

SINGLE INDUCTION LOG

Company		Pioneer Natural Resources	
Well		Hellzapoppin 24-32 Tr	
Field		Purgatoire River	
County		Las Animas	
State		Colorado	
Location:		APL #: 05 071 09793 00	
SEC 32 TWP 32S RGE 66W		CDNL	
Permanent Datum Log Measured From		Ground Level Elevation 7488'	
Drilling Measured From		Kelly Bushing 4' AGL Kelly Bushing	
Date		5-22-11	
Run Number		One	
Depth Driller		1815'	
Depth Logger		1799'	
Bottom Logged Interval		1796'	
Top Log Interval		Surface Casing	
Casing Driller		8 5/8" @ 635'	
Casing Logger		635'	
Bit Size		7 7/8"	
Type Fluid in Hole		Airtated 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 A.M.	
Time Logger on Bottom		4:45 A.M.	
Maximum Recorded Temperature		98 DEG F	
Equipment Number		T590	
Location		Trinidad	
Recorded By		C. Sisneros	
Witnessed By		Mr. Derrick Berry	

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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

Directions:
Sarcillo right to La Garita, at Y stay left towards Cottontail Compressor, first left at arrowhead lane(line of mail boxes), at Y stay left, next Y stay left, at three way stay left to location.

Database File: hellzapoppintr.db
Dataset Pathname: pass3.1
Presentation Format: iel
Dataset Creation: Mon May 23 08:20:08 2011 by Calc Open-Cased 110302
Charted by: Depth in Feet scaled 1:240

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

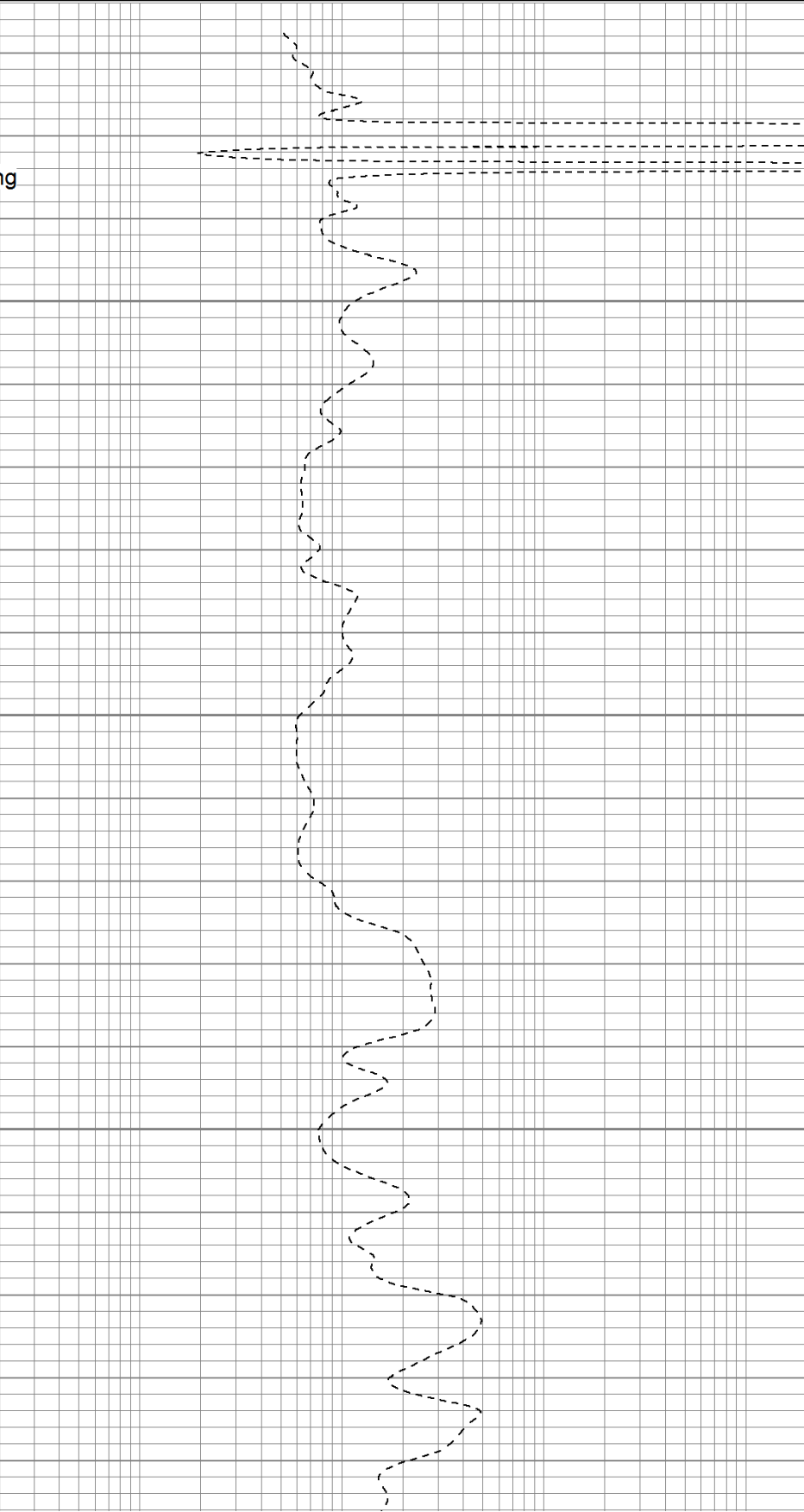
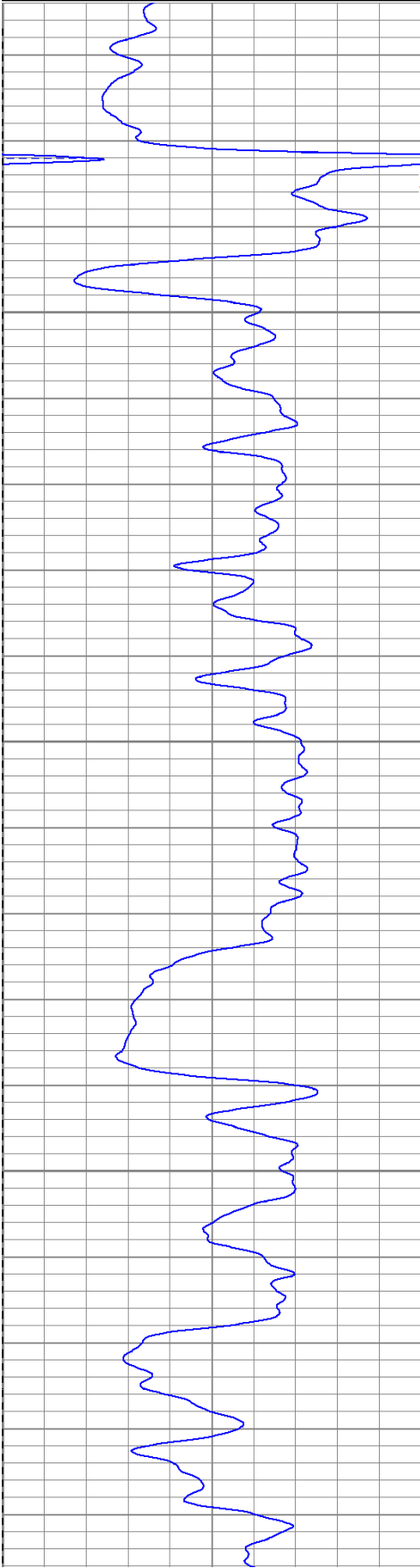
0.2	DIR (Ohm-m)	2000
0.2	SN (Ohm-m)	2000

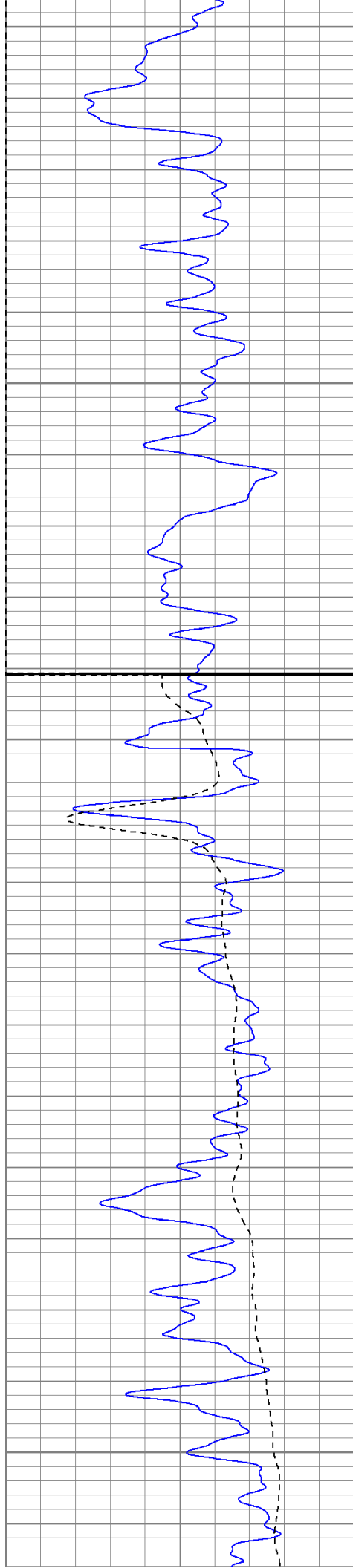
Surface Casing

650

700

750





800

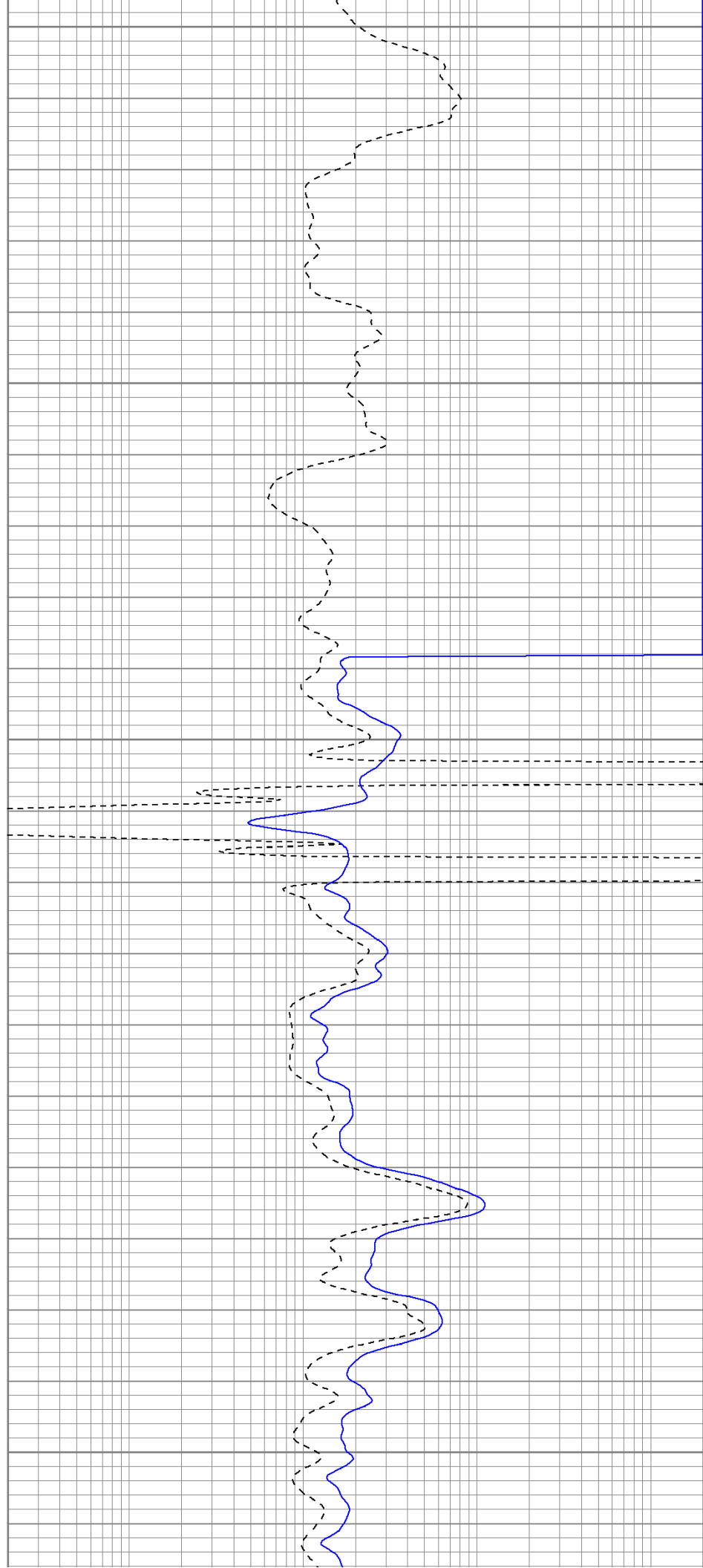
850

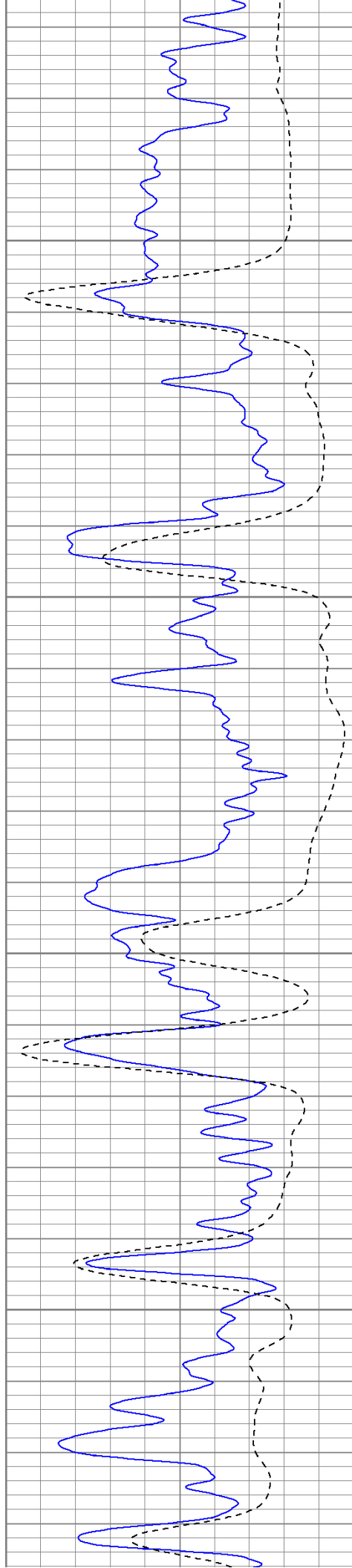
Fluid Level

900

950

1000



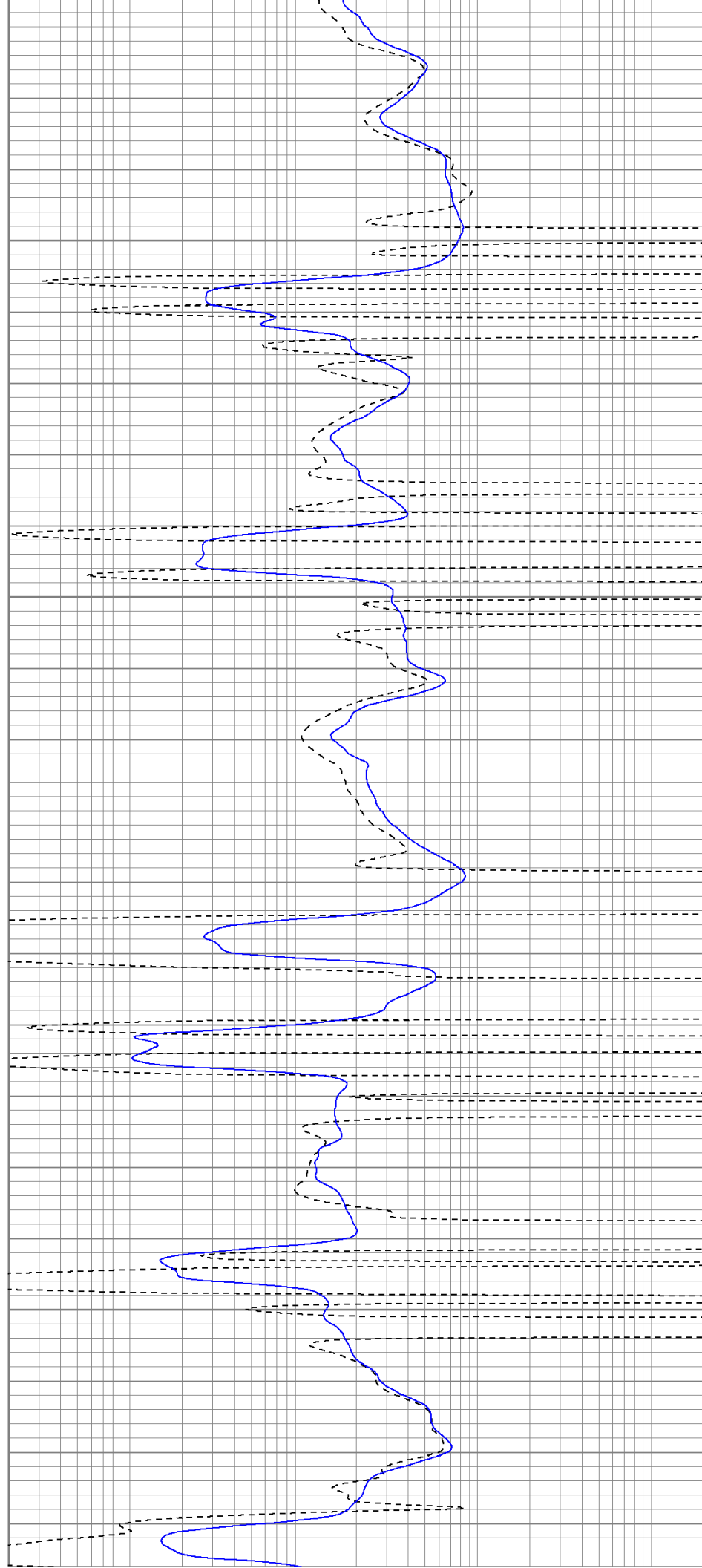


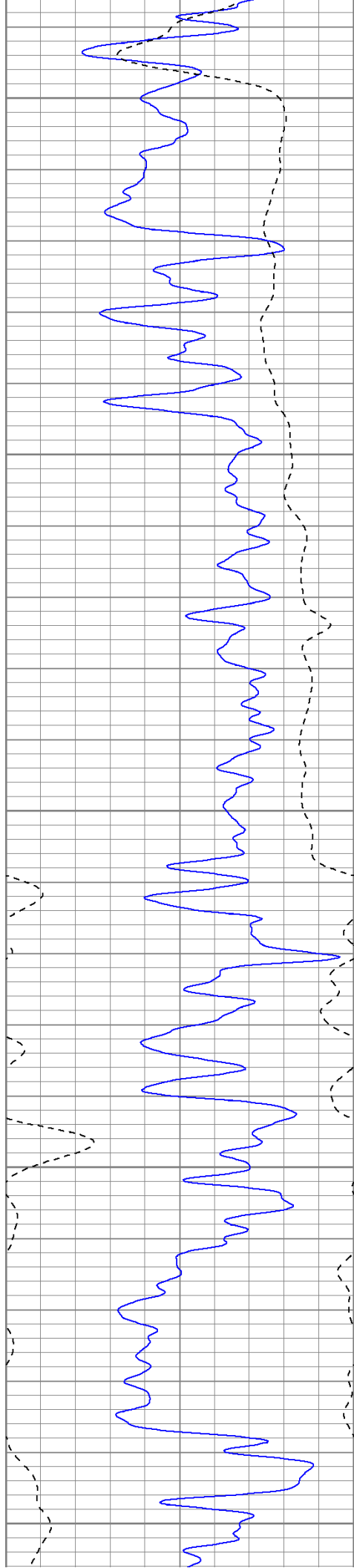
1050

1100

1150

1200





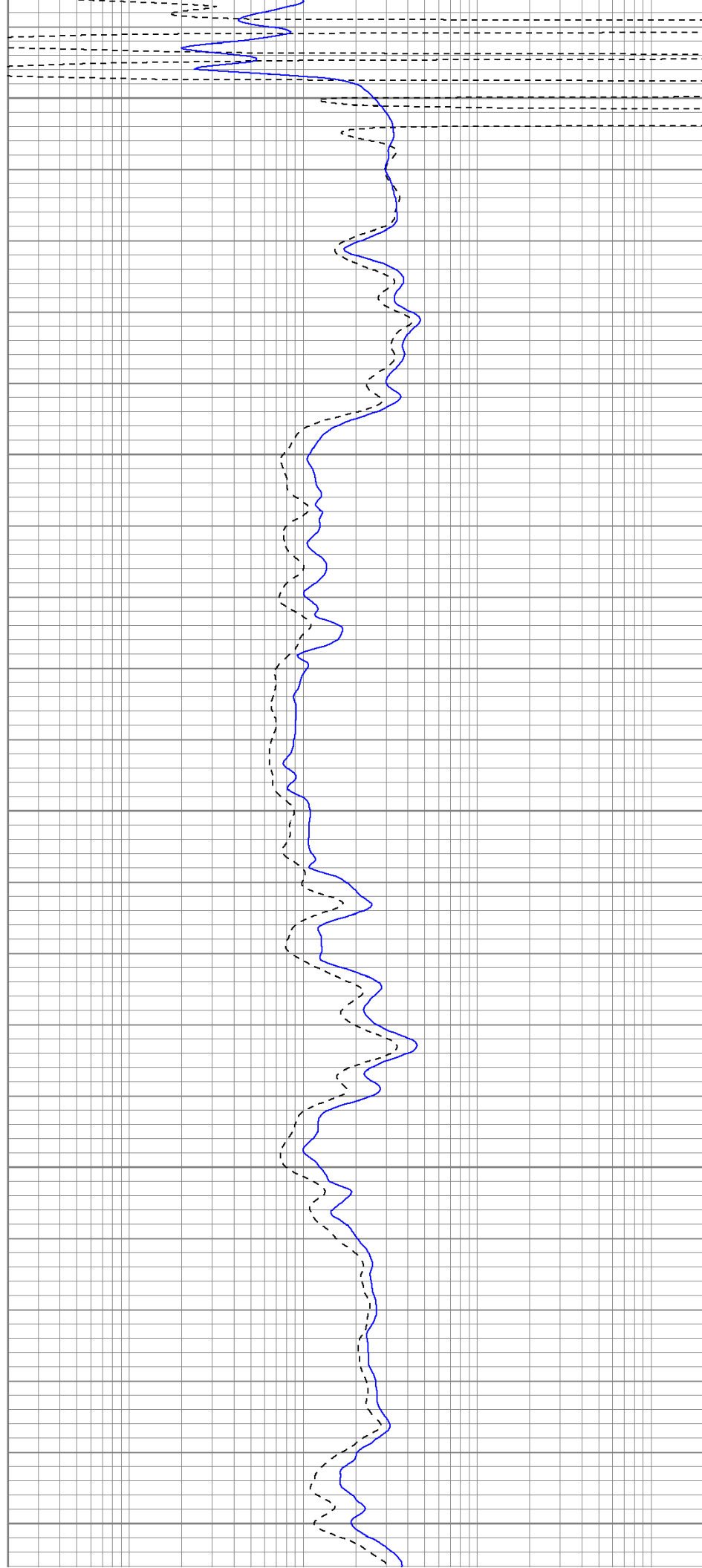
1250

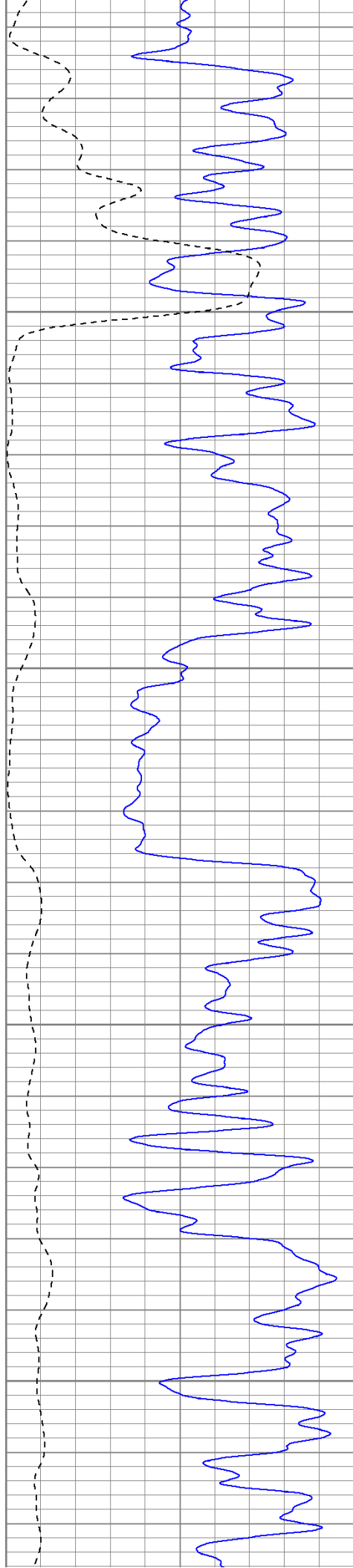
1300

1350

1400

1450



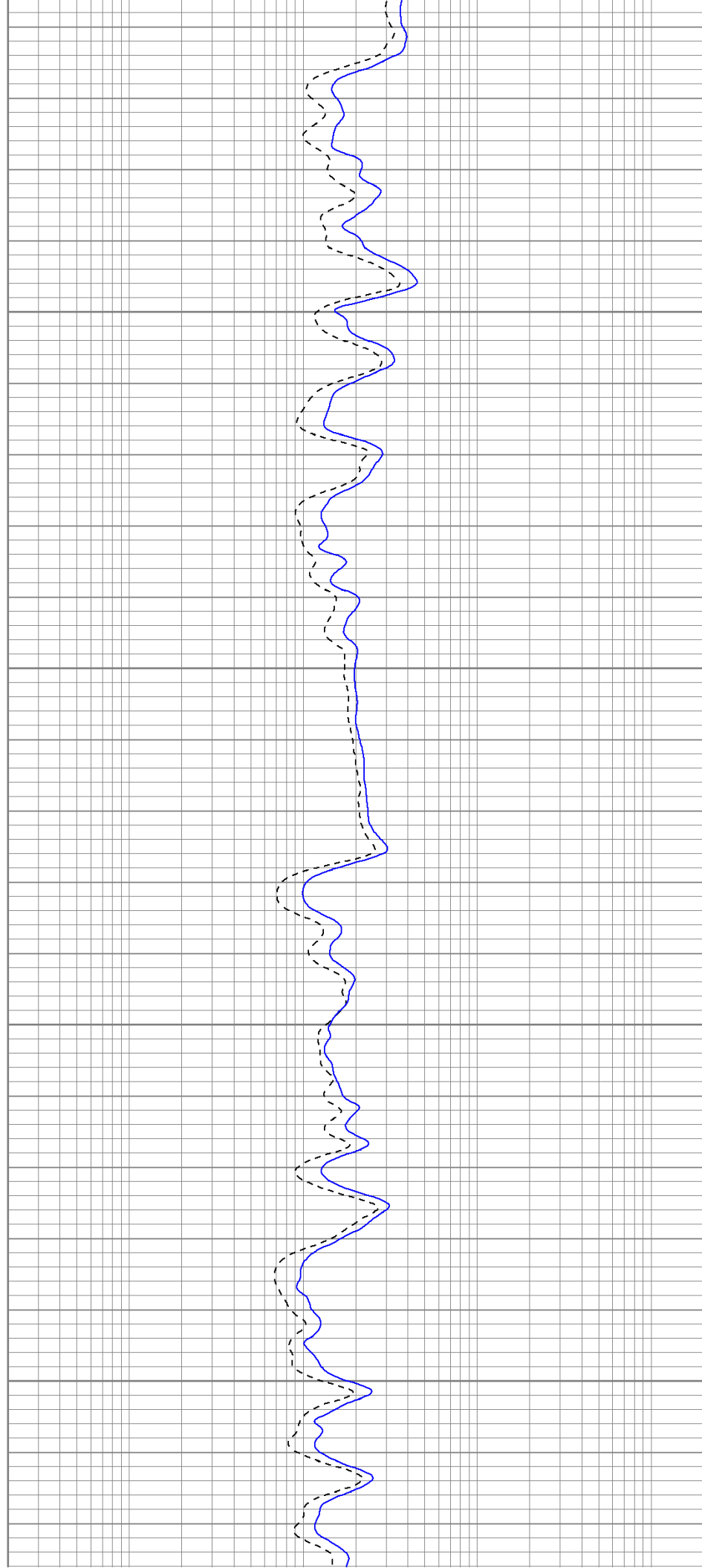


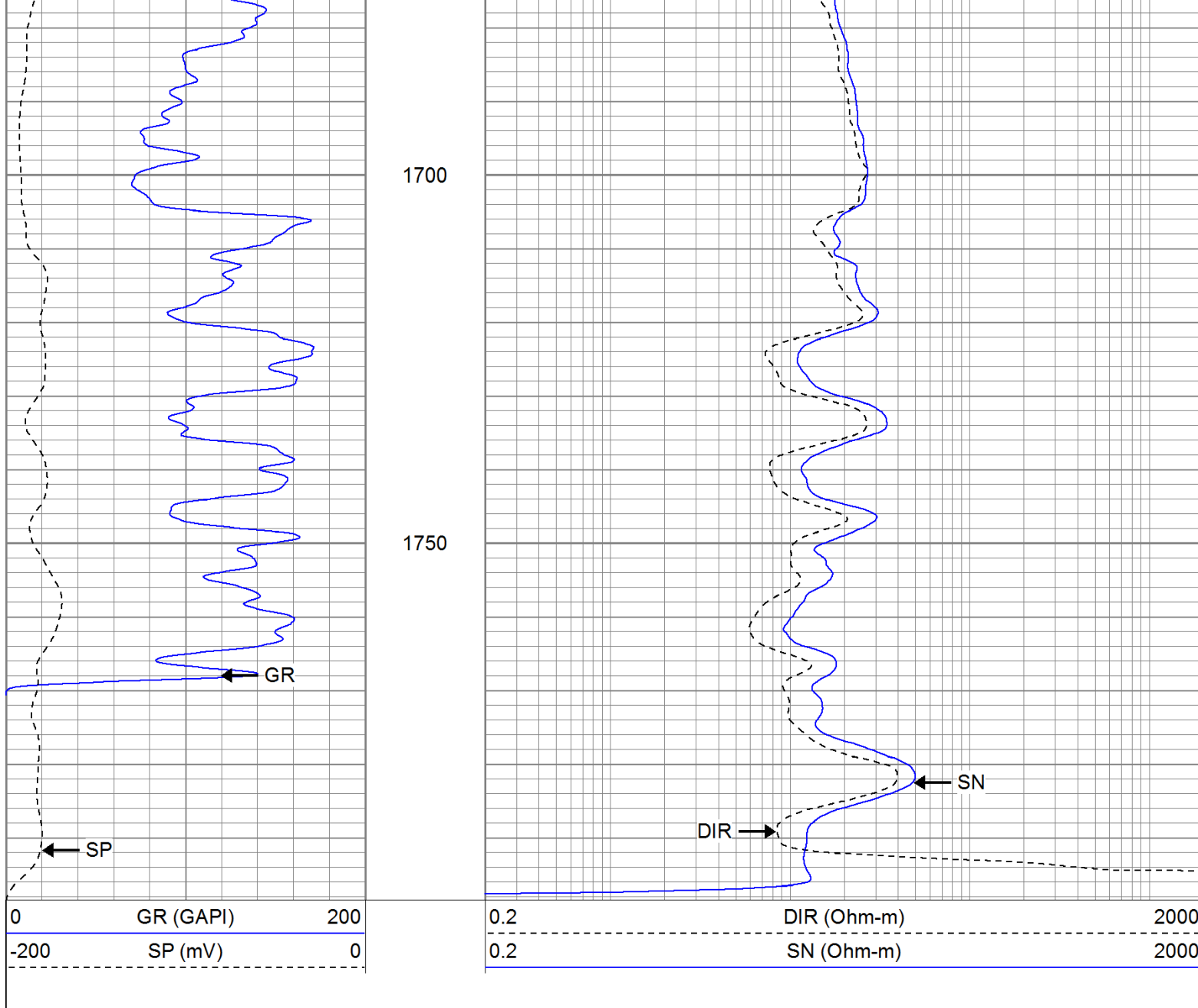
1500

1550

1600

1650

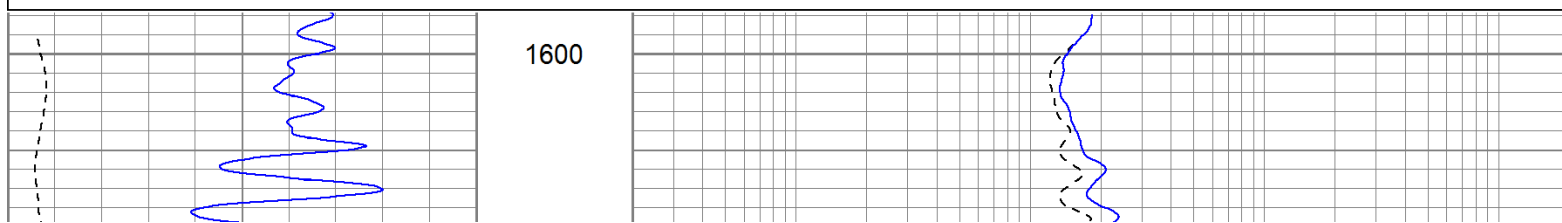


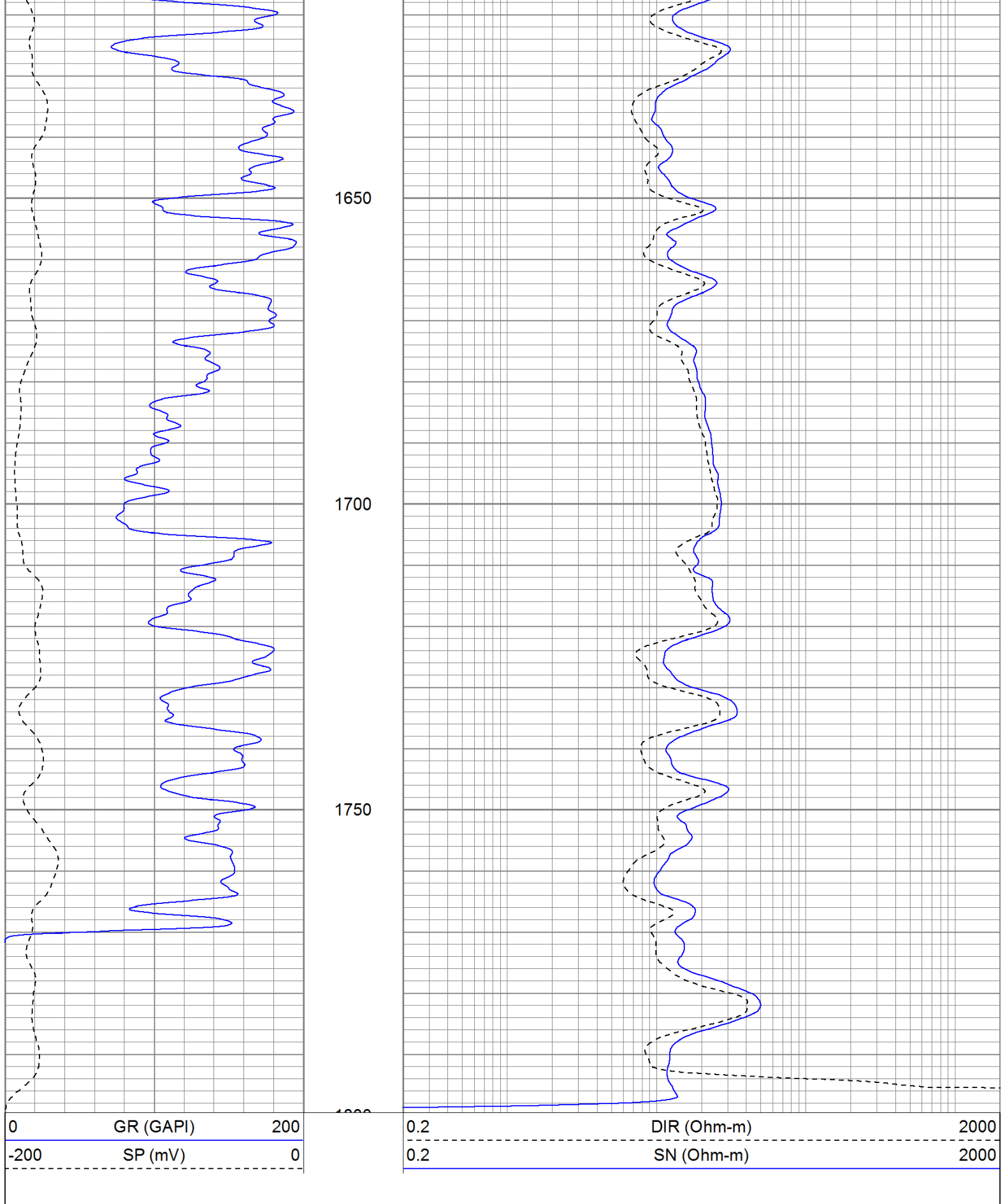


Repeat Section

Database File: hellzapoppintr.db
Dataset Pathname: pass2.1
Presentation Format: iel
Dataset Creation: Mon May 23 08:55:01 2011 by Calc Open-Cased 110302
Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	200	0.2	DIR (Ohm-m)	2000
-200	SP (mV)	0	0.2	SN (Ohm-m)	2000





Calibration Report

Database File: hellzapoppintr.db
Dataset Pathname: pass2
Dataset Creation: Sun May 22 04:49:13 2011 by Log Open-Cased 110302

Induction Tool Calibration Report

Serial Number: 701
 Tool Model: Probe
 Downhole Cal Performed: Fri May 13 12:26:14 2011
 Surface Cal Performed: Wed Apr 27 12:27:07 2011
 After Survey Verification Performed:

Surface Calibration:	Air	Loop	
Conductivity Reference:	0.000	500.000	mmho
Conductivity Reading:	0.006	0.644	V
Internal Reference:	Zero	Cal	
Conductivity Reference:	0.000	500.000	mmho
Conductivity Reading:	0.007	0.643	V

Downhole Calibration:	Internal Zero	Internal Cal	
Conductivity Reference:	0.703	499.163	mmho
Conductivity Reading:	0.000	0.000	V
Short Normal Reference:	0.000	20.000	Ohm-m
Short Normal Reading:	0.005	0.214	V

Results:	Gain	Offset
Loop Conductivity:	783.886	-4.674
Downhole Correction:	1.000	0.000
Short Normal Resistivity:	95.281	-0.432

After Survey Verification	Internal Zero	Internal Cal	
Conductivity Reading:	0.000	0.000	V
Conductivity Result:	0.000	0.000	mmho
Short Normal Reading:	0.000	0.000	V
Short Normal Result:	0.000	0.000	Ohm-m

Compensated Density Calibration Report

Serial-Model: 901-2.75POH
 Source / Verifier: /
 Master Calibration Performed: Tue May 17 10:06:24 2011
 Before Survey Verification Performed:
 After Survey Verification Performed:

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1001.79	578.48	cps
Aluminum	2.590	g/cc	180.36	300.39	cps
Spine Angle = 69.08			Density/Spine Ratio = 0.479		
	Size		Reading		
Small Ring	8.00	in	2.47	V	
Large Ring	17.00	in	4.50	V	

Before Survey Verification

Target	Measured
g/cc	g/cc
g/cc	g/cc
g/cc	g/cc

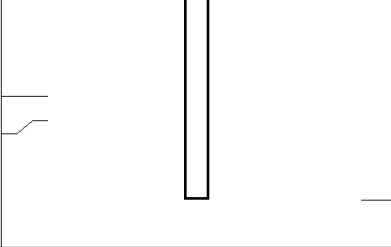
After Survey Verification

Target	Measured
g/cc	g/cc
g/cc	g/cc
g/cc	g/cc

Neutron Calibration Report		
Serial Number:	802	
Tool Model:	2.75POH	
Performed:	Tue May 03 12:28:21 2011	
Calibrator Value:	700	NAPI
Calibrator Reading:	1000	cps
Sensitivity:	0.7	NAPI/cps

Gamma Ray Calibration Report		
Serial Number:	801	
Tool Model:	2.75POH	
Performed:	Thu May 05 13:29:10 2011	
Calibrator Value:	200.0	GAPI
Background Reading:	8.0	cps
Calibrator Reading:	264.7	cps
Sensitivity:	0.6500	GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	29.58		None	0.75	1.50	5.00
			GR-2.75POH (801) Probe 2.75" Probe Open Hole Gamma Ray	3.73	2.75	43.00
NEU	24.04		NEU-2.75POH (802) Probe Epithermal	4.75	2.75	58.00
LSD DCAL SSD	16.21		CDL-2.75POH (901) Probe	8.43	2.75	106.00
	15.94					
	15.69					
DIC	6.24		IEL-Probe (701)	13.46	2.75	93.00

SP SN	2.25 1.71				
<div>Dataset: hellzapoppintr.db: field/well/run1/pass2</div> <div>Total Length: 31.11 ft</div> <div>Total Weight: 305.00 lb</div> <div>O.D. 2.75 in</div>					