

**Patterson**

**SINGLE  
INDUCTION  
LOG**

Company Pioneer Natural Resources  
Well Olympian 13-31  
Field Purgatoire River  
County Las Animas State Colorado

Location: API # : 05 071 08504 00

2375' FSL & 517' FWL

Other Services  
CDL  
NEUTRON

SEC 31 TWP 31S RGE 65W

Permanent Datum Ground Level Elevation 7396'  
Log Measured From Kelly Bushing 4' Above G.L.  
Drilling Measured From Kelly Bushing

Elevation  
K.B. 7400'  
D.F. -----  
G.L. 7396'

Date 9-11-05

Run Number One

Depth Driller 2100'

Depth Logger 2082'

Bottom Logged Interval 2080'

Top Log Interval Surface

Casing Driller 8 5/8" @ 852'

Casing Logger 852'

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 6:35 P.M.

Maximum Recorded Temperature N/R

Equipment Number T720

Location Trinidad

Recorded By M. Norton

Witnessed By Mr. Jack Wiseman

**Comments**

Well Directions:  
Ludlow At Y Stay Left, County Road 51.0, First Location On The Right.

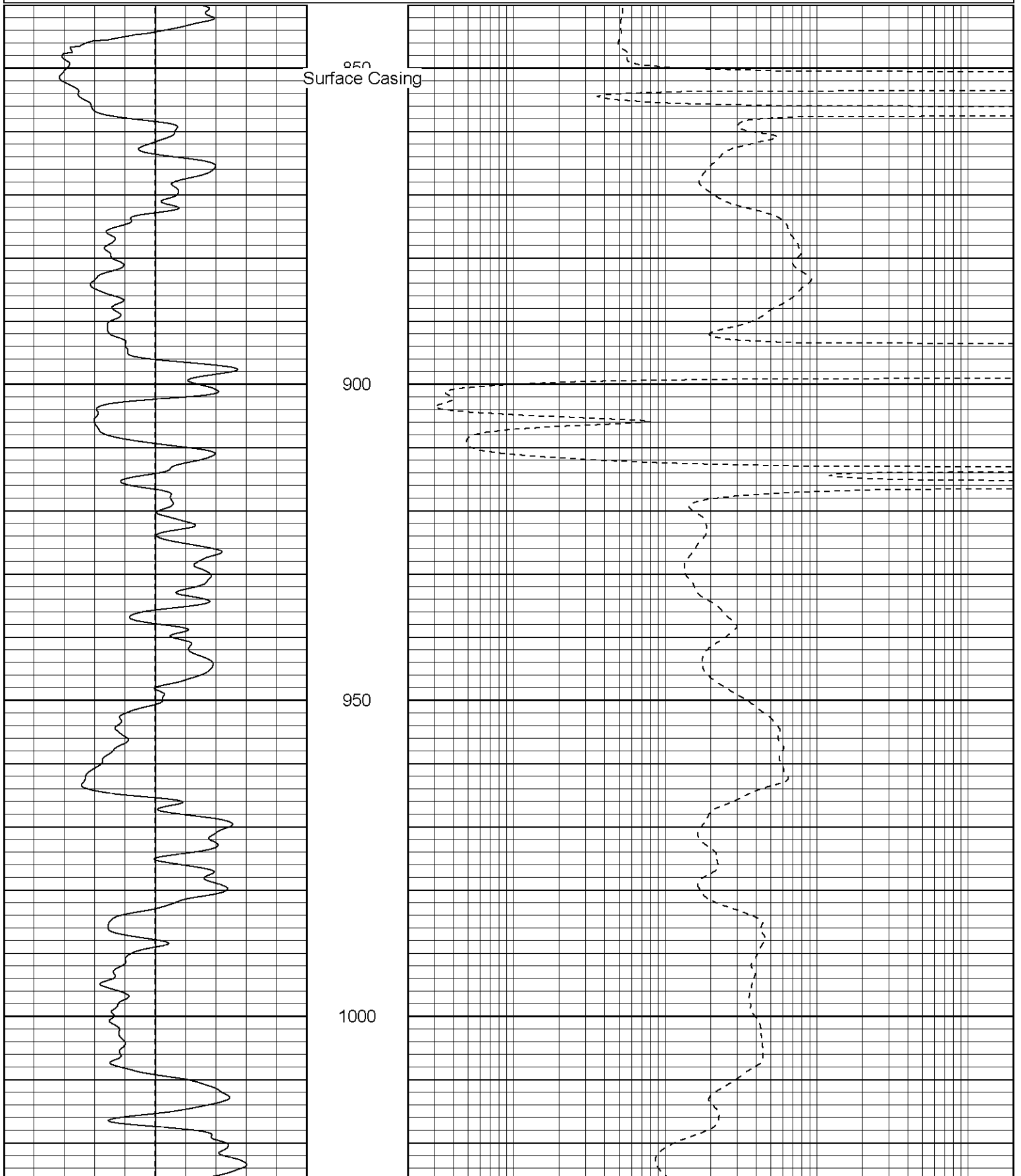
**Patterson**

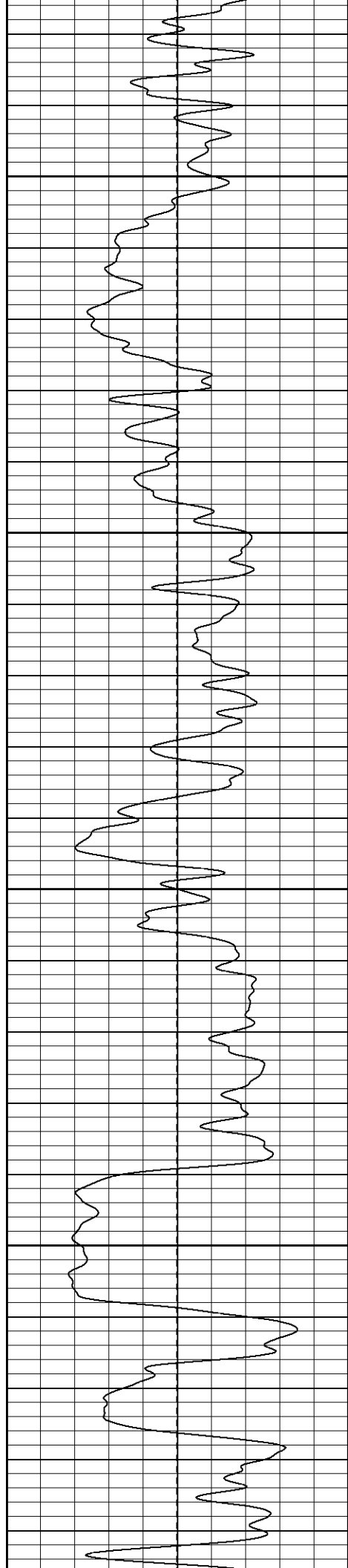
**Main Pass**

Database File: olympian.db  
Dataset Pathname: pass2.1  
Presentation Format: iel  
Dataset Creation: Sun Sep 11 20:18:28 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



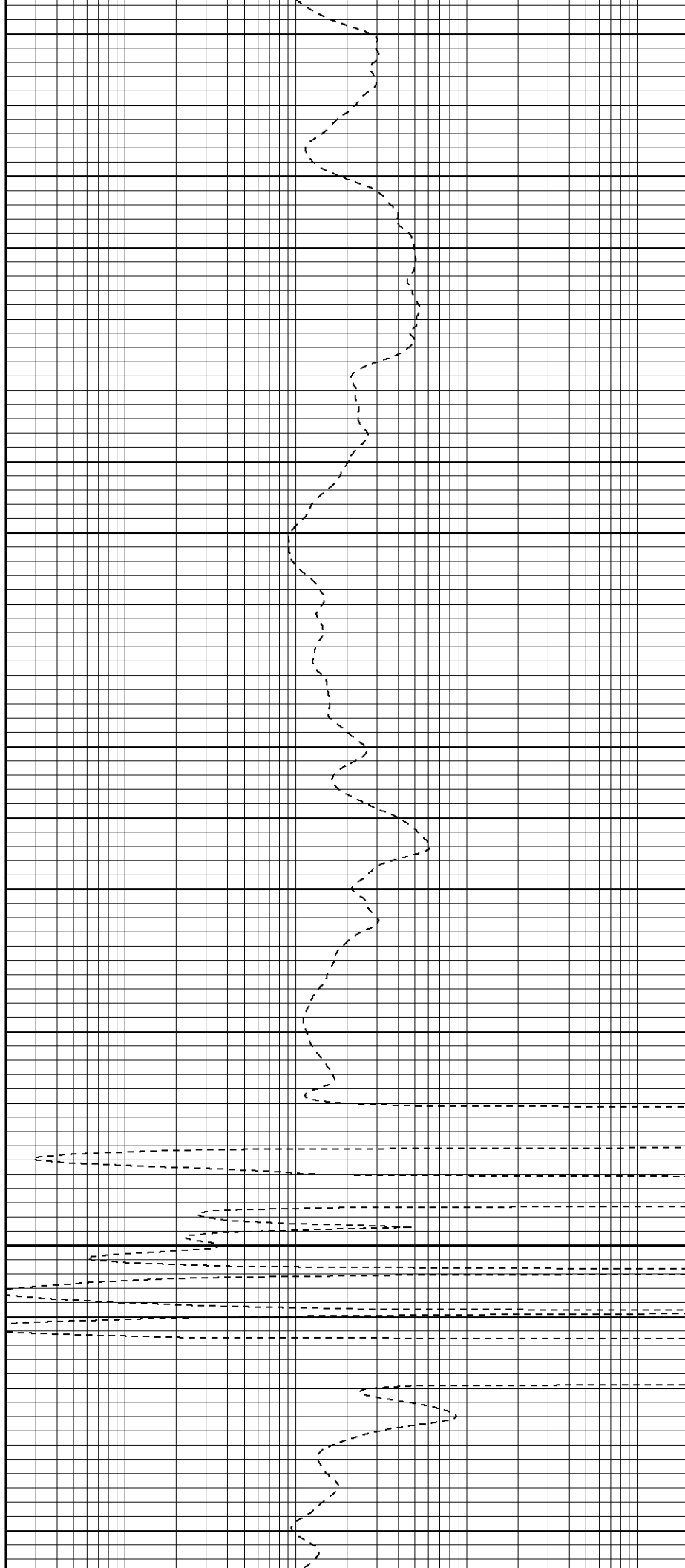


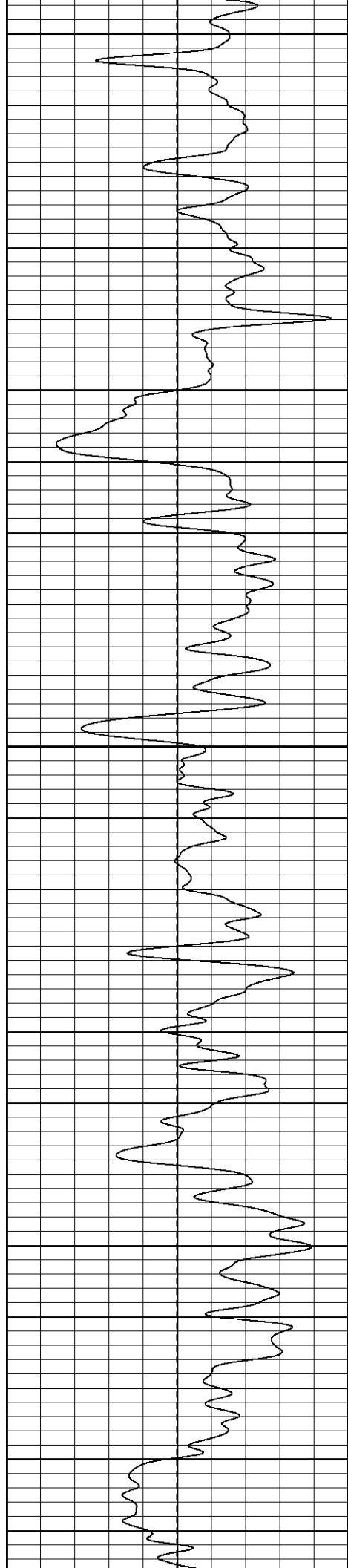
1050

1100

1150

1200





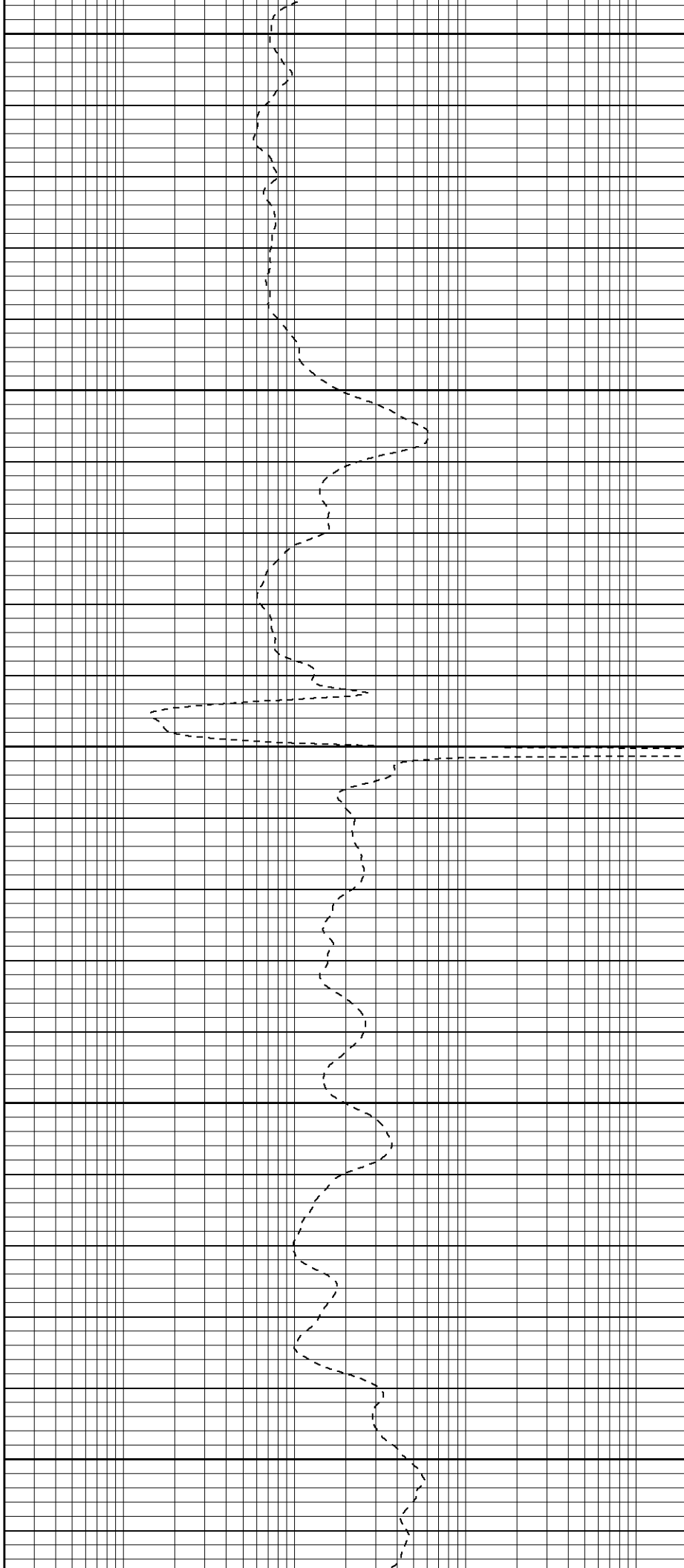
1250

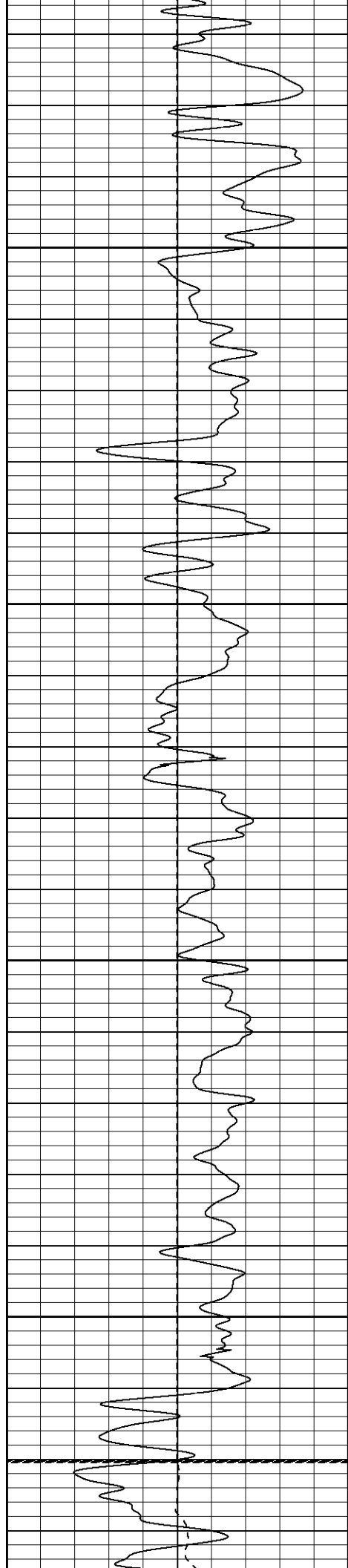
1300

1350

1400

1450





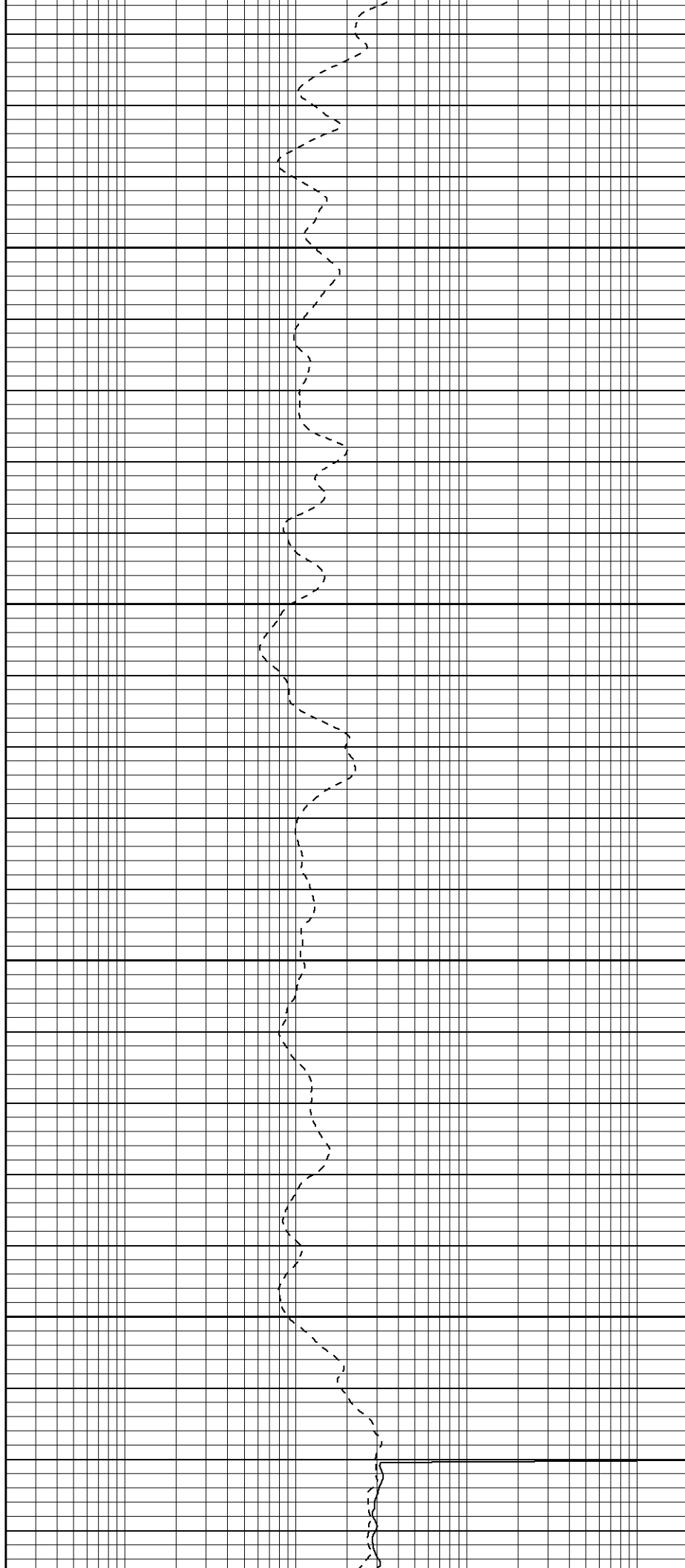
1500

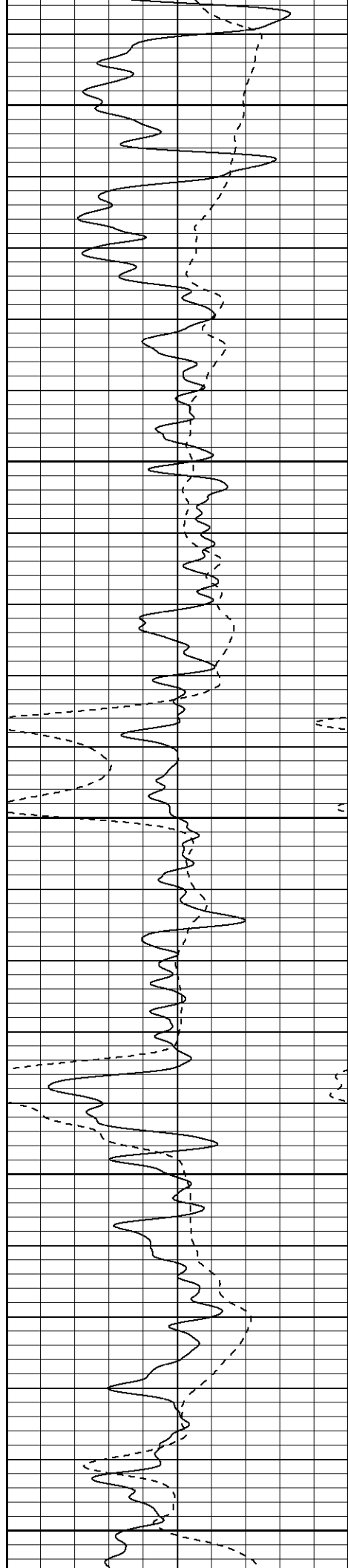
1550

1600

1650

Fluid Level





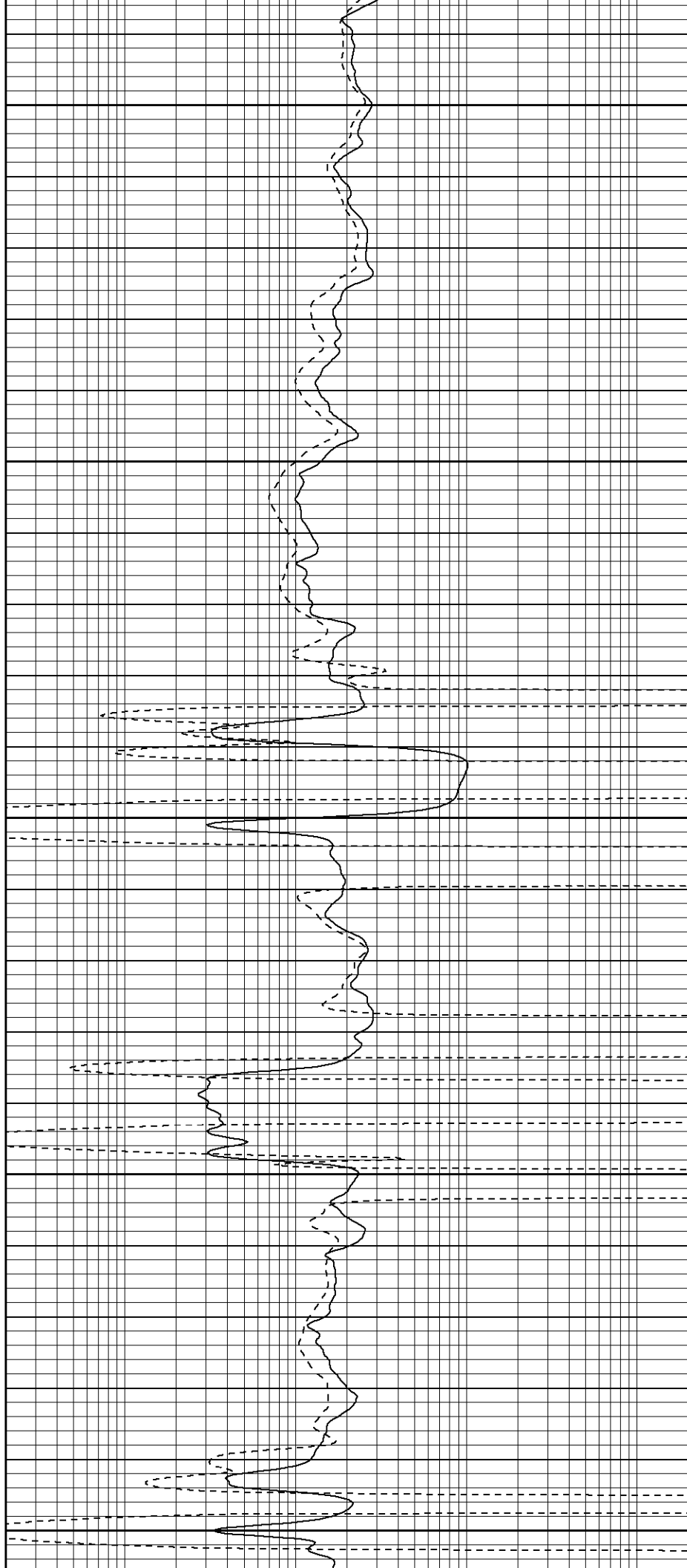
1700

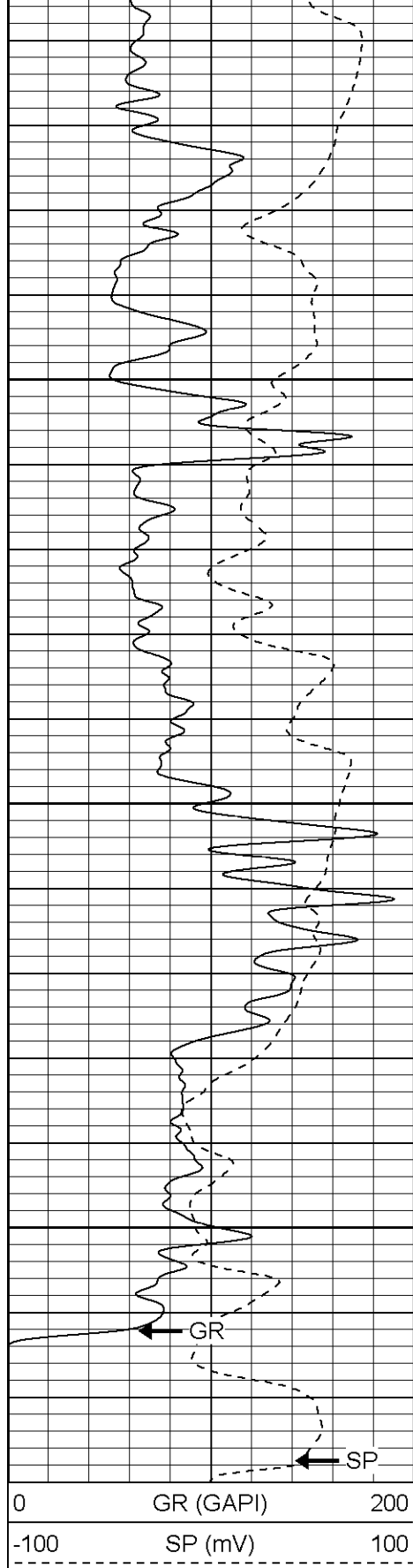
1750

1800

1850

1900

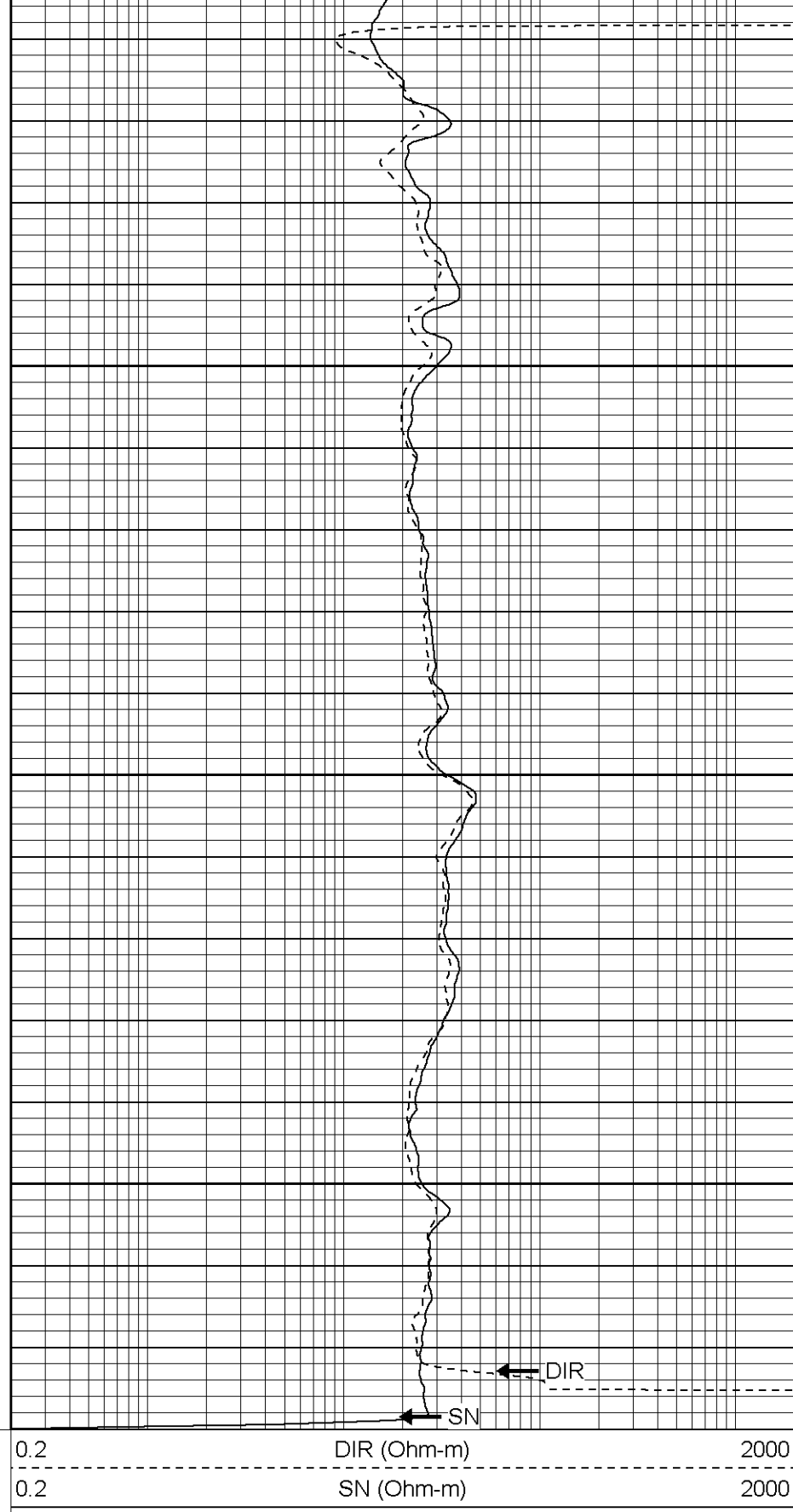




1950

2000

2050



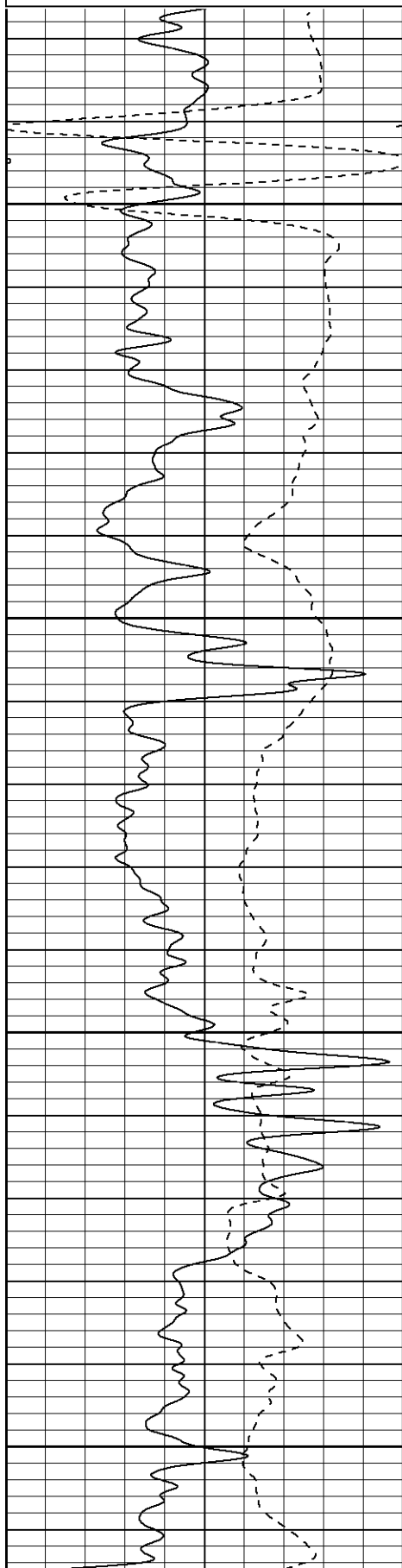
**Patterson**

**Repeat Section**

Dataset Pathname: pass1.1  
Presentation Format: iel  
Dataset Creation: Sun Sep 11 20:17:34 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

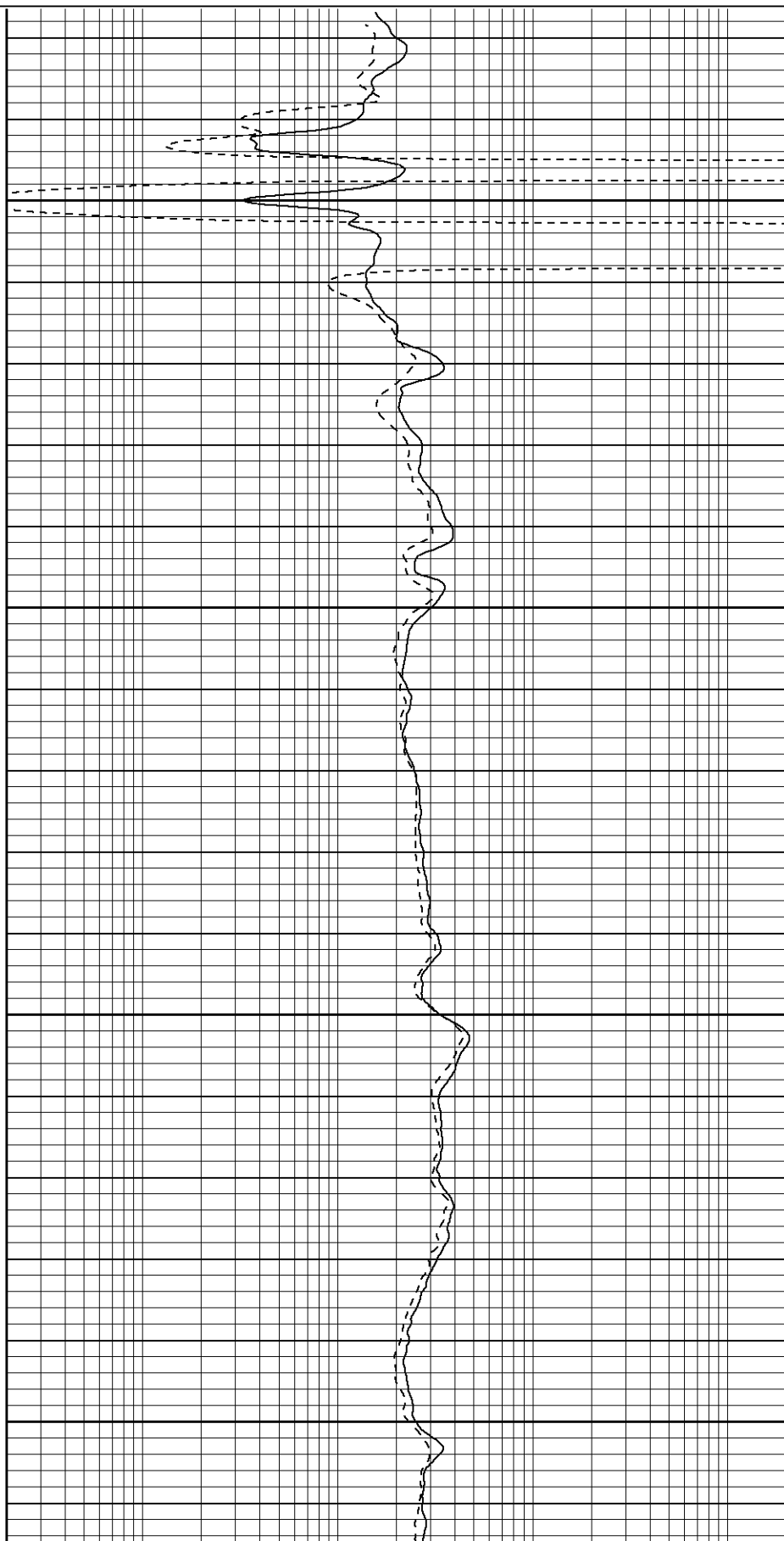


1900

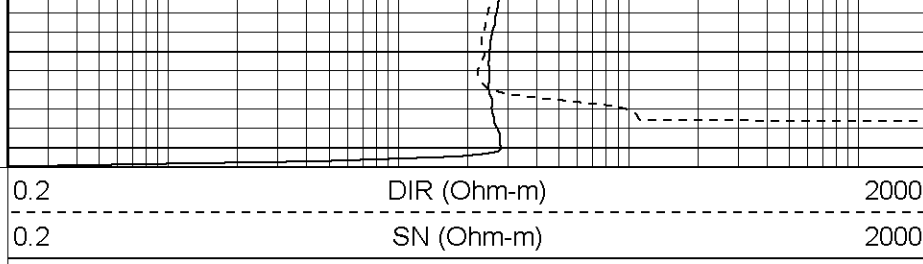
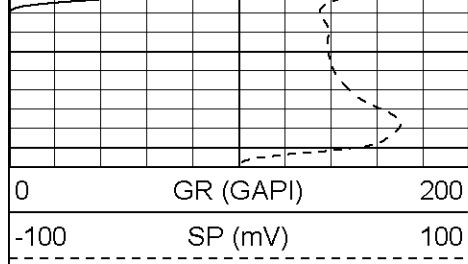
1950

2000

2050







### Induction Tool Calibration Report

Serial Number: 106  
Tool Model: G  
Downhole Cal Performed: Fri Sep 09 16:37:37 2005  
Surface Cal Performed: Wed Jul 06 15:00:32 2005

Surface Calibration:	Air	Loop	
Conductivity Reference:	0.000	450.000	mmho
Conductivity Reading:	-0.060	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:	37.351	470.551	V
Short Normal Reference:	0.000	17.000	Ohm-m
Short Normal Reading:	0.006	0.207	V

Results:	Gain	Offset
Loop Conductivity:	648.669	38.920
Downhole Correction:	1.038	-38.770
Short Normal Resistivity:	110.000	0.000

### Gamma Ray Calibration Report



Serial Number: 2001  
Tool Model: OH  
Performed: Thu Aug 25 08:21:40 2005

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps  
Calibrator Reading: 1.0 cps

Sensitivity: 0.2000 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					