



# HOLE VOLUME CALIPER LOG

COMPANY				BILL BARRETT CORPORATION			
WELL				GGU MILLER 24C-32-691			
FIELD				MAMM CREEK			
PROVINCE/COUNTY				GARFIELD			
COUNTRY/STATE				U.S.A. / COLORADO			
LOCATION				SHL: 1220' FSL & 2284' FWL			
				BHL: 857' FNL & 1990' FWL			
SEC	TWP	RGE	Other Services				
32	6S	91W	MPD/MDN				
API Number		05-045-19429		MAI/MFE			
Permit Number							
Permanent Datum G.L., Elevation 6120 feet						Elevations: KB DF GL	
Log Measured From K.B. @ 22 FEET above Permanent Datum							
Drilling Measured From K.B.						6120.00	
Date	05-NOV-2010						
Run Number	ONE						
Depth Driller	7162.00					feet	
Depth Logger	7164.00					feet	
First Reading	7142.00						
Last Reading	789.00						
Casing Driller	789.00					feet	
Casing Logger	789.00					feet	
Bit Size	7.875					inches	
Hole Fluid Type	LSND						
Density / Viscosity	10.50 lb/USg					60.00 CP	
PH / Fluid Loss	9.30					6.20 ml/30Min	
Sample Source	FLOW LINE						
Rm @ Measured Temp	1.95 @ 86.5					ohm-m	
Rmf @ Measured Temp	1.56 @ 86.5					ohm-m	
Rmc @ Measured Temp	2.34 @ 86.5					ohm-m	
Source Rmf / Rmc	CALC					CALC	
Rm @ BHT	0.926 @186.0					ohm-m	
Time Since Circulation	8.5 HOURS						
Max Recorded Temp	186.00					deg F	
Equipment Name	COMPACT						
Equipment / Base	13038					GD JCT	
Recorded By	S.LACKEY						
Witnessed By	C.CROW						

BOREHOLE RECORD			Last Edited: 06-NOV-2010 01:51	
Bit Size inches	Depth From feet	Depth To feet		
8.750	789.00	5109.00		
7.880	5109.00	7162.00		
CASING RECORD				
Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	9.625	0.00	789.00	36.00

REMARKS	
TOOLS: SHA, MCG, MDN, MPD, SKJ, MFE, AND MAI RAN IN COMBINATION	
HARDWARE:   MPD: (1) 8 INCH PROFILE PLATE MAI: (1) 0.5 INCH STANDOFF MDN: (1) DUAL BOWSPRING	
GAMMA NORMALIZED TO OFF SET WELL	
DENSITY PROCESSED USING RIB EXPO SCRIPT FOR CORRECTION OF TOOL ROLL OVER AND SONDE SKEW AT 5310-5320, 5928-6020, 6330-6320 AND 6520-6660.	
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. = 8.92" (9 5/8", 36 LB/FT CASING)

UNDERGAUGED SECTIONS FROM 6800 FT TO 6400 FT REPEATED TO VERIFY.

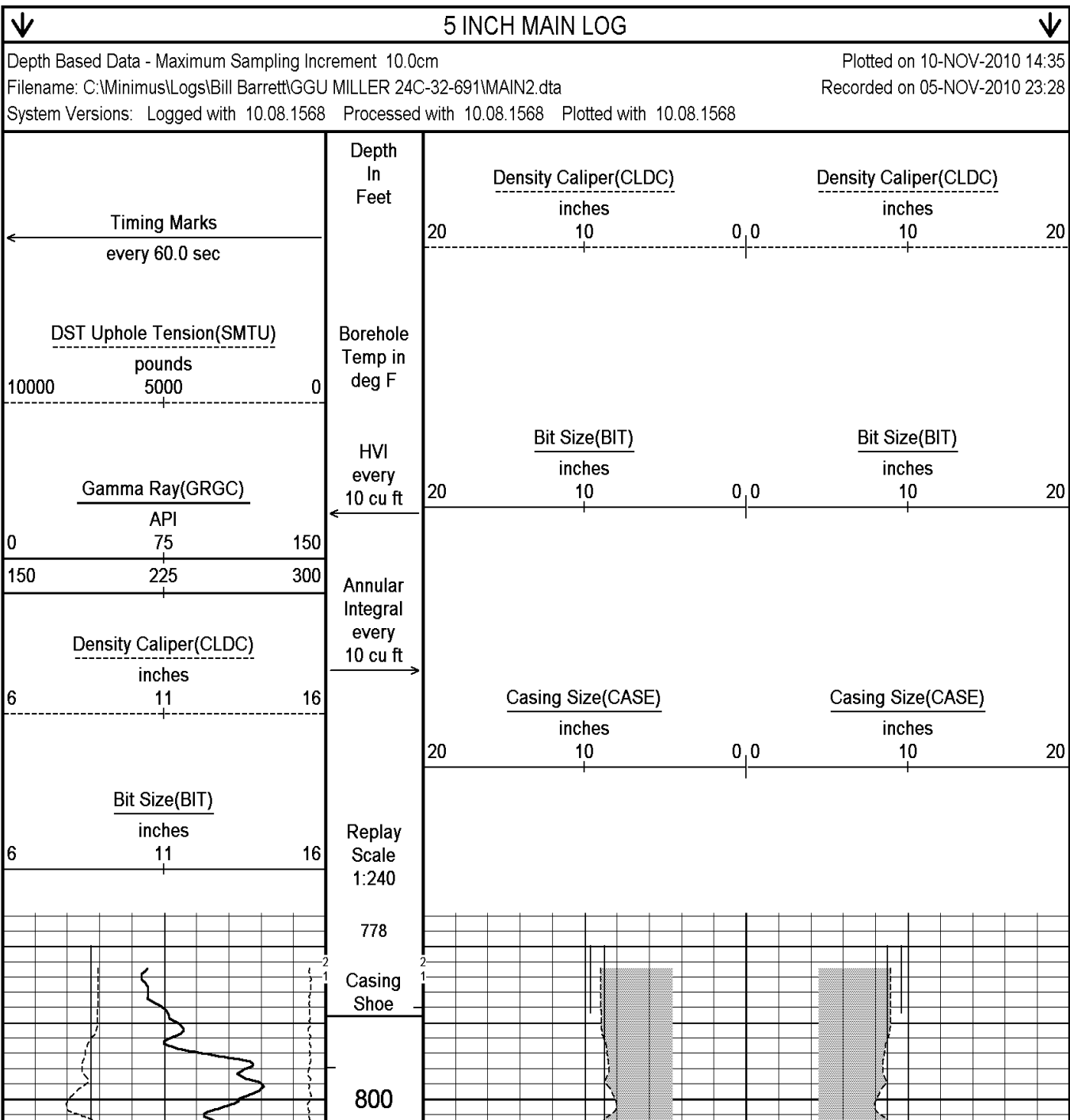
TOTAL HOLE VOLUME FROM TD TO SURFACE CASING = 2430 CU.FT.

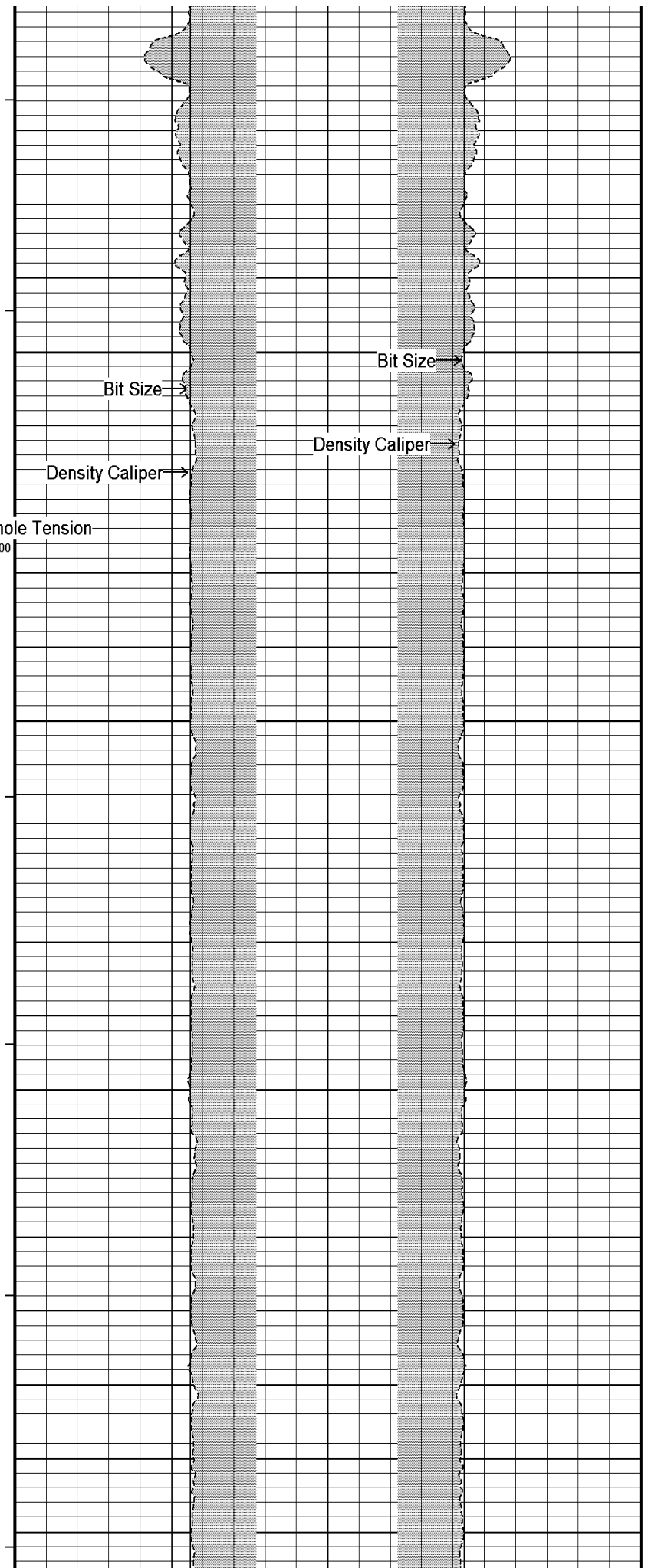
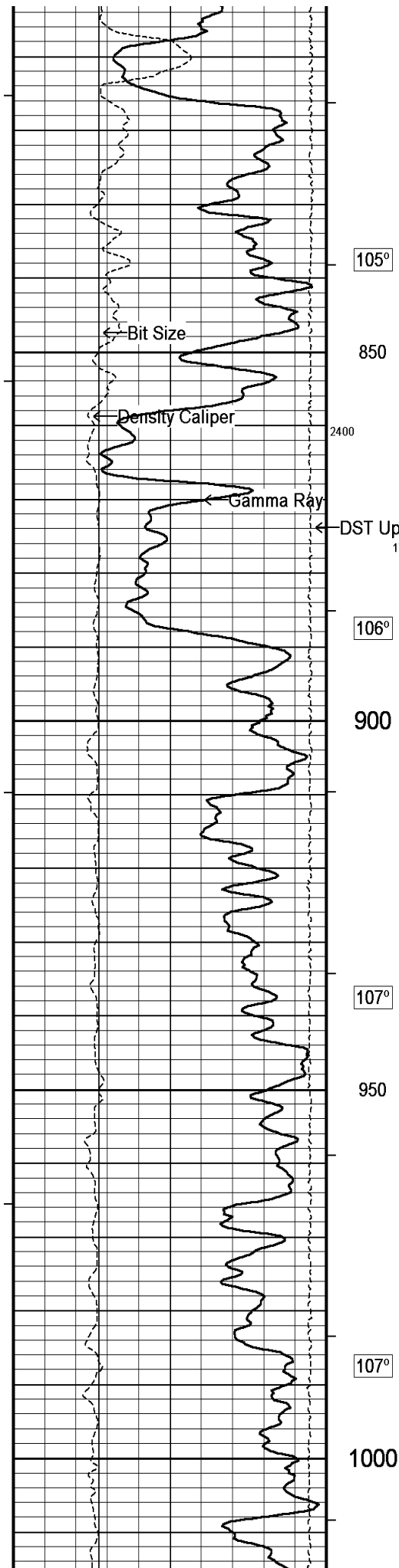
ANNULAR VOLUME WITH 4.5 INCH PRODUCTION CASING = 1727 CU.FT.

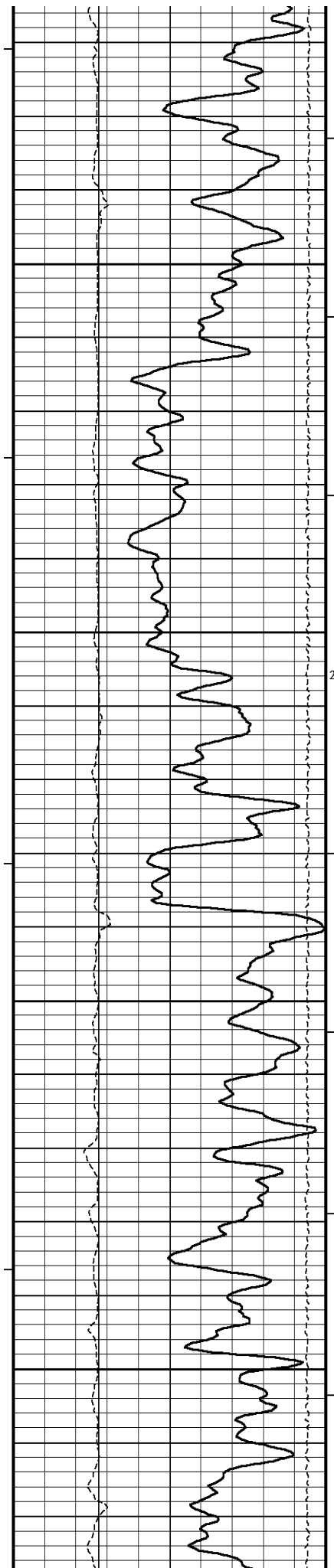
SERVICE ORDER: #3526066

RIG: PATTERSON #307

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.







106°

1050

107°

1100

2300

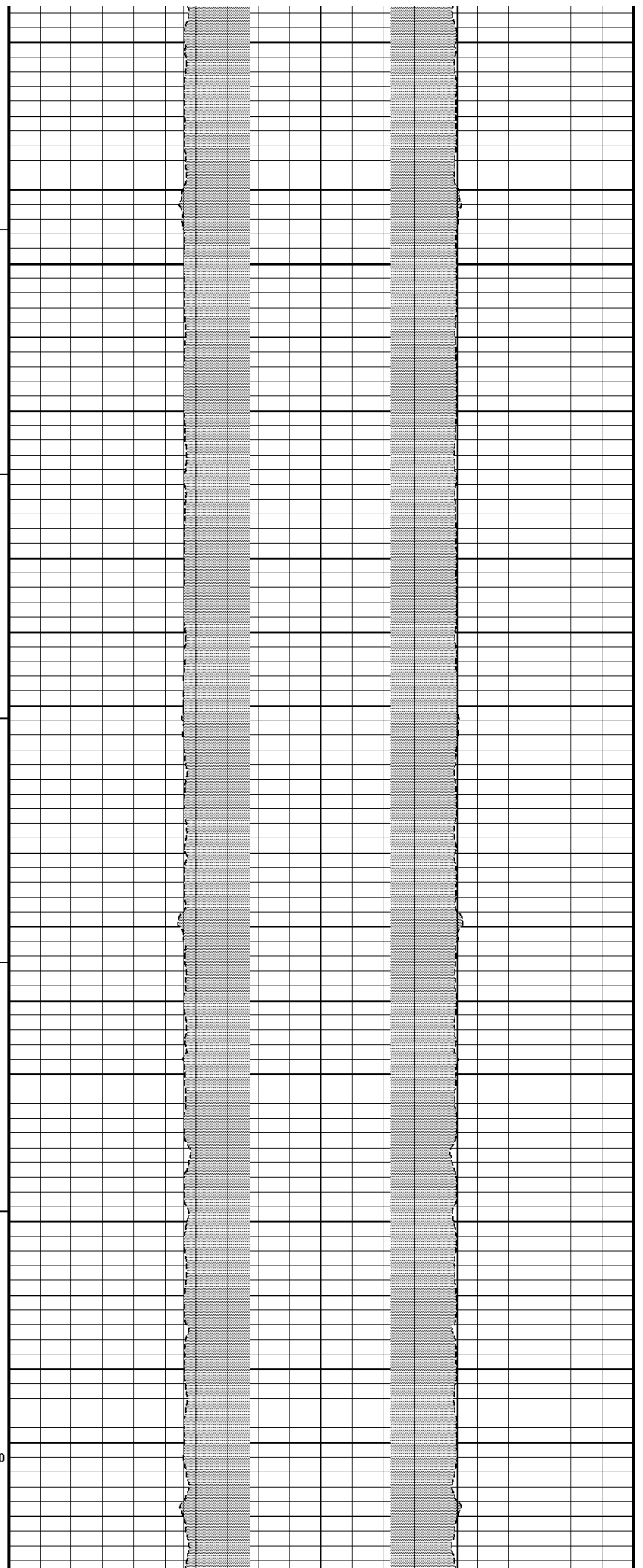
107°

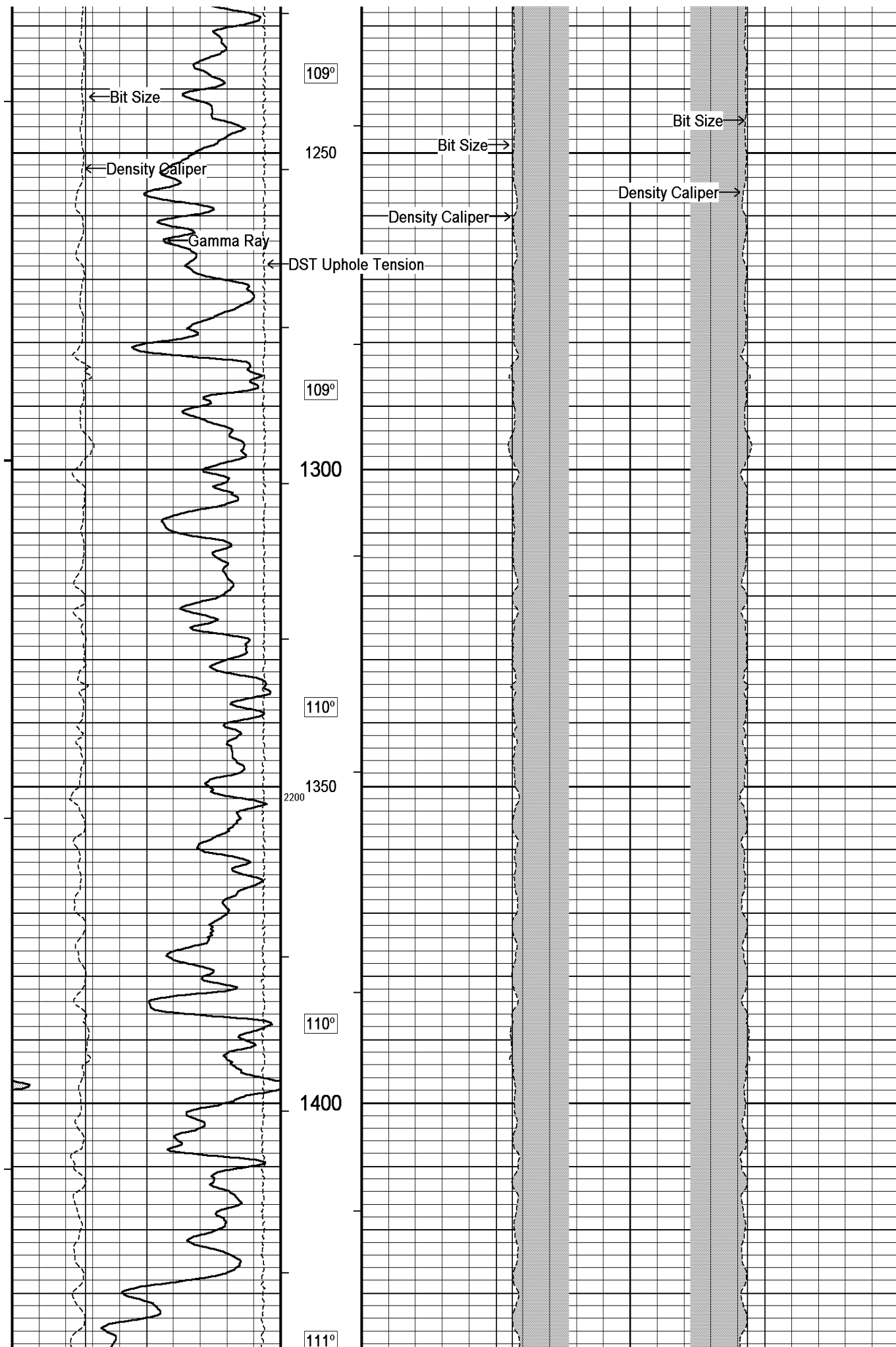
1150

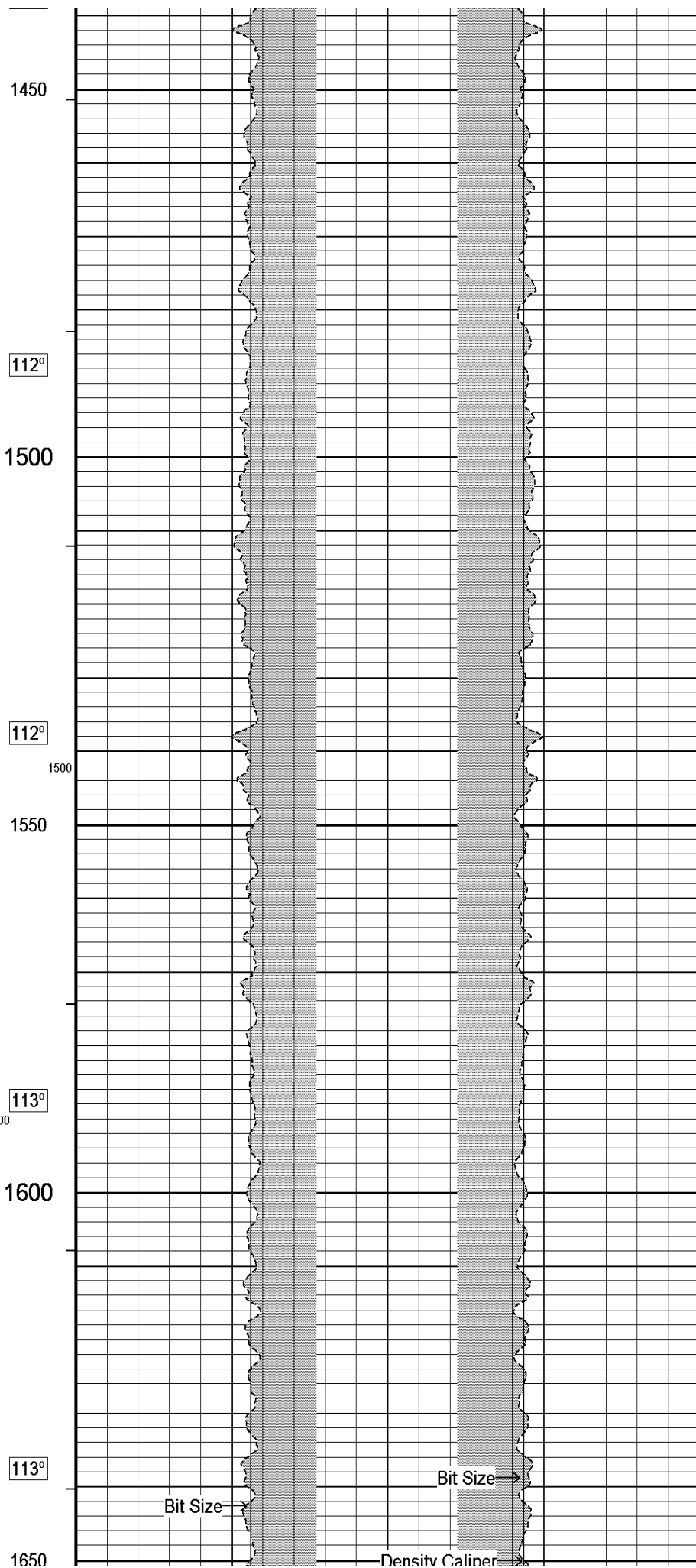
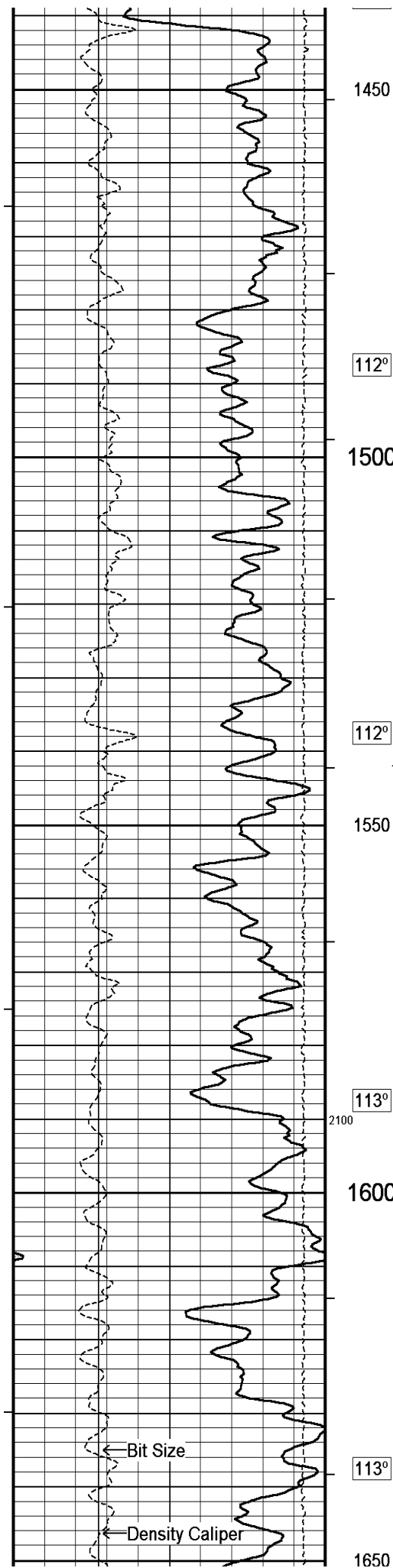
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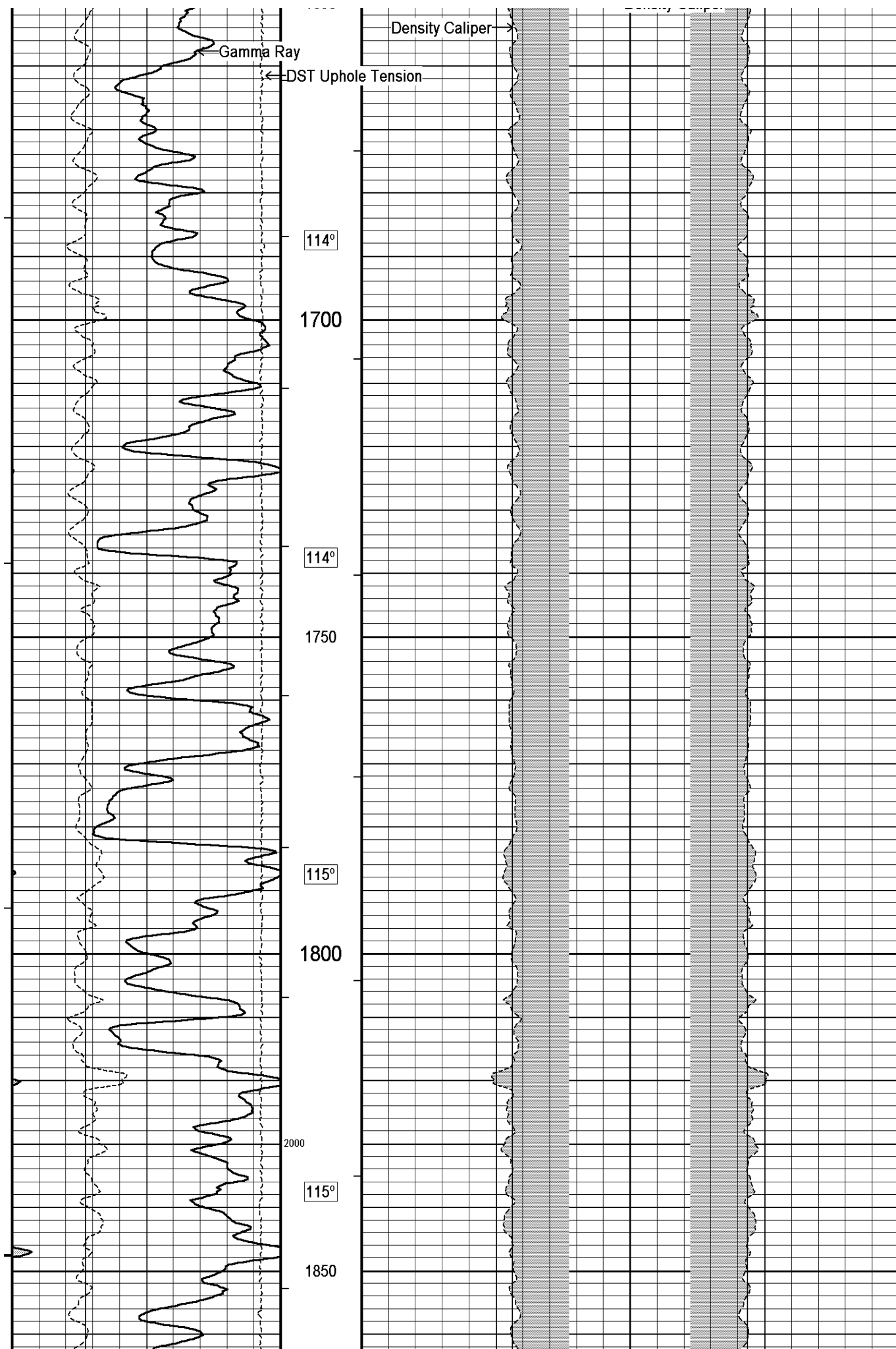
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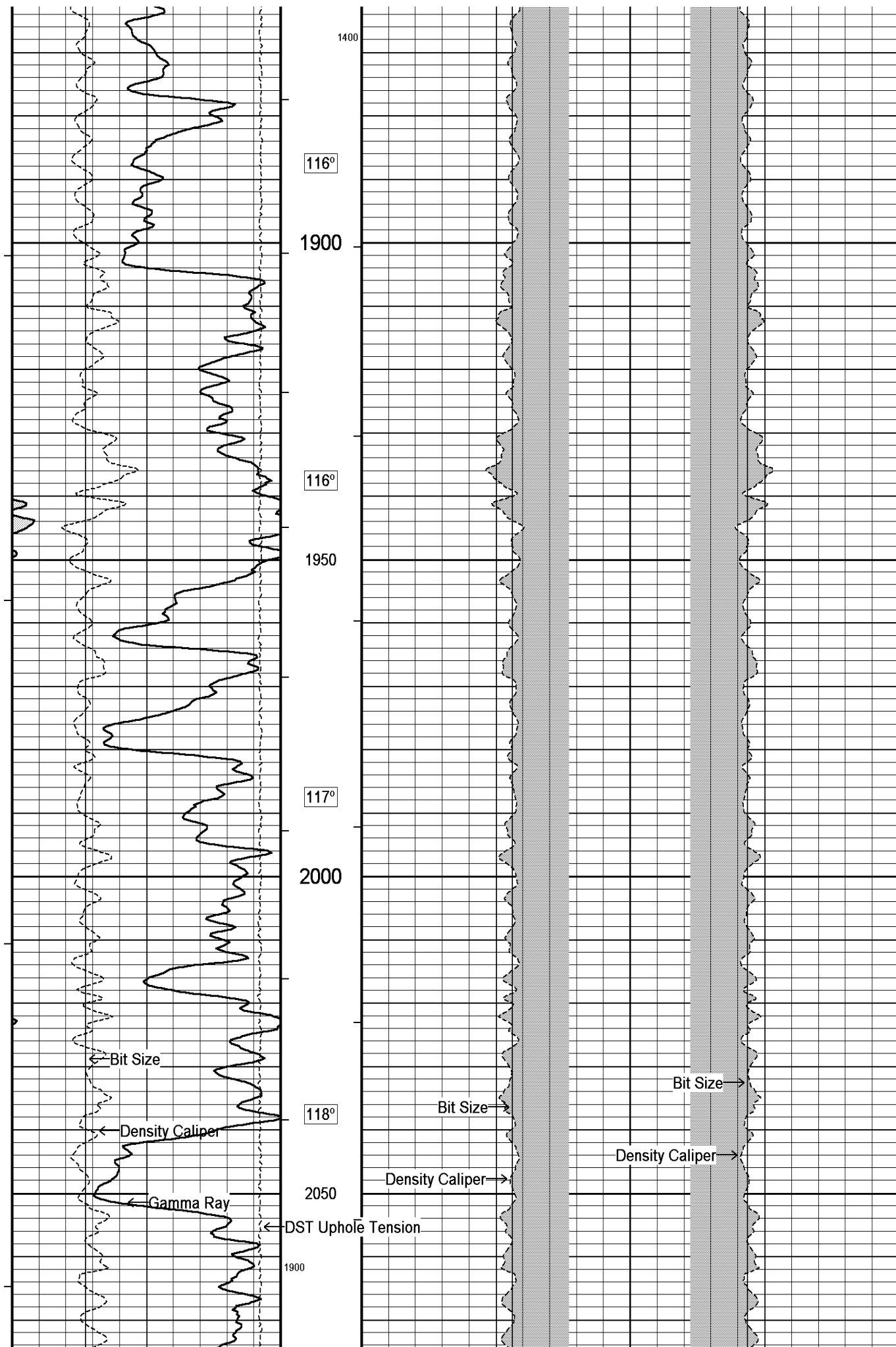
1600



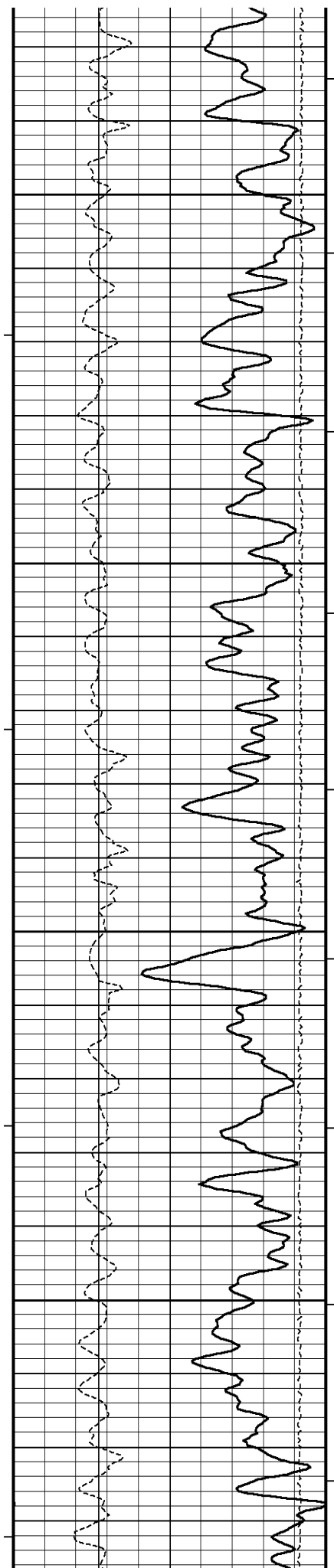












118°

2100

119°

2150

1300

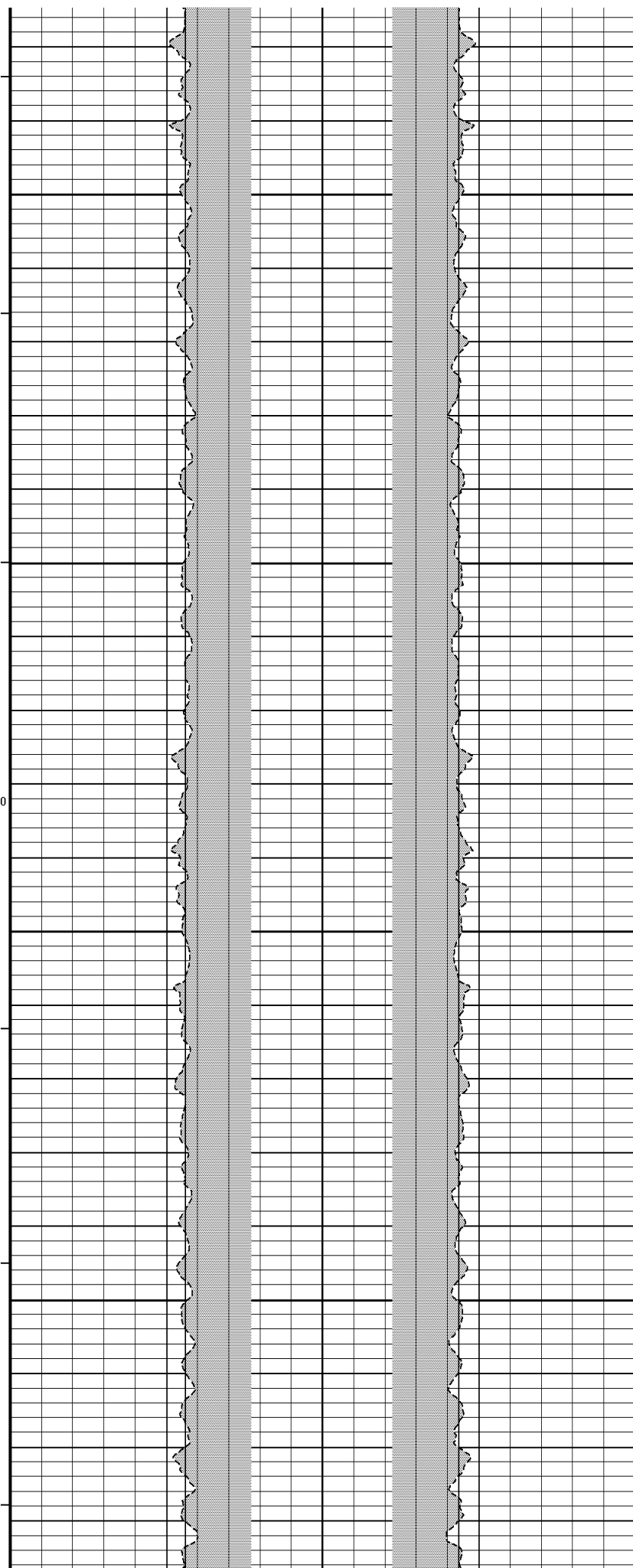
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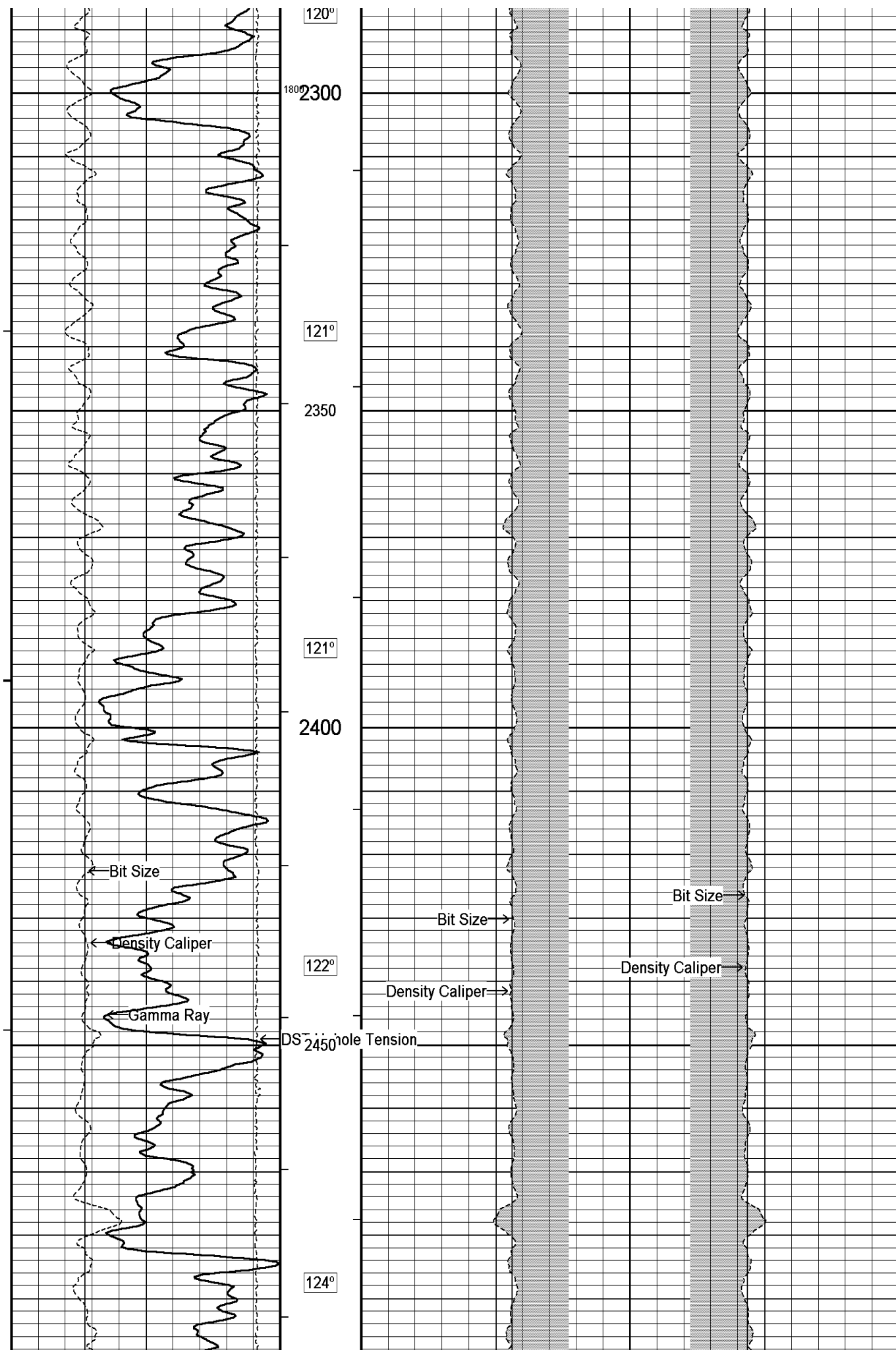
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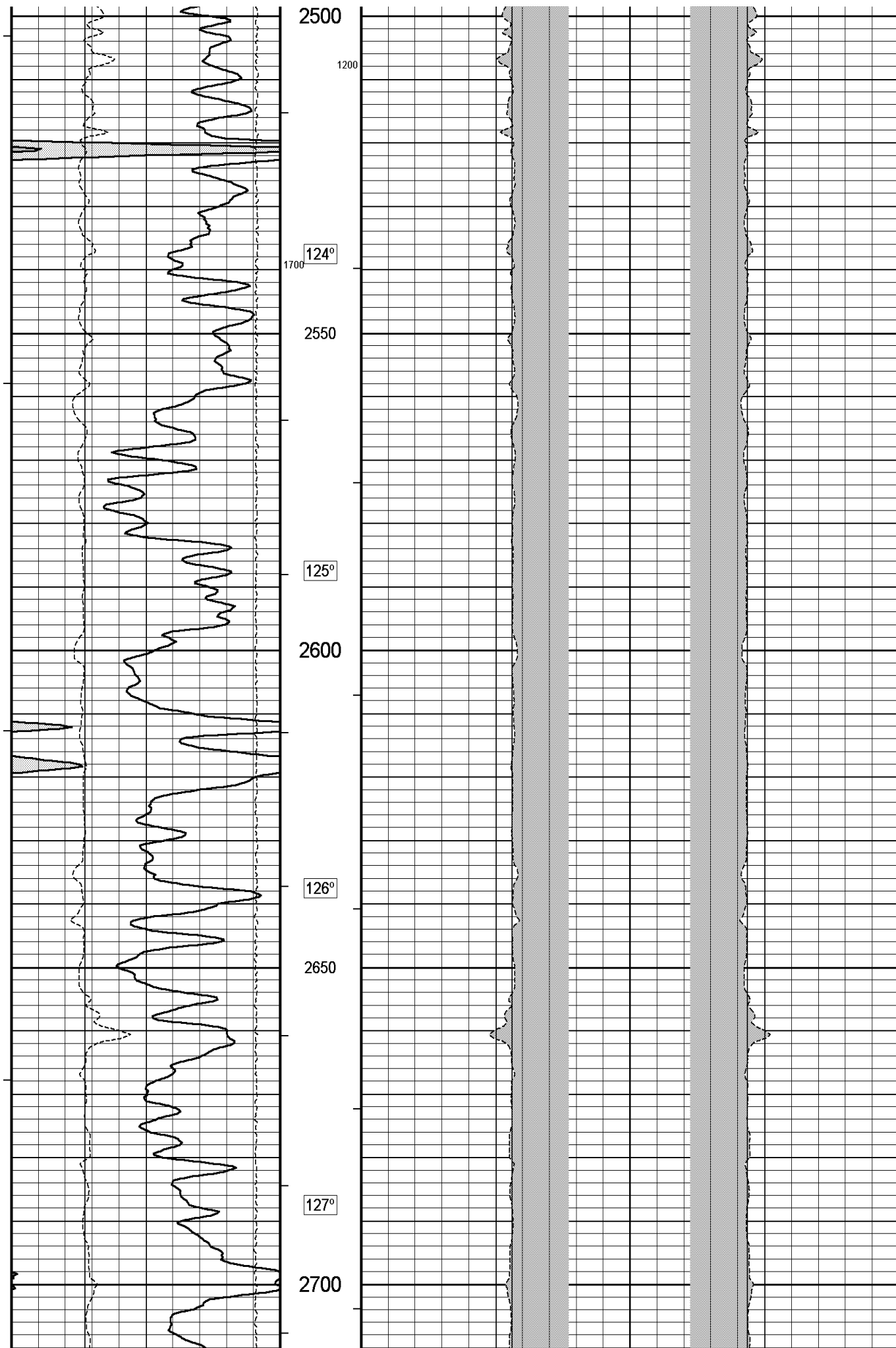
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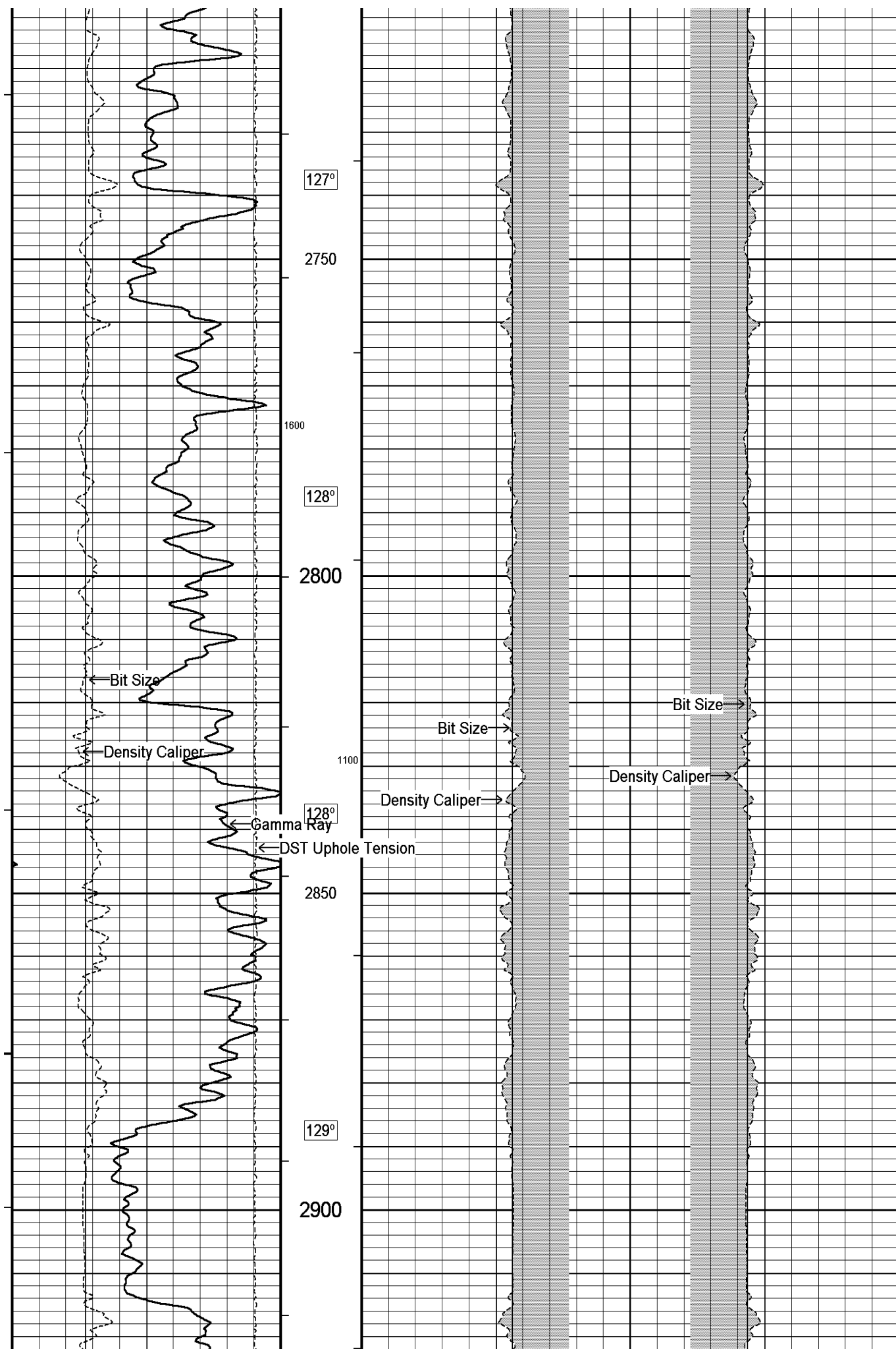
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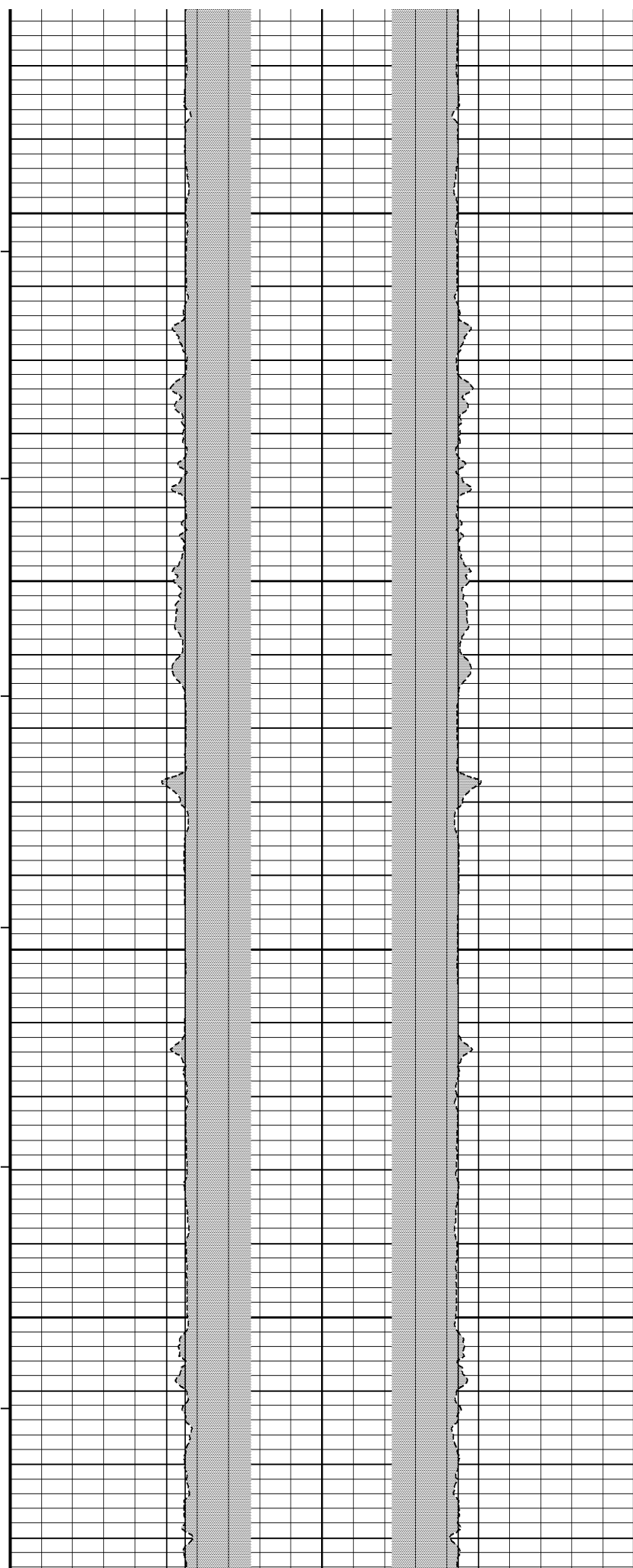
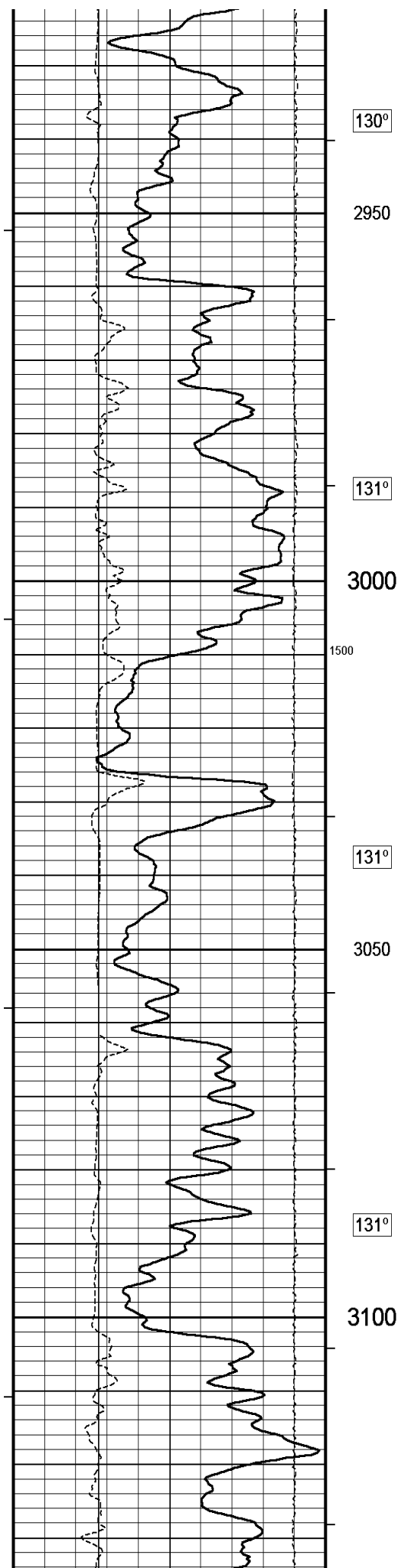
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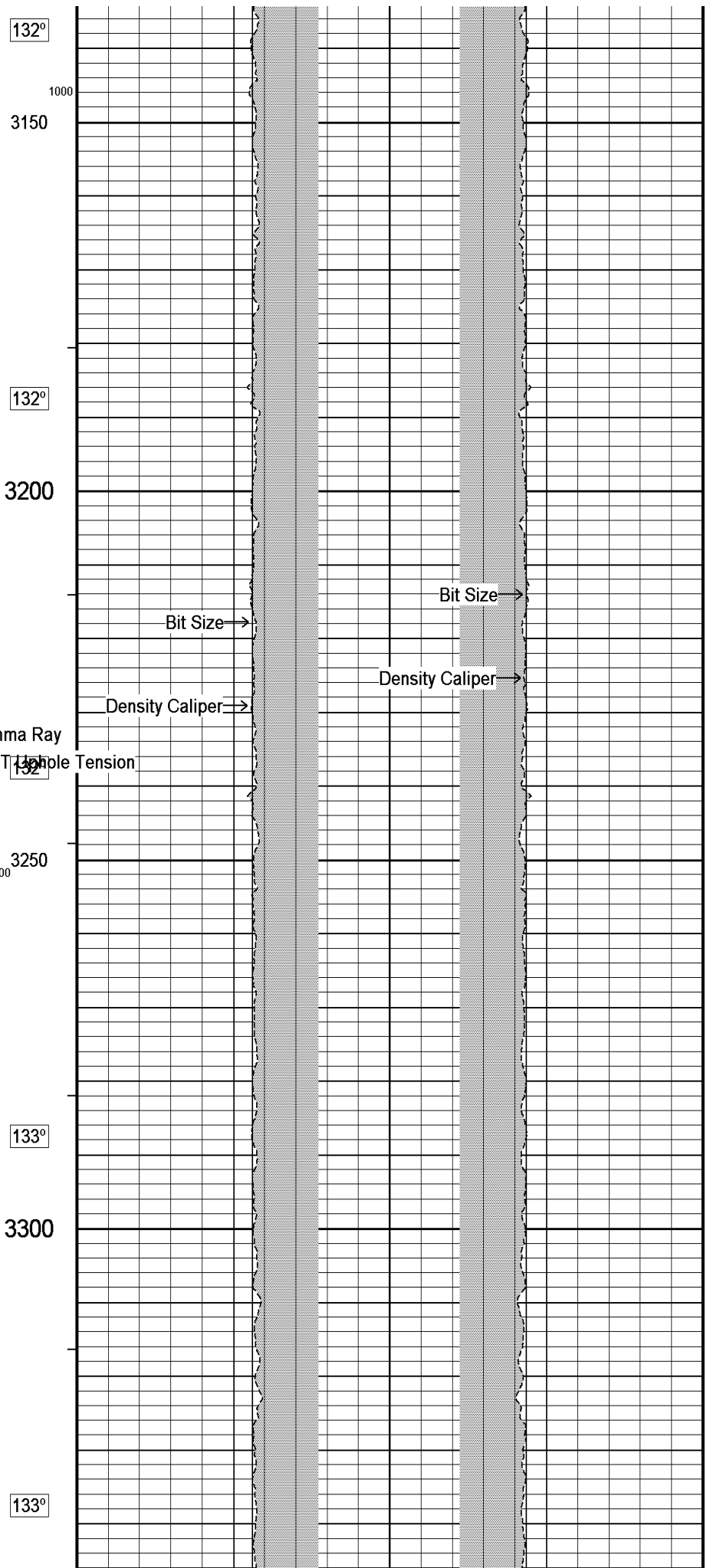
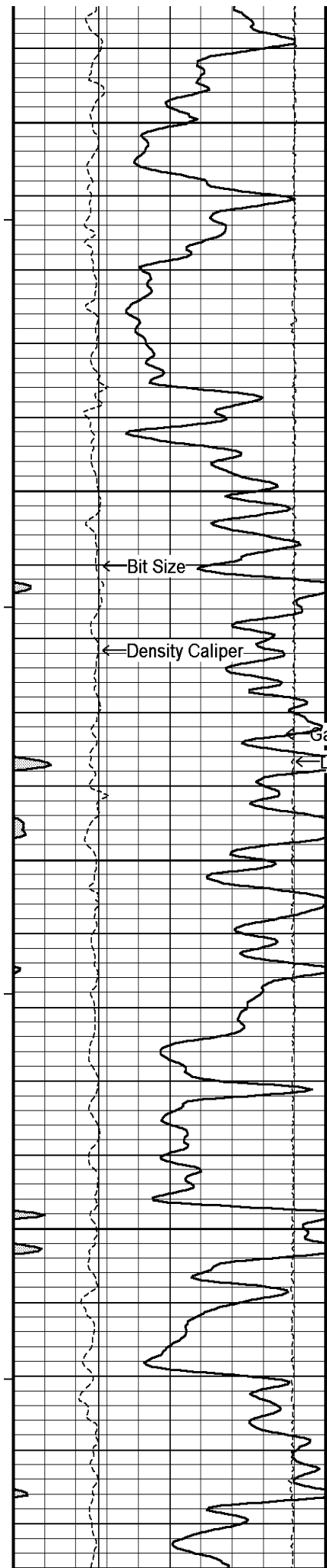


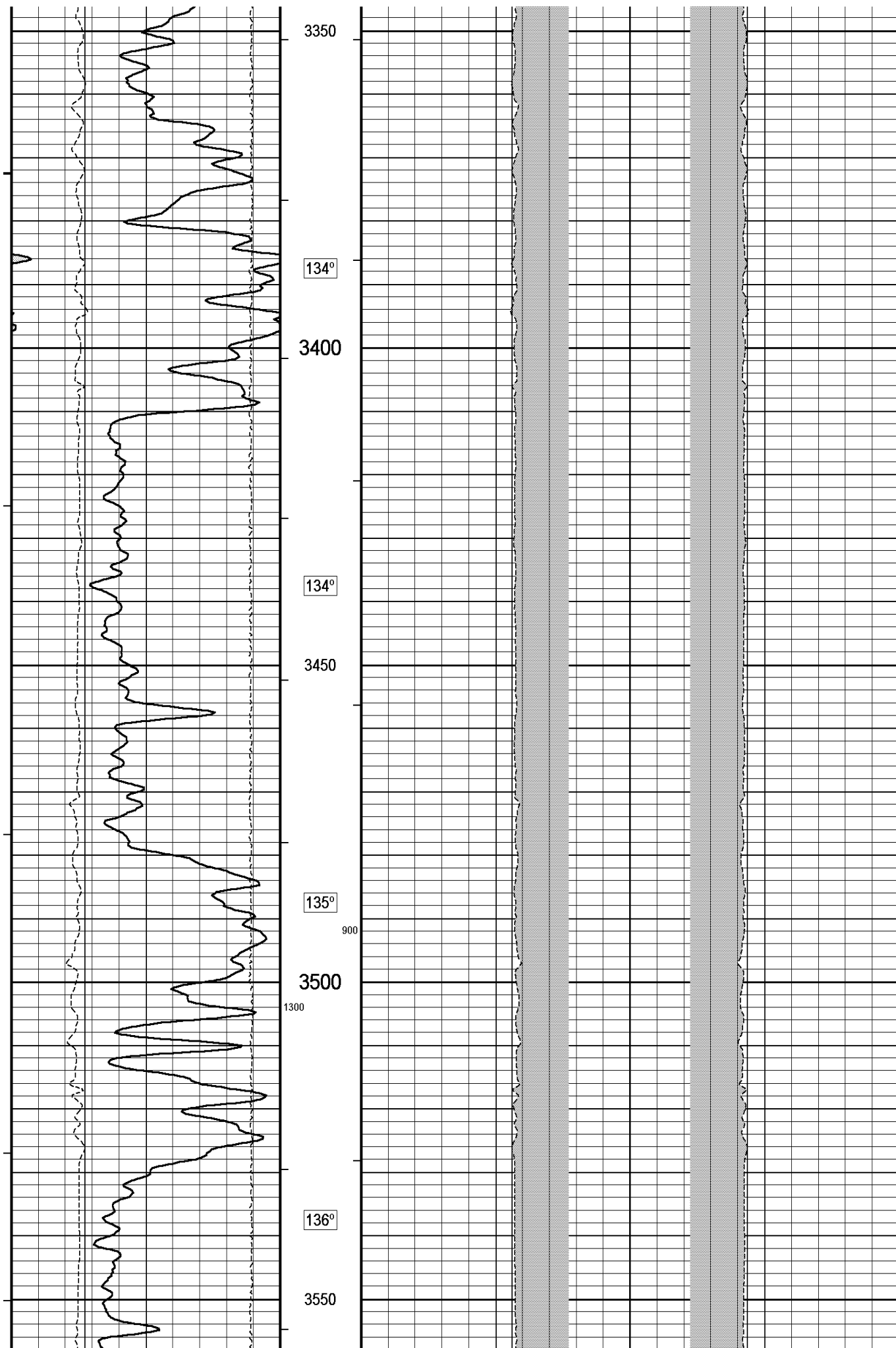


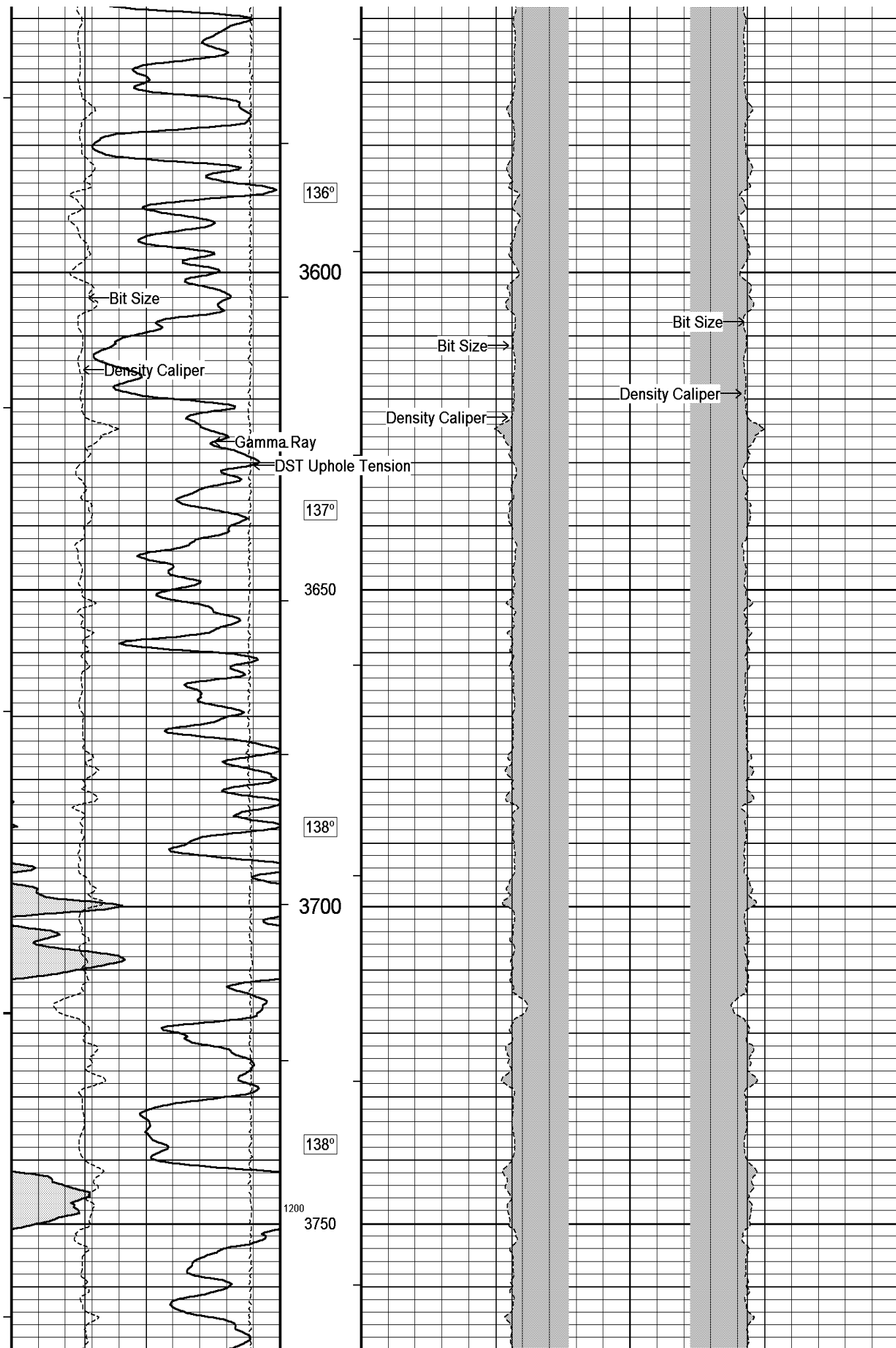




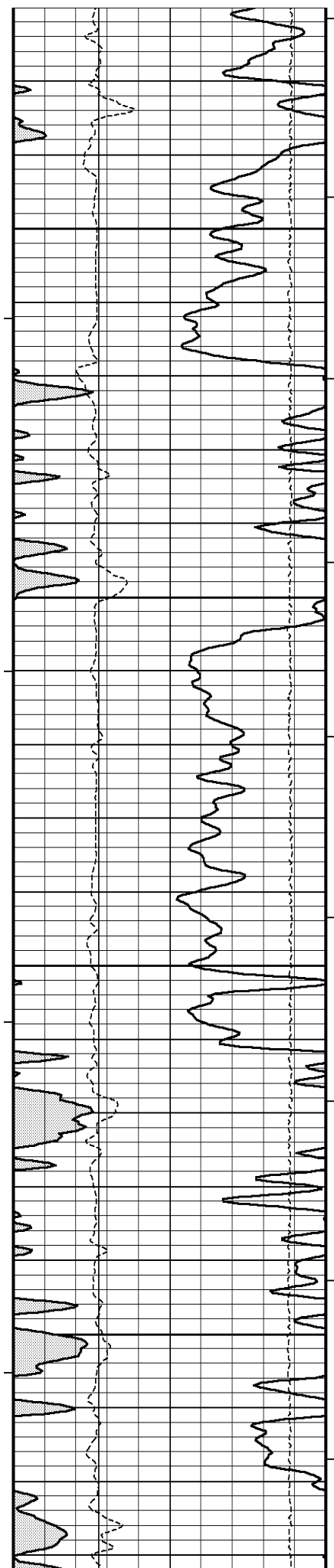












139°

3800

800

139°

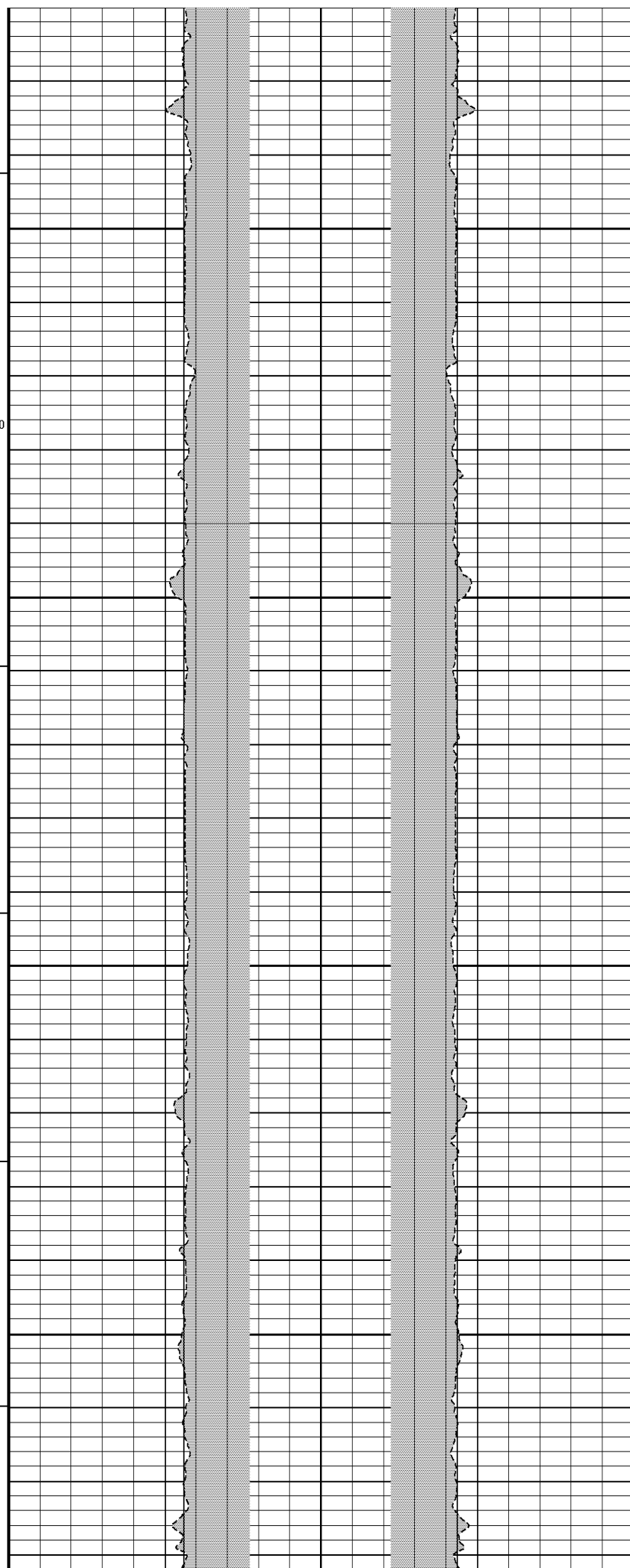
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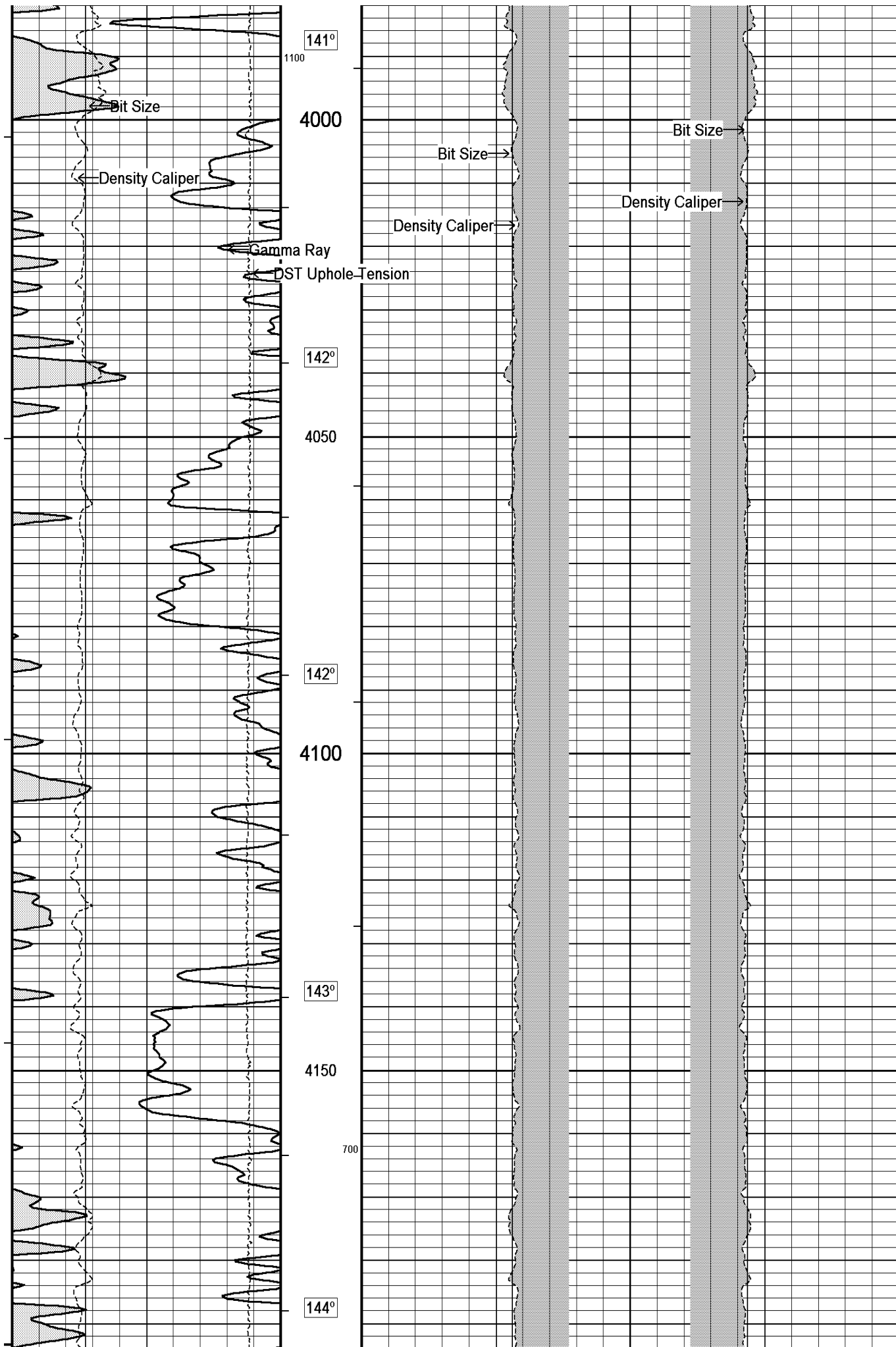
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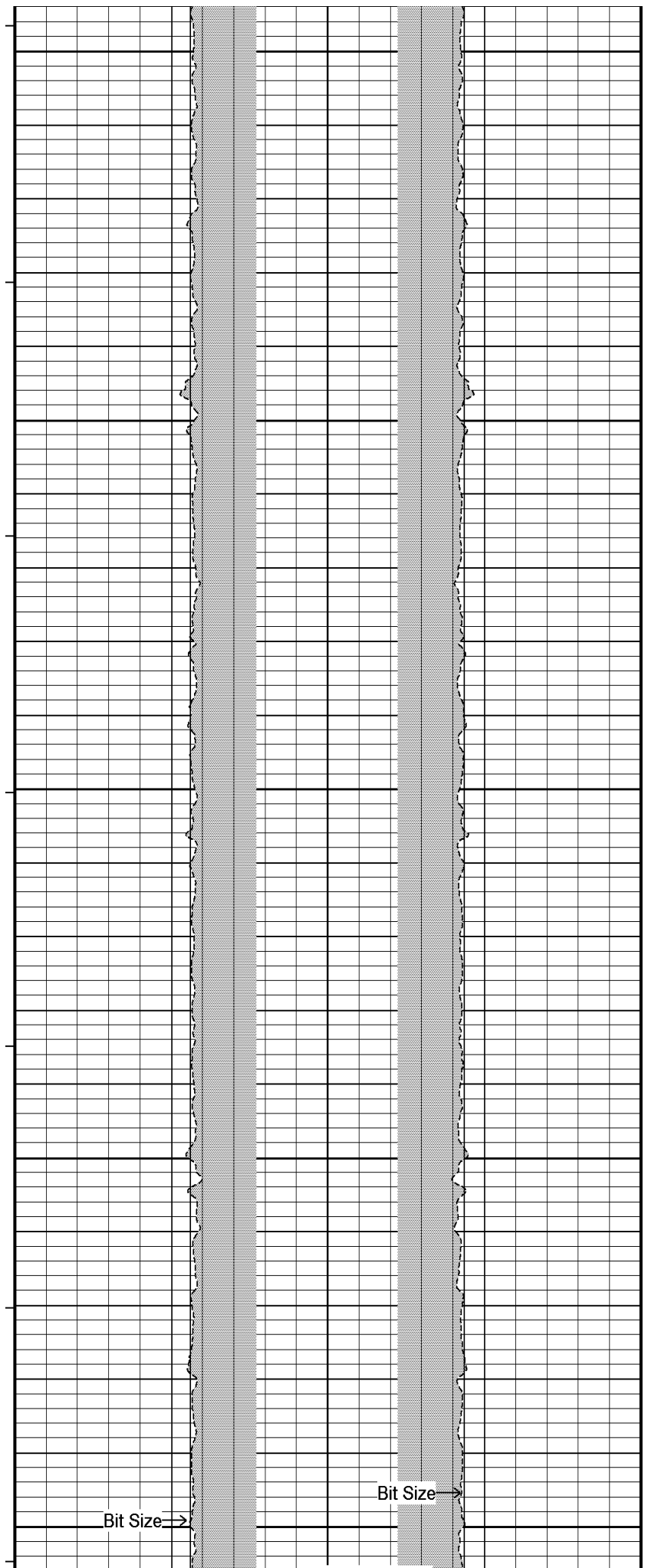
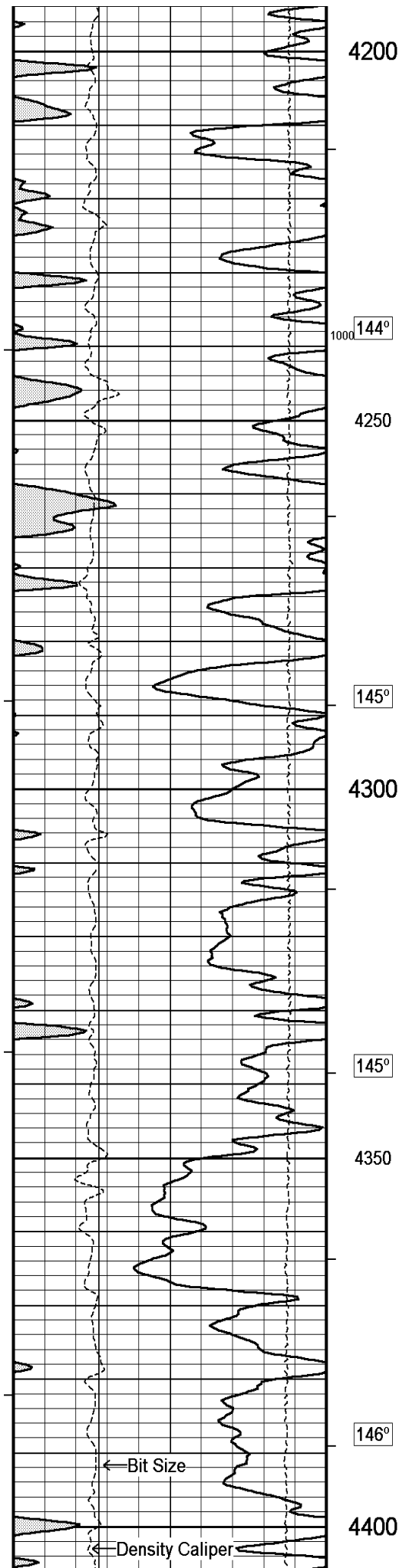
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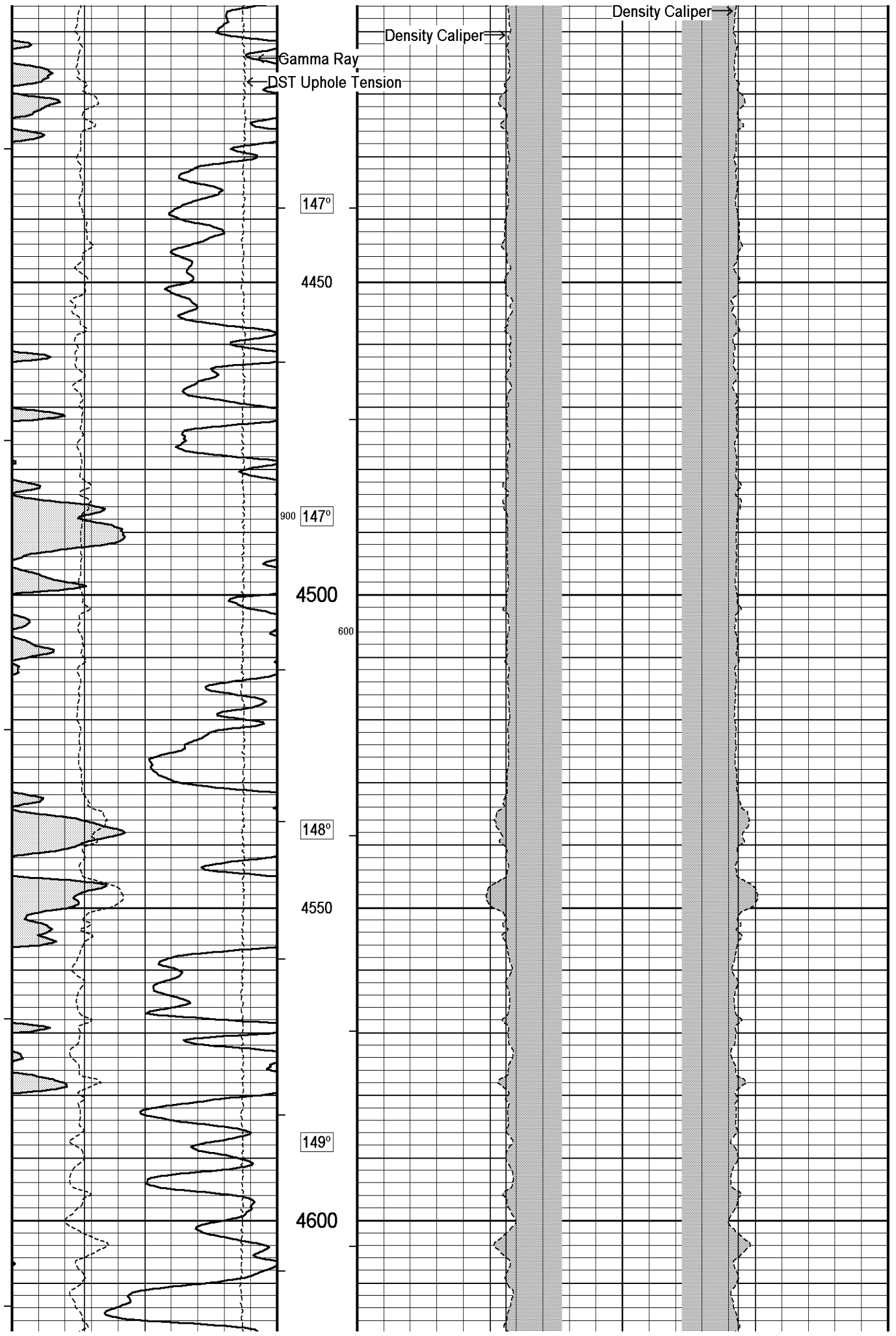
141°

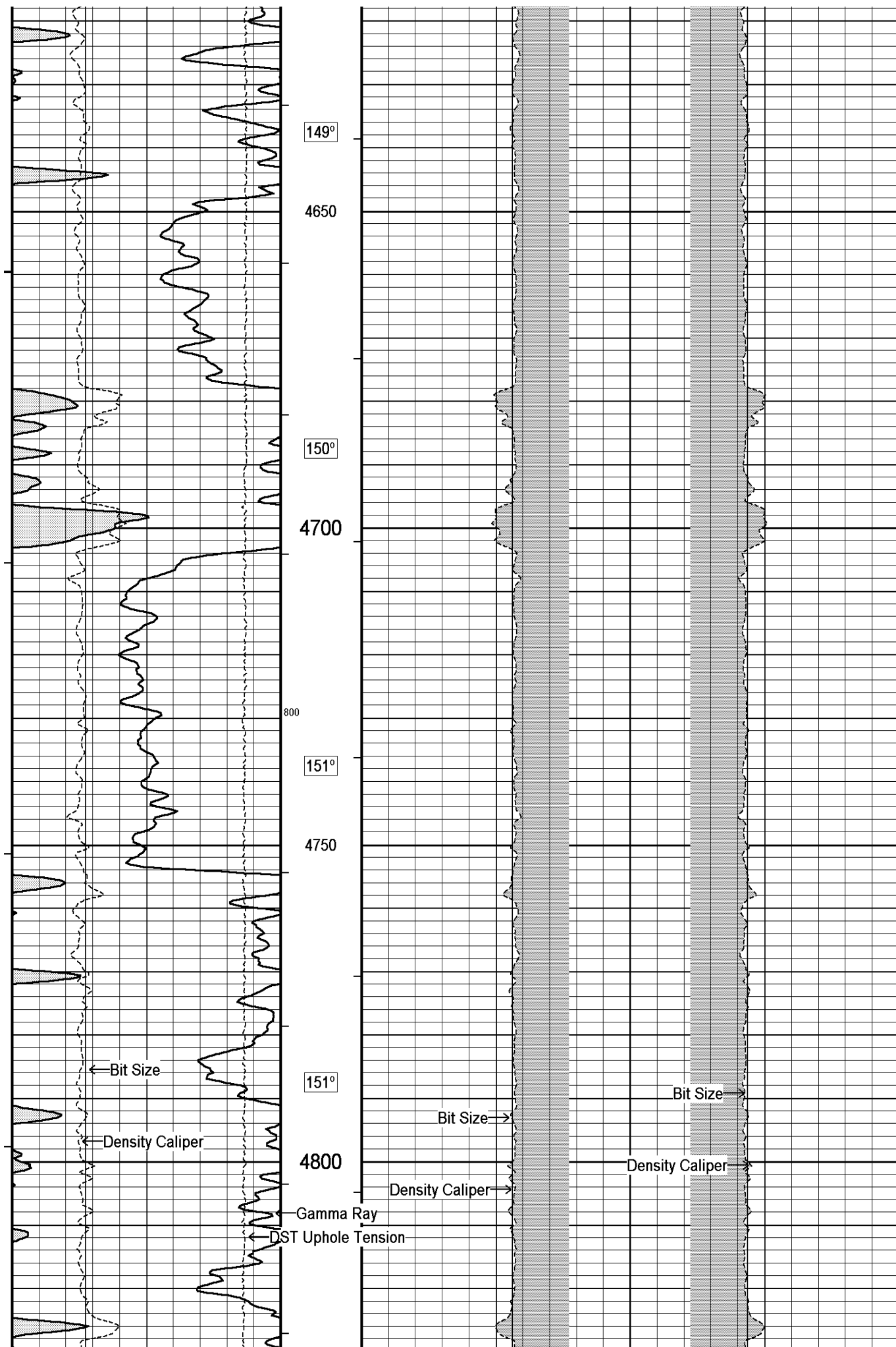
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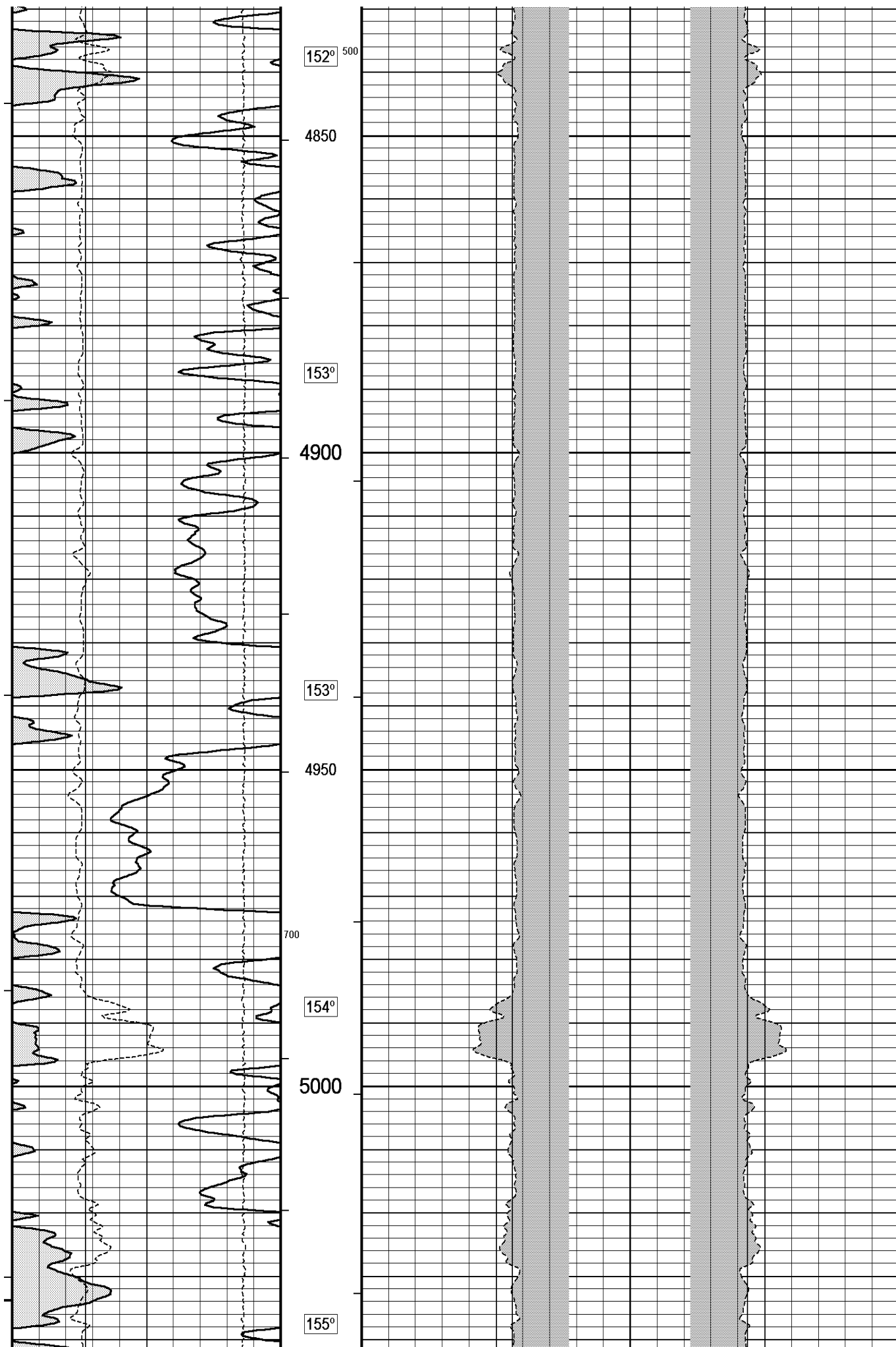


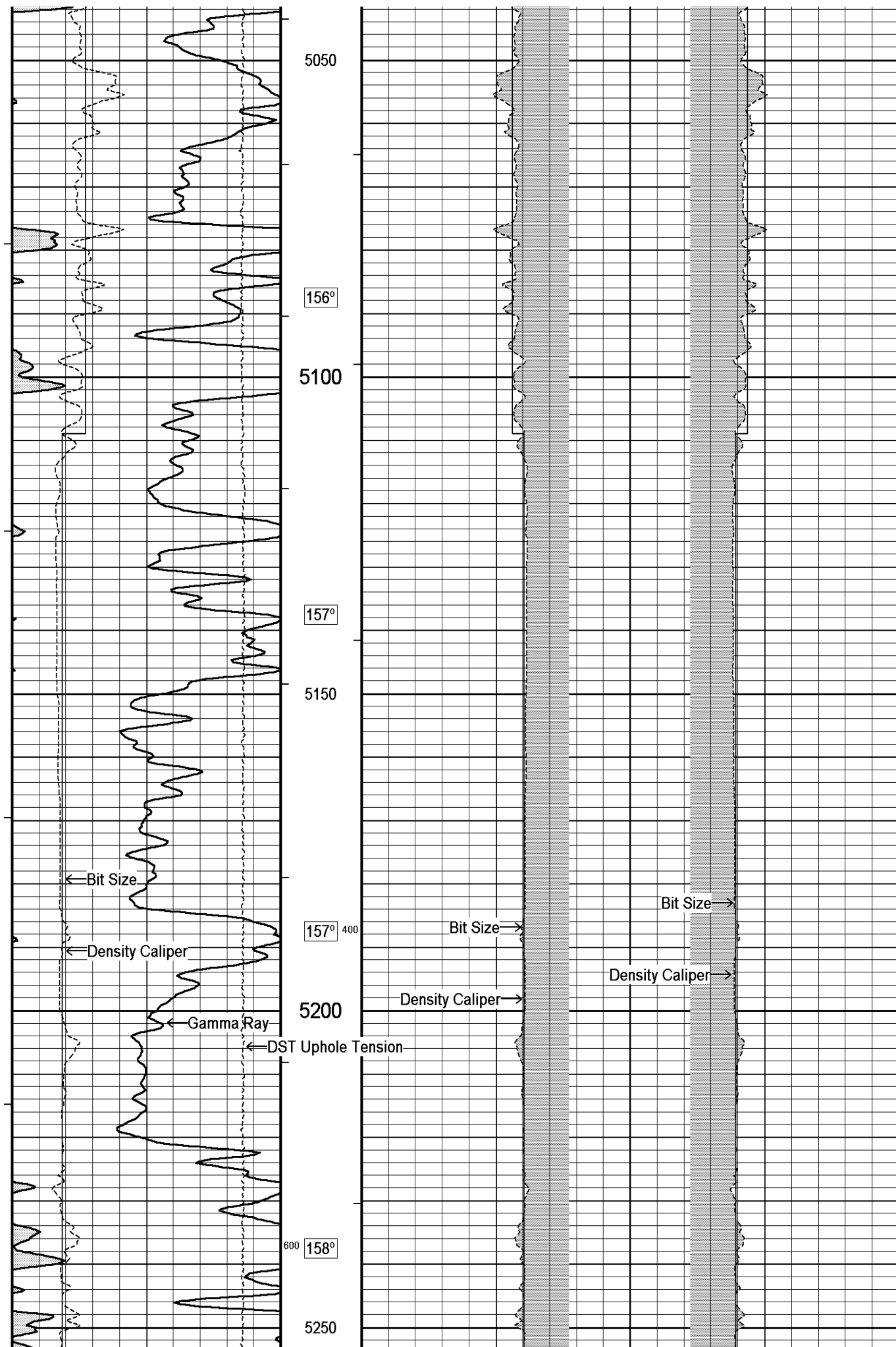


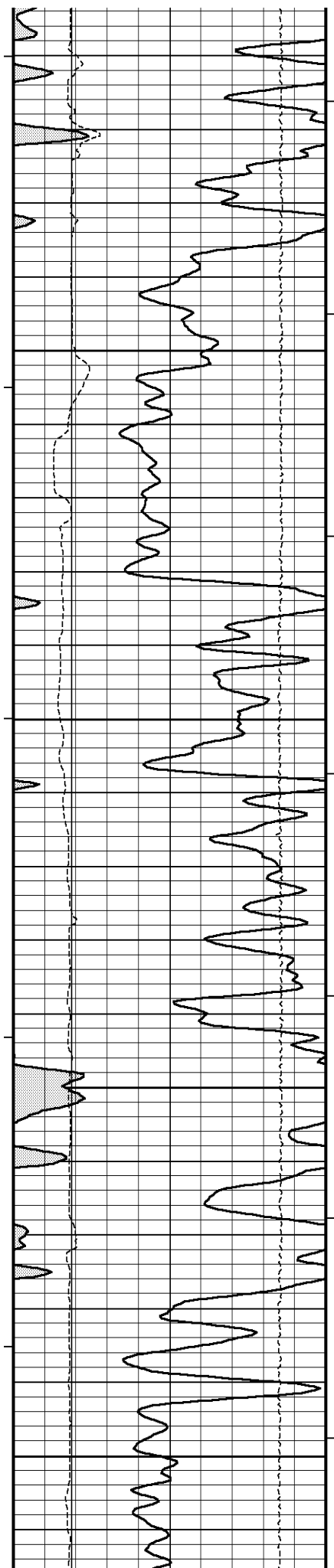












159°

5300

160°

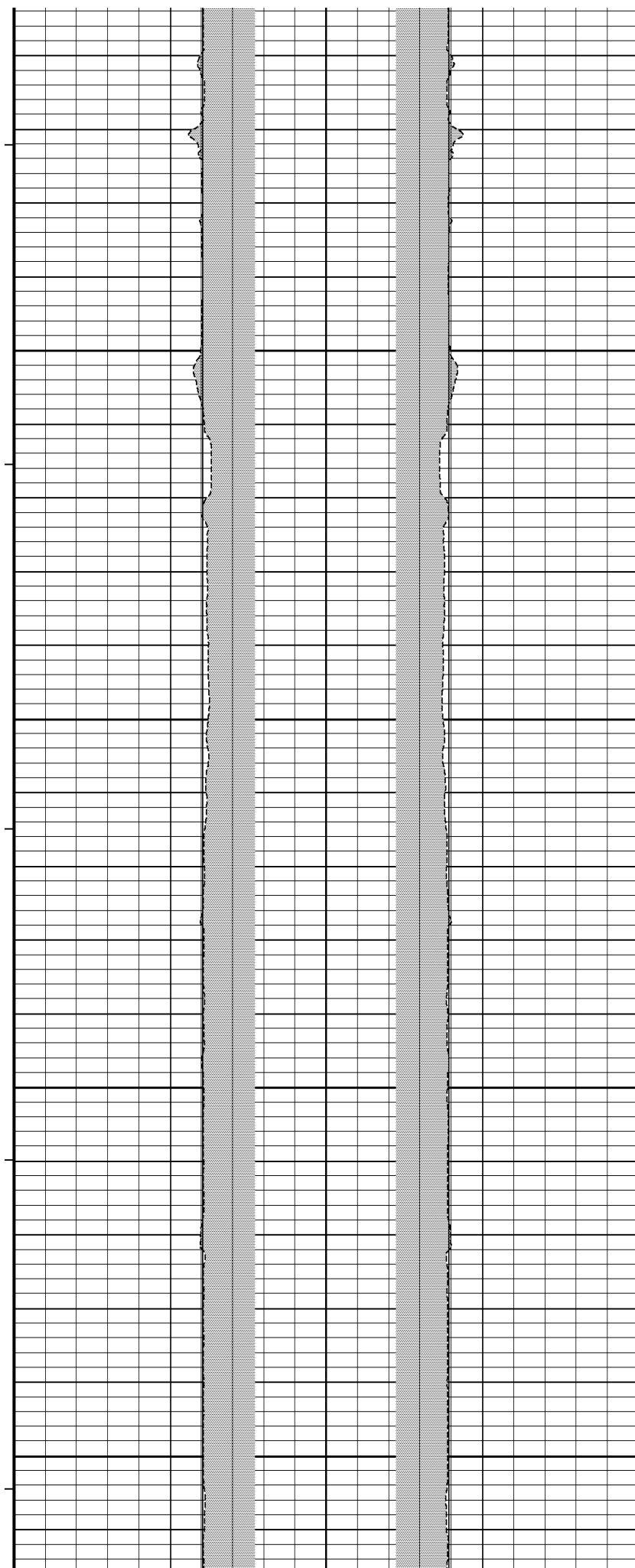
5350

160°

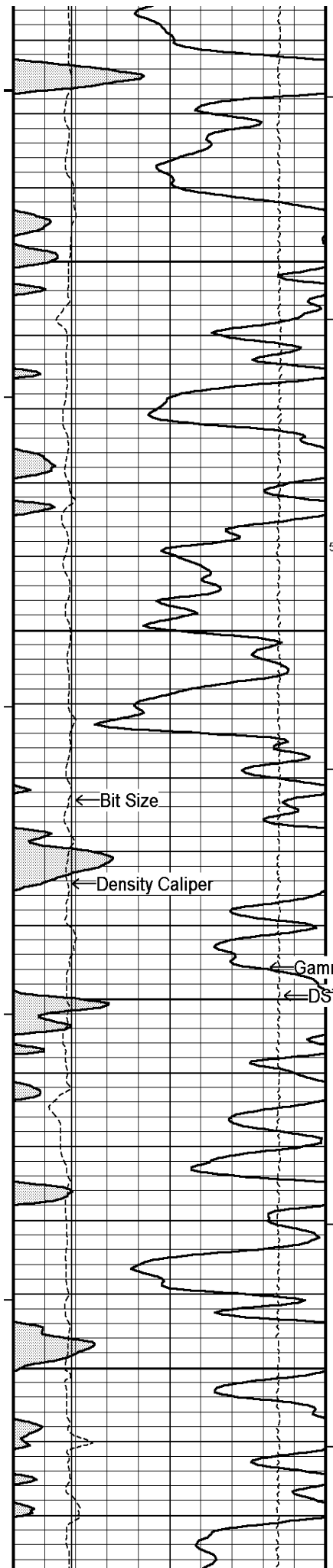
5400

161°

5450







161°

5500

162°

5550

163°

5600

164°

5650

← Bit Size

← Density Caliper

Gamma Ray

← DST

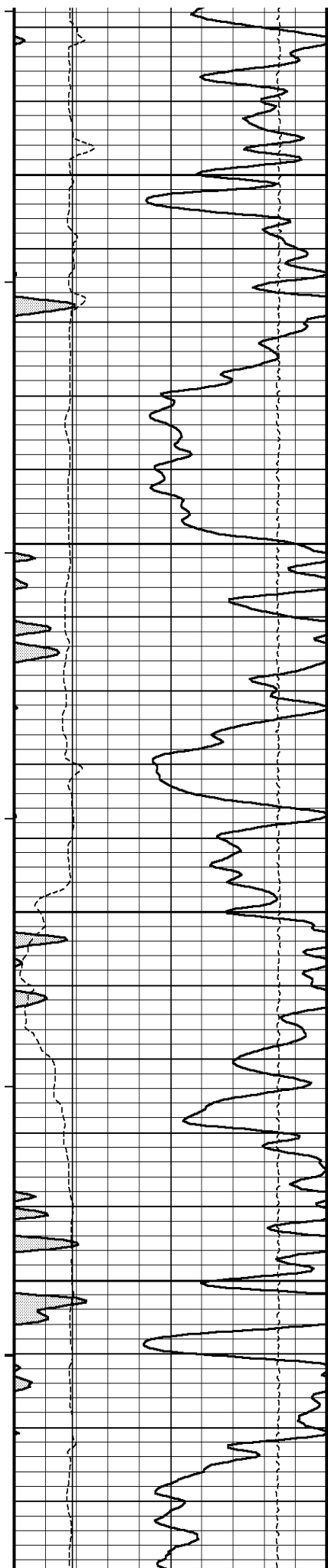
Tension

Bit Size →

Density Caliper →

Bit Size →

Density Caliper →



165°

5700

166°

5750

167°

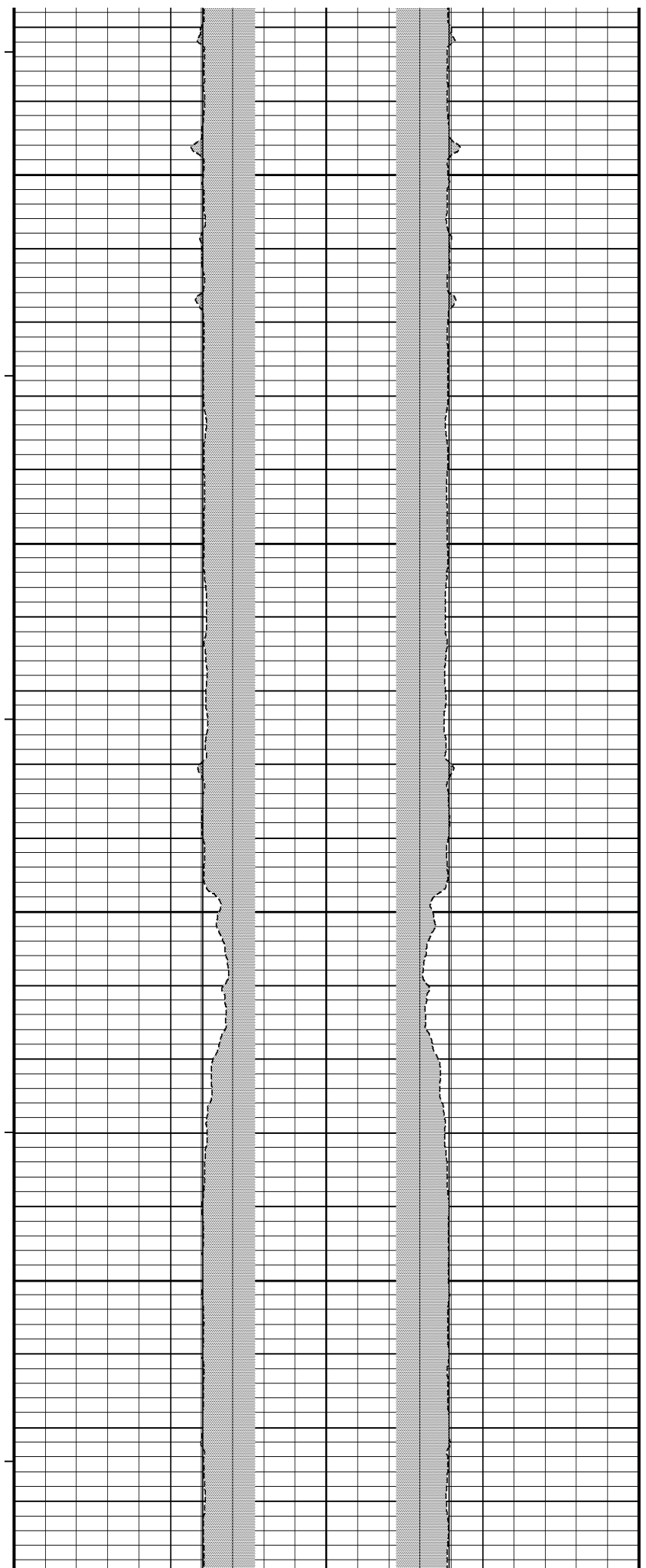
5800

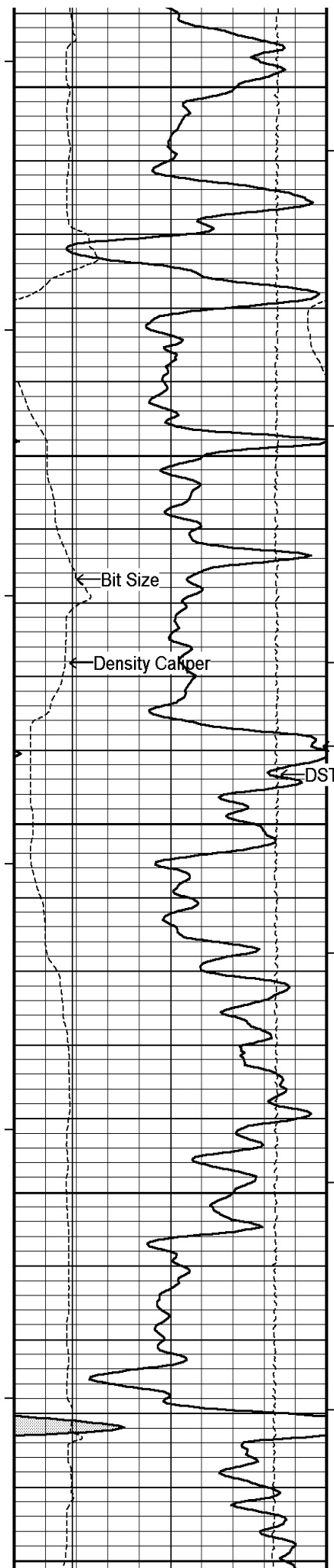
167°

5850

169°

400





5900

170°

5950

← Bit Size

← Density Caliper

171°

Gamma Ray

DST Uphole Tension

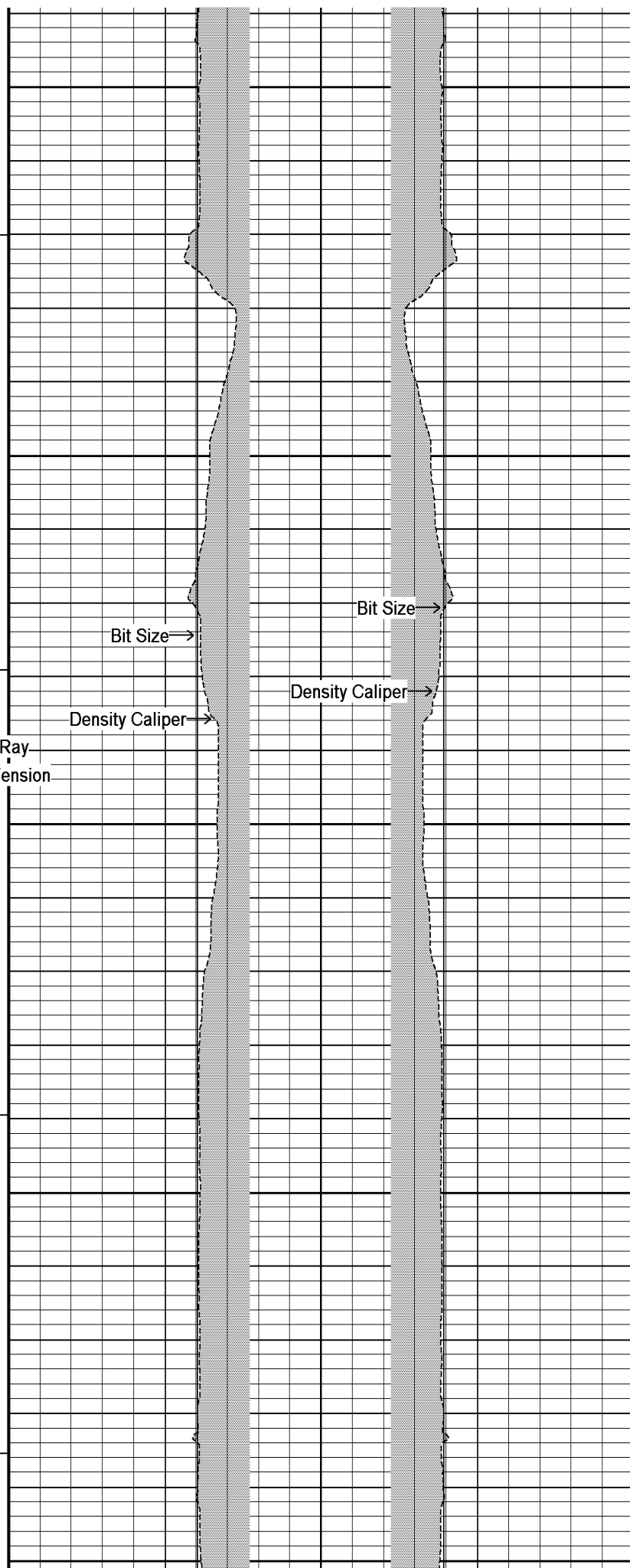
6000

171°

6050

172°

6100

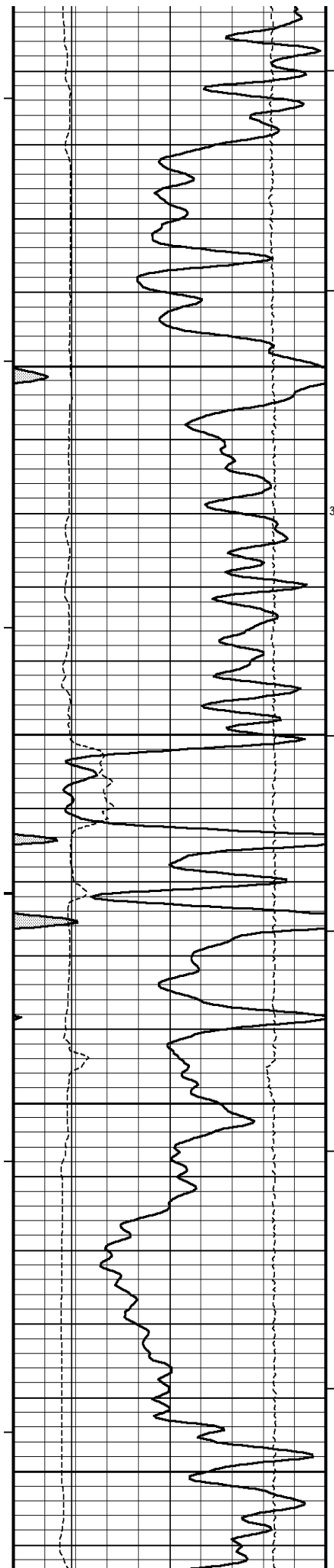


Bit Size →

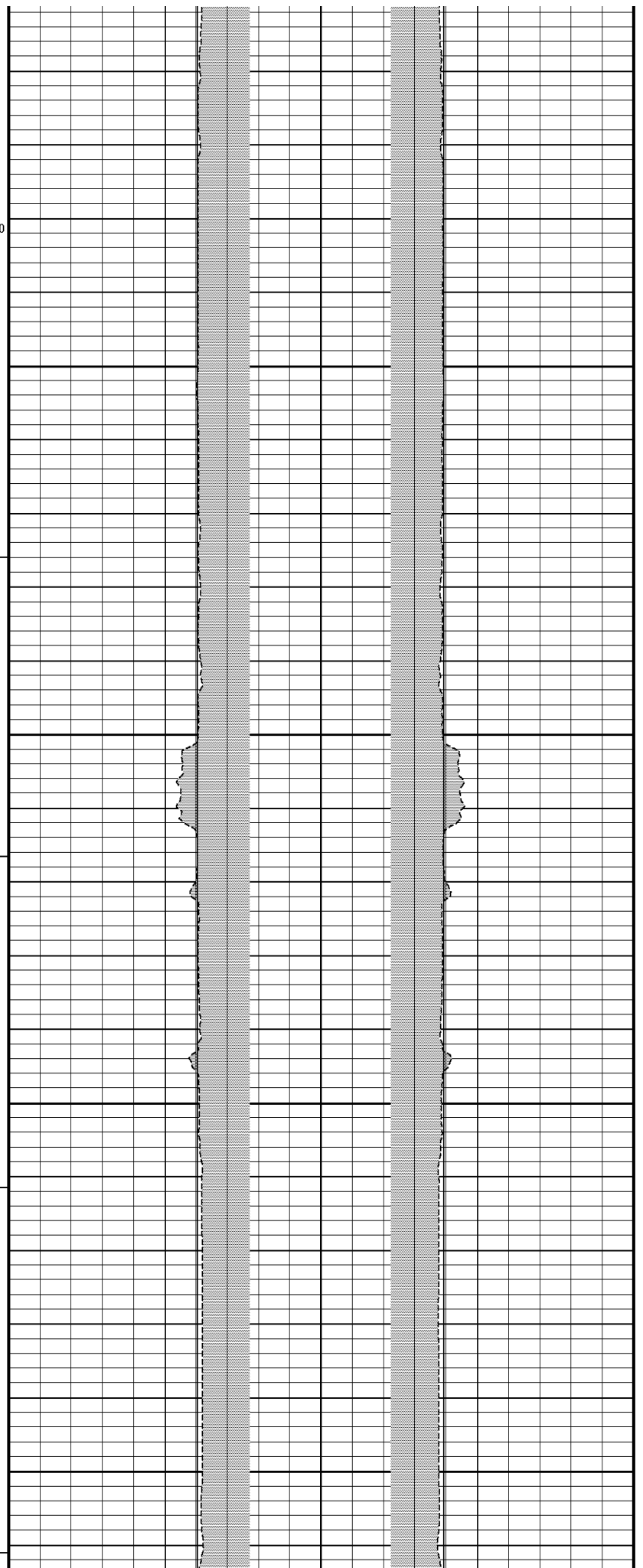
Bit Size →

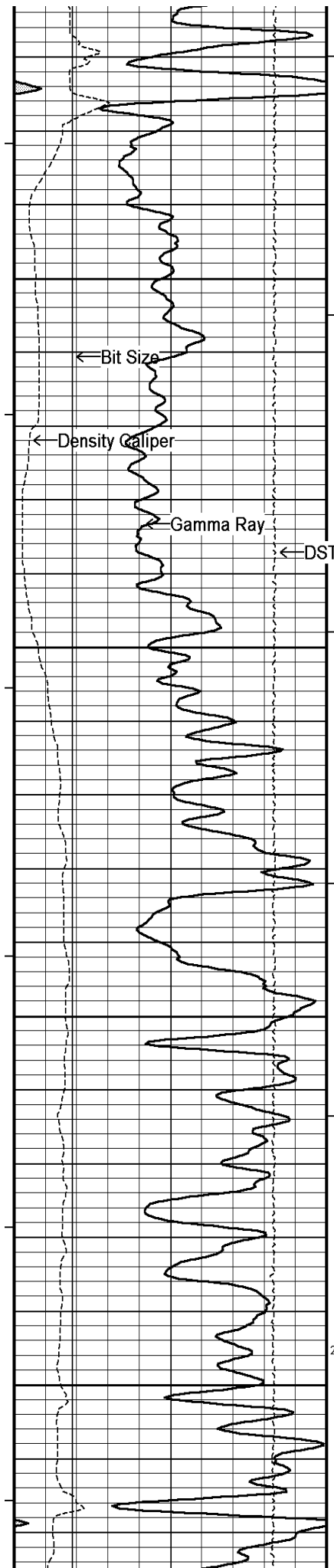
Density Caliper →

Density Caliper →



200  
172°  
6150  
300  
173°  
6200  
175°  
6250  
175°  
6300





177°

6350

← Bit Size

← Density Caliper

← Gamma Ray

← DST Upflow Tension

6400

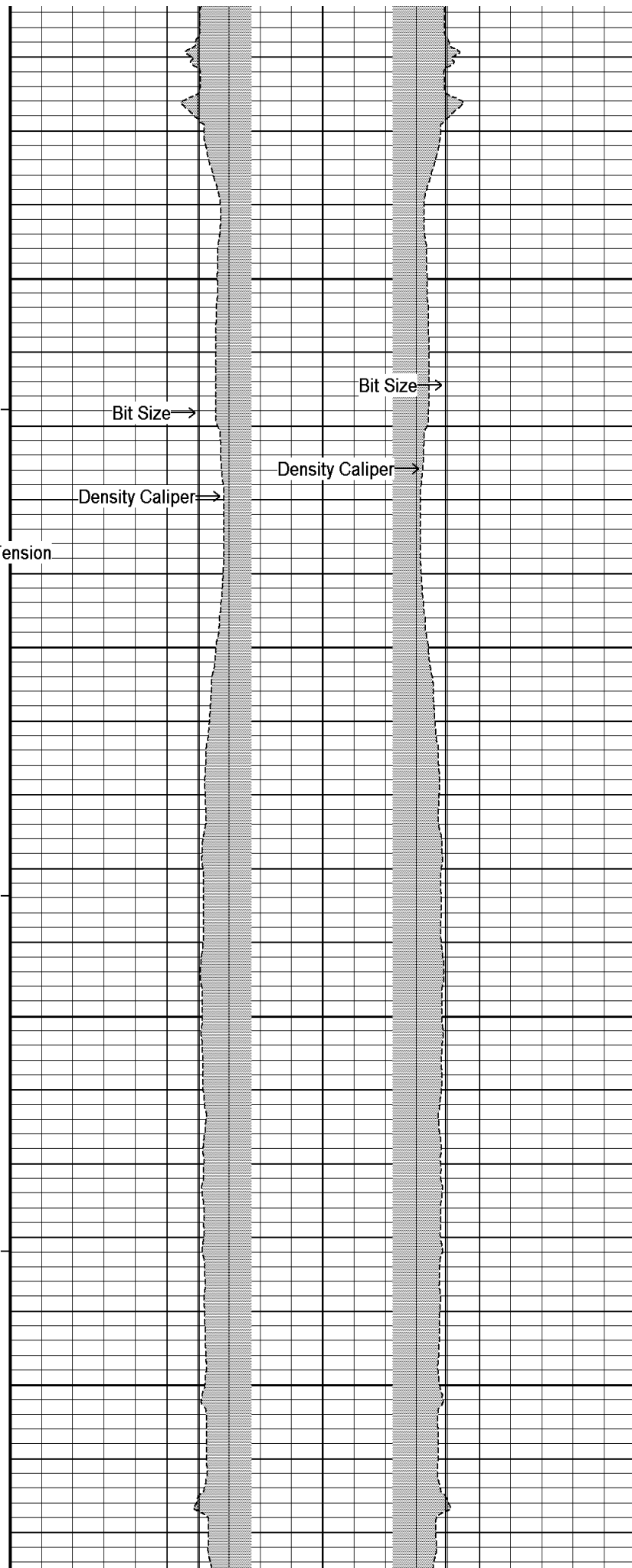
178°

6450

179°

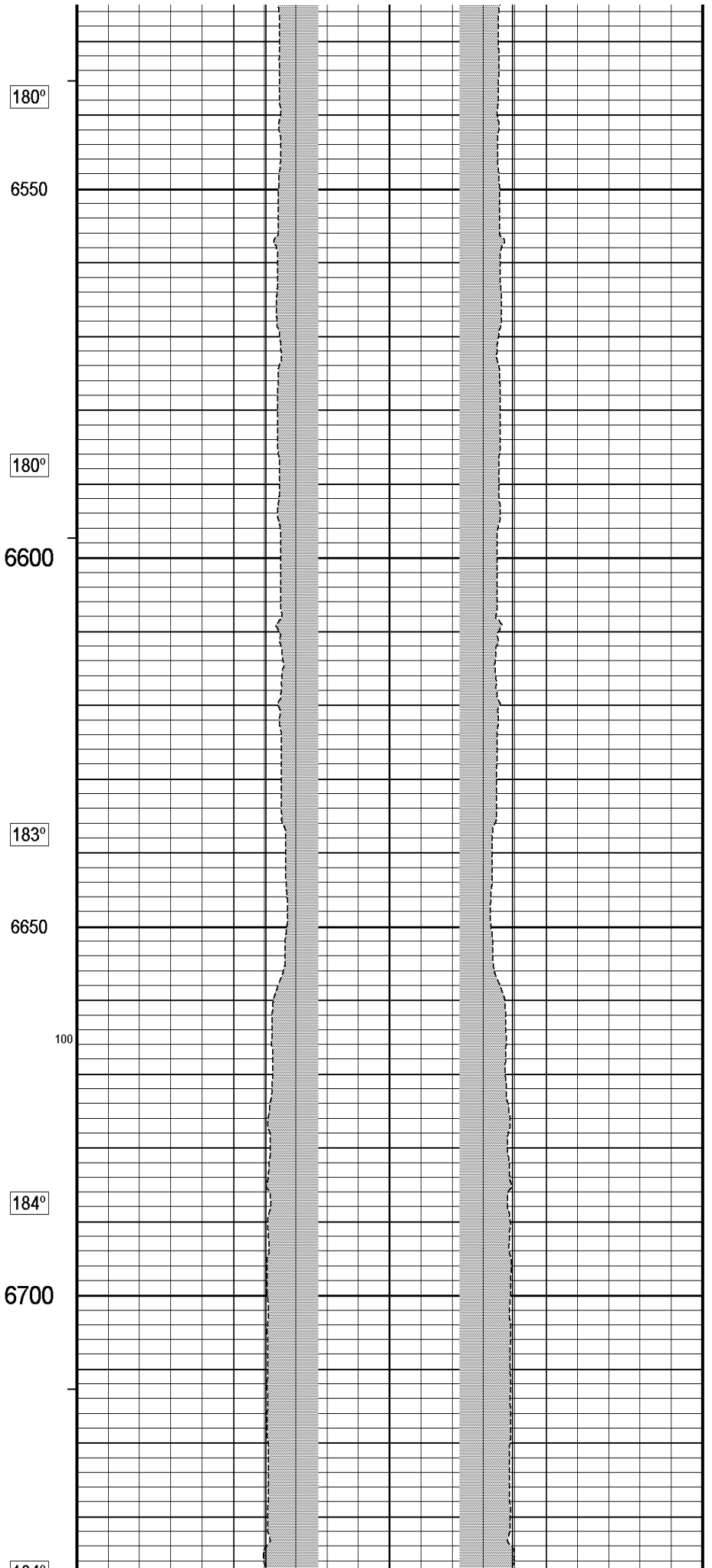
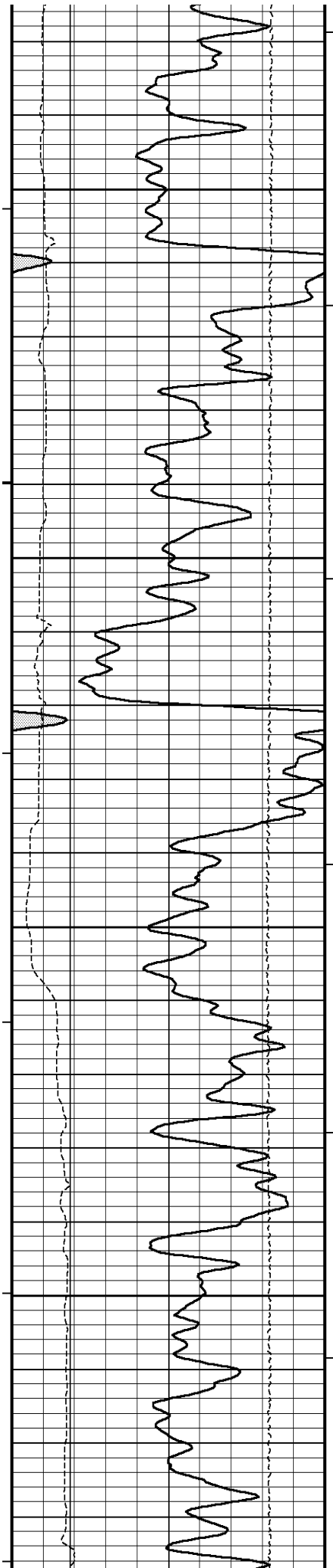
200

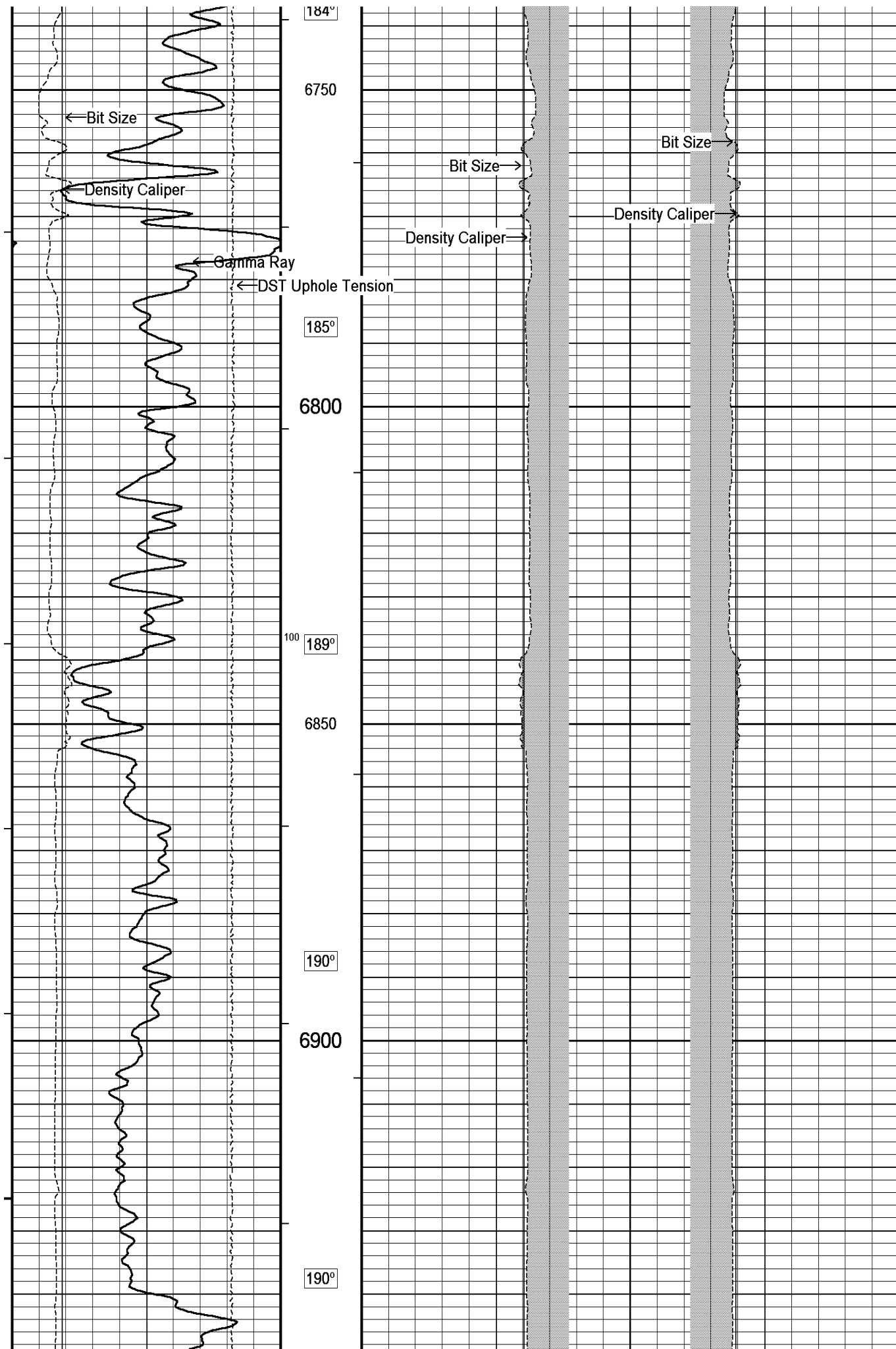
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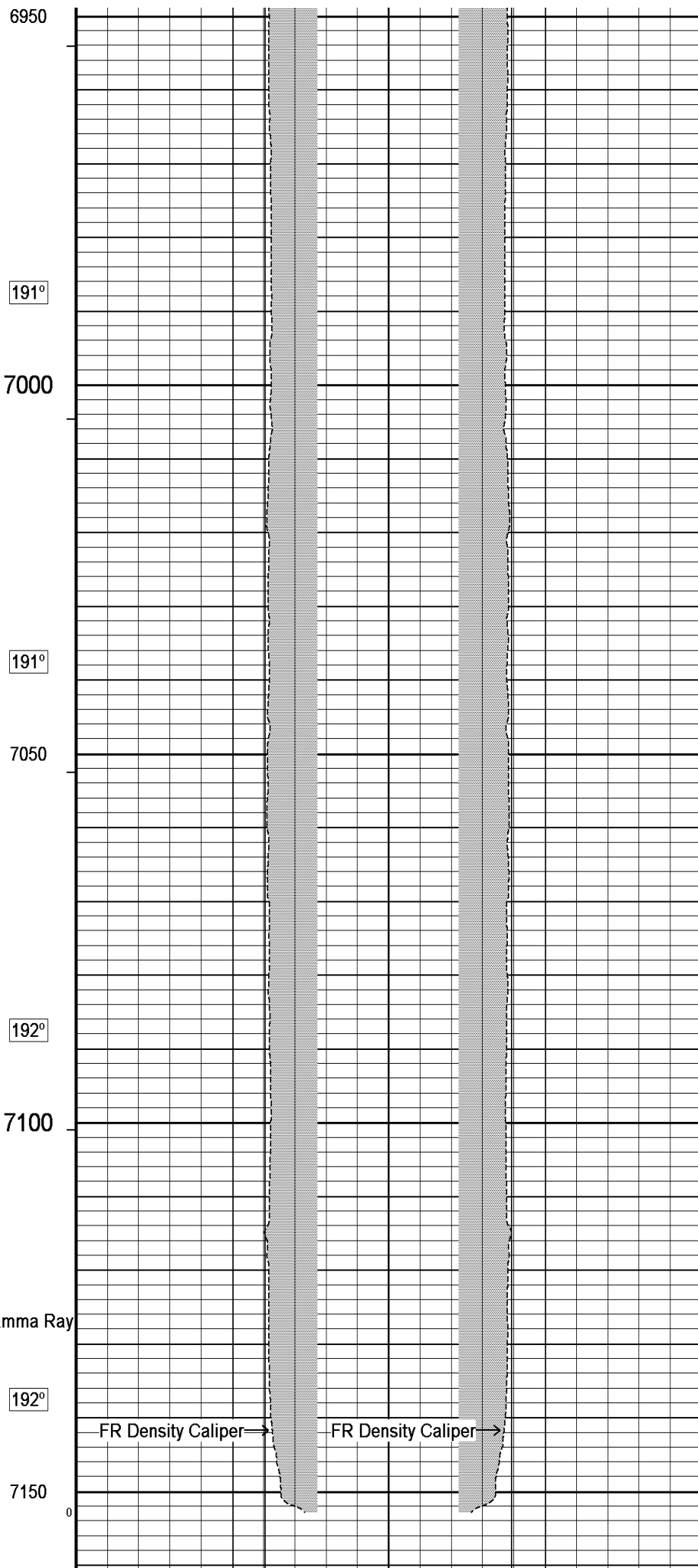
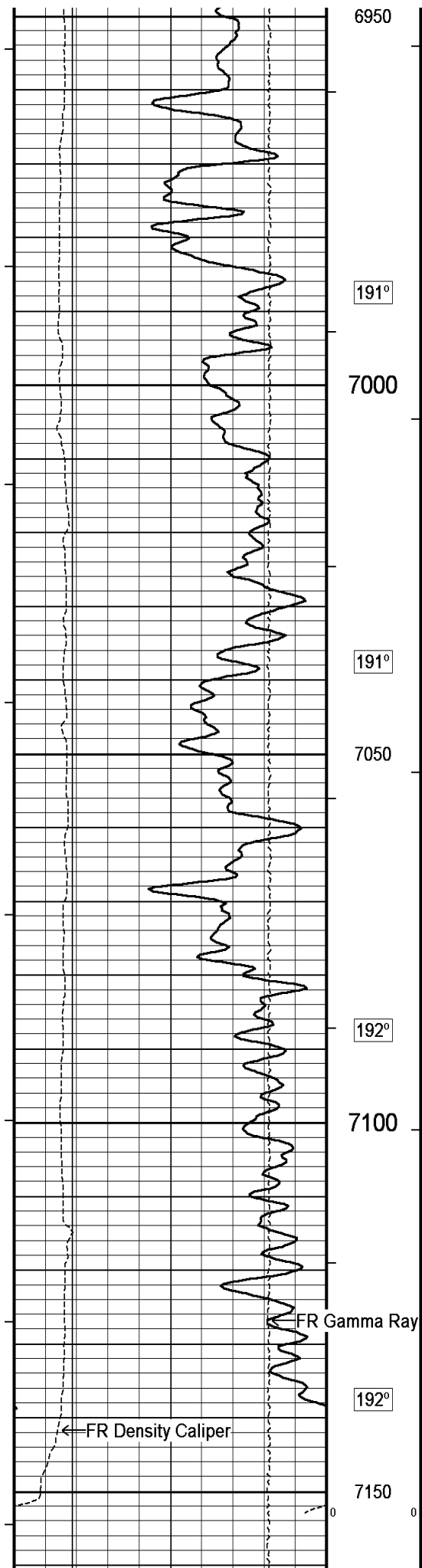


Bit Size →

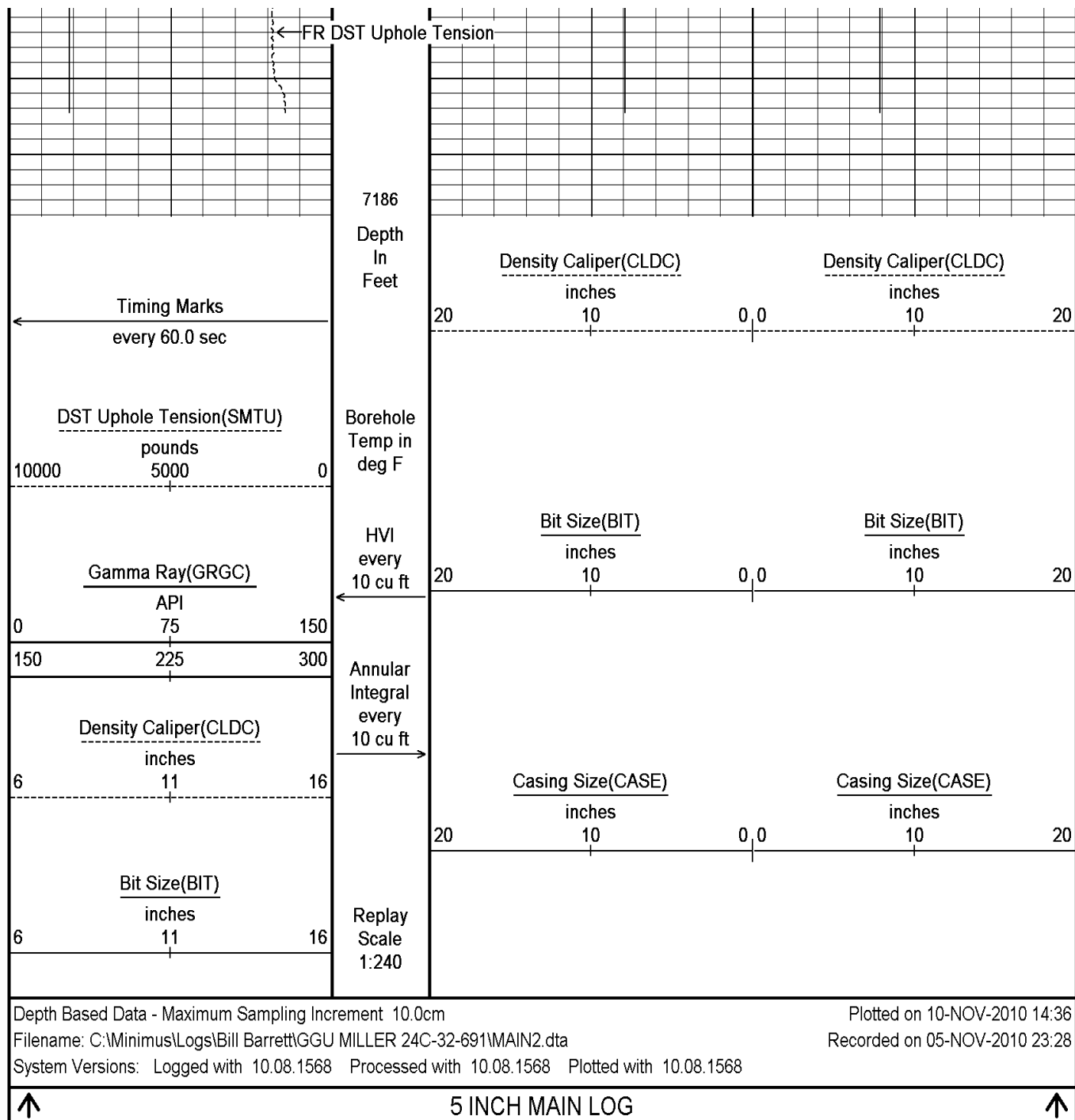
Density Caliper →











## DOWNHOLE EQUIPMENT

C:\Minimus\Logs\Bill Barrett\GGU MILLER 24C-32-691\MAIN2.dta

SHA-J.A Compact Swivel Head Adaptor  
SHA 286 Length: 2.30 ft Weight: 22.0 lb

Compact Gamma  
MCG 342 Length: 8.70 ft Weight: 63.9 lb

Compact Neutron  
MDN 250 Length: 5.04 ft Weight: 50.7 lb

Compact Density/Caliper  
MPD 253 Length: 9.59 ft Weight: 90.4 lb

SKJ-E.A Compact Knuckle Joint  
SKJ 143 Length: 2.17 ft Weight: 24.3 lb



Compact Focussed Electric  
MFE 136 Length: 6.03 ft Weight: 48.5 lb

Compact Induction  
MAI 191 Length: 10.81 ft Weight: 48.5 lb

Total Length: 44.64 ft Weight: 348.3 lb



Tool Zero (0.13ft from bottom)  
All measurements relative to tool zero.

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WELL	GGU MILLER 24C-32-691
FIELD	MAMM CREEK
PROVINCE/COUNTY	GARFIELD
COUNTRY/STATE	U.S.A. / COLORADO

Elevation Kelly Bushing	6142.00	feet	First Reading	7142.00
Elevation Drill Floor		feet	Depth Driller	7162.00 feet
Elevation Ground Level	6120.00	feet	Depth Logger	7164.00 feet



**Weatherford®**

HOLE VOLUME  
CALIPER  
LOG