



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

DUAL INDUCTION LOG

Company XTO Energy Inc.
Well Apache Canyon 03-13
Field Purgatoire River
County Las Animas State Colorado

Location: API # : 05 071 09571 00

427' FSL & 495' FWL

SEC 3 TWP 34S RGE 67W

Permanent Datum Ground Level Elevation 7546'
Log Measured From Ground Level
Drilling Measured From Ground Level

Other Services
cdl
neu
Elevation
K.B. -----
D.F. -----
G.L. 7546'

Date 7-26-08

Run Number One

Depth Driller 2200'

Depth Logger 2194'

Bottom Logged Interval 2192'

Top Log Interval Surface Casing

Casing Driller 8 5/8" @ 480'

Casing Logger 480'

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 12:30 p.m.

Time Logger on Bottom 1:35 p.m.

Maximum Recorded Temperature 108 DEG F

Equipment Number T697

Location Trinidad

Recorded By L. Smith

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

First Bosque Entrance to Alamacito Canyon, stay on main road, turn left at Apache Canyon 04-07, drive thru a location and take left to location.



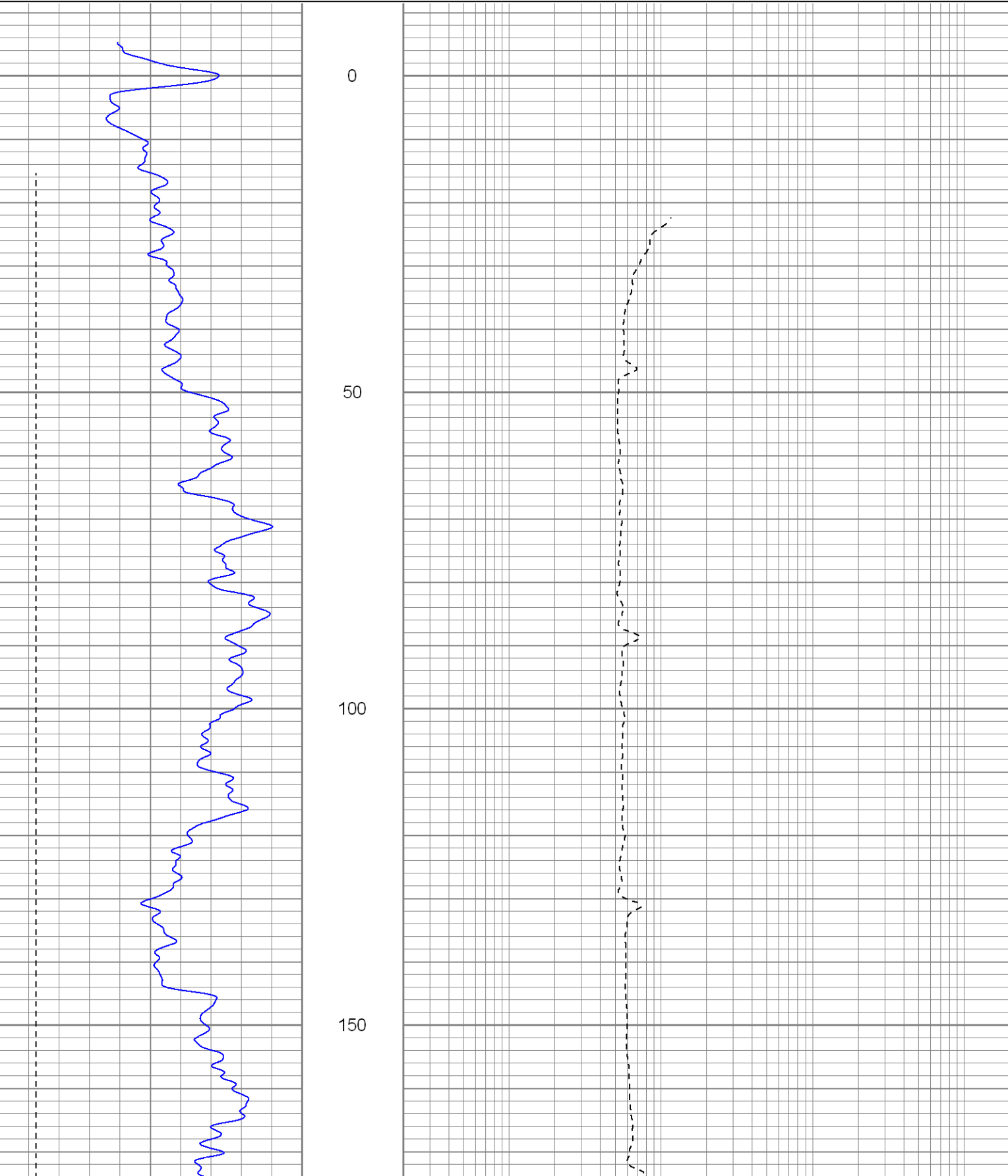
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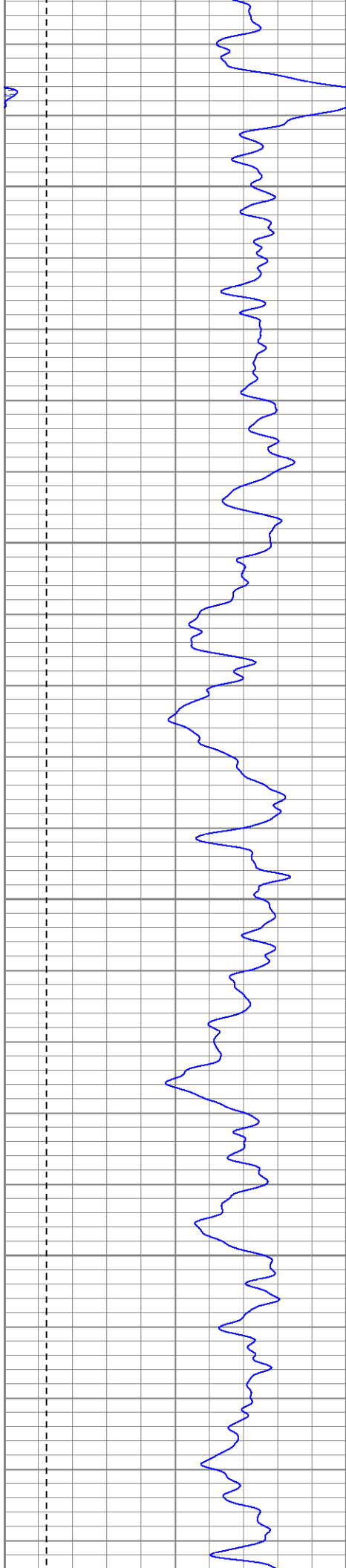
Main Pass

Database File: xtoac0313.db
Dataset Pathname: pass2.1
Presentation Format: dil
Dataset Creation: Sat Jul 26 15:46:38 2008
Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	200
-200	SP (mV)	0

0.2	RILM (Ohm-m)	2000
0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000



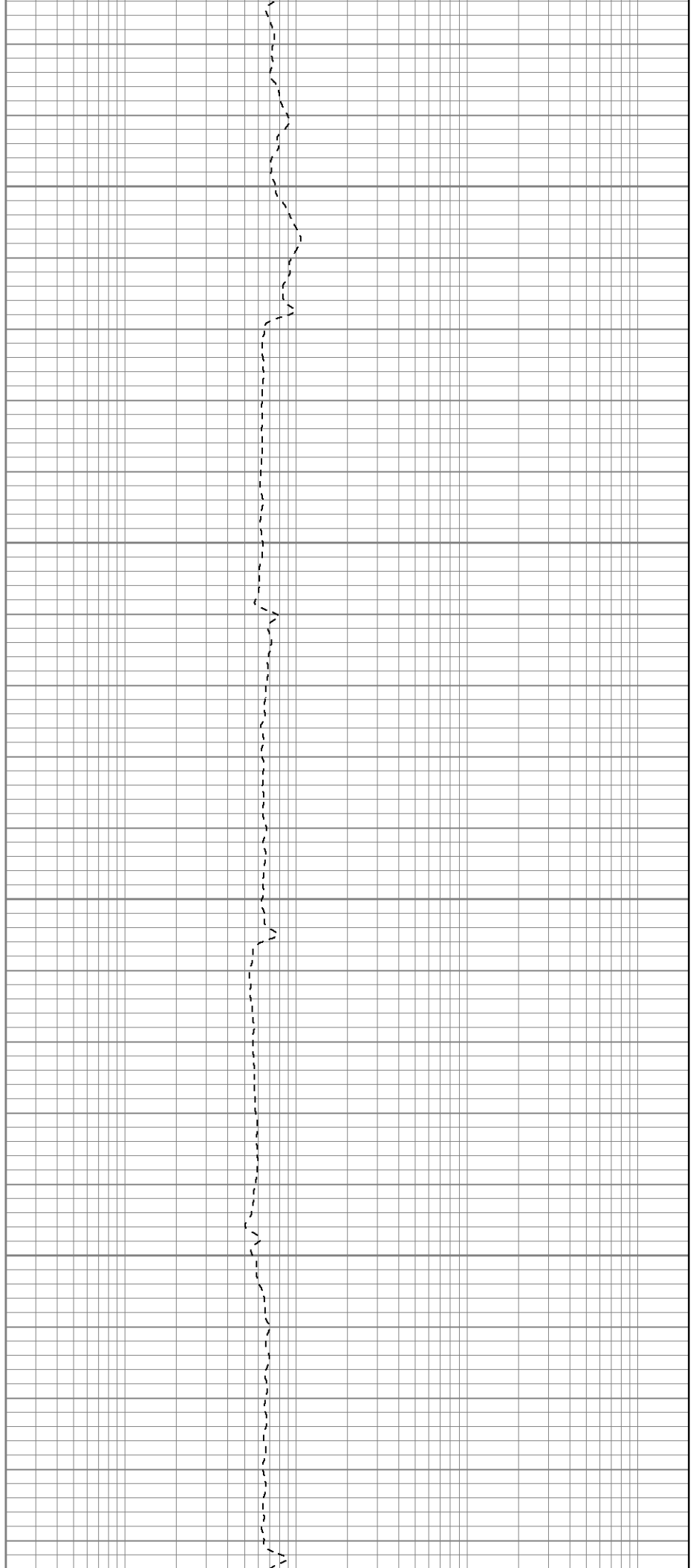


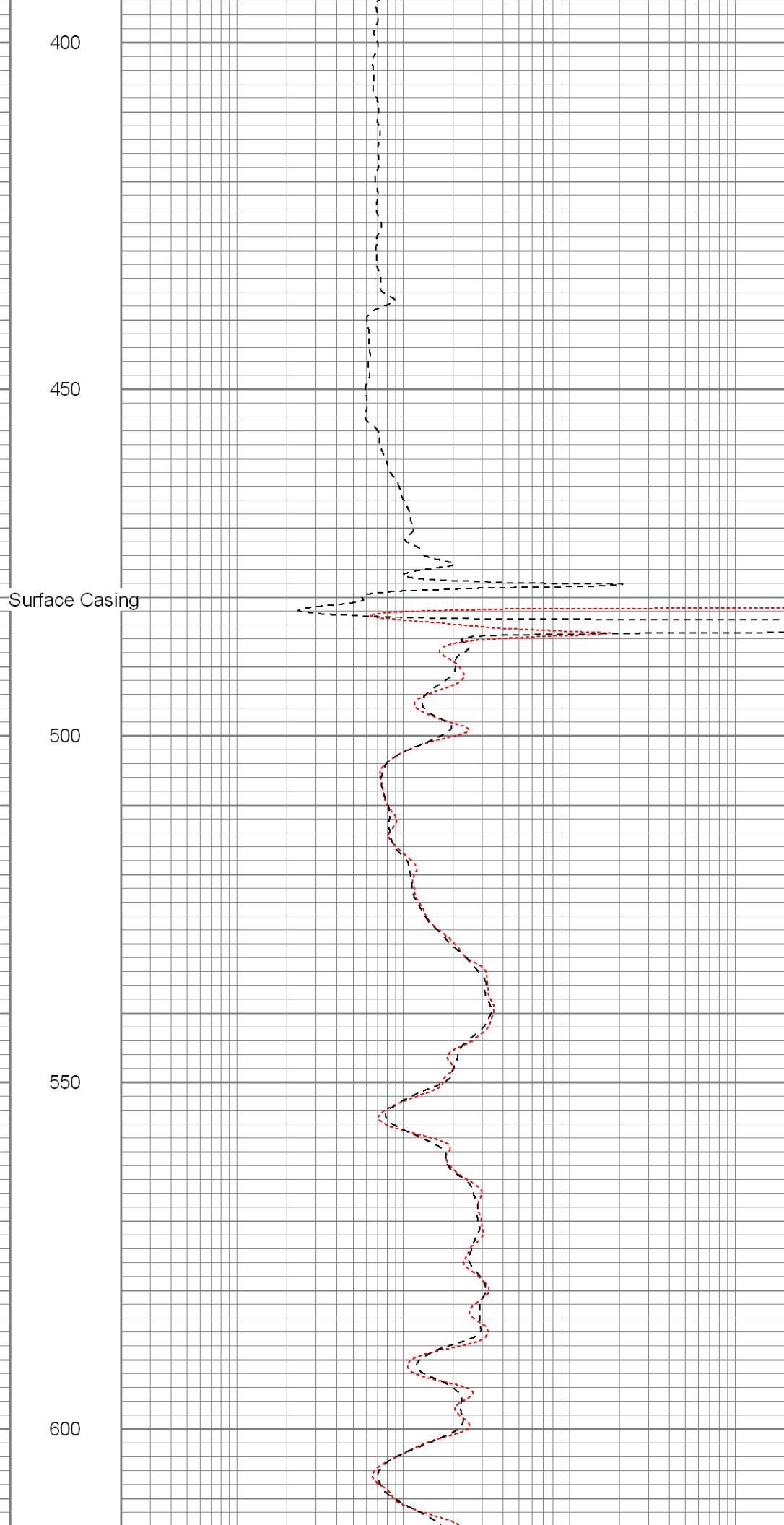
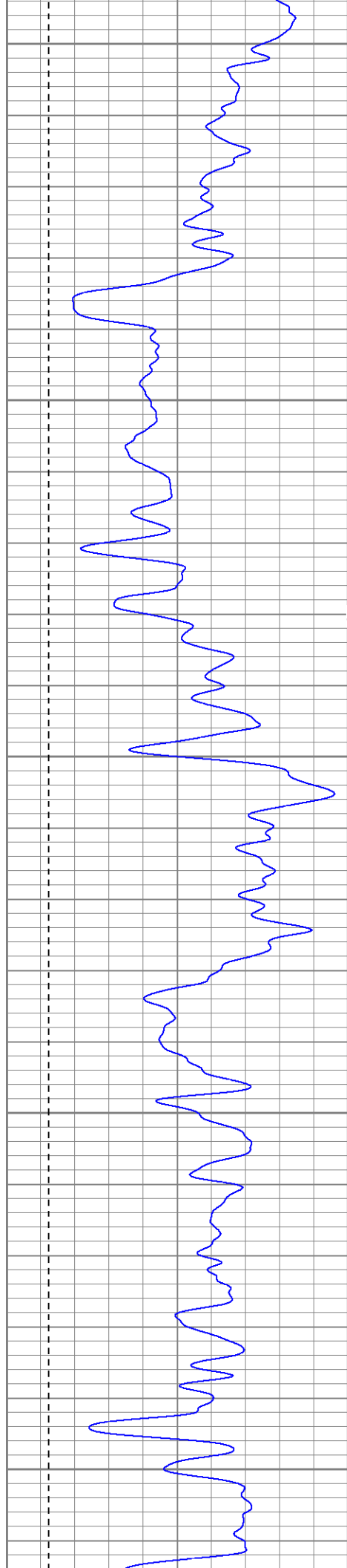
200

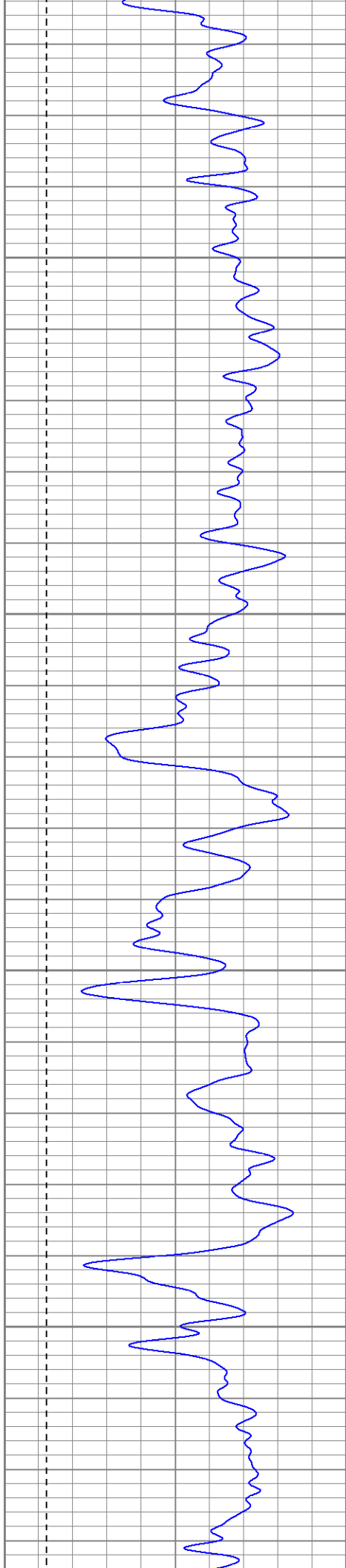
250

300

350





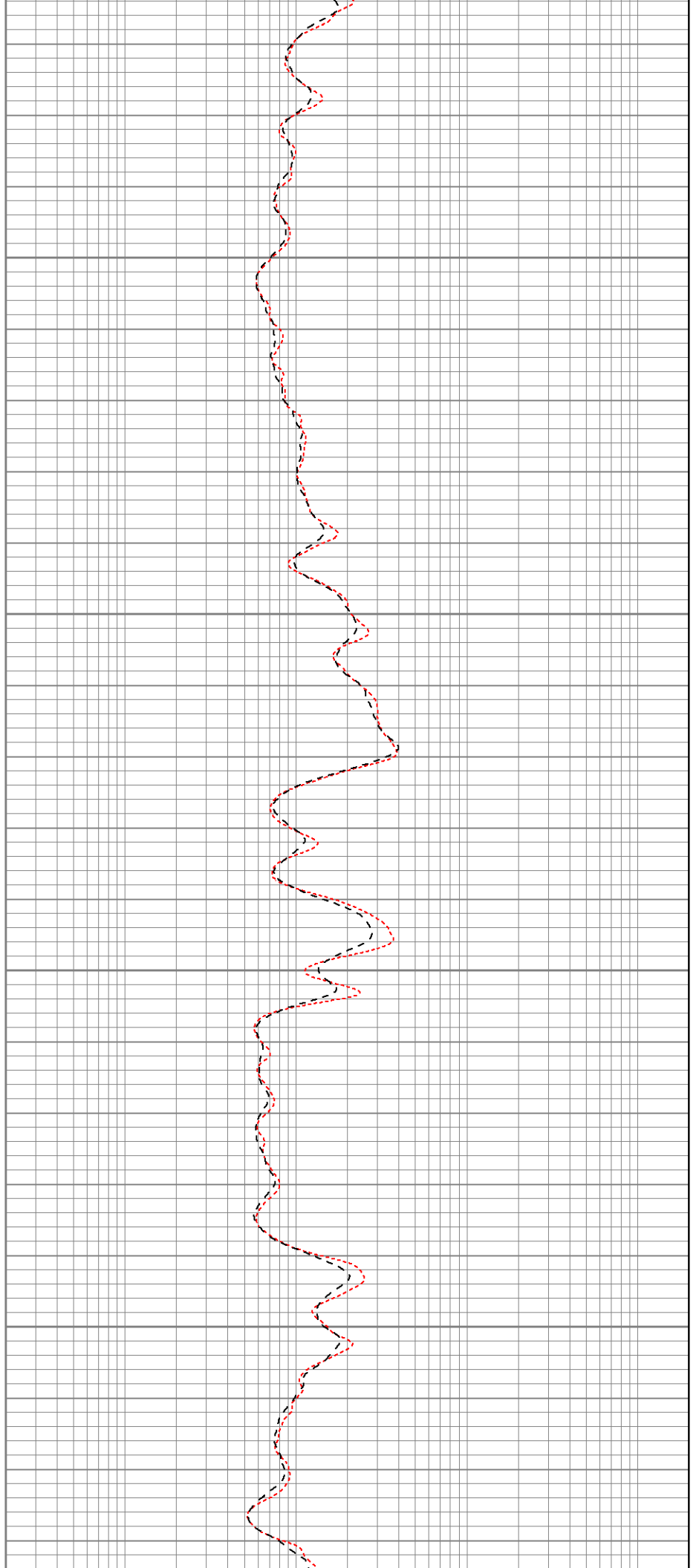


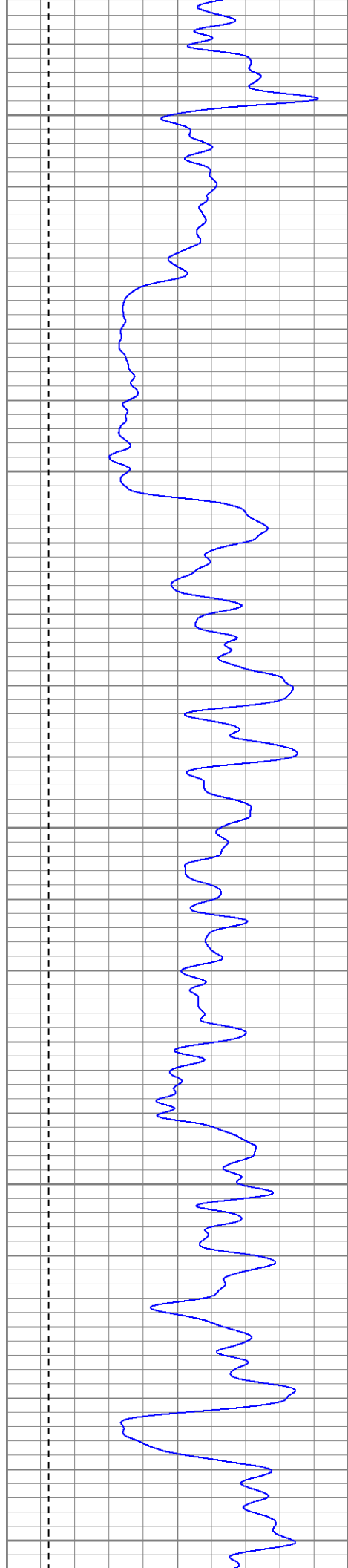
650

700

750

800





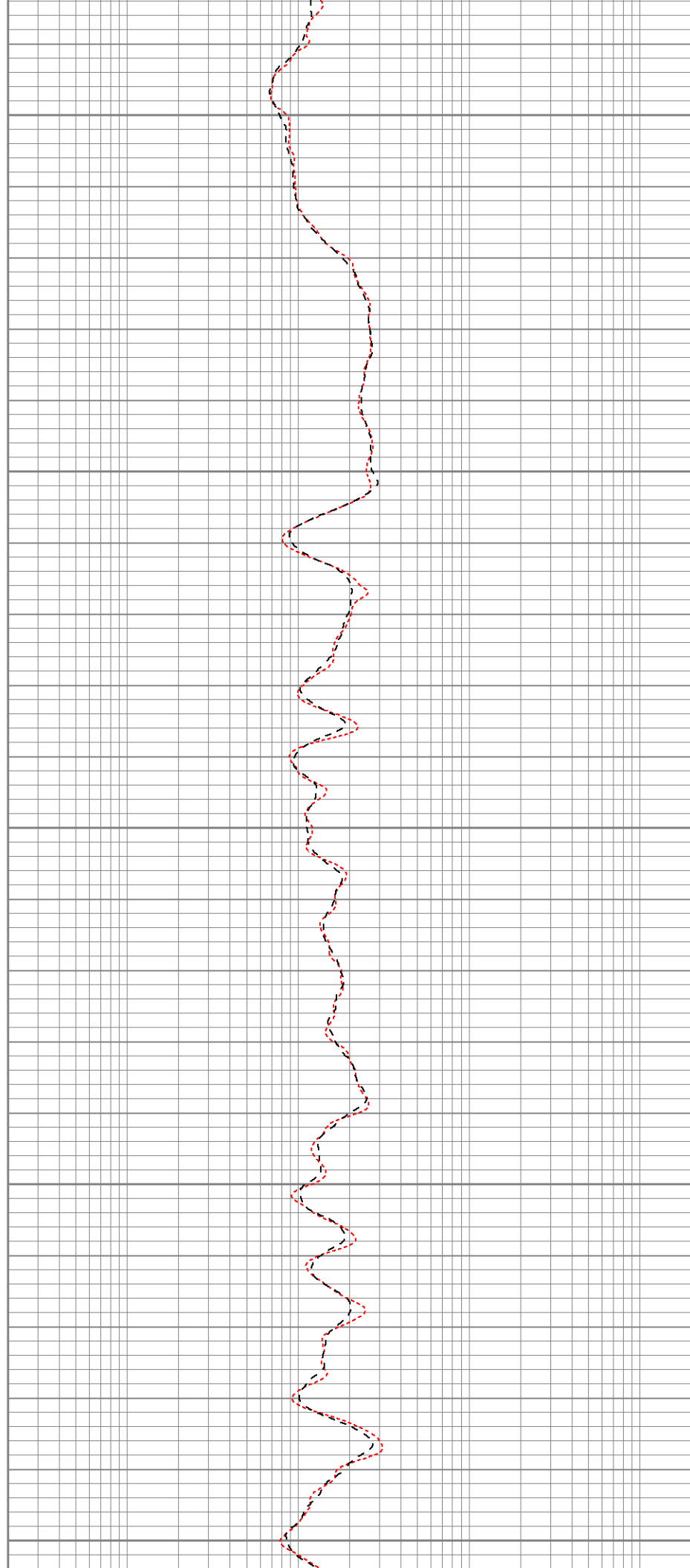
850

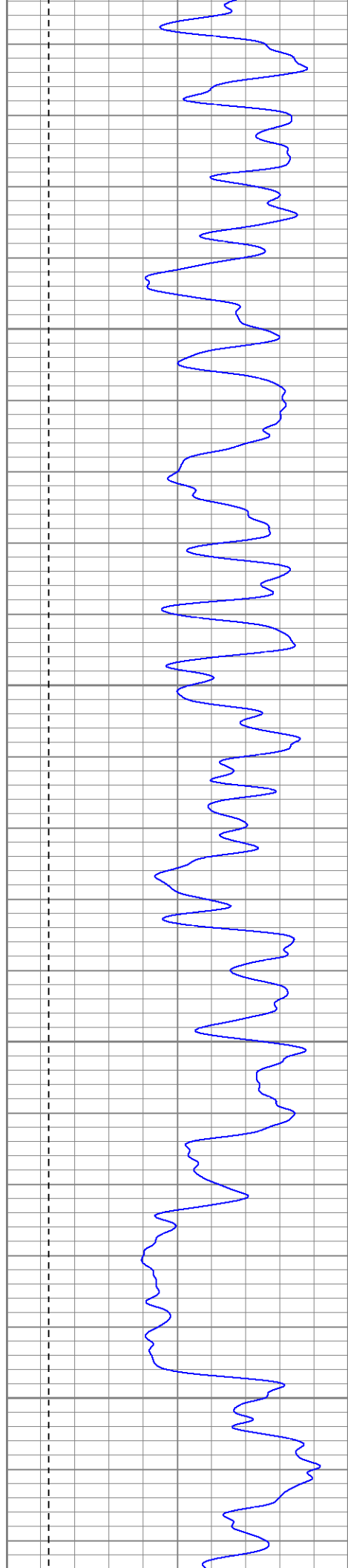
900

950

1000

1050



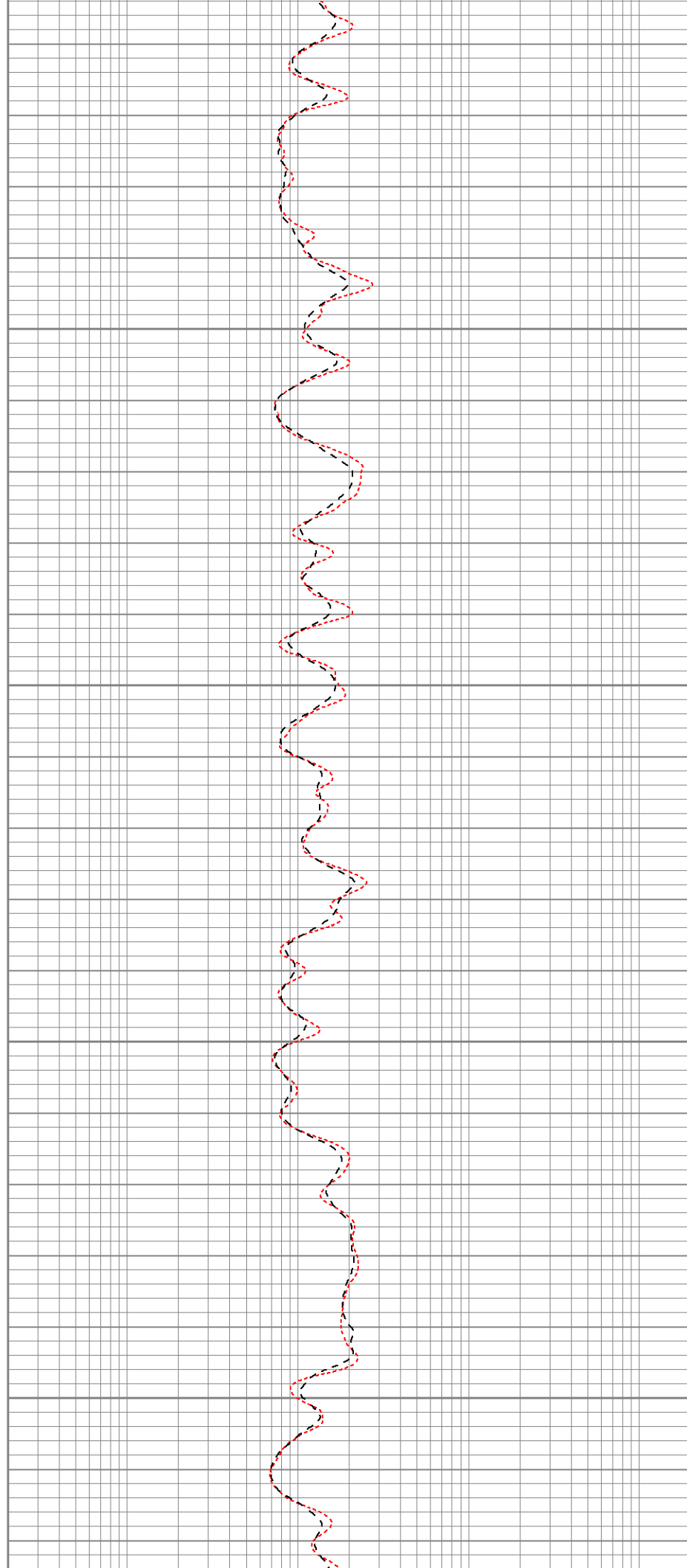


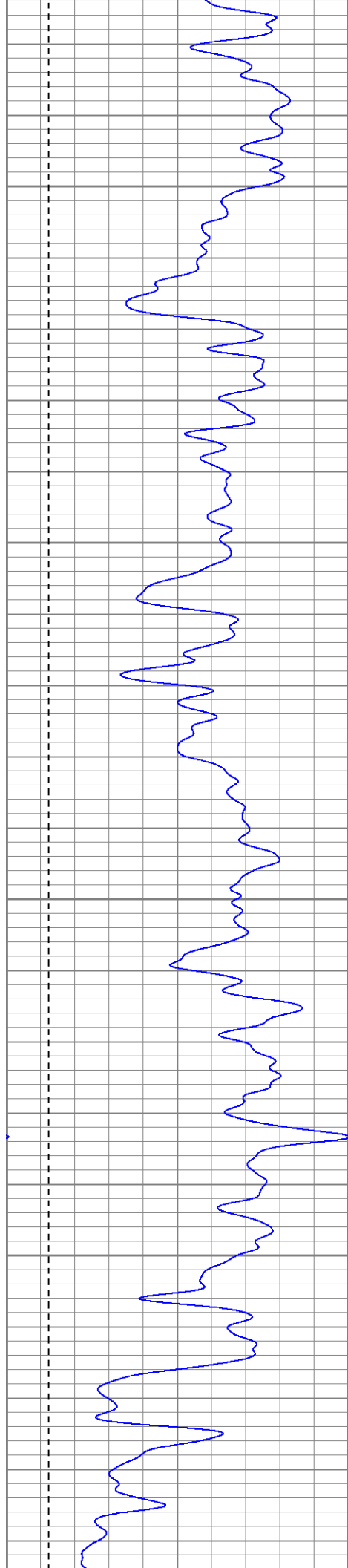
1100

1150

1200

1250



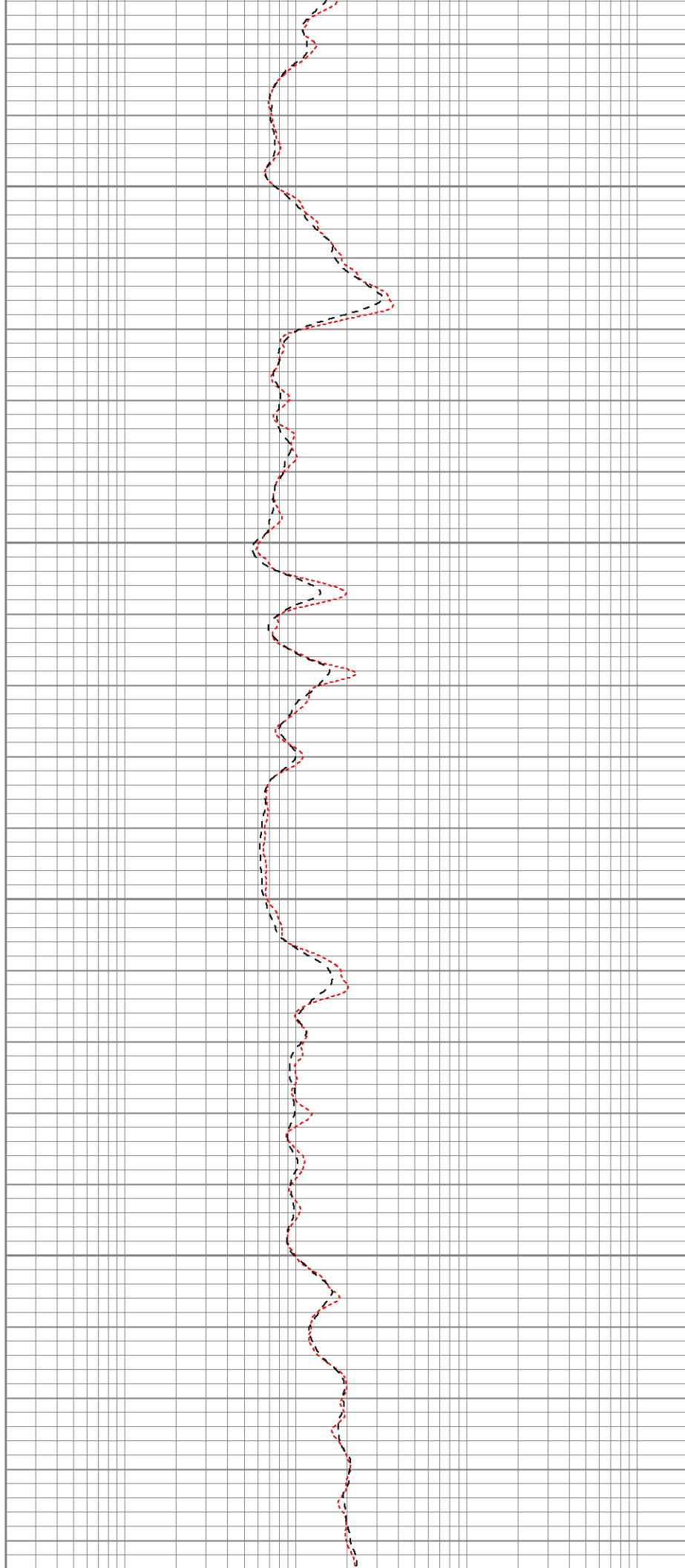


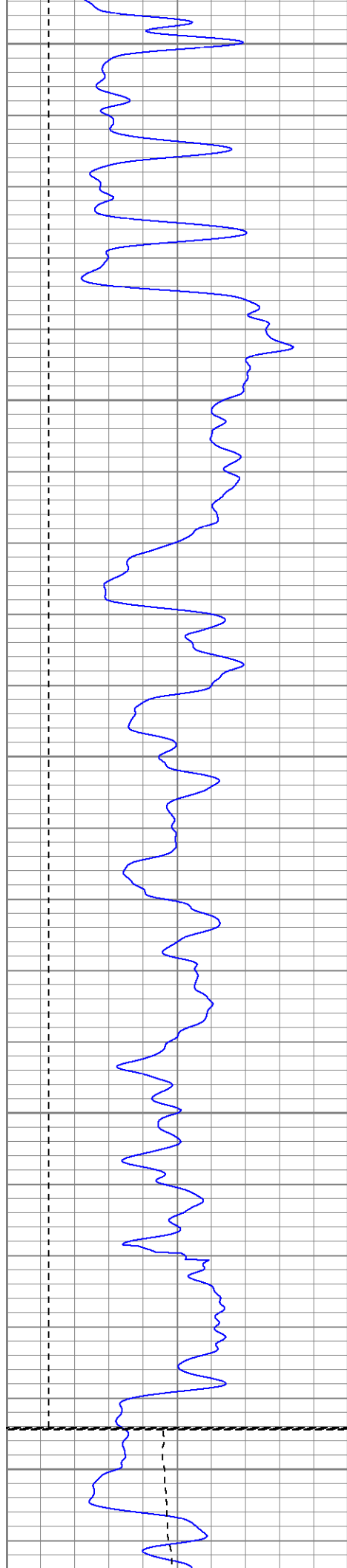
1300

1350

1400

1450





1500

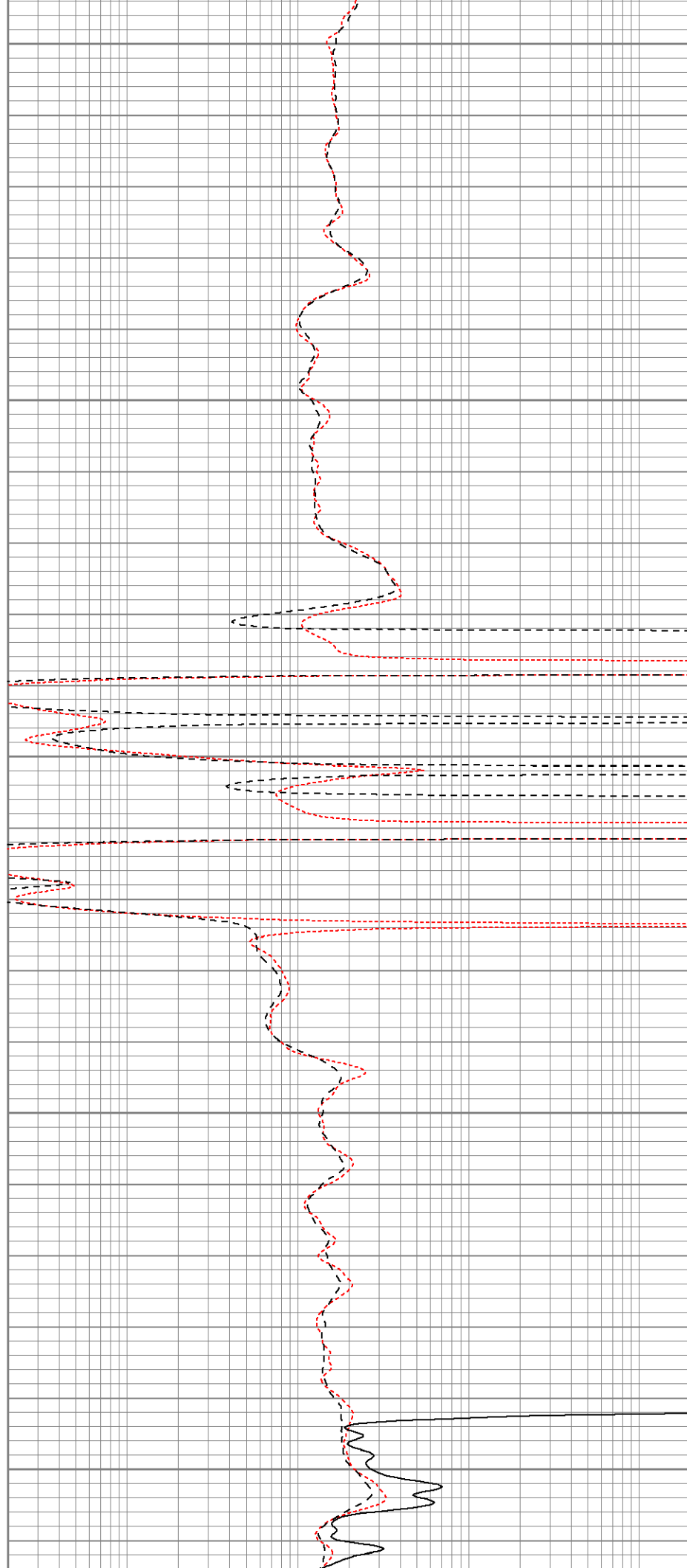
1550

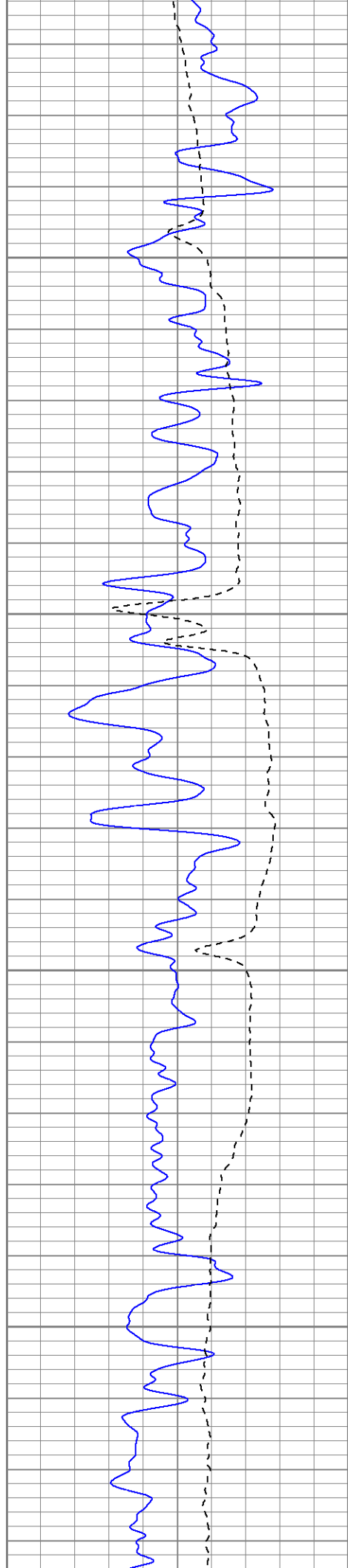
1600

1650

Air

1700





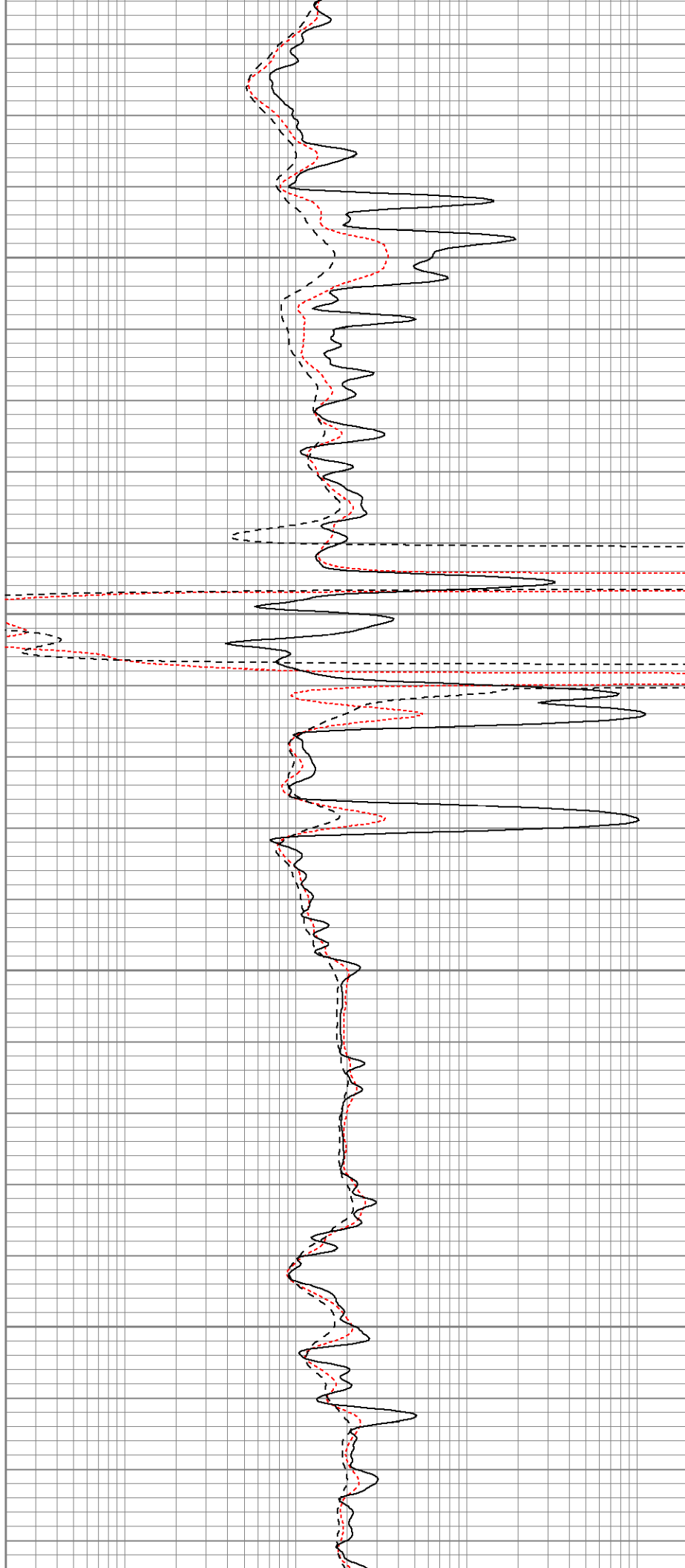
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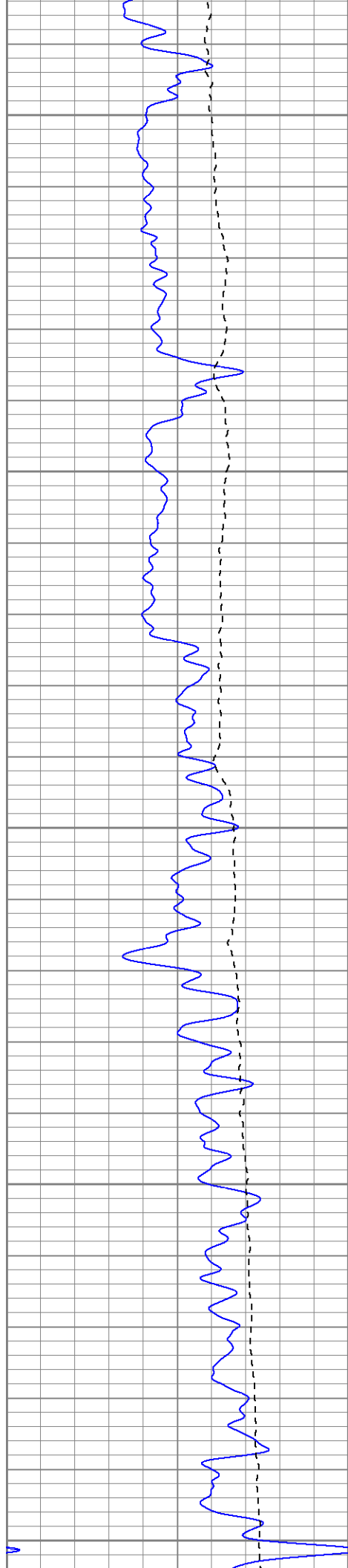
1800

FOAM

1850

1900





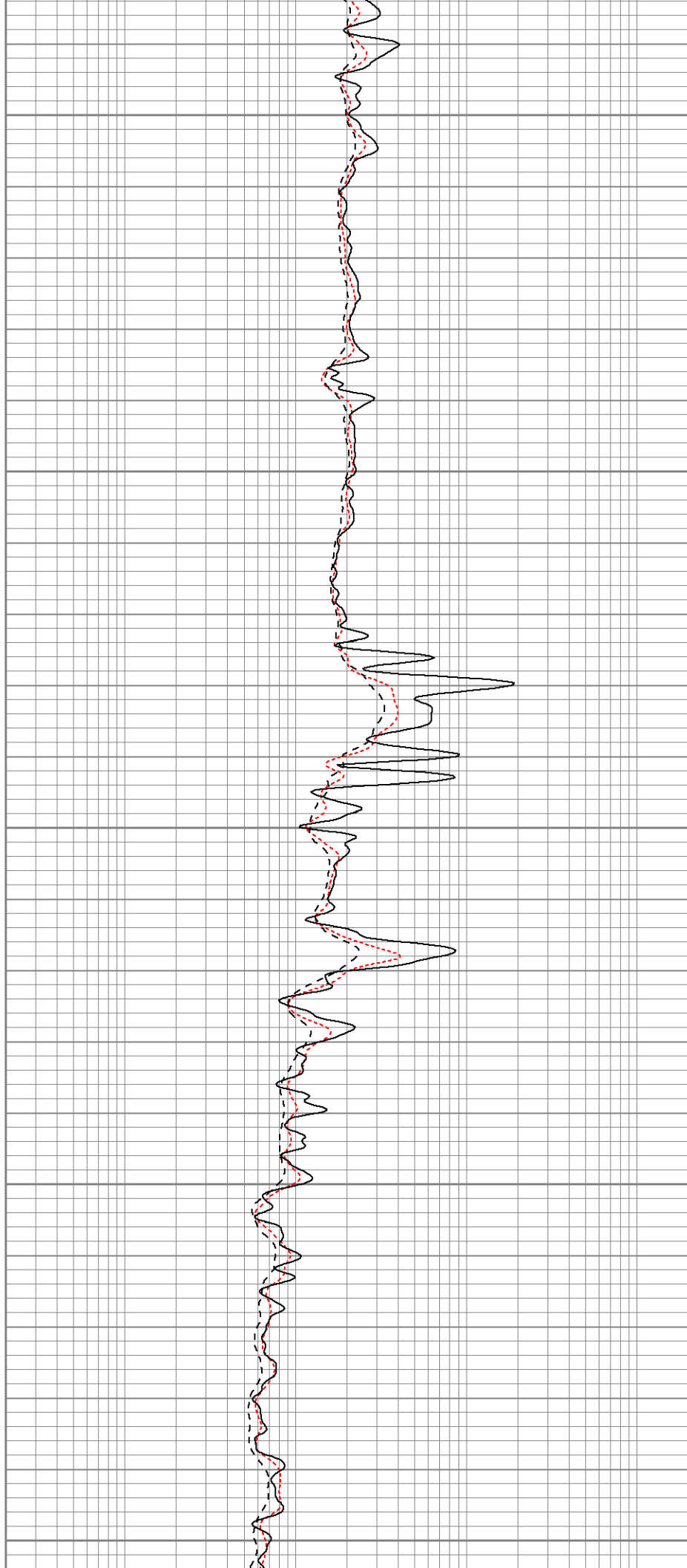
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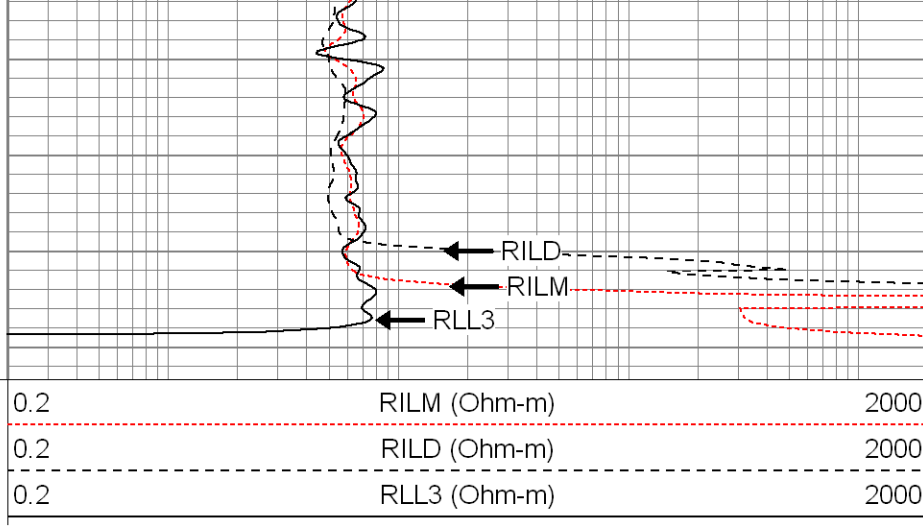
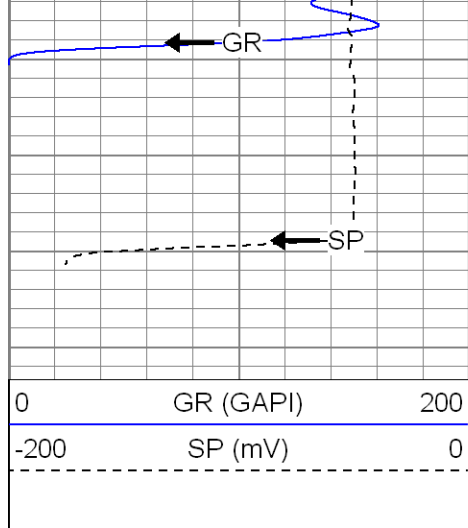
2000

2050

2100

2150





SUPERIOR

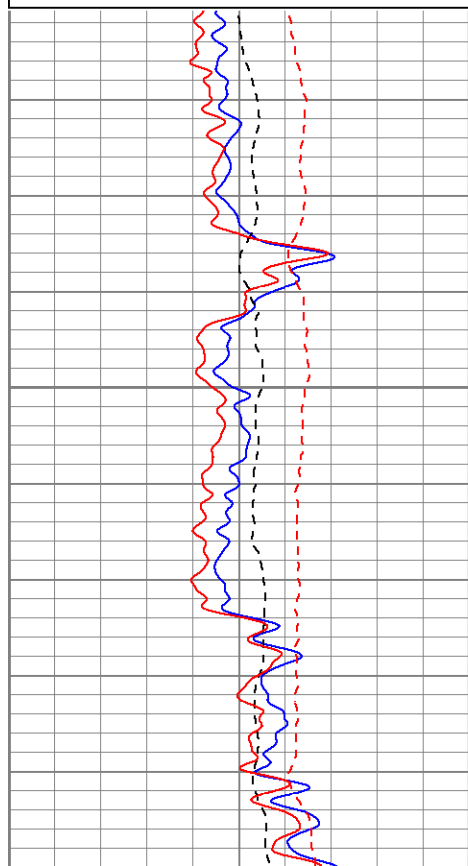
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Repeat Pass

Database File: xtoac0313.db
 Dataset Pathname: pass1.1
 Presentation Format: dil
 Dataset Creation: Sat Jul 26 14:28:42 2008 by Calc Open-Cased 071220
 Charted by: Depth in Feet scaled 1:240

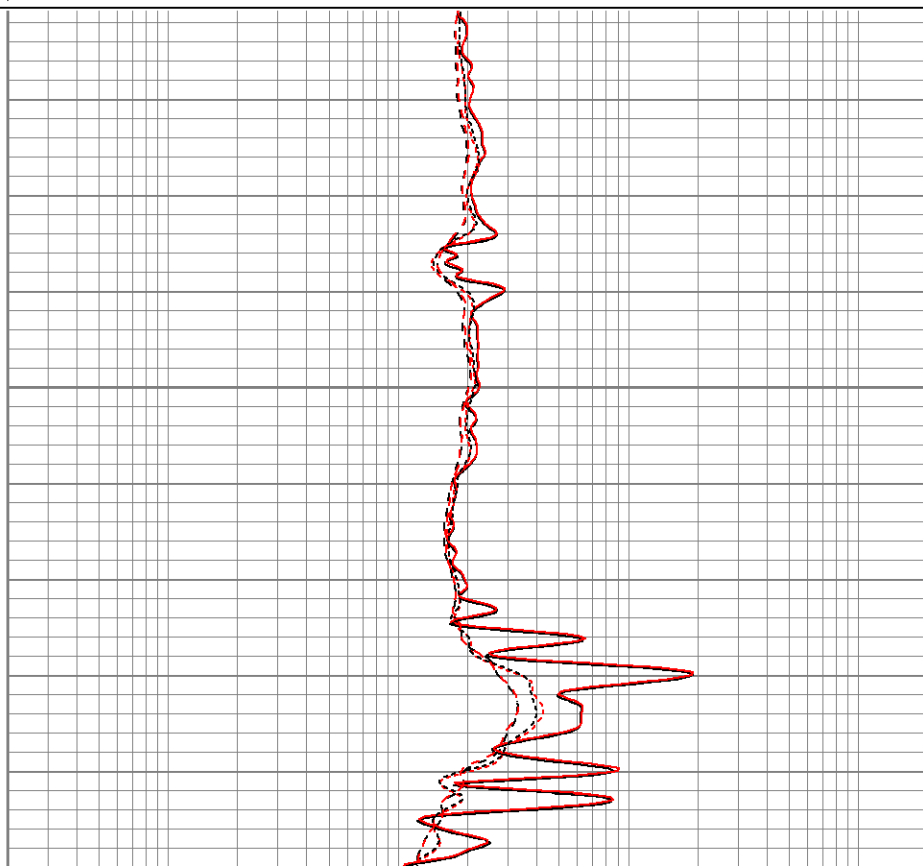
0	GR (GAPI)	200
-200	SP (mV)	0
0	GR-repeat (GAPI)	200
-200	SP-repeat (mV)	0

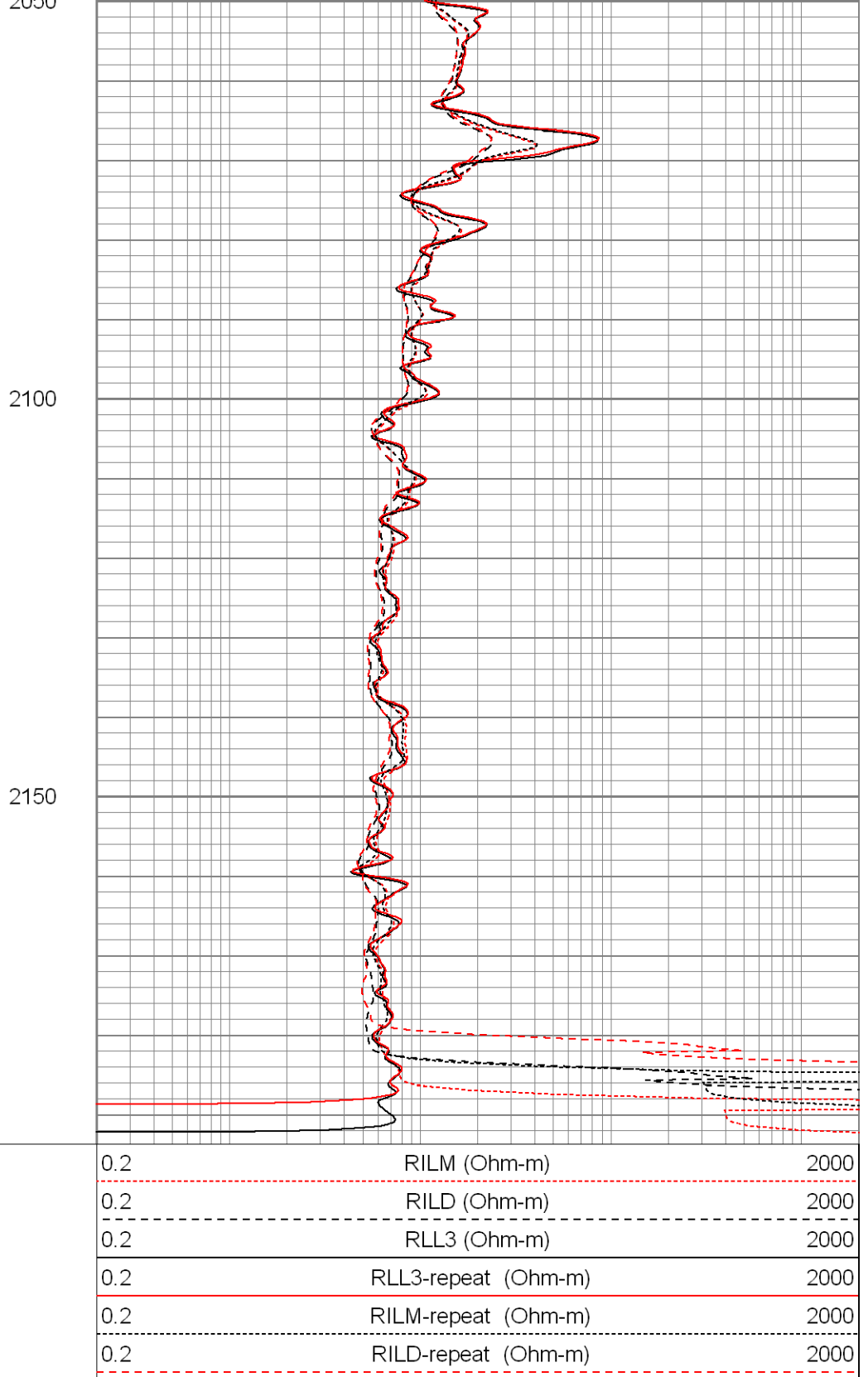
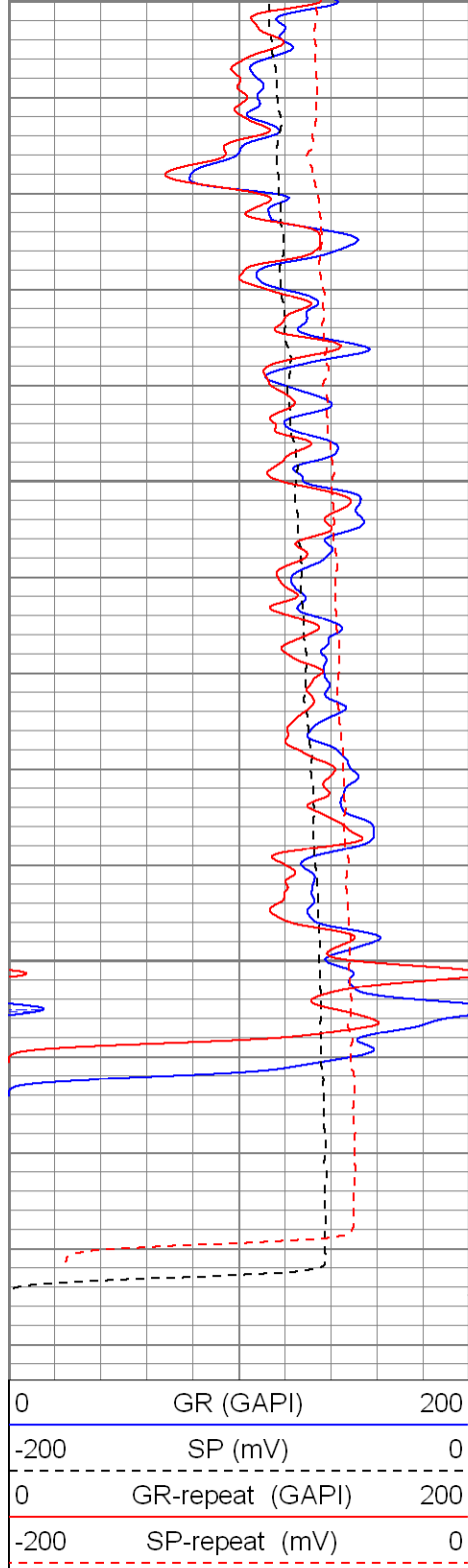
0.2	RILM (Ohm-m)	2000
0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
0.2	RLL3-repeat (Ohm-m)	2000
0.2	RILM-repeat (Ohm-m)	2000
0.2	RILD-repeat (Ohm-m)	2000



2000

2050





Calibration Report

Database File: xtoac0313.db
 Dataset Pathname: pass1
 Dataset Creation: Sat Jul 26 13:43:14 2008 by Log Open-Cased 071220

Dual Induction Calibration Report

Serial-Model: 5375-G
 Surface Cal Performed: Wed Jul 23 11:29:18 2008
 Downhole Cal Performed: Wed Jul 23 11:29:47 2008

Surface Calibration

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.026	0.645	V	0.000	500.000	mmho-m	808.472	-21.376
Medium	0.030	0.770	V	0.000	550.000	mmho-m	743.584	-22.316
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.027	0.645	V	0.000	500.000	mmho-m	808.639	-21.534
Medium	0.030	0.770	V	0.000	550.000	mmho-m	743.302	-22.248

Downhole Calibration

Readings				References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	-0.271	500.262	mmho-m	0.153	500.049	mmho-m	0.999	0.424
Medium	-0.141	550.313	mmho-m	-0.059	550.150	mmho-m	1.000	0.082
Shallow	2.528	0.036	V	500.000	2.000	Ohm-m	124.000	-3.000

Compensated Density Calibration Report

Serial-Model: 2118-poilex
 Source / Verifier: /
 Master Calibration Performed: Thu Jul 24 15:28:16 2008

Master Calibration

Density			Far Detector	Near Detector	
Magnesium	1.710	g/cc	430.93	391.13	cps
Aluminum	2.590	g/cc	97.14	270.75	cps
Spine Angle = 76.13			Density/Spine Ratio = 0.573		
Size			Reading		
Small Ring	8.00	in	4.21	V	
Large Ring	14.00	in	8.11	V	

Gamma Ray Calibration Report

Serial Number: 2001
 Tool Model: OH
 Performed: Thu Jul 24 15:21:22 2008
 Calibrator Value: 1.0 GAPI
 Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps
 Sensitivity: 0.2500 GAPI/cps

Neutron Calibration Report

Serial Number: 5145
 Tool Model: G
 Performed: Thu Jul 24 15:36:19 2008
 Calibrator Value: 1200 NAPI
 Calibrator Reading: 1700 cps
 Sensitivity: 0.705882 NAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)	
NEU	37.73		None	0.75	1.50	5.00	
			NEU-G (5145) Gearhart Epithermal	5.65	3.50	85.00	
GR	31.47		GR-OH (2001) 2001	3.56	3.25	40.00	
			CDL-poilex (2118)	8.83	4.00	275.00	
LSD	23.30						
DCAL	22.89						
SSD	22.72						
CILD SP	10.60 10.60			DIL-G (5375) Gearhart	21.47	4.00	345.00
CILM	6.89						
RLL3	1.70						

Dataset: xtoac0313.db: field/well/run1/pass1
Total Length: 40.26 ft

Total Weight:	750.00 lb
O.D.	4.00 in