



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

## DUAL INDUCTION LOG

Company XTO Energy Inc.  
Well Golden Eagle 33-07  
Field Purgatoire River  
County Las Animas State Colorado

Location: API # : 05 071 09513 00

1794' FNL & 1819' FEL

SEC 33 TWP 33S RGE 67W

Permanent Datum Ground Level Elevation 7636'  
Log Measured From Ground Level  
Drilling Measured From Ground Level

Other Services  
CDL  
NEUTRON  
Elevation  
K.B. -----  
D.F. -----  
G.L. 7636'

Date 7-14-08

Run Number One

Depth Driller 2350'

Depth Logger 2342'

Bottom Logged Interval 2340'

Top Log Interval Surface Casing

Casing Driller 8 5/8" @ 467'

Casing Logger 467'

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 4:00 P.M.

Time Logger on Bottom 7:25 P.M.

Maximum Recorded Temperature 99 DEG F

Equipment Number T697

Location Trinidad

Recorded By J. Cappellucci

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

#### Well Directions:

First Bosque Entrance to Cherry Canyon, stay on Cherry Canyon Road,  
drive thru green gate, drive past the Compressor station 5, end on next drive thru location.

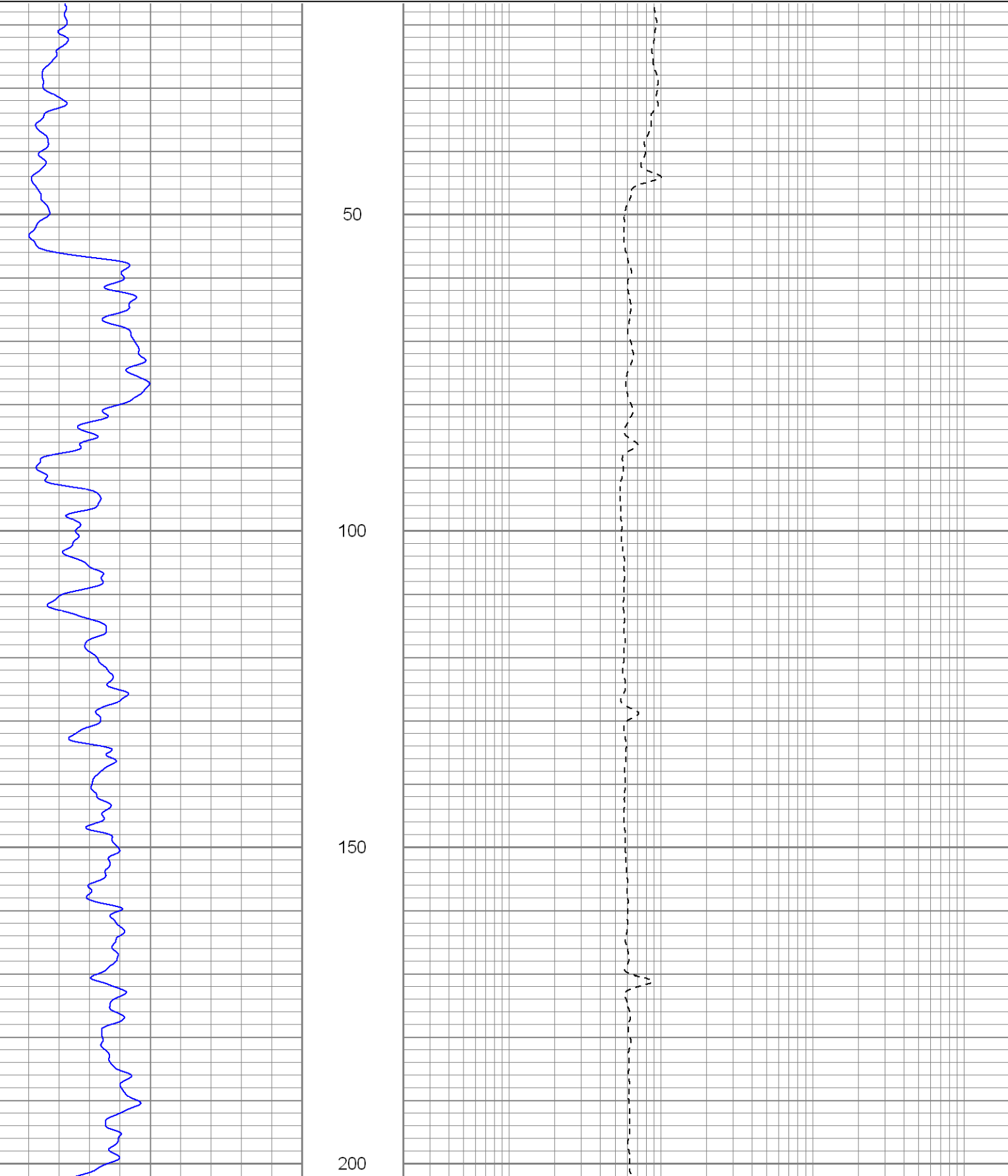


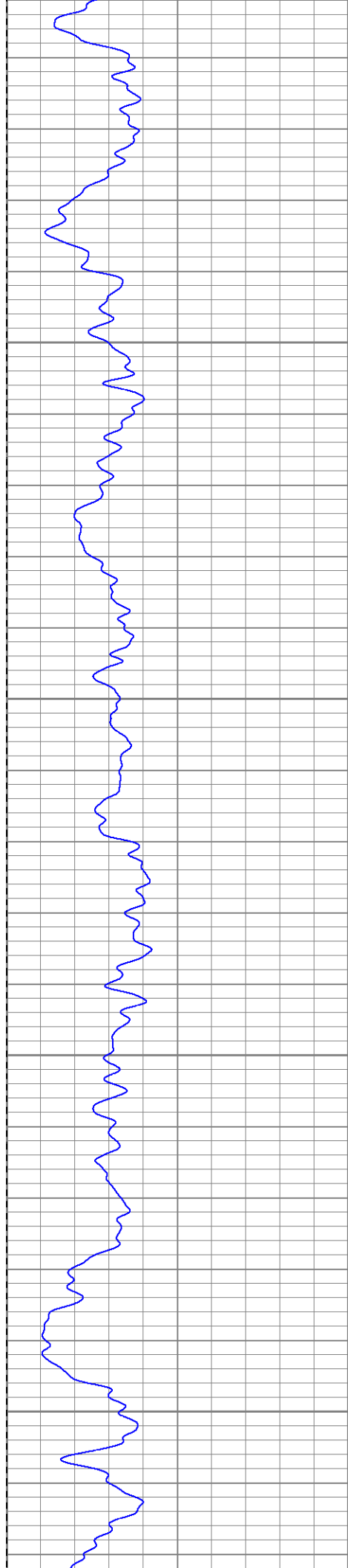
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# Main Pass

Database File: xtoge3307.db  
Dataset Pathname: pass4.1  
Presentation Format: dil  
Dataset Creation: Mon Jul 14 21:36:27 2008 by Calc Open-Cased 071220  
Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	200	0.2	RILM (Ohm-m)	2000
-200	SP (mV)	0	0.2	RILD (Ohm-m)	2000
			0.2	RLL3 (Ohm-m)	2000



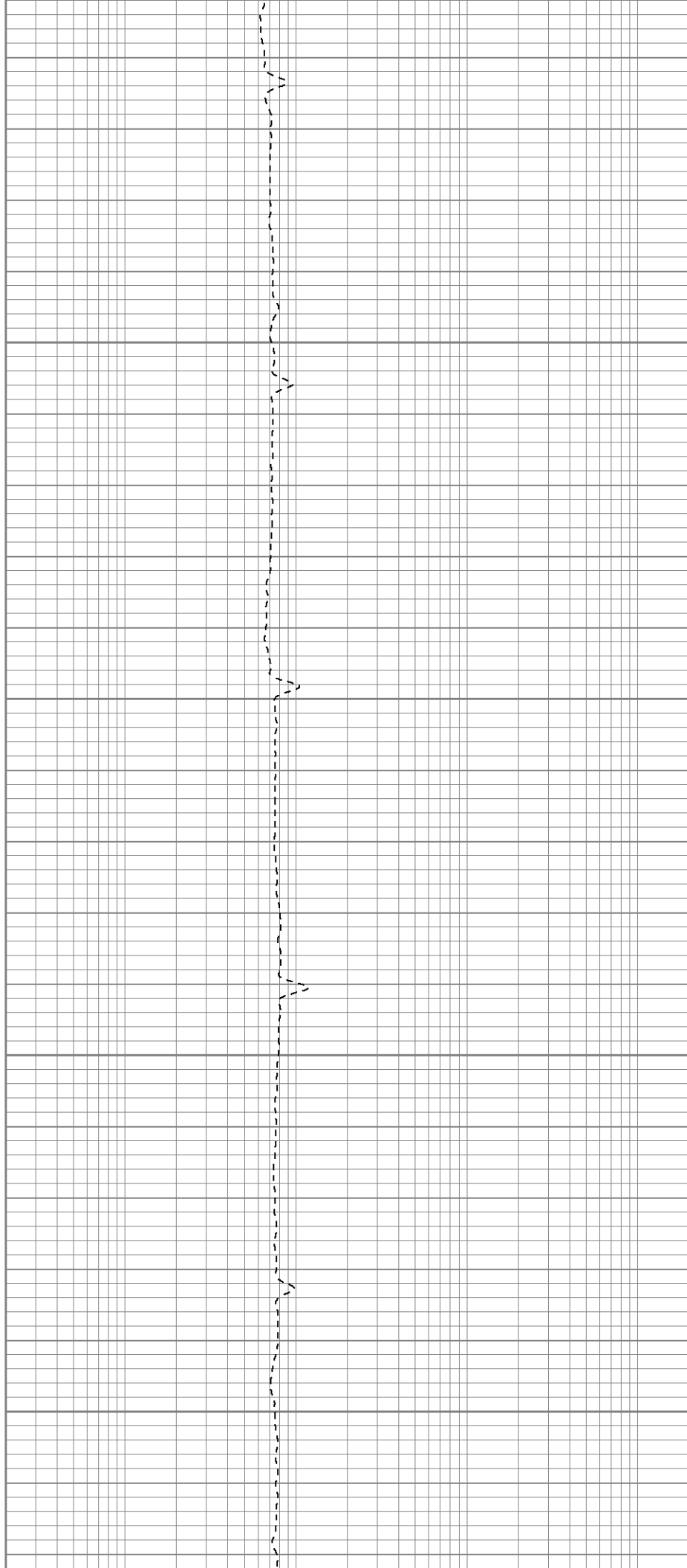


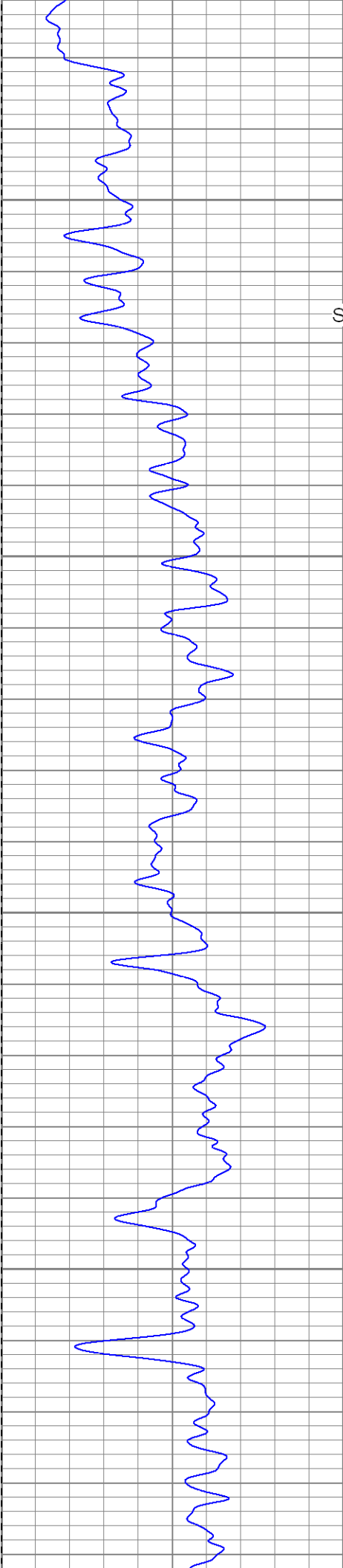
250

300

350

400





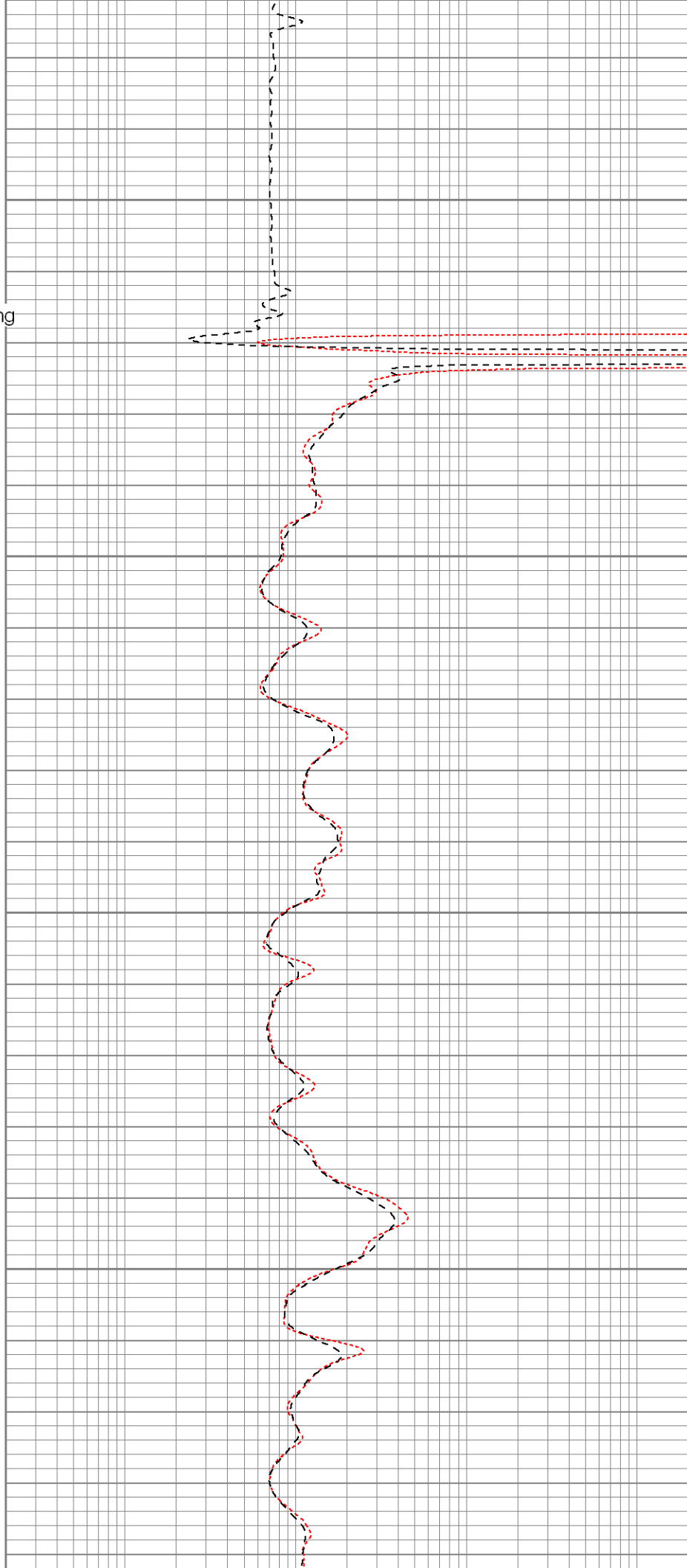
450

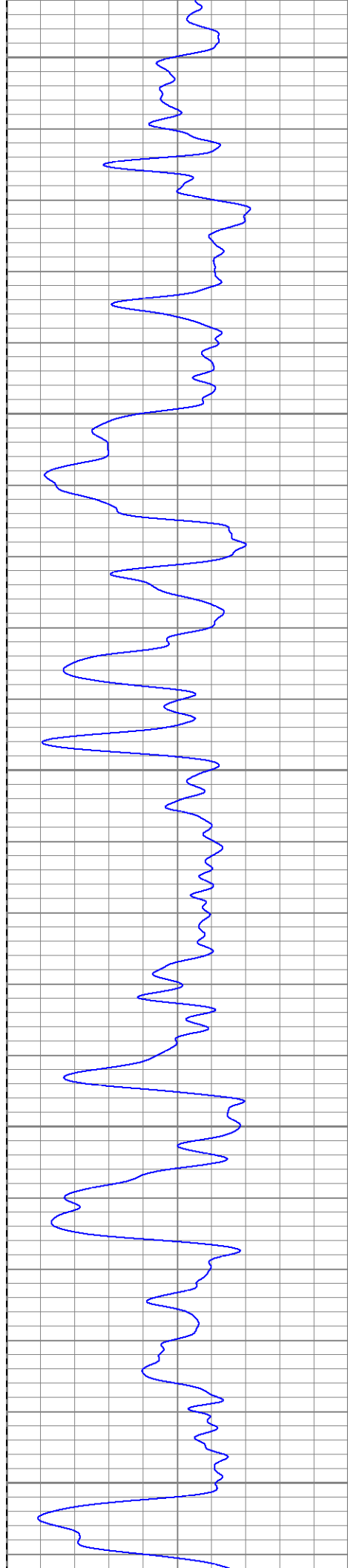
Surface Casing

500

550

600





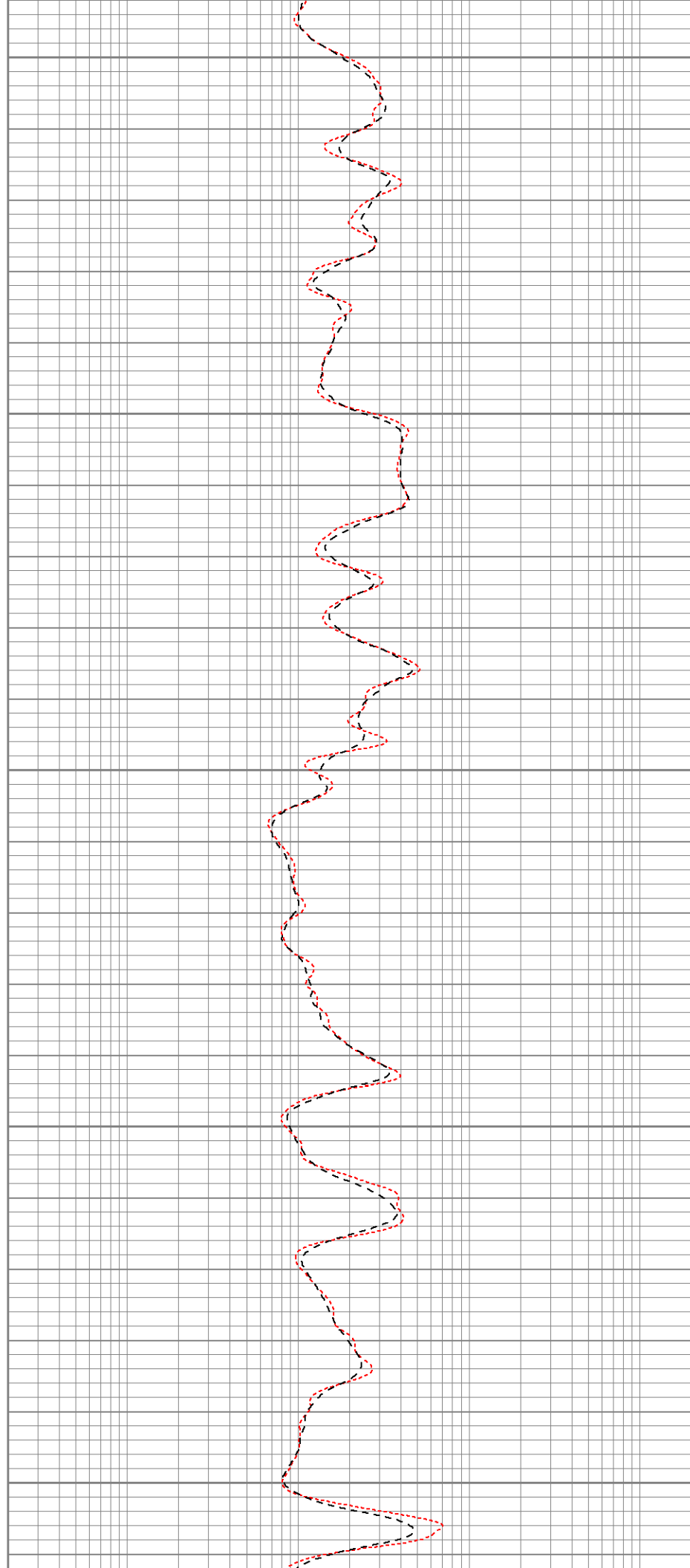
650

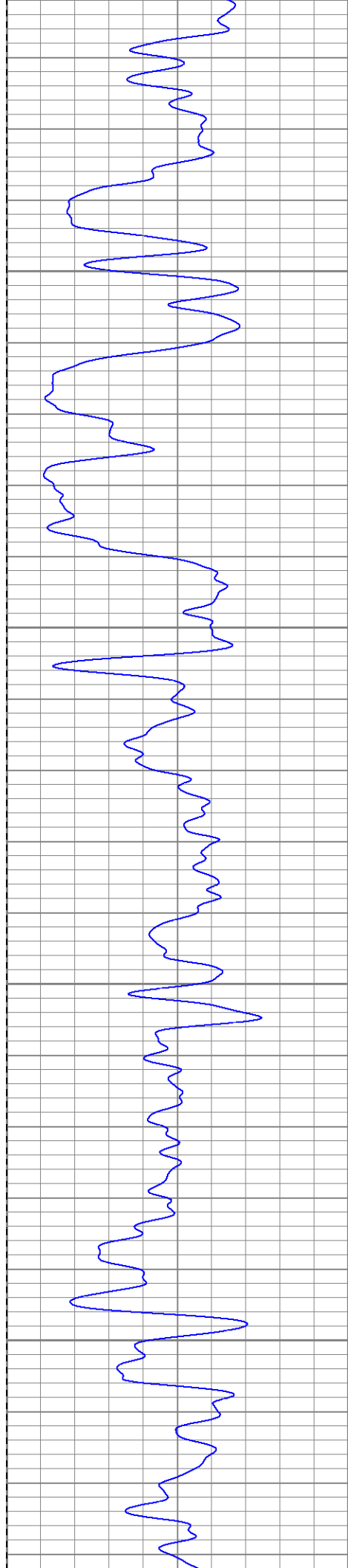
700

750

800

850



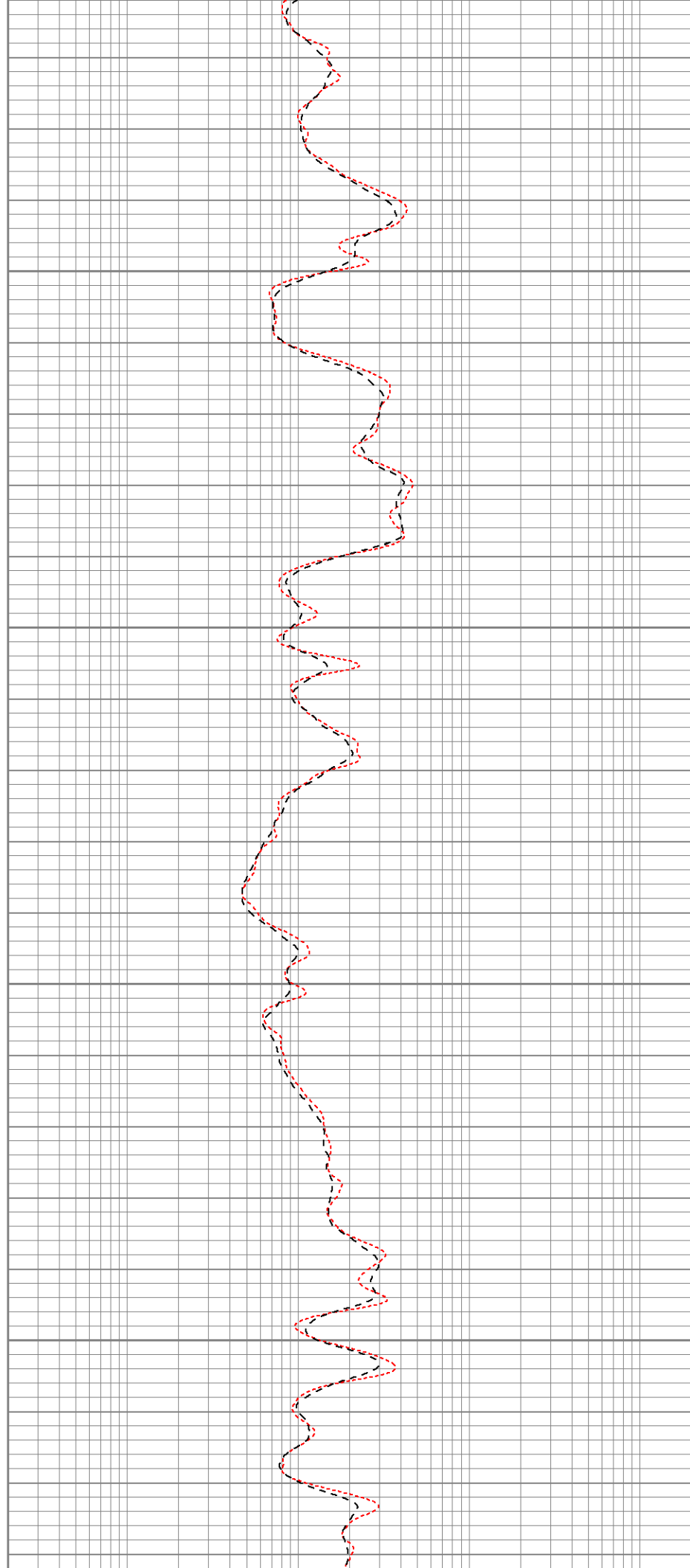


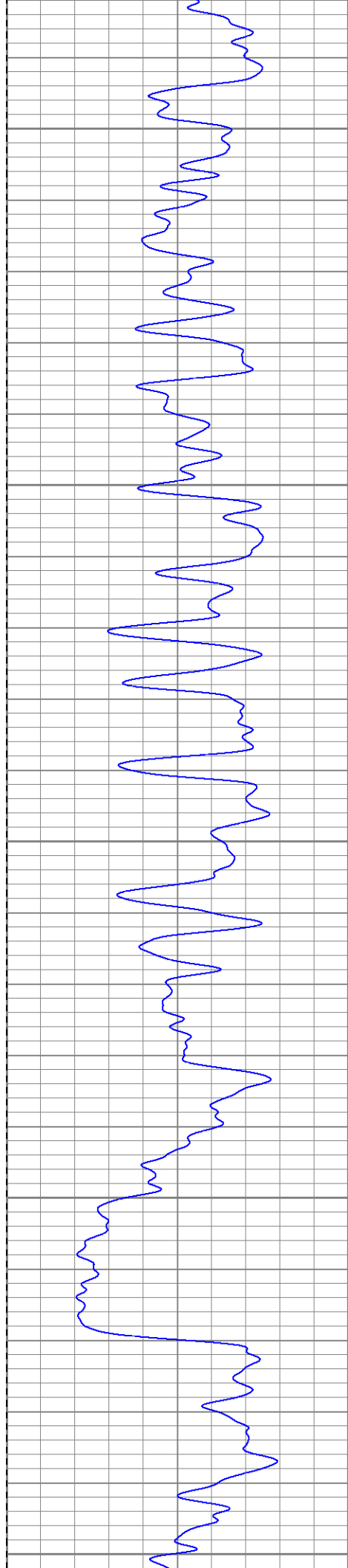
900

950

1000

1050





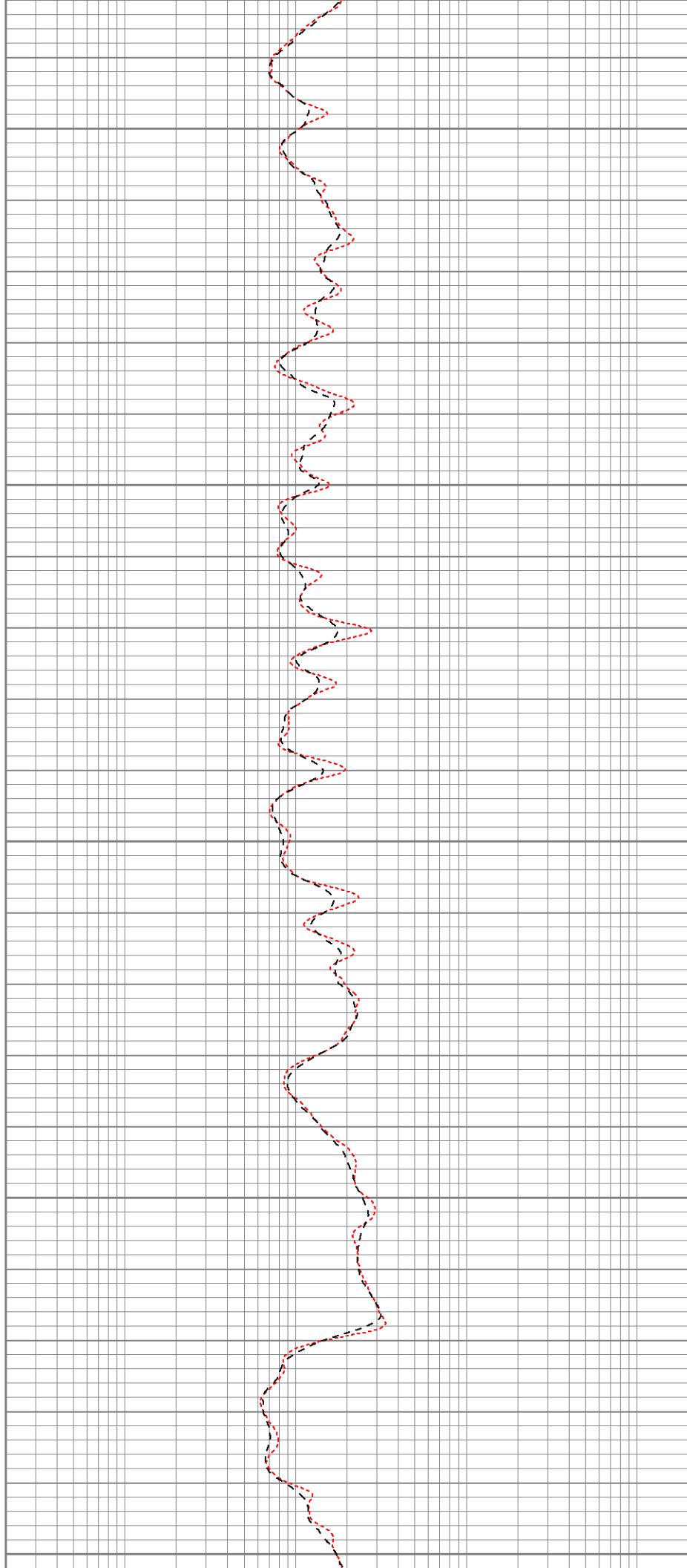
1100

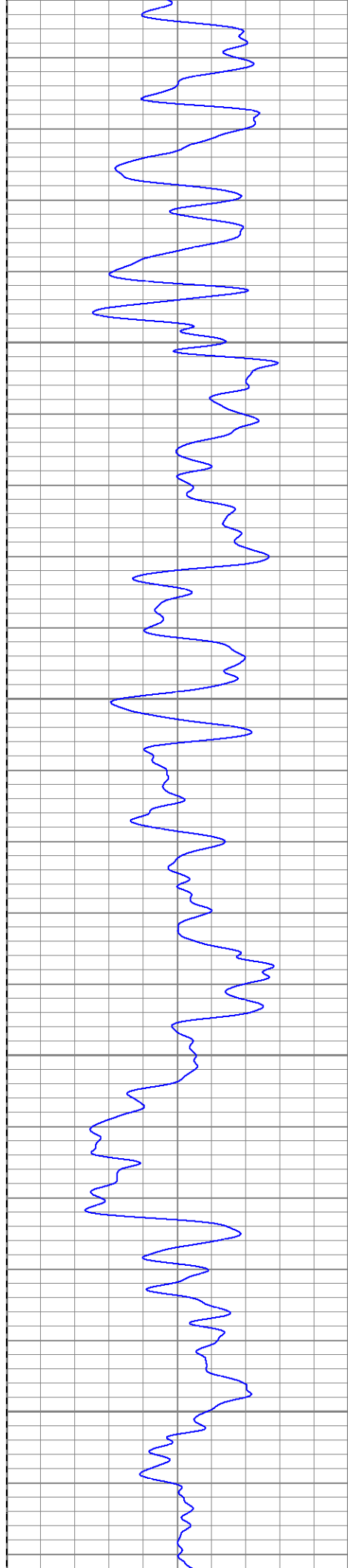
1150

1200

1250

1300



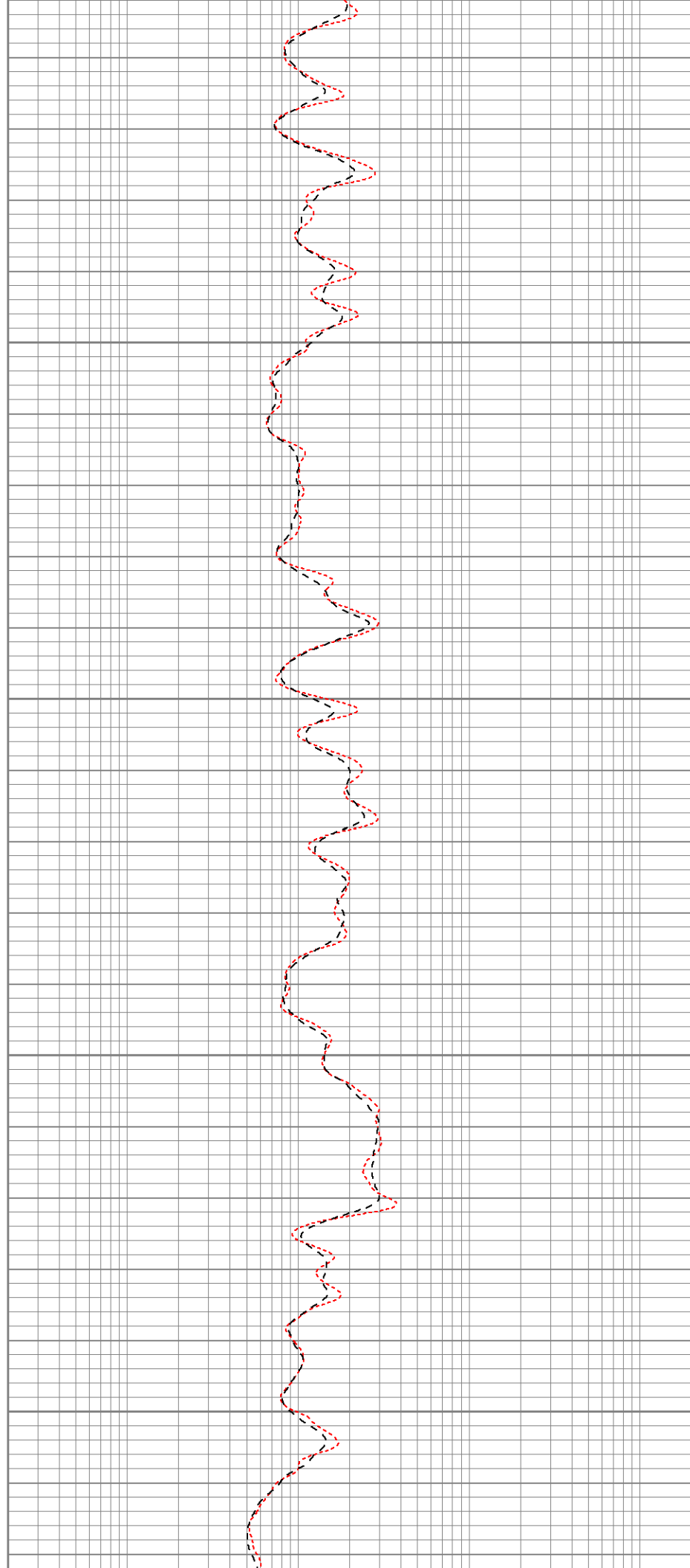


1350

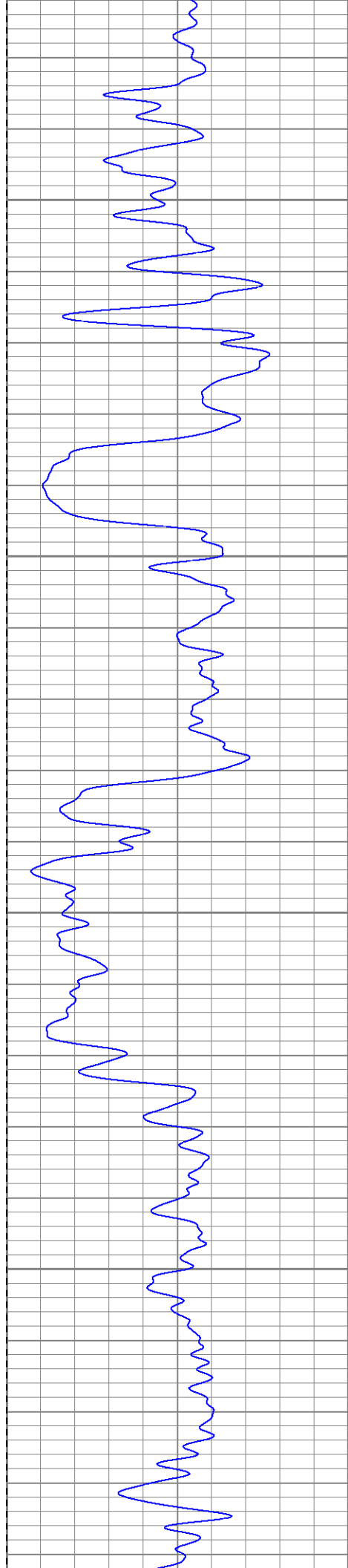
1400

1450

1500





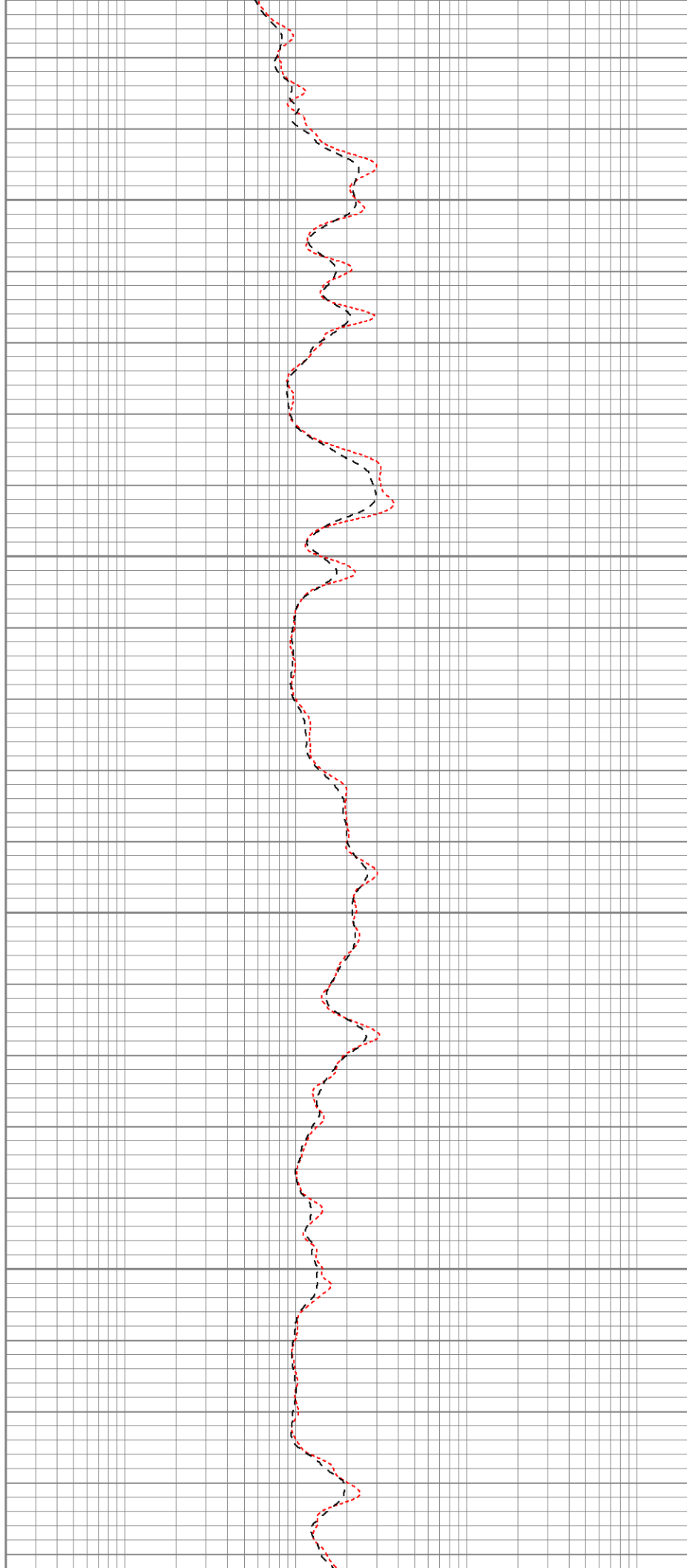


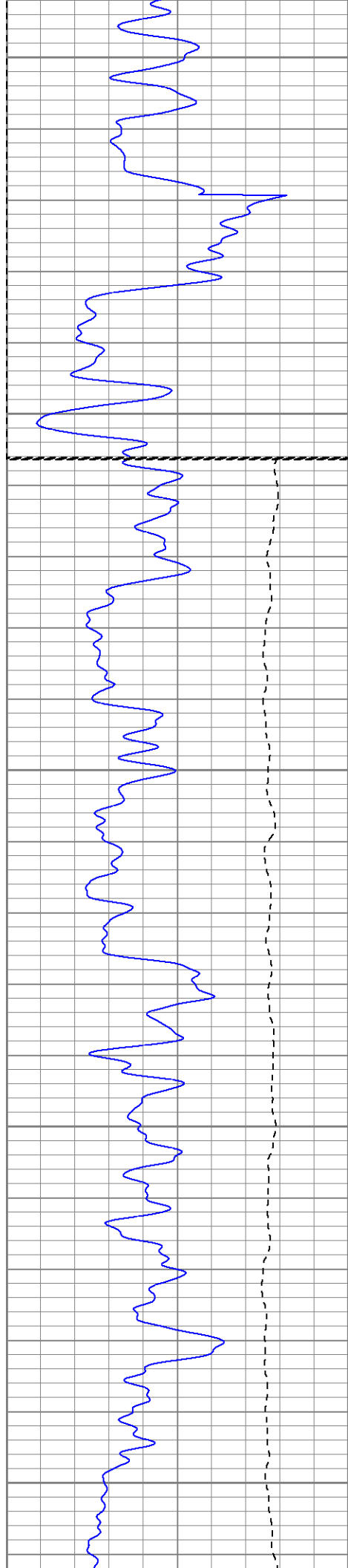
1550

1600

1650

1700





Fluid Level

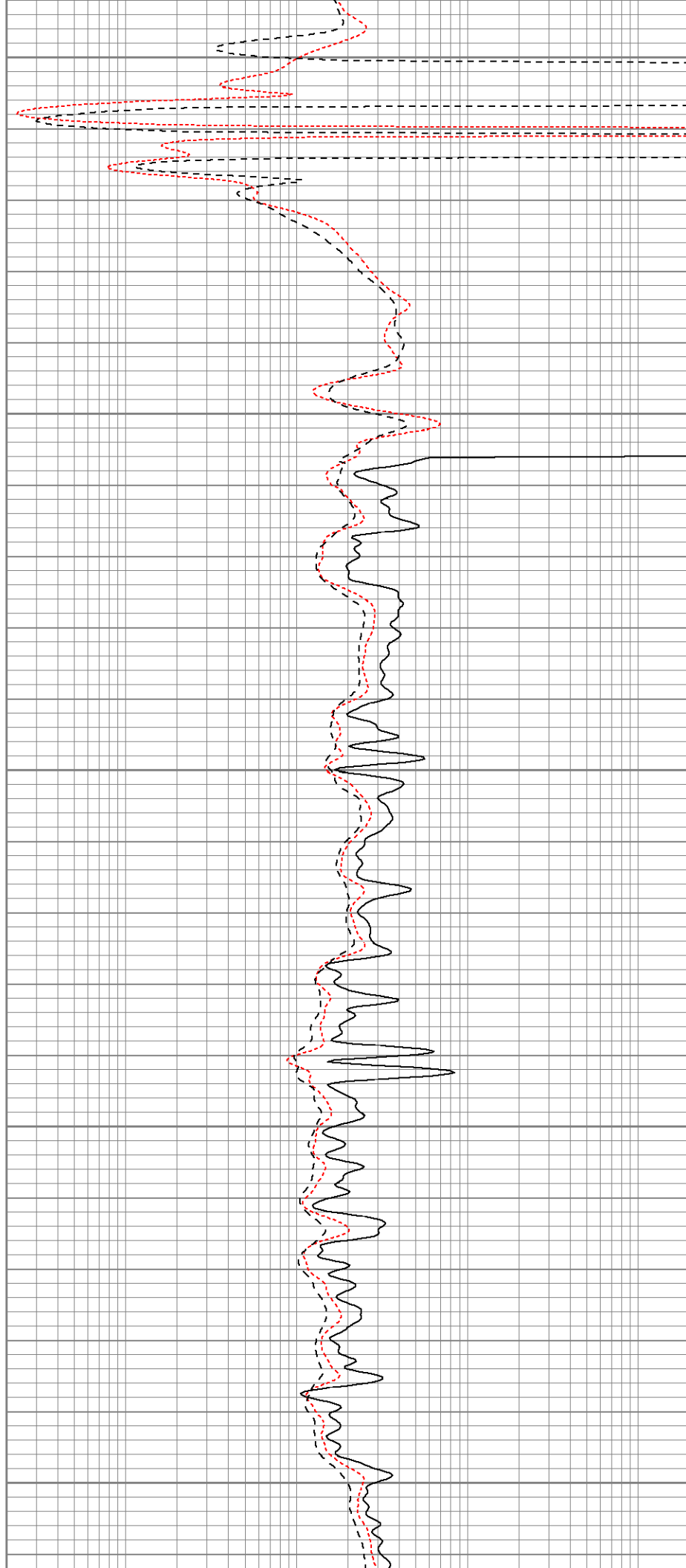
1750

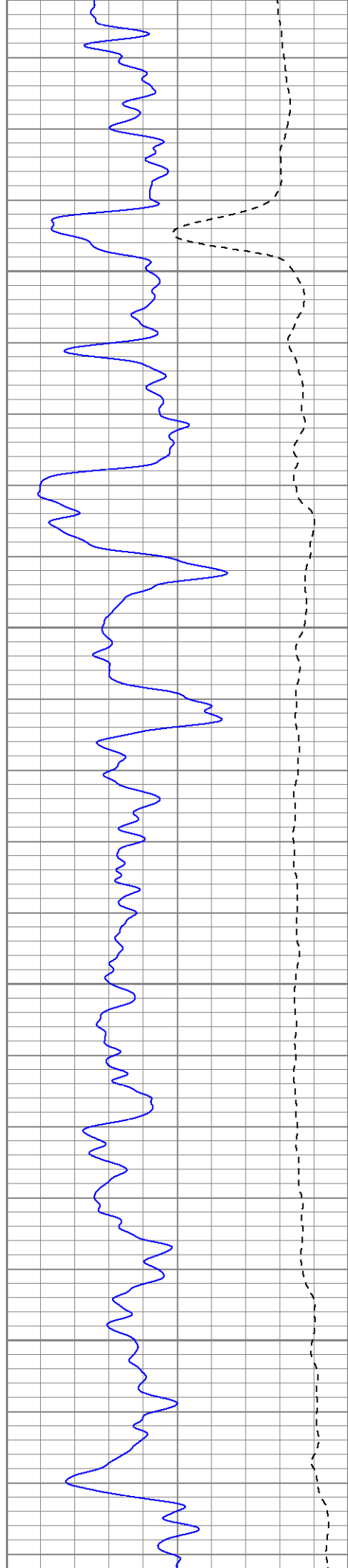
1800

1850

1900

1950



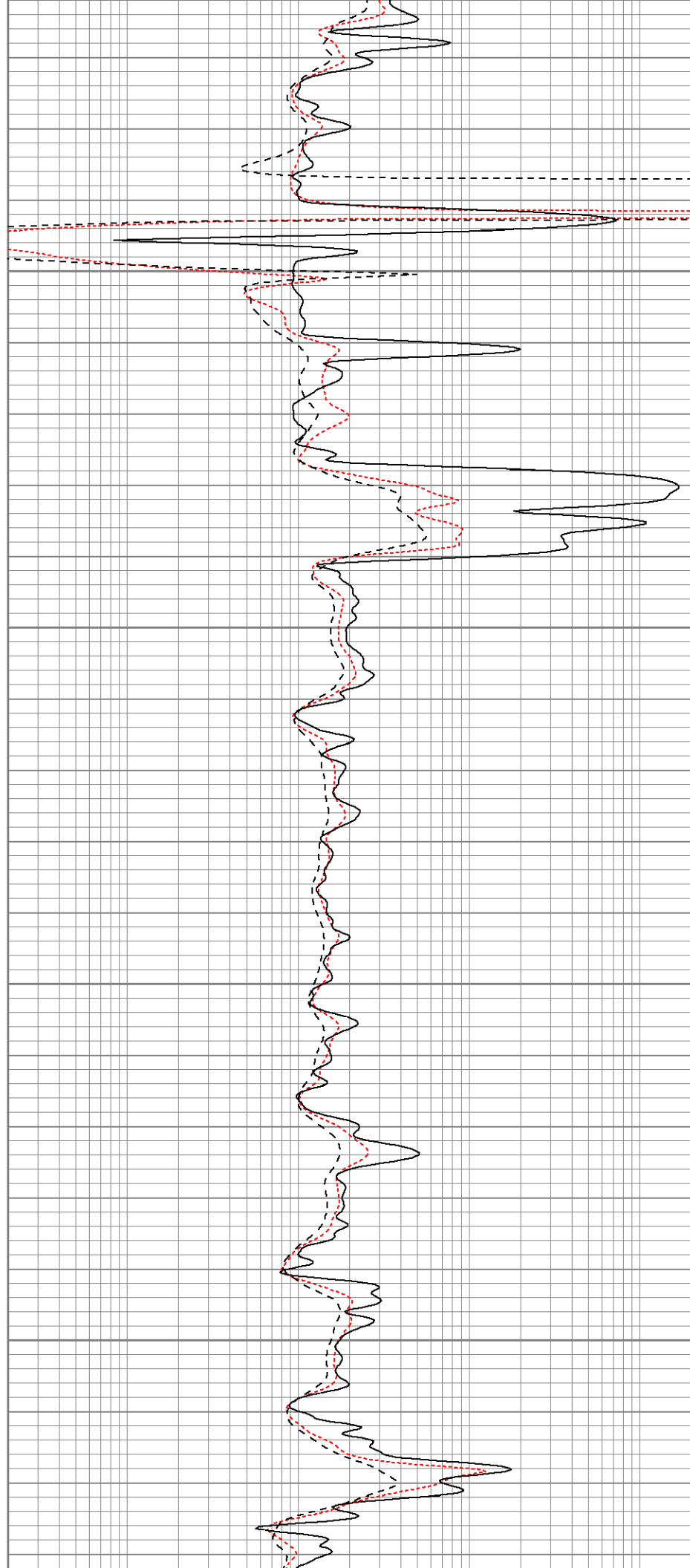


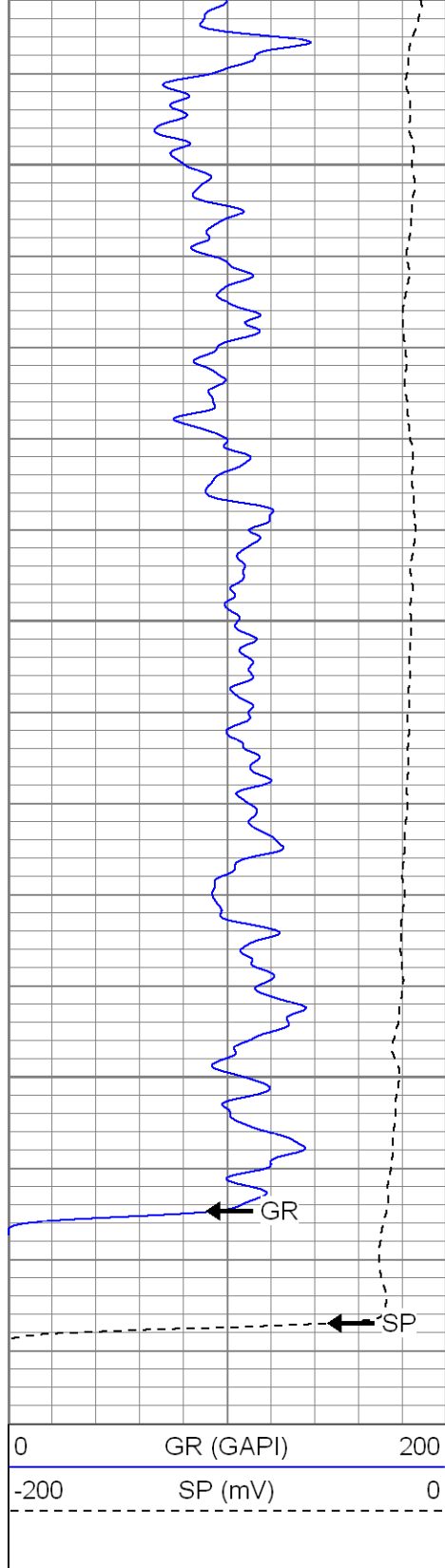
2000

2050

2100

2150

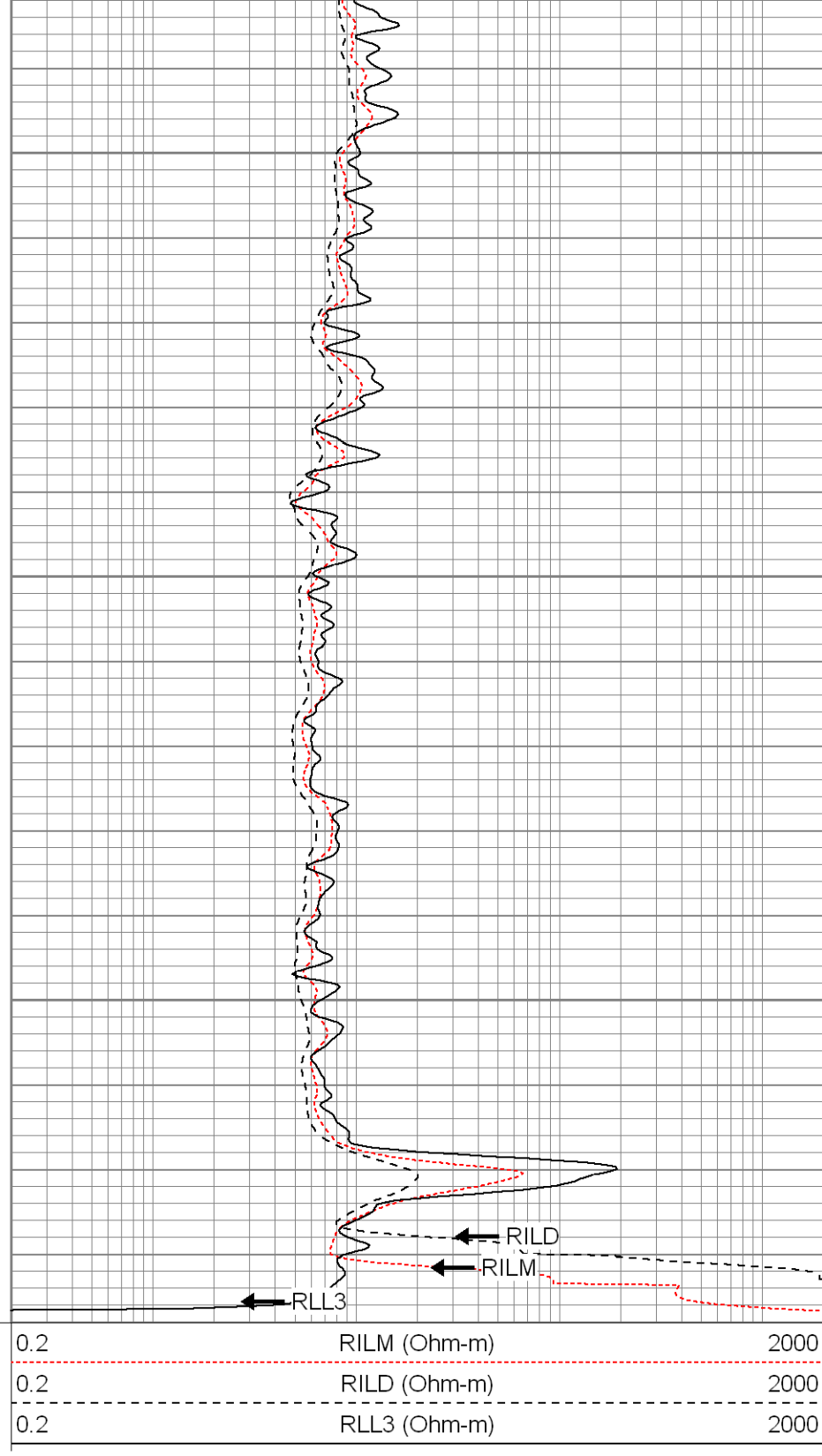




2200

2250

2300



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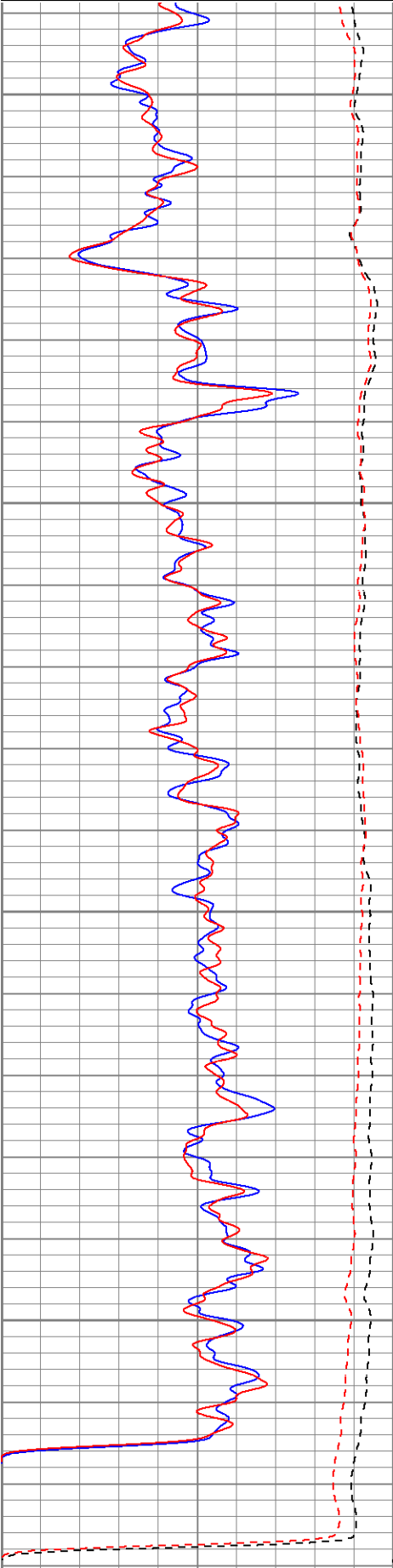
# Repeat Pass

Database File: xtoge3307.db  
Dataset Pathname: pass3.1  
Presentation Format: dil  
Dataset Creation: Mon Jul 14 21:35:19 2008 by Calc Open-Cased 071220  
Charted by: Depth in Feet scaled 1:240

0 GR (GAPI) 200

0.2 RIL M (Ohm-m) 2000

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



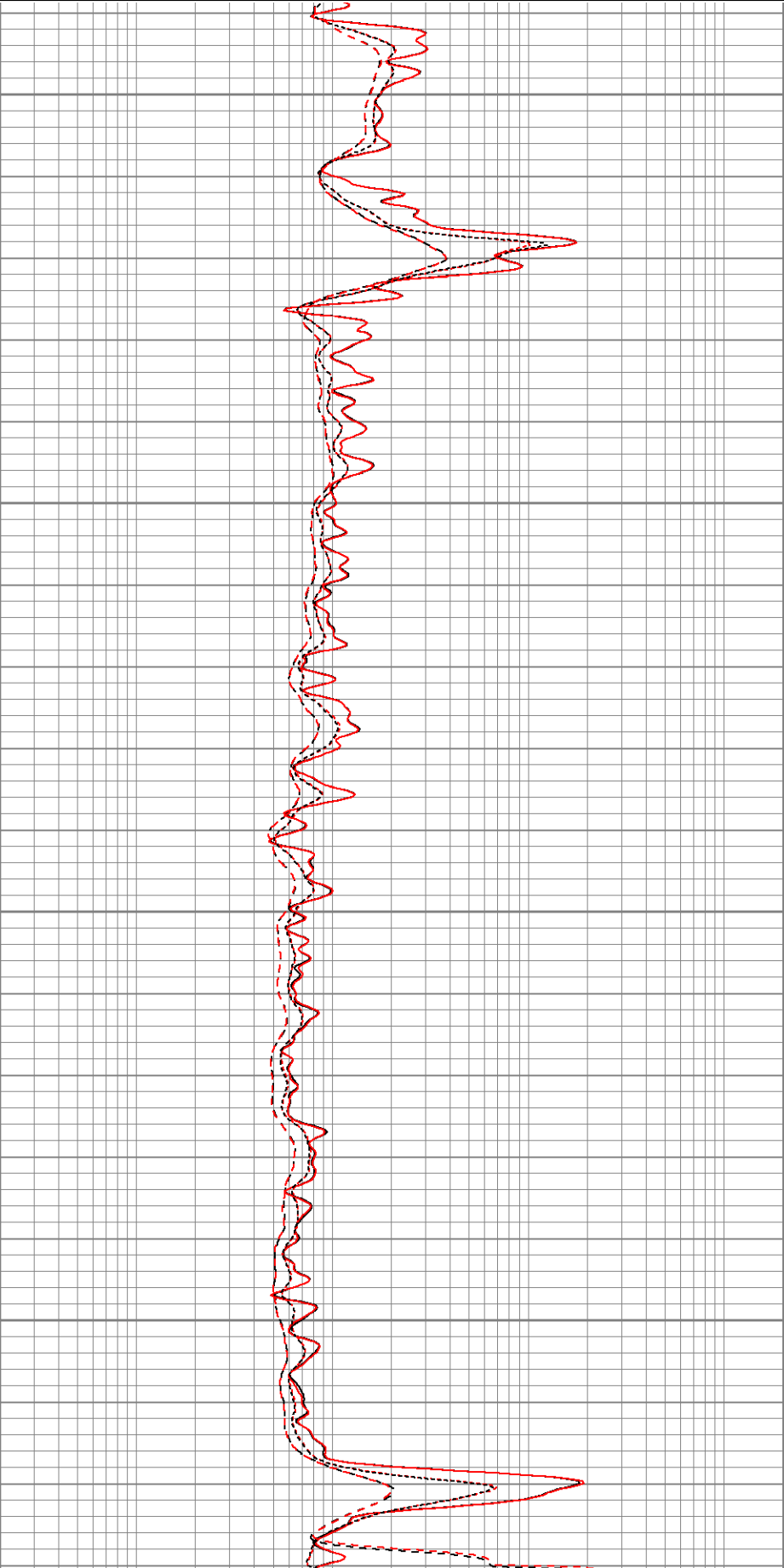
2150

2200

2250

2300

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



0	GR (GAPI)	200	0.2	RILM (Ohm-m)	2000
-200	SP (mV)	0	0.2	RILD (Ohm-m)	2000
0	GR-repeat (GAPI)	200	0.2	RLL3 (Ohm-m)	2000
-200	SP-repeat (mV)	0	0.2	RLL3-repeat (Ohm-m)	2000
			0.2	RILM-repeat (Ohm-m)	2000
			0.2	RILD-repeat (Ohm-m)	2000

Calibration Report	
Database File:	xtoge3307.db
Dataset Pathname:	pass1
Dataset Creation:	Mon Jul 14 19:23:14 2008 by Log Open-Cased 071220

Dual Induction Calibration Report	
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Serial-Model:	080522-Probe
Surface Cal Performed:	Mon Jul 14 19:20:56 2008
Downhole Cal Performed:	Mon Jul 14 19:20:59 2008
After Survey Verification Performed:	Mon Jul 14 19:21:01 2008

Surface Calibration									
Readings				References			Results		
Loop:	Air	Loop		Air	Loop		m	b	
Deep	0.006	0.647	V	0.000	400.000	mmho-m	623.790	-3.739	
Medium	0.014	0.754	V	0.000	464.000	mmho-m	627.128	-8.884	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.007	0.648	V	0.000	400.000	mmho-m	624.783	-4.587	
Medium	0.013	0.754	V	0.000	464.000	mmho-m	626.379	-8.017	

Downhole Calibration									
Readings				References			Results		
	Zero	Cal		Zero	Cal		m'	b'	
Deep	2.604	402.452	mmho-m	0.841	400.206	mmho-m	0.999	-1.760	
Medium	1.030	462.308	mmho-m	-0.857	463.698	mmho-m	1.007	-1.894	
LL3		7.405	V		750.000	Ohm-m			
		-0.005	V		12.000	Ohm-m			
		-7.230	V		3745.000	mmho-m			

Temperature Calibration Report	
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Serial Number:	2542T
Tool Model:	CDLP
Performed:	Mon Jul 14 13:40:29 2008
Reference	Reading
Low Reference:	55.00 degF 3.11 V
High Reference:	160.00 degF 5.35 V
Gain:	46.88
Offset:	-90.78
Delta Spacing	1

Compensated Density Calibration Report	
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Serial-Model:	2542-T2
Source / Verifier:	/

## Master Calibration




	Density			Far Detector	Near Detector	
Magnesium	1.710	g/cc		725.64	339.44	cps
Aluminum	2.590	g/cc		162.65	232.88	cps
Spine Angle = 75.86			Density/Spine Ratio = 0.571			
	Size			Reading		
Small Ring	8.00	in		1.33	V	
Large Ring	14.00	in		2.67	V	

## Gamma Ray Calibration Report

Serial Number: 2001  
 Tool Model: OH  
 Performed: Mon Jul 07 18:02:27 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: 5108  
 Tool Model: PROBE  
 Performed: Mon Jul 14 13:33:34 2008  
  
 Calibrator Value: 1 NAPI  
  
 Calibrator Reading: 1 cps  
  
 Sensitivity: 1 NAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
NEU	37.47		None	0.75	1.50	5.00
			NEU-PROBE (5108) Probe Epithermal	4.92	3.63	85.00
GR	31.94		GR-OH (2001) 2001	3.56	3.25	40.00
			CDL-T2 (2542) Gearhart	9.29	4.00	201.00
LSD	23.19		TEMP-CDLP (2542T) Probe Density/Temp	0.01	1.00	1.00
DCAL	22.98					
SSD	22.73					
TEMP	22.55					

CILD SP	10.60 10.60		DIL-Probe (080522) Probe Dual Induction	21.47	4.00	345.00
CILM	6.89					
RLL3	1.70					

Dataset: xtoge3307.db: field/well/run1/pass1

Total Length: 40.00 ft

Total Weight: 677.00 lb

O.D. 4.00 in