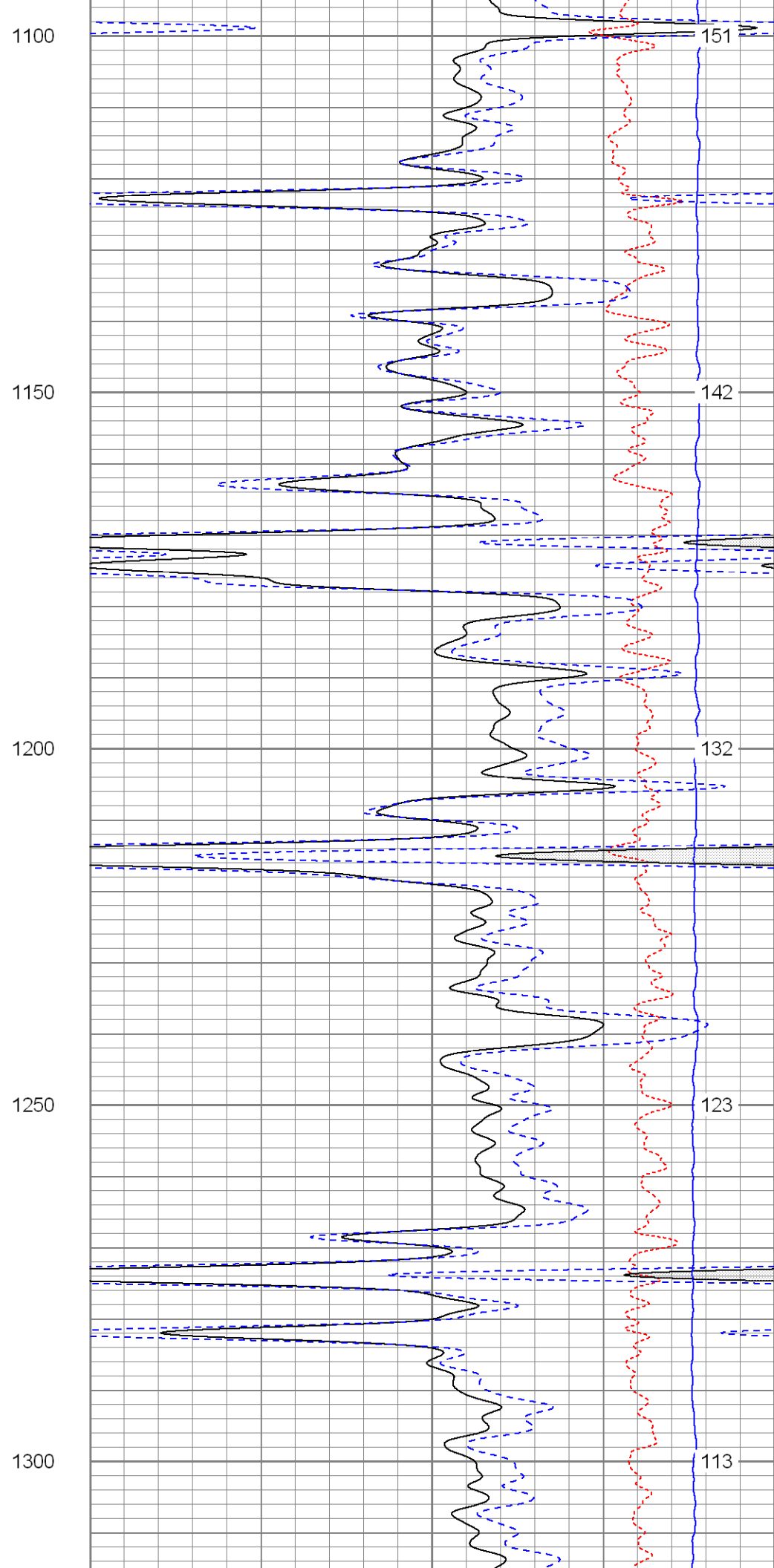
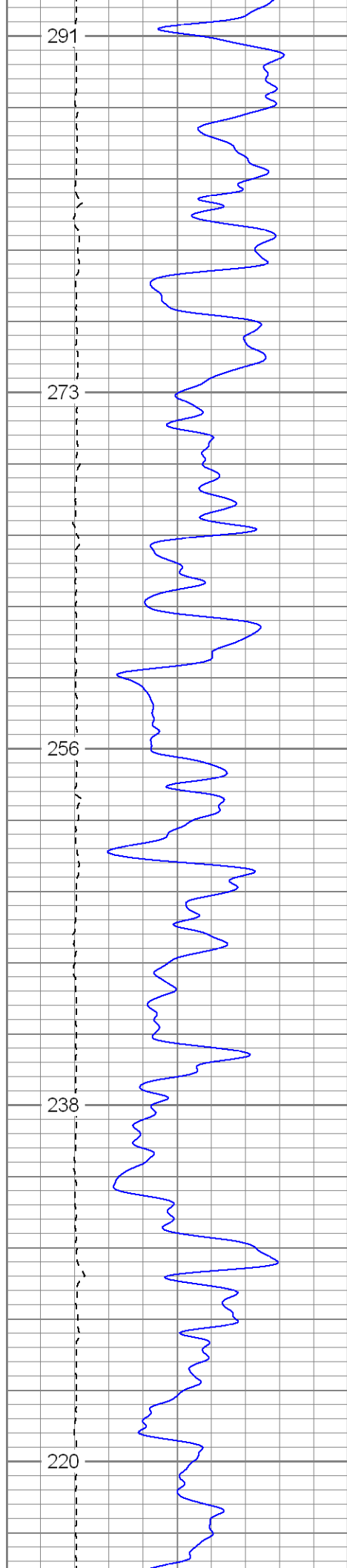
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Dataset Pathname: pass2.1
Presentation Format: cdl
Dataset Creation: Sun Sep 02 05:46:44 2007 by Calc Open-Cased 061129
Charted by: Depth in Feet scaled 1:240

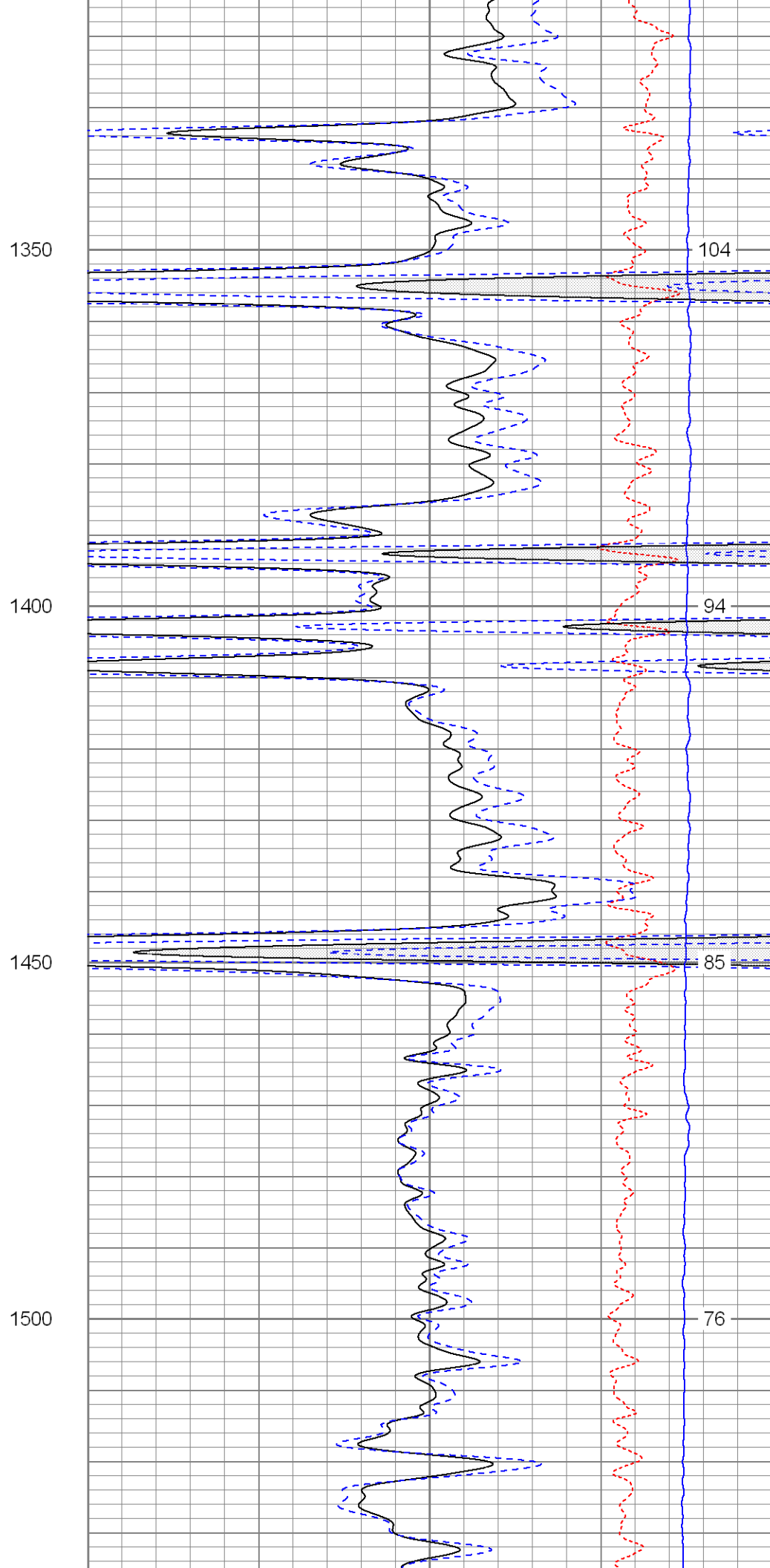
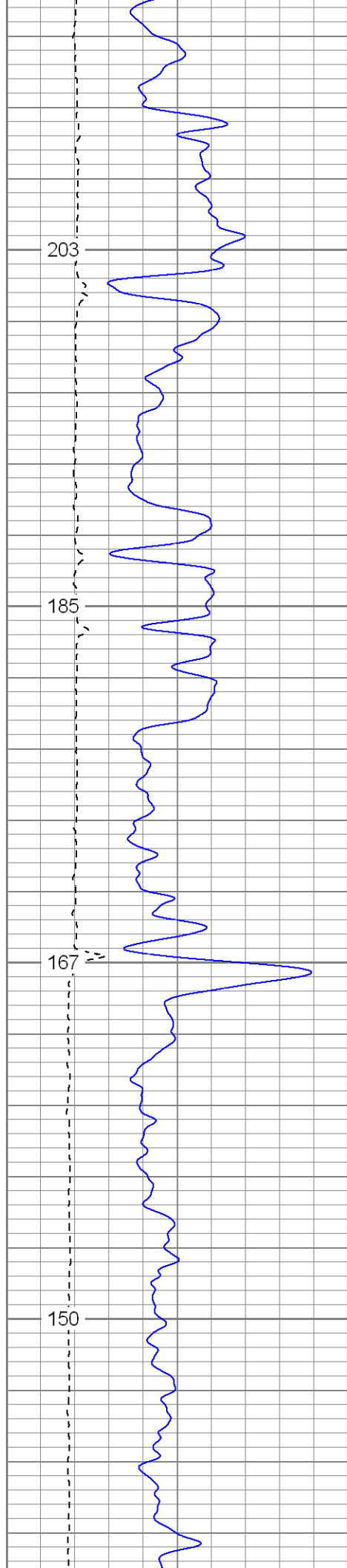
0	GR (GAPI)	200	1	RHOB (g/cc)	2
6	DCAL (in)	16	30	DPOR (pu)	-10
			-0.5 RHOC (g/cc) 0.5		
			4000 LTEN (lb) 0		

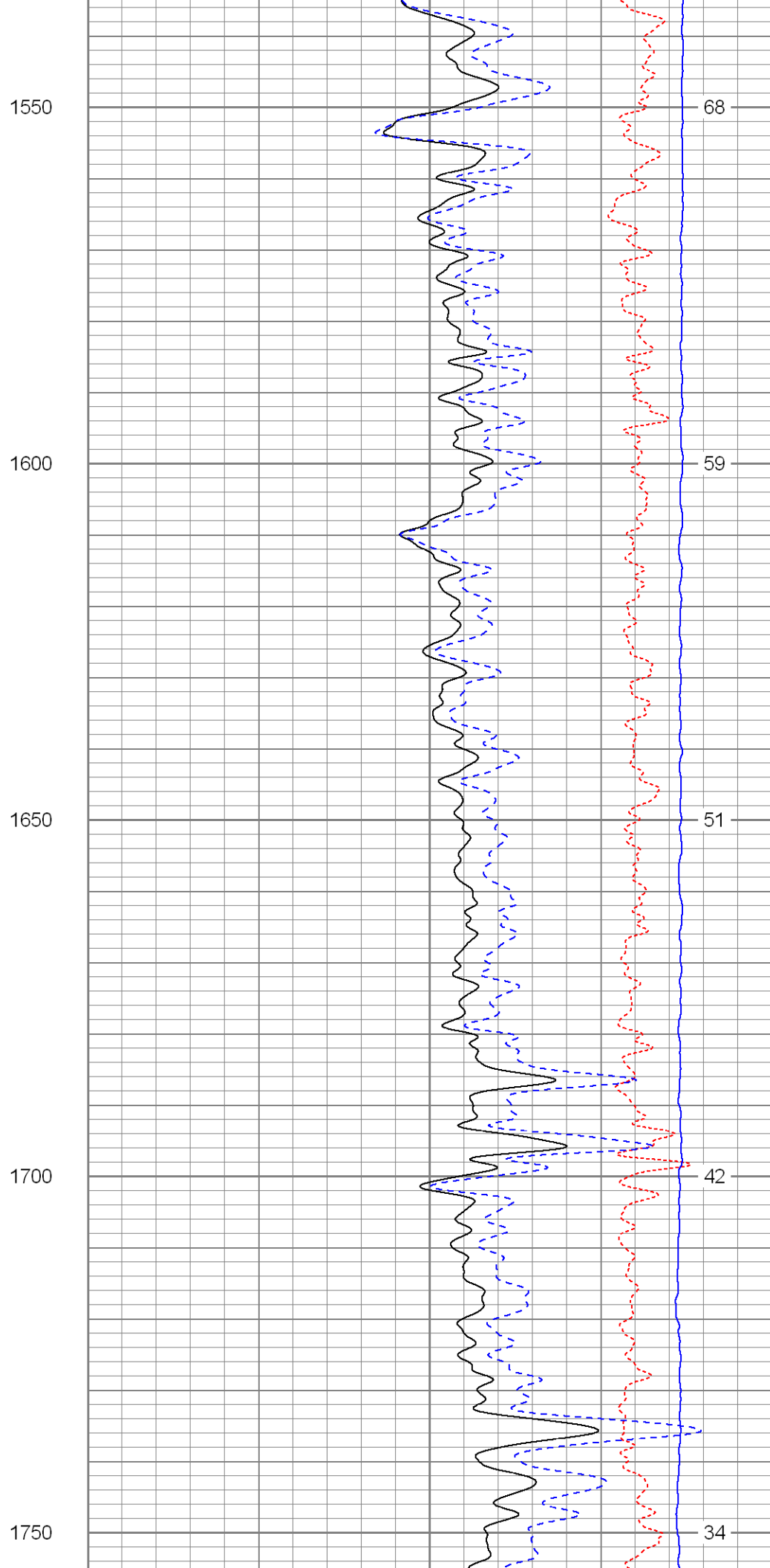
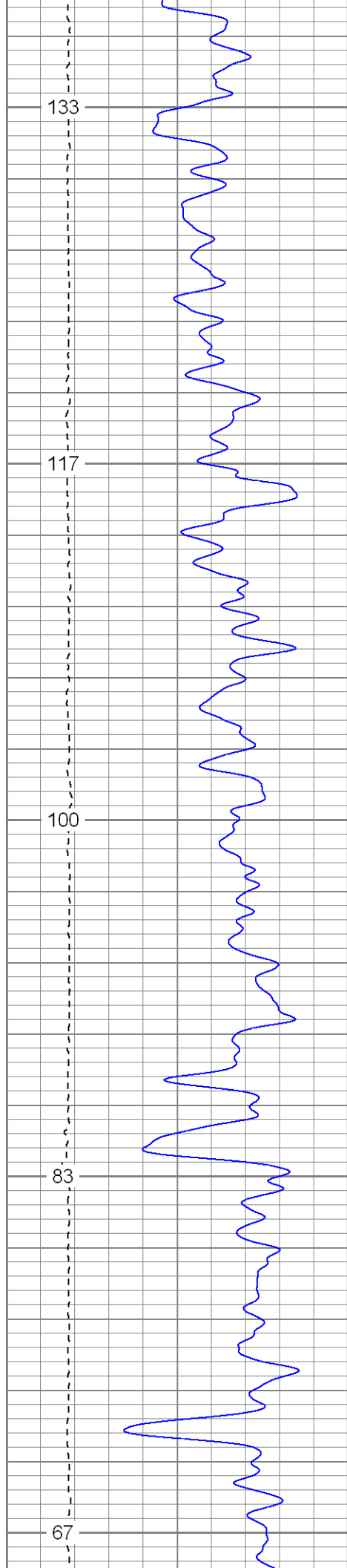


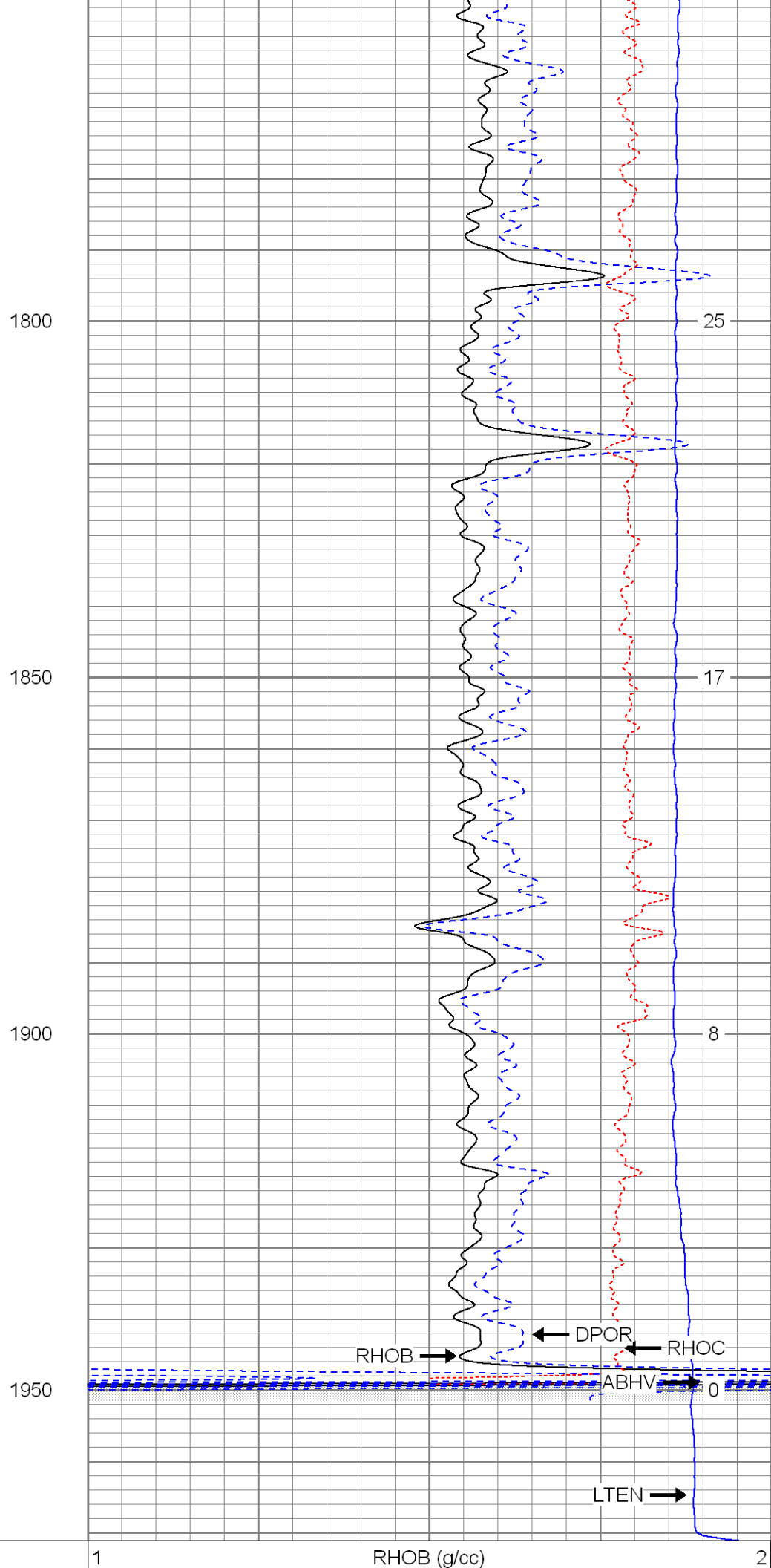
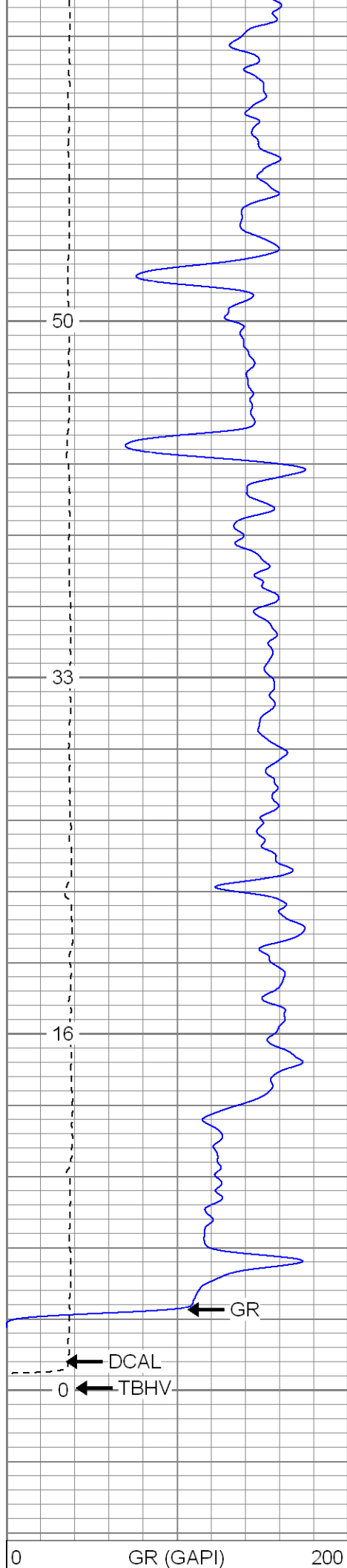












6	DCAL (in)	16
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30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0



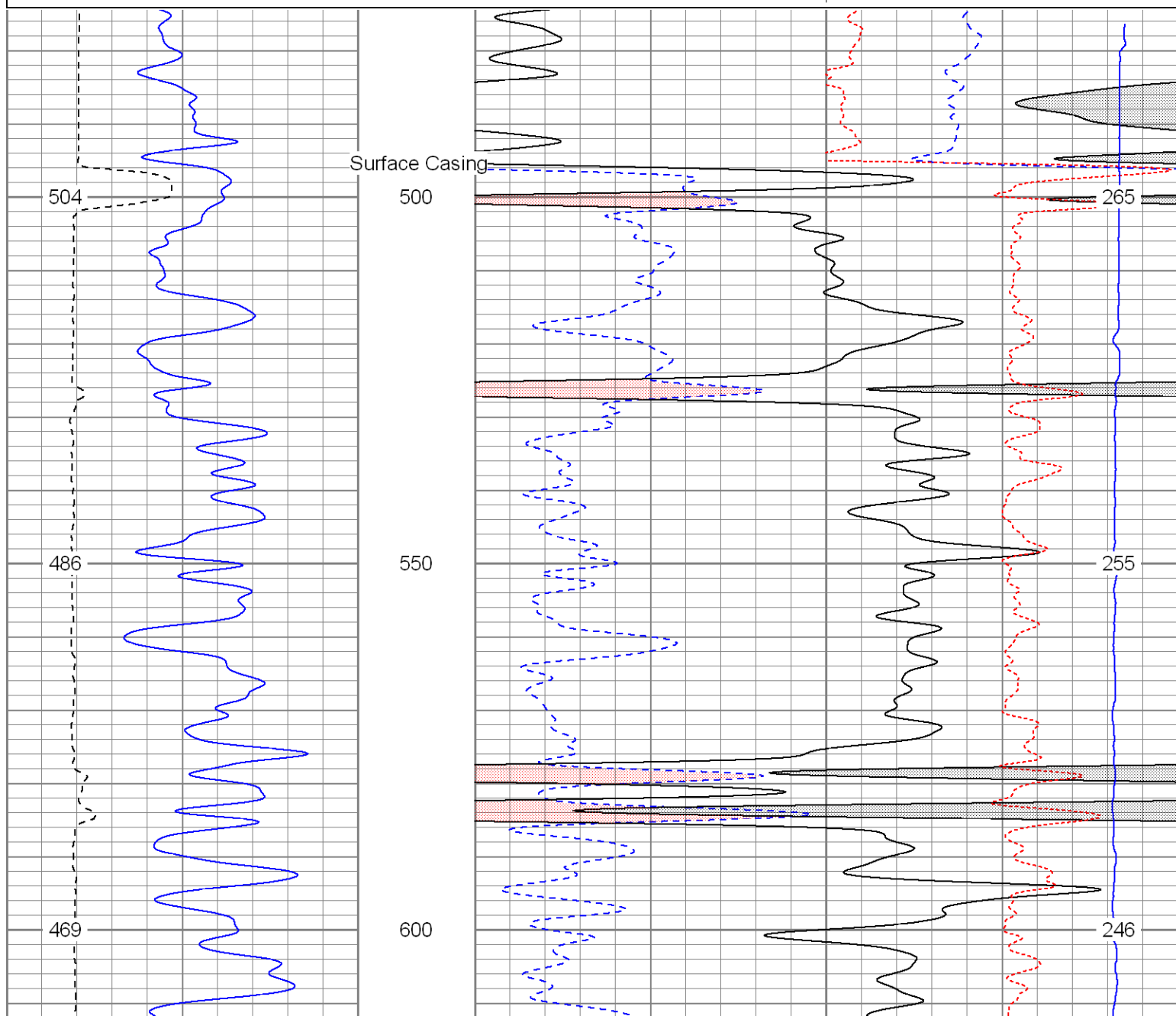
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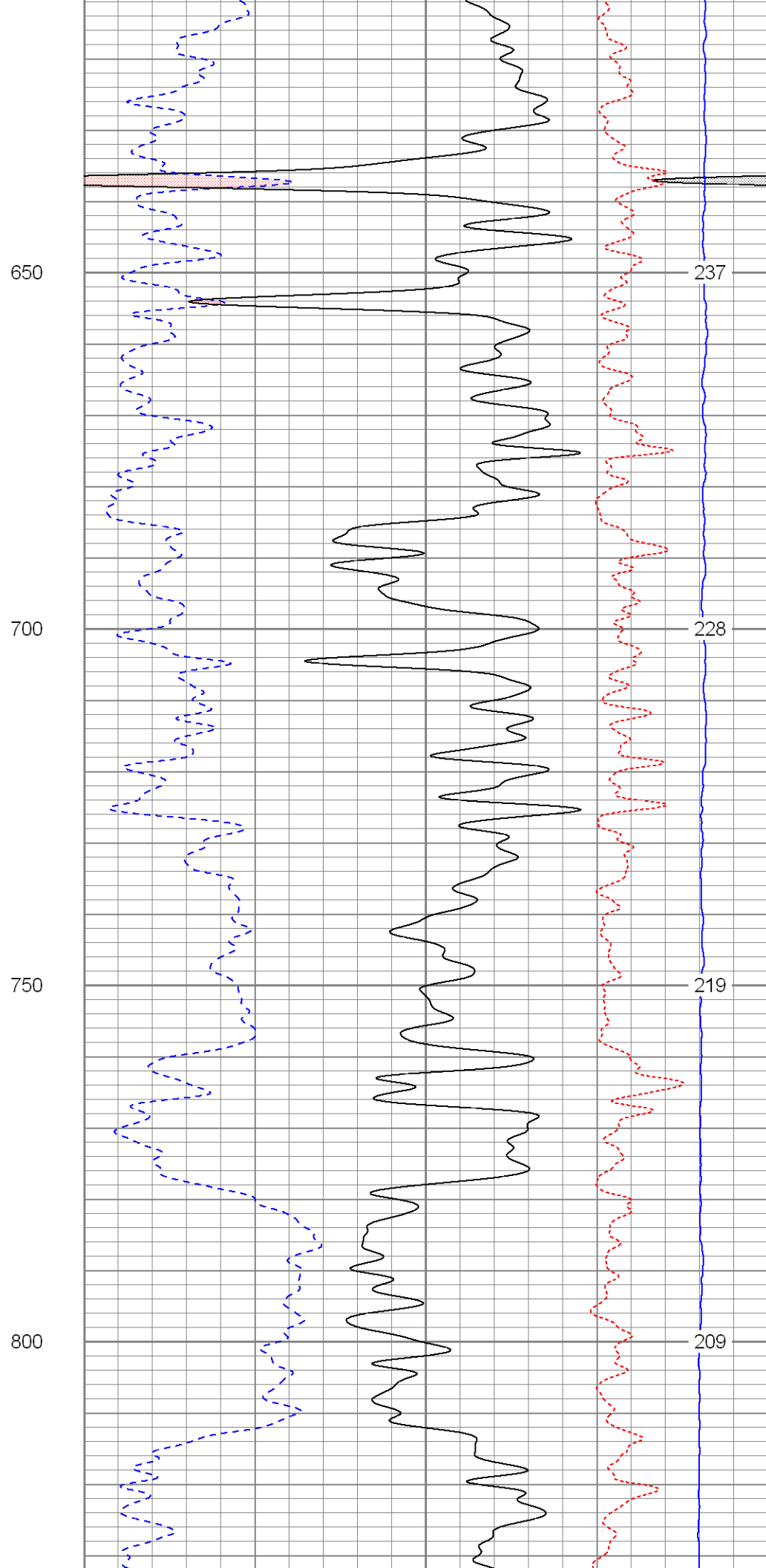
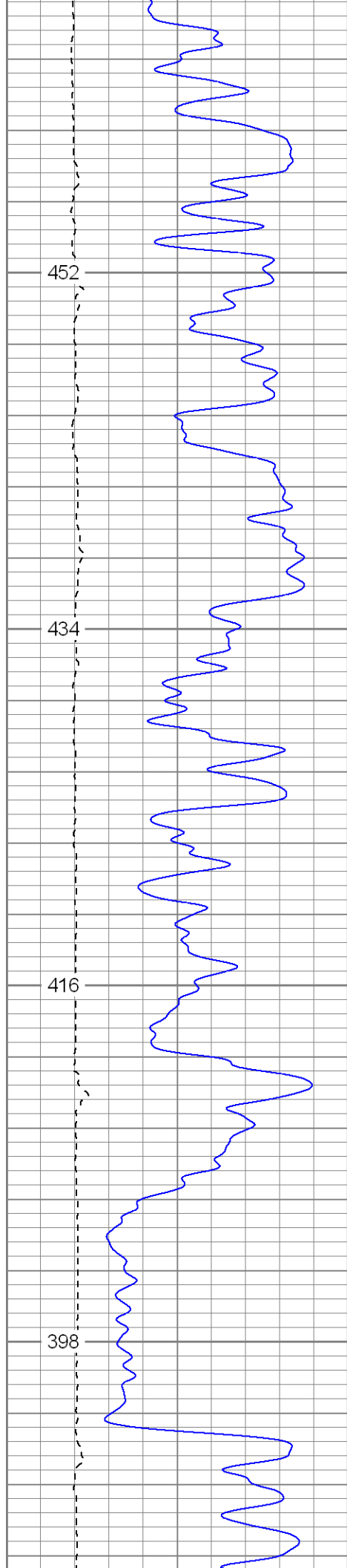
Main Pass

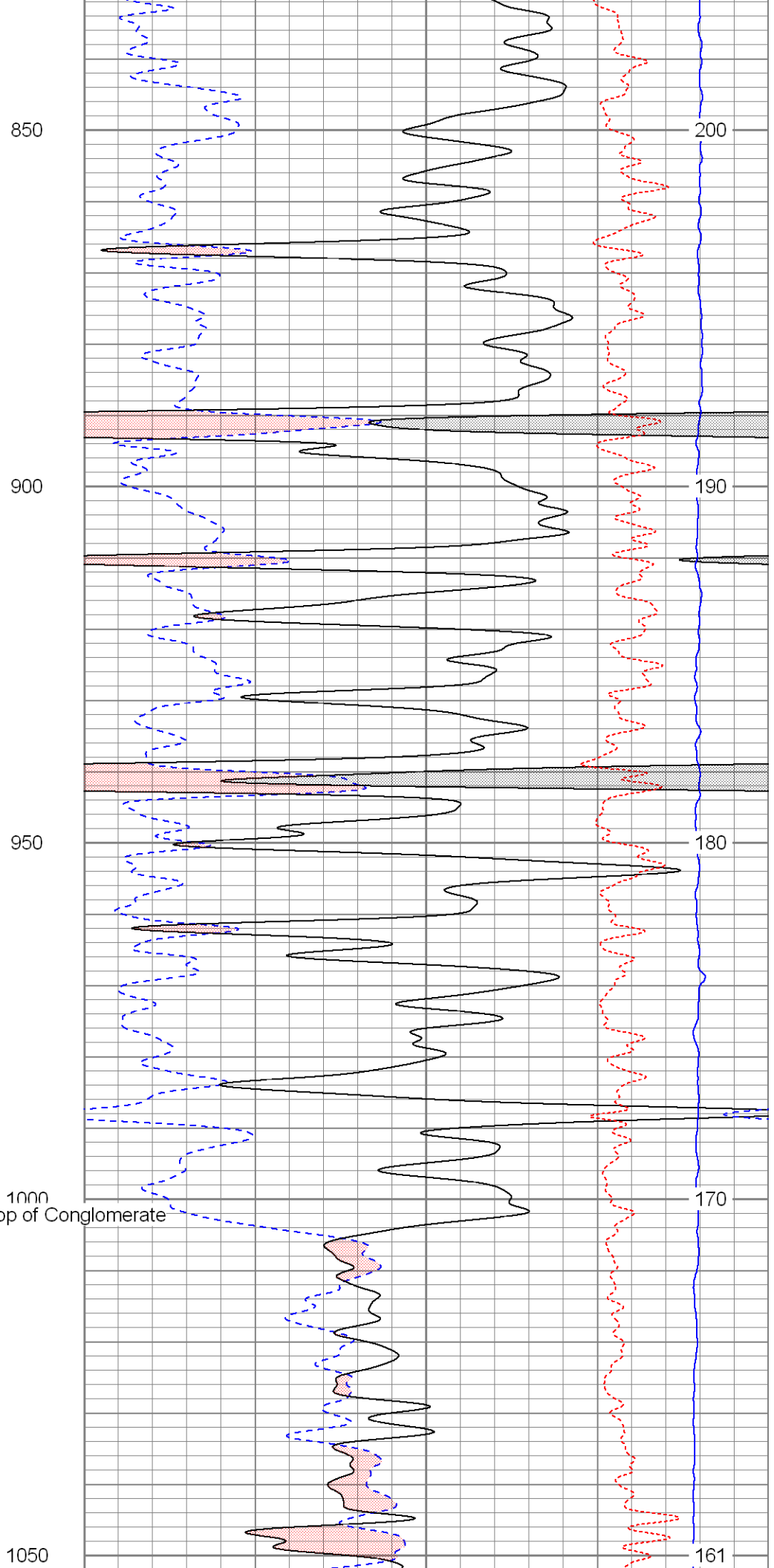
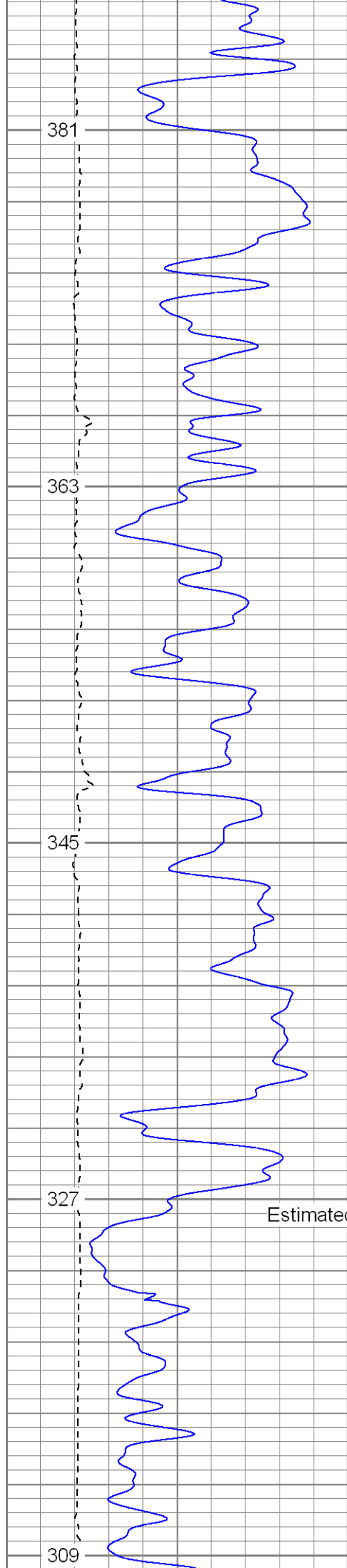
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 Dataset Pathname: pass2.1
 Presentation Format: cdnl
 Dataset Creation: Sun Sep 02 05:46:44 2007 by Calc Open-Cased 061129
 Charted by: Depth in Feet scaled 1:240

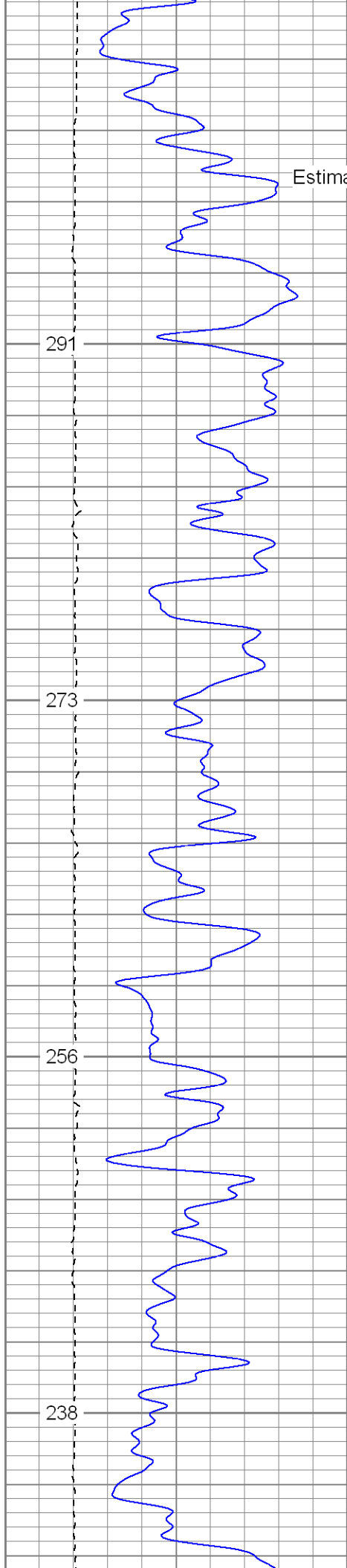
0	GR (GAPI)	200
6	DCAL (in)	16

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

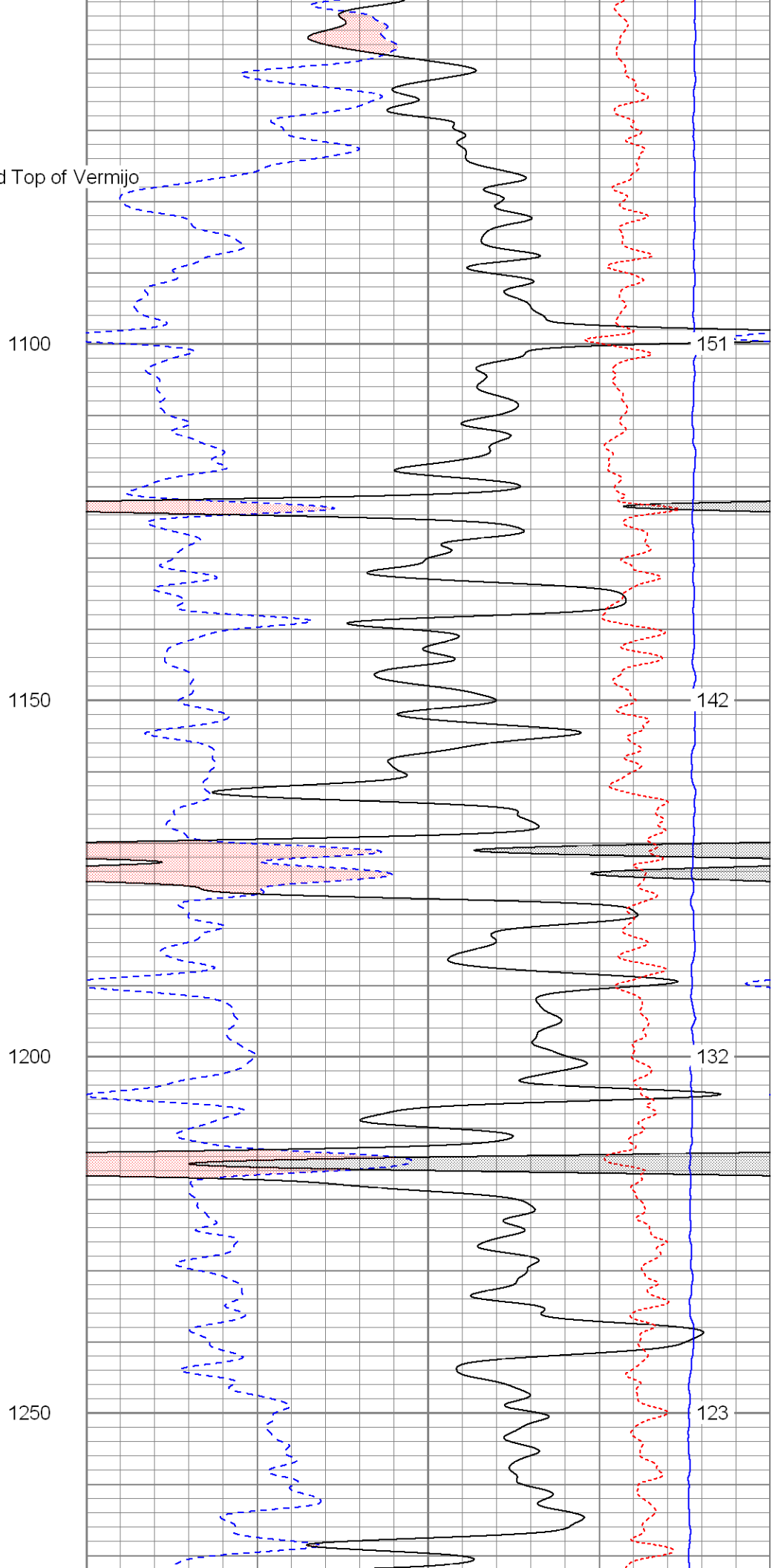


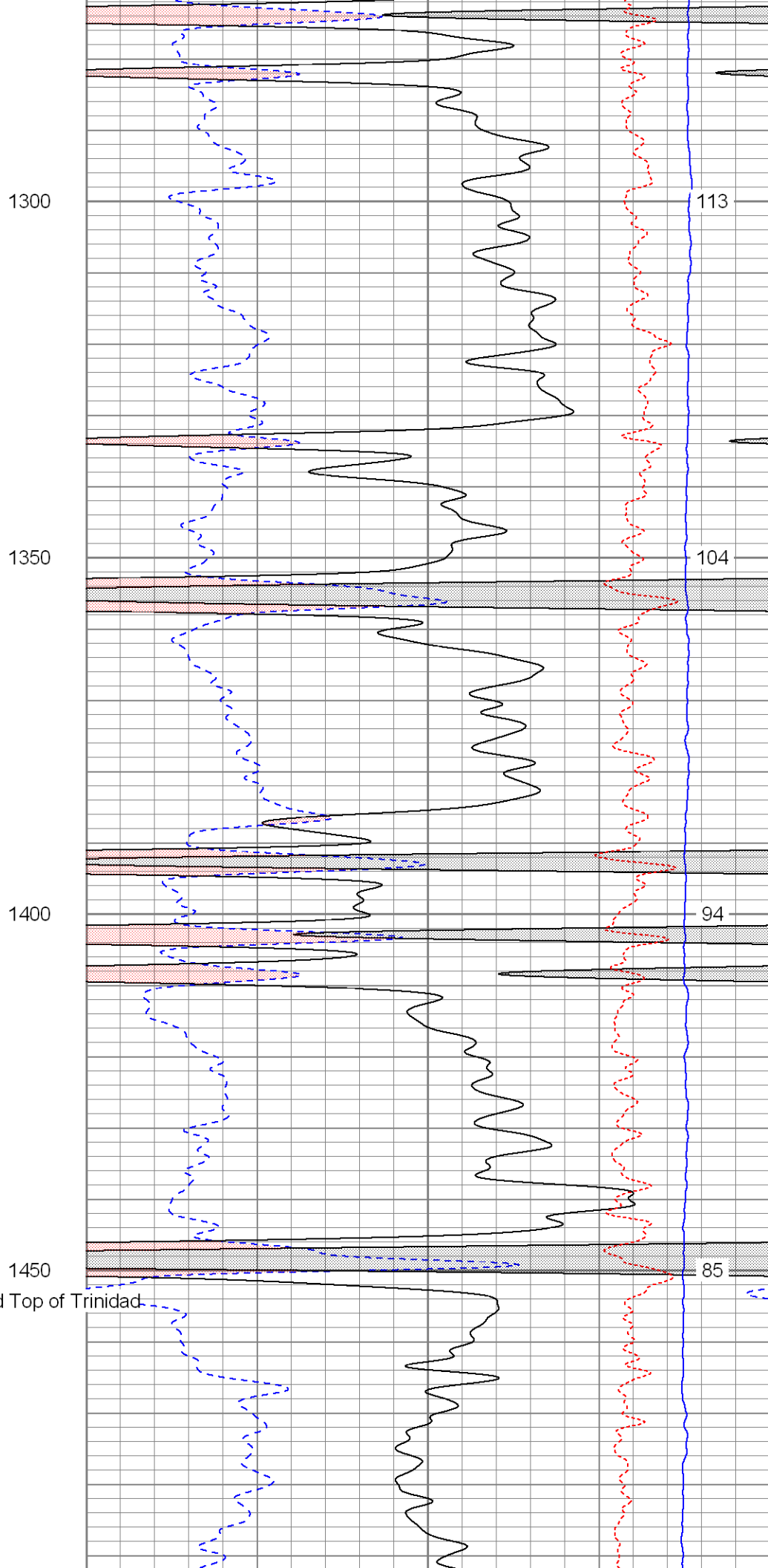
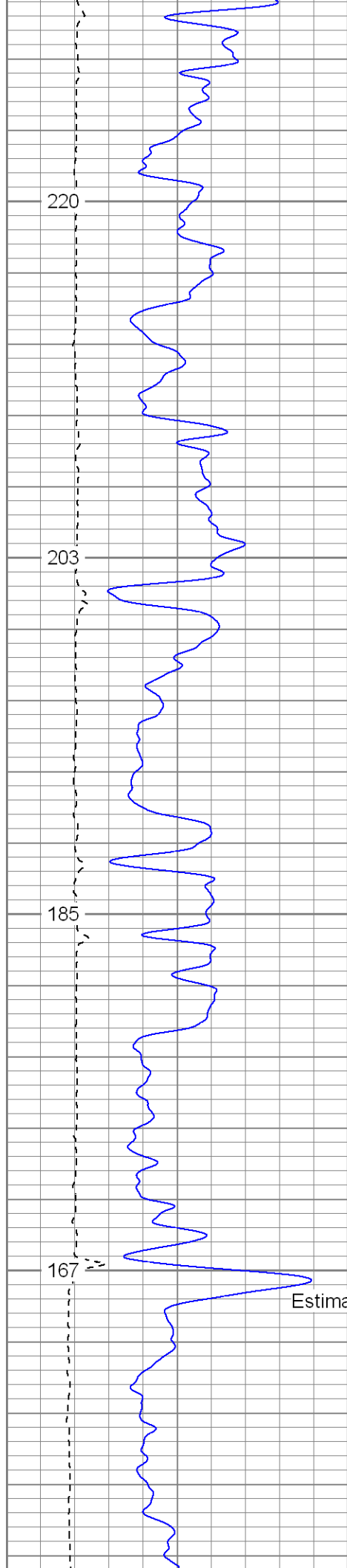


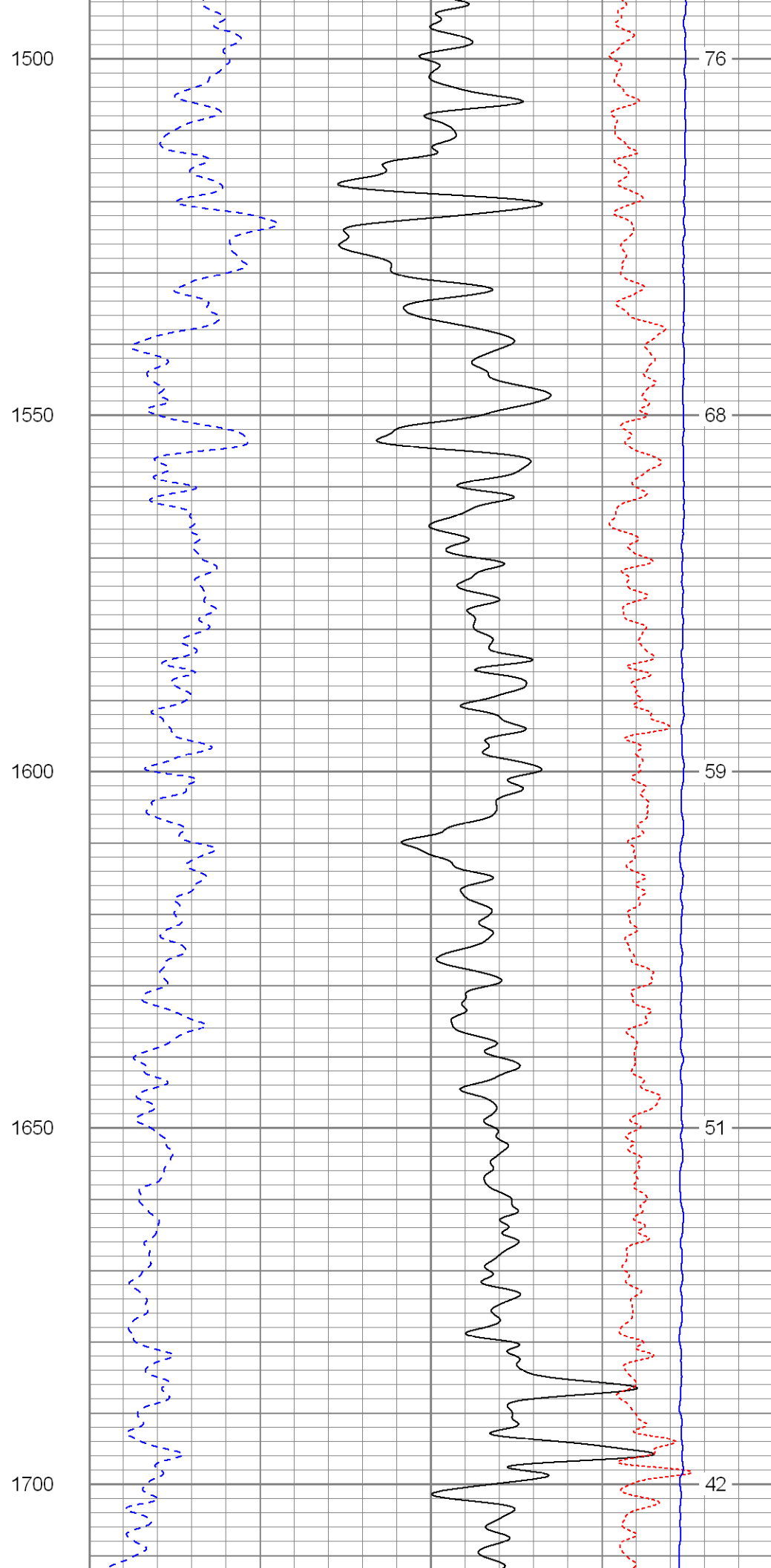
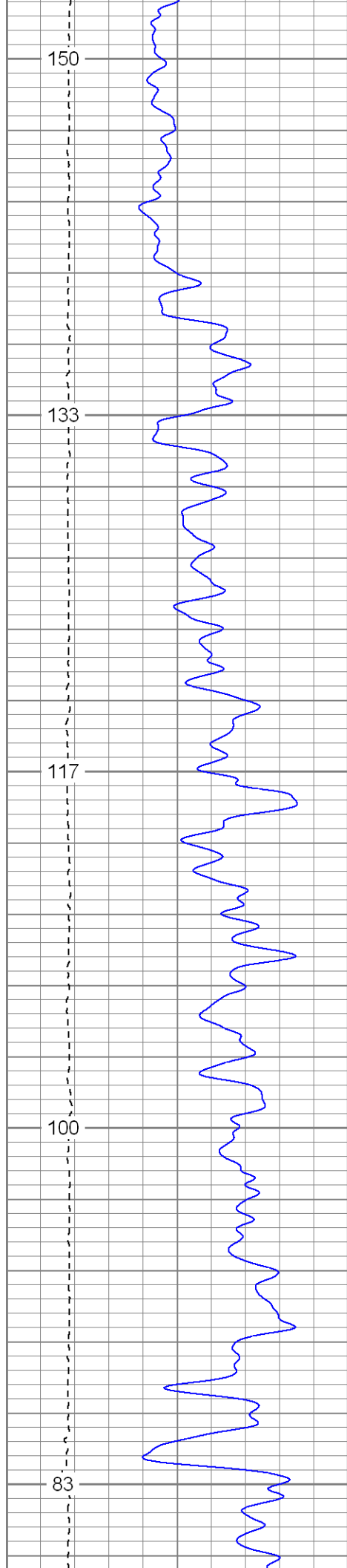


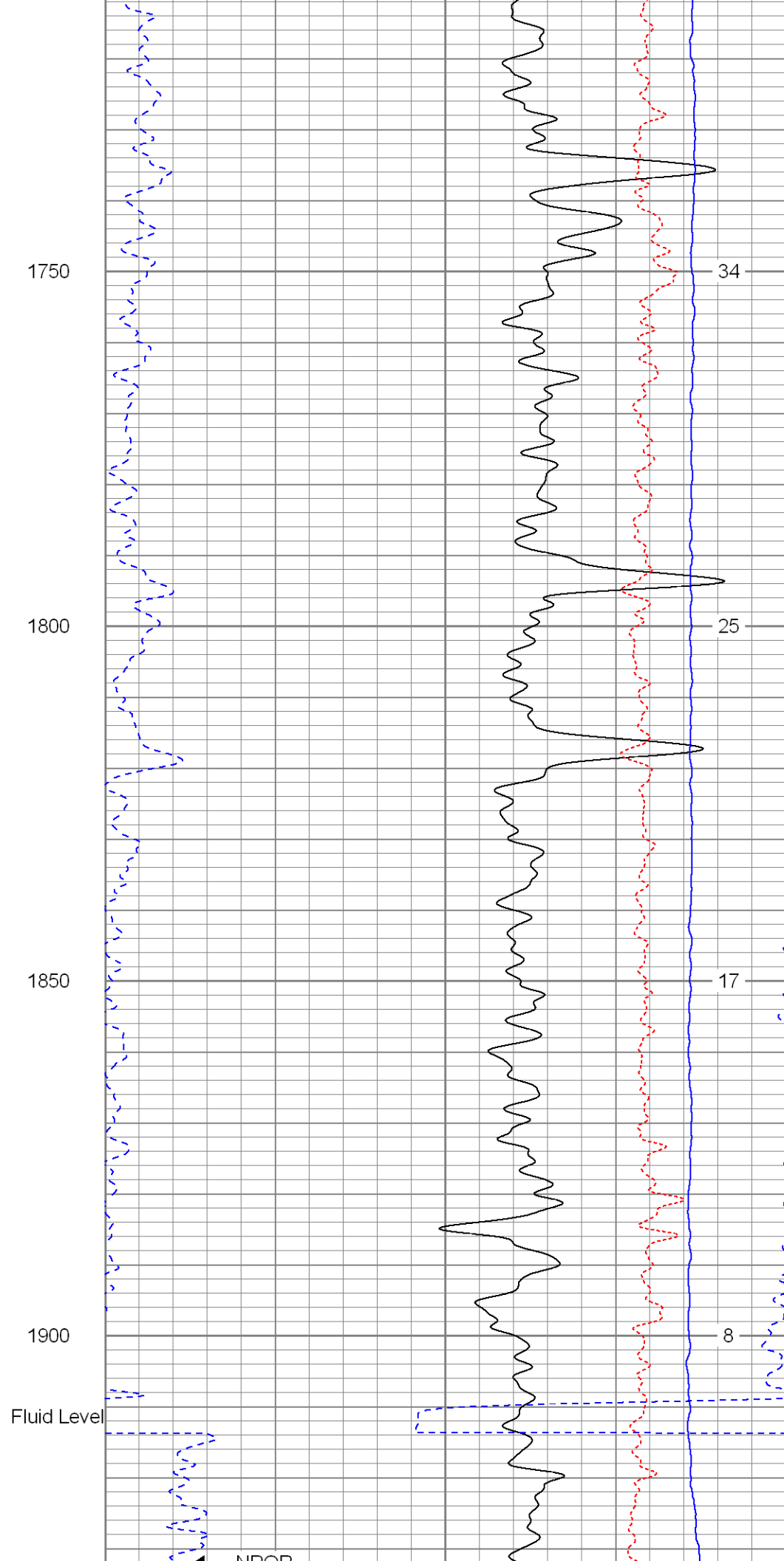
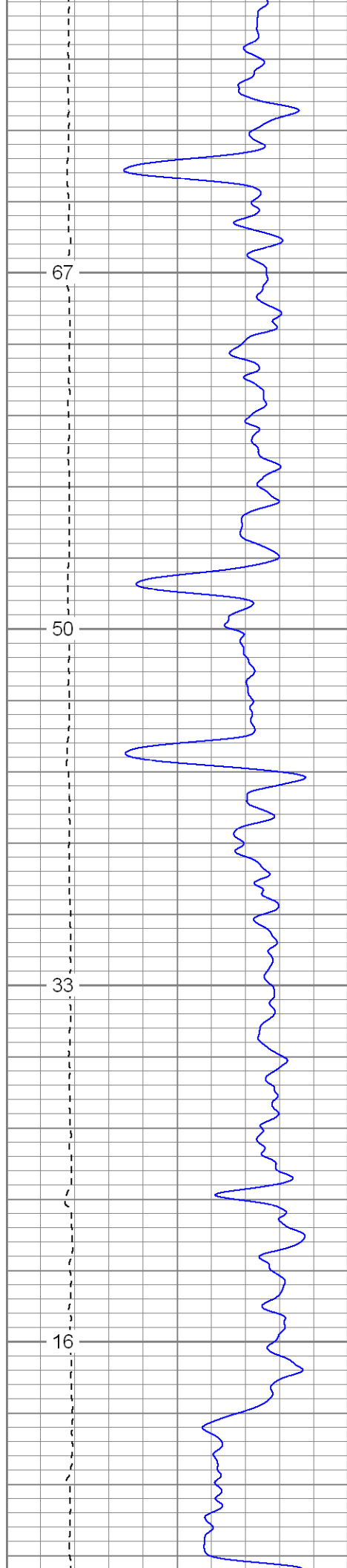


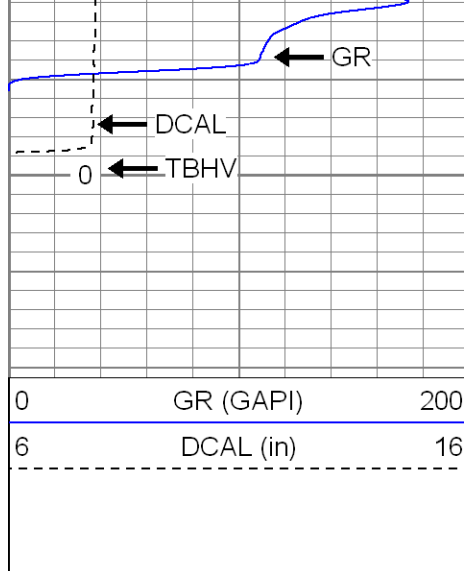
Estimated Top of Vermijo



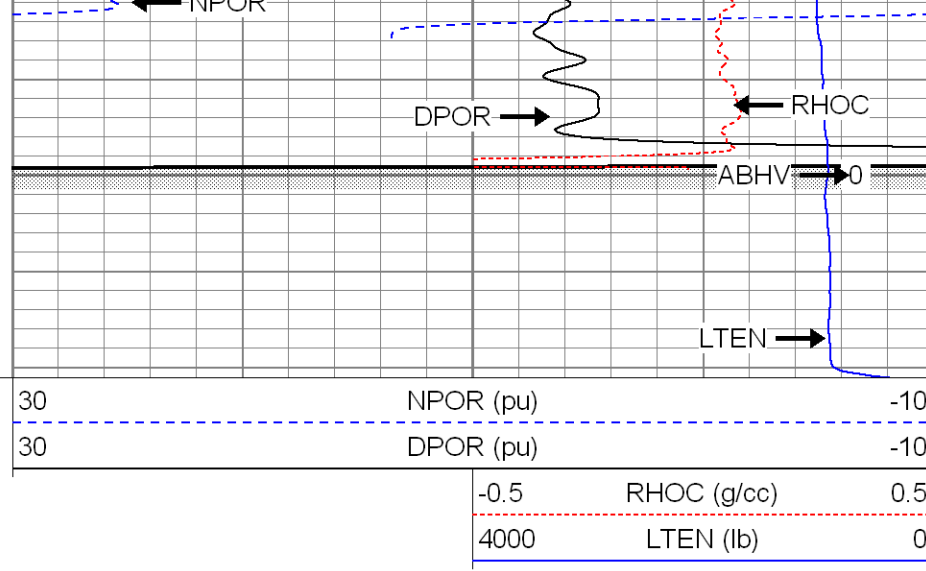








1950



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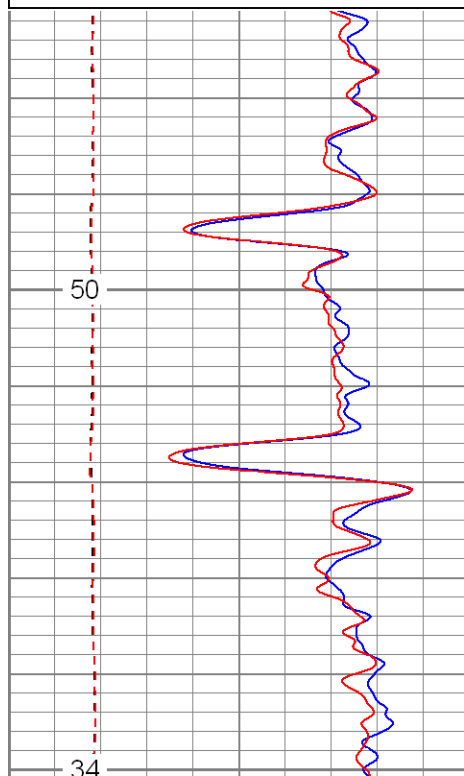
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Repeat Section

Database File: xtoac3507.db
Dataset Pathname: pass1.1
Presentation Format: cdnl
Dataset Creation: Sun Sep 02 05:27:10 2007 by Calc Open-Cased 061129
Charted by: Depth in Feet scaled 1:240

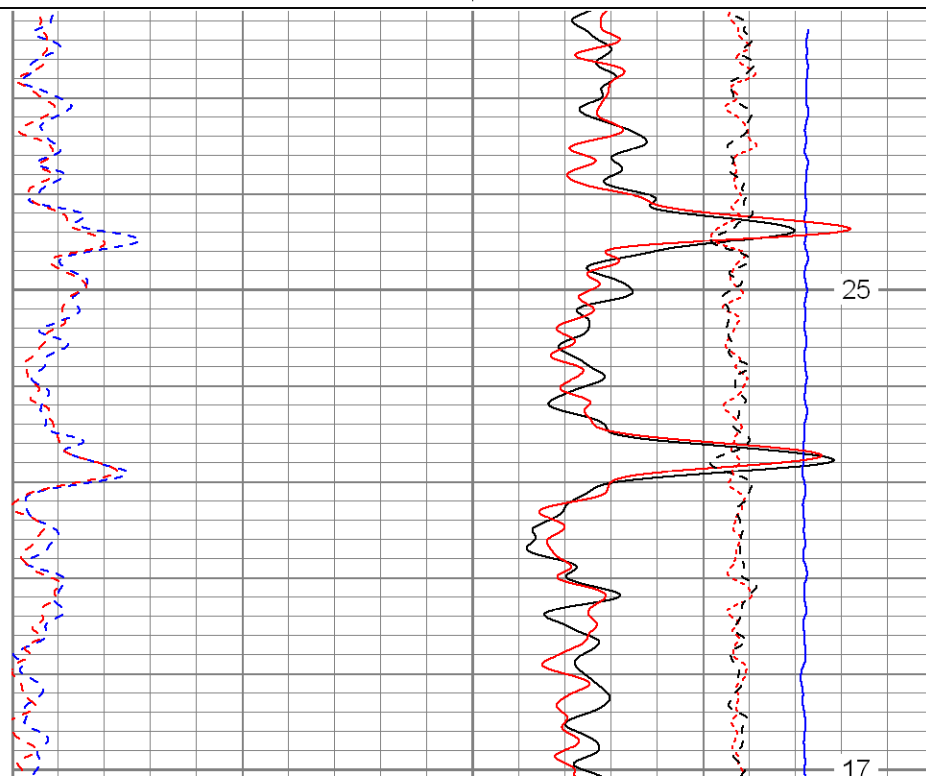
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0	GR-repeat (GAPI)	200
6	DCAL-repeat (in)	16

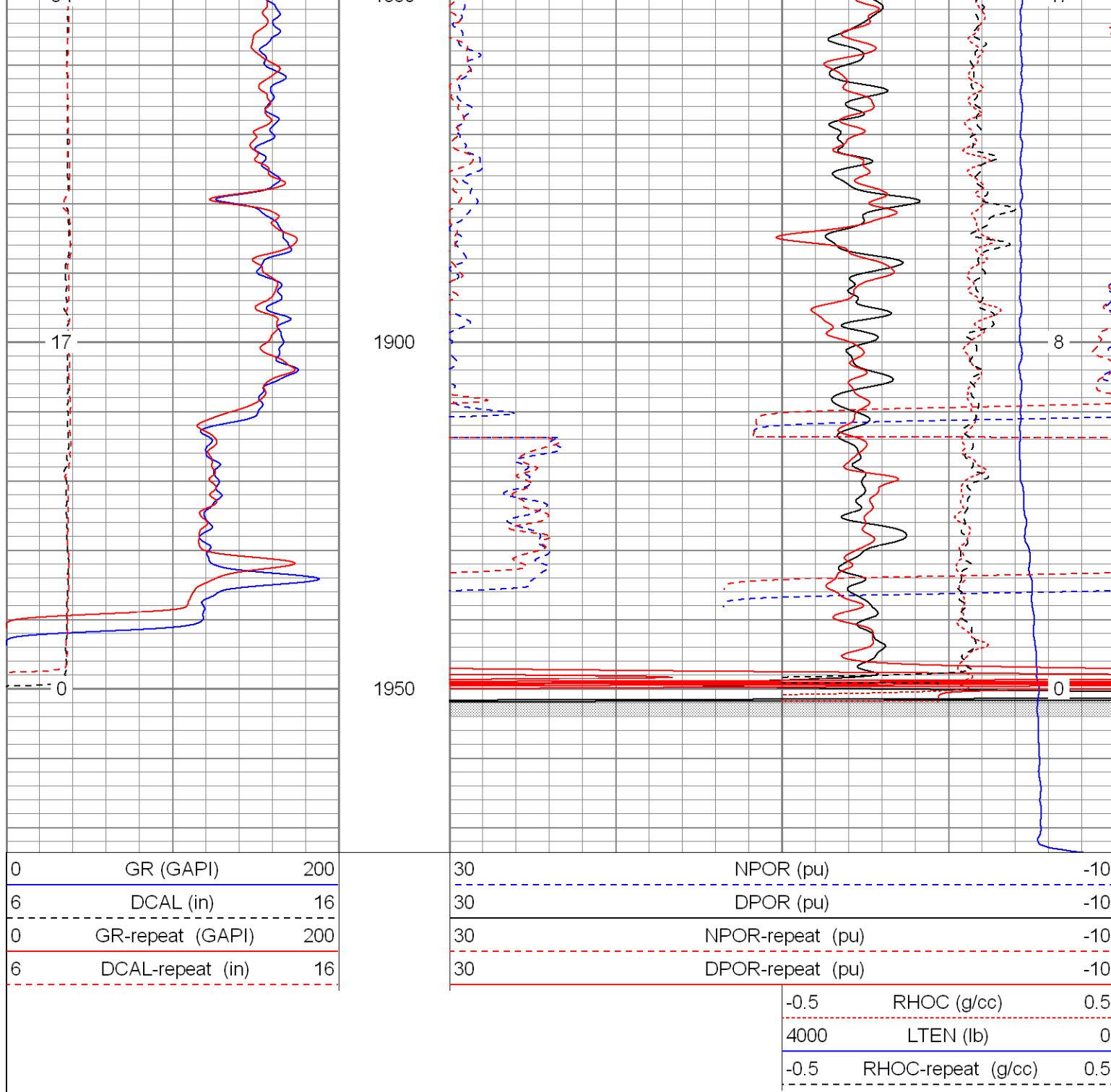
30	NPOR (pu)	-10
30	DPOR (pu)	-10
30	NPOR-repeat (pu)	-10
30	DPOR-repeat (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
-0.5	RHOC-repeat (g/cc)	0.5



1800

1850





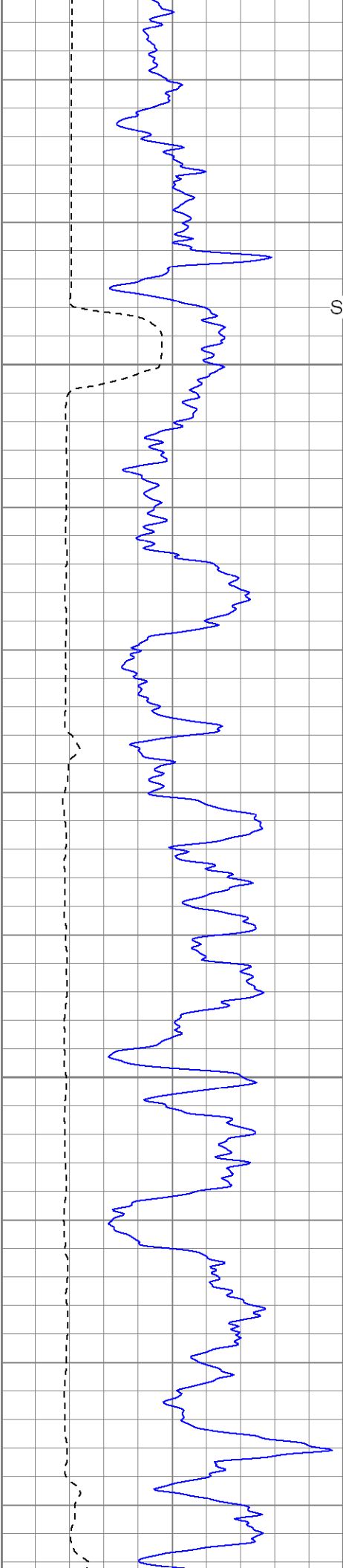
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High Resolution Pass

Database File: xtoac3507.db
Dataset Pathname: pass2.2
Presentation Format: cdlhr
Dataset Creation: Sun Sep 02 05:51:25 2007 by Calc Open-Cased 061129
Charted by: Depth in Feet scaled 1:120

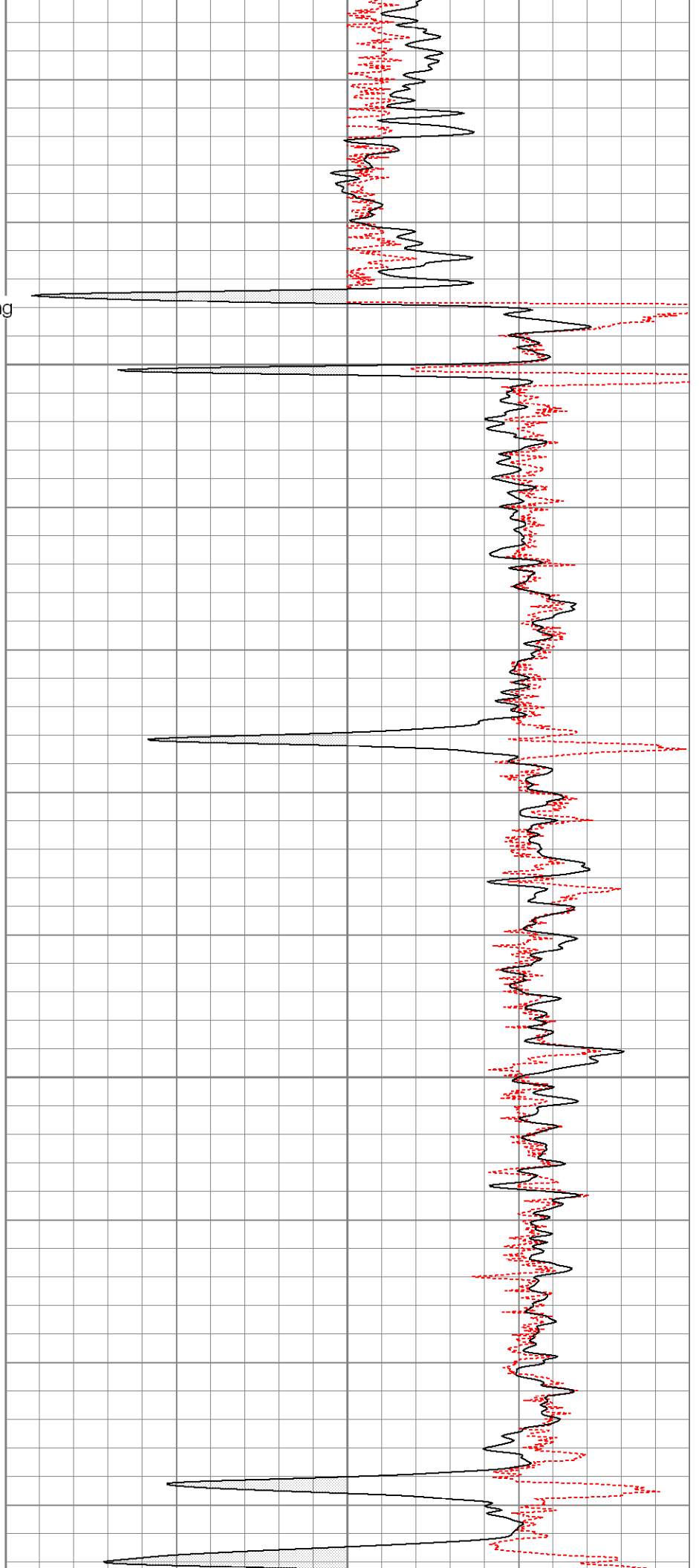
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6	DCAL (in)	16		-0.5	RHOC (g/cc) 0.5

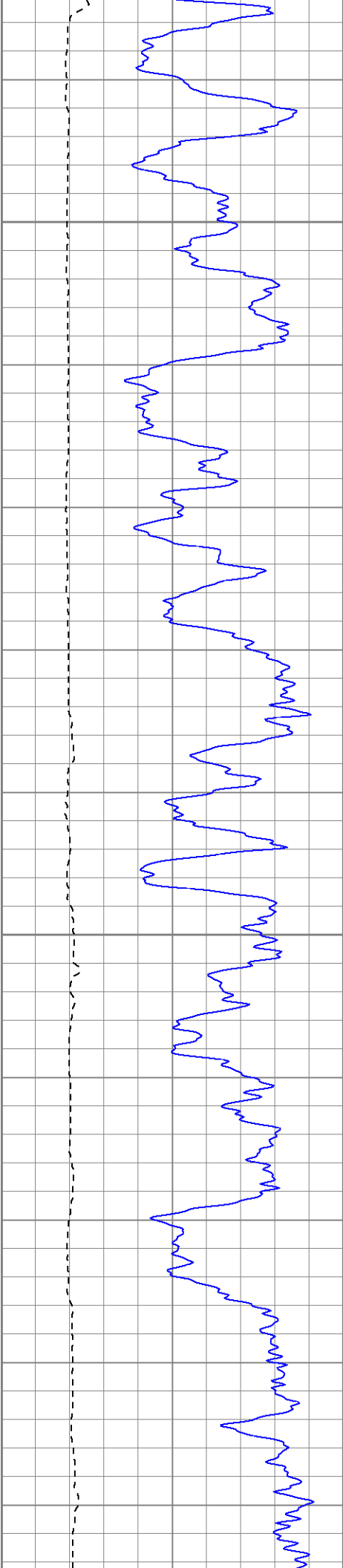


Surface Casing

500

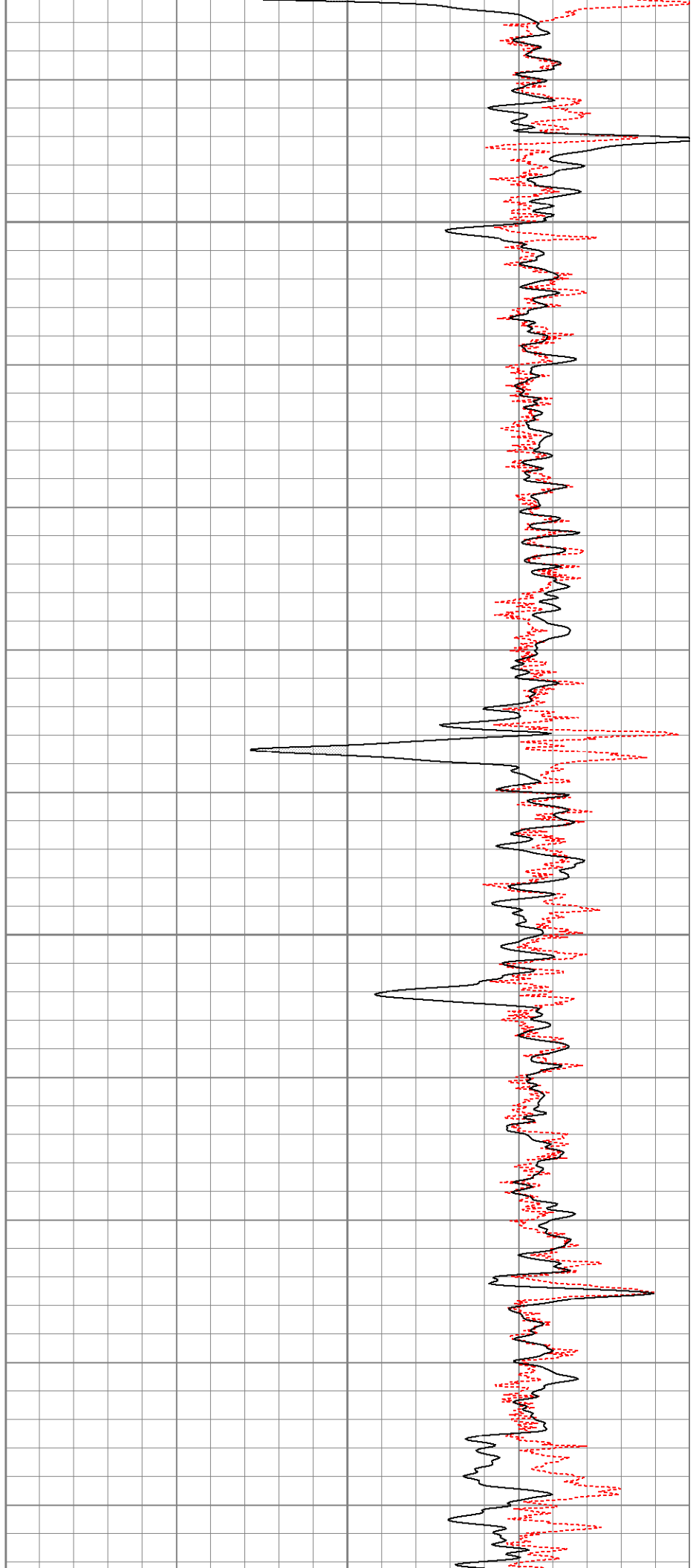
550

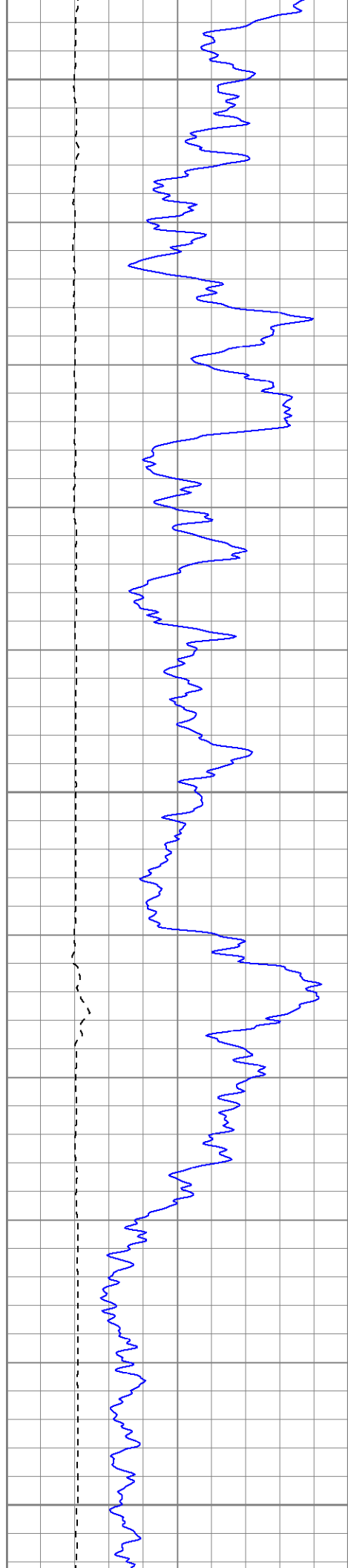




600

650

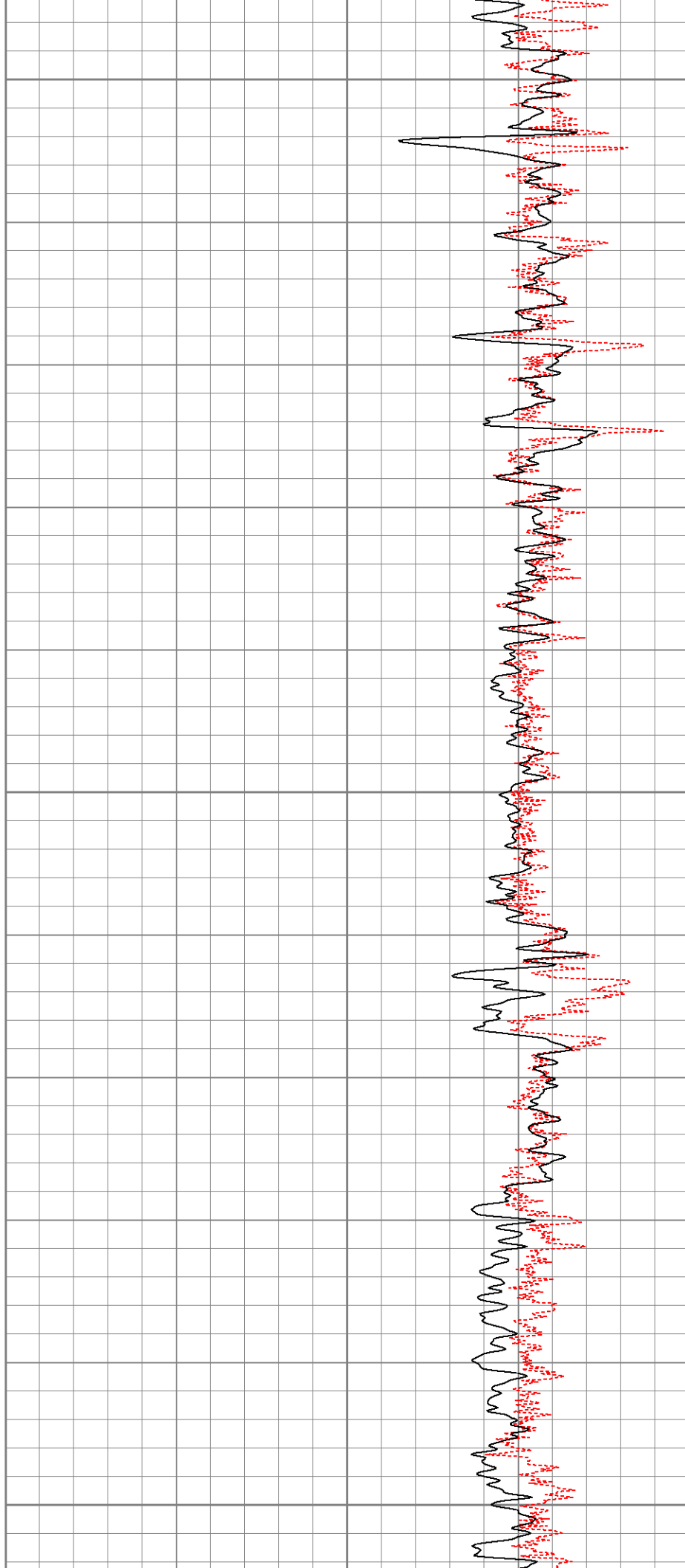


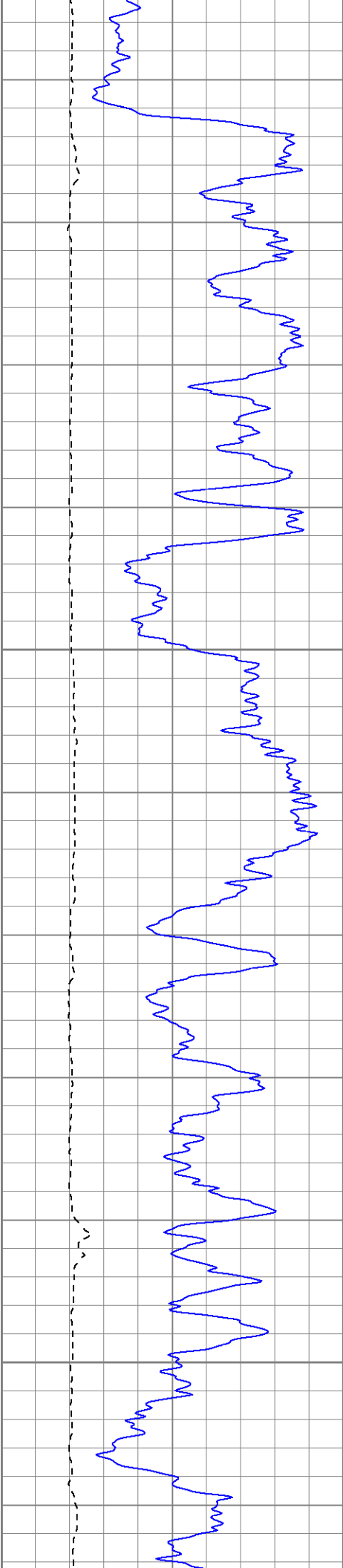


700

750

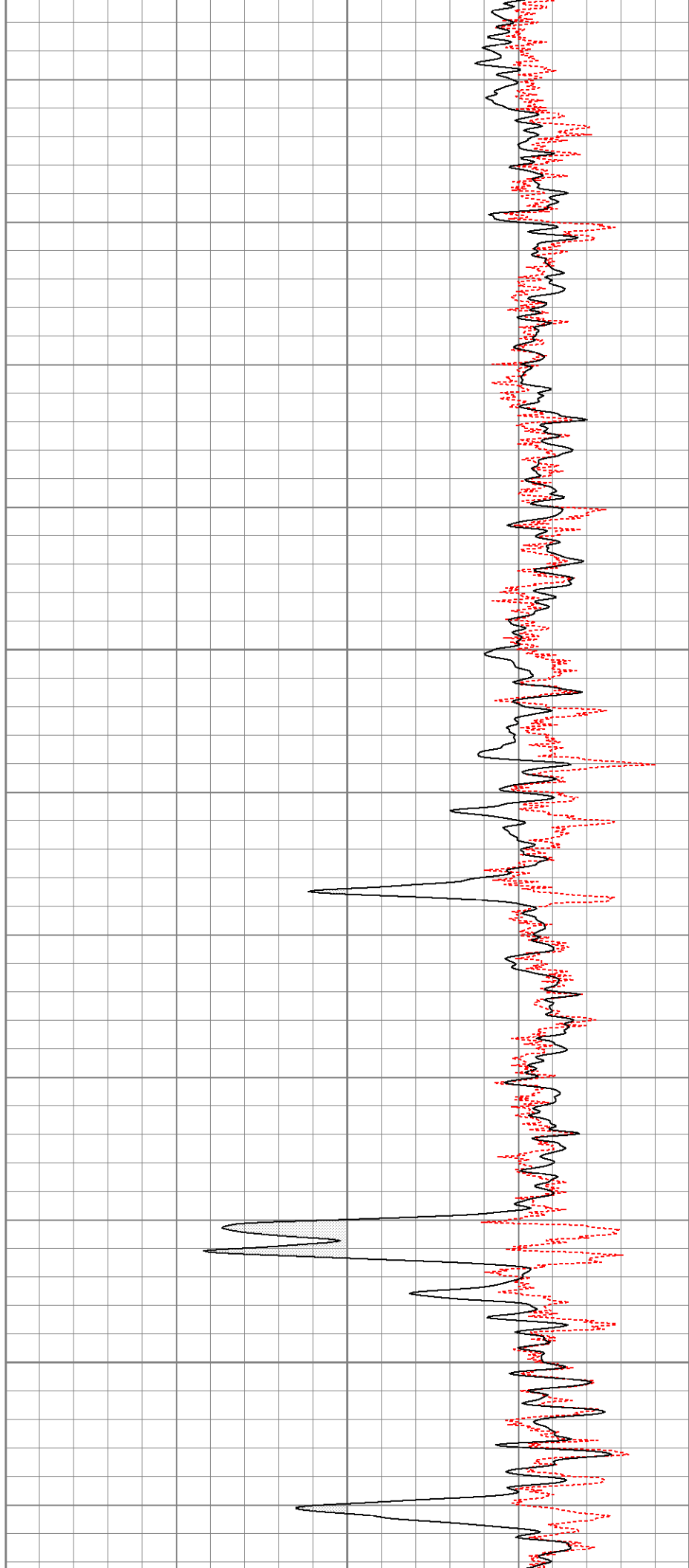
800

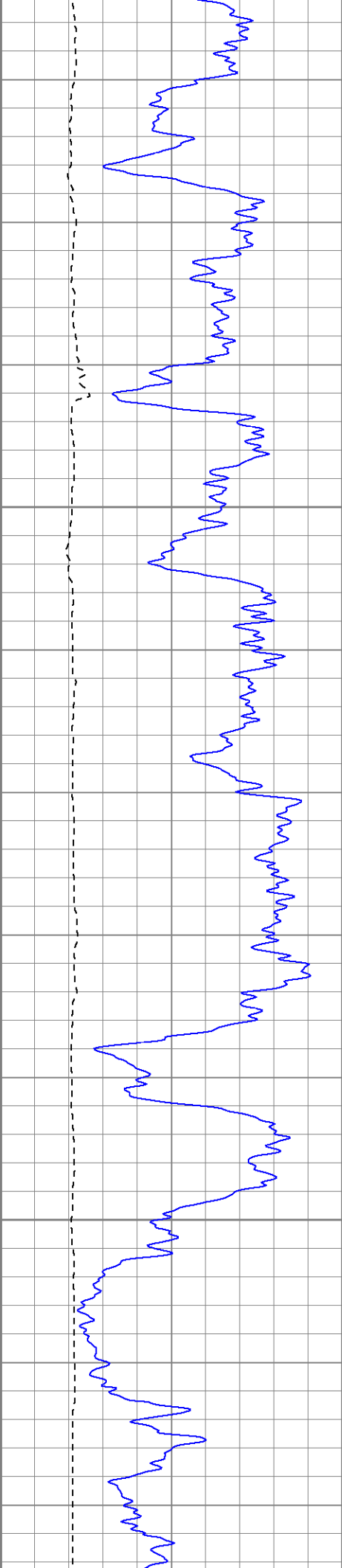




850

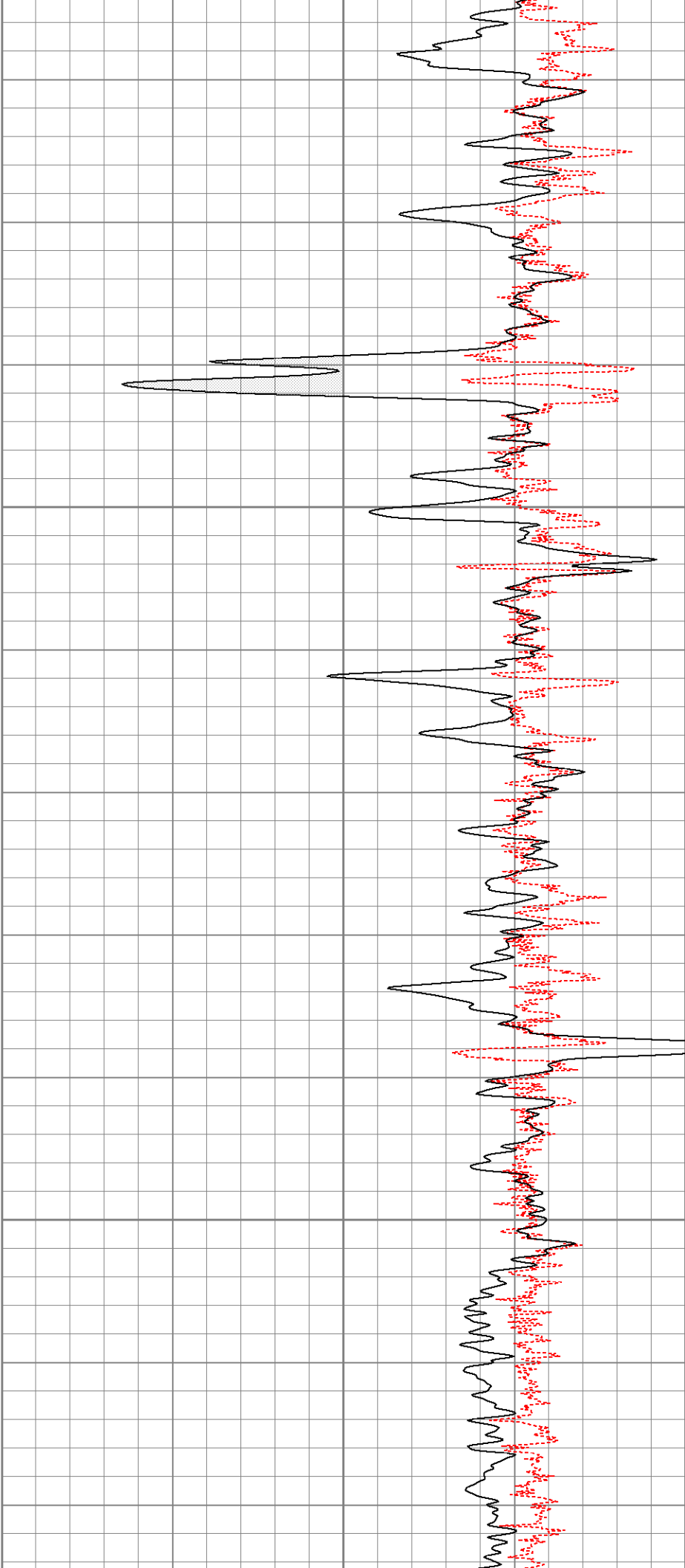
900

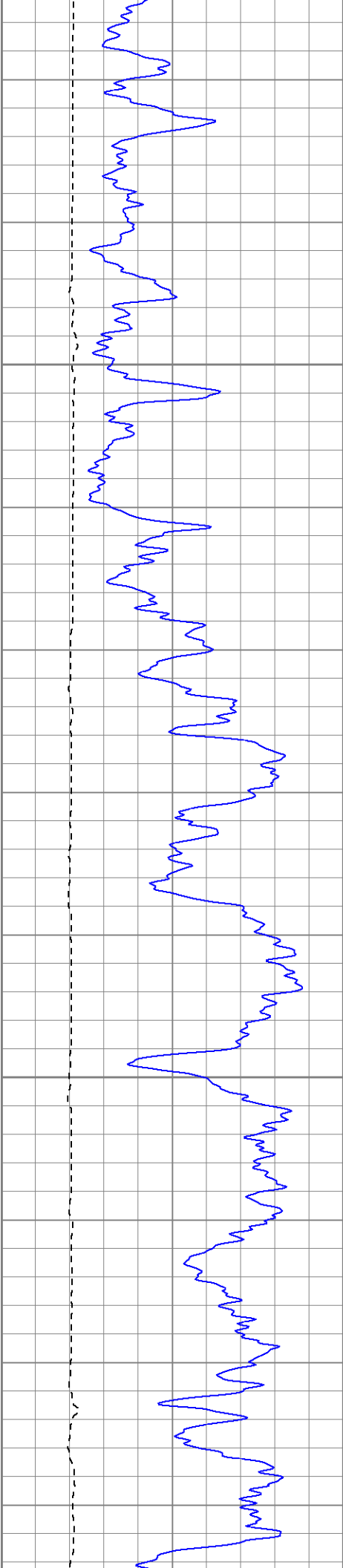




950

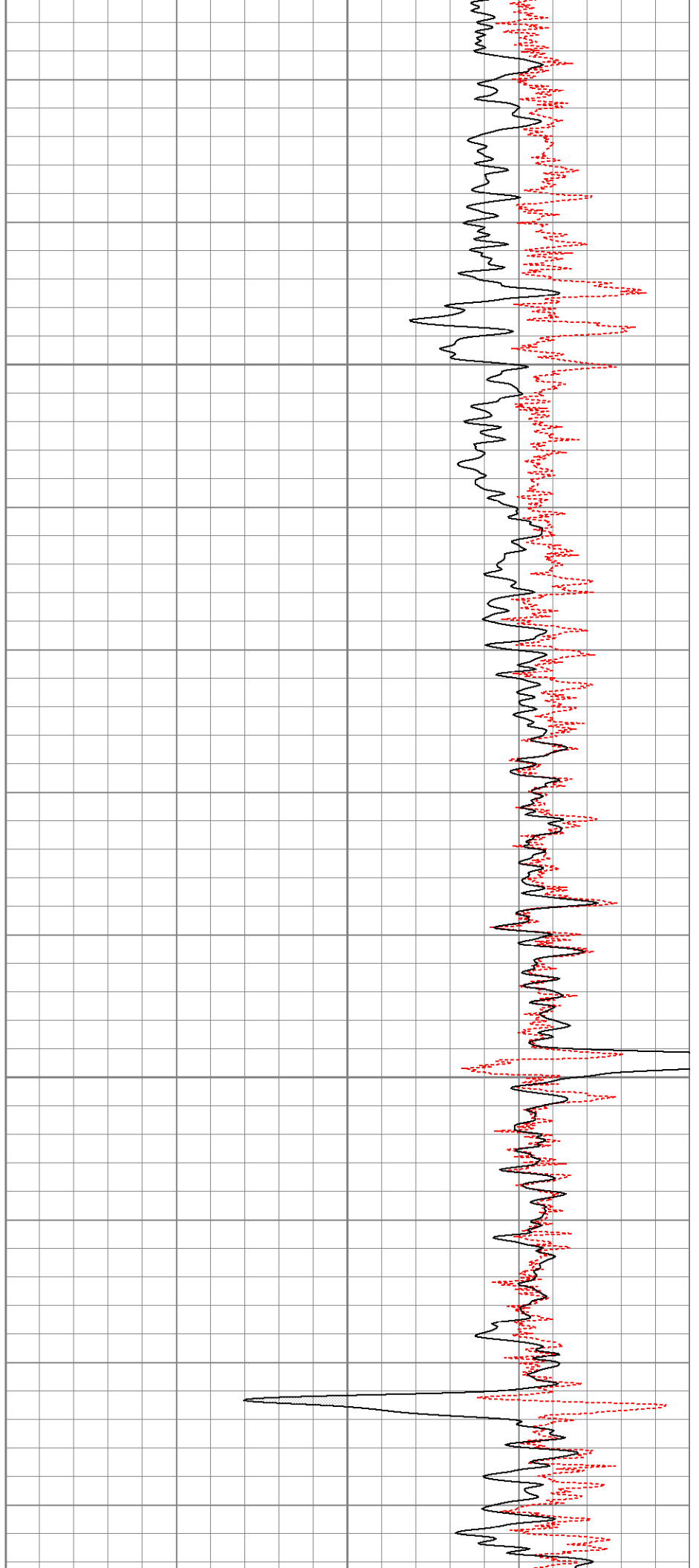
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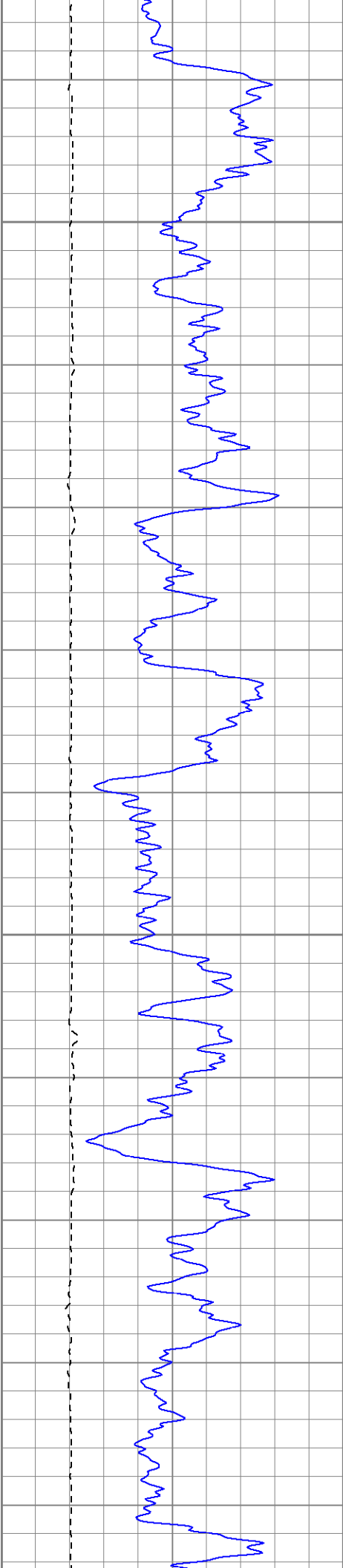




1050

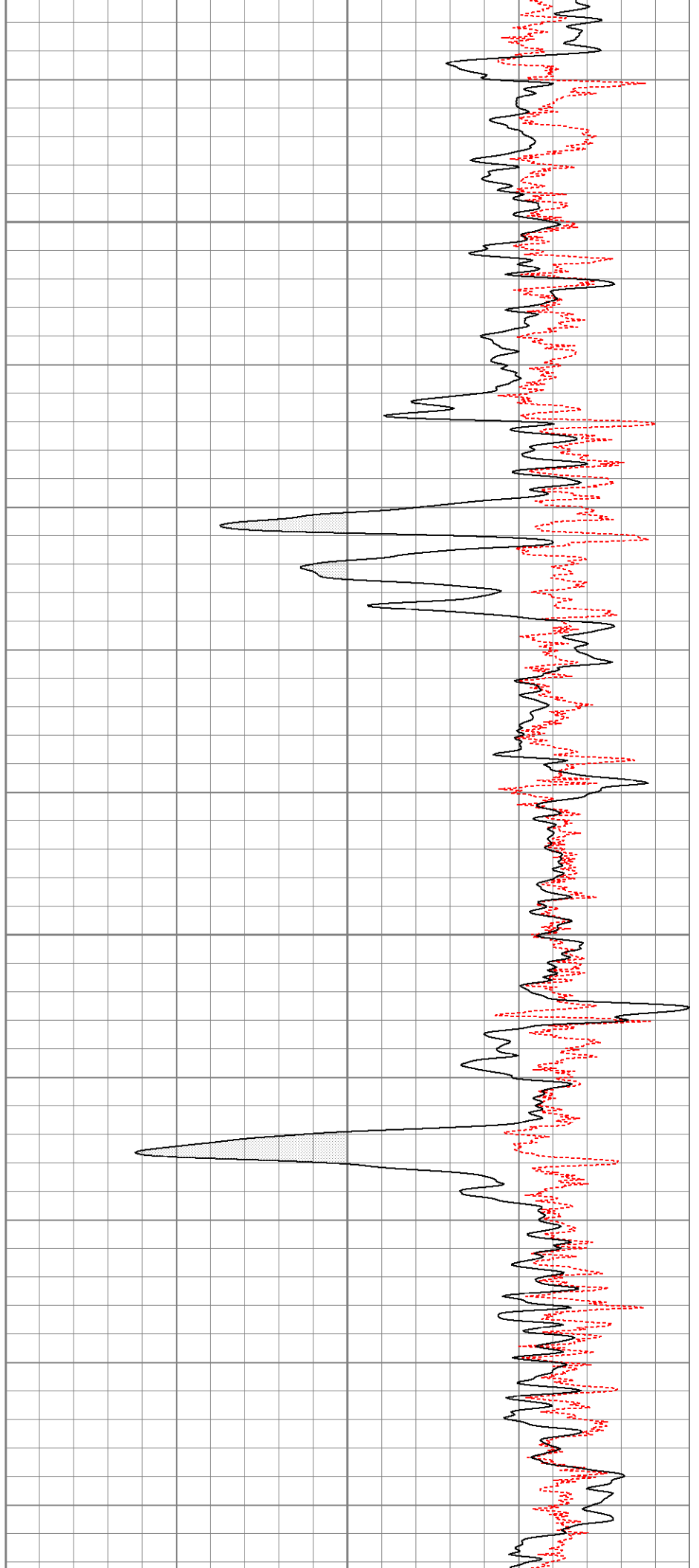
1100

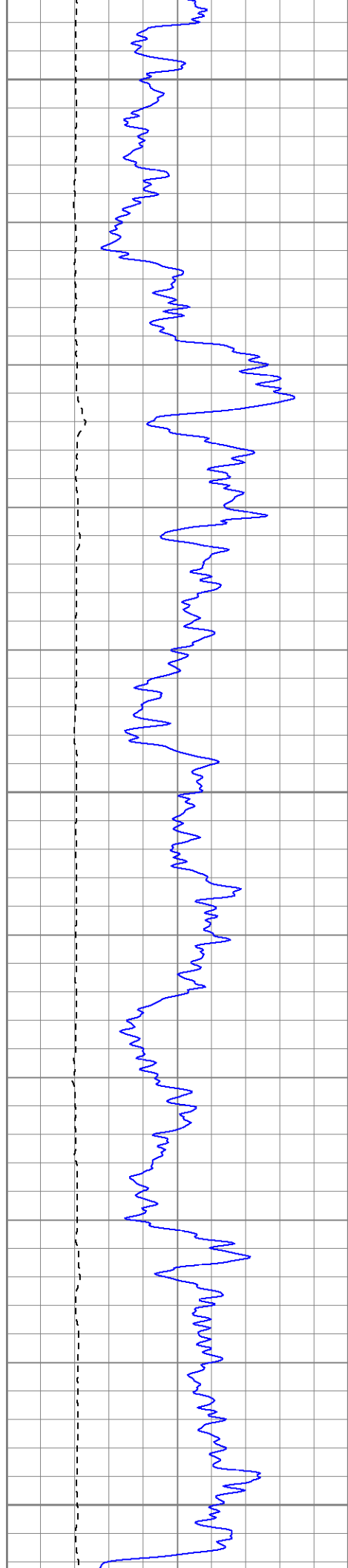




1150

1200

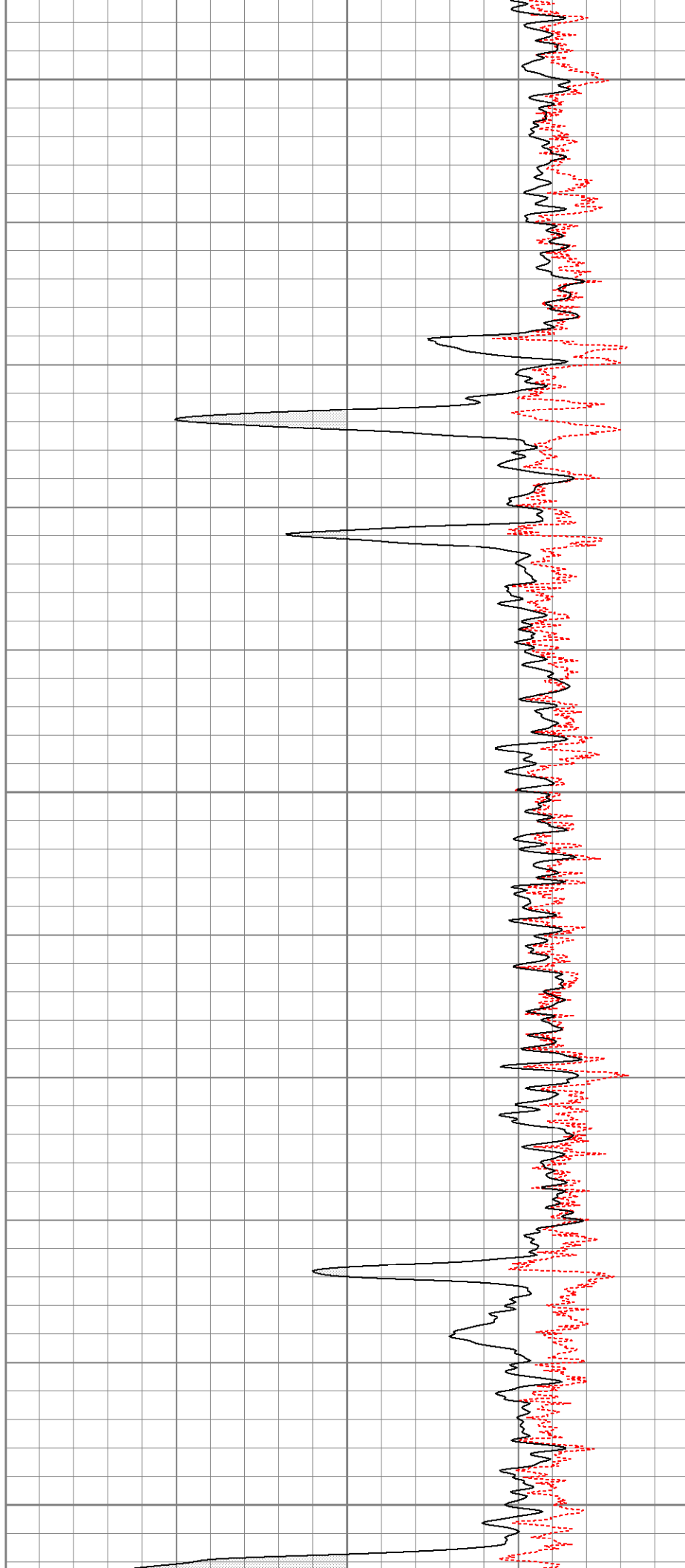


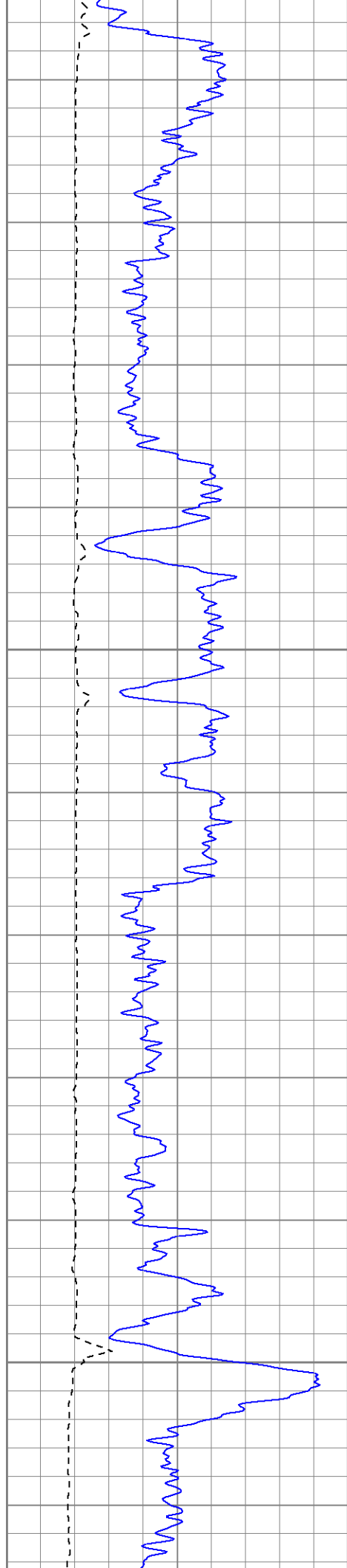


1250

1300

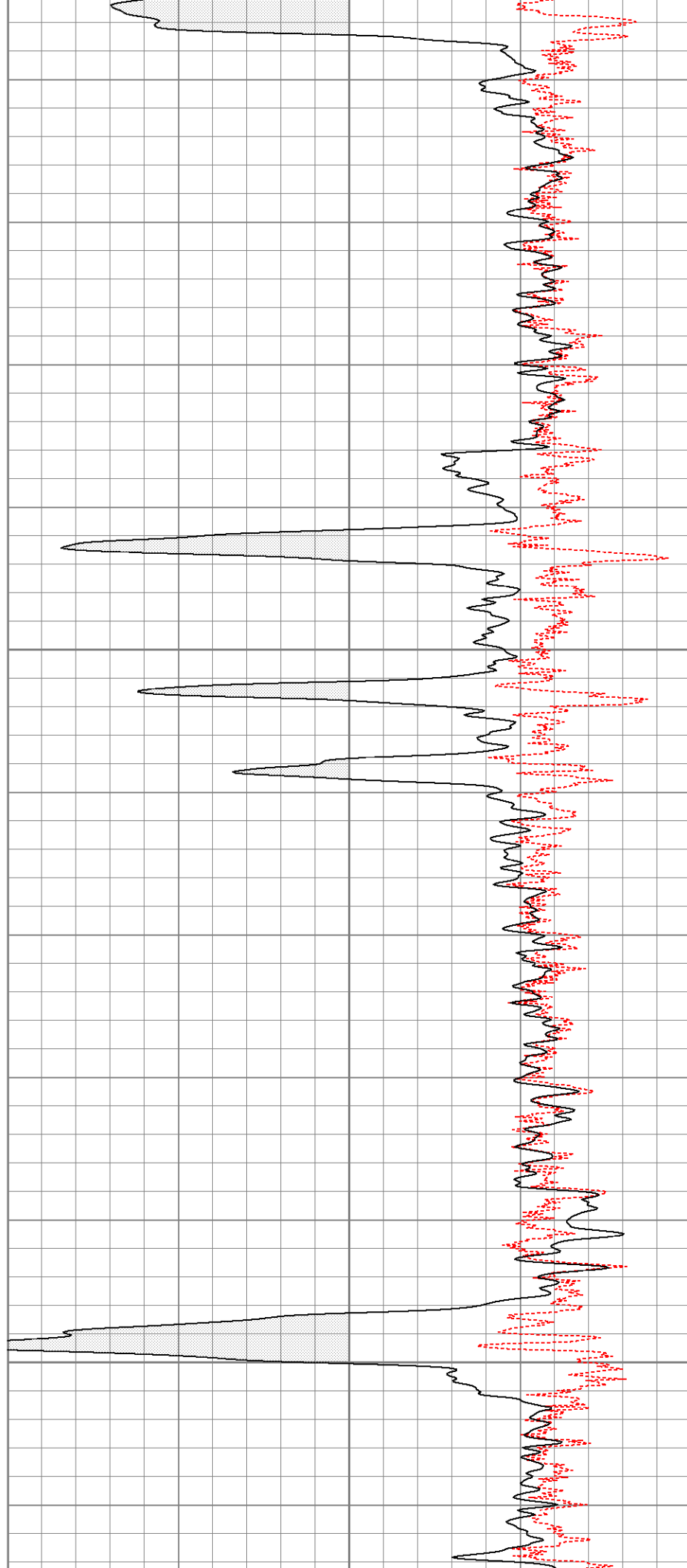
1350

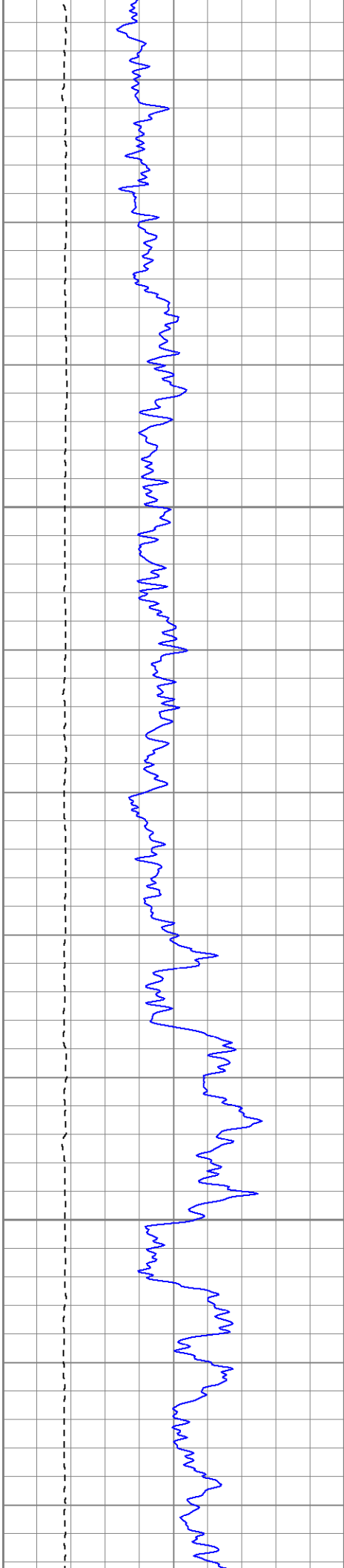




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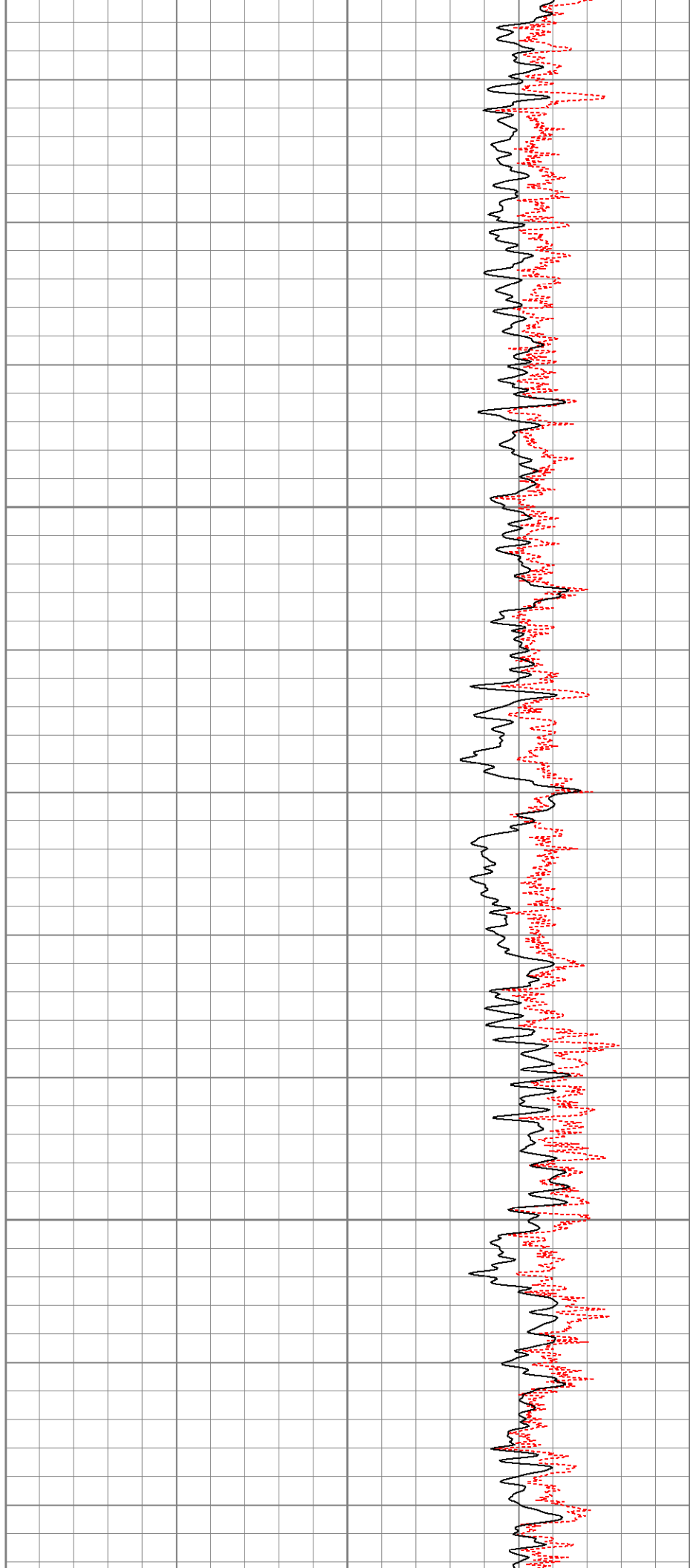
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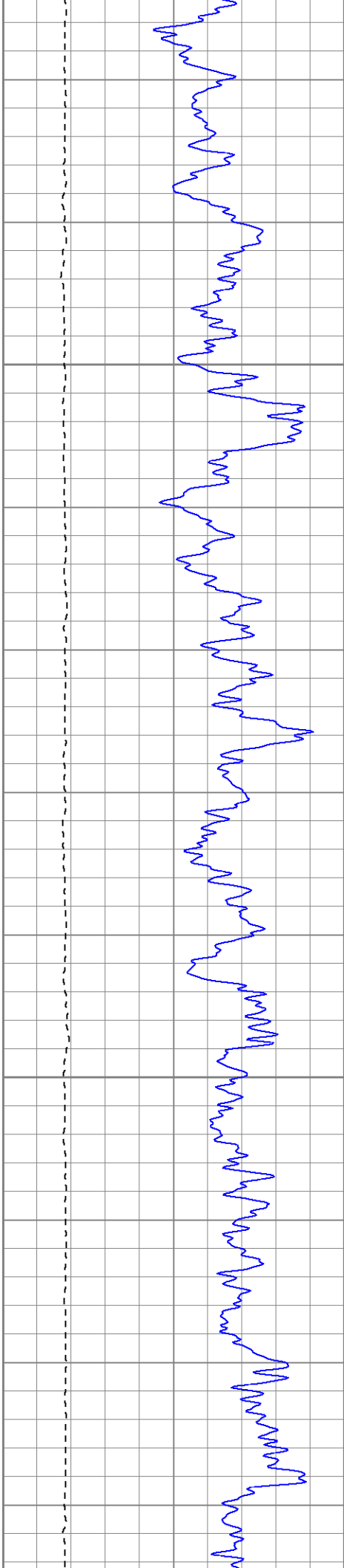




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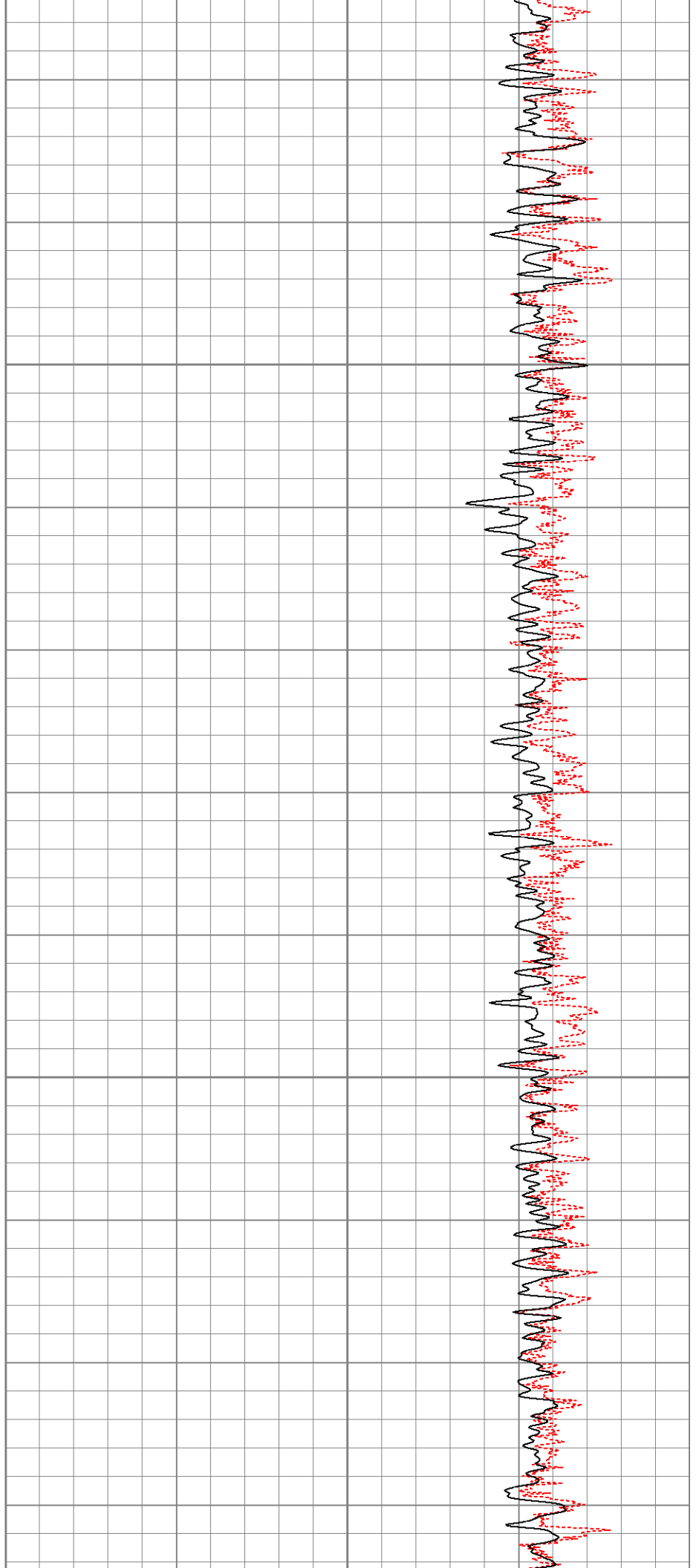
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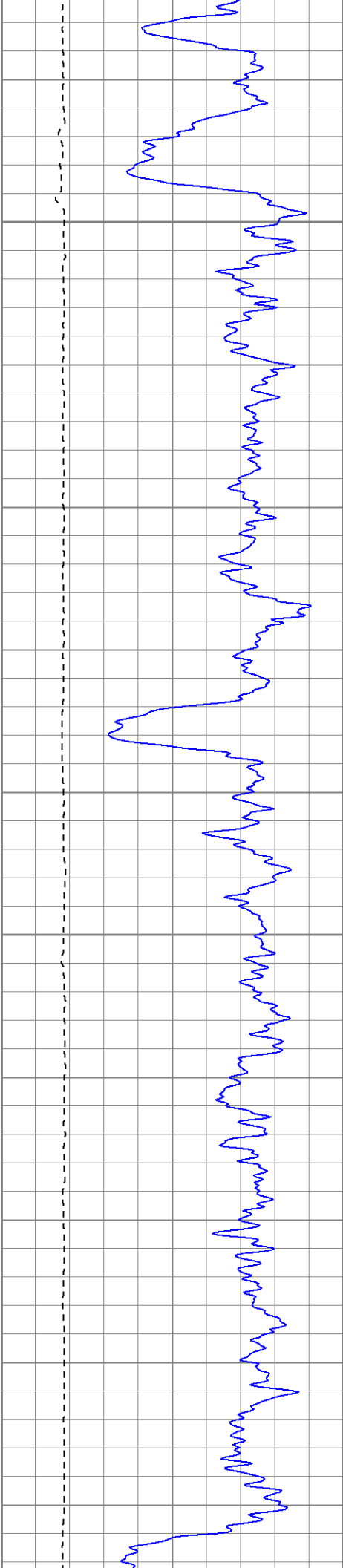




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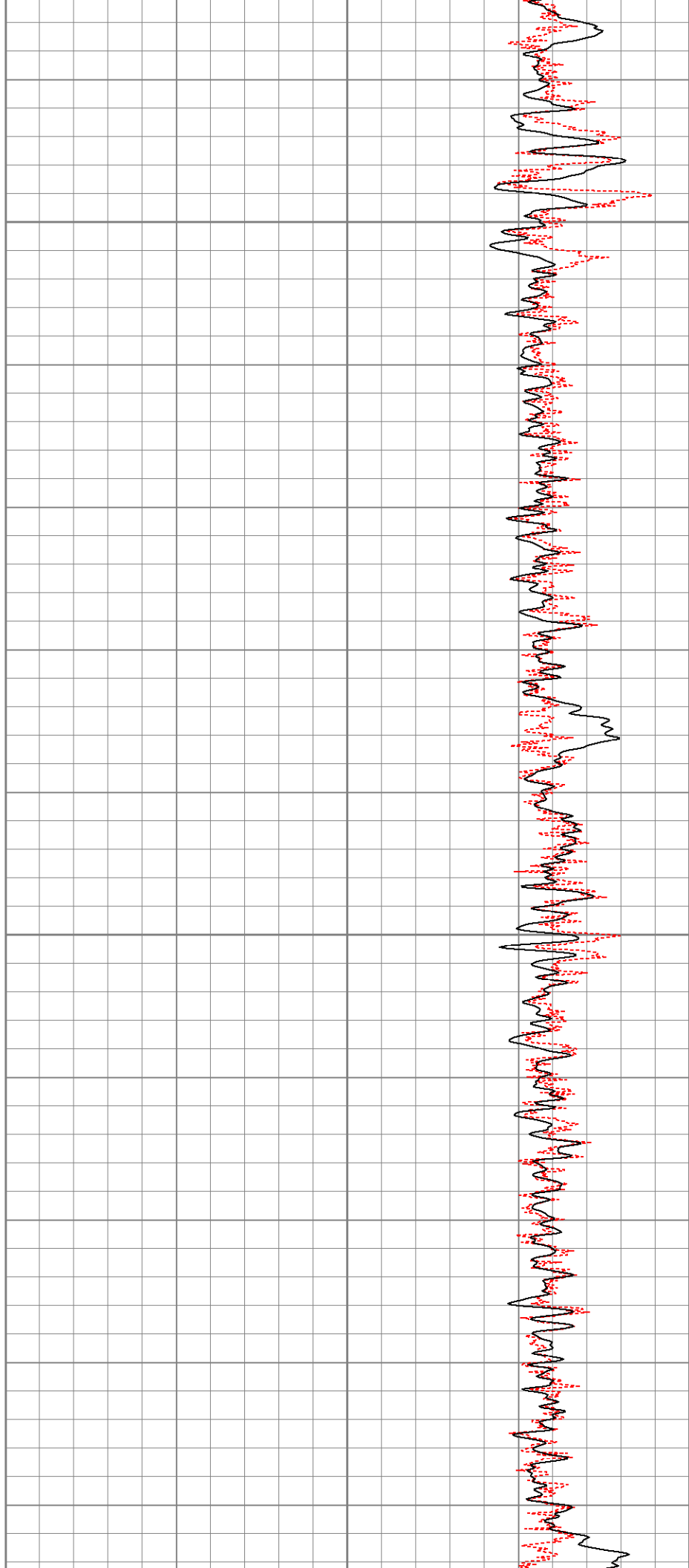
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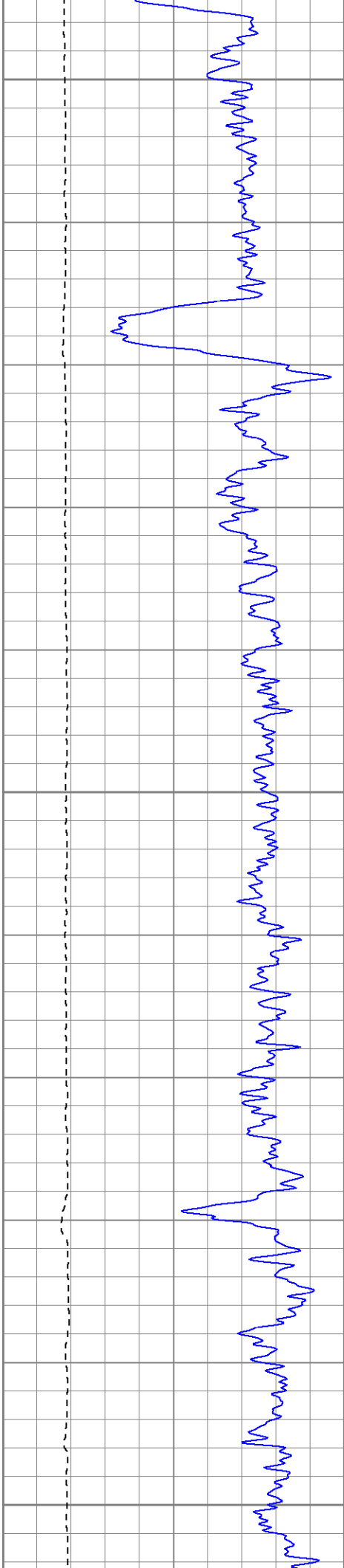




1700

1750

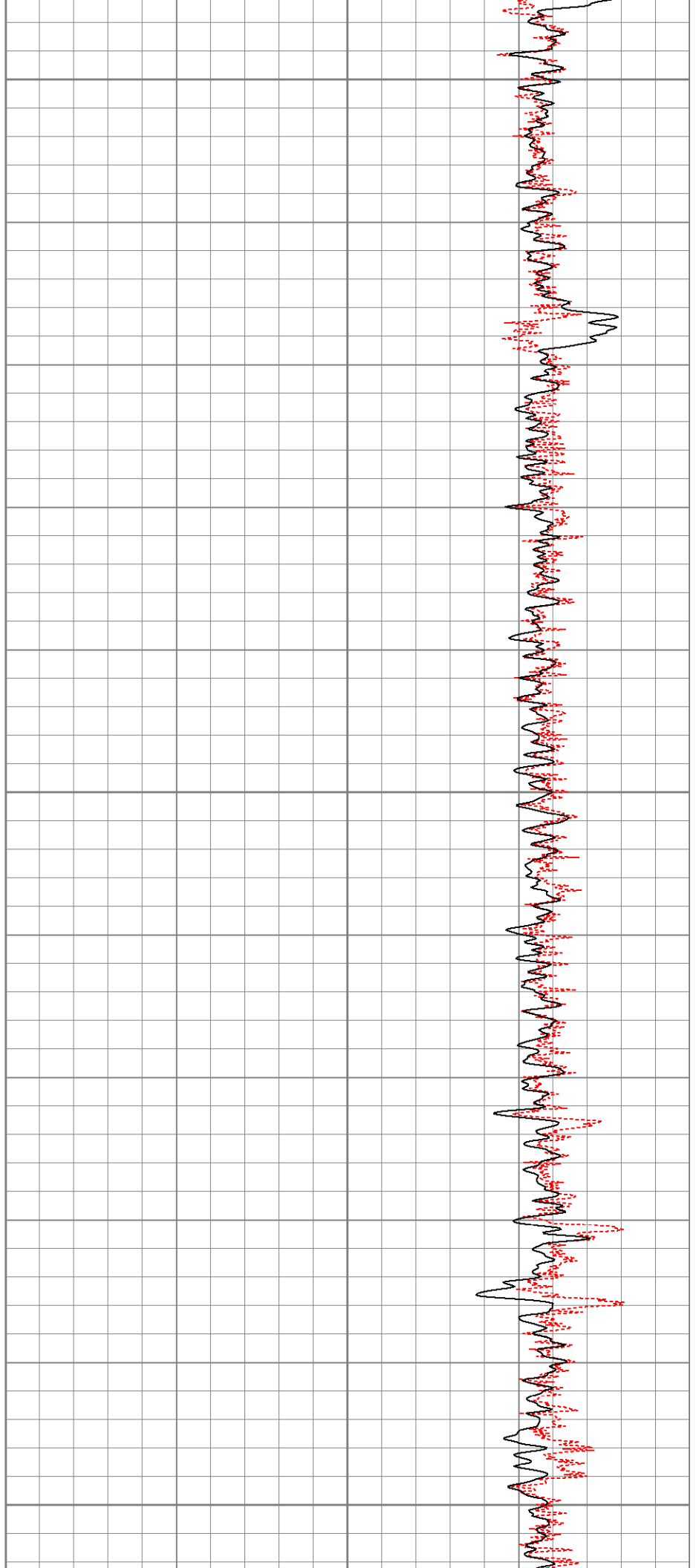


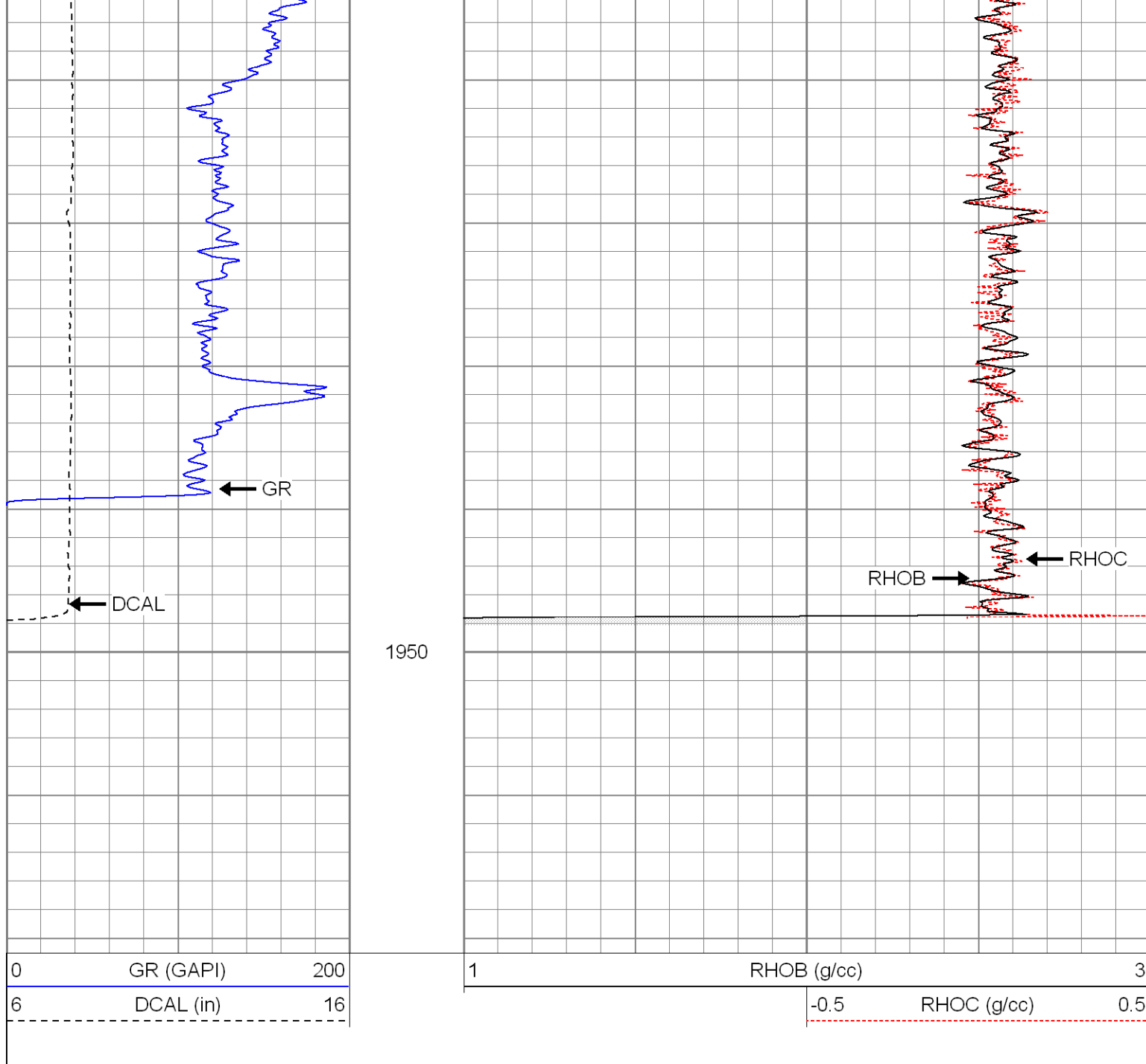


1800

1850

1900





Calibration Report

Database File: xtoac3507.db
 Dataset Pathname: pass1
 Dataset Creation: Sun Sep 02 04:32:23 2007 by Log Open-Cased 061129

Dual Induction Calibration Report

Serial-Model: 5375-G
 Surface Cal Performed: Wed Aug 08 13:10:57 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	807.380	-1.996
Medium	0.004	0.745	V	0.000	550.000	mmho-m	742.488	-3.313

Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.002	0.621	V	0.000	500.000	mmho-m	807.436	-1.769
Medium	0.004	0.745	V	0.000	550.000	mmho-m	742.818	-3.183
Downhole Calibration								
	Readings			References			Results	
Internal:	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	105.000	0.000

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		4.45		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)	5.75	3.50	85.00

Tool Joint	Length (ft)	Weight (lb)	O.D. (in)	Material	Length (ft)	Weight (lb)	O.D. (in)
GR	31.62			GR-OH (2001) SIE	3.50	3.25	40.00
LSD	23.45			CDL-poilex (2118)	8.79	4.00	275.00
DCAL	23.04						
SSD	22.91						
CILD	10.60			DIL-G (5375) Gearhart	20.83	4.00	345.00
SP	10.60						
CILM	6.89						
RLL3	1.70						
Dataset: xtoac3507.db: field/well/run1/pass2 Total Length: 39.62 ft Total Weight: 750.00 lb O.D.: 4.00 in							