



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

## DUAL INDUCTION 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

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

Other Services  
CDL  
NEUTRON  
Elevation  
K.B. -----  
D.F. -----  
G.L. 6953'

Date	9-02-07		
Run Number	One		
Depth Driller	1980'		
Depth Logger	1974'		
Bottom Logged Interval	1972'		
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

Well Directions:  
First Bosque entrance, right on Cherry Canyon,  
at Y stay right, second right to location.

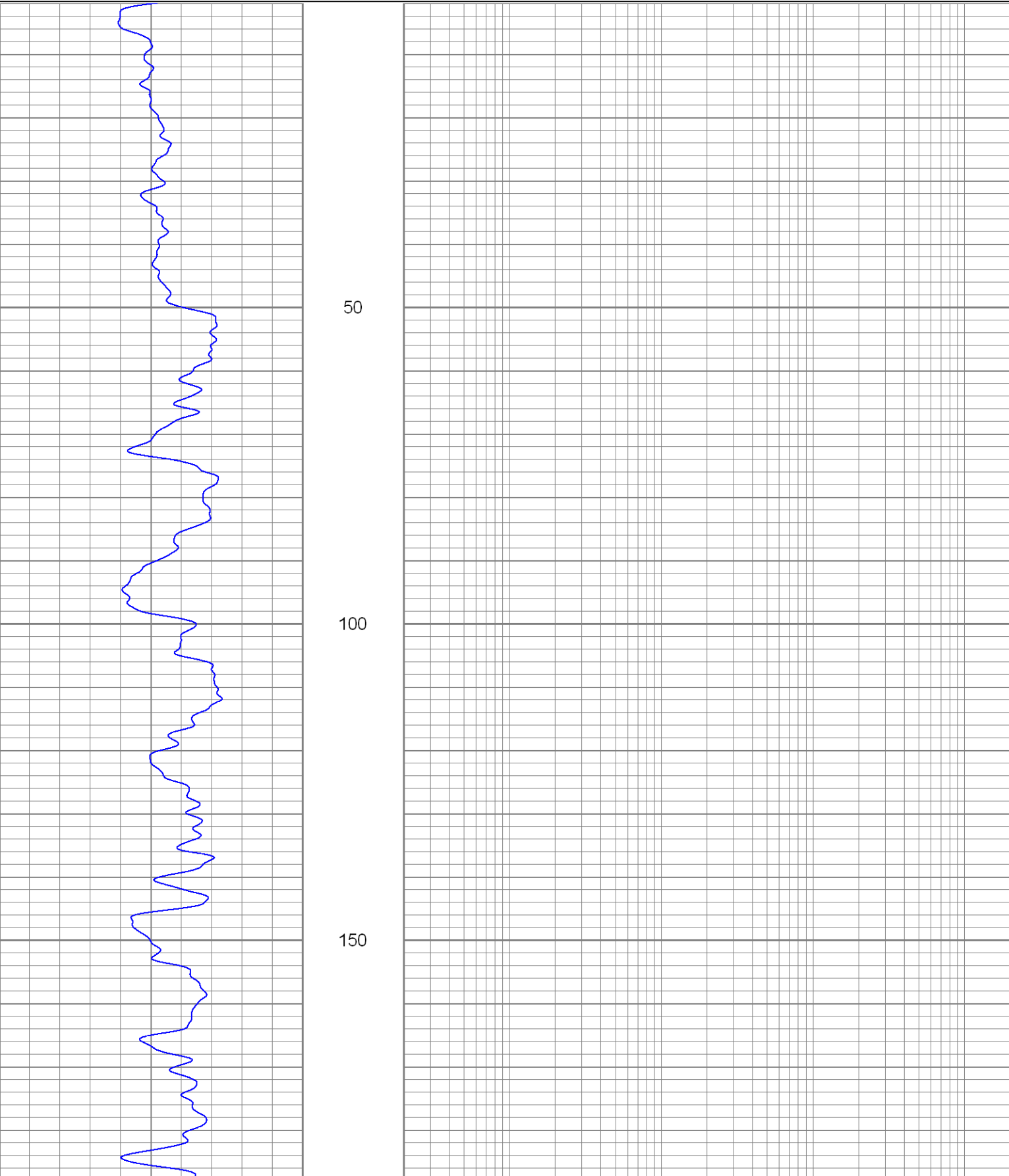


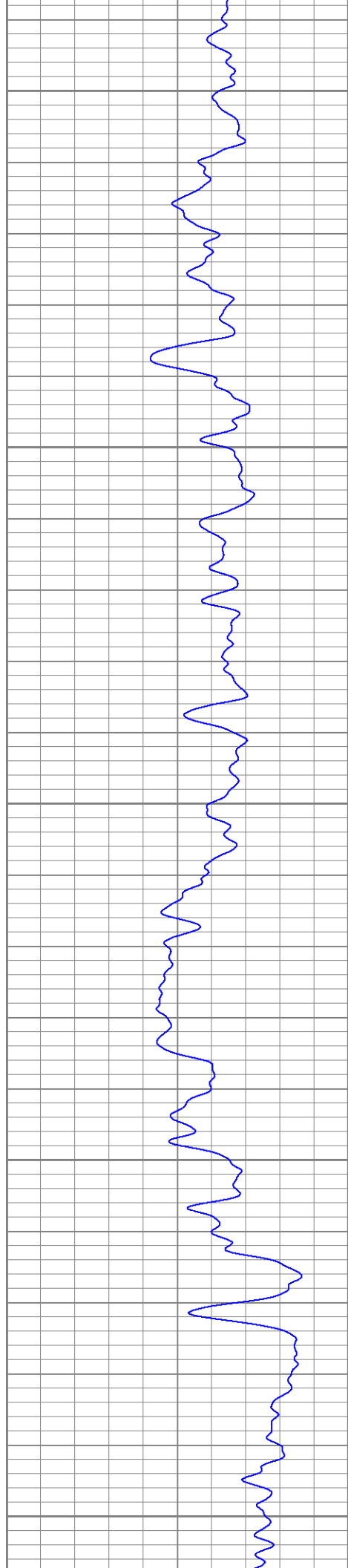
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# Main Pass

Database File: xtoac3507.db  
Dataset Pathname: pass2.1  
Presentation Format: dil  
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	0.2	RILM (Ohm-m)	2000
-100	SP (mV)	100	0.2	RILD (Ohm-m)	2000
			0.2	RLL3 (Ohm-m)	2000





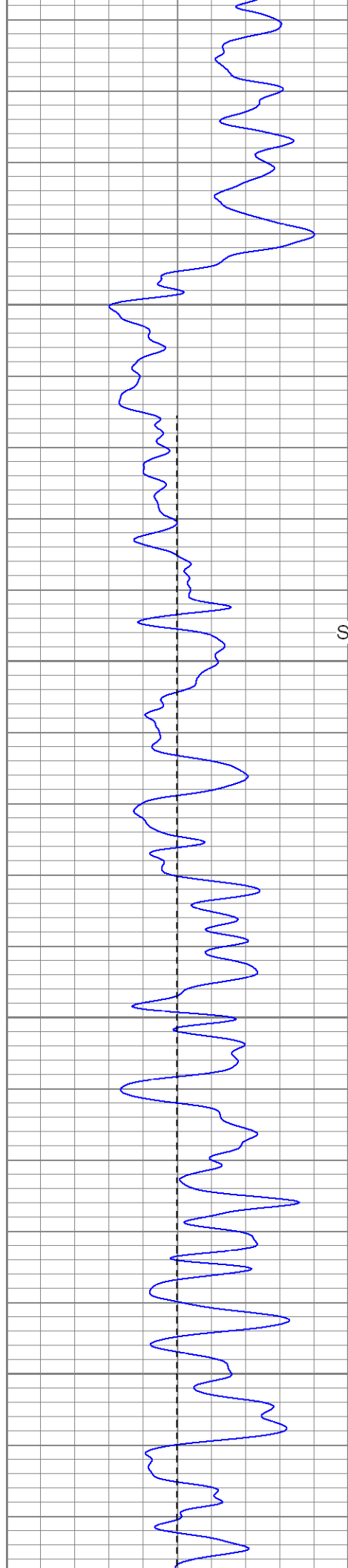
200

250

300

350

400



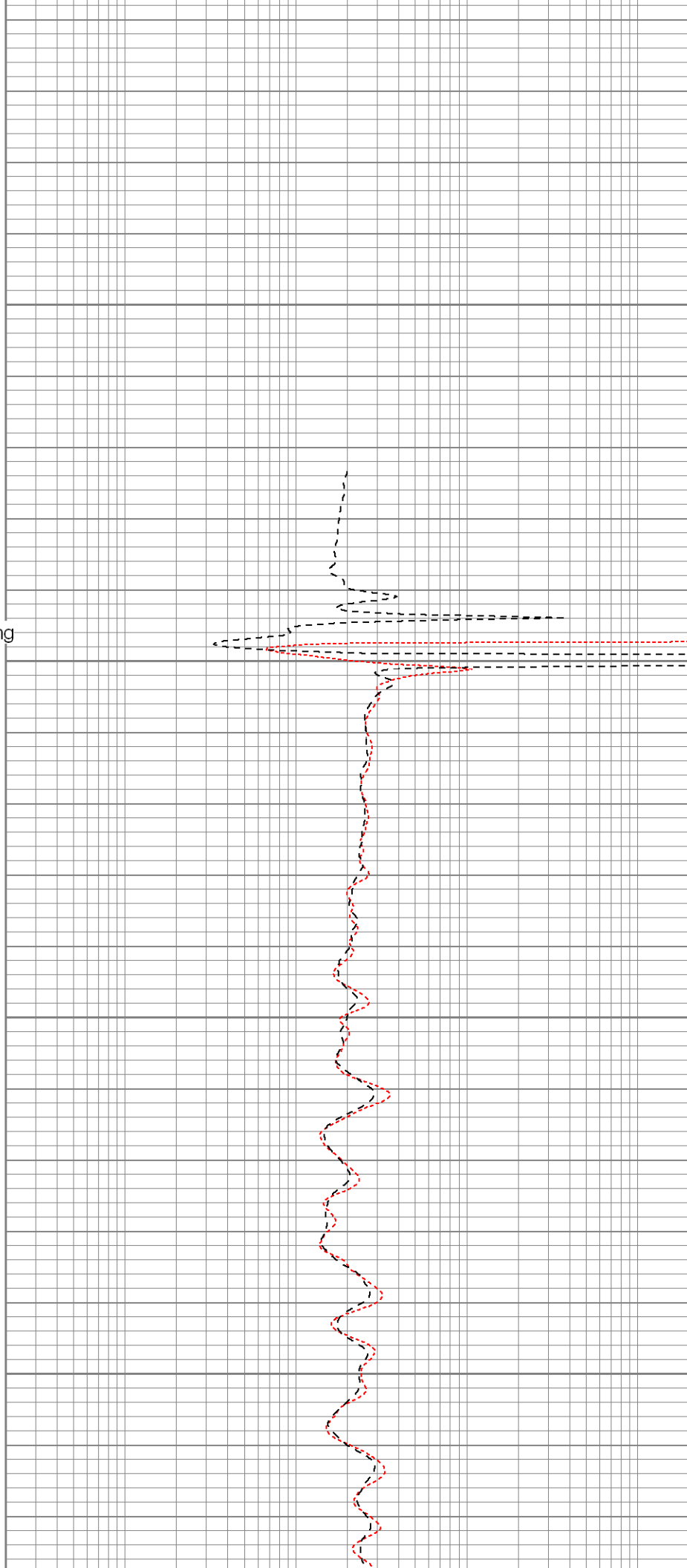
450

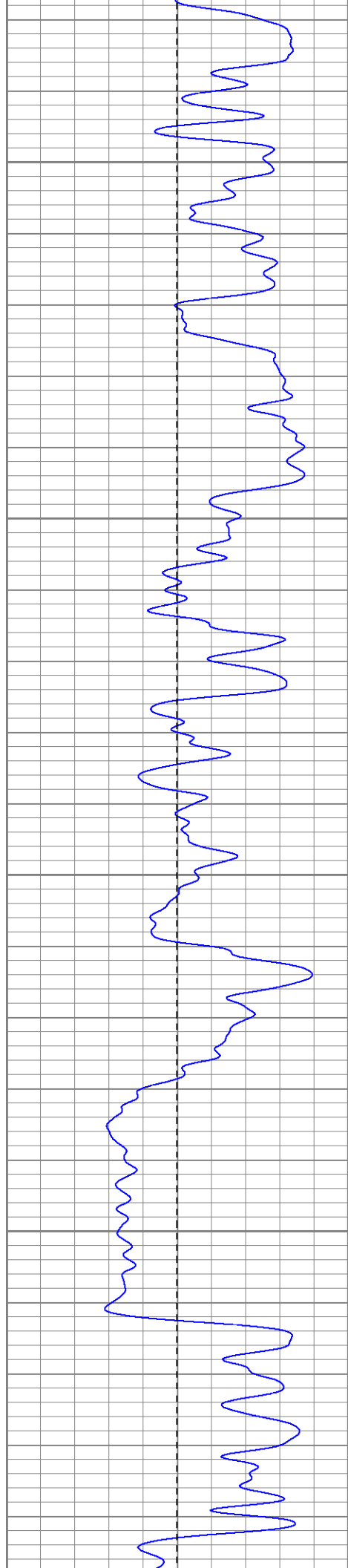
Surface Casing

500

550

600



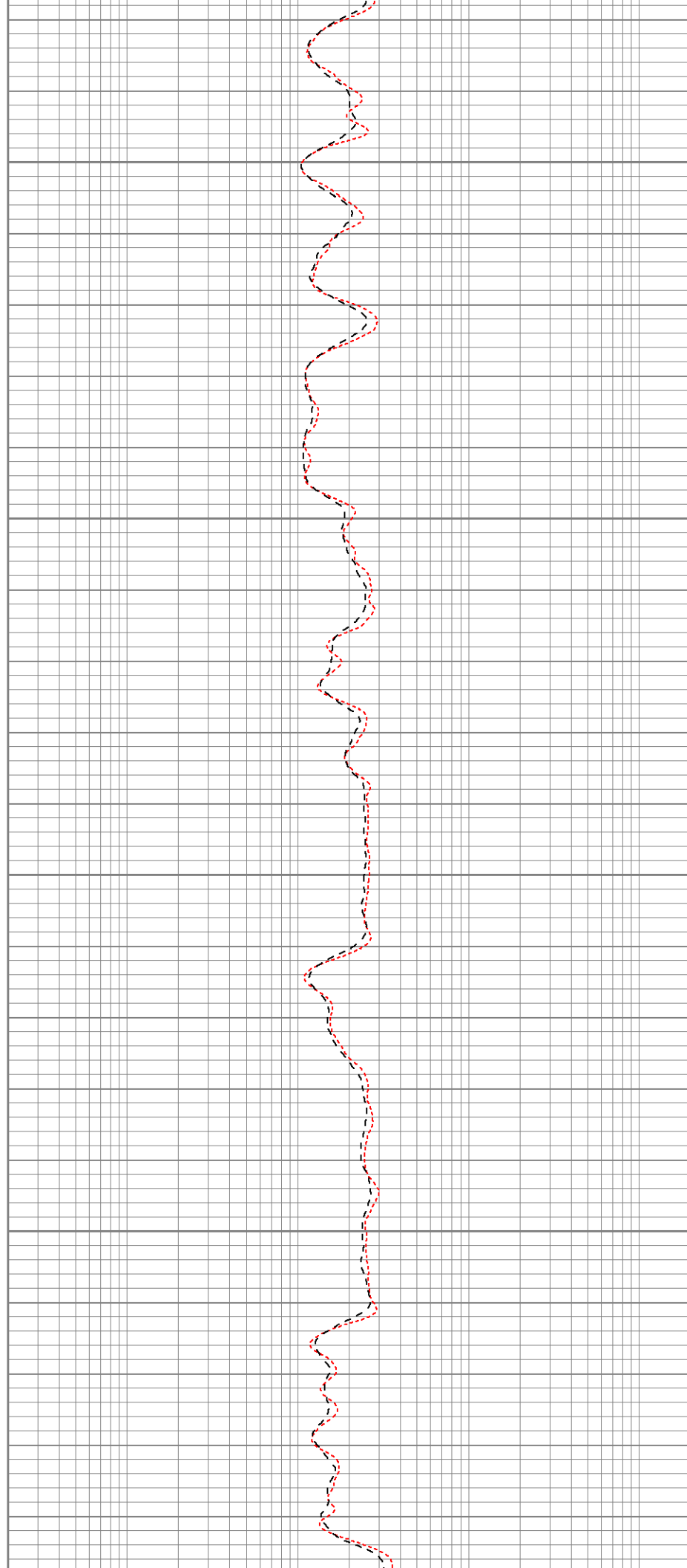


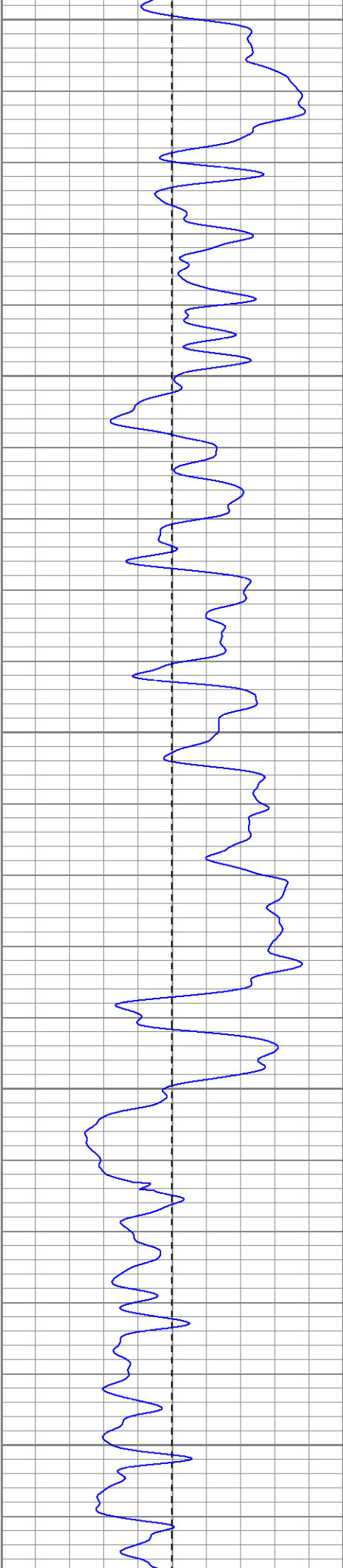
650

700

750

800





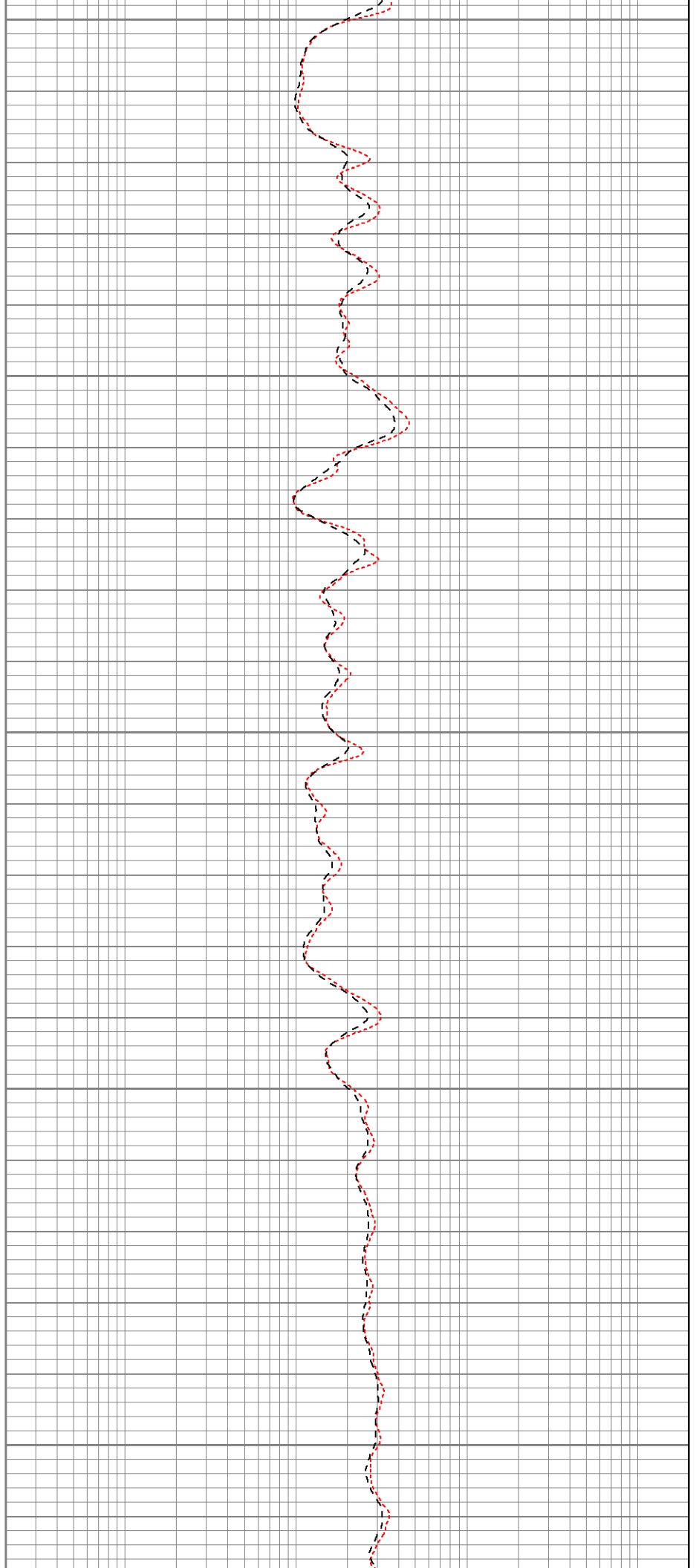
850

900

950

1000

1050



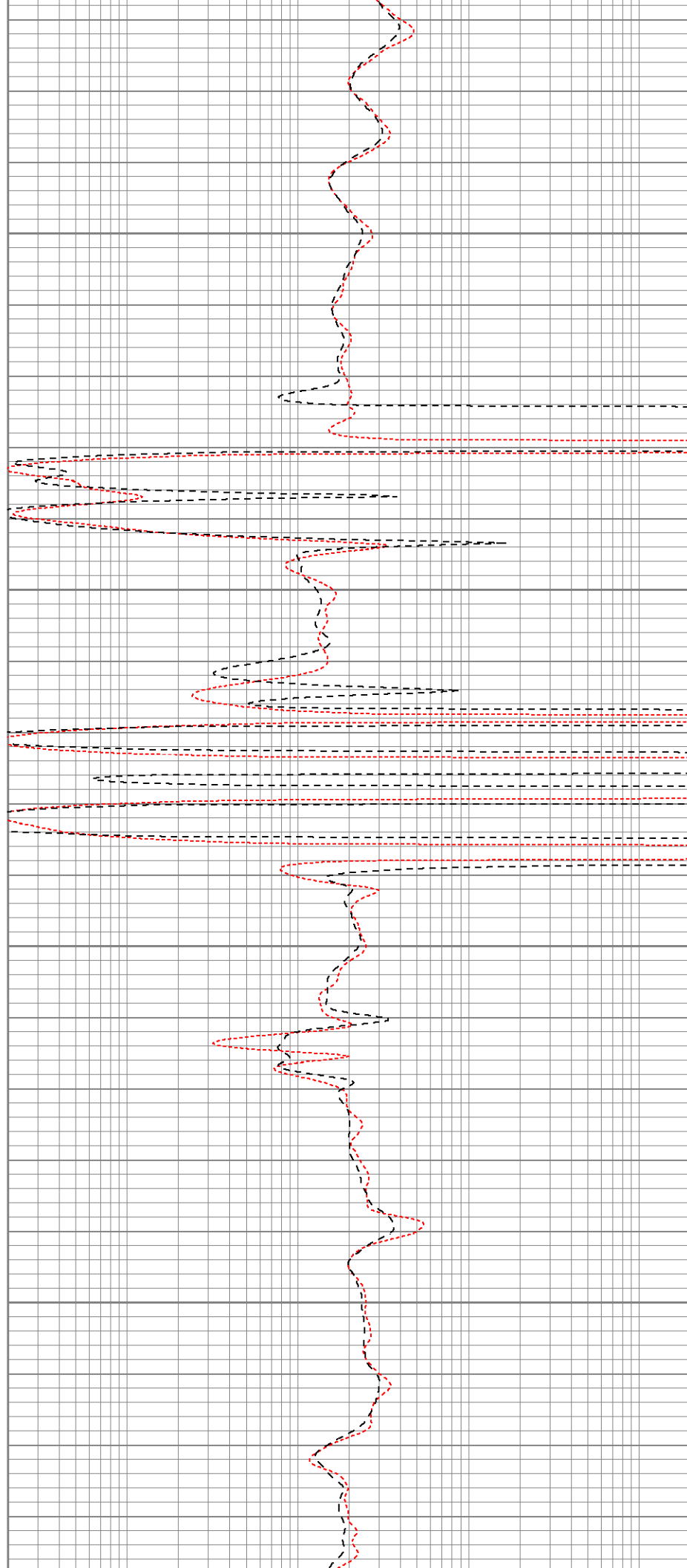


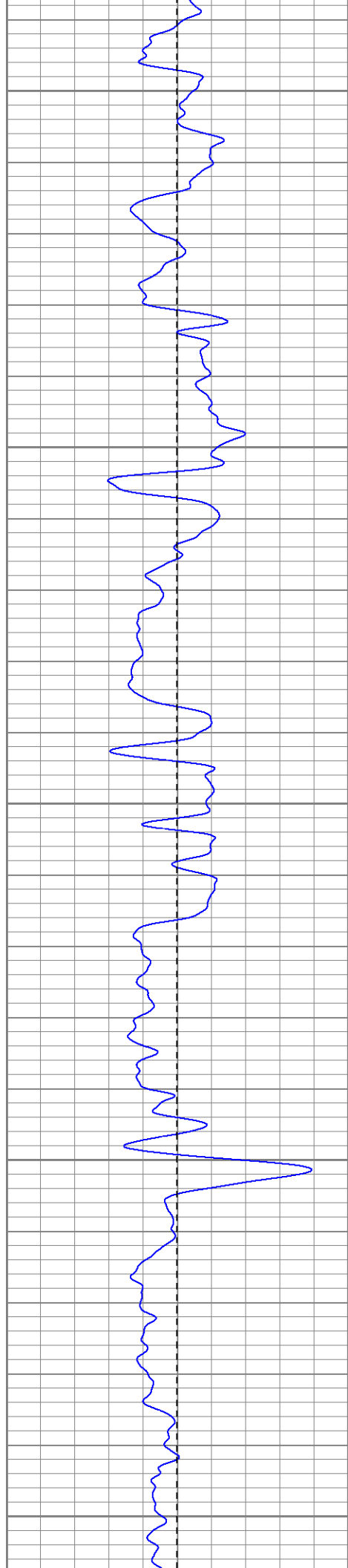
1100

1150

1200

1250





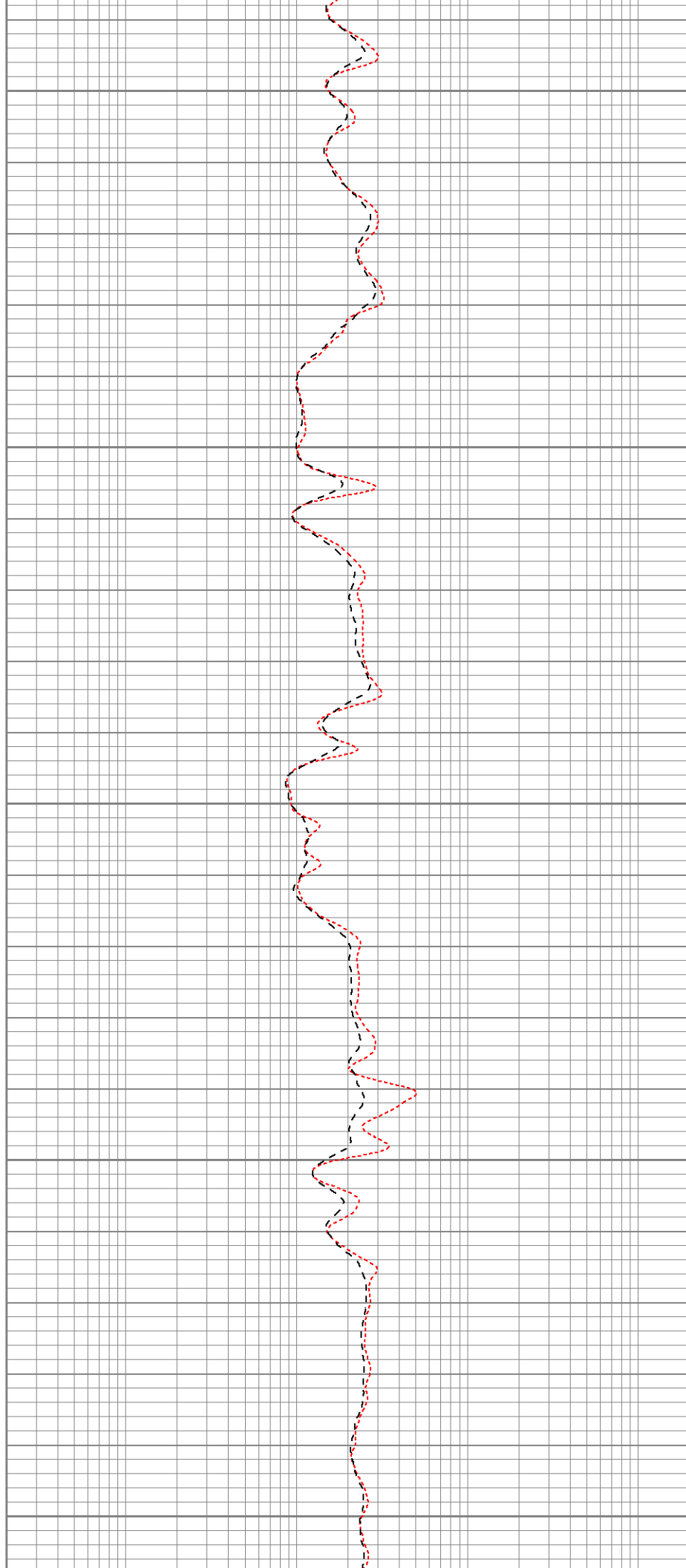
1300

1350

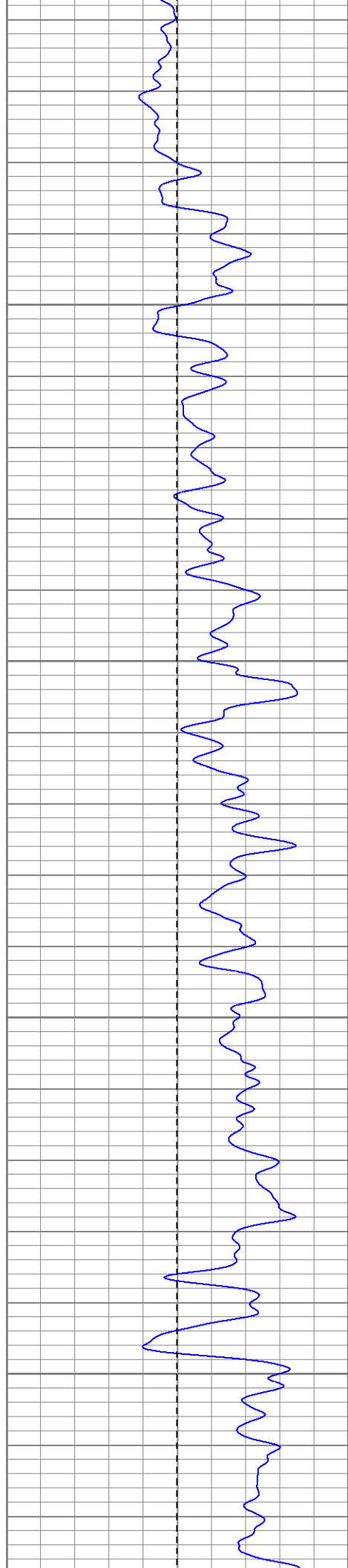
1400

1450

1500





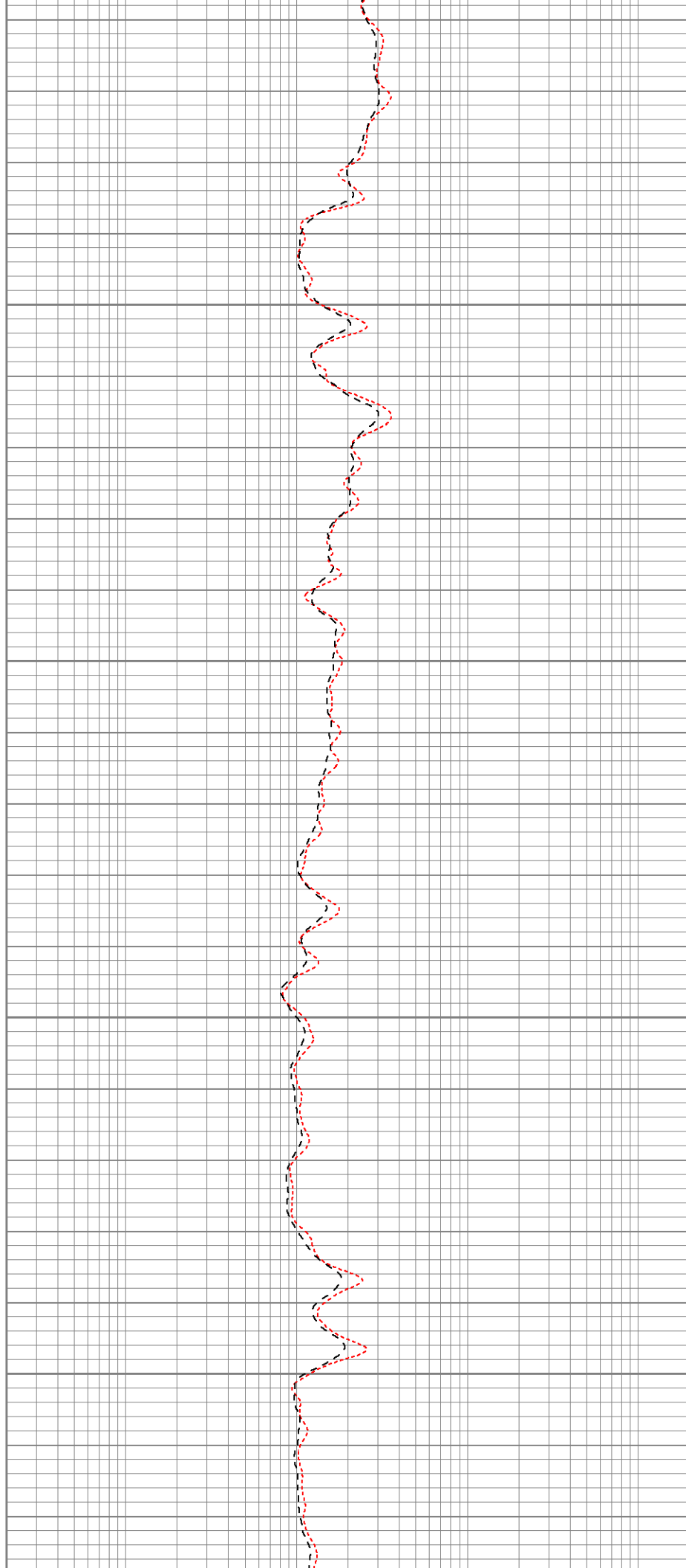


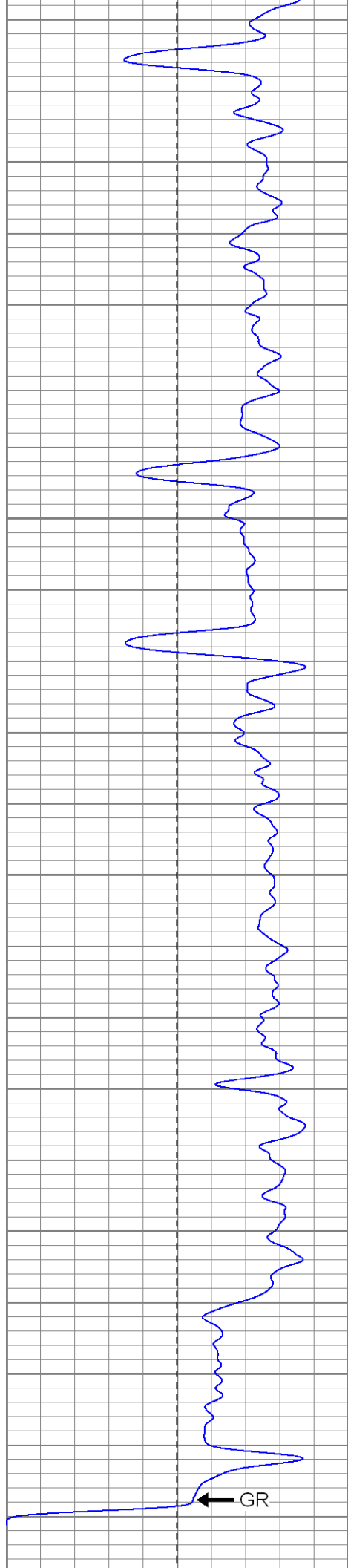
1550

1600

1650

1700



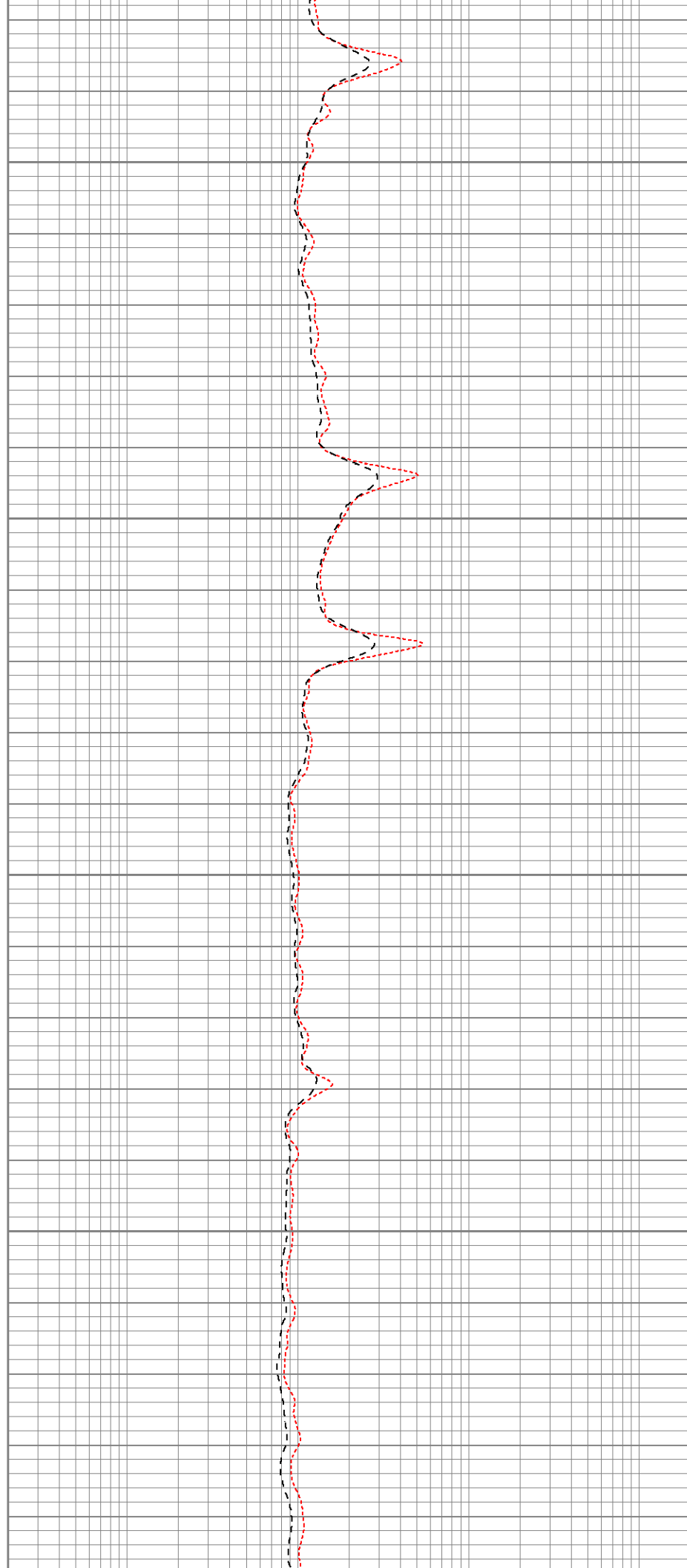


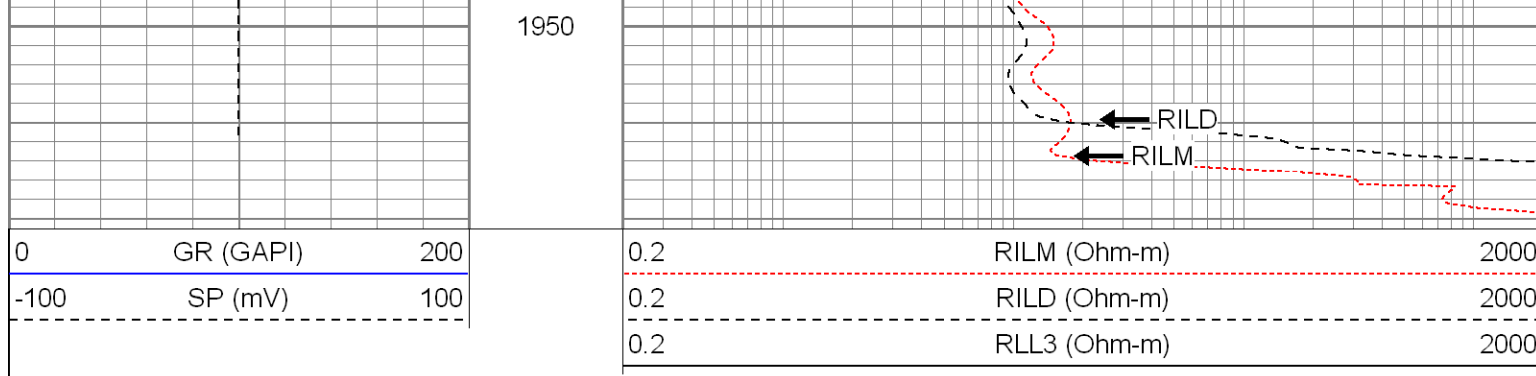
1750

1800

1850

1900





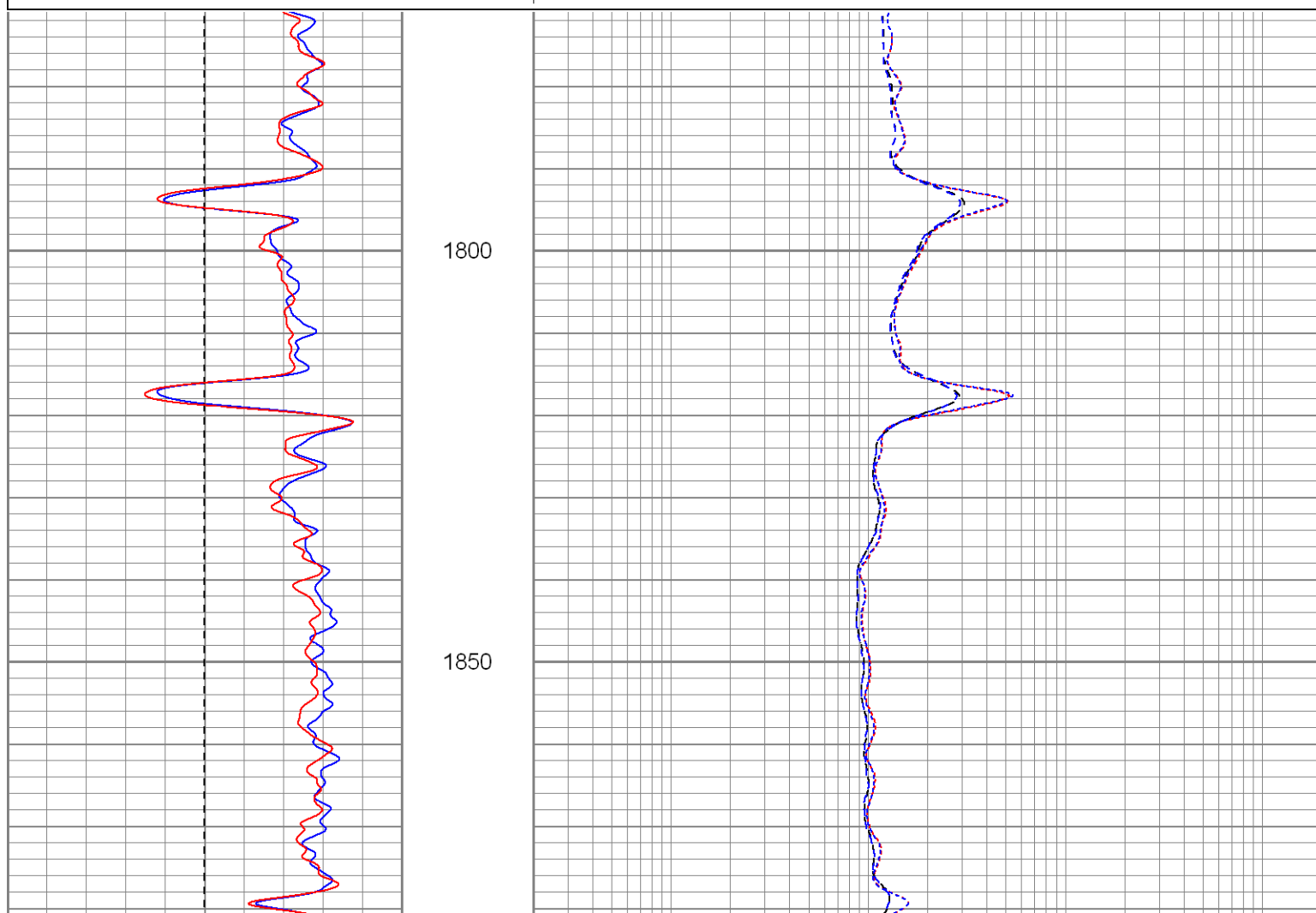
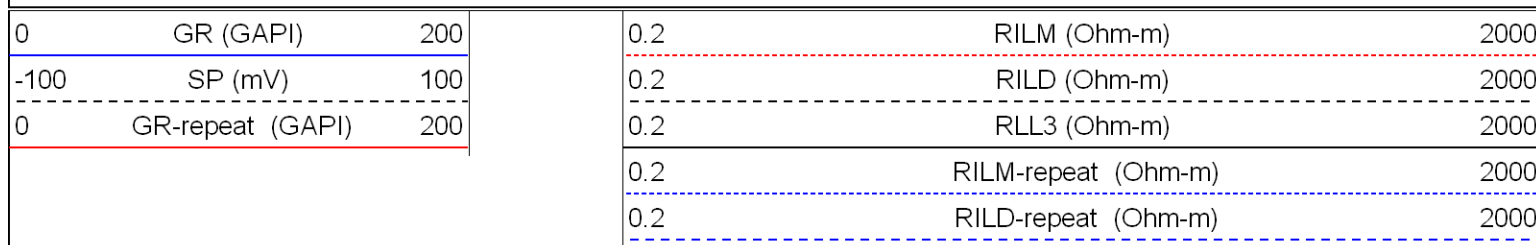


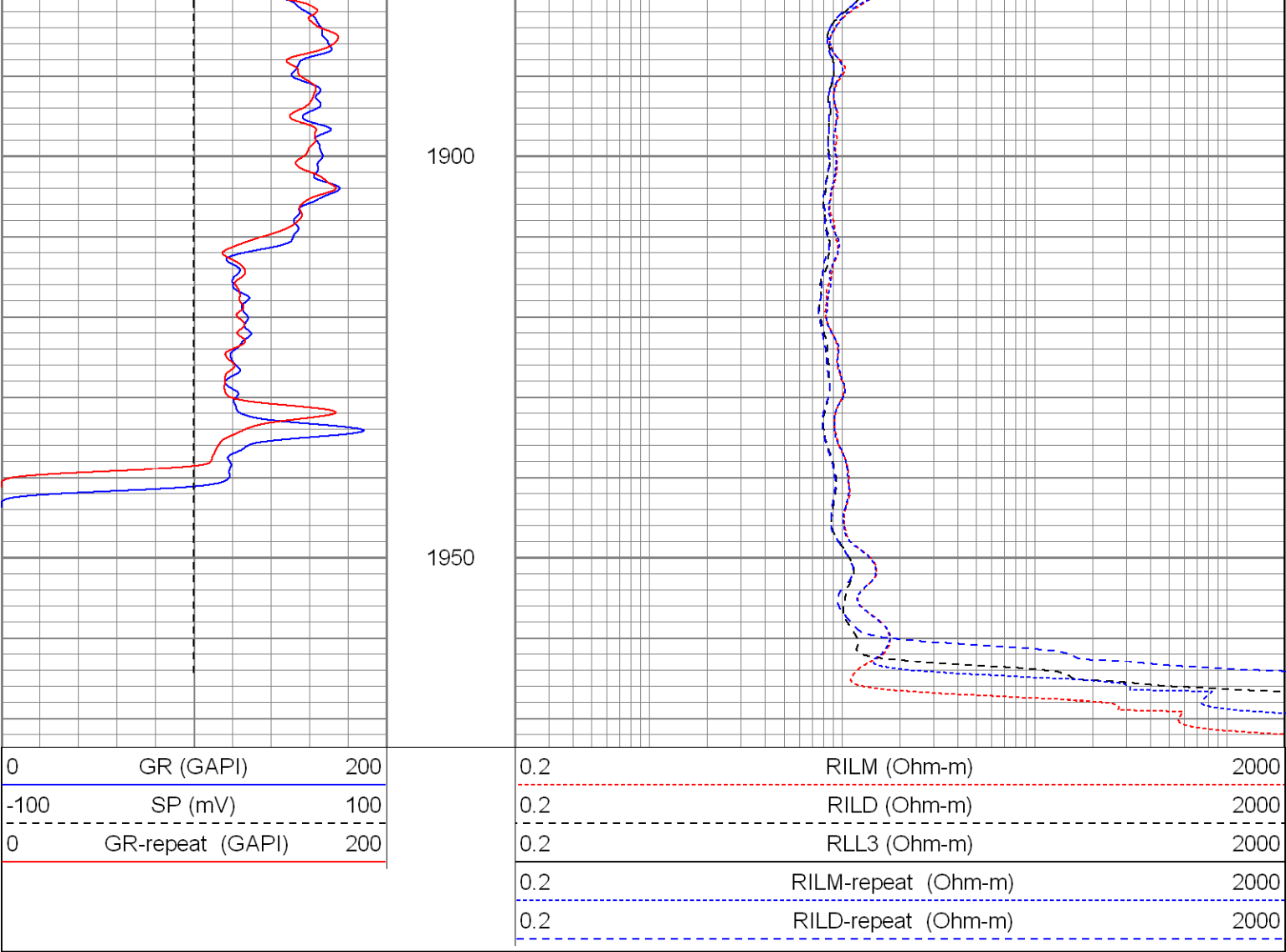
**SUPERIOR**  
WELL SERVICES

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# Repeat Section



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





Calibration Report									
Database File:		xtoac3507.db							
Dataset Pathname:		pass2							
Dataset Creation:		Sun Sep 02 04:45:12 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	500.000	2.000	
Medium	0.004	0.745	V	0.000	550.000	mmho-m	450.000	2.000	
Internal:	Zero				Cal			m	b
Deep	0.002	0.621	V	0.000	500.000	mmho-m	500.000	2.000	
Medium	0.004	0.745	V	0.000	550.000	mmho-m	450.000	2.000	
Downhole Calibration									
Internal:	Readings				References			Results	
	Zero	Cal			Zero	Cal		m	b

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	180.000	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) Gearhart Epithermal	5.75	3.50	85.00
GR	31.62		GR-OH (2001) SIE	3.50	3.25	40.00

Tool Joint	Length (ft)	Weight (lb)	OD (in)	Material	Length (ft)	Weight (lb)	OD (in)
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							