



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

## DUAL INDUCTION LOG

Company XTO Energy Inc.  
Well Apache Canyon 35-14-2  
Field Purgatoire River  
County Las Animas State Colorado

Location: API # : 05 071 09233 00

1077' FSL & 2121' FWL

SEC 35 TWP 33S RGE 67W

Permanent Datum Ground Level Elevation 7008'  
Log Measured From Ground Level  
Drilling Measured From Ground Level

Other Services  
CDL  
NEUTRON  
Elevation  
K.B. -----  
D.F. -----  
G.L. 7008'

Date 4-29-07

Run Number One

Depth Driller 1750'

Depth Logger 1750'

Bottom Logged Interval 1748'

Top Log Interval Surface

Casing Driller 8 5/8" @ 494'

Casing Logger 494'

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 3:15 P.M.

Maximum Recorded Temperature 95 DEG F

Equipment Number T0697

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 just before Weston,  
first right just after compressor (thru contractor yard)



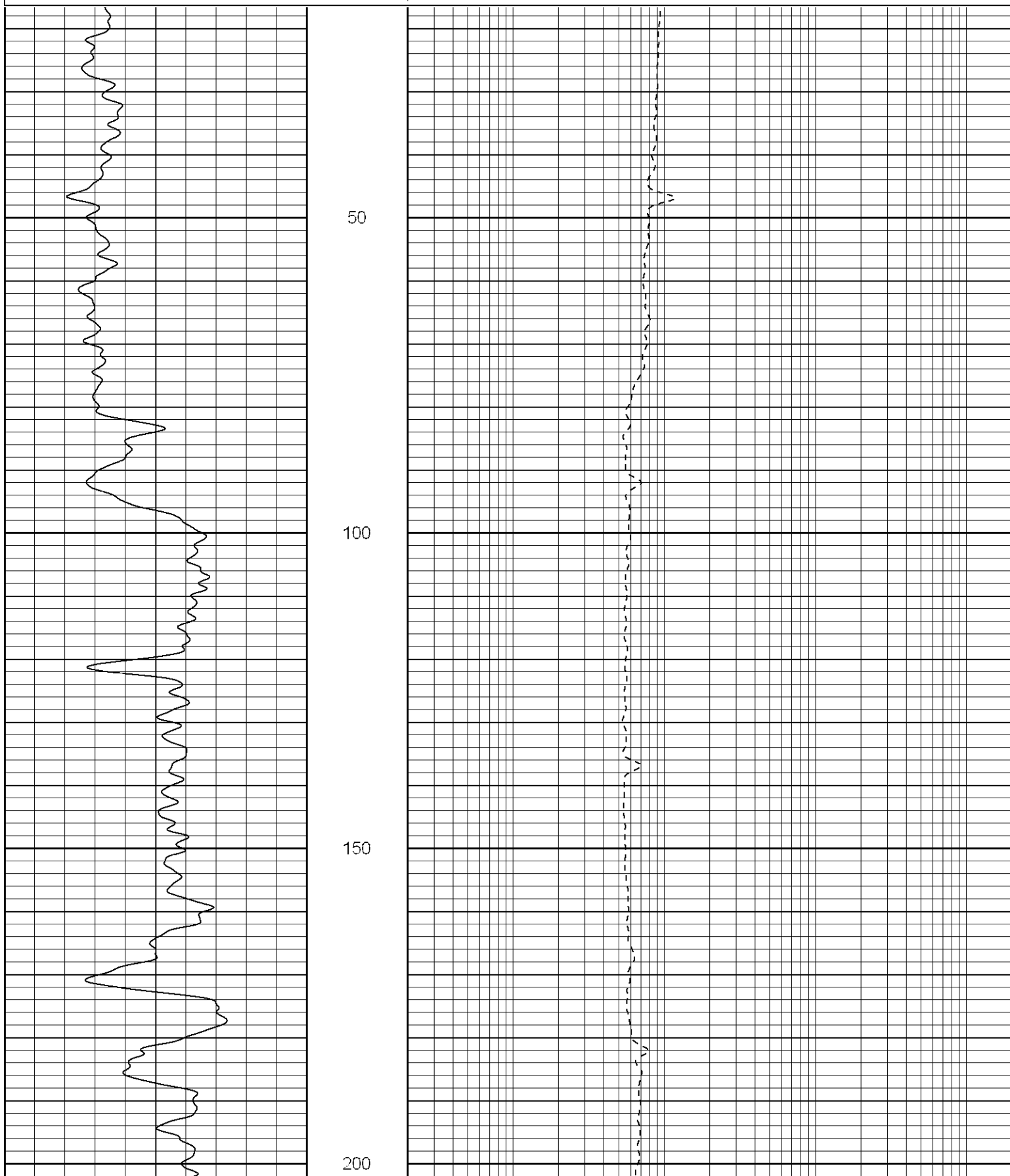
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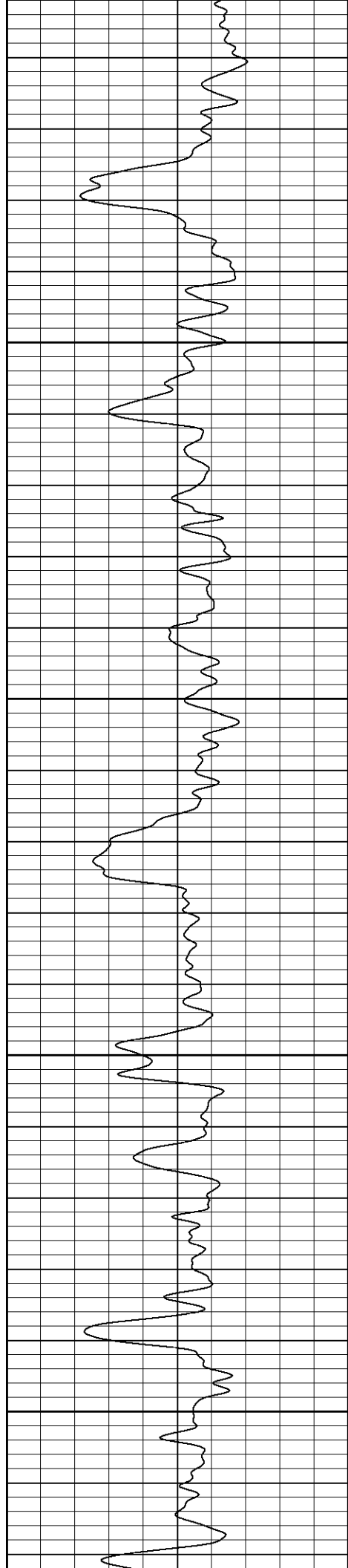
# Main Pass

Database File: xtoac35142.db  
Dataset Pathname: pass2.1  
Presentation Format: dil  
Dataset Creation: Sun Apr 29 16:47:08 2007 by Calc Open-Cased 061129  
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



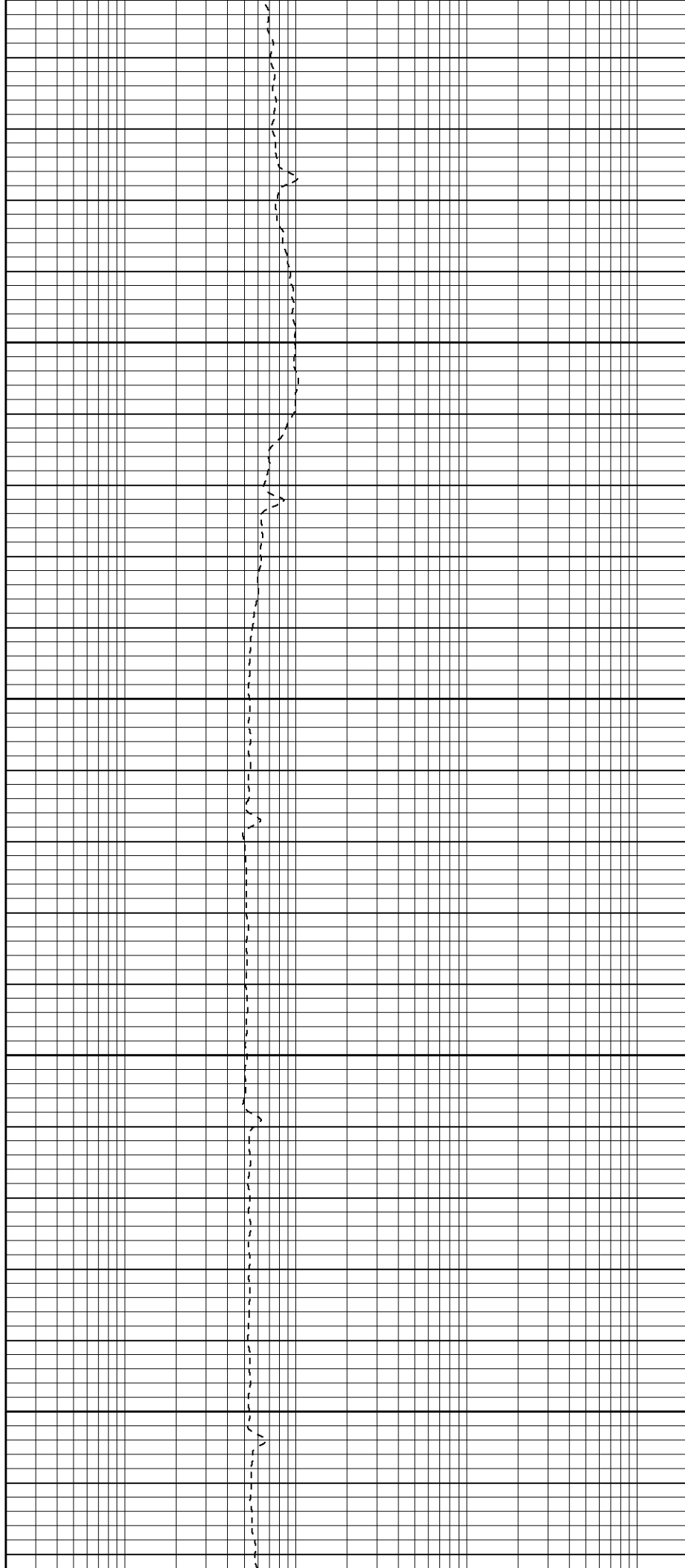


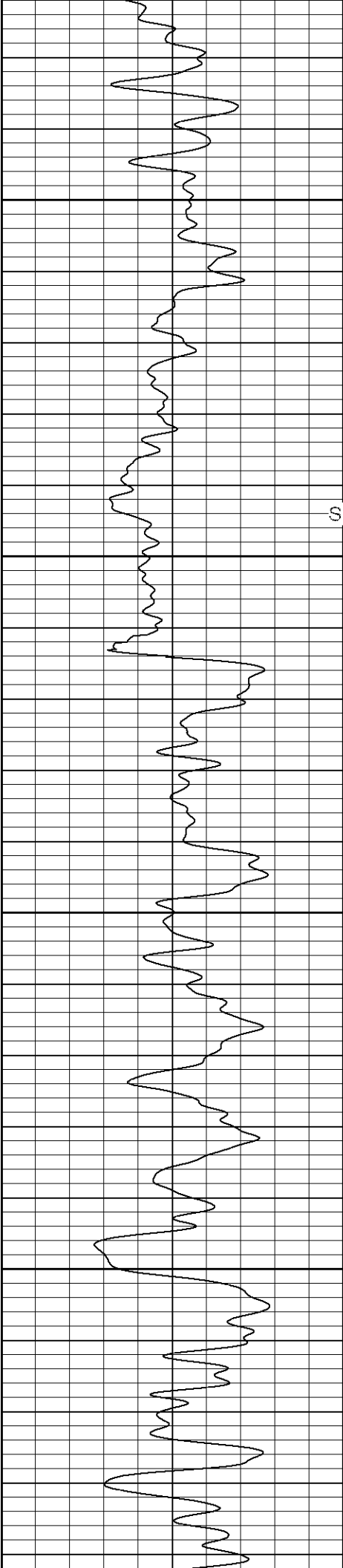
250

300

350

400





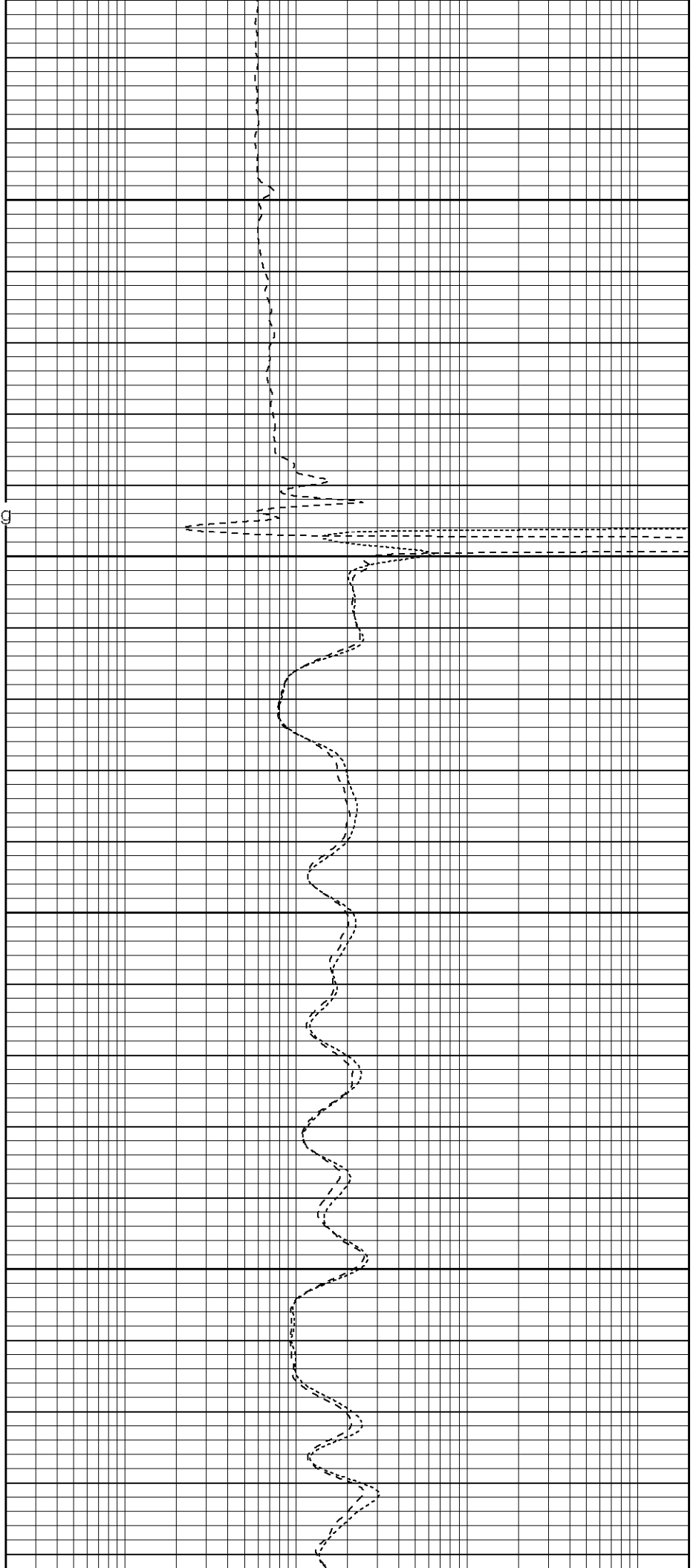
450

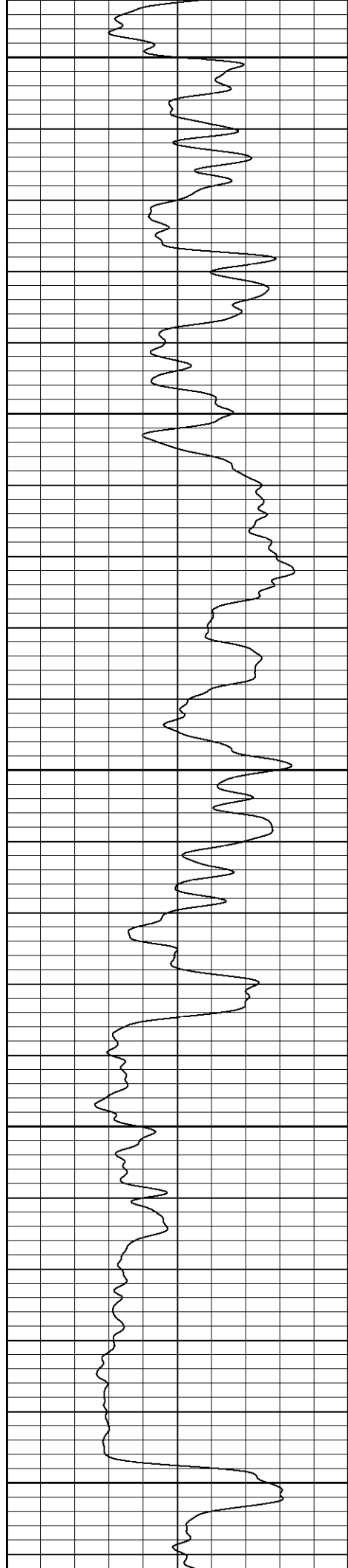
Surface Casing

500

550

600





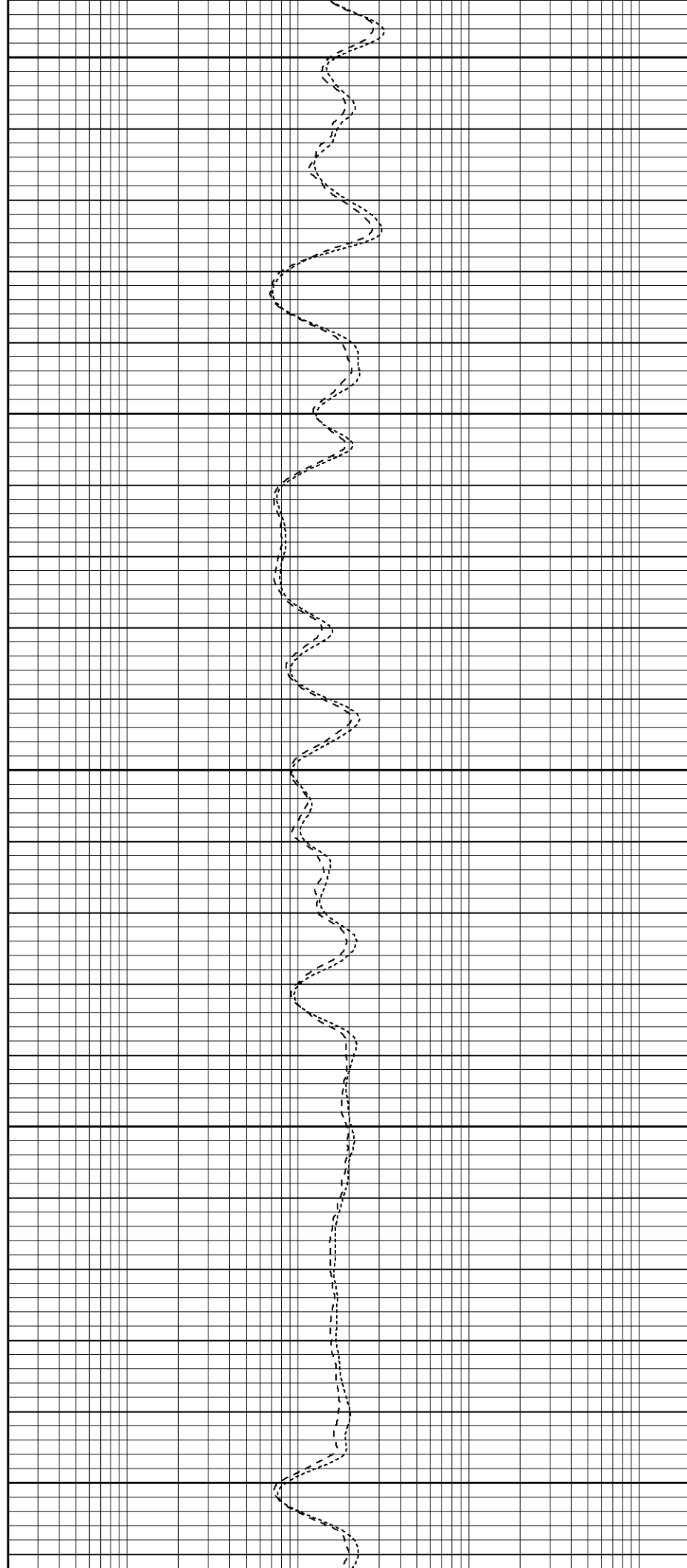
650

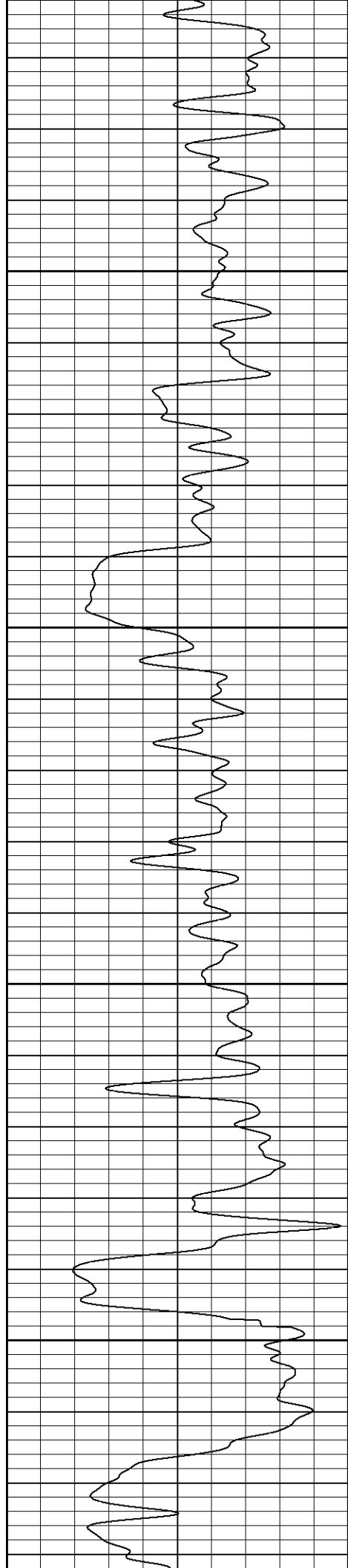
700

750

800

850



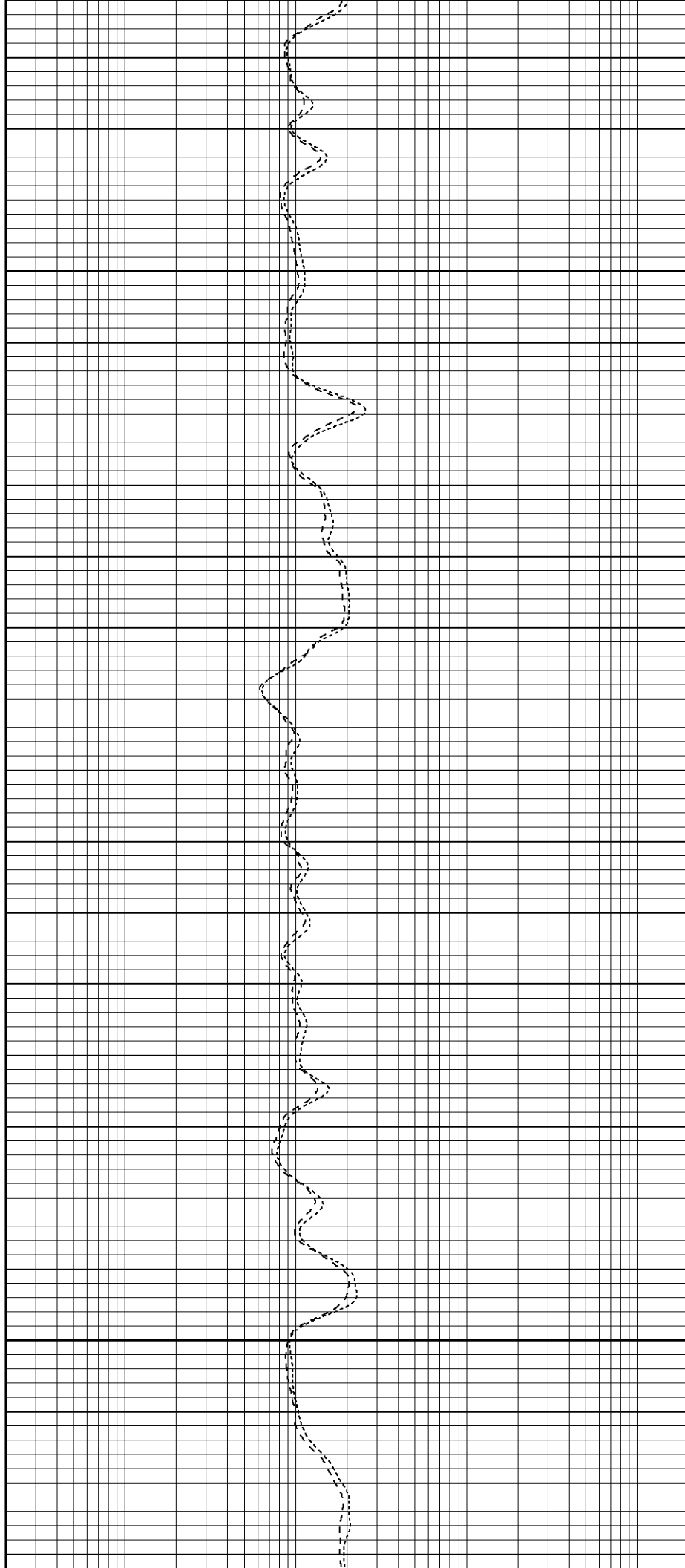


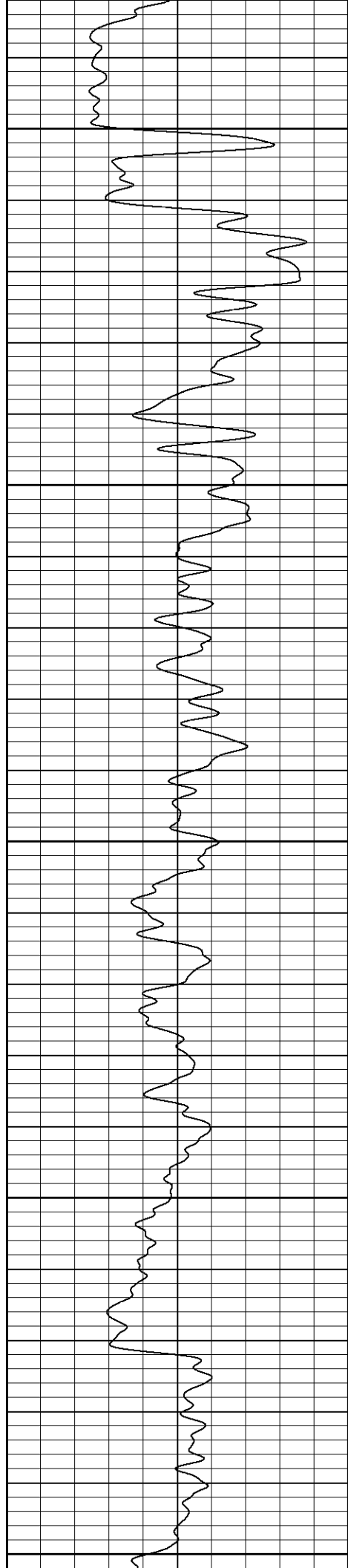
900

950

1000

1050





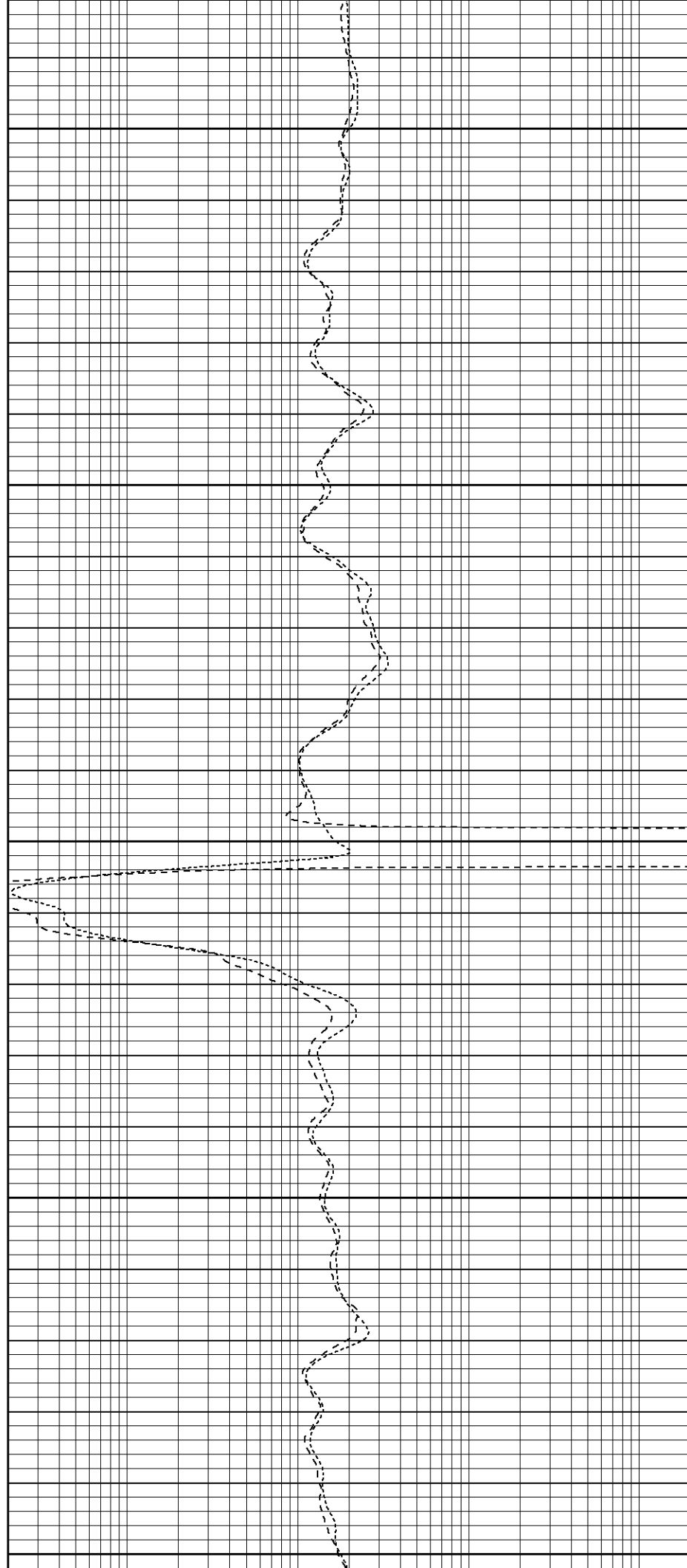
1100

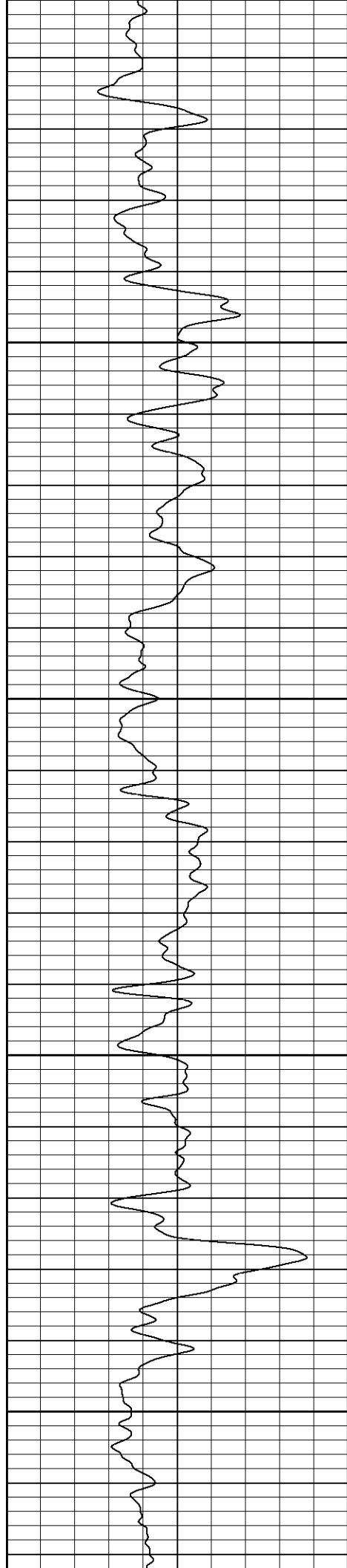
1150

1200

1250

1300



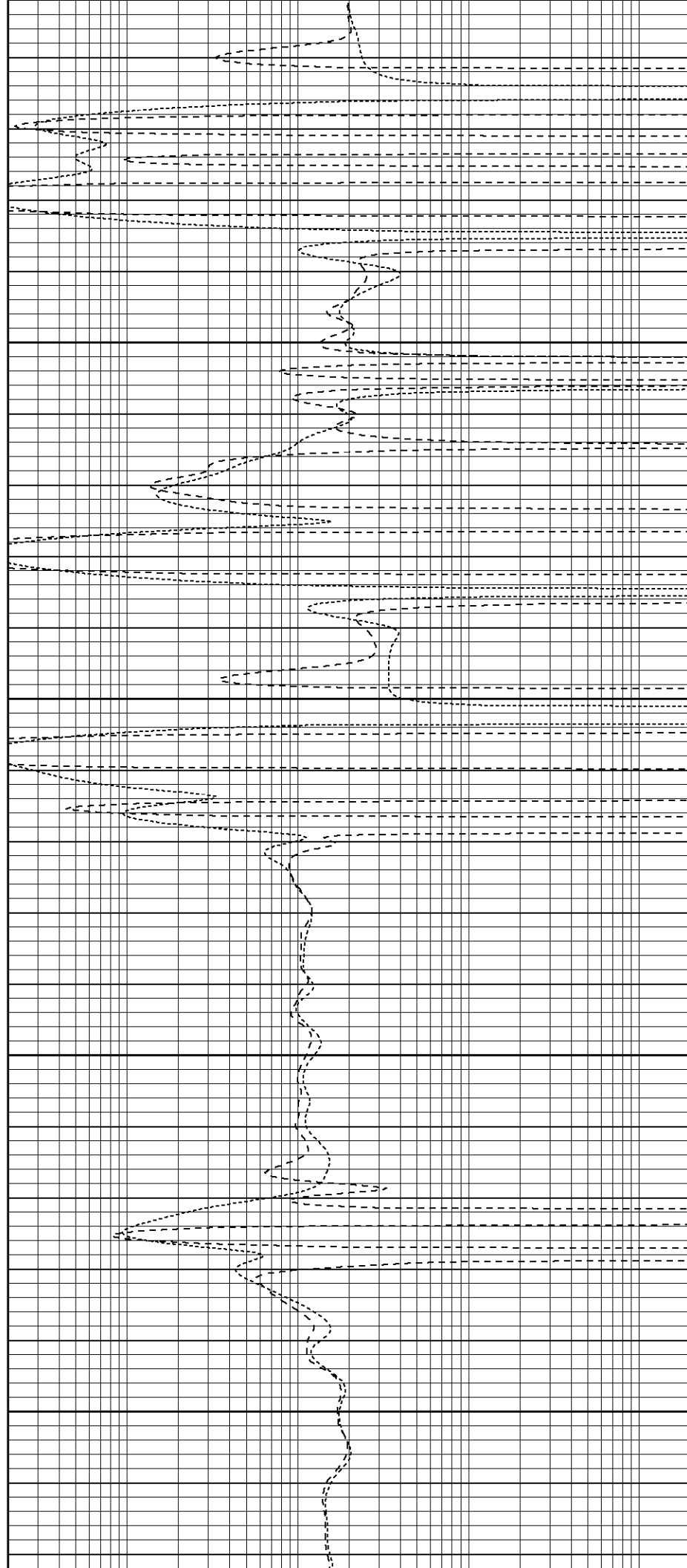


1350

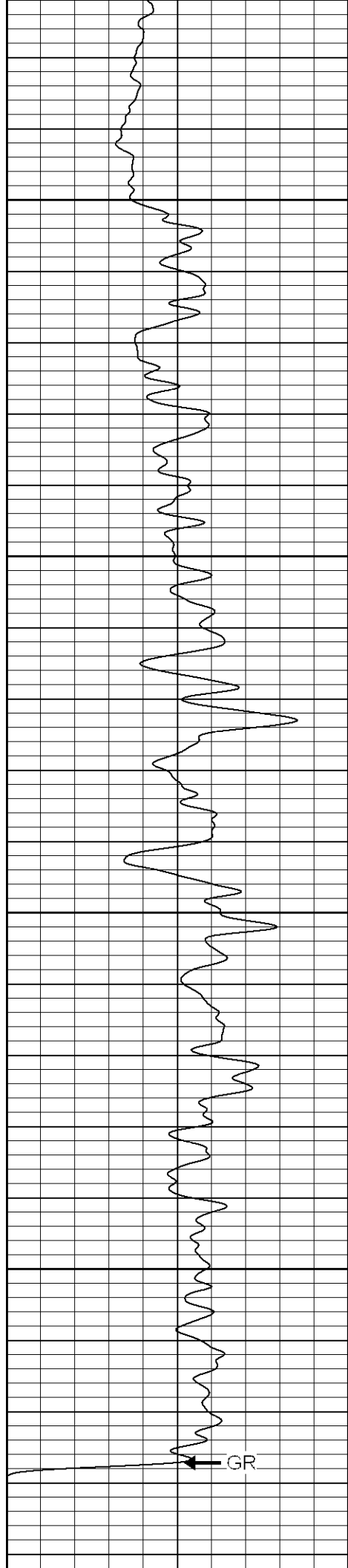
1400

1450

1500







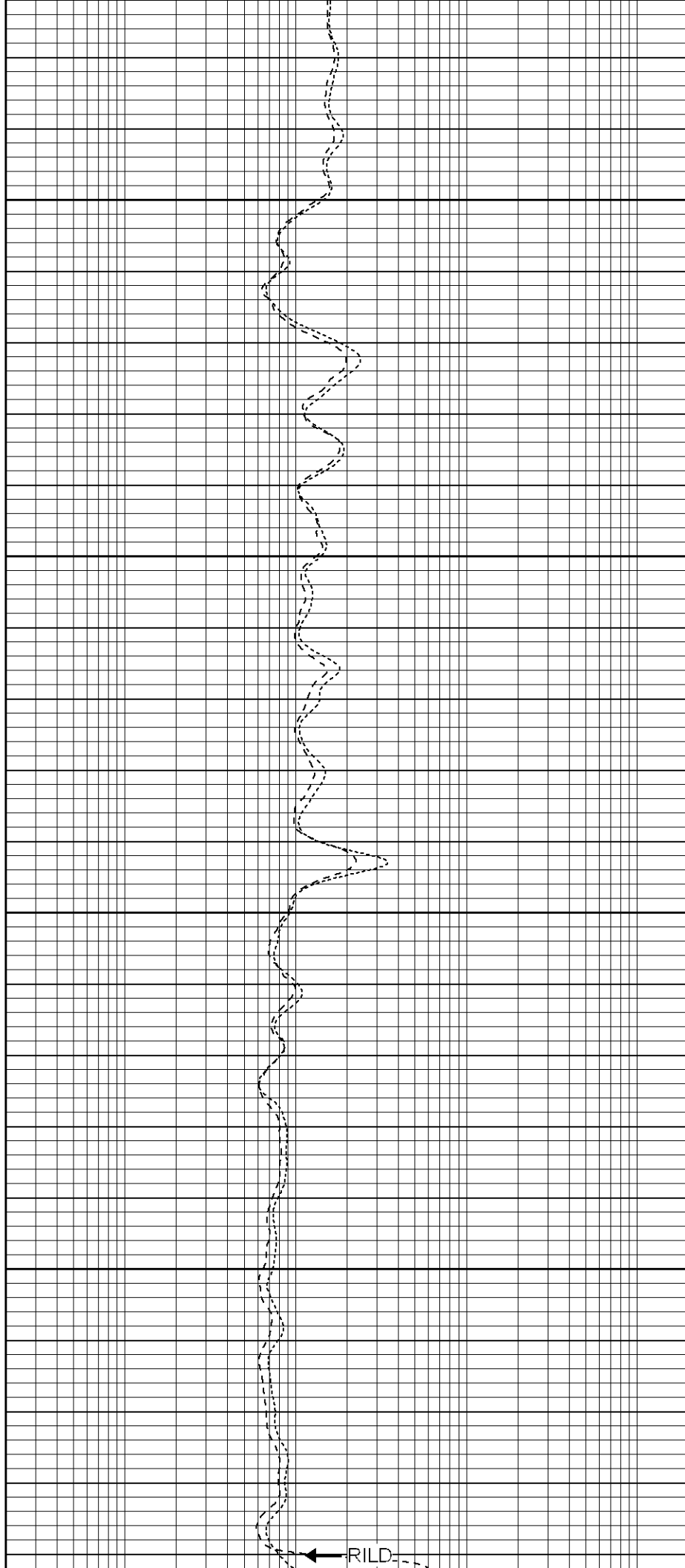
1550

1600

1650

1700

GR



RILD

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

1750

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



**SUPERIOR**

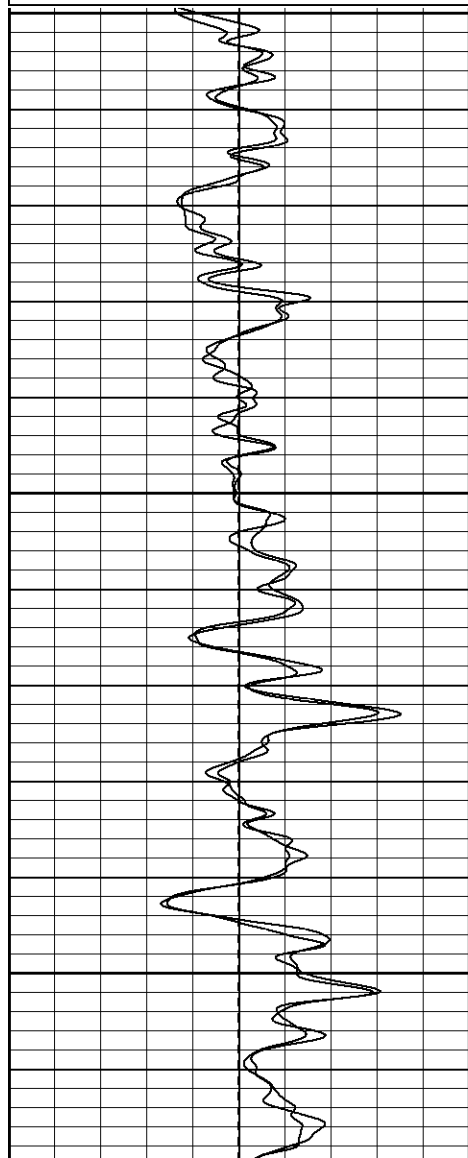
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# Repeat Section

Database File: xtoac35142.db  
 Dataset Pathname: pass1.1  
 Presentation Format: dil  
 Dataset Creation: Sun Apr 29 16:46:08 2007 by Calc Open-Cased 061129  
 Charted by: Depth in Feet scaled 1:240

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

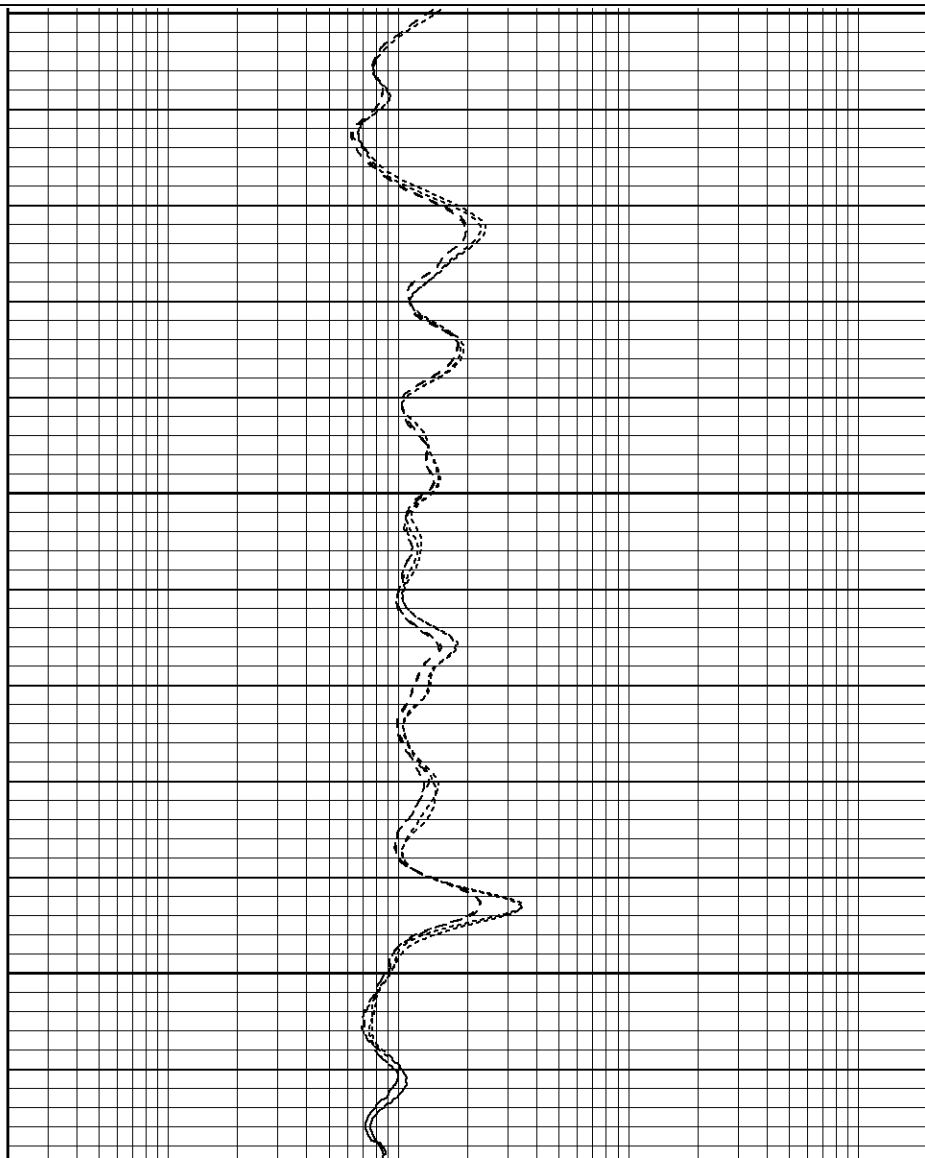
0.2	RILM (Ohm-m)	2000
0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
0.2	RLL3-repeat (Ohm-m)	2000
0.2	RILM-repeat (Ohm-m)	2000
0.2	RILD-repeat (Ohm-m)	2000

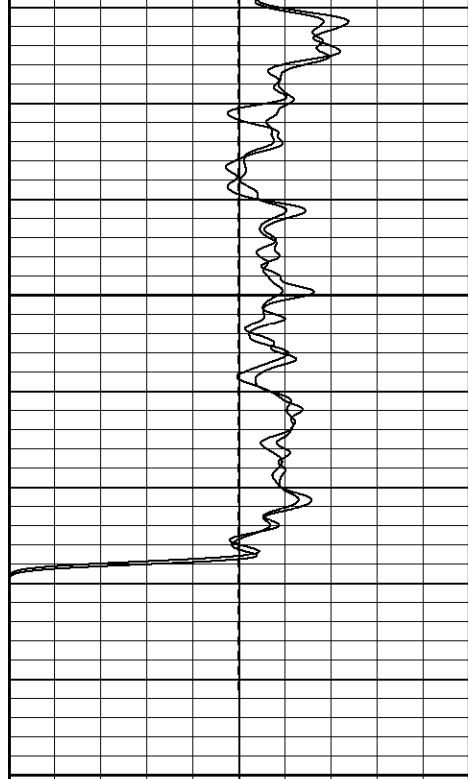


1550

1600

1650

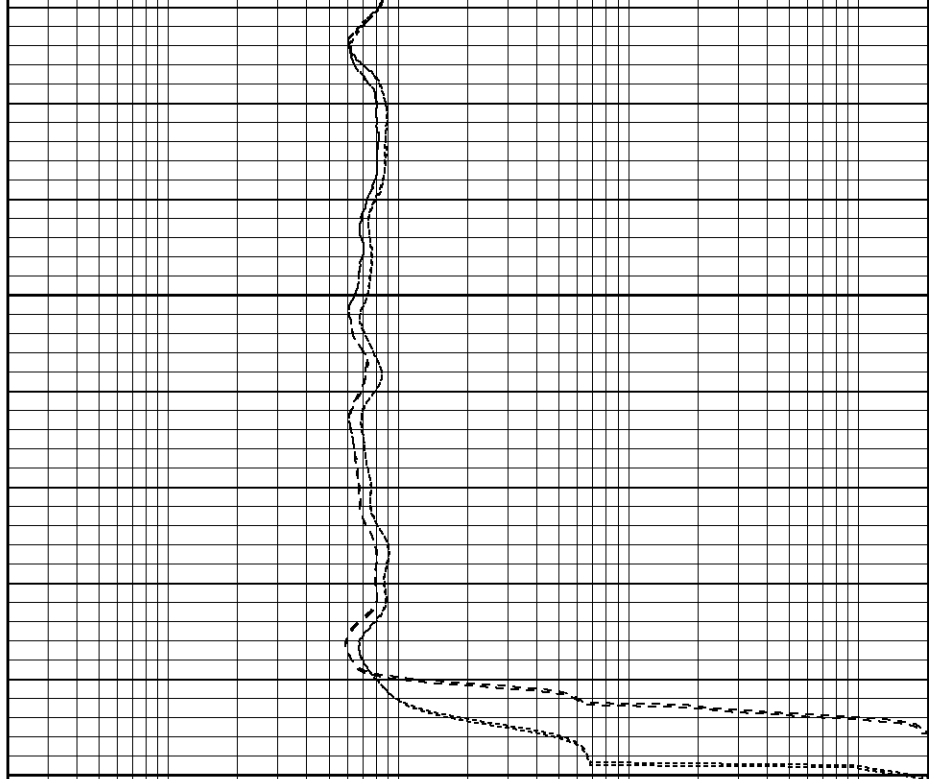




1700

1750

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



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

### Calibration Report

Database File: xtoac35142.db  
 Dataset Pathname: pass2  
 Dataset Creation: Sun Apr 29 15:21:54 2007 by Log Open-Cased 061129

### Dual Induction Calibration Report

Serial-Model: 5375-G  
 Surface Cal Performed: Thu Apr 26 17:31:10 2007  
 Downhole Cal Performed: Thu Apr 26 17:31:26 2007

#### Surface Calibration





Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.001	0.620	V	0.000	500.000	mmho-m	807.659	-1.119
Medium	0.005	0.743	V	0.000	550.000	mmho-m	744.727	-3.505
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.001	0.620	V	0.000	500.000	mmho-m	807.698	-1.159
Medium	0.005	0.743	V	0.000	550.000	mmho-m	744.801	-3.569

#### Downhole Calibration

Internal:	Readings			References			Results	
	Zero	Cal		Zero	Cal		m	b
Deep	0.123	400.001	mmho-m	0.020	500.015	mmho-m	1.000	0.084

Deep	0.123	499.901	mmho-m	0.039	500.013	mmho-m	1.000	-0.084
Medium	0.245	549.982	mmho-m	0.064	550.009	mmho-m	1.000	-0.182
Shallow	2.506	0.009	V	500.000	2.000	Ohm-m	150.000	0.000

Gamma Ray Calibration Report				
Serial Number:	2001			
Tool Model:	OH			
Performed:	Wed Mar 28 14:54:25 2007			
Calibrator Value:	1.0	GAPI		
Background Reading:	0.0	cps		
Calibrator Reading:	1.0	cps		
Sensitivity:	0.1700	GAPI/cps		

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	22.83		None	0.75	1.50	5.00
			GR-OH (2001) SIE	3.50	3.25	40.00
CILD SP	10.60 10.60		DIL-G (5375) Gearhart	20.83	4.00	345.00
CILM	6.89					
RLL3	1.70					
		Dataset:	xtoac35142.db: field/well/run1/pass2			
		Total Length:	25.08 ft			
		Total Weight:	390.00 lb			
		O.D.	4.00 in			