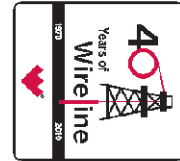




Weatherford

**HOLE VOLUME
CALIPER LOG**

COMPANY **XTO ENERGY, INC.**
WELL **HOCKER #4-35**
FIELD **IGNACIO BLANCO/FRUITLAND COAL**
PROVINCE/COUNTY **LA PLATA**
COUNTRY/STATE **USA/COLORADO**
LOCATION **SHL: 0945' FNL & 1210' FEL**
BHL: 0660' FNL & 0660' FEL



SEC	TWP	RGE	Other Services	Elevations:
35	33N	7W	MPD/MDN MAI/MFE	KB 6353.00 DF 6353.00 GL 6342.00
API Number	05-067-09853		Permit Number	
Permanent Datum GL, Elevation 6342 feet				
Log Measured From KB				
Drilling Measured From KB @ 11 FEET				
Date	16-NOV-2011			
Run Number	1			
Depth Driller	2965.00		feet	
Depth Logger	2959.00		feet	
First Reading	2930.00			
Last Reading	286.00			
Casing Driller	290.00		feet	
Casing Logger	286.00		feet	
Bit Size	7.875		inches	
Hole Fluid Type	LSND			
Density / Viscosity	9.80	lb/USg	95.00	sect/qt
PH / Fluid Loss	8.00		8.40	ml/30Min
Sample Source	FLOW LINE			
Rm @ Measured Temp	2.88 @ 80.0		ohm-m	
Rmf @ Measured Temp	2.30 @ 80.0		ohm-m	
Rmc @ Measured Temp	3.46 @ 80.0		ohm-m	
Source Rmf / Rmc	CALC		CALC	
Rm @ BHT	2.01 @ 116.0		ohm-m	
Time Since Circulation	4 HRS			
Max Recorded Temp	116.00		deg F	
Equipment Name	COMPACT			
Equipment / Base	13173		GJCT	
Recorded By	O. GOVZUETA			
Witnessed By	L. LADOUCEUR			
Service Order	3529380			

BOREHOLE RECORD

Last Edited: 16-NOV-2011 14:25

Bit Size inches	Depth From feet	Depth To feet
7.875	286.00	2959.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	8.625	0.00	286.00	24.00

REMARKS

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

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

2.65 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. = 8.20" (8 5/8", 24 LB/FT CASING)

TOTAL HOLE VOLUME FROM TD TO SURFACE CASING = 540 CU.FT.

ANNULAR VOLUME WITH 5.5 INCH PRODUCTION CASING = 970 CU.FT.

MAXIMUM DEVIATION OF 32 DEGREES IN WELL.

ENGINEER(S): O.GOYZUETA, M. BRENNAN (JFE)

OPERATOR(S): L.STAAKE, A. ALLRED

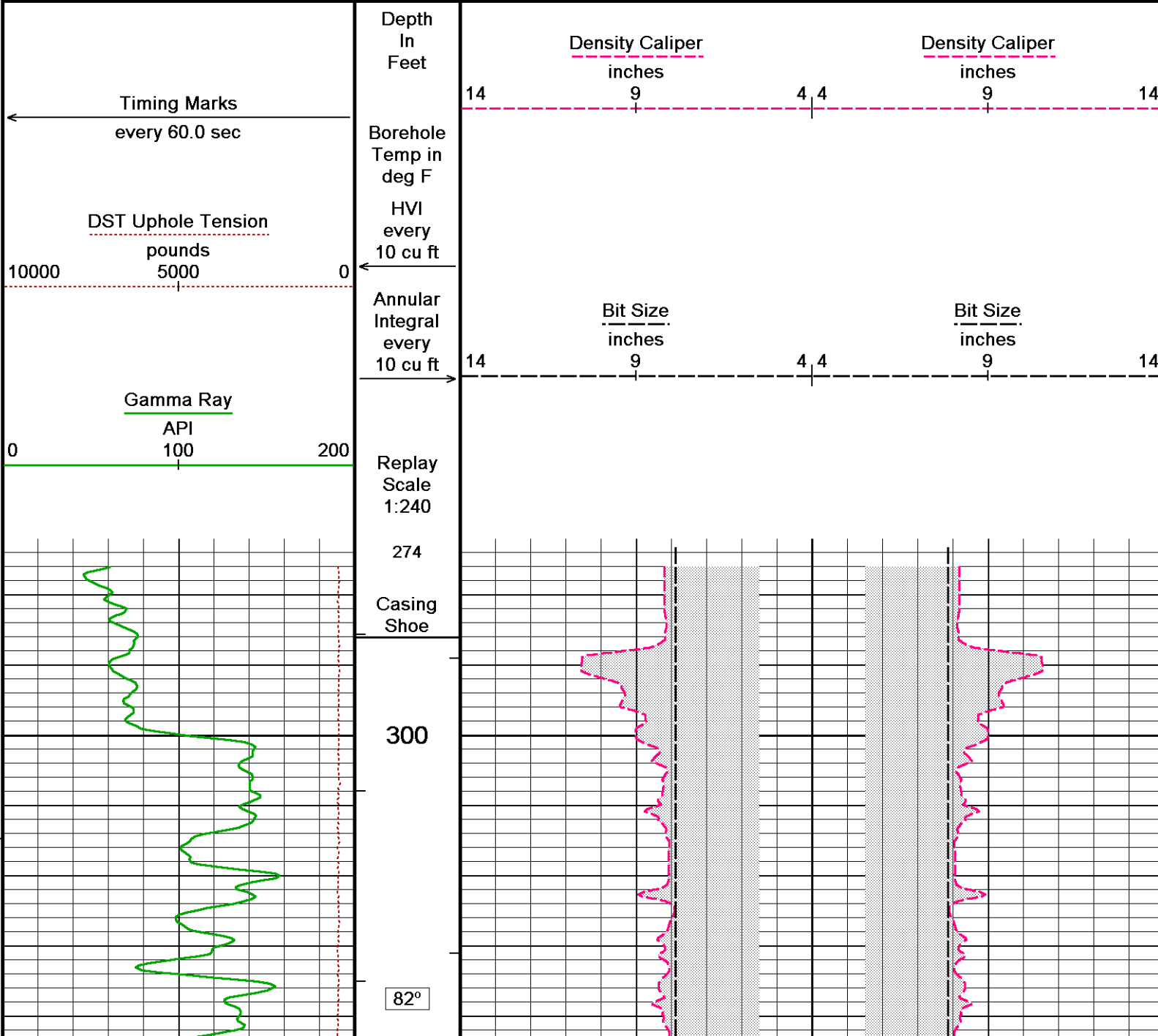
SERVICE ORDER: # 3529380

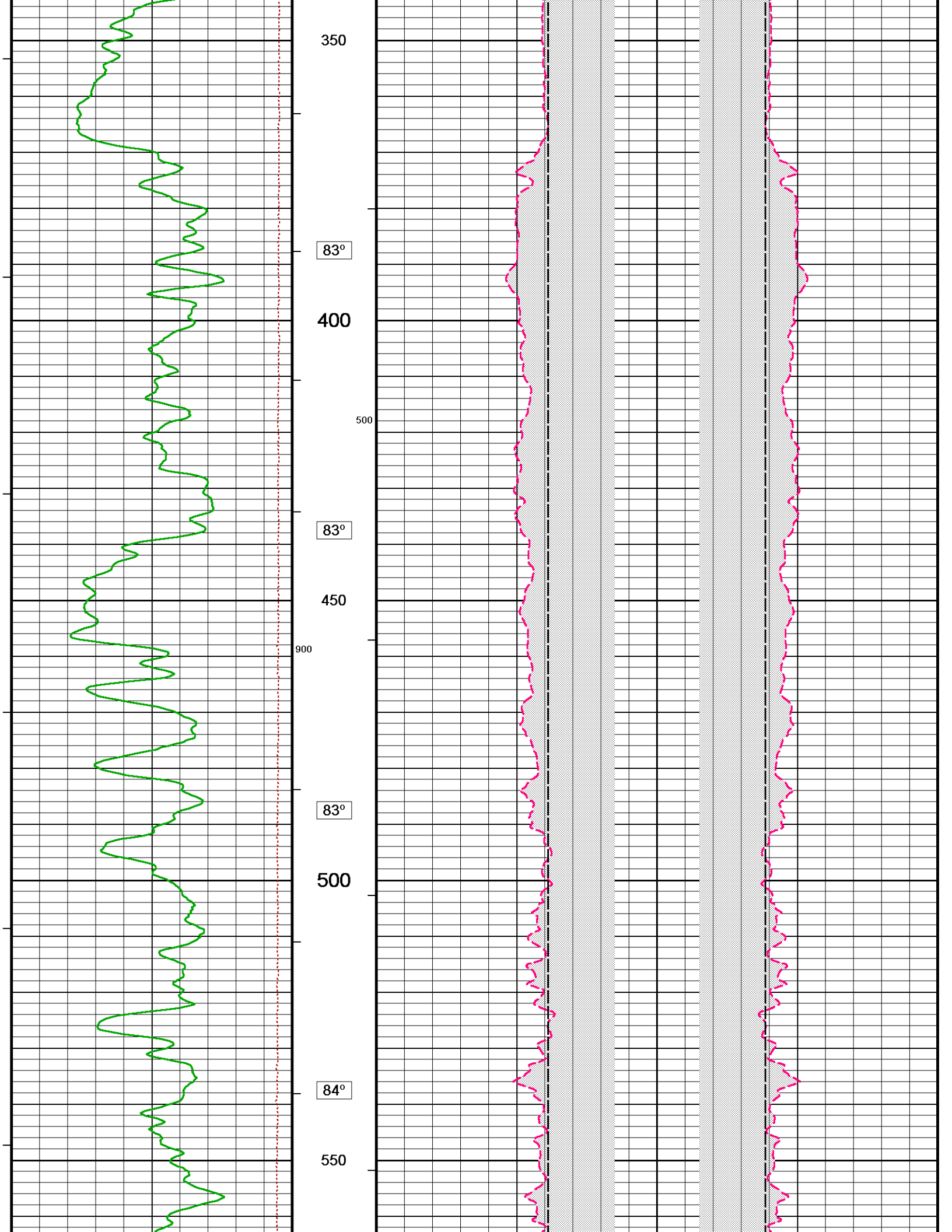
RIG: AZTEC #580

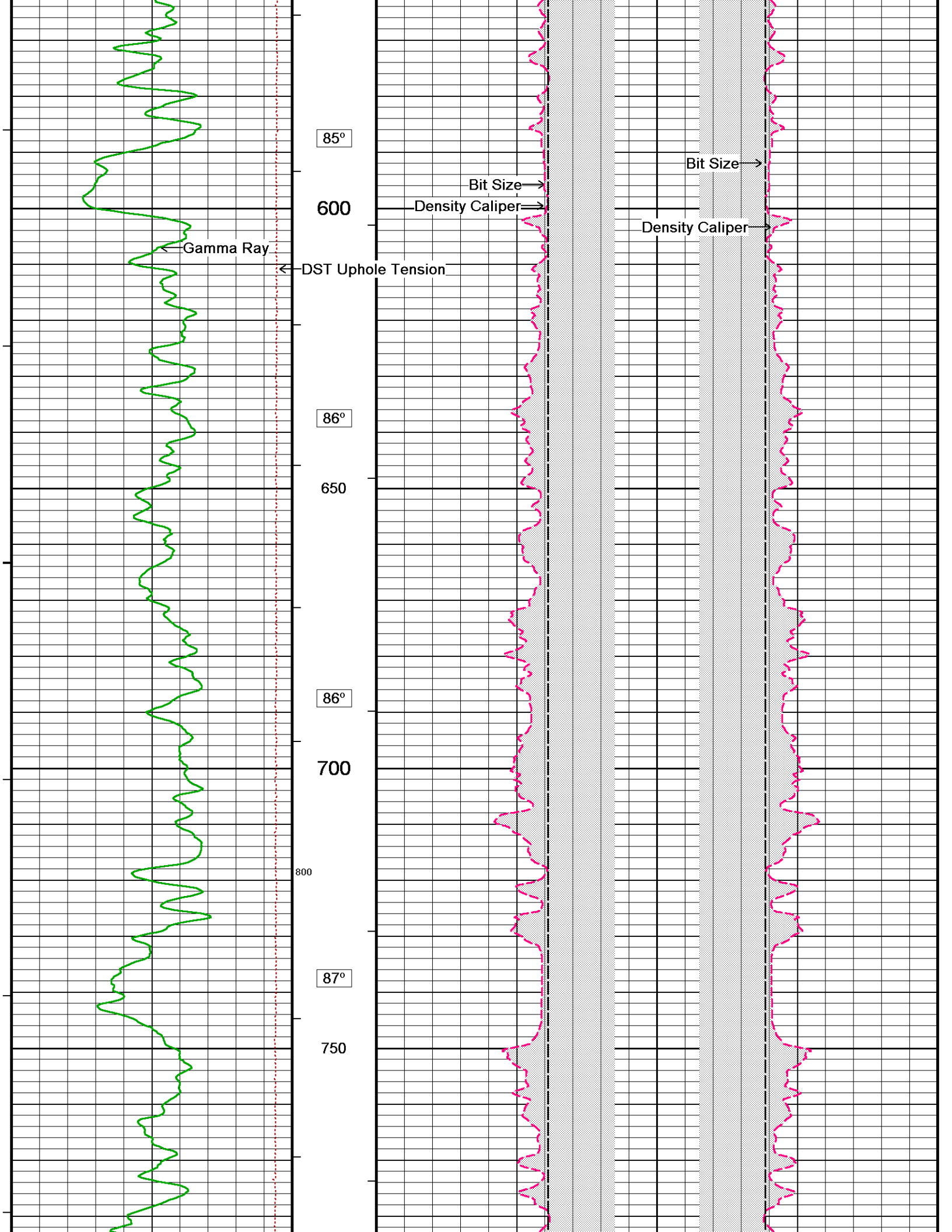
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

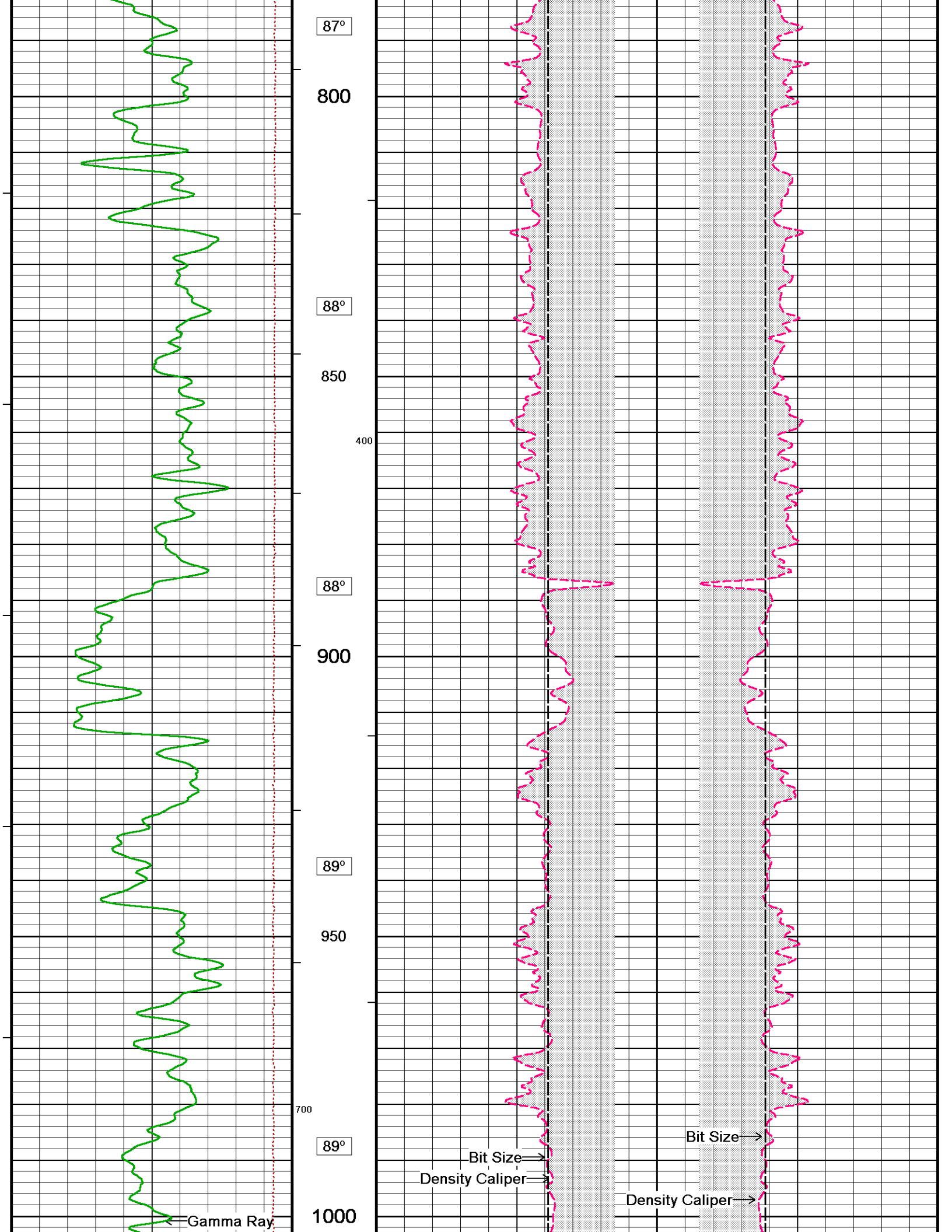
5 INCH MAIN LOG

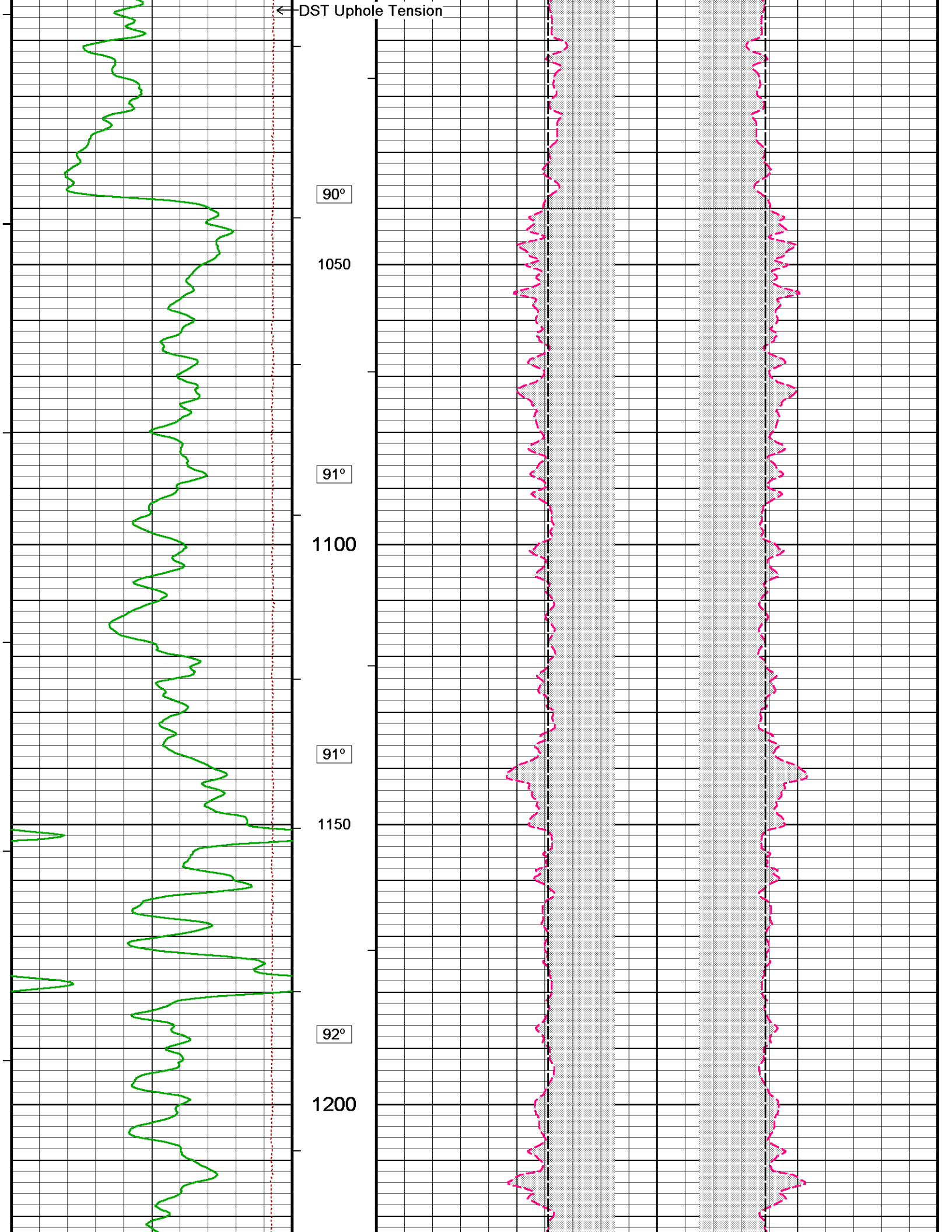
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 21-MAY-2012 12:38
Filename: C:\LOGS\XTO\Hocker #4-35\Main.dta
Recorded on 16-NOV-2011 13:03
System Versions: Logged with 12.02.4401 Processed with 12.02.4401 Plotted with 12.02.4401

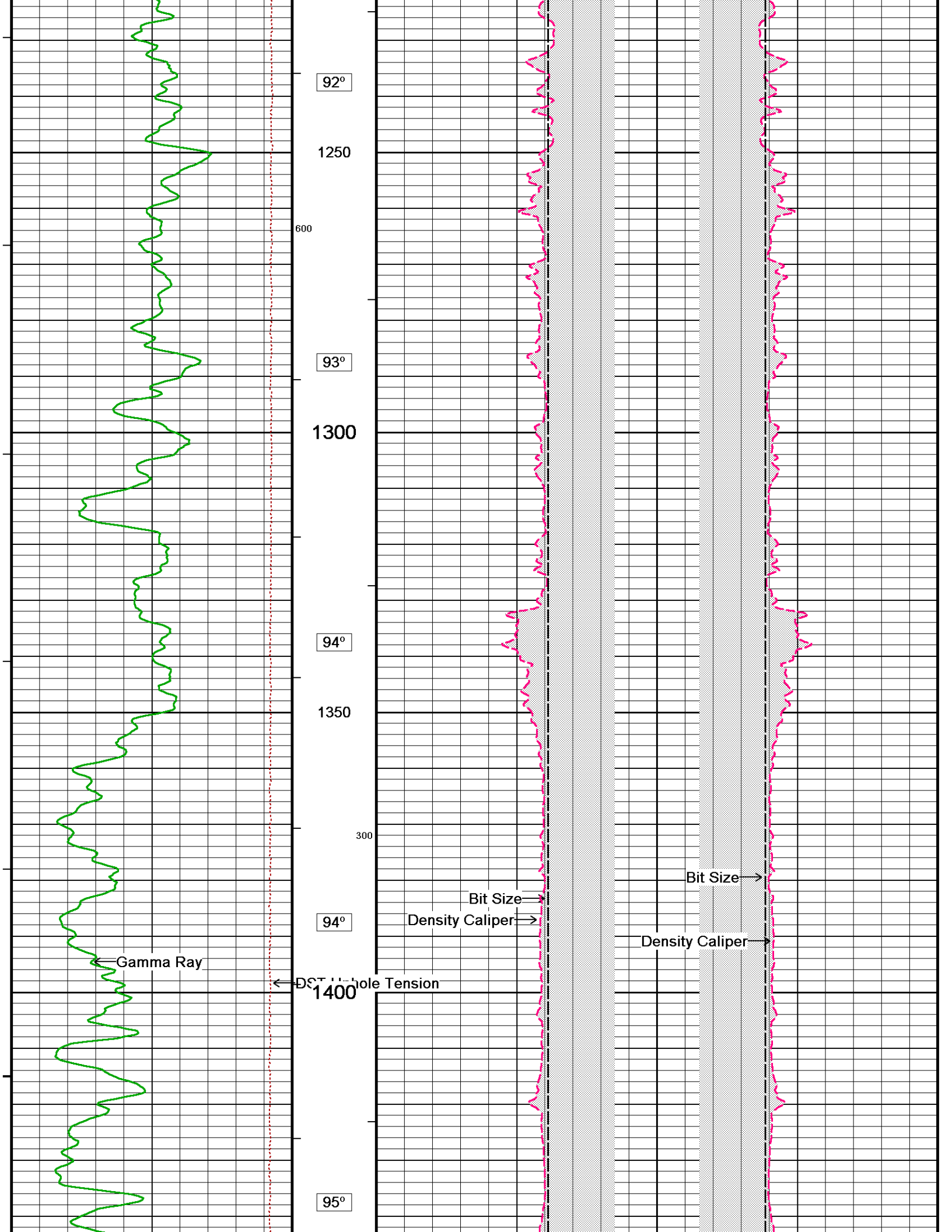


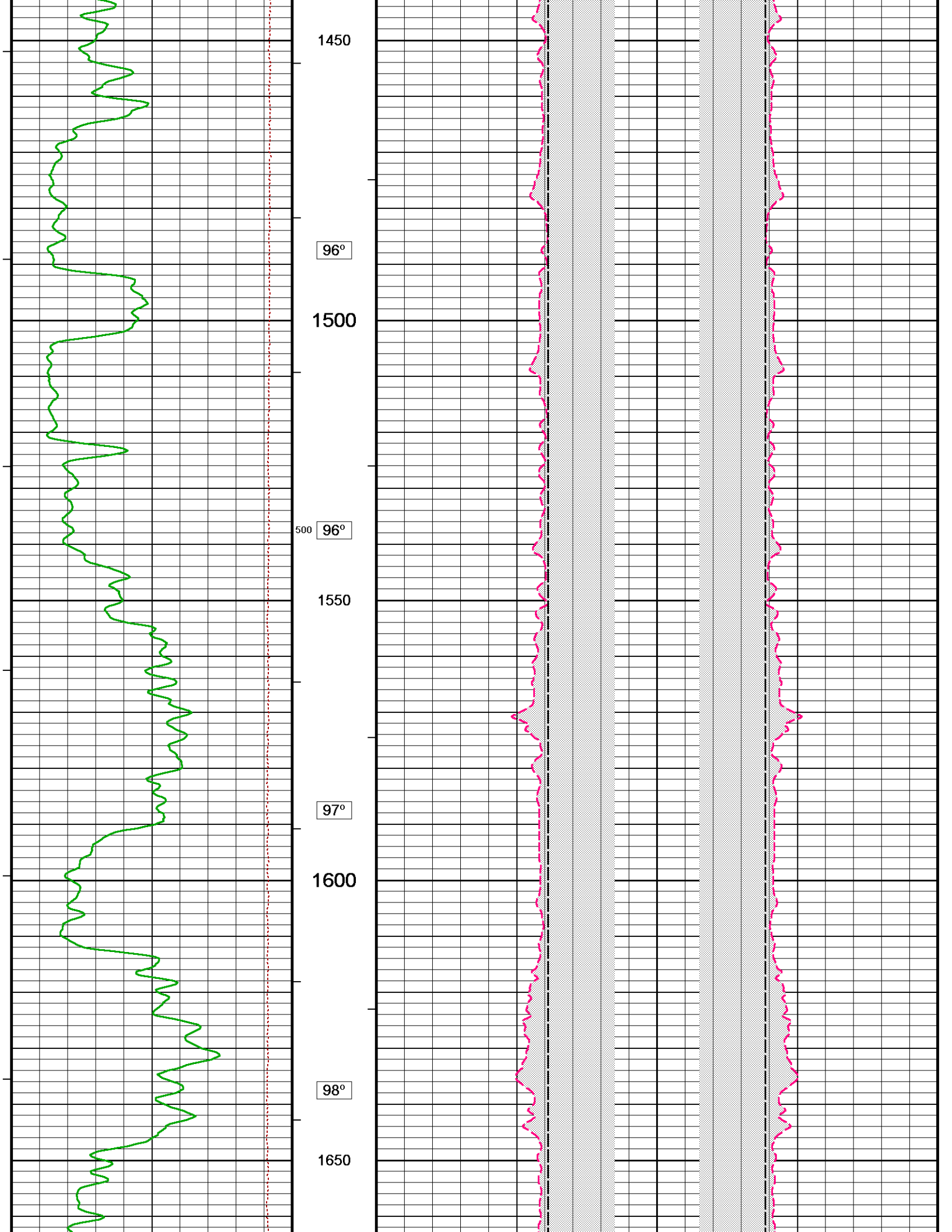


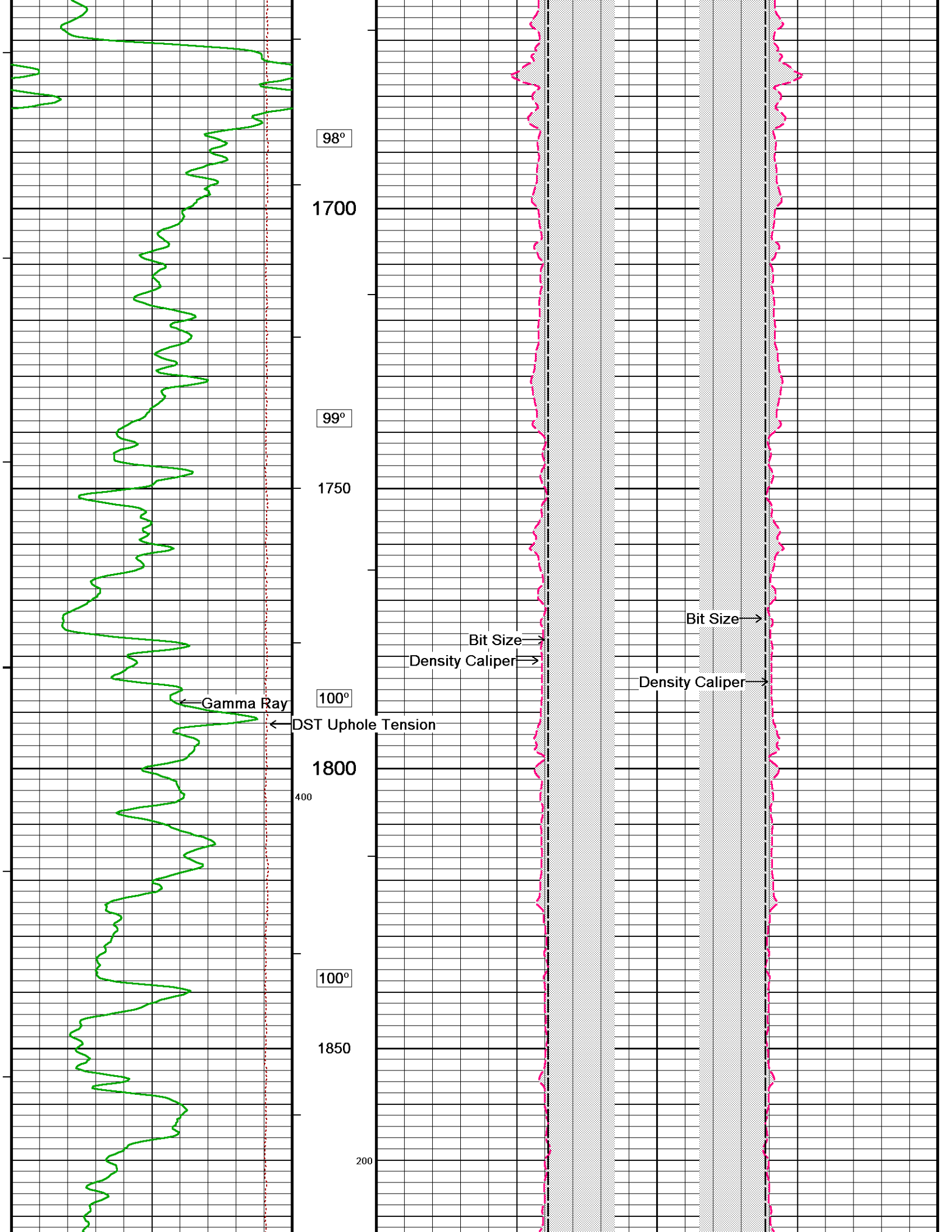


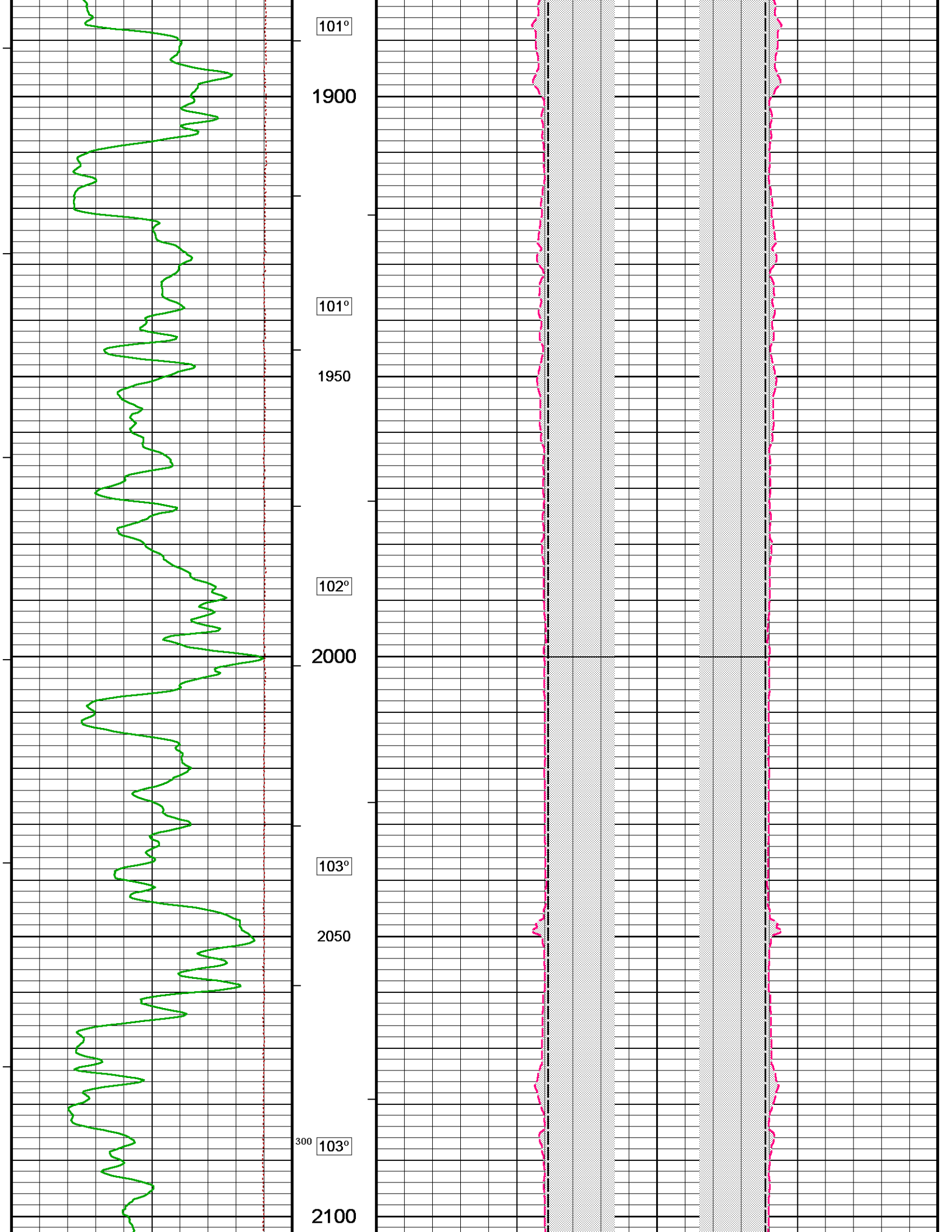


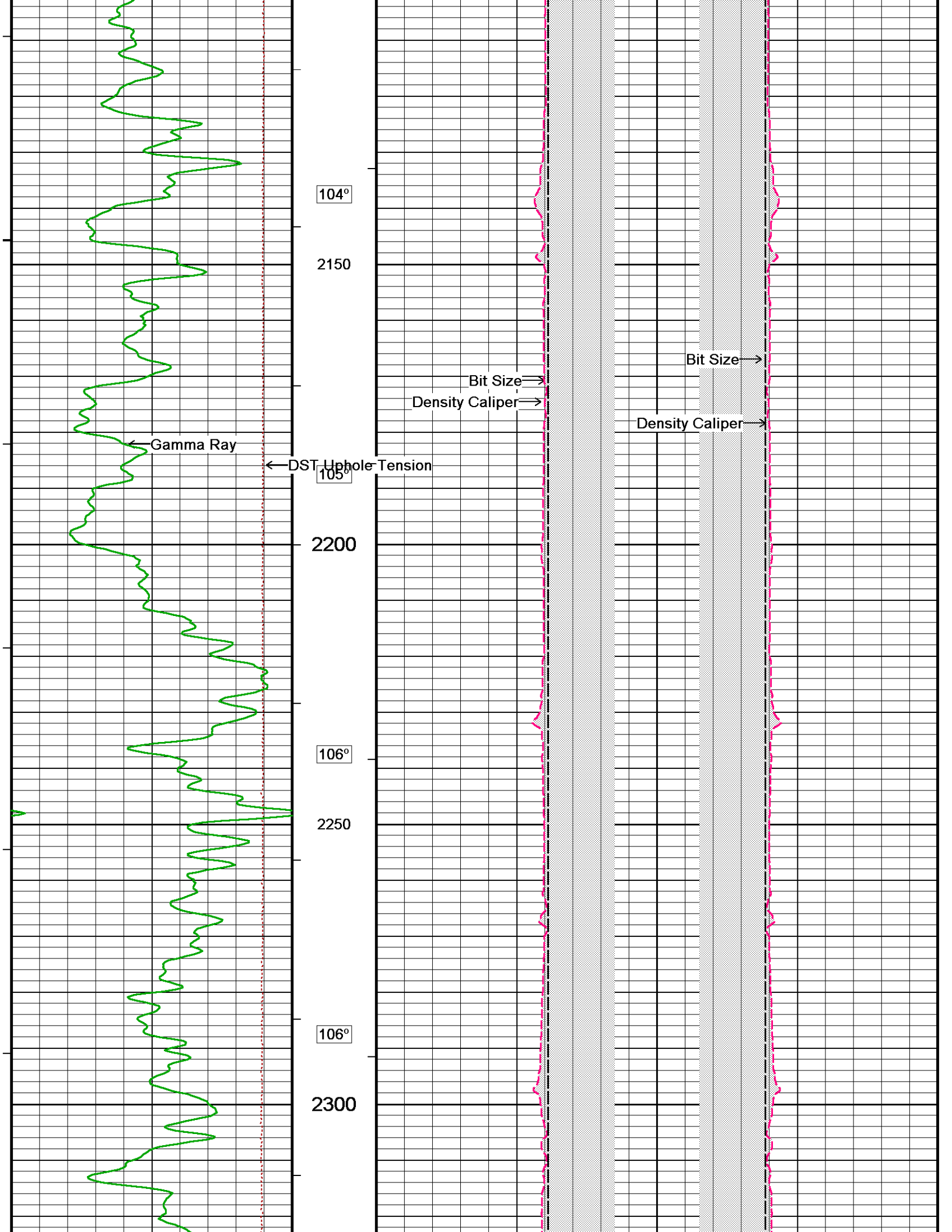


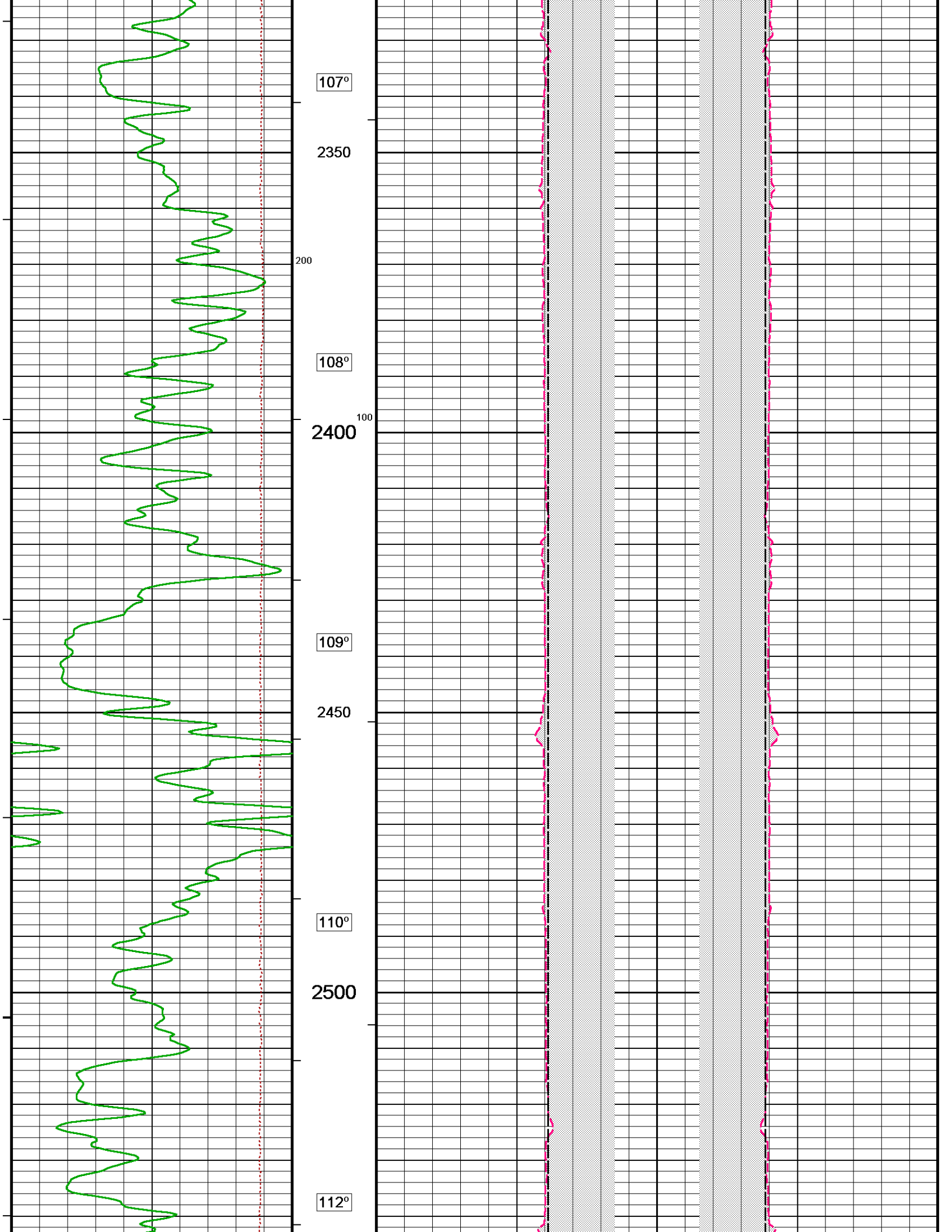


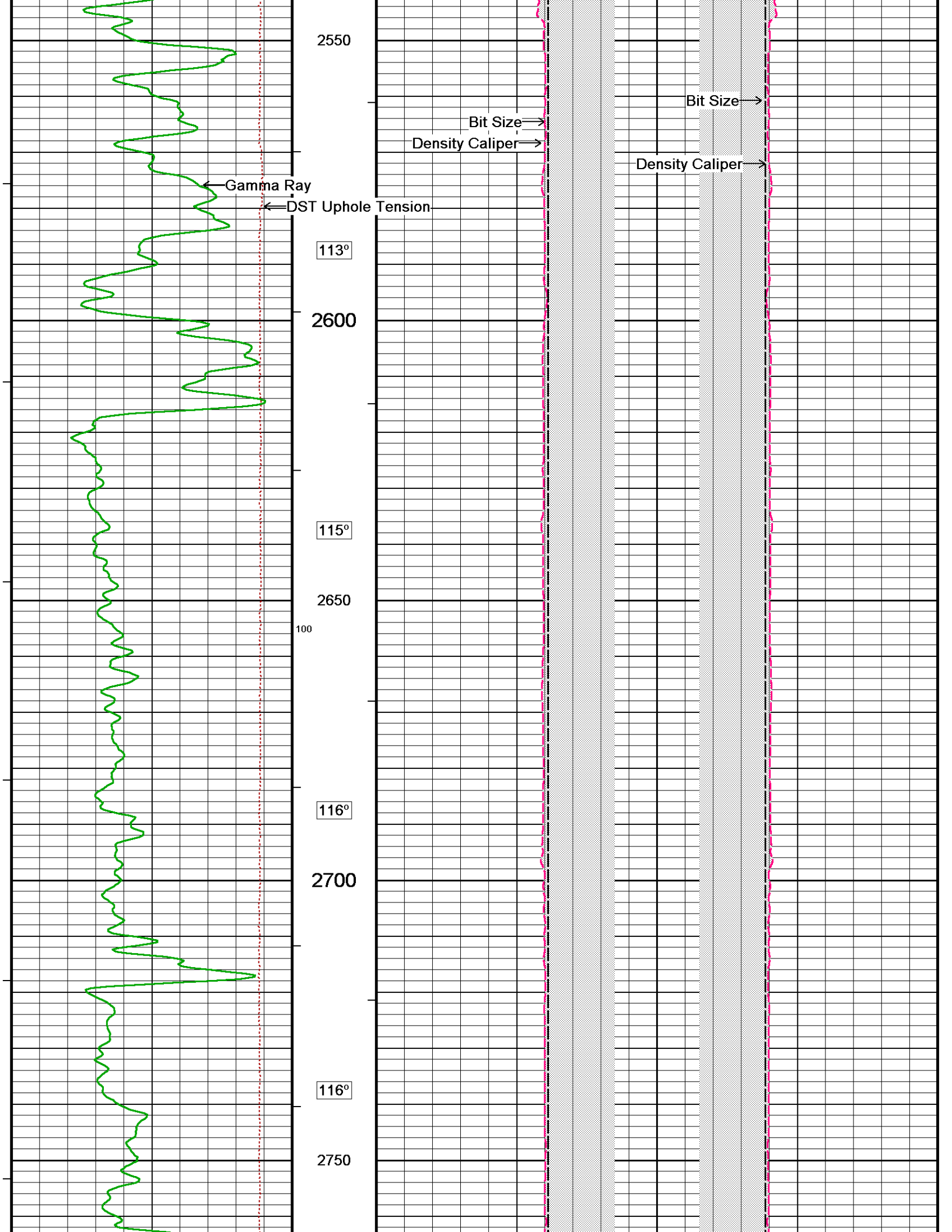


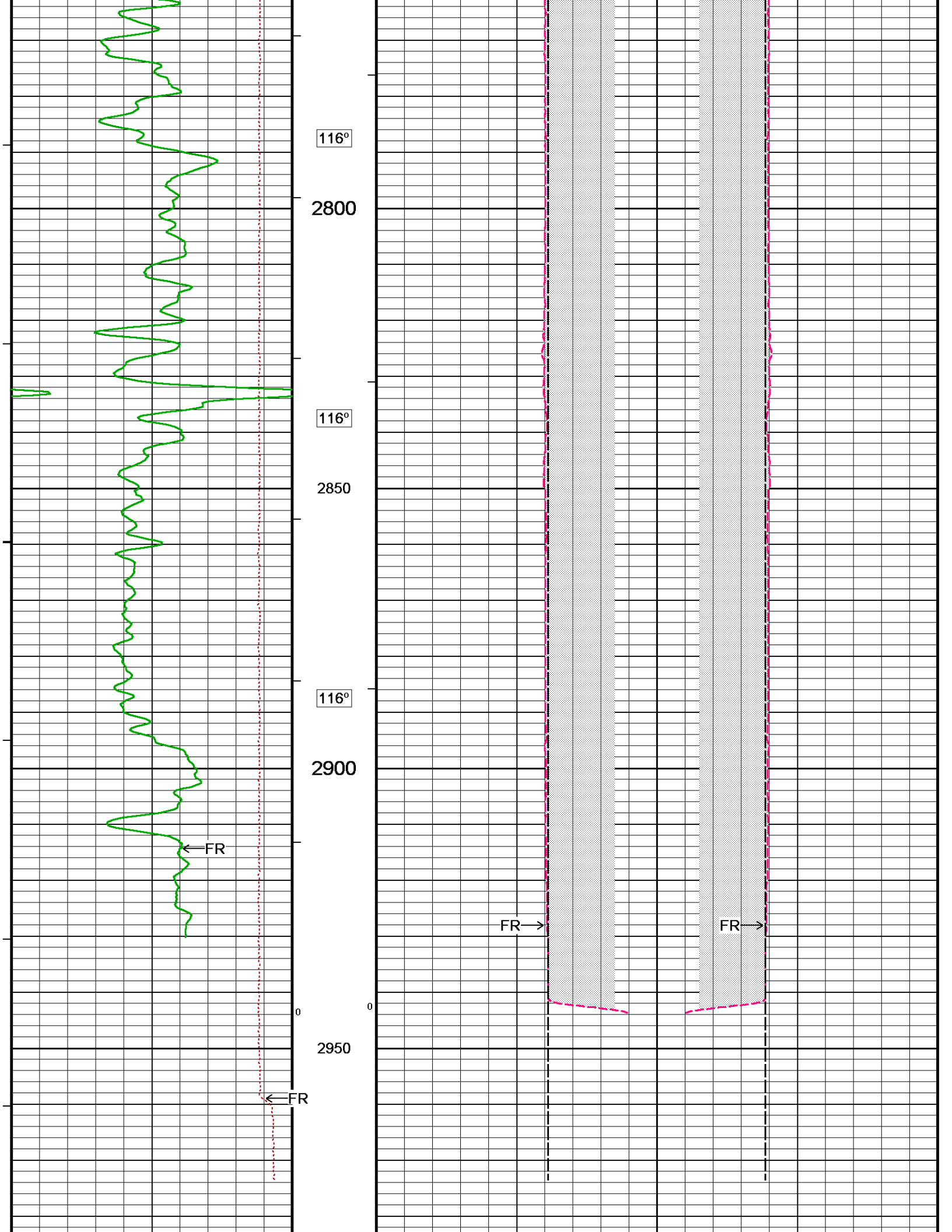


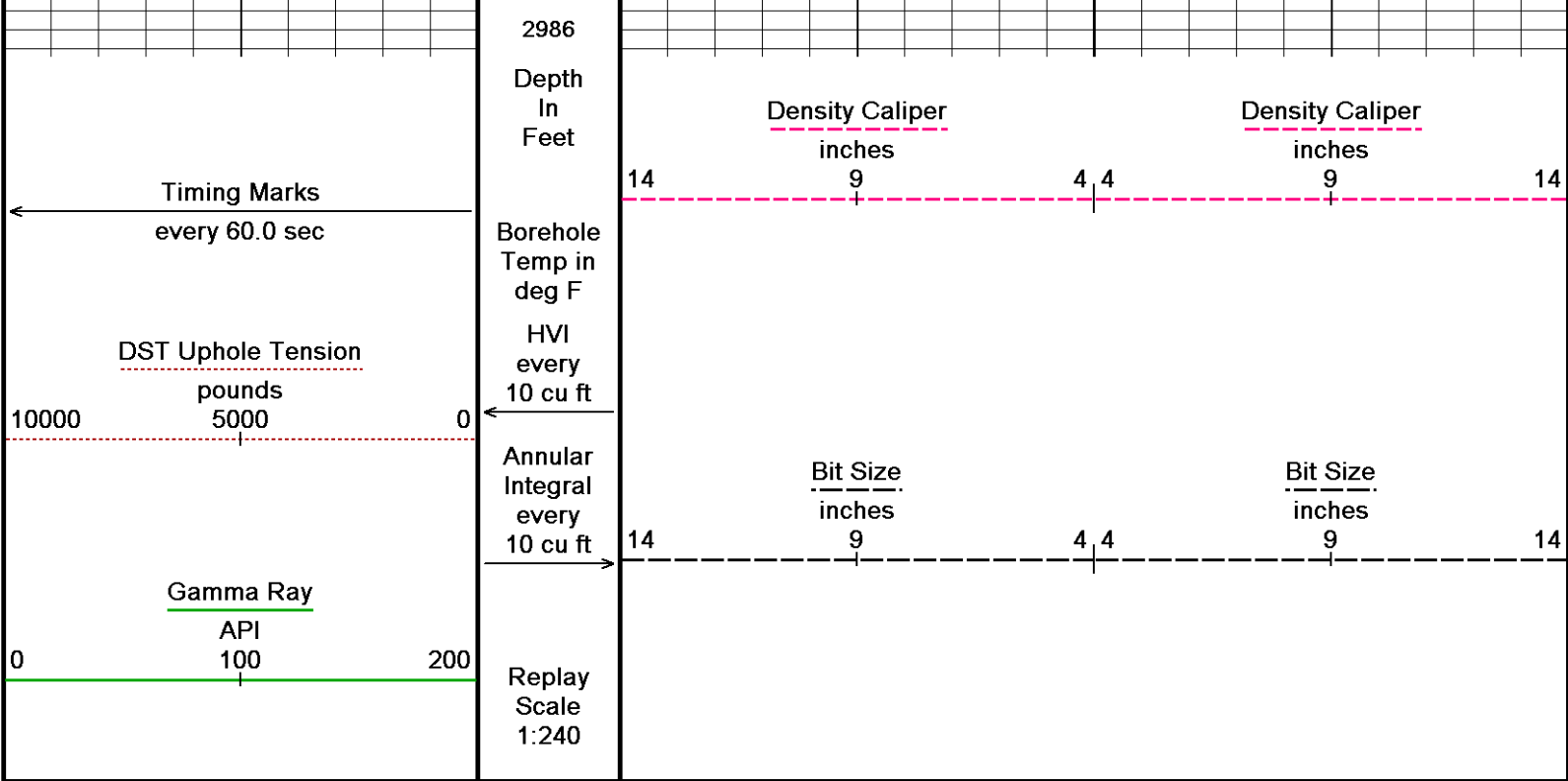












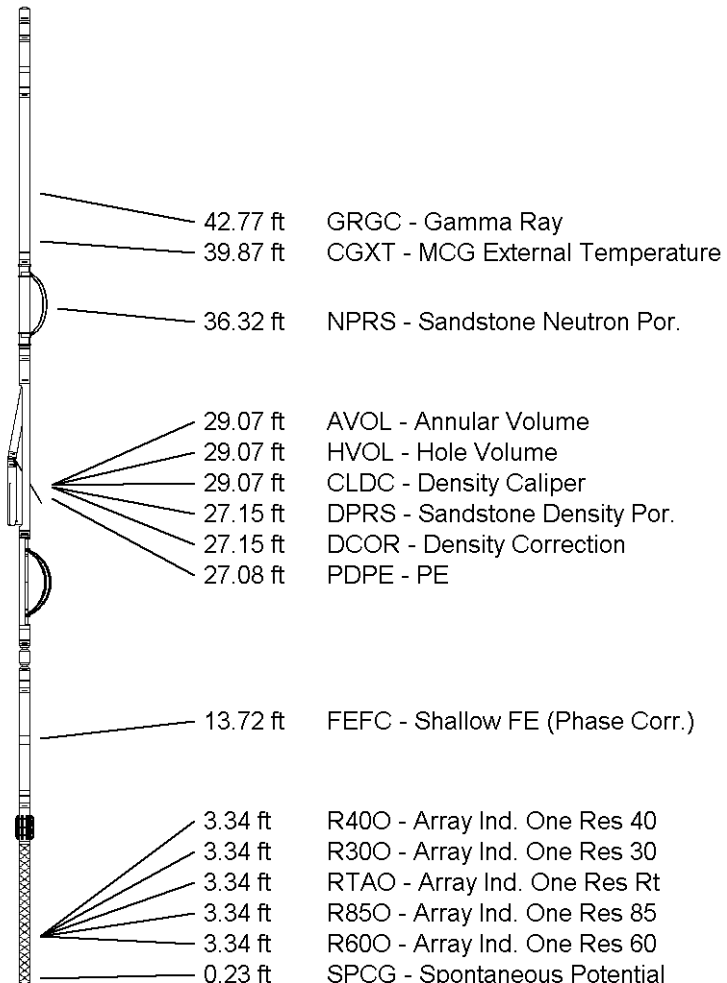
Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 21-MAY-2012 12:38
 Filename: C:\LOGS\XTO\Hocker #4-35\Main.dta
 Recorded on 16-NOV-2011 13:03
 System Versions: Logged with 12.02.4401 Processed with 12.02.4401 Plotted with 12.02.4401

↑ 5 INCH MAIN LOG ↑

DOWNHOLE EQUIPMENT

C:\LOGS\XTO\Hocker #4-35\Setup.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-C 192 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-C.A 219 LG: 9.59 ft WT: 90.4 lb OD: 2.45 in
- MIS-D.A Compact Inline Bowspring sub
MIS-D.A 439 LG: 5.70 ft WT: 33.1 lb OD: 2.24 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: 12.52 ft WT: 48.5 lb OD: 2.24 in
- Total Length: 54.09 ft Weight: 401.2 lb





Tool Zero (1.84ft from bottom)
 -1.84 ft SMTU - DST Uphole Tension
 All measurements relative to tool zero.

COMPANY	XTO ENERGY, INC.		
WELL	HOCKER #4-35		
FIELD	IGNACIO BLANCO/FRUITLAND COAL		
PROVINCE/COUNTY	LA PLATA		
COUNTRY/STATE	USA/COLORADO		

Elevation Kelly Bushing	6353.00	feet	First Reading	2930.00	
Elevation Drill Floor	6353.00	feet	Depth Driller	2965.00	feet
Elevation Ground Level	6342.00	feet	Depth Logger	2959.00	feet



Weatherford[®]

HOLE VOLUME
 CALIPER LOG

