COMPENSATED PHOTO DENSITY
COMPENSATED DUAL NEUTRON
LOG

COMPANY	WEXPRO COMPANY
WELL	CARL ALLEN #28
FIELD	POWDER WASH UNIT
PROVINCE/COUNTY	MOFFAT
COUNTRY/STATE	U.S.A. / COLORADO
LOCATION	2346' FSL & 783' FWL

SEC	TWP	RGE	Other Services
28	12N	97W	MAI/MFE
API Number 05-081-0740900			MML
Permit Number			

Permanent Datum G.L., Elevation 6653 feet
Log Measured From K.B. @ 13 FEET above Permanent Datum
Drilling Measured From K.B.

Elevations:	feet
KB	6666.00
DF	6665.00
GL	6653.00

Date	05-APR-2008			
Run Number	ONE			
Depth Driller	9058.00	feet		
Depth Logger	9033.00	feet		
First Reading	9012.00			
Last Reading	488.00			
Casing Driller	492.00	feet		
Casing Logger	488.00	feet		
Bit Size	7.88	inches		
Hole Fluid Type	KCL / POLY			
Density / Viscosity	10.60 lb/USg	53.00 CP		
PH / Fluid Loss	9.50	6.80 ml/30Min		
Sample Source	FLOWLINE			
Rm @ Measured Temp	0.39 @ 58.5	ohm-m		
Rmf @ Measured Temp	0.31 @ 58.5	ohm-m		
Rmc @ Measured Temp	0.46 @ 58.5	ohm-m		
Source Rmf / Rmc	CALC	CALC		
Rm @ BHT	0.12 @195.0	ohm-m		
Time Since Circulation	8 HOURS			
Max Recorded Temp	195.00	deg F		
Equipment Name	COMPACT			
Equipment / Base	13056	RK SPR		
Recorded By	C, FERREYRA			
Witnessed By	R. LARSON			
Last Title	Last Line		Last Line	

BOREHOLE RECORD

Last Edited: 5-APR-2008 12:18

Bit Size inches	Depth From feet	Depth To feet
7.875	492.00	7392.00
7.000	7392.00	8173.00
6.000	8173.00	9058.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	9.625	0.00	492.00	36.00

REMARKS

TOOLS RUN: SHA, MCG, MML, MDN, MPD, SKJ, MFE, MAI RAN IN COMBINATION.

HARDWARE: MPD: 8" PROFILE PLATE USED.
MFE: ONE 0.5" STANDOFF USED.
MAI: TWO 0.5" STANDOFFS USED.
MDN: NO BOWSPRINGS USED AS PER CUSTOMERS REQUEST.

2.65 G/CC DENSITY MATRIX USED TO CALCULATE POROSITY.

INDUCTION MODEL USED: ENHANCED.

ALL INTERVALS LOGGED AND SCALED PER CUSTOMER'S REQUEST.

TOTAL HOLE VOLUME FROM T.D. TO SURFACE CASING = 3290 CUBIC FEET.

ANNULAR VOLUME WITH 4.5 INCH PRODUCTION CASING = 2342 CUBIC FEET.

TIGHT PULLS, BOREHOLE SIZE AND RUGOSITY WILL AFFECT REPEATABILITY AND DATA QUALITY.

REPEAT SECTION PULLED BELOW CASING DUE TO CUSTOMER'S REQUEST.

ONE REPEAT RAN ONLY BELOW CASING AND BOTTOM PER CUSTOMER'S REQUEST.

MAIN PASS PULLED FROM 9033 TO SURFACE DUE TO INABILITY TO REACH T.D.

TD FROM REPEAT PASS AND MAIN PASS ARE 6 FEET DIFFERENT DUE TO A HOLE CONDITIONS.

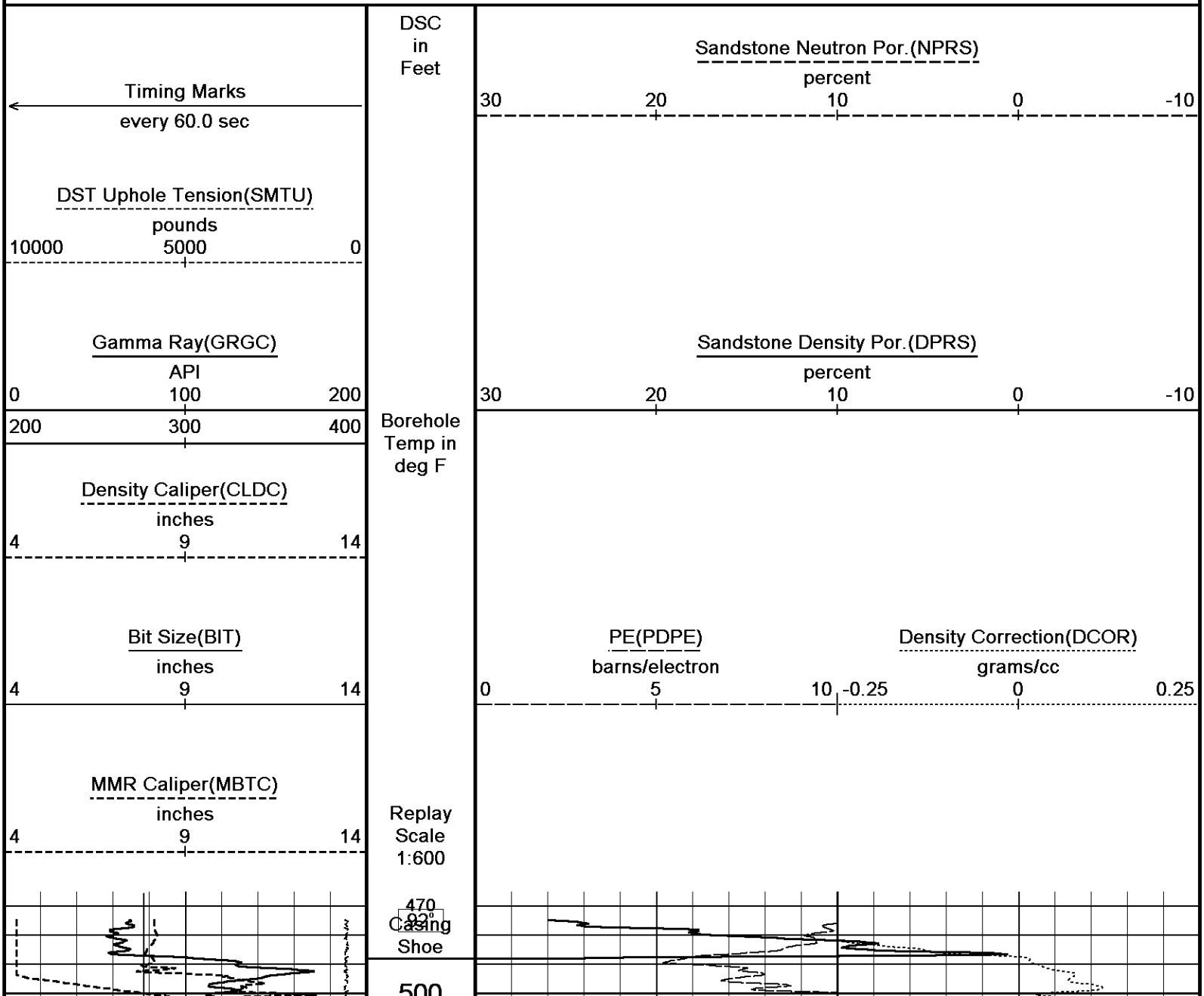
OPERATORS: B. STEWARD.

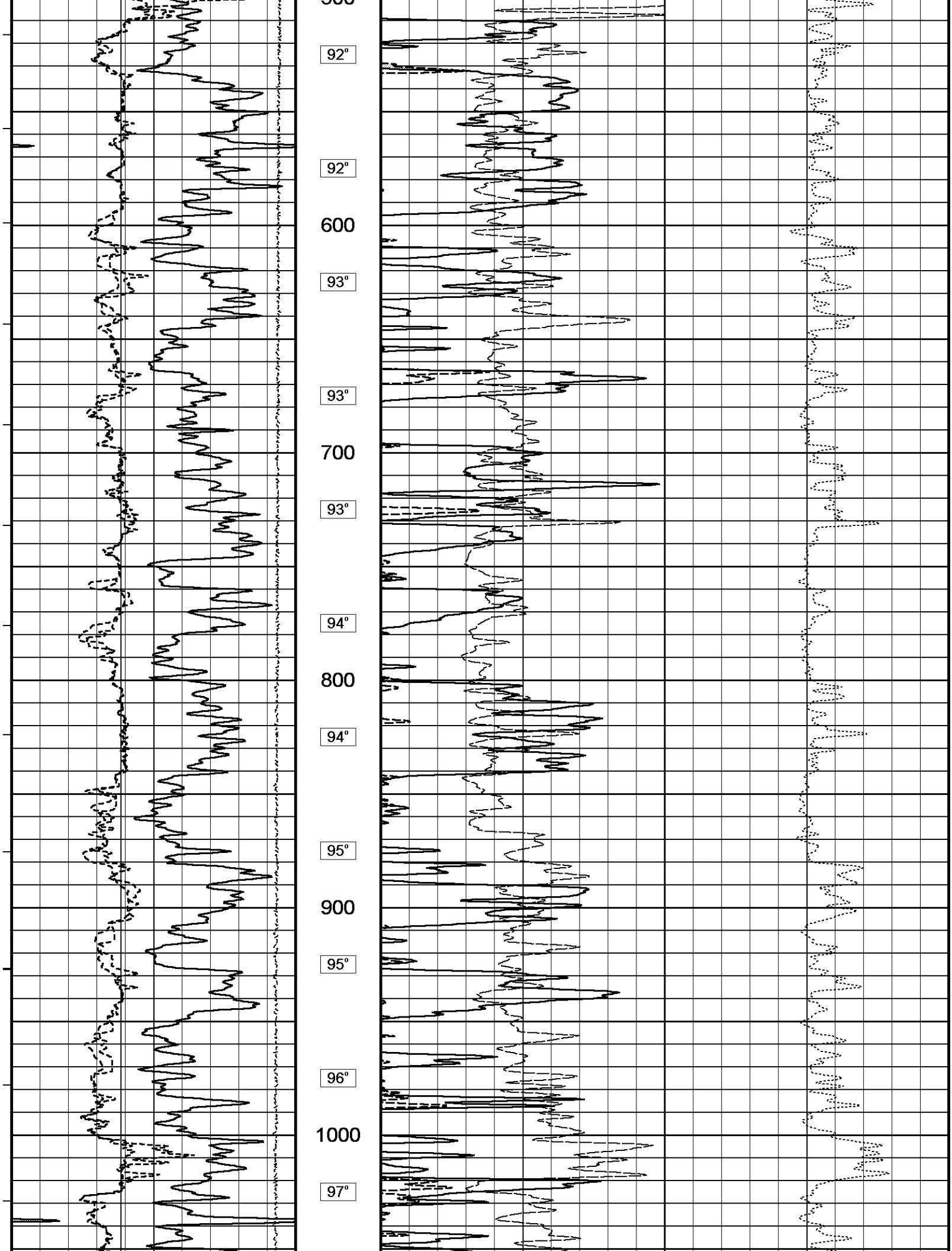
SERVICE ORDER: #3504927.

RIG: UNIT # 137.

2 INCH MAIN LOG

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:49
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_002.dta — Recorded on 05-APR-2008 07:59
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

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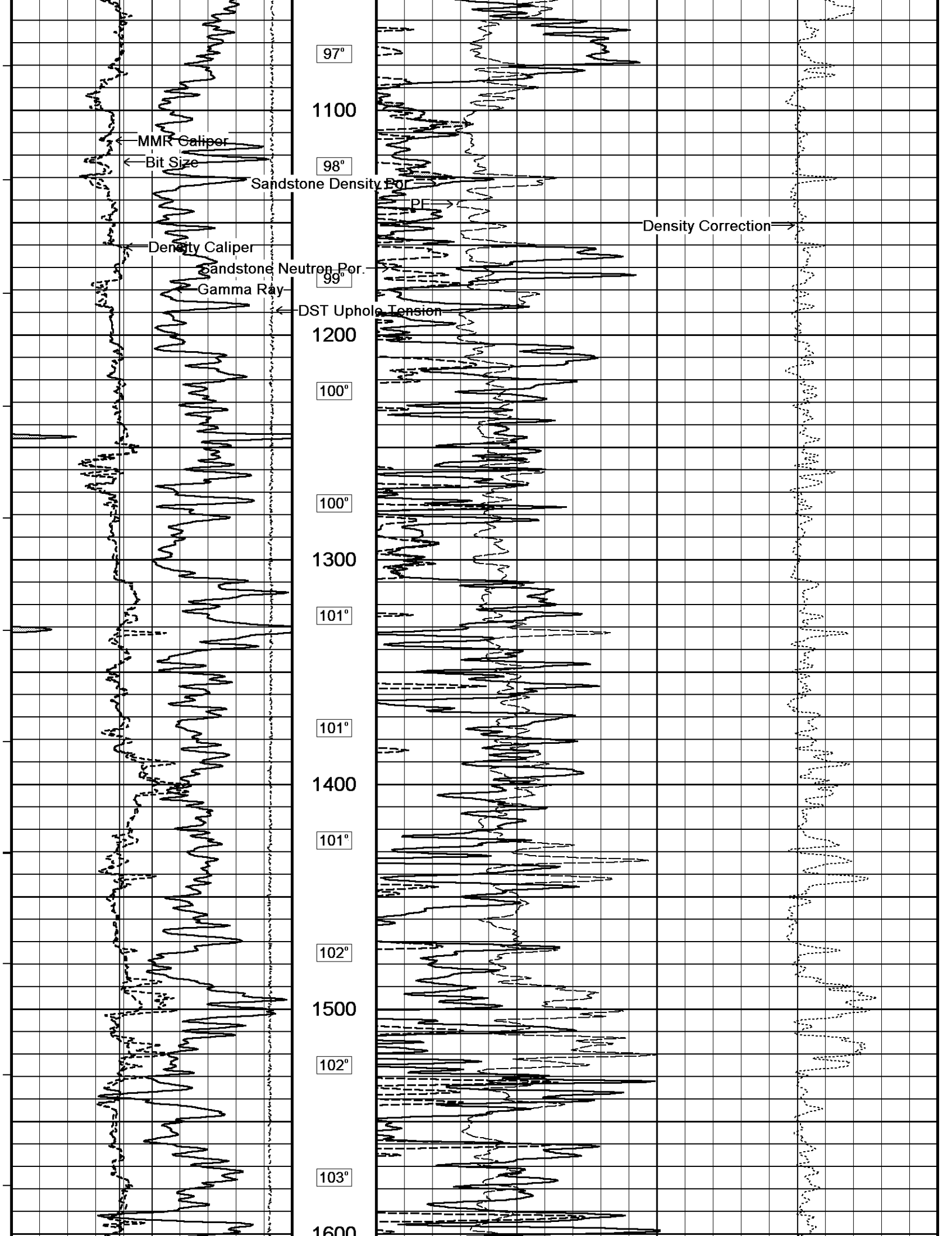
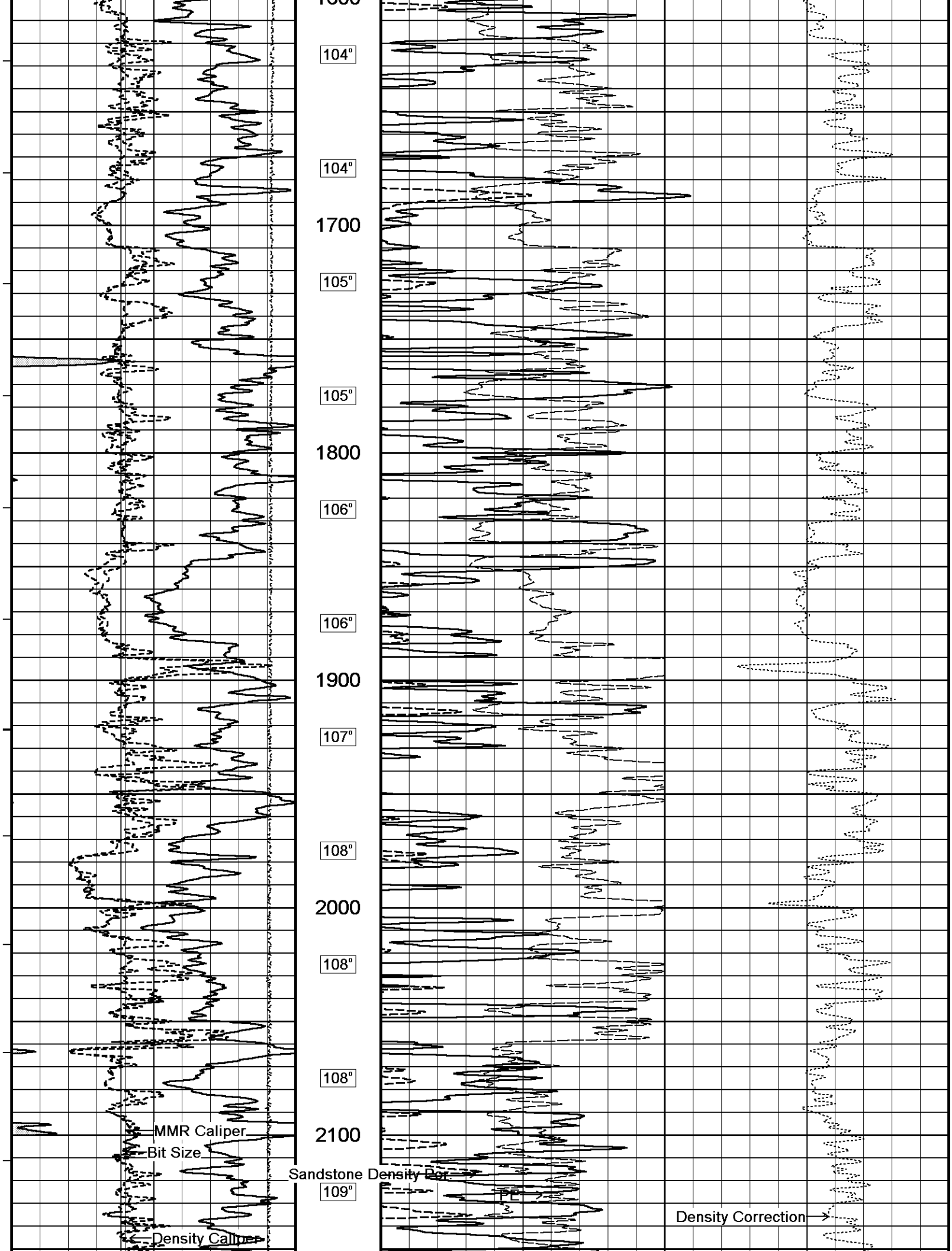
95°
96°
1000
97°


97°
1100
MMR Caliper
Bit Size
98°
Sandstone Density Por.
PE
Density Correction
Density Caliper
Sandstone Neutron Por.
99°
Gamma Ray
DST Uphole Tension
1200
100°
100°
1300
101°
101°
1400
101°
102°
1500
102°
103°
1600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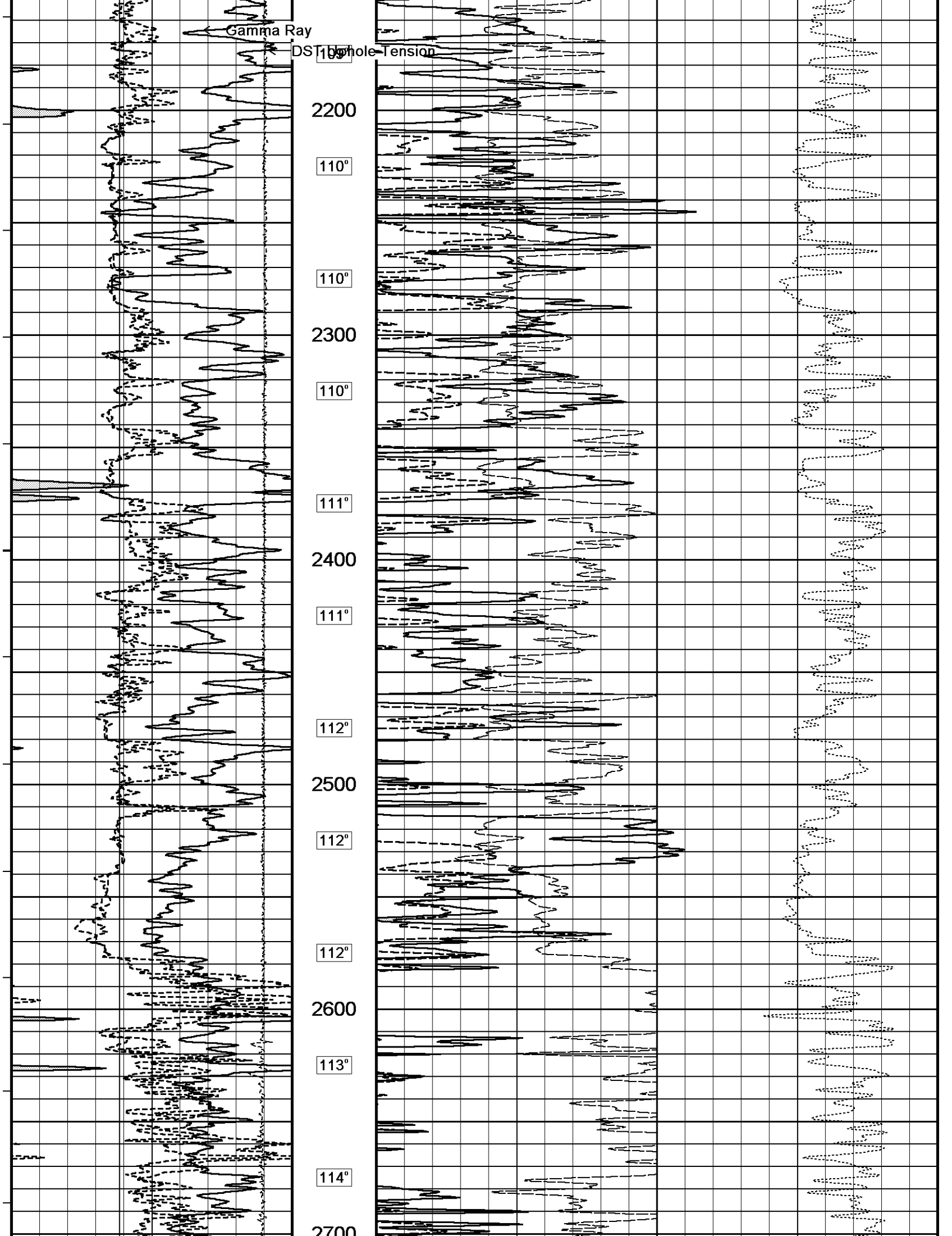
104°
1700
105°
105°
1800
106°
106°
1900
107°
108°
2000
108°
108°
2100
109°
MMR Caliper
Bit Size
Density Caliper
Sandstone Density Dor
PE
Density Correction


Gamma Ray
DST Downhole Tension
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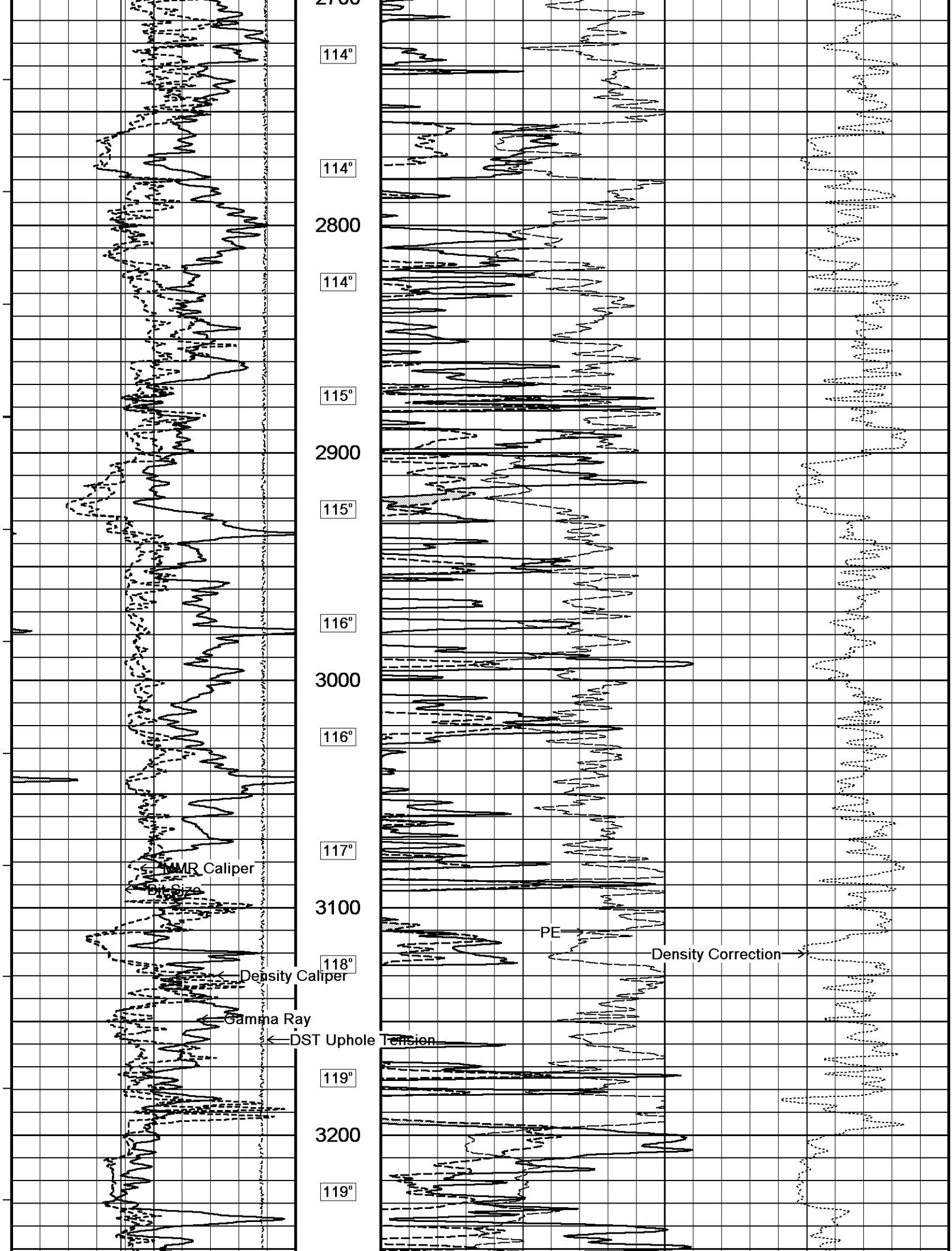
110°
110°
2300
110°
111°
2400
111°
112°
2500
112°
112°
2600
113°
114°
2700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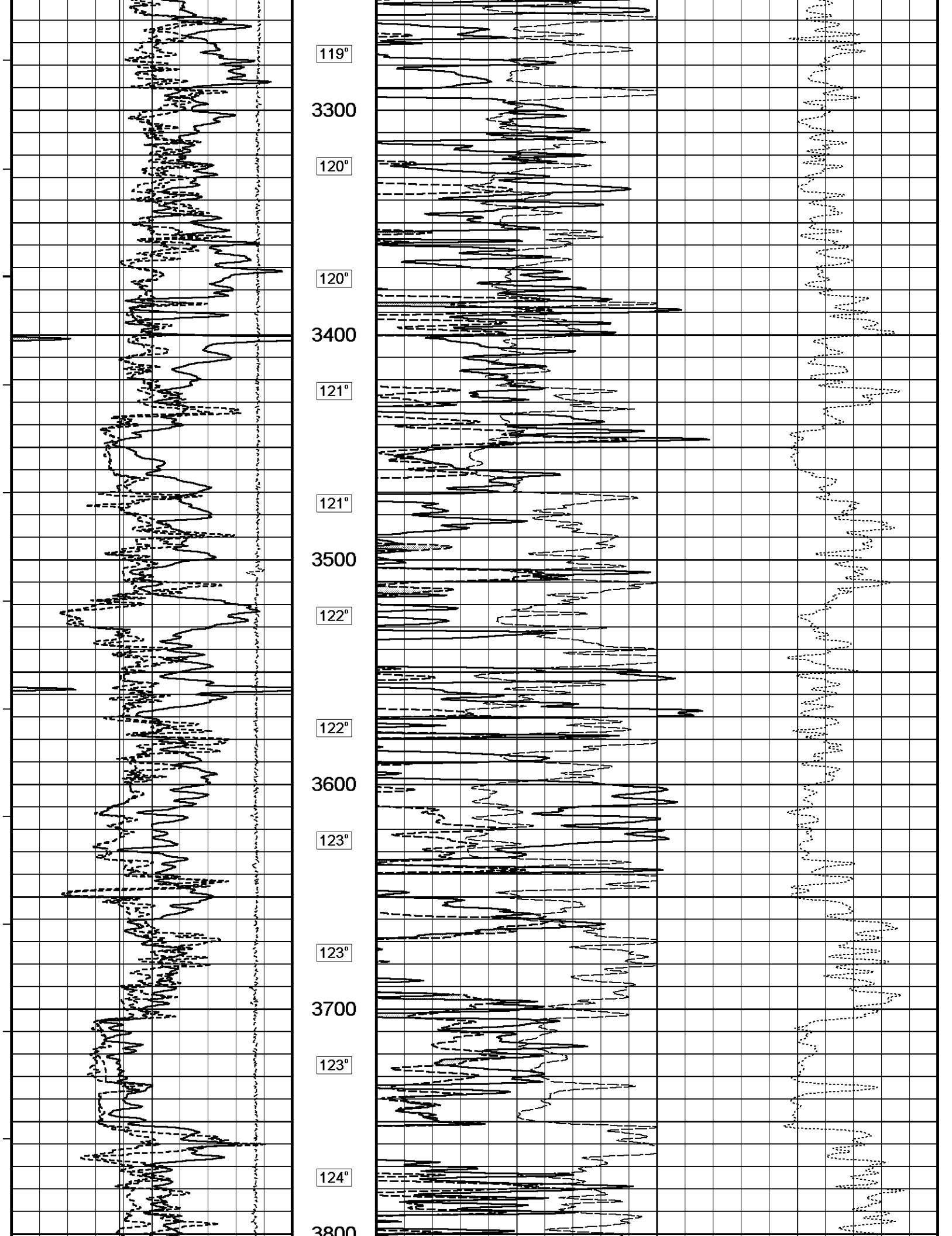
114°
2800
114°
115°
2900
115°
116°
3000
116°
117°
MMR Caliper
Bit Size
3100
PE
Density Correction
118°
Density Caliper
Gamma Ray
DST Uphole Tension
119°
3200
119°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3300
120°
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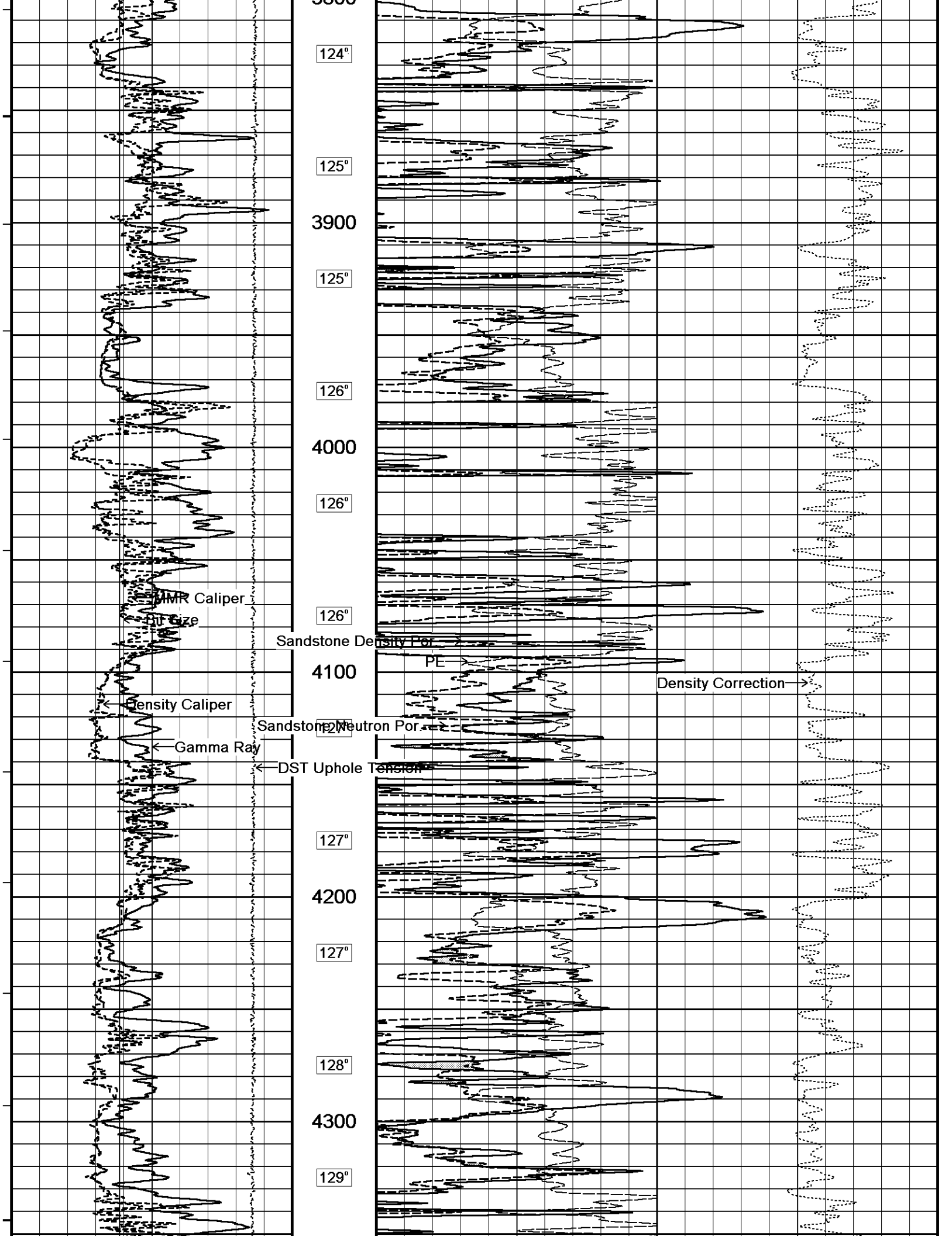
122°
122°
3600
123°
123°
3700
123°
124°
3800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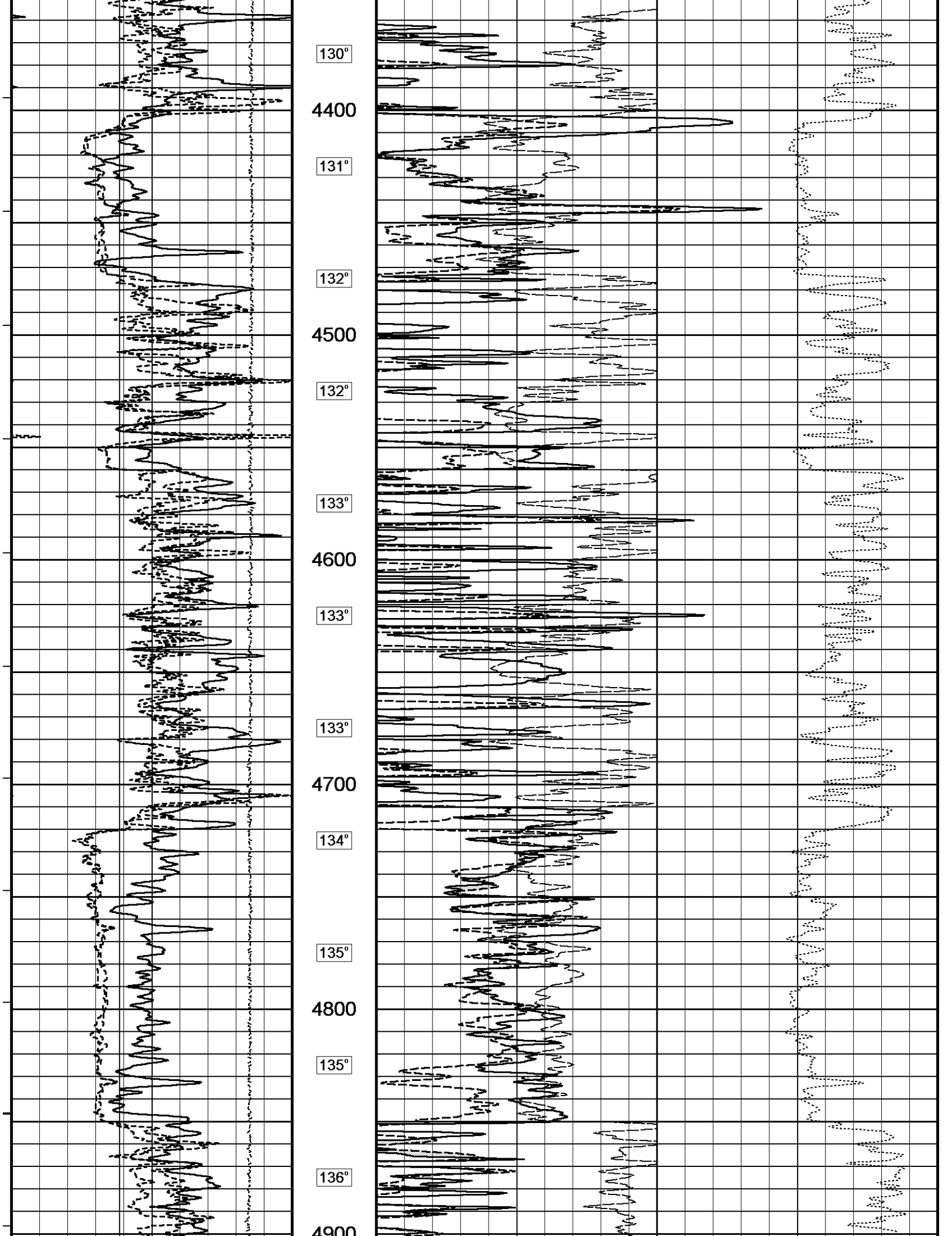
125°
3900
125°
126°
4000
126°
NMR Caliper
Bit Size
126°
Sandstone Density Por
PE
4100
Density Correction
Density Caliper
Sandstone Neutron Por
Gamma Ray
DST Uphole Tension
127°
4200
127°
128°
4300
129°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4400
131°
132°
4500
132°
133°
4600
133°
133°
4700
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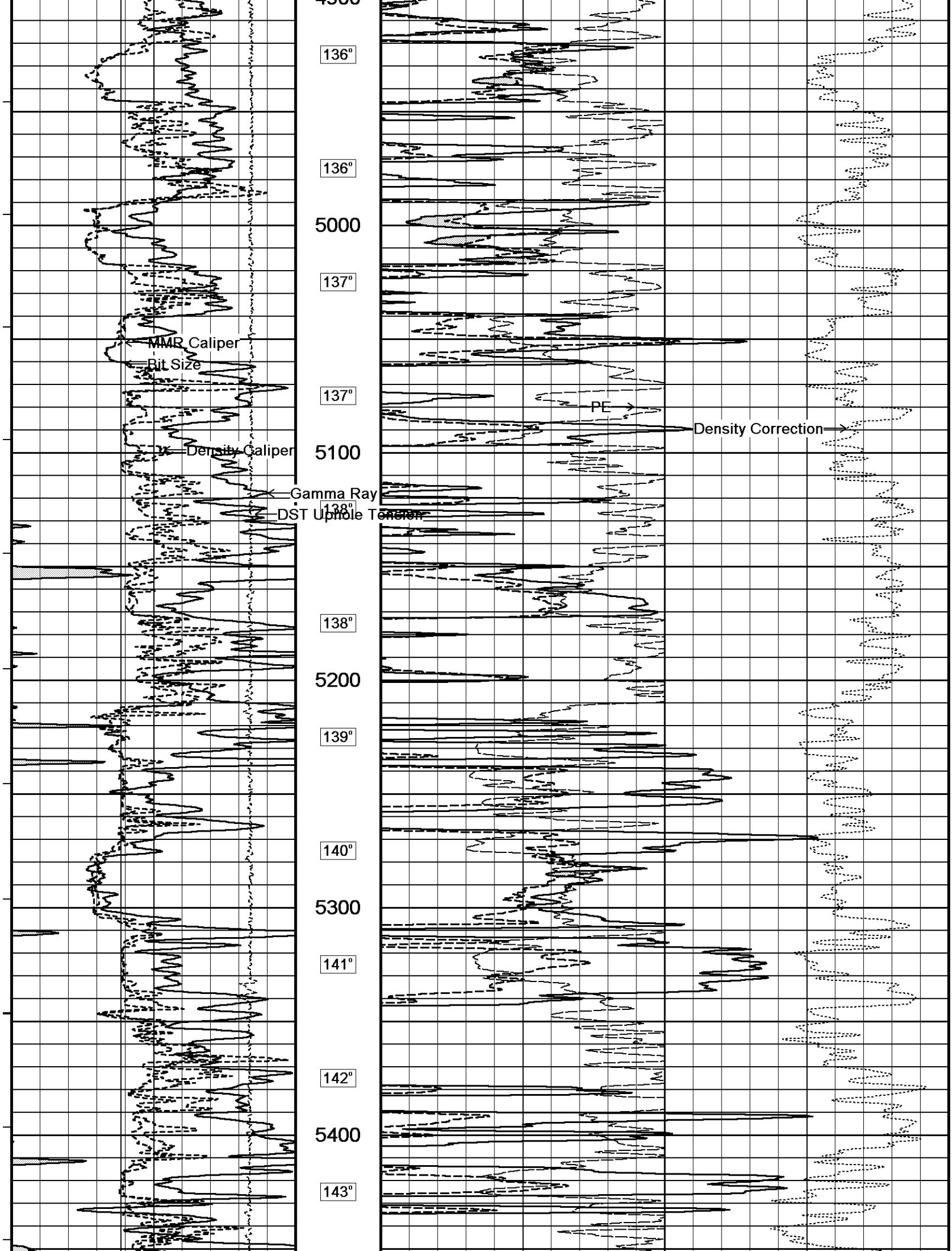
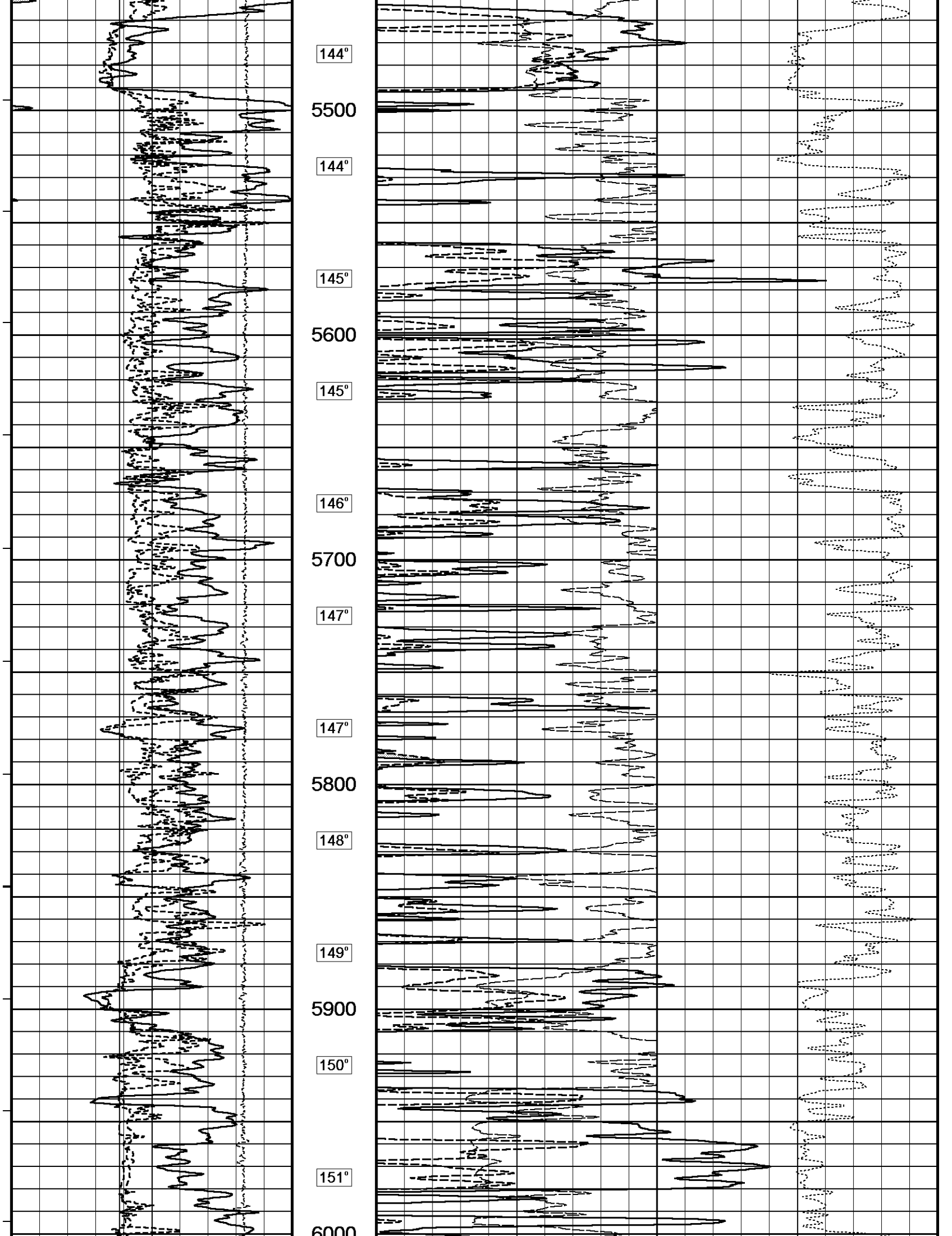
135°
4800
135°
136°
4900


136°
136°
5000
137°
MMR Caliper
Bit Size
137°
PE
Density Correction
Density Caliper
5100
Gamma Ray
138°
DST Uphole Tension
138°
5200
139°
140°
5300
141°
142°
5400
143°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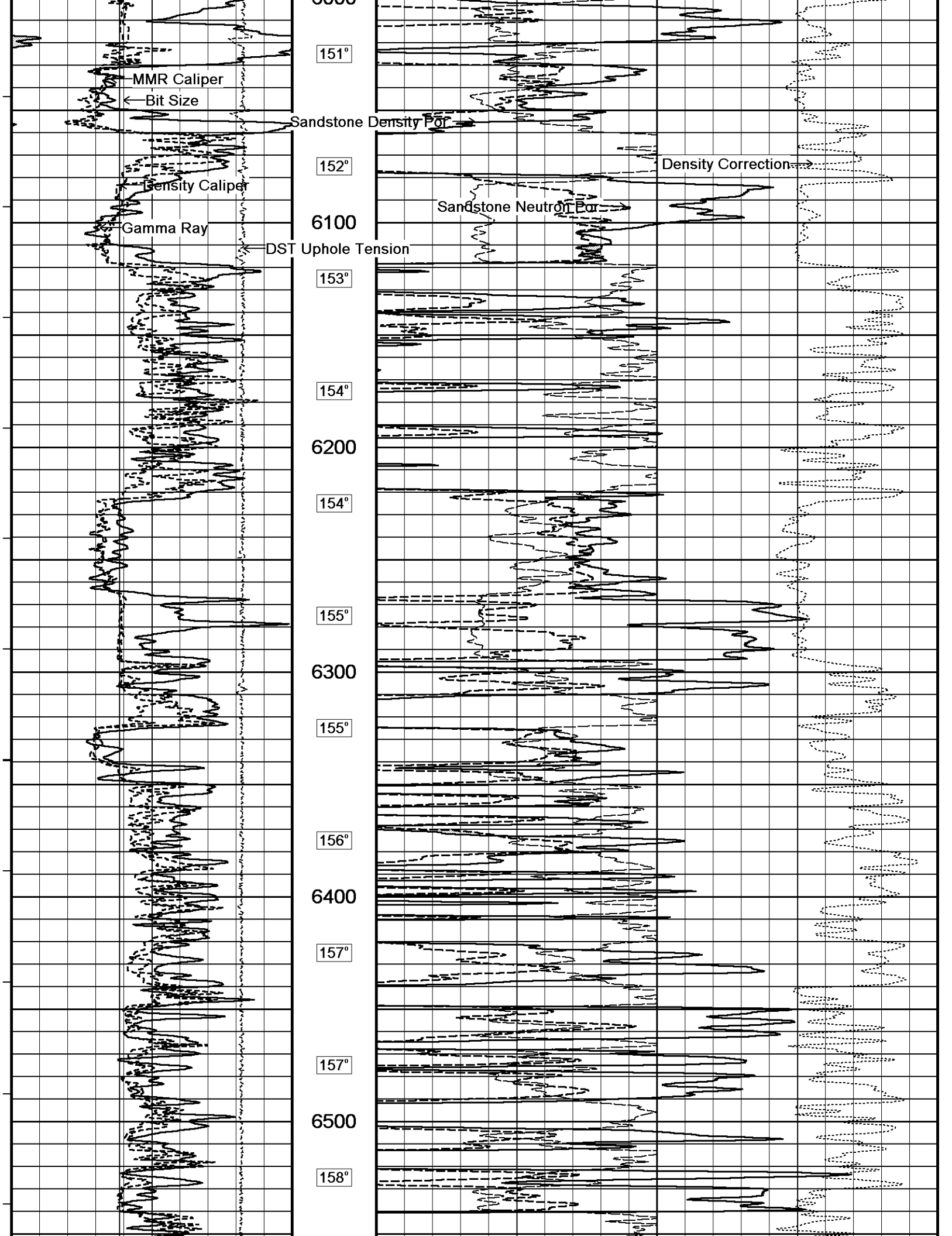
149°
5900
150°
151°
6000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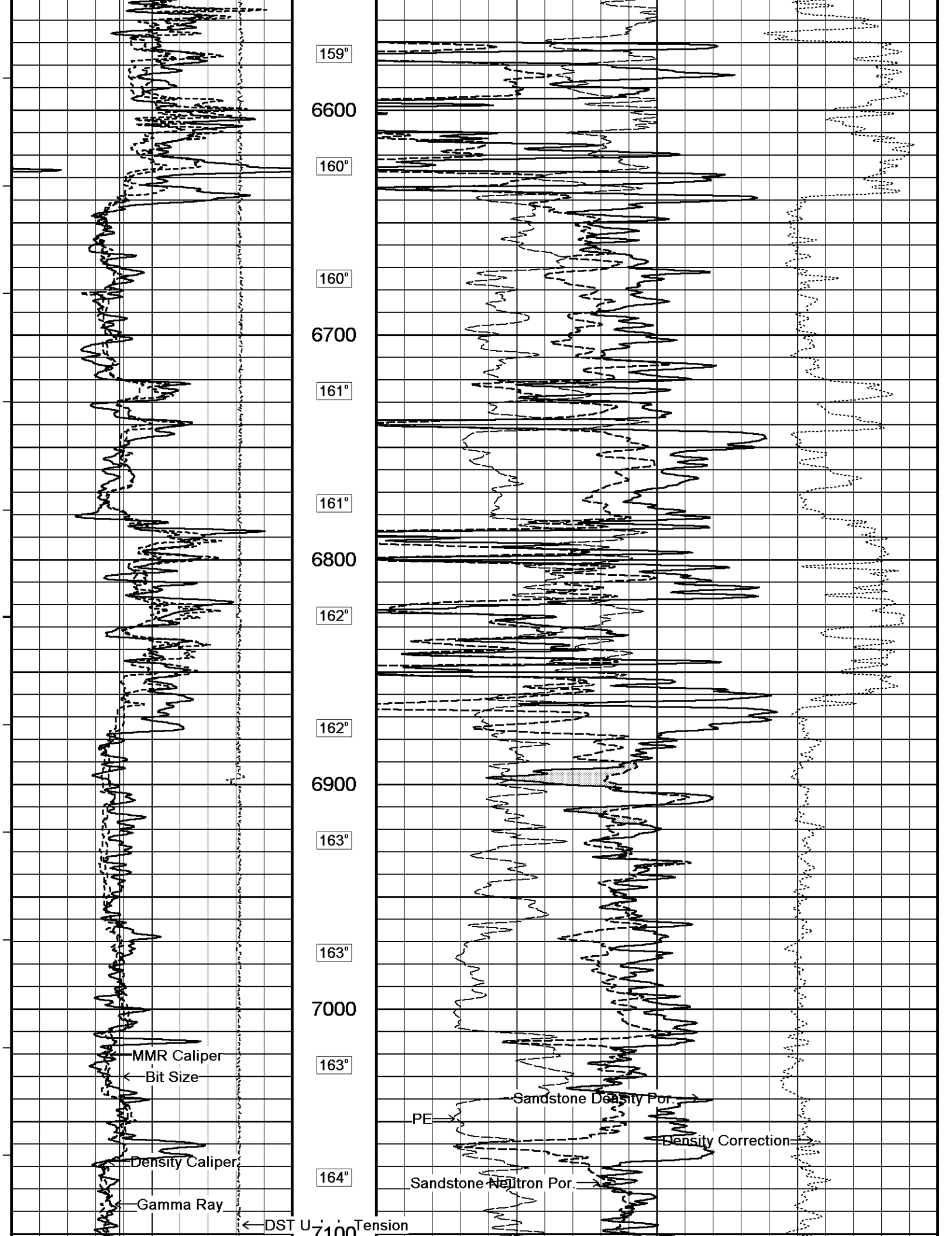
MMR Caliper
Bit Size
Sandstone Density Por
152°
Density Correction
Density Caliper
Sandstone Neutron Por
6100
Gamma Ray
DST Uphole Tension
153°
154°
6200
154°
155°
6300
155°
156°
6400
157°
157°
6500
158°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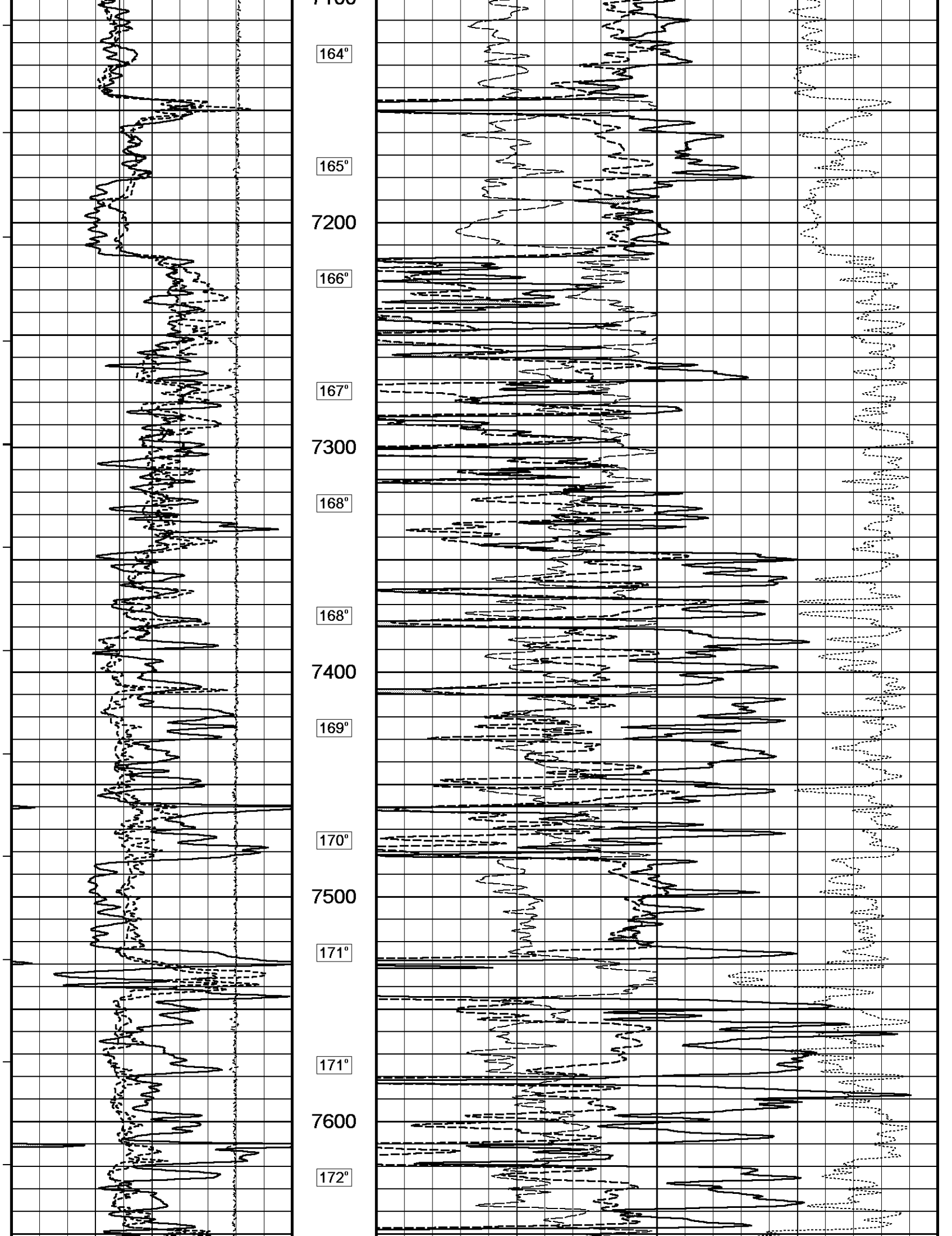
Bit Size
Density Caliper
Gamma Ray
DST U
Tension
7100
Sandstone Density Por
PE
Density Correction
Sandstone Neutron Por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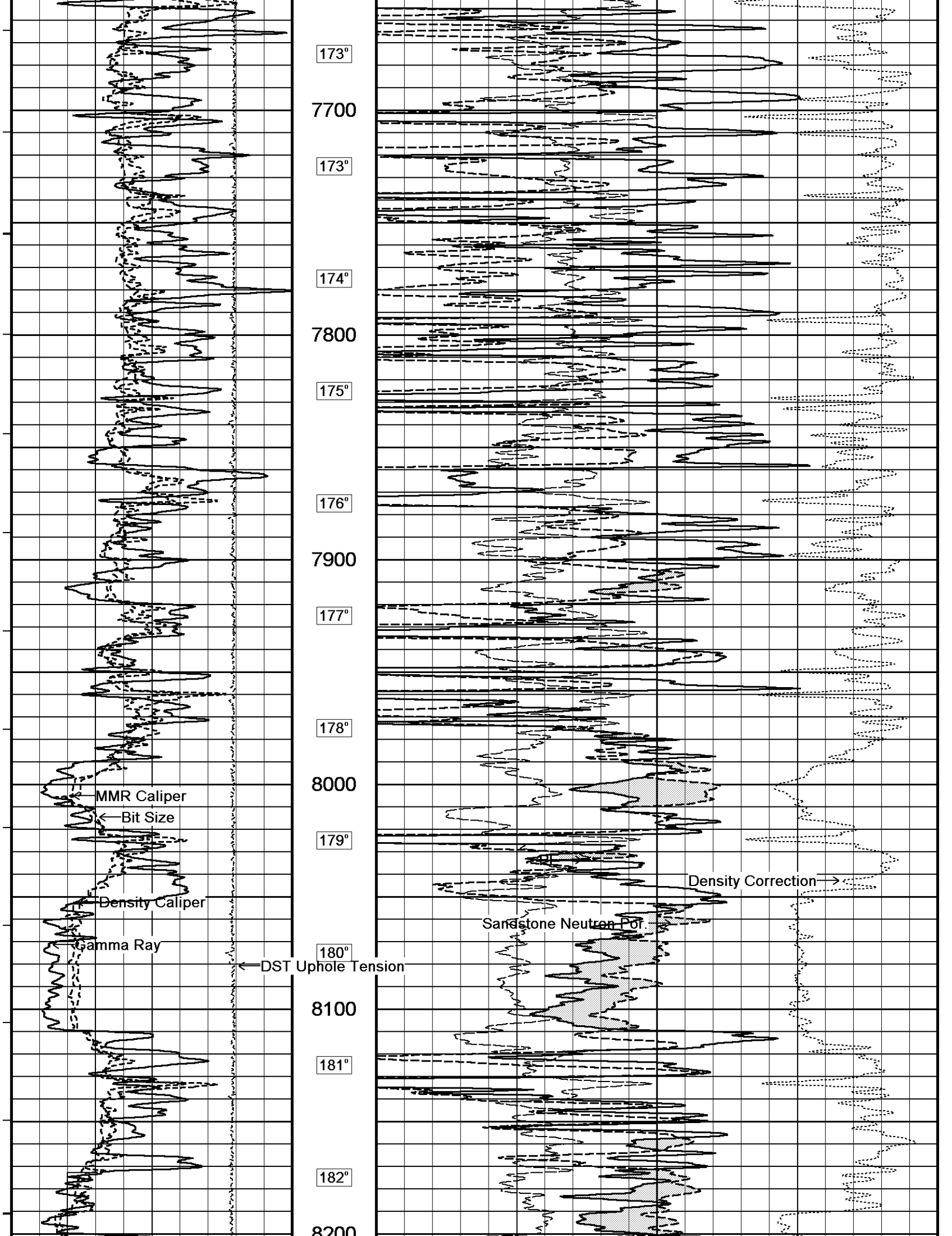
7600
172°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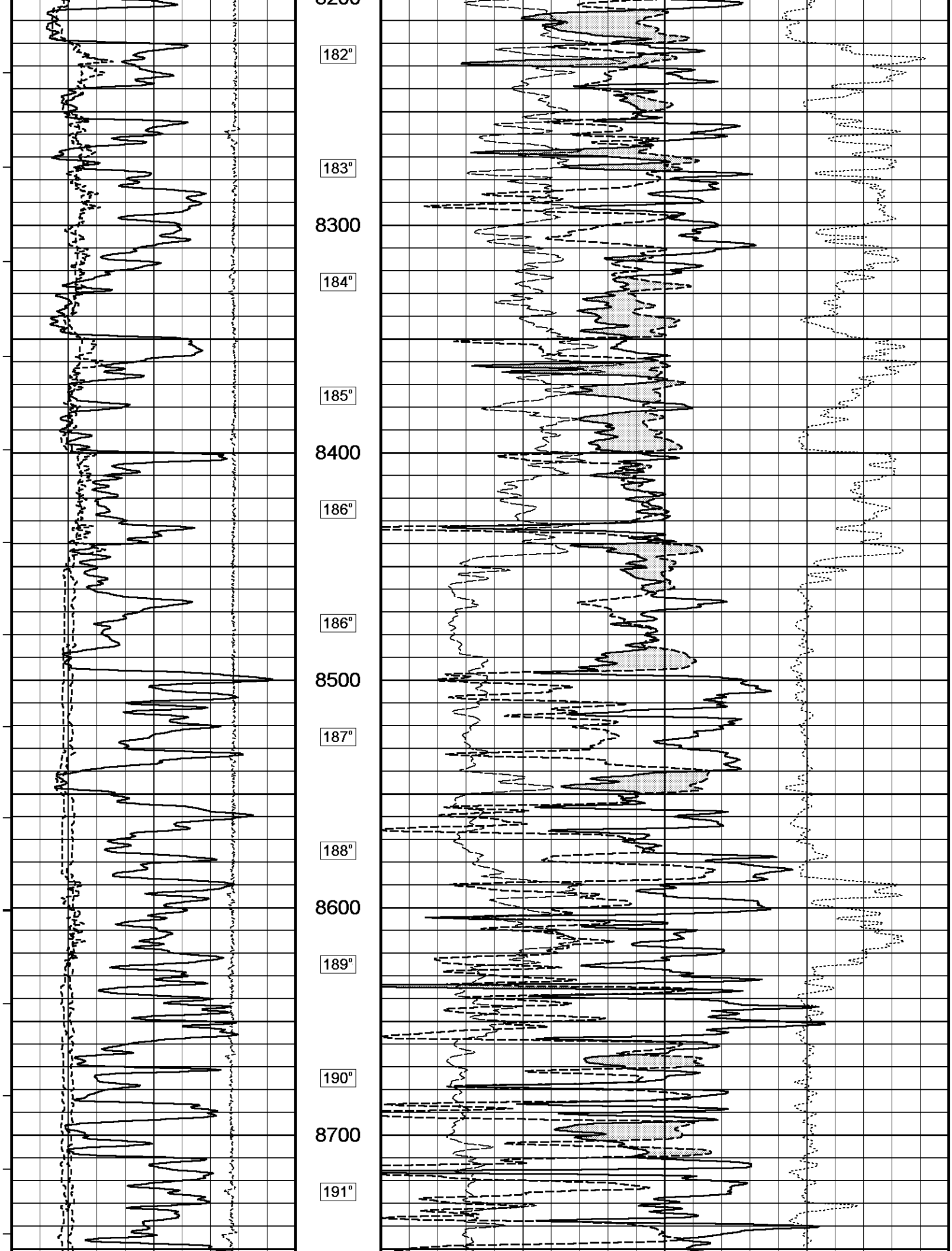
8200
MMR Caliper
Bit Size
Density Caliper
Gamma Ray
DST Uphole Tension
Density Correction
Sandstone Neutron Por.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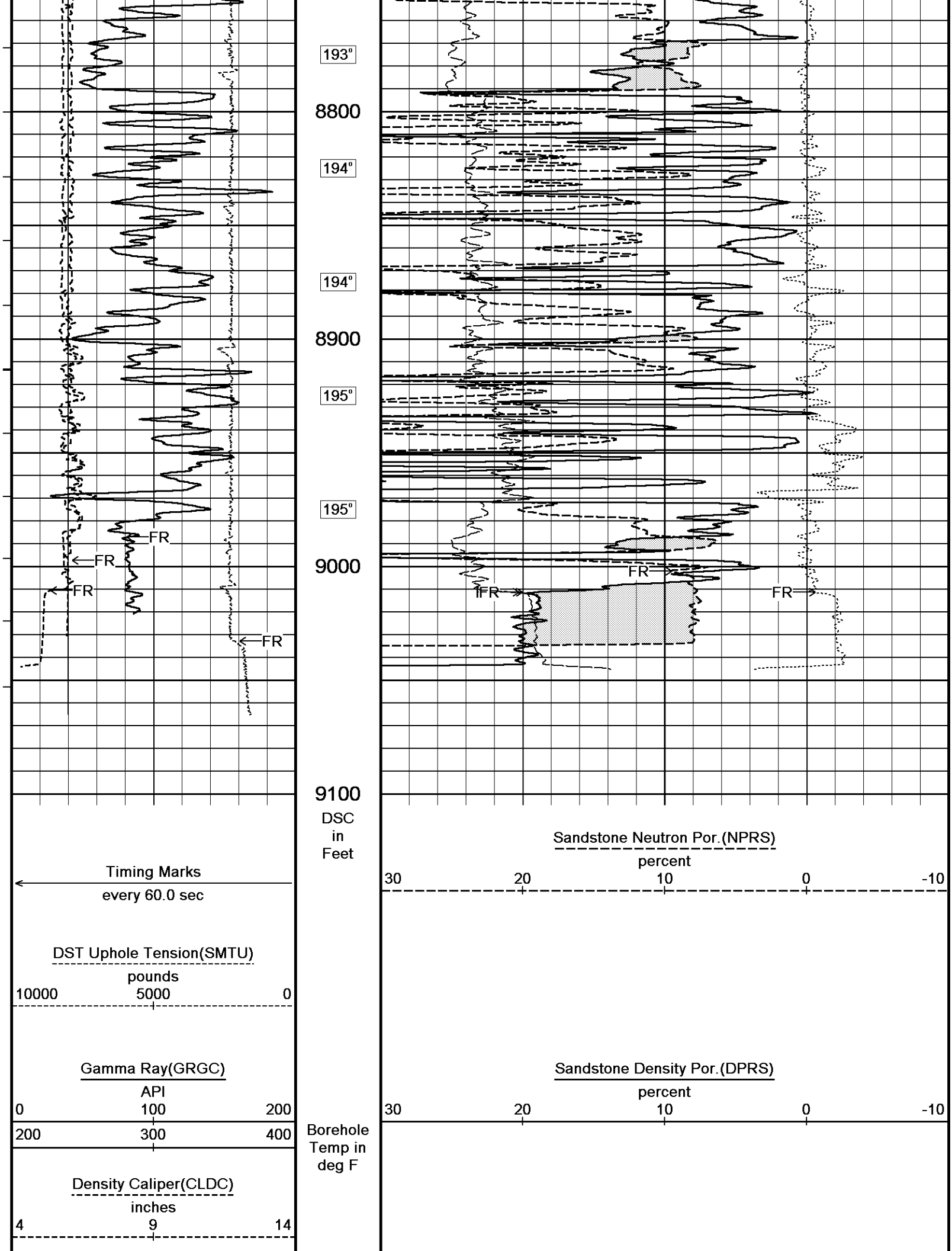

193°
8800
194°
194°
8900
195°
195°
9000
9100
FR
FR
FR
FR
FR
FR
DSC
in
Feet
Timing Marks
every 60.0 sec
DST Uphole Tension(SMTU)
pounds
10000
5000
0
Gamma Ray(GRGC)
API
0
100
200
200
300
400
Borehole
Temp in
deg F
Density Caliper(CLDC)
inches
4
9
14
Sandstone Neutron Por.(NPRS)
percent
30
20
10
0
-10
Sandstone Density Por.(DPRS)
percent
30
20
10
0
-10

Bit Size(BIT)
inches
4 9 14

MMR Caliper(MBTC)
inches
4 9 14

Replay Scale 1:600

PE(PDPE)
barns/electron
0 5 10

Density Correction(DCOR)
grams/cc
-0.25 0 0.25

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 06-APR-2008 17:49
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_002.dta
Recorded on 05-APR-2008 07:59
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

2 INCH MAIN LOG

5 INCH MAIN LOG

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 06-APR-2008 17:49
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_002.dta
Recorded on 05-APR-2008 07:59
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

Timing Marks
every 60.0 sec

DST Uphole Tension(SMTU)
pounds
10000 5000 0

Gamma Ray(GRGC)
API
0 100 200

Density Caliper(CLDC)
inches
4 9 14

Bit Size(BIT)
inches
4 9 14

DSC in Feet

Borehole Temp in deg F

HVI every 10 cu ft

Annular Integral every 10 cu ft

Replay Scale 1:240

Sandstone Neutron Por.(NPRS)
percent
30 20 10 0 -10

Sandstone Density Por.(DPRS)
percent
30 20 10 0 -10

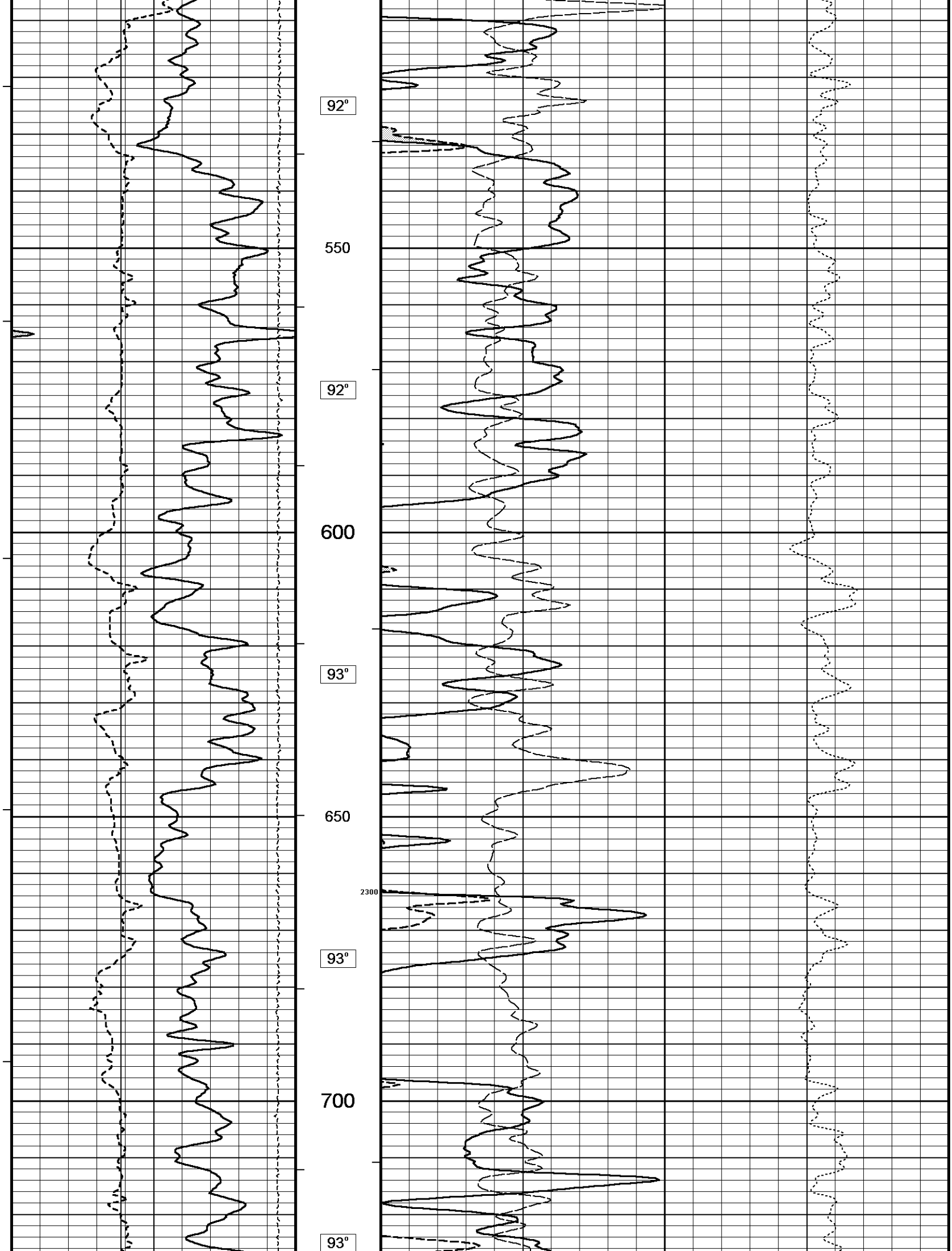
PE(PDPE)
barns/electron
0 5 10

Density Correction(DCOR)
grams/cc
-0.25 0 0.25

474
92

Casing Shoe

500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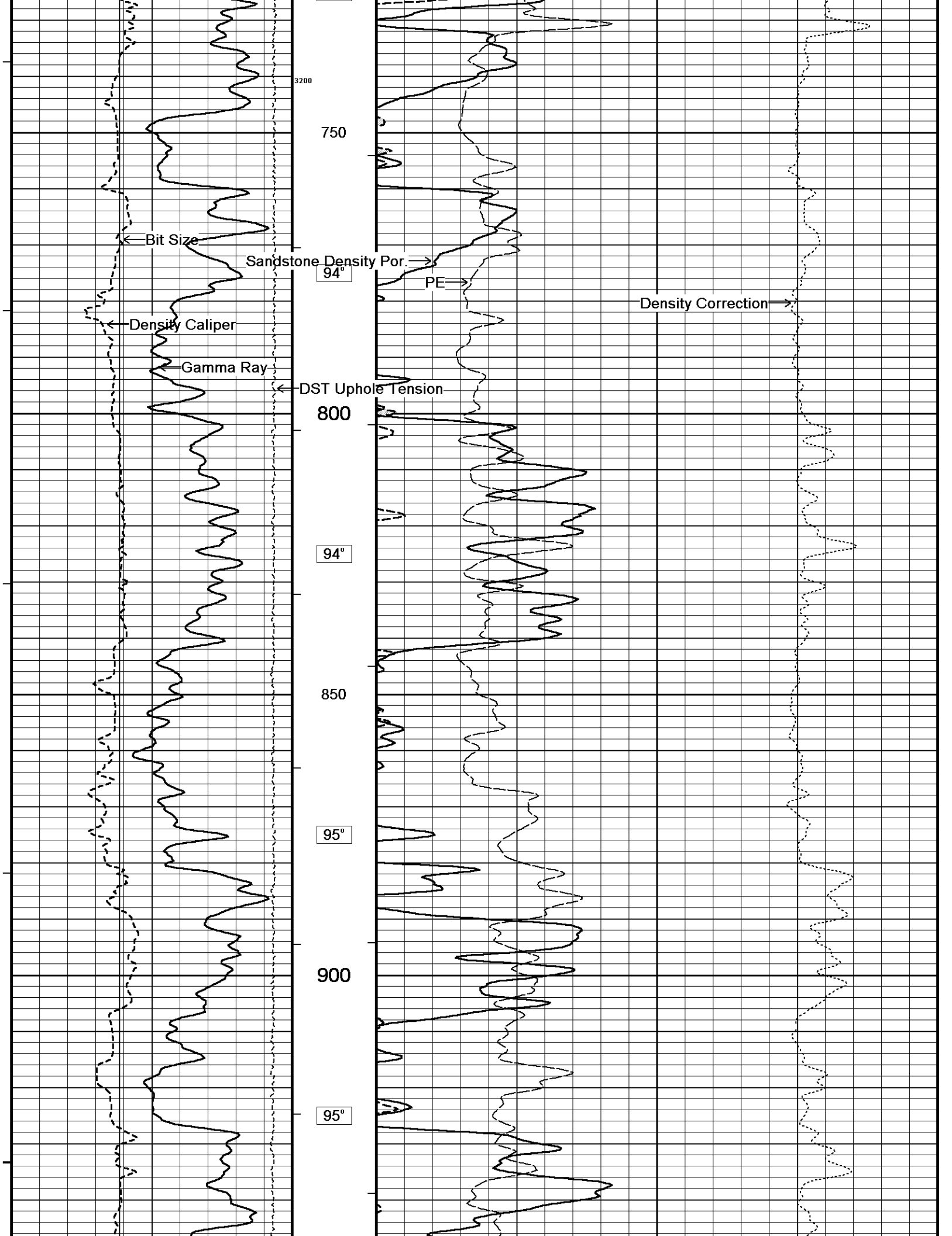
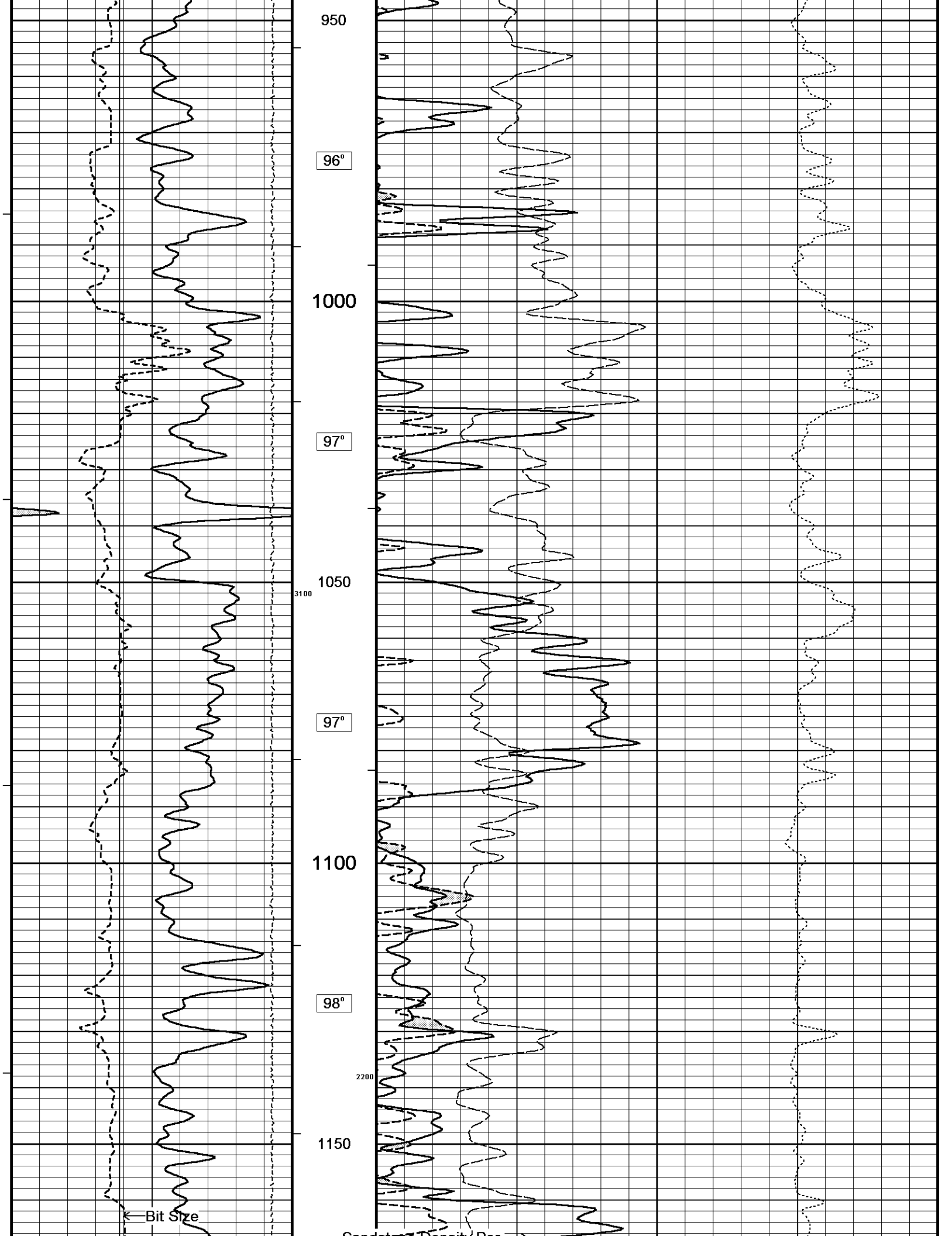
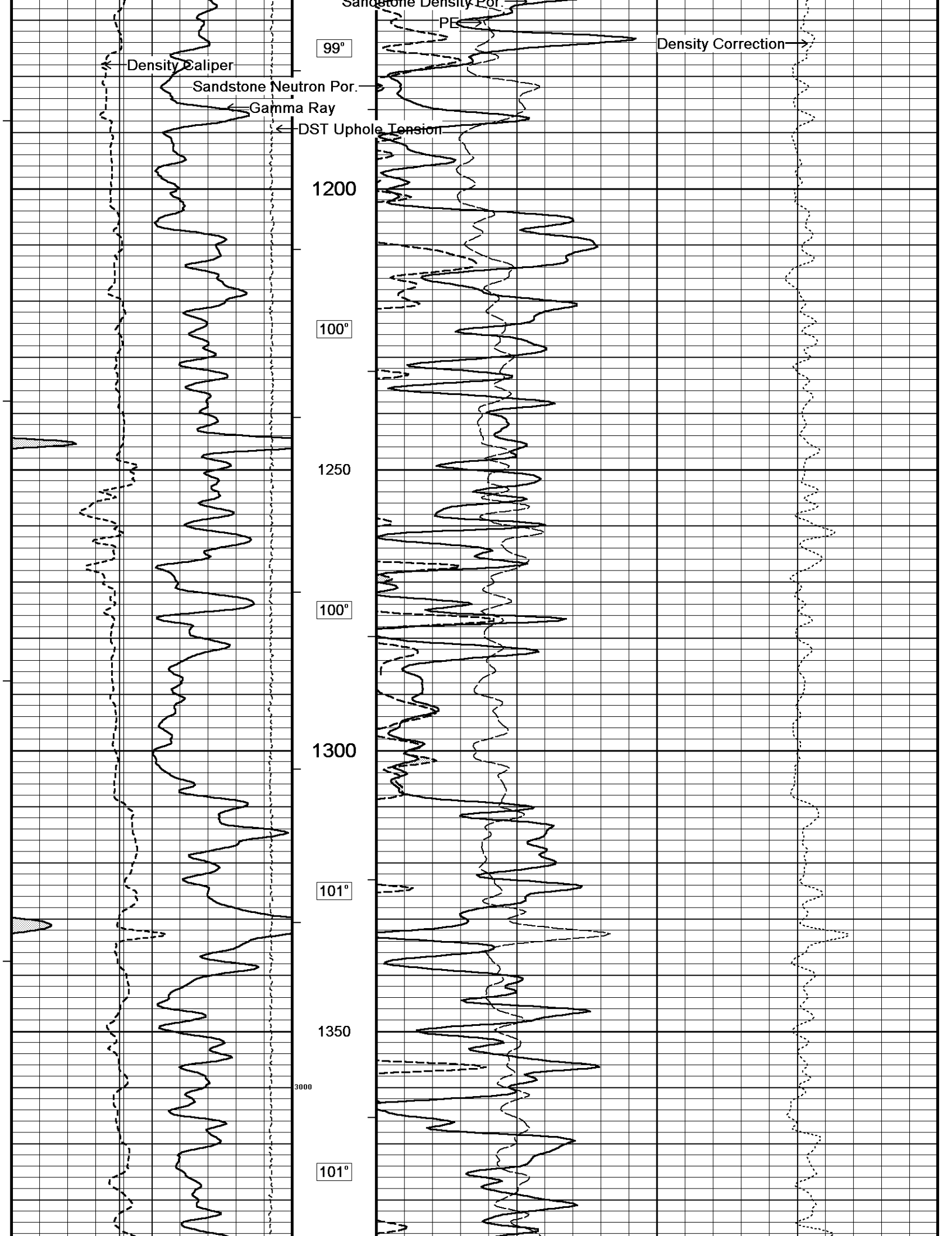
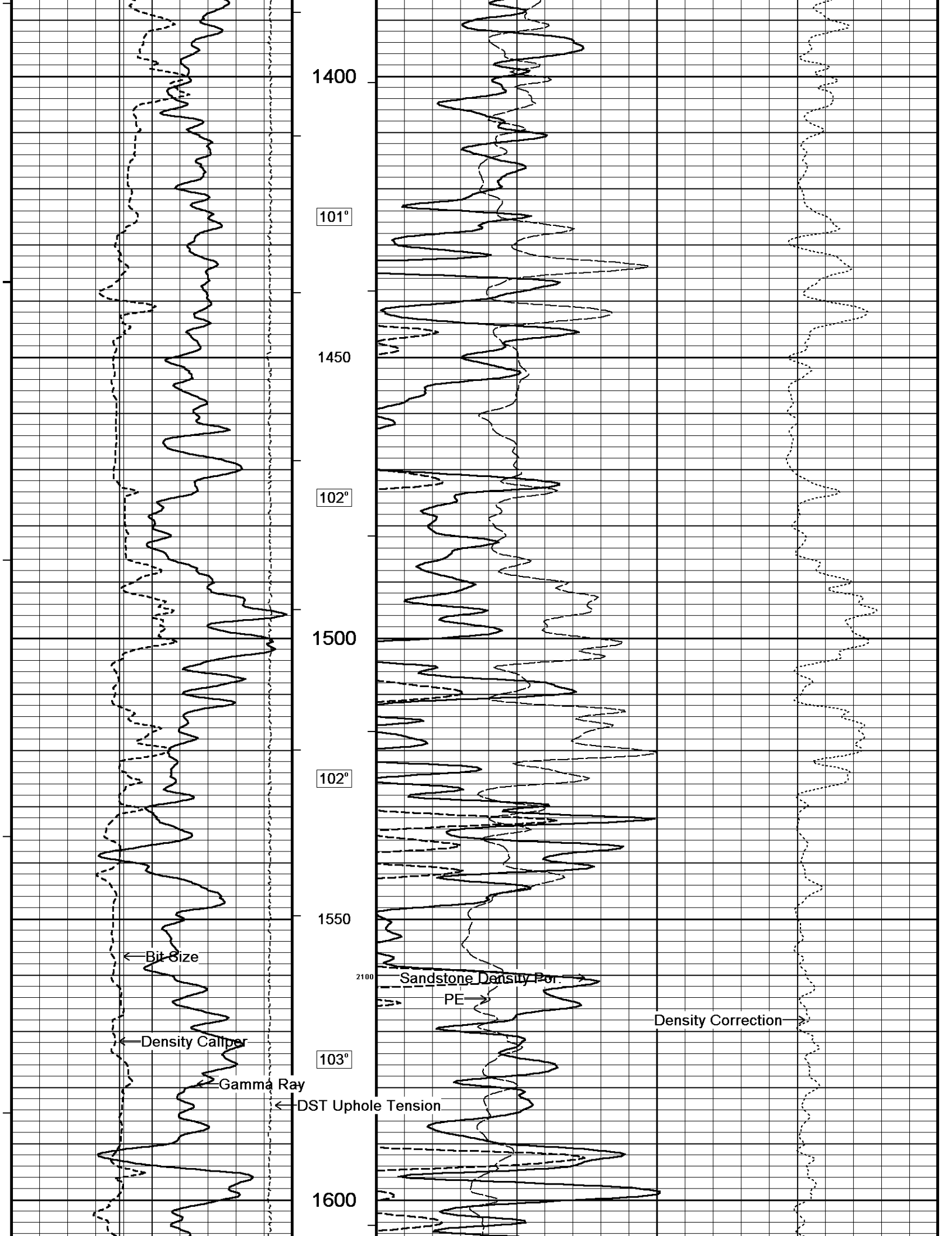
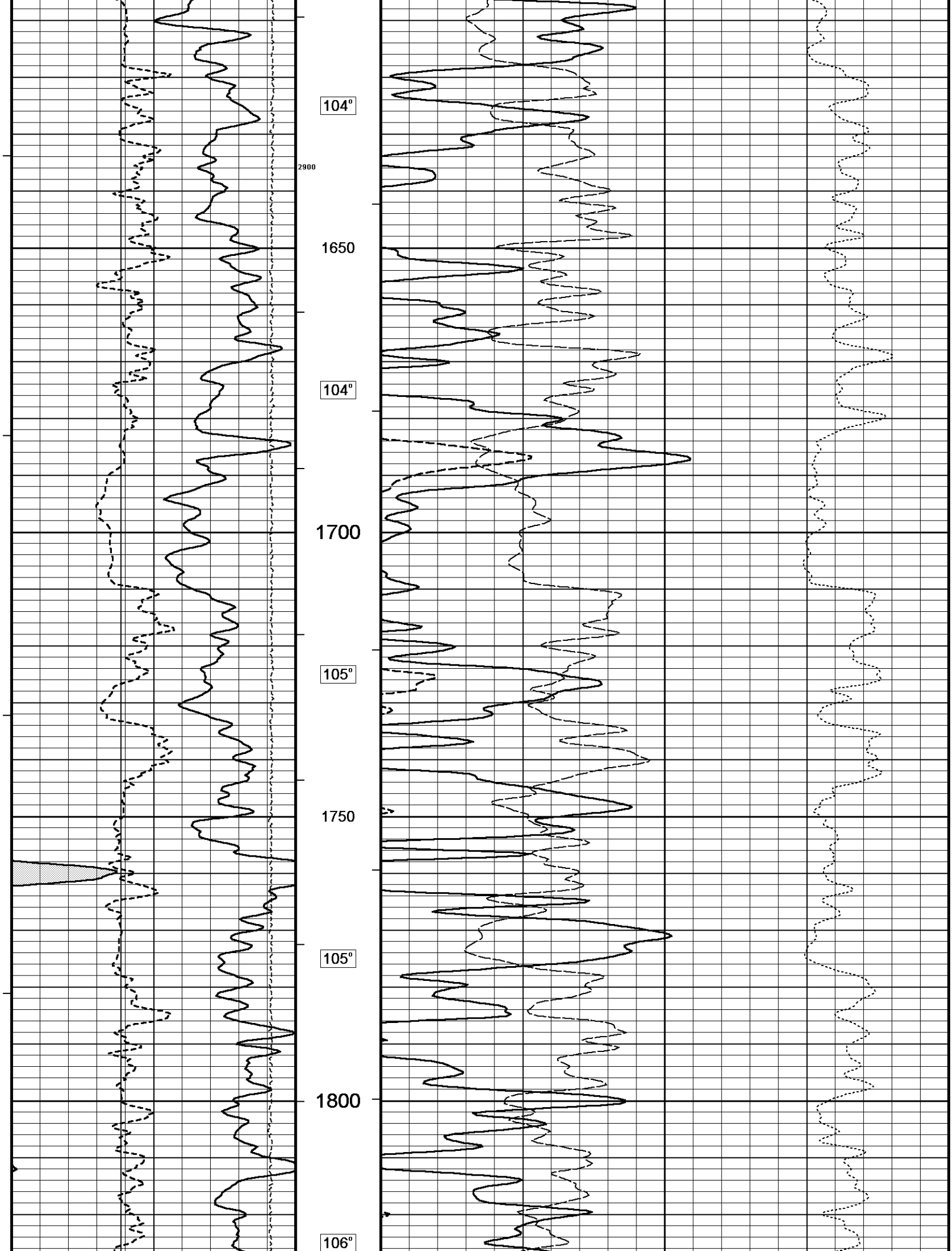
550
92°
600
93°
650
2300
93°
700
93°


3200
750
Bit Size
Sandstone Density Por.
94°
PE
Density Correction
Density Caliper
Gamma Ray
DST Uphole Tension
800
94°
850
95°
900
95°


950
96°
1000
97°
1050
3100
97°
1100
98°
2200
1150
Bit Size


Sandstone Density Por.
PE
Density Correction
Density Caliper
Sandstone Neutron Por.
Gamma Ray
DST Uphole Tension
99°
1200
100°
1250
100°
1300
101°
1350
3000
101°


1400
101°
1450
102°
1500
102°
1550
Bit Size
2100
Sandstone Density Por.
PE
Density Correction
Density Caliper
103°
Gamma Ray
DST Uphole Tension
1600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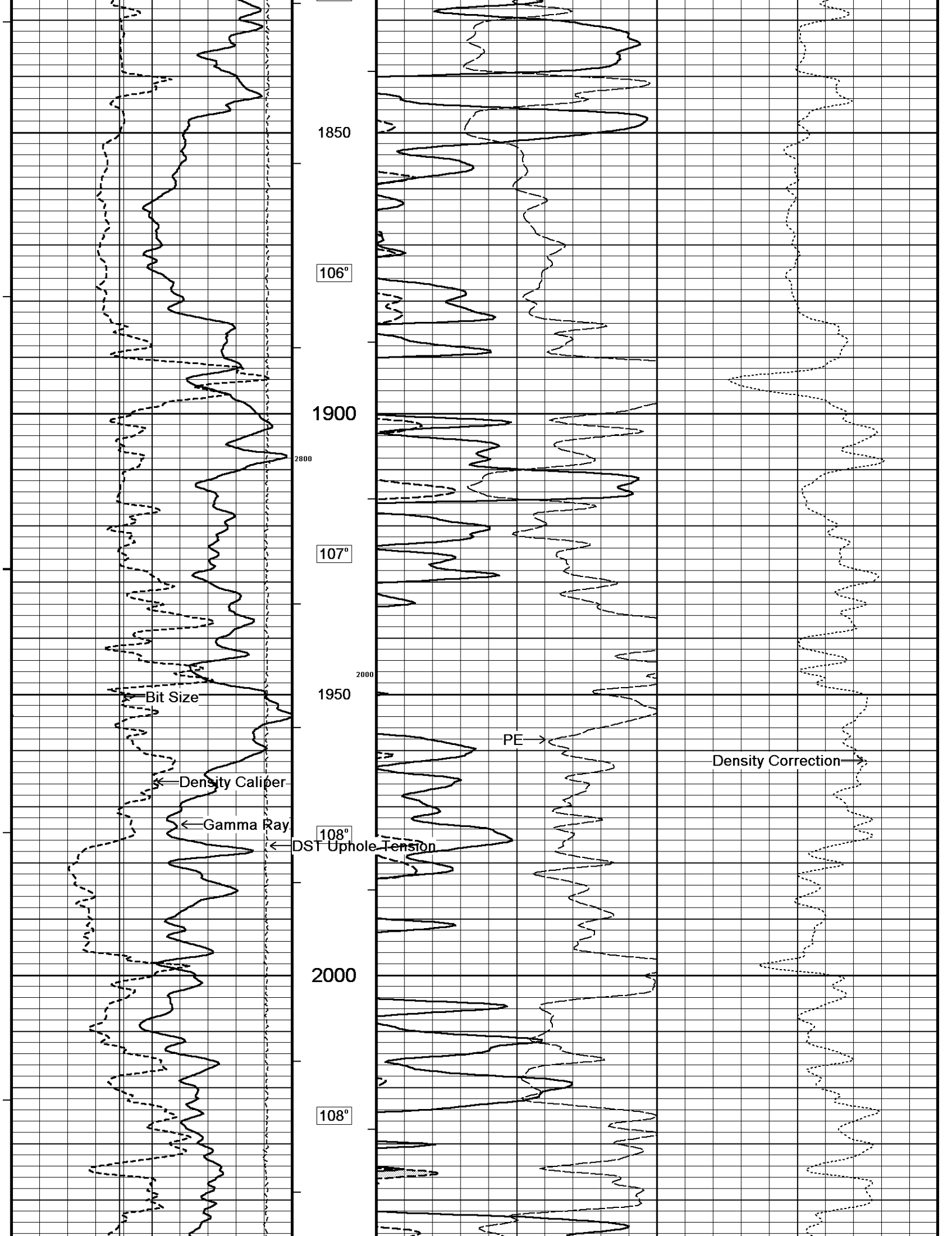
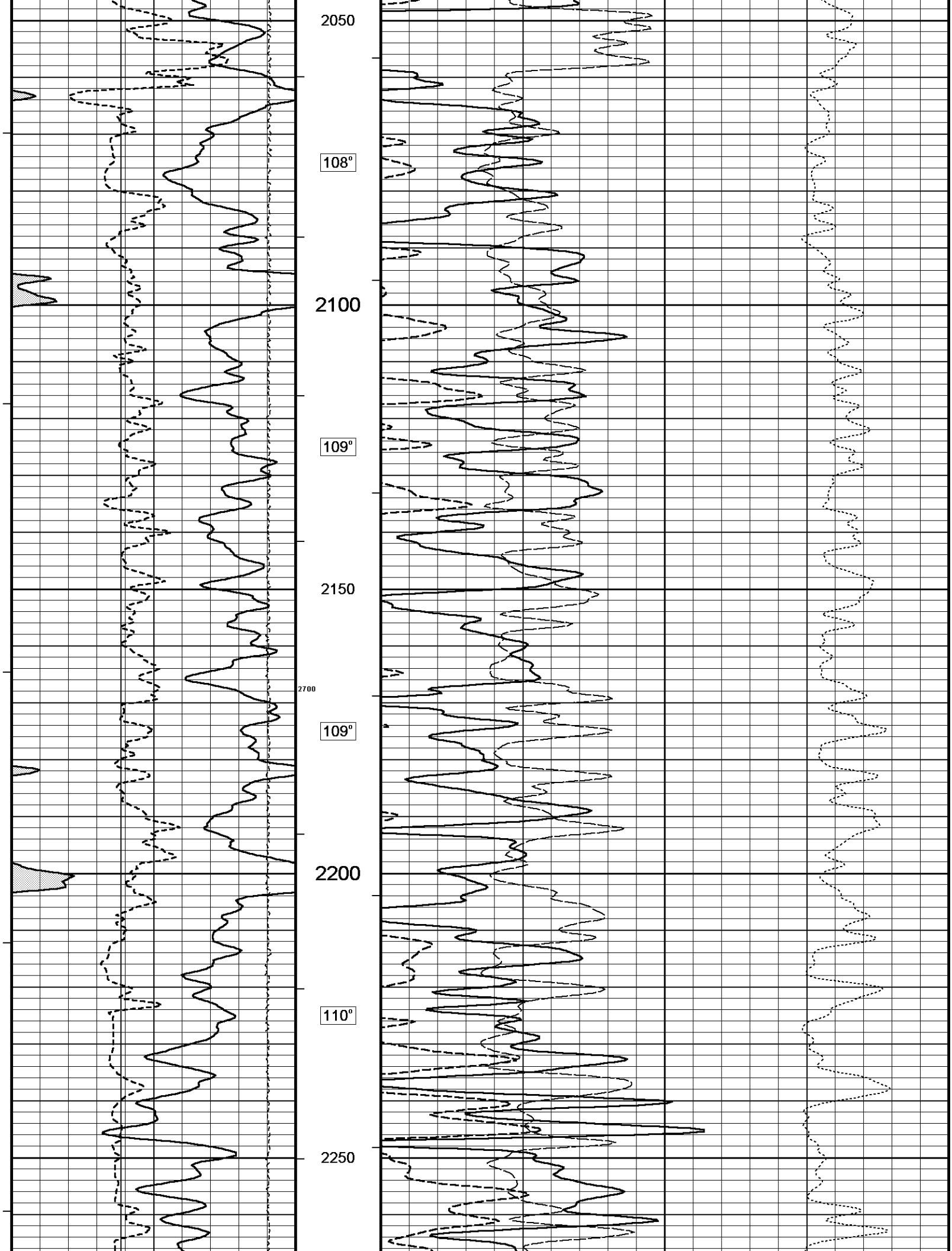
1650
104°
1700
105°
1750
105°
1800
106°


1850
106°
1900
2800
107°
2000
1950
Bit Size
PE
Density Correction
Density Caliper
Gamma Ray
108°
DST Uphole Tension
2000
108°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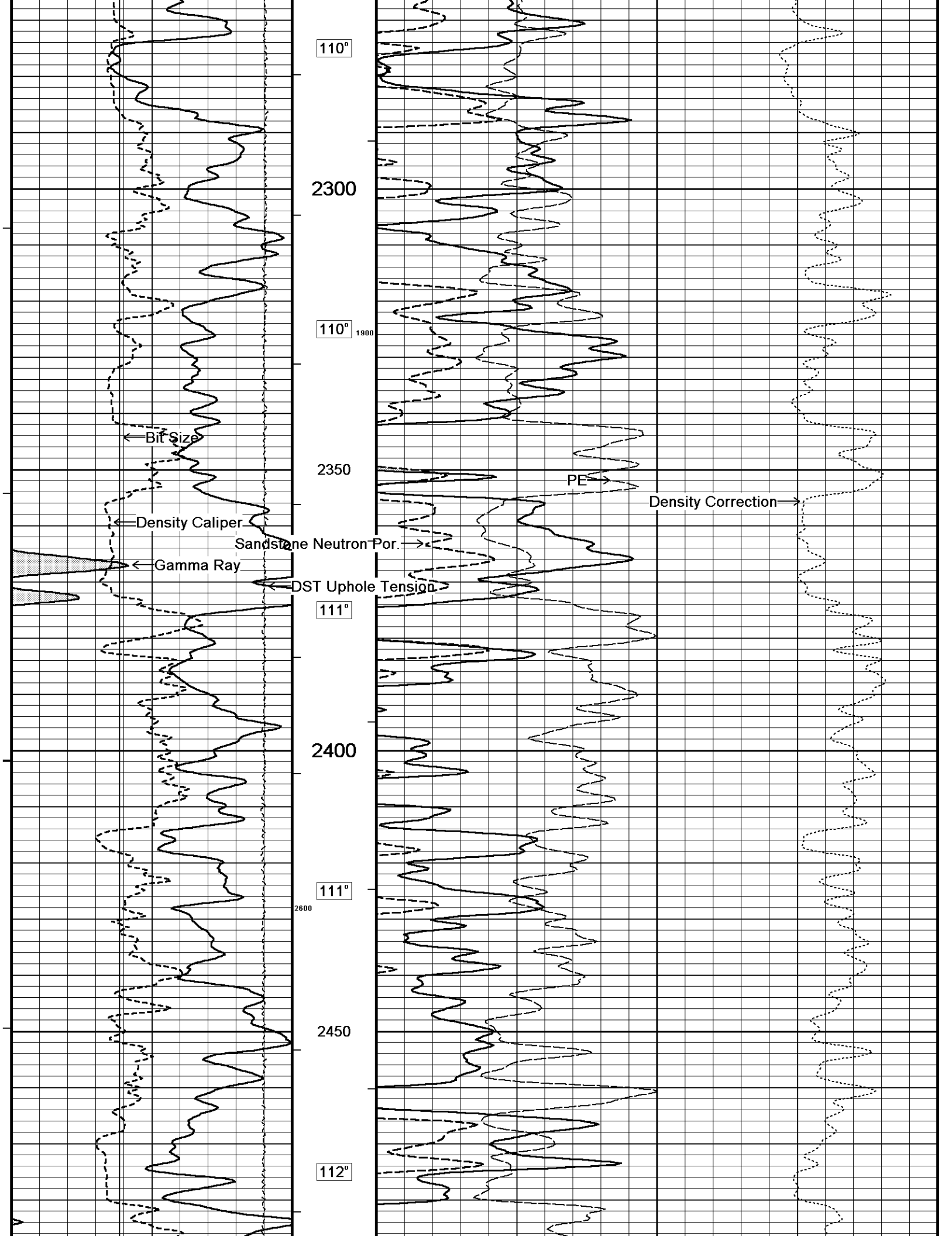
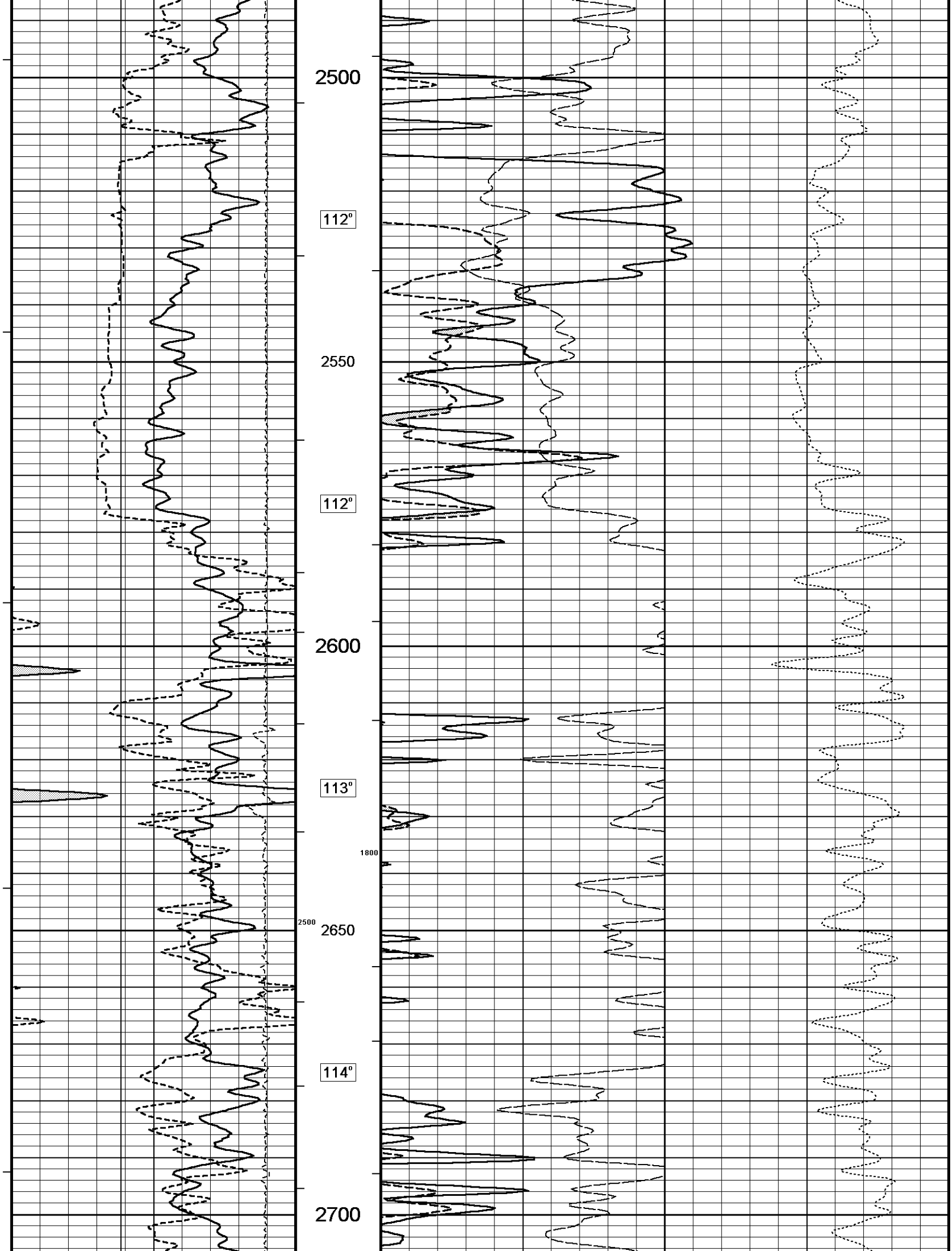
2100
109°
2150
2700
109°
2200
110°
2250


110°
2300
110°
1900
Bit Size
2350
PE
Density Correction
Density Caliper
Sandstone Neutron Por.
Gamma Ray
DST Uphole Tension
111°
2400
111°
2600
2450
112°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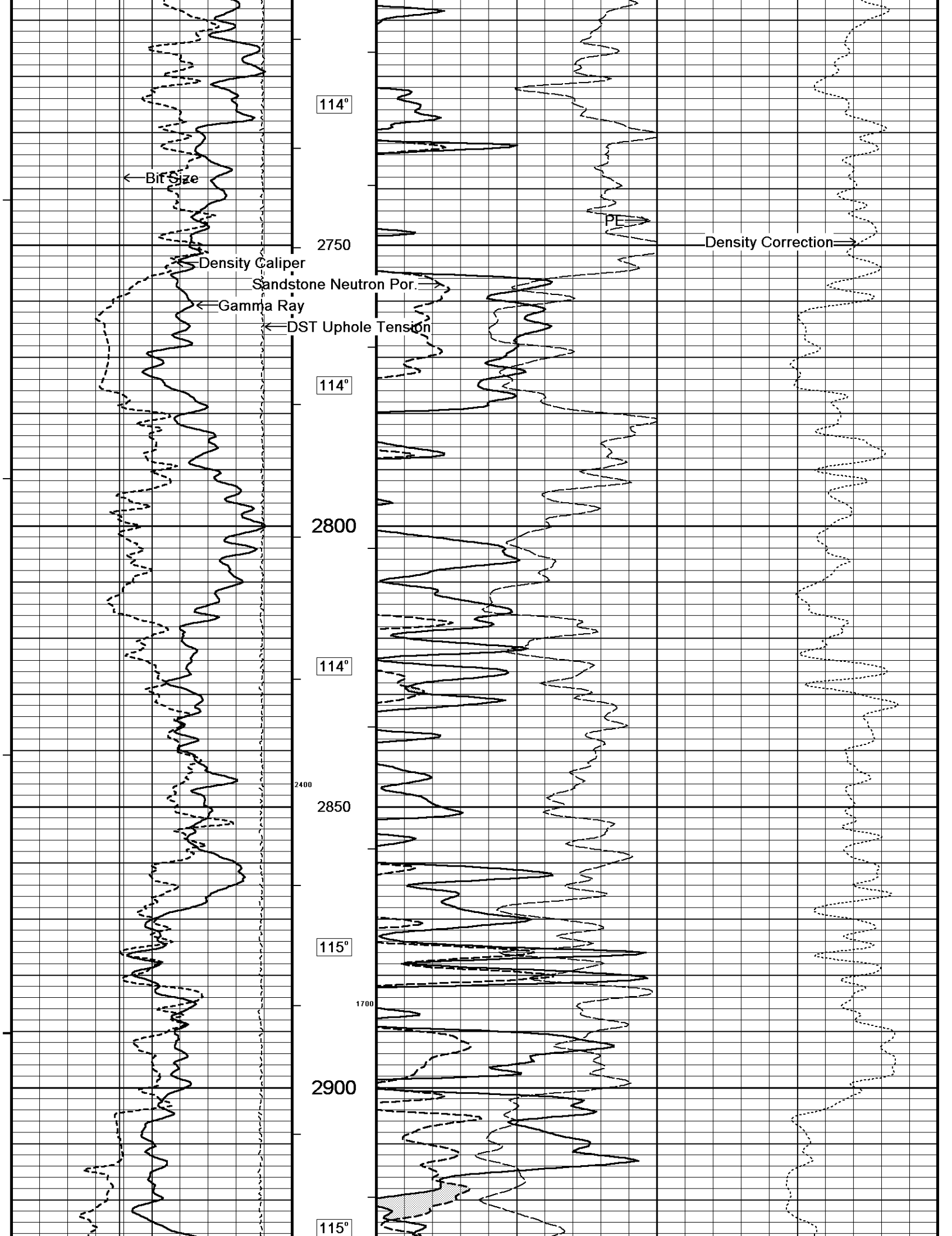
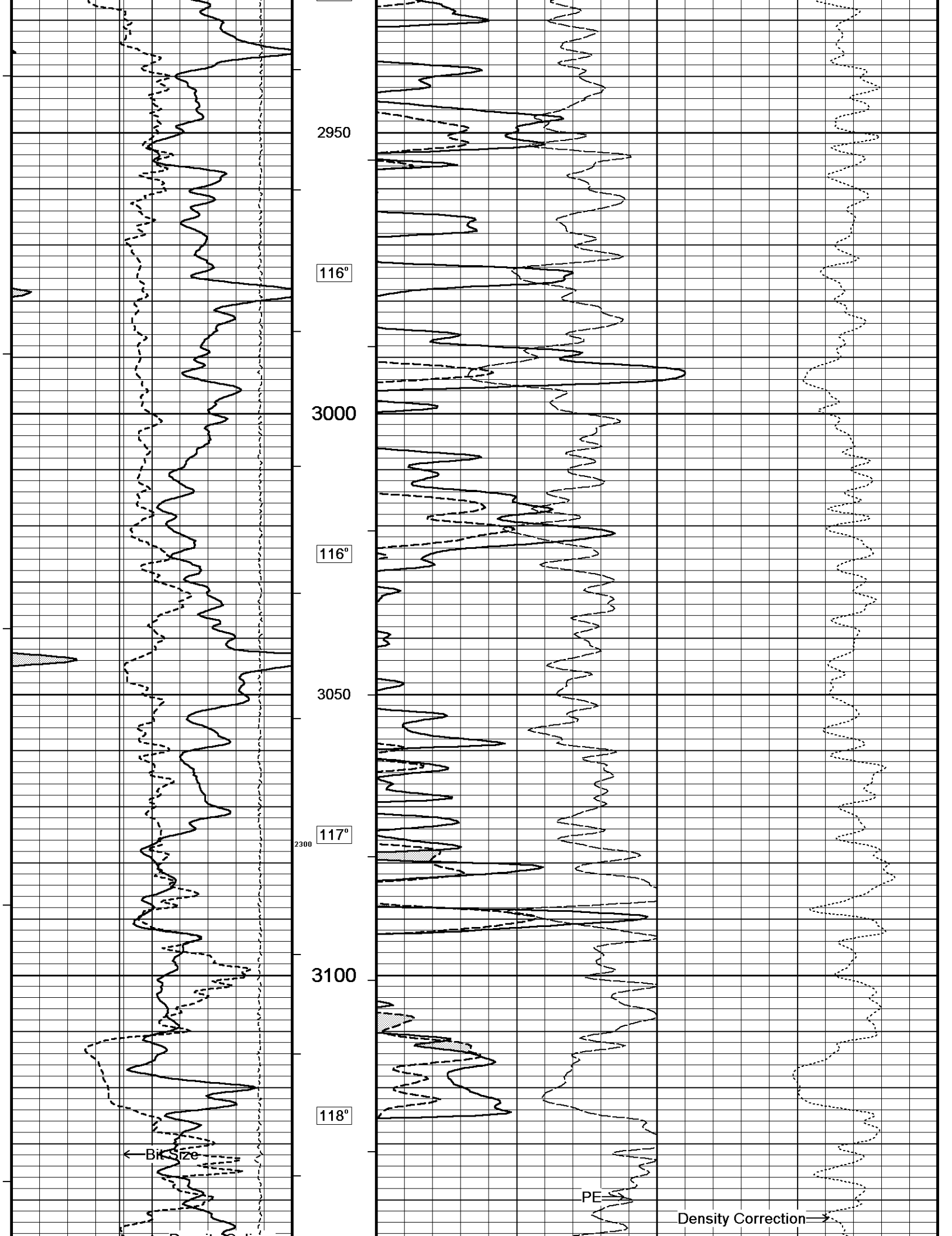
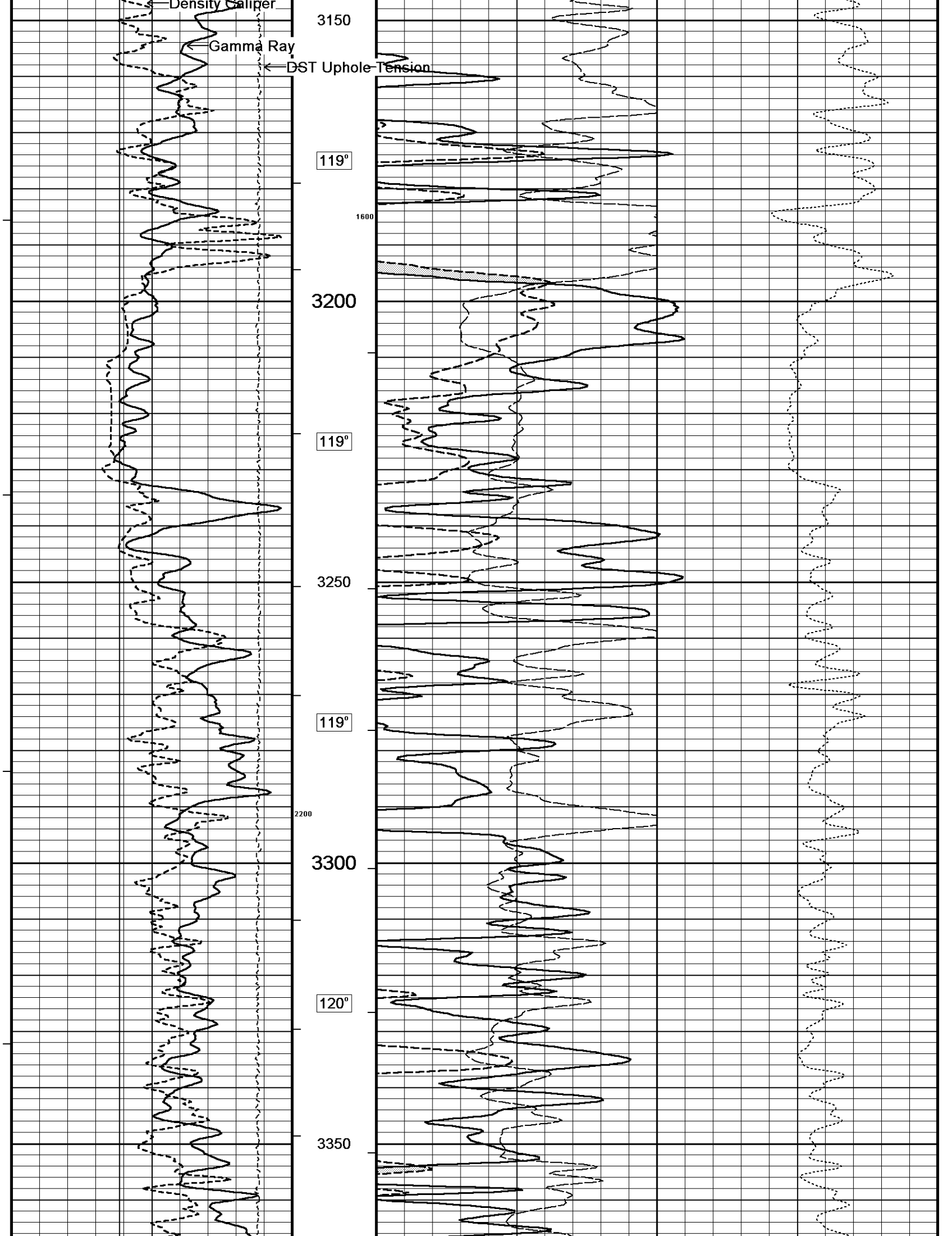
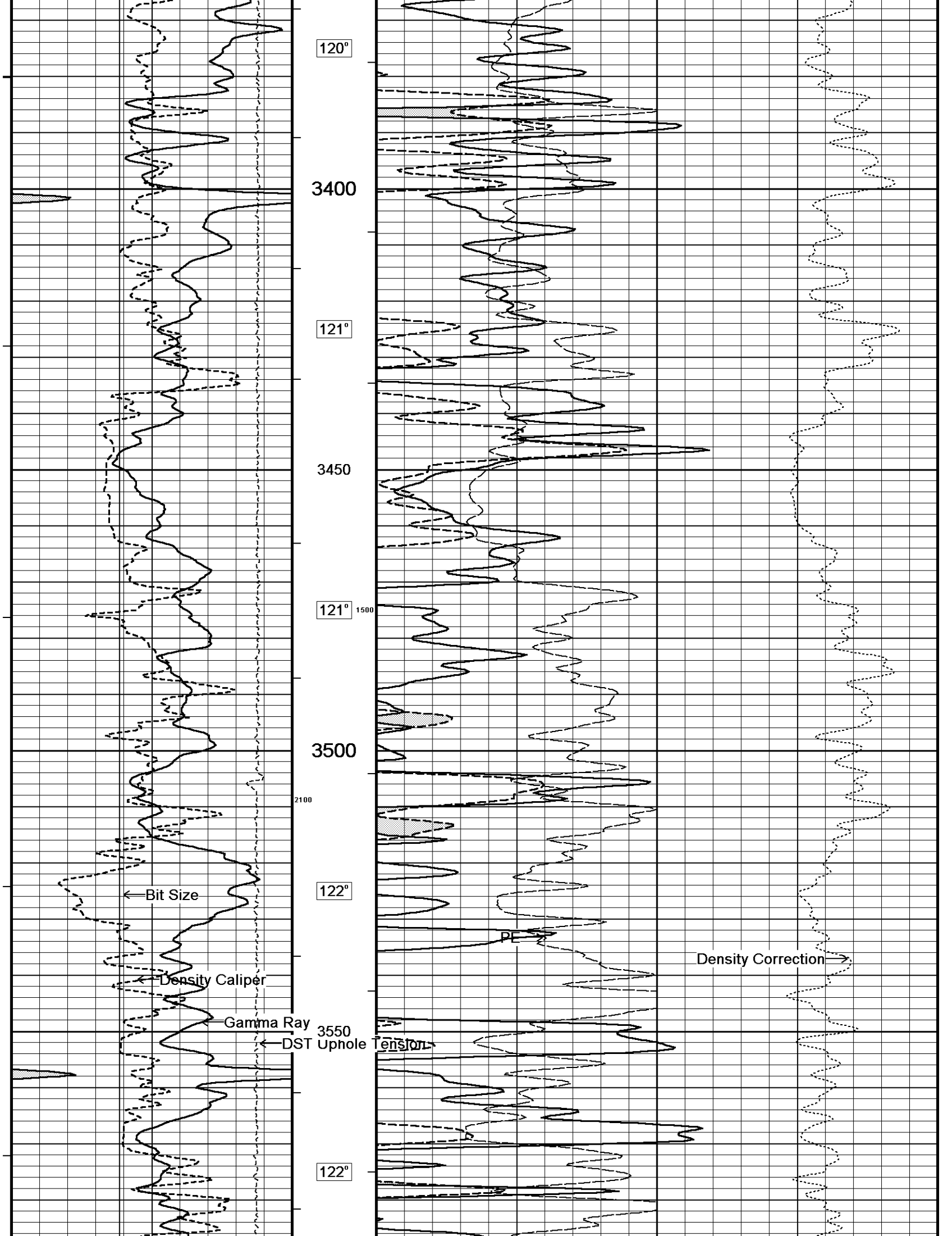
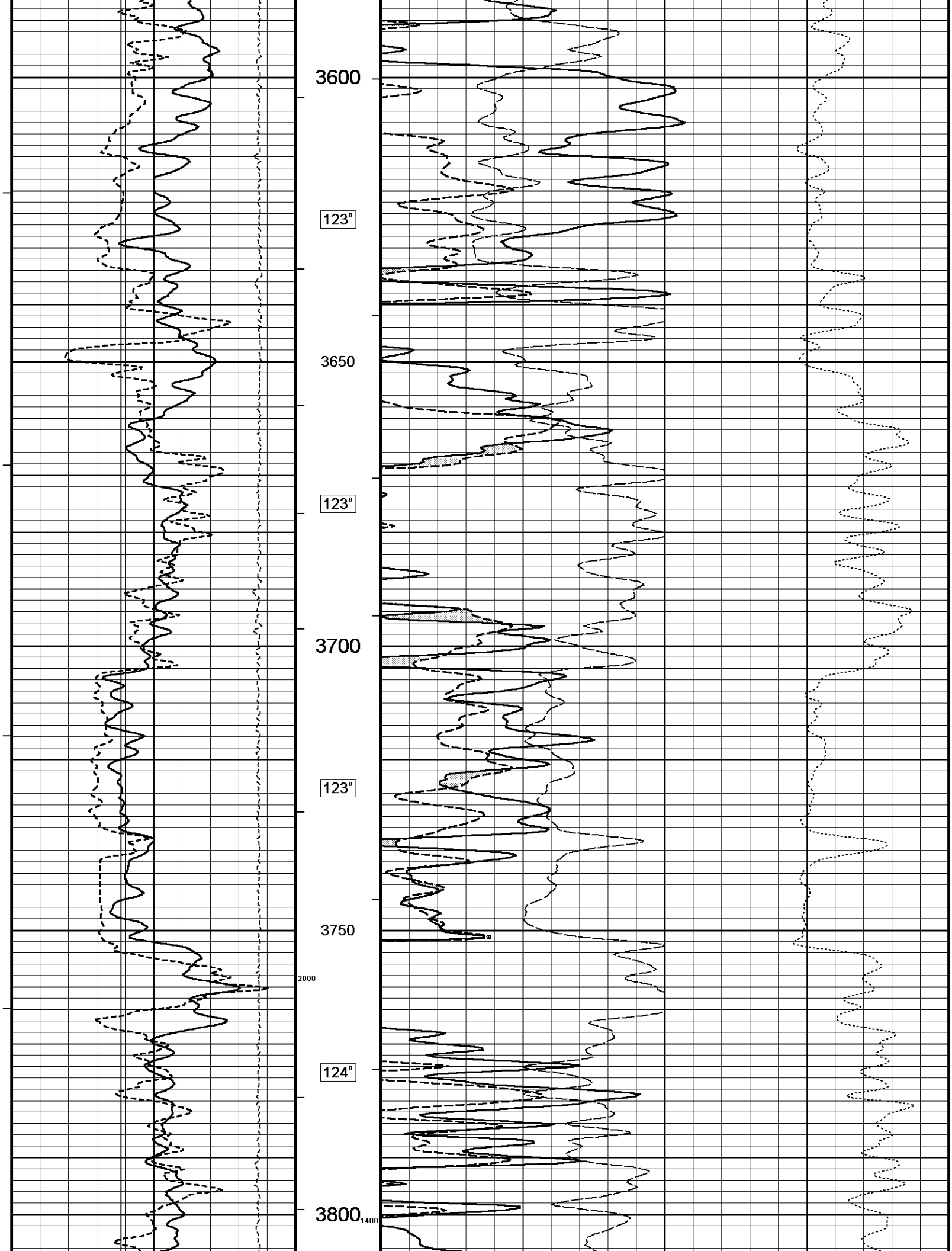
112°
2550
112°
2600
113°
1800
2500
2650
114°
2700

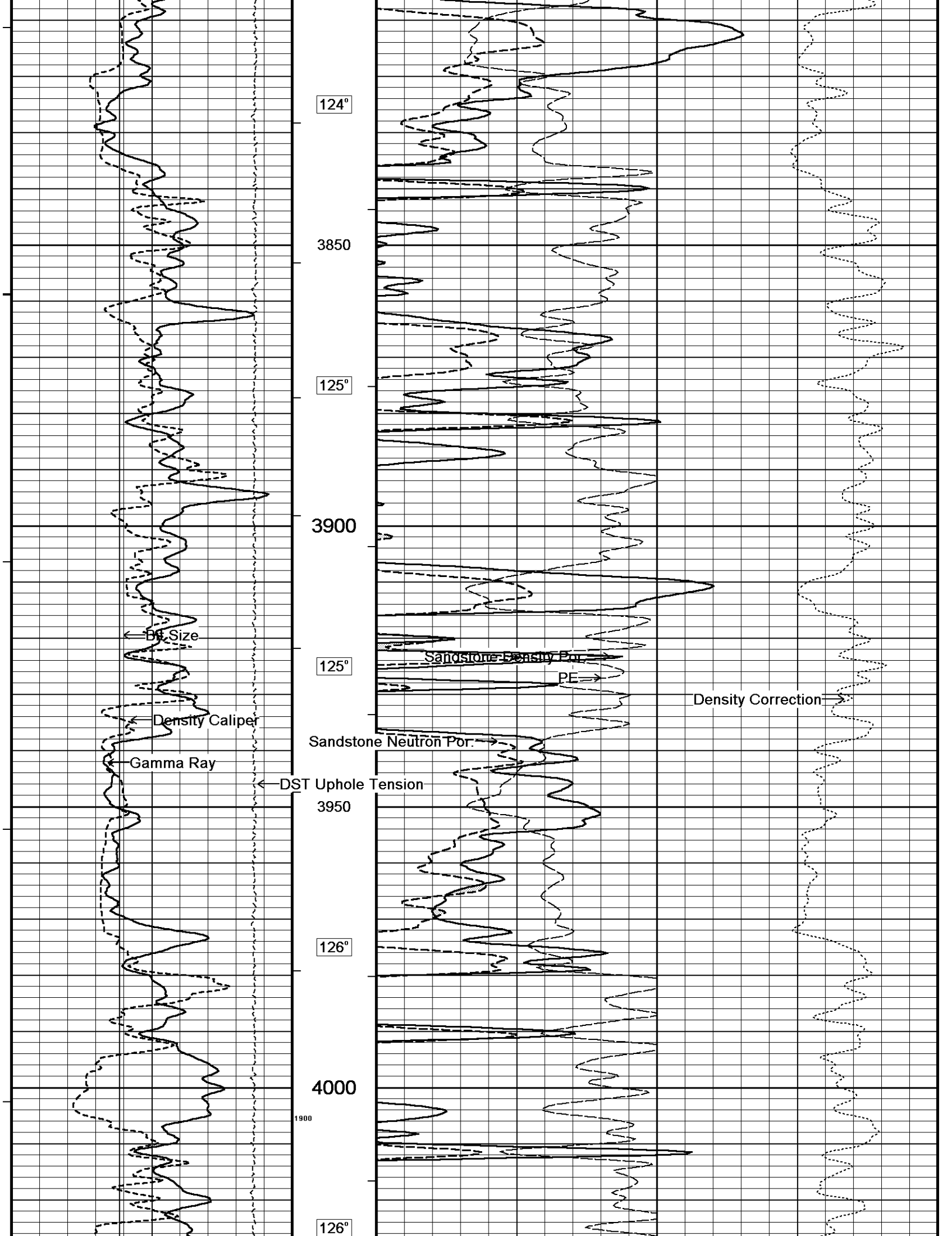

114°
Bit Size
PE
2750
Density Correction
Density Caliper
Sandstone Neutron Por.
Gamma Ray
DST Uphole Tension
114°
2800
114°
2400
2850
115°
1700
2900
115°

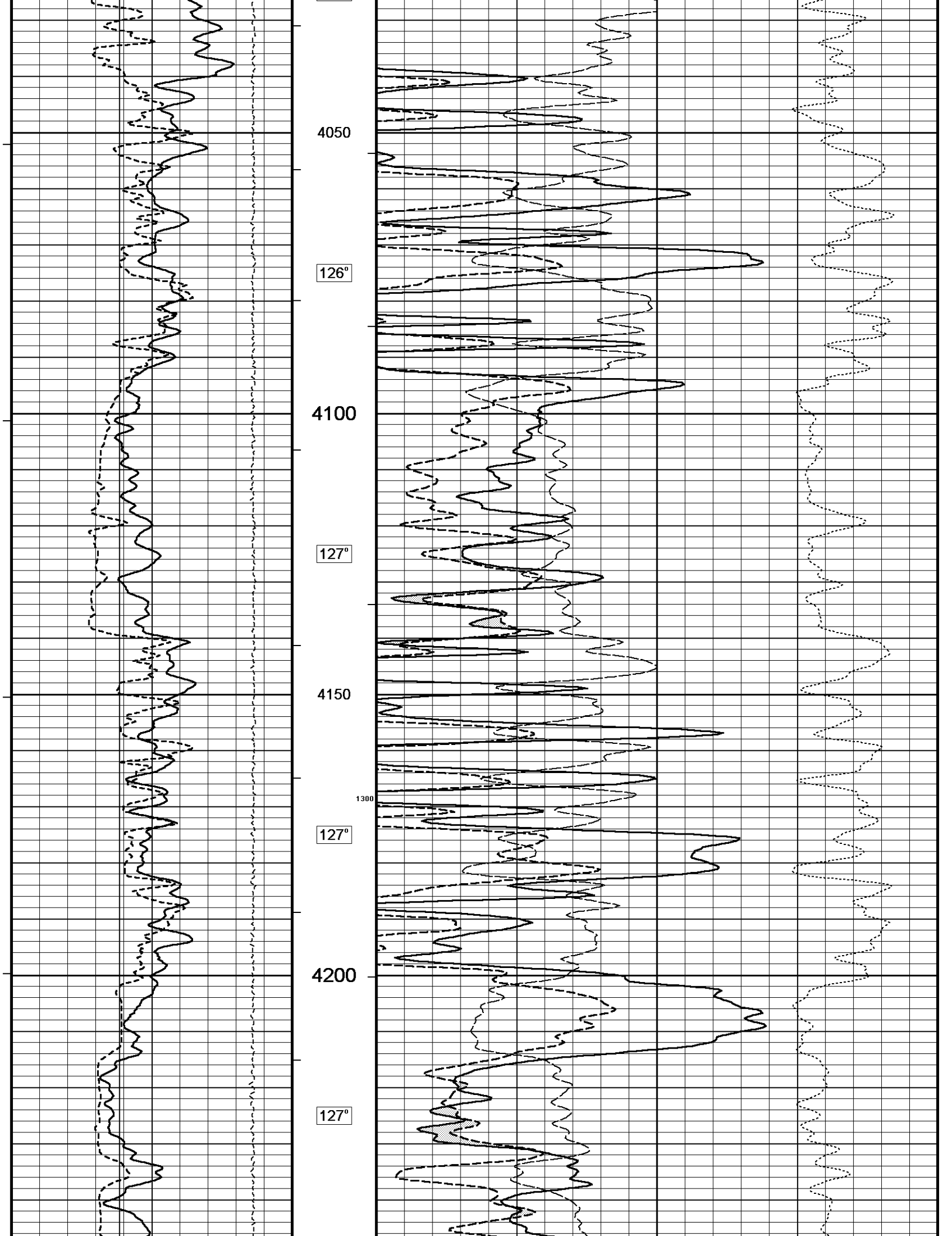

2950
116°
3000
116°
3050
117°
2300
3100
118°
Bit Size
PE
Density Correction

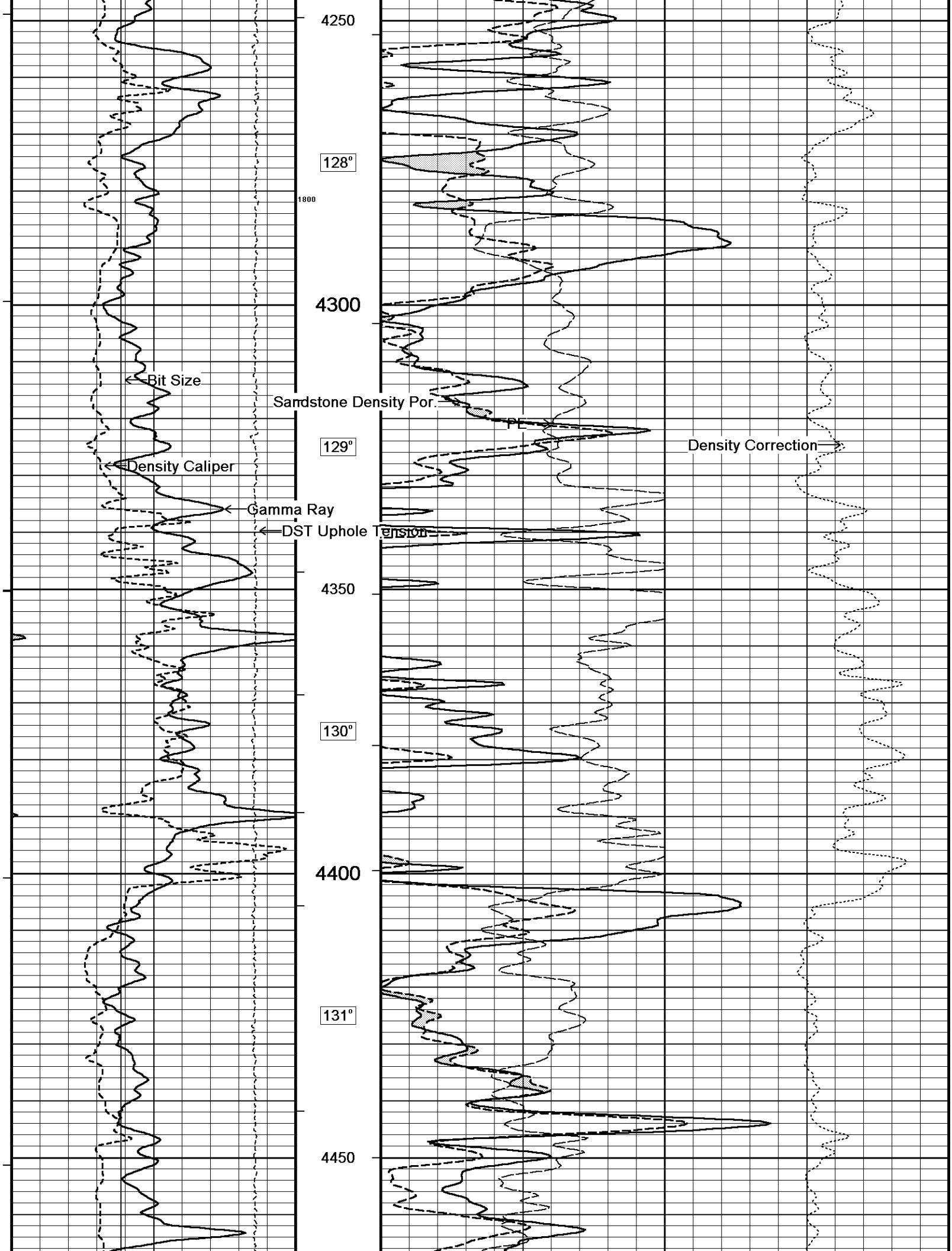

Density Caliper
Gamma Ray
DST Uphole Tension
3150
119°
1600
3200
119°
3250
119°
2200
3300
120°
3350

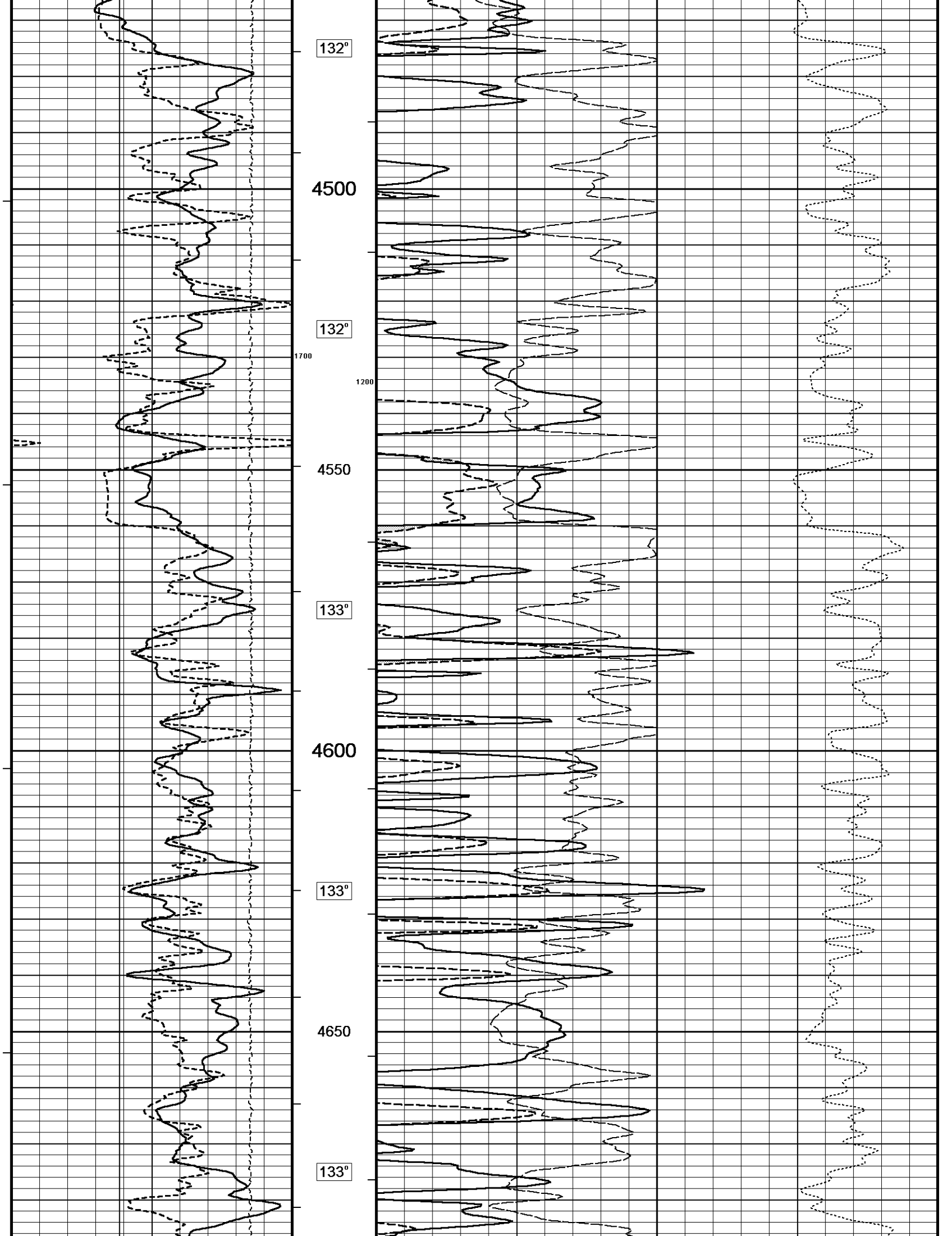

120°
3400
121°
3450
121°
1500
3500
2100
122°
Bit Size
PE
Density Correction
Density Caliper
Gamma Ray
3550
DST Uphole Tension
122°

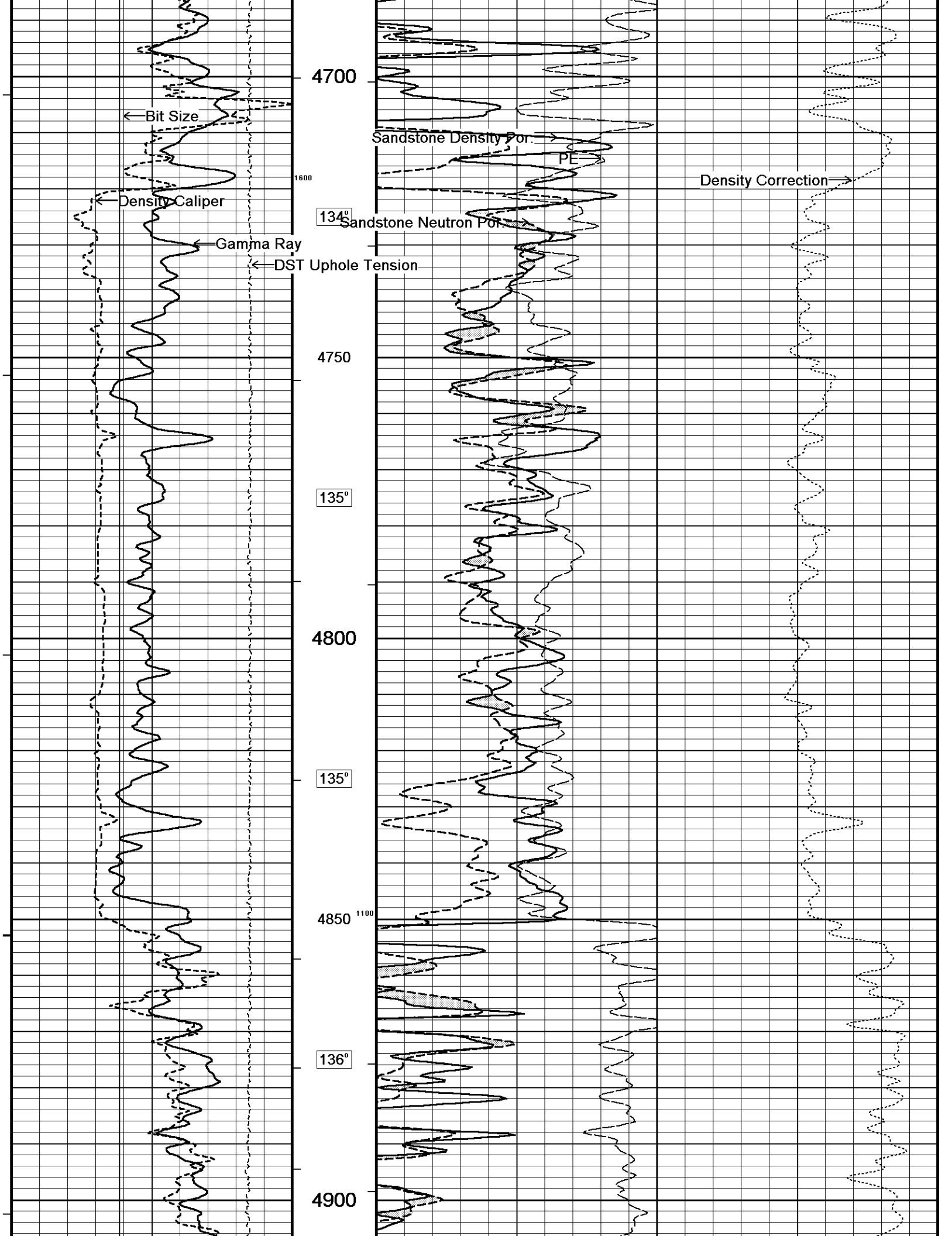

3600
123°
3650
123°
3700
123°
3750
2000
124°
3800
1400

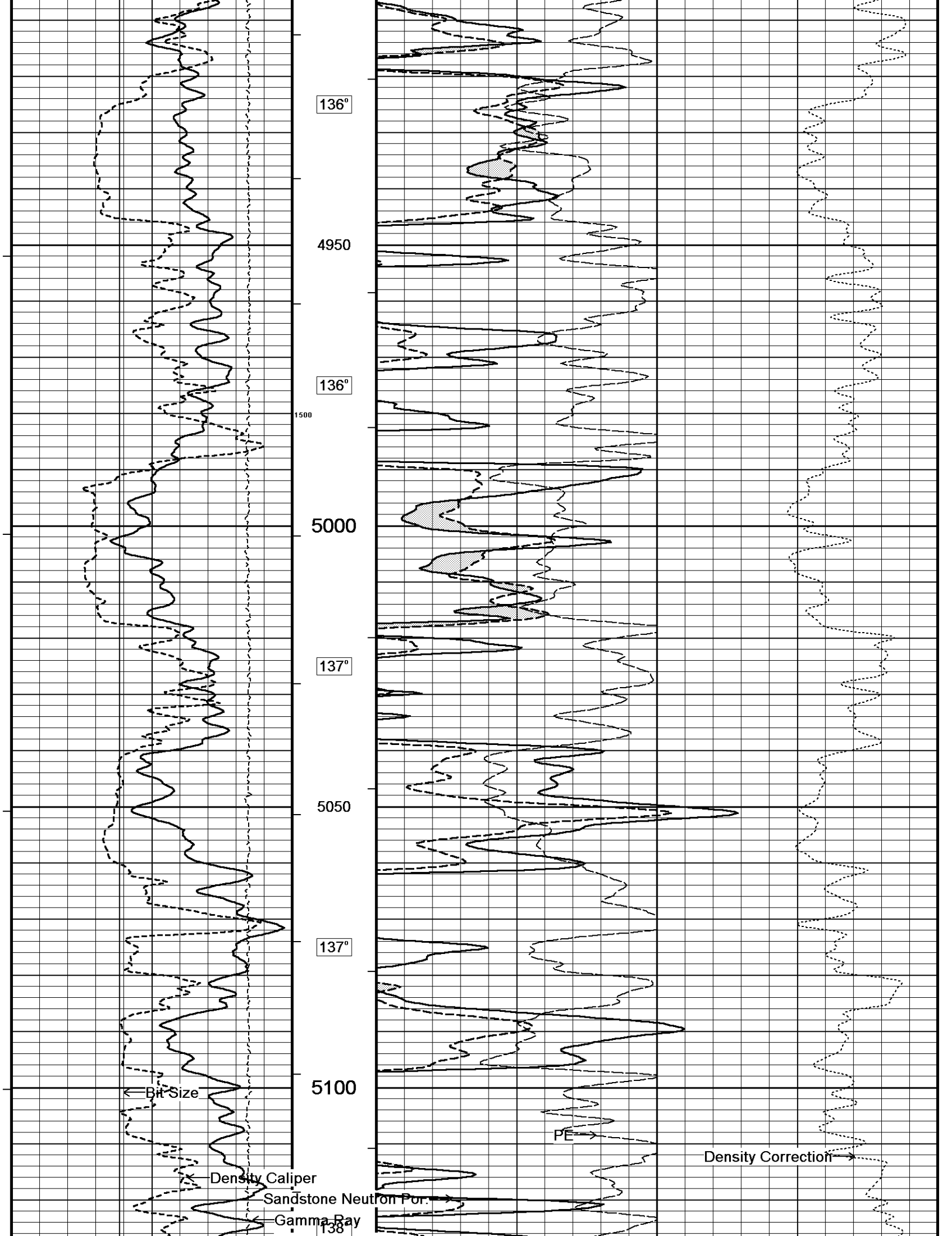

124°
3850
125°
3900
Bit Size
125°
Sandstone Density Por.
PE
Density Correction
Density Caliper
Sandstone Neutron Por.
Gamma Ray
DST Uphole Tension
3950
126°
4000
1900
126°

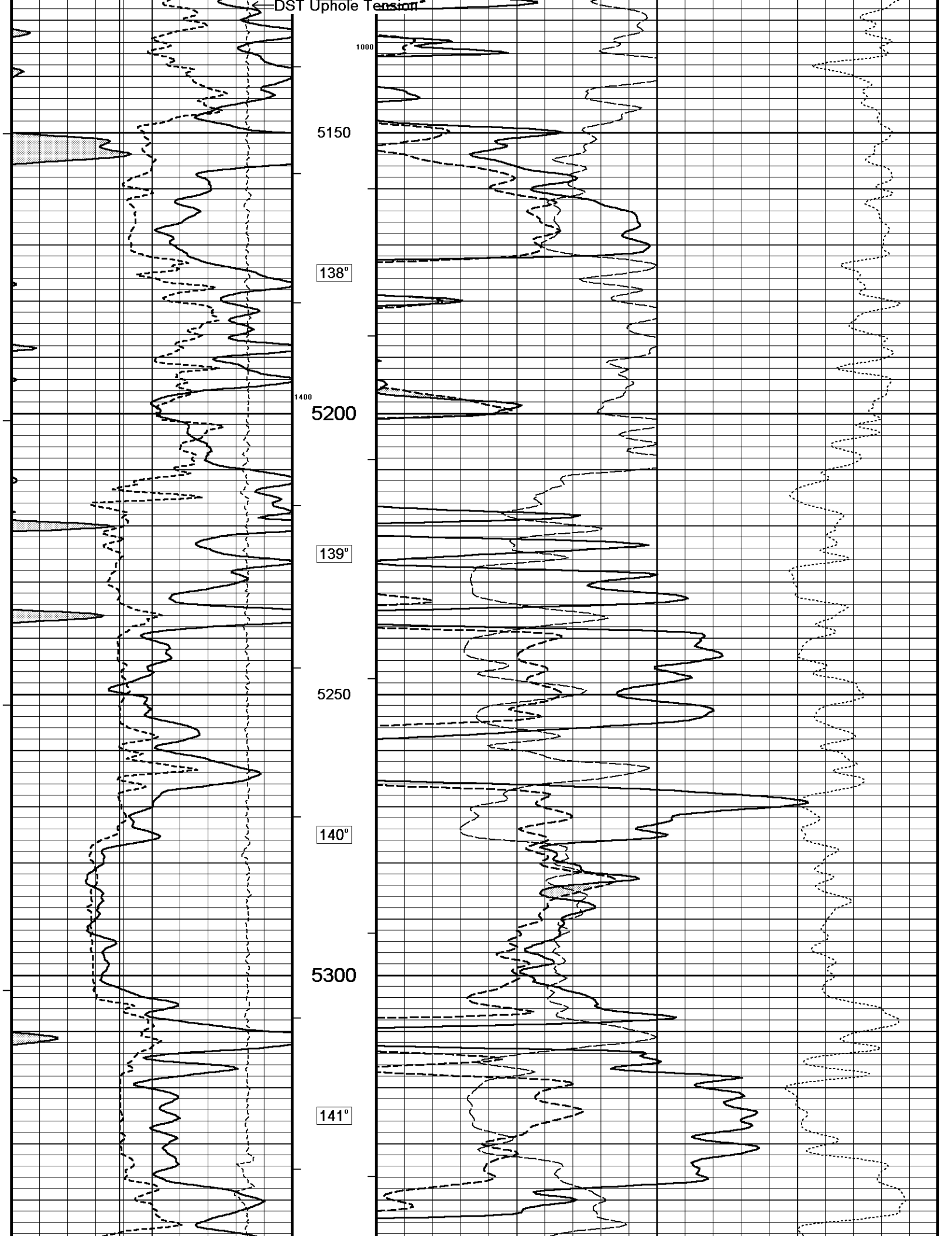

4050
126°
4100
127°
4150
1300
127°
4200
127°

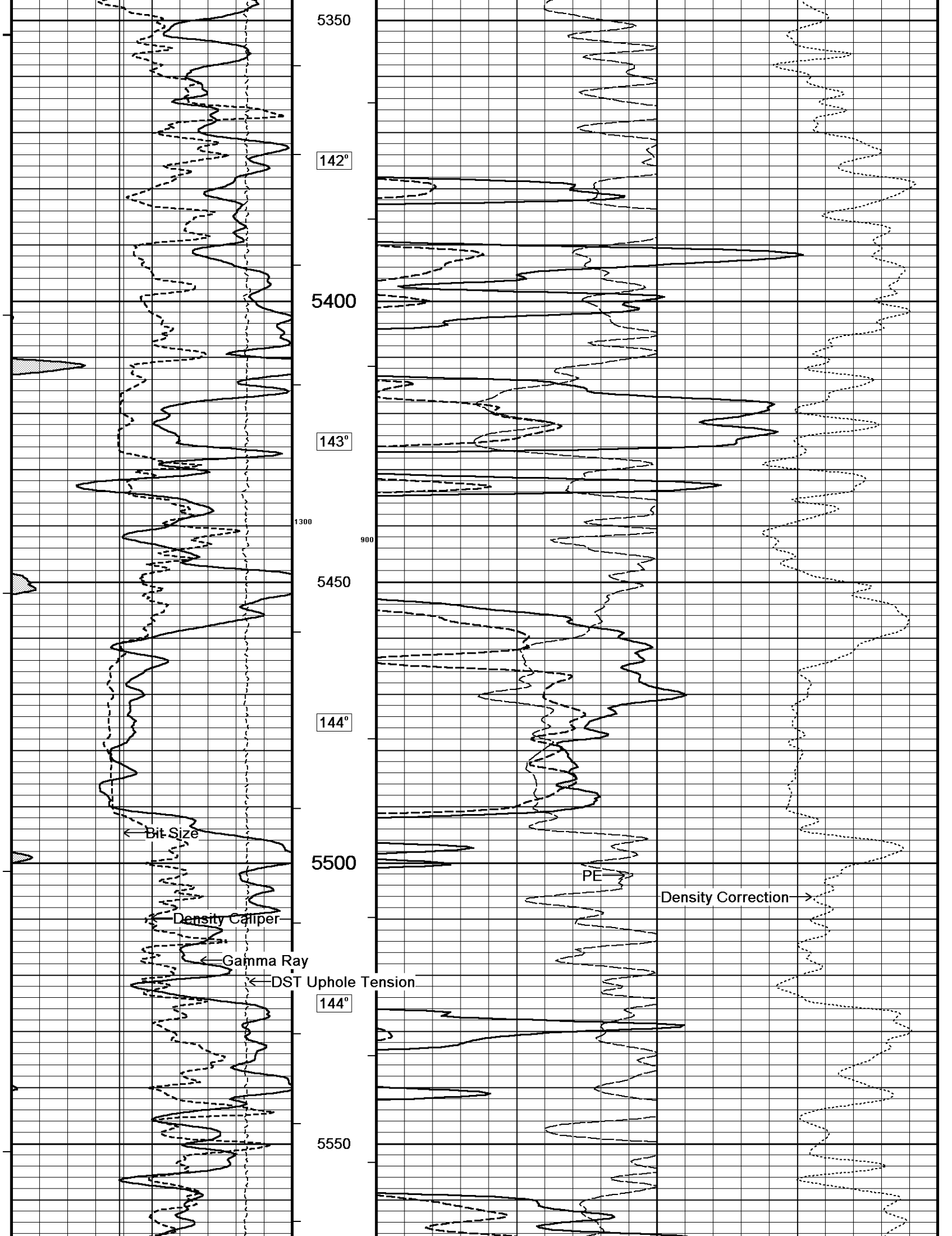

4250
128°
1800
4300
Bit Size
Sandstone Density Por.
PE
129°
Density Correction
Density Caliper
Gamma Ray
DST Uphole Tension
4350
130°
4400
131°
4450

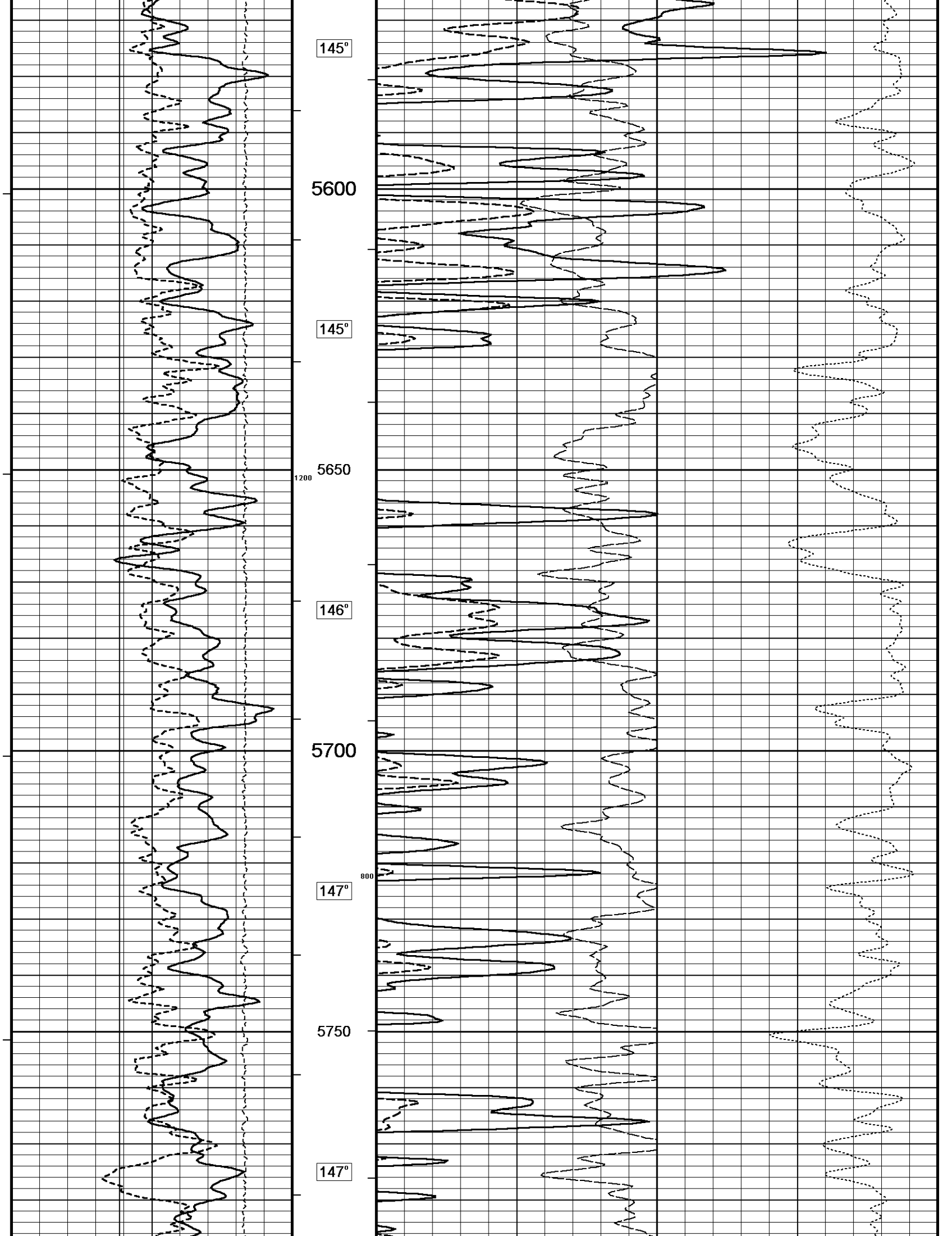

132°
4500
132°
1700
1200
4550
133°
4600
133°
4650
133°

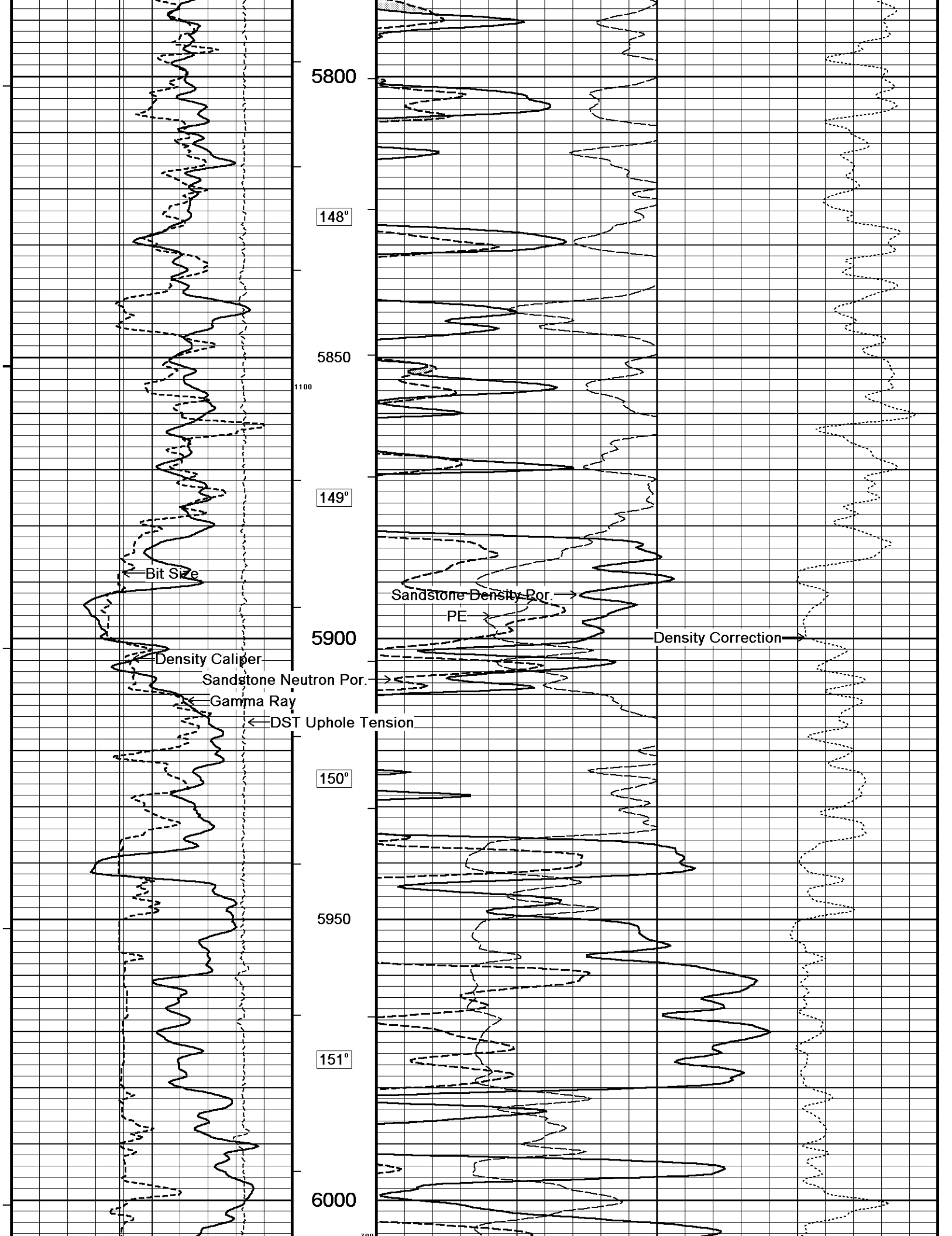

4700
Bit Size
Sandstone Density Por.
PE
1600
Density Caliper
134°
Sandstone Neutron Por.
Gamma Ray
DST Uphole Tension
Density Correction
4750
135°
4800
135°
4850
1100
136°
4900

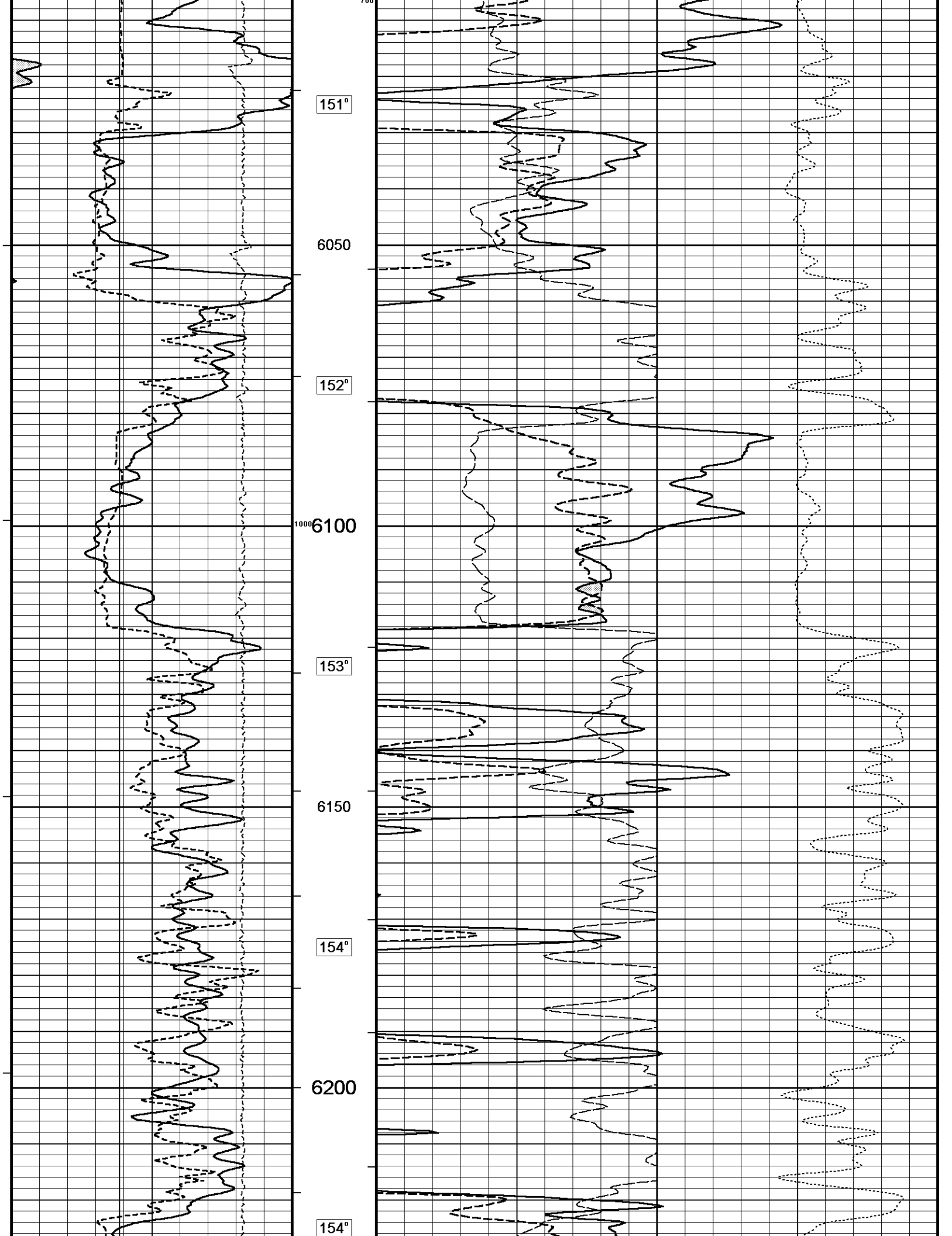

136°
4950
136°
1500
5000
137°
5050
137°
5100
Bit Size
Density Caliper
Sandstone Neutron Por.
Gamma Ray
138
PE
Density Correction

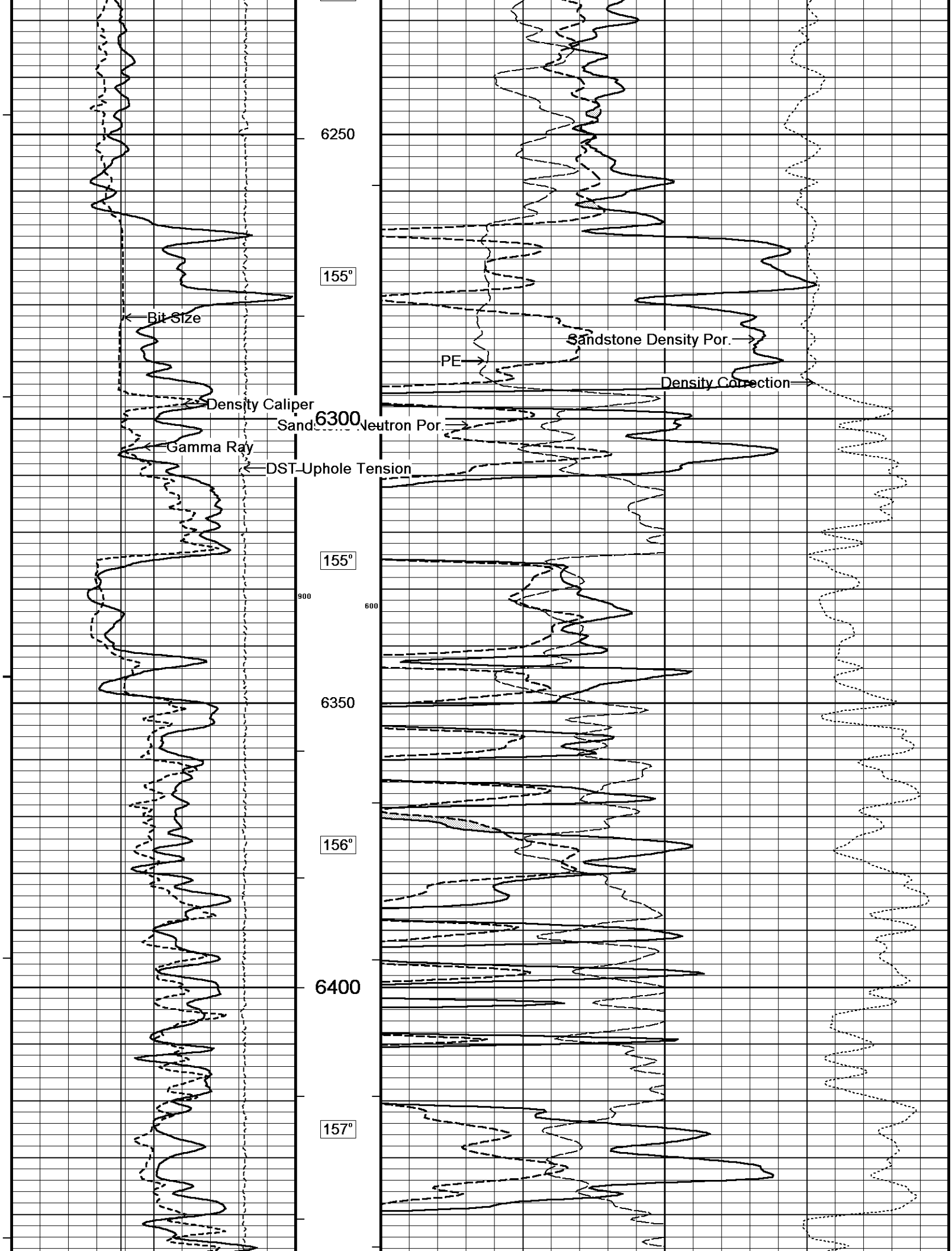

DST Uphole Tension
1000
5150
138°
1400
5200
139°
5250
140°
5300
141°

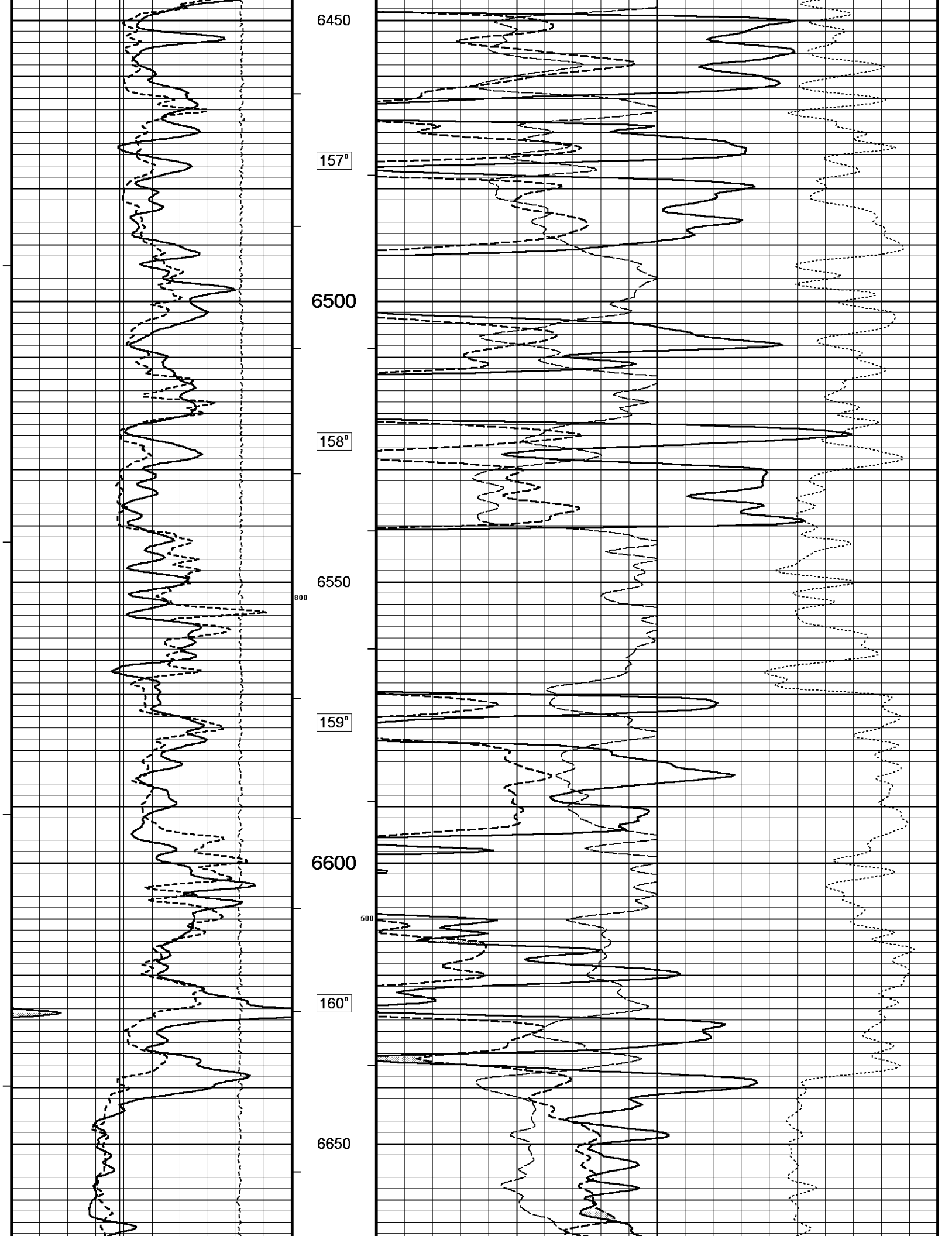

5350
142°
5400
143°
1300
900
5450
144°
Bit Size
5500
PE
Density Correction
Density Caliper
Gamma Ray
DST Uphole Tension
144°
5550

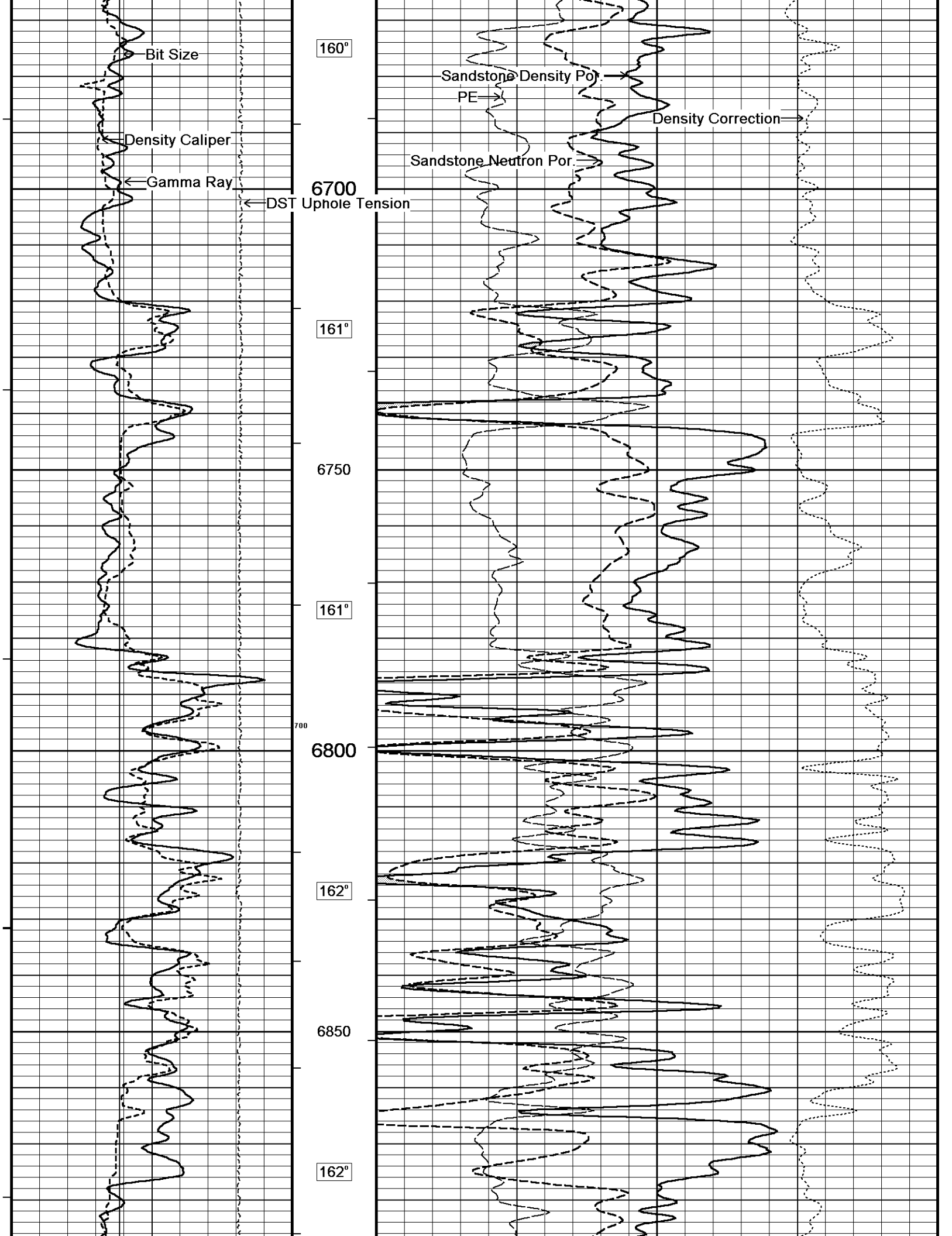

145°
5600
145°
1200
5650
146°
5700
800
147°
5750
147°

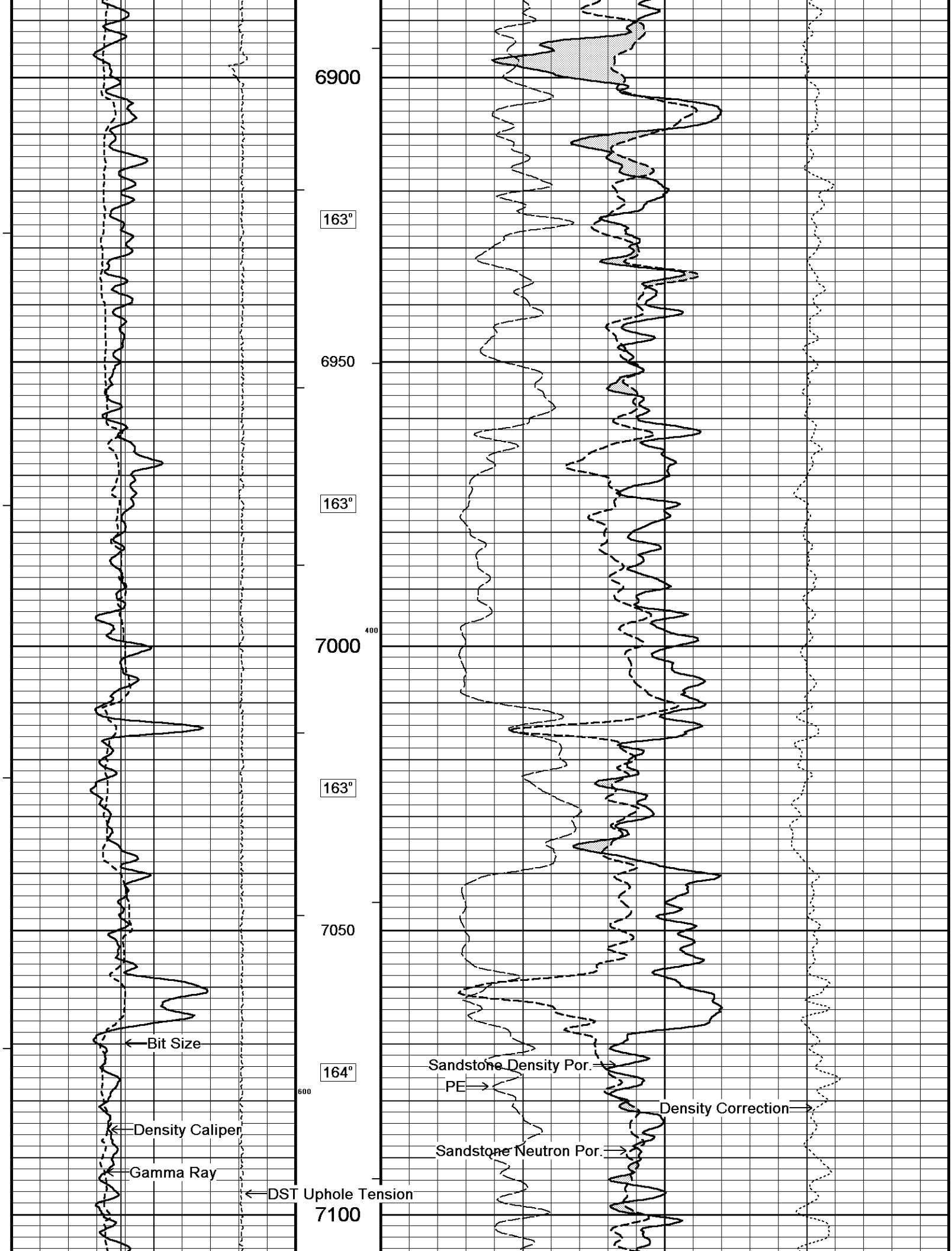

5800
148°
5850
1100
149°
Bit Size
Sandstone Density Por.
PE
5900
Density Correction
Density Caliper
Sandstone Neutron Por.
Gamma Ray
DST Uphole Tension
150°
5950
151°
6000

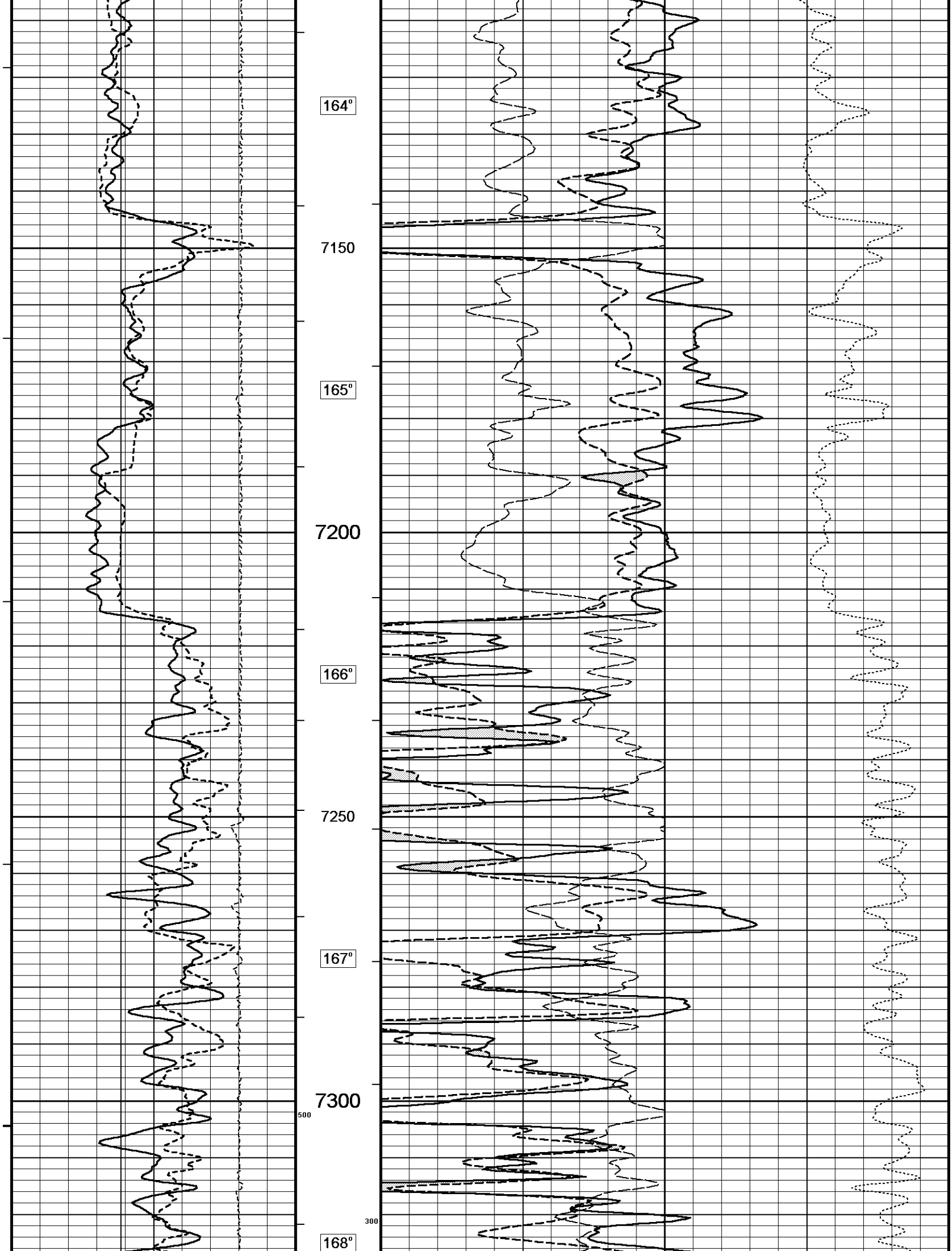

151°
6050
152°
1000
6100
153°
6150
154°
6200
154°

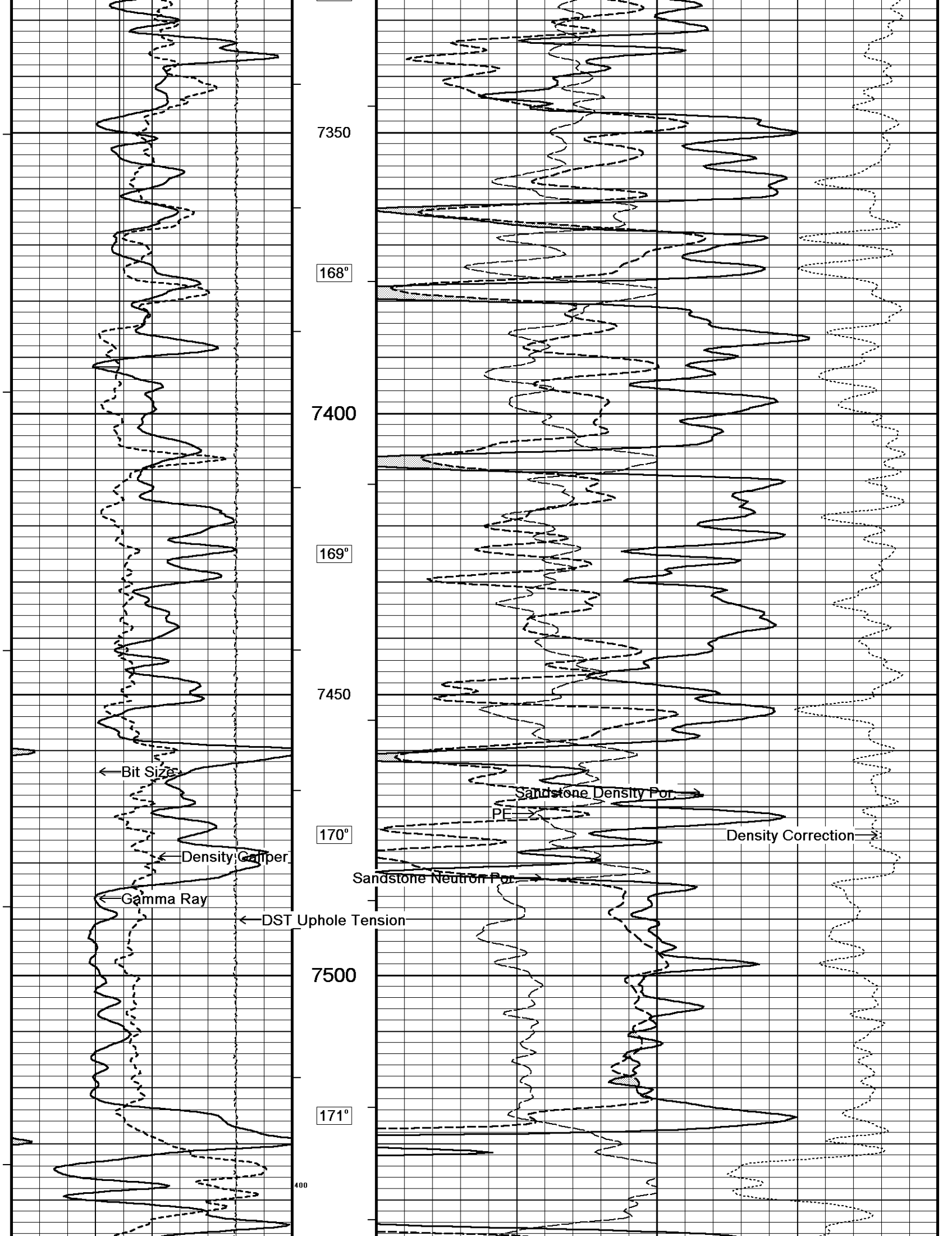

6250
155°
Bit Size
Sandstone Density Por.
PE
Density Correction
Density Caliper
6300
Sandstone Neutron Por.
Gamma Ray
DST-Uphole Tension
155°
900
600
6350
156°
6400
157°

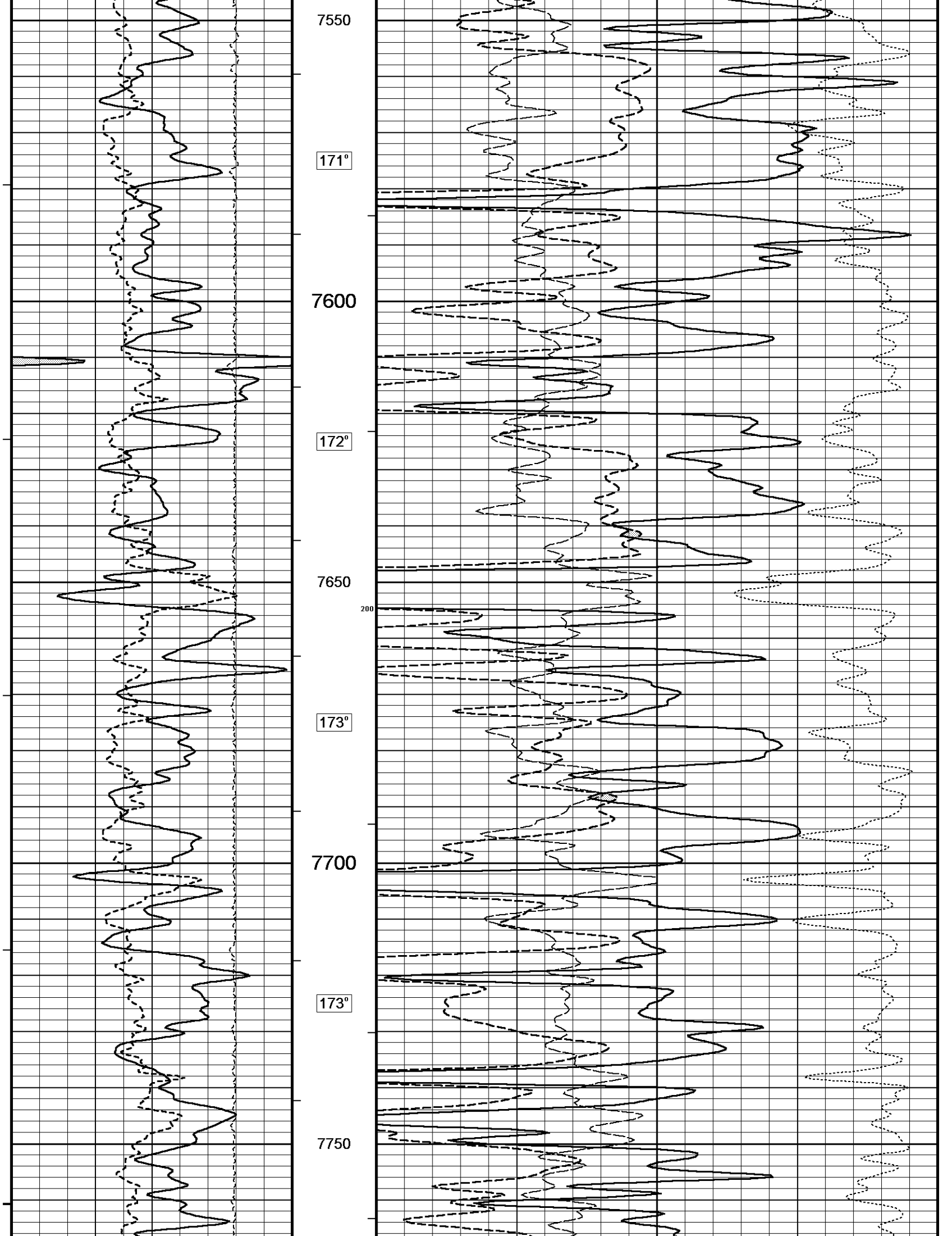

6450
157°
6500
158°
6550
800
159°
6600
500
160°
6650

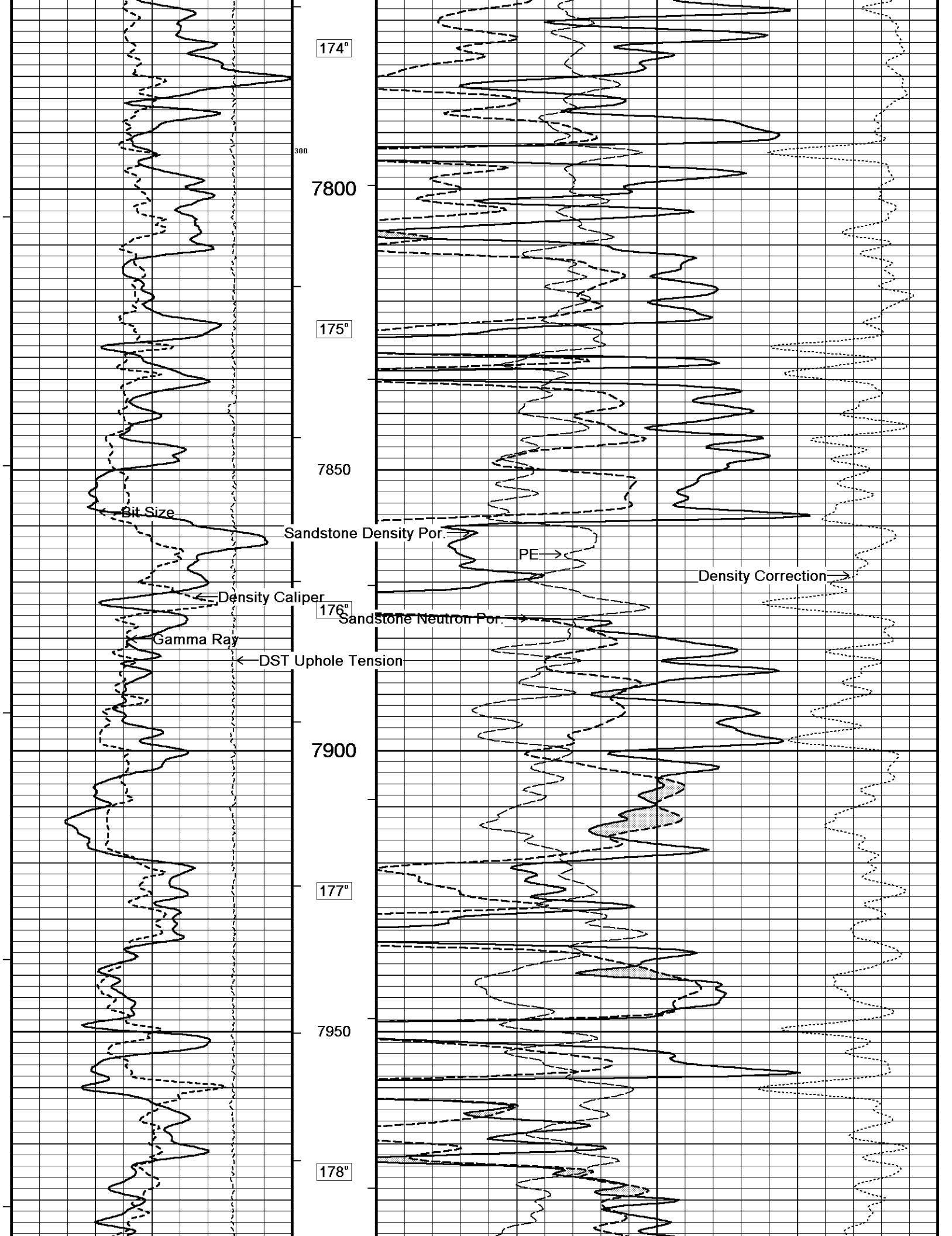

Bit Size
Density Caliper
Gamma Ray
DST Uphole Tension
Sandstone Density Por.
PE
Density Correction
Sandstone Neutron Por.
160°
6700
161°
6750
161°
6800
162°
6850
162°

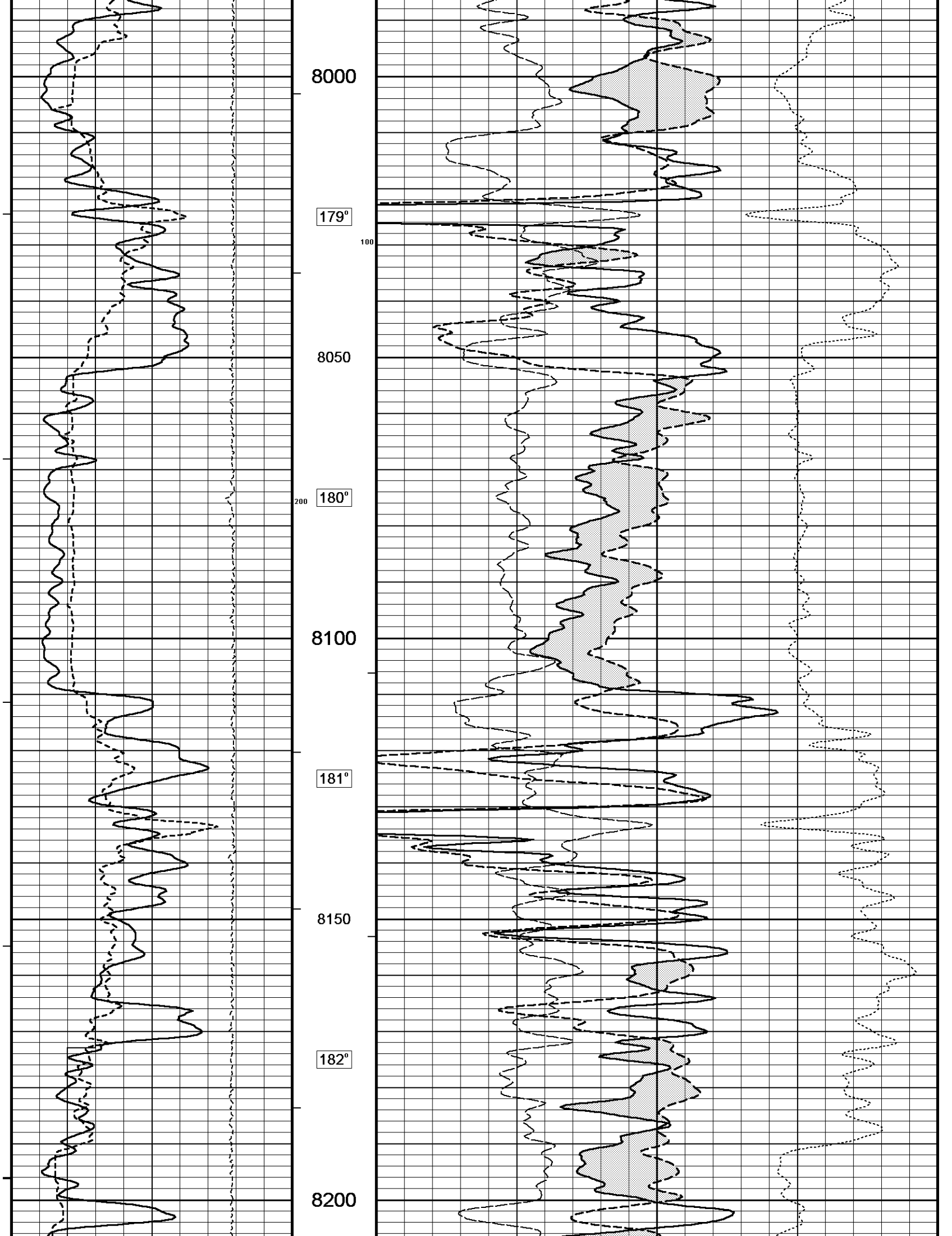

6900
163°
6950
163°
7000
400
163°
7050
164°
600
7100
Bit Size
Density Caliper
Gamma Ray
DST Uphole Tension
Sandstone Density Por.
PE
Density Correction
Sandstone Neutron Por.

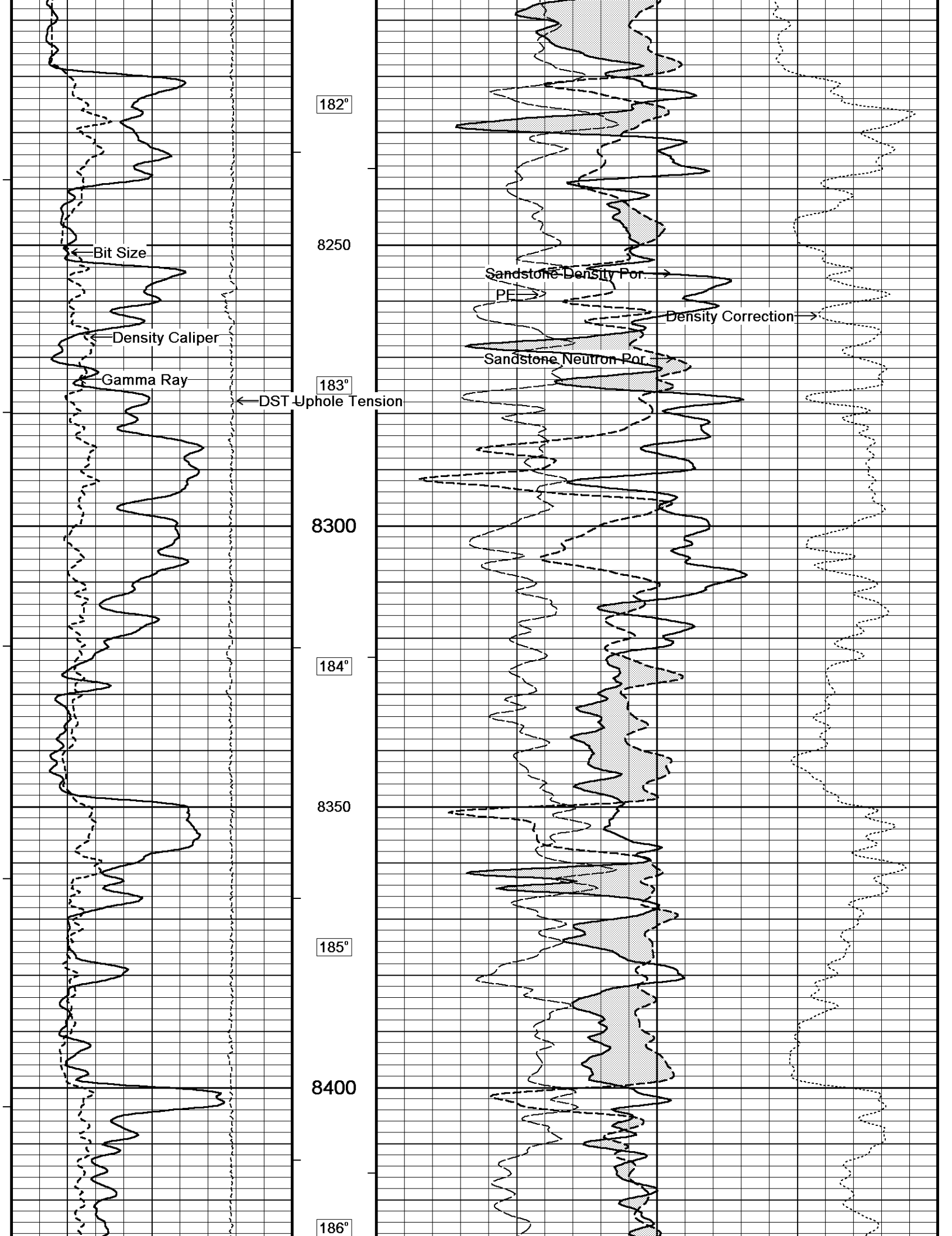

164°
7150
165°
7200
166°
7250
167°
7300
500
300
168°

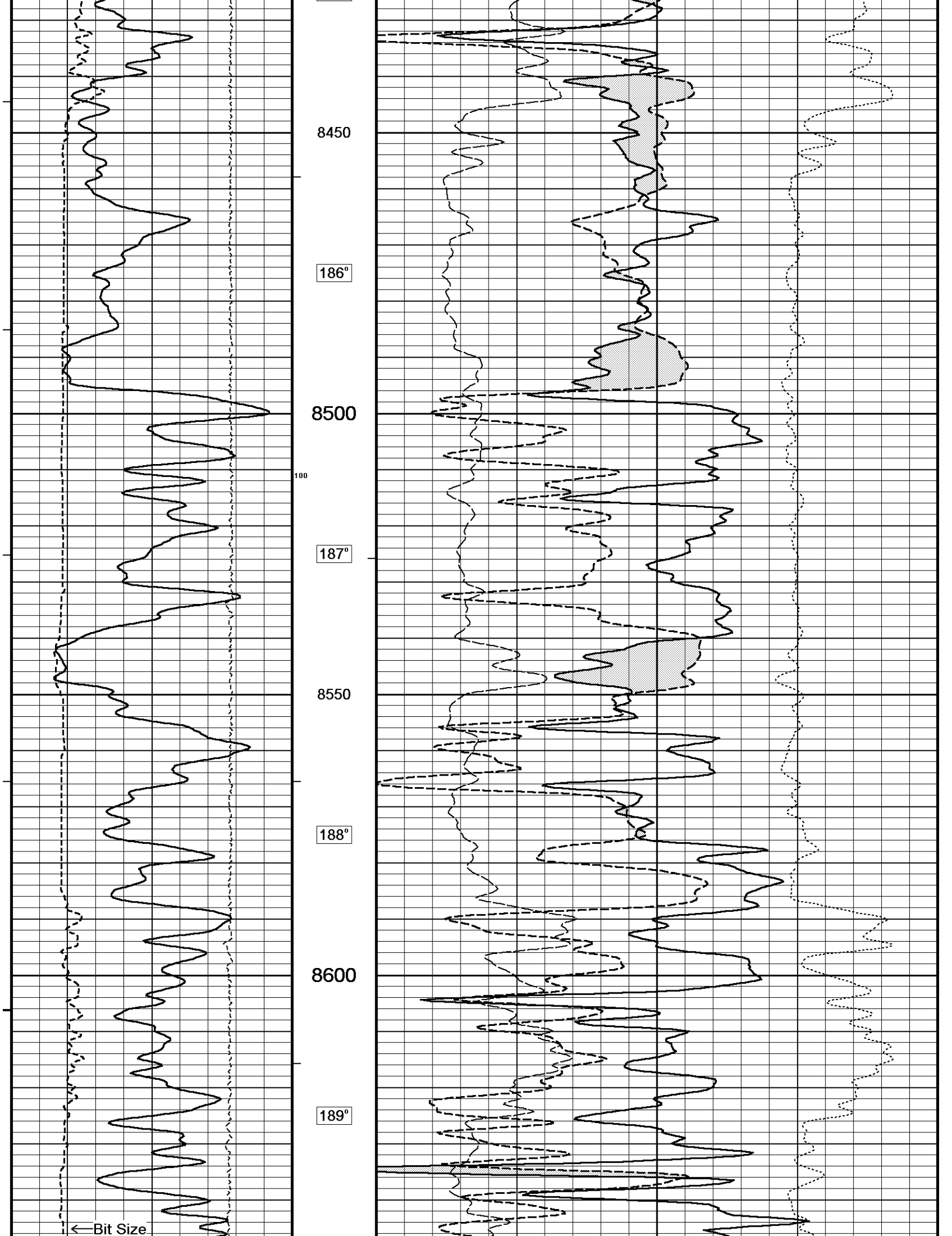

7350
168°
7400
169°
7450
Bit Size
Sandstone Density Por.
PE
170°
Density Correction
Density Caliper
Sandstone Neutron Por.
Gamma Ray
DST Uphole Tension
7500
171°
400

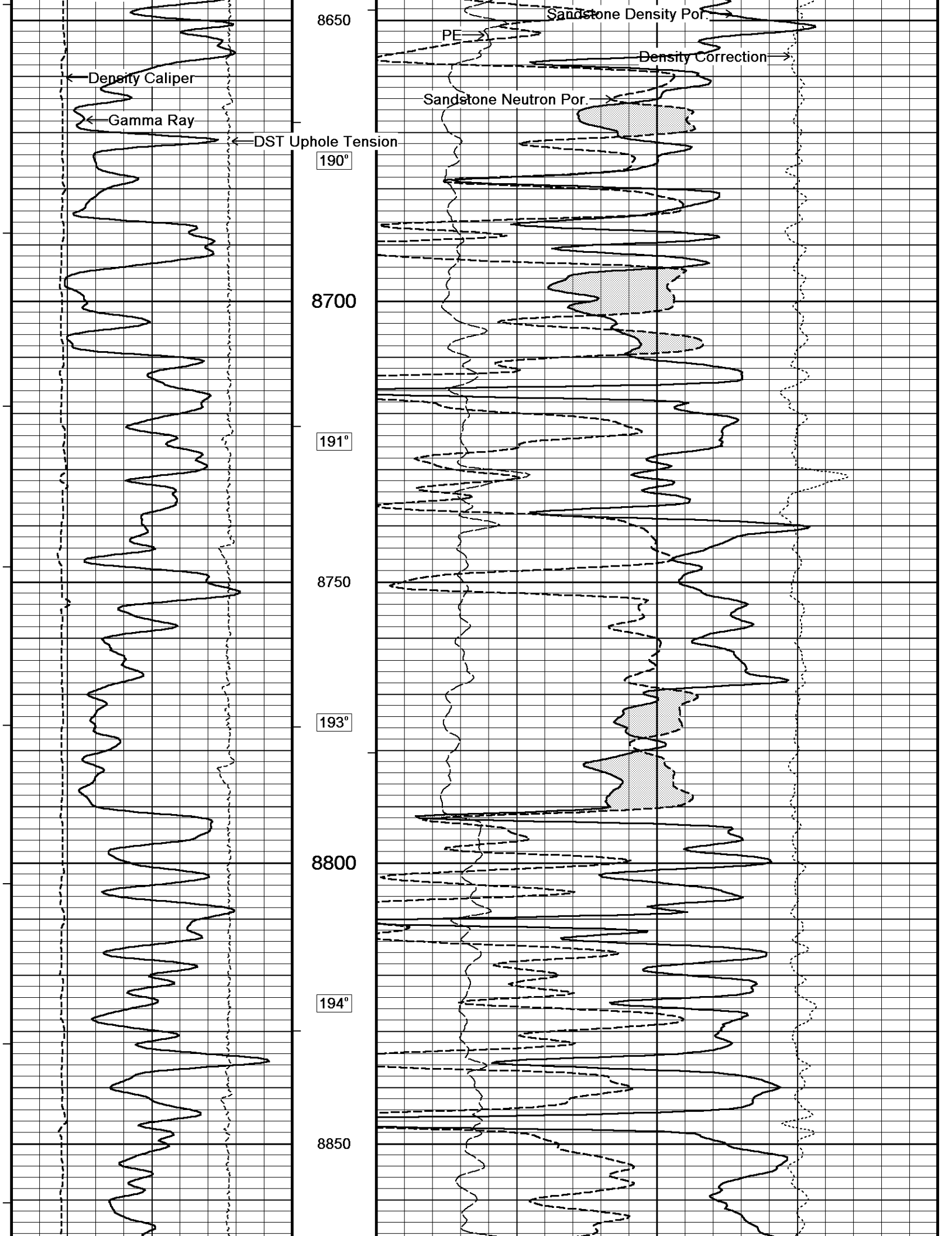

7550
171°
7600
172°
7650
200
173°
7700
173°
7750

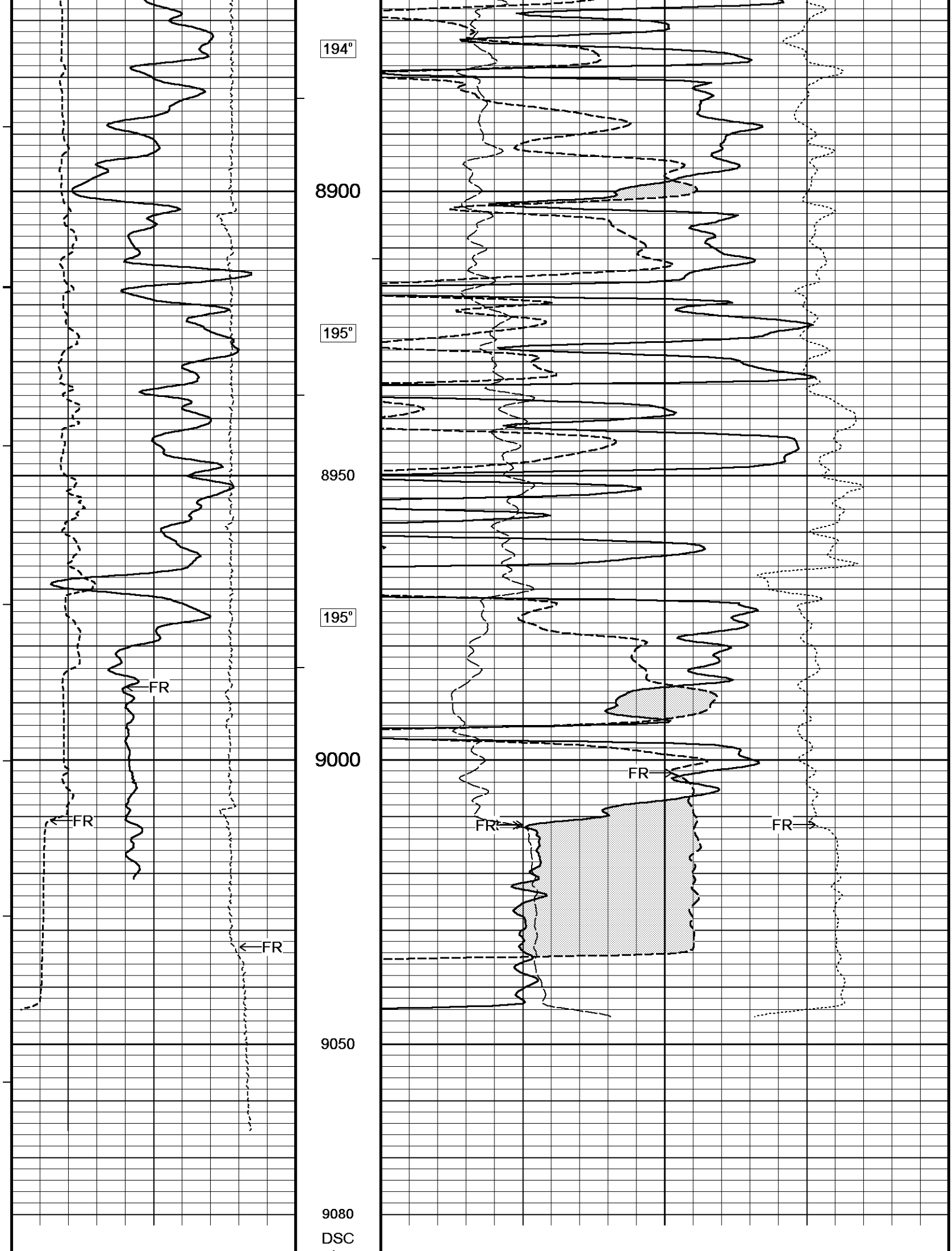

174°
300
7800
175°
7850
Bit Size
Sandstone Density Por.
PE
Density Correction
Density Caliper
176°
Sandstone Neutron Por.
Gamma Ray
DST Uphole Tension
7900
177°
7950
178°

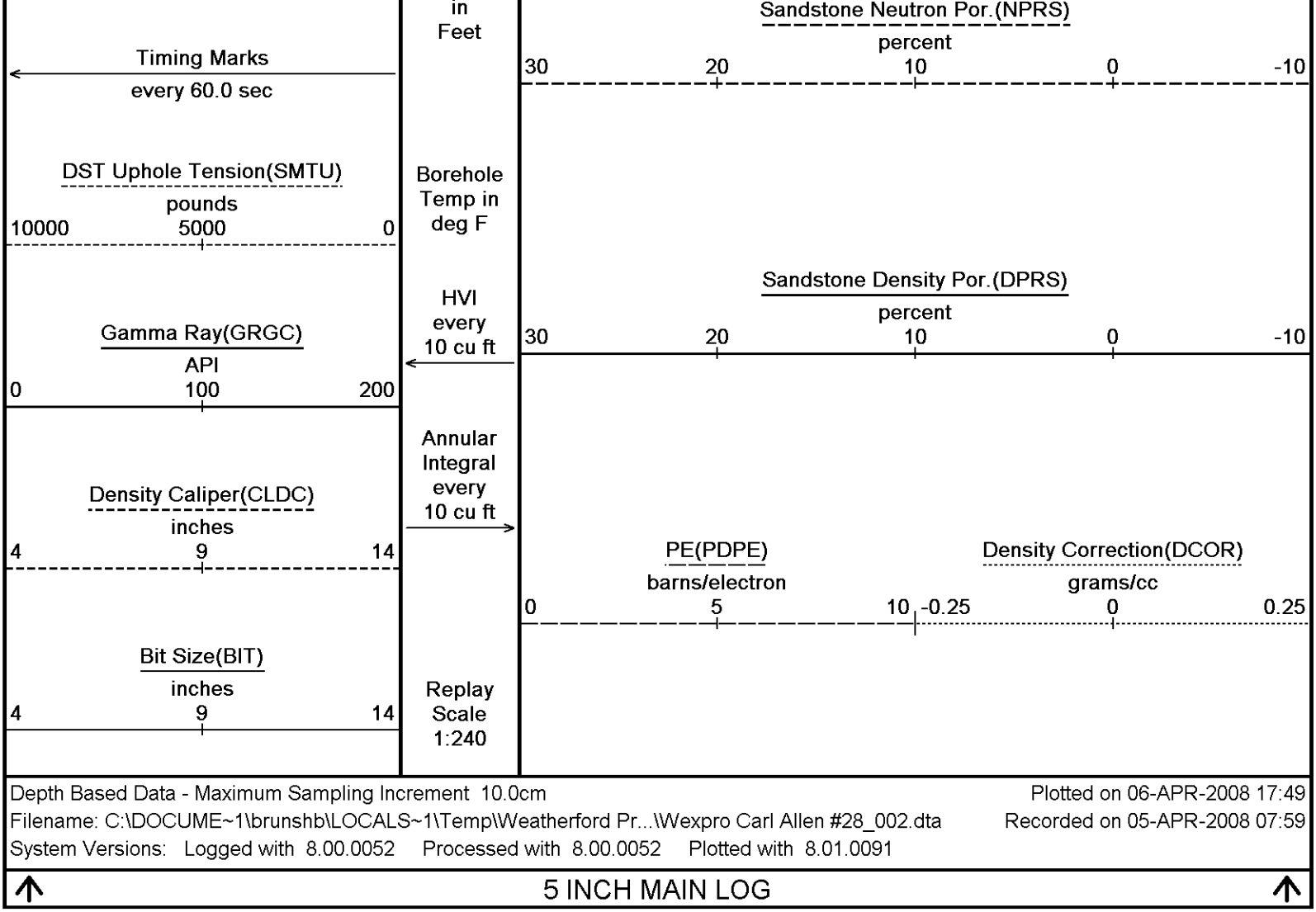

8000
179°
100
8050
180°
200
8100
181°
8150
182°
8200


182°
8250
Bit Size
Density Caliper
Gamma Ray
183°
DST Uphole Tension
Sandstone Density Por
PE
Density Correction
Sandstone Neutron Por
8300
184°
8350
185°
8400
186°


8450
186°
8500
100
187°
8550
188°
8600
189°
←Bit Size


Sandstone Density Por.
PE
Density Correction
Sandstone Neutron Por.
Density Caliper
Gamma Ray
DST Uphole Tension
8650
190°
8700
191°
8750
193°
8800
194°
8850


194°
8900
195°
8950
195°
FR
9000
FR
FR
FR
FR
9050
9080
DSC

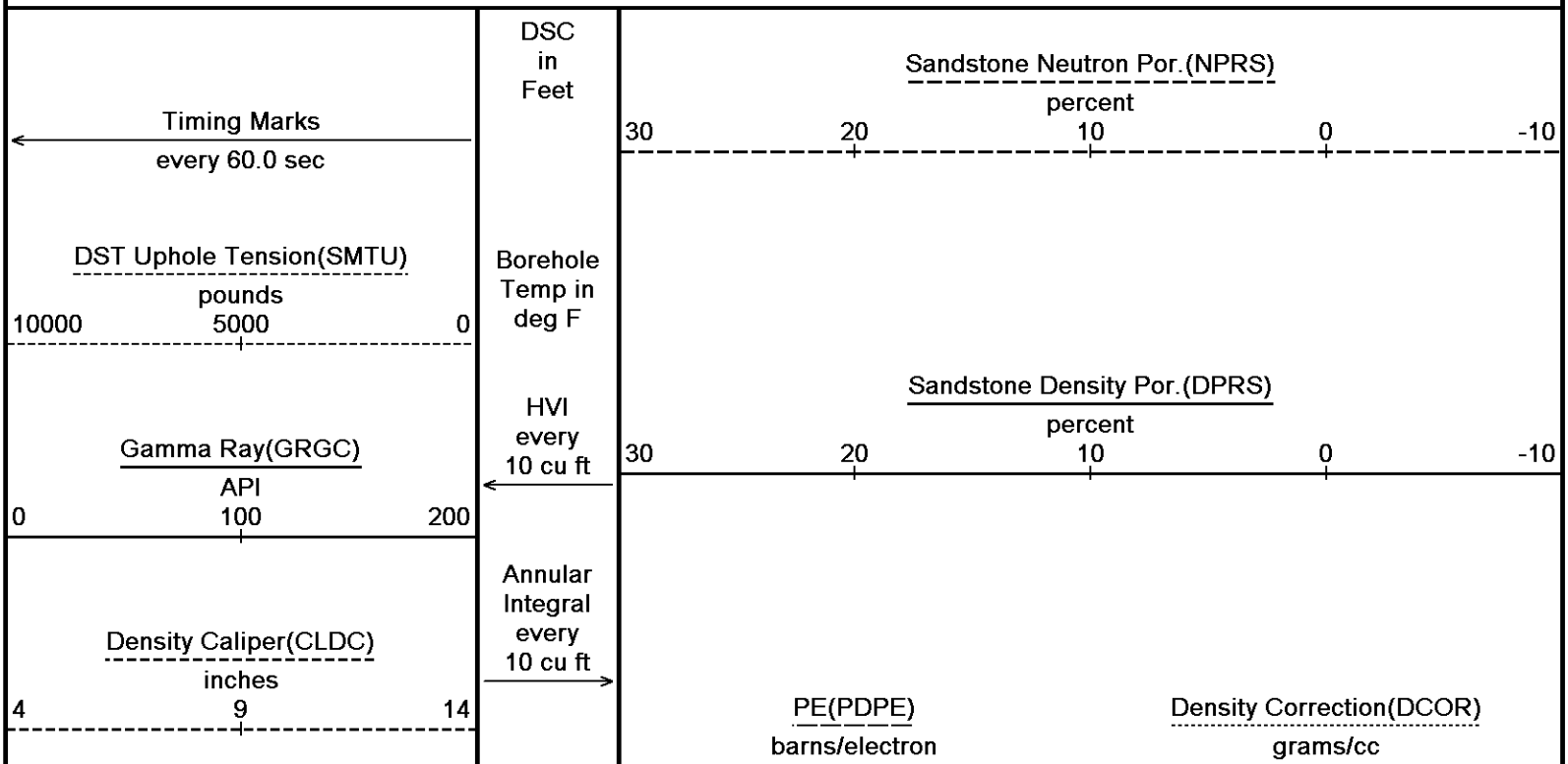


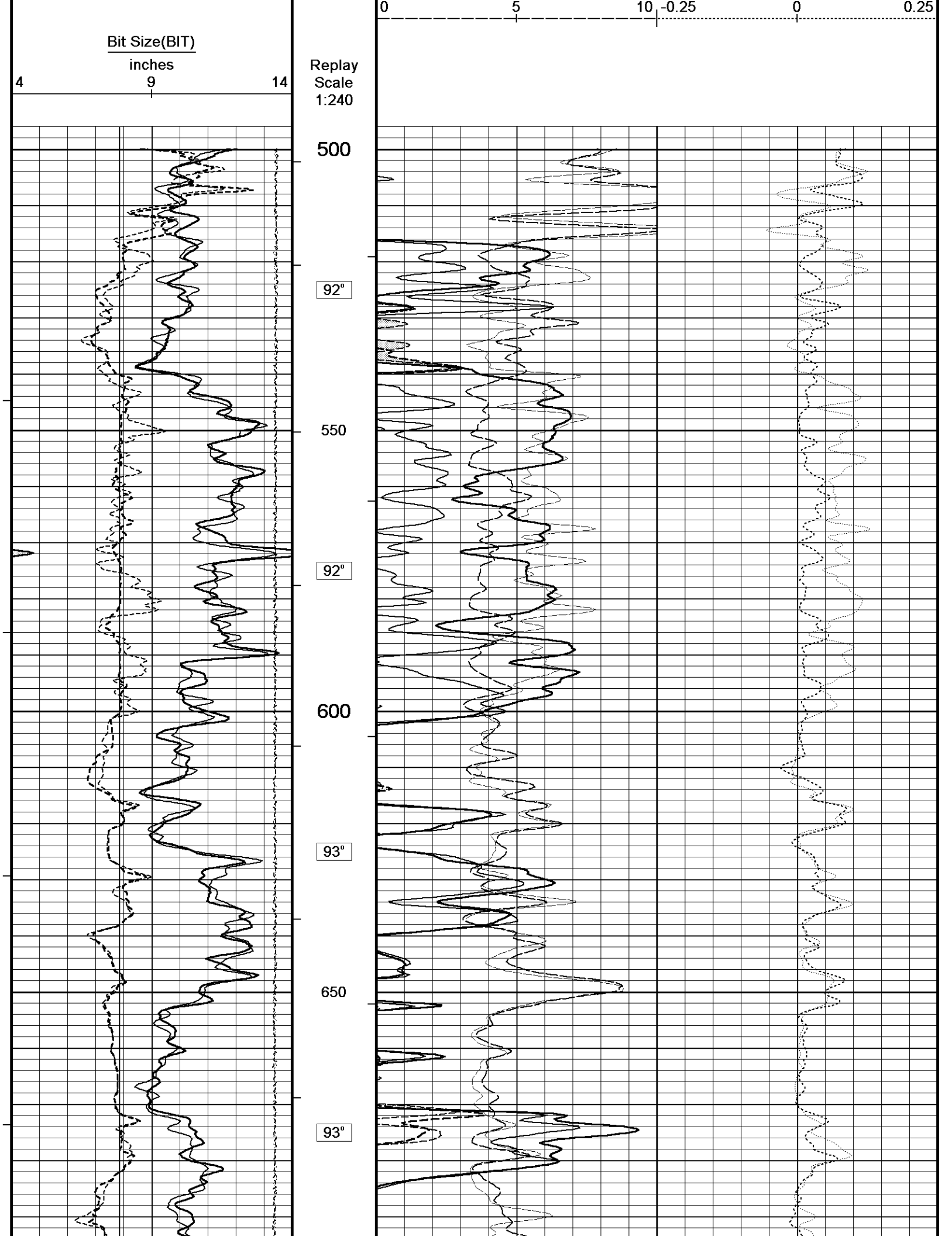
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:49
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_002.dta — Recorded on 05-APR-2008 07:59
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

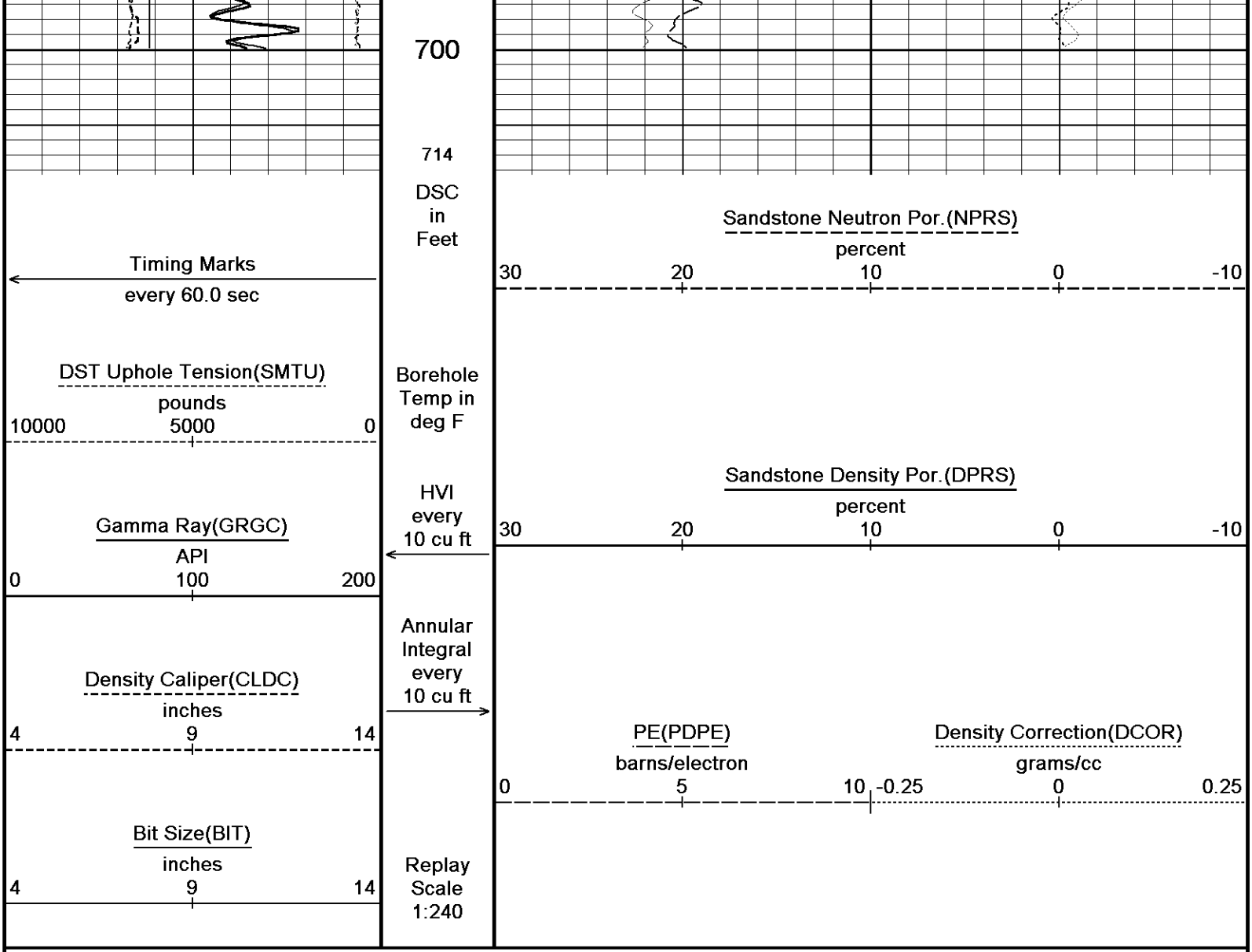
5 INCH MAIN LOG

UPPER OVERLAY

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:49
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_003.dta — Recorded on 05-APR-2008 07:59
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford PreVie...\Wexpro Carl Allen #28.dta — Recorded on 05-APR-2008 06:29
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091




Bit Size(BIT)
inches
4
9
14
Replay
Scale
1:240
0
5
10
-0.25
0
0.25
500
92°
550
92°
600
93°
650
93°

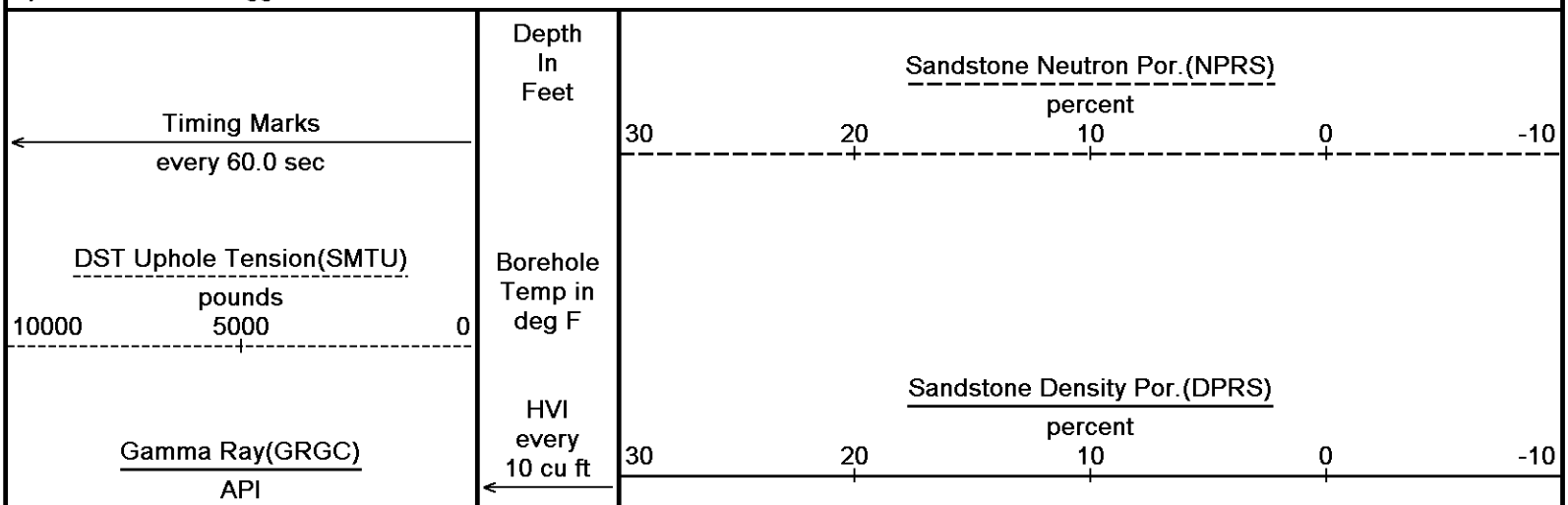


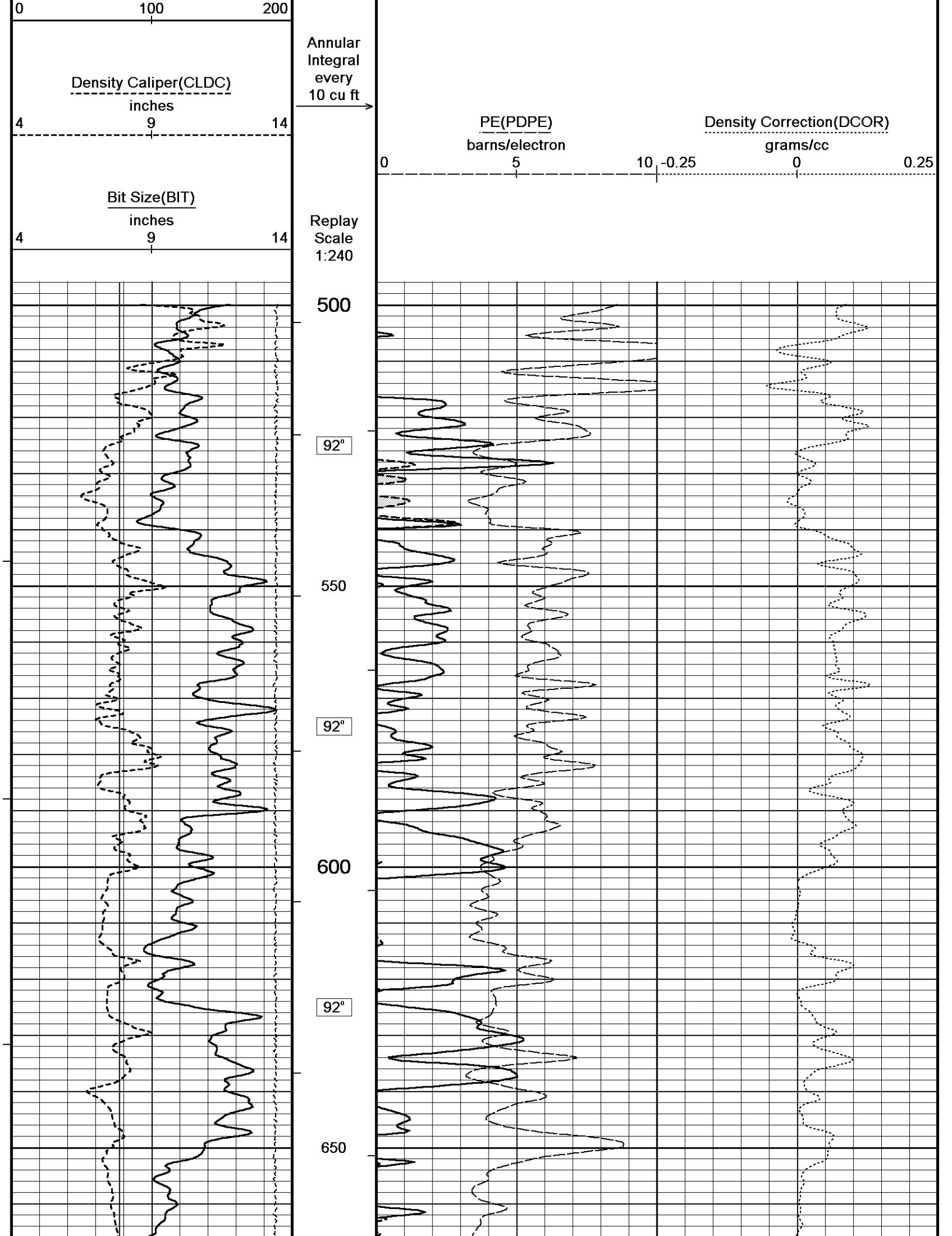
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:49
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_003.dta — Recorded on 05-APR-2008 07:59
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford PreVie...\Wexpro Carl Allen #28.dta — Recorded on 05-APR-2008 06:29
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

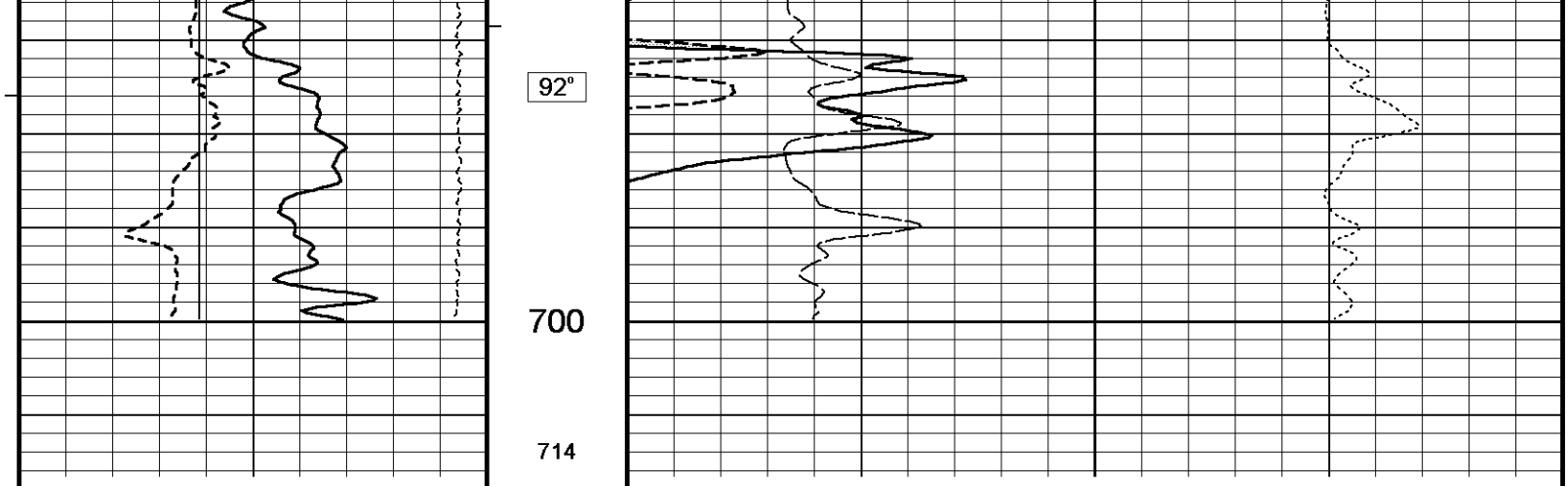
UPPER OVERLAY

UPPER REPEAT SECTION

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:49
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford PreVie...\Wexpro Carl Allen #28.dta — Recorded on 05-APR-2008 06:29
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091




0
100
200
Density Caliper(CLDC)
inches
4
9
14
Bit Size(BIT)
inches
4
9
14
Annular Integral every 10 cu ft
Replay Scale 1:240
PE(PDPE)
barns/electron
0
5
10
Density Correction(DCOR)
grams/cc
-0.25
0
0.25
500
92°
550
92°
600
92°
650



Depth In Feet

Timing Marks
every 60.0 sec

Sandstone Neutron Por.(NPRS)
percent
30 20 10 0 -10

DST Uphole Tension(SMTU)
pounds
10000 5000 0

Borehole Temp in deg F

Sandstone Density Por.(DPRS)
percent
30 20 10 0 -10

Gamma Ray(GRGC)
API
0 100 200

HVI every 10 cu ft

Annular Integral every 10 cu ft

Density Caliper(CLDC)
inches
4 9 14

PE(PDPE)
barns/electron
0 5 10

Density Correction(DCOR)
grams/cc
-0.25 0 0.25

Bit Size(BIT)
inches
4 9 14

Replay Scale 1:240

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 06-APR-2008 17:49
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford PreVie...\Wexpro Carl Allen #28.dta
Recorded on 05-APR-2008 06:29
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

UPPER REPEAT SECTION

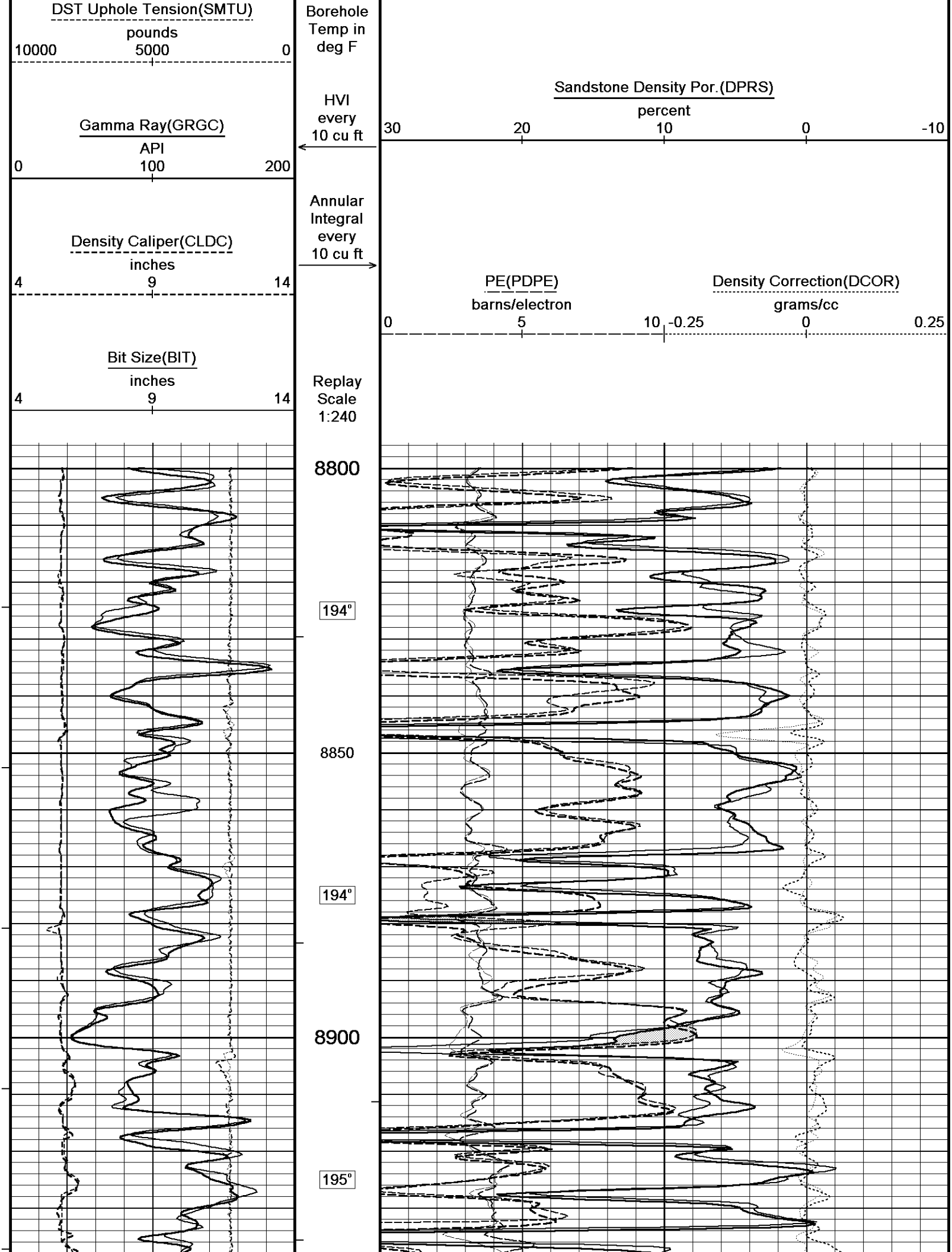
BOTTOM OVERLAY

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 06-APR-2008 17:49
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_002.dta
Recorded on 05-APR-2008 07:59
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_001.dta
Recorded on 05-APR-2008 07:42
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

Depth in Feet

Timing Marks
every 60.0 sec

Sandstone Neutron Por.(NPRS)
percent
30 20 10 0 -10


DST Uphole Tension(SMTU)
pounds
10000
5000
0
Gamma Ray(GRGC)
API
0
100
200
Density Caliper(CLDC)
inches
4
9
14
Bit Size(BIT)
inches
4
9
14
Borehole Temp in deg F
HVI every 10 cu ft
Annular Integral every 10 cu ft
Replay Scale 1:240
Sandstone Density Por.(DPRS)
percent
30
20
10
0
-10
PE(PDPE)
barns/electron
0
5
10
Density Correction(DCOR)
grams/cc
-0.25
0
0.25
8800
194°
8850
194°
8900
195°

Depth in Feet

Timing Marks
every 60.0 sec

DST Uphole Tension(SMTU)
pounds
10000 5000 0

Gamma Ray(GRGC)
API
0 100 200

Density Caliper(CLDC)
inches
4 9 14

Borehole Temp in deg F

HVI every 10 cu ft

Annular Integral every 10 cu ft

Sandstone Neutron Por.(NPRS)
percent
30 20 10 0 -10

Sandstone Density Por.(DPRS)
percent
30 20 10 0 -10

PE(PDPE)

Density Correction(DCOR)

PE(PDPE)
barns/electron
0 5 10

Density Correction(DCOR)
grams/cc
-0.25 0 0.25

Bit Size(BIT)
inches
4 9 14

Replay
Scale
1:240

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:49
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_002.dta — Recorded on 05-APR-2008 07:59
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_001.dta — Recorded on 05-APR-2008 07:42
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

BOTTOM OVERLAY

BOTTOM REPEAT SECTION

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:49
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_001.dta — Recorded on 05-APR-2008 07:42
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

Depth
in
Feet

Timing Marks
every 60.0 sec

Sandstone Neutron Por.(NPRS)
percent
30 20 10 0 -10

DST Uphole Tension(SMTU)
pounds
10000 5000 0

Borehole
Temp in
deg F

Sandstone Density Por.(DPRS)
percent
30 20 10 0 -10

HVI
every
10 cu ft

Gamma Ray(GRGC)
API
0 100 200

Annular
Integral
every
10 cu ft

Density Caliper(CLDC)
inches
4 9 14

PE(PDPE)
barns/electron
0 5 10

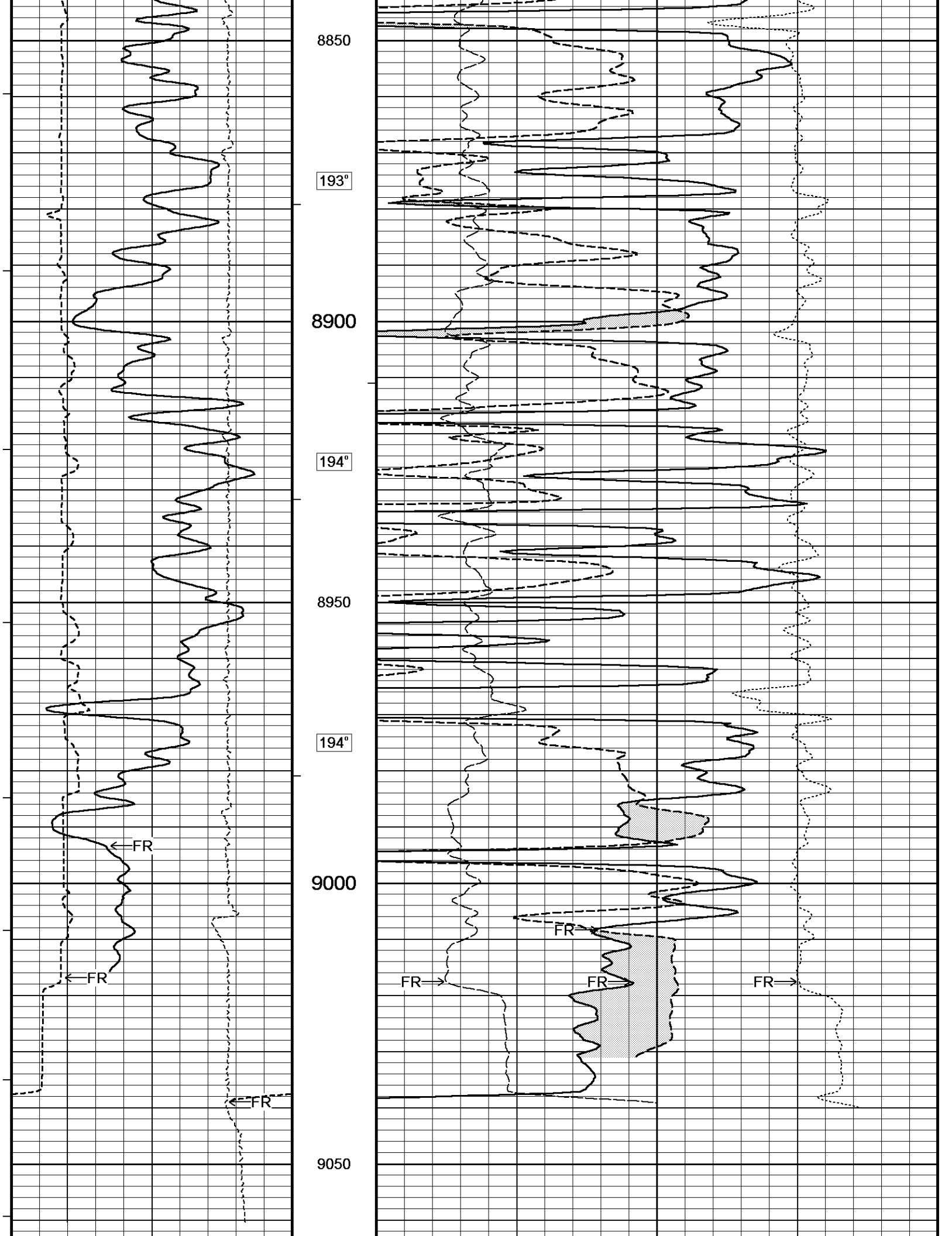
Density Correction(DCOR)
grams/cc
-0.25 0 0.25

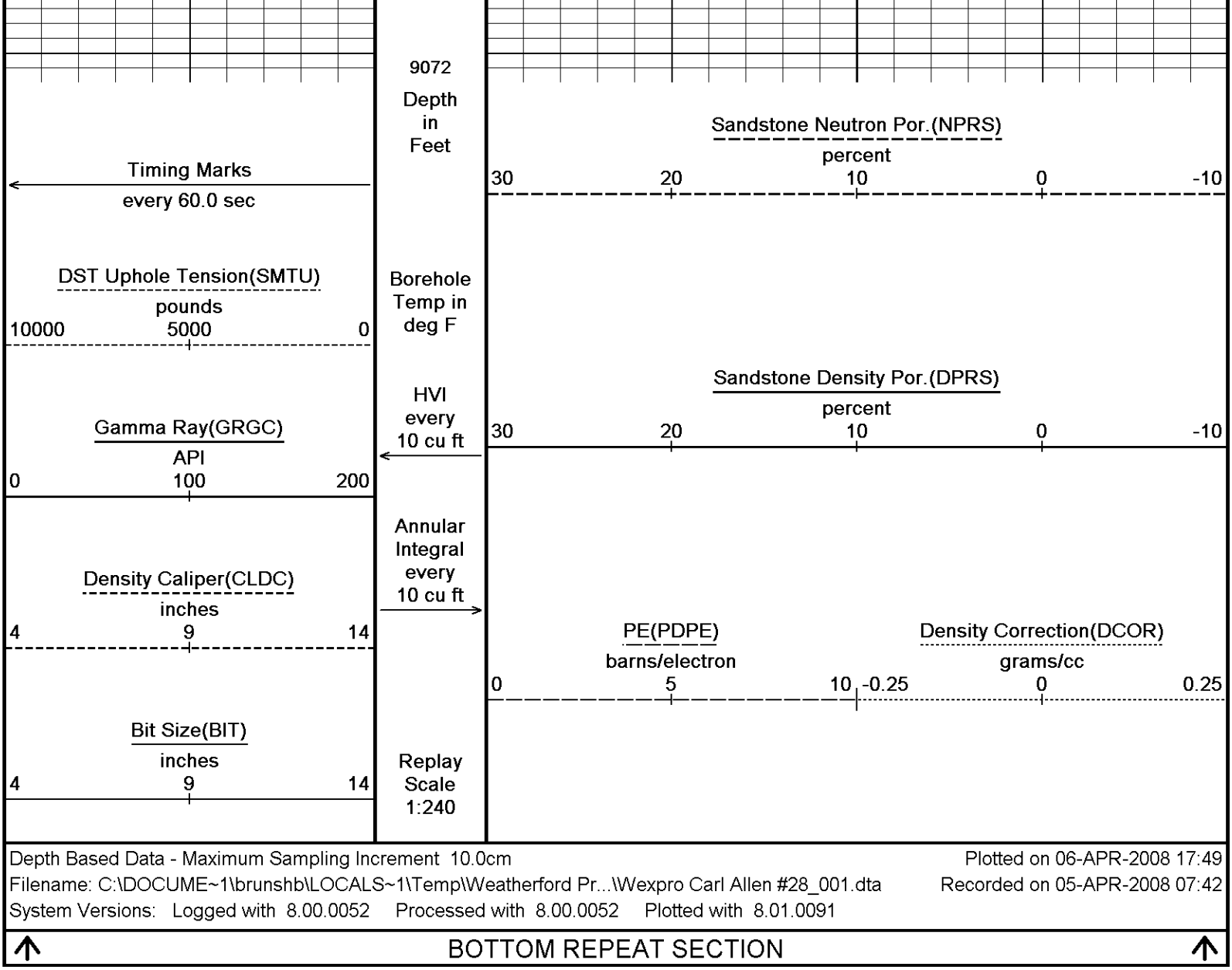
Bit Size(BIT)
inches
4 9 14

Replay
Scale
1:240

8800

193°


8850
193°
8900
194°
8950
194°
9000
9050
FR
FR
FR
FR
FR
FR
FR

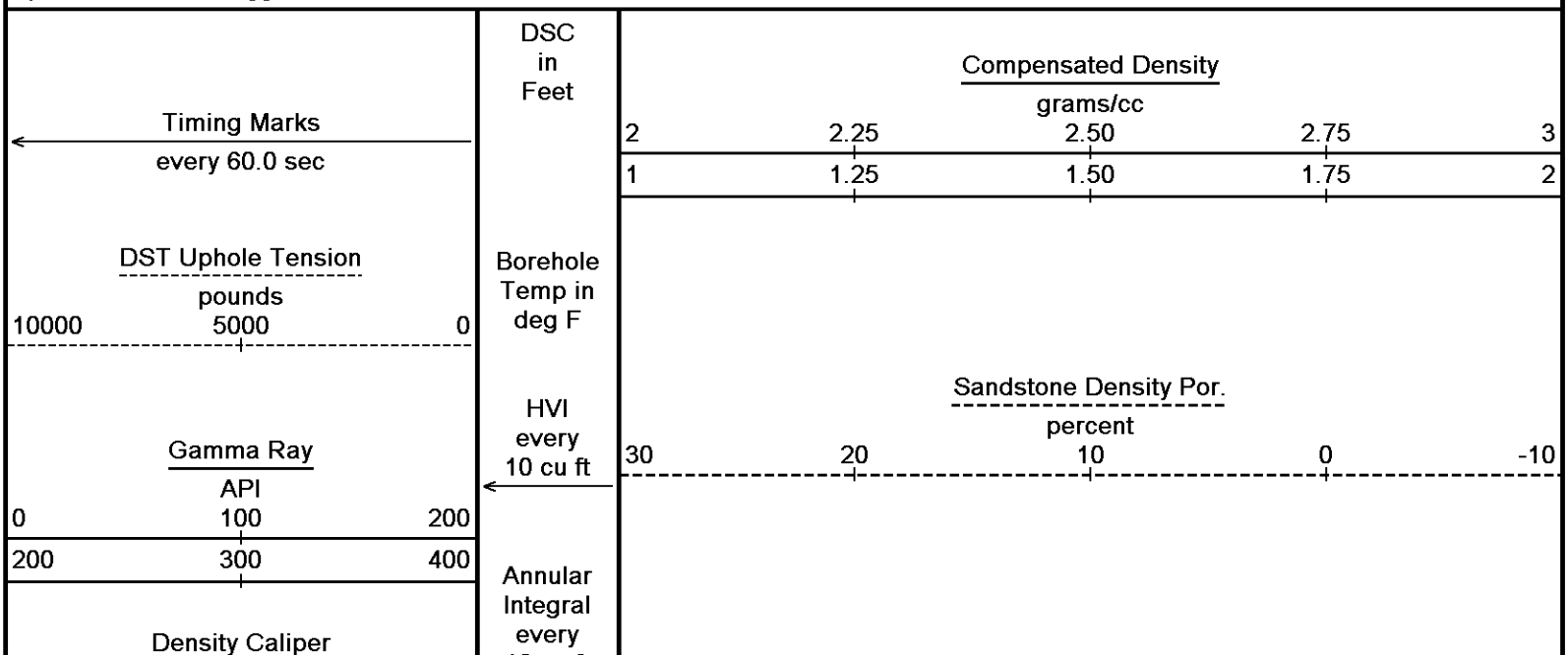


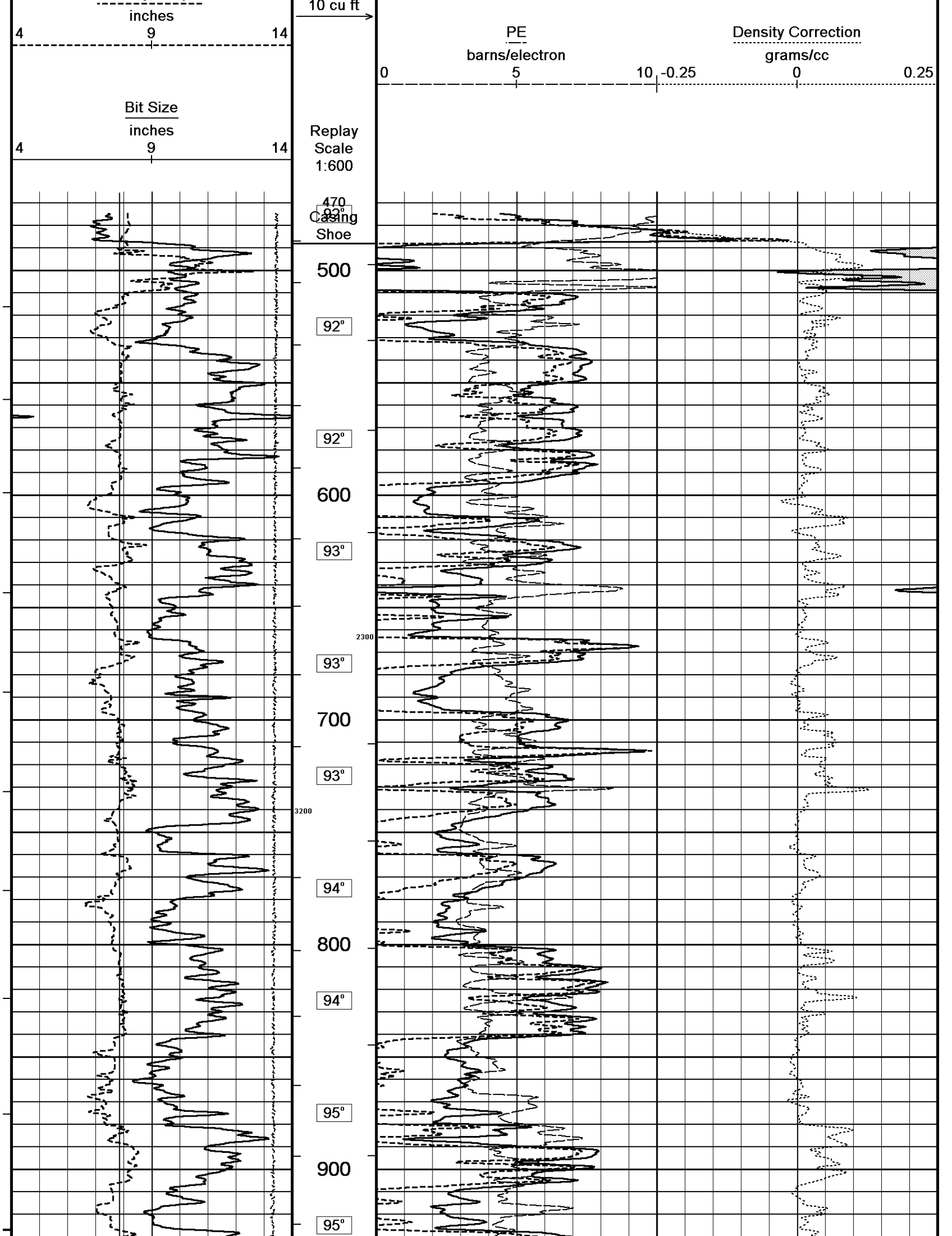
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:49
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_001.dta — Recorded on 05-APR-2008 07:42
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

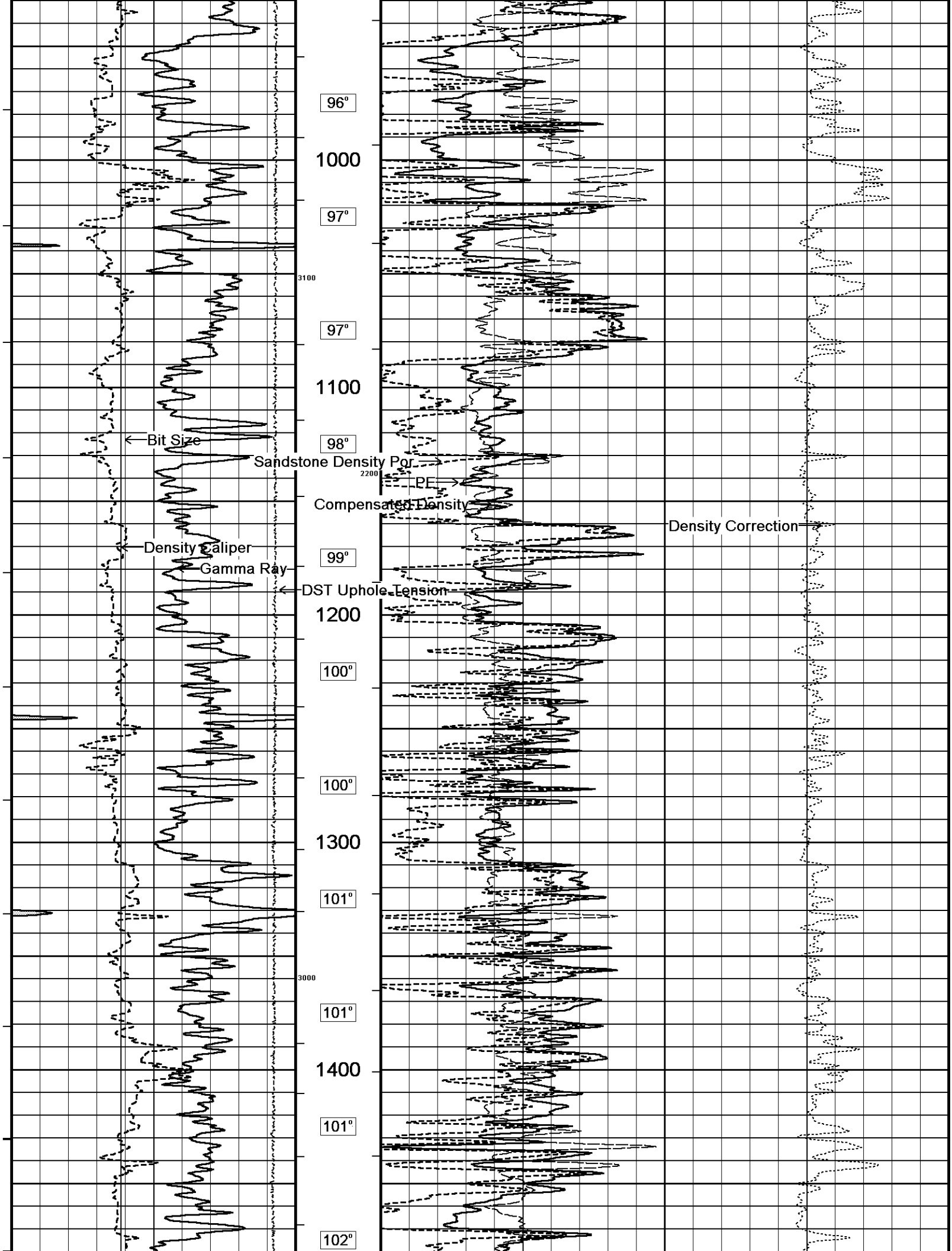
BOTTOM REPEAT SECTION

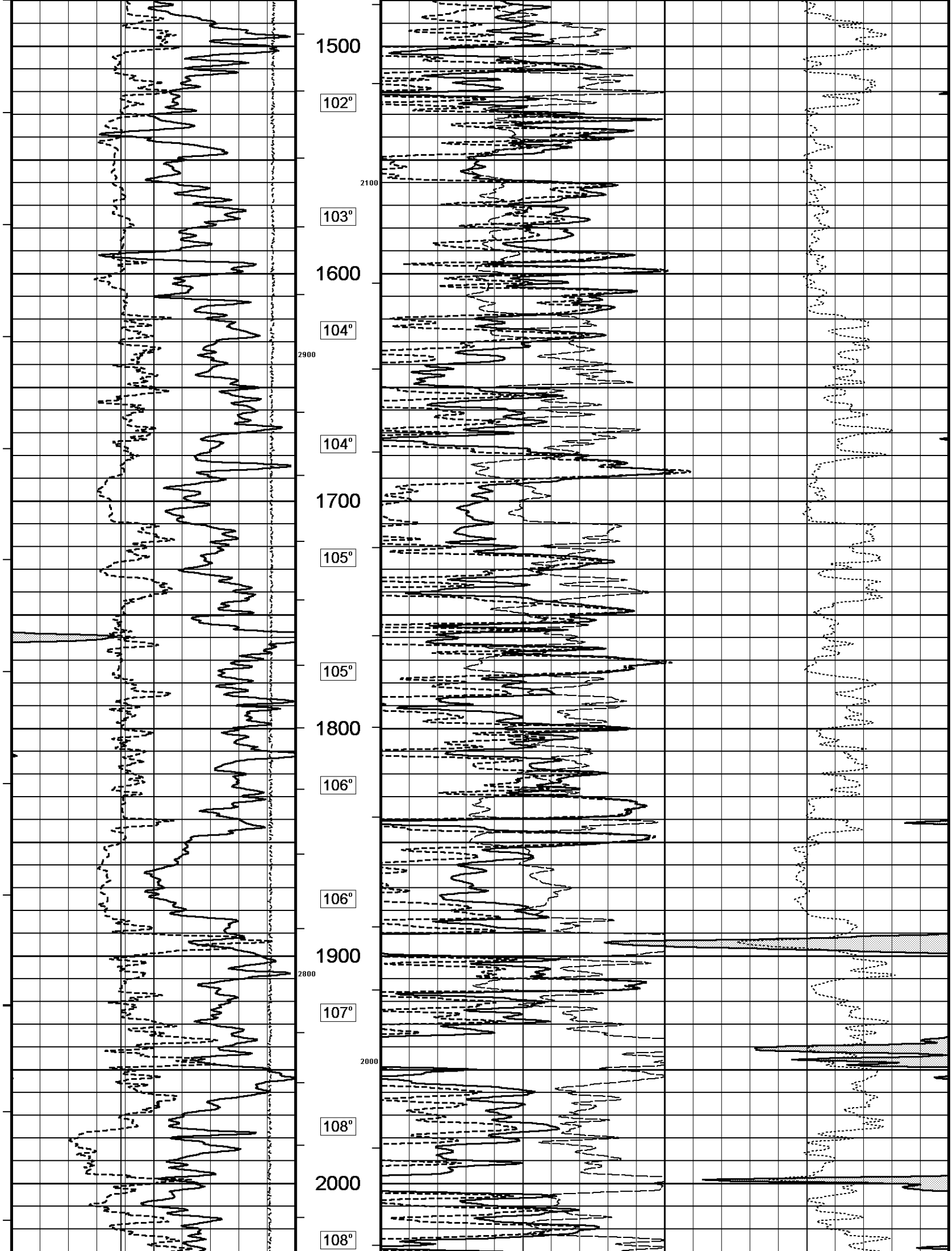
2 INCH MAIN LOG

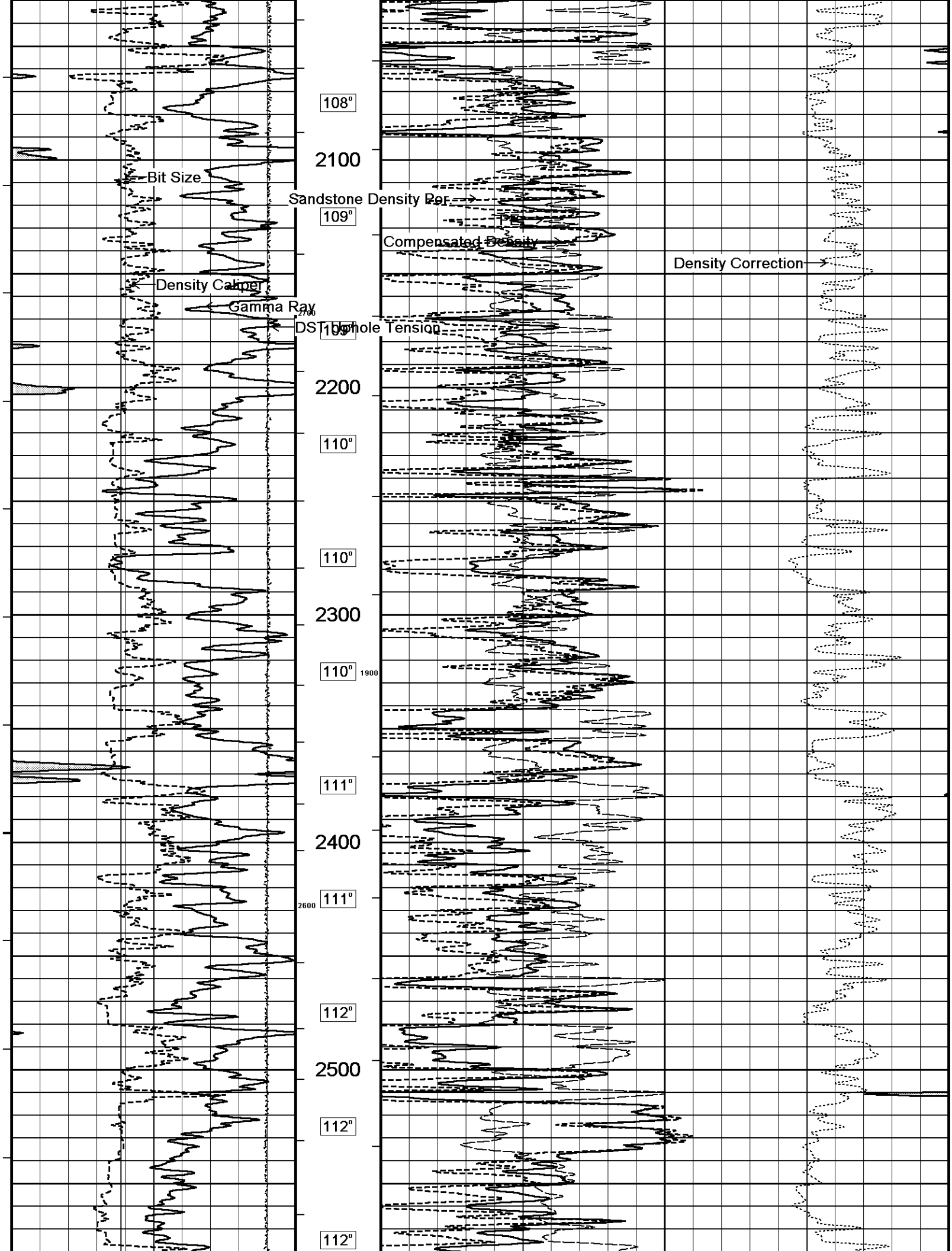
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:49
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_002.dta — Recorded on 05-APR-2008 07:59
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

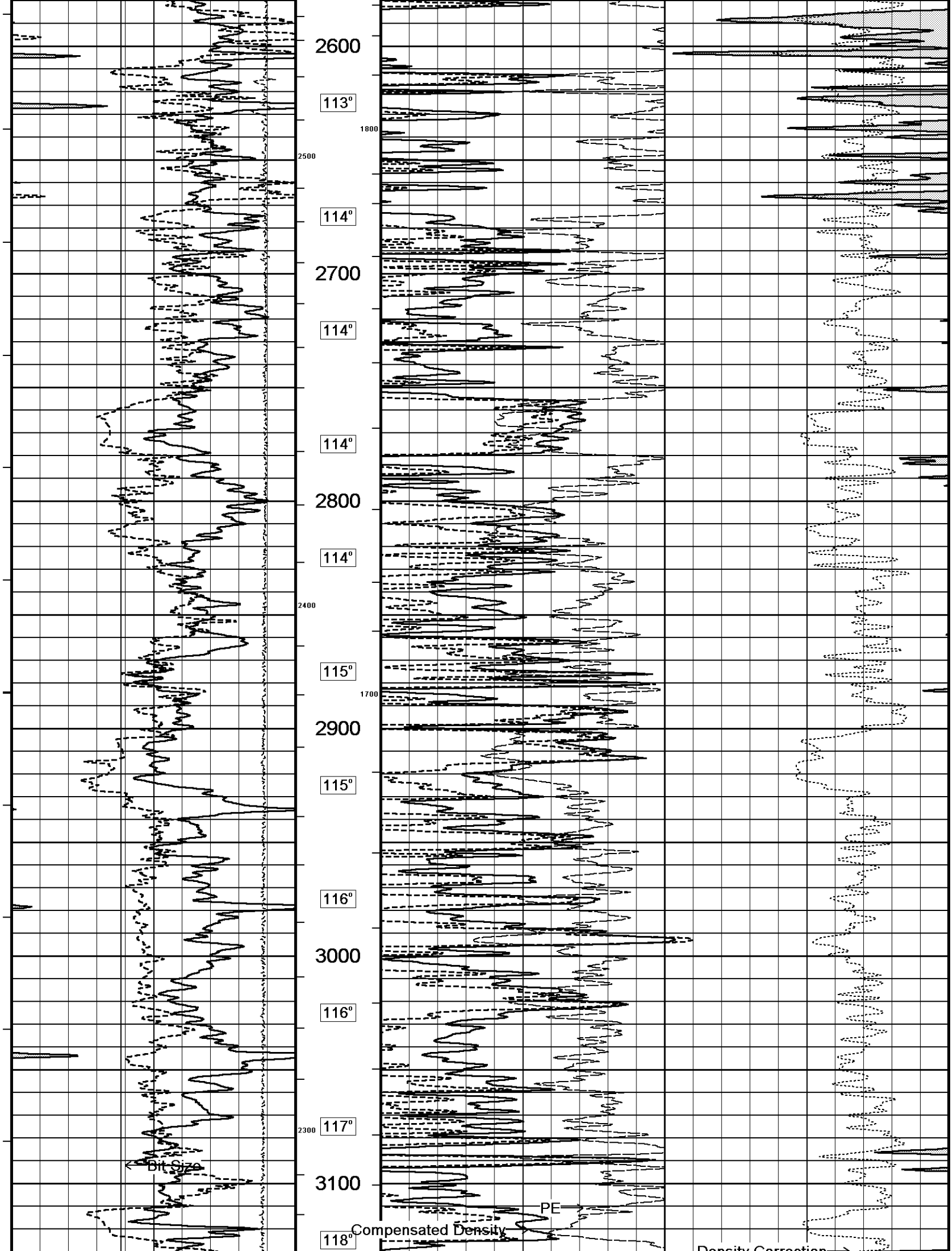


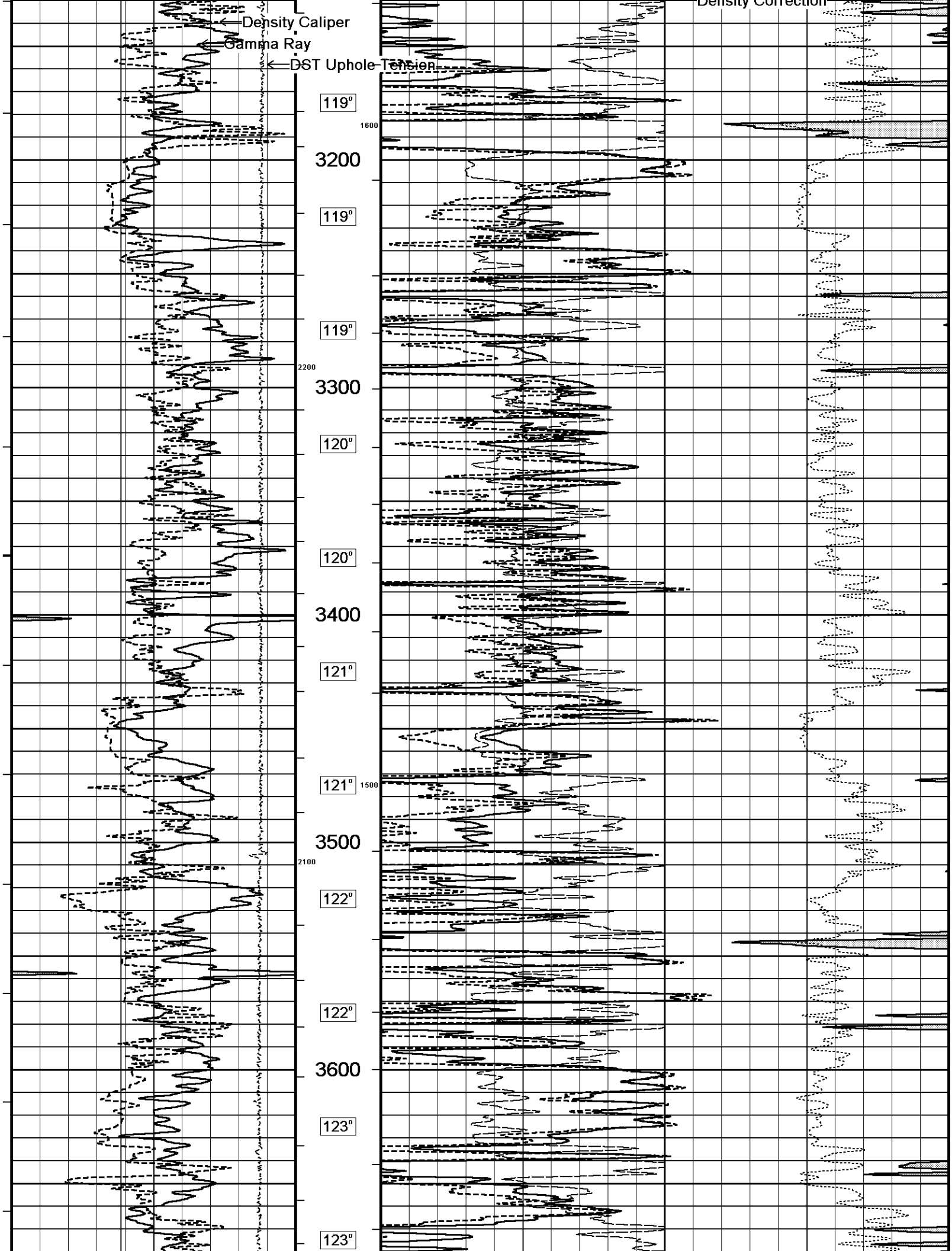

10 cu ft
PE
barns/electron
0
5
10
Density Correction
grams/cc
-0.25
0
0.25
Bit Size
inches
4
9
14
Replay
Scale
1:600
470
92°
Casing
Shoe
500
92°
92°
600
93°
2300
93°
700
93°
3200
94°
800
94°
95°
900
95°

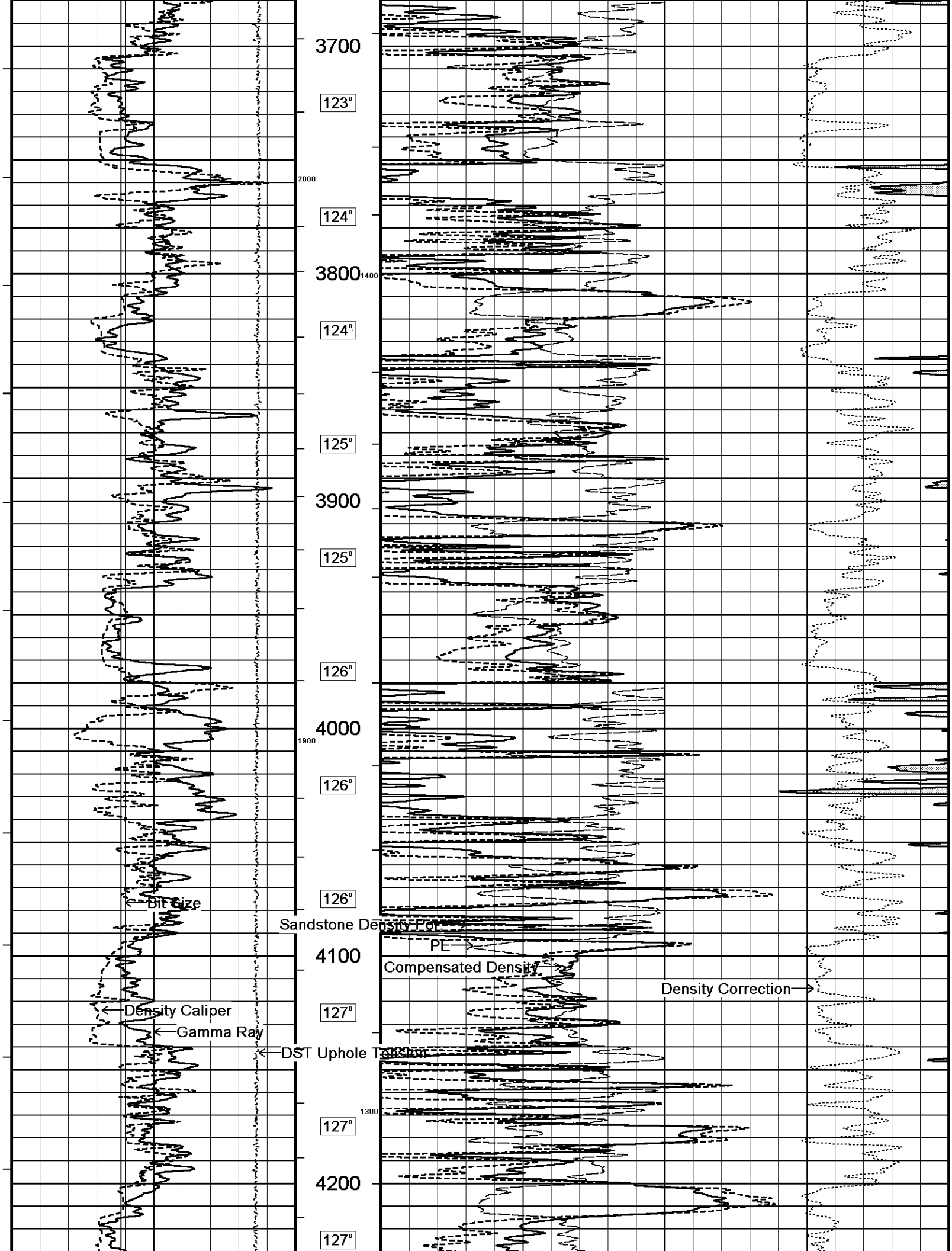

96°
1000
97°
3100
97°
1100
98°
Bit Size
Sandstone Density Por
2200
PE
Compensated Density
Density Correction
Density Caliper
99°
Gamma Ray
DST Uphole Tension
1200
100°
100°
1300
101°
3000
101°
1400
101°
102°

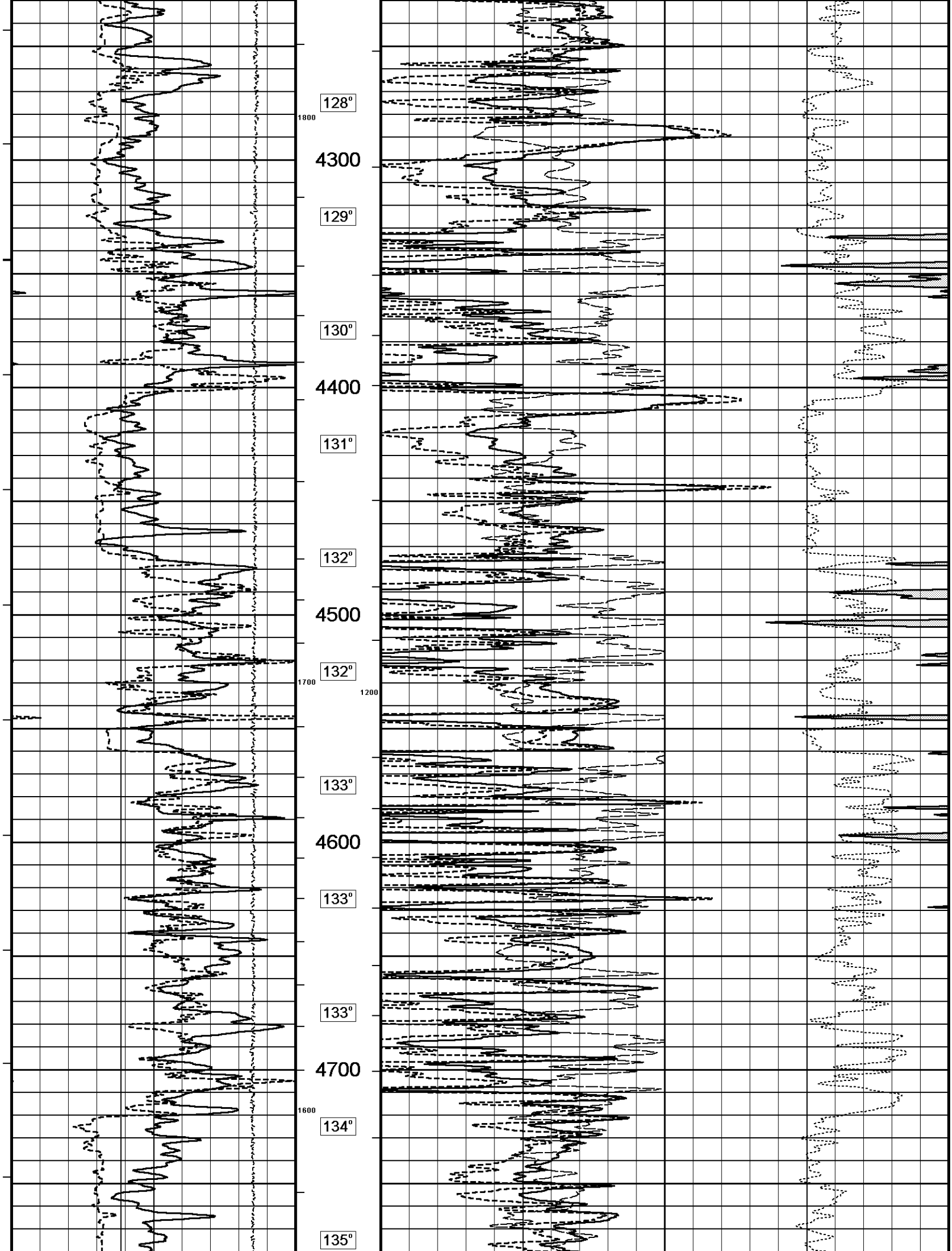

1500
102°
2100
103°
1600
104°
2900
104°
1700
105°
105°
1800
106°
106°
1900
2800
107°
2000
108°
2000
108°

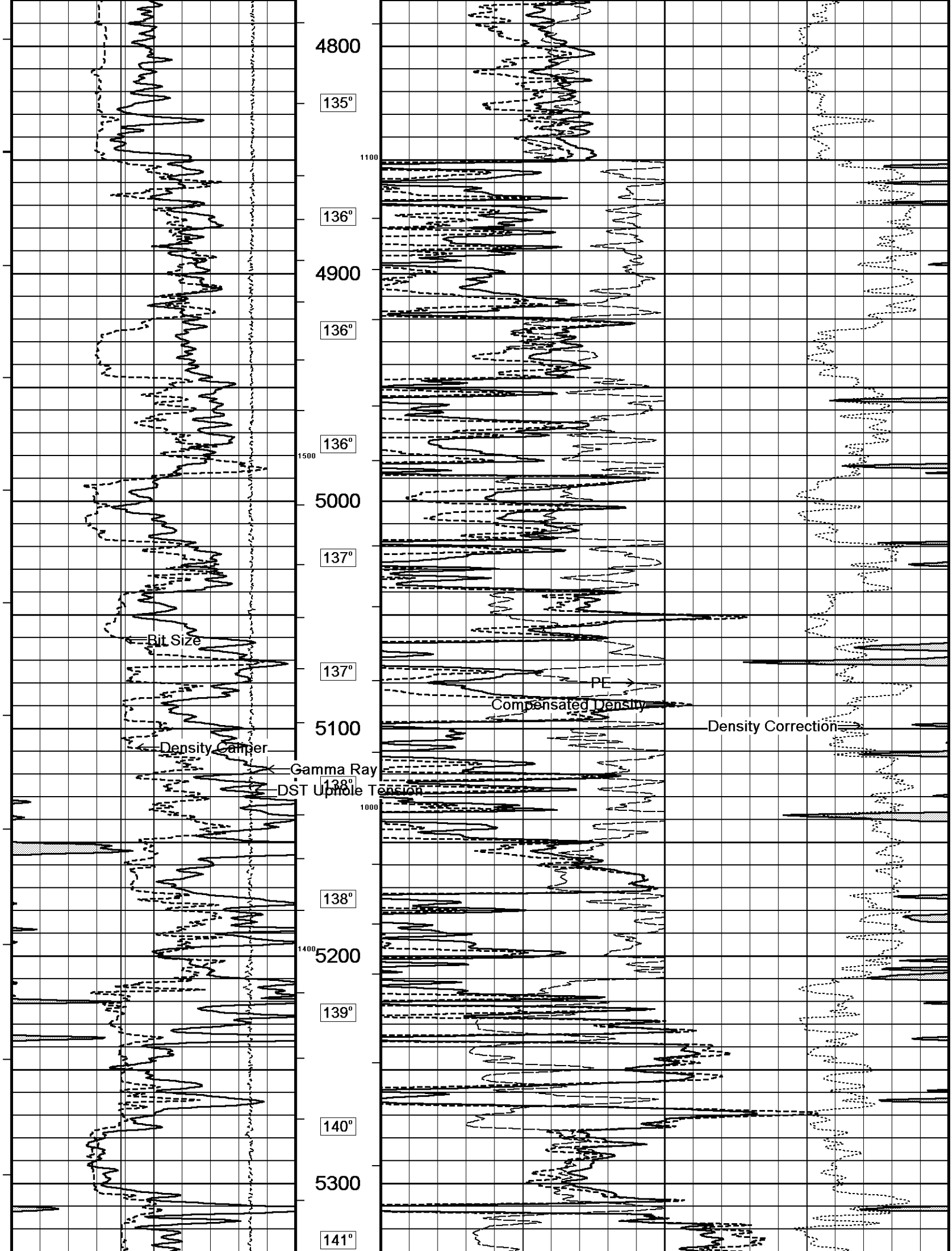

Bit Size
Sandstone Density Por
Compensated Density
Density Correction
Density Caliper
Gamma Ray
DST Borehole Tension
108°
109°
110°
111°
112°
2100
2200
2300
2400
2500
1900
2600

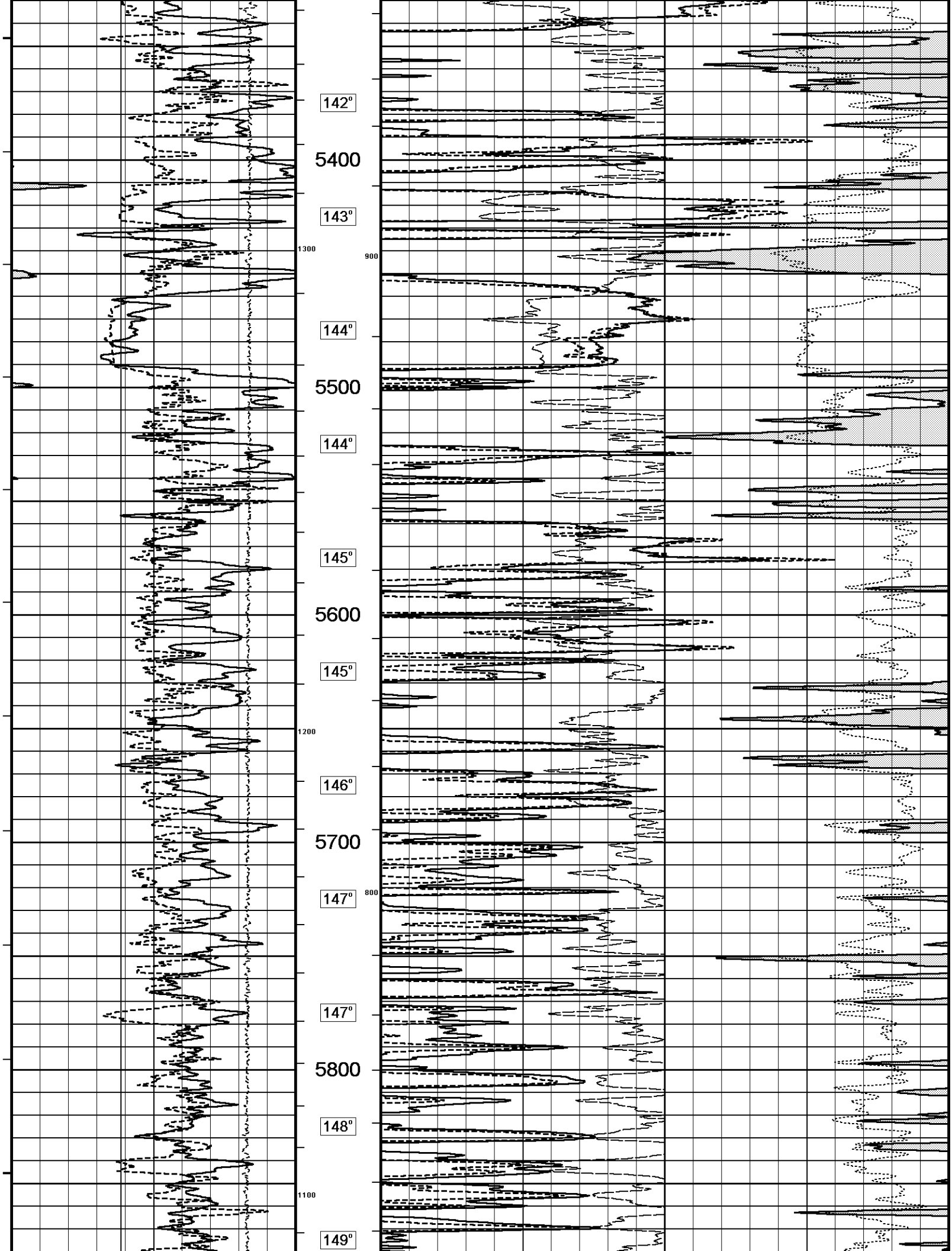

2600
113°
1800
2500
114°
2700
114°
114°
2800
114°
2400
115°
1700
2900
115°
116°
3000
116°
2300
117°
Bit Size
3100
PE
Compensated Density
118°
Density Correction

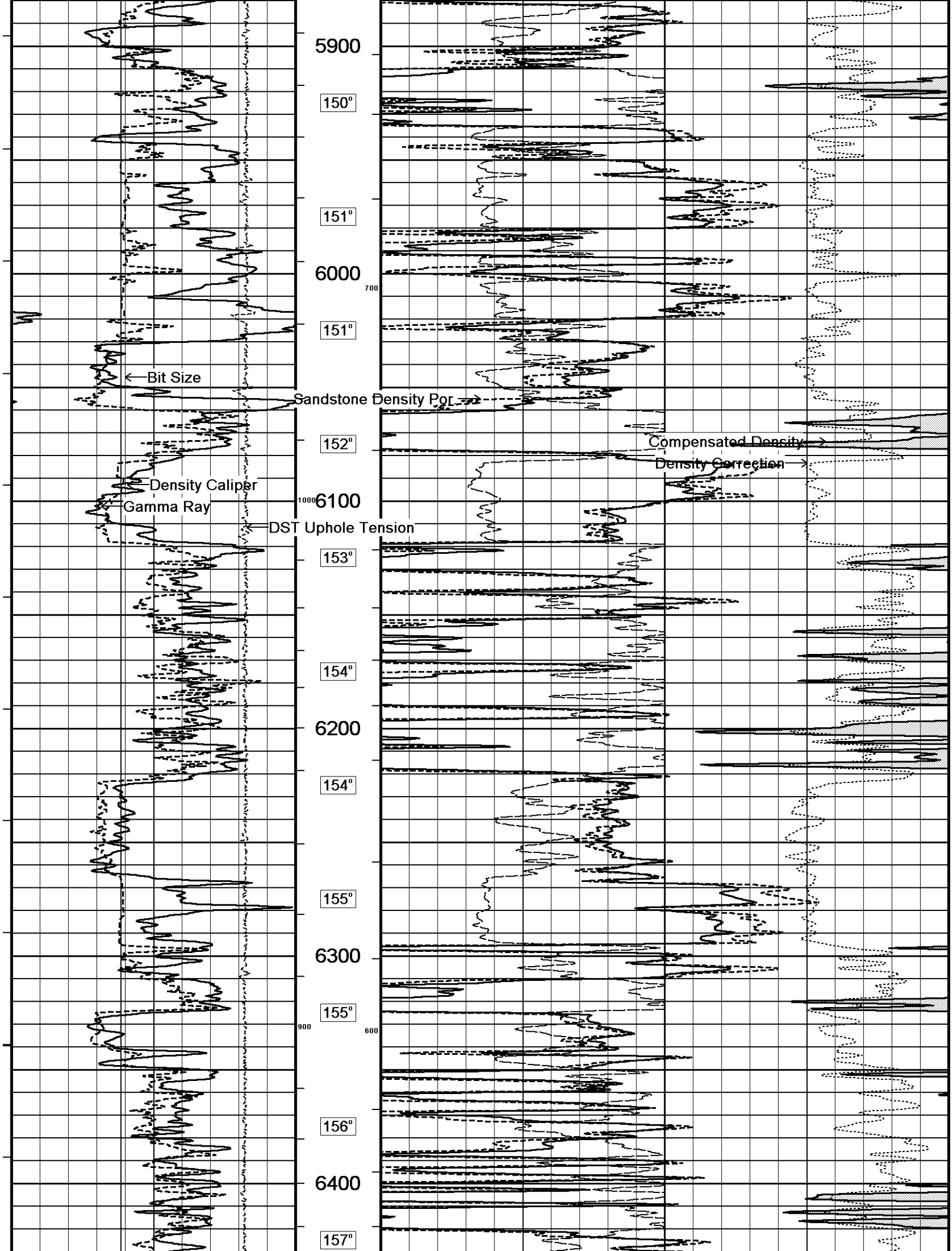

Density Caliper
Gamma Ray
DST Uphole Tension
Density Correction
119°
119°
119°
120°
120°
121°
121°
122°
122°
123°
123°
1600
2200
1500
2100
3200
3300
3400
3500
3600

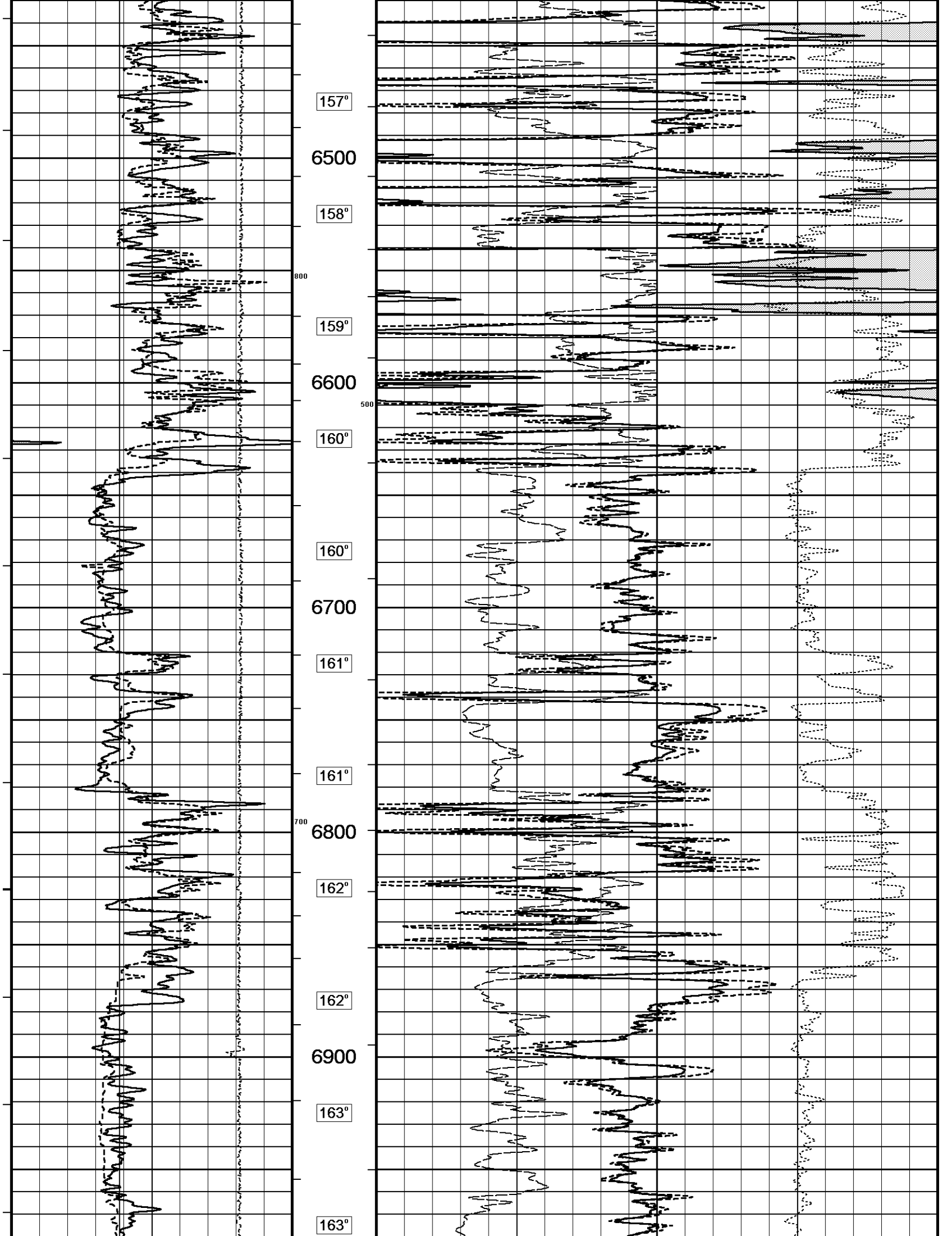

3700
123°
2000
124°
3800
1400
124°
125°
3900
125°
126°
4000
1900
126°
126°
Bit Size
Sandstone Density Por
PE
4100
Compensated Density
Density Correction
Density Caliper
127°
Gamma Ray
DST Uphole Tension
1300
127°
4200
127°

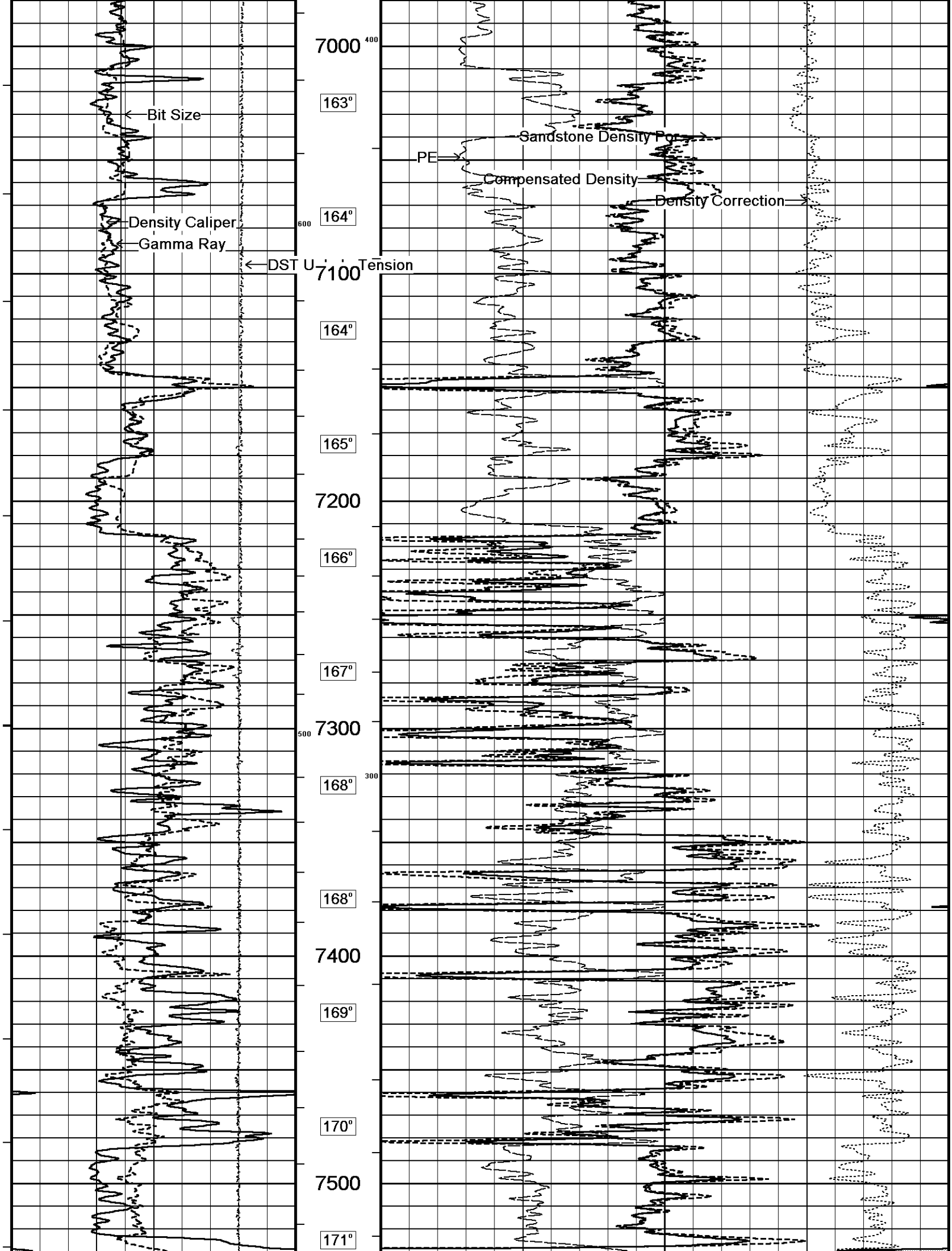

128°
4300
129°
130°
4400
131°
132°
4500
132°
133°
4600
133°
133°
4700
134°
135°
1800
1700
1600
1200

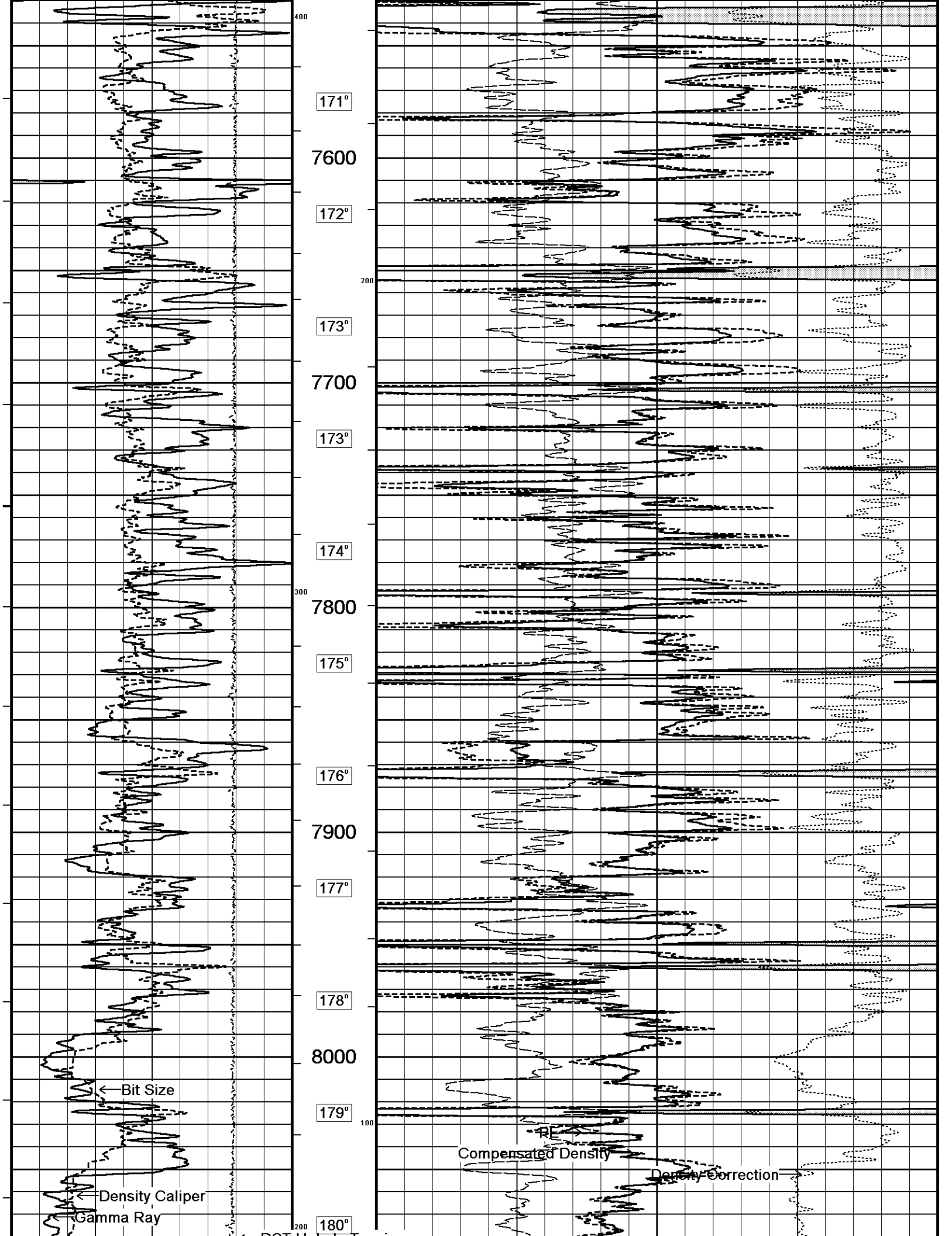

4800
135°
1100
136°
4900
136°
1500
136°
5000
137°
Bit Size
137°
PE
Compensated Density
5100
Density Correction
Density Caliper
Gamma Ray
138°
DST Uphole Tension
1000
138°
1400
5200
139°
140°
5300
141°

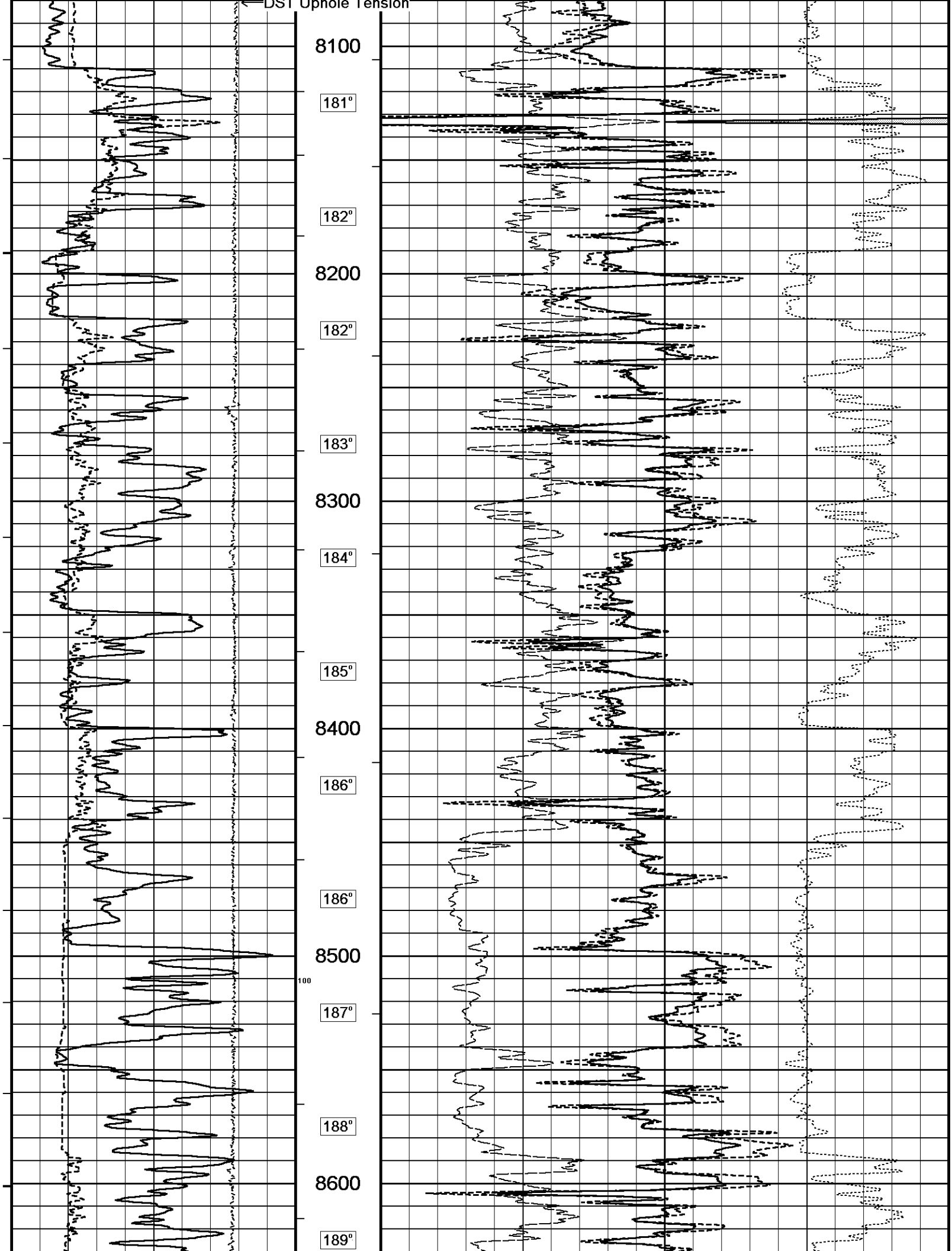

142°
5400
143°
1300
900
144°
5500
144°
145°
5600
145°
1200
146°
5700
147°
800
147°
5800
148°
1100
149°

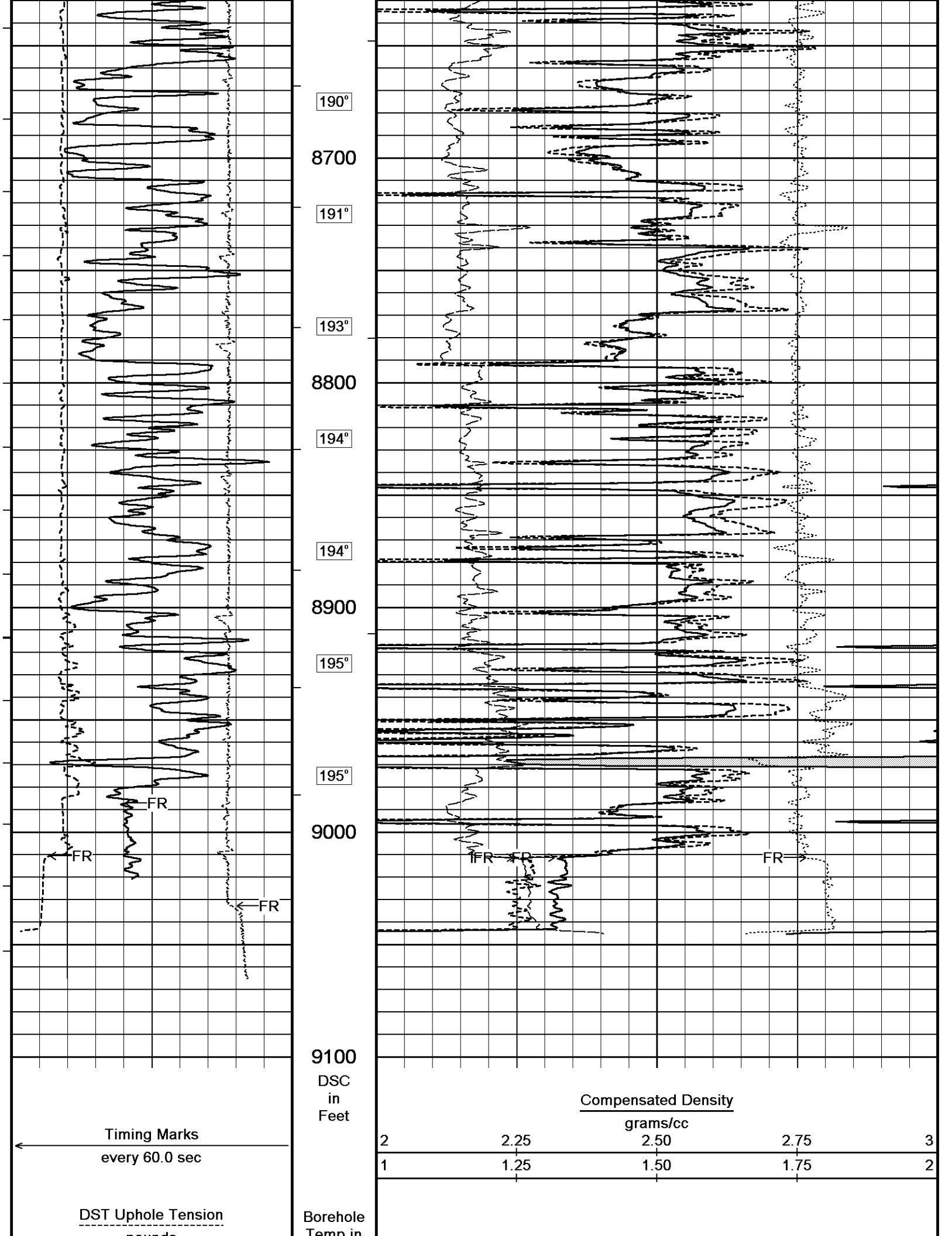

5900
150°
151°
6000
700
151°
Bit Size
Sandstone Density Por
152°
Compensated Density
Density Correction
Density Caliper
Gamma Ray
1000
6100
DST Uphole Tension
153°
154°
6200
154°
155°
6300
155°
900
600
156°
6400
157°


157°
6500
158°
800
159°
6600
500
160°
160°
6700
161°
161°
700
6800
162°
162°
6900
163°
163°


Bit Size
Density Caliper
Gamma Ray
DST U
Tension
Sandstone Density Por
PE
Compensated Density
Density Correction
7000
7100
7200
7300
7400
7500
163°
164°
165°
166°
167°
168°
169°
170°
171°
400
600
500
300


400
171°
7600
172°
200
173°
7700
173°
174°
300
7800
175°
176°
7900
177°
178°
8000
179°
100
180°
200
Bit Size
Density Caliper
Gamma Ray
RE
Compensated Density
Density Correction


DST Upholе Tension
8100
181°
182°
8200
182°
183°
8300
184°
185°
8400
186°
186°
8500
187°
188°
8600
189°


190°
8700
191°
193°
8800
194°
194°
8900
195°
195°
9000
9100
FR
FR
FR
FR
FR
FR
DSC
in
Feet
Timing Marks
every 60.0 sec
DST Uphole Tension
pounds
Borehole
Temp in
Compensated Density
grams/cc
2
2.25
2.50
2.75
3
1
1.25
1.50
1.75
2

pounds
10000 5000 0

Temp in deg F

Sandstone Density Por.
percent
30 20 10 0 -10

HVI every 10 cu ft

Gamma Ray
API
0 100 200
200 300 400

Annular Integral every 10 cu ft

Density Caliper
inches
4 9 14

PE
barns/electron
0 5 10

Density Correction
grams/cc
-0.25 0 0.25

Bit Size
inches
4 9 14

Replay Scale 1:600

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:49
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_002.dta — Recorded on 05-APR-2008 07:59
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

2 INCH MAIN LOG

5 INCH MAIN LOG

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:49
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_002.dta — Recorded on 05-APR-2008 07:59
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

DSC in Feet

Compensated Density
grams/cc
2 2.25 2.50 2.75 3
1 1.25 1.50 1.75 2

Timing Marks
every 60.0 sec

DST Uphole Tension
pounds
10000 5000 0

Borehole Temp in deg F

Sandstone Density Por.
percent
30 20 10 0 -10

HVI every 10 cu ft

Gamma Ray
API
0 100 200

Annular Integral every 10 cu ft

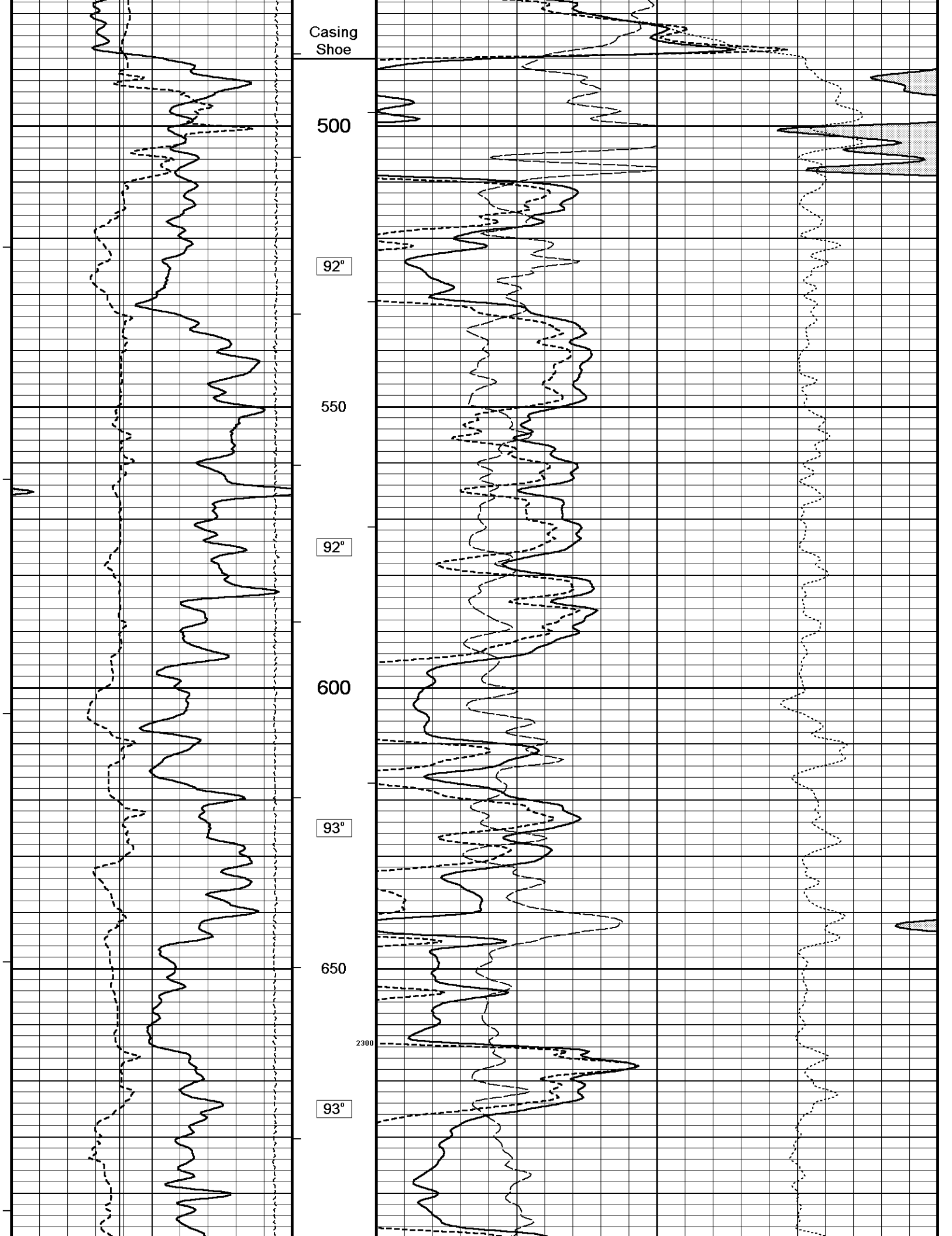
Density Caliper
inches
4 9 14

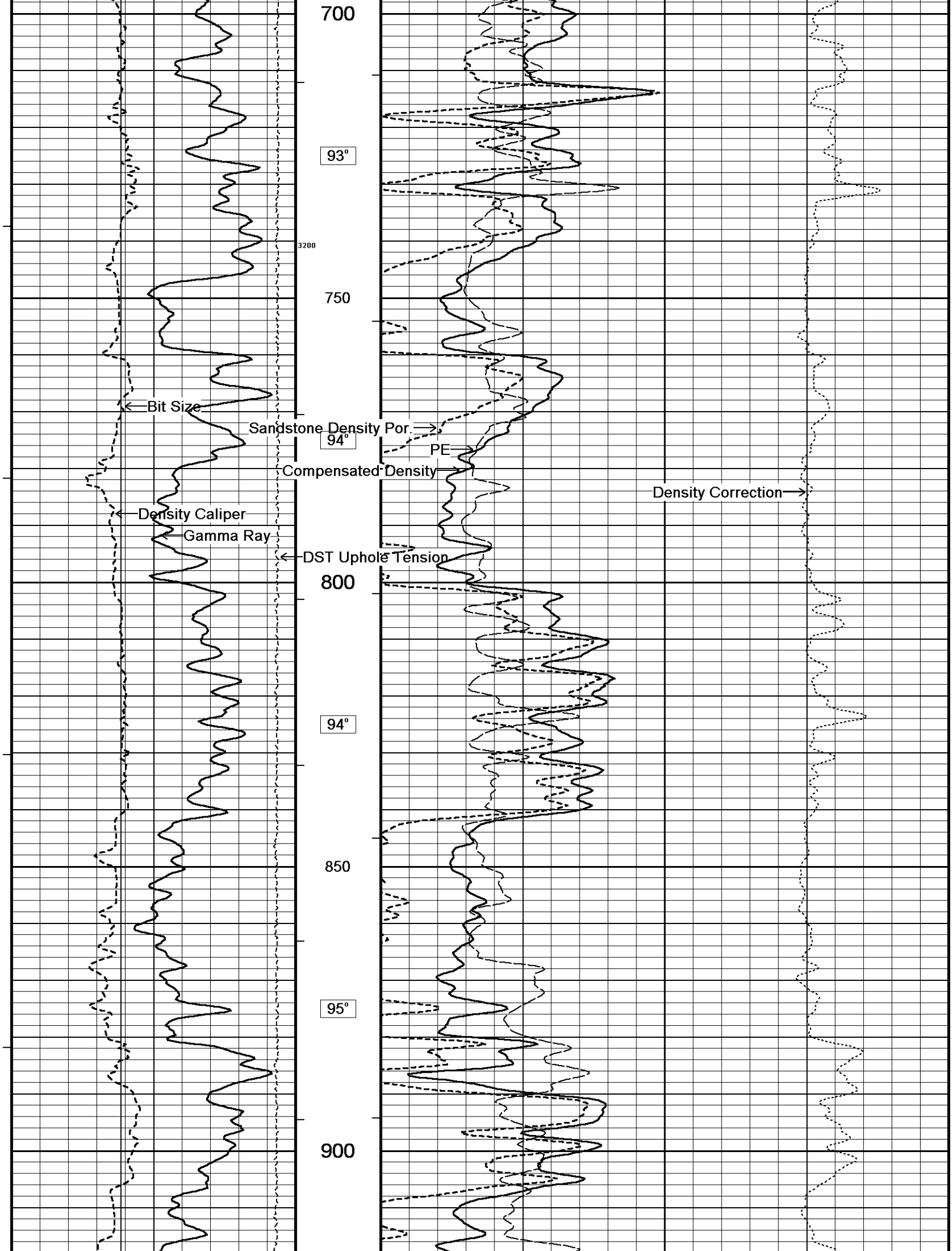
PE
barns/electron
0 5 10

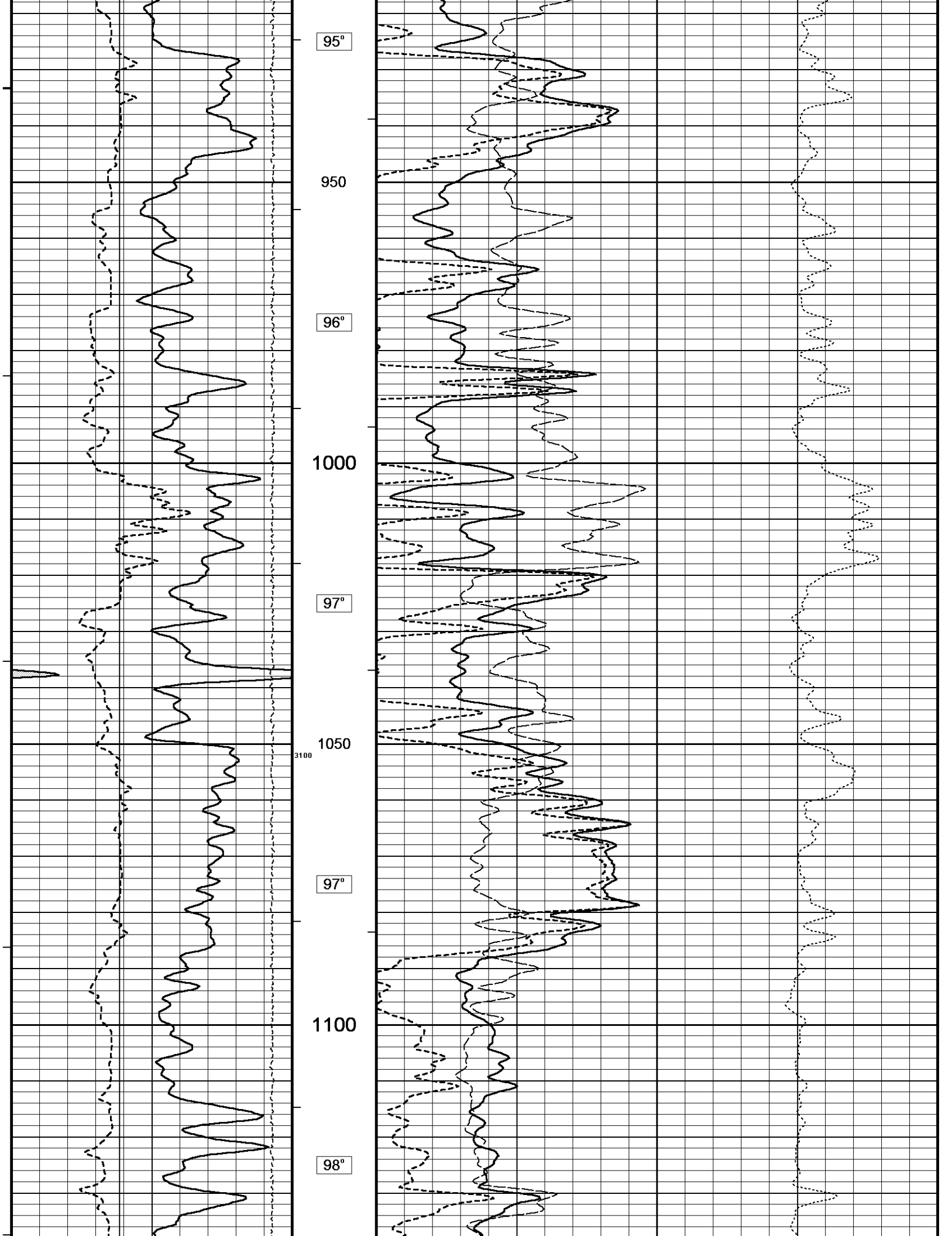
Density Correction
grams/cc
-0.25 0 0.25

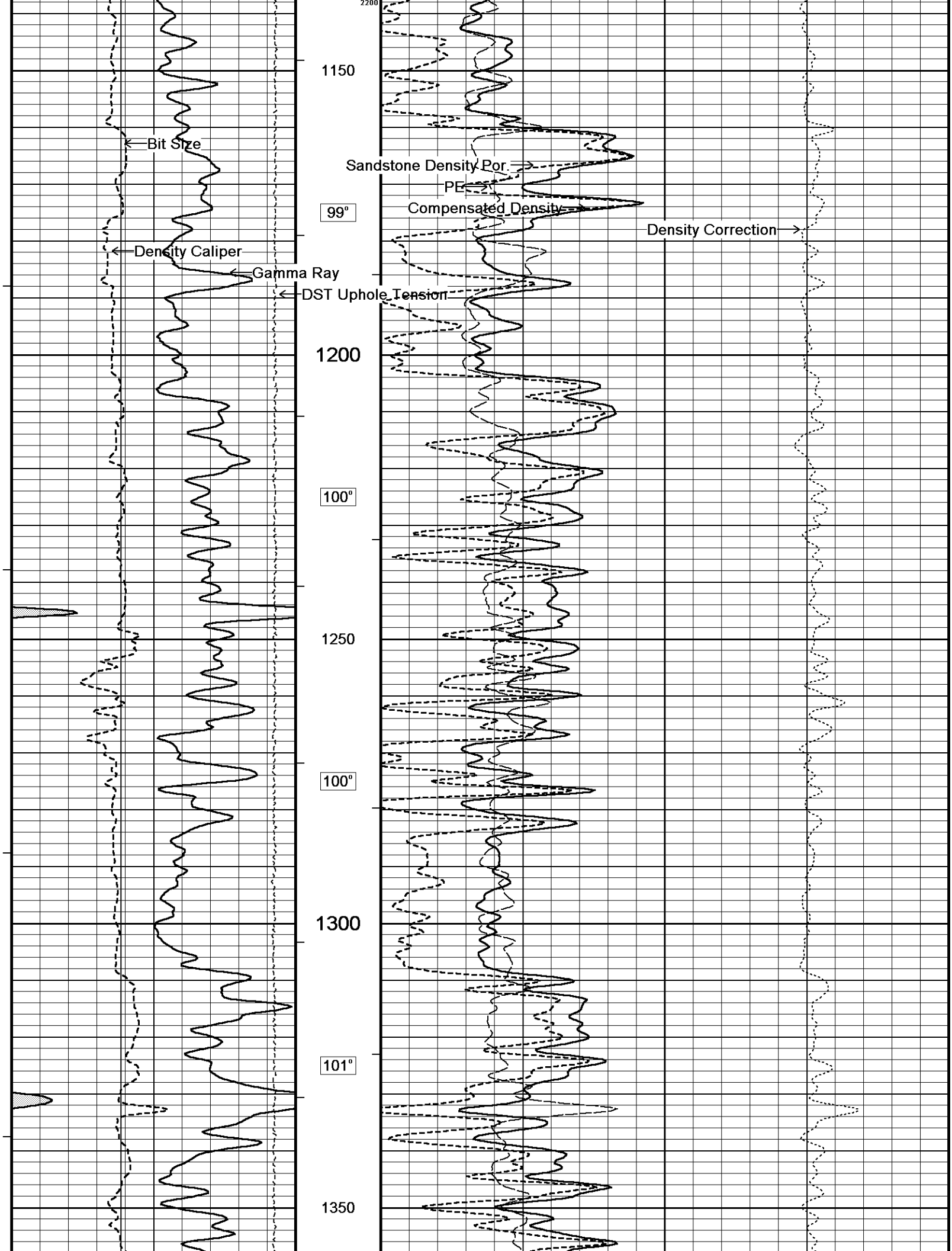
Bit Size
inches
4 9 14

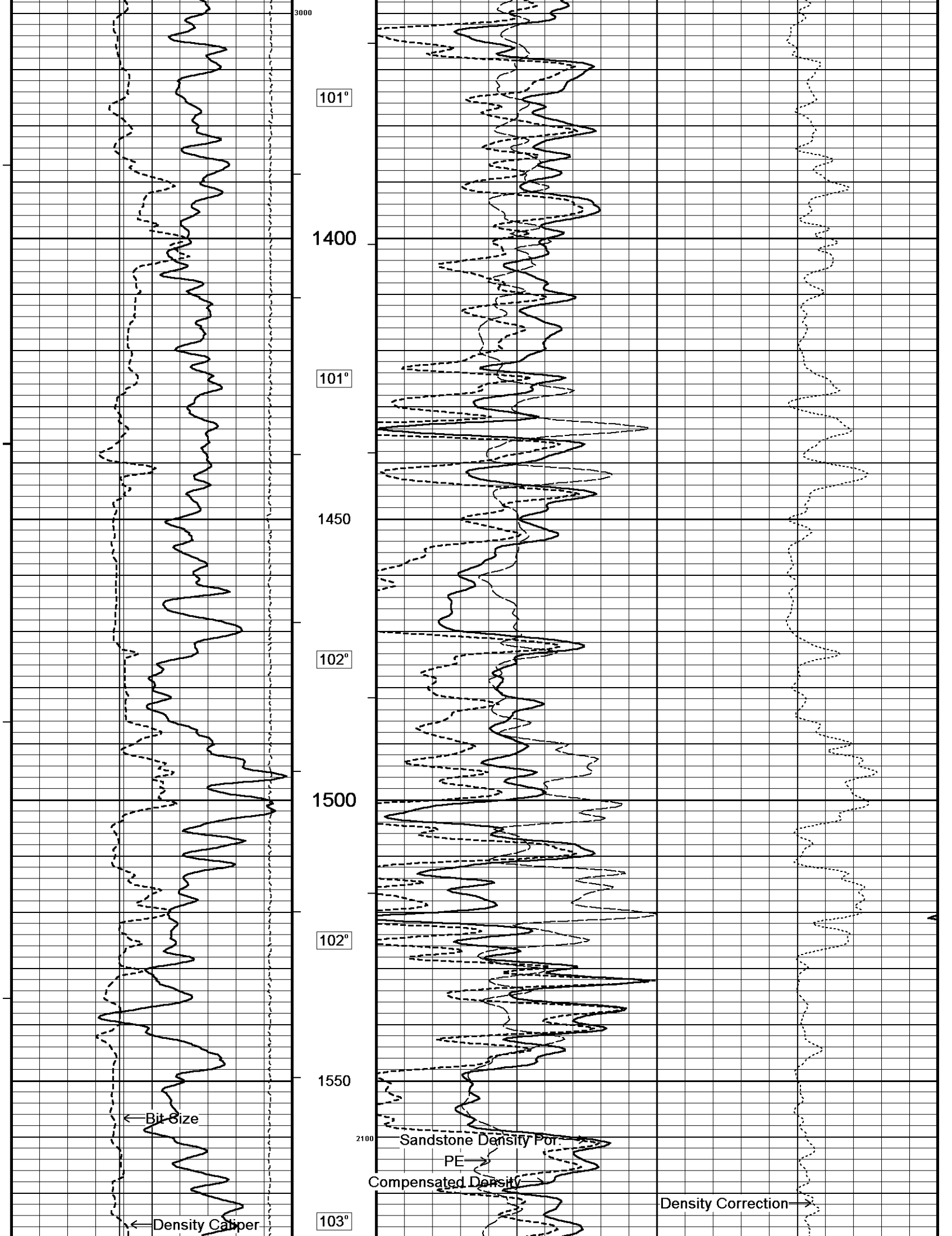
Replay Scale 1:240

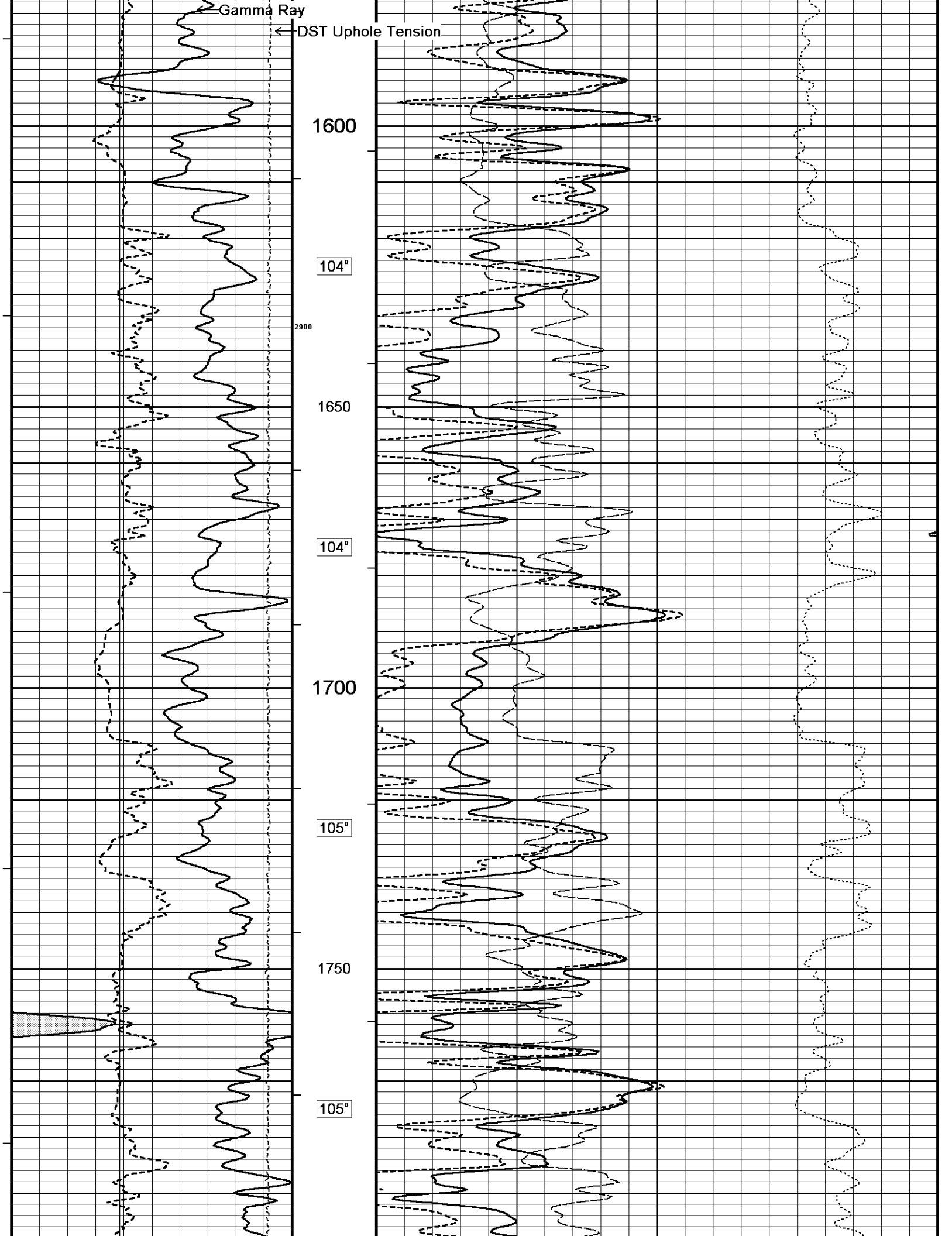

Casing
Shoe
500
92°
550
92°
600
93°
650
2300
93°

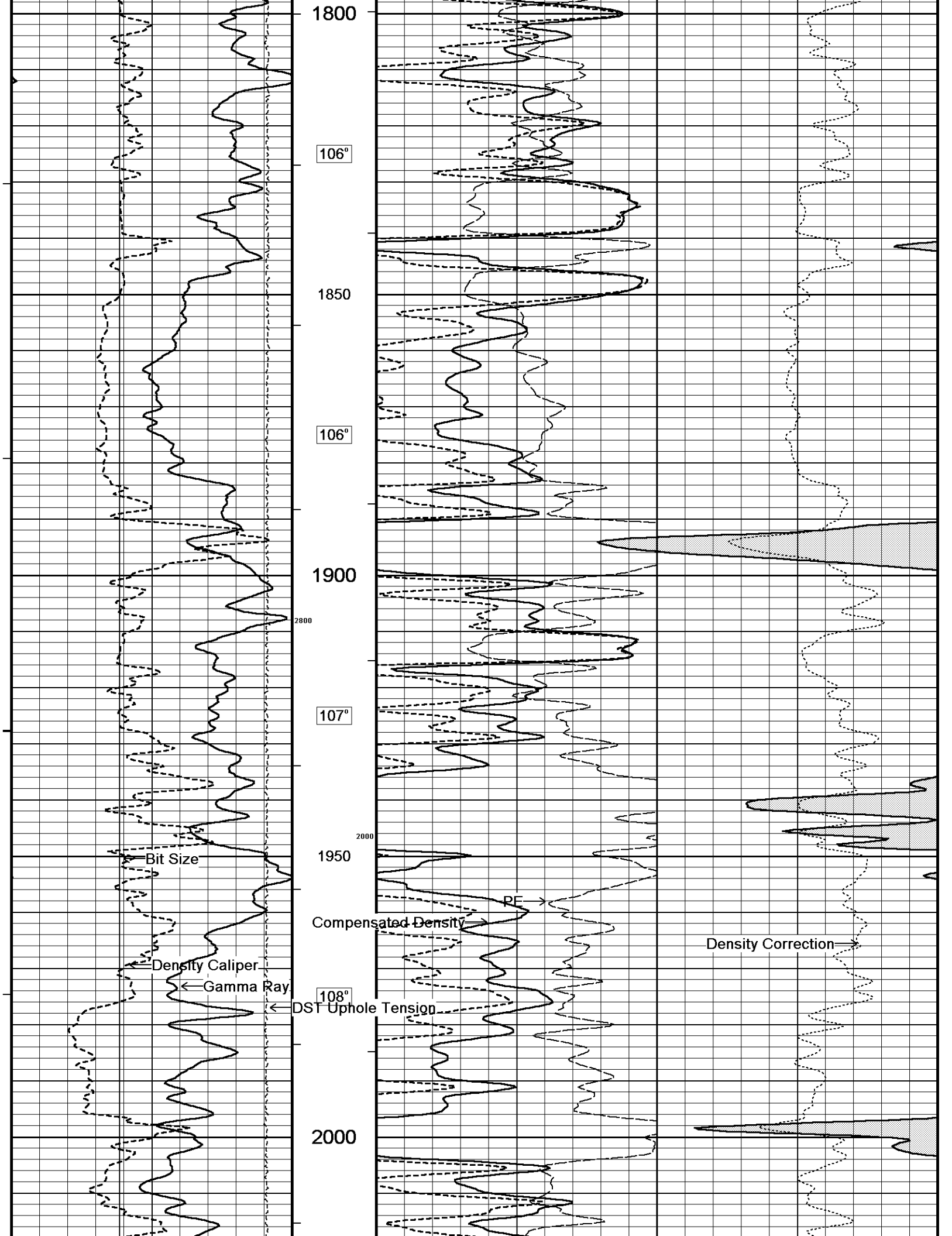

700
93°
3200
750
Bit Size
Sandstone Density Por
94°
PE
Compensated Density
Density Correction
Density Caliper
Gamma Ray
DST Uphole Tension
800
94°
850
95°
900

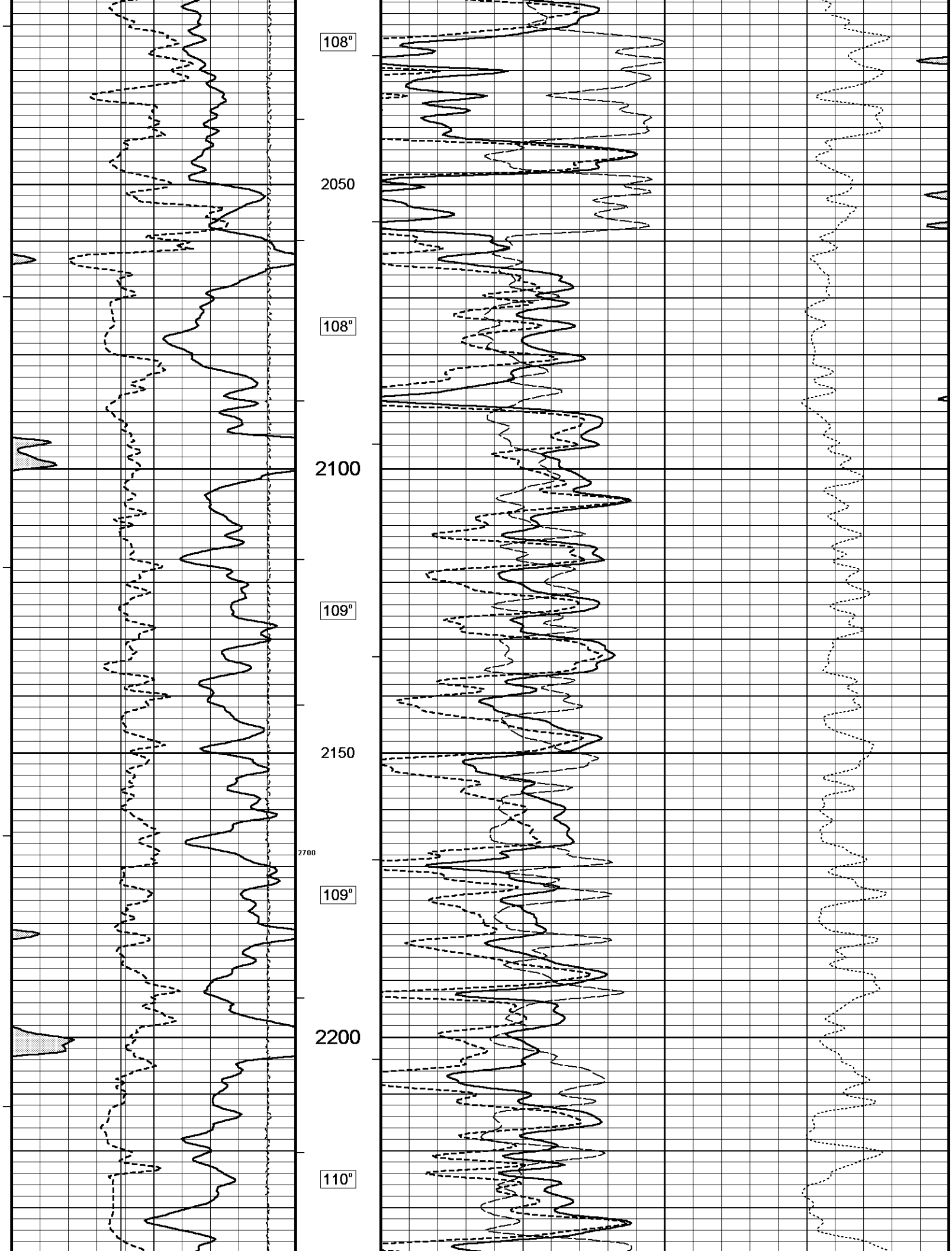

95°
950
96°
1000
97°
1050
3100
97°
1100
98°

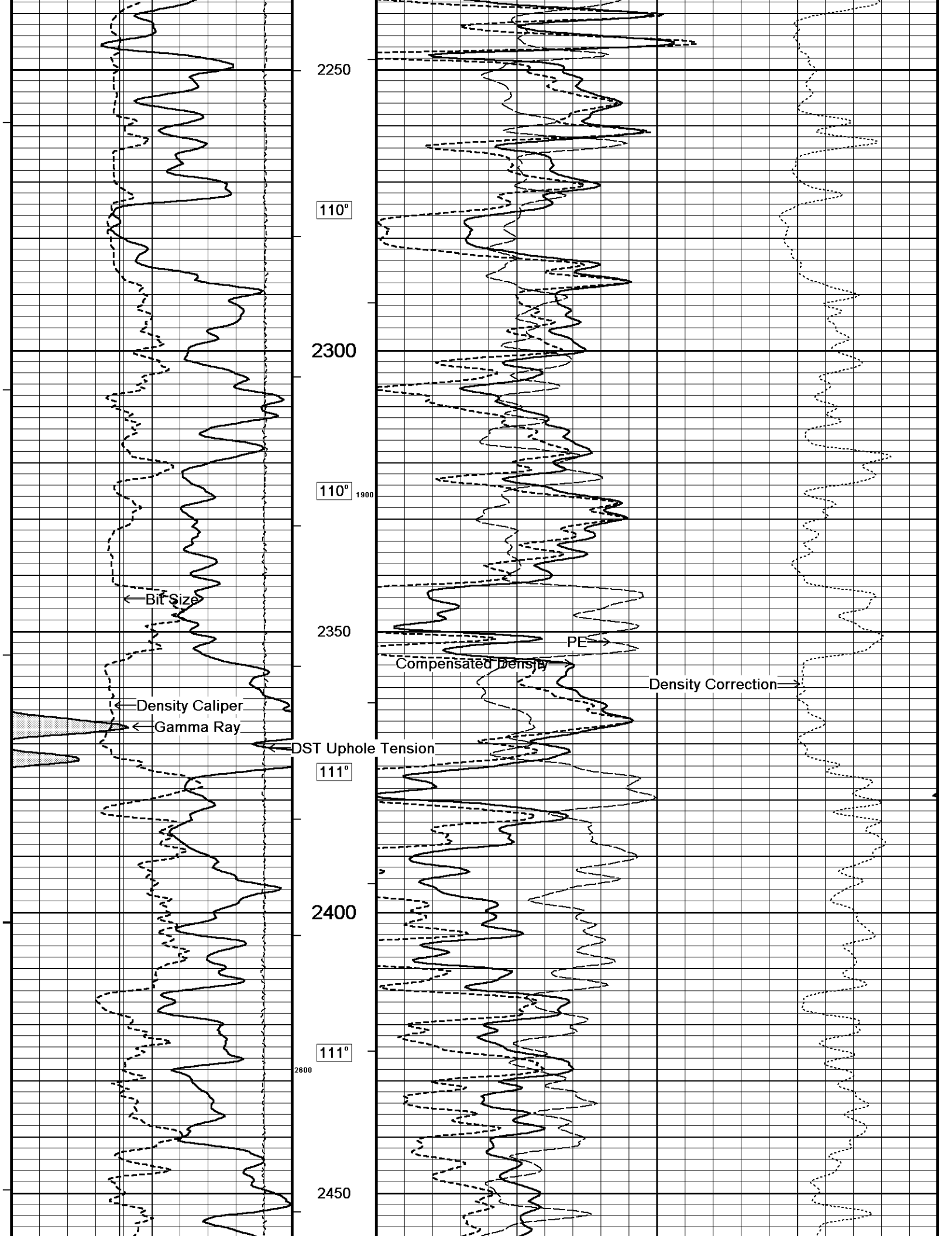

2200
1150
Bit Size
Sandstone Density Por.
PE
Compensated Density
99°
Density Correction
Density Caliper
Gamma Ray
DST Uphole Tension
1200
100°
1250
100°
1300
101°
1350

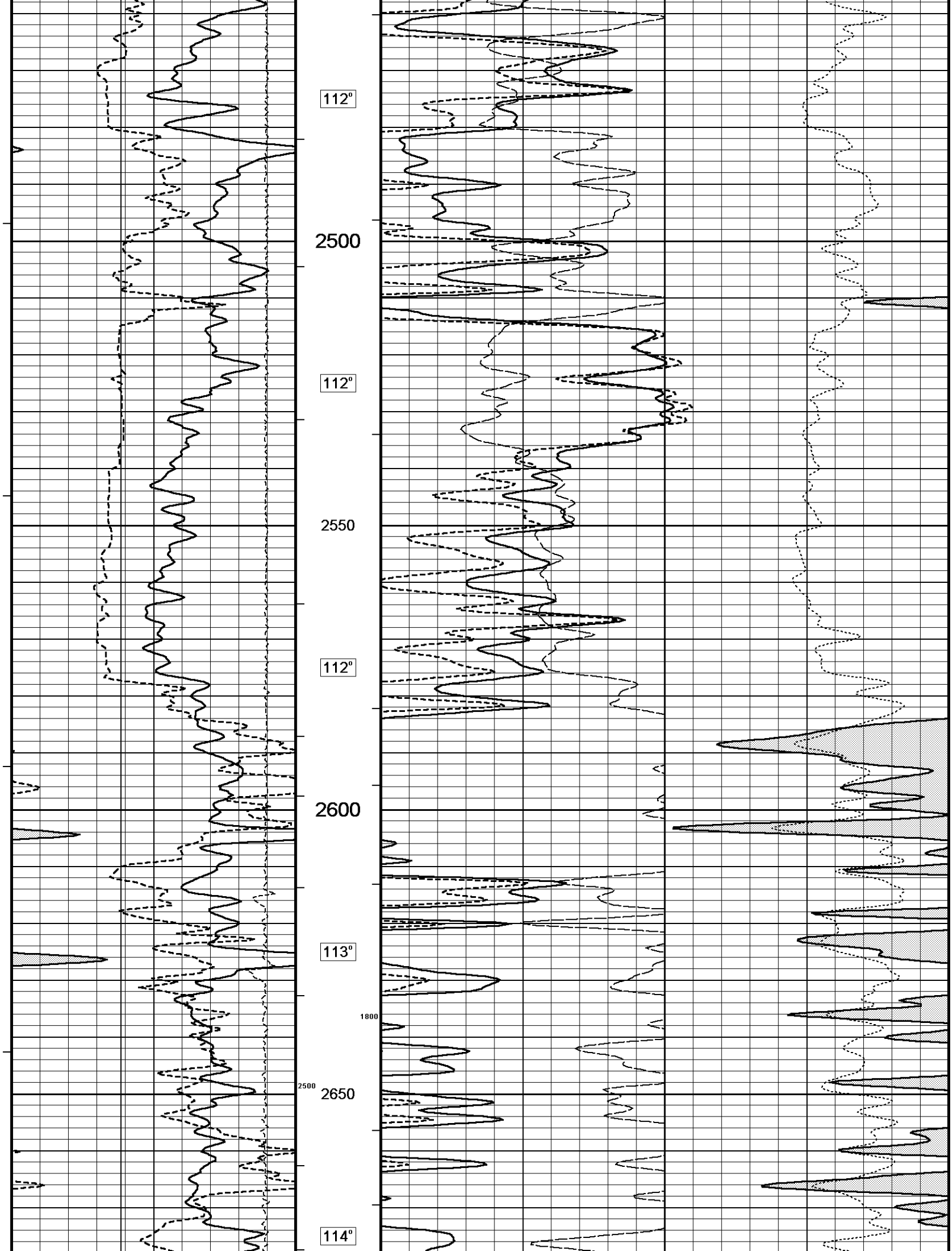

3000
101°
1400
101°
1450
102°
1500
102°
1550
2100
103°
Bit Size
Density Caliper
Sandstone Density Por.
PE
Compensated Density
Density Correction

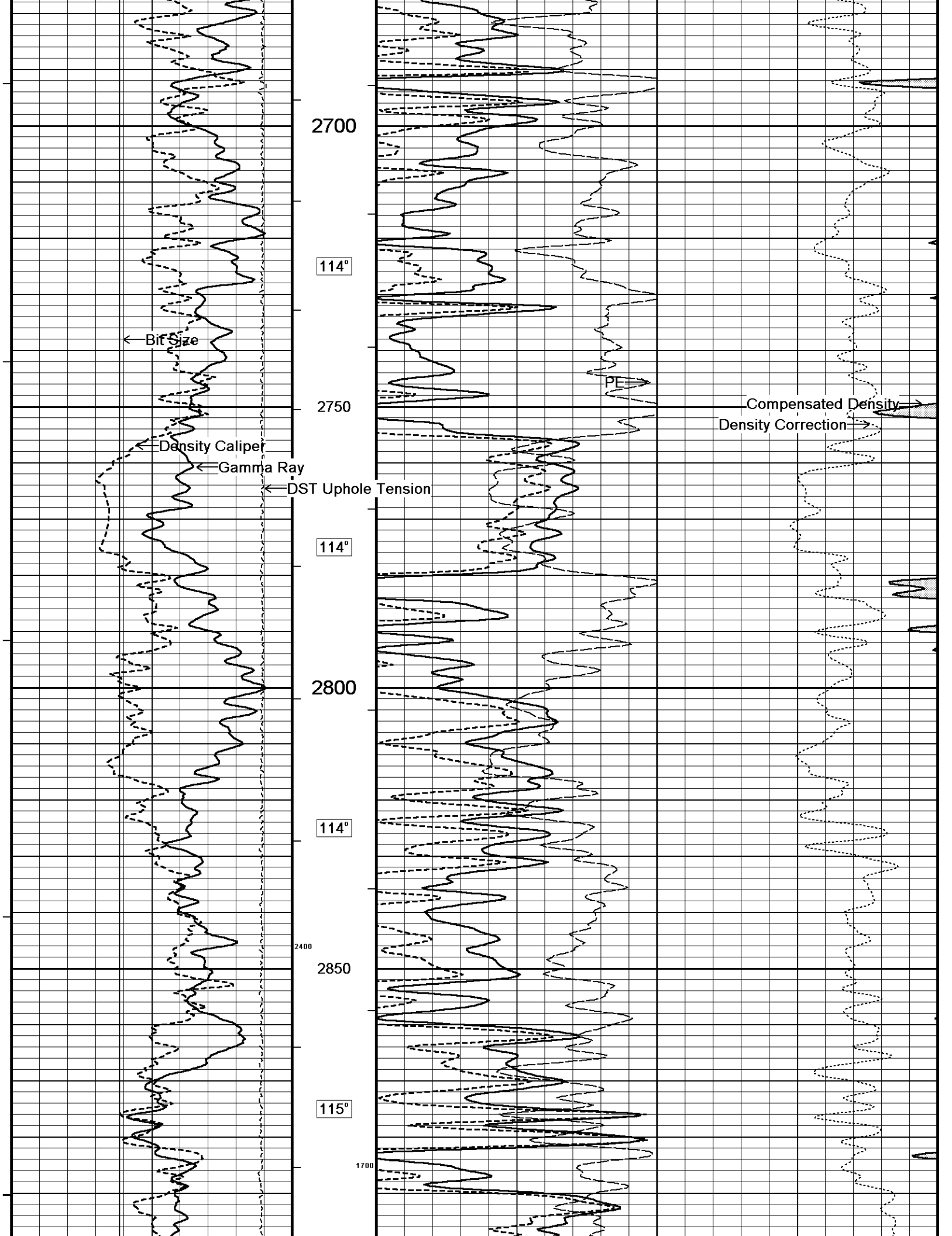

Gamma Ray
DST Uphole Tension
1600
104°
2900
1650
104°
1700
105°
1750
105°

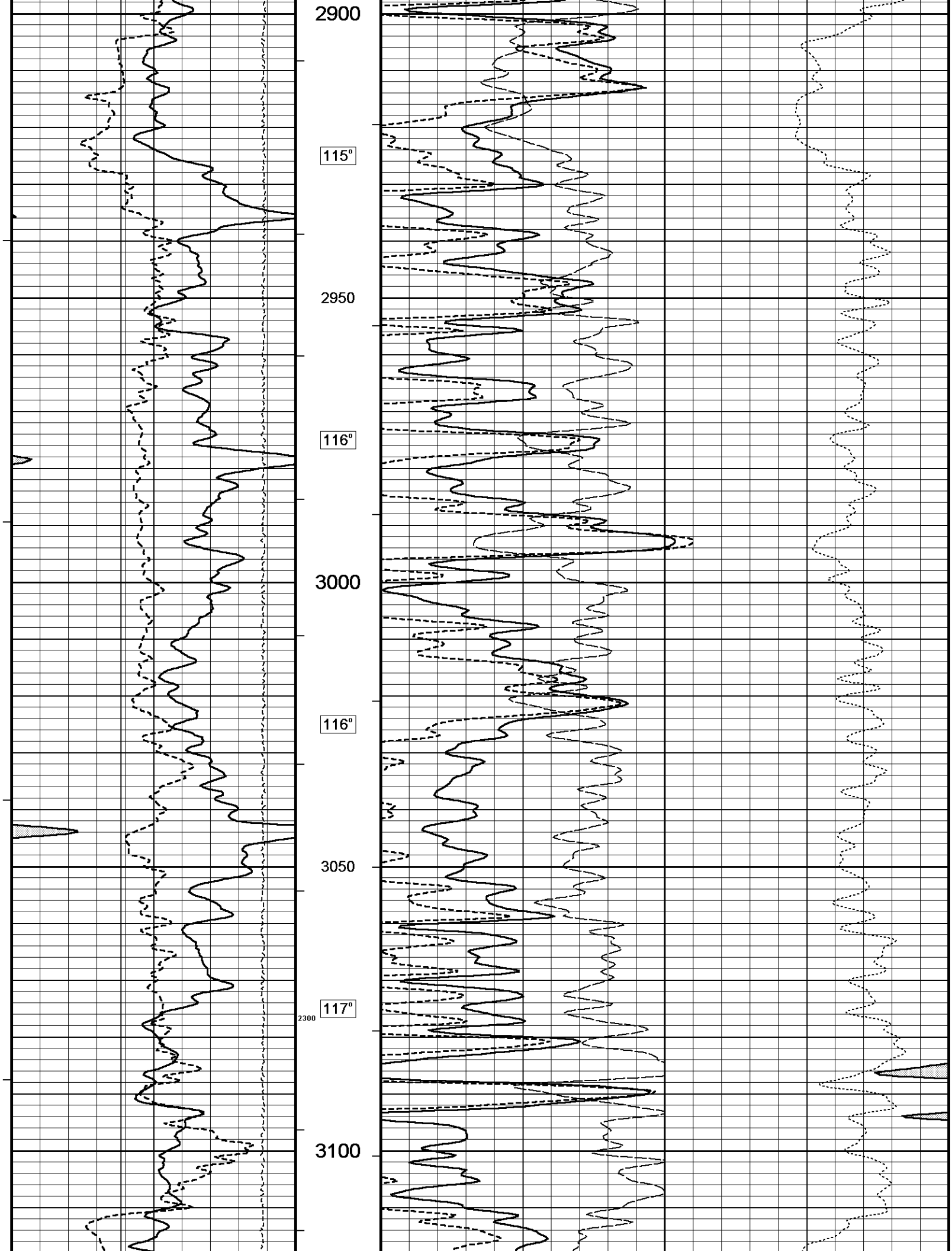

1800
106°
1850
106°
1900
2800
107°
2000
1950
Bit Size
PE
Compensated Density
Density Correction
Density Caliper
Gamma Ray
108°
DST Uphole Tension
2000

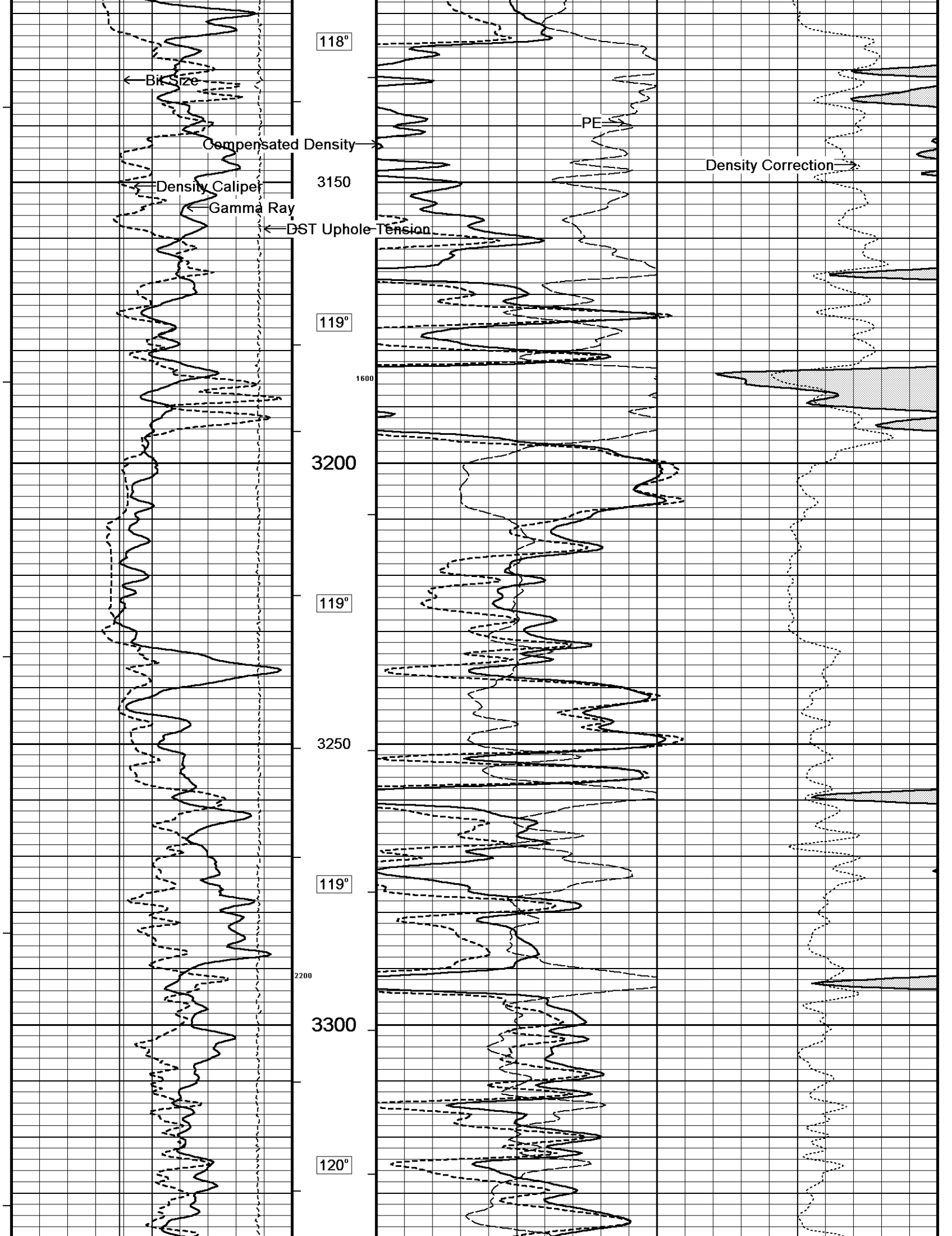

108°
2050
108°
2100
109°
2150
2700
109°
2200
110°

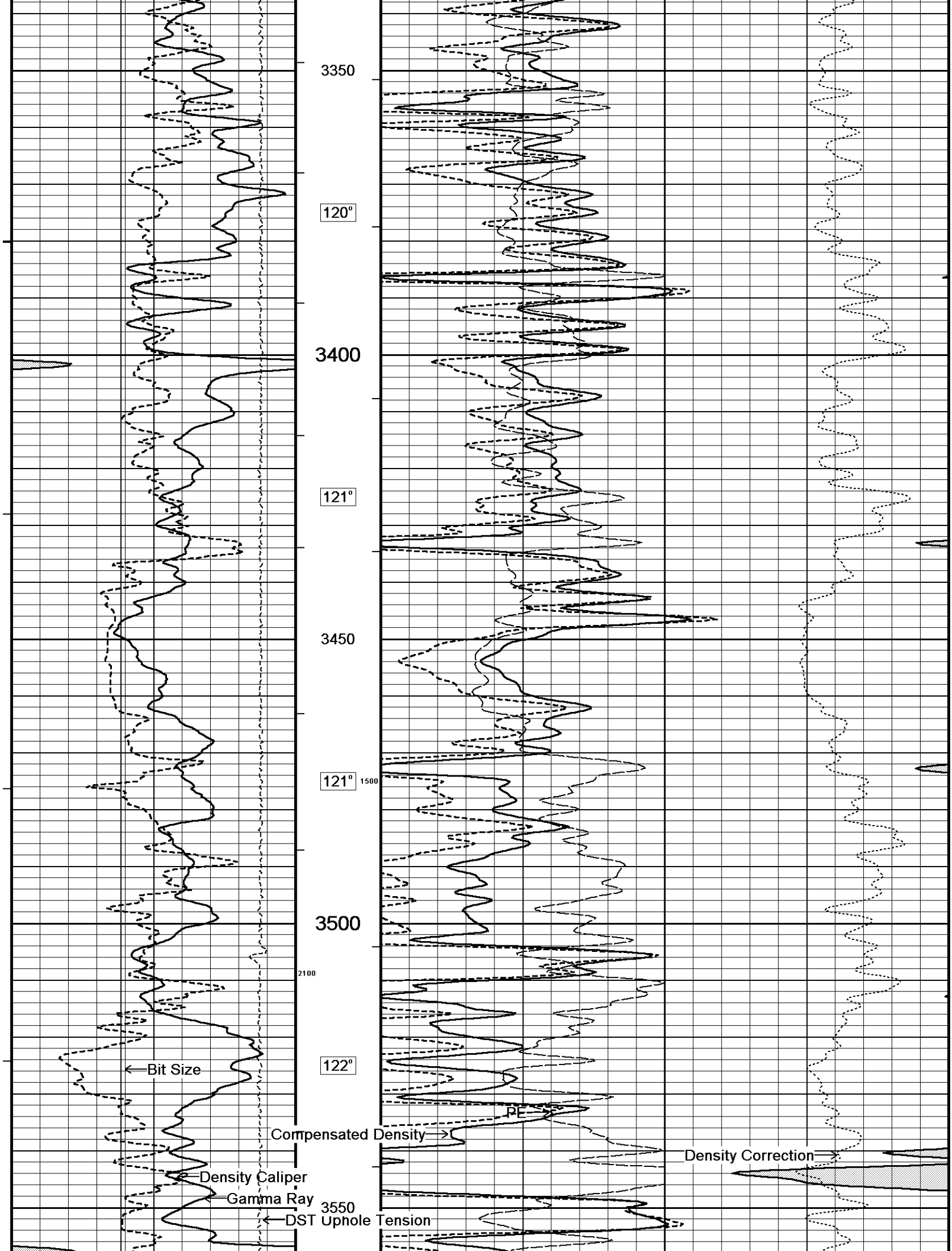

2250
110°
2300
110°
1900
Bit Size
2350
PE
Compensated Density
Density Correction
Density Caliper
Gamma Ray
DST Uphole Tension
111°
2400
111°
2600
2450

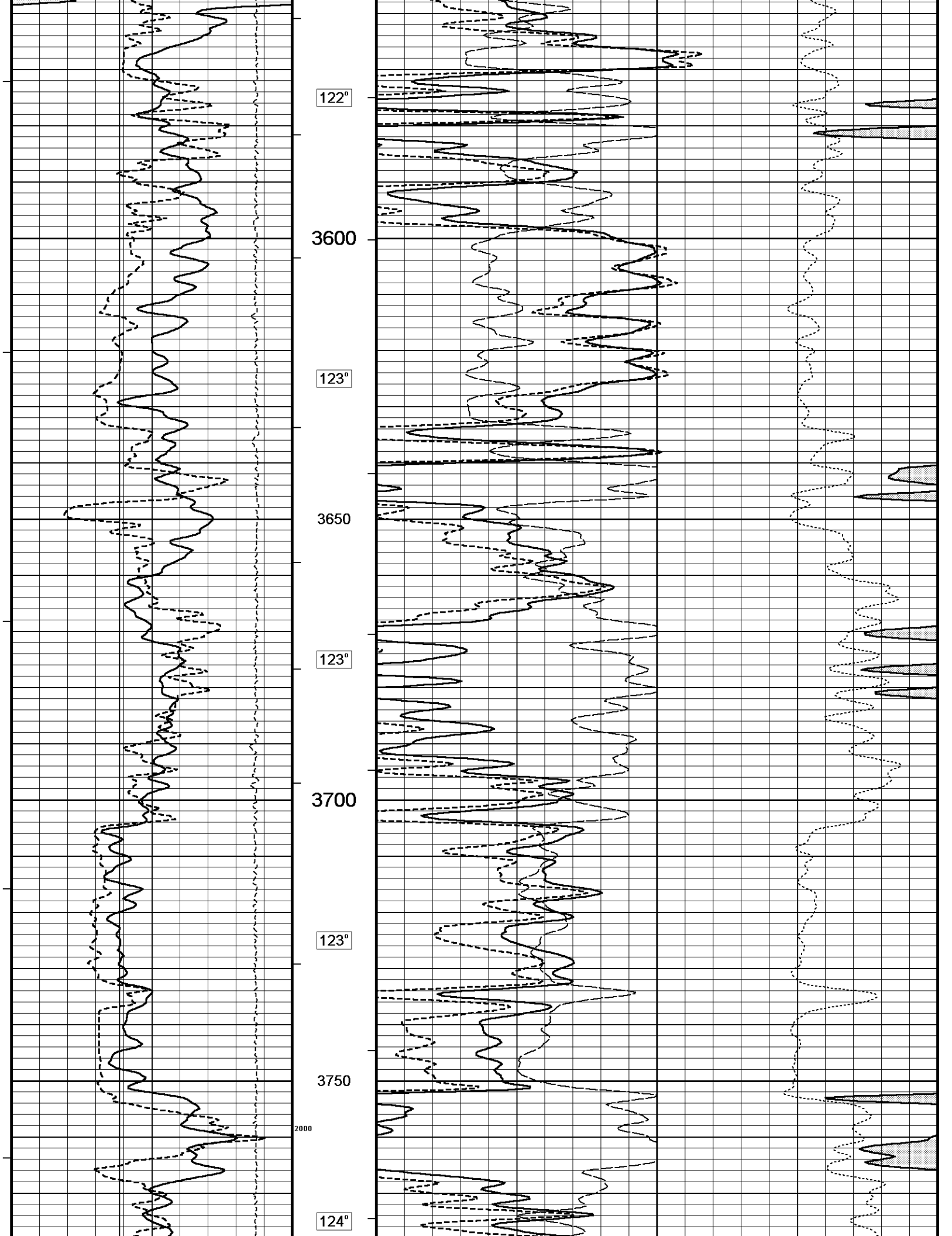

112°
2500
112°
2550
112°
2600
113°
1800
2500
2650
114°

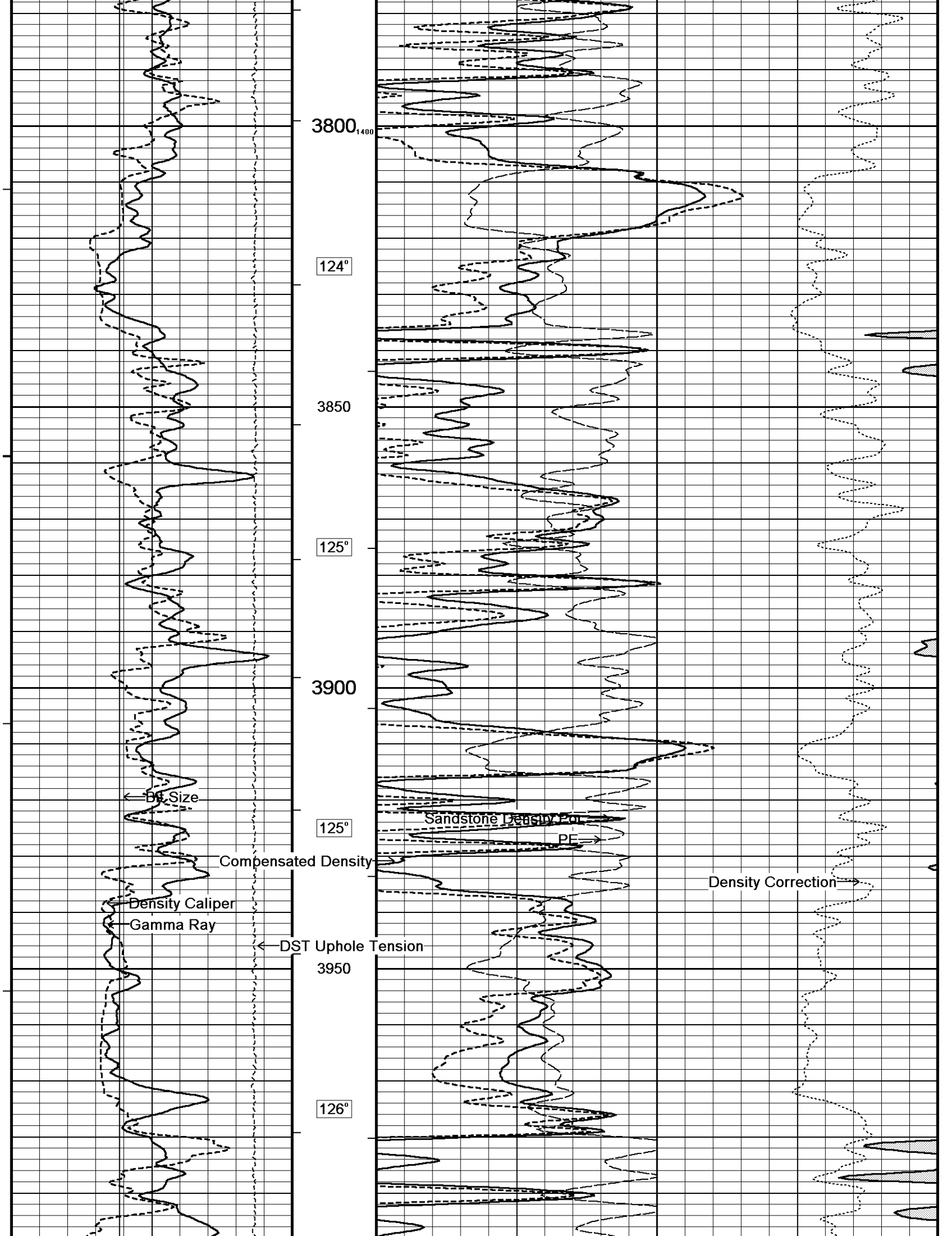

2700
114°
Bit Size
PE
2750
Compensated Density
Density Correction
Density Caliper
Gamma Ray
DST Uphole Tension
114°
2800
114°
2400
2850
115°
1700

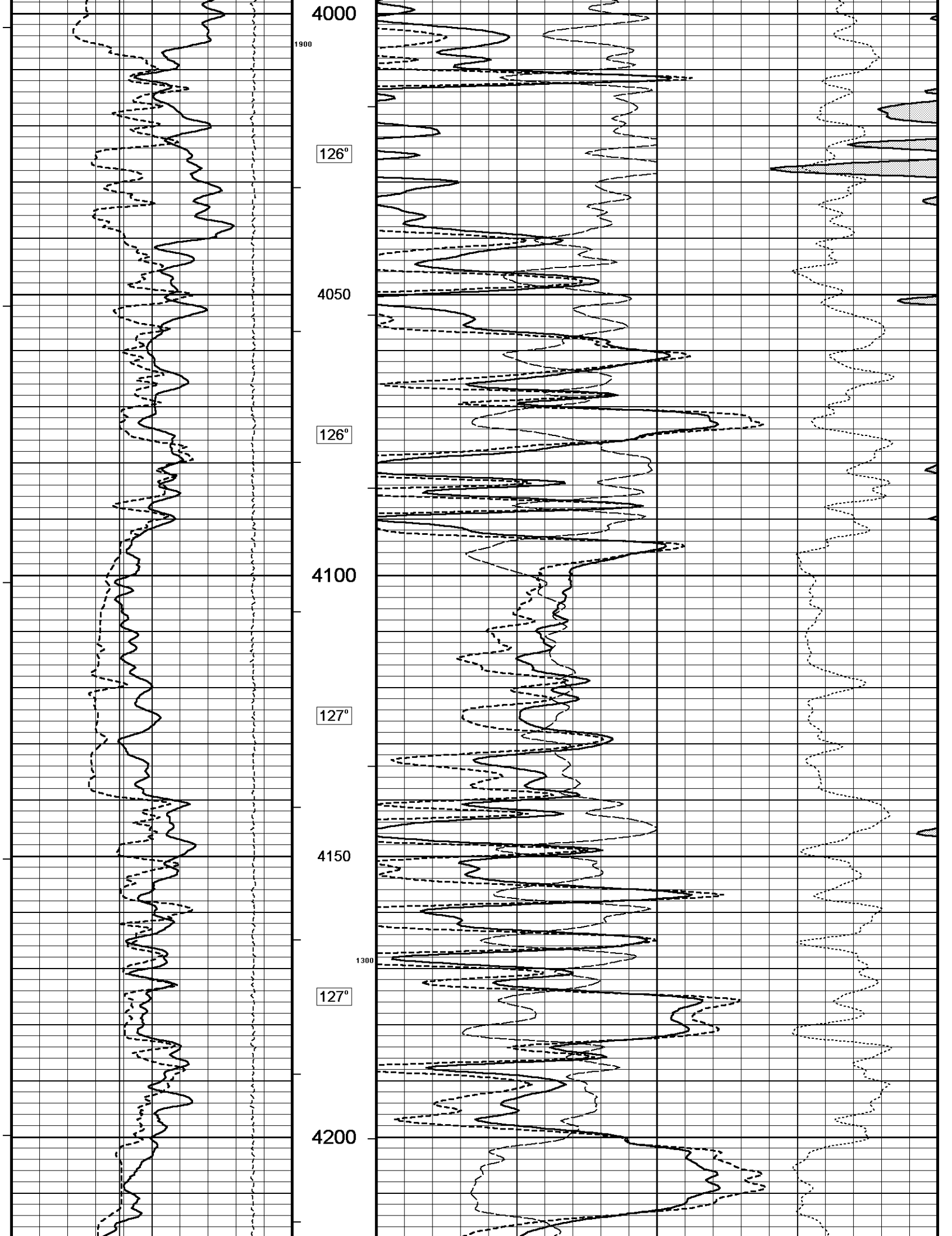

2900
115°
2950
116°
3000
116°
3050
117°
2300
3100

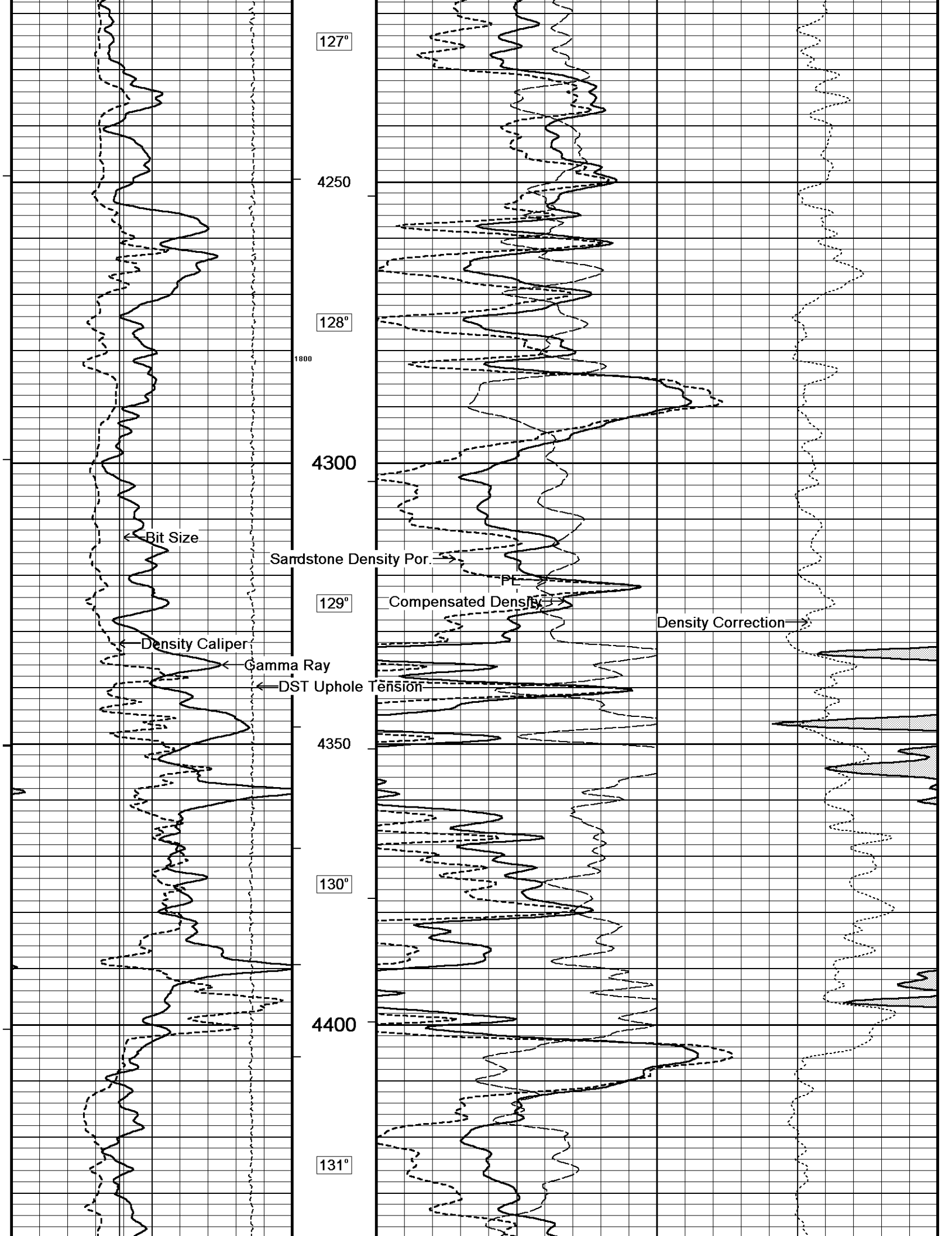

118°
Bit Size
PE
Compensated Density
Density Correction
3150
Density Caliper
Gamma Ray
DST Uphole Tension
119°
1600
3200
119°
3250
119°
2200
3300
120°

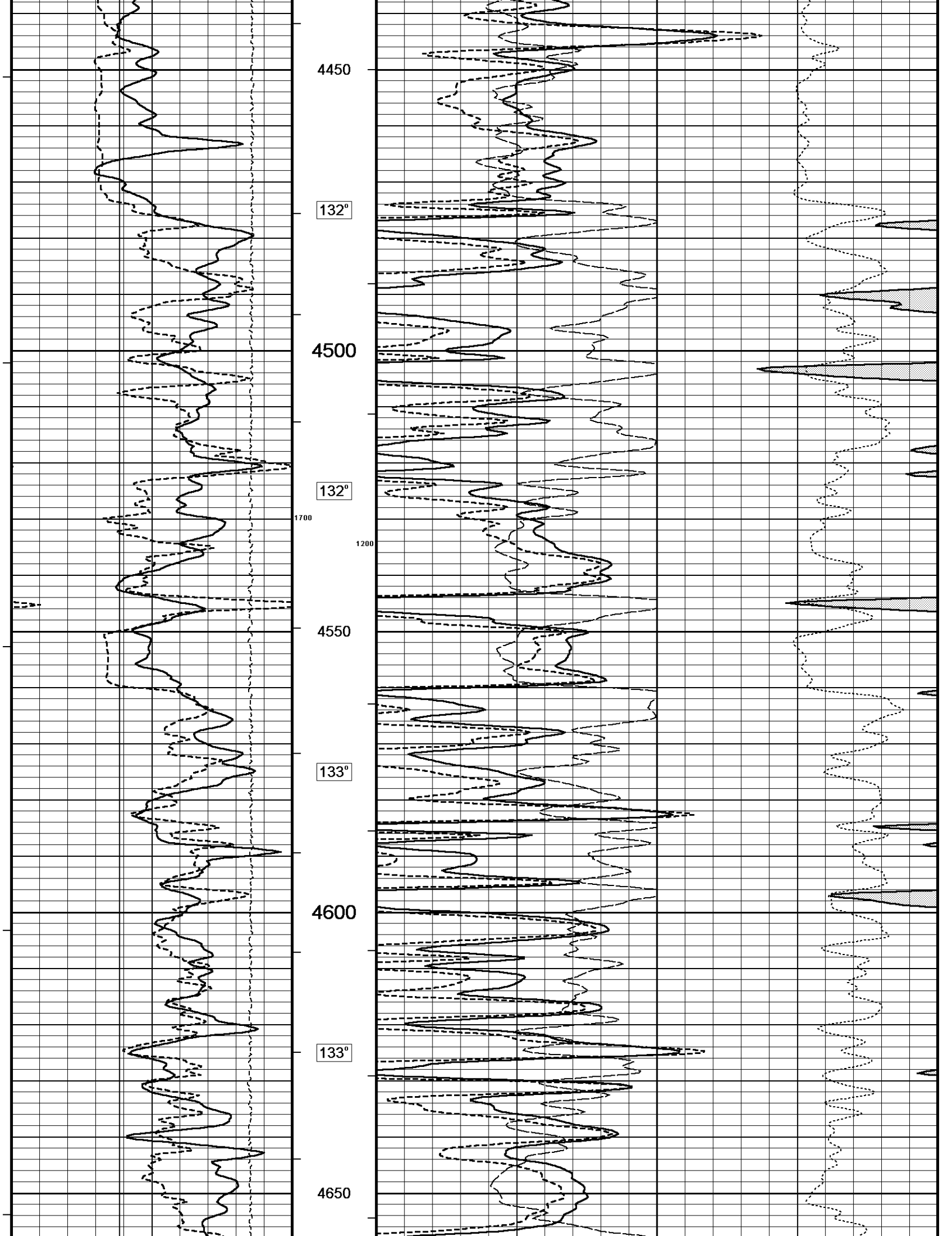

3350
120°
3400
121°
3450
121°
1500
3500
2100
122°
Bit Size
PE
Compensated Density
Density Correction
Density Caliper
Gamma Ray
3550
DST Uphole Tension

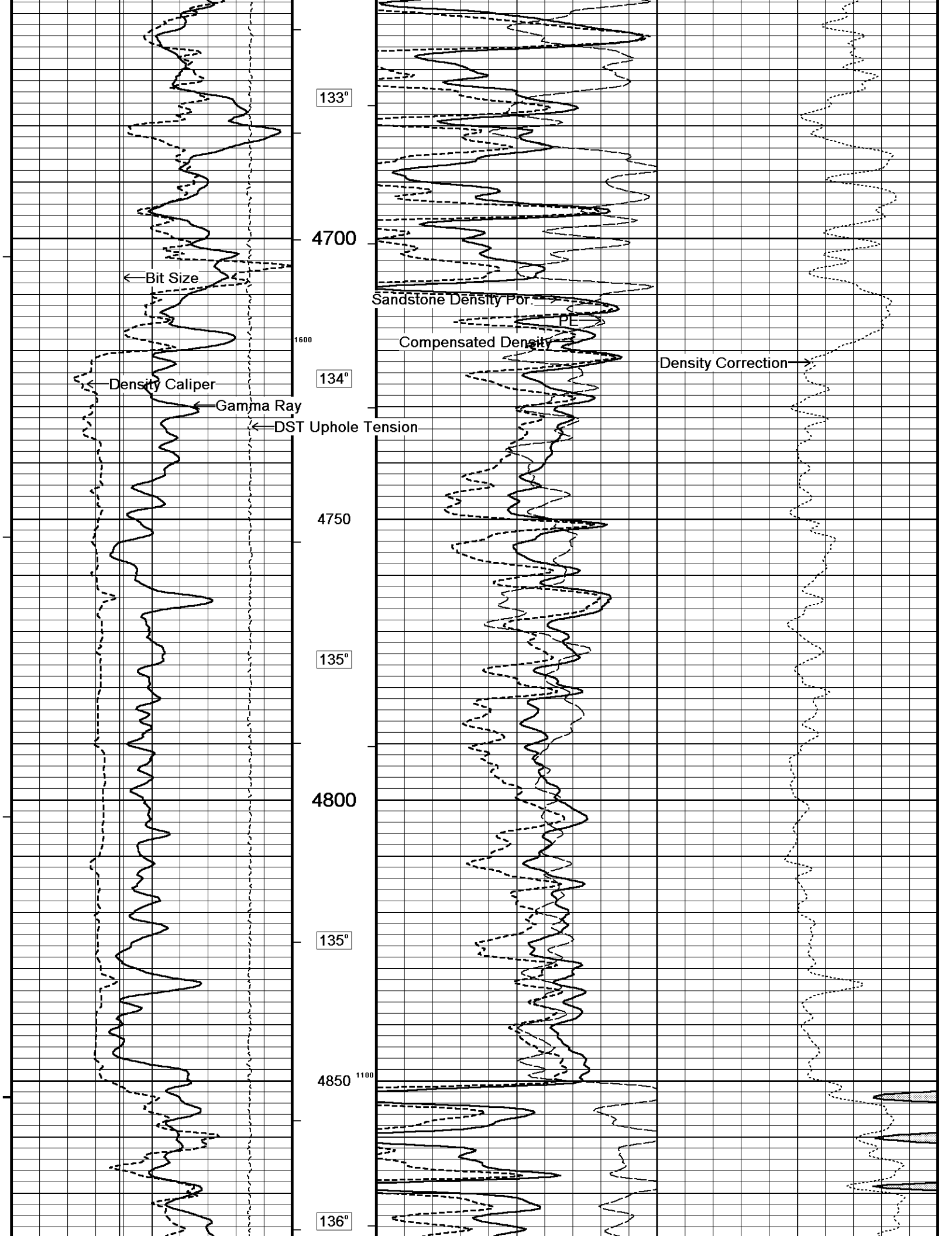

122°
3600
123°
3650
123°
3700
123°
3750
2000
124°

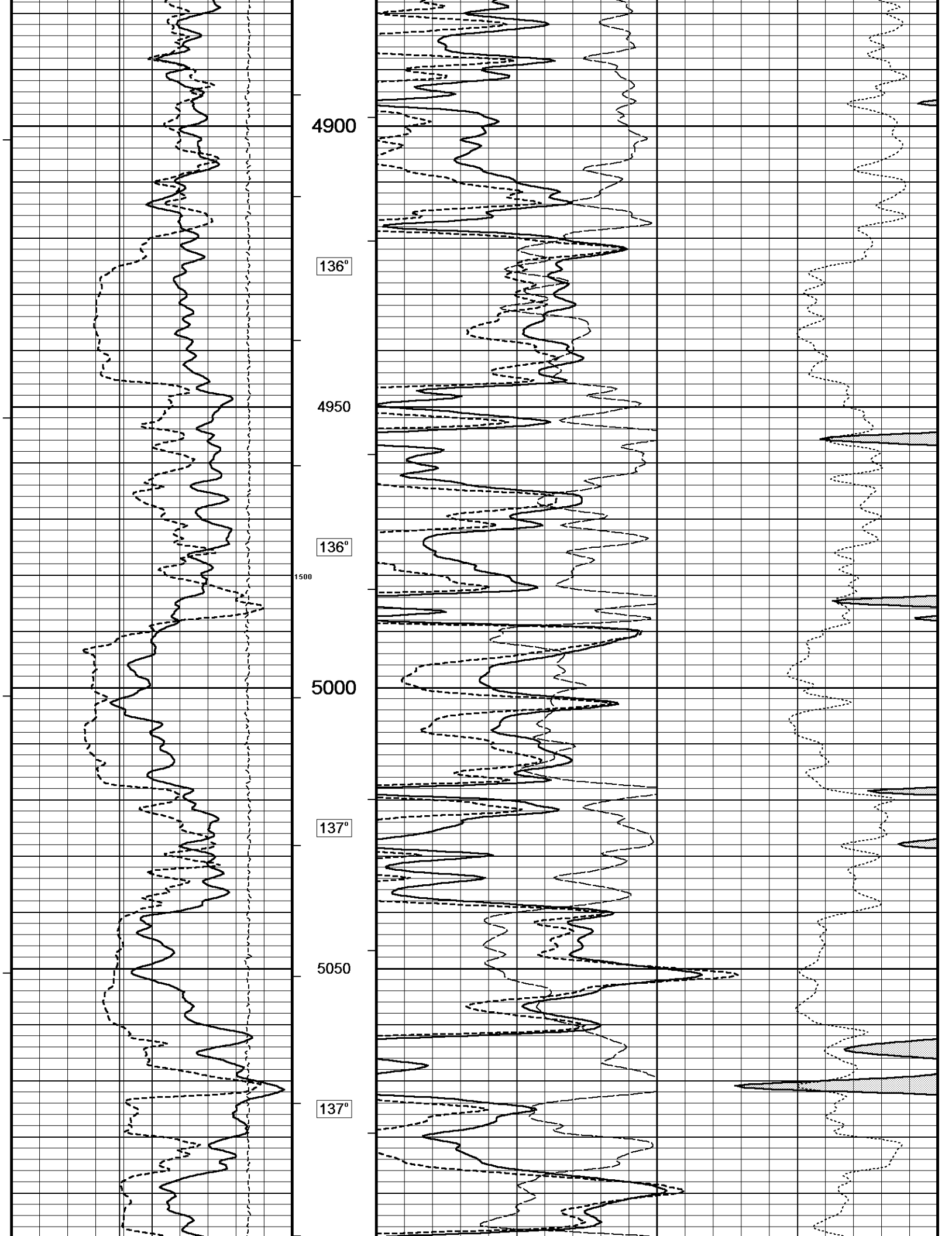

3800
1400
124°
3850
125°
3900
BS Size
125°
Sandstone Density Por
PE
Compensated Density
Density Correction
Density Caliper
Gamma Ray
DST Uphole Tension
3950
126°

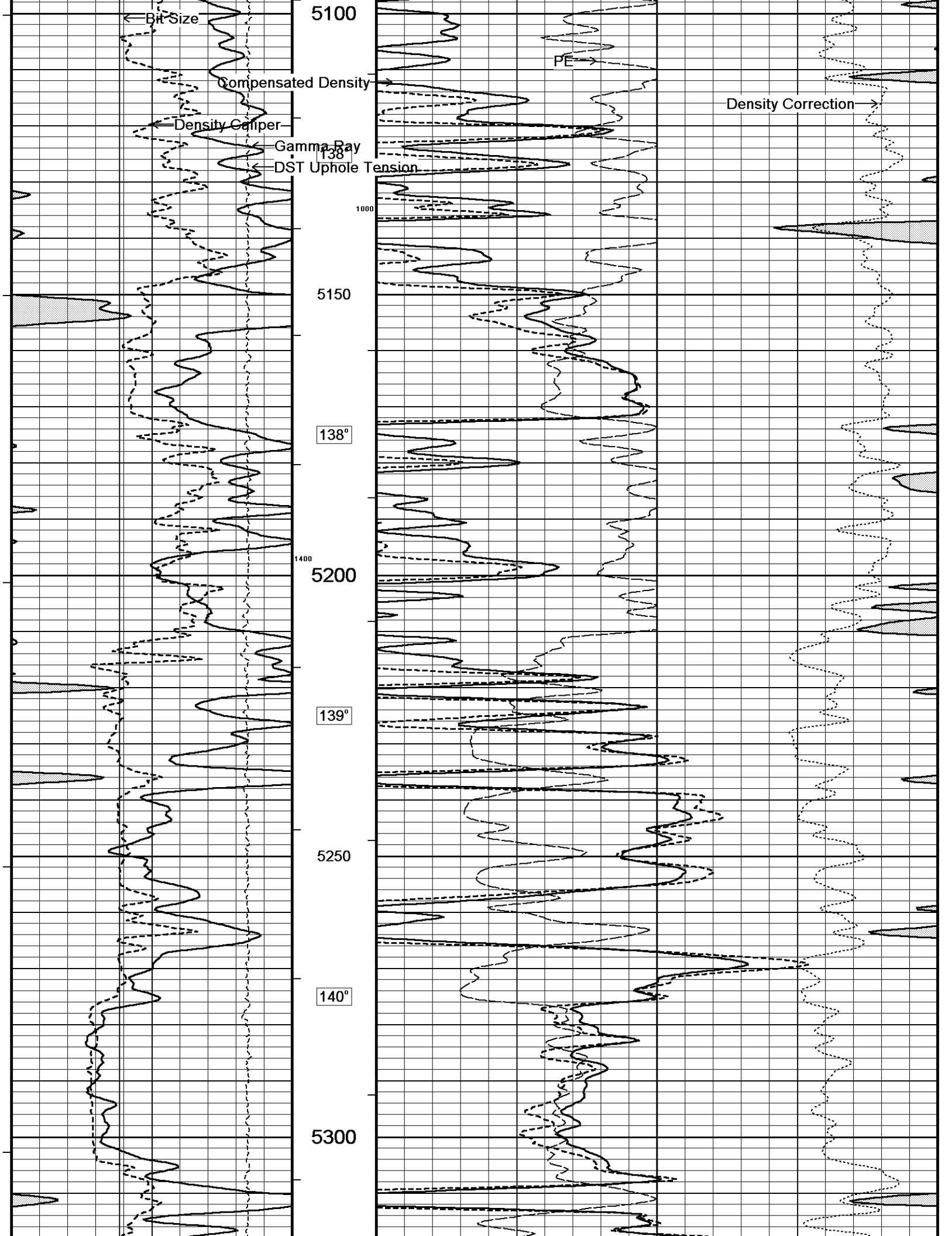

4000
1900
126°
4050
126°
4100
127°
4150
1300
127°
4200

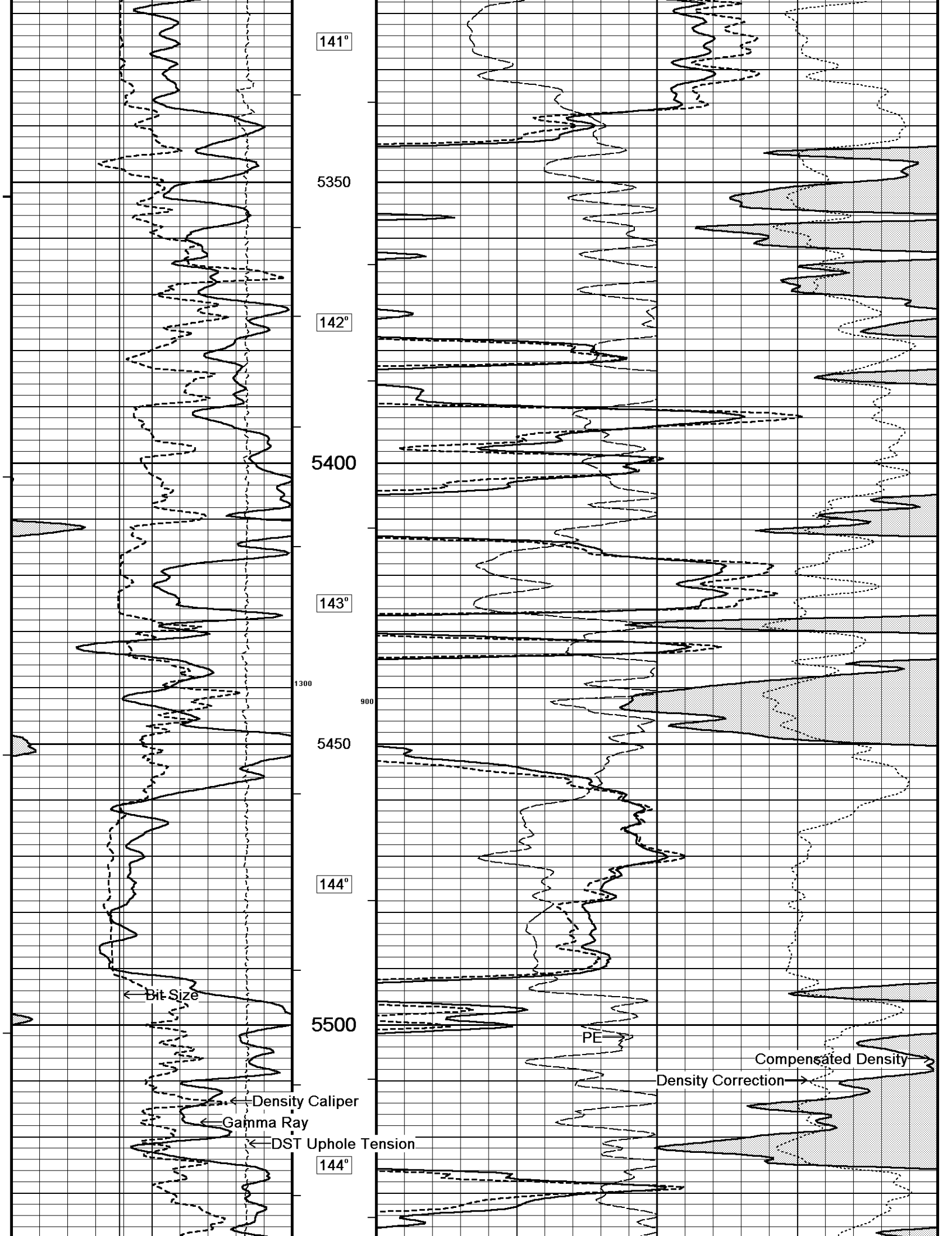

127°
4250
128°
1800
4300
Bit Size
Sandstone Density Por.
PE
129°
Compensated Density
Density Correction
Density Caliper
Gamma Ray
DST Uphole Tension
4350
130°
4400
131°

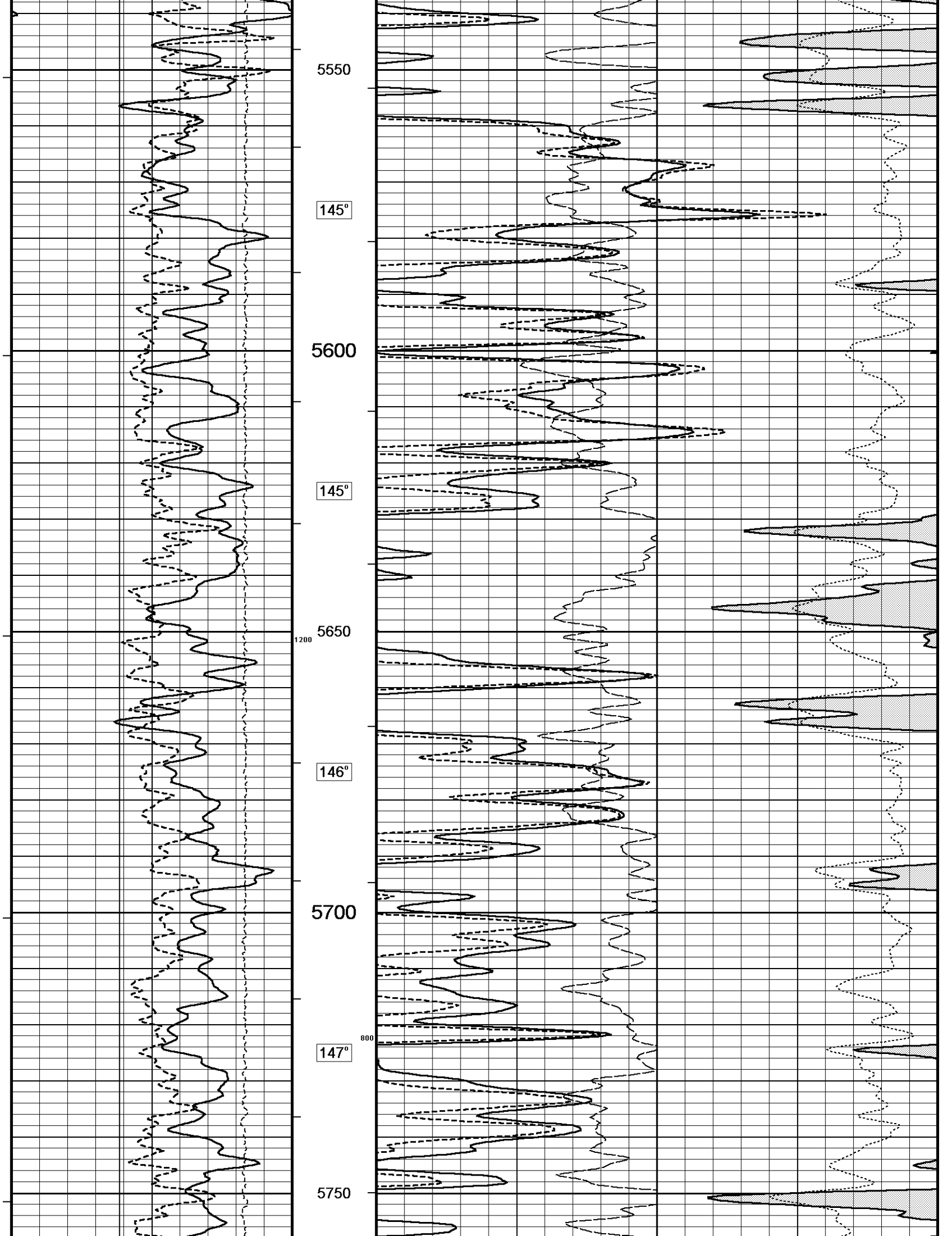

4450
132°
4500
132°
1700
1200
4550
133°
4600
133°
4650

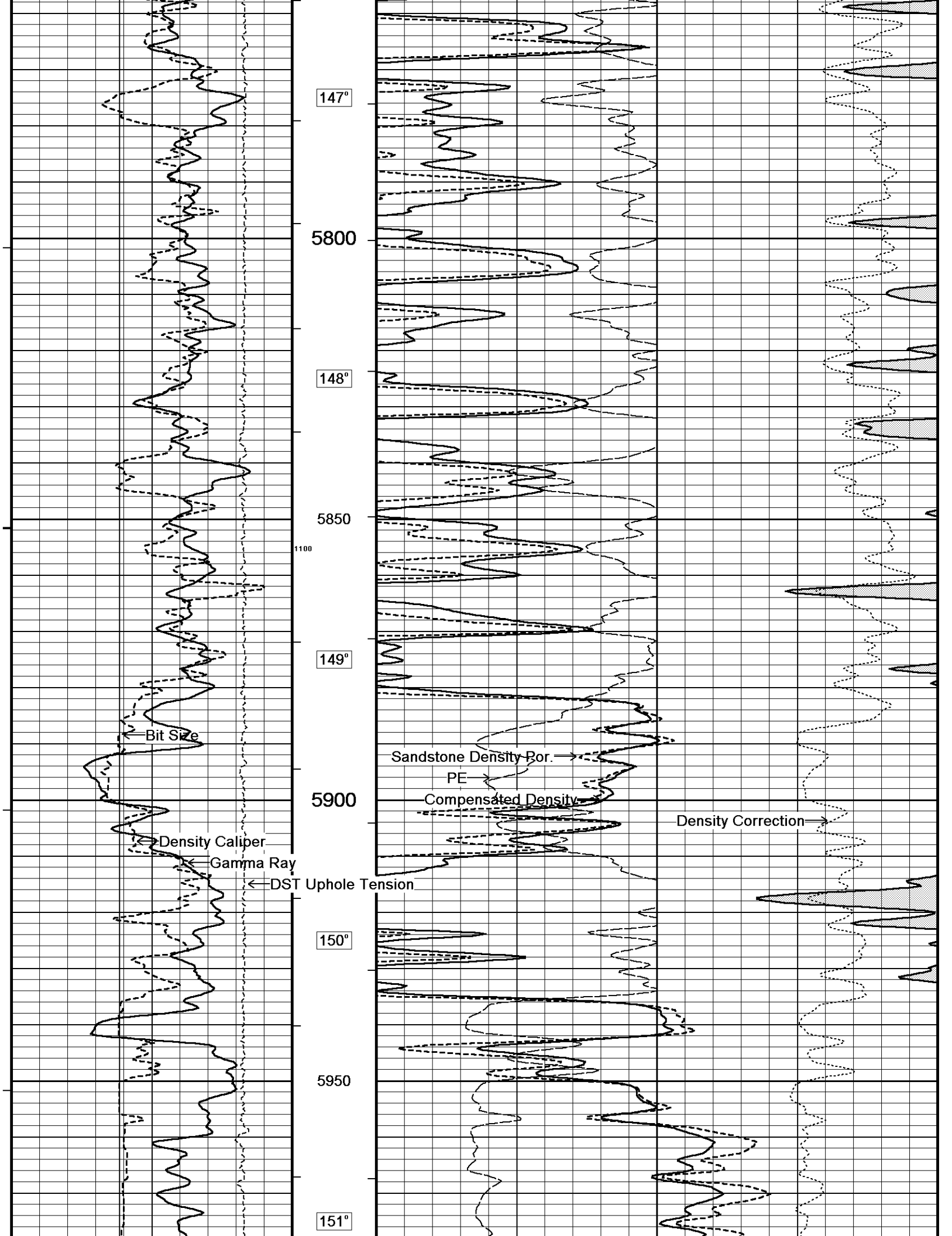

133°
4700
Bit Size
1600
Sandstone Density Por.
PE
Compensated Density
Density Correction
134°
Density Caliper
Gamma Ray
DST Uphole Tension
4750
135°
4800
135°
4850
1100
136°

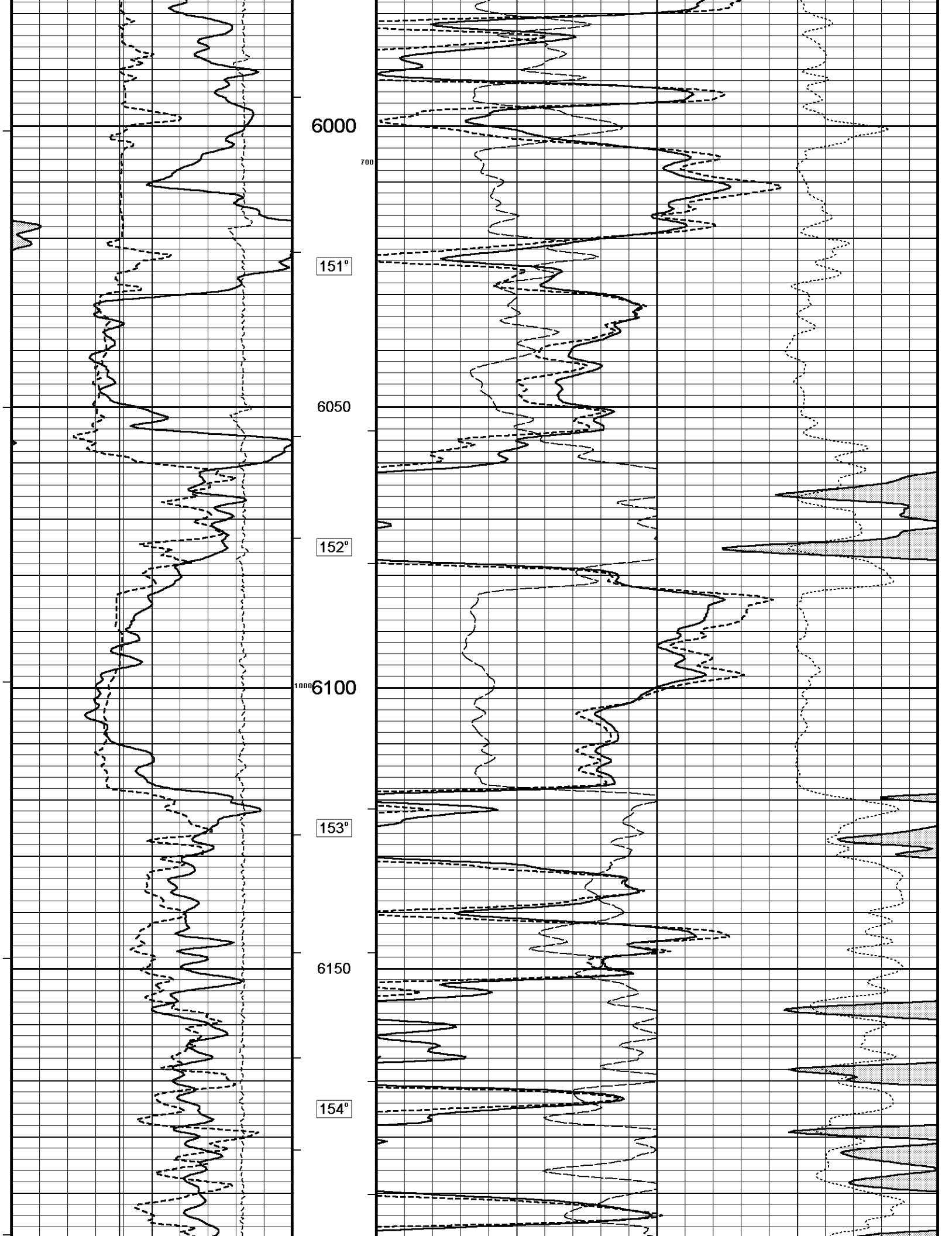

4900
136°
4950
136°
1500
5000
137°
5050
137°

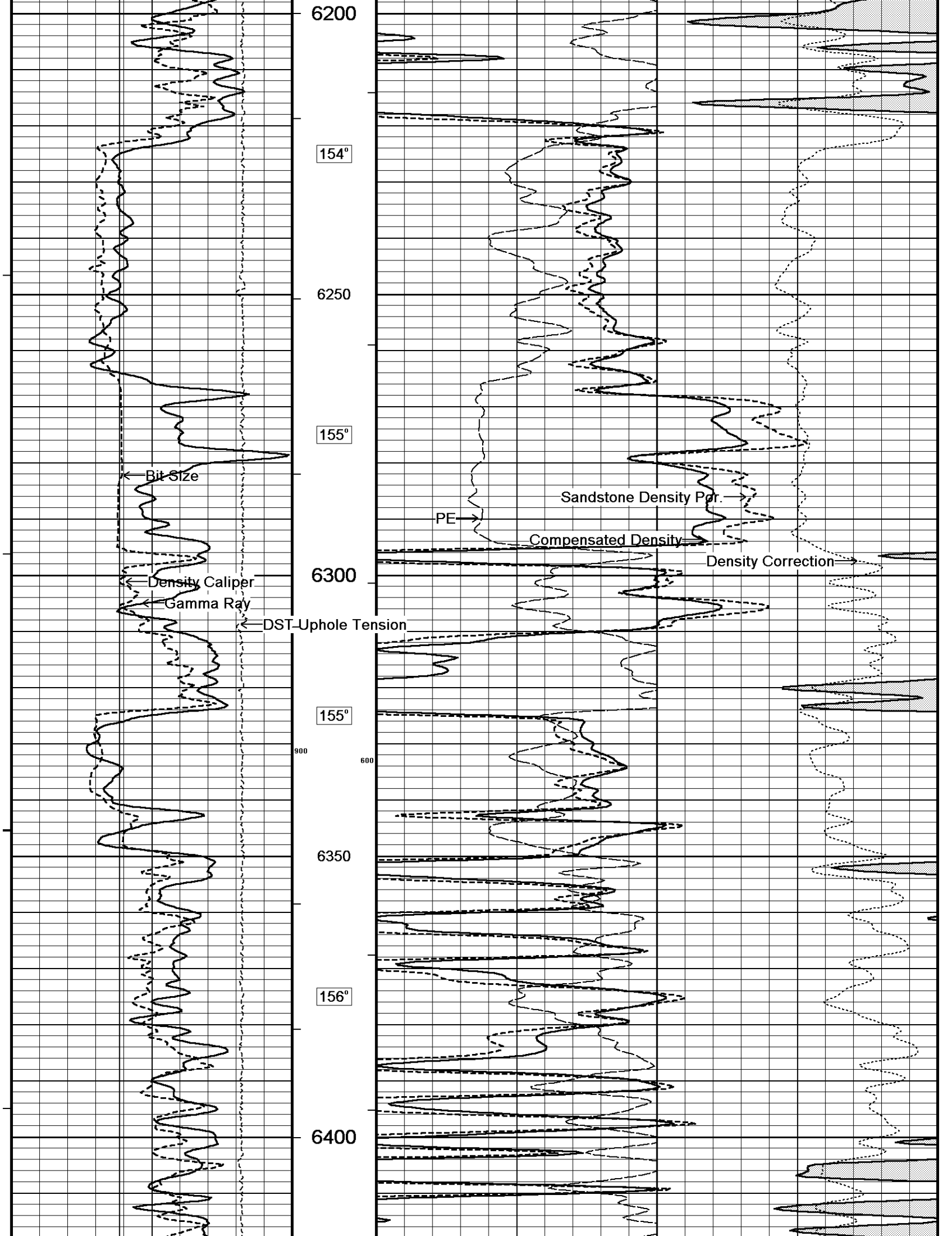

Bit Size
5100
PE
Compensated Density
Density Correction
Density Caliper
Gamma Ray
138
DST Uphole Tension
1000
5150
138°
1400
5200
139°
5250
140°
5300

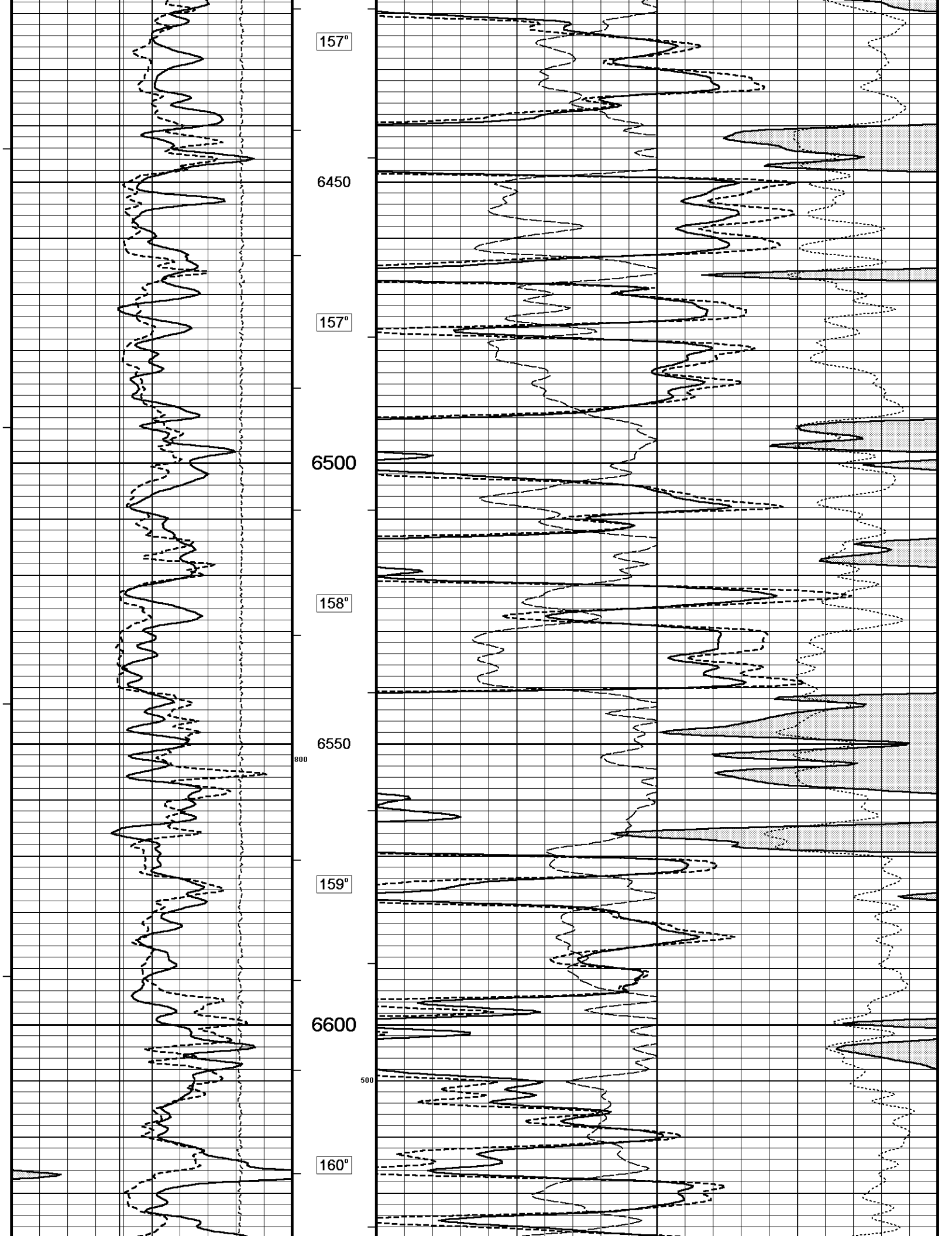

141°
5350
142°
5400
143°
1300
900
5450
144°
Bit Size
5500
PE
Compensated Density
Density Correction
Density Caliper
Gamma Ray
DST Uphole Tension
144°

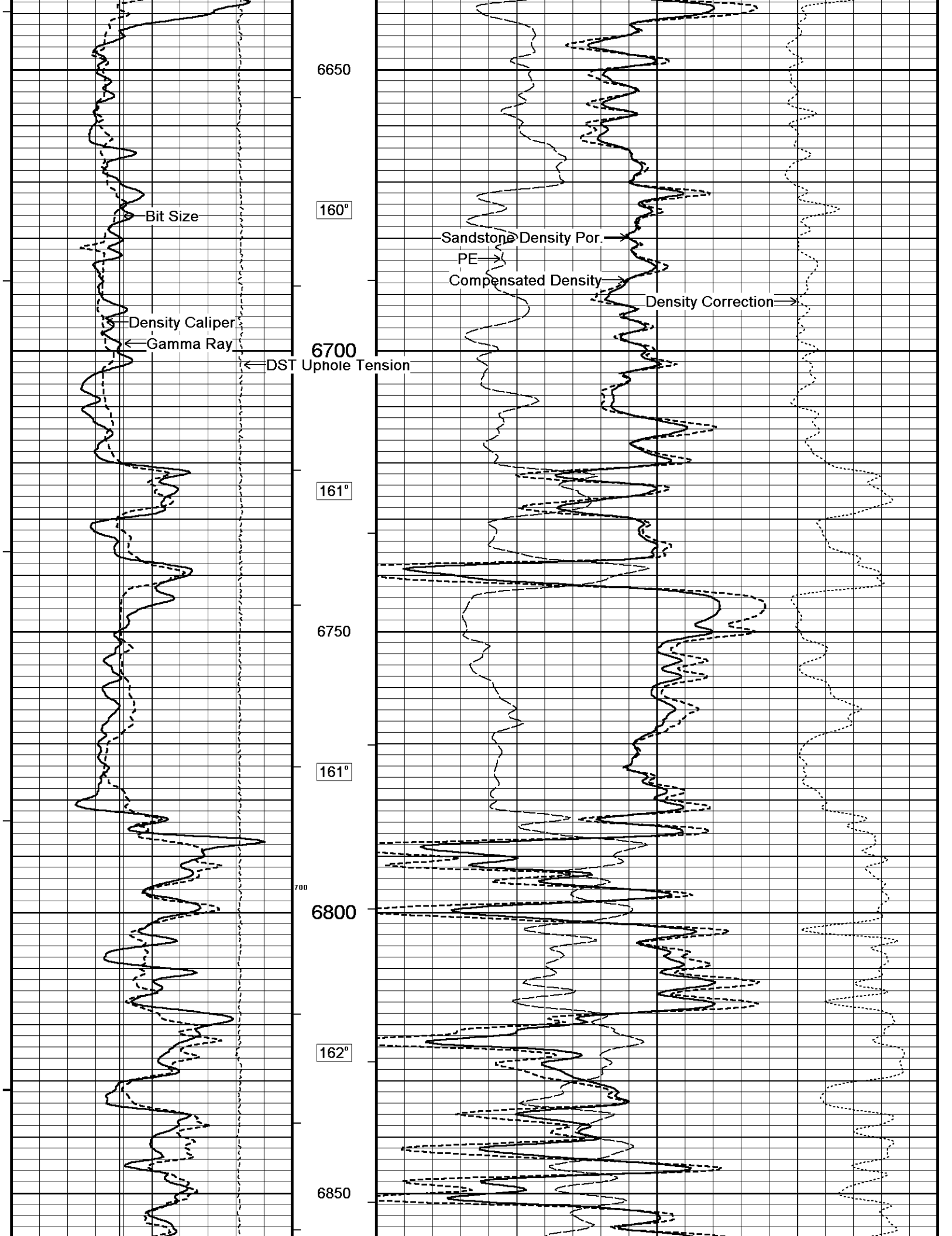

5550
145°
5600
145°
1200
5650
146°
5700
147°
800
5750

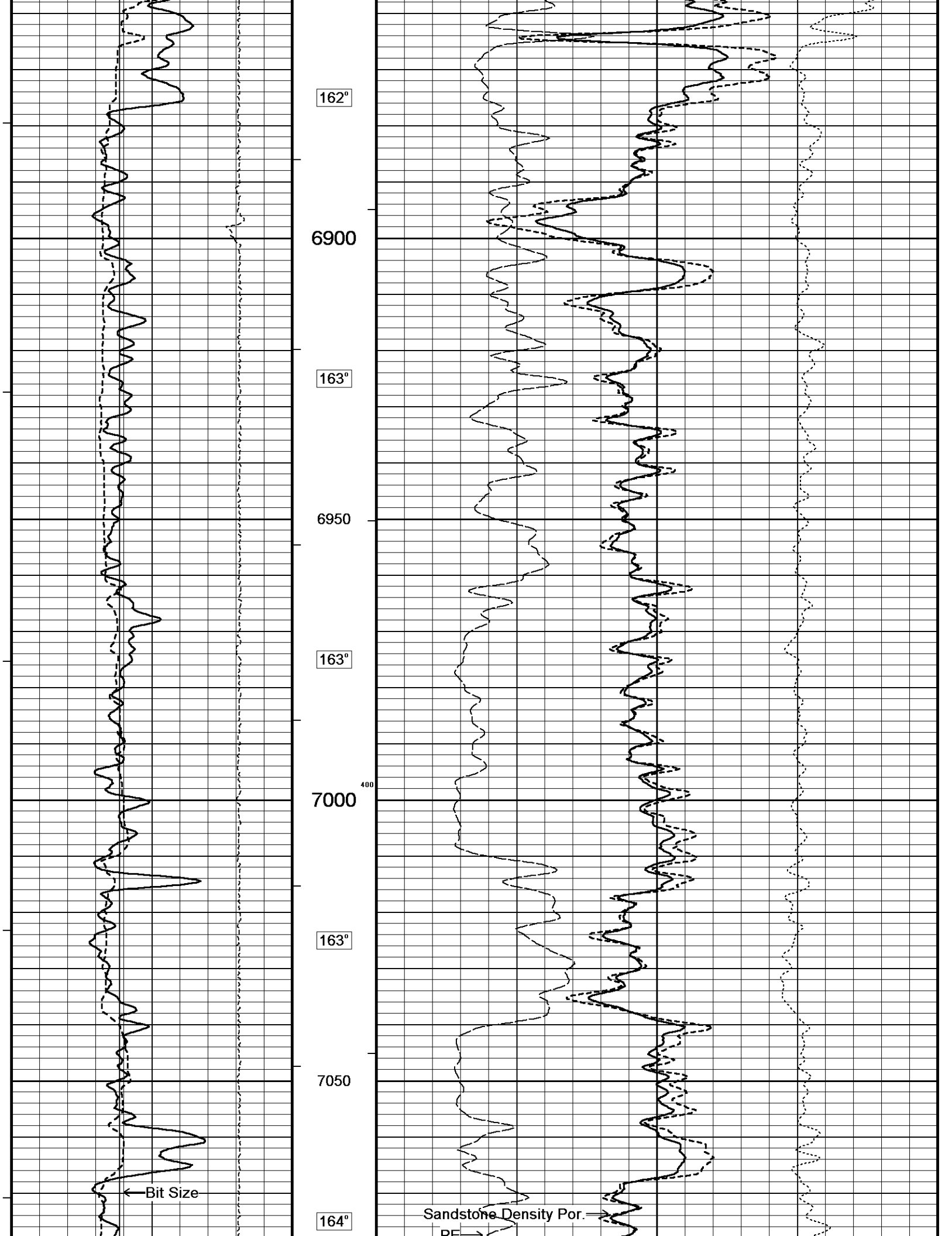

147°
5800
148°
5850
1100
149°
Bit Size
Sandstone Density Por.
PE
Compensated Density
5900
Density Correction
Density Caliper
Gamma Ray
DST Uphole Tension
150°
5950
151°

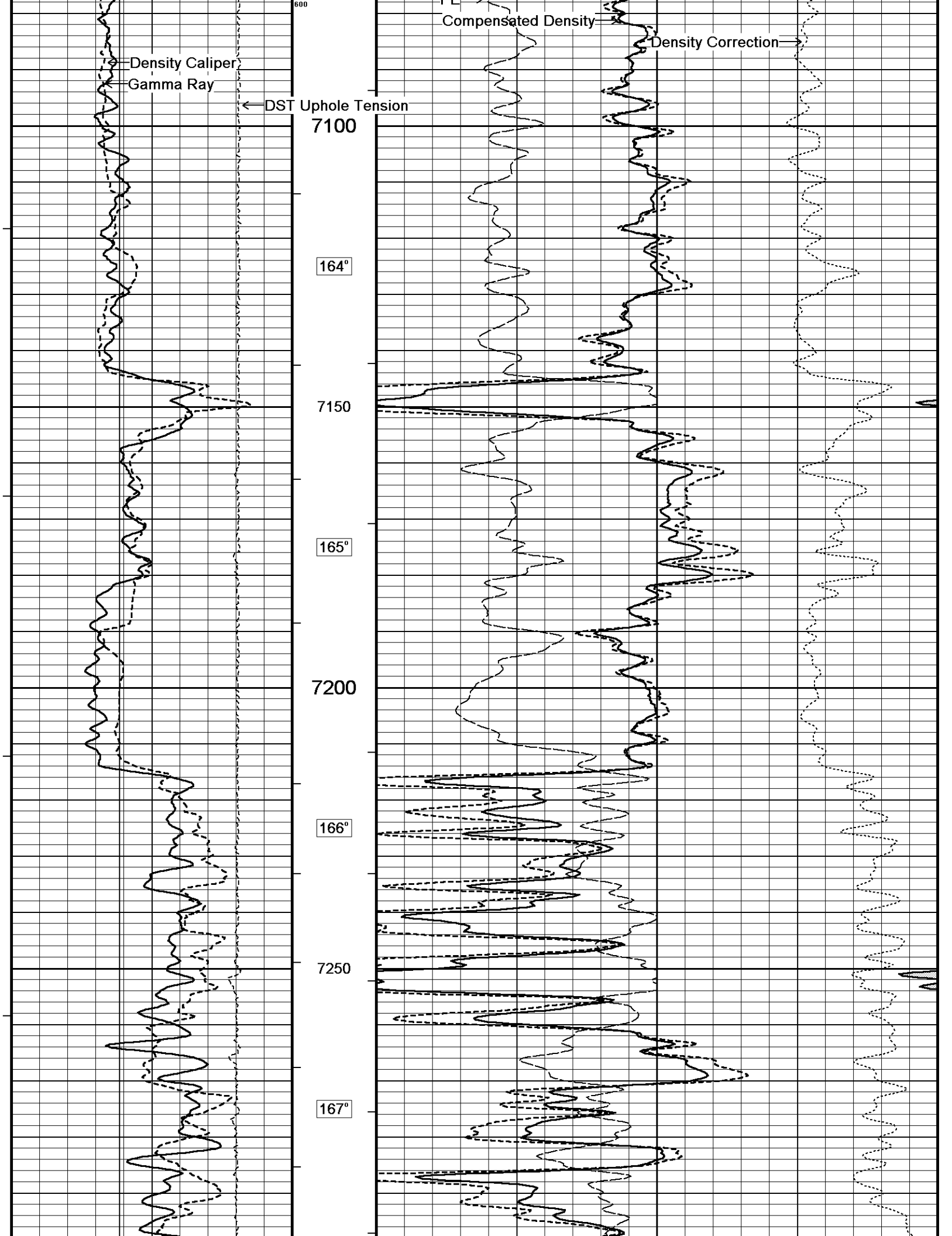

6000
700
151°
6050
152°
1000
6100
153°
6150
154°

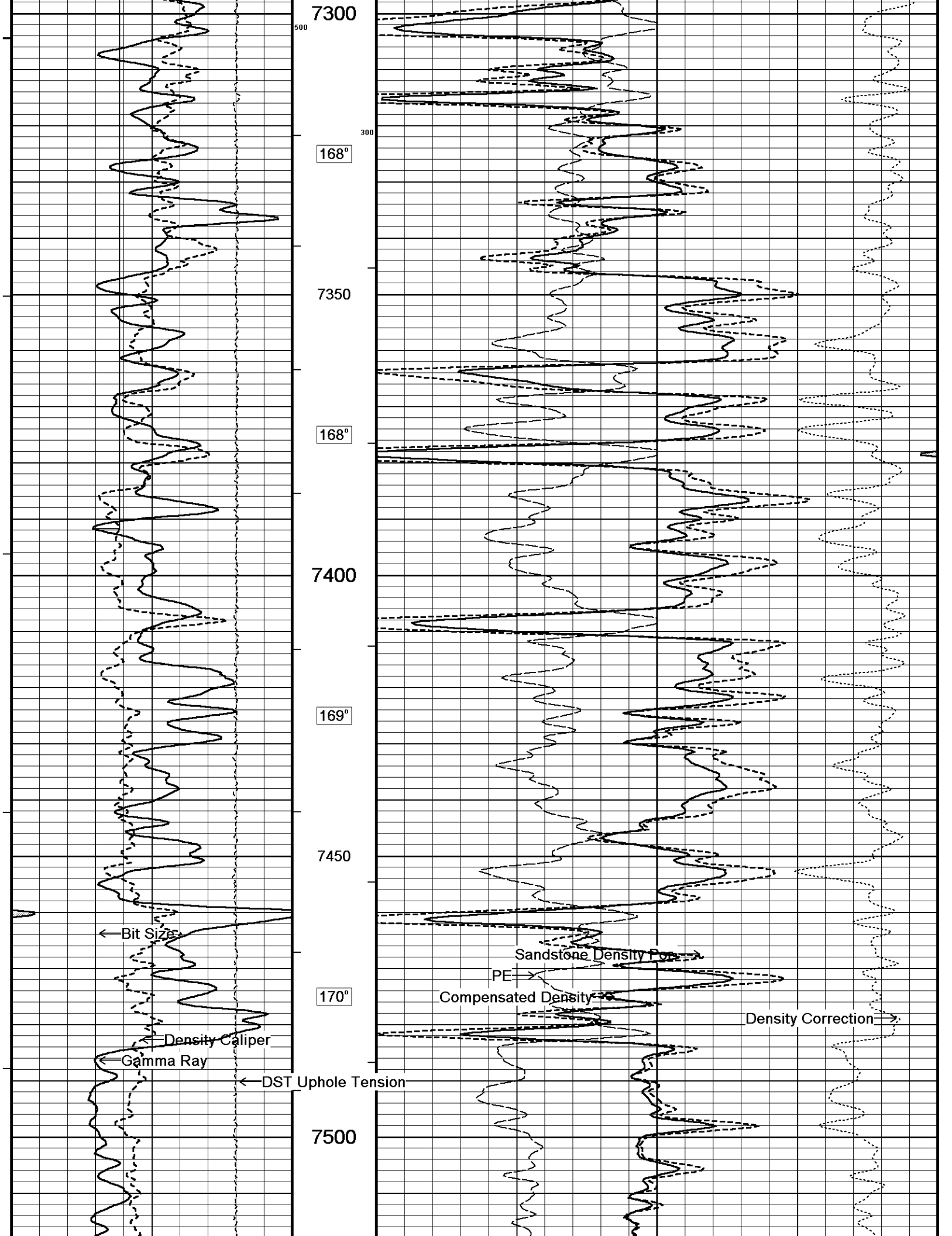

6200
154°
6250
155°
Bit Size
Sandstone Density Por.
PE
Compensated Density
Density Correction
6300
Density Caliper
Gamma Ray
DST Uphole Tension
155°
900
600
6350
156°
6400

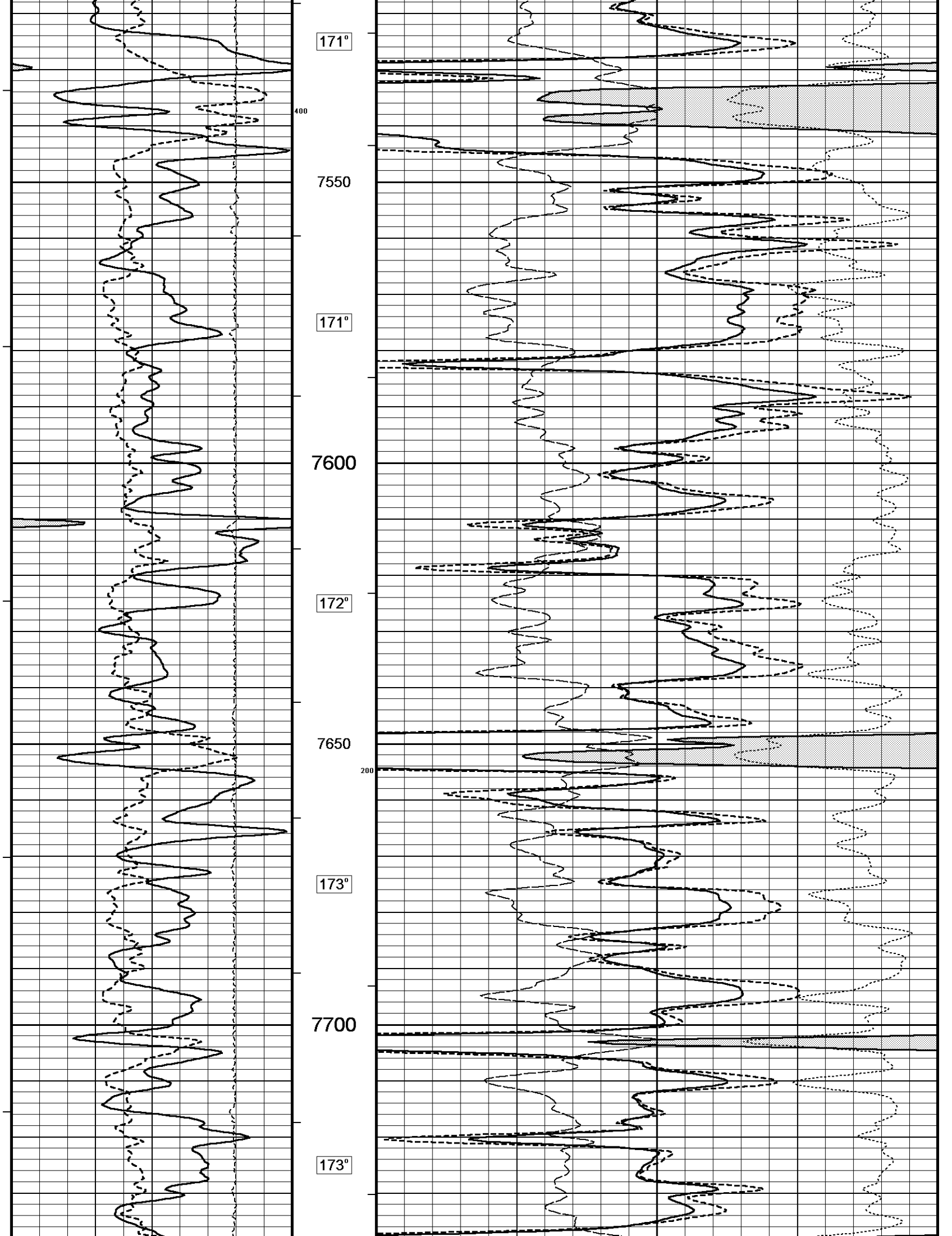

157°
6450
157°
6500
158°
6550
800
159°
6600
500
160°

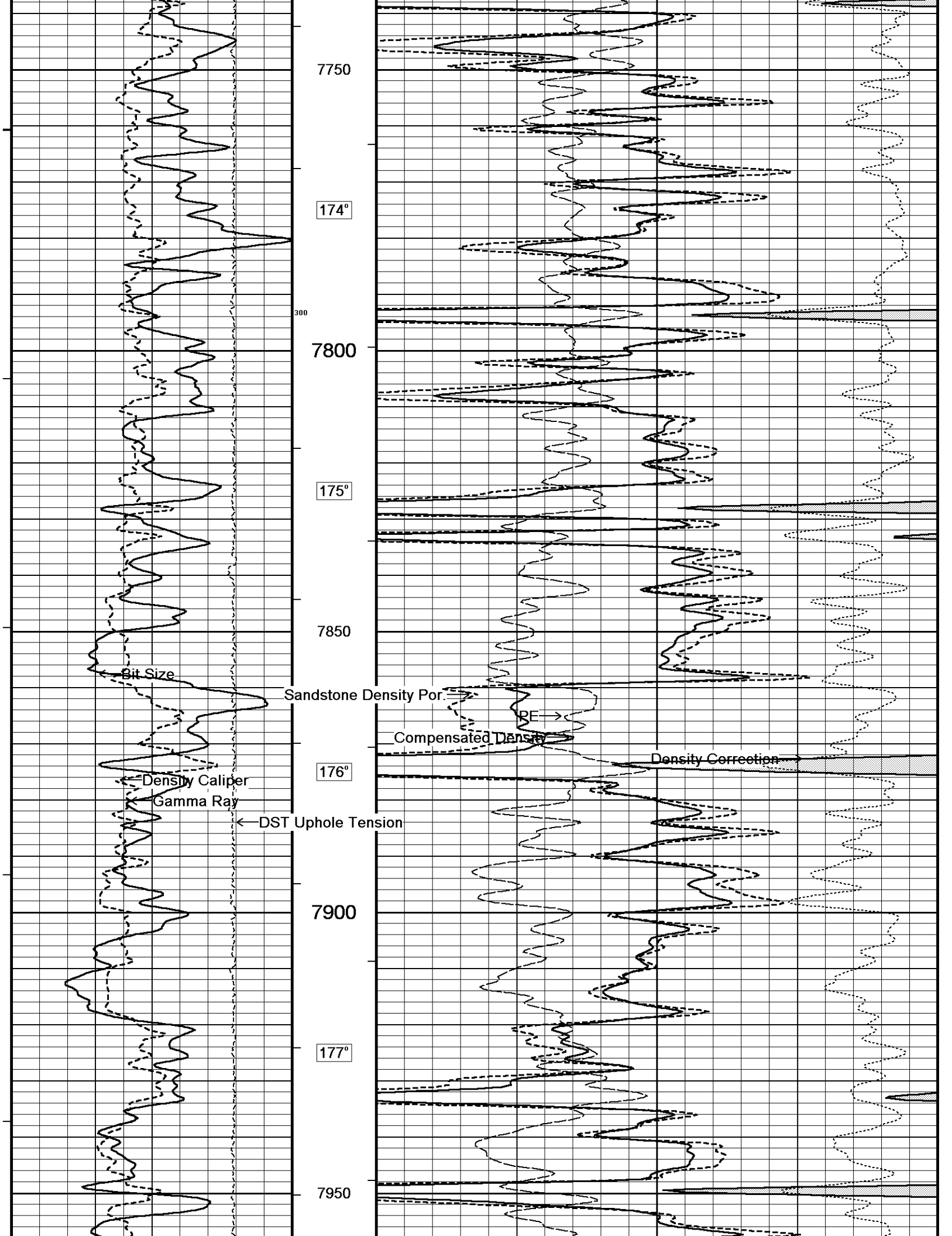

6650
160°
Bit Size
Sandstone Density Por.
PE
Compensated Density
Density Correction
Density Caliper
Gamma Ray
6700
DST Uphole Tension
161°
6750
161°
700
6800
162°
6850

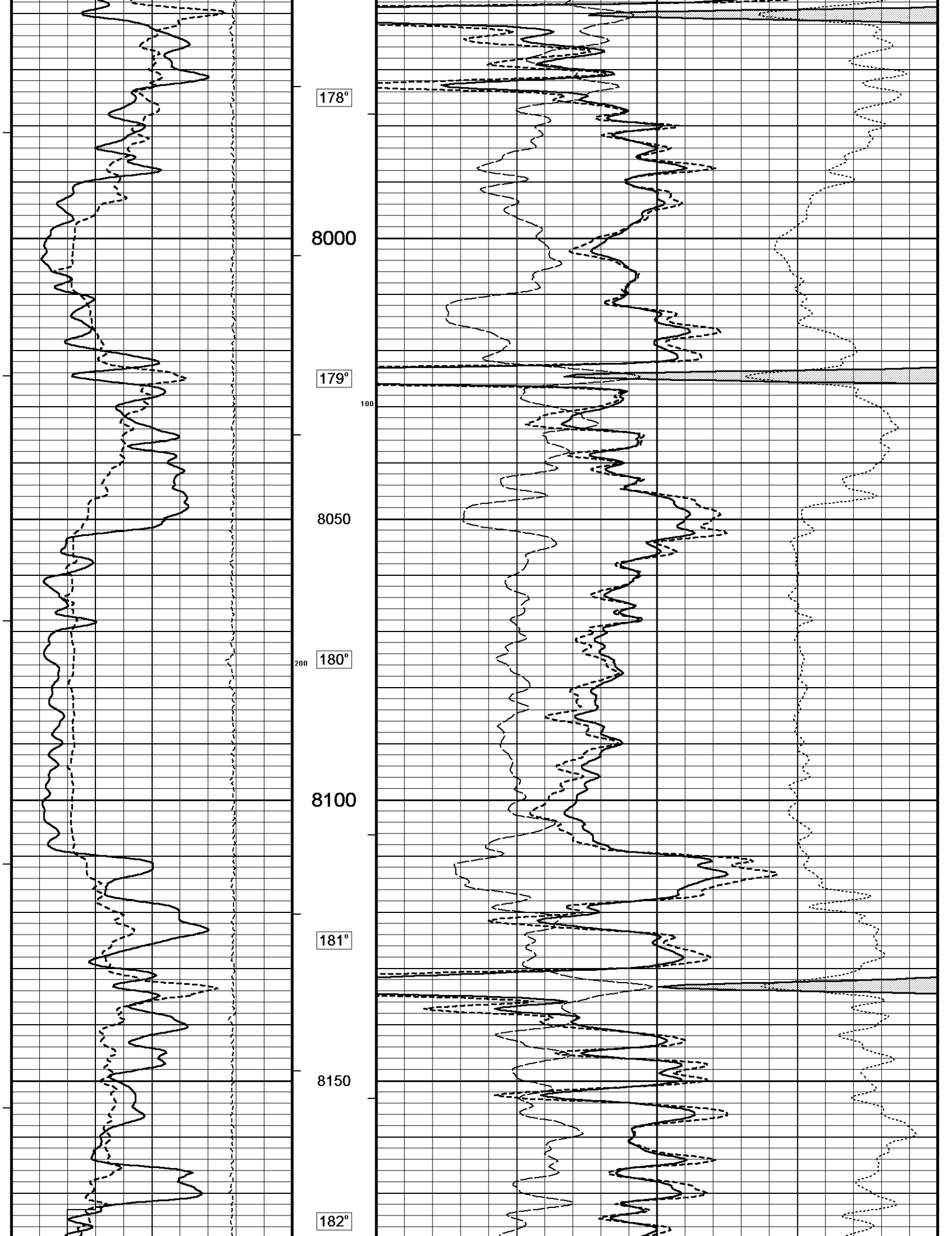

162°
6900
163°
6950
163°
7000
400
163°
7050
164°
Bit Size
Sandstone Density Por.

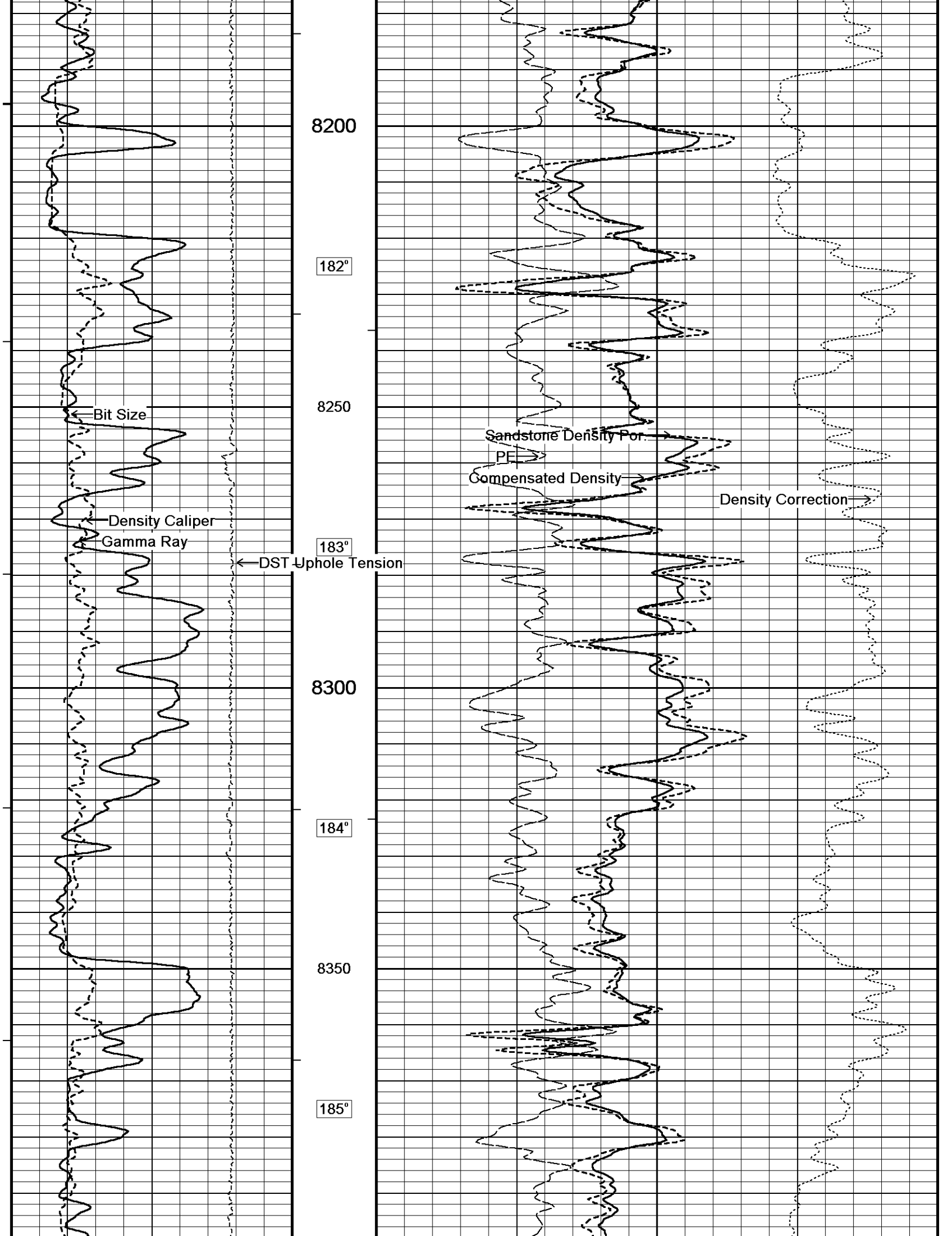

600
Compensated Density
Density Correction
Density Caliper
Gamma Ray
DST Uphole Tension
7100
164°
7150
165°
7200
166°
7250
167°

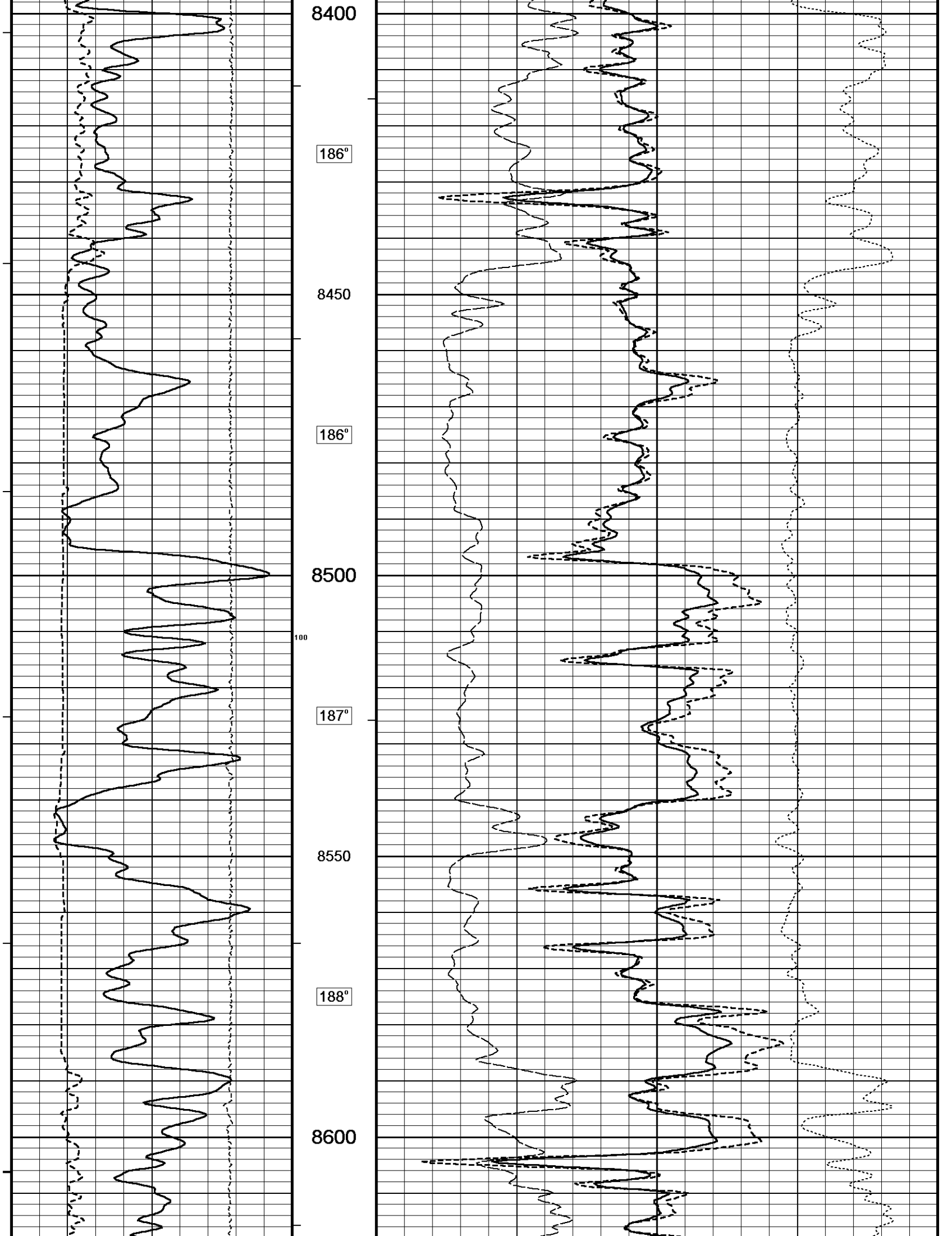

7300
500
300
168°
7350
168°
7400
169°
7450
170°
7500
Bit Size
Density Caliper
Gamma Ray
DST Uphole Tension
Sandstone Density Por
PE
Compensated Density
Density Correction

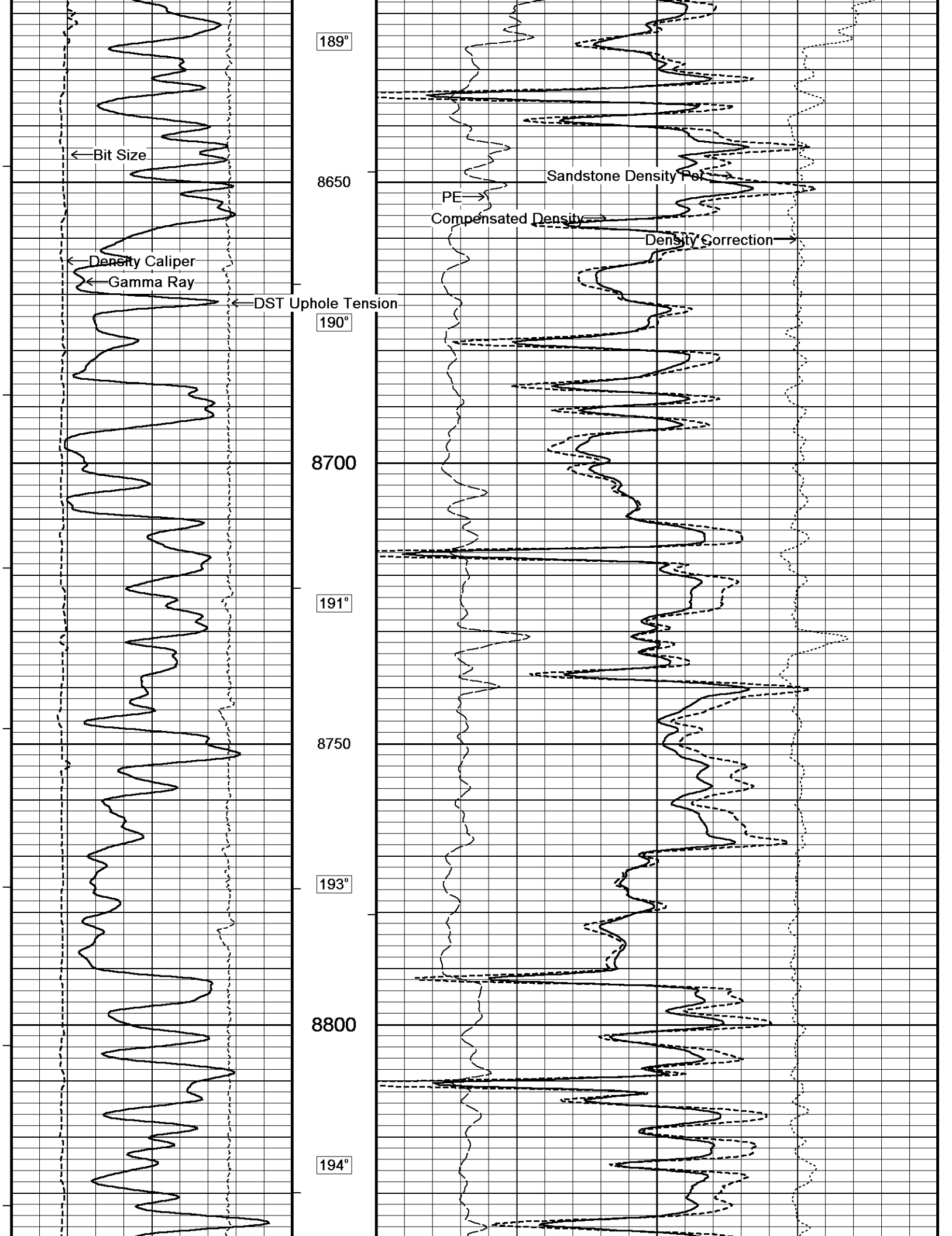

171°
400
7550
171°
7600
172°
7650
200
173°
7700
173°

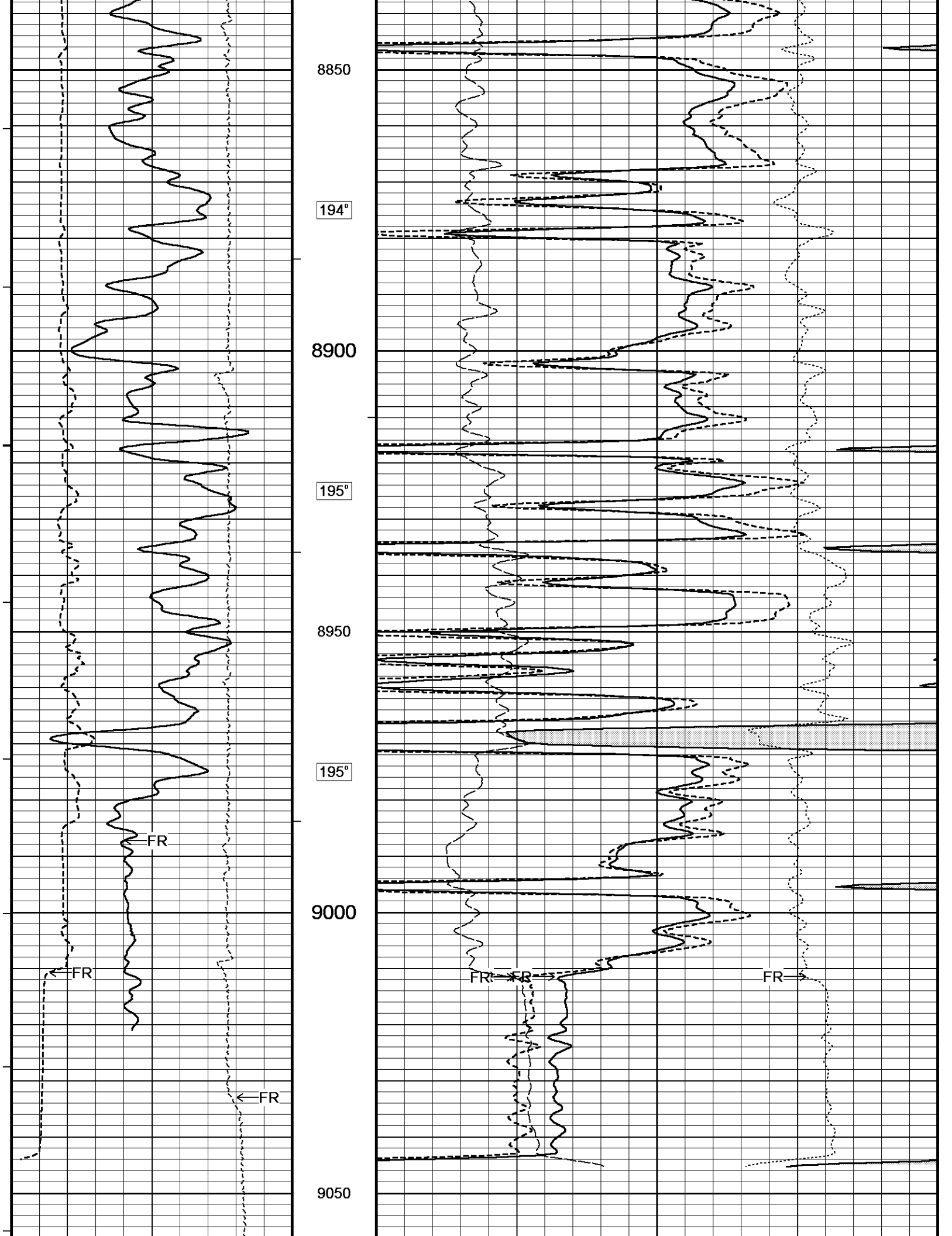

7750
174°
300
7800
175°
7850
Bit Size
Sandstone Density Por.
RE
Compensated Density
Density Correction
176°
Density Caliper
Gamma Ray
DST Uphole Tension
7900
177°
7950

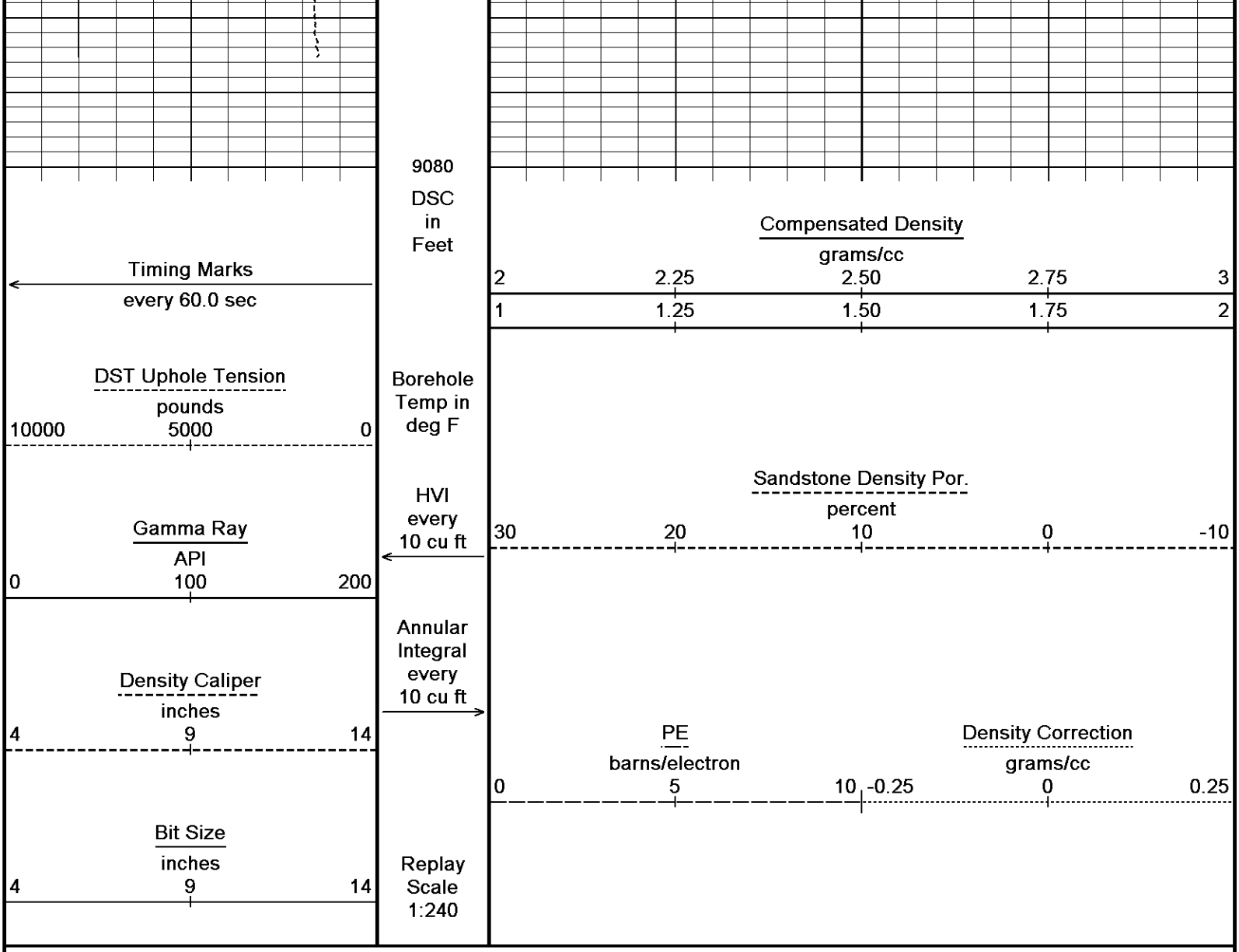

178°
8000
179°
100
8050
180°
200
8100
181°
8150
182°


8200
182°
8250
Bit Size
Sandstone Density Por.
PE
Compensated Density
Density Correction
Density Caliper
Gamma Ray
183°
DST Uphole Tension
8300
184°
8350
185°


8400
186°
8450
186°
8500
100
187°
8550
188°
8600


189°
Bit Size
8650
Sandstone Density Por
PE
Compensated Density
Density Correction
Density Caliper
Gamma Ray
DST Uphole Tension
190°
8700
191°
8750
193°
8800
194°


8850
194°
8900
195°
8950
195°
9000
9050
FR
FR
FR
FR
FR
FR

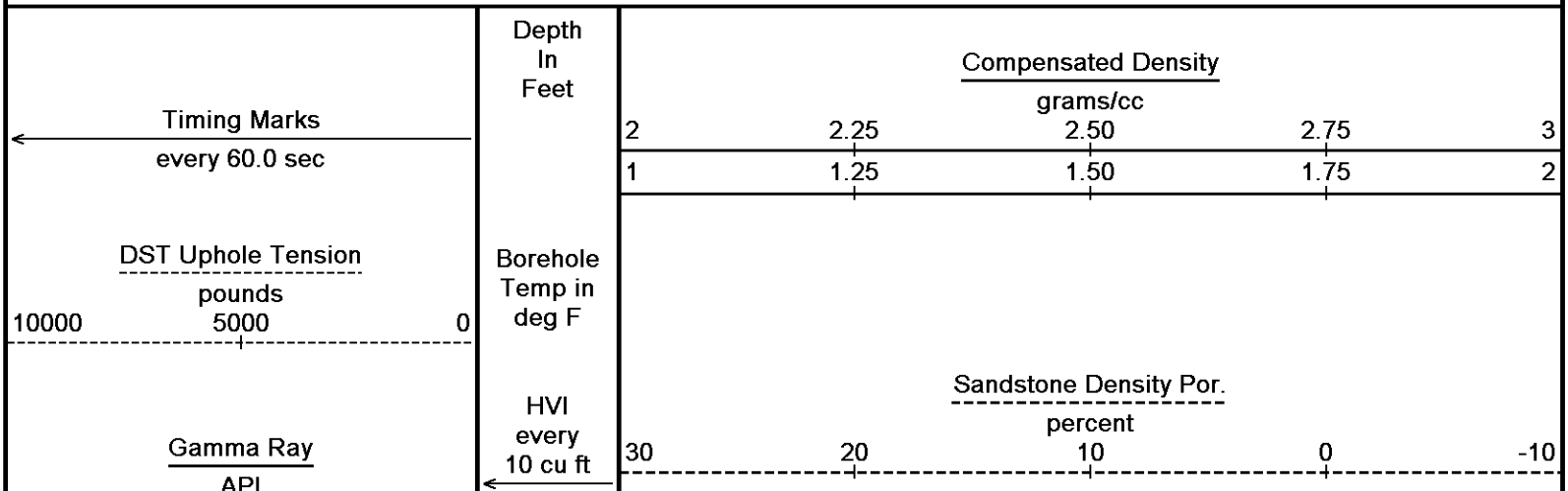


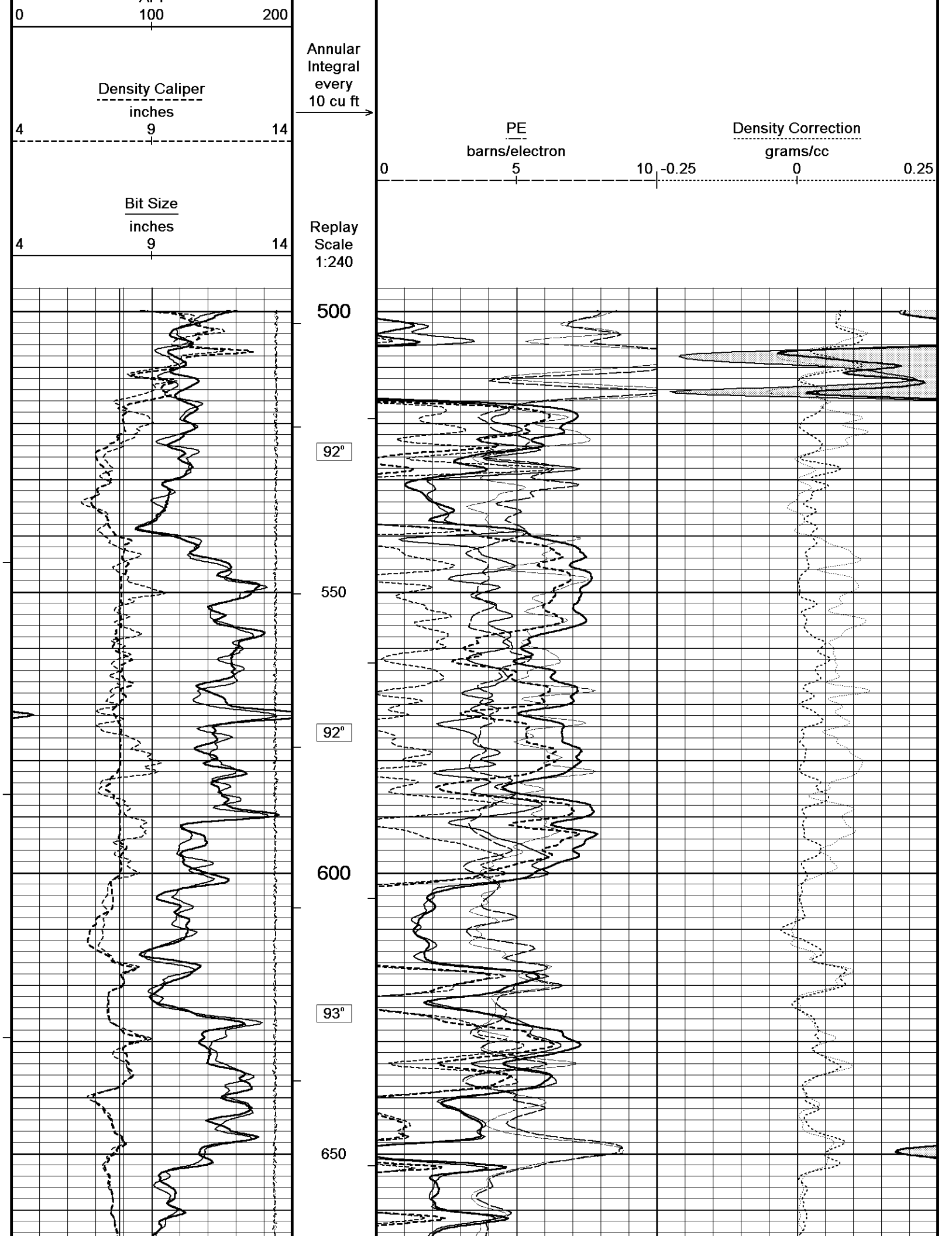
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:50
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_002.dta — Recorded on 05-APR-2008 07:59
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

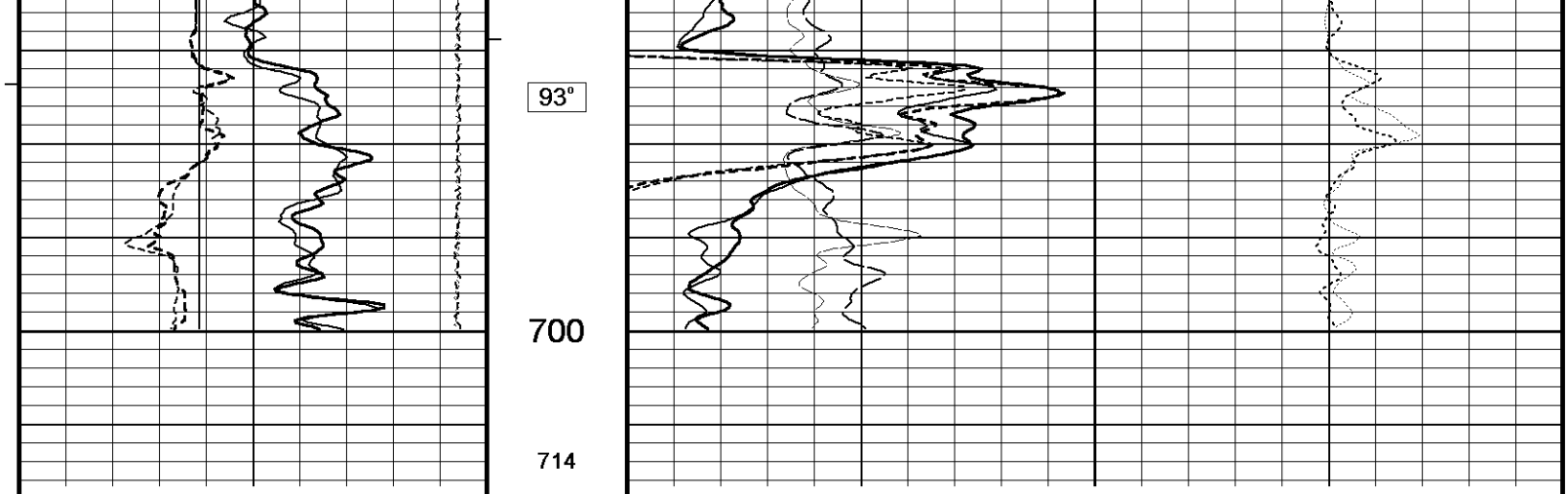
5 INCH MAIN LOG

UPPER OVERLAY

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:50
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_003.dta — Recorded on 05-APR-2008 07:59
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford PreVie...\Wexpro Carl Allen #28.dta — Recorded on 05-APR-2008 06:29
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091




0
100
200
Density Caliper
inches
4
9
14
Bit Size
inches
4
9
14
Annular Integral every 10 cu ft
Replay Scale 1:240
PE
barns/electron
0
5
10
Density Correction
grams/cc
-0.25
0
0.25
500
92°
550
92°
600
93°
650



714

Depth In Feet

Timing Marks
every 60.0 sec

DST Uphole Tension
pounds
10000 5000 0

Gamma Ray
API
0 100 200

Density Caliper
inches
4 9 14

Bit Size
inches
4 9 14

Borehole Temp in deg F

HVI every 10 cu ft

Annular Integral every 10 cu ft

Replay Scale 1:240

Compensated Density
grams/cc
2 2.25 2.50 2.75 3
1 1.25 1.50 1.75 2

Sandstone Density Por.
percent
30 20 10 0 -10

PE
barns/electron
0 5 10

Density Correction
grams/cc
-0.25 0 0.25

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:50
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_003.dta — Recorded on 05-APR-2008 07:59
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford PreVie...\Wexpro Carl Allen #28.dta — Recorded on 05-APR-2008 06:29
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

UPPER OVERLAY

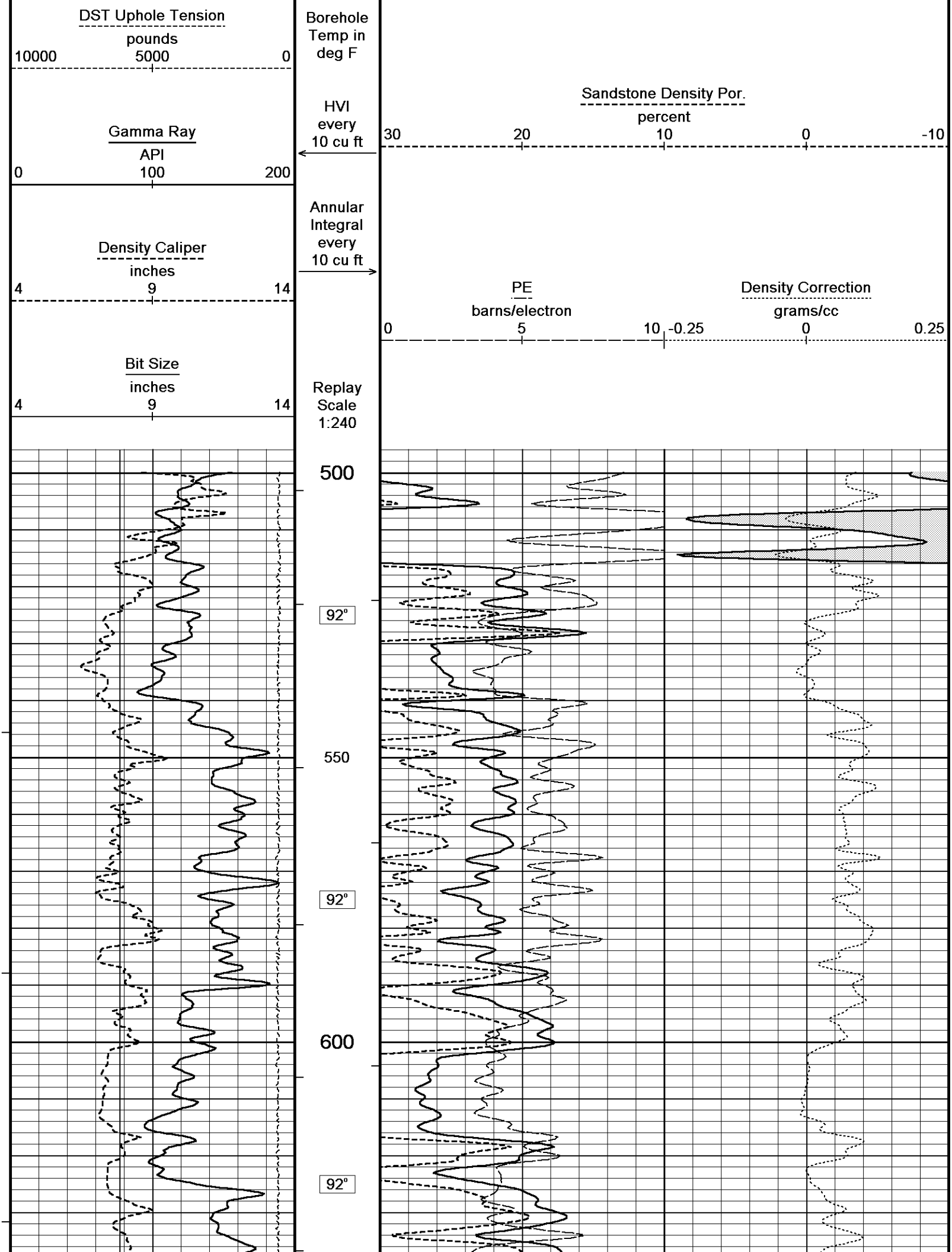
UPPER REPEAT SECTION

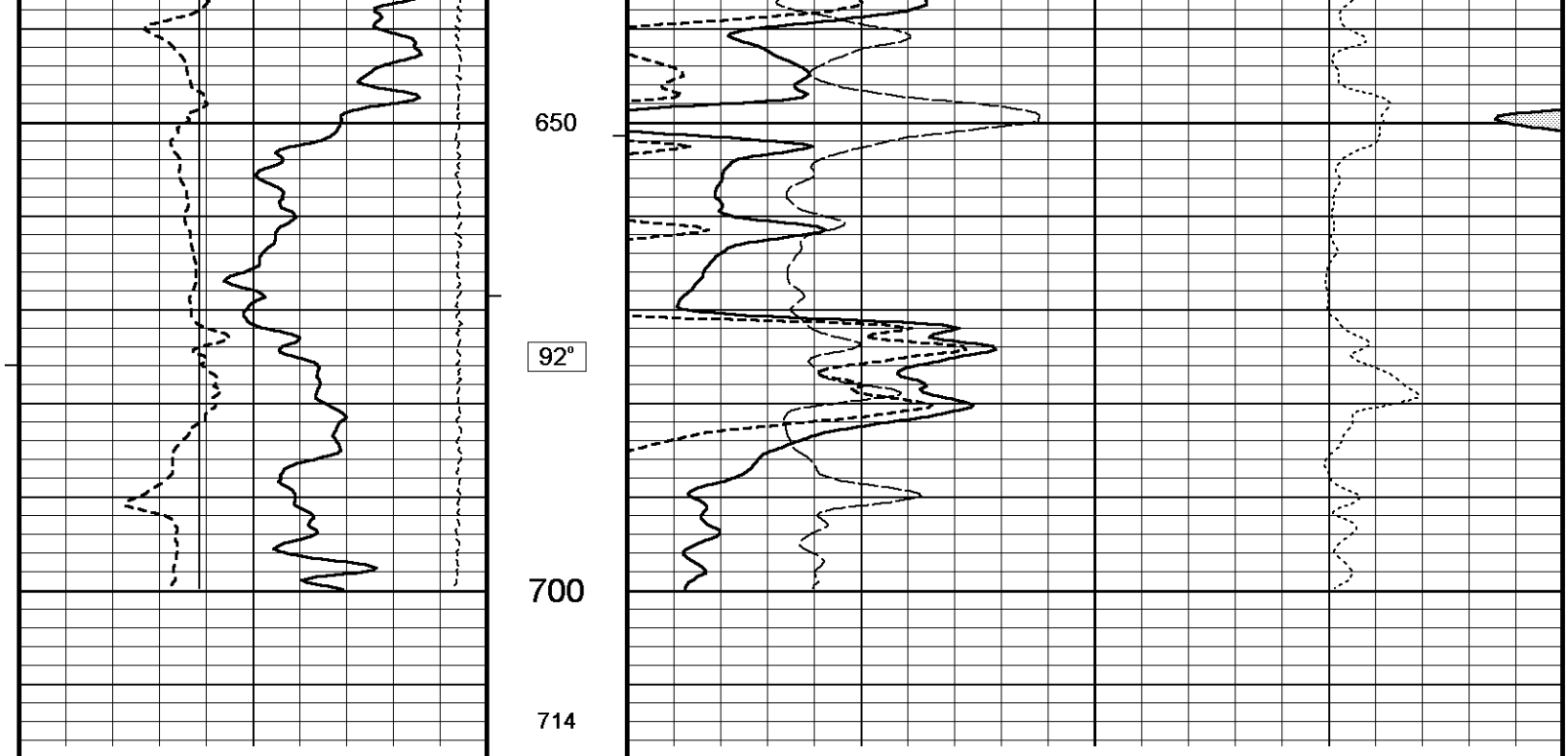
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:50
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford PreVie...\Wexpro Carl Allen #28.dta — Recorded on 05-APR-2008 06:29
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

Depth In Feet

Timing Marks
every 60.0 sec

Compensated Density
grams/cc
2 2.25 2.50 2.75 3
1 1.25 1.50 1.75 2


DST Uphole Tension
pounds
10000
5000
0
Borehole Temp in deg F
HVI every 10 cu ft
Sandstone Density Por.
percent
30
20
10
0
-10
Gamma Ray
API
0
100
200
Annular Integral every 10 cu ft
Density Caliper
inches
4
9
14
PE
barns/electron
0
5
10
Density Correction
grams/cc
-0.25
0
0.25
Bit Size
inches
4
9
14
Replay Scale 1:240
500
92°
550
92°
600
92°



Depth In Feet

Timing Marks
every 60.0 sec

DST Uphole Tension
pounds
10000 5000 0

Gamma Ray
API
0 100 200

Density Caliper
inches
4 9 14

Bit Size
inches
4 9 14

Borehole Temp in deg F

HVI every 10 cu ft

Annular Integral every 10 cu ft

Replay Scale 1:240

Compensated Density
grams/cc
2 2.25 2.50 2.75 3
1 1.25 1.50 1.75 2

Sandstone Density Por.
percent
30 20 10 0 -10

PE
barns/electron
0 5 10

Density Correction
grams/cc
-0.25 0 0.25

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:50
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford PreVie...\Wexpro Carl Allen #28.dta — Recorded on 05-APR-2008 06:29
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

UPPER REPEAT SECTION

BOTTOM OVERLAY

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:50
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_002.dta — Recorded on 05-APR-2008 07:59
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_001.dta — Recorded on 05-APR-2008 07:42

System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

Timing Marks
every 60.0 sec

DST Uphole Tension
pounds
10000 5000 0

Gamma Ray
API
0 100 200

Density Caliper
inches
4 9 14

Bit Size
inches
4 9 14

Depth in Feet

Borehole Temp in deg F

HVI every 10 cu ft

Annular Integral every 10 cu ft

Replay Scale 1:240

Compensated Density
grams/cc
2 2.25 2.50 2.75 3
1 1.25 1.50 1.75 2

Sandstone Density Por.
percent
30 20 10 0 -10

PE
barns/electron
0 5 10

Density Correction
grams/cc
-0.25 0 0.25

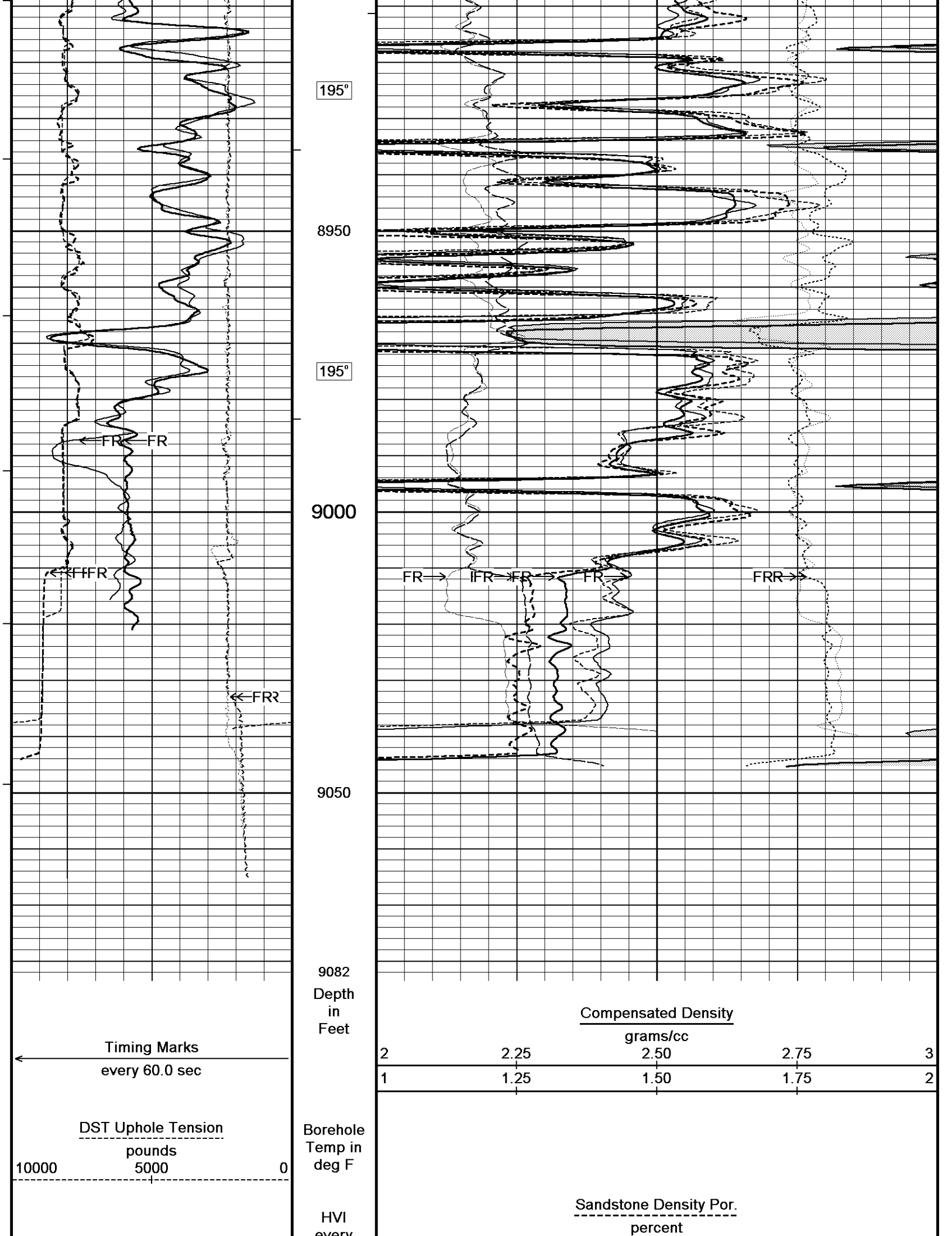
8800

194°

8850

194°

8900


195°
8950
195°
FR
FR
9000
FR
FR
FR
FR
FR
FR
9050
9082
Depth
in
Feet
Timing Marks
every 60.0 sec
DST Uphole Tension
pounds
10000
5000
0
Borehole
Temp in
deg F
HVI
Compensated Density
grams/cc
2
2.25
2.50
2.75
3
1
1.25
1.50
1.75
2
Sandstone Density Por.
percent

Gamma Ray
API
0 100 200

Density Caliper
inches
4 9 14

Bit Size
inches
4 9 14

Annular Integral every 10 cu ft

Replay Scale 1:240

30 20 10 0 -10

PE
barns/electron
0 5 10

Density Correction
grams/cc
-0.25 0 0.25

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:50
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_002.dta — Recorded on 05-APR-2008 07:59
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_001.dta — Recorded on 05-APR-2008 07:42
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

BOTTOM OVERLAY

BOTTOM REPEAT SECTION

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 06-APR-2008 17:50
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_001.dta — Recorded on 05-APR-2008 07:42
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

Timing Marks
every 60.0 sec

DST Uphole Tension
pounds
10000 5000 0

Gamma Ray
API
0 100 200

Density Caliper
inches
4 9 14

Bit Size
inches
4 9 14

Depth in Feet

Borehole Temp in deg F

HVI every 10 cu ft

Annular Integral every 10 cu ft

Replay Scale 1:240

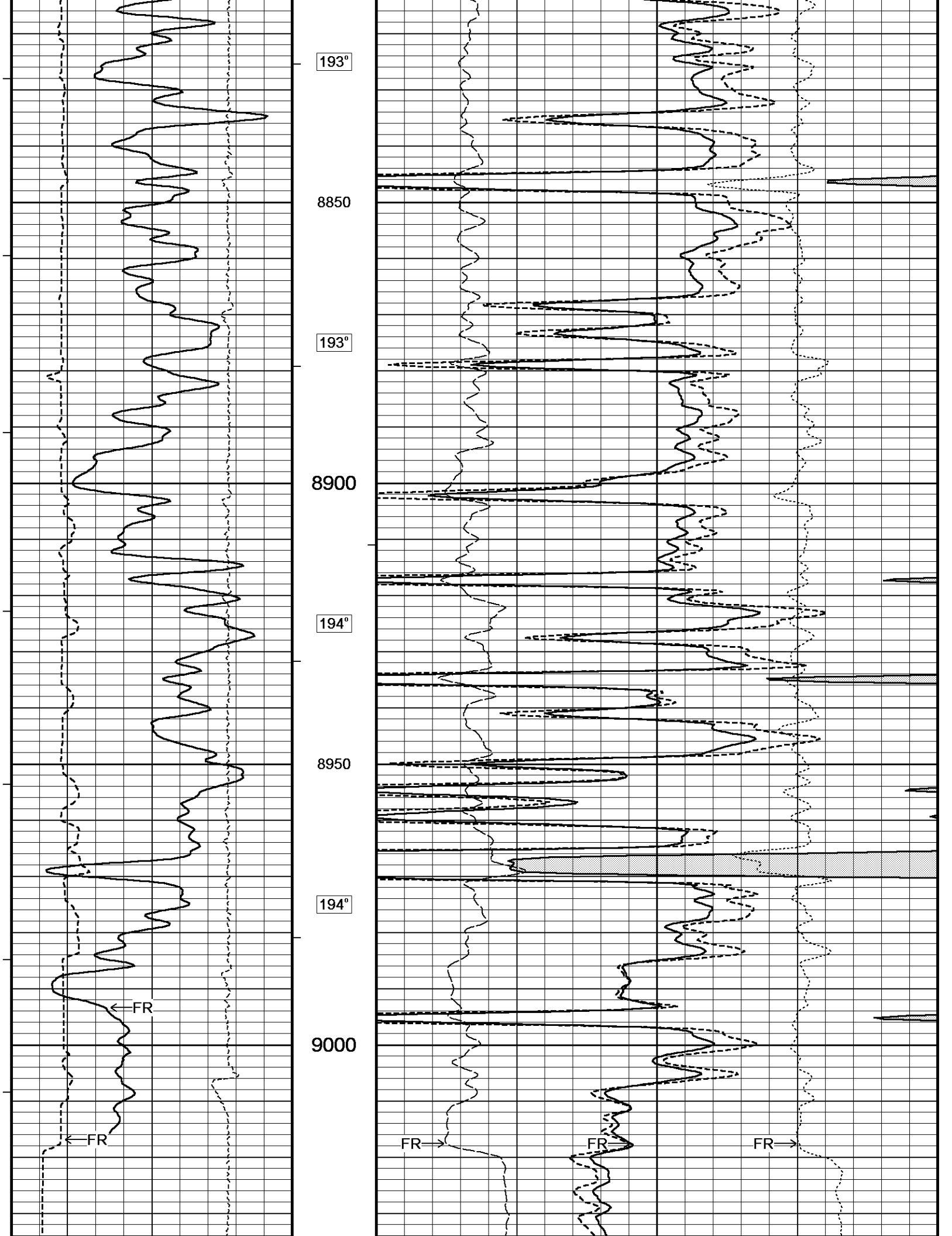
Compensated Density
grams/cc
2 2.25 2.50 2.75 3
1 1.25 1.50 1.75 2

Sandstone Density Por.
percent
30 20 10 0 -10

PE
barns/electron
0 5 10

Density Correction
grams/cc
-0.25 0 0.25

8800


193°
8850
193°
8900
194°
8950
194°
9000
FR
FR
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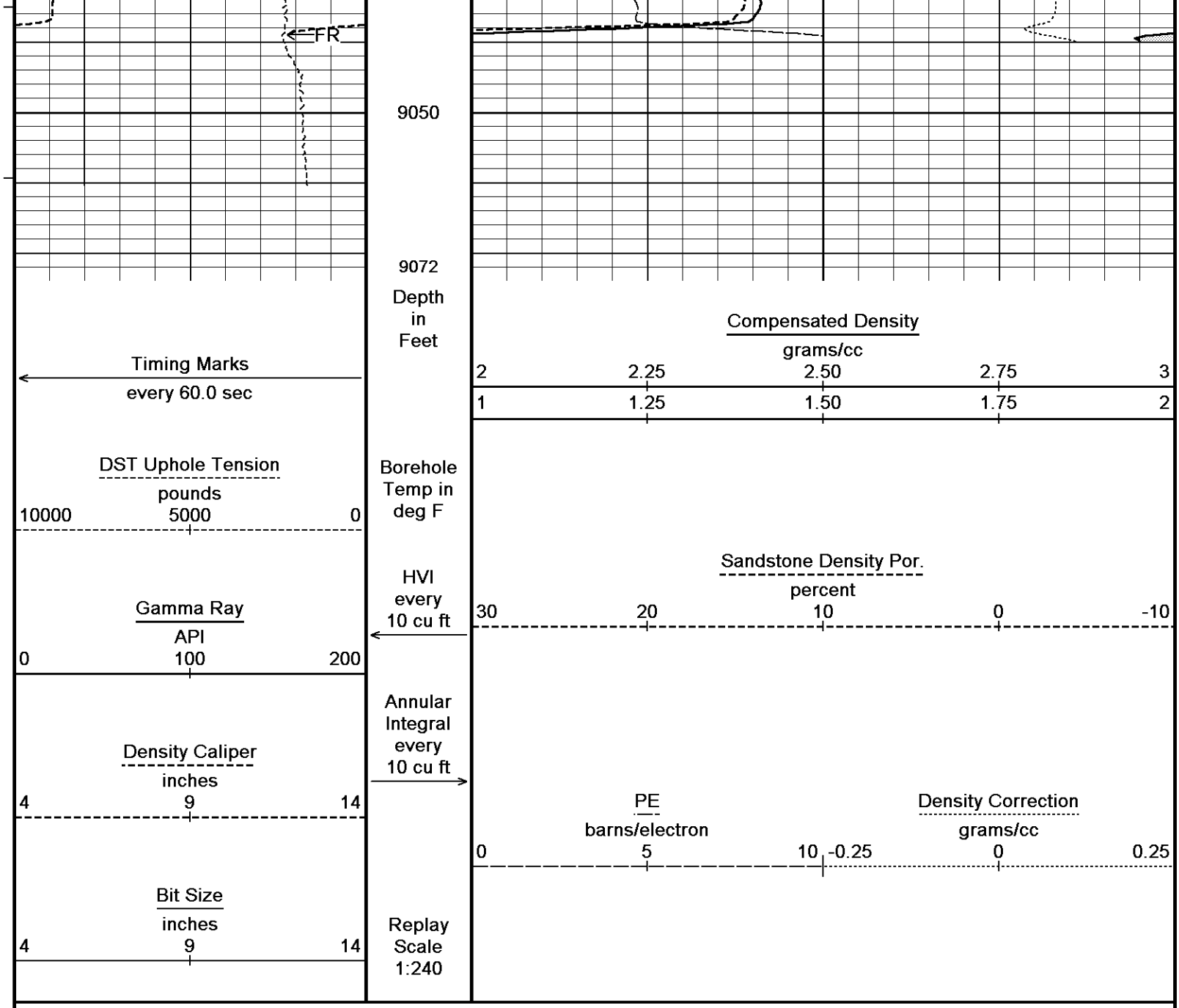
FR



Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 06-APR-2008 17:50
Filename: C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford Pr...\Wexpro Carl Allen #28_001.dta
Recorded on 05-APR-2008 07:42
System Versions: Logged with 8.00.0052 Processed with 8.00.0052 Plotted with 8.01.0091

BOTTOM REPEAT SECTION

BEFORE SURVEY CALIBRATION

C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford PreView\0\Wexpro Carl Allen #28_001.dta

General Constants All 000

Last Edited on 5-APR-2008,12:12

General Parameters		
Mud Resistivity	0.390	ohm-metres
Mud Resistivity Temperature	58.500	degrees F
Water Level	0.000	feet
Density/Neutron Processing	Wet Hole	
Hole/Annular Volume and Differential Caliper Parameters		
HVOL Caliper 1	Density Caliper	
HVOL Caliper 2	None	
Annular Volume Diameter	4.500	inches
Caliper for Differential Caliper	None	

Rwa Parameters

Porosity used	Sandstone Density Por.
Resistivity used	Deep Induction
RWA Constant A	0.610
RWA Constant M	2.150

Down-hole Tension Calibration SMS 000

Field Calibration on 12-MAR-2008 02:23

Reading No	Measured	Calibrated (lbs)
1	14234.77	0.00
2	16672.25	715.00

High Resolution Temperature Calibration MCG 145

Field Calibration on 5-APR-2008,05:52

	Measured	Calibrated(Deg F)
Lower	50.00	50.00
Upper	75.00	75.00

High Resolution Temperature Constants MCG 145

Pre-filter Length	11

SP Calibration MCG 145

Field Calibration on 5-APR-2008,05:51

	Measured	Calibrated (mV)
Reference 1	104.4	102.0
Reference 2	-97.1	-102.0

Gamma Calibration MCG 145

Field Calibration on 5-APR-2008,05:51

	Measured	Calibrated (API)
Background	71	49
Calibrator (Gross)	771	529
Calibrator (Net)	700	480

Gamma Constants MCG 145

Last Edited on 5-APR-2008,00:31

Gamma Calibrator Number	GRCC-112	
Mud Density	1.00	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

Micro Laterolog Calibration MMR 068

Base Calibration on
Field Check on

Base Calibration

	Measured		Calibrated (ohm-m)	
	Ref 1	Ref 2	Ref 1	Ref 2
	0.0	0.0	0.0	0.0

Base Check (ohm-m)	Field Check (ohm-m)
0.0	0.0

Micro Laterolog Constants MMR 068

Last Edited on 29-OCT-2007 22:27

Micro Laterolog K Factor	0.0128	
Standoff Offset	0.0000	inches

Borehole Correction Constants

Mud Cake Source	Constant Value	
Mud Cake Thickness	0.4000	inches
Mud Cake Thickness Caliper	N/A	
Mud Cake Resistivity	0.1500	ohm-m

Caliper Calibration MMR 068

Base Calibration on 4-APR-2008 08:57
Field Calibration on 5-APR-2008,06:20

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	14032	5.97
2	17245	7.96
3	20456	9.86
4	24380	11.92
5	0	0.00
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
5.95	5.97

Micro Normal and Micro Inverse Calibration MMR 068

Base Calibration on 4-APR-2008 15:37
Field Check on 5-APR-2008,06:20

Base Calibration

Channel	Measured Resistor 1	Measured Resistor 2	Calibrated (ohm-m) Resistor 1	Calibrated (ohm-m) Resistor 2
Micro Normal	10.1	49.6	5.1	25.6
Micro Inverse	9.8	49.4	3.4	16.9

Channel	Base Check (ohm-m)	Field Check (ohm-m)
Micro Normal	94.1	94.1
Micro Inverse	62.2	62.2

Micro Normal and Micro Inverse Constants MMR 068

Last Edited on 29-OCT-2007 22:28

Micro Normal K Factor	0.5110	
Micro Inverse K Factor	0.3380	
Standoff Offset	0.0000	inches

Neutron Calibration MDN 193

Base Calibration on 18-MAR-2008 10:00
Field Check on 5-APR-2008,06:20

Base Calibration

	Measured Near	Measured Far	Calibrated (cps) Near	Calibrated (cps) Far
	2574	79	3714	110
Ratio	32.437		33.764	

Field Calibrator at Base

	Calibrated (cps)	
	2704	3947
Ratio	0.685	

Field Check

	Calibrated (cps)	
	2715	3983
Ratio	0.682	

Neutron Constants MDN 193

Last Edited on 4-APR-2008 16:04

Neutron Source Id	728	
Neutron Jig Number	NJ5239	
Epithermal Neutron	No	
Caliper Source for Processing	Bit Size	
Stand-off	0.00	inches
Mud Density	1.00	gm/cc
Limestone Sigma	7.10	cu
Sandstone Sigma	7.00	cu
Dolomite Sigma	4.70	cu
Formation Pressure Source	None	
Formation Pressure	0.00	kpsi
Temperature Source	None	
Temperature	20.00	degrees F
Mud Salinity	0.00	kppm
Formation Fluid Salinity Source	None	
Formation Fluid Salinity	0.00	kppm
Barite Mud Correction	Not Applied	

Caliper Calibration MPD 195

Base Calibration on 4-APR-2008 10:31
Field Calibration on 5-APR-2008,06:21

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	9356	3.99
2	17888	5.97
3	26288	7.96
4	34608	9.86
5	43840	11.92
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)

	5.95	5.97

Photo Density Calibration MPD 195

Base Calibration on 18-MAR-2008 12:05
Field Check on 5-APR-2008,06:20

Density Calibration

Base Calibration	Measured Near	Measured Far	Calibrated (sdu) Near	Calibrated (sdu) Far
Reference 1	54080	27744	60276	31815
Reference 2	22051	2799	24760	2550
Field Check at Base	1444.2	1587.2		
Field Check	1448.1	1583.9		

PE Calibration

Base Calibration	WS	Measured WH	Measured Ratio	Calibrated Ratio
Background	258	1283		
Reference 1	21161	53850	0.398	0.366
Reference 2	5916	21880	0.275	0.269
Field Check at Base	258.4	1282.5		
Field Check	256.7	1284.7		

Density Constants MPD 195

Last Edited on 5-APR-2008,08:45

Density Source Id	237	
Nylon Calibrator Number	DNC-E-658	
Aluminium/Fe Calibrator Number	DAC-D-658	
Density Shoe Profile	8 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1.27	gm/cc
Mud Density Z/A Correction	1.11	
Mud Filtrate Density	1.00	gm/cc
Dry Hole Mud Filtrate Density	1.00	gm/cc
DNCT	0.00	gm/cc
CRCT	0.00	gm/cc
Density Z/A Correction	Advanced	

Matrix Density (gm/cc)	Depth (ft)
2.65	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	

FE Calibration MFE 076

Base Calibration on 17-MAR-2008 14:08
Field Check on 5-APR-2008,06:21

Base Calibration

	Measured	Calibrated (ohm-m)
Reference 1	0.0	0.0
Reference 2	959.8	126.8
Base Check		279.7
Field Check		279.7

FE Constants MFE 076

Last Edited on 4-APR-2008,10:40

Caliper Source for FE correction	Density Caliper	
Rm Source for FE correction	Temperature Corr	
Temp. for Rm Corr.	MCG External Temperature	
Stand-off	0.5	inches

High Resolution Temperature Calibration MAI 192

Field Calibration on 5-APR-2008,06:21

	Measured	Calibrated(Deg F)
Lower	50.00	50.00
Upper	75.00	75.00

High Resolution Temperature Constants MAI 192

Pre-filter Length	11

Induction Calibration MAI 192

Base Calibration on 17-MAR-2008,15:22
Field Check on 5-APR-2008,06:21

Base Calibration

Test Loop Calibration	Measured		Calibrated (mmho/m)	
Channel	Low	High	Low	High
1	17.6	480.1	9.3	966.2
2	6.4	394.6	7.6	821.4
3	3.6	267.1	5.2	566.0
4	2.2	137.7	2.6	279.2
Array Temperature		79.7	Deg F	

Channel	Base Check (mmho/m)		Field Check (mmho/m)		
	Low	High	Low	High	
1	11.2	3801.6	12.3	3802.3	
2	28.9	3430.9	29.1	3431.1	
3	27.7	2975.3	27.9	2975.4	
4	18.6	2018.4	18.6	2018.2	
Deep	16.7	1961.5	16.8	1961.5	
Medium	41.1	3905.7	41.2	3905.7	
Shallow	43.5	5042.6	43.8	5043.0	
Array Temperature		55.2		69.7	Deg F

Induction Constants MAI 192

Last Edited on 5-APR-2008,06:21

Induction Model	ENHANCED	
Caliper for Borehole Corr.	Density Caliper	
Hole Size for Borehole Correction	N/A	inches
Stand-off	0.50	inches
Number of Fins on Stand-off	6.0000	
Stand-off Fin Width	0.5000	inches
Borehole Corr. Rm Source	Temperature Corr	
Temp. for Rm Corr.	MCG External Temperature	
Squasher Start	0.0020	mhos/metre

Borehole Normalisation

DRM1	0.0000	DRC1	0.0000
DRM2	0.0000	DRC2	0.0000
MRM1	0.0000	MRC1	0.0000
MRM2	0.0000	MRC2	0.0000
SRM1	0.0000	SRC1	0.0000
SRM2	0.0000	SRC2	0.0000

Calibration Site Corrections

Channel 1	0.00	mmhos/metre
Channel 2	0.00	mmhos/metre
Channel 3	0.00	mmhos/metre
Channel 4	0.00	mmhos/metre

Apparent Porosity and Water Saturation Constants

Archie Constant (A)	1.00	
Cementation Exponent (M)	2.00	
Saturation Exponent (N)	2.00	
Saturation of Water for Apor	100.00	percent
Resistivity of Water for Apor and Sw	0.05	ohm-m
Resistivity of Mud Filtrate for Sw	0.00	ohm-m

DOWNHOLE EQUIPMENT

C:\DOCUME~1\brunshb\LOCALS~1\Temp\Weatherford PreView\0\Wexpro Carl Allen #28_001.dta

SHA-F Compact Swivel Head Adaptor
SHA 97 Length: 2.74 ft Weight: 26.5 lb

Compact Gamma
MCG 145 Length: 8.70 ft Weight: 63.9 lb

Compact Micro-Resistivity
MMR 68 Length: 8.59 ft Weight: 81.6 lb

Compact Neutron
MDN 193 Length: 5.04 ft Weight: 50.7 lb

Compact Density/Caliper
MPD 195 Length: 9.59 ft Weight: 90.4 lb

SKJ-D.A Compact Knuckle Joint
SKJ 115 Length: 2.17 ft Weight: 24.3 lb

Compact Focussed Electric
MFE 76 Length: 6.03 ft Weight: 48.5 lb

Compact Induction
MAI 192 Length: 10.81 ft Weight: 48.5 lb

Total Length: 53.67 ft Weight: 434.3 lb

45.64 ft	GRGC - Gamma Ray
42.74 ft	CGXT - MCG External Temperature
35.39 ft	MINV - MMR MicroLog Inverse
35.39 ft	MNRL - MMR MicroLog Normal
35.39 ft	MBTC - MMR Caliper
30.59 ft	NPRS - Sandstone Neutron Por.
22.12 ft	CLDC - Density Caliper
21.42 ft	DEN - Compensated Density
21.42 ft	DCOR - Density Correction
21.42 ft	DPRS - Sandstone Density Por.
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
WELL
FIELD
PROVINCE/COUNTY
COUNTRY/STATE

Elevation Kelly Bushing	6666.00	feet	First Reading		
Elevation Drill Floor	6665.00	feet	Depth Driller	9058.00	feet
Elevation Ground Level	6653.00	feet	Depth Logger	9033.00	feet

Weatherford®