



Weatherford

**COMPACT PHOTO DENSITY
COMPENSATED NEUTRON
MICRORESISTIVITY LOG**

COMPANY			WESTERN OPERATING COMPANY		
WELL			MARTIN-PETERSON #1		
FIELD			ARROYO		
PROVINCE/COUNTY			STANTON		
COUNTRY/STATE			U.S.A. / KANSAS		
LOCATION			2100' FSL & 2150' FWL		
SEC 16	TWP 29S	RGE 41W	Other Services		
Latitude			MAI/MFE		
Longitude					
API Number			15-187-21342		
Permanent Datum GL, Elevation 3404 feet					
Log Measured From KB, 13.00 feet above Permanent Datum					
Drilling Measured From KB					
Date	09-JAN-2019				Elevations: KB 3417.00 DF 3415.00 GL 3404.00
Run Number	ONE				
Service Order	4558-234191091				
Depth Driller	5708.00		feet		
Depth Logger	5711.00		feet		
First Reading	5690.00		feet		
Last Reading	3500.00		feet		
Casing Driller	1657.00		feet		
Casing Logger	1656.00		feet		
Bit Size	7.875		inches		
Hole Fluid Type	CHEMICAL				
Density / Viscosity	9.15 lb/USg		53.00 CP		
PH / Fluid Loss	10.00		6.40 ml/30Min		
Sample Source	FLOWLINE				
Rm @ Measured Temp	1.86 @ 75.0		ohm-m		
Rmf @ Measured Temp	1.49 @ 75.0		ohm-m		
Rmc @ Measured Temp	2.23 @ 75.0		ohm-m		
Source Rmf / Rmc	CALC		CALC		
Rm @ BHT	1.14 @ 122.0		ohm-m		
Time Since Circulation	5 HOURS				
Max Recorded Temp	122.00		deg F		
Equipment / Base	13096		LIB		
Recorded By	ADAM SILL				
Witnessed By	PETER DEBENHAM				

BOREHOLE RECORD					Last Edited: 09-JAN-2019 01:26
Bit Size inches		Depth From feet		Depth To feet	
7.875		1657.00		5708.00	
CASING RECORD					
Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft	
SURFACE	8.625	0.00	1657.00	24.00	

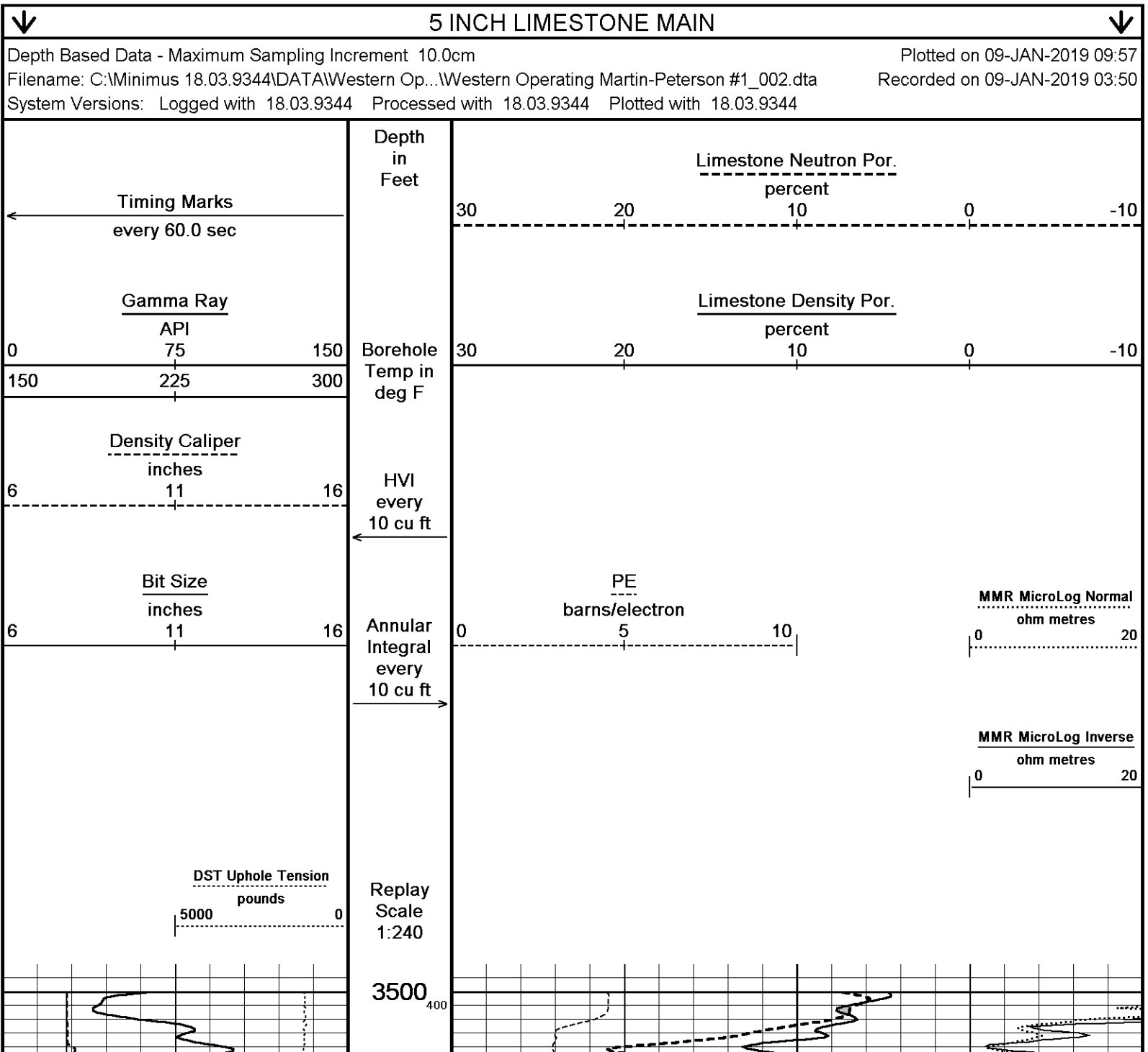
REMARKS
- SOFTWARE ISSUE: WLS 18.03.9344.
- RUN ONE: MCG, MML, MDN, MPD, MFE, MAI RUN IN COMBINATION. - HARDWARE: DUAL BOWSPRING USED ON MDN. 0.5 INCH STANDOFF USED ON MFE. 0.5 INCH STANDOFF USED ON MAI.
- 2.71 G/CC LIMESTONE DENSITY MATRIX USED TO CALCULATE POROSITY.
- BOREHOLE RUGOSITY, TIGHT PULLS, AND WASHOUTS WILL AFFECT DATA QUALITY.
- ALL INTERVALS LOGGED AND SCALED PER CUSTOMER'S REQUEST.
- TOTAL HOLE VOLUME FROM TD TO SURFACE CASING: 1433 CU.FT.
- ANNULAR HOLE VOLUME WITH 5.5 INCH PRODUCTION CASING FROM TD TO 3500 FEET: 400 CU.FT.
- RIG: DUKE #9

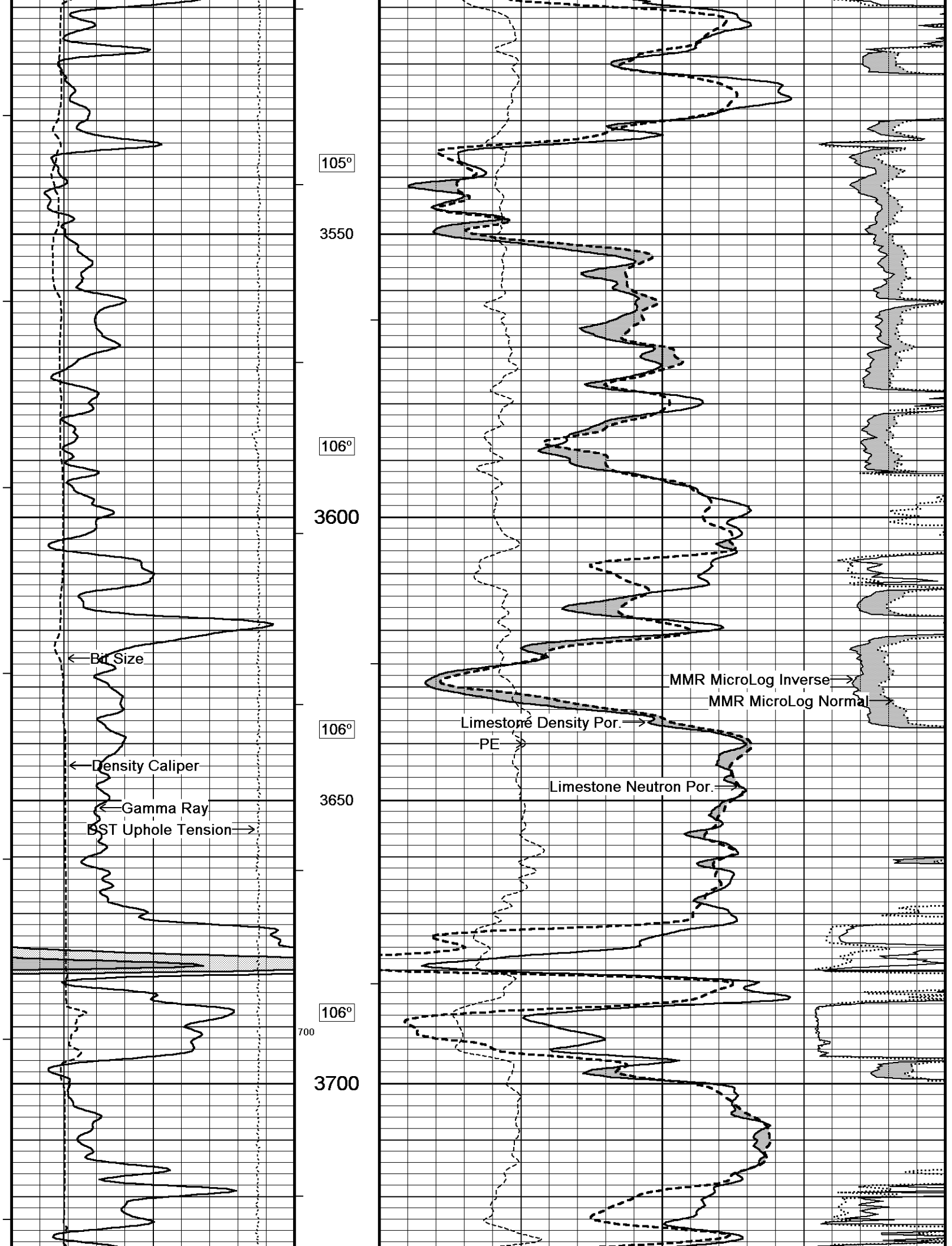
RIG: DORE #0:

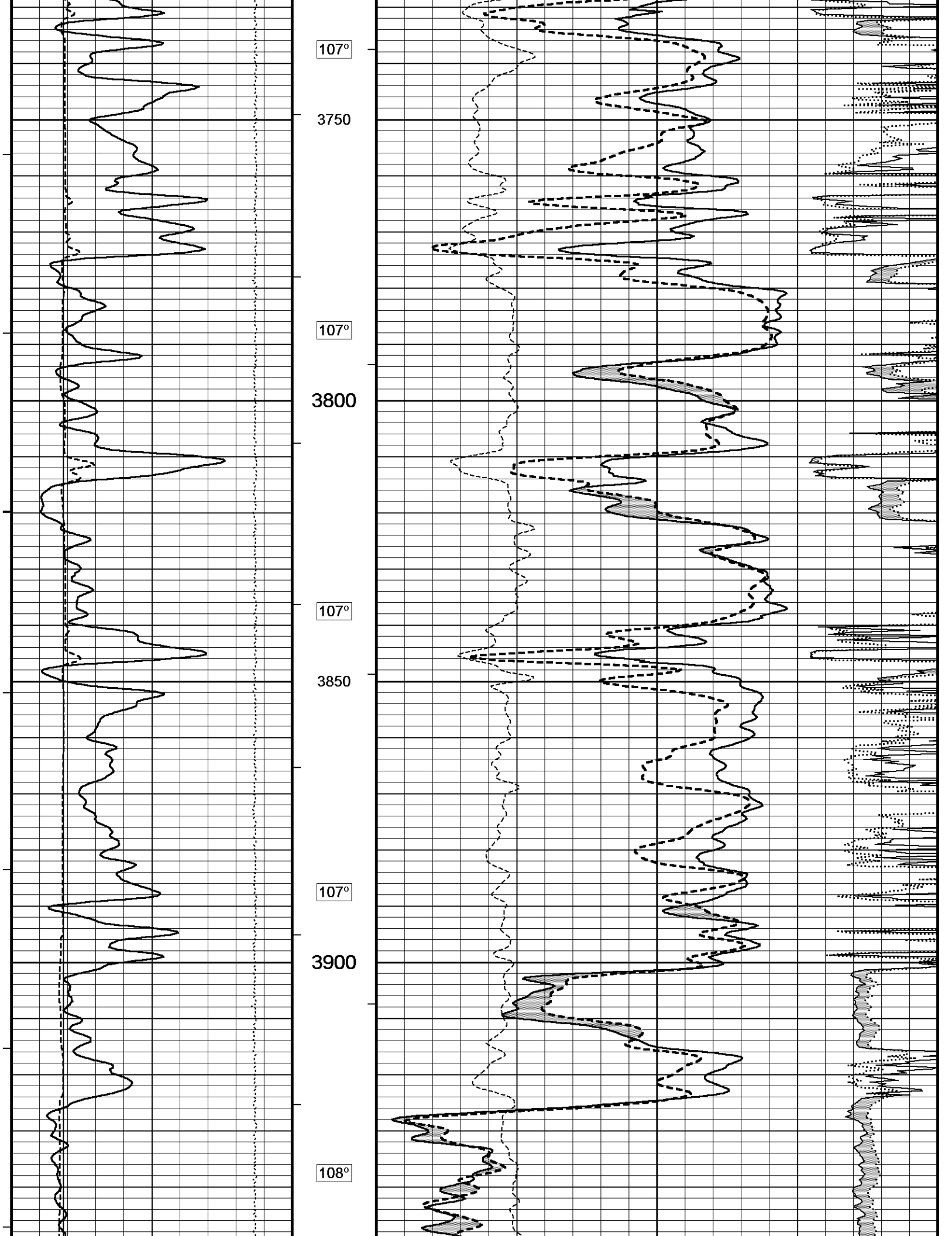
- ENGINEER: A. SILL.

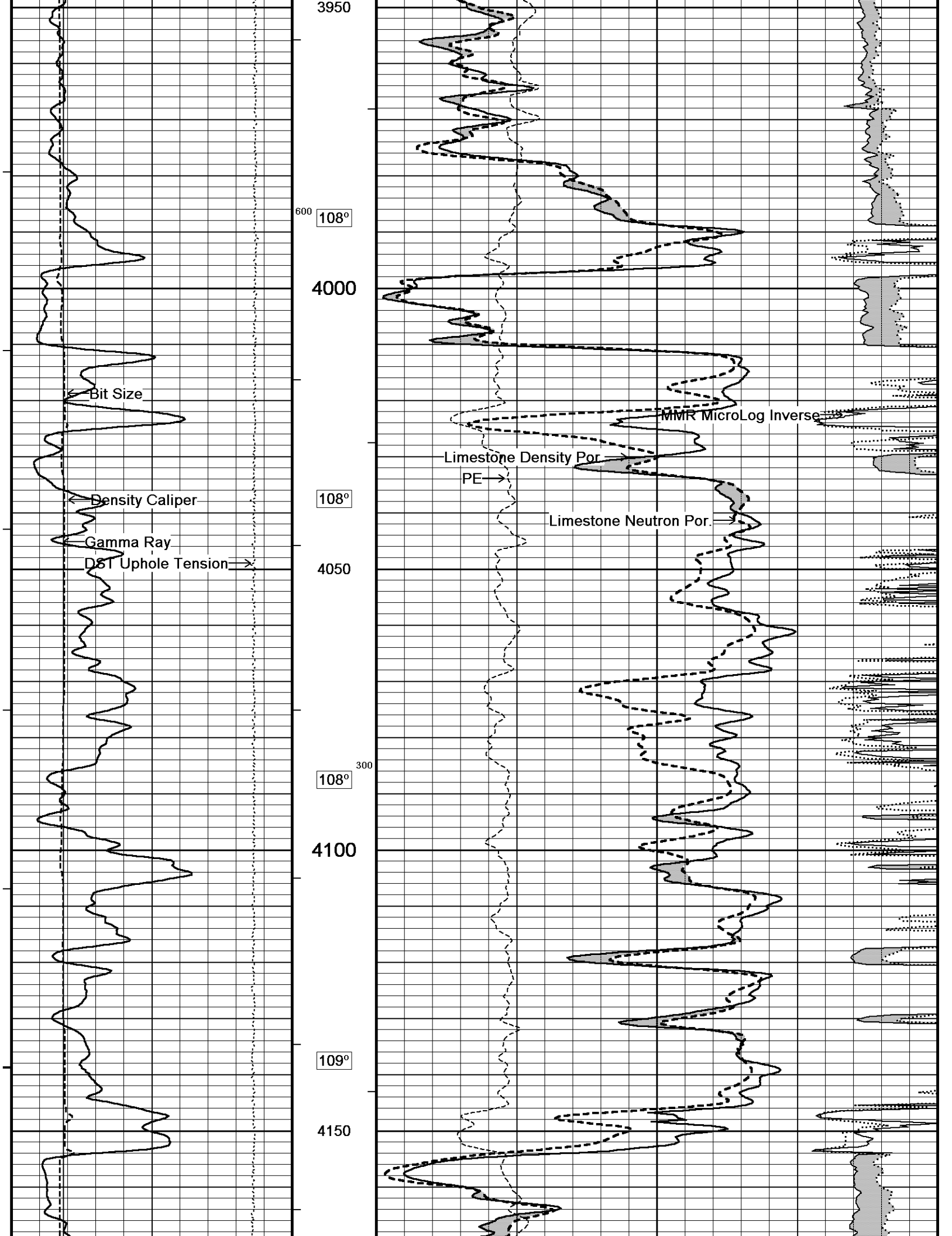
- OPERATOR: B. TOVAR, B. COPELAND.

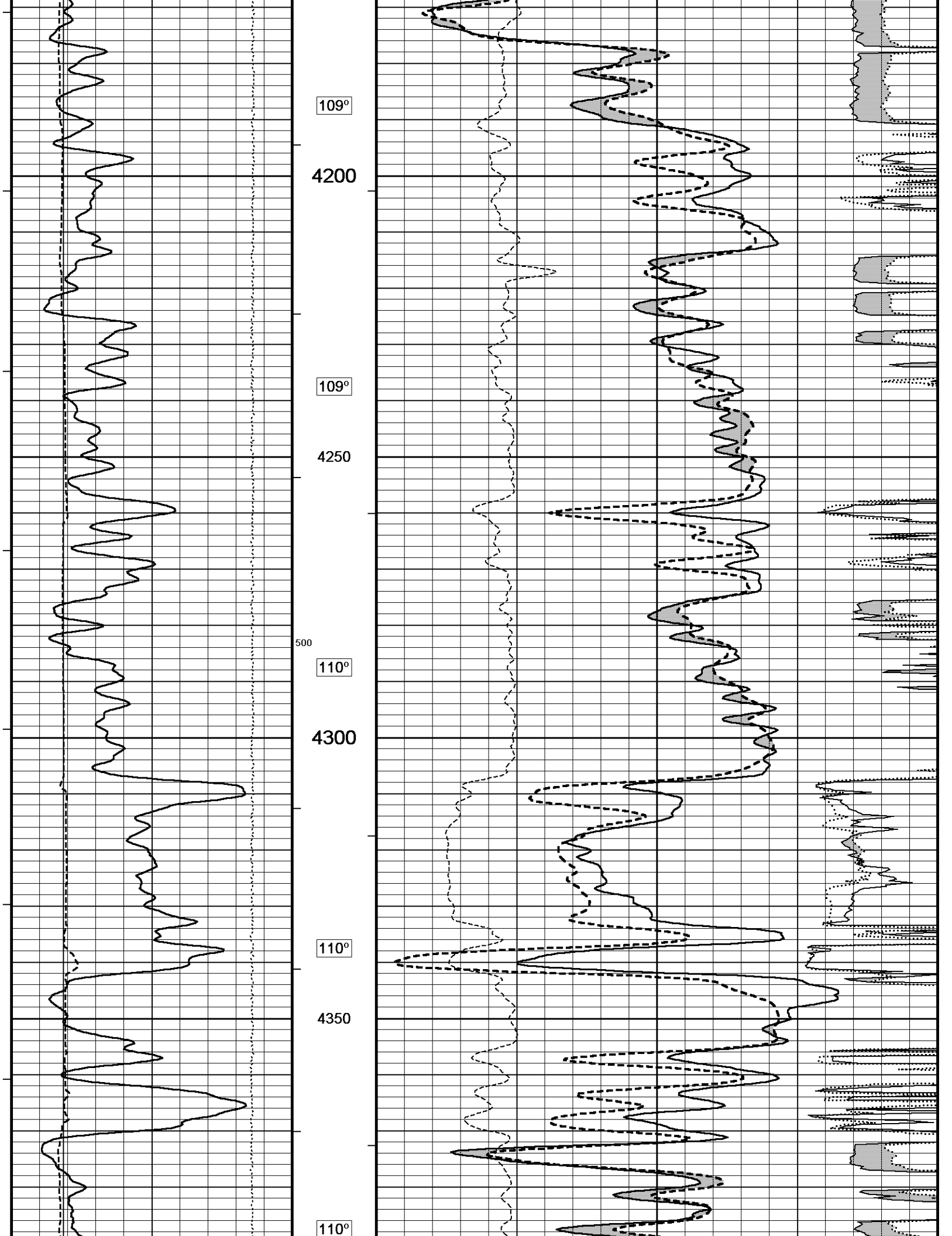
In interpreting, communicating or providing information and/or making recommendations, either written or oral, as to logs or test or other data, type or amount of material, or Work or other service to be furnished, or manner of performance, or in predicting results to be obtained, the Contractor will give the Company the benefit of the Contractor's best judgment based on its experience and will perform all such Work in a good and workmanlike manner. Any interpretation of test or other data, and any recommendation or reservoir description based upon such interpretations, are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and assumptions are not infallible, and with respect to which professional engineers and analysts may differ. ACCORDINGLY ANY INTERPRETATION OR RECOMMENDATION RESULTING FROM THE SERVICES WILL BE AT THE SOLE RISK OF THE COMPANY, AND THE CONTRACTOR CANNOT AND DOES NOT WARRANT THE ACCURACY, CORRECTNESS OR COMPLETENESS OF ANY SUCH INTERPRETATION OR RECOMMENDATION, WHICH INTERPRETATIONS AND RECOMMENDATIONS SHOULD NOT, THEREFORE, UNDER ANY CIRCUMSTANCES BE RELIED UPON AS THE SOLE OR MAIN BASIS FOR ANY DRILLING, COMPLETION, WELL TREATMENT, PRODUCTION OR FINANCIAL DECISION, OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING ACTIVITY, DRILLING RIG OR ITS CREW OR ANY OTHER INDIVIDUAL. THE COMPANY HAS FULL RESPONSIBILITY FOR ALL DECISIONS CONCERNING THE SERVICES.

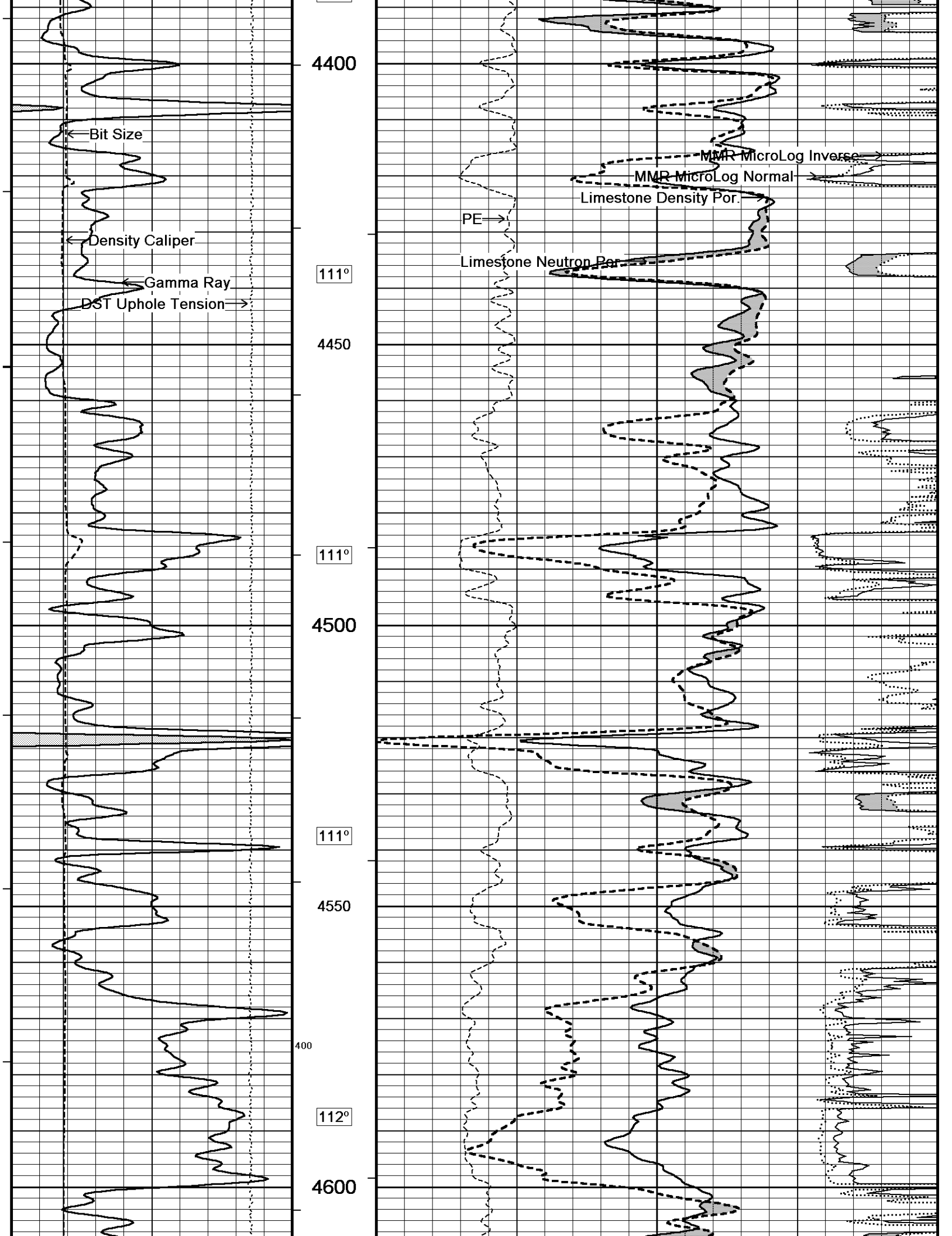


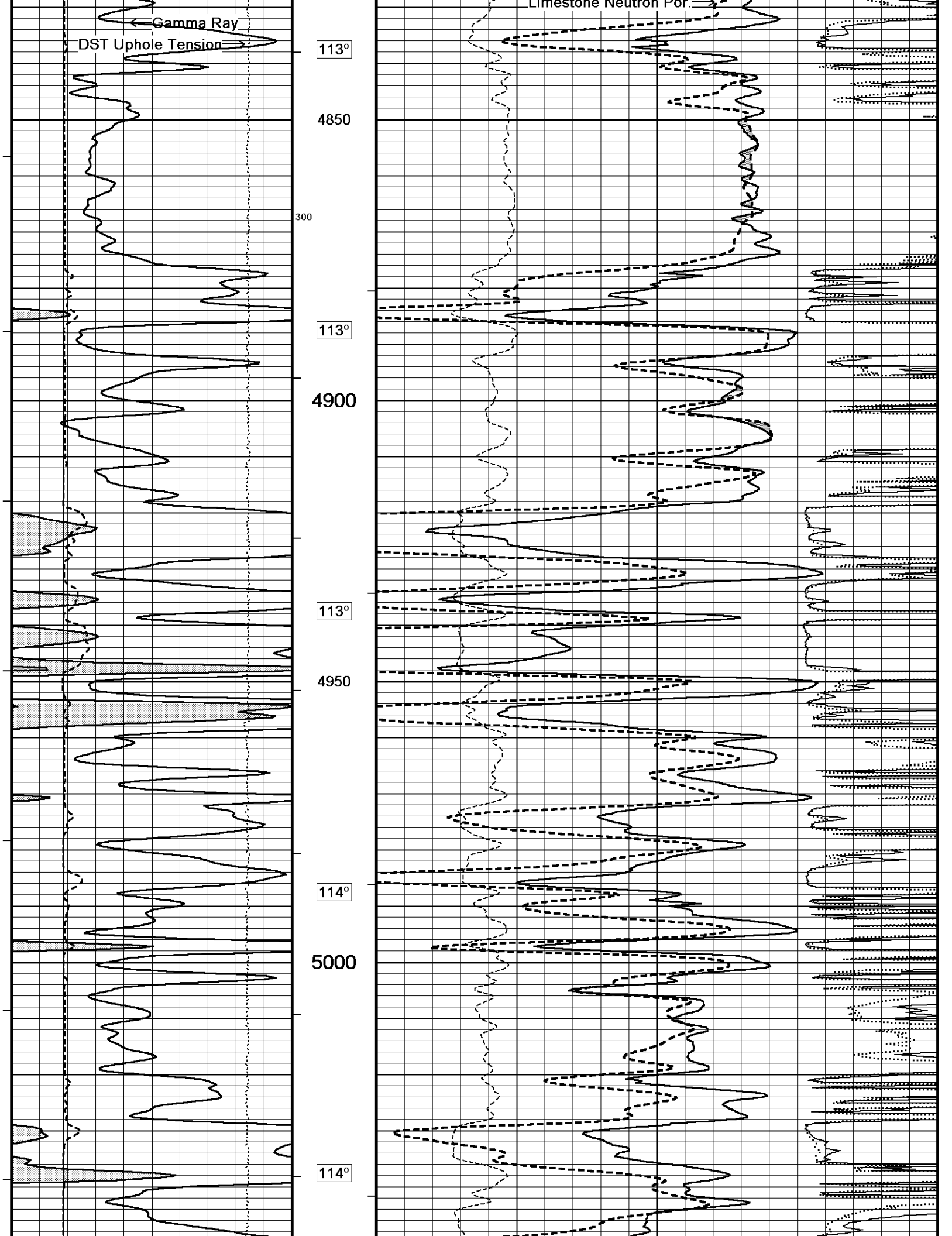


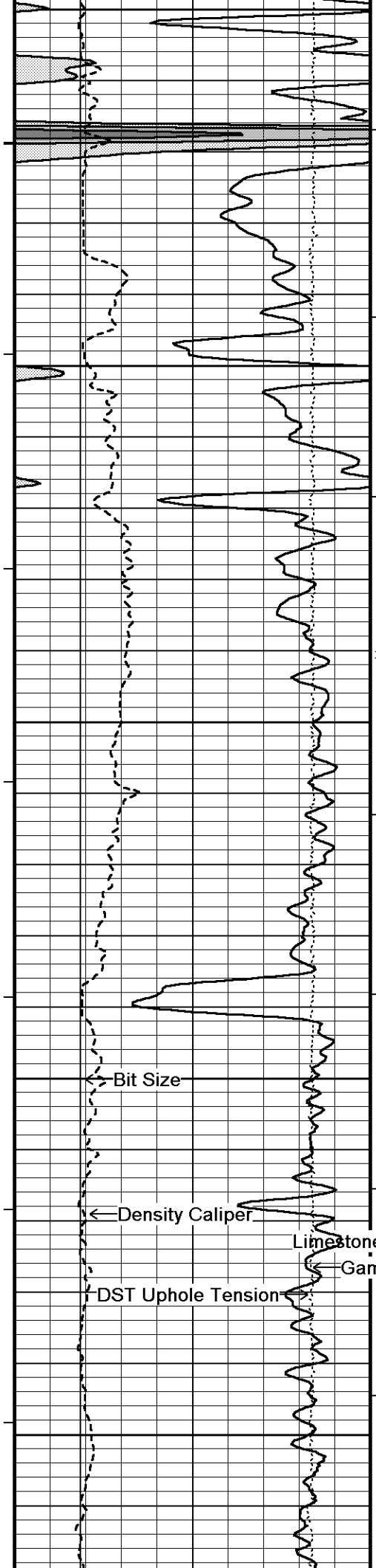




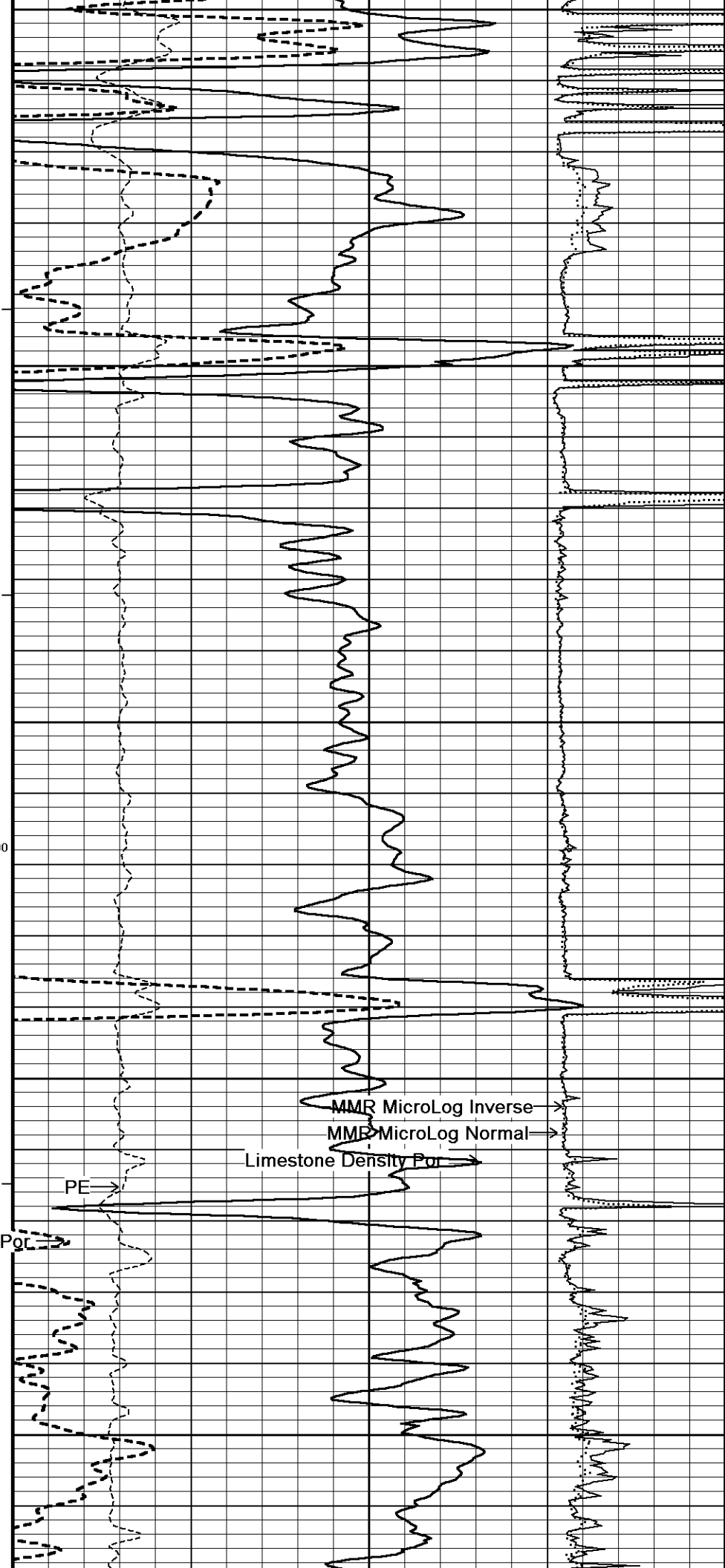








5050
115°
5100
115°
200
5150
100
116°
5200
116°
5250



Bit Size

Density Caliper

DST Uphole Tension

Limestone Neutron Por

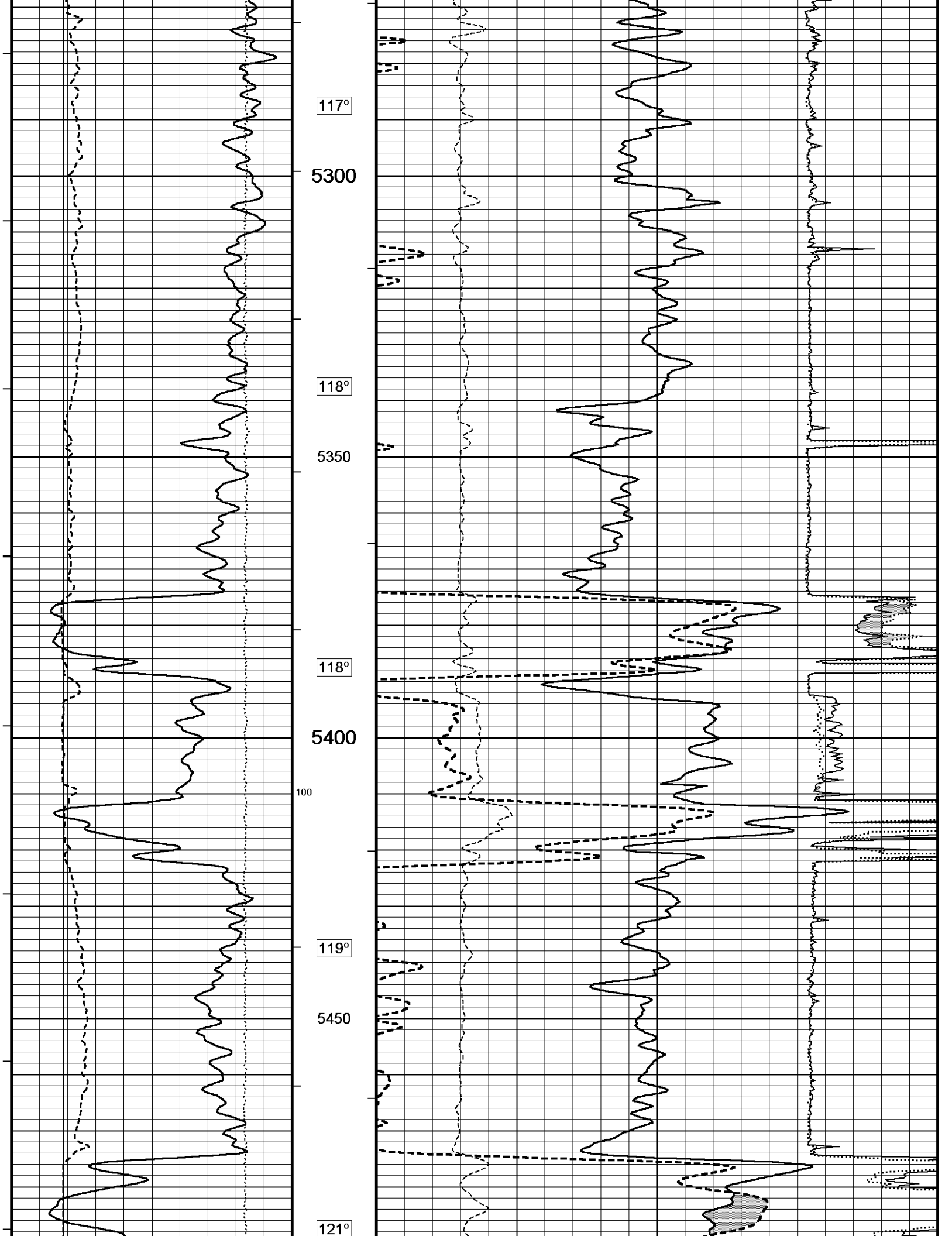
Gamma Ray

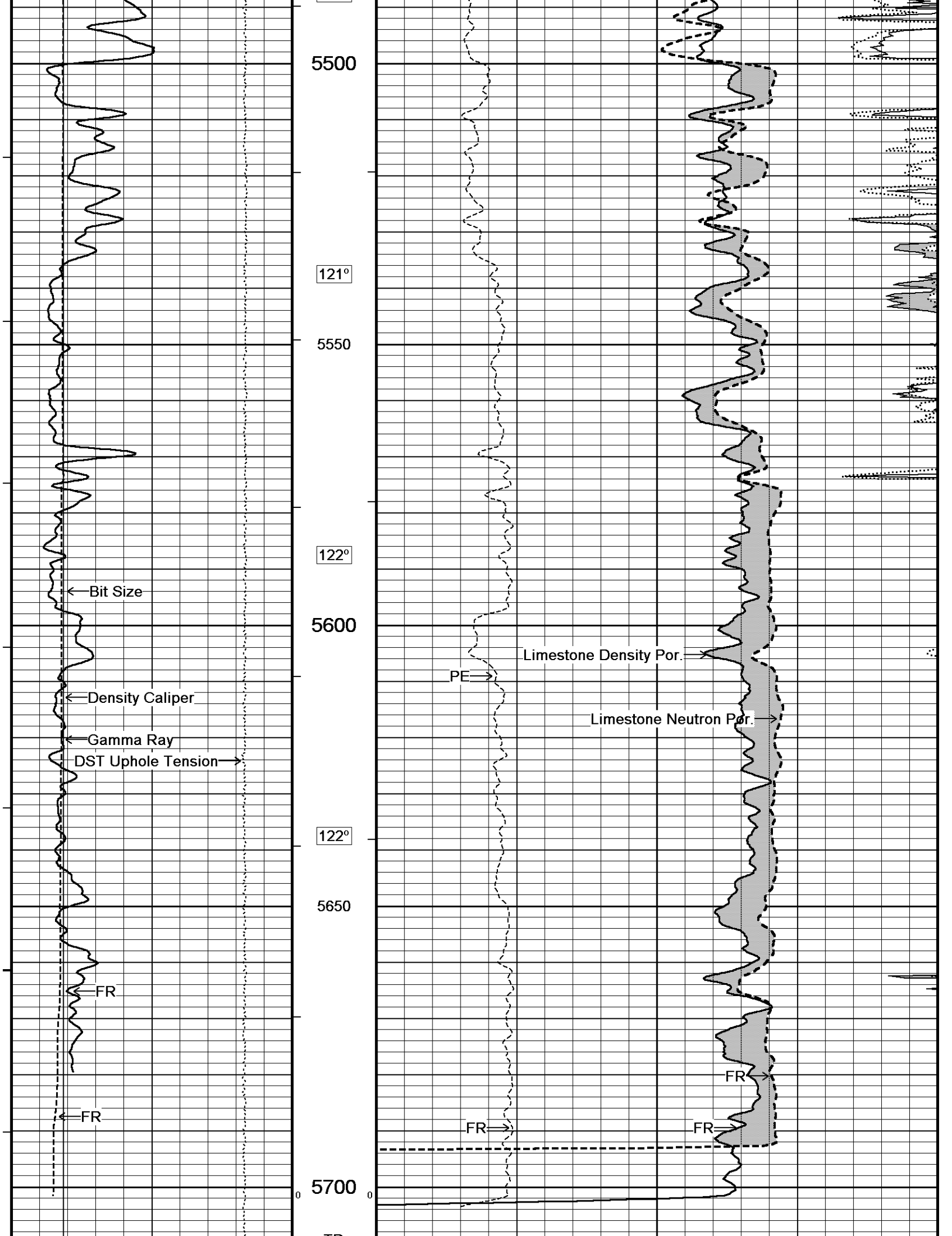
PE

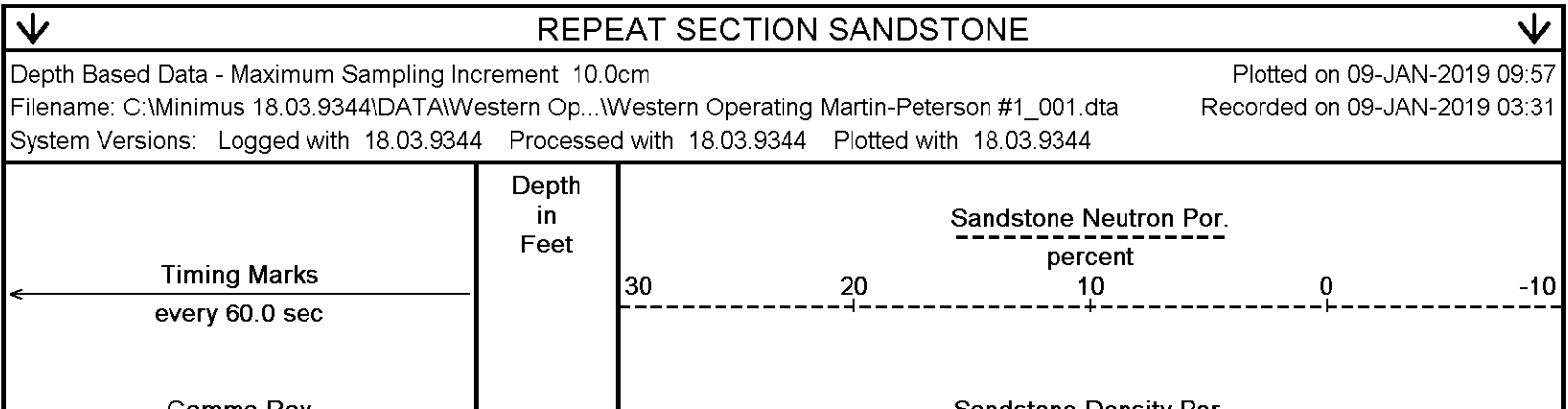
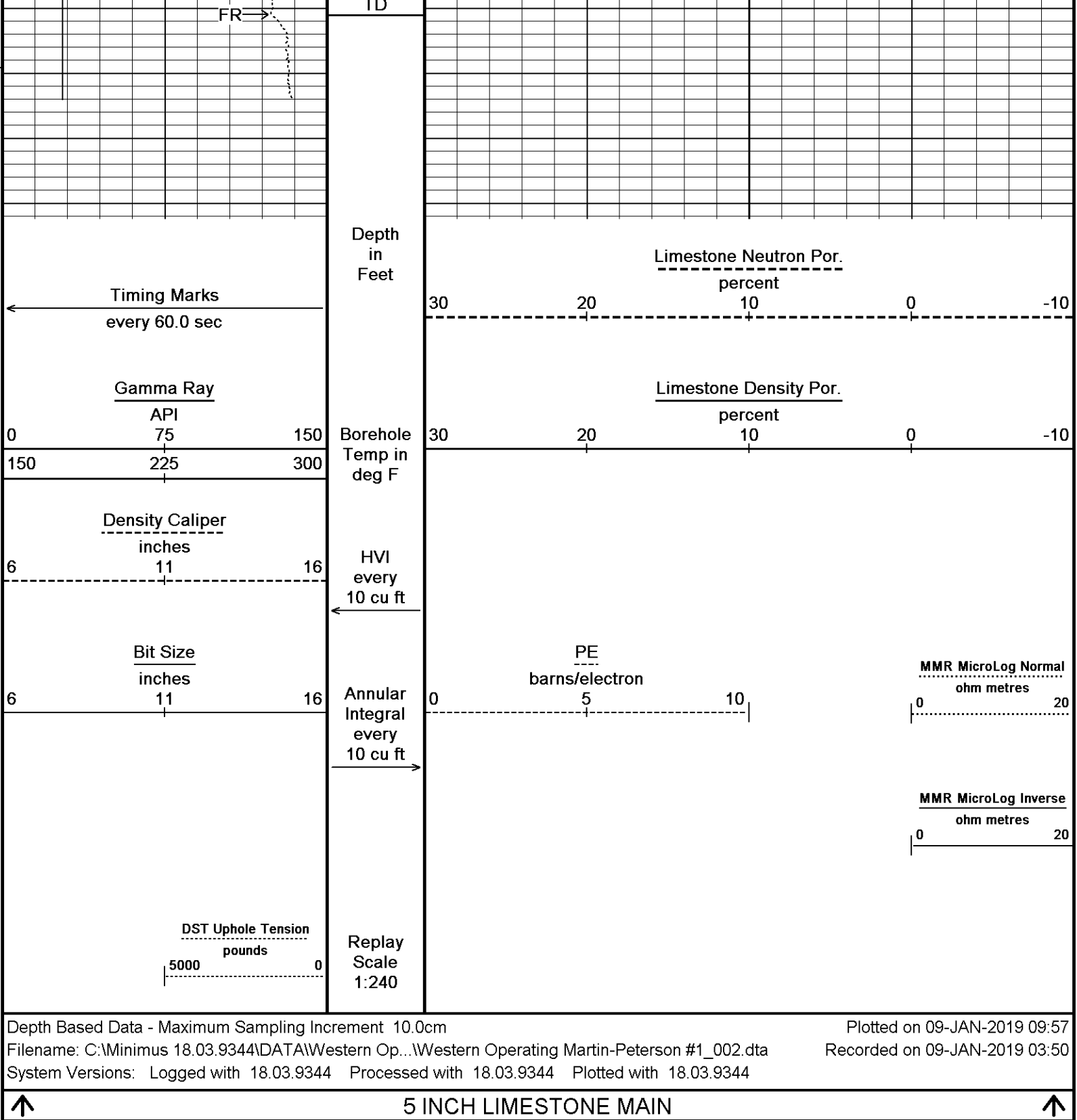
MMR MicroLog Inverse

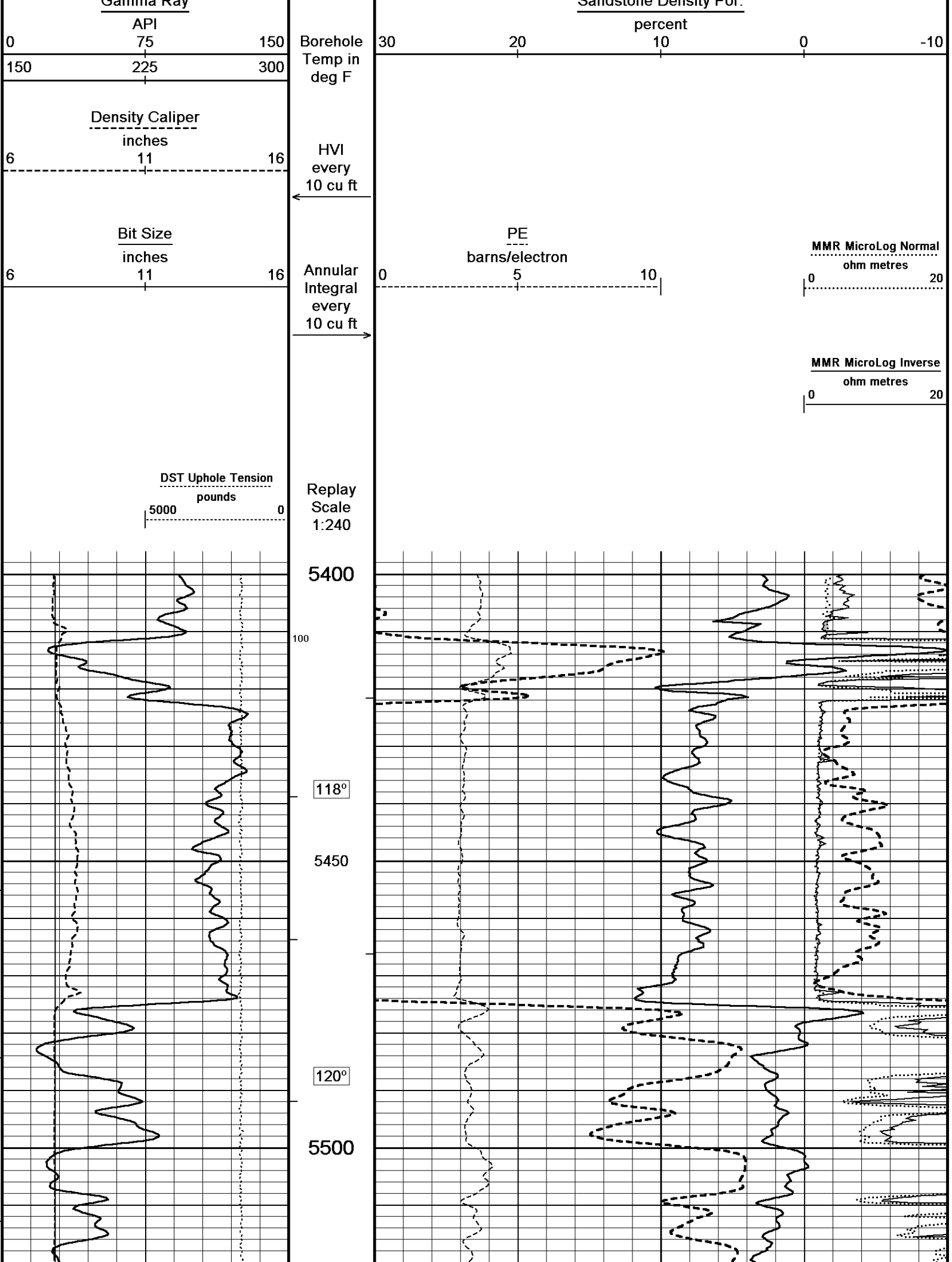
MMR MicroLog Normal

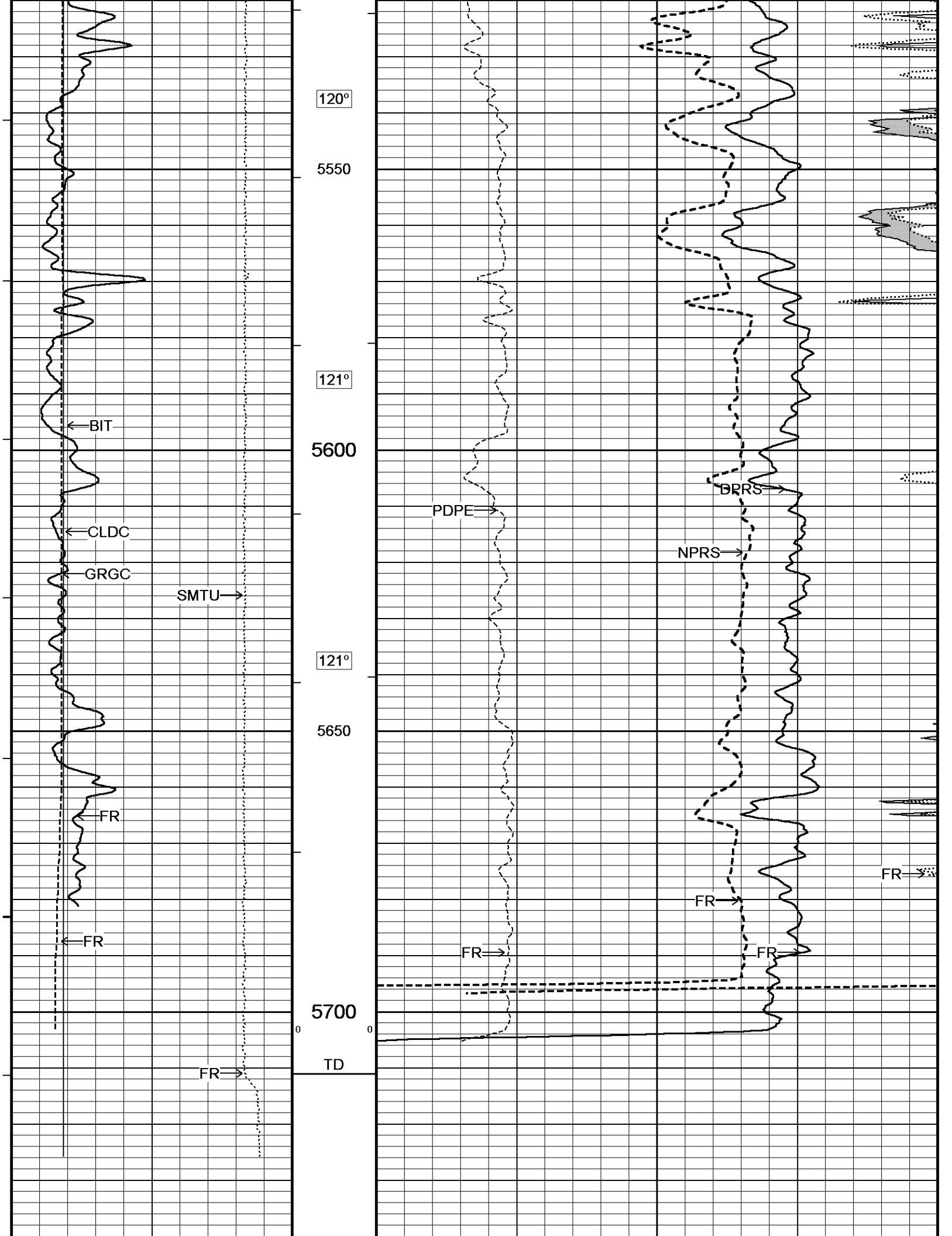
Limestone Density Por

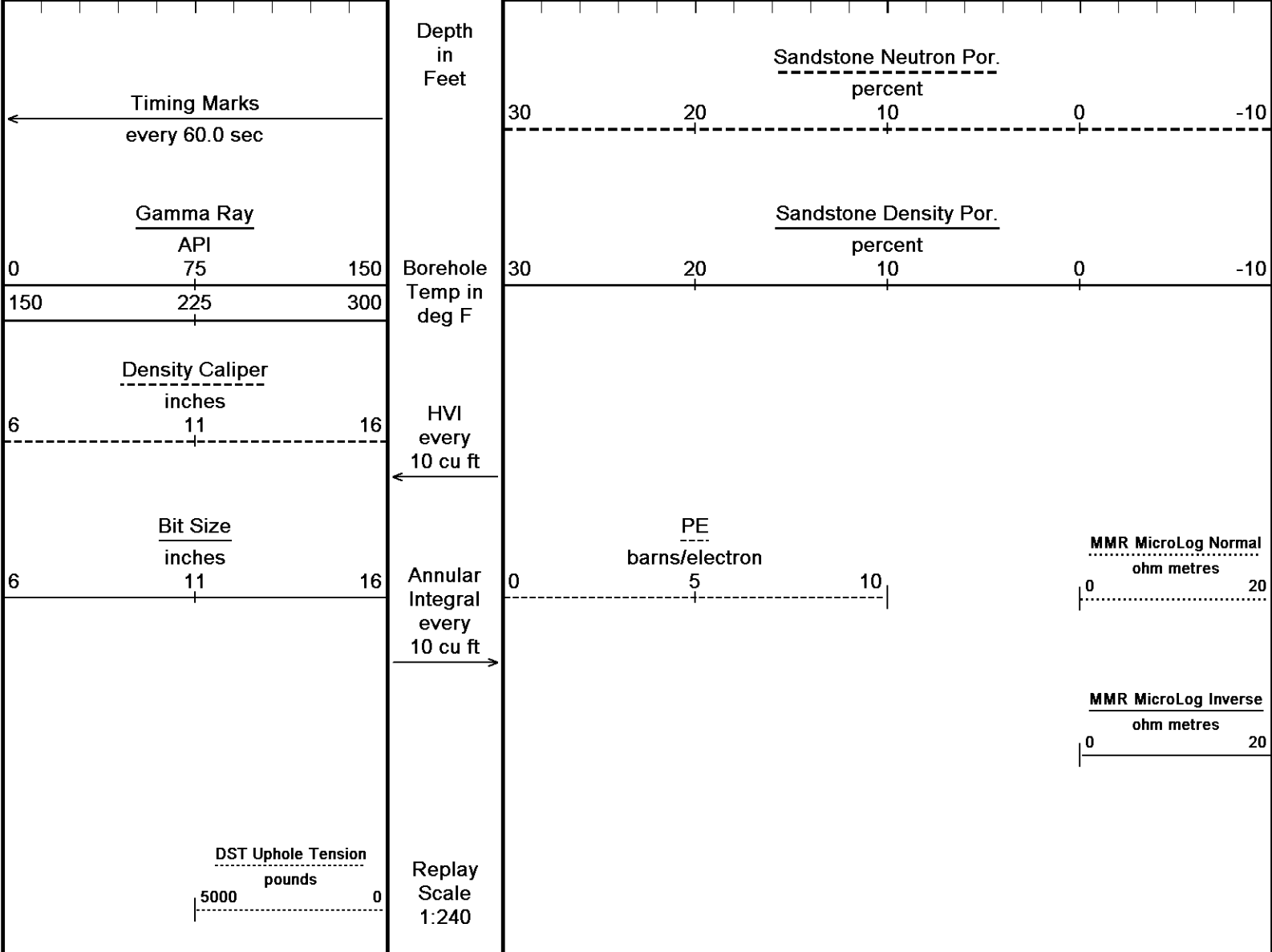












Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 09-JAN-2019 09:57

Filename: C:\Minimus 18.03.9344\DATA\Western Op...\Western Operating Martin-Peterson #1_001.dta

Recorded on 09-JAN-2019 03:31

System Versions: Logged with 18.03.9344 Processed with 18.03.9344 Plotted with 18.03.9344

↑

REPEAT SECTION SANDSTONE

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↓

5 INCH BULK DENSITY MAIN

↓

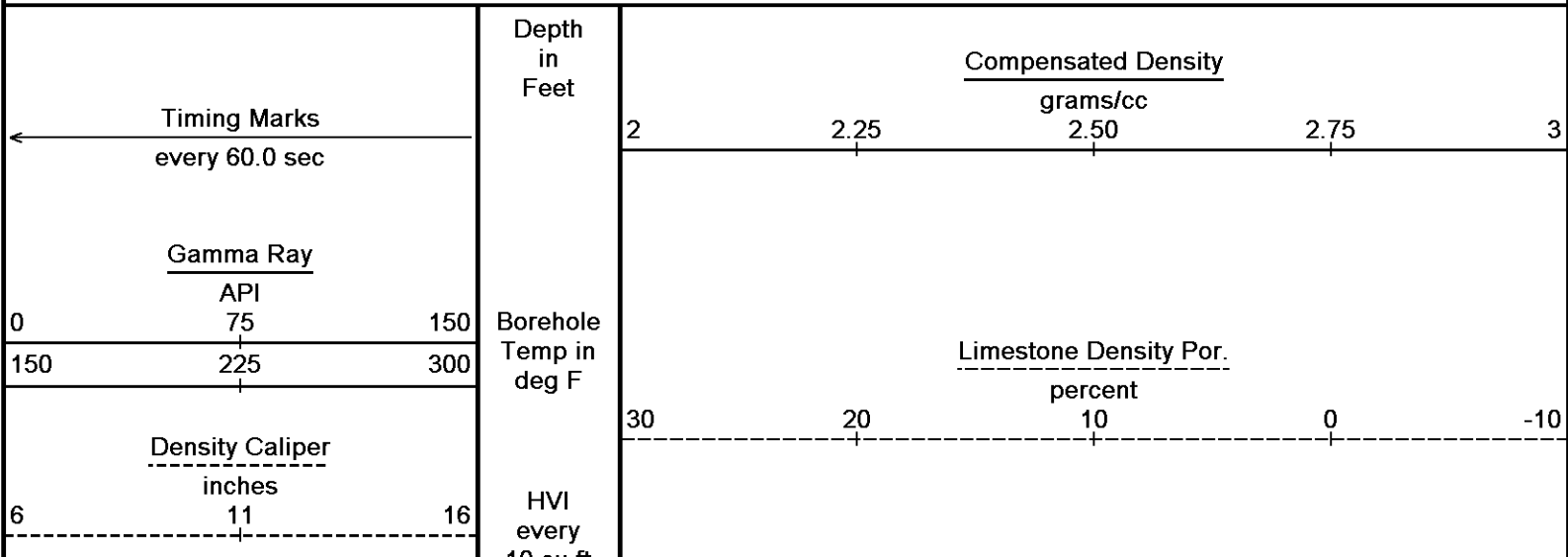
Depth Based Data - Maximum Sampling Increment 10.0cm

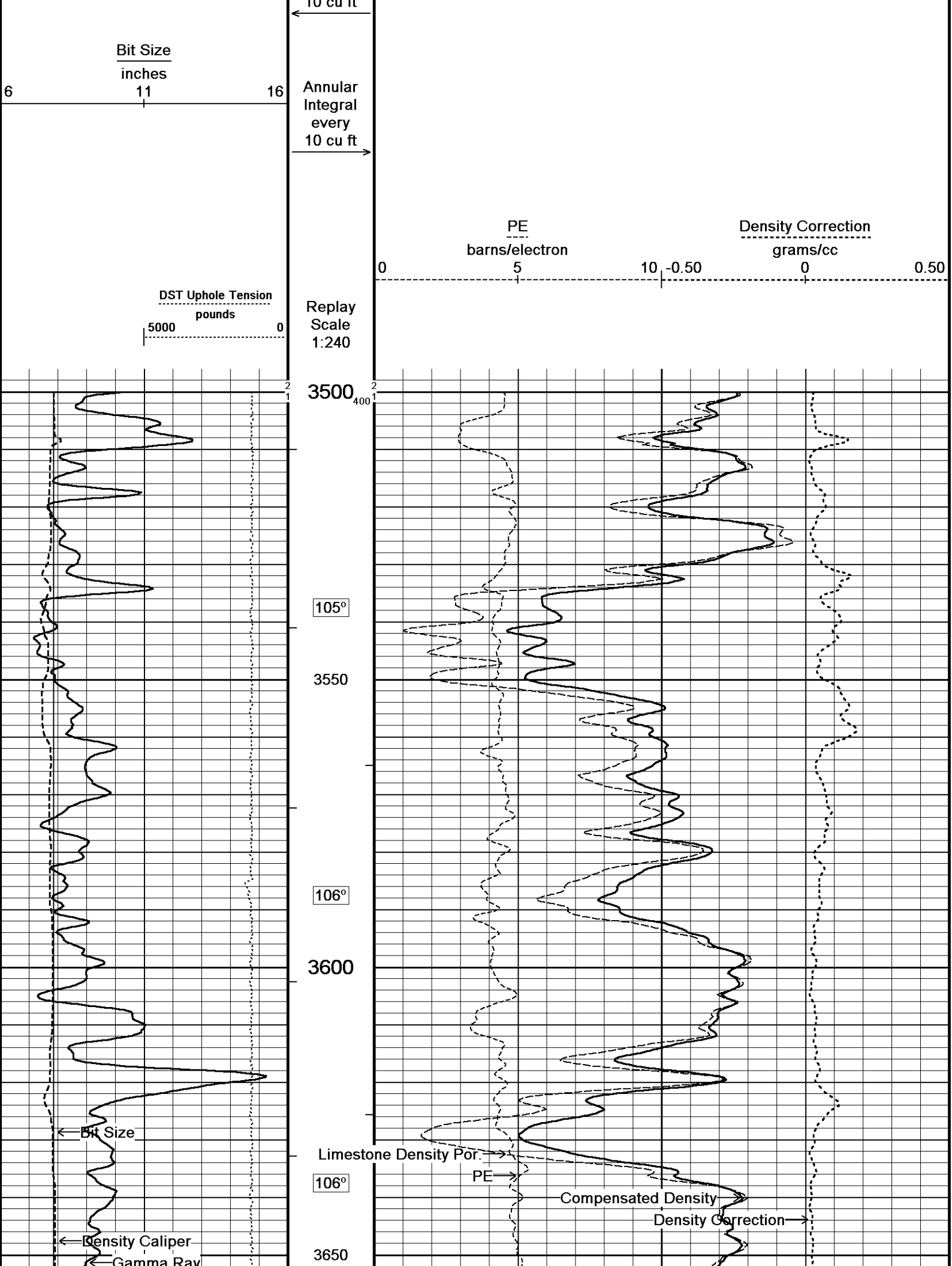
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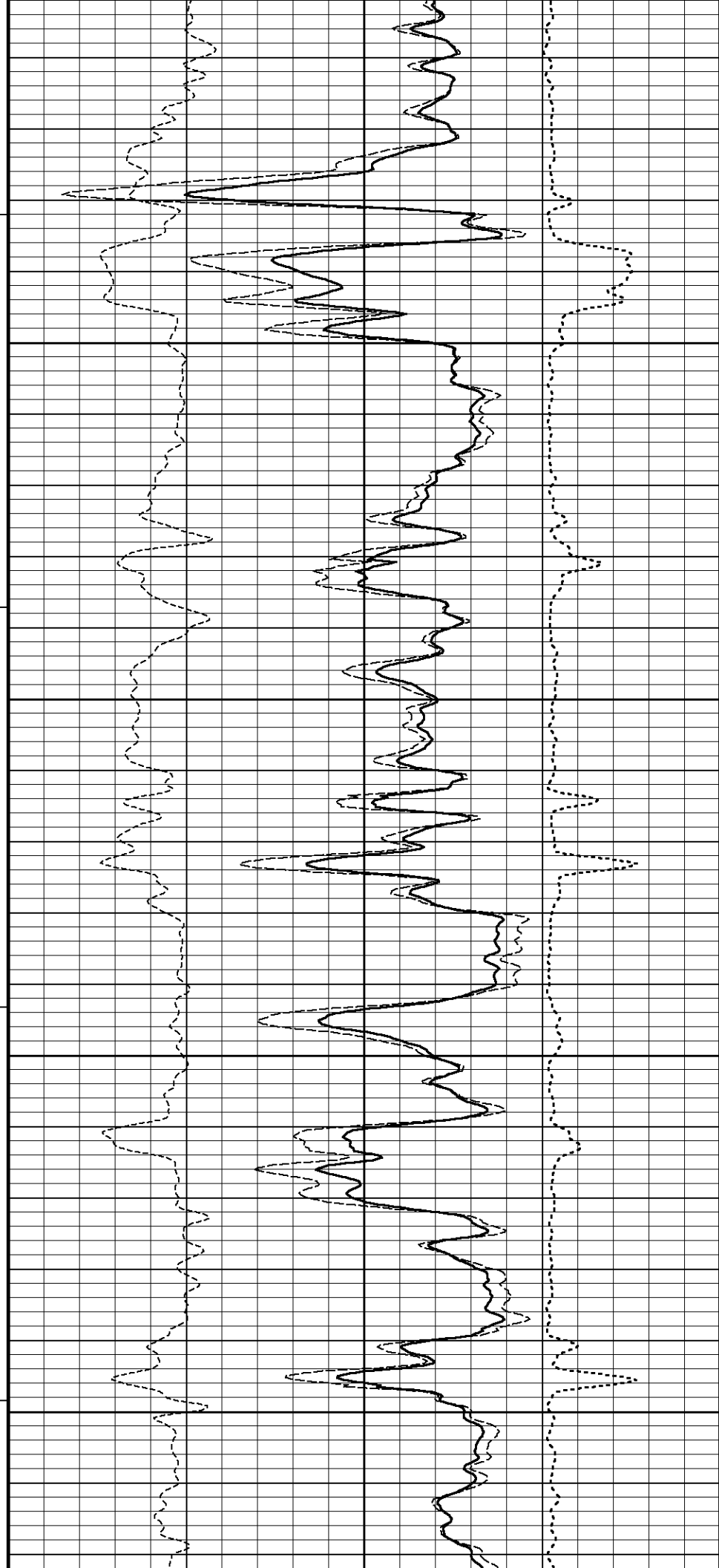
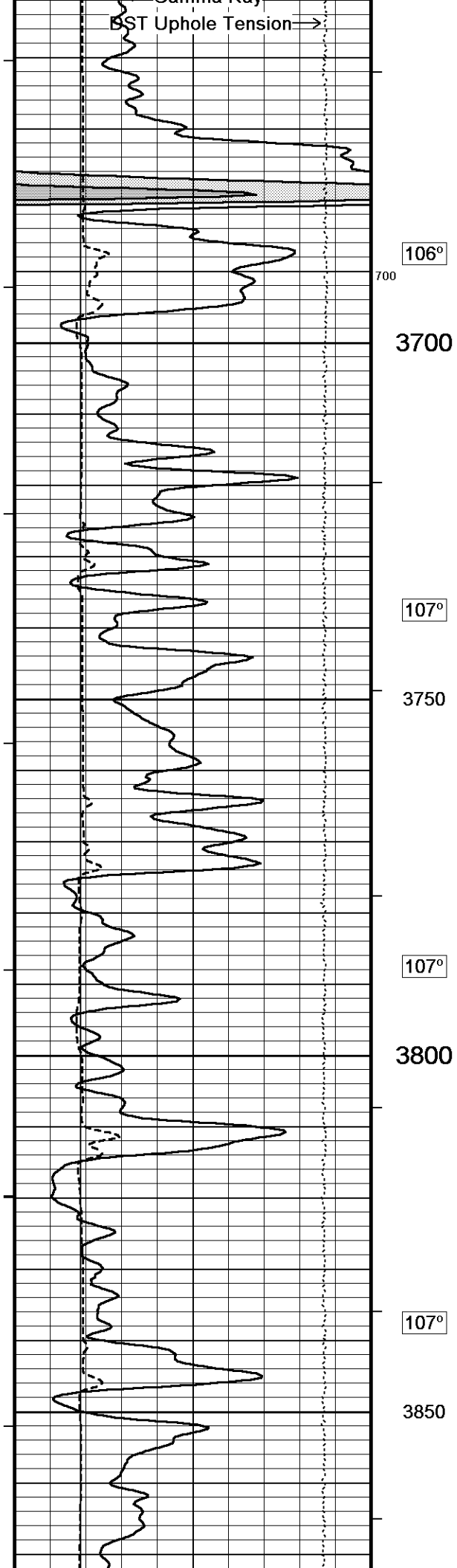
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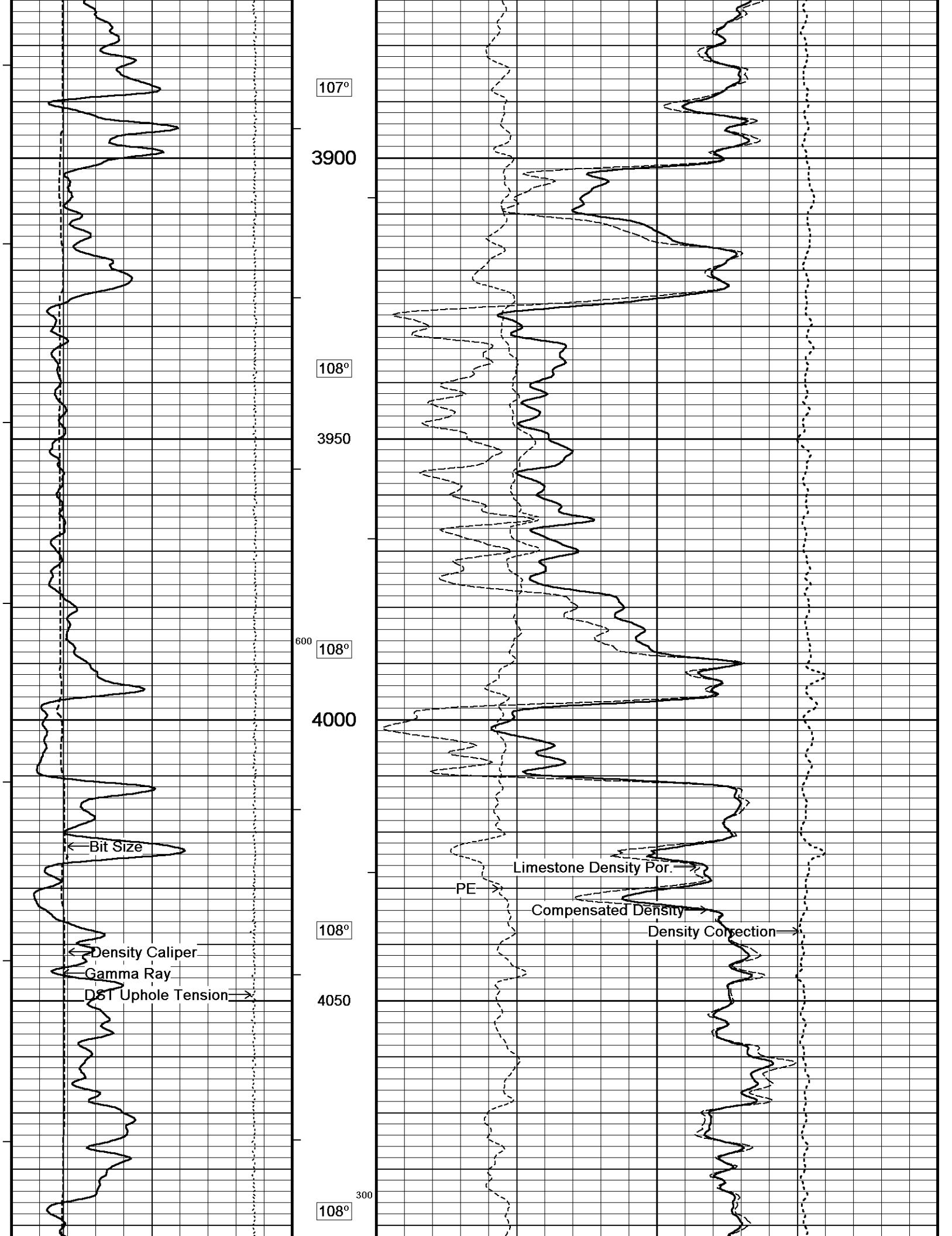
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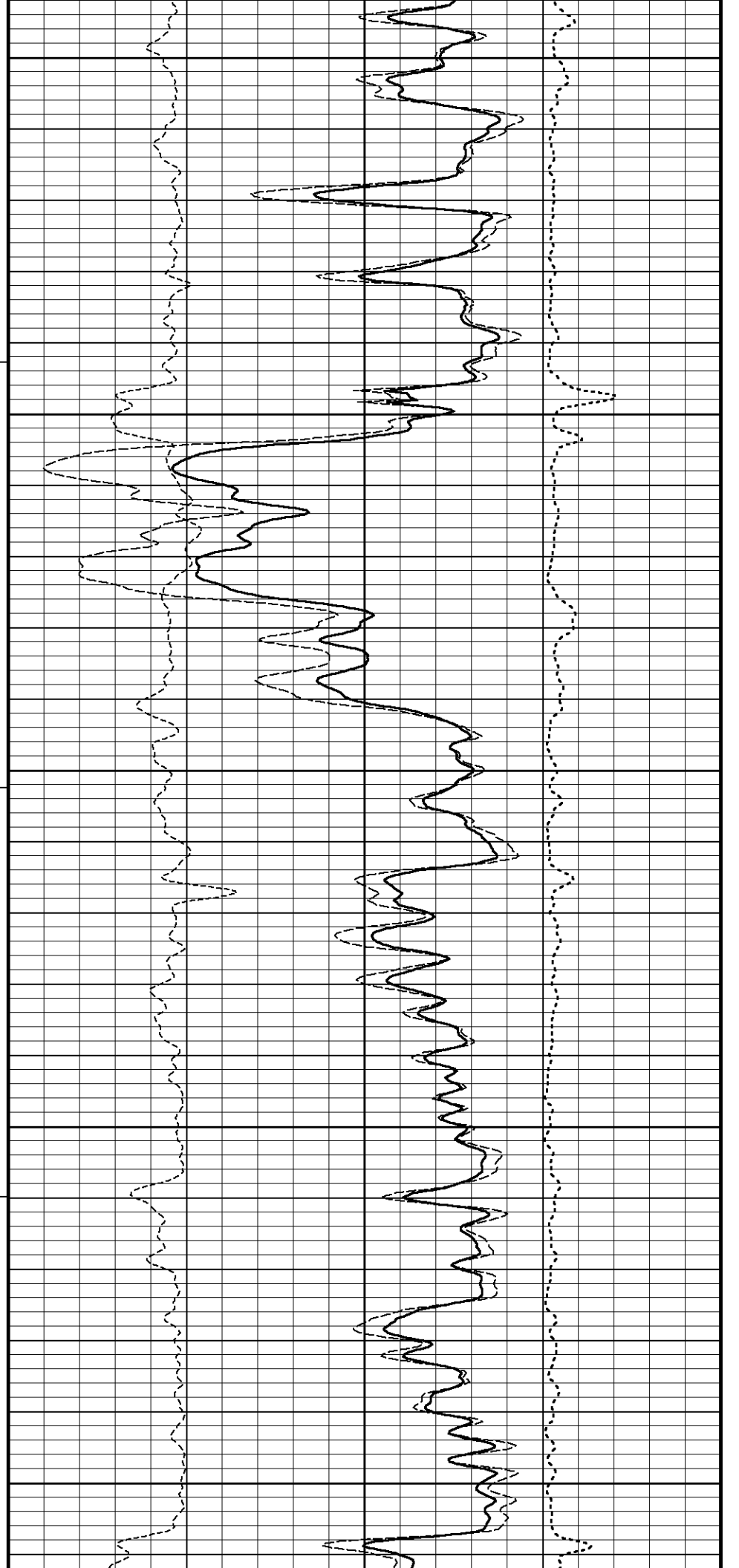
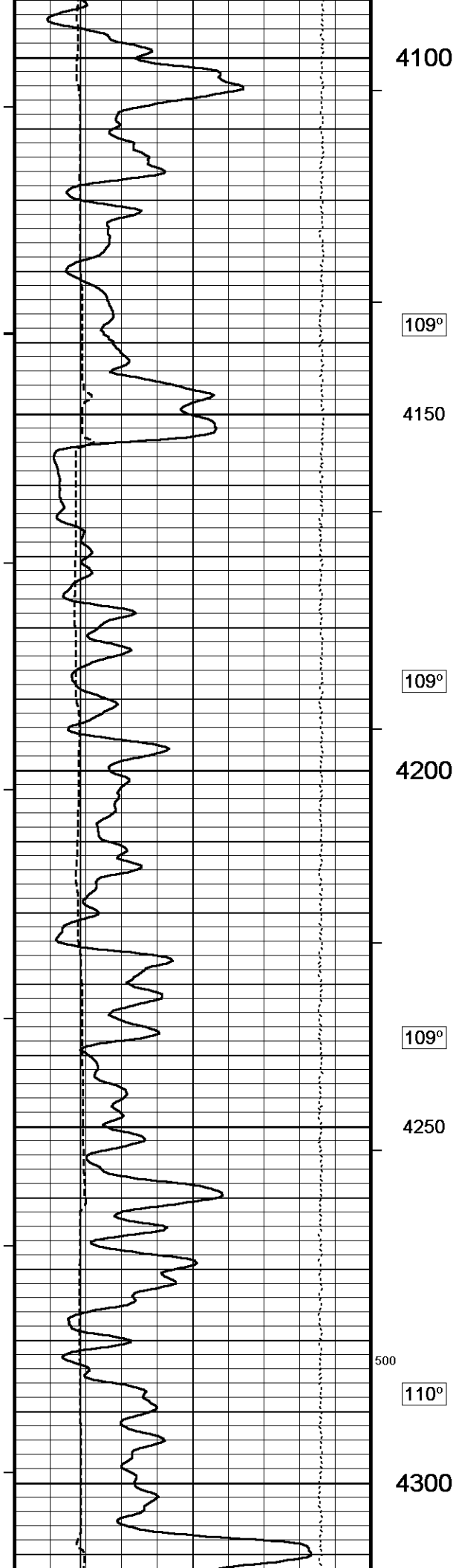
System Versions: Logged with 18.03.9344 Processed with 18.03.9344 Plotted with 18.03.9344

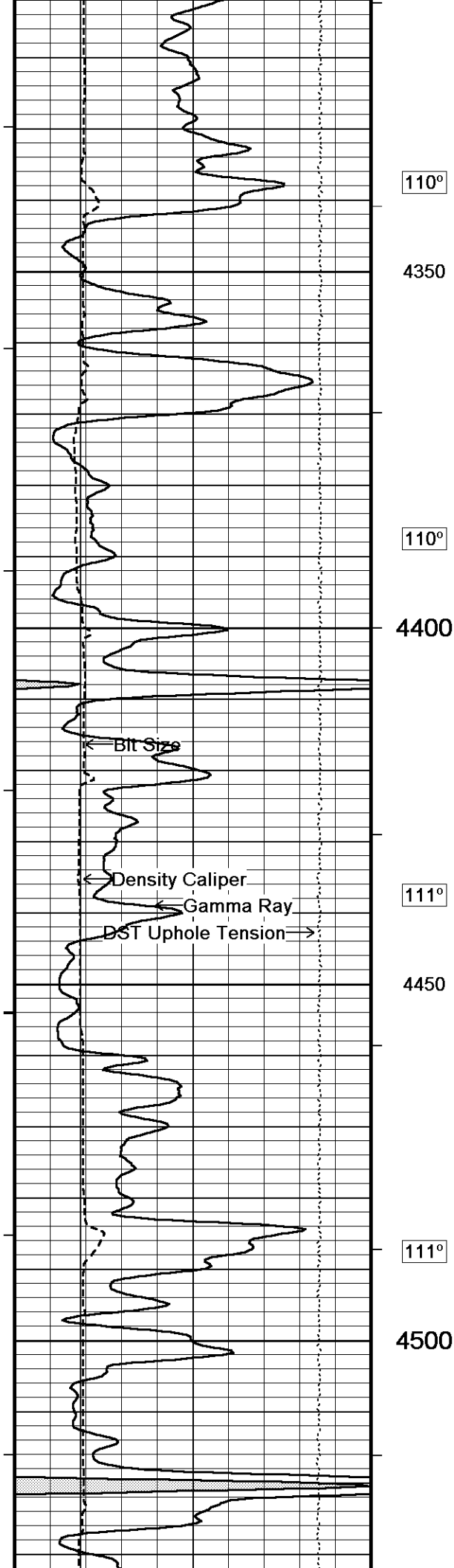












110°

4350

110°

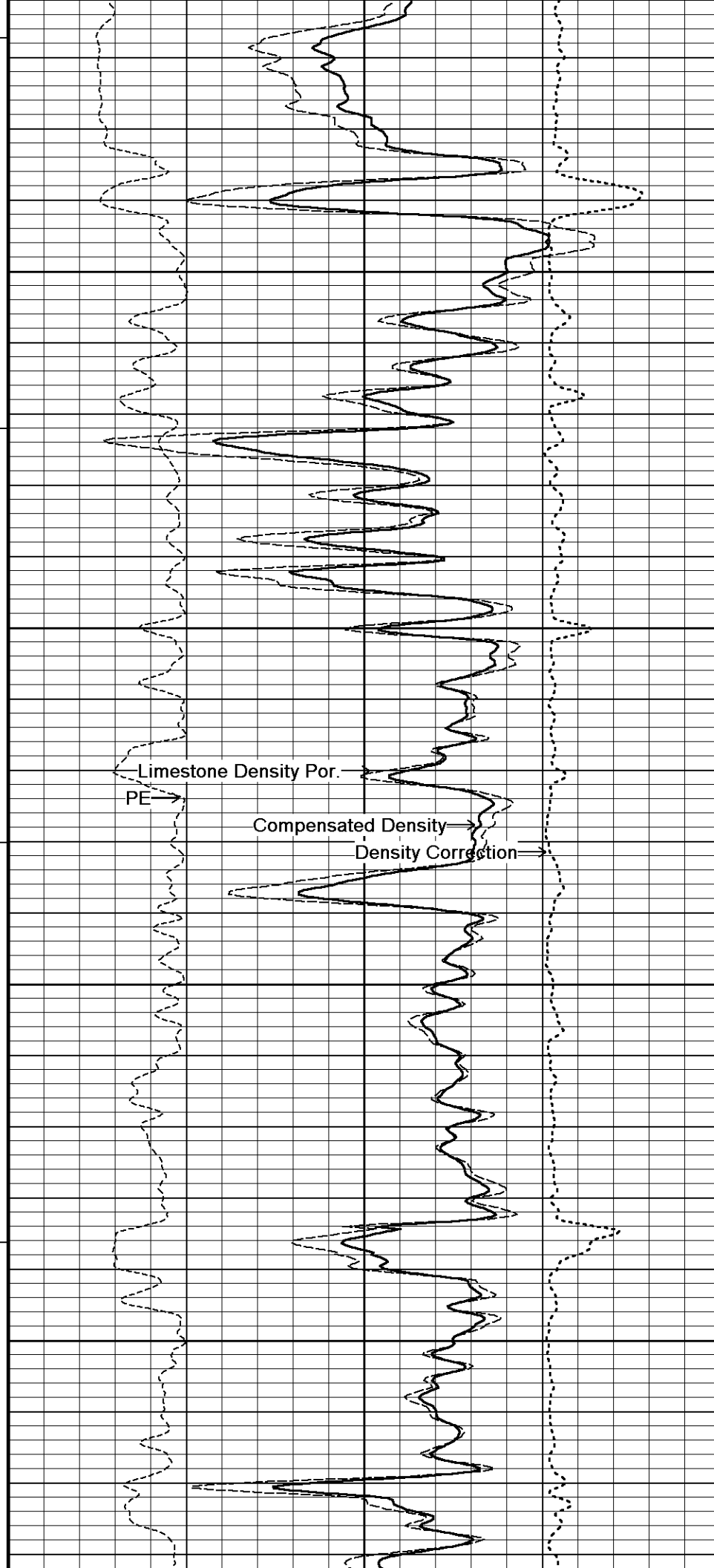
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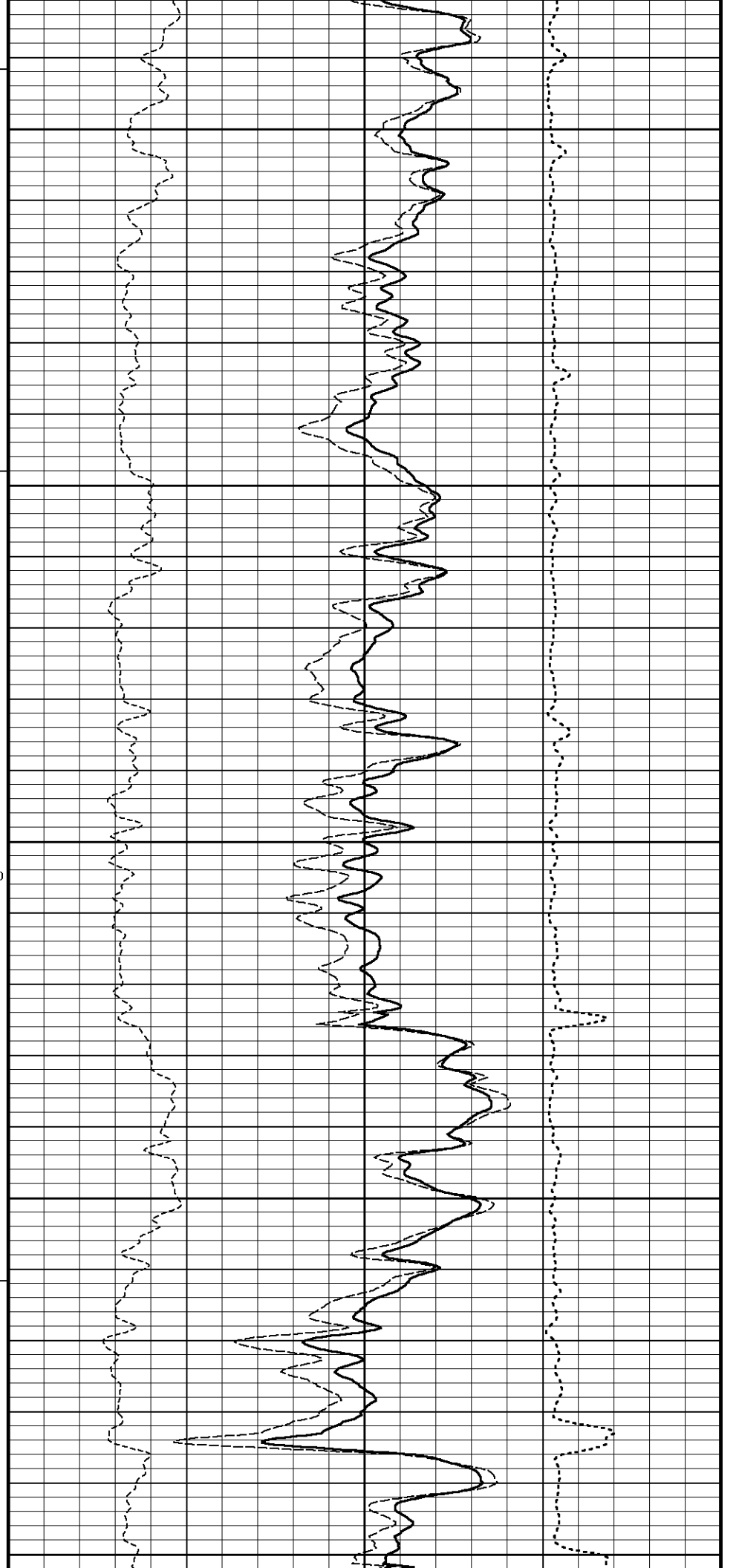
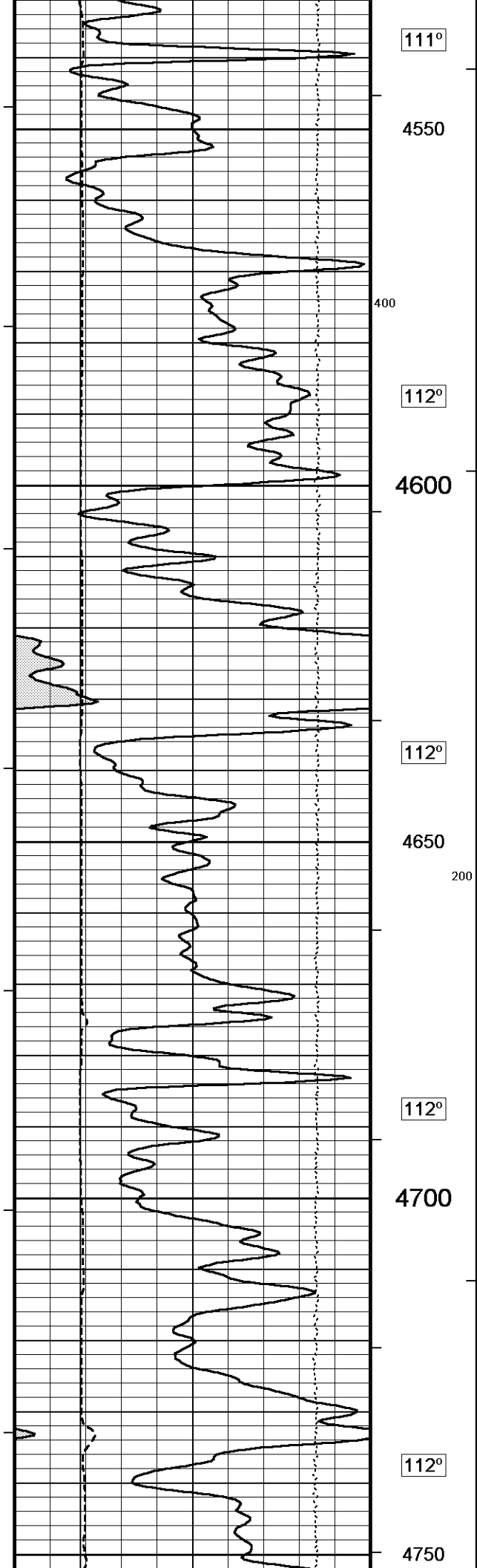
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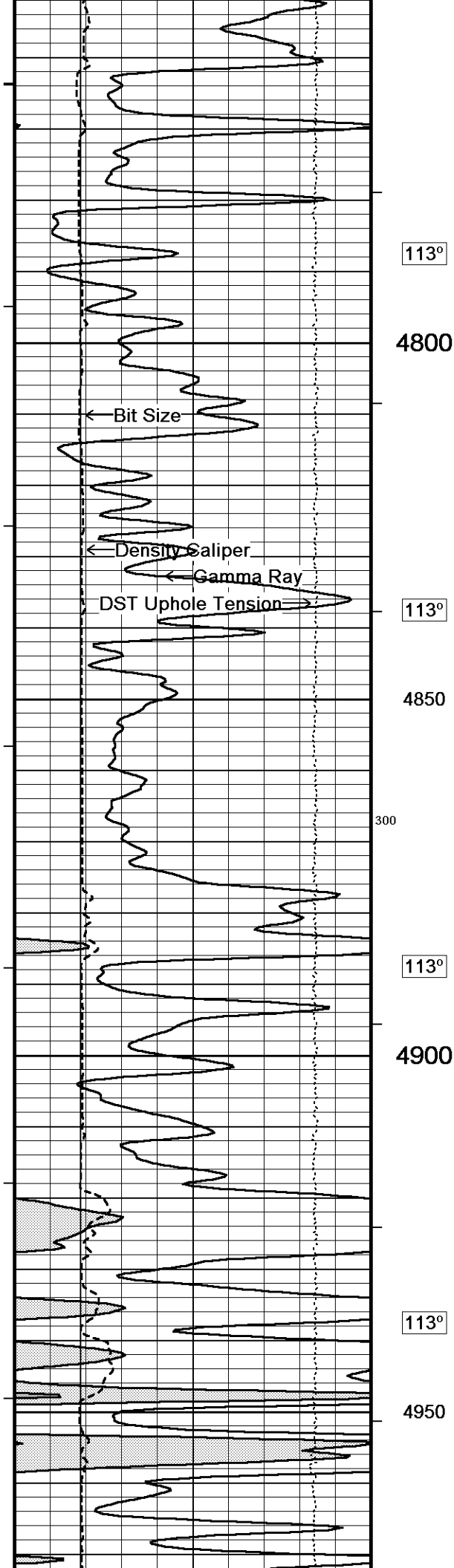
4450

111°

4500







113°

4800

113°

4850

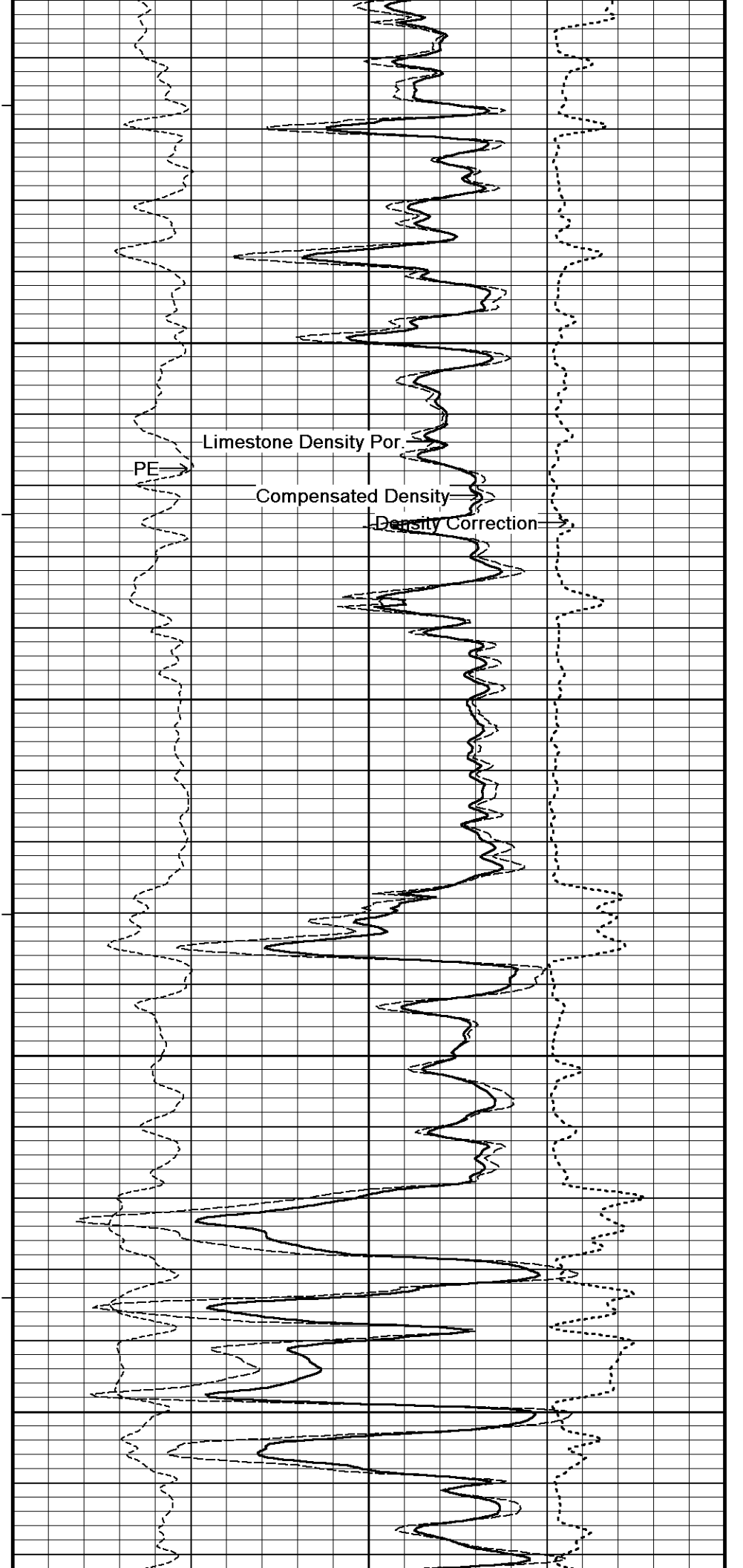
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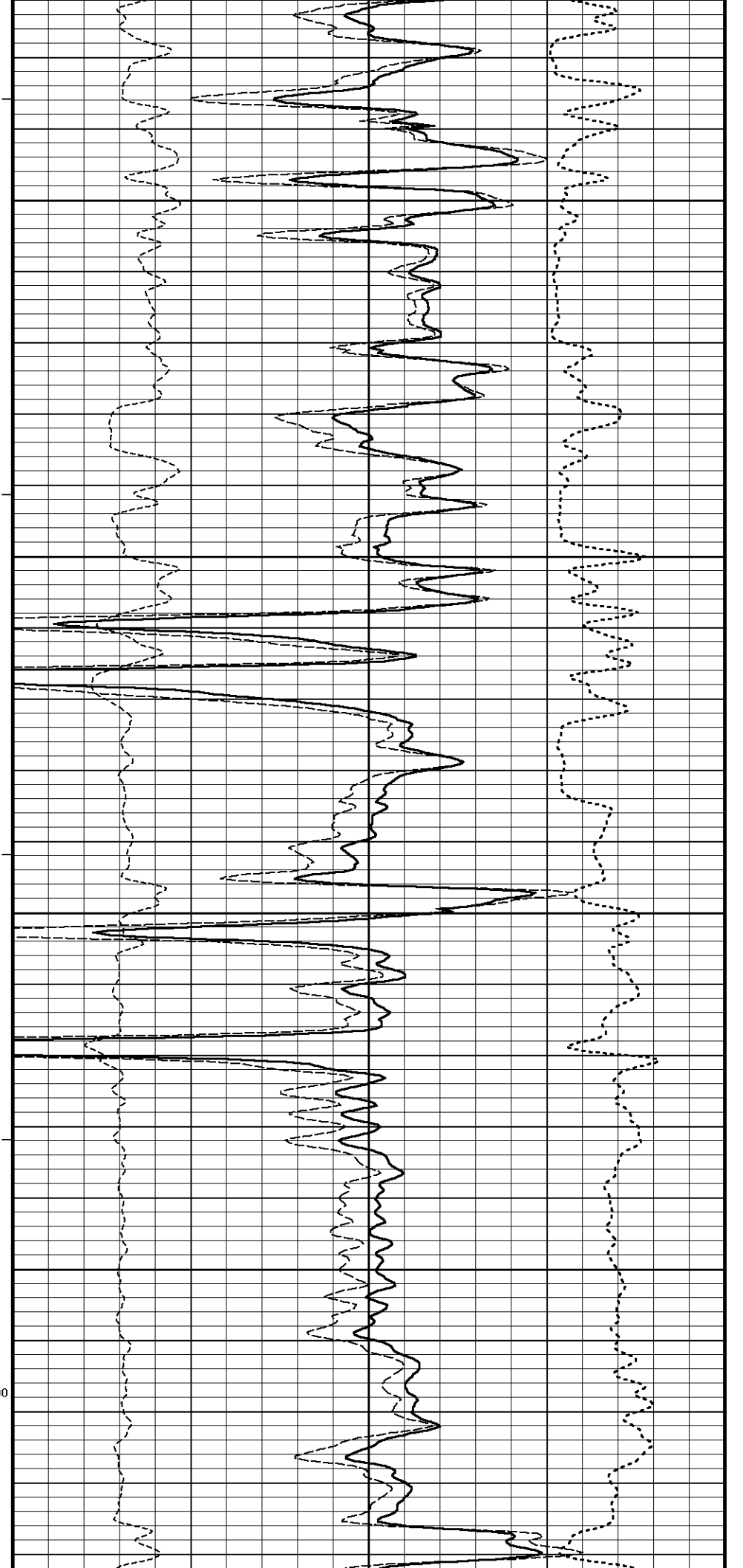
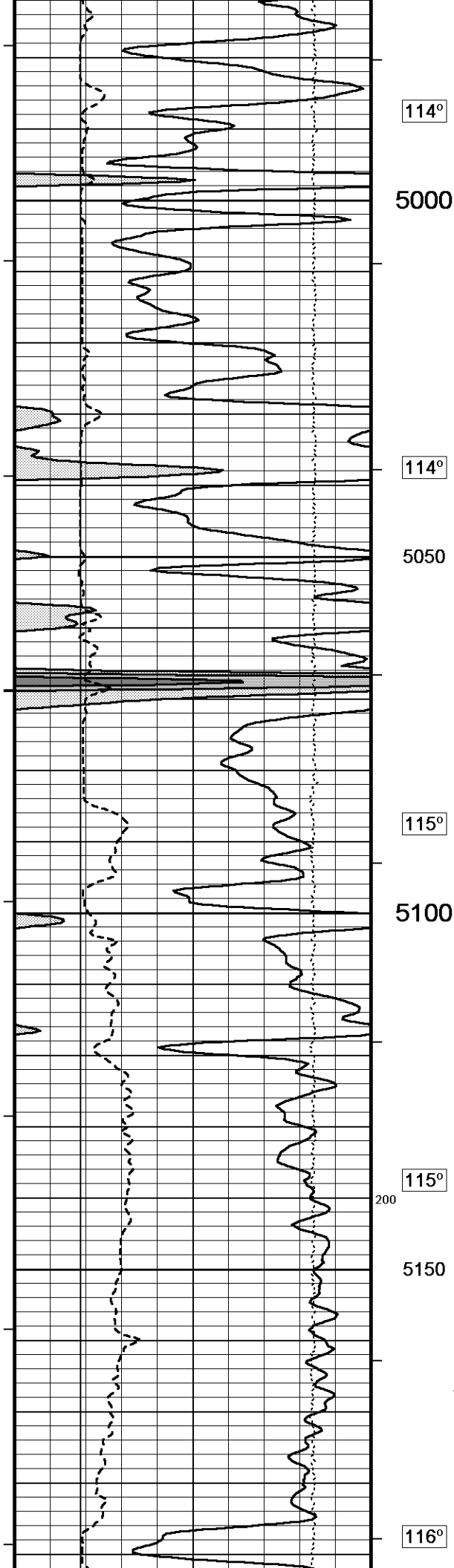
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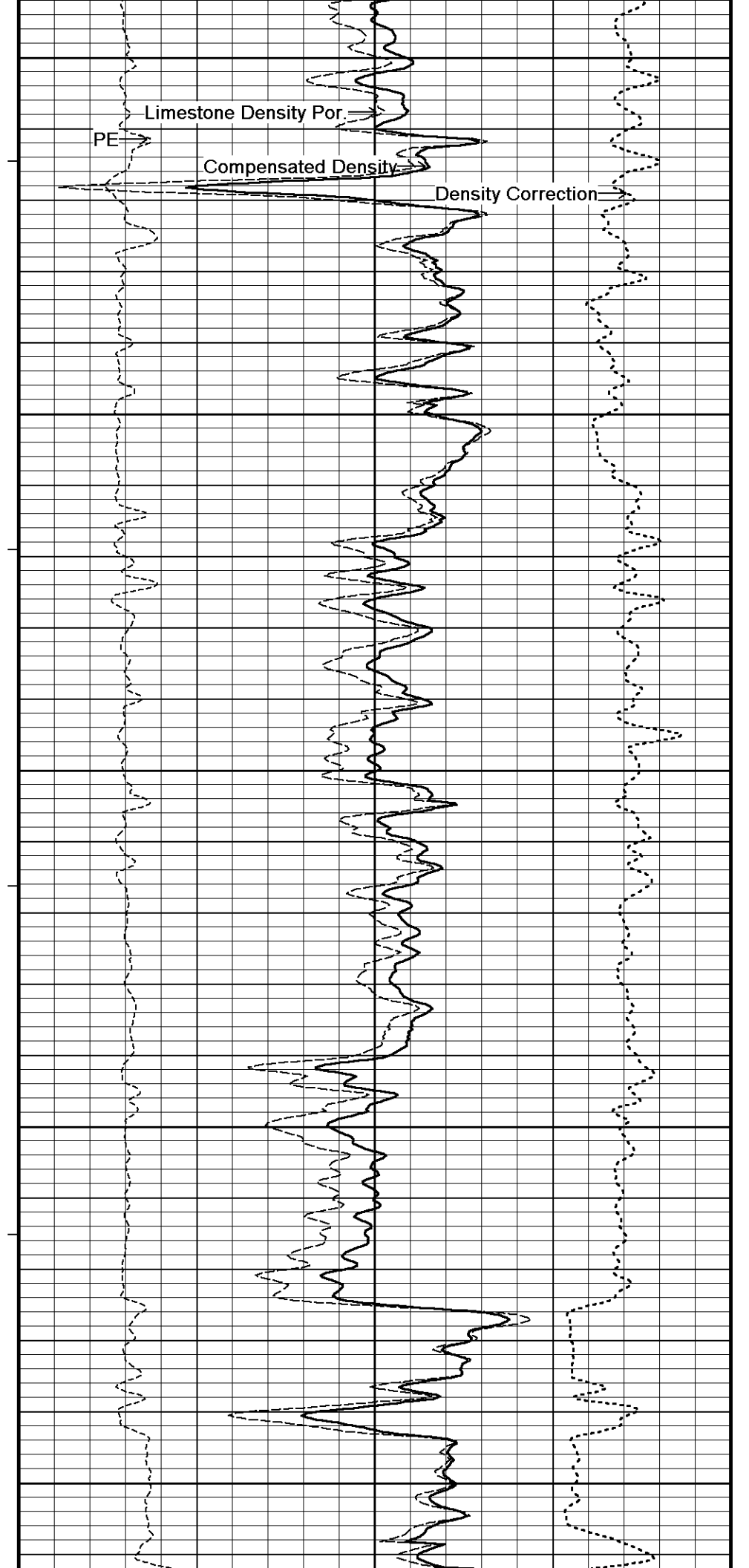
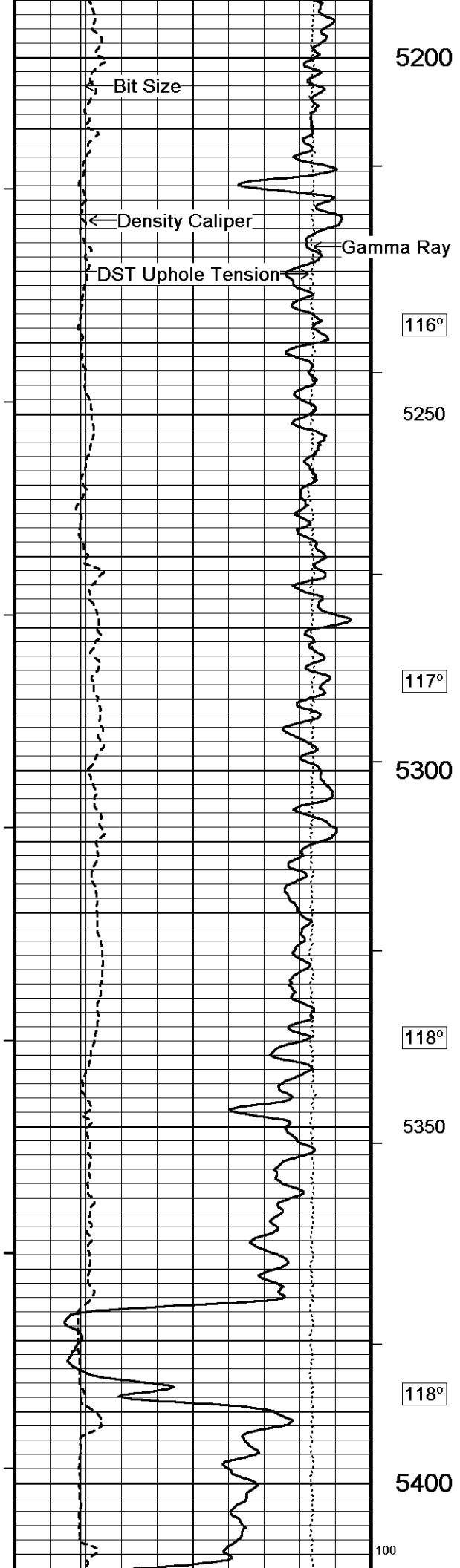
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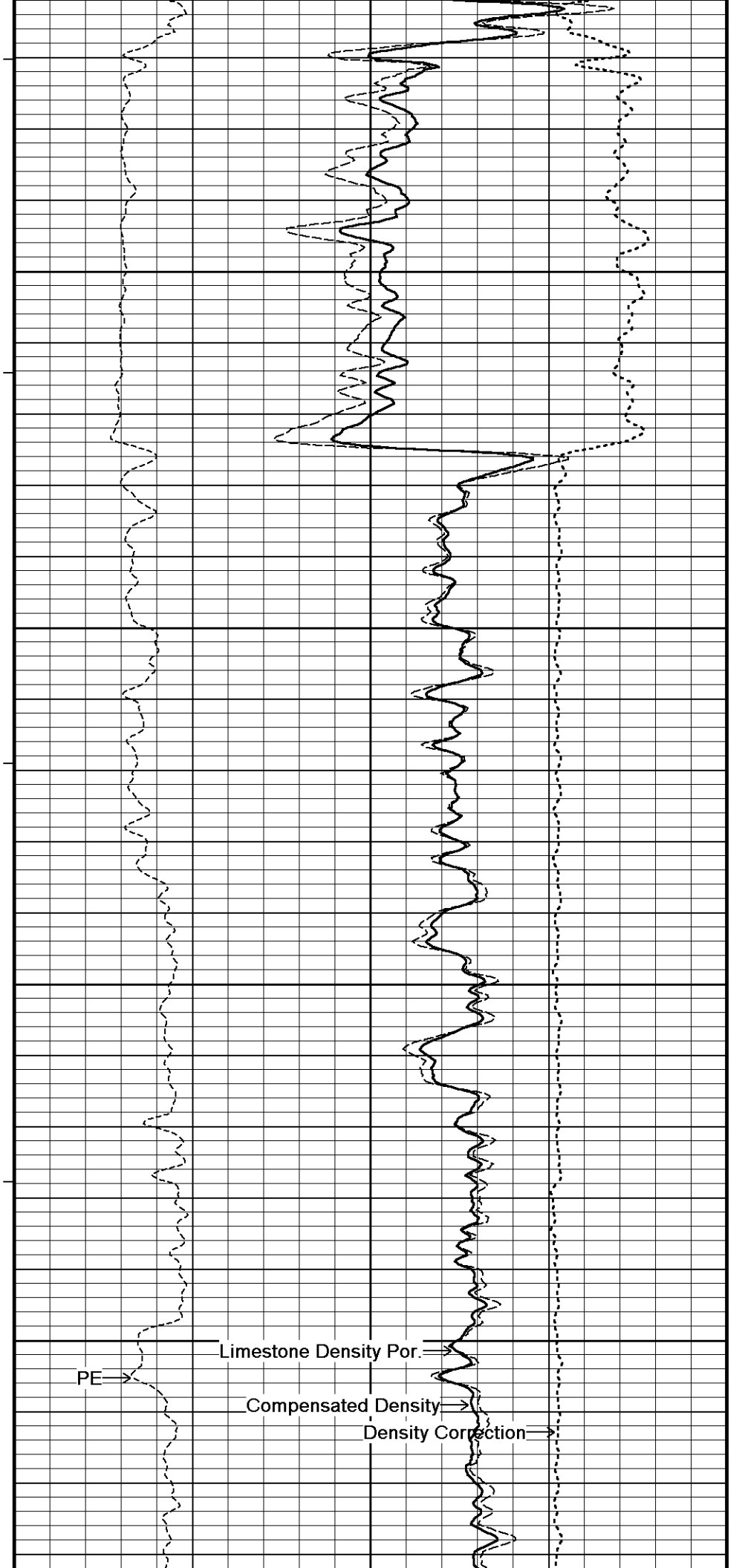
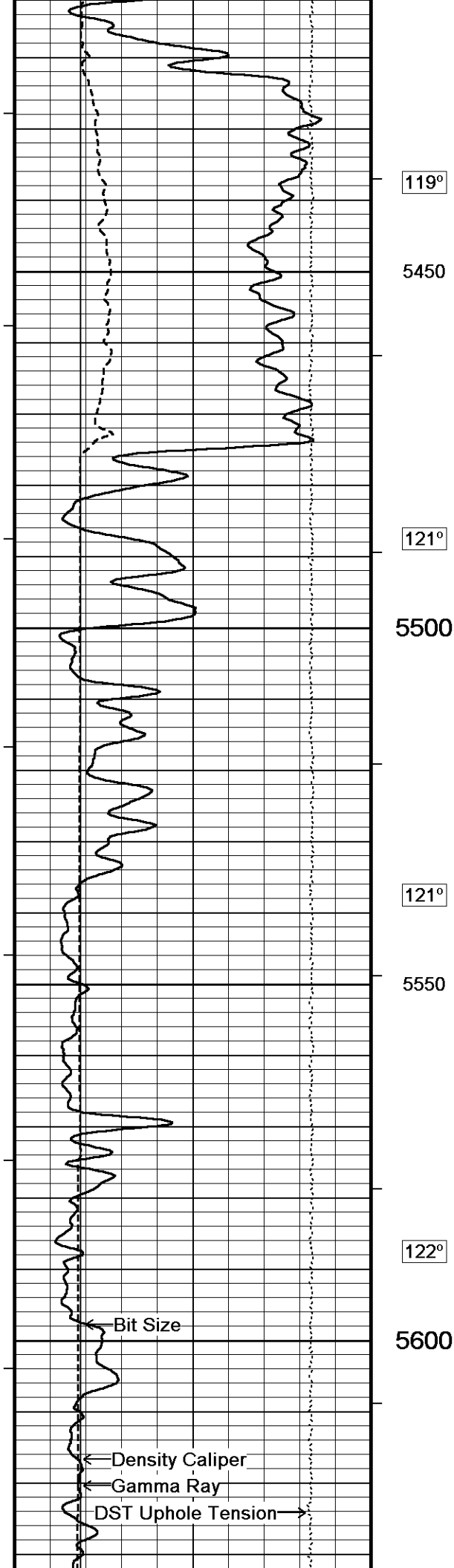
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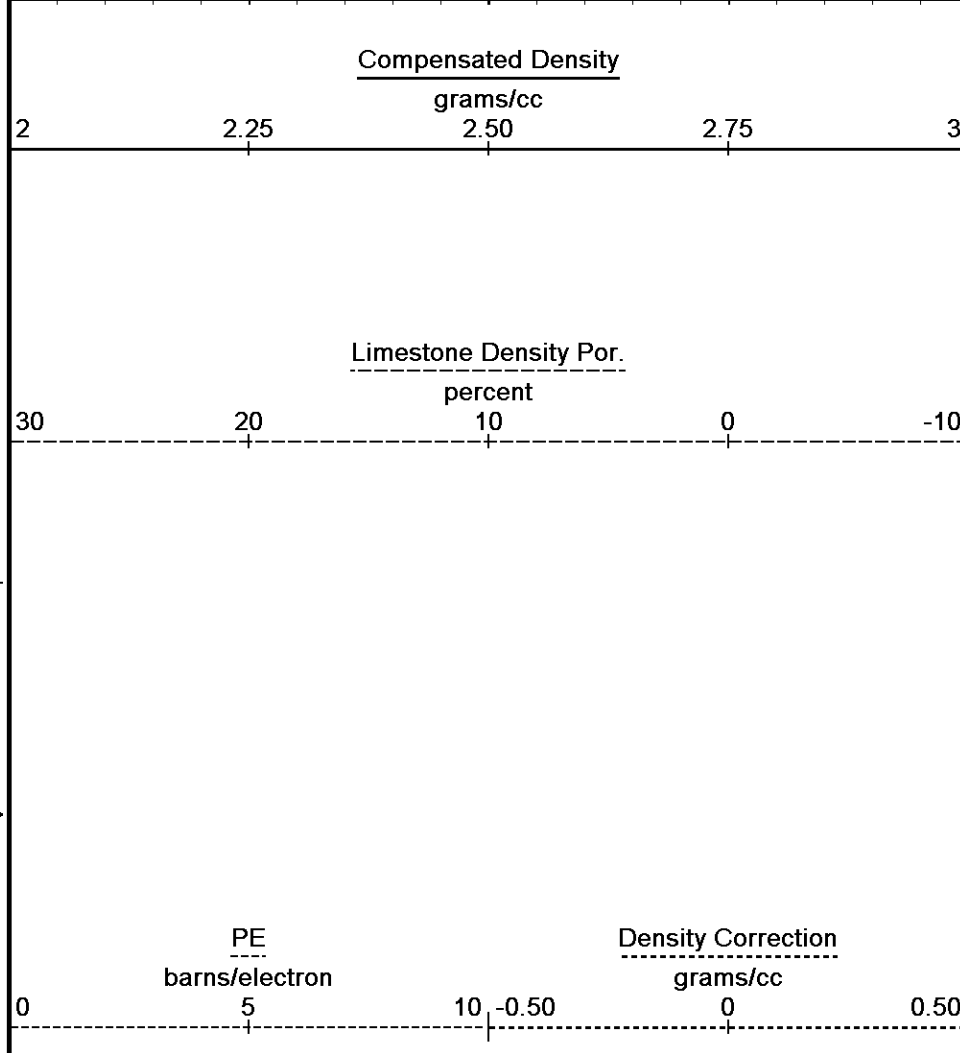
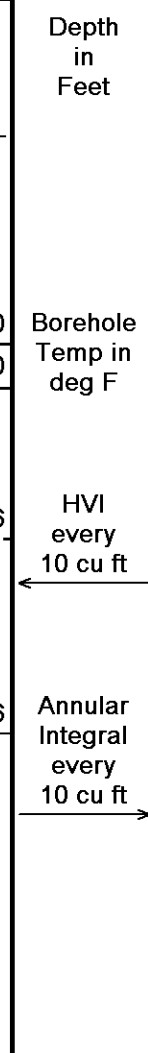
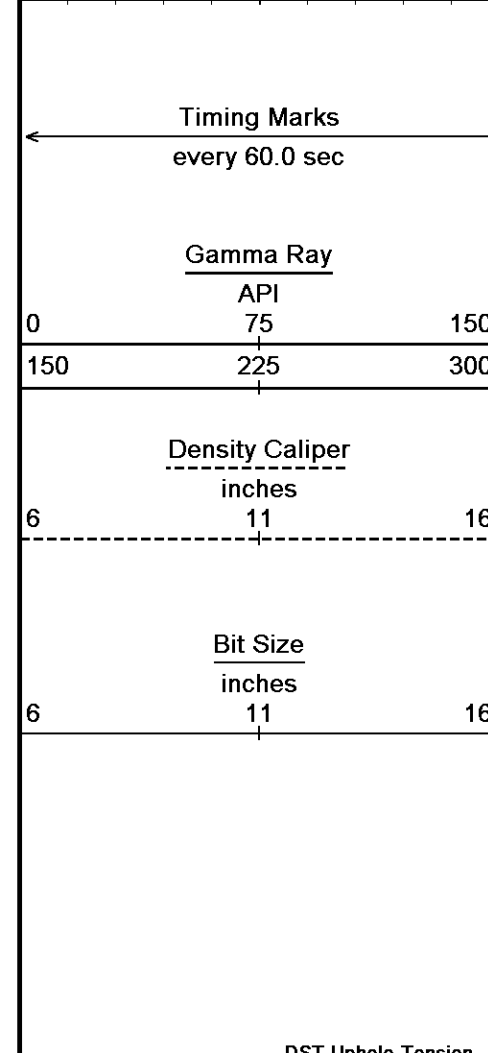
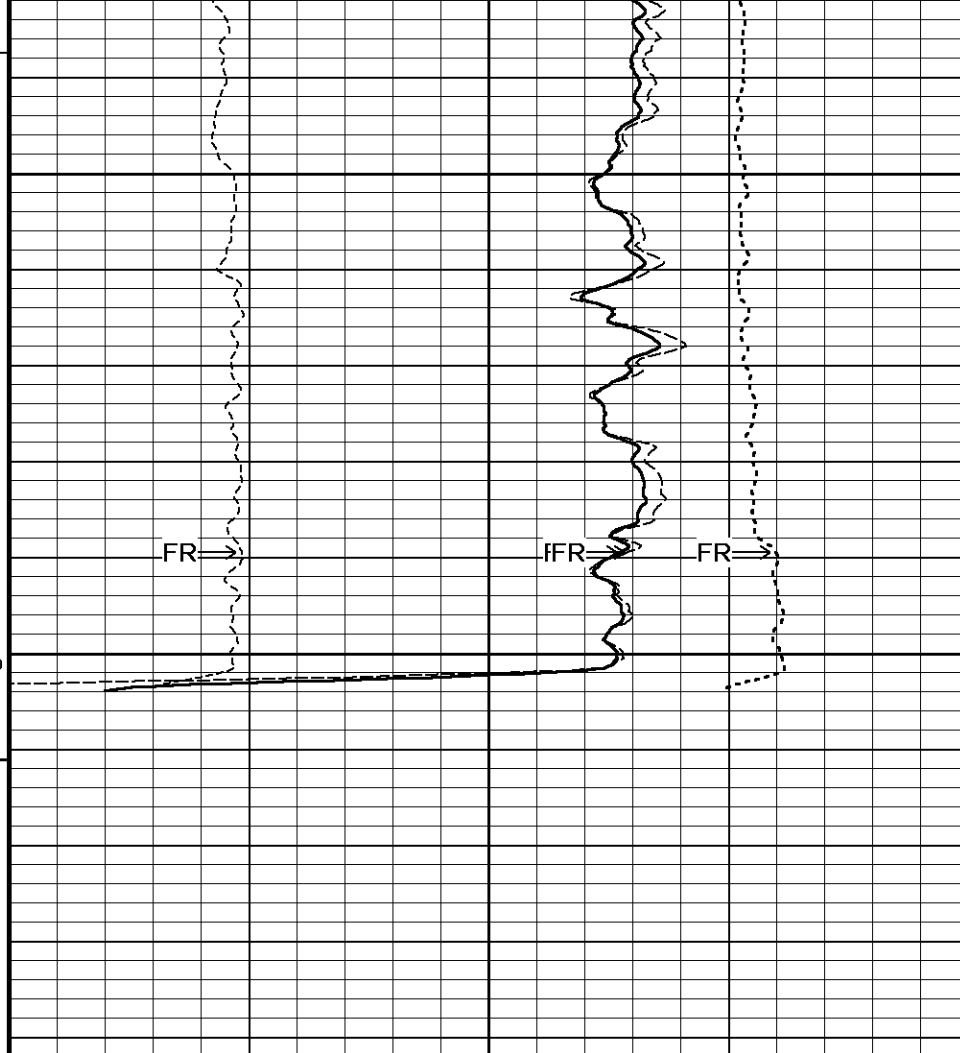
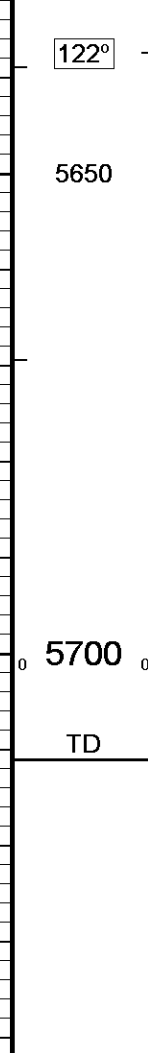
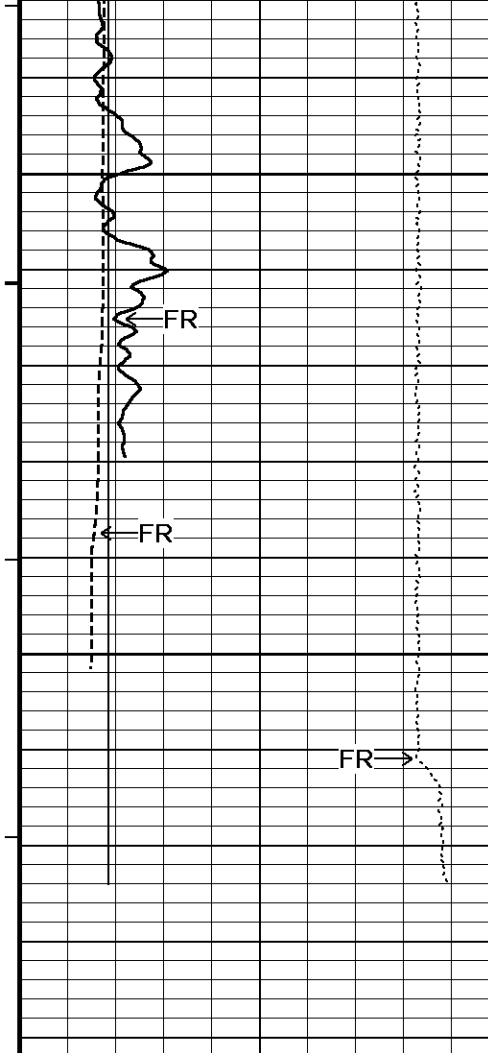
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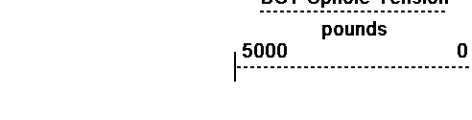












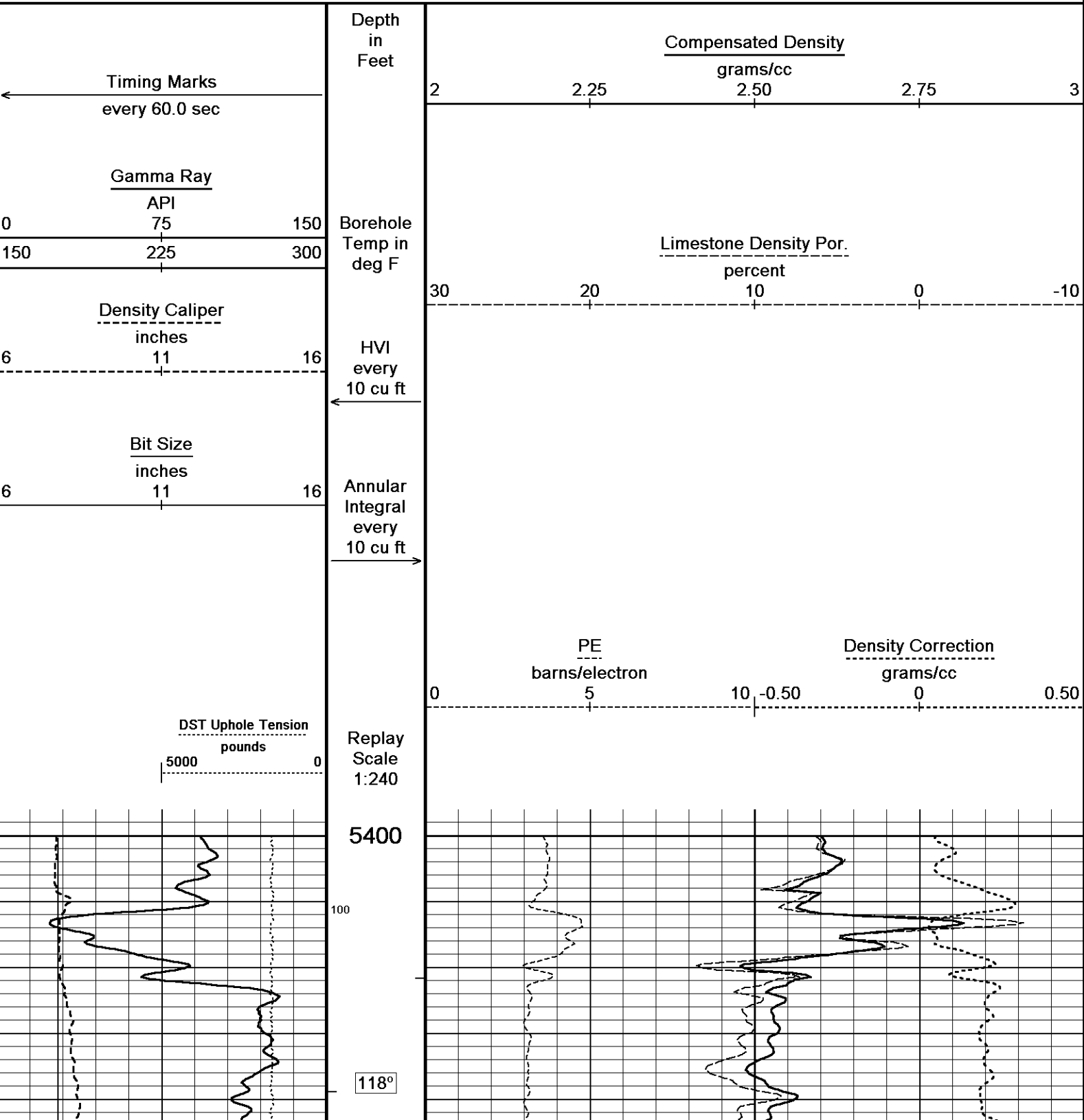
Replay
Scale
1:240

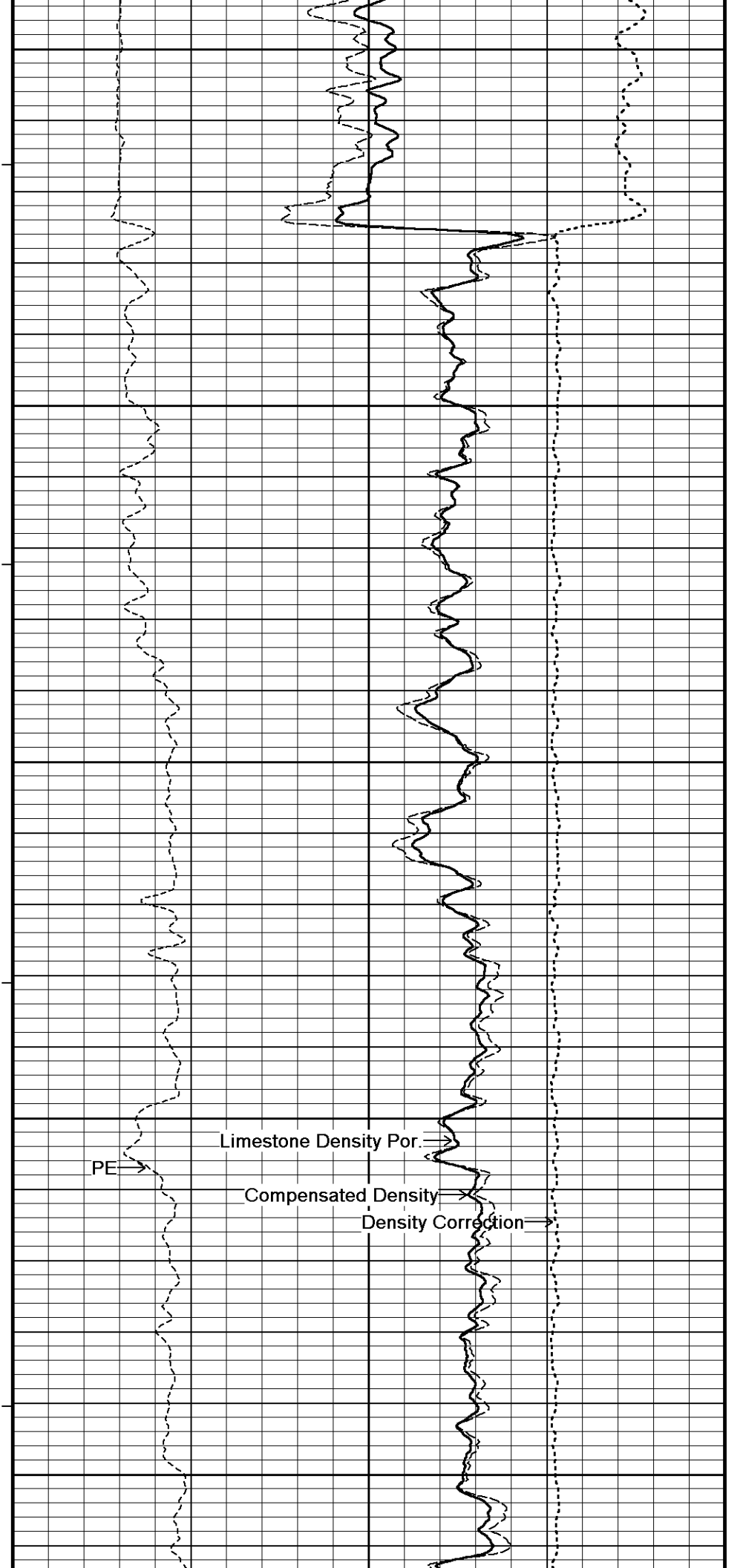
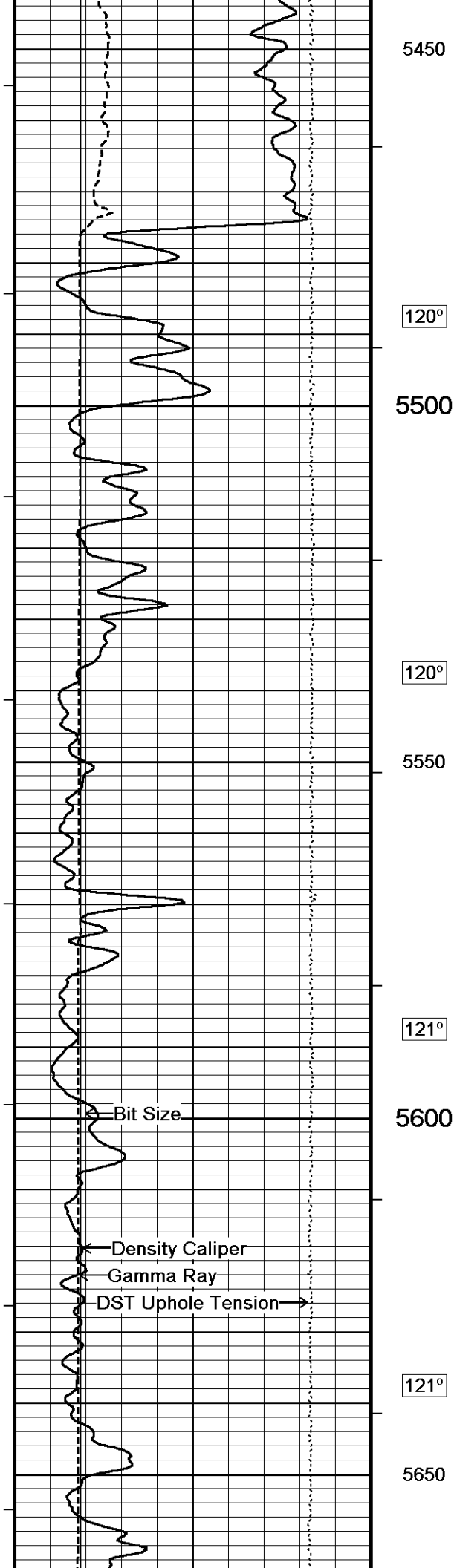
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 09-JAN-2019 09:57
Filename: C:\Minimus 18.03.9344\DATA\Western Op...\Western Operating Martin-Peterson #1_002.dta
Recorded on 09-JAN-2019 03:50
System Versions: Logged with 18.03.9344 Processed with 18.03.9344 Plotted with 18.03.9344

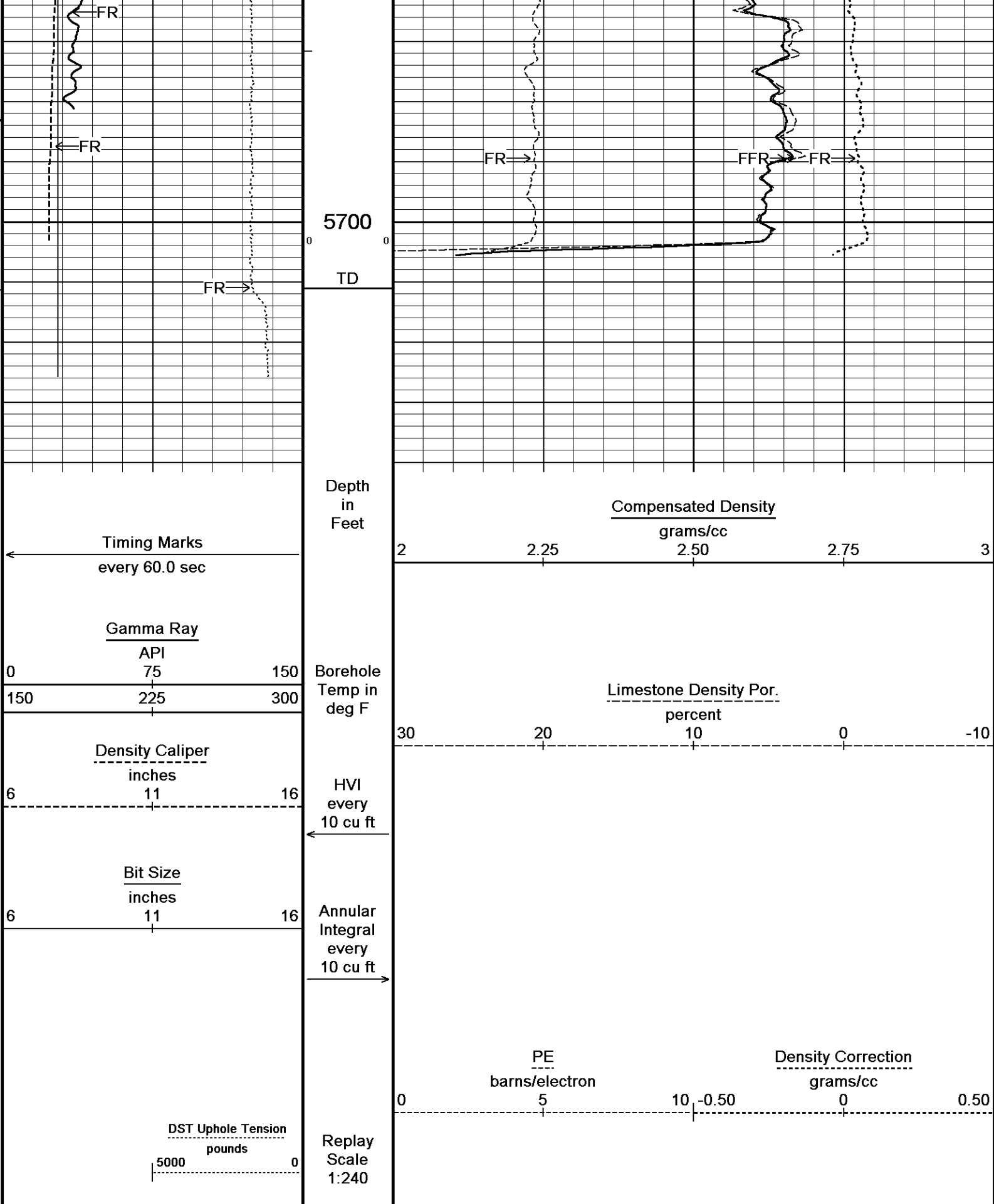
5 INCH BULK DENSITY MAIN

REPEAT SECTION

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 09-JAN-2019 09:57
Filename: C:\Minimus 18.03.9344\DATA\Western Op...\Western Operating Martin-Peterson #1_001.dta
Recorded on 09-JAN-2019 03:31
System Versions: Logged with 18.03.9344 Processed with 18.03.9344 Plotted with 18.03.9344







Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Minimus 18.03.9344\DATA\Western Op...Western Operating Martin-Peterson #1_001.dta
System Versions: Logged with 18.03.9344 Processed with 18.03.9344 Plotted with 18.03.9344
Plotted on 09-JAN-2019 09:57
Recorded on 09-JAN-2019 03:31

BEFORE SURVEY CALIBRATION

C:\Minimus 18.03.9344\DATA\Western Operating Martin-Peterson #1\Western Operating Martin-Peterson #1_001.dta

General Constants All 000

Last Edited on 09-JAN-2019,03:06

General Parameters

Mud Resistivity	1.860	ohm-metres
Mud Resistivity Temperature	75.000	degrees F
Water Level	0.000	feet
Borehole Fluid 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	Crossplot Porosity
Resistivity used	Array Ind. Two Res Rt
RWA Constant A	0.620
RWA Constant M	2.150
SW/APOR Tool Source	0.000

Down-hole Tension Calibration SMS 0

Field Calibration on 09-JAN-2019 02:34

Reading No	Measured	Calibrated (lbs)
1	15386.85	0.00
2	16599.47	454.00

SP Calibration MCG-D.K 443

Field Calibration on 10-DEC-2018 15:37

	Measured	Calibrated (mV)
Reference 1	100.8	99.9
Reference 2	-98.4	-99.9

High Resolution Temperature Calibration MCG-D.K 443

Field Calibration on 12-OCT-2018,05:20

	Measured	Calibrated(Deg F)
Lower	50.00	50.00
Upper	212.00	212.00

High Resolution Temperature Constants MCG-D.K 443

Last Edited on 12-OCT-2018,05:20

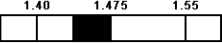
Pre-filter Length	11
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Gamma Calibration MCG-D.K 443

Field Calibration on 08-JAN-2019 22:15

	Measured	Calibrated (API)
Background	120	84
Calibrator (Gross)	774	540
Calibrator (Net)	654	456

Gamma Calibration Tolerances MCG-D.K 443

Ratio	1.435		Counts/API
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Gamma Constants MCG-D.K 443

Last Edited on 09-JAN-2019,01:30

Gamma Calibrator Number	MCGGRCC141	
GRC-M Calibrator Jig in Use?	NO	
Inactive Background Jig in Use?	NO	
Mud Density	1.10	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Potassium Equivalence	Chloride	
K Mud Concentration	0.00	%

Micro Normal and Micro Inverse Calibration MMR-B.A 91

Base Calibration on 07-JAN-2019,11:11

Field Check on 08-JAN-2019 21:53

Resistor 1 (ohm)	Resistor 2 (ohm)
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Base Calibration

		Measured	Calibrated (ohm-m)	
Micro Normal	10.4	49.9	5.1	25.6
Micro Inverse	9.9	49.4	3.4	16.9

Channel	Base Check (ohm-m)	Field Check (ohm-m)
Micro Normal	93.9	93.9
Micro Inverse	62.3	62.3

Micro Normal & Micro Inverse Calibration Tolerance MMR-B.A 91

Micro Normal Res. 1	10.4		ohm	Micro Normal Res. 2	49.9		ohm
Micro Inverse Res. 1	9.9		ohm	Micro Inverse Res. 2	49.4		ohm
Micro Normal Base Check	93.9		ohm-m				
Micro Inverse Base Check	62.3		ohm-m				
Micro Normal Field Check	93.9		ohm-m				
Micro Inverse Field Check	62.3		ohm-m				

Micro Normal and Micro Inverse Constants MMR-B.A 91

Last Edited on 13-APR-2018,05:04

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	0.0000 inches

Caliper Calibration MMR-B.A 91

Base Calibration on 07-JAN-2019,11:07
Field Calibration on 08-JAN-2019 21:51

Base Calibration		
Reading No	Measured	Calibrator Size (in)
1	14099	5.98
2	17485	7.97
3	20790	9.86
4	24525	11.92
5	0	0.00
6	N/A	N/A
Field Calibration		
	Measured Caliper (in)	Actual Caliper (in)
	7.94	7.97

Caliper Calibration Tolerances MMR-B.A 91

Short Arm Field Cal.	7.94		in
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Micro-Resistivity Caliper Constants MMR-B.A 91

Sonde Configuration	Resistivity Mode
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Micro Laterolog Calibration MMR-B.A 91

Base Calibration on 31-DEC-1999 00:00
Field Check on 31-DEC-1999 00:00

	Resistor 1 (ohm)	Resistor 2 (ohm)
	0.0	0.0
Base Calibration		
	Measured	Calibrated (ohm-m)
	Ref 1 Ref 2	Ref 1 Ref 2
	0.0 0.0	0.0 0.0
	Base Check (ohm-m)	Field Check (ohm-m)
	0.0	0.0

Micro Laterolog Constants MMR-B.A 91

Pad Type	6 in Solid Nylon B23059
Standoff Offset	0.0000 inches
Micro Laterolog K Factor	0.0128
Micro Laterolog Rm K Factor	N/A

Mudcake Thickness Correction Constants

Mud Cake Source	Constant Value	
Mud Cake Thickness	0.4000	inches
Mud Cake Thickness Caliper		
Mud Cake Resistivity	0.1500	ohm-m
Mud Cake Resistivity Temp.	20.00	Degrees C
Mud Cake Resistivity Source	Constant Value	
Temp. for Rmc Corr.	MCG External Temperature	

Neutron Calibration MDN-B.A 292

Base Calibration on 07-JAN-2019,13:23

Field Check on 08-JAN-2019 22:00

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
	2910	91	3714	110
Ratio	31.871		33.764	

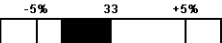
Field Calibrator at Base

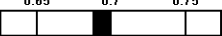
	Calibrated (cps)	
	2207	3209
Ratio	0.688	

Field Check

	Calibrated (cps)	
	2239	3227
Ratio	0.694	

Neutron Calibration Tolerances MDN-B.A 292

Ratio	31.871	
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Base Check	0.688	
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Field Check	0.694	
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Neutron Constants MDN-B.A 292

Last Edited on 08-JAN-2019,21:53

Neutron Source Id	P0204NN	
Neutron Jig Number	NJ5736	
Air Hole Processing	Legacy	
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
Salinity Correction	Not Applied	
Formation Fluid Salinity Source	None	
Formation Fluid Salinity	N/A	kppm
Barite Mud Correction	Not Applied	

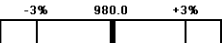
FE Calibration MFE-B.J 352

Base Calibration on 07-JAN-2019,10:39

Field Check on 08-JAN-2019 21:40

	Resistor 1 (ohm)	Resistor 2 (ohm)
	0.0	1000.0
Base Calibration		
	Measured	Calibrated (ohm-m)
Reference 1	0.0	0.0
Reference 2	982.1	126.8
Base Check		276.0
Field Check		276.0

FE Calibration Tolerances MFE-B.J 352

Reference 2	982.1		ohm
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Base Check 276.0

-2%

277.0

+2%

 ohm-m

Field Check 276.0

-2%

276.0

+2%

 ohm-m

FE Constants MFE-B.J 352

Last Edited on 08-JAN-2019,21:39

Running Mode No Sleeve
MFE K Factor 0.1268

Borehole Correction Constants
Sonde Position 0.5 inches
Hole Size Source Density Caliper
Hole Size Constant Value N/A inches
Rm Source Global Value: Temperature Corrected
Temp. for Rm Corr. MCG External Temperature

Induction Calibration MAI-B.J 390

Factory Loop Calibration 07-JAN-2019 10:28
Field Check on 08-JAN-2019 21:39

Factory Loop Calibration

High Conductivity Reference Resistor 3.3 ohm
Low Conductivity Reference Resistor 333.3 ohm

Array	Measured Signal (unitless)		Reference Conductivity (mmho/m)		Calibration	
	Low	High	Low	High	Gain	Offset
1 (near)	16.8	458.6	9.3	966.2	2.166	-27.2
2	6.3	377.7	7.6	821.4	2.191	-6.2
3	3.8	258.6	5.2	566.0	2.200	-3.0
4 (far)	1.9	132.3	2.6	279.2	2.121	-1.4
Array Temperature	77.9		Deg F			

Tool Checks

Array	Factory Reference (mmho/m)		Before Survey (mmho/m)		
	Low	High	Low	High	
1 (near)	13.2	3960.1	13.2	3959.2	
2	29.9	3563.5	29.9	3563.0	
3	27.9	3061.4	27.9	3061.6	
4 (far)	19.7	2087.8	19.7	2088.2	
Array Temperature	64.9		65.3		Deg F

Induction Check Tolerances MAI-B.J 390

Low Array 1	13.2	11.7 13.2 14.7	mmho/m	High Array 1	3959.2	-0.5% 3960.1 +0.5%	mmho/m
Low Array 2	29.9	28.4 29.9 31.4	mmho/m	High Array 2	3563.0	-0.5% 3563.5 +0.5%	mmho/m
Low Array 3	27.9	26.4 27.9 29.4	mmho/m	High Array 3	3061.6	-0.5% 3061.4 +0.5%	mmho/m
Low Array 4	19.7	18.2 19.7 21.2	mmho/m	High Array 4	2088.2	-0.5% 2087.8 +0.5%	mmho/m

Induction Constants MAI-B.J 390

Last Edited on 08-JAN-2019,21:37

Induction Model RtAP-WBM

Borehole Correction Constants
Tool Centred No
Hole Size Source Density Caliper
Hole Size Constant Value N/A inches
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
Rm Source Global Value: Constant Temperature
Temp. for Rm Corr. N/A
Borehole Correction Method Default

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

Symmetrised Receiver Gains

Receiver 1	1.00
Receiver 2	1.00
Receiver 3	1.00
Receiver 4	1.00

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 390

Field Calibration on 15-MAY-2018,12:48

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

High Resolution Temperature Constants MAI-B.J 390

Last Edited on 06-MAR-2018,13:01

Pre-filter Length	11
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Caliper Calibration MPD-C.A 216

Base Calibration on 07-JAN-2019,10:51
Field Calibration on 08-JAN-2019 21:42

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	15599	3.99
2	24289	5.98
3	32989	7.97
4	41250	9.86
5	50464	11.92
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
7.97	7.97

Caliper Calibration Tolerances MPD-C.A 216

Long Arm Field Cal.	7.97	7.57 7.97 8.37	in
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Photo Density Calibration MPD-C.A 216

Base Calibration on 07-JAN-2019,10:55
Field Check on 08-JAN-2019 21:49

Density Calibration

Base Calibration	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Background	996	1188		
Reference 1	49174	23910	59556	30836
Reference 2	19716	2252	24941	2541

Field Check at Base

996.3	1187.9
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Field Check

1005.7	1203.2
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PE Calibration

Base Calibration

	WS	Measured WH	Ratio	Calibrated Ratio
Background	183	895		
Reference 1	20502	49024	0.422	0.371
Reference 2	5636	19607	0.291	0.272

Field Check at Base

182.6 895.4

Field Check

182.1 903.5

Photo Density Calibration Tolerances MPD-C.A 216

Near Density Ratio	2.57	-5% 2.52 +5%
PE Calibration	0.122	0.089 0.110 0.131

Far Density Ratio	21.36	-5% 21.00 +5%
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Near Den. Field Check	1005.7	-3% 996.3 +3%
PE WS Field Check	182.1	-6% 182.6 +6%

Far Den. Field Check	1203.2	-3% 1187.9 +3%
PE WH Field Check	903.5	-6% 895.4 +6%

Density Constants MPD-C.A 216

Last Edited on 09-JAN-2019,01:29

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	1.10 gm/cc
Mud Density Type	
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
Precision Enhanced Density Processing	Applied

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

DOWNHOLE EQUIPMENT

C:\Minimus 18.03.9344\DATA\Western Operating Martin-Peterson #1\Western Operating Martin-Peterson #1_001.dta

Cablehead, 11 pin
CBH-CB 264 LG: 2.40 ft WT: 24.3 lb OD: 2.244 in

Compact Swivel Head Adaptor
SHA-J.B 595 LG: 2.30 ft WT: 22.0 lb OD: 2.244 in

Compact Comms Gamma
MCG-D.K 443 LG: 8.70 ft WT: 63.9 lb OD: 2.244 in

Compact Micro-Resistivity
MMR-B.A 91 LG: 8.59 ft WT: 81.6 lb OD: 4.882 in



45.66 ft GRGC - MCG Gamma Ray

42.76 ft CGXT - MCG External Temperature

36.40 ft MBTC - MMR Caliper

35.41 ft MINV - Micro-inverse

35.41 ft MNRL - Micro-normal

Compact Neutron
MDN-B.A 292 LG: 5.04 ft WT: 50.7 lb OD: 2.244 in

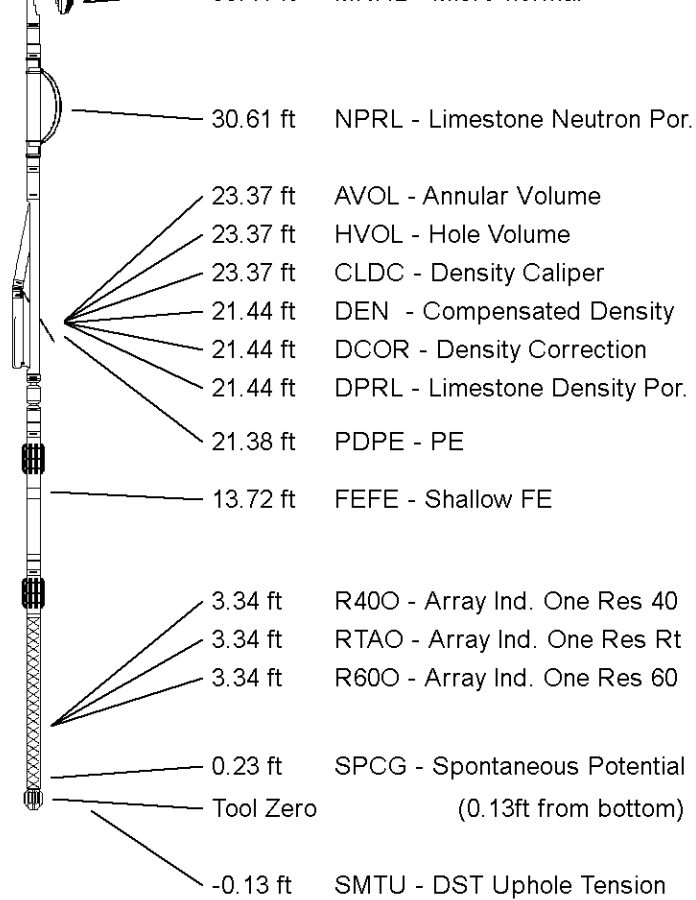
Compact Density/Caliper
MPD-C.A 216 LG: 9.59 ft WT: 90.4 lb OD: 2.913 in

Compact Knuckle Joint
SKJ-D.A 167 LG: 2.17 ft WT: 24.3 lb OD: 2.244 in

Compact Focussed Electric
MFE-B.J 352 LG: 6.05 ft WT: 48.5 lb OD: 2.244 in

Compact Induction
MAI-B.J 390 LG: 10.81 ft WT: 48.5 lb OD: 2.244 in

Total Length: 55.64 ft Weight: 454.2 lb



All measurements relative to tool zero.

COMPANY	WESTERN OPERATING COMPANY
WELL	MARTIN-PETERSON #1
FIELD	ARROYO
PROVINCE/COUNTY	STANTON
COUNTRY/STATE	U.S.A. / KANSAS

Elevation Kelly Bushing	3417	feet	First Reading	5690.00	feet
Elevation Drill Floor	3415	feet	Depth Driller	5708.00	feet
Elevation Ground Level	3404	feet	Depth Logger	5711.00	feet



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