

**Patterson**

**DUAL  
INDUCTION  
LOG**

Company XTO Energy Inc.		Company XTO Energy Inc.	
Well Apache Canyon 36-16		Well Apache Canyon 36-16	
Field Purgatoire River		Field Purgatoire River	
County Las Animas		County Las Animas	
State Colorado		State Colorado	
Location:		API # : 05 071 08747 00	Other Services cdl neutron
SEC 36 TWP 33S RGE 68W		376' FSL & 285' FEL	
Permanent Datum	Ground Level	Elevation	Elevation K.B. ----- D.F. ----- G.L. 8287'
Log Measured From	Ground Level		
Drilling Measured From	Ground Level		
Date	07-28-06		
Run Number	One		
Depth Driller	2700'		
Depth Logger	2687'		
Bottom Logged Interval	2685'		
Top Log Interval	Surface Casing		
Casing Driller	8 5/8" @ 569'		
Casing Logger	588'		
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	4:30 a.m.		
Time Logger on Bottom	9:40 a.m.		
Maximum Recorded Temperature	114		
Equipment Number	T677		
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

Turn at Bosque before Weston, go right at Cherry Canyon, stay left @ Y, stay on main rd. (approx. 5.7 miles) to T, go right, drive thru a location and stay on main rd., will be next location.

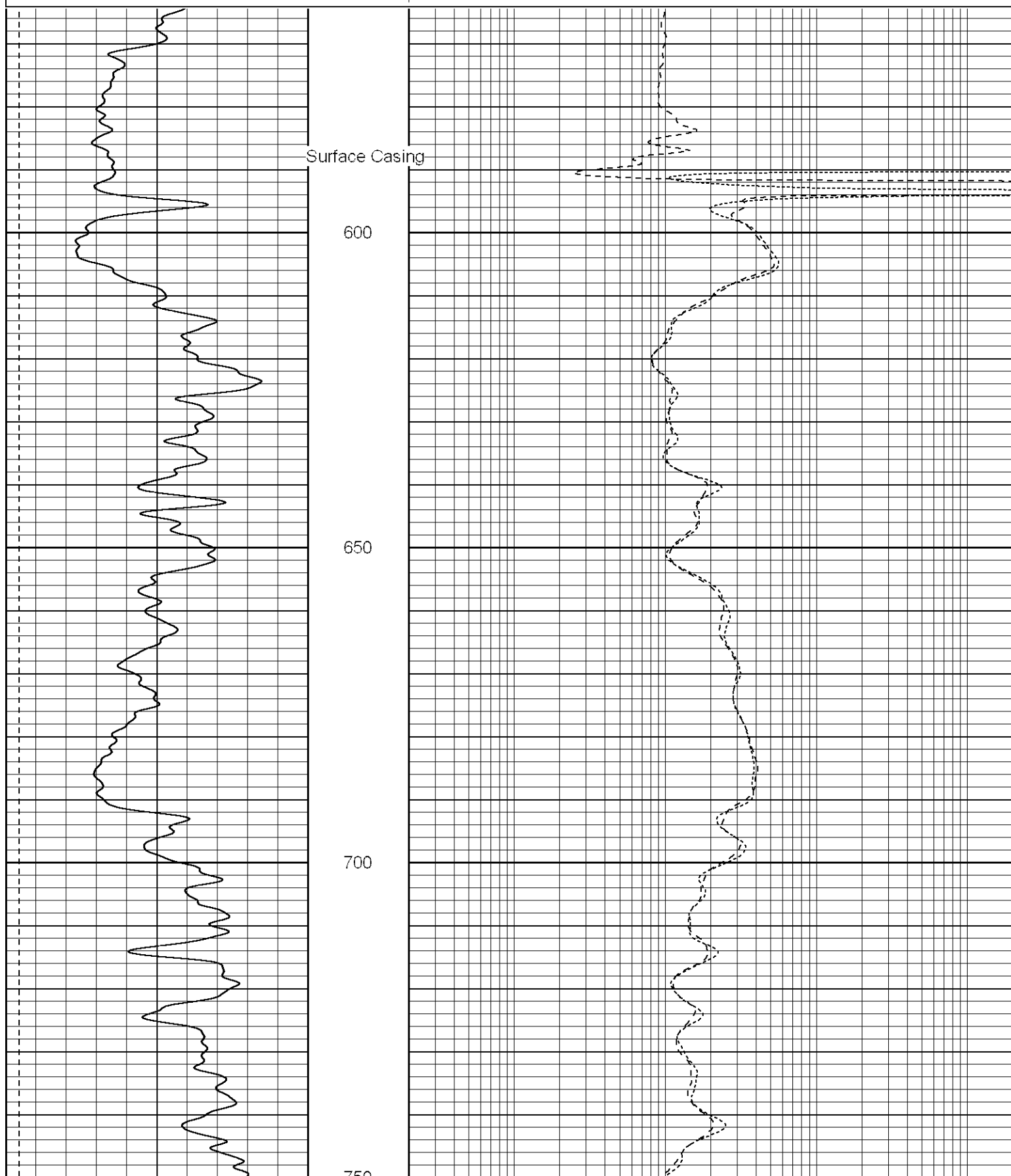
**Patterson**

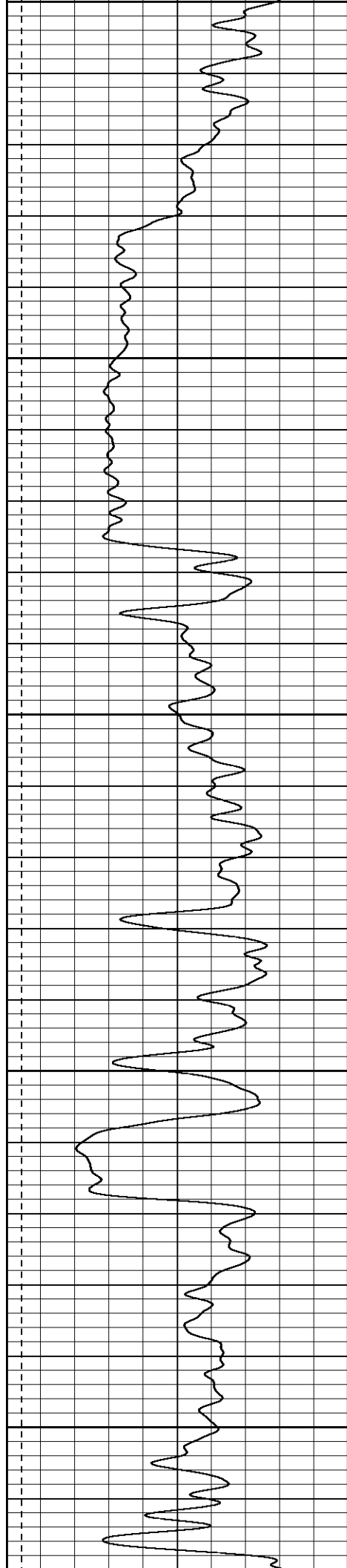
**Main Pass**

Database File: xtoac3616.db  
Dataset Pathname: pass2.1  
Presentation Format: dil  
Dataset Creation: Fri Jul 28 11:24:12 2006 by Calc Warrior 7.0 STD Ope  
Charted by: Depth in Feet scaled 1:240

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

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





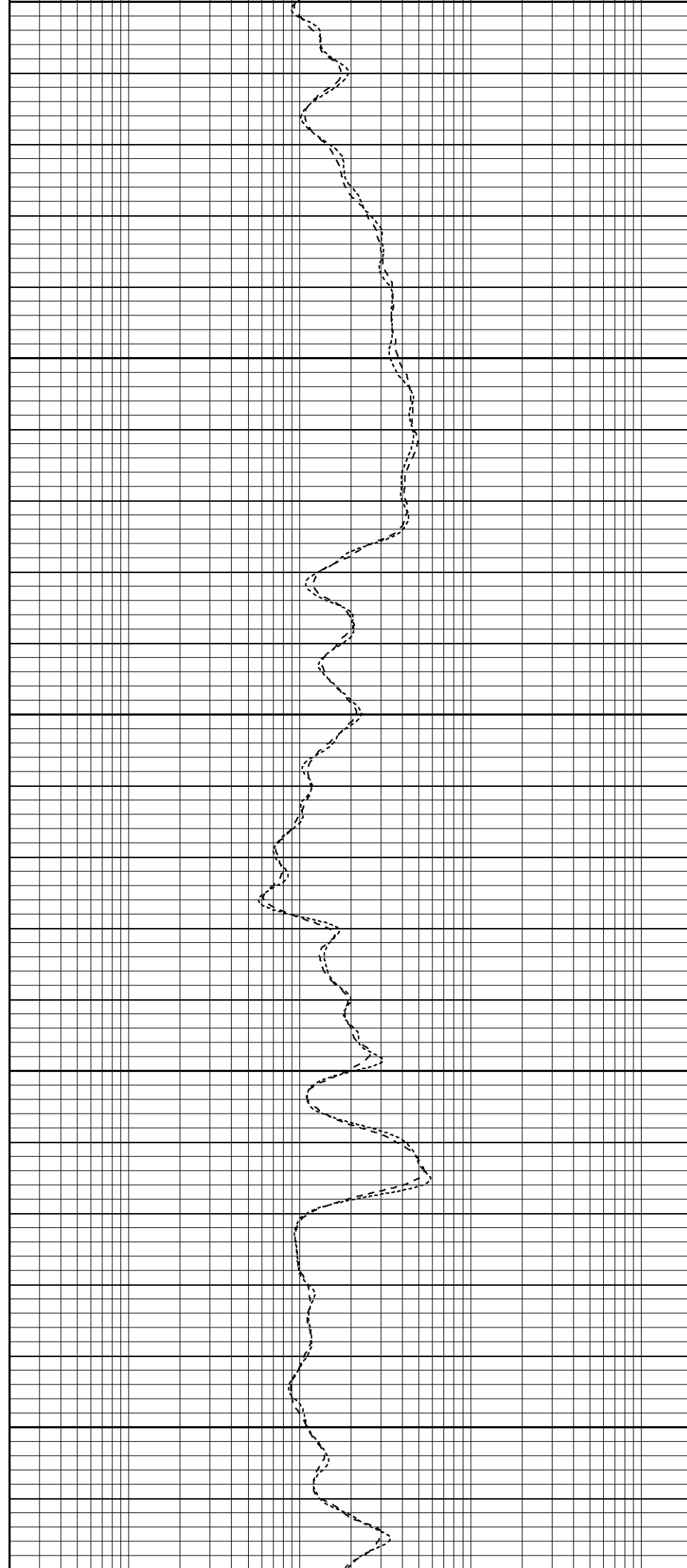
750

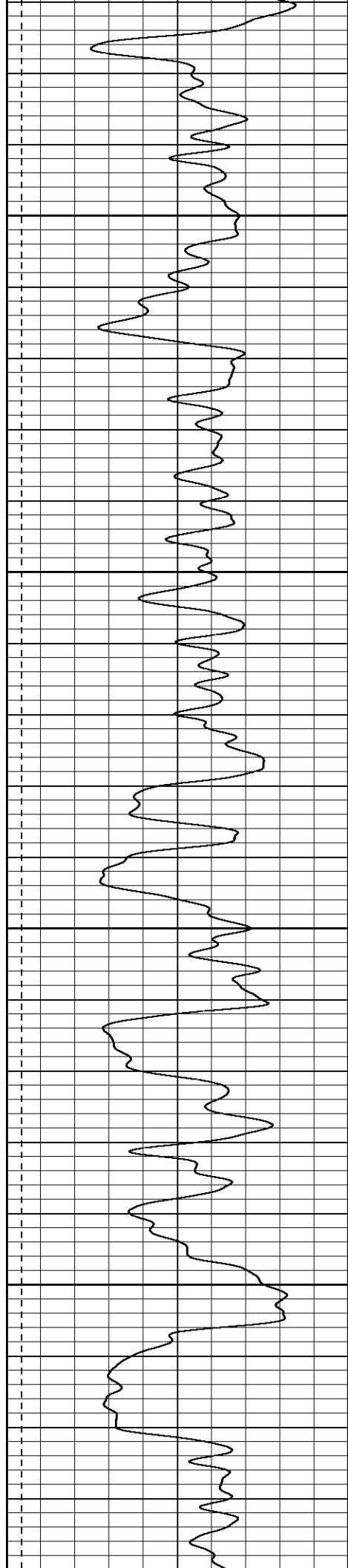
800

850

900

950



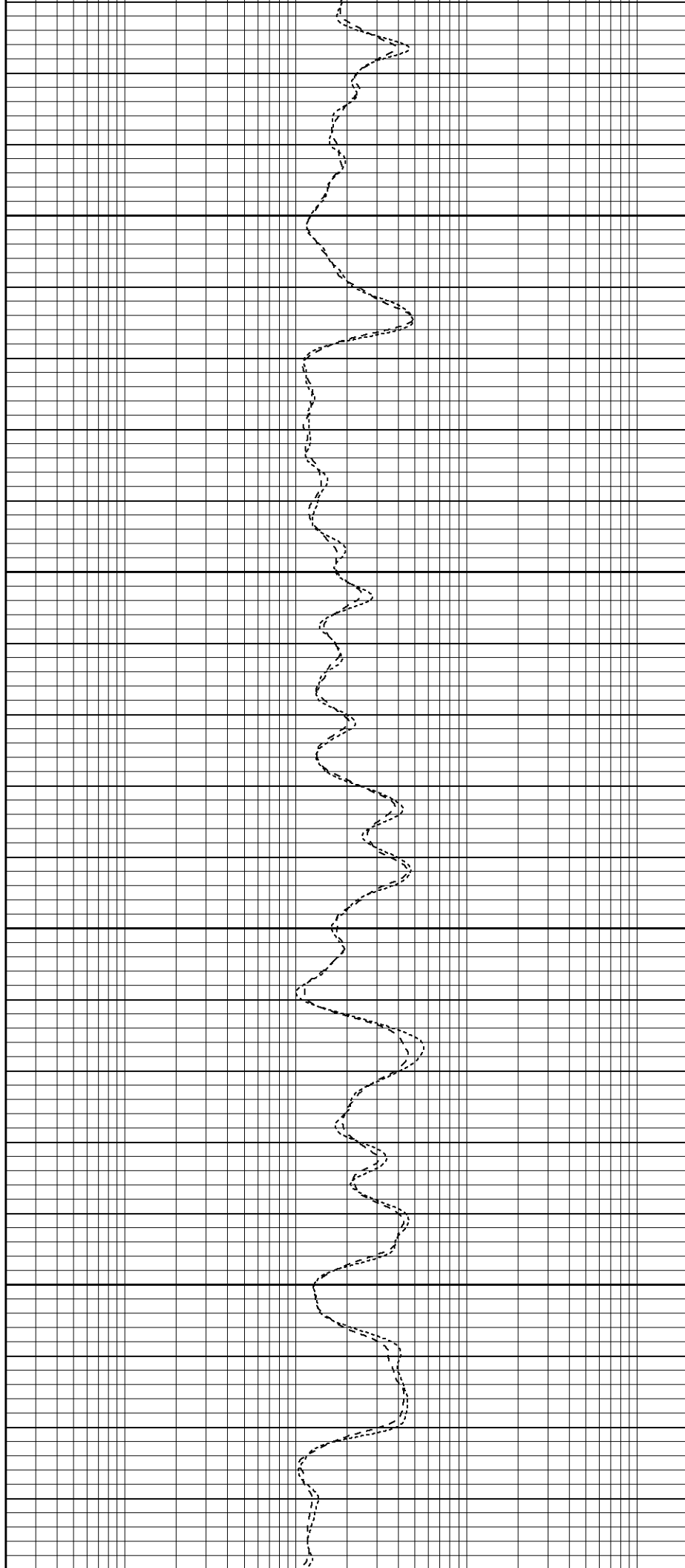


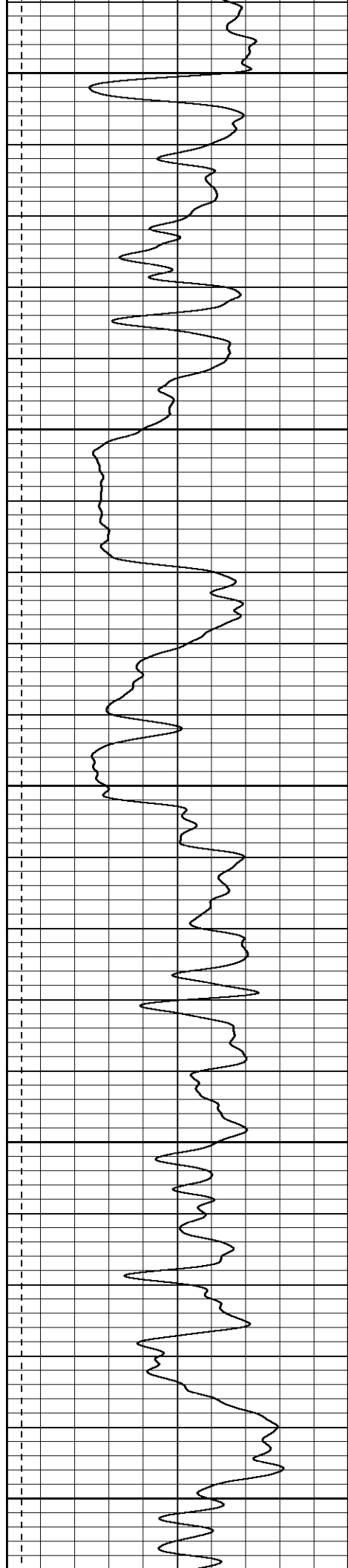
1000

1050

1100

1150





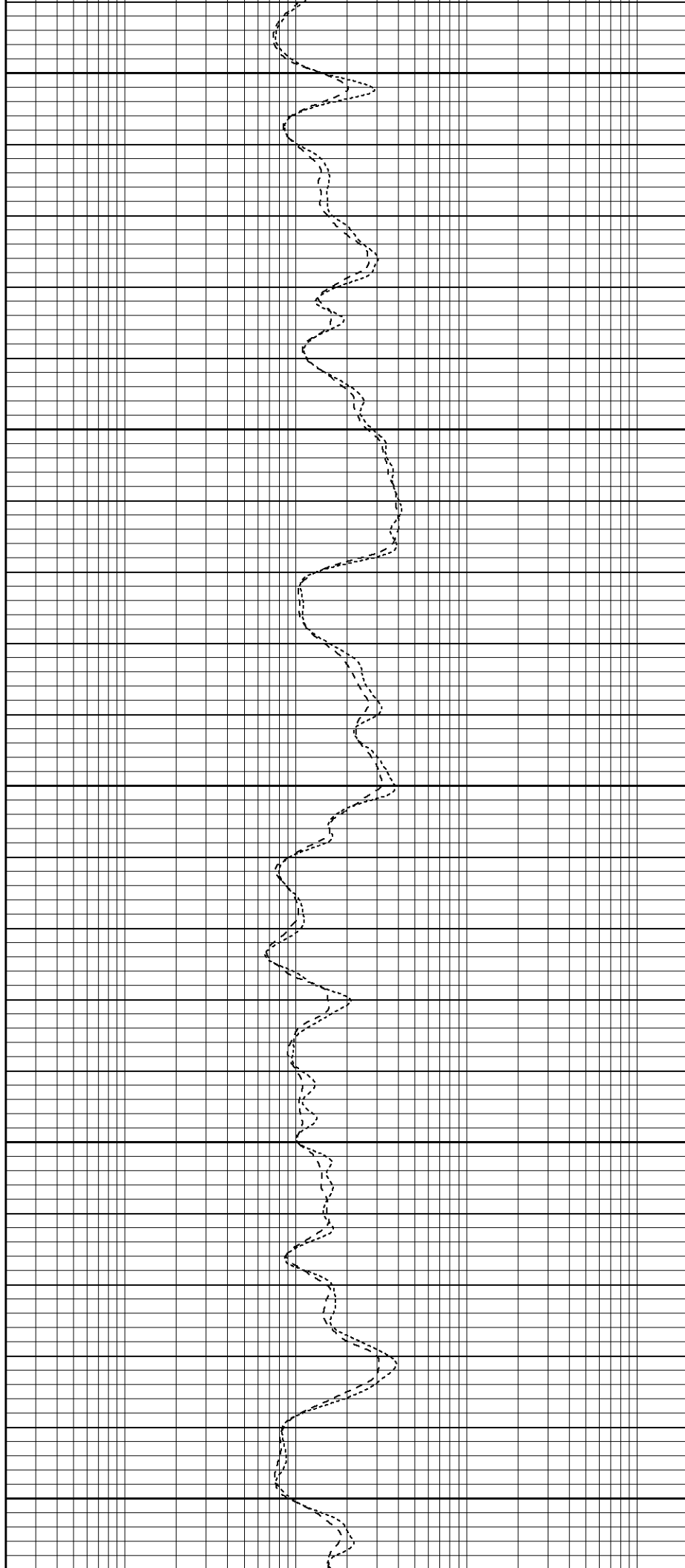
1200

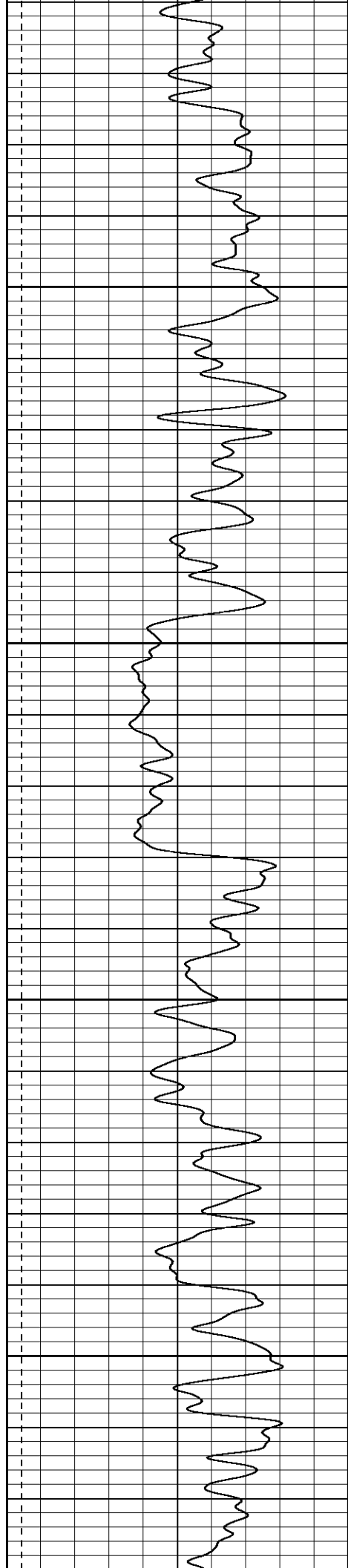
1250

1300

1350

1400



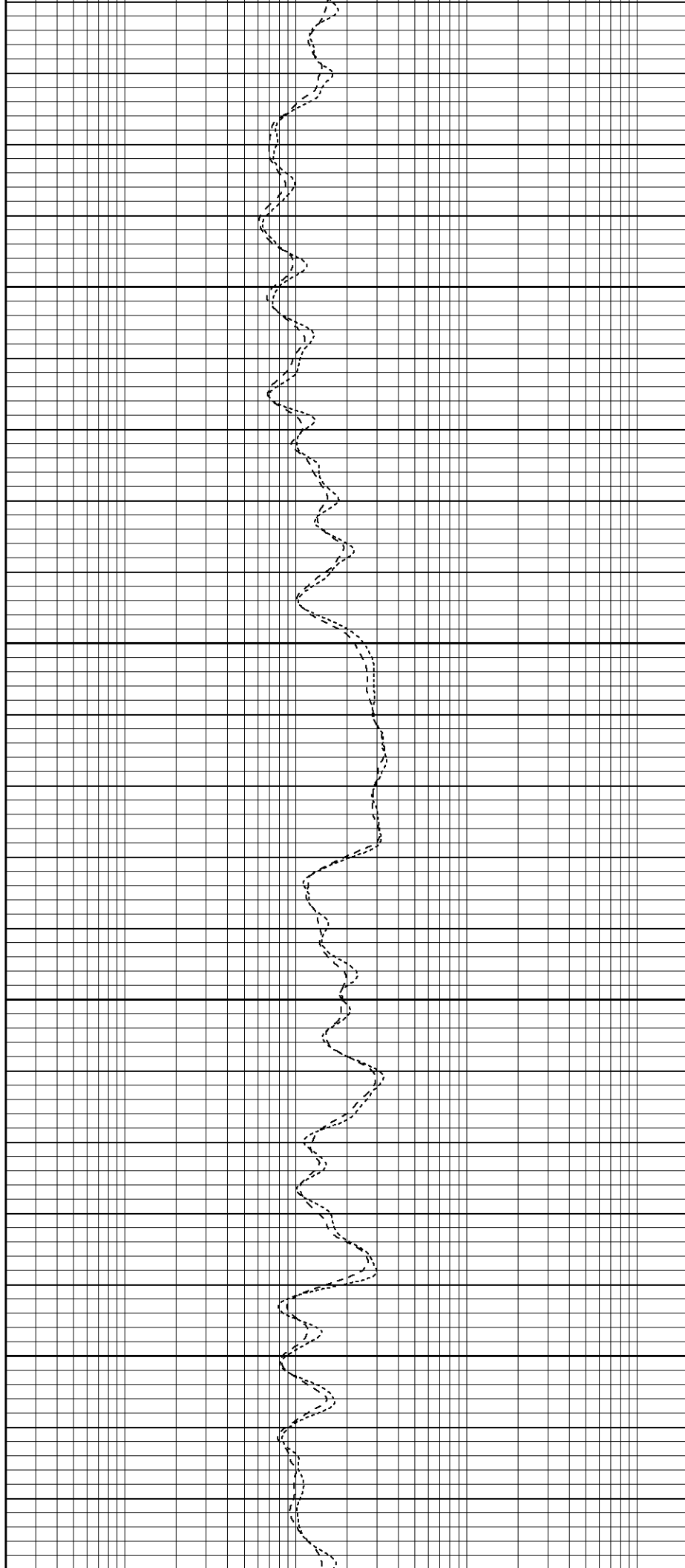


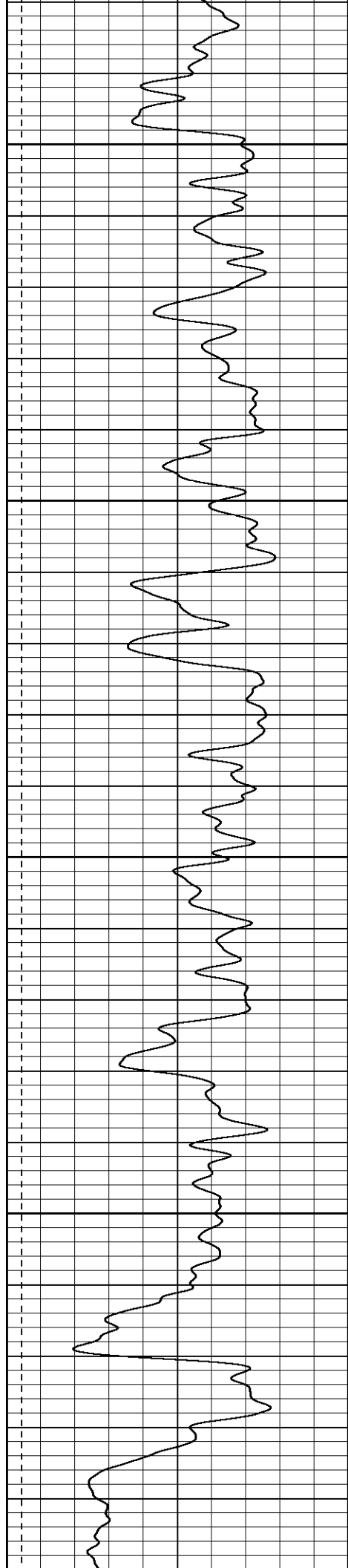
1450

1500

1550

1600





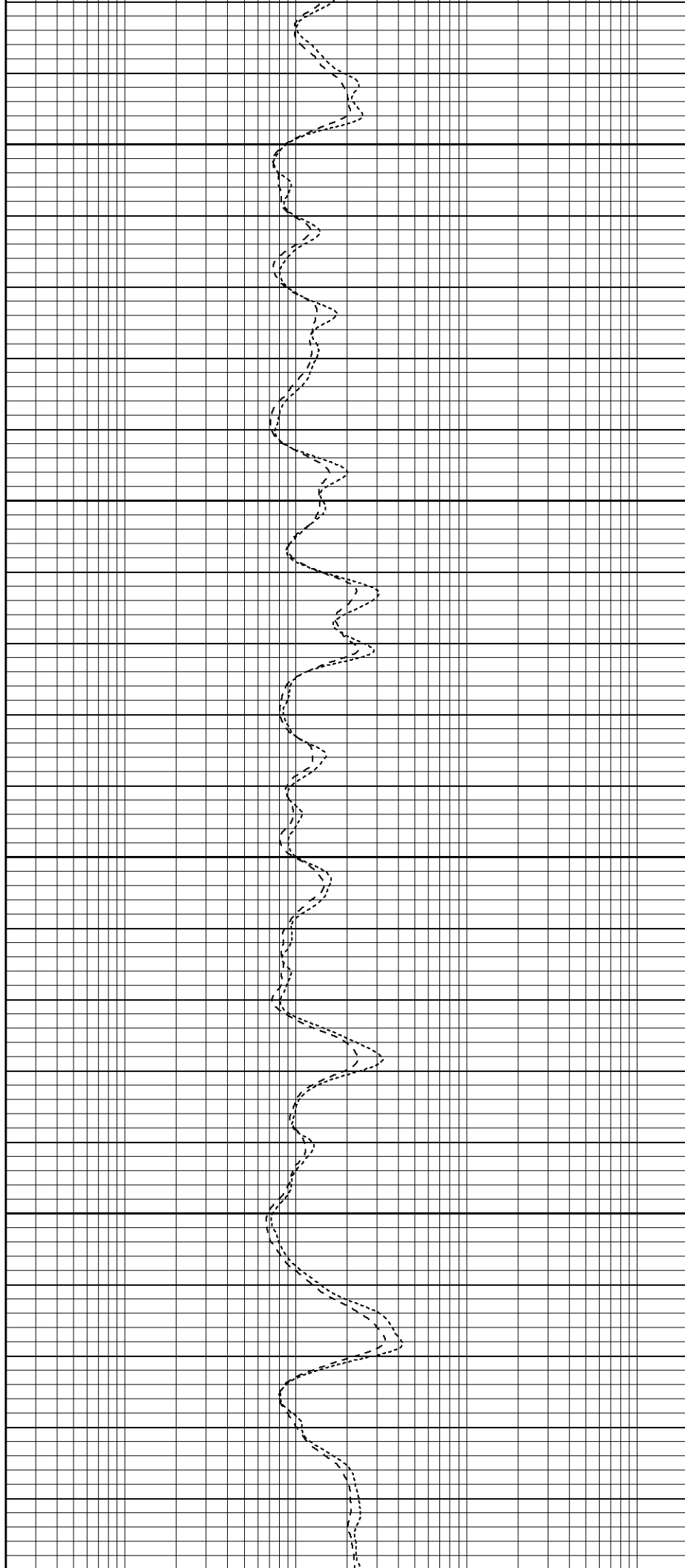
1650

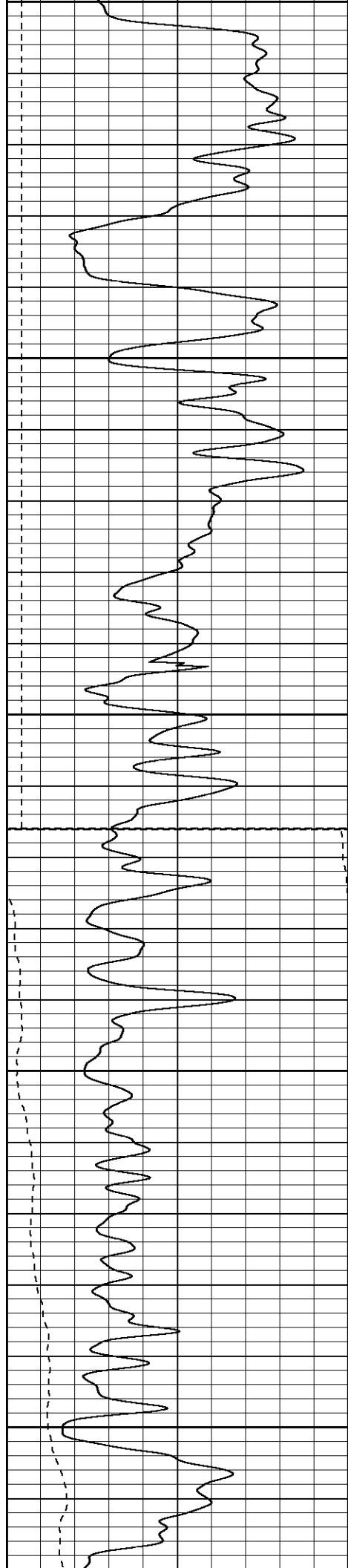
1700

1750

1800

1850





1850

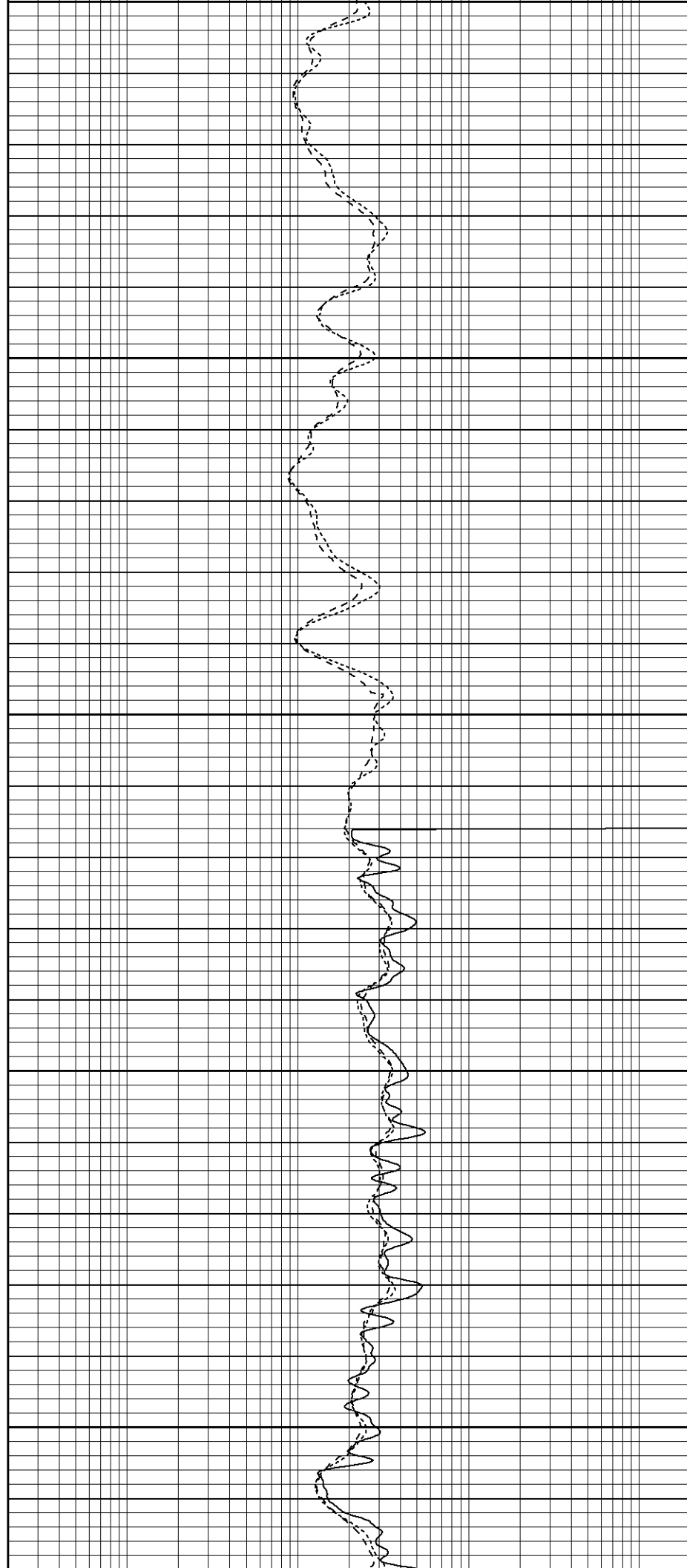
1900

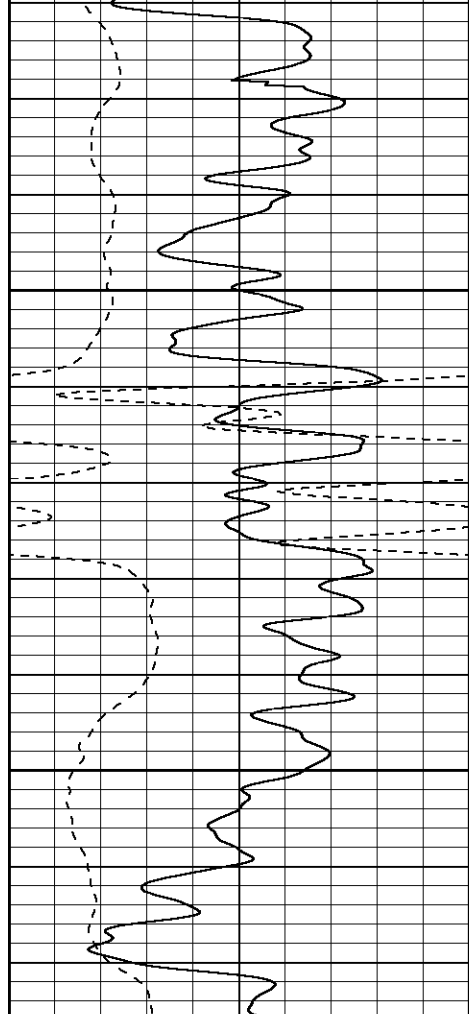
1950

Fluid Level

2000

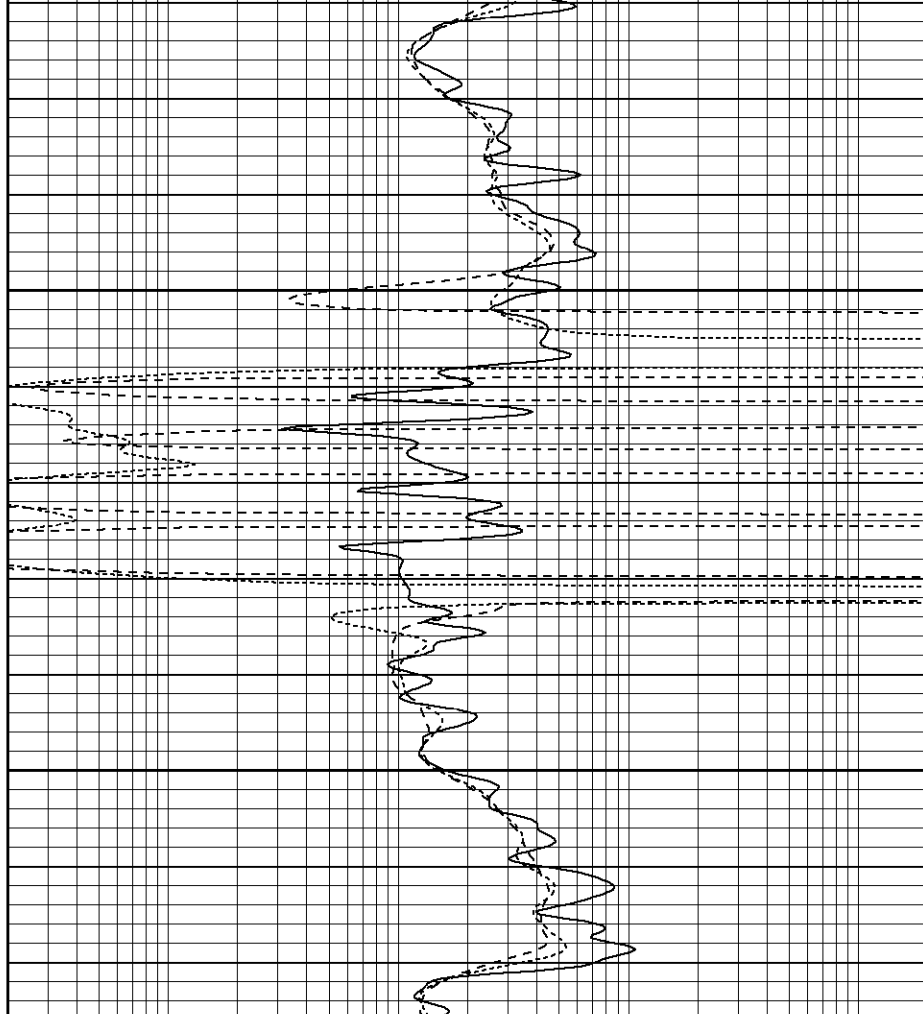
2050

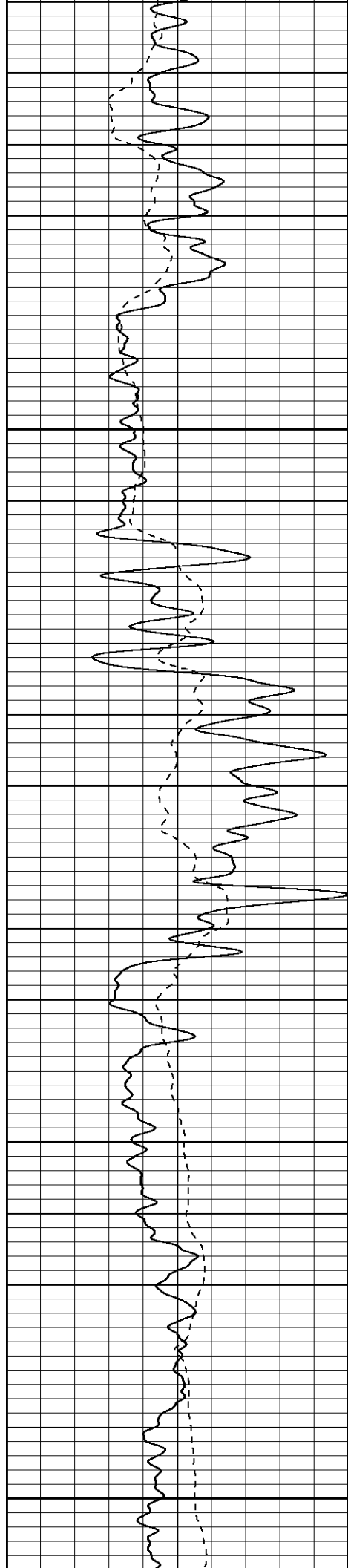




2100

2150





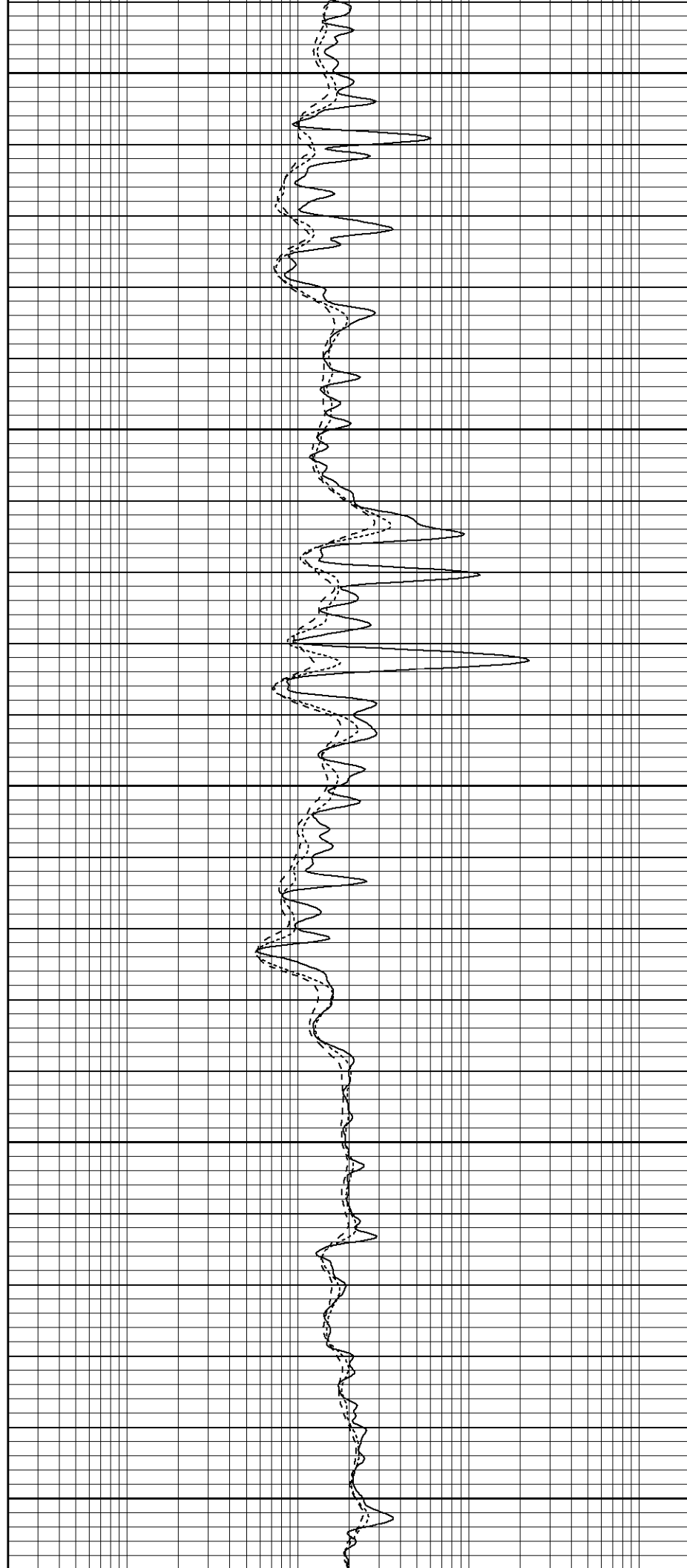
2300

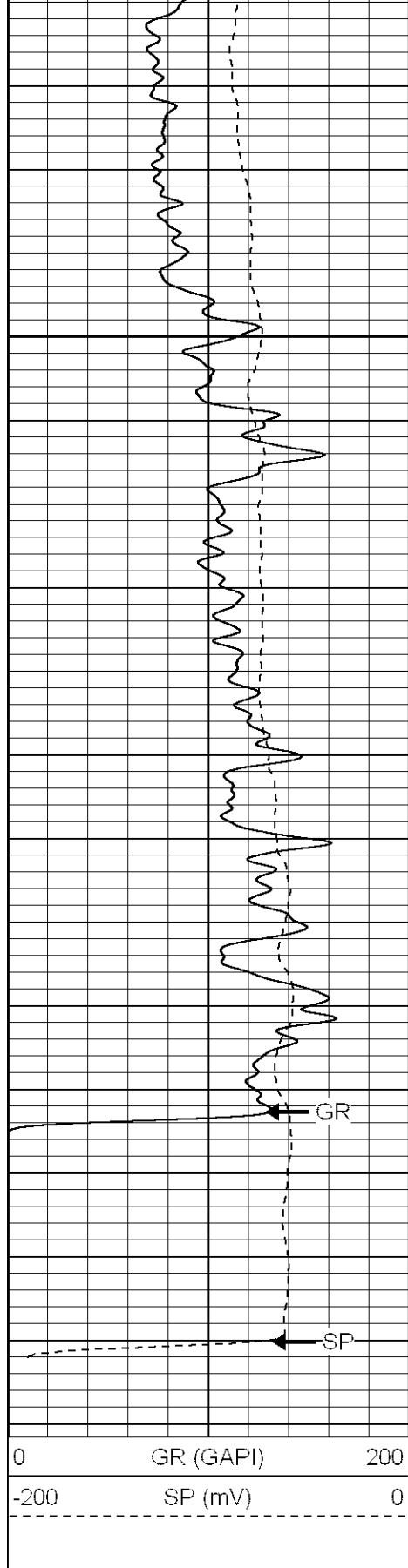
2350

2400

2450

2500

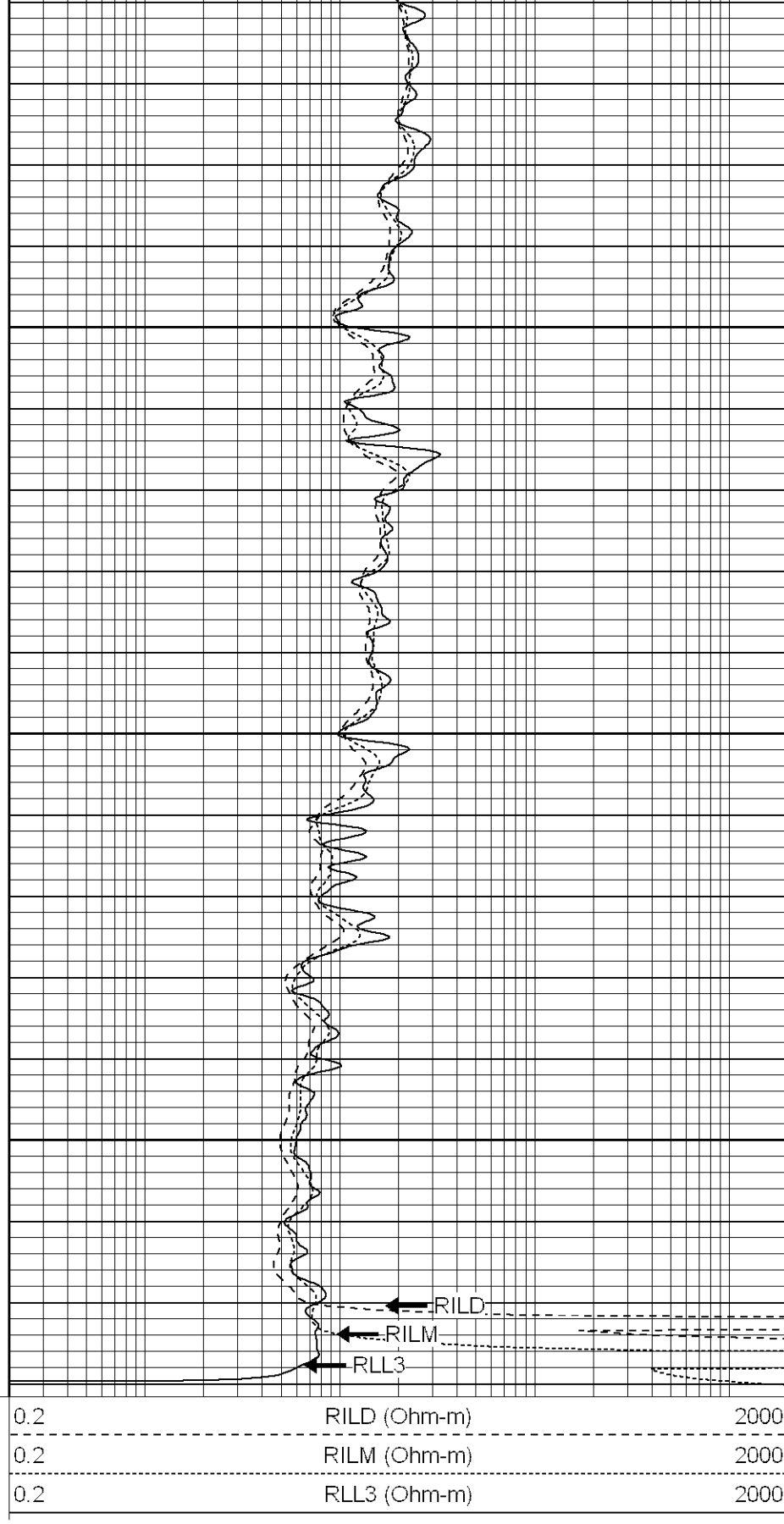




2550

2600

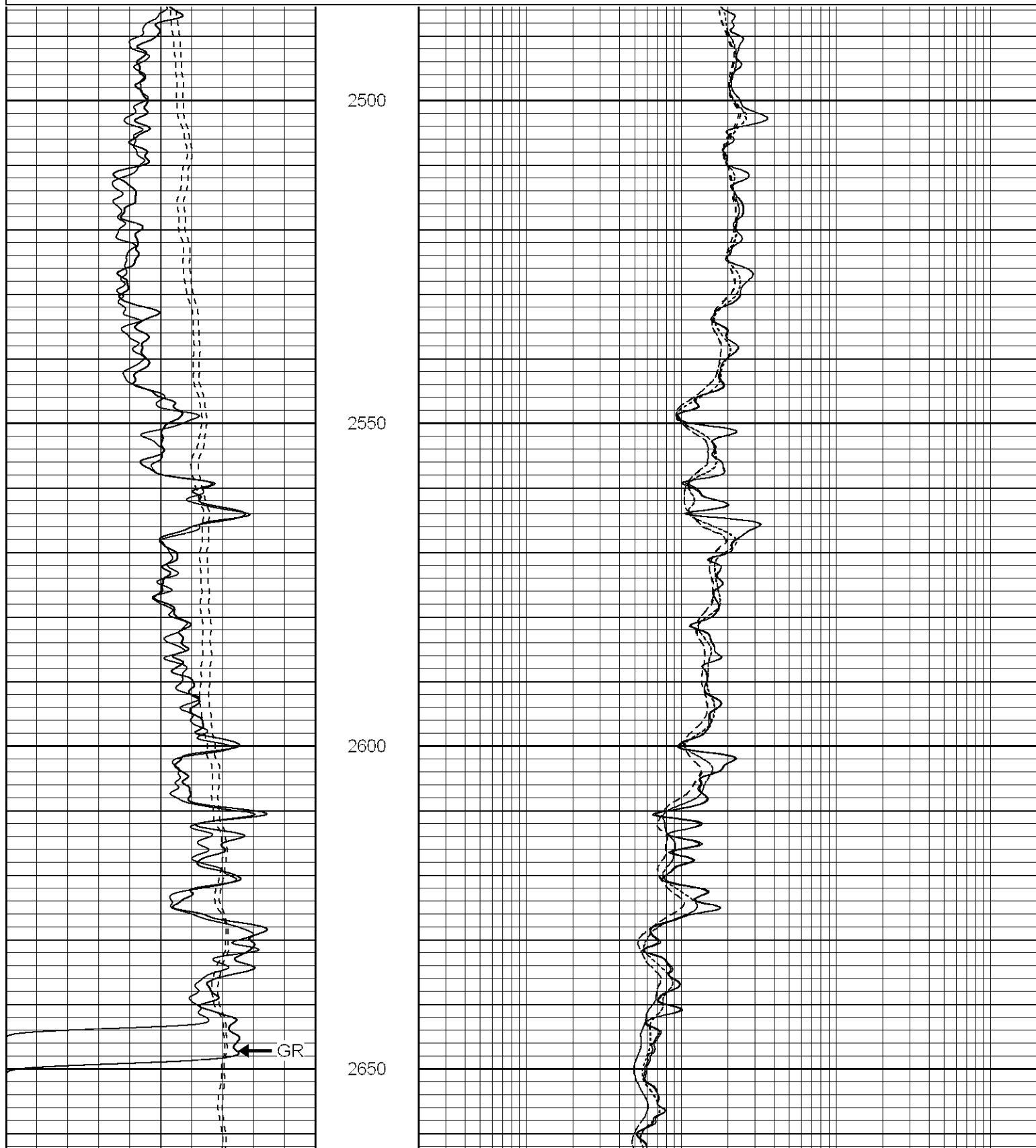
2650

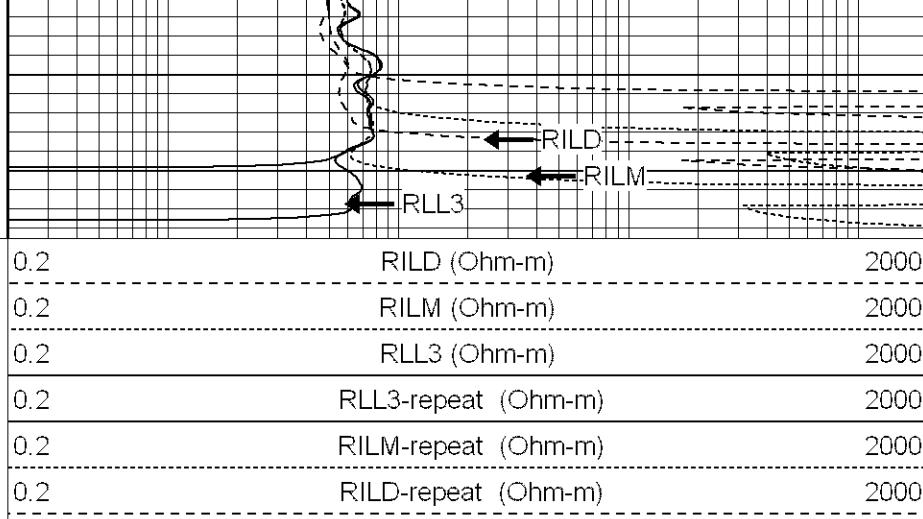
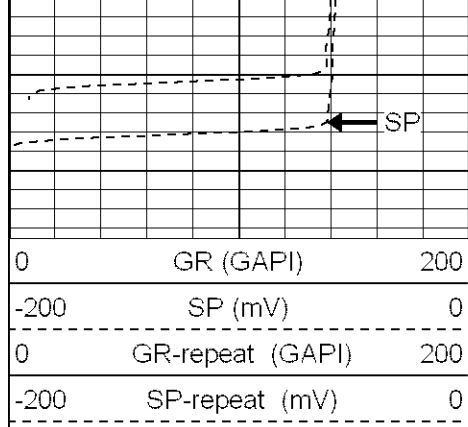


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**Repeat Pass**

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





Dual Induction Calibration Report									
Serial-Model:				5375-G					
Surface Cal Performed:				Fri Jul 07 07:11:05 2006					
Downhole Cal Performed:				Fri Jul 28 09:30:36 2006					
Surface Calibration									
Readings				References			Results		
Loop:	Air	Loop		Air	Loop		m	b	
Deep	0.007	0.626	V	0.000	500.000	mmho-m	808.448	-6.054	
Medium	0.010	0.749	V	0.000	550.000	mmho-m	744.284	-7.677	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.007	0.626	V	0.000	500.000	mmho-m	808.280	-5.935	
Medium	0.010	0.749	V	0.000	550.000	mmho-m	744.155	-7.535	
Downhole Calibration									
Readings				References			Results		
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	-0.286	500.148	mmho-m	-0.118	499.985	mmho-m	0.999	0.168	
Medium	-0.377	549.918	mmho-m	-0.141	549.955	mmho-m	1.000	0.236	
Shallow	2.509	0.018	V	500.000	2.000	Ohm-m	149.883	-3.000	

Compensated Density Calibration Report					
Serial-Model:		902-2.75POH			
Source / Verifier:		/			
Master Calibration Performed:		Mon Jul 24 13:29:01 2006			
Master Calibration					
	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1017.78	494.16	cps
Aluminum	2.590	g/cc	182.34	245.43	cps
Spine Angle = 67.85			Density/Spine Ratio = 0.474		
	Size		Reading		

Small Ring	8.10	in	1.84	V
Large Ring	17.00	in	4.32	V
Neutron Calibration Report				
Serial Number:	802			
Tool Model:	2.75POH			
Performed:	Mon Jul 24 13:55:59 2006			
Calibrator Value:	1	NAPI		
Calibrator Reading:	1	cps		
Sensitivity:	1	NAPI/cps		
Gamma Ray Calibration Report				
Serial Number:	804			
Tool Model:	2.75POH			
Performed:	Tue Jul 18 14:57:08 2006			
Calibrator Value:	1.0	GAPI		
Background Reading:	0.0	cps		
Calibrator Reading:	1.0	cps		
Sensitivity:	0.8000	GAPI/cps		

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
CHD	39.37		None	0.75	1.50	5.00
GR	37.64		GR-2.75POH (804) Probe	3.73	2.75	43.00
NEU	32.10		NEU-2.75POH (802) Probe Epithermal	4.75	2.75	58.00
LSD	24.47		CDL-2.75POH (902) Probe	8.43	2.75	106.00
DCAL	24.19		Probe	0.89	3.50	20.00
SSD	23.95					
10pin	21.72					
CILD	10.60		DIL-G (5375) Geobert	20.83	4.00	345.00
CP	10.60					

SP	10.60			Geomatic			
CILM	6.89						
RLL3	1.70						
Dataset: /field/well/run1/_plots_/_jobs_/dil							
Total Length: 39.37 ft							
Total Weight: 577.00 lb							
O.D. 4.00 in							