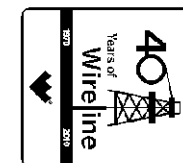




Weatherford

HOLE VOLUME CALIPER LOG



COMPANY
WELL
FIELD
PROVINCE/COUNTY
COUNTRY/STATE
LOCATION

BILL BARRETT CORPORATION
GGU KAUFMAN 32D-30-691
GIBSON GULCH
GARFIELD
U.S.A. / COLORADO
SHL: 1680' FNL & 1007' FWL
BHL: 1510' FNL & 1984' FEL

SEC	TWP	RGE	Other Services
30	6S	91W	MPD/MDN MAI/MFE
API Number	05-045-20741		
Permit Number			
Permanent Datum G.L., Elevation 5835 feet			
Log Measured From KB			Elevations: KB 5858.00 DF 5858.00 GL 5835.00
Drilling Measured From K.B. @ 23 FT.			
Date	19-DEC-2011		
Run Number	ONE		
Depth Driller	7900.00	feet	
Depth Logger	7899.00	feet	
First Reading	7876.00		
Last Reading	824.00		
Casing Driller	825.00	feet	
Casing Logger	824.00	feet	
Bit Size	7.875	inches	
Hole Fluid Type	LSND		
Density / Viscosity	10.90 lb/USg	43.00 sec/qt	
PH / Fluid Loss	9.30	10.00 ml/30Min	
Sample Source	FLOW LINE		
Rm @ Measured Temp	4.0 @ 91.5	ohm-m	
Rmf @ Measured Temp	3.20 @ 91.5	ohm-m	
Rmc @ Measured Temp	4.80 @ 91.5	ohm-m	
Source Rmf / Rmc	CALC	CALC	
Rm @ BHT	1.986 @187.0	ohm-m	
Time Since Circulation	6 HOURS		
Max Recorded Temp	187.00	deg F	
Equipment Name	COMPACT		
Equipment / Base	13045	GD JCT	
Recorded By	D. KUNTZ		
Witnessed By	D. MILLER		
Service Order	3531779		

BOREHOLE RECORD

Last Edited: 19-DEC-2011 17:19

Bit Size inches	Depth From feet	Depth To feet
8.750	824.00	5497.00
7.875	5497.00	7900.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	9.625	0.00	824.00	36.00

REMARKS

LOGGED USING WLS SOFTWARE VERSION 12.02.4401

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

HARDWARE: MPD: (1) 8 INCH PROFILE PLATE
MAI: (2) 0.5 INCH STANDOFF
MFE: (1) 0.5 INCH STANDOFF
MDN: (1) DUAL BOWSPRING

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.

MAXIMUM DEVIATION OF 38.6 DEGREES.

CALIPER CHECK IN CASING PRESENTED, REFERENCE I.D. = 9.05" (9 5/8", 36 LB/FT CASING)

8.75 INCH BIT USED FROM SURFACE CASING TO 5497 FEET.

TOTAL HOLE VOLUME FROM TD TO SURFACE CASING = 3295 CU.FT.

ANNULAR VOLUME WITH 4.5 INCH PRODUCTION CASING = 2515 CU.FT.

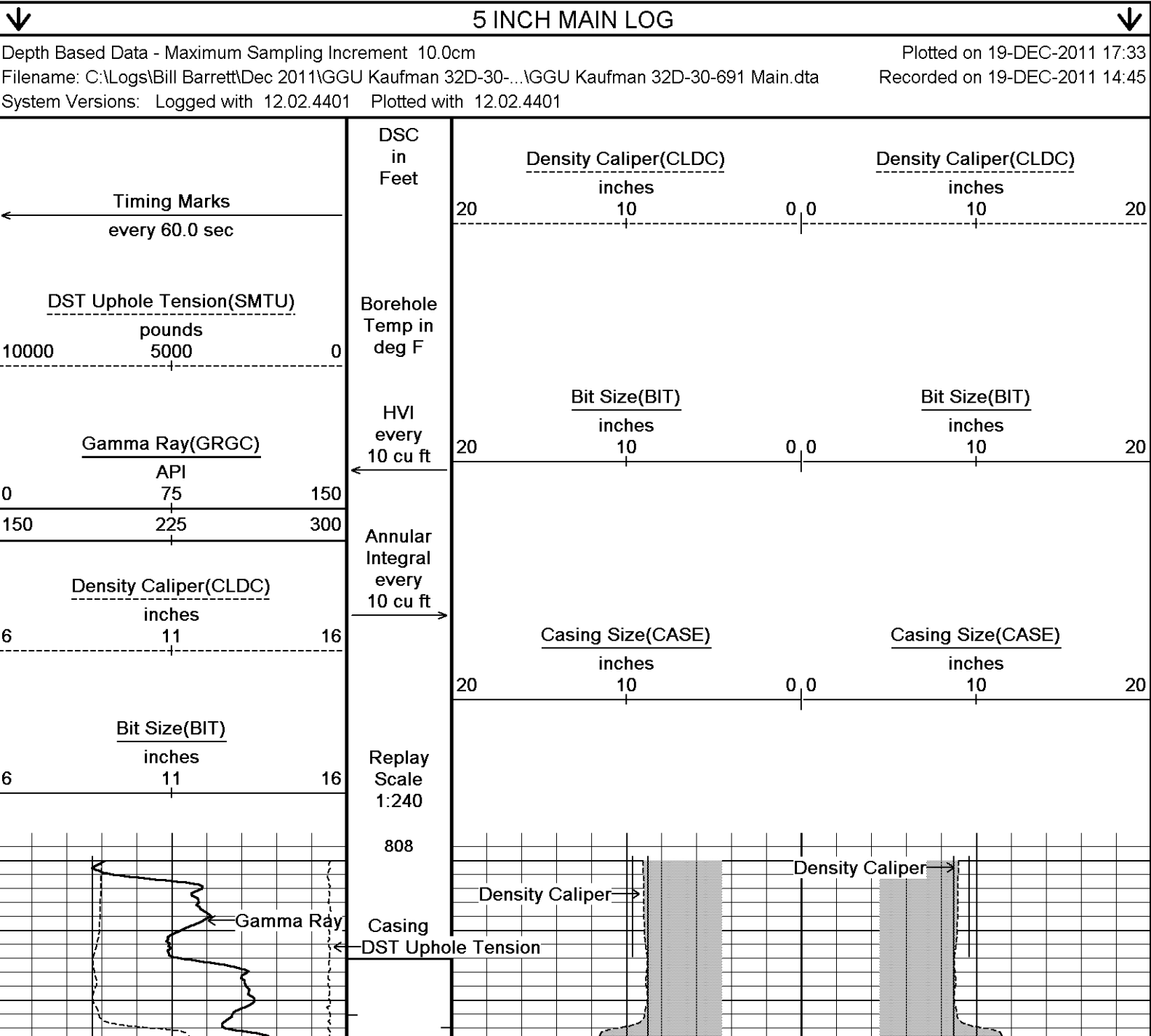
ENGINEER(S): D. KUNTZ, M. BRENNAN(JFE)

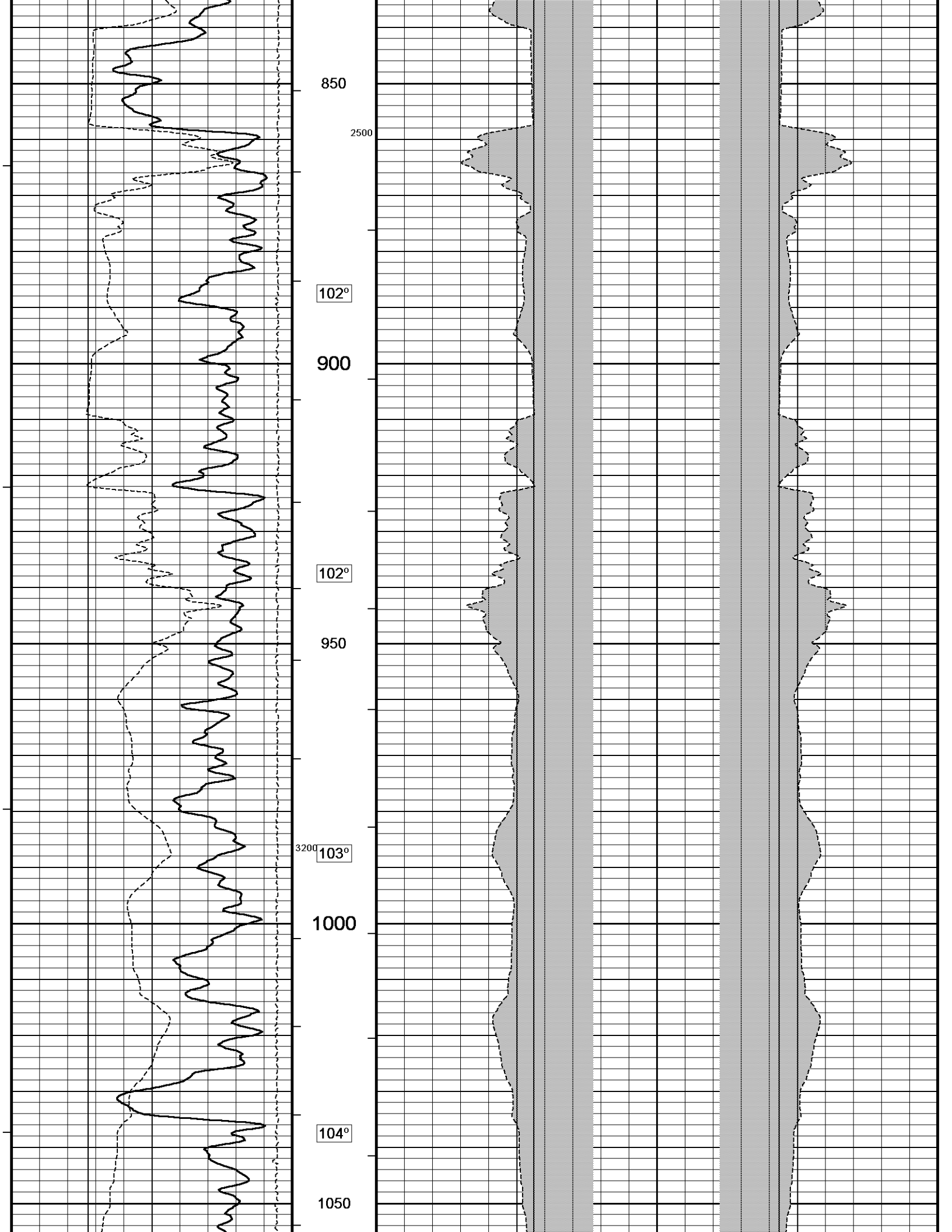
OPERATOR(S): A. ALLRED, B. FRISBIE

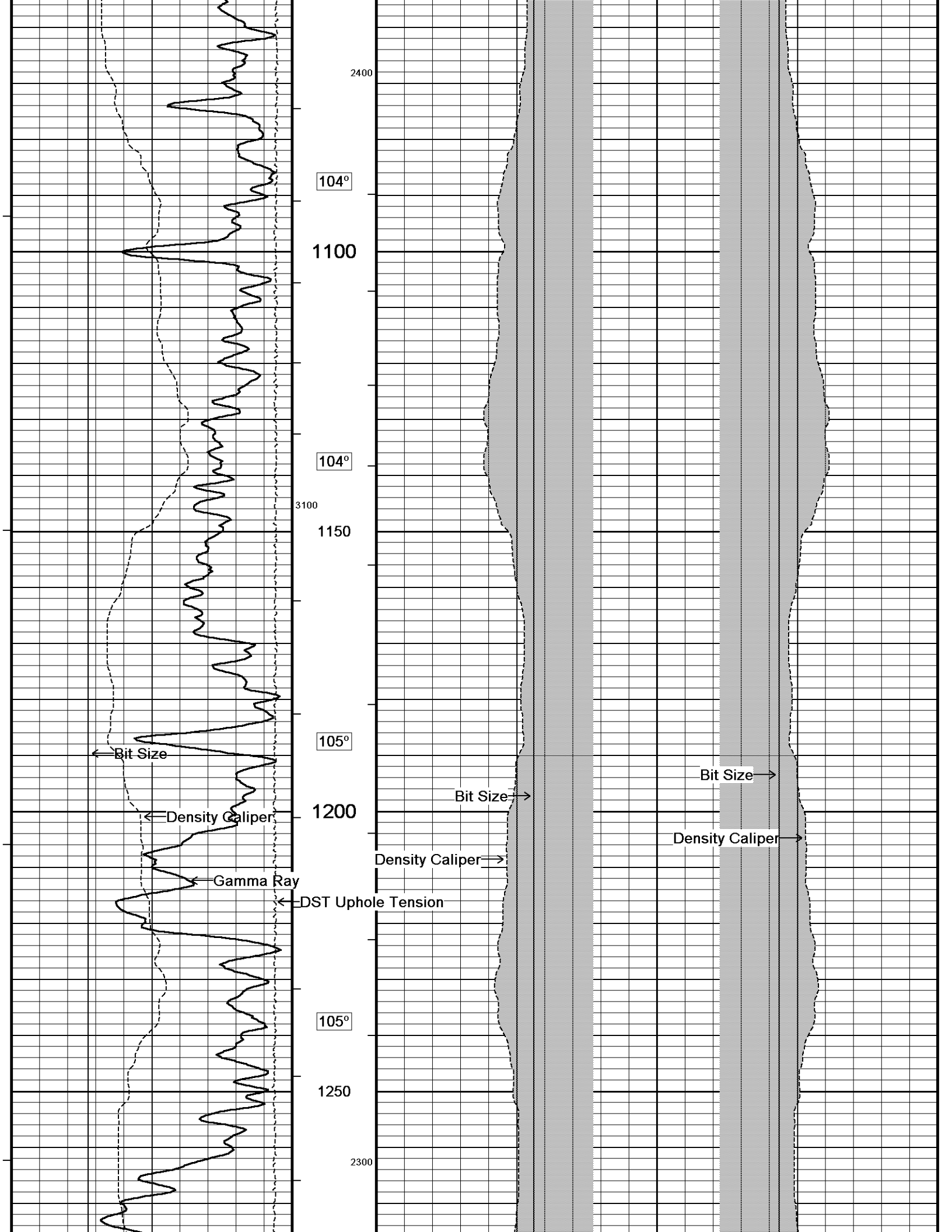
RIG: PATTERSON 313

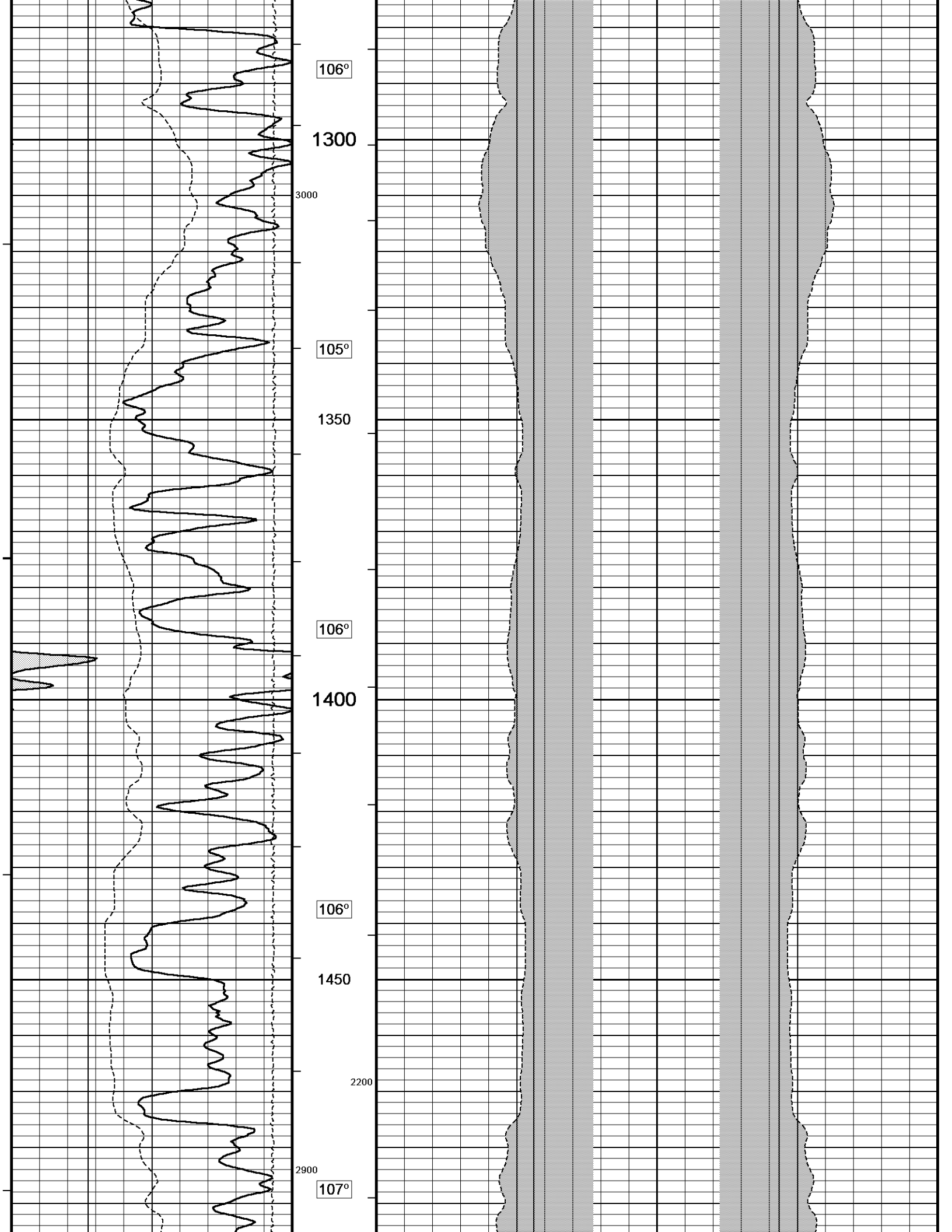
SERVICE ORDER: #3531779

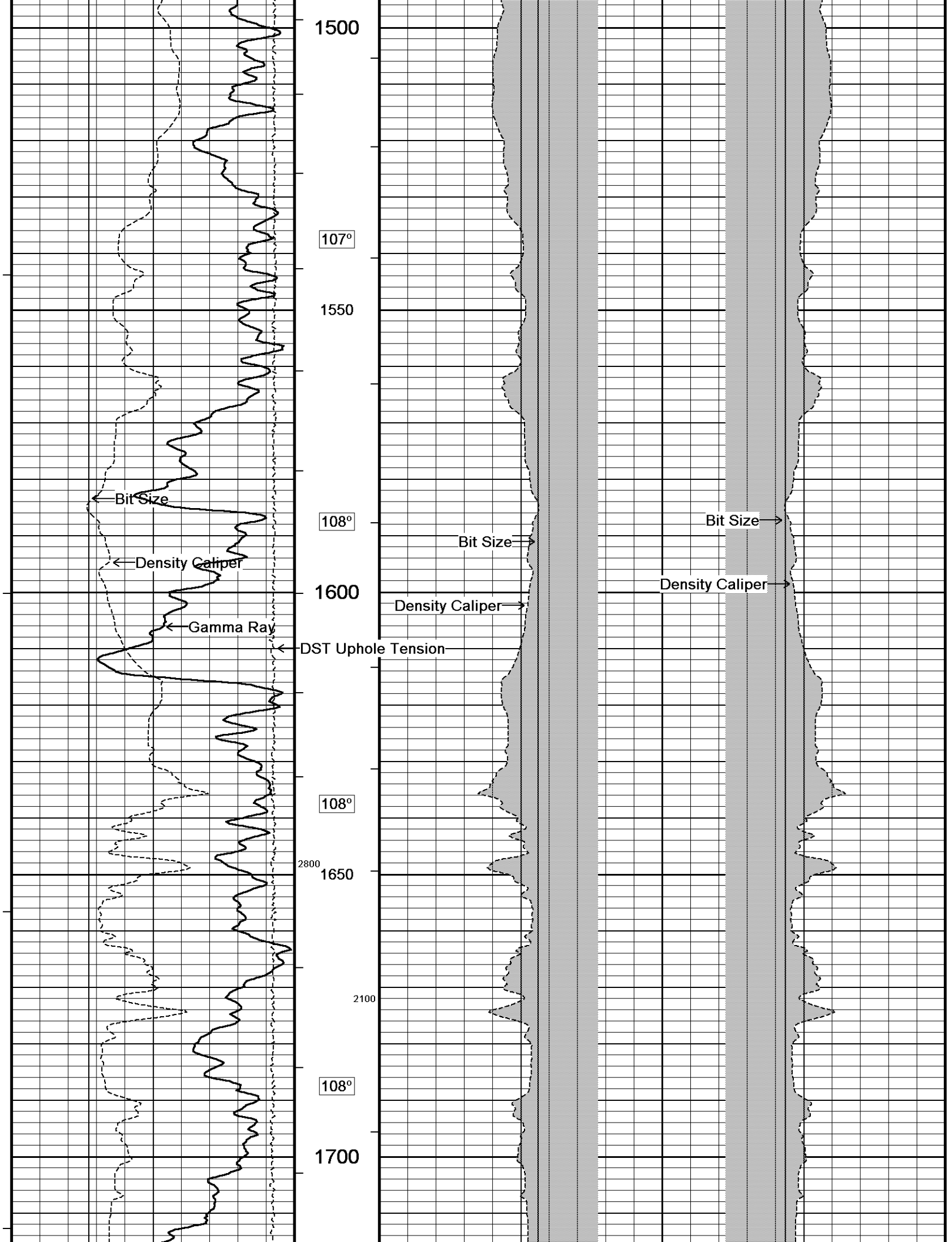
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

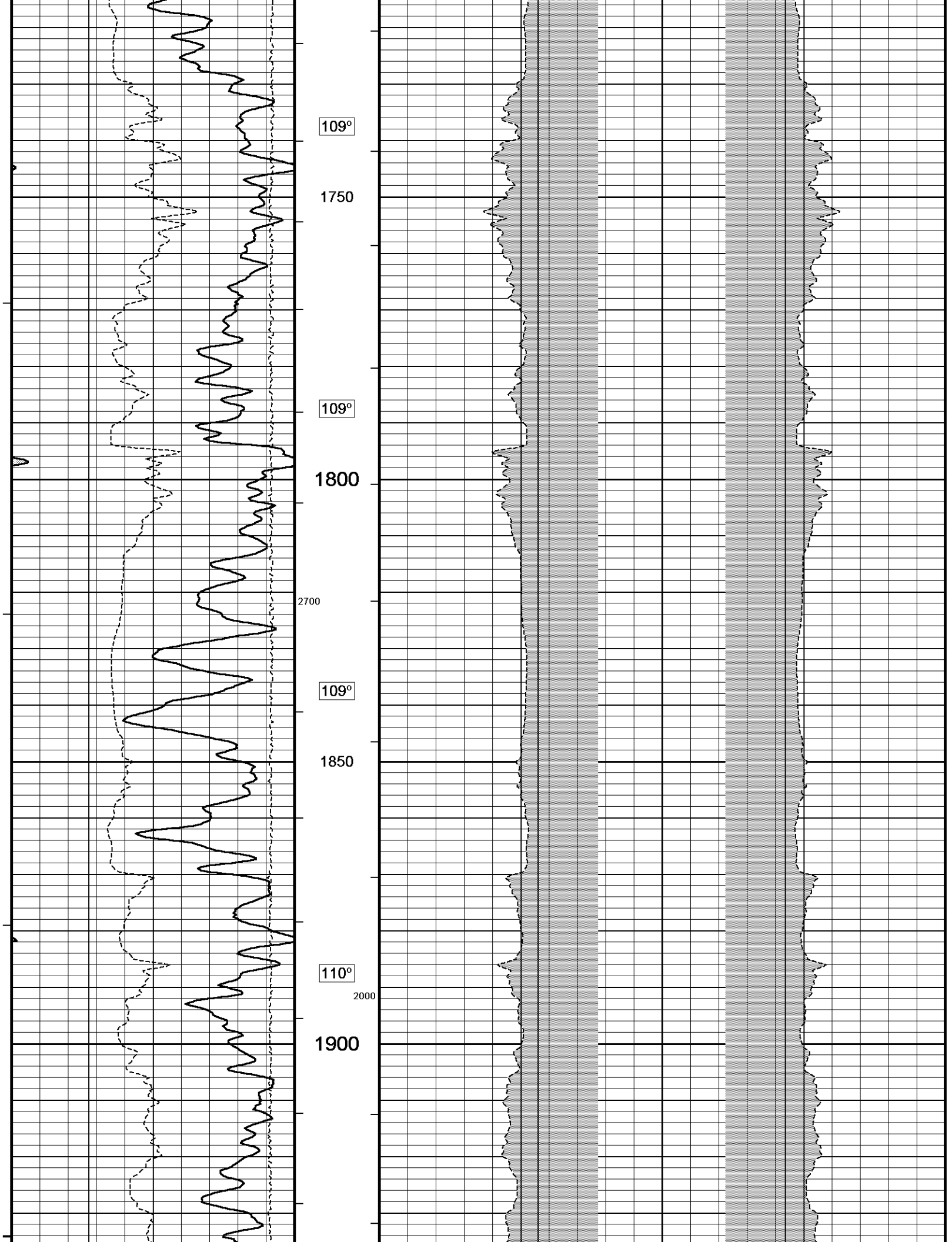


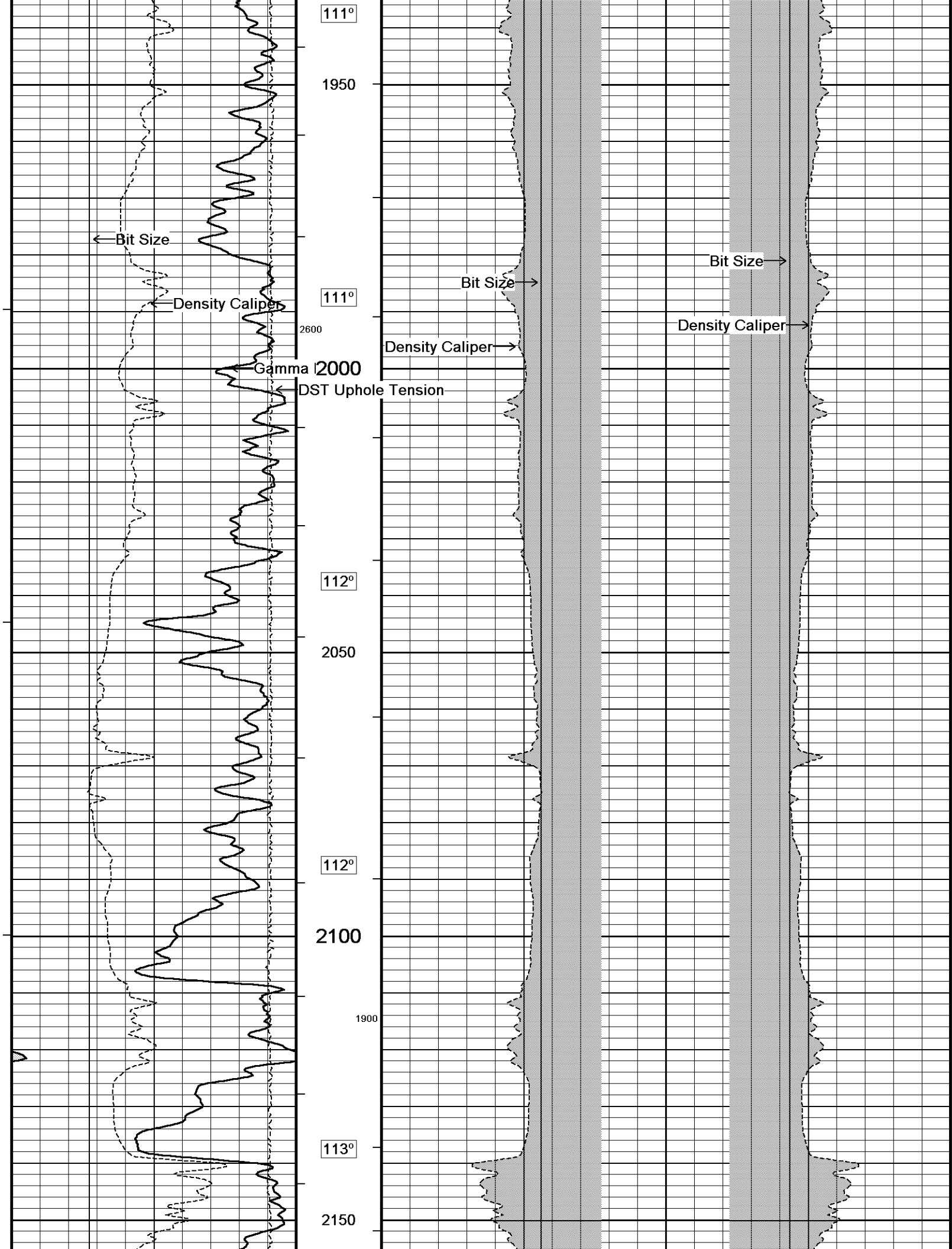


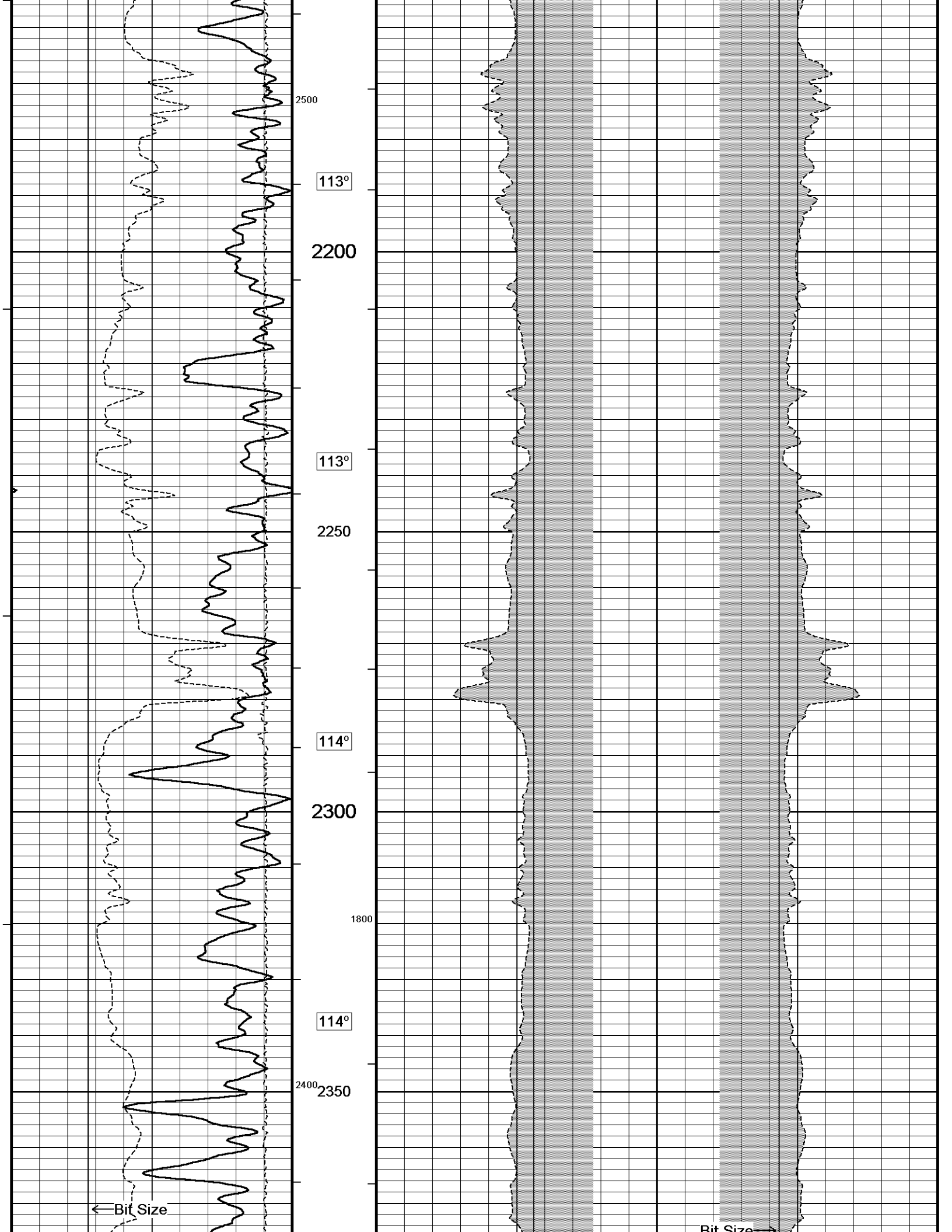


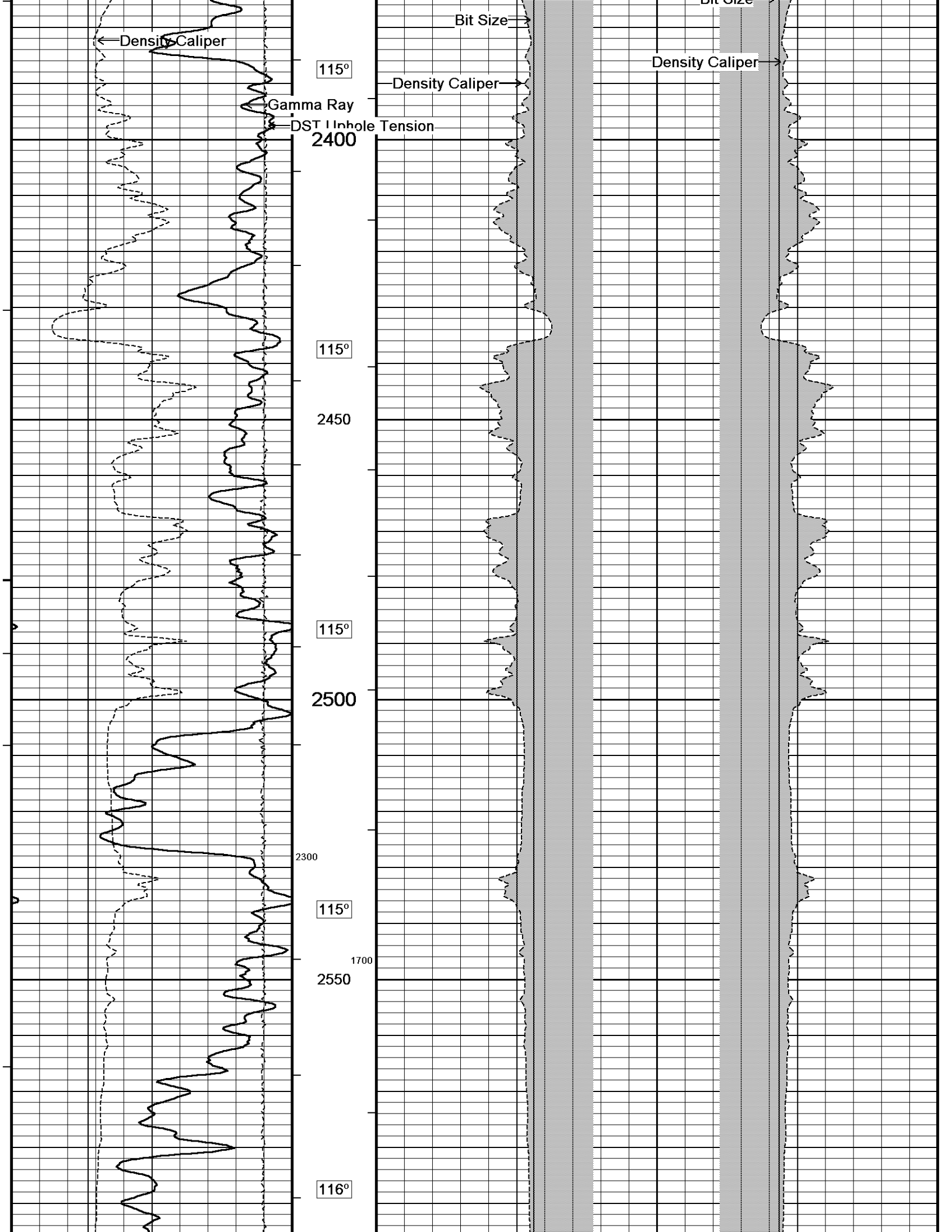


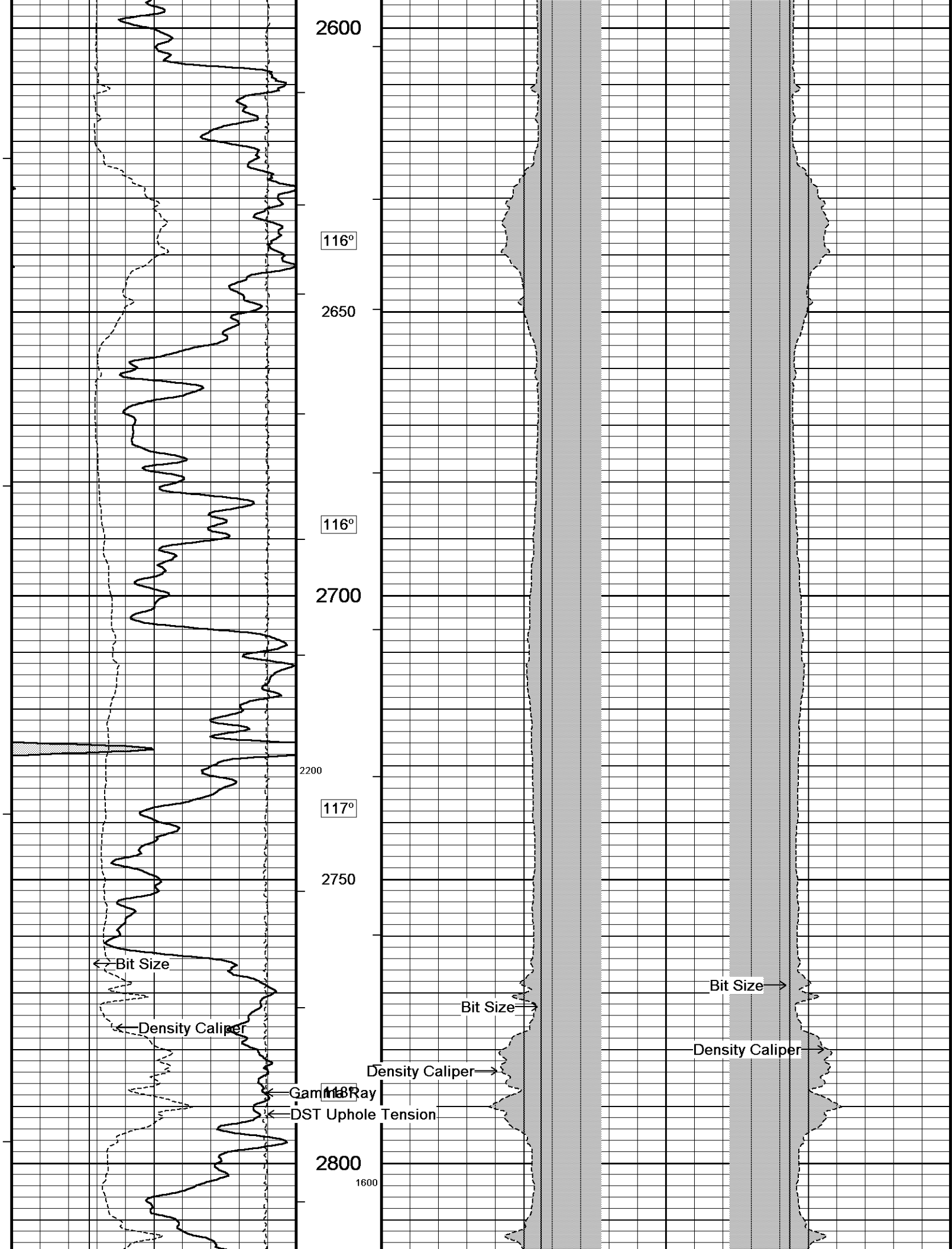


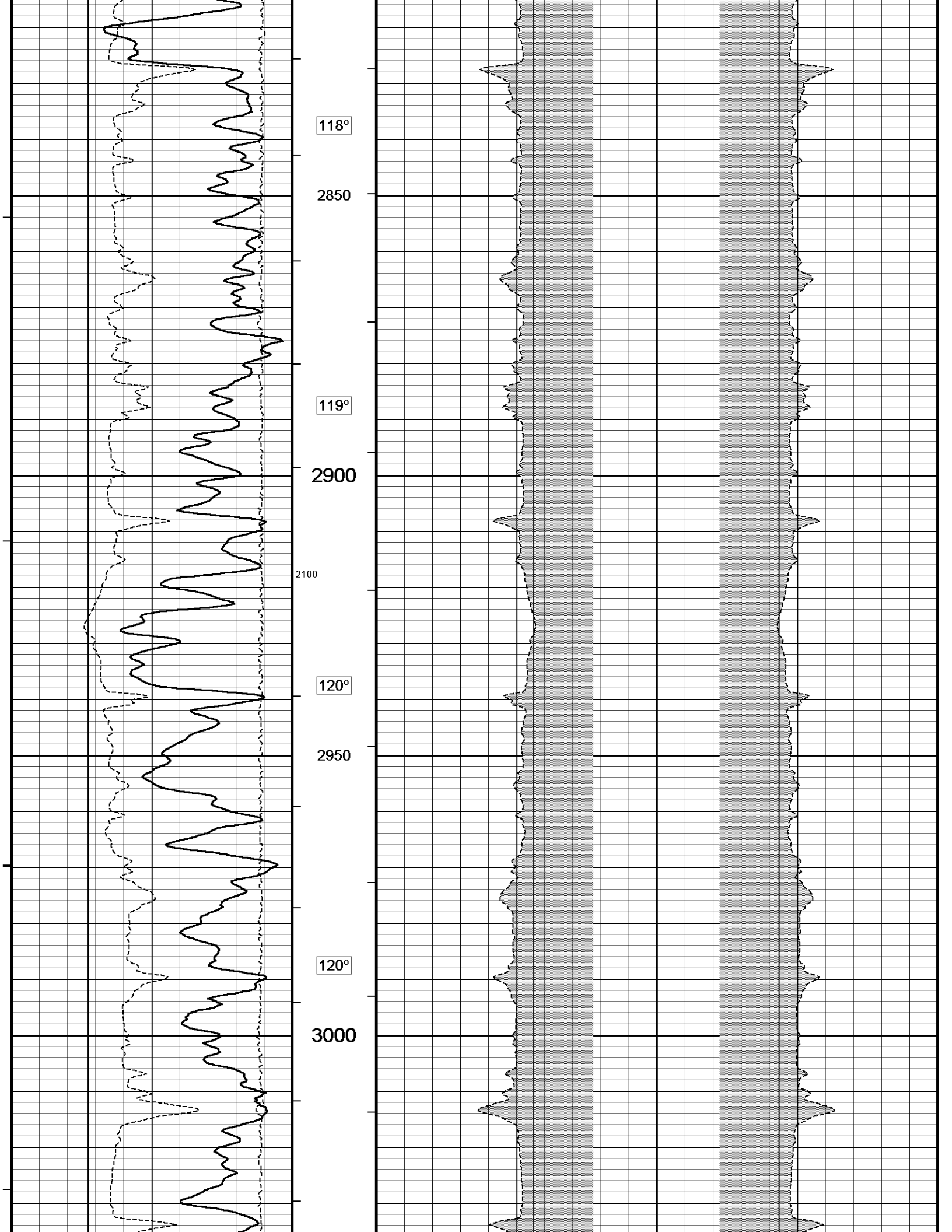


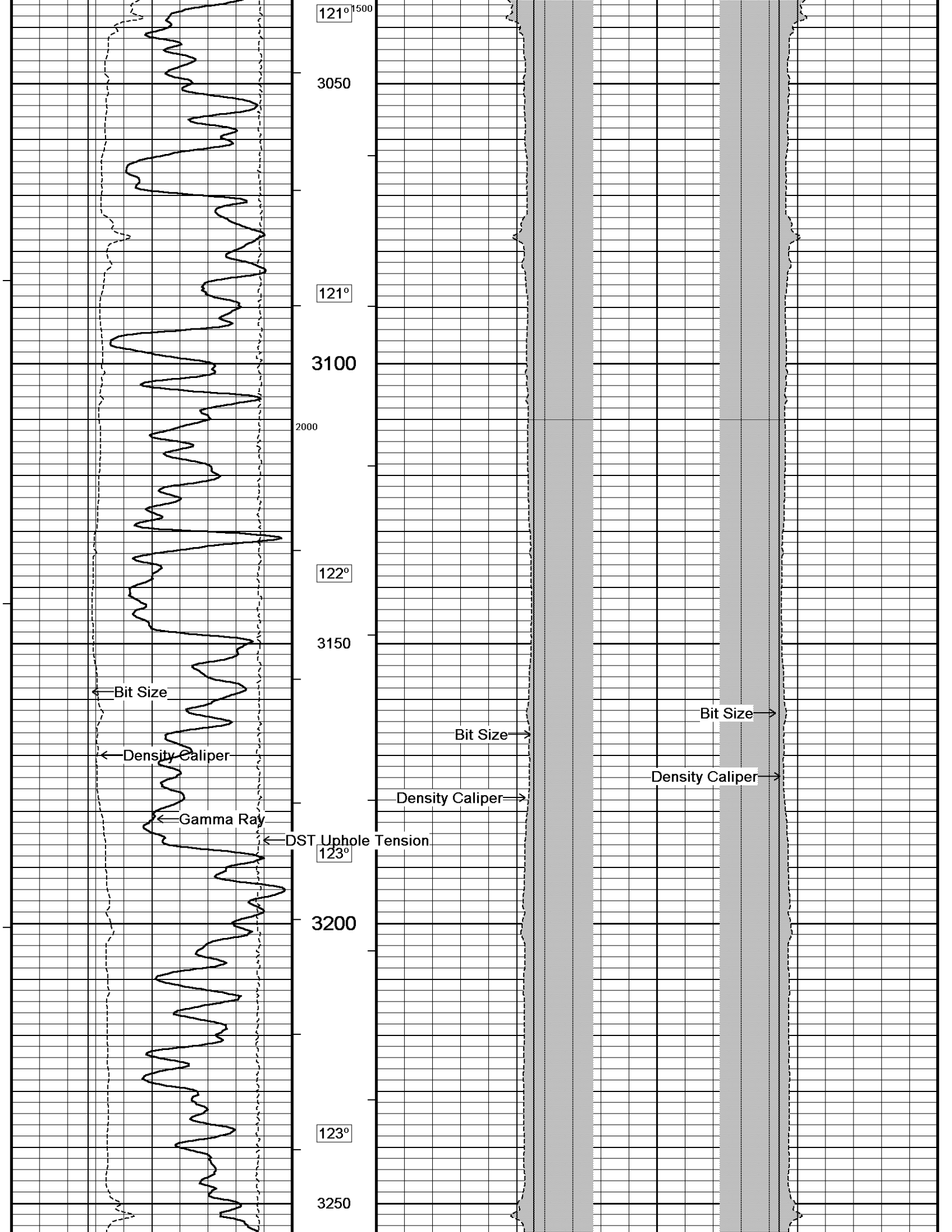


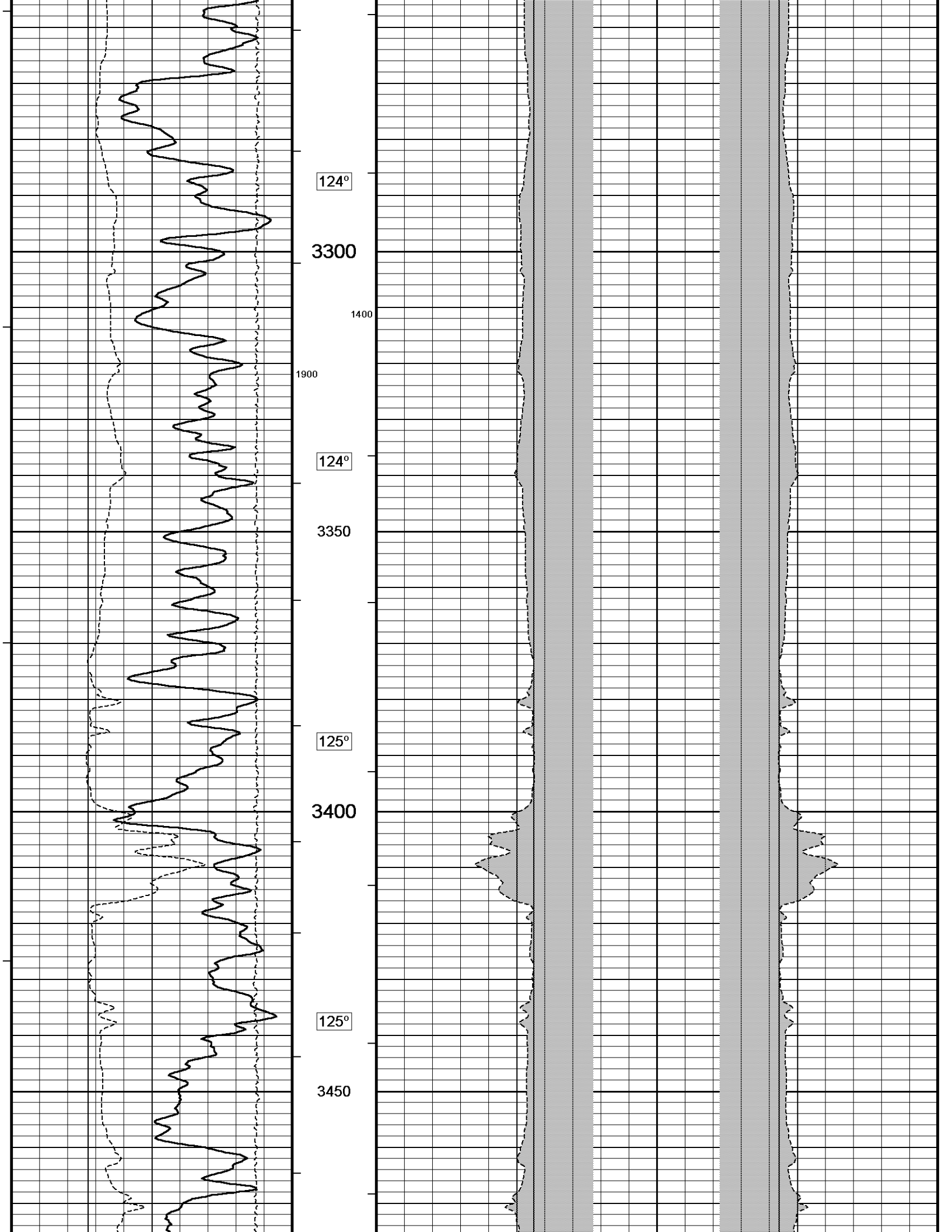


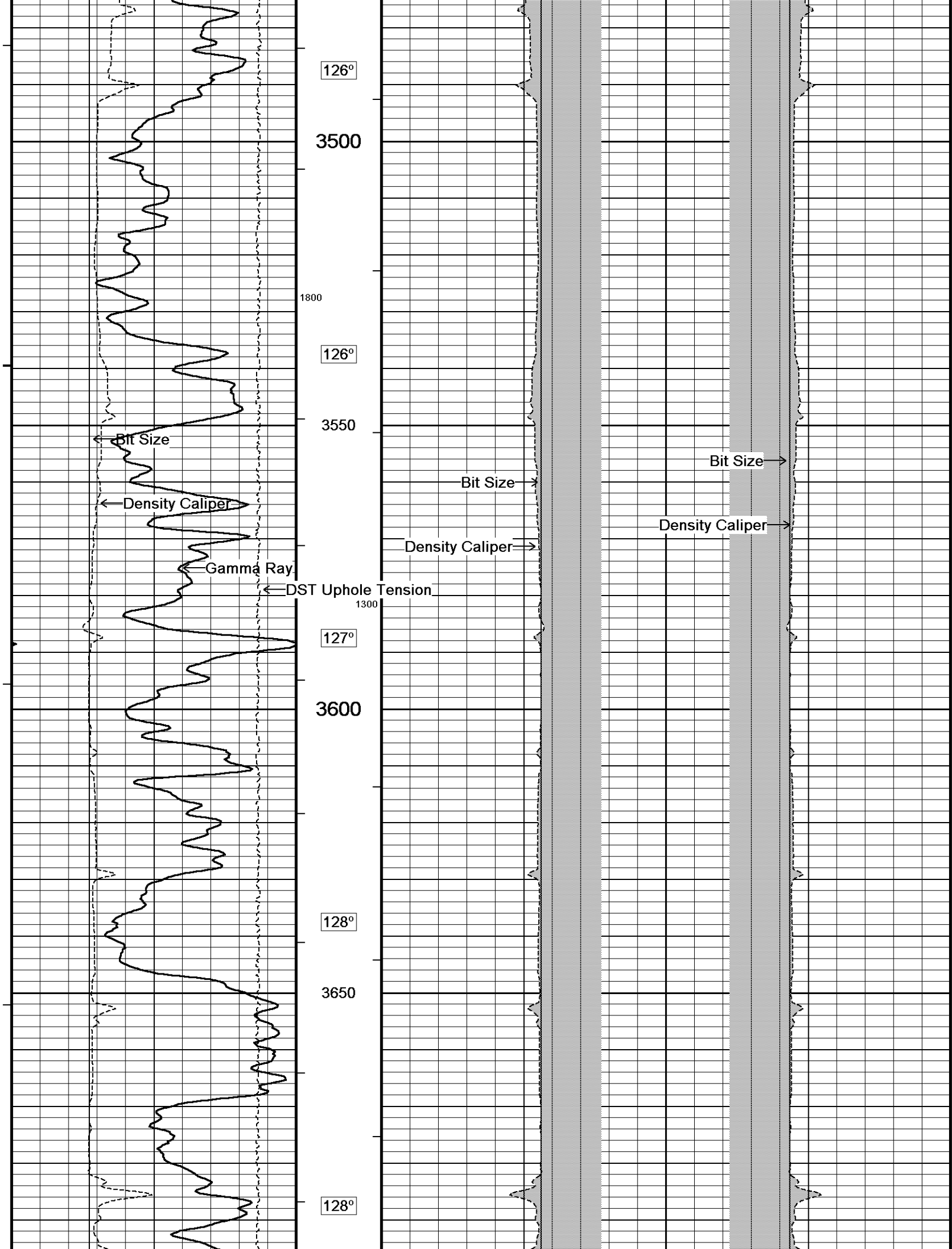


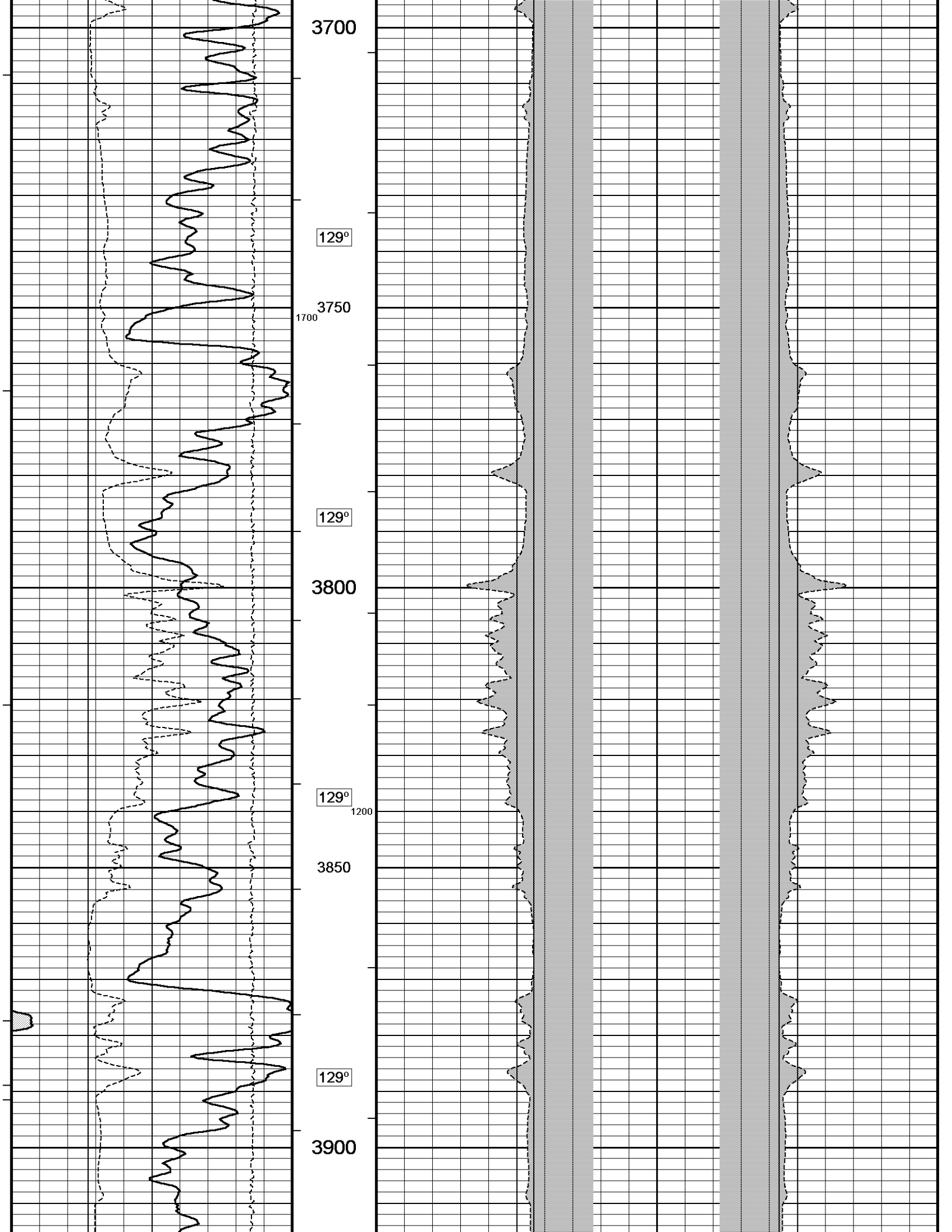


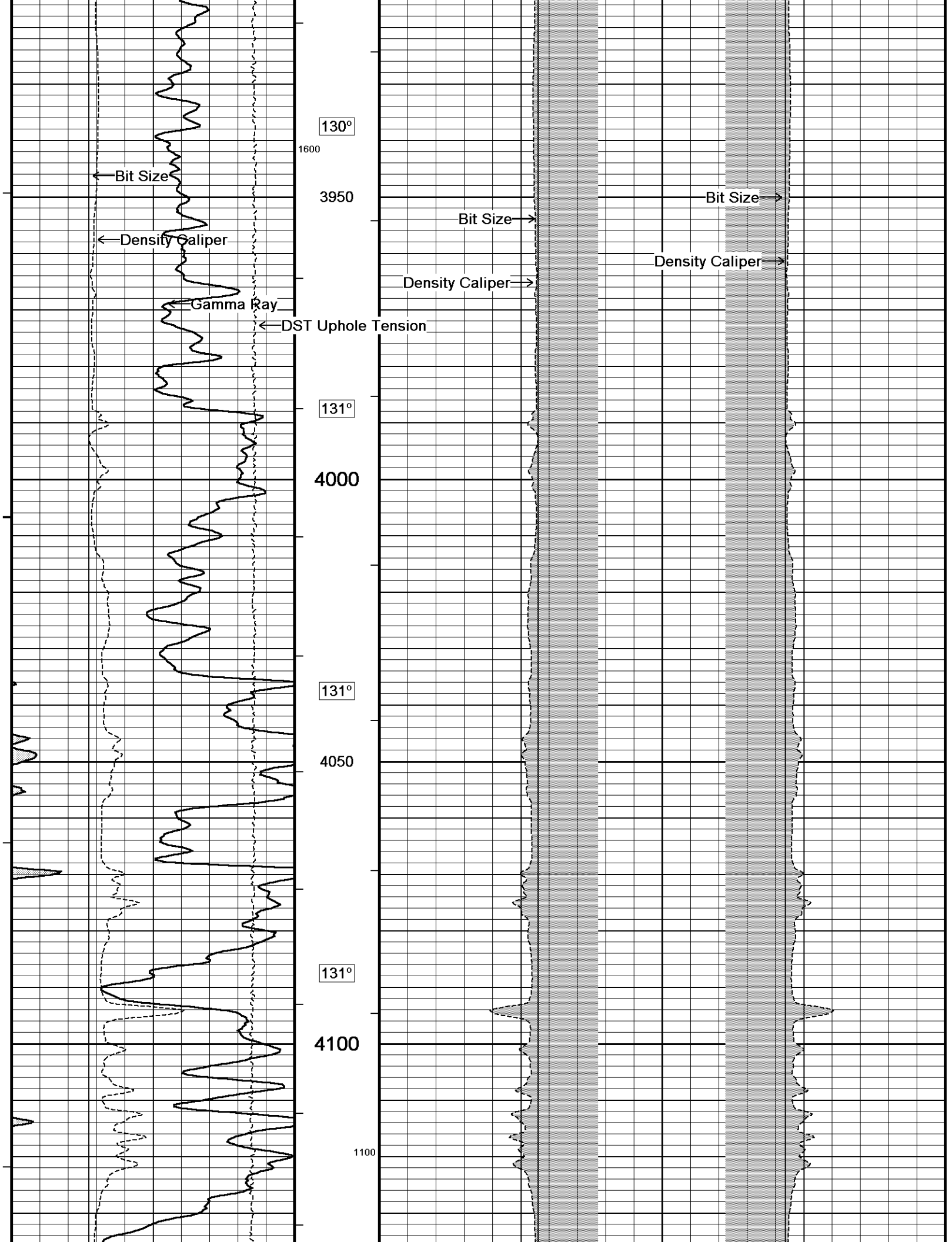


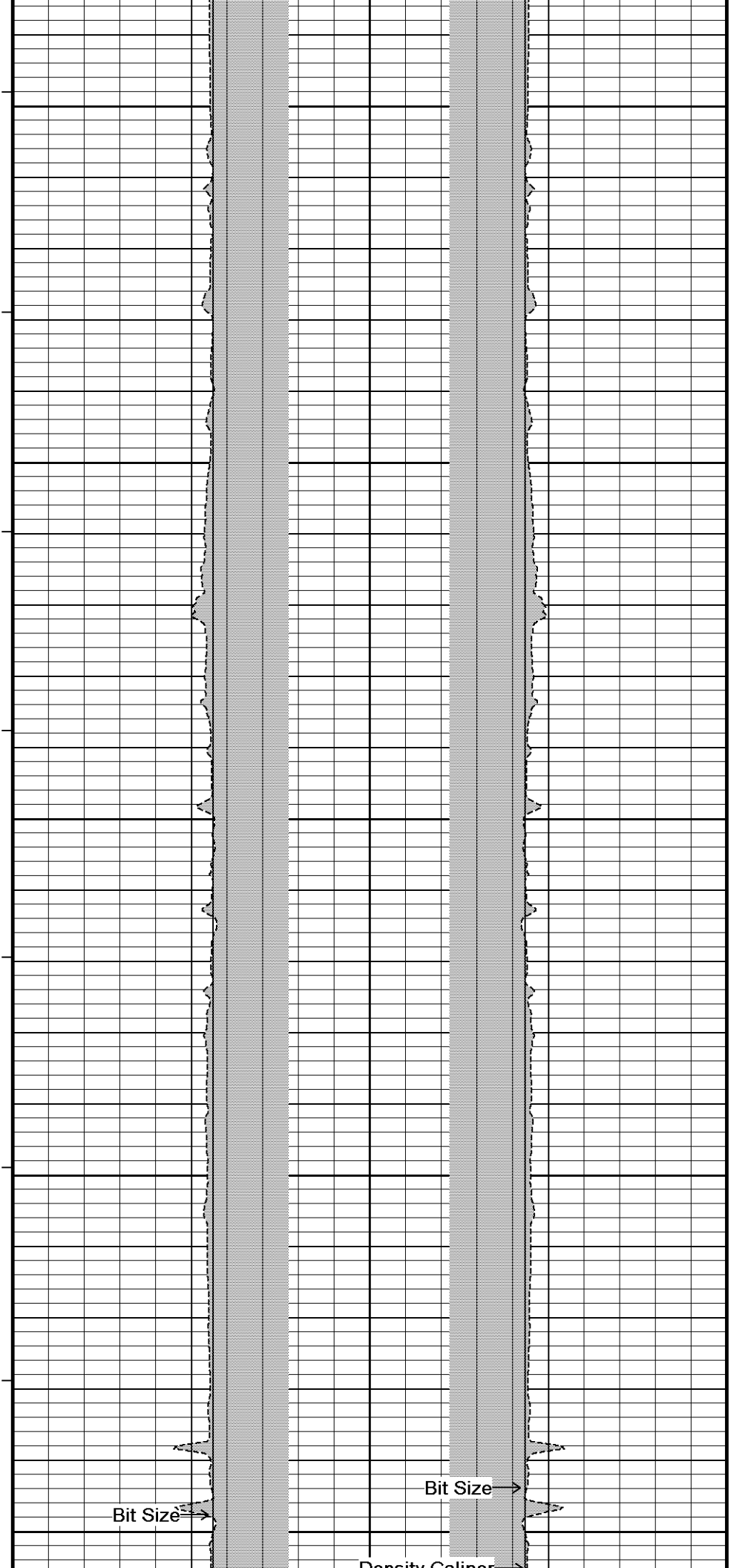
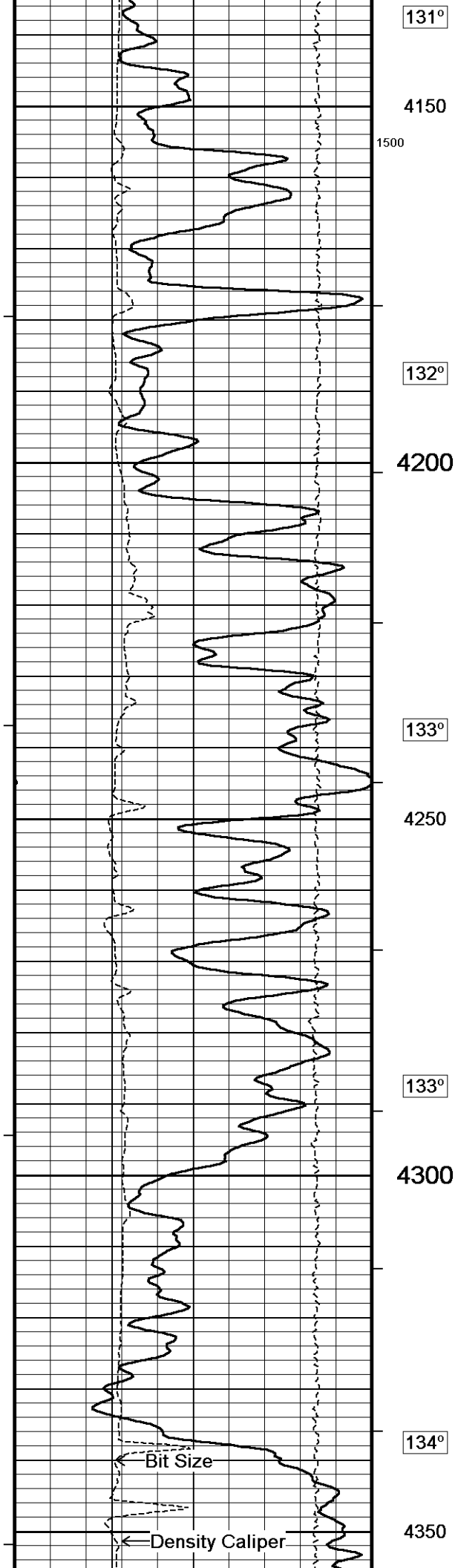


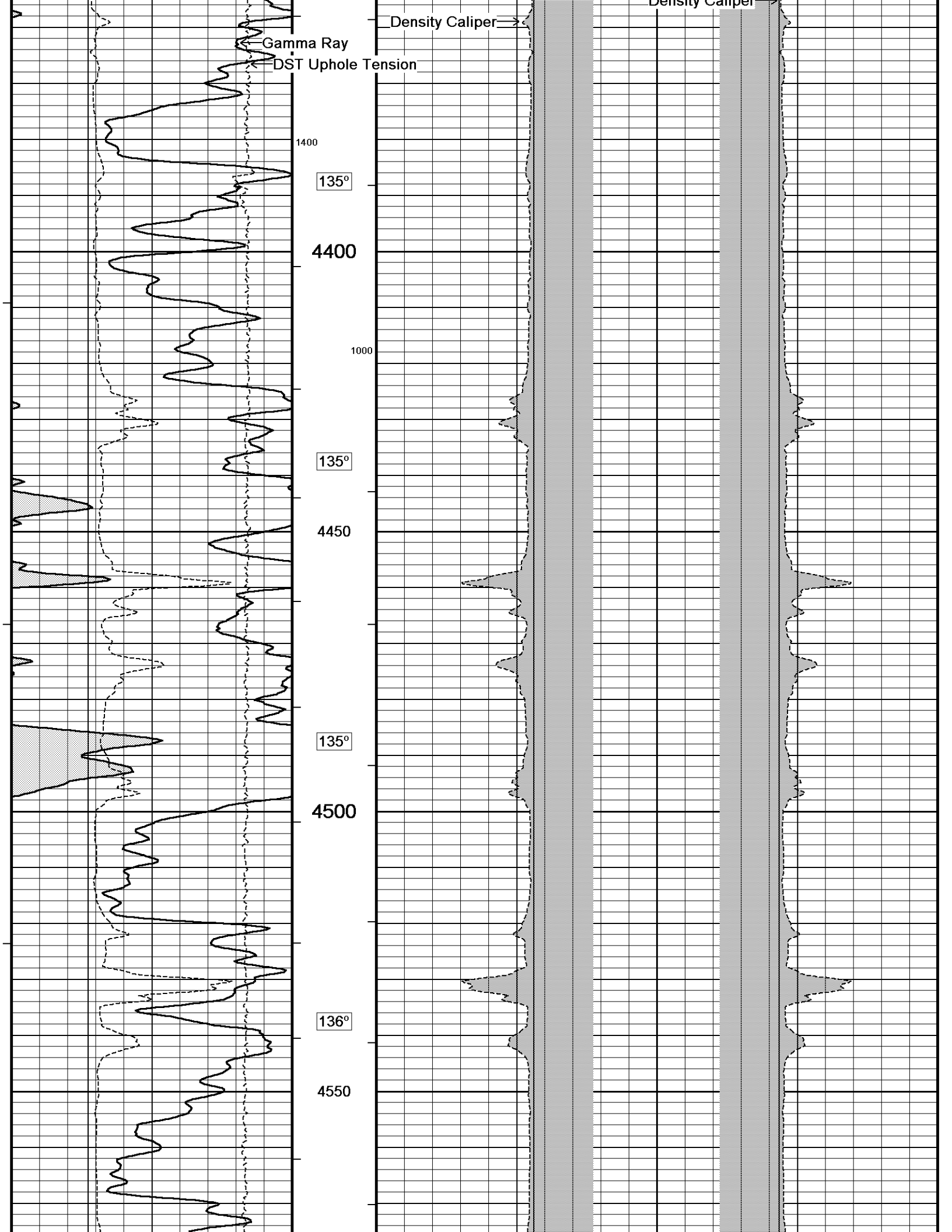


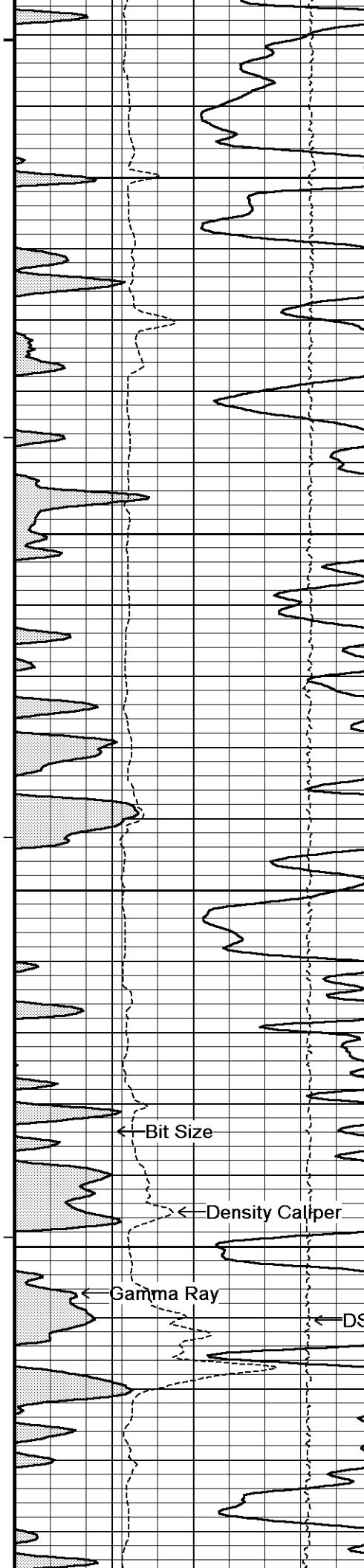




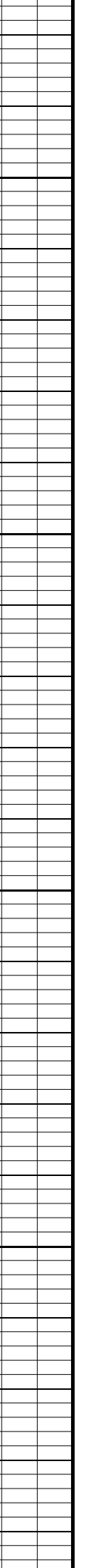
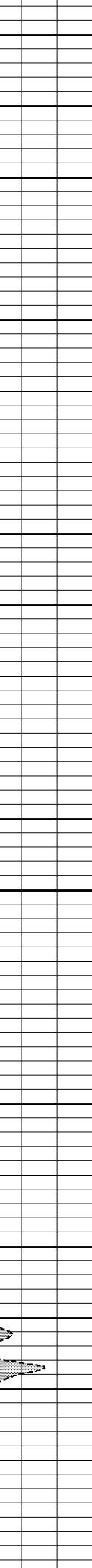
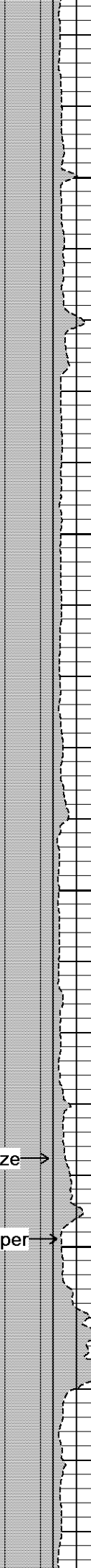
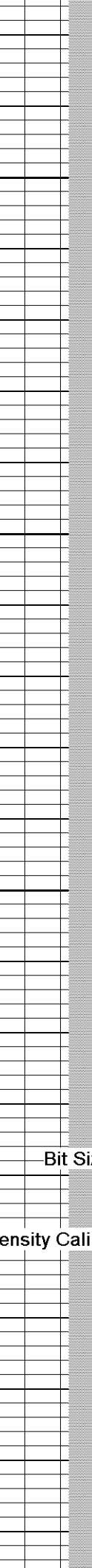
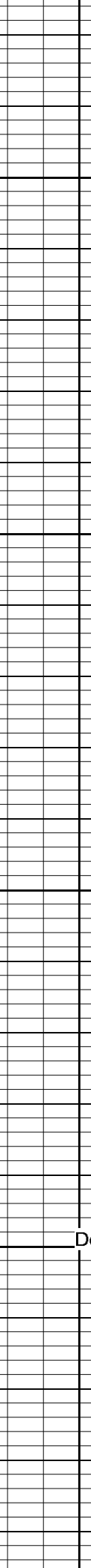
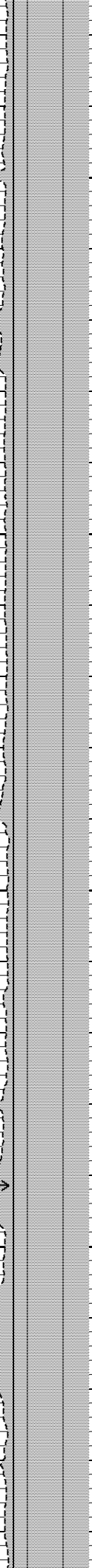
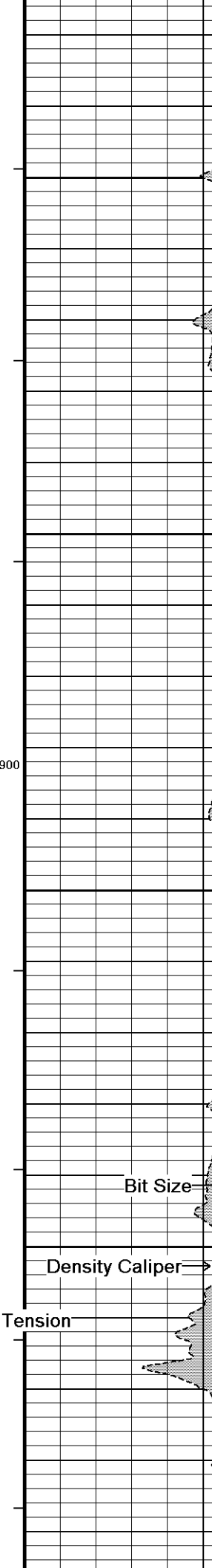


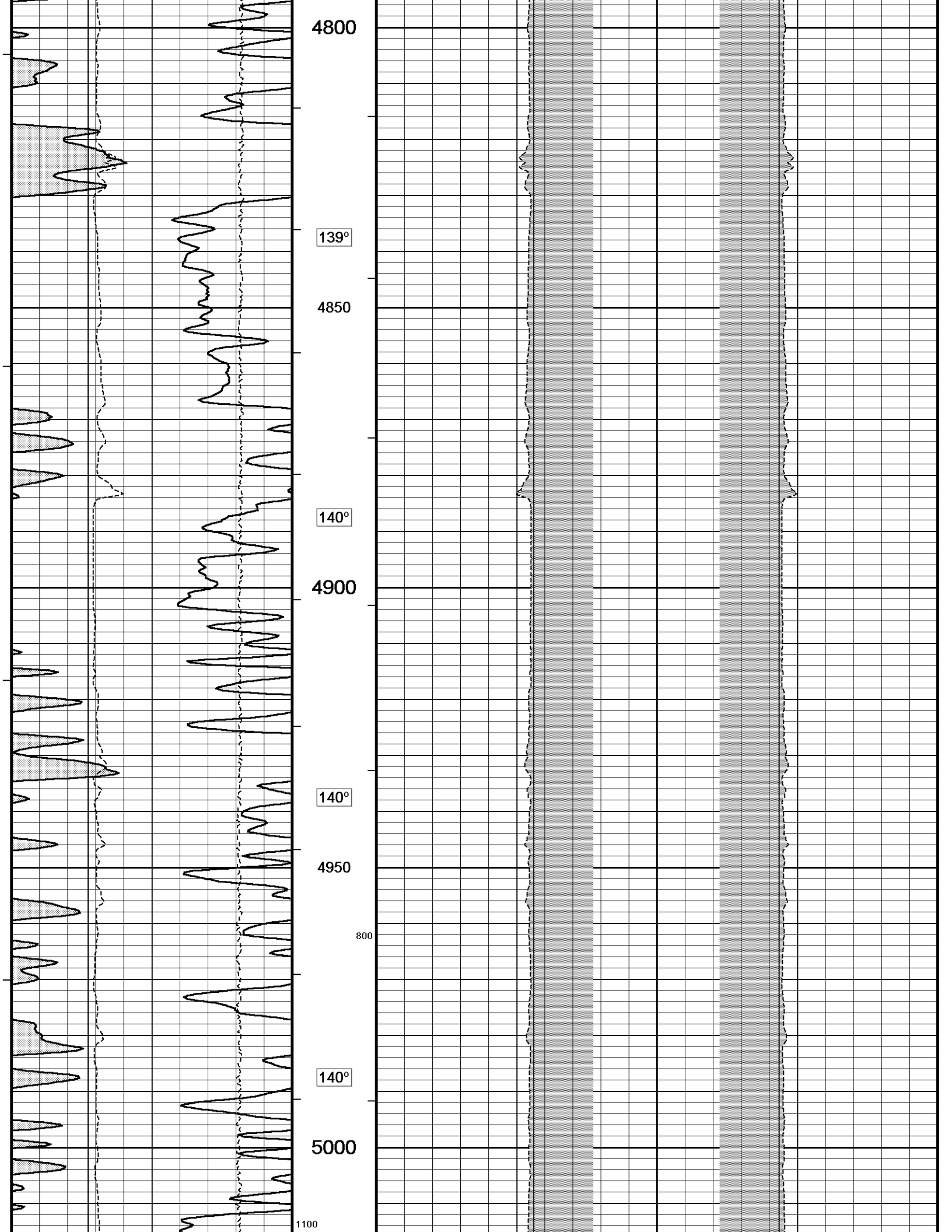


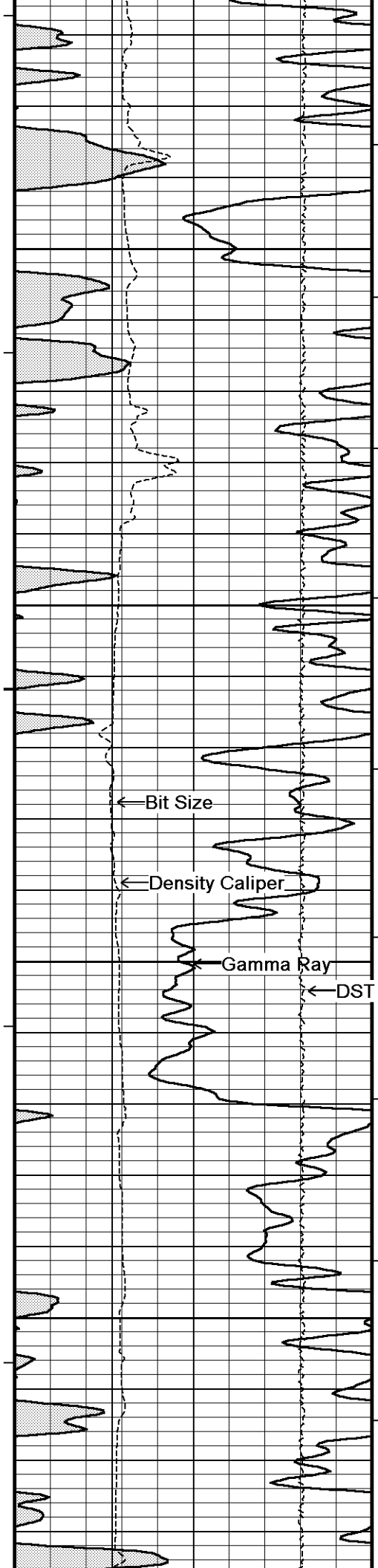




1300
137°
4600
137°
4650
900
138°
4700
138°
4750
138°
1200







141°

5050

141°

5100

← Bit Size

← Density Caliper

← Gamma Ray

← DST Uphole Tension

142°

5150

142°

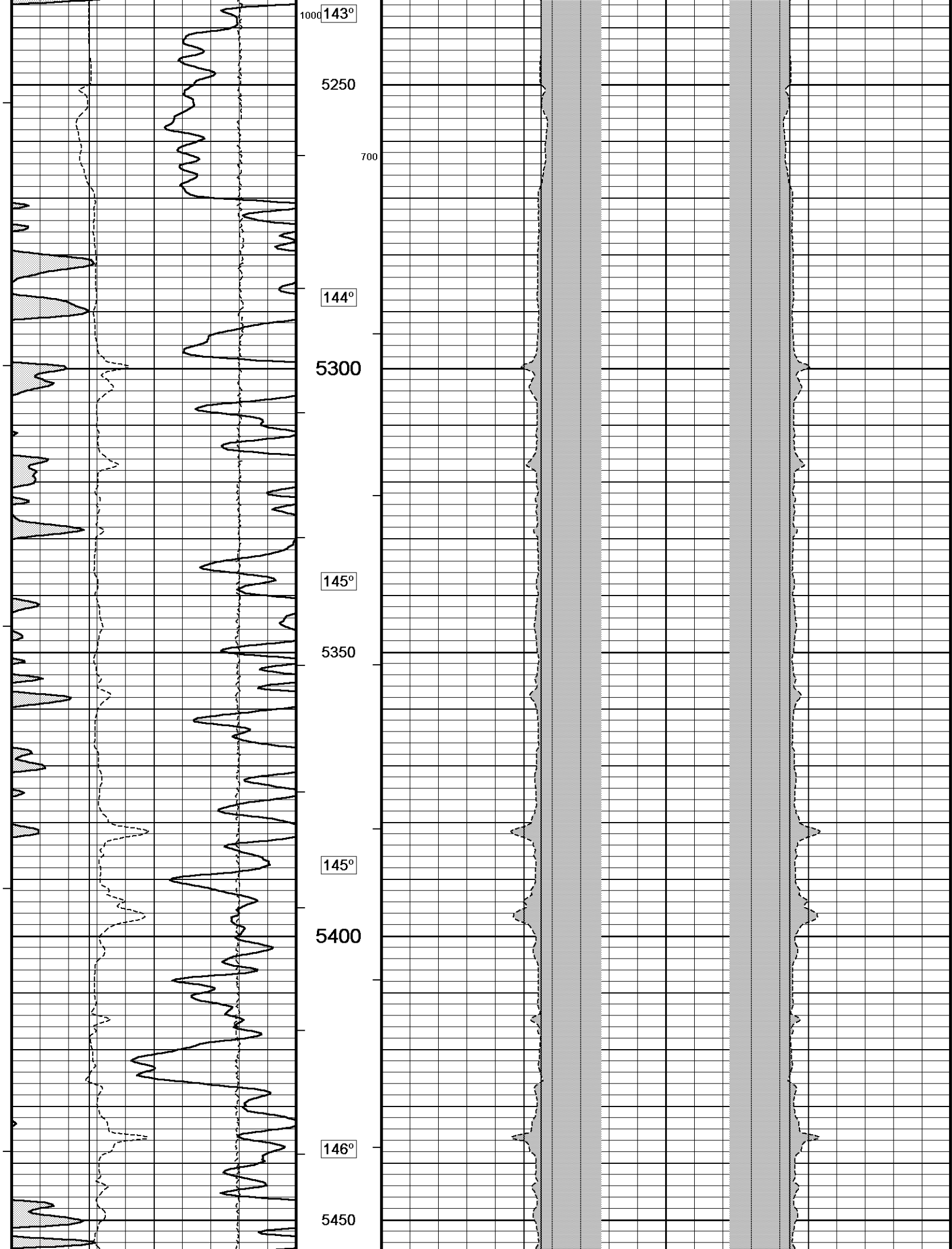
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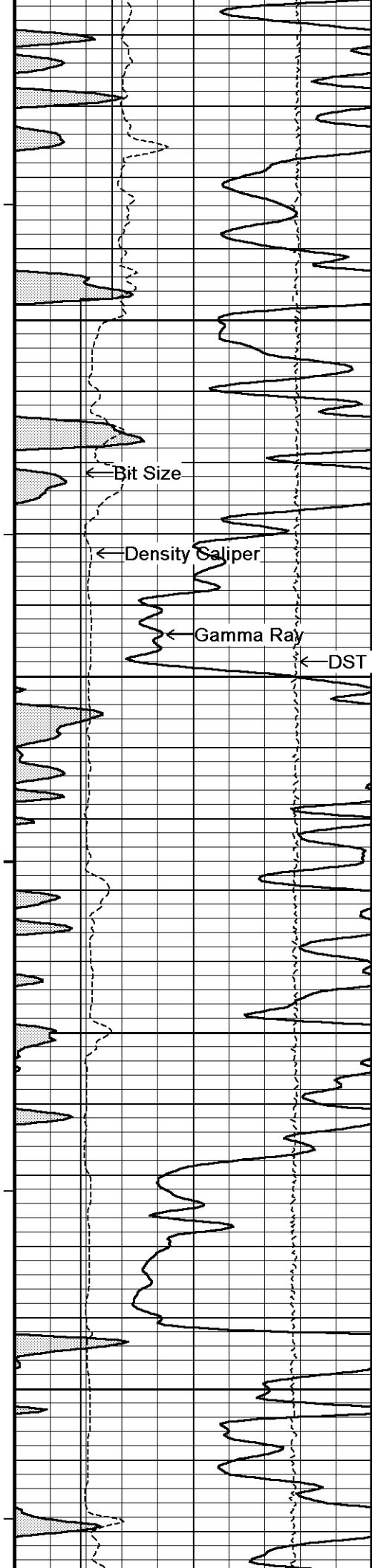
Bit Size →

Density Caliper →

Bit Size →

Density Caliper →





900
147°
5500

147°

DST Uphole Tension
5550

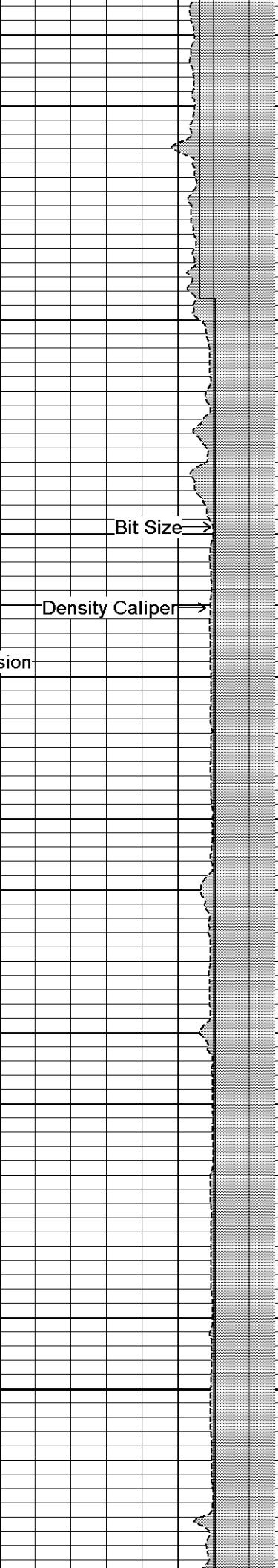
600

148°

5600

148°

5650



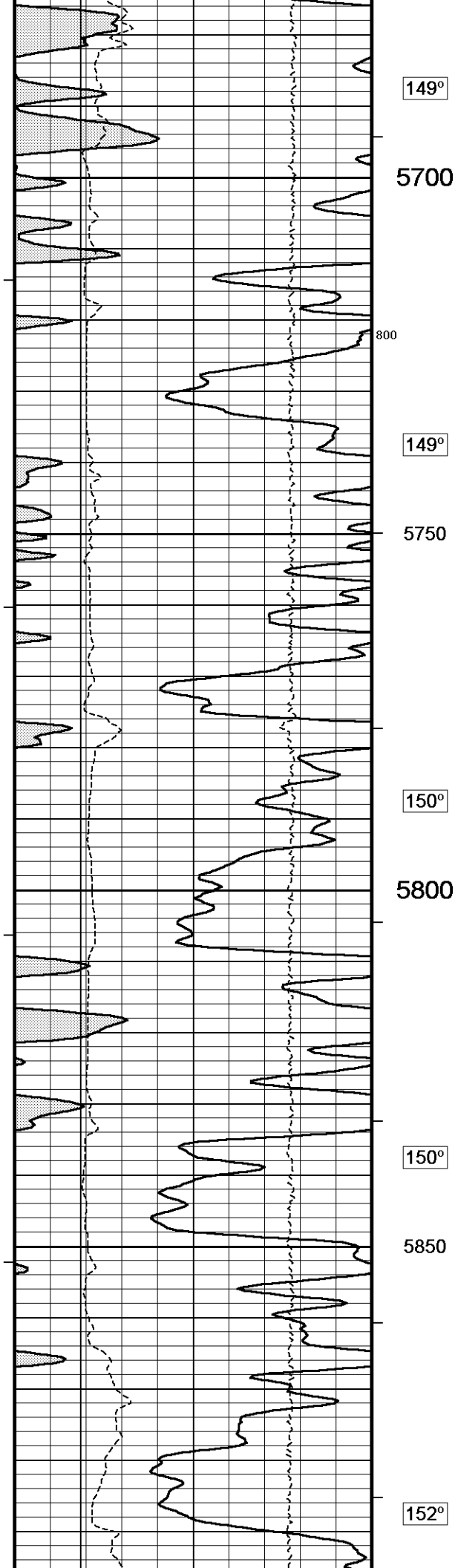
Bit Size

Density Caliper



Bit Size

Density Caliper



149°

5700

800

149°

5750

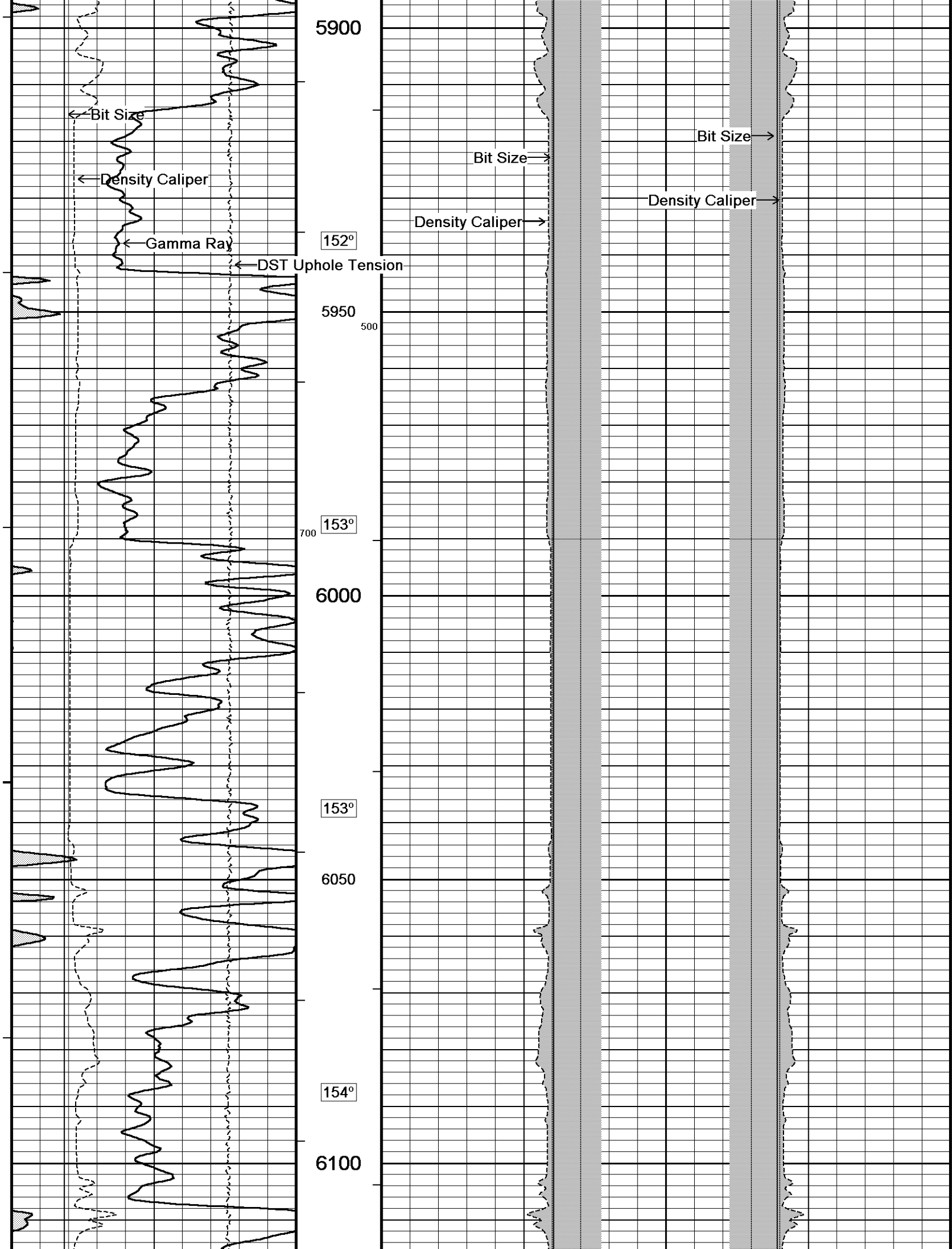
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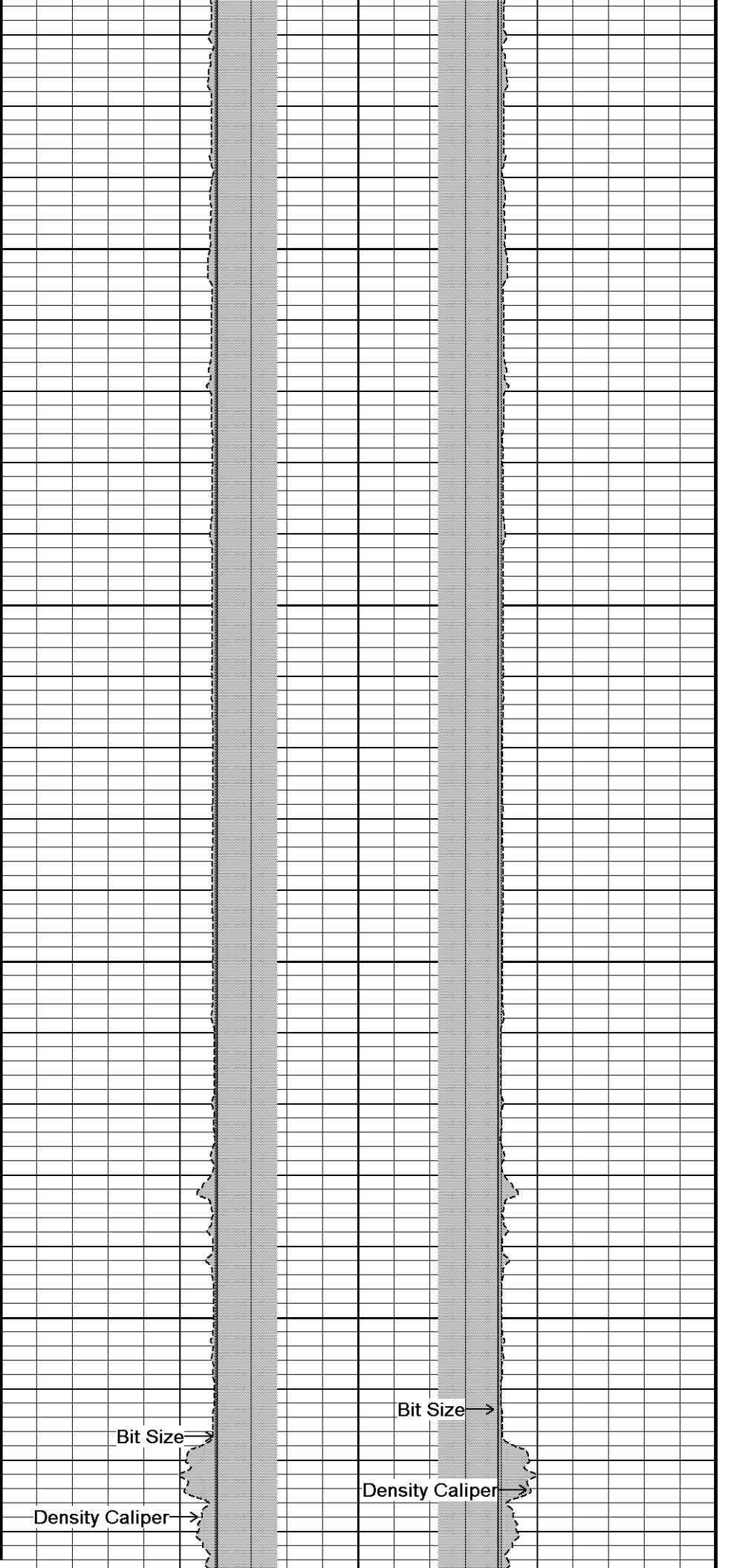
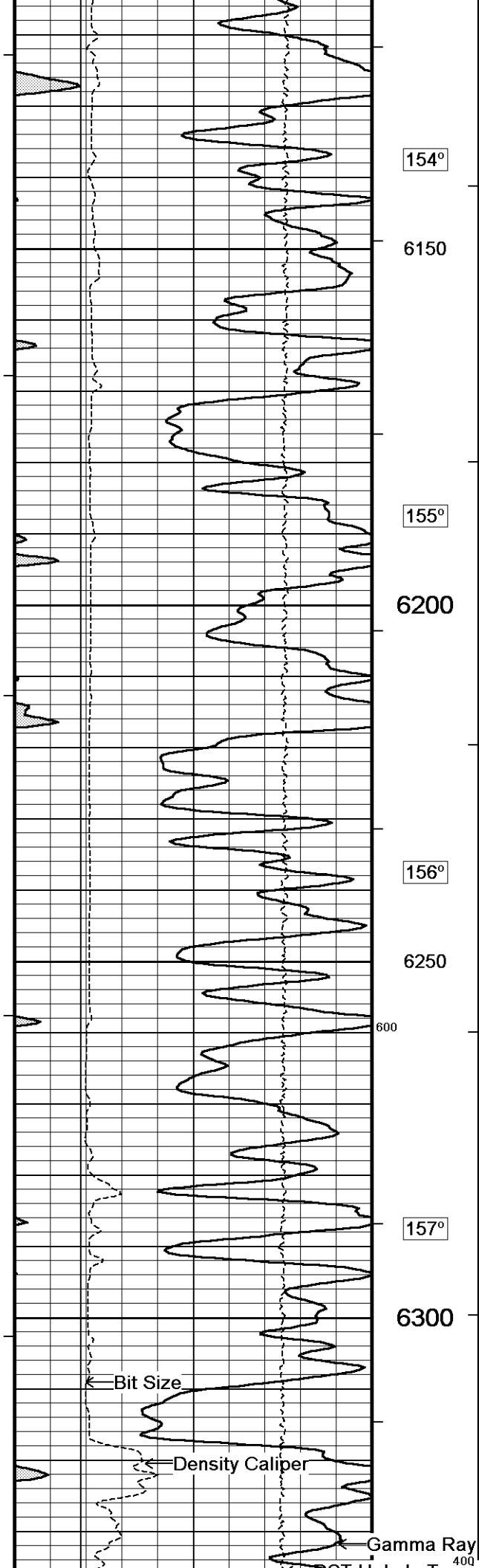
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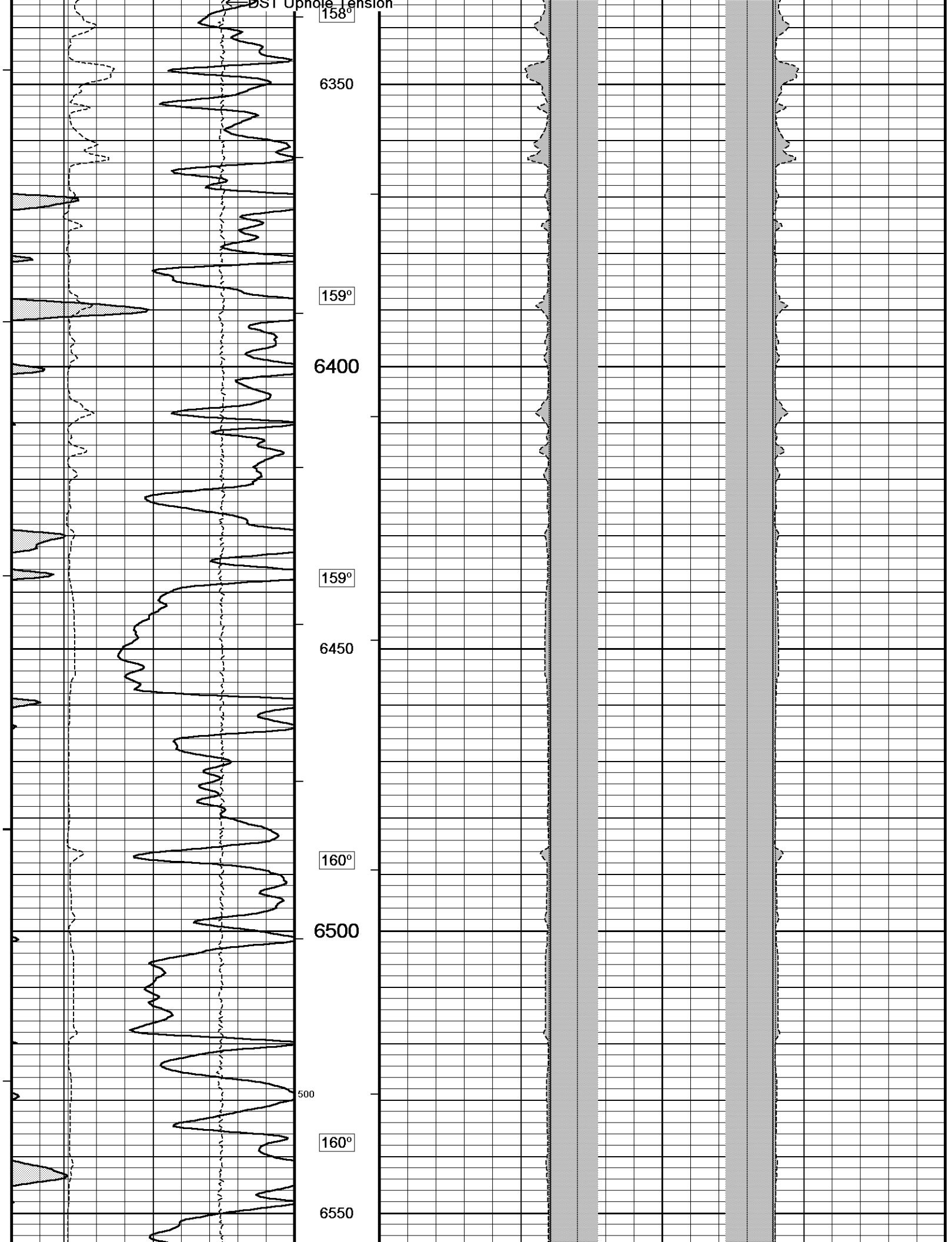
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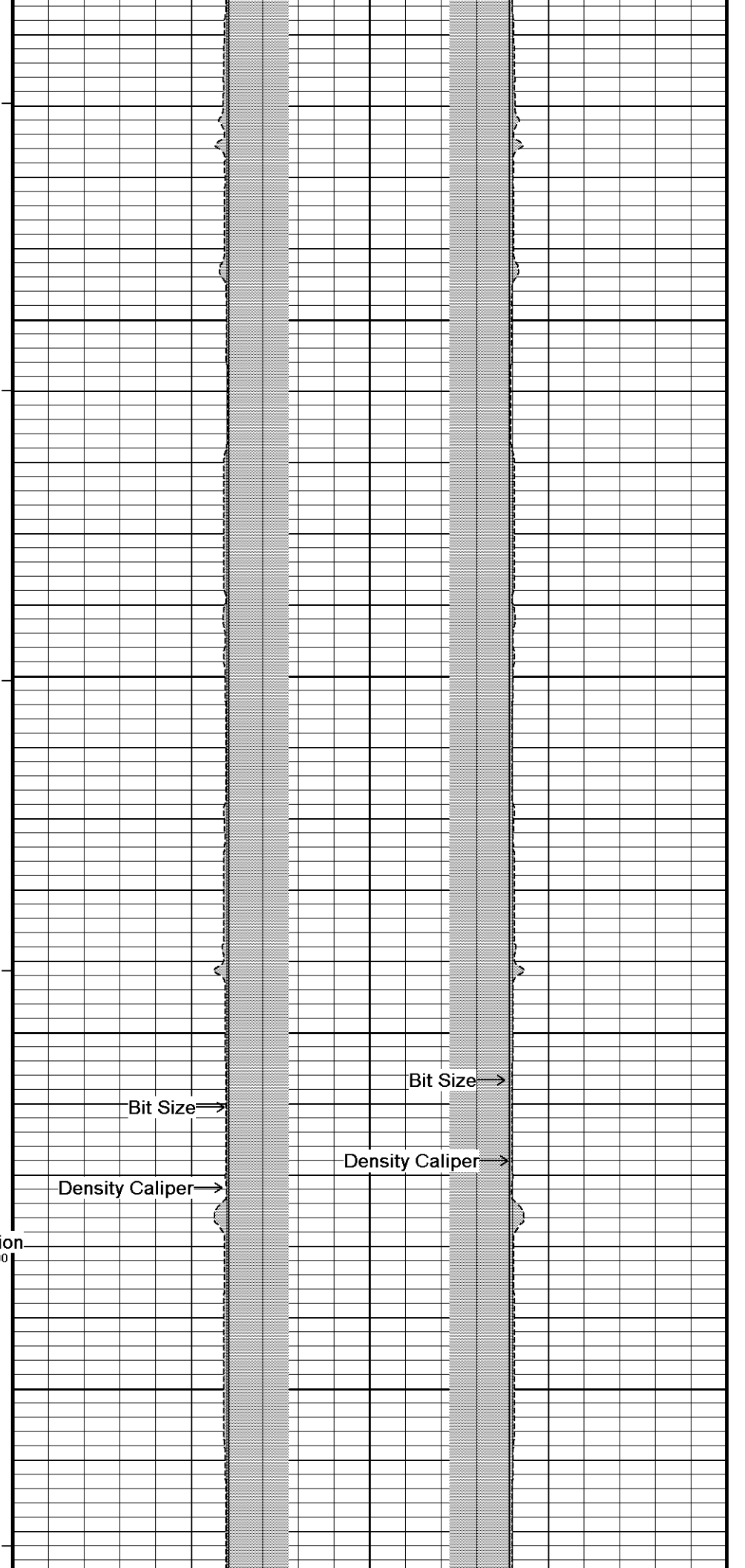
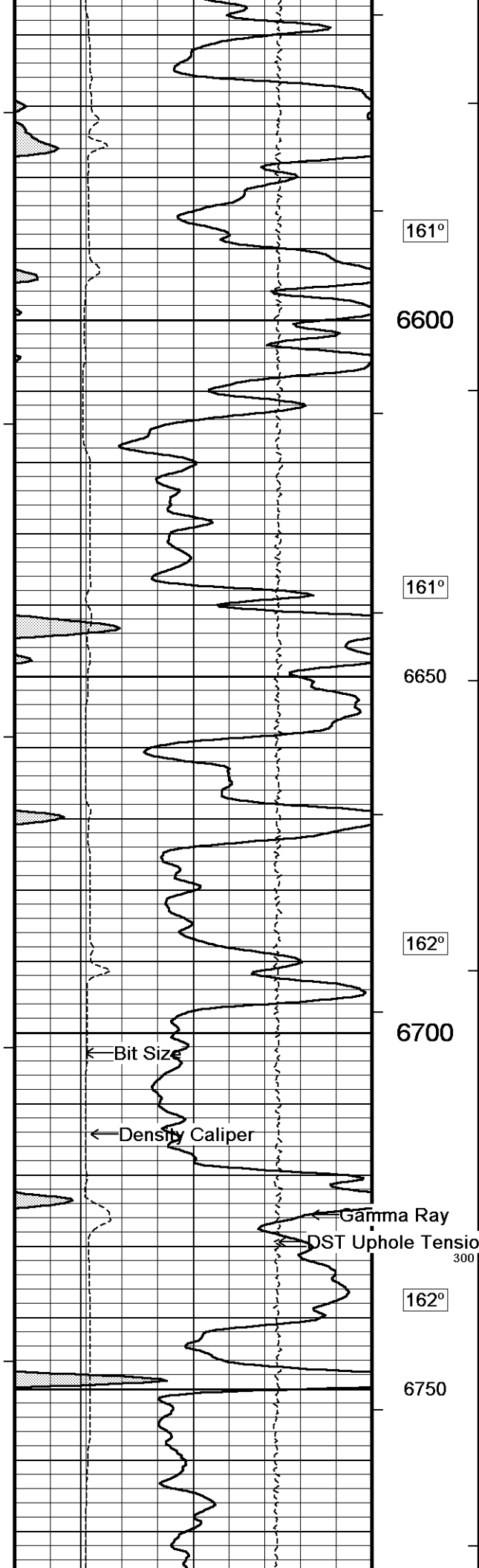
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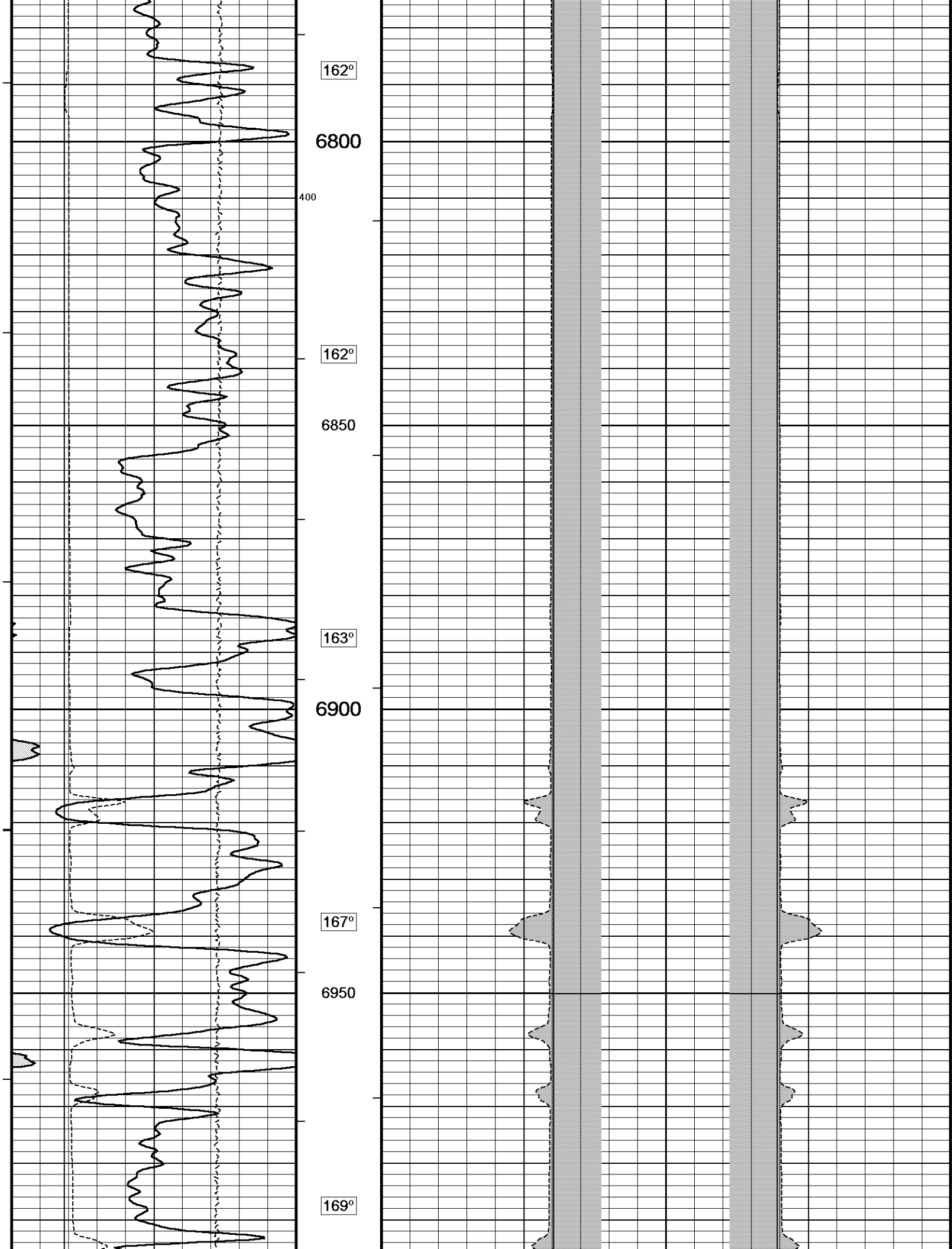
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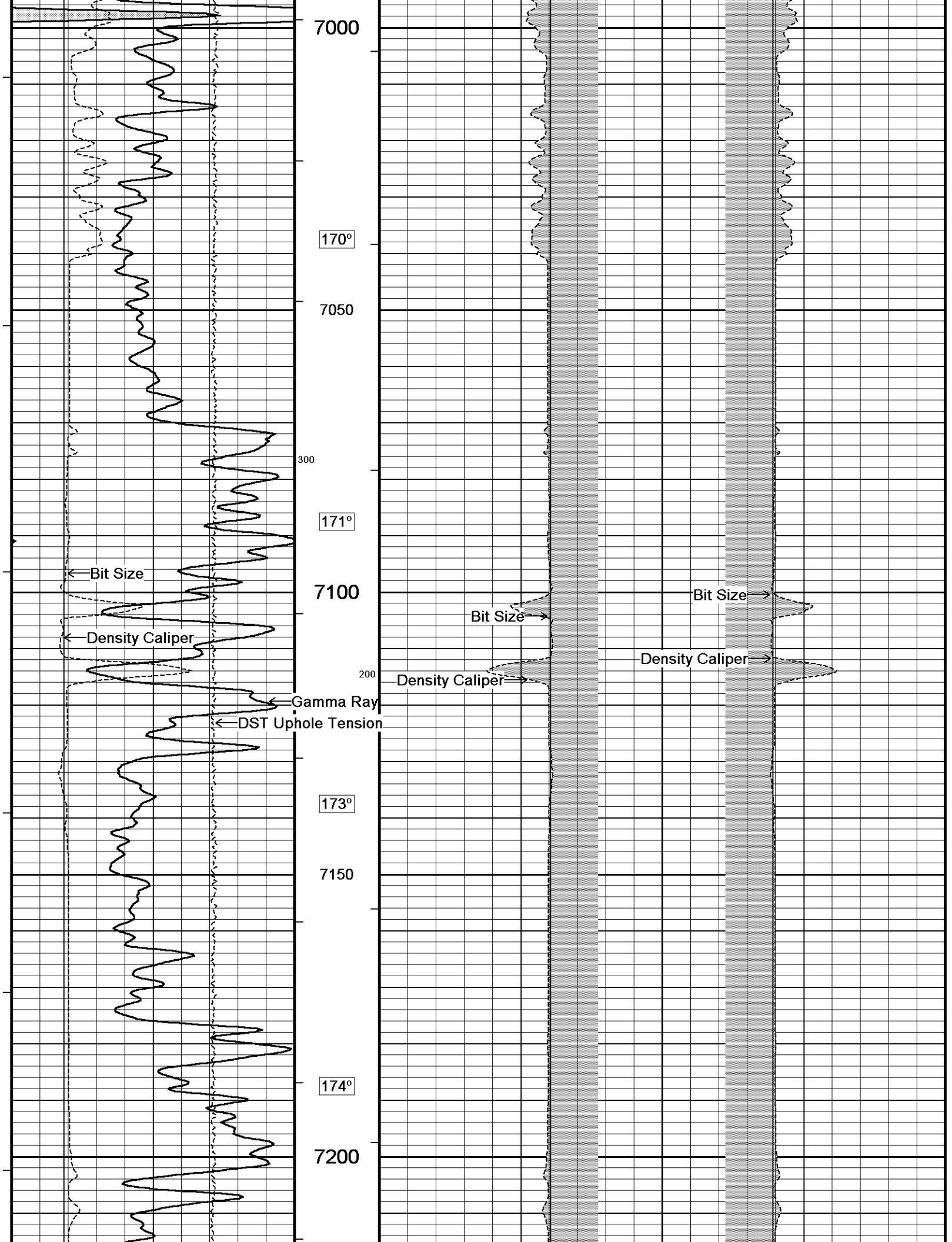


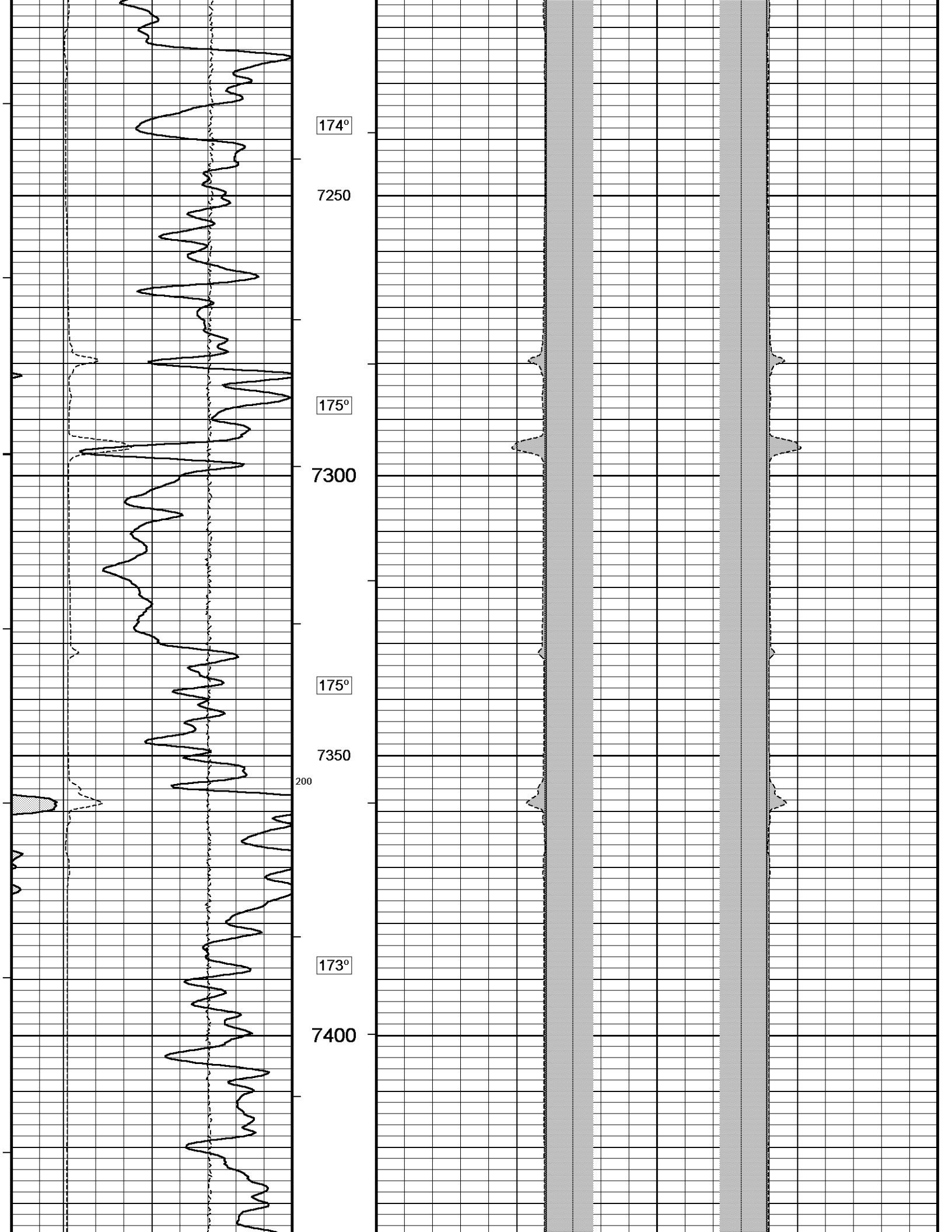


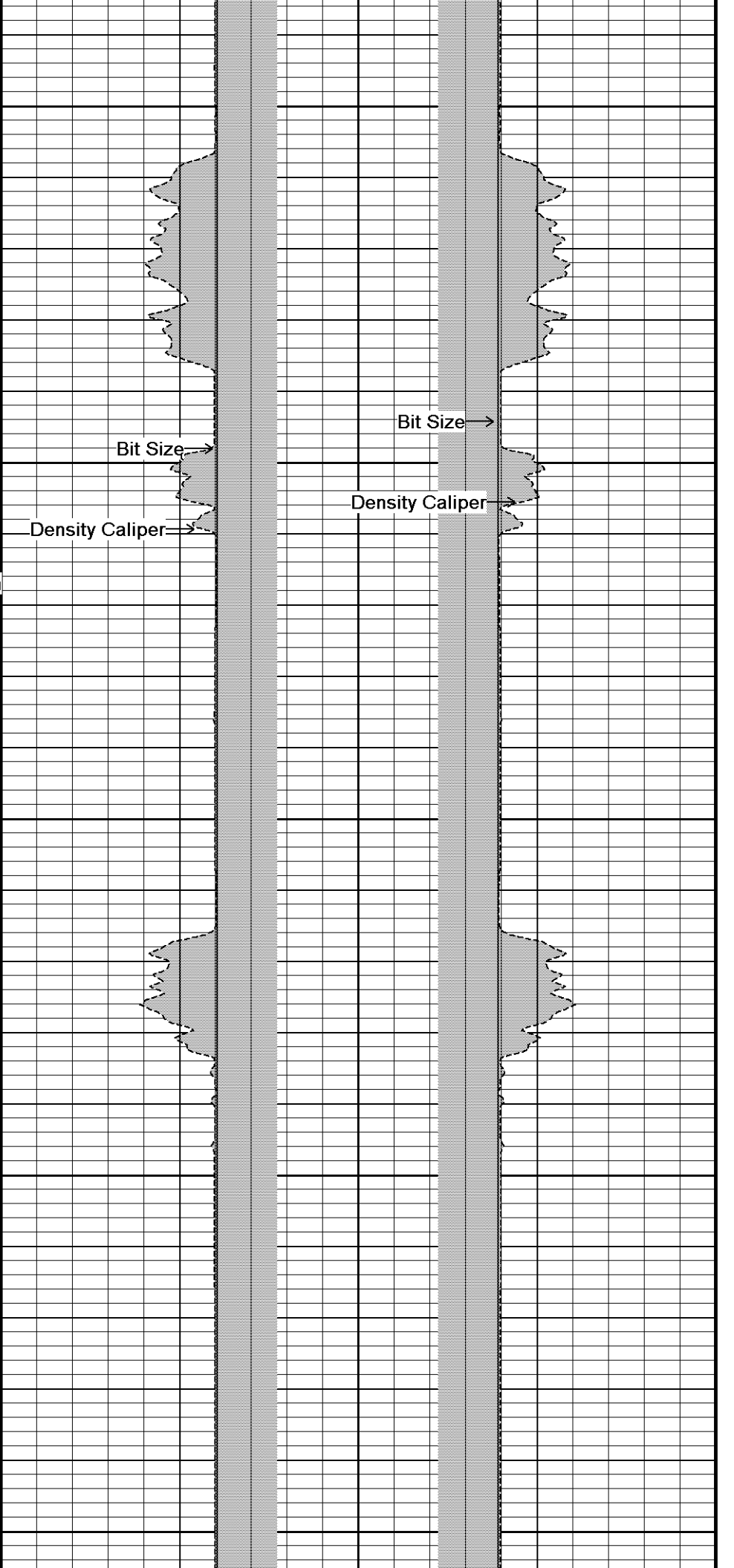
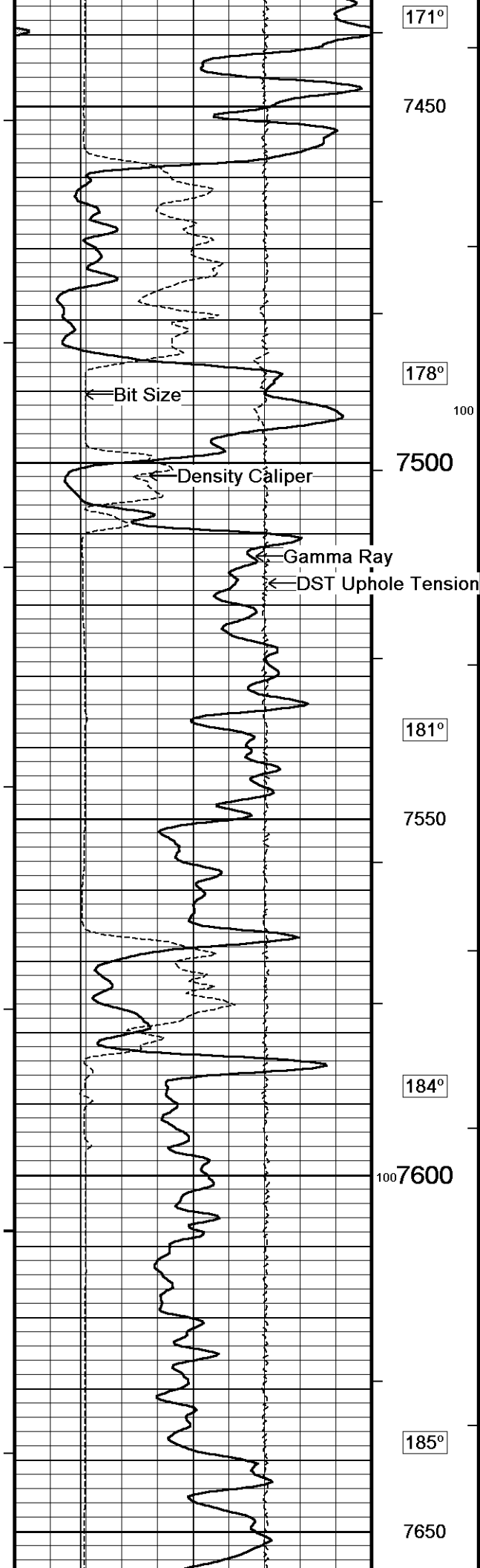


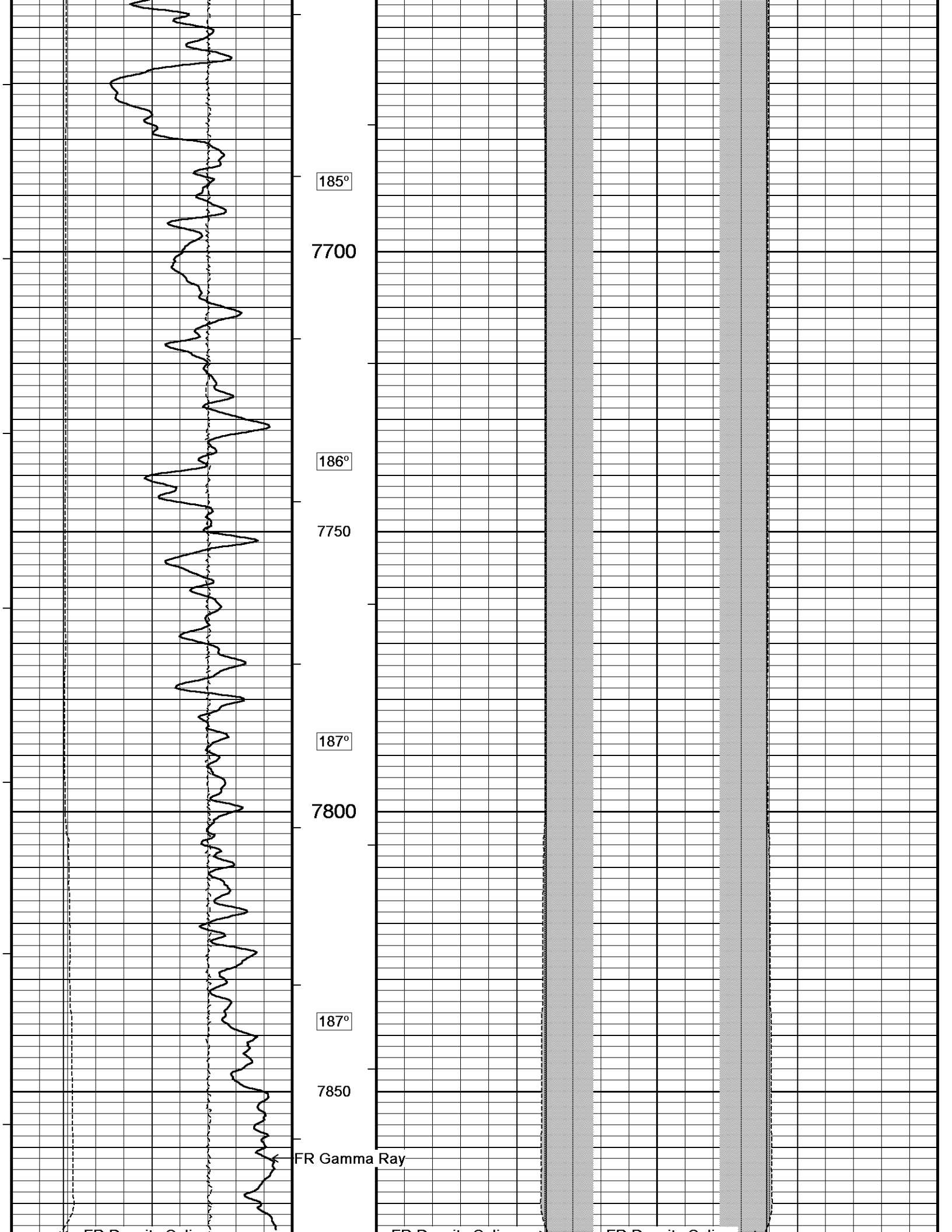


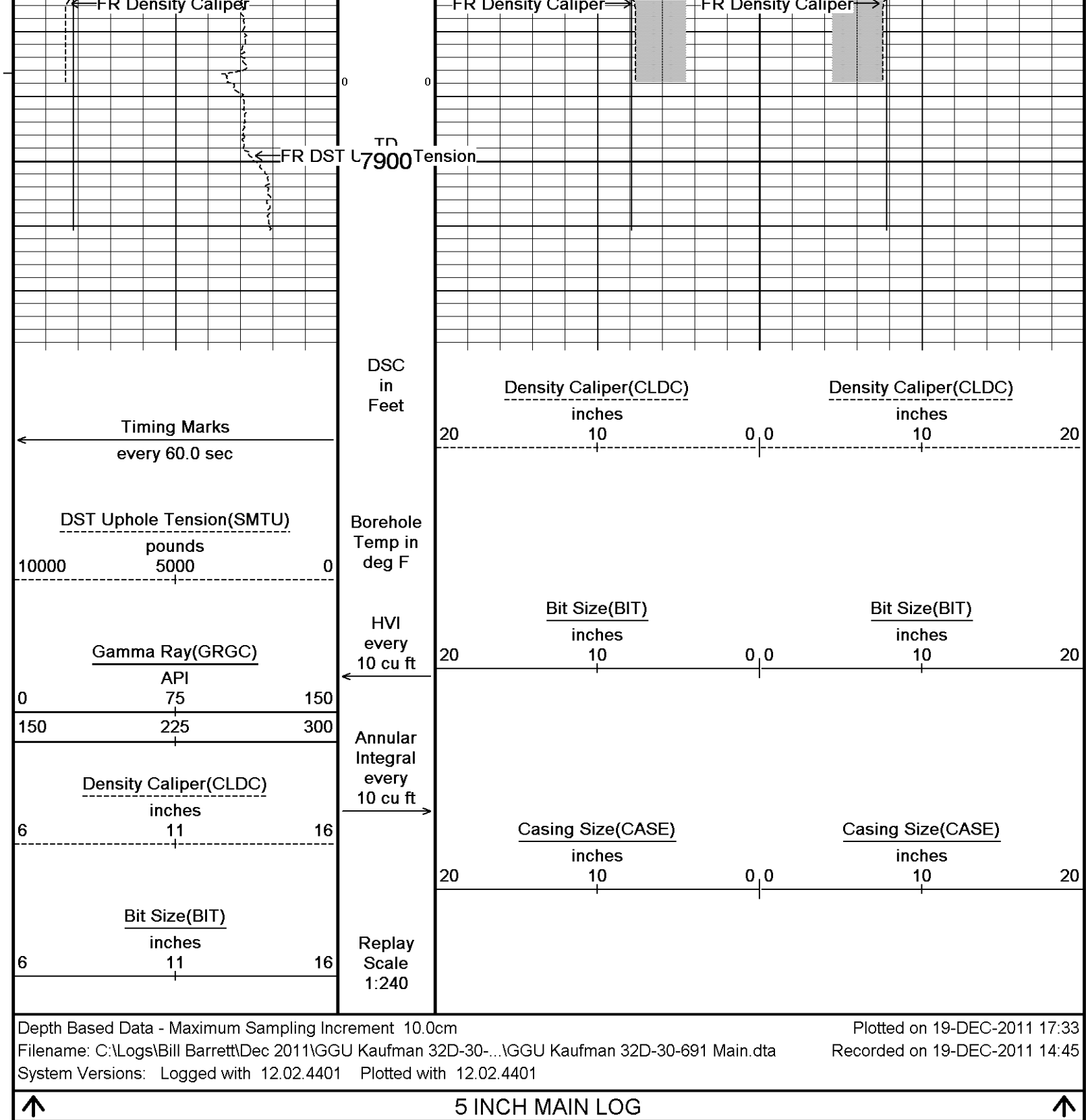












DOWNHOLE EQUIPMENT

C:\Logs\Bill Barrett\Dec 2011\GGU Kaufman 32D-30-691\GGU Kaufman 32D-30-691 Main.dta

SHA-J.A Compact Swivel Head Adaptor
SHA-J.A 314 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in

Compact Comms Gamma
MCG-D.A 342 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in

Compact Neutron
MDN-B.A 250 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in



37.07 ft GRGC - Gamma Ray
34.16 ft CGXT - MCG External Temperature
30.61 ft NPRS - Sandstone Neutron Por.

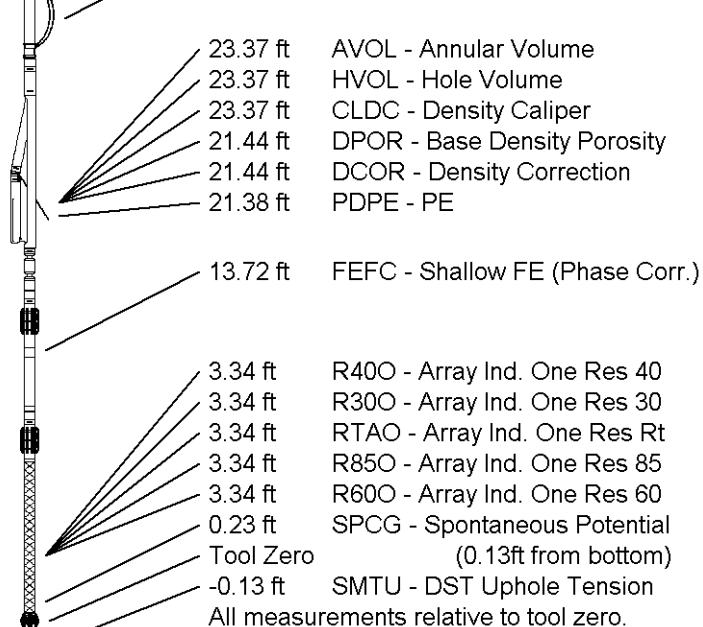
Compact Density/Caliper
MPD-B 167 LG: 9.59 ft WT: 90.4 lb OD: 2.45 in

SKJ-D.A Compact Knuckle Joint
SKJ-D.A 88 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

Compact Focussed Electric
MFE-B.A 179 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

Compact Induction
MAI-A.A 191 LG: 10.81 ft WT: 48.5 lb OD: 2.24 in

Total Length: 44.66 ft Weight: 348.3 lb



COMPANY	BILL BARRETT CORPORATION
WELL	GGU KAUFMAN 32D-30-691
FIELD	GIBSON GULCH
PROVINCE/COUNTY	GARFIELD
COUNTRY/STATE	U.S.A. / COLORADO

Elevation Kelly Bushing	5858.00	feet	First Reading	7876.00
Elevation Drill Floor	5858.00	feet	Depth Driller	7900.00 feet
Elevation Ground Level	5835.00	feet	Depth Logger	7899.00 feet



Weatherford®

HOLE VOLUME
CALIPER LOG

