



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

**COMPENSATED  
 DENSITY  
 LOG**

Company Pioneer Natural Resources  
 Well Maximus 12-2  
 Field Purgatoire River  
 County Las Animas  
 State Colorado

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 Well Maximus 12-2  
 Field Purgatoire River  
 County Las Animas State Colorado

Location: API #: 05 071 09685 00  
 1834' FNL & 522' FWL  
 SEC 2 TWP 33S RGE 68W  
 Permanent Datum Ground Level Elevation : 7920'  
 Log Measured From Kelly Bushing 4' Above G.L.  
 Drilling Measured From Kelly Bushing  
 Elevation  
 K.B. 7924'  
 D.F. -----  
 G.L. 7920'

Date	12-21-08	12-22-08	12-23-08
Run Number	One	Seven	Eleven
Depth Driller	2440'	2440'	2440'
Depth Logger	1387'	1637'	2374'
Bottom Logged Interval	1370'	1635'	2372'
Top Log Interval	Surface Casing	5.5" Casing	5.5" Casing
Casing Driller	8 5/8" @ 726'	5.5" @ 1545'	5.5" @ 2221'
Casing Logger	728'	1545'	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.	3:30 A.M.	7:30 P.M.
Maximum Recorded Temperature	70 DEGF	///	///
Equipment Number	T697	T0701	T0701
Location	Trinidad	Trinidad	Trinidad
Recorded By	J. Cappellucci	C. Sineros	C. Sineros
Witnessed By	Mr. CW Ely	Mr. Mitchell 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**

Density Porosity Presented On Sandstone Matrix.  
 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.



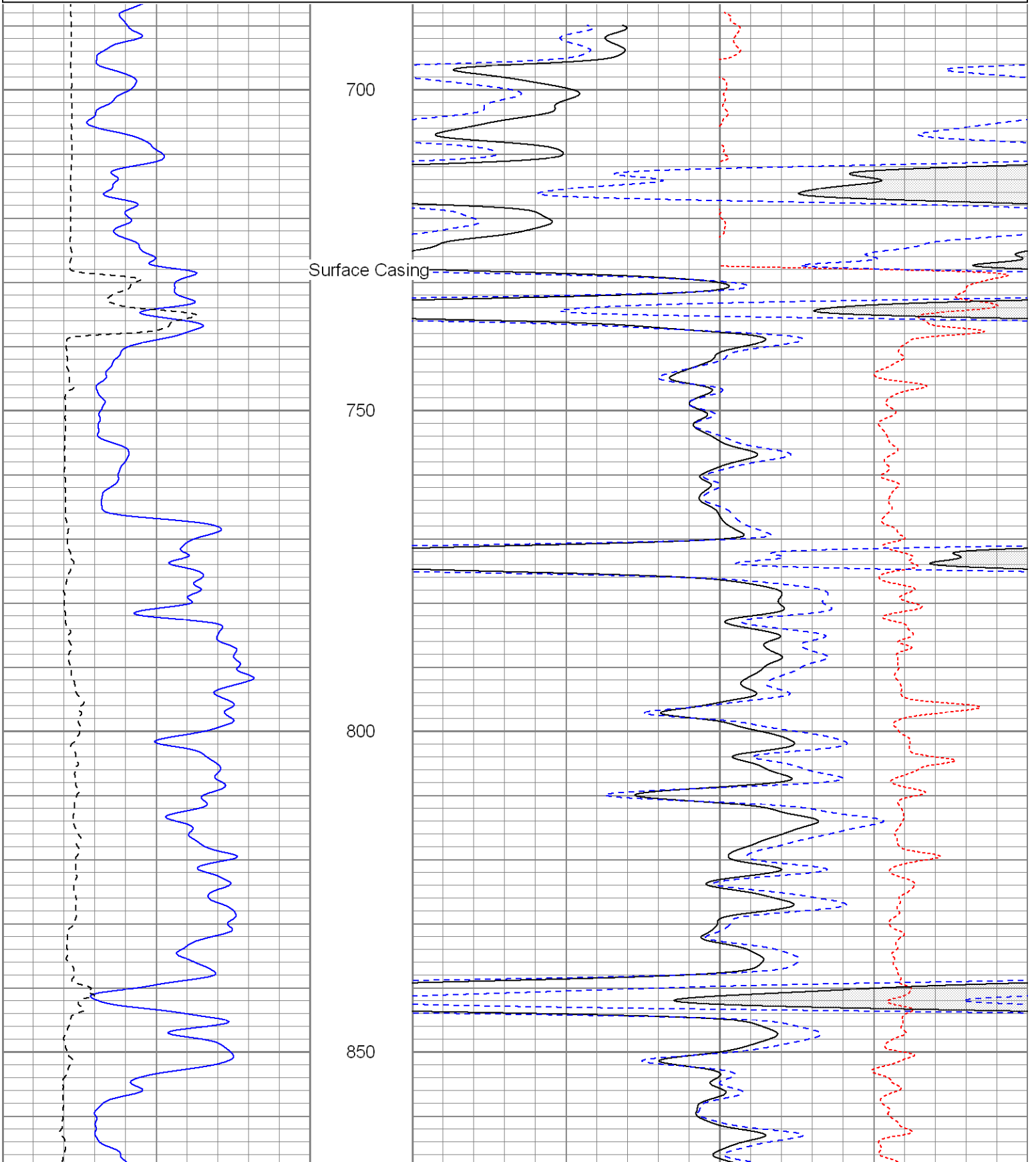
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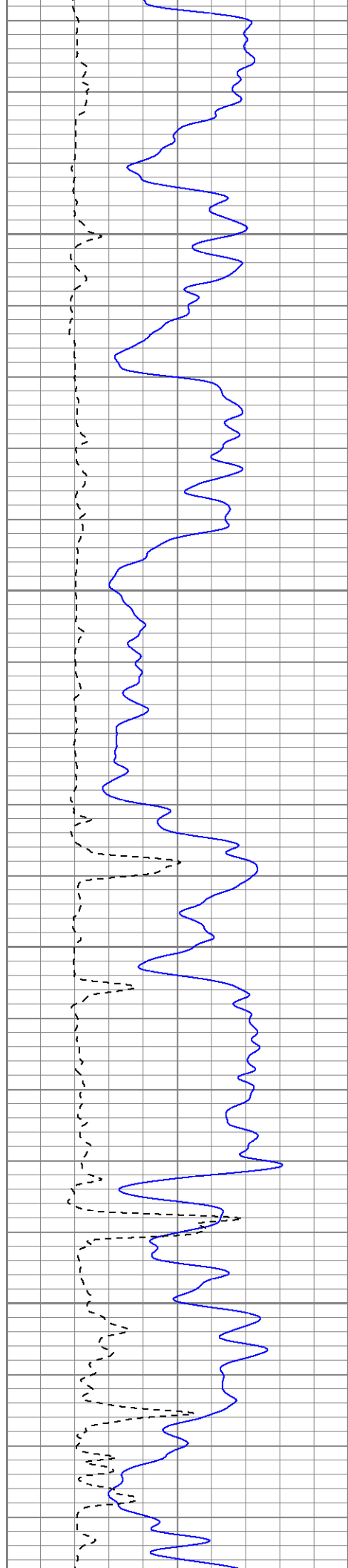
**Main Merged Pass**

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 Dataset Pathname: pass1cdl  
 Presentation Format: cdl  
 Dataset Creation: Wed Dec 24 08:26:15 2008  
 Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	200
6	DCAL (in)	16

2	RHOB (g/cc)	3	
1	RHOB (g/cc)	2	
30	DPOR (pu)	-10	
	-0.5	RHOC (g/cc)	0.5



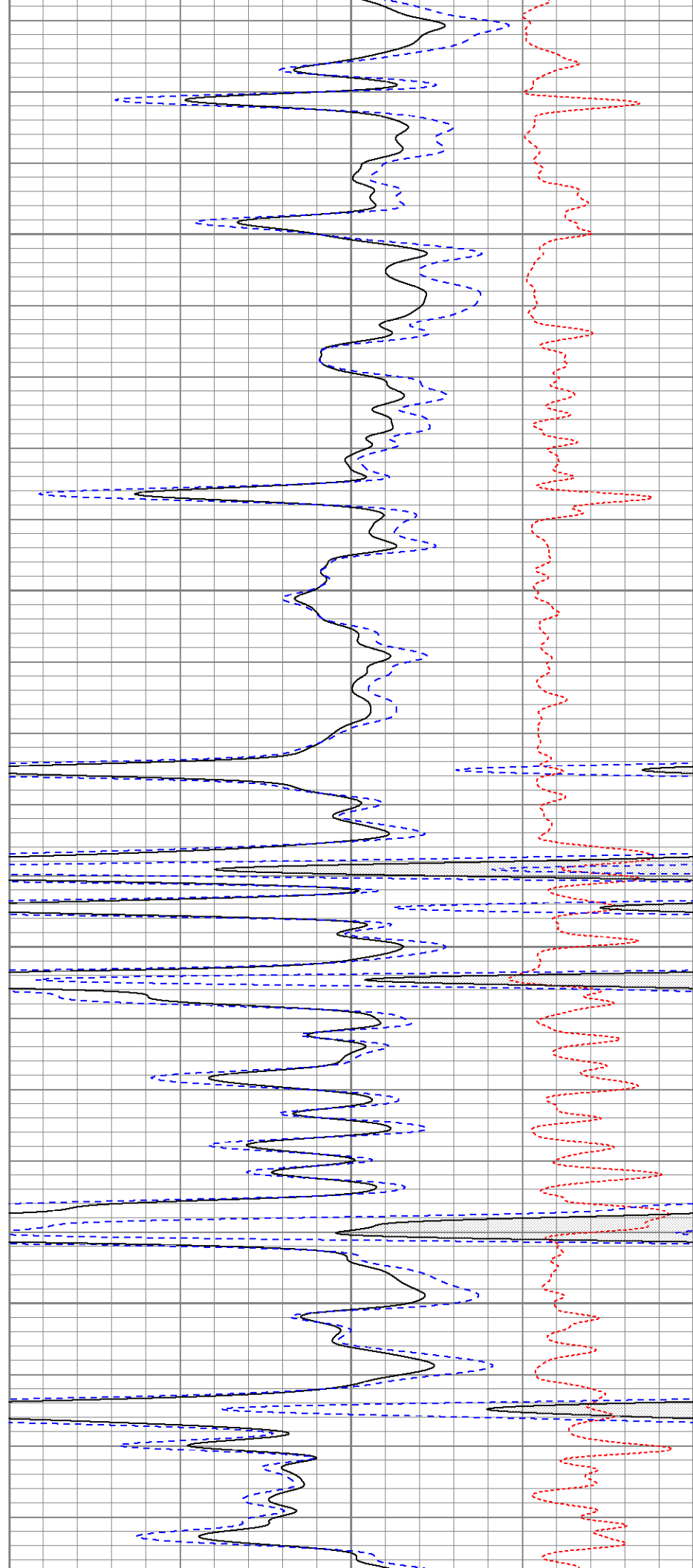


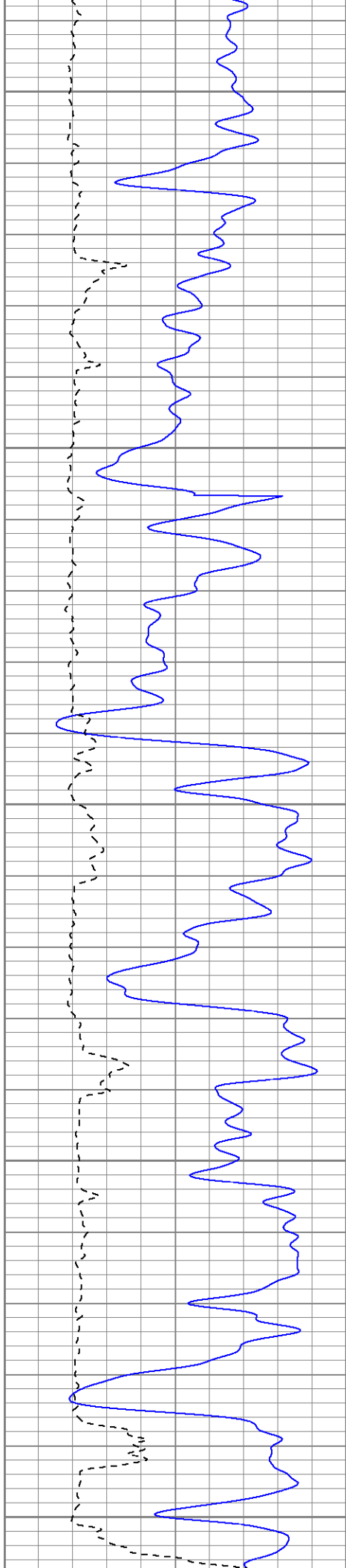
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950

1000

1050





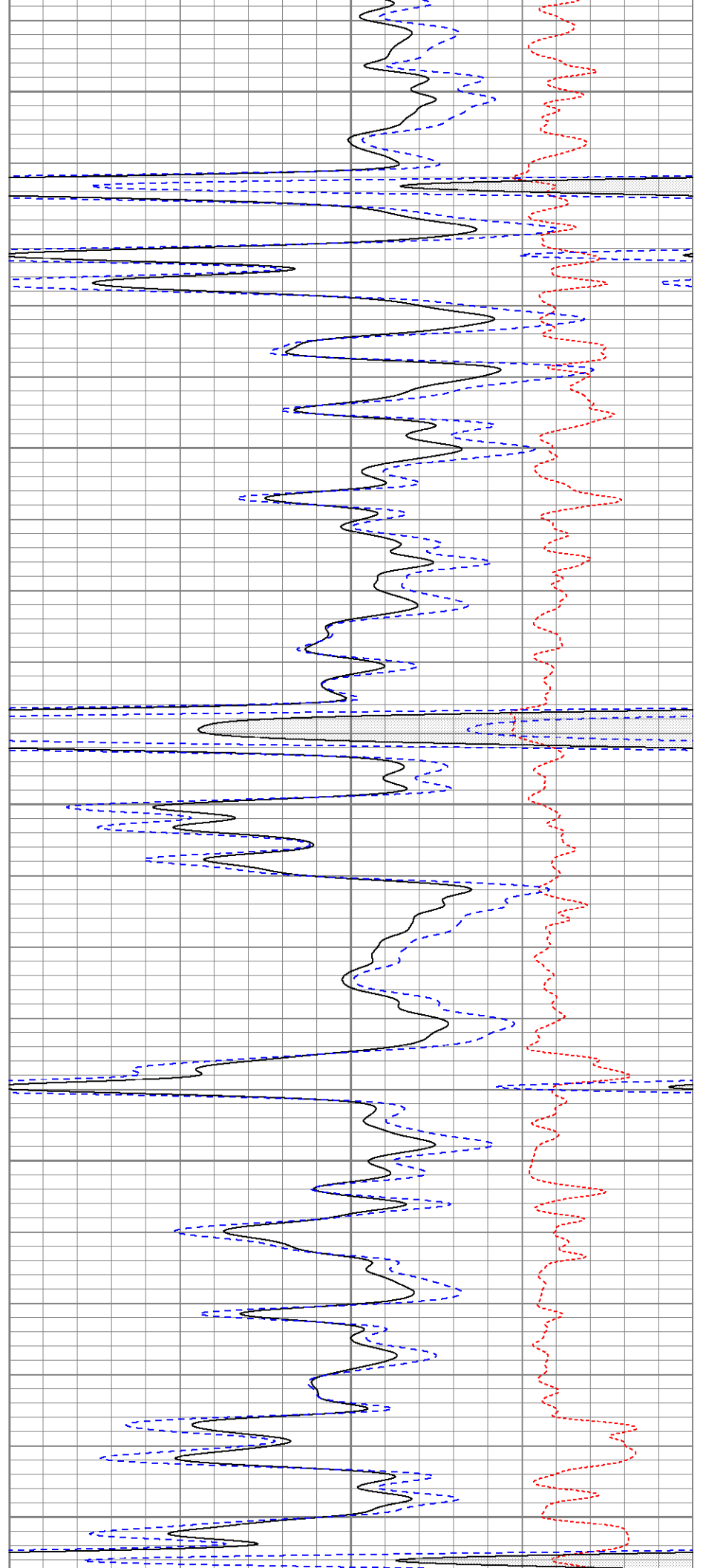
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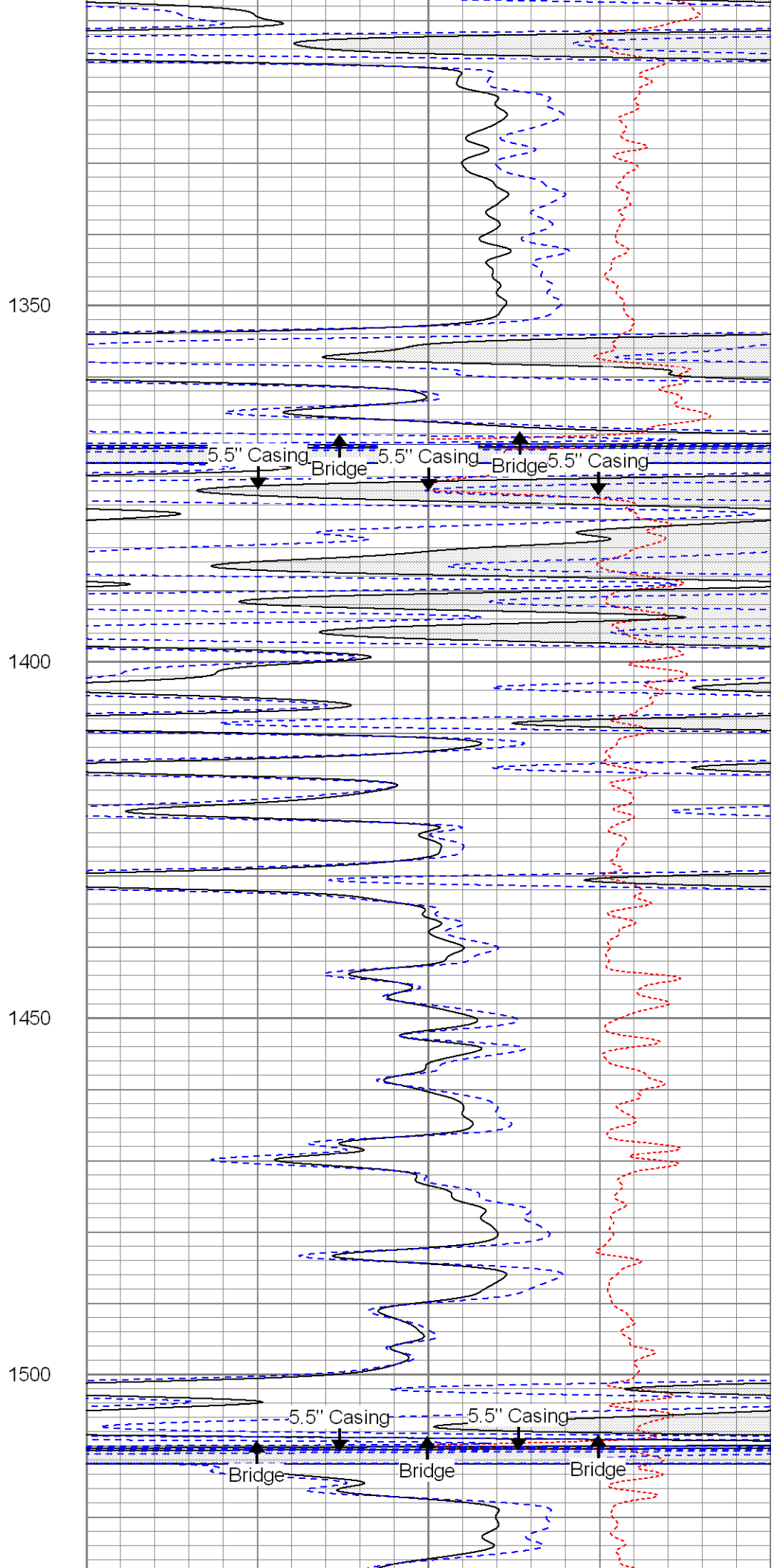
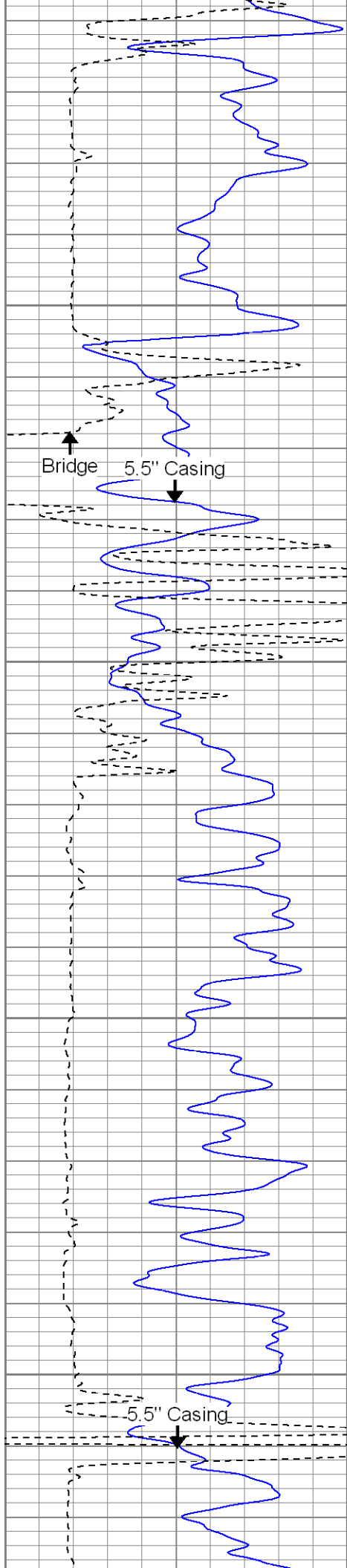
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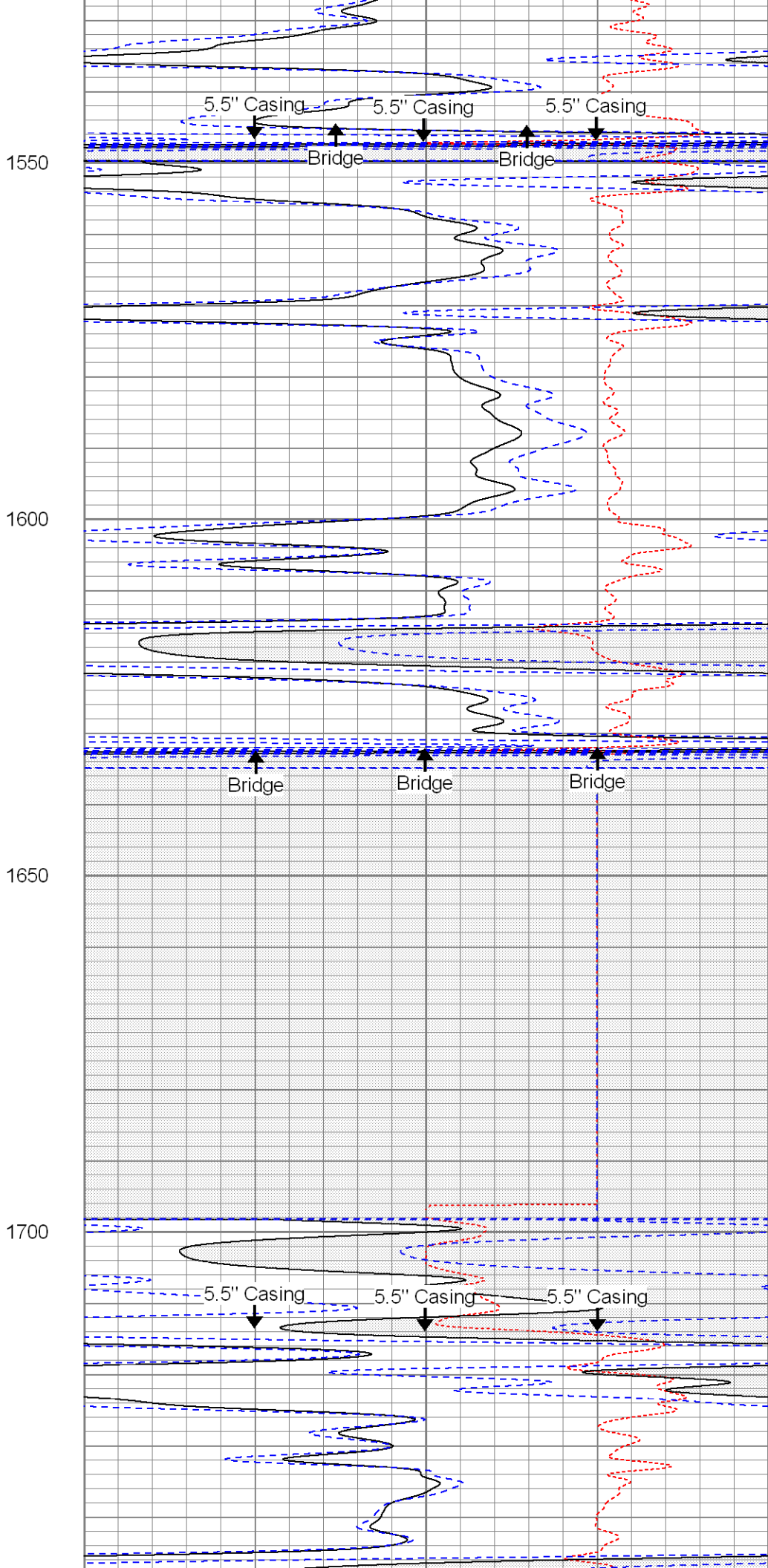
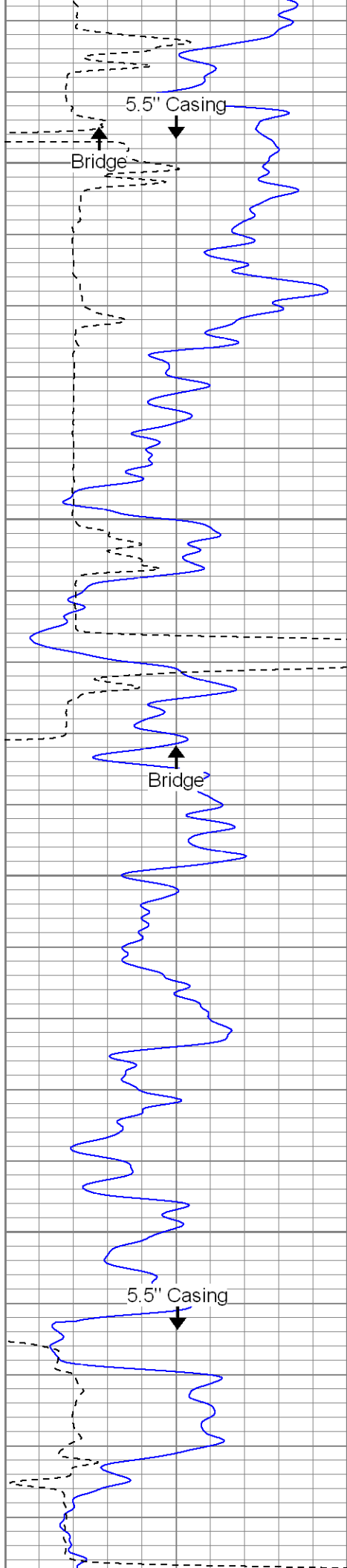
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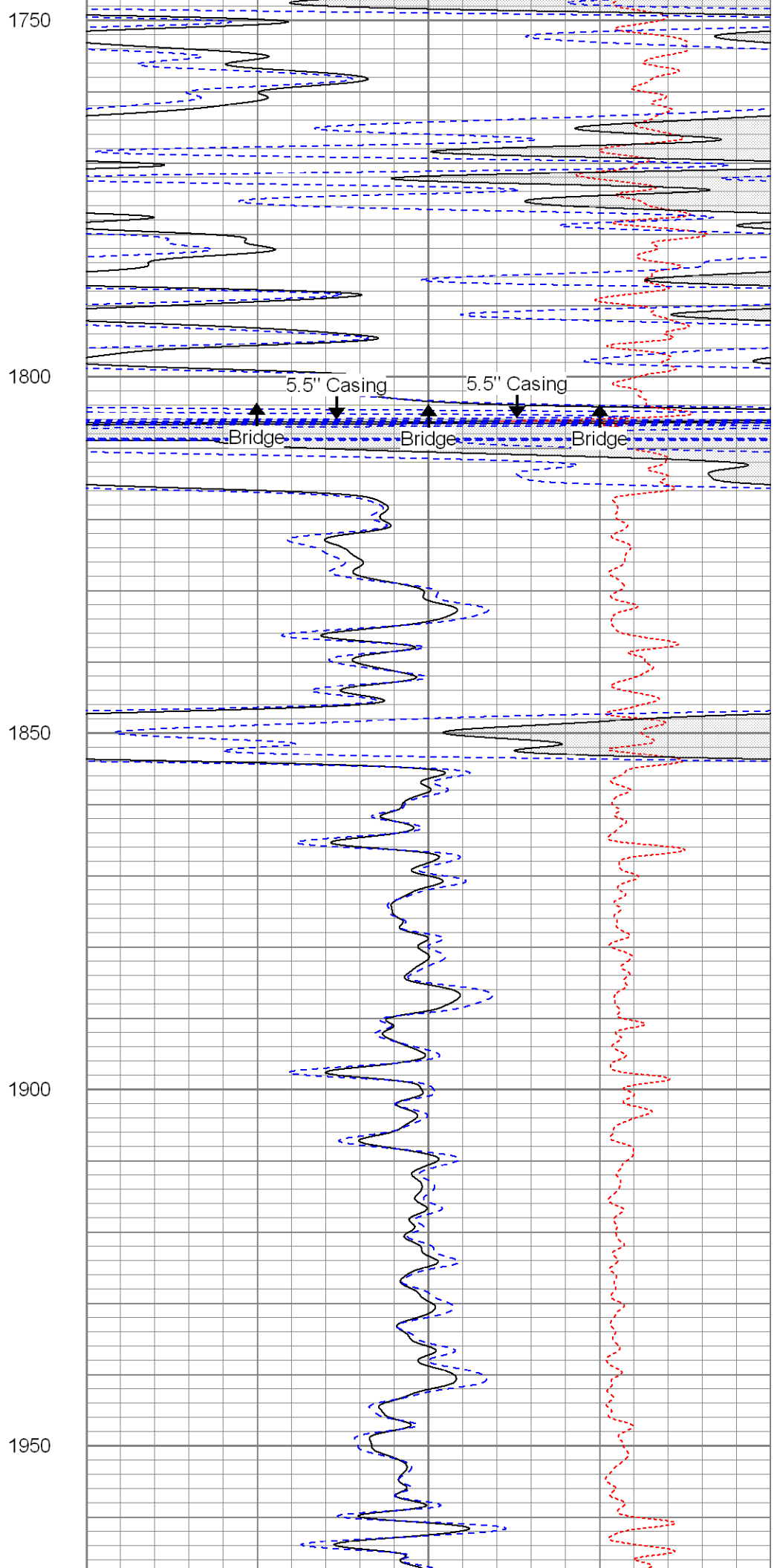
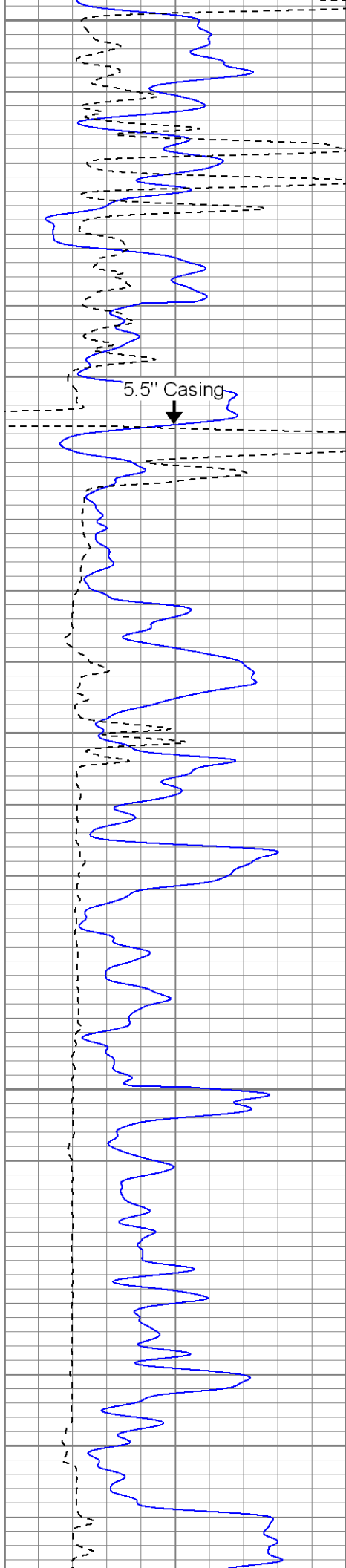
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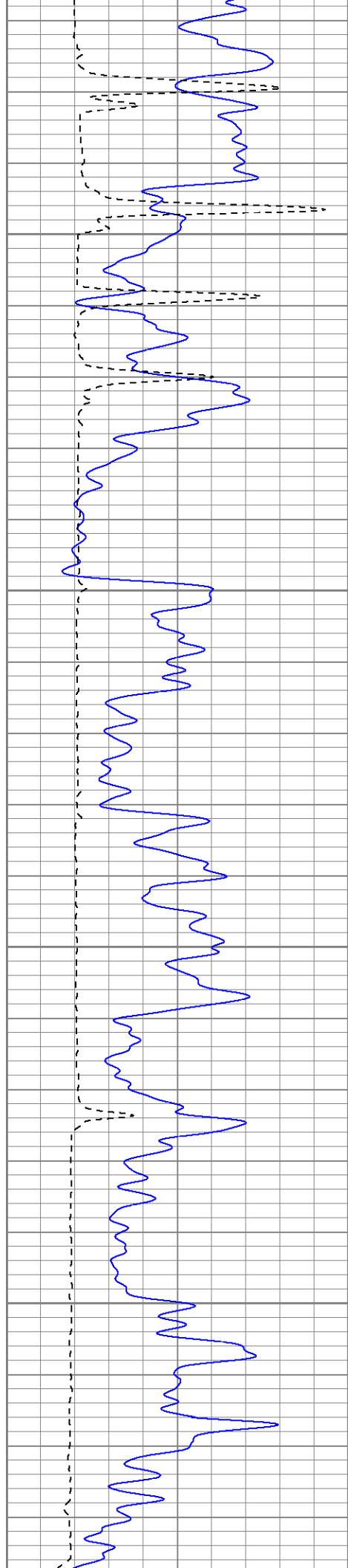
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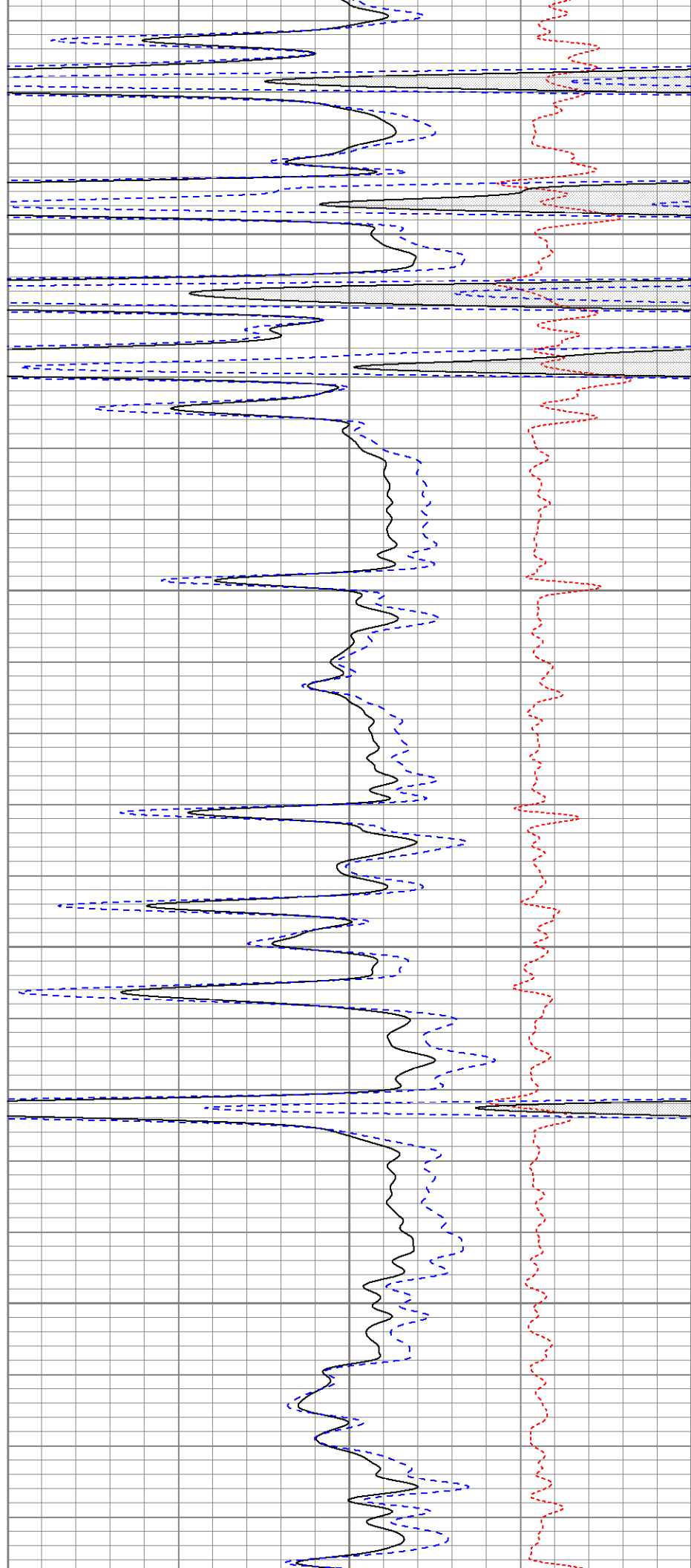


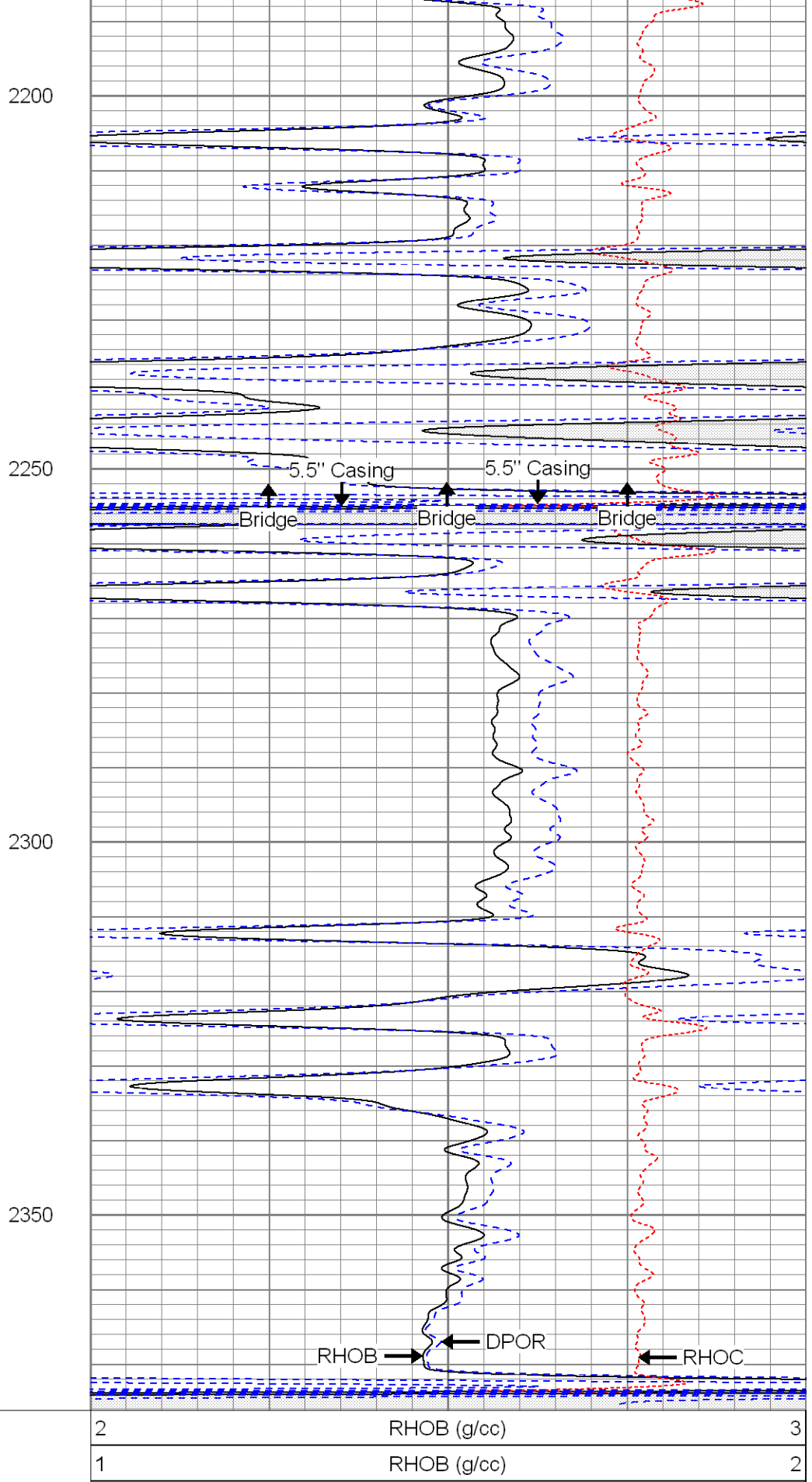
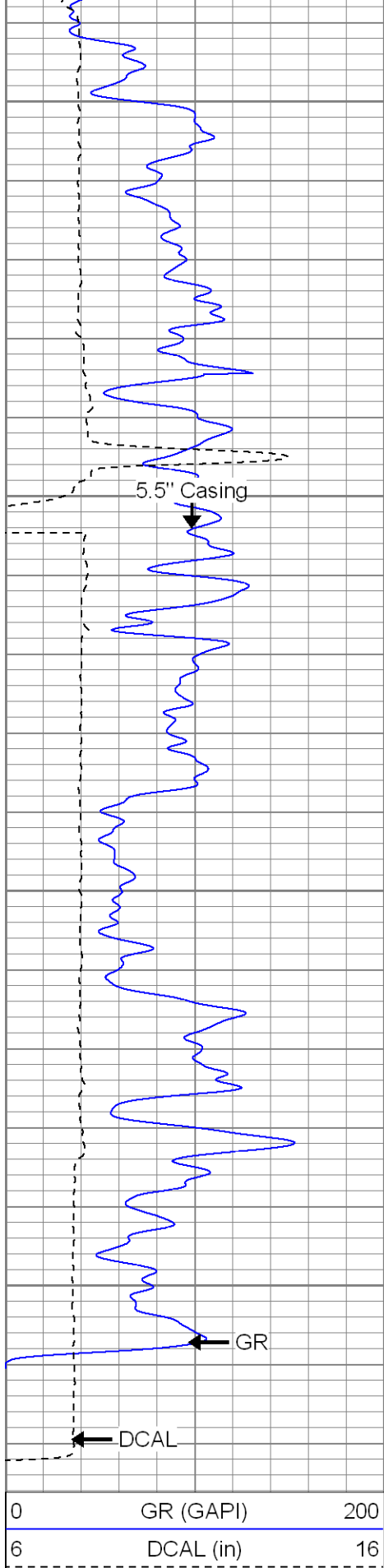
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2050

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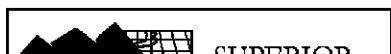
2150





0	GR (GAPI)	200
6	DCAL (in)	16

2	RHOB (g/cc)	3	
1	RHOB (g/cc)	2	
30	DPOR (pu)	-10	
	-0.5	RHOC (g/cc)	0.5





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# Repeat Pass

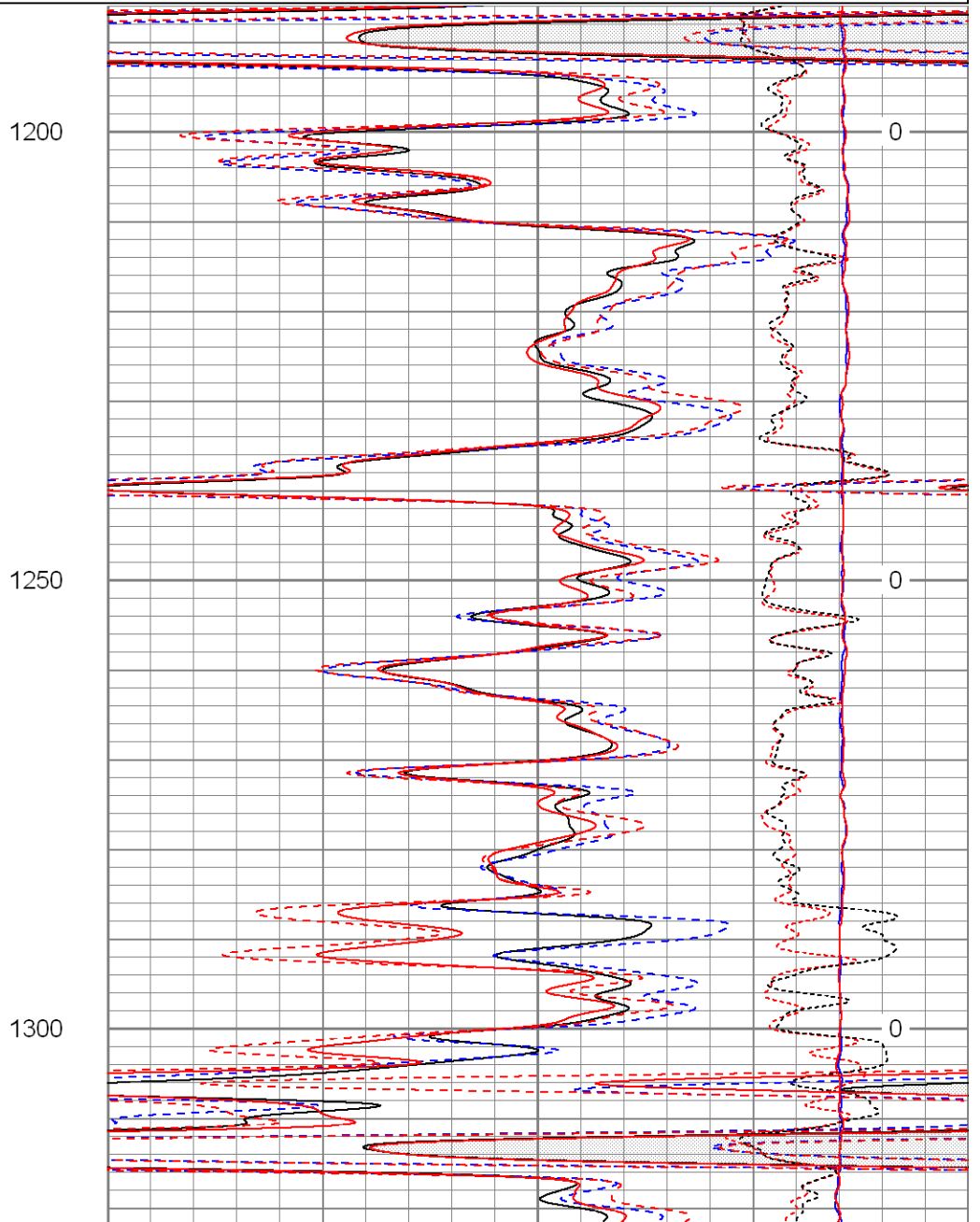
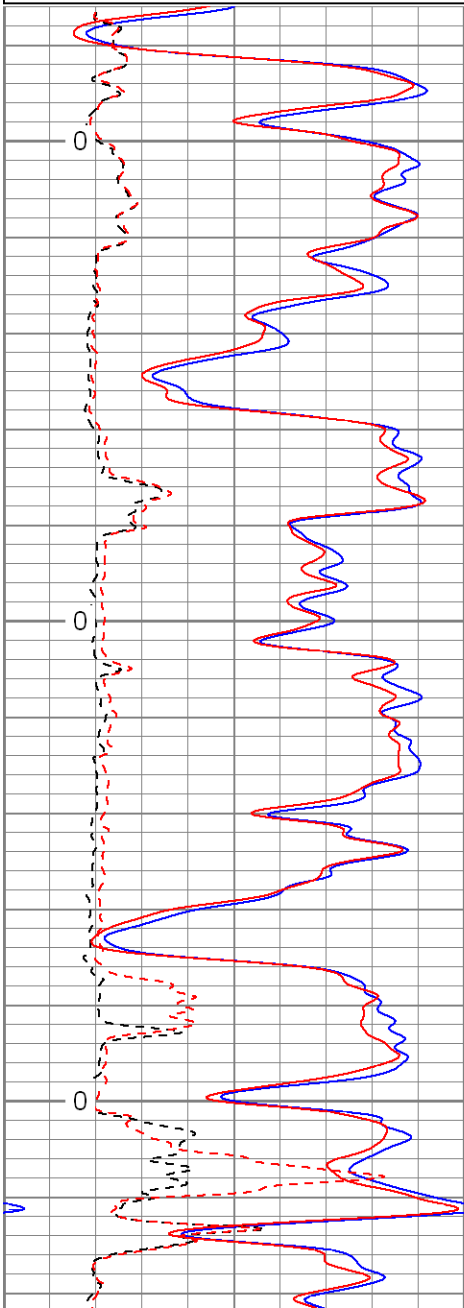
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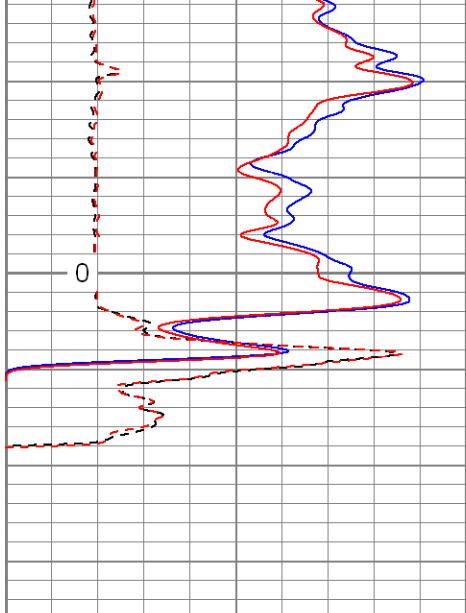
0	GR (GAPI)	200
6	DCAL (in)	16
0	GR-repeat (GAPI)	200
6	DCAL-repeat (in)	16
TBHV (ft3)		

2	RHOB (g/cc)	3
1	RHOB (g/cc)	2
30	DPOR (pu)	-10
30	DPOR-repeat (pu)	-10
2	RHOB-repeat (g/cc)	3

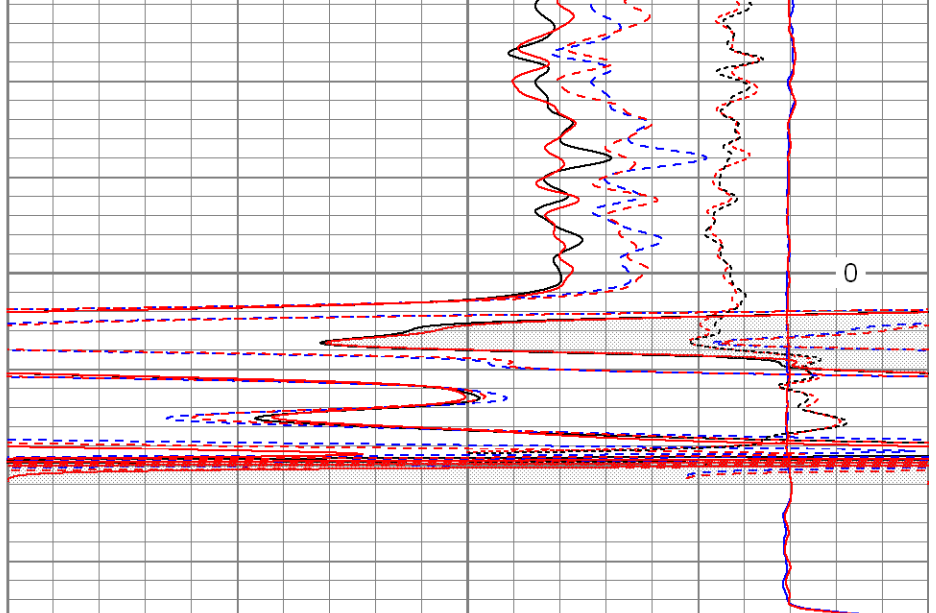
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
-0.5	RHOC-repeat (g/cc)	0.5
4000	LTEN-repeat (lb)	0

ABHV (ft3)





1350



0	GR (GAPI)	200
6	DCAL (in)	16
0	GR-repeat (GAPI)	200
6	DCAL-repeat (in)	16
TBHV (ft3)		

2	RHOB (g/cc)	3
1	RHOB (g/cc)	2
30	DPOR (pu)	-10
30	DPOR-repeat (pu)	-10
2	RHOB-repeat (g/cc)	3

-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
-0.5	RHOC-repeat (g/cc)	0.5
4000	LTEN-repeat (lb)	0

ABHV (ft3)



**SUPERIOR**

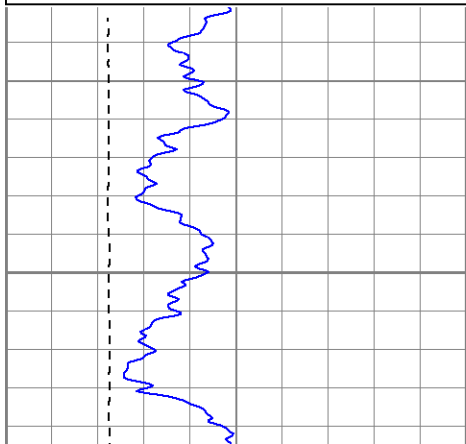
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# Merged High Resolution Pass

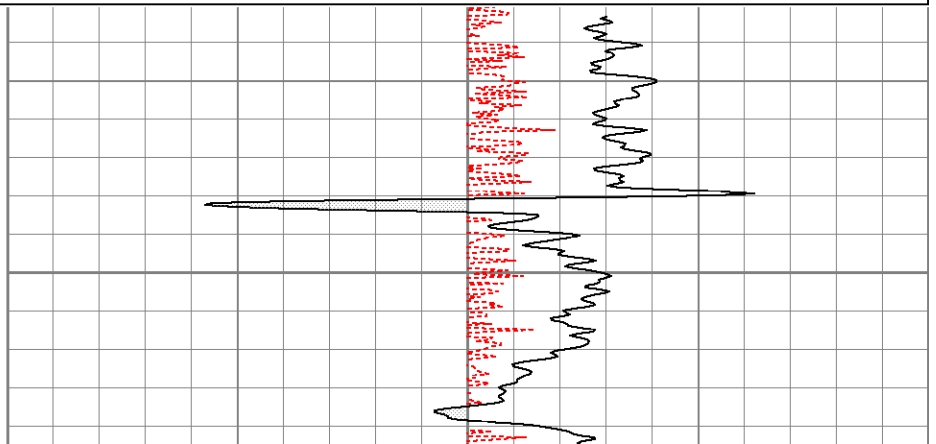
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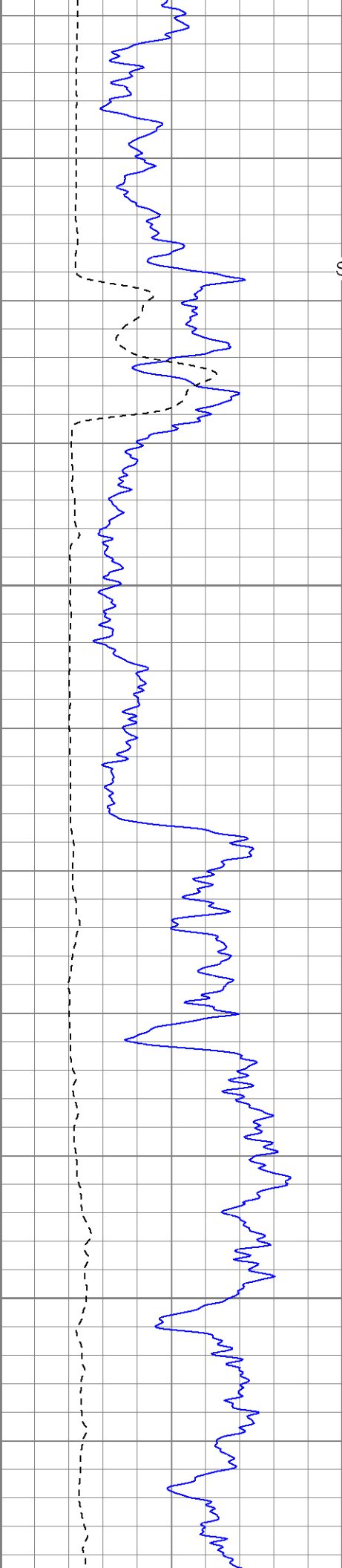
0	GR (GAPI)	200
6	DCAL (in)	16

1	RHOB (g/cc)	3
-0.5	RHOC (g/cc)	0.5



700

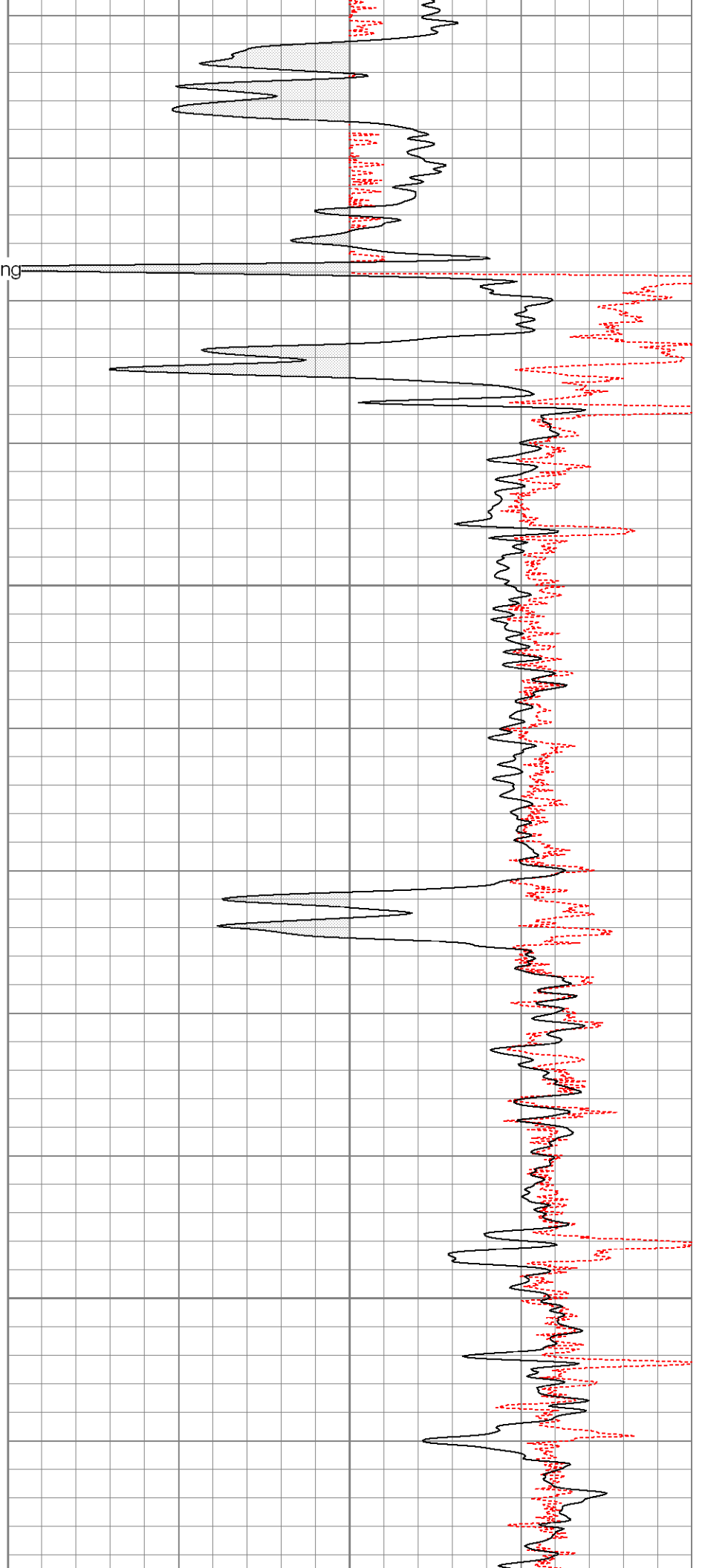


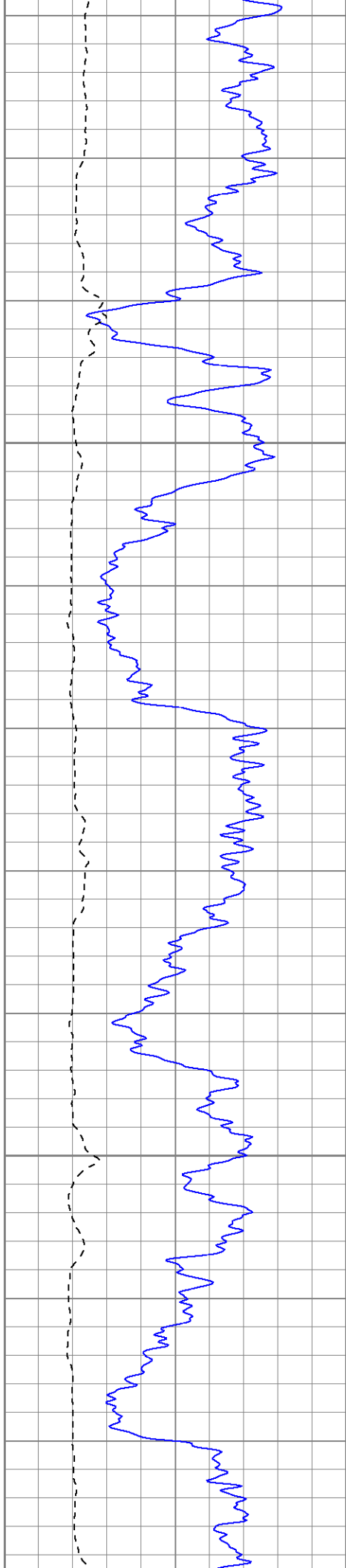


Surface Casing

750

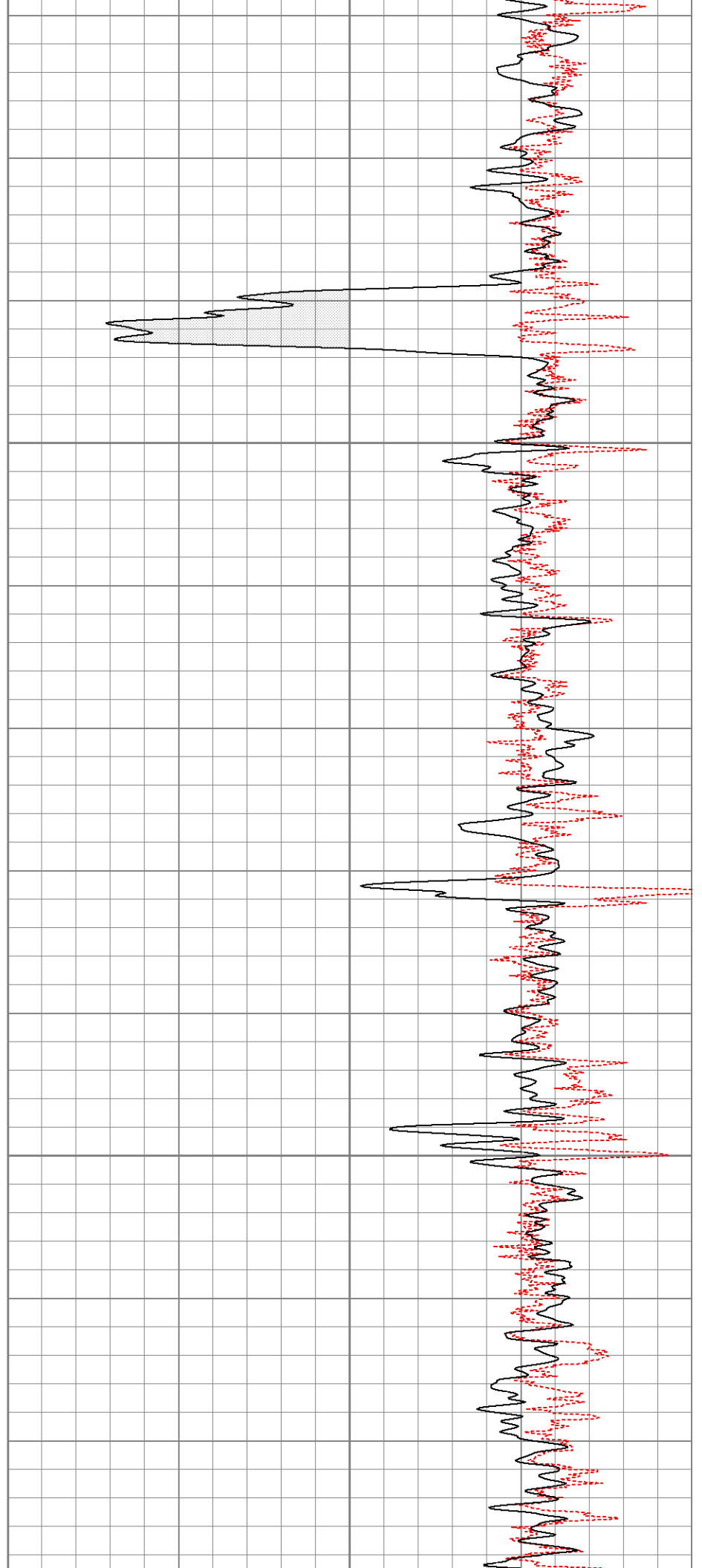
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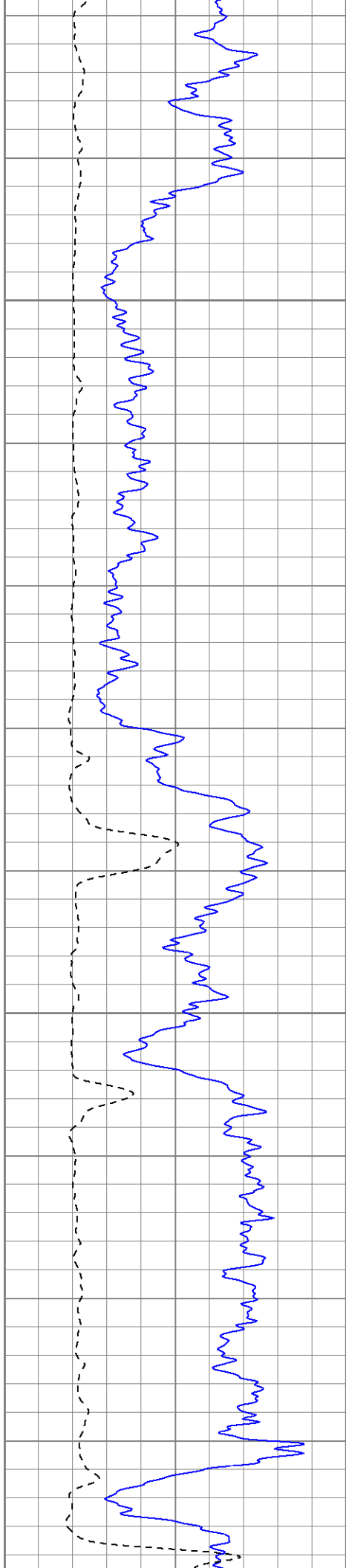




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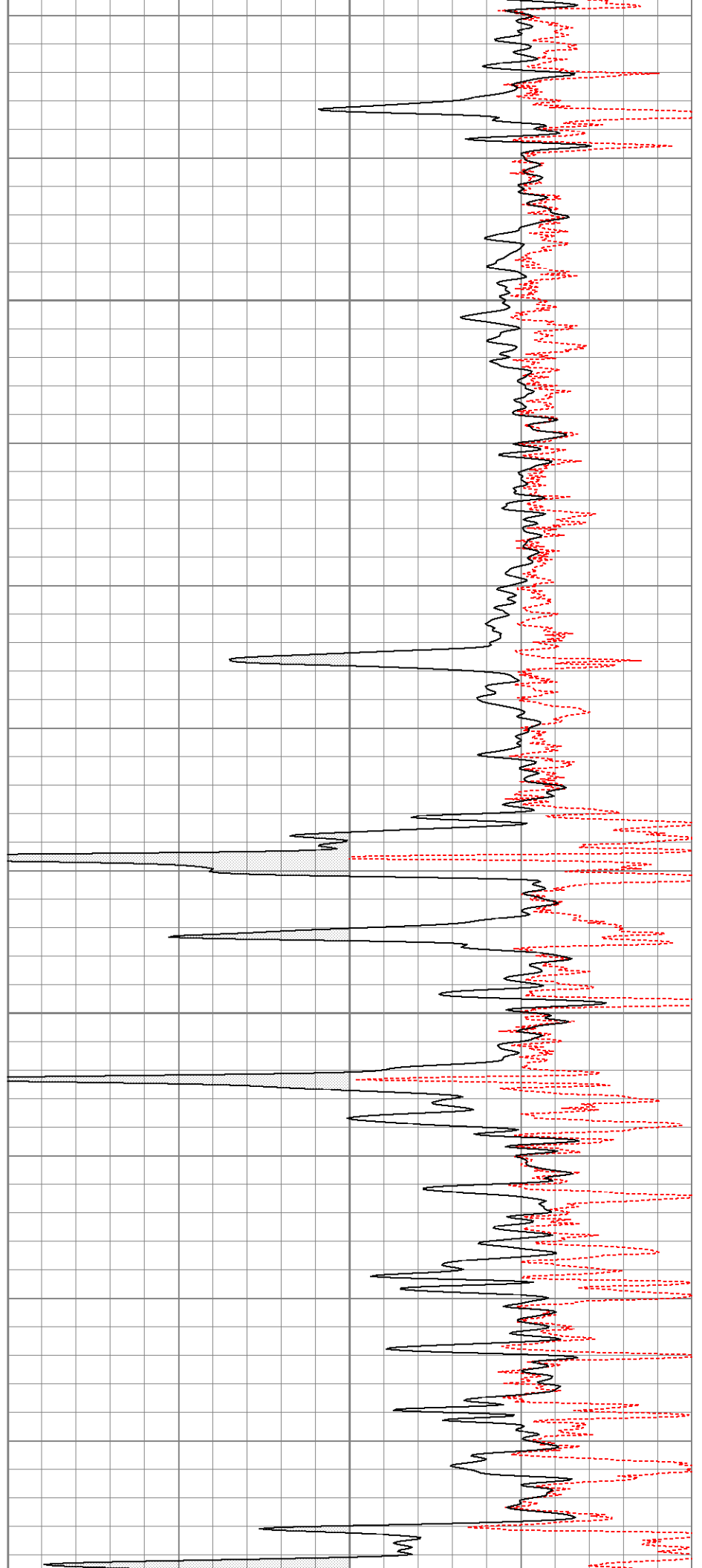
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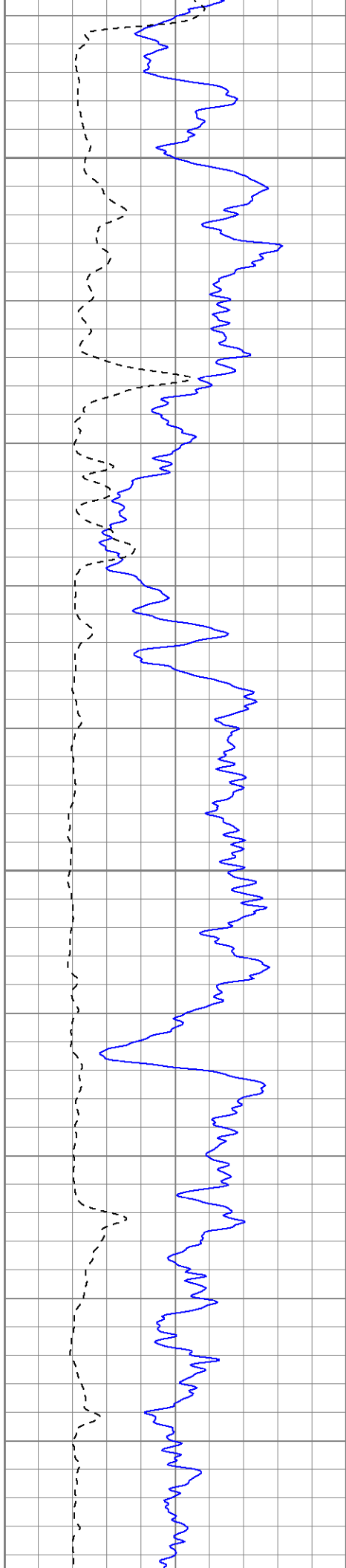




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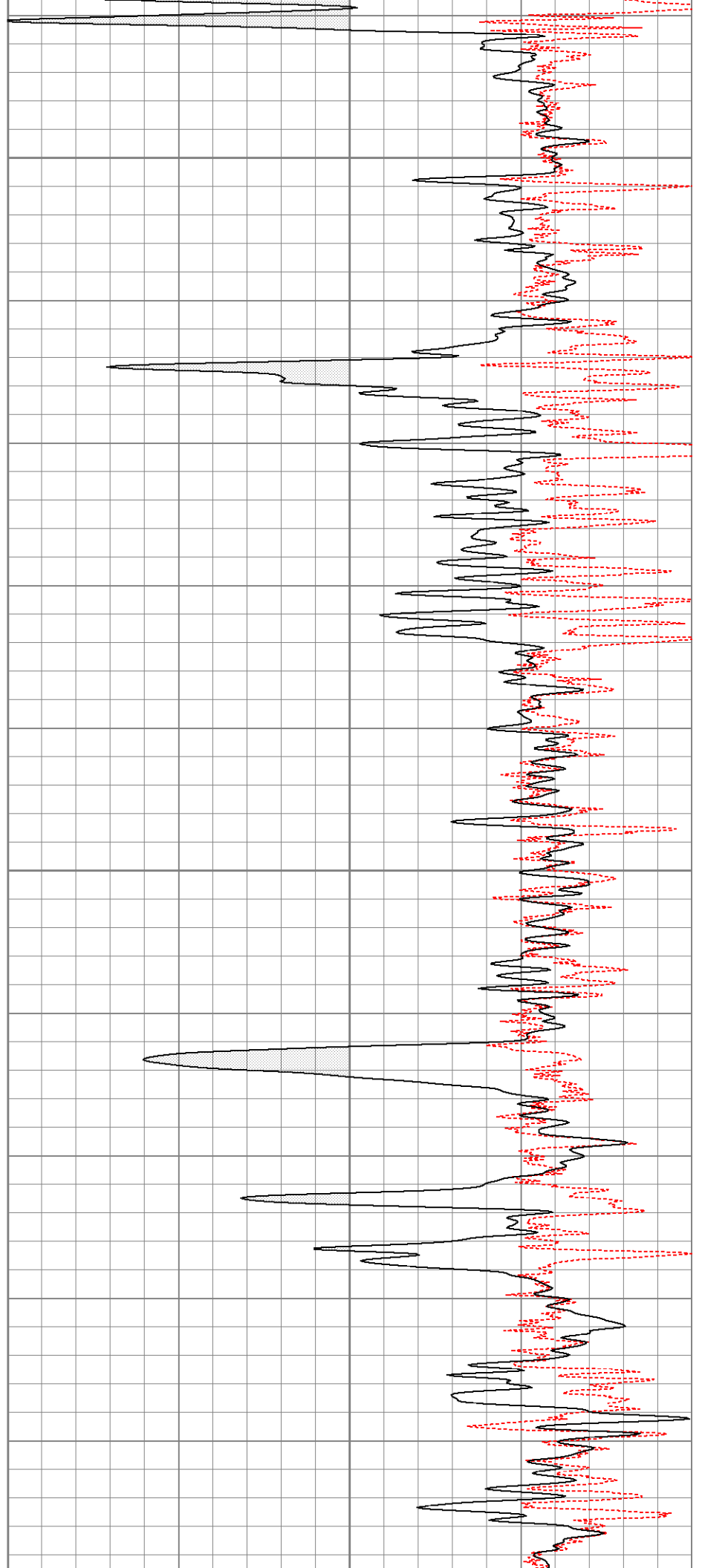
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1050

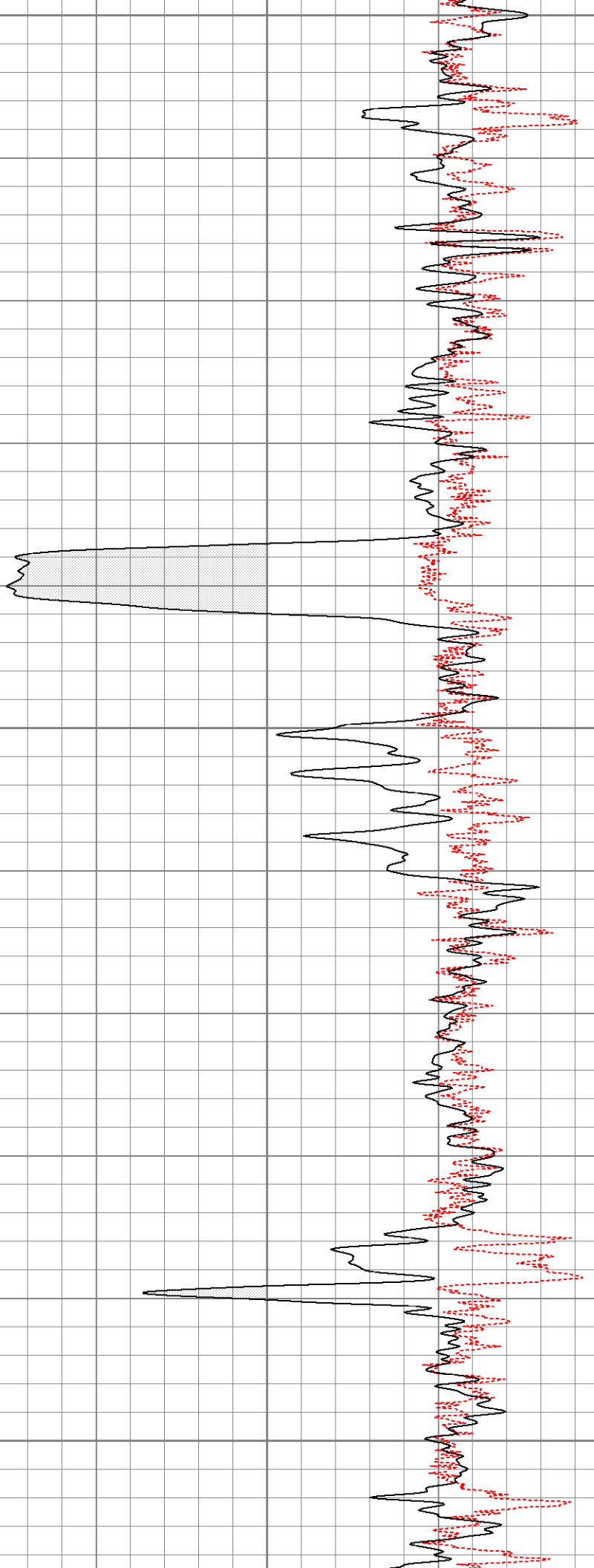
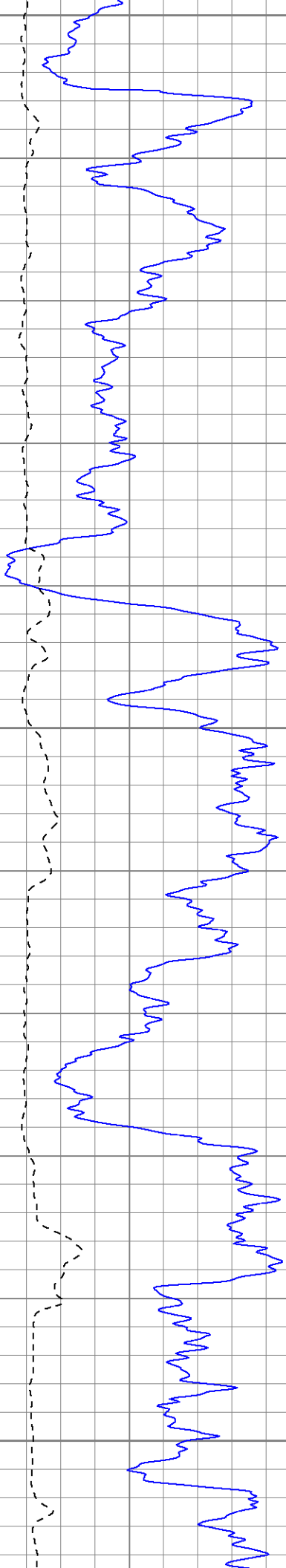
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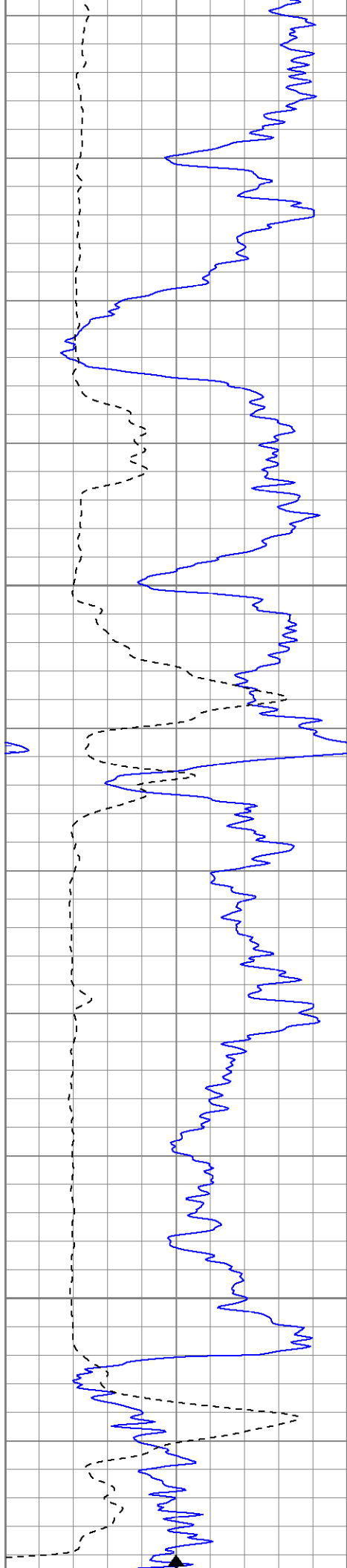


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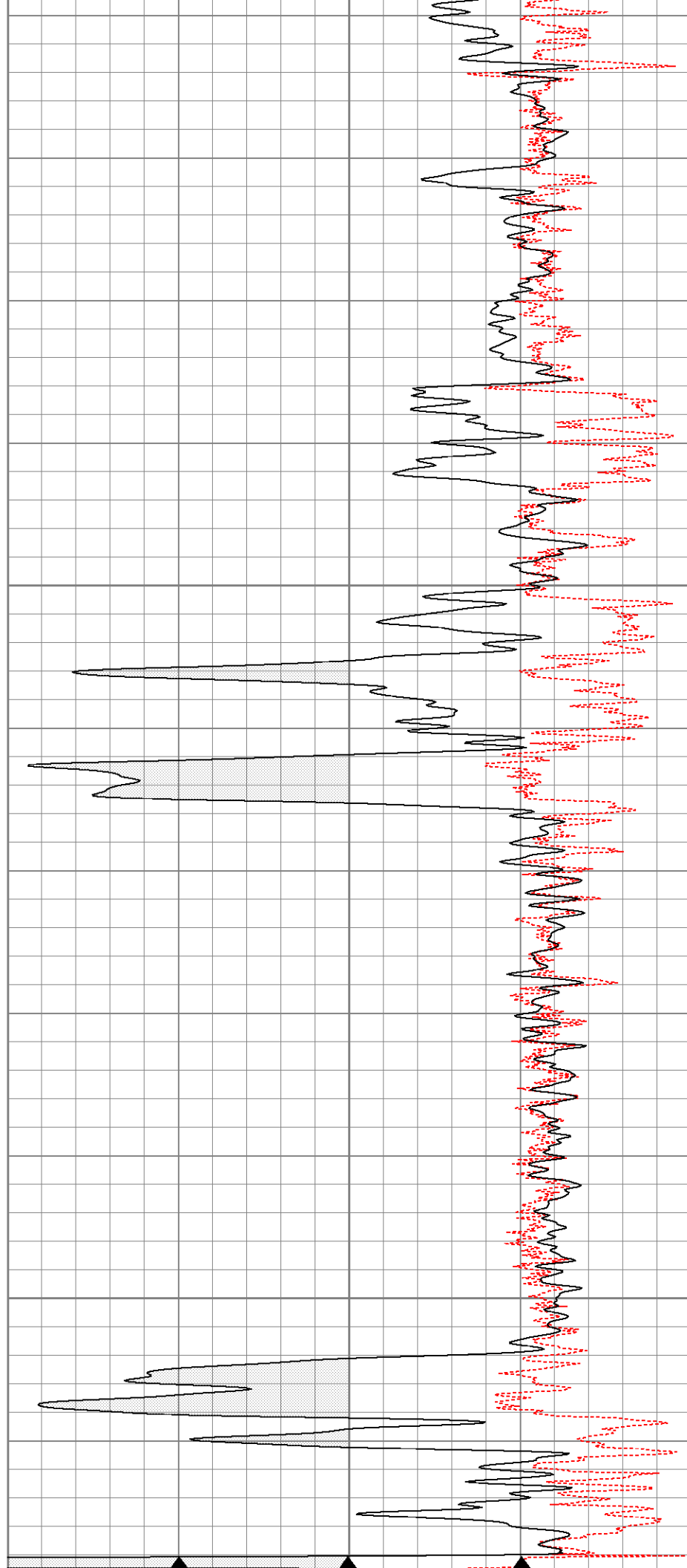
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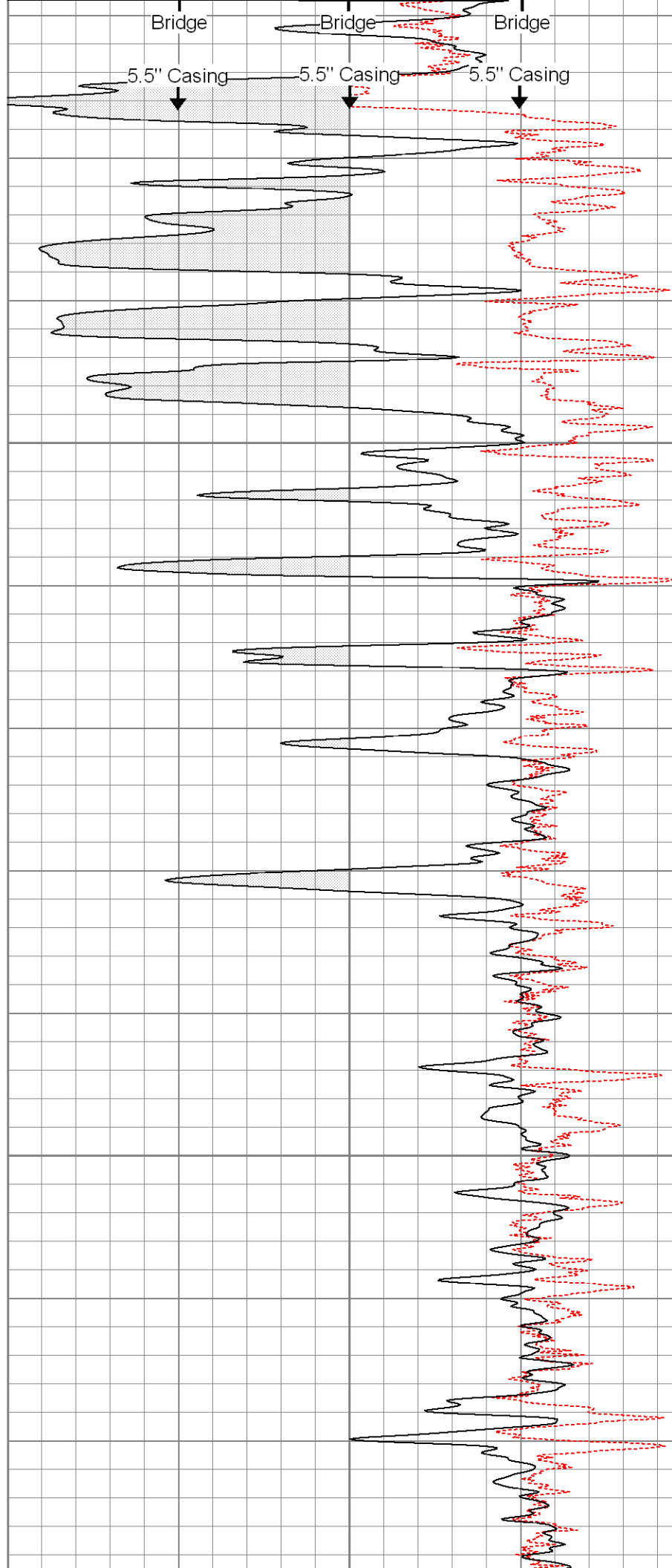
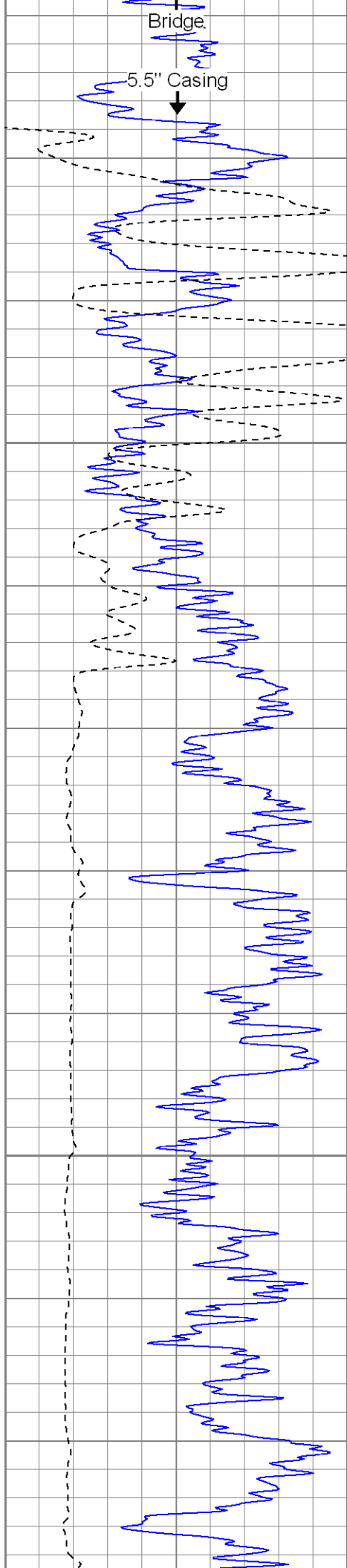


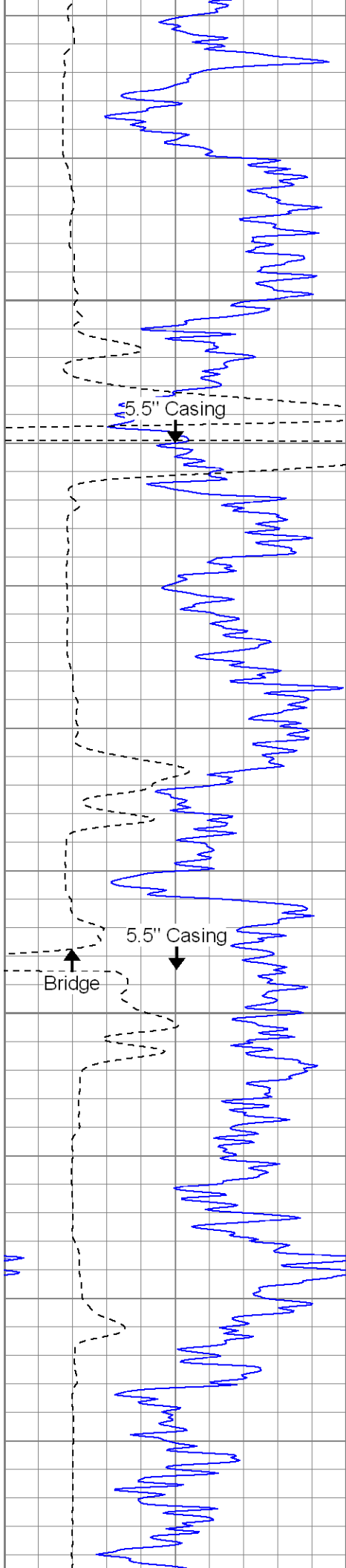


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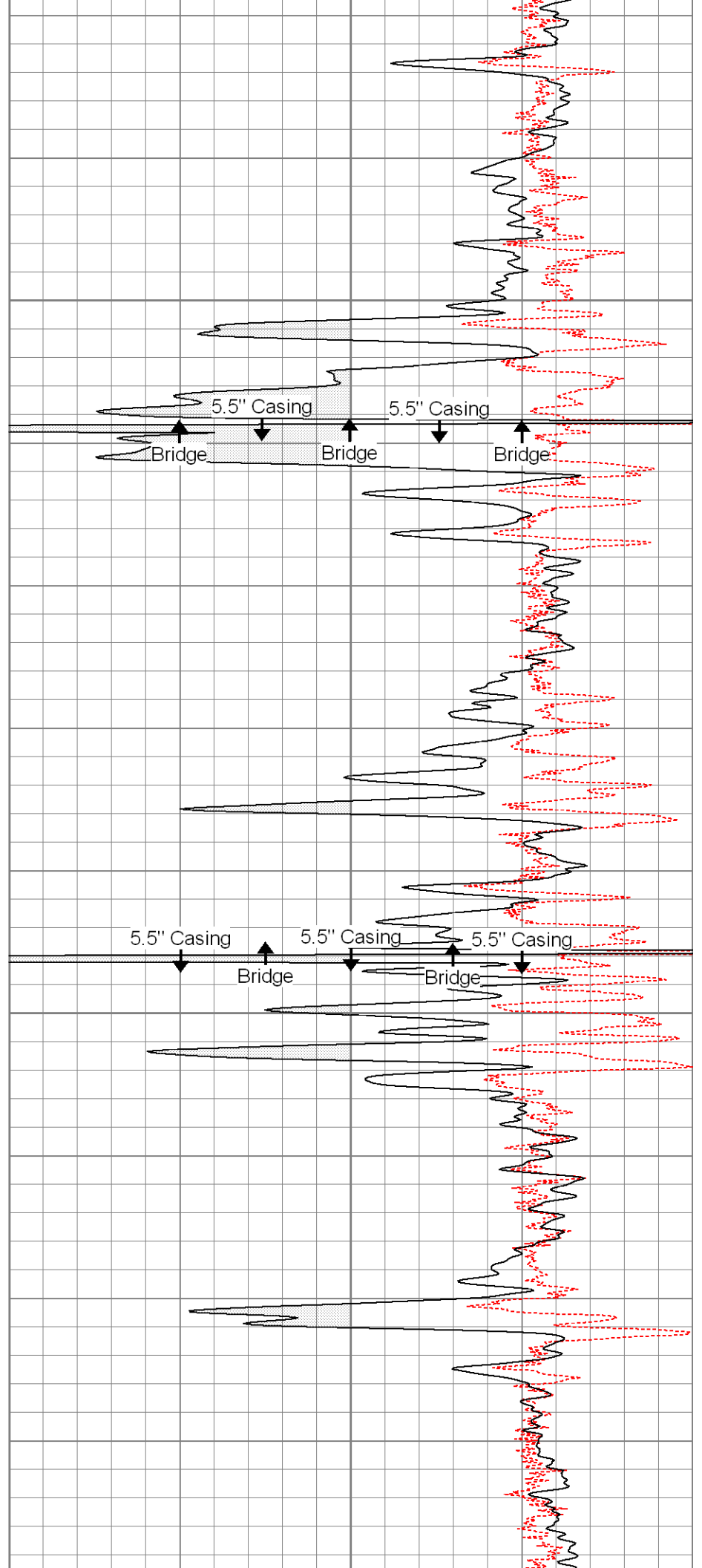


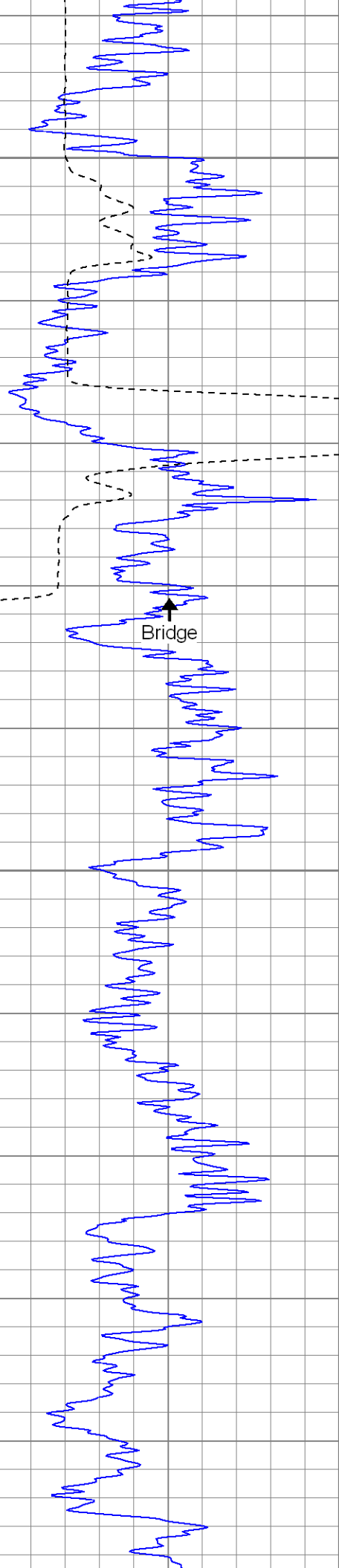




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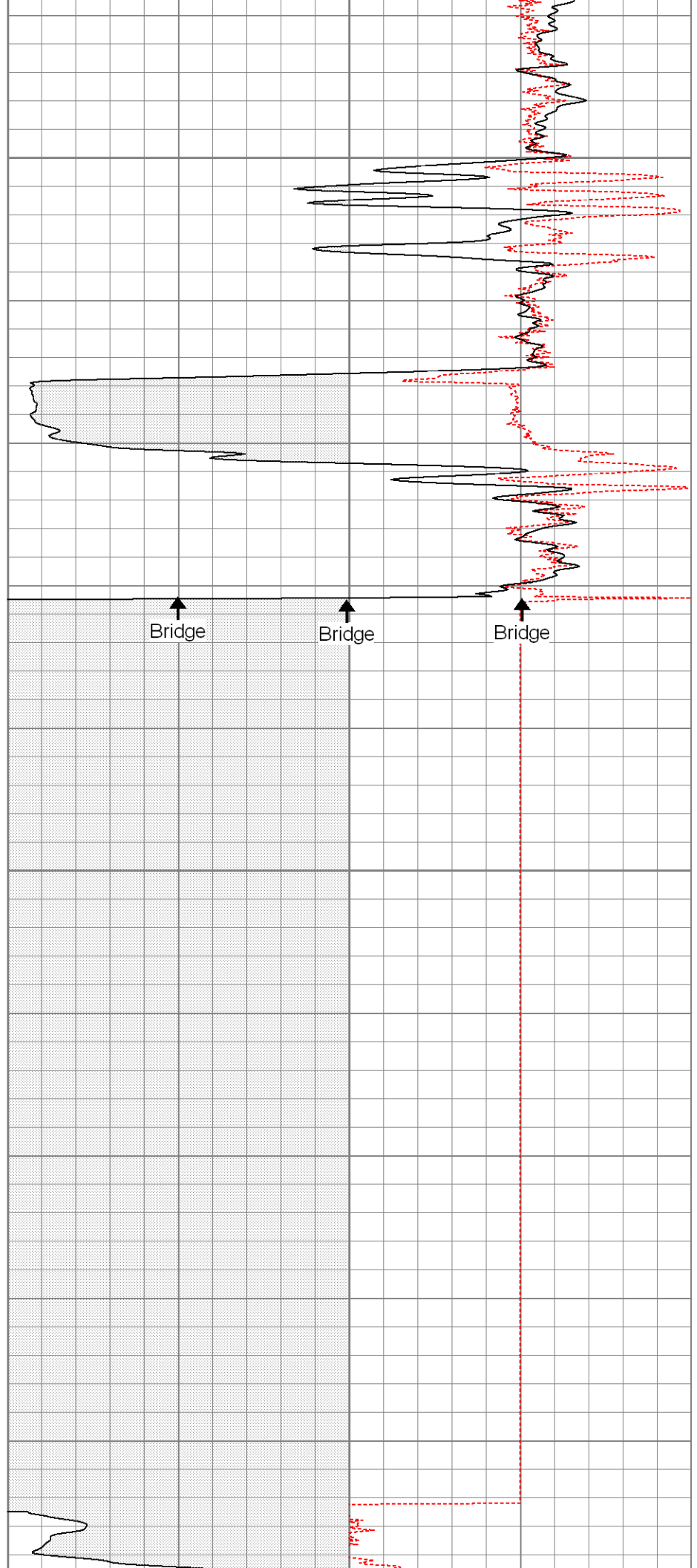
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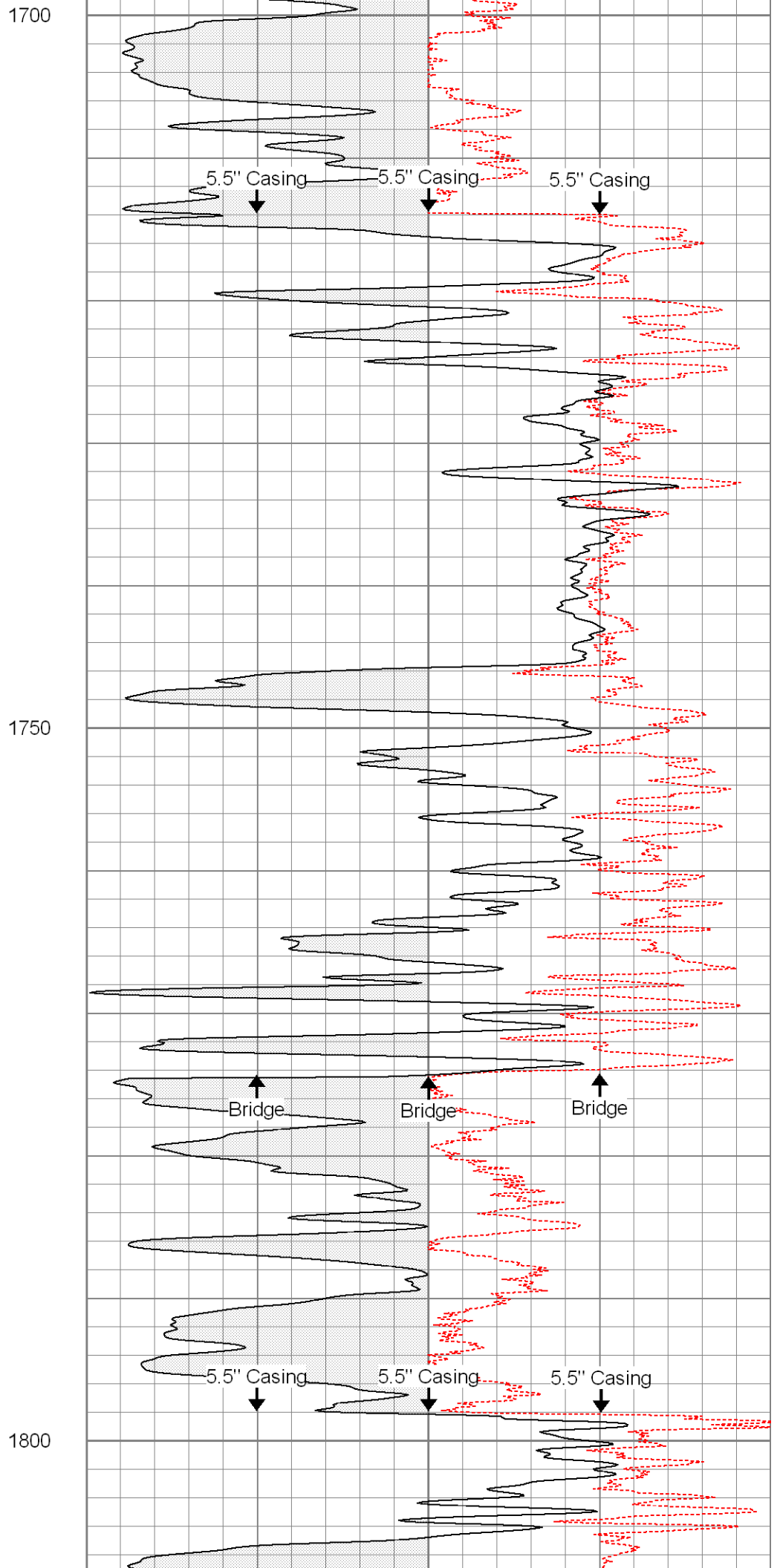
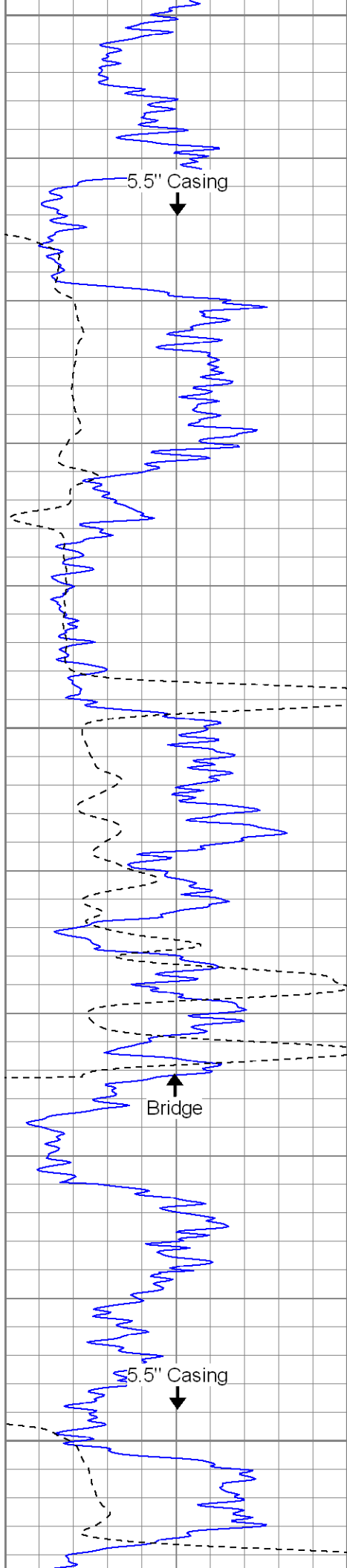


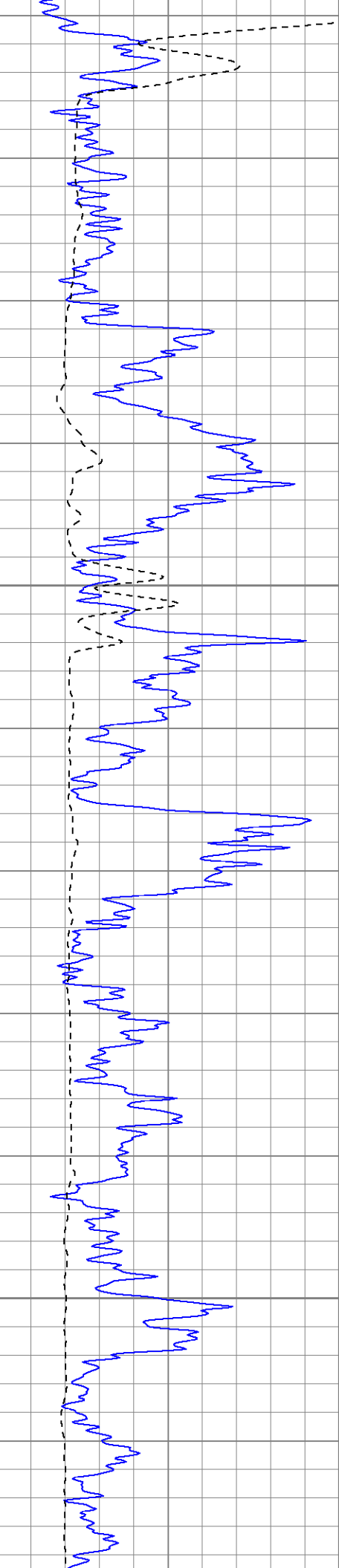


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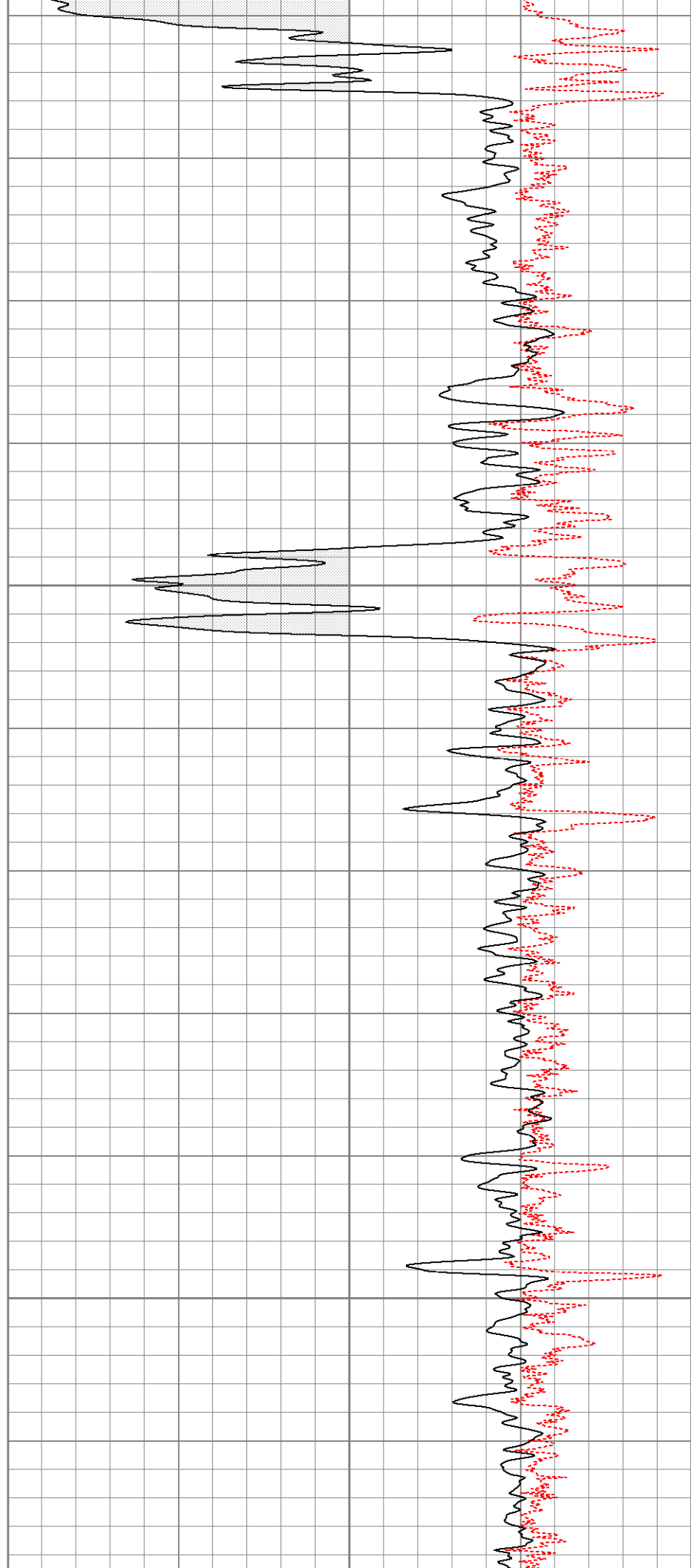


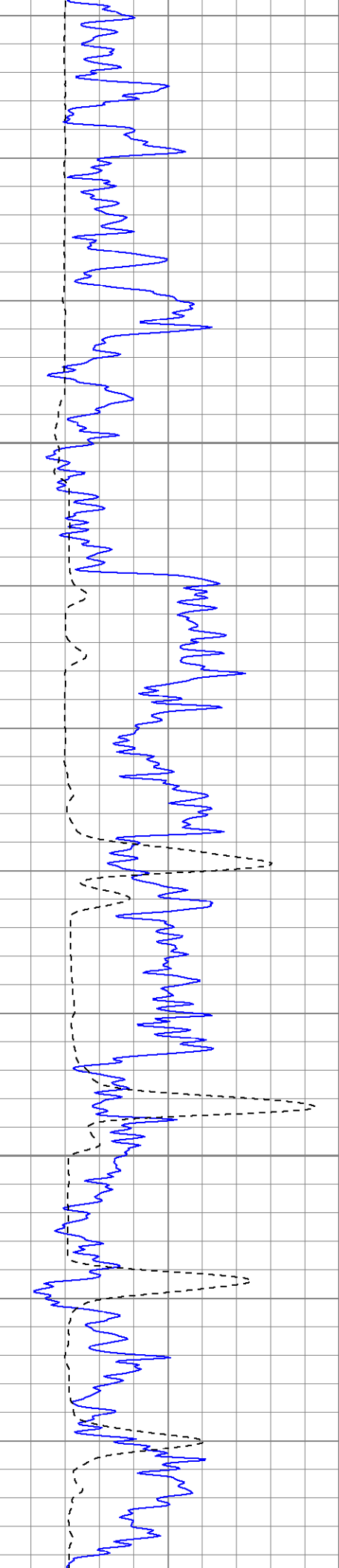




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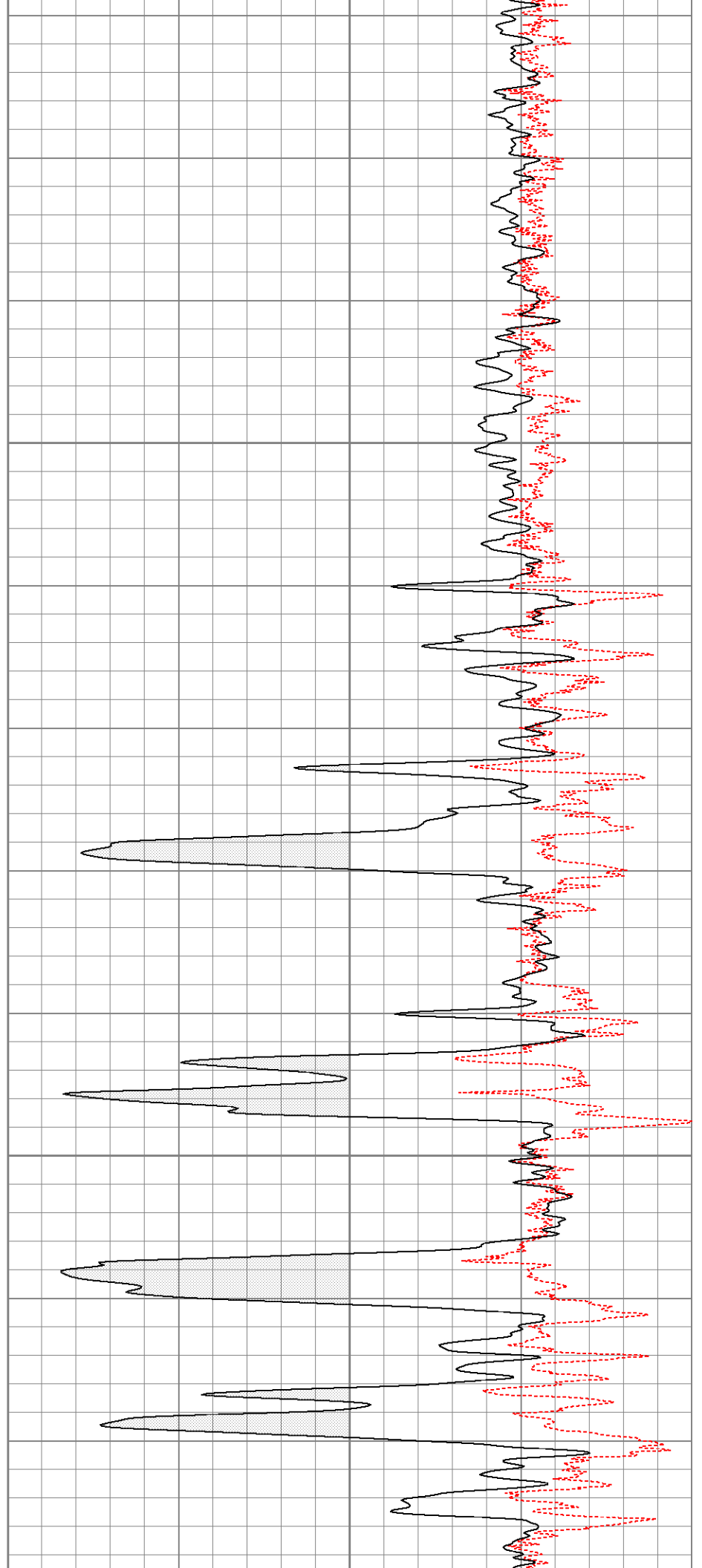
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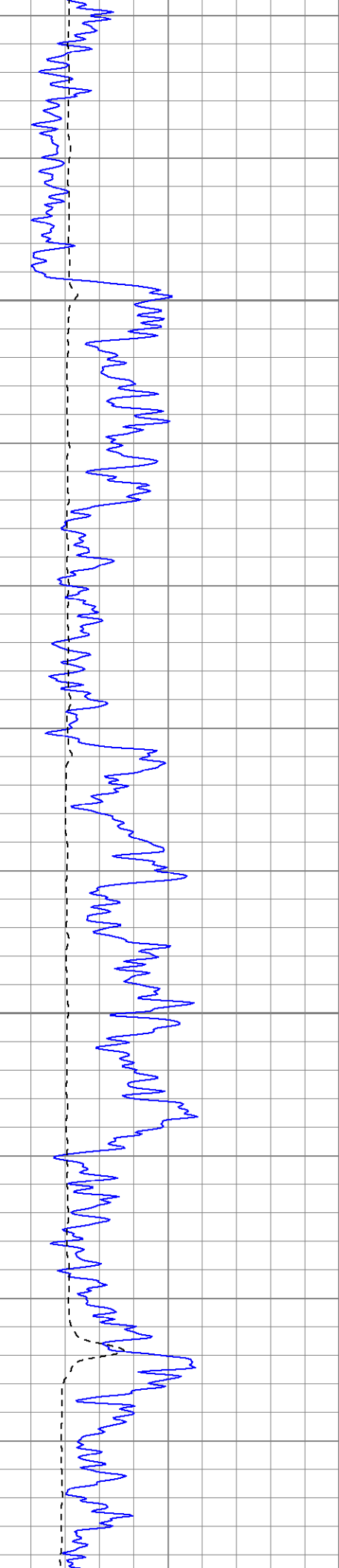




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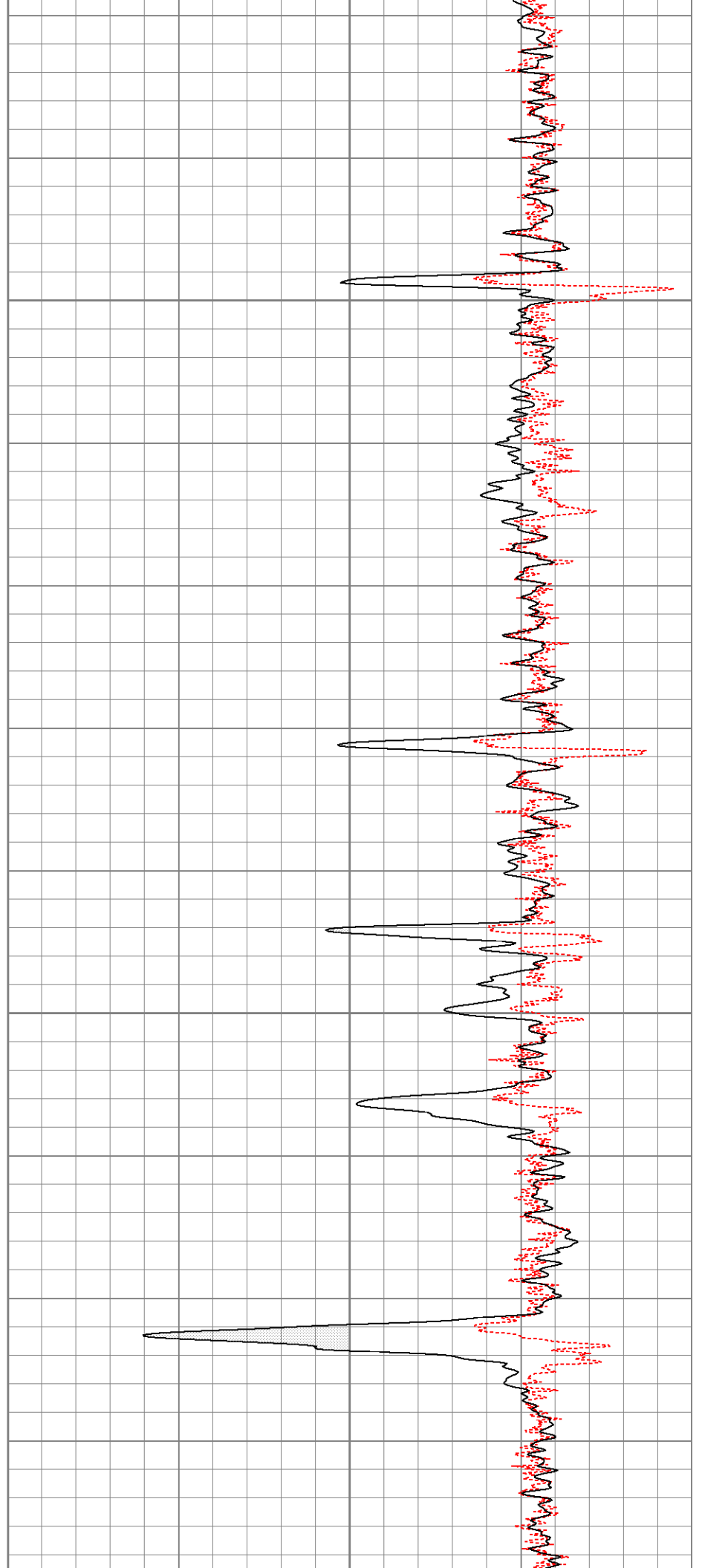
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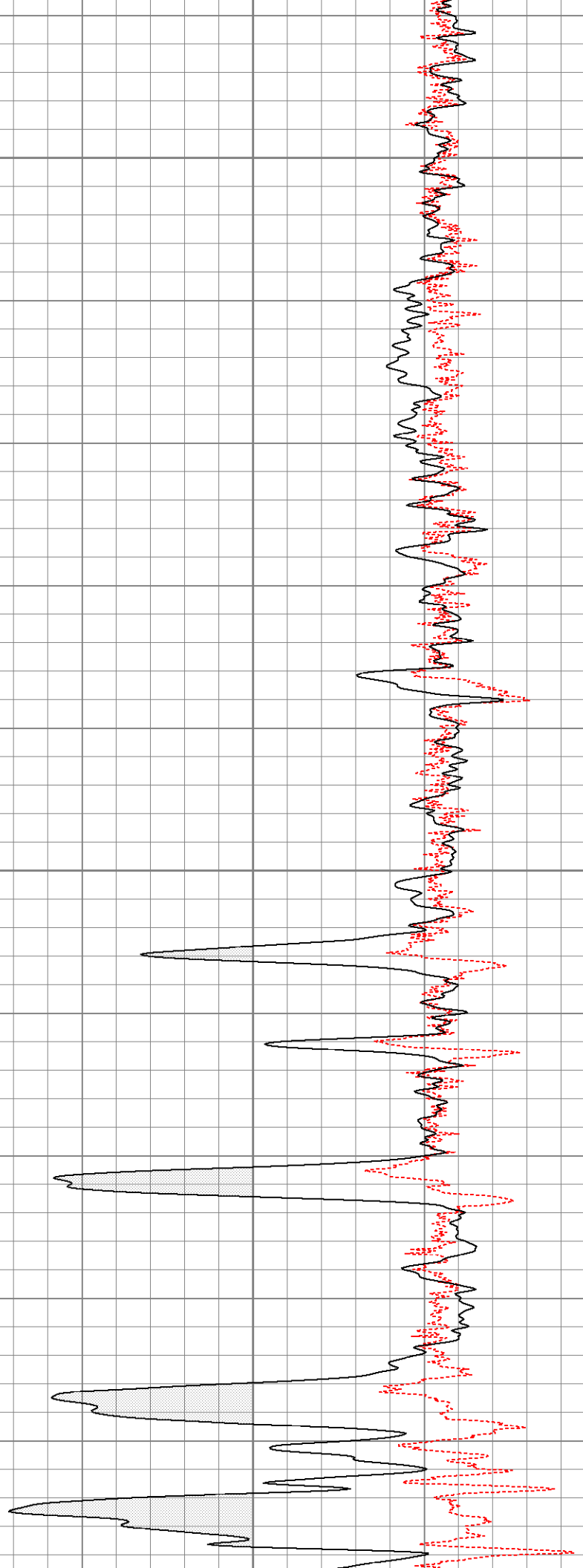
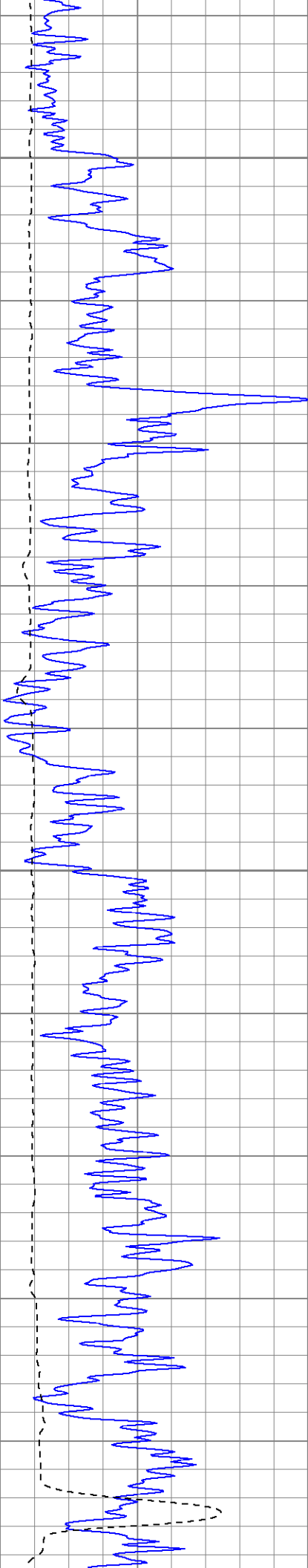
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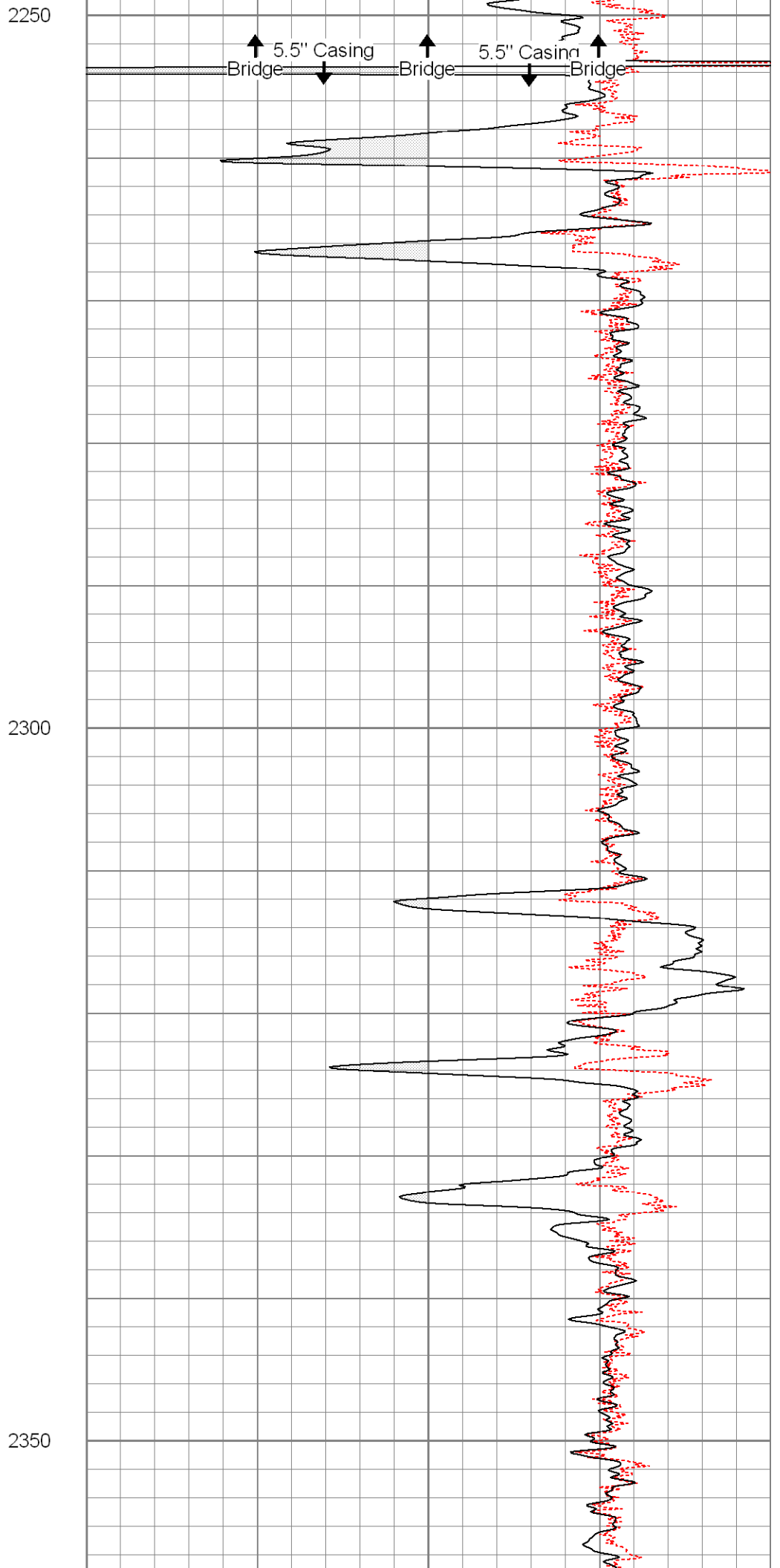
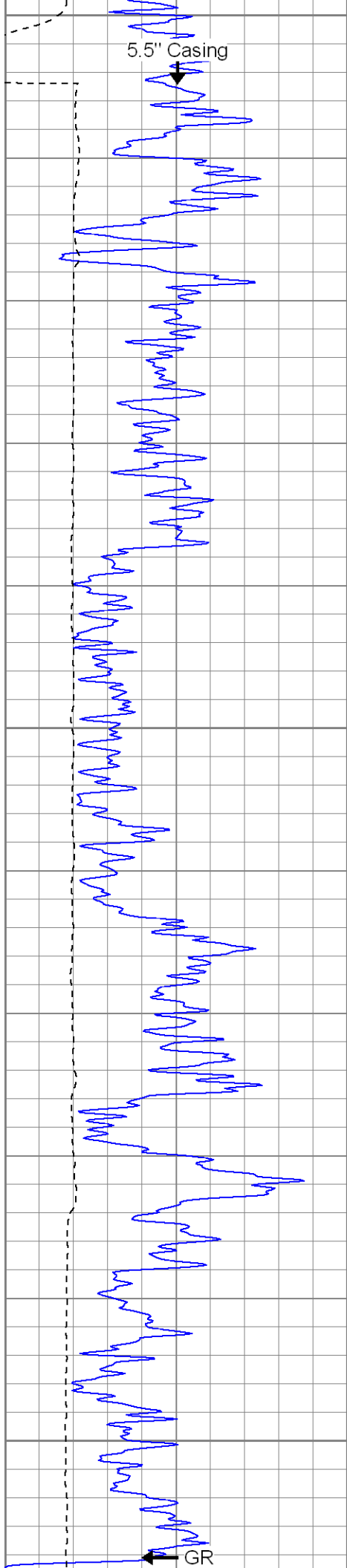
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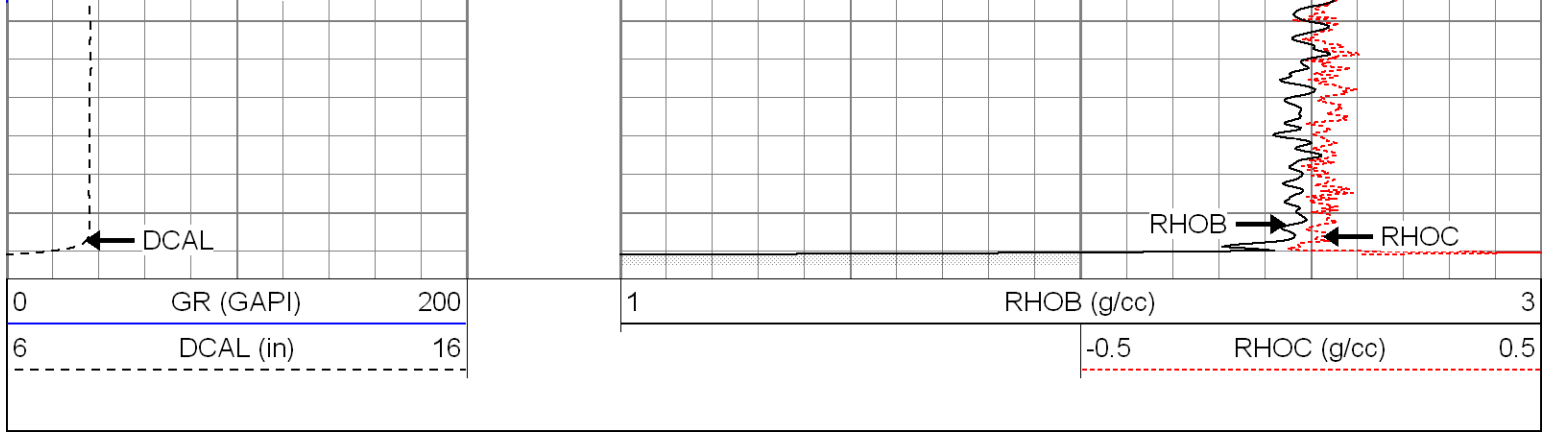


2150

2200







Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	11.38		None	0.75	1.50	5.00
			GR-2.75POH (801) Probe	3.73	2.75	43.00
			CDL-2.75POH (902) Probe	8.43	2.75	106.00
LSD	2.75					
DCAL	2.48					
SSD	2.23					
			Dataset: maximus.db: field/well/run1/pass4			
			Total Length: 12.91 ft			
			Total Weight: 154.00 lb			
			O.D.: 2.75 in			

Calibration Report					
Database File:	maximus.db				
Dataset Pathname:	pass4				
Dataset Creation:	Mon Dec 22 23:58:11 2008 by Log Open-Cased 071220				
Compensated Density Calibration Report					
Serial-Model:	902-2.75POH				
Source / Verifier:	/				
Master Calibration Performed:	Fri Dec 12 14:04:23 2008				
Master Calibration					
	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1087.92	571.32	cps
Aluminum	2.590	g/cc	194.74	283.22	cps
Spine Angle = 67.81			Density/Spine Ratio = 0.474		
	Size		Reading		
Small Ring	8.00	in	1.89	V	
Large Ring	17.00	in	4.10	V	

Gamma Ray Calibration Report	
Serial Number:	801
Tool Model:	2.75POH

Performed:

Fri Dec 12 10:56:27 2008

Calibrator Value:

200.0

GAPI

Background Reading:

50.0

cps

Calibrator Reading:

300.0

cps

Sensitivity:

0.6000

GAPI/cps