

Patterson

**DUAL
INDUCTION
LOG**

Company XTO Energy Inc.
Well Apache Canyon 18-13
Field Purgatoire River
County Las Animas State Colorado

Location: API # : 05 071 08823 00
338' FSL & 1115' FWL
SEC 18 TWP 34S RGE 67W
Permanent Datum Ground Level Elevation 8087'
Log Measured From Ground Level
Drilling Measured From Ground Level
Other Services
cdl
neutron
Elevation
K.B. -----
D.F. -----
G.L. 8087'

Date	08-25-06		
Run Number	Two		
Depth Driller	2580'		
Depth Logger	2567'		
Bottom Logged Interval	2565'		
Top Log Interval	Surface Casing		
Casing Driller	8 5/8" @ 770'		
Casing Logger	770'		
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	5:30 p.m.		
Time Logger on Bottom	8:10 p.m.		
Maximum Recorded Temperature	116		
Equipment Number	T677		
Location	Trinidad		
Recorded By	L. Smith		
Witnessed By	Mr. Dan Uhl		

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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 Big Bingham Canyon,
take first left thru green gate, at top of hill take sharp left,
third location.

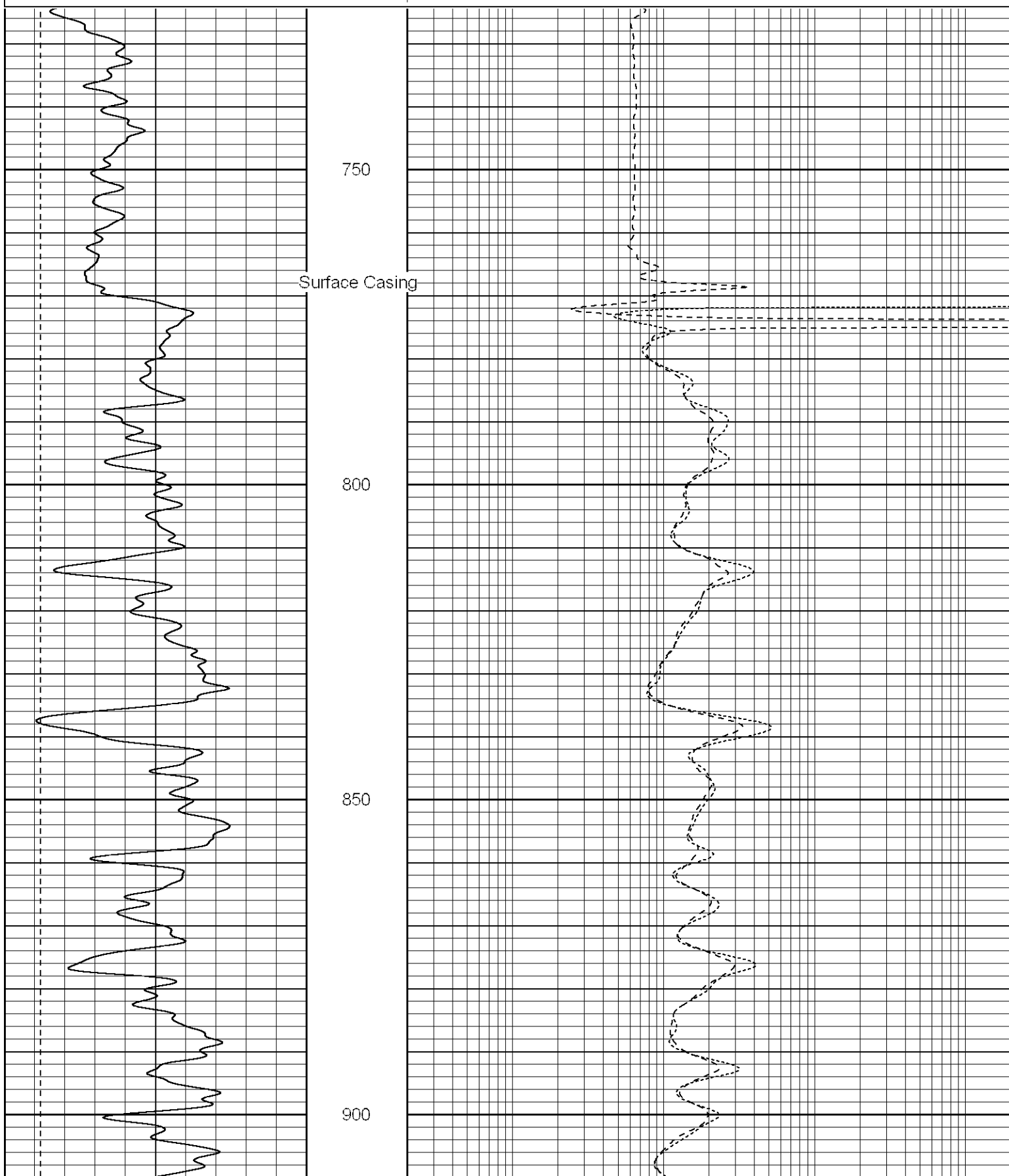
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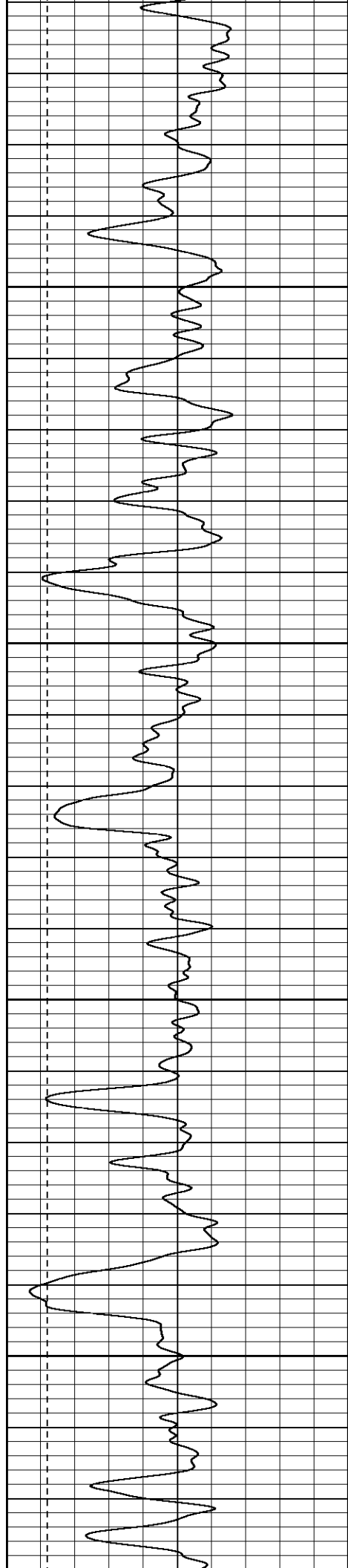
Main Pass

Database File: xtoac1813.db
Dataset Pathname: pass3.1
Presentation Format: dil
Dataset Creation: Fri Aug 25 21:29:09 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



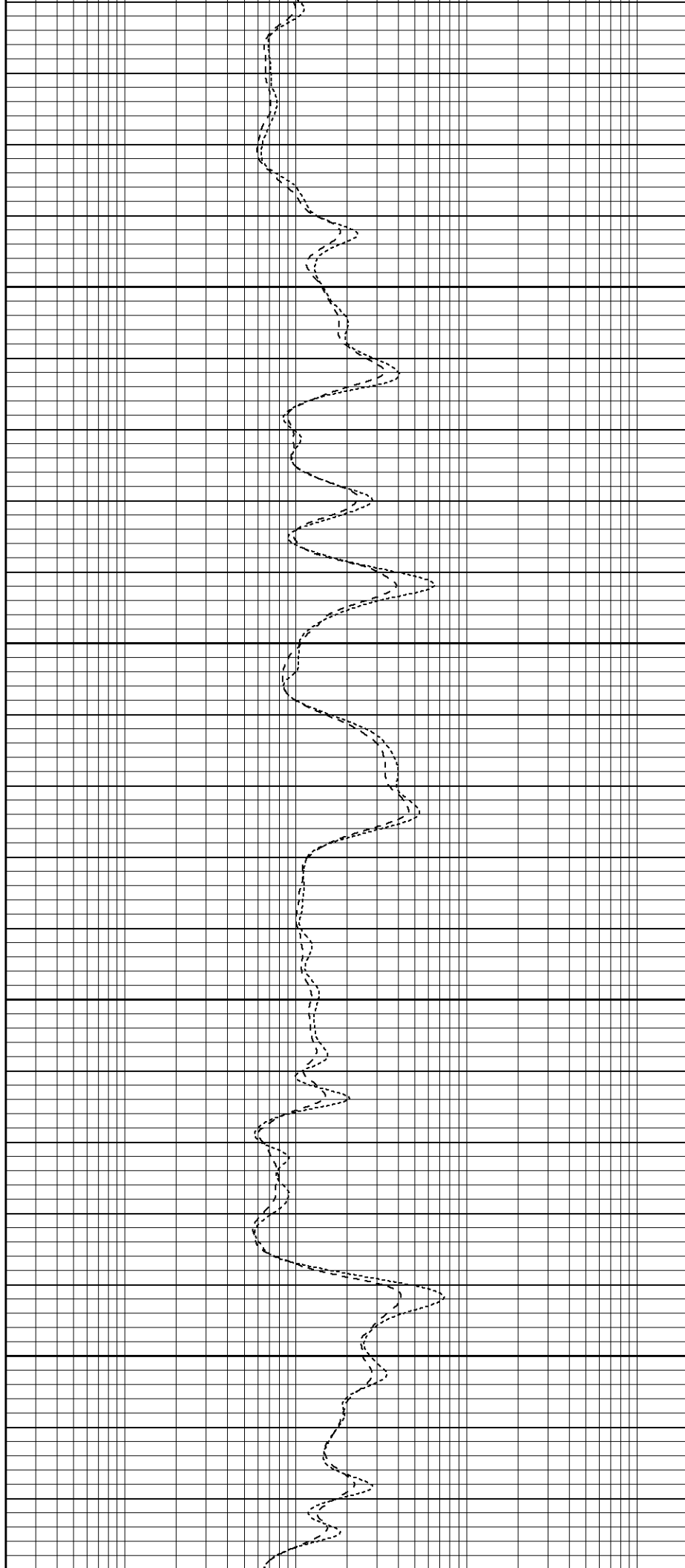


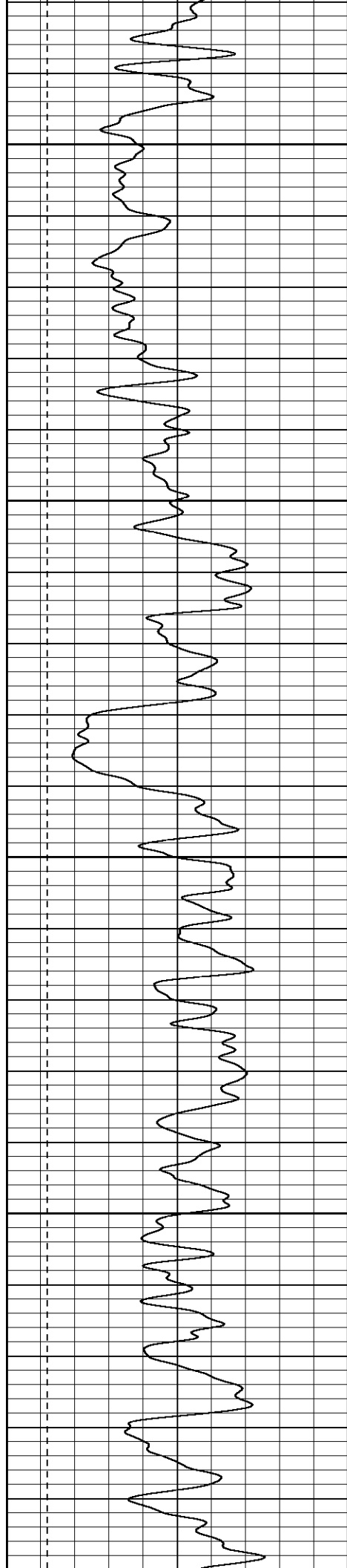
950

1000

1050

1100





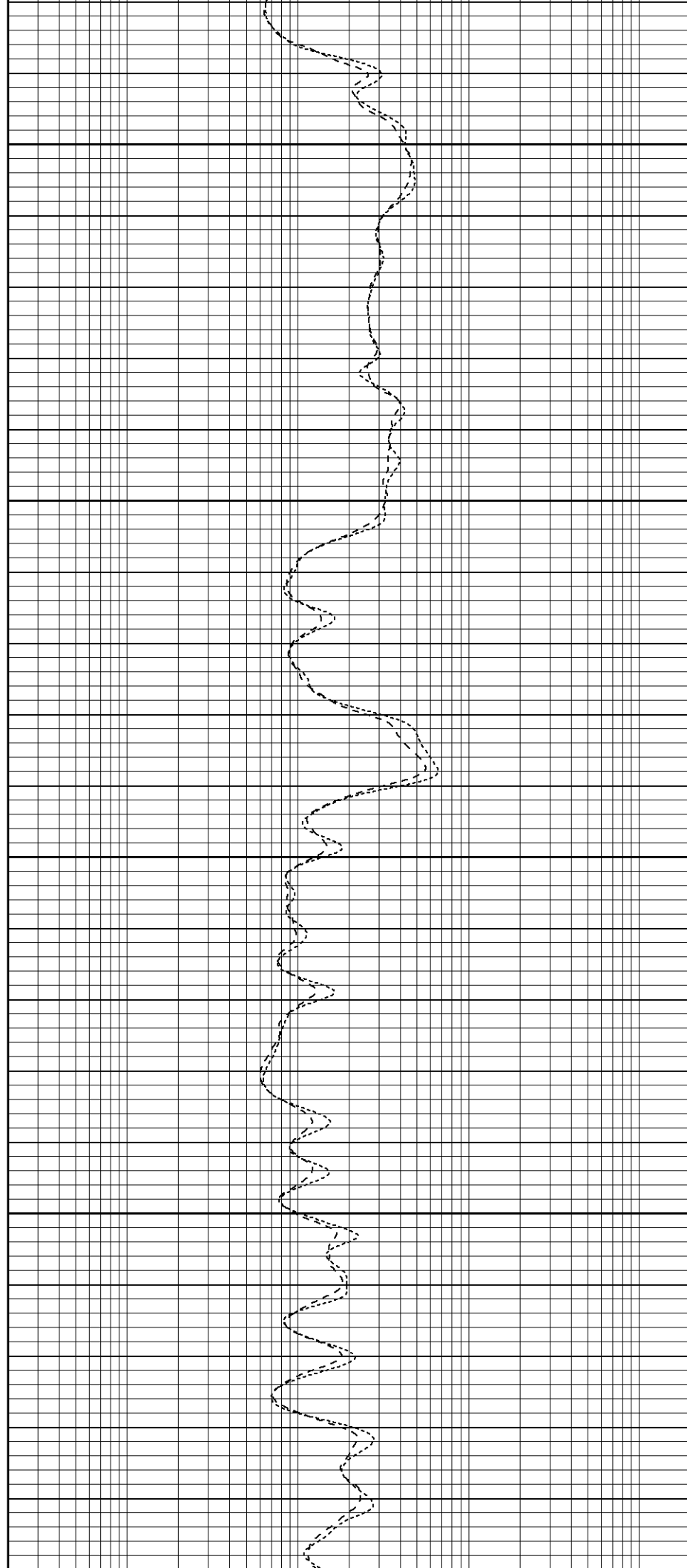
1150

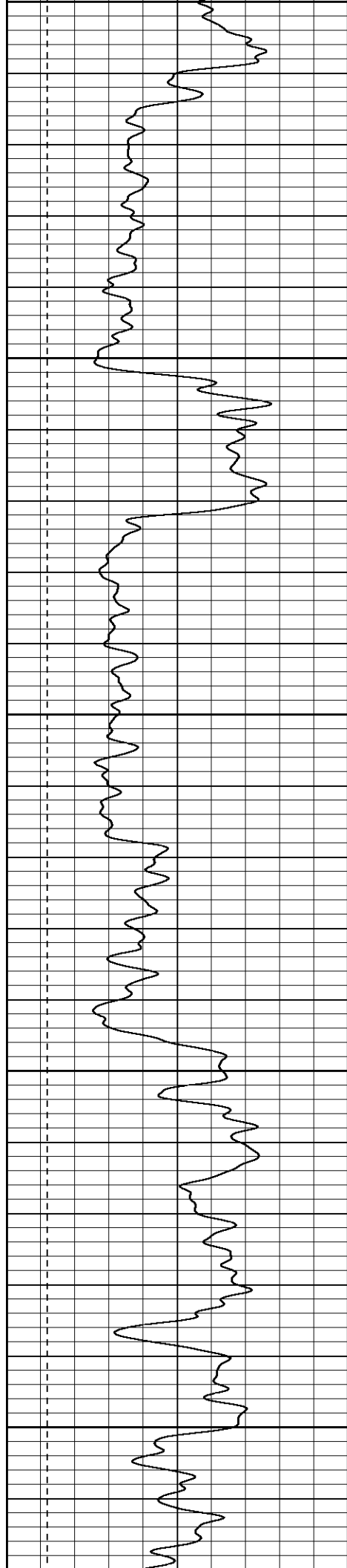
1200

1250

1300

1350





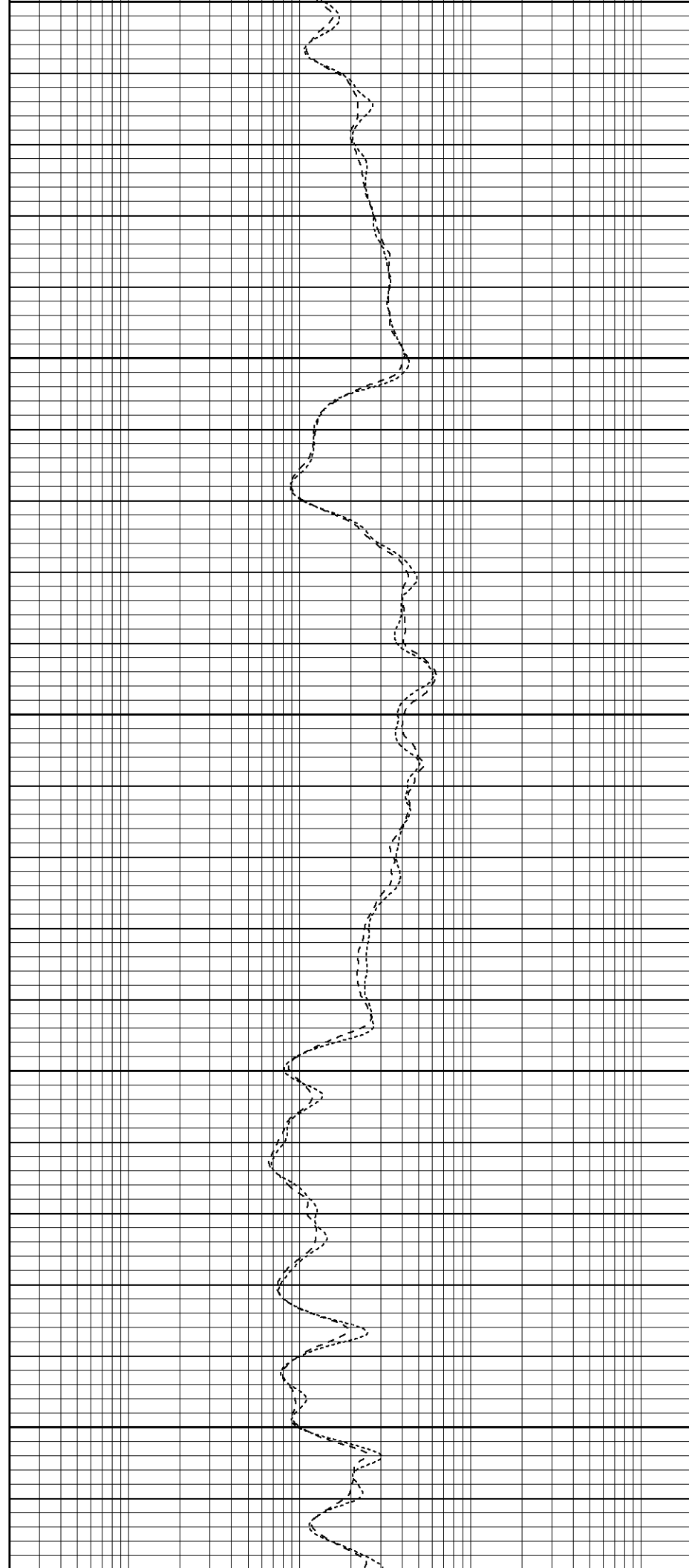
1350

1400

1450

1500

1550



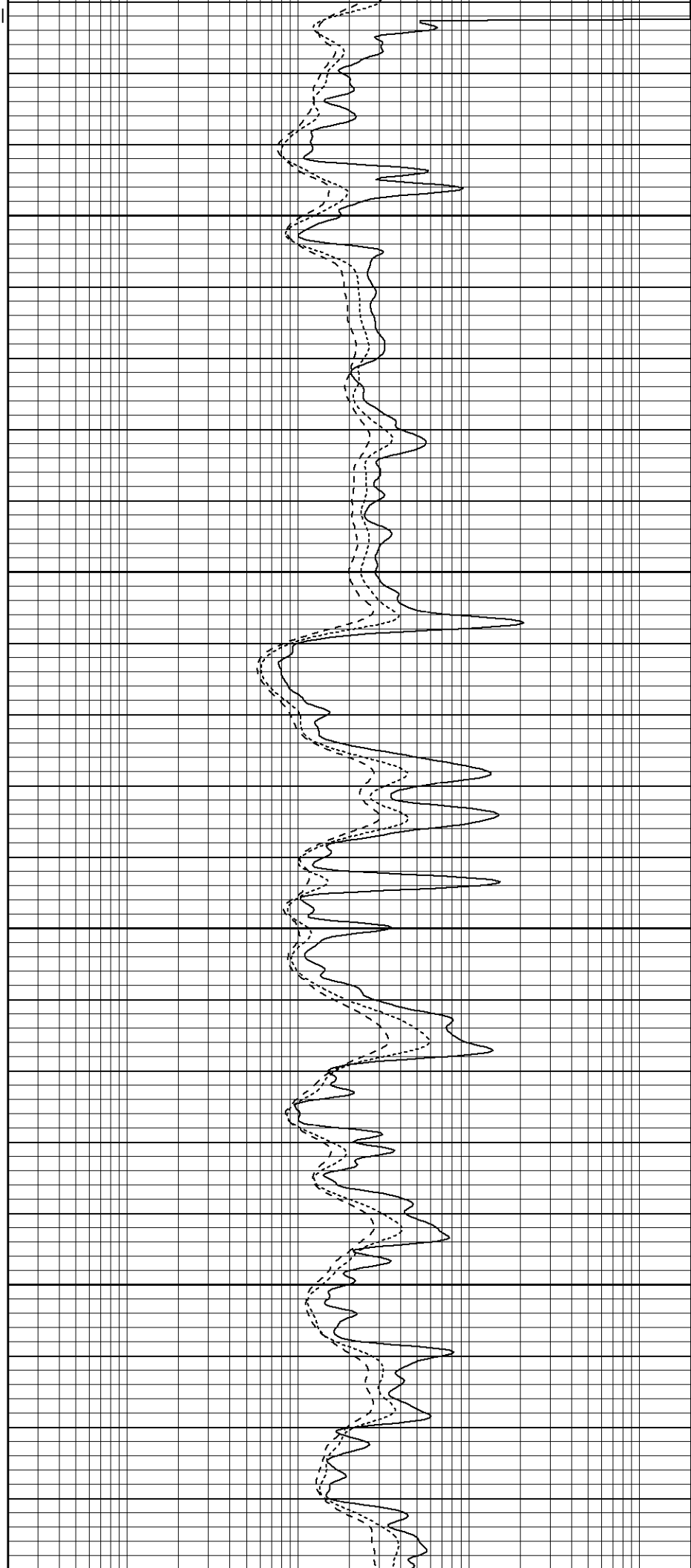
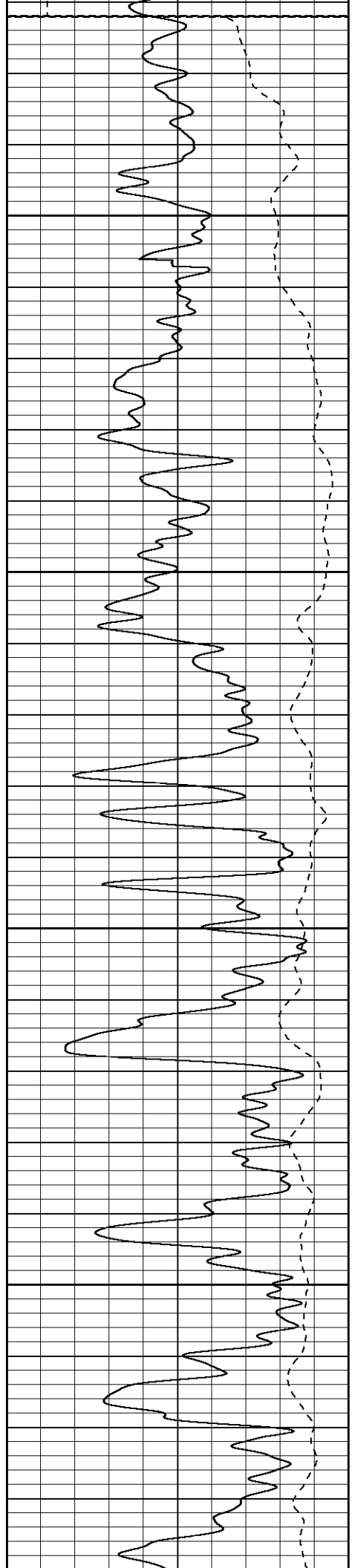
Fluid Level

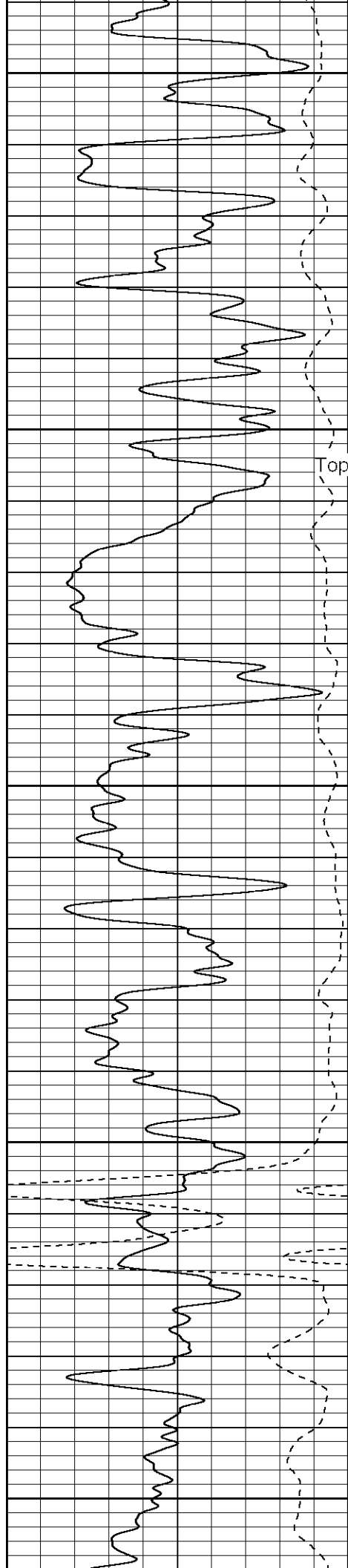
1600

1650

1700

1750





1800

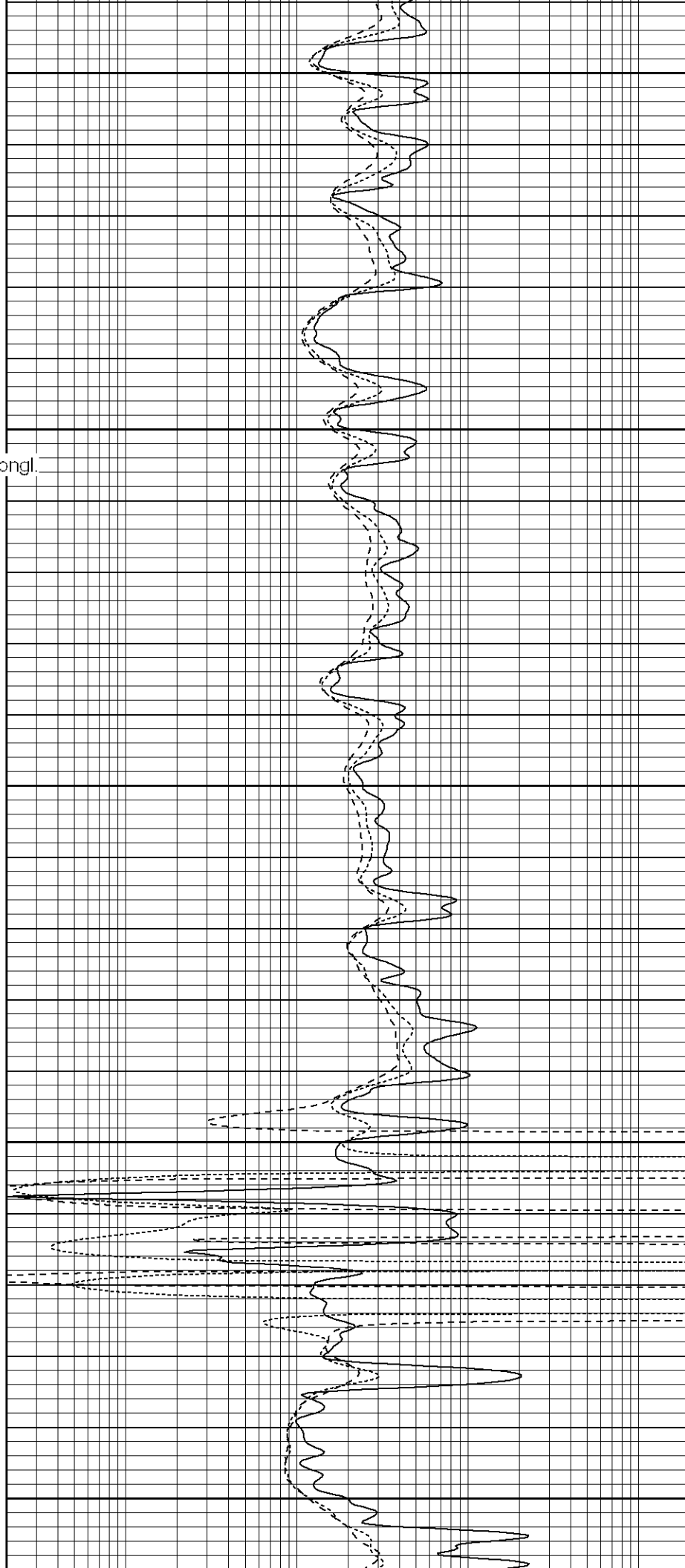
1850

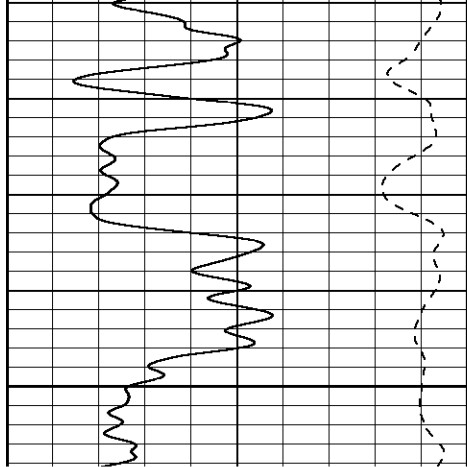
Top Of Raton Congl.

1900

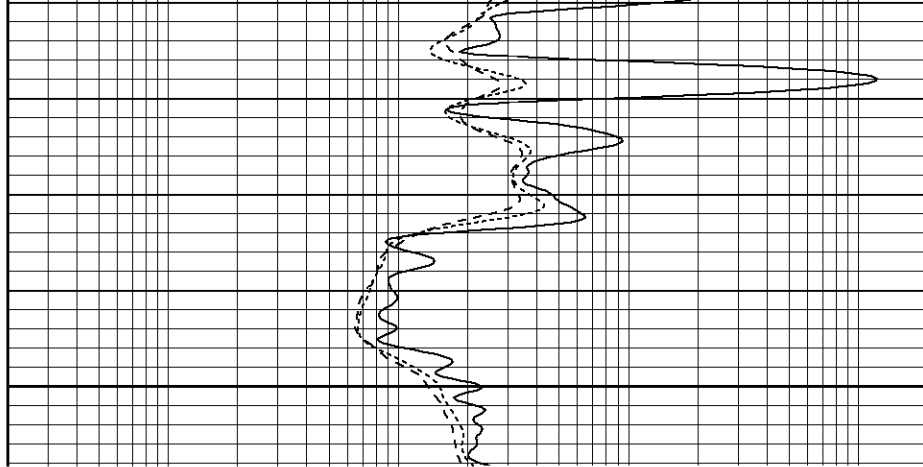
1950

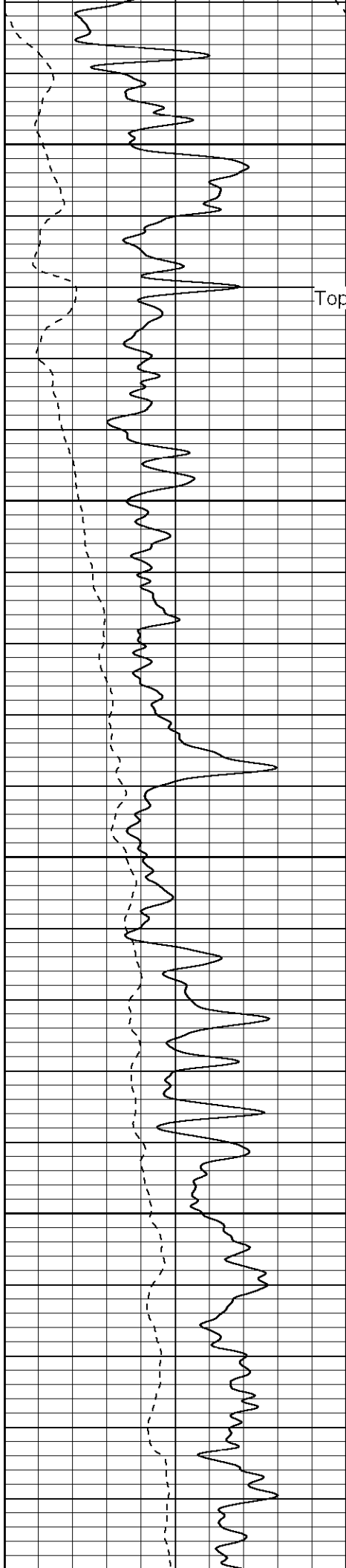
2000





2050





2250

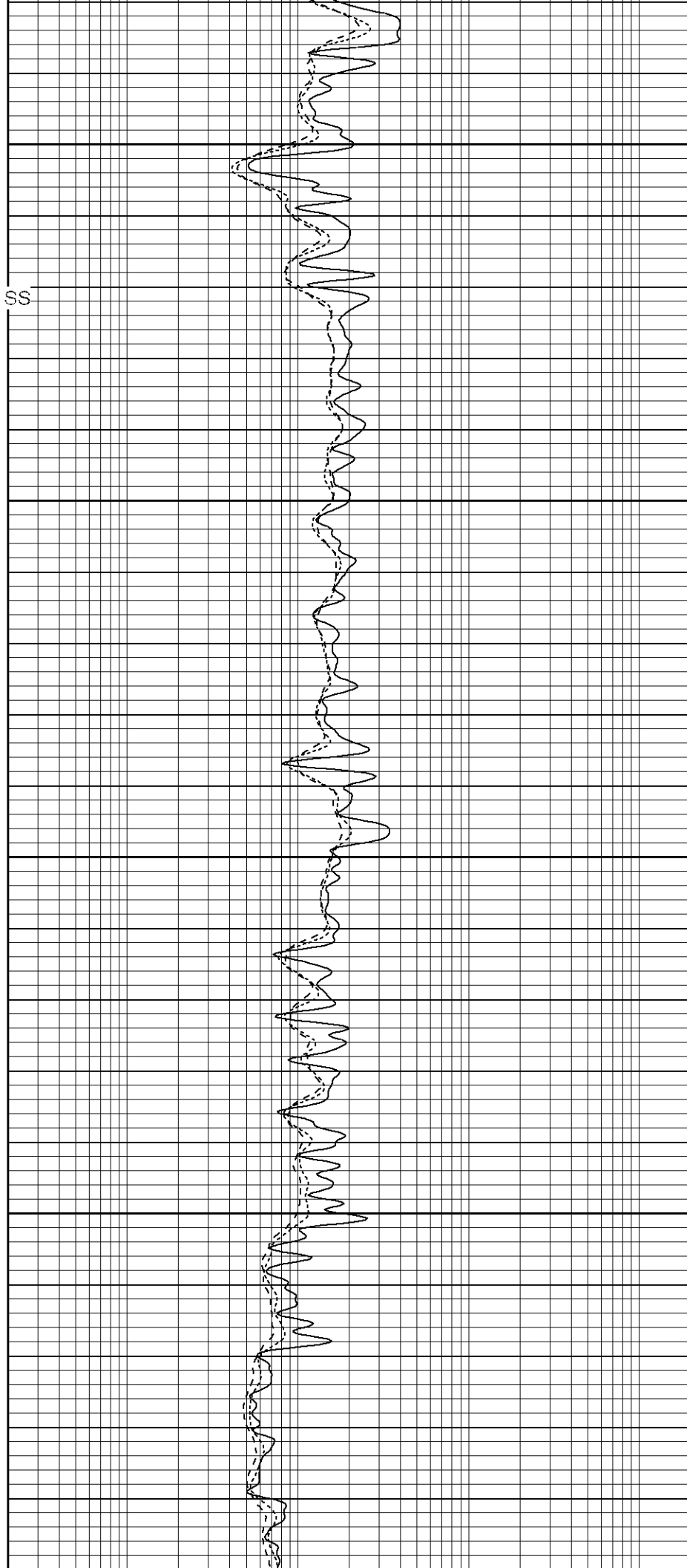
Top Of Trinidad SS

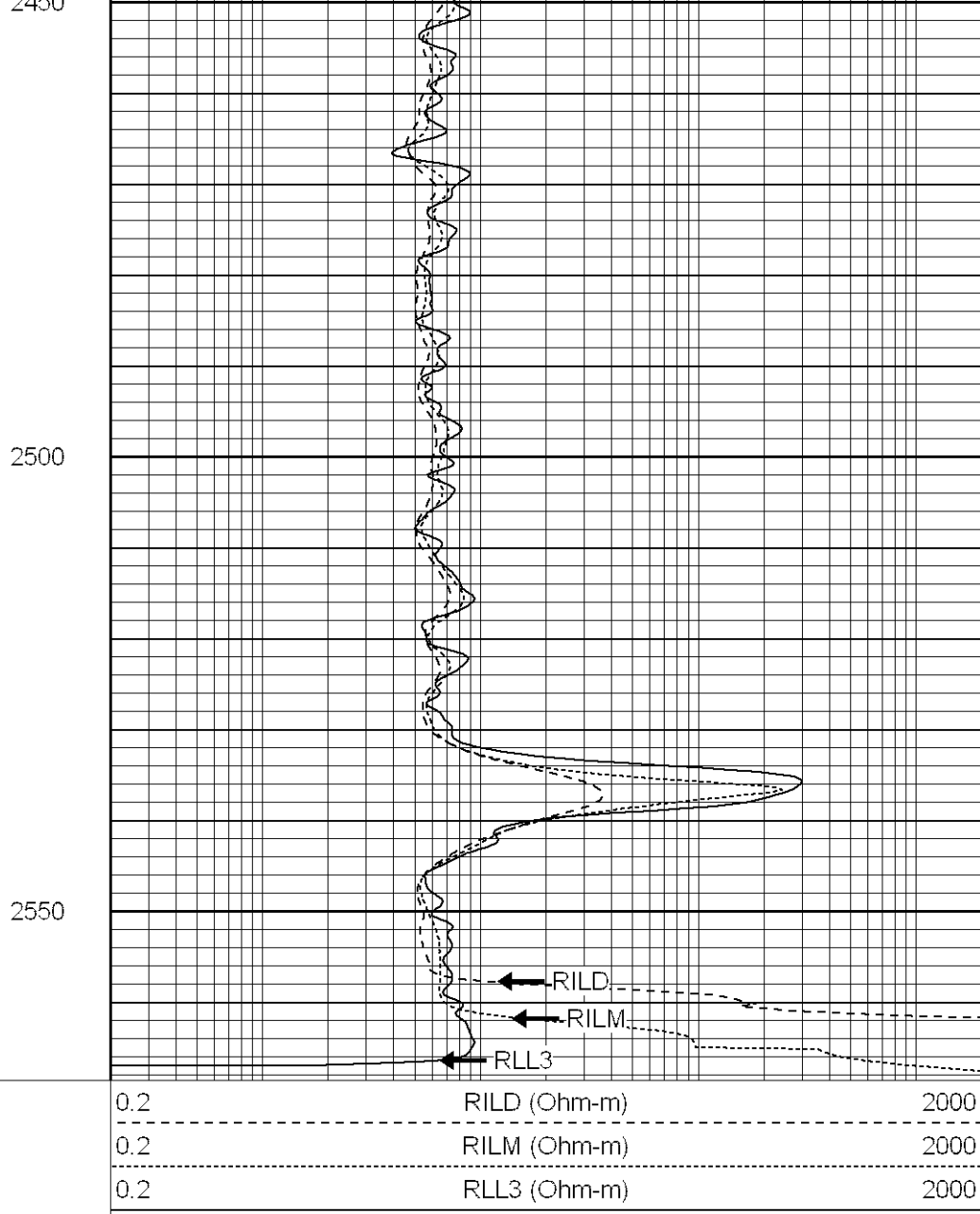
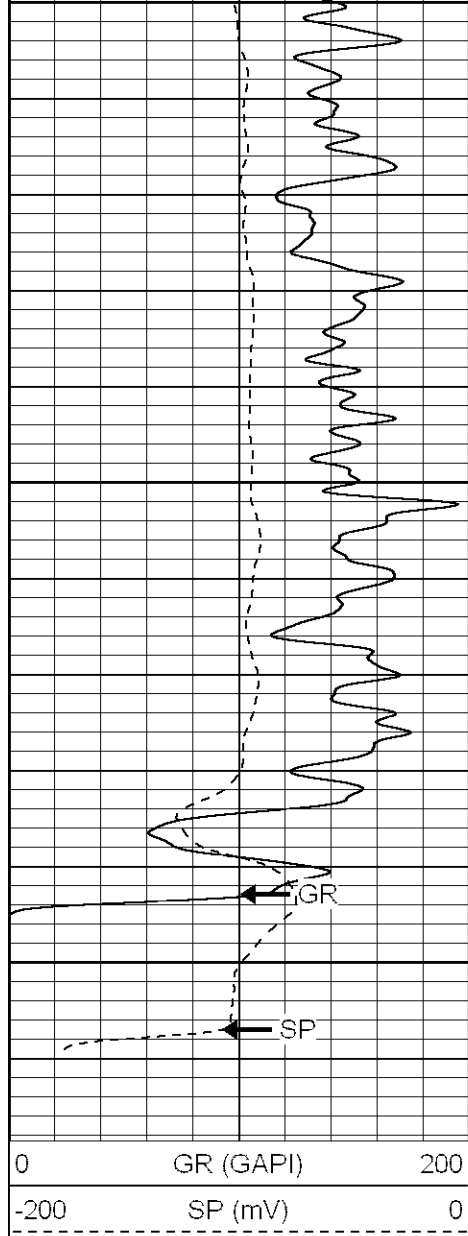
2300

2350

2400

2450





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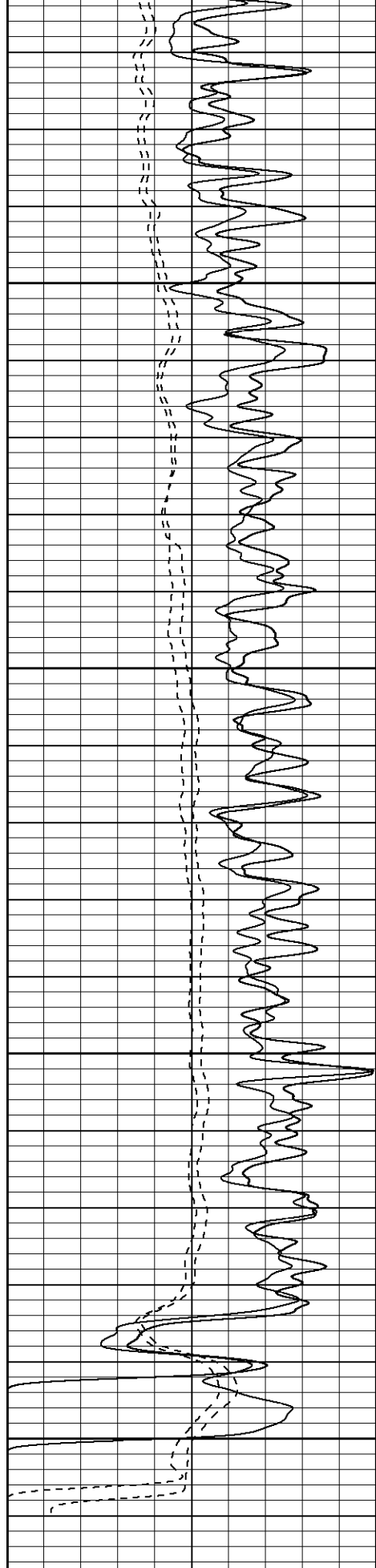
Repeat Pass

Database File: xtoac1813.db
 Dataset Pathname: pass1.1
 Presentation Format: dil
 Dataset Creation: Fri Aug 25 20:55:42 2006 by Calc Warrior 7.0 STD Ope
 Charted by: Depth in Feet scaled 1:240

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

0.2	RILD (Ohm-m)	2000
0.2	RILM (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





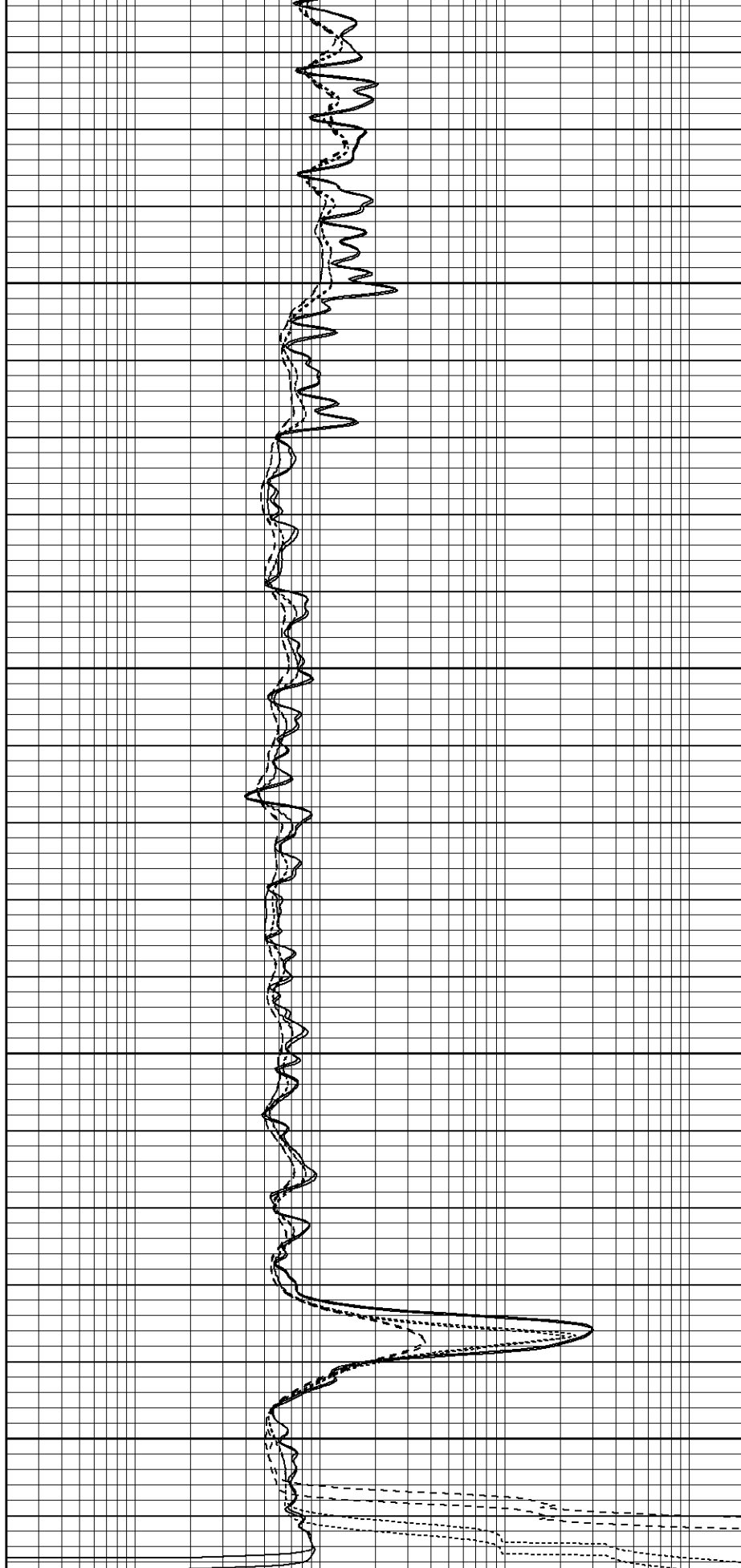
2400

2450

2500

2550

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



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

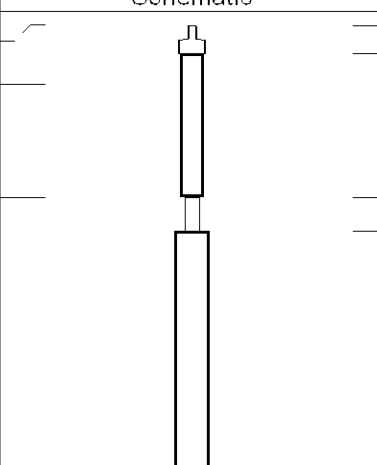
0	GR-repeat (GAPI)	200	0.2	RLL3-repeat (Ohm-m)	2000
			0.2	RILM-repeat (Ohm-m)	2000
			0.2	RILD-repeat (Ohm-m)	2000

Dual Induction Calibration Report					
Serial-Model:			5375-G		
Surface Cal Performed:			Fri Aug 25 14:47:44 2006		
Downhole Cal Performed:			Fri Aug 25 14:46:18 2006		

Surface Calibration								
Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.007	0.626	V	0.000	500.000	mmho-m	807.723	-5.990
Medium	0.011	0.749	V	0.000	550.000	mmho-m	744.808	-7.828
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.007	0.626	V	0.000	500.000	mmho-m	808.280	-5.940
Medium	0.010	0.749	V	0.000	550.000	mmho-m	744.980	-7.794

Downhole Calibration								
Internal:	Readings			References			Results	
	Zero	Cal		Zero	Cal		m	b
Deep	0.025	500.232	mmho-m	-0.054	499.601	mmho-m	0.999	-0.079
Medium	-0.182	550.455	mmho-m	-0.036	549.836	mmho-m	0.999	0.145
Shallow	2.510	0.017	V	500.000	2.000	Ohm-m	149.001	-4.800

Gamma Ray Calibration Report					
Serial Number:		804			
Tool Model:		2.75POH			
Performed:		Mon Aug 21 14:48:38 2006			
Calibrator Value:		1.0	GAPI		
Background Reading:		0.0	cps		
Calibrator Reading:		1.0	cps		
Sensitivity:		0.8100	GAPI/cps		

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
CHD	26.20		None	0.75	1.50	5.00
GR	24.67		GR-2.75POH (804) Probe	3.73	2.75	43.00
10pin	21.72		Probe	0.89	3.50	20.00

CILD SP	10.60 10.60		20.83	4.00	345.00
CILM	6.89				
RLL3	1.70				
		Dataset: /field/well/run1/_plots/_jobs_/dil Total Length: 26.20 ft Total Weight: 413.00 lb O.D. 4.00 in			