

HOLE VOLUME LOG

COMPANY				WHITING OIL & GAS			
WELL				BOIES #B-19P-O3			
FIELD				SULPHUR CREEK			
PROVINCE/COUNTY				RIO BLANCO			
COUNTRY/STATE				U.S.A. / COLORADO			
LOCATION				SHL: 306' FSL & 1184' FEL			
				BHL: 515' FSL & 2019' FEL			
LSD	SEC	TWP	RGE	Other Services			
	19	2S	97W				
API Number		05-103-11067					
Permit Number							
Permanent Datum G.L., Elevation 6246 feet							
Log Measured From K.B. @ 30 FEET above Permanent Datum				Elevations:			
Drilling Measured From K.B.				KB 6278.00			
				DF 6277.00			
				GL 6248.00			
Date	15-JUL-2008						
Run Number	ONE						
Depth Driller	10930.00			feet			
Depth Logger	10954.00			feet			
First Reading	10933.00			feet			
Last Reading	4966.00			feet			
Casing Driller	5000.00			feet			
Casing Logger	4966.00			feet			
Bit Size	8.75			inches			
Hole Fluid Type	LSND						
Density / Viscosity	9.60 lb/USg			60.00 CP			
PH / Fluid Loss	9.00			5.60 ml/30Min			
Sample Source	FLOW LINE						
Rm @ Measured Temp	1.56 @ 99.7			ohm-m			
Rmf @ Measured Temp	1.25 @ 99.7			ohm-m			
Rmc @ Measured Temp	1.87 @ 99.7			ohm-m			
Source Rmf / Rmc	CALC			CALC			
Rm @ BHT	0.67 @238.0			ohm-m			
Time Since Circulation	10 HOURS						
Max Recorded Temp	238.00			deg F			
Equipment Name	COMPACT						
Equipment / Base	13038			GDUCT			
Recorded By	C. PHILLIPS						
Witnessed By	A. FULLER						
Last Title	Last Line			Last Line			

BOREHOLE RECORD				Last Edited: 16-JUL-2008 14:56
Bit Size inches		Depth From feet		Depth To feet
8.750		5000.00		11930.00
CASING RECORD				
Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	9.625	0.00	5000.00	36.00

REMARKS
TOOLS RAN: SHA, MCG, MDN, MPD, SKJ, MFE, MAI RAN IN COMBINATION.
HARDWARE: MDN: DUAL NEUTRON BOWSPRING USED. MPD: 8 INCH PROFILE PLATE USED. MAI: TWO 0.5 INCH STANDOFFS USED.
FIRST RUN BRIDGED OFF AT 10013 FEET. RIG MADE WIPER TRIP IN AN ATTEMPT TO LOG THE BOTTOM SECTION. SECOND RUN T.D. 10954 FEET. DATA SPLICED AT 9950 FEET.
2.68 G/CC DENSITY MATRIX USED TO CALCULATE POROSITY.
ALL INTERVALS LOGGED AND SCALED PER CUSTOMER'S REQUEST.
LOGS WERE RAN FROM TD TO SURFACE CASING AS PER ONSITE COMPANY REP.
MAXIMUM DEVIATION APPROX 11 DEGREES.
BOREHOLE SIZE AND RUGOSITY WILL AFFECT DATA QUALITY.

TOTAL HOLE VOLUME FROM CASING TO T.D. WAS APPROXIMATELY 2580 CUBIC FEET.

ANNULAR HOLE VOLUME FROM SURFACE CASING TO T.D. BASED ON 4.5 INCH PRODUCTION CASING WAS APPROXIMATELY 1920 CUBIC FEET.

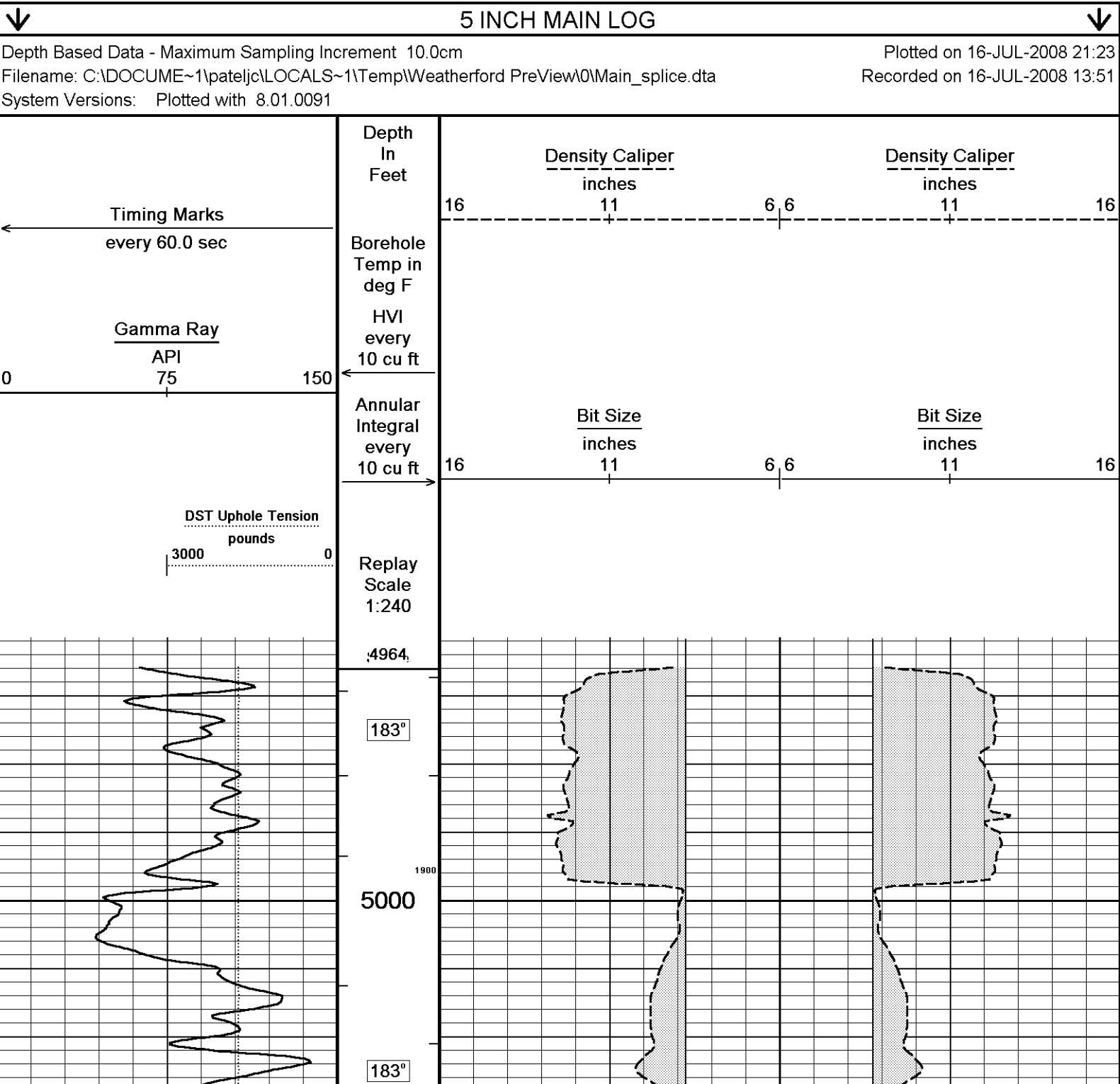
SERVICE ORDER # 3511307

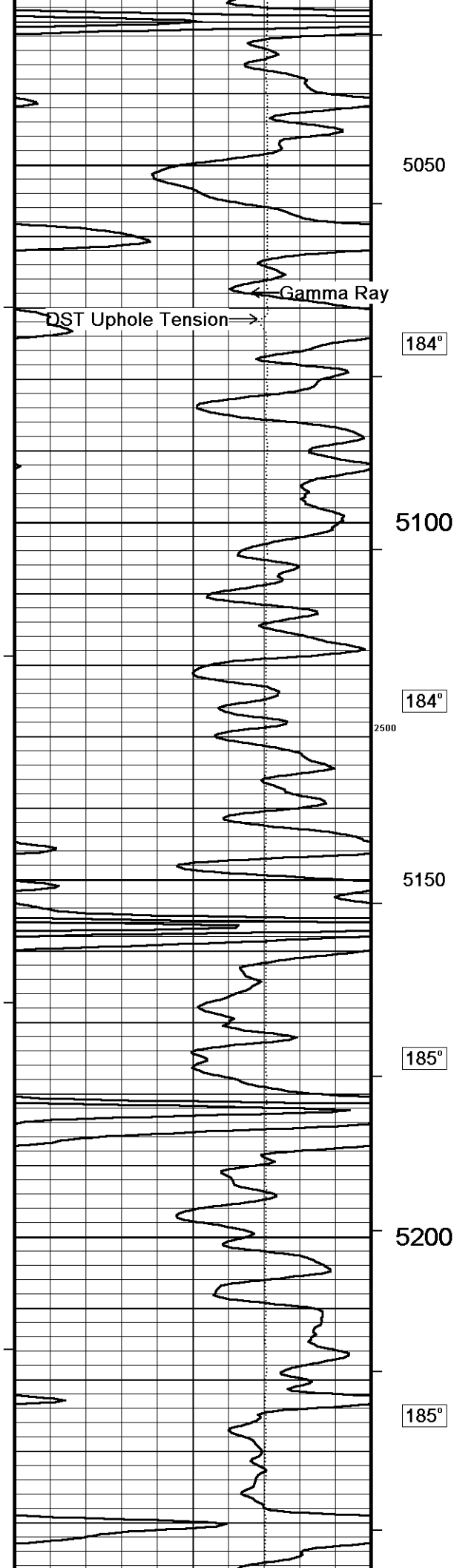
RIG: GREY WOLF #106

ENGINEER(S): C. PHILLIPS

OPERATOR(S): J. YOAKUM

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.





5050

184°

5100

184°

5150

185°

5200

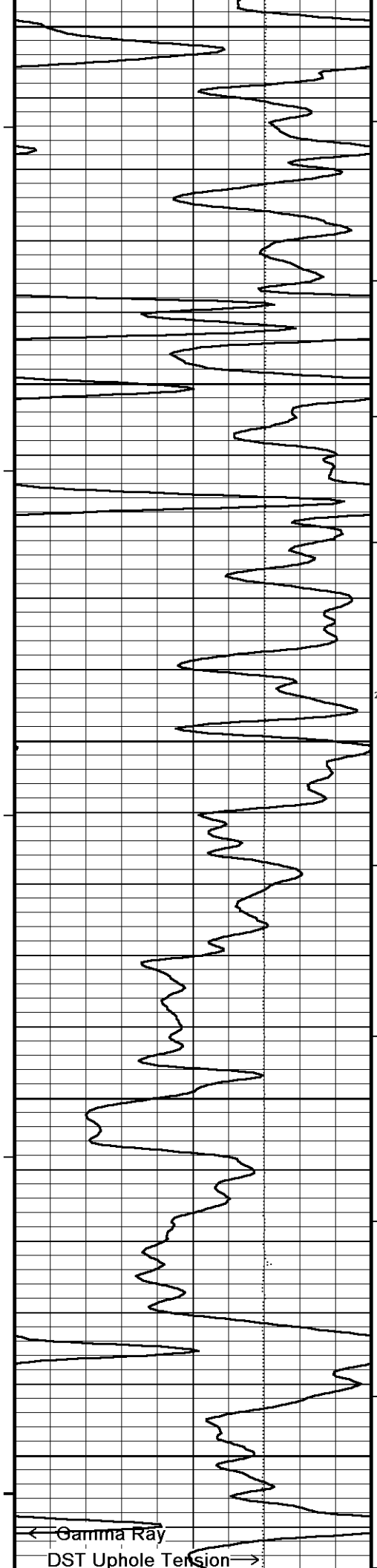
185°

Bit Size →

Density Caliper →

Bit Size →

Density Caliper →



5250

186°

5300

186°

5350

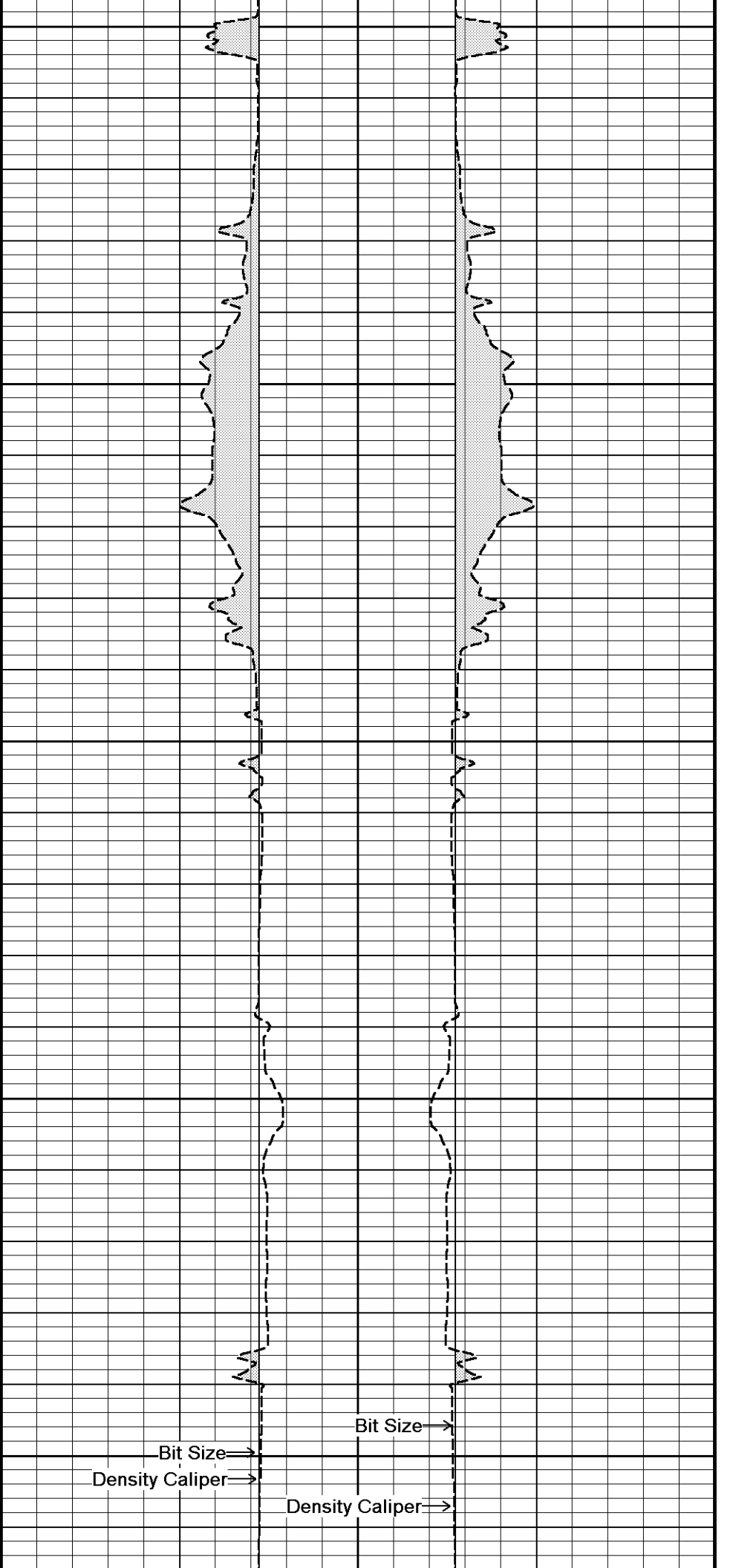
187°

5400

187°

5450

Gamma Ray
DST Uphole Tension



1800

2400

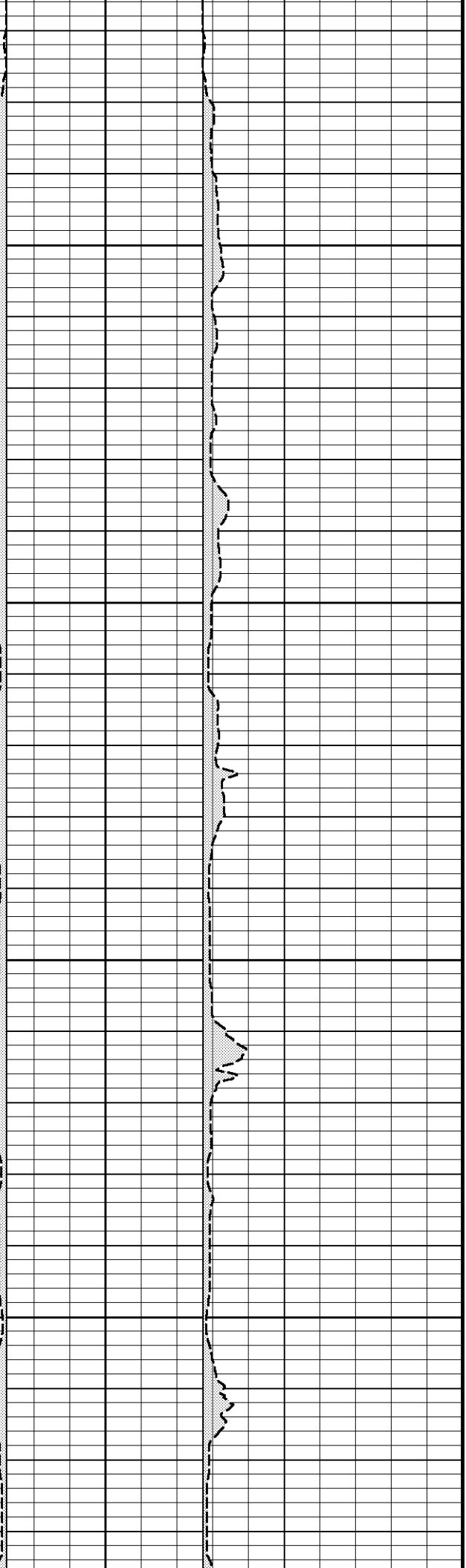
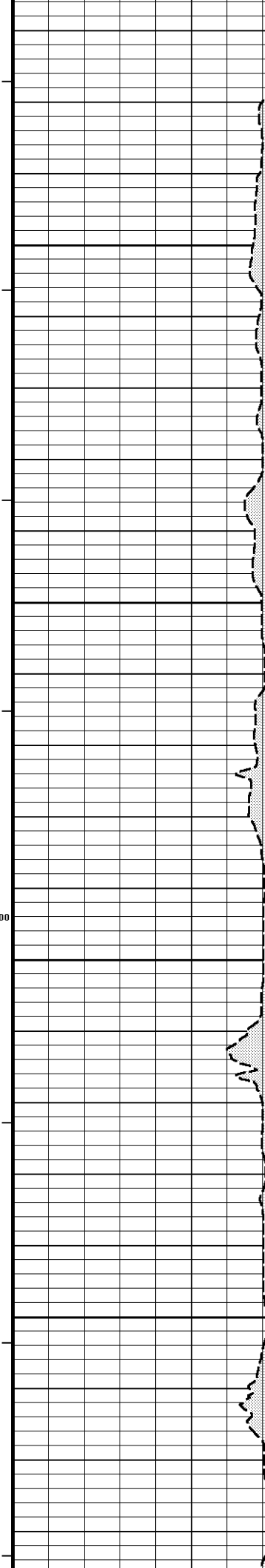
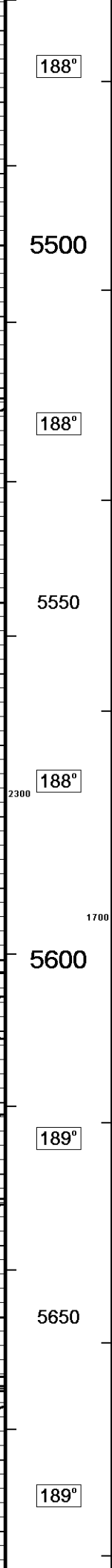
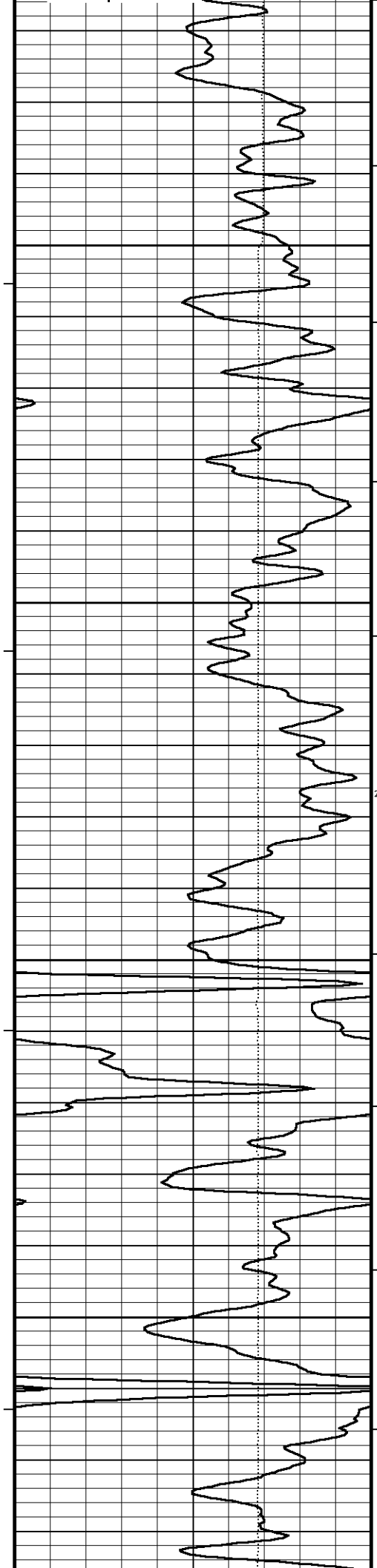
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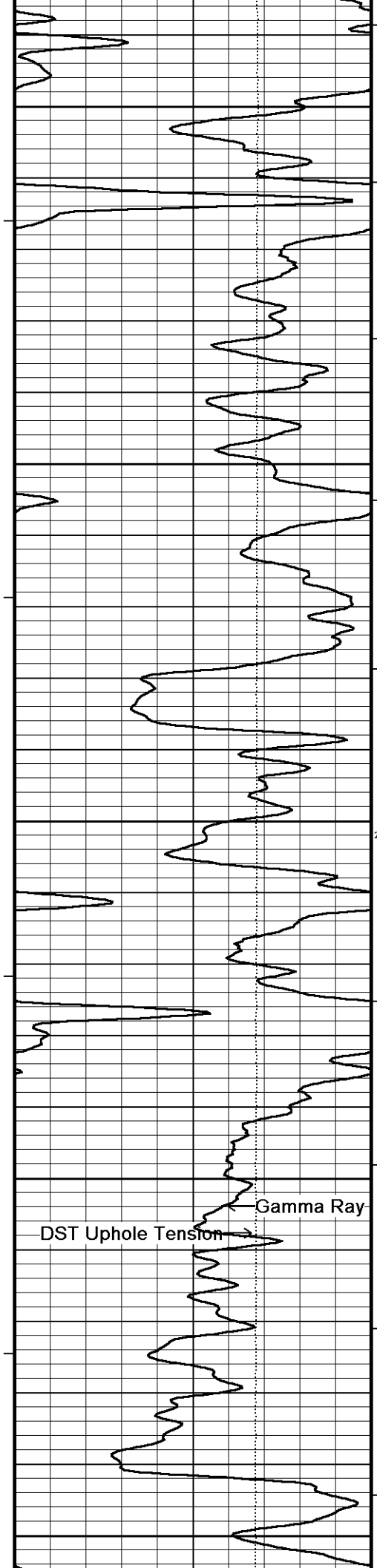
4200

Bit Size
Density Caliper

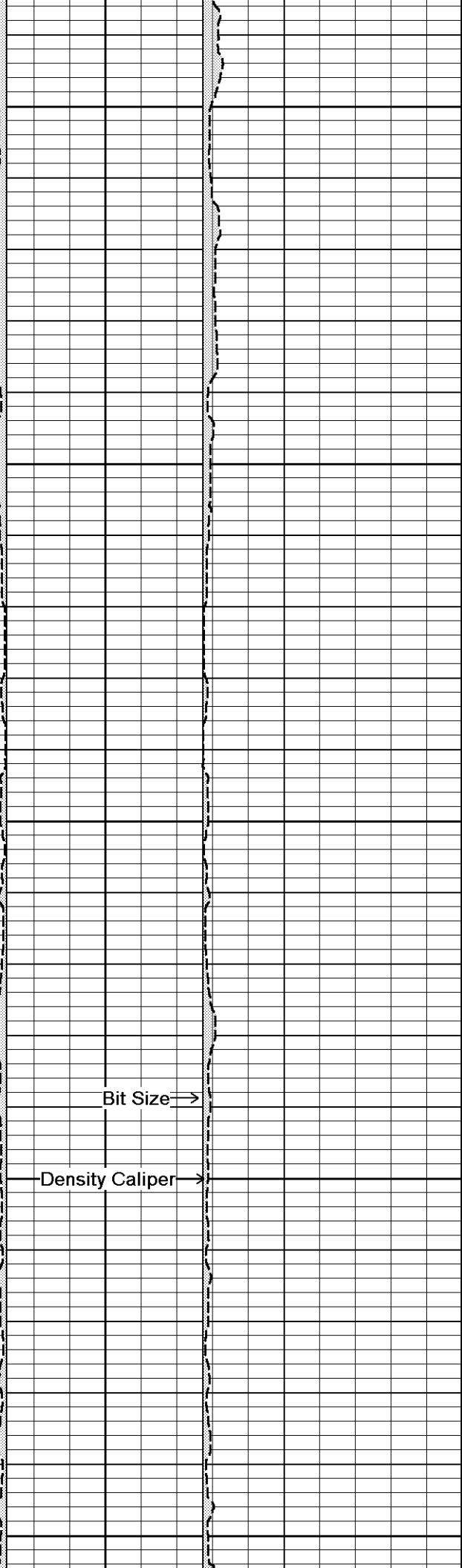
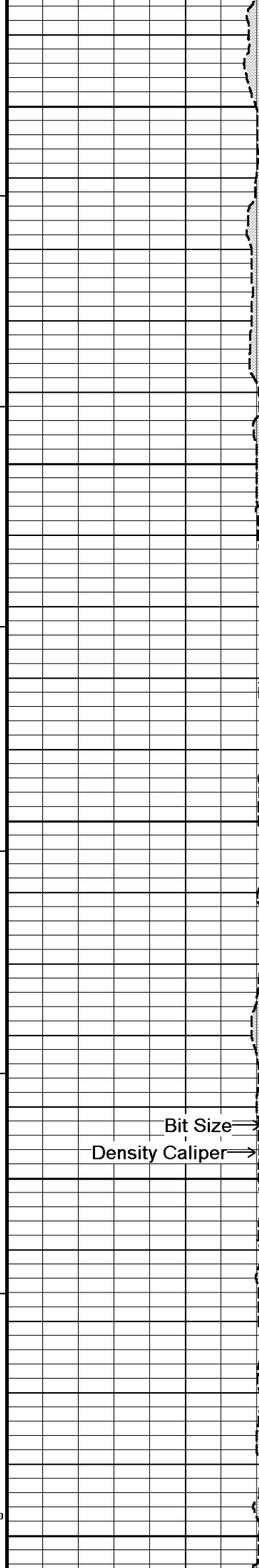
Bit Size

Density Caliper

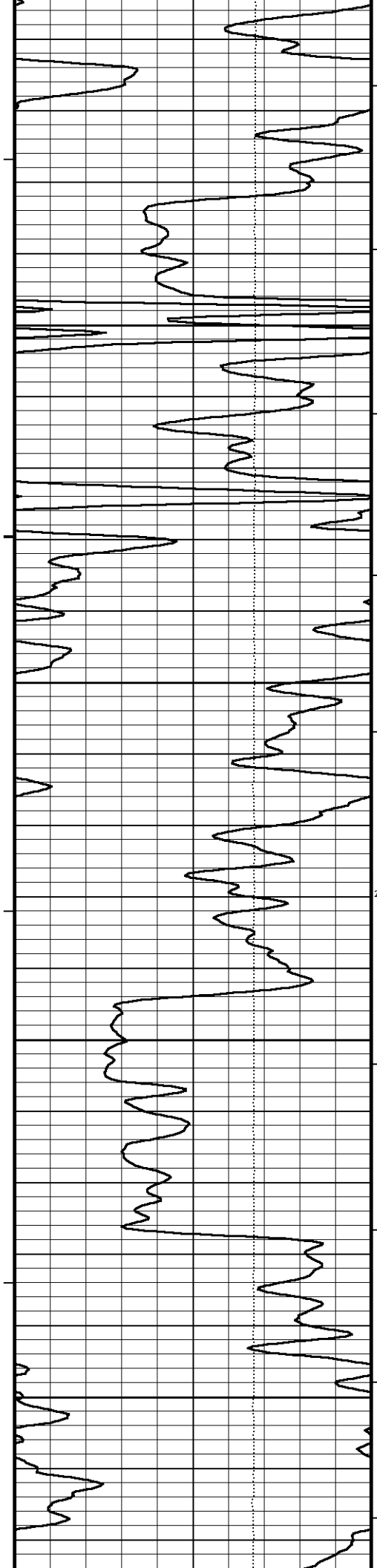




5700
190°
5750
190°
5800
2200
191°
5850
191°
5900
1600



Bit Size →
Density Caliper →
Bit Size →
Density Caliper →



191°

5950

192°

6000

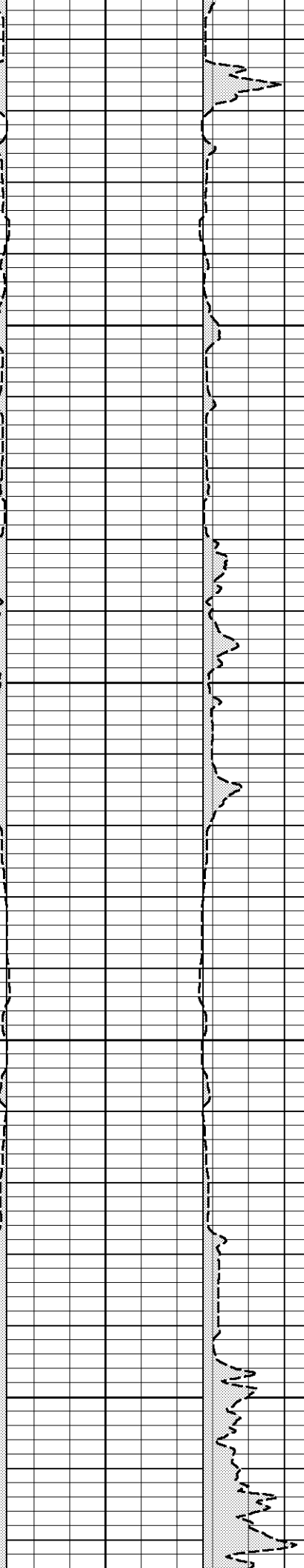
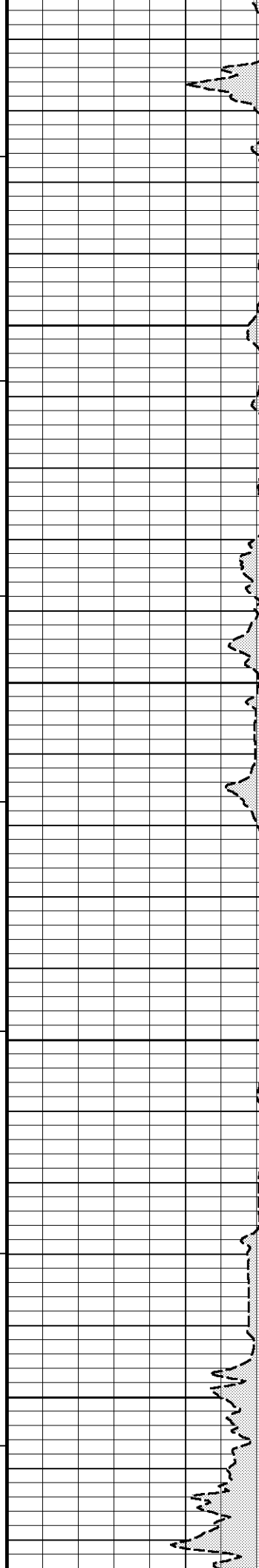
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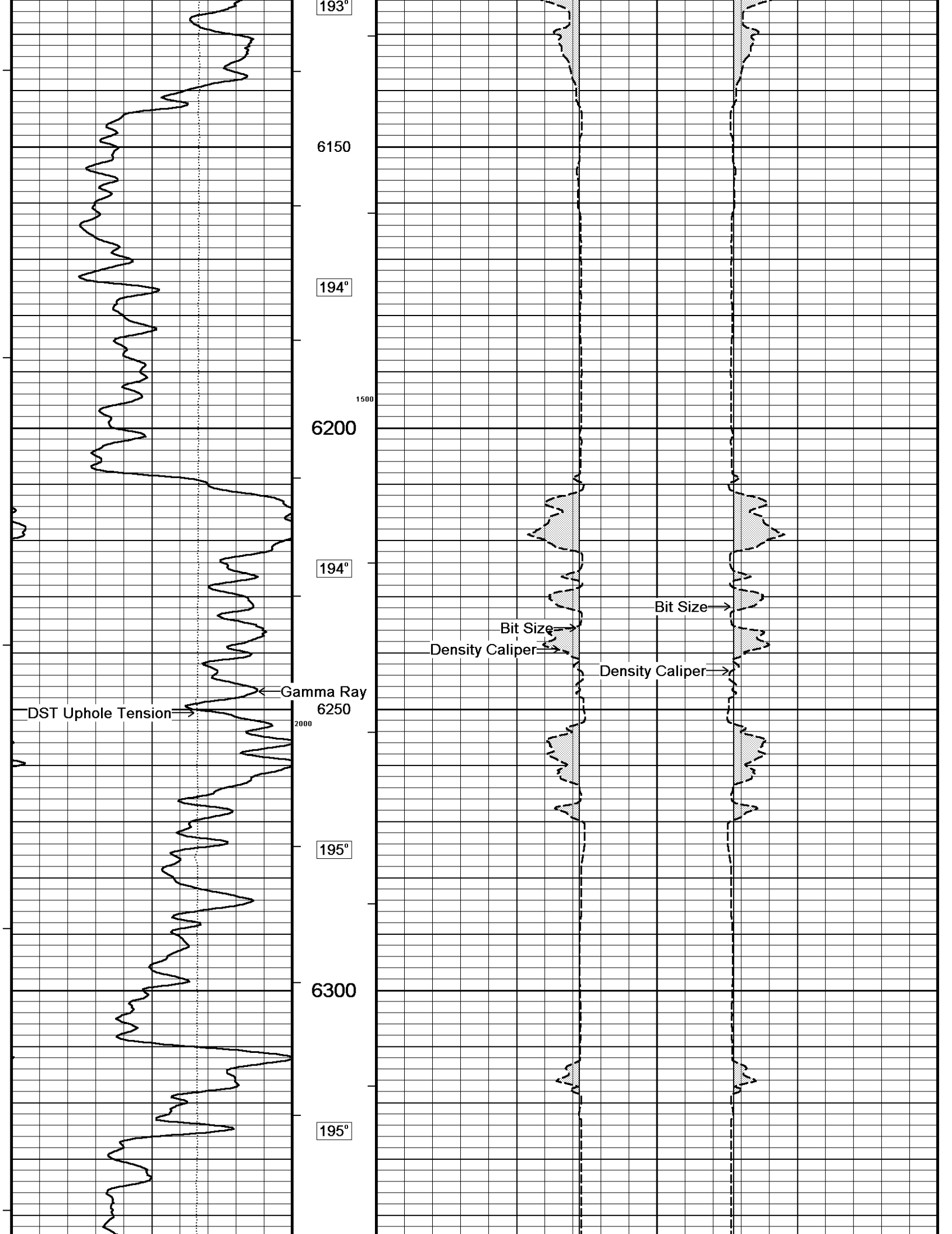
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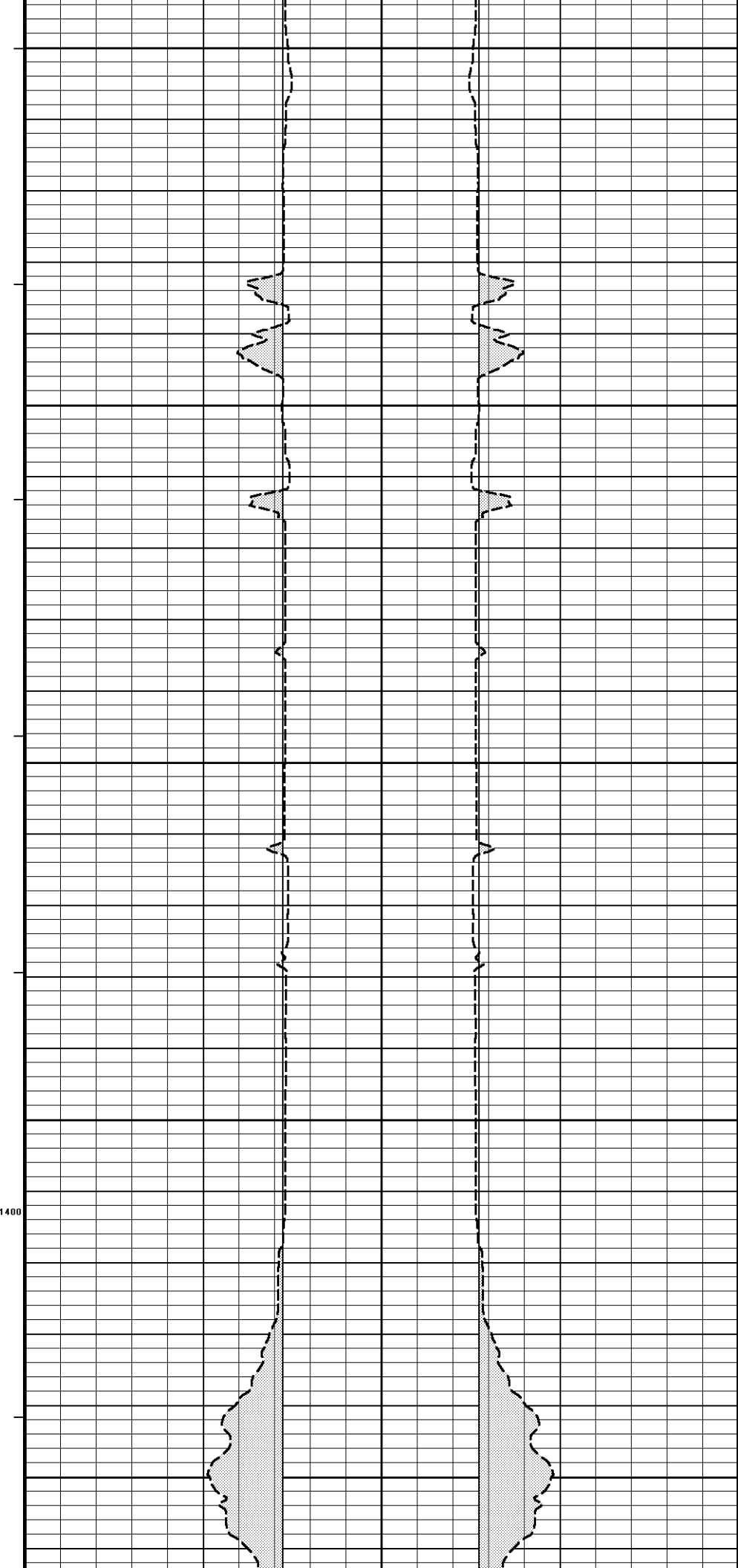
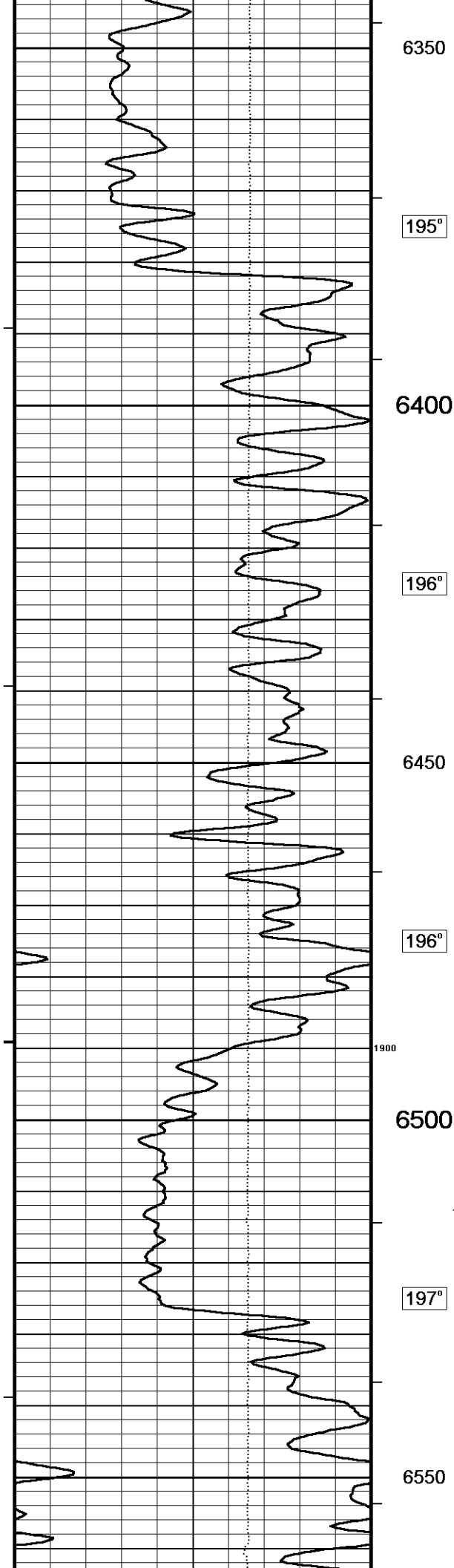
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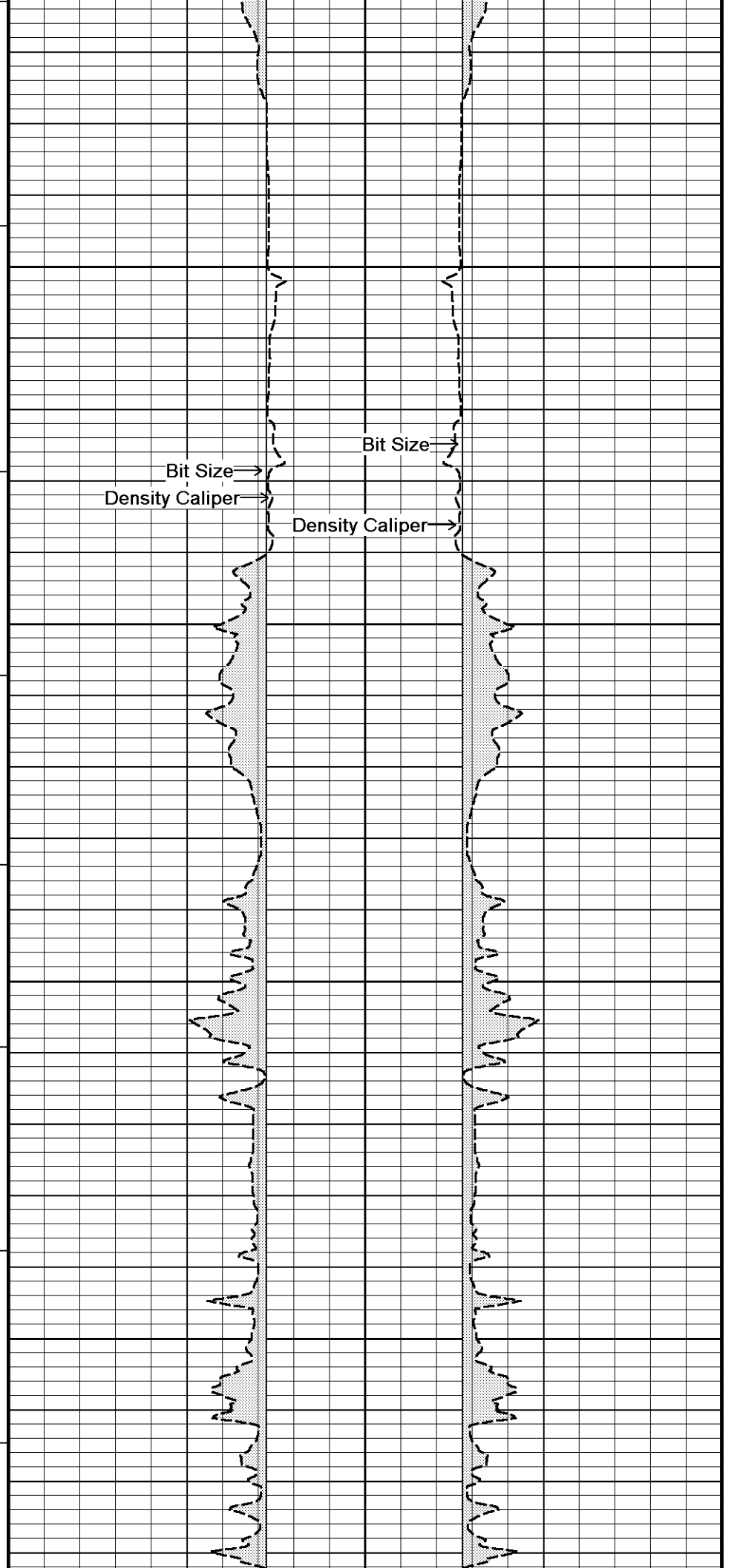
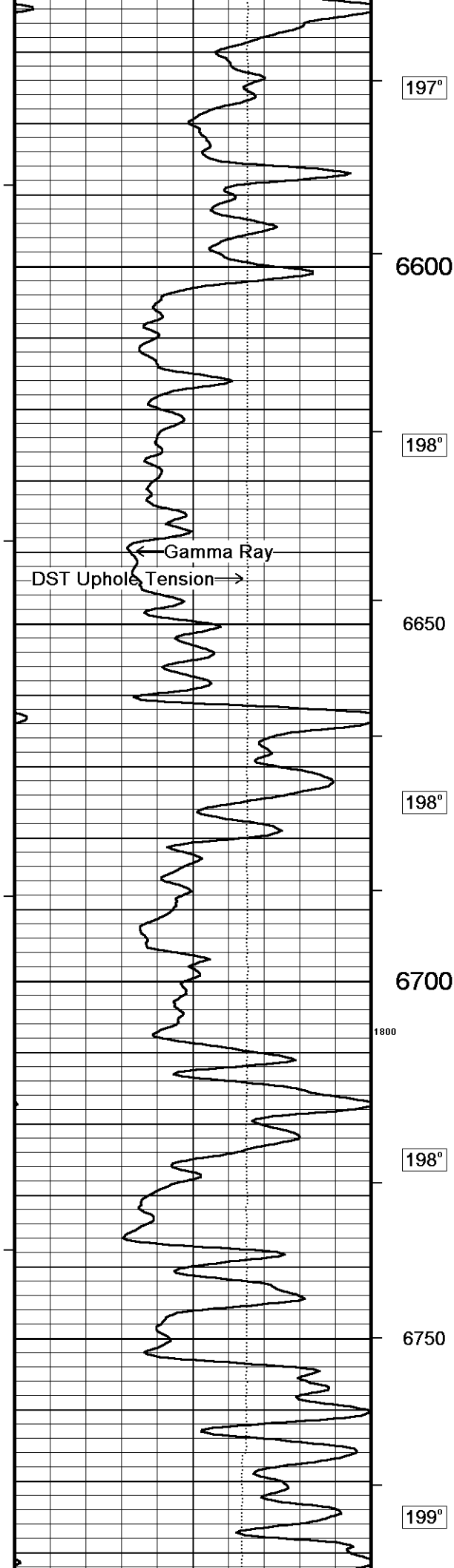
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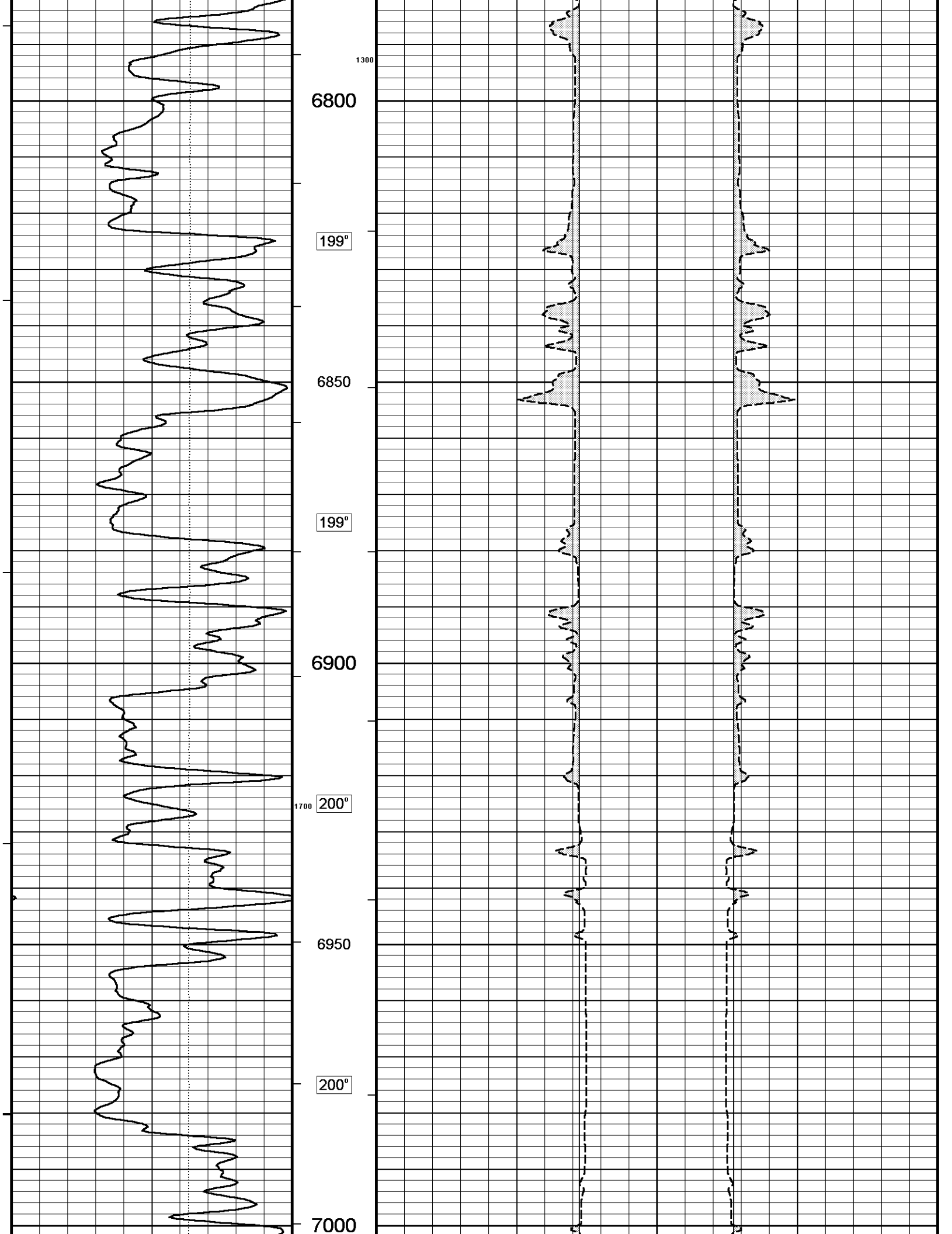
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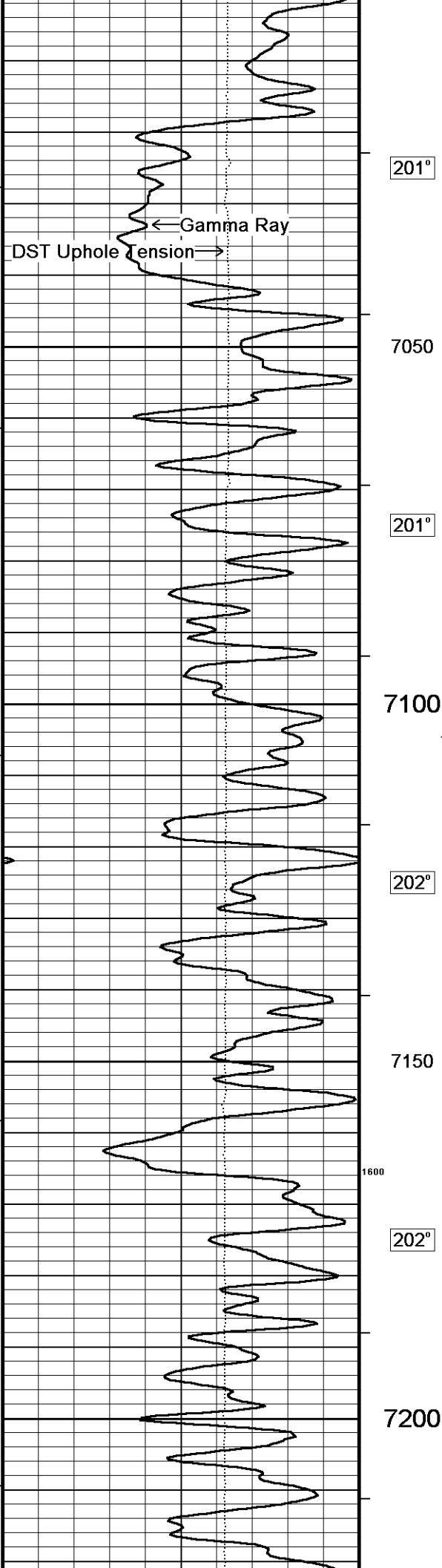












201°

7050

201°

7100

202°

7150

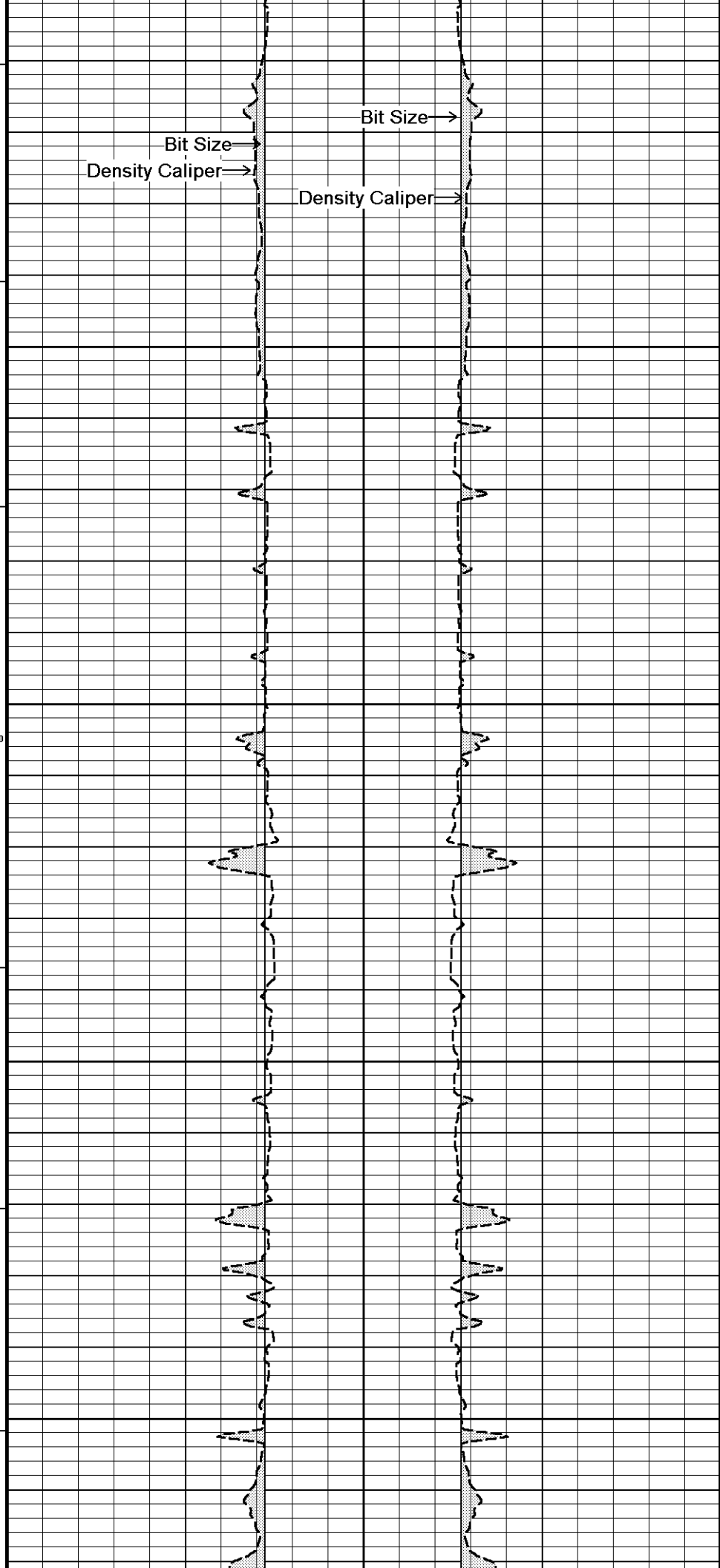
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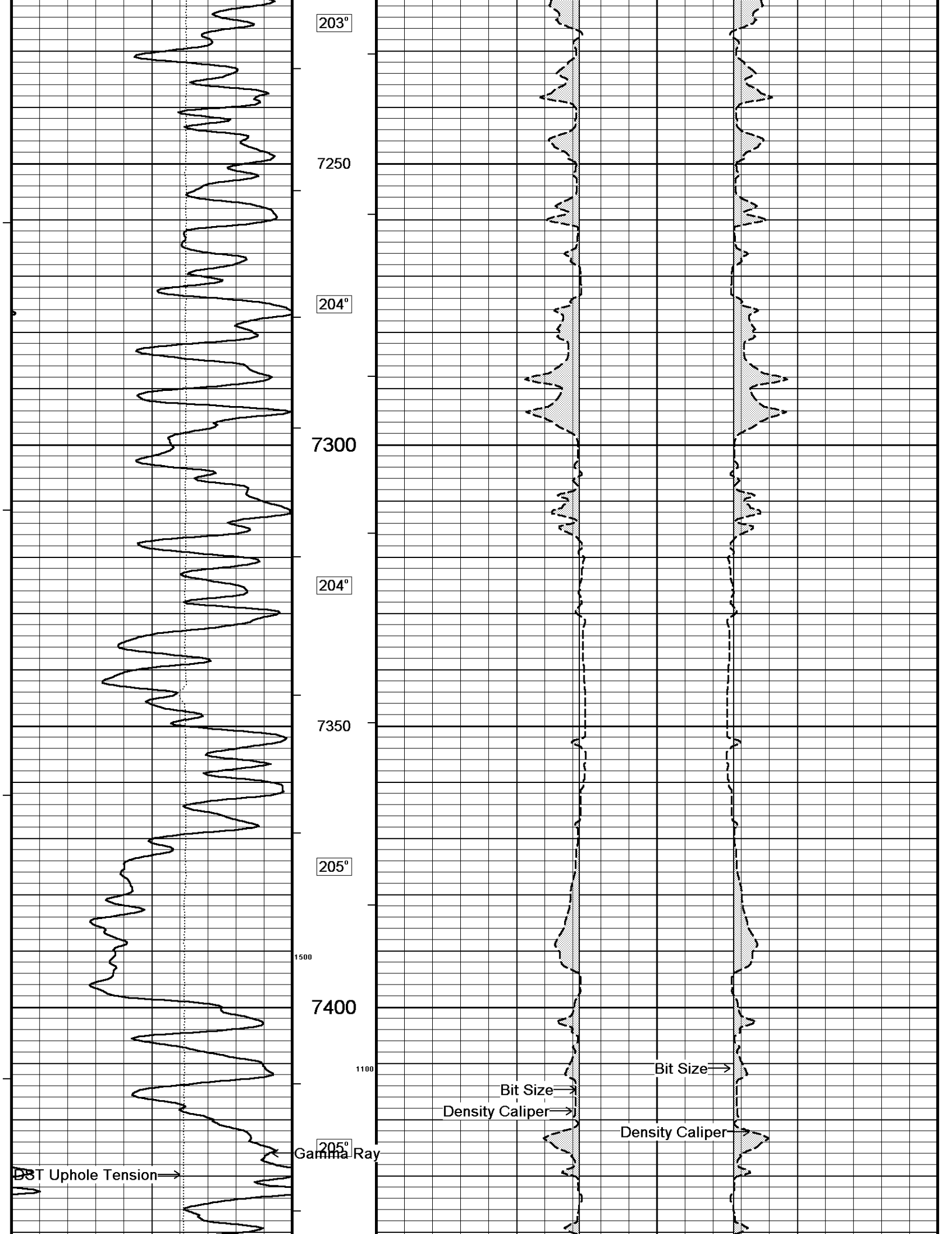
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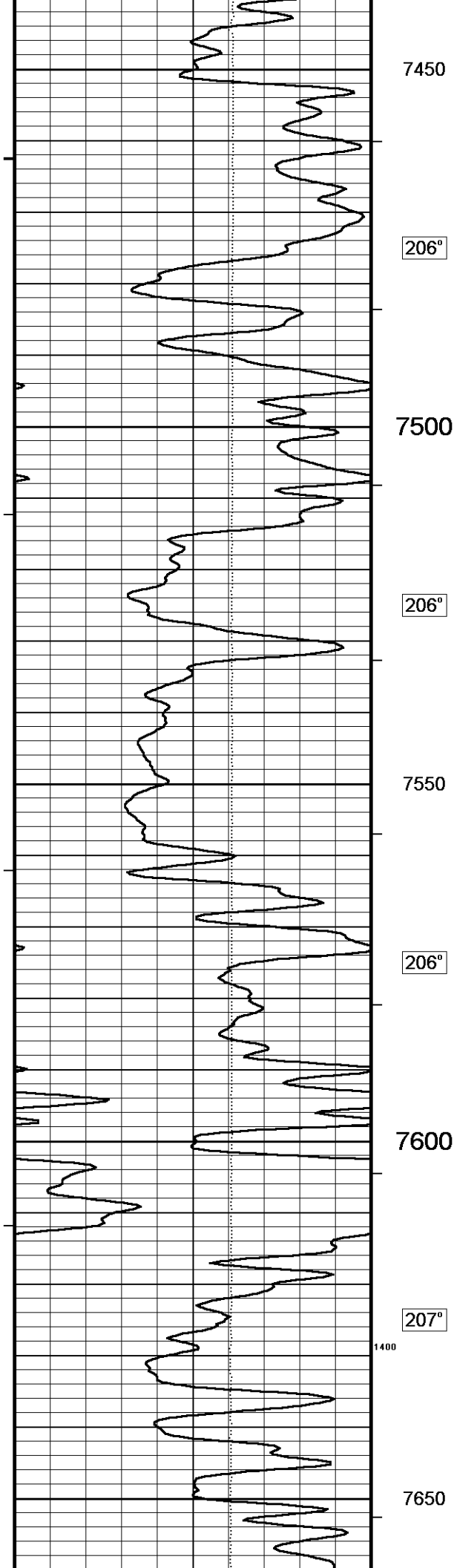
1200

1600

Bit Size
Density Caliper
Bit Size
Density Caliper







7450

206°

7500

206°

7550

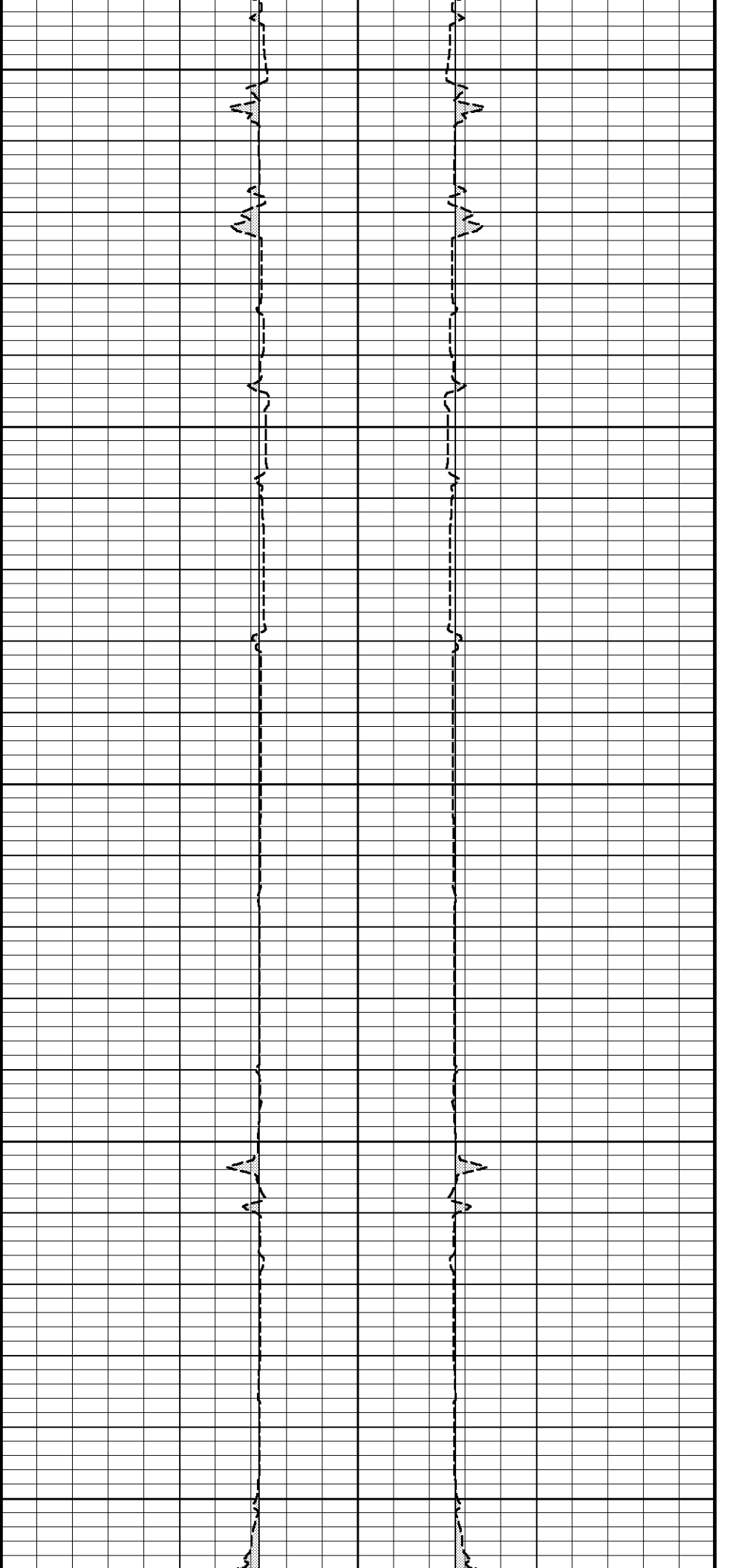
206°

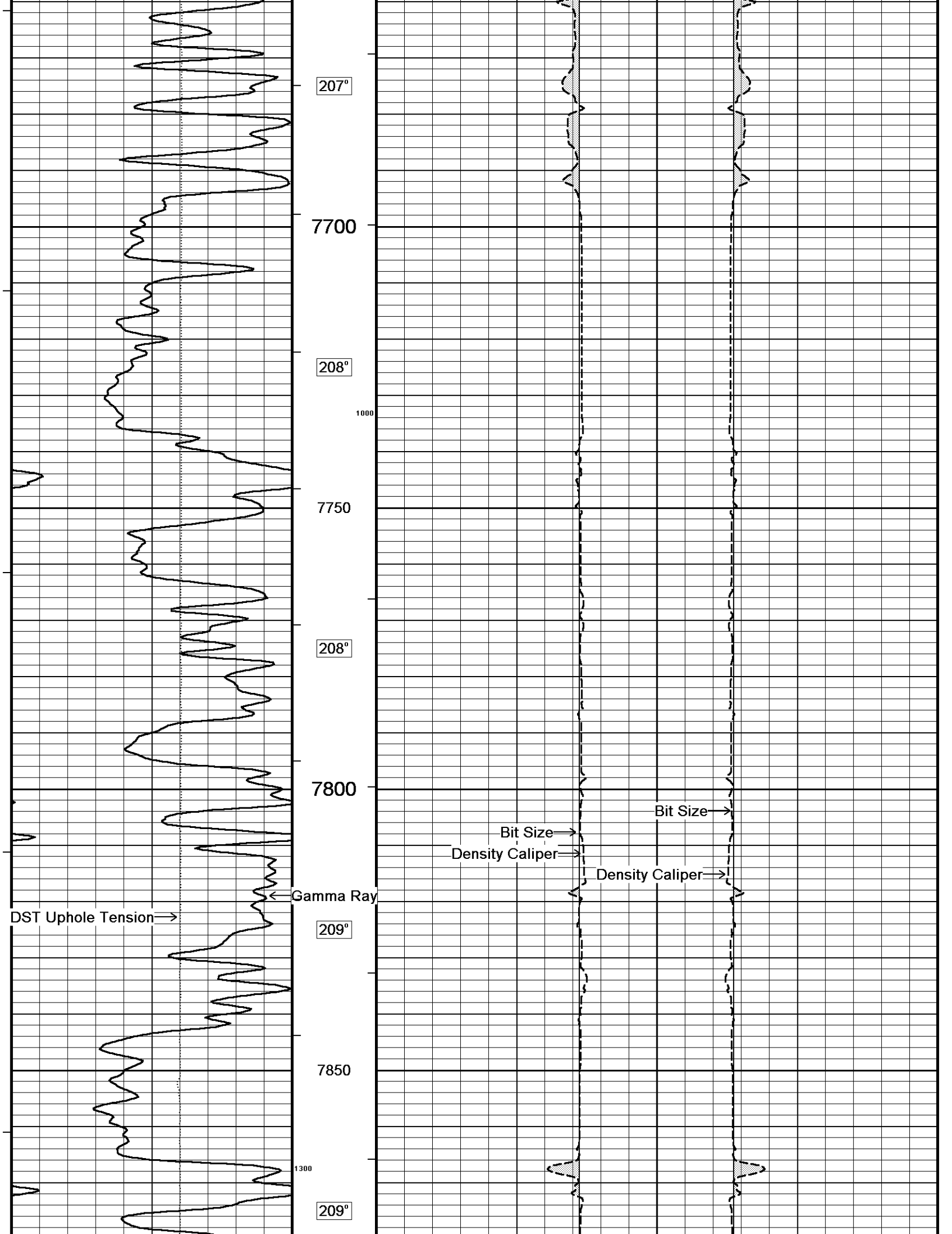
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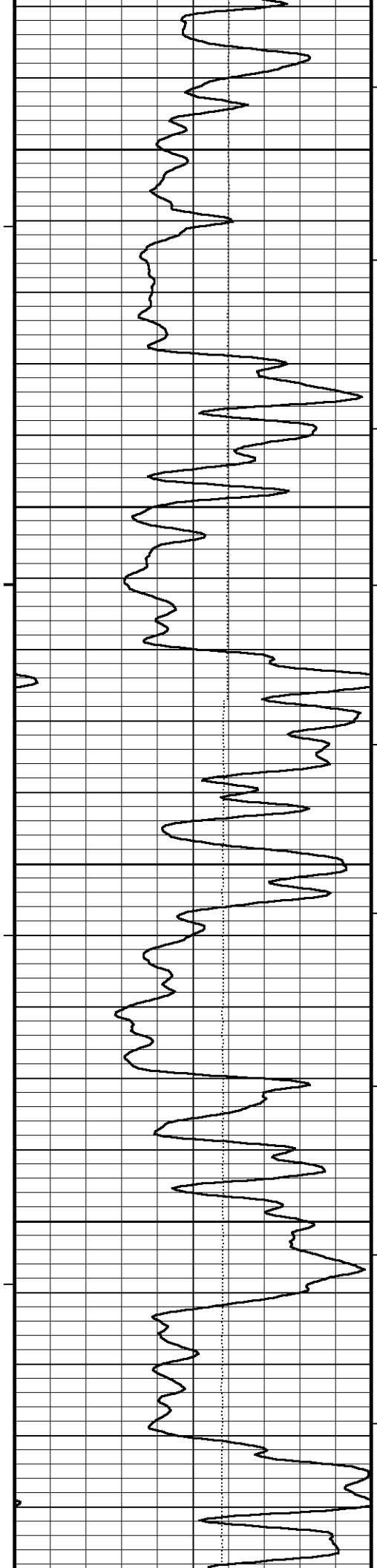
207°

1400

7650







7900

209°

7950

209°

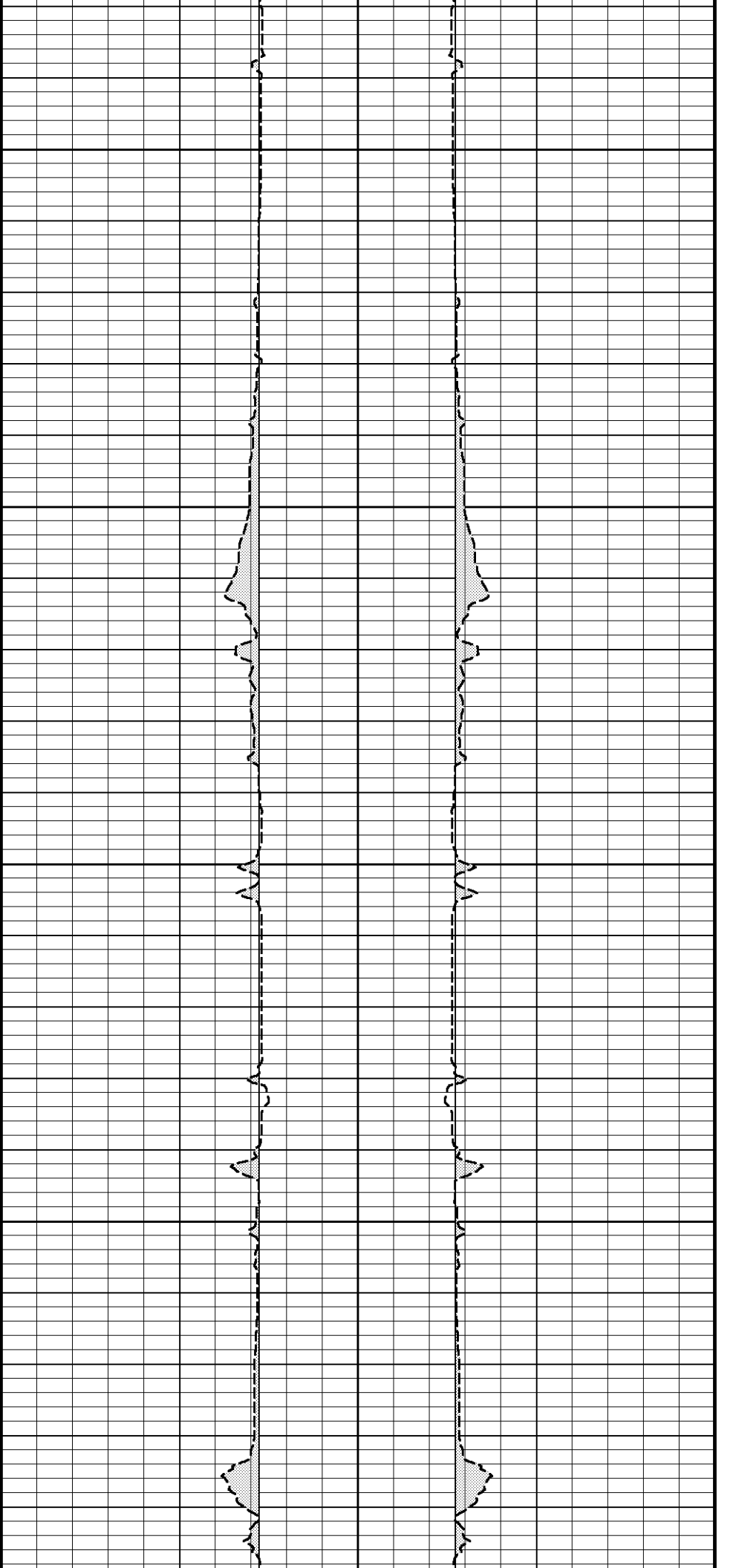
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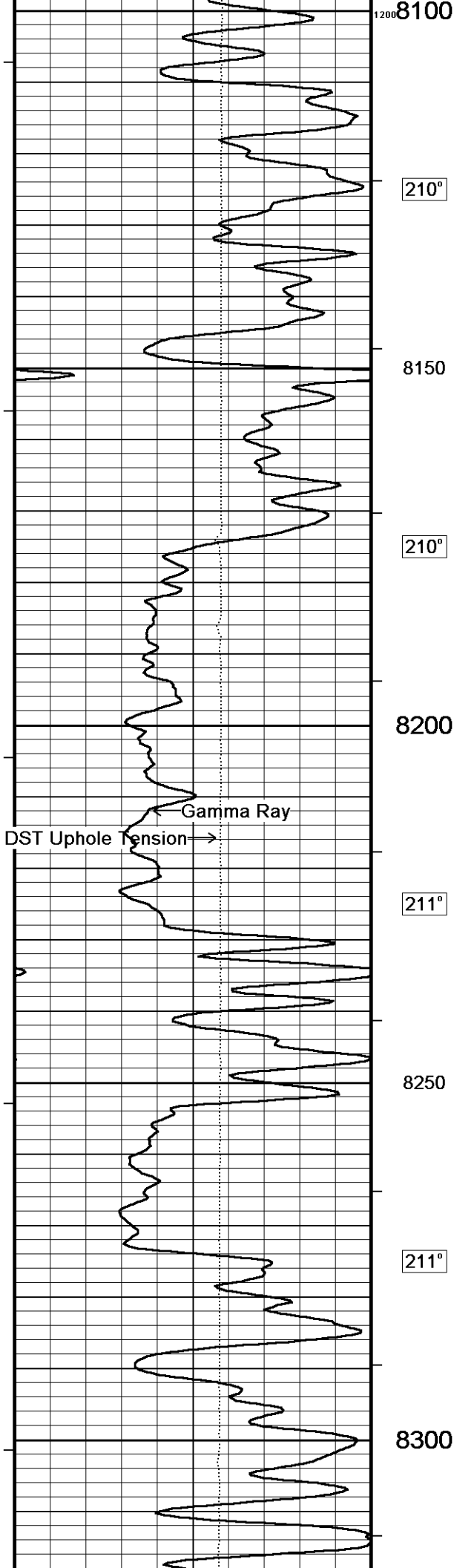
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8050

900

210°





8100

210°

8150

210°

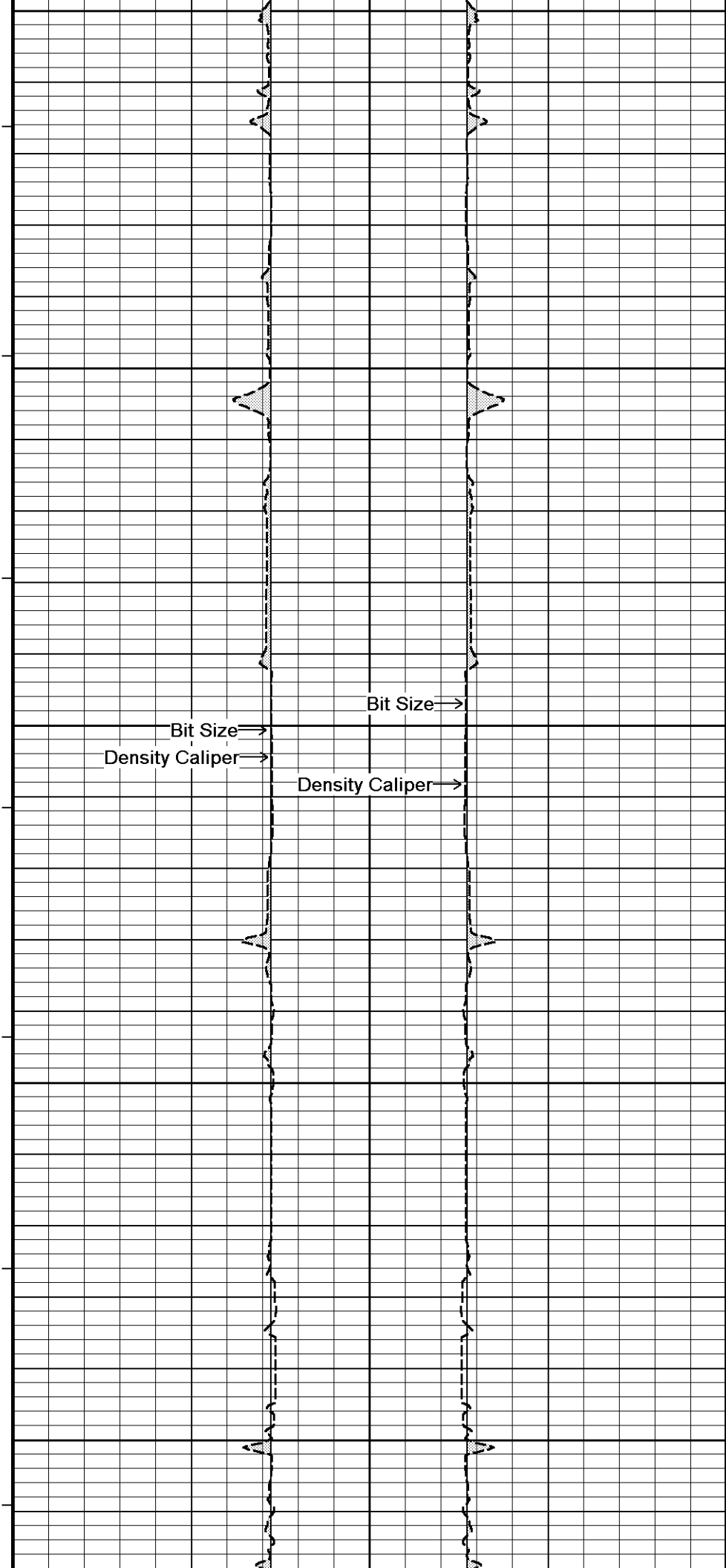
8200

211°

8250

211°

8300

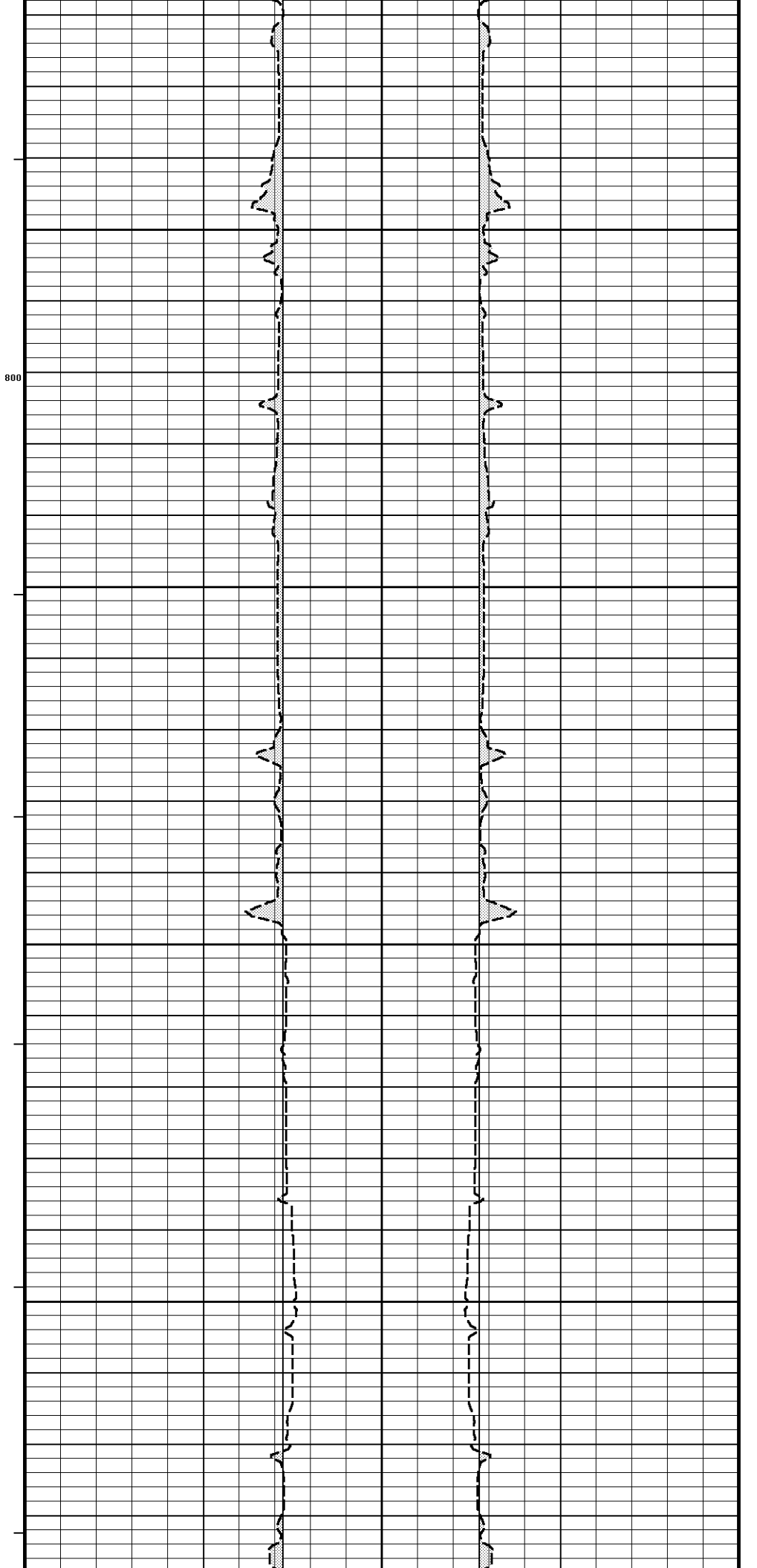
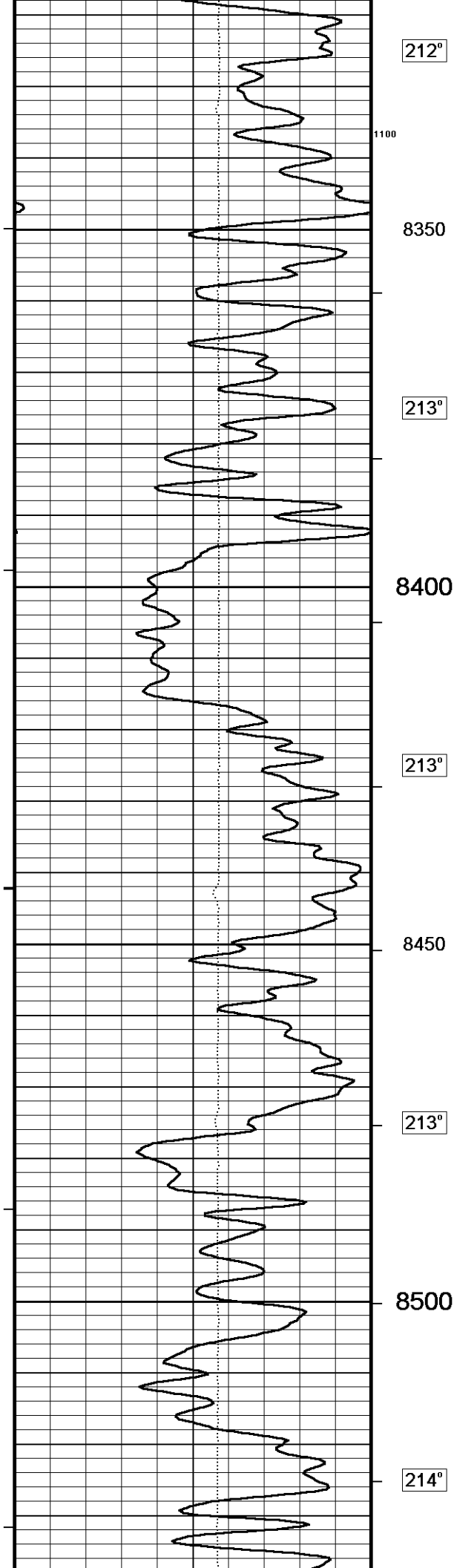


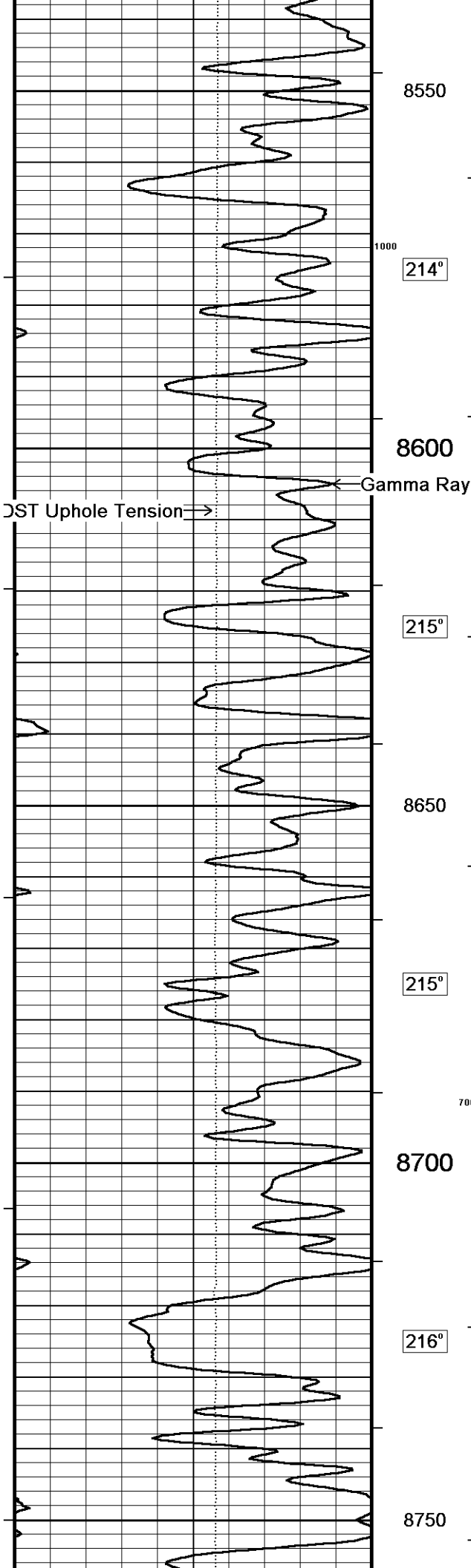
Bit Size →

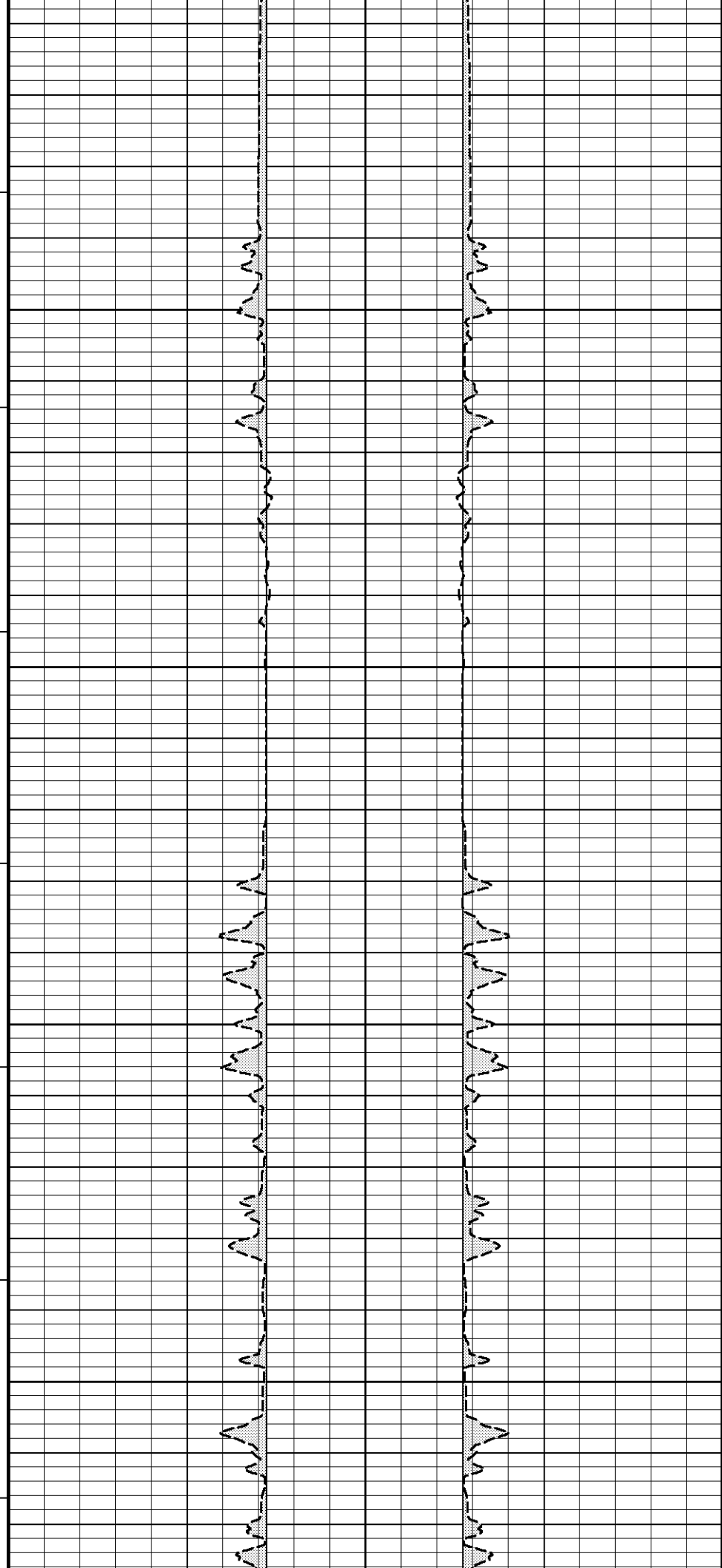
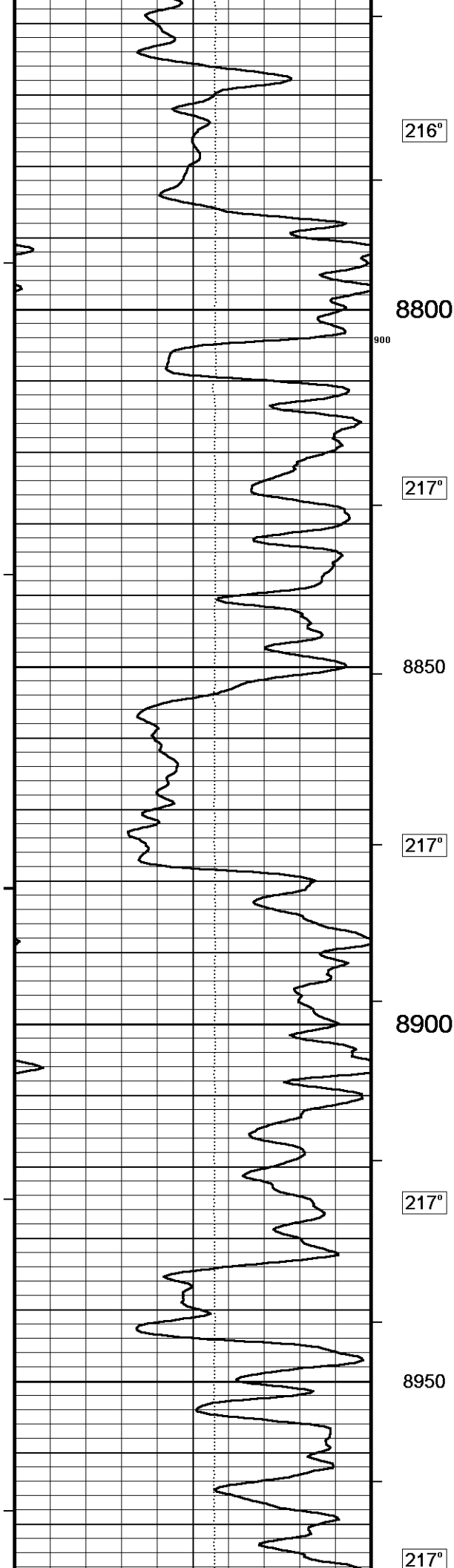
Density Caliper →

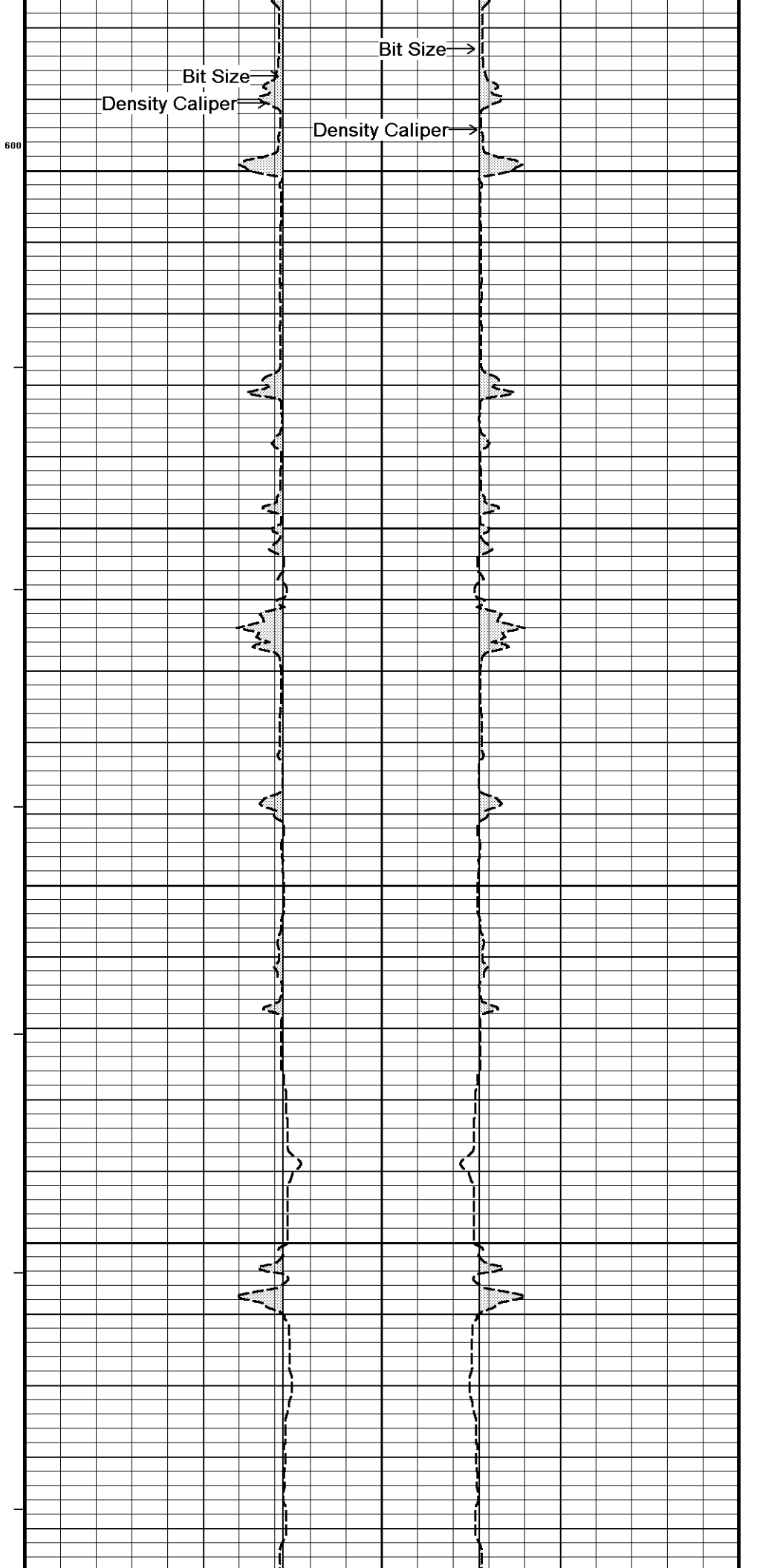
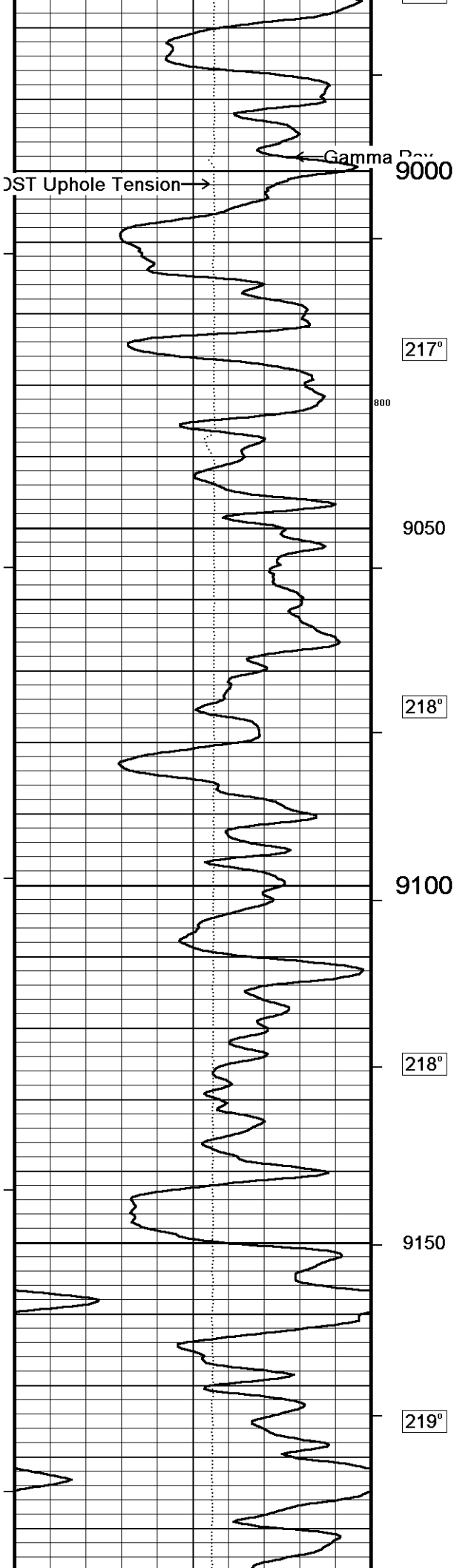
Bit Size →

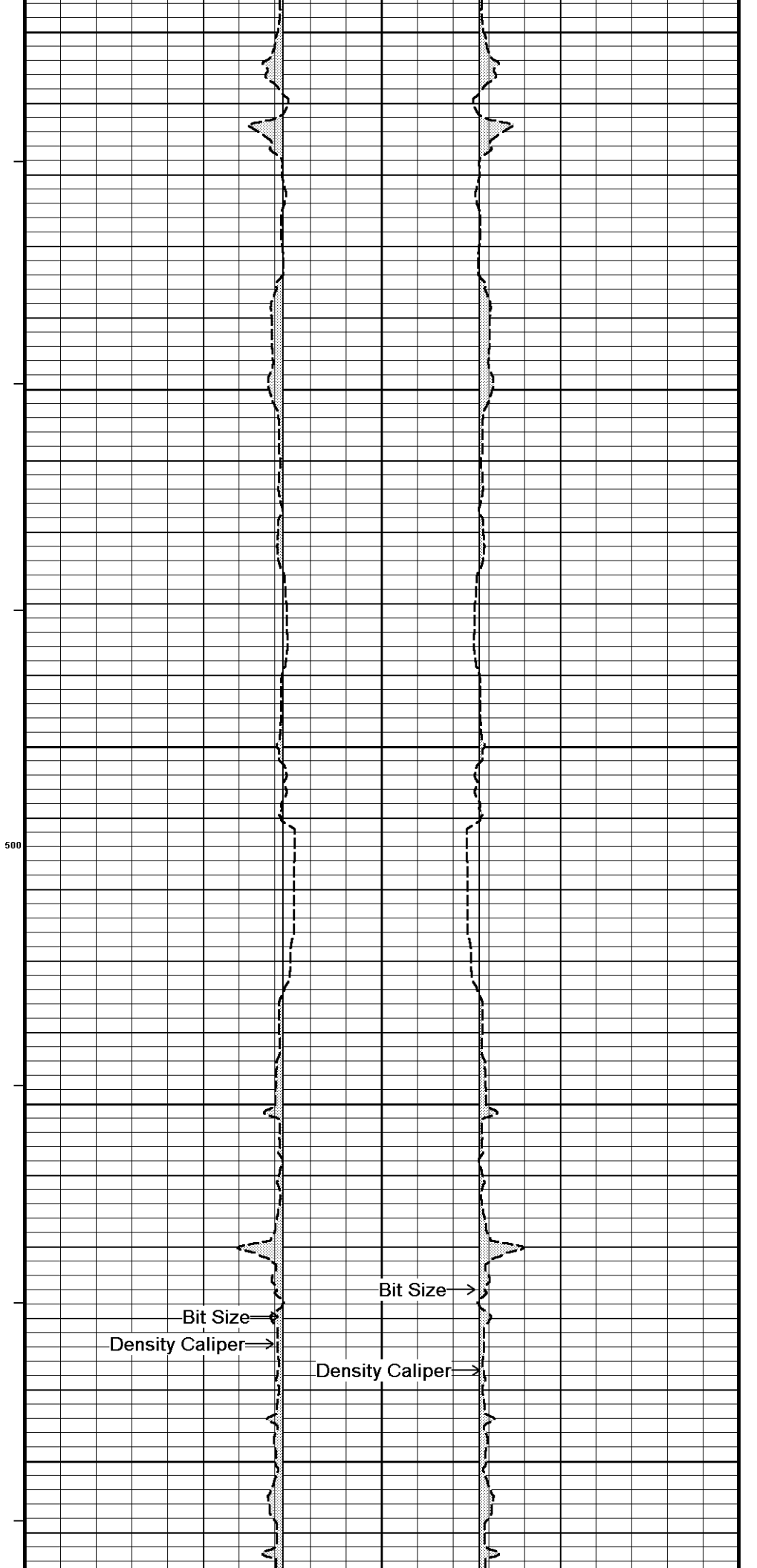
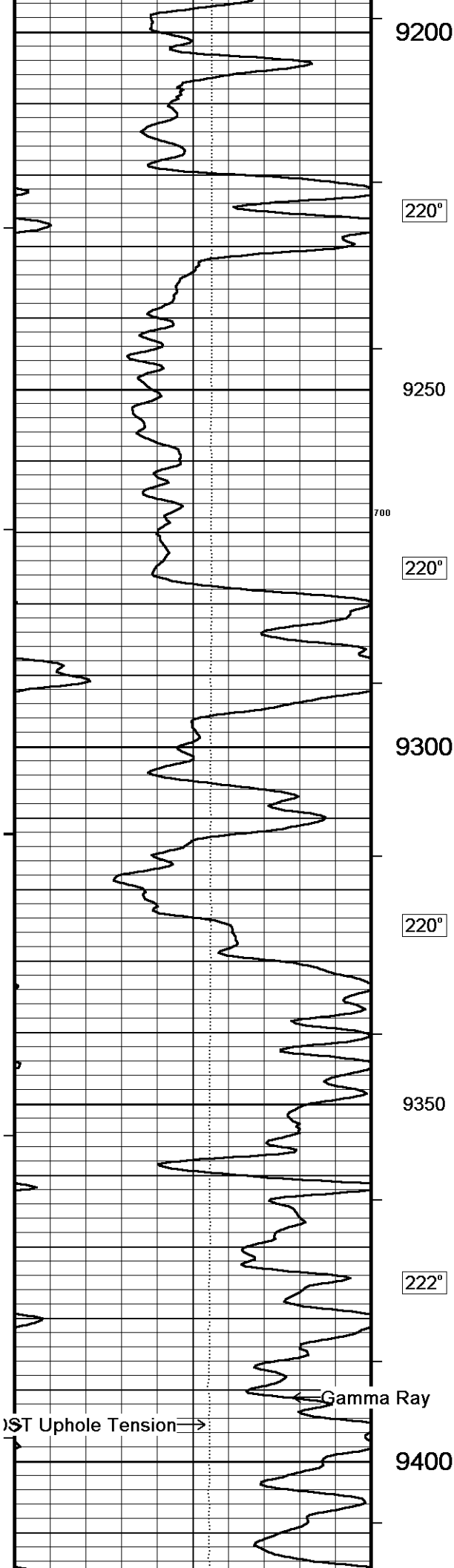
Density Caliper →

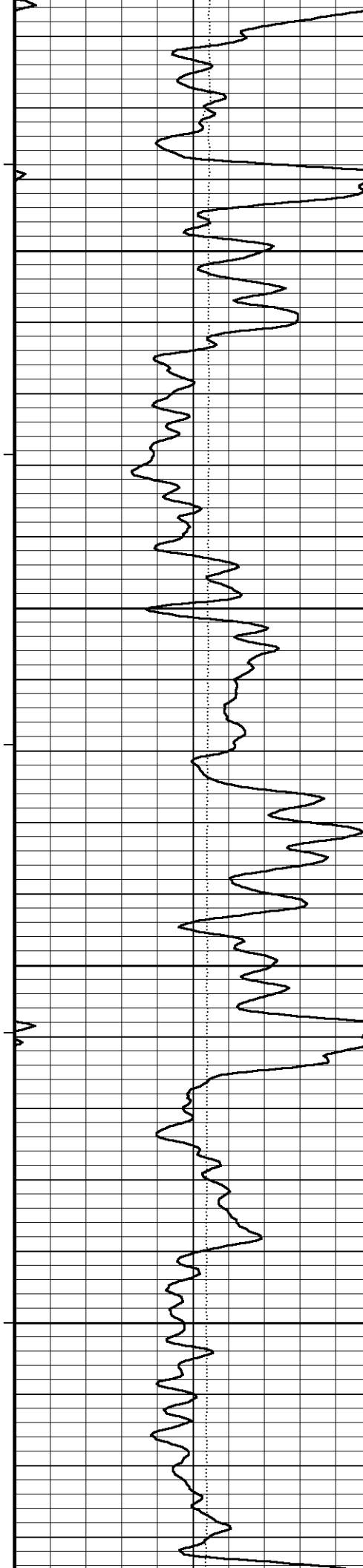












223°

9450

223°

9500

600

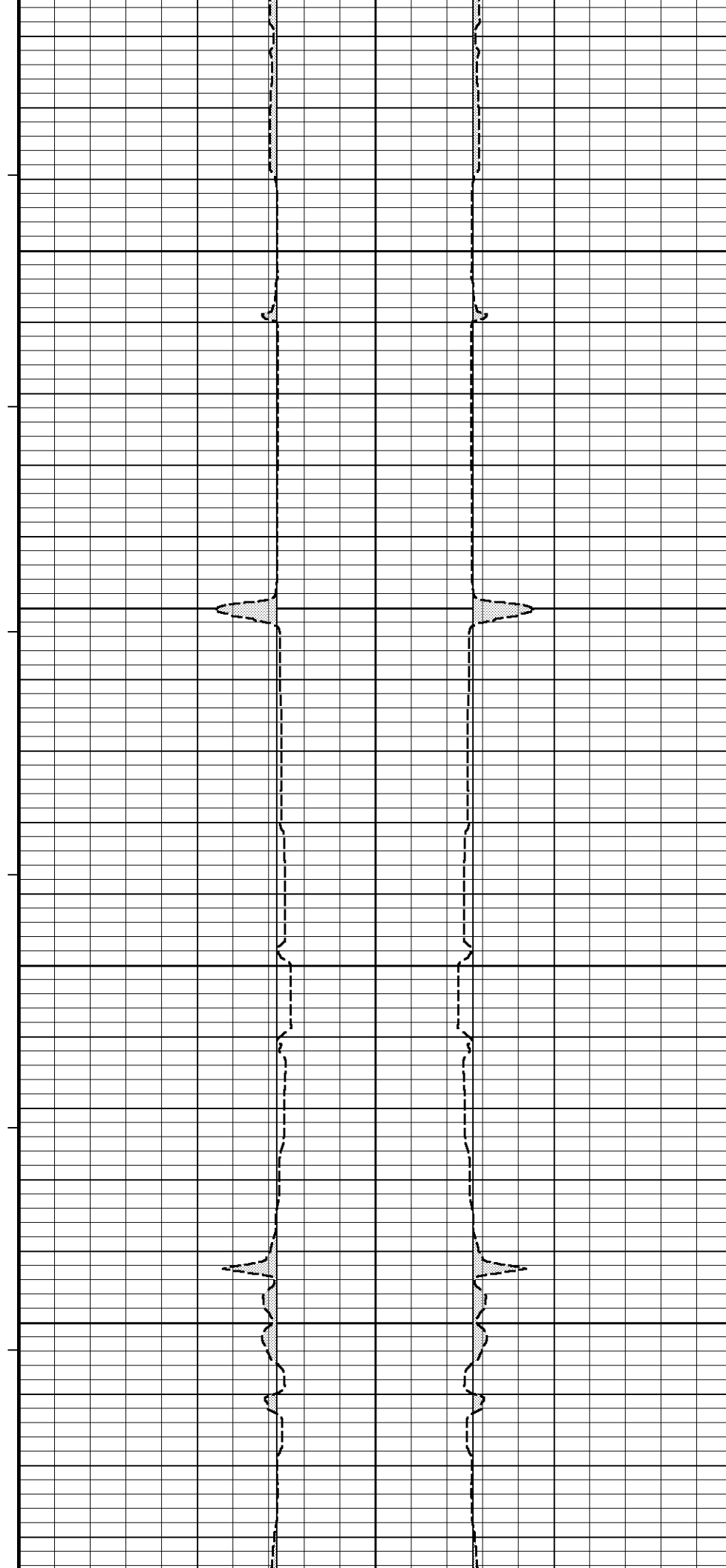
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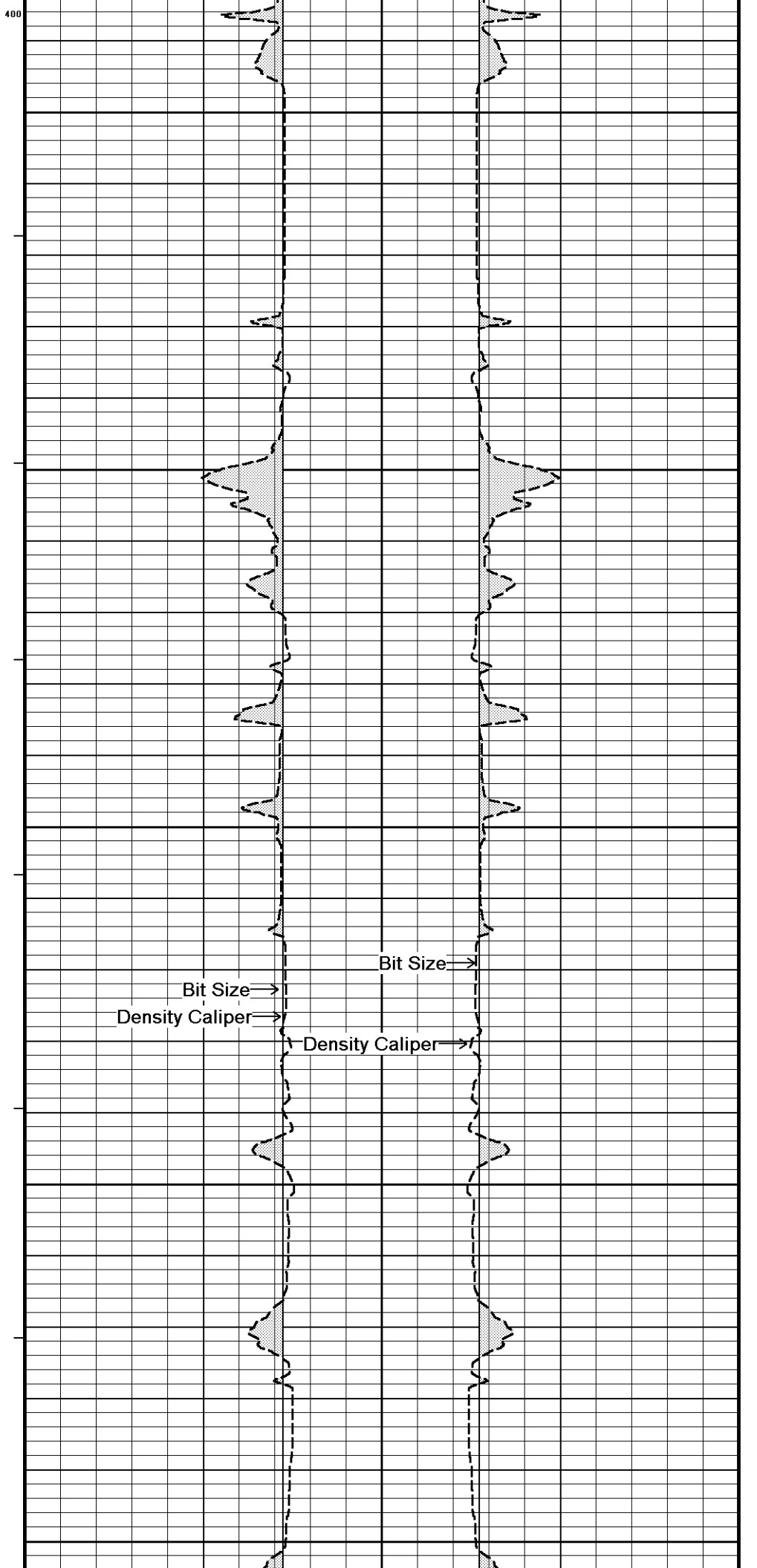
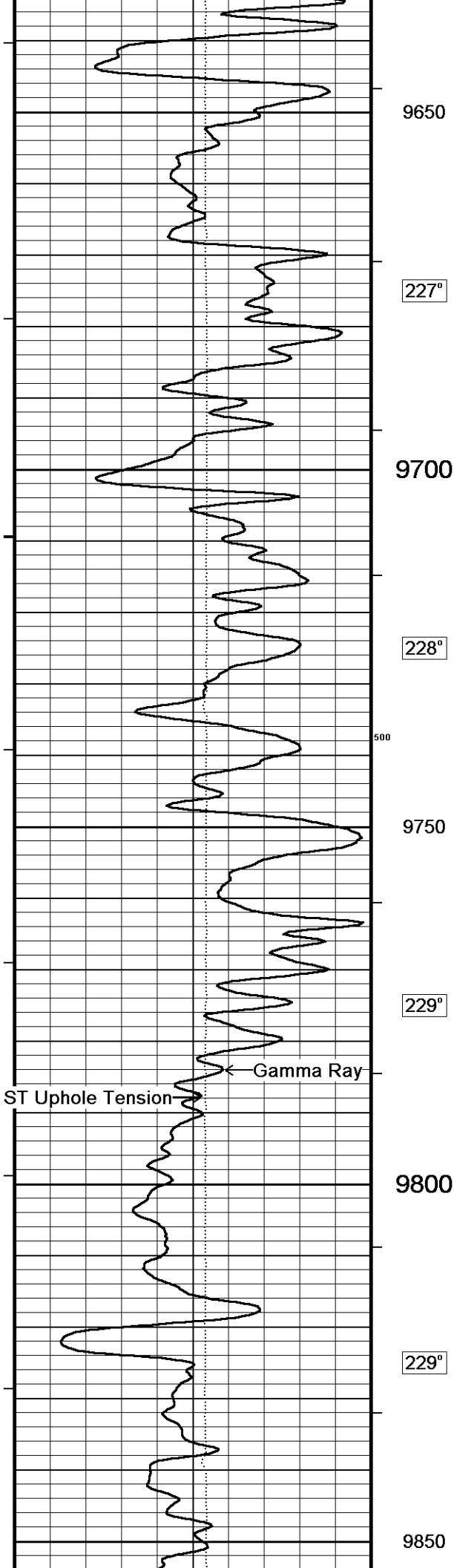
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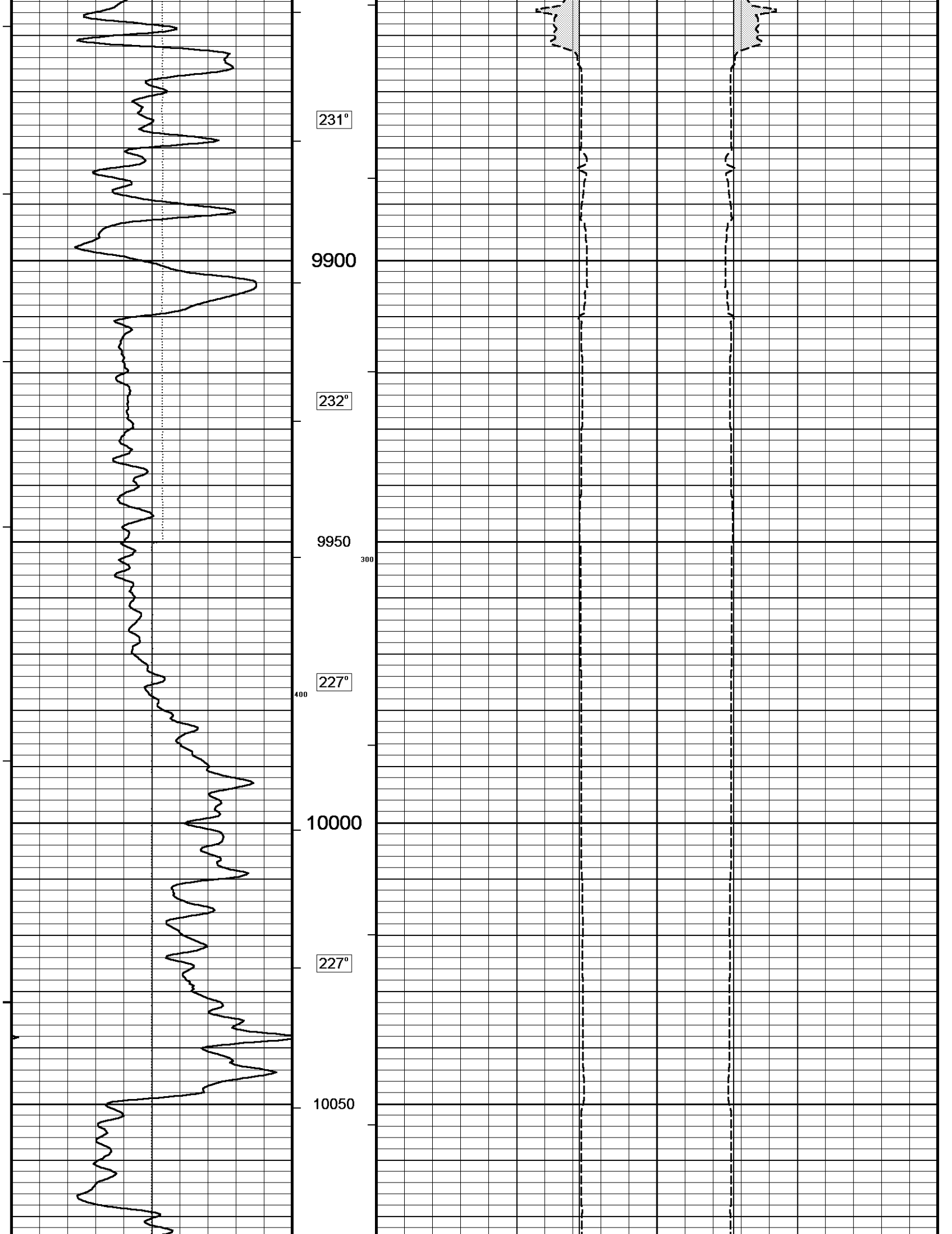
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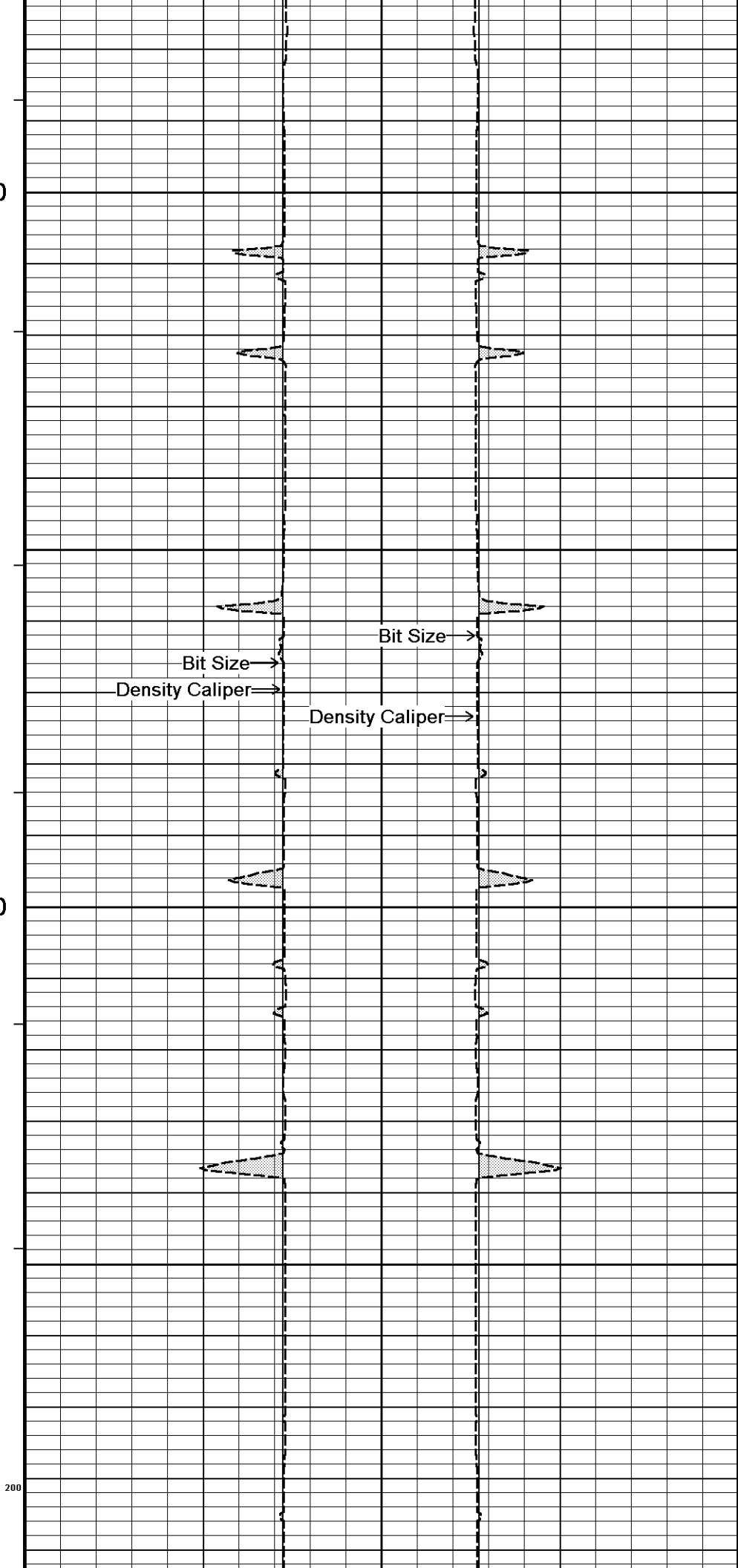
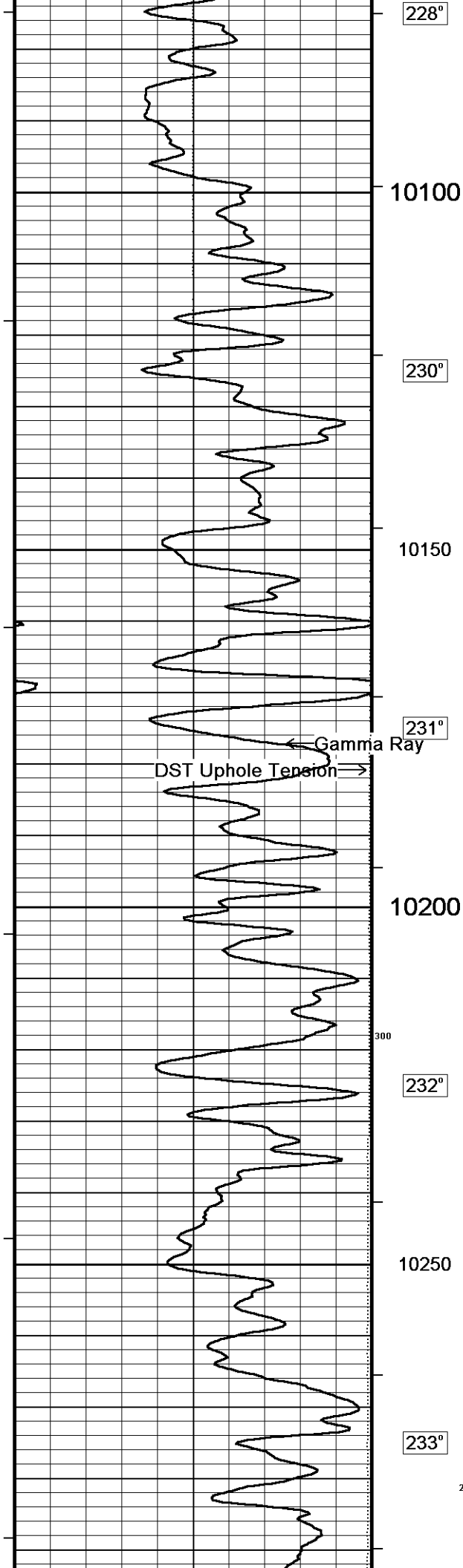
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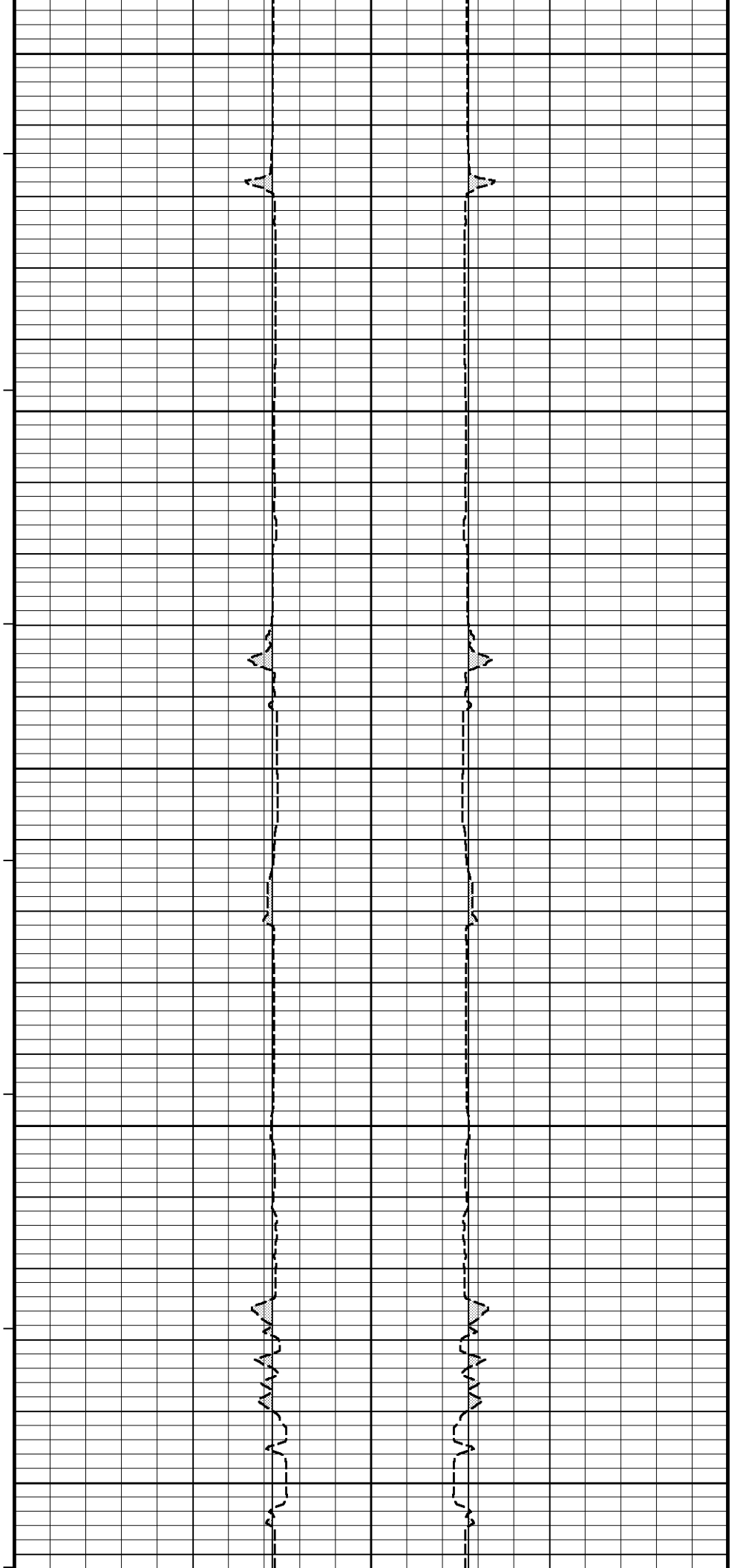
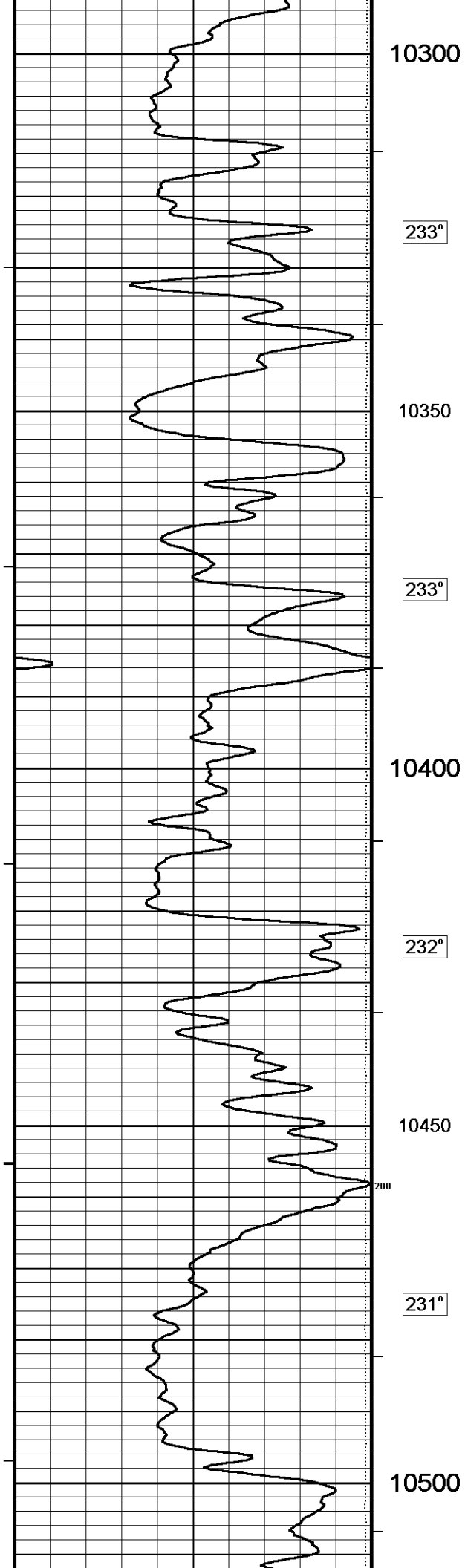
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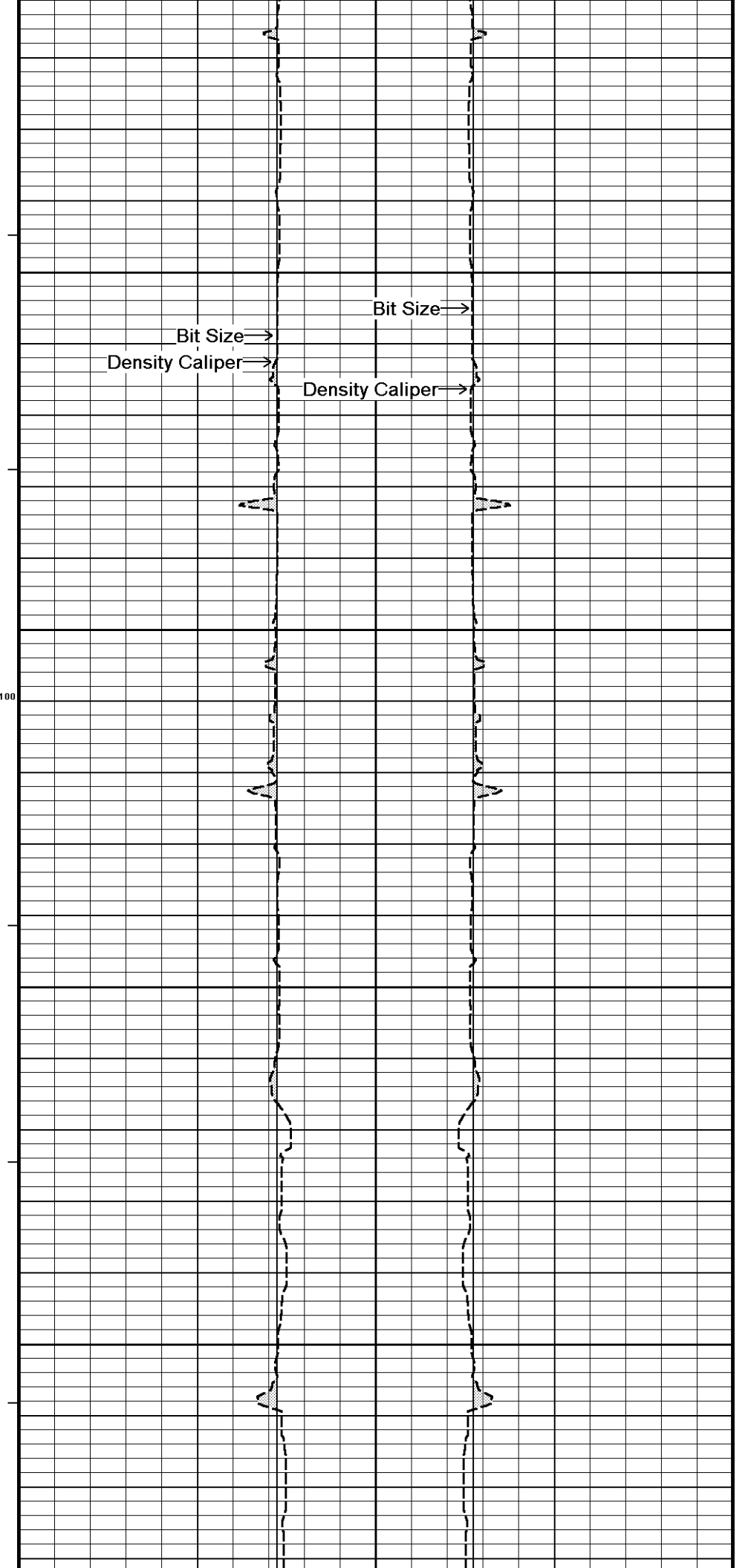
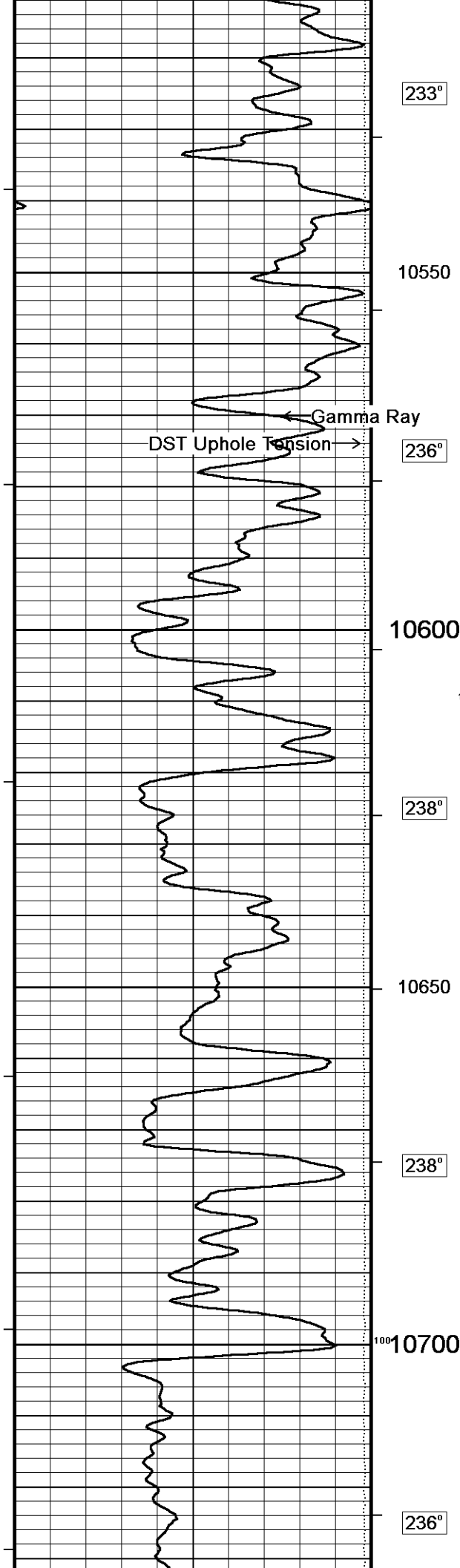


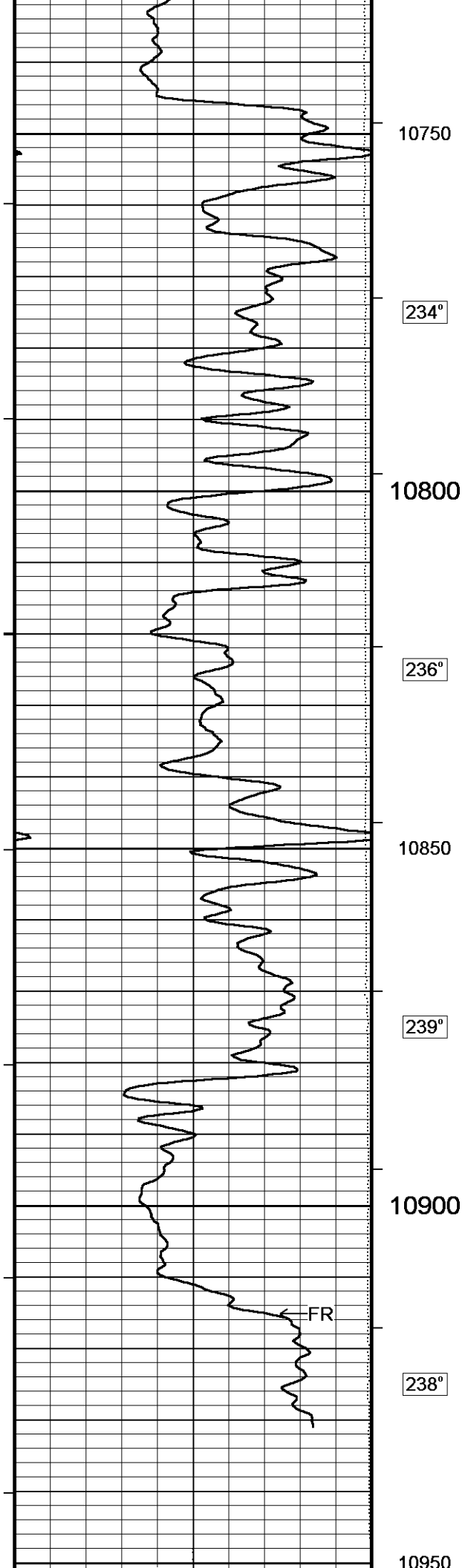










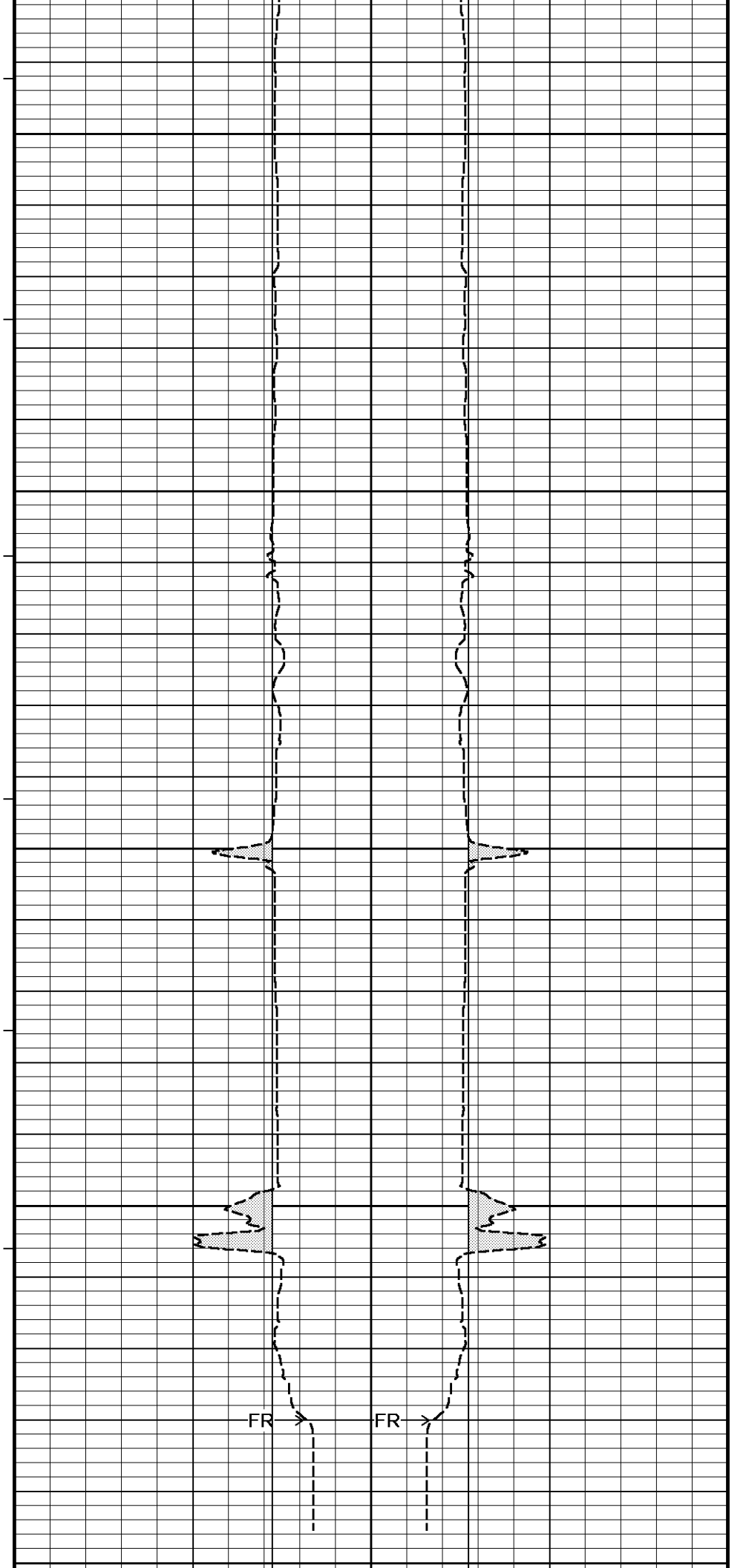


234°

236°

239°

238°



FR→

10968

Depth
In
FeetTiming Marks
every 60.0 sec

Gamma Ray

API

75

150

Borehole
Temp in
deg FHVI
every
10 cu ftAnnular
Integral
every
10 cu ft

DST Uphole Tension

pounds

3000

0

Replay
Scale
1:240Density Caliper
inches

16

11

6

6

Density Caliper
inches

11

16

Bit Size
inches

16

11

6

6

Bit Size
inches

11

16

Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 16-JUL-2008 21:23

Filename: C:\DOCUME~1\patelj\LOCALS~1\Temp\Weatherford PreView\0\Main_splice.dta

Recorded on 16-JUL-2008 13:51

System Versions: Plotted with 8.01.0091



5 INCH MAIN LOG



DOWNHOLE EQUIPMENT

C:\DOCUME~1\patelj\LOCALS~1\Temp\Weatherford PreView\0\Main_splice.dta

SHA-J.A Compact Swivel Head Adaptor

SHA 285 Length: 2.30 ft Weight: 22.0 lb

Compact Gamma

MCG 54 Length: 8.70 ft Weight: 63.9 lb

Compact Neutron

MDN 15 Length: 5.04 ft Weight: 50.7 lb

Compact Density/Caliper

MPD 157 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 85 Length: 6.03 ft Weight: 48.5 lb

Compact Induction

MAI 116 Length: 10.81 ft Weight: 48.5 lb

Total Length: 44.64 ft Weight: 348.3 lb



37.05 ft

GRGC - Gamma Ray

34.14 ft

CGXT - MCG External Temperature

30.59 ft

NPRS - Sandstone Neutron Por.

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

DEN - Compensated Density

21.42 ft

DCOR - Density Correction

21.36 ft

PDPE - PE

13.70 ft

FEFE - Shallow FE

2.58 ft

RILM - Medium Induction

2.58 ft

RILD - Deep Induction

0.23 ft

SPCG - Spontaneous Potential

Tool Zero

(0.13ft from bottom)

All measurements relative to tool zero.

COMPANY	WHITING OIL & GAS
WELL	BOIES #B-19P-O3
FIELD	SULPHUR CREEK
PROVINCE/COUNTY	RIO BLANCO
COUNTRY/STATE	U.S.A. / COLORADO

Elevation Kelly Bushing	6278.00	feet	First Reading	10933.00	feet
Elevation Drill Floor	6277.00	feet	Depth Driller	10930.00	feet
Elevation Ground Level	6248.00	feet	Depth Logger	10954.00	feet



Weatherford®

HOLE VOLUME
LOG