



HOLE VOLUME CALIPER LOG

COMPANY				BILL BARRETT CORPORATION			
WELL				GGU FEDERAL 44B-29-691			
FIELD				GIBSON GULCH			
PROVINCE/COUNTY				GARFIELD			
COUNTRY/STATE				U.S.A. / COLORADO			
LOCATION				SHL: 393' FNL & 260' FWL BHL: 490' FSL & 664' FEL			
SEC	TWP	RGE	Other Services				
33	6S	91W	MPD/MDN				
API Number		05-045-18907		MAI/MFE			
Permit Number							
Permanent Datum G.L., Elevation 6352 feet							
Log Measured From K.B. @ 23 FEET above Permanent Datum							
Drilling Measured From K.B.							
Date	17-AUG-2010			Elevations:			
Run Number	ONE			KB		6375.00	
Depth Driller	7800.00			feet			
Depth Logger	7801.00			feet			
First Reading	7780.00						
Last Reading	832.00						
Casing Driller	829.00			feet			
Casing Logger	832.00			feet			
Bit Size	7.880			inches			
Hole Fluid Type	LSND						
Density / Viscosity	10.70 lb/USg		57.00	CP			
PH / Fluid Loss	9.20		8.00	ml/30Min			
Sample Source	FLOW LINE						
Rm @ Measured Temp	1.79 @105.6		ohm-m				
Rmf @ Measured Temp	1.43 @105.6		ohm-m				
Rmc @ Measured Temp	2.15 @105.6		ohm-m				
Source Rmf / Rmc	CALC	CALC					
Rm @ BHT	0.99 @193.0		ohm-m				
Time Since Circulation	6 HOURS						
Max Recorded Temp	194.00		deg F				
Equipment Name	COMPACT						
Equipment / Base	13173	GD JCT					
Recorded By	R. BROWN						
Witnessed By	C. CROW						

BOREHOLE RECORD			Last Edited: 17-AUG-2010 11:01	
Bit Size inches	Depth From feet	Depth To feet		
8.750	829.00	5585.00		
7.875	5585.00	7800.00		
CASING RECORD				
Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	9.625	0.00	829.00	36.00

REMARKS	
TOOLS: SHA, MCG, MDN, MPD, SKJ, MFE AND MAI RAN IN COMBINATION.	
HARDWARE: MPD: 8 INCH PROFILE PLATE USED. ONE 0.5 INCH STANDOFFS USED ON INDUCTION. ONE 0.5 INCH STANDOFFS USED ON MFE. DUAL BOWSPRING USED ON NEUTRON.	
NO ECCENTRALIZING BOWSTRINGS RAN BELOW DENSITY TOOL AS SPECIFICALLY REQUESTED BY CLIENT. THIS MAY EFFECT DATA QUALITY.	
2.68 G/CC DENSITY MATRIX USED TO CALCULATE POROSITY.	
ALL INTERVALS LOGGED AND SCALED PER CUSTOMER'S REQUEST.	
TIGHT PULLS, BOREHOLE SIZE, AND RUGOSITY WILL AFFECT REPEATABILITY AND DATA QUALITY.	
CALIPER CHECK IN CASING PRESENTED, REFERENCE I.D. = 8.96" (9 5/8", 36 LB/FT CASING)	
UNDERGUAGED CALIPER BETWEEN THE DEPTHS OF 7750 FEET TO 7710 FEET, 7630 FEET TO 7590 FEET, AND 7380 FEET TO 7335	

UNDERGASSED CALIPER BETWEEN THE DEPTHS OF 7750 FEET TO 7760 FEET, 7850 FEET TO 7950 FEET, AND 7950 FEET TO 7955 FEET. BECAUSE OF THIS, DATA QUALITY AND REPEATABILITY WILL BE EFFECTED GREATLY.

DATA SPLICED AT 7480 FEET, AND 7300 FEET.

8.75 INCH BIT USED FROM SURFACE CASING TO 5585 FT.

TOTAL HOLE VOLUME FROM TD TO SURFACE CASING = 2773 CU.FT.

ANNULAR VOLUME WITH 4.5 INCH PRODUCTION CASING = 2005 CU.FT.

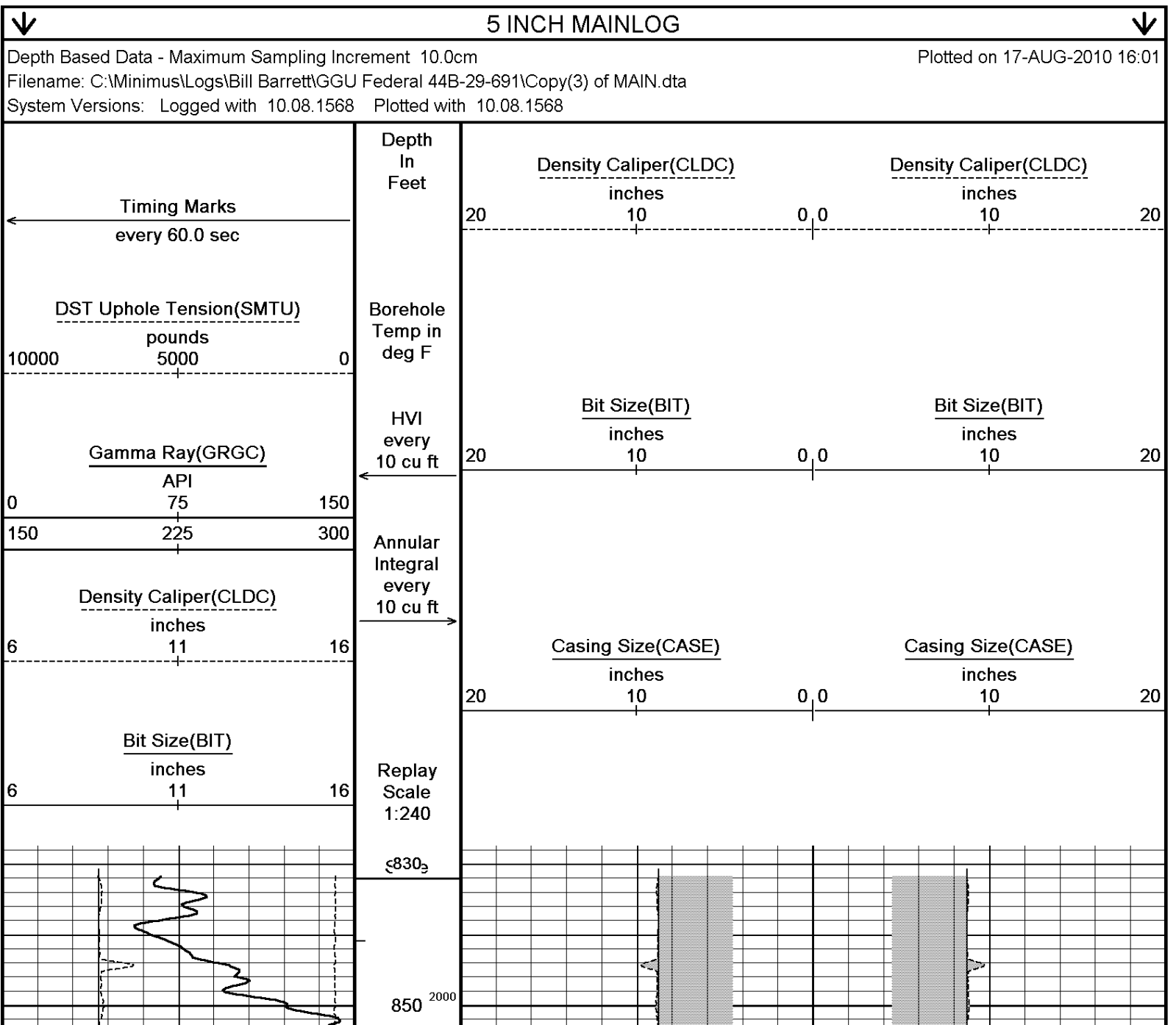
ENGINEER(S): R. BROWN

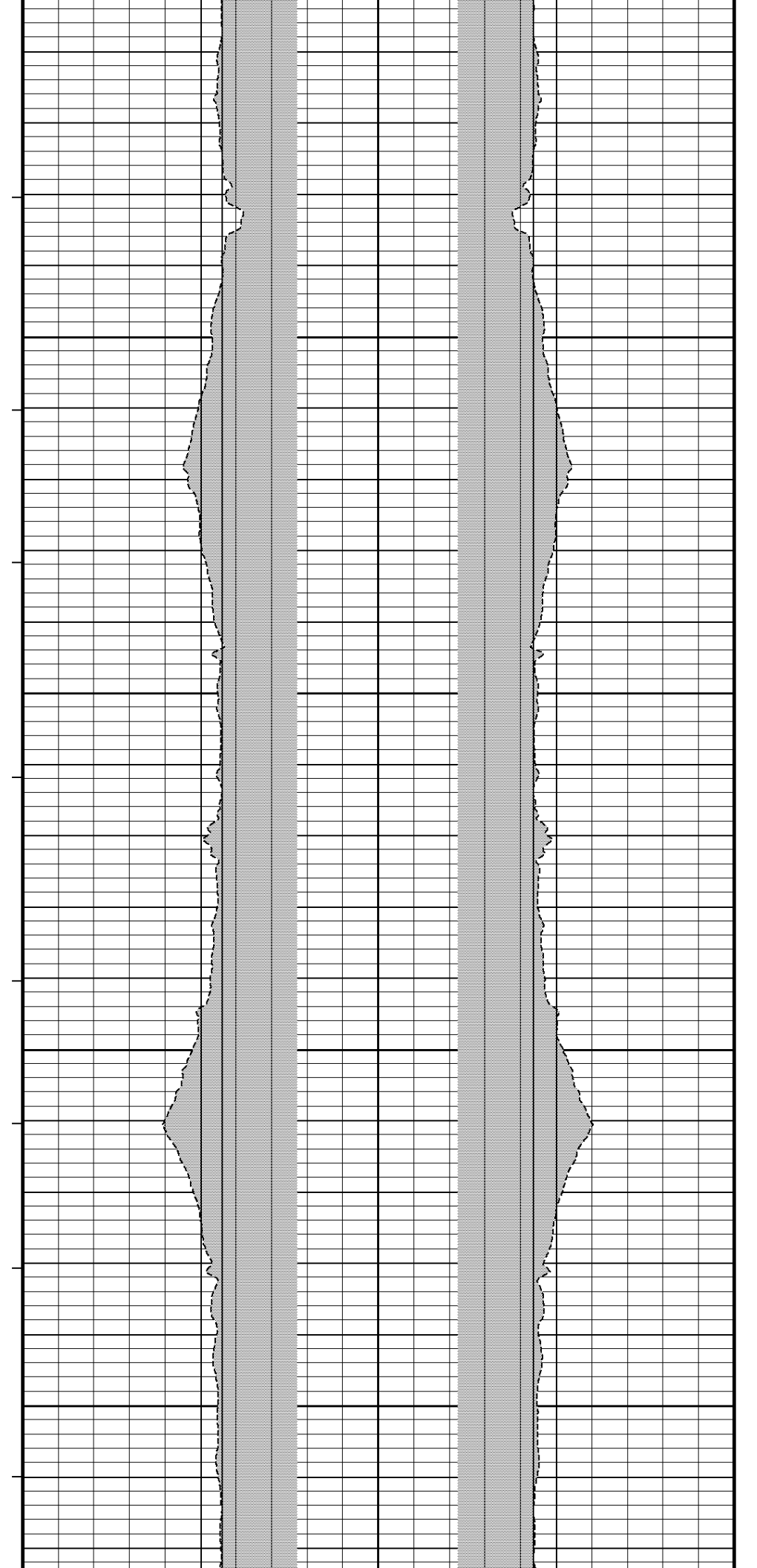
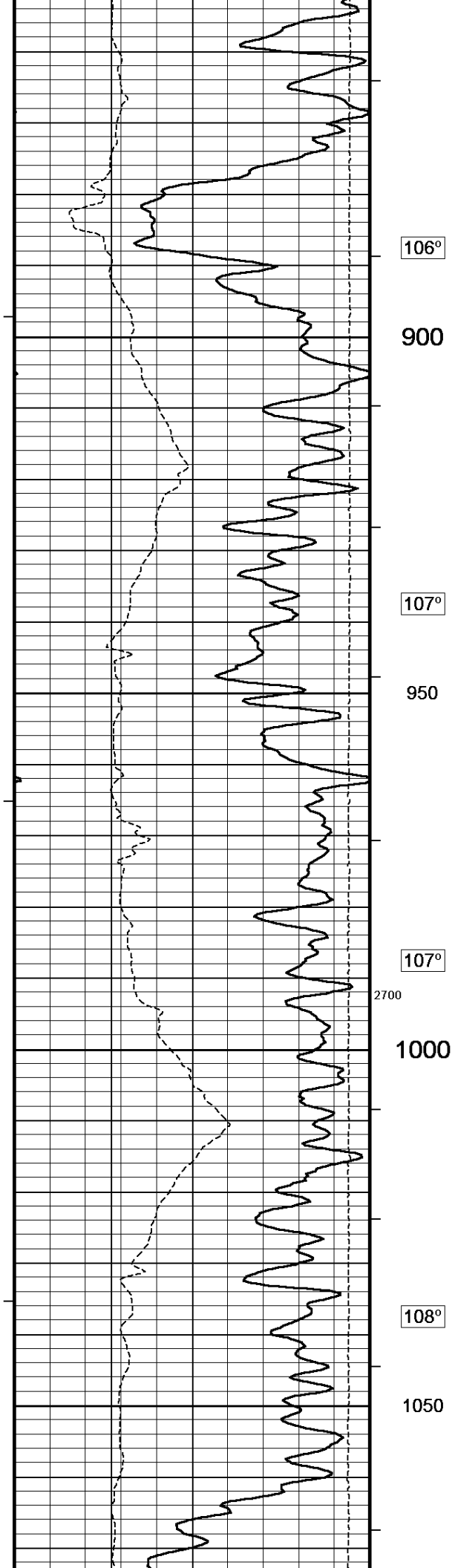
OPERATOR: W. WILLIAMS

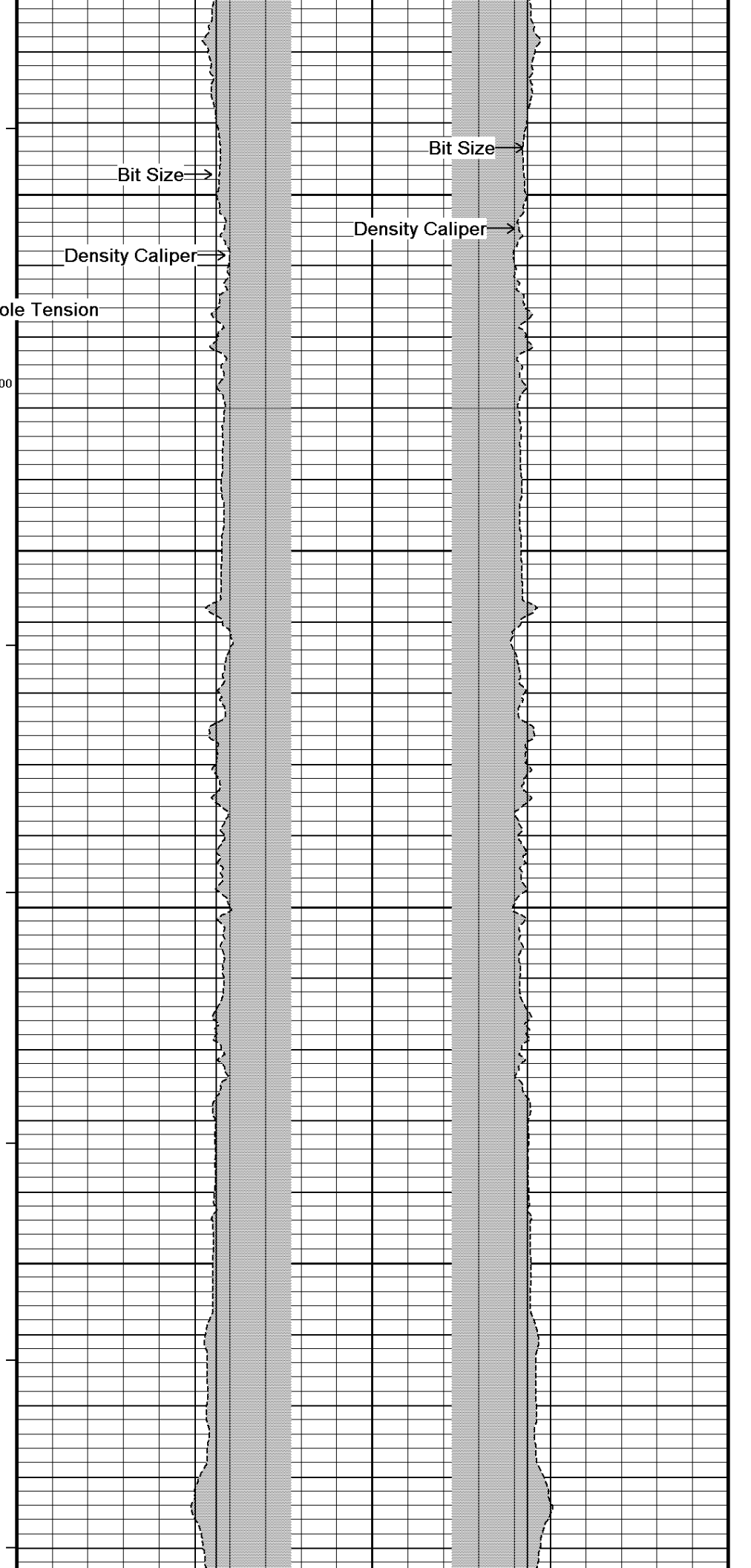
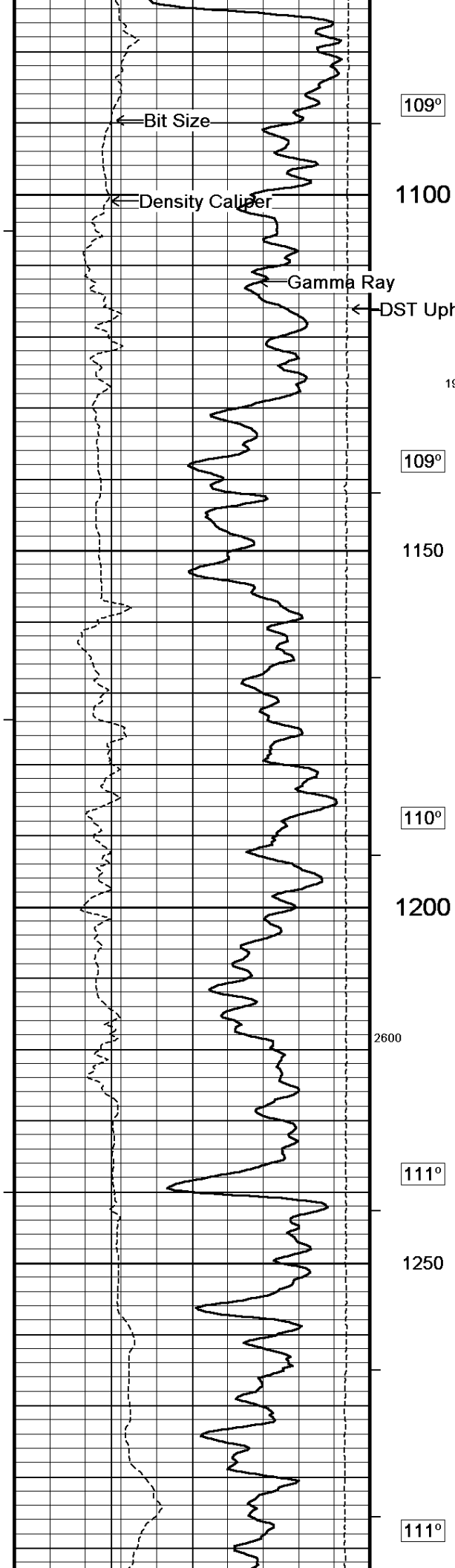
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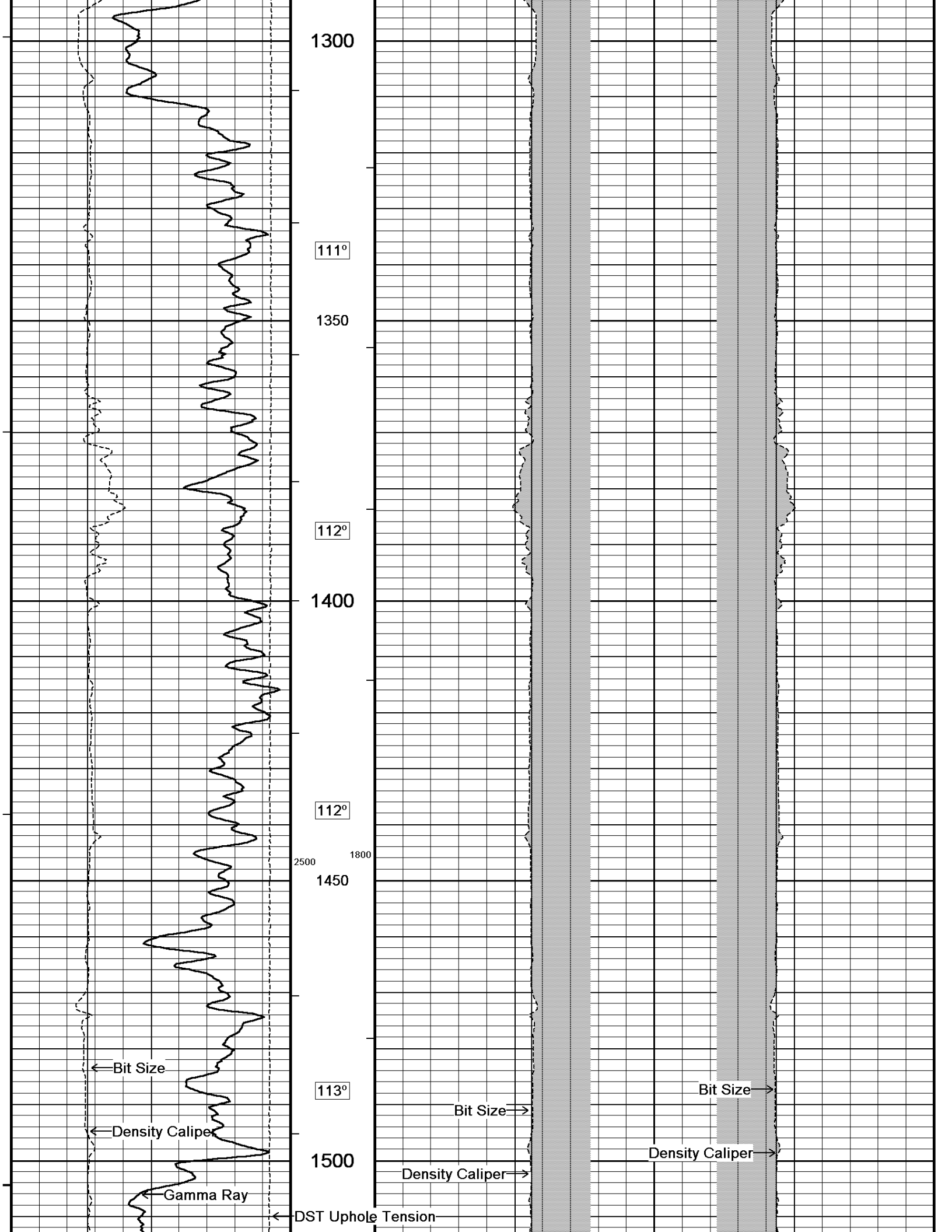
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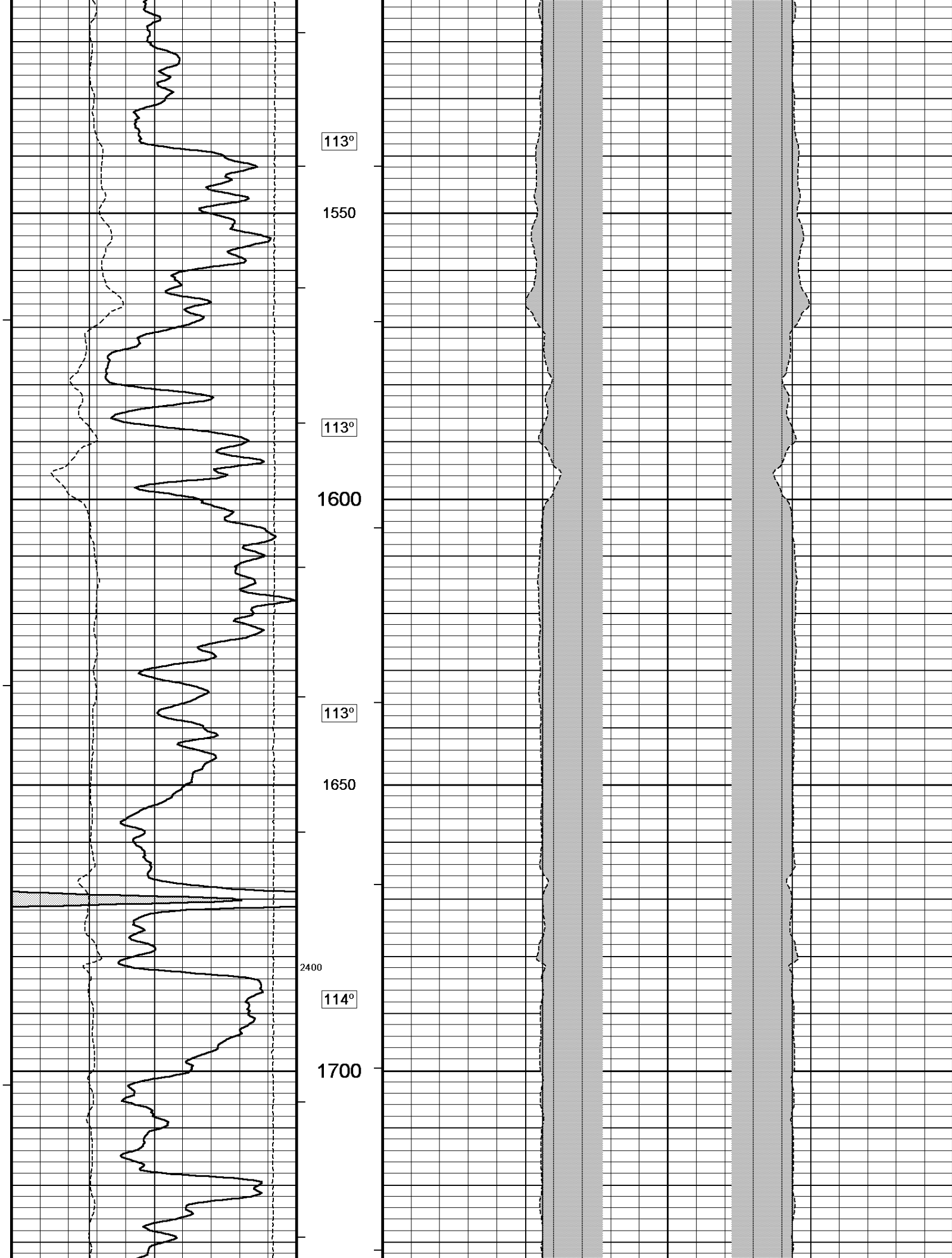
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs, 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 in our price schedule.

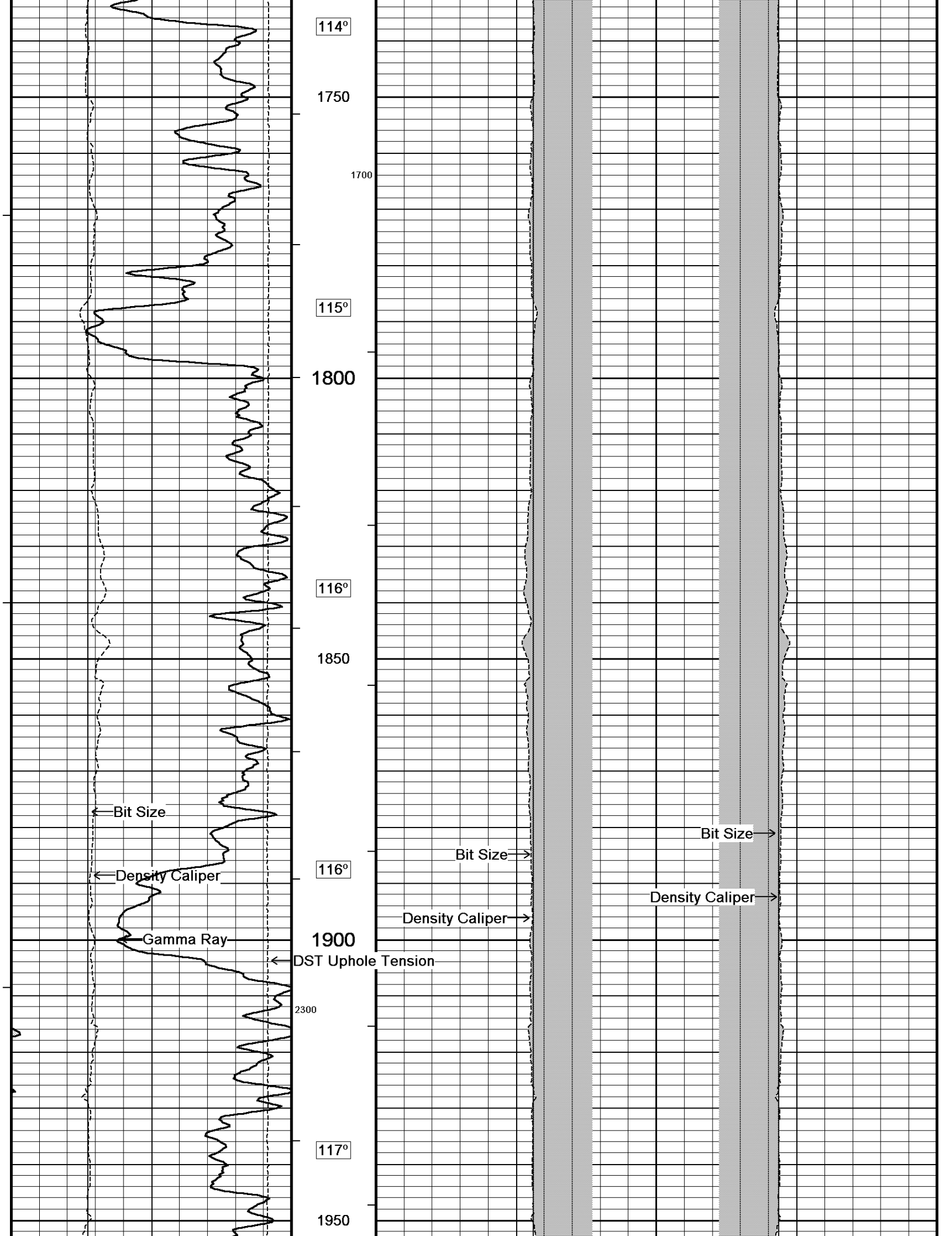


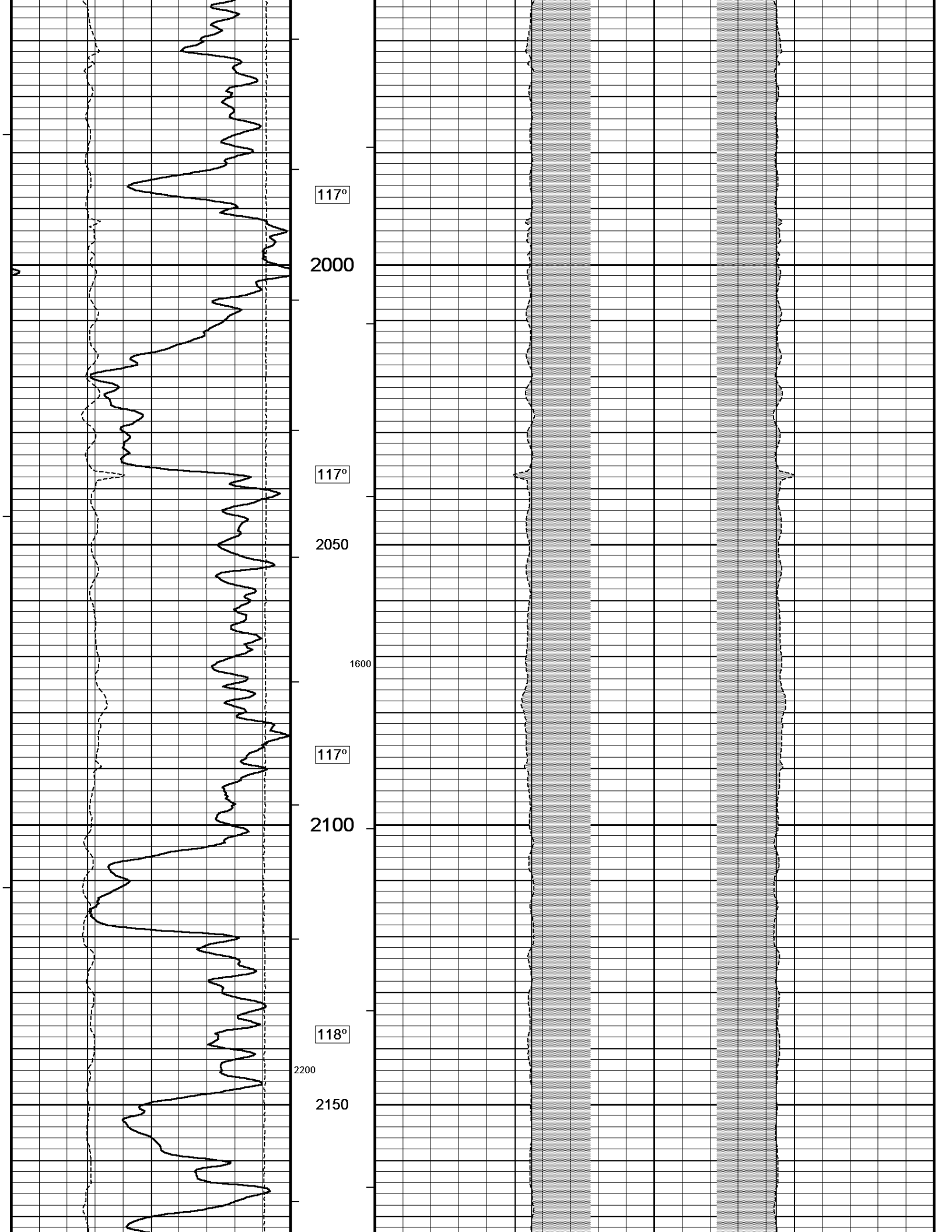


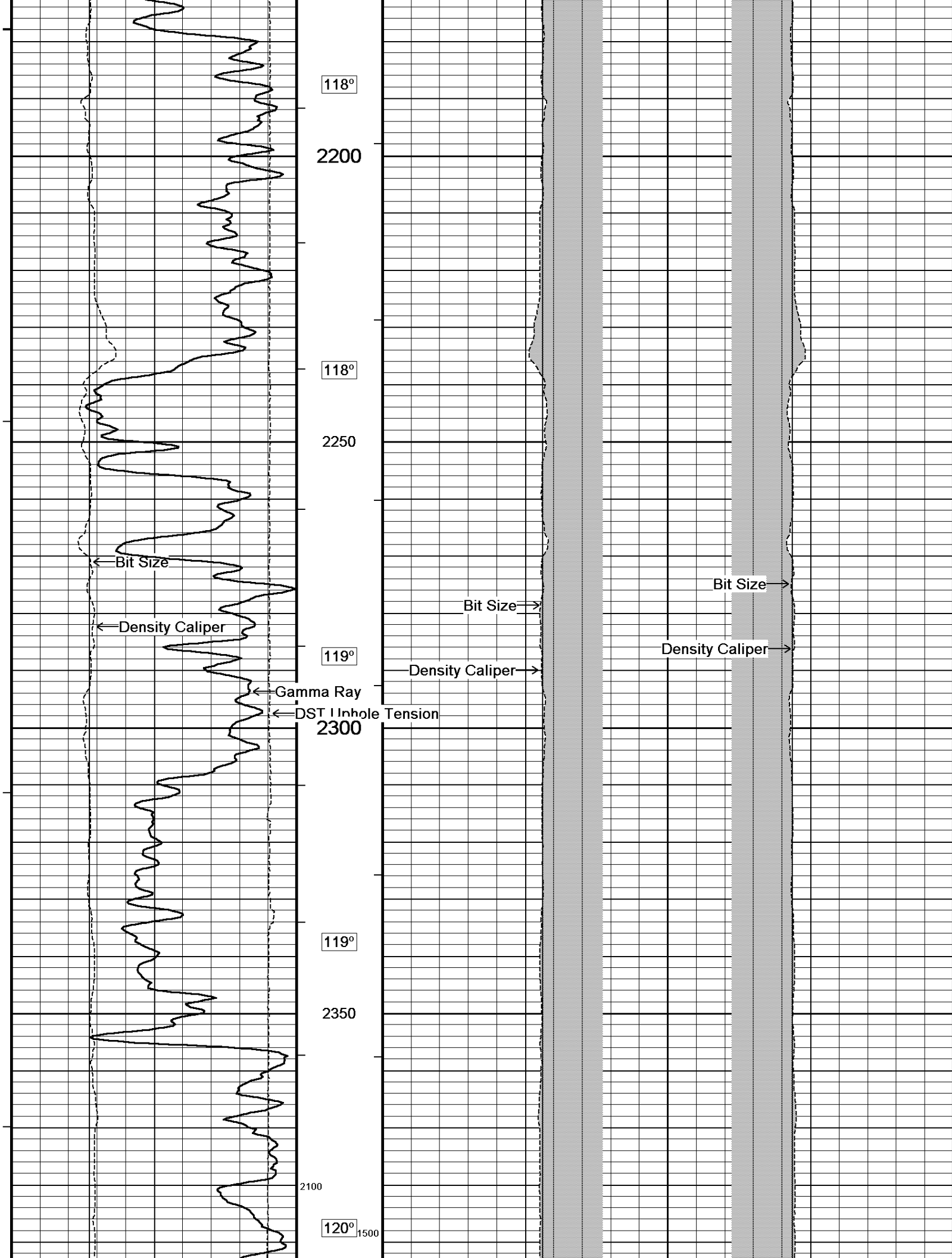


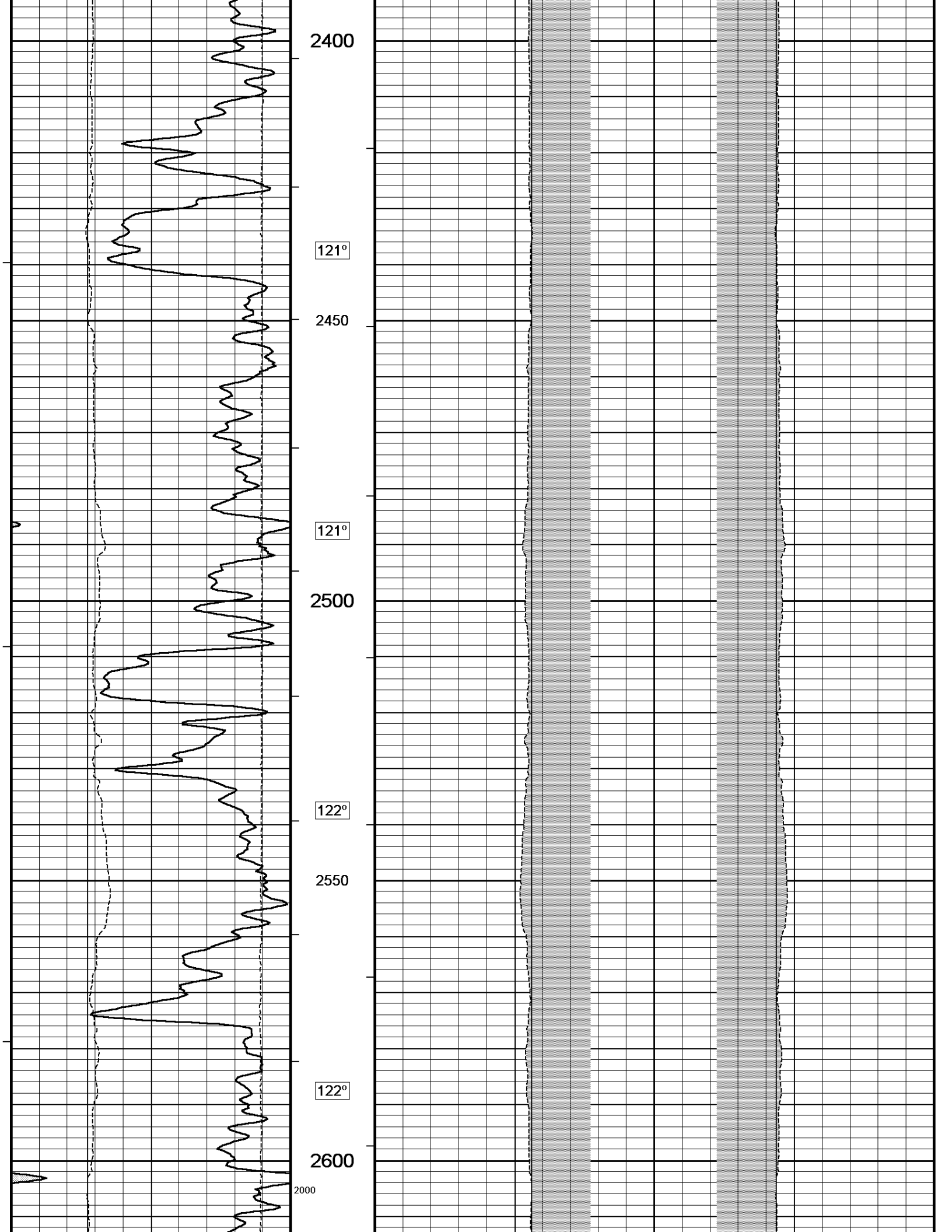


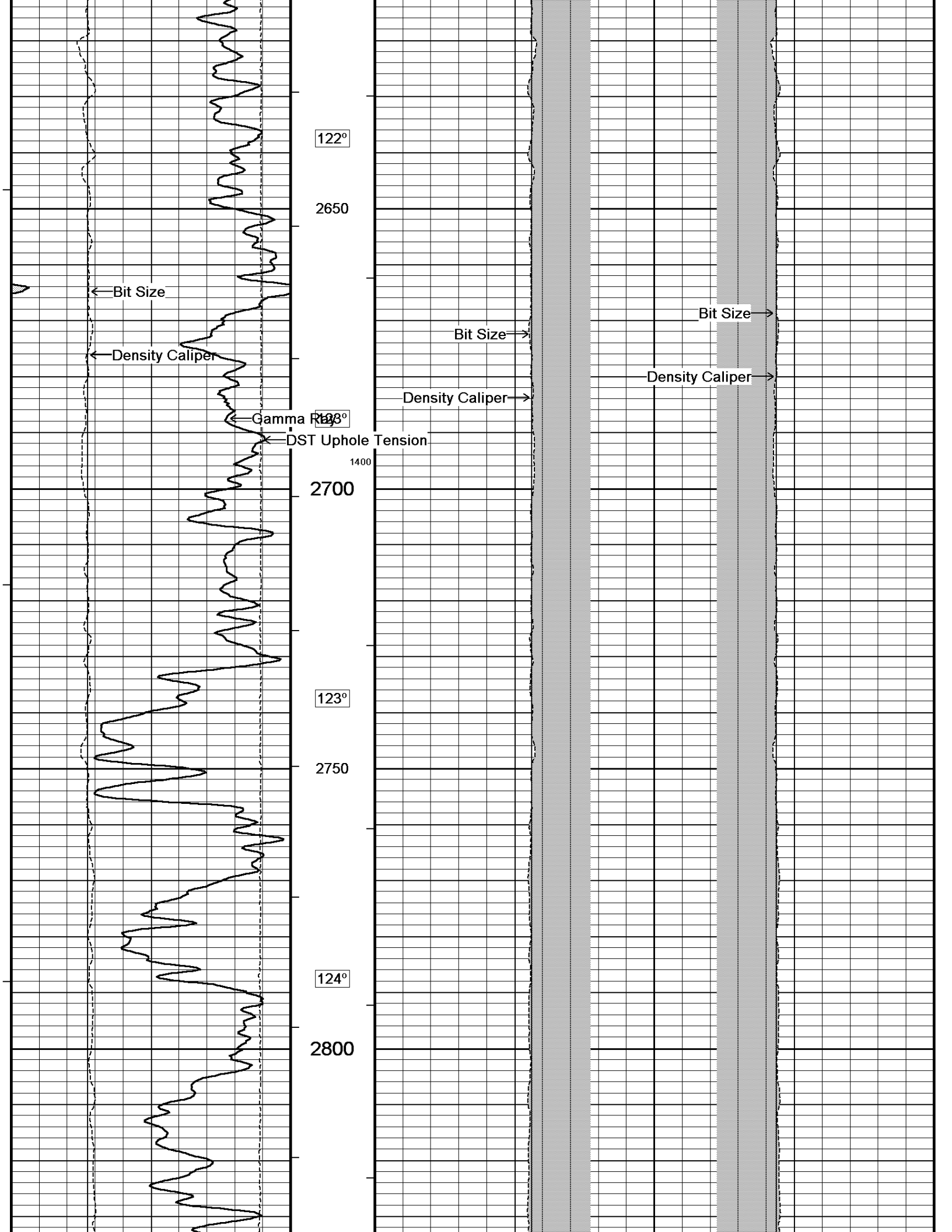


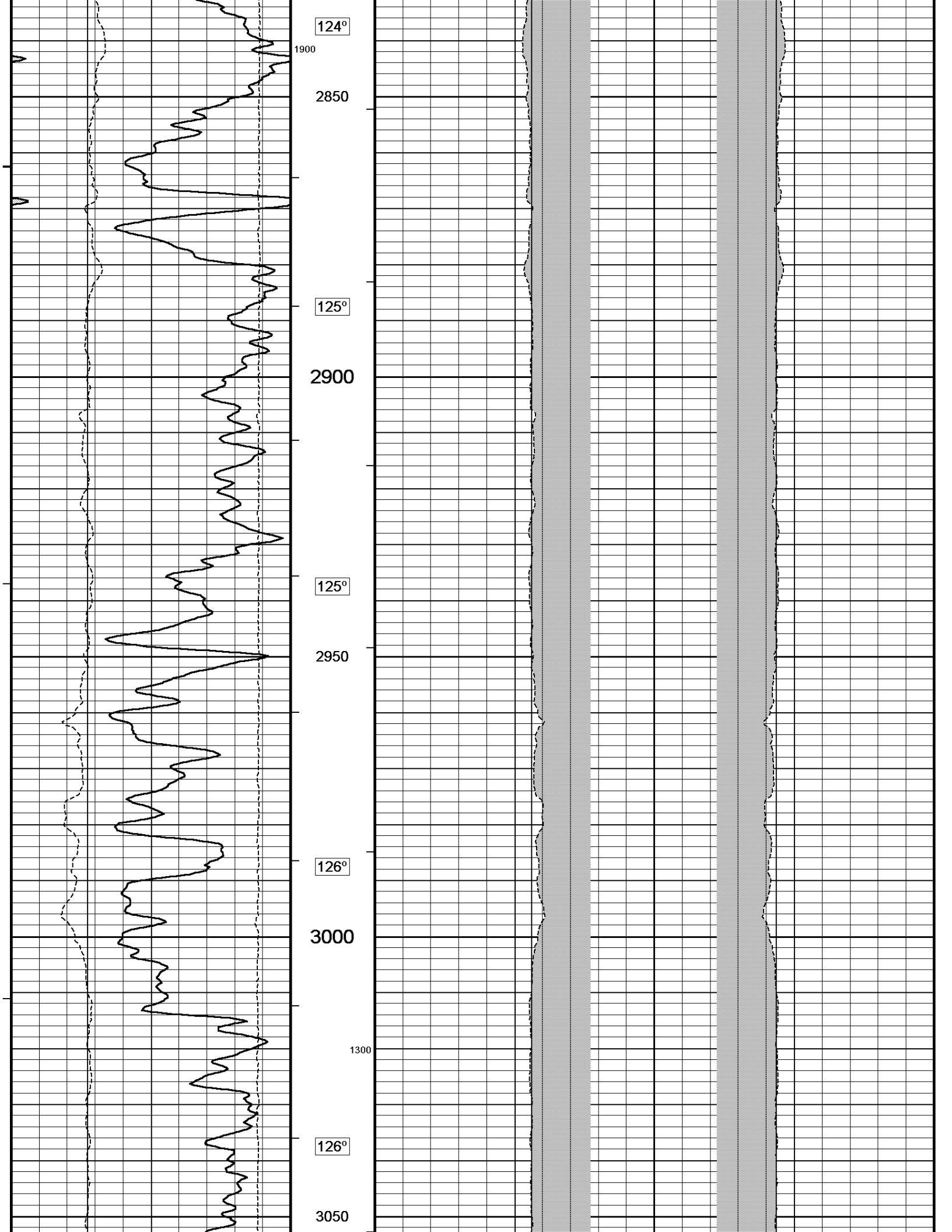


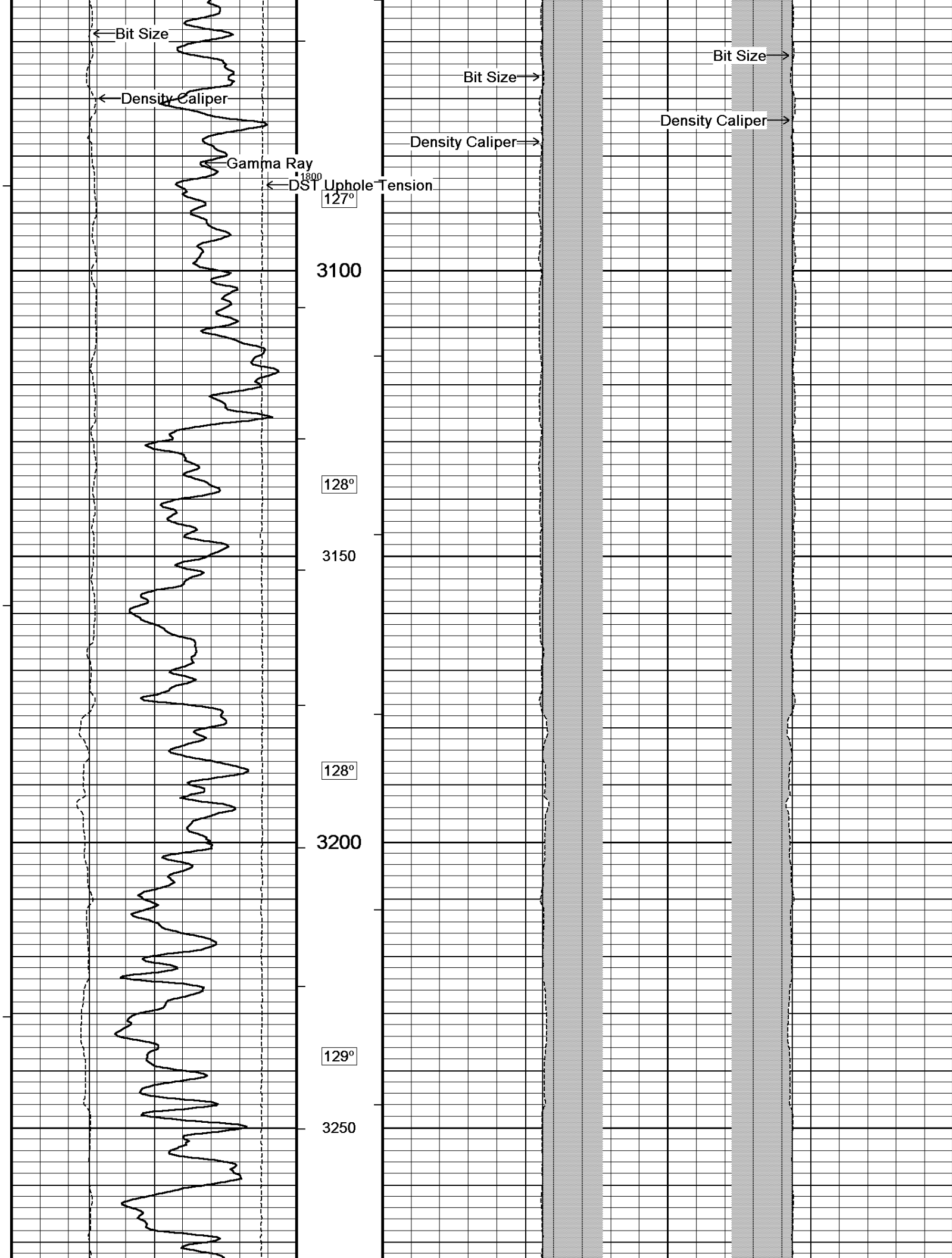


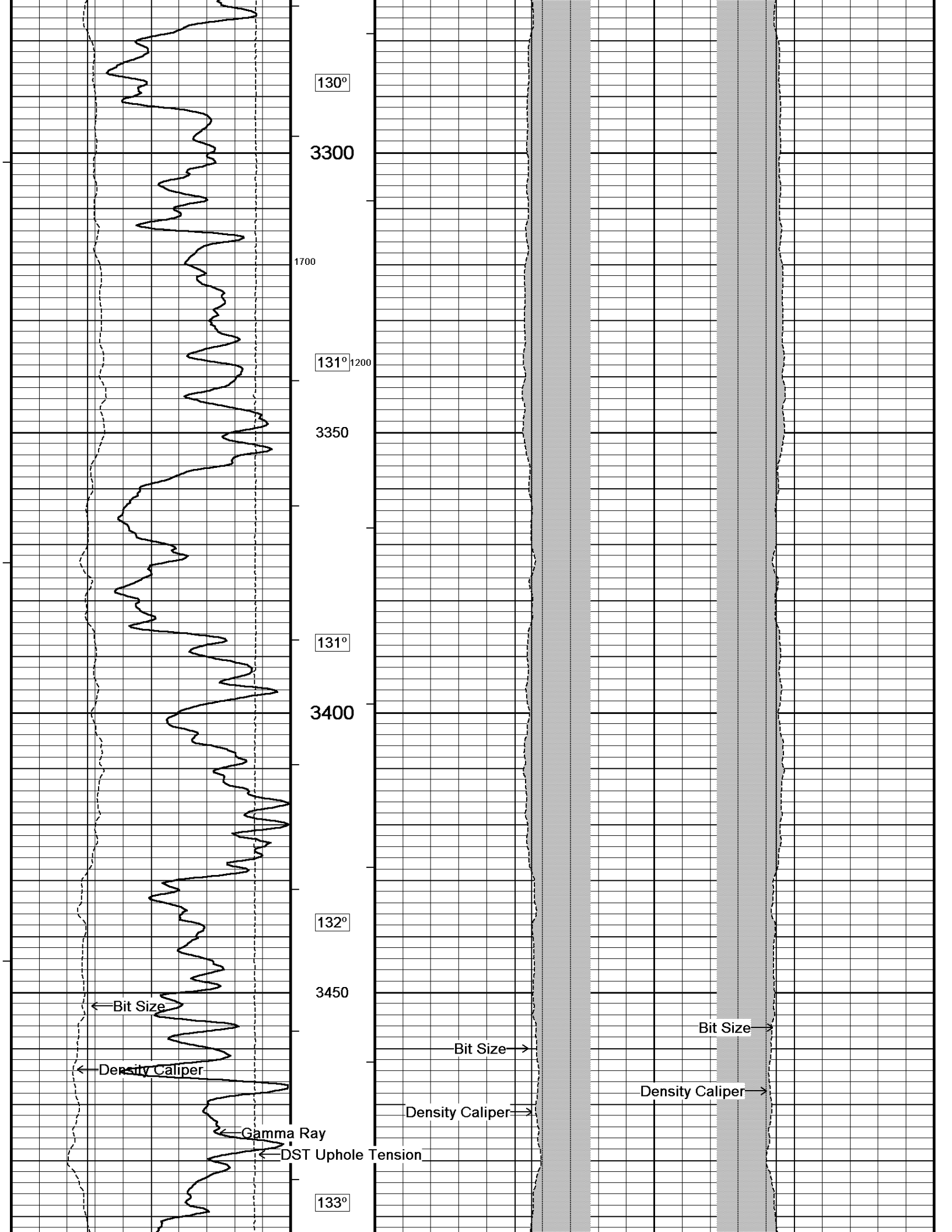


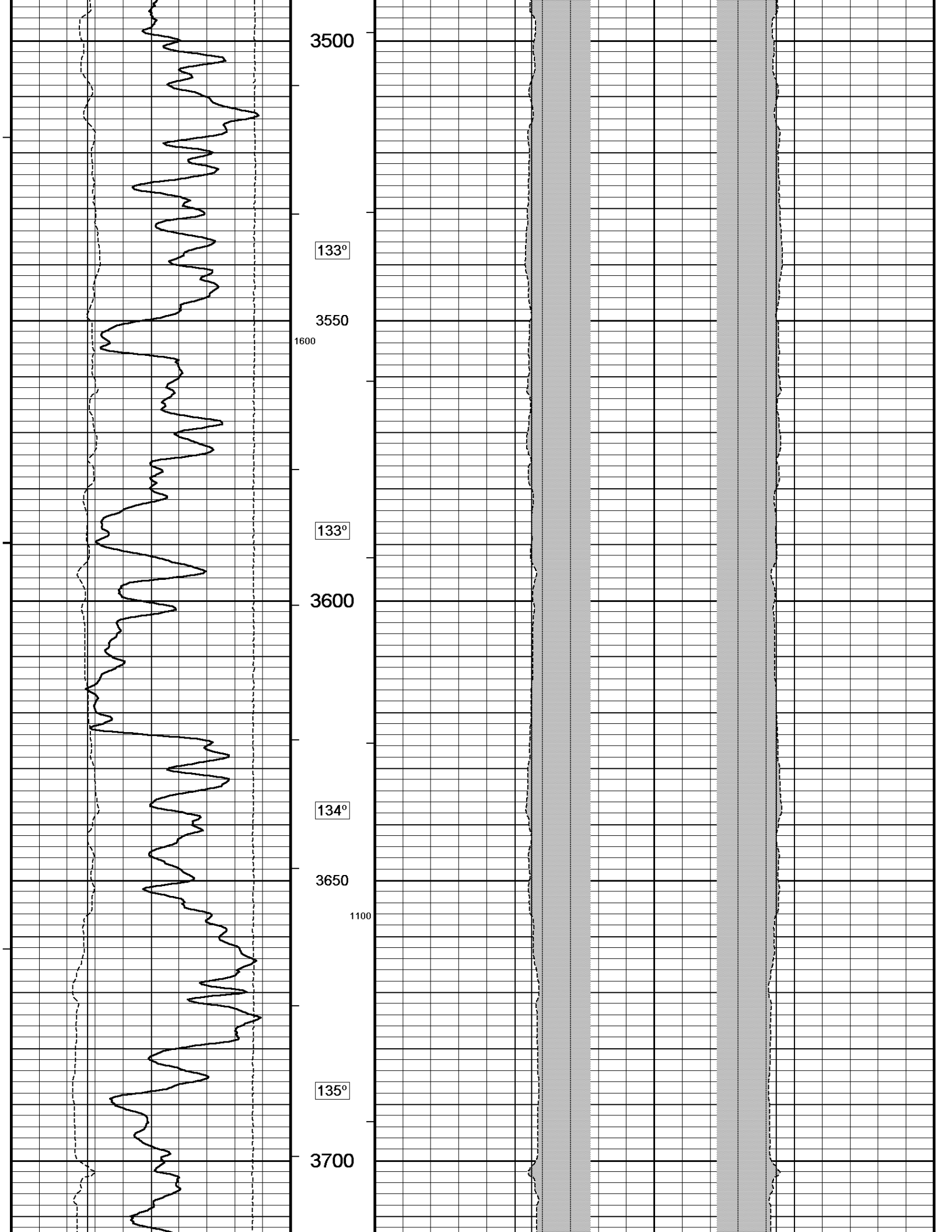


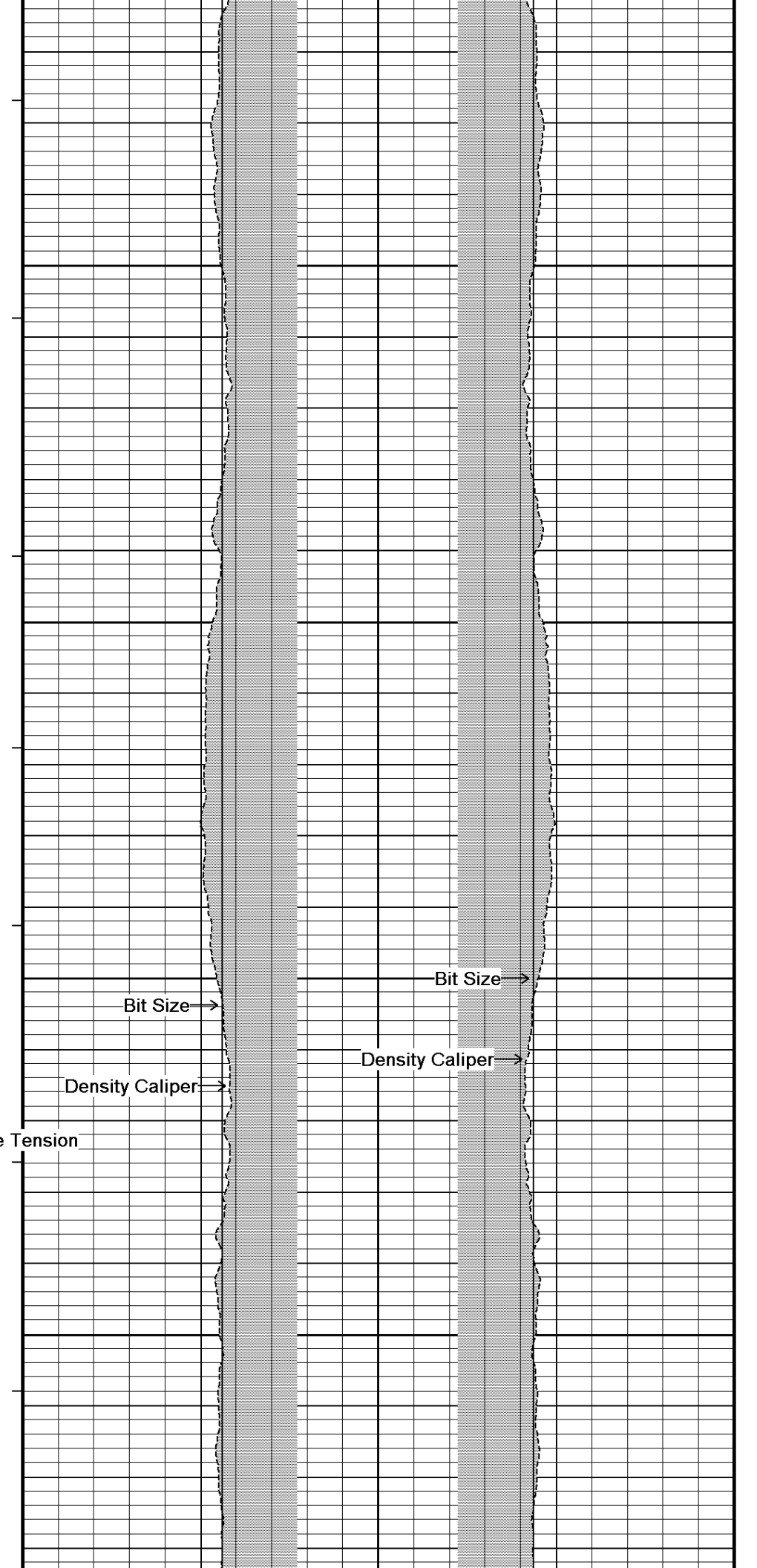
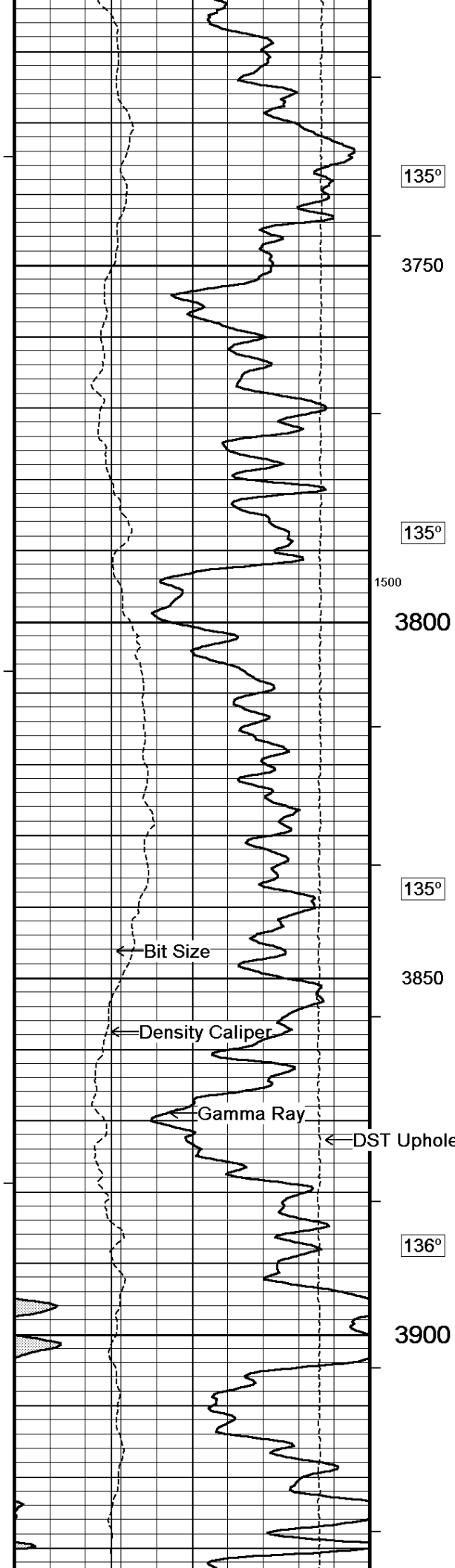


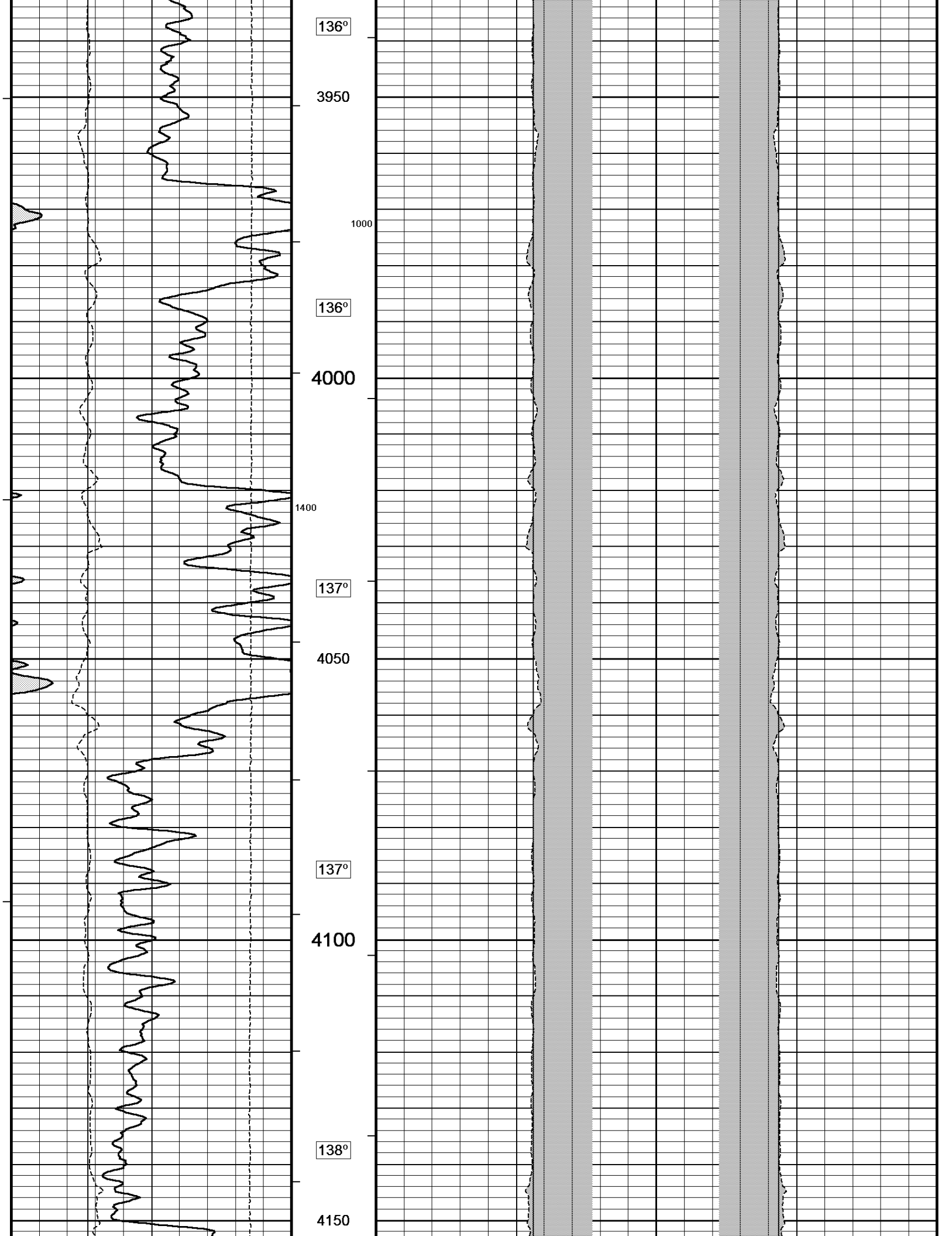


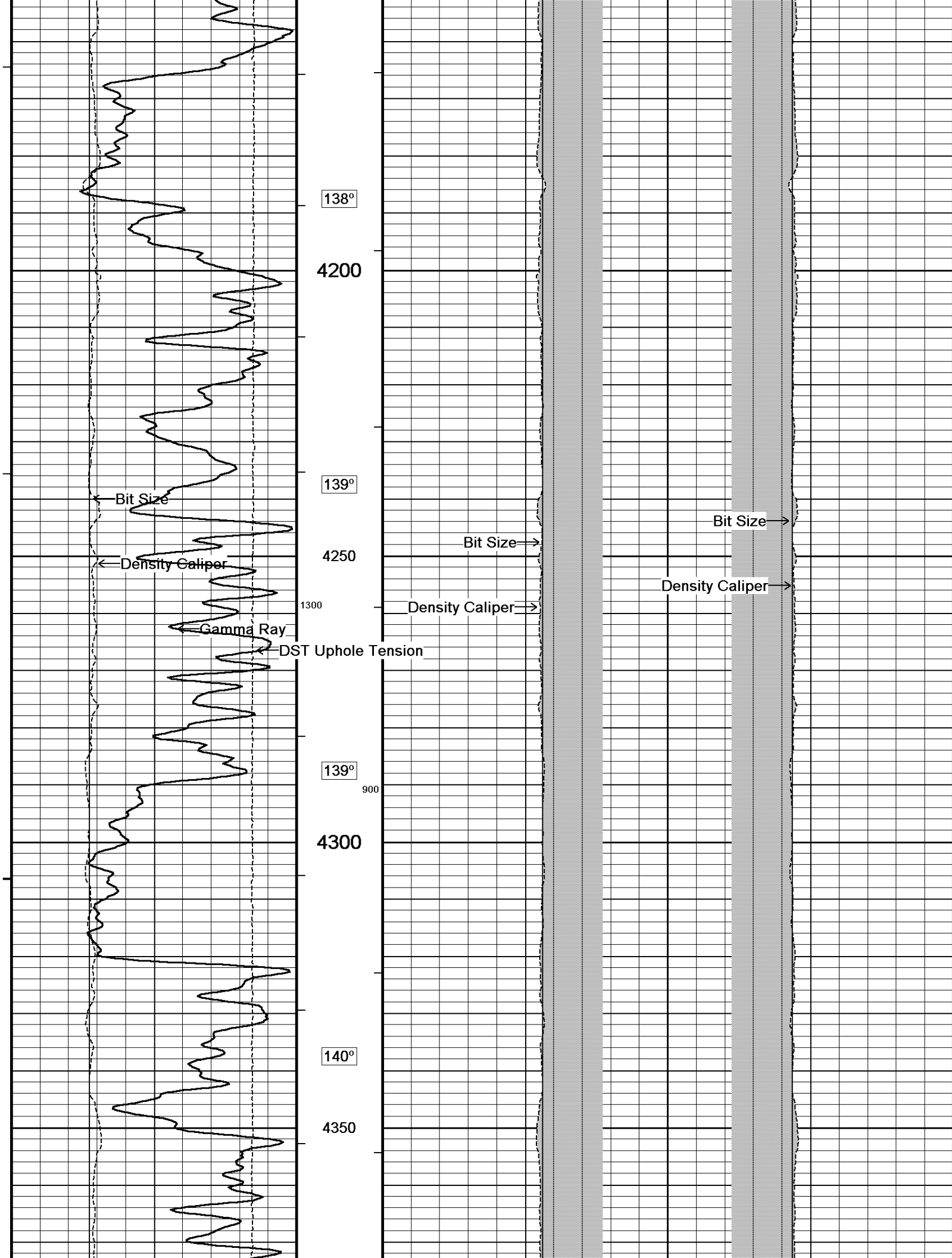


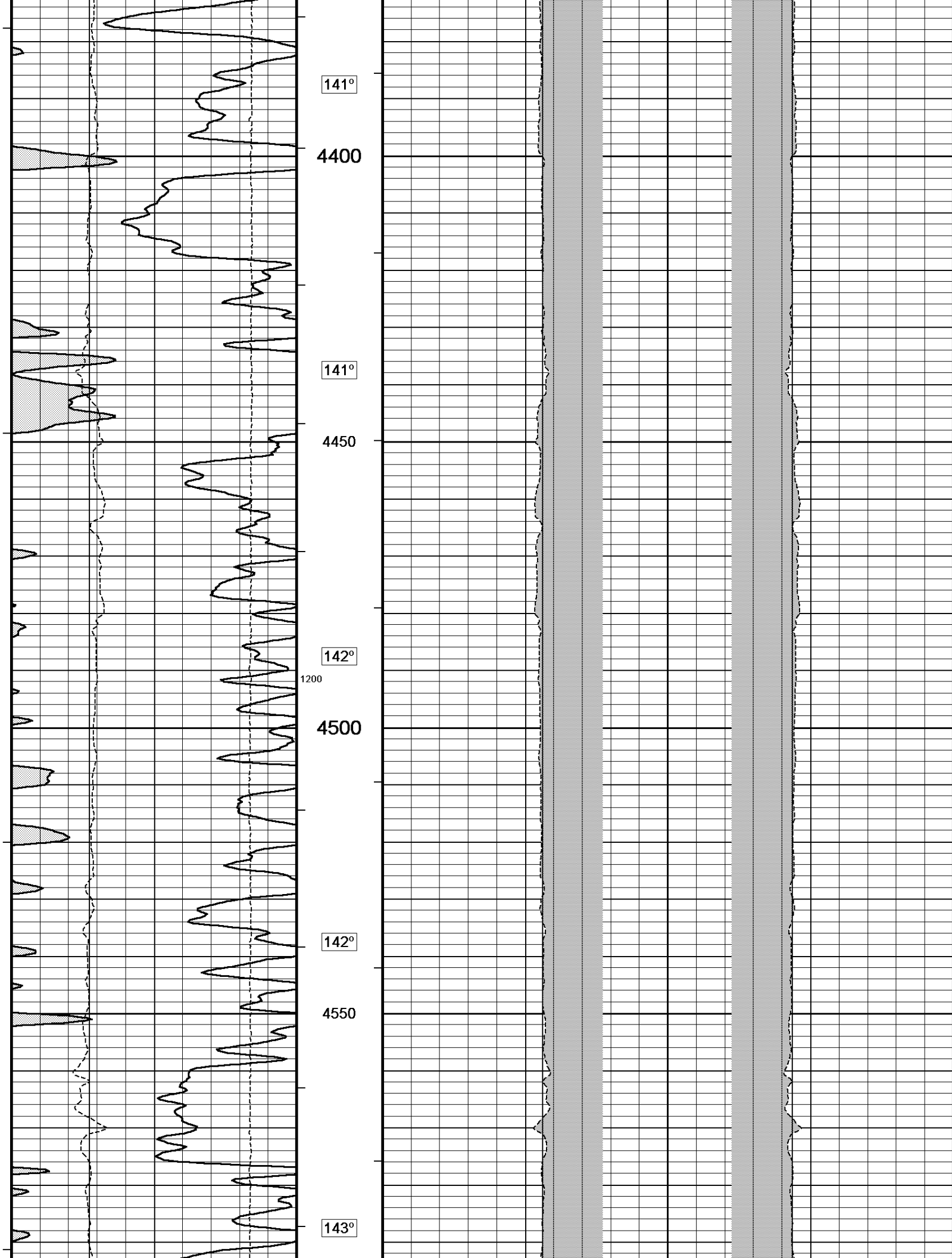


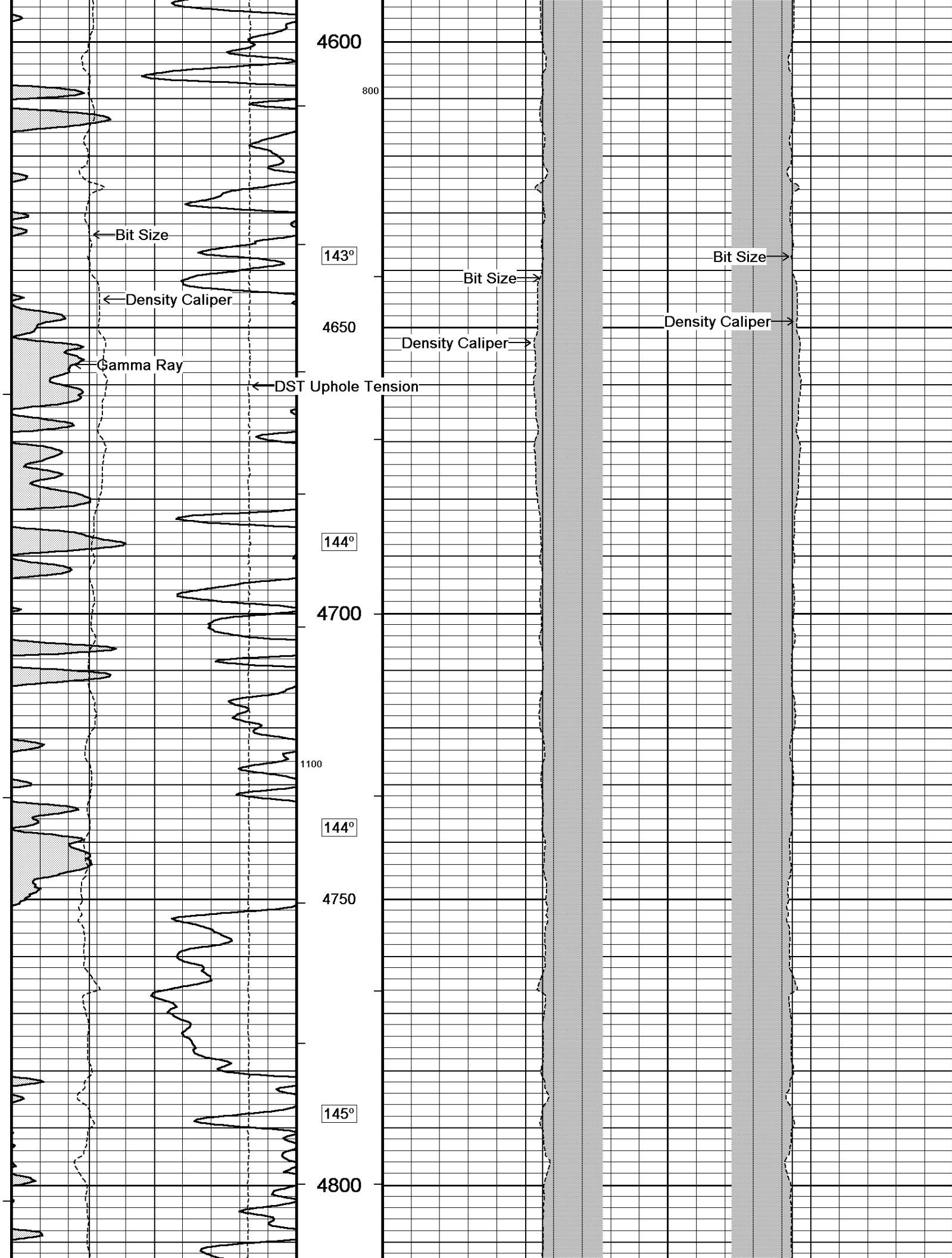


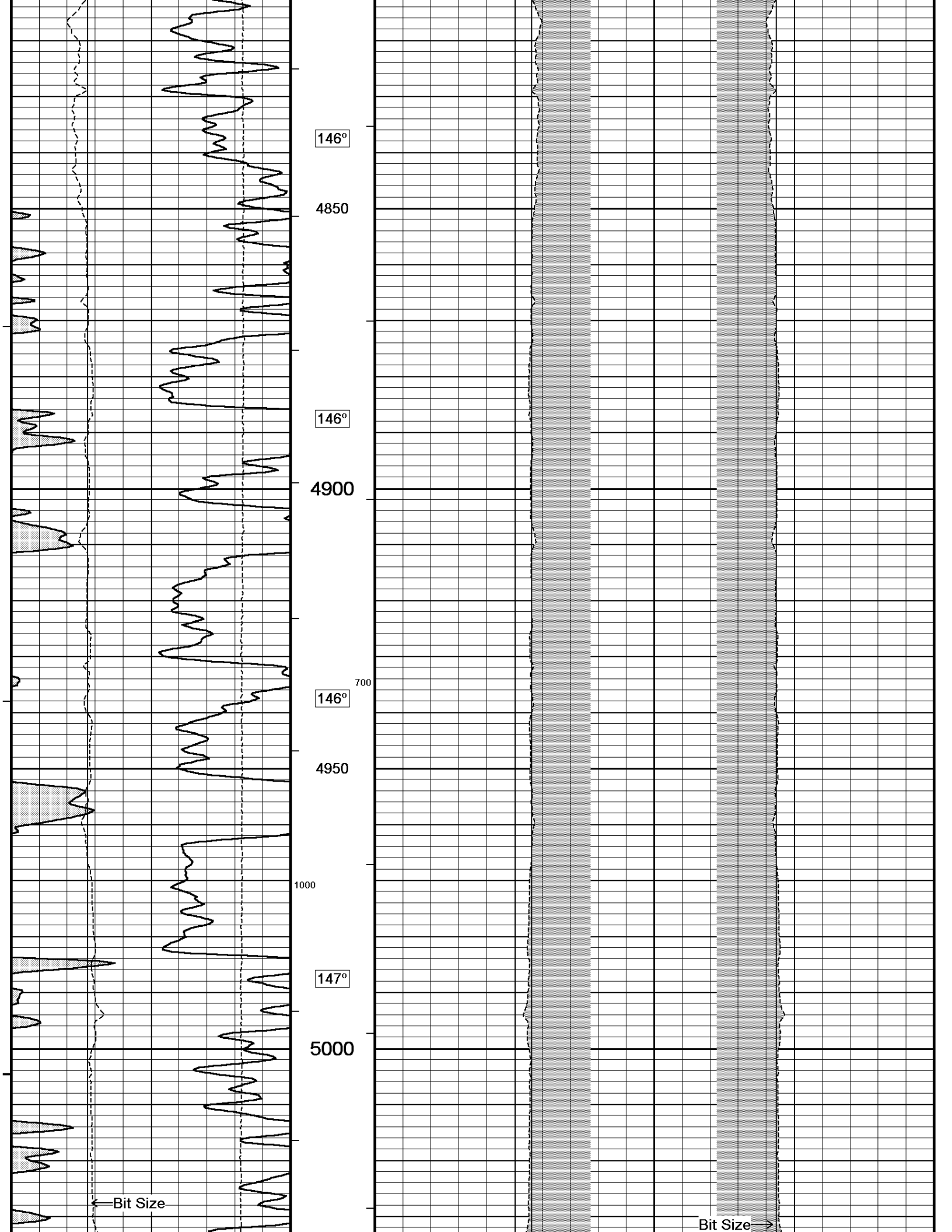


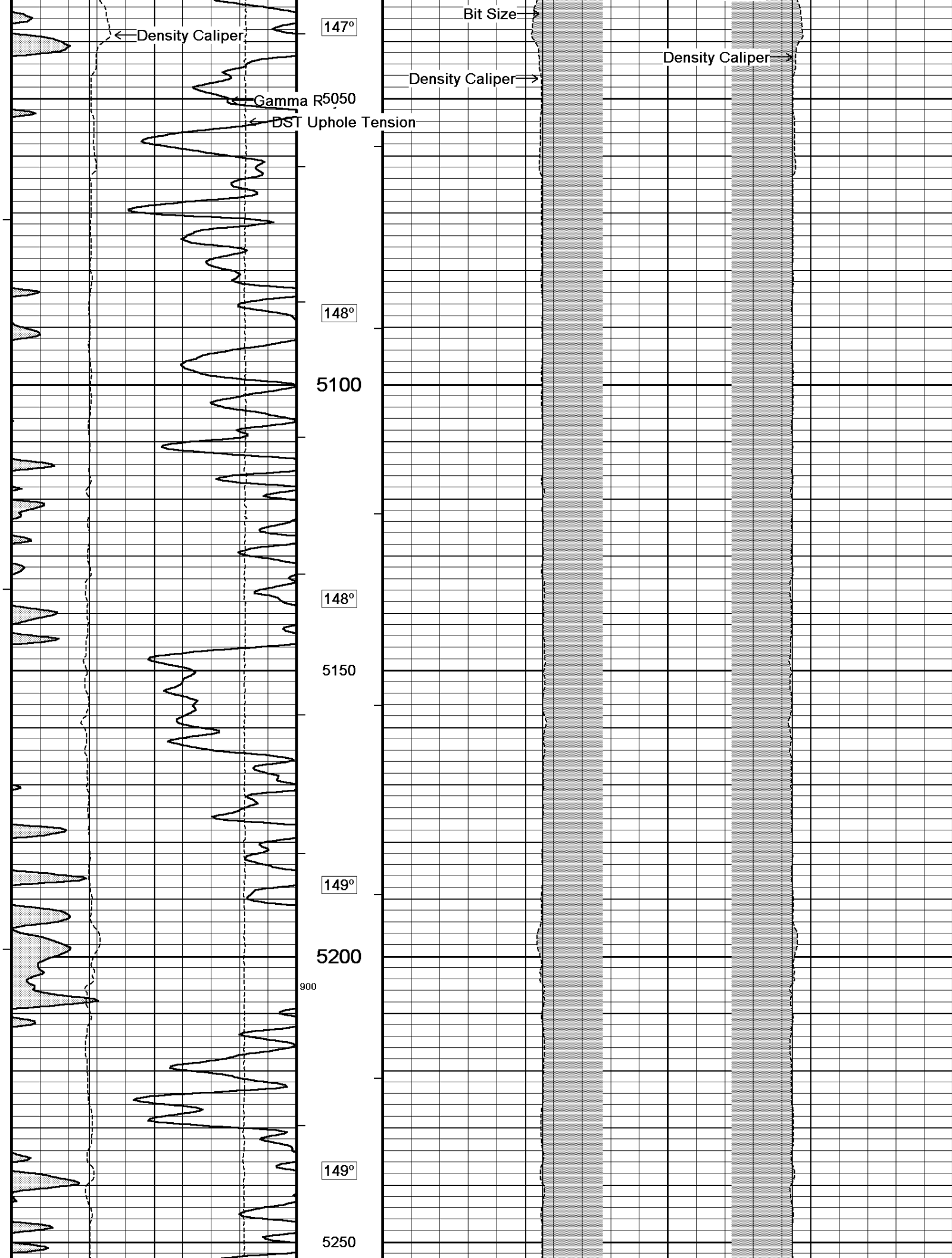


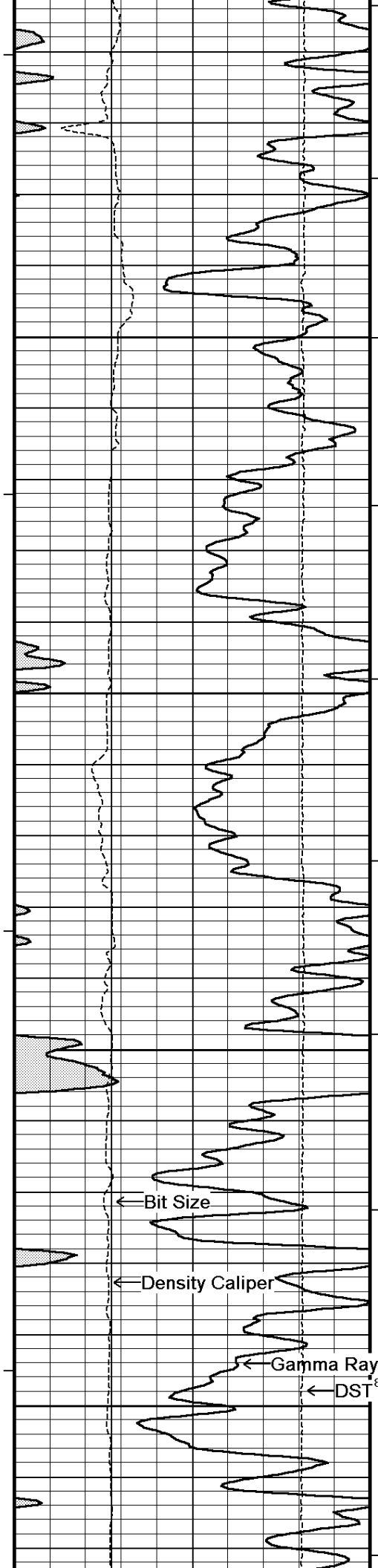




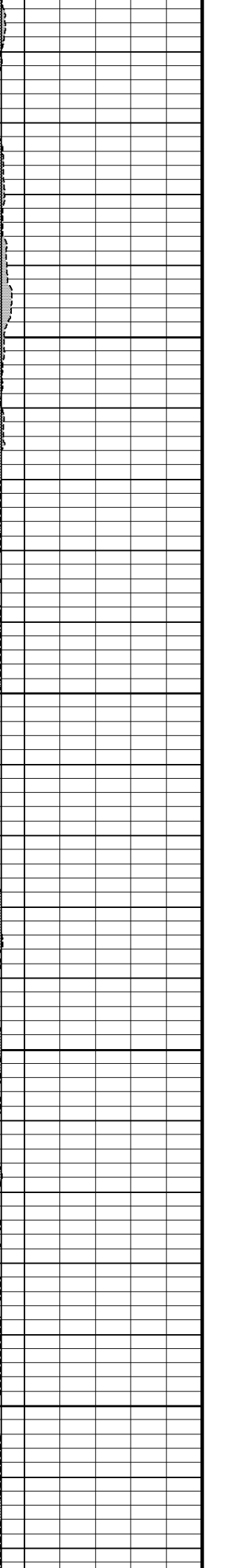
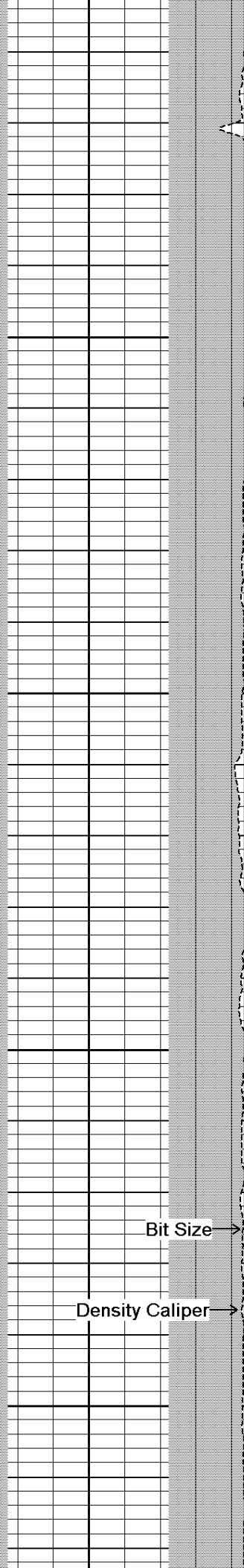
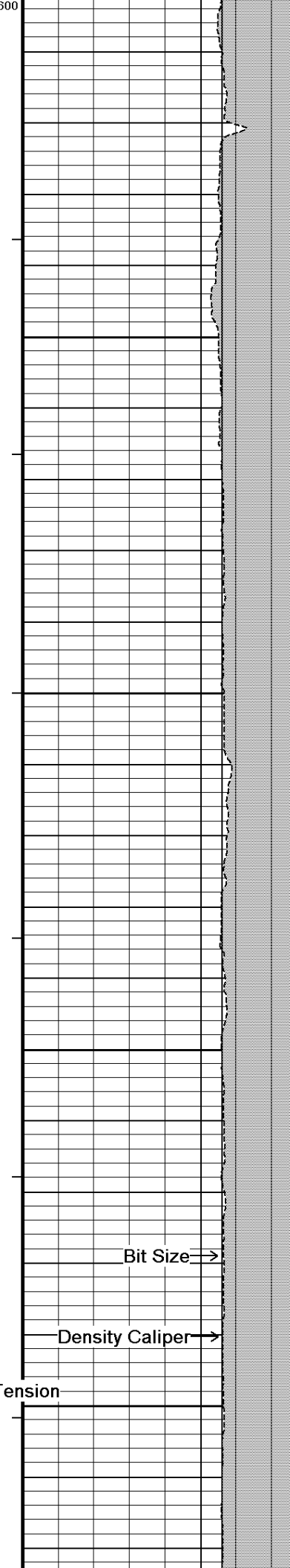


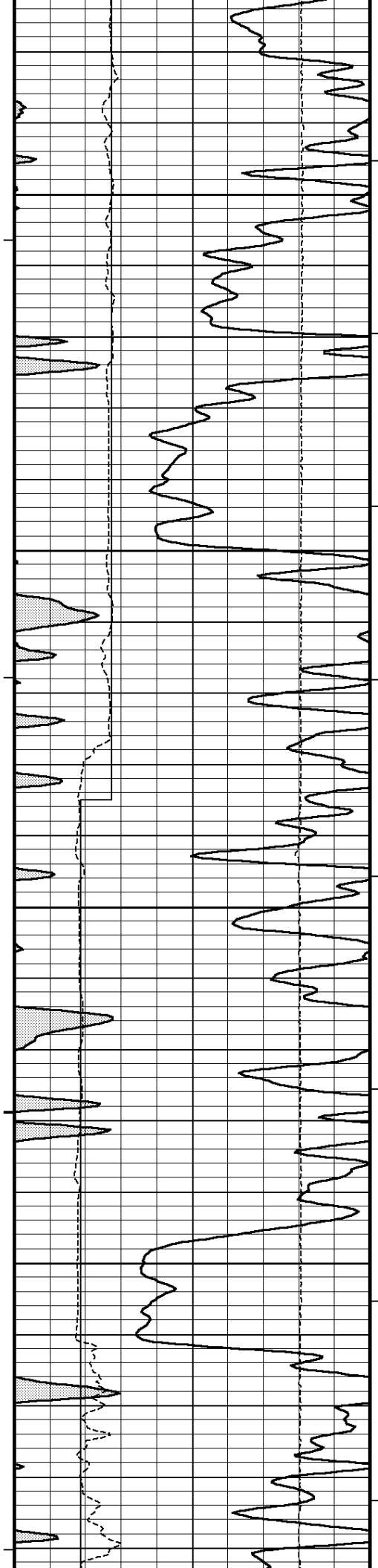






600
150°
5300
150°
5350
151°
5400
151°
5450





152°

5500

152°

5550

153°

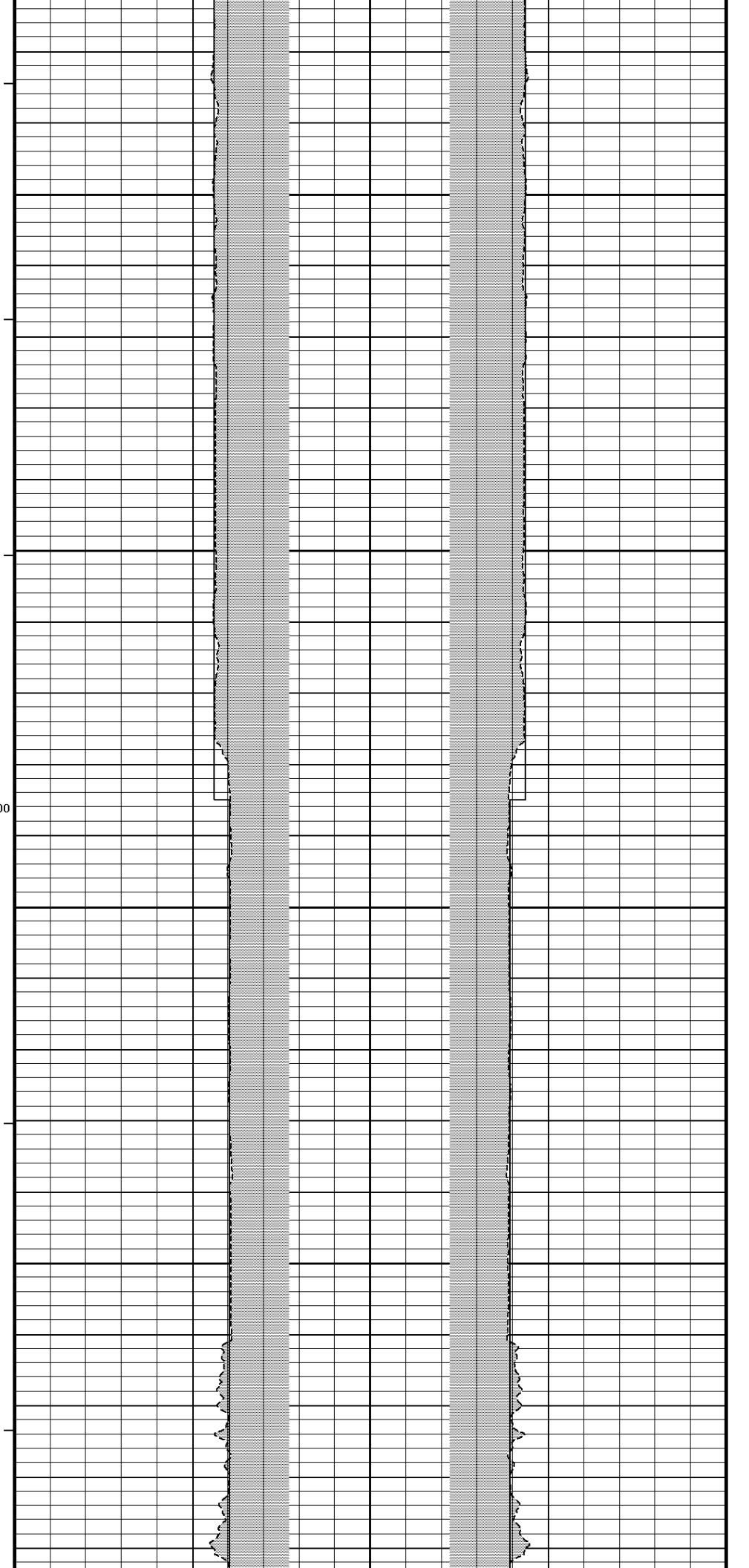
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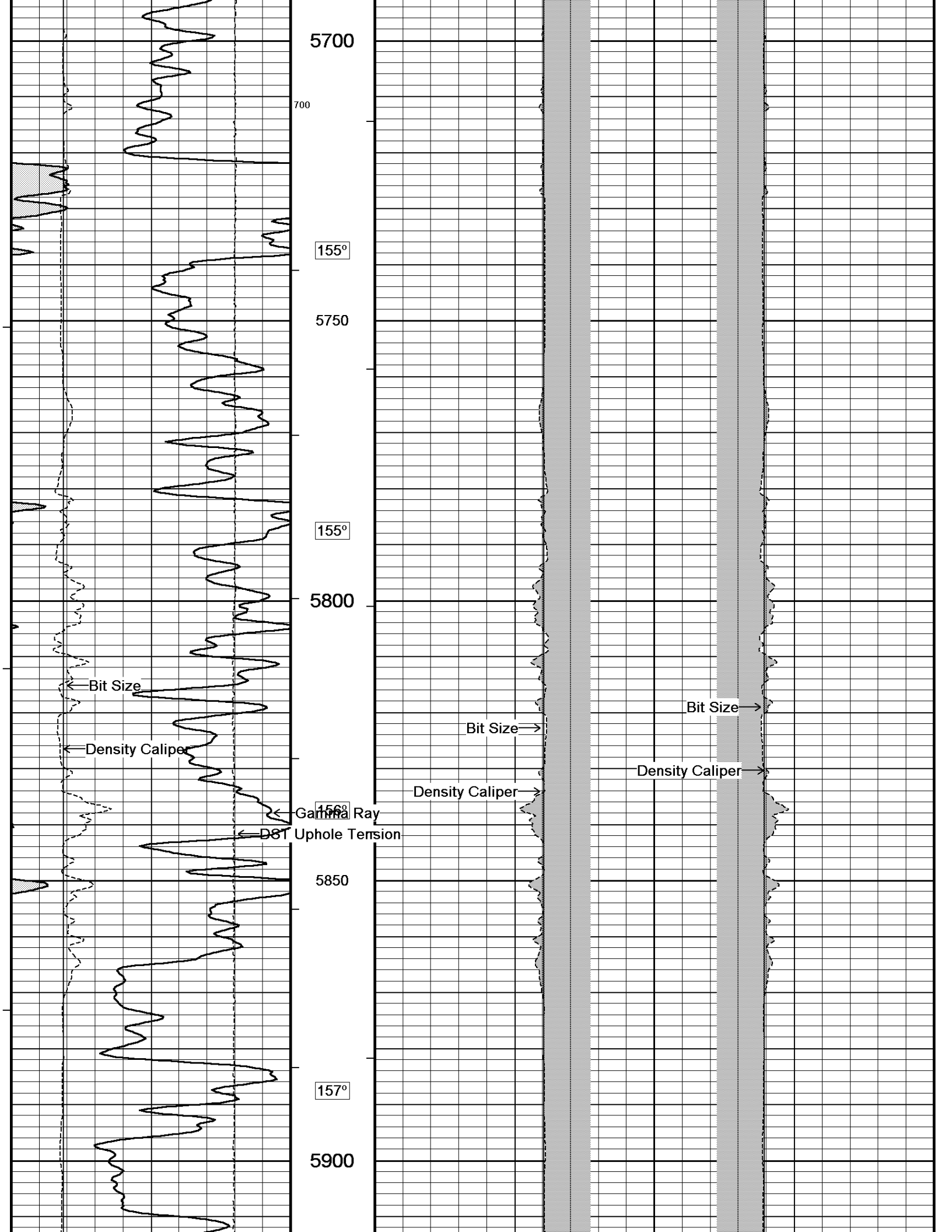
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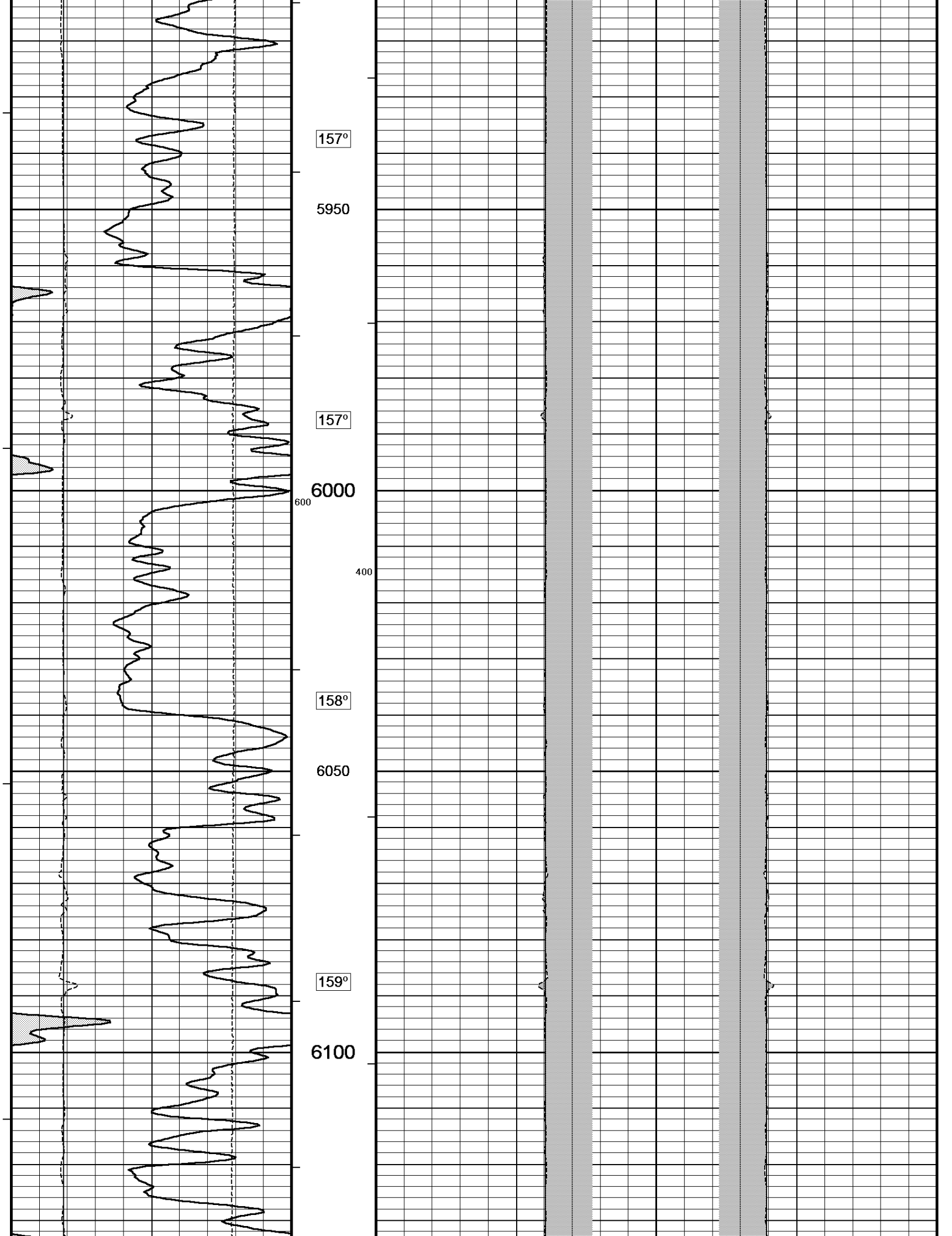
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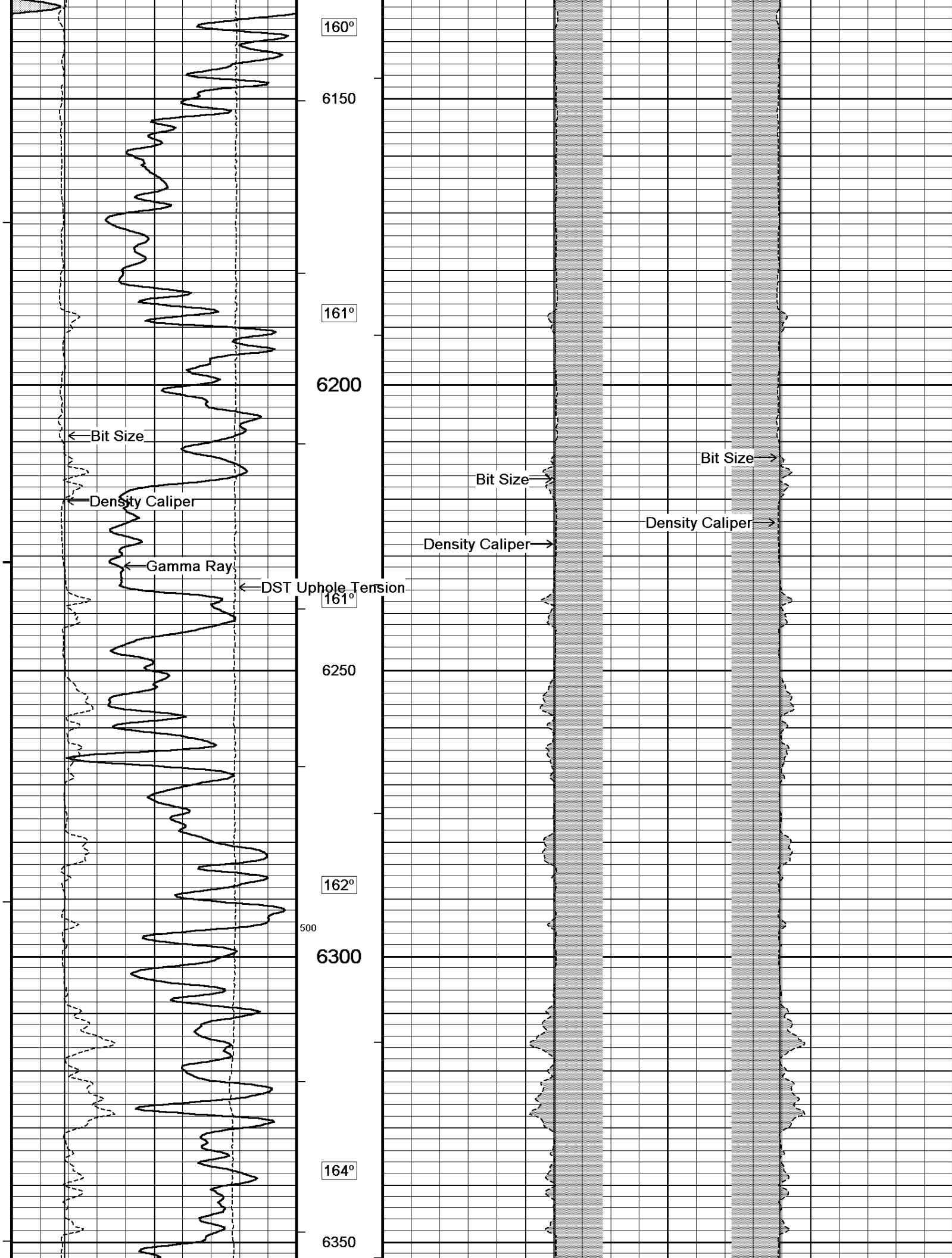
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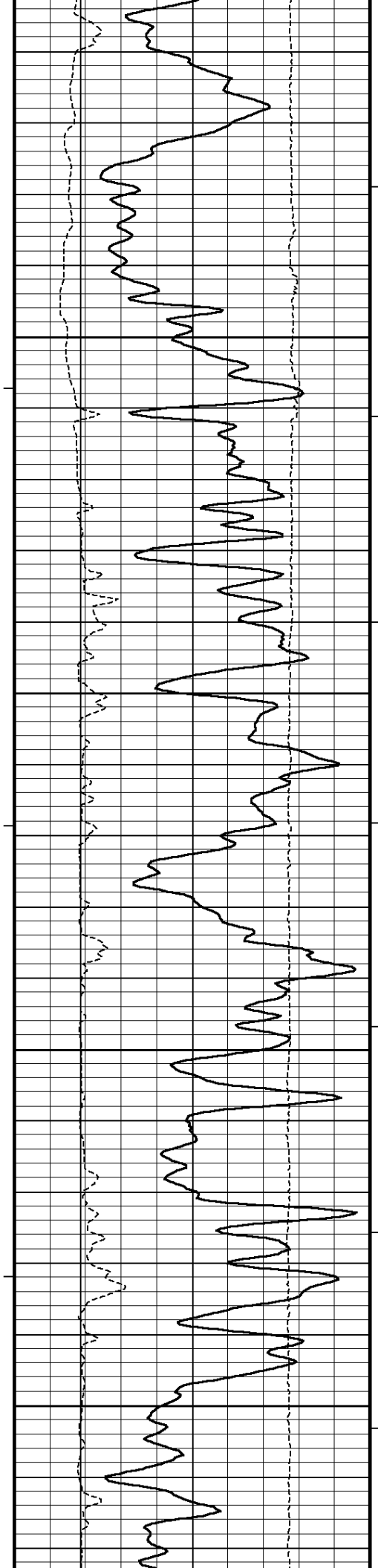
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165°

6400

165°

6450

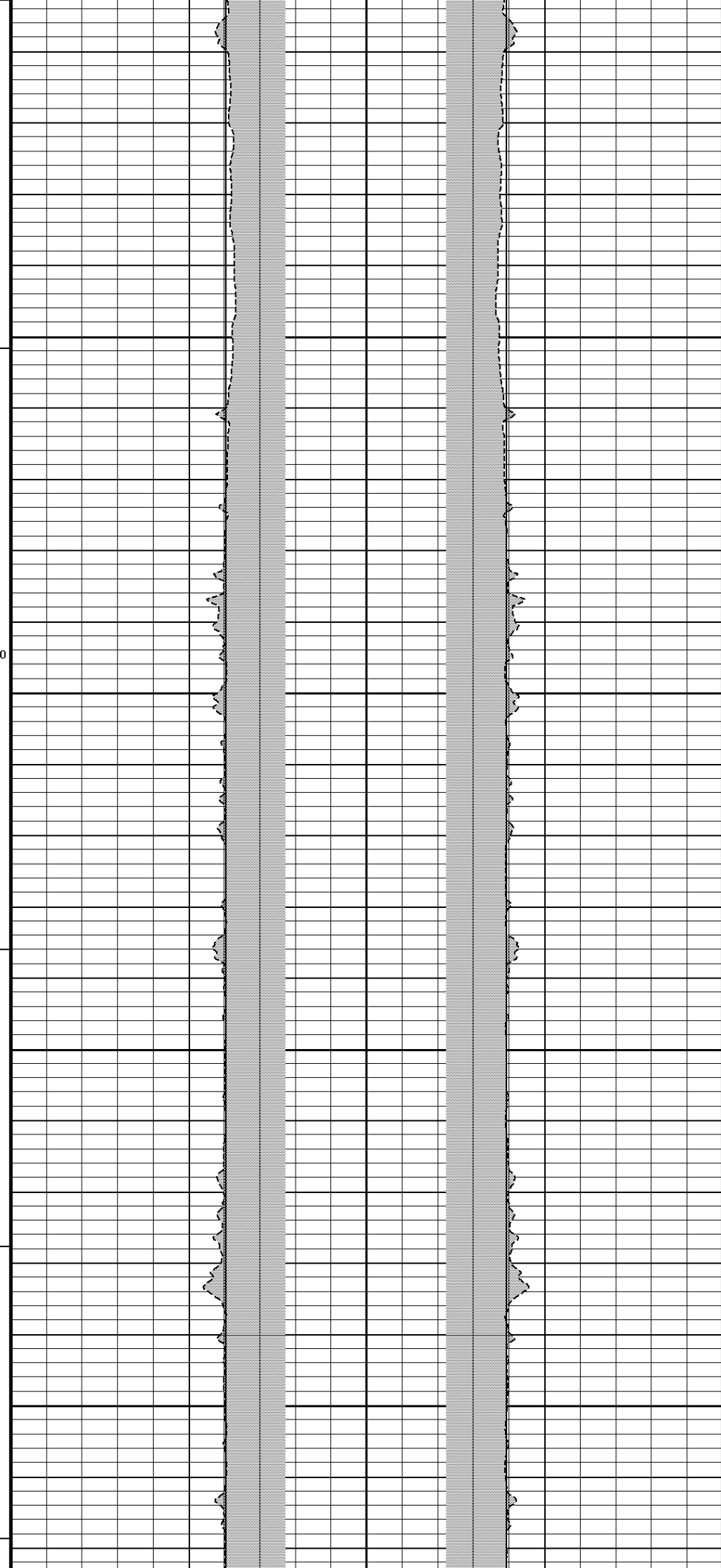
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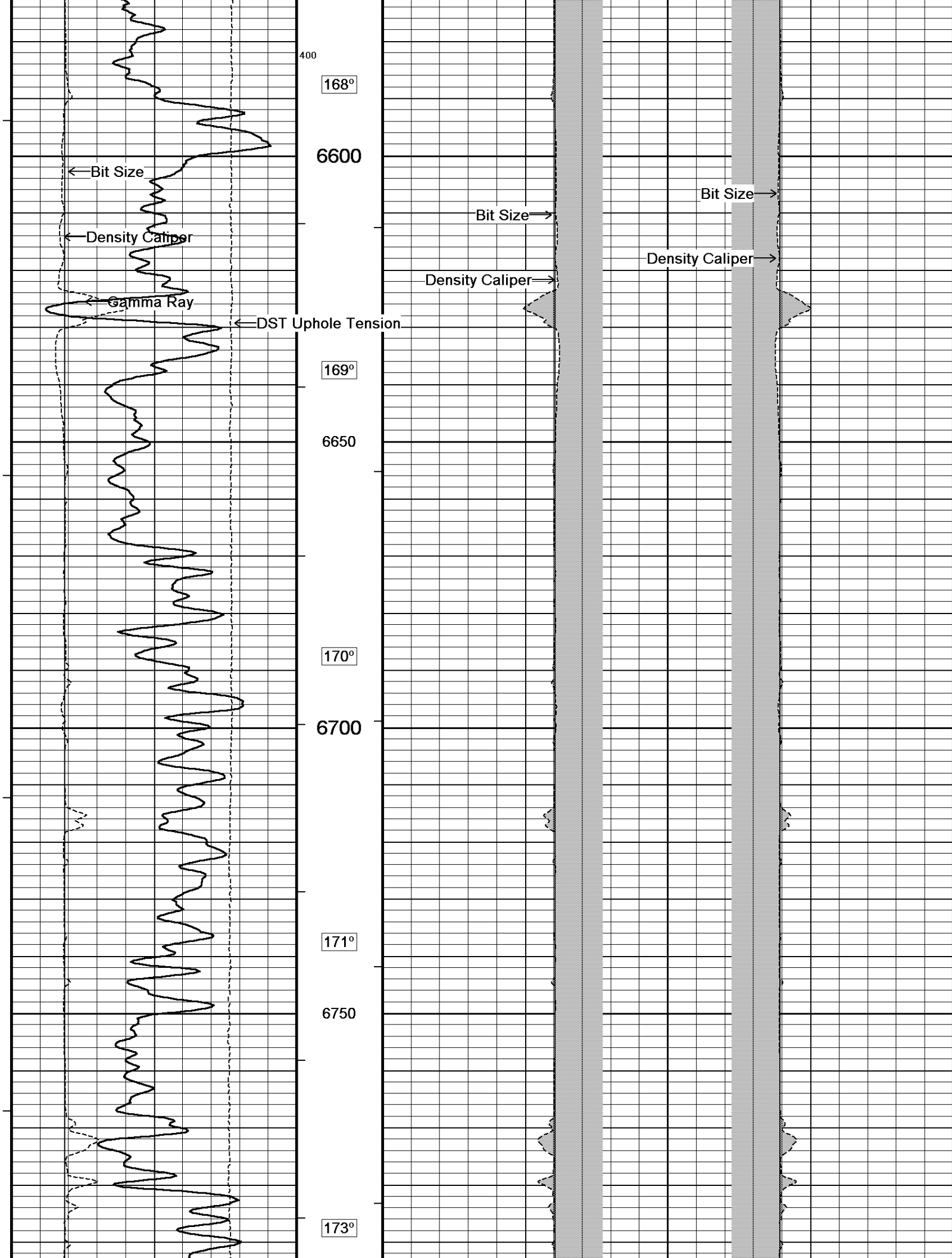
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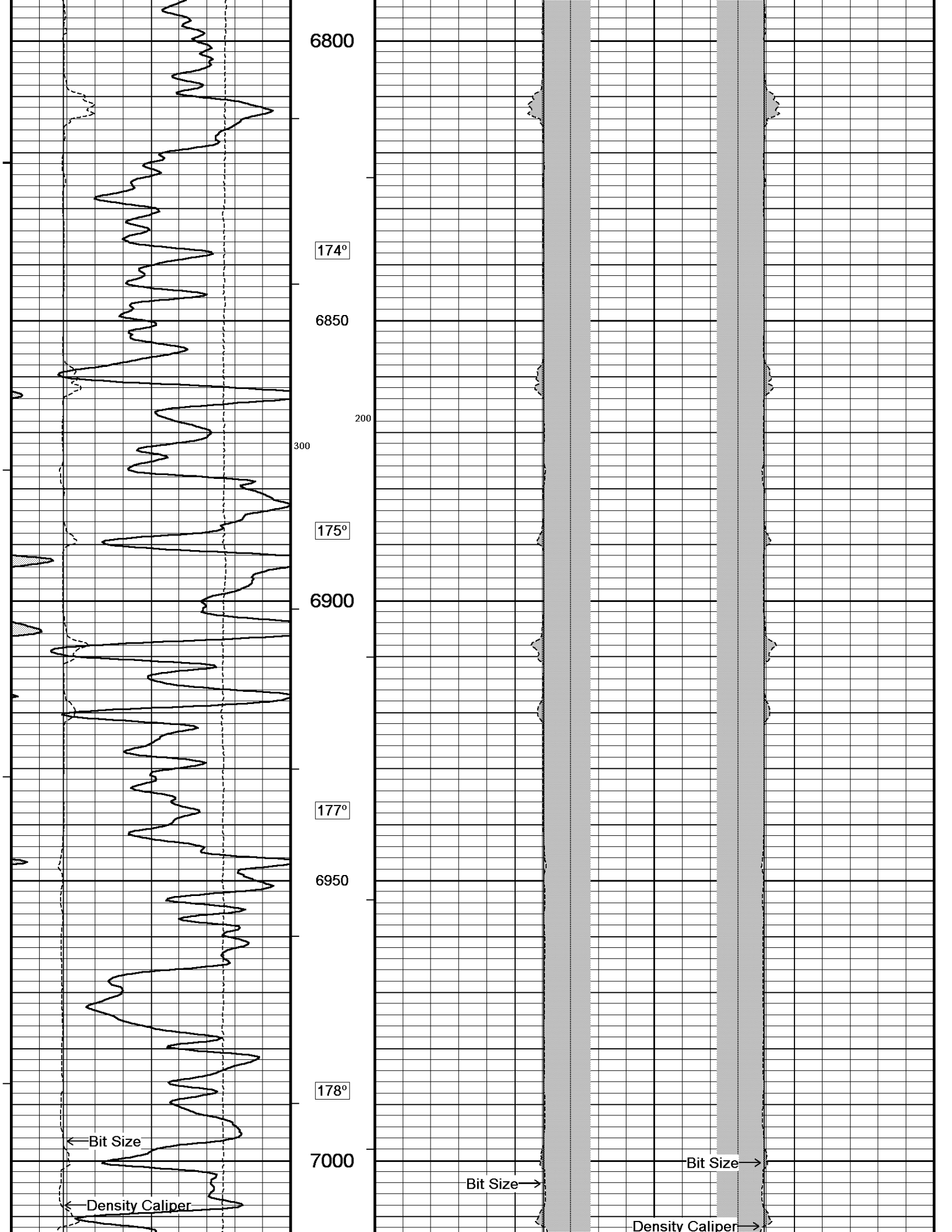
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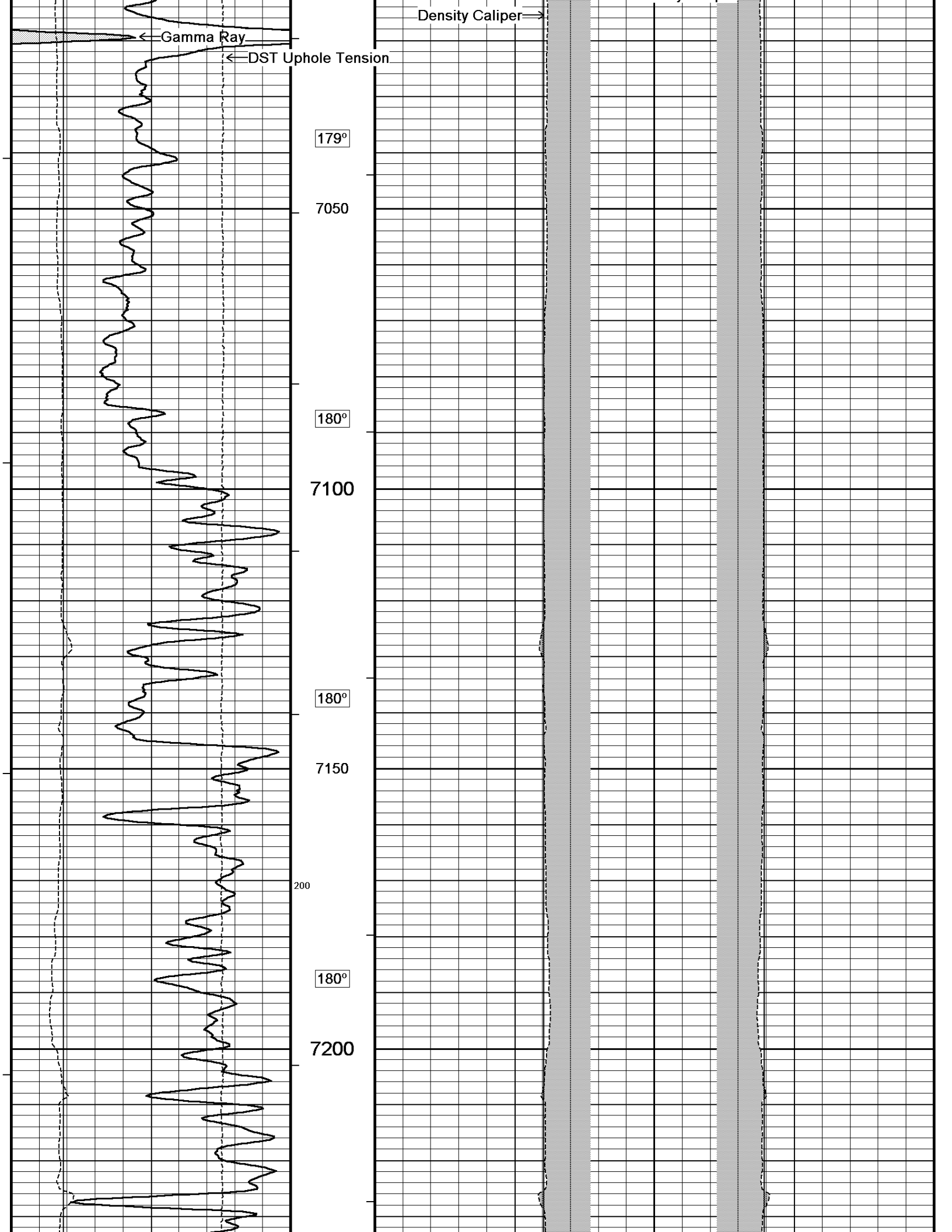
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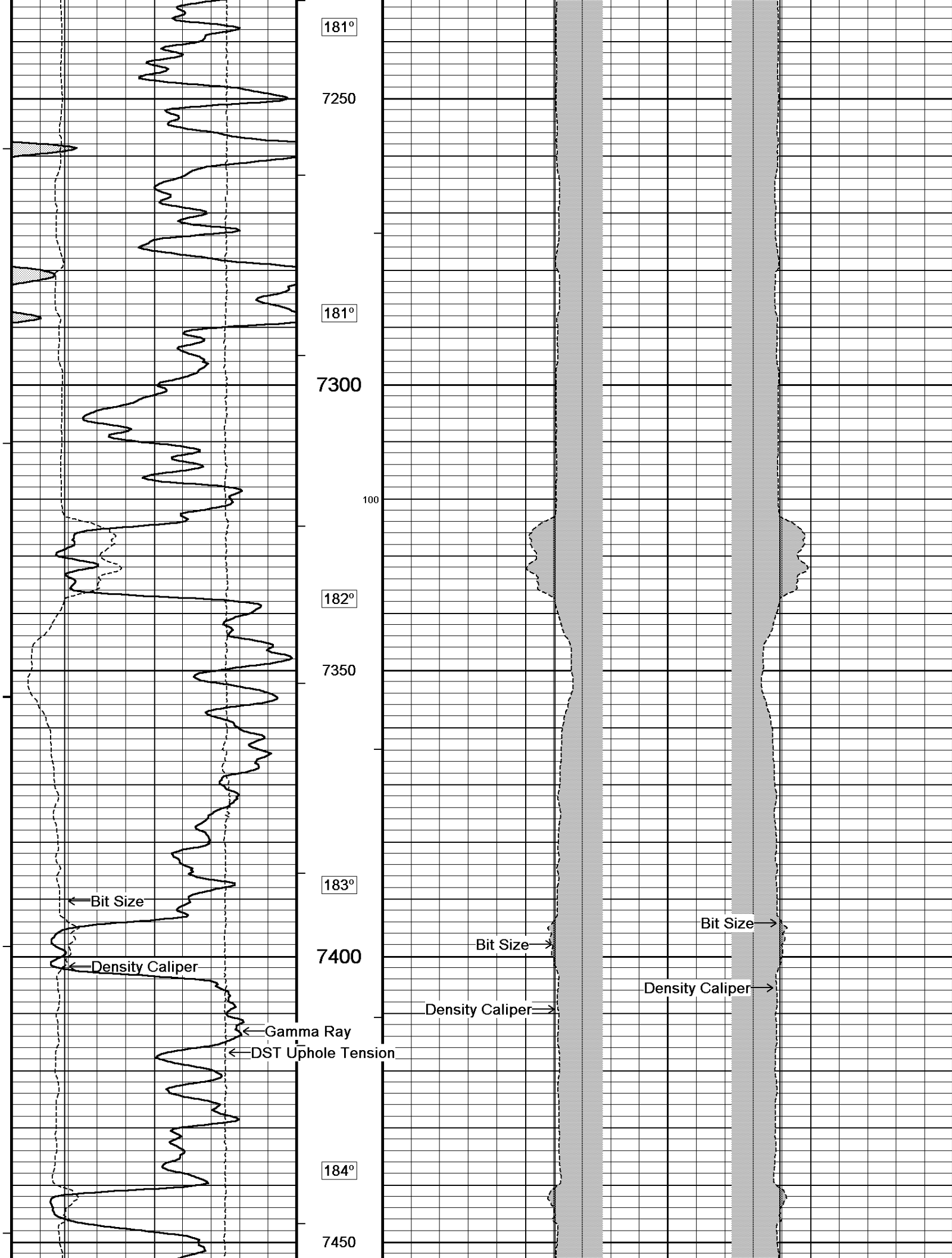
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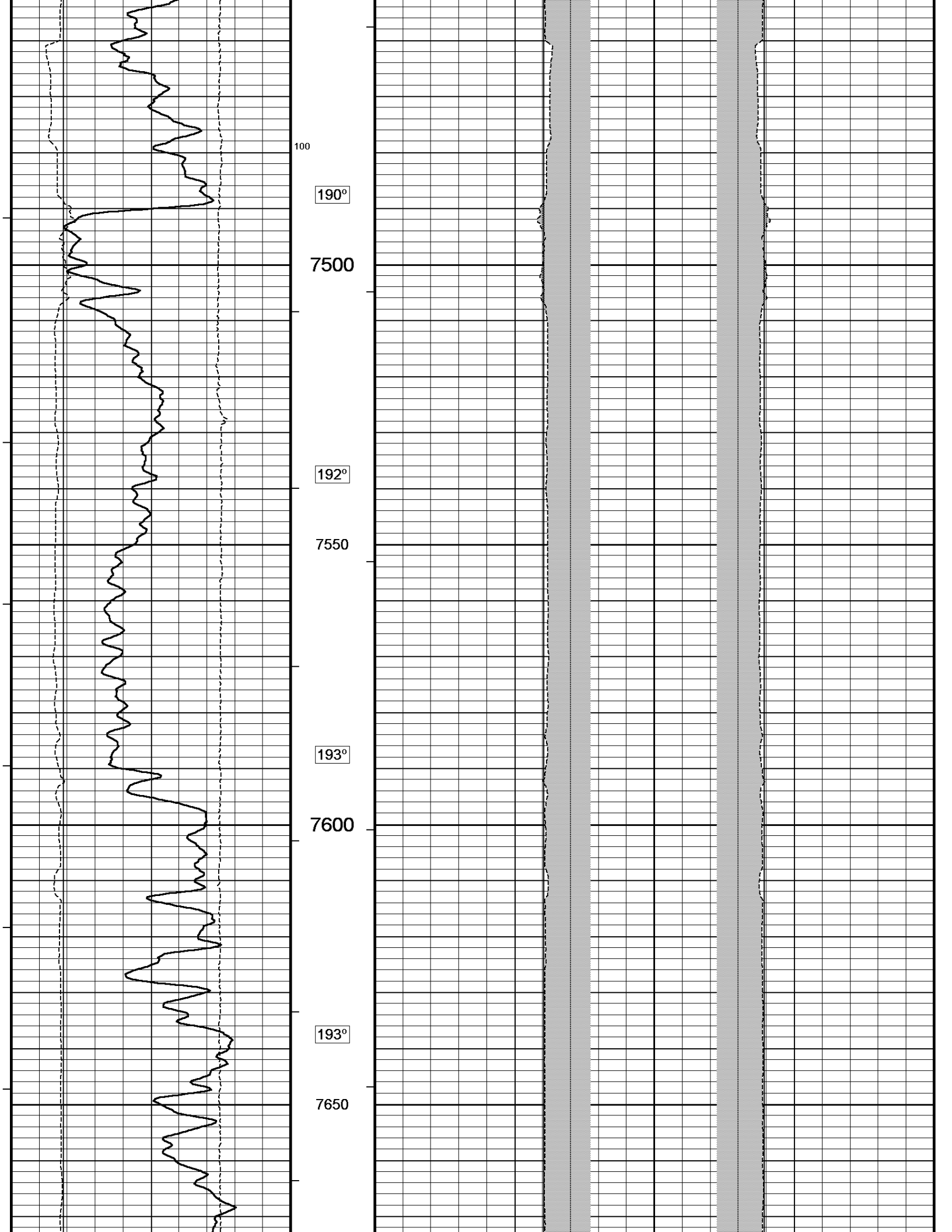


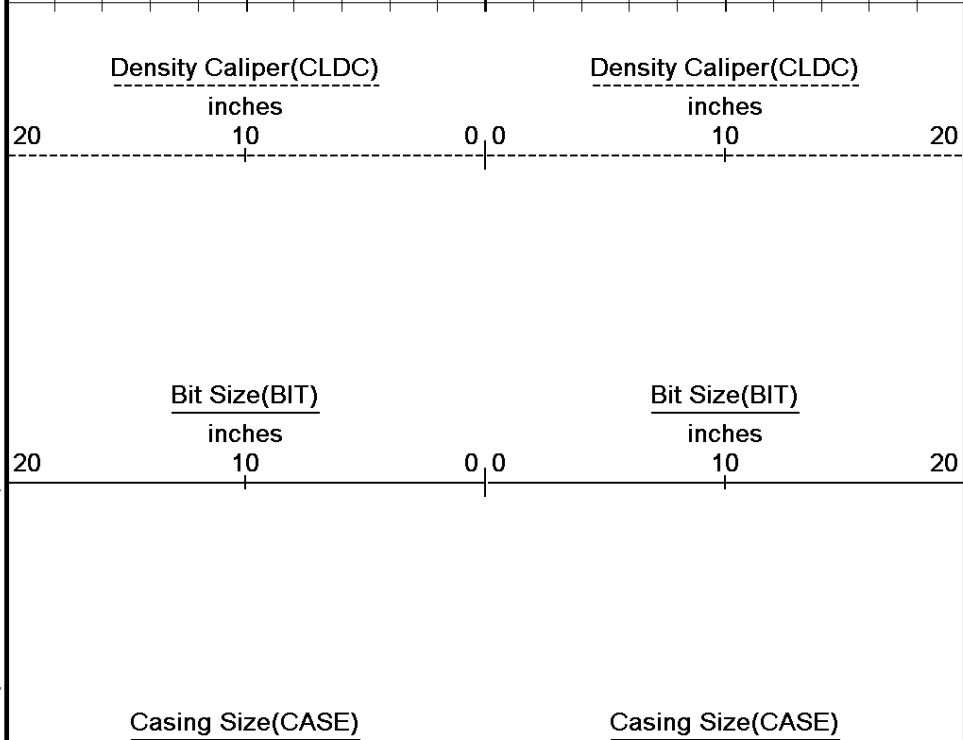
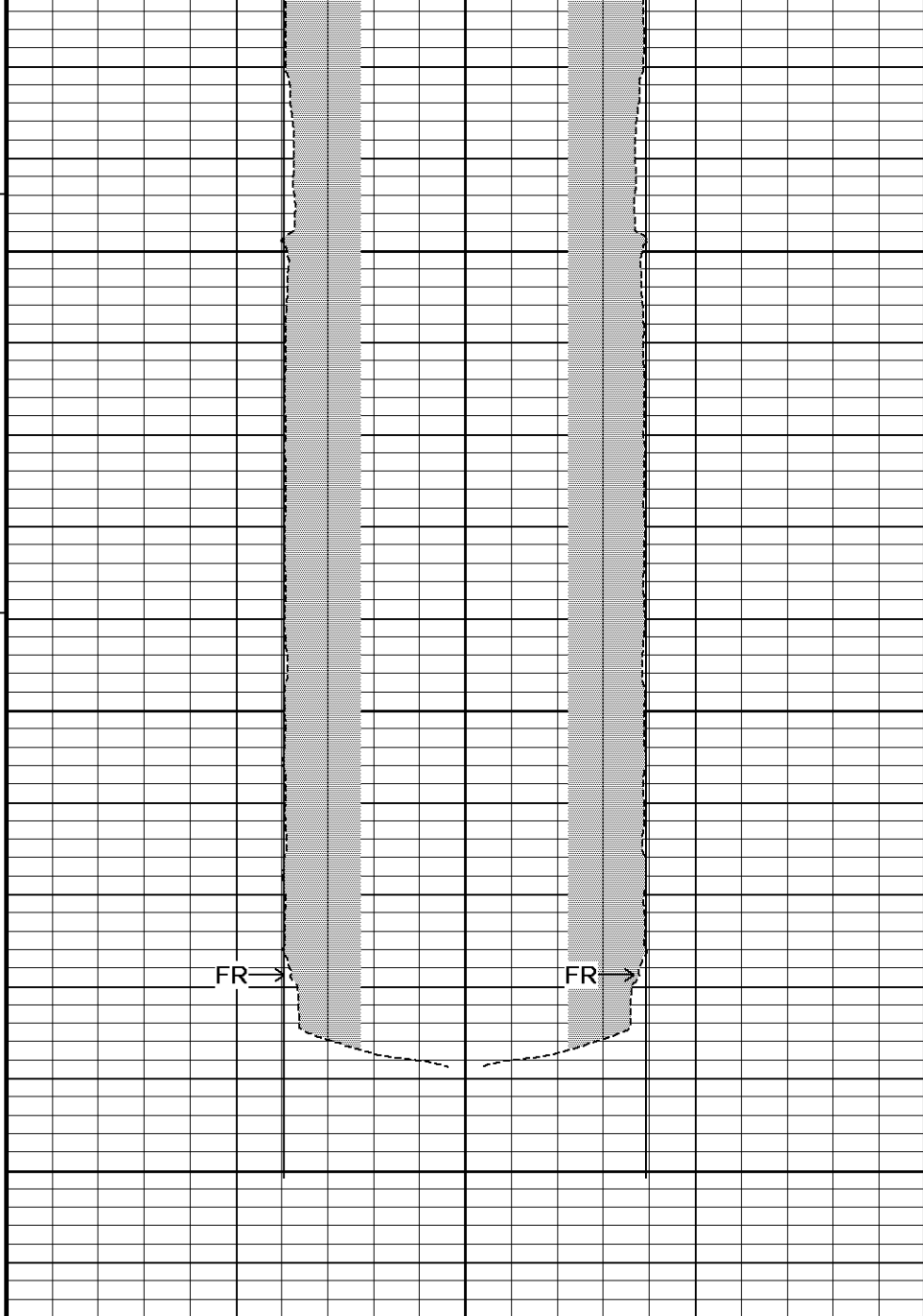
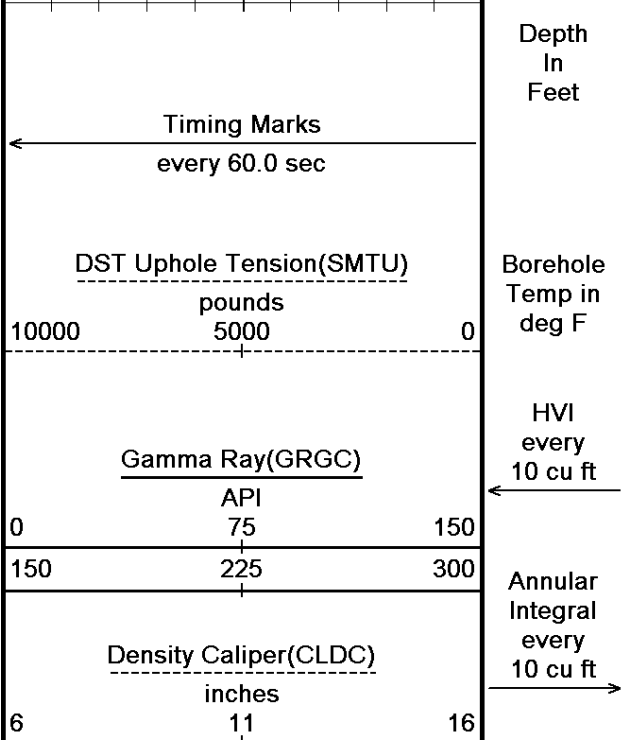
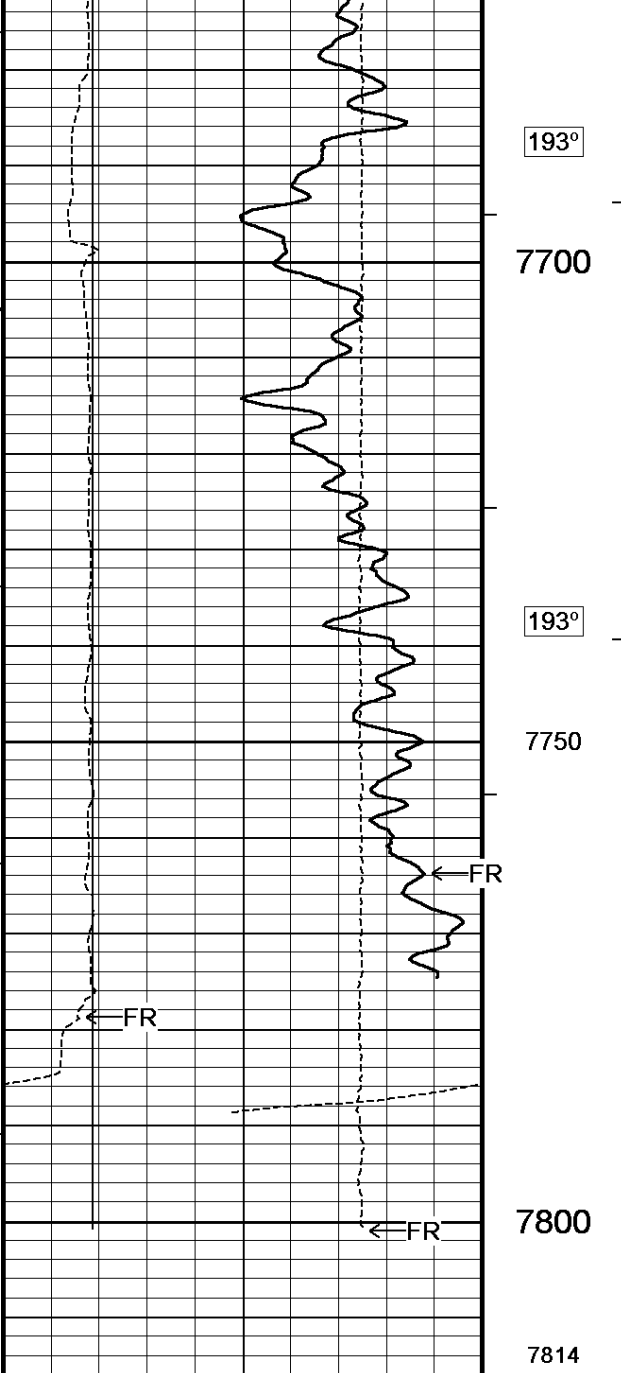













Bit Size(BIT) inches 6 11 16		Replay Scale 1:240	20 10 0 0 10 20 inches inches

Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 17-AUG-2010 16:01
 Filename: C:\Minimus\Logs\Bill Barrett\GGU Federal 44B-29-691\Copy(3) of MAIN.dta
 System Versions: Logged with 10.08.1568 Plotted with 10.08.1568


↑
5 INCH MAINLOG
↑

DOWNHOLE EQUIPMENT
 C:\Minimus\Logs\Bill Barrett\GGU Federal 44B-29-691\Copy(3) of MAIN.dta

SHA-J.A Compact Swivel Head Adaptor SHA 214 Length: 2.30 ft Weight: 22.0 lb Compact Gamma MCG 247 Length: 8.70 ft Weight: 63.9 lb Compact Neutron MDN 143 Length: 5.04 ft Weight: 50.7 lb Compact Density/Caliper MPD 296 Length: 9.59 ft Weight: 90.4 lb SKJ-D.A Compact Knuckle Joint SKJ 172 Length: 2.17 ft Weight: 24.3 lb Compact Focussed Electric MFE 178 Length: 6.03 ft Weight: 48.5 lb Compact Induction MAI 213 Length: 10.81 ft Weight: 48.5 lb Total Length: 44.64 ft Weight: 348.3 lb		<div style="margin-bottom: 10px;"> 37.05 ft GRGC - Gamma Ray 34.14 ft CGXT - MCG External Temperature 30.59 ft NPRS - Sandstone Neutron Por. </div> <div style="margin-bottom: 10px;"> 22.12 ft AVOL - Annular Volume 22.12 ft HVOL - Hole Volume 22.12 ft CLDC - Density Caliper 21.42 ft DPOR - Base Density Porosity 21.42 ft DCOR - Density Correction 21.36 ft PDPE - PE </div> <div style="margin-bottom: 10px;"> 13.70 ft FEFC - Shallow FE (Phase Corr.) </div> <div> 3.34 ft R30O - Array Ind. One Res 30 3.34 ft R85O - Array Ind. One Res 85 3.34 ft R60O - Array Ind. One Res 60 3.34 ft R40O - Array Ind. One Res 40 0.23 ft SPCG - Spontaneous Potential Tool Zero (0.13ft from bottom) -0.13 ft SMTU - DST Uphole Tension All measurements relative to tool zero. </div>
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WELL	GGU FEDERAL 44B-29-691		
FIELD	GIBSON GULCH		
PROVINCE/COUNTY	GARFIELD		
COUNTRY/STATE	U.S.A. / COLORADO		

Elevation Kelly Bushing	6375.00	feet	First Reading	7780.00	
Elevation Drill Floor	6374.00	feet	Depth Driller	7800.00	feet
Elevation Ground Level	6352.00	feet	Depth Logger	7801.00	feet


Weatherford®

HOLE VOLUME
CALIPER LOG

