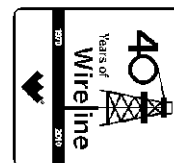




Weatherford

HOLE VOLUME CALIPER LOG

COMPANY **BILL BARRETT CORPORATION**
WELL **CB TG LAND 11D-20-692**
FIELD **MAMM CREEK**
PROVINCE/COUNTY **GARFIELD**
COUNTRY/STATE **U.S.A. / COLORADO**
LOCATION **SHL: 628' FNL & 2581' FEL**
BHL: 105' FNL & 660' FWL



SEC	TWP	RGE	Other Services
20	6S	92W	MPD/MDN MAI/MFE
API Number 05-045-19757			
Permit Number			
Permanent Datum G.L., Elevation 5530 feet			
Log Measured From KB			
Drilling Measured From K.B. @ 23 FT.			
Date	27-JUNE-2011		
Run Number	ONE		
Depth Driller	8193.00	feet	
Depth Logger	8188.00	feet	
First Reading	8165.00		
Last Reading	857.00		
Casing Driller	861.00	feet	
Casing Logger	857.00	feet	
Bit Size	7.875	inches	
Hole Fluid Type	LSND		
Density / Viscosity	10.70 lb/USg	55.00 CP	
PH / Fluid Loss	9.30	8.00 ml/30Min	
Sample Source	FLOW LINE		
Rm @ Measured Temp	2.20 @ 97.0	ohm-m	
Rmf @ Measured Temp	1.76 @ 97.0	ohm-m	
Rmc @ Measured Temp	2.64 @ 97.0	ohm-m	
Source Rmf / Rmc	CALC	CALC	
Rm @ BHT	1.096 @ 198.0	ohm-m	
Time Since Circulation	5 HOURS		
Max Recorded Temp	198.00	deg F	
Equipment Name	COMPACT		
Equipment / Base	13173	GD JCT	
Recorded By	D. KUNTZ		
Witnessed By	J. BOYD		

Elevations:
KB 5553.00
DF 5552.00
GL 5530.00

BOREHOLE RECORD

Last Edited: 27-JUN-2011 17:03

Bit Size inches	Depth From feet	Depth To feet
8.750	857.00	5455.00
7.880	5455.00	8193.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	9.625	0.00	857.00	36.00

REMARKS

LOGGING SOFTWARE USED: 11.03.3657

TOOLS: SHA,MCG, MDN, MPD, SKJ, MFE AND MAI RAN IN COMBINATION.

HARDWARE: MPD: 8 INCH PROFILE PLATE USED.
TWO 0.5 INCH STANDOFFS USED ON INDUCTION.
ONE 0.5 INCH STANDOFF USED ON MFE.
DUAL BOWSPRING USED ON NEUTRON.

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.

MULTIPLE REPEAT SECTIONS CONDUCTED AND PRESENTED.

LOGS SPLICED AT FOLLOWING DEPTHS: 7910, 7590 FT.

SP READINGS MAY BE EFFECTED AT SPLICE DEPTHS.

UNDERGAUGE CALIPER READINGS WERE REPEATED AT FOLLOWING DEPTHS WITH NO CHANGE IN LOG RESPONSE: 7840-7860, 7660-7725, 7550-7570 FT.

CALIPER NOT REPEATED FROM 7050-7080 FT DUE TO TIGHT PULLS IN THE AREA,

CALIPER CHECK IN CASING PRESENTED, REFERENCE I.D. = 9.04" (9 5/8", 36 LB/FT CASING).

8.75 INCH BIT CHANGE AT 5455 FT.

TOTAL HOLE VOLUME FROM TD TO SURFACE CASING = 3065 CU.FT.

ANNULAR VOLUME WITH 4.5 INCH PRODUCTION CASING = 2255 CU.FT.

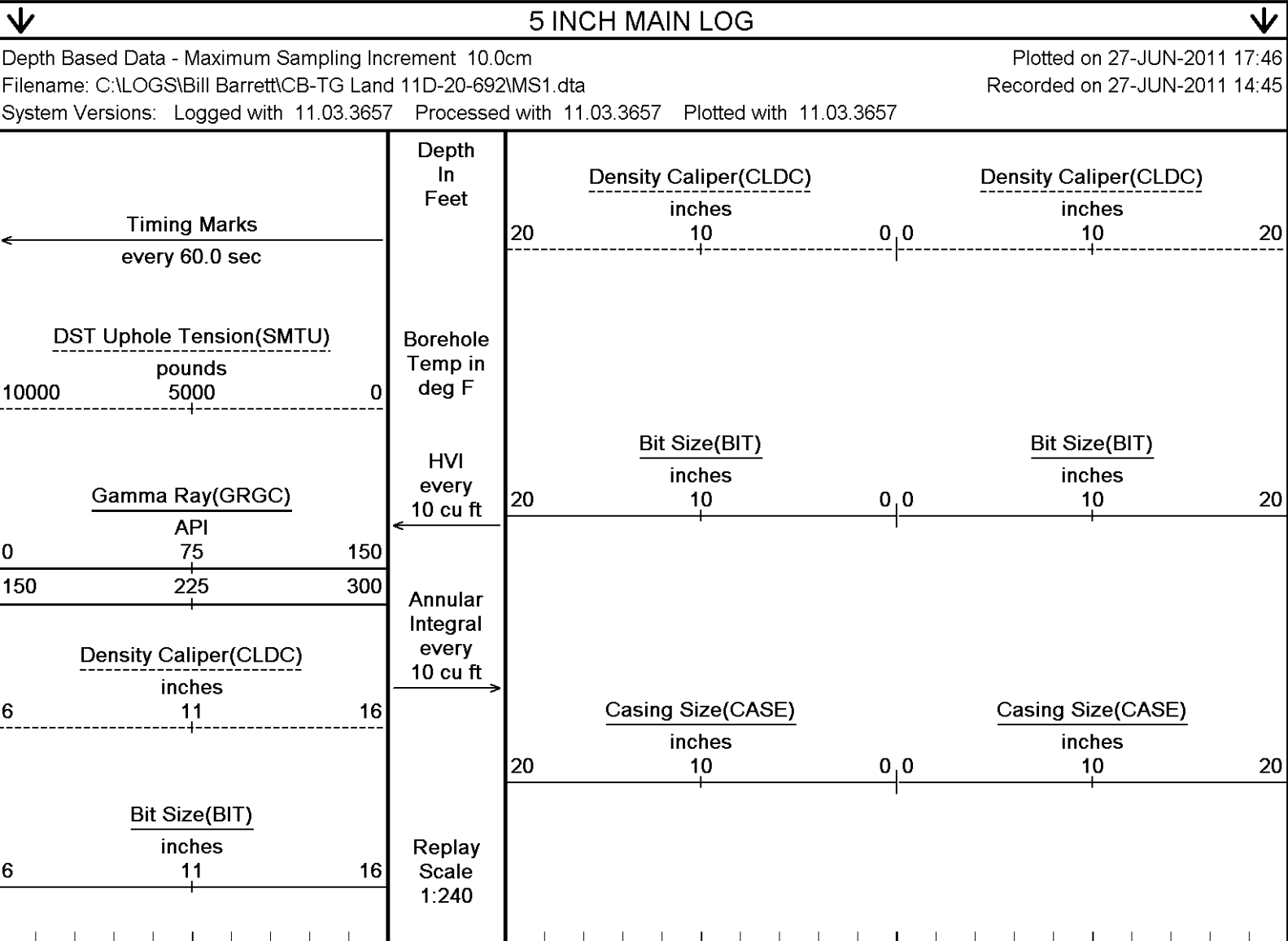
ENGINEER(S): D. KUNTZ

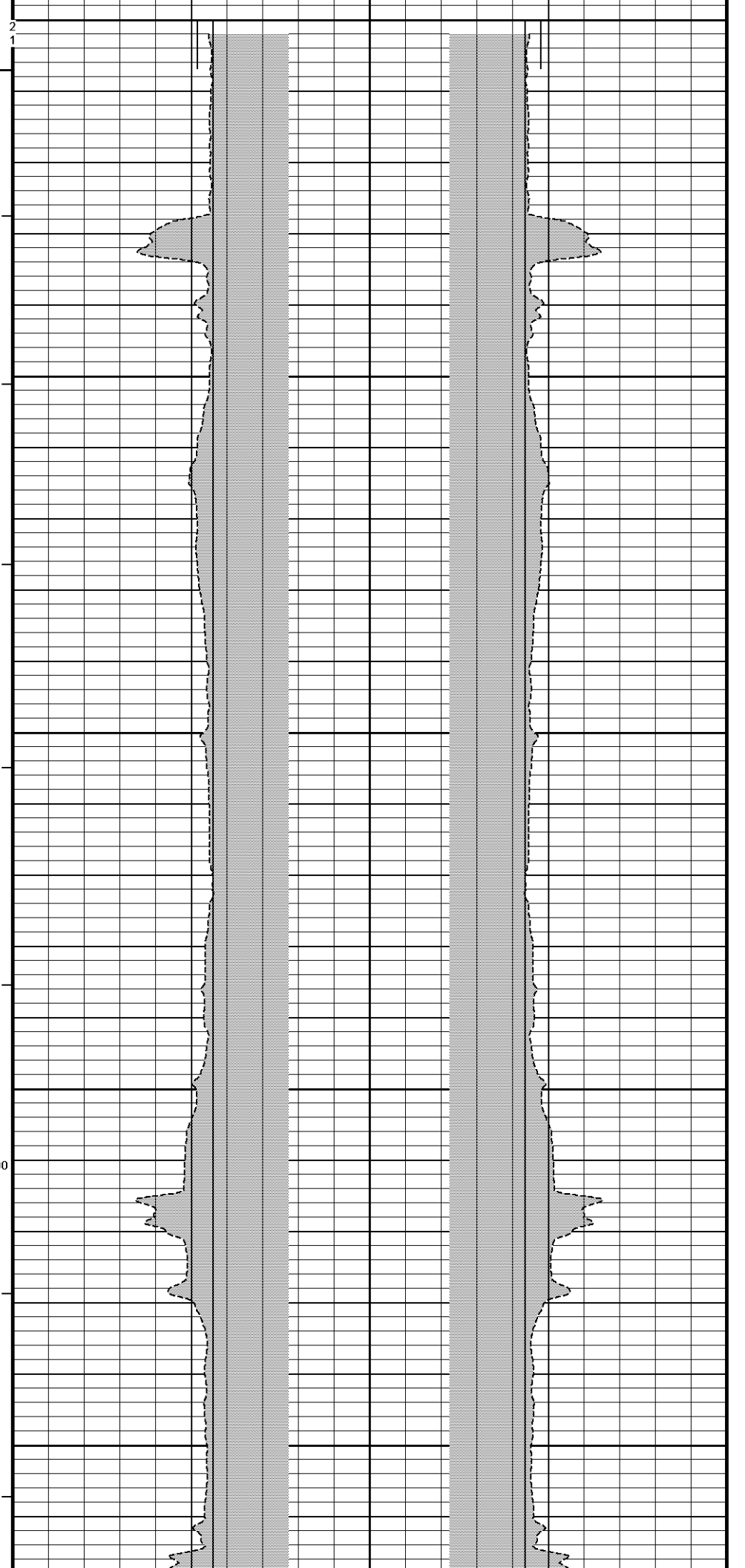
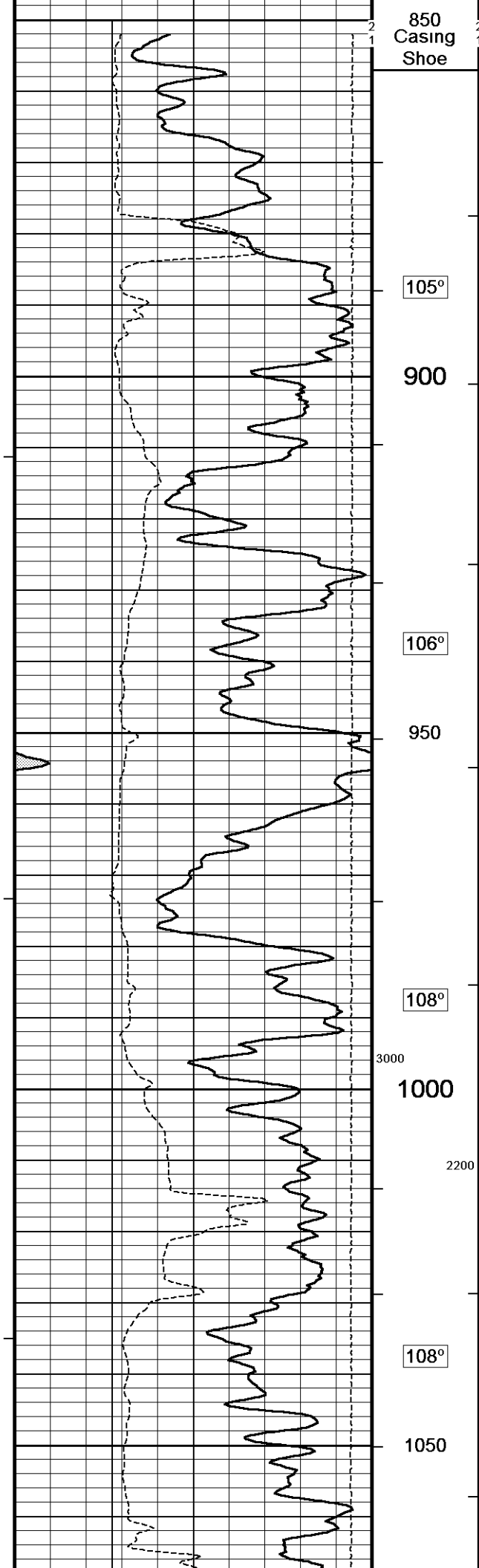
OPERATOR(S): R. SYERS, K. BOBLITT

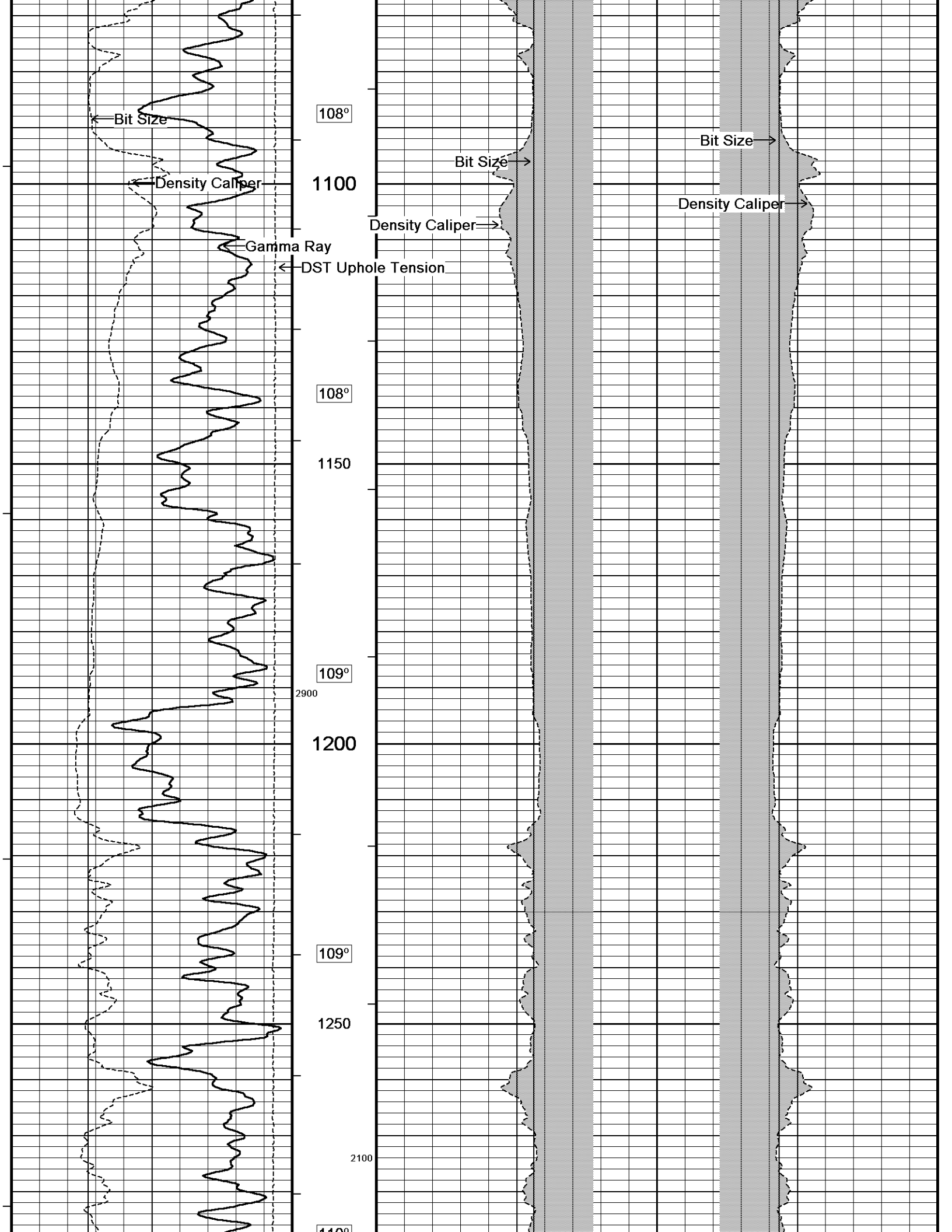
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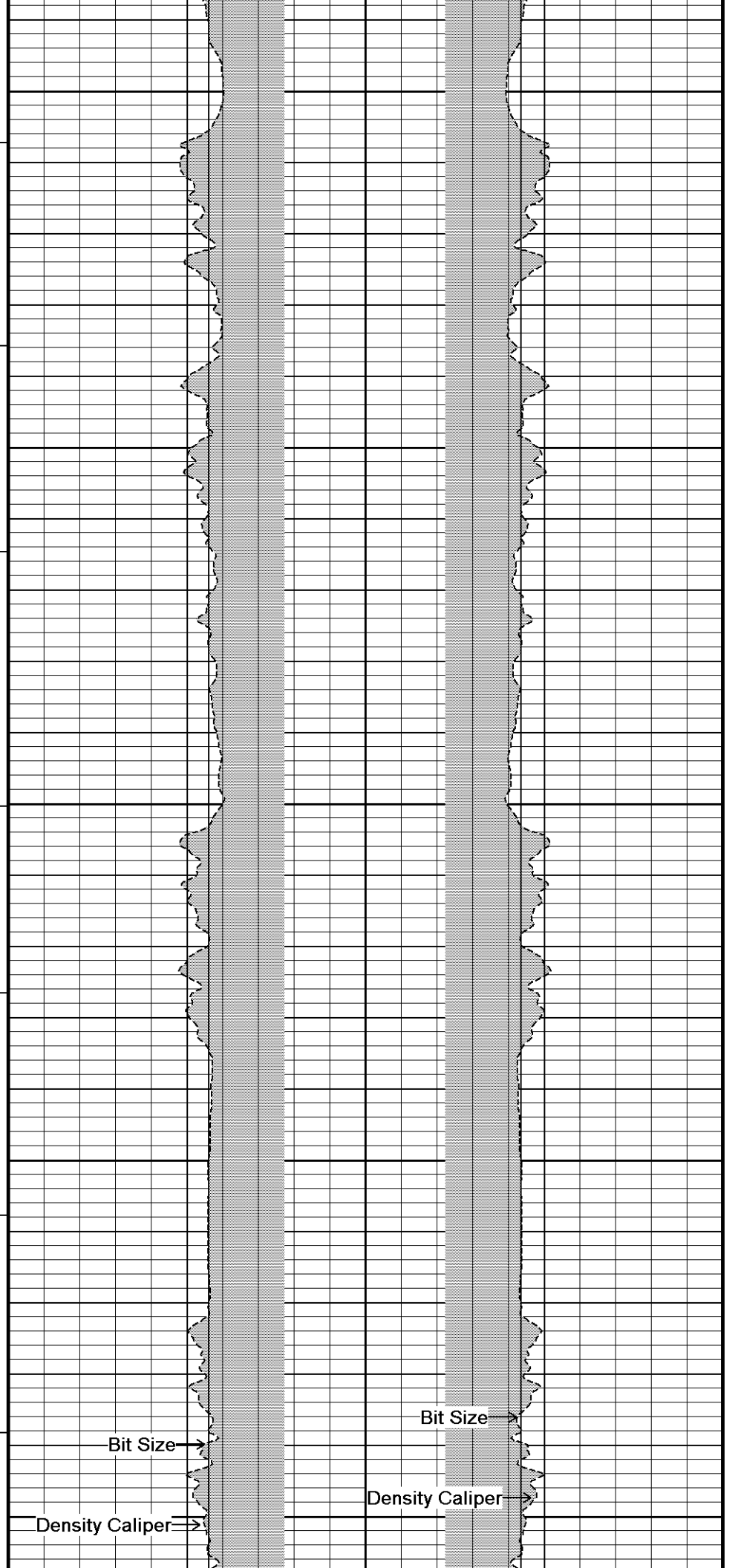
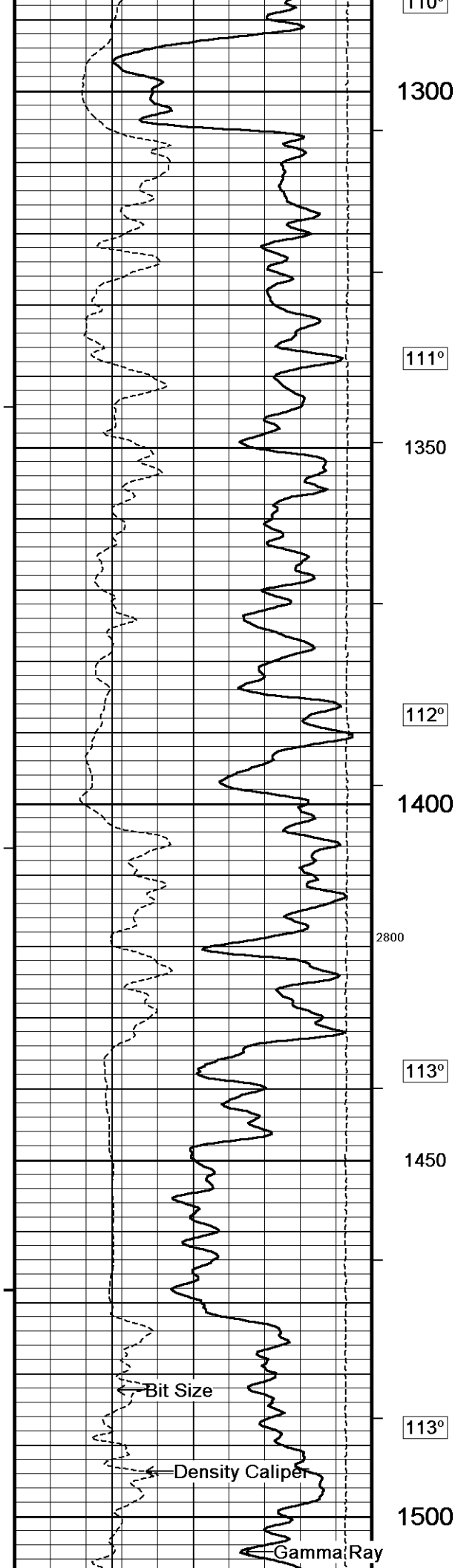
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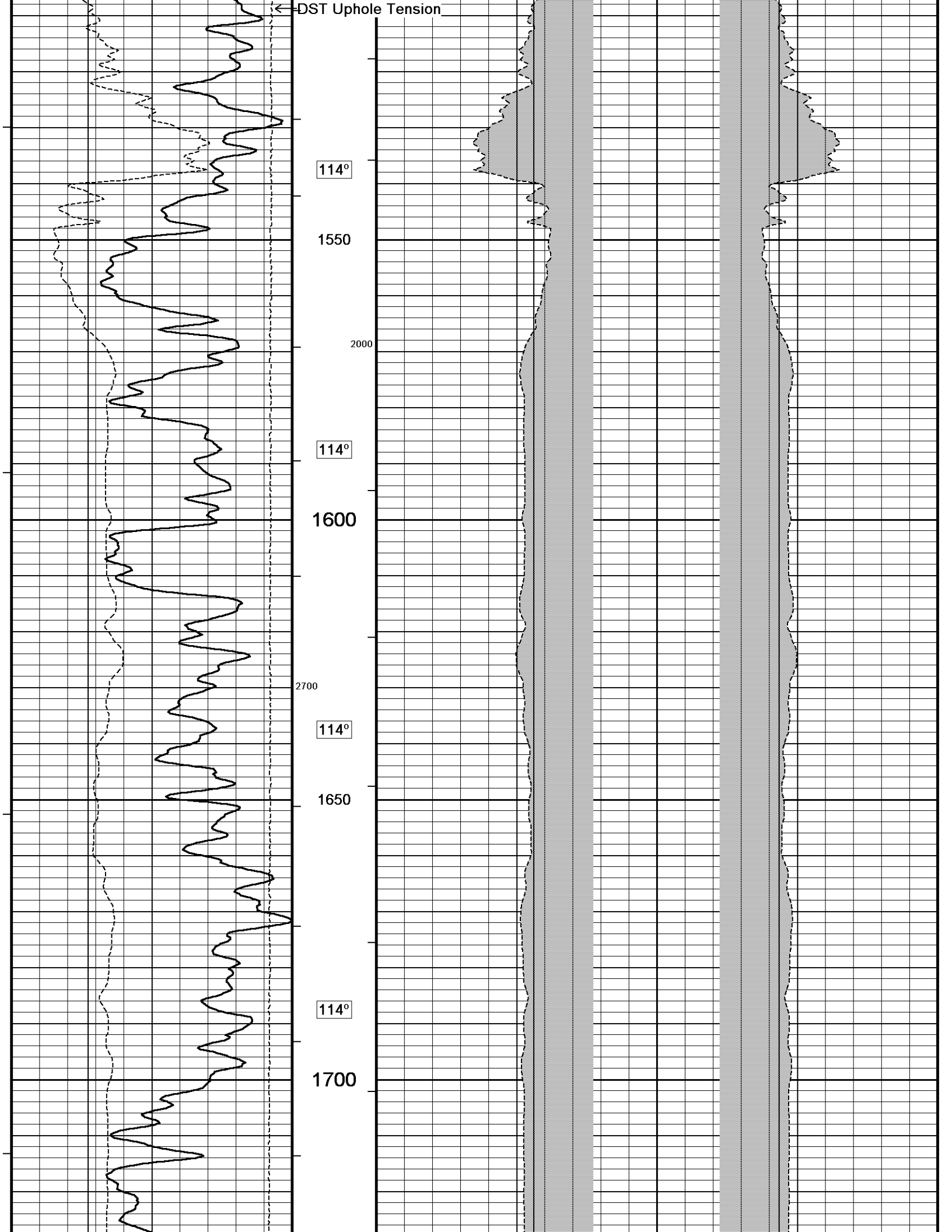
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

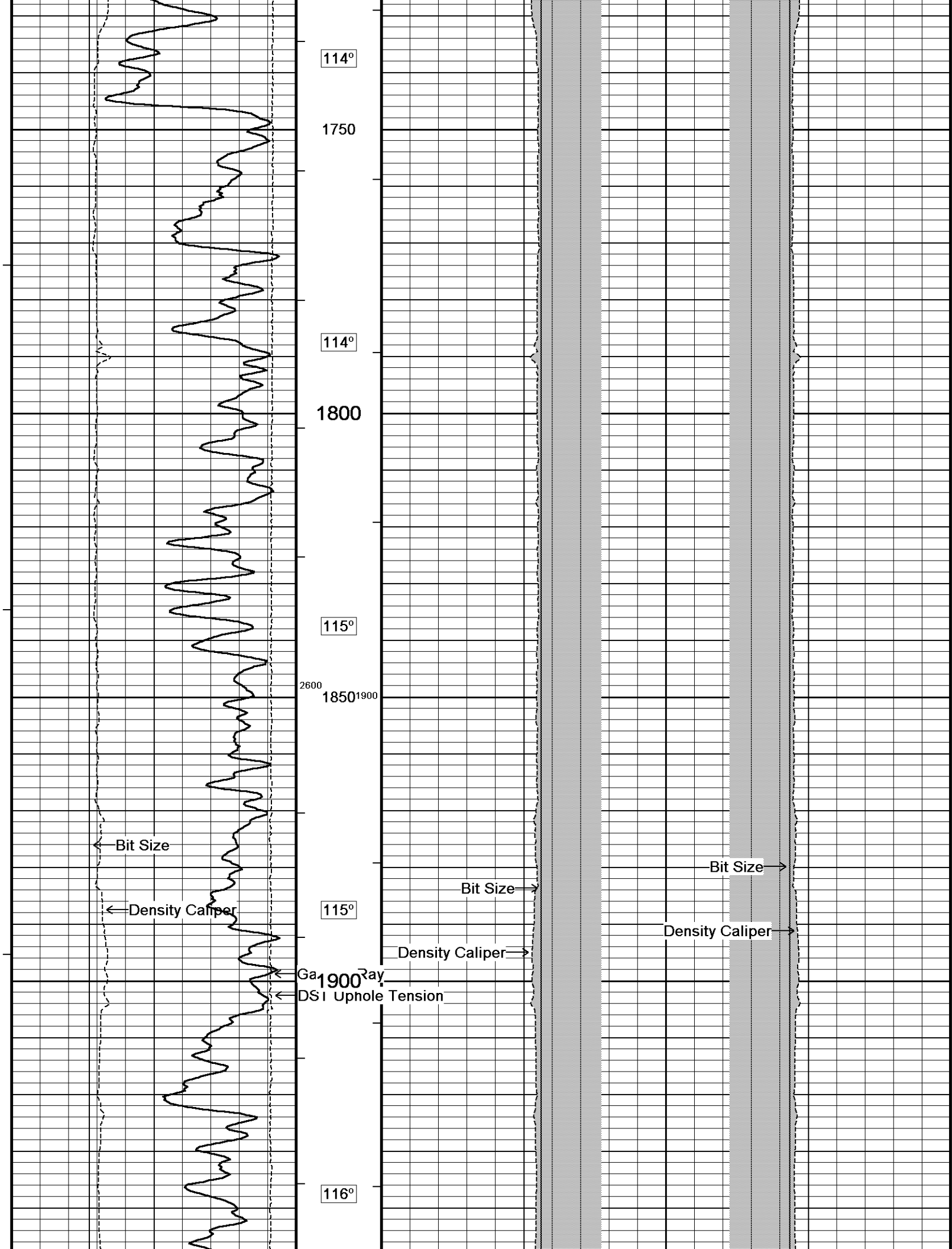


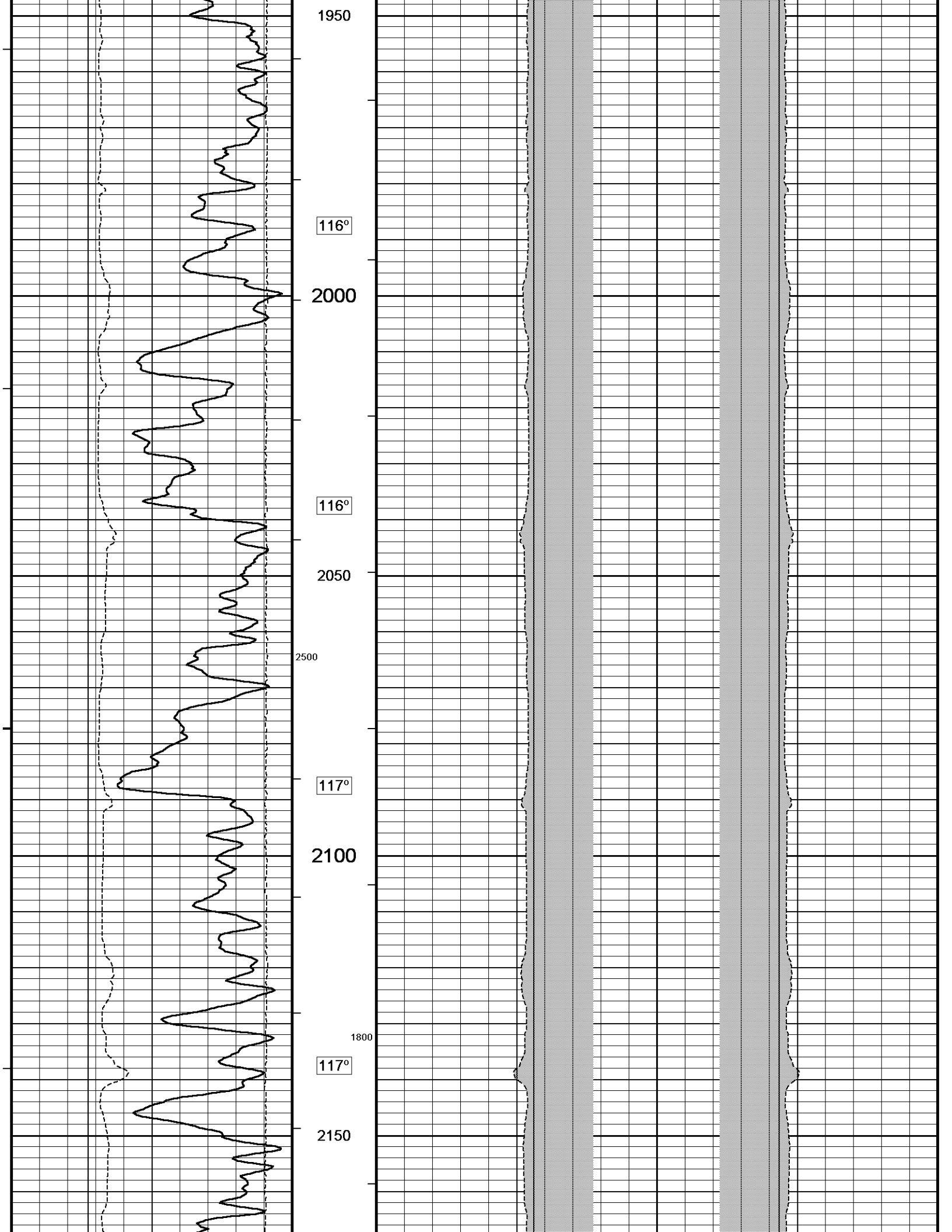


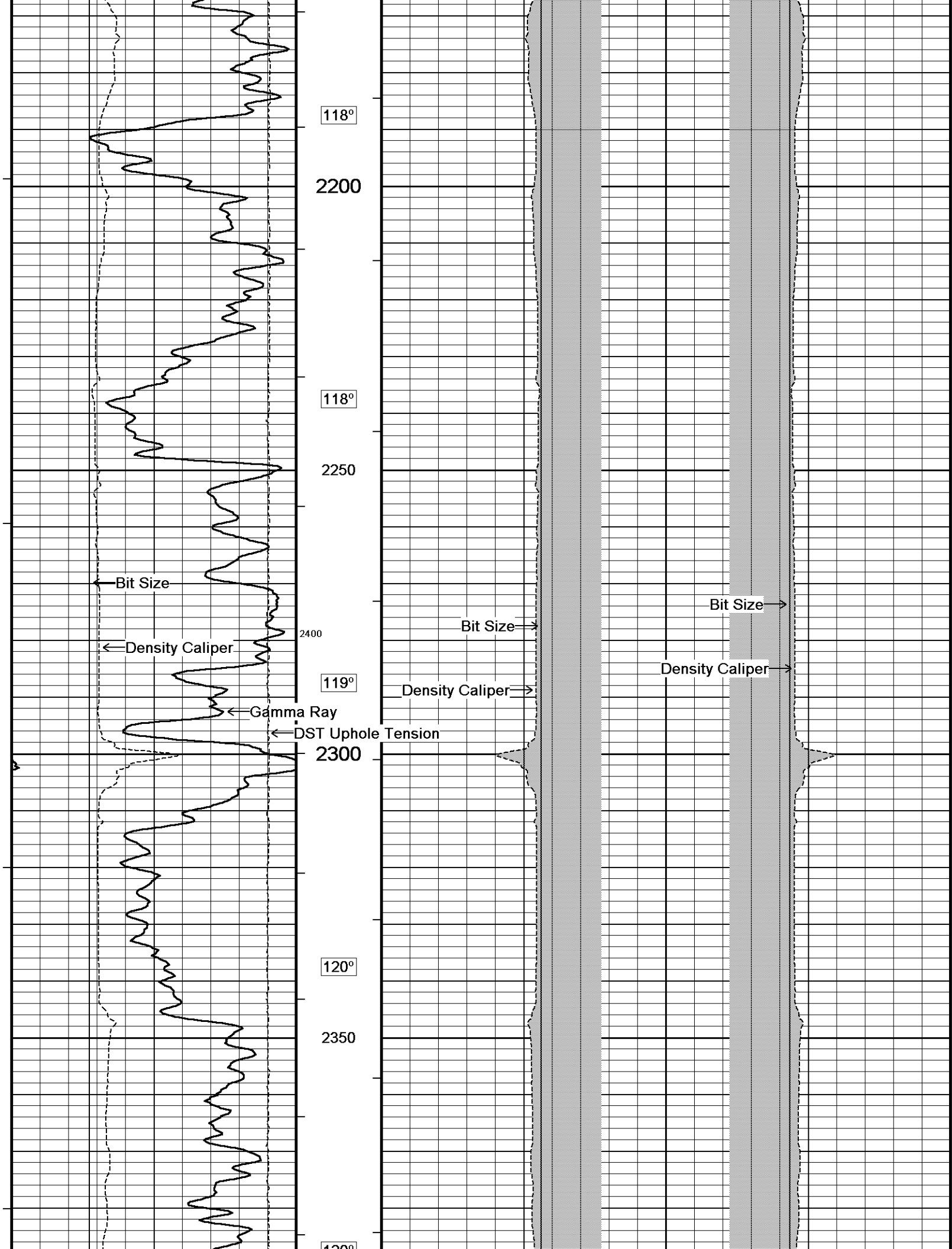


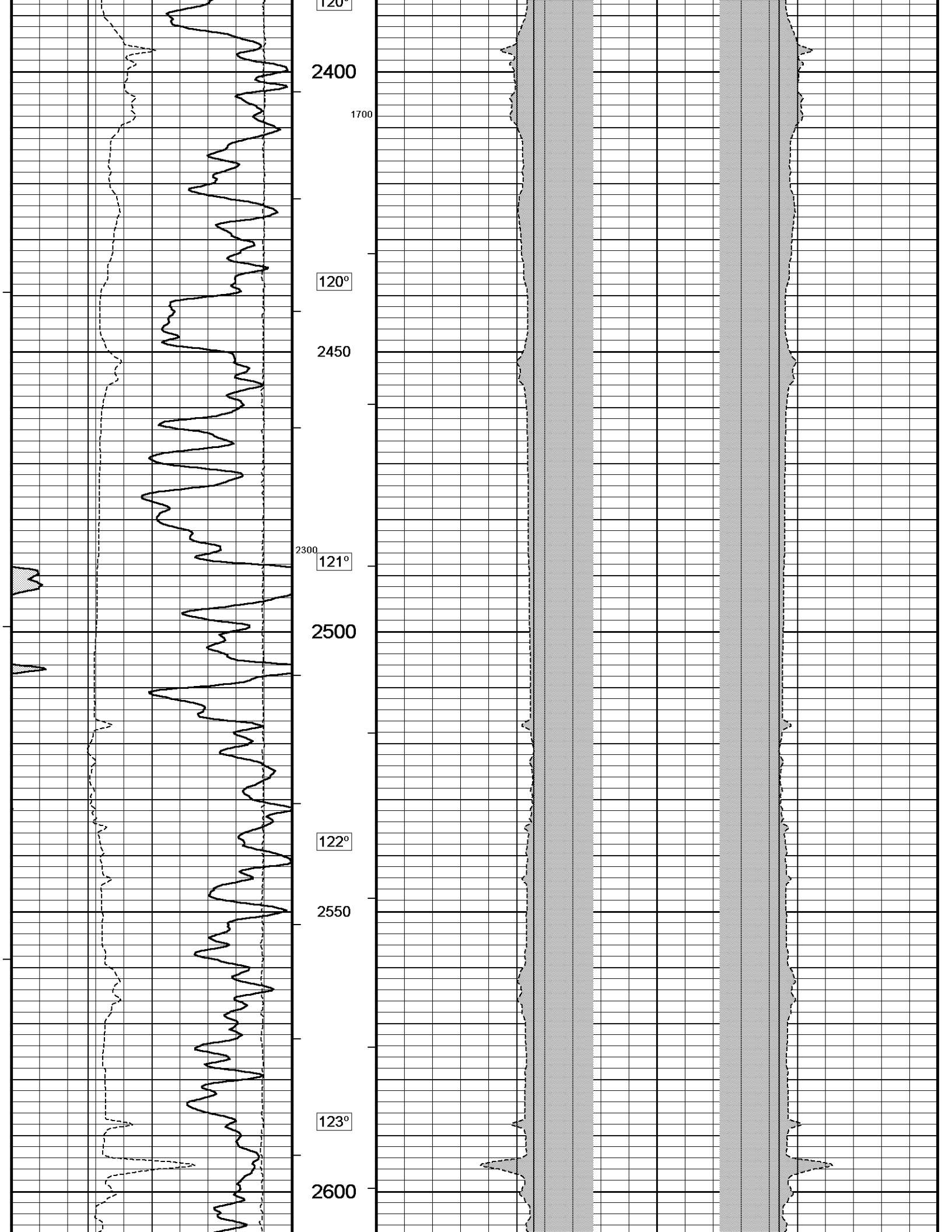


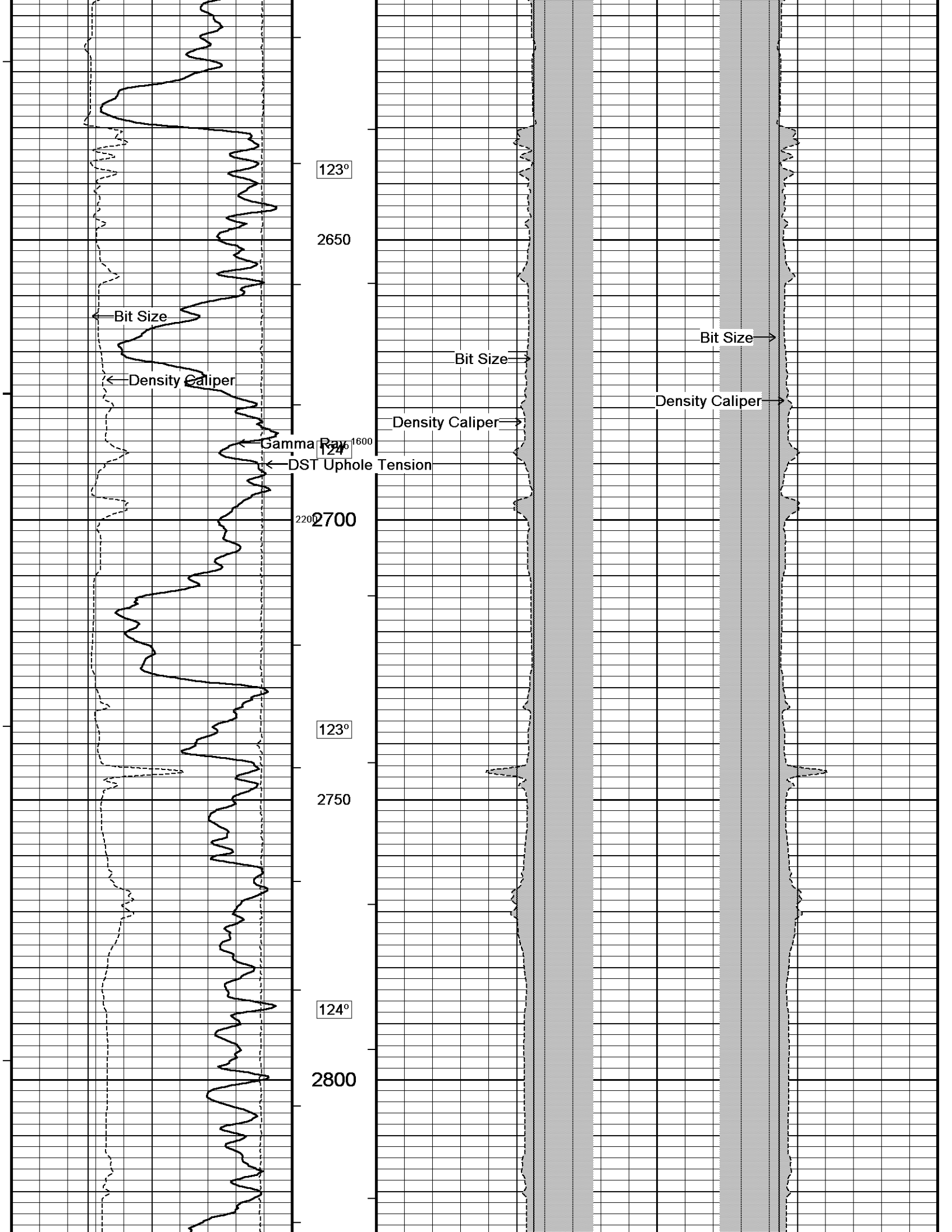


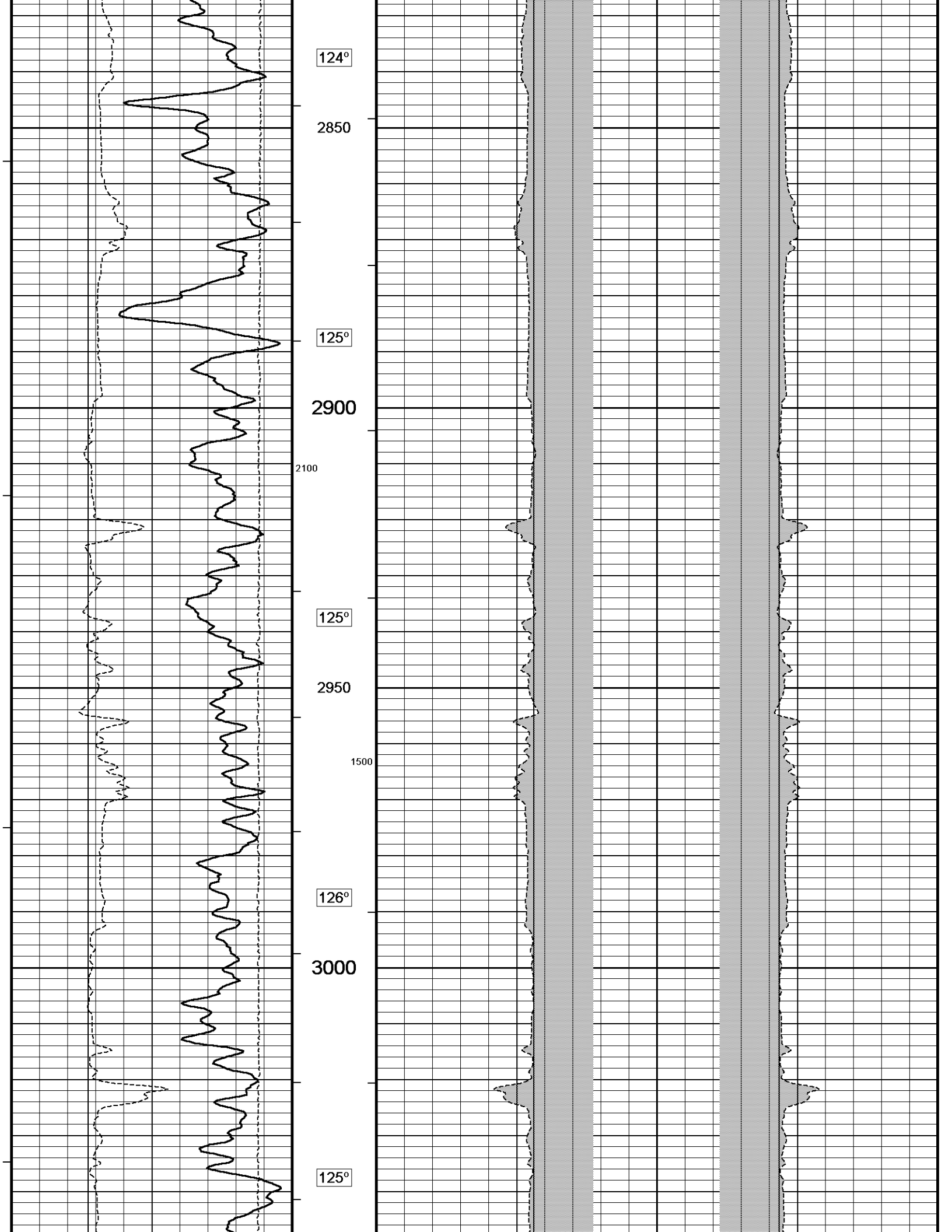


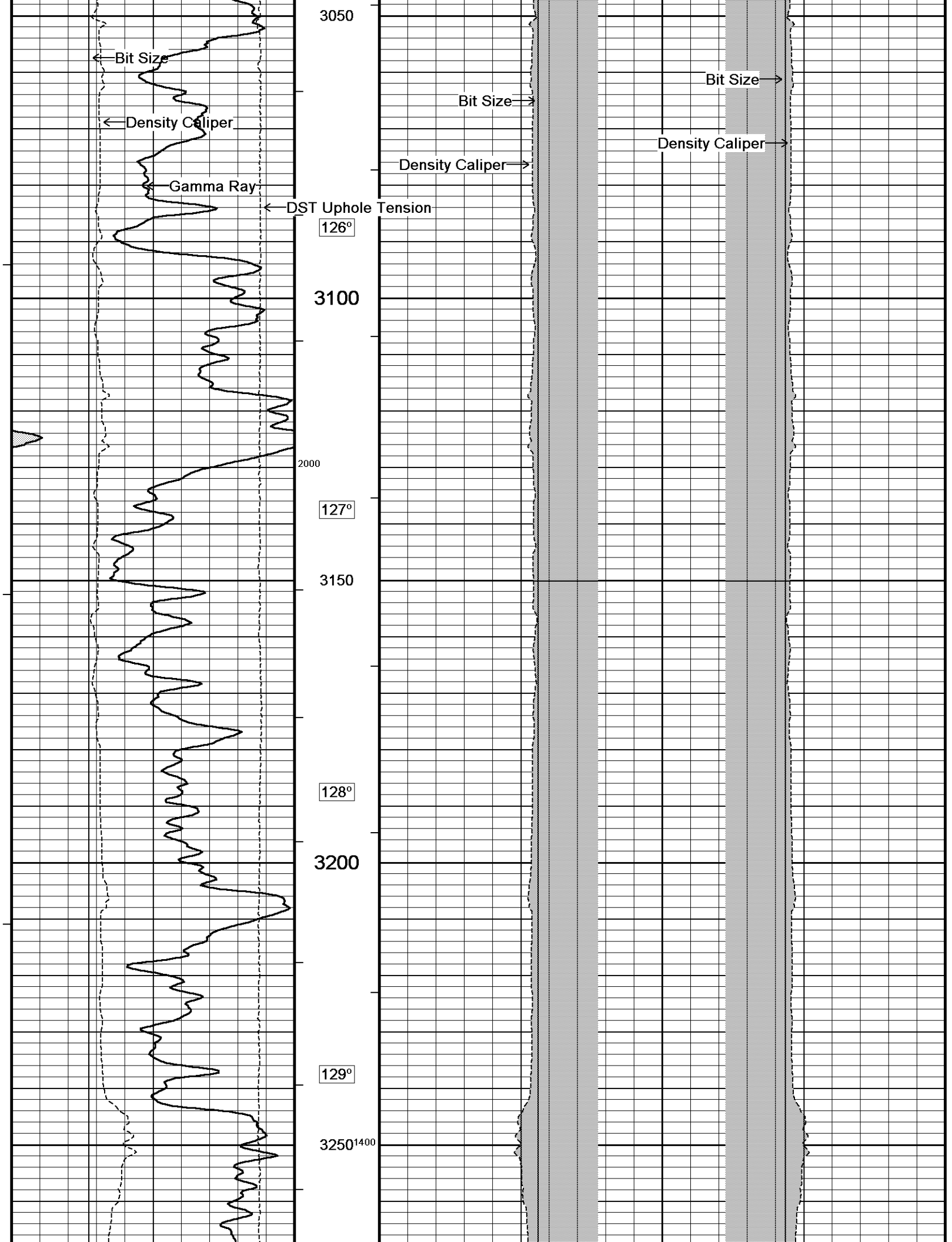


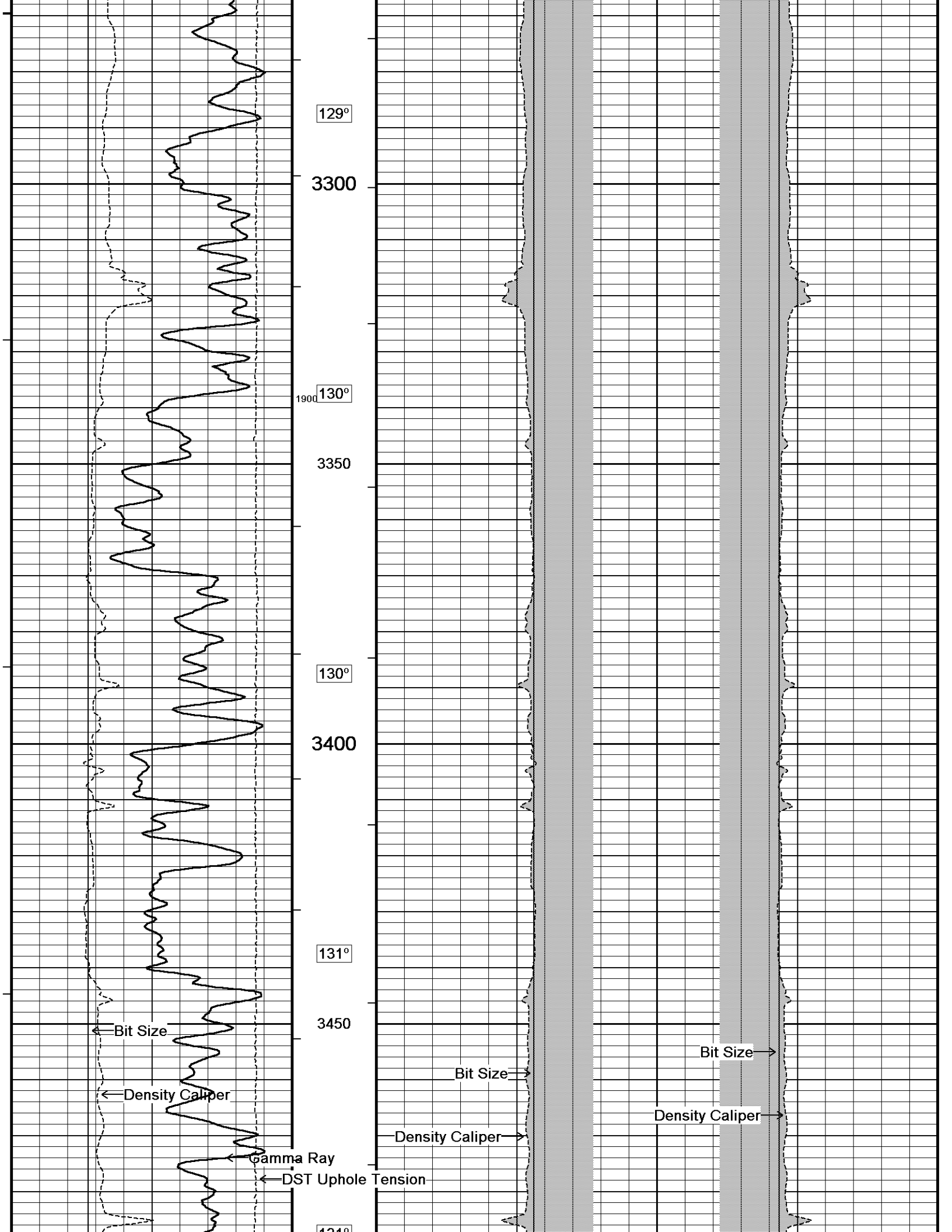


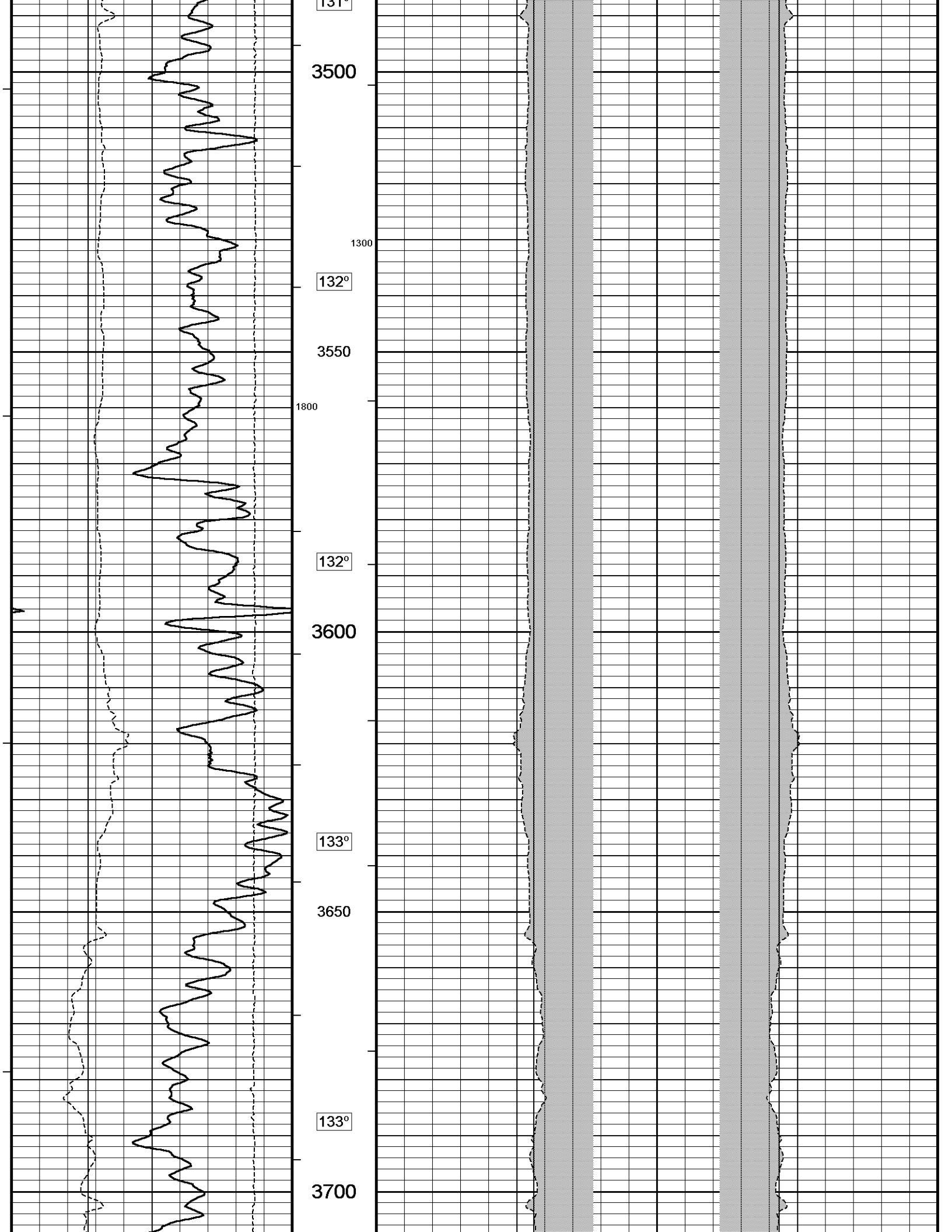


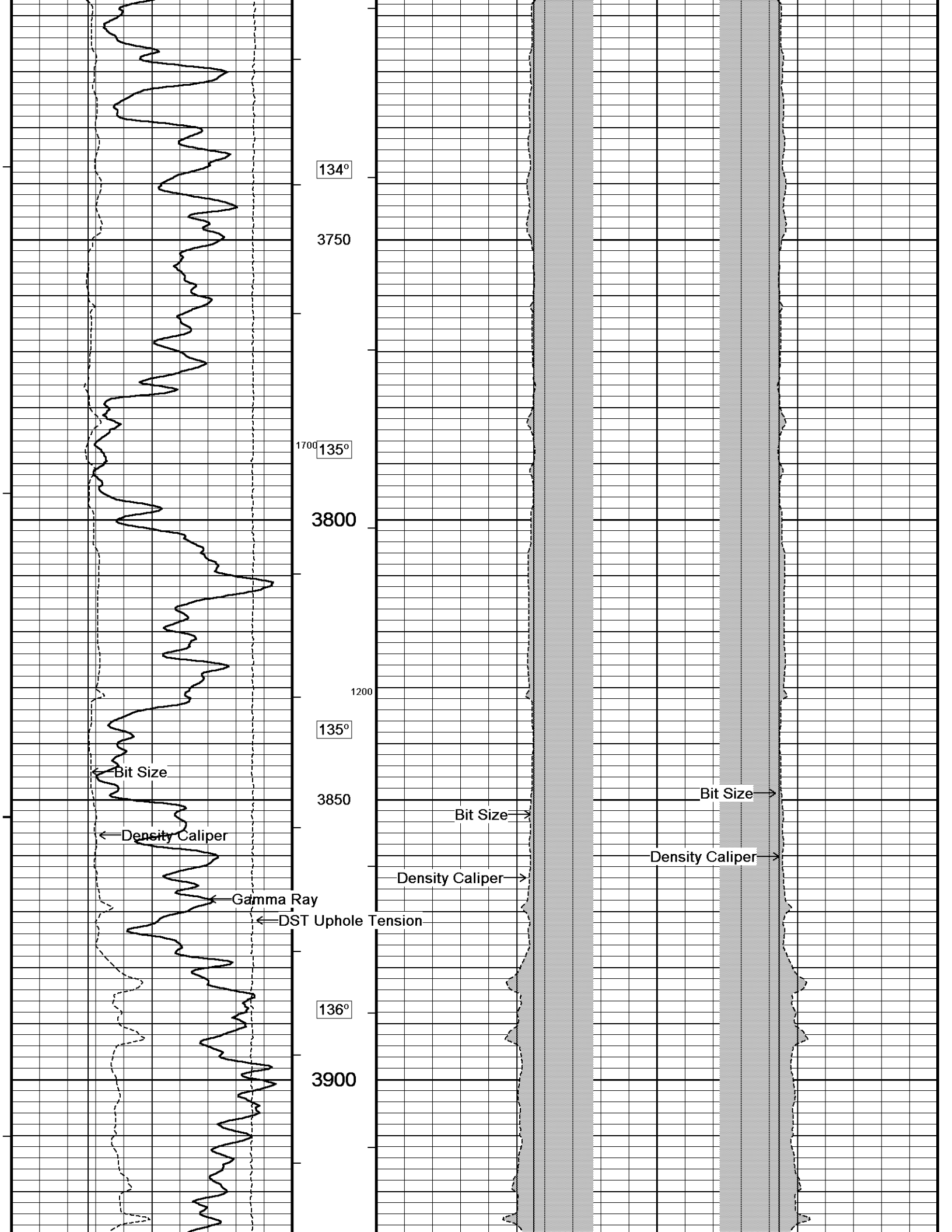


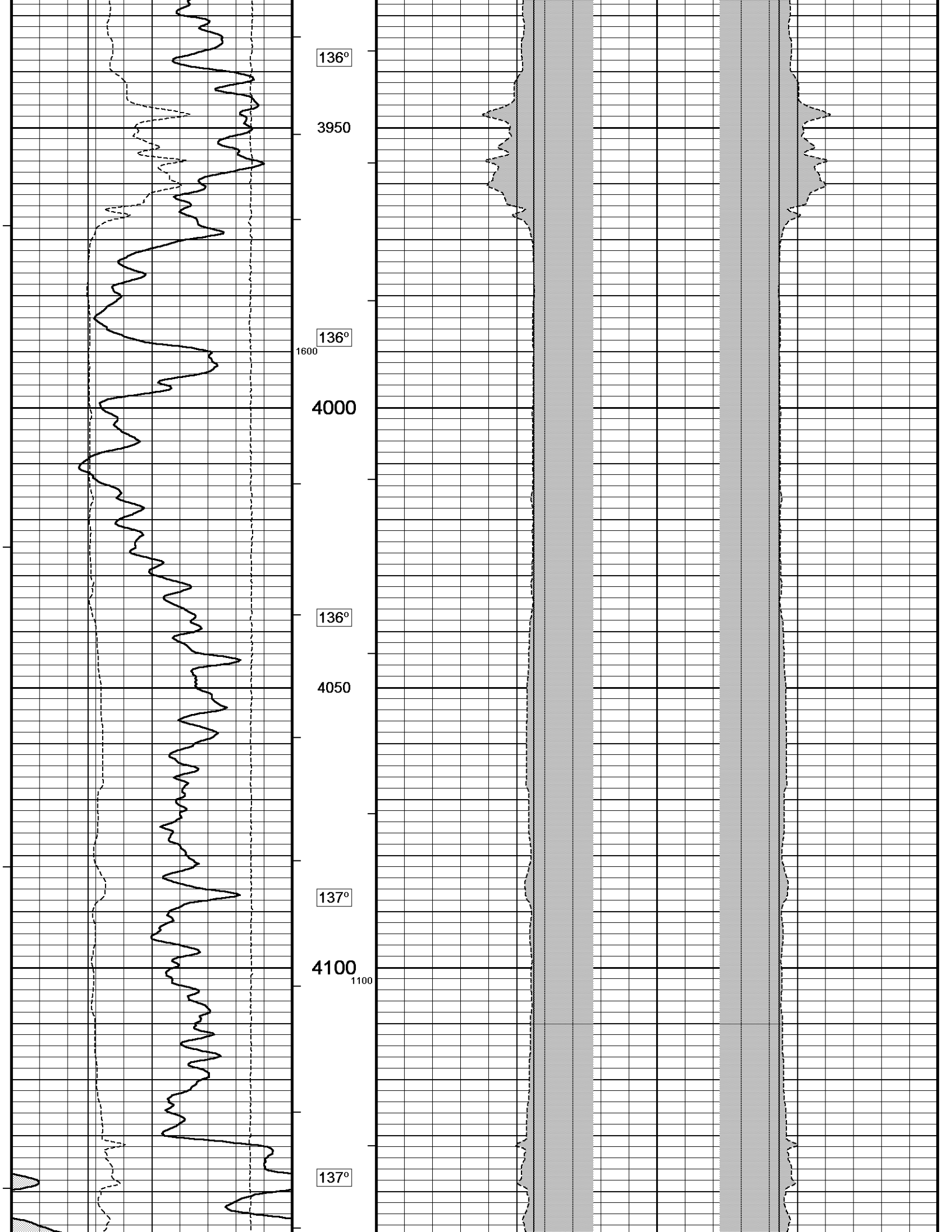


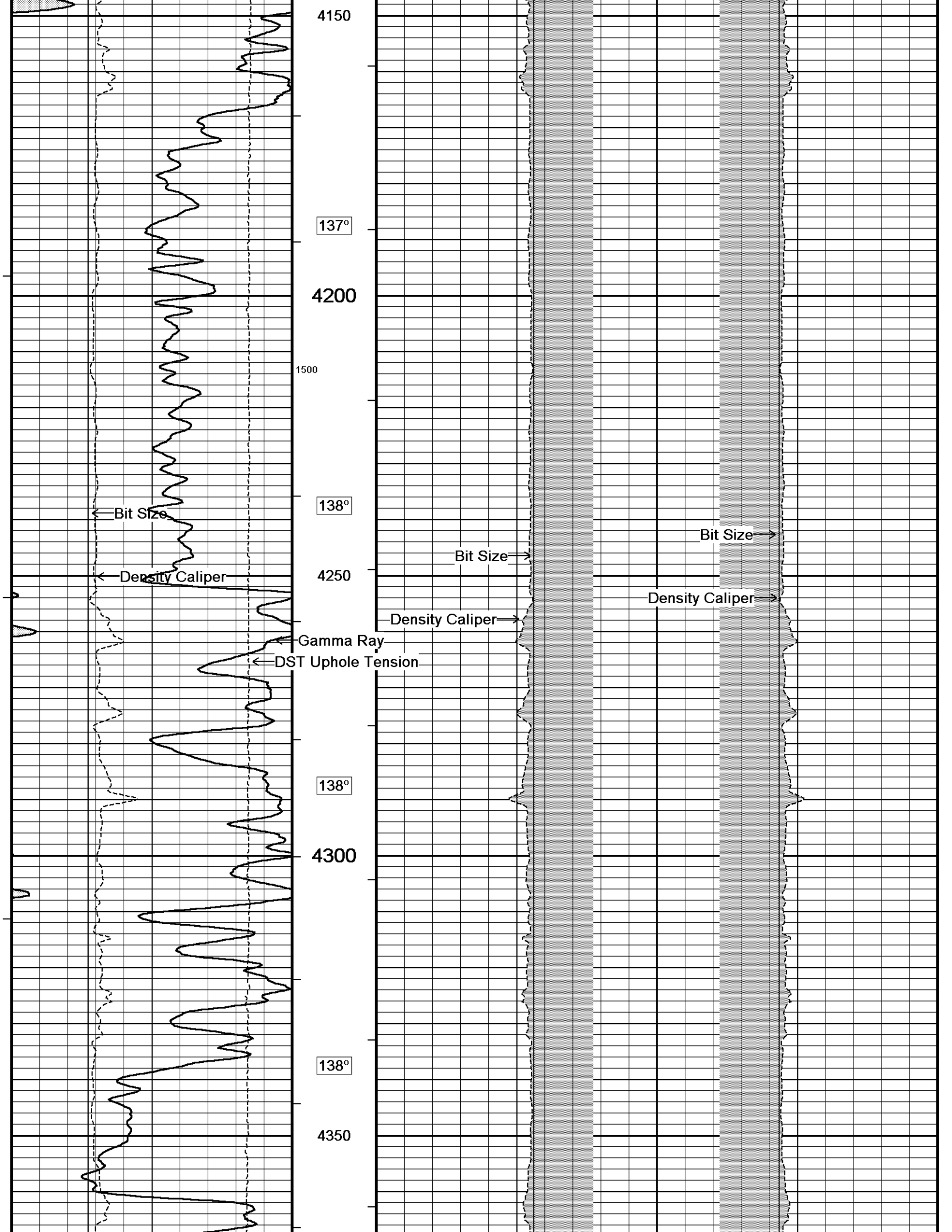


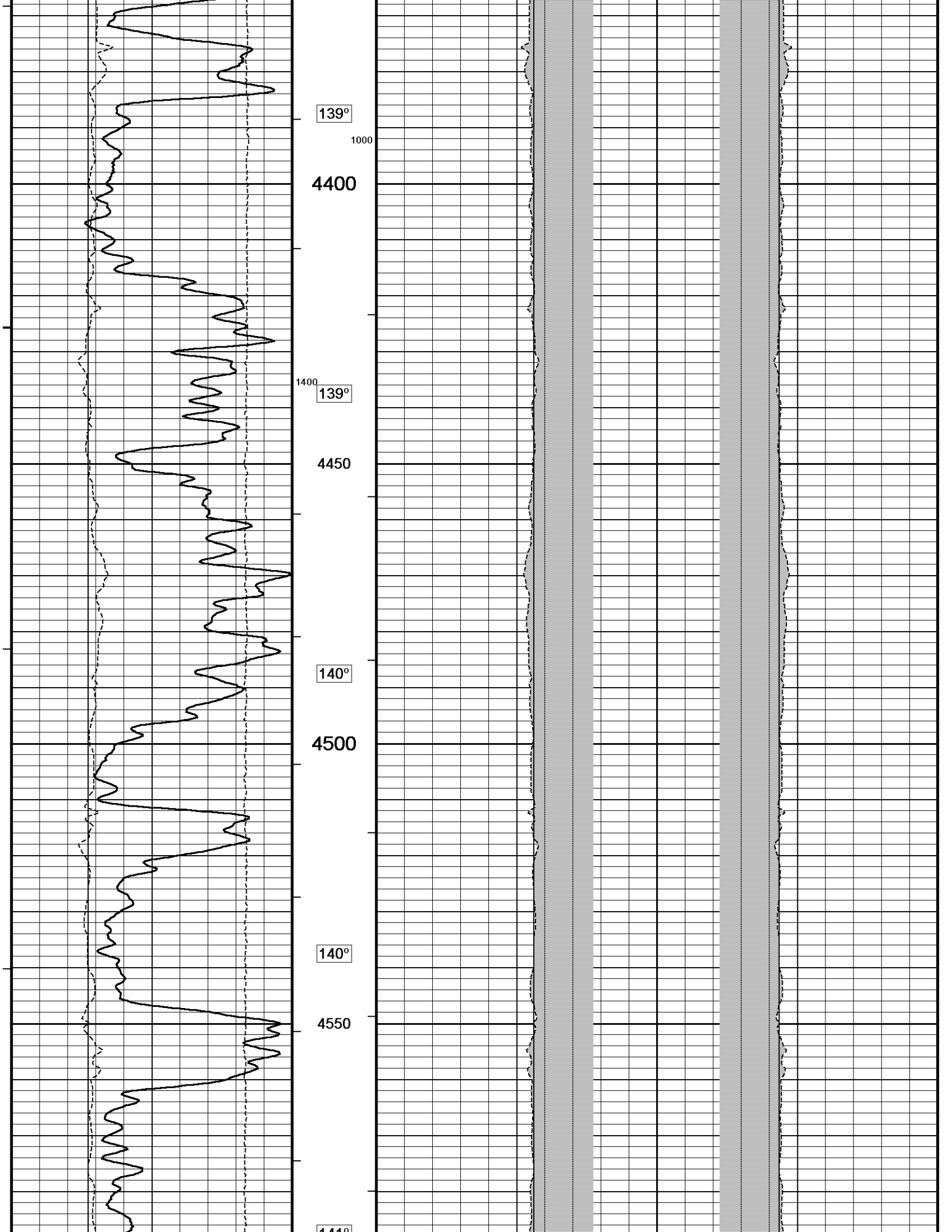


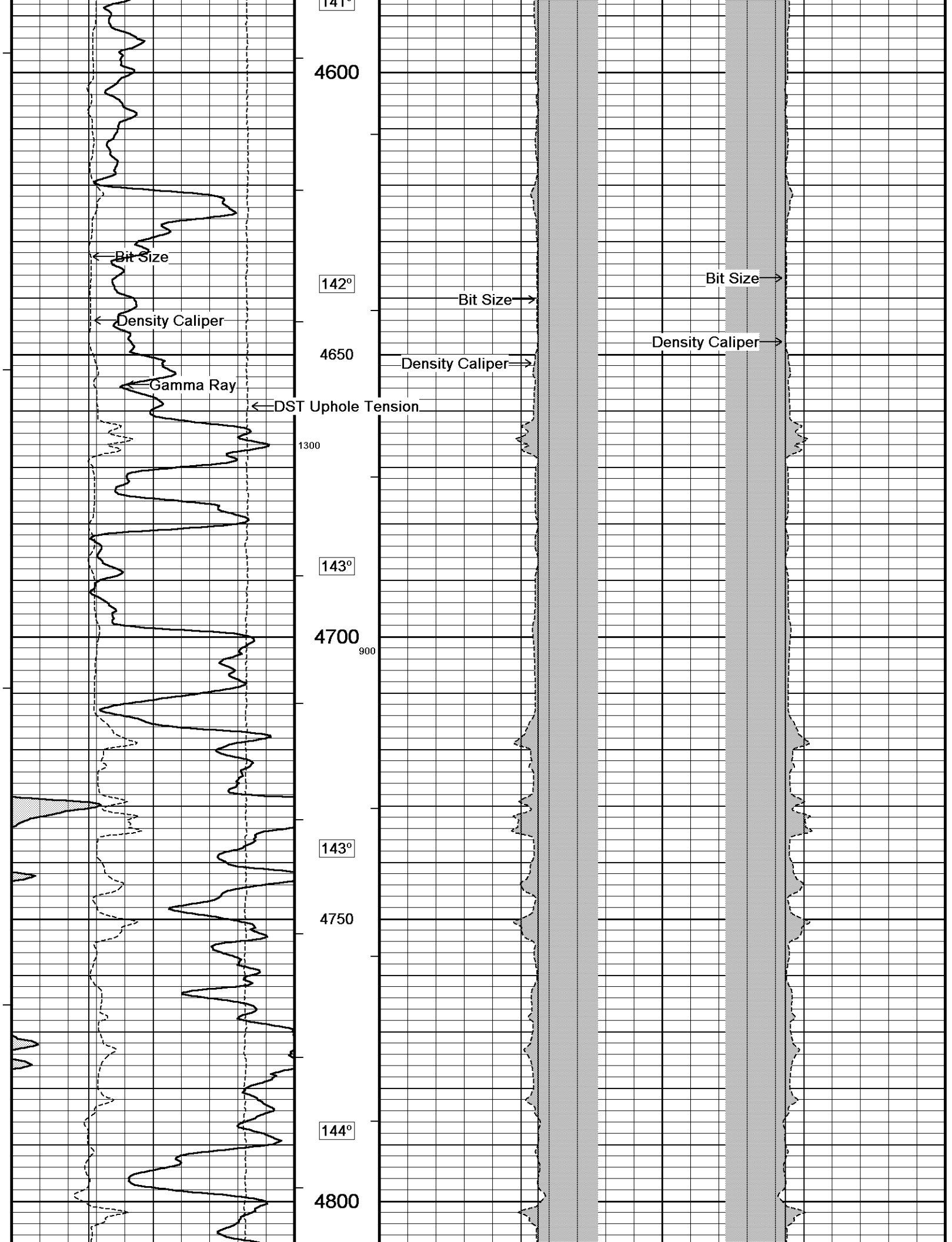


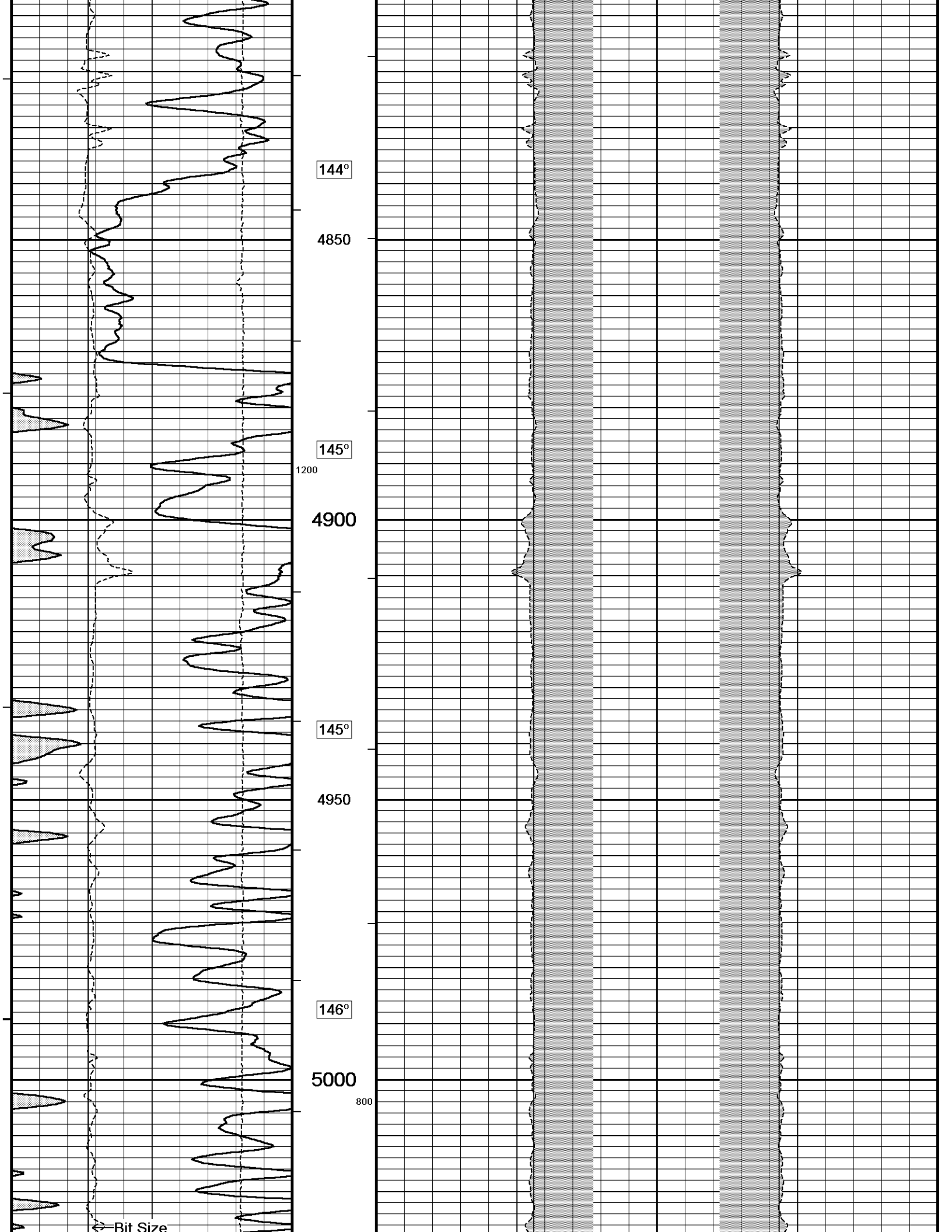


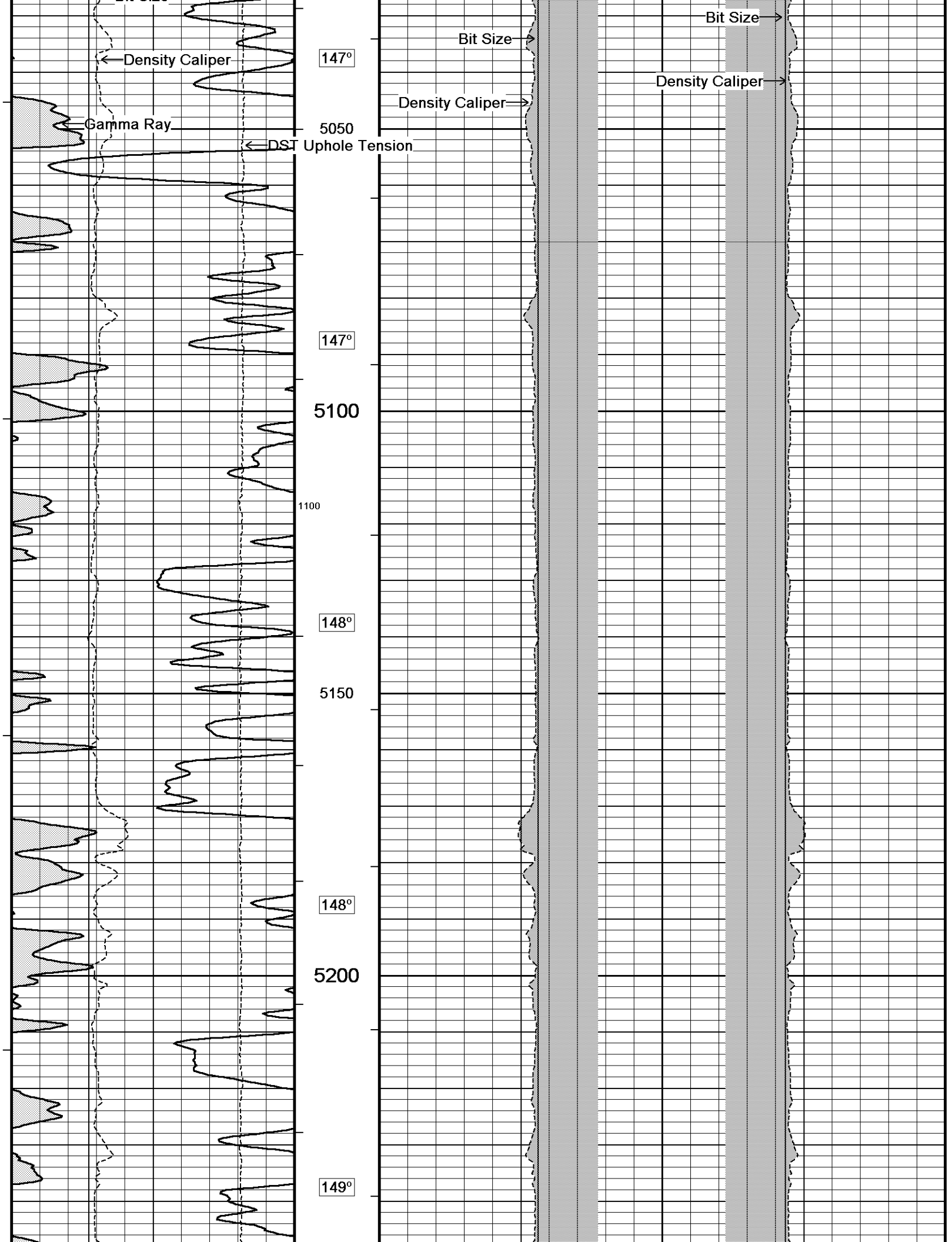


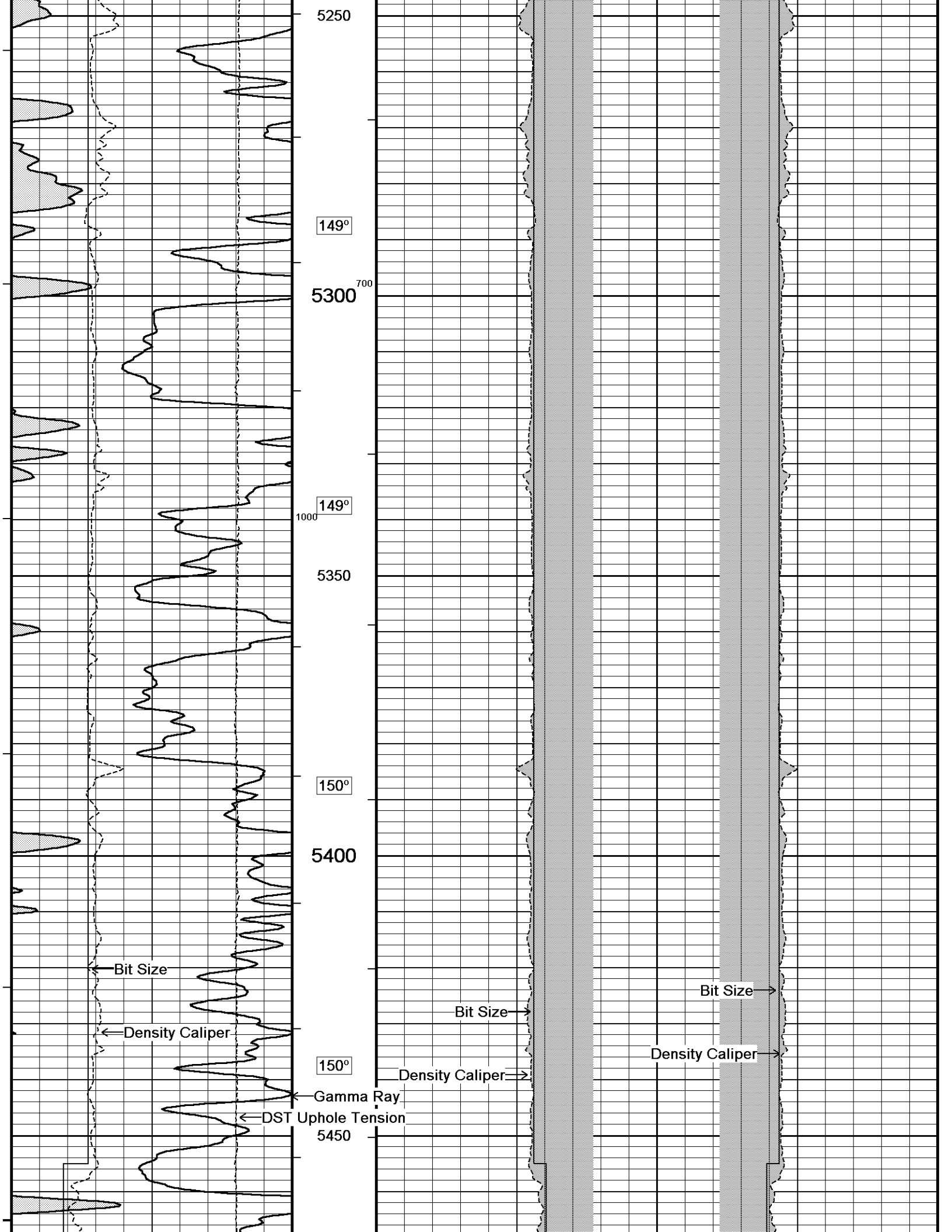


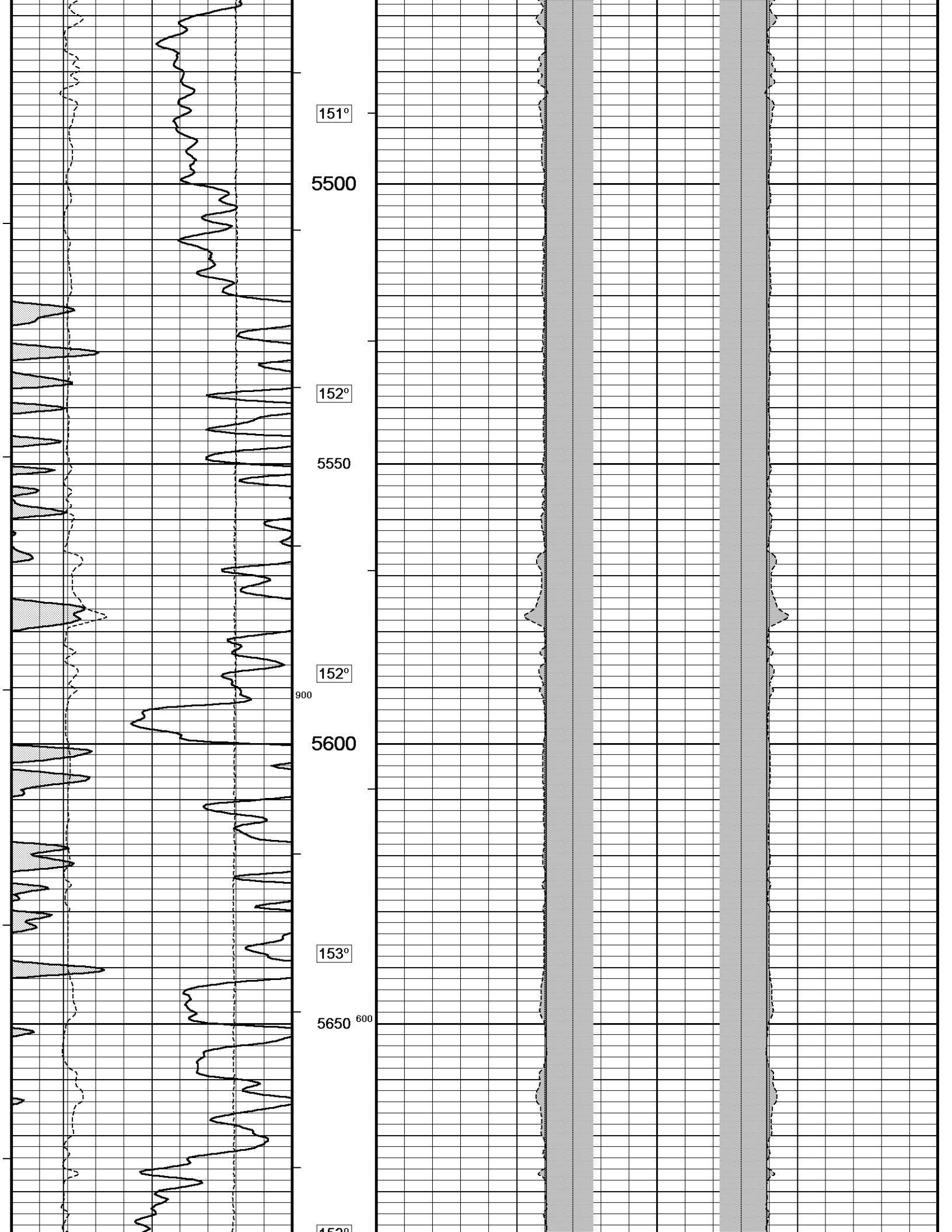


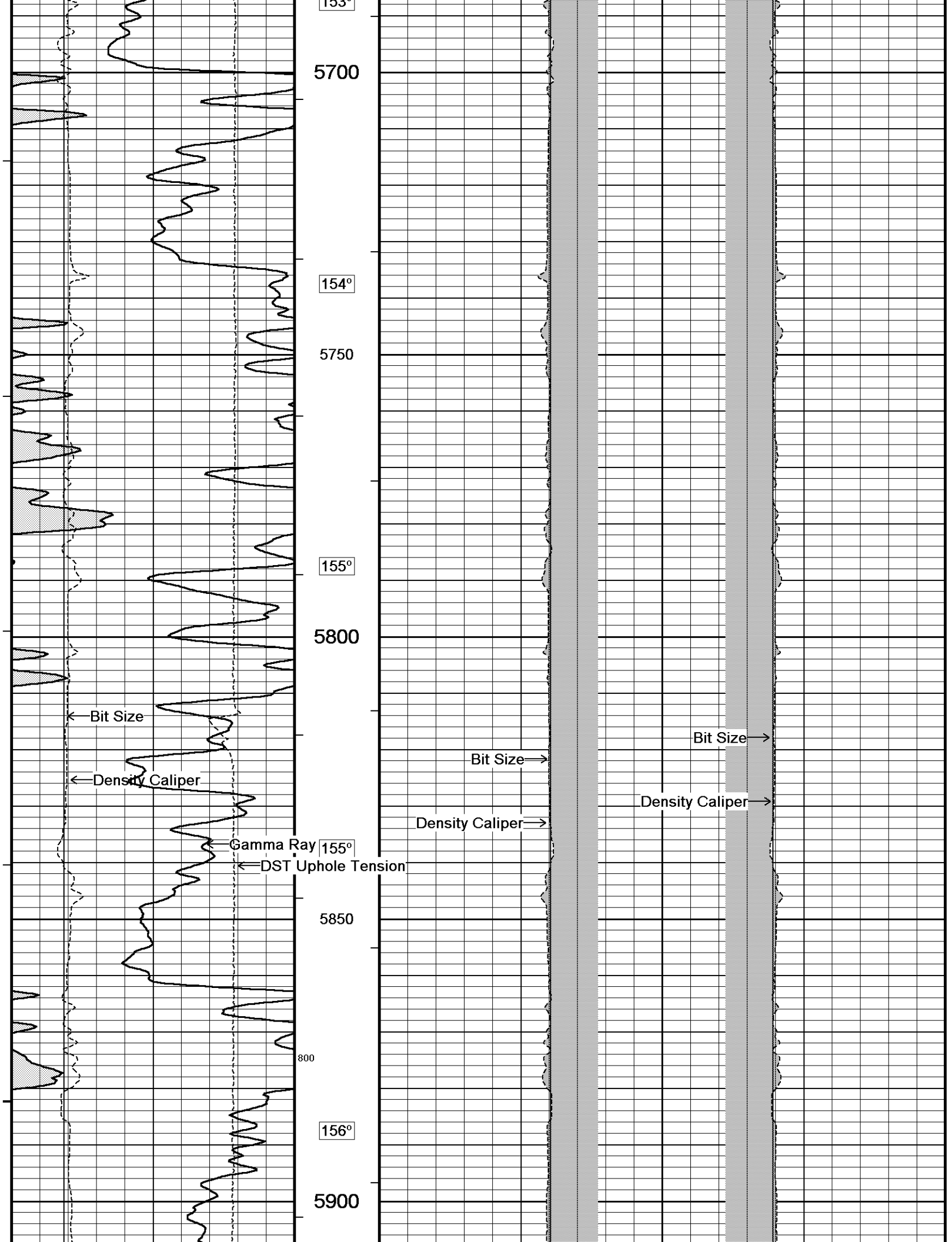


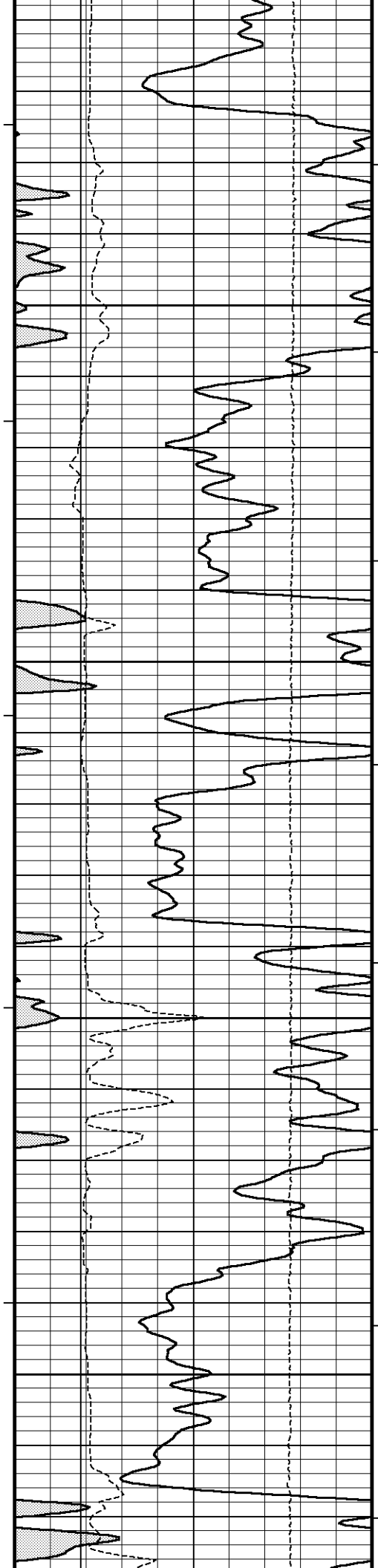












156°

5950

157°

6000

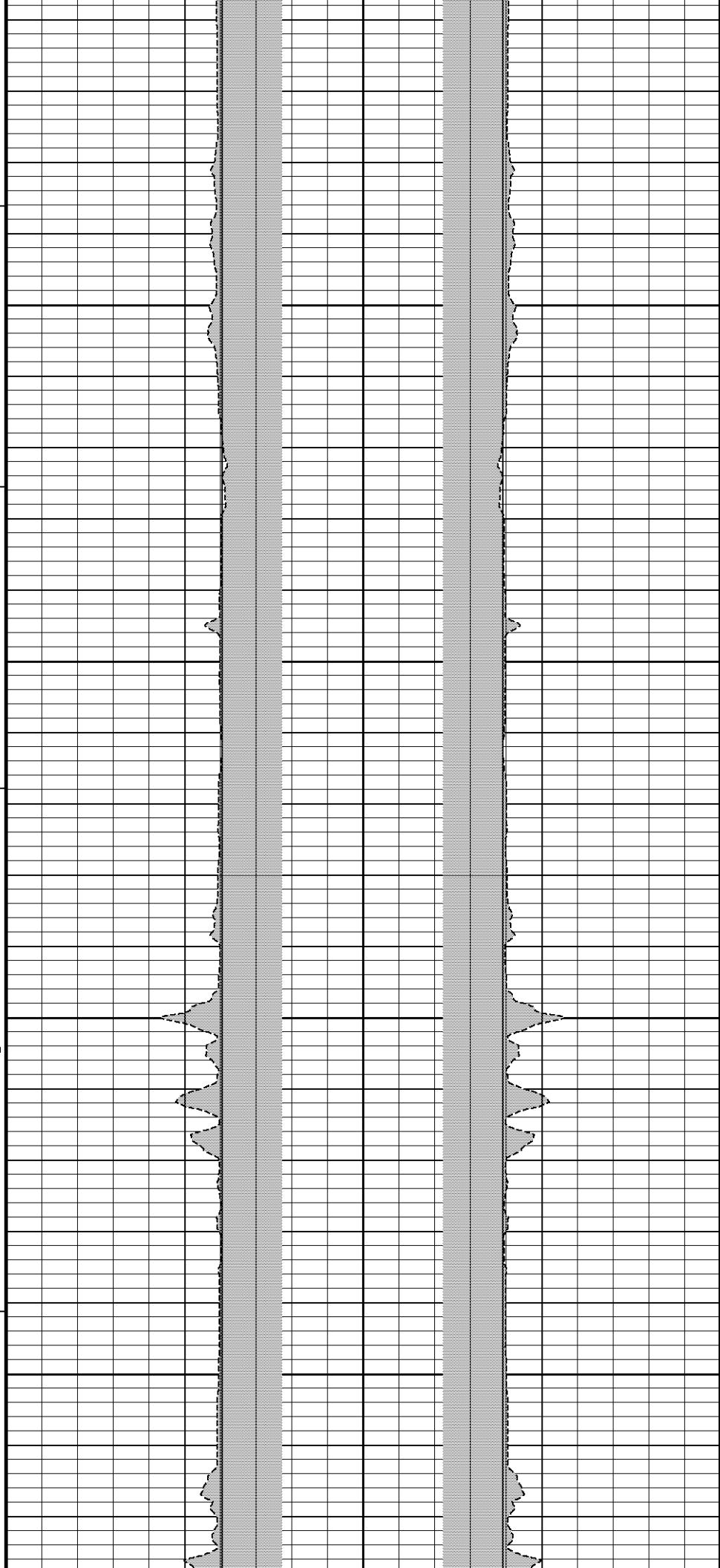
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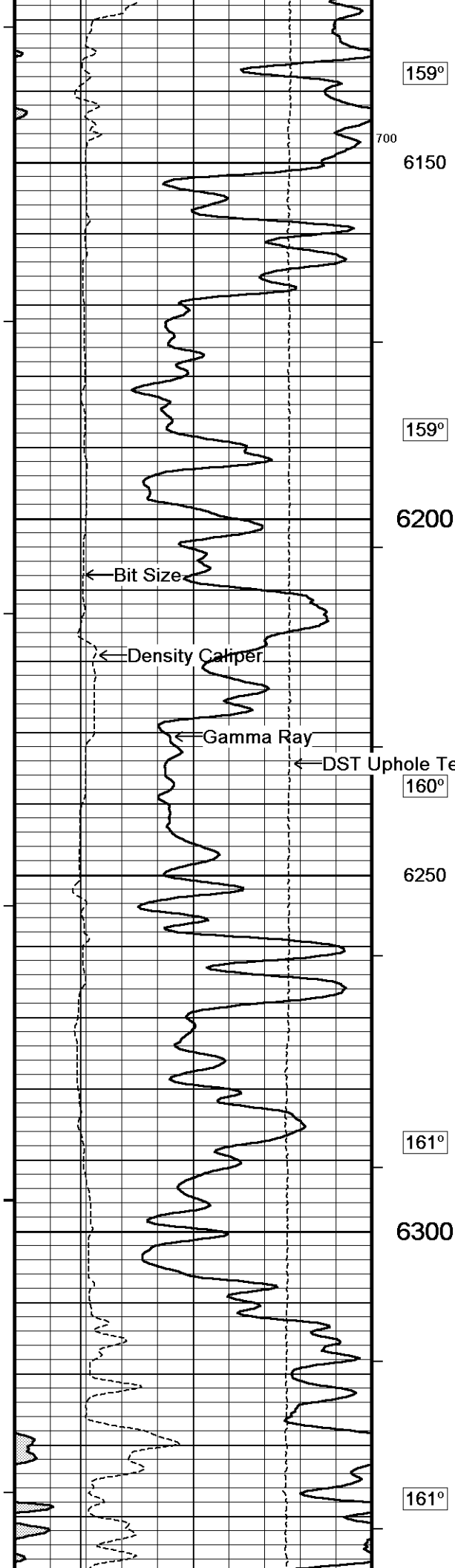
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500

158°

6100





159°

6150

159°

6200

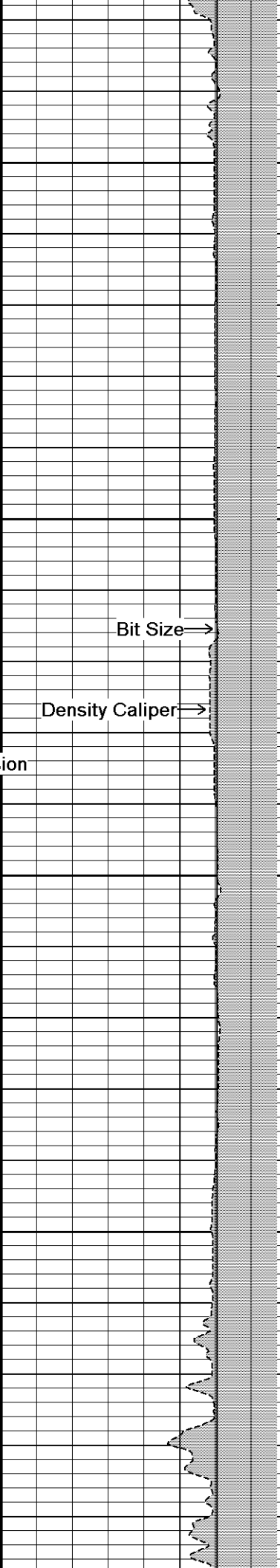
160°

6250

161°

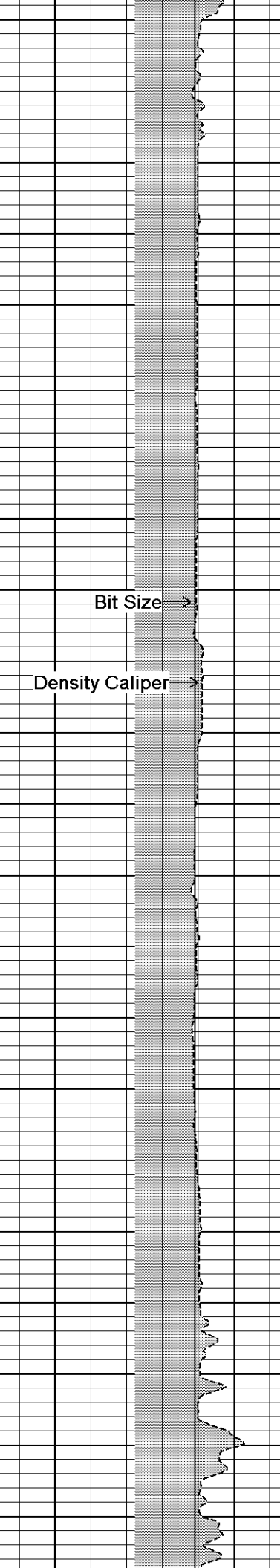
6300

161°



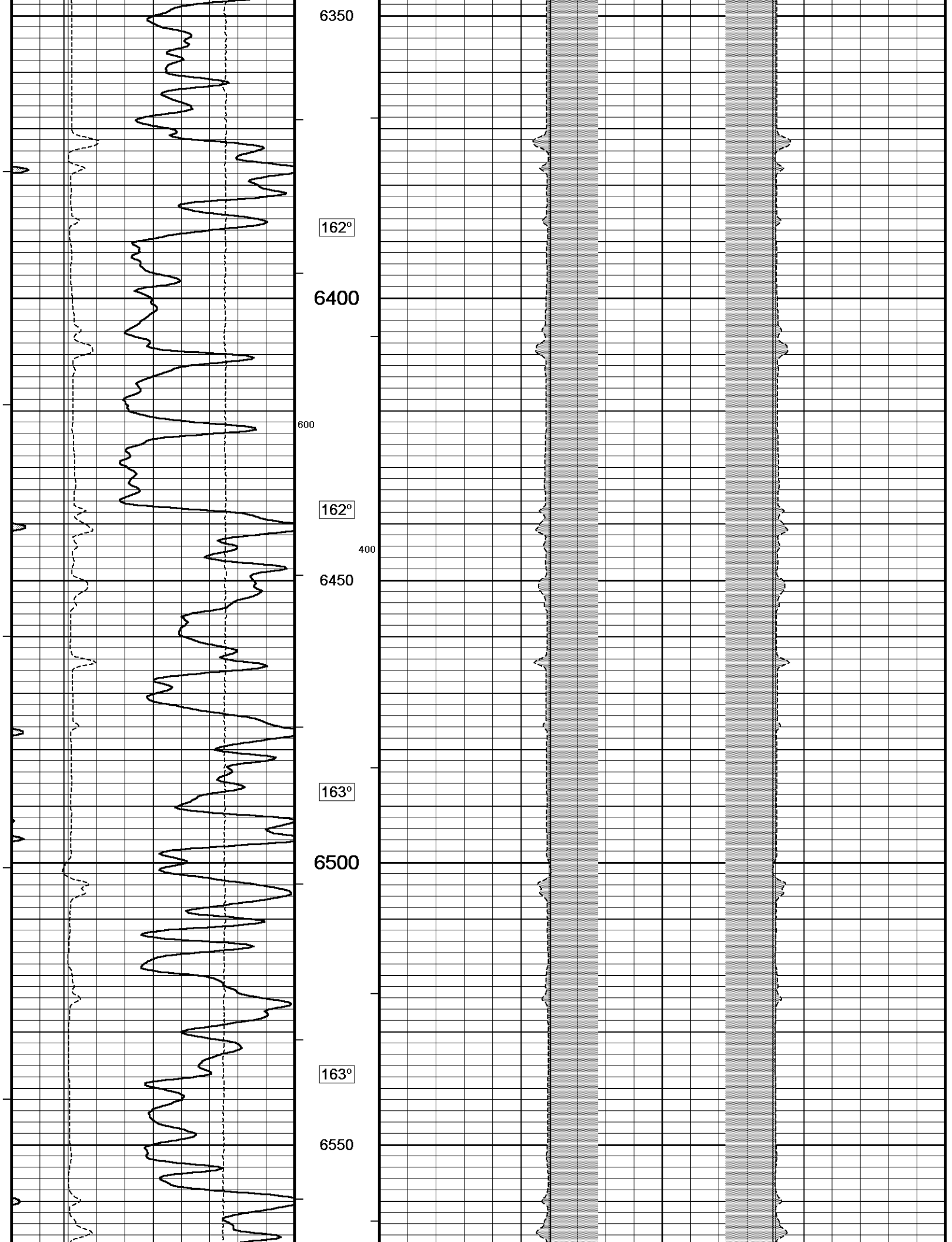
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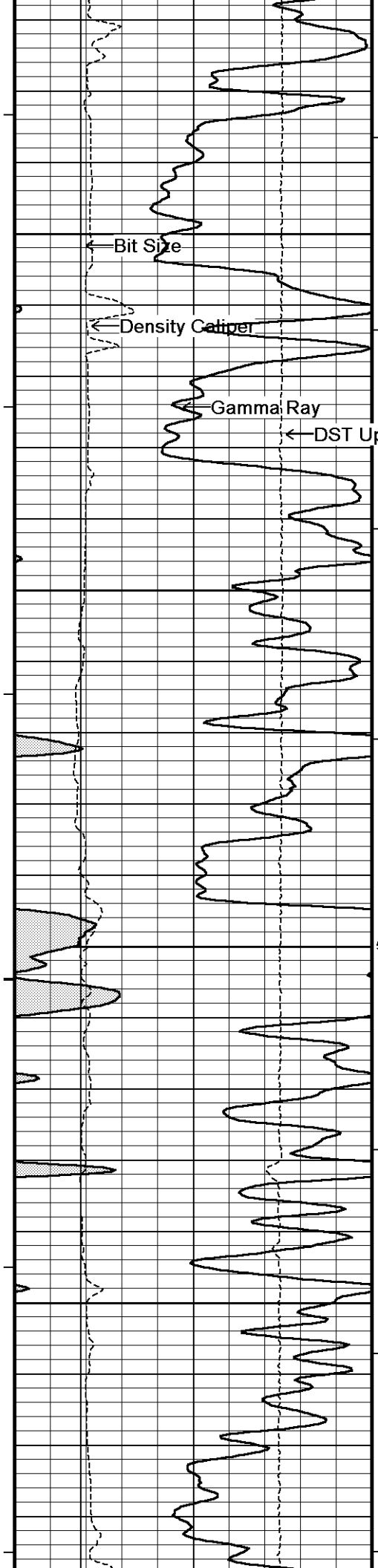
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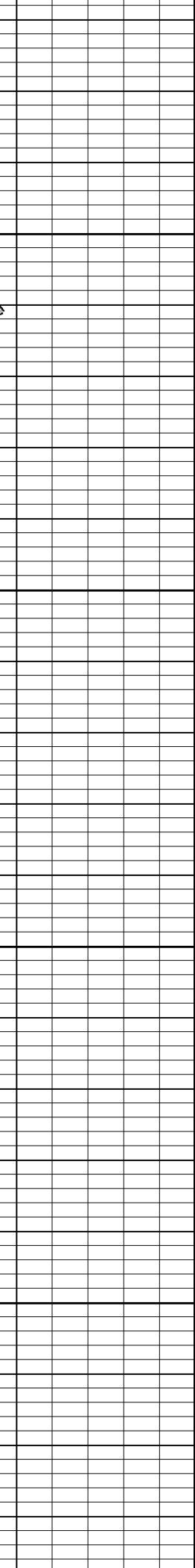
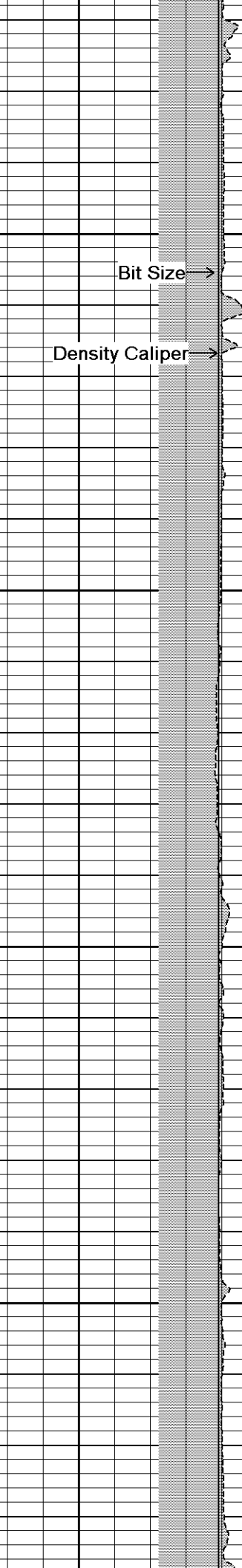
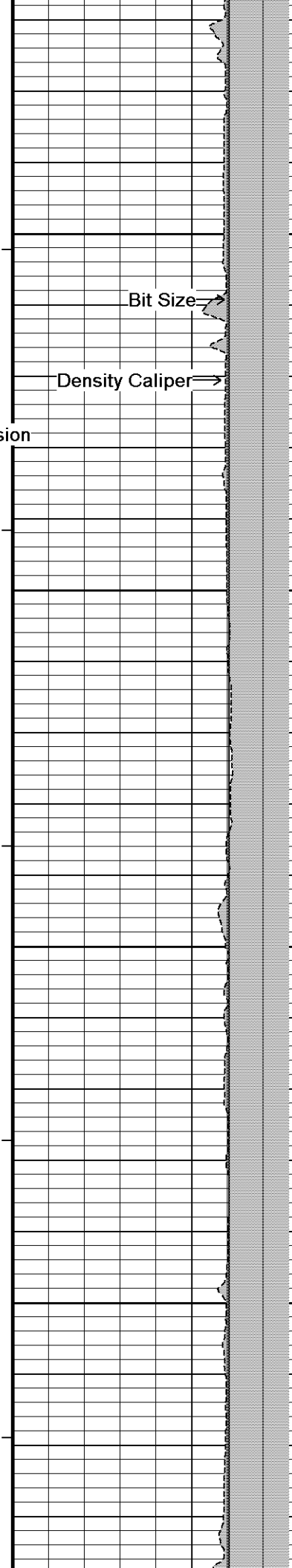
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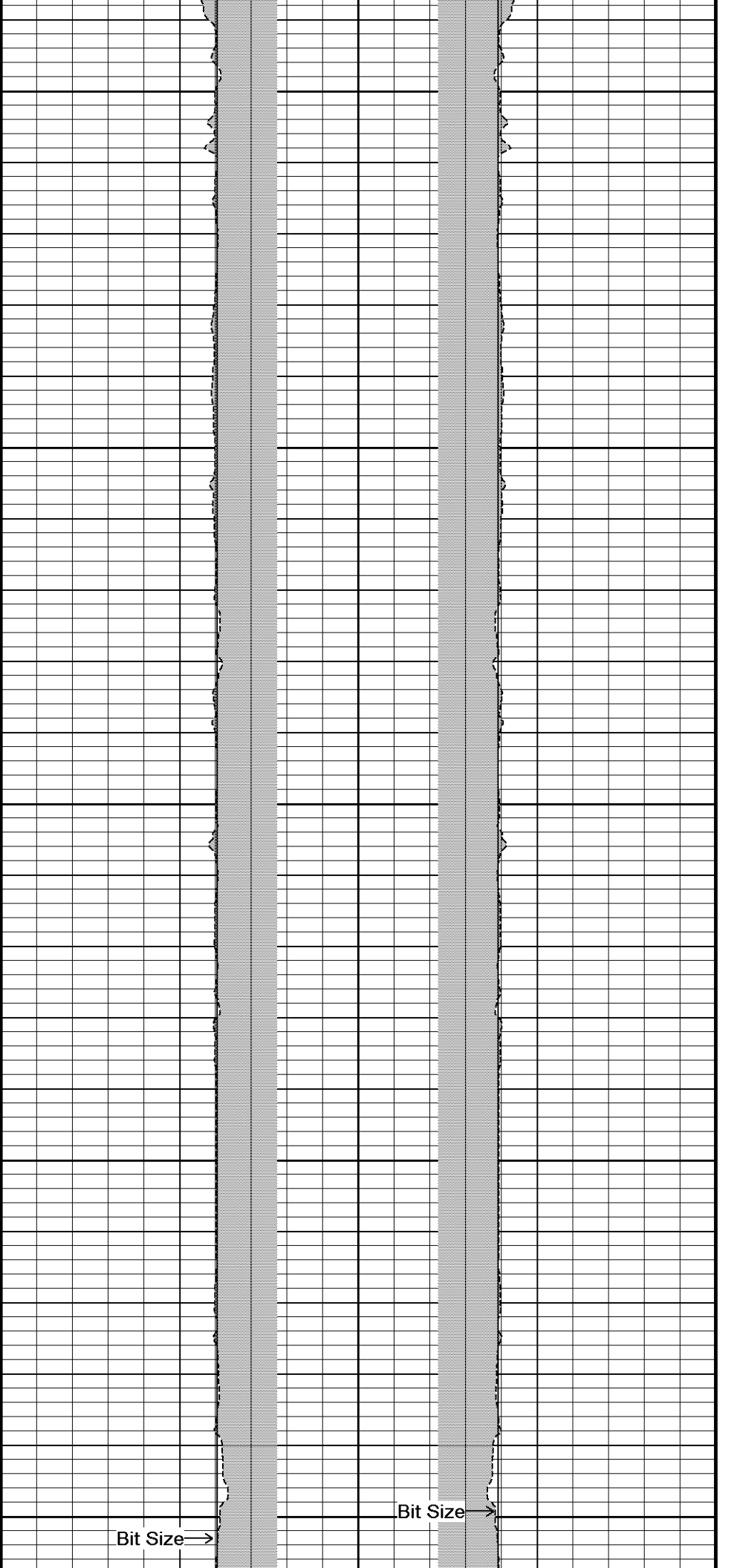
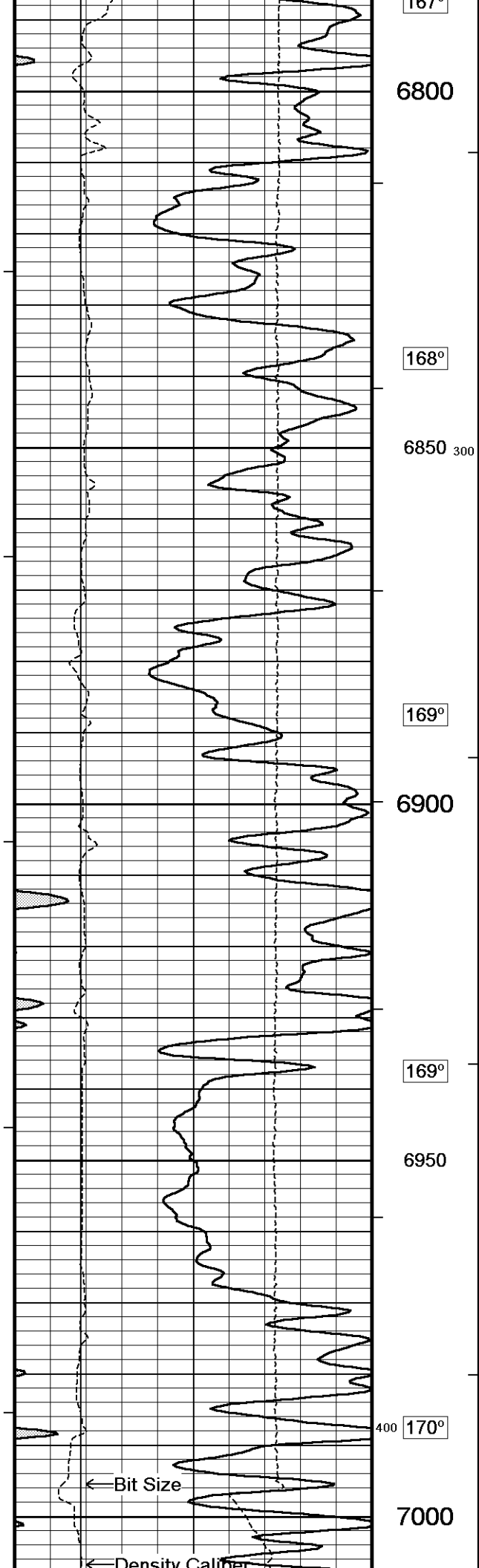
Density Caliper

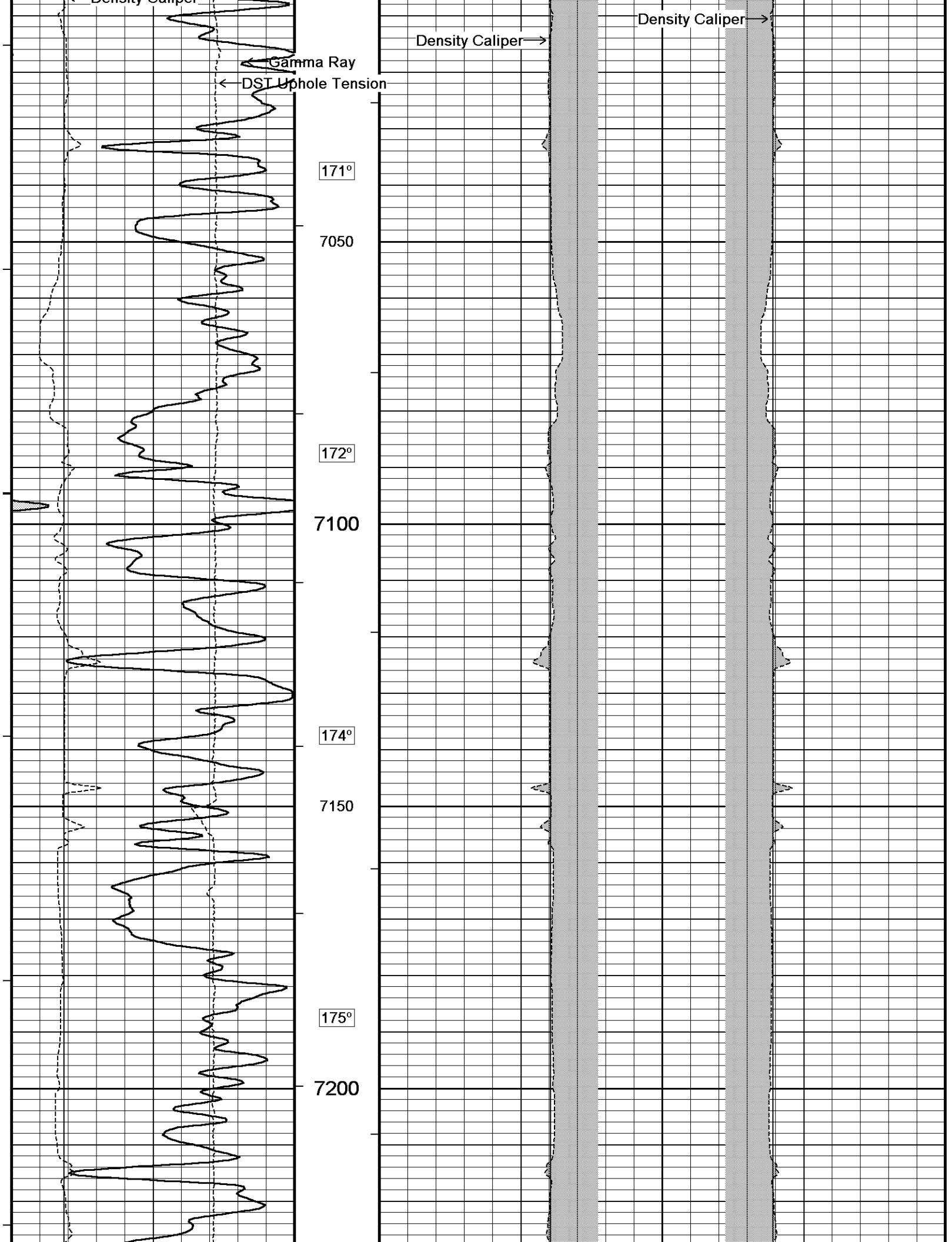


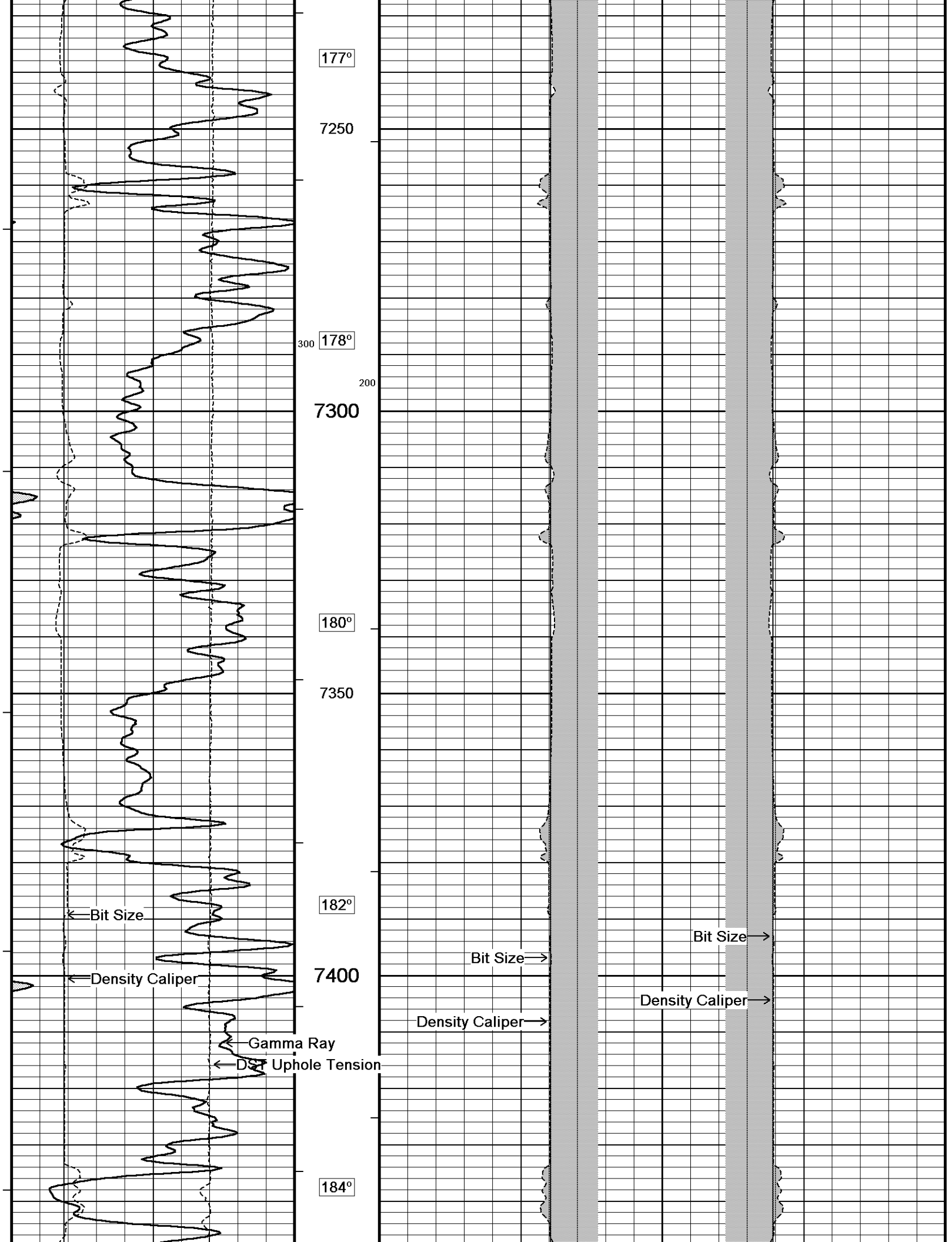


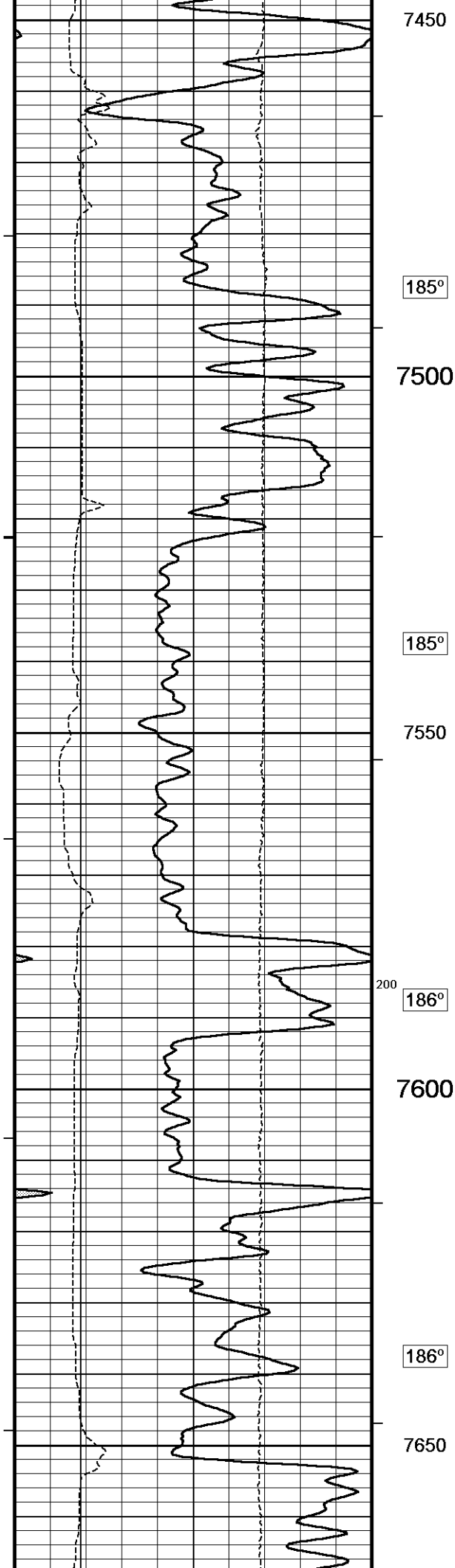
164°
6600
6650
500 6700
165°
166°
6750
167°











7450

185°

7500

185°

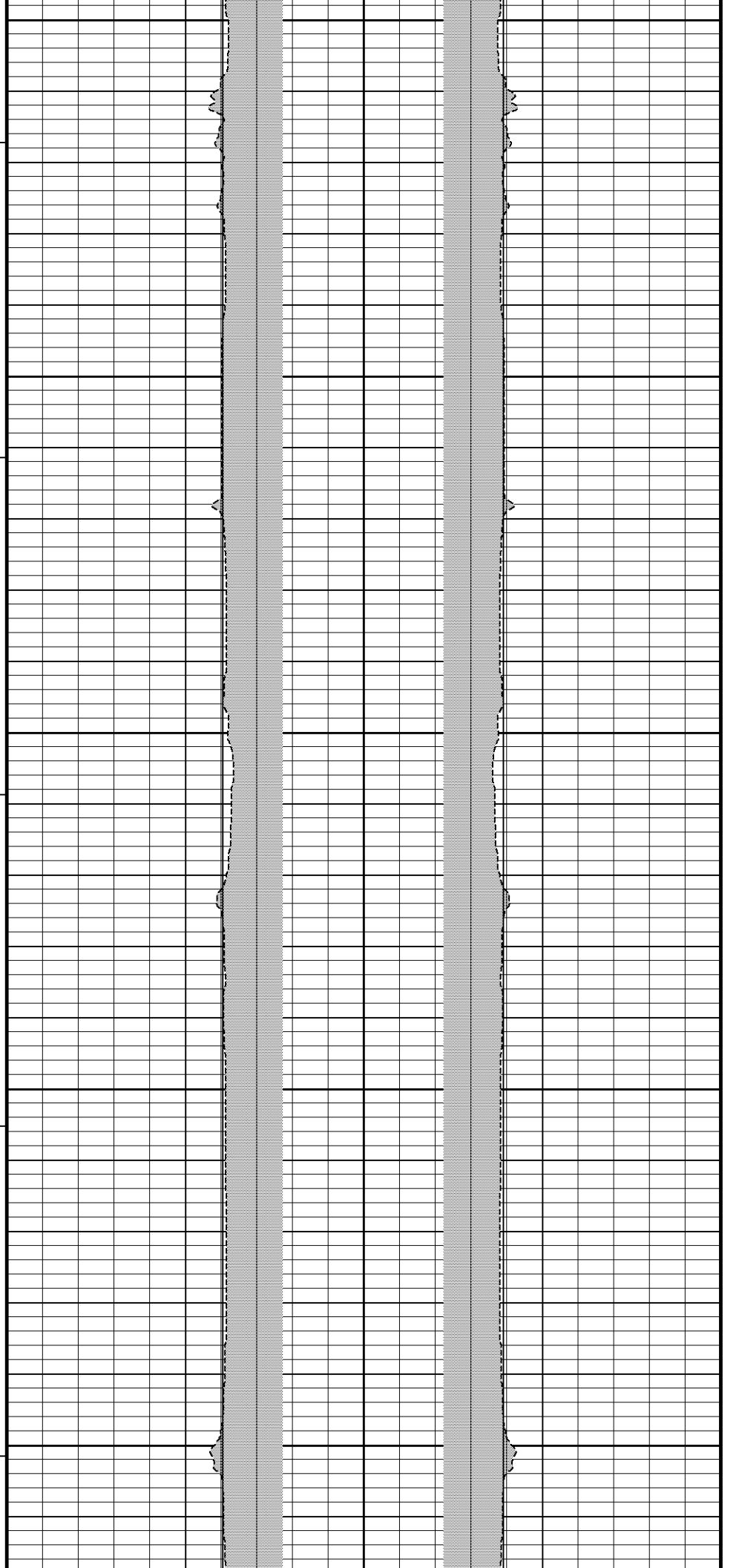
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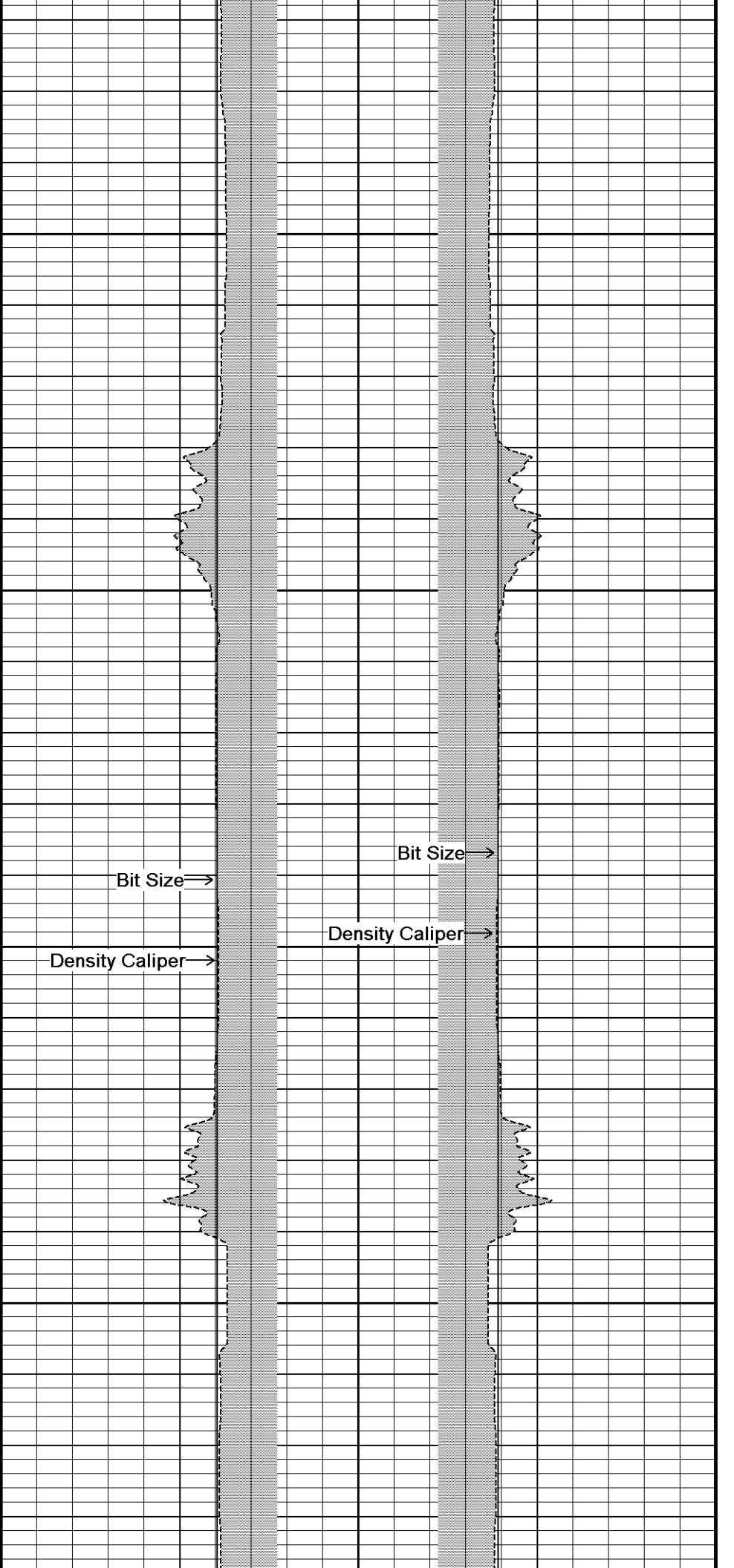
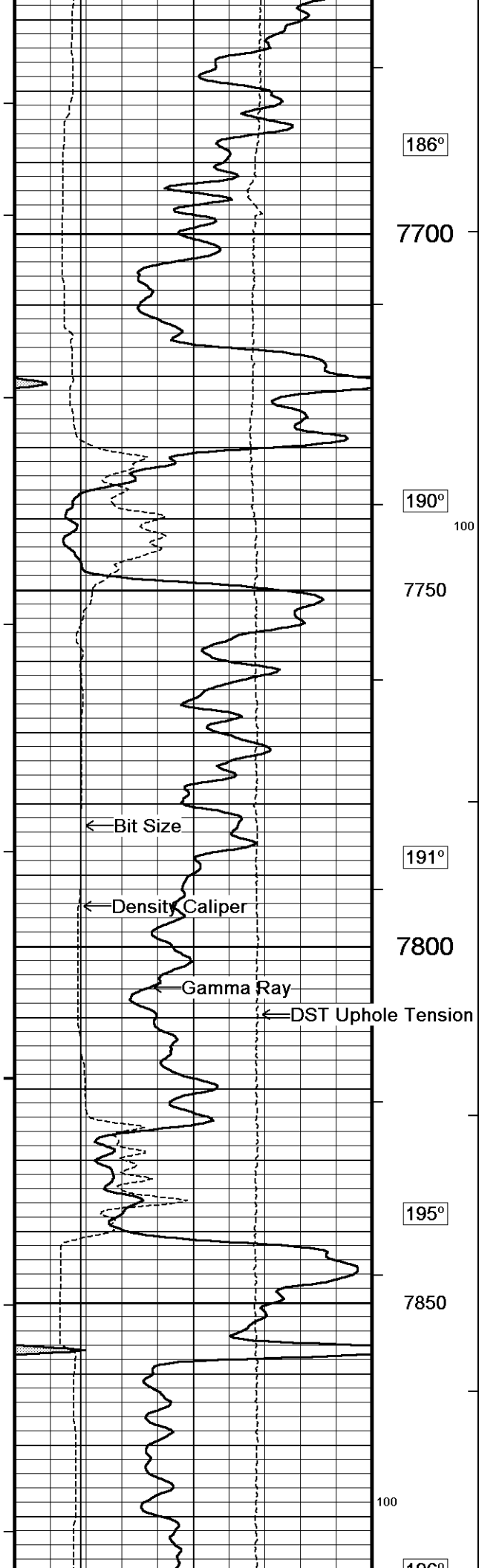
200 186°

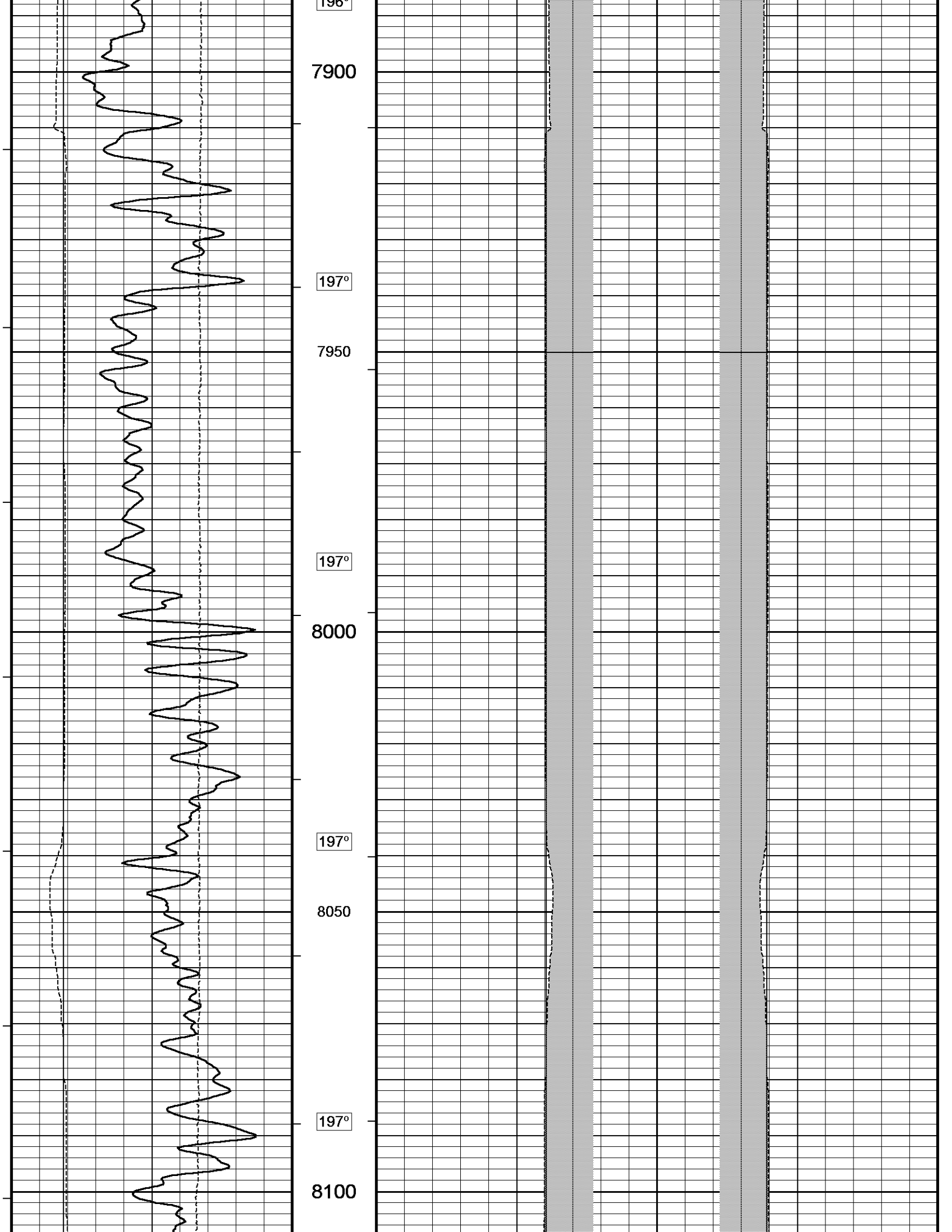
7600

186°

7650









DOWNHOLE EQUIPMENT

C:\LOGS\Bill Barrett\CB-TG Land 11D-20-692\MS1.dta

3/8" Triple Cone Cable Head (MCB C A)
MCB-C.A 5 LG: 1.58 ft WT: 15.4 lb OD: 2.24 in

SHA-F Compact Swivel Head Adaptor
SHA-F 82 LG: 2.74 ft WT: 26.5 lb OD: 2.24 in

Compact Comms Gamma
MCG-D.A 287 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in

Compact Neutron
MDN-A.B 160 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

Compact Density/Caliper
MPD-B 167 LG: 9.59 ft WT: 90.4 lb OD: 2.45 in

SKJ-D.A Compact Knuckle Joint
SKJ-D.A 114 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

Compact Focussed Electric
MFE-A.A 85 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

Compact Induction
MAI-B.A 213 LG: 10.81 ft WT: 48.5 lb OD: 2.24 in

TotalLength: 46.67 ftWeight: 368.2 lb

37.07 ft GRGC - Gamma Ray
34.16 ft CGXT - MCG External Temperature
30.61 ft NPRS - Sandstone Neutron Por.
23.37 ft AVOL - Annular Volume
23.37 ft HVOL - Hole Volume
23.37 ft CLDC - Density Caliper
21.44 ft DPOR - Base Density Porosity
21.44 ft DCOR - Density Correction
21.38 ft PDPE - PE
13.72 ft FEFC - Shallow FE (Phase Corr.)
3.34 ft R400 - Array Ind. One Res 40
3.34 ft R300 - Array Ind. One Res 30
3.34 ft RTAO - Array Ind. One Res Rt
3.34 ft R850 - Array Ind. One Res 85
3.34 ft R600 - Array Ind. One Res 60
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.

COMPANY

WELL

FIELD

PROVINCE/COUNTY

COUNTRY/STATE

BILL BARRETT CORPORATION

CB TG LAND 11D-20-692

MAMM CREEK

GARFIELD

U.S.A. / COLORADO

Elevation Kelly Bushing	5553.00	feet	First Reading	8165.00	
Elevation Drill Floor	5552.00	feet	Depth Driller	8193.00	feet
Elevation Ground Level	5530.00	feet	Depth Logger	8188.00	feet

Weatherford®

HOLE VOLUME

CALIPER LOG

40

Years of

Wireline

19702010

