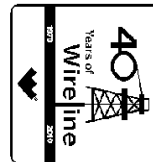




Weatherford

**HOLE VOLUME
CALIPER LOG**

COMPANY **BILL BARRETT CORPORATION**
WELL **KAUFMAN 22B-25-692**
FIELD **MAMM CREEK**
PROVINCE/COUNTY **GARFIELD**
COUNTRY/STATE **U.S.A. / COLORADO**
LOCATION **SHL: 2181' FSL & 1641' FWL**
BHL: 2135' FNL & 1980' FWL



SEC 25 TWP 6S RGE 92W
API Number 05-045-19658
Permit Number MA/IMFE
Other Services MPD/MDN MA/IMFE

Permanent Datum G.L., Elevation 5922 feet
Log Measured From KB above Permanent Datum
Drilling Measured From K.B. @ 23 FT.

Elevations: KB 5945.00
DF 5944.00
GL 5922.00

Date	17-JULY-2011
Run Number	ONE
Depth Driller	7619.00 feet
Depth Logger	7614.00 feet
First Reading	7591.00
Last Reading	810.00
Casing Driller	806.00 feet
Casing Logger	810.00 feet
Bit Size	7.875 inches
Hole Fluid Type	LSND
Density / Viscosity	10.60 lb/USg 52.00 CP
PH / Fluid Loss	9.50 6.60 ml/30Min
Sample Source	FLOW LINE
Rm @ Measured Temp	2.32 @100.5 ohm-m
Rmf @ Measured Temp	1.86 @100.5 ohm-m
Rmc @ Measured Temp	2.78 @100.5 ohm-m
Source Rmf / Rmc	CALC CALC
Rm @ BHT	1.239 @191.0 ohm-m
Time Since Circulation	5 HOURS
Max Recorded Temp	191.00 deg F
Equipment Name	COMPACT
Equipment / Base	13045 GD JCT
Recorded By	D. KUNTZ
Witnessed By	C. CROW

BOREHOLE RECORD

Last Edited: 17-JUL-2011 11:08

Bit Size inches	Depth From feet	Depth To feet
8.750	810.00	5710.00
7.880	5710.00	7619.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	9.625	0.00	810.00	36.00

REMARKS

LOGGING SOFTWARE USED: 11.03.3186

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

2.00 GRCC 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.

UNDERGAUGE CALIPER READINGS OVER FOLLOWING DEPTHS WERE REPEATED WITH NO CHANGE IN LOG RESPONSE:
BETWEEN 7140 FT AND 7260 FT, 7060-7100 FT.

CLIENT REQUESTED TO START THE MAIN PASS AT 7590 FT DUE TO A TIGHT PULL AT 7595 FT ON THE REPEAT PASS.

TIGHT PULL ENCOUNTERED AT 6720 FT.

CALIPER CHECK IN CASING PRESENTED, REFERENCE I.D. = 8.95" (9 5/8", 36 LB/FT CASING).

8.75 INCH BIT CHANGE AT 5710 FT.

TOTAL HOLE VOLUME FROM TD TO SURFACE CASING = 3125 CU.FT.

ANNULAR VOLUME WITH 4.5 INCH PRODUCTION CASING = 2380 CU.FT.

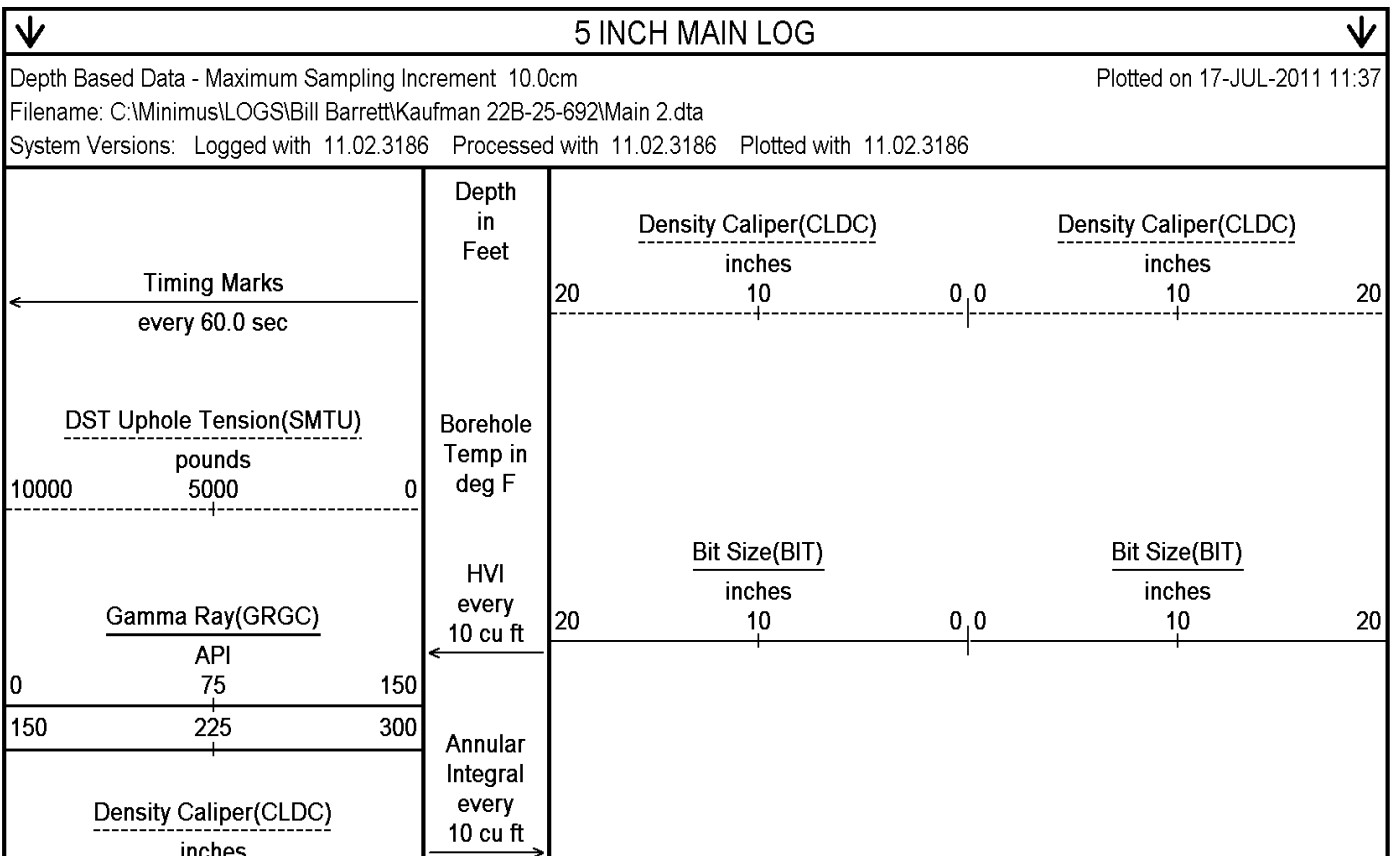
ENGINEER(S): D. KUNTZ

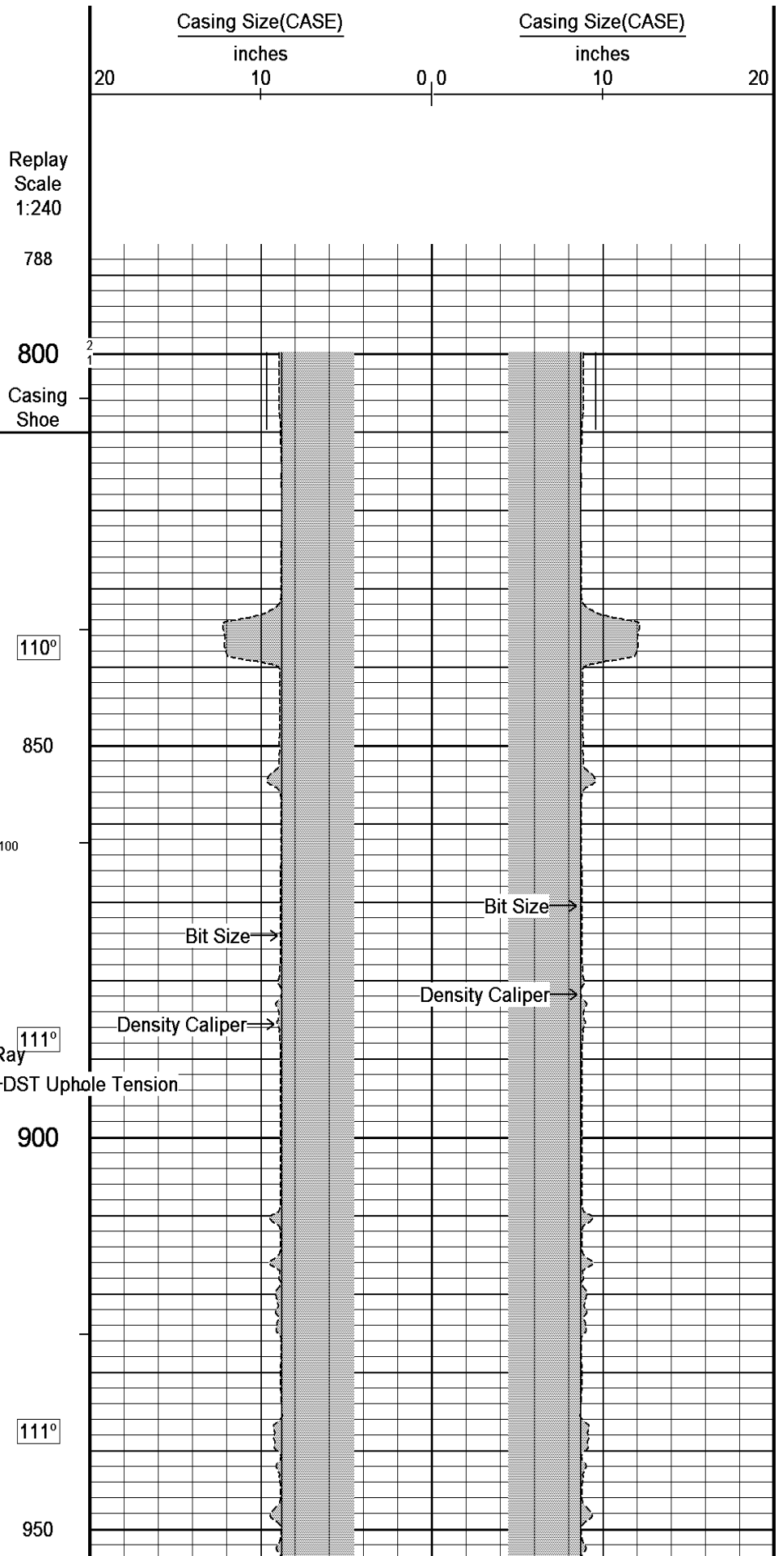
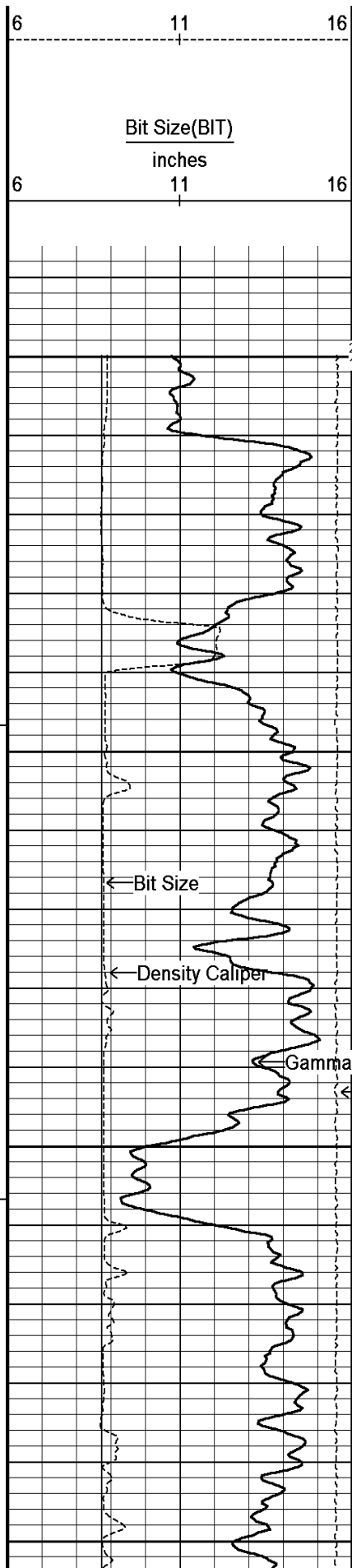
OPERATOR(S): D. DALEY

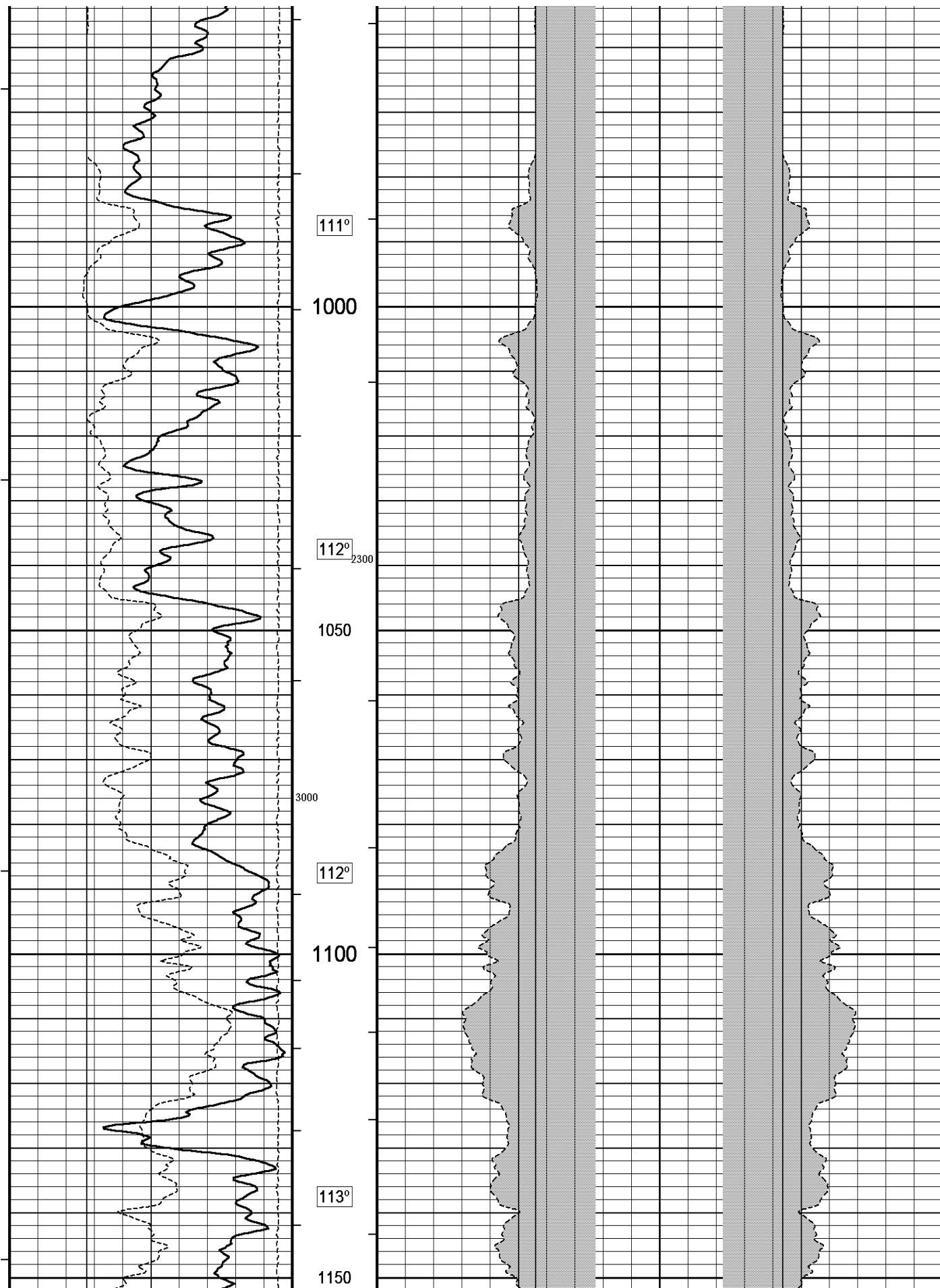
SERVICE ORDER: # 3524788

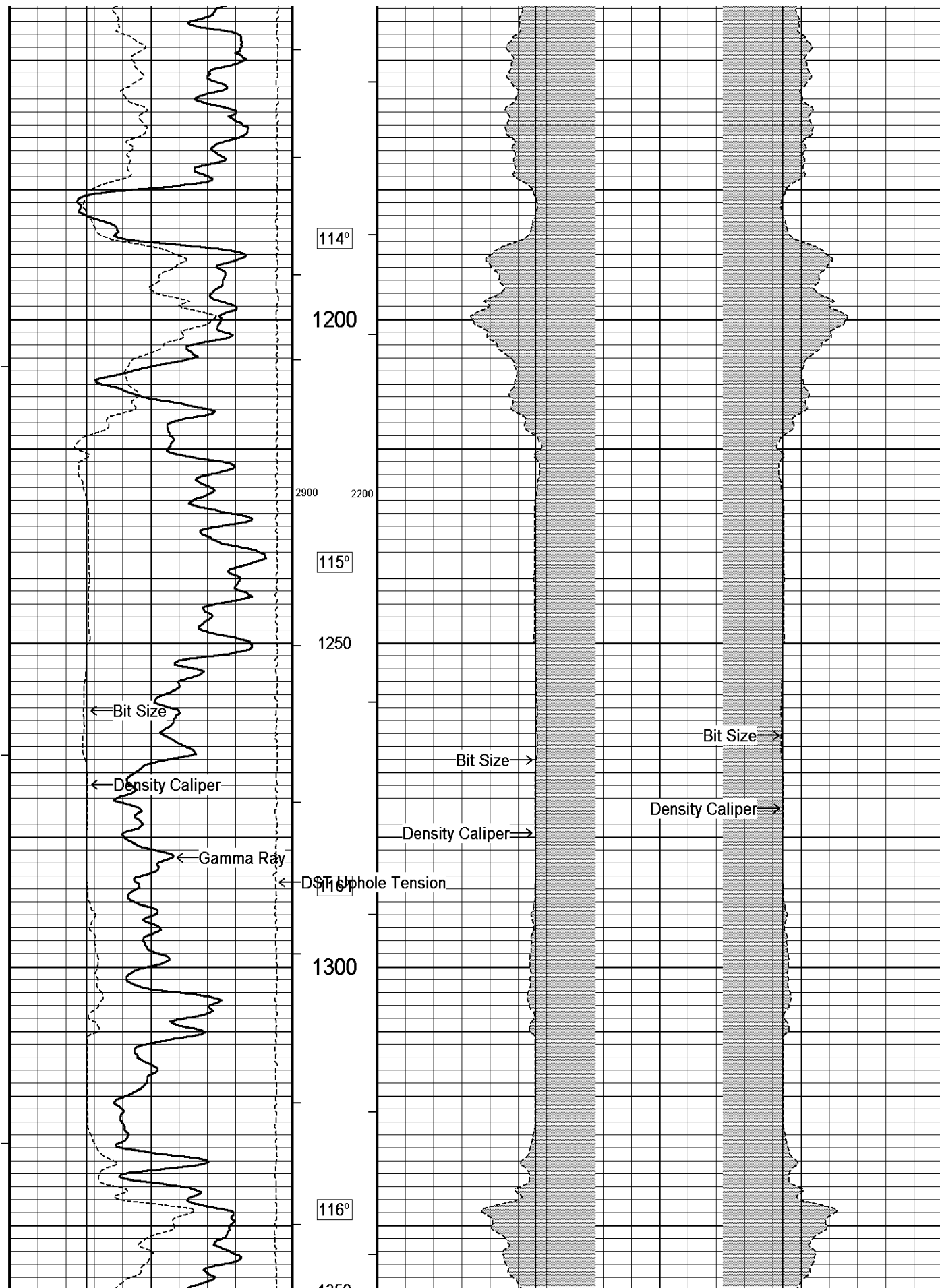
RIG: PATTERSON #307

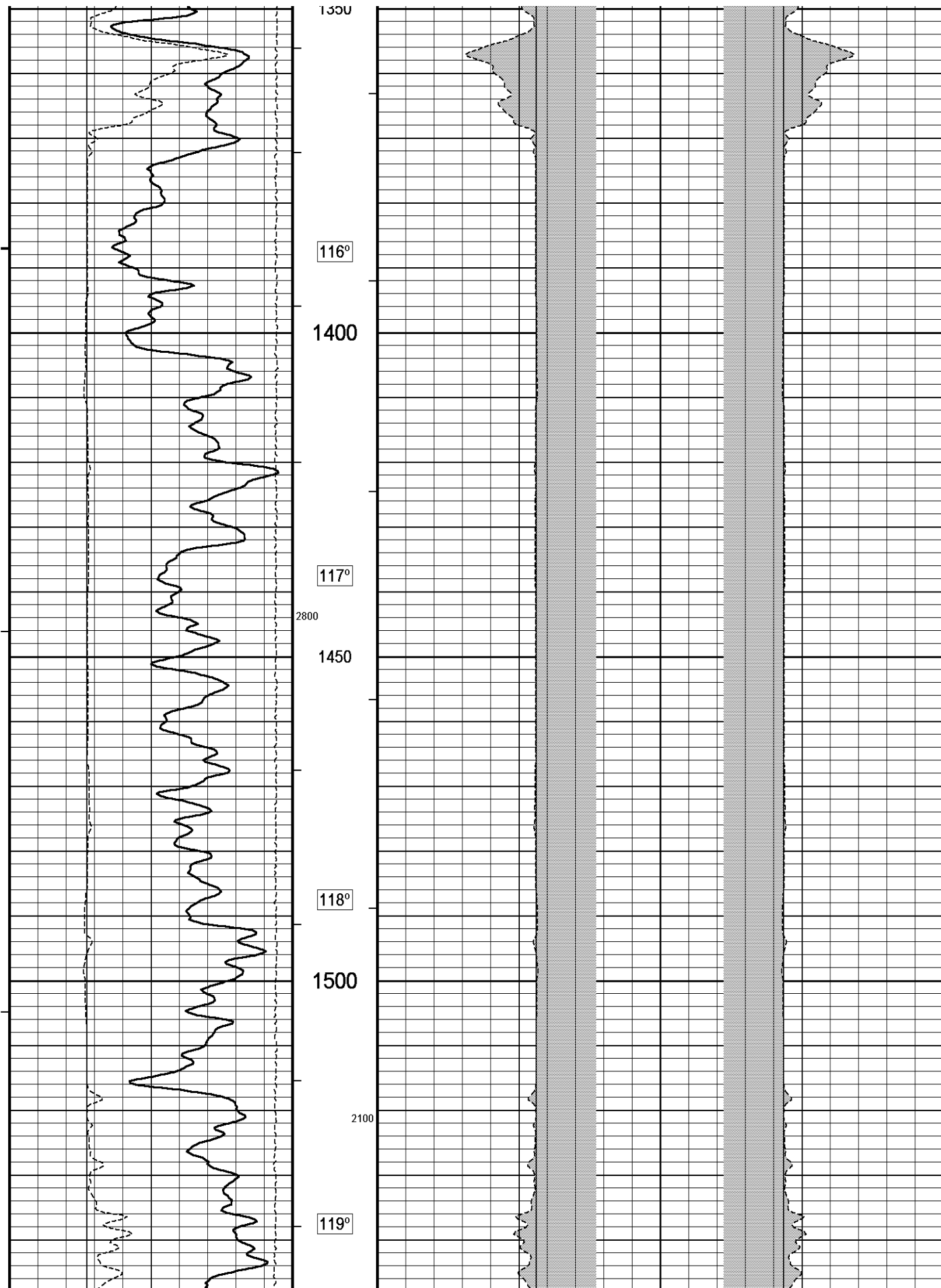
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

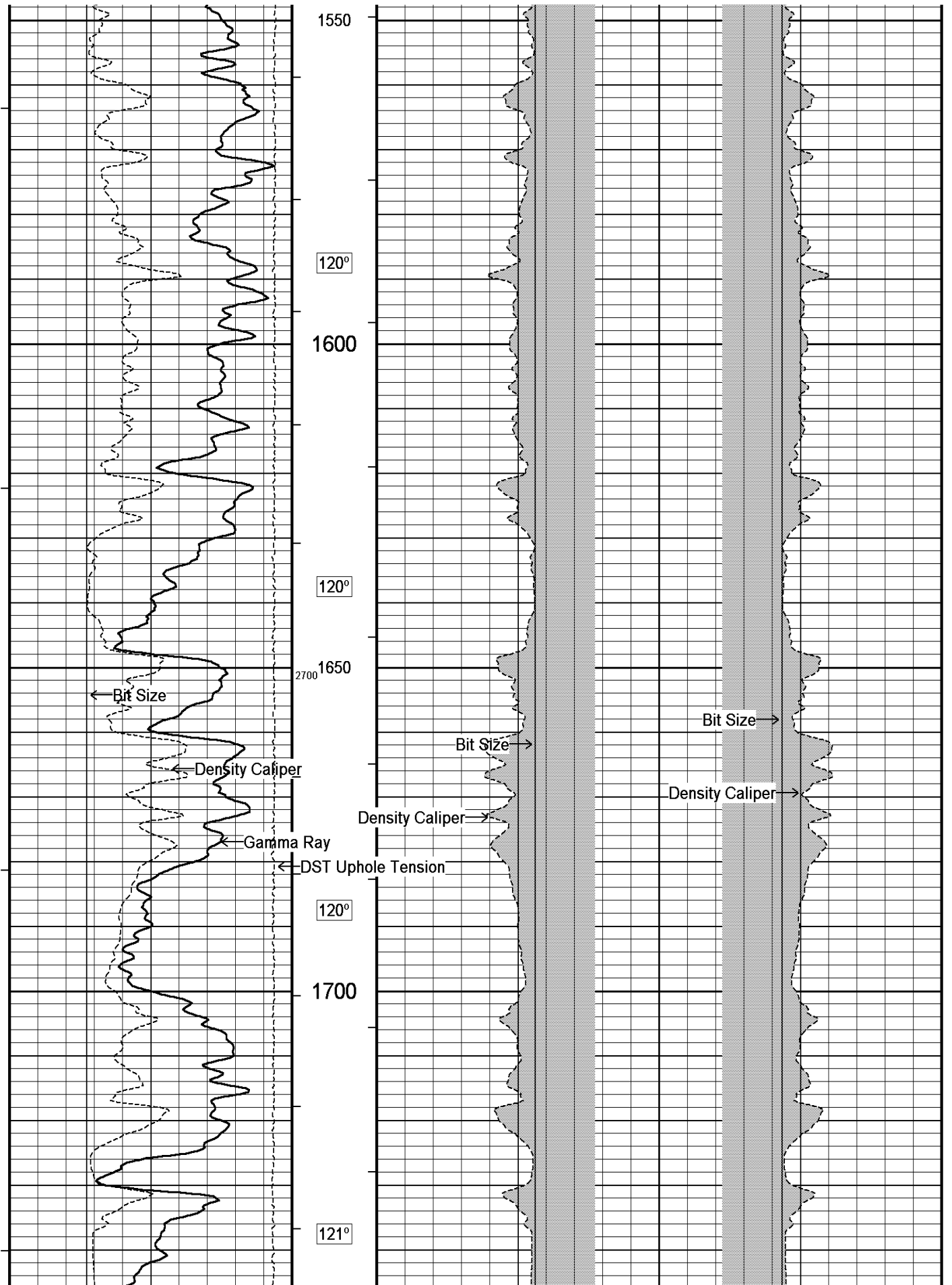


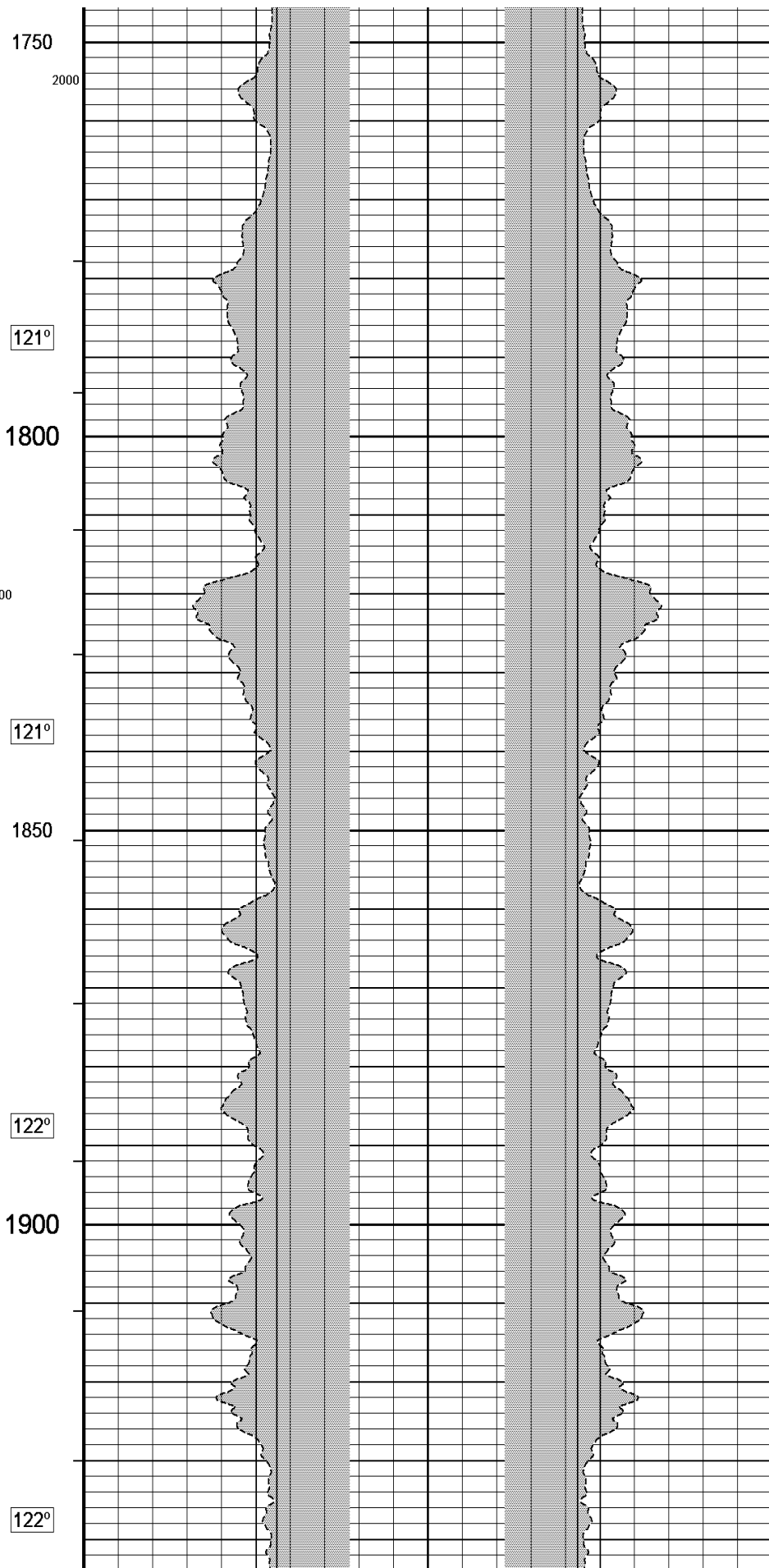
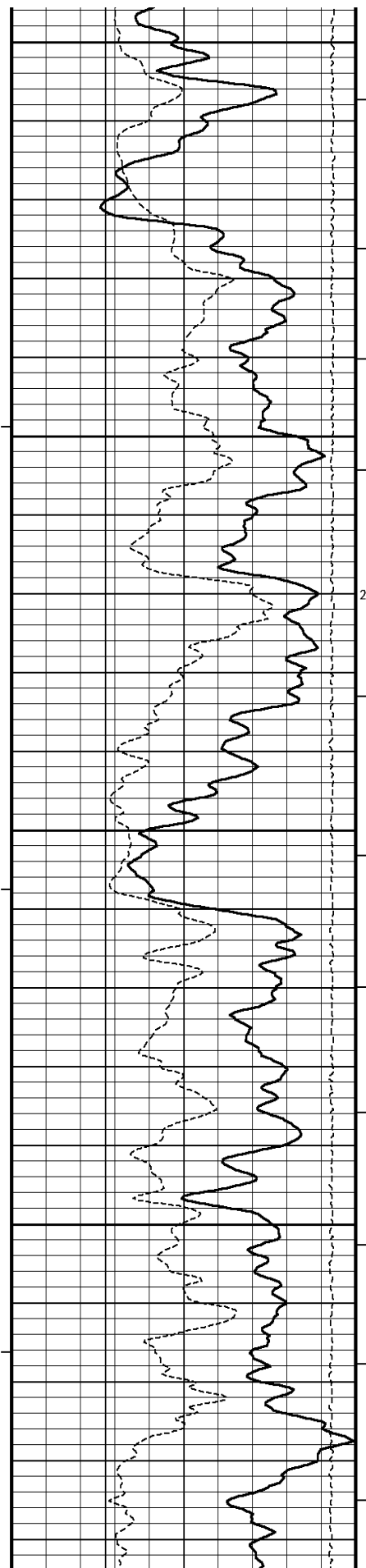


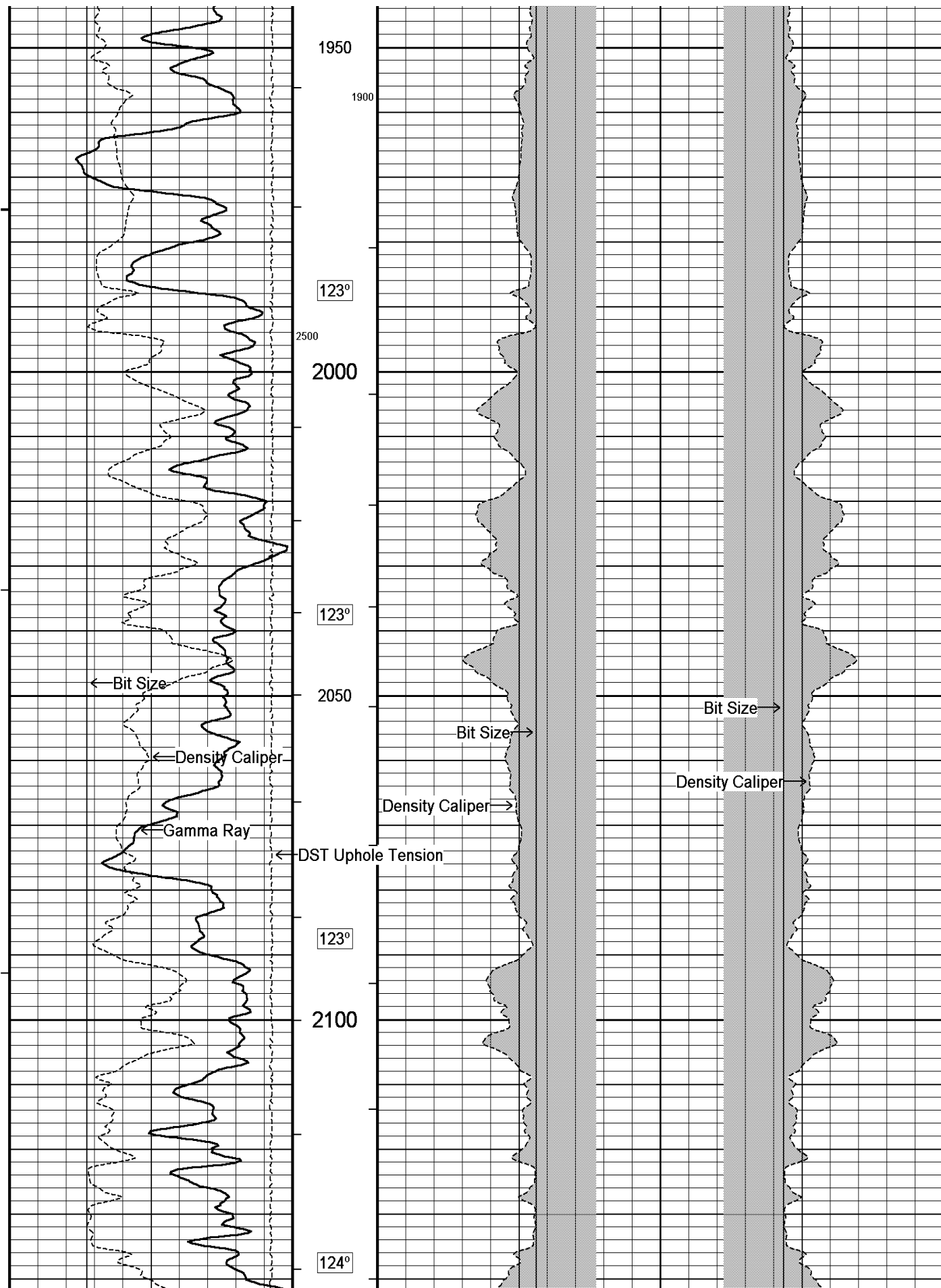


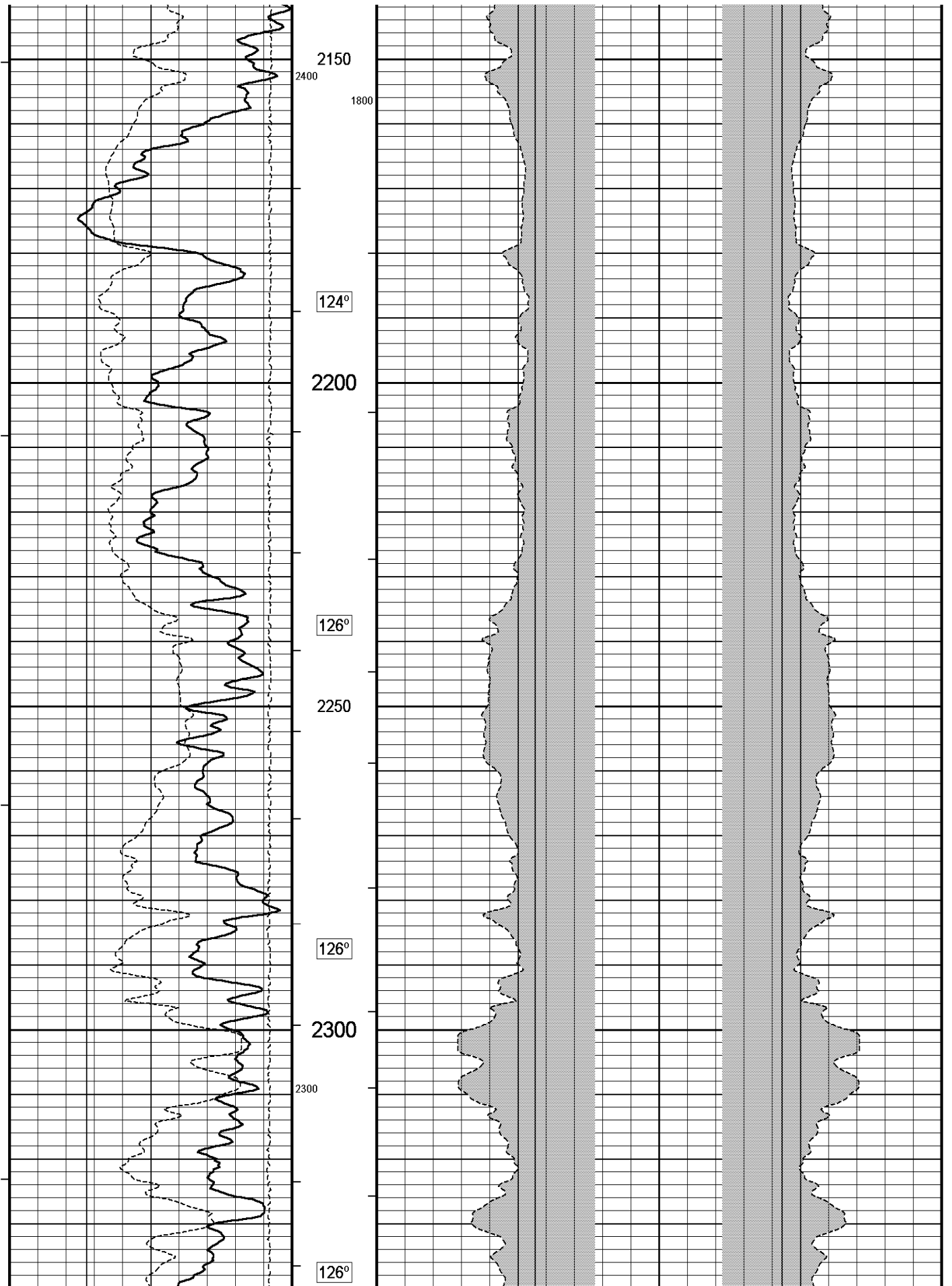


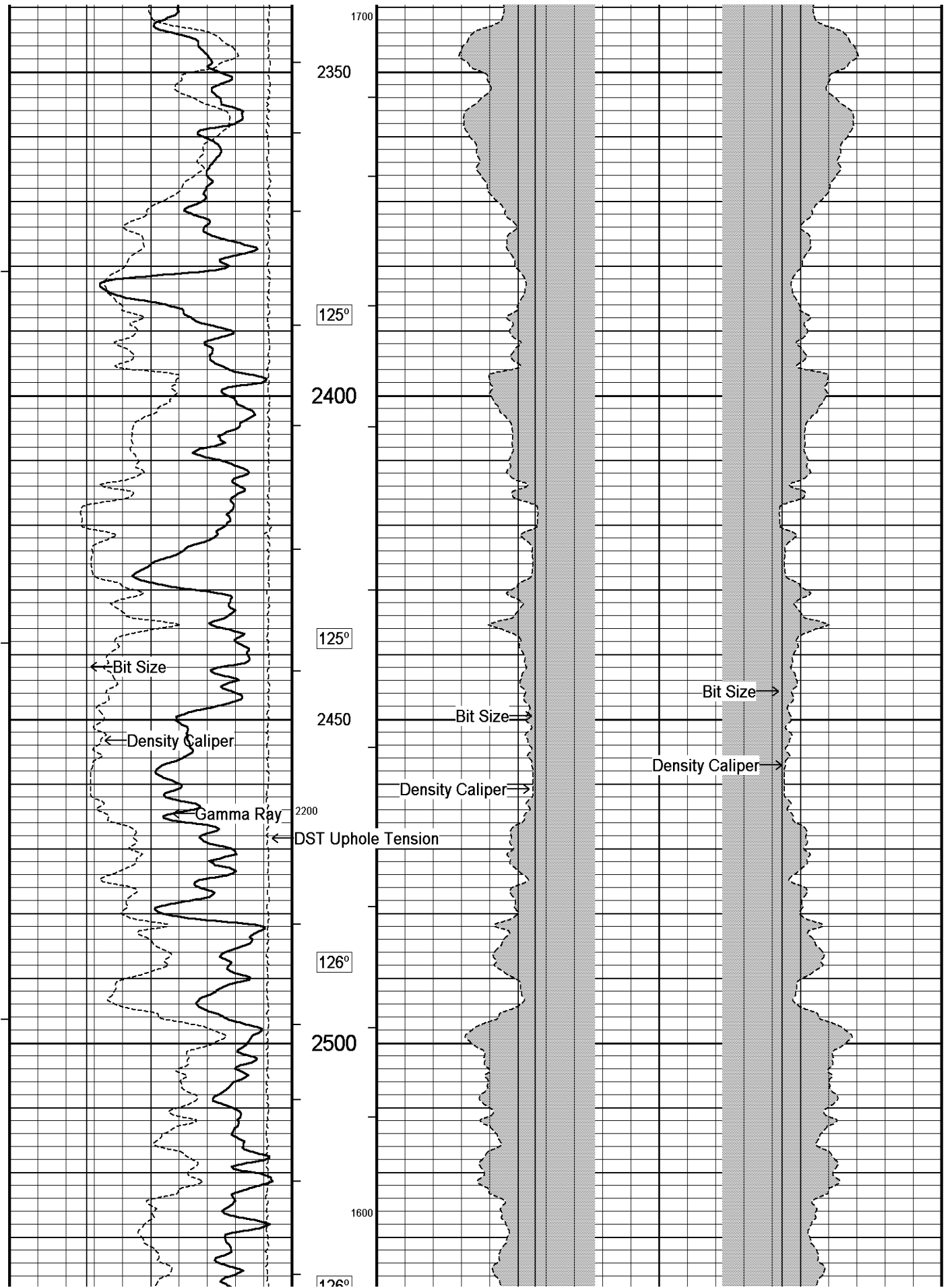


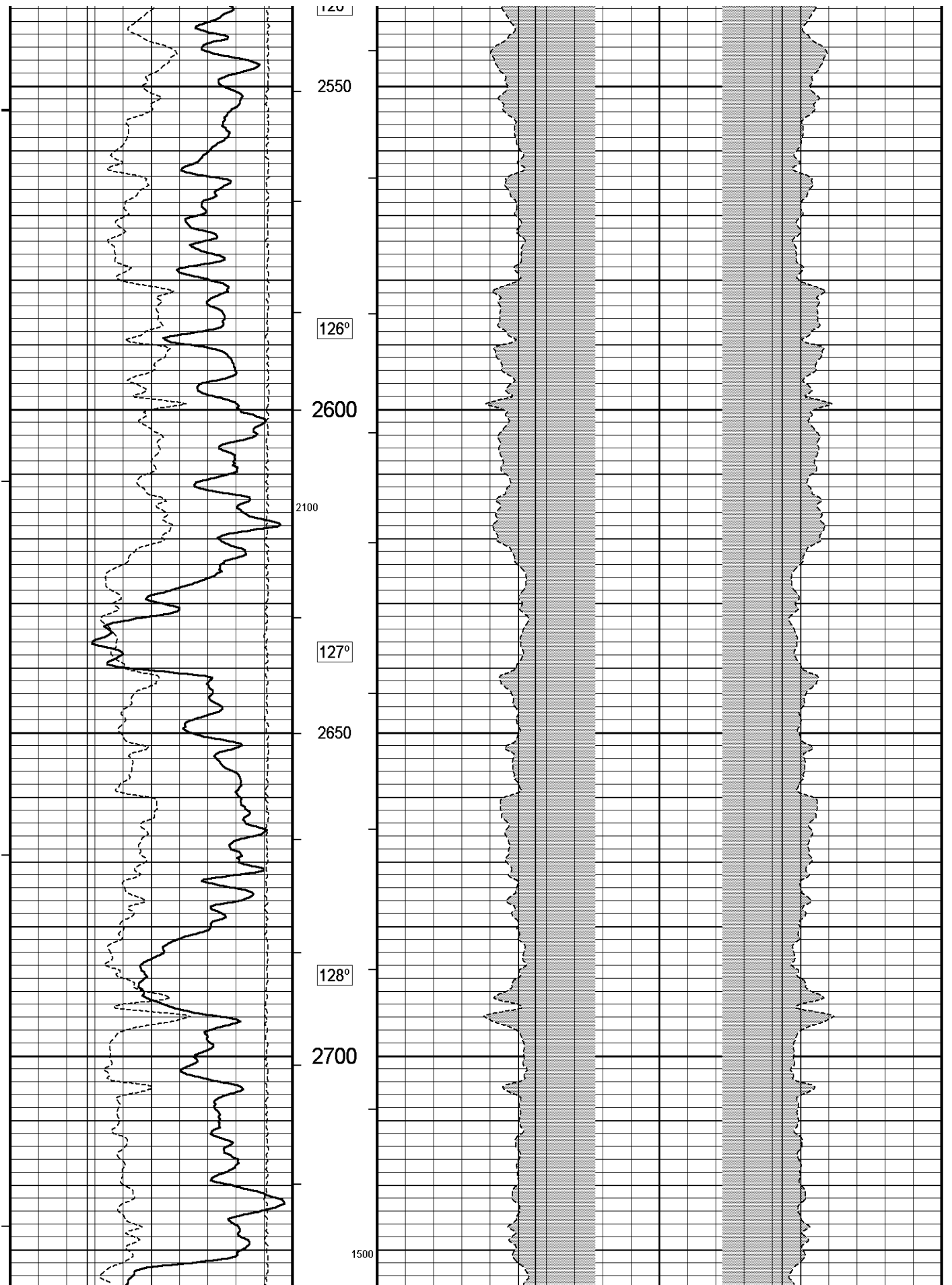


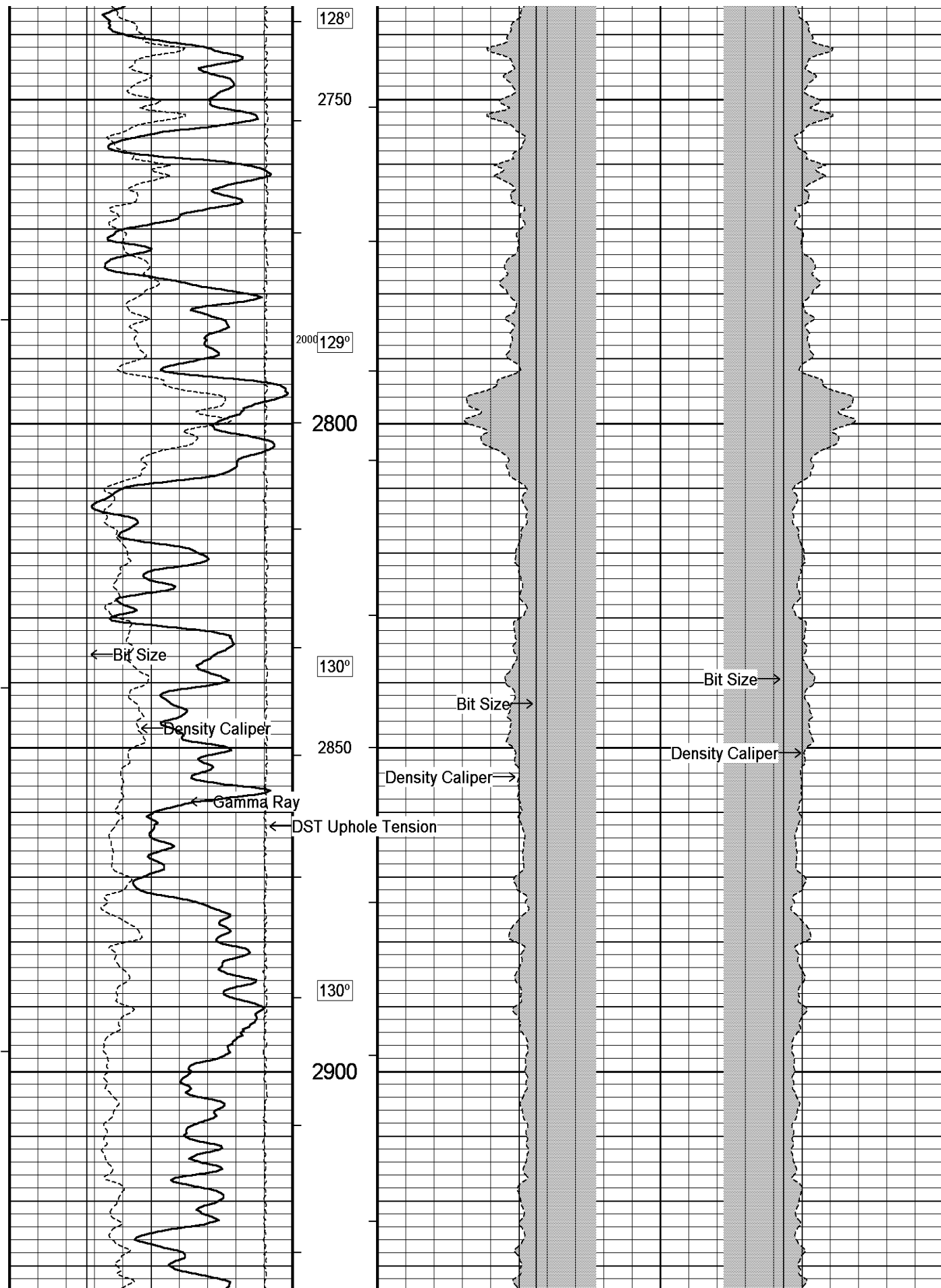


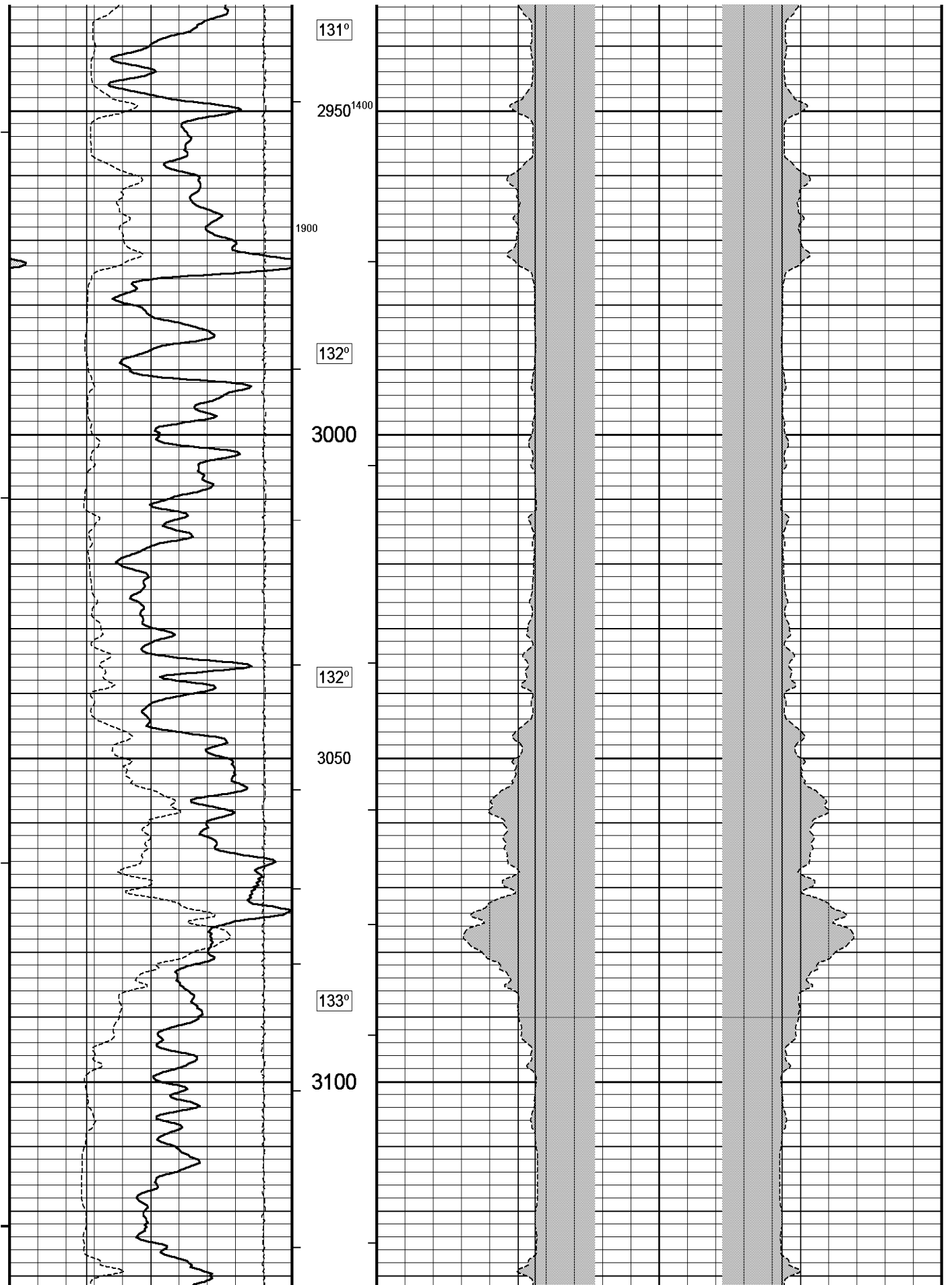


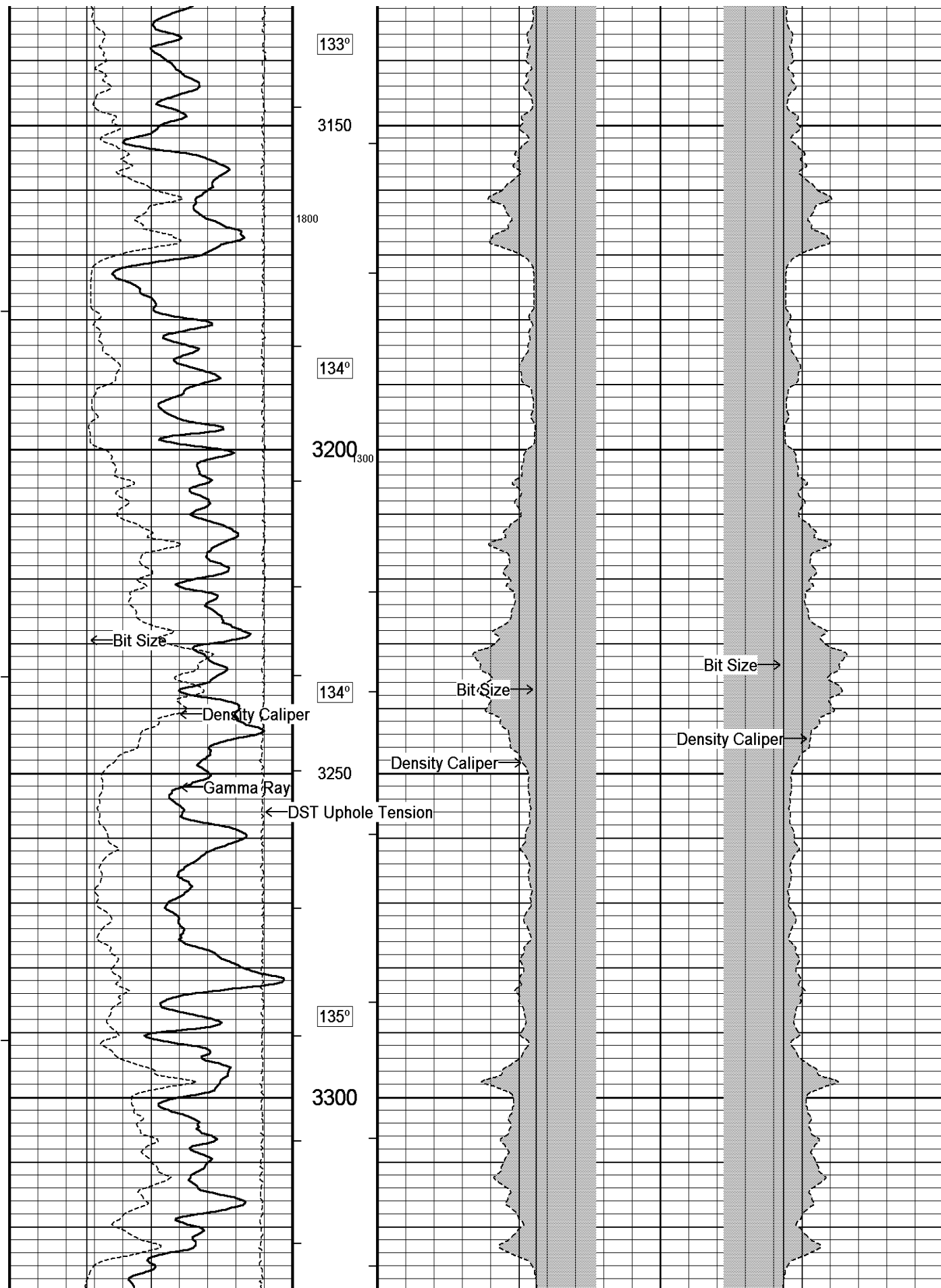


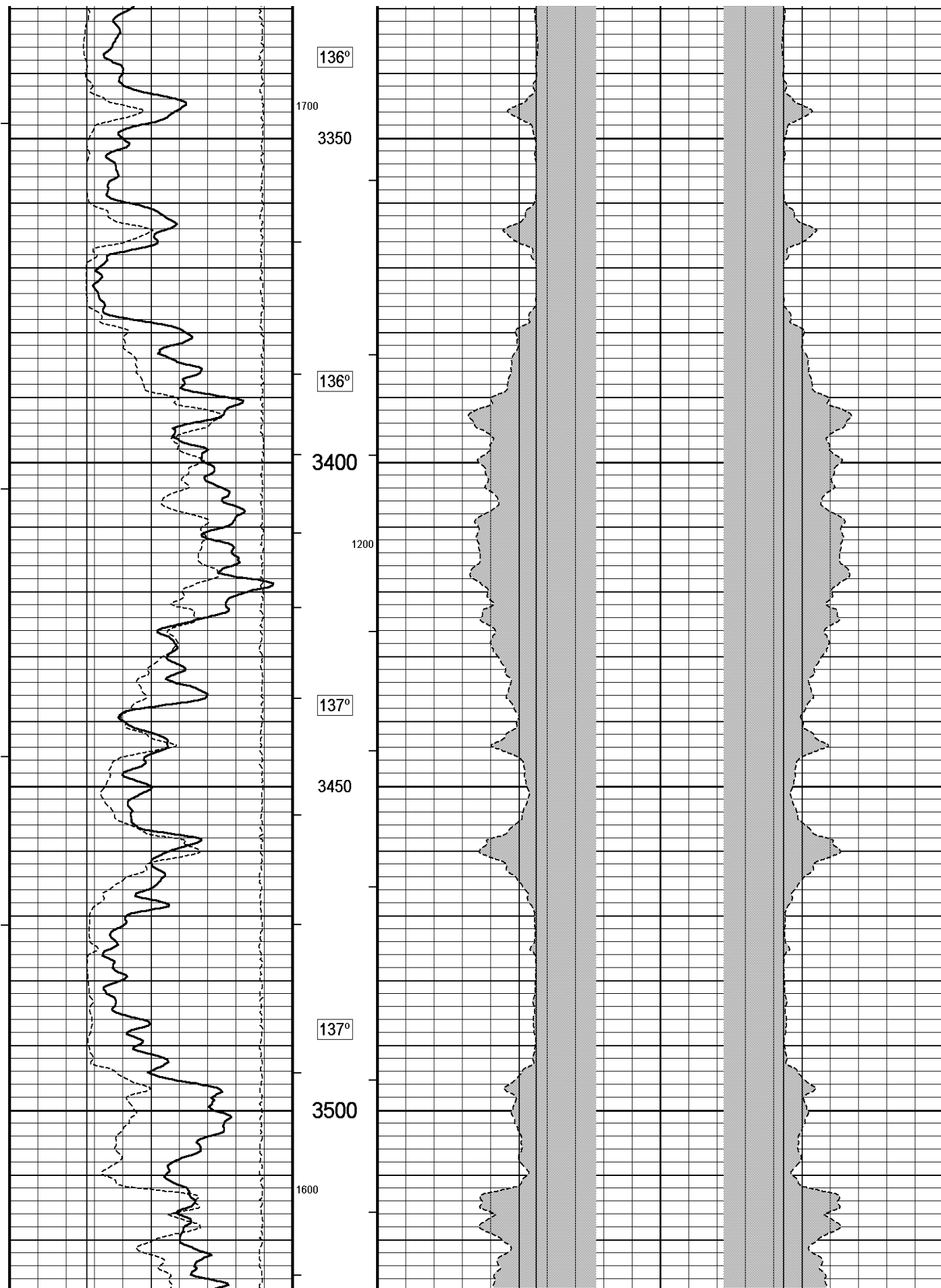


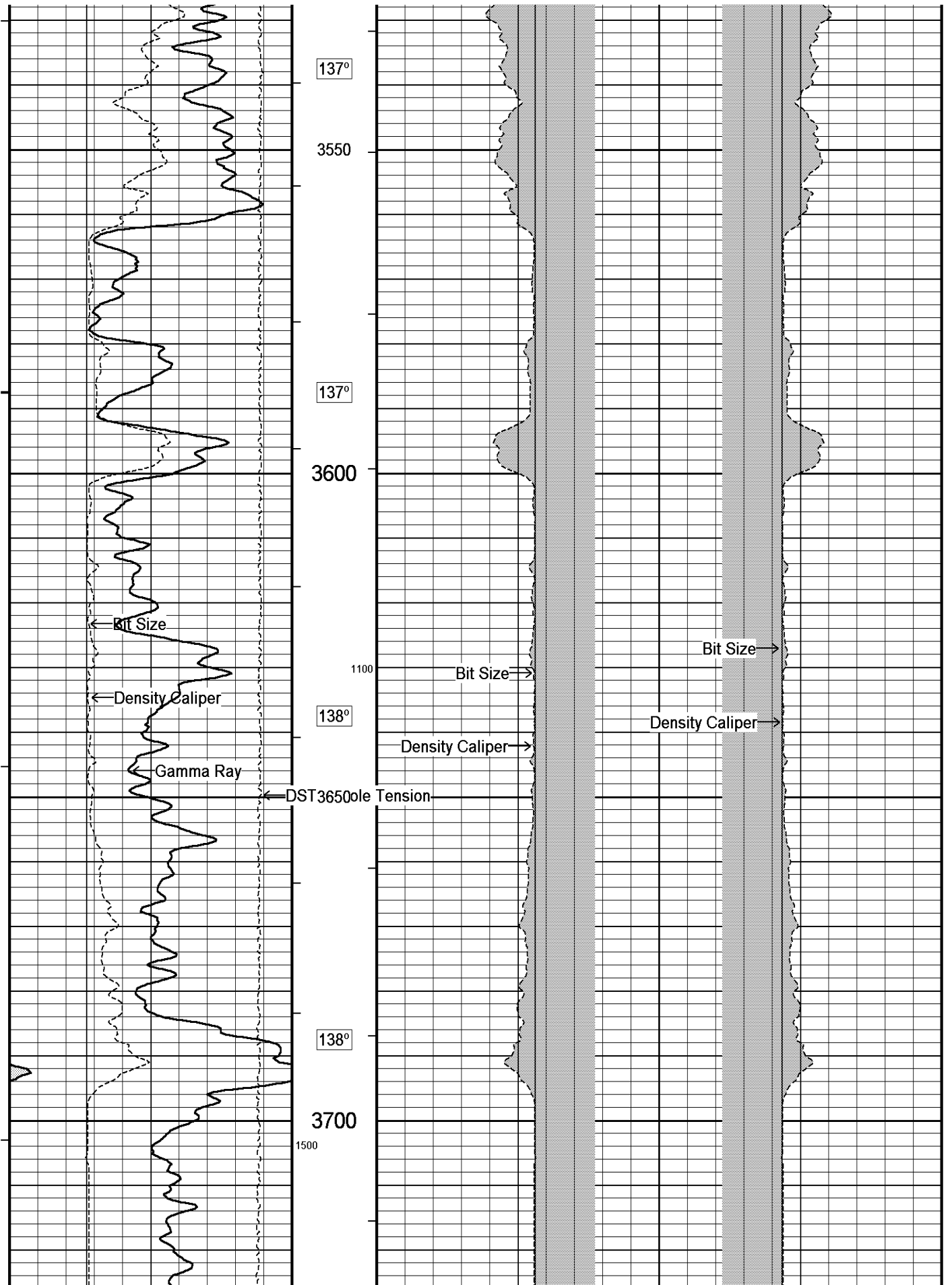


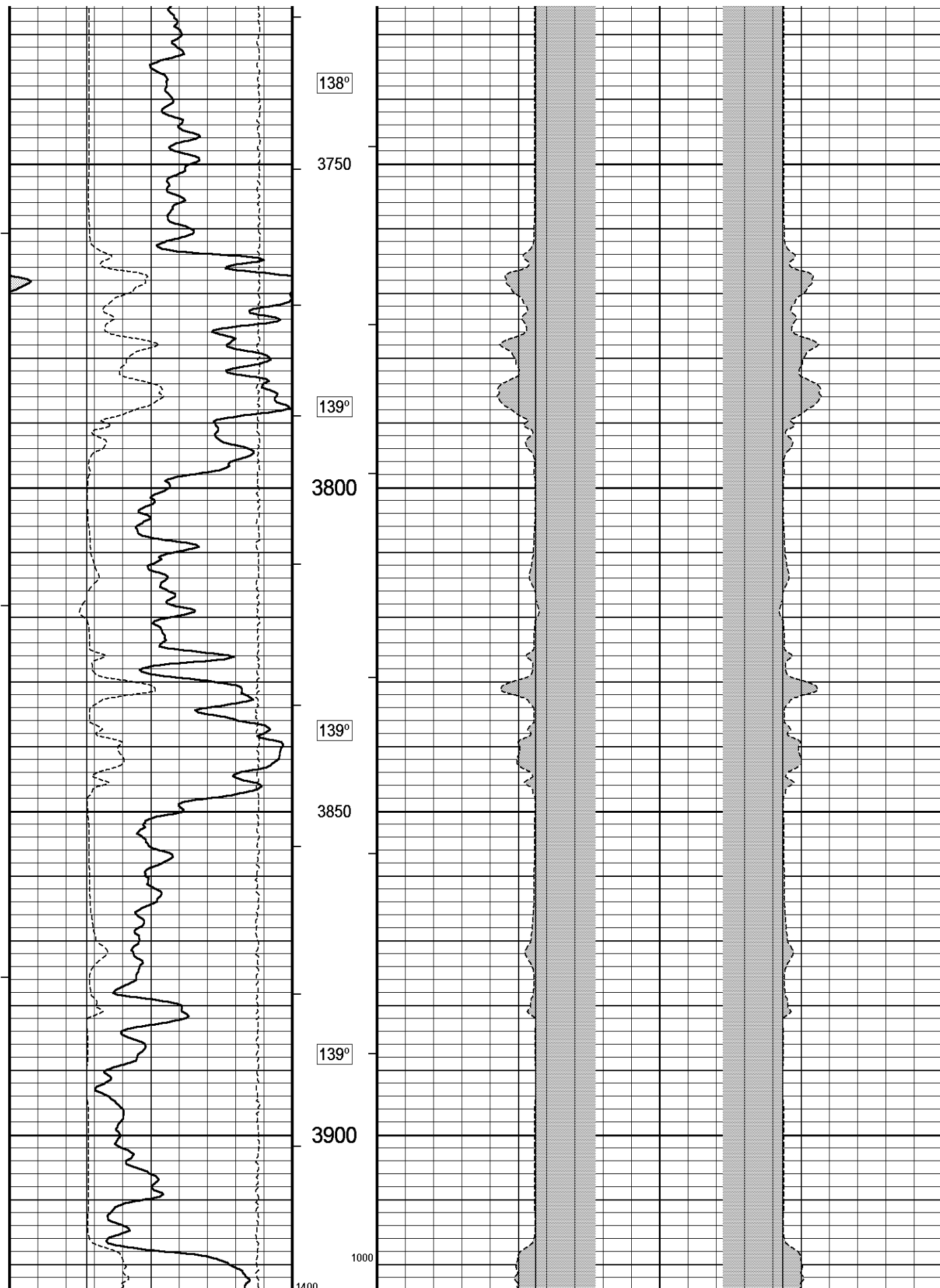


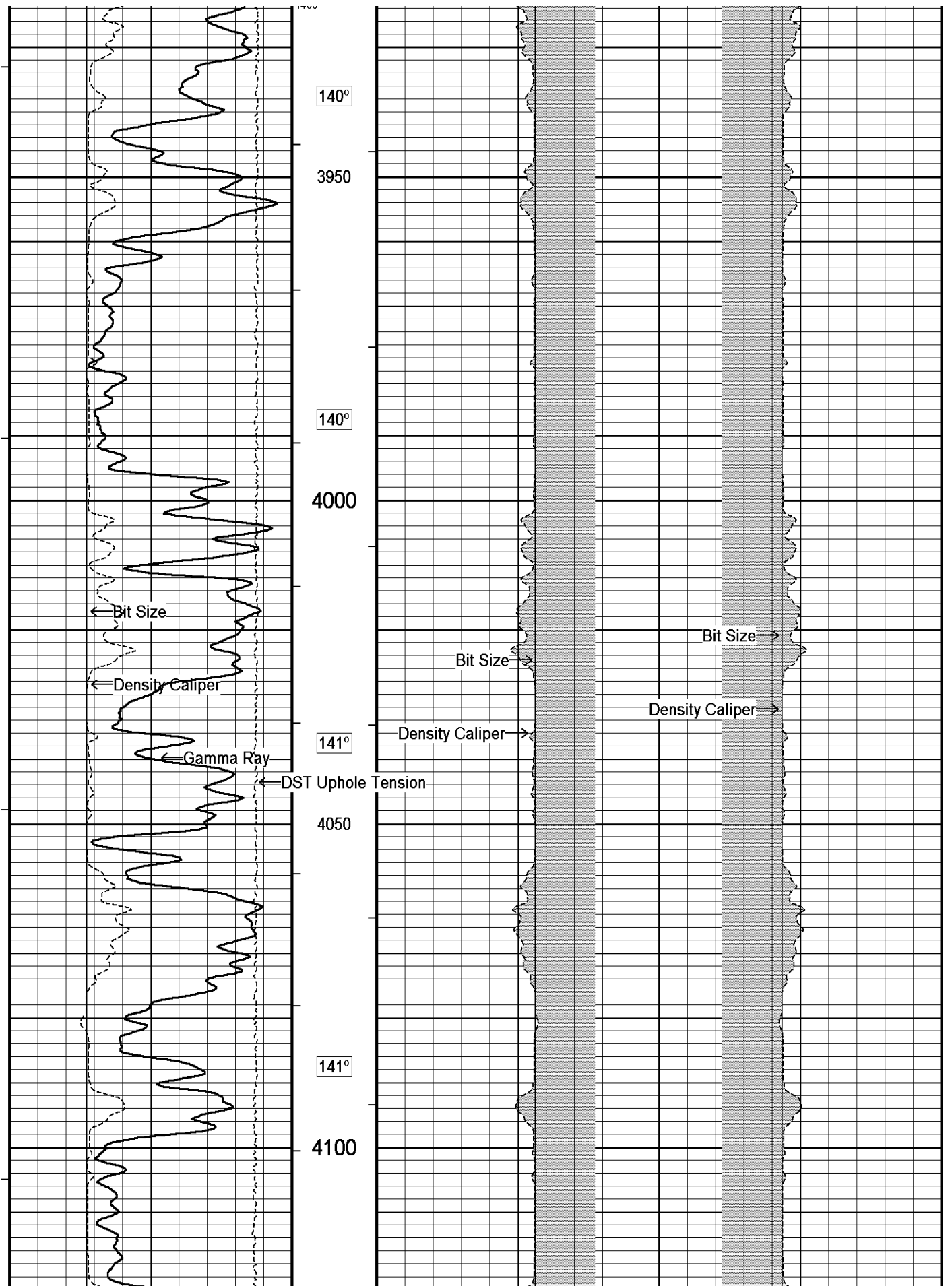


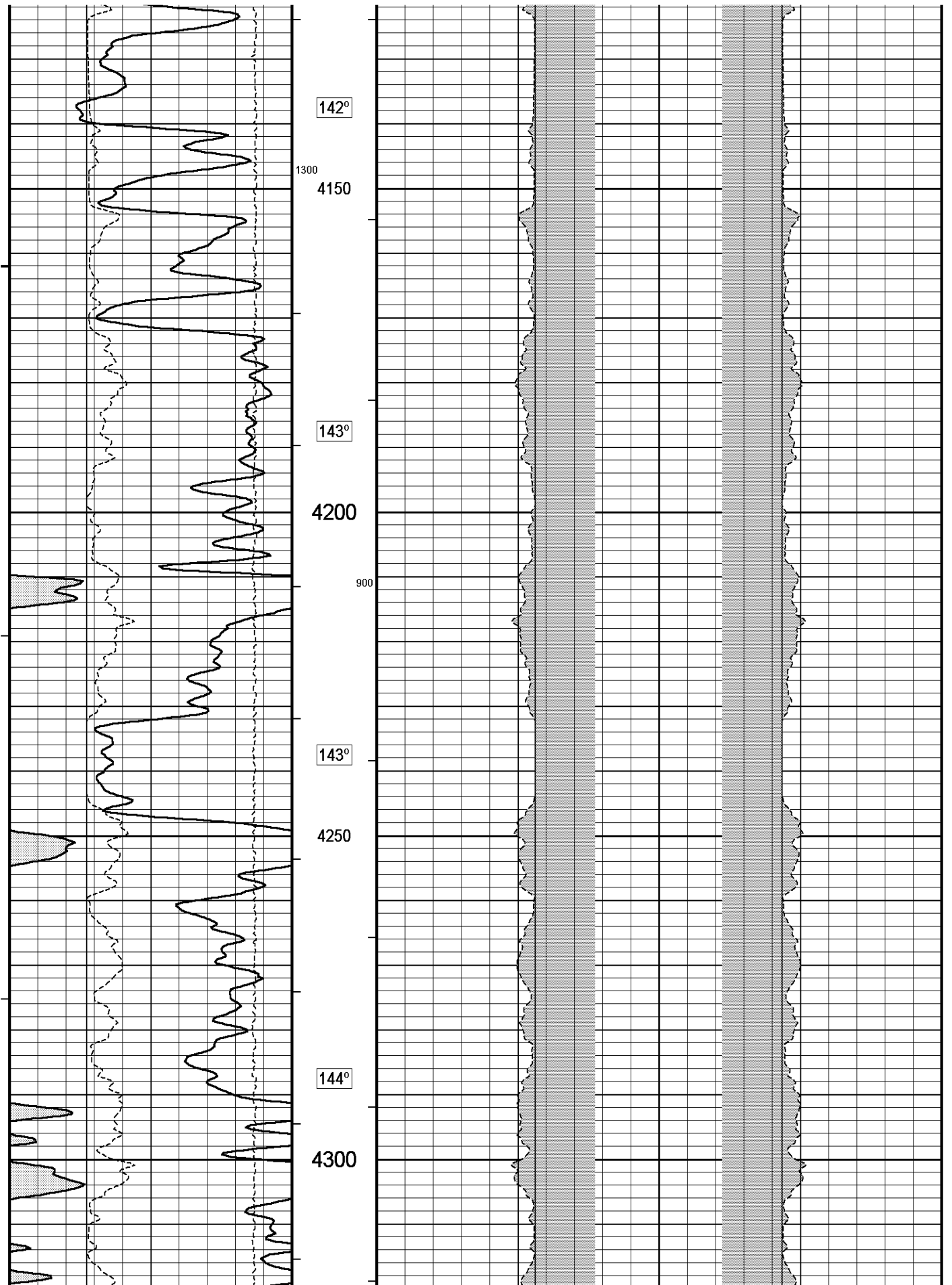


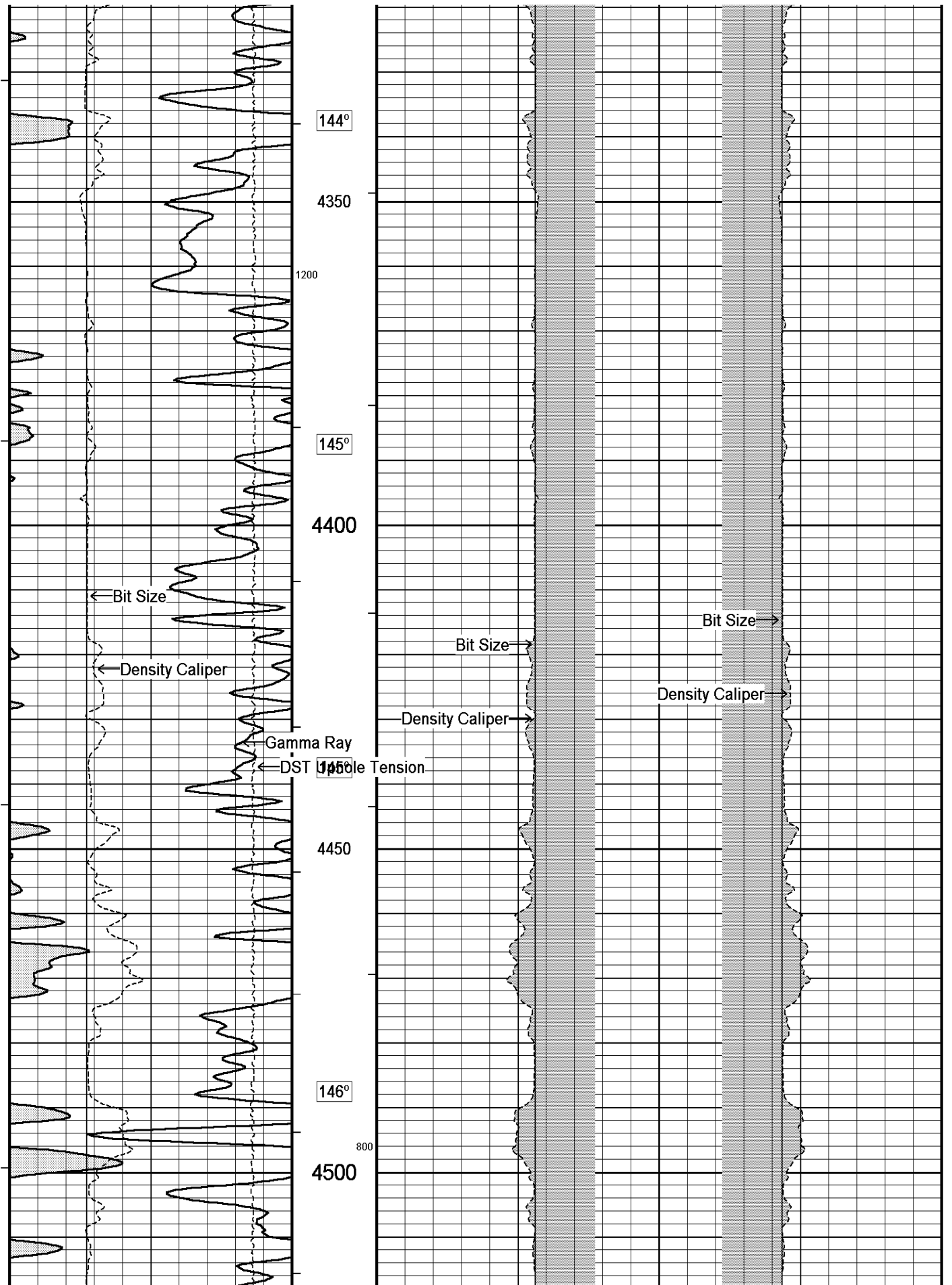


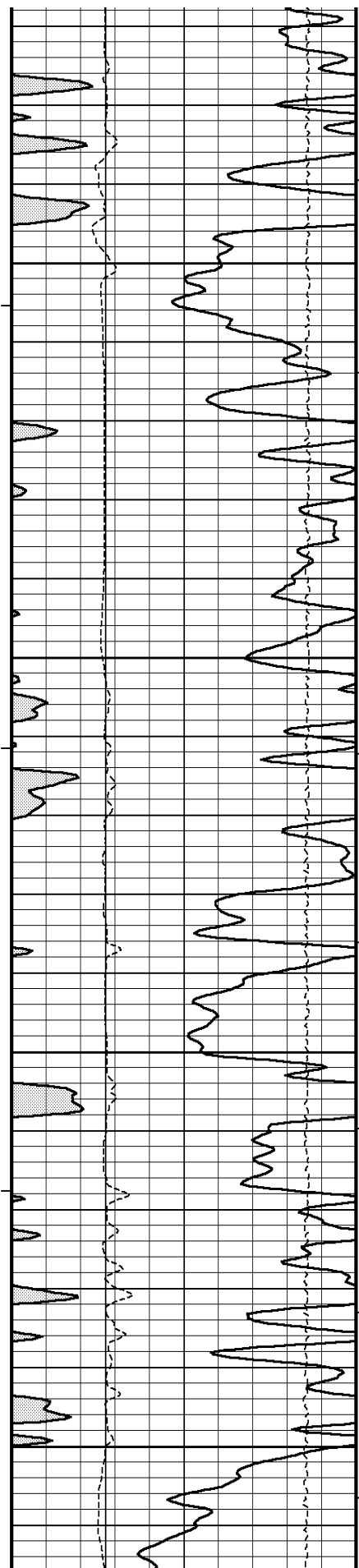












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4550

1100 147°

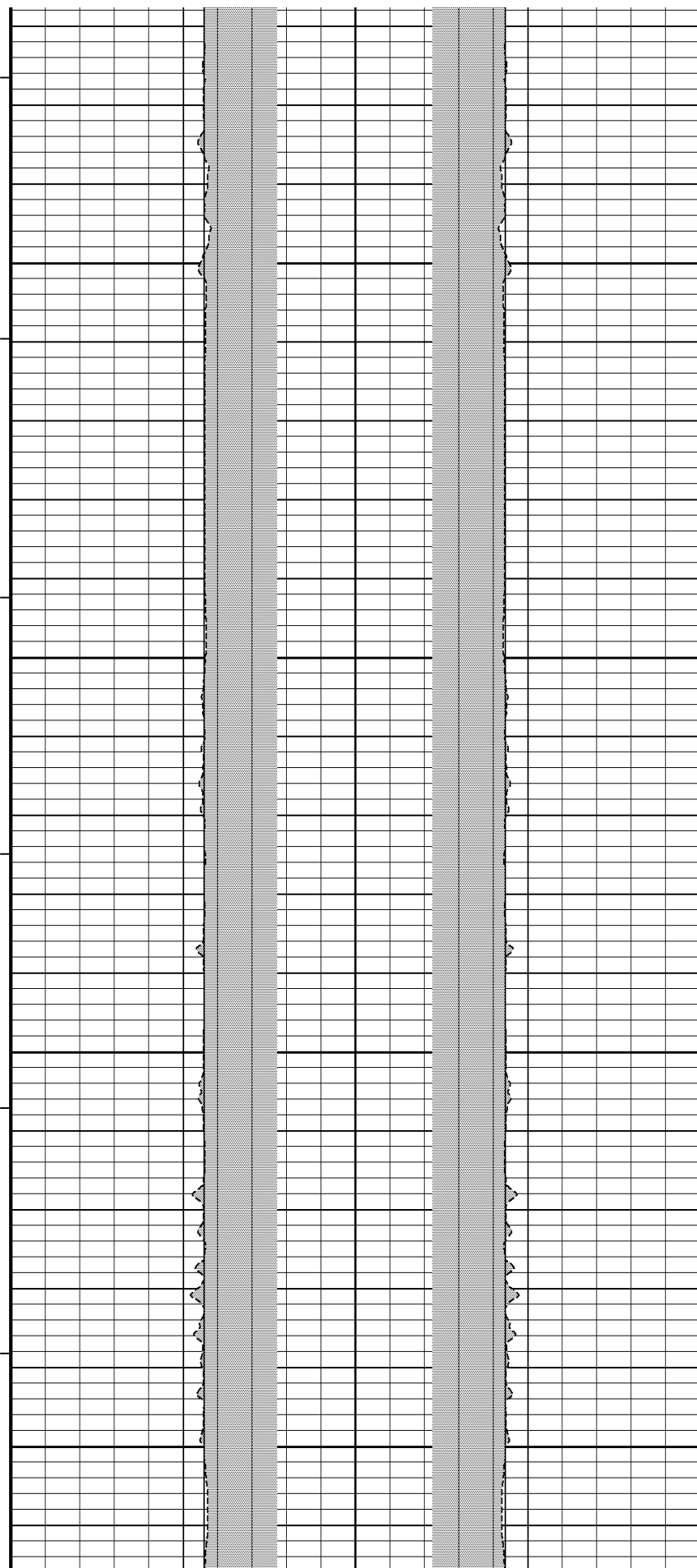
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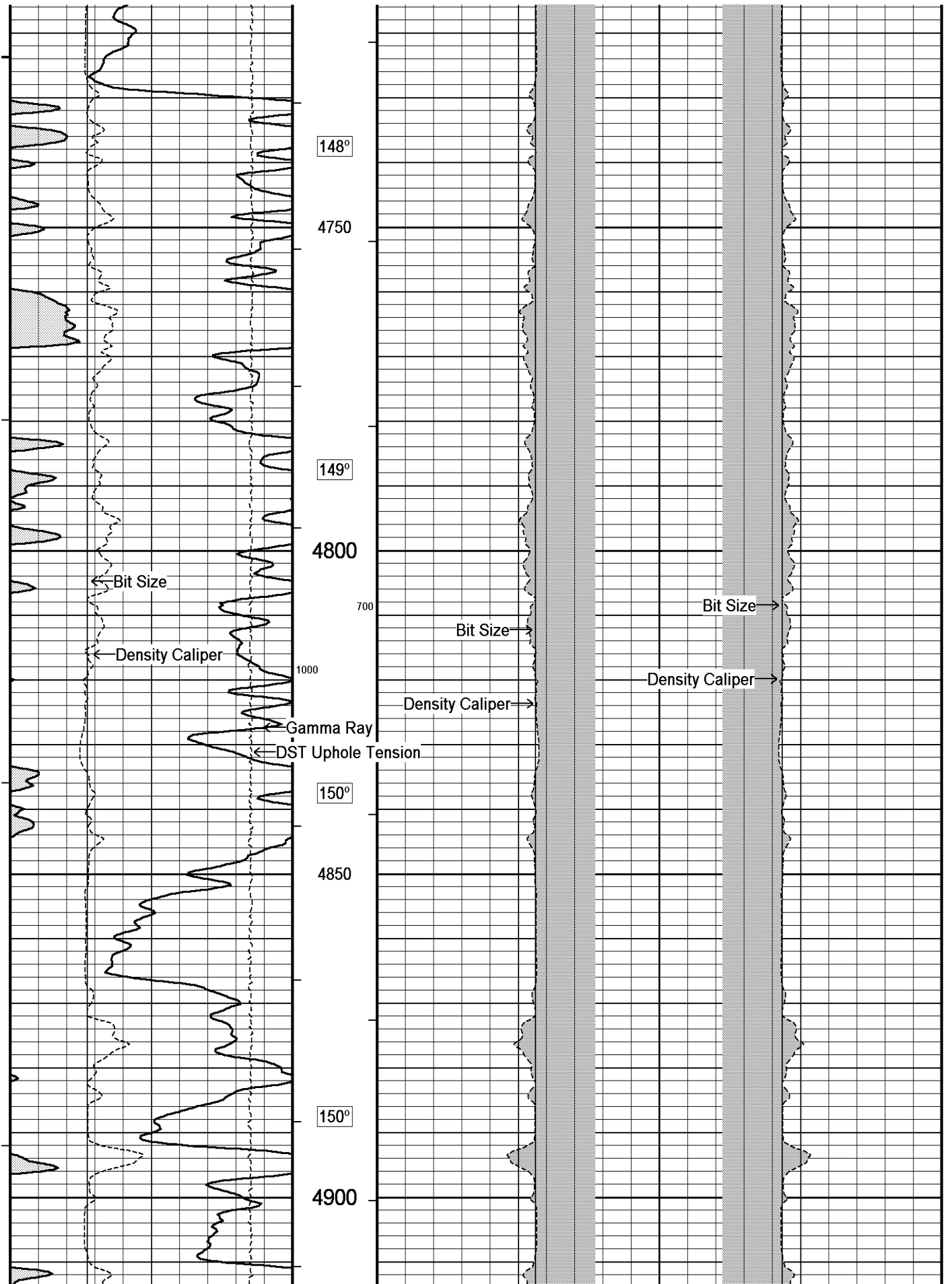
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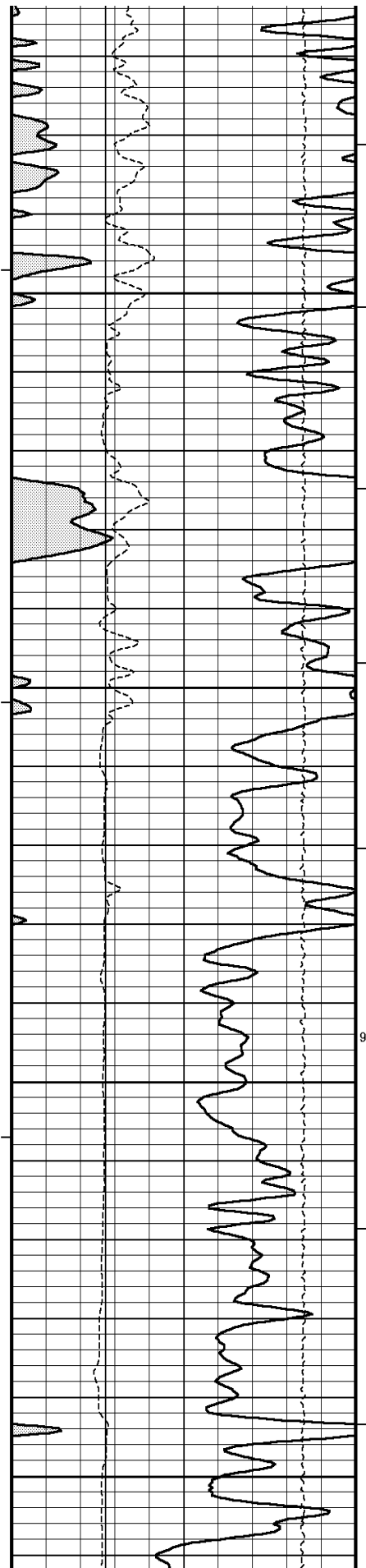
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4950

151°

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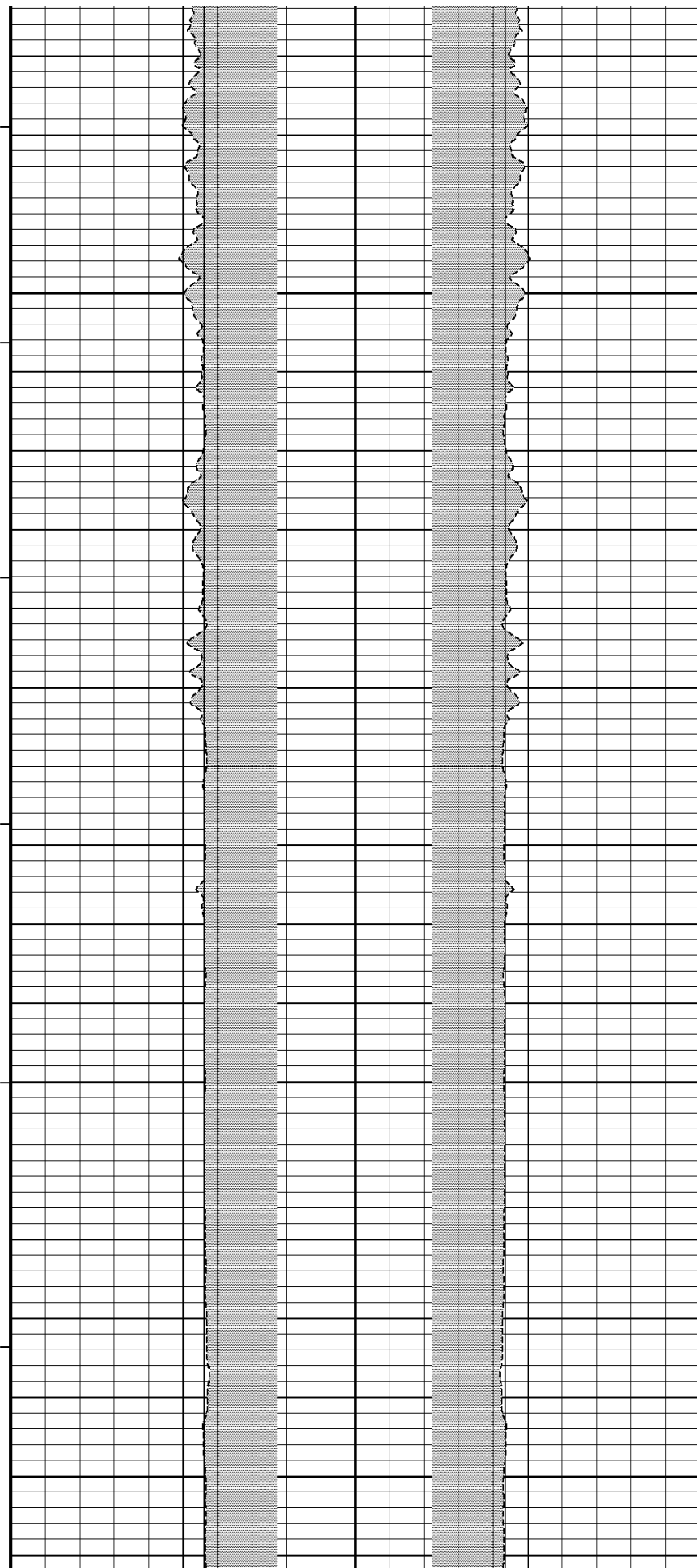
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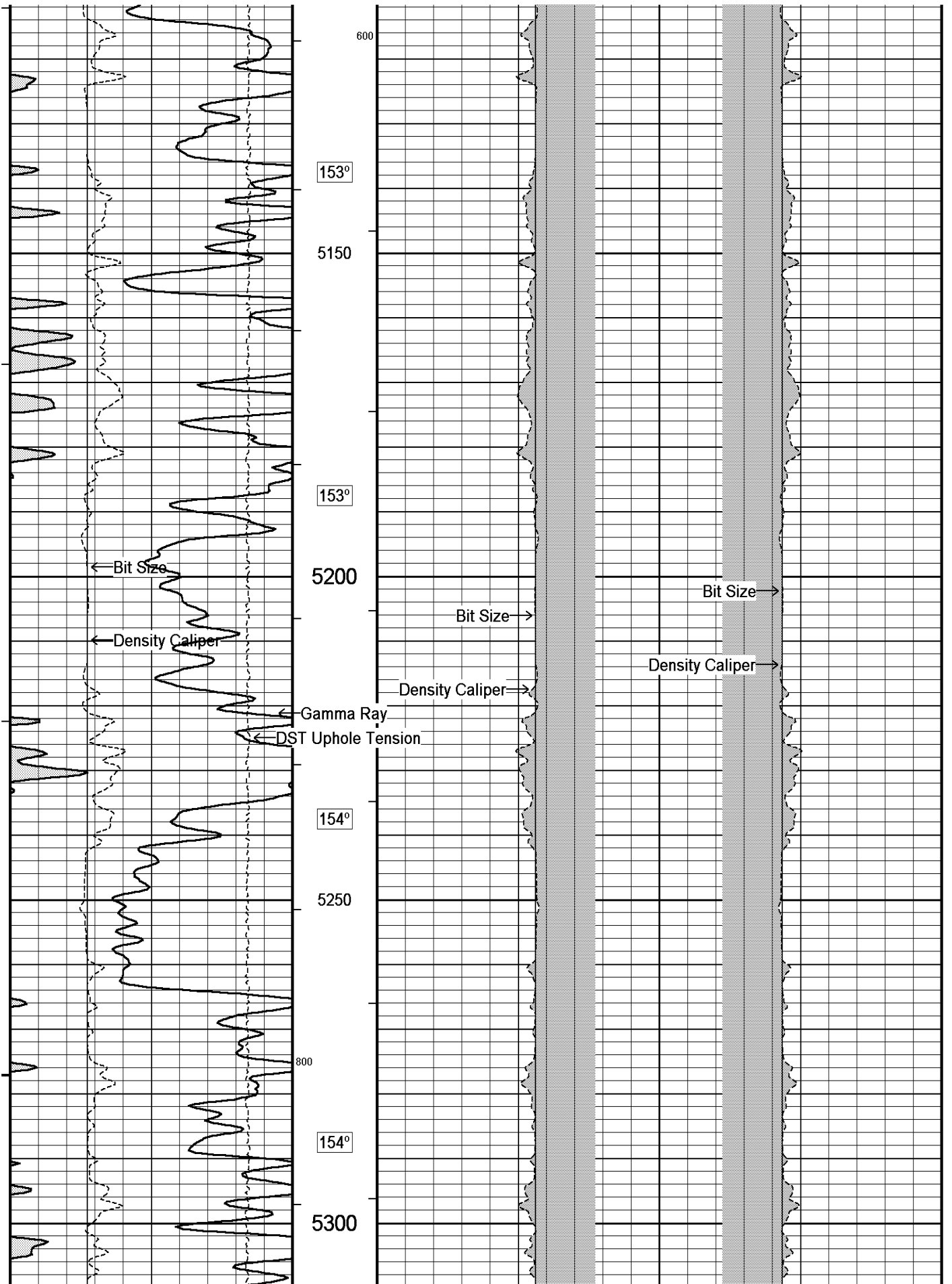
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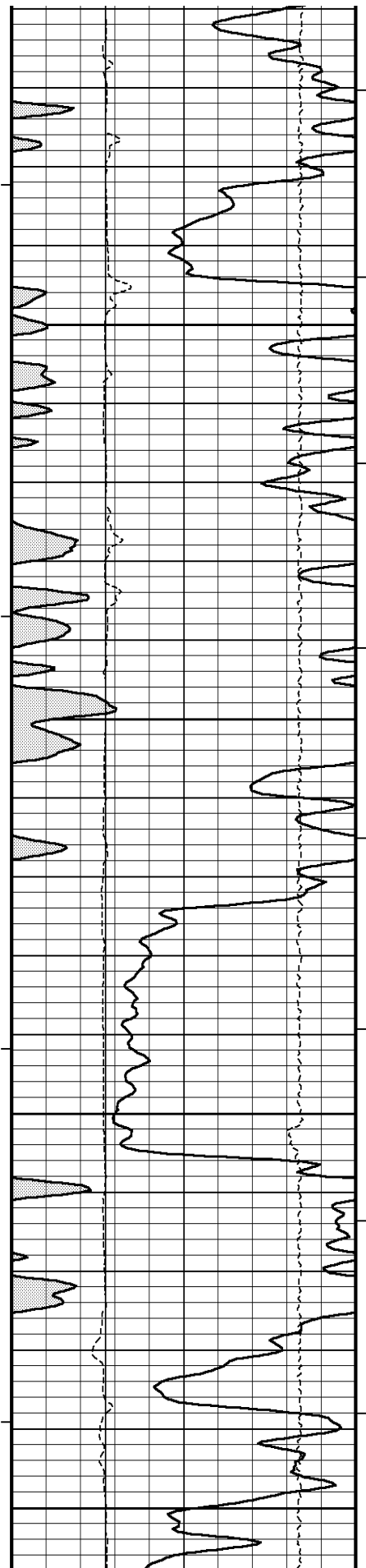
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155°

5350

155°

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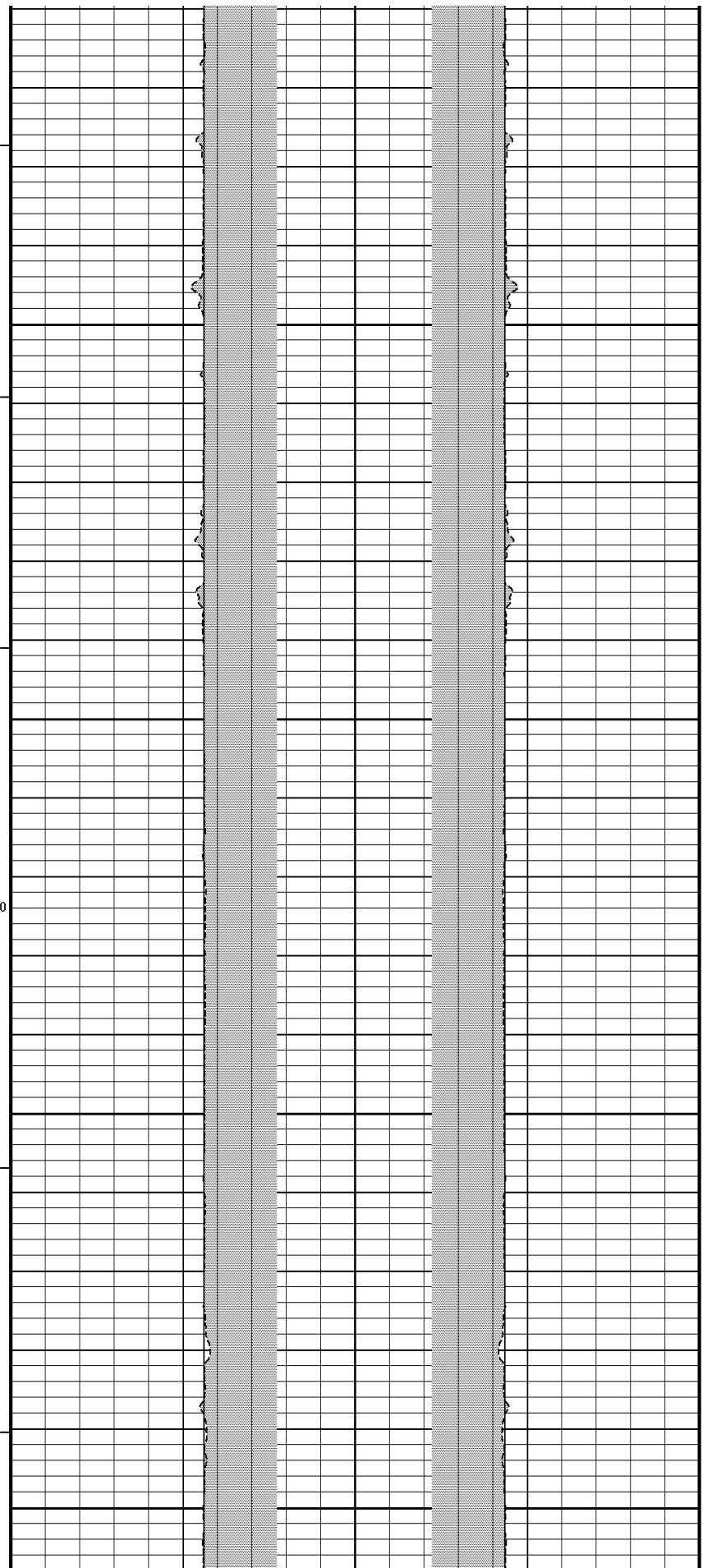
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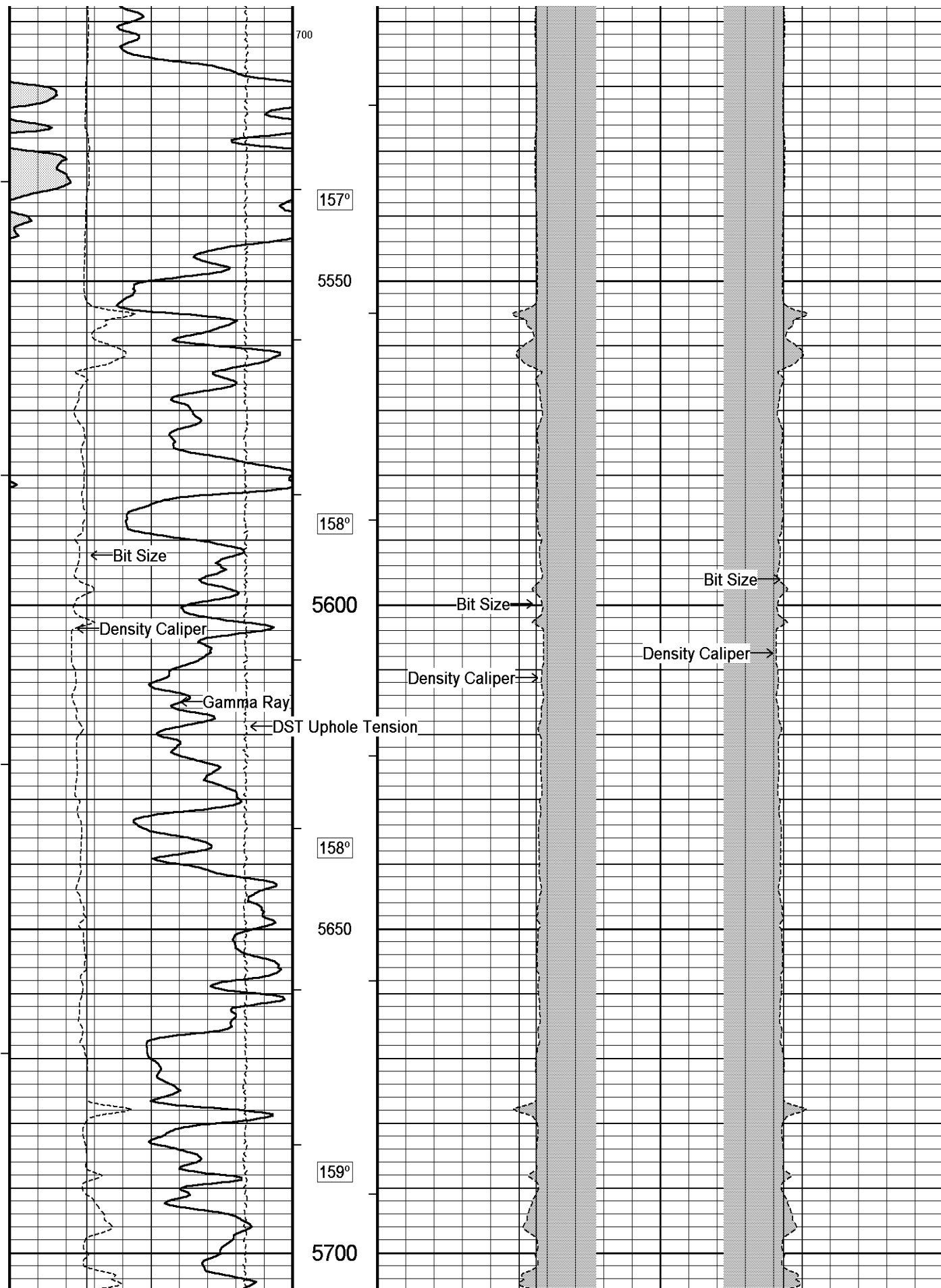
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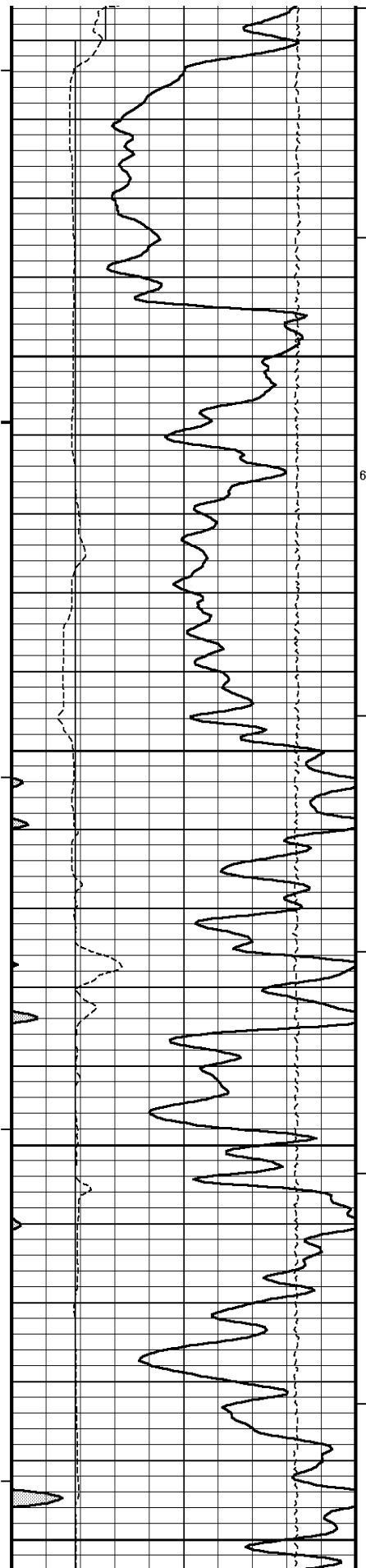
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156°

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5750

600

400

160°

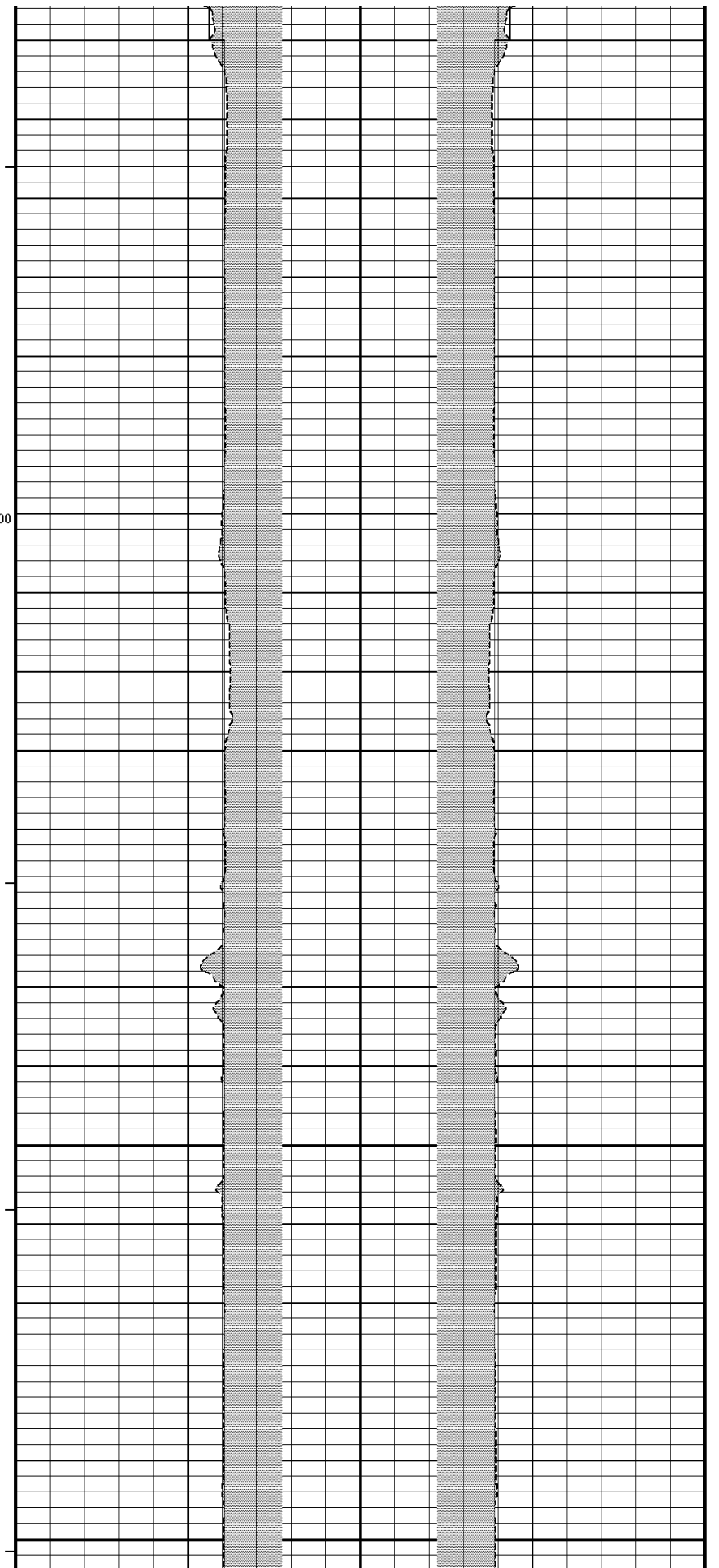
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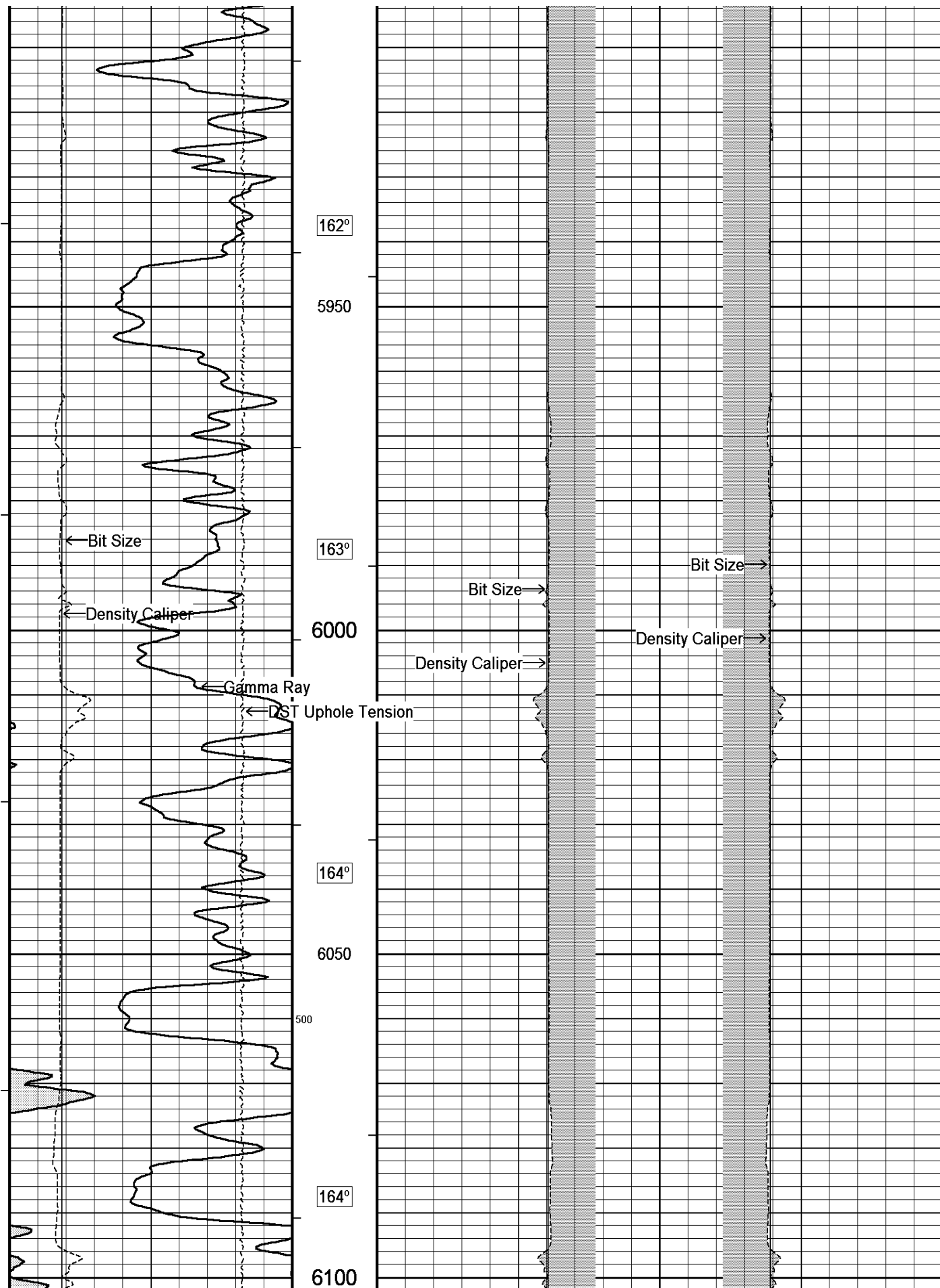
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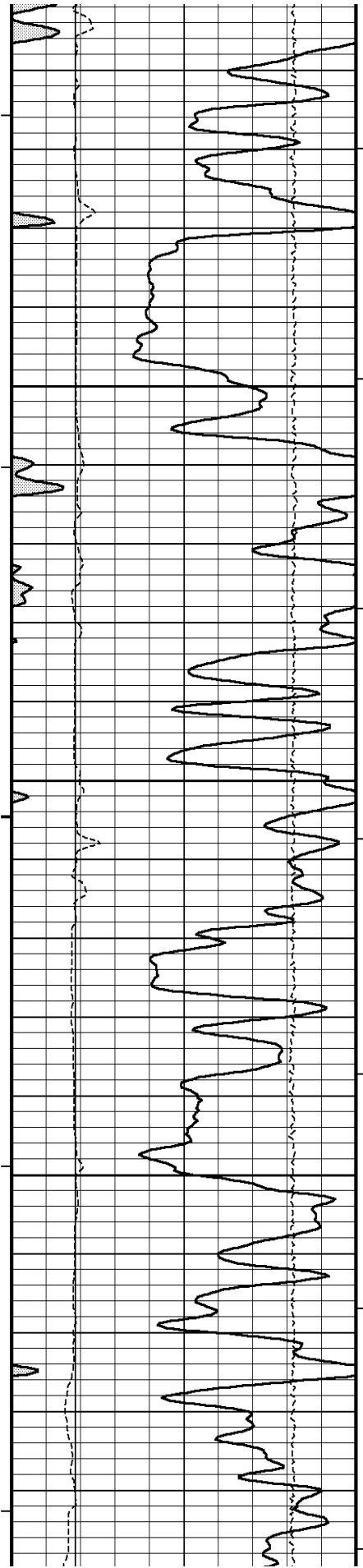
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161°

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165°

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166°

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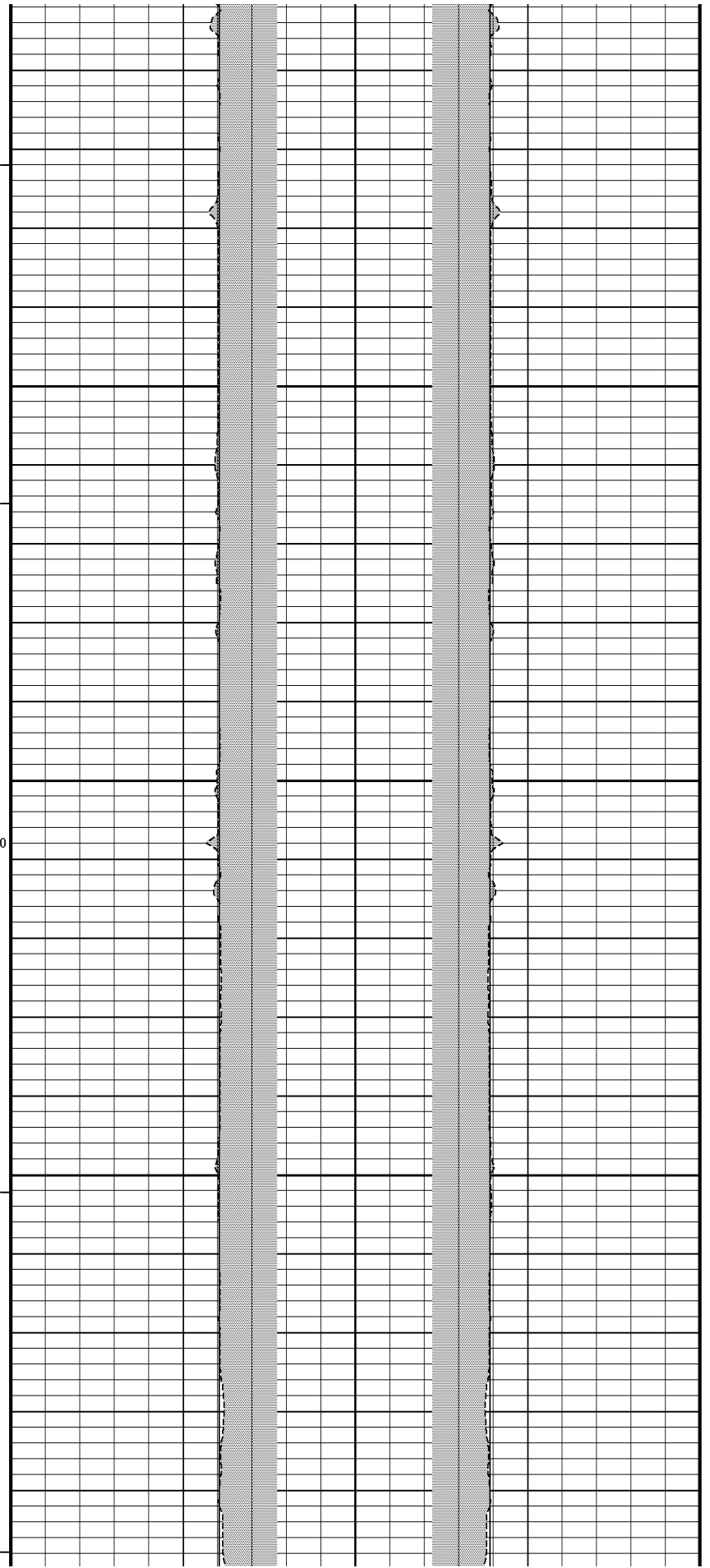
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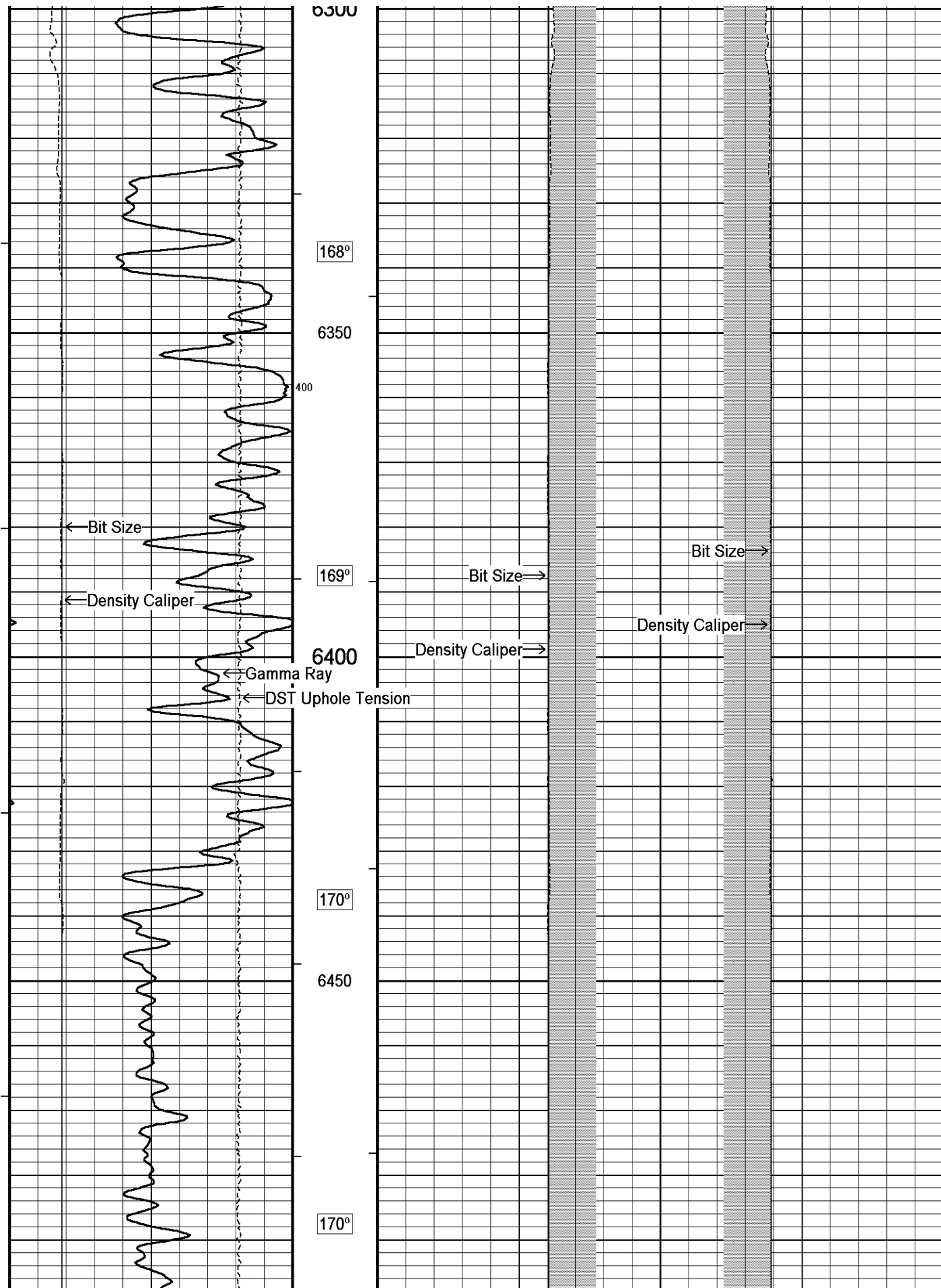
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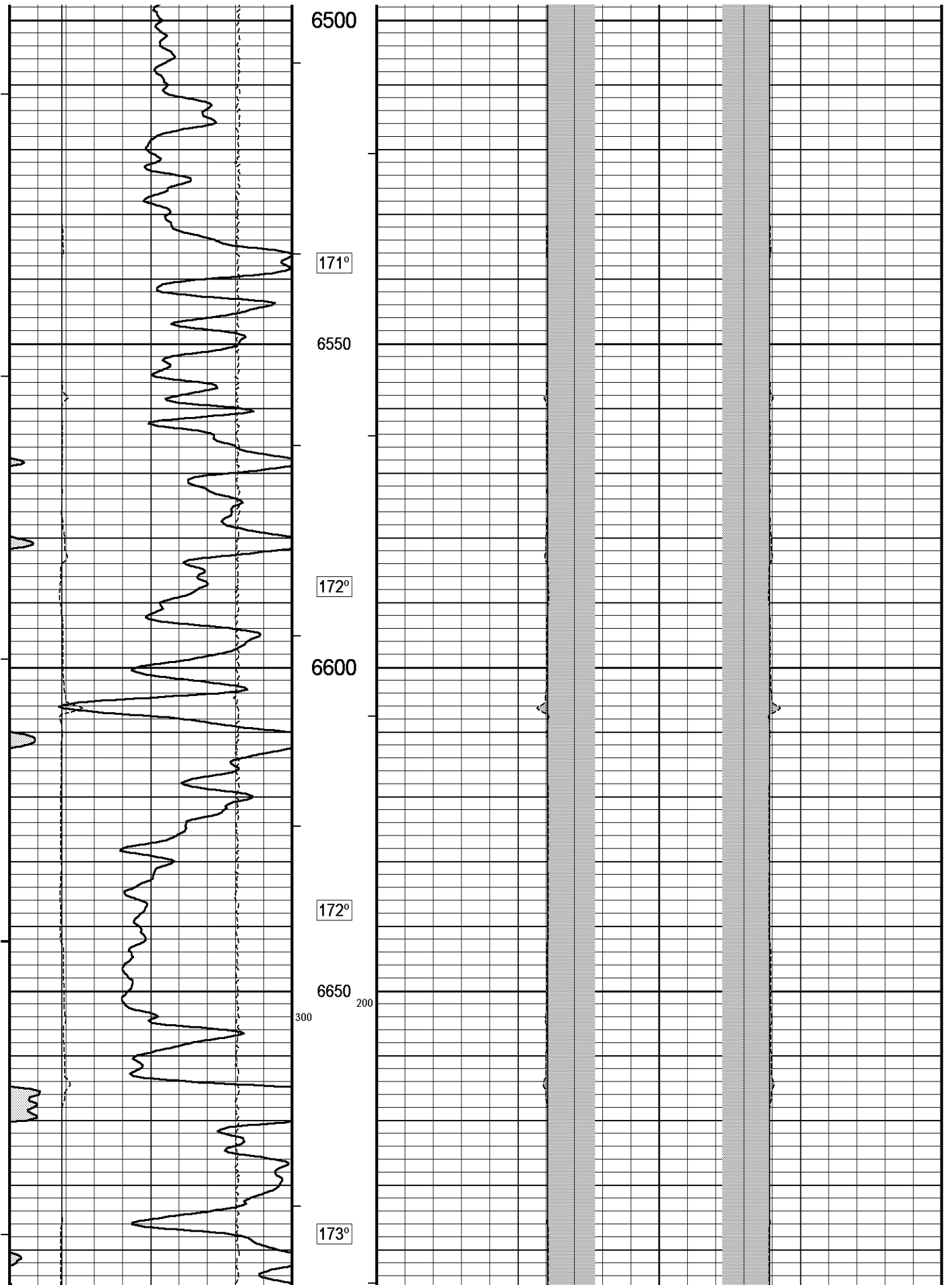
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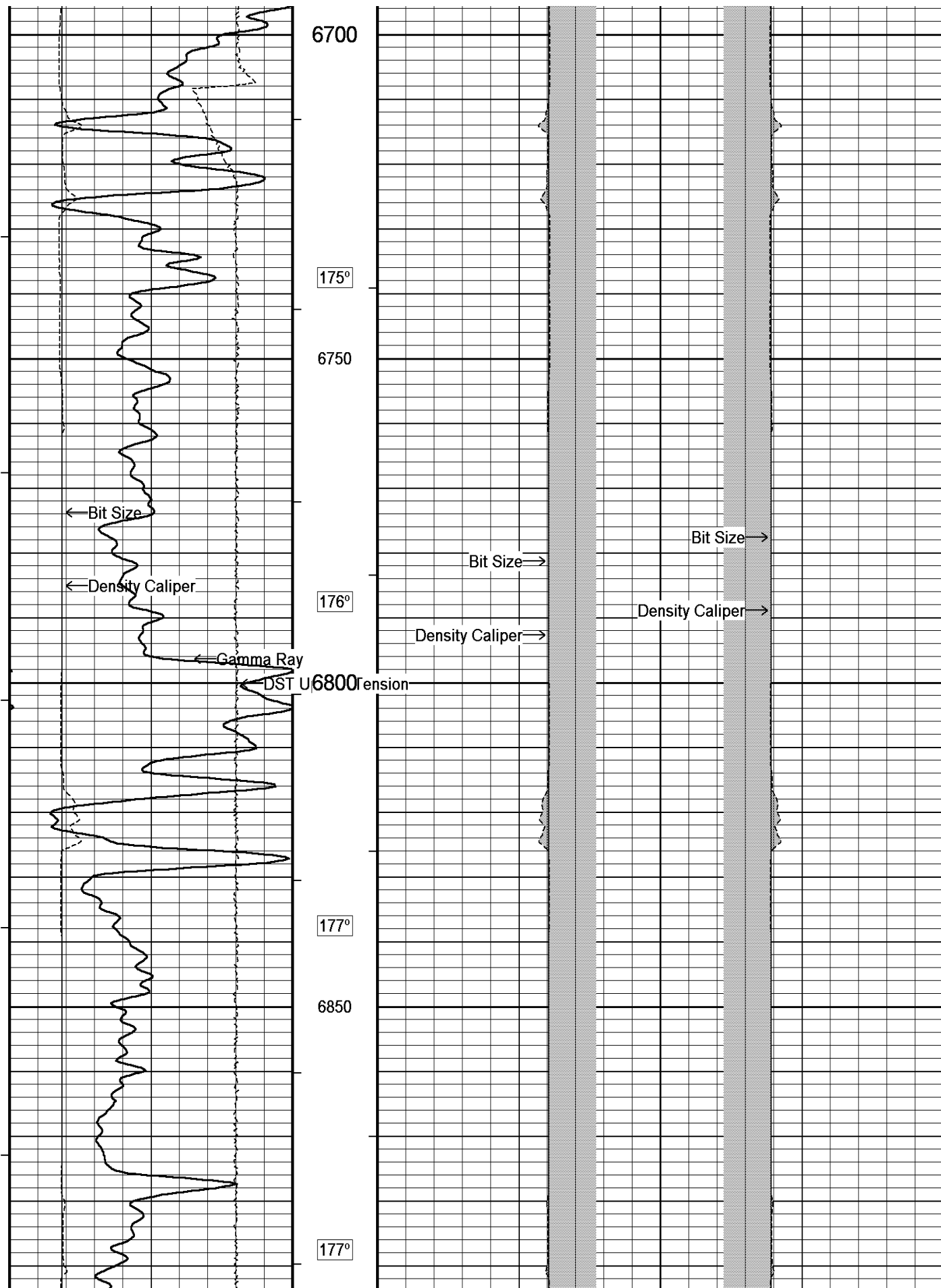
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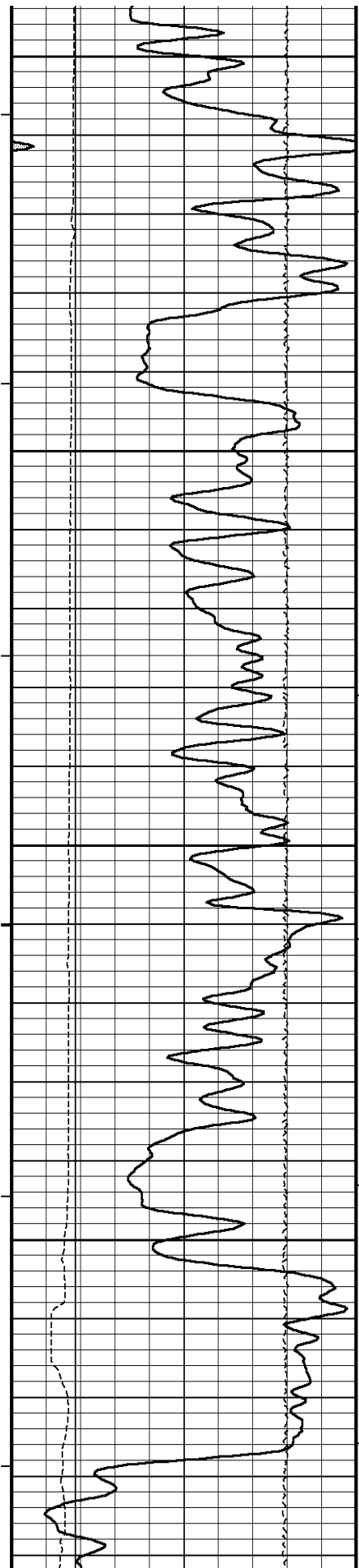
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6900

177°

200 6950

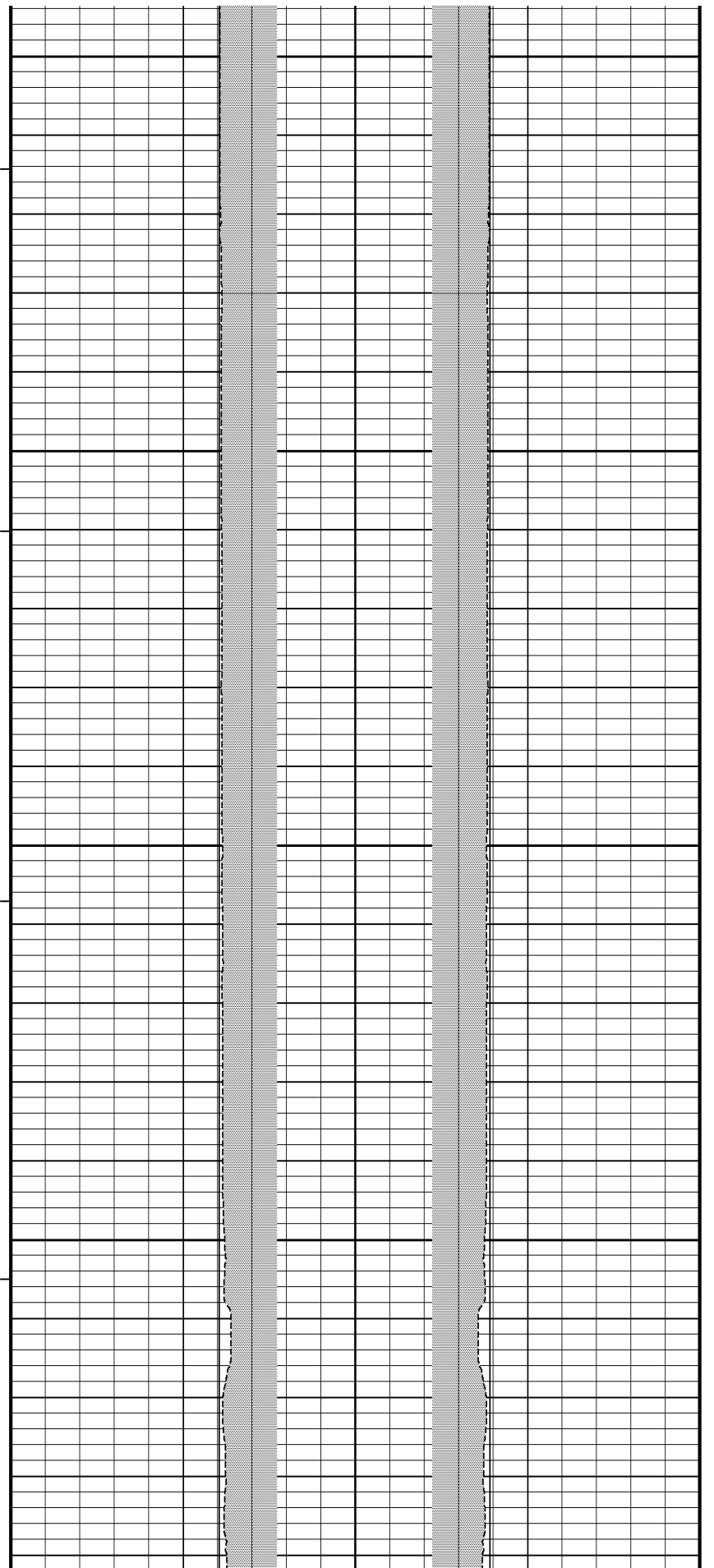
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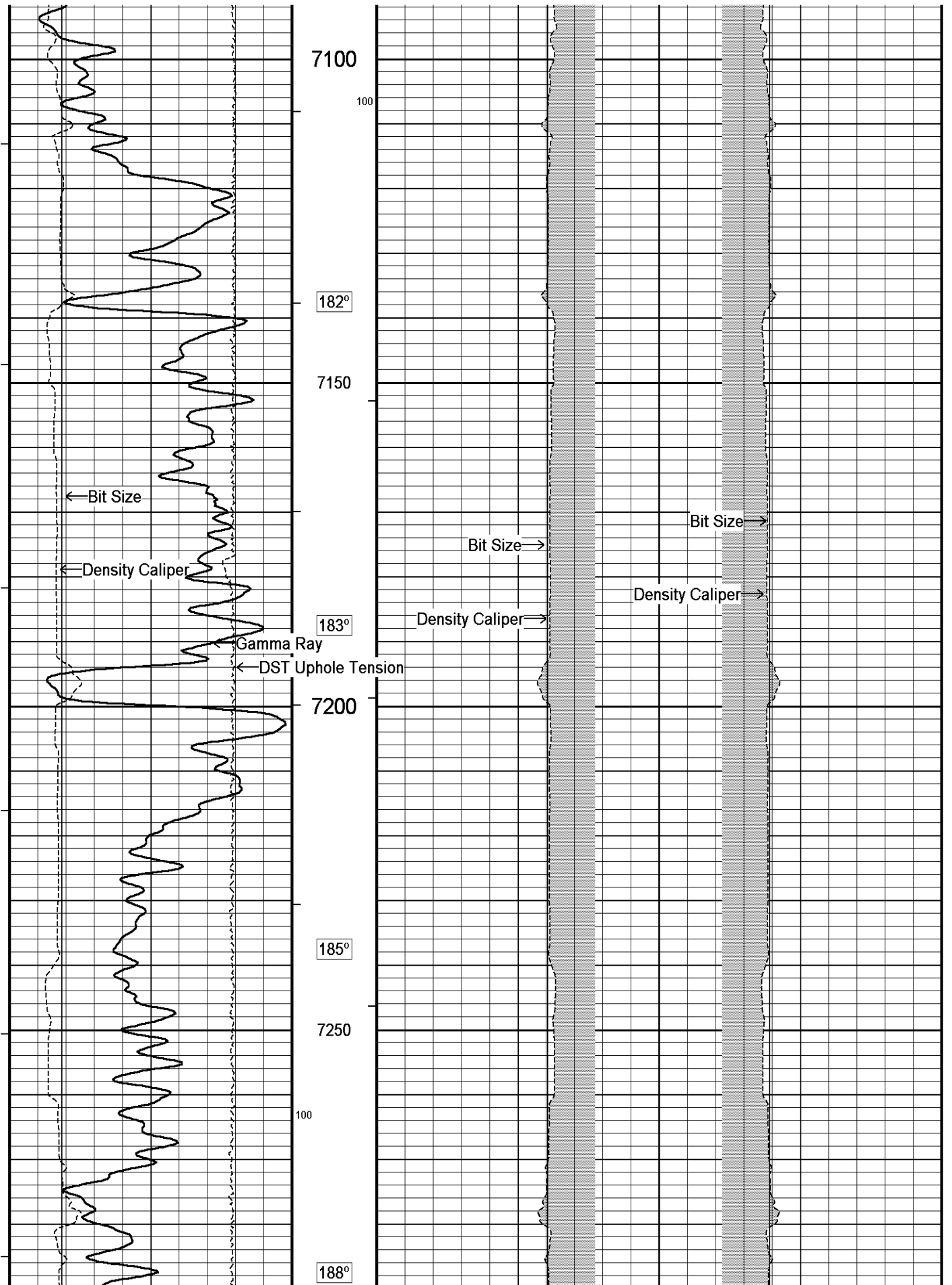
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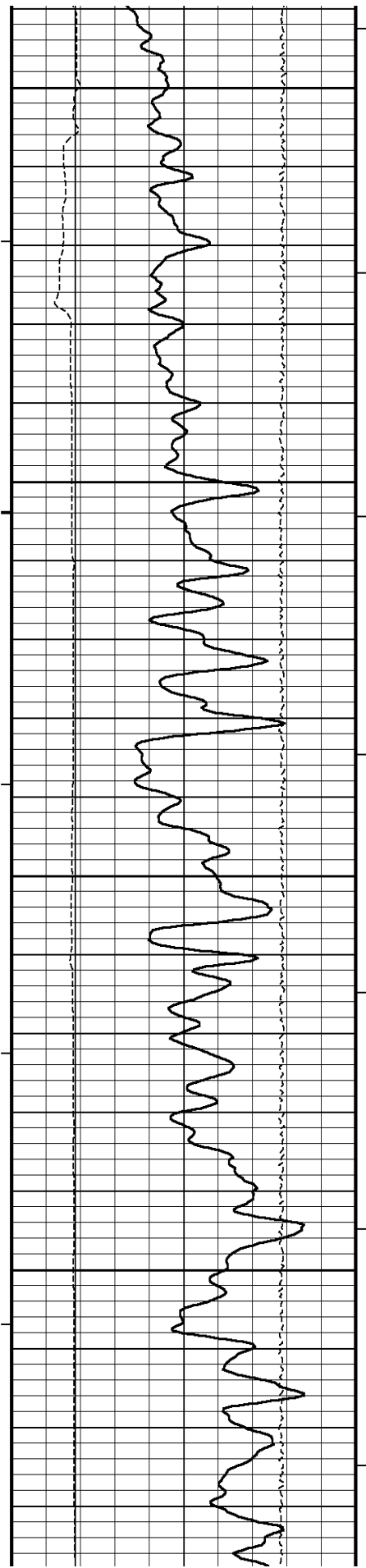
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7350

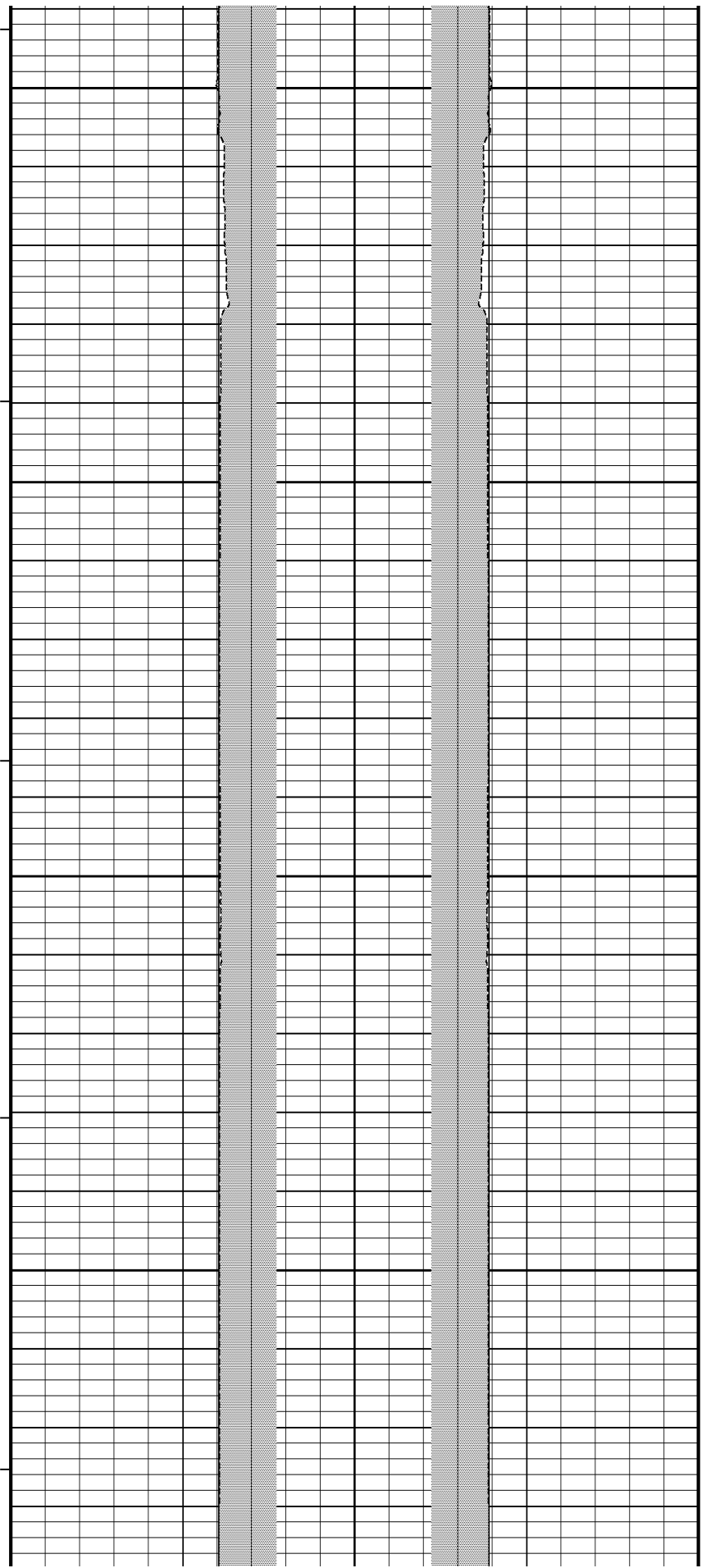
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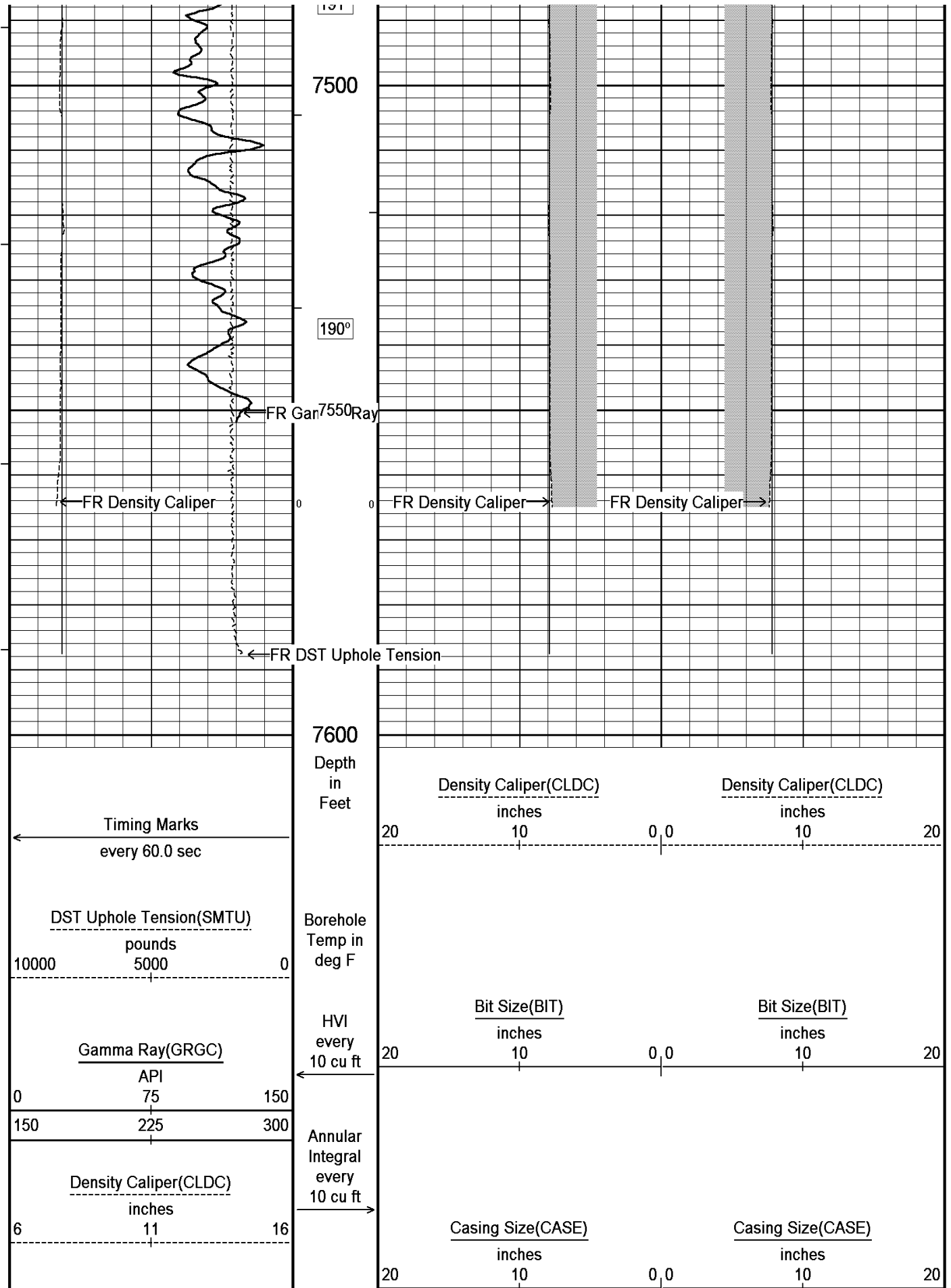
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190°

7450

191°





<u>Bit Size(BIT)</u> inches 6 11 16	Replay Scale 1:240
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Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 17-JUL-2011 11:37
Filename: C:\Minimus\LOGS\Bill Barrett\Kaufman 22B-25-692\Main 2.dta
System Versions: Logged with 11.02.3186 Processed with 11.02.3186 Plotted with 11.02.3186

↑ **5 INCH MAIN LOG** ↑

DOWNHOLE EQUIPMENT
C:\Minimus\LOGS\Bill Barrett\Kaufman 22B-25-692\Kaufman 22B-25-692.dta

<p>MCB-A 11B Tension Cablehead MCB-A 95 LG: 2.18 ft WT: 19.8 lb OD: 2.24 in</p> <p>SHA-J.A Compact Swivel Head Adaptor SHA-J.A 213 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in</p> <p>Compact Comms Gamma MCG-D.A 342 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in</p> <p>Compact Neutron MDN-B.A 306 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in</p> <p>Compact Density/Caliper MPD-C.A 298 LG: 9.59 ft WT: 90.4 lb OD: 2.45 in</p> <p>SKJ-D.A Compact Knuckle Joint SKJ-D.A 115 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in</p> <p>Compact Focussed Electric MFE-B.A 179 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in</p> <p>Compact Induction MAI-B.A 301 LG: 10.81 ft WT: 48.5 lb OD: 2.24 in</p> <p>Total Length: 46.83 ft Weight: 368.2 lb</p>		<p>37.07 ft GRGC - Gamma Ray 34.16 ft CGXT - MCG External Temperature</p> <p>30.61 ft NPRS - Sandstone Neutron Por.</p> <p>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</p> <p>13.72 ft FEFC - Shallow FE (Phase Corr.)</p> <p>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 R1 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.</p>
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COMPANY	BILL BARRETT CORPORATION
WELL	KAUFMAN 22B-25-692
FIELD	MAMM CREEK
PROVINCE/COUNTY	GARFIELD
COUNTRY/STATE	U.S.A. / COLORADO

Elevation Drill Floor 5944.00 feet
Elevation Ground Level 5922.00 feet

Depth Driller 7619.00 feet
Depth Logger 7614.00 feet



Weatherford[®]

HOLE VOLUME
CALIPER LOG

