



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

SINGLE INDUCTION LOG

Company Pioneer Natural Resources
Well E Budd 24-33
Field Purgatoire River
County Las Animas State Colorado

Location: API # : 05 071 09628 00

597' FSL & 1368' FWL

SEC 33 TWP 31S RGE 65W

Permanent Datum Ground Level Elevation 7267'
Log Measured From Kelly Bushing 9' Above G.L.
Drilling Measured From Kelly Bushing

Other Services
CDL
NEU
Elevation
K.B. 7276'
D.F. -----
G.L. 7267'

Date 8-9-08

Run Number One

Depth Driller 1760'

Depth Logger 1758'

Bottom Logged Interval 1756'

Top Log Interval Surface Casing

Casing Driller 8 5/8" @ 357'

Casing Logger 358'

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 P.M.

Time Logger on Bottom 10:15 P.M.

Maximum Recorded Temperature 103 DEG F

Equipment Number T700

Location Trinidad

Recorded By K. Lucero

Witnessed By Mr. Mike Polley

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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:
Riley Canyon 2nd right after Zellie's Ranch, 1st right left at Y to location

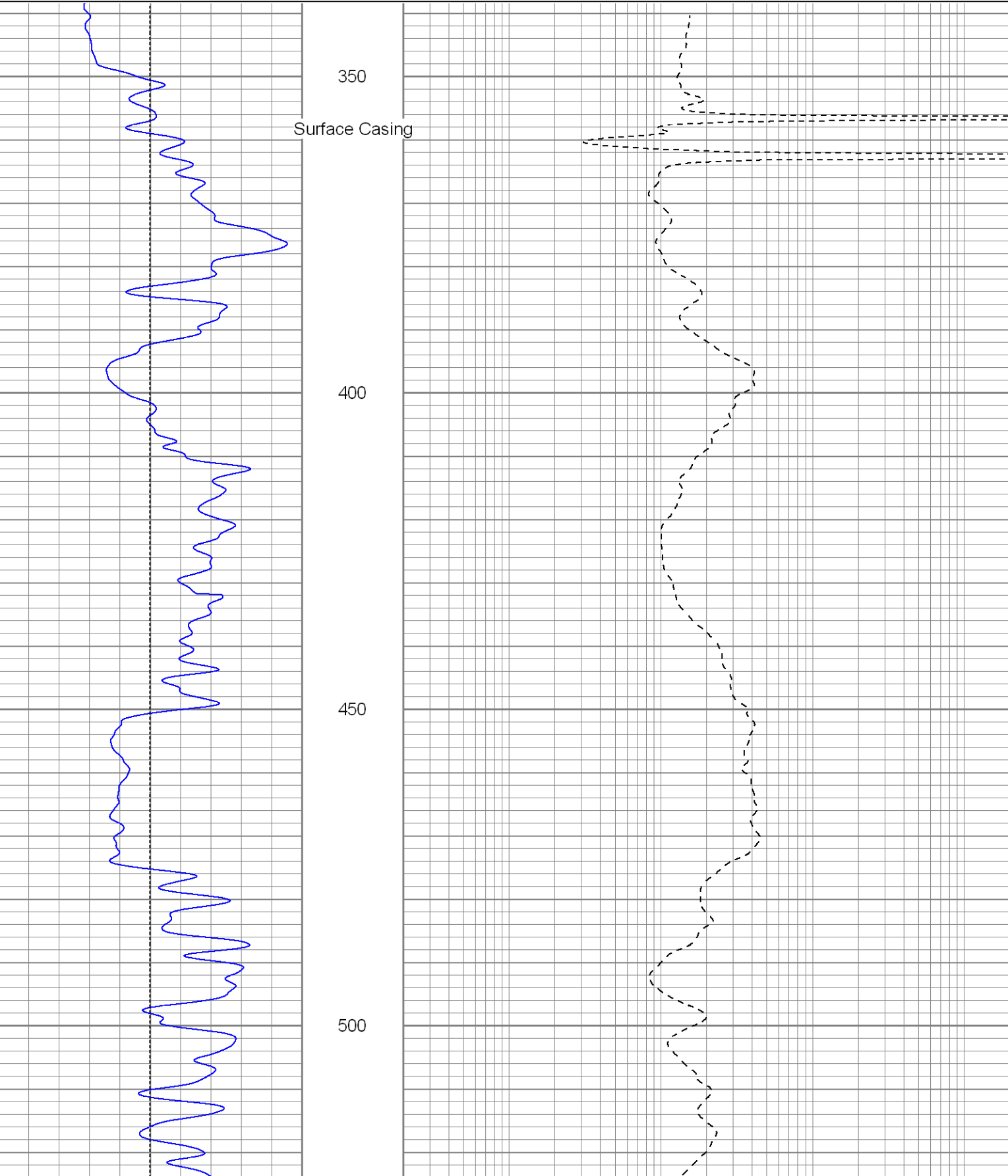


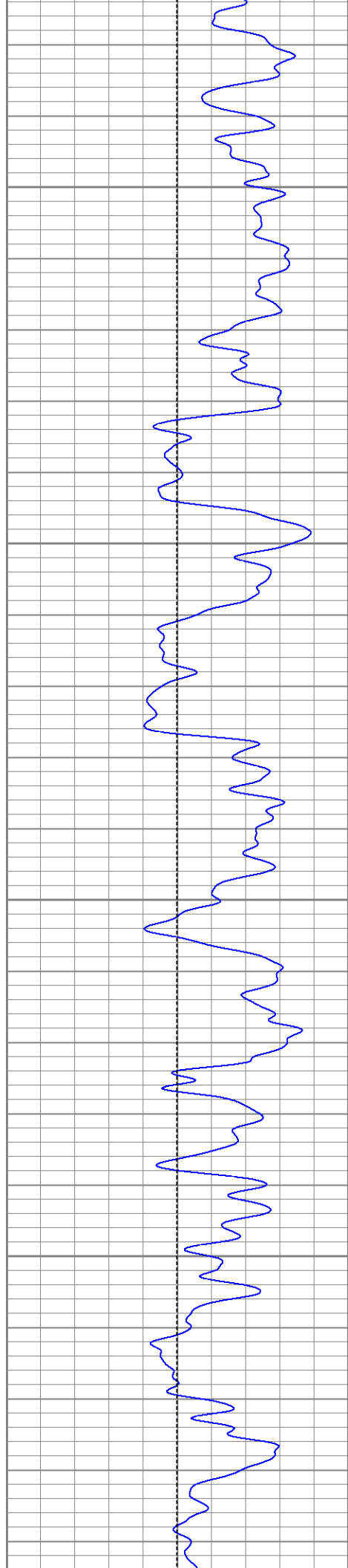
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Main Pass

Database File: e budd .db
Dataset Pathname: pass3.1
Presentation Format: iel
Dataset Creation: Sat Aug 09 23:40:12 2008 by Calc Open-Cased 071220
Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	200	0.2	DIR (Ohm-m)	2000
-100	SP (mV)	100	0.2	SN (Ohm-m)	2000



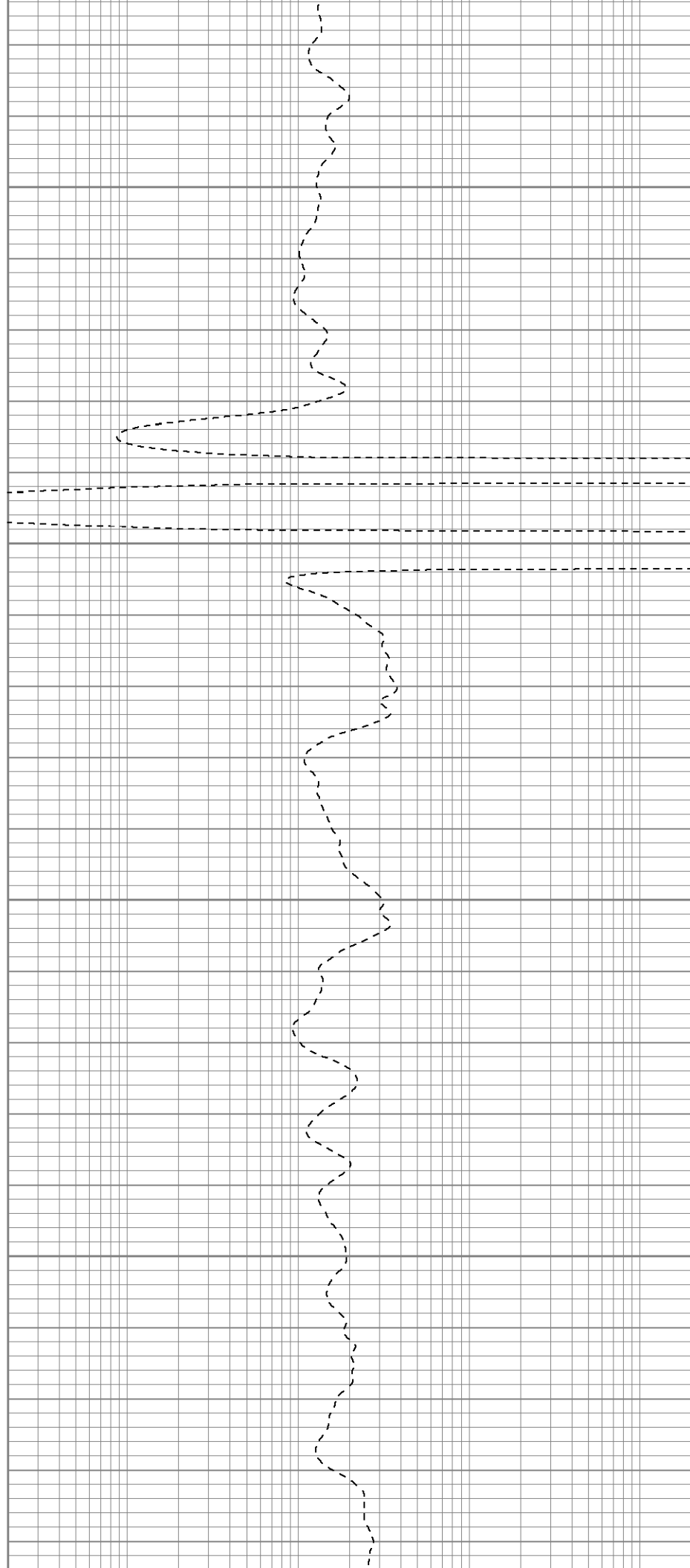


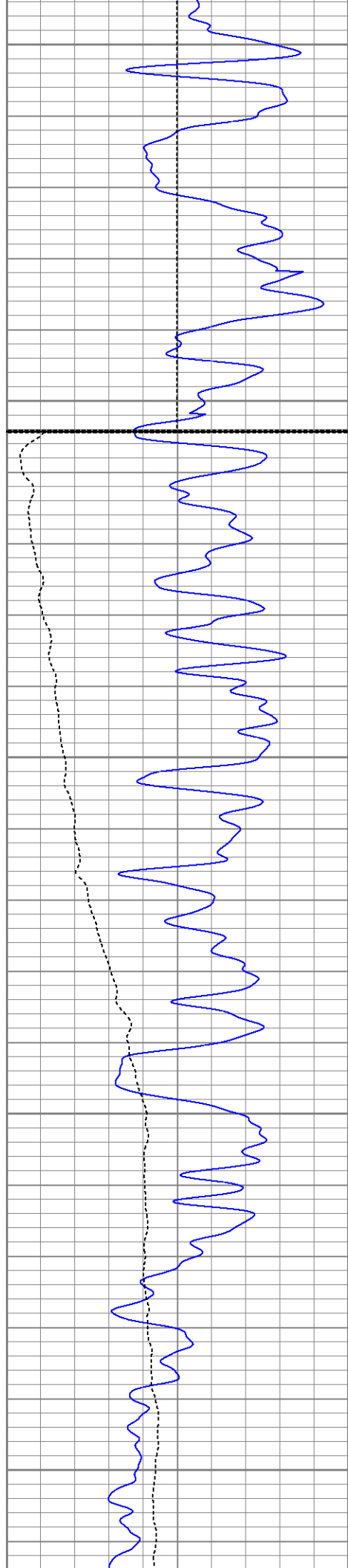
550

600

650

700





750

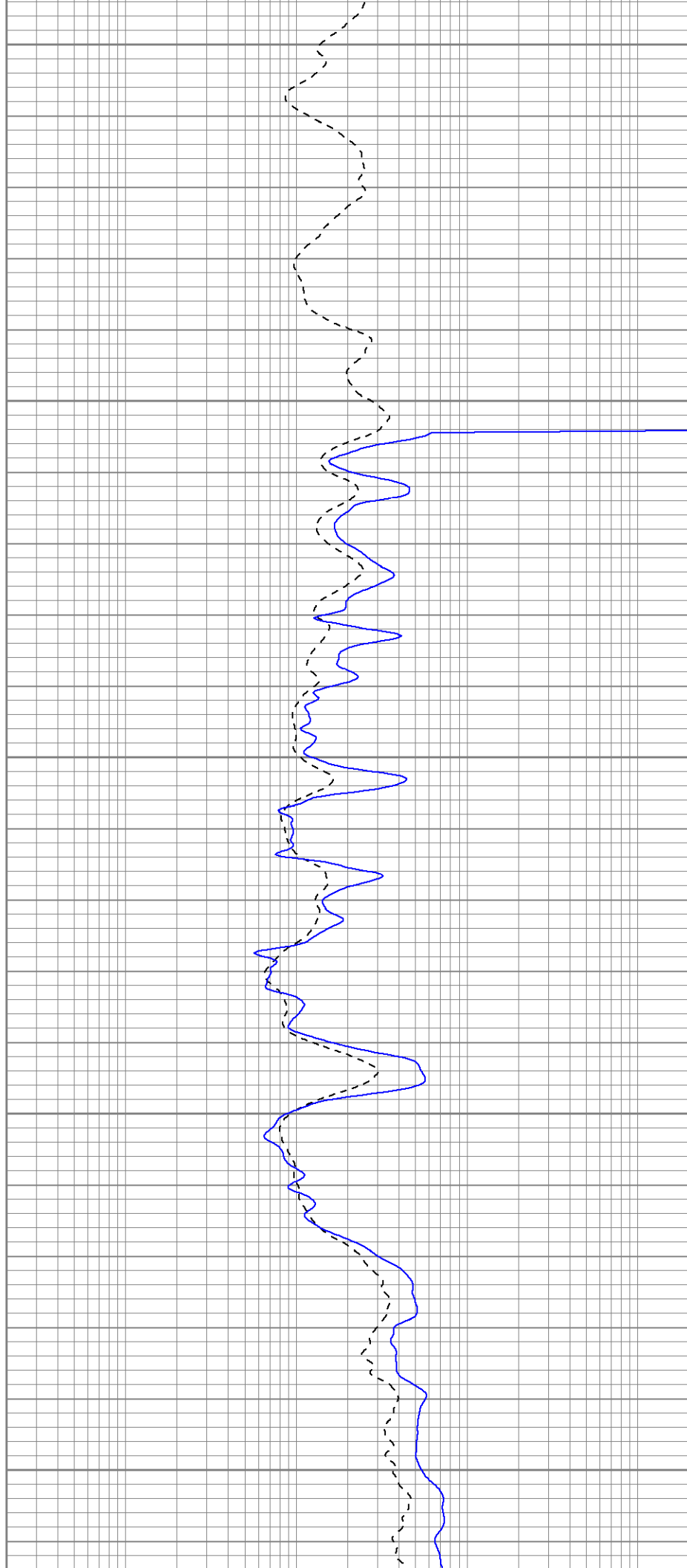
800

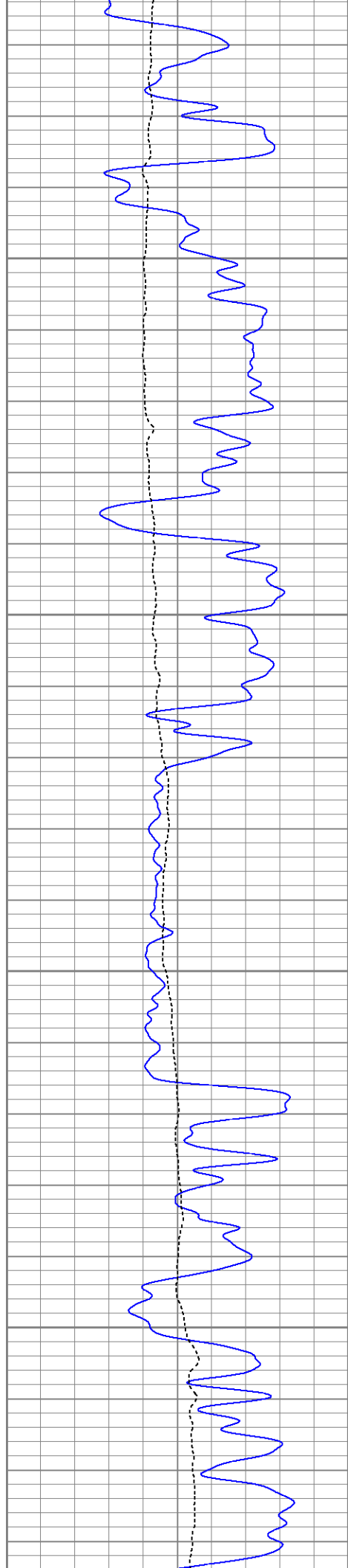
Fluid Level

850

900

950



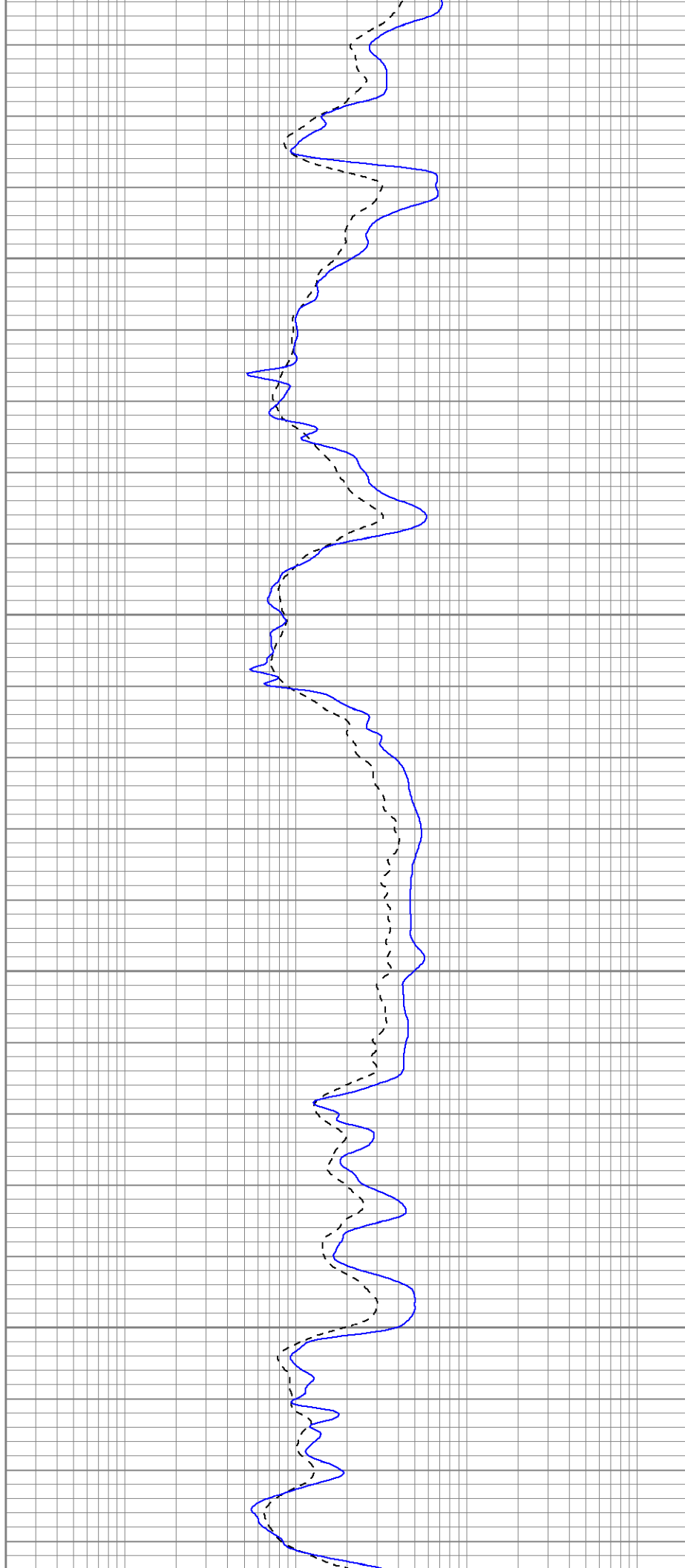


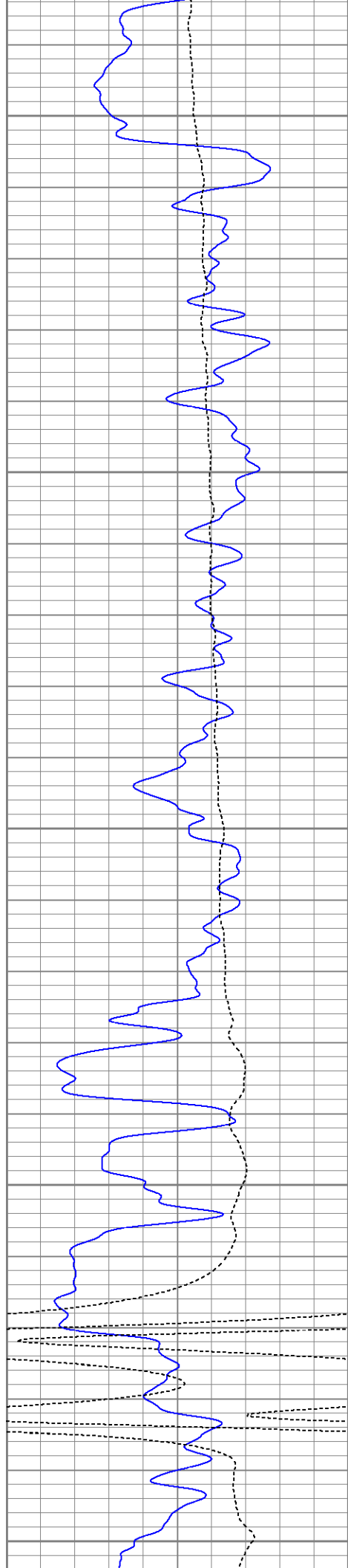
1000

1050

1100

1150





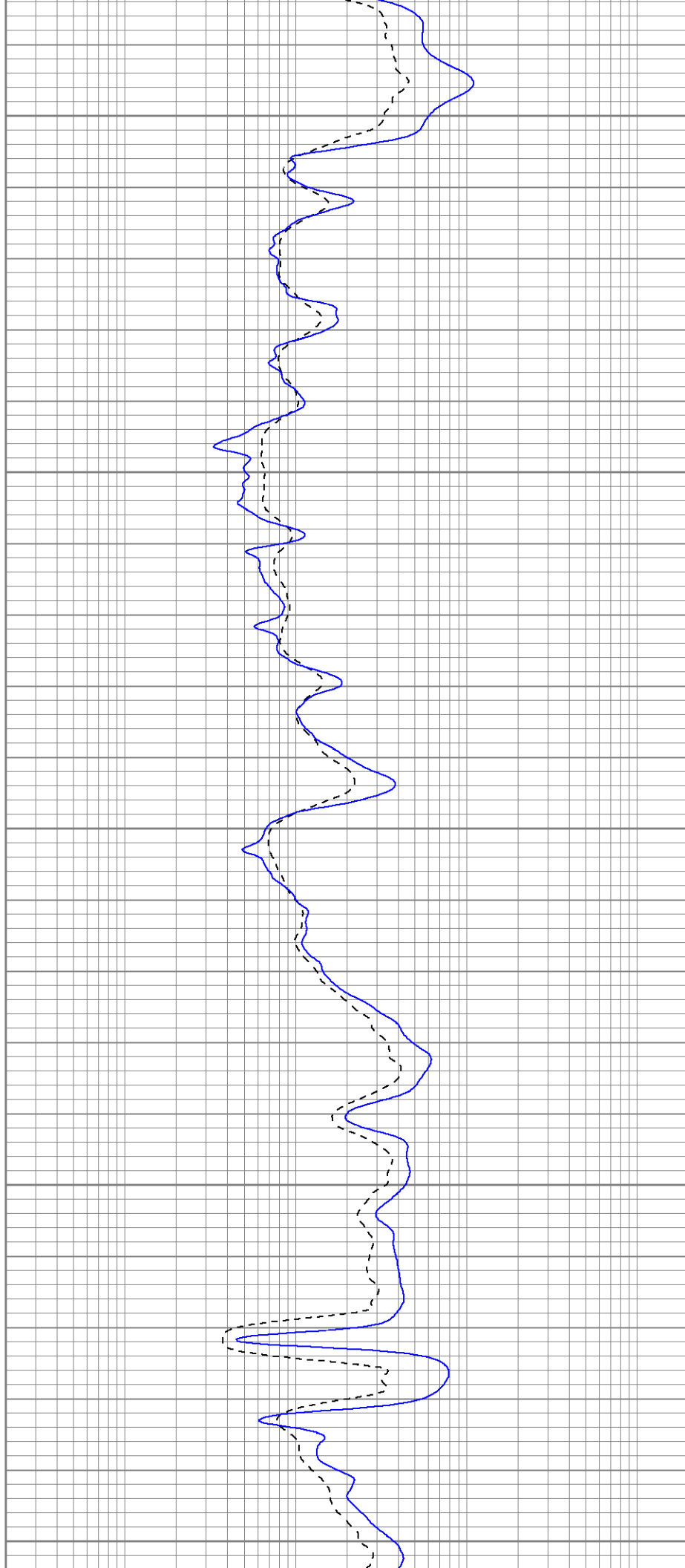
1200

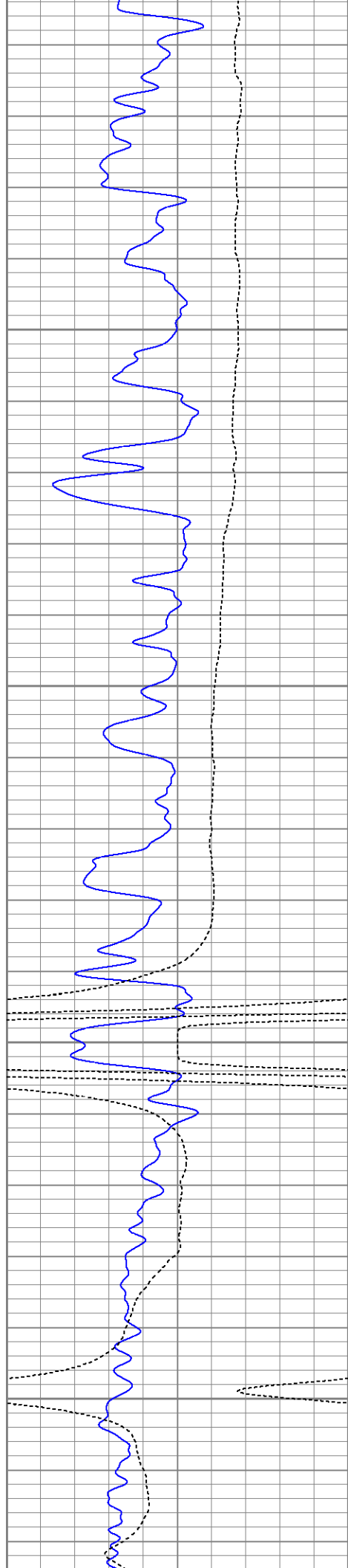
1250

1300

1350

1400



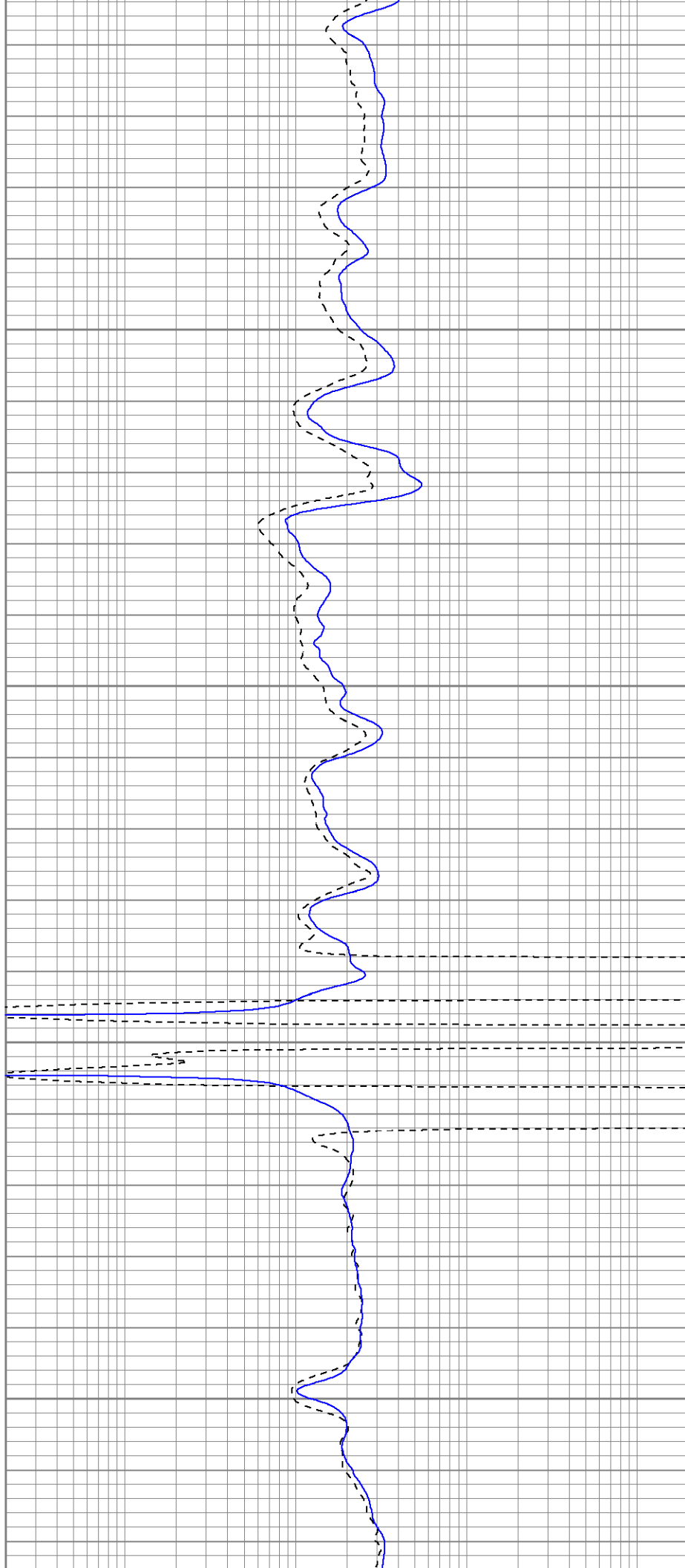


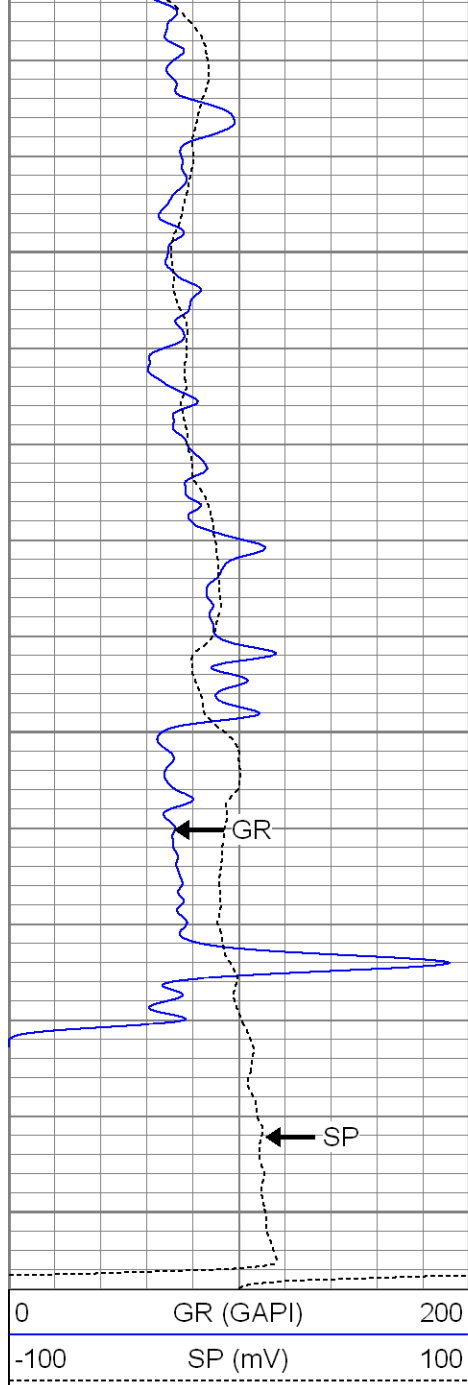
1450

1500

1550

1600

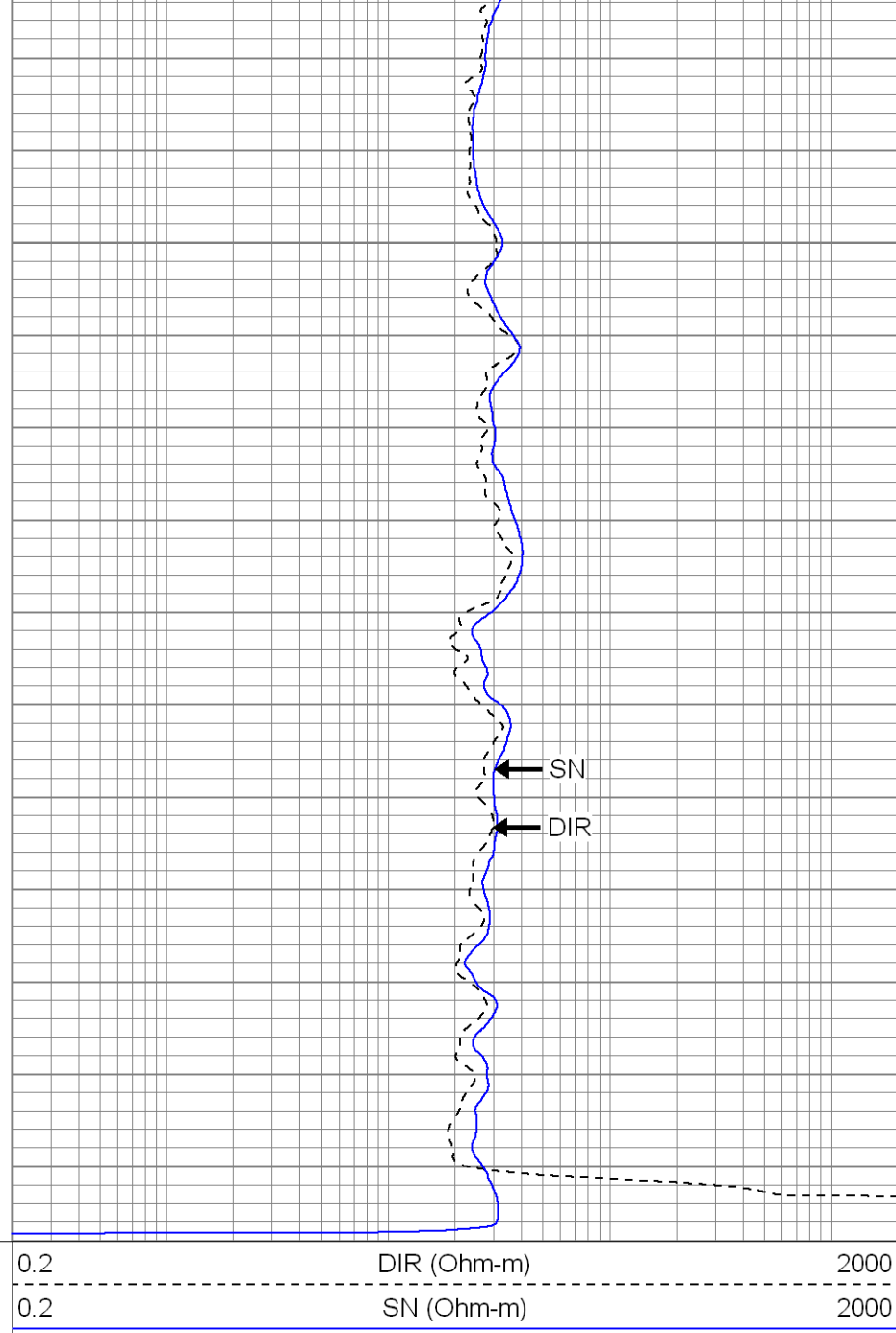




1650

1700

1750



SUPERIOR

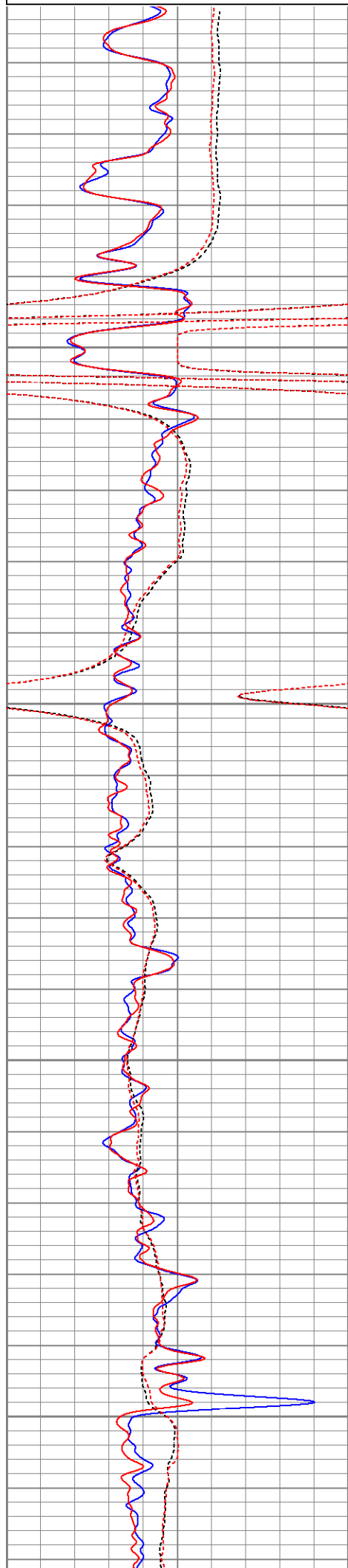
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Repeat Section

Database File: e budd .db
Dataset Pathname: pass2.1
Presentation Format: iel
Dataset Creation: Sat Aug 09 23:16:31 2008 by Calc Open-Cased 071220
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	DIR (Ohm-m)	2000
0.2	SN (Ohm-m)	2000
0.2	DIR-repeat (Ohm-m)	2000
0.2	SN-repeat (Ohm-m)	2000

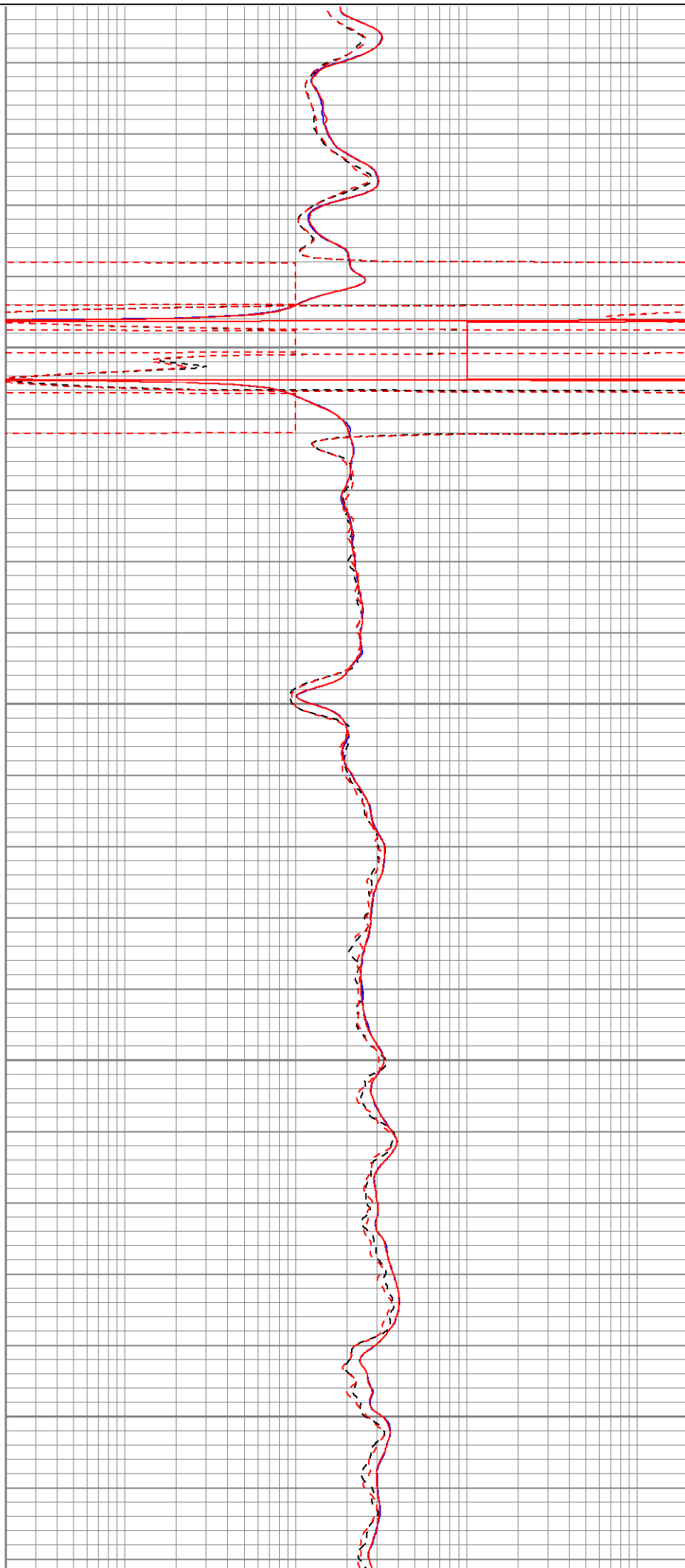


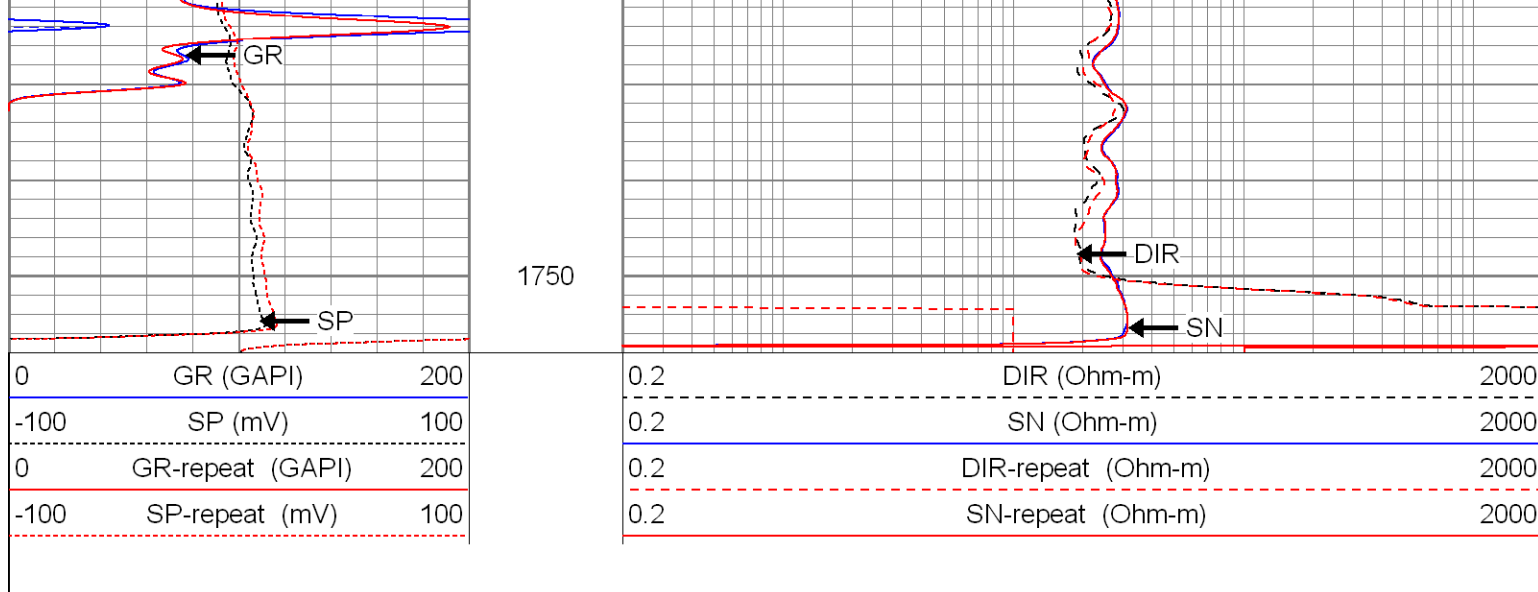
1550

1600

1650

1700





Calibration Report

Database File: e budd .db
Dataset Pathname: pass1
Dataset Creation: Sat Aug 09 22:16:06 2008 by Log Open-Cased 071220

Induction Tool Calibration Report

Serial Number: 121
Tool Model: GL121
Downhole Cal Performed: Thu Aug 07 12:46:17 2008
Surface Cal Performed: Thu Aug 07 12:46:11 2008

Surface Calibration:	Air	Loop	
Conductivity Reference:	0.000	450.000	mmho
Conductivity Reading:	0.010	0.634	V
Internal Reference:	Zero	Cal	
Conductivity Reference:	0.000	500.000	mmho
Conductivity Reading:	0.007	0.619	V

Downhole Calibration:	Internal Zero	Internal Cal	
Conductivity Reference:	-2.555	439.683	mmho
Conductivity Reading:	-1.577	443.895	V
Short Normal Reference:	0.000	17.000	Ohm-m
Short Normal Reading:	0.005	0.195	V

Results:	Gain	Offset
Loop Conductivity:	721.720	-7.387
Downhole Correction:	0.993	-0.989
Short Normal Resistivity:	89.266	-0.436

Temperature Calibration Report

Serial Number: 2099T
Tool Model: CDLP
Performed: Tue Aug 05 12:45:58 2008

	Reference	Reading
Low Reference:	55.00 degF	3.15 V
High Reference:	161.00 degF	5.35 V

Gain: 48.18
Offset: -96.77
Delta Spacing: 1

Compensated Density Calibration Report

Serial-Model:	2099-NG
Source / Verifier:	csv-n20 / blocks
Master Calibration Performed:	Tue Aug 05 12:45:51 2008

Master Calibration


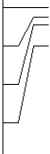
	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	426.18	194.49	cps
Aluminum	2.590	g/cc	85.17	121.21	cps
Spine Angle = 73.64			Density/Spine Ratio = 0.524		
	Size		Reading		
Small Ring	8.00	in	1.65	V	
Large Ring	14.00	in	2.99	V	

Gamma Ray Calibration Report

Serial Number:	2000	
Tool Model:	P2000	
Performed:	Tue Aug 05 11:45:31 2008	
Calibrator Value:	200.0	GAPI
Background Reading:	54.0	cps
Calibrator Reading:	219.0	cps
Sensitivity:	0.2300	GAPI/cps

Neutron Calibration Report

Serial Number:	5108	
Tool Model:	P	
Performed:	Tue Aug 05 09:45:17 2008	
Calibrator Value:	1	NAPI
Calibrator Reading:	1	cps
Sensitivity:	1	NAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
NEU	33.08		NEU-P (5108)	4.92	3.63	85.00
GR	27.11		GR-P2000 (2000)	3.67	3.25	40.00
			CDL-NG (2099)	9.69	4.00	201.00
LSD	18.32		TEMP-CDLP (2099T)	0.01	4.00	1.00
DCAL	18.02					
SSD	17.77					
TEMP	17.08					

