



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

## SINGLE INDUCTION LOG

Company	Pioneer Natural Resources	Company	Pioneer Natural Resources
Well	Maximus 12-2	Well	Maximus 12-2
Field	Purgatoire River	Field	Purgatoire River
County	Las Animas	County	Las Animas
State	Colorado	State	Colorado
Location:	API # : 05 071 09685 00 1834' FNL & 522' FWL	Other Services	CDL
Permanent Datum	SEC 2 TWP 33S RGE 68W	Elevation	
Log Measured From	Ground Level	K.B. 7924'	
Drilling Measured From	Kelly Bushing 4' Above G.L. Kelly Bushing	D.F. -----	
		G.L. 7920'	
Date	12-21-08	12-22-08	12-23-08
Run Number	One	Three	Ten
Depth Driller	2440'	2440'	2440'
Depth Logger	1387'	1637'	2374'
Bottom Logged Interval	1385'	1635'	2372'
Top Log Interval	Surface Casing	5.5" Casing	5.5" Casing
Casing Driller	8 5/8" @ 726'	5.5" @ 1376'	5.5" @ 2221'
Casing Logger	728'	1376'	2221'
Bit Size	7 7/8"	7 7/8"	7 7/8"
Type Fluid in Hole	Water	Water	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	3:00 P.M.	6:45 P.M.	6:45 P.M. 12-22-08
Time Logger on Bottom	7:25 P.M.	11:20 P.M.	7:15 P.M.
Maximum Recorded Temperature	70 DEG F	///	///
Equipment Number	T697	T0701	T0701
Location	Trinidad	Trinidad	Trinidad
Recorded By	J. Cappellucci	C. Sisneros	C. Sisneros
Witnessed By	Mr. CW Ely	Mr. Micheal Polley	Mr. Jack Pierce

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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

Multiple passes made thru 5.5" casing.  
Merged all data.  
No bottom hole temp ran due to logging conditions.  
Well Directions:

Wet Canyon to Hicks School, take left, take third right, drive thru the Julian Location, next left, go thru gate, at Y go right, drive thru the Mule Herder, go thru double green gates, go left, at Y go left, next Y go right, at next Y stay right, go thru double green gates, at Y stay left, go down hill thru double green gates, stay on main road, past wooden wall past old cabin, at Y stay right, stay on main road, at Y stay right up switchbacks, at top stay left, dead end on location.



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# Main Merged Pass

Database File: maximus.db  
Dataset Pathname: pass1sil  
Presentation Format: iel  
Dataset Creation: Wed Dec 24 09:09:28 2008  
Charted by: Depth in Feet scaled 1:240

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

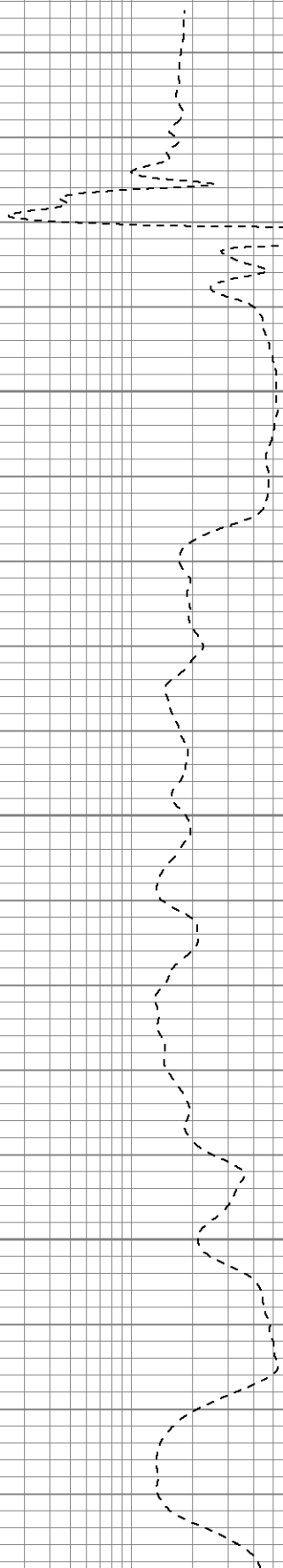
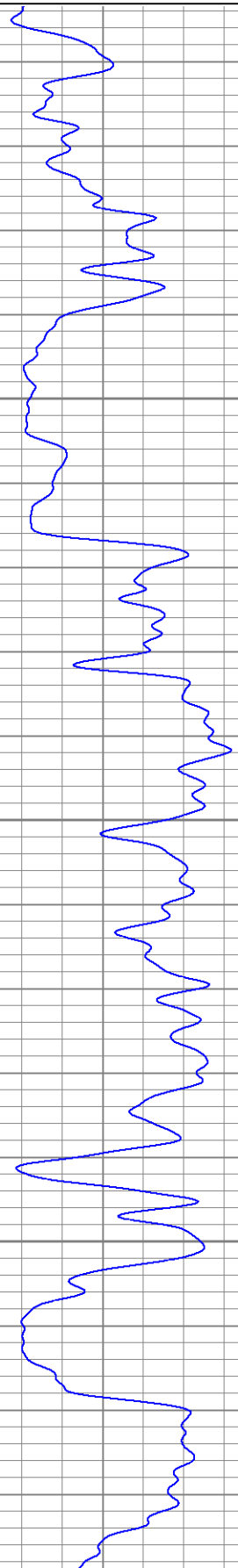
0.2	DIR (Ohm-m)	2000
0.2	SN (Ohm-m)	2000

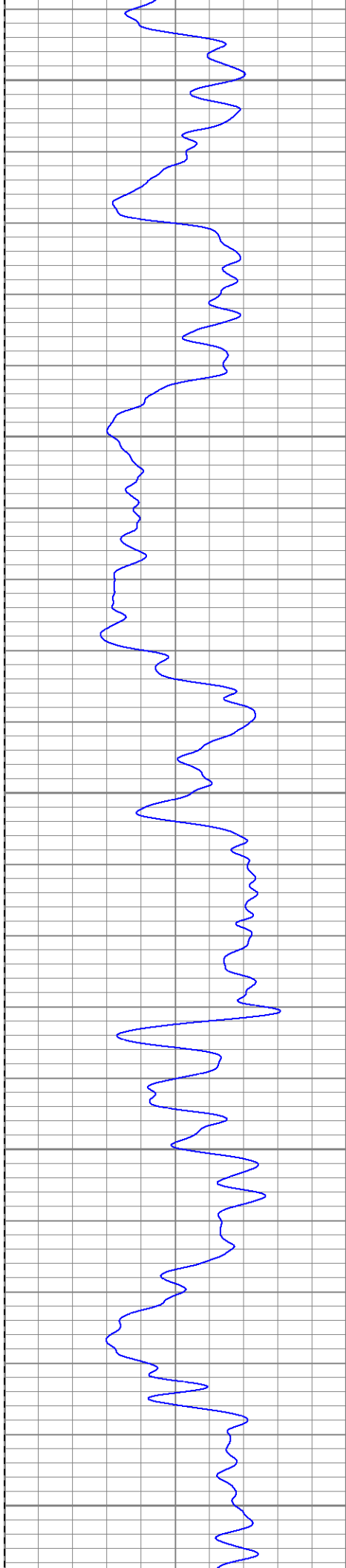
Surface Casing

750

800

850





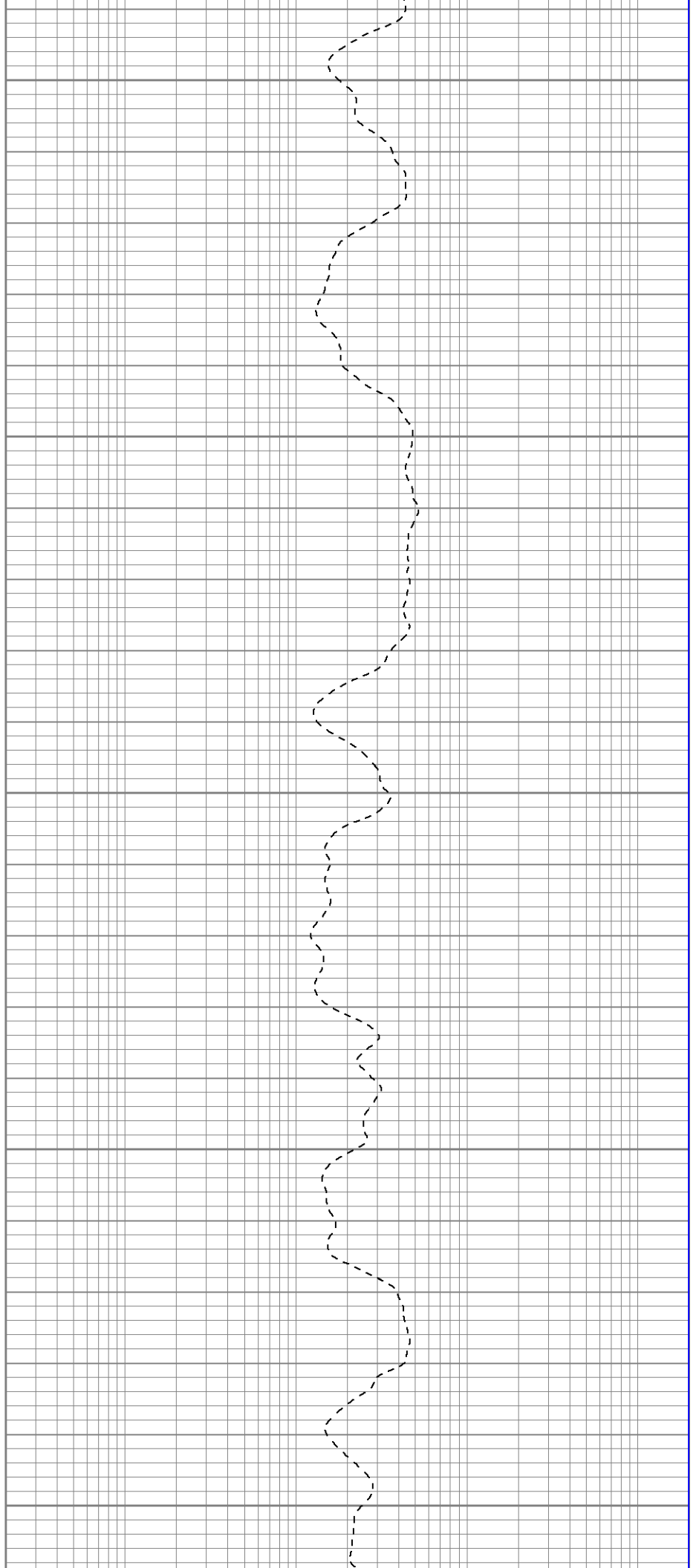
900

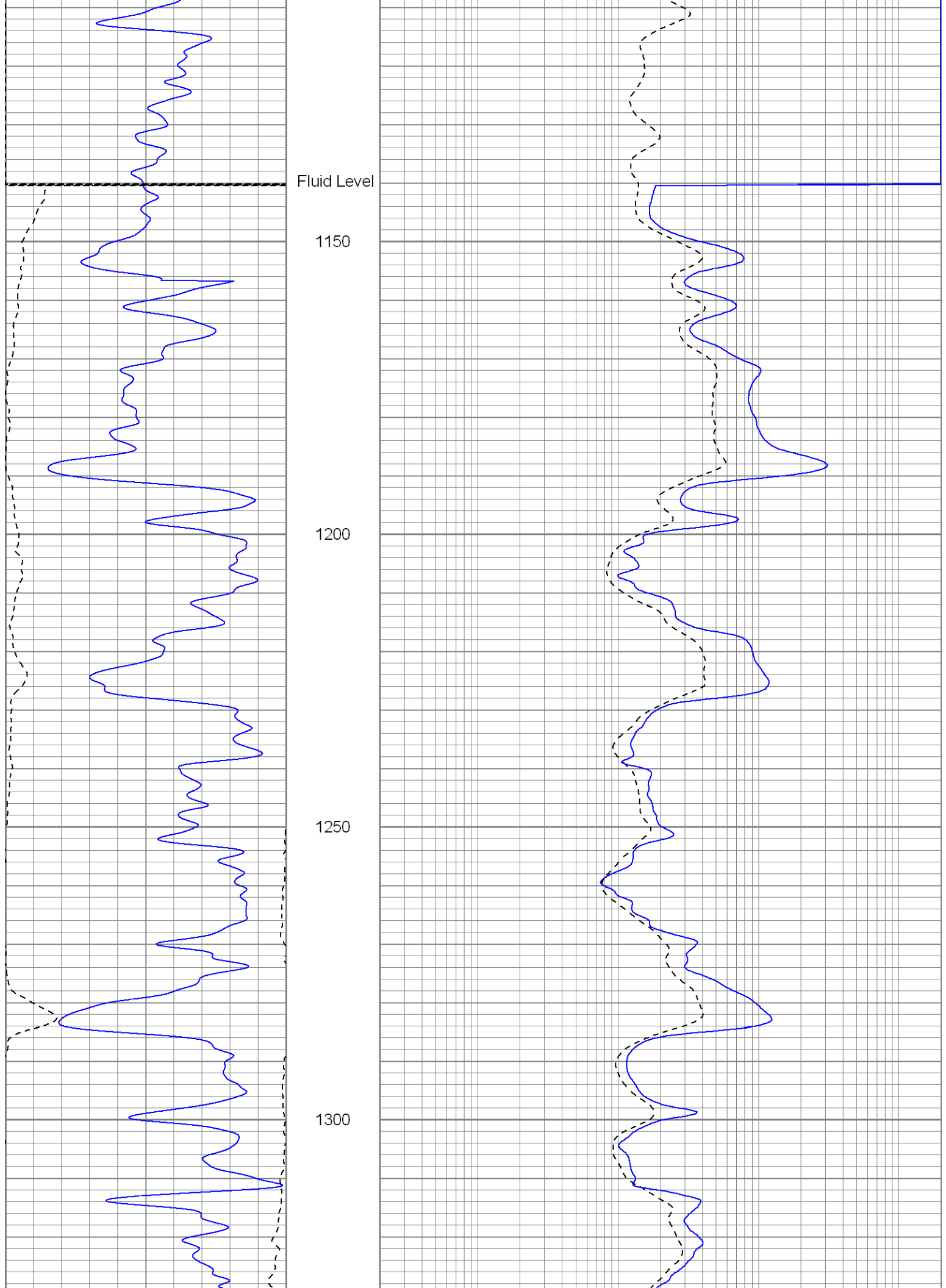
950

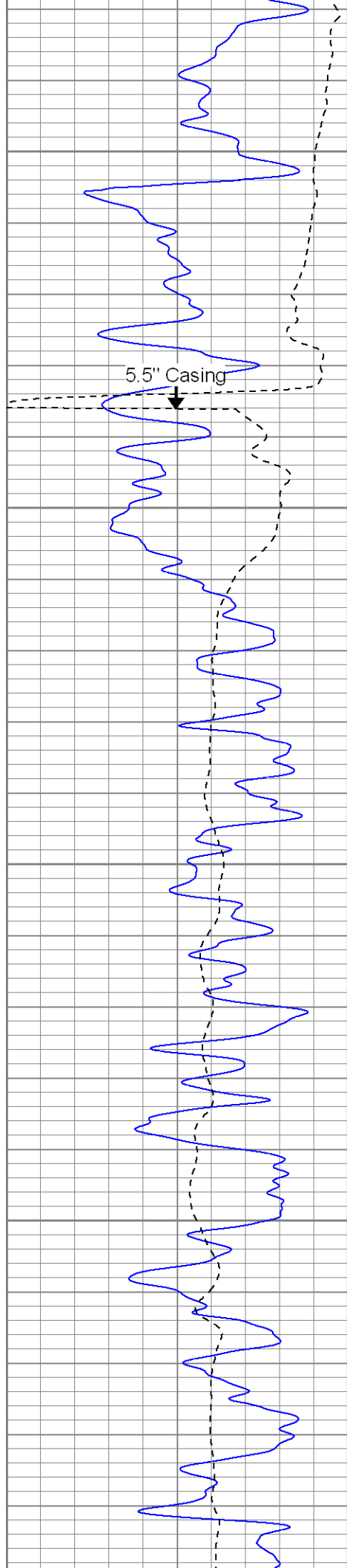
1000

1050

1100







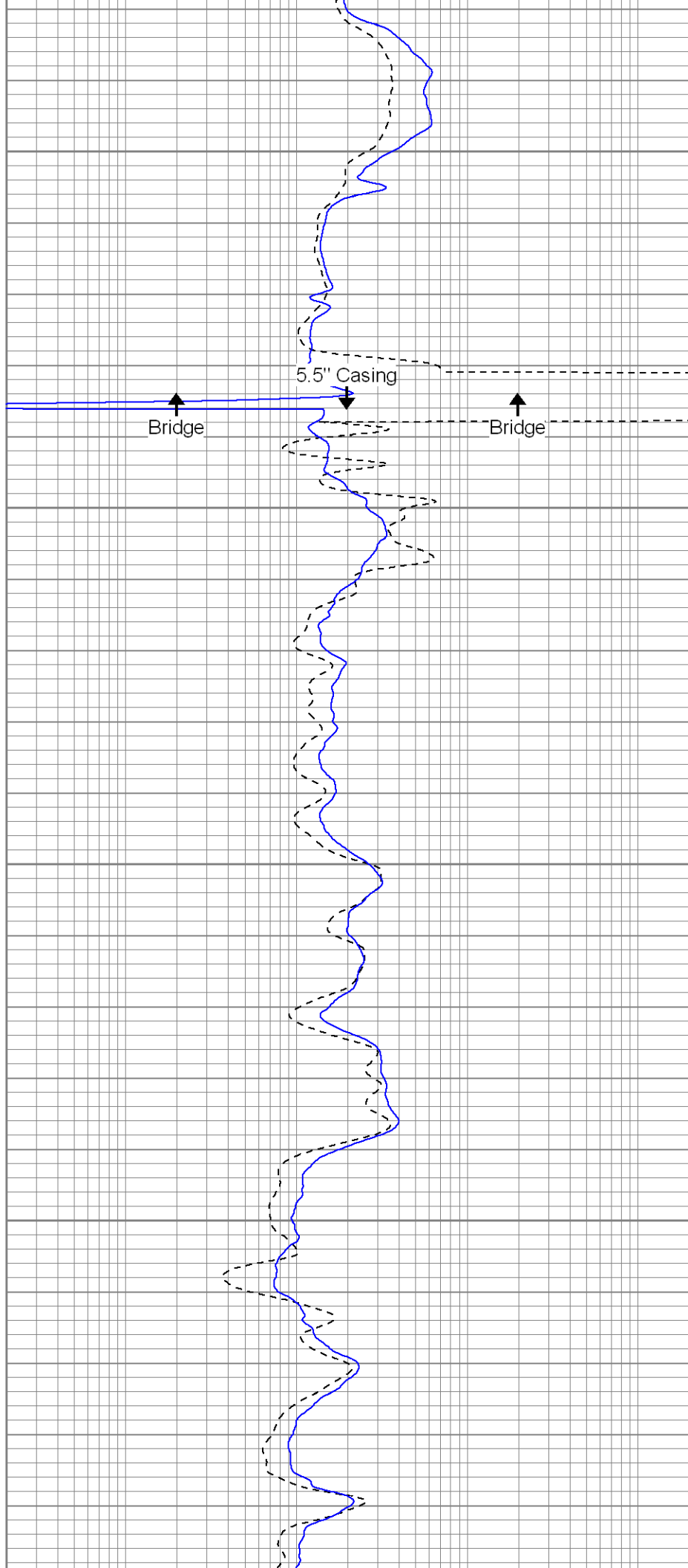
1350

5.5" Casing

1400

1450

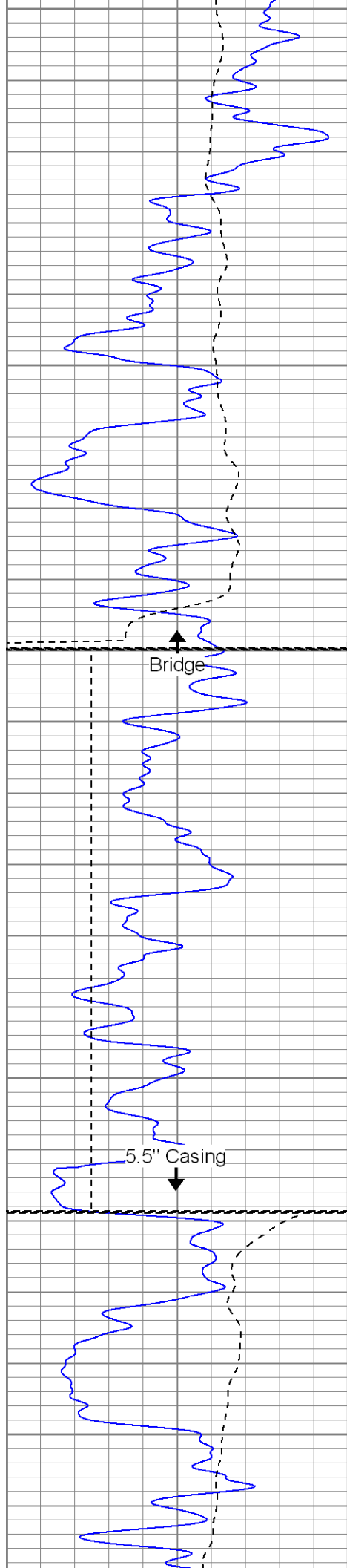
1500



5.5" Casing

Bridge

Bridge



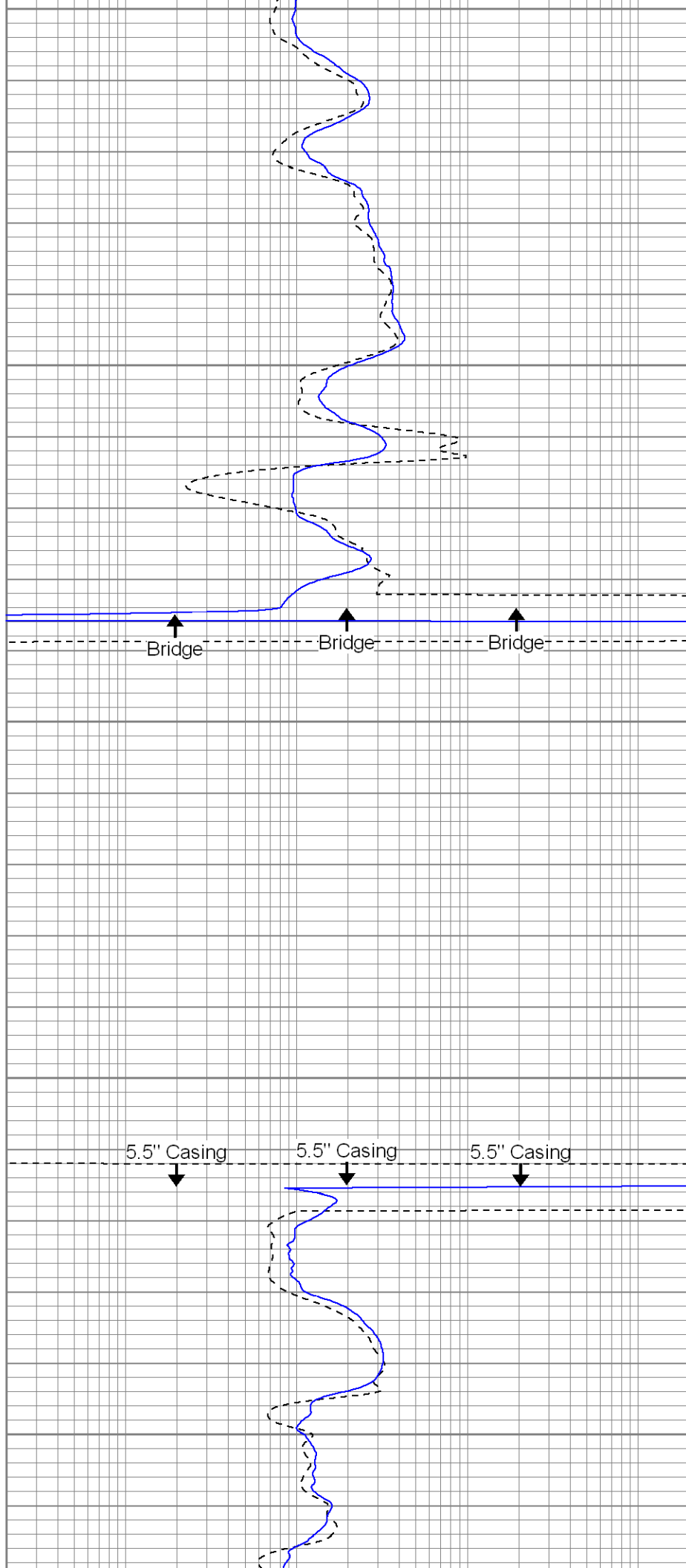
1550

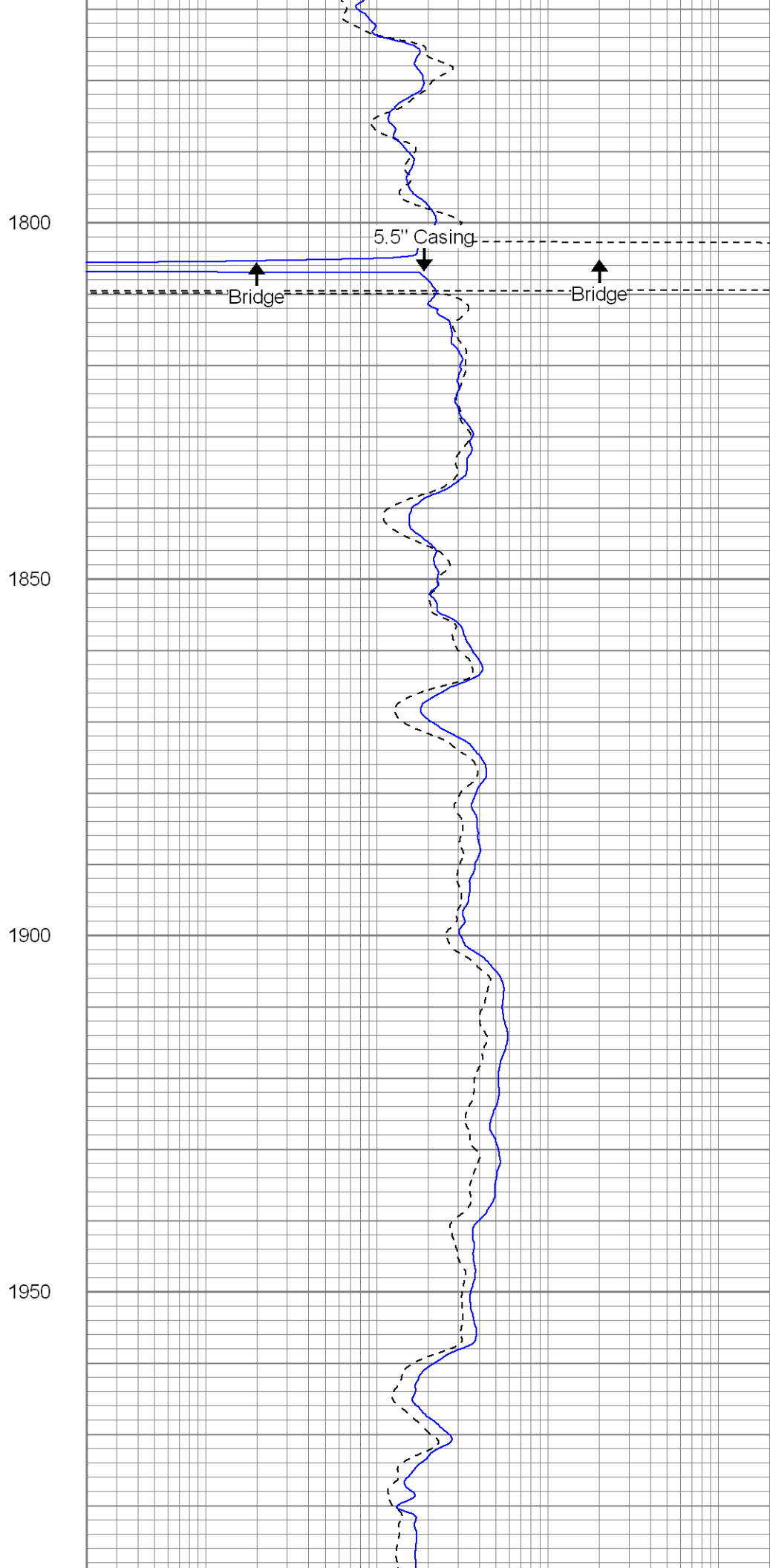
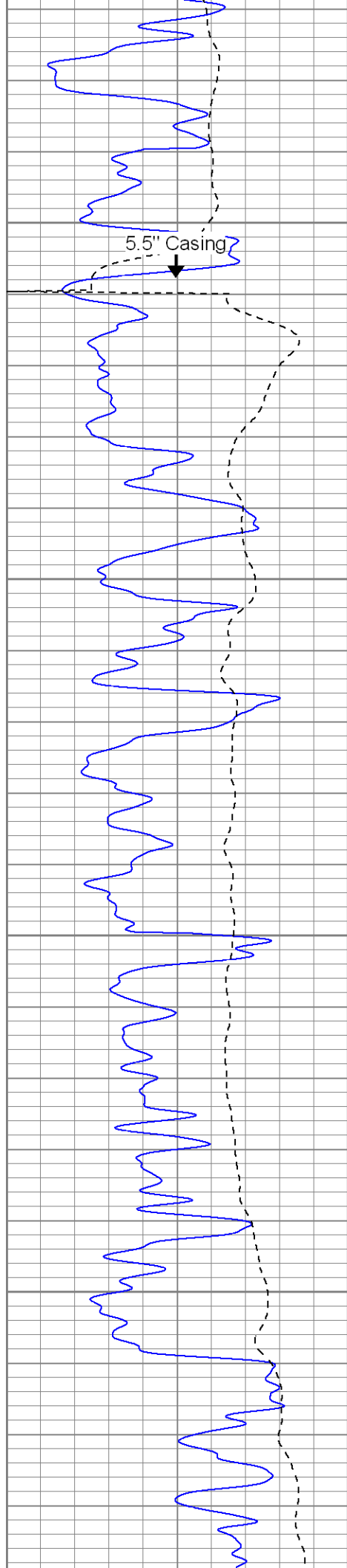
1600

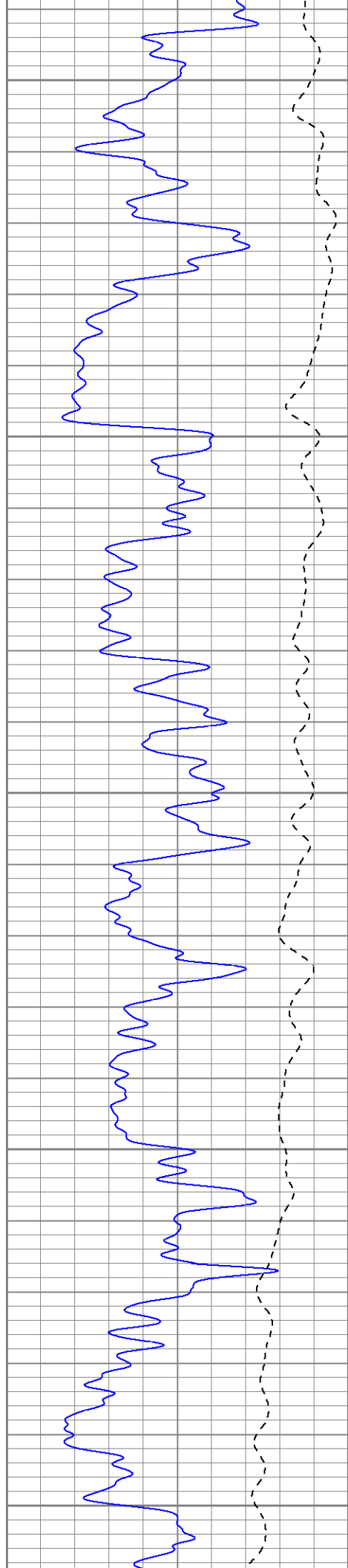
1650

1700

1750







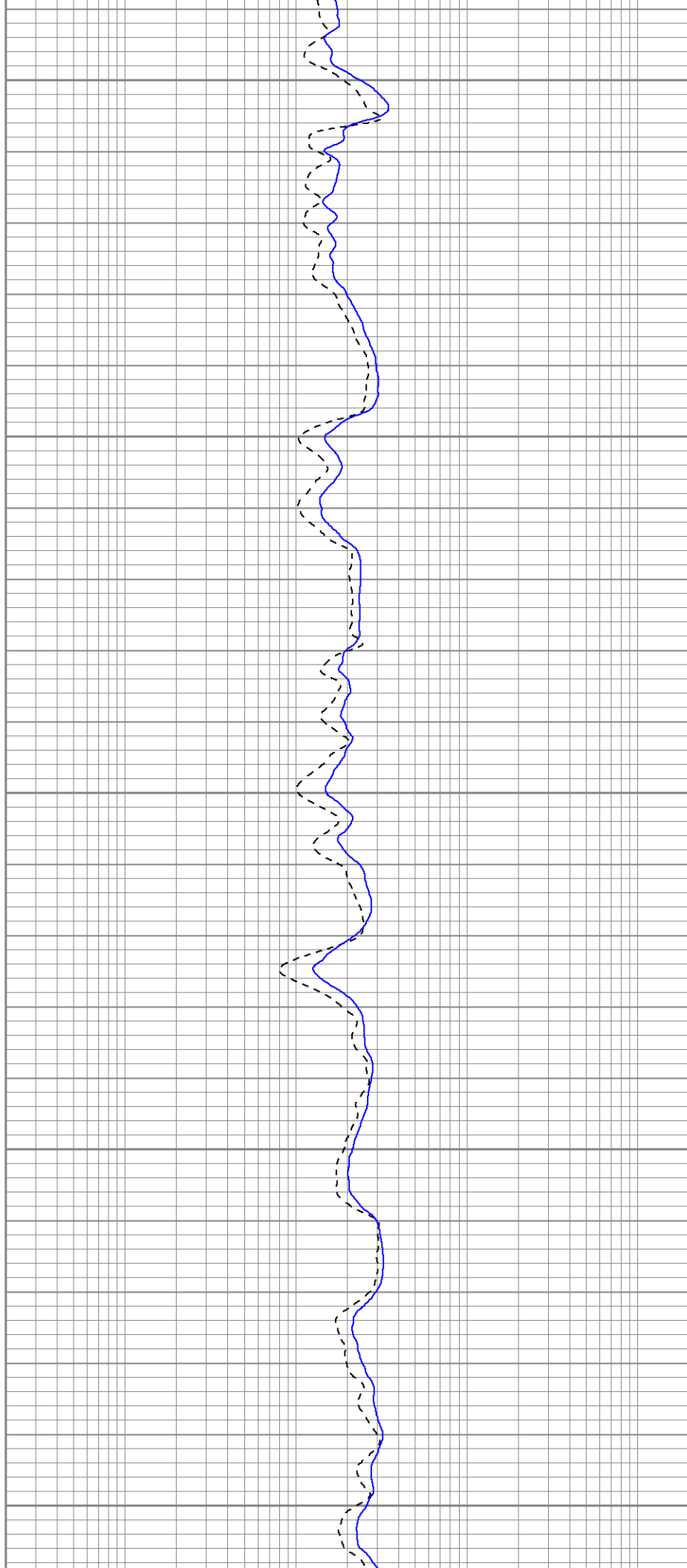
2000

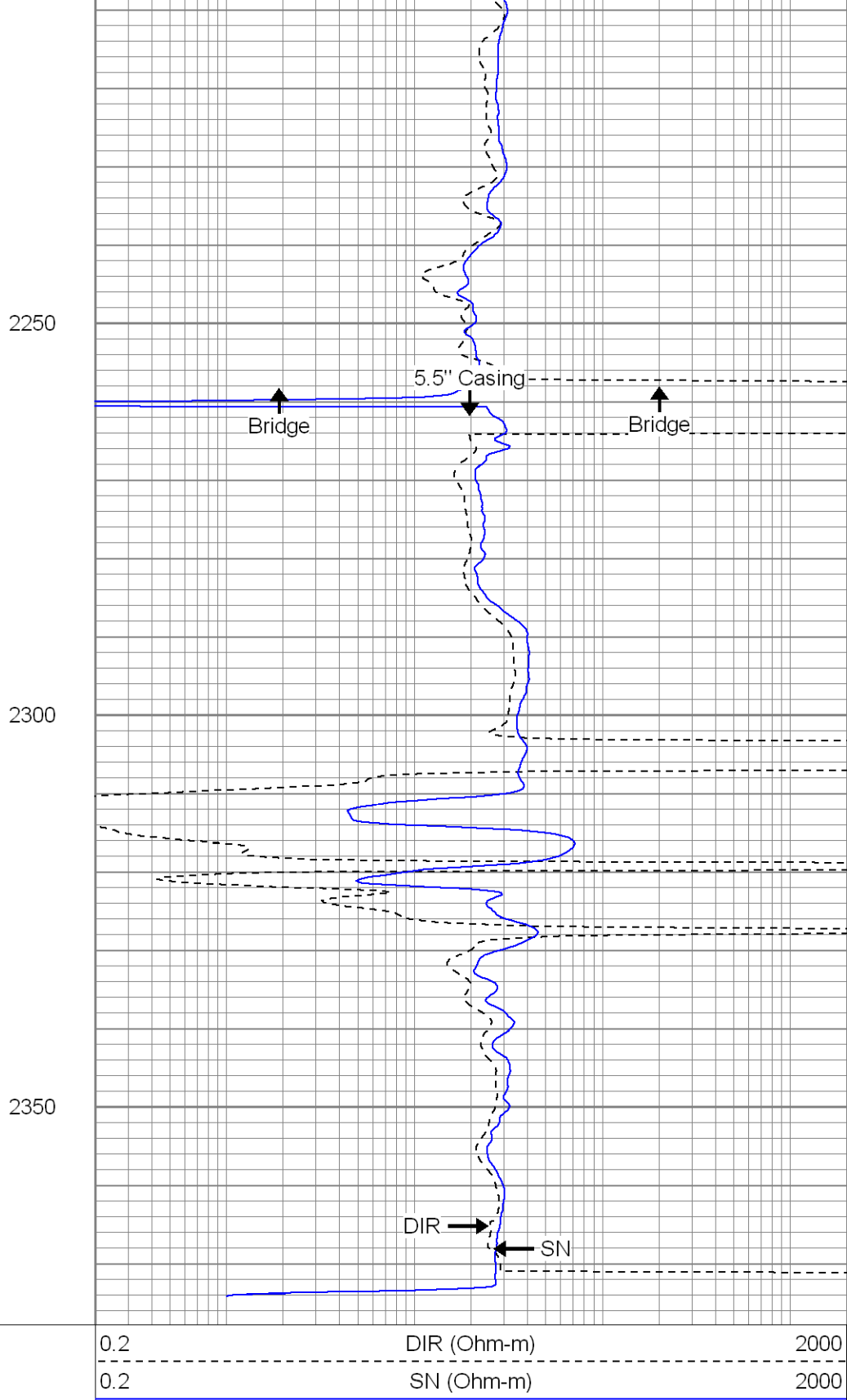
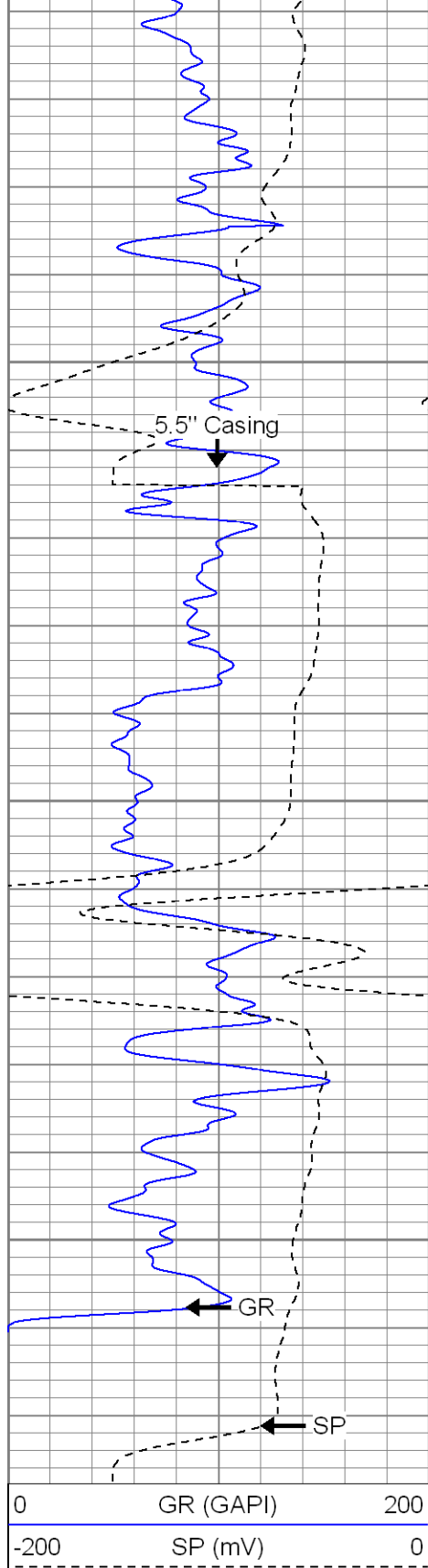
2050

2100

2150

2200





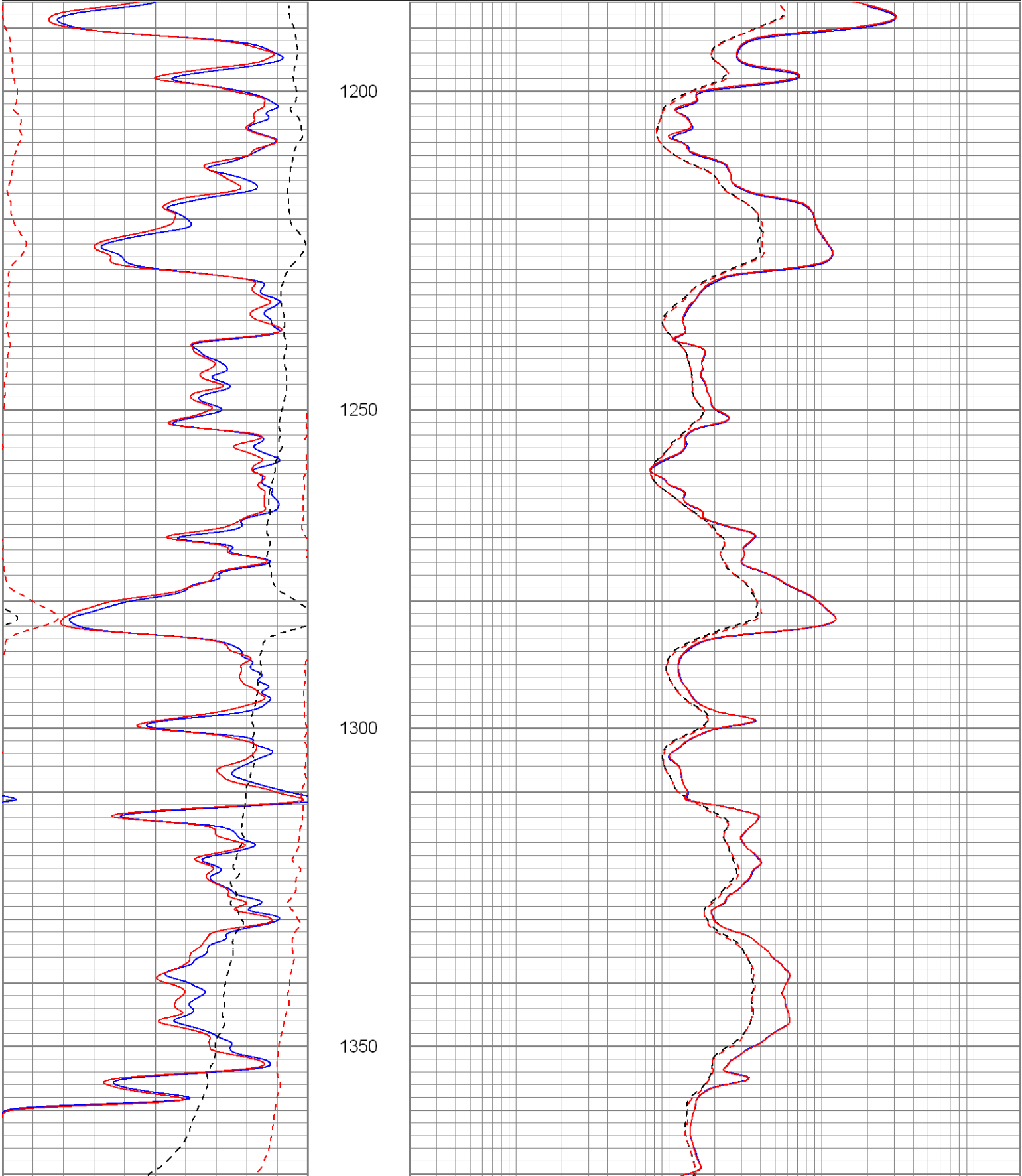
**SUPERIOR**

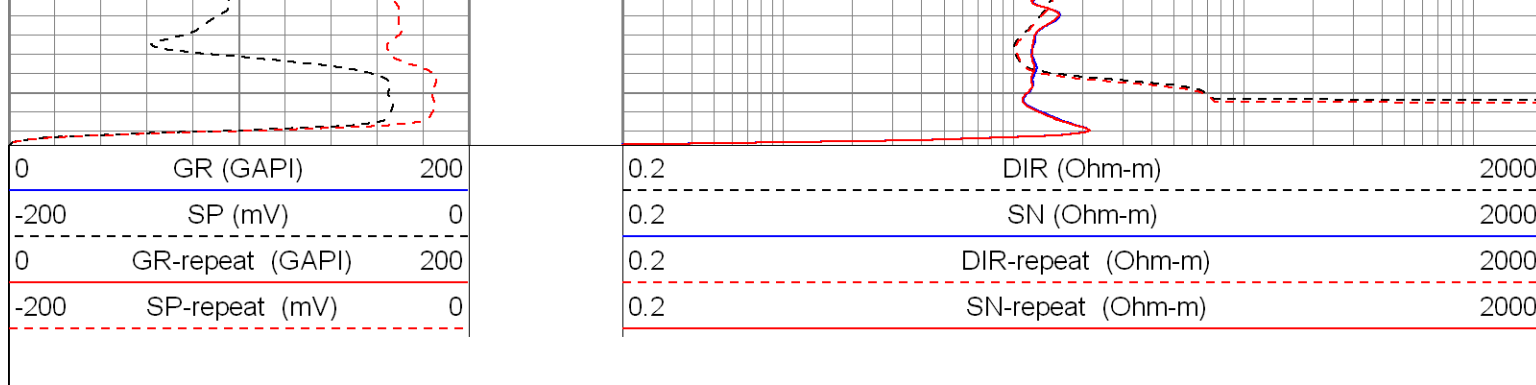
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# Repeat Pass

Database File: maximus.db  
Dataset Pathname: pass1.1  
Presentation Format: iel

Presentation Format: ICR			Sun Dec 21 20:24:26 2008 by Calc Open-Cased 071220		
Dataset Creation:			Depth in Feet scaled 1:240		
Charted by:					
0	GR (GAPI)	200	0.2	DIR (Ohm-m)	2000
-200	SP (mV)	0	0.2	SN (Ohm-m)	2000
0	GR-repeat (GAPI)	200	0.2	DIR-repeat (Ohm-m)	2000
-200	SP-repeat (mV)	0	0.2	SN-repeat (Ohm-m)	2000





Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	16.41		None	0.75	1.50	5.00
			GR-2.75POH (804) Probe	3.73	2.75	43.00
DIC	6.24		IEL-Probe (040903)	13.46	2.75	93.00
SP	2.25					
SN	1.71					
Dataset: maximus.db: field/well/run1/pass3 Total Length: 17.94 ft Total Weight: 141.00 lb O.D.: 2.75 in						

Calibration Report			
Database File:	maximus.db		
Dataset Pathname:	pass3		
Dataset Creation:	Mon Dec 22 23:25:13 2008	by Log Open-Cased	071220
Induction Tool Calibration Report			
Serial Number:	040903		
Tool Model:	Probe		
Downhole Cal Performed:	Tue Dec 16 11:15:14 2008		
Surface Cal Performed:	Tue Dec 16 11:15:29 2008		
Surface Calibration:	Air	Loop	
Conductivity Reference:	0.000	500.000	mmho
Conductivity Reading:	-0.045	0.650	V
Internal Reference:	Zero	Cal	
Conductivity Reference:	0.000	500.000	mmho
Conductivity Reading:	0.015	0.650	V
Downhole Calibration:	Internal Zero	Internal Cal	
Conductivity Reference:	0.264	500.062	mmho
Conductivity Reading:	-0.721	499.976	V
Short Normal Reference:	0.000	20.000	Ohm-m
Short Normal Reading:	0.007	0.235	V
Results:	Gain	Offset	

Loop Conductivity:	719.911	32.396
Downhole Correction:	0.998	0.984
Short Normal Resistivity:	71.000	-1.000
Gamma Ray Calibration Report		
Serial Number:	804	
Tool Model:	2.75POH	
Performed:	Fri Dec 12 14:16:18 2008	
Calibrator Value:	200.0	GAPI
Background Reading:	50.0	cps
Calibrator Reading:	250.0	cps
Sensitivity:	0.8000	GAPI/cps