

**Patterson**

**SINGLE  
INDUCTION  
LOG**

Company		Pioneer Natural Resources		Company	Pioneer Natural Resources
Well		Manville 42-14		Well	Manville 42-14
Field		Purgatoire River		Field	Purgatoire River
County		Las Animas		County	Las Animas
State		Colorado		State	Colorado
Location:		API # : 05 071 08385 00		Other Services CDL NEUTRON	
SEC 14 TWP 32S RGE 66W		2035' FNL & 506' FEL		Elevation	
Permanent Datum	Ground Level	Elevation	7537'	K.B. 7541'	
Log Measured From	Kelly Bushing 4'	Above G.L.		D.F. -----	
Drilling Measured From	Kelly Bushing			G.L. 7537'	
Date	6-09-05				
Run Number	One				
Depth Driller	2365'				
Depth Logger	2365'				
Bottom Logged Interval	2363'				
Top Log Interval	Surface Casing				
Casing Driller	8 5/8" @ 846'				
Casing Logger	849'				
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	6:00 A.M.				
Time Logger on Bottom	8:35 A.M.				
Maximum Recorded Temperature	N/R				
Equipment Number	T720				
Location	Trinidad				
Recorded By	M. Norton				
Witnessed By	Mr. Cal Elton				

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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**

Bon Carbo Right At The Post Office, Left At County Road 51.0,  
Third Left, Thru The Trojan, First Left After The Trojan, Second Left To Location.

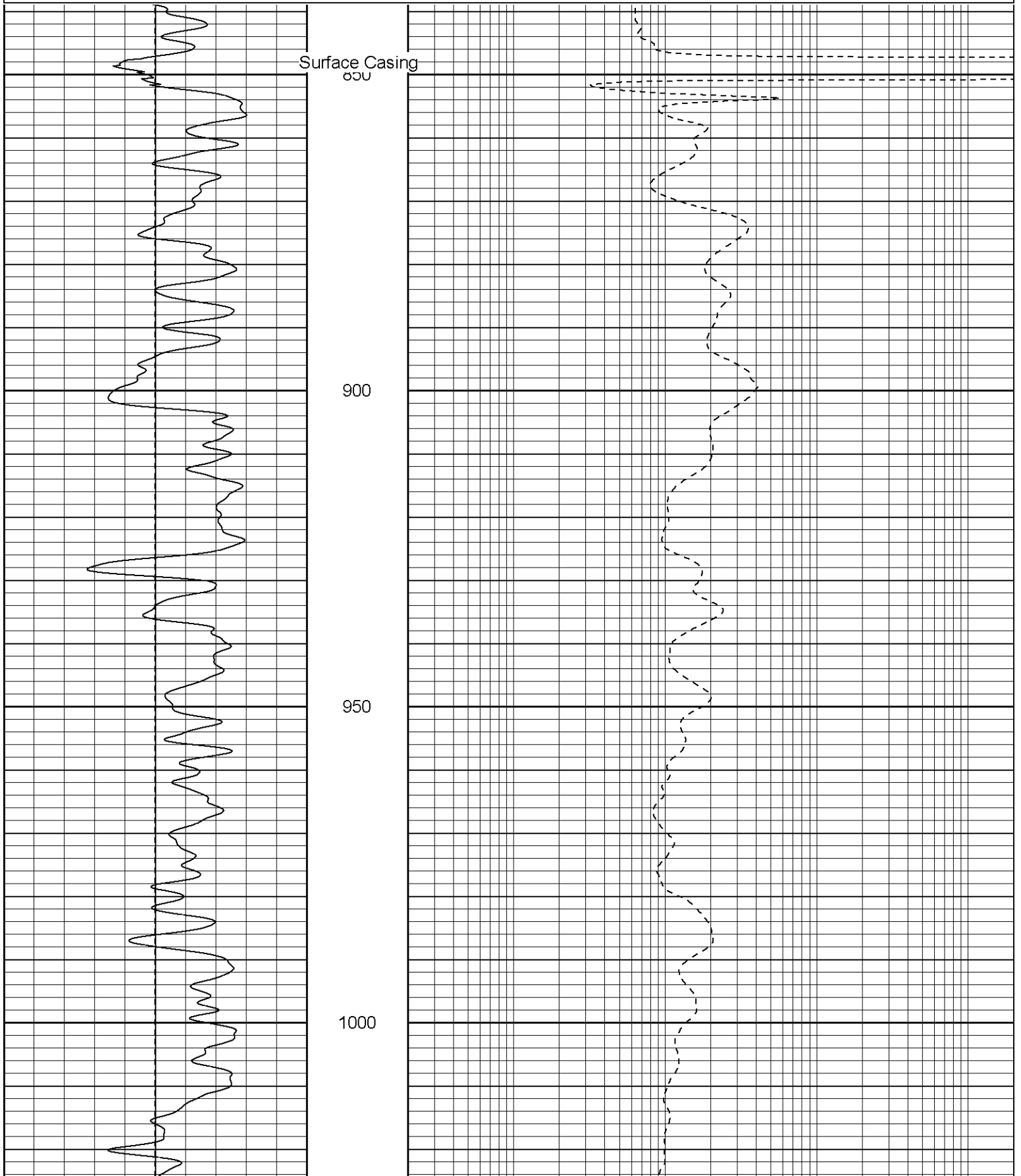
**Patterson**

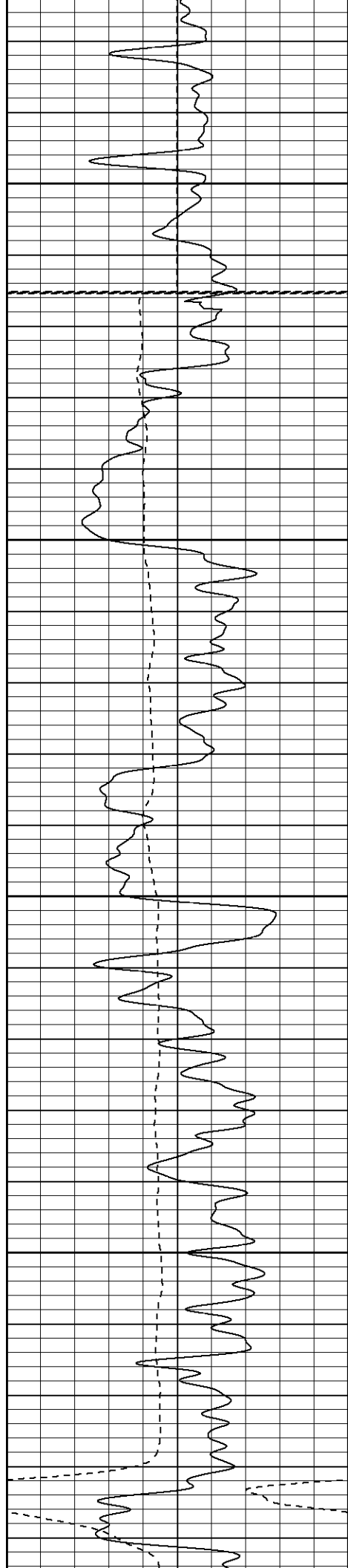
**Main Pass**

Database File: manville.db  
Dataset Pathname: pass2.2  
Presentation Format: iel  
Dataset Creation: Thu Jun 09 13:55:15 2005 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	DIR (Ohm-m)	2000
0.2	SN (Ohm-m)	2000





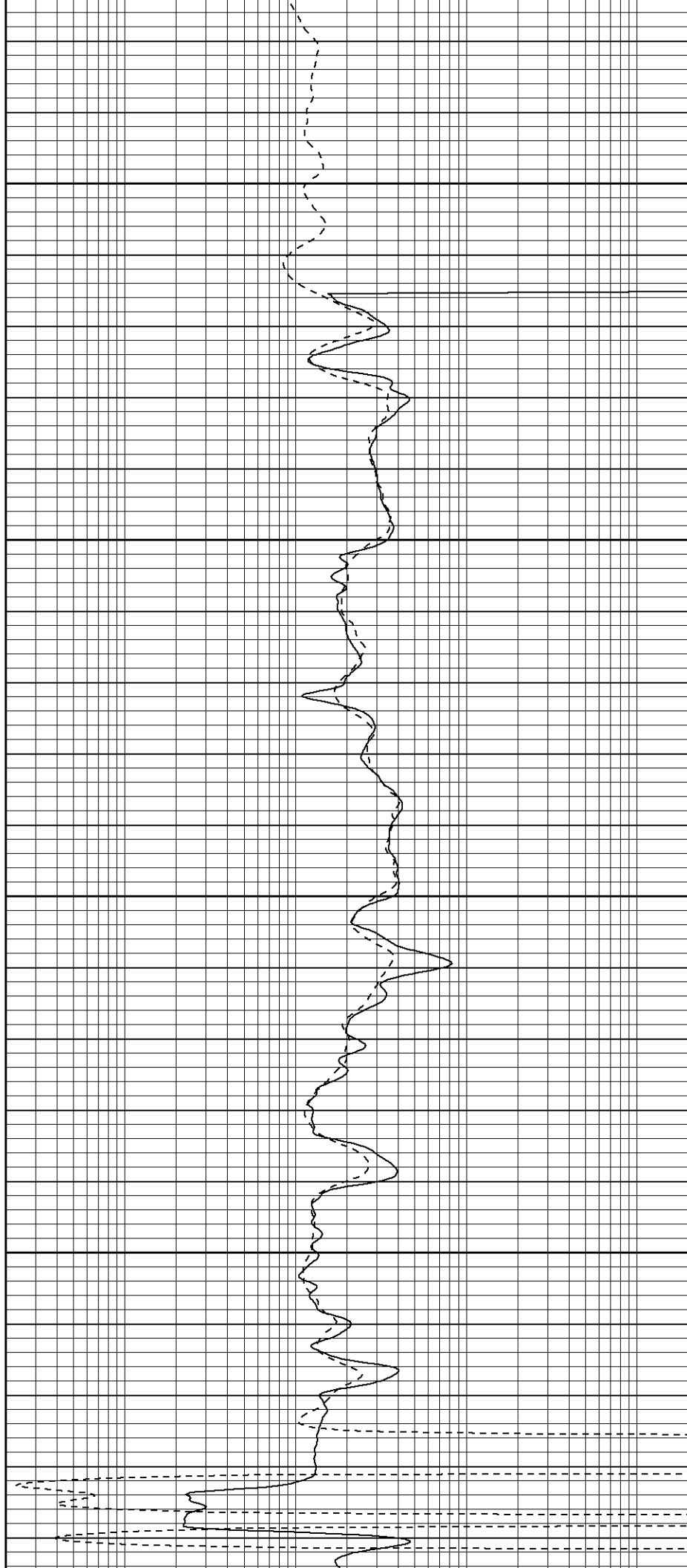
1050

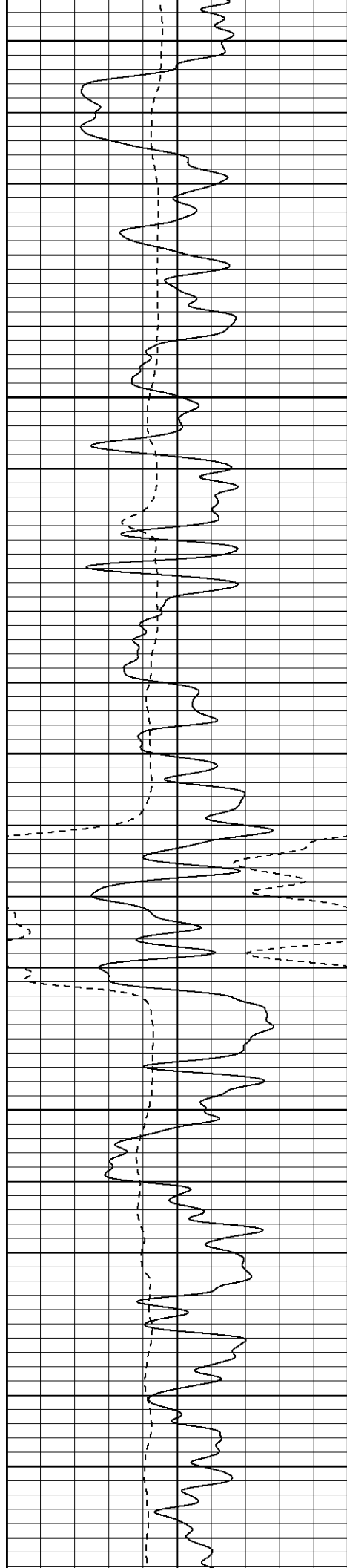
Fluid Level

1100

1150

1200





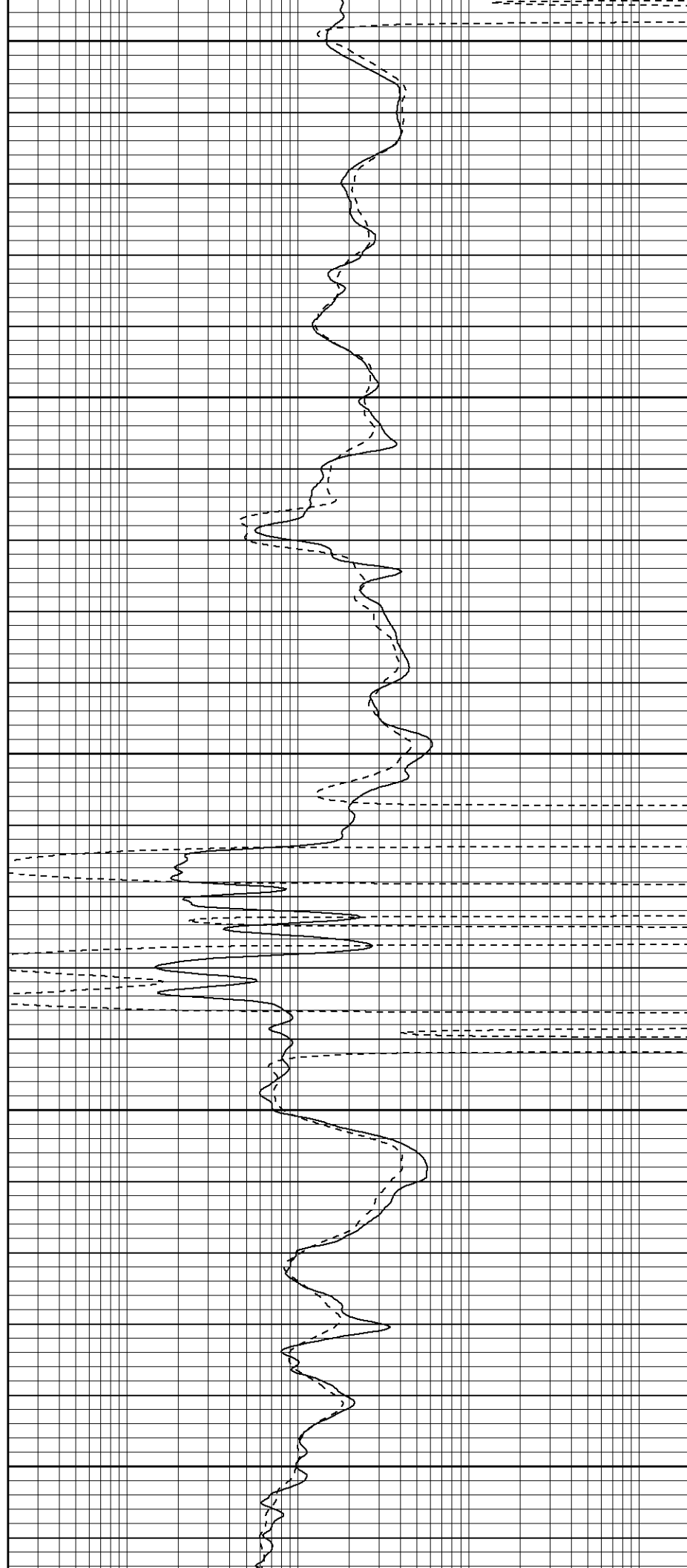
1250

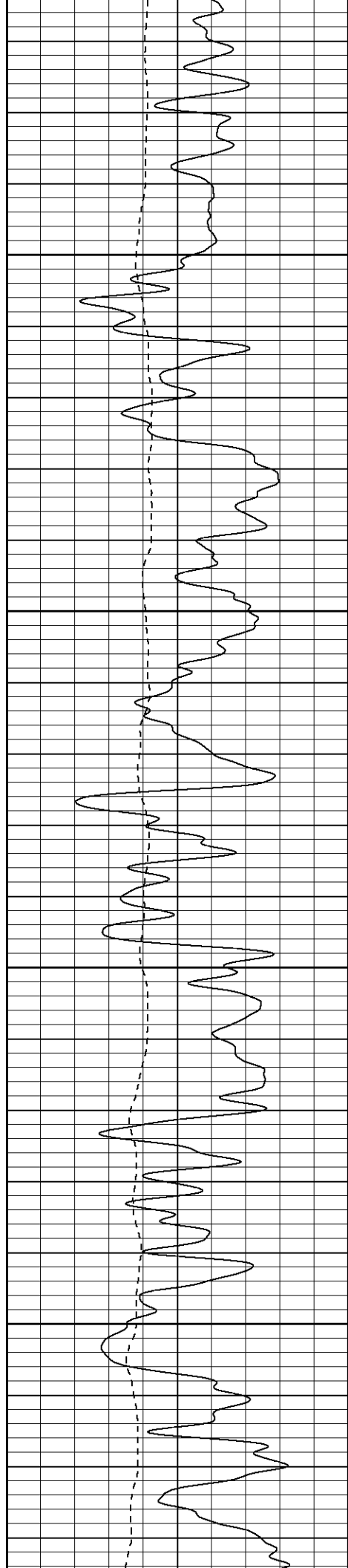
1300

1350

1400

1450



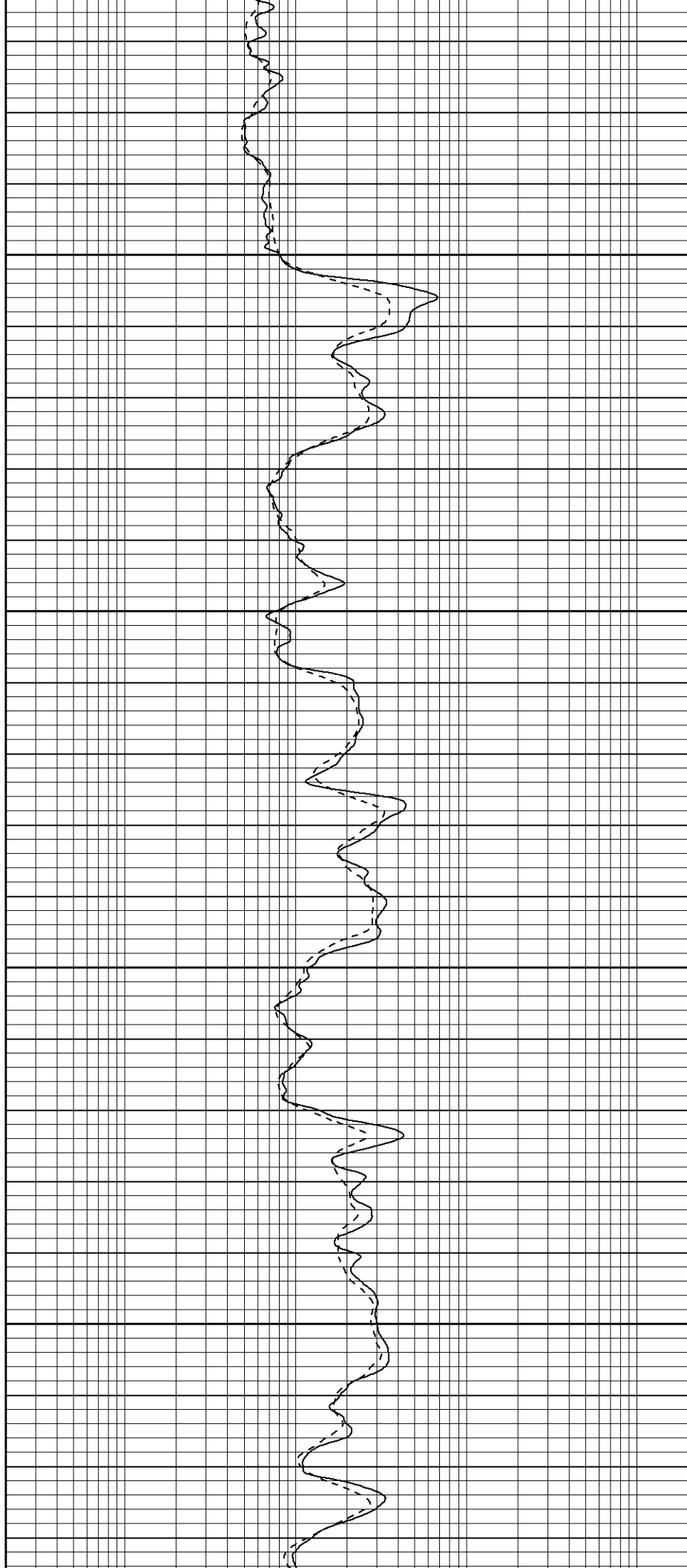


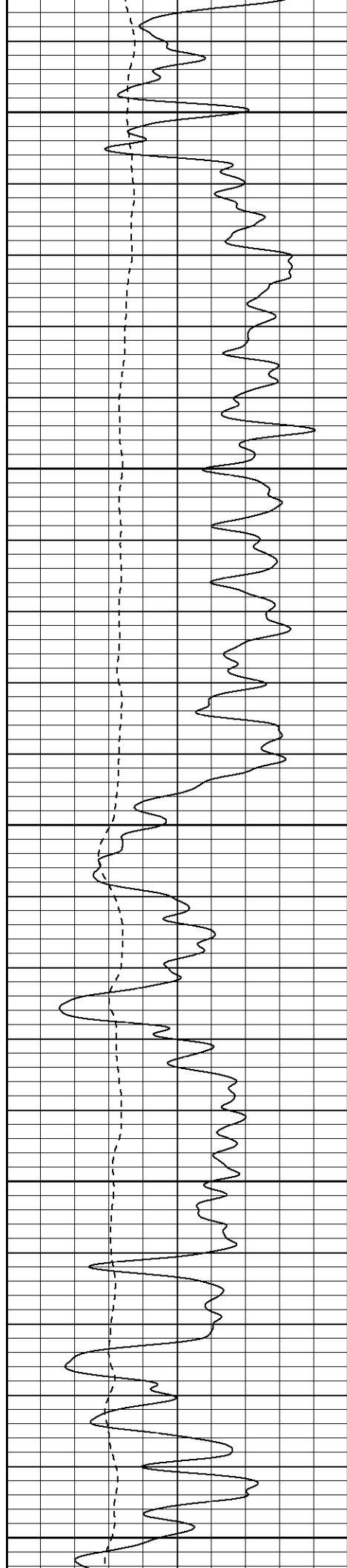
1500

1550

1600

1650





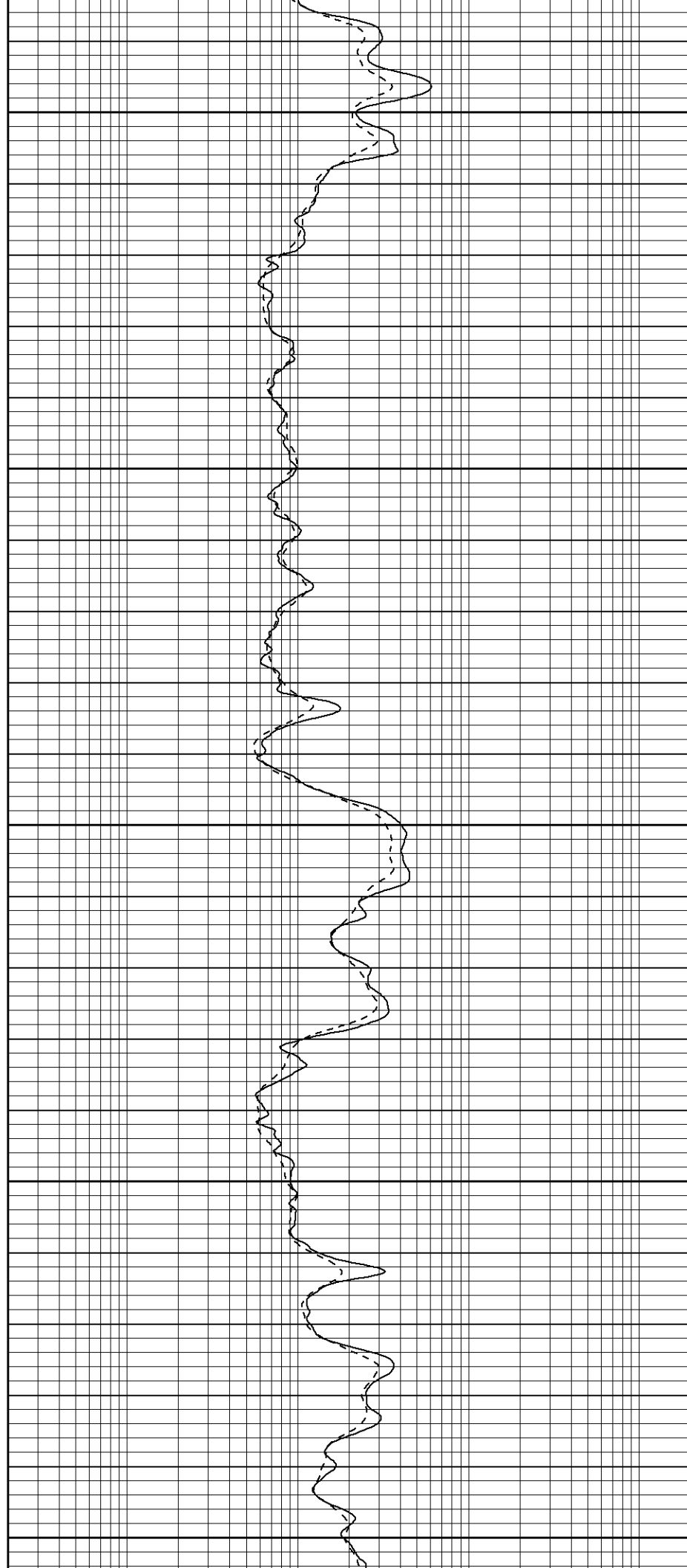
1700

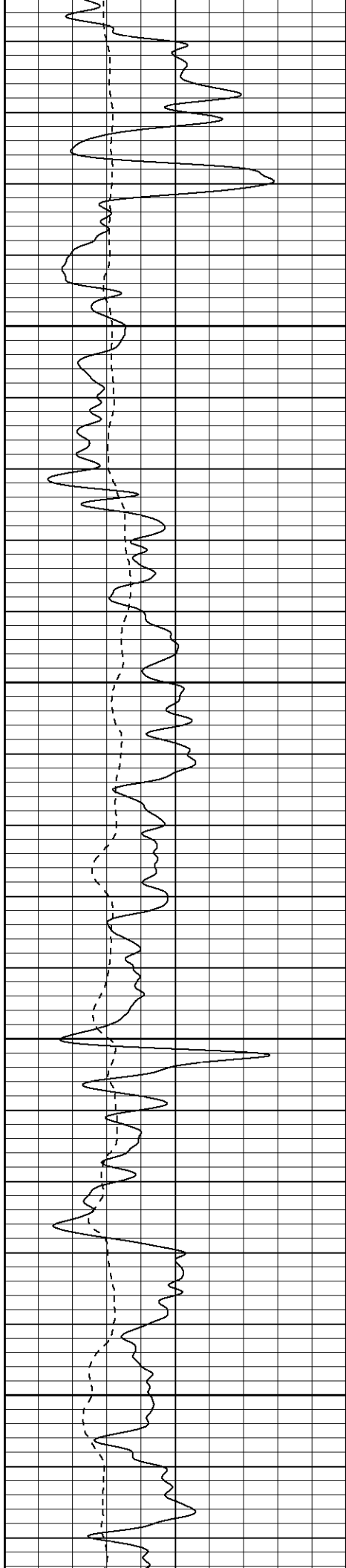
1750

1800

1850

1900



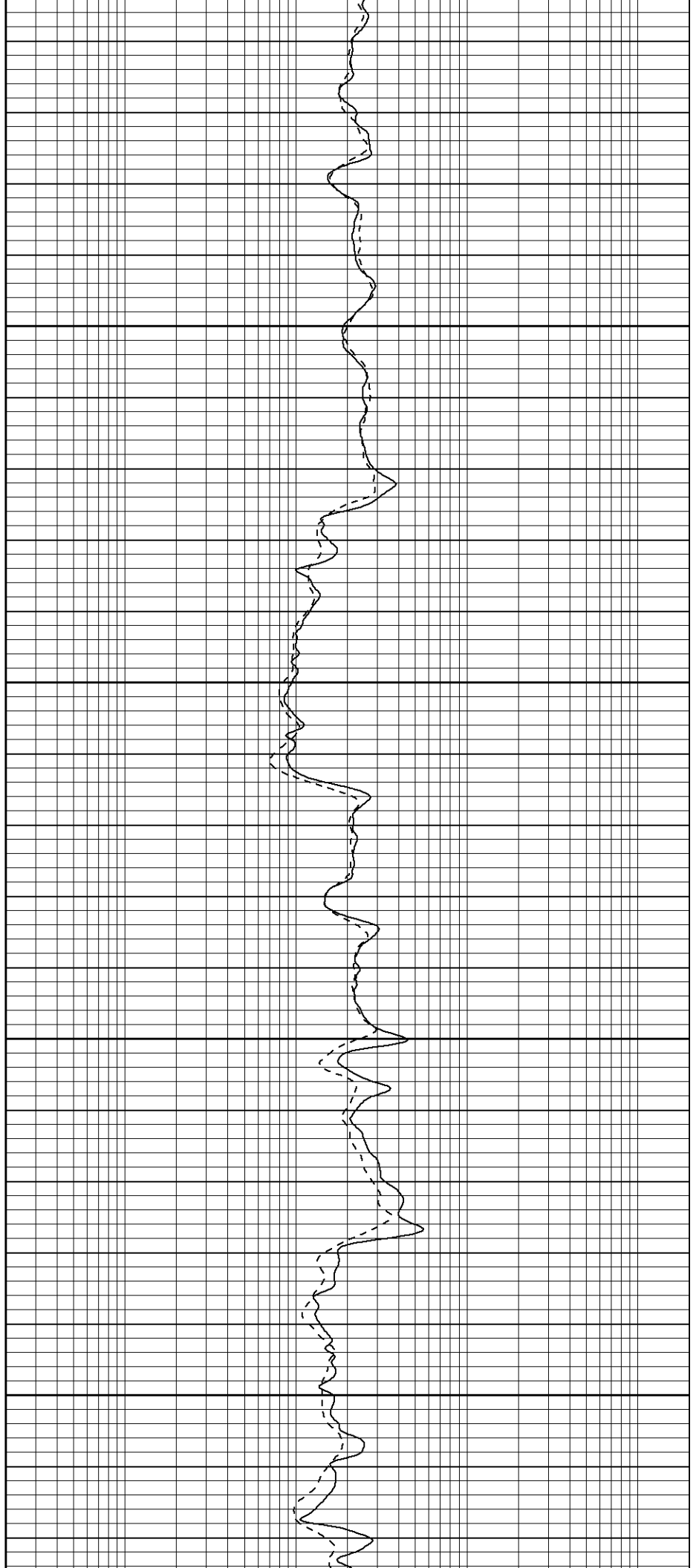


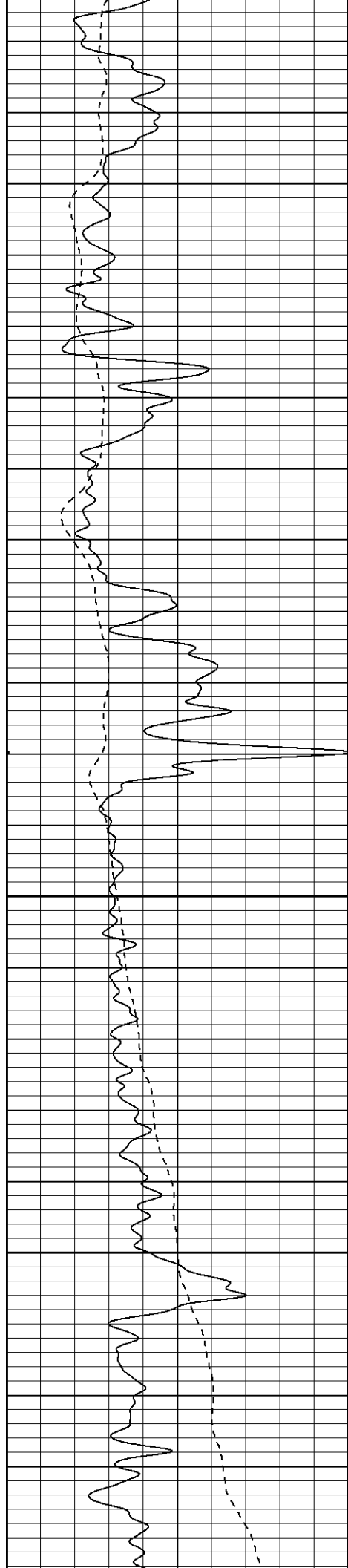
1950

2000

2050

2100



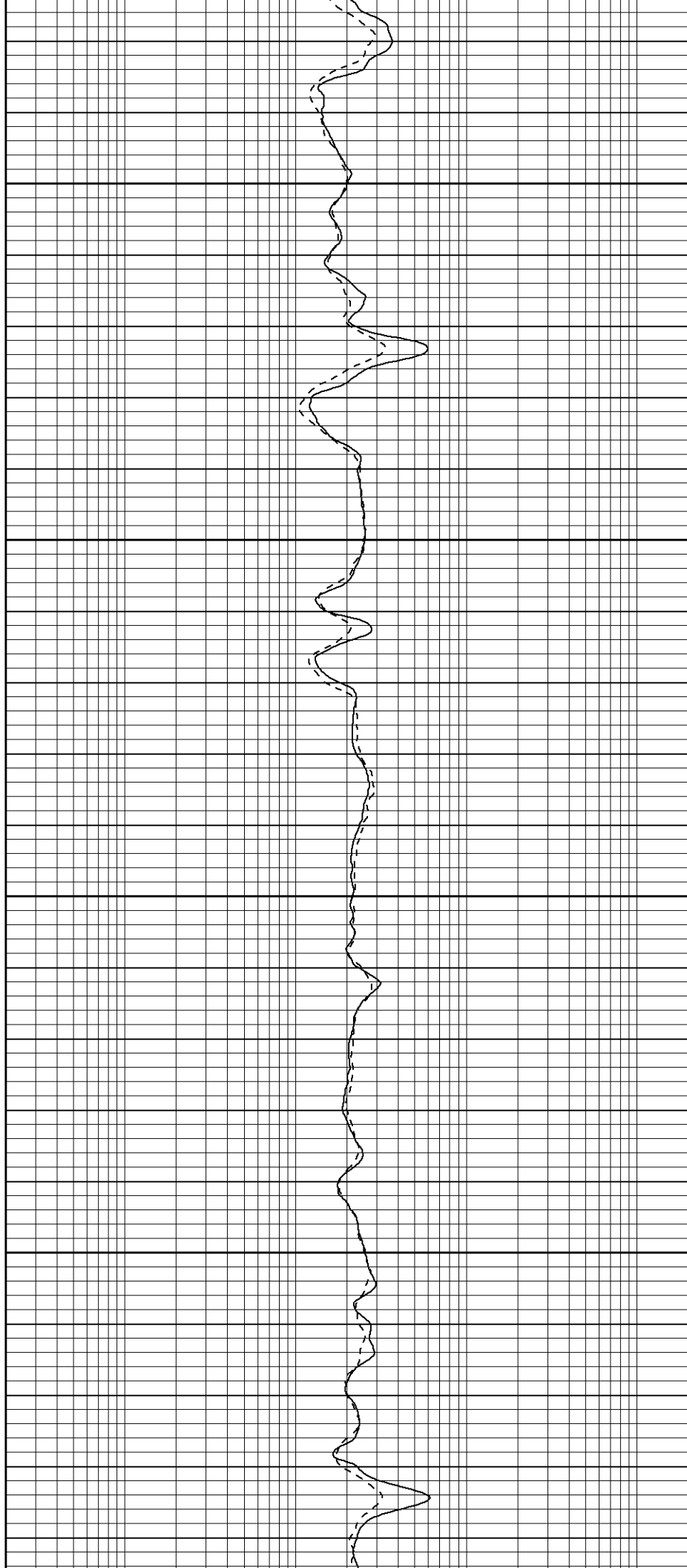


2150

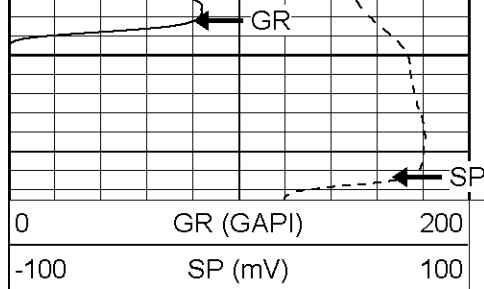
2200

2250

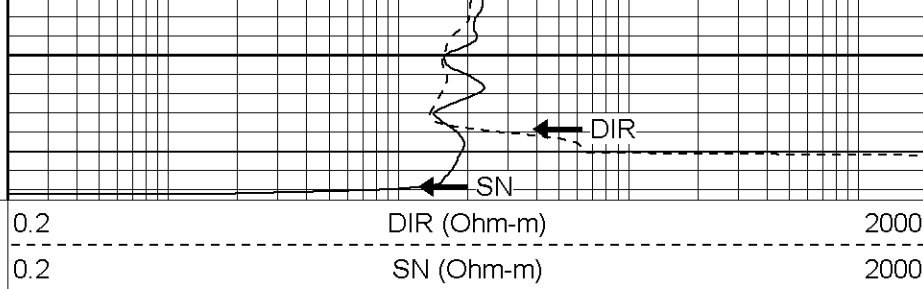
2300







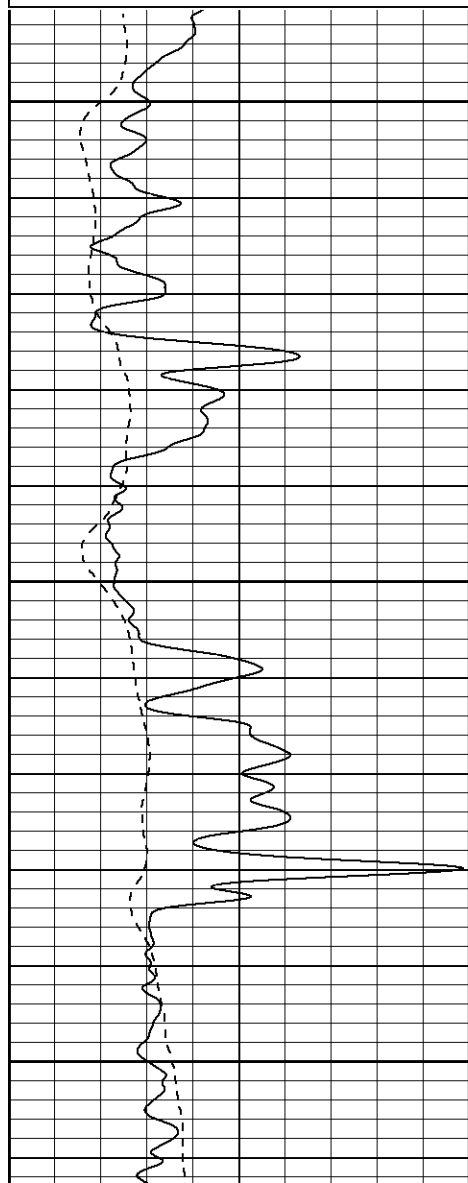
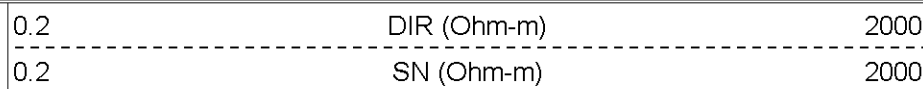
2350



**Patterson**

# Repeat Section

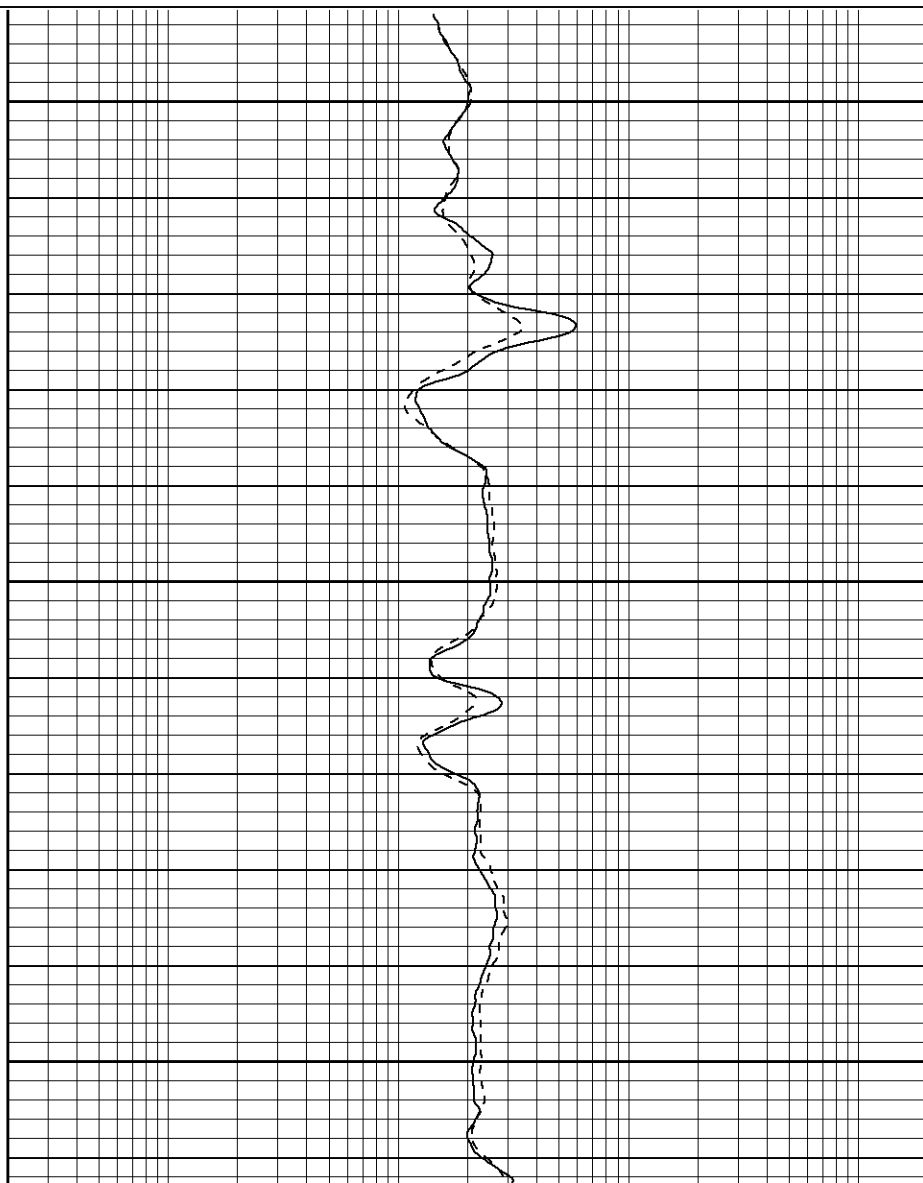
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 Dataset Pathname: pass1.2  
 Presentation Format: iel  
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 Charted by: Depth in Feet scaled 1:240

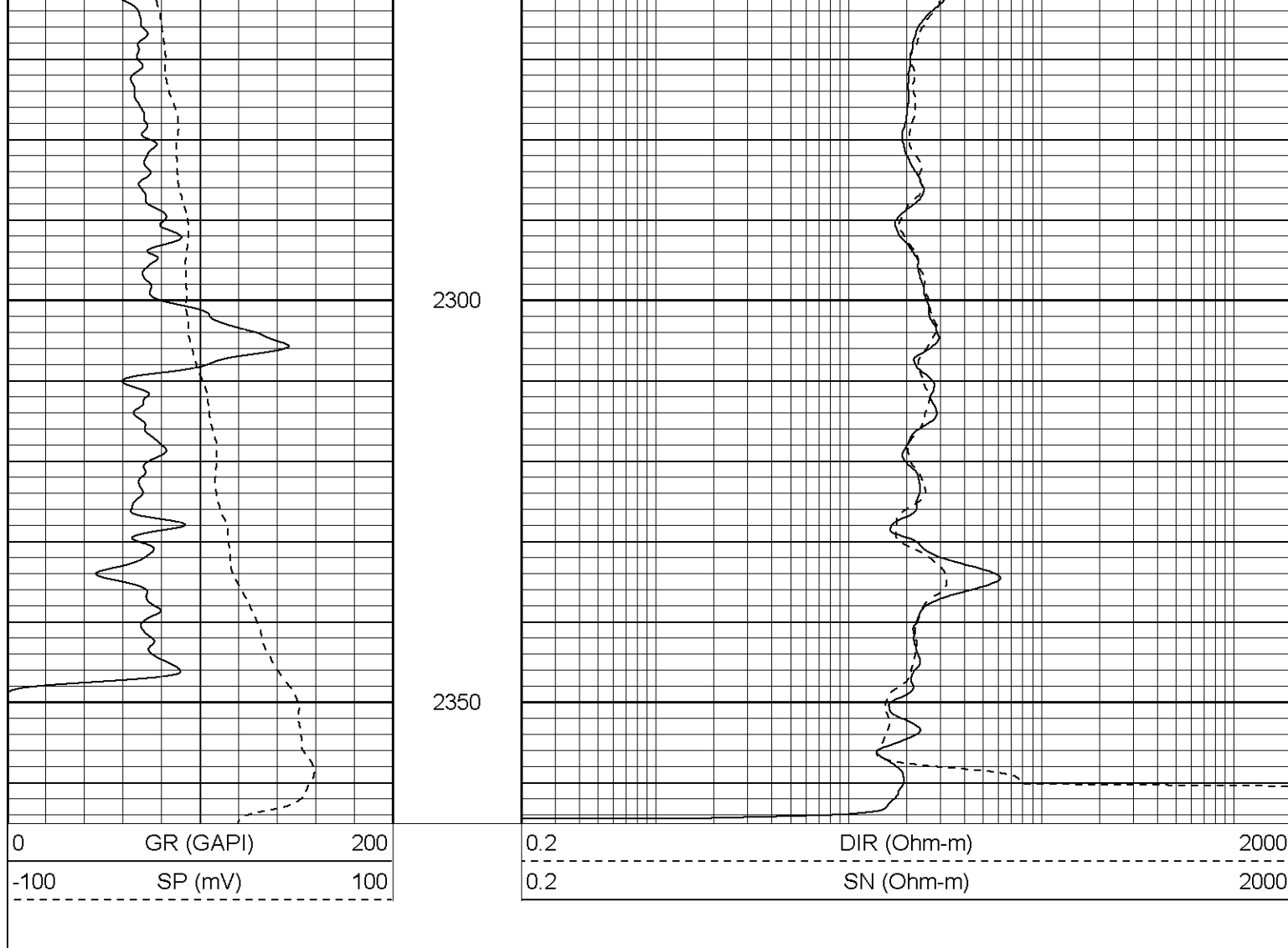


2150

2200

2250





Induction Tool Calibration Report				
Serial Number:		106		
Tool Model:		G		
Downhole Cal Performed:		Thu Jun 09 08:41:16 2005		
Surface Cal Performed:		Tue Jun 07 13:43:59 2005		
Surface Calibration:		Air	Loop	
Conductivity Reference:		0.000	450.000	mmho
Conductivity Reading:		-0.002	0.634	V
Internal Reference:		Zero	Cal	
Conductivity Reference:		0.000	500.000	mmho
Conductivity Reading:		0.002	0.633	V
Downhole Calibration:		Internal Zero	Internal Cal	
Conductivity Reference:		0.004	449.717	mmho
Conductivity Reading:		9.305	468.248	V
Short Normal Reference:		0.000	17.000	Ohm-m
Short Normal Reading:		0.007	0.211	V
Results:		Gain	Offset	
Loop Conductivity:		707.850	1.416	
Downhole Correction:		0.980	-9.113	
Short Normal Resistivity:		85.000	-1.000	

Gamma Ray Calibration Report	
Serial Number:	2001
Tool Model:	CU

Tool Model:	CH	
Performed:	Mon May 30 03:02:18 2005	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.2400	GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
CHD	19.50		None	0.75	1.50	5.00
GR	17.25		GR-OH (2001) SIE	3.50	3.25	40.00
DIC	6.89		IEL-G (106)	15.25	4.00	178.00
SP	1.50					
SN	1.00					
Dataset: /field/well/run1/_plots/_jobs_/sil Total Length: 19.50 ft Total Weight: 223.00 lb O.D. 4.00 in						