



Weatherford

TEMPERATURE LOG

COMPANY

BILL BARRETT CORPORATION

WELL

GGU DALEY 21D-30-691

FIELD

GIBSON GULCH

PROVINCE/COUNTY

GARFIELD

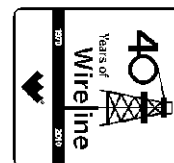
COUNTRY/STATE

U.S.A. / COLORADO

LOCATION

SHL: 236' FSL & 2009' FWL

BHL: 185' FNL & 1960' FWL



SEC

TWP

RGE

Other Services

30

6S

91W

API Number

05-045-19578

Permit Number

Permanent Datum G.L., Elevation 7290 feet

Log Measured From K.B. @ 22 FEET above Permanent Datum

Drilling Measured From K.B.

Date

08-APR-2011

Elevations:

feet

KB

DF

GL

7312.00

7311.00

7290.00

Run Number

ONE

Depth Driller

7262.00

feet

Depth Logger

7250.00

feet

First Reading

200.00

feet

Last Reading

7250.00

feet

Casing Driller

7309.00

feet

Casing Logger

7.880

inches

Hole Fluid Type

WATER

Density / Viscosity

PH / Fluid Loss

FLOW LINE

Sample Source

Rm @ Measured Temp

Rmf @ Measured Temp

Rmc @ Measured Temp

Source Rmf / Rmc

CALC

CALC

Rm @ BHT

Time Since Circulation

Max Recorded Temp

193.00

deg F

Equipment Name

COMPACT

Equipment / Base

13173

GD JCT

Recorded By

M.RICHINS

F.MRABET

Witnessed By

J.BOYD

BOREHOLE RECORD

Last Edited: 08-APR-2011 05:02

Bit Size
inchesDepth From
feetDepth To
feet

8.750

811.00

5390.00

7.880

5390.00

7310.00

CASING RECORD

Type

Size
inchesDepth From
feetShoe Depth
feetWeight
pounds/ft

SURFACE

9.625

0.00

811.00

36.00

PRODUCT

4.500

0.00

7309.00

11.60

REMARKS

TOP OF CEMENT IS APPROXIMATELY 2500 FEET.

4.5 INCH PRODUCTION CASING.

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

CORRELATED TO WEATHERFORDS OPEN HOLE LOGS.

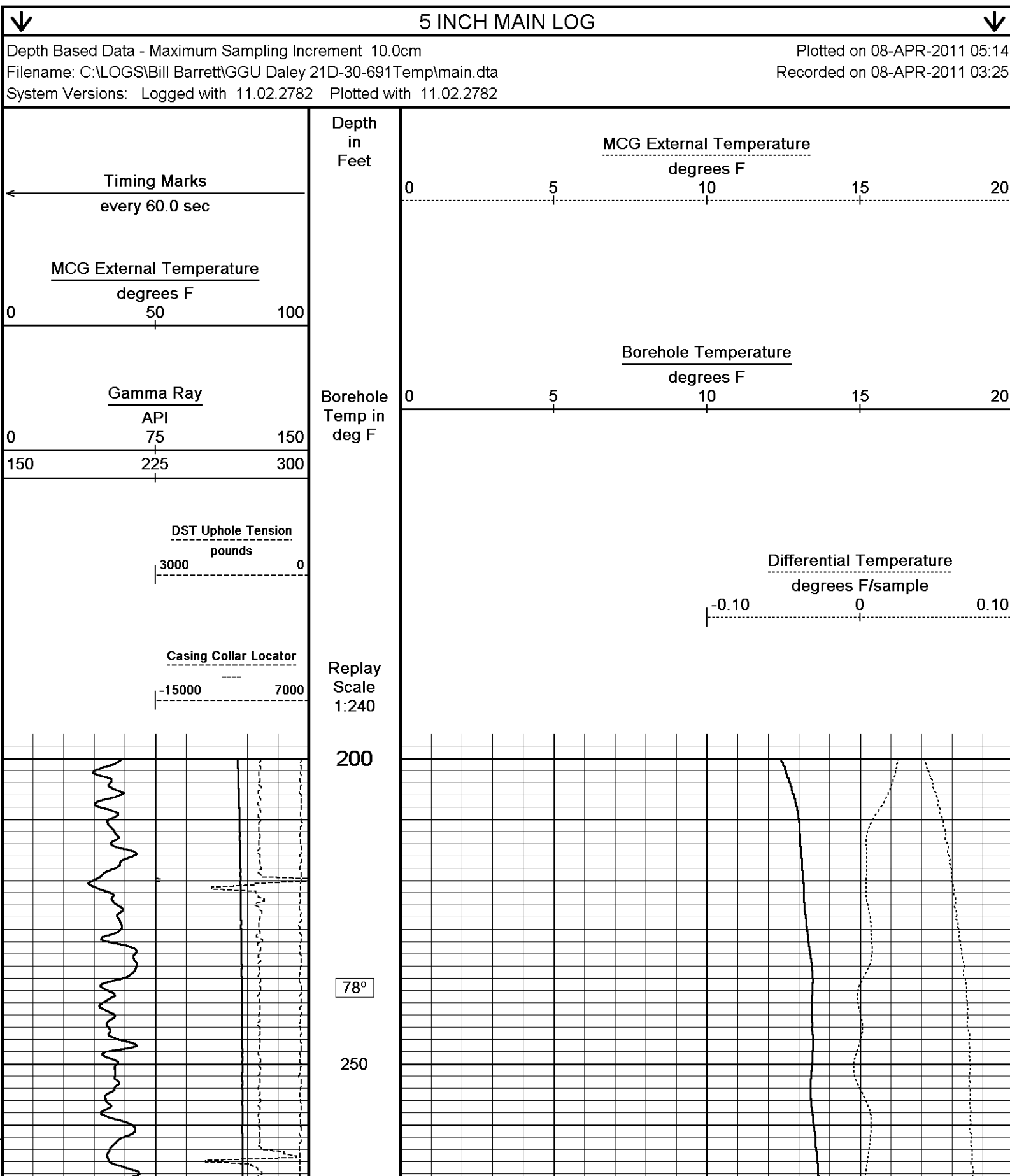
ALL INTERVALS LOGGED AND SCALED PER CUSTOMER REQUEST.

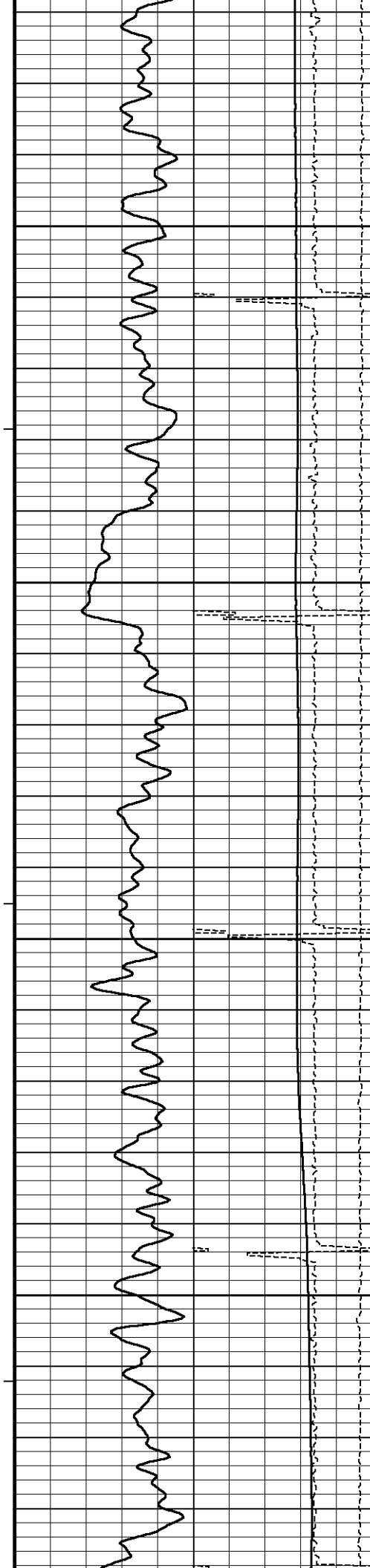
ENGINEER: M.RICHINS , F.MRABET

OPERATORS: K.BOBLITT,J.PEHRSON

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.





79°

300

79°

350

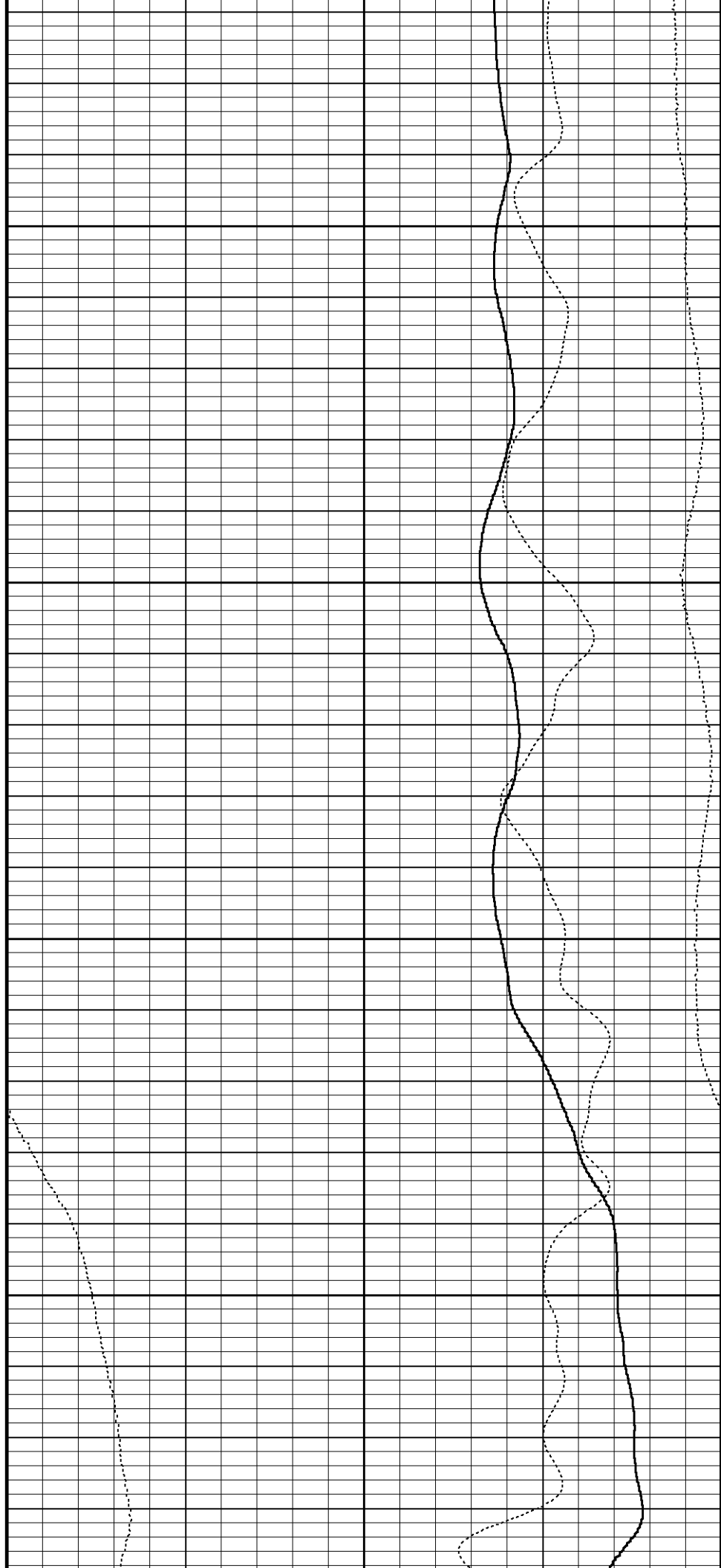
79°

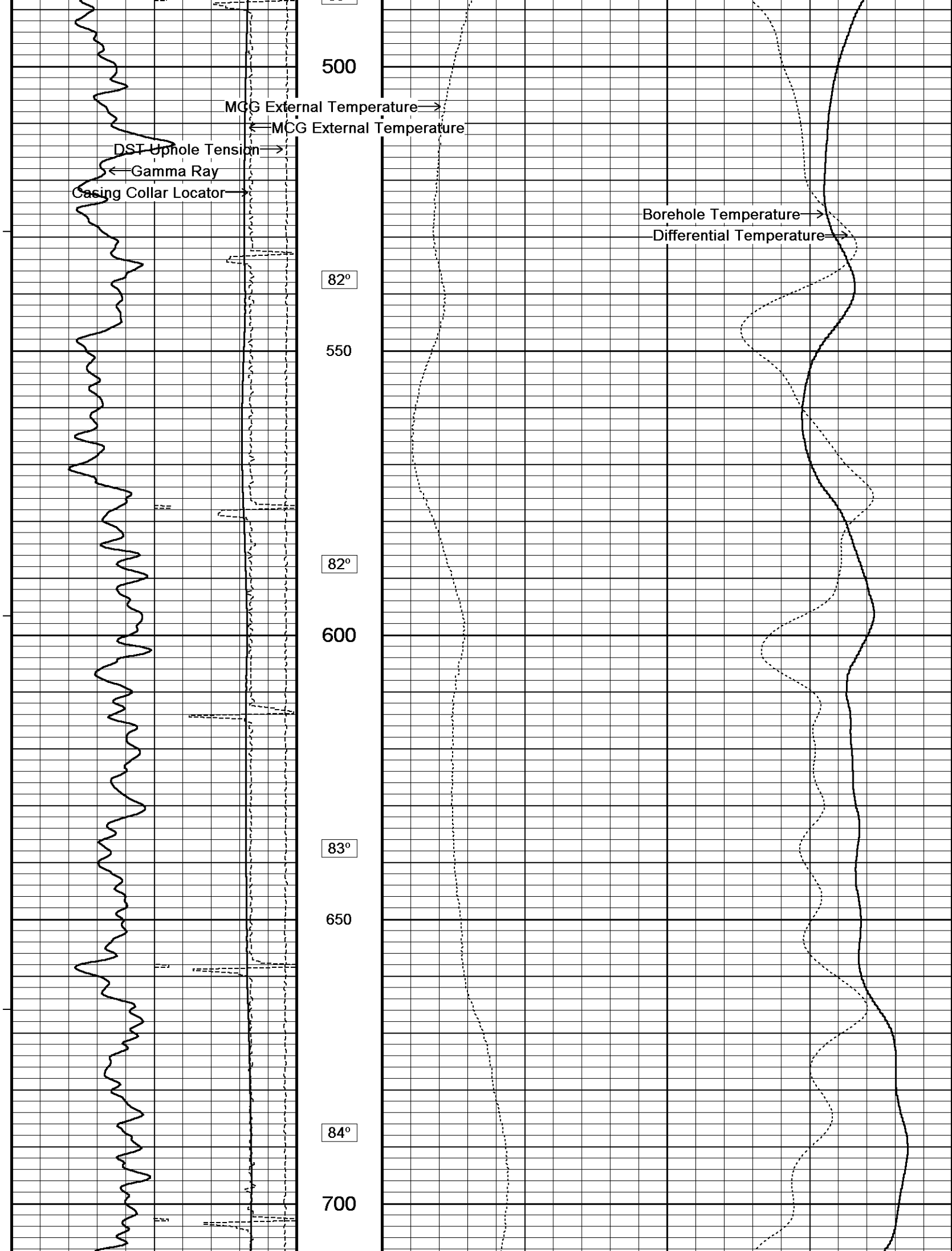
400

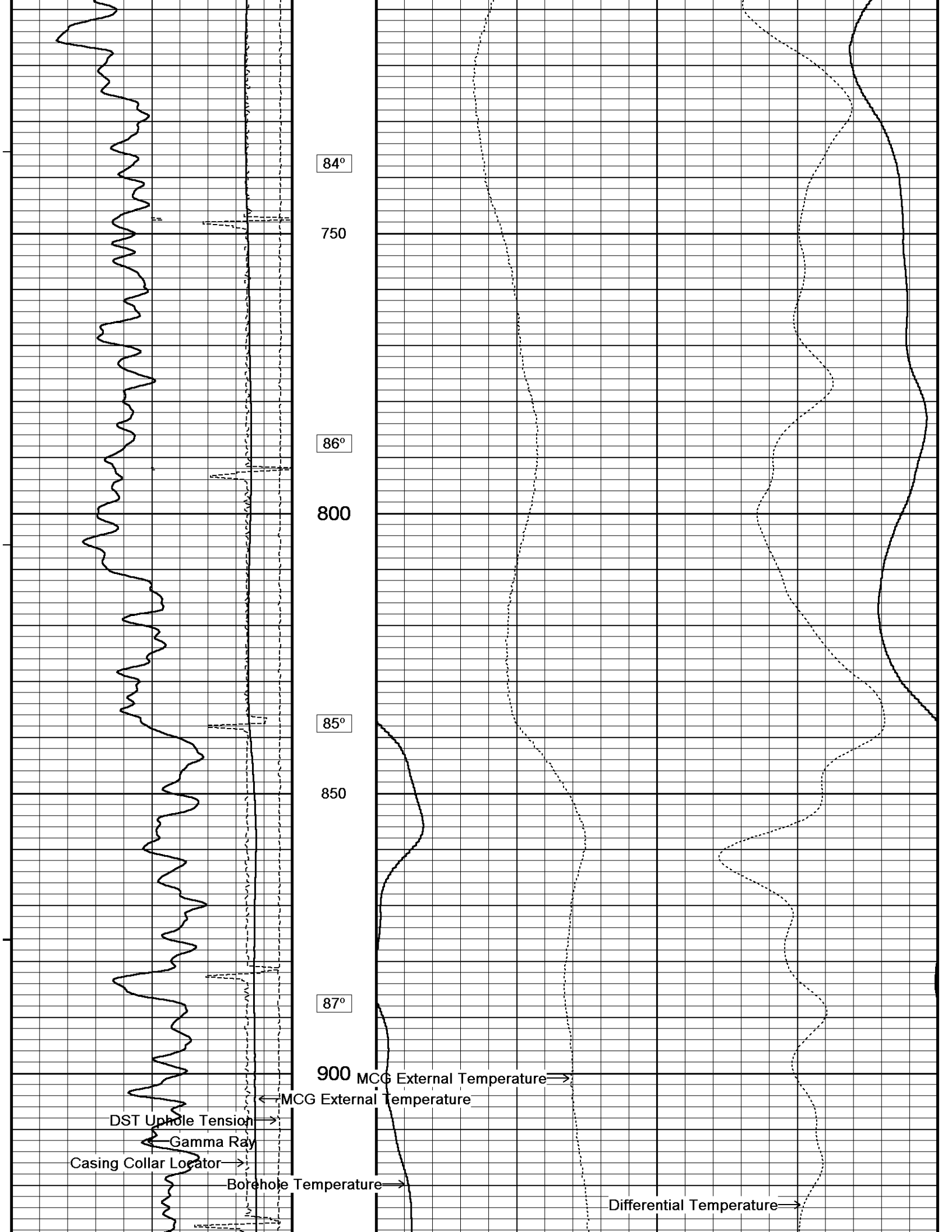
82°

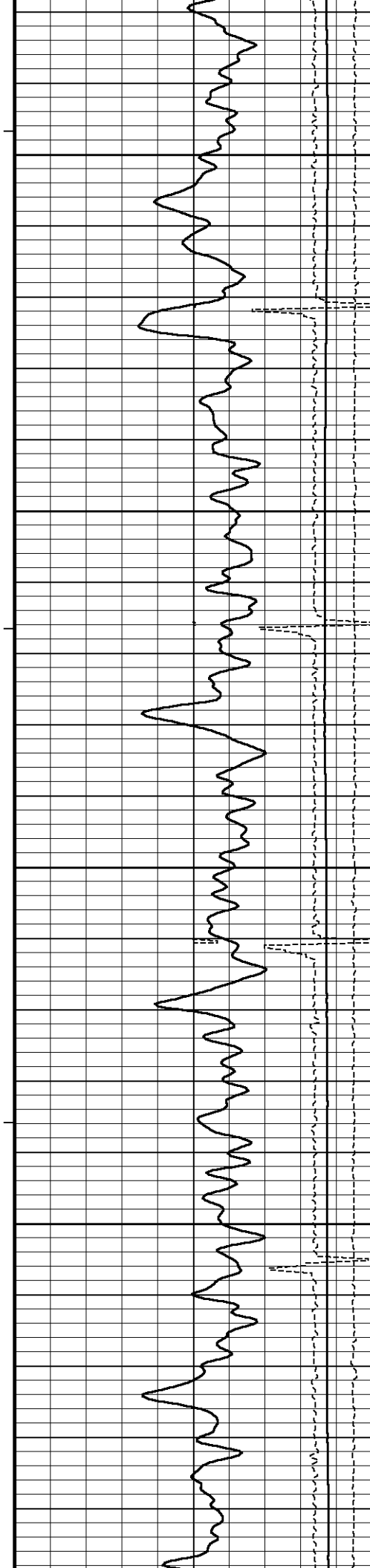
450

83°









88°

950

87°

1000

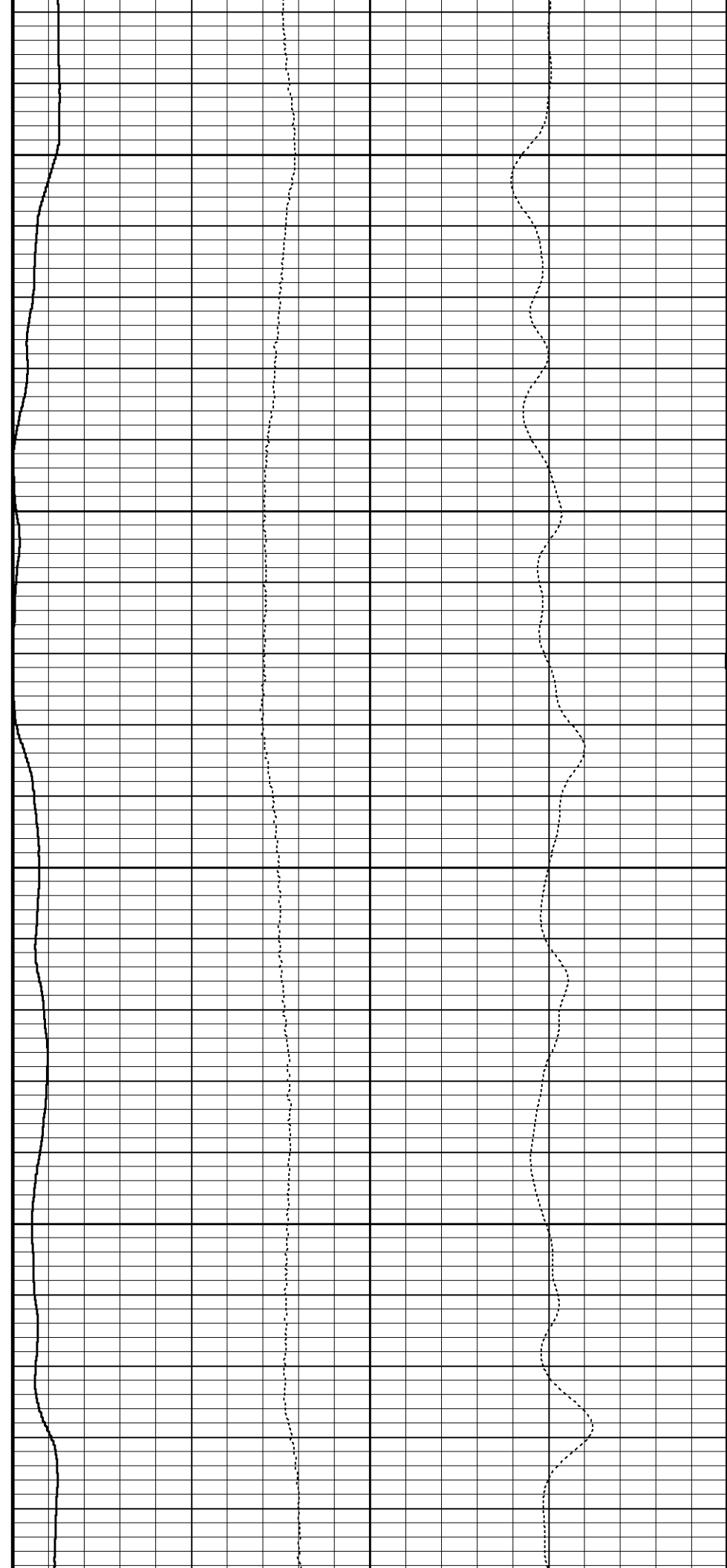
87°

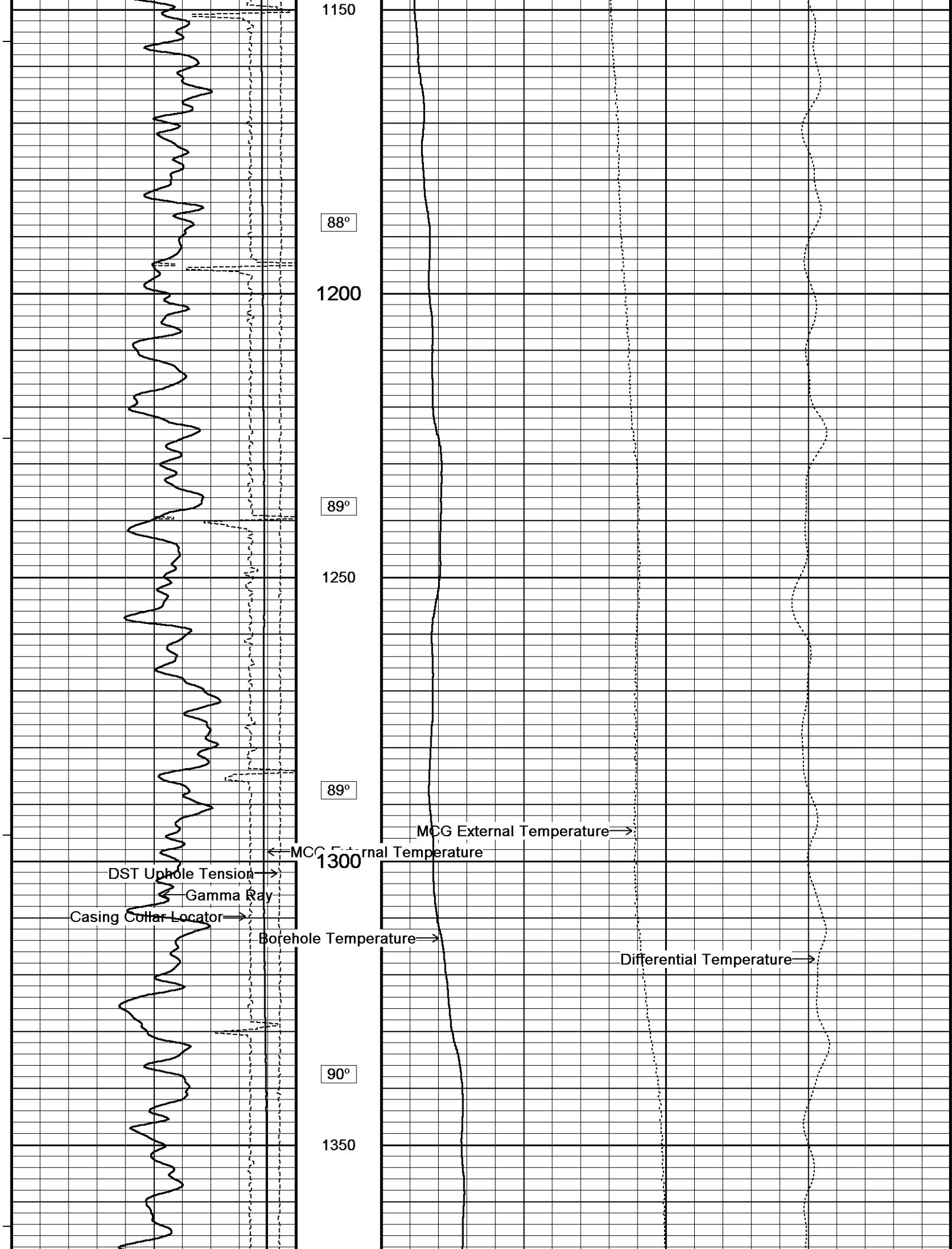
1050

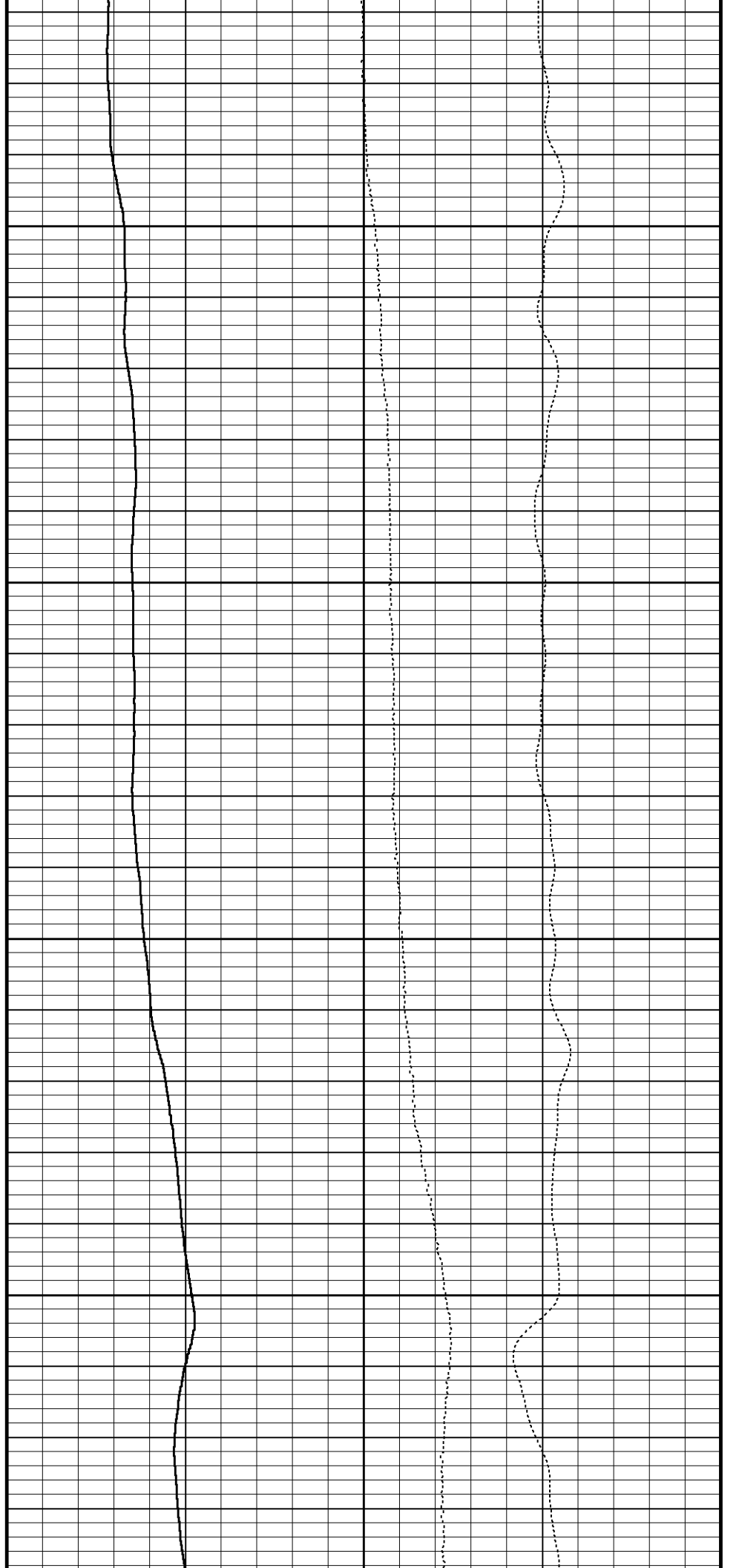
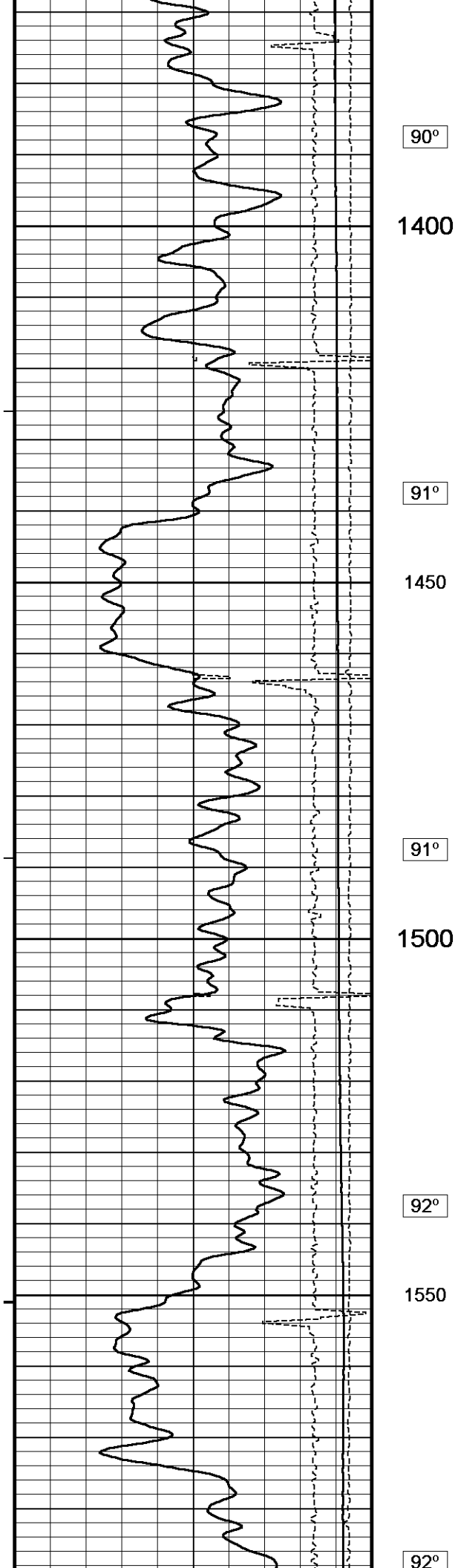
88°

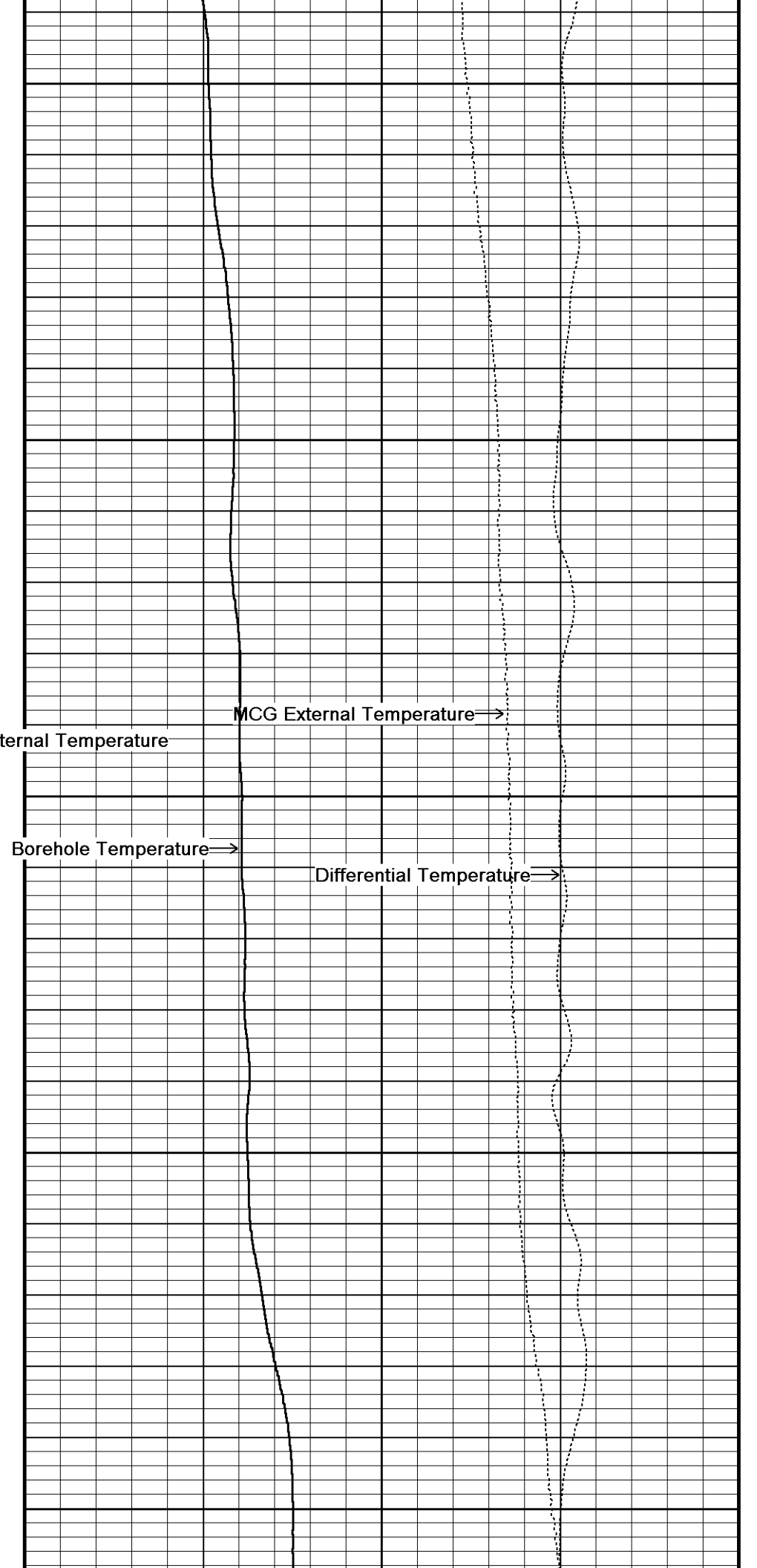
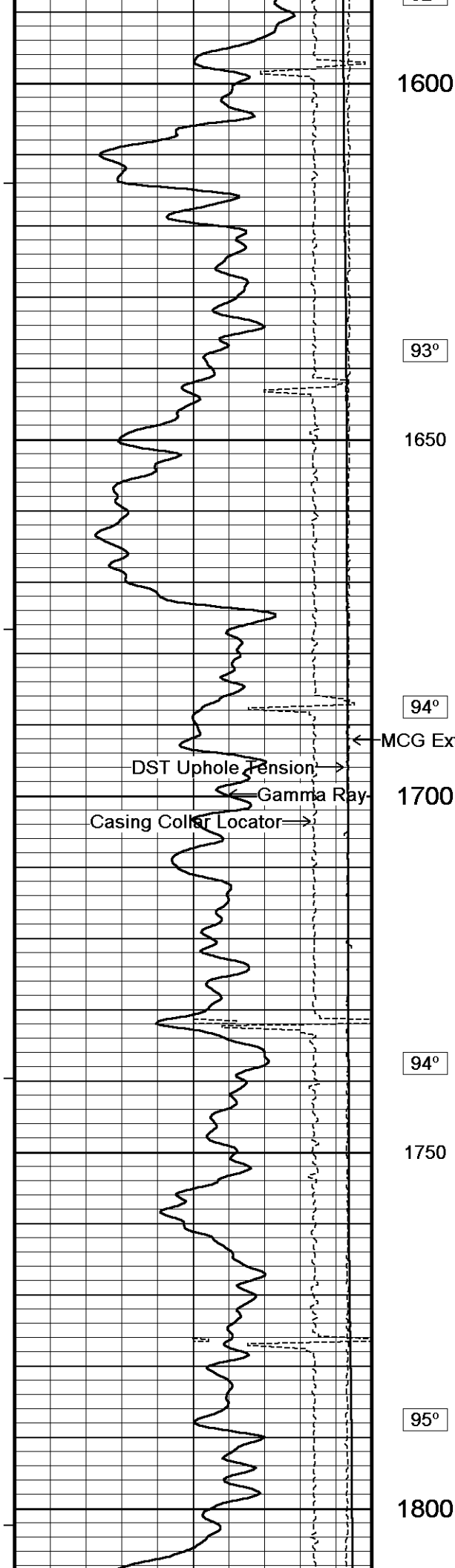
1100

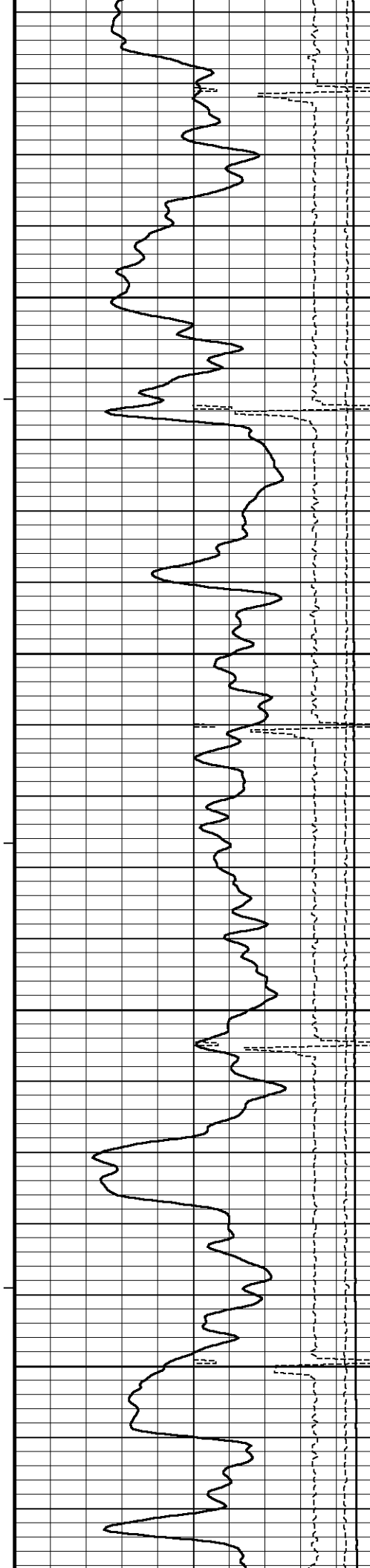
88°











95°

1850

95°

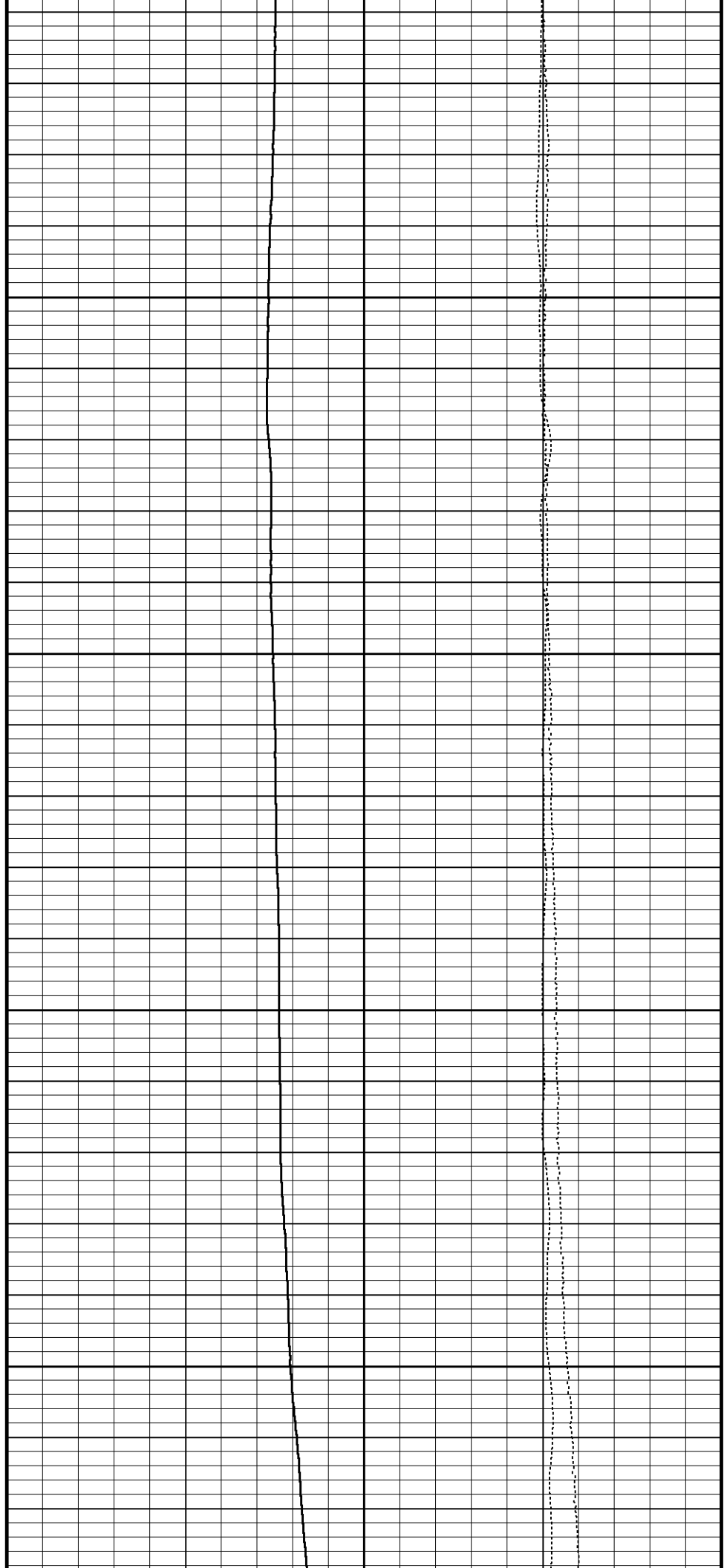
1900

95°

1950

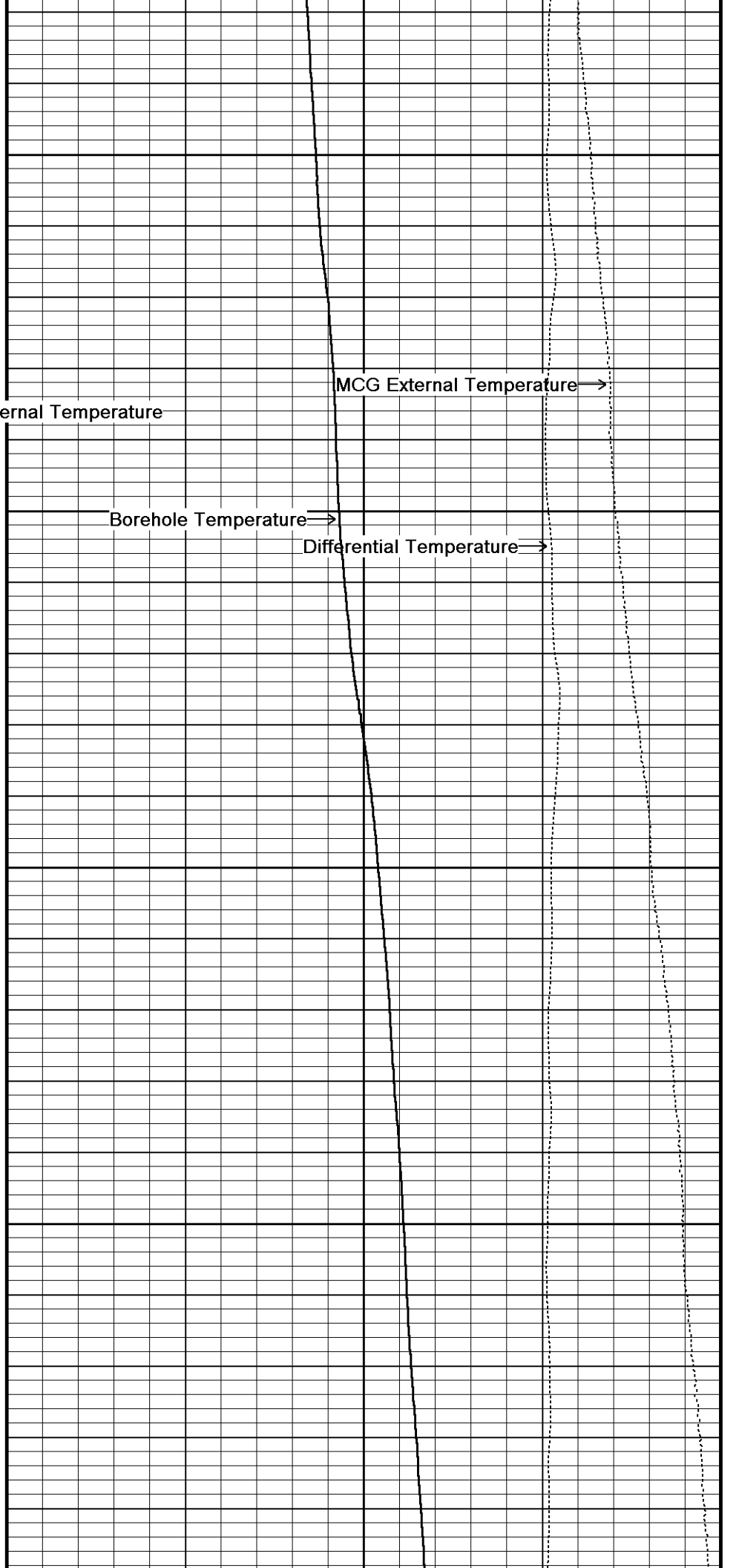
96°

2000

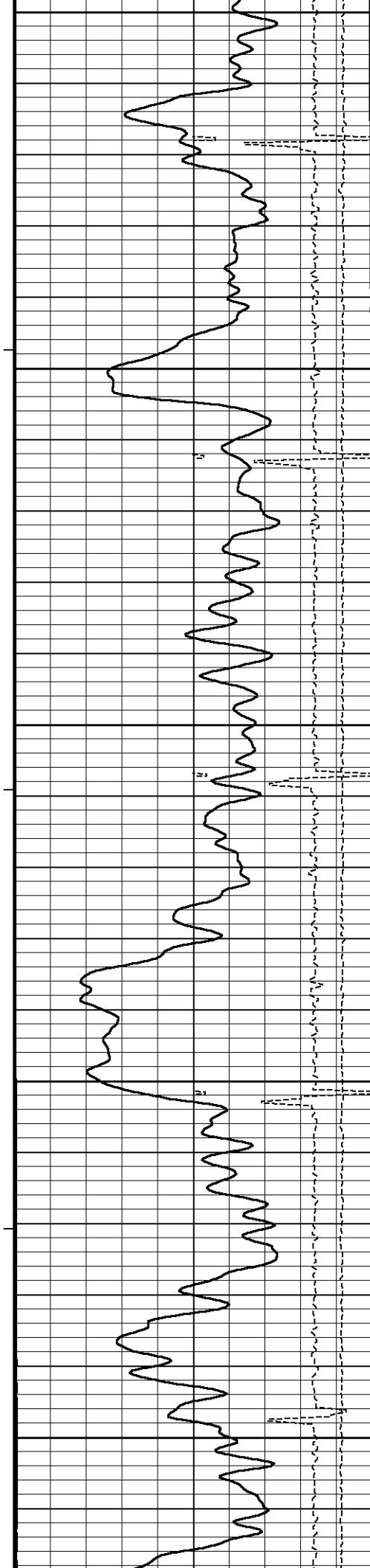




96°
2050
97°
2100
98°
2150
99°
2200
100°



DST Uphole Tension
Gamma Ray
Casing Collar Locator
MCG External Temperature
Borehole Temperature
Differential Temperature



2250

100°

2300

100°

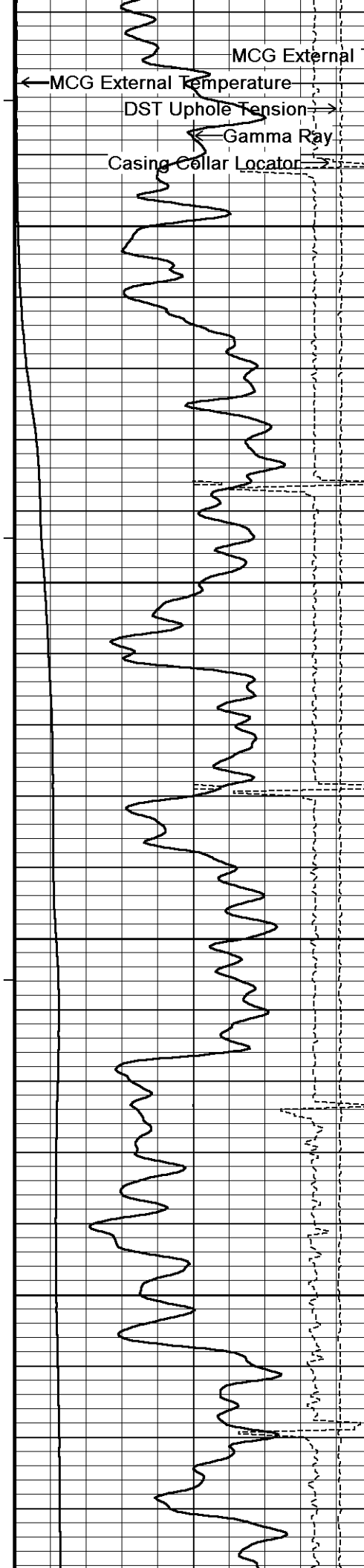
2350

101°

2400

101°

2450



101°

2500

107°

2550

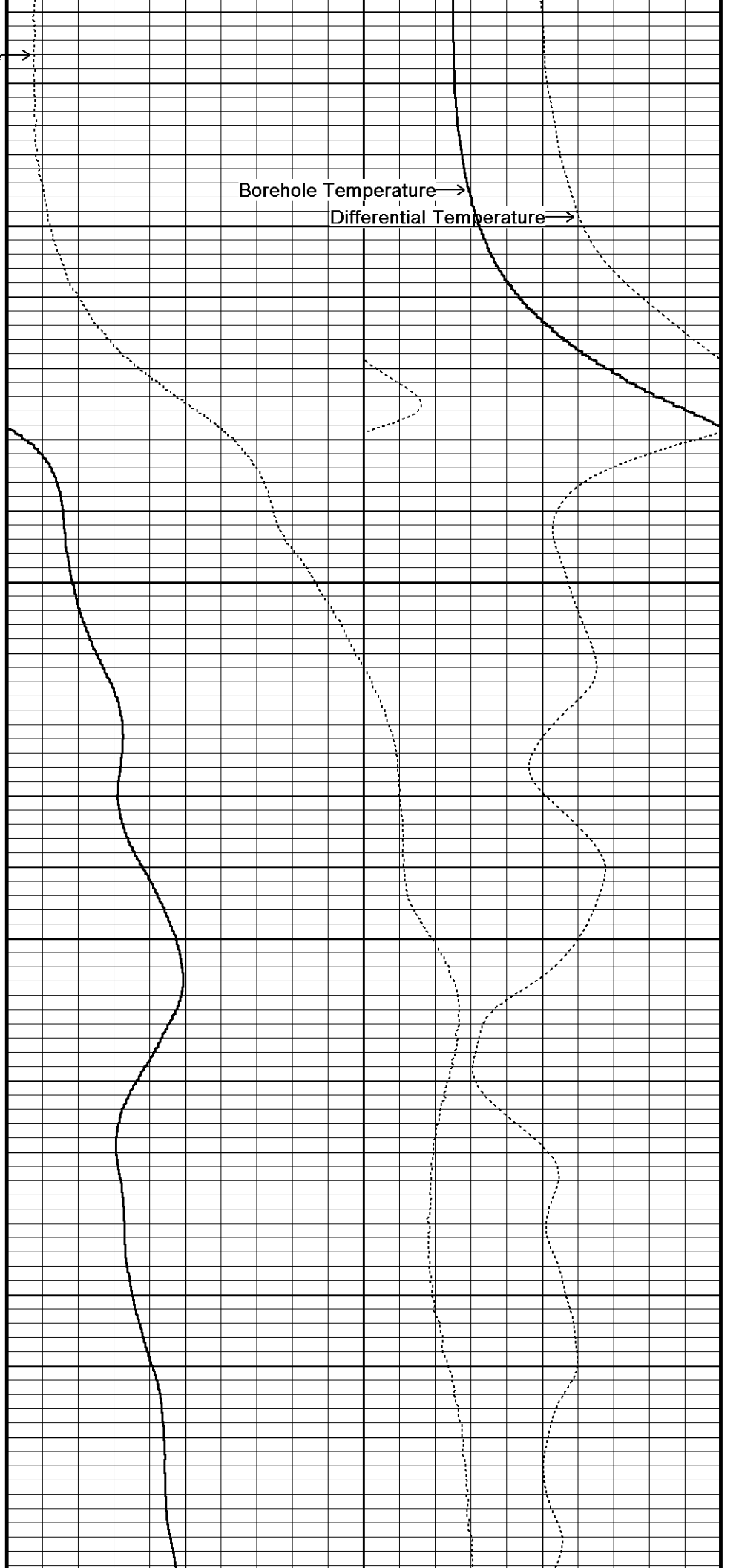
111°

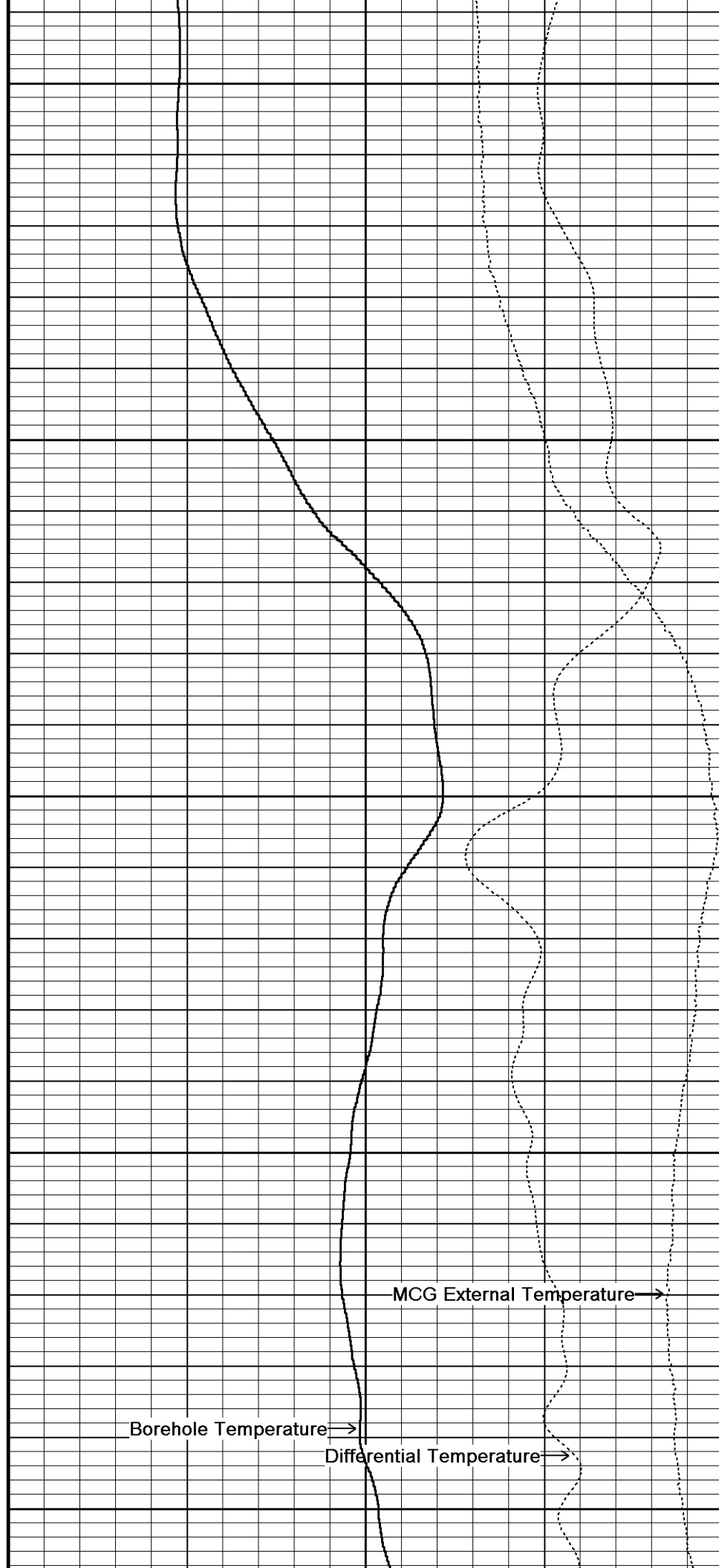
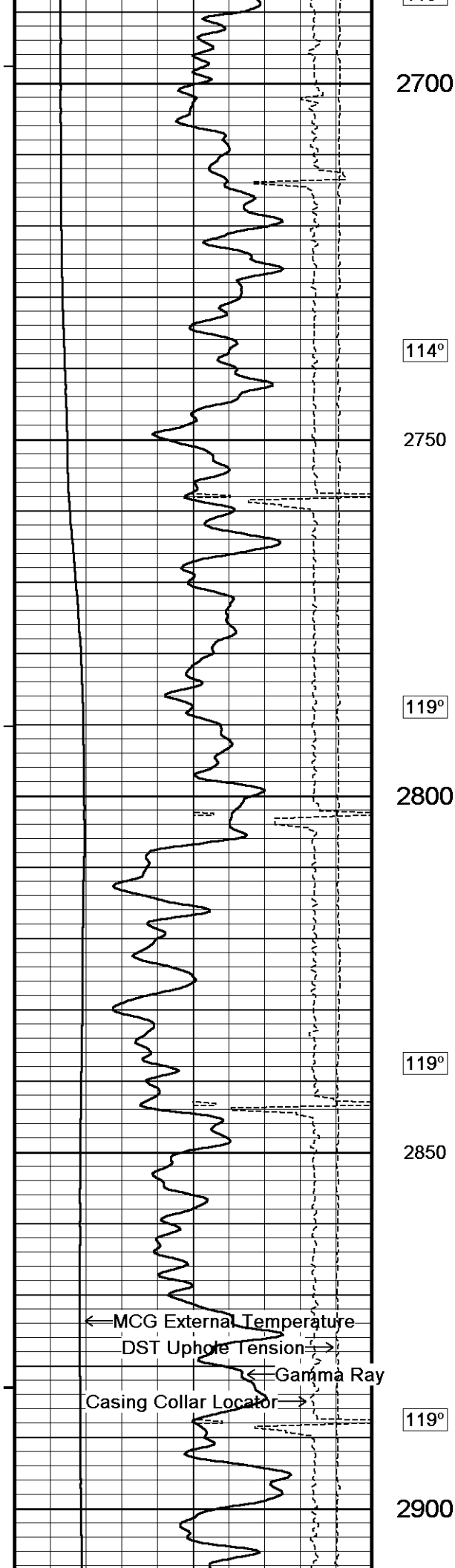
2600

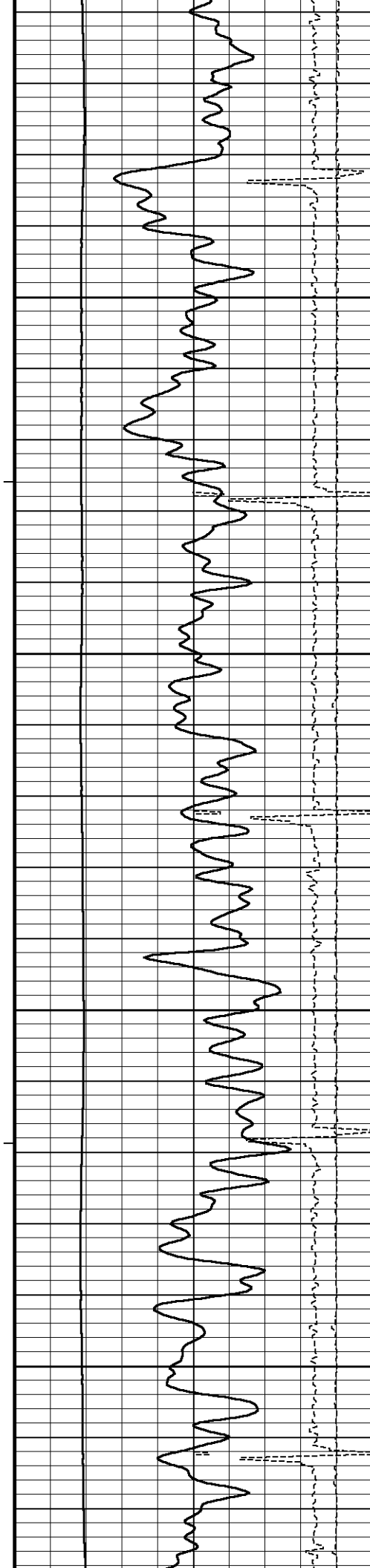
112°

2650

113°







119°

2950

119°

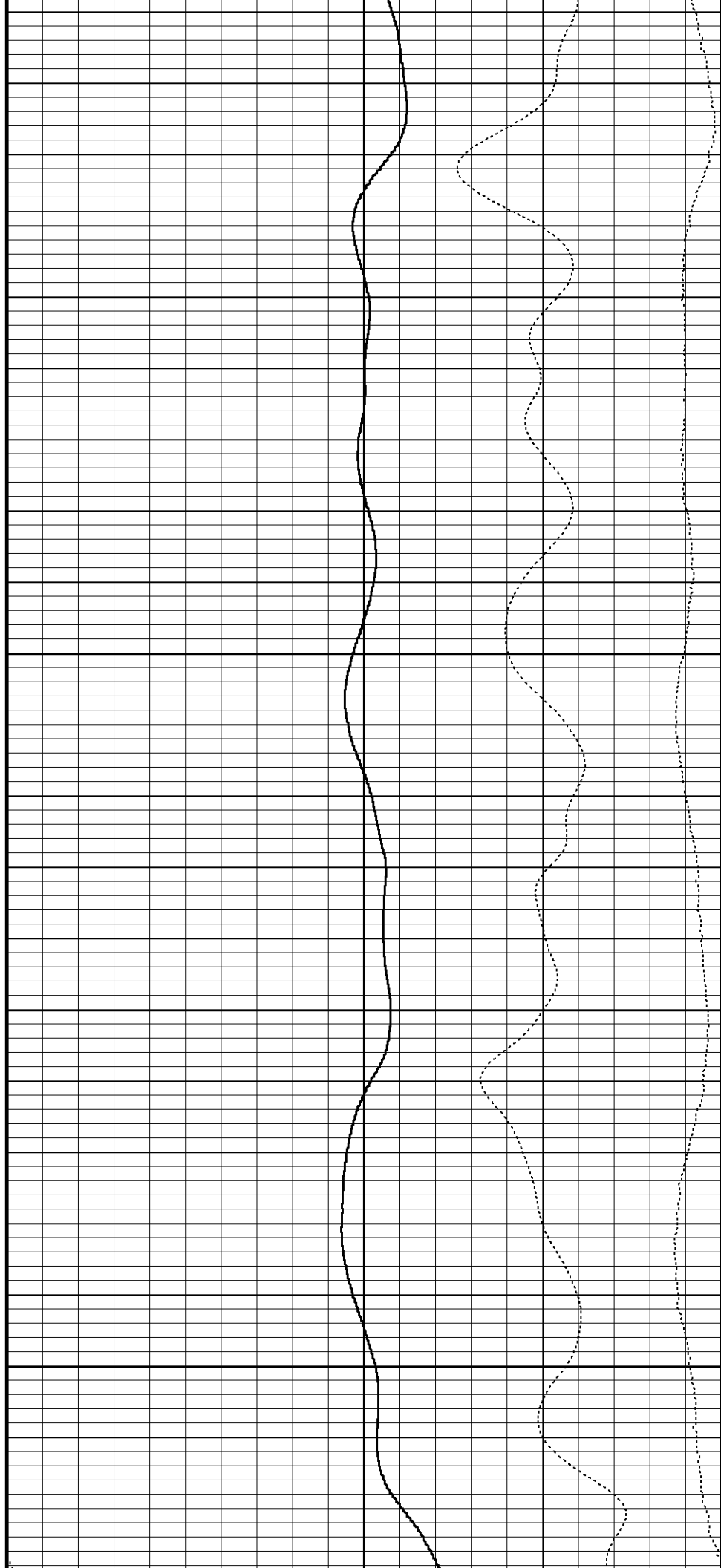
3000

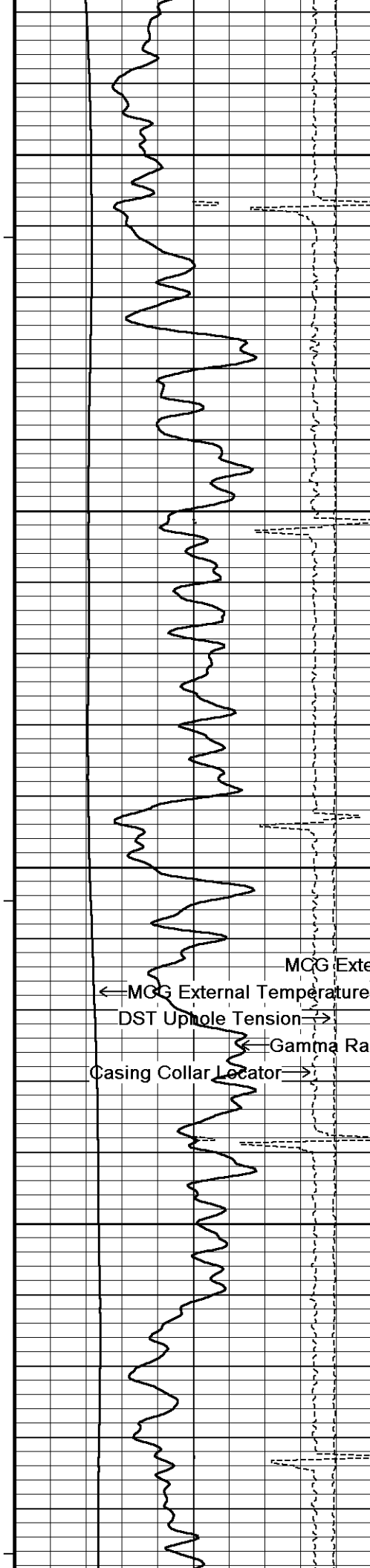
119°

3050

119°

3100





121°

3150

121°

3200

121°

3250

MCG External Temperature →

← MCG External Temperature

DST Up-hole Tension →

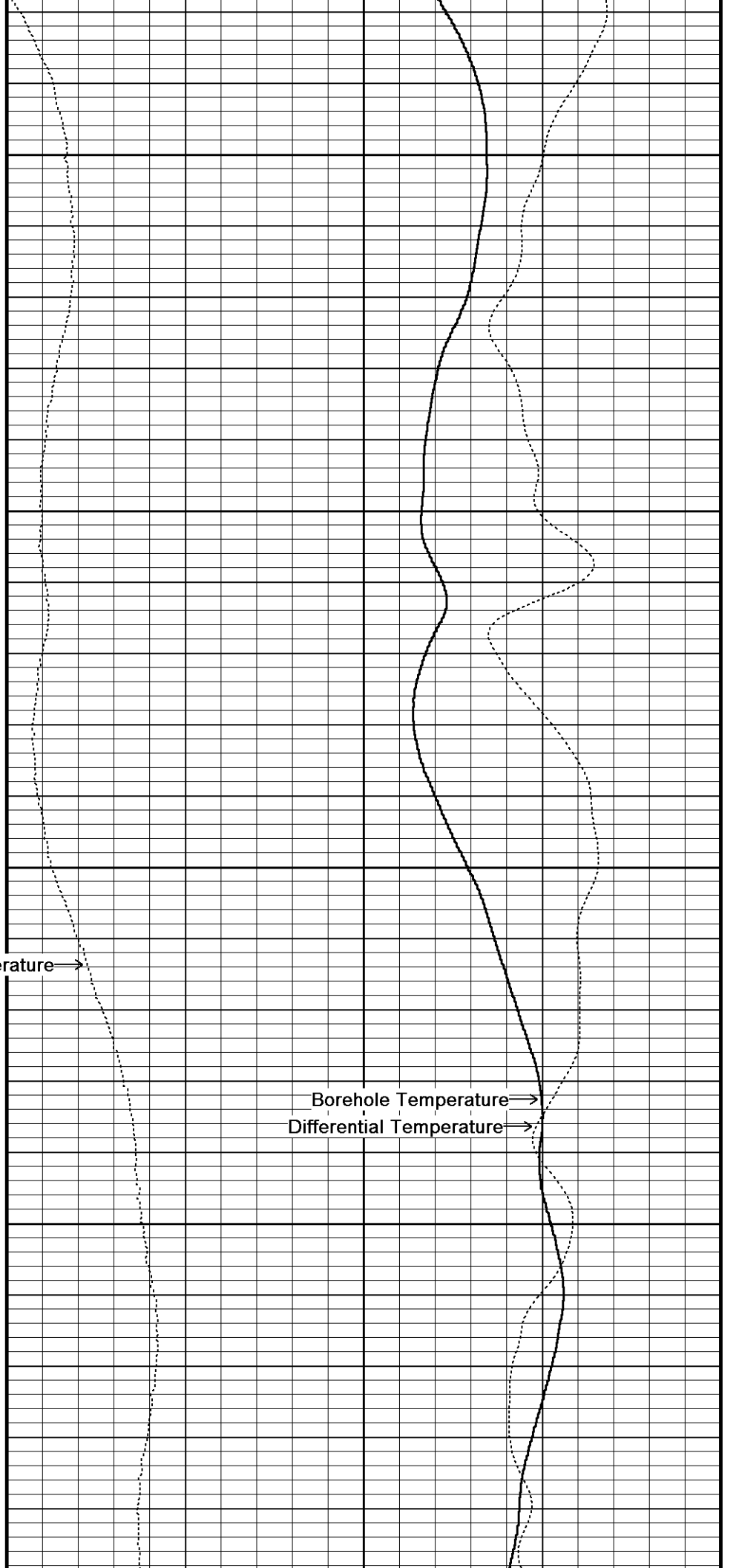
Gamma Ray

Casing Collar Locator →

124°

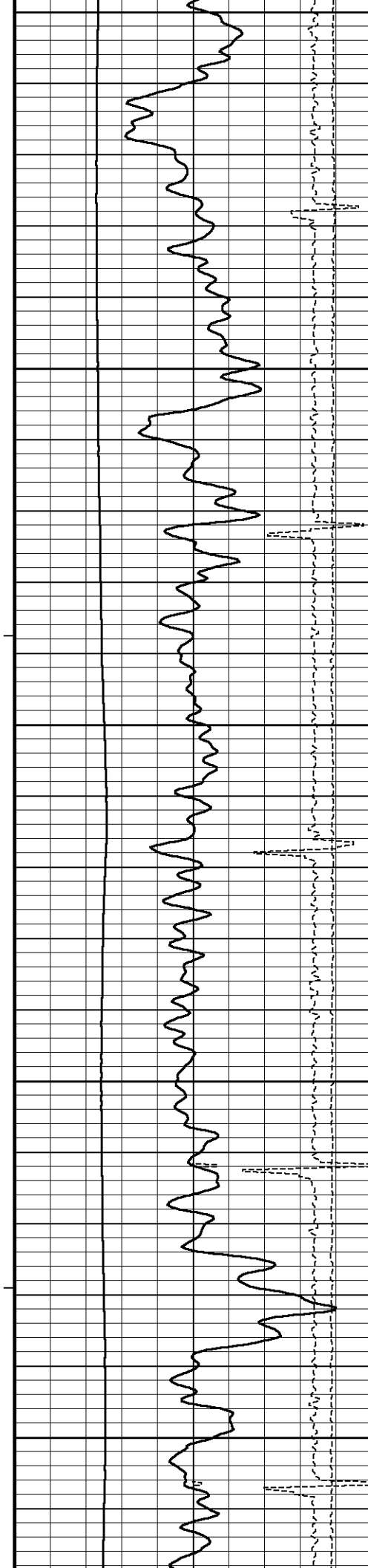
3300

124°



Borehole Temperature →

Differential Temperature →



3350

123°

3400

125°

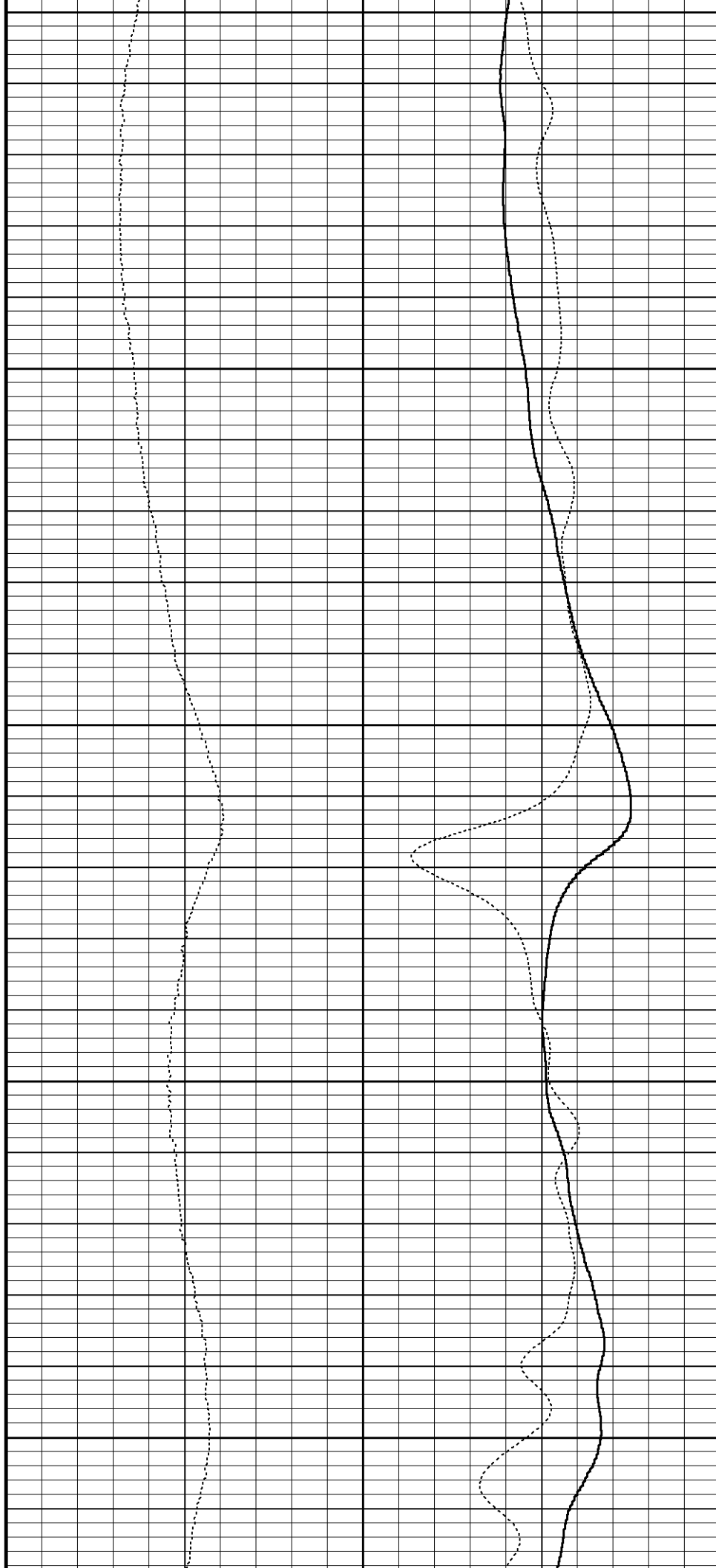
3450

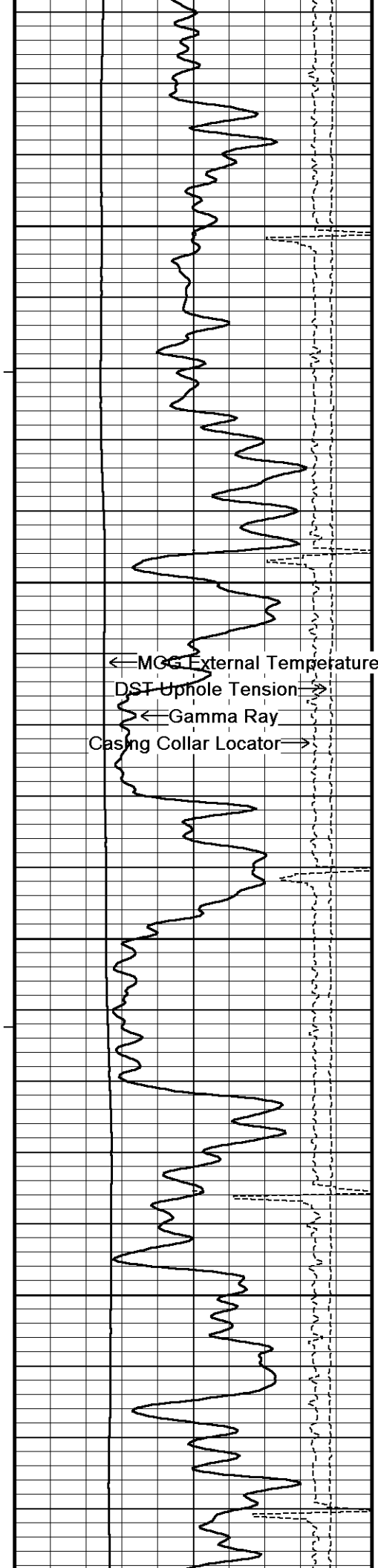
125°

3500

126°

3550





124°

3600

125°

3650

MCG External Temperature →

← MCG External Temperature

DST Uphole Tension →

← Gamma Ray

Casing Collar Locator →

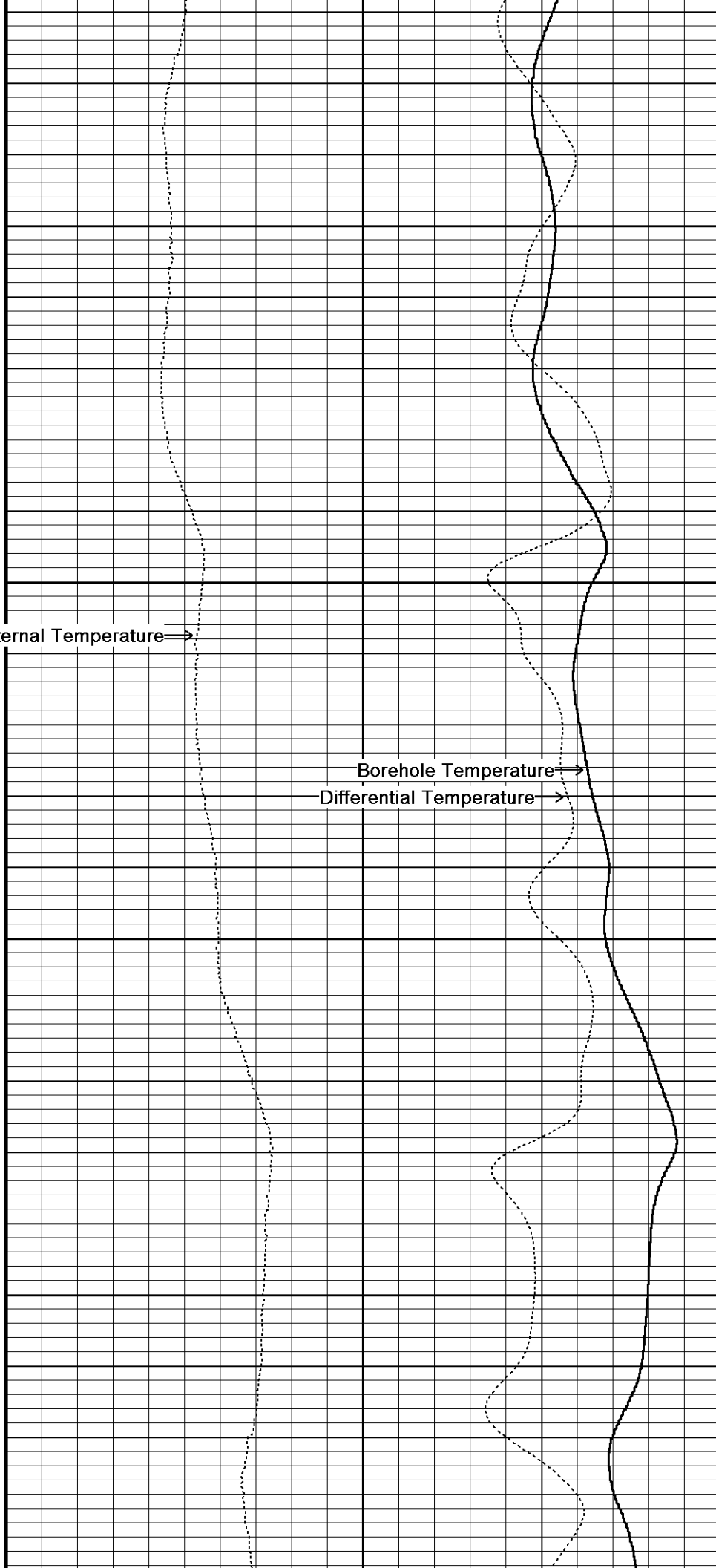
126°

3700

127°

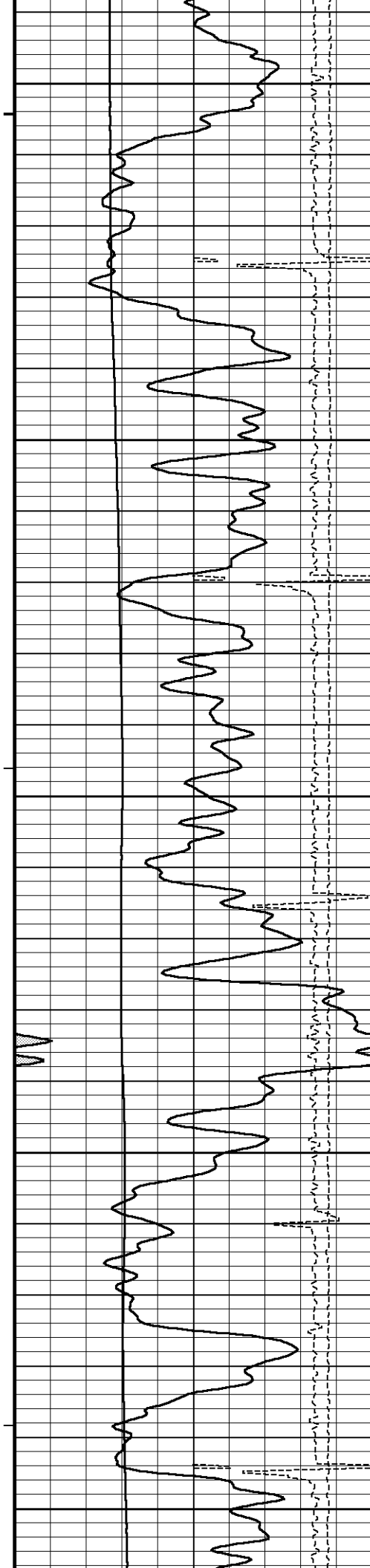
3750

127°



Borehole Temperature →

Differential Temperature →



127°

3800

128°

3850

130°

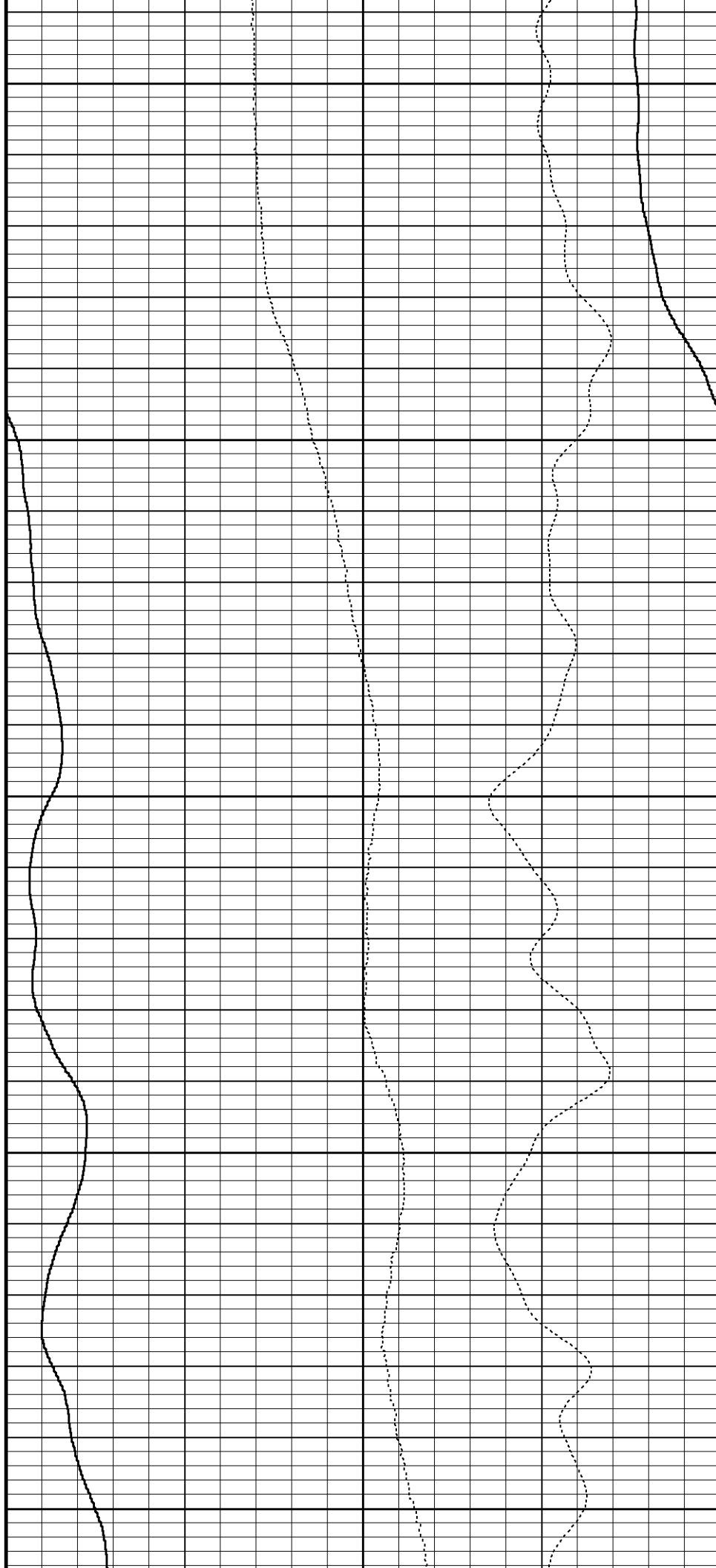
3900

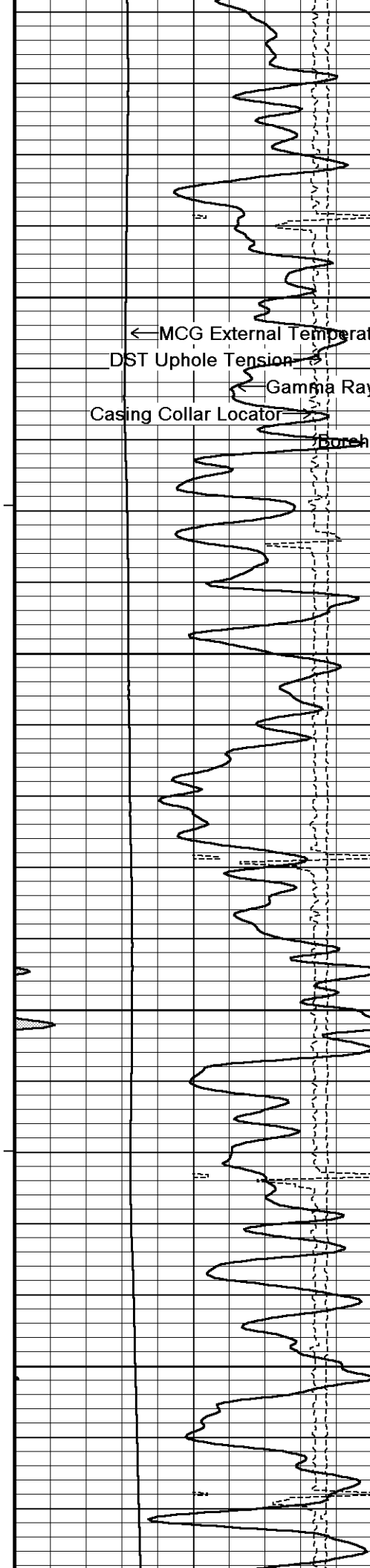
130°

3950

131°

4000





132°

4050

← MCG External Temperature
DST Uphole Tension
Gamma Ray
Casing Collar Locator

→ Borehole Temperature

132°

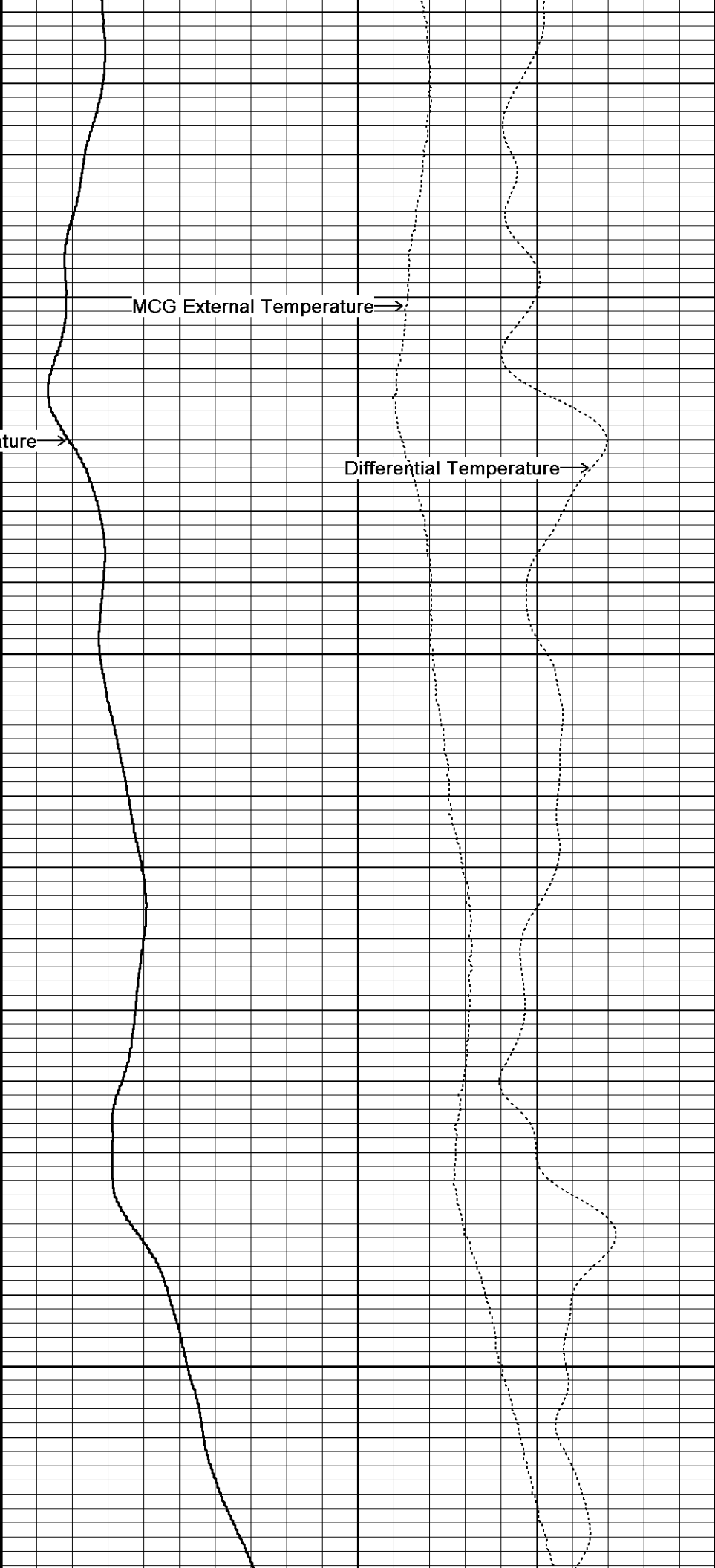
4100

133°

4150

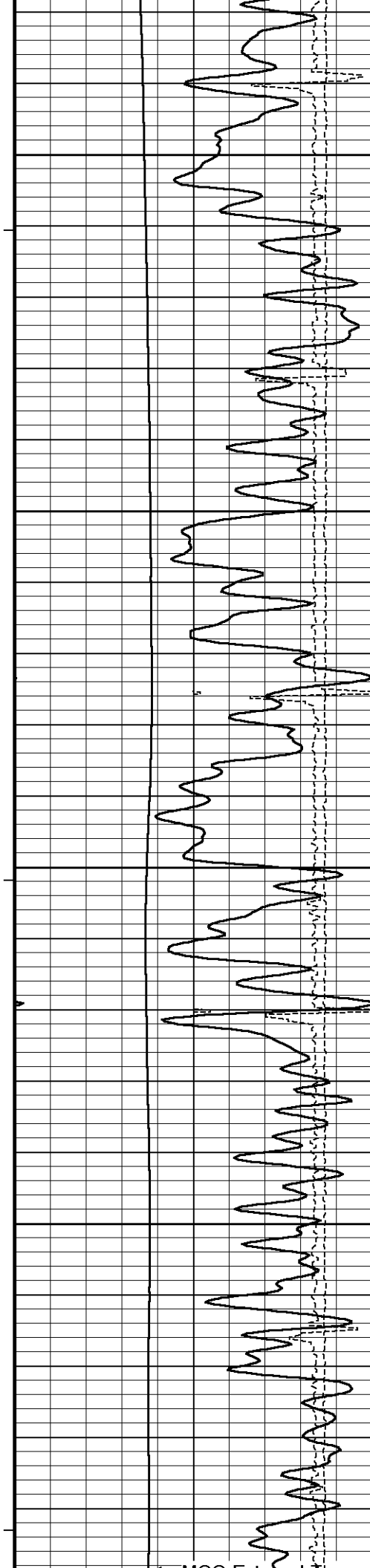
133°

4200



→ MCG External Temperature

→ Differential Temperature



136°

4250

138°

4300

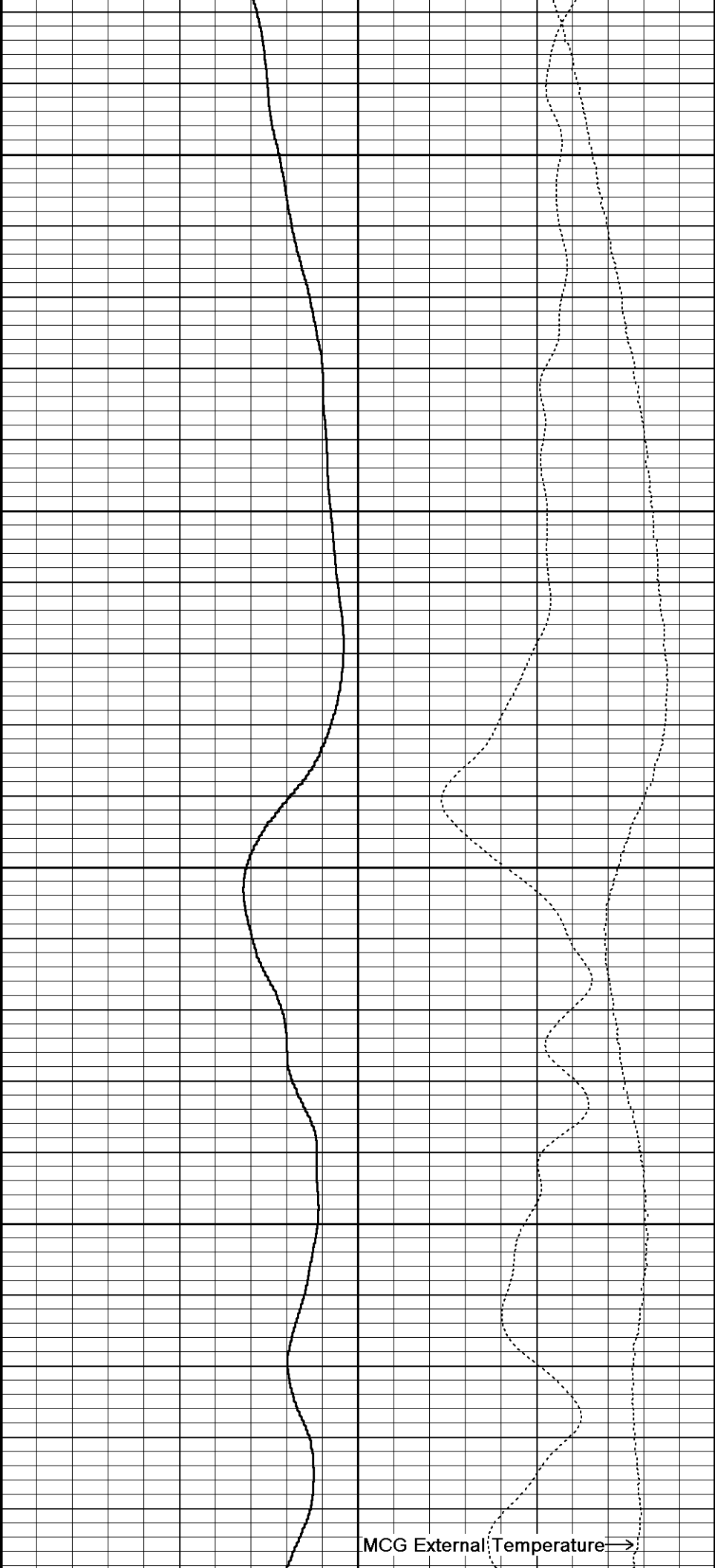
138°

4350

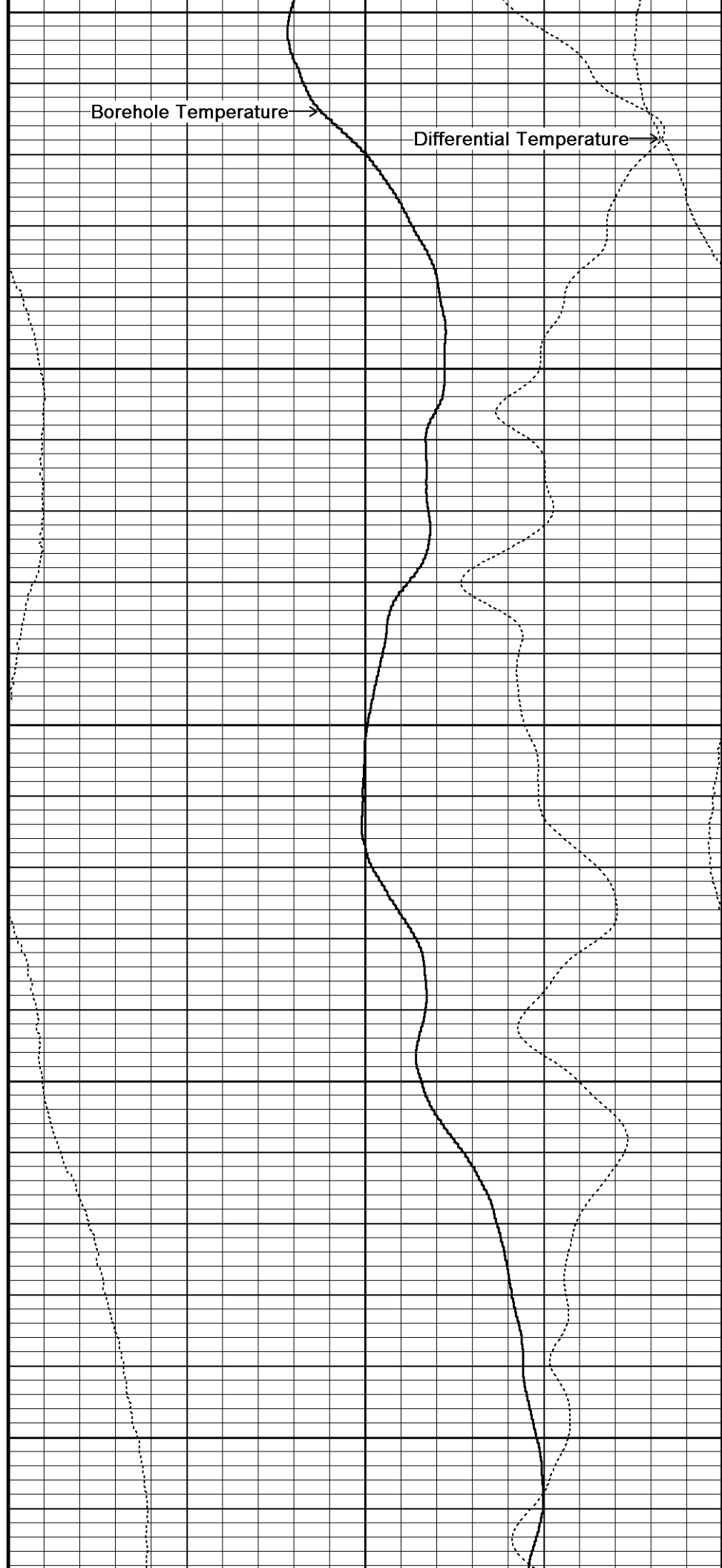
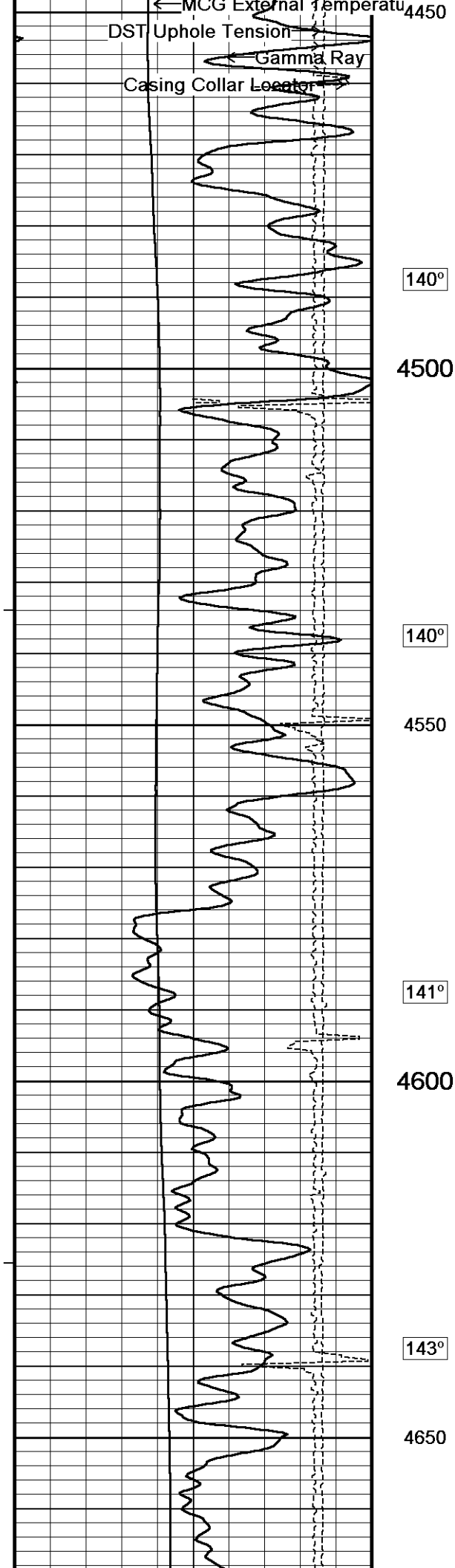
138°

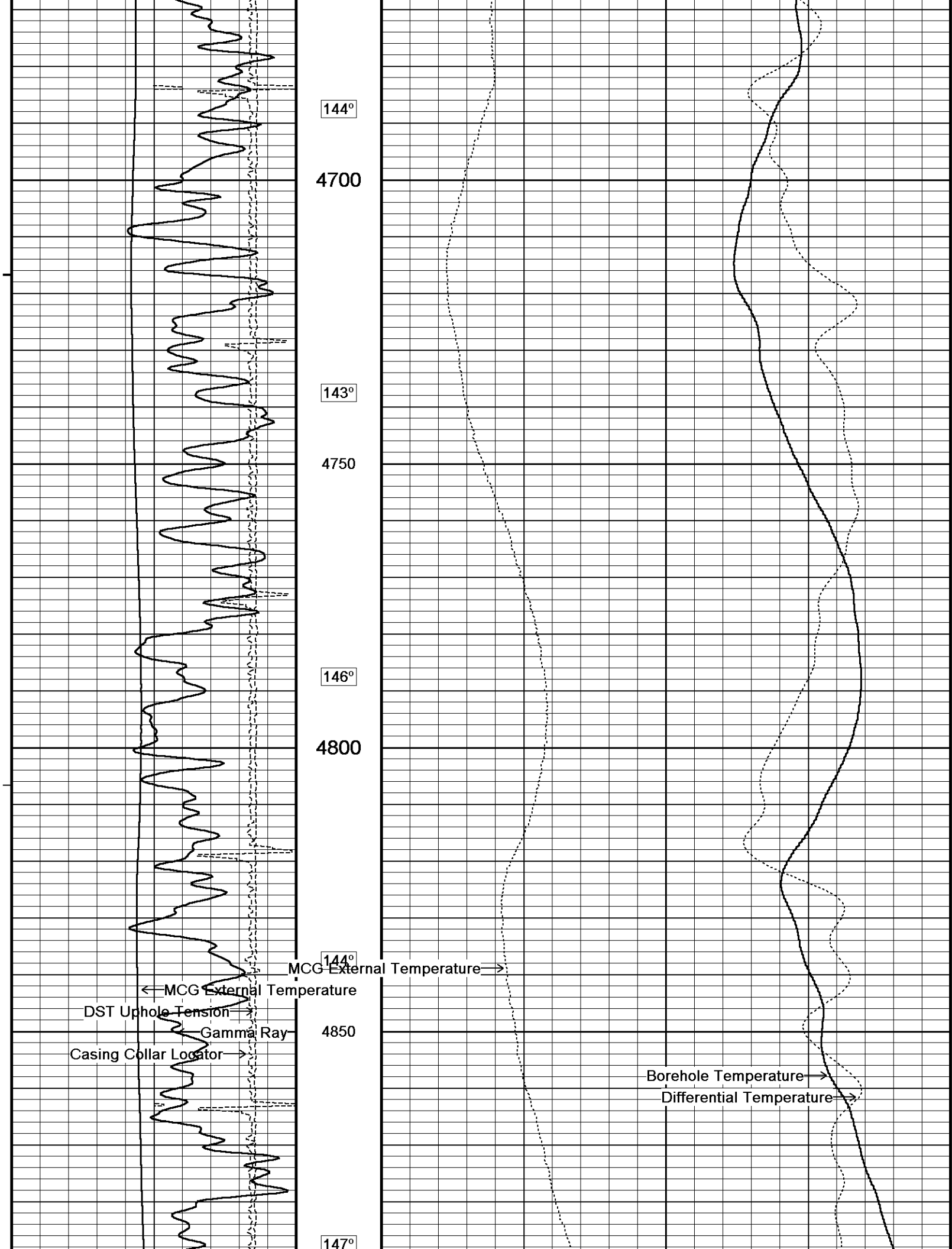
4400

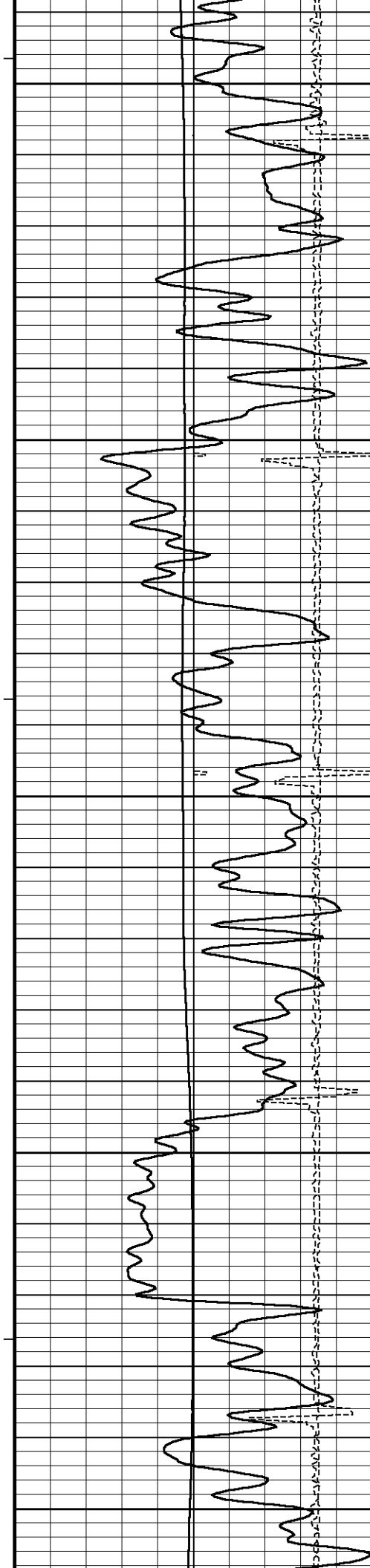
138°



MCG External Temperature →







4900

148°

4950

147°

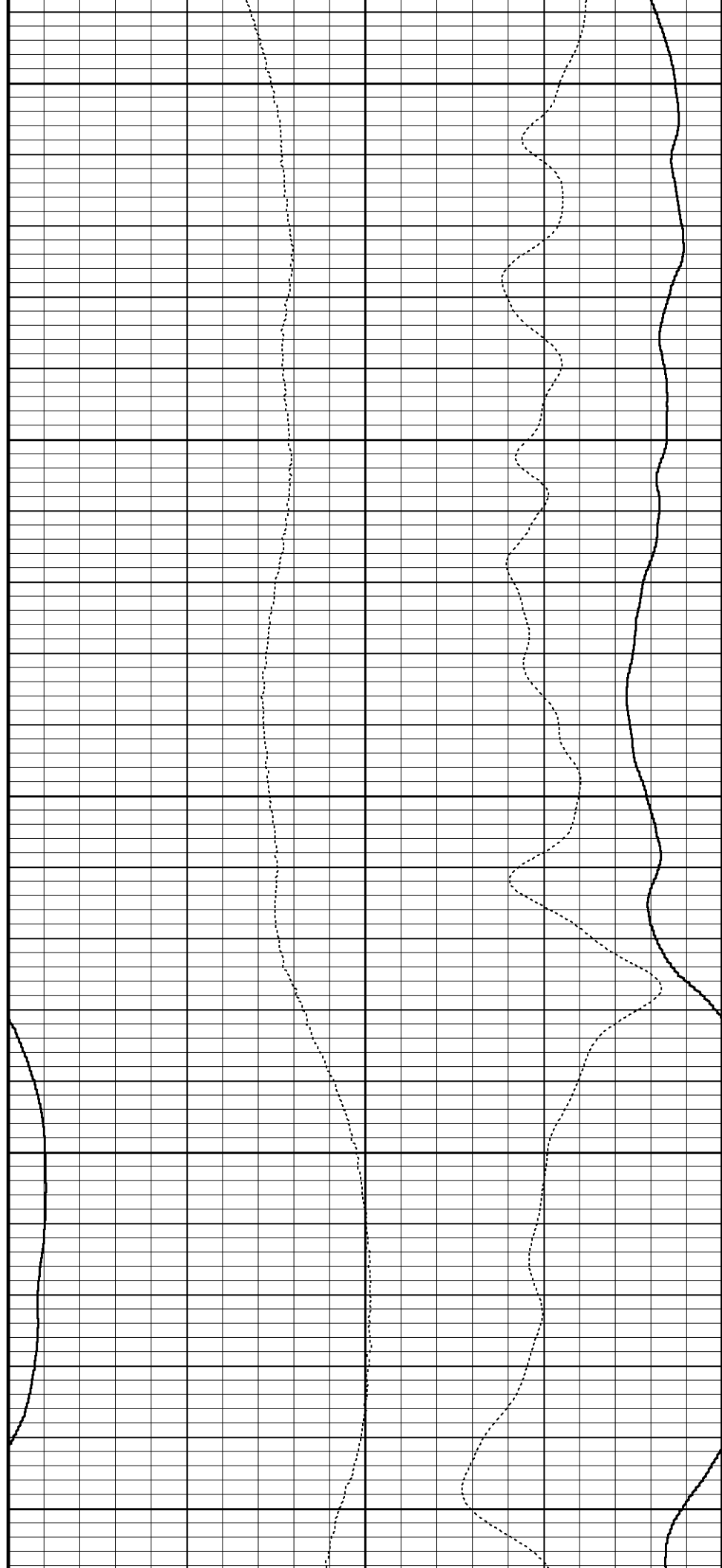
5000

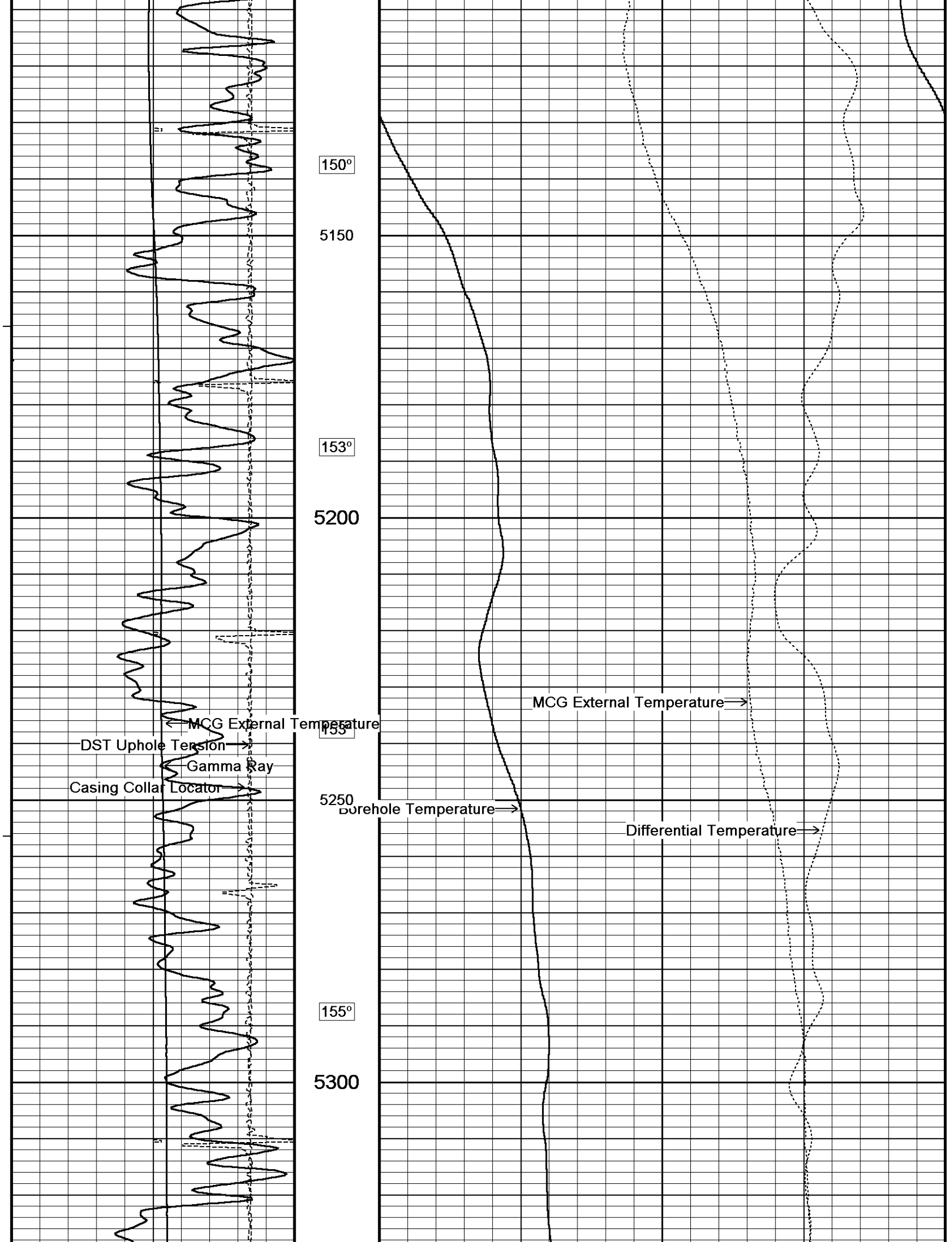
149°

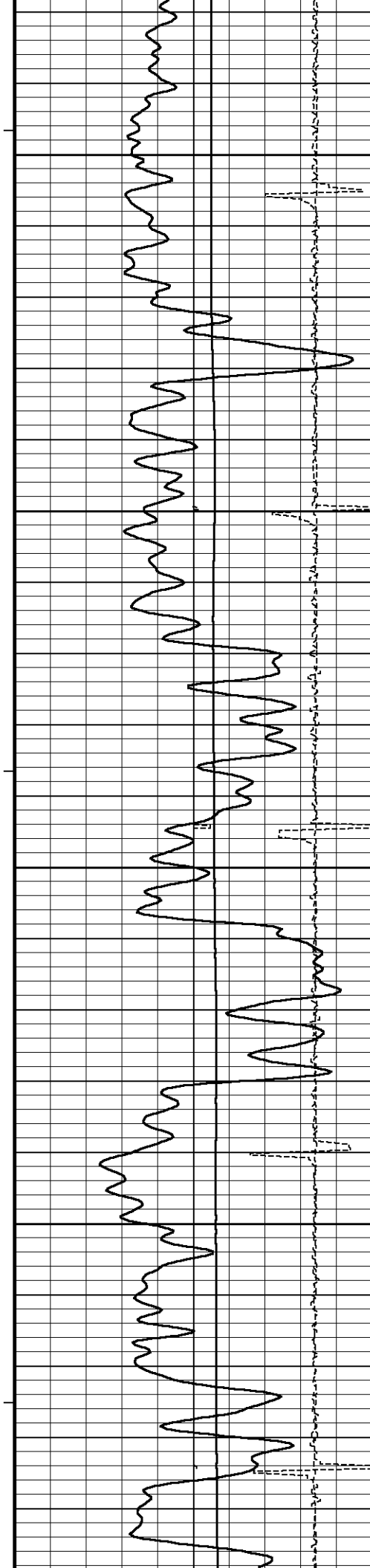
5050

150°

5100







155°

5350

156°

5400

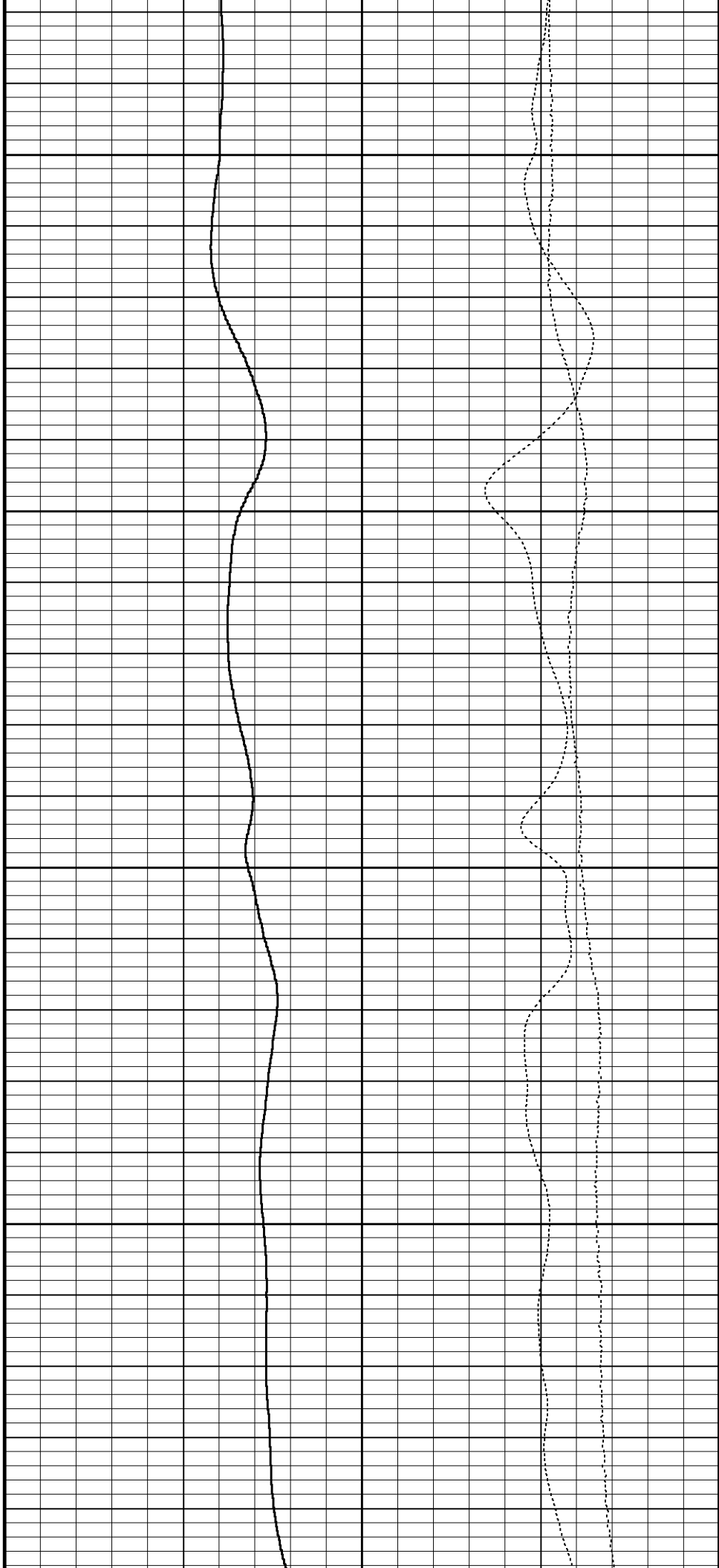
156°

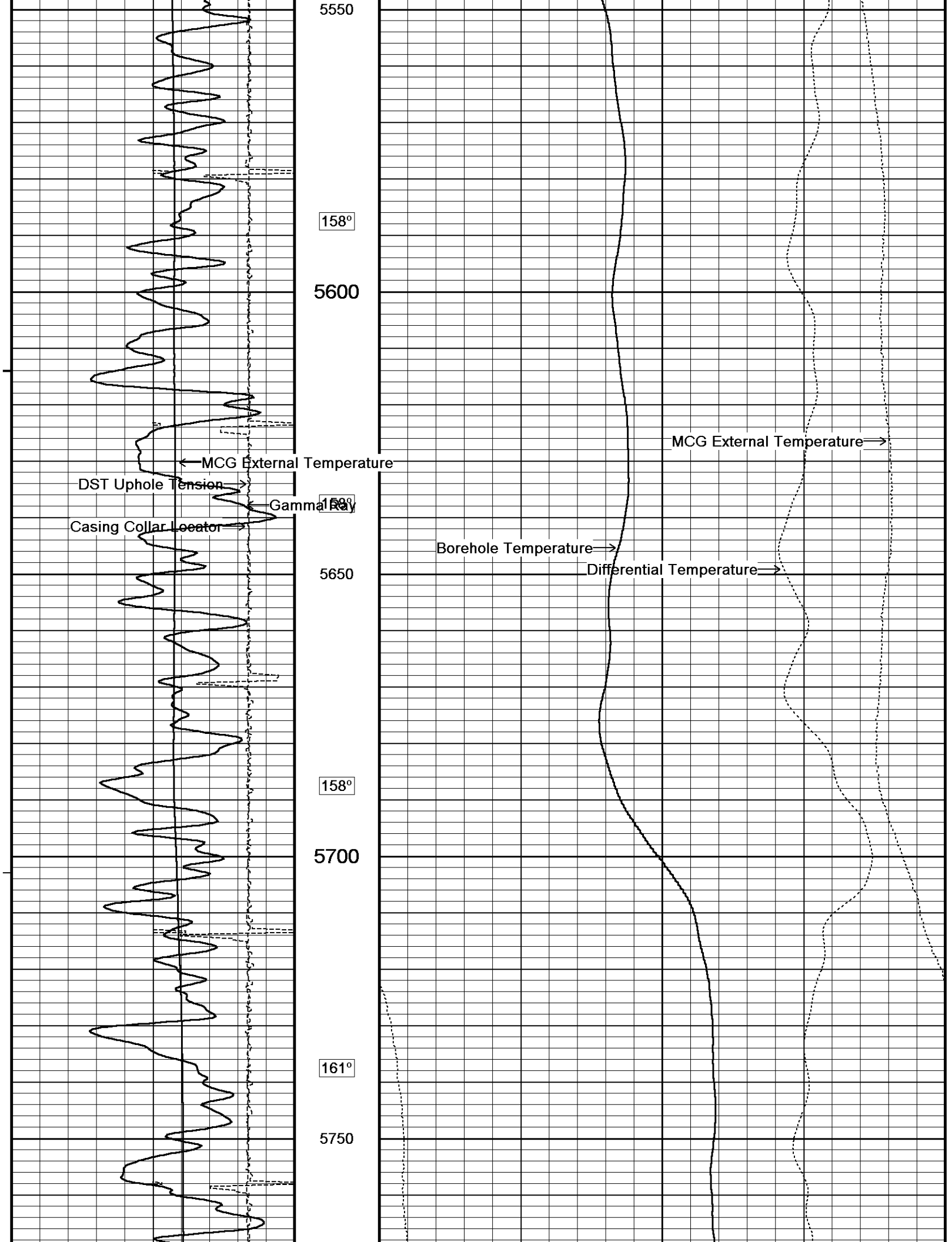
5450

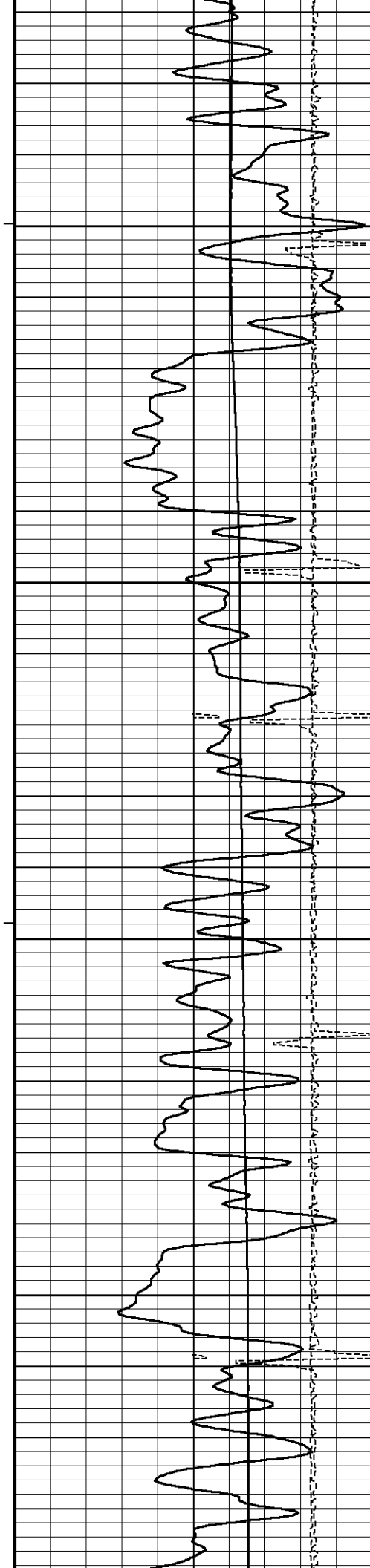
157°

5500

157°







161°

5800

163°

5850

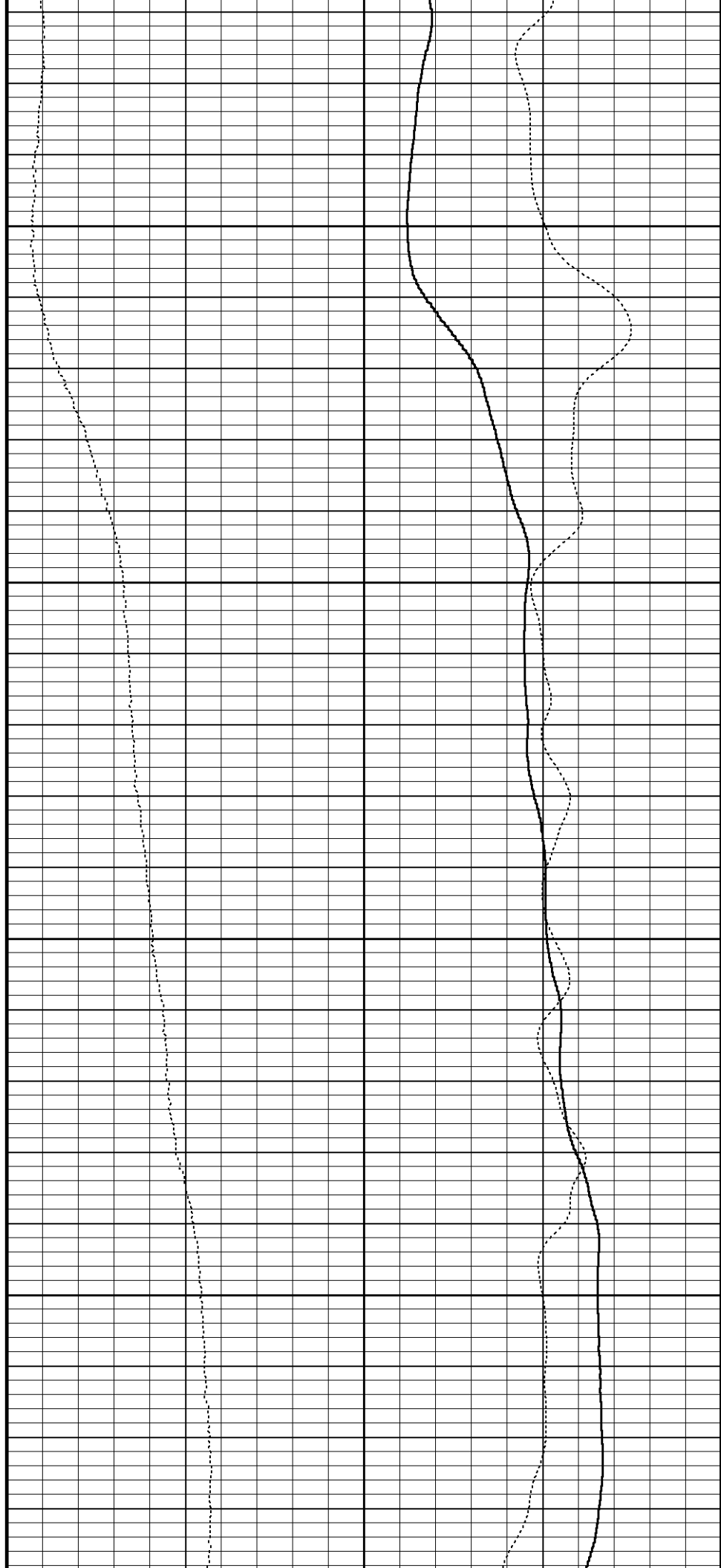
164°

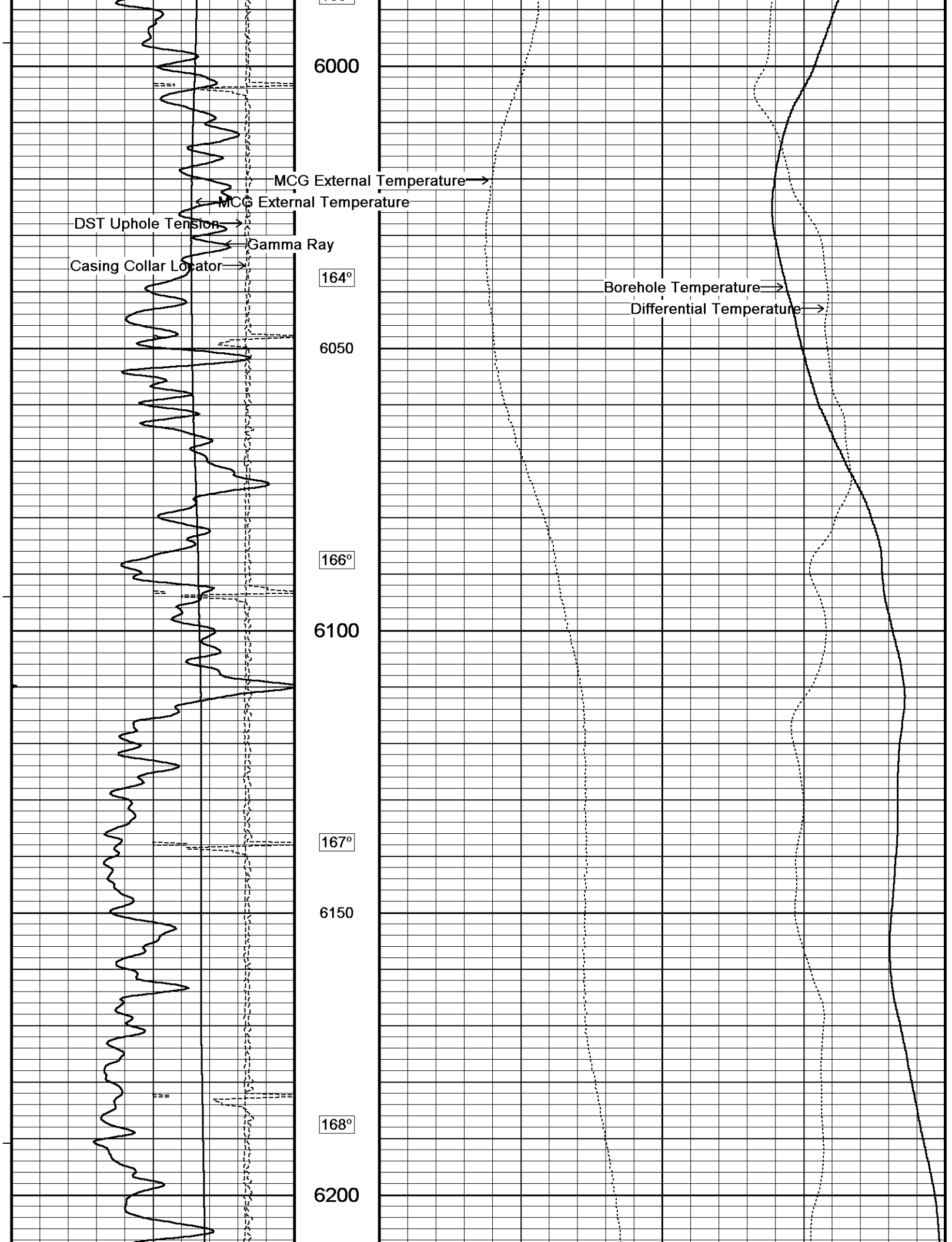
5900

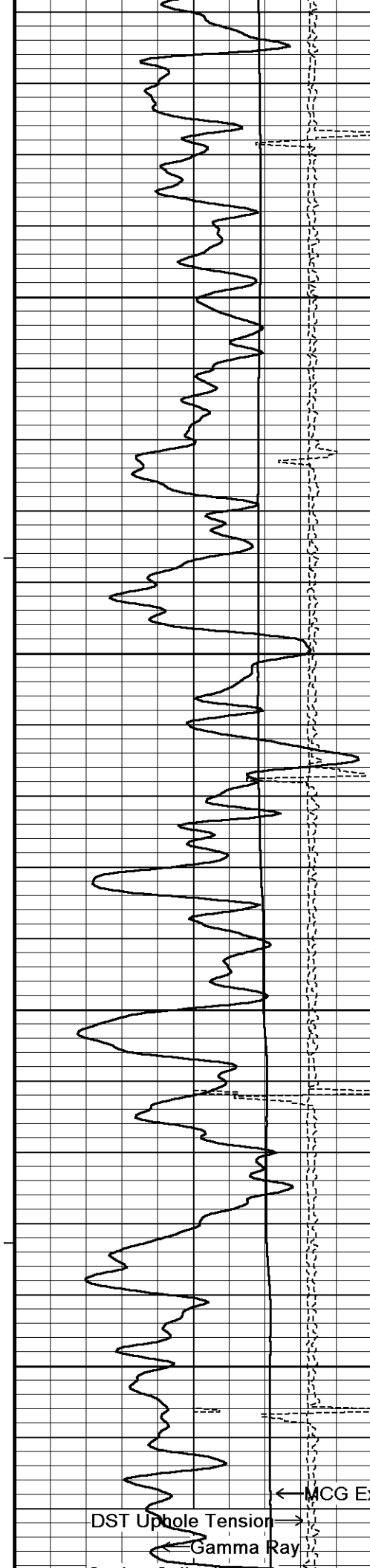
165°

5950

166°







169°

6250

169°

6300

170°

6350

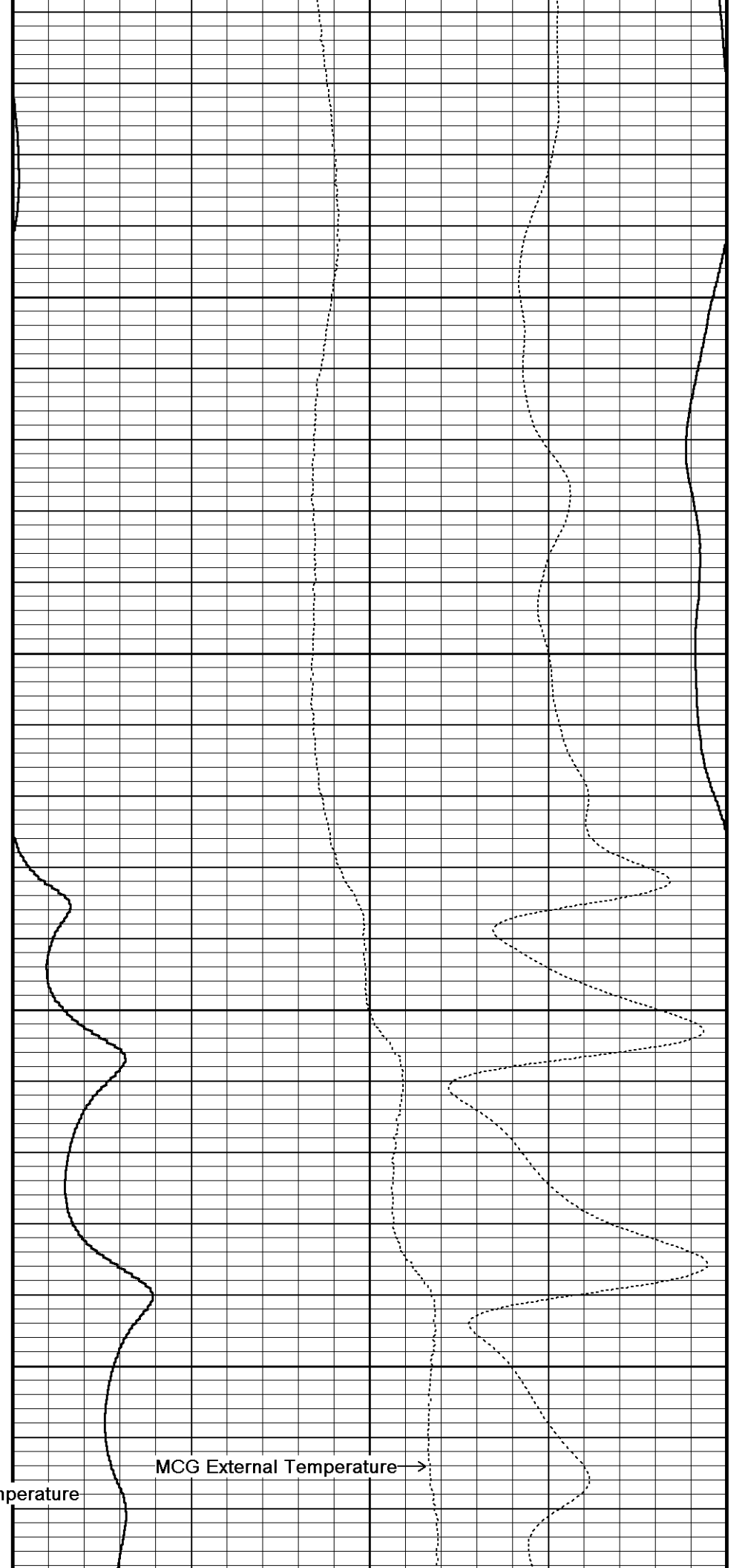
171°

6400

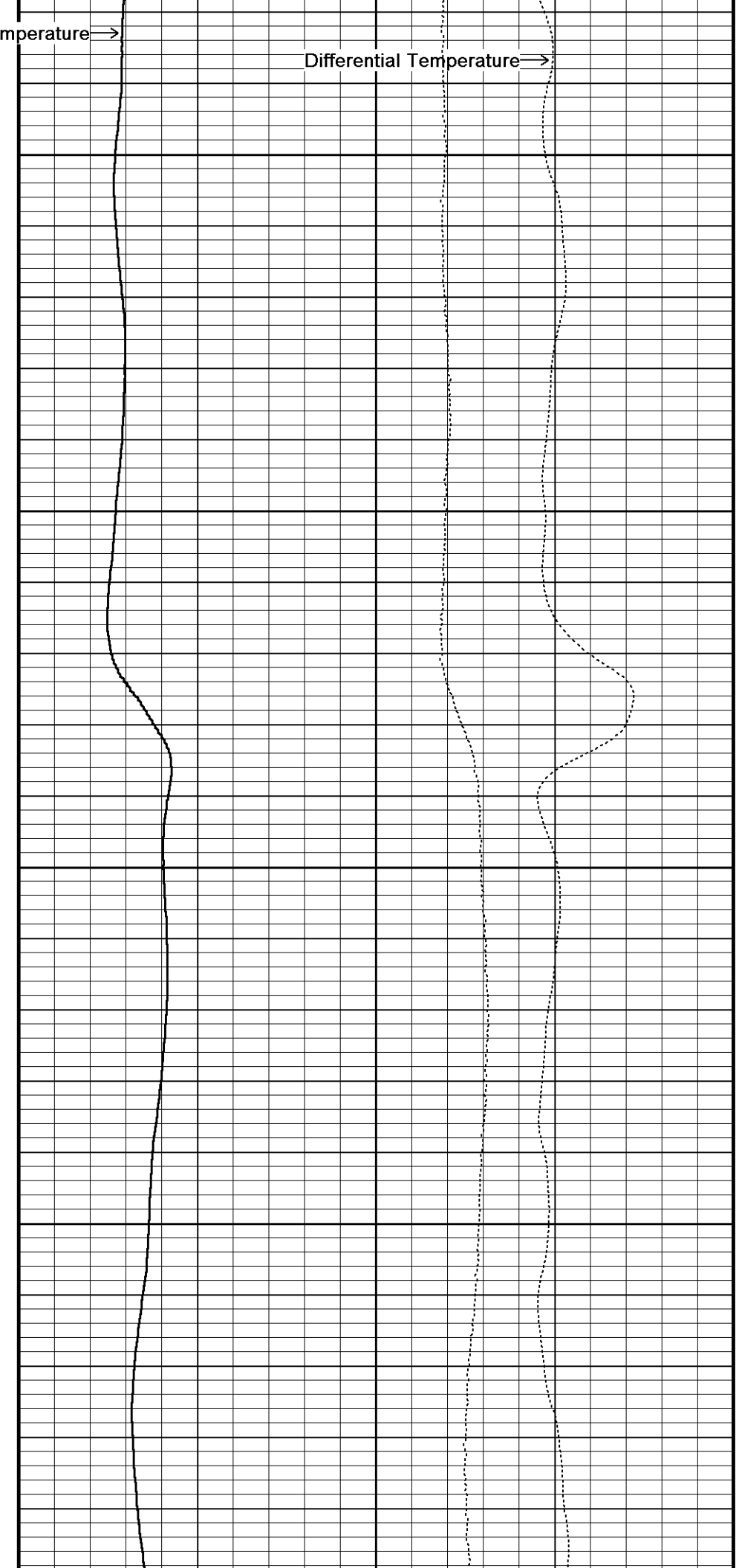
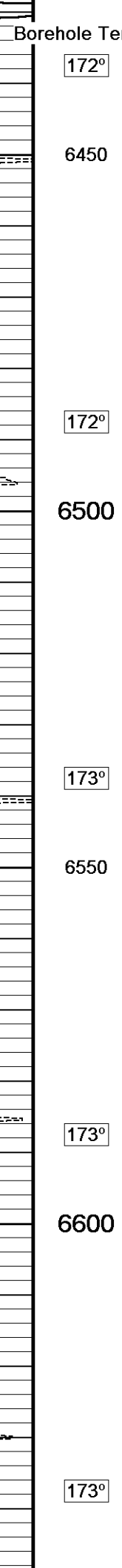
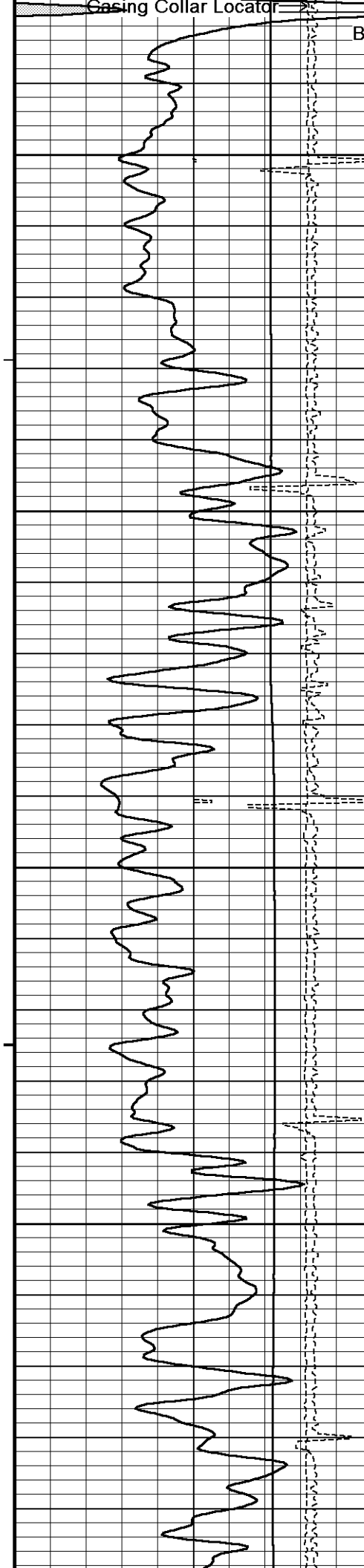
← MCG External Temperature

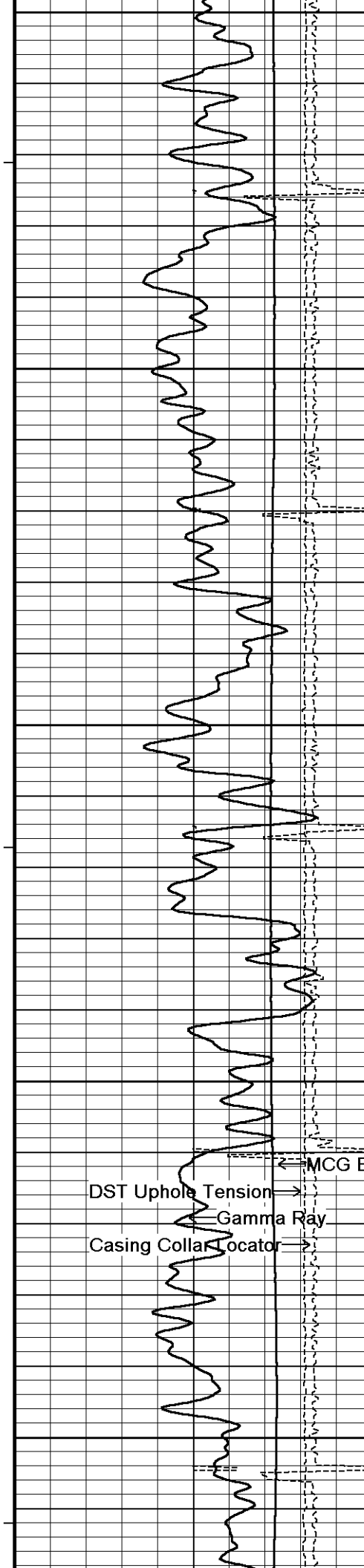
DST Uphole Tension →

← Gamma Ray

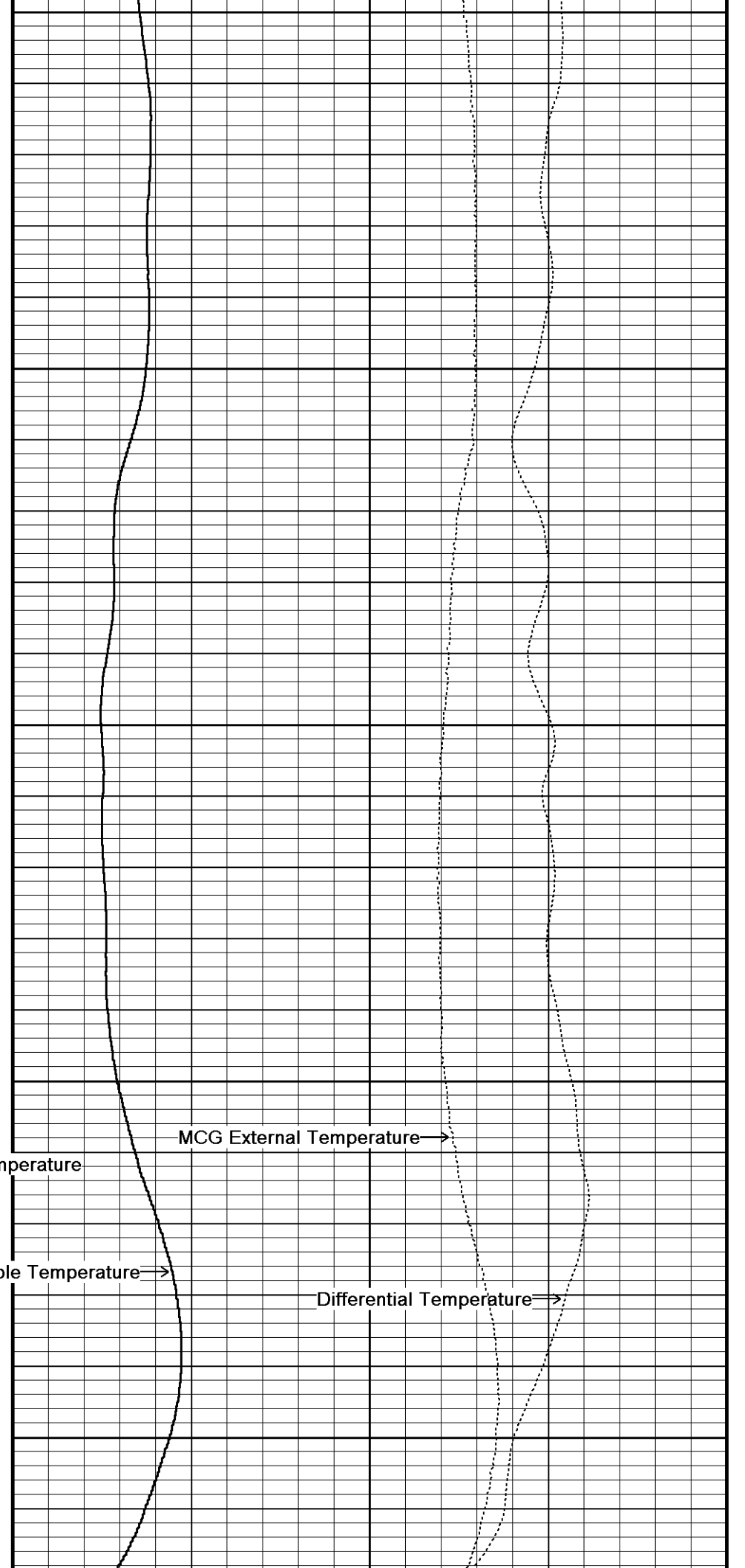


MCG External Temperature →





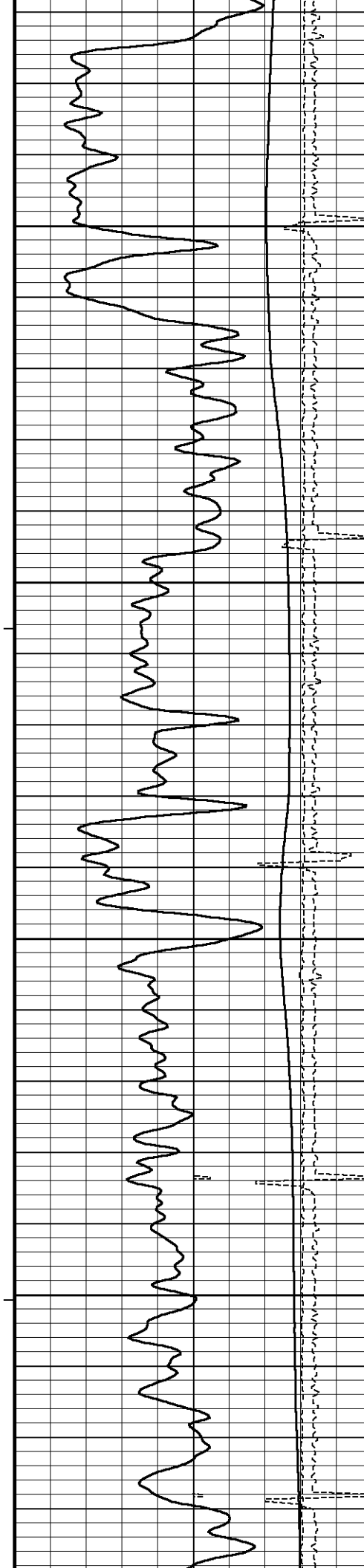
6650
173°
6700
172°
6750
172°
6800
6850



DST Uphole Tension
Gamma Ray
Casing Collar Locator

MCG External Temperature
Borehole Temperature
Differential Temperature

174°



171°

6900

176°

6950

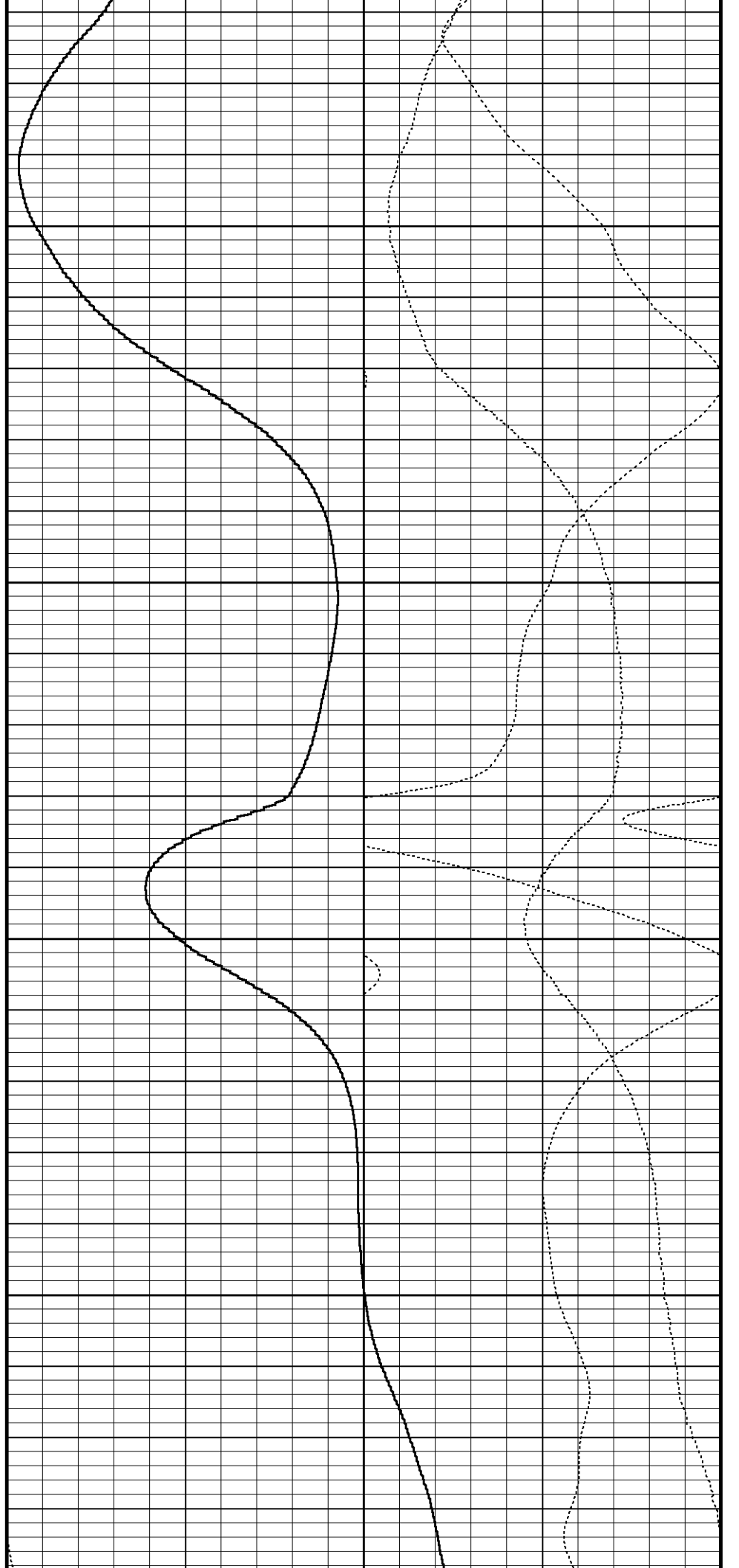
176°

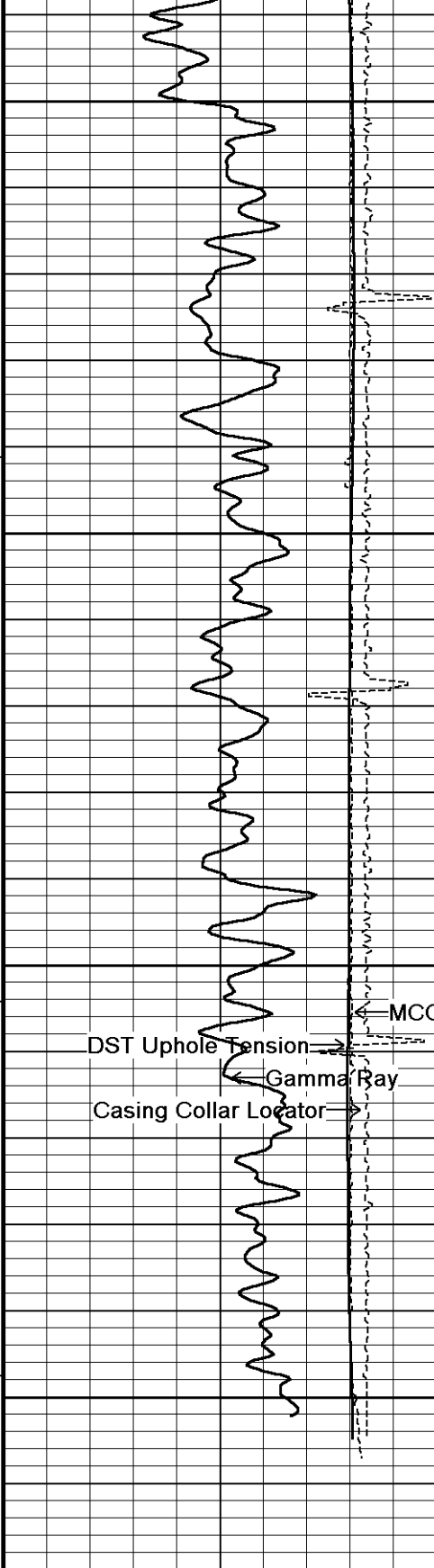
7000

178°

7050

180°





7100

181°

7150

180°

7200

180°

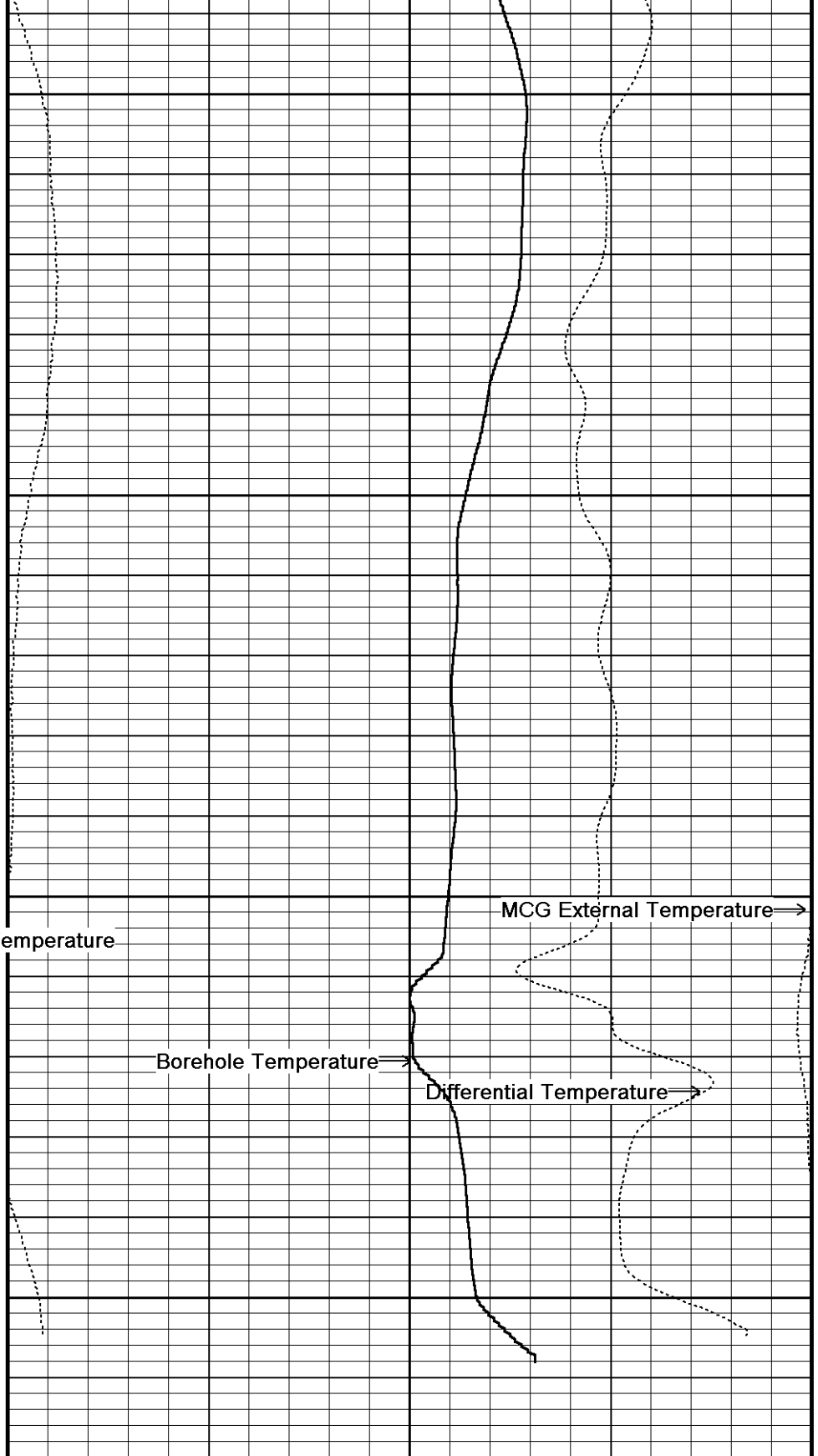
7250

7268

Depth
in
Feet

← Timing Marks
every 60.0 sec

MCG External Temperature
degrees F
0 50 100



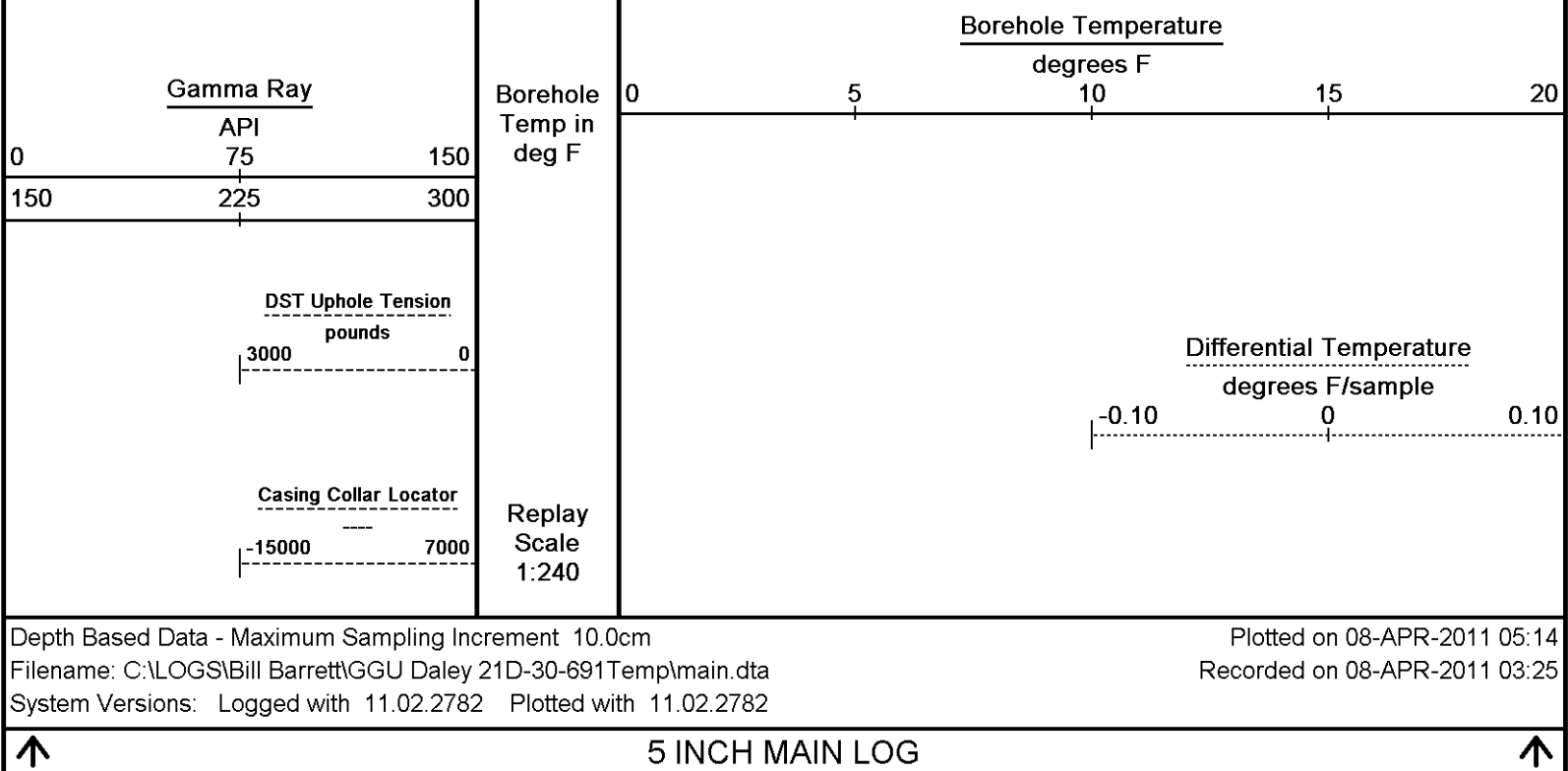
MCG External Temperature →

Borehole Temperature →

Differential Temperature →

MCG External Temperature
degrees F

0 5 10 15 20



BEFORE SURVEY CALIBRATION			
C:\LOGS\Bill Barrett\GGU Daley 21D-30-691Temp\main.dta			
General Constants All 000			Last Edited on 08-APR-2011,02:06
General Parameters			
Mud Resistivity	2.900	ohm-metres	
Mud Resistivity Temperature	97.000	degrees F	
Water Level	0.000	feet	
Density/Neutron Processing	Wet Hole		
Hole/Annular Volume and Differential Caliper Parameters			
HVOL Method	Single Caliper		
HVOL Caliper 1	None		
HVOL Caliper 2	N/A		
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 0			Field Calibration on 07-APR-2011 04:35
Reading No	Measured	Calibrated (lbs)	
1	15689.12	0.00	
2	16797.48	350.00	
High Resolution Temperature Calibration MCG-C 192			Field Calibration on 07-APR-2011,01:22
	Measured	Calibrated(Deg F)	
Lower	50.00	50.00	
Upper	75.00	75.00	
High Resolution Temperature Constants MCG-C 192			Last Edited on 11-MAR-2011,06:06
Pre-filter Length	11		
SP Calibration MCG-C 192			Field Calibration on 07-APR-2011,01:22
	Measured	Calibrated (mV)	
Reference 1	100.9	100.0	

Reference 2

-100.2

-100.0

Gamma Calibration MCG-C 192

Field Calibration on 08-APR-2011,02:05

	Measured	Calibrated (API)
Background	130	90
Calibrator (Gross)	1447	1002
Calibrator (Net)	1317	912

Gamma Constants MCG-C 192

Last Edited on 08-APR-2011,02:05

Gamma Calibrator Number	GRC-072	
Mud Density	1.00	gm/cc
Caliper Source for Processing	Bit Size	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

High Resolution Temperature Calibration MHT-A 11

Field Calibration on 08-APR-2011,02:04

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

High Resolution Temperature Constants MHT-A 11

Last Edited on 26-MAR-2011,08:09

Pre-filter Length	11
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DOWNHOLE EQUIPMENT

C:\LOGS\Bill Barrett\GGU Daley 21D-30-691Temp\main.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

Compact Comms Gamma
MCG-C 192 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in

Compact High Resolution Temperature
MHT-A 11 LG: 1.53 ft WT: 13.2 lb OD: 2.24 in

Total Length: 11.80 ft Weight: 92.6 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 DALEY 21D-30-691

FIELD GIBSON GULCH

PROVINCE/COUNTY GARFIELD

COUNTRY/STATE U.S.A. / COLORADO

Elevation Kelly Bushing	7312.00	feet	First Reading	200.00	feet
Elevation Drill Floor	7311.00	feet	Depth Driller	7262.00	feet
Elevation Ground Level	7290.00	feet	Depth Logger	7250.00	feet



Weatherford®

TEMPERATURE LOG

