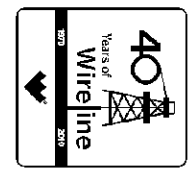




**Weatherford**<sup>®</sup>

**COMPACT PHOTO DENSITY  
COMPENSATED NEUTRON  
LOG**

COMPANY **SHORELINE ENERGY PARTNERS, LLC.**  
 WELL **SEIFERT 1-27**  
 FIELD **WILDCAT**  
 PROVINCE/COUNTY **HARPER**  
 COUNTRY/STATE **U.S.A. / KANSAS**  
 LOCATION **115' FNL & 150' FWL**



SEC 27 TWP 34S RGE 5W Other Services MFE/MAI  
 API Number 15-077-21753 SON MML  
 Permit Number  
 Permanent Datum G.L., Elevation 1206 feet  
 Log Measured From K.B. @ 10 FEET above Permanent Datum  
 Drilling Measured From K.B.

Elevations: feet  
 KB 1216.00  
 DF 1214.00  
 GL 1206.00

Date	28-SEP-2011
Run Number	ONE
Depth Driller	5355.00 feet
Depth Logger	5352.00 feet
First Reading	5321.00 feet
Last Reading	3800.00 feet
Casing Driller	350.00 feet
Casing Logger	348.00 feet
Bit Size	7.875 inches
Hole Fluid Type	GEL
Density / Viscosity	9.00 lb/USg 67.00 CP
PH / Fluid Loss	9.00 13.80 ml/30Min
Sample Source	MUD PIT
Rm @ Measured Temp	1.50 @ 82.0 ohm-m
Rmf @ Measured Temp	1.20 @ 82.0 ohm-m
Rmc @ Measured Temp	1.80 @ 82.0 ohm-m
Source Rmf / Rmc	CALC CALC
Rm @ BHT	0.89 @ 137.0 ohm-m
Time Since Circulation	6 HOURS
Max Recorded Temp	137.00 deg F
Equipment Name	COMPACT
Equipment / Base	13226 OKC
Recorded By	B. ALLEN
Witnessed By	C. PARKER

BOREHOLE RECORD			Last Edited: 28-SEP-2011 18:33	
Bit Size inches	Depth From feet	Depth To feet		
7.875	350.00	5355.00		
CASING RECORD				
Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	8.625	0.00	350.00	29.00

**REMARKS**

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

HARDWARE: MAI: TWO 0.5 INCH STANDOFFS USED.  
 MDN: DUAL NEUTRON BOW SPRINGS USED.  
 MPD: 8 INCH PROFILE PLATE USED.

2.71 G/CC DENSITY MATRIX USED TO CALCULATE POROSITY  
 ALL INTERVALS LOGGED AND SCALED PER CUSTOMER'S REQUEST.

TOTAL HOLE VOLUME FROM TD TO 3300' = 950 CU.FT.  
 ANNULAR HOLE VOLUME WITH 5.5 INCH PRODUCTION CASING FROM TD TO 3300' = 610 CU.FT.

SERVICE ORDER # 3534146  
 RIG: LANDMARK DRILLING #6

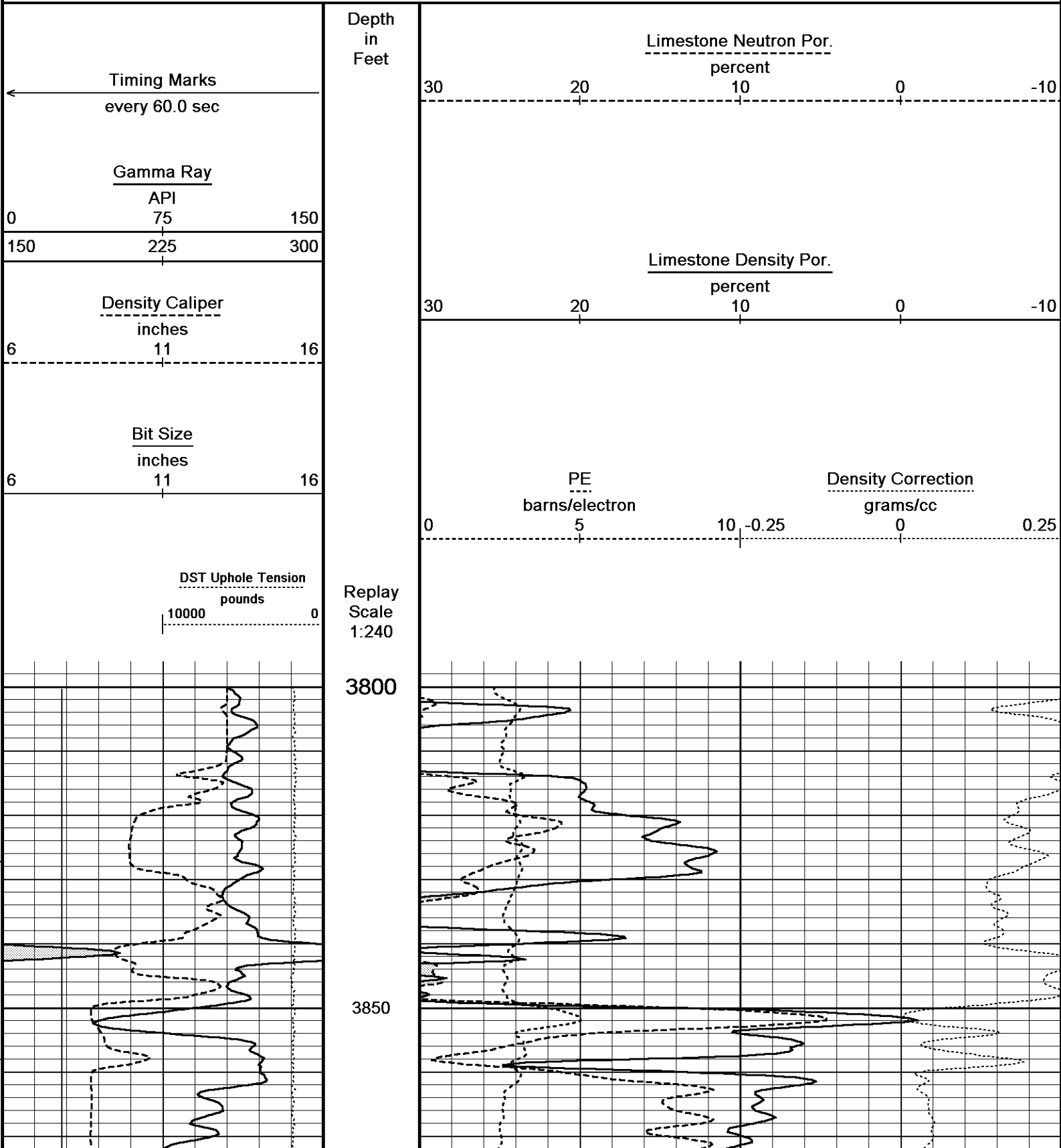
ENGINEER: B. ALLEN

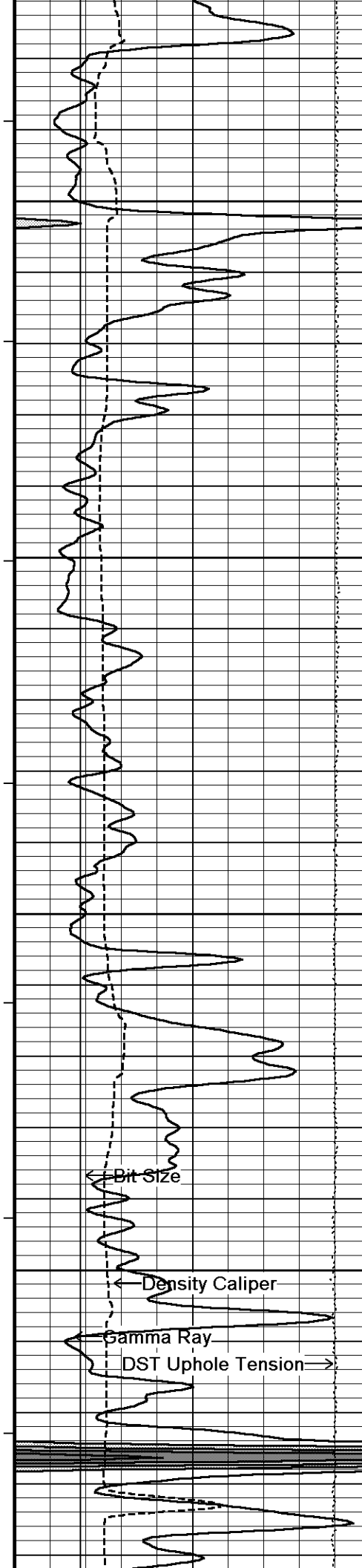
OPERATOR(S): R. POGUE

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions in our price schedule.

**5 INCH POROSITY LOG**

Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 29-SEP-2011 08:14  
 Filename: C:\Users\garcianr\AppData\Local\Temp\Weatherford PreView\0\SEIFERT 1-27\_003.dta Recorded on 28-SEP-2011 18:24  
 System Versions: Logged with 11.02.2782 Plotted with 12.01.3513



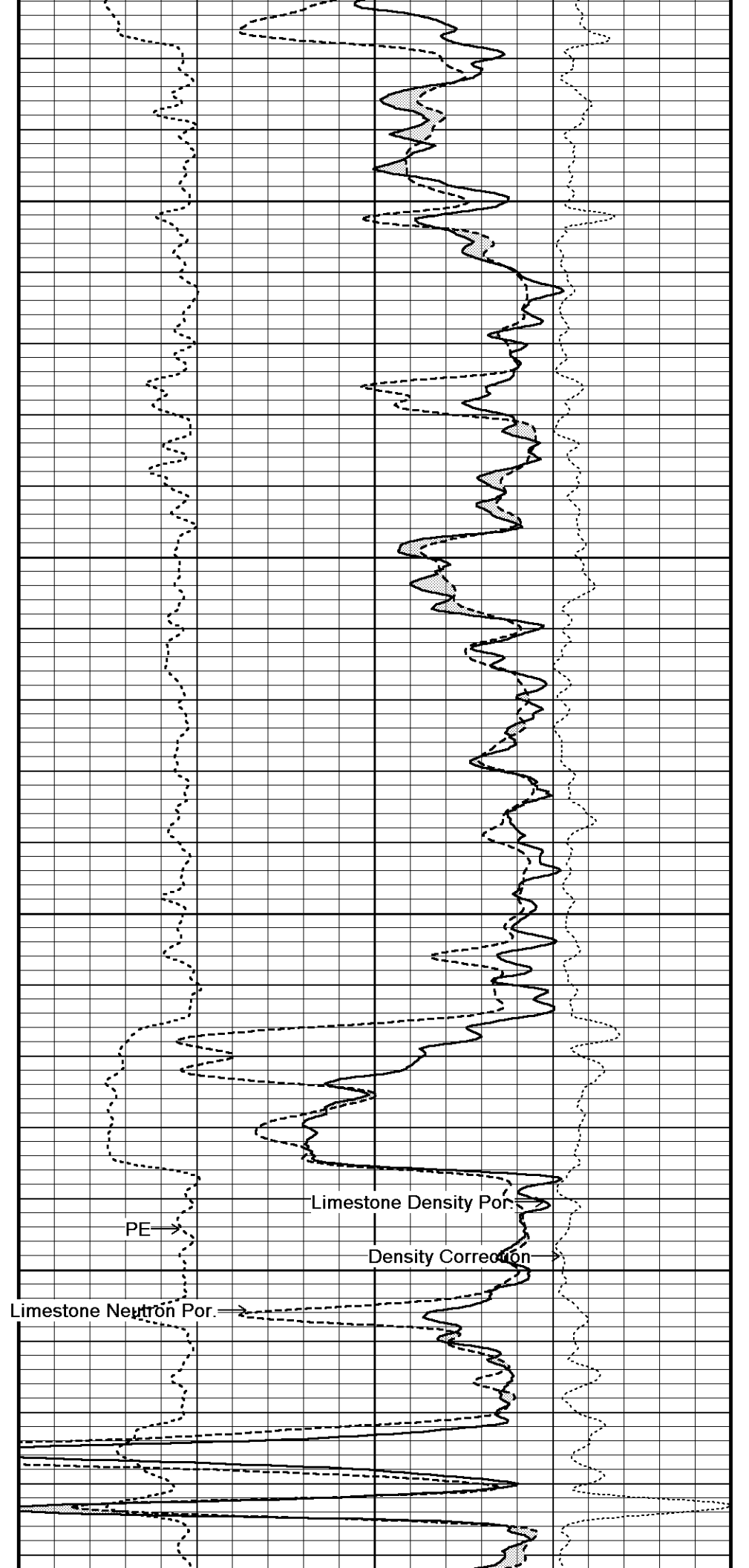


3900

3950

4000

4050

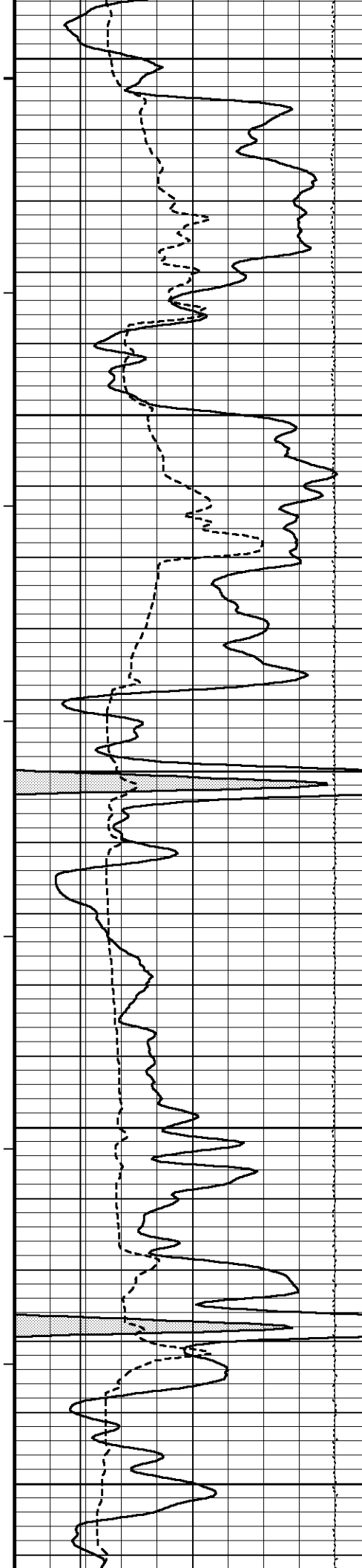


Limestone Density Por.

Density Correction

Limestone Neutron Por.

PE



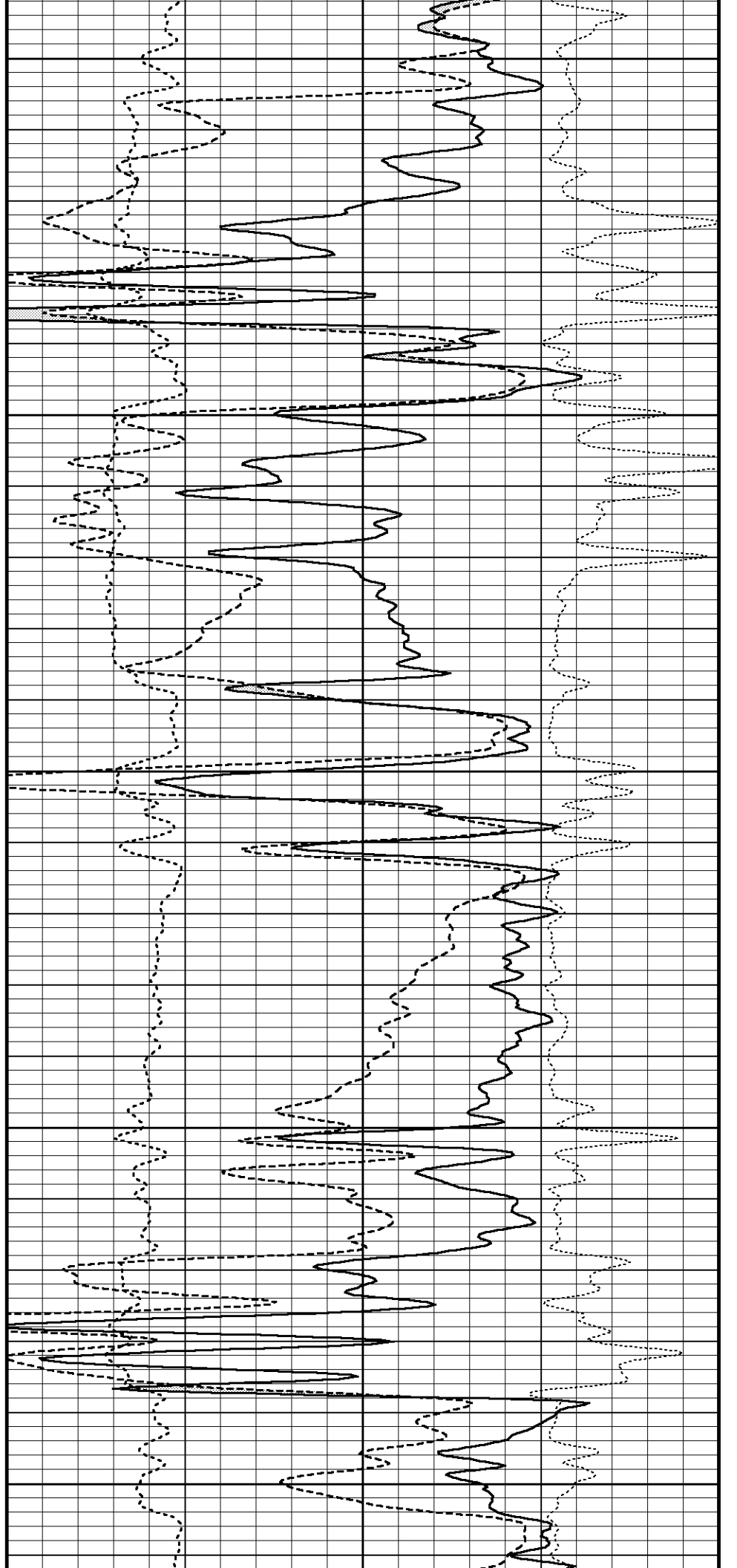
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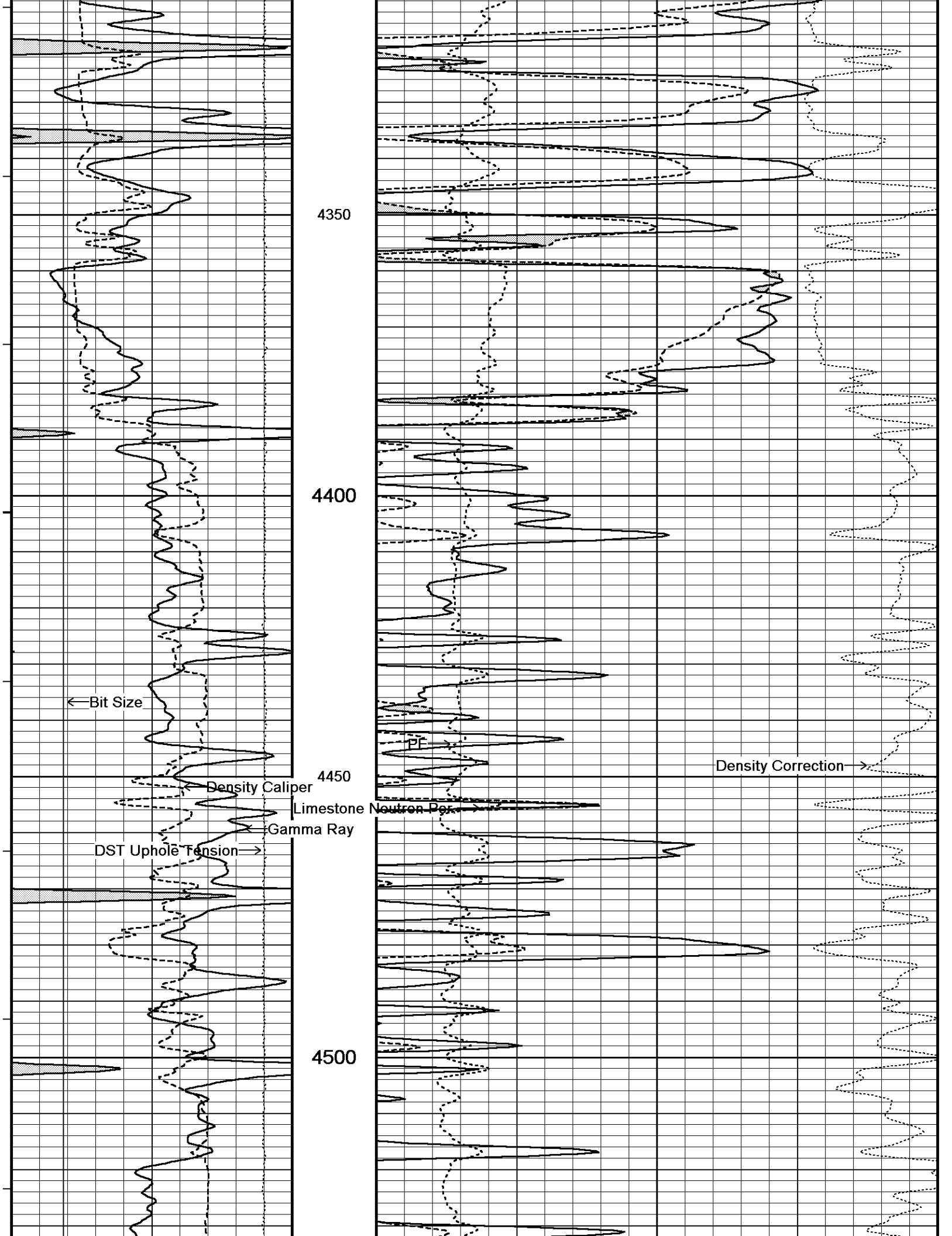
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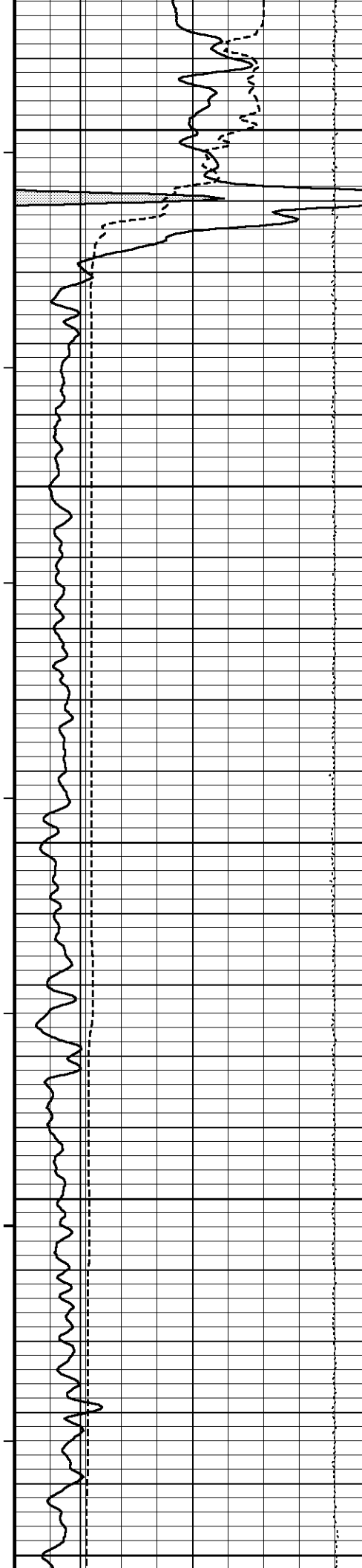
4200

4250

4300







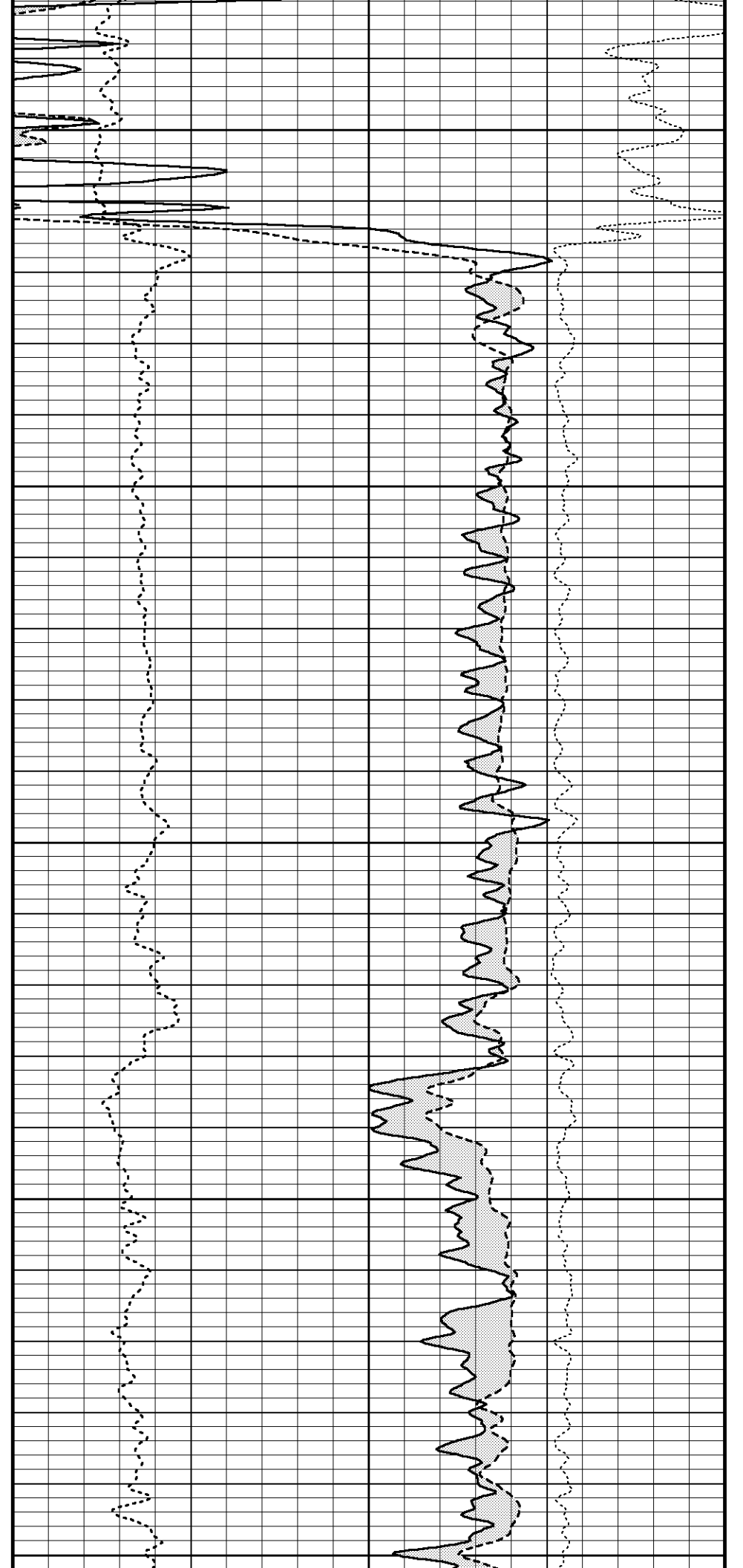
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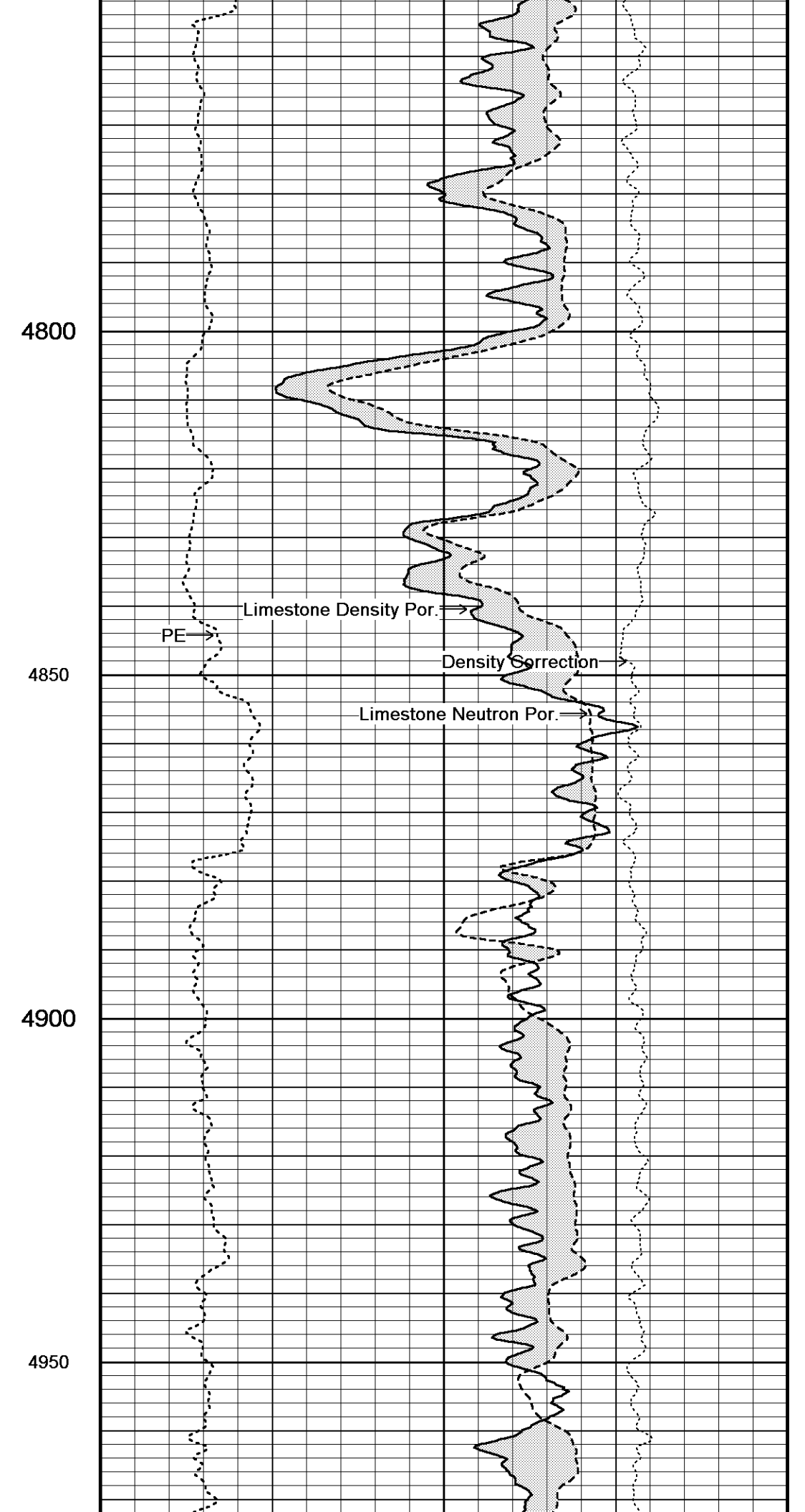
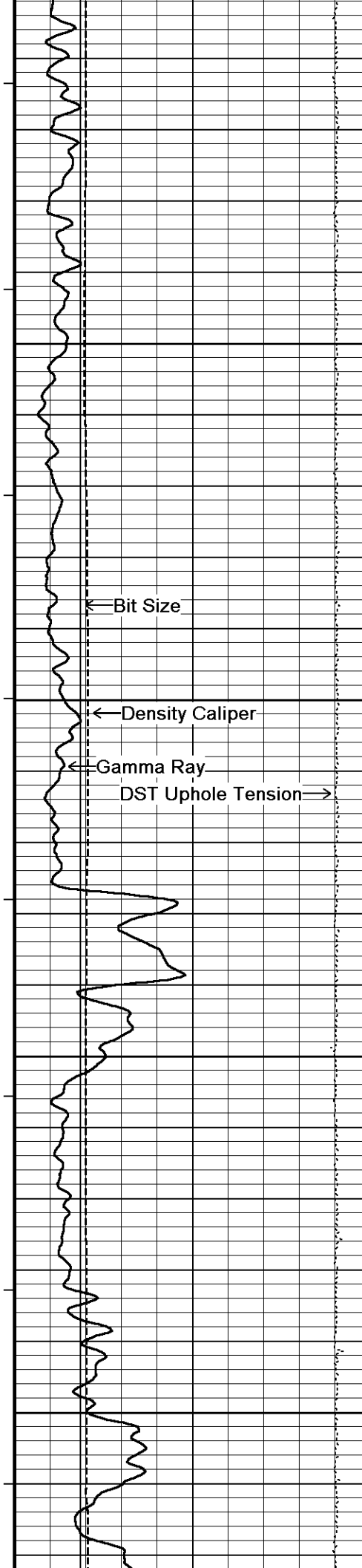
4600

4650

4700

4750





4800

4850

4900

4950

← Bit Size

← Density Caliper

← Gamma Ray

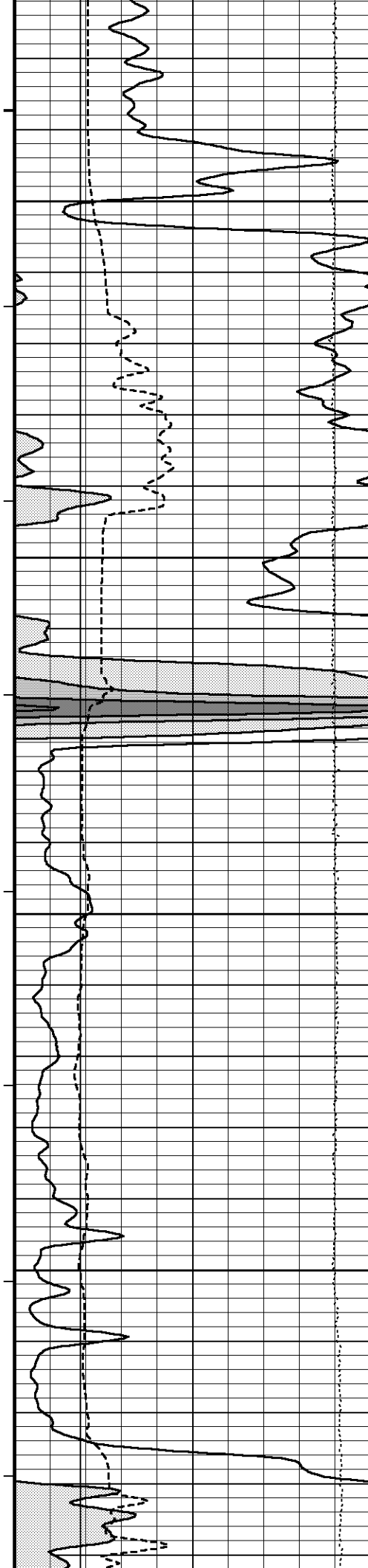
DST Uphole Tension →

PE →

Limestone Density Por. →

Density Correction →

Limestone Neutron Por. →

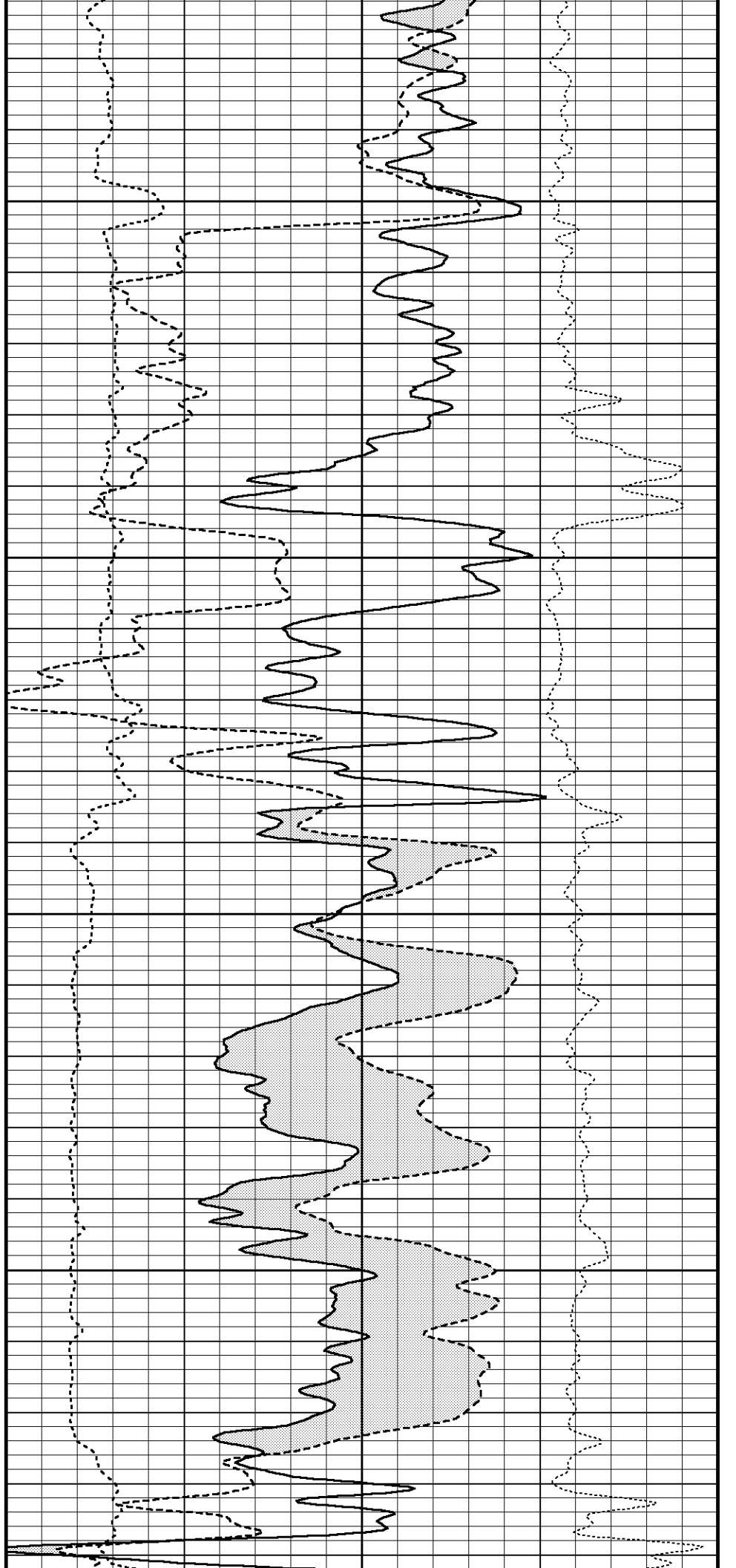


5000

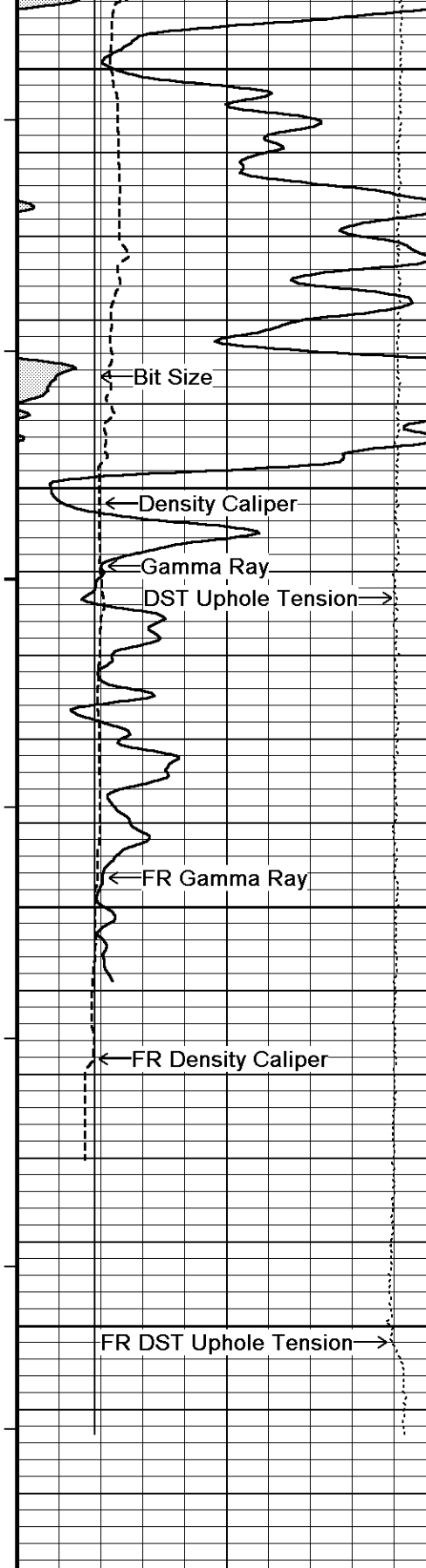
5050

5100

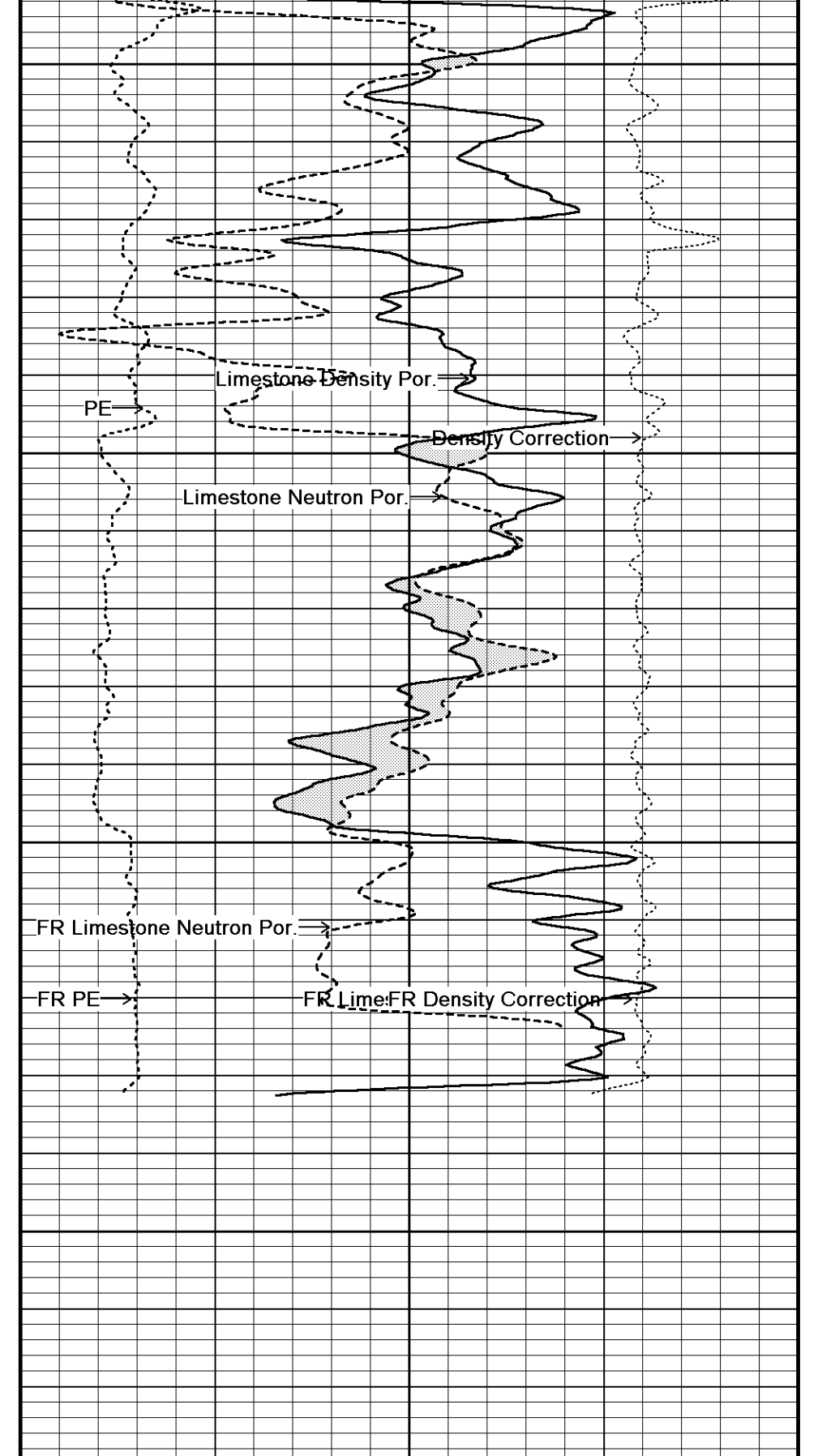
5150





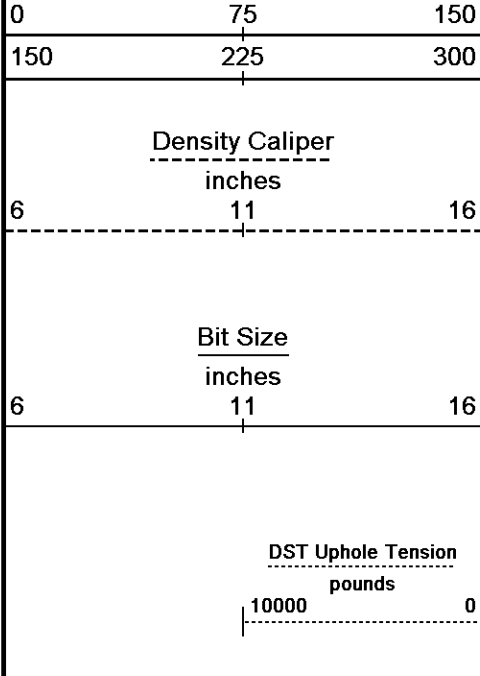


5200  
 5250  
 5300  
 5350  
 5378  
 Depth  
 in  
 Feet

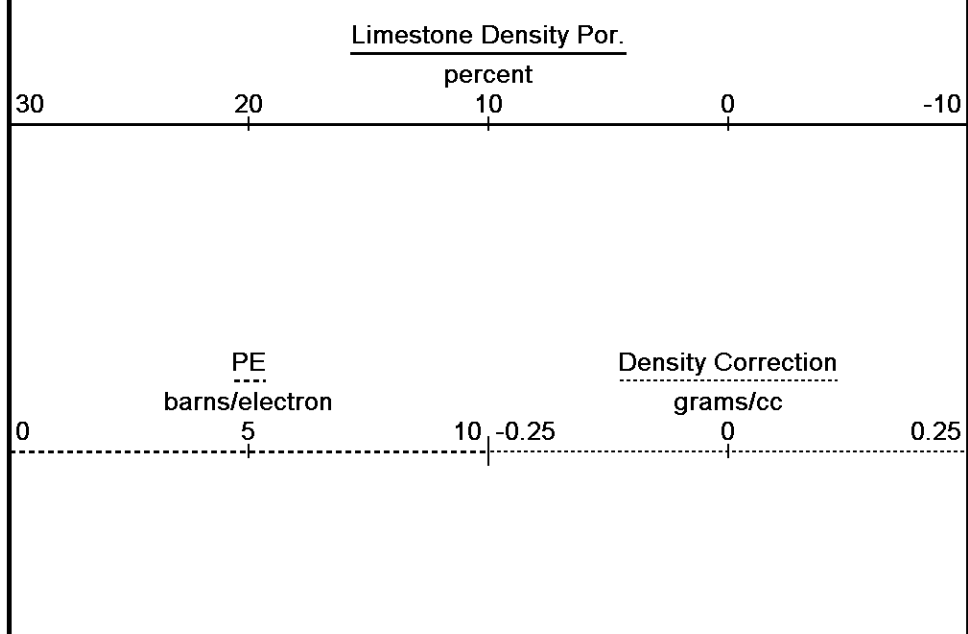


Timing Marks  
 every 60.0 sec  
 Gamma Ray  
 API

Limestone Neutron Por.  
 percent  
 30 20 10 0 -10



Replay  
Scale  
1:240

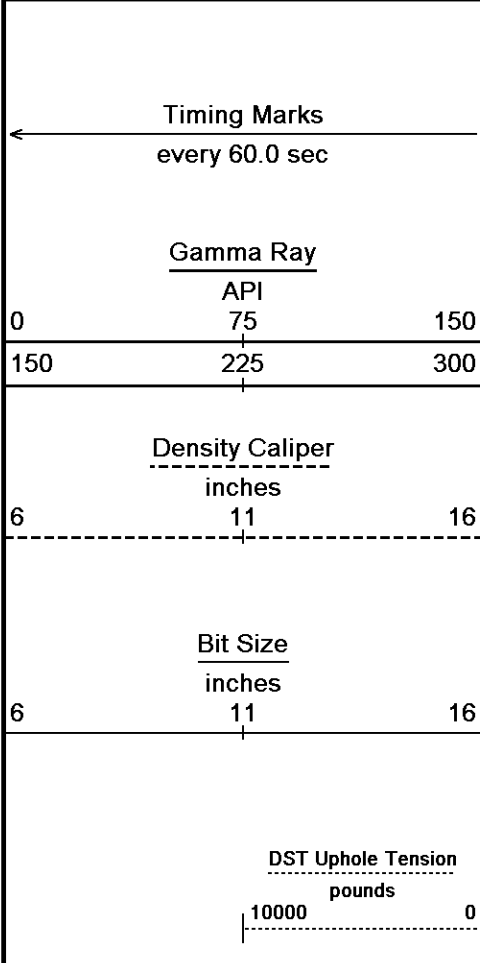


Depth Based Data - Maximum Sampling Increment 10.0cm  
 Plotted on 29-SEP-2011 08:14  
 Filename: C:\Users\garciar\AppData\Local\Temp\Weatherford PreView\0\SEIFERT 1-27\_003.dta  
 Recorded on 28-SEP-2011 18:24  
 System Versions: Logged with 11.02.2782 Plotted with 12.01.3513

5 INCH POROSITY LOG

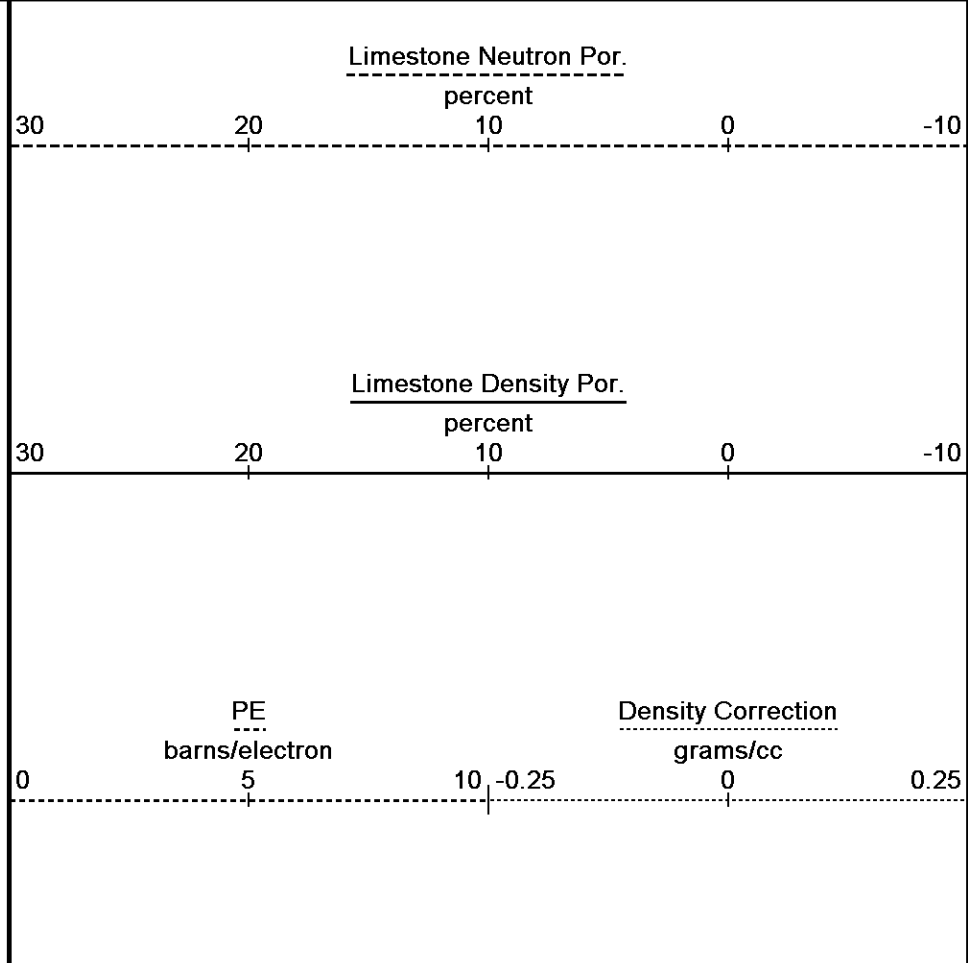
Depth Based Data - Maximum Sampling Increment 10.0cm  
 Plotted on 29-SEP-2011 08:14  
 Filename: C:\Users\garciar\AppData\Local\Temp\Weatherford PreView\0\SEIFERT 1-27\_002.dta  
 Recorded on 28-SEP-2011 18:07  
 System Versions: Logged with 11.02.2782 Plotted with 12.01.3513

5 INCH REPEAT

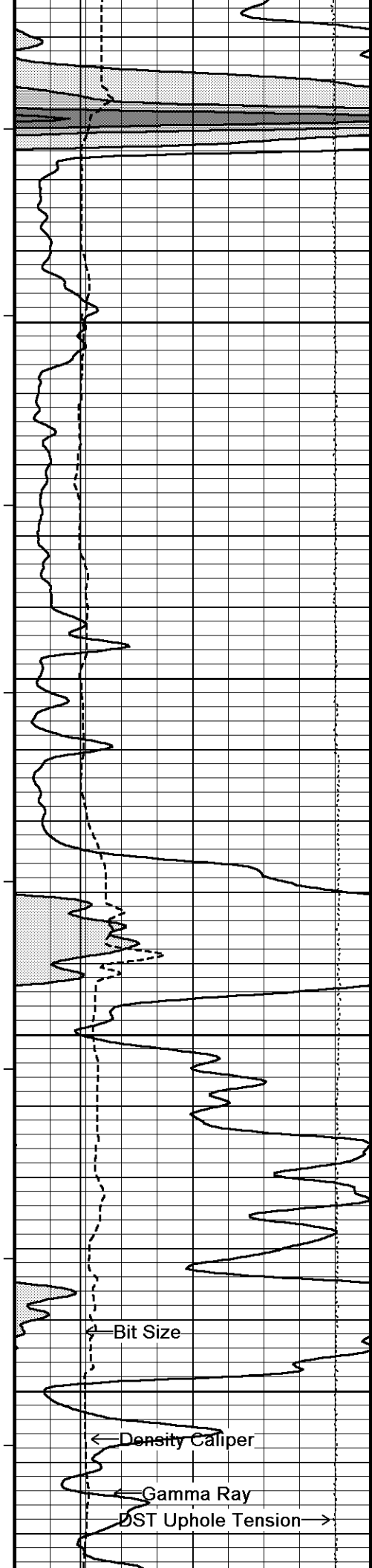


Depth  
in  
Feet

Replay  
Scale  
1:240



5050

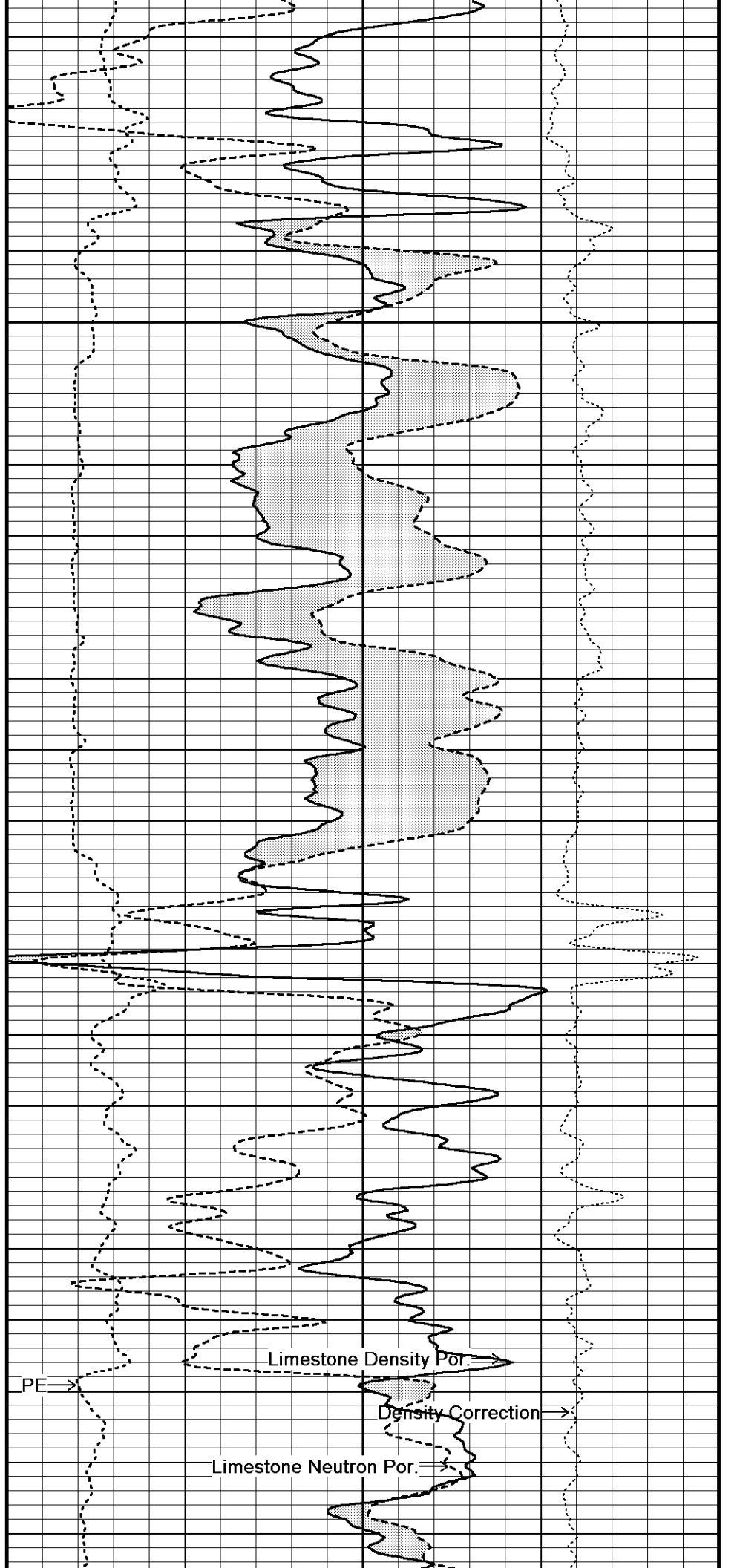


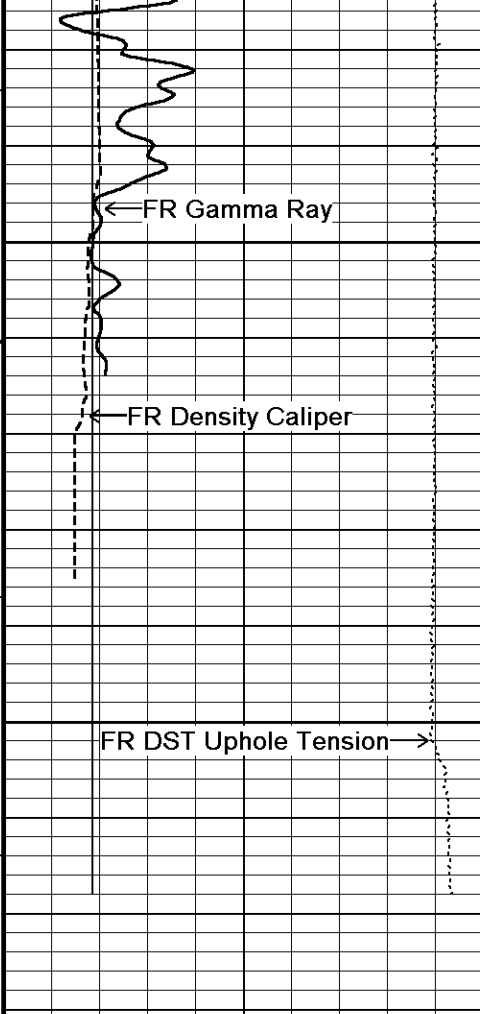
5100

5150

5200

5250



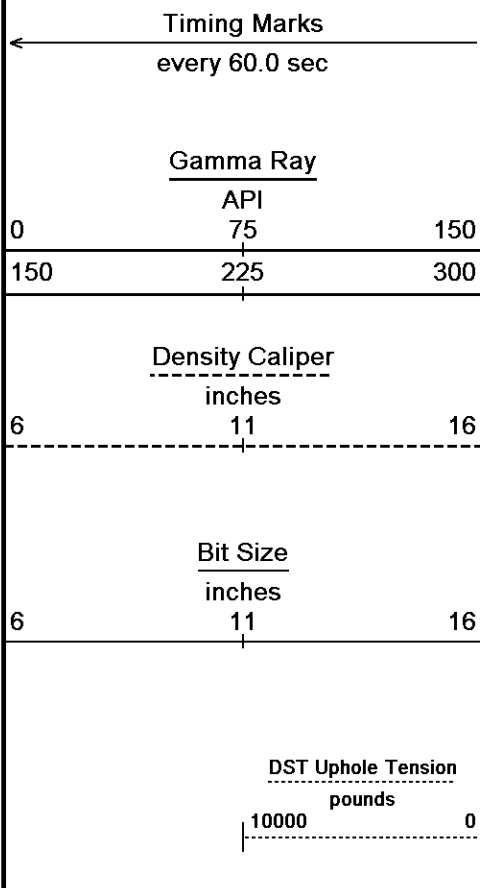


5300

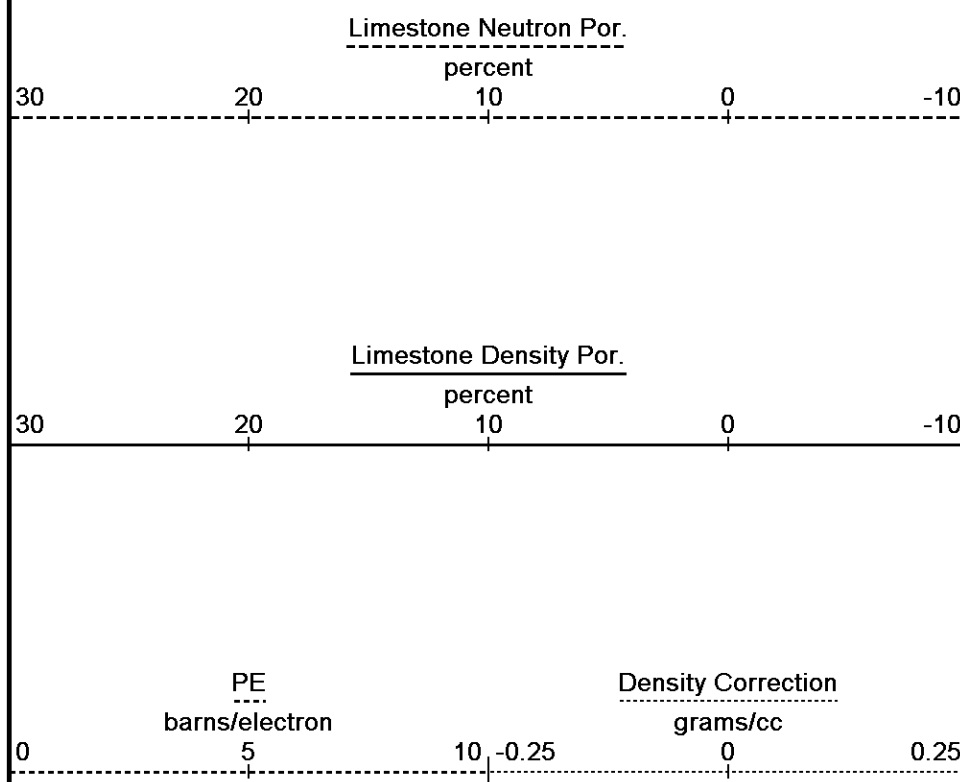
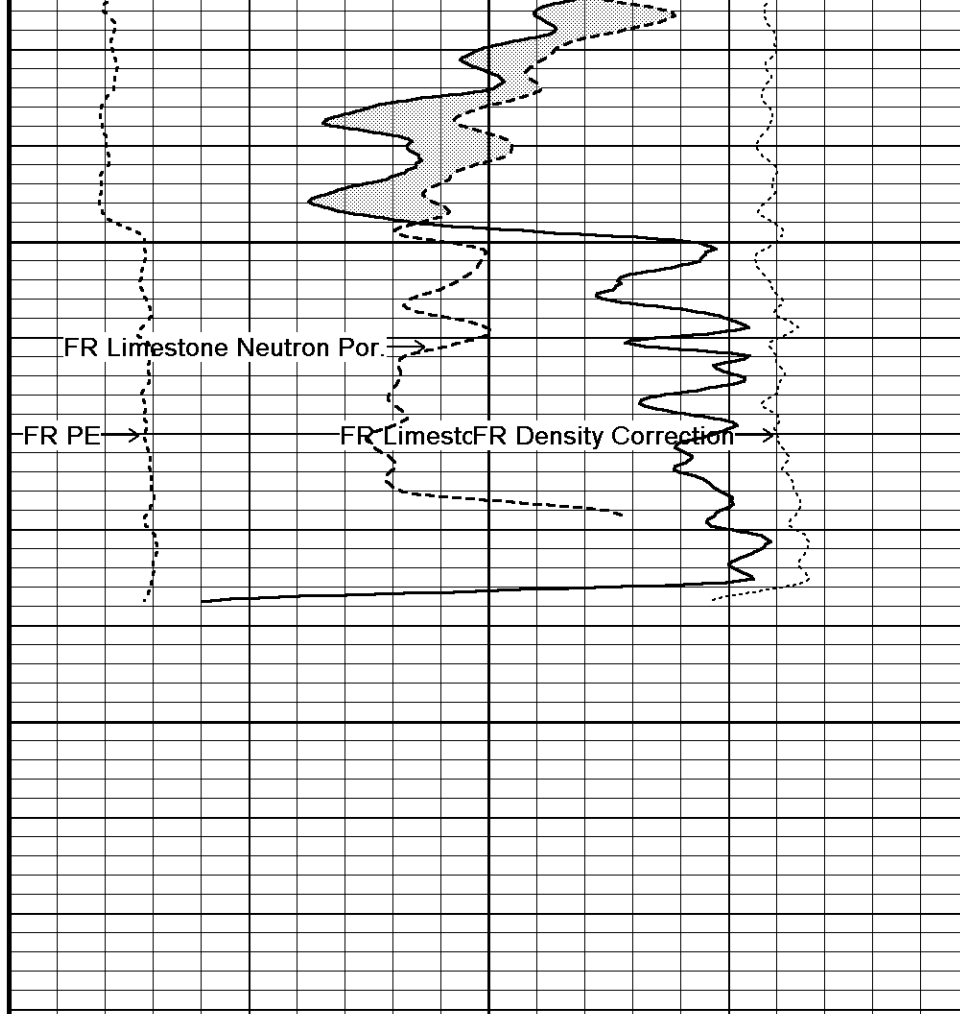
5350

5380

Depth  
in  
Feet



Replay  
Scale  
1:240





5 INCH BULK DENSITY



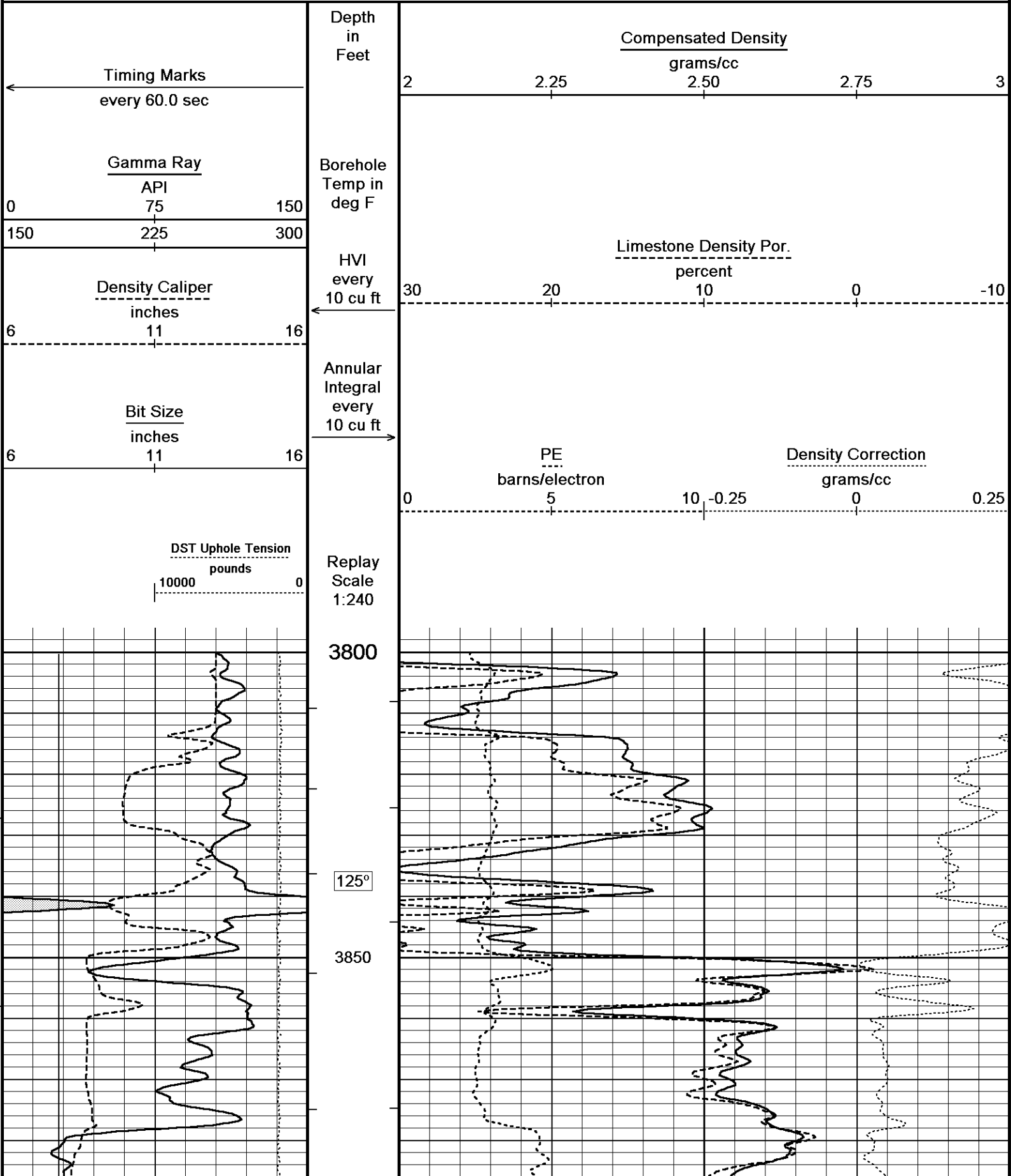
Depth Based Data - Maximum Sampling Increment 10.0cm

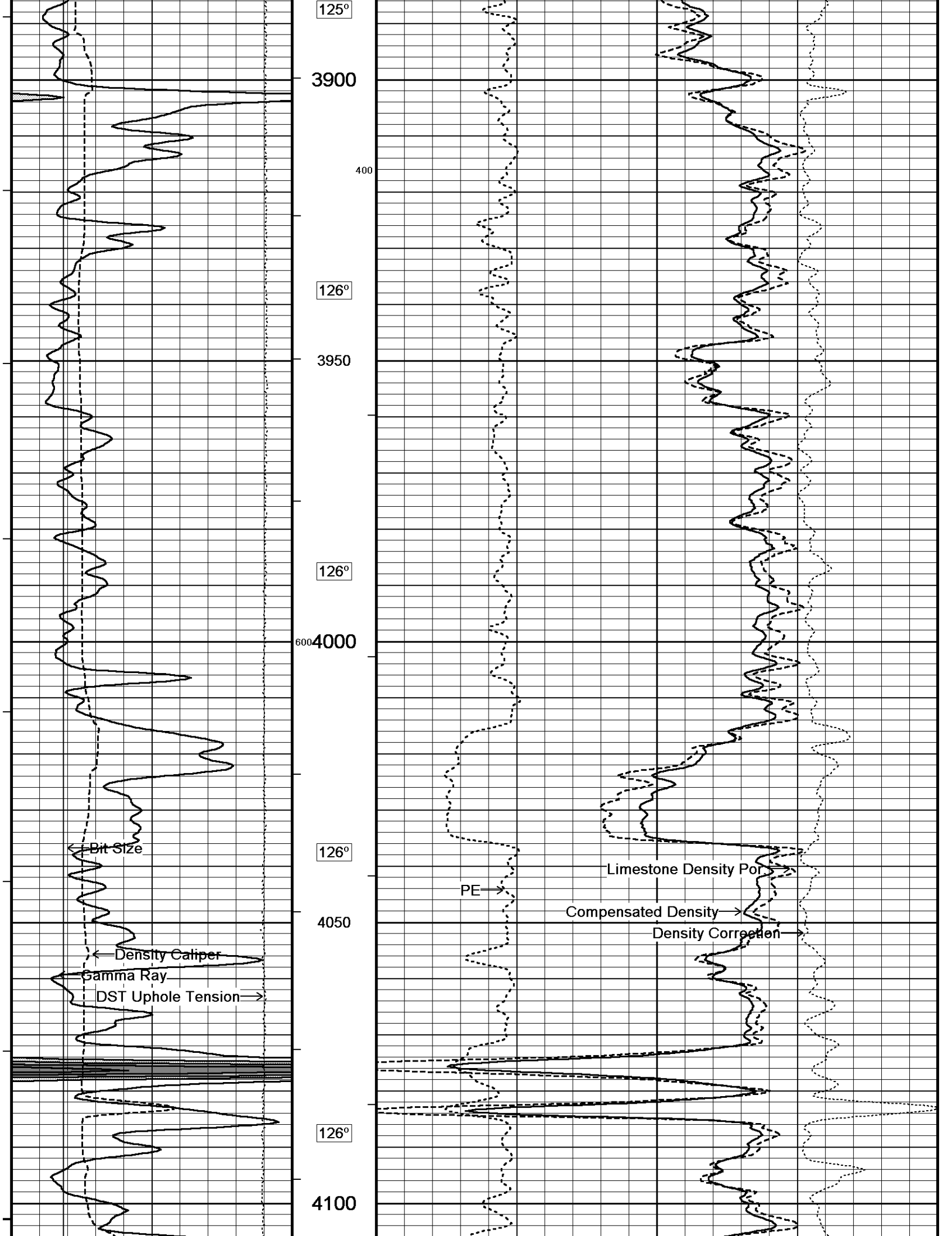
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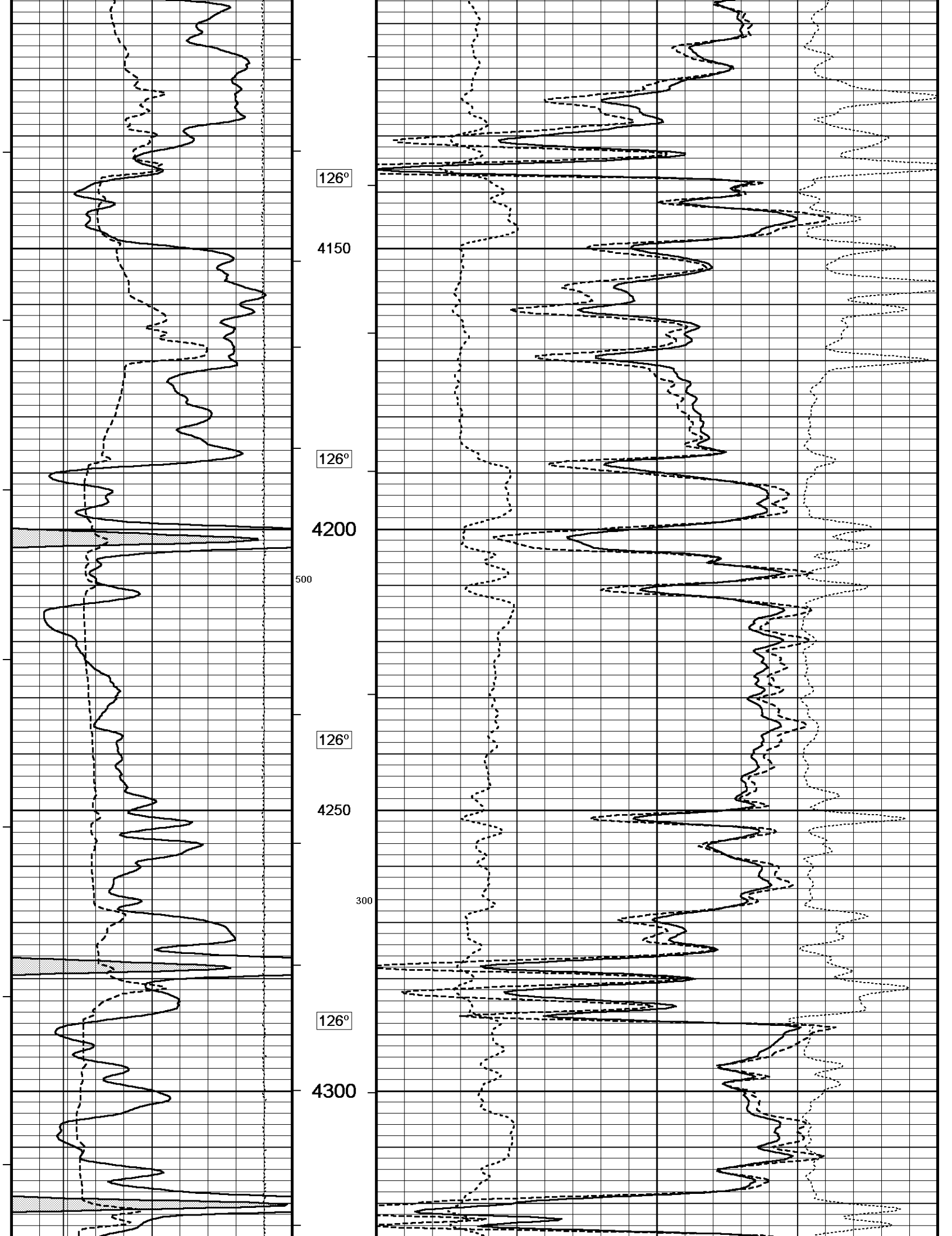
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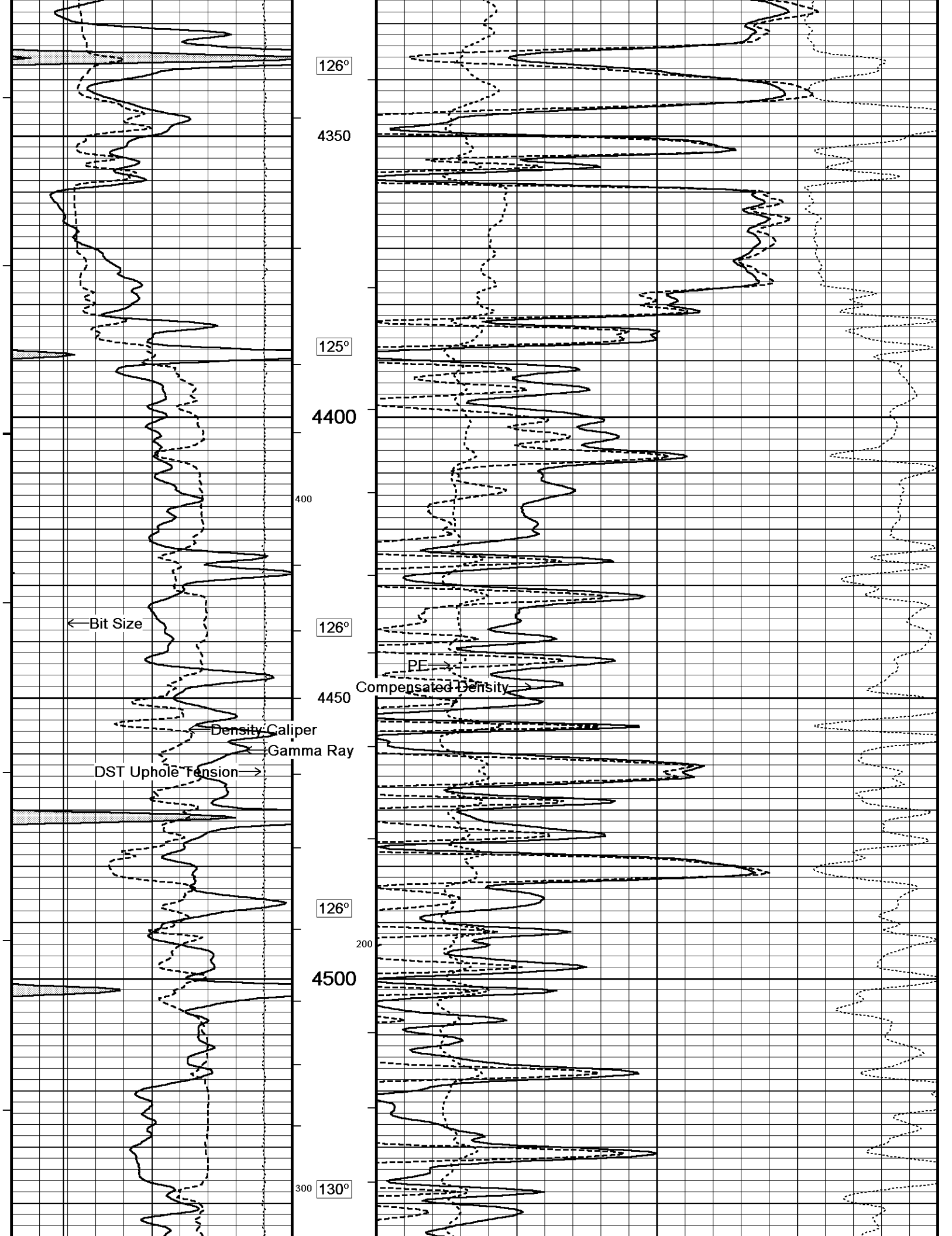
Recorded on 28-SEP-2011 18:24

System Versions: Logged with 11.02.2782 Plotted with 12.01.3513

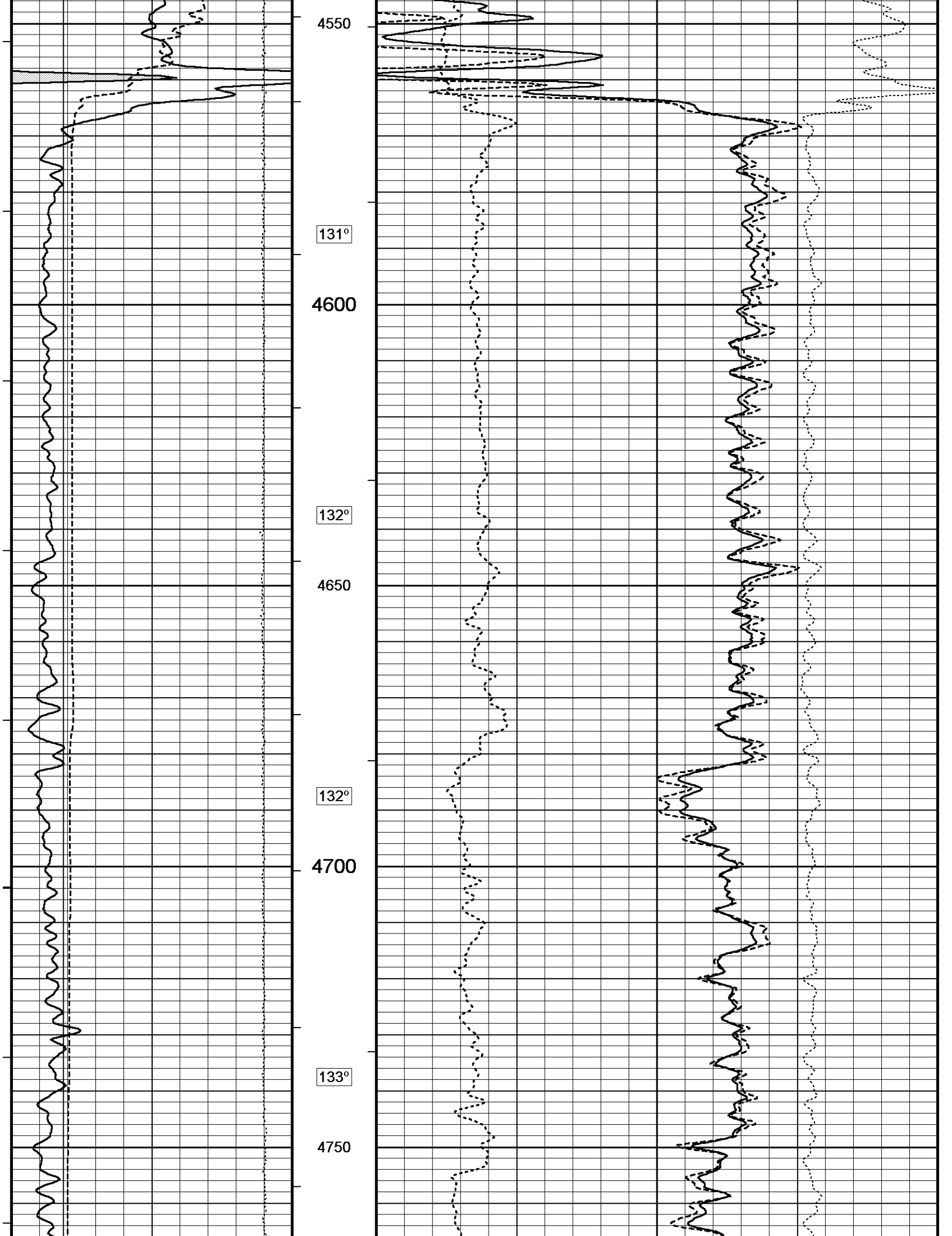


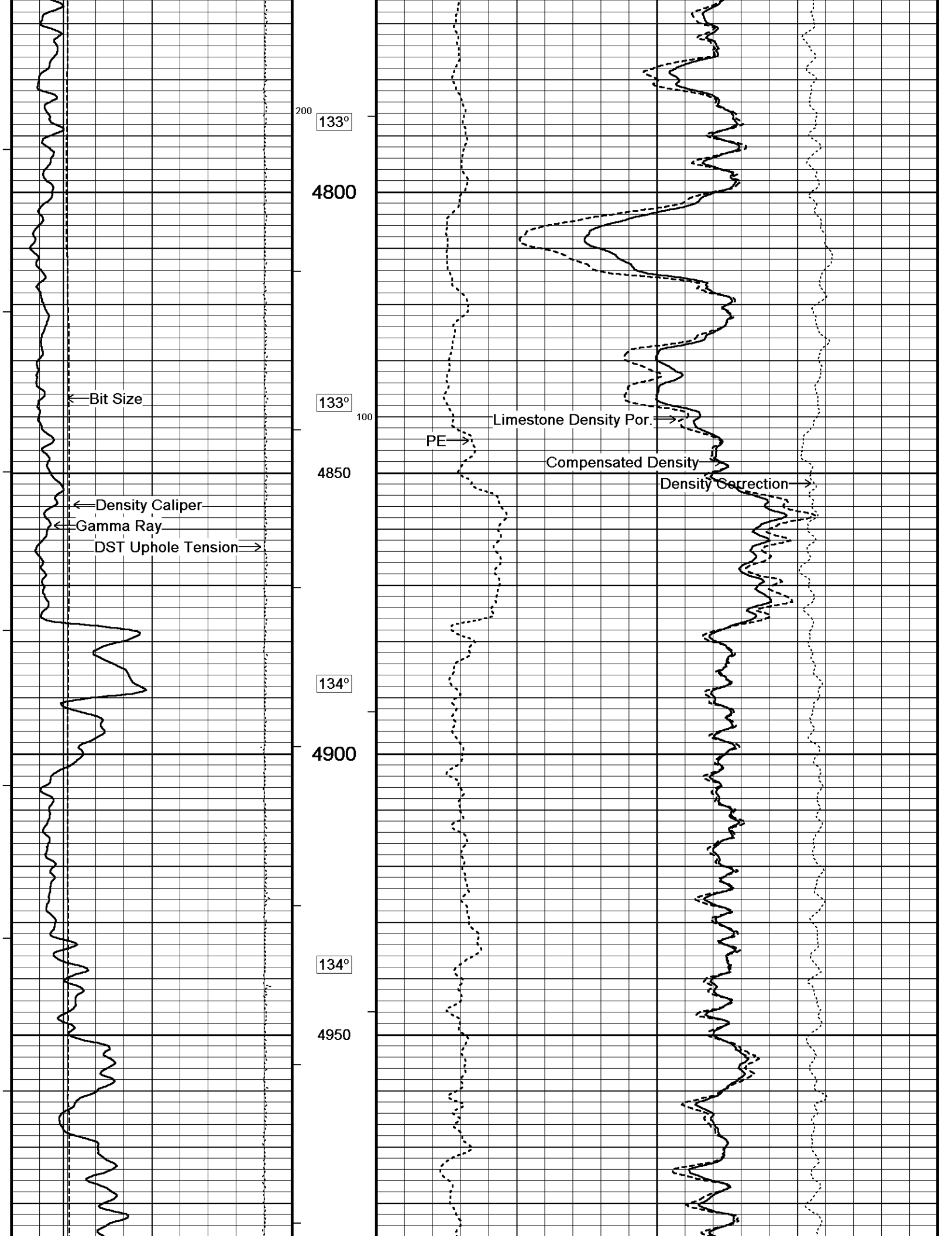


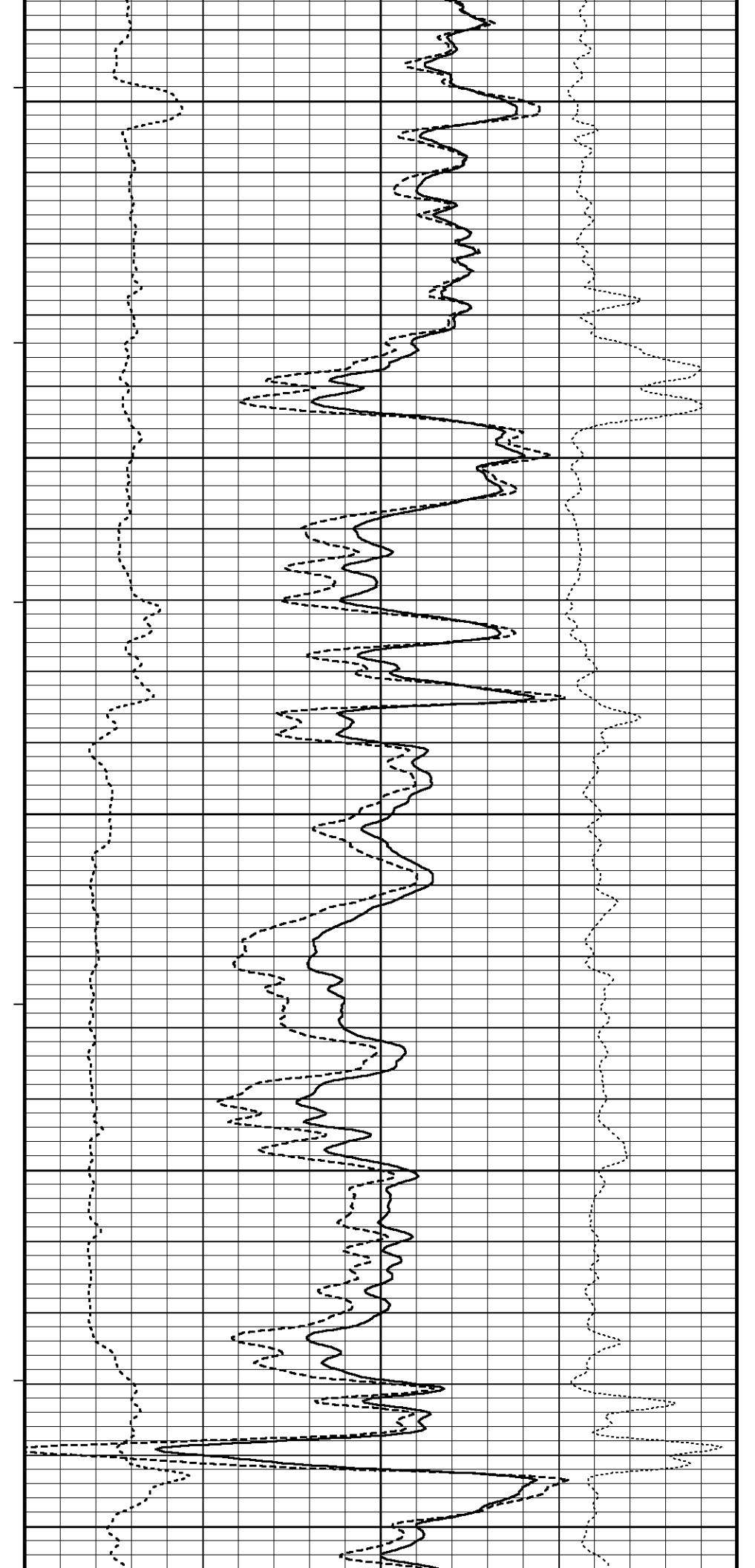
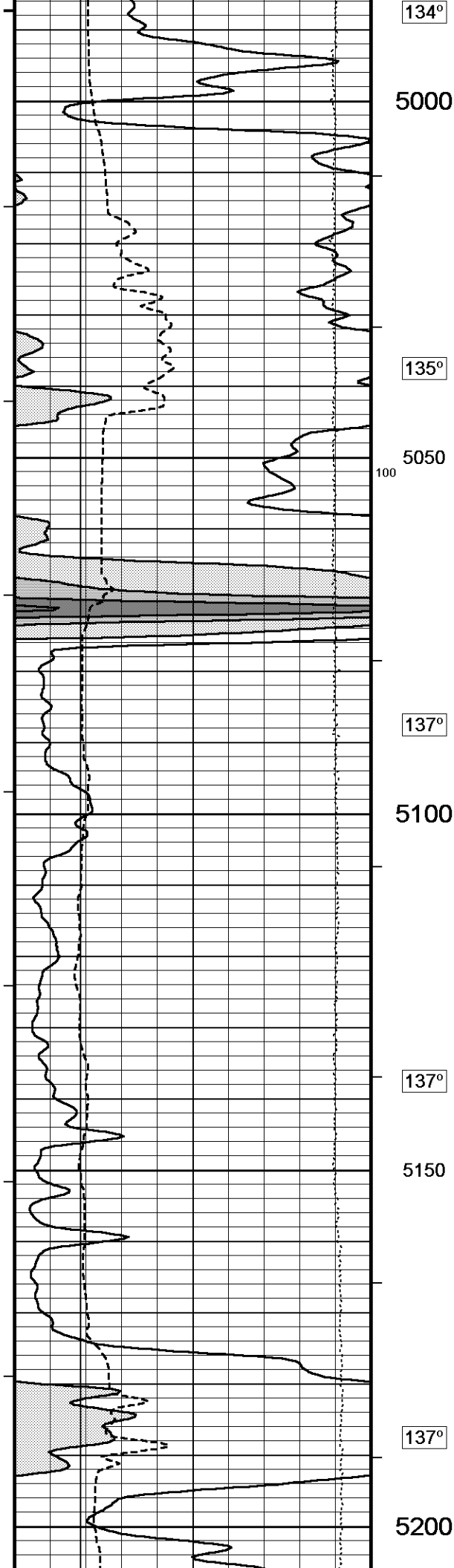


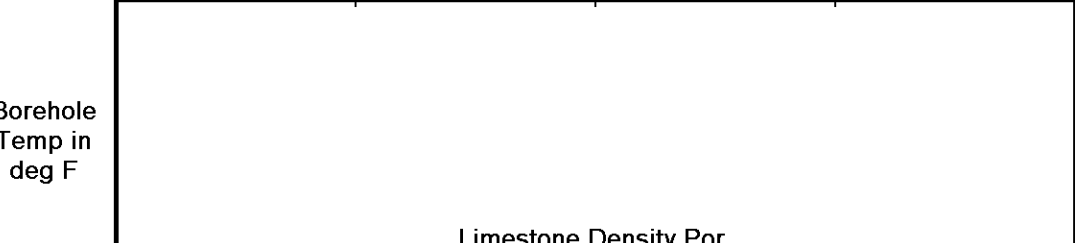
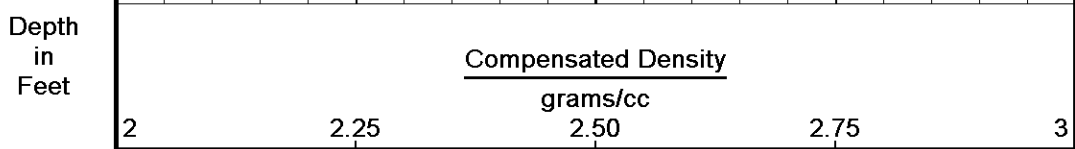
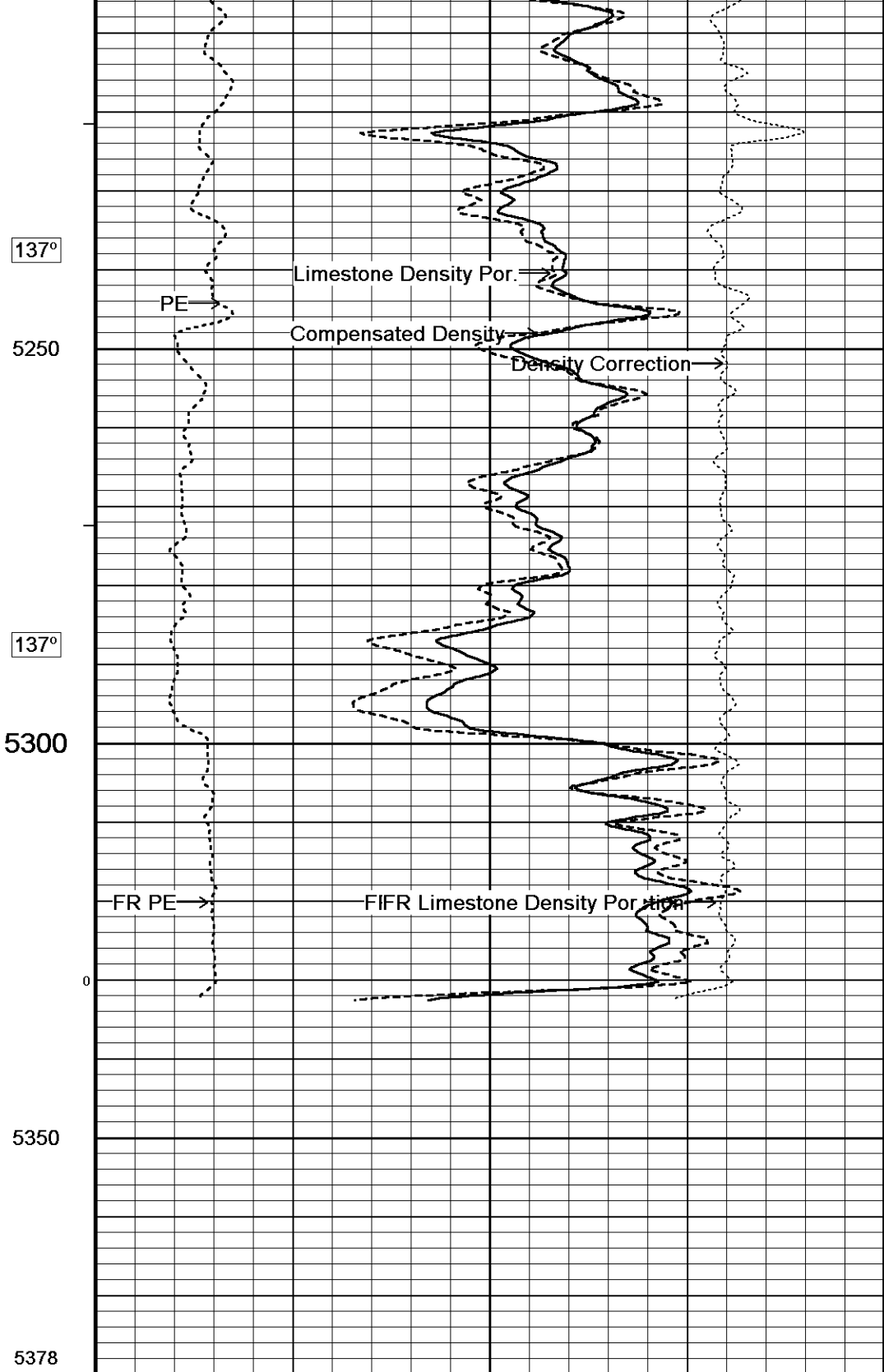
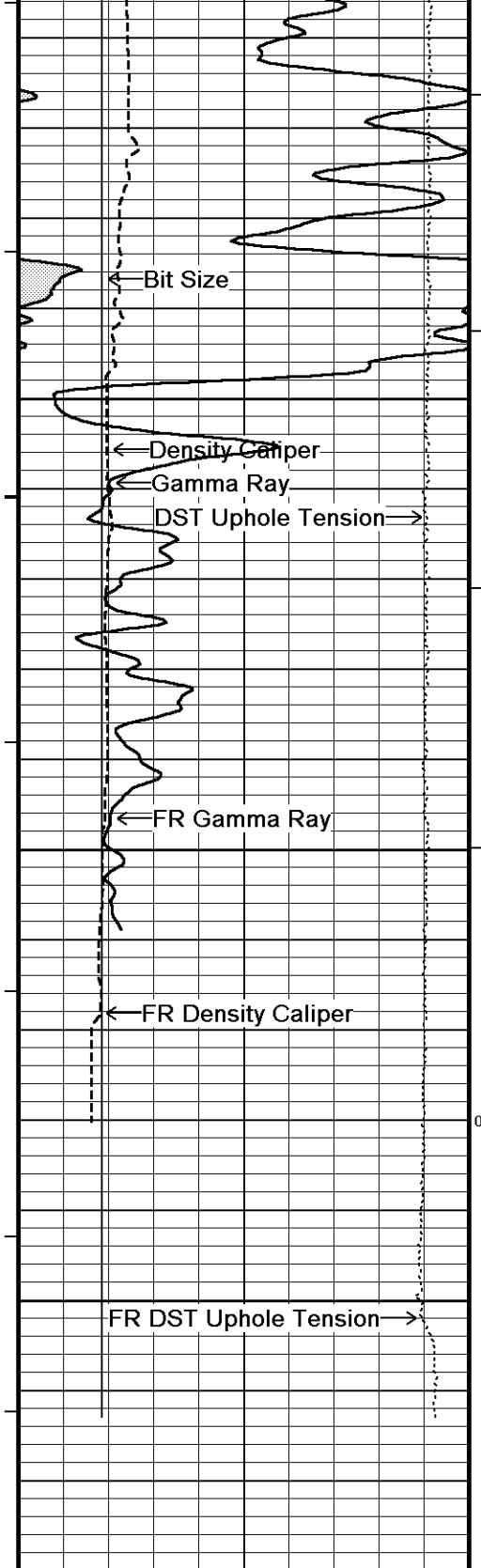










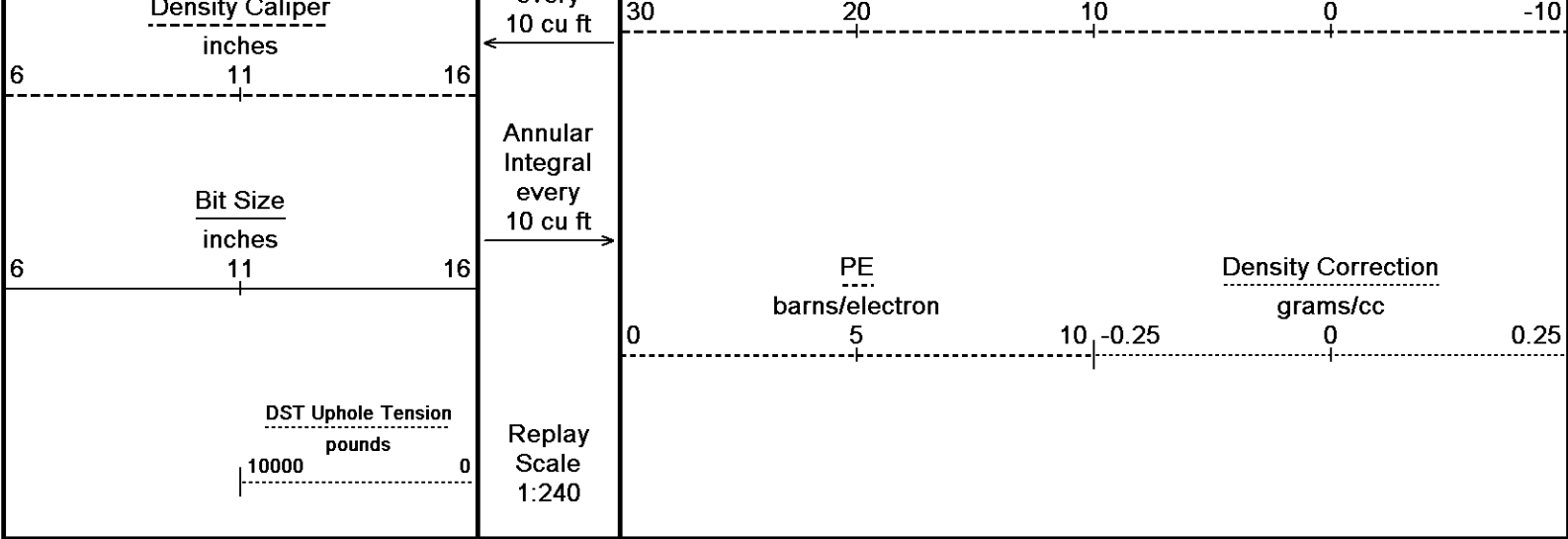


Timing Marks every 60.0 sec

Gamma Ray			
API			
0	75	150	
150	225	300	

Borehole Temp in deg F

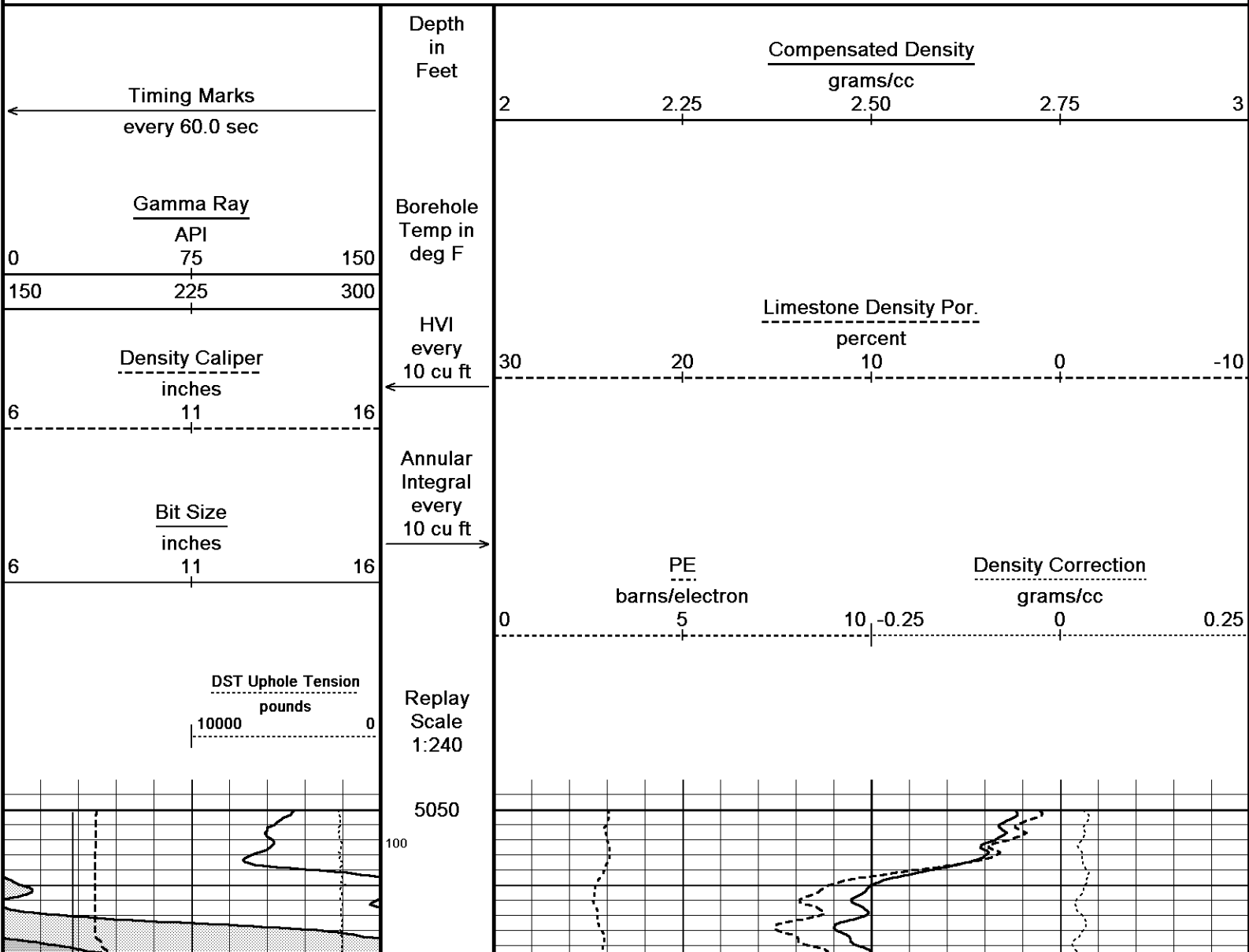
HVI every

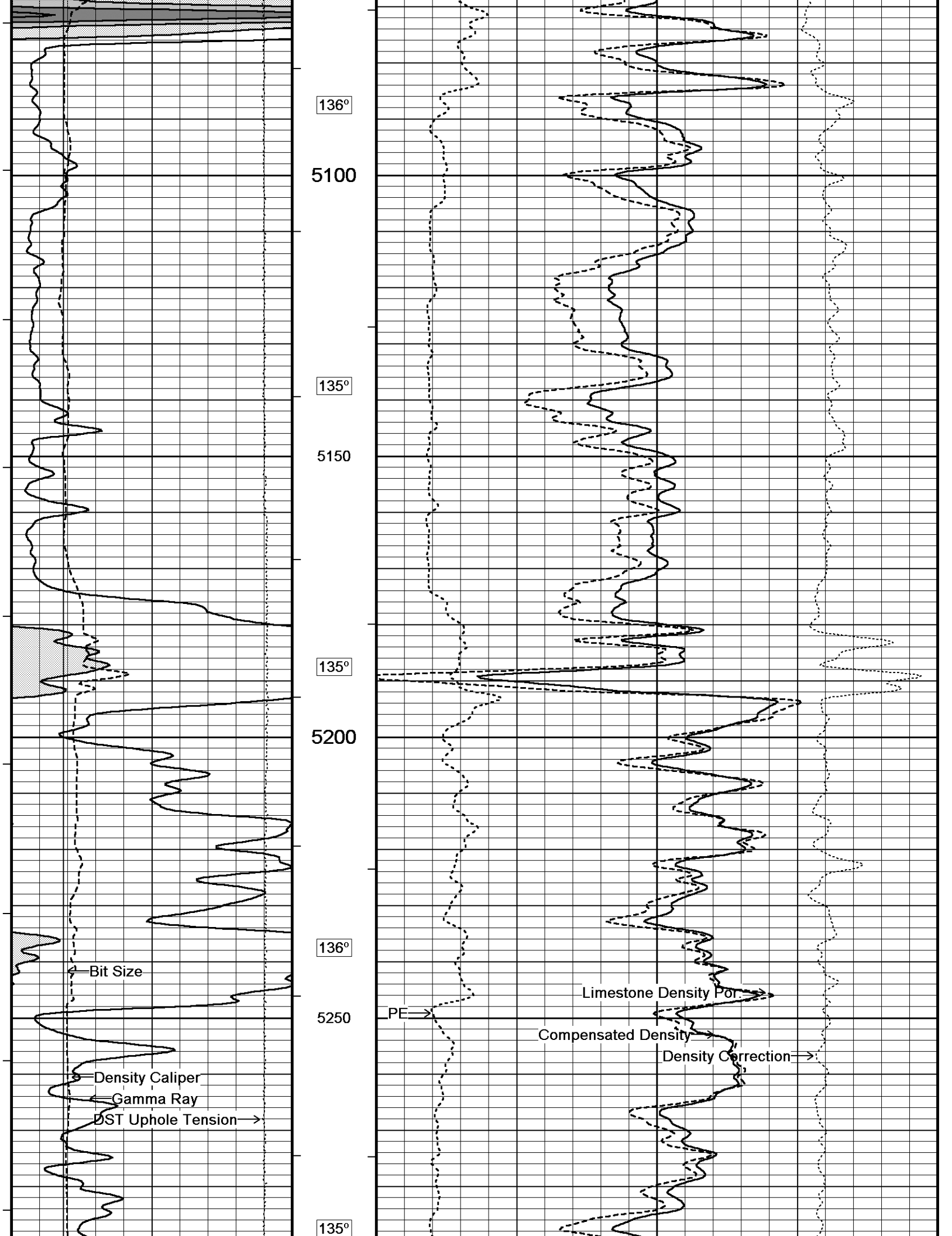


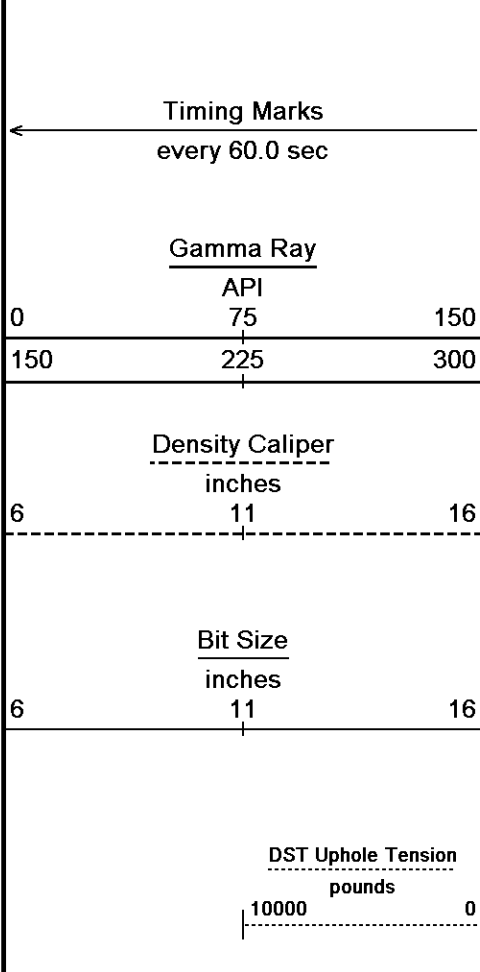
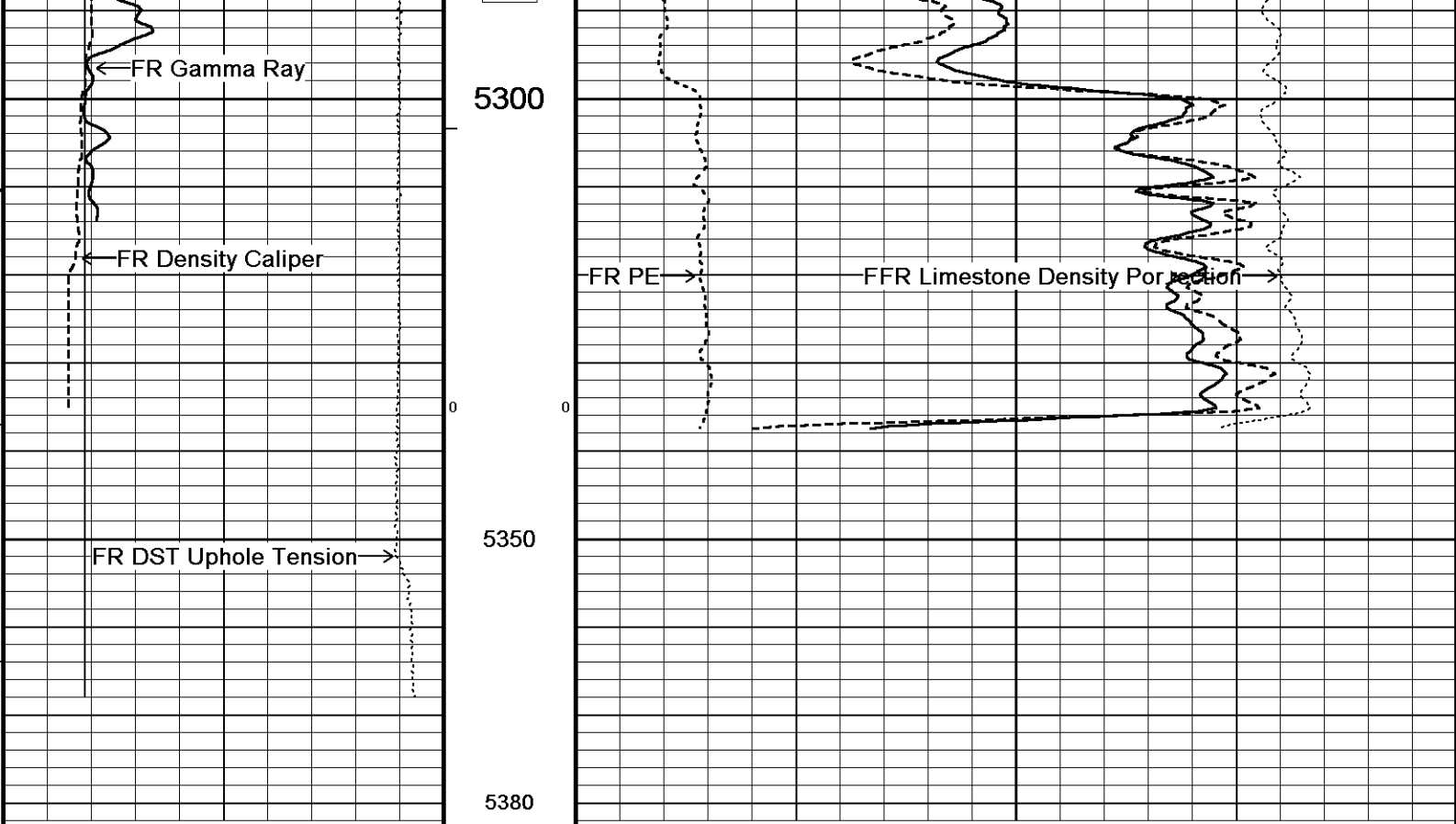
Depth Based Data - Maximum Sampling Increment 10.0cm  
 Plotted on 29-SEP-2011 08:14  
 Filename: C:\Users\garcian\AppData\Local\Temp\Weatherford PreView\0\SEIFERT 1-27\_003.dta  
 Recorded on 28-SEP-2011 18:24  
 System Versions: Logged with 11.02.2782 Plotted with 12.01.3513

5 INCH BULK DENSITY

5 INCH REPEAT  
 Depth Based Data - Maximum Sampling Increment 10.0cm  
 Plotted on 29-SEP-2011 08:14  
 Filename: C:\Users\garcian\AppData\Local\Temp\Weatherford PreView\0\SEIFERT 1-27\_002.dta  
 Recorded on 28-SEP-2011 18:07  
 System Versions: Logged with 11.02.2782 Plotted with 12.01.3513







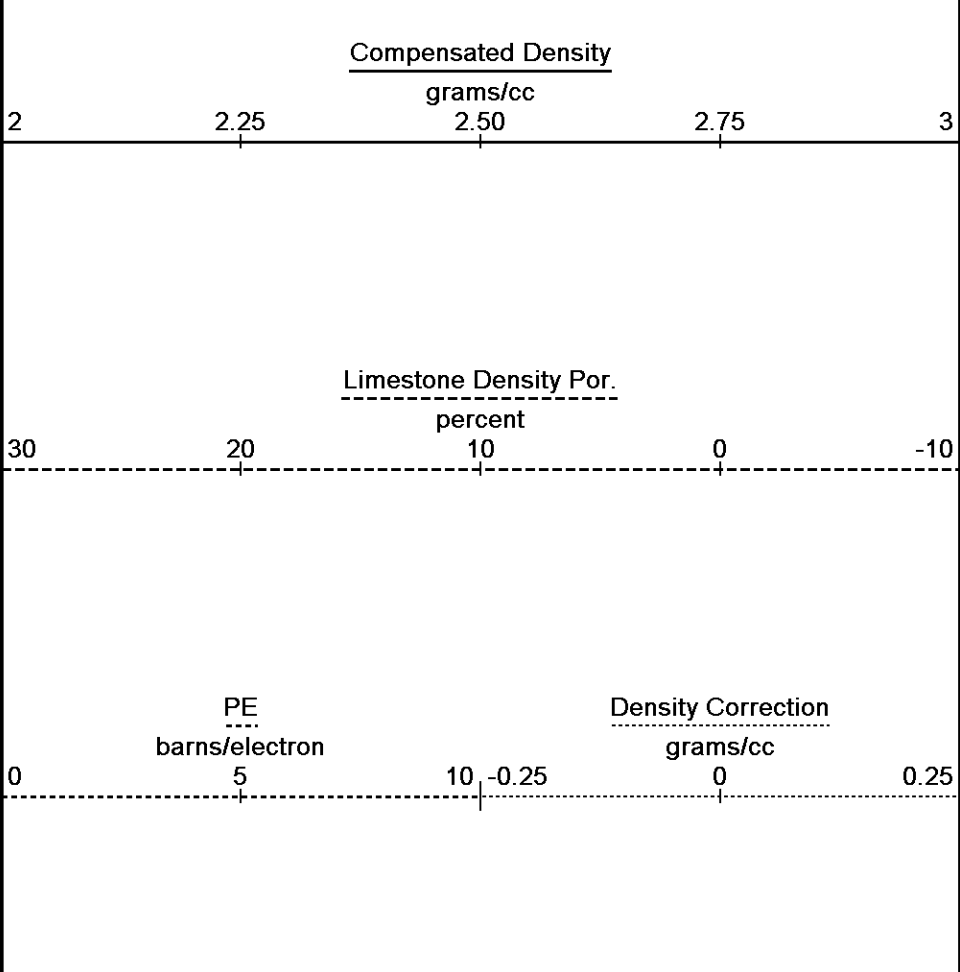
Depth in Feet

Borehole Temp in deg F

HVI every 10 cu ft

Annular Integral every 10 cu ft

Replay Scale 1:240



Depth Based Data - Maximum Sampling Increment 10.0cm  
 Plotted on 29-SEP-2011 08:14  
 Filename: C:\Users\garcianr\AppData\Local\Temp\Weatherford PreView\0\SEIFERT 1-27\_002.dta  
 Recorded on 28-SEP-2011 18:07  
 System Versions: Logged with 11.02.2782 Plotted with 12.01.3513

↑ 5 INCH REPEAT ↑

BEFORE SURVEY CALIBRATION

## General Constants All 000

Last Edited on 28-SEP-2011 18:30

## General Parameters

Mud Resistivity	1.500	ohm-metres
Mud Resistivity Temperature	82.000	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	None	

## Rwa Parameters

Porosity used	Limestone Density Por.	
Resistivity used	Array Ind. One Res Rt	
RWA Constant A	0.610	
RWA Constant M	2.150	

## Down-hole Tension Calibration SMS 0

Field Calibration on 10-SEP-2011 14:39

Reading No	Measured	Calibrated (lbs)
1	14299.72	0.00
2	15662.60	358.00

## Gamma Calibration MCG-D.A 328

Field Calibration on 28-SEP-2011 17:04

	Measured	Calibrated (API)
Background	42	29
Calibrator (Gross)	1361	926
Calibrator (Net)	1319	897

## Gamma Constants MCG-D.A 328

Last Edited on 28-SEP-2011 17:04

Gamma Calibrator Number	13226	
Mud Density	1.08	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

## SP Calibration MCG-D.A 328

Field Calibration on 28-SEP-2011 17:04

	Measured	Calibrated (mV)
Reference 1	-100.0	-100.0
Reference 2	100.0	100.0

## High Resolution Temperature Calibration MCG-D.A 328

Field Calibration on 28-SEP-2011 17:04

	Measured	Calibrated(Deg F)
Lower	50.00	50.00
Upper	150.00	150.00

## High Resolution Temperature Constants MCG-D.A 328

Last Edited on

Pre-filter Length	11
-------------------	----

## Micro Normal and Micro Inverse Calibration MML-A 13

Base Calibration on 22-SEP-2011 17:10

Field Check on 28-SEP-2011 17:04

## Base Calibration

Channel	Measured		Calibrated (ohm-m)	
	Resistor 1	Resistor 2	Resistor 1	Resistor 2
Micro Normal	12.3	58.0	2.6	12.8
Micro Inverse	16.4	77.4	1.7	8.4

Channel	Base Check (ohm-m)	Field Check (ohm-m)
Micro Normal	33.6	33.6
Micro Inverse	16.6	16.6

## Micro Normal and Micro Inverse Constants MML-A 13

Last Edited on 28-SEP-2011 17:04



Pad Type	8-12 in Soft Rubber Inflatable	006-9011-159
Micro Normal K Factor		0.5110
Micro Inverse K Factor		0.3380
Standoff Offset		N/A inches

**Caliper Calibration MML-A 13**

Base Calibration on 22-SEP-2011 16:35  
Field Calibration on 28-SEP-2011 18:18

Base Calibration		
Reading No	Measured	Calibrator Size (in)
1	13606	5.98
2	16663	7.98
3	20008	9.95
4	23797	12.01
5	0	0.00
6	N/A	N/A
Field Calibration		
	Measured Caliper (in)	Actual Caliper (in)
	8.30	8.10

**Neutron Calibration MDN-A.A 10**

Base Calibration on 12-MAY-2011 19:29  
Field Check on 28-SEP-2011 17:04

Base Calibration				
	Measured		Calibrated (cps)	
	Near	Far	Near	Far
	3130	98	3714	110
Ratio	31.818		33.764	
Field Calibrator at Base				
			Calibrated (cps)	
			1248	1792
Ratio			0.696	
Field Check				
			Calibrated (cps)	
			1248	1792
Ratio			0.696	

**Neutron Constants MDN-A.A 10**

Last Edited on 28-SEP-2011 17:04

Neutron Source Id	P14033B		
Neutron Jig Number	13226		
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	Constant Value		
Formation Pressure	0.00	kpsi	
Temperature Source	None		
Temperature	N/A	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-A.A 65**

Base Calibration on 10-AUG-2011 15:44  
Field Check on 28-SEP-2011 17:05

Base Calibration		
	Measured	Calibrated (ohm-m)
Reference 1	0.0	0.0
Reference 2	961.4	126.8
Base Check		280.8
Field Check		280.8

**FE Constants MFE-A.A 65**

Last Edited on 28-SEP-2011 17:05

Running Mode	No Sleeve		
MFE K Factor	0.1268		
Caliper Source for FE correction	Density Caliper		

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

Sonic Constants MSS-A.A 101

Last Edited on 28-SEP-2011 17:05

Maximum Boundary Contrast	100.00	micro-sec/ft
Fluid Transit Time	189.00	micro-sec/ft
Limestone Transit Time	47.50	micro-sec/ft
Sandstone Transit Time	55.50	micro-sec/ft
Dolomite Transit Time	43.50	micro-sec/ft
Sonic used for Porosities	3-5' Compensated Sonic	
Correction for Sonde Skew	Applied	
Cycle Stretch Algorithm	Applied	
MN3FT	N/A	micro-sec
MX3FT	N/A	micro-sec
Hunt-Raymer Constant	83.13	micro-sec/ft

Sonde Mode	Compensated
Hole Type	Open Hole

Sonde Parameters

	Measured	Calibrated
Offset	N/A	0.0000
Free Pipe	N/A	N/A
Peak Amplitude Source		N/A

Waveform	Start Time (micro-sec)	Width (micro-sec)	Pre Gain	Start Gain	Discriminator (mV)
3'	N/A	N/A	N/A	N/A	N/A
4'	N/A	N/A	N/A	N/A	N/A
5'	N/A	N/A	N/A	N/A	N/A
6'	N/A	N/A	N/A	N/A	N/A

Processed Fixed Gate Parameters

Waveform Used For Processing	N/A			
Start Time (micro-sec)	End Time (micro-sec)	Discriminator (mV)	Depth (ft)	
N/A	N/A	N/A	0.00	
N/A	N/A	N/A	0.00	
N/A	N/A	N/A	0.00	
N/A	N/A	N/A	0.00	
N/A	N/A	N/A	0.00	

Full Waveform Parameters

Use 3' Waveform to derive TR	N/A
Use 4' Waveform to derive TR	N/A
Use 5' Waveform to derive TR	N/A
Use 6' Waveform to derive TR	N/A
3' Waveform Discriminator Level	N/A mV
4' Waveform Discriminator Level	N/A mV
5' Waveform Discriminator Level	N/A mV
6' Waveform Discriminator Level	N/A mV
3' Waveform Filter	N/A
4' Waveform Filter	N/A
5' Waveform Filter	N/A
6' Waveform Filter	N/A
Semblance Level	N/A
Semblance Window Width	N/A micro-sec
Sonic 1 Despiker	N/A
Sonic 2 Despiker	N/A

Induction Calibration MAI-B.J 393

Base Calibration on 22-SEP-2010 10:00  
Field Check on 28-SEP-2011 17:05

Base Calibration		Measured		Calibrated (mmho/m)	
Test Loop Calibration		Low	High	Low	High
Channel					
1		17.4	474.6	9.3	966.2
2		6.5	382.5	7.6	821.4

3	3.5	251.8	5.2	566.0
4	2.1	131.0	2.6	279.2

Array Temperature 74.1 Deg F

Channel	Base Check (mmho/m)		Field Check (mmho/m)	
	Low	High	Low	High
1	0.0	0.0	16.2	3824.1
2	0.0	0.0	31.7	3523.5
3	0.0	0.0	31.1	3140.9
4	0.0	0.0	20.8	2111.9
Deep	0.0	0.0	19.9	2110.3
Medium	0.0	0.0	44.9	4139.0
Shallow	0.0	0.0	46.1	5104.5
Array Temperature	0.0		95.0	Deg F

Induction Constants MAI-B.J 393

Last Edited on 28-SEP-2011 17:06

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	6.0000		
Stand-off Fin Angle	60.00	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		
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-B.J 393

Field Calibration on 28-SEP-2011 17:06

	Measured	Calibrated(Deg F)
Lower	50.00	50.00
Upper	100.00	100.00

High Resolution Temperature Constants MAI-B.J 393

Last Edited on

Pre-filter Length 11

Caliper Calibration MPD-A 3

Base Calibration on 10-AUG-2011 16:37  
Field Calibration on 28-SEP-2011 18:19

Base Calibration	Measured	Calibrator Size (in)
Reading No		
1	20208	3.98

2	28784	5.95
3	37424	7.97
4	45392	9.84
5	54503	11.91
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
8.43	8.10

Photo Density Calibration MPD-A 3

Base Calibration on 21-SEP-2011 15:08  
Field Check on 28-SEP-2011 17:05

Density Calibration

Base Calibration	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	47357	25239	60364	31945
Reference 2	20102	2812	25079	2547

Field Check at Base	1315.7	1670.4
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Field Check	1315.7	1670.4
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PE Calibration

Base Calibration	WS	Measured		Calibrated Ratio
		WH	Ratio	
Background	242	1164		
Reference 1	19956	47156	0.429	0.399
Reference 2	5535	19946	0.282	0.273

Field Check at Base	241.8	1163.6
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Field Check	241.8	1163.6
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Density Constants MPD-A 3

Last Edited on 28-SEP-2011 17:05

Density Source Id	260	
Nylon Calibrator Number	633	
Aluminium Calibrator Number	633	
Density Shoe Profile	8 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1.08	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\garcianr\AppData\Local\Temp\Weatherford PreView\0\SEIFERT 1-27.dta

SHA-F Compact Swivel Head Adaptor  
SHA-F 45 LG: 2.74 ft WT: 26.5 lb OD: 2.24 in



Compact Comms Gamma  
MCG-D.A 328 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in

Compact Micro-log  
MML-A 13 LG: 7.97 ft WT: 81.6 lb OD: 2.24 in

Compact Neutron  
MDN-A.A 10 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

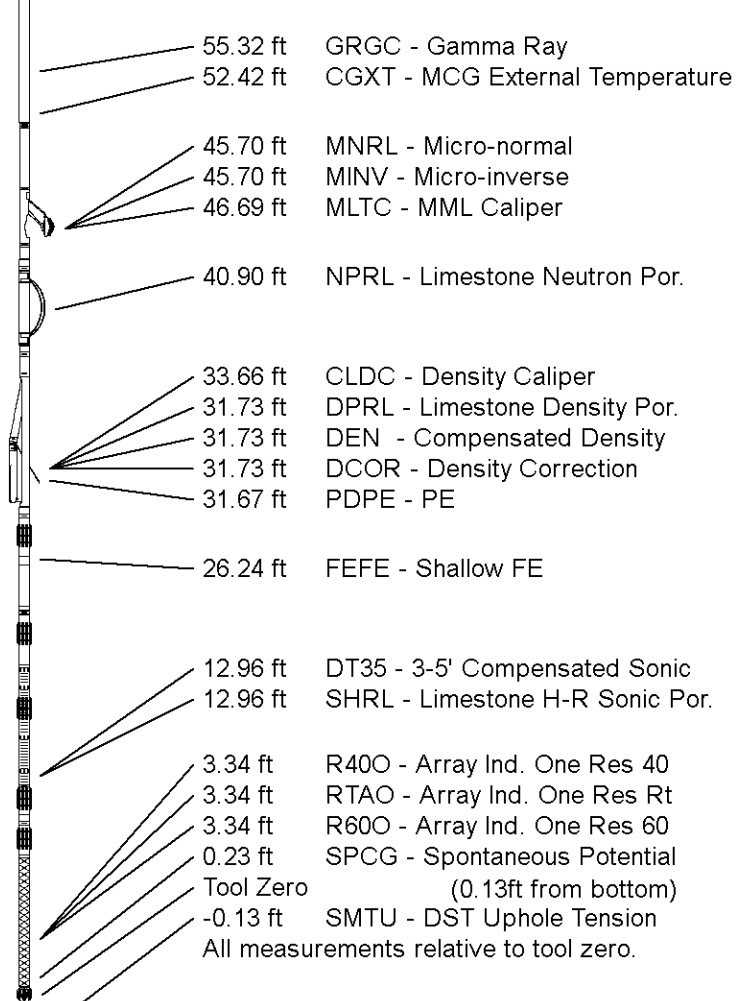
Compact Density/Caliper  
MPD-A 3 LG: 9.53 ft WT: 90.4 lb OD: 2.45 in

Compact Focussed Electric  
MFE-A.A 65 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

Compact Sonic  
MSS-A.A 101 LG: 12.52 ft WT: 72.8 lb OD: 2.24 in

Compact Induction  
MAI-B.J 393 LG: 10.81 ft WT: 48.5 lb OD: 2.24 in

Total Length: 63.35 ft Weight: 482.8 lb



<b>COMPANY</b>	<b>SHORELINE ENERGY PARTNERS, LLC.</b>
<b>WELL</b>	<b>SEIFERT 1-27</b>
<b>FIELD</b>	<b>WILDCAT</b>
<b>PROVINCE/COUNTY</b>	<b>HARPER</b>
<b>COUNTRY/STATE</b>	<b>U.S.A. / KANSAS</b>

Elevation Kelly Bushing	1216.00	feet	First Reading	5321.00	feet
Elevation Drill Floor	1214.00	feet	Depth Driller	5355.00	feet
Elevation Ground Level	1206.00	feet	Depth Logger	5352.00	feet



**COMPACT PHOTO DENSITY  
COMPENSATED NEUTRON  
LOG**

