

Patterson

**DUAL
INDUCTION
LOG**

Company XTO Energy, Inc.		Company XTO Energy, Inc.	
Well Apache Canyon 13-12X		Well Apache Canyon 13-12X	
Field Purgatoire River		Field Purgatoire River	
County Las Animas		County Las Animas	
State CO		State CO	
Location: API # : 05 071 08828 00		Other Services CDL NEUTRON	
SEC 13 TWP 34S RGE 68W		Elevation	
Permanent Datum	Ground Level	Elevation	8394'
Log Measured From	Ground Level		
Drilling Measured From	Ground Level		
Date 8-19-06			
Run Number	One		
Depth Driller	2400'		
Depth Logger	2328'		
Bottom Logged Interval	2326'		
Top Log Interval	Surface Casing		
Casing Driller	8 5/8" @ 216'		
Casing Logger	216'		
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	1:00 P.M.		
Time Logger on Bottom	3:10 P.M.		
Maximum Recorded Temperature	110 DEG F		
Equipment Number	T720		
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 Big Bingham, first left thru double green gates,
stay on main road, second drive thru location.

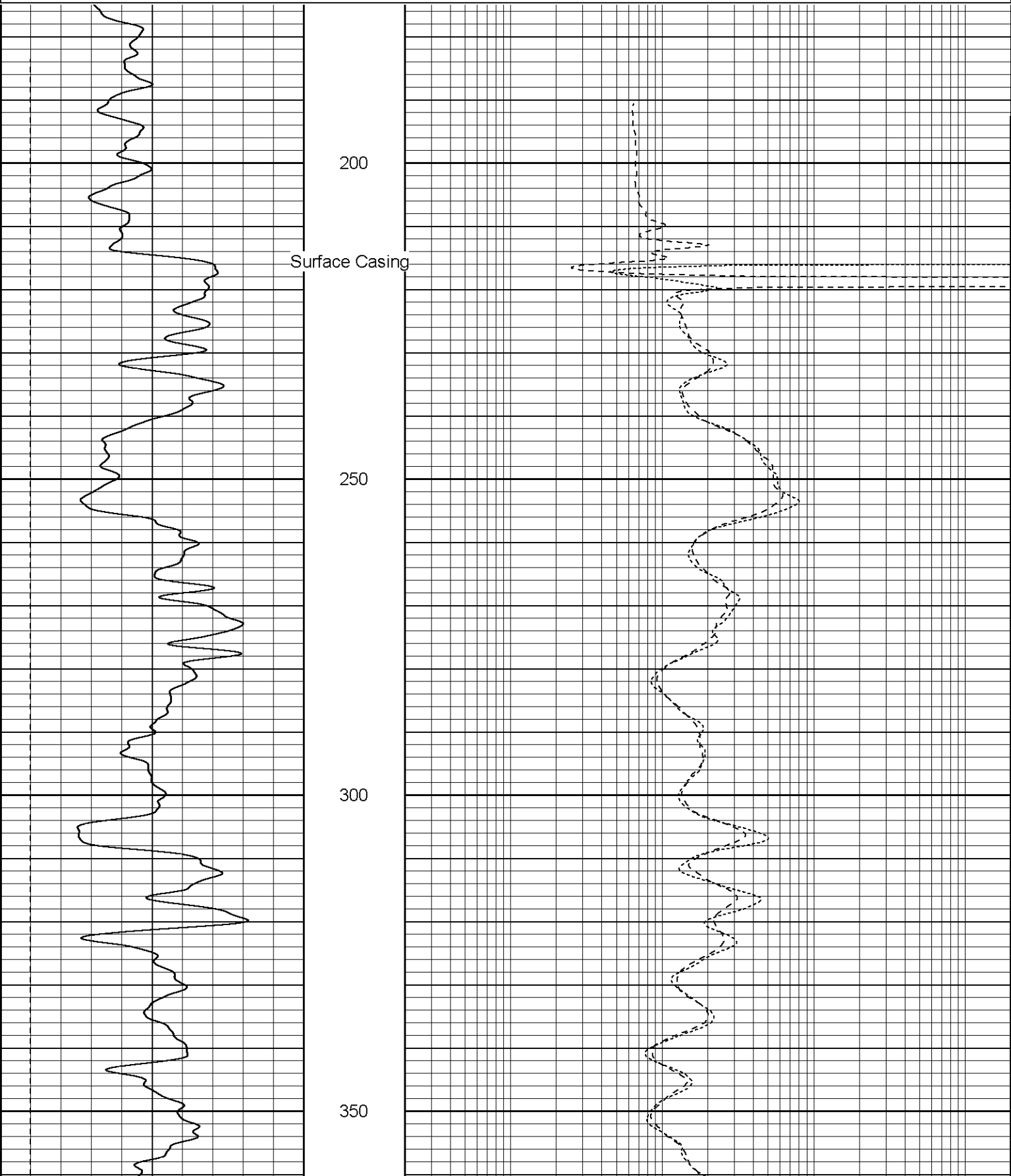
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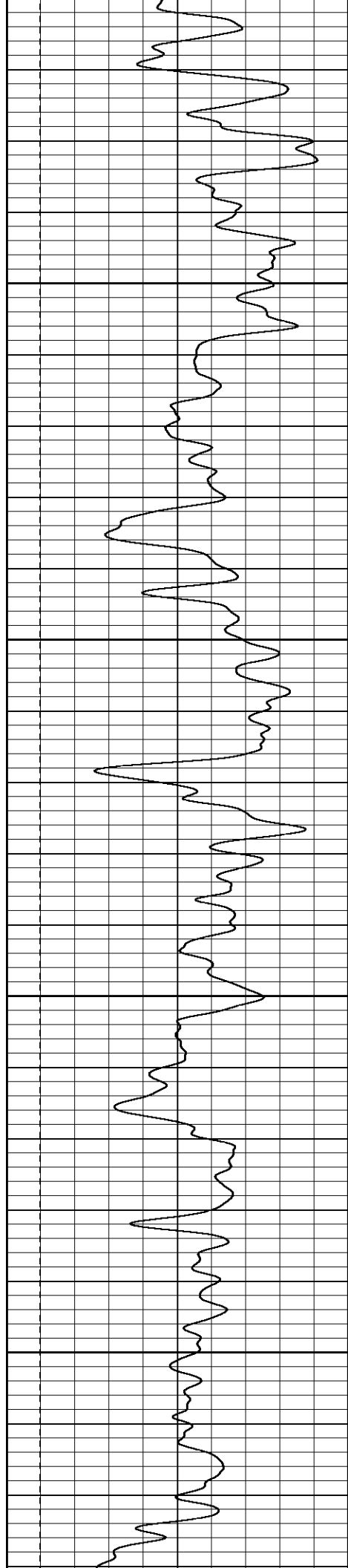
Main Pass

Database File: xtoac1312x.db
Dataset Pathname: pass2.2
Presentation Format: dil
Dataset Creation: Sat Aug 19 17:19:59 2006
Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	200
-100	SP (mV)	100

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



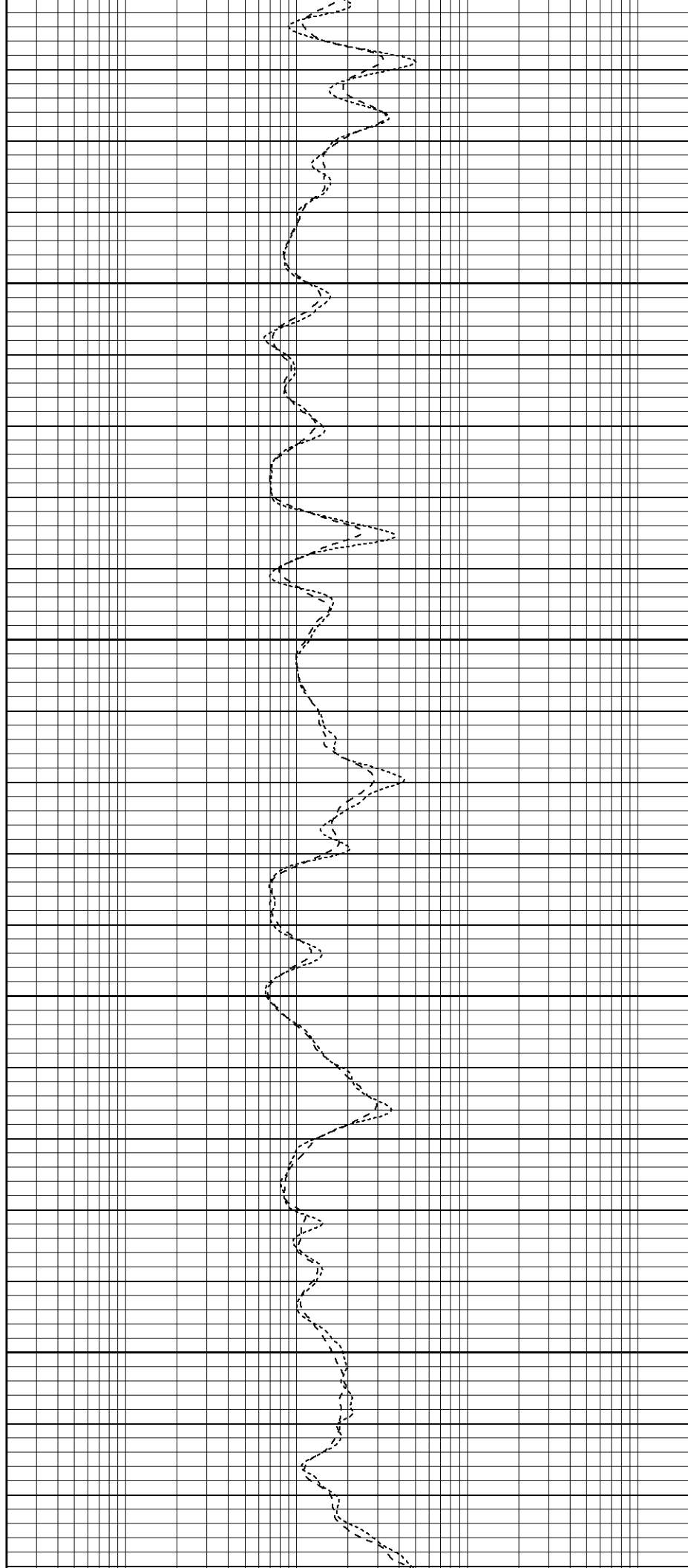


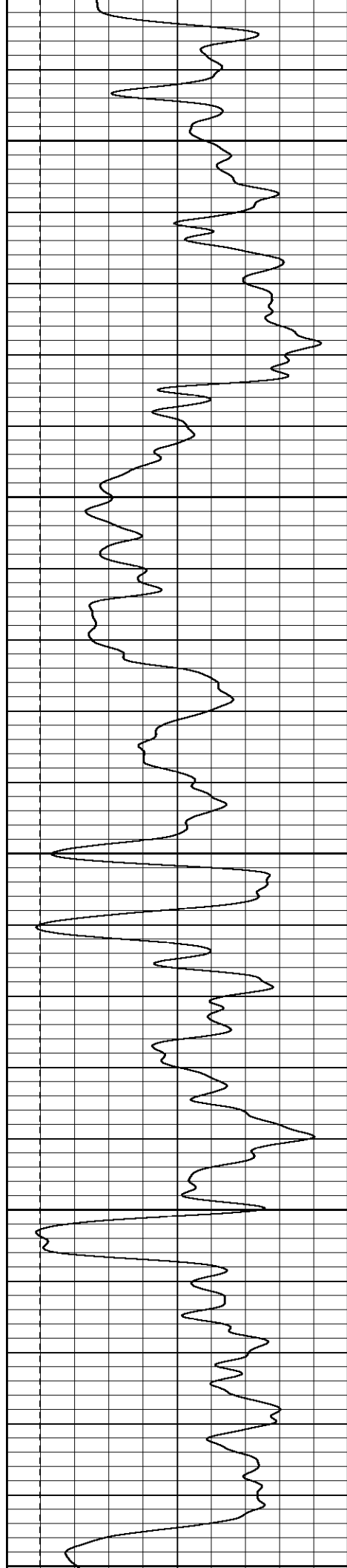
400

450

500

550





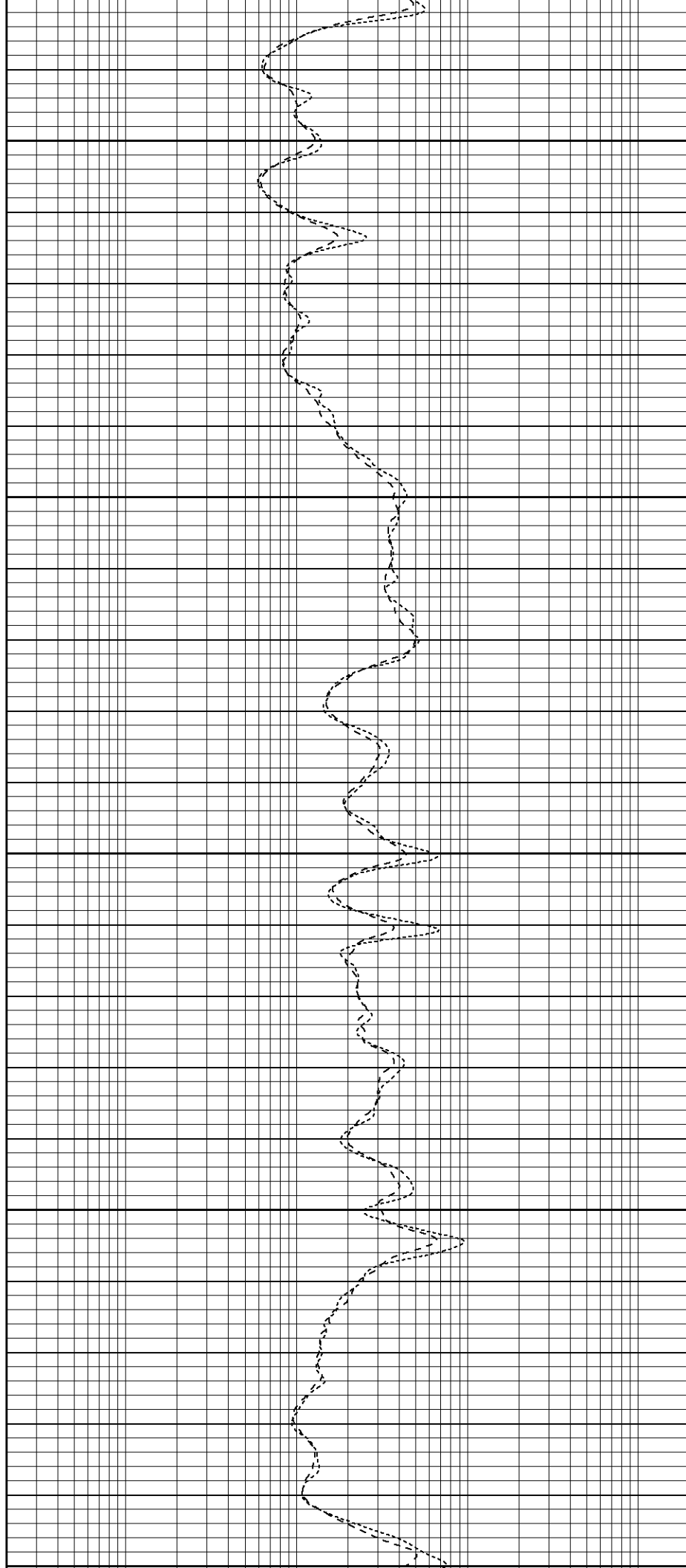
600

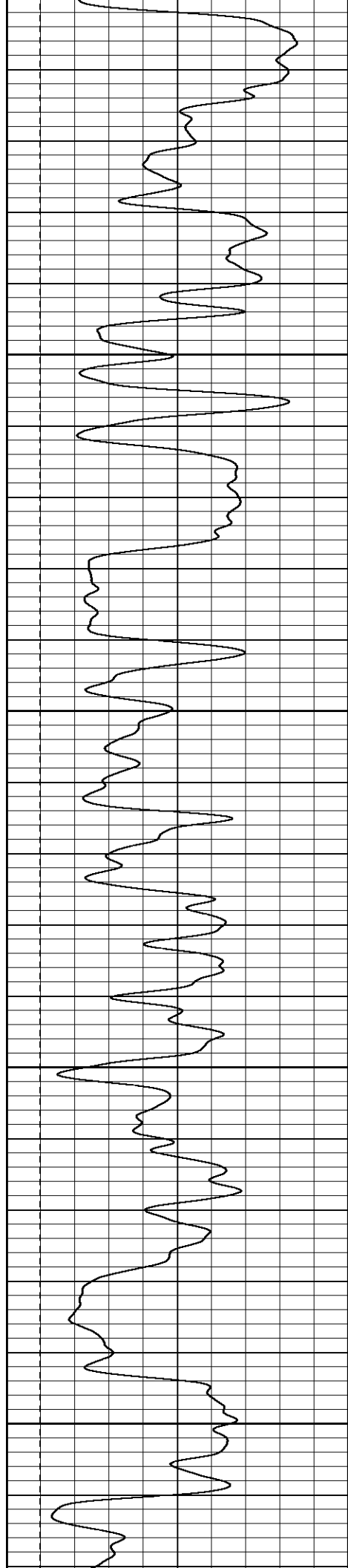
650

700

750

800





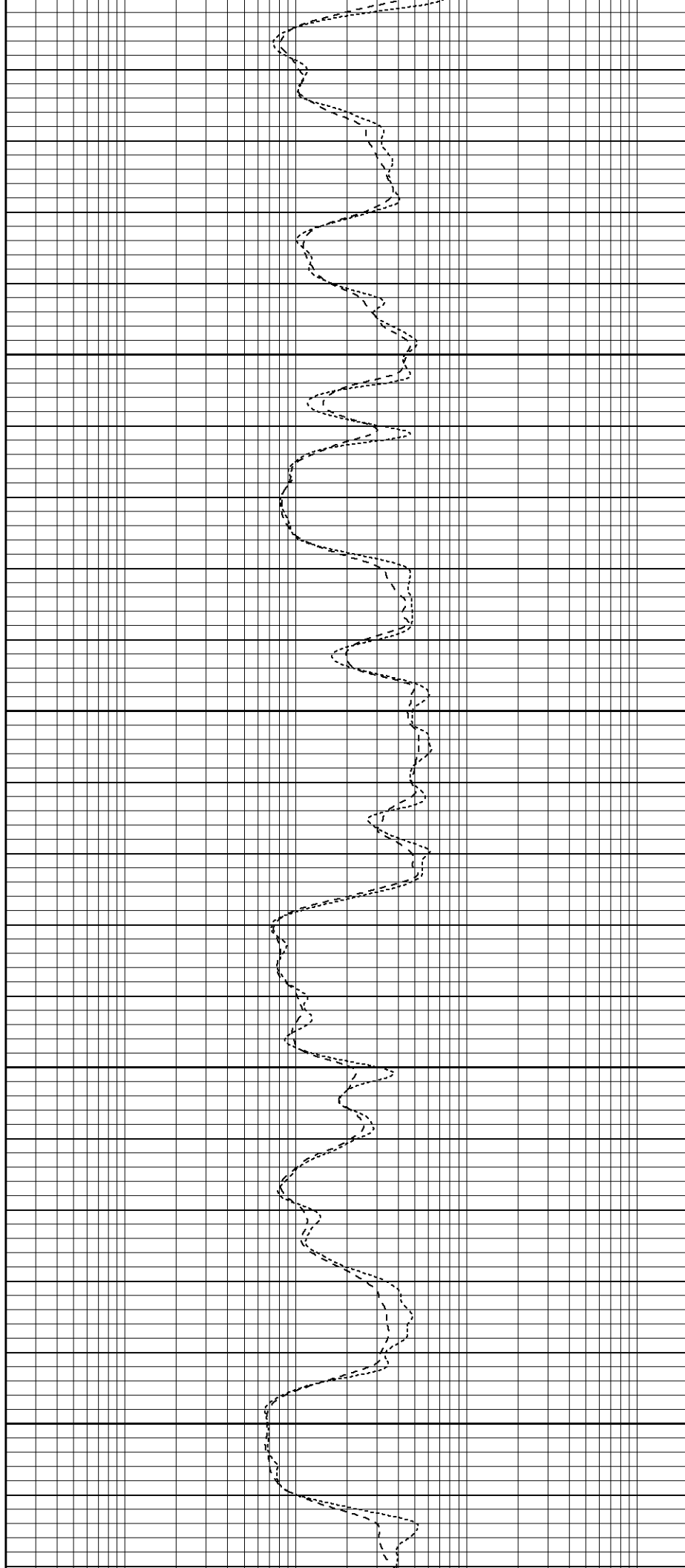
800

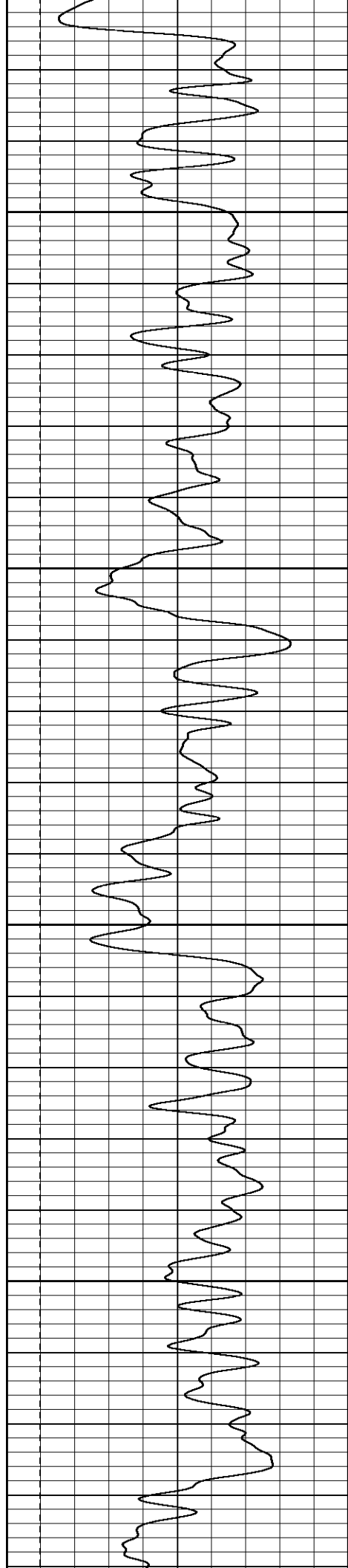
850

900

950

1000



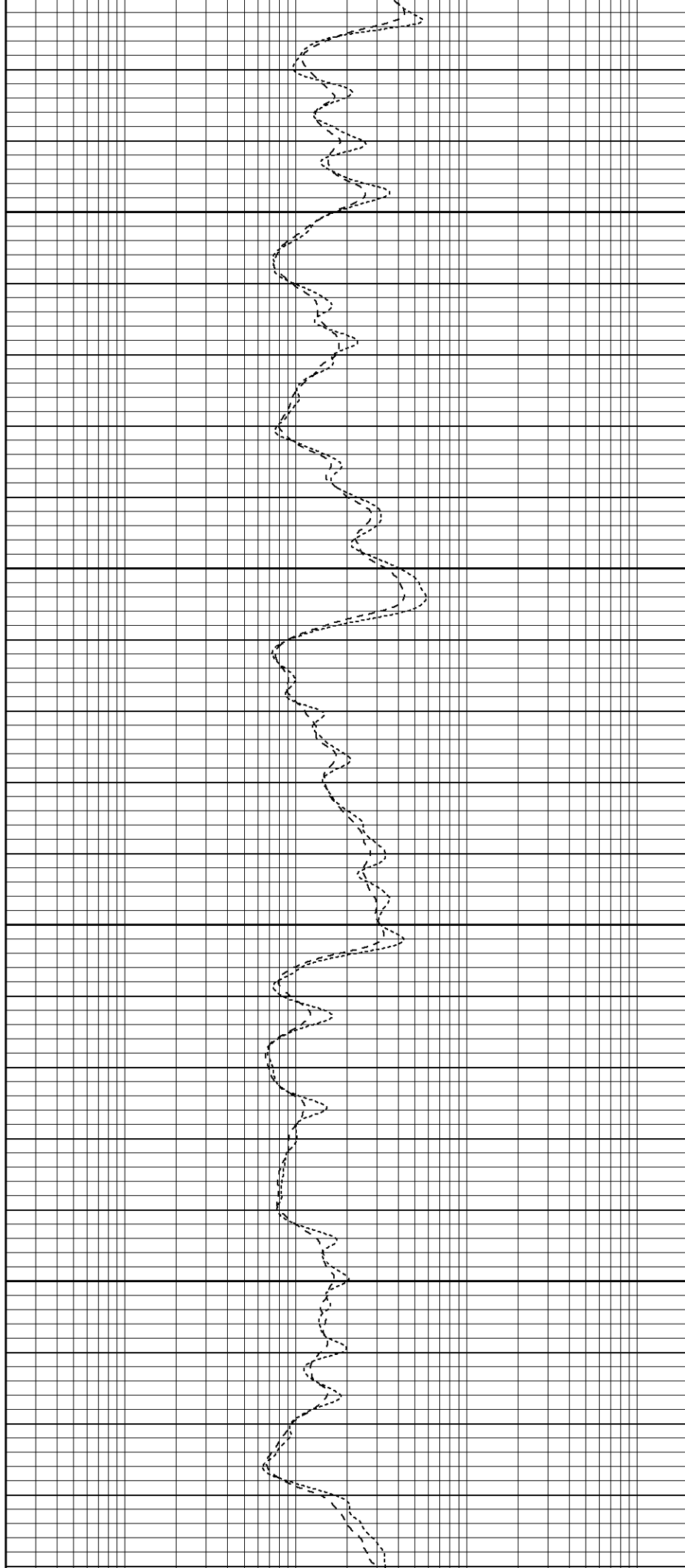


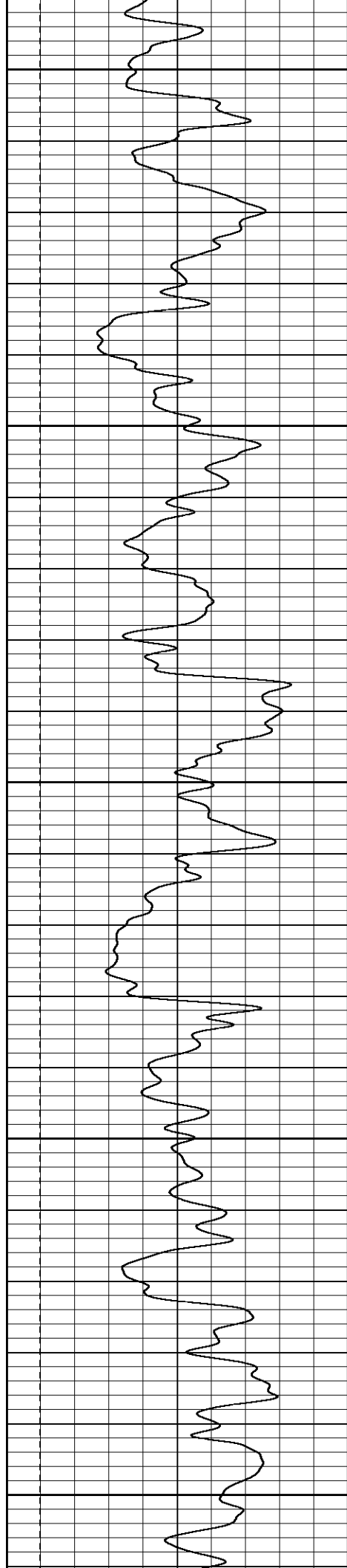
1050

1100

1150

1200





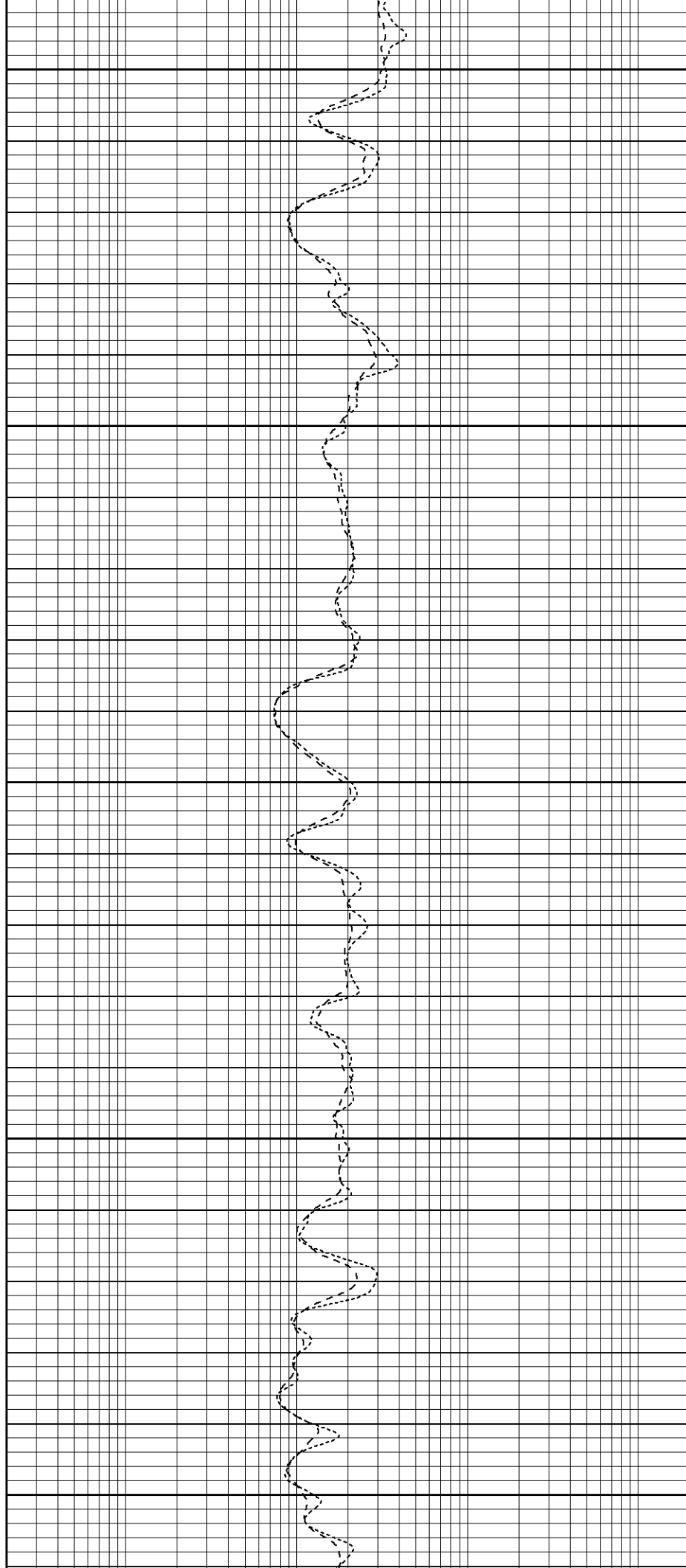
1250

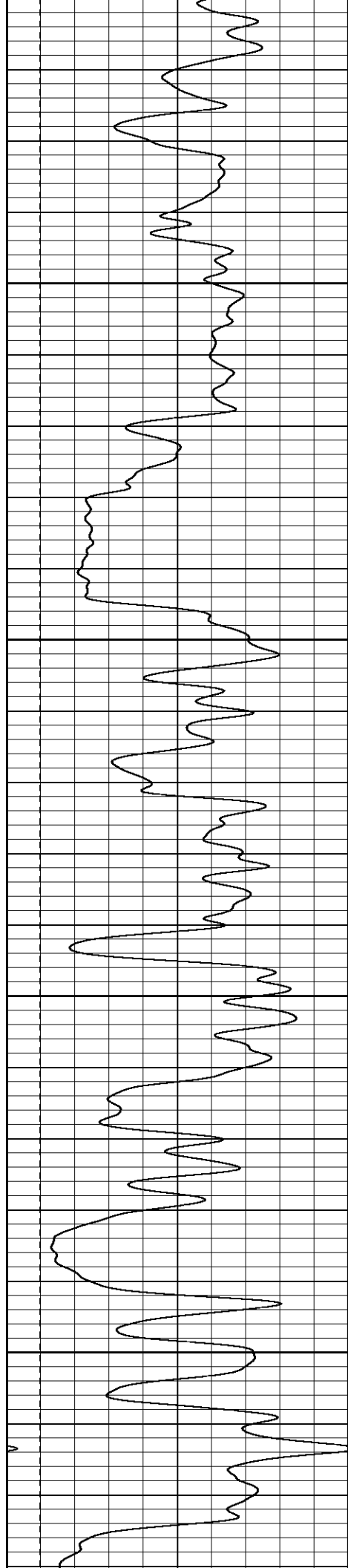
1300

1350

1400

1450



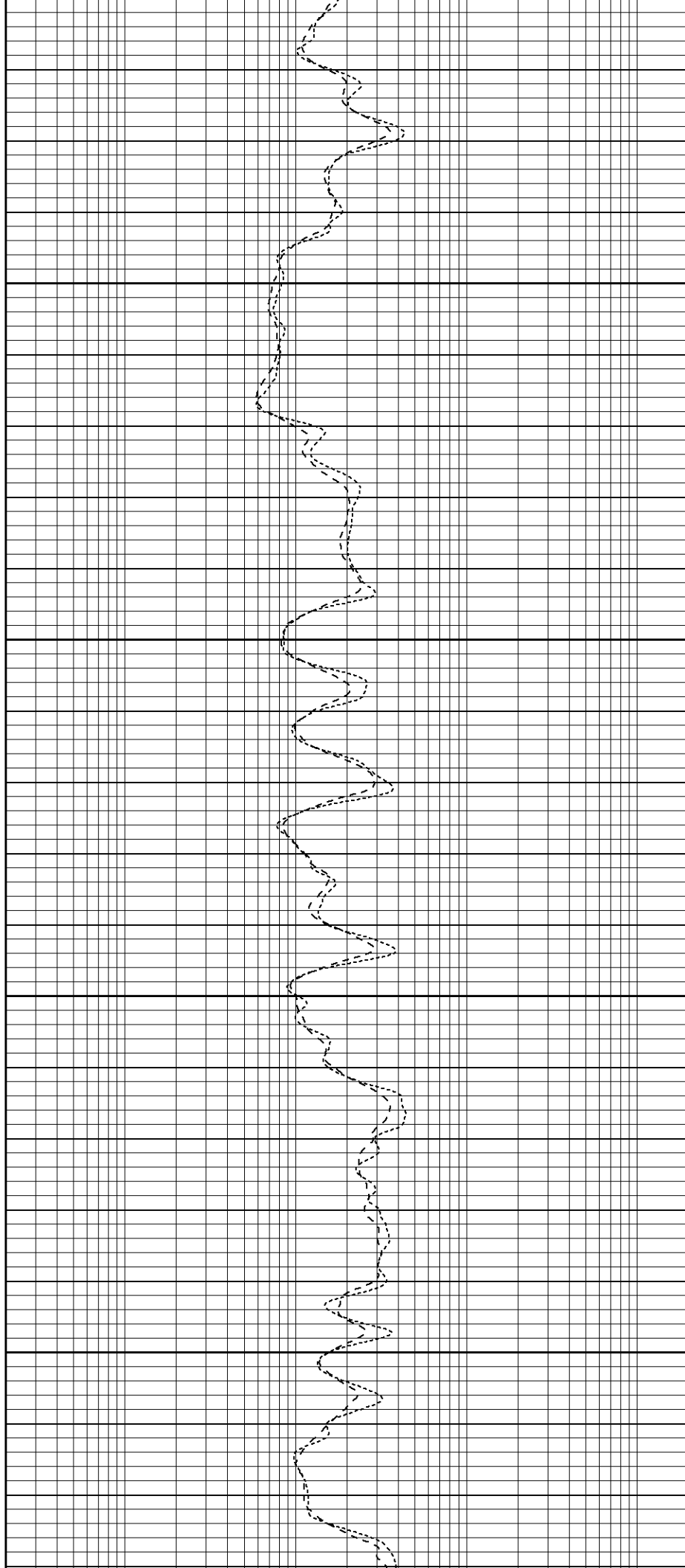


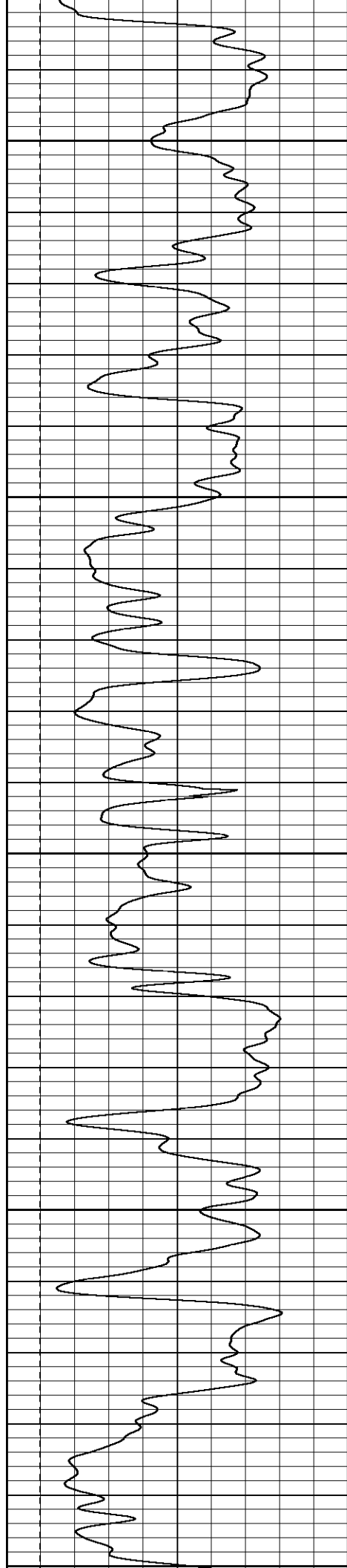
1500

1550

1600

1650





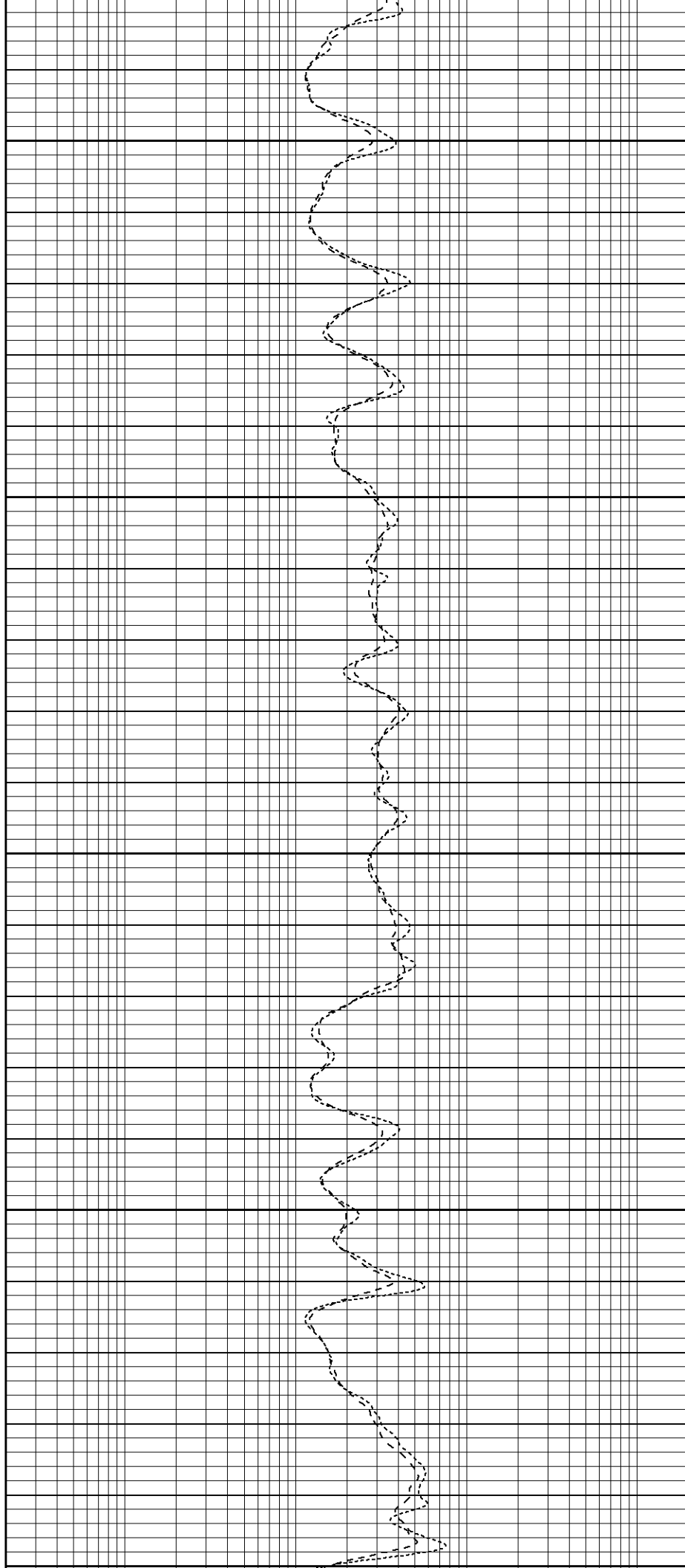
1700

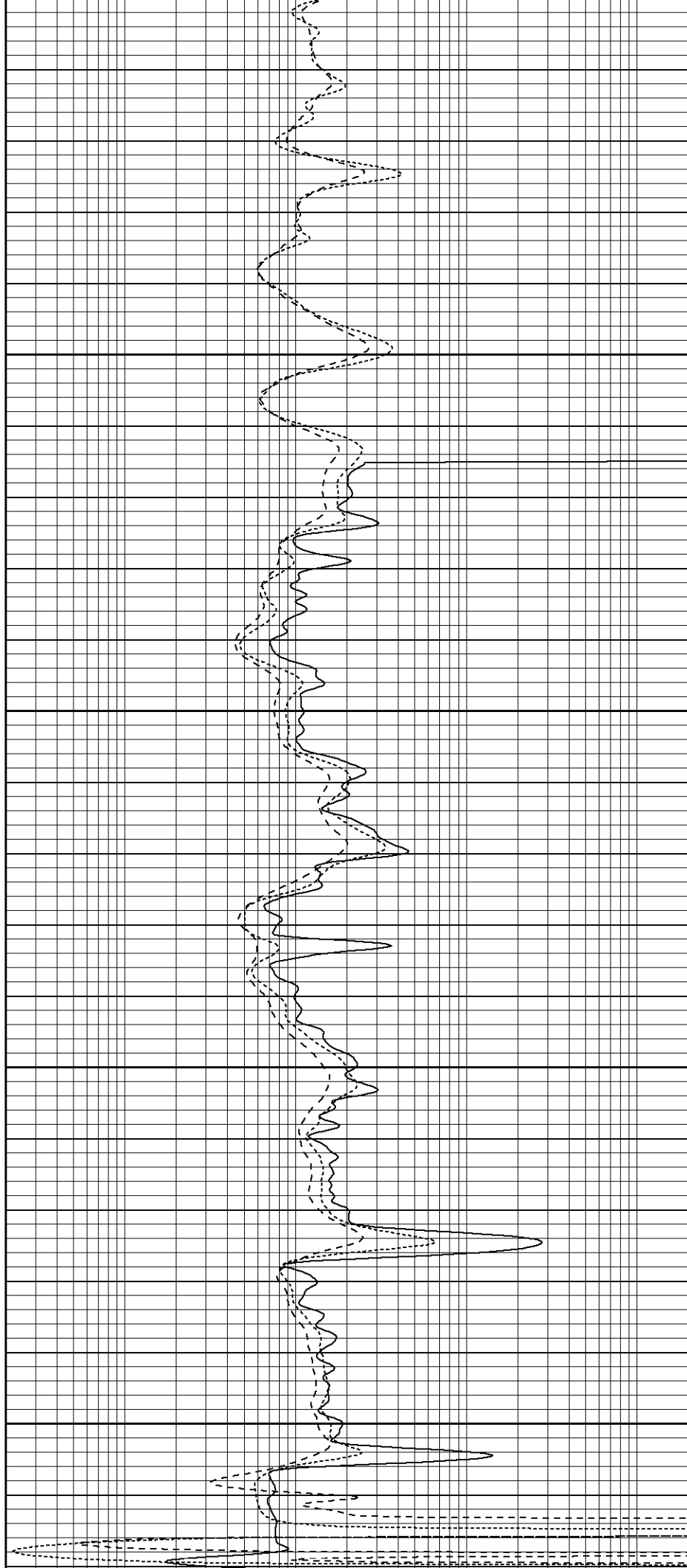
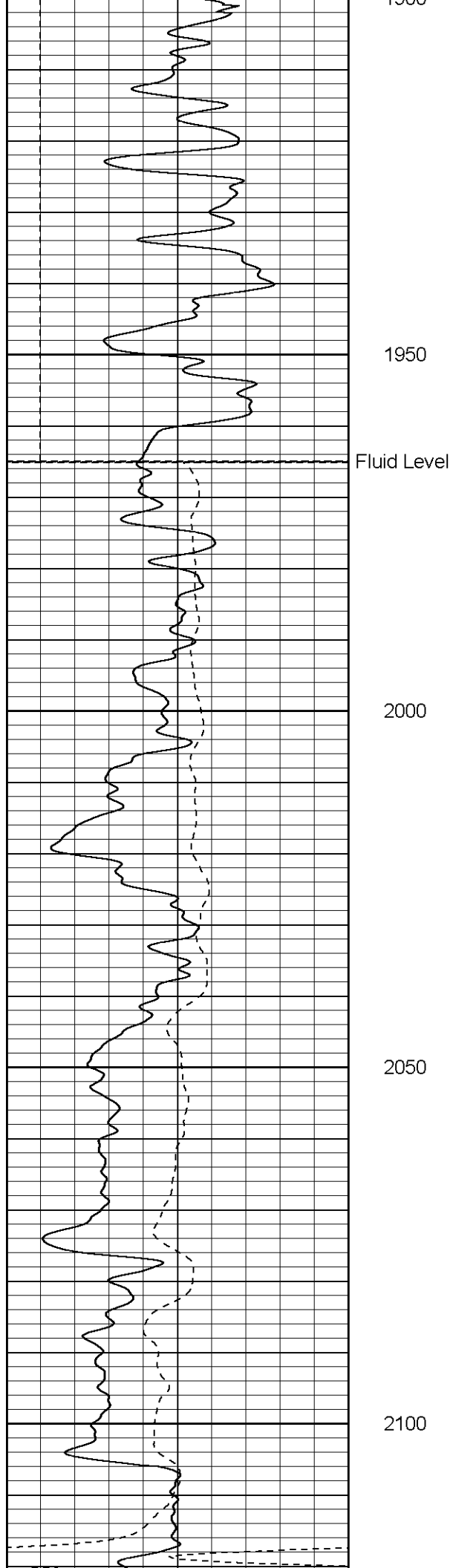
1750

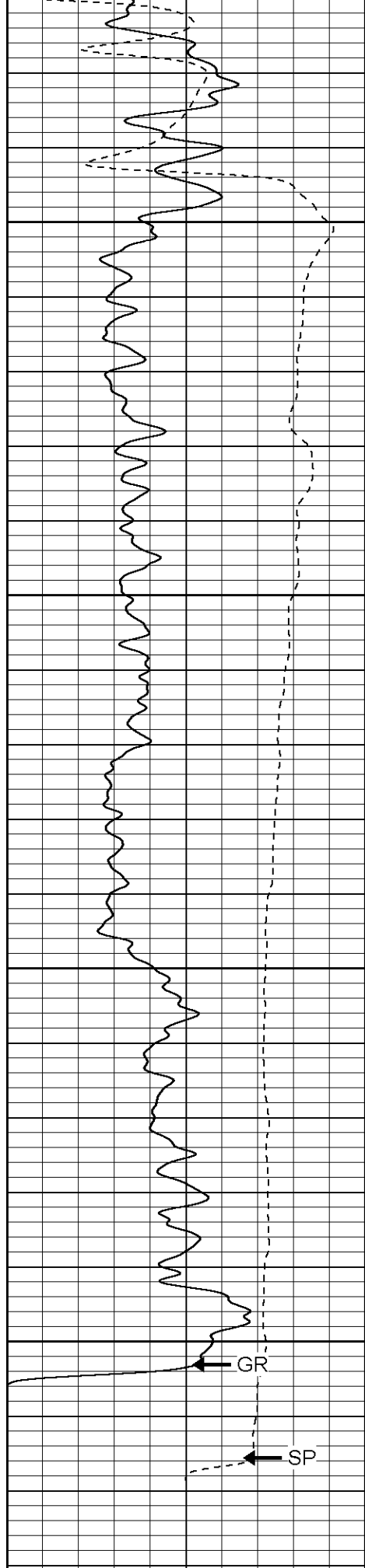
1800

1850

1900







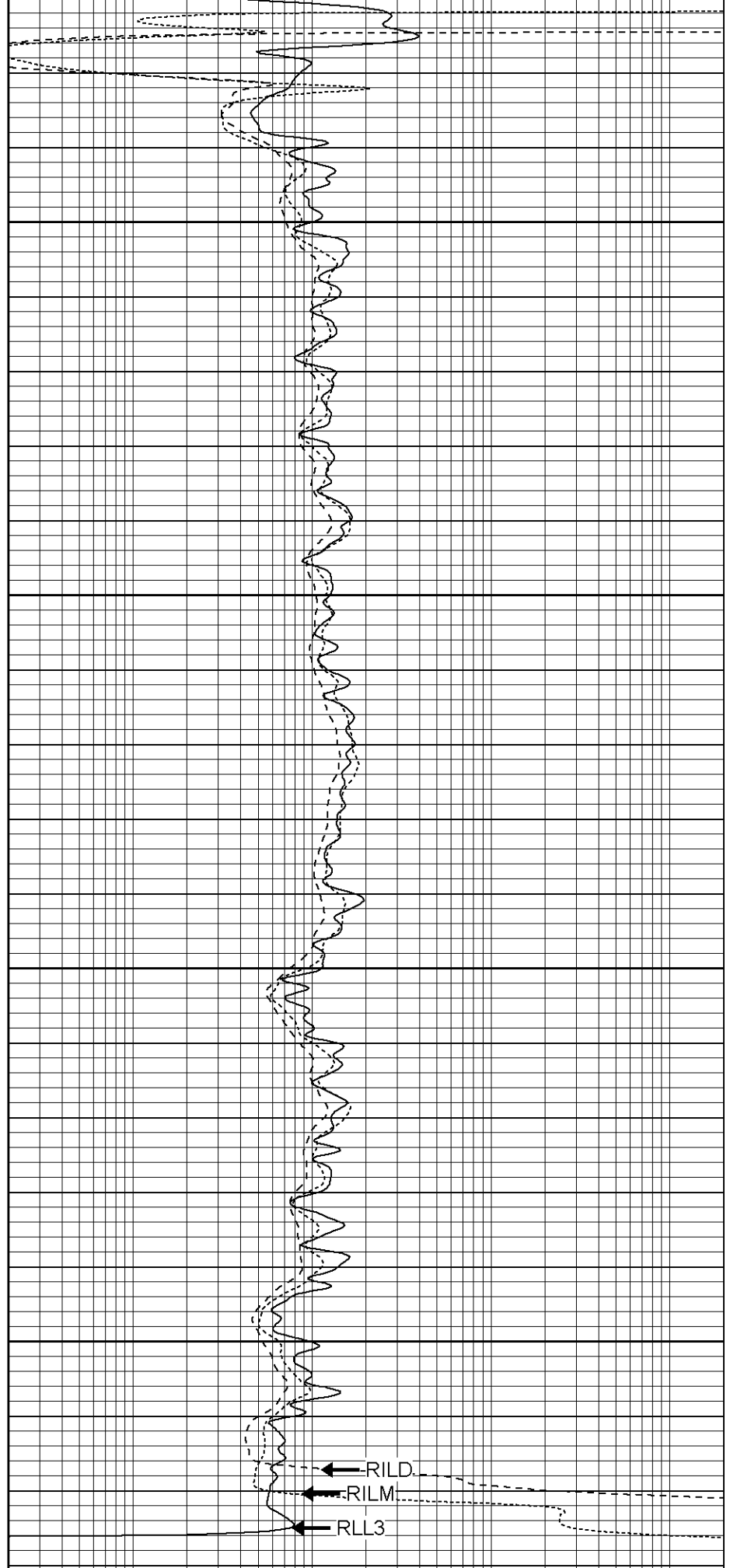
0	GR (GAPI)	200
-100	SP (mV)	100

2150

2200

2250

2300



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

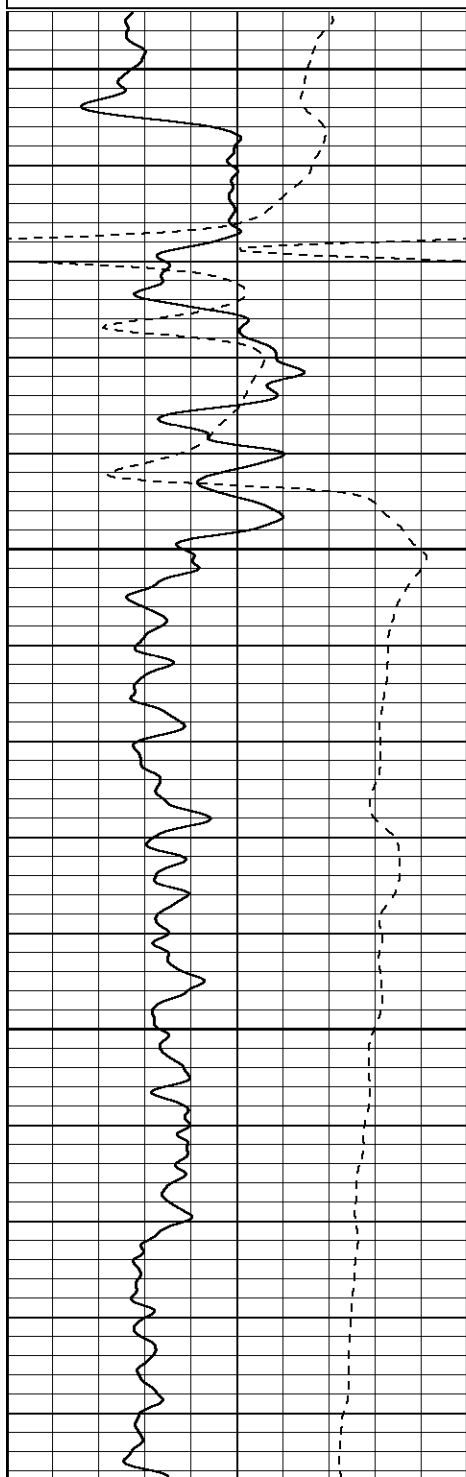
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Repeat Section

Database File: xtoac1312x.db
Dataset Pathname: pass1.1
Presentation Format: dil
Dataset Creation: Sat Aug 19 17:17:10 2006 by Calc Warrior 7.0 STD Ope
Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	200
-100	SP (mV)	100

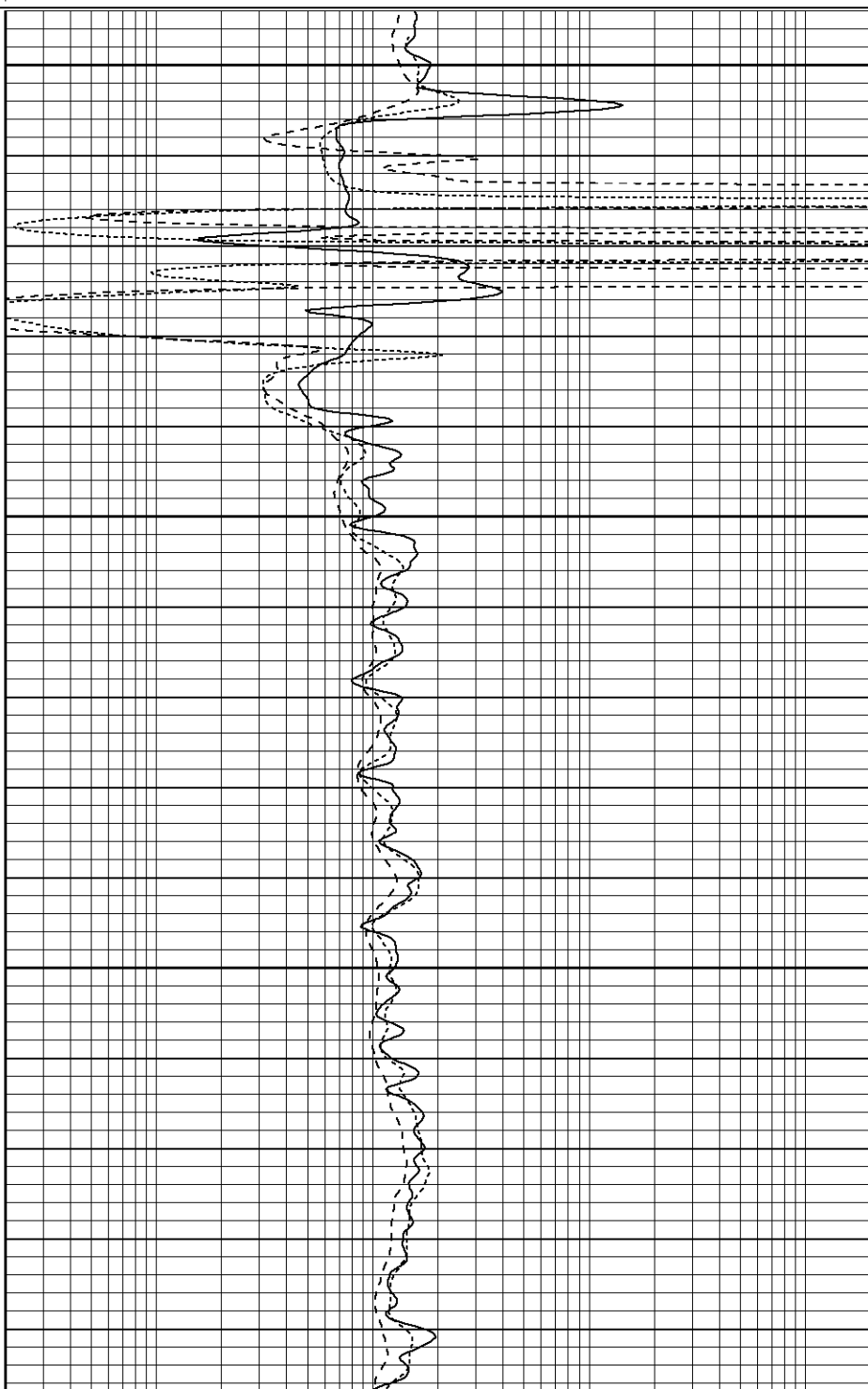
0.2	RILM (Ohm-m)	2000
0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000

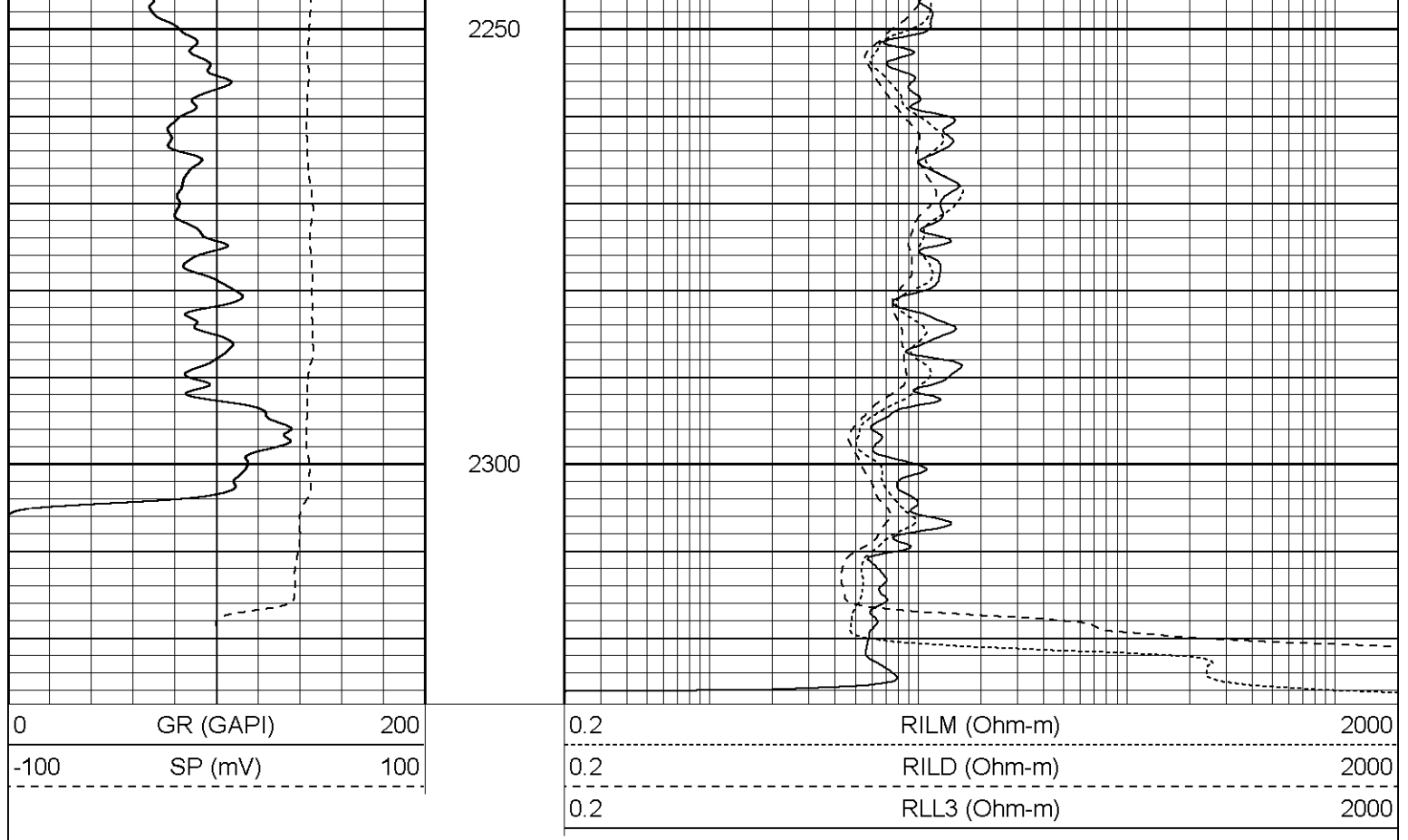


2100

2150

2200





Dual Induction Calibration Report									
Serial-Model:				5375-G					
Surface Cal Performed:				Mon Aug 14 08:21:41 2006					
Downhole Cal Performed:				Wed Aug 16 20:35:44 2006					
After Survey Verification Performed:				Sun Dec 04 10:51:51 2005					
Surface Calibration									
Readings				References			Results		
Loop:	Air	Loop		Air	Loop		m	b	
Deep	0.012	0.633	V	0.000	500.000	mmho-m	804.288	-9.342	
Medium	0.016	0.752	V	0.000	550.000	mmho-m	747.433	-11.697	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.012	0.636	V	0.000	500.000	mmho-m	800.610	-9.578	
Medium	0.016	0.752	V	0.000	550.000	mmho-m	747.389	-12.066	
Downhole Calibration									
Readings				References			Results		
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	1.512	503.799	mmho-m	0.280	500.000	mmho-m	0.995	-1.224	
Medium	0.922	551.464	mmho-m	0.370	550.000	mmho-m	0.998	-0.550	
Shallow	2.522	0.024	V	500.000	2.000	Ohm-m	155.000	-2.000	
After Survey Verification									
Readings				Targets			Results		
Internal:	Zero	Cal		Zero	Cal		m'	b'	

Deep	0.000	0.000	mmho-m	1.512	503.799	mmho-m	0.995	-1.224
Medium	0.000	0.000	mmho-m	0.922	551.464	mmho-m	0.998	-0.550
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000

Gamma Ray Calibration Report								
Serial Number:	2001							
Tool Model:	OH							
Performed:	Tue Aug 08 07:50:36 2006							
Calibrator Value:	1.0			GAPI				
Background Reading:	0.0			cps				
Calibrator Reading:	1.0			cps				
Sensitivity:	0.1800			GAPI/cps				

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
CHD	25.08		None	0.75	1.50	5.00
GR	22.83		GR-OH (2001) SIE	3.50	3.25	40.00
CILD	10.60		DIL-G (5375) Gearhart	20.83	4.00	345.00
SP	10.60					
CILM	6.89					
RLL3	1.70					

Dataset:	/field/well/run1/_plots/_jobs_/dil
Total Length:	25.08 ft
Total Weight:	390.00 lb
O.D.	4.00 in