TEMPERATURE LOG

COMPANY	BILL BARRETT CORPORATION
WELL	GGU MILLER 24D-32-691
FIELD	GIBSON GULCH
PROVINCE/COUNTY	GARFIELD
COUNTRY/STATE	U.S.A. / COLORADO
LOCATION	SHL: 1225' FSL & 2288' FWL
	BHL: 1184' FSL & 1990' FWL

SEC	TWP	RGE	Other Services
32	6S	91W	

API Number 05-045-19427
Permit Number

Permanent Datum G.L., Elevation 6120 feet
Log Measured From K.B. @ 22 FEET above Permanent Datum
Drilling Measured From K.B.

Elevations:	feet
KB	6142.00
DF	6141.00
GL	6120.00

Date	21-NOV-2010			
Run Number	ONE			
Depth Driller	7875.00	feet		
Depth Logger	7815.00	feet		
First Reading	7815.00	feet		
Last Reading	200.00	feet		
Casing Driller	7872.00	feet		
Casing Logger				
Bit Size	7.875	inches		
Hole Fluid Type	WATER			
Density / Viscosity				
PH / Fluid Loss				
Sample Source				
Rm @ Measured Temp				
Rmf @ Measured Temp				
Rmc @ Measured Temp				
Source Rmf / Rmc	CALC	CALC		
Rm @ BHT				
Time Since Circulation				
Max Recorded Temp	196.00	deg F		
Equipment Name	COMPACT			
Equipment / Base	13045	GD JCT		
Recorded By	D.KUNTZ		J.GARCIA	
Witnessed By	C.CROW			

BOREHOLE RECORD

Last Edited: 21-NOV-2010 09:50

Bit Size inches	Depth From feet	Depth To feet
8.750	788.00	3697.00
7.880	3697.00	7875.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	9.625	0.00	788.00	36.00
PRODUCTI	4.500	0.00	7872.00	11.60

REMARKS

TOP OF CEMENT IS APPROXIMATELY 3330 FEET.

4.5 INCH PRODUCTION CASING.

CASED HOLE TEMPERATURE LOG WAS LOGGED WITH SHA, MCG AND MHT.

CORRELATED TO WEATHERFORDS OPEN HOLE LOGS.

ALL INTERVALS LOGGED AND SCALED PER CUSTOMER REQUEST.

ENGINEER: D. KUNTZ, J. GARCIA, O. GOYZUETA

OPERATORS: S. KAISER

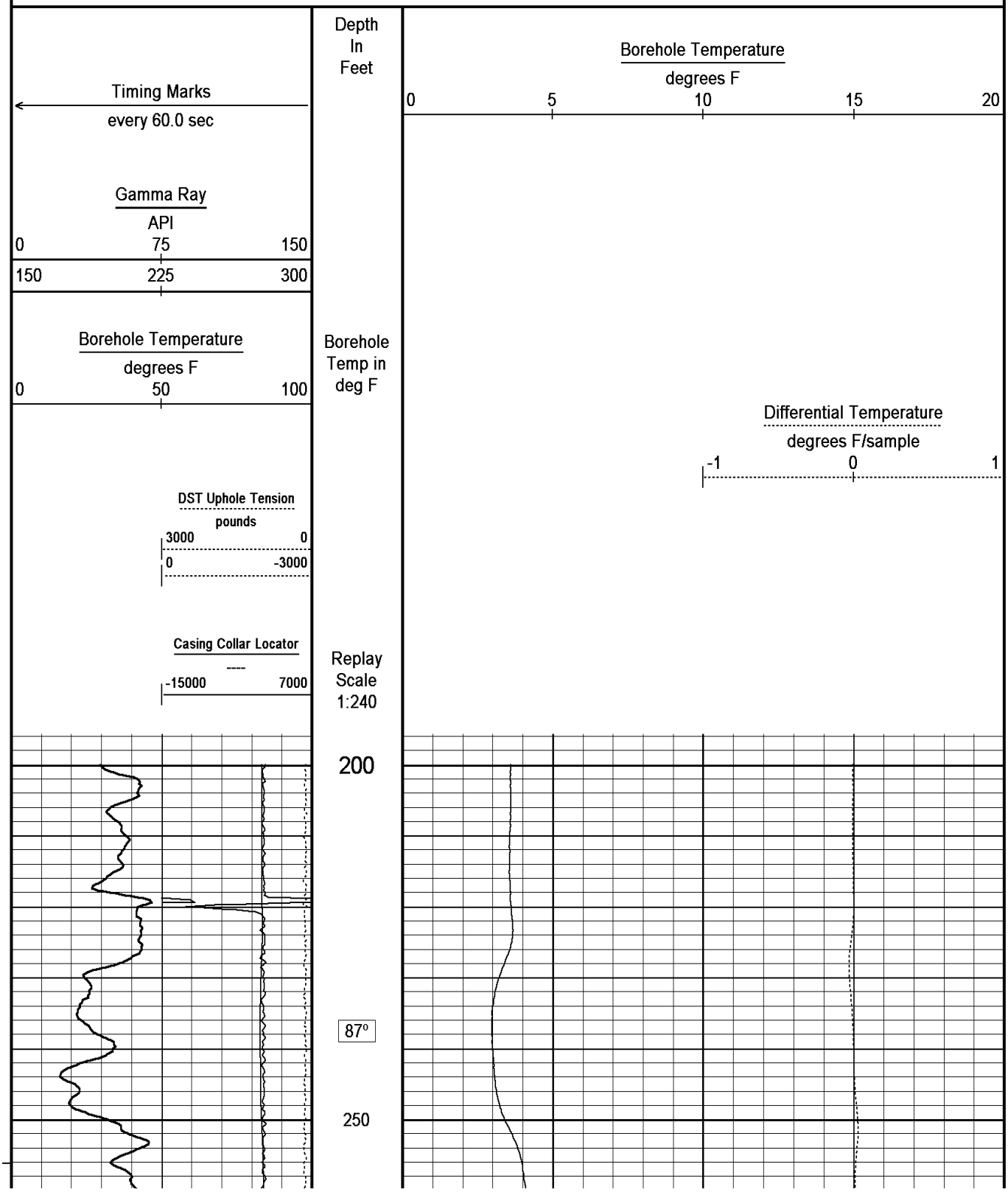
RIG: PATTERSON 307

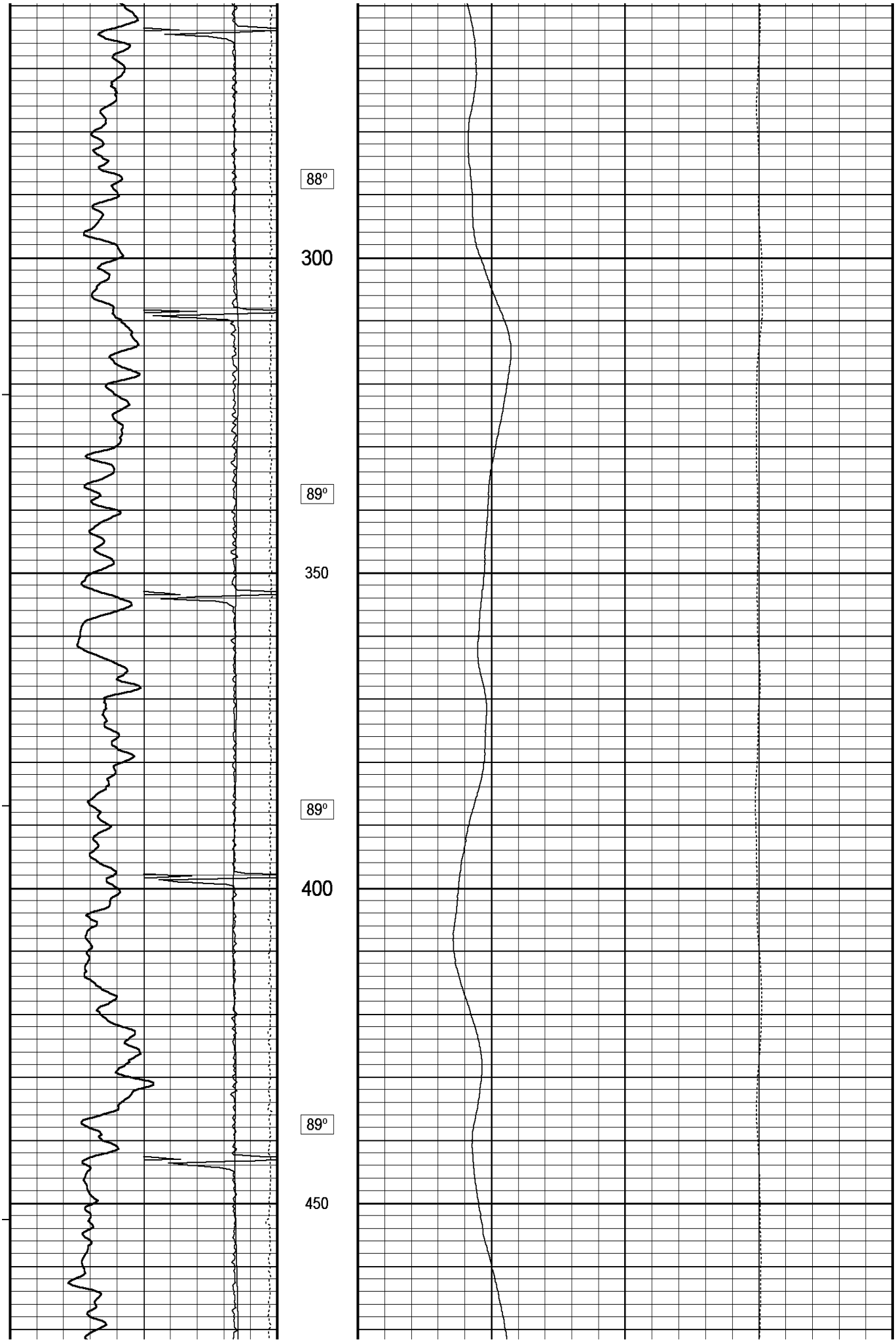
SERVICE ORDER #3526200

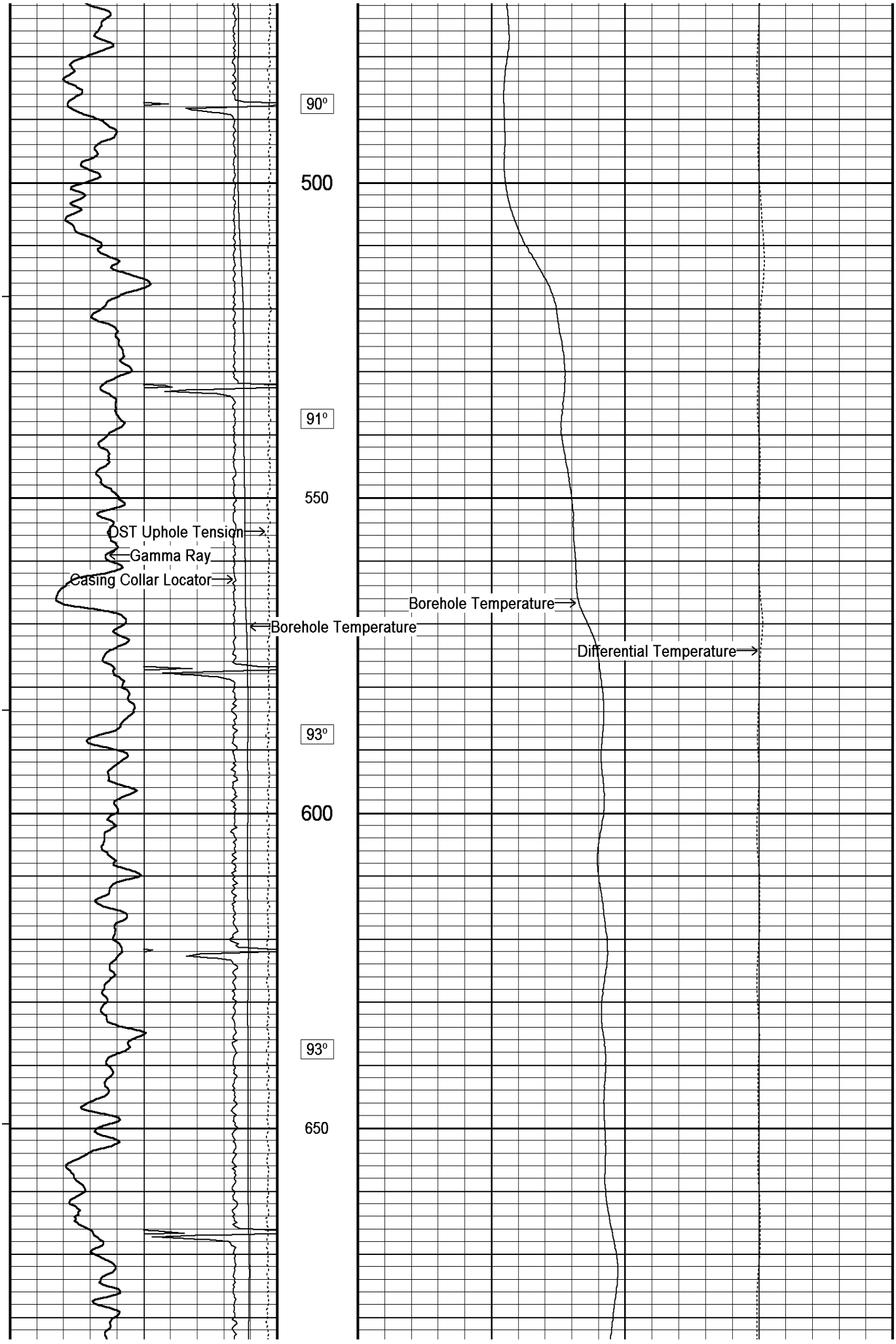
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

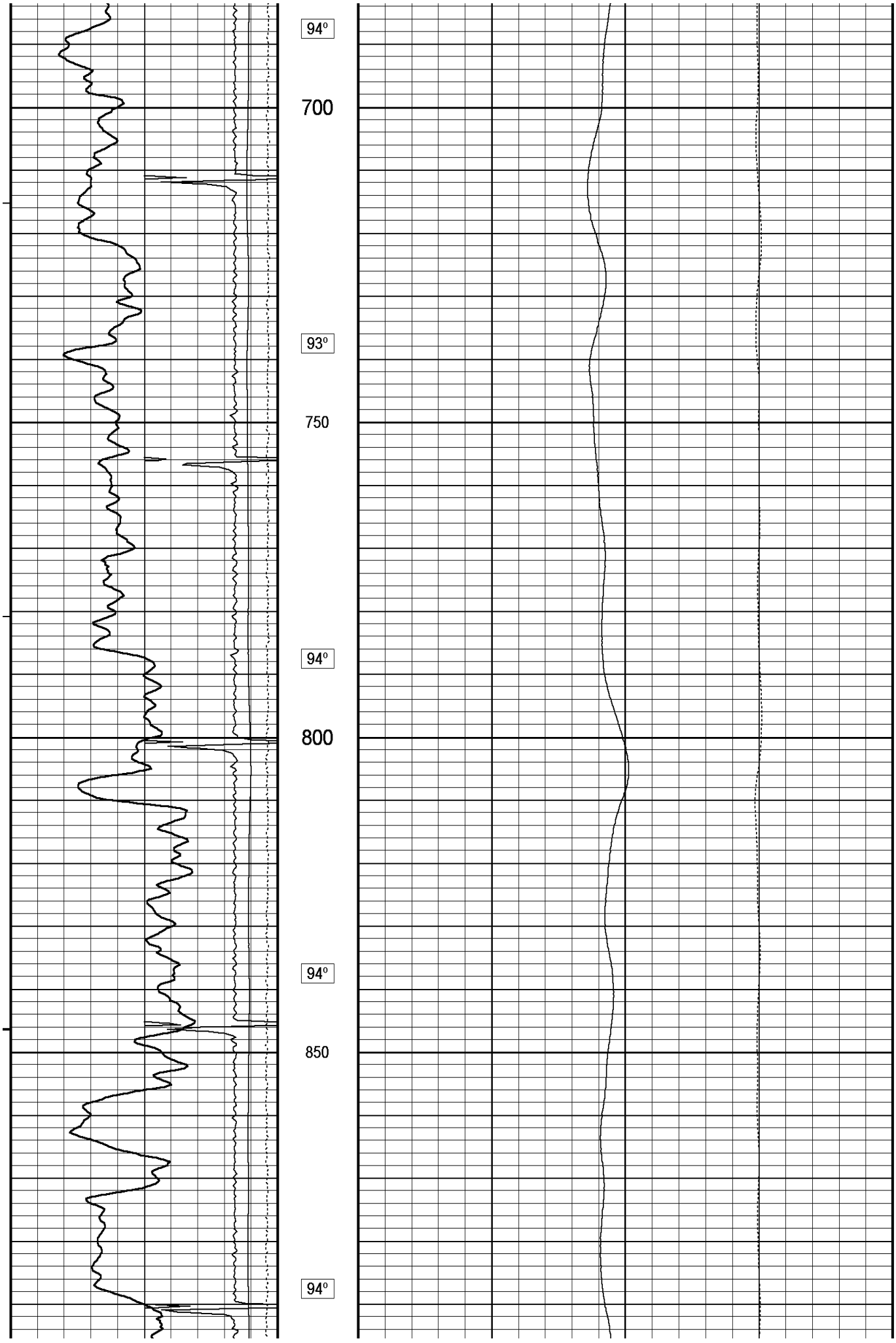
5 INCH MAIN LOG

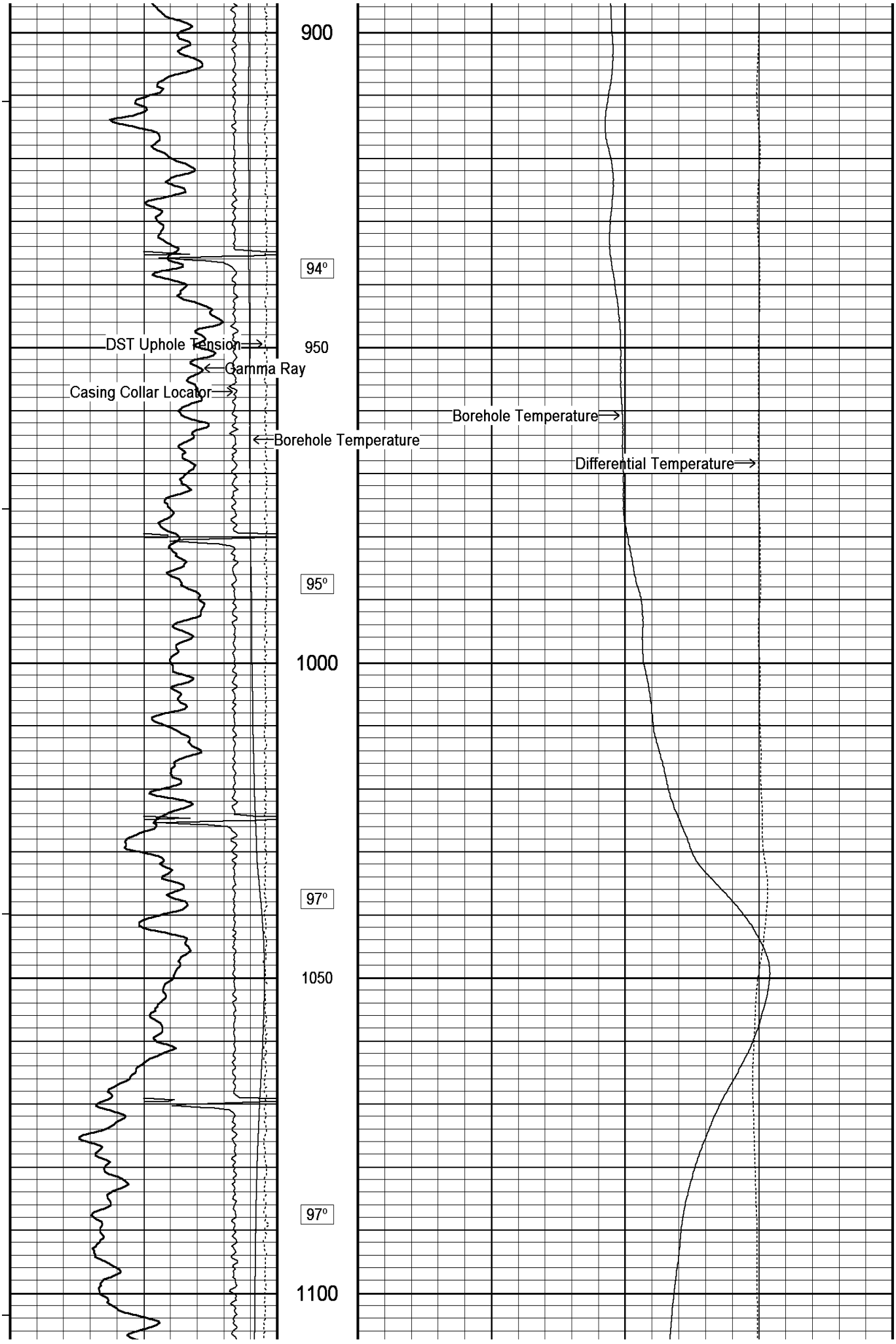
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 21-NOV-2010 09:55
Filename: C:\Minimus\LOGS\Bill Barrett Temp Logs\GGU Miller 24D-32-691 (Temp)\Temp.dta
Recorded on 21-NOV-2010 07:40
System Versions: Logged with 10.07.0791 Plotted with 10.07.0791

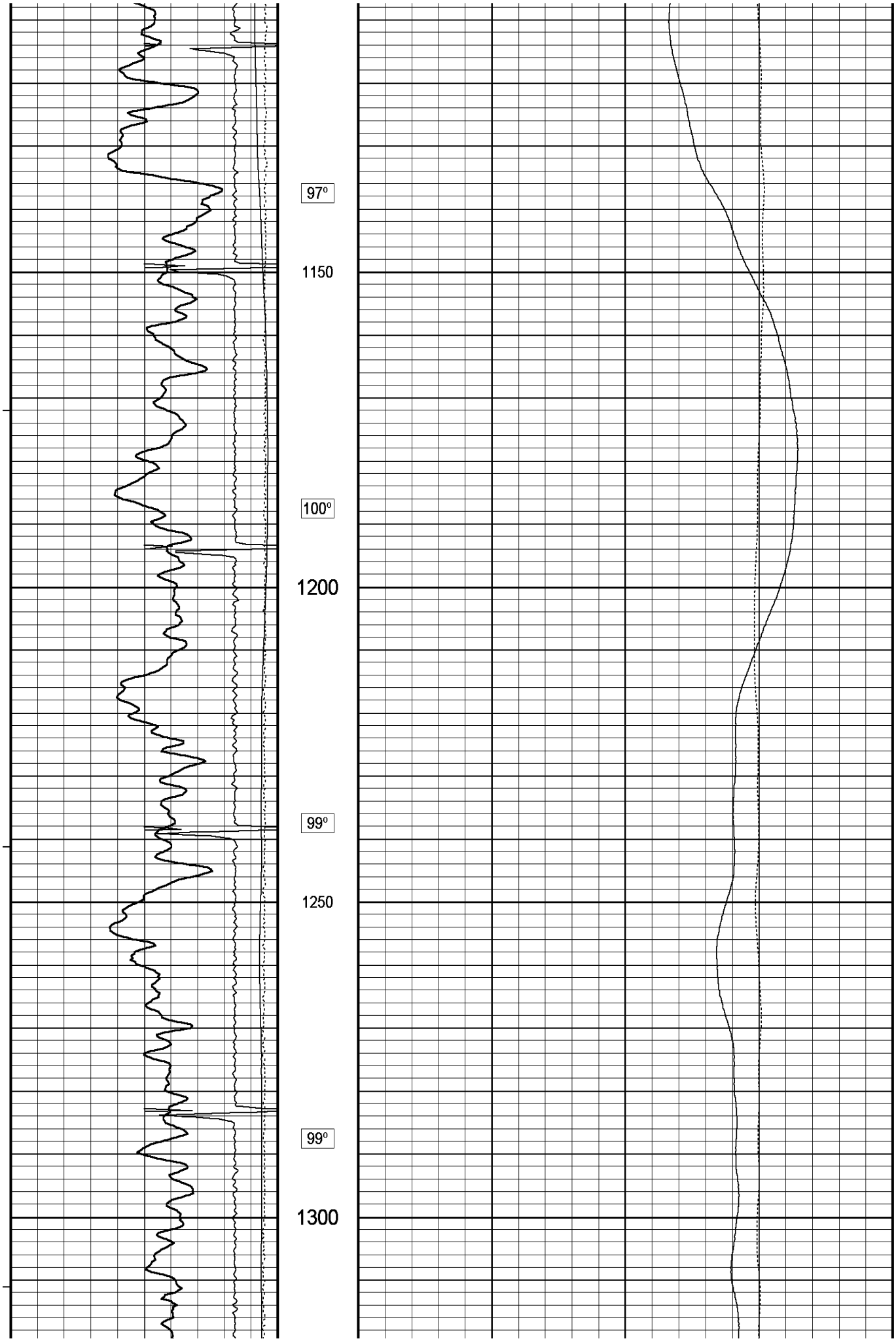


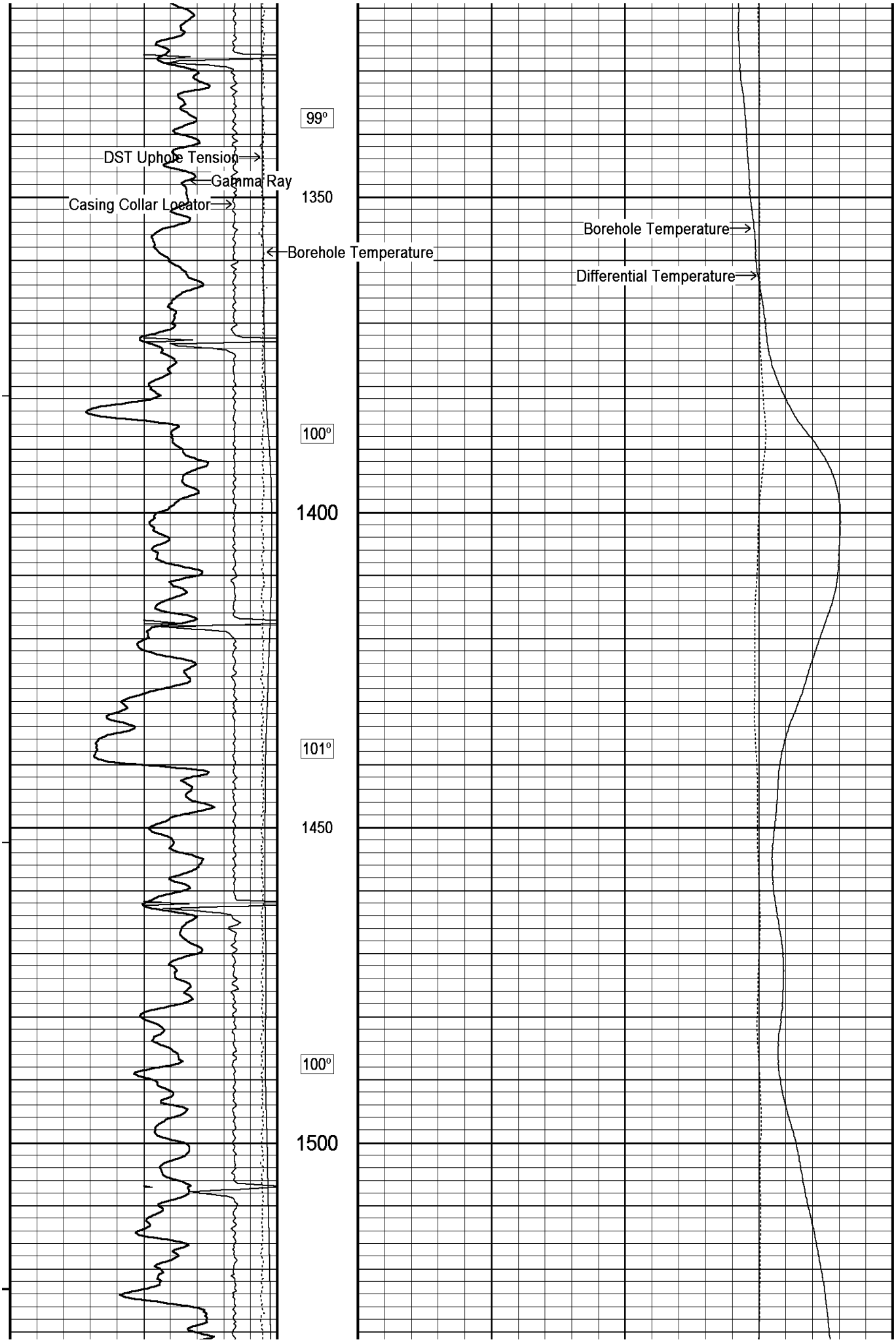

88°
300
89°
350
89°
400
89°
450


90°
500
91°
550
OST Uphole Tension
Gamma Ray
Casing Collar Locator
Borehole Temperature
Borehole Temperature
Differential Temperature
93°
600
93°
650


94°
700
93°
750
94°
800
94°
850
94°


900
94°
DST Uphole Tension
950
Gamma Ray
Casing Collar Locator
Borehole Temperature
Borehole Temperature
Differential Temperature
95°
1000
97°
1050
97°
1100


97°
1150
100°
1200
99°
1250
99°
1300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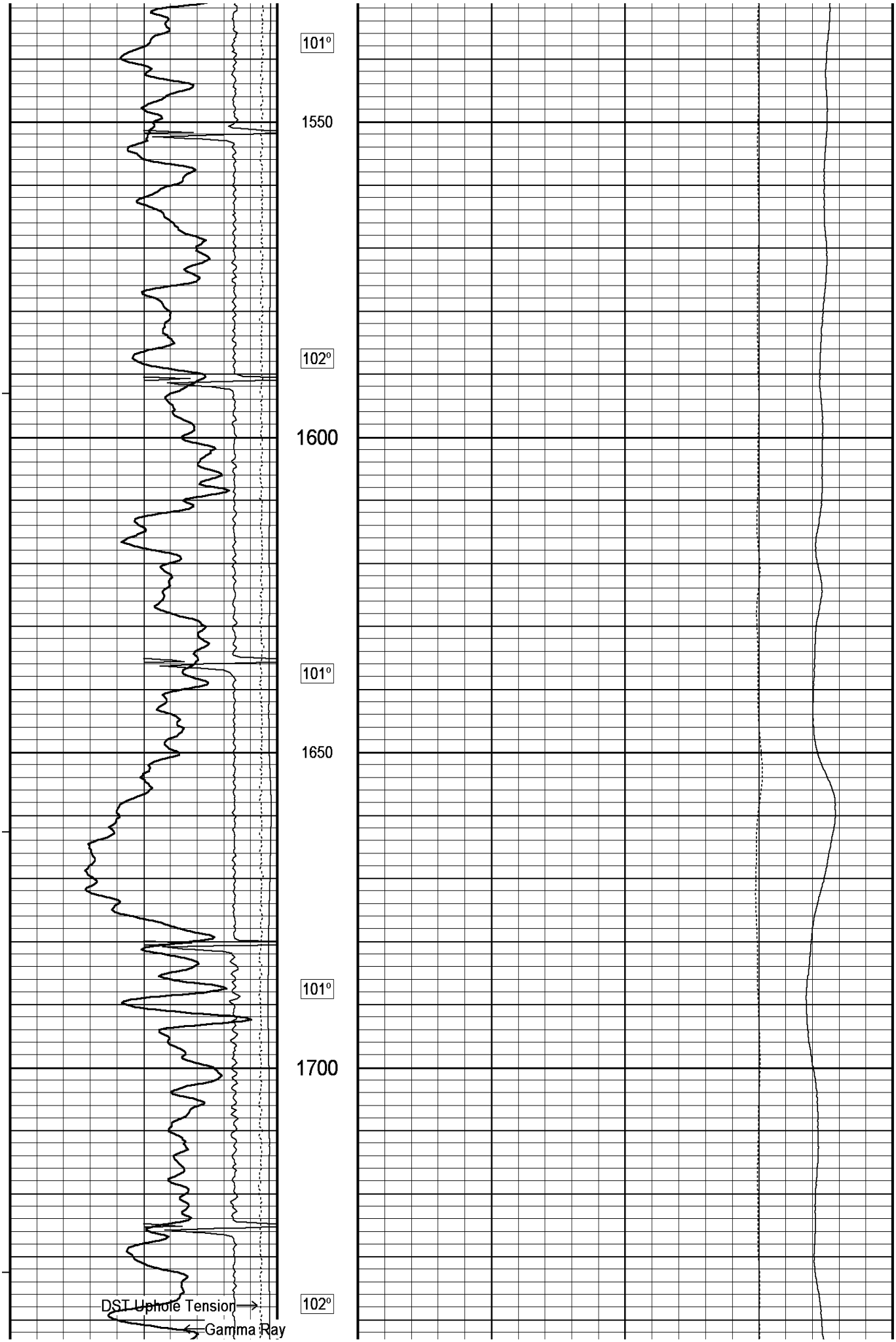
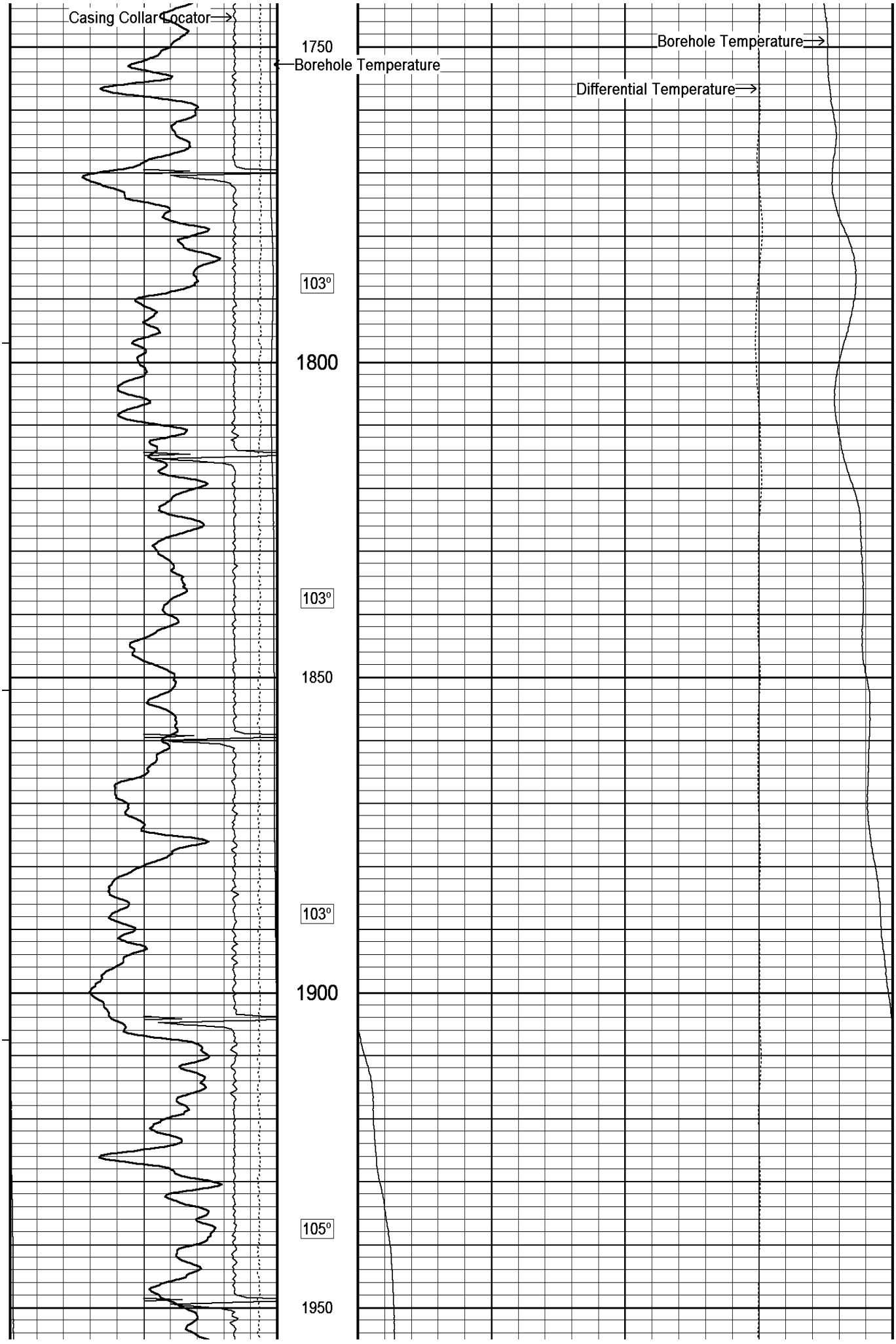
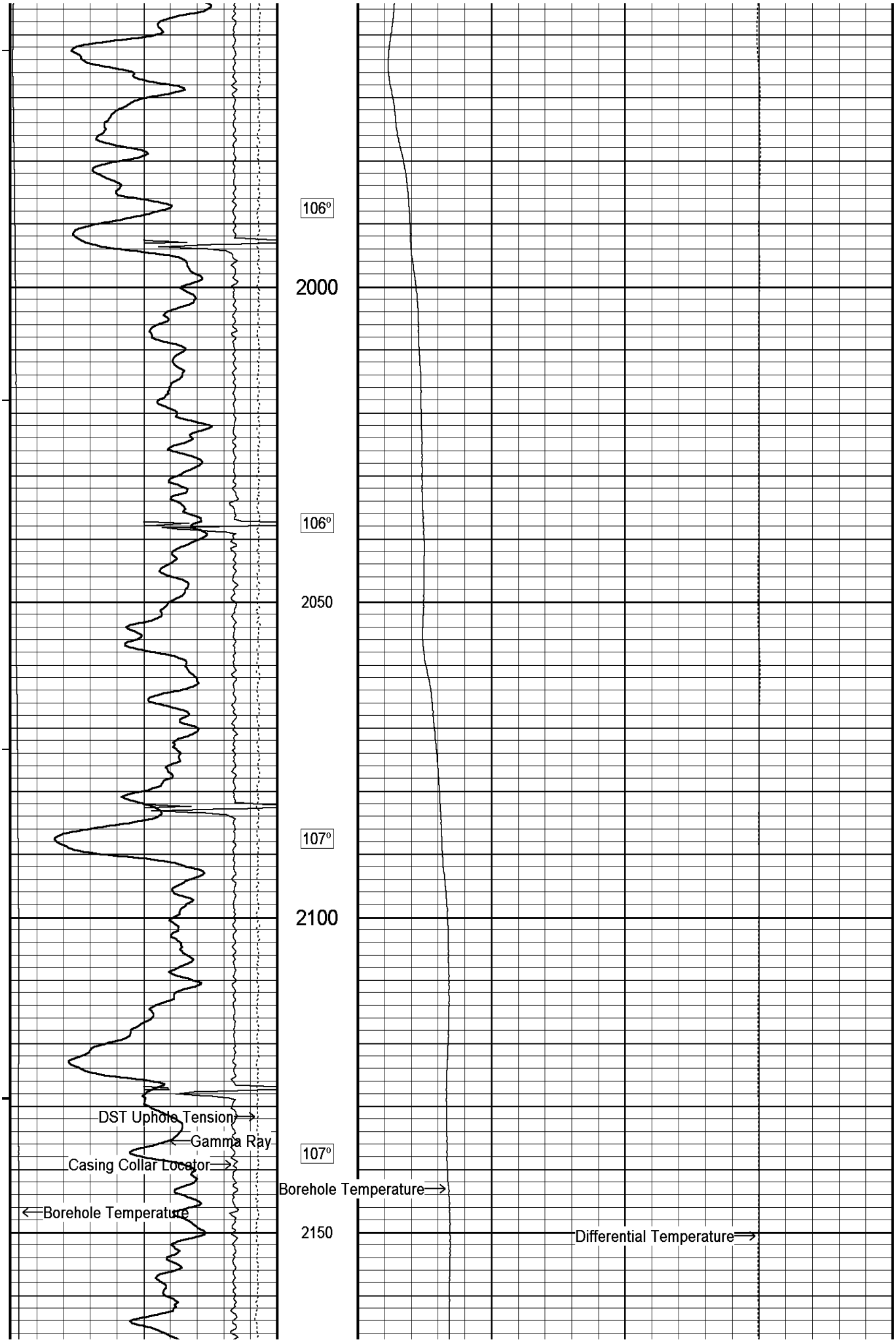
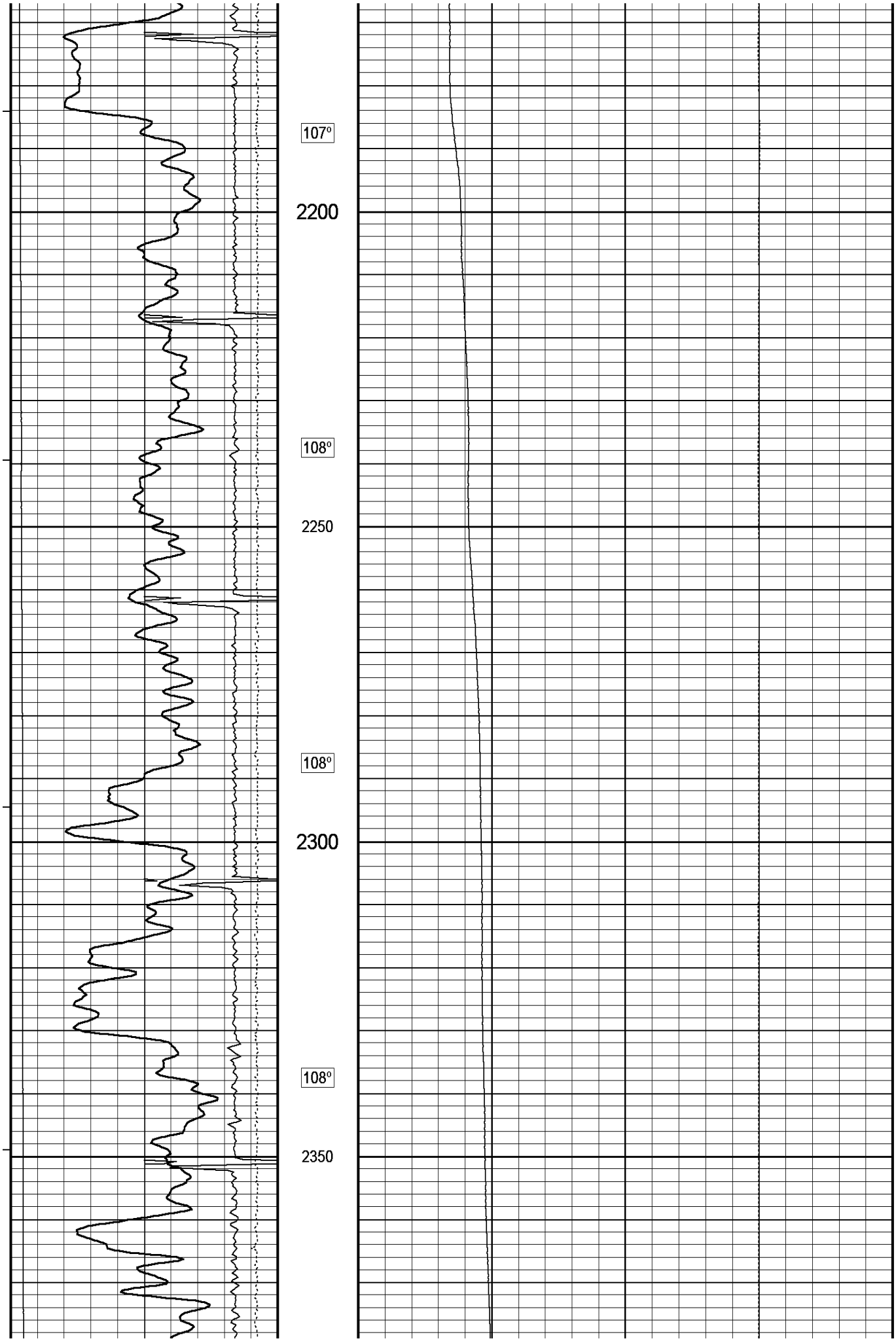
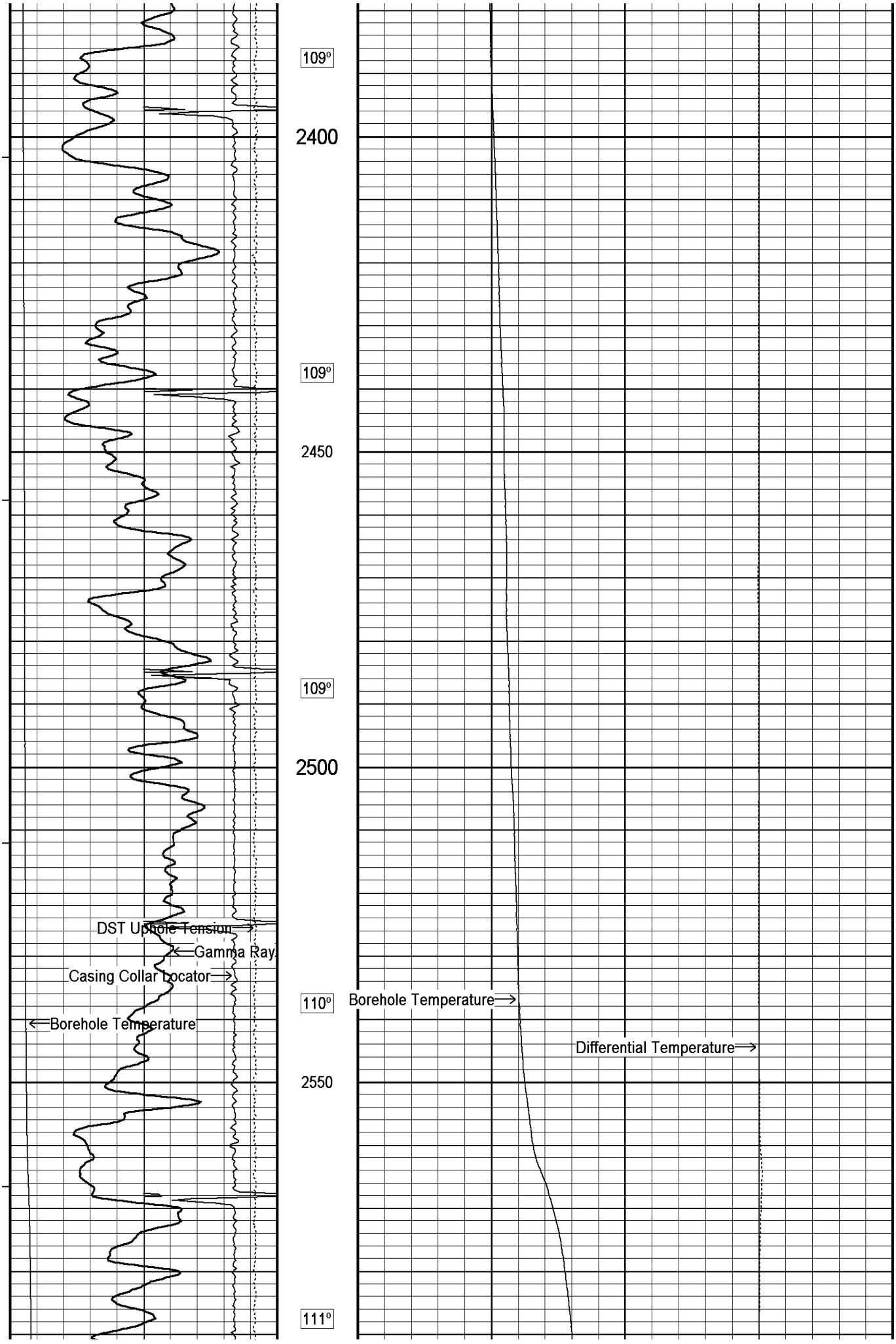
DST Uphole Tension
Gamma Ray
Casing Collar Locator
1350
Borehole Temperature
Borehole Temperature
Differential Temperature
100°
1400
101°
1450
100°
1500

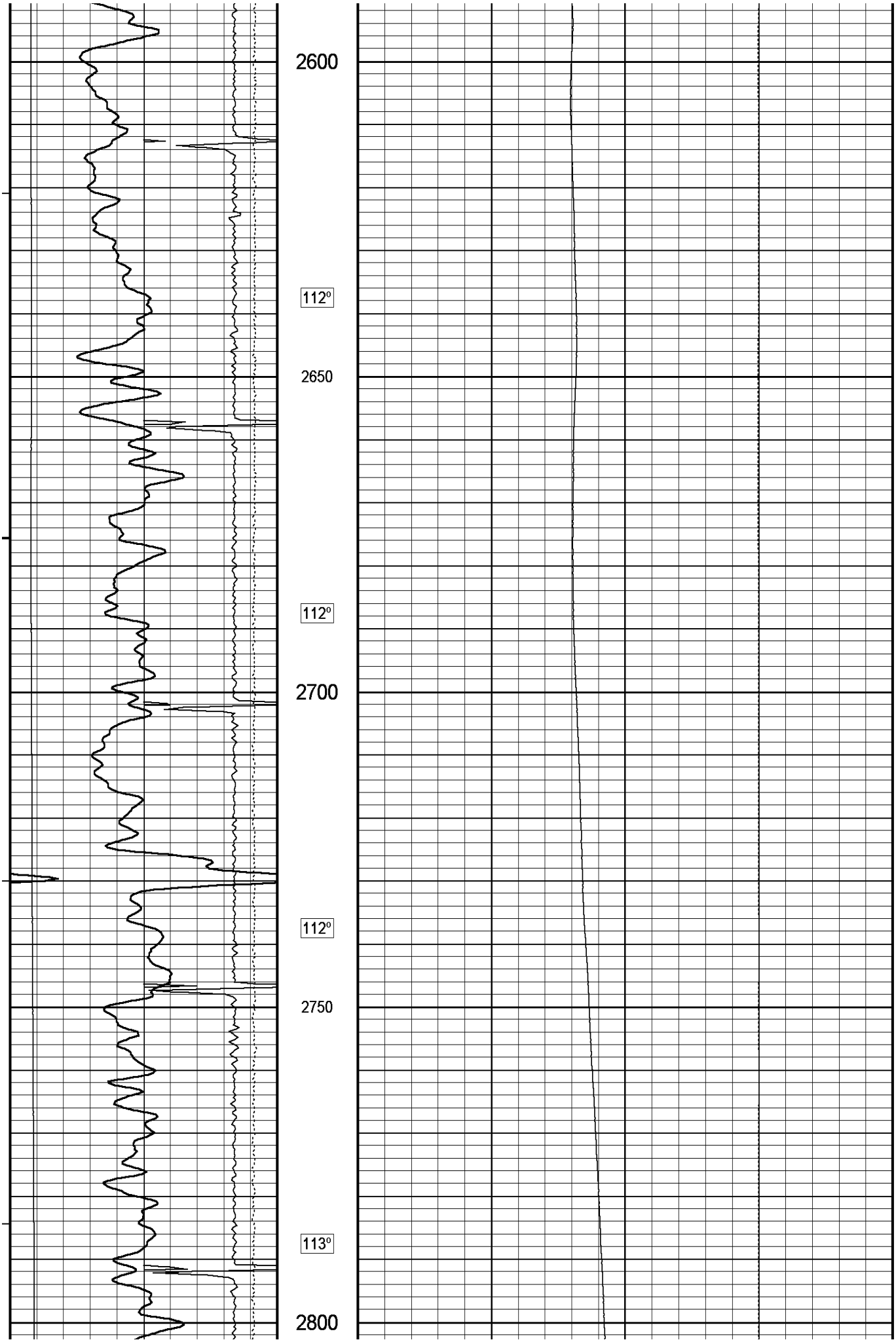

101°
1550
102°
1600
101°
1650
101°
1700
102°
DST Uphole Tension
Gamma Ray

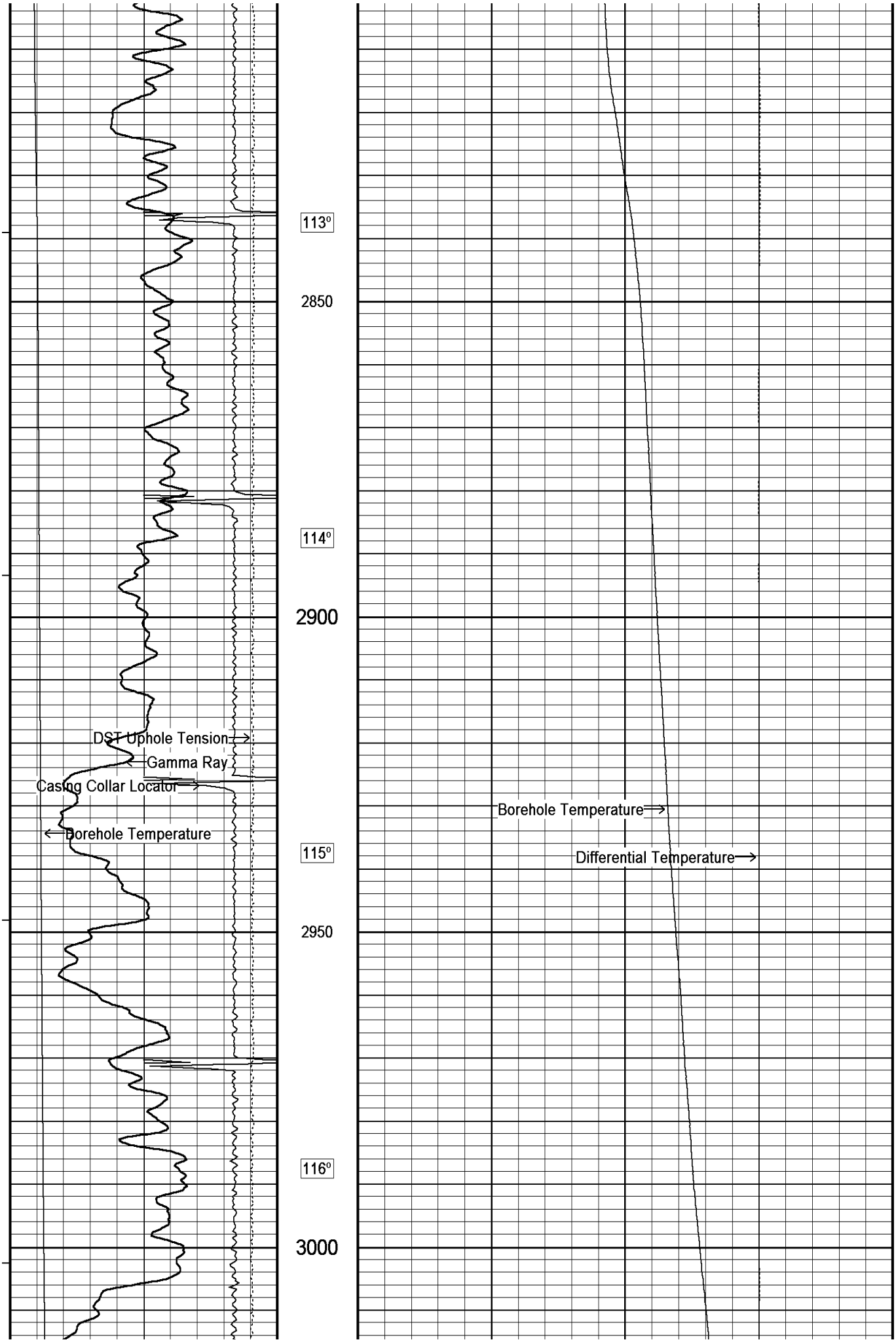

Casing Collar Locator
1750
Borehole Temperature
Borehole Temperature
Differential Temperature
103°
1800
103°
1850
103°
1900
105°
1950

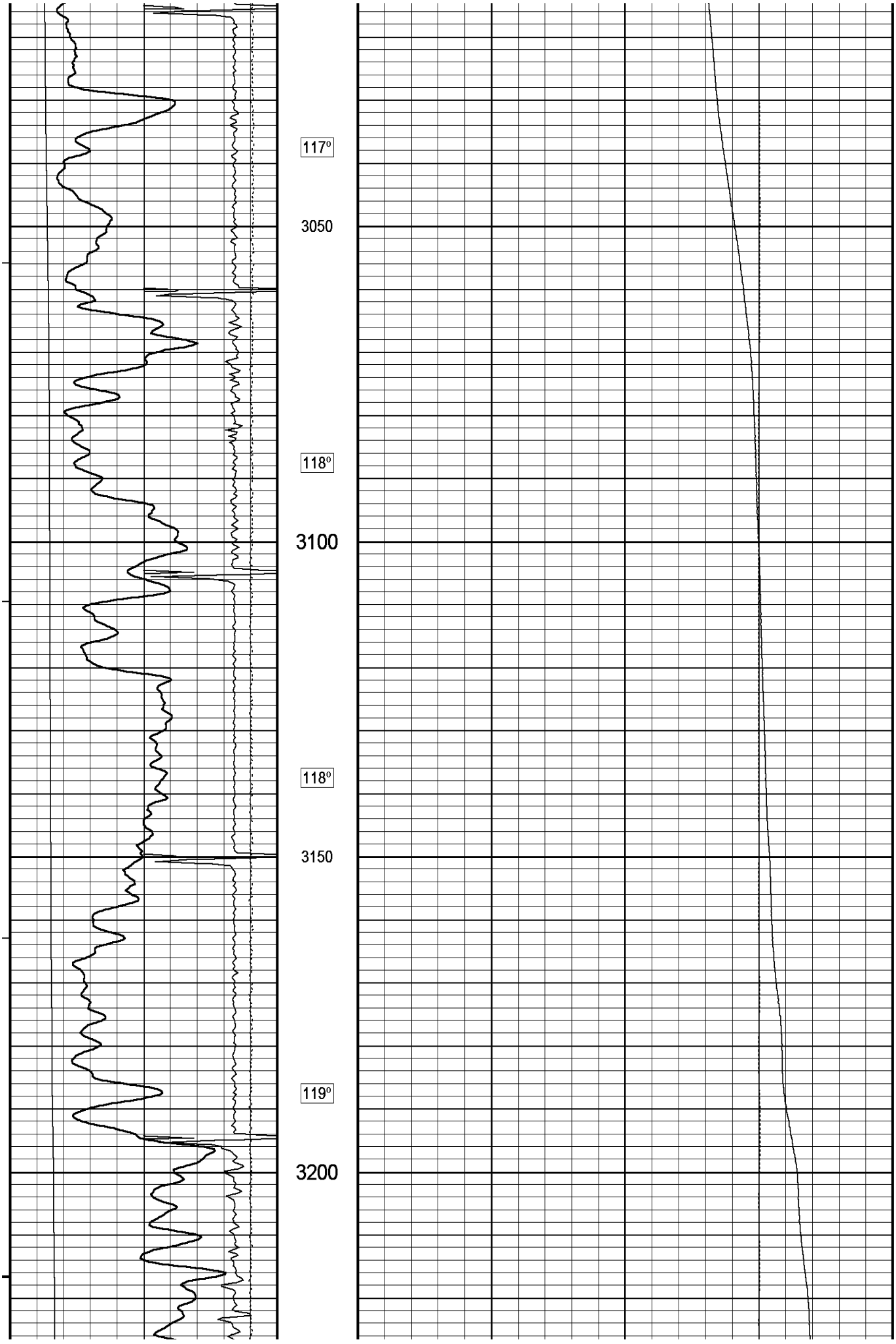

106°
2000
106°
2050
107°
2100
107°
2150
DST Uphole Tension
Gamma Ray
Casing Collar Locator
Borehole Temperature
Borehole Temperature
Differential Temperature

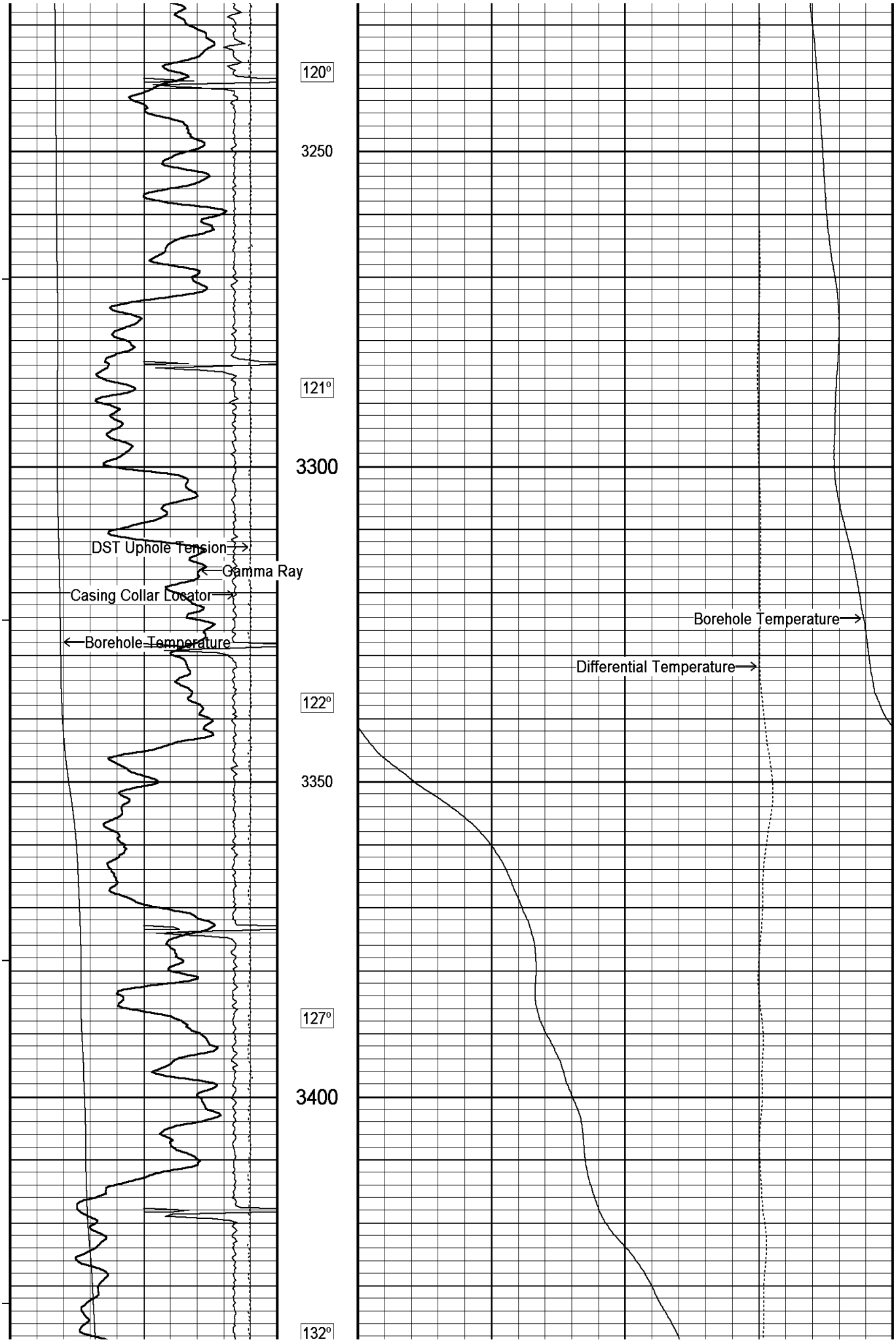

107°
2200
108°
2250
108°
2300
108°
2350

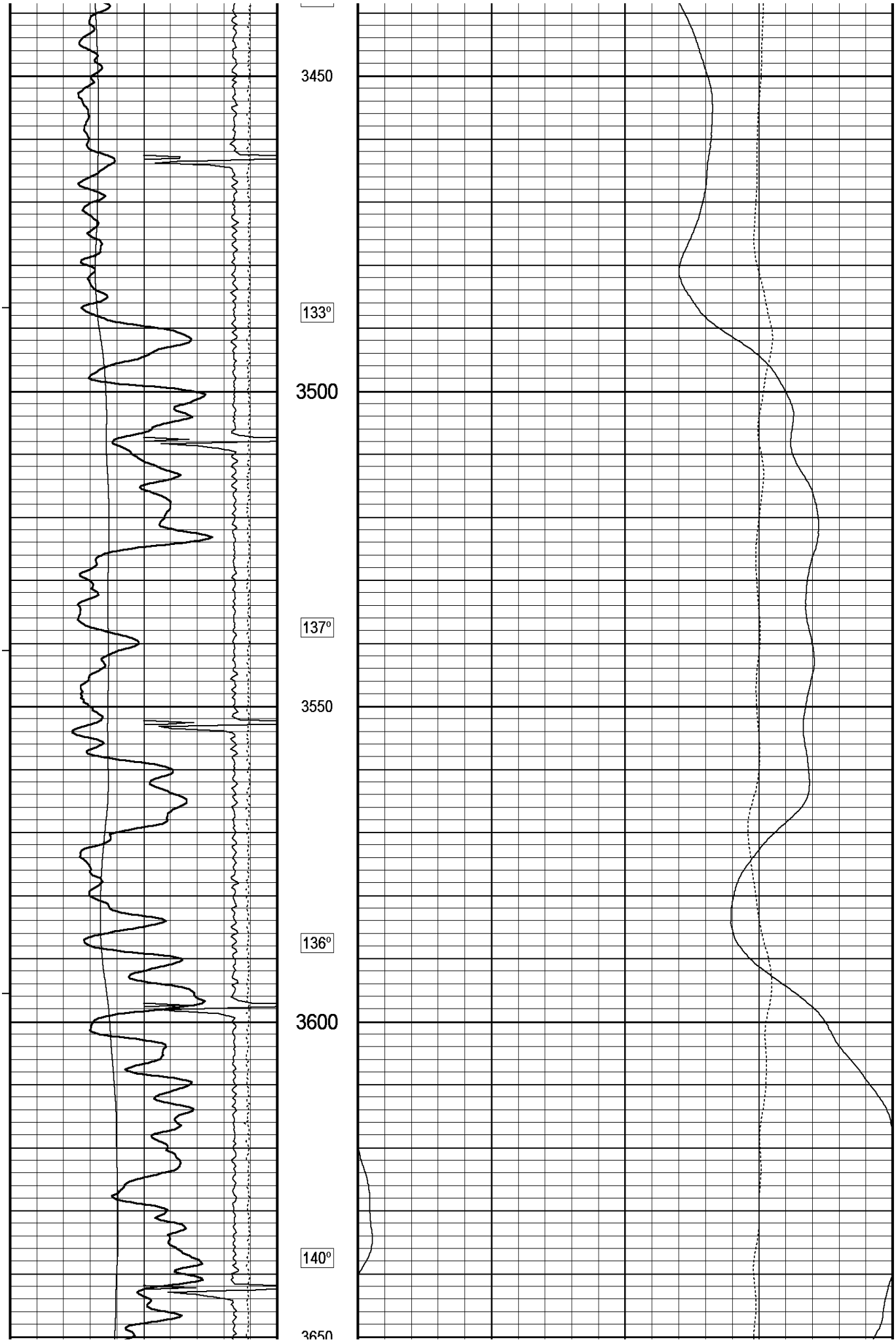

109°
2400
109°
2450
109°
2500
110°
2550
111°
DST Uphole Tension
Gamma Ray
Casing Collar Locator
Borehole Temperature
Borehole Temperature
Differential Temperature

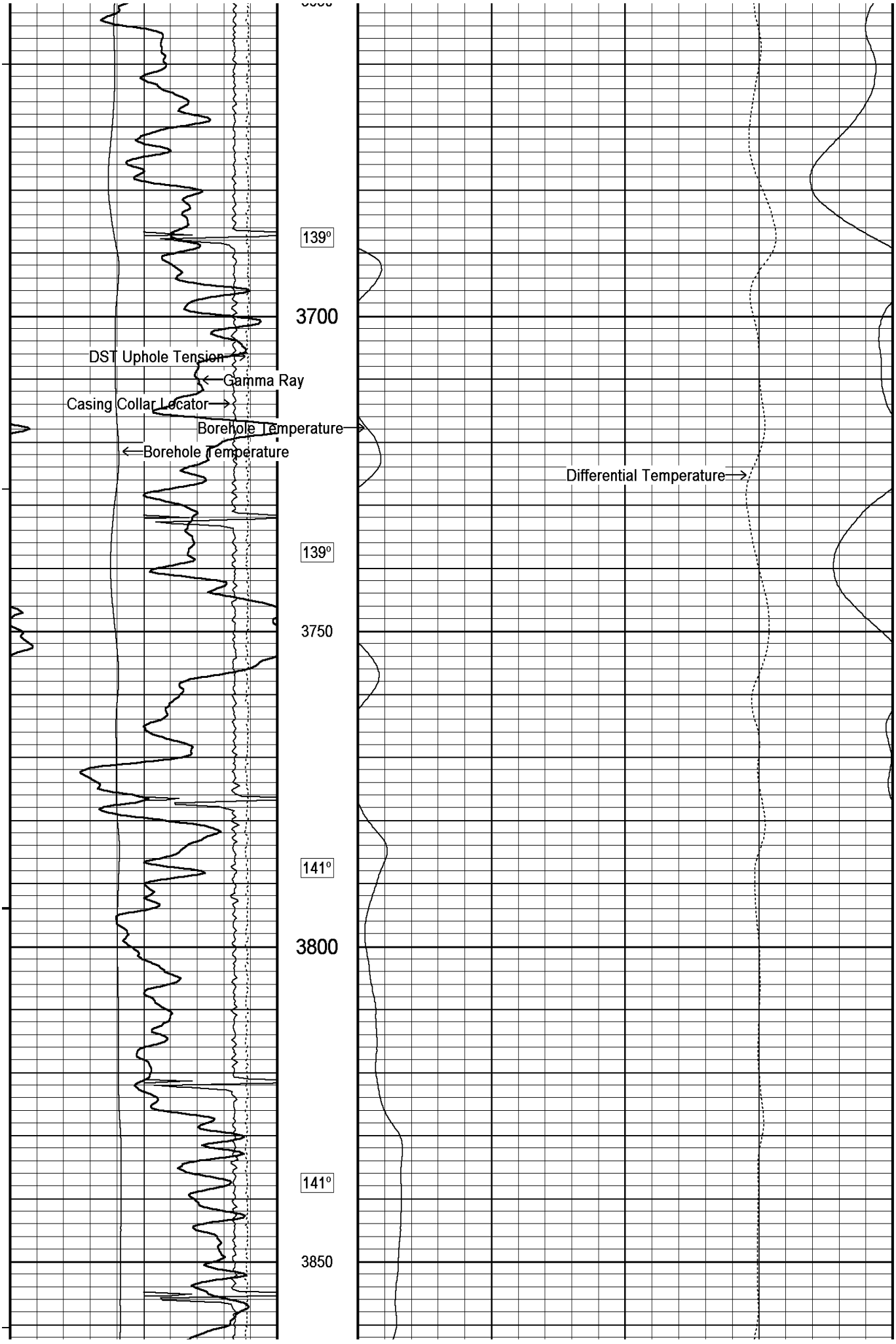

2600
112°
2650
112°
2700
112°
2750
113°
2800

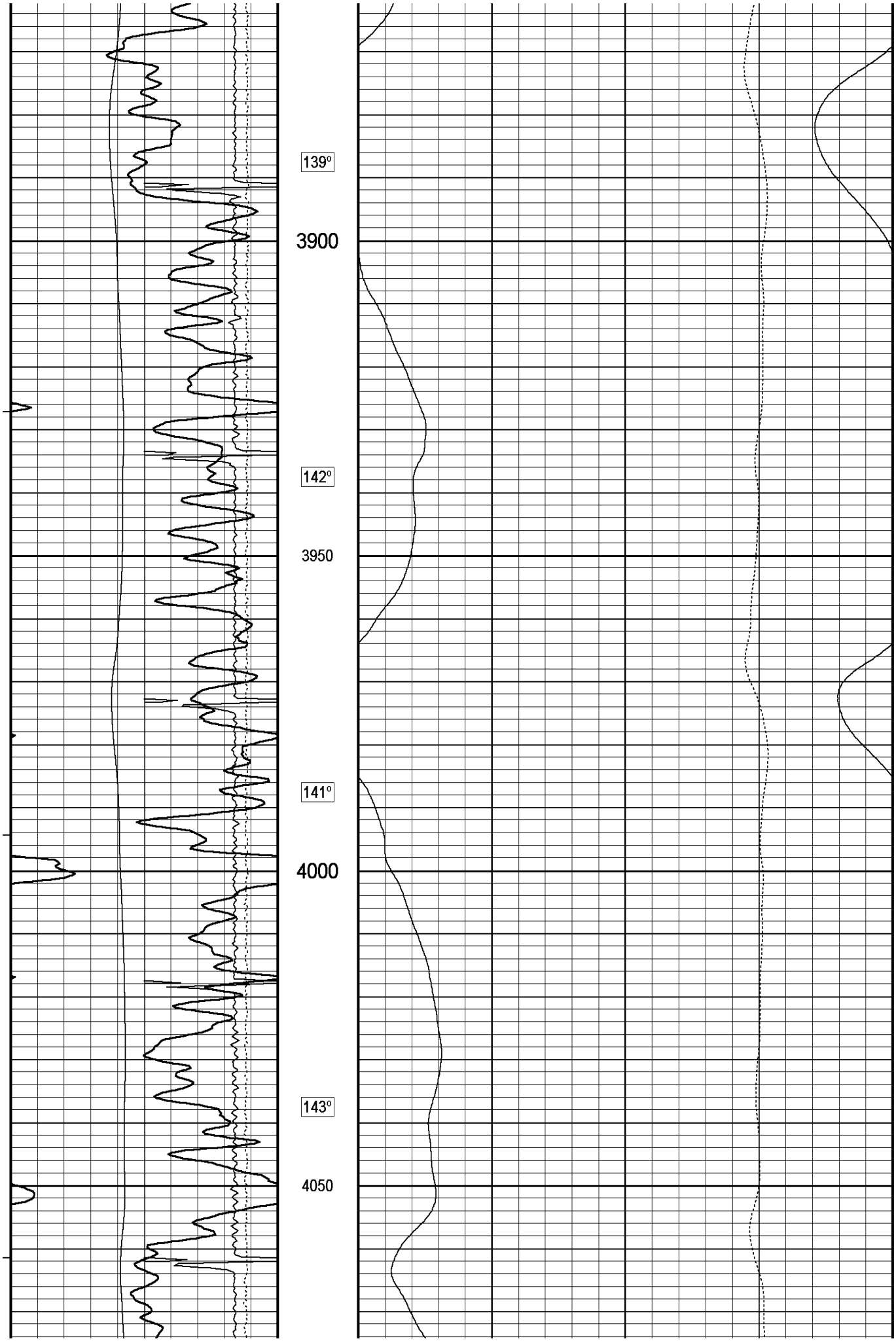

113°
2850
114°
2900
DST Uphole Tension
Gamma Ray
Casing Collar Locator
Borehole Temperature
115°
2950
Borehole Temperature
Differential Temperature
116°
3000

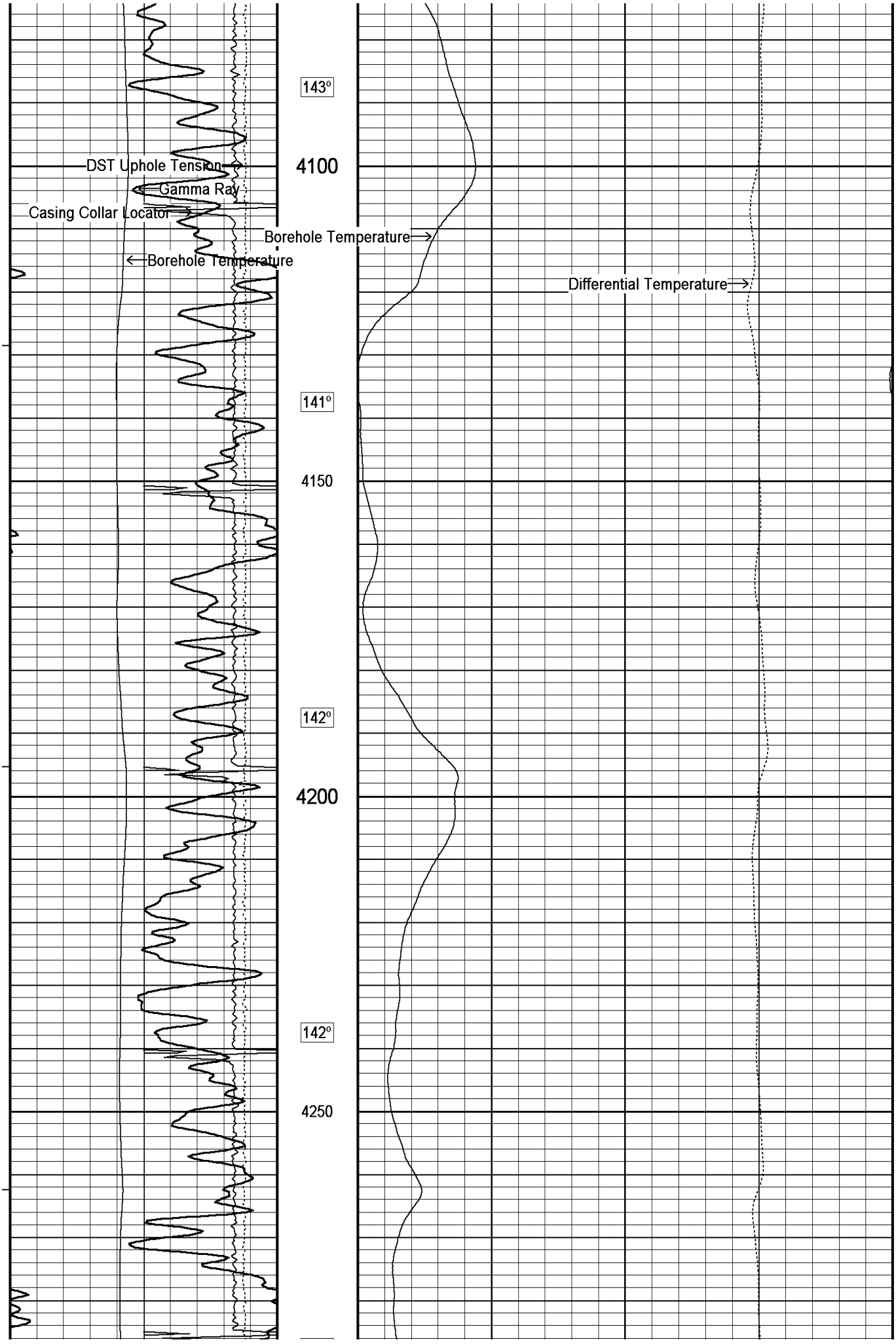

117°
3050
118°
3100
118°
3150
119°
3200

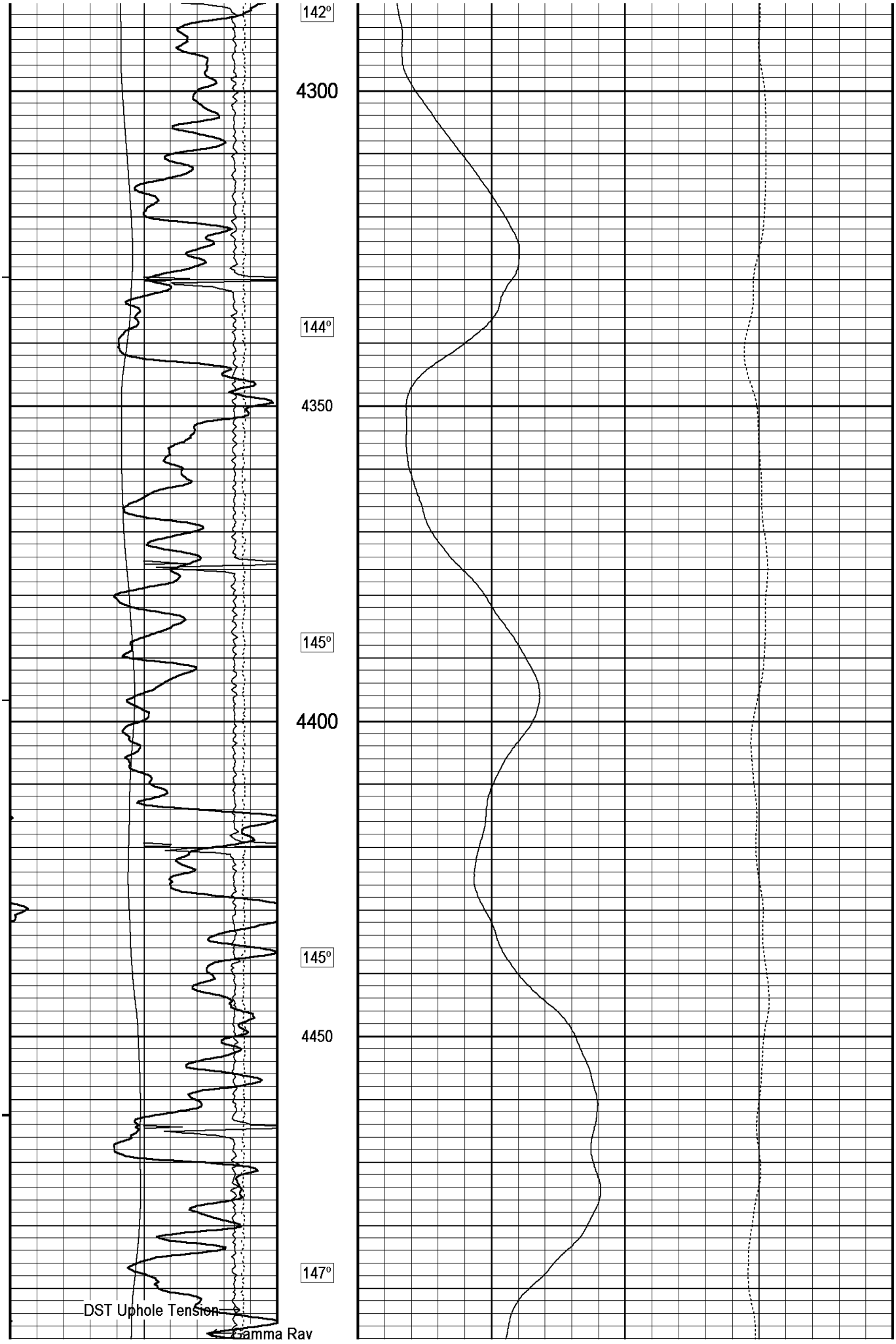

120°
3250
121°
3300
DST Uphole Tension
Gamma Ray
Casing Collar Locator
Borehole Temperature
122°
3350
127°
3400
132°
Borehole Temperature
Differential Temperature

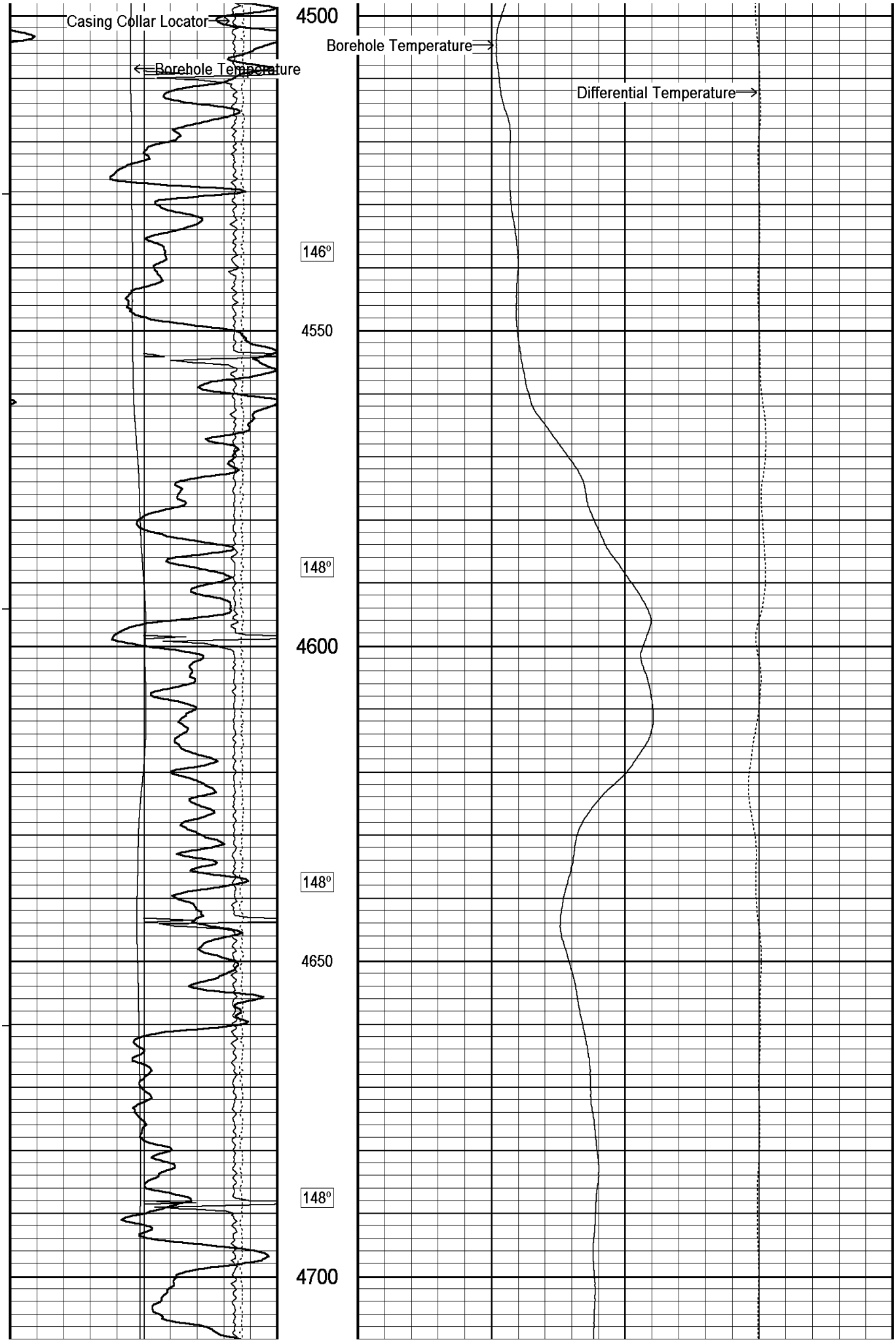

3450
133°
3500
137°
3550
136°
3600
140°
3650

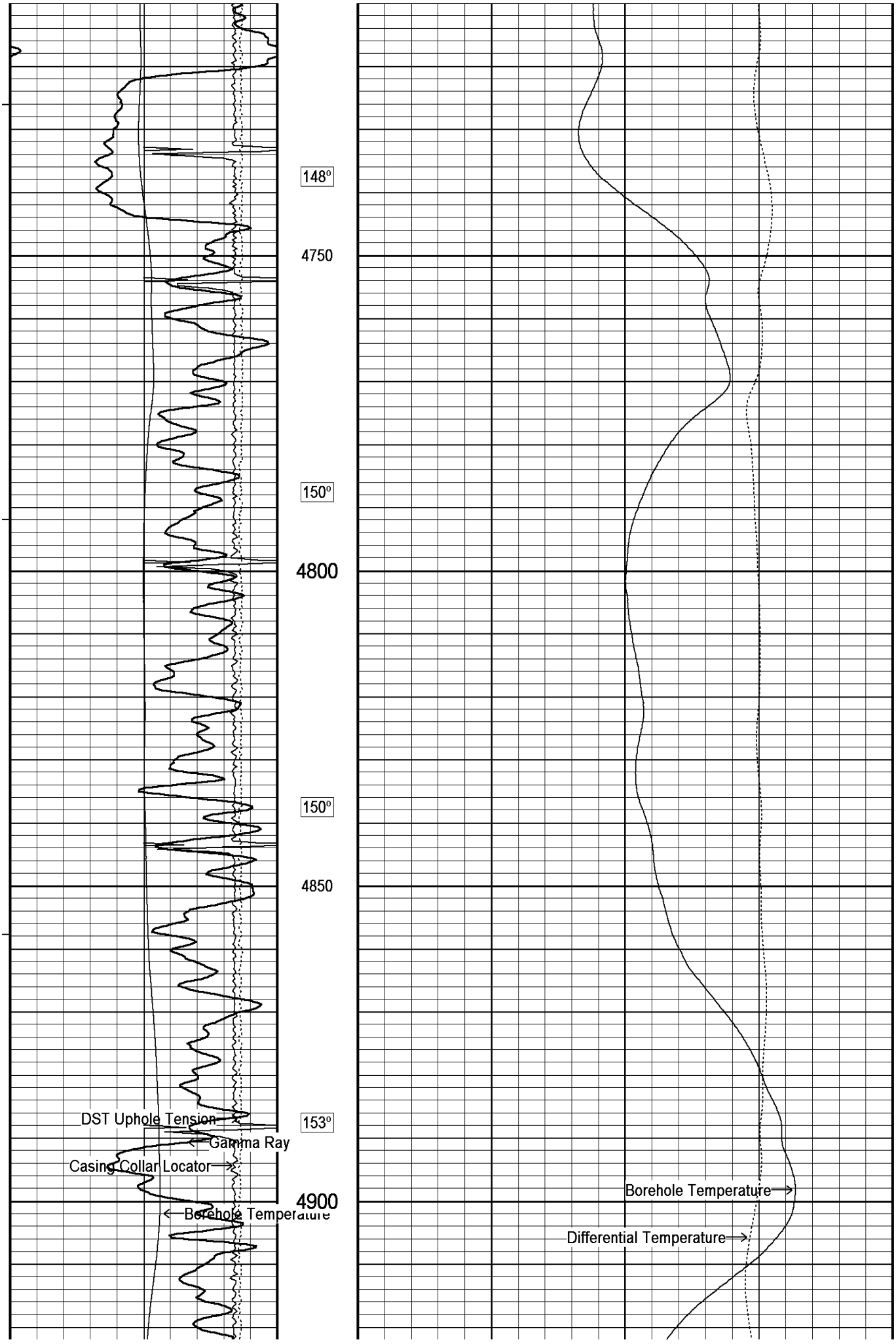

139°
3700
DST Uphole Tension
Gamma Ray
Casing Collar Locator
Borehole Temperature
Borehole Temperature
Differential Temperature
139°
3750
141°
3800
141°
3850

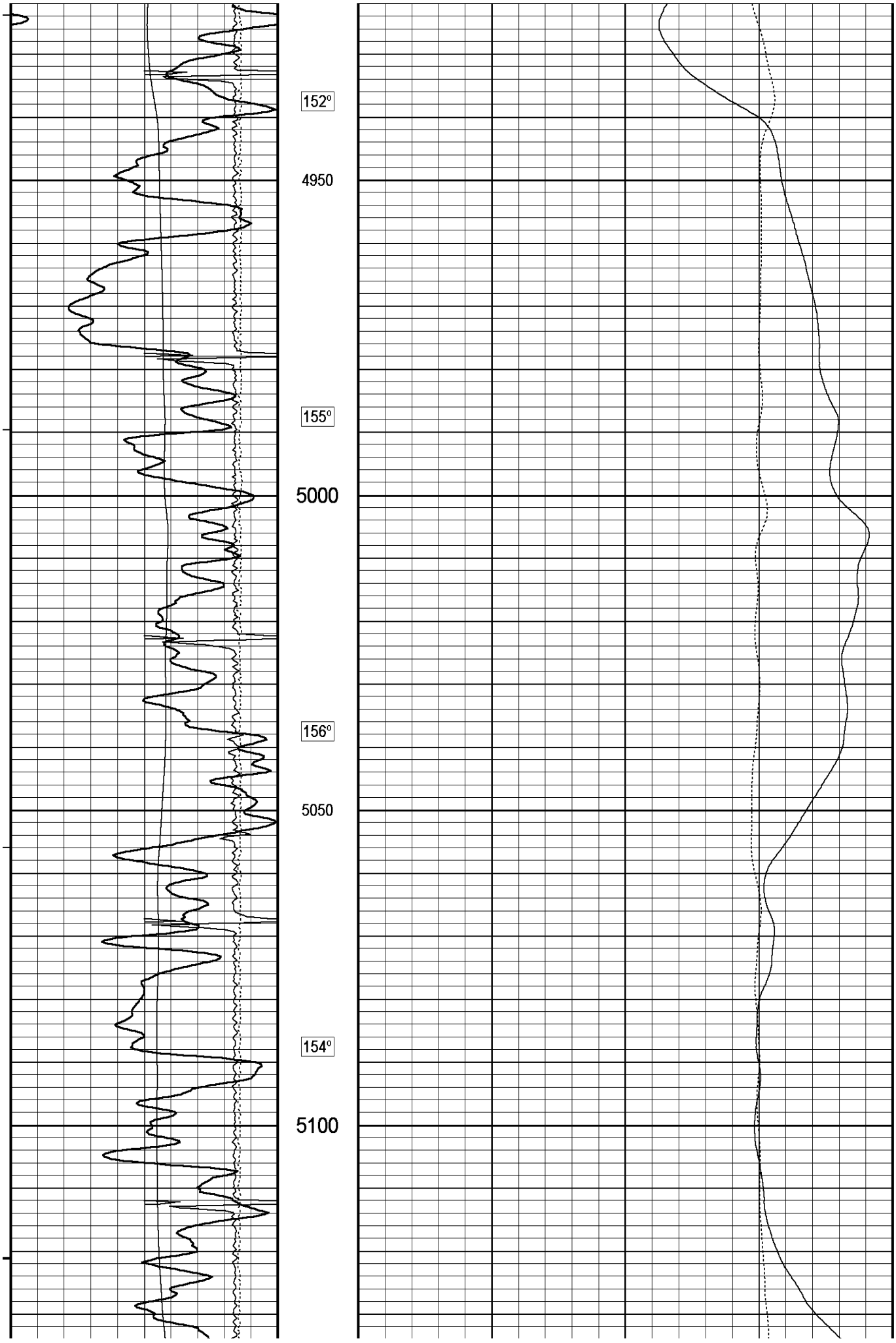

139°
3900
142°
3950
141°
4000
143°
4050


143°
DST Uphole Tension
4100
Gamma Ray
Casing Collar Locator
Borehole Temperature
Borehole Temperature
Differential Temperature
141°
4150
142°
4200
142°
4250


142°
4300
144°
4350
145°
4400
145°
4450
147°
DST Uphole Tension
Gamma Ray


Casing Collar Locator
Borehole Temperature
Borehole Temperature
Differential Temperature
4500
146°
4550
148°
4600
148°
4650
148°
4700


148°
4750
150°
4800
150°
4850
153°
4900
DST Uphole Tension
Gamma Ray
Casing Collar Locator
Borehole Temperature
Borehole Temperature
Differential Temperature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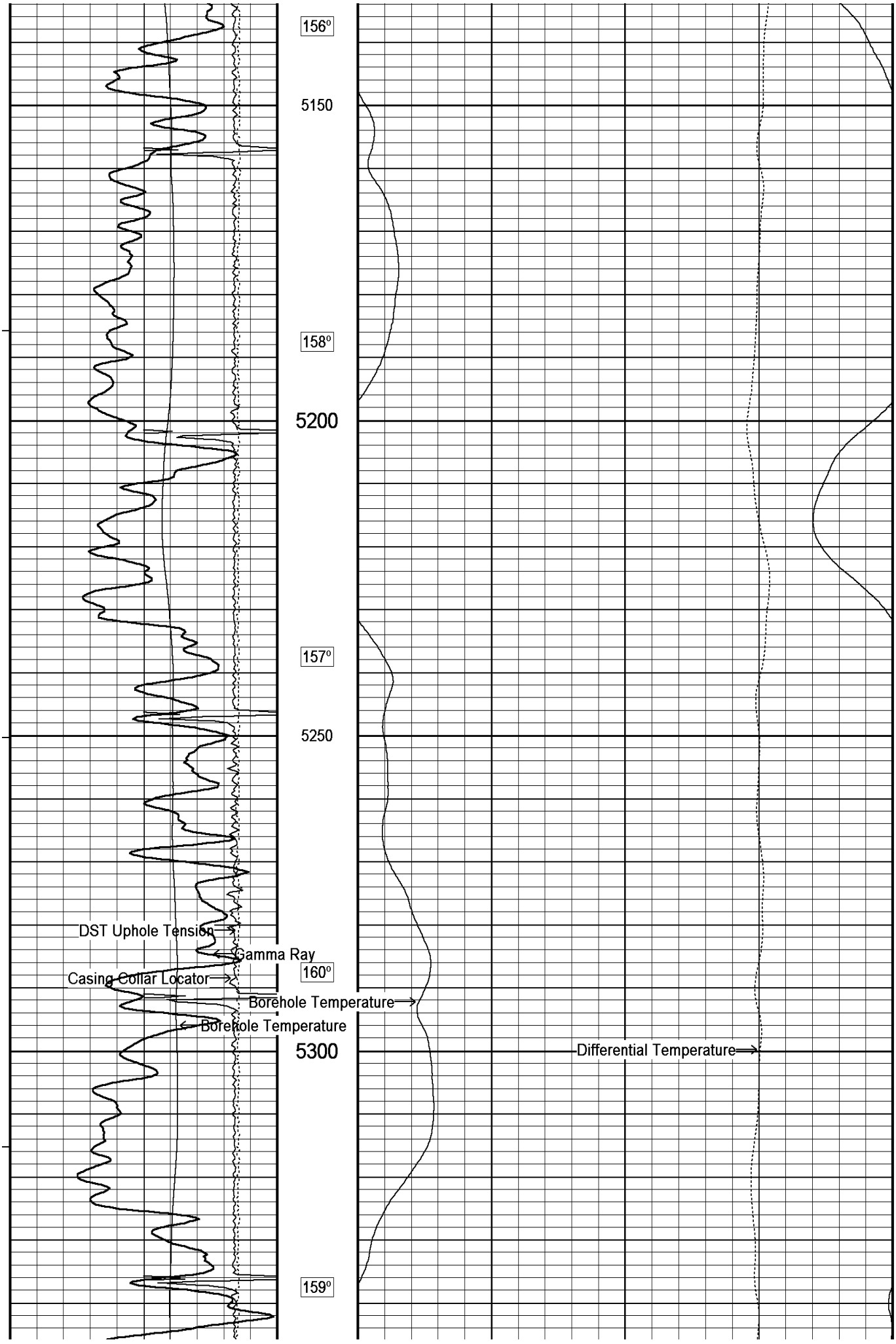
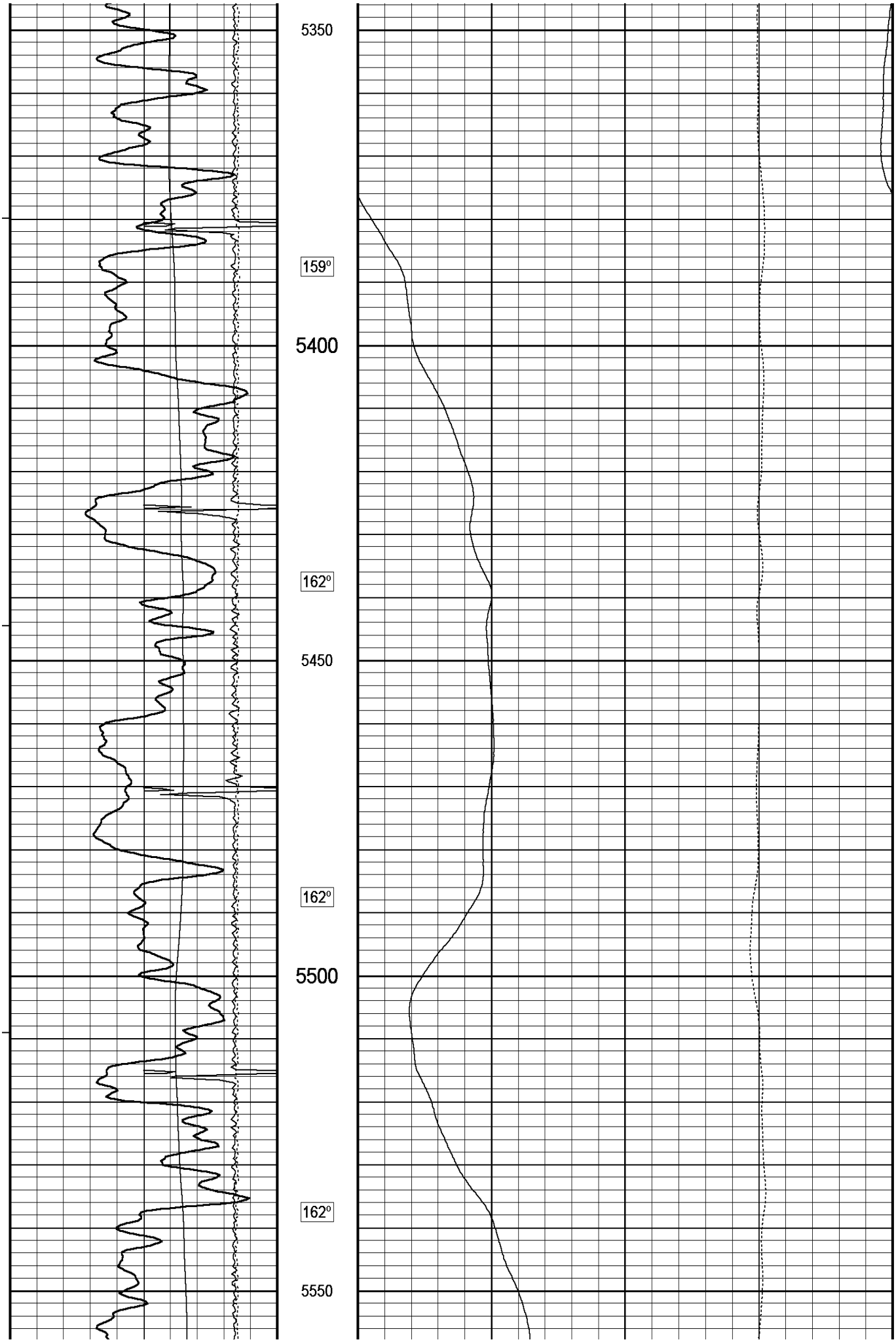
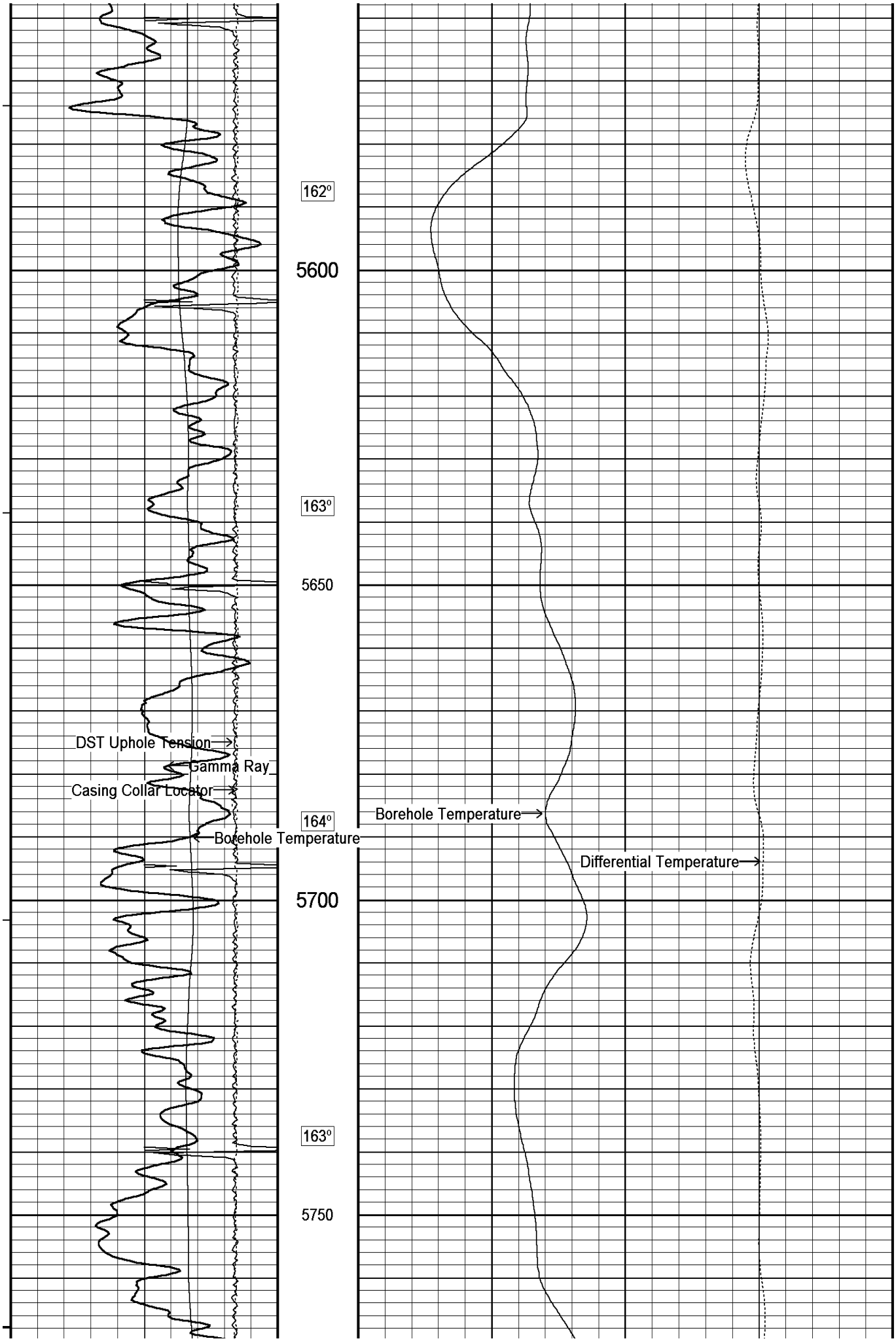
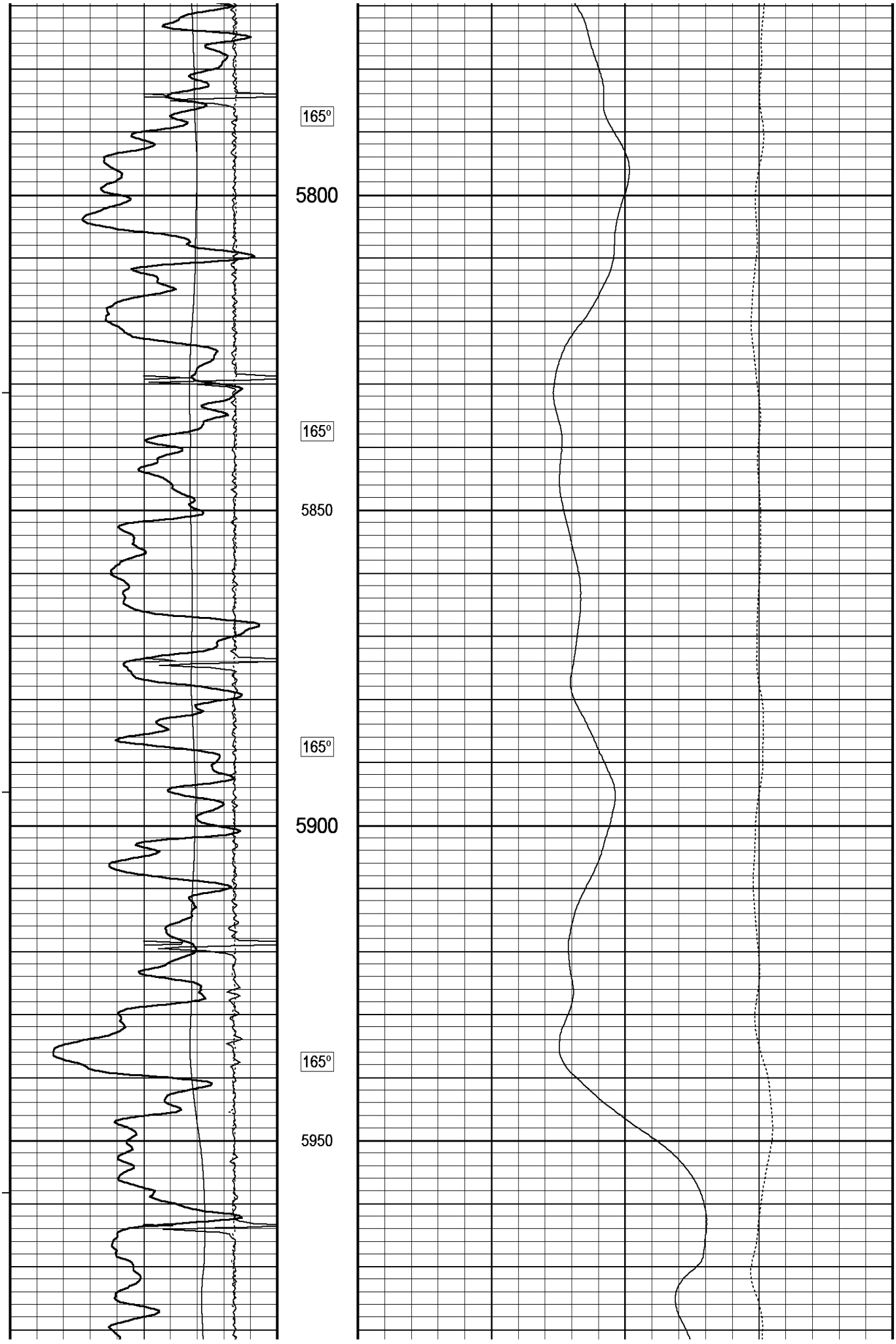
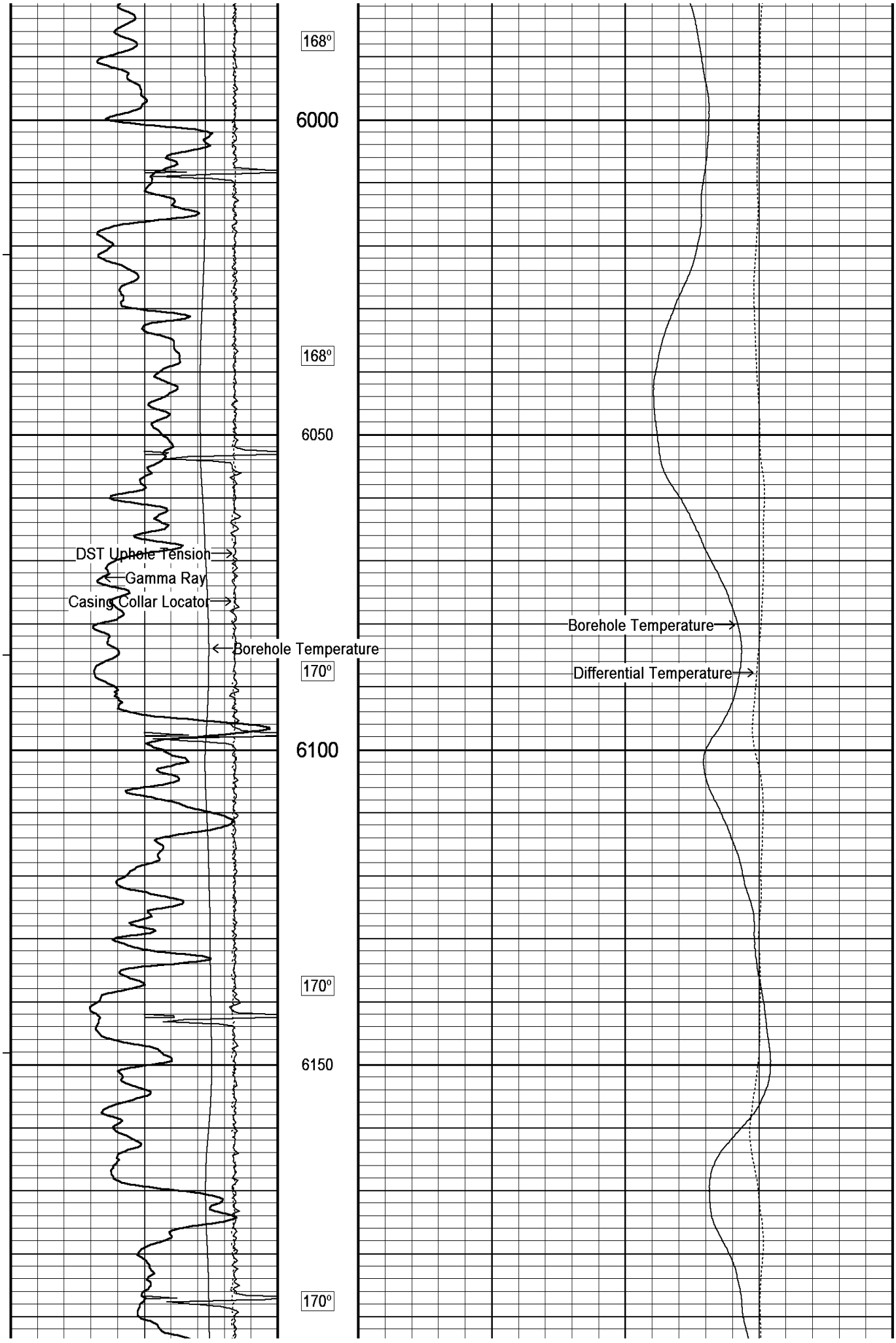
4950
155°
5000
156°
5050
154°
5100

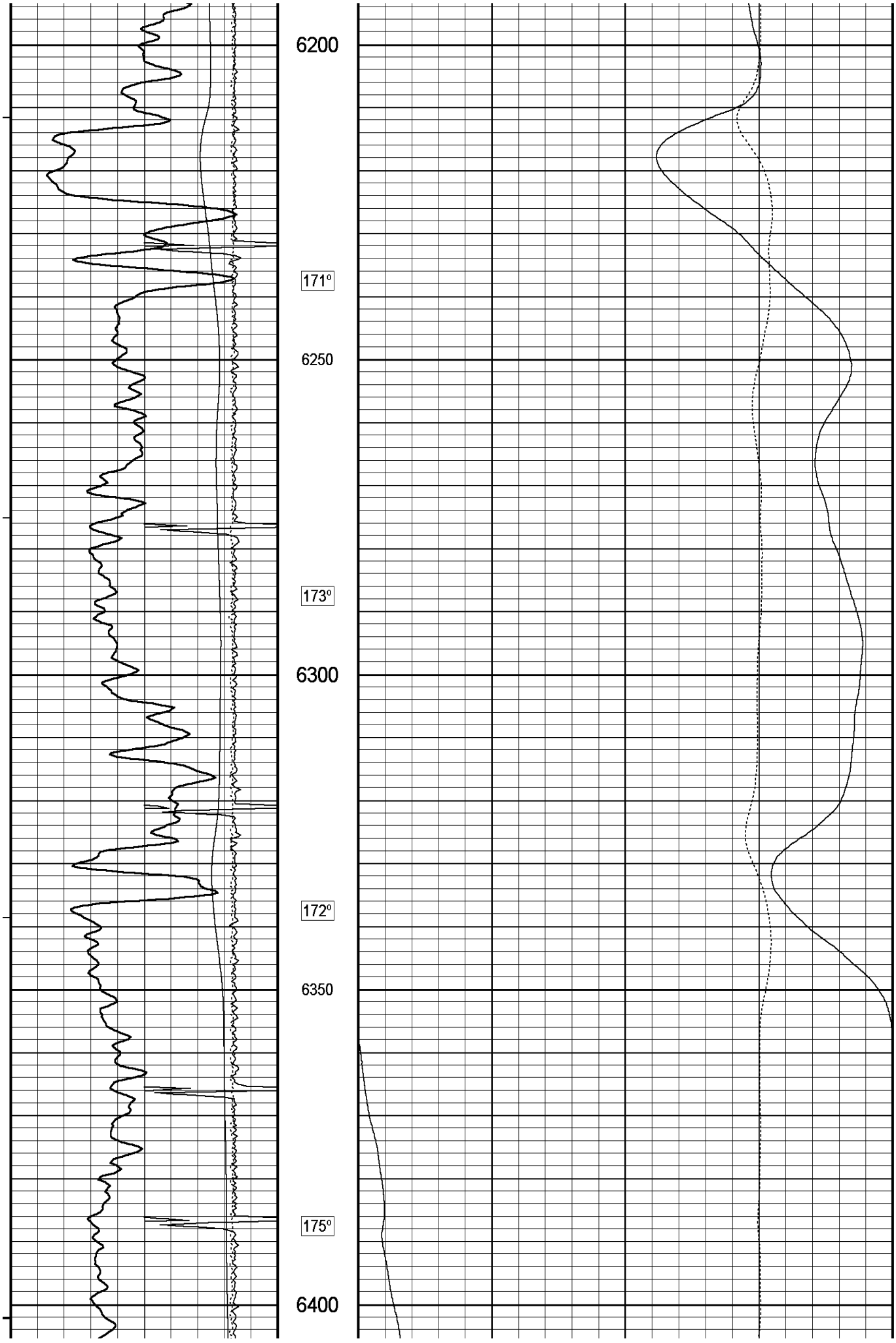

156°
5150
158°
5200
157°
5250
160°
5300
159°
DST Uphole Tension
Gamma Ray
Casing Collar Locator
Borehole Temperature
Borehole Temperature
Differential Temperature

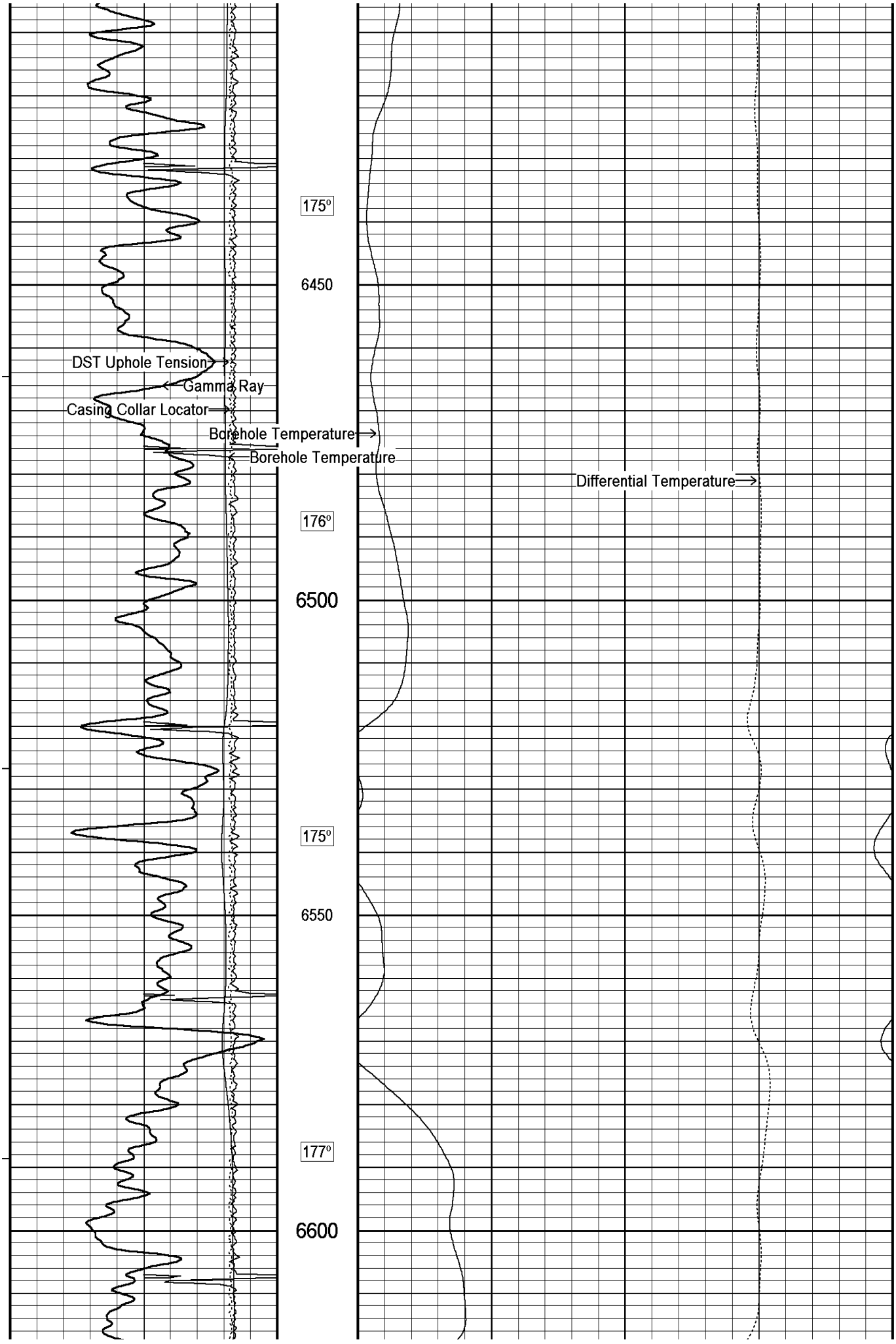

5350
159°
5400
162°
5450
162°
5500
162°
5550

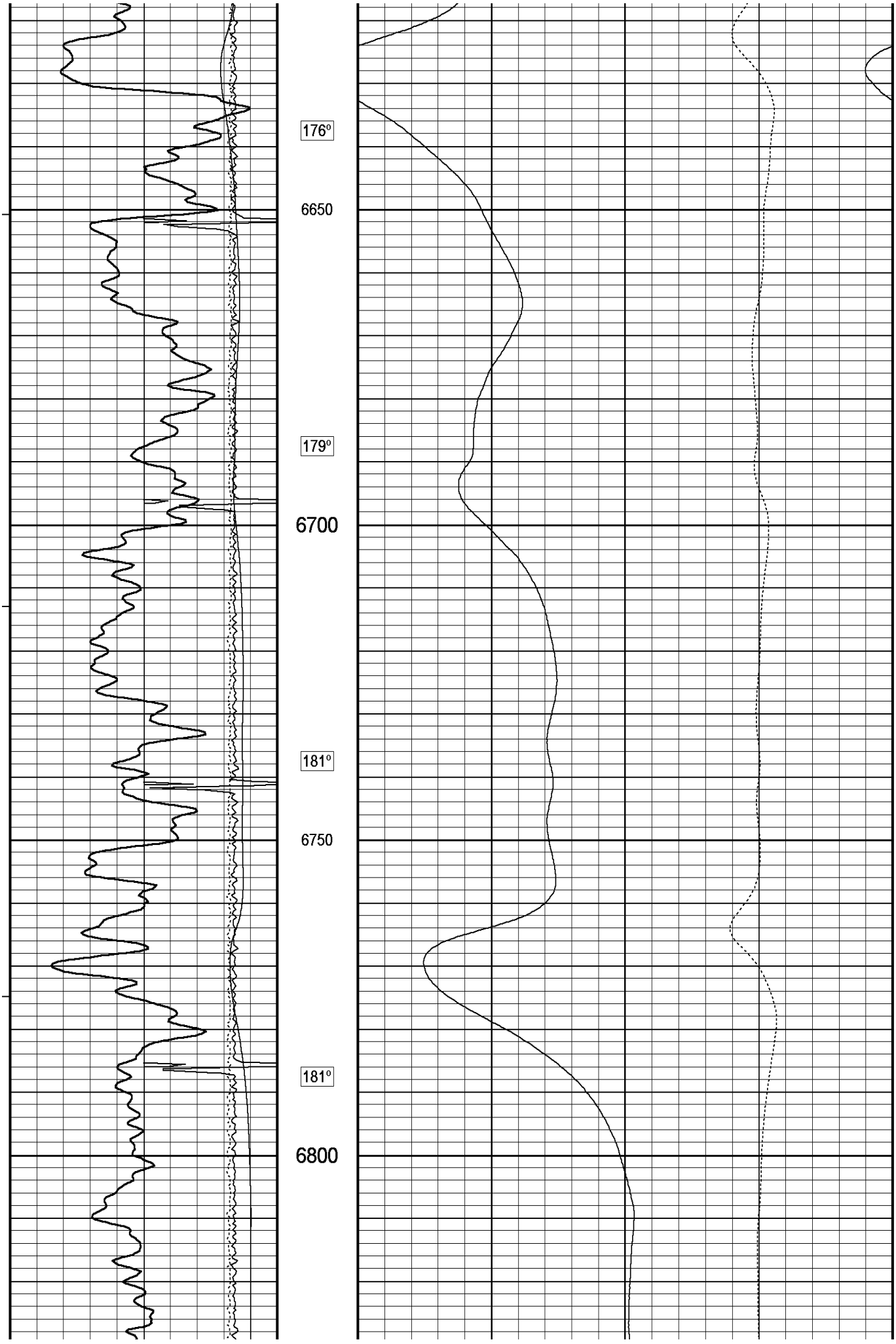

162°
5600
163°
5650
DST Uphole Tension
Gamma Ray
Casing Collar Locator
164°
Borehole Temperature
Borehole Temperature
Differential Temperature
5700
163°
5750

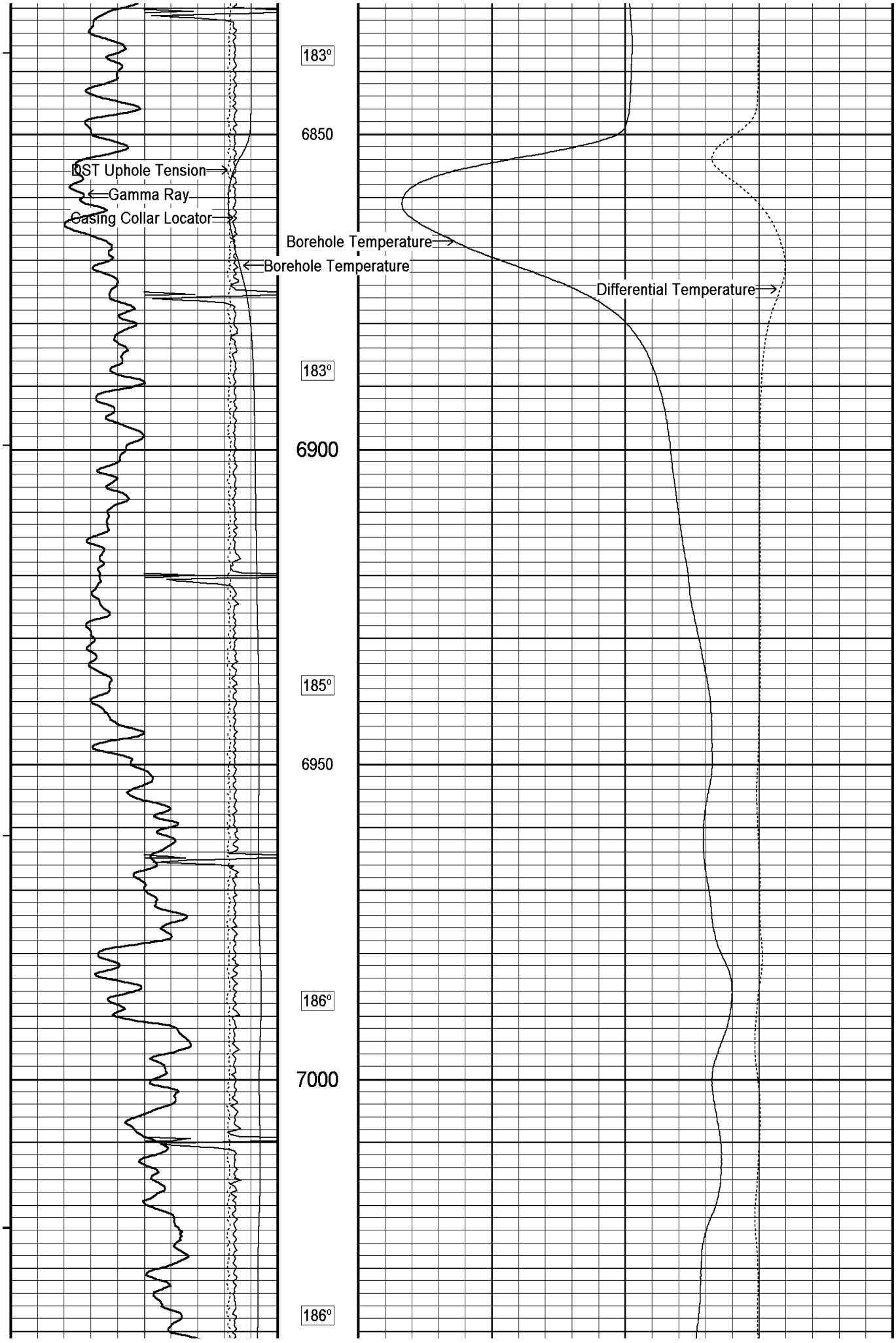

165°
5800
165°
5850
165°
5900
165°
5950

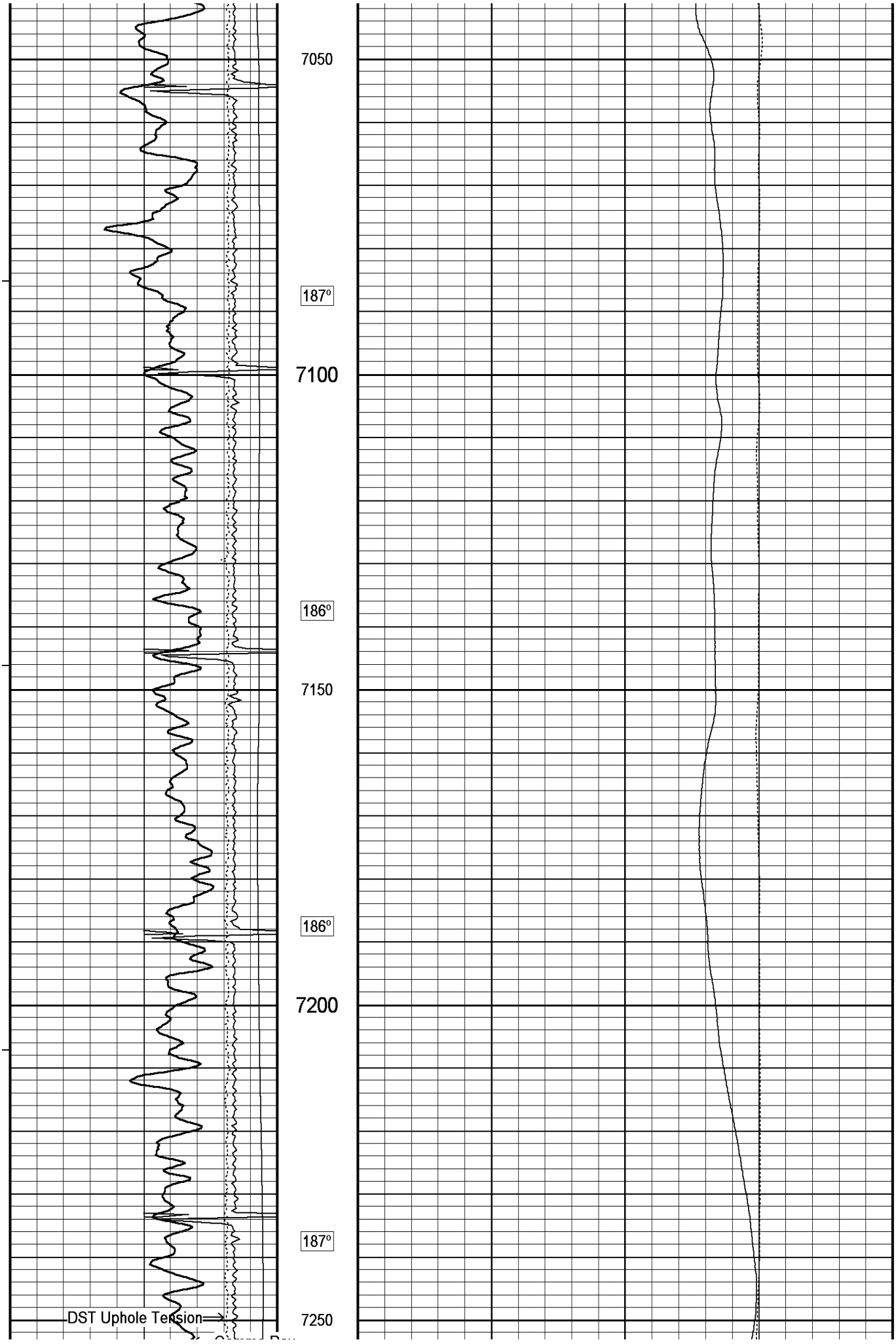

168°
6000
168°
6050
DST Uphole Tension
Gamma Ray
Casing Collar Locator
Borehole Temperature
170°
6100
170°
6150
170°
Borehole Temperature
Differential Temperature

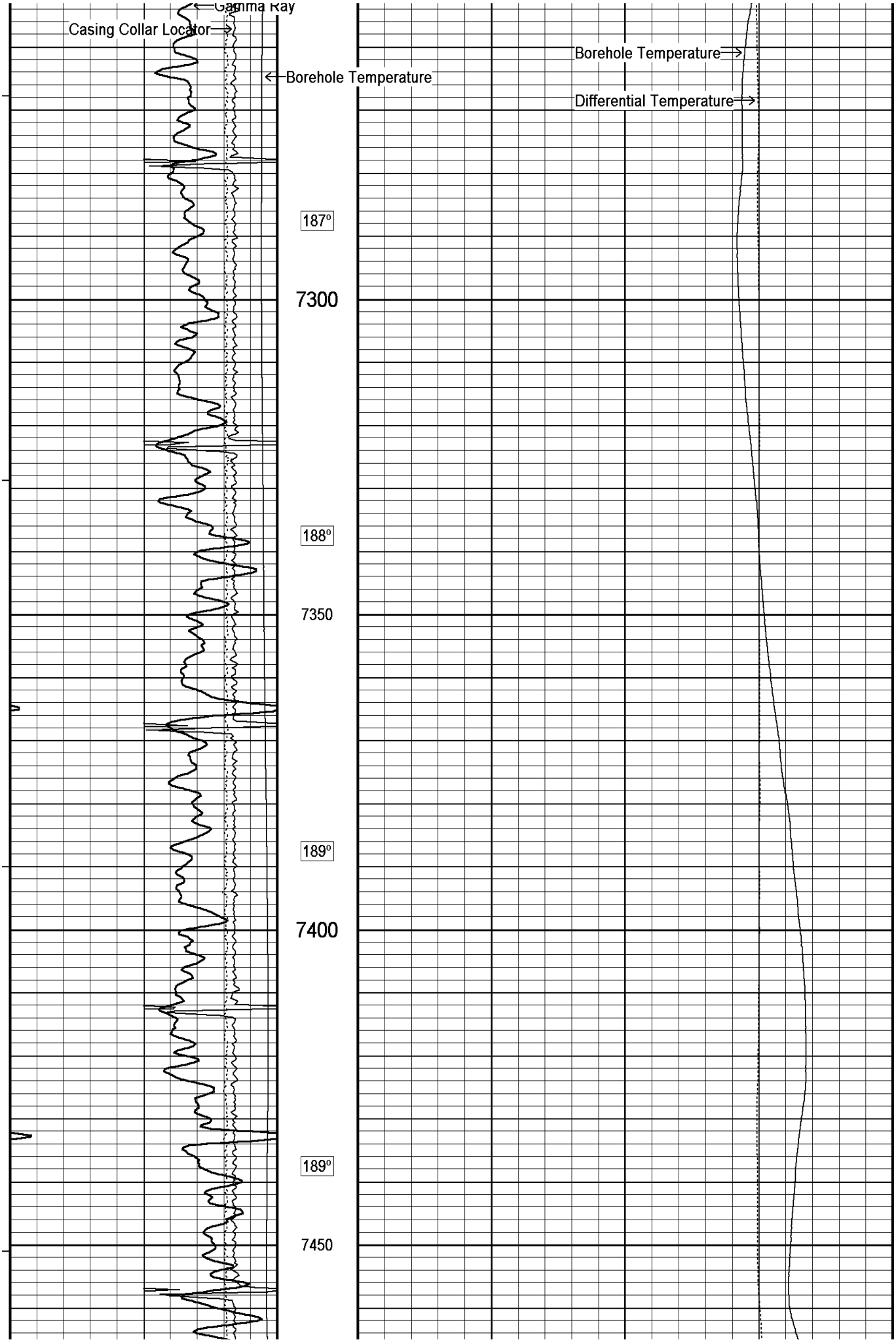

6200
171°
6250
173°
6300
172°
6350
175°
6400

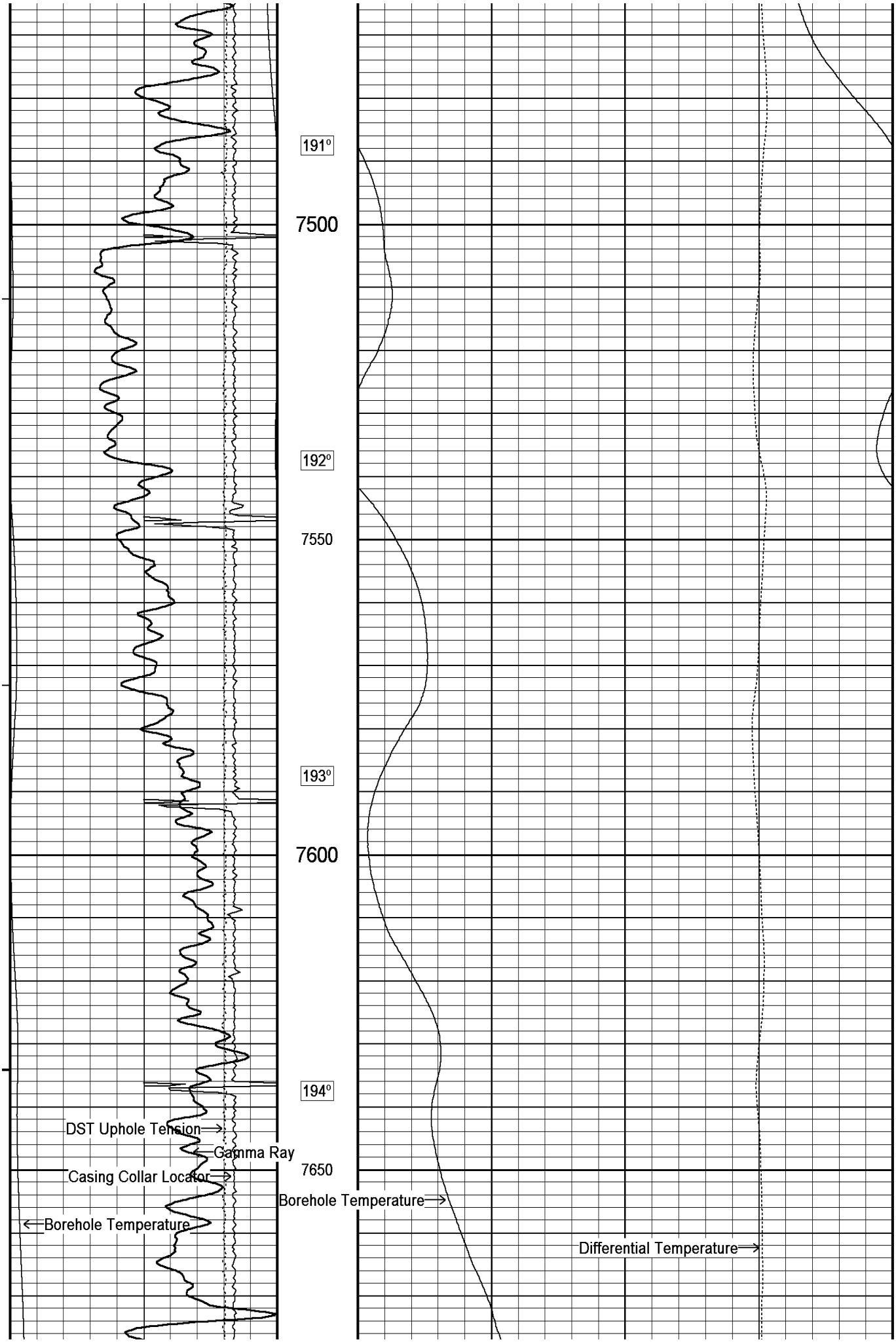

175°
6450
DST Uphole Tension
Gamma Ray
Casing Collar Locator
Borehole Temperature
Borehole Temperature
Differential Temperature
176°
6500
175°
6550
177°
6600

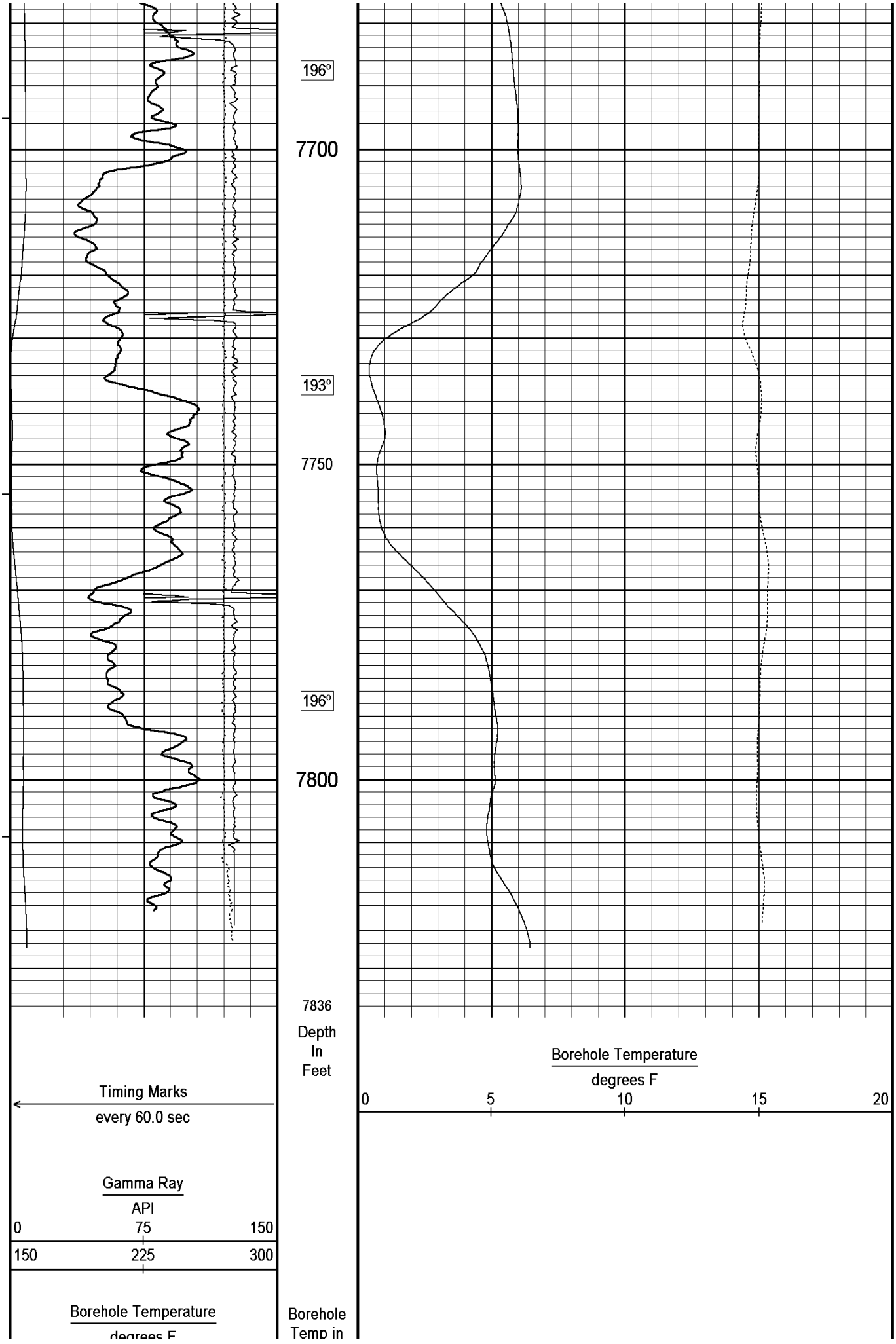

176°
6650
179°
6700
181°
6750
181°
6800

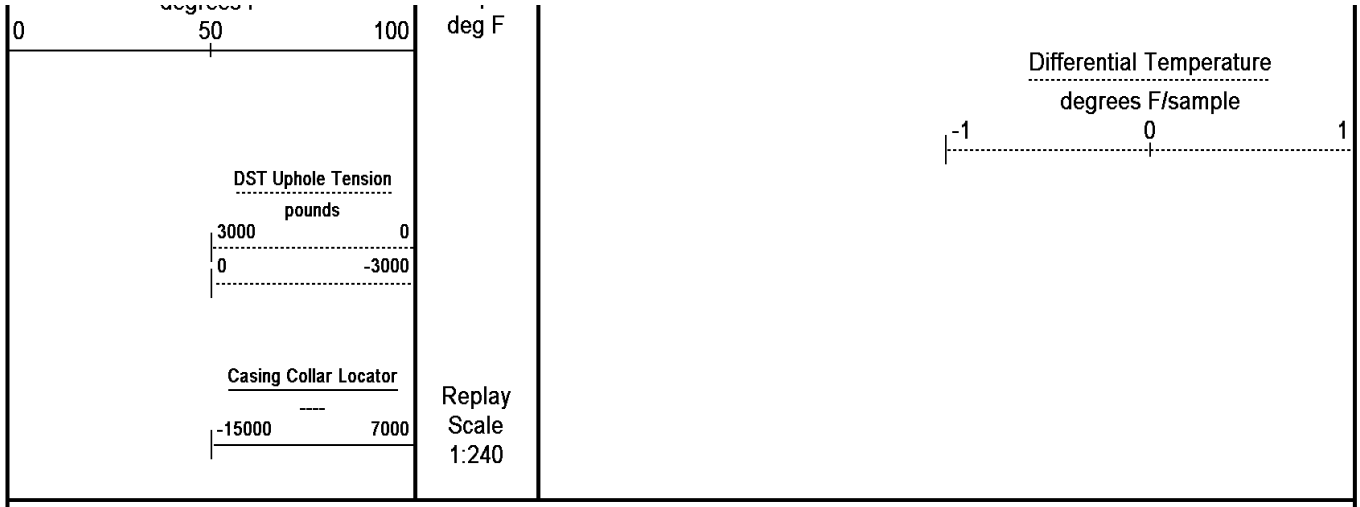

183°
6850
DST Uphole Tension
Gamma Ray
Casing Collar Locator
Borehole Temperature
Borehole Temperature
Differential Temperature
183°
6900
185°
6950
186°
7000
186°


7050
187°
7100
186°
7150
186°
7200
187°
DST Uphole Tension
7250


Gamma Ray
Casing Collar Locator
Borehole Temperature
Borehole Temperature
Differential Temperature
187°
7300
188°
7350
189°
7400
189°
7450


191°
7500
192°
7550
193°
7600
194°
7650
DST Uphole Tension
Gamma Ray
Casing Collar Locator
Borehole Temperature
Borehole Temperature
Differential Temperature


196°
7700
193°
7750
196°
7800
7836
Depth
In
Feet
Timing Marks
every 60.0 sec
Gamma Ray
API
0
75
150
150
225
300
Borehole Temperature
degrees F
Borehole
Temp in
Borehole Temperature
degrees F
0
5
10
15
20



Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 21-NOV-2010 09:55
Filename: C:\Minimus\LOGS\Bill Barrett Temp Logs\GGU Miller 24D-32-691 (Temp)\Temp.dta — Recorded on 21-NOV-2010 07:40
System Versions: Logged with 10.07.0791 Plotted with 10.07.0791

5 INCH MAIN LOG

BEFORE SURVEY CALIBRATION

C:\Minimus\LOGS\Bill Barrett Temp Logs\GGU Miller 24D-32-691 (Temp)\Temp.dta

General Constants All 000

Last Edited on 21-NOV-2010,07:01

General Parameters		
Mud Resistivity	1.000	ohm-metres
Mud Resistivity Temperature	75.000	degrees F
Water Level	0.000	feet
Density/Neutron Processing	Wet Hole	
Hole/Annular Volume and Differential Caliper Parameters		
HVOL Caliper 1	Bit Size	
HVOL Caliper 2	None	
Annular Volume Diameter	4.500	inches
Caliper for Differential Caliper	None	
Rwa Parameters		
Porosity used	N/A	
Resistivity used	N/A	
RWA Constant A	N/A	
RWA Constant M	N/A	

Down-hole Tension Calibration SMS 000

Field Calibration on 20-NOV-2010 11:09

Reading No	Measured	Calibrated (lbs)
1	15548.93	0.00
2	17625.57	365.00

High Resolution Temperature Calibration MCG 287

Field Calibration on 21-NOV-2010,07:02

	Measured	Calibrated(Deg F)
Lower	10.00	10.00
Upper	100.00	100.00

High Resolution Temperature Constants MCG 287

Last Edited on 27-OCT-2010,11:54

Pre-filter Length	11

SP Calibration MCG 287

Field Calibration on 20-NOV-2010,11:20

	Measured	Calibrated (mV)
Reference 1	95.0	104.2
Reference 2	-87.4	-104.5

Gamma Calibration MCG 287

Gamma Calibration MCG 287

Field Calibration on 21-NOV-2010,07:02

	Measured	Calibrated (API)
Background	90	62
Calibrator (Gross)	848	589
Calibrator (Net)	759	527

Gamma Constants MCG 287 — Last Edited on 21-NOV-2010,07:02

Gamma Calibrator Number	GRC-174	
Mud Density	1.00	gm/cc
Caliper Source for Processing	Bit Size	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

High Resolution Temperature Calibration MHT 011

Field Calibration on 21-NOV-2010,07:02

	Measured	Calibrated(Deg F)
Lower	80.57	61.00
Upper	140.33	129.00

High Resolution Temperature Constants MHT 011 — Last Edited on 29-JAN-2010,07:05

Pre-filter Length	11

DOWNHOLE EQUIPMENT

C:\Minimus\LOGS\Bill Barrett Temp Logs\GGU Miller 24D-32-691 (Temp)\Temp.dta

3/8" Triple Cone Cable Head (MCB C A)
MCB 5 Length: 1.58 ft Weight: 15.4 lb

SHA-J.A Compact Swivel Head Adaptor
SHA 213 Length: 2.30 ft Weight: 22.0 lb

Compact Gamma
MCG 287 Length: 8.70 ft Weight: 63.9 lb

Compact High Resolution Temperature
MHT 11 Length: 1.53 ft Weight: 13.2 lb

Total Length: 14.10 ft Weight: 114.6 lb

4.94 ft	GRGC - Gamma Ray
2.76 ft	CCLG - Casing Collar Locator
2.03 ft	CGXT - MCG External Temperature
0.00 ft	BHTF - Borehole Temperature
Tool Zero	(0.13ft from bottom)
-0.13 ft	SMTU - DST Uphole Tension

All measurements relative to tool zero.

COMPANY	BILL BARRETT CORPORATION
WELL	GGU MILLER 24D-32-691
FIELD	GIBSON GULCH
PROVINCE/COUNTY	GARFIELD
COUNTRY/STATE	U.S.A. / COLORADO

Elevation Kelly Bushing	6142.00	feet	First Reading	7815.00	feet
Elevation Drill Floor	6141.00	feet	Depth Driller	7875.00	feet
Elevation Ground Level	6120.00	feet	Depth Logger	7815.00	feet

Weatherford®

TEMPERATURE LOG