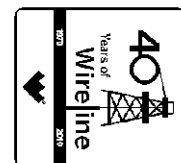




Weatherford

ARRAY INDUCTION SHALLOW FOCUSED ELECTRIC LOG



SANDRIDGE EXPLORATION

CARISSA SWD # 1-15

GOEBEL

HODGEMAN

U.S.A. / KANSAS

518' FSL & 203' FEL

Company
Well
Field
Province
Country
Location

SEC 15 TWP 21S RGE 24W
API Number 15-083-21763
Permit Number

Other
MPD/MDN
MML

Permanent G.L.CommaElevation 2338 feet

LogFrom KB
DrillFrom K.B.

Elevations
Kb 2348.50
Df 2347.00
GI 2338.00

Date 02-MAY-2012

RunNo ONE

DepthDriller 5060.00 feet

DepthLogger 5072.00 feet

FirstReading 5069.00 feet

LastReading 791.00 feet

CasingDriller 787.00 feet

CasingLogger 791.00 feet

BitSize 8.750 inches

HoleFluid CHEMICAL

Density 9.10 lb/USg 50.00 CP

Ph 10.50 4.80 ml/30Min

SampleSource FLOWLINE

RmMeas 0.36 @ 67.0 ohm-m

RmMeas 0.29 @ 67.0 ohm-m

RmMeas 0.43 @ 67.0 ohm-m

RmSource CALC CALC

RmBit 0.20 @127.0 ohm-m

TimeCirc 5 HOURS

MaxTemp 127.00 deg F

Equipment COMPACT

Base 13025 LIB

Recorded F. MARTINS

Witnessed V. RAMIREZ

S.O. / JOB # 3534652

B. WILCOX
LB12-110

BoreholeRec

Last Edited: 02-MAY-2012 08:27

BitSize
Inches

8.750

DepthFrom
Feet

791.00

DepthTo
Feet

5072.00

CasingRec

Type

Size
Inches

9.625

DepthFrom
Feet

0.00

ShoeDepth
Feet

791.00

Weight
Pdfs

29.30

Remarks

Tools Used: MPD, MCG, MDN, MFE, MAI, MML
Hardware: MPD: 8 inch profile plate used. MAI, MFE: 0.5 Inch standoffs used. MDN: Dual Bowspring used.
2.71 G/CC Limestone density matrix used to calculate porosity.
Borehole rugosity, tight pulls, and washouts will affect data quality.
All intervals logged and scaled per customer's request.
Annular volume with 5.5 inch production casing = 1180 cu. ft.
Service order #3534652
Rig: Tomcat #4
Engineer: F. Martins
Operator(s): K. Rinehart

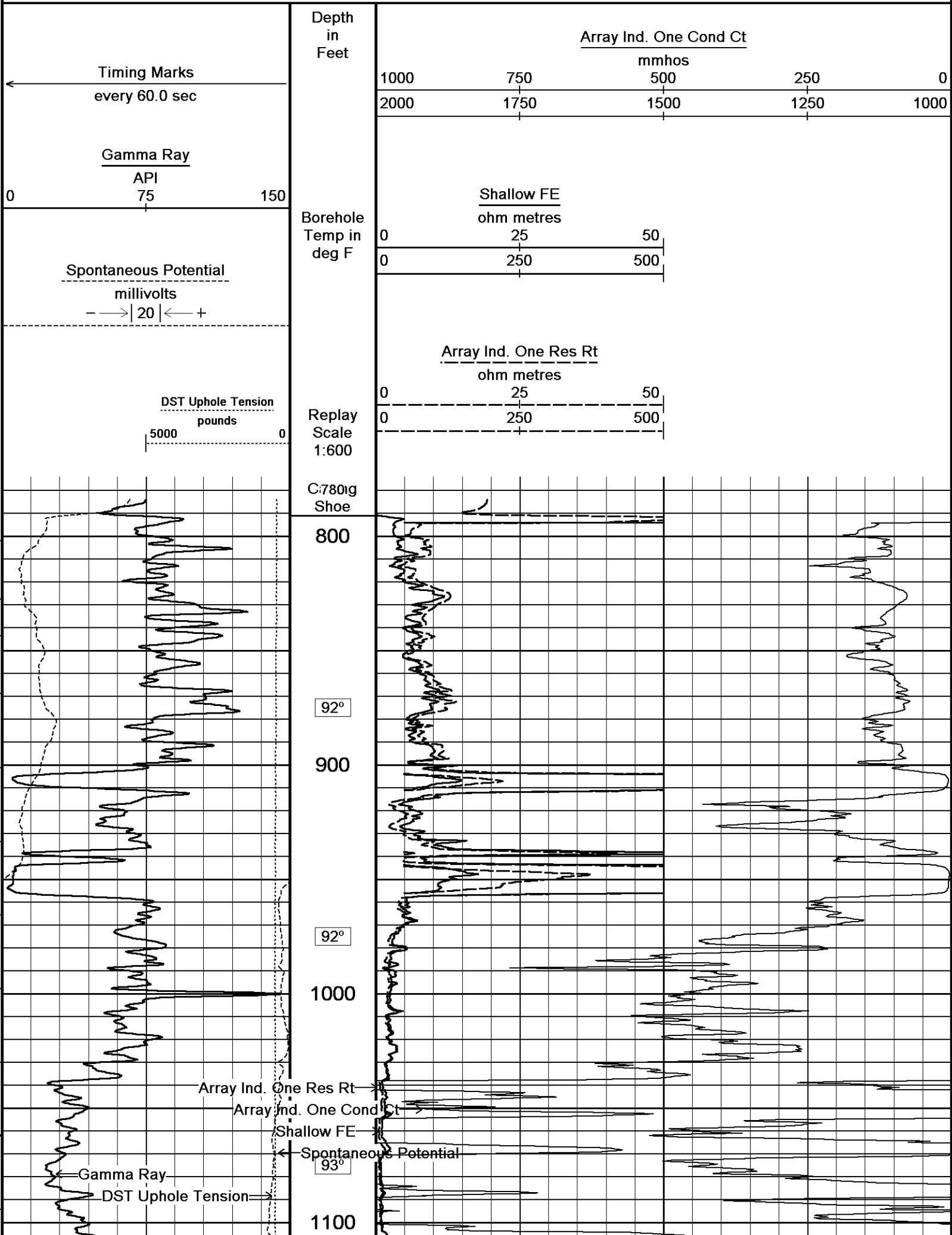
2 INCH MAIN

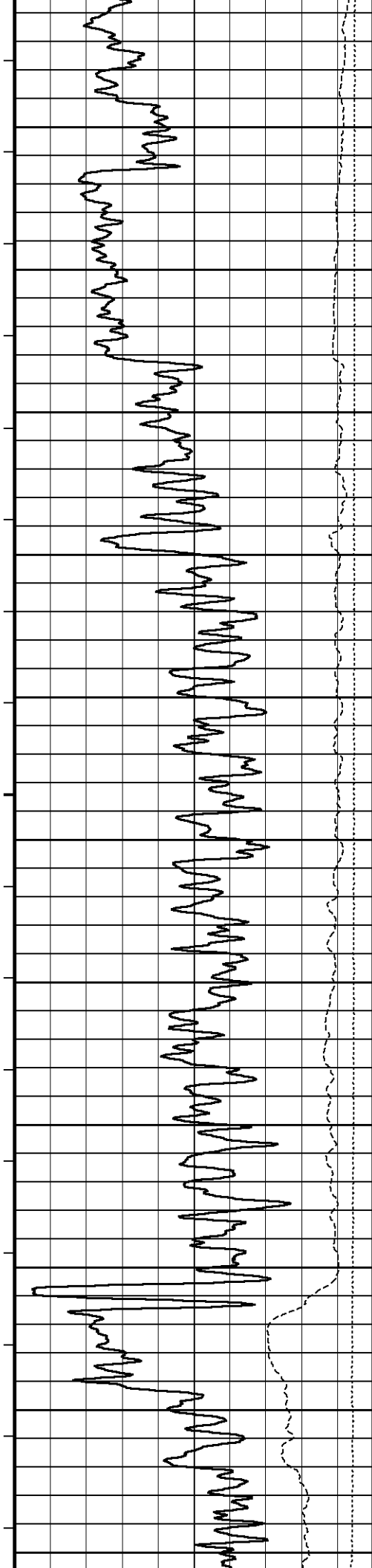
Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 22-MAY-2012 10:14

Filename: C:\Users\lamundt\AppData\Local\Temp\Weat...Sandridge Carissa SWD # 1-15 Real 003.dta

Recorded on 02-MAY-2012 05:58





93°

1200

94°

1300

95°

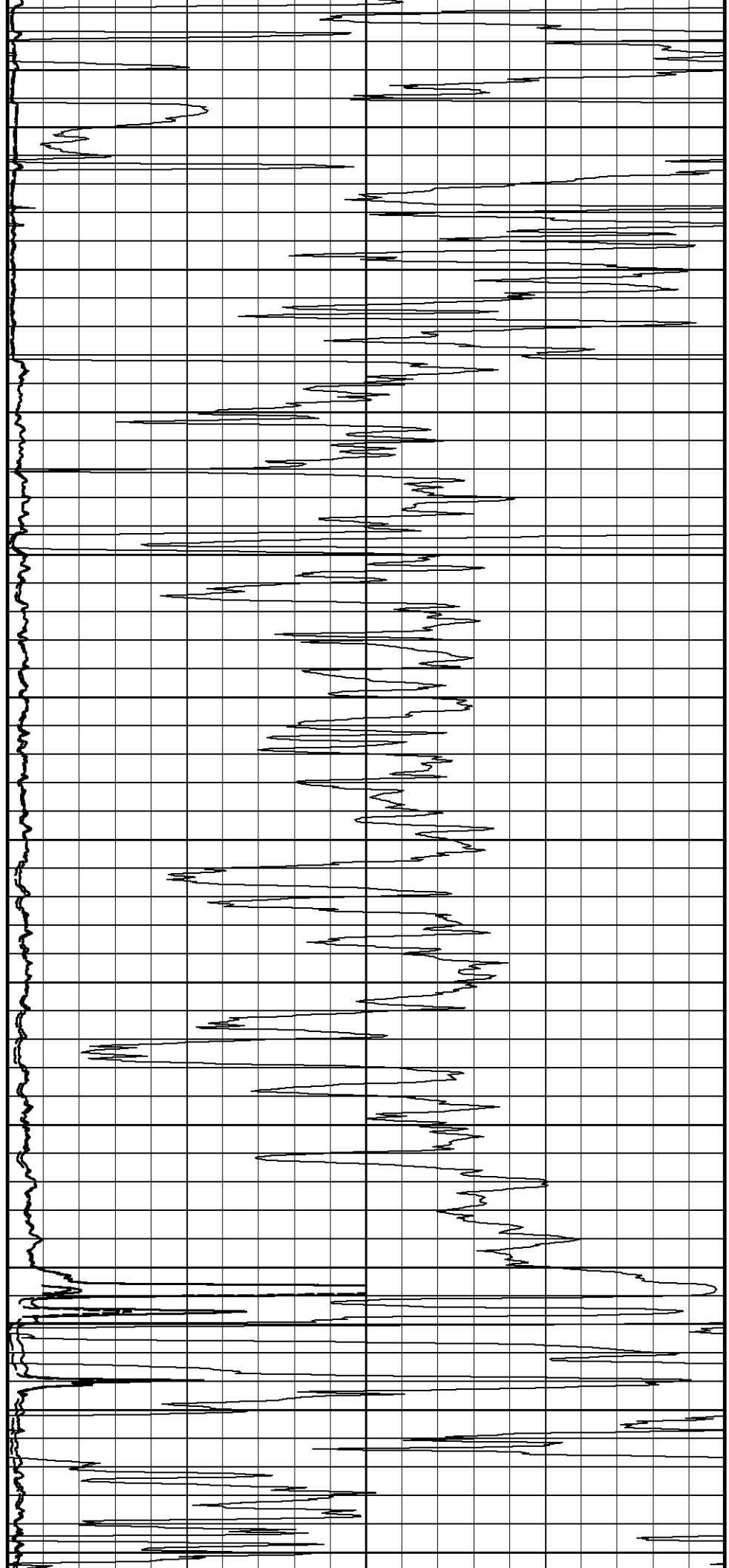
1400

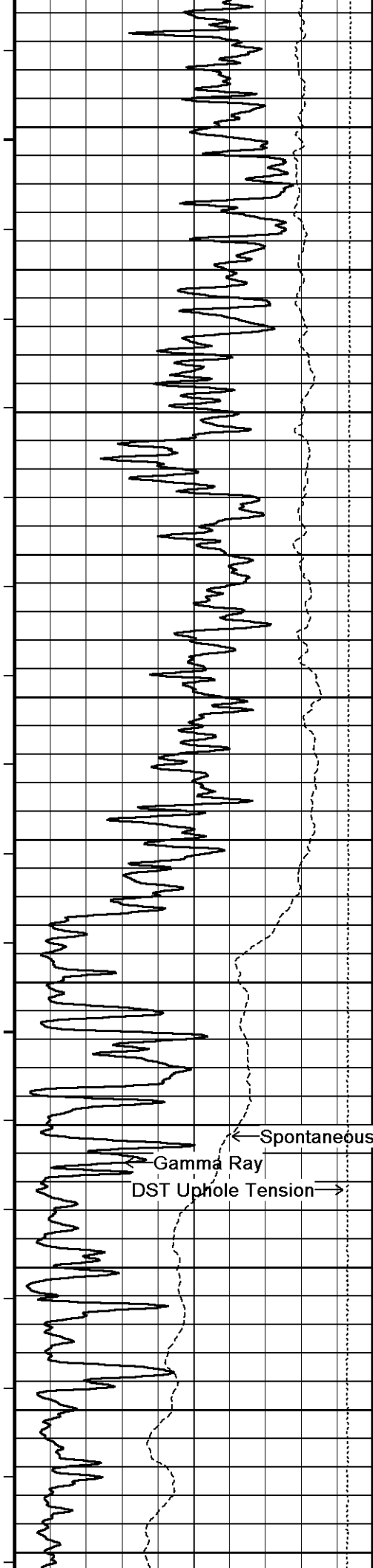
96°

1500

96°

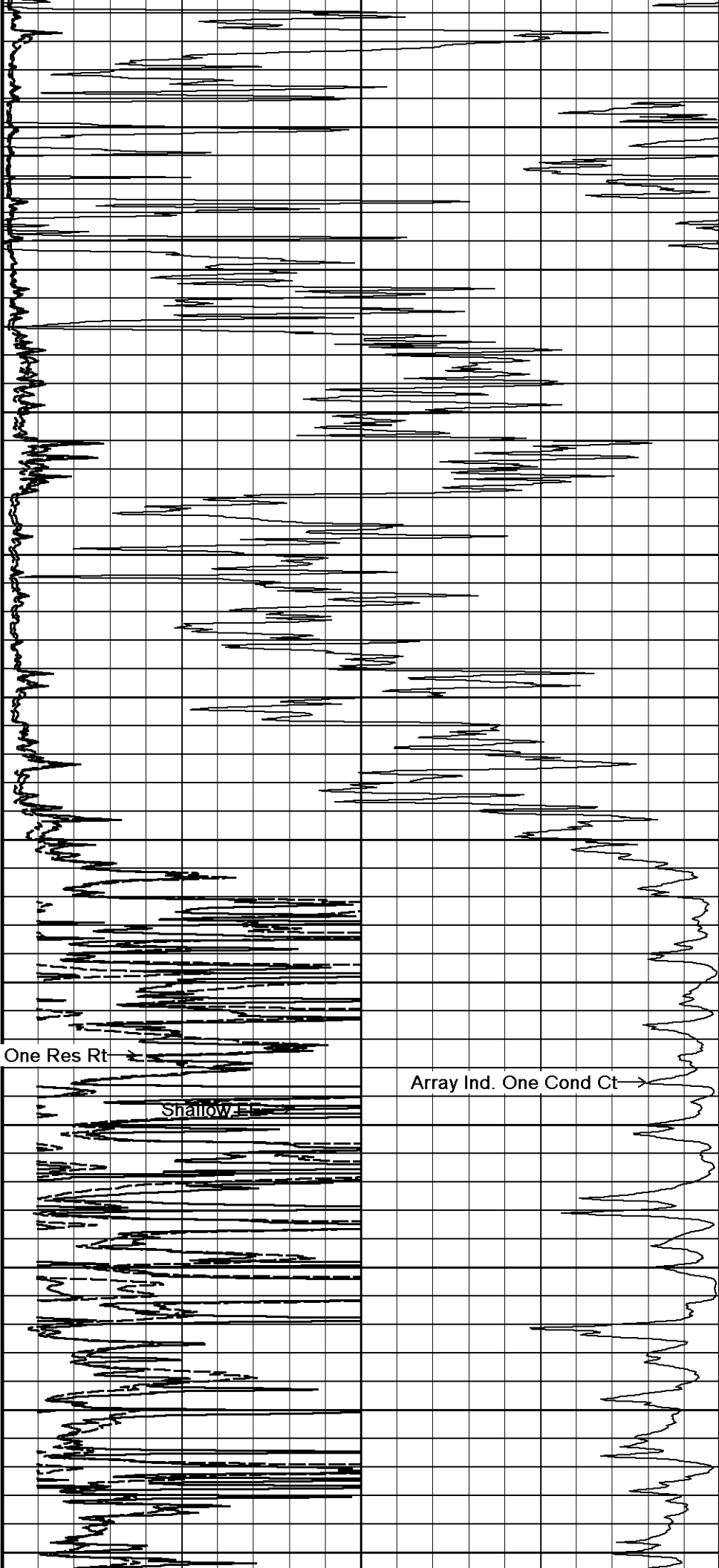
1600





98°
1700
98°
1800
99°
1900
100°
2000
101°
2100
102°
2200

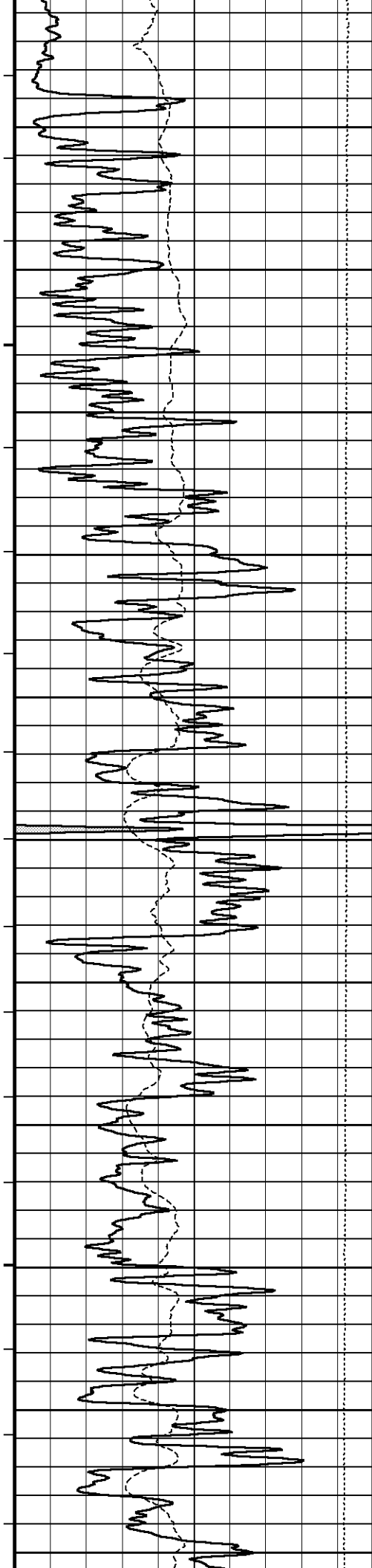
Array Ind. One Res Rt



Array Ind. One Cond Ct

Spontaneous Potential
Gamma Ray
DST Uphole Tension

Shallow



101°

2300

102°

2400

103°

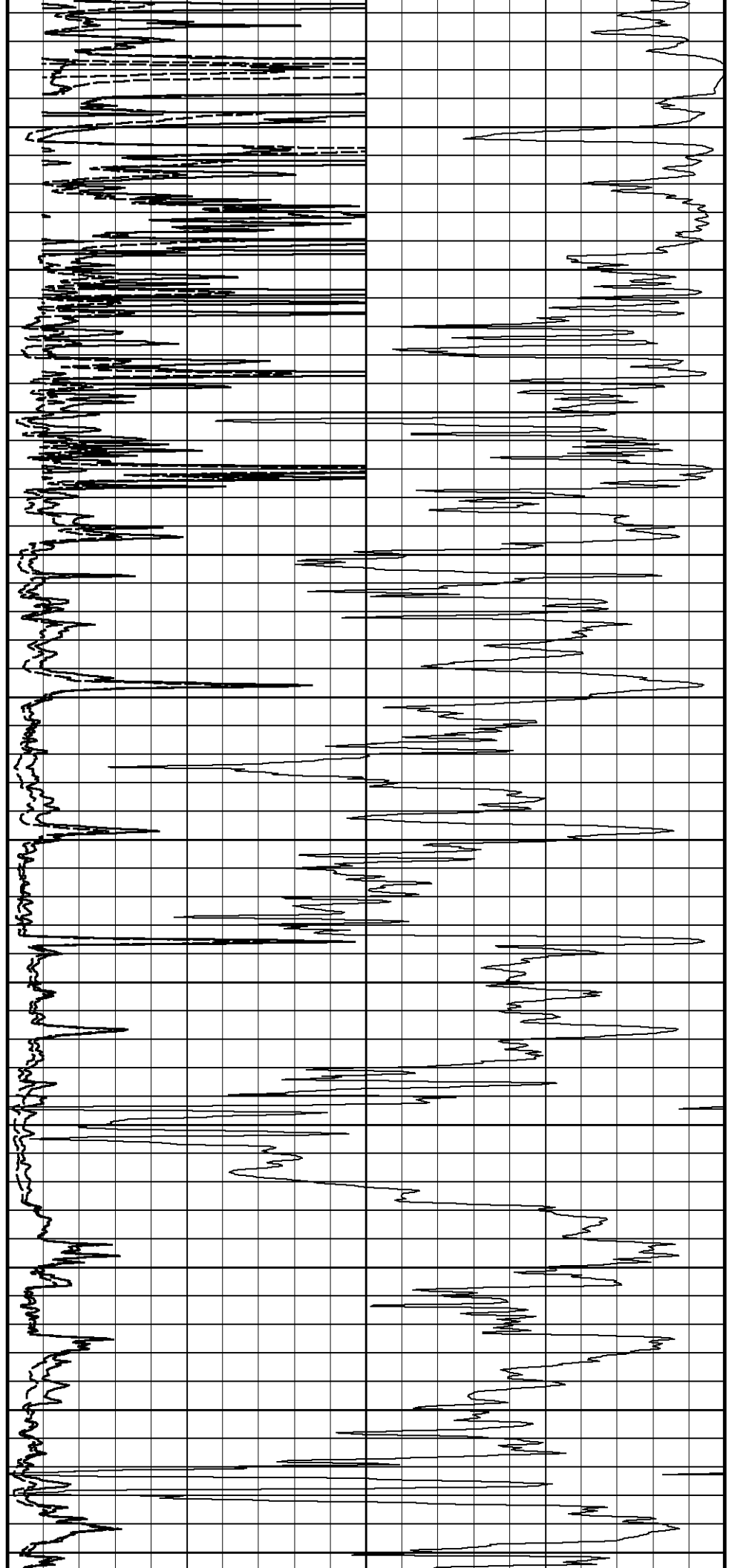
2500

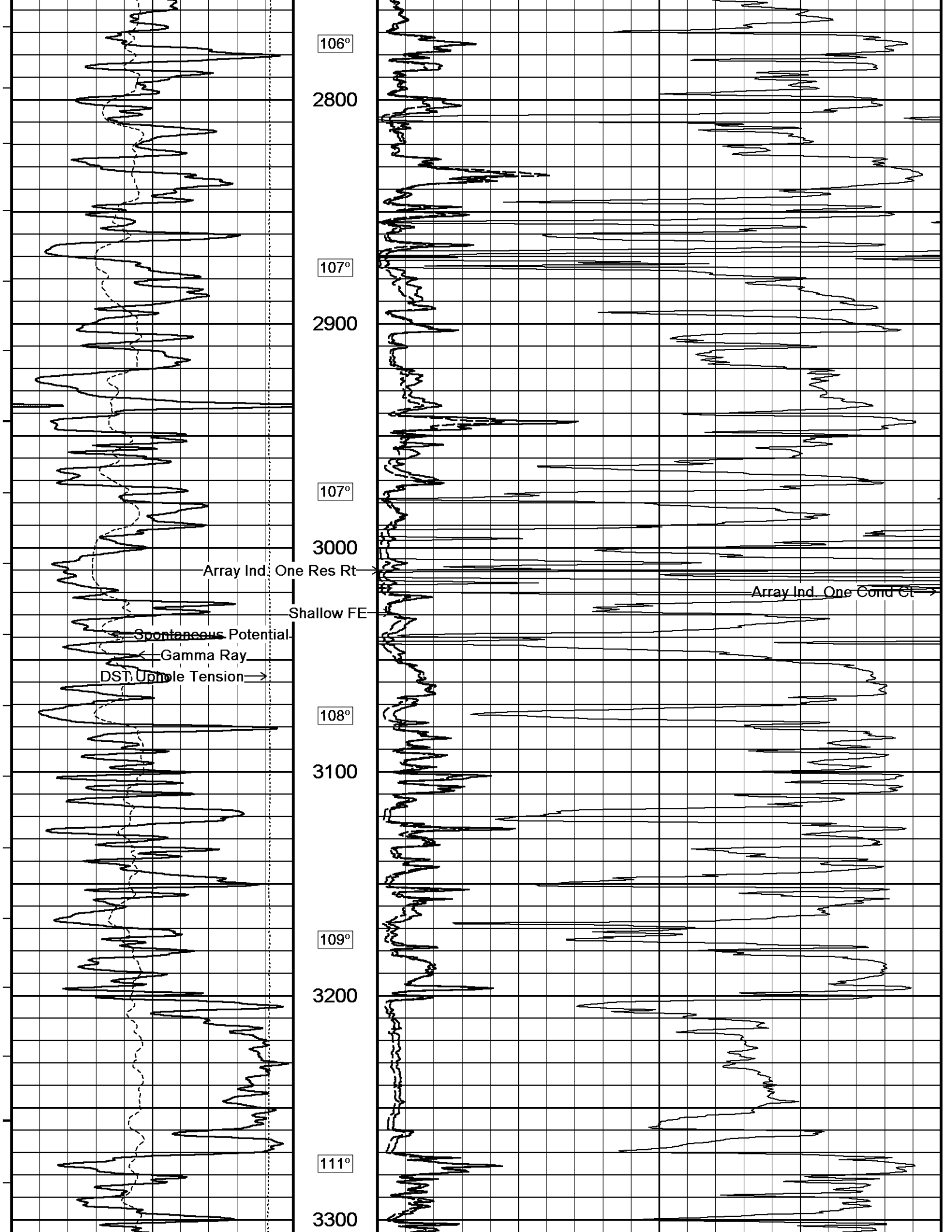
104°

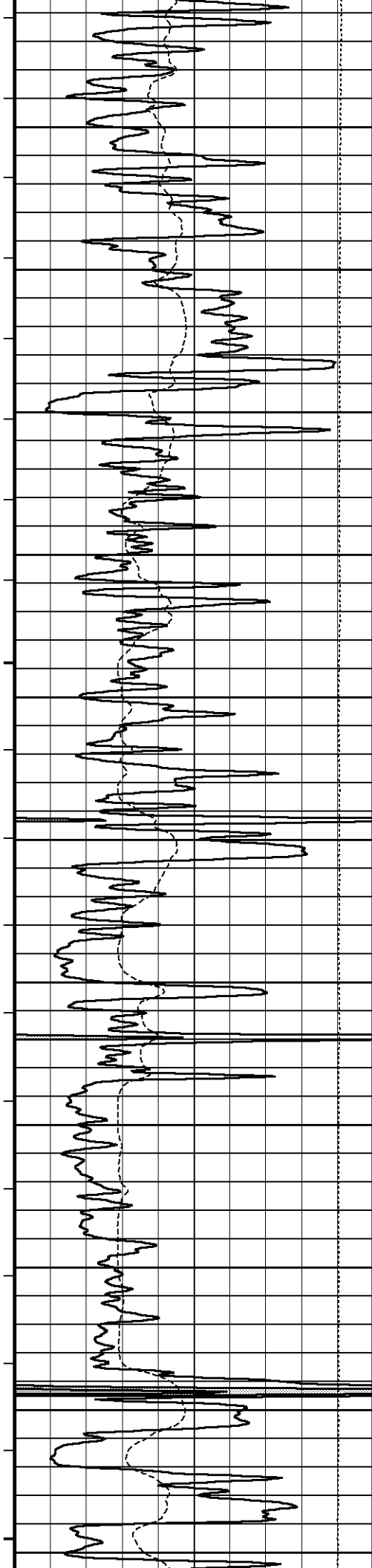
2600

105°

2700







112°

3400

112°

3500

113°

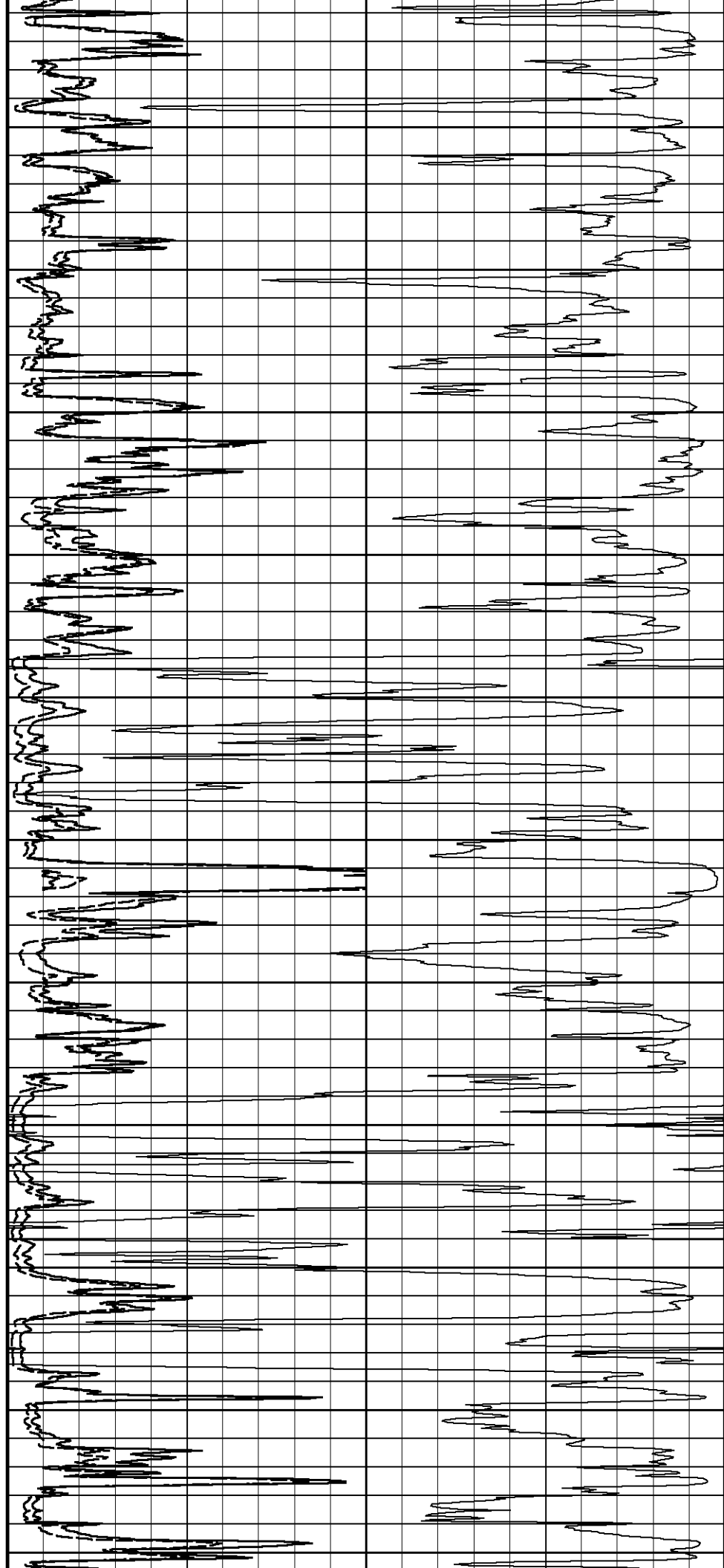
3600

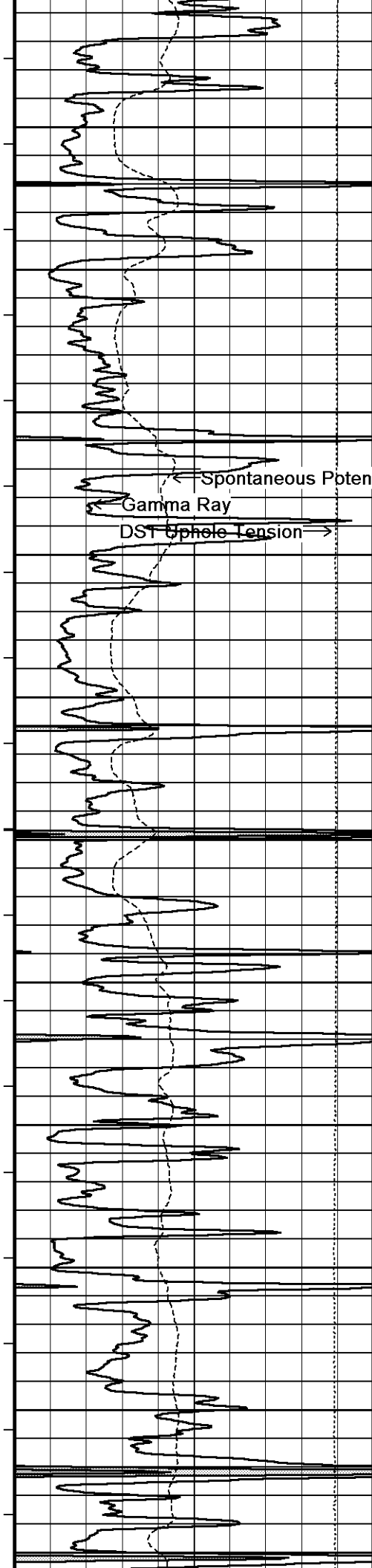
114°

3700

115°

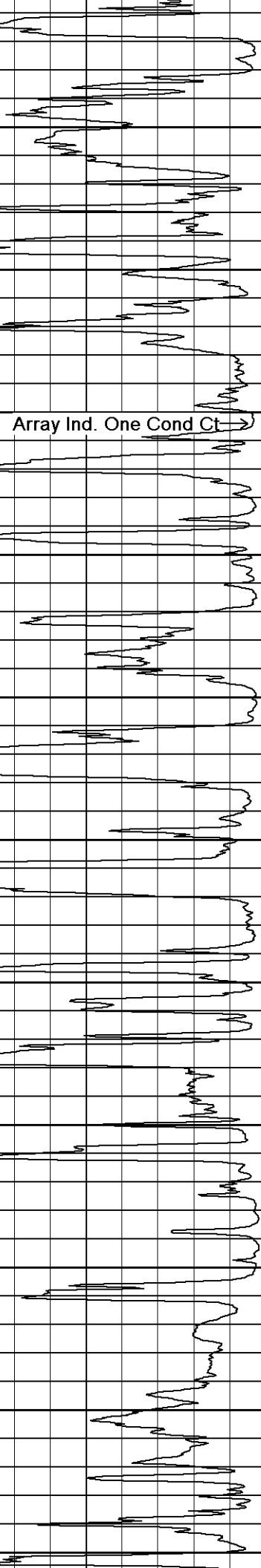
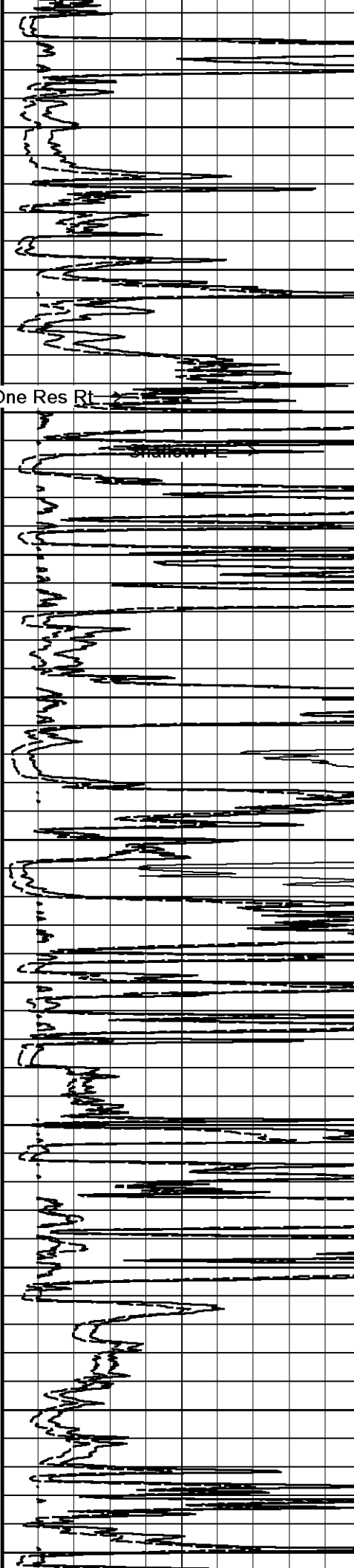
3800



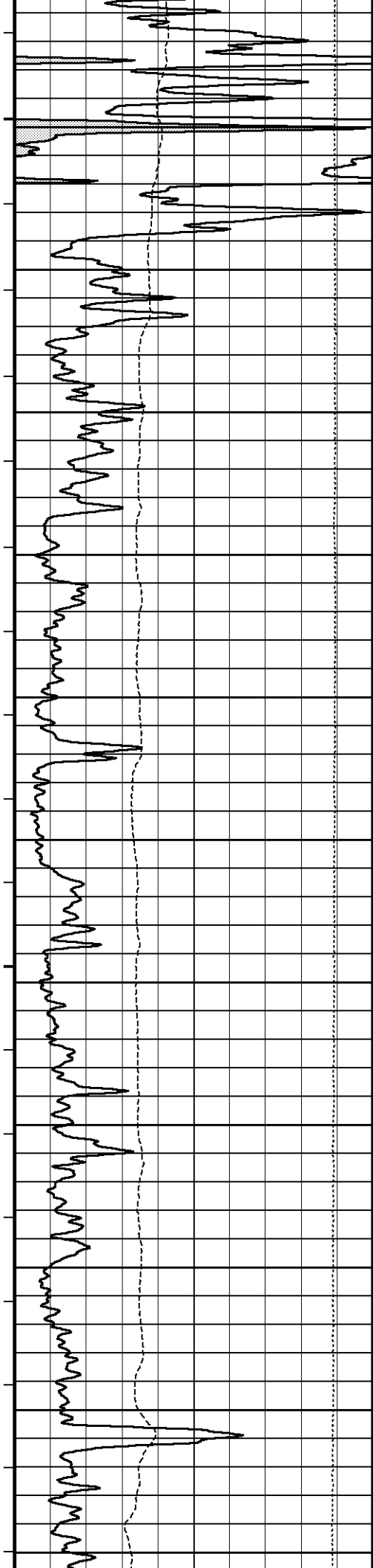


116°
3900
117°
4000
118°
4100
119°
4200
120°
4300
121°
4400

Array Ind. One Res Rt



Array Ind. One Cond Ct



122°

4500

123°

4600

124°

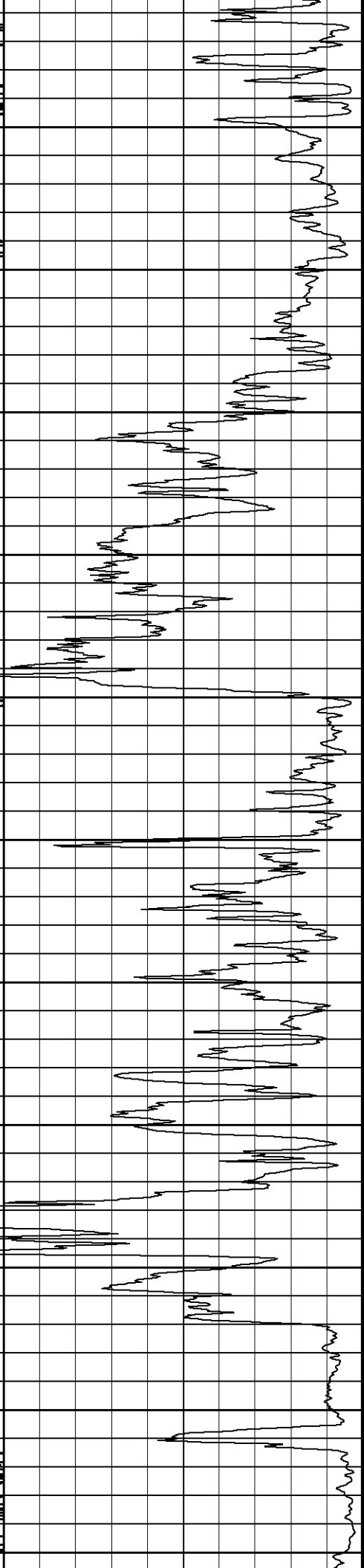
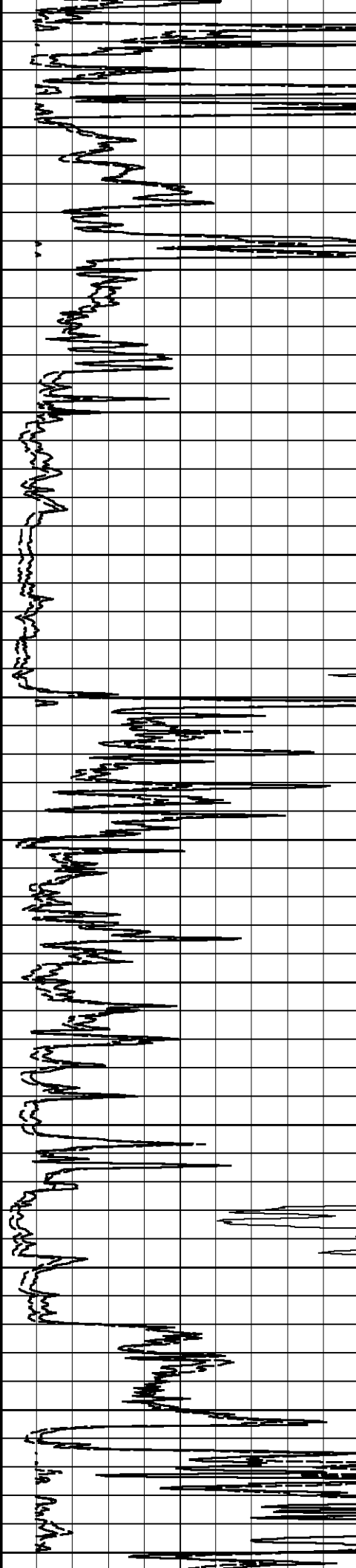
4700

125°

4800

127°

4900





Borehole
Temp in
deg F

Replay
Scale
1:240

782
Casing
Shoe

800

91°

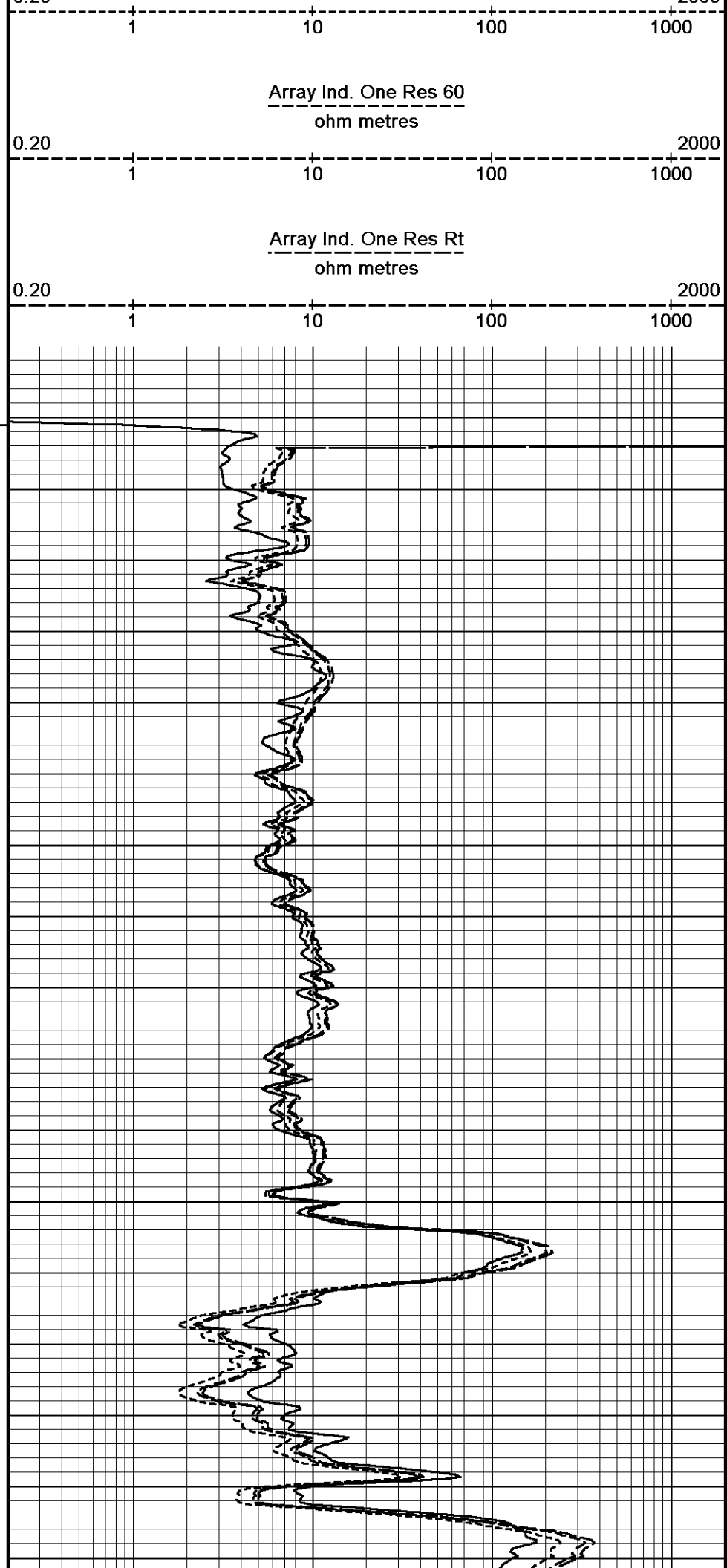
850

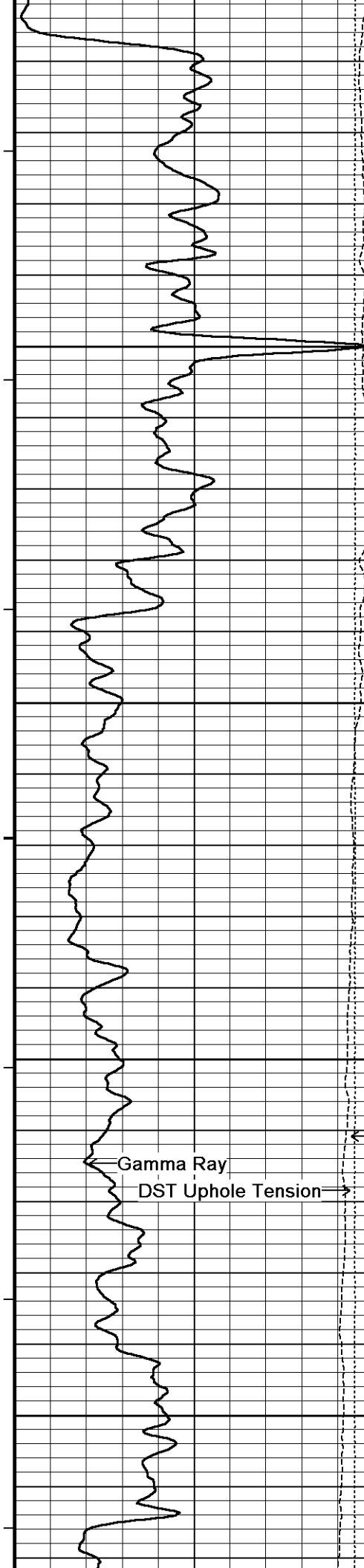
92°

900

92°

950





92°

1000

92°

1050

93°

Array Ind. One Res Rt

Arr1100 One Res 60

Array Ind. One Res 40

Shallow FF

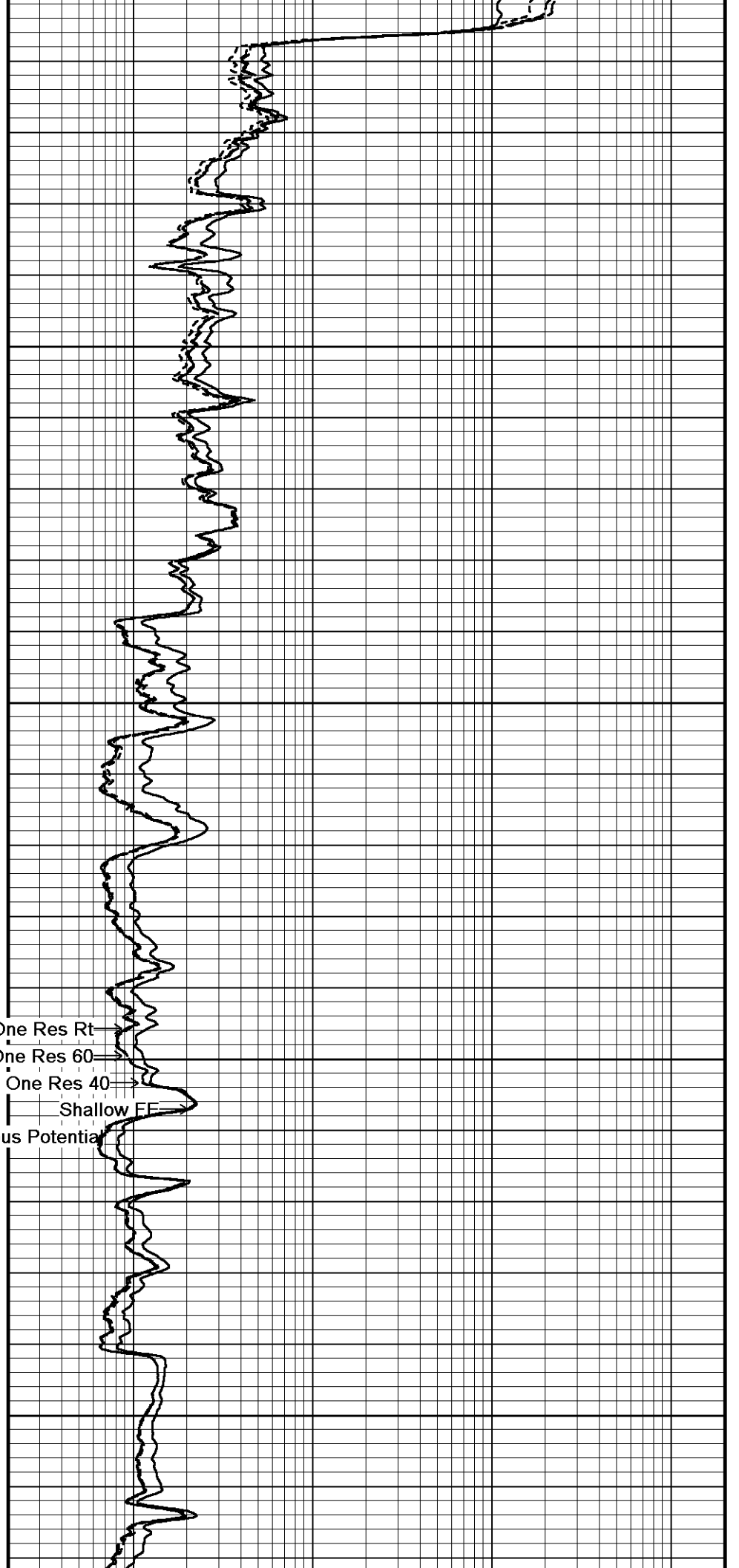
Spontaneous Potential

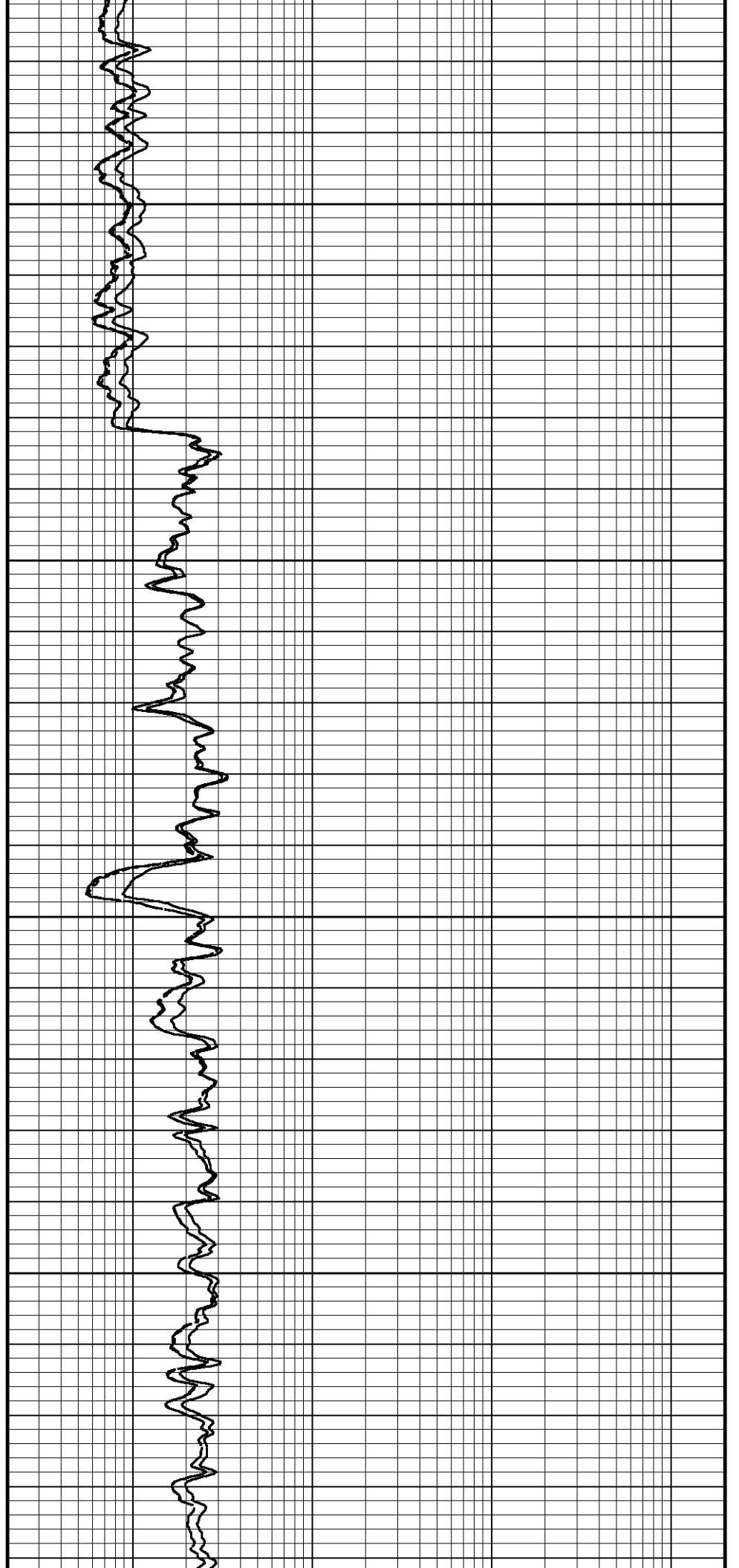
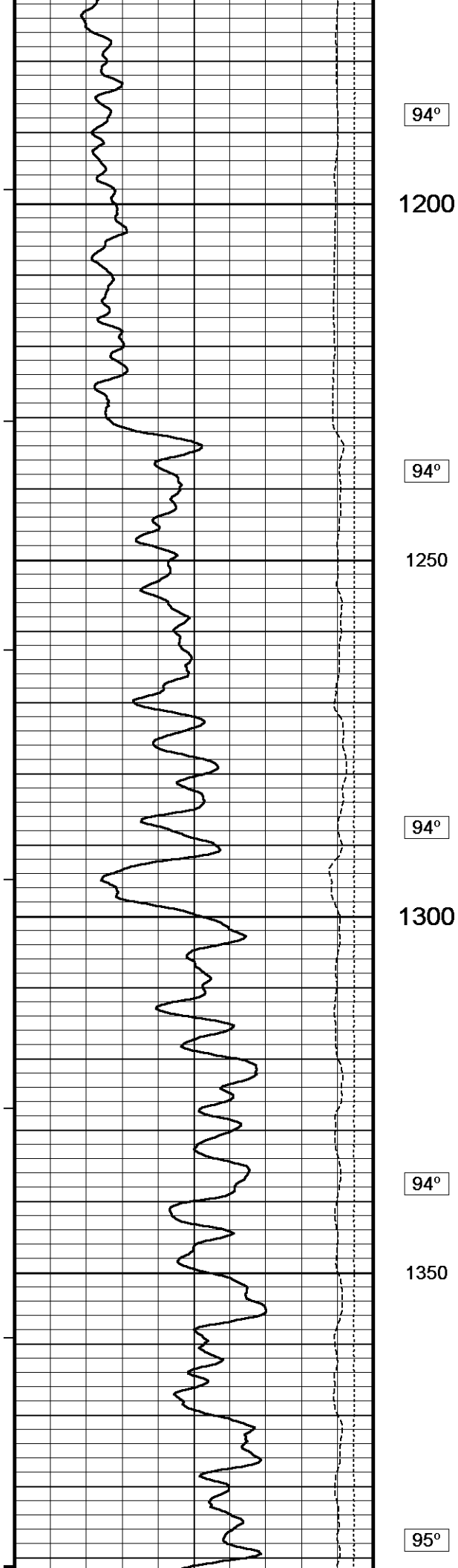
Gamma Ray

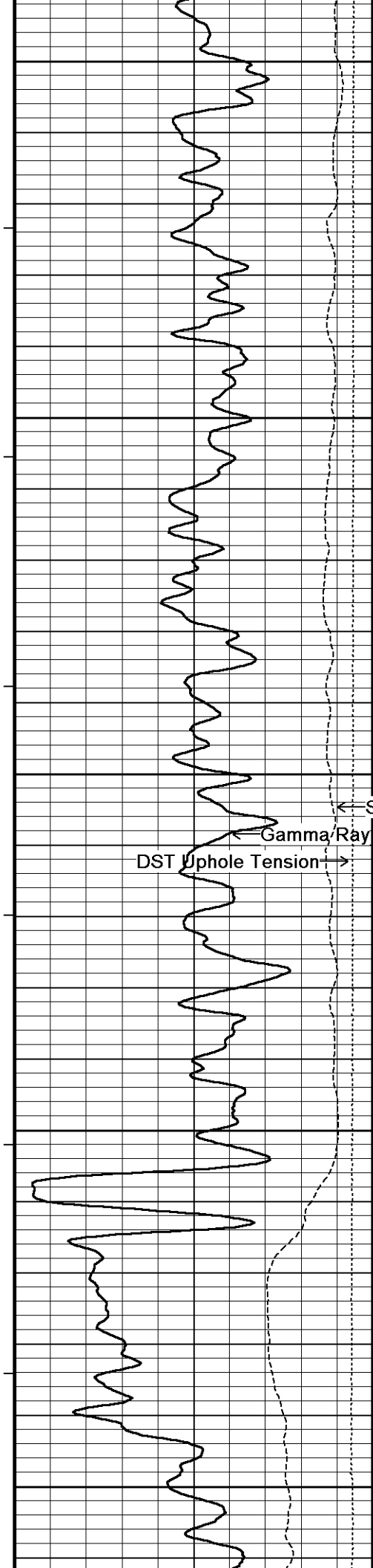
DST Uphole Tension

93°

1150







1400

95°

1450

96°

Array Ind. One Res Rt

Array Ind. One Res 60

Array Ind. One Res 40

1500

Shallow FE

← Spontaneous Potential

← Gamma Ray

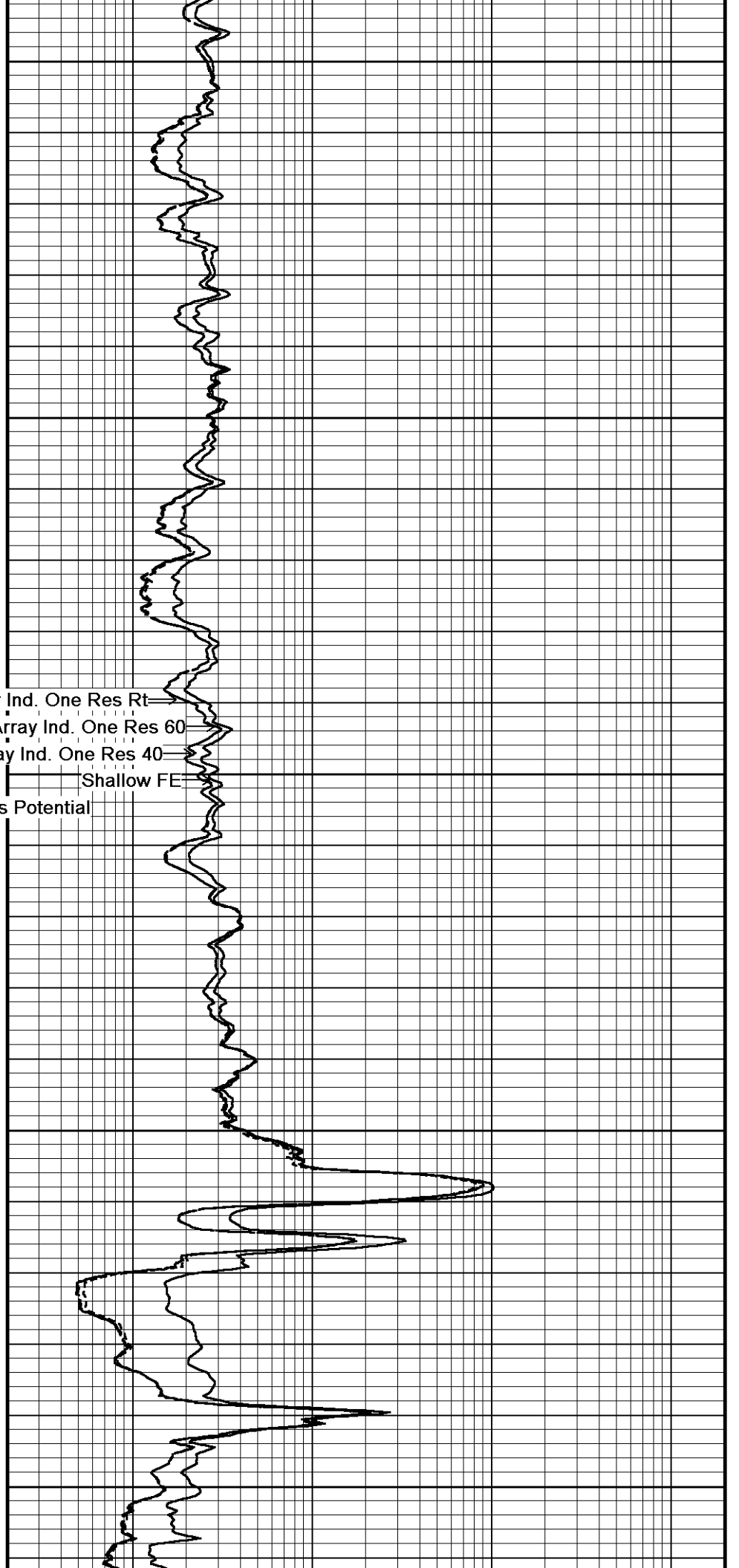
DST Uphole Tension →

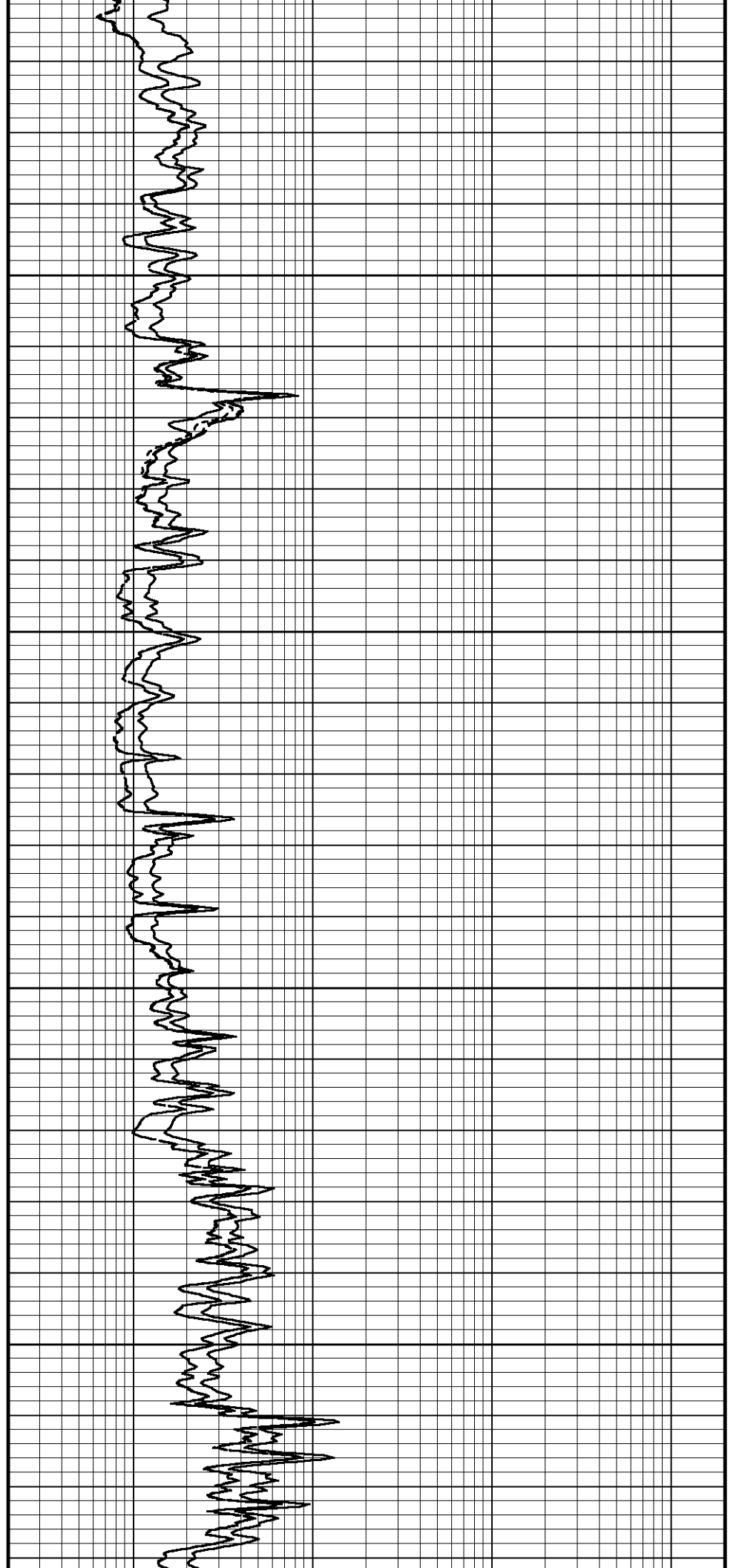
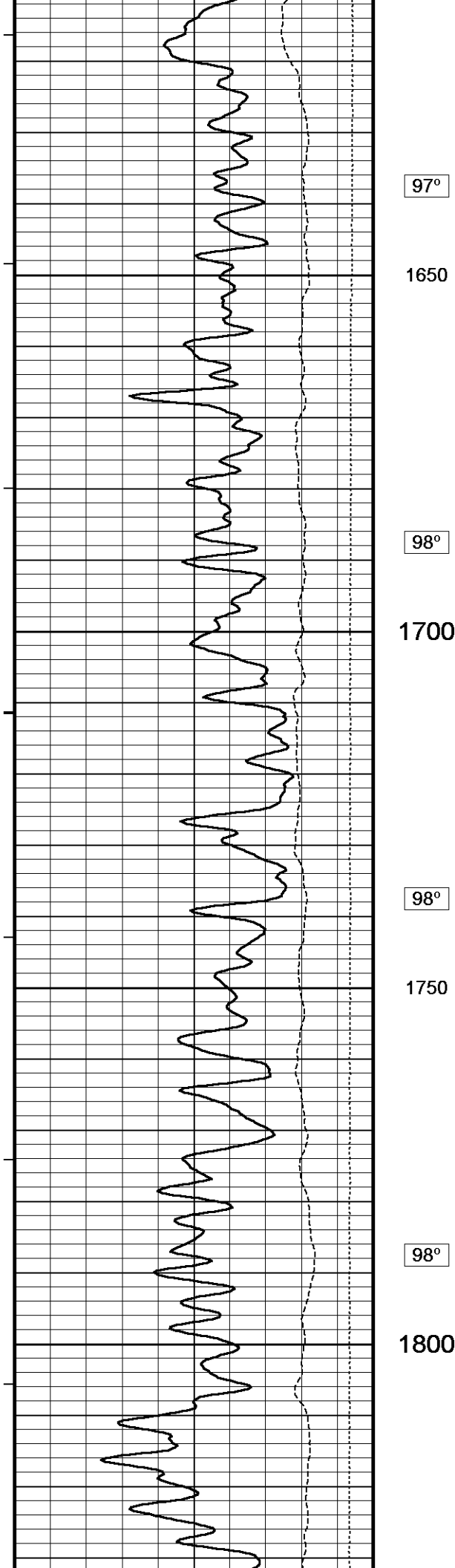
96°

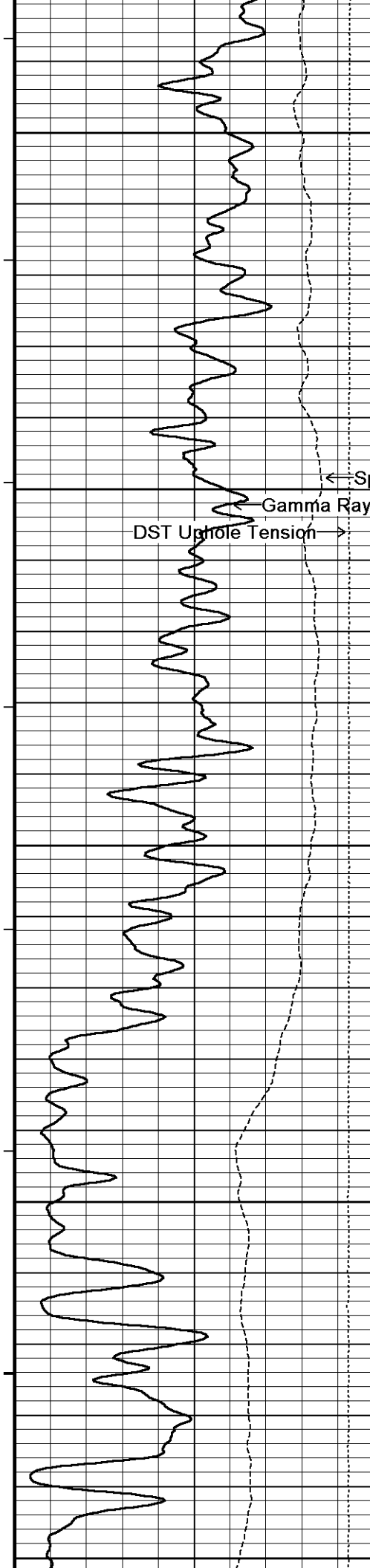
1550

97°

1600

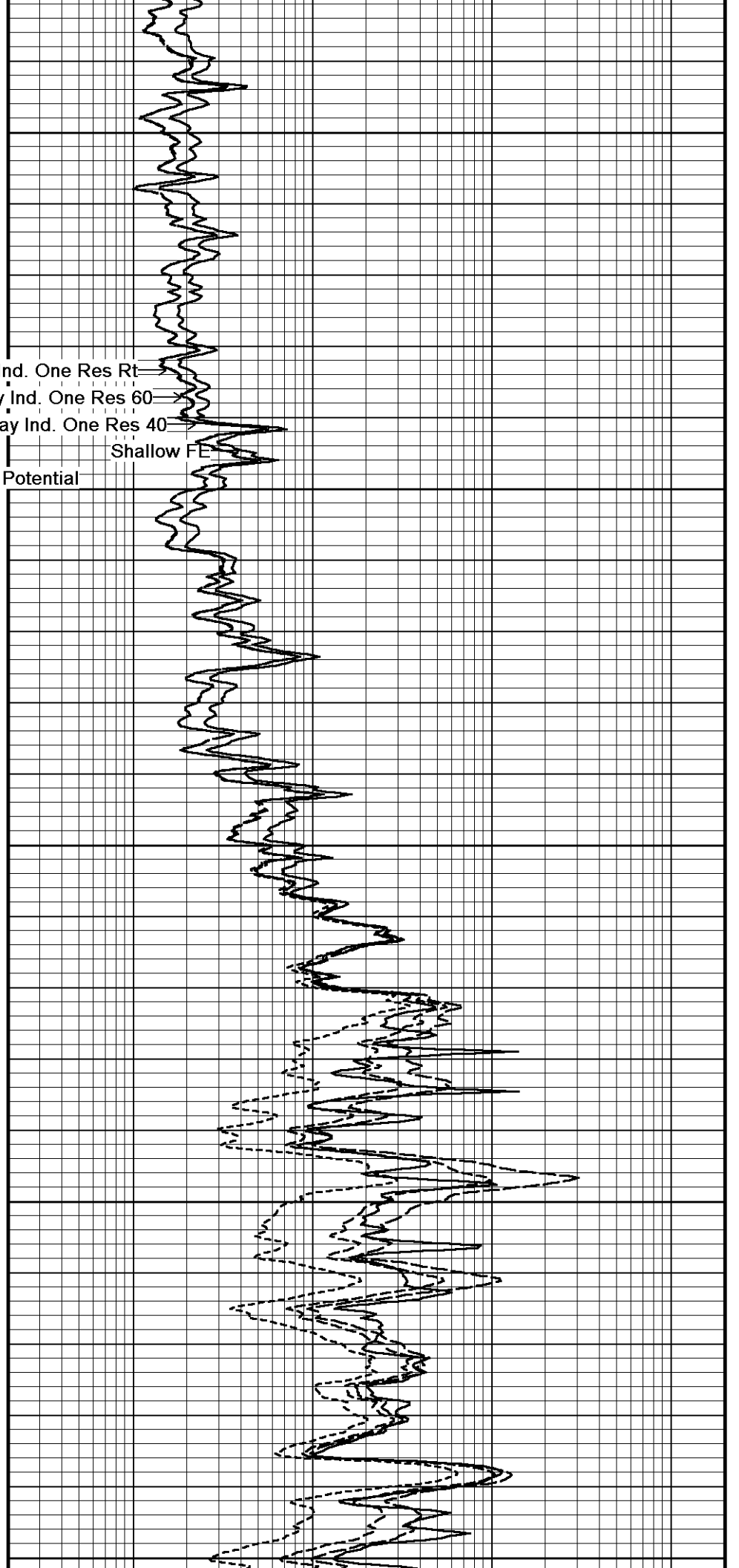


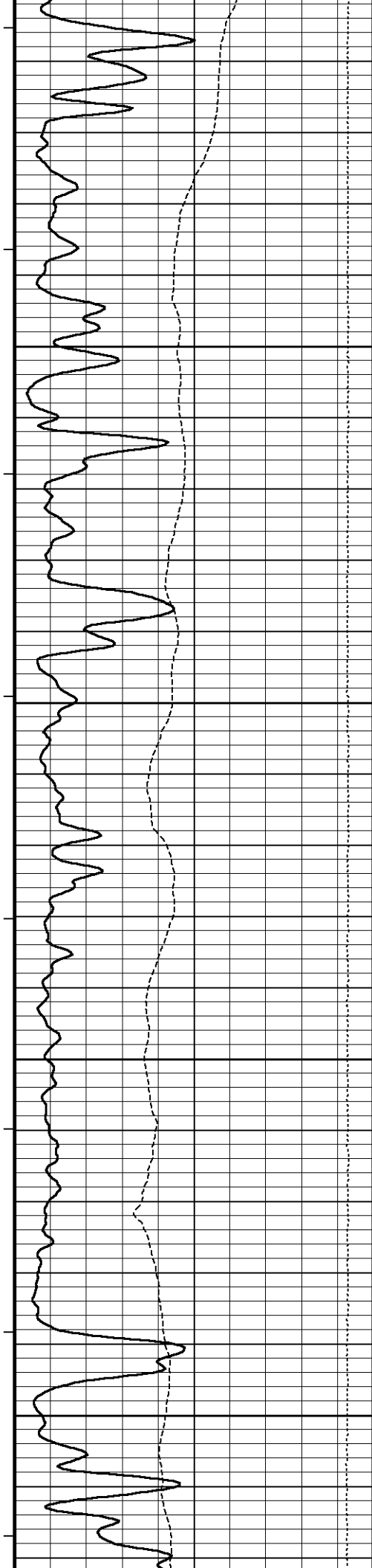




99°
1850
1900
1950
2000
2050

Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spon. Pot
Is Potential





101°

2100

102°

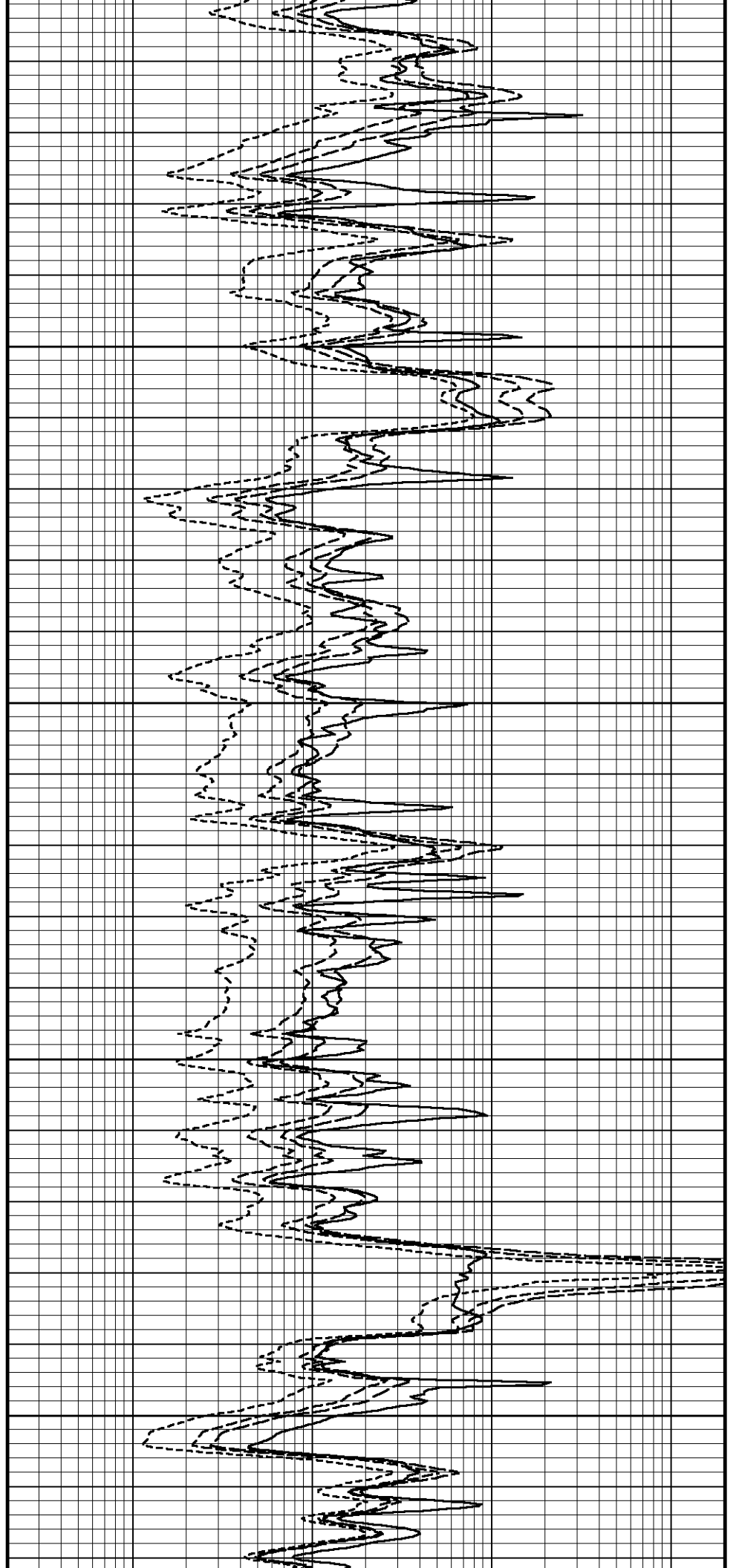
2150

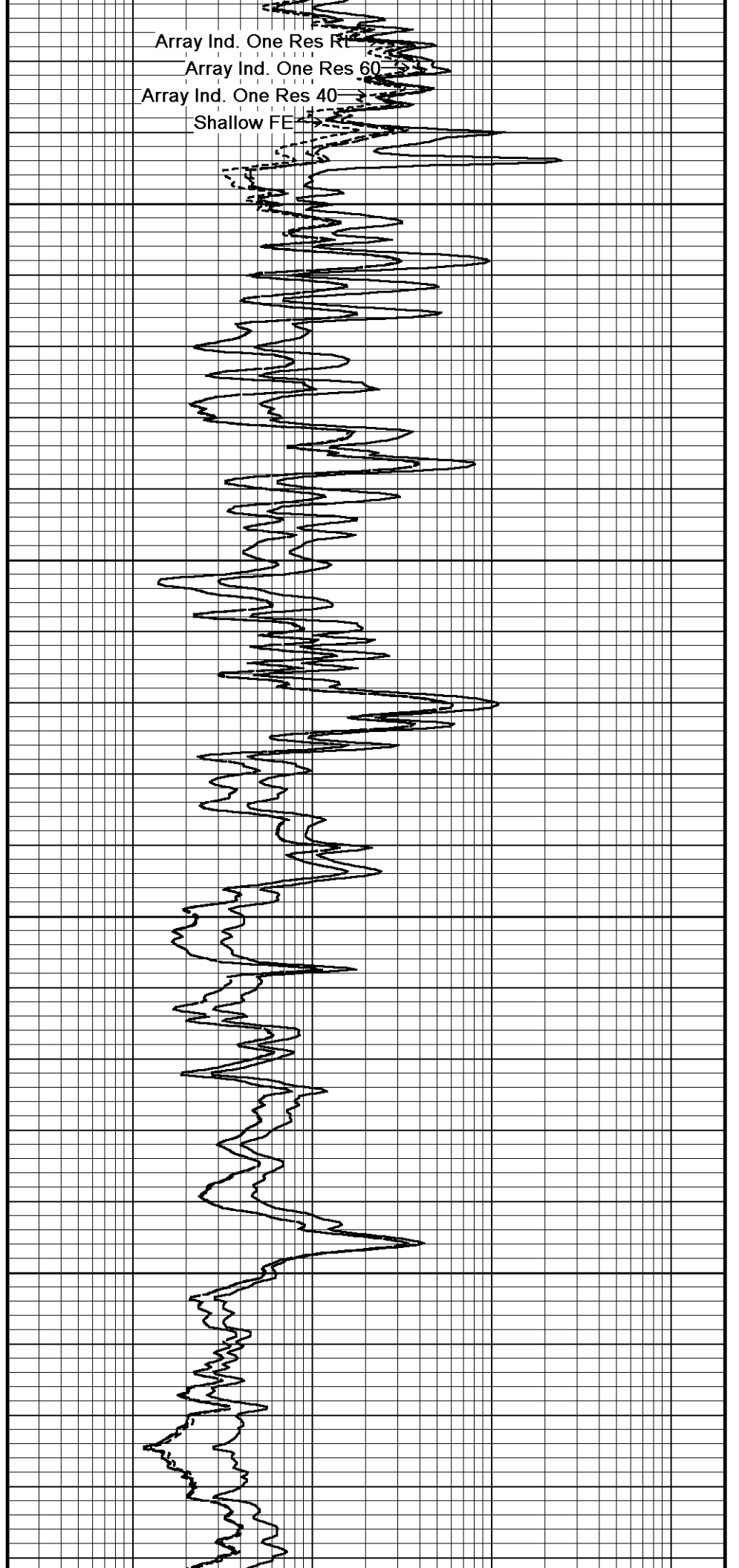
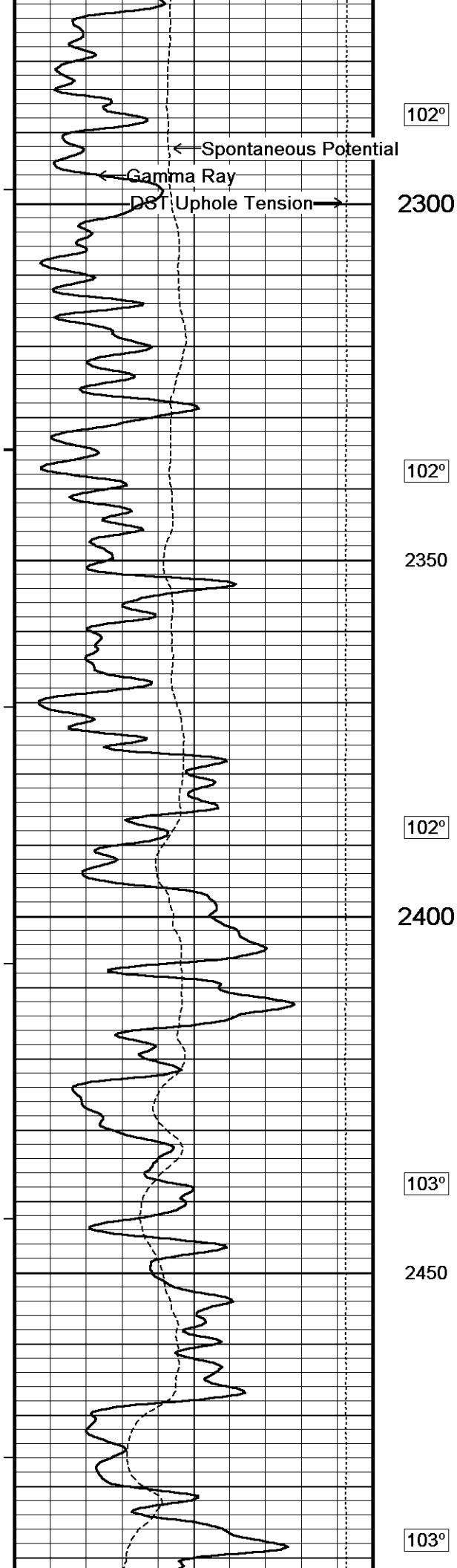
102°

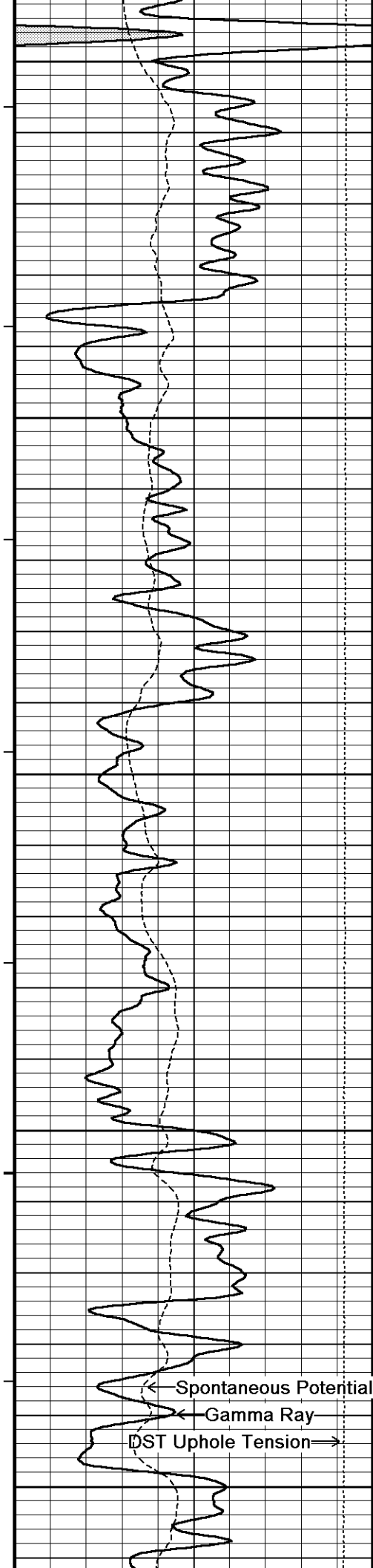
2200

101°

2250







2500

103°

2550

104°

2600

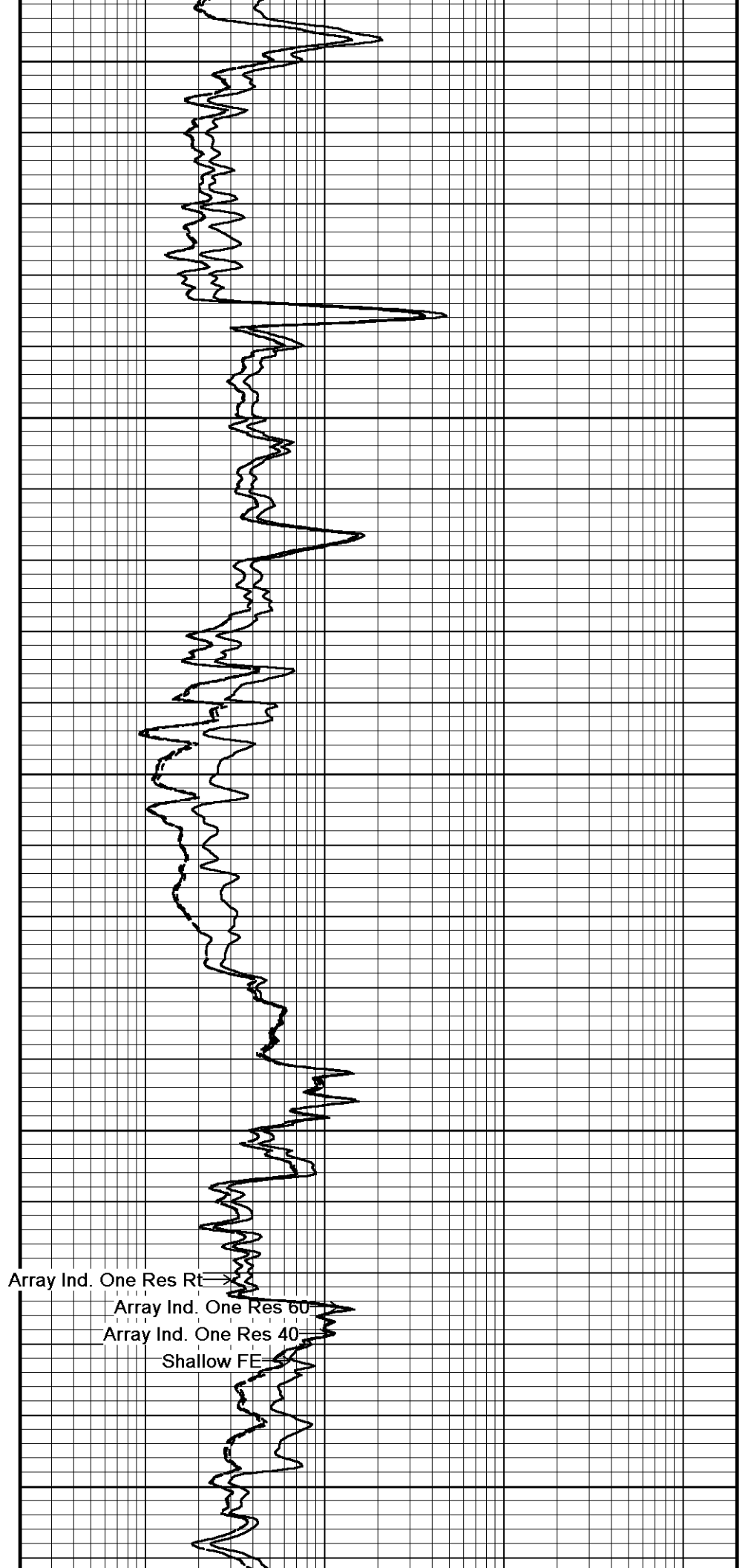
104°

2650

105°

2700

← Spontaneous Potential
← Gamma Ray
DST Uphole Tension →

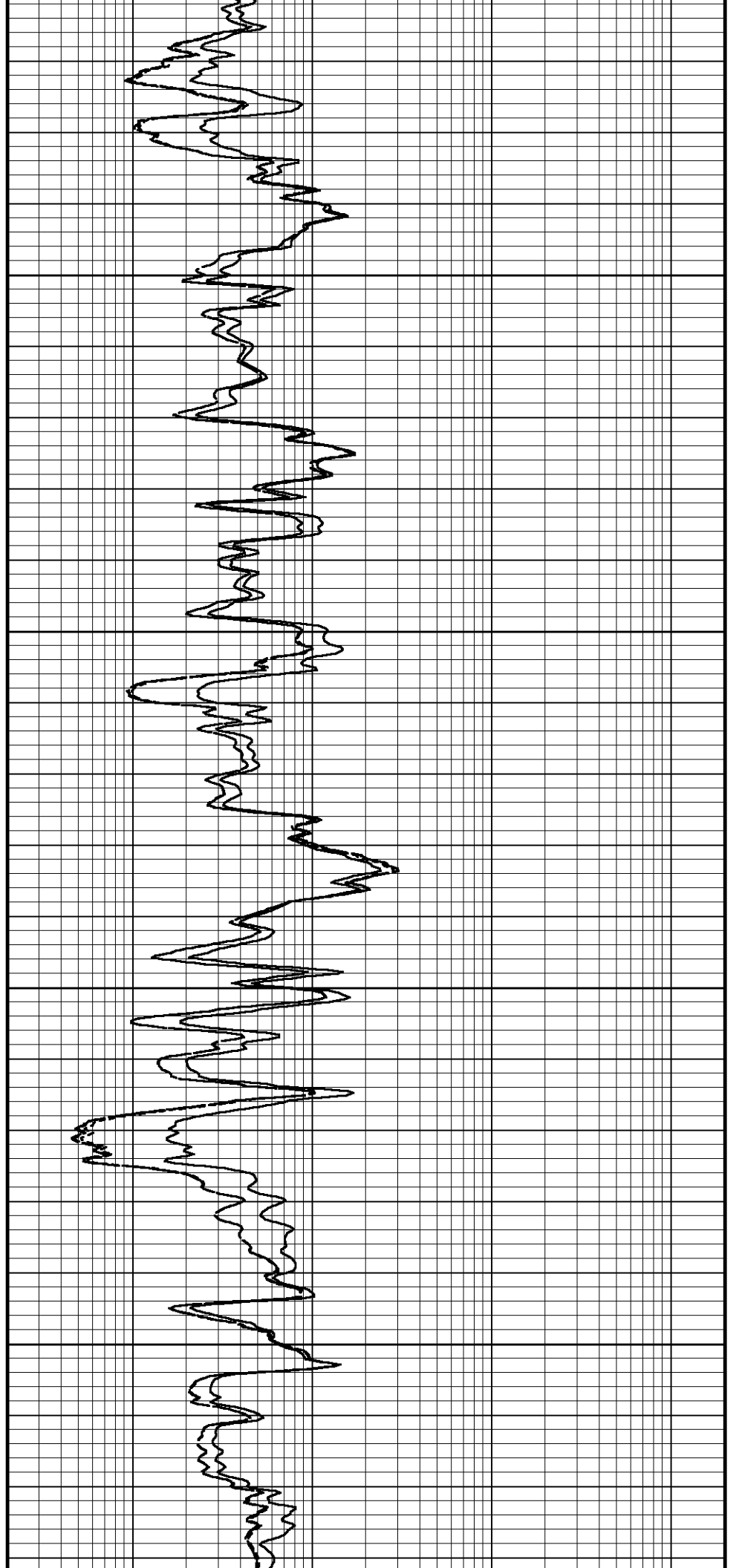
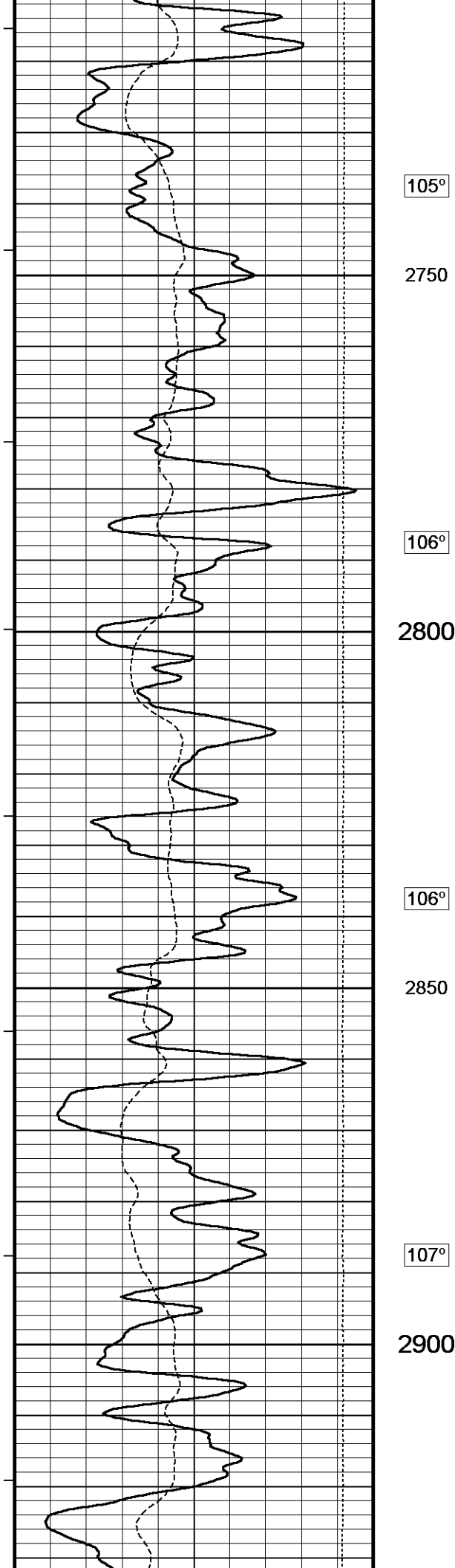


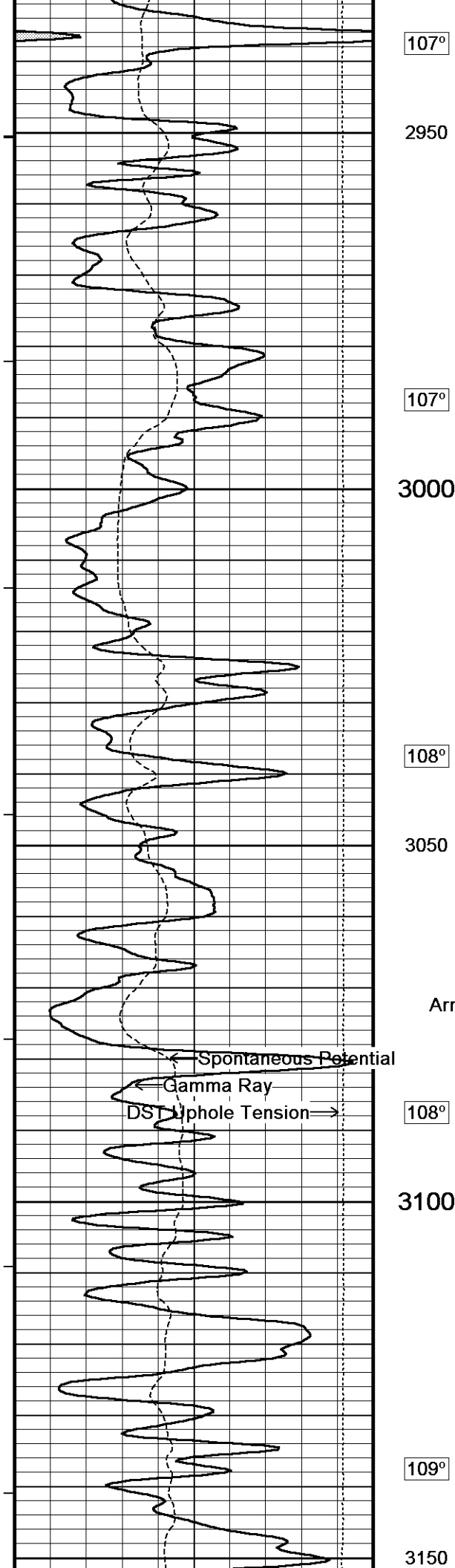
Array Ind. One Res Rt

Array Ind. One Res 60

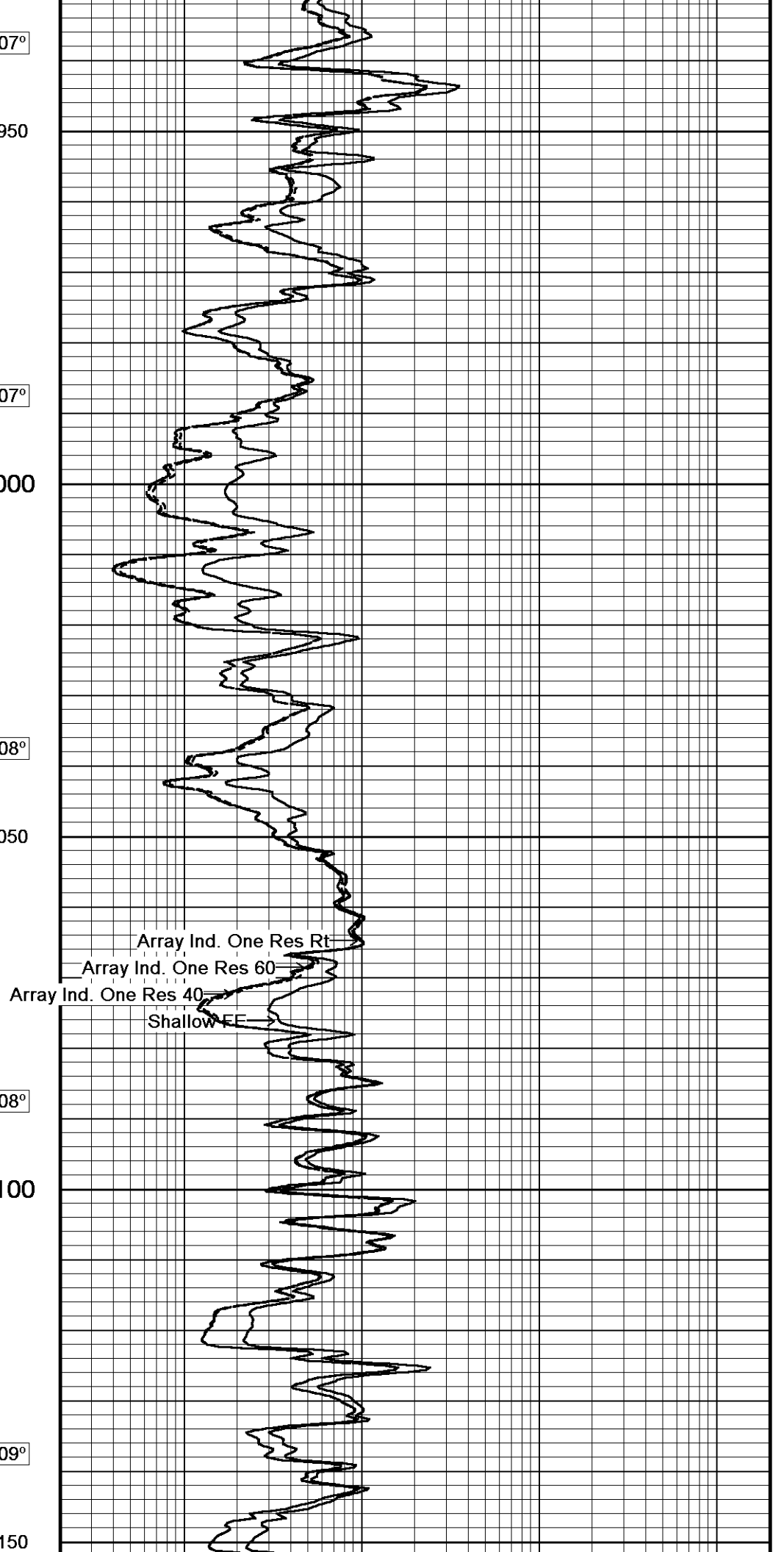
Array Ind. One Res 40

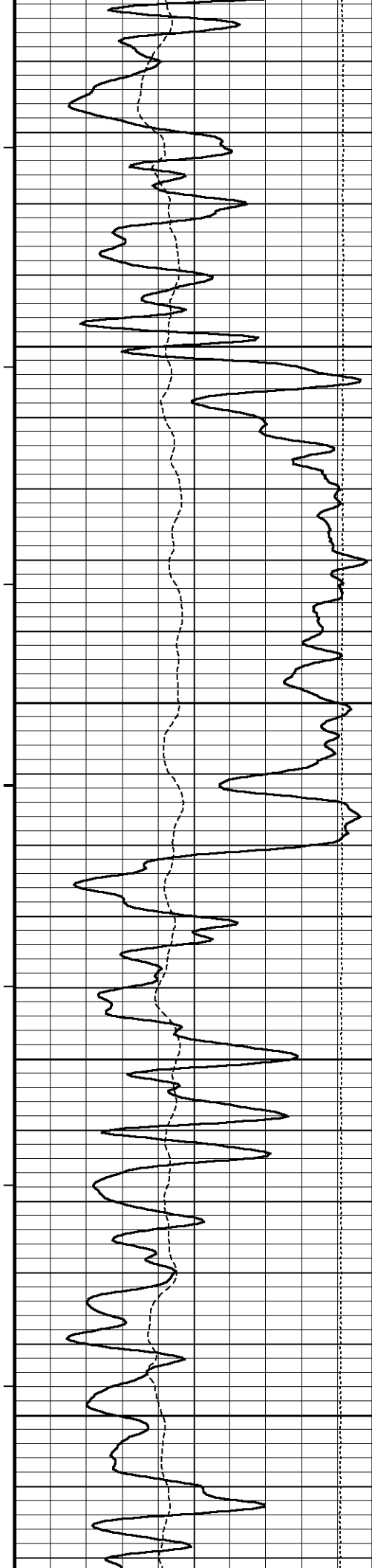
Shallow FE





107°
2950
107°
3000
108°
3050
108°
3100
109°
3150





109°

3200

110°

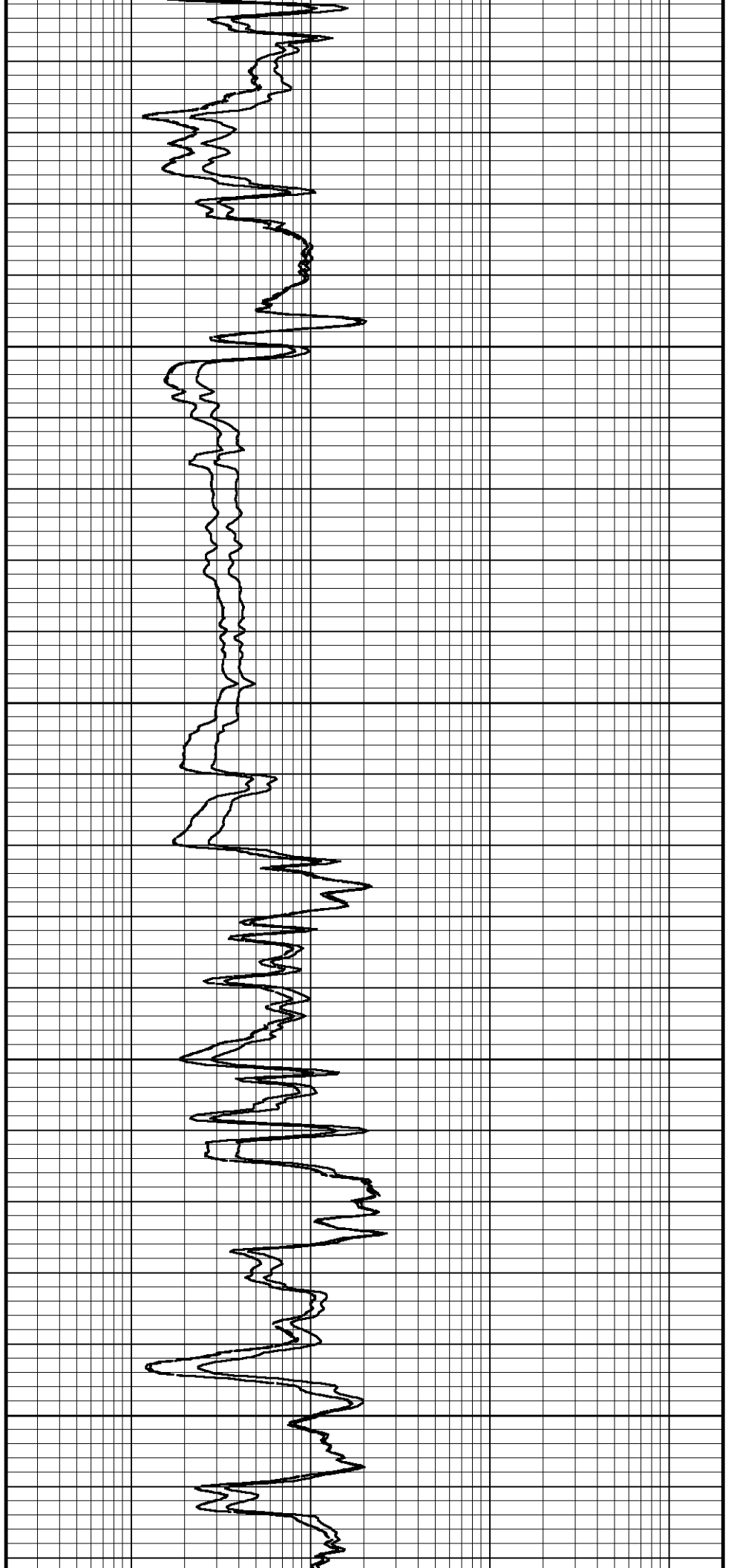
3250

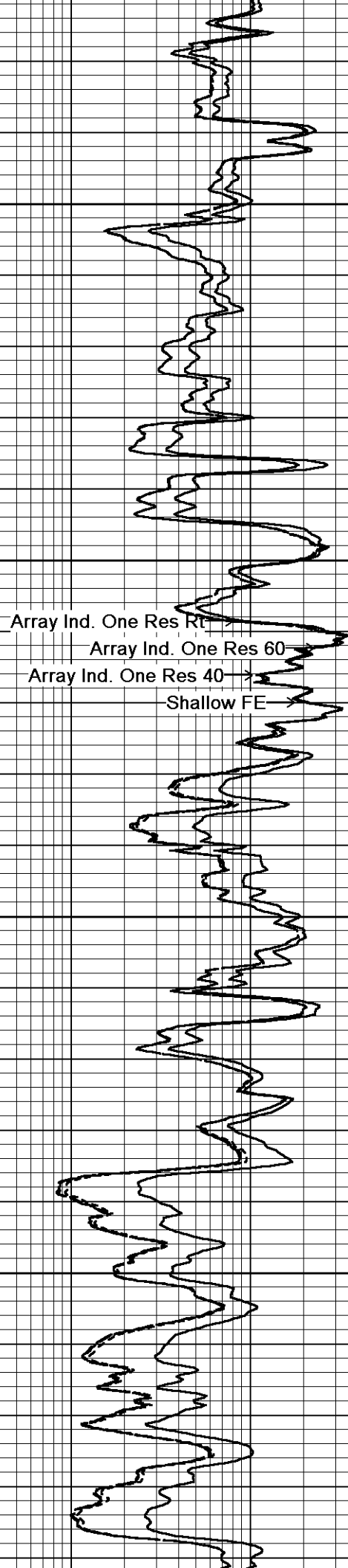
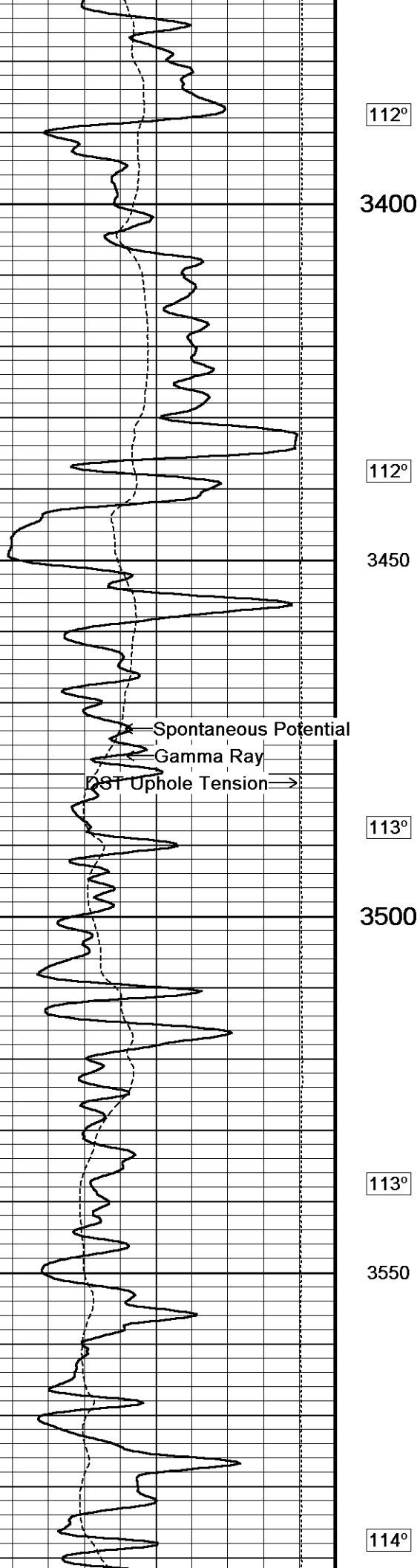
111°

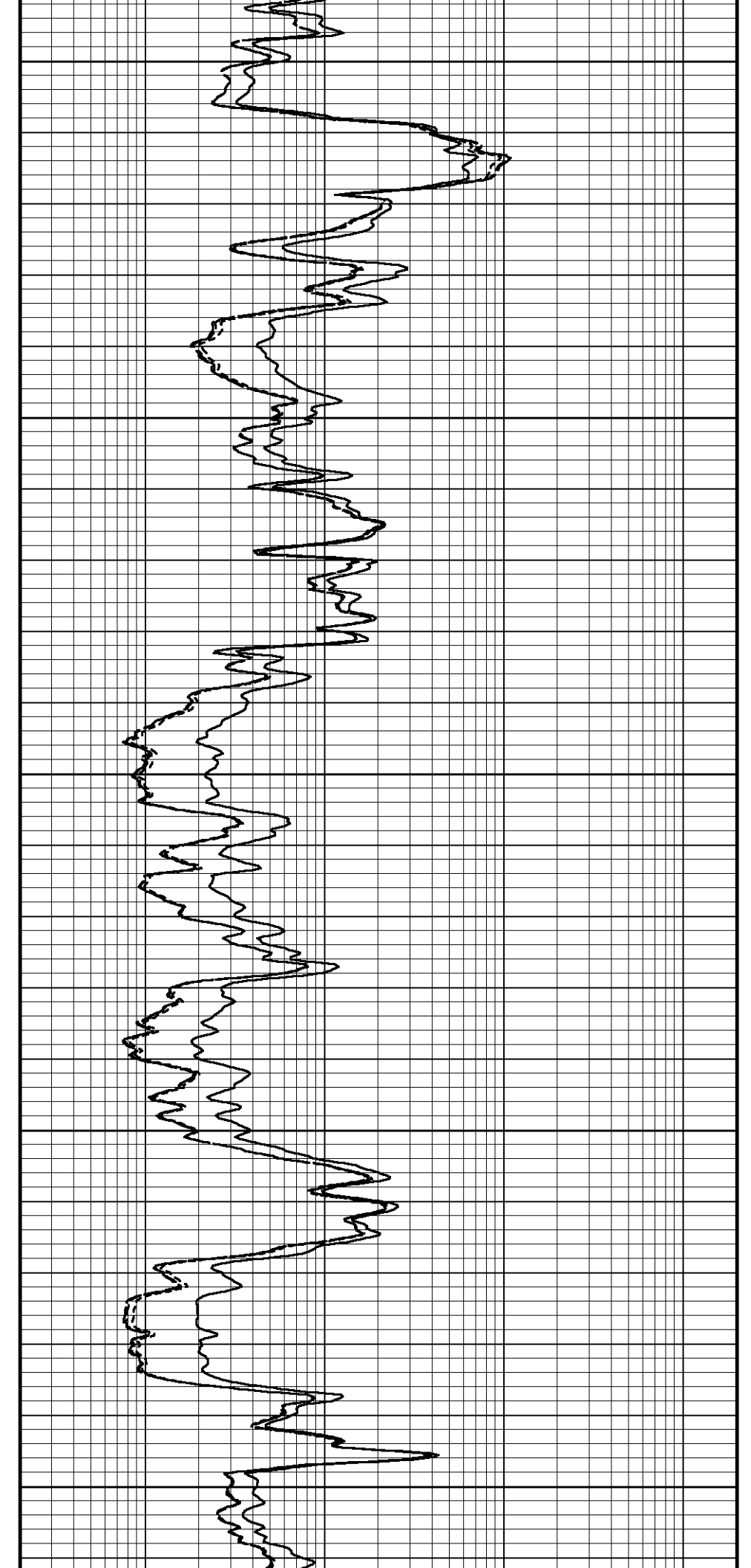
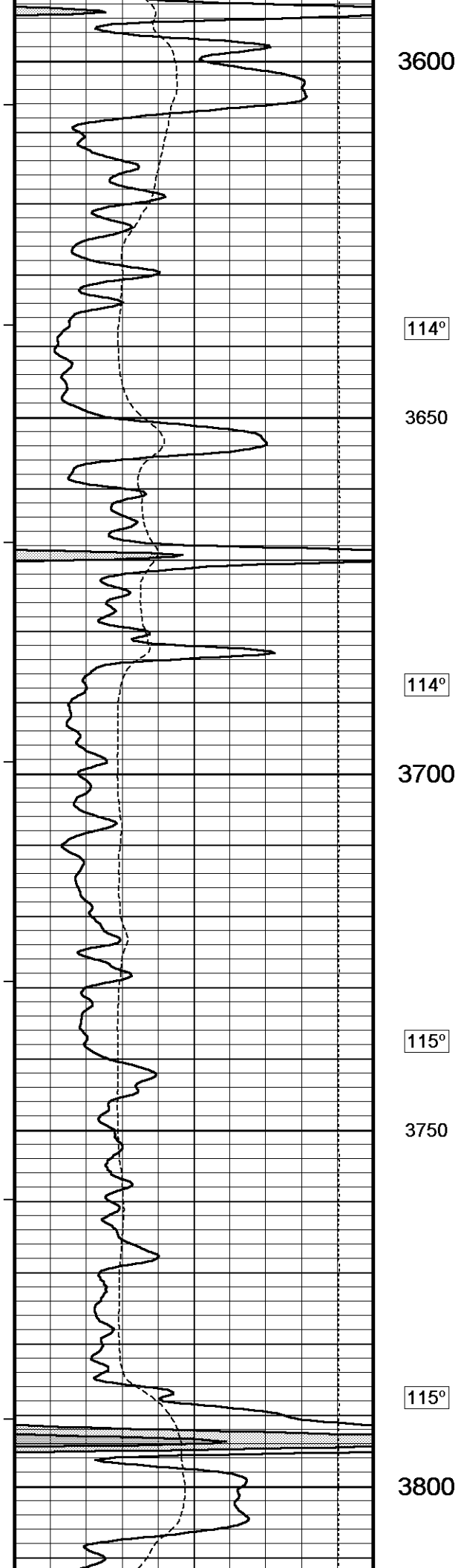
3300

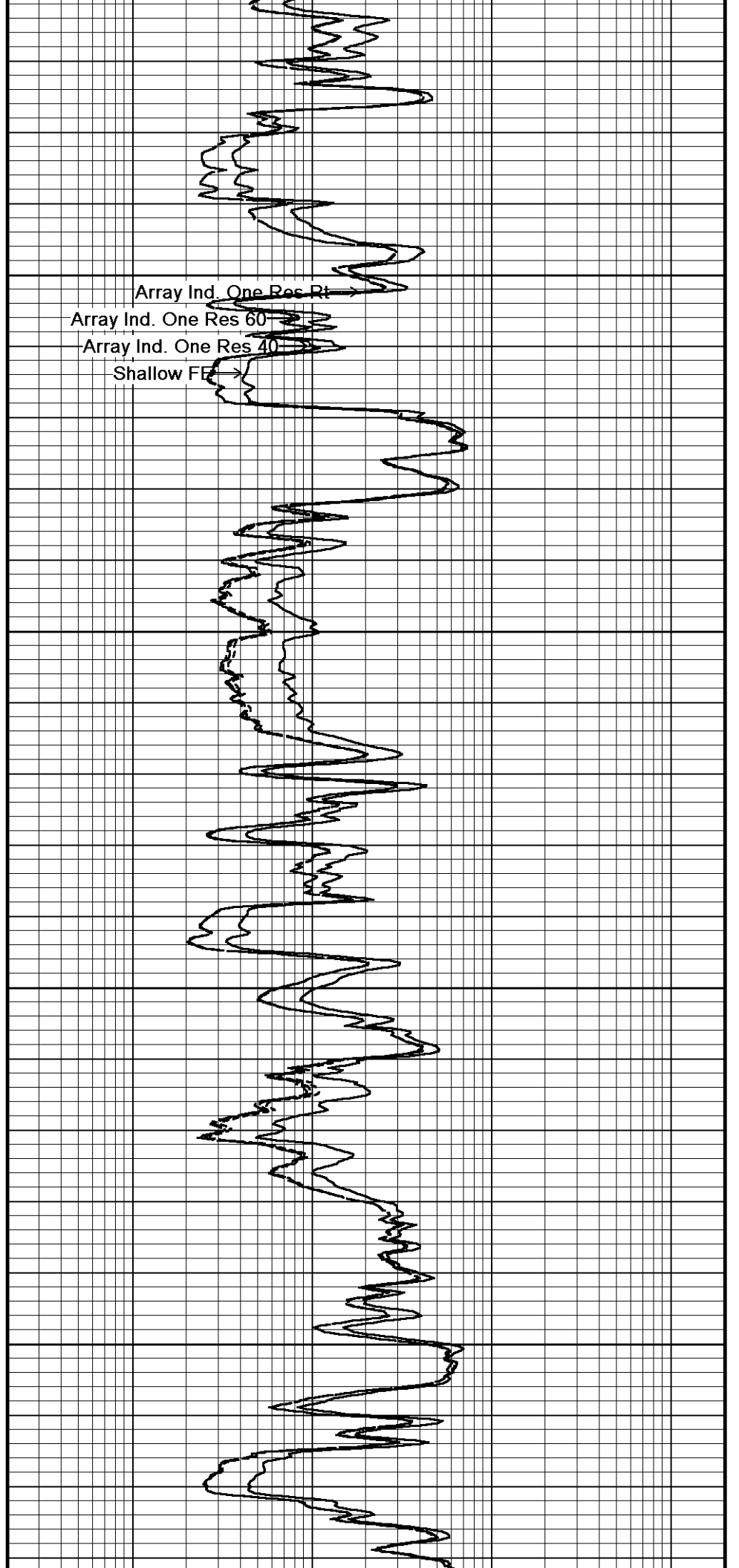
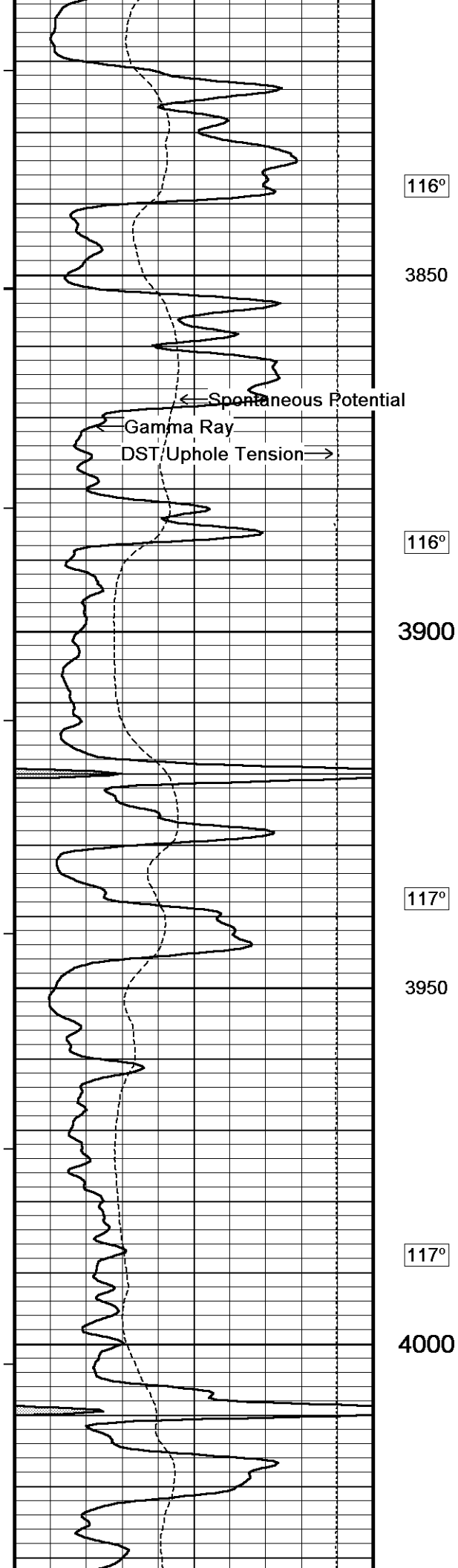
111°

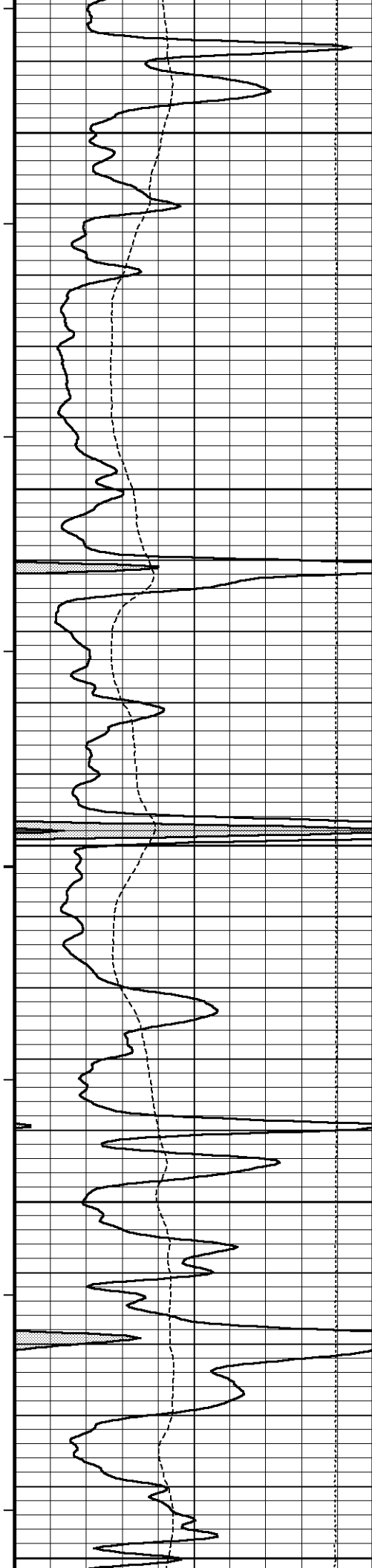
3350











118°

4050

118°

4100

118°

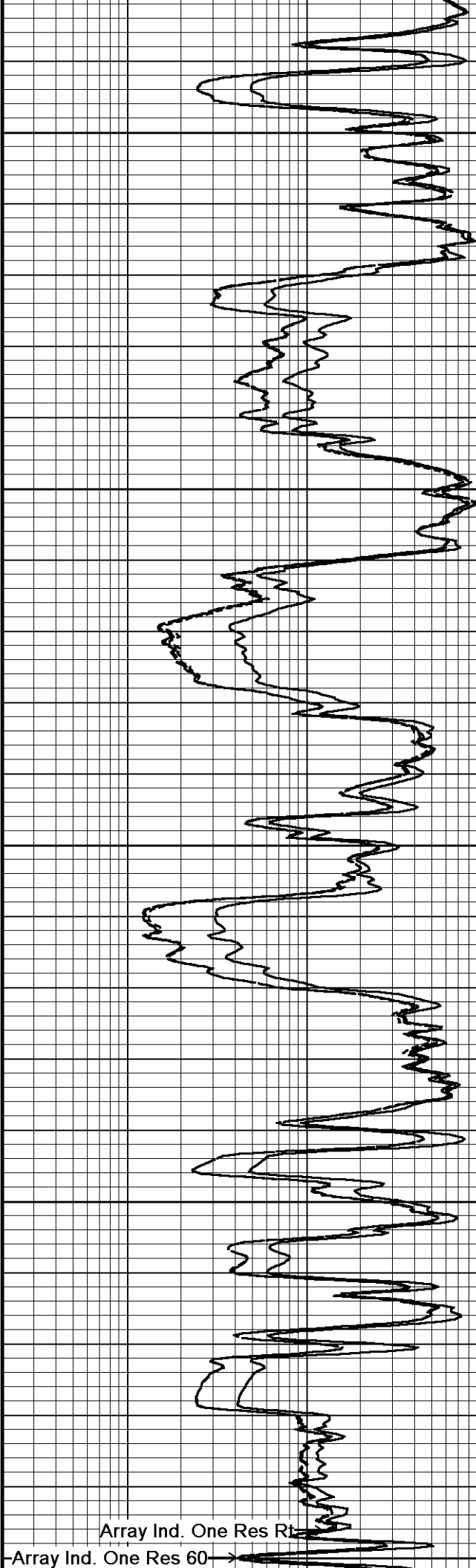
4150

119°

4200

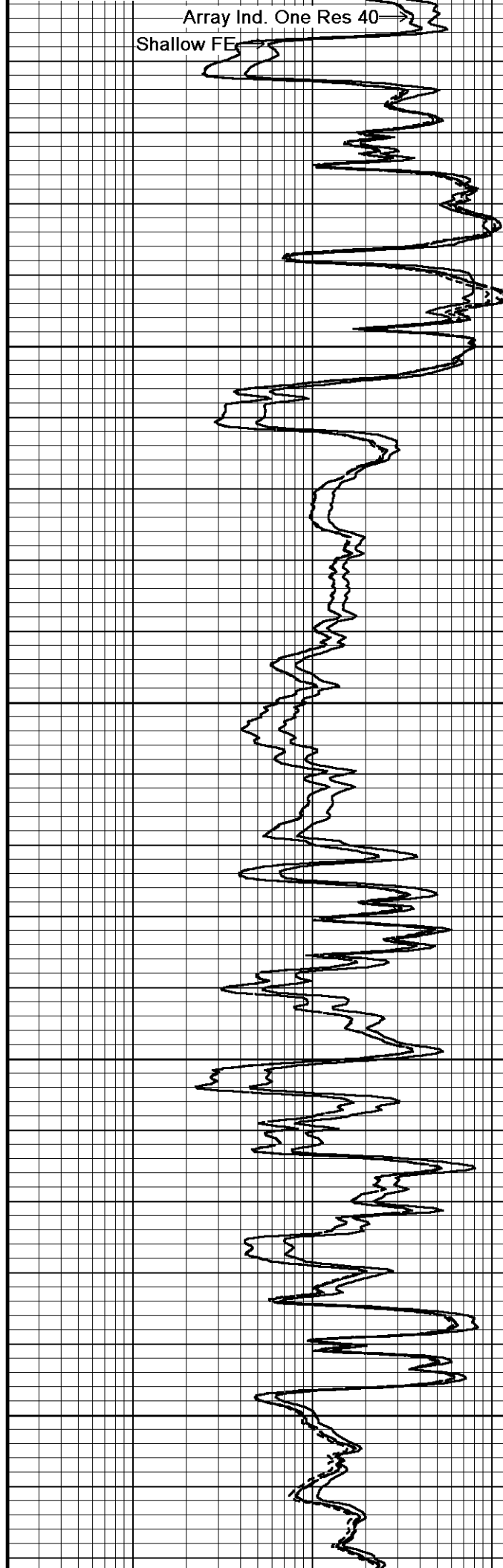
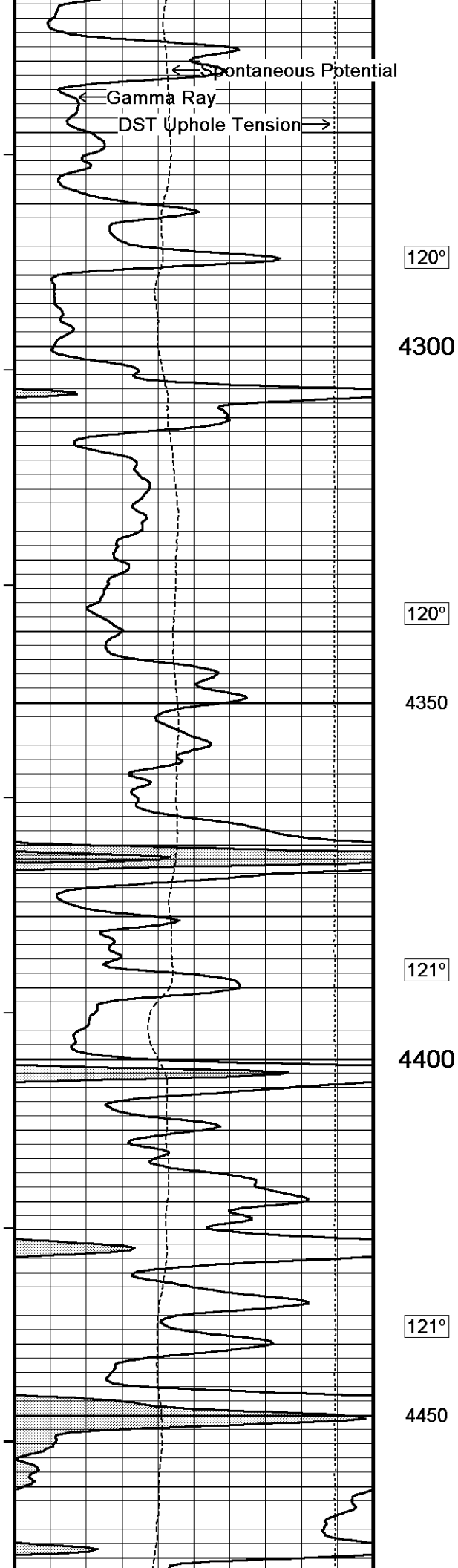
119°

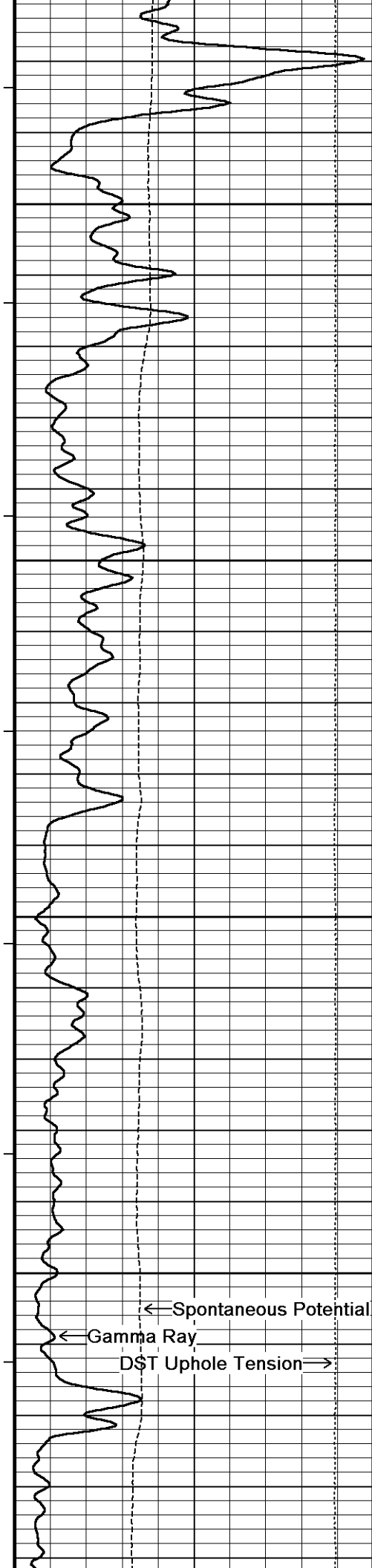
4250



Array Ind. One Res Rt

Array Ind. One Res 60 →





122°

4500

122°

4550

123°

4600

124°

Array Ind. One Res Rt

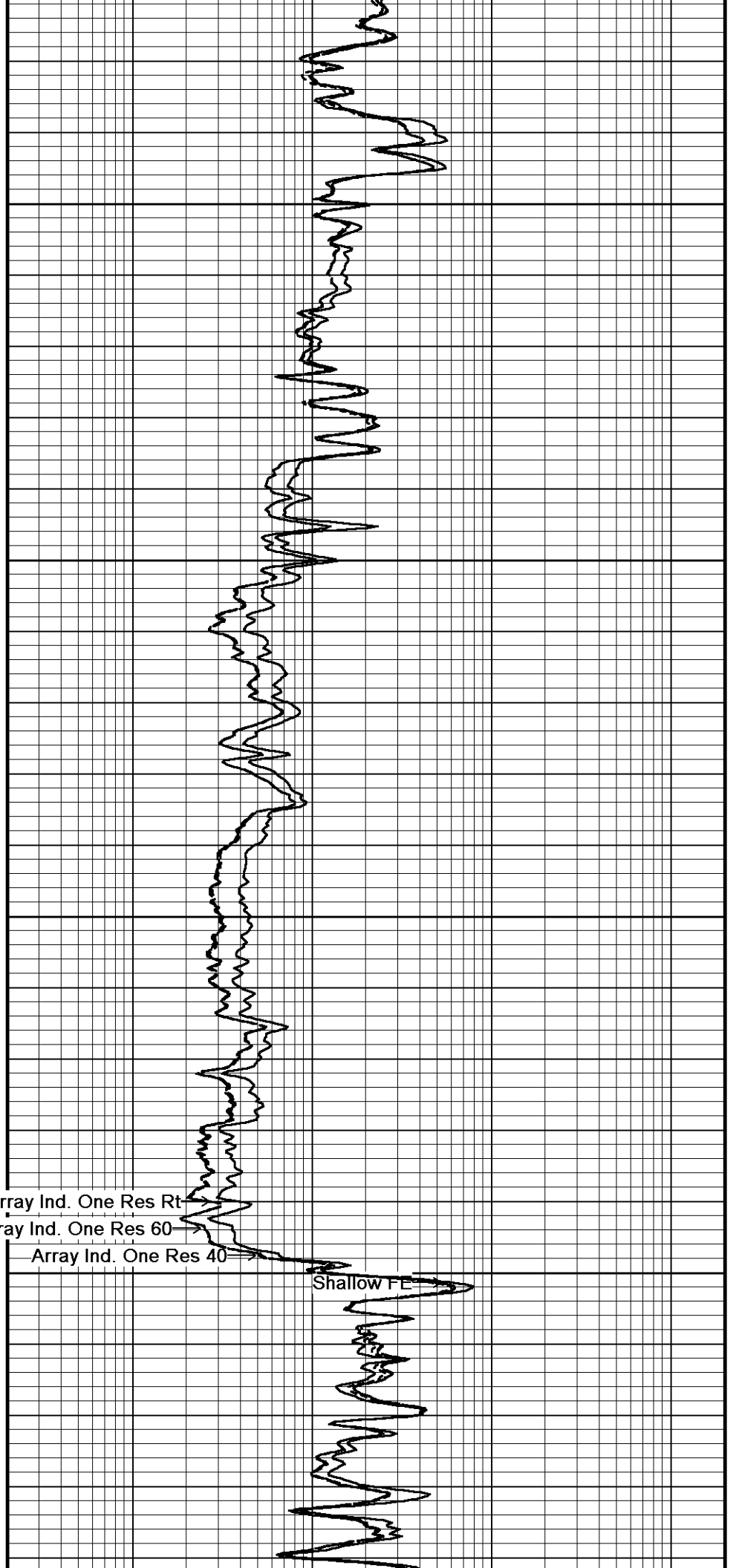
Array Ind. One Res 60

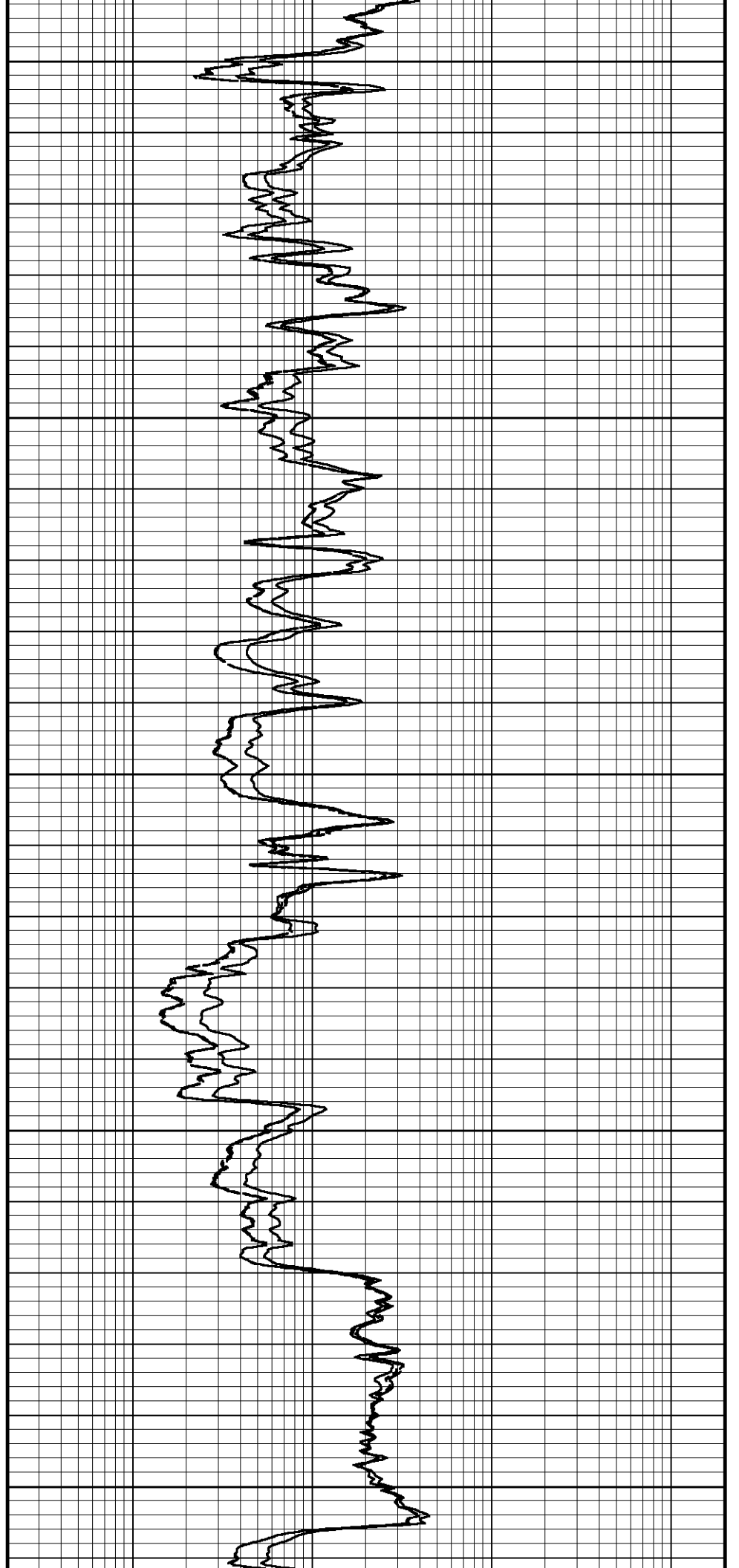
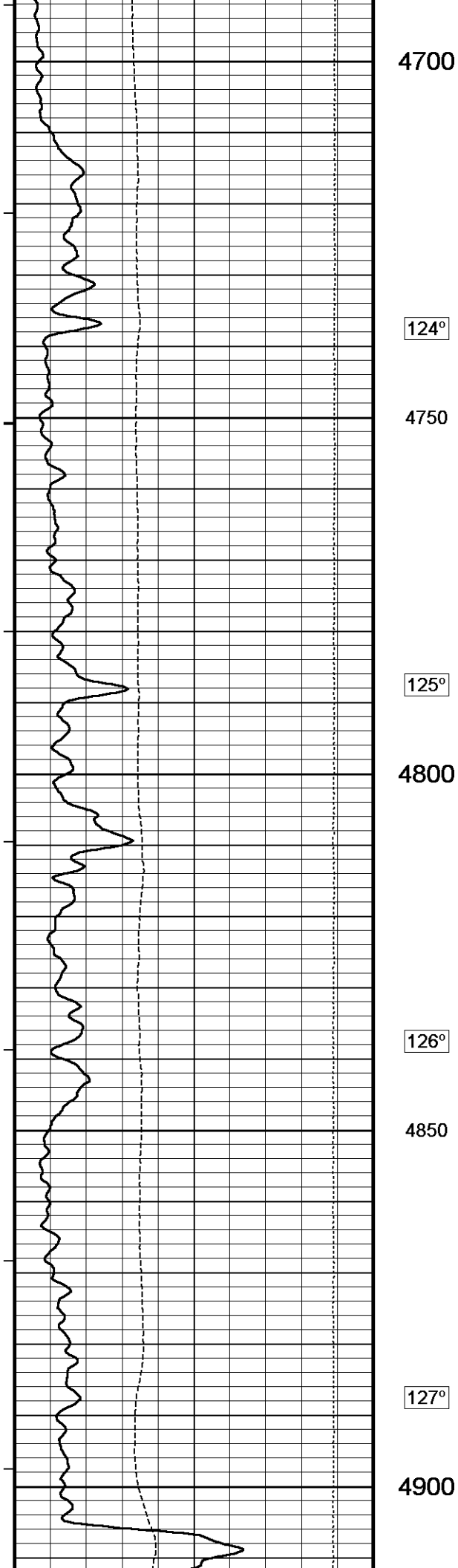
Array Ind. One Res 40

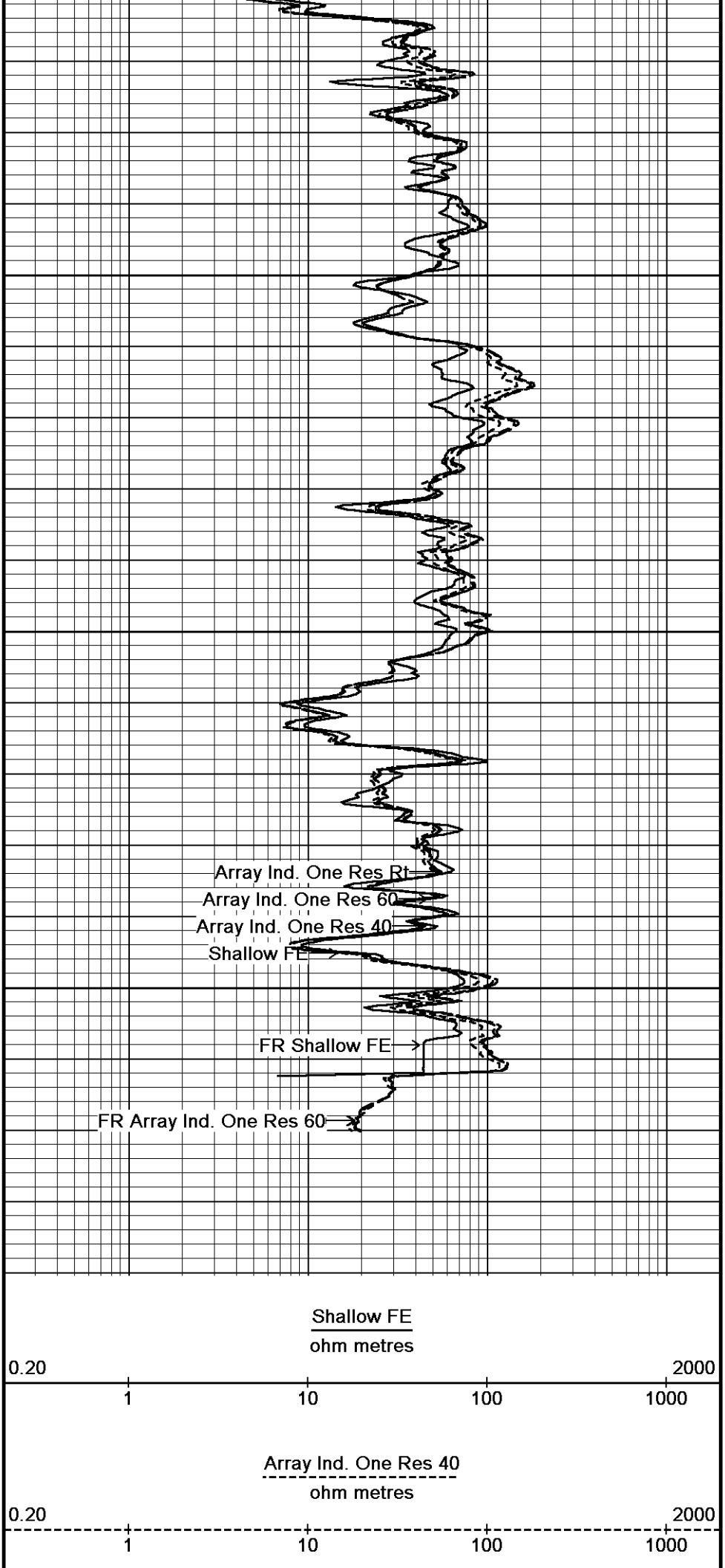
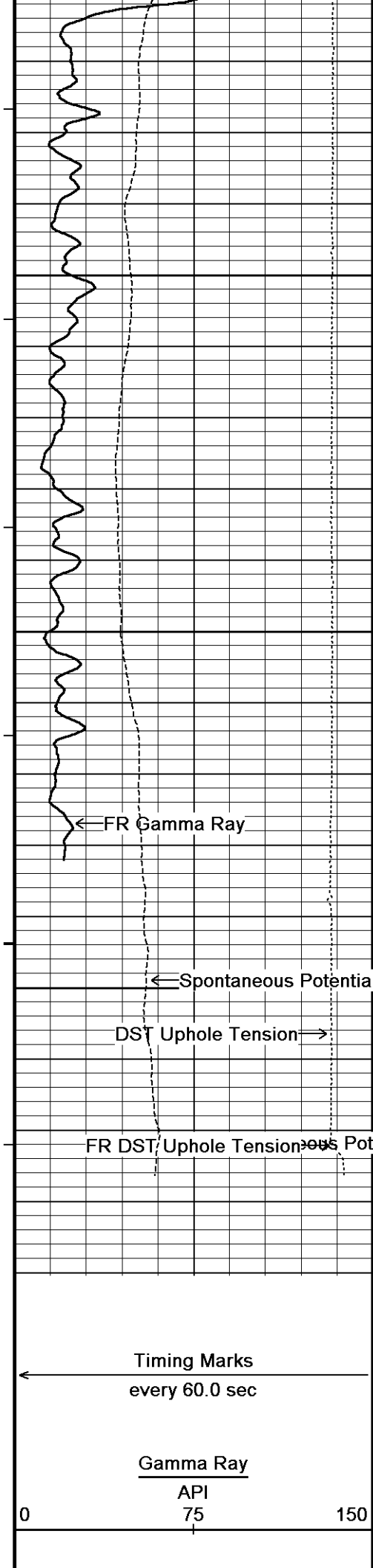
4650

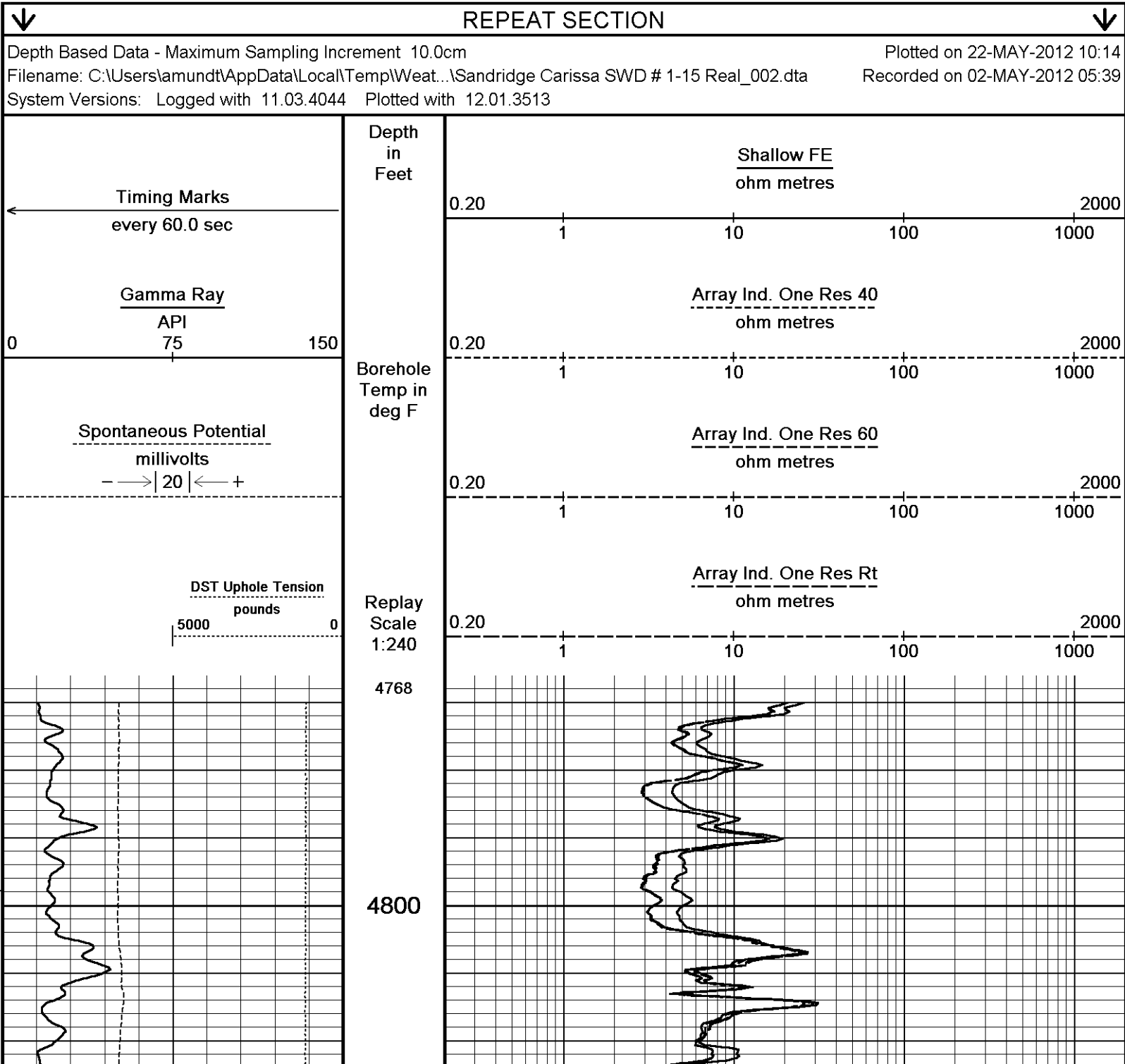
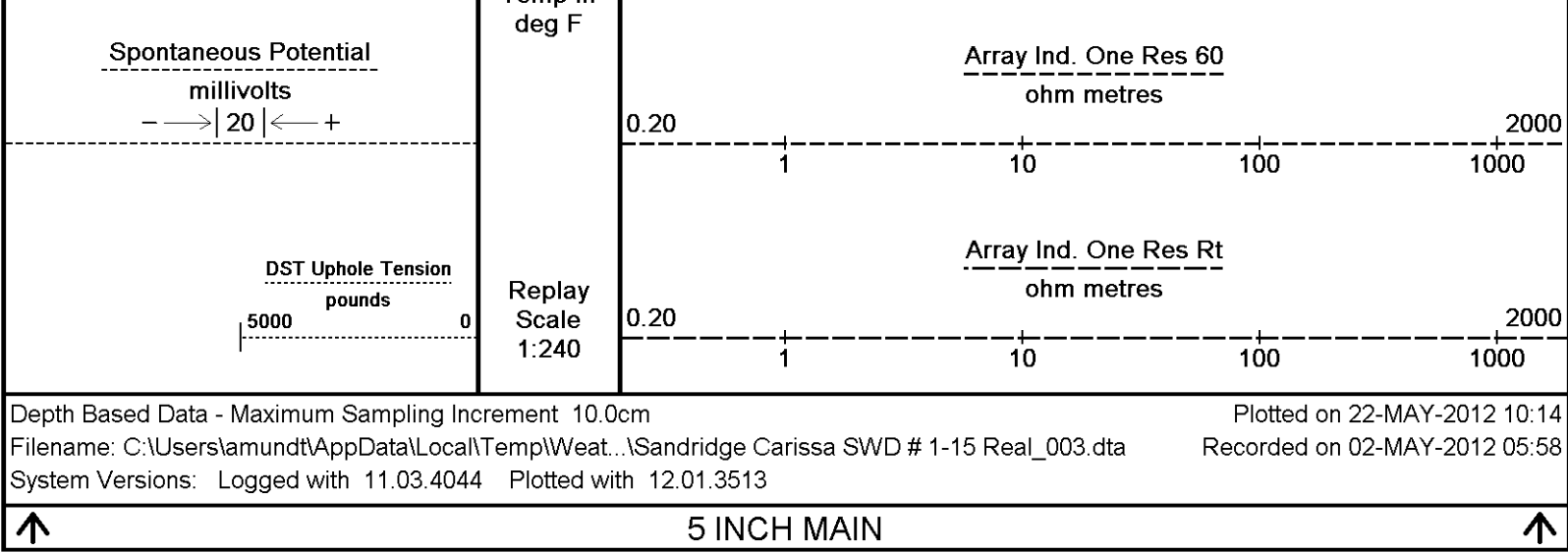
Shallow FE

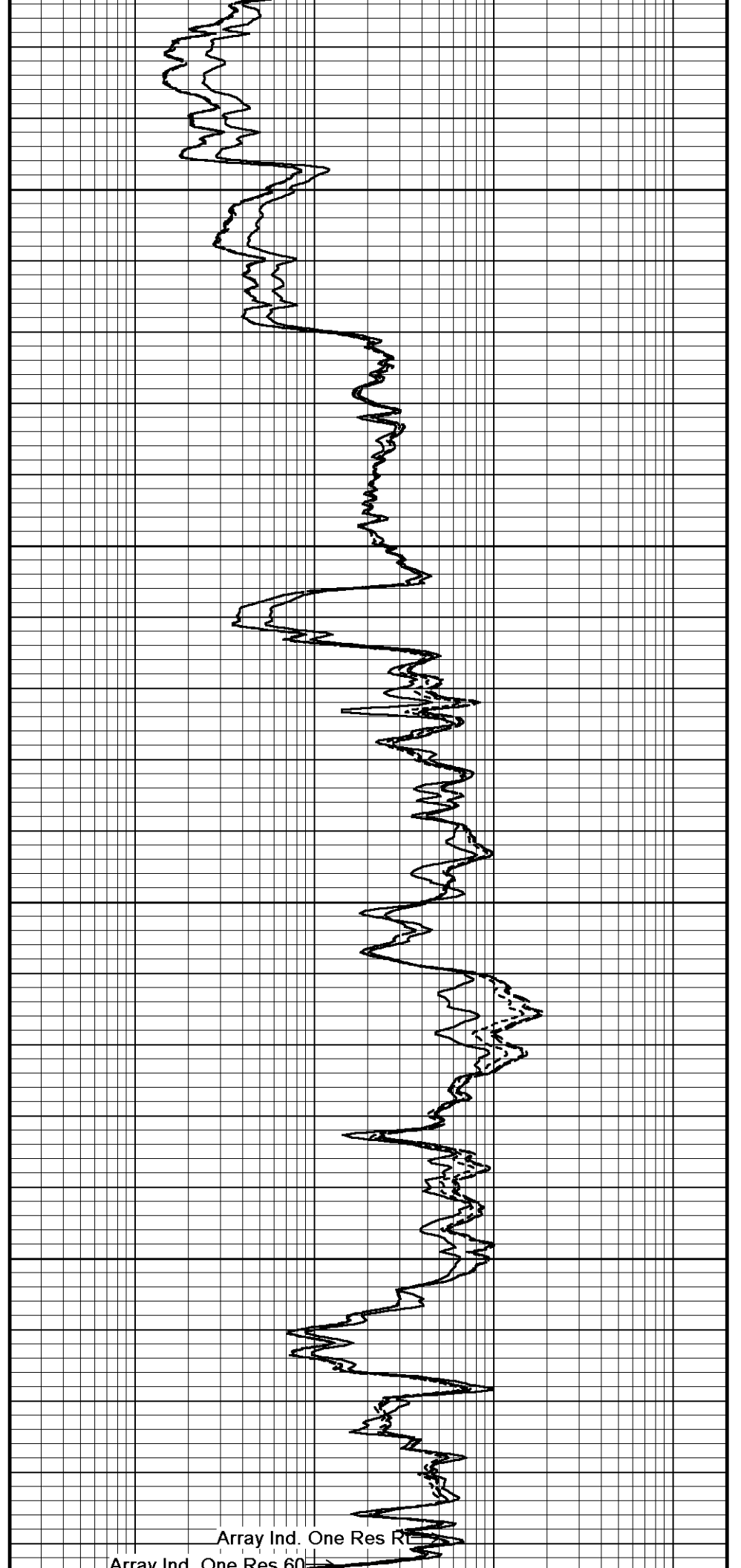
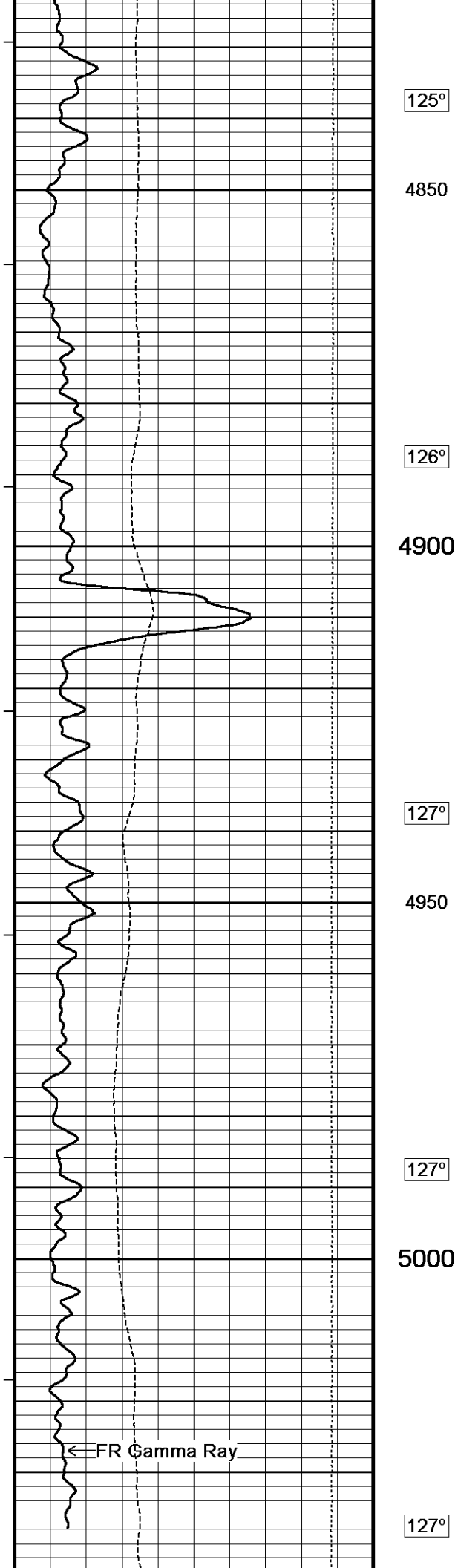
124°











RWA Constant A		1.000	
RWA Constant M		2.000	
Down-hole Tension Calibration All 000			
		Field Calibration on 30-JUN-2010 01:00	
Reading No	Measured	Calibrated (lbs)	
1	14112.01	10.00	
2	15164.79	427.00	
Down-hole Tension Calibration SMS 0			
		Field Calibration on 29-MAR-2012 12:07	
Reading No	Measured	Calibrated (lbs)	
1	-2133.10	0.00	
2	-2135.89	100.00	
Gamma Calibration MCG-C 208			
		Field Calibration on 02-MAY-2012 00:32	
	Measured	Calibrated (API)	
Background	68	47	
Calibrator (Gross)	1123	772	
Calibrator (Net)	1055	725	
Gamma Constants MCG-C 208			
		Last Edited on 02-MAY-2012 05:15	
Gamma Calibrator Number	gcr38		
Mud Density	1.09	gm/cc	
Caliper Source for Processing	Density Caliper		
Tool Position	Eccentred		
Concentration of KCl	0.00	kppm	
SP Calibration MCG-C 208			
		Field Calibration on 24-FEB-2012 11:08	
	Measured	Calibrated (mV)	
Reference 1	98.6	100.0	
Reference 2	-101.8	-100.0	
High Resolution Temperature Calibration MCG-C 208			
		Field Calibration on 18-OCT-2011 15:32	
	Measured	Calibrated(Deg F)	
Lower	50.00	50.00	
Upper	75.00	75.00	
High Resolution Temperature Constants MCG-C 208			
		Last Edited on	
Pre-filter Length	11		
Caliper Calibration MML-A 16			
		Base Calibration on 12-MAR-2012 09:42	
		Field Calibration on 02-MAY-2012 00:27	
Base Calibration			
Reading No	Measured	Calibrator Size (in)	
1	14446	5.98	
2	17749	7.97	
3	20974	9.86	
4	24969	11.92	
5	0	0.00	
6	N/A	N/A	
Field Calibration			
	Measured Caliper (in)	Actual Caliper (in)	
	6.07	5.98	
Micro Normal and Micro Inverse Calibration MML-A 16			
		Base Calibration on 26-APR-2012 12:26	
		Field Check on 02-MAY-2012 00:26	
Base Calibration			
	Measured	Calibrated (ohm-m)	
Channel	Resistor 1	Resistor 2	Resistor 1
			Resistor 2
Micro Normal	12.2	60.2	5.0
Micro Inverse	15.6	78.3	5.0
			25.0
Channel	Base Check (ohm-m)		Field Check (ohm-m)
Micro Normal	62.9		62.9
Micro Inverse	48.2		48.2
Micro Normal and Micro Inverse Constants MML-A 16			
		Last Edited on 02-MAY-2012 05:14	

Pad Type	8-12 in Soft Rubber Inflatable 006-9011-159		
Micro Normal K Factor	1.0000		
Micro Inverse K Factor	1.0000		
Standoff Offset	N/A	inches	

Neutron Calibration MDN-A.B 66				Base Calibration on 26-APR-2012 15:28	
				Field Check on 02-MAY-2012 00:37	
Base Calibration					
		Measured		Calibrated (cps)	
	Near	Far	Near	Far	
	3170	99	3714	110	
Ratio	32.037		33.764		
Field Calibrator at Base					
			Calibrated (cps)		
			1619	2337	
Ratio	0.693				
Field Check					
			Calibrated (cps)		
			1627	2344	
Ratio	0.694				

Neutron Constants MDN-A.B 66

Last Edited on 02-MAY-2012 05:14

Neutron Source Id	P58125B	
Neutron Jig Number	5824NE	
Epithermal Neutron	No	
Caliper Source for Processing	Density Caliper	
Stand-off	0.00	inches
Mud Density	1.00	gm/cc
Limestone Sigma	7.10	cu
Sandstone Sigma	4.26	cu
Dolomite Sigma	4.70	cu
Formation Pressure Source	None	
Formation Pressure	N/A	kpsi
Temperature Source	Constant Value	
Temperature	68.00	degrees F
Mud Salinity	0.00	kppm
Formation Fluid Salinity Source	Constant Value	
Formation Fluid Salinity	0.00	kppm
Barite Mud Correction	Not Applied	

FE Calibration MFE-C.A 353			Base Calibration on 26-APR-2012 11:56	
			Field Check on 02-MAY-2012 00:16	
Base Calibration				
	Measured		Calibrated (ohm-m)	
Reference 1	0.0		0.0	
Reference 2	964.1		126.8	
Base Check			281.1	
Field Check			281.0	

FE Constants MFE-C.A 353				Last Edited on 02-MAY-2012 05:13	
Running Mode		No Sleeve			
MFE K Factor		0.1268			
Caliper Source for FE correction		Density Caliper			
Caliper Value for FE correction		N/A		inches	
Rm Source for FE correction		Temperature Corr			
Temp. for Rm Corr.		MCG External Temperature			
Stand-off		0.5		inches	

Induction Calibration MAI-A.A 167				Base Calibration on 11-MAR-2011 09:58	
				Field Check on 02-MAY-2012 00:14	
Base Calibration					
Test Loop Calibration		Measured		Calibrated (mmho/m)	
Channel	Low	High	Low	High	
1	17.3	474.2	9.3	966.2	
2	6.3	388.4	7.6	821.4	
3	3.3	259.4	5.2	566.0	
4	1.9	133.0	2.6	279.2	

Array Temperature

76.8

Deg F

Channel	Base Check (mmho/m)		Field Check (mmho/m)	
	Low	High	Low	High
1	0.0	0.0	13.1	3840.2
2	0.0	0.0	29.6	3477.6
3	0.0	0.0	29.1	3053.3
4	0.0	0.0	19.7	2081.8
Deep	0.0	0.0	18.5	2048.8
Medium	0.0	0.0	42.2	3991.7
Shallow	0.0	0.0	43.0	5055.6
Array Temperature		0.0	74.0	Deg F

Induction Constants MAI-A.A 167

Last Edited on 02-MAY-2012 05:12

Induction Model	RtAP-WBM		
Caliper for Borehole Corr.	Density Caliper		
Hole Size for Borehole Correction	N/A	inches	
Tool Centred	No		
Stand-off Type	Fins		
Stand-off	0.50	inches	
Number of Fins on Stand-off	8.0000		
Stand-off Fin Angle	45.00	degrees	
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	
Squasher Offset	N/A	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
Source for Rt	0.00	
Source for Rxo	0.00	

High Resolution Temperature Calibration MAI-A.A 167

Field Calibration on 12-MAR-2012 11:57

	Measured	Calibrated(Deg F)
Lower	1.00	33.80
Upper	11.00	51.80

High Resolution Temperature Constants MAI-A.A 167

Last Edited on

Pre-filter Length	11
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Caliper Calibration MPD-B 31

Base Calibration on 25-APR-2012 10:33

Field Calibration on 02-MAY-2012 00:19

Base Calibration		
Reading No	Measured	Calibrator Size (in)
1	17391	3.99
2	25871	5.98
3	34557	7.97
4	42895	9.86

5
652288
N/A11.92
N/A

Field Calibration

Measured Caliper (in)
5.96Actual Caliper (in)
5.98

Photo Density Calibration MPD-B 31

Base Calibration on 25-APR-2012 10:55
Field Check on 02-MAY-2012 00:24

Density Calibration

Base Calibration

Measured

Calibrated (sdu)

Near

Far

Near

Far

Reference 1

57255

28372

59556

30836

Reference 2

22697

2144

24941

2541

Field Check at Base

697.4

855.9

Field Check

695.6

857.1

PE Calibration

Base Calibration

Measured

Calibrated

WS

WH

Ratio

Ratio

Background

128

611

Reference 1

22865

57104

0.402

0.371

Reference 2

6649

22599

0.297

0.272

Field Check at Base

128.3

610.7

Field Check

127.9

609.4

Density Constants MPD-B 31

Last Edited on 02-MAY-2012 05:13

Density Source Id

P50557B

Nylon Calibrator Number

DNCE695

Aluminium Calibrator Number

DACD698

Density Shoe Profile

8 inch

Caliper Source for Processing

Density Caliper

PE Correction to Density

Not Applied

Mud Density

1.09

gm/cc

Mud Density Z/A Multiplier

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

Hybrid

Matrix Density (gm/cc)

Depth (ft)

2.71

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

DOWNHOLE EQUIPMENT

C:\Users\amundt\AppData\Local\Temp\Weatherford PreView\0\Sandridge Carissa SWD # 1-15 Real_003.dta

Compact Comms Gamma

MCG-C 208 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in



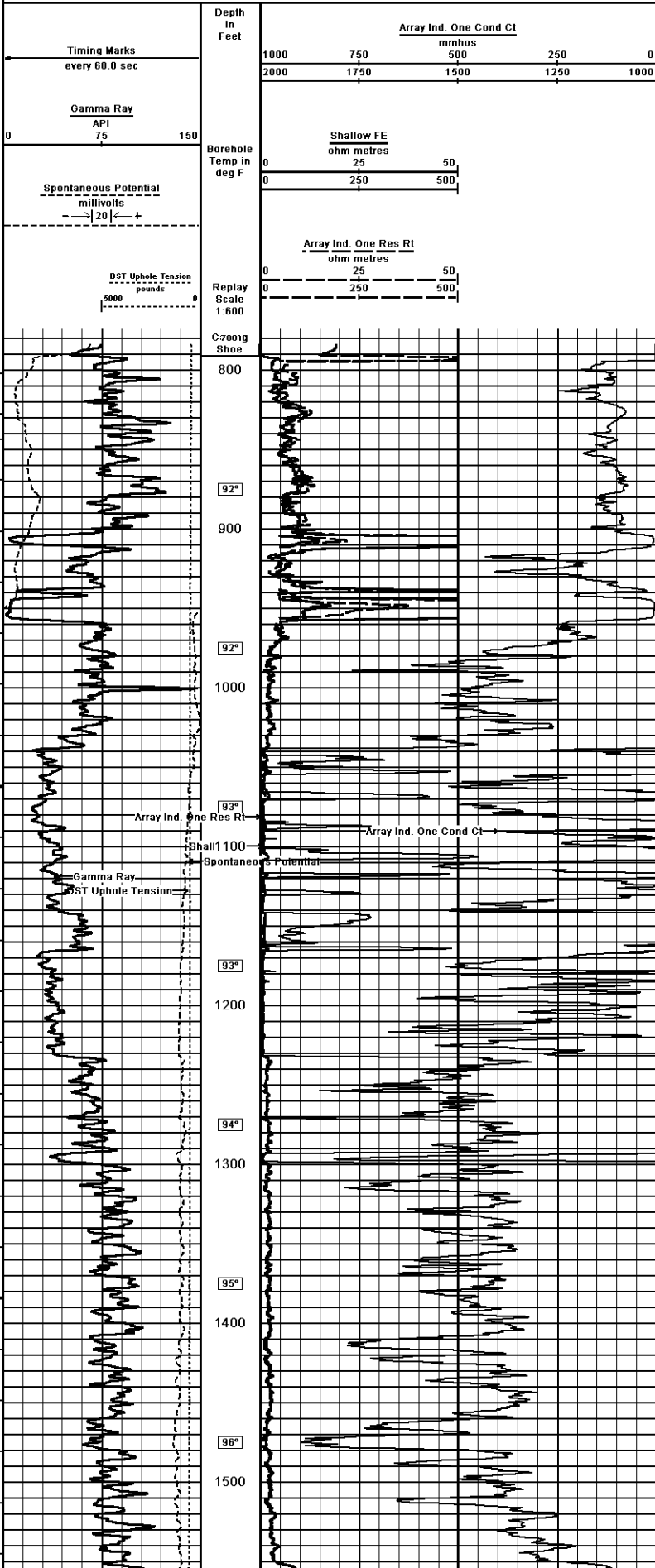
45.04 ft

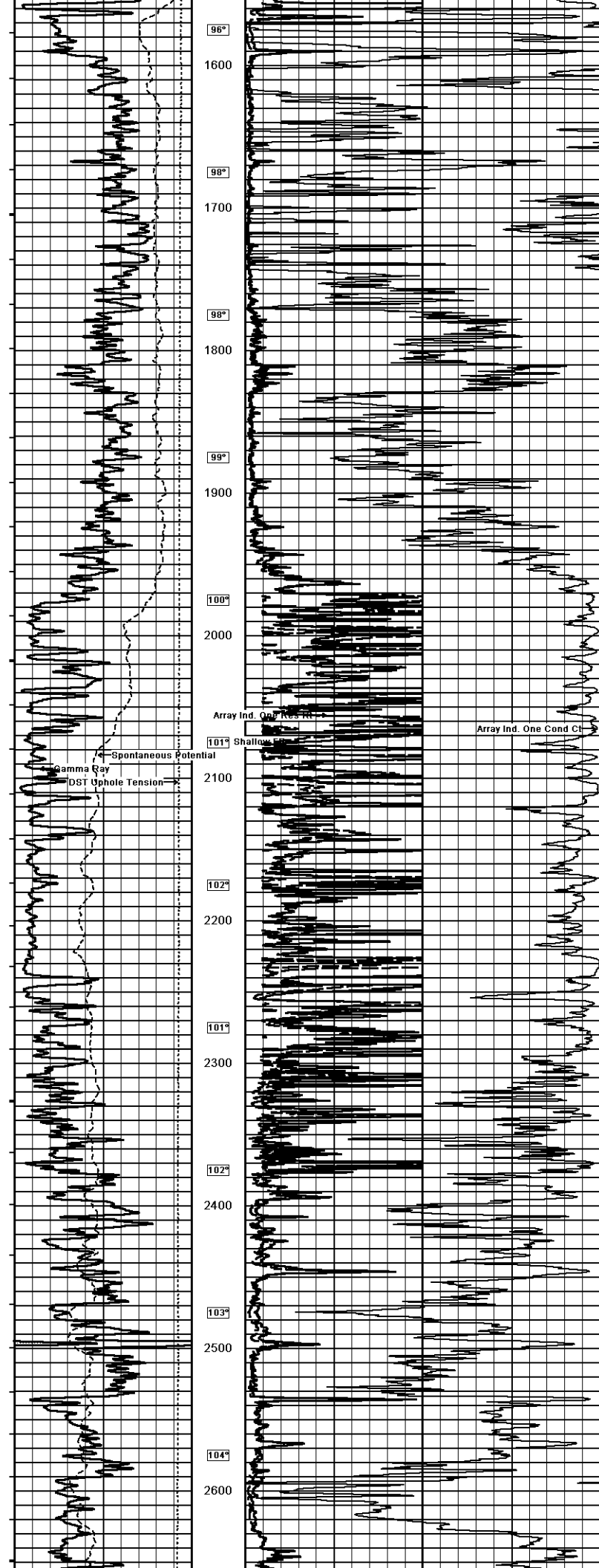
42.13 ft

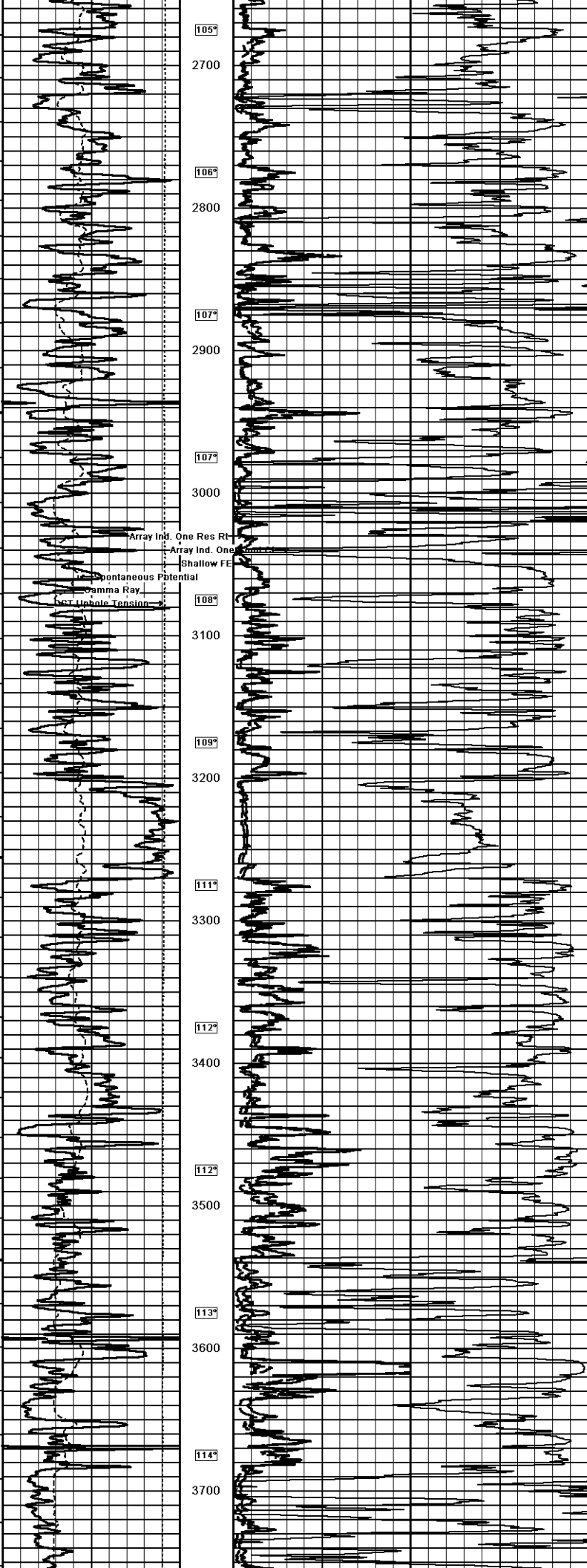
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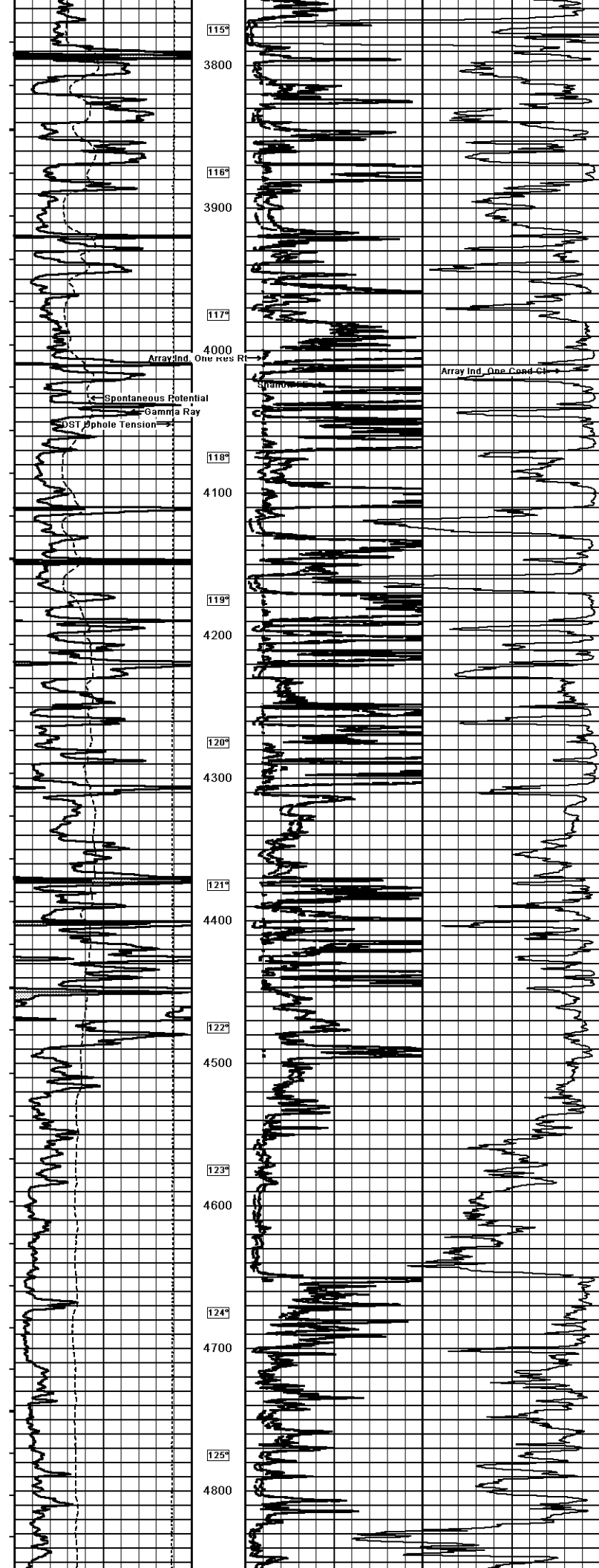
CGXT - MCG External Temperature

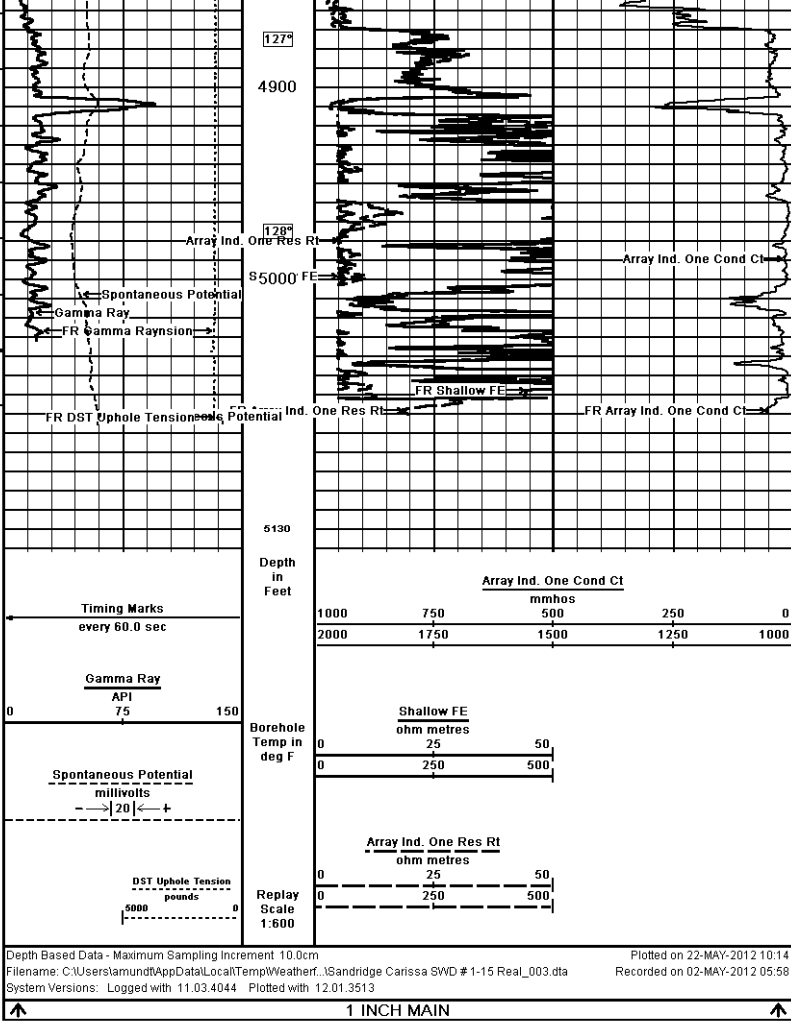
Company		SANDRIDGE EXPLORATION		ARRAY INDUCTIVE	
Well		CARRISDA SWD # 1-15		SHALLOW FOCUS	
Field		GOEBEL		ELECTRIC LOG	
Province		HODGEMAN			
Country		U.S.A. / KANSAS			
Location		518' FSL & 203' FEL			
SEC	TEMP	REA	Other		
115	215	24W			
API Number	15-083-21753	MP/DMM/N			
Permit Number		MML			
Permanent G.L. Correlation Elevation 2238 feet					
Log from KB					
Cutoff from KB					
Date	02-MAY-2012			Elev	
Turns	ONE			ft	
Depth/Cutler	5060.00			feet	
Depth/Copper	5072.00			feet	
Firstrigging	5089.00			feet	
Last Rigging	781.00			feet	
Casing/Cutler	787.00			feet	
Casing/Copper	781.00			feet	
Bit Size	8.750			inches	
HO/Fluid	CHEMICAL				
Density	9.10	lb/sg		50.00	CP
pH	10.50			4.80	mg/30mm
Spans/Source	FLOWLINE				
RTM/loss	0.38 @ 67.0	0hr:m			
RTM/loss	0.29 @ 67.0	0hr:m			
RTM/loss	0.43 @ 67.0	0hr:m			
RTM/Solue	CALC	CALC			
RTM/Bt	0.20 @ 21.0	0hr:m			
Time/Circ	5 HOURS				
Max Temp	127.00	deg F			
Equipment	COMPACT				
Base	130.25	lb			
Recorded	F MARTINS				
Witnessed	V RAMIREZ				
CO JOB#	3534652				
				B. MILL COX	
				LB12-110	











Company	SANDRIDGE EXPLORATION			
Well	CARISSA SWD # 1-15			
Field	GOEBEL			
Province	HODGEMAN			
Country	U.S.A. / KANSAS			
ElevationKB	2348.50	feet	FirstReading	5069.00 feet
ElevationDrill	2347.00	feet	DepthDriller	5060.00 feet
ElevationGround	2338.00	feet	DepthLogger	5072.00 feet



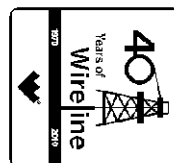
ARRAY INDUCTION
SHALLOW FOCUSED
ELECTRIC LOG



**Weatherford**

COMPACT PHOTO DENSITY COMPENSATED NEUTRON MICRORESISTIVITY LOG

Company SANDRIDGE EXPLORATION
Well CARISSA SWD # 1-15
Field GOEBEL
Province HODGEMAN
Country U.S.A. / KANSAS
Location 518' FSL & 203' FEL



SEC TWP RGE Other
15 21S 24W MAI/MFE
API Number 15-083-21763 MML
Permit Number

Permanent G.L.CommaElevation 2338 feet
LogFrom KB
DrillFrom K.B.

Elevations
Kb 2348.50
Df 2347.00
GI 2338.00

Date	02-MAY-2012	
RunNo	ONE	
DepthDriller	5060.00	feet
DepthLogger	5072.00	feet
FirstReading	5051.00	feet
LastReading	791.00	feet
CasingDriller	787.00	feet
CasingLogger	791.00	feet
BitSize	8.750	inches
HoleFluid	CHEMICAL	
Density	9.10 lb/USg	50.00 CP
Ph	10.50	4.80 ml/30Min
SampleSource	FLOWLINE	
RmMeas	0.36 @ 67.0	ohm-m
RmFlMeas	0.29 @ 67.0	ohm-m
RmCMeas	0.43 @ 67.0	ohm-m
RmISouce	CALC	CALC
RmBht	0.20 @127.0	ohm-m
TimeCirc	5 HOURS	
MaxTemp	127.00	deg F
Equipment	COMPACT	
Base	13025	LIB
Recorded	F. MARTINS	
Witnessed	V. RAMIREZ	B. WILCOX
S.O. / JOB #	3534652	LB12-110

BoreholeRec

Last Edited: 02-MAY-2012 08:27

BitSize Inches	DepthFrom Feet	DepthTo Feet
8.750	791.00	5072.00

CasingRec

Type	Size Inches	DepthFrom Feet	ShoeDepth Feet	Weight Pdff
SURFACE	9.625	0.00	791.00	29.30

Remarks

Tools Used: MPD, MCG, MDN, MFE, MAI, MML
Hardware: MPD: 8 inch profile plate used. MAI, MFE: 0.5 Inch standoffs used. MDN: Dual Bowspring used.
2.71 G/CC Limestone density matrix used to calculate porosity.
Borehole rugosity, tight pulls, and washouts will affect data quality.
All intervals logged and scaled per customer's request.
Annular volume with 5.5 inch production casing = 1180 cu. ft.
Service order #3534652
Rig: Tomcat #4
Engineer: F. Martins
Operator(s): K. Rinehart

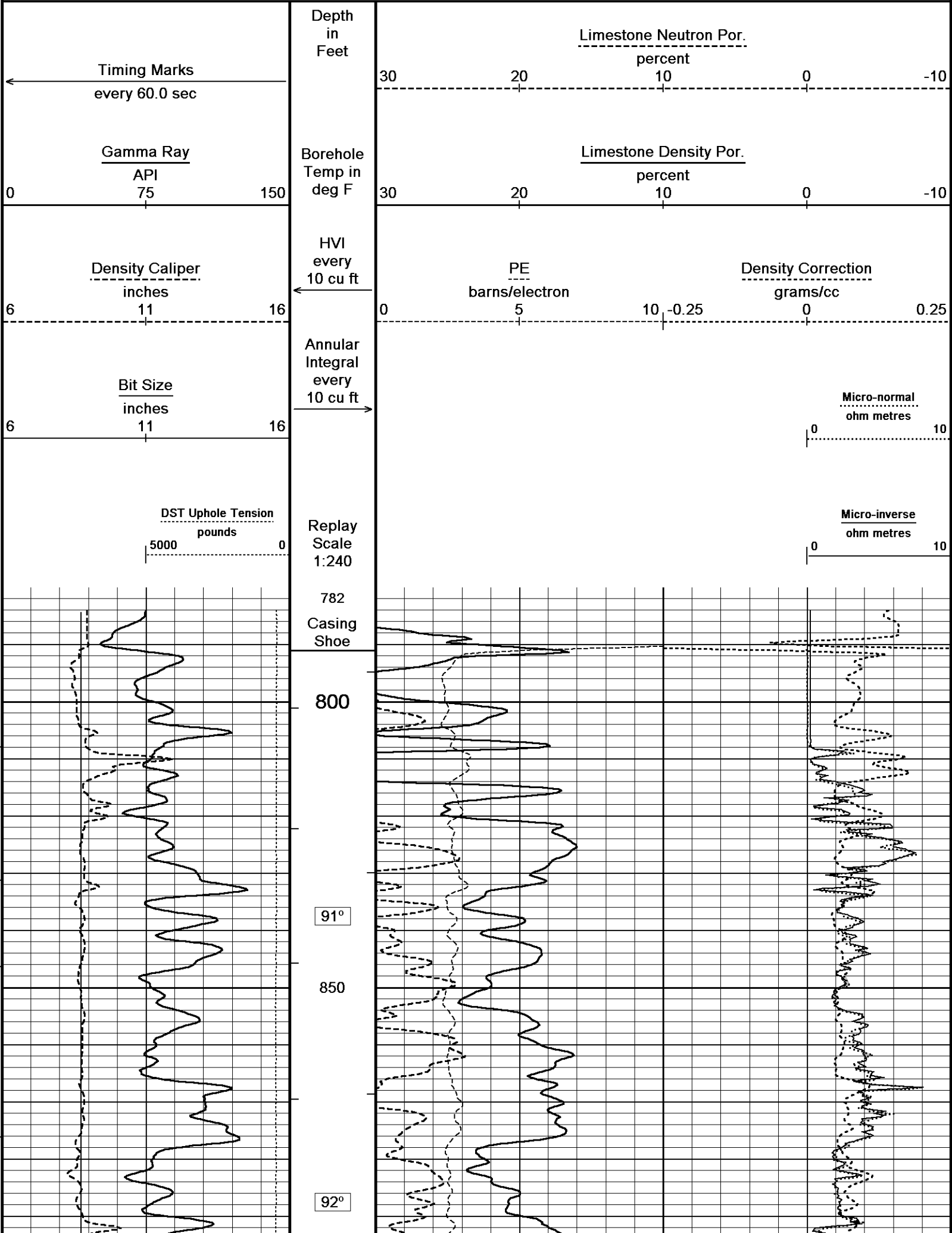
5 INCH MAIN

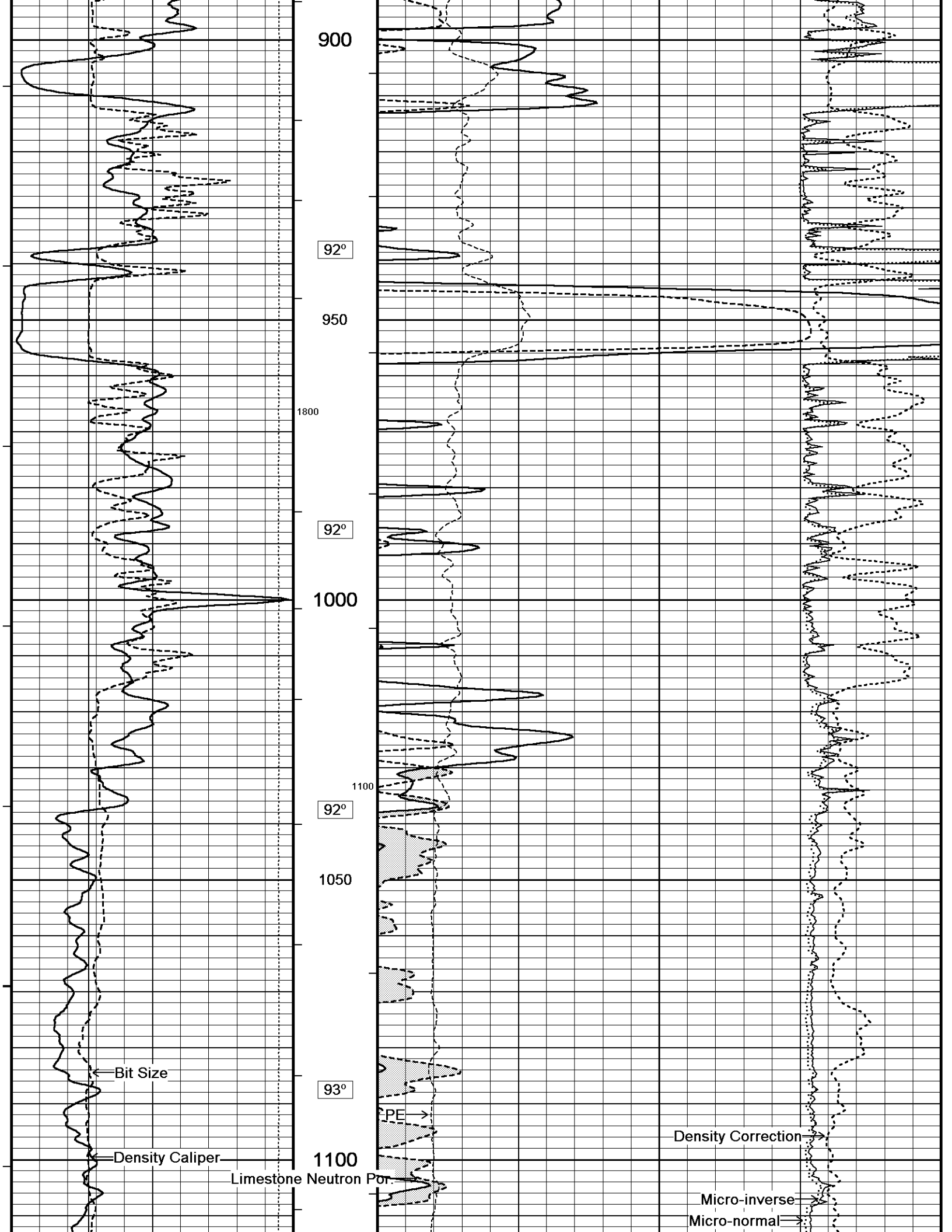
Depth Based Data - Maximum Sampling Increment 10.0cm

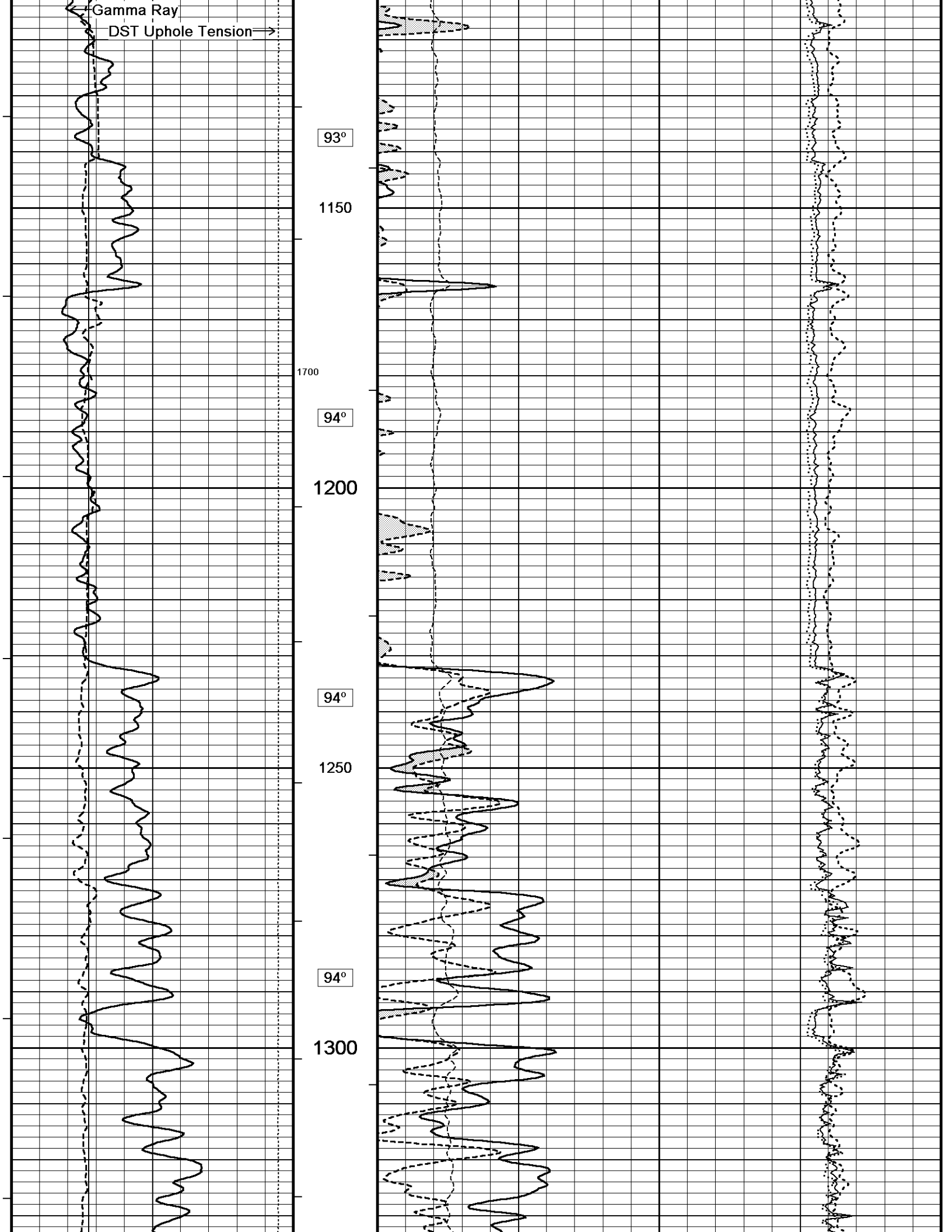
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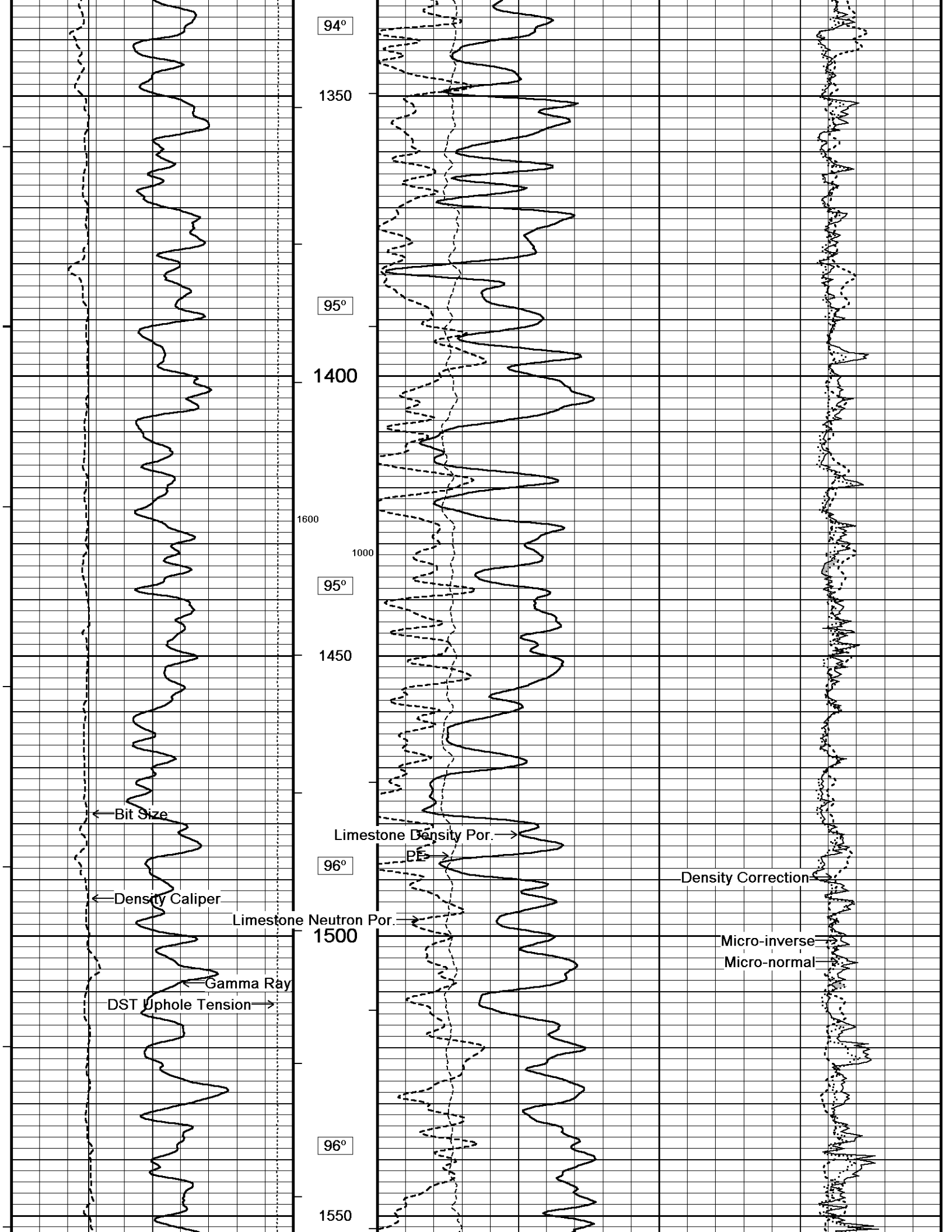
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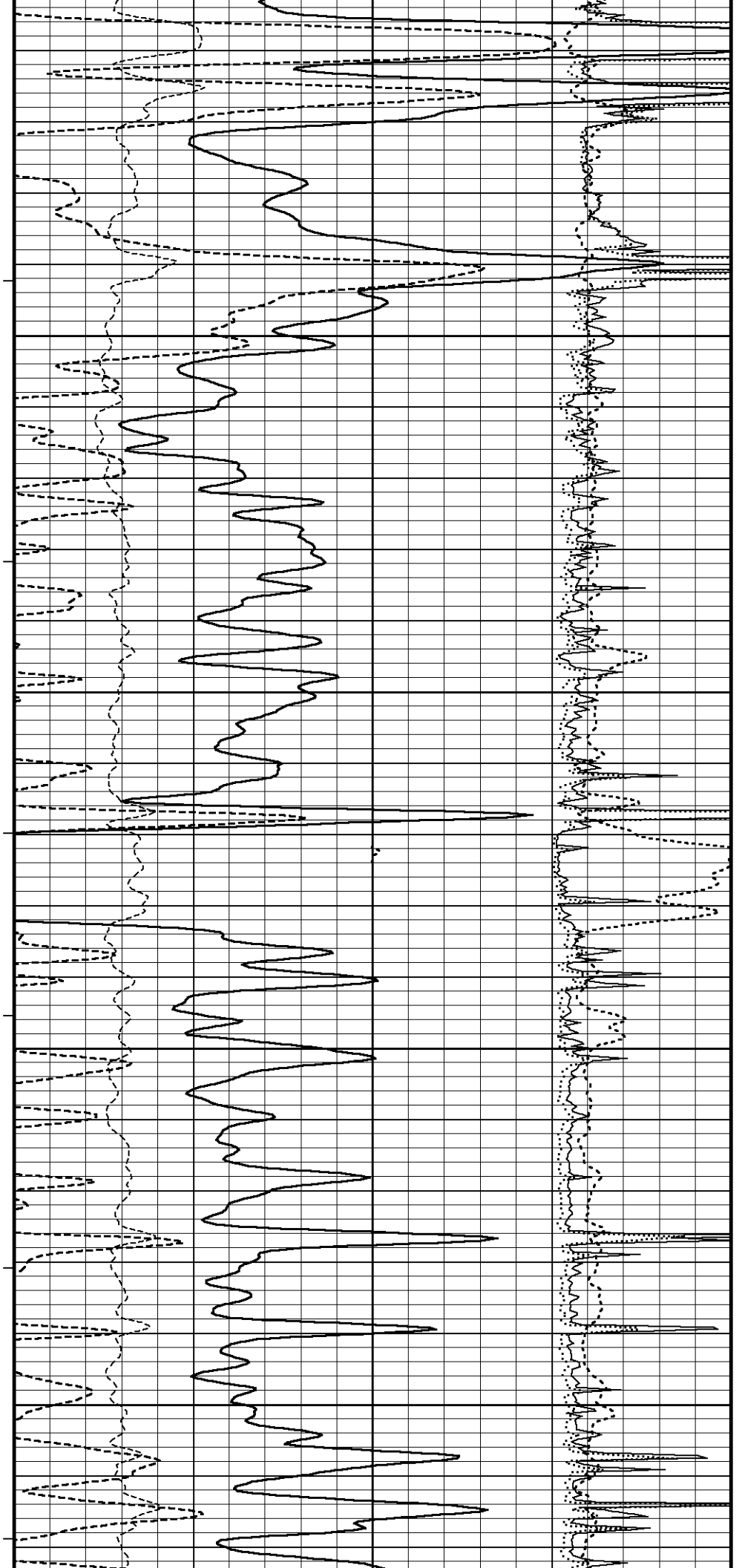
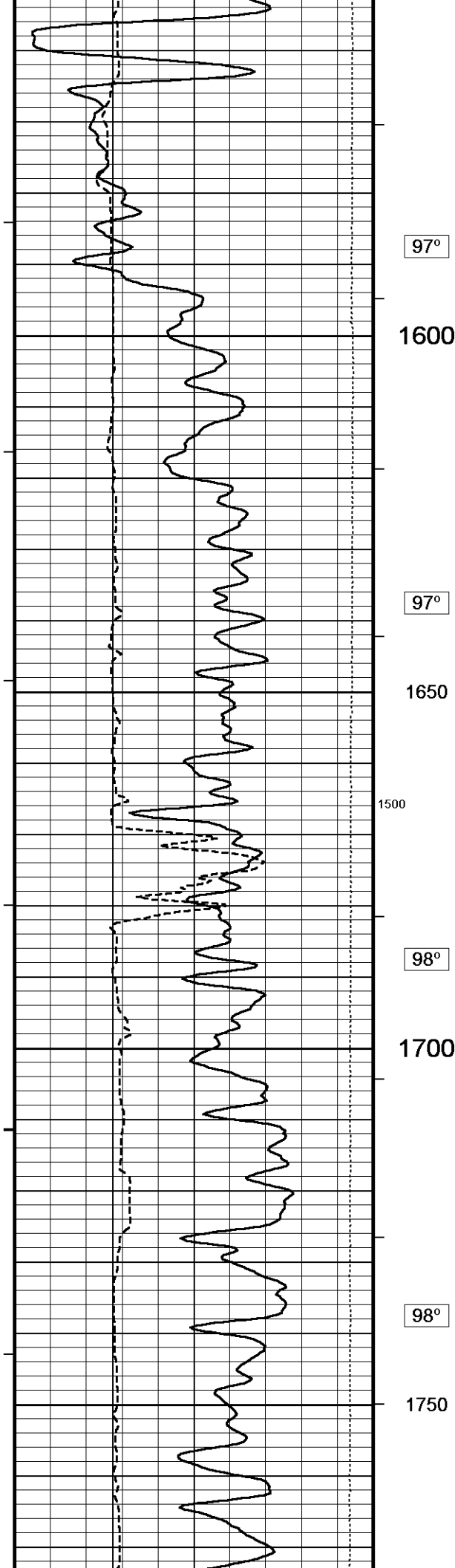
Recorded on 02-MAY-2012 05:58

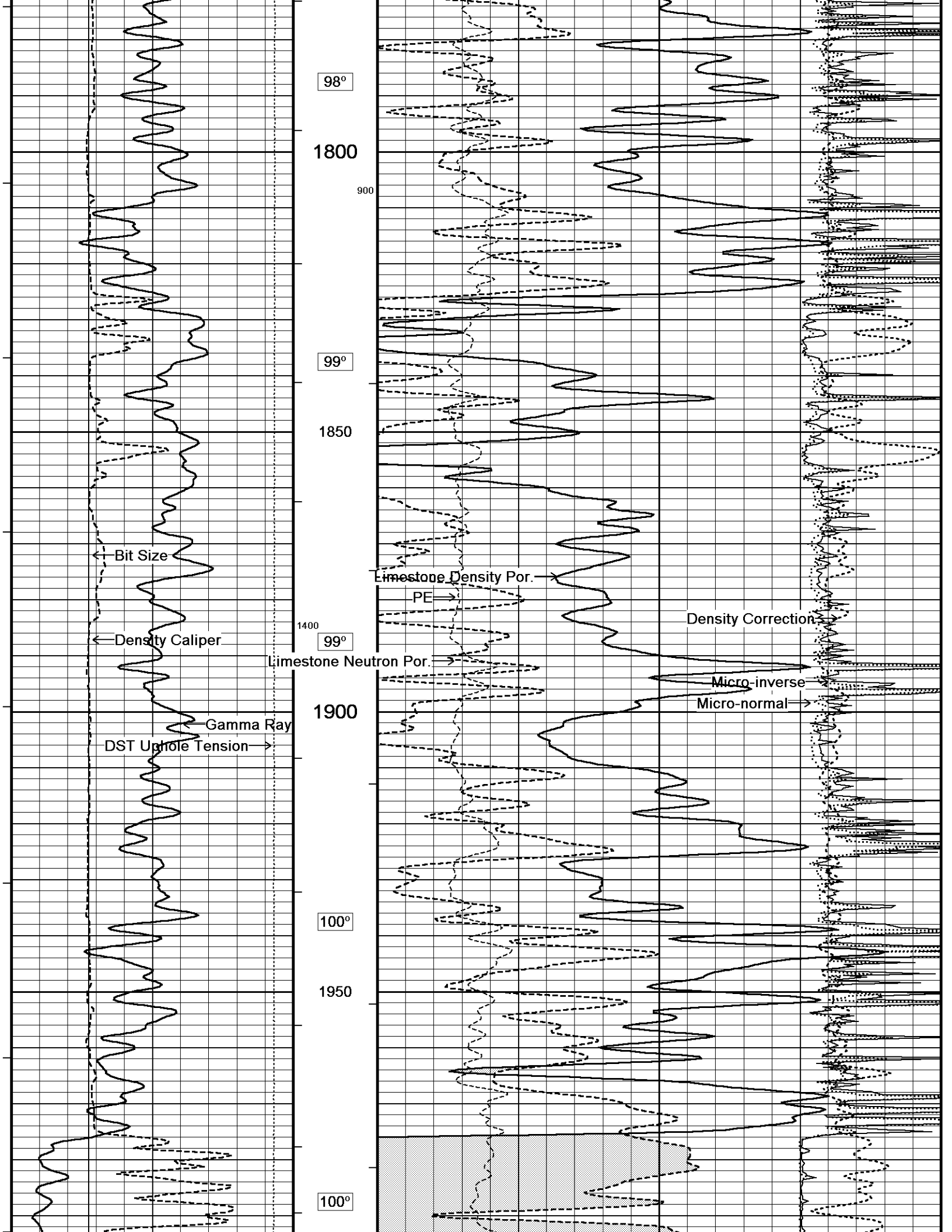


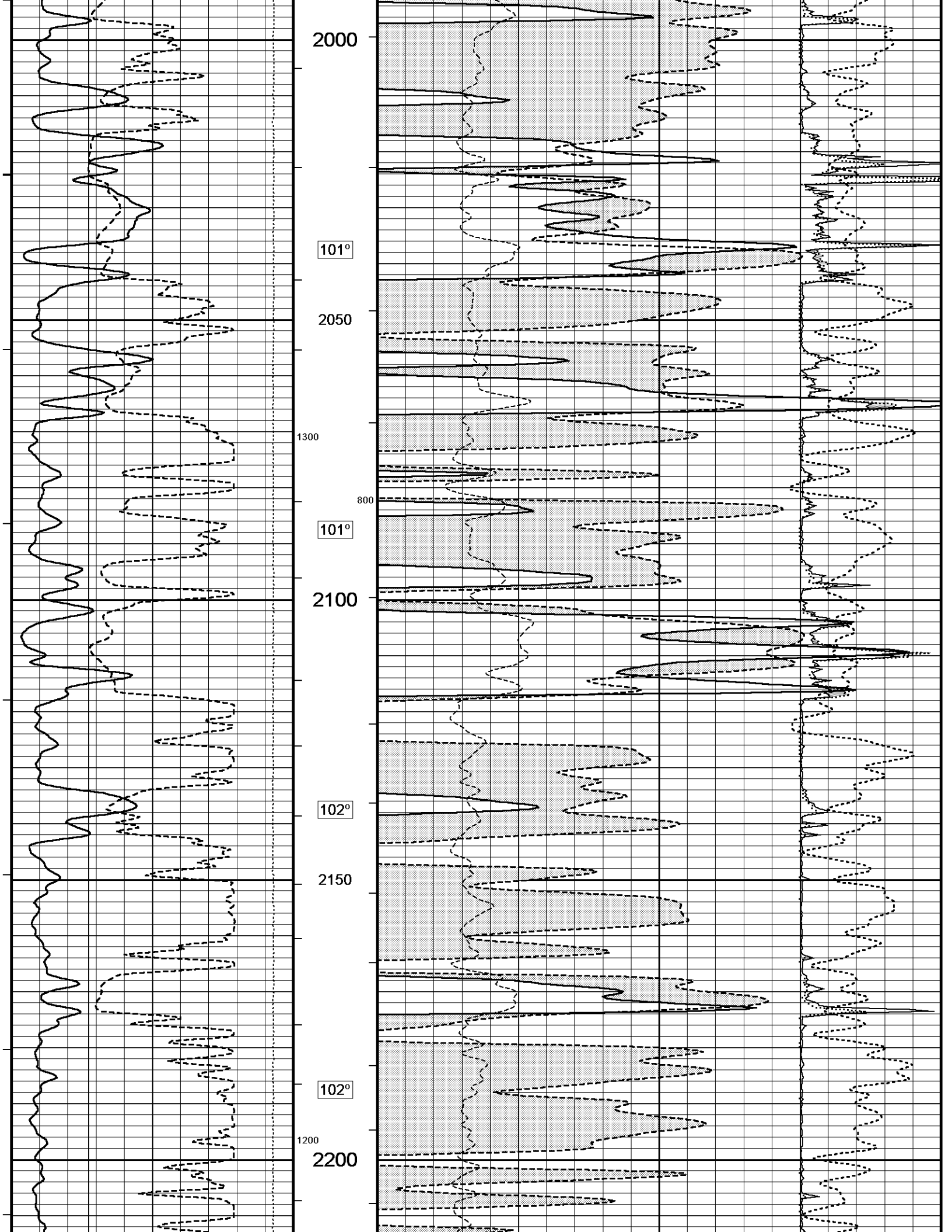


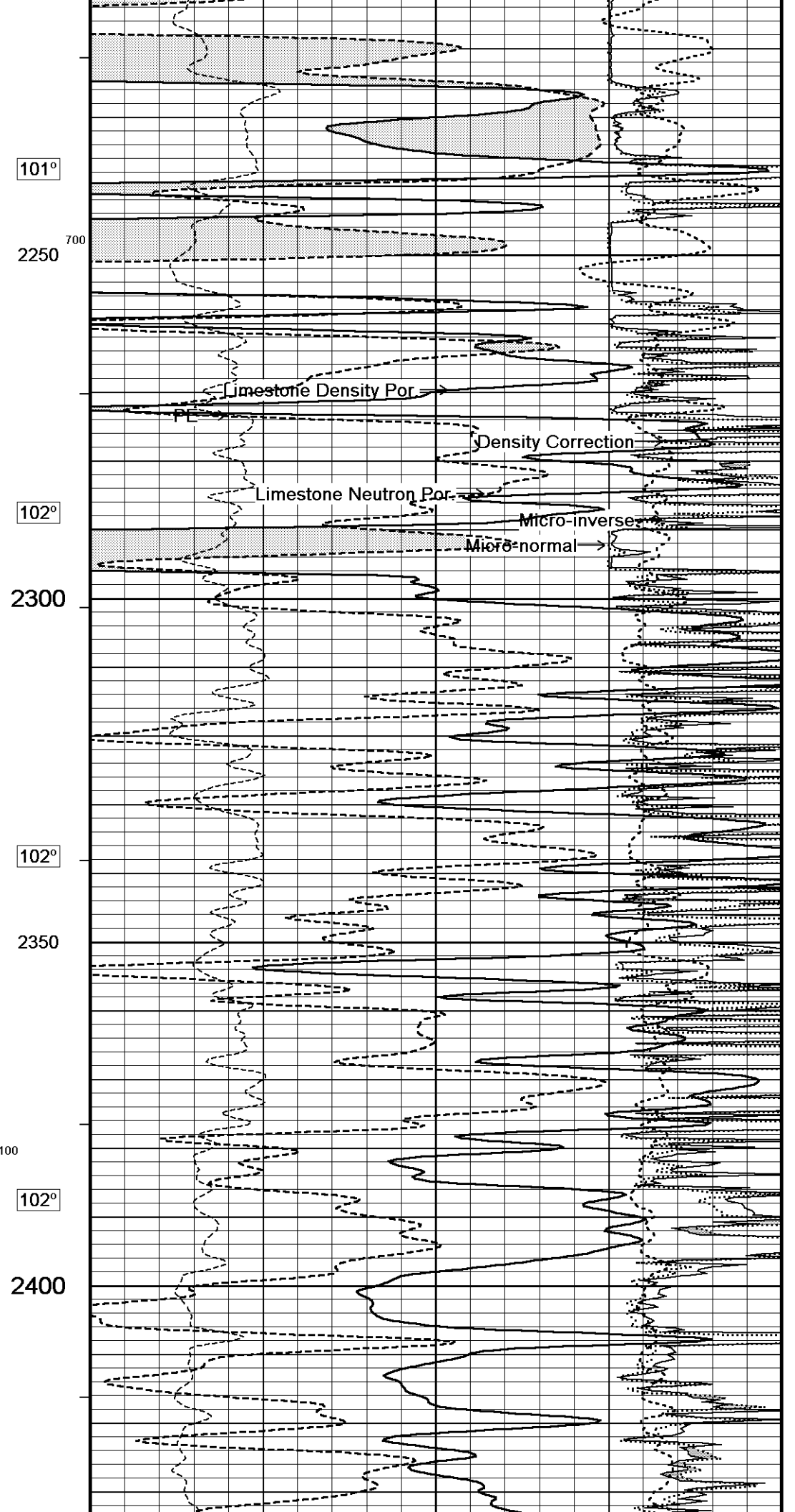
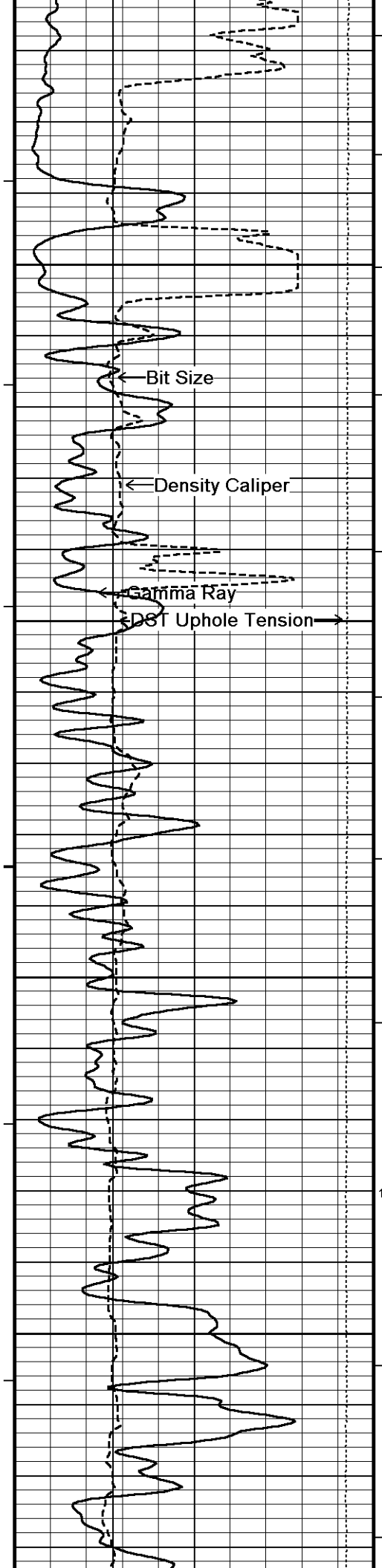


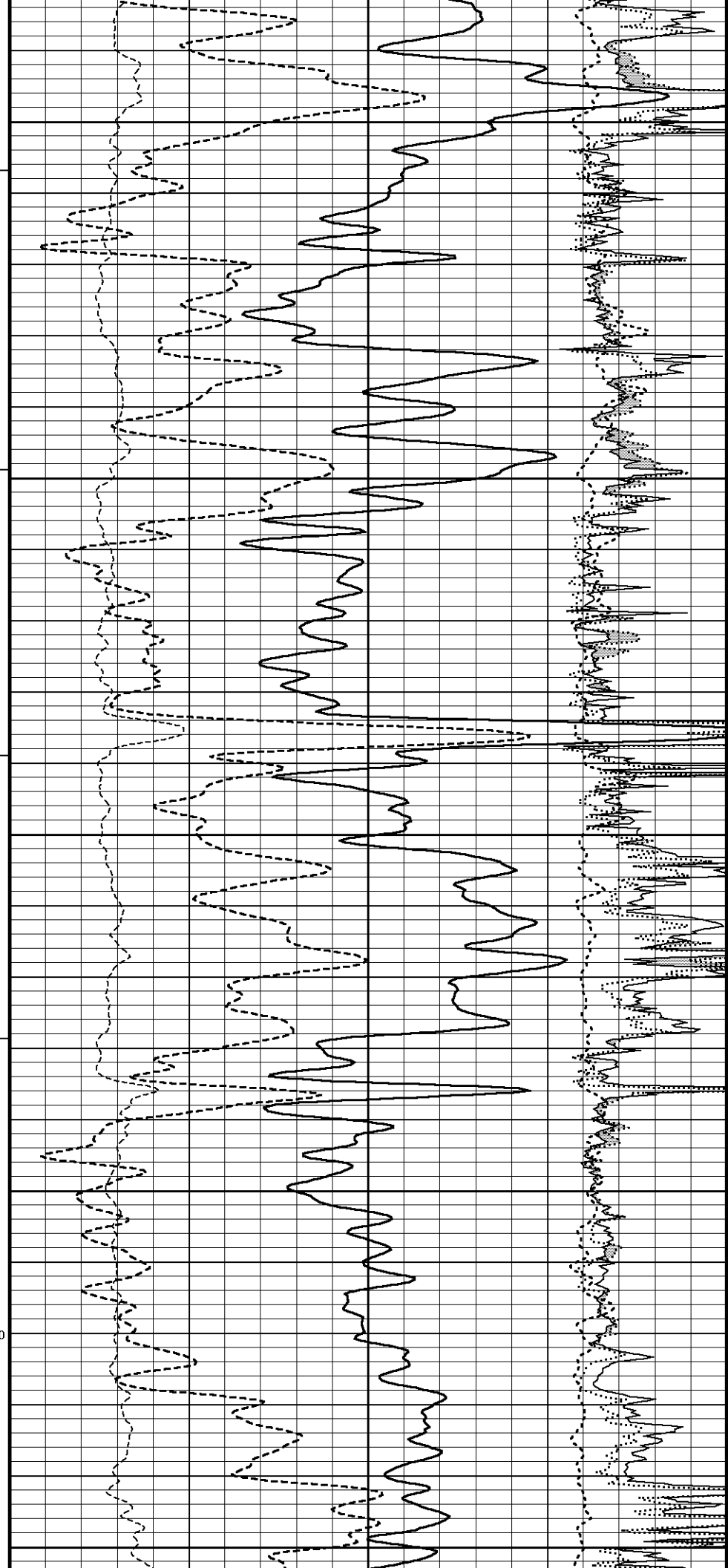
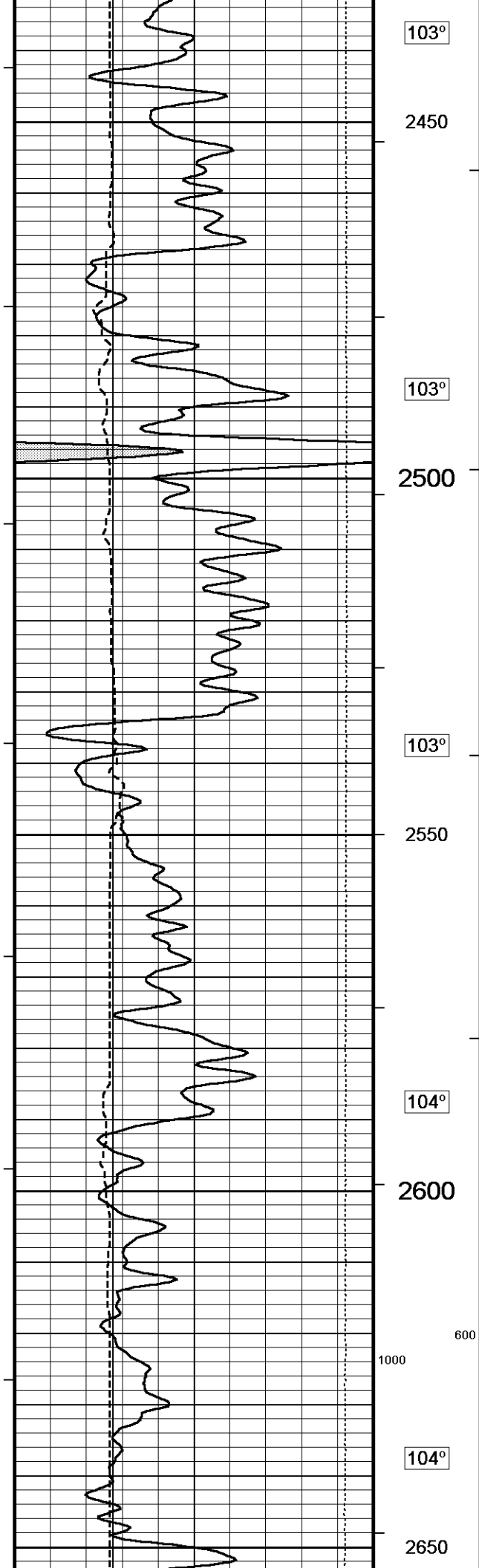


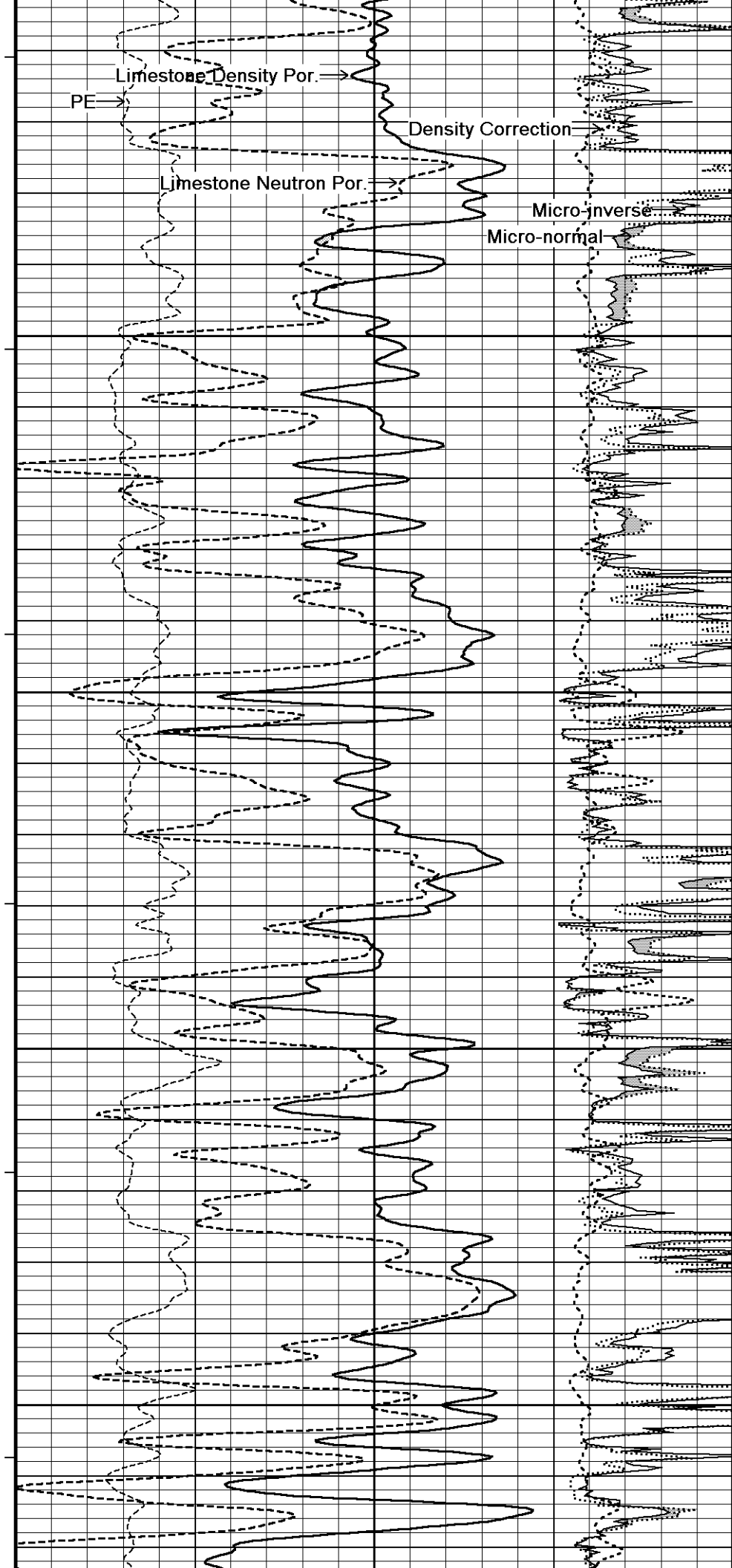
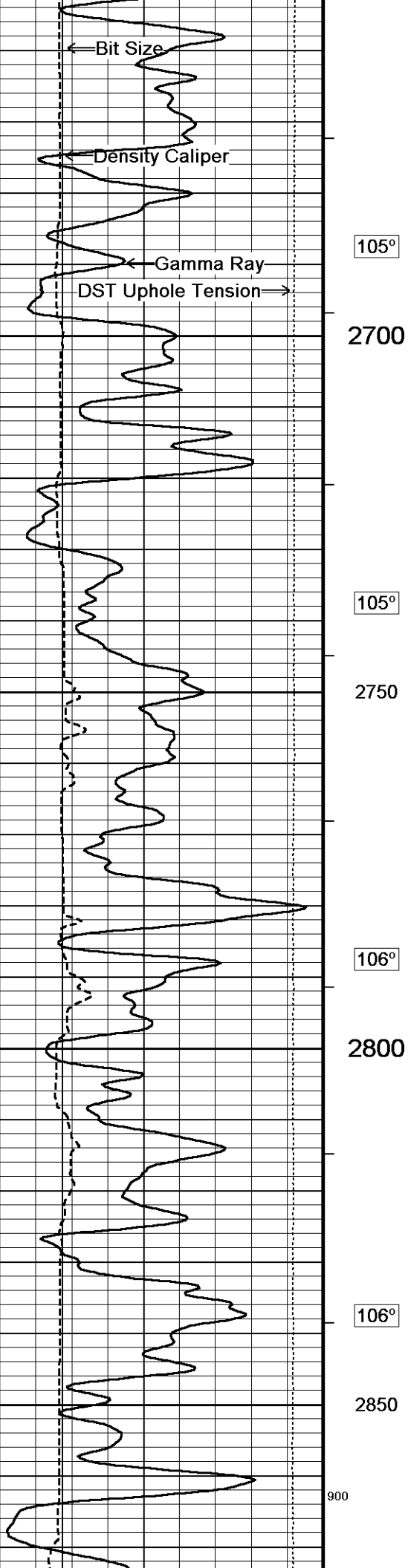


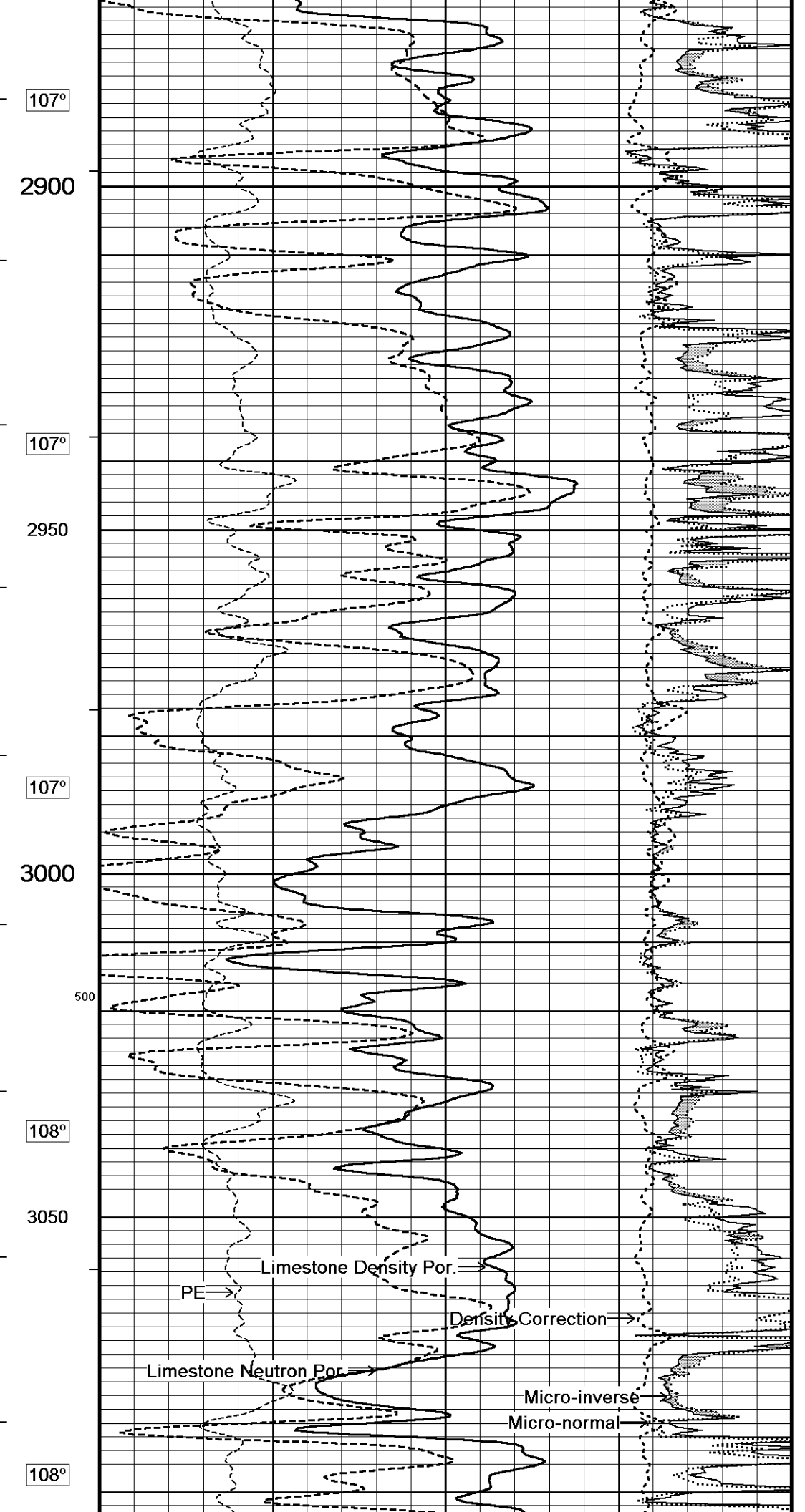
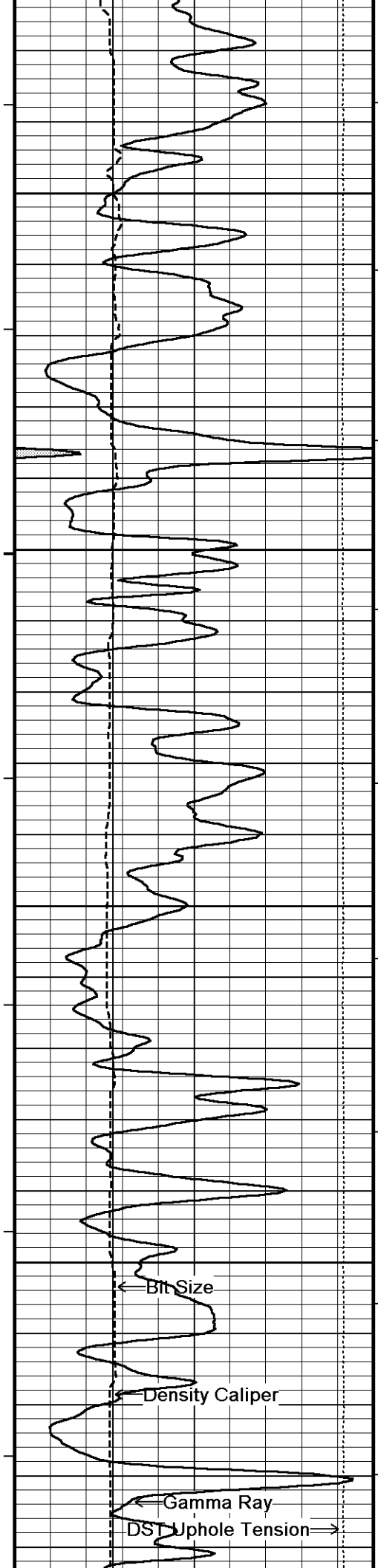


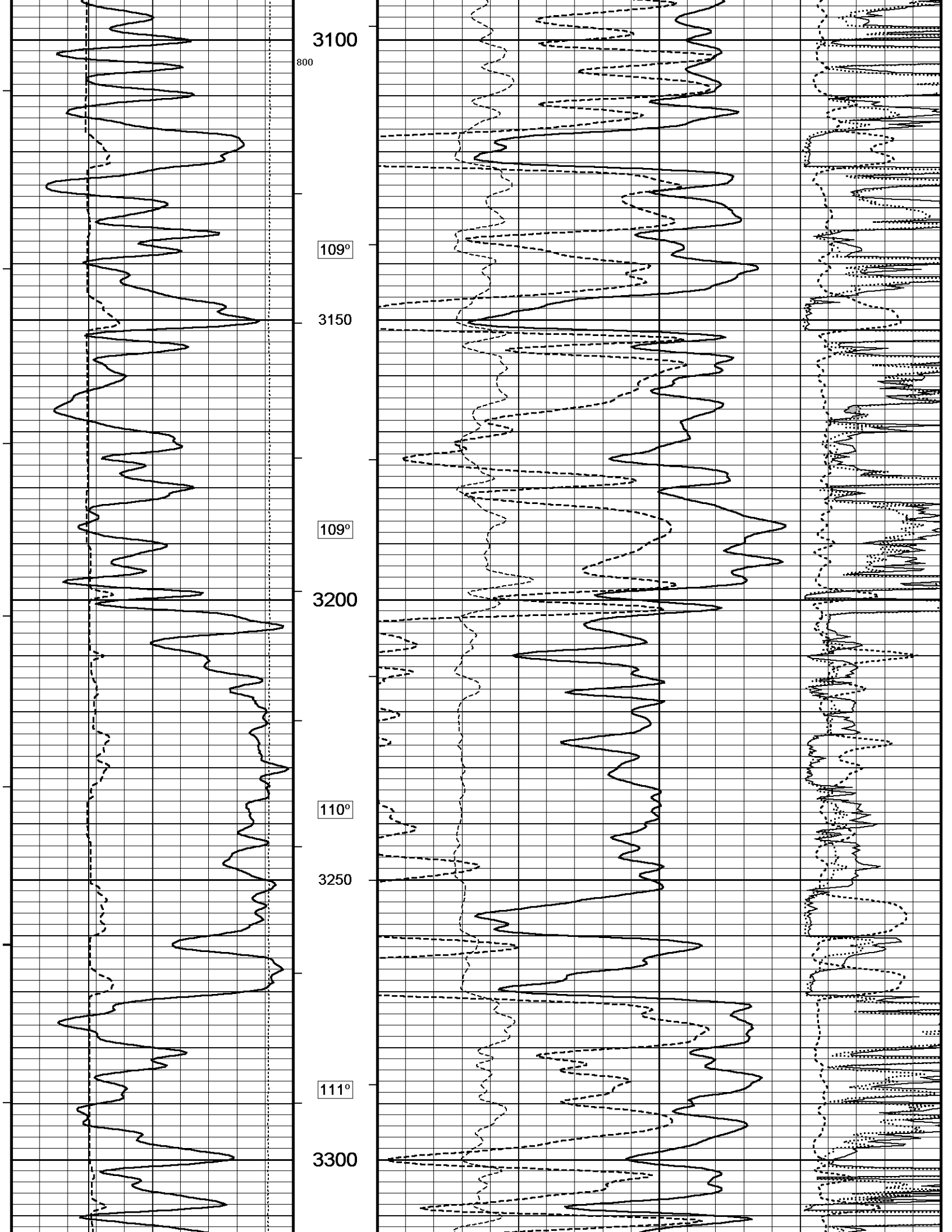


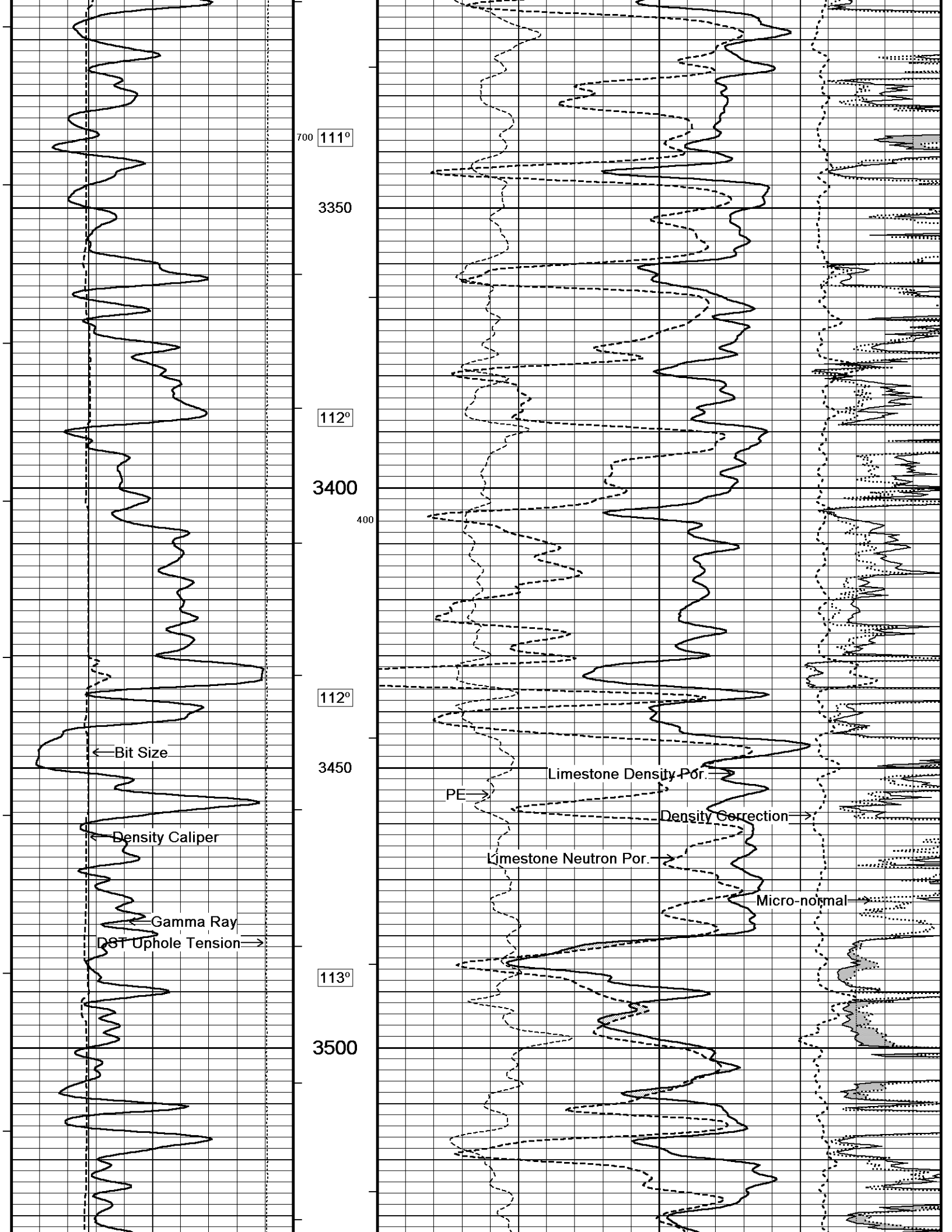


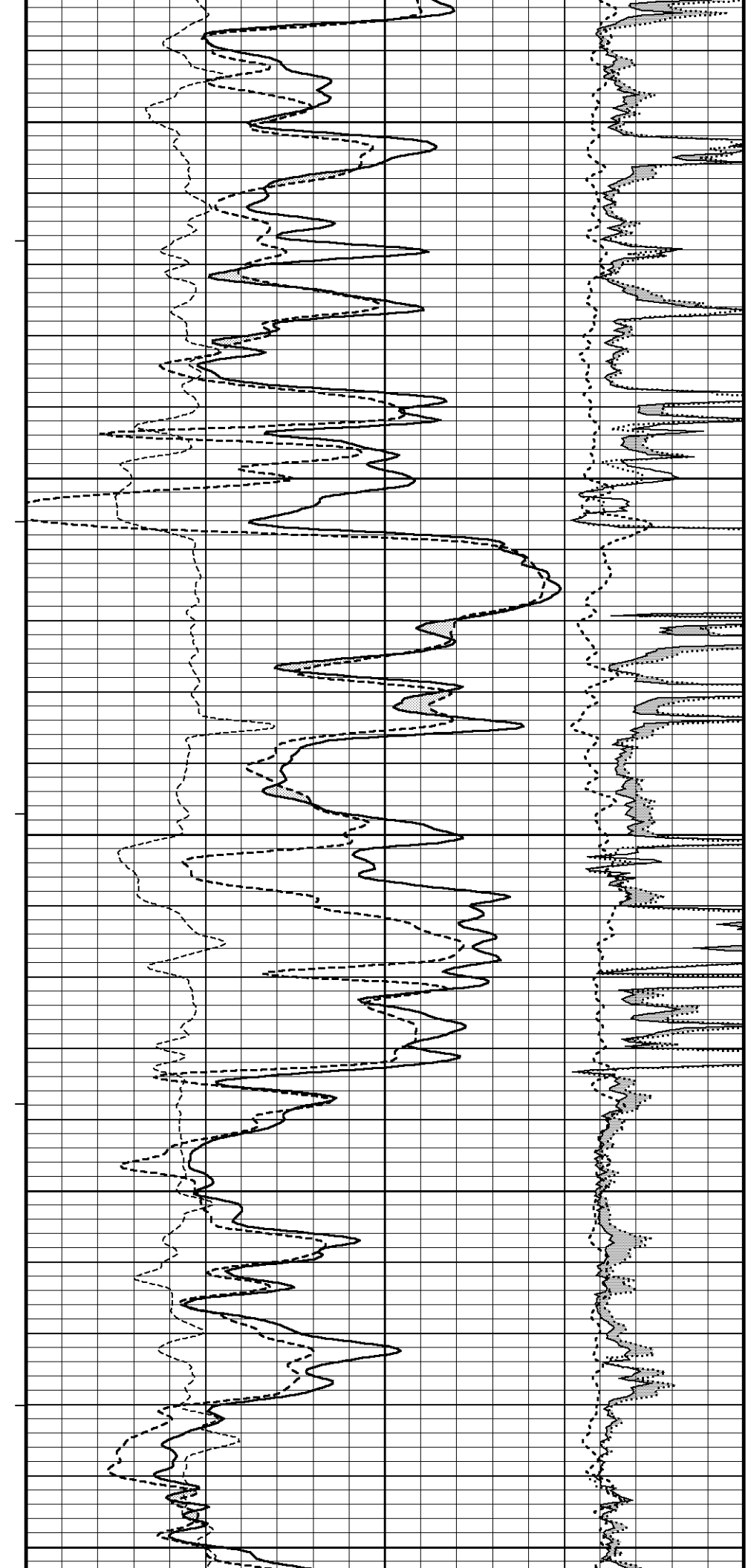
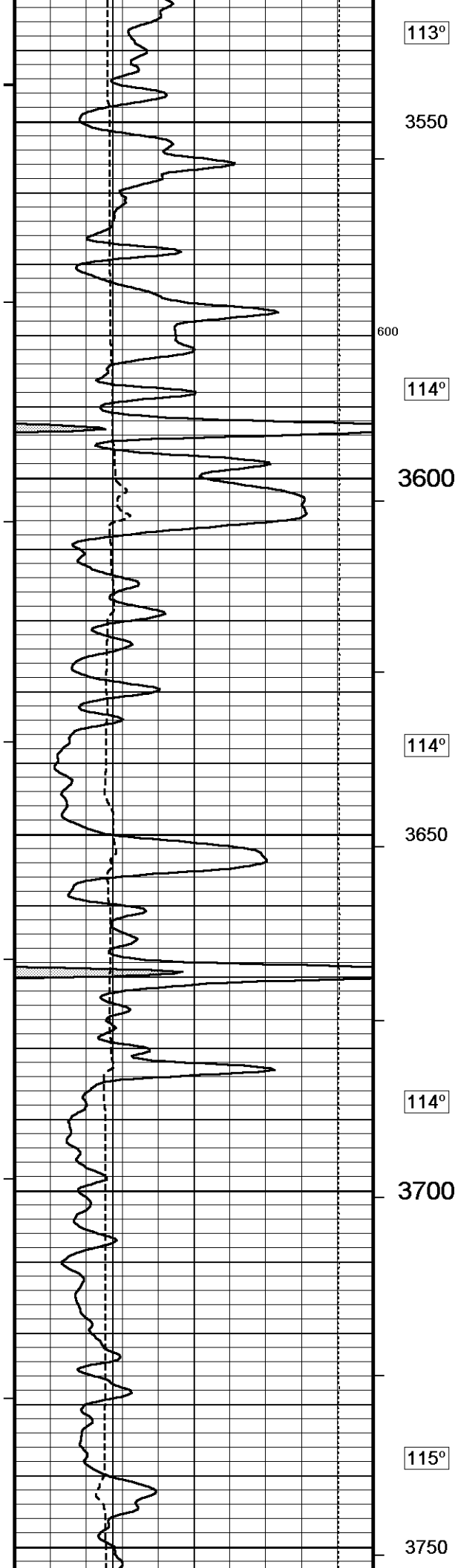


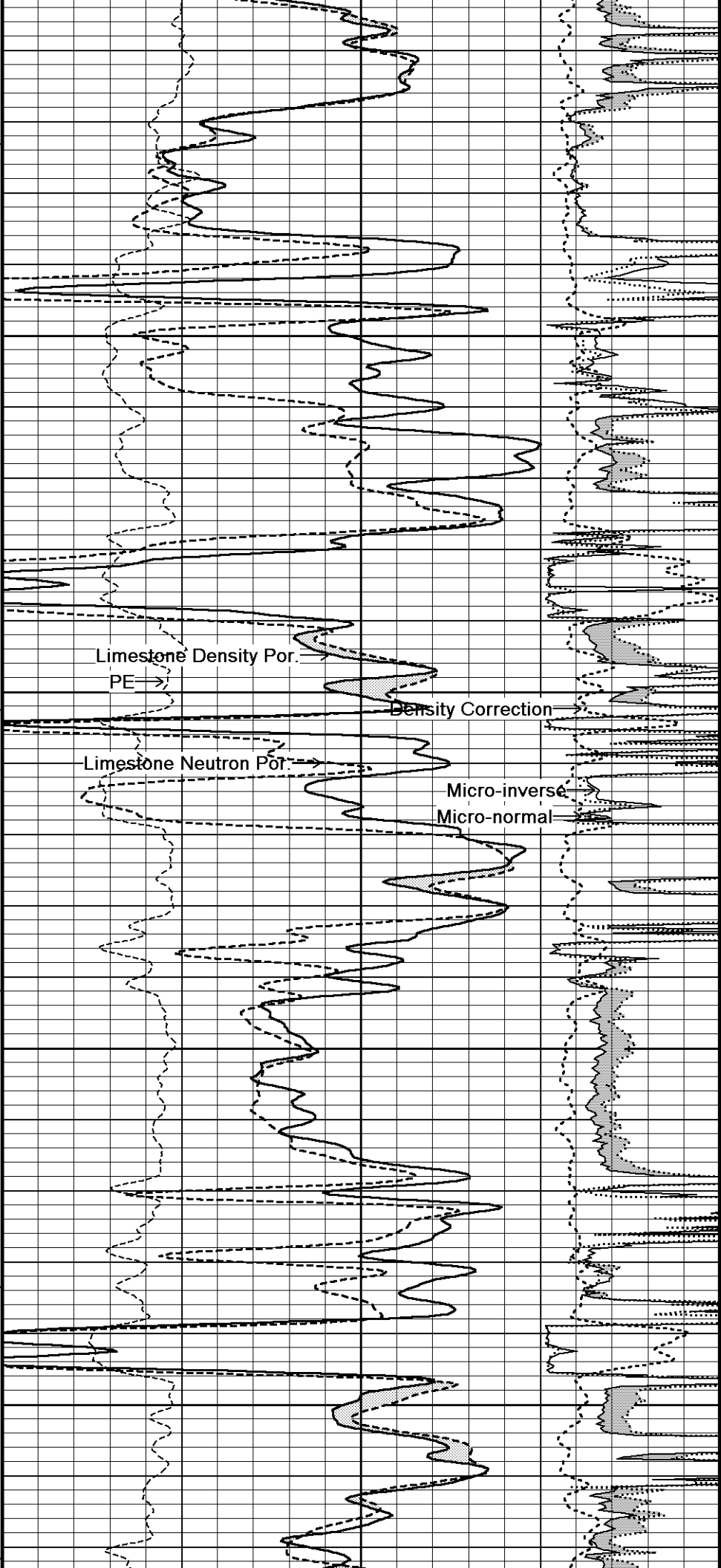
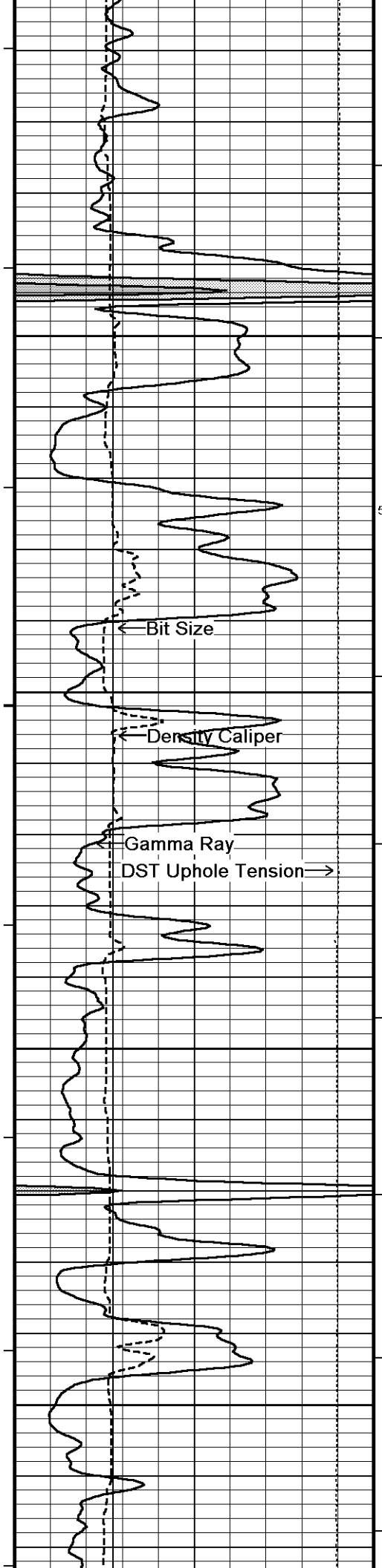


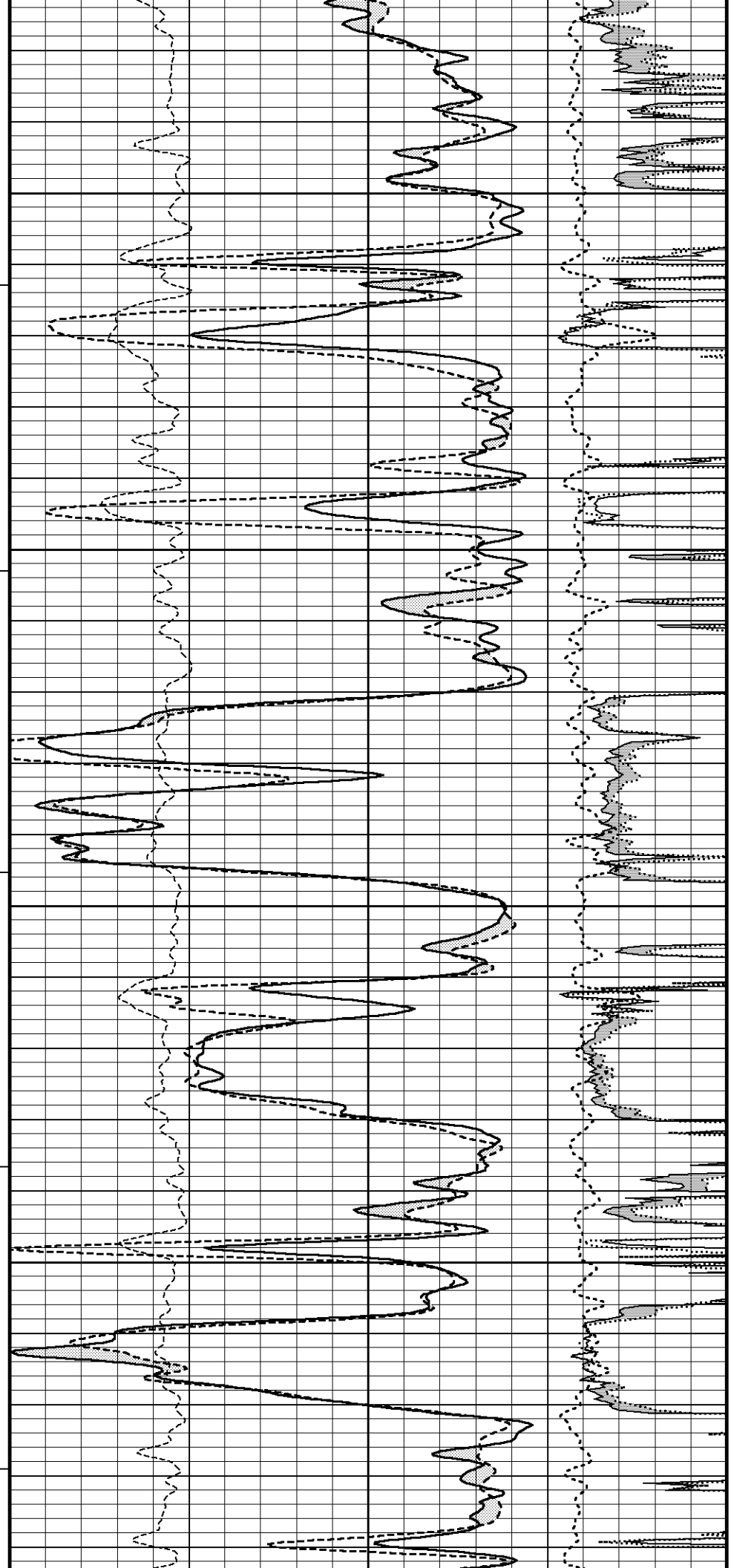
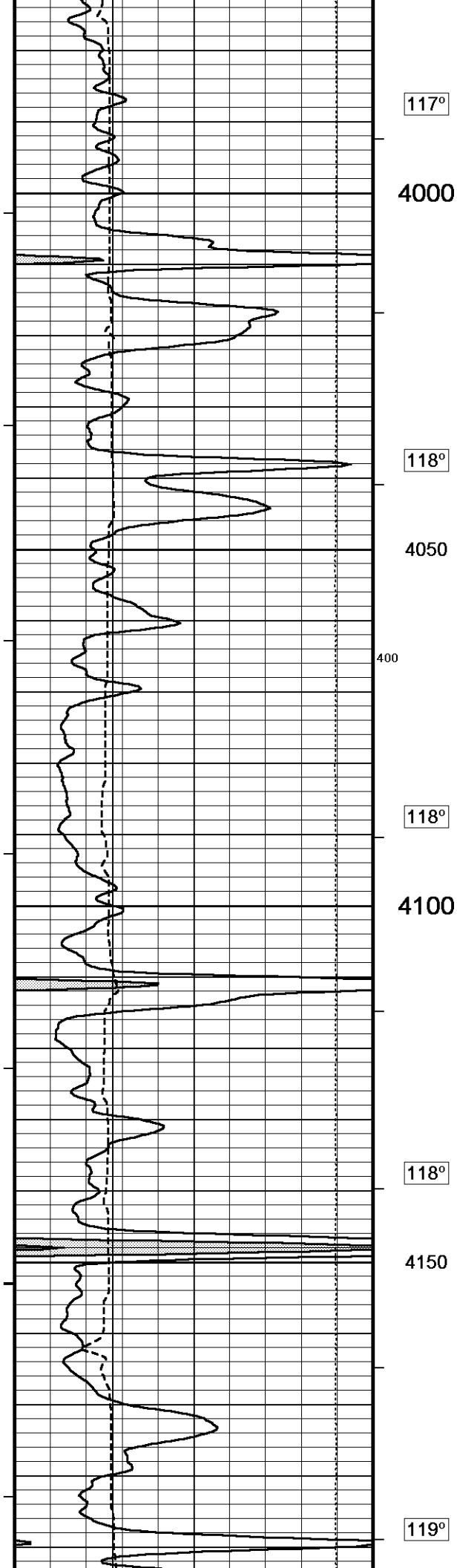


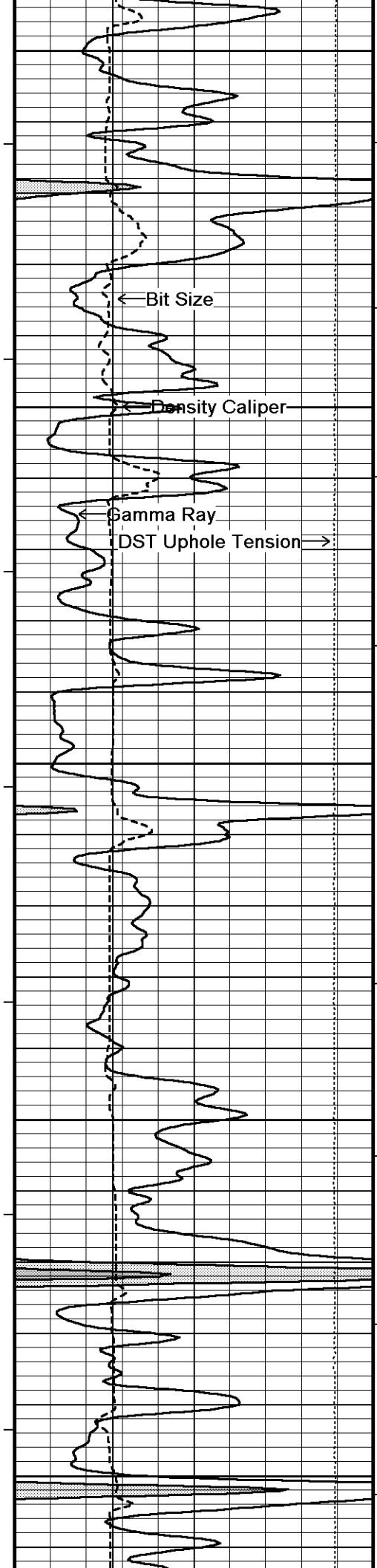












4200

200

119°

4250

120°

4300

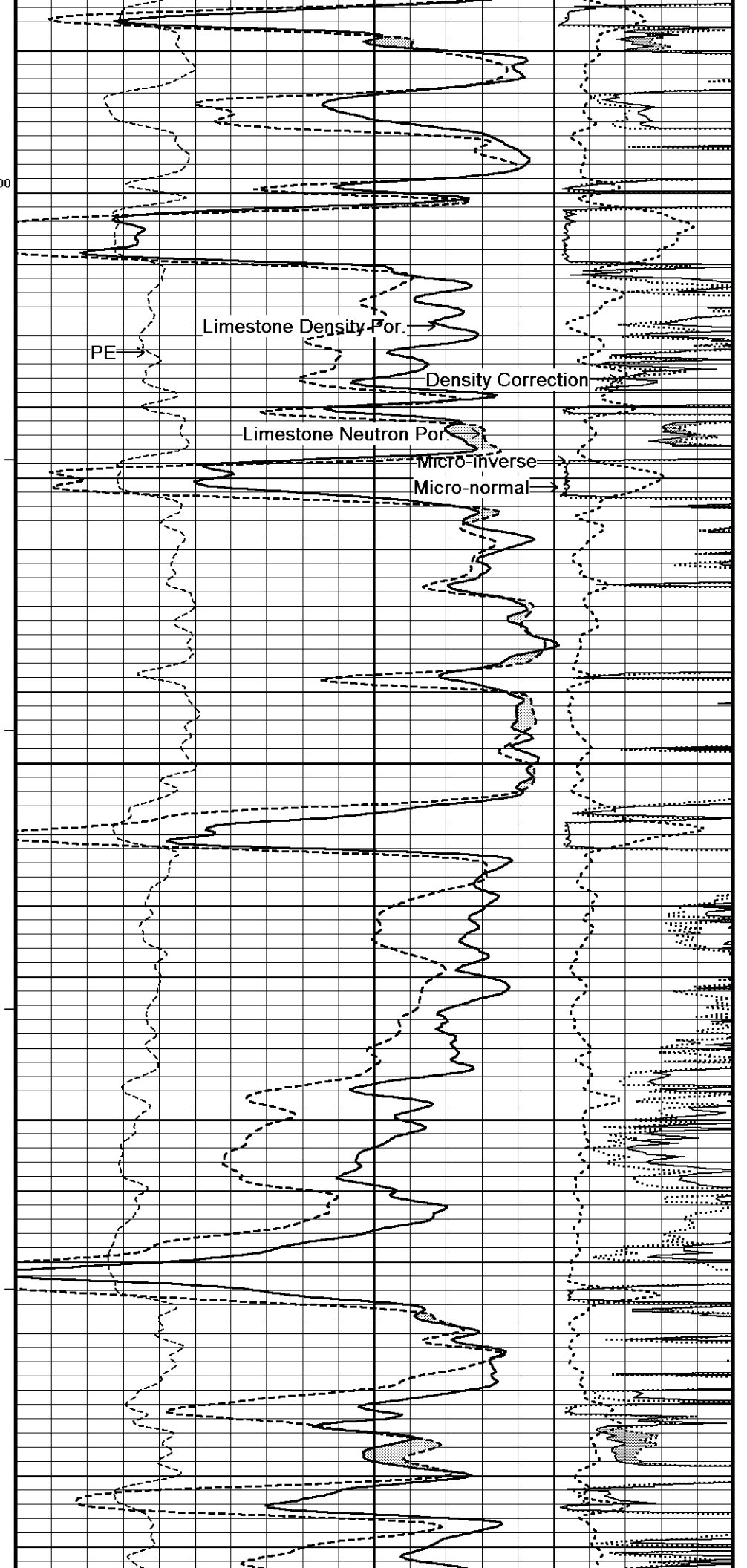
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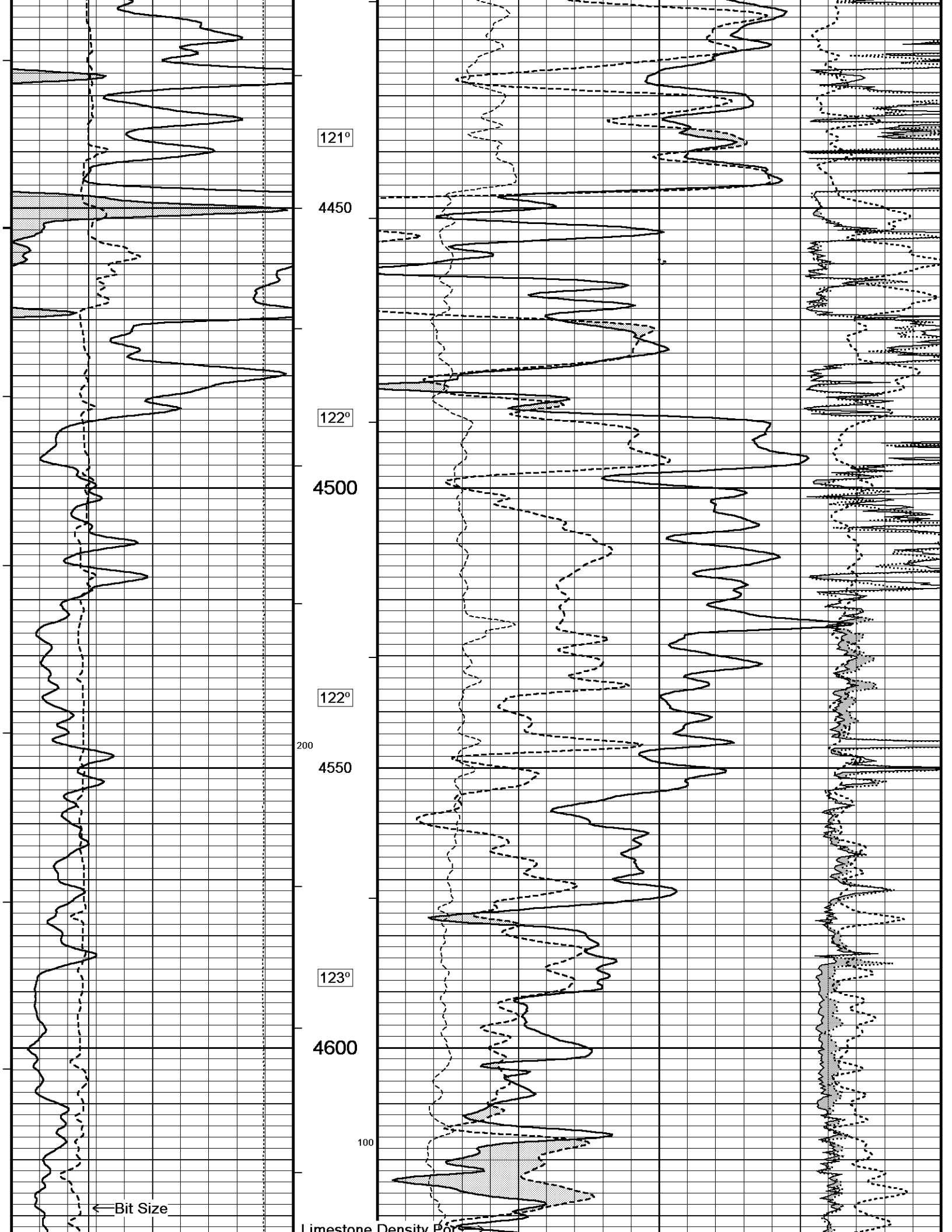
120°

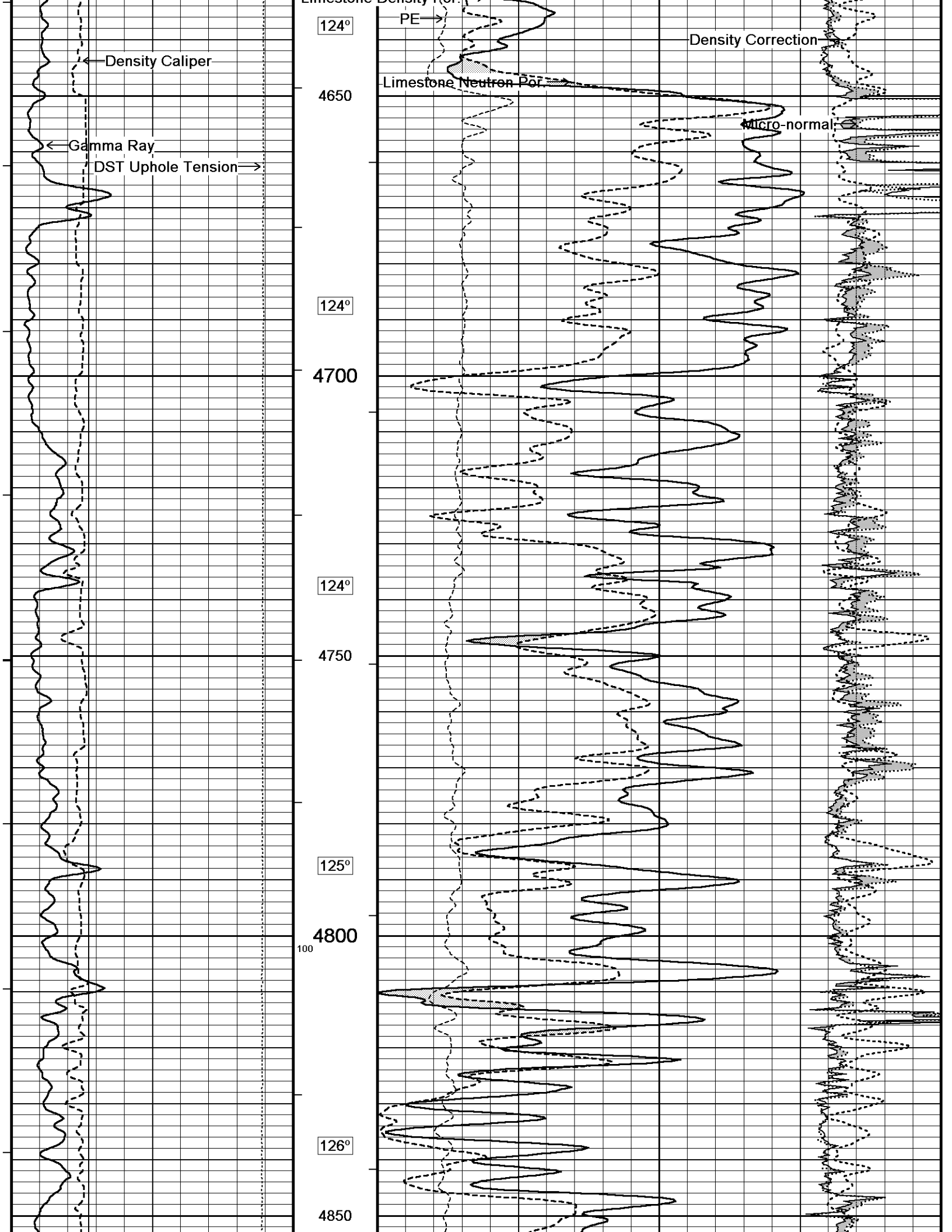
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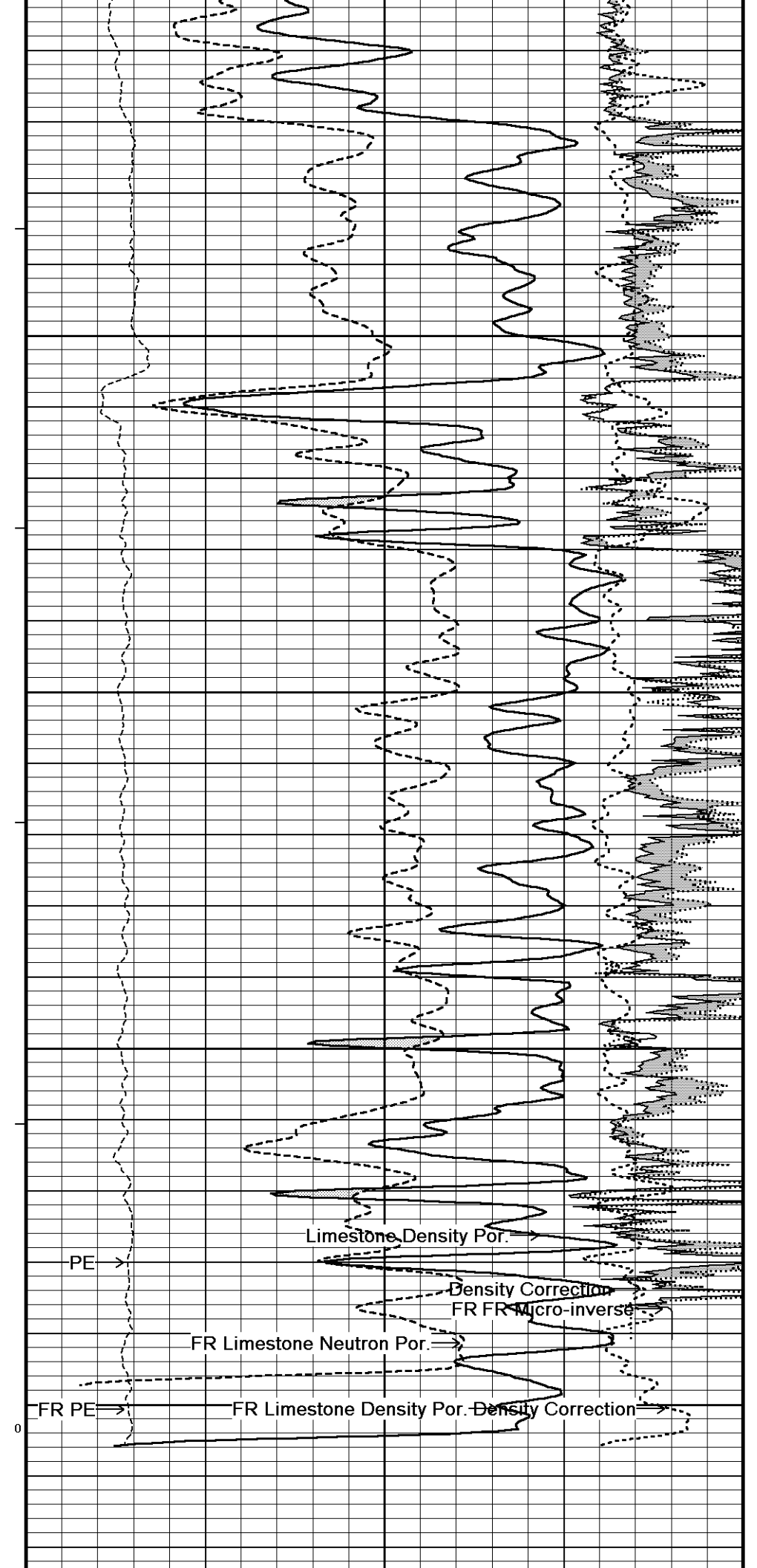
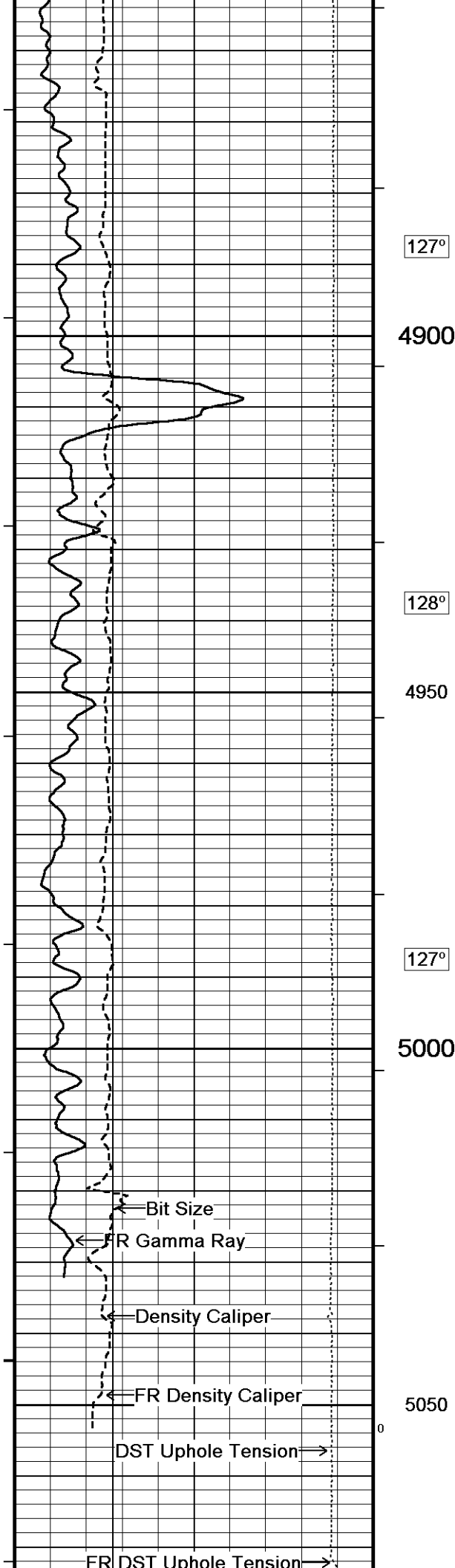
121°

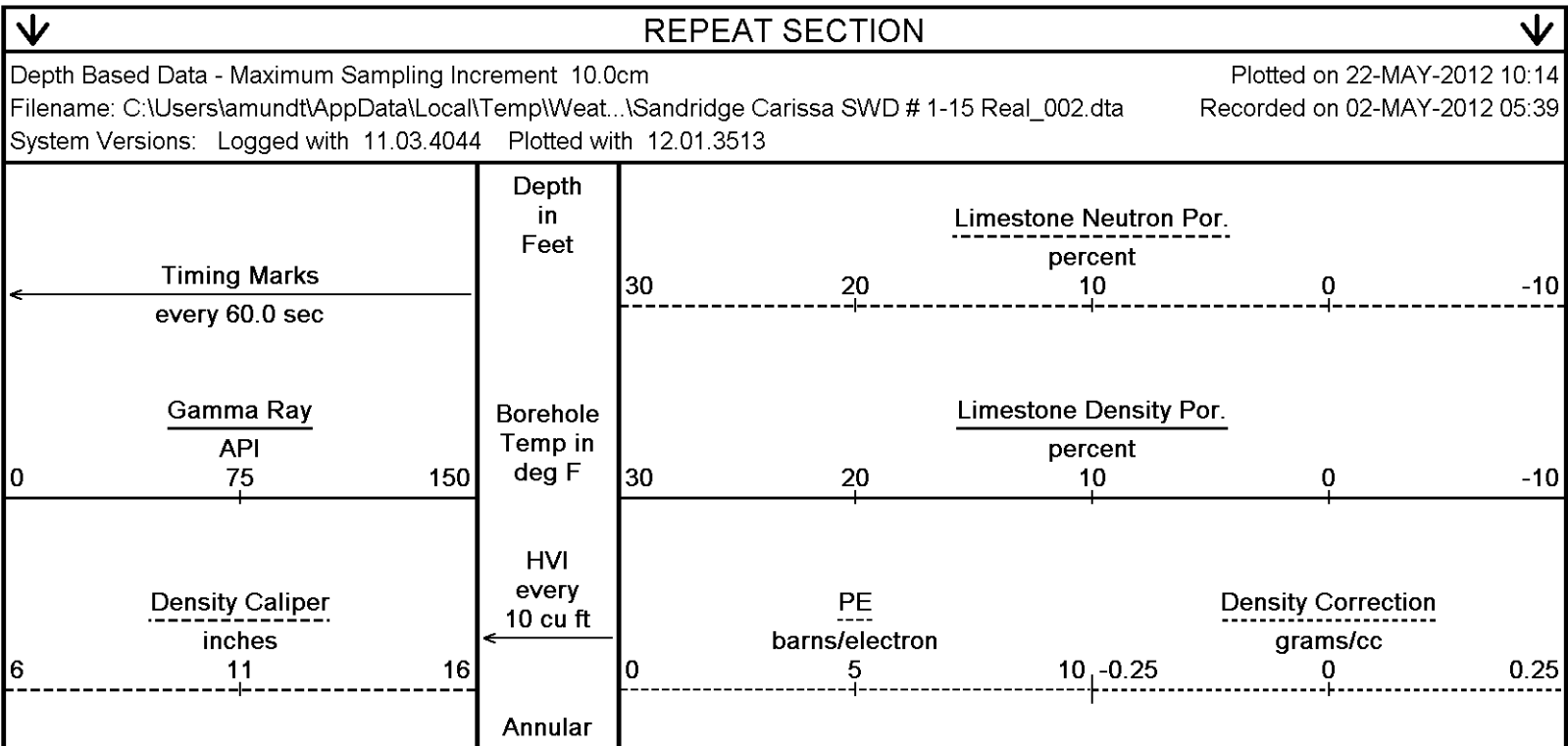
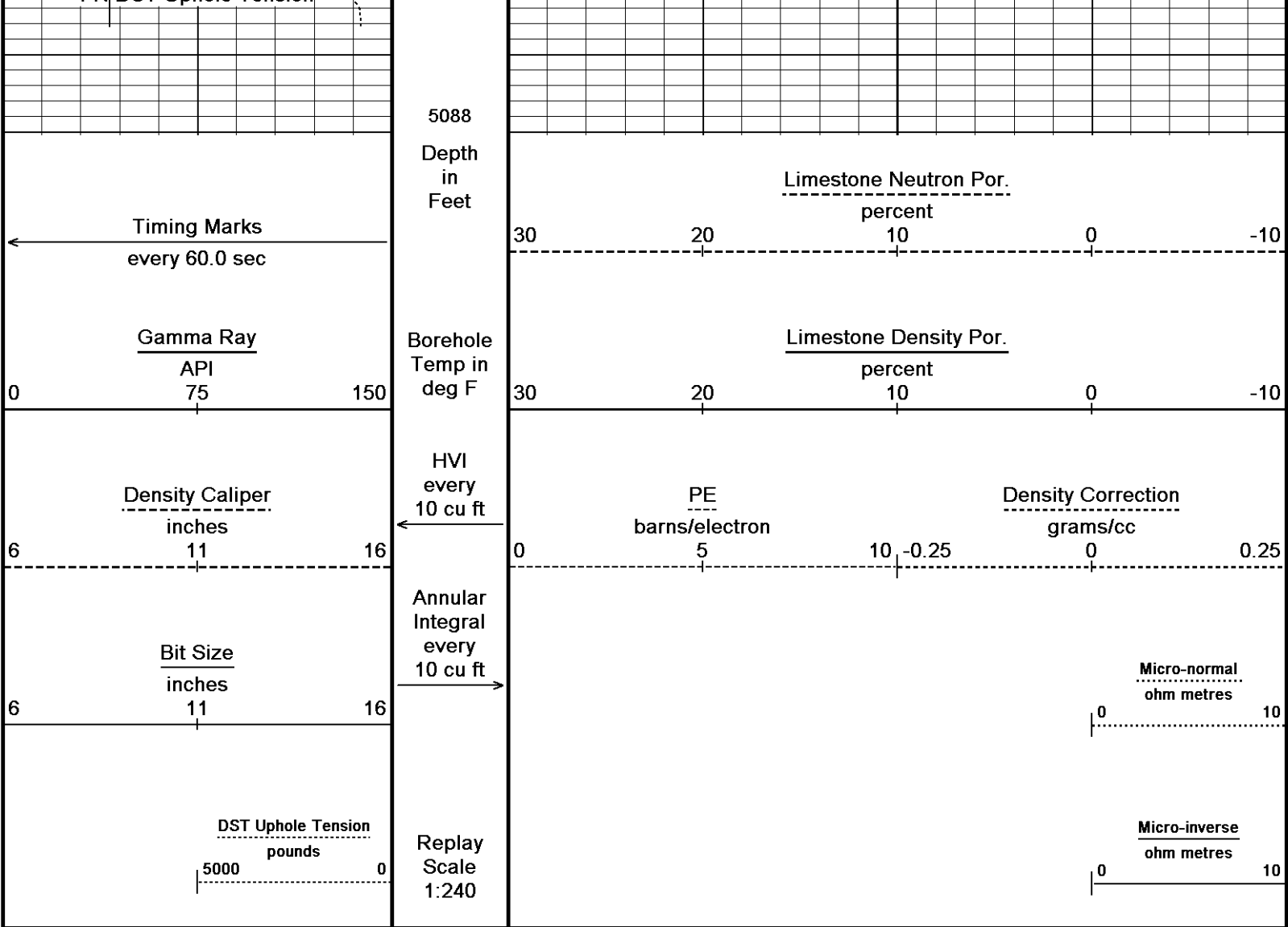
4400

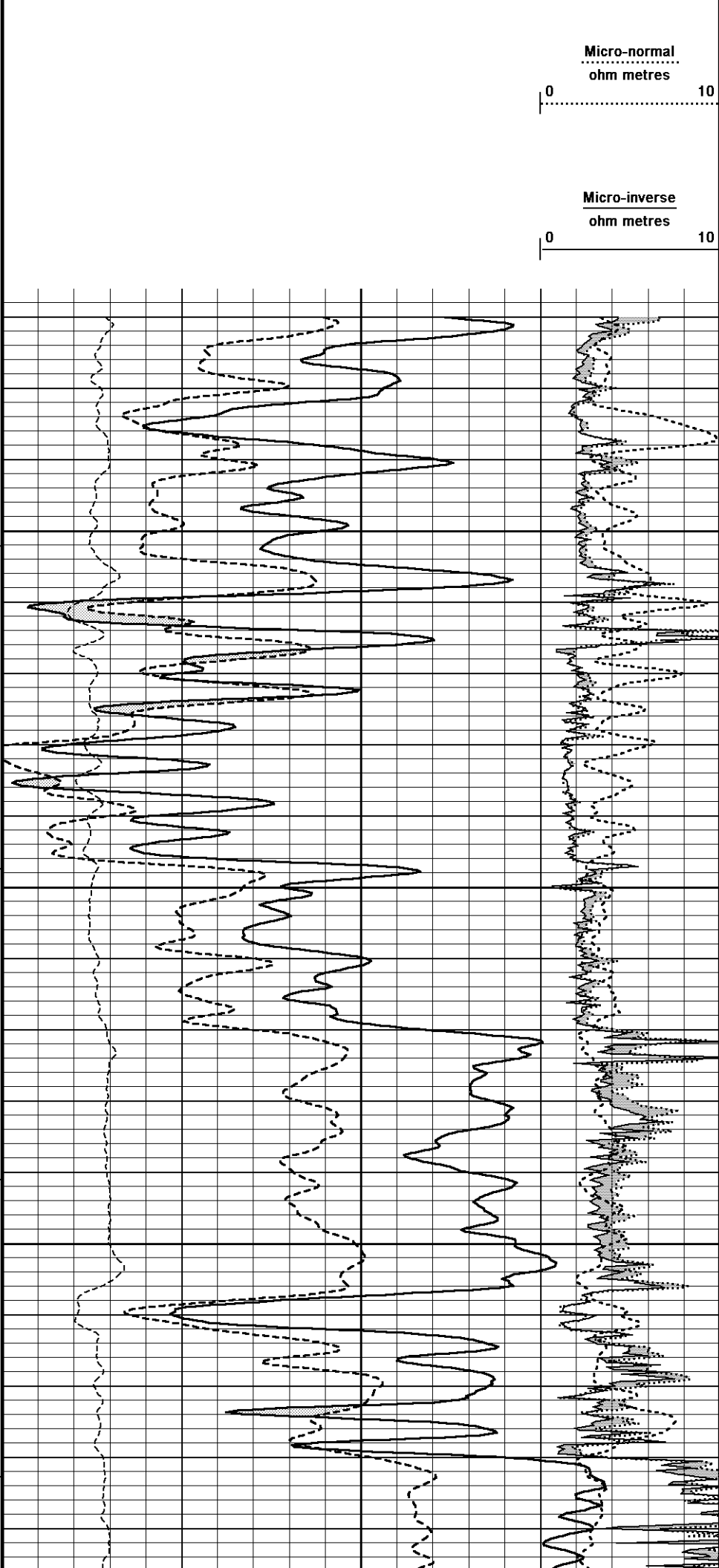
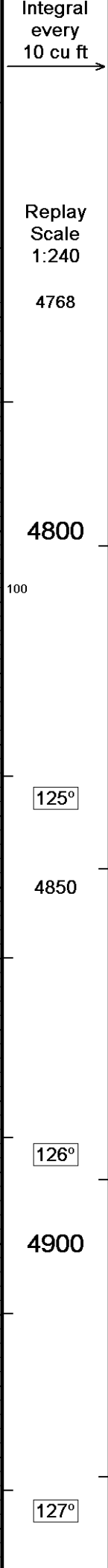
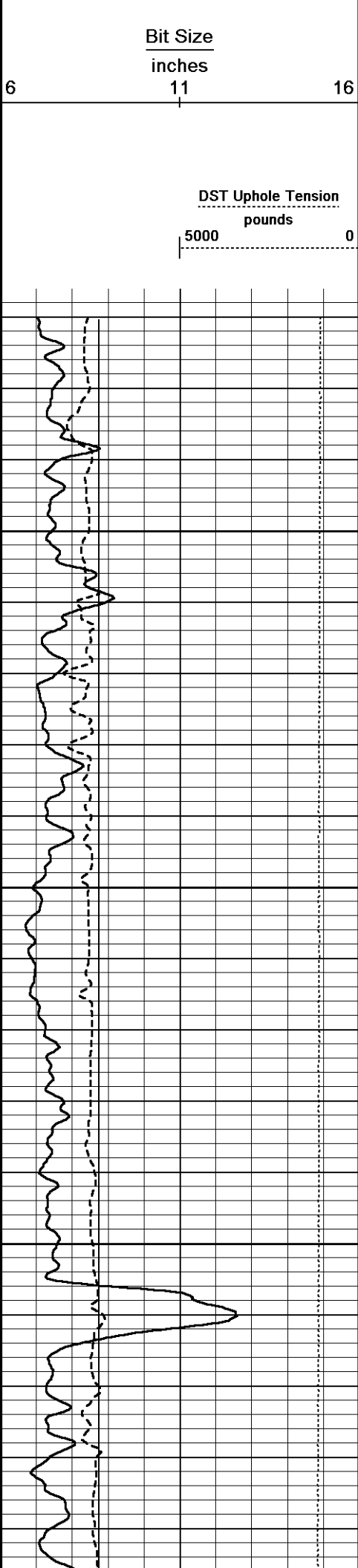


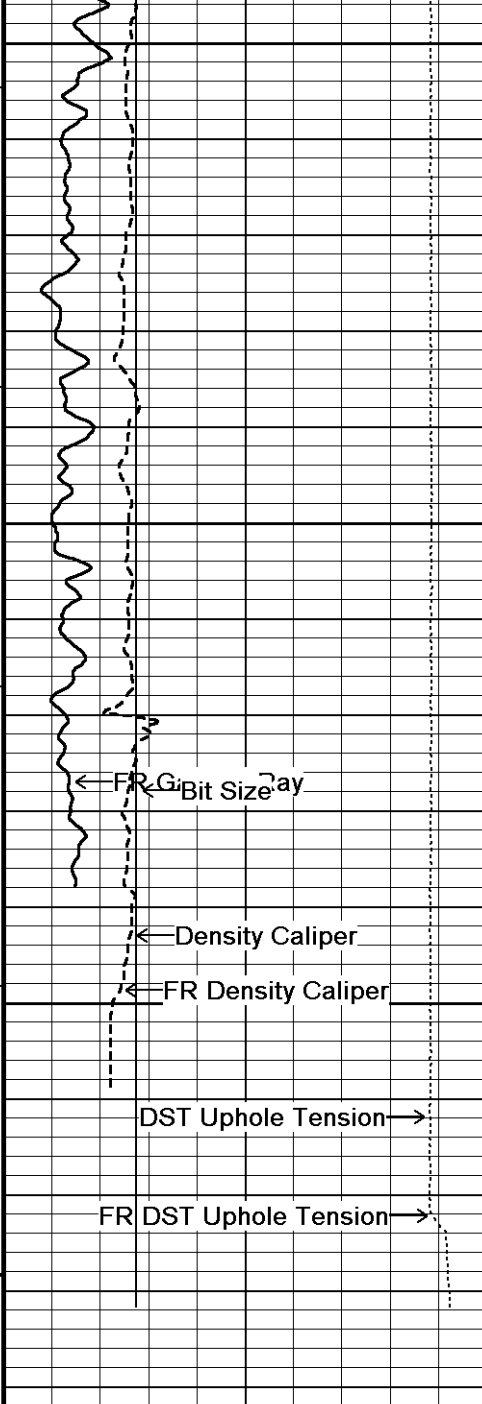












4950

127°

5000

127°

5050

0

5090

Depth
in
Feet

Timing Marks
every 60.0 sec

Gamma Ray
API
0 75 150

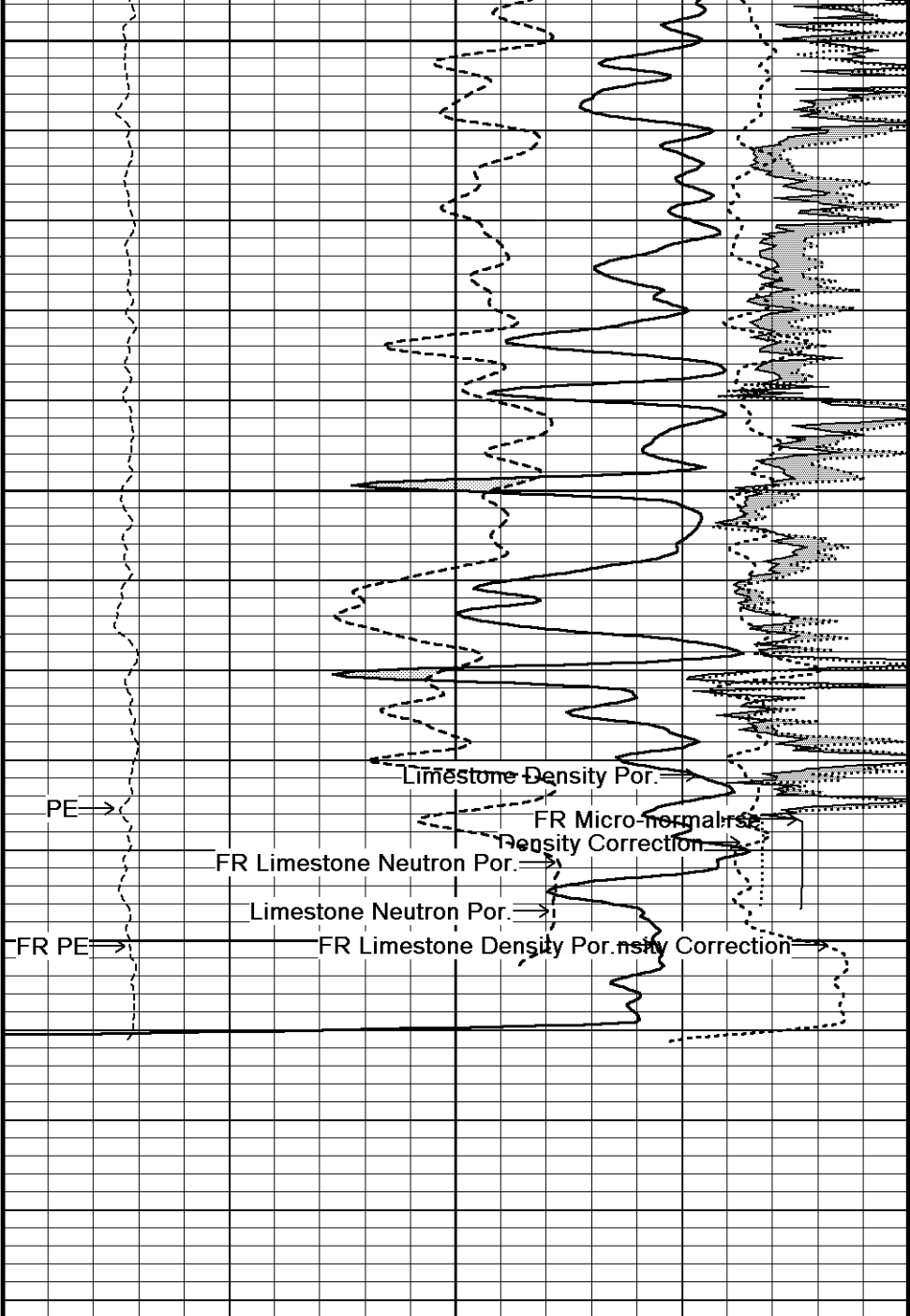
Density Caliper
inches
6 11 16

Bit Size
inches

Borehole
Temp in
deg F

HVI
every
10 cu ft

Annular
Integral
every
10 cu ft



PE

Limestone Density Por.

FR Micro-normalized
Density Correction

FR Limestone Neutron Por.

Limestone Neutron Por.

FR PE

FR Limestone Density Por.

Limestone Neutron Por.
percent
30 20 10 0 -10

Limestone Density Por.
percent
30 20 10 0 -10

PE
barns/electron
0 5 10 -0.25

Density Correction
grams/cc
0 0.25

Micro-normal
ohm metres



Depth Based Data - Maximum Sampling Increment 10.0cm Filename: C:\Users\amundt\AppData\Local\Temp\Weat...\Sandridge Carissa SWD # 1-15 Real_002.dta System Versions: Logged with 11.03.4044 Plotted with 12.01.3513	Plotted on 22-MAY-2012 10:14 Recorded on 02-MAY-2012 05:39
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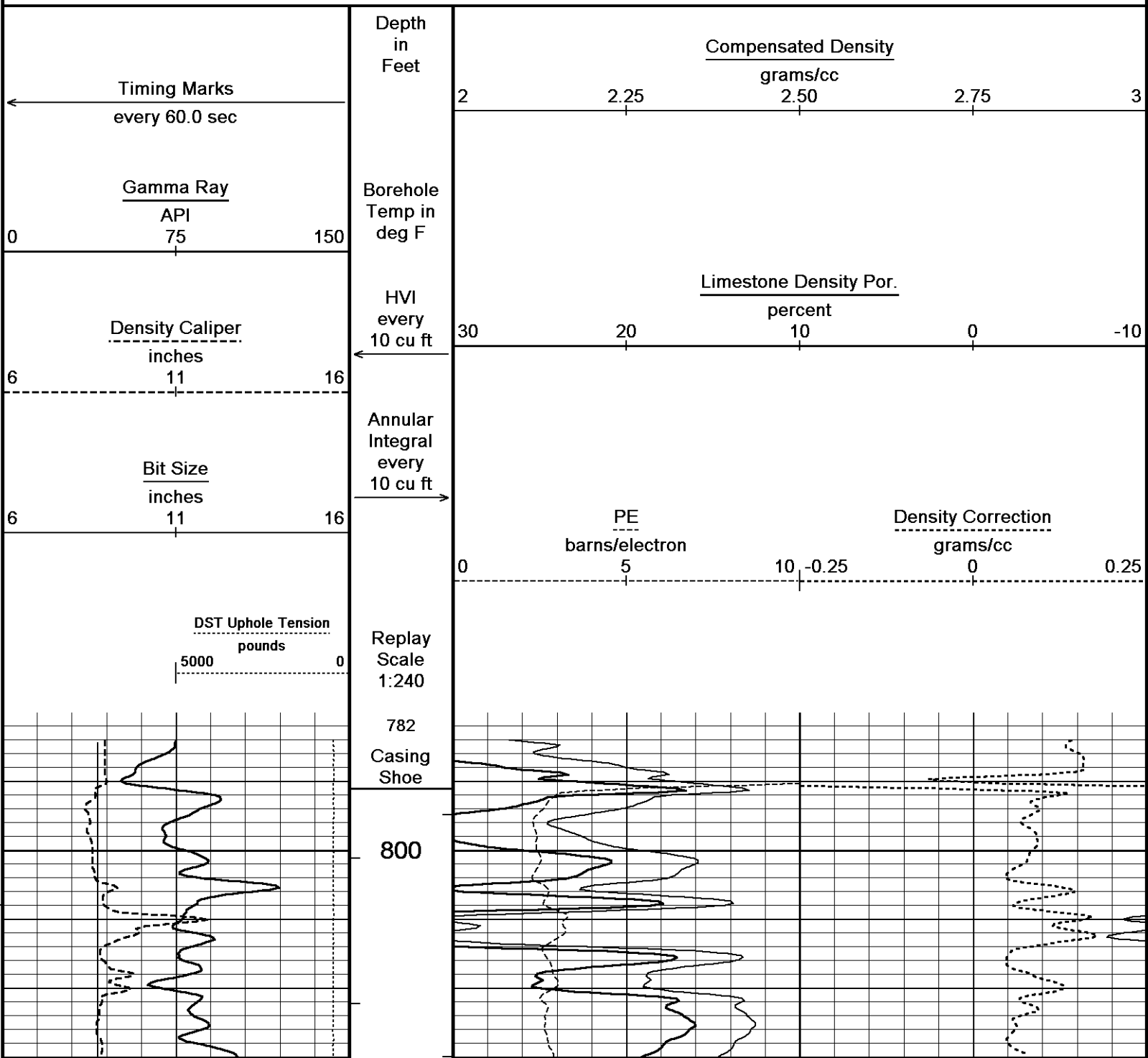
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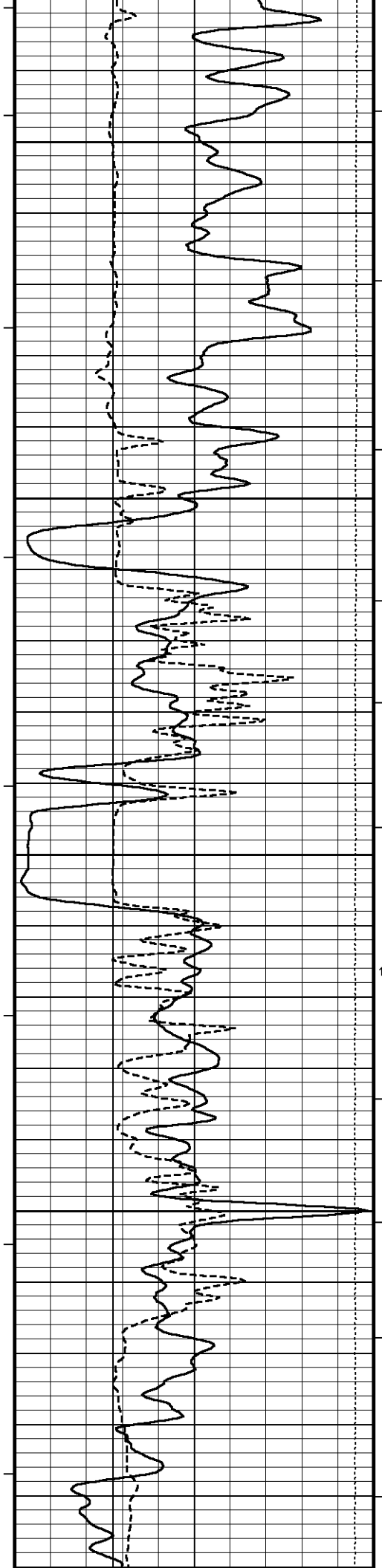
REPEAT SECTION

↑



Depth Based Data - Maximum Sampling Increment 10.0cm Filename: C:\Users\amundt\AppData\Local\Temp\Weat...\Sandridge Carissa SWD # 1-15 Real_003.dta System Versions: Logged with 11.03.4044 Plotted with 12.01.3513	Plotted on 22-MAY-2012 10:14 Recorded on 02-MAY-2012 05:58
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91°

850

92°

900

92°

950

1800

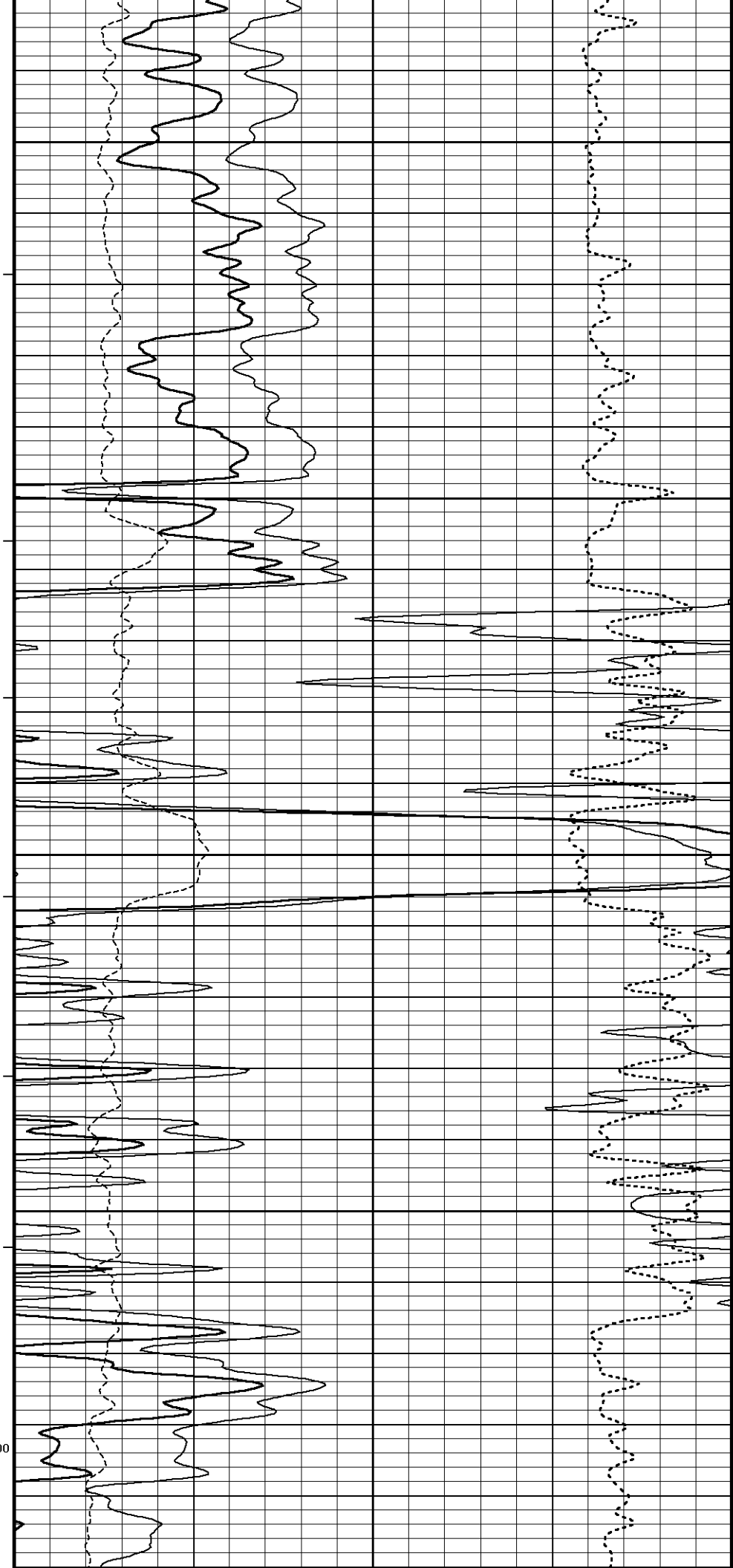
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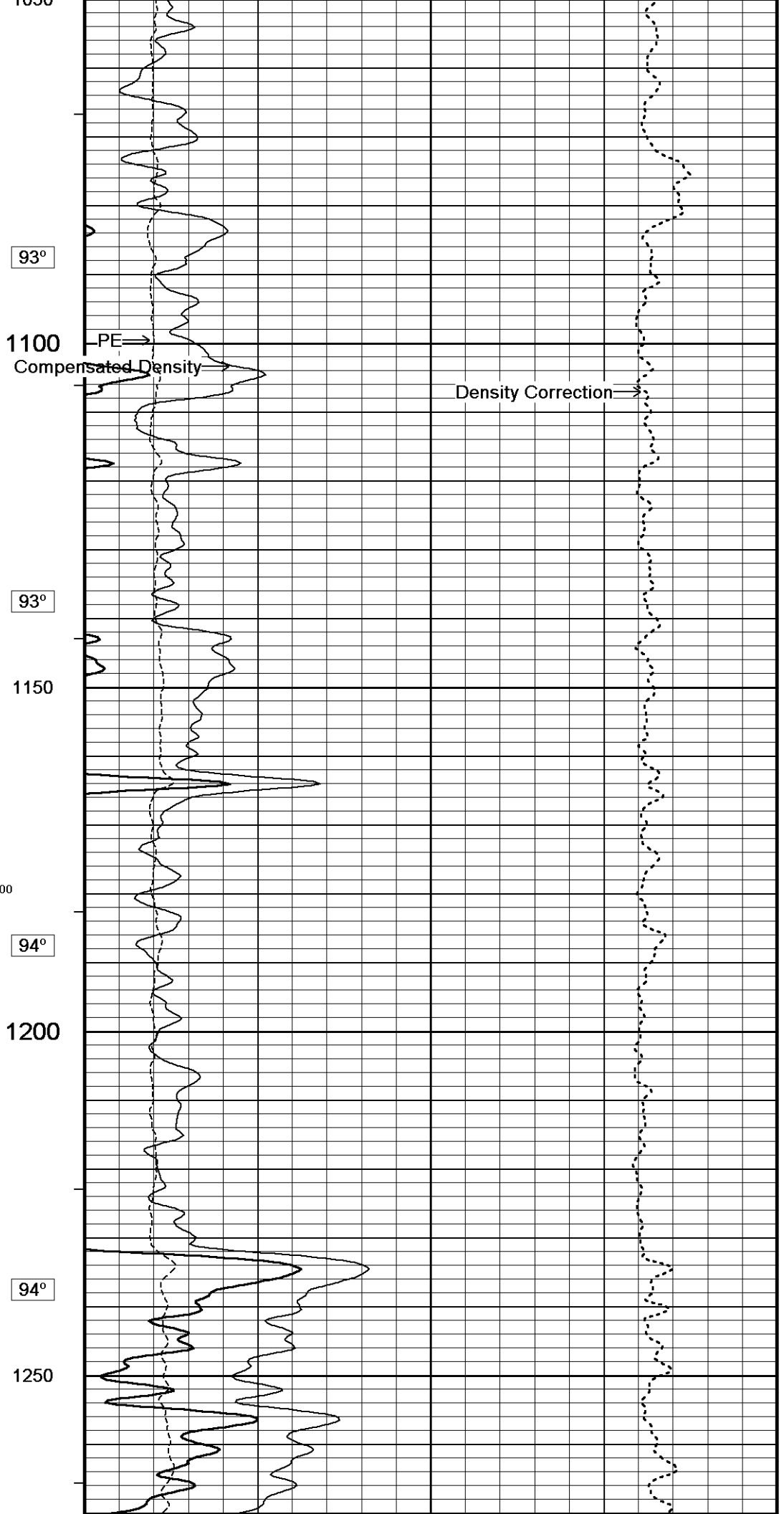
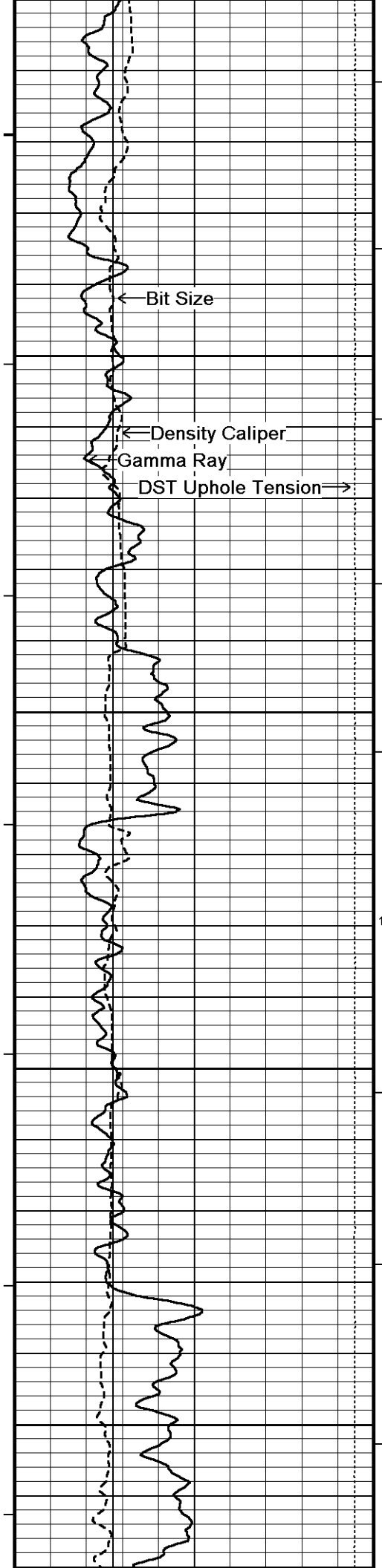
1000

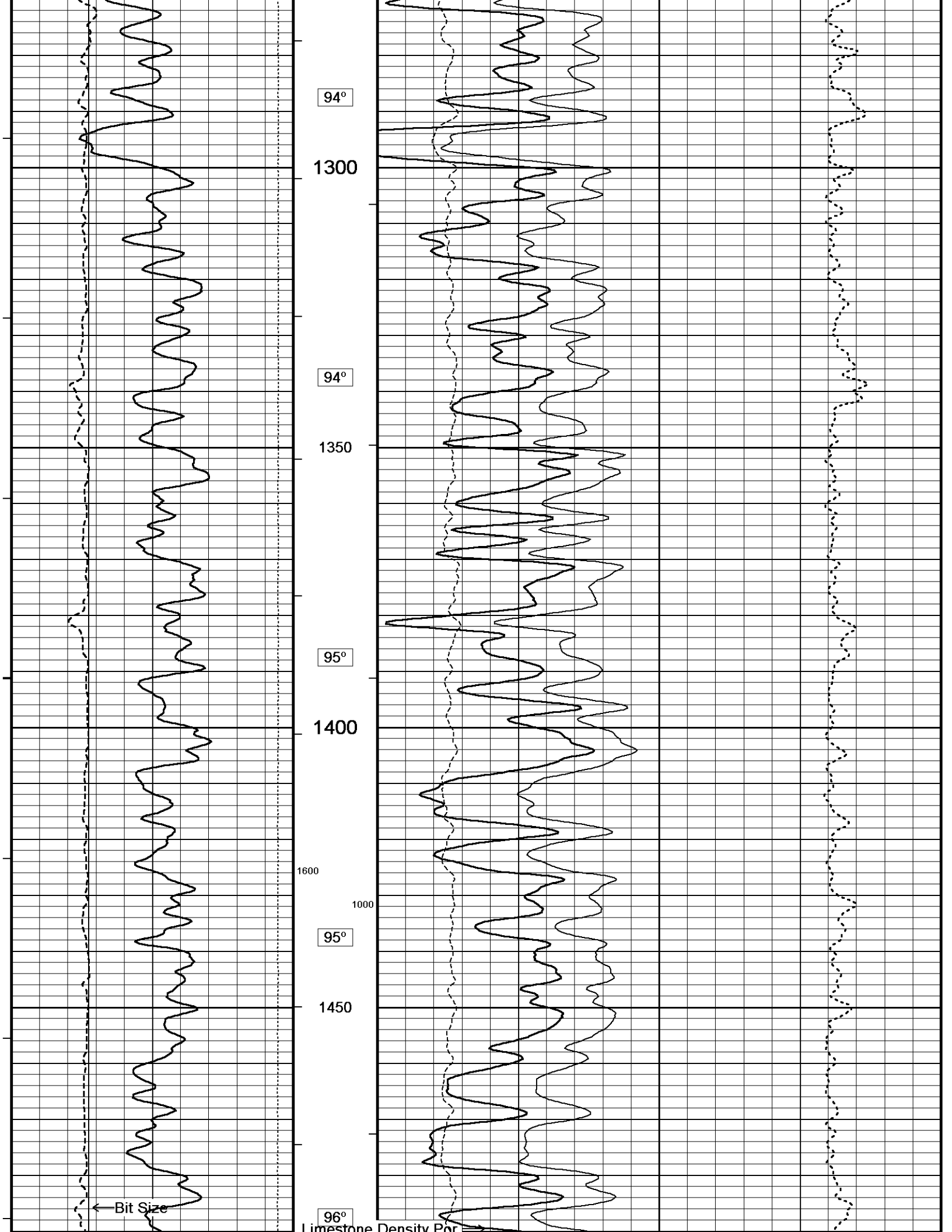
1100

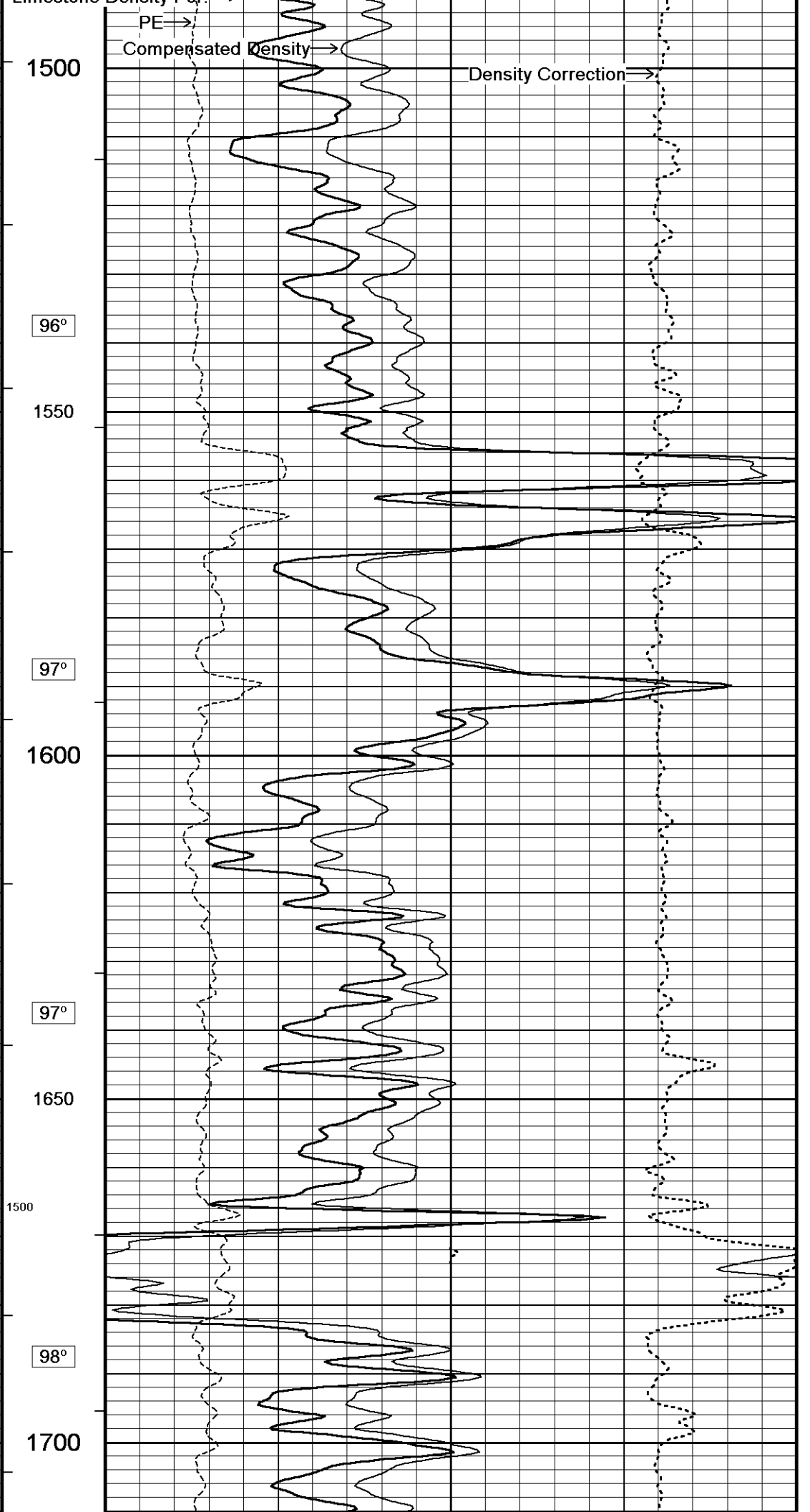
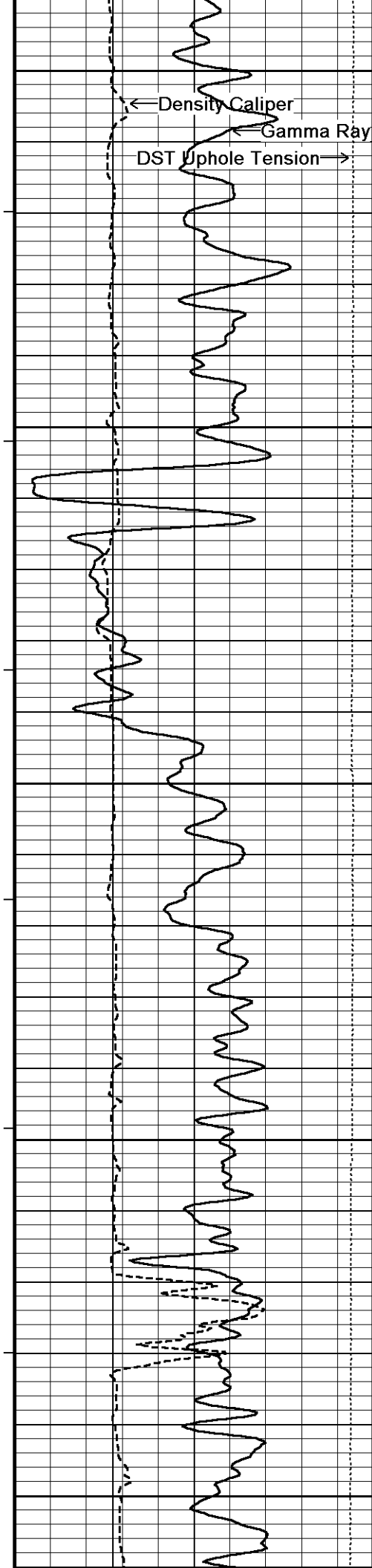
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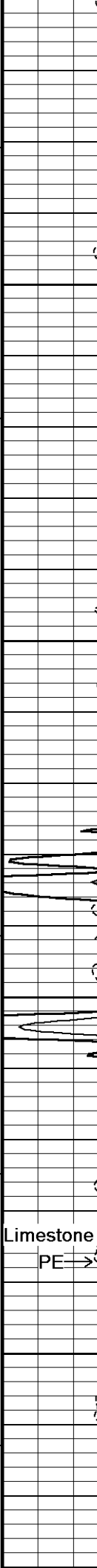
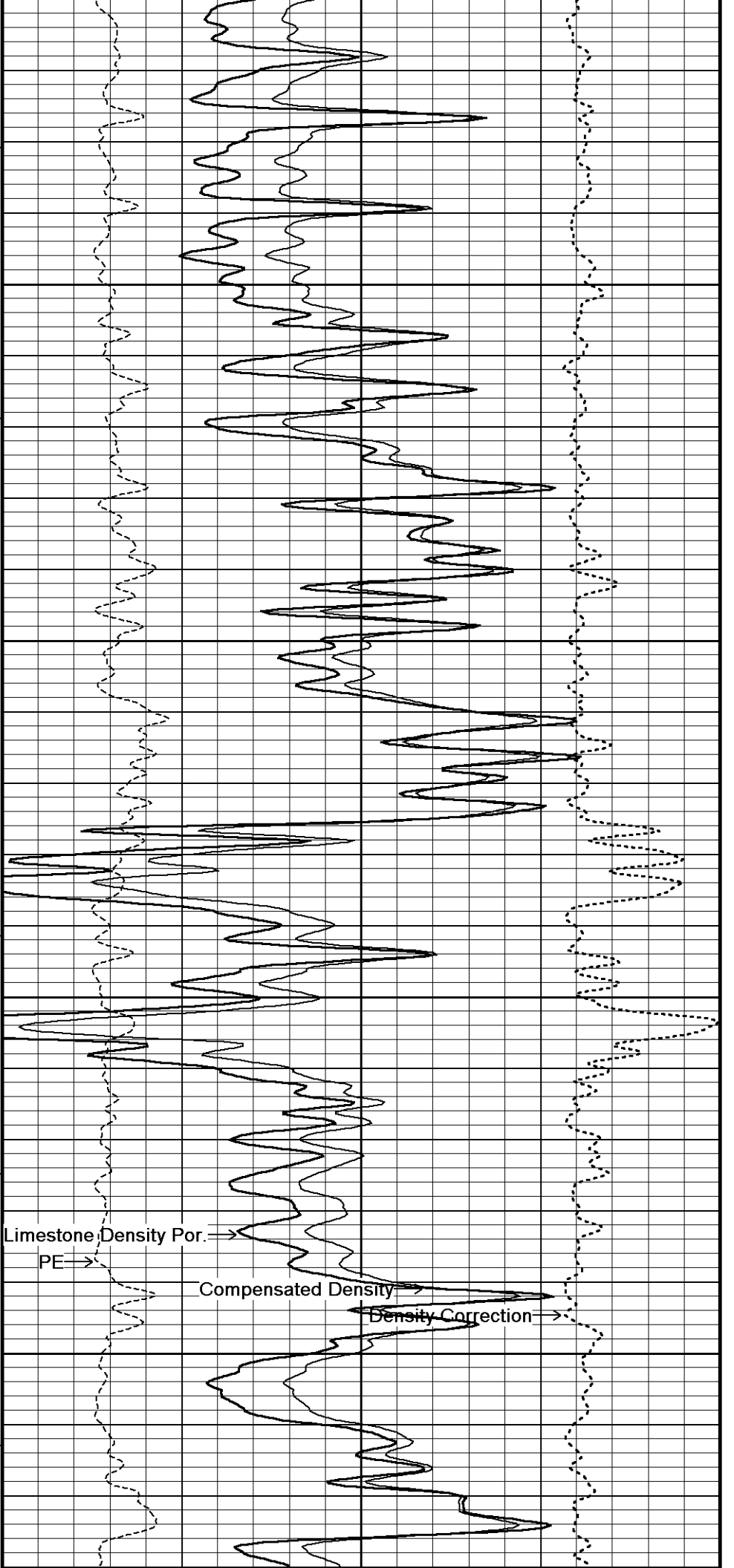
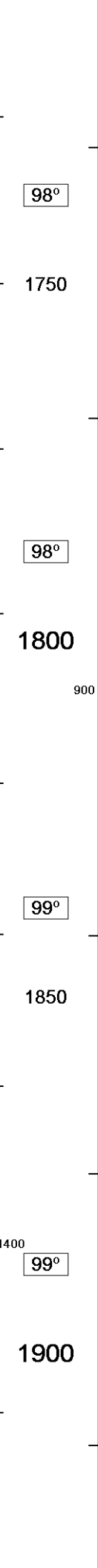
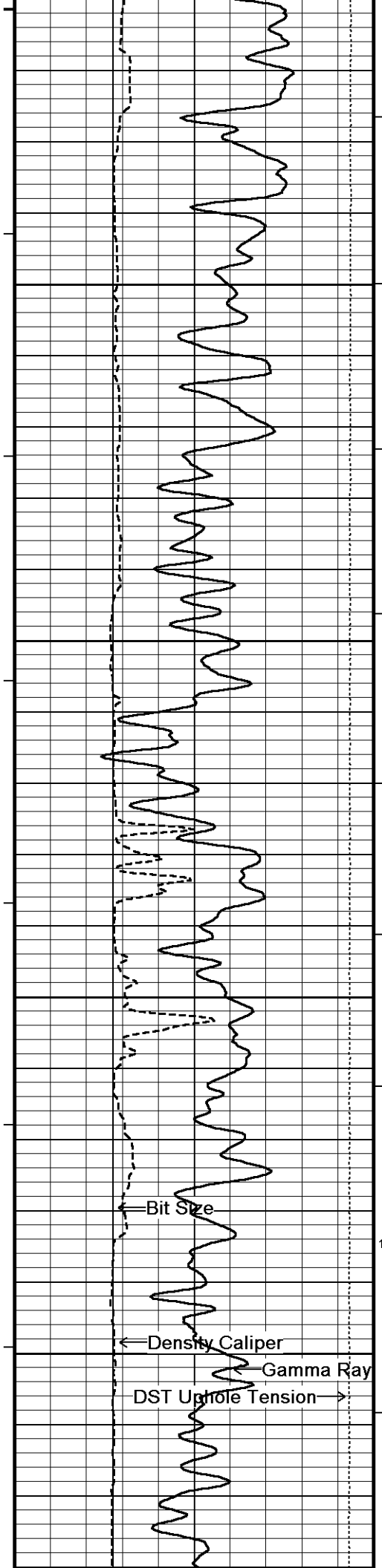
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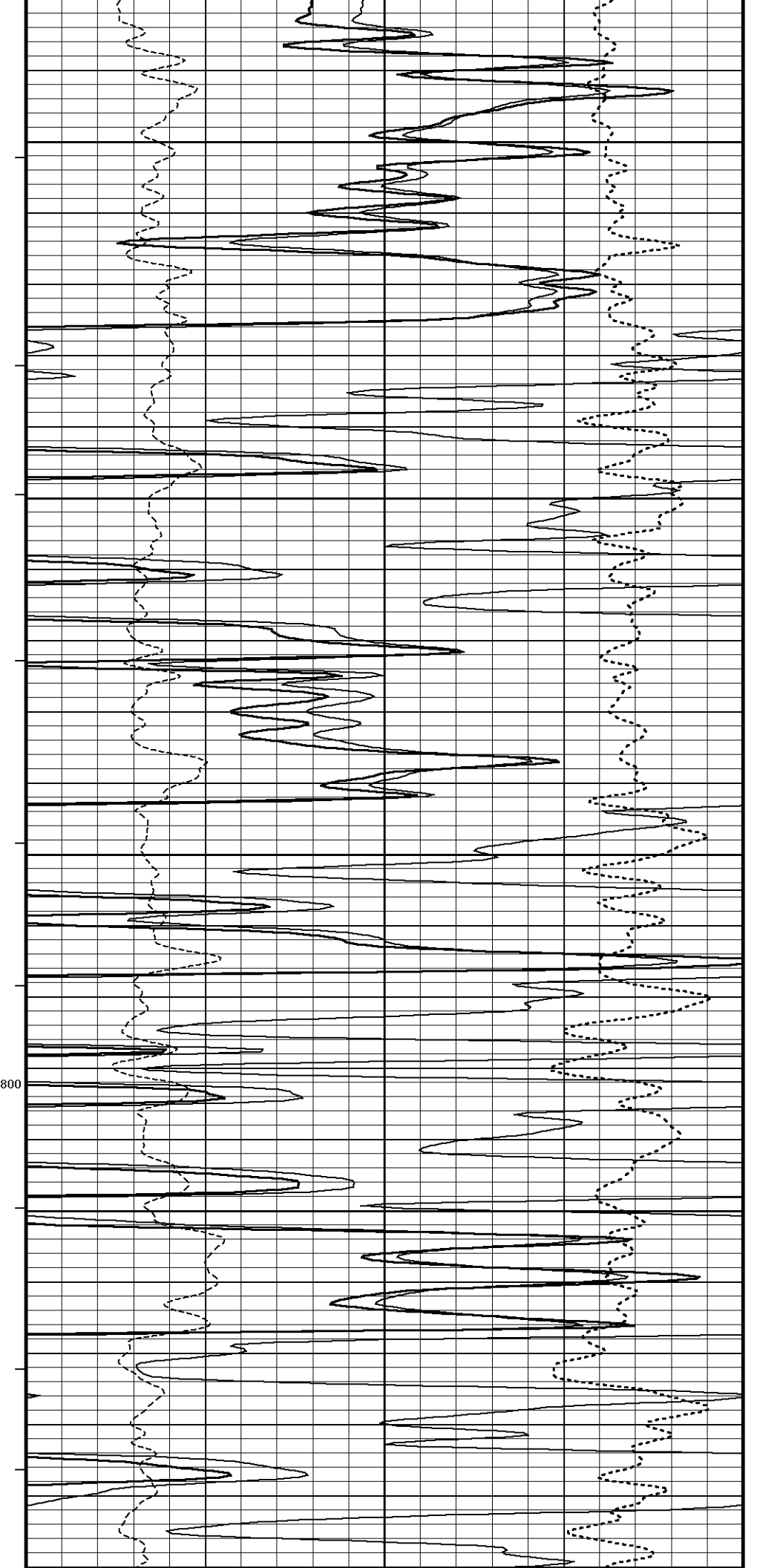
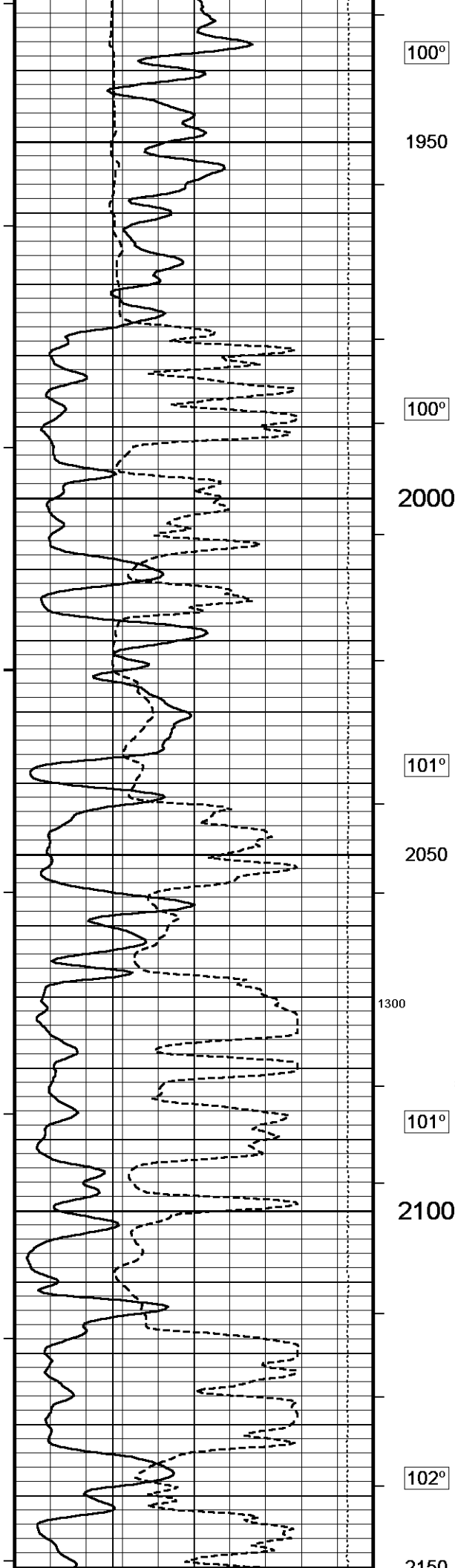


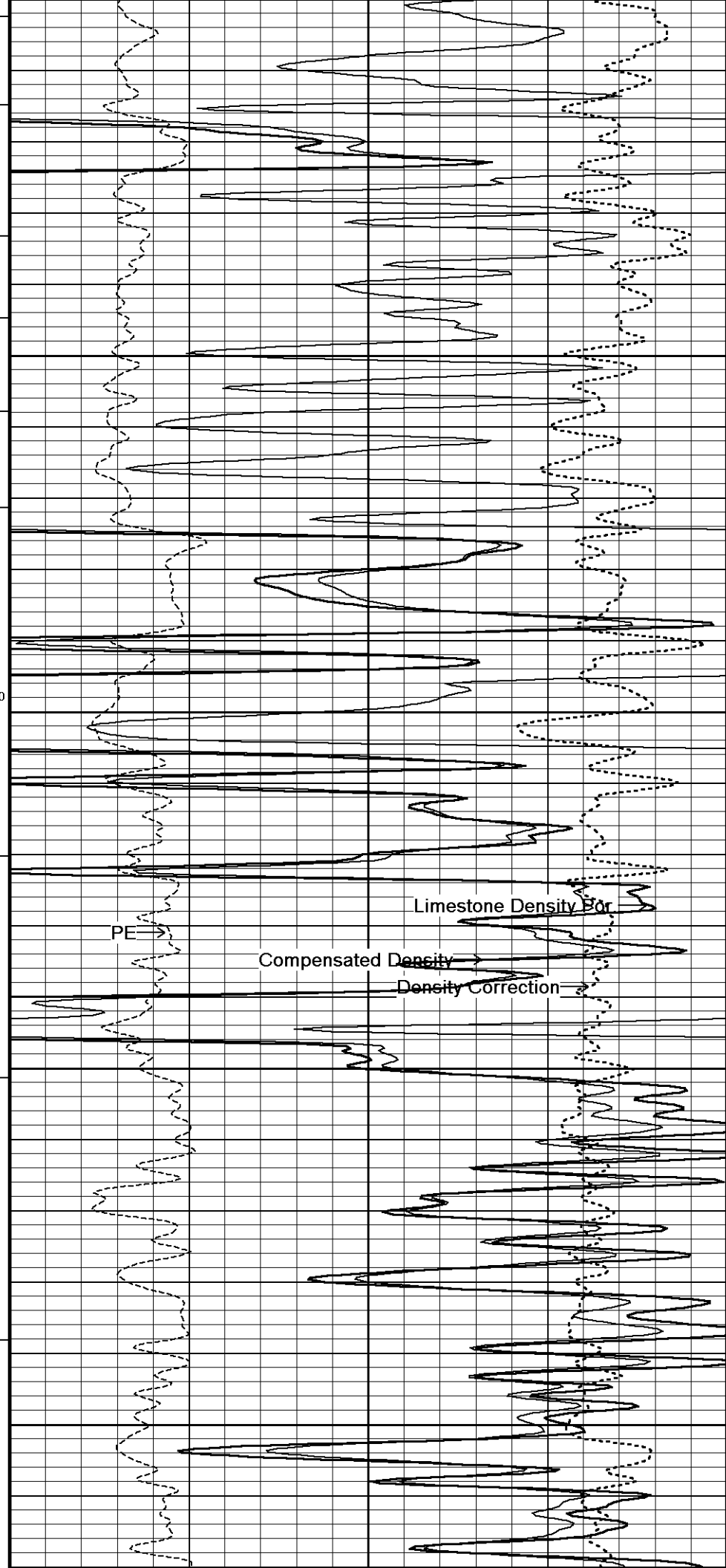
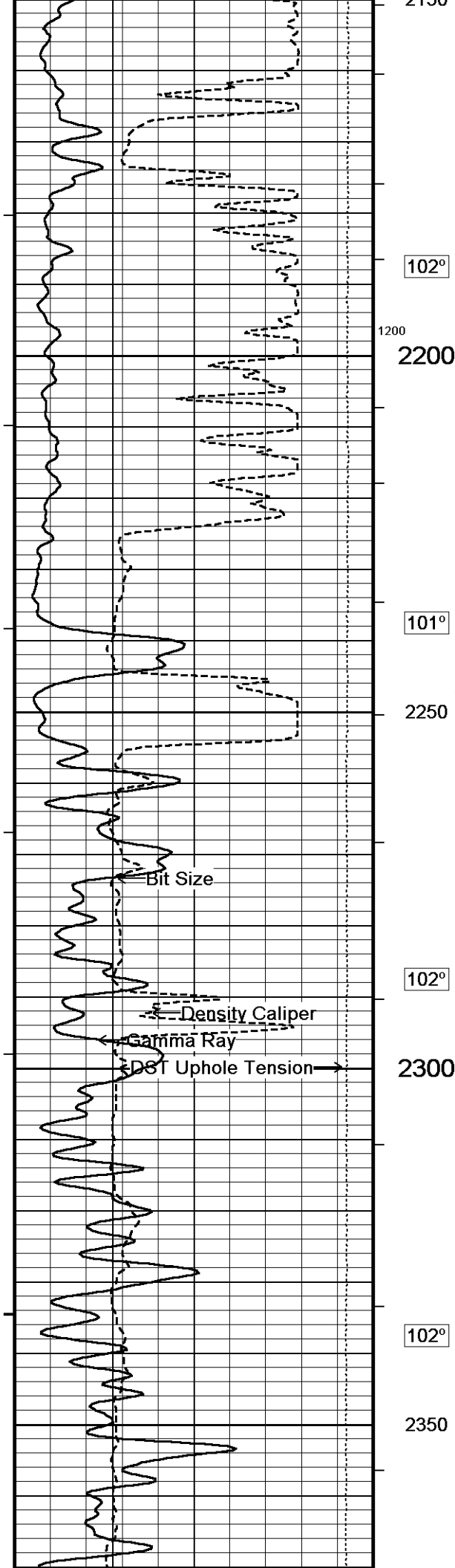


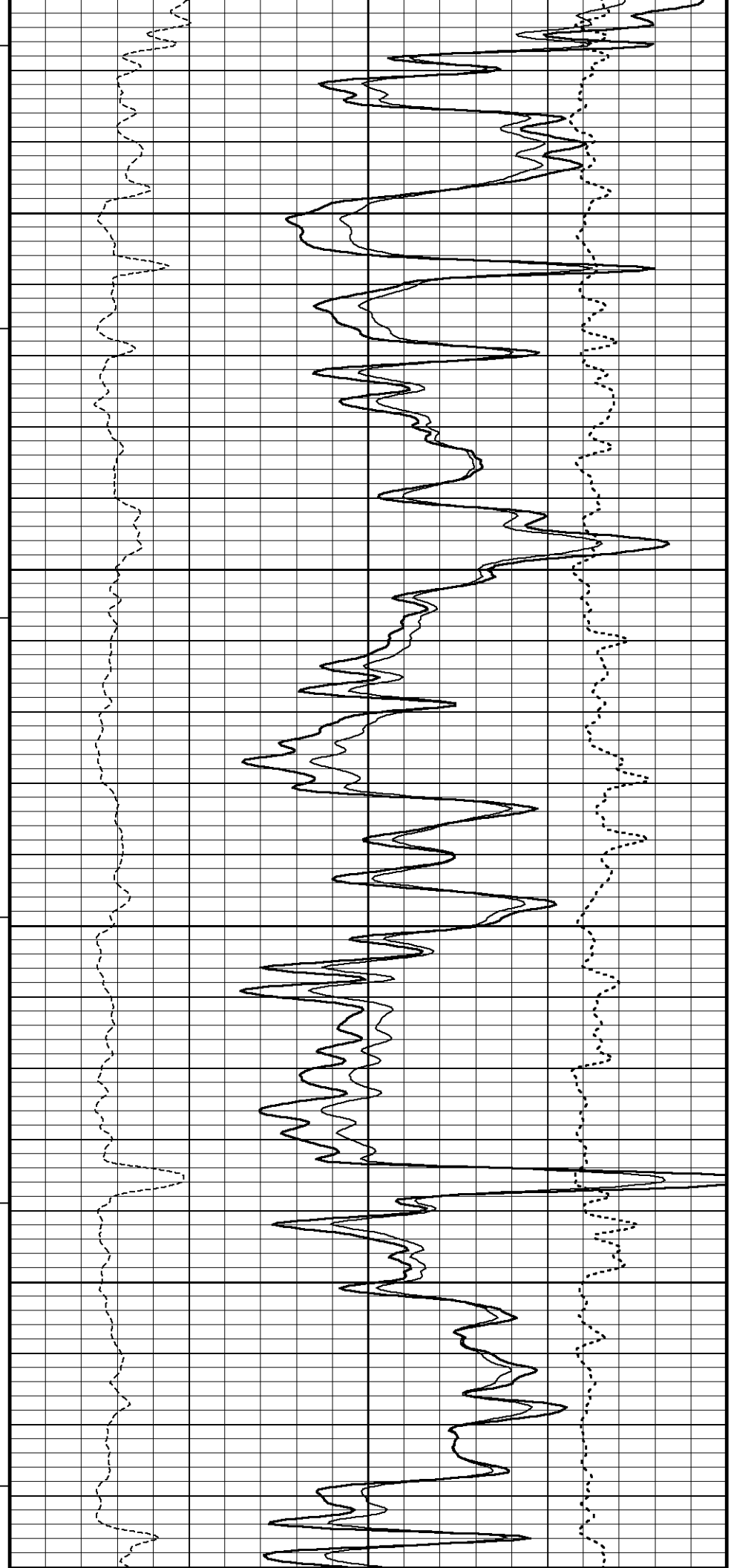
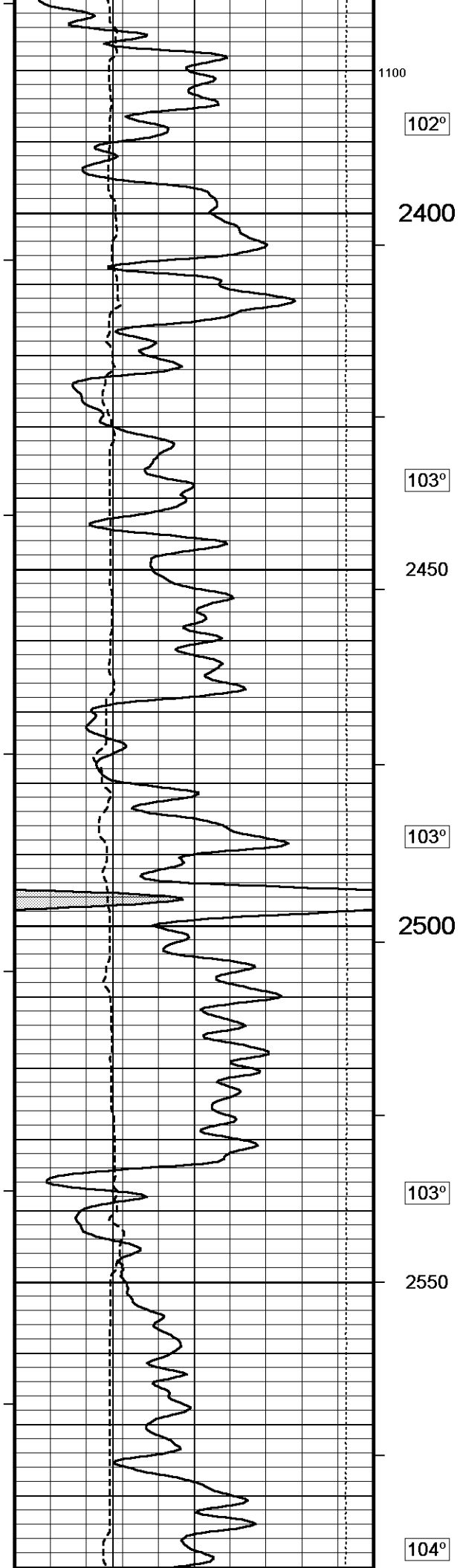


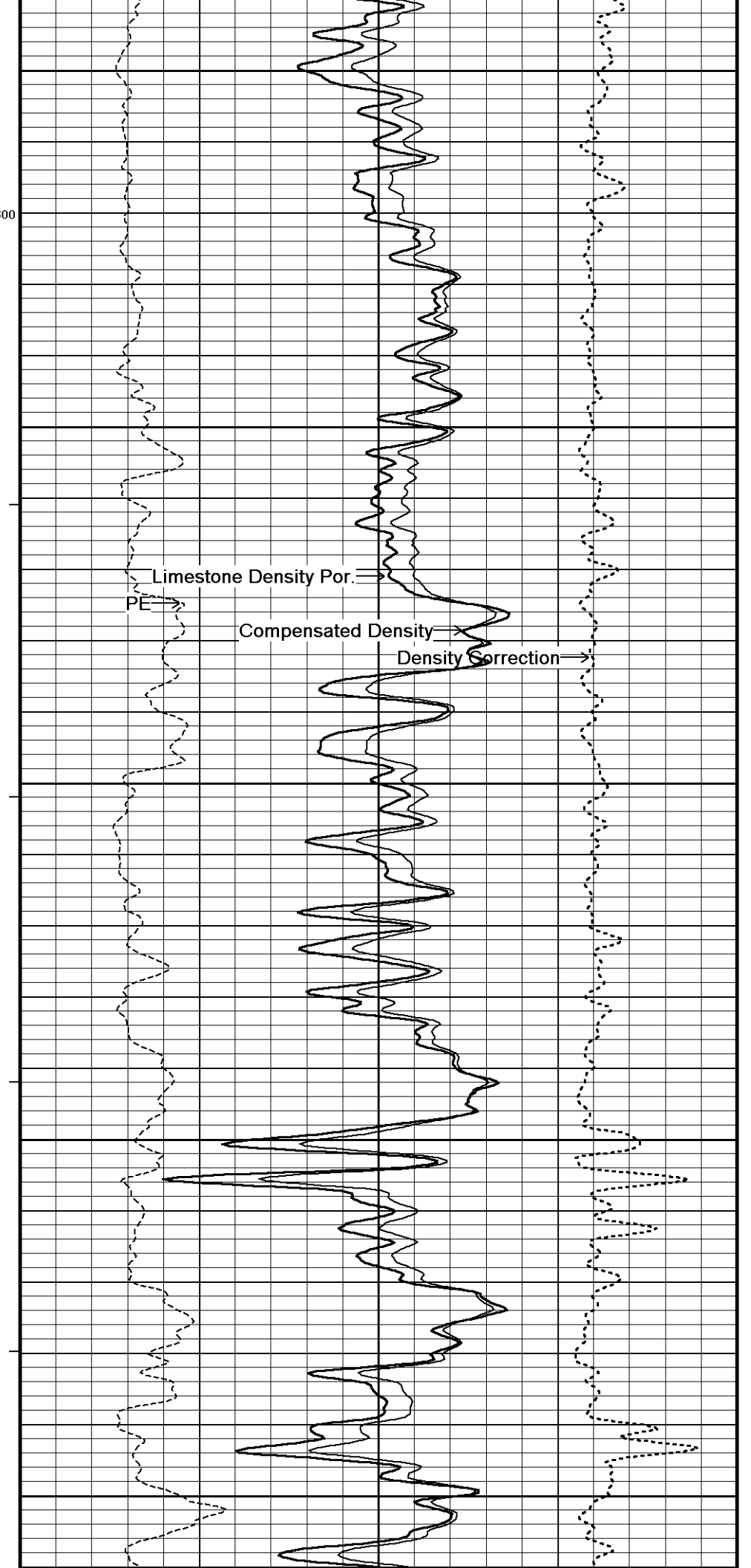
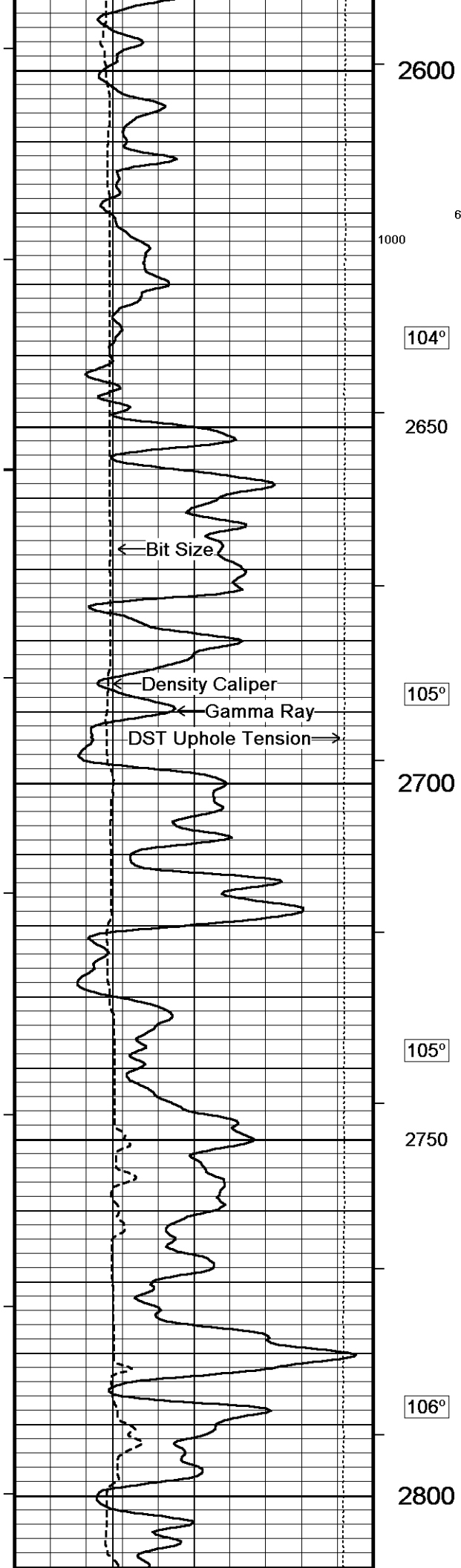


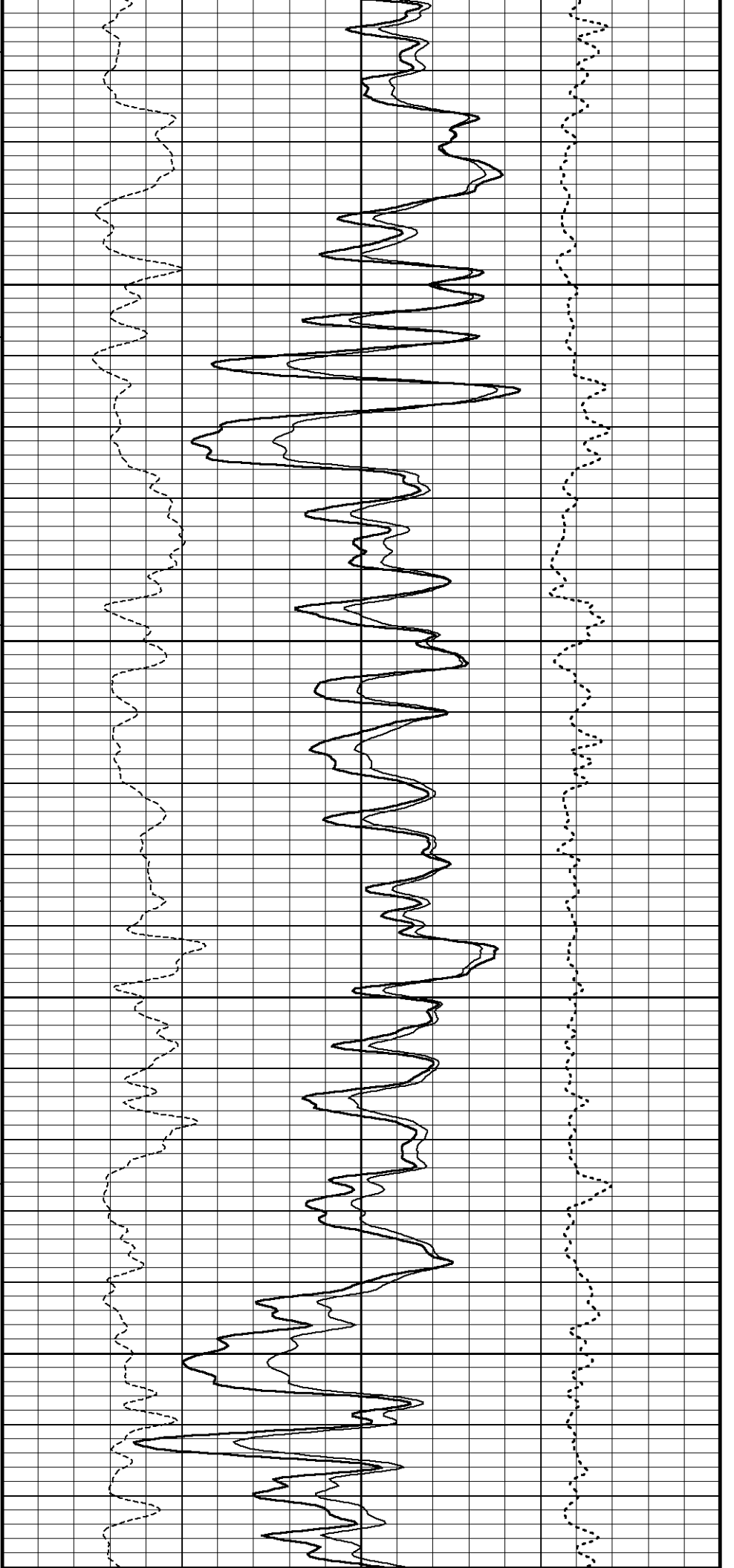
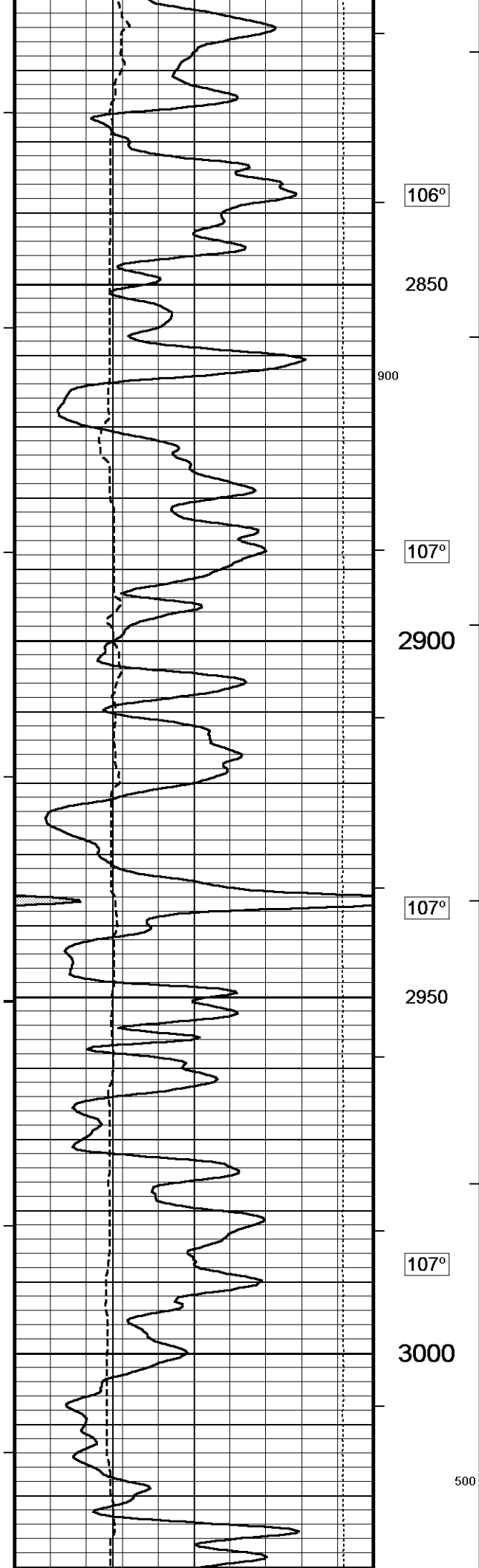


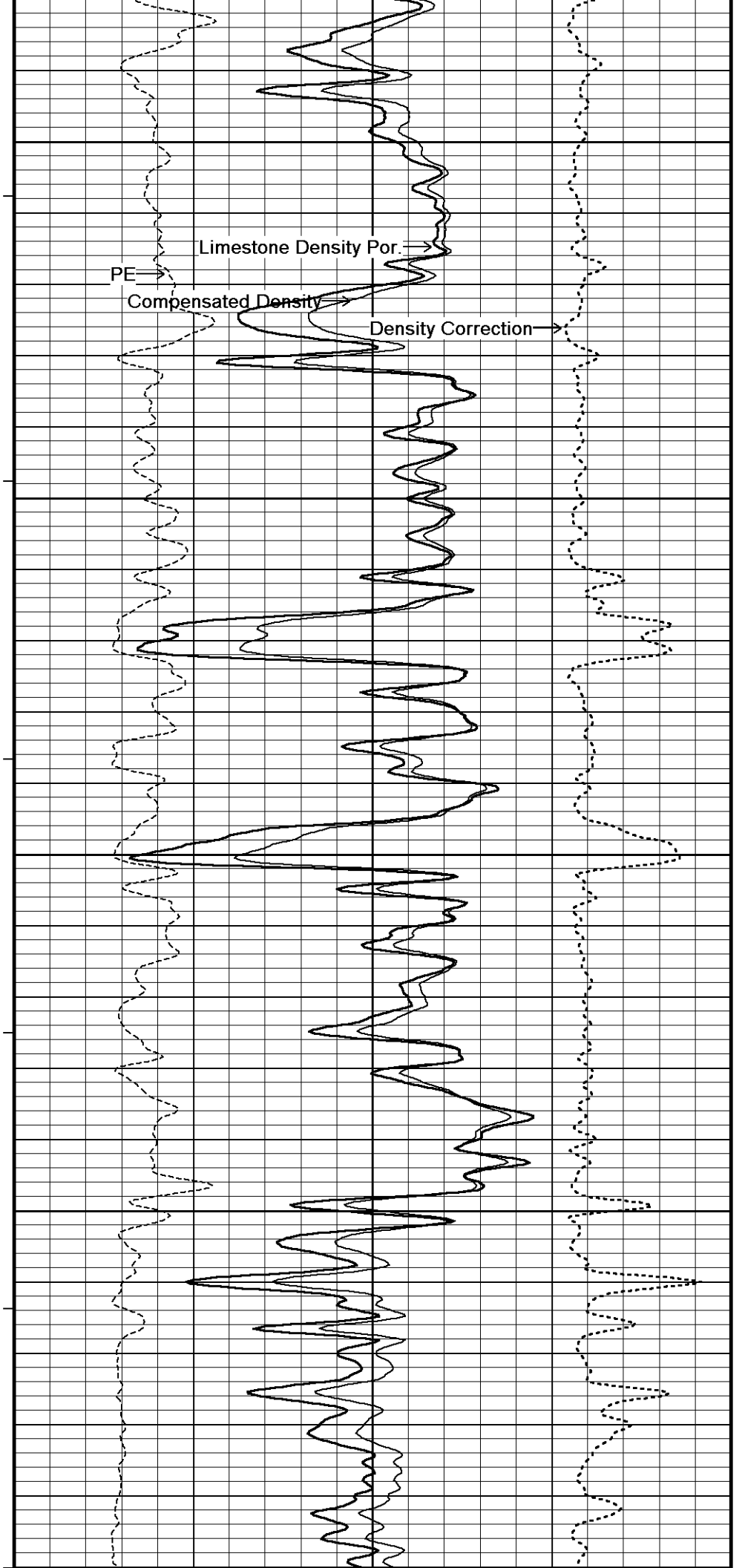
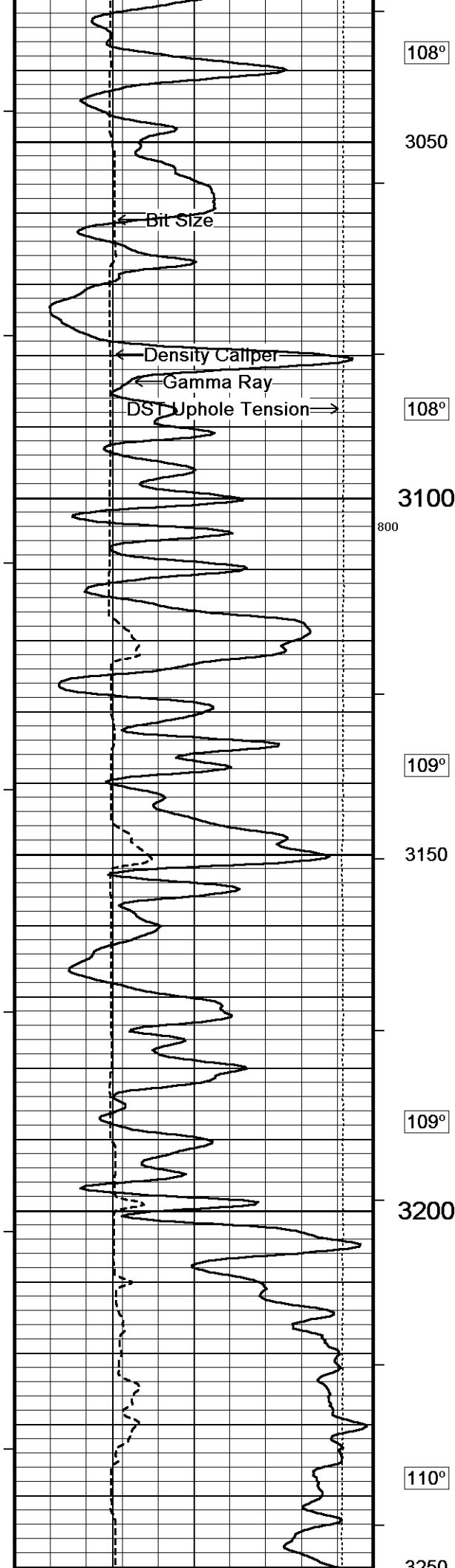


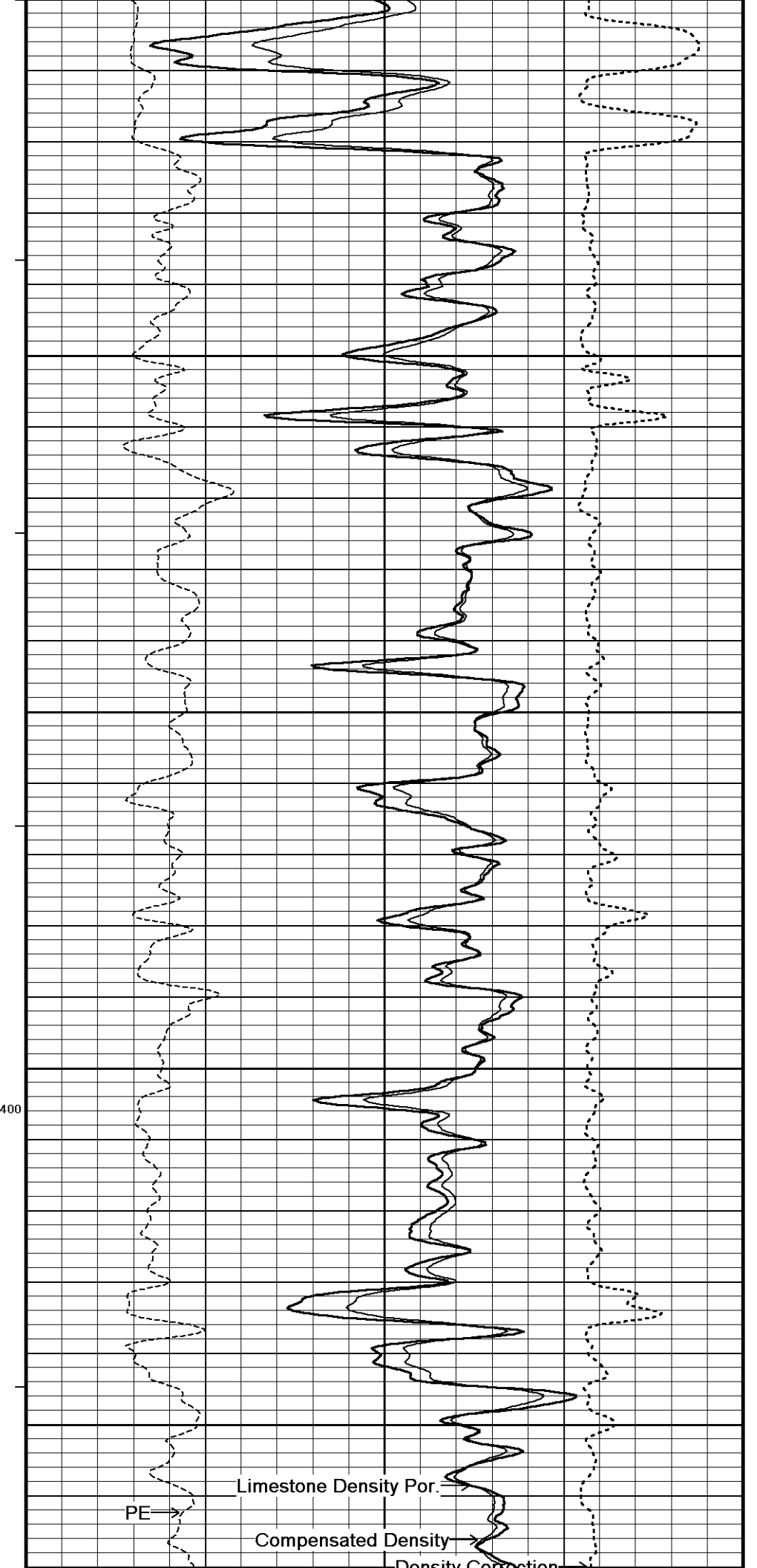
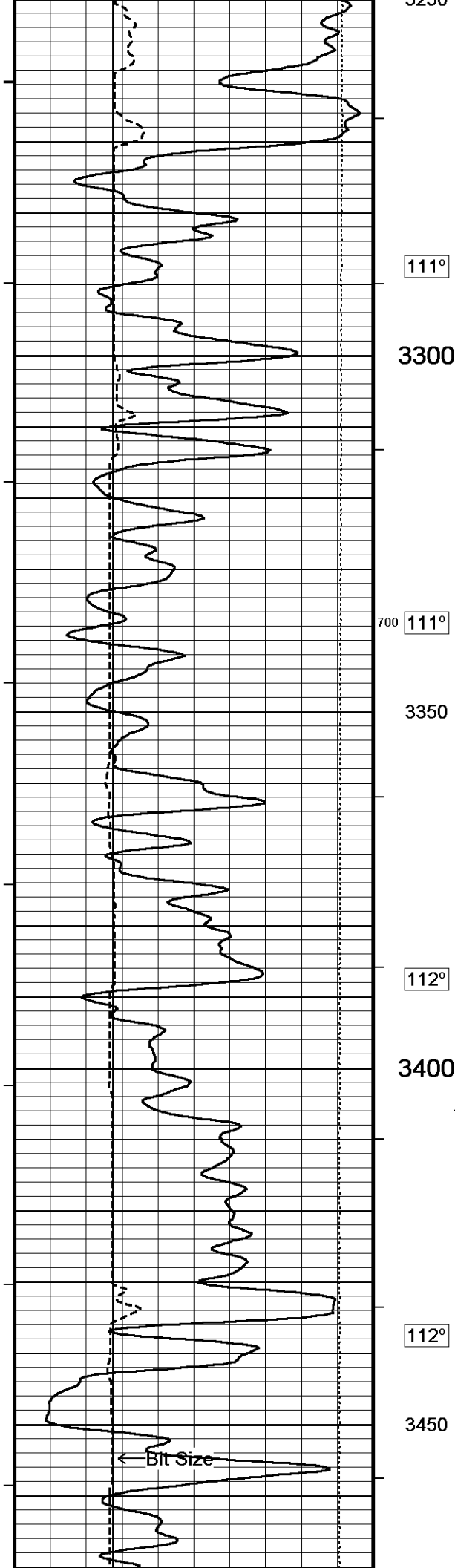


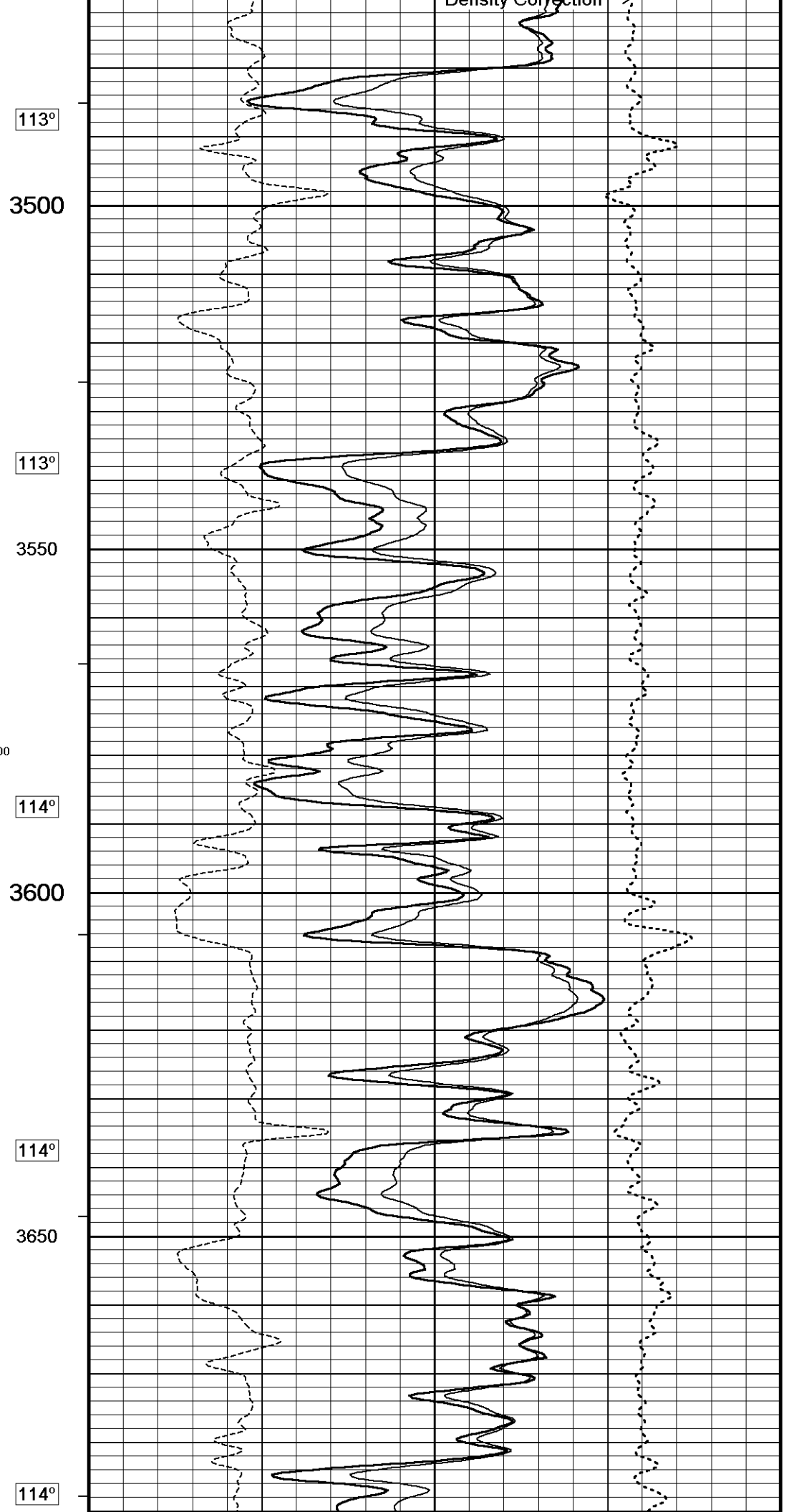
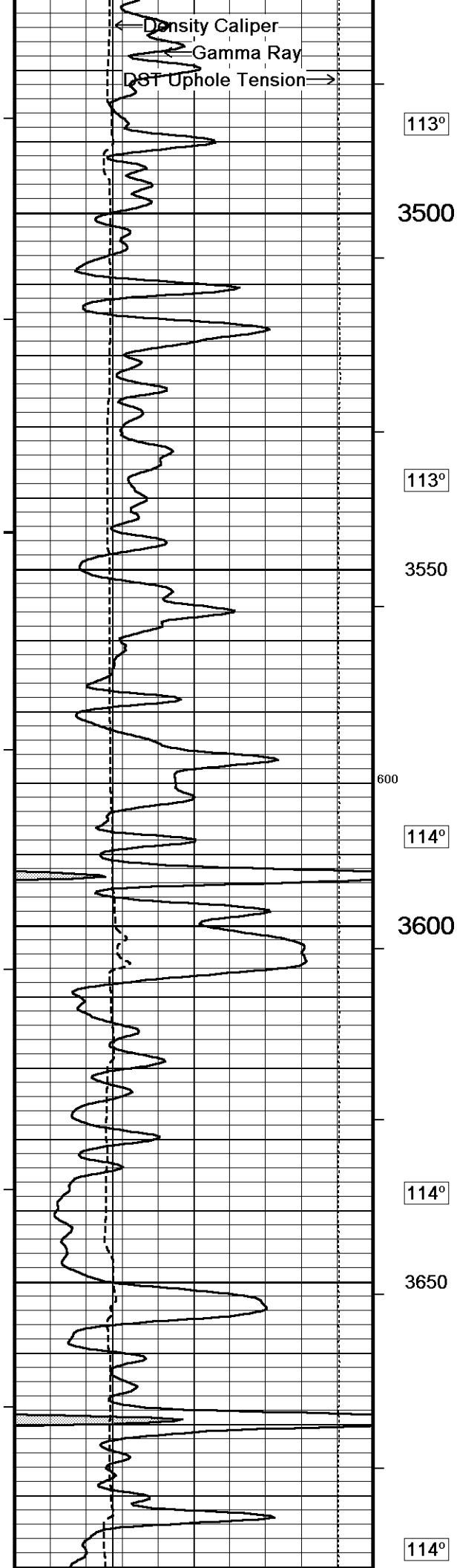


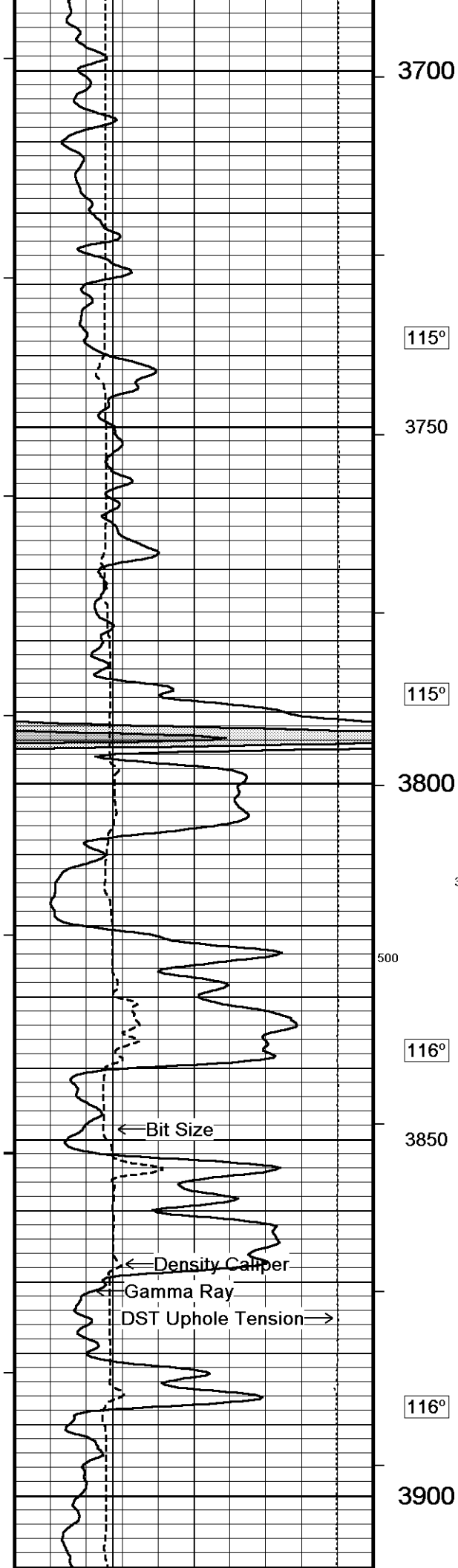












3700

115°

3750

115°

3800

300

500

116°

3850

116°

3900

← Bit Size

← Density Caliper

Gamma Ray

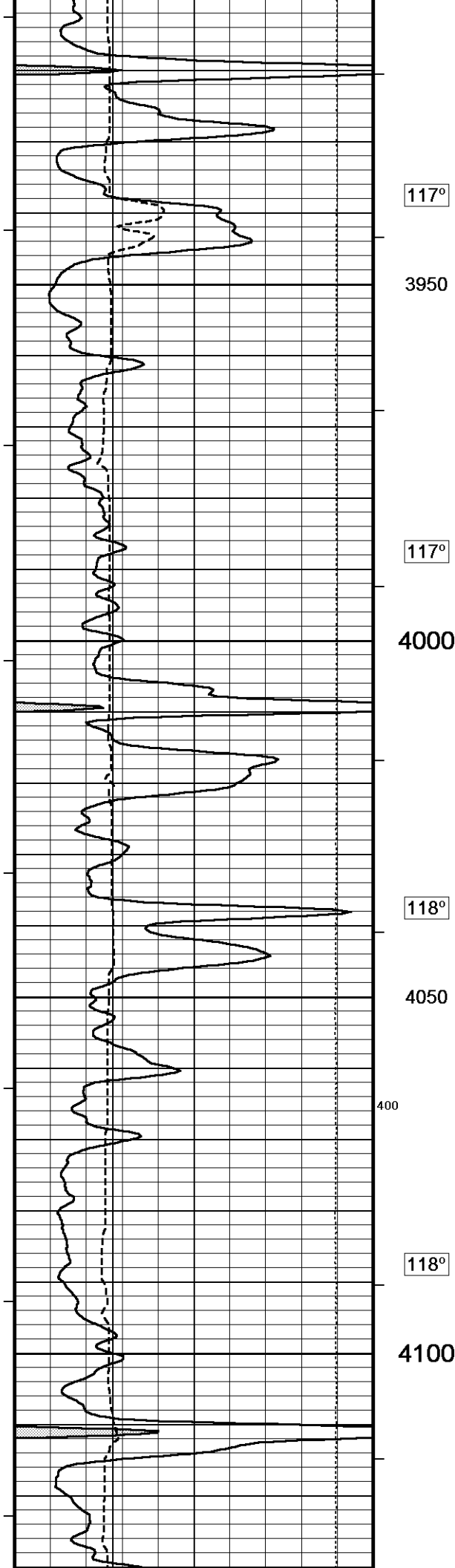
DST Uphole Tension →

PE →

Limestone Density Por →

Compensated Density

Density Correction →



117°

3950

117°

4000

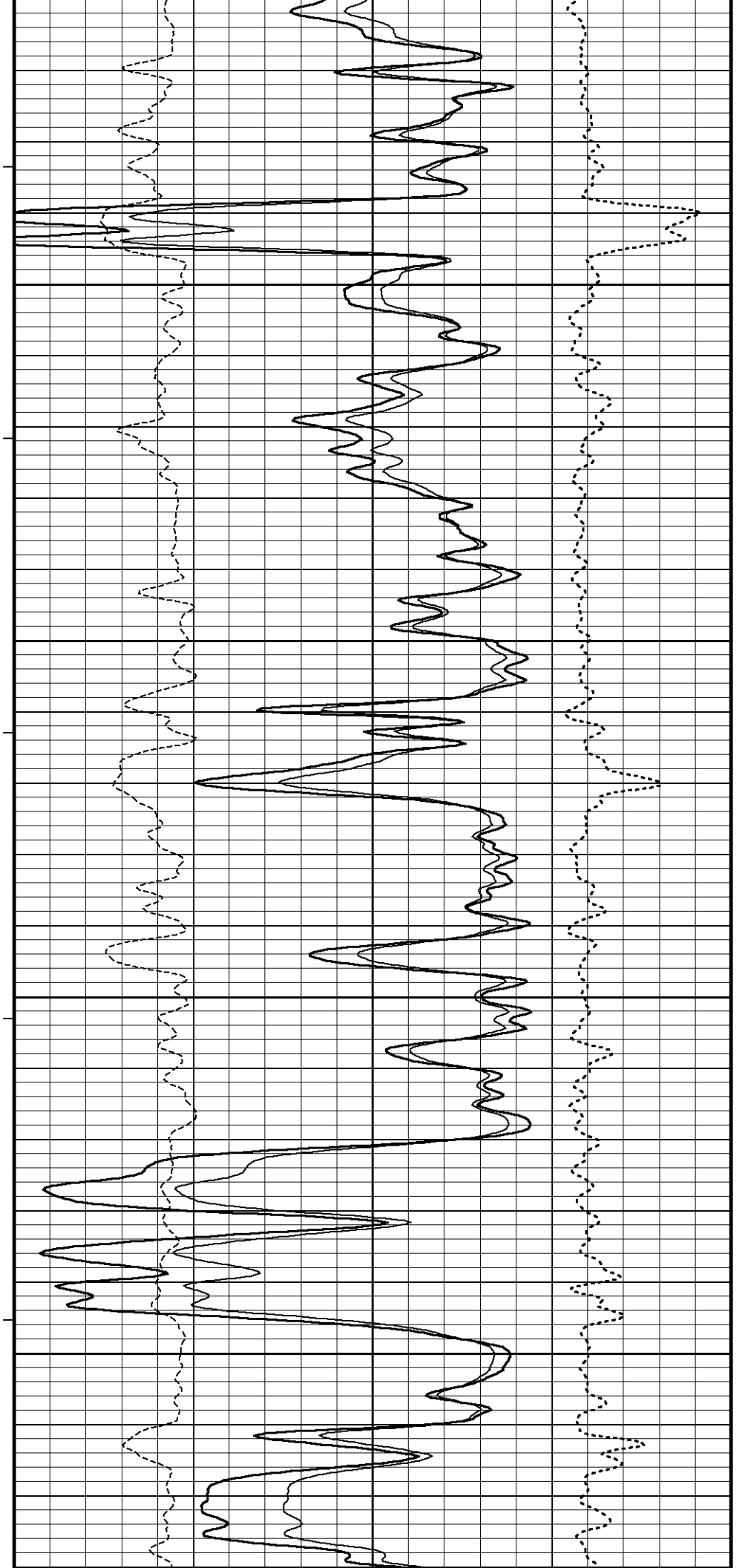
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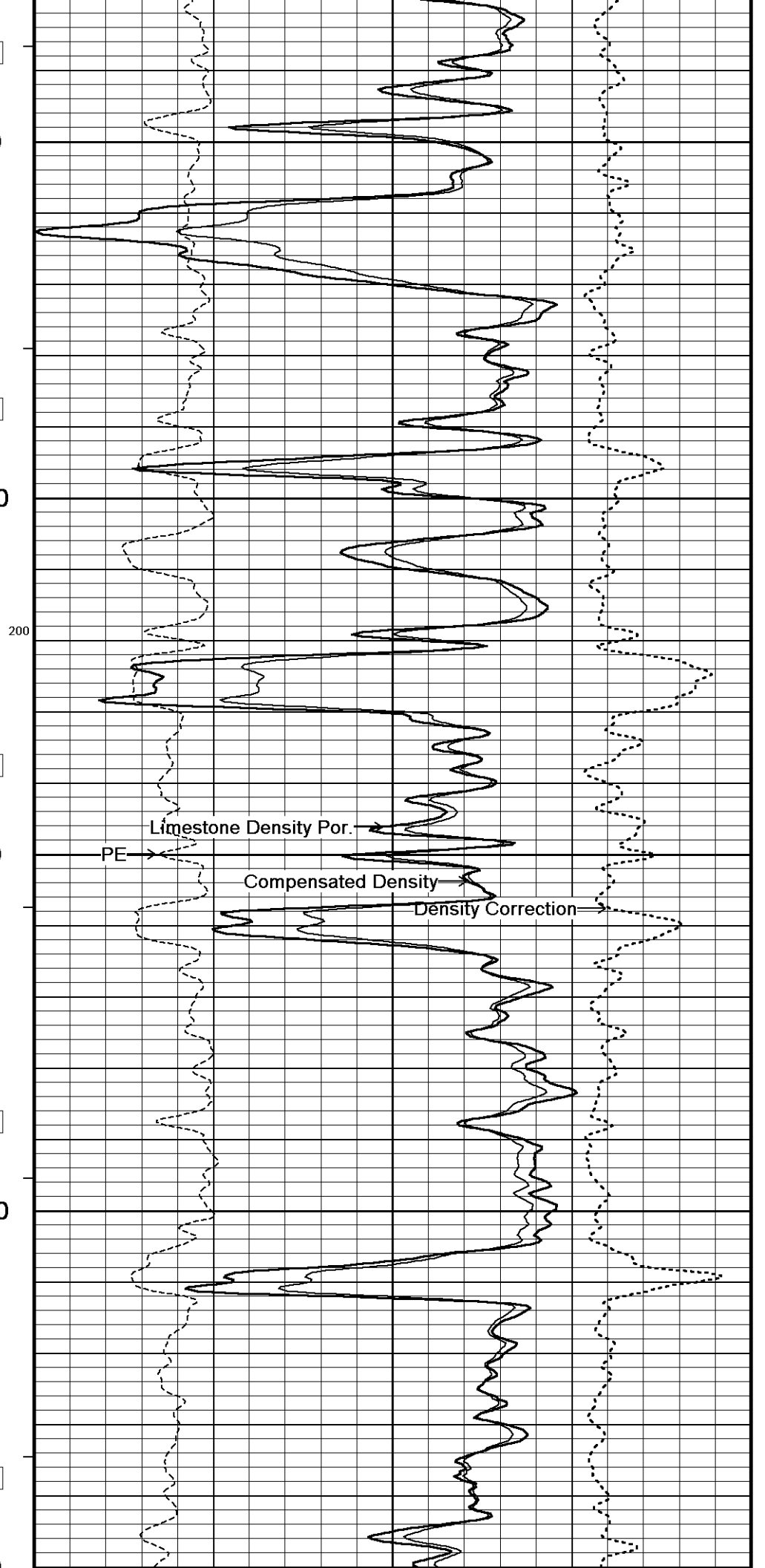
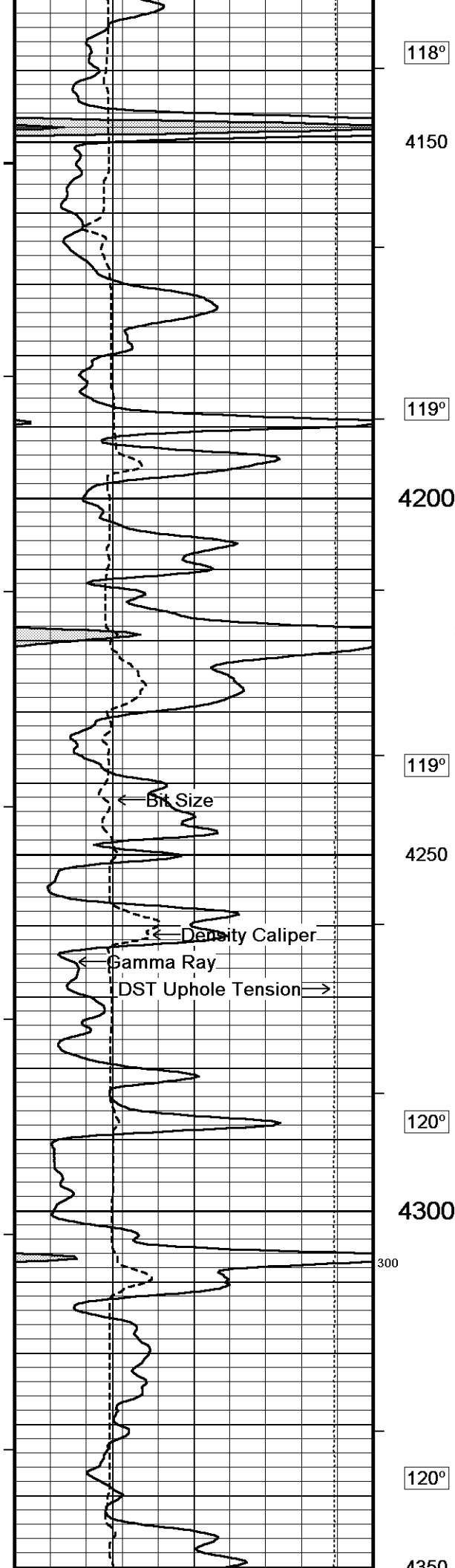
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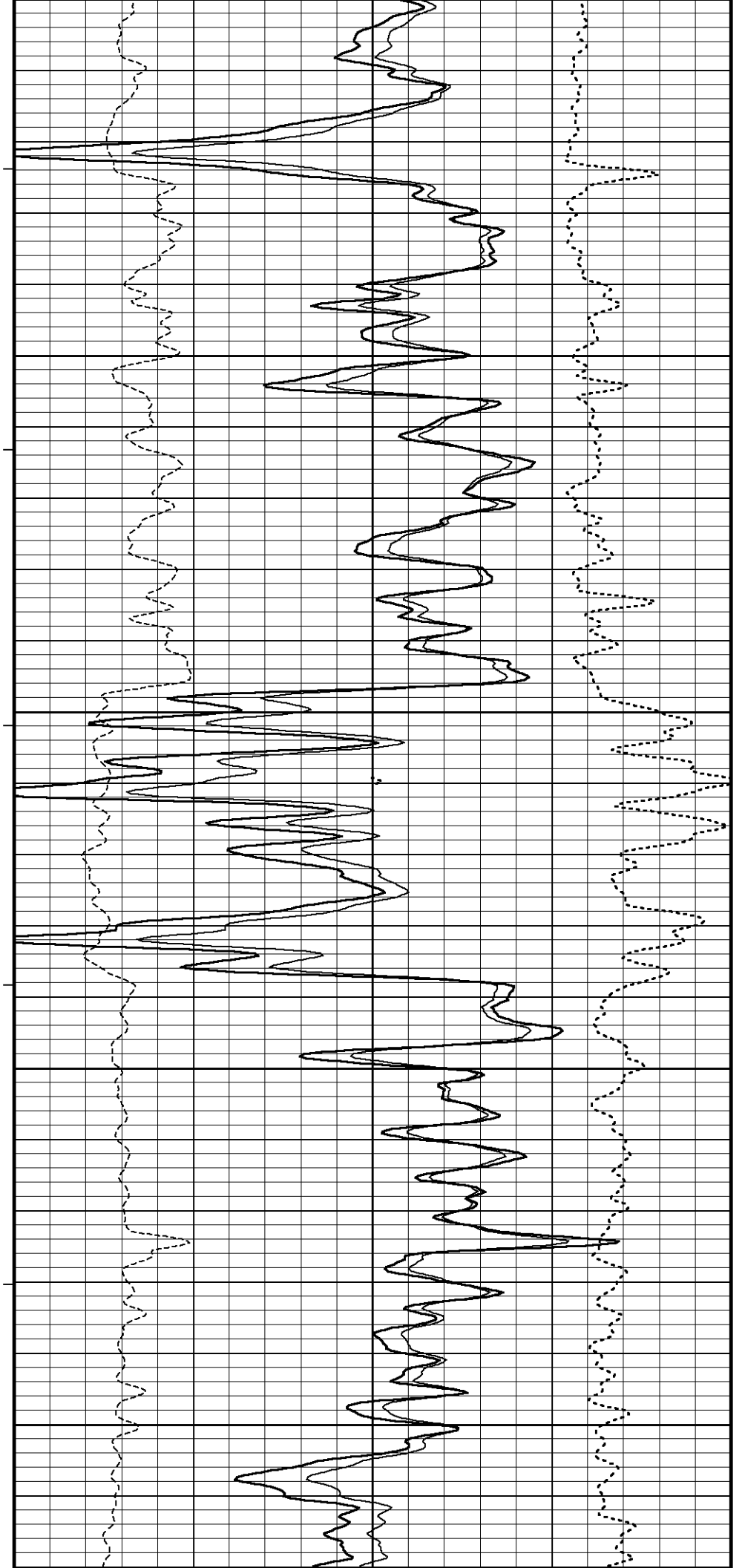
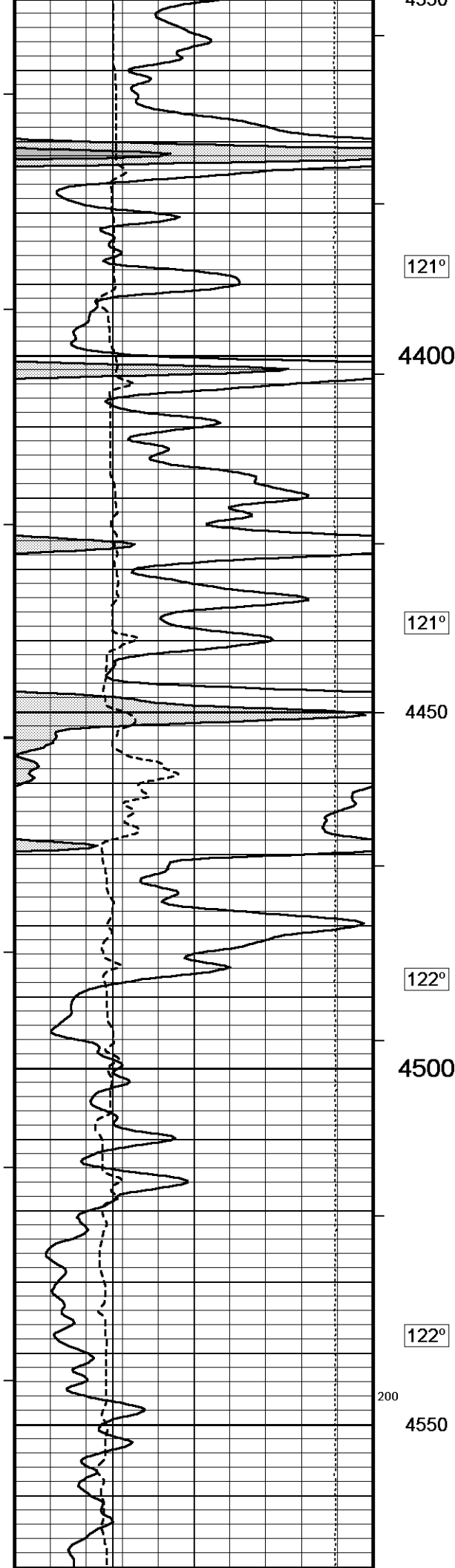
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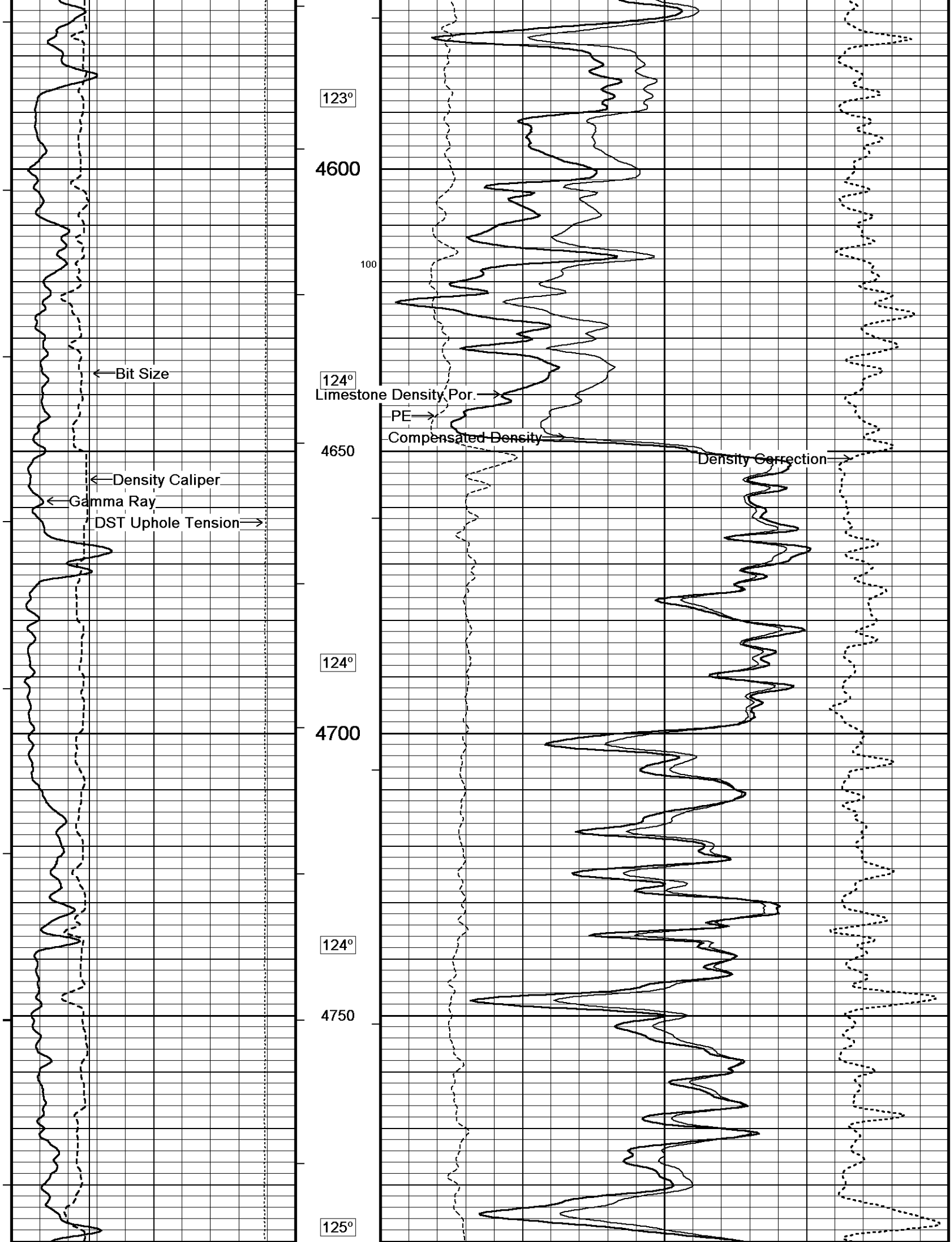
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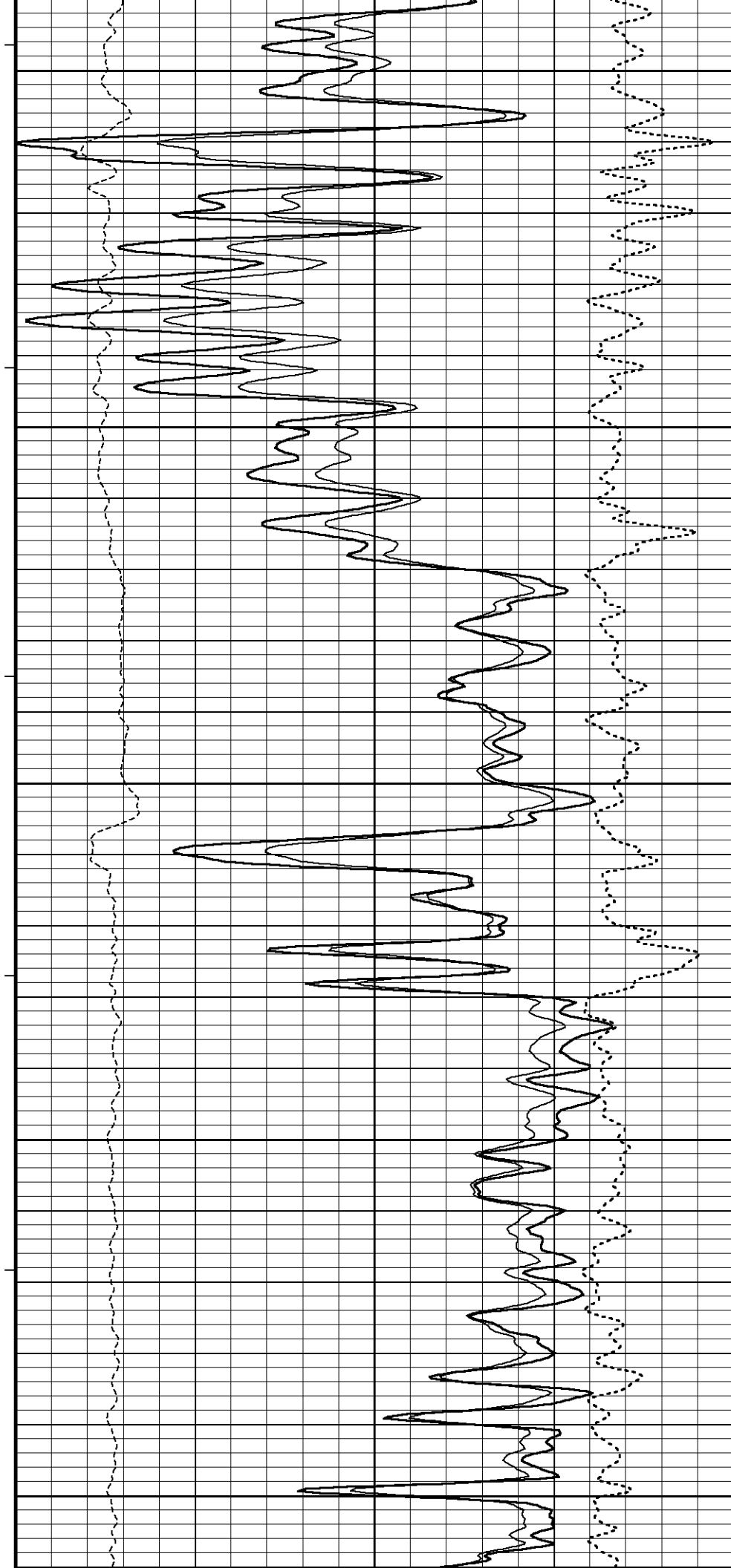
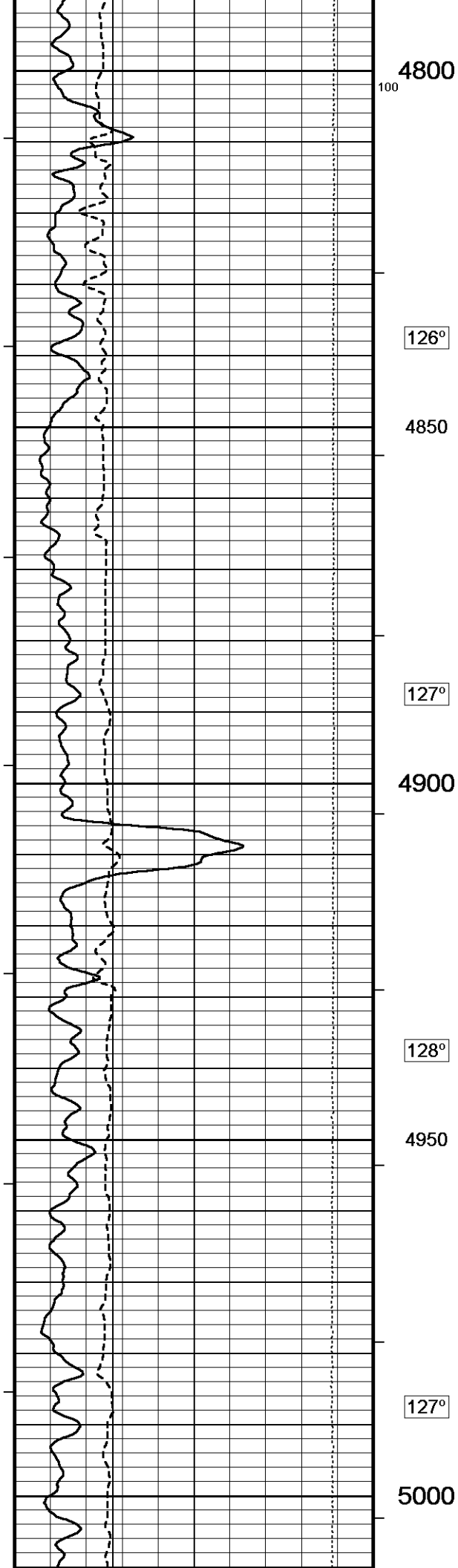
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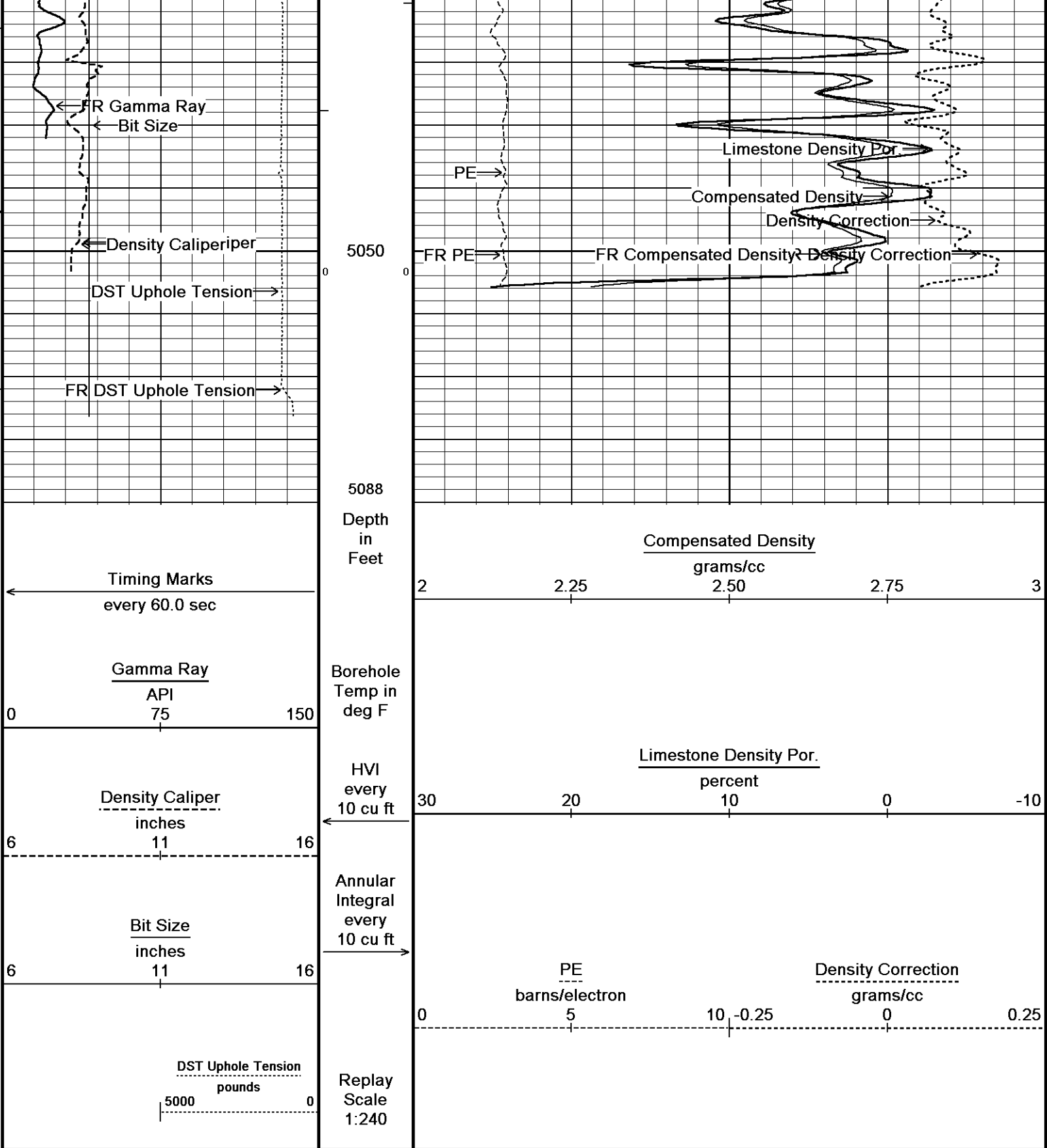












Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 22-MAY-2012 10:14

Filename: C:\Users\amundt\AppData\Local\Temp\Weat...\Sandridge Carissa SWD # 1-15 Real_003.dta

Recorded on 02-MAY-2012 05:58

System Versions: Logged with 11.03.4044 Plotted with 12.01.3513

↑

5 INCH MAIN

↑

↓

REPEAT SECTION

↓

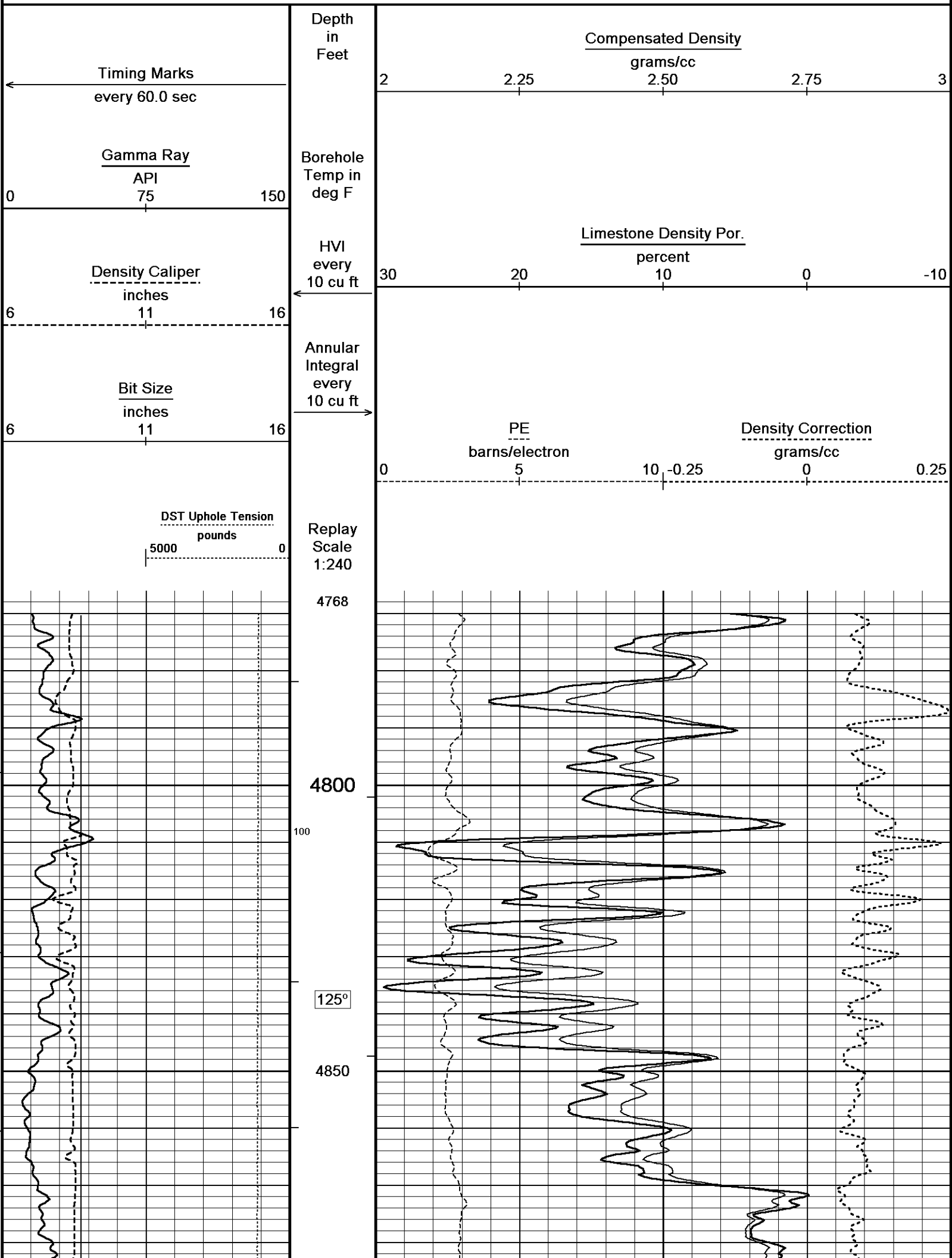
Depth Based Data - Maximum Sampling Increment 10.0cm

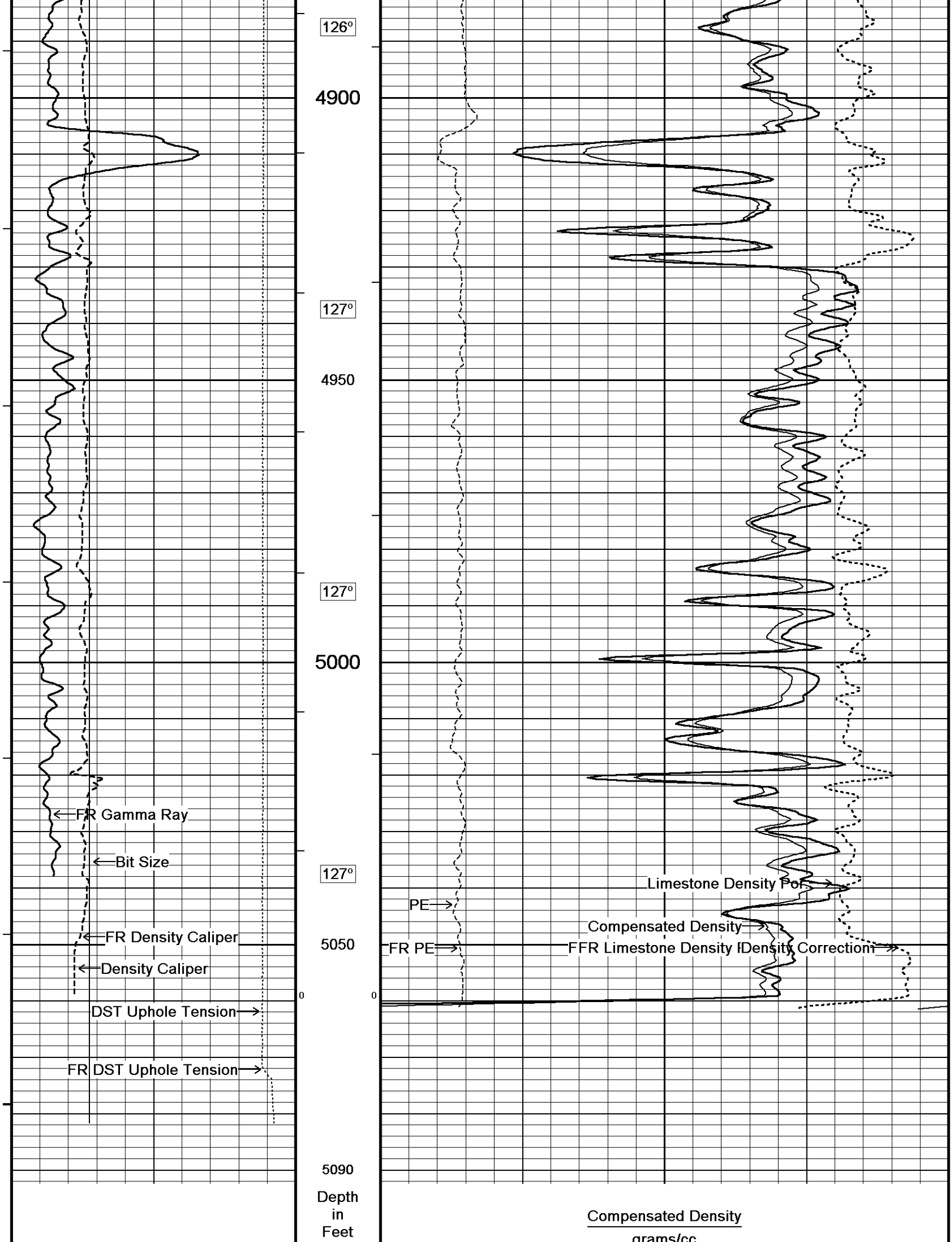
Plotted on 22-MAY-2012 10:14

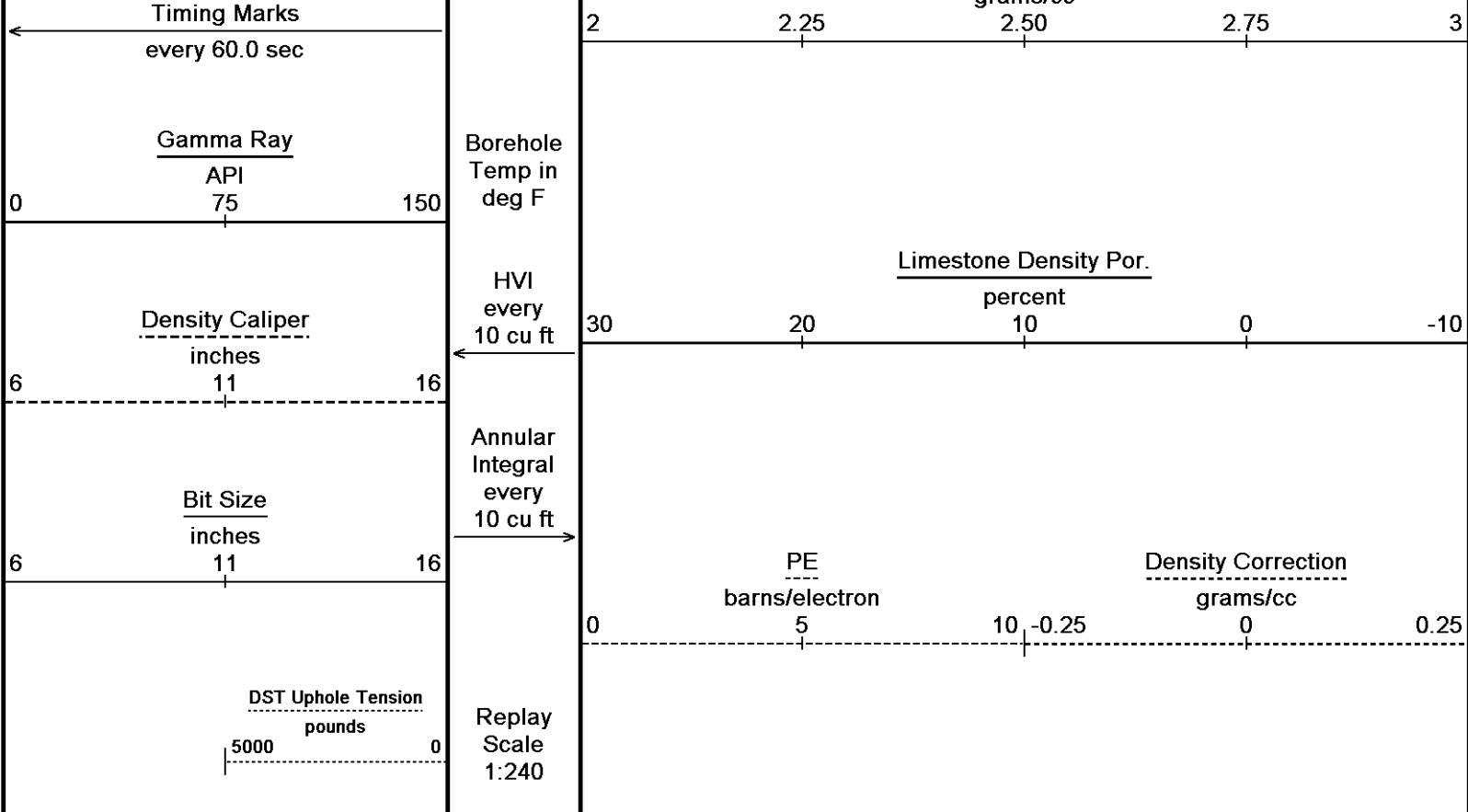
Filename: C:\Users\amundt\AppData\Local\Temp\Weat...\Sandridge Carissa SWD # 1-15 Real_002.dta

Recorded on 02-MAY-2012 05:39

System Versions: Logged with 11.03.4044 Plotted with 12.01.3513







Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 22-MAY-2012 10:14
Filename: C:\Users\amundt\AppData\Local\Temp\Weat...\Sandridge Carissa SWD # 1-15 Real_002.dta Recorded on 02-MAY-2012 05:39
System Versions: Logged with 11.03.4044 Plotted with 12.01.3513

↑ REPEAT SECTION ↑

BEFORE SURVEY CALIBRATION

C:\Users\amundt\AppData\Local\Temp\Weatherford PreView\0\Sandridge Carissa SWD # 1-15 Real_003.dta

General Constants All 000			Last Edited on 02-MAY-2012 05:16	
General Parameters				
Mud Resistivity	0.360	ohm-metres		
Mud Resistivity Temperature	67.000	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	Density Caliper			
HVOL Caliper 2	N/A			
Annular Volume Diameter	5.500	inches		
Caliper for Differential Caliper	Density Caliper			
Rwa Parameters				
Porosity used	Limestone Density Por.			
Resistivity used	Array Ind. One Res Rt			
RWA Constant A	1.000			
RWA Constant M	2.000			

Down-hole Tension Calibration All 000			Field Calibration on 30-JUN-2010 01:00	
Reading No	Measured	Calibrated (lbs)		
1	14112.01	10.00		
2	15164.79	427.00		

Down-hole Tension Calibration SMS 0			Field Calibration on 29-MAR-2012 12:07	
Reading No	Measured	Calibrated (lbs)		
1	-2133.10	0.00		
2	-2133.10	122.22		

2			-2135.89	100.00
Gamma Calibration MCG-C 208				
	Measured	Calibrated (API)	Field Calibration on 02-MAY-2012 00:32	
Background	68	47		
Calibrator (Gross)	1123	772		
Calibrator (Net)	1055	725		
Gamma Constants MCG-C 208				
			Last Edited on 02-MAY-2012 05:15	
Gamma Calibrator Number	gcr38			
Mud Density	1.09	gm/cc		
Caliper Source for Processing	Density Caliper			
Tool Position	Eccentred			
Concentration of KCl	0.00	kppm		
SP Calibration MCG-C 208				
	Measured	Calibrated (mV)	Field Calibration on 24-FEB-2012 11:08	
Reference 1	98.6	100.0		
Reference 2	-101.8	-100.0		
High Resolution Temperature Calibration MCG-C 208				
	Measured	Calibrated(Deg F)	Field Calibration on 18-OCT-2011 15:32	
Lower	50.00	50.00		
Upper	75.00	75.00		
High Resolution Temperature Constants MCG-C 208				
			Last Edited on	
Pre-filter Length	11			
Caliper Calibration MML-A 16				
			Base Calibration on 12-MAR-2012 09:42	
			Field Calibration on 02-MAY-2012 00:27	
Base Calibration				
Reading No	Measured	Calibrator Size (in)		
1	14446	5.98		
2	17749	7.97		
3	20974	9.86		
4	24969	11.92		
5	0	0.00		
6	N/A	N/A		
Field Calibration				
	Measured Caliper (in)	Actual Caliper (in)		
	6.07	5.98		
Micro Normal and Micro Inverse Calibration MML-A 16				
			Base Calibration on 26-APR-2012 12:26	
			Field Check on 02-MAY-2012 00:26	
Base Calibration				
	Measured	Calibrated (ohm-m)		
Channel	Resistor 1 Resistor 2	Resistor 1 Resistor 2		
Micro Normal	12.2 60.2	5.0 25.0		
Micro Inverse	15.6 78.3	5.0 25.0		
Channel	Base Check (ohm-m)	Field Check (ohm-m)		
Micro Normal	62.9	62.9		
Micro Inverse	48.2	48.2		
Micro Normal and Micro Inverse Constants MML-A 16				
			Last Edited on 02-MAY-2012 05:14	
Pad Type	8-12 in Soft Rubber Inflatable 006-9011-159			
Micro Normal K Factor	1.0000			
Micro Inverse K Factor	1.0000			
Standoff Offset	N/A	inches		
Neutron Calibration MDN-A.B 66				
			Base Calibration on 26-APR-2012 15:28	
			Field Check on 02-MAY-2012 00:37	
Base Calibration				
	Measured	Calibrated (cps)		
	Near Far	Near Far		
	3170 99	3714 110		
Ratio	32.037	33.764		

Field Calibrator at Base	Calibrated (cps)	
	1619	2337
Ratio	0.693	
Field Check	Calibrated (cps)	
	1627	2344
Ratio	0.694	

Neutron Constants MDN-A.B 66

Last Edited on 02-MAY-2012 05:14

Neutron Source Id	P58125B	
Neutron Jig Number	5824NE	
Epithermal Neutron	No	
Caliper Source for Processing	Density Caliper	
Stand-off	0.00	inches
Mud Density	1.00	gm/cc
Limestone Sigma	7.10	cu
Sandstone Sigma	4.26	cu
Dolomite Sigma	4.70	cu
Formation Pressure Source	None	
Formation Pressure	N/A	kpsi
Temperature Source	Constant Value	
Temperature	68.00	degrees F
Mud Salinity	0.00	kppm
Formation Fluid Salinity Source	Constant Value	
Formation Fluid Salinity	0.00	kppm
Barite Mud Correction	Not Applied	

FE Calibration MFE-C.A 353

Base Calibration on 26-APR-2012 11:56

Field Check on 02-MAY-2012 00:16

Base Calibration	Measured	Calibrated (ohm-m)
Reference 1	0.0	0.0
Reference 2	964.1	126.8
Base Check		281.1
Field Check		281.0

FE Constants MFE-C.A 353

Last Edited on 02-MAY-2012 05:13

Running Mode	No Sleeve	
MFE K Factor	0.1268	
Caliper Source for FE correction	Density Caliper	
Caliper Value for FE correction	N/A	inches
Rm Source for FE correction	Temperature Corr	
Temp. for Rm Corr.	MCG External Temperature	
Stand-off	0.5	inches

Induction Calibration MAI-A.A 167

Base Calibration on 11-MAR-2011 09:58

Field Check on 02-MAY-2012 00:14

Base Calibration				
Test Loop Calibration	Measured		Calibrated (mmho/m)	
Channel	Low	High	Low	High
1	17.3	474.2	9.3	966.2
2	6.3	388.4	7.6	821.4
3	3.3	259.4	5.2	566.0
4	1.9	133.0	2.6	279.2
Array Temperature	76.8		Deg F	
Channel	Base Check (mmho/m)		Field Check (mmho/m)	
	Low	High	Low	High
1	0.0	0.0	13.1	3840.2
2	0.0	0.0	29.6	3477.6
3	0.0	0.0	29.1	3053.3
4	0.0	0.0	19.7	2081.8
Deep	0.0	0.0	18.5	2048.8
Medium	0.0	0.0	42.2	3991.7
Shallow	0.0	0.0	43.0	5055.6
Array Temperature	0.0		74.0	
			Deg F	

Induction Model	RtAP-WBM		
Caliper for Borehole Corr.	Density Caliper		
Hole Size for Borehole Correction	N/A	inches	
Tool Centred	No		
Stand-off Type	Fins		
Stand-off	0.50	inches	
Number of Fins on Stand-off	8.0000		
Stand-off Fin Angle	45.00	degrees	
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	
Squasher Offset	N/A	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
Source for Rt	0.00	
Source for Rxo	0.00	

High Resolution Temperature Calibration MAI-A.A 167

Field Calibration on 12-MAR-2012 11:57

	Measured	Calibrated(Deg F)
Lower	1.00	33.80
Upper	11.00	51.80

High Resolution Temperature Constants MAI-A.A 167

Last Edited on

Pre-filter Length	11
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Caliper Calibration MPD-B 31

Base Calibration on 25-APR-2012 10:33

Field Calibration on 02-MAY-2012 00:19

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	17391	3.99
2	25871	5.98
3	34557	7.97
4	42895	9.86
5	52288	11.92
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
5.96	5.98

Photo Density Calibration MPD-B 31

Base Calibration on 25-APR-2012 10:55

Field Check on 02-MAY-2012 00:24

Density Calibration

Base Calibration	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	57255	28372	59556	30836

Reference 2 22697 2144 24941 2541

Field Check at Base

697.4 855.9

Field Check

695.6 857.1

PE Calibration

Base Calibration

	WS	Measured WH	Ratio	Calibrated Ratio
Background	128	611		
Reference 1	22865	57104	0.402	0.371
Reference 2	6649	22599	0.297	0.272

Field Check at Base

128.3 610.7

Field Check

127.9 609.4

Density Constants MPD-B 31

Last Edited on 02-MAY-2012 05:13

Density Source Id	P50557B
Nylon Calibrator Number	DNCE695
Aluminium Calibrator Number	DACD698
Density Shoe Profile	8 inch
Caliper Source for Processing	Density Caliper
PE Correction to Density	Not Applied
Mud Density	1.09 gm/cc
Mud Density Z/A Multiplier	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	Hybrid
Matrix Density (gm/cc)	Depth (ft)
2.71	
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

DOWNHOLE EQUIPMENT

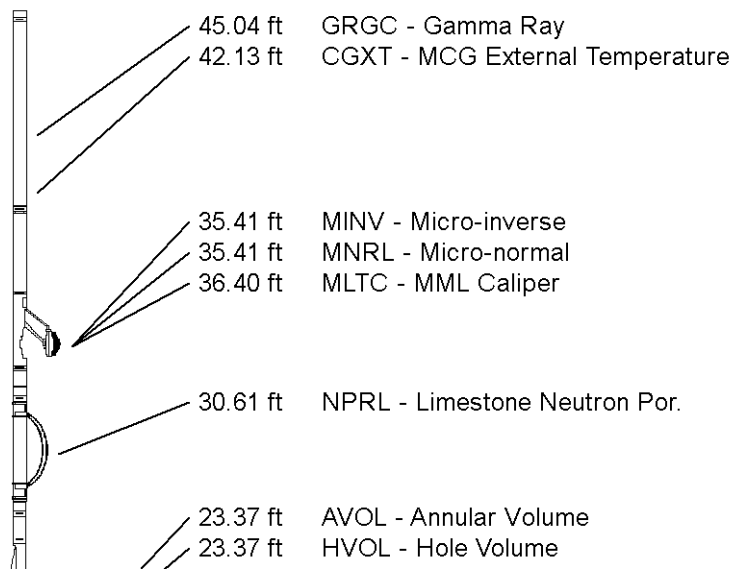
C:\Users\amundt\AppData\Local\Temp\Weatherford PreView\0\Sandridge Carissa SWD # 1-15 Real_003.dta

Compact Comms Gamma
MCG-C 208 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in

Compact Micro-log
MML-A 16 LG: 7.97 ft WT: 81.6 lb OD: 2.24 in

Compact Neutron
MDN-A.B 66 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

Compact Density/Caliper
MPD-B 31 LG: 9.59 ft WT: 90.4 lb OD: 2.45 in

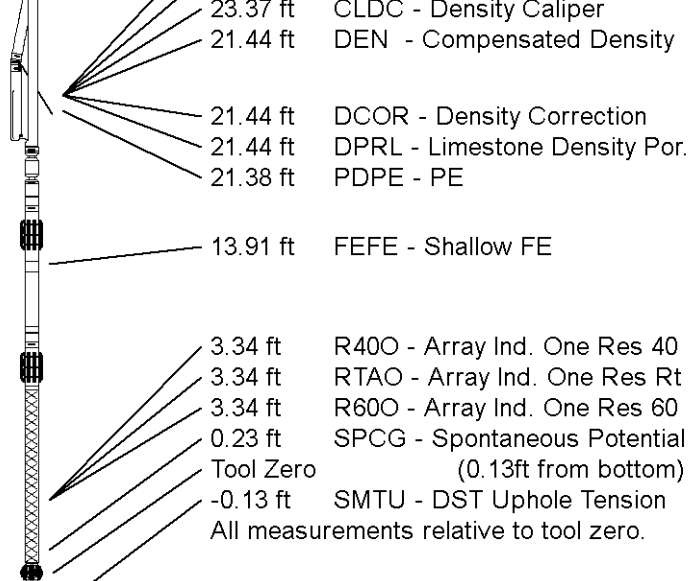


SKJ-D.A Compact Knuckle Joint
 SKJ-D.A 36 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

Compact Focussed Electric
 MFE-C.A 353 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

Compact Induction
 MAI-A.A 167 LG: 10.81 ft WT: 48.5 lb OD: 2.24 in

Total Length: 50.32 ft Weight: 407.9 lb



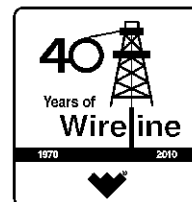
Company	SANDRIDGE EXPLORATION
Well	CARISSA SWD # 1-15
Field	GOEBEL
Province	HODGEMAN
Country	U.S.A. / KANSAS

ElevationKB	2348.50	feet	FirstReading	5051.00	feet
ElevationDrill	2347.00	feet	DepthDriller	5060.00	feet
ElevationGround	2338.00	feet	DepthLogger	5072.00	feet



Weatherford®

COMPACT PHOTO DENSITY
 COMPENSATED NEUTRON
 MICRORESISTIVITY LOG

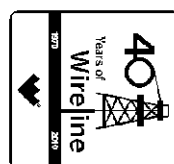




Weatherford

MICRORESISTIVITY LOG

Company SANDRIDGE EXPLORATION
 Well CARISSA SWD # 1-15
 Field GOEBEL
 Province HODGEMAN
 Country U.S.A. / KANSAS
 Location 518' FSL & 203' FEL



SEC TWP RGE
 15 21S 24W
 API Number 15-083-21763
 Permit Number

Other
 MPD/MDN
 MAI/MFE

Permanent G.L.CommaElevation 2338 feet

LogFrom KB Elevations
 DrillFrom K.B. Kb 2348.50
 Df 2347.00
 GI 2338.00

Date	02-MAY-2012	
RunNo	ONE	
DepthDriller	5060.00	feet
DepthLogger	5072.00	feet
FirstReading	5036.00	feet
LastReading	791.00	feet
CasingDriller	787.00	feet
CasingLogger	791.00	feet
BitSize	8.750	inches
HoleFluid	CHEMICAL	
Density	9.10 lb/USg	50.00 CP
Ph	10.50	4.80 ml/30Min
SampleSource	FLOWLINE	
RmMeas	0.36 @ 67.0	ohm-m
RmFlMeas	0.29 @ 67.0	ohm-m
RmCMeas	0.43 @ 67.0	ohm-m
RmISouce	CALC	CALC
RmBht	0.20 @127.0	ohm-m
TimeCirc	5 HOURS	
MaxTemp	127.00	deg F
Equipment	COMPACT	
Base	13025	LIB
Recorded	F. MARTINS	
Witnessed	V. RAMIREZ	B. WILCOX
S.O. / JOB #	3534652	LB12-110

BoreholeRec

Last Edited: 02-MAY-2012 08:27

BitSize Inches	DepthFrom Feet	DepthTo Feet
8.750	791.00	5072.00

CasingRec

Type	Size Inches	DepthFrom Feet	ShoeDepth Feet	Weight Pdff
SURFACE	9.625	0.00	791.00	29.30

Remarks

Tools Used: MPD, MCG, MDN, MFE, MAI, MML
 Hardware: MPD: 8 inch profile plate used. MAI, MFE: 0.5 Inch standoffs used. MDN: Dual Bowspring used.
 2.71 G/CC Limestone density matrix used to calculate porosity.
 Borehole rugosity, tight pulls, and washouts will affect data quality.
 All intervals logged and scaled per customer's request.
 Annular volume with 5.5 inch production casing = 1180 cu. ft.
 Service order #3534652
 Rig: Tomcat #4
 Engineer: F. Martins
 Operator(s): K. Rinehart

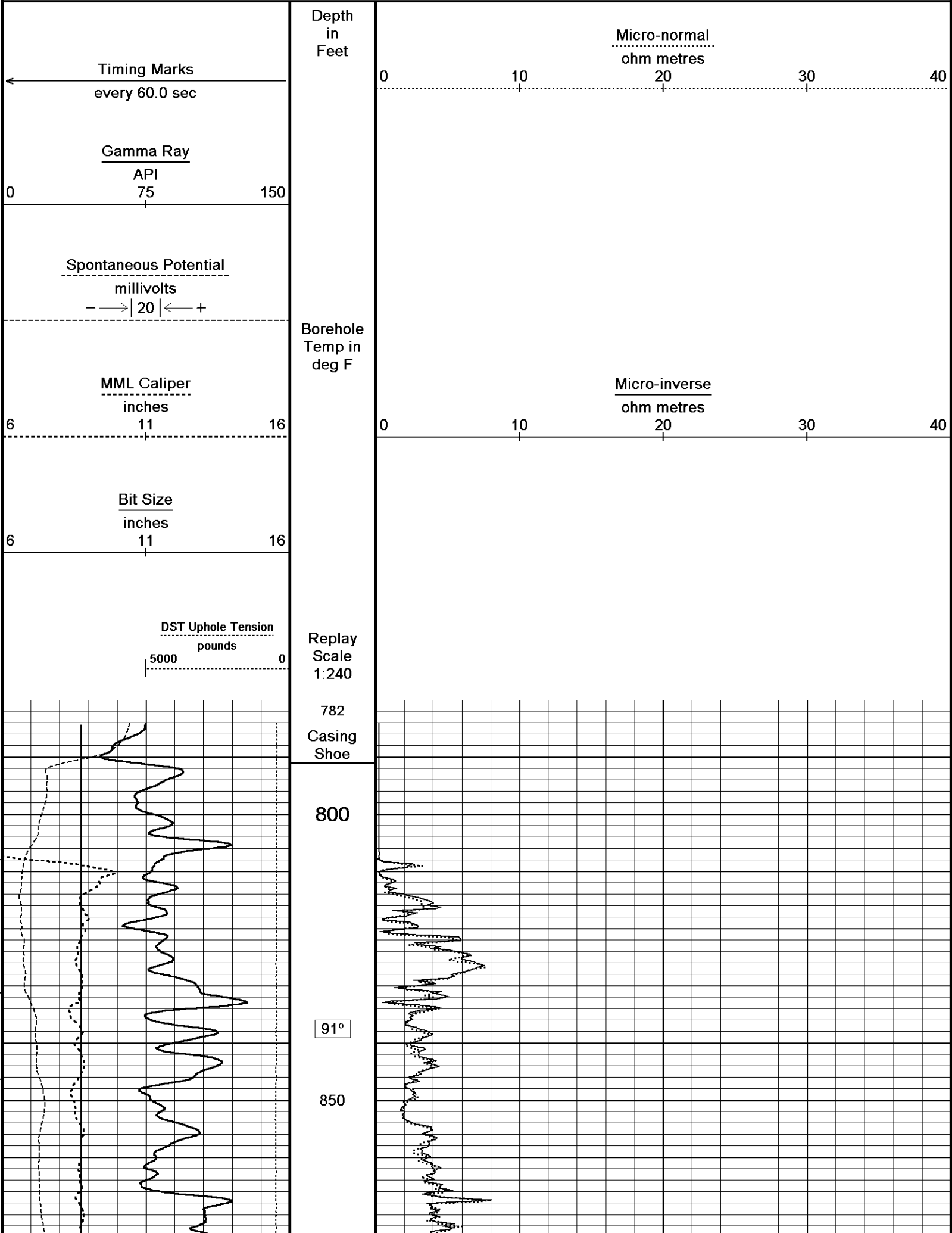
5 INCH MAIN

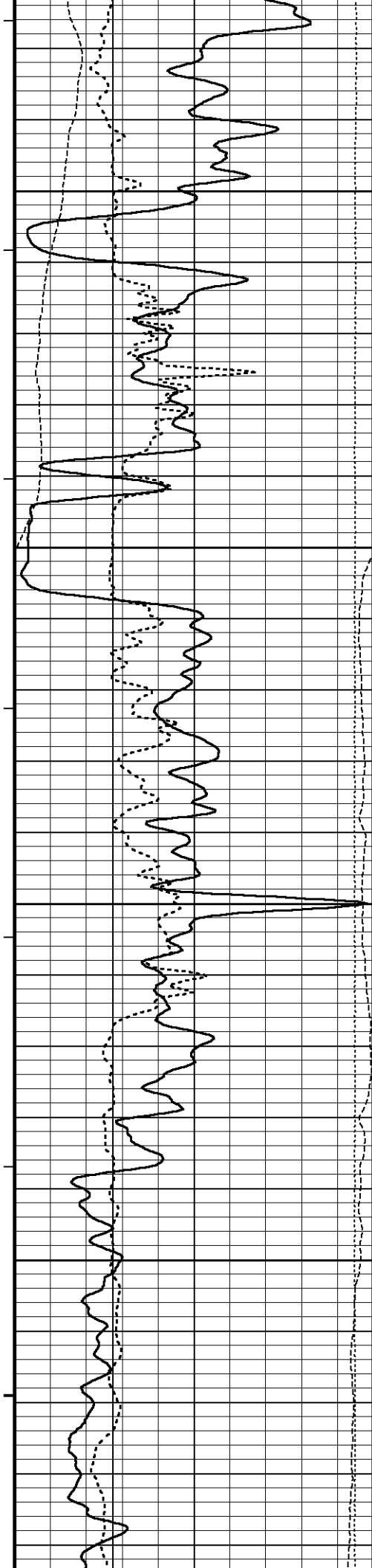
Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 22-MAY-2012 10:14

Filename: C:\Users\lamundt\AppData\Local\Temp\Weat...\Sandridge Carissa SWD # 1-15 Real 003.dta

Recorded on 02-MAY-2012 05:58





92°

900

92°

950

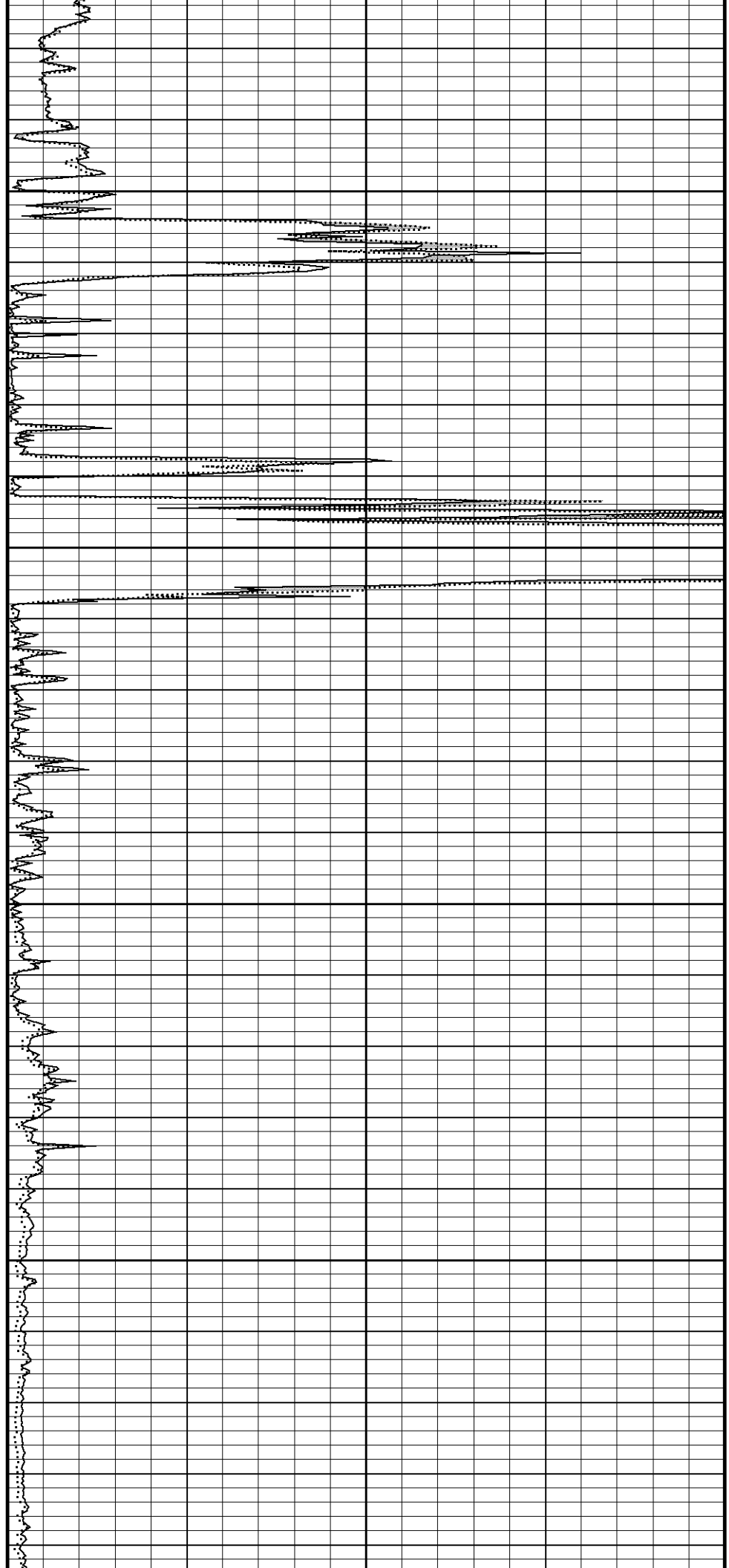
92°

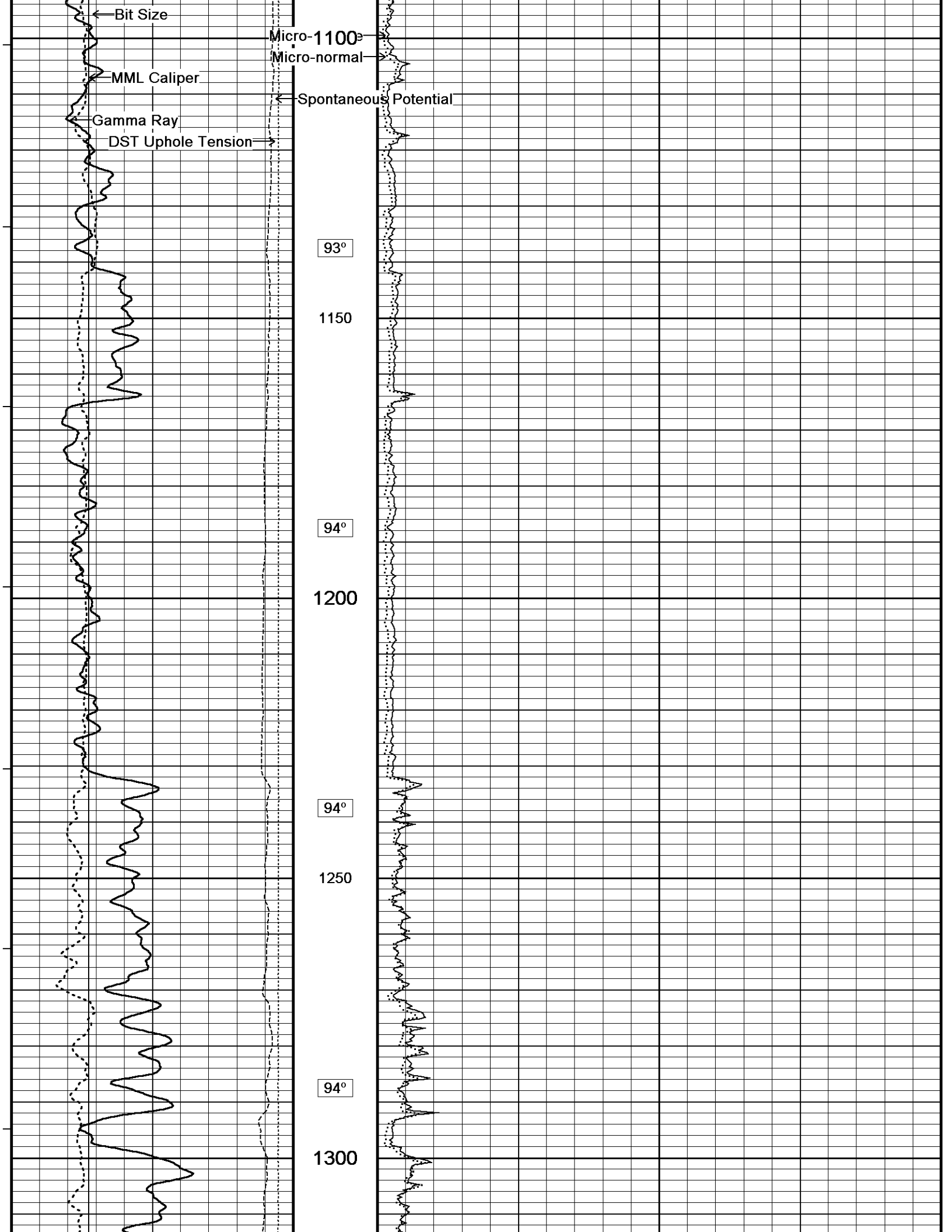
1000

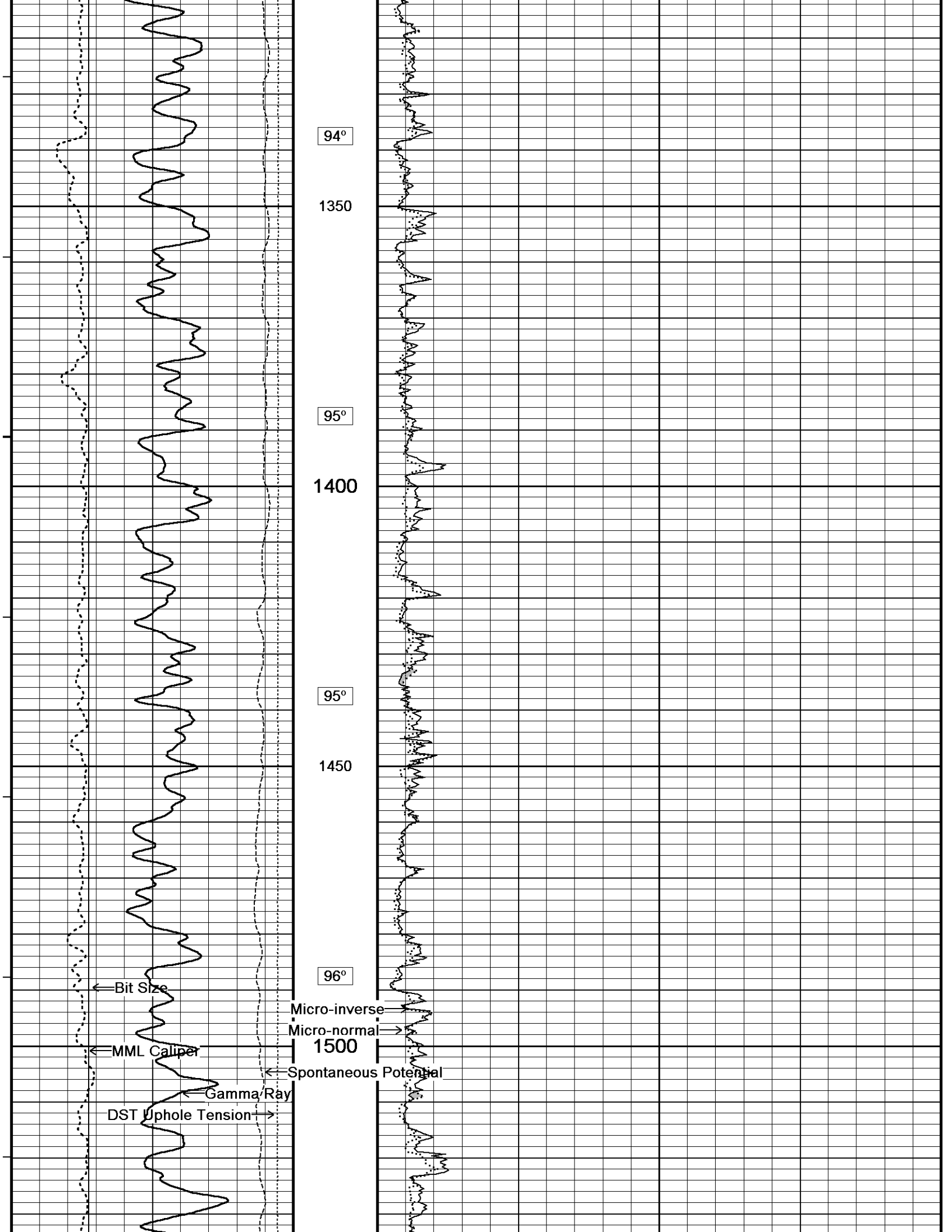
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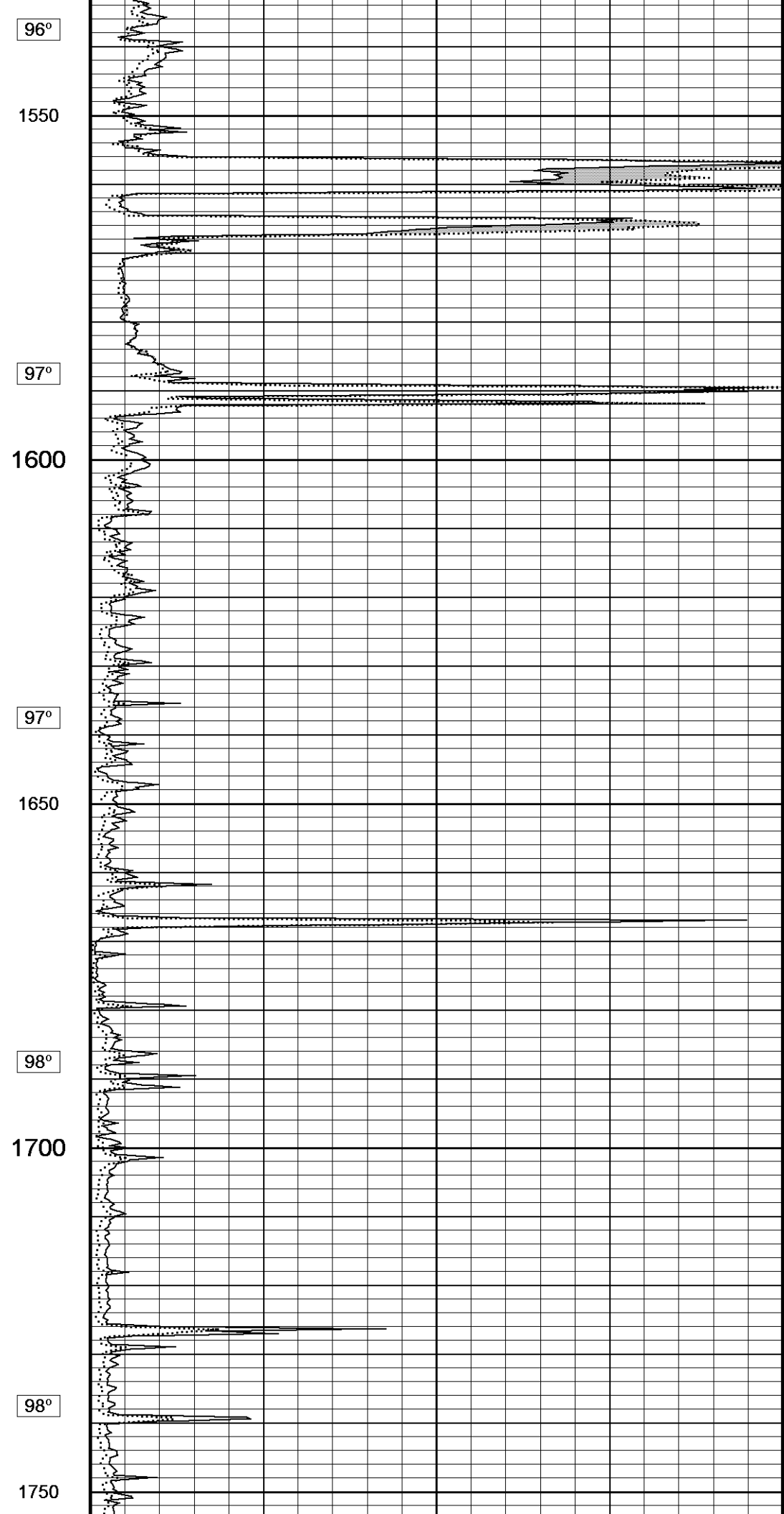
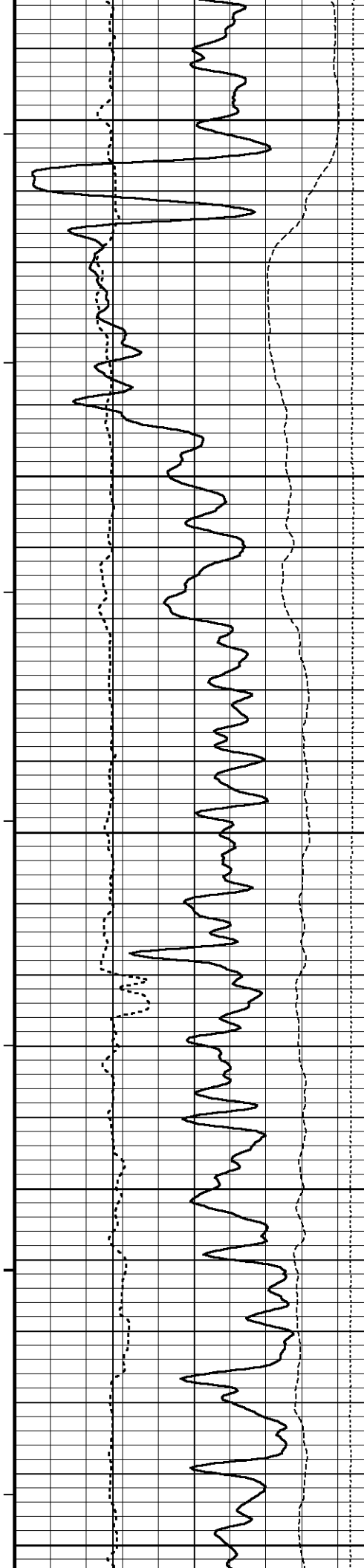
1050

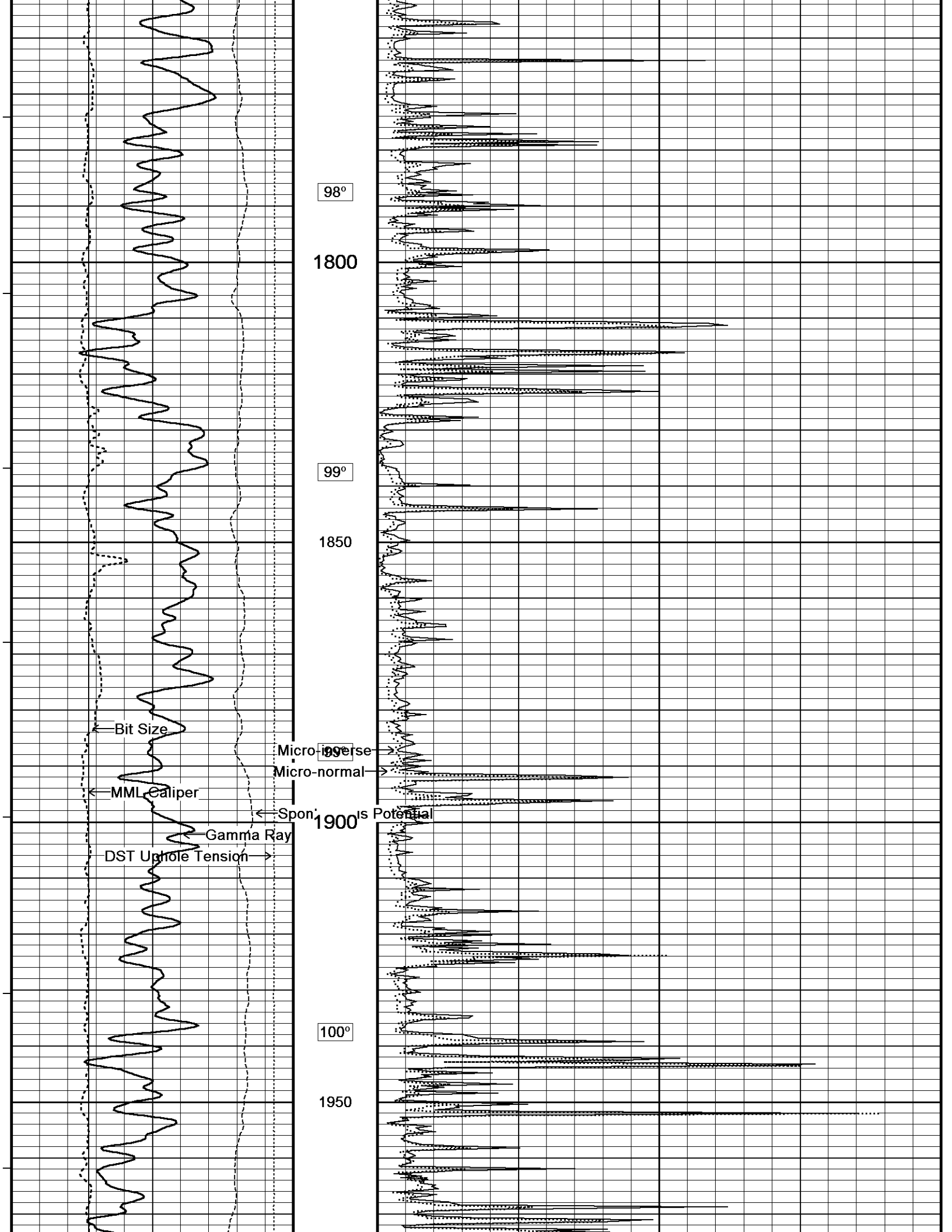
93°

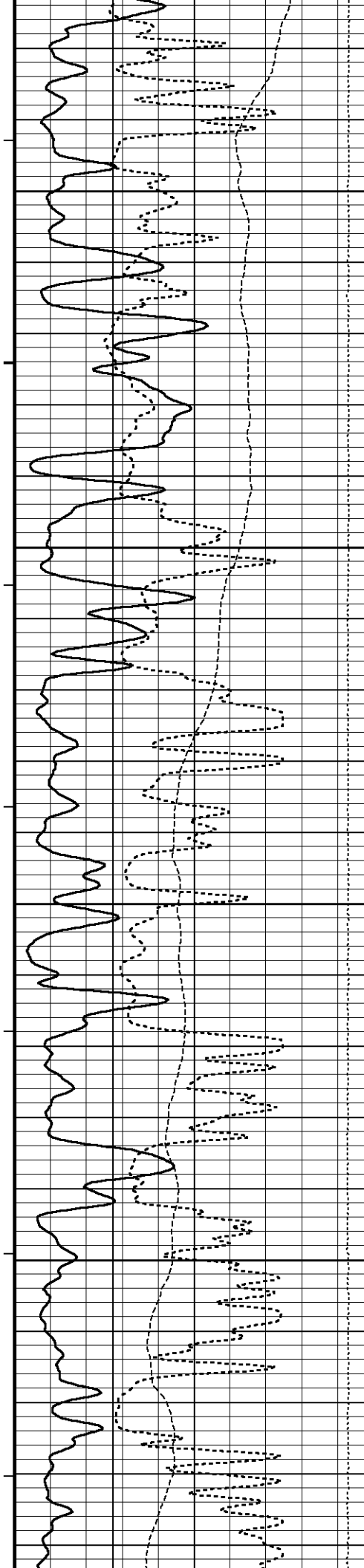












100°

2000

101°

2050

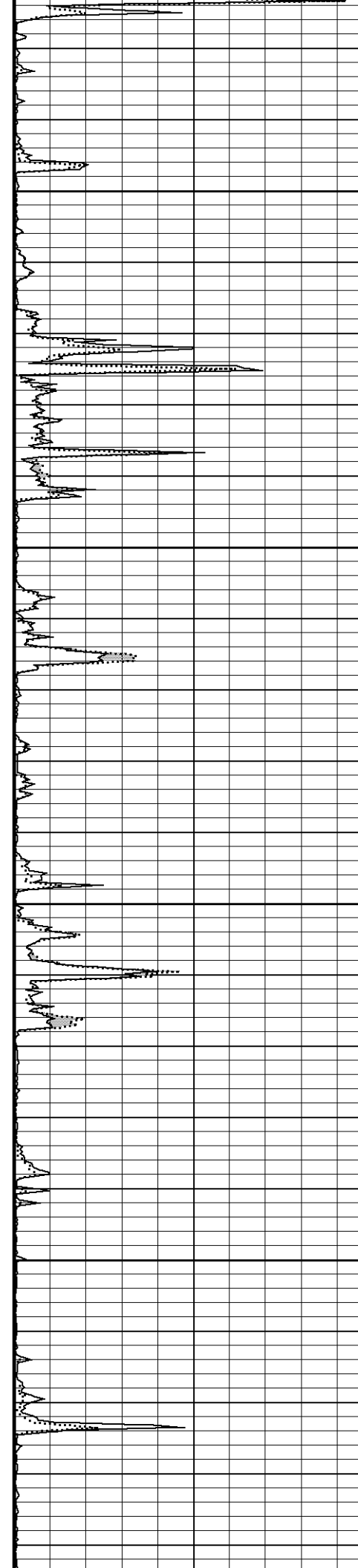
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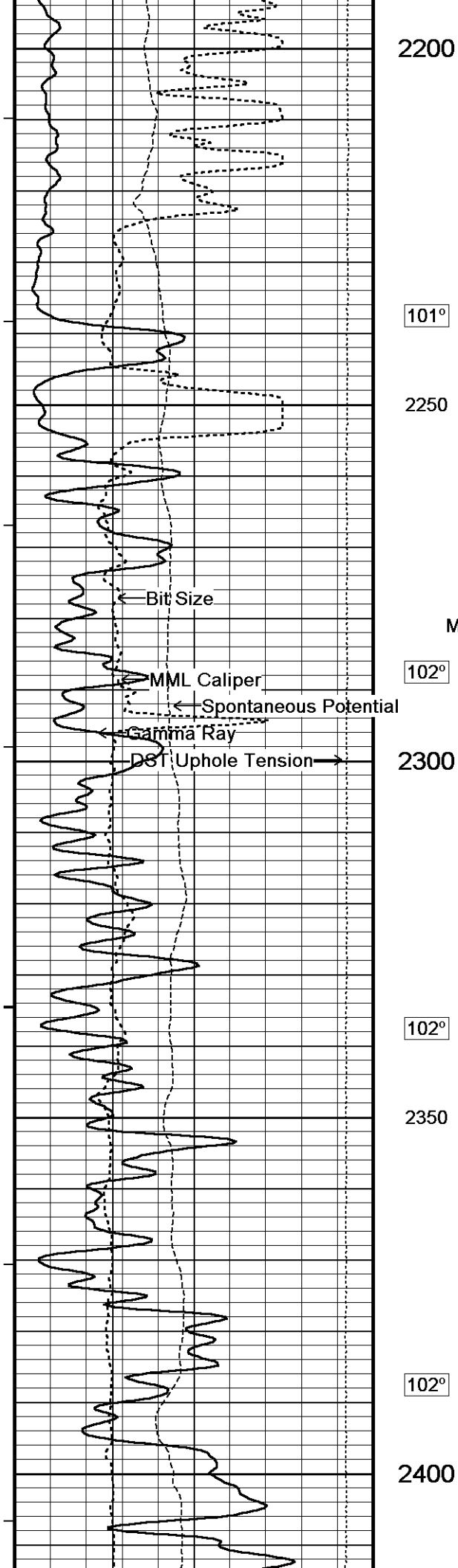
2100

102°

2150

102°





2200

101°

2250

102°

2300

102°

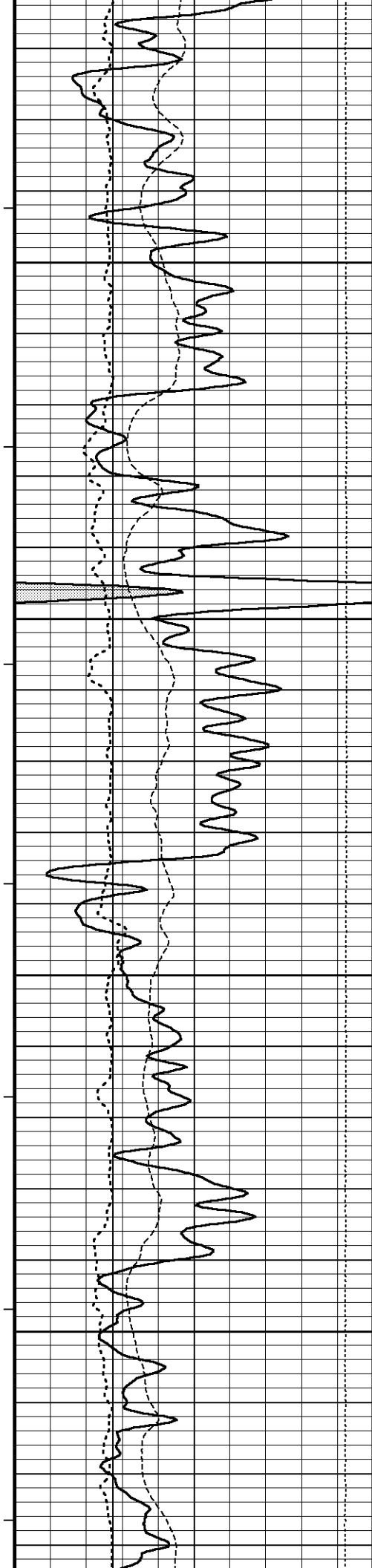
2350

102°

2400

Micro-inverse

Micro-normal



103°

2450

103°

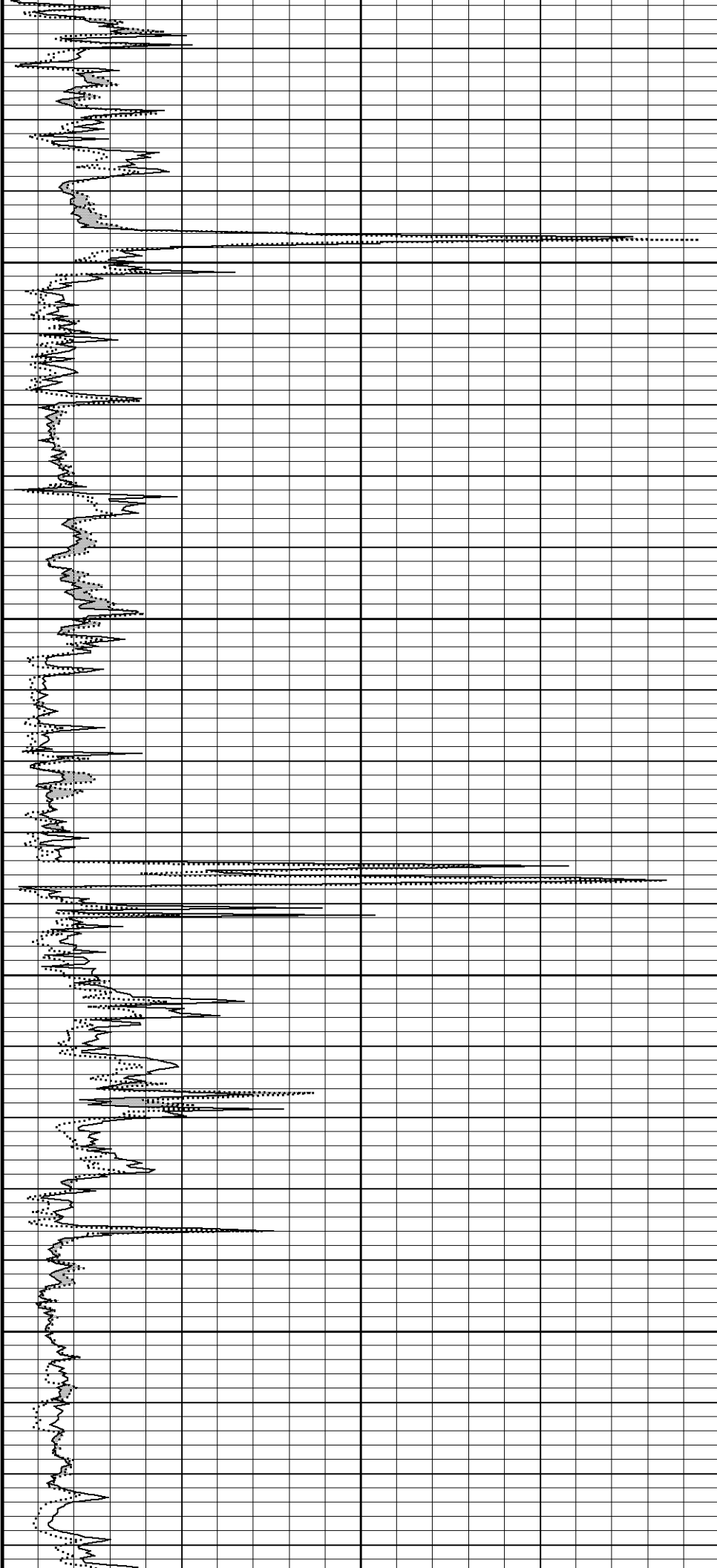
2500

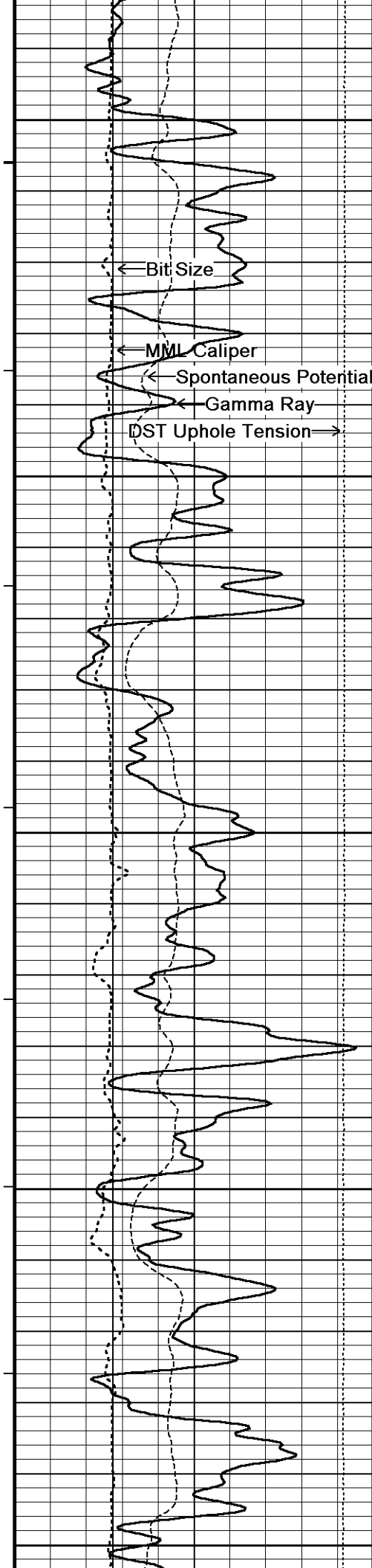
103°

2550

104°

2600





104°

2650

105°

105°

2700

105°

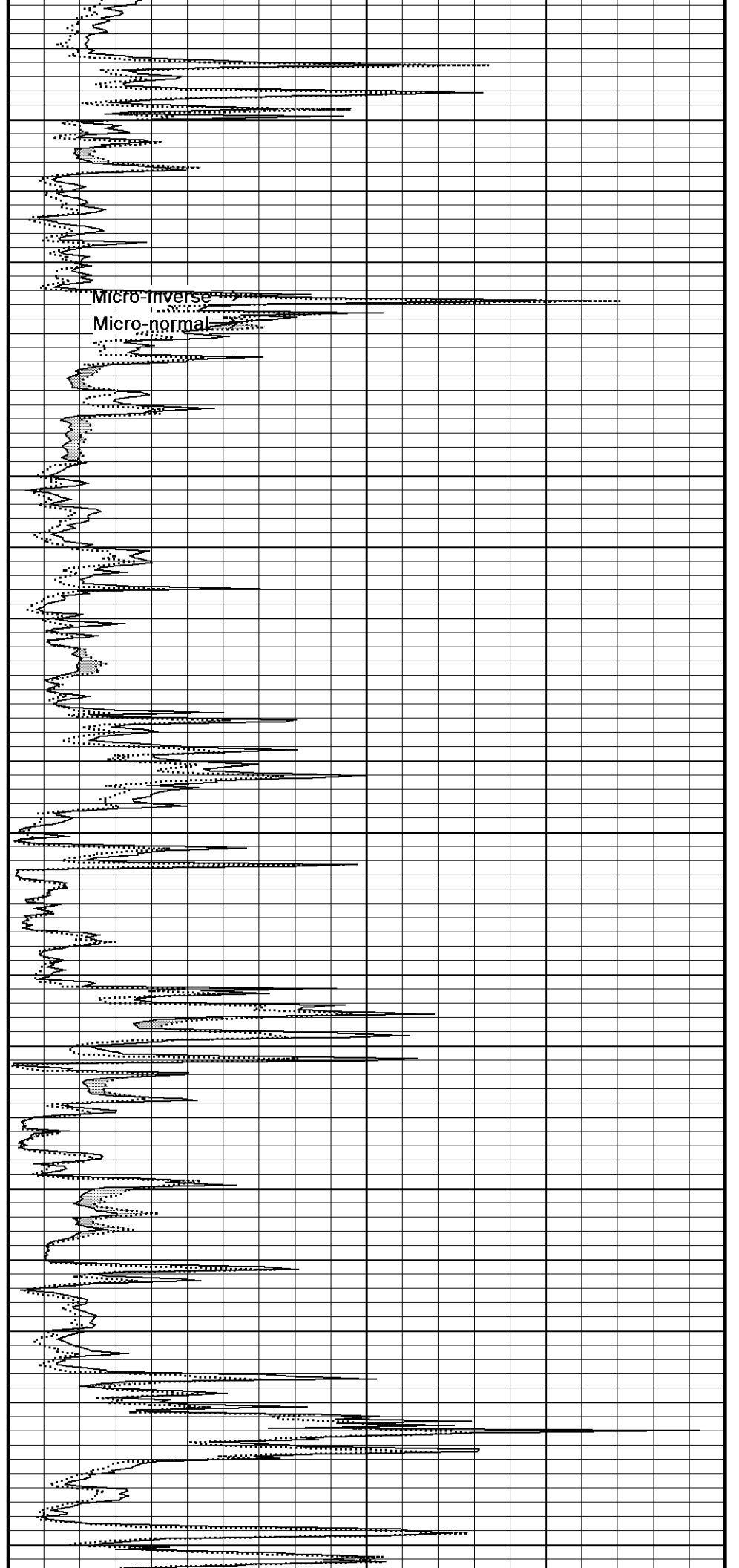
2750

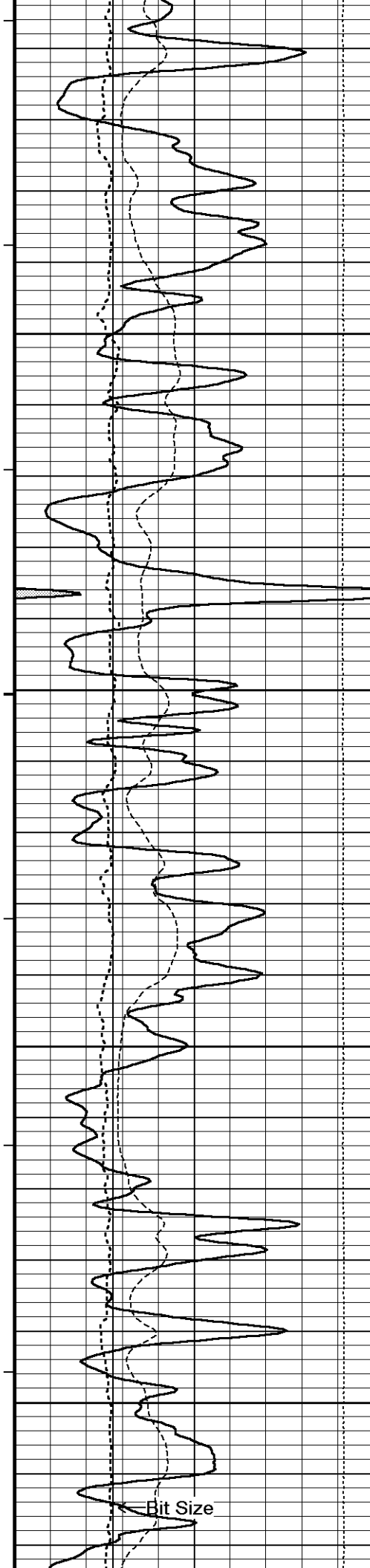
106°

2800

106°

2850





107°

2900

107°

2950

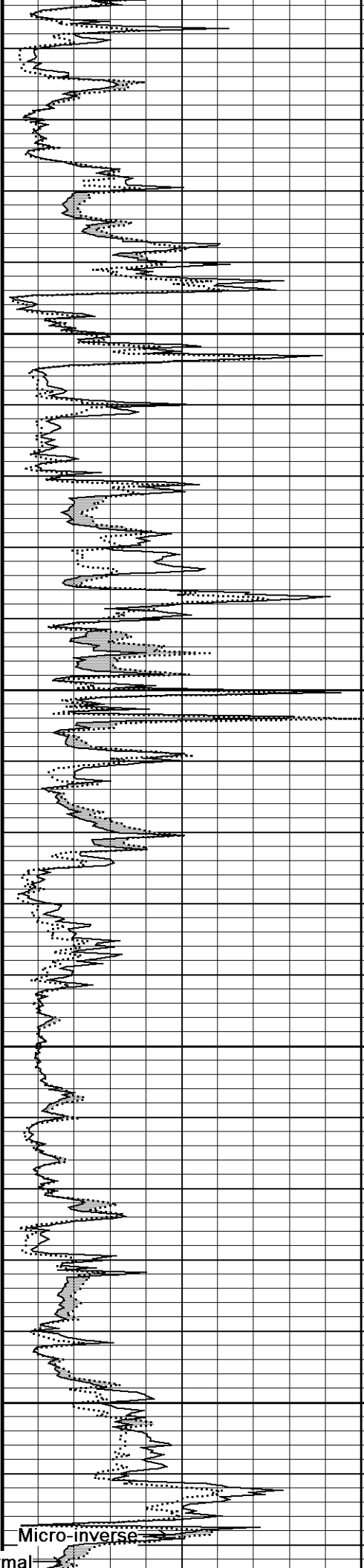
107°

3000

108°

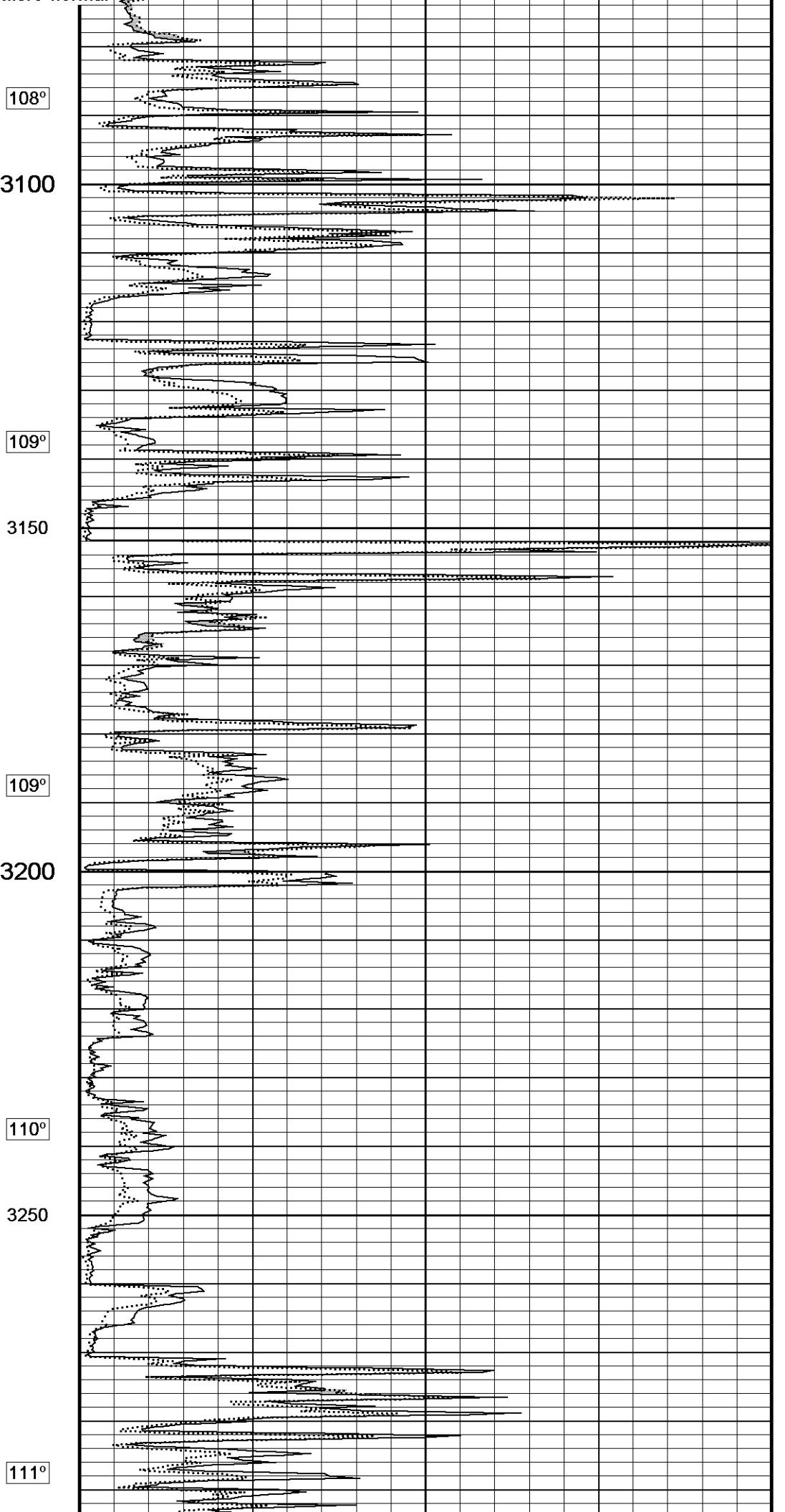
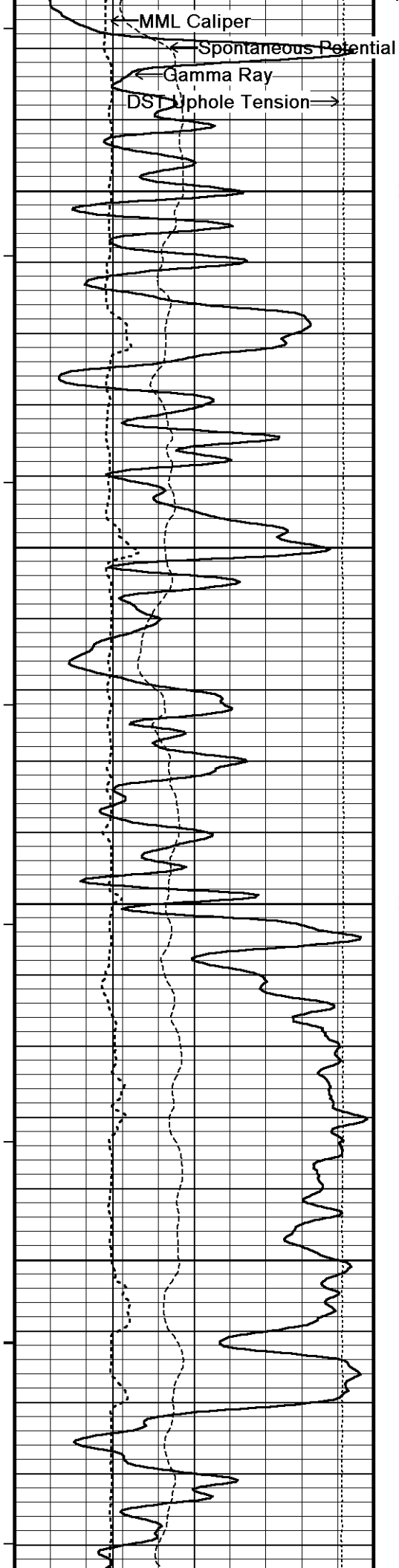
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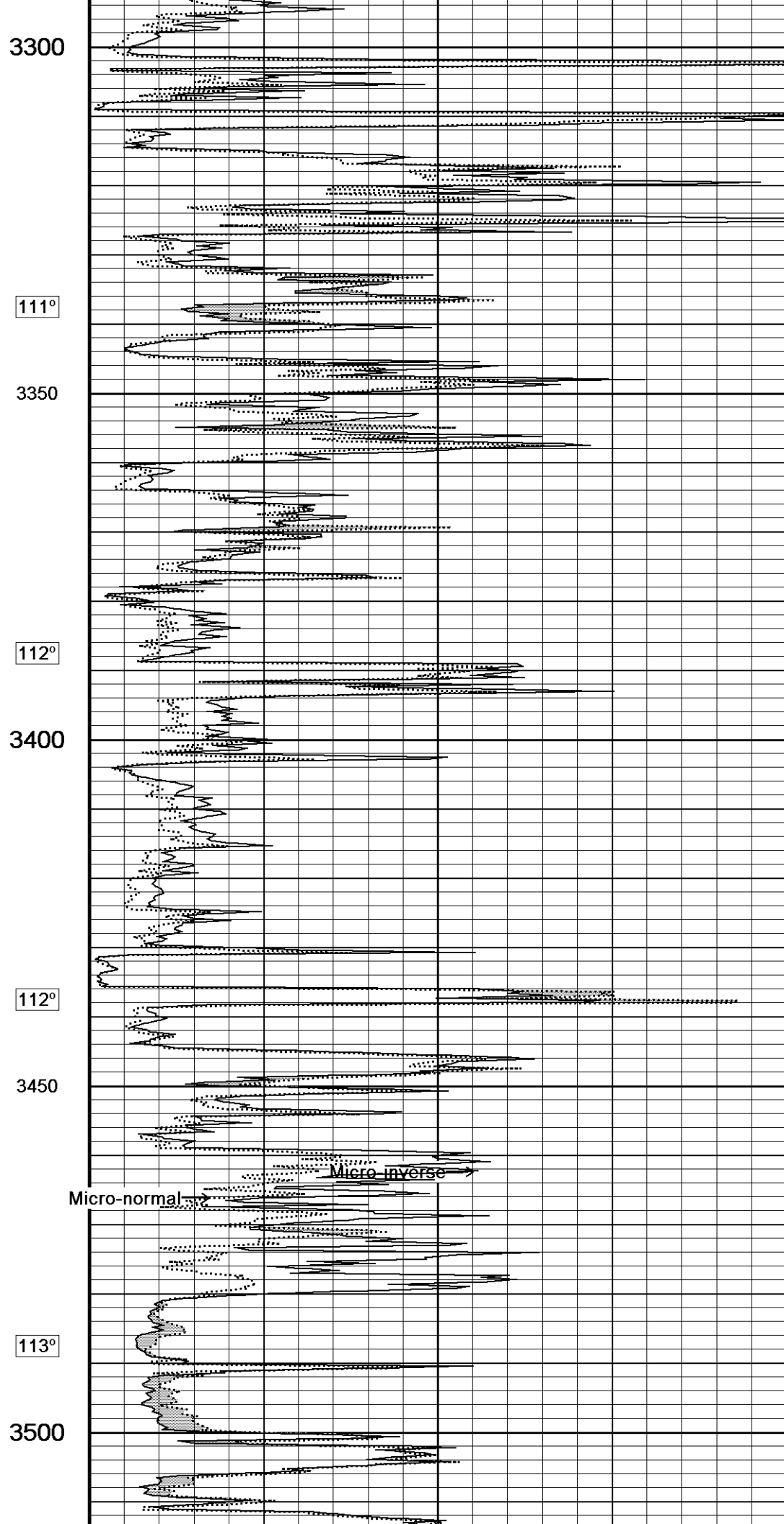
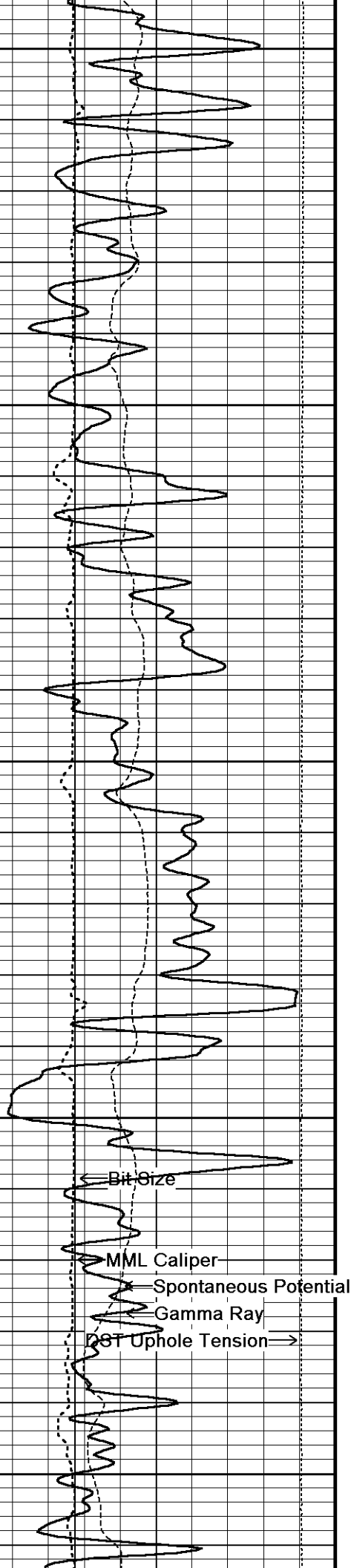
Bit Size

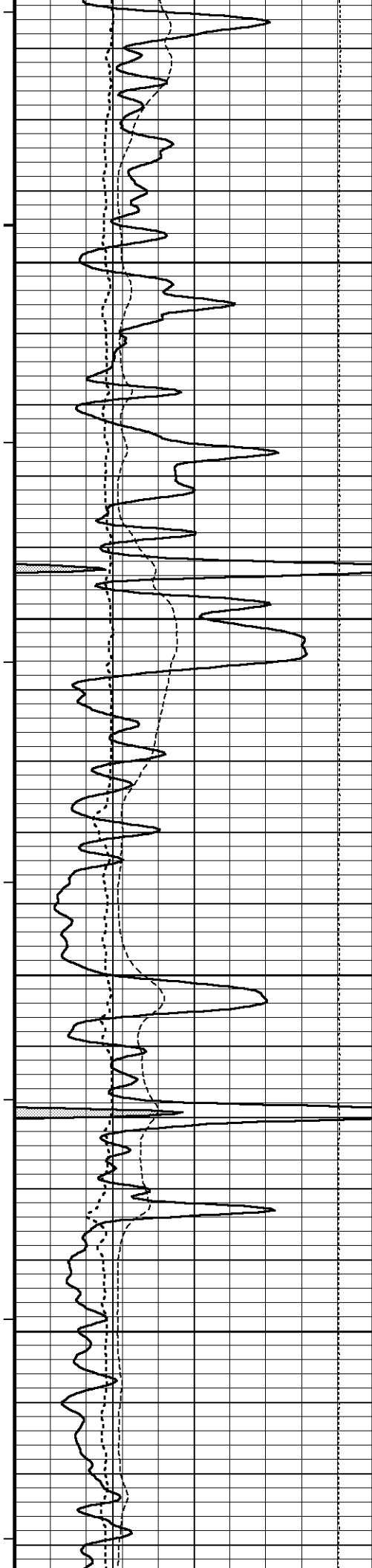


Micro-inverse

Micro-normal







113°

3550

114°

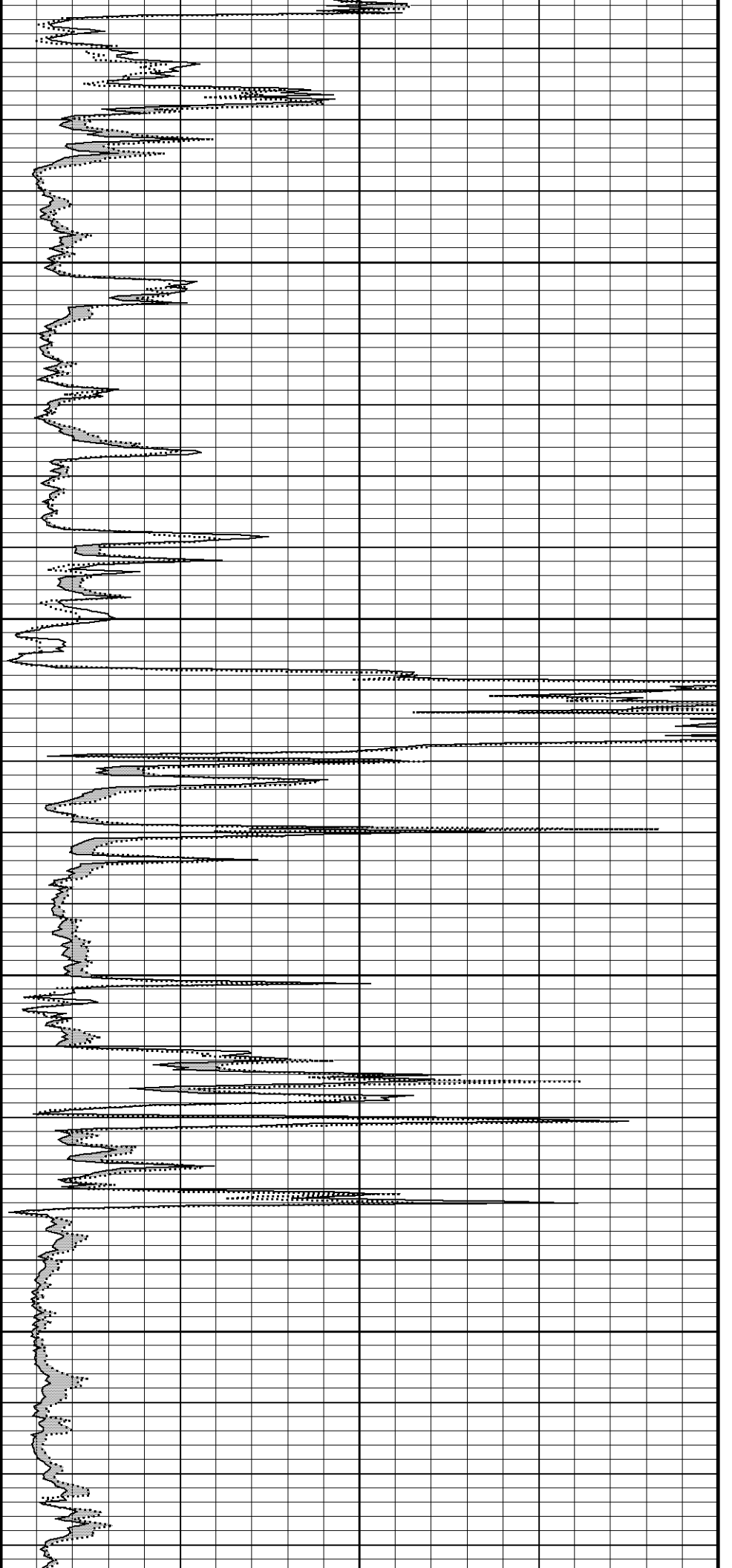
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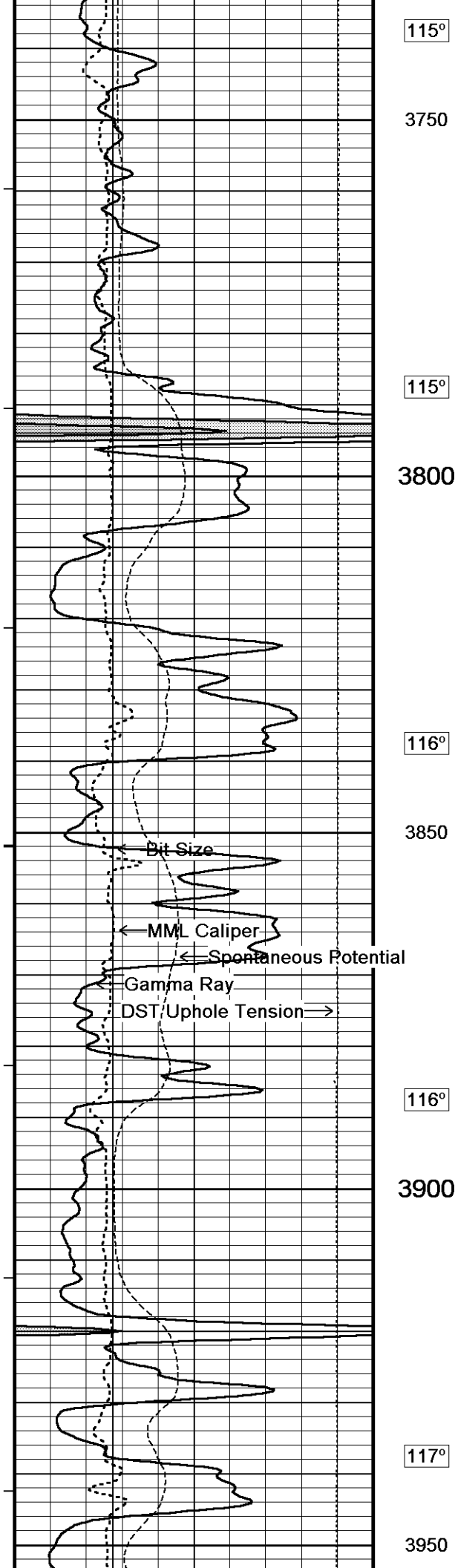
114°

3650

114°

3700





115°

3750

115°

3800

116°

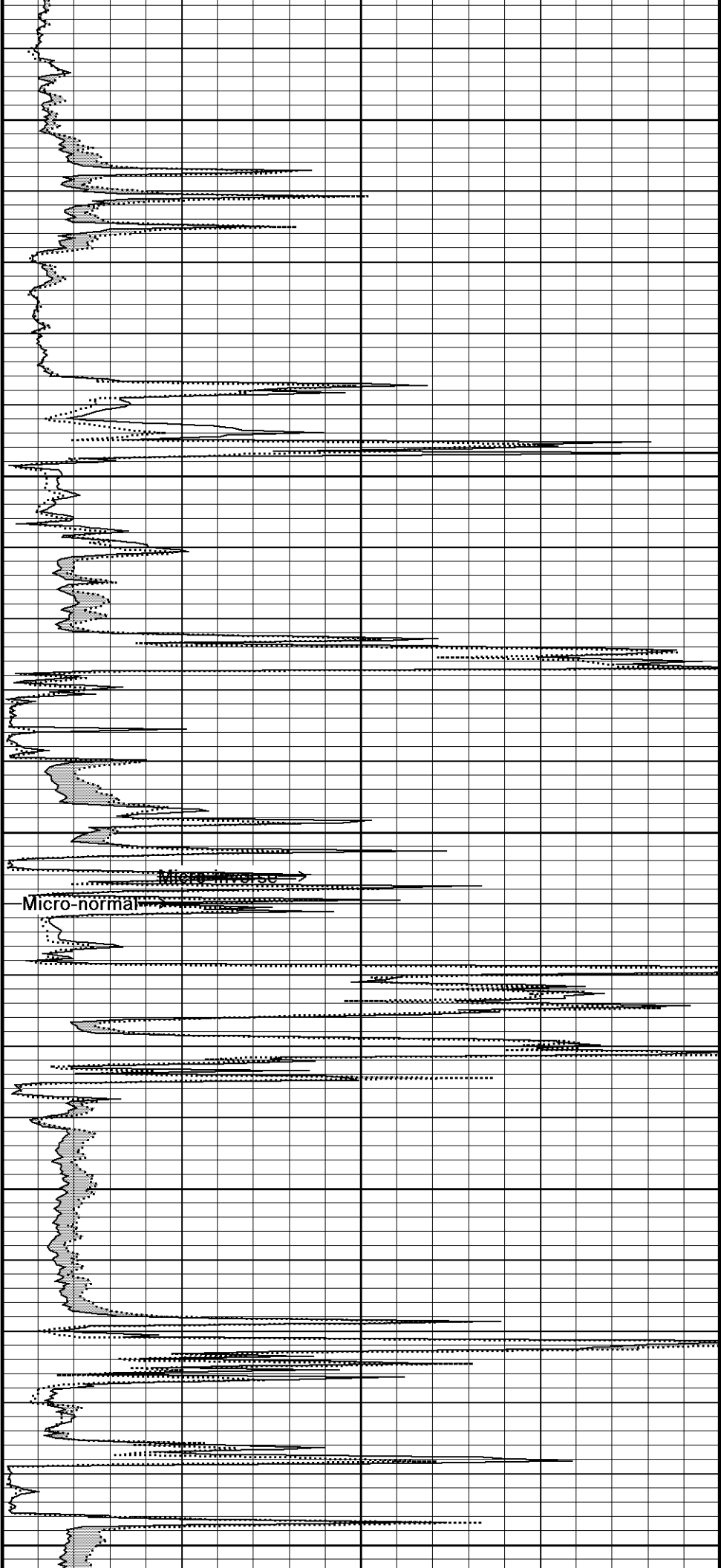
3850

116°

3900

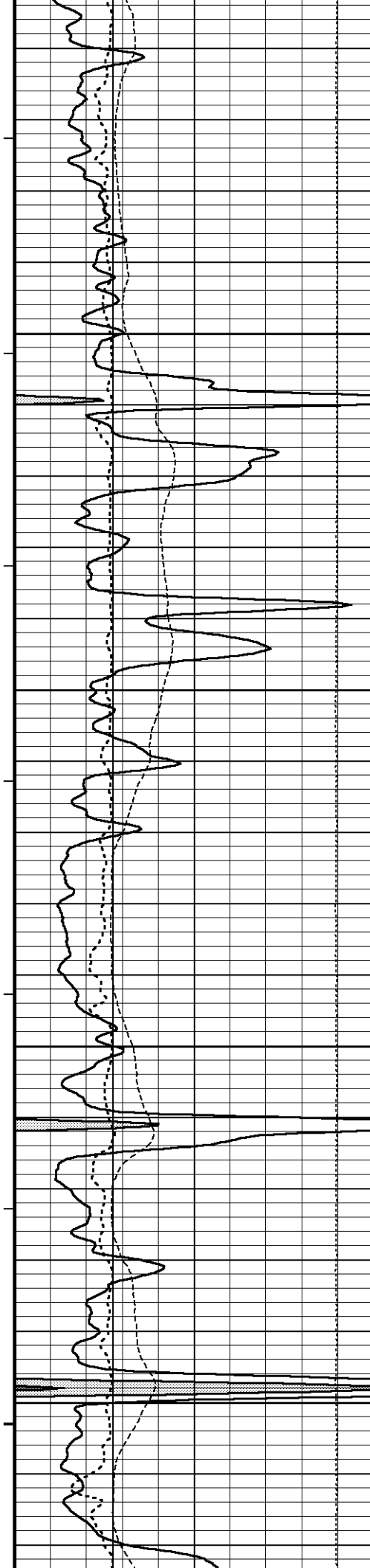
117°

3950



Micro-normal

Micro-inverse



117°

4000

118°

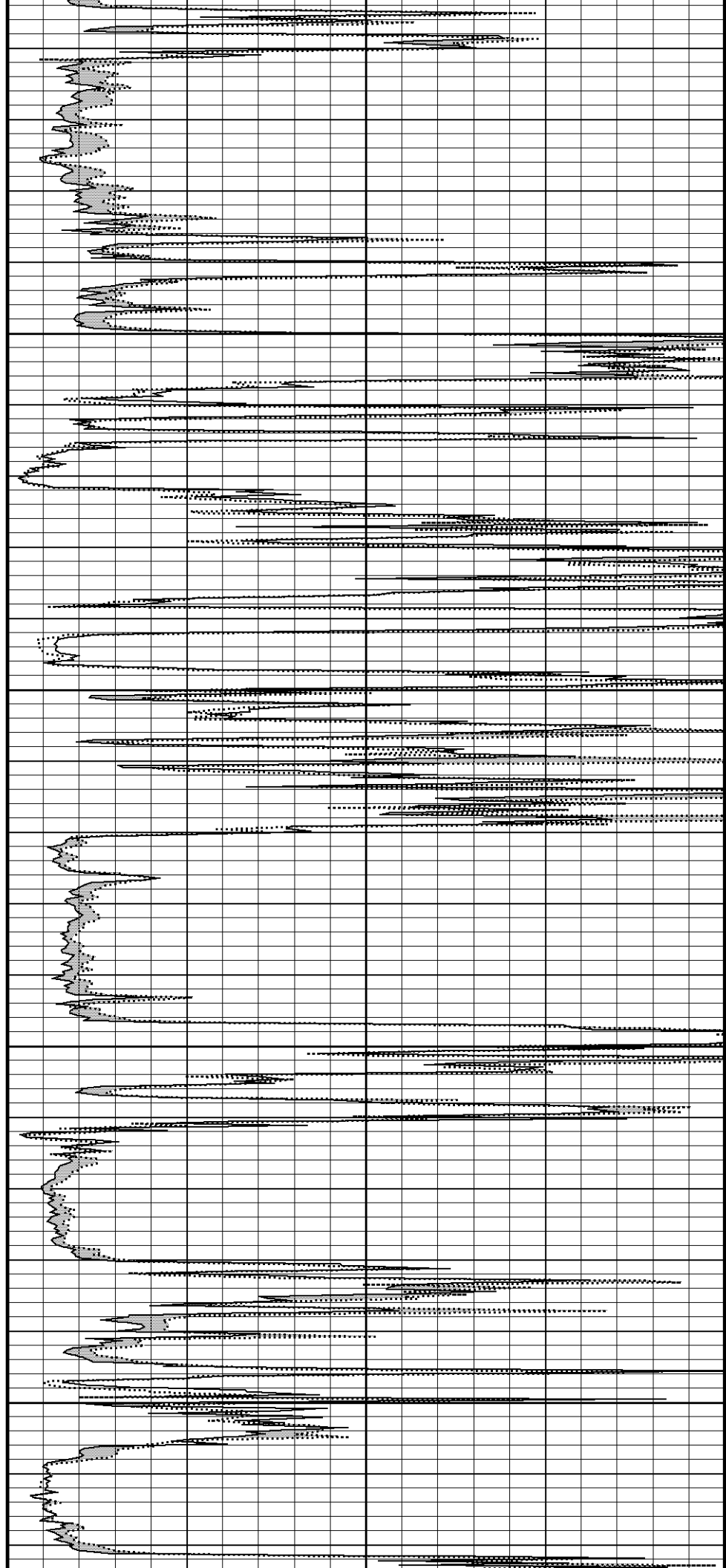
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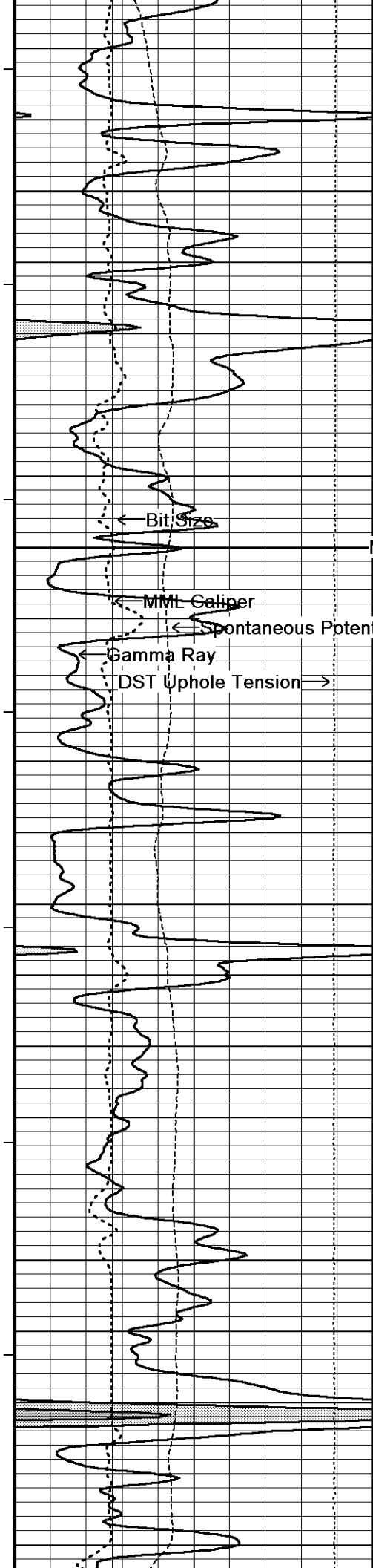
118°

4100

118°

4150





119°

4200

119°

Micr4250ersee

Micro-normal

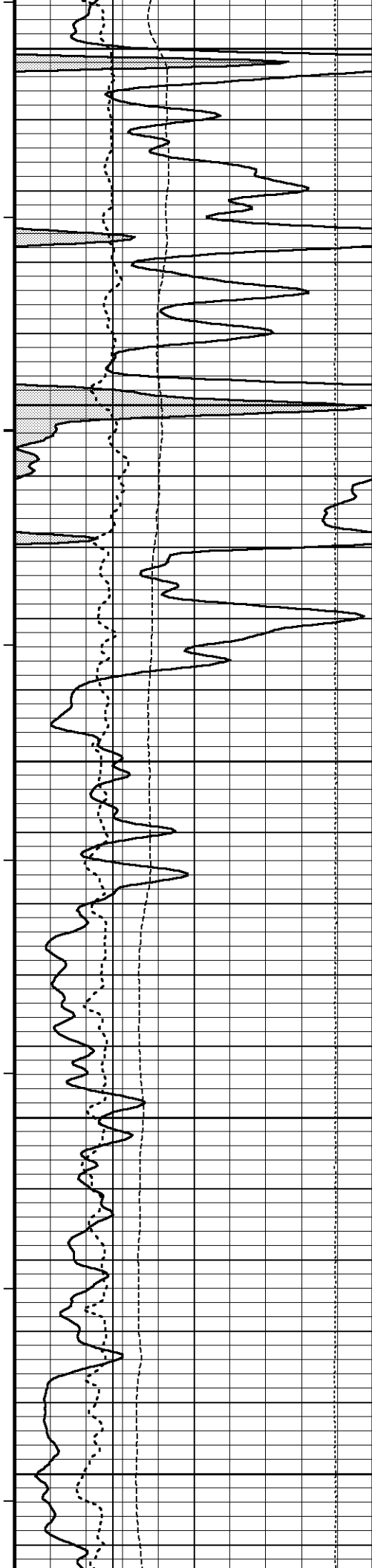
120°

4300

120°

4350

121°



4400

121°

4450

122°

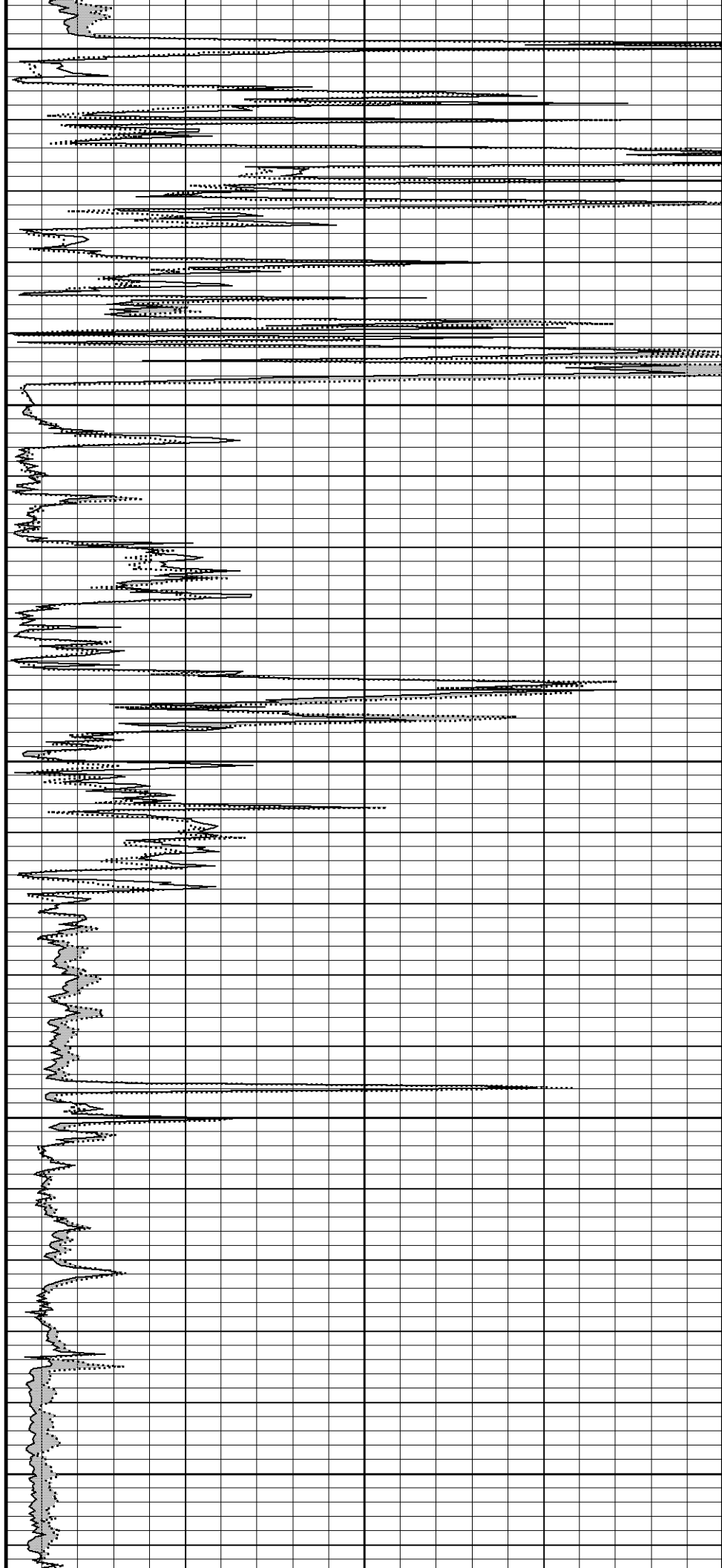
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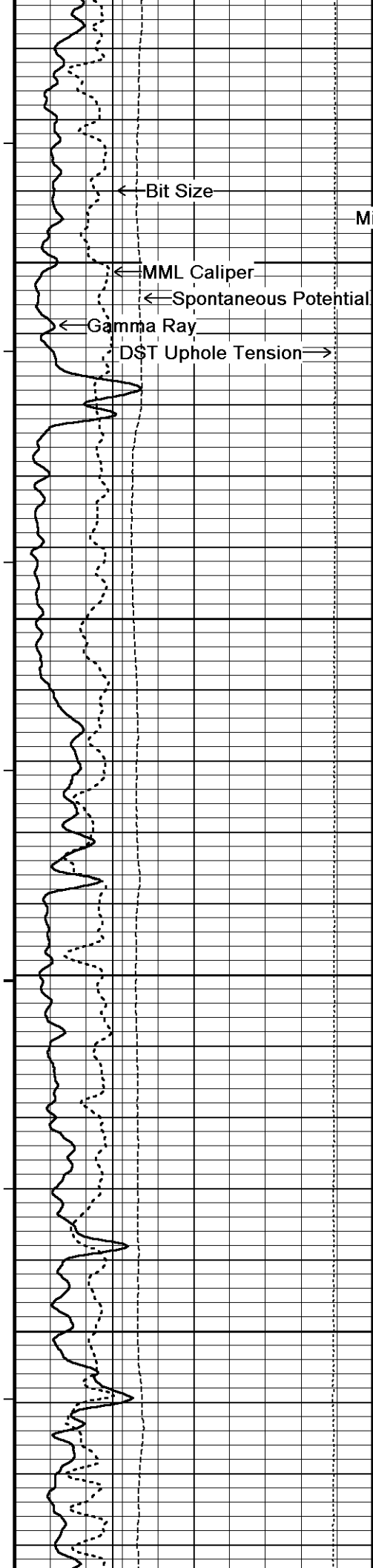
122°

4550

123°

4600





124°
Micro-inverse

Micro-normal
4650

124°

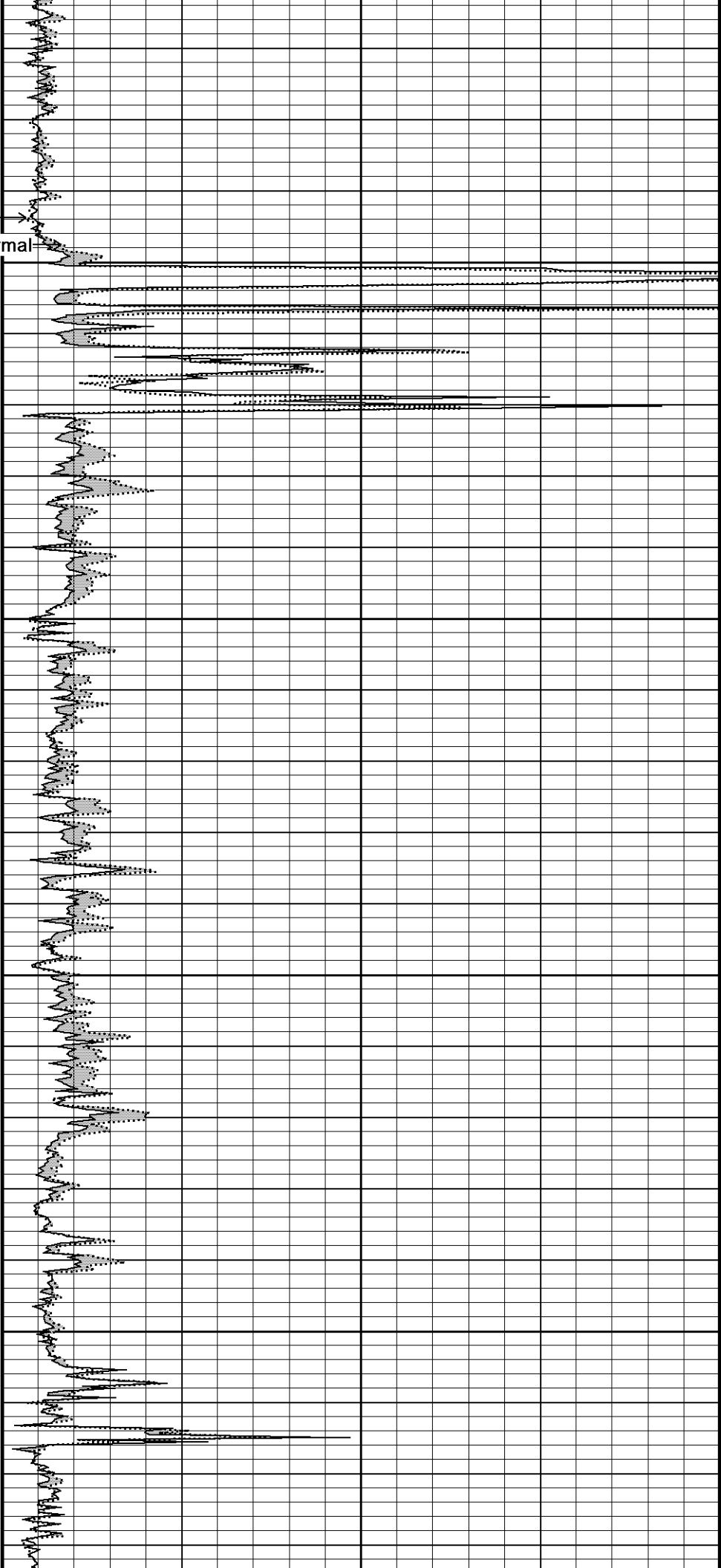
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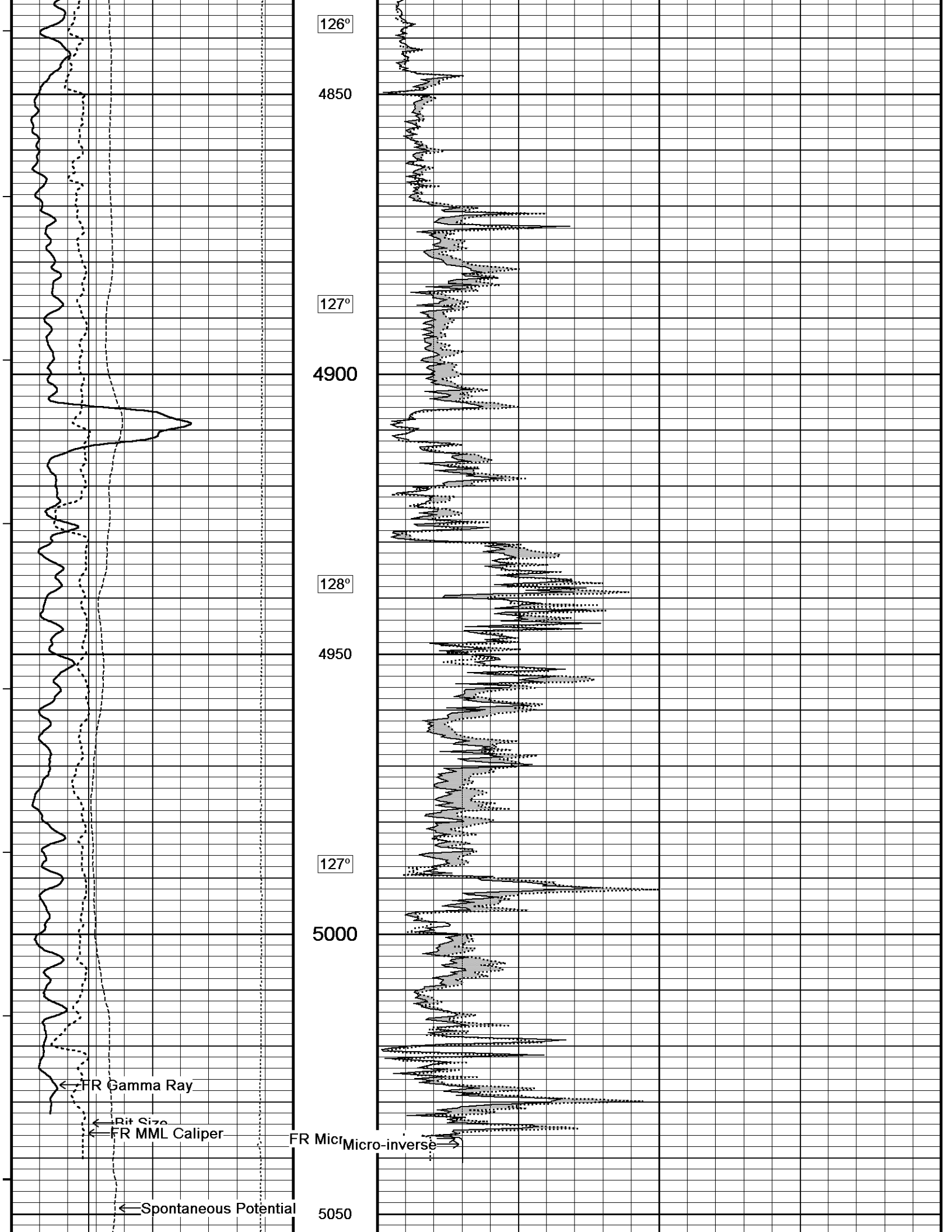
124°

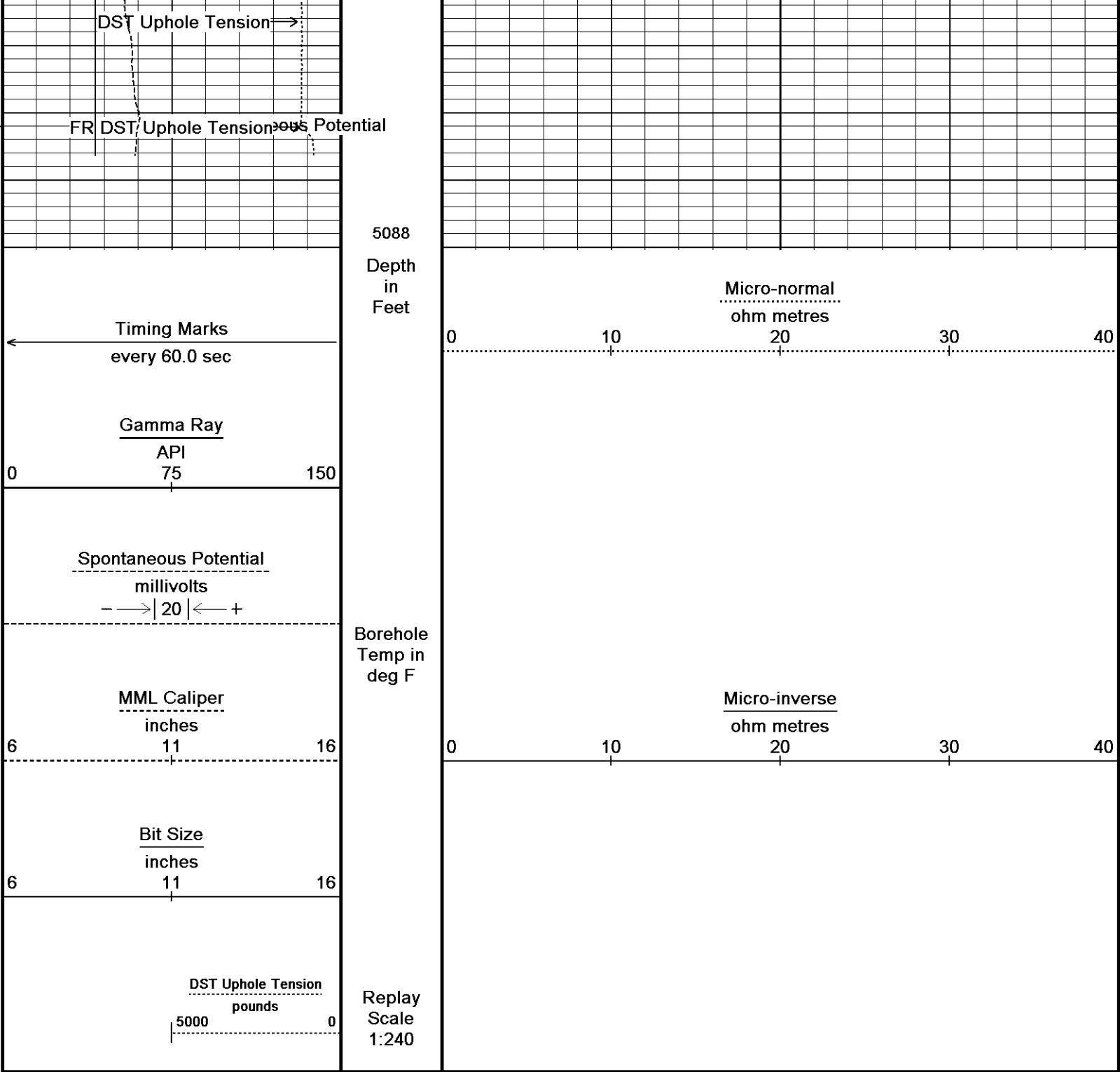
4750

125°

4800







Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 22-MAY-2012 10:14

Filename: C:\Users\amundt\AppData\Local\Temp\Weat...\Sandridge Carissa SWD # 1-15 Real_003.dta

Recorded on 02-MAY-2012 05:58

System Versions: Logged with 11.03.4044 Plotted with 12.01.3513

↑

5 INCH MAIN

↑

↓

REPEAT SECTION

↓

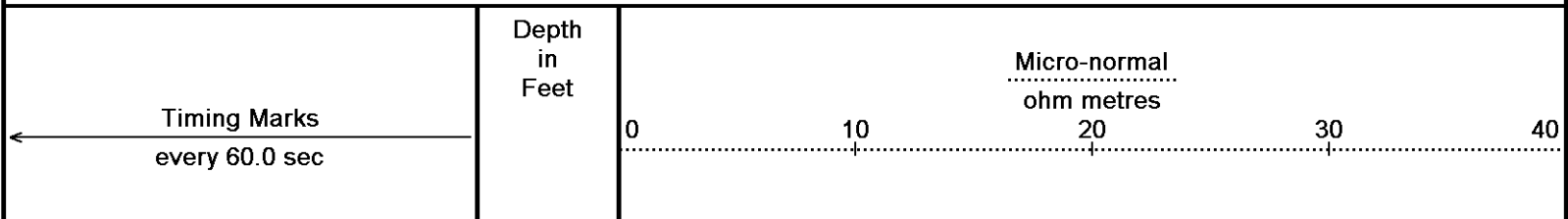
Depth Based Data - Maximum Sampling Increment 10.0cm

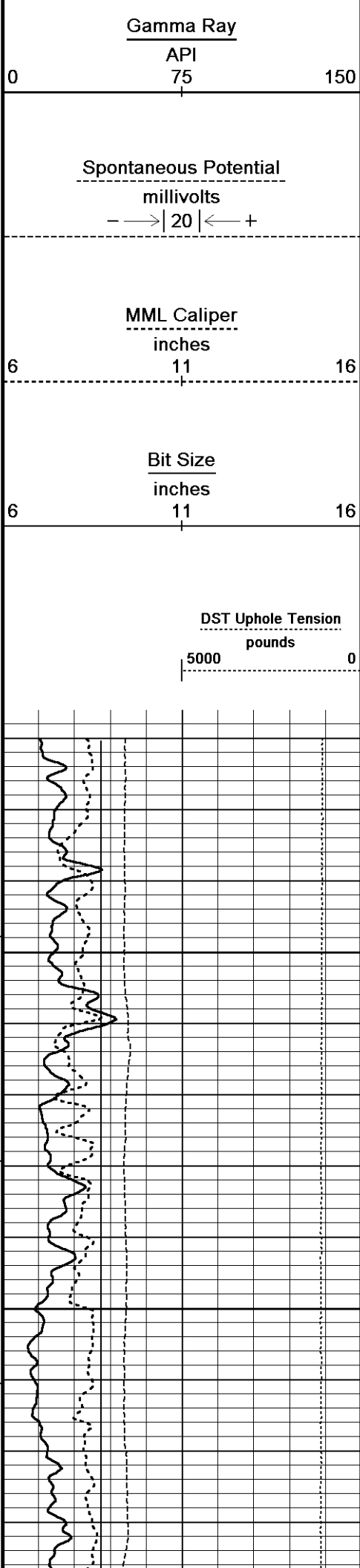
Plotted on 22-MAY-2012 10:14

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Recorded on 02-MAY-2012 05:39

System Versions: Logged with 11.03.4044 Plotted with 12.01.3513





Borehole
Temp in
deg F

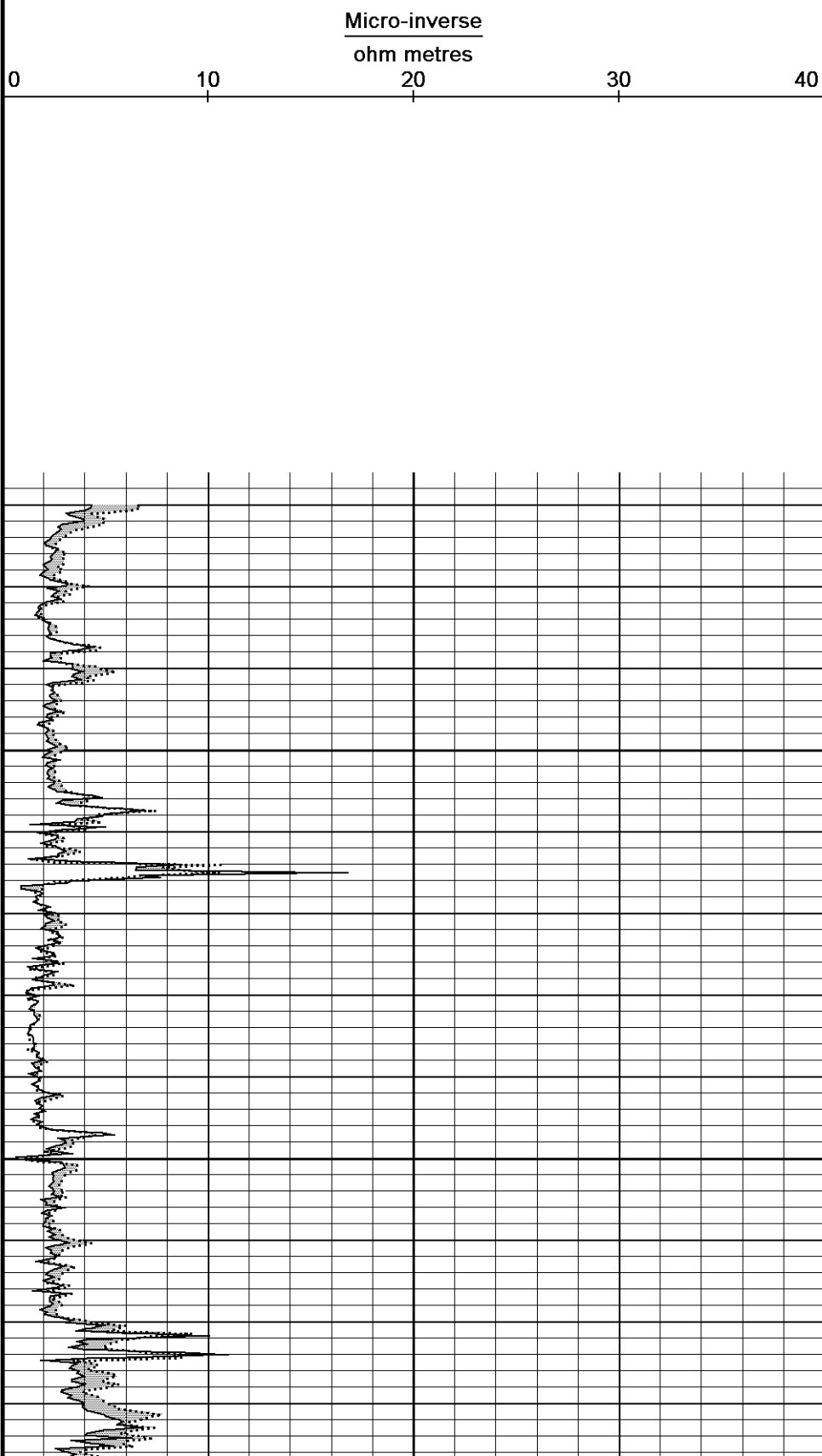
Replay
Scale
1:240

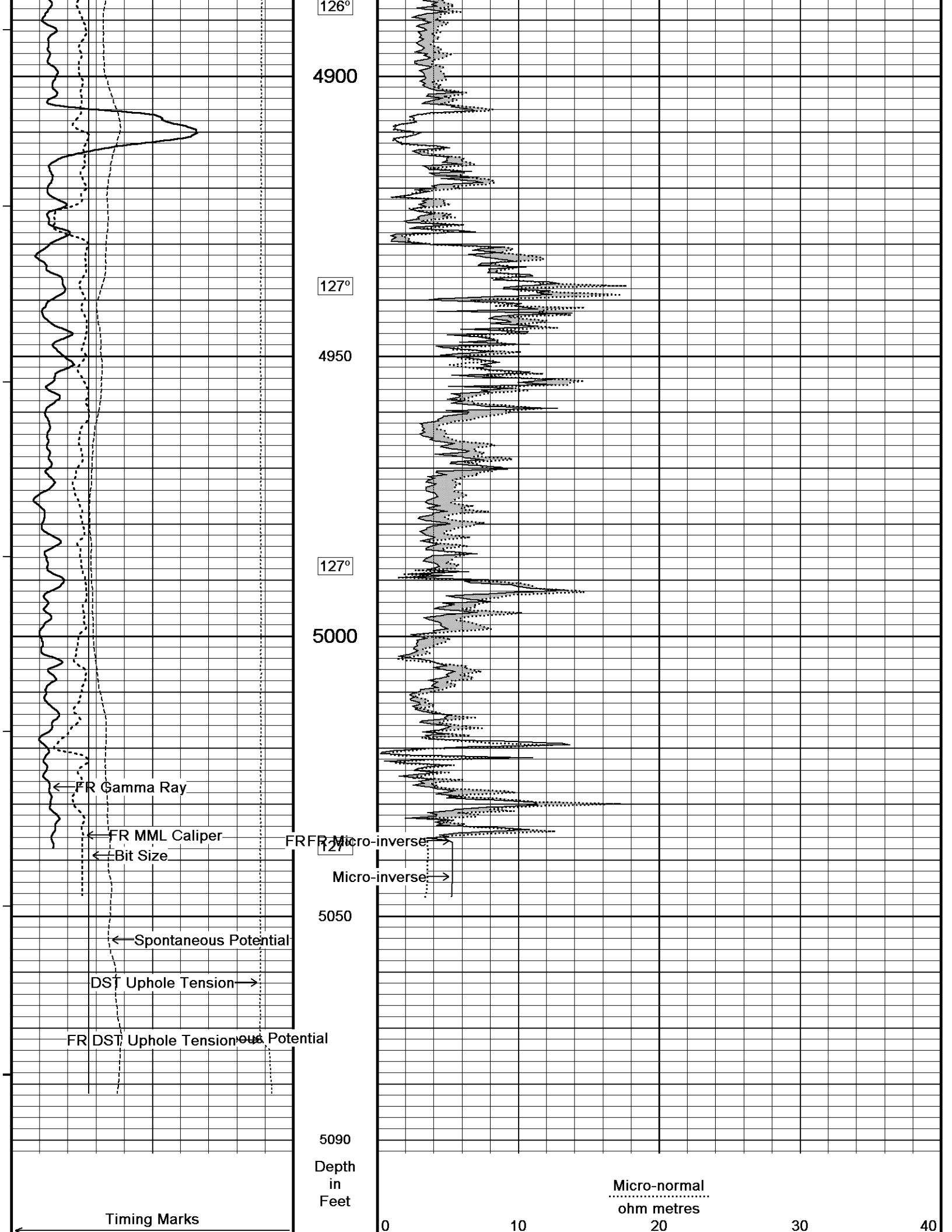
4768

4800

125°

4850





every 60.0 sec

Gamma Ray

API

75

0

150

Spontaneous Potential

millivolts

- —> | 20 | <— +

MML Caliper

inches

6

11

16

Bit Size

inches

6

11

16

DST Uphole Tension

pounds

5000

0

Borehole
Temp in
deg F

Replay
Scale
1:240

Micro-inverse

ohm metres

0

10

20

30

40

Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 22-MAY-2012 10:14

Filename: C:\Users\amundt\AppData\Local\Temp\Weat...\Sandridge Carissa SWD # 1-15 Real_002.dta

Recorded on 02-MAY-2012 05:39

System Versions: Logged with 11.03.4044 Plotted with 12.01.3513



REPEAT SECTION



BEFORE SURVEY CALIBRATION

C:\Users\amundt\AppData\Local\Temp\Weatherford PreView\0\Sandridge Carissa SWD # 1-15 Real_003.dta

General Constants All 000

Last Edited on 02-MAY-2012 05:16

General Parameters

Mud Resistivity	0.360	ohm-metres
Mud Resistivity Temperature	67.000	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	Density Caliper	
HVOL Caliper 2	N/A	
Annular Volume Diameter	5.500	inches
Caliper for Differential Caliper	Density Caliper	

Rwa Parameters

Porosity used	Limestone Density Por.
Resistivity used	Array Ind. One Res Rt
RWA Constant A	1.000
RWA Constant M	2.000

Down-hole Tension Calibration All 000

Field Calibration on 30-JUN-2010 01:00

Reading No	Measured	Calibrated (lbs)
1	14112.01	10.00
2	15164.79	427.00

Down-hole Tension Calibration SMS 0			Field Calibration on 29-MAR-2012 12:07	
Reading No	Measured	Calibrated (lbs)		
1	-2133.10	0.00		
2	-2135.89	100.00		
Gamma Calibration MCG-C 208			Field Calibration on 02-MAY-2012 00:32	
	Measured	Calibrated (API)		
Background	68	47		
Calibrator (Gross)	1123	772		
Calibrator (Net)	1055	725		
Gamma Constants MCG-C 208			Last Edited on 02-MAY-2012 05:15	
Gamma Calibrator Number	gcr38			
Mud Density	1.09	gm/cc		
Caliper Source for Processing	Density Caliper			
Tool Position	Eccentred			
Concentration of KCl	0.00	kppm		
SP Calibration MCG-C 208			Field Calibration on 24-FEB-2012 11:08	
	Measured	Calibrated (mV)		
Reference 1	98.6	100.0		
Reference 2	-101.8	-100.0		
High Resolution Temperature Calibration MCG-C 208			Field Calibration on 18-OCT-2011 15:32	
	Measured	Calibrated(Deg F)		
Lower	50.00	50.00		
Upper	75.00	75.00		
High Resolution Temperature Constants MCG-C 208			Last Edited on	
Pre-filter Length	11			
Caliper Calibration MML-A 16			Base Calibration on 12-MAR-2012 09:42 Field Calibration on 02-MAY-2012 00:27	
Base Calibration				
Reading No	Measured	Calibrator Size (in)		
1	14446	5.98		
2	17749	7.97		
3	20974	9.86		
4	24969	11.92		
5	0	0.00		
6	N/A	N/A		
Field Calibration				
	Measured Caliper (in)	Actual Caliper (in)		
	6.07	5.98		
Micro Normal and Micro Inverse Calibration MML-A 16			Base Calibration on 26-APR-2012 12:26 Field Check on 02-MAY-2012 00:26	
Base Calibration				
	Measured	Calibrated (ohm-m)		
Channel	Resistor 1 Resistor 2	Resistor 1 Resistor 2		
Micro Normal	12.2 60.2	5.0 25.0		
Micro Inverse	15.6 78.3	5.0 25.0		
Channel	Base Check (ohm-m)	Field Check (ohm-m)		
Micro Normal	62.9	62.9		
Micro Inverse	48.2	48.2		
Micro Normal and Micro Inverse Constants MML-A 16			Last Edited on 02-MAY-2012 05:14	
Pad Type	8-12 in Soft Rubber Inflatable 006-9011-159			
Micro Normal K Factor	1.0000			
Micro Inverse K Factor	1.0000			
Standoff Offset	N/A	inches		
Neutron Calibration MDN-A.B 66			Base Calibration on 26-APR-2012 15:28 Field Check on 02-MAY-2012 00:37	
Base Calibration				

Base Calibration		Measured		Calibrated (cps)	
		Near	Far	Near	Far
		3170	99	3714	110
Ratio		32.037		33.764	
Field Calibrator at Base				Calibrated (cps)	
				1619	2337
Ratio				0.693	
Field Check				Calibrated (cps)	
				1627	2344
Ratio				0.694	

Neutron Constants MDN-A.B 66			Last Edited on 02-MAY-2012 05:14		
Neutron Source Id	P58125B				
Neutron Jig Number	5824NE				
Epithermal Neutron	No				
Caliper Source for Processing	Density Caliper				
Stand-off	0.00	inches			
Mud Density	1.00	gm/cc			
Limestone Sigma	7.10	cu			
Sandstone Sigma	4.26	cu			
Dolomite Sigma	4.70	cu			
Formation Pressure Source	None				
Formation Pressure	N/A	kpsi			
Temperature Source	Constant Value				
Temperature	68.00	degrees F			
Mud Salinity	0.00	kppm			
Formation Fluid Salinity Source	Constant Value				
Formation Fluid Salinity	0.00	kppm			
Barite Mud Correction	Not Applied				

FE Calibration MFE-C.A 353		Base Calibration on 26-APR-2012 11:56 Field Check on 02-MAY-2012 00:16			
Base Calibration		Measured		Calibrated (ohm-m)	
Reference 1		0.0		0.0	
Reference 2		964.1		126.8	
Base Check				281.1	
Field Check				281.0	

FE Constants MFE-C.A 353			Last Edited on 02-MAY-2012 05:13		
Running Mode		No Sleeve			
MFE K Factor		0.1268			
Caliper Source for FE correction		Density Caliper			
Caliper Value for FE correction		N/A		inches	
Rm Source for FE correction		Temperature Corr			
Temp. for Rm Corr.		MCG External Temperature			
Stand-off		0.5		inches	

Induction Calibration MAI-A.A 167		Base Calibration on 11-MAR-2011 09:58 Field Check on 02-MAY-2012 00:14			
Base Calibration					
Test Loop Calibration		Measured		Calibrated (mmho/m)	
Channel	Low	High	Low	High	
1	17.3	474.2	9.3	966.2	
2	6.3	388.4	7.6	821.4	
3	3.3	259.4	5.2	566.0	
4	1.9	133.0	2.6	279.2	
Array Temperature	76.8		Deg F		
Channel		Base Check (mmho/m)		Field Check (mmho/m)	
		Low	High	Low	High
1		0.0	0.0	13.1	3840.2
2		0.0	0.0	29.6	3477.6
3		0.0	0.0	29.1	3053.3
4		0.0	0.0	19.7	2081.8

Deep	0.0	0.0	18.5	2048.8
Medium	0.0	0.0	42.2	3991.7
Shallow	0.0	0.0	43.0	5055.6
Array Temperature		0.0	74.0	Deg F

Induction Constants MAI-A.A 167

Last Edited on 02-MAY-2012 05:12

Induction Model		RtAP-WBM	
Caliper for Borehole Corr.		Density Caliper	
Hole Size for Borehole Correction		N/A	inches
Tool Centred		No	
Stand-off Type		Fins	
Stand-off		0.50	inches
Number of Fins on Stand-off		8.0000	
Stand-off Fin Angle		45.00	degrees
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
Squasher Offset		N/A	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
Source for Rt		0.00	
Source for Rxo		0.00	

High Resolution Temperature Calibration MAI-A.A 167

Field Calibration on 12-MAR-2012 11:57

	Measured	Calibrated(Deg F)
Lower	1.00	33.80
Upper	11.00	51.80

High Resolution Temperature Constants MAI-A.A 167

Last Edited on

Pre-filter Length	11
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Caliper Calibration MPD-B 31

Base Calibration on 25-APR-2012 10:33
Field Calibration on 02-MAY-2012 00:19

Base Calibration		
Reading No	Measured	Calibrator Size (in)
1	17391	3.99
2	25871	5.98
3	34557	7.97
4	42895	9.86
5	52288	11.92
6	N/A	N/A
Field Calibration		
	Measured Caliper (in)	Actual Caliper (in)
	5.96	5.98

Photo Density Calibration MPD-B 31

Base Calibration on 25-APR-2012 10:55

Density Calibration

Base Calibration

	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	57255	28372	59556	30836
Reference 2	22697	2144	24941	2541

Field Check at Base

697.4 855.9

Field Check

695.6 857.1

PE Calibration

Base Calibration

	WS	Measured WH	Ratio	Calibrated Ratio
Background	128	611		
Reference 1	22865	57104	0.402	0.371
Reference 2	6649	22599	0.297	0.272

Field Check at Base

128.3 610.7

Field Check

127.9 609.4

Density Constants MPD-B 31

Last Edited on 02-MAY-2012 05:13

Density Source Id	P50557B
Nylon Calibrator Number	DNCE695
Aluminium Calibrator Number	DACD698
Density Shoe Profile	8 inch
Caliper Source for Processing	Density Caliper
PE Correction to Density	Not Applied
Mud Density	1.09 gm/cc
Mud Density Z/A Multiplier	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	Hybrid
Matrix Density (gm/cc)	Depth (ft)
2.71	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	0.00

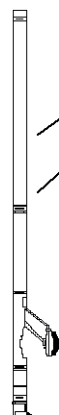
DOWNHOLE EQUIPMENT

C:\Users\lamundt\AppData\Local\Temp\Weatherford PreView\0\Sandridge Carissa SWD # 1-15 Real_003.dta

Compact Comms Gamma
MCG-C 208 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in

Compact Micro-log
MML-A 16 LG: 7.97 ft WT: 81.6 lb OD: 2.24 in

Compact Neutron



45.04 ft GRGC - Gamma Ray
42.13 ft CGXT - MCG External Temperature

35.41 ft MINV - Micro-inverse
35.41 ft MNRL - Micro-normal
36.40 ft MLTC - MML Caliper

30.61 ft NPRL - Limestone Neutron Por.

MDN-A.B 66 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

Compact Density/Caliper

MPD-B 31 LG: 9.59 ft WT: 90.4 lb OD: 2.45 in

SKJ-D.A Compact Knuckle Joint

SKJ-D.A 36 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

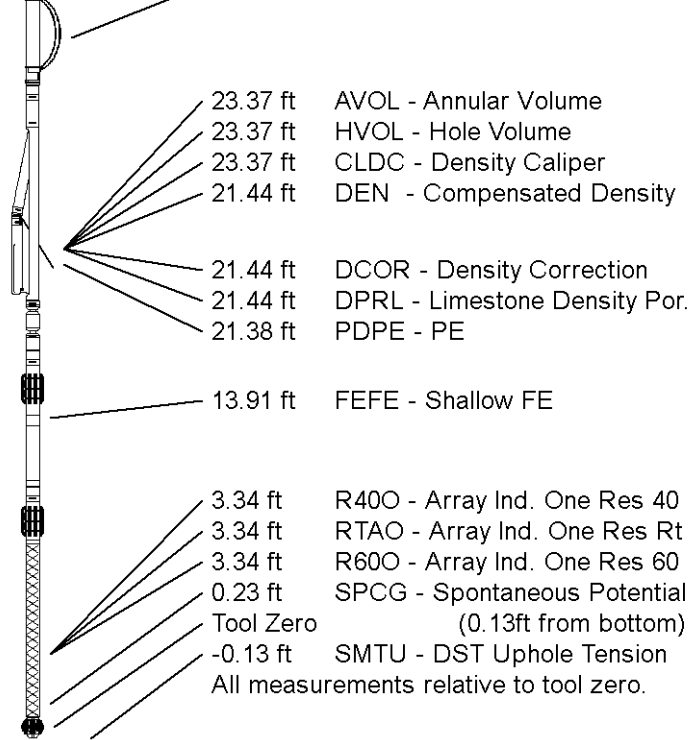
Compact Focussed Electric

MFE-C.A 353 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

Compact Induction

MAI-A.A 167 LG: 10.81 ft WT: 48.5 lb OD: 2.24 in

Total Length: 50.32 ft Weight: 407.9 lb



Company	SANDRIDGE EXPLORATION
Well	CARISSA SWD # 1-15
Field	GOEBEL
Province	HODGEMAN
Country	U.S.A. / KANSAS

ElevationKB	2348.50	feet	FirstReading	5036.00	feet
ElevationDrill	2347.00	feet	DepthDriller	5060.00	feet
ElevationGround	2338.00	feet	DepthLogger	5072.00	feet



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MICRORESISTIVITY LOG

