



Weatherford

**DUAL SPACED NEUTRON
PHOTO DENSITY
LOG**

COMPANY	COLEMAN OIL AND GAS		
WELL	LA PLATA 34-7-33 #1		
FIELD	IGNACIO BLANCO		
PROVINCE/COUNTY	LA PLATA		
COUNTRY/STATE	USA / COLORADO		
LOCATION	SHL: 218' FSL & 750' FEL		
SEC 33	TWP 34N	RGE 7W	Other Services
Latitude	37.14081		
Longitude	-107.60764		
API Number	05067099160000		
Permanent Datum GL, Elevation	6726 feet		
Log Measured From	KB		
Drilling Measured From	KB @16 FT		
Date	21-MAY-2015		
Run Number	2		
Service Order	8367-119352096		
Depth Driller	3334.00 feet		
Depth Logger	3317.00 feet		
First Reading	3290.00 feet		
Last Reading	508.00 feet		
Casing Driller	525.00 feet		
Casing Logger	523.00 feet		
Bit Size	8.750 inches		
Hole Fluid Type	WBM		
Density / Viscosity	9.90 lb/USg	70.00 SEC/QT	
PH / Fluid Loss	8.00	8.00 ml/30Min	
Sample Source	FLOW LINE		
Rm @ Measured Temp	4.06 @ 77.0	ohm-m	
Rmf @ Measured Temp	3.25 @ 77.0	ohm-m	
Rmc @ Measured Temp	4.87 @ 77.0	ohm-m	
Source Rmf / Rmc	CALC	CALC	
Rm @ BHT	2.68 @118.0	ohm-m	
Time Since Circulation	1 HOUR		
Max Recorded Temp	118.00	deg F	
Equipment / Base	13173	CASPER	
Recorded By	A. A. EASTAUGHFFE		D. E. BEANS
Witnessed By	J. NICOLETTE		

Elevations:	feet
KB	6742.00
DF	6742.00
GL	6726.00

BOREHOLE RECORD Last Edited: 20-MAY-2015 21:30

Bit Size inches	Depth From feet	Depth To feet
8.750	535.00	3334.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	9.625	0.00	525.00	36.00

REMARKS

SOFTWARE: 15.01.3109

DEPTH CONTROL: CALIBRATED MEASURE WHEEL METHOD.

RUN 1 IS THE PRIMARY DEPTH REFERENCE. LOG CORRELATED TO RUN 1 (PRECOLLAR) ON 5/18/2015

TOOLS: MAI, MFE, MVC, MPD, MDN, MMR, MCG, SHA RUN IN COMBINATION.

HARDWARE: MAI: 2 x 0.5" STANDOFFS
MFE: 1 X 0.5" STANDOFF
MDN: NO HARDWARE, ECCENTRALIZED BY MMR CALIPER ARM.

ALL INTERVALS LOGGED AND SCALED PER CUSTOMER'S REQUEST.

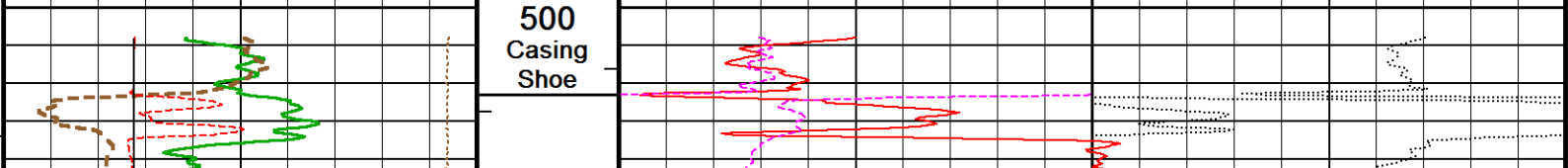
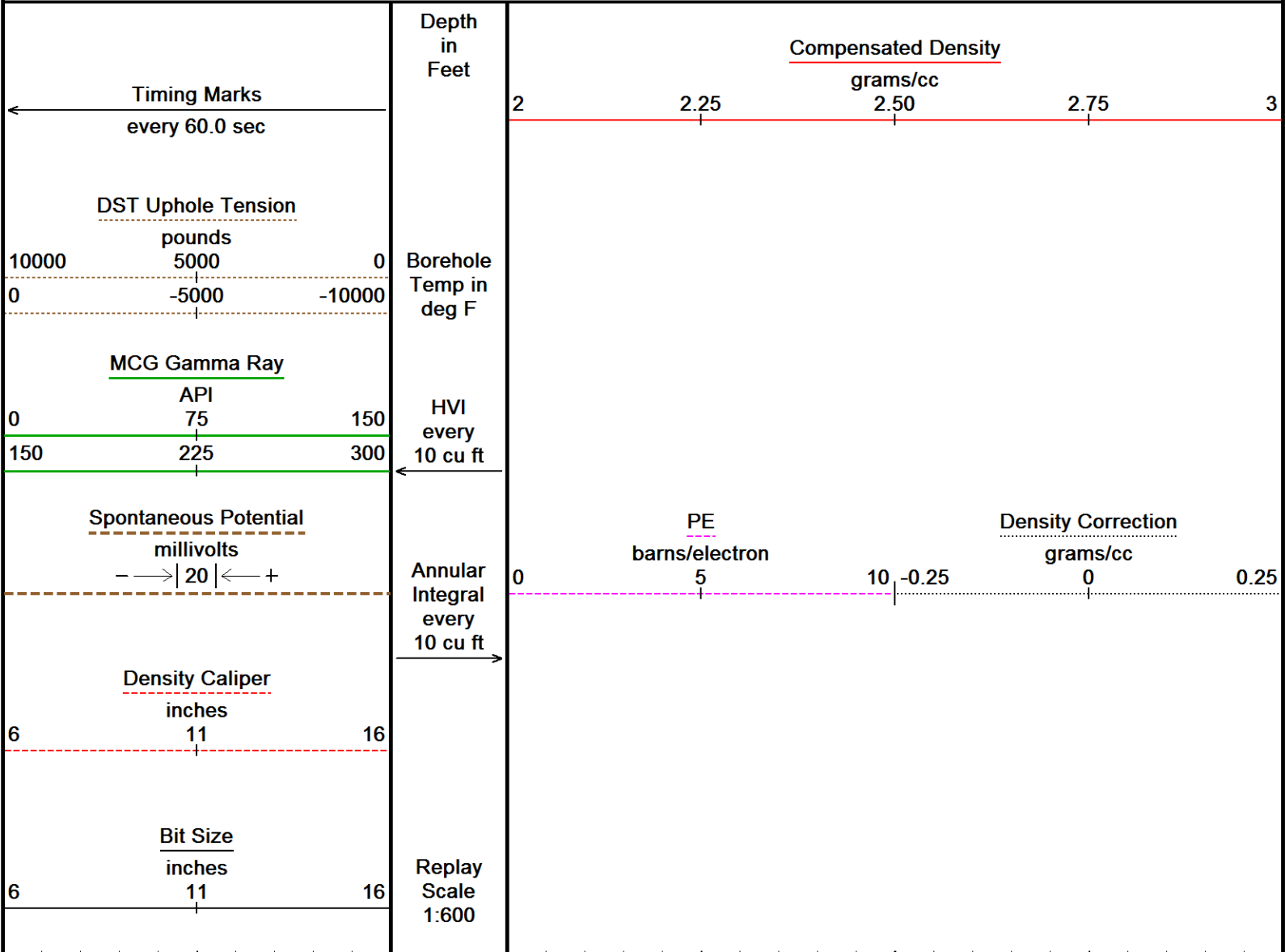
MAXIMUM DEVIATION ADVISED: APPROX 27 DEG.

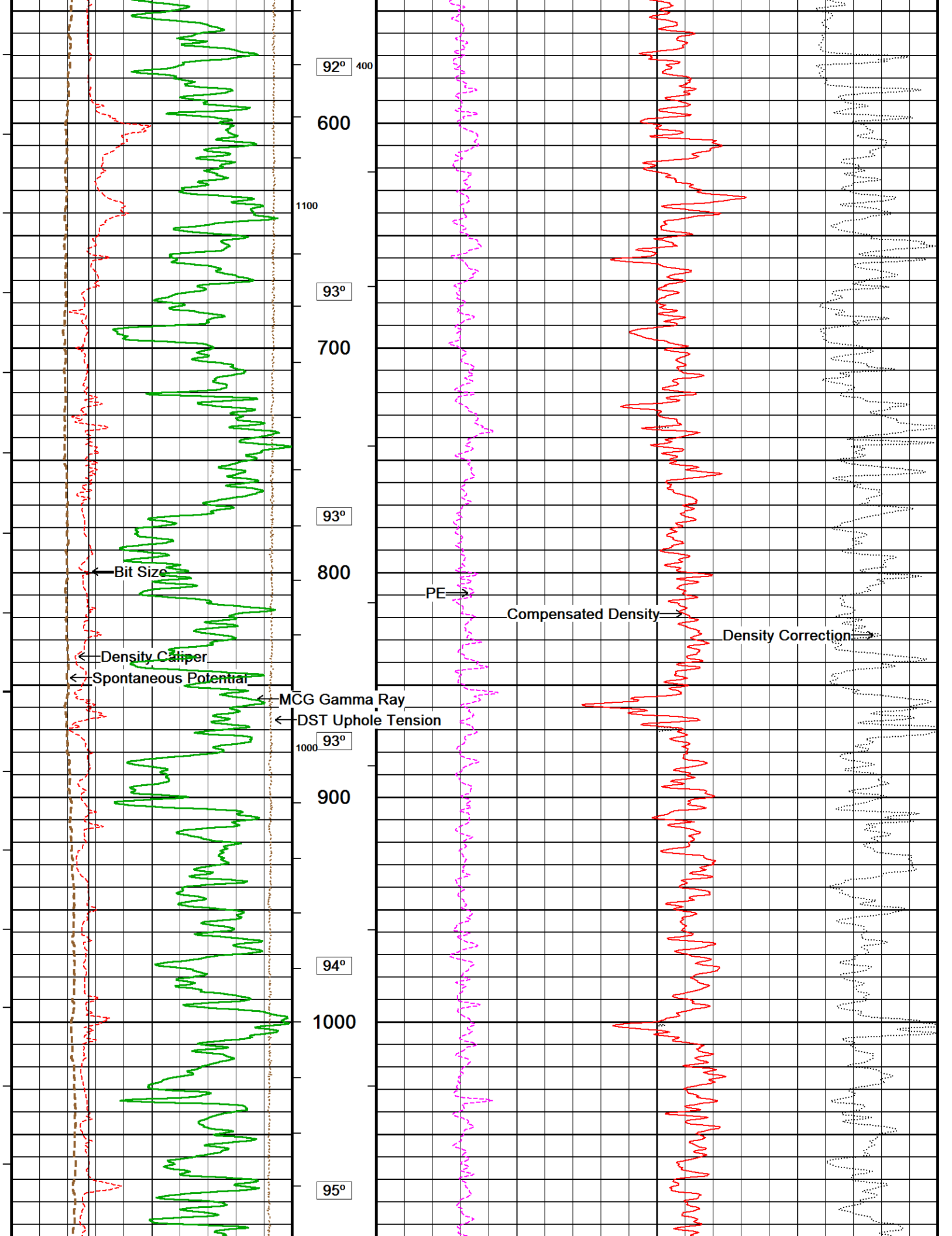
TOTAL HOLE VOLUME FROM T.D. TO CASING SHOE: 1160 CU.FT

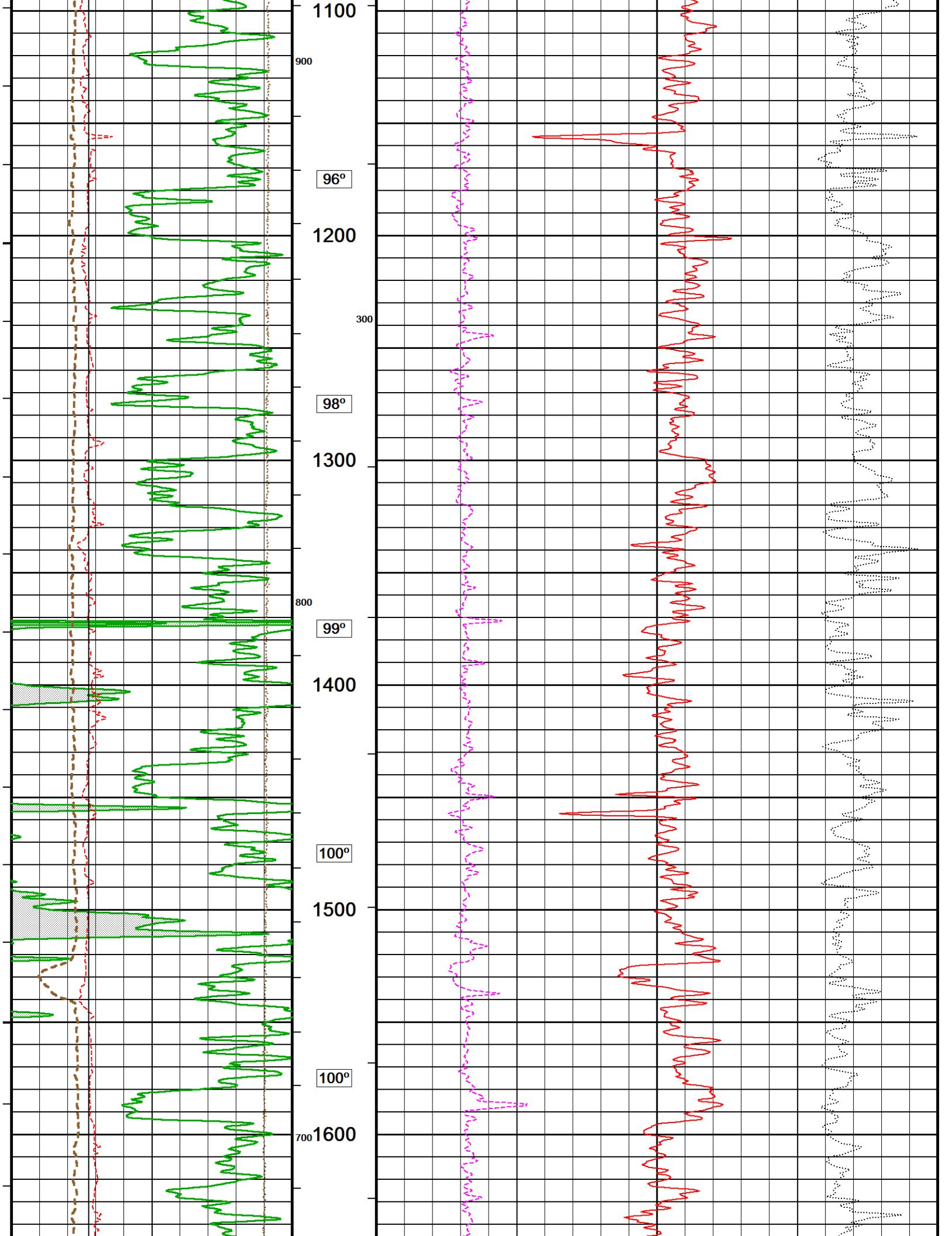
In interpreting, communicating or providing information and/or making recommendations, either written or oral, as to logs or test or other data, type or amount of material, or Work or other service to be furnished, or manner of performance, or in predicting results to be obtained, the Contractor will 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.

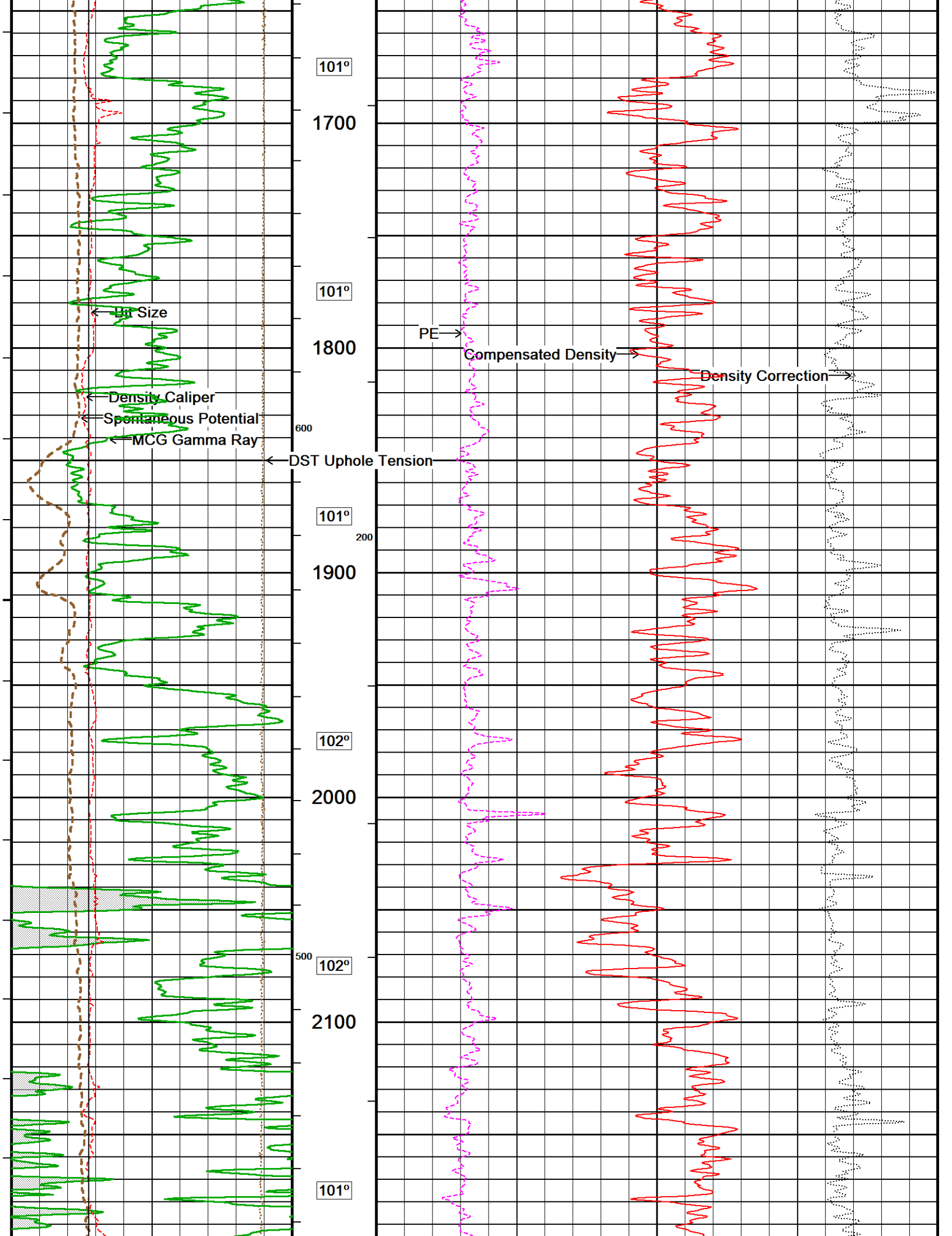
2 INCH MAIN LOG

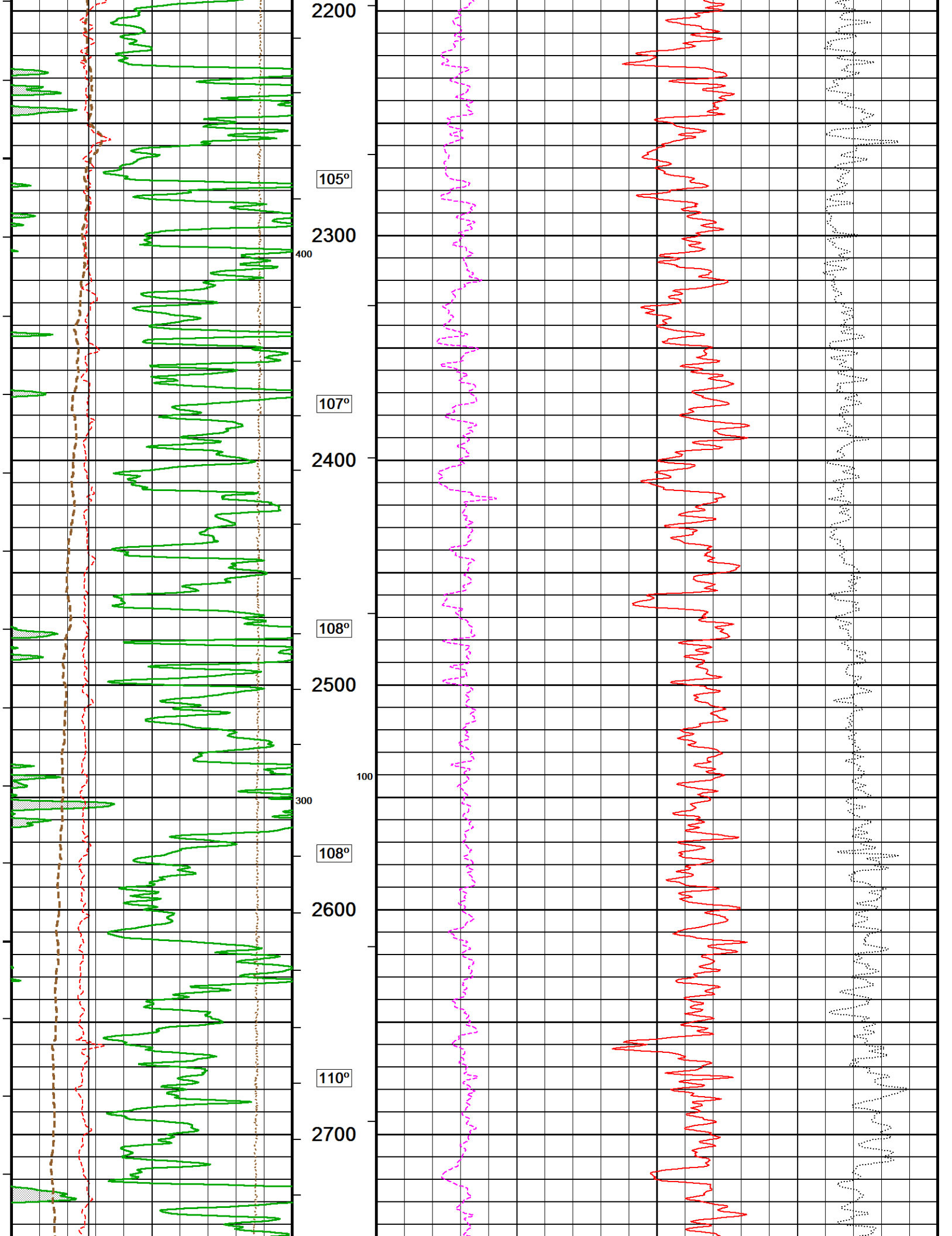
Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 21-MAY-2015 04:18
 Filename: C:\Logs\Coleman Oil and Gas\La Plata 34-7-33 #1\run...\La Plata 34-7-33 #1_MAINPASS.dta Recorded on 21-MAY-2015 01:34
 System Versions: Logged with 15.01.3109 Processed with 15.01.3109 Plotted with 15.01.3109

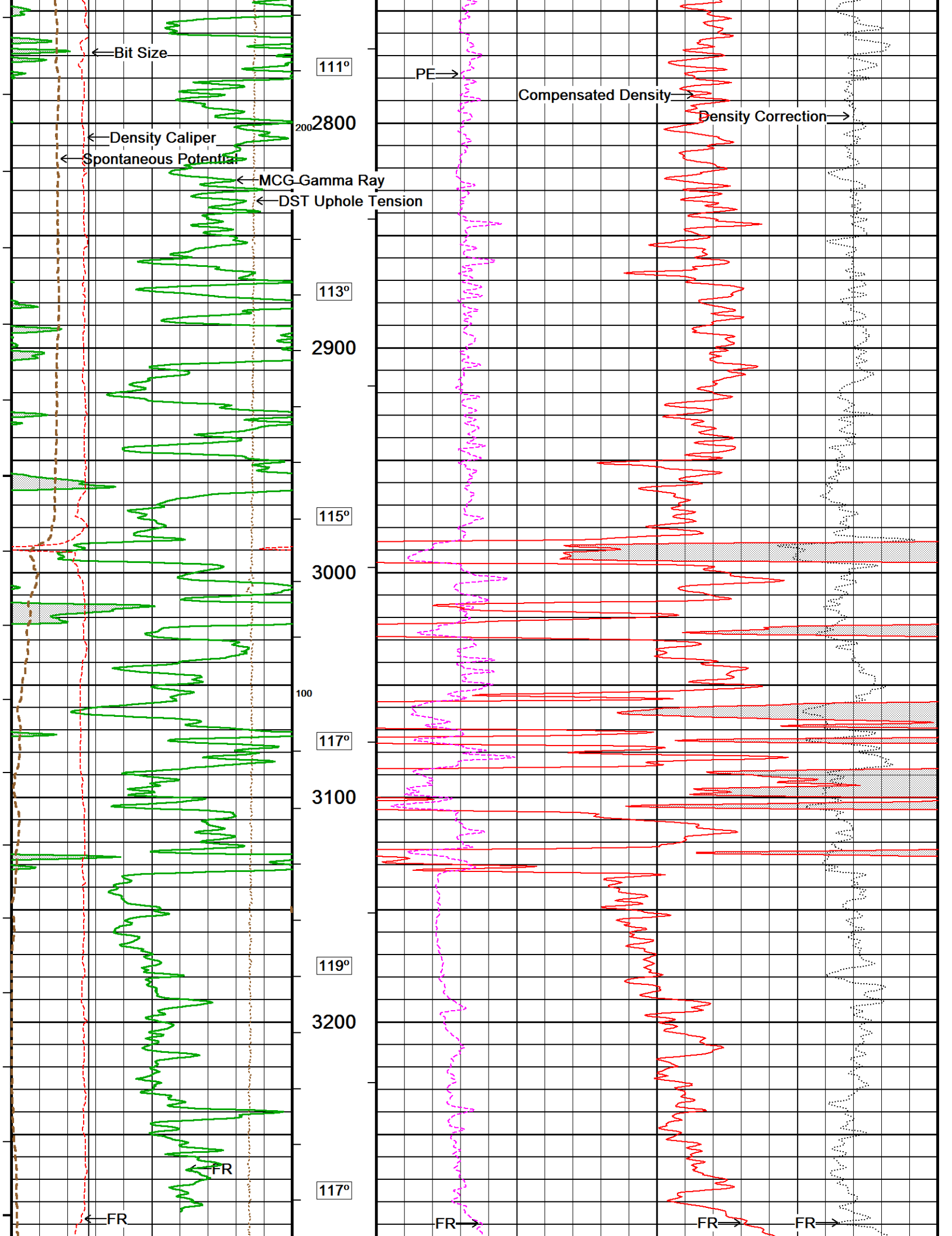


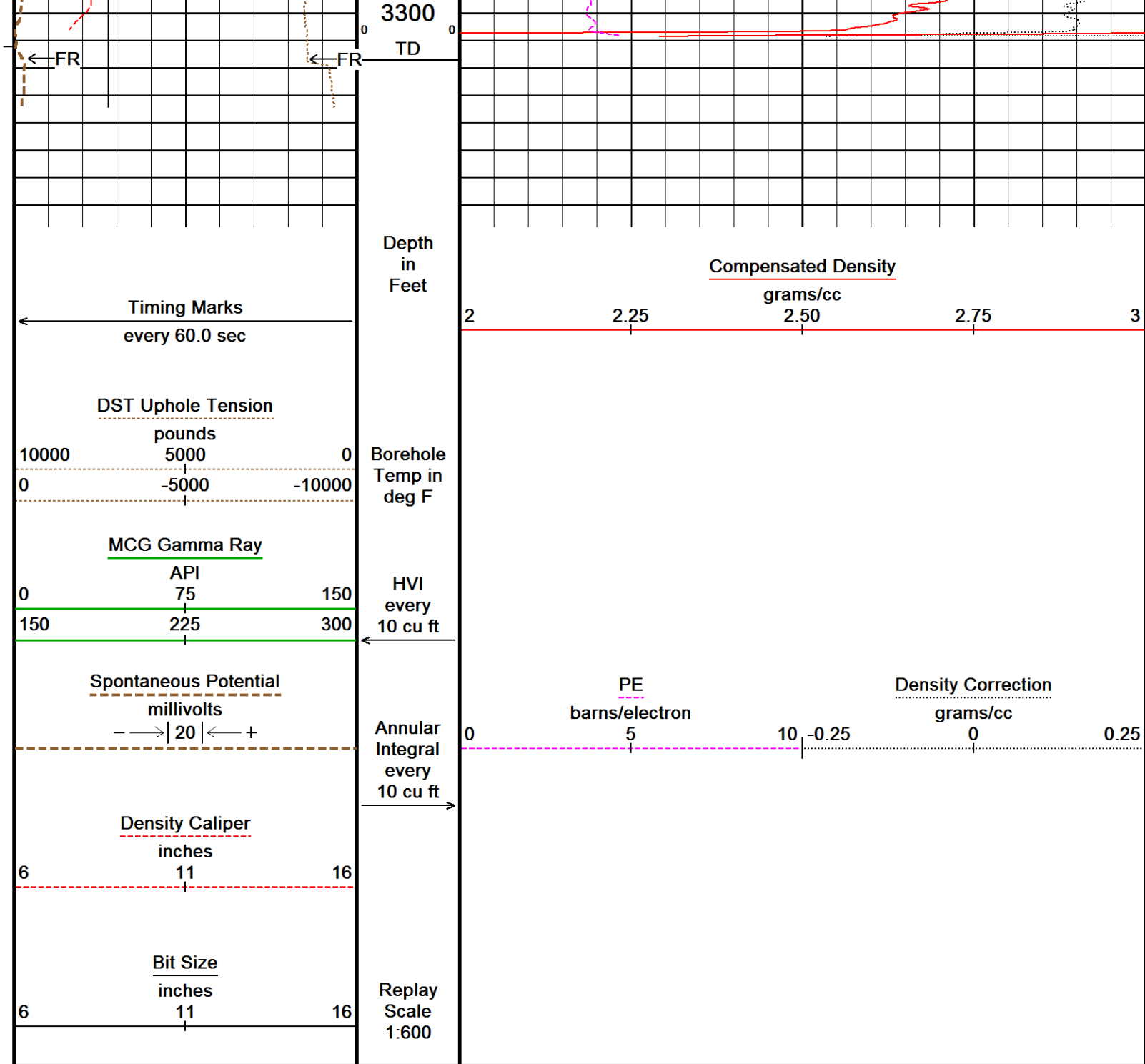








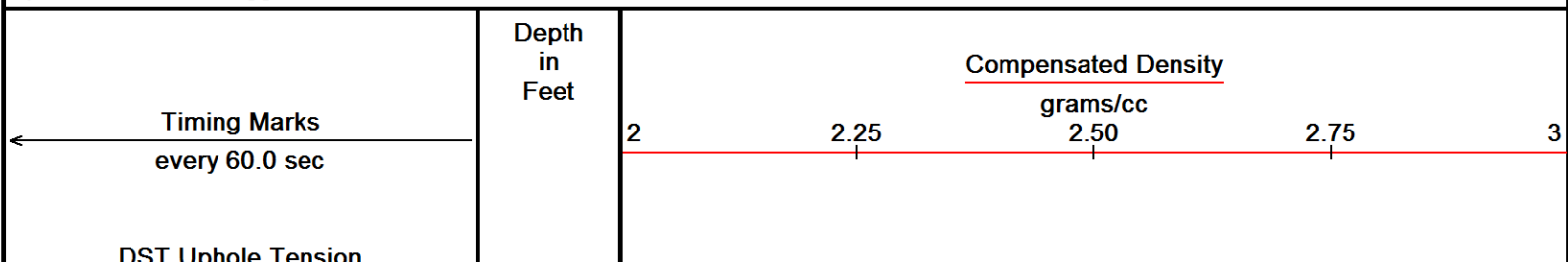




2 INCH MAIN LOG

5 INCH MAIN LOG

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10000 5000 0
0 -5000 -10000

Borehole
Temp in
deg F

MCG Gamma Ray
API
0 75 150
150 225 300

HVI
every
10 cu ft

Spontaneous Potential
millivolts
- -> | 20 | <- +

Annular
Integral
every
10 cu ft

PE
barns/electron
0 5 10
Density Correction
grams/cc
-0.25 0 0.25

Density Caliper
inches
6 11 16

Bit Size
inches
6 11 16

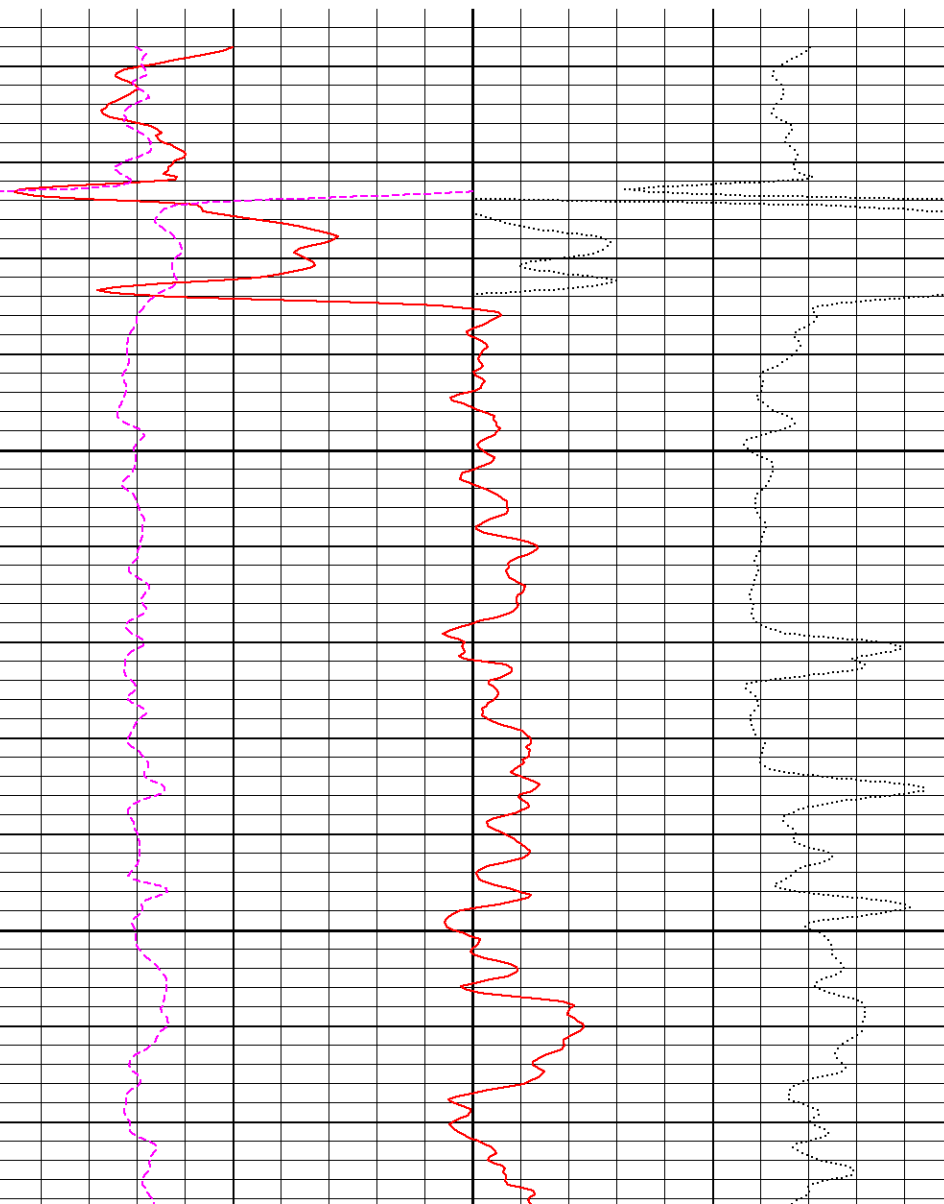
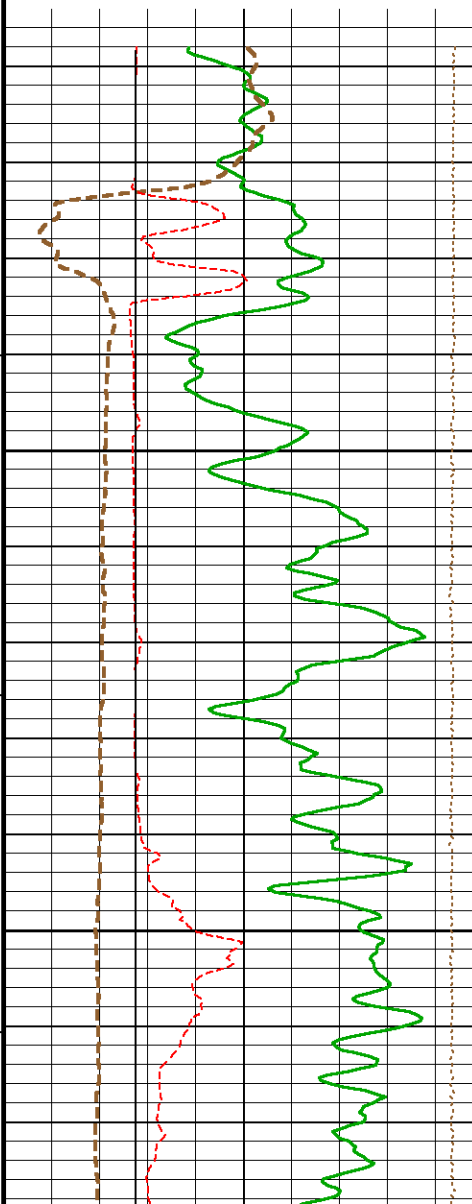
Replay
Scale
1:240

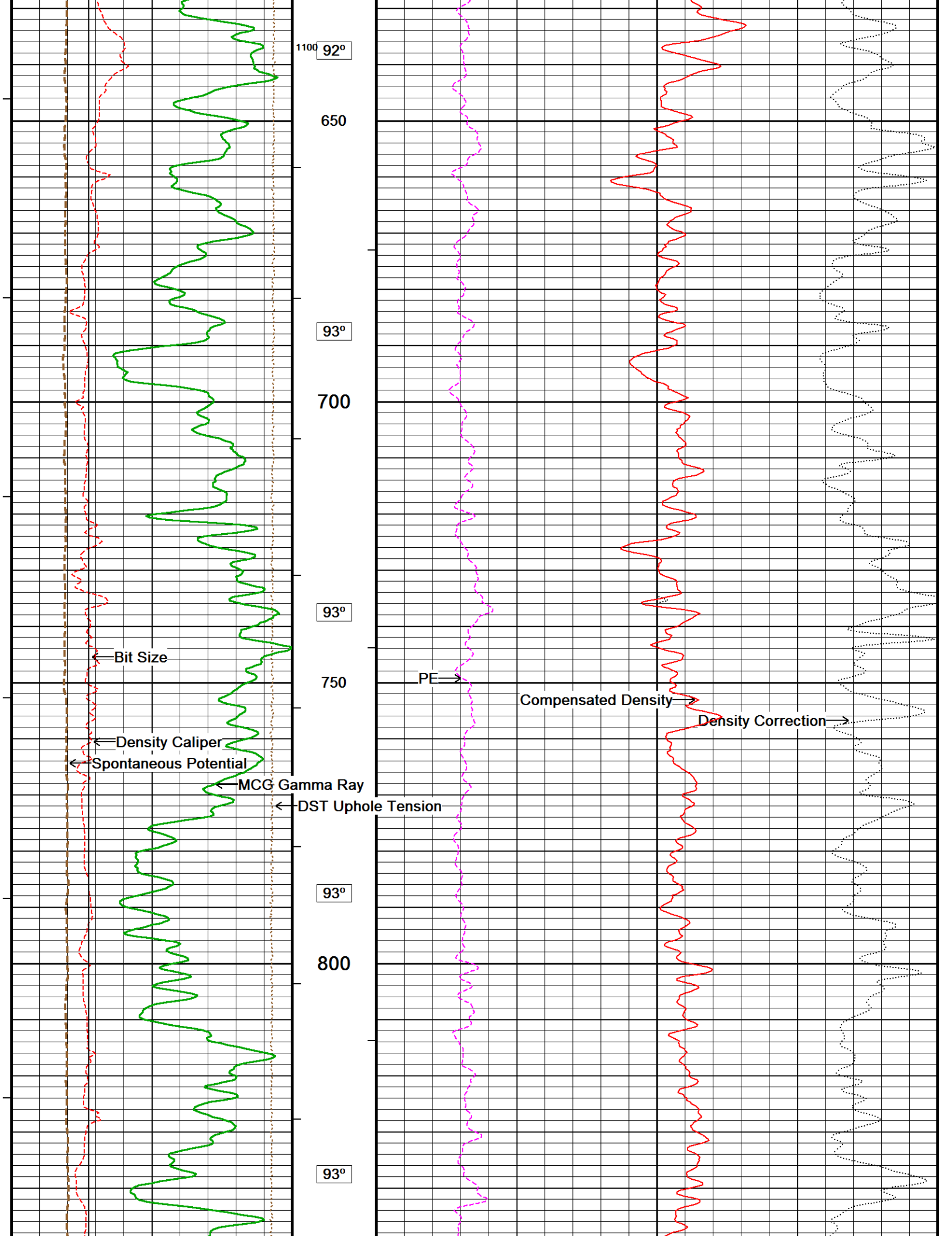
506
Casing
Shoe

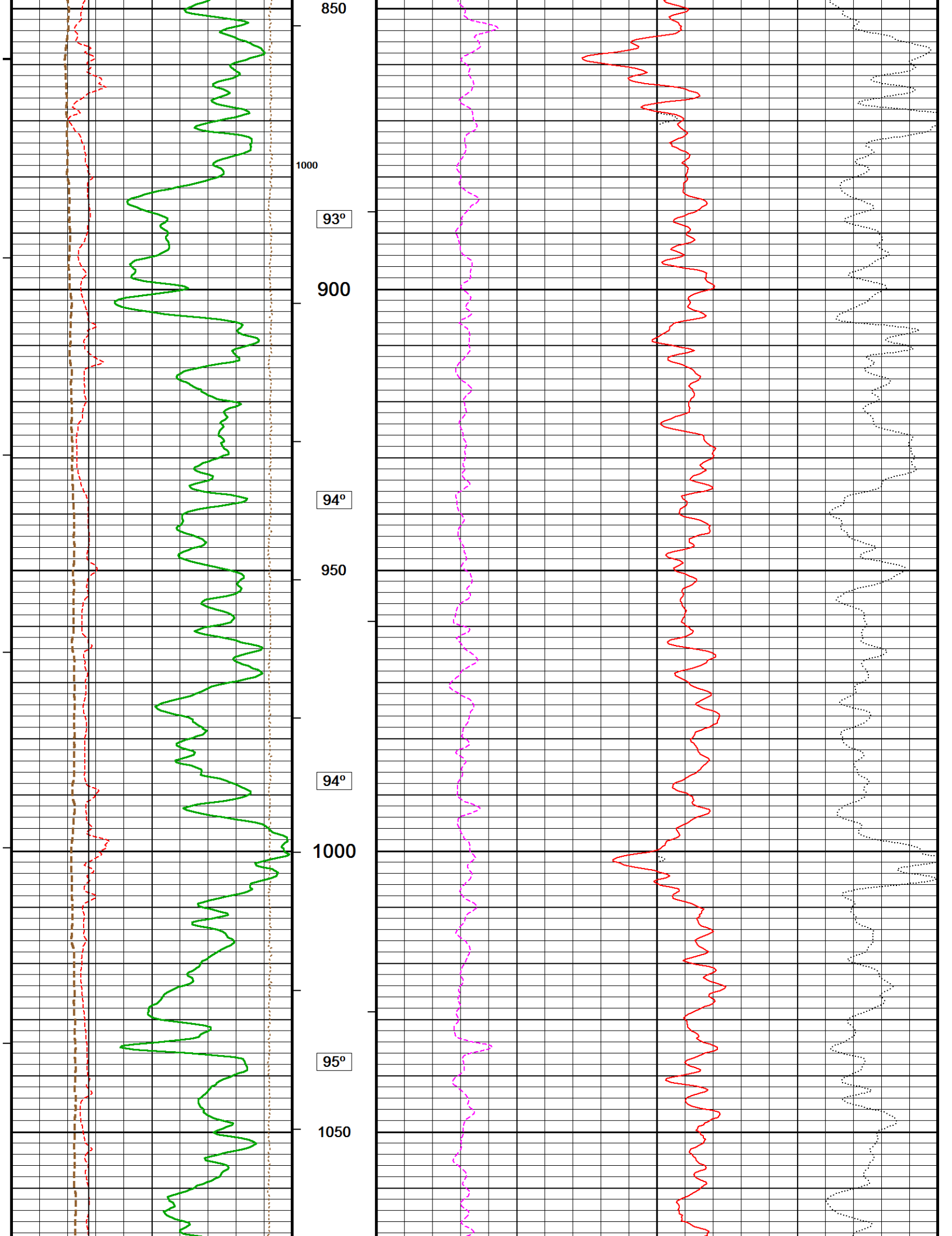
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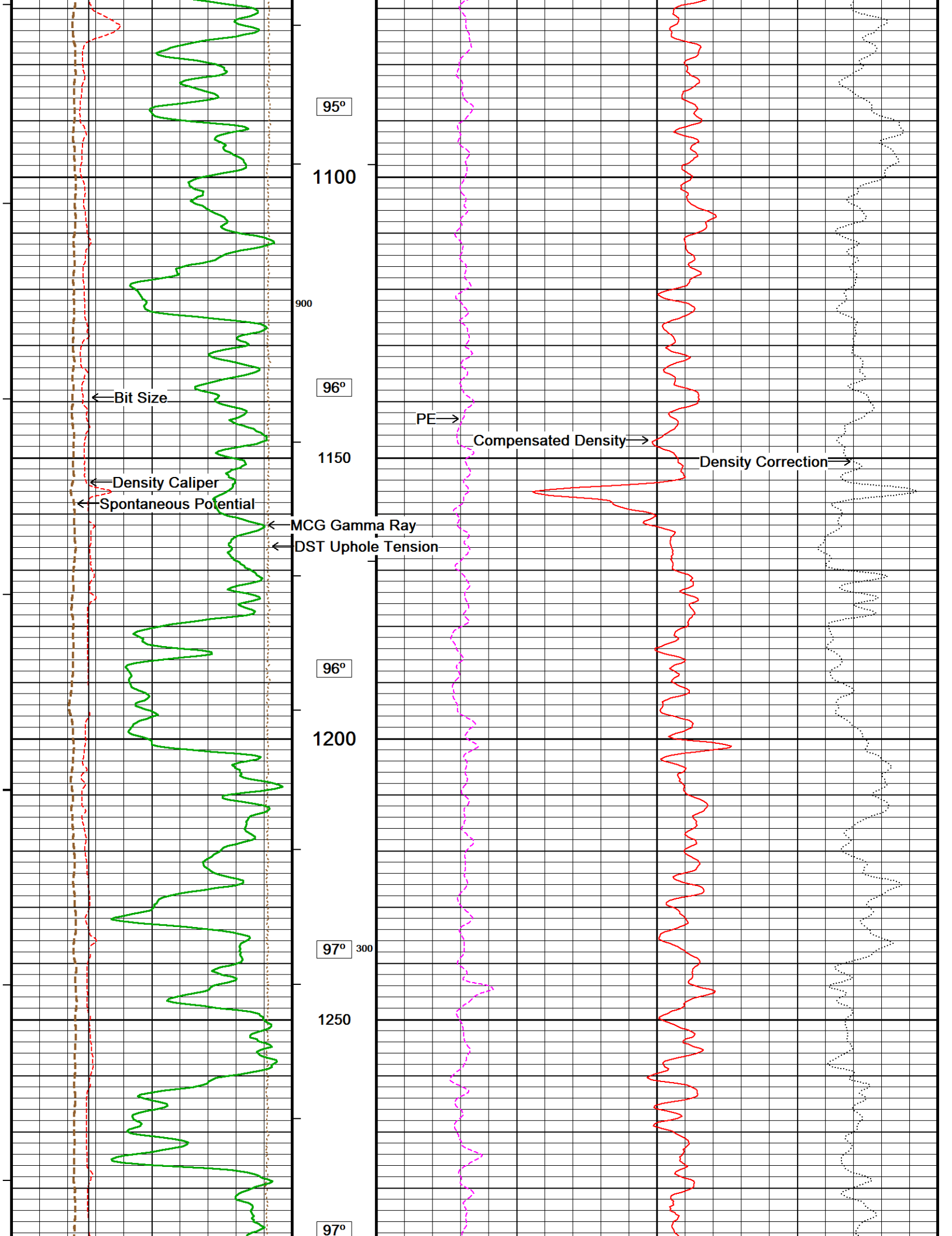
92°

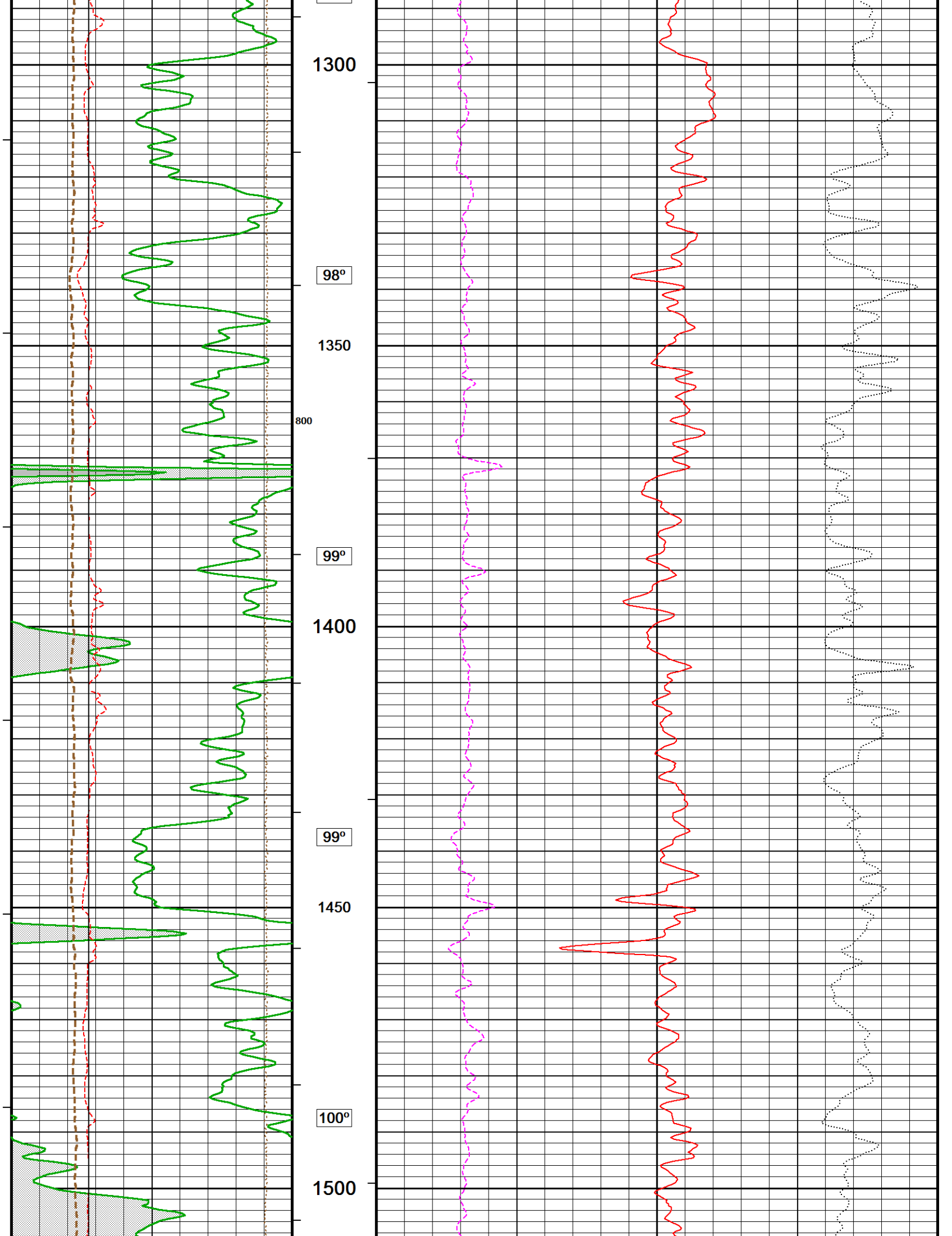
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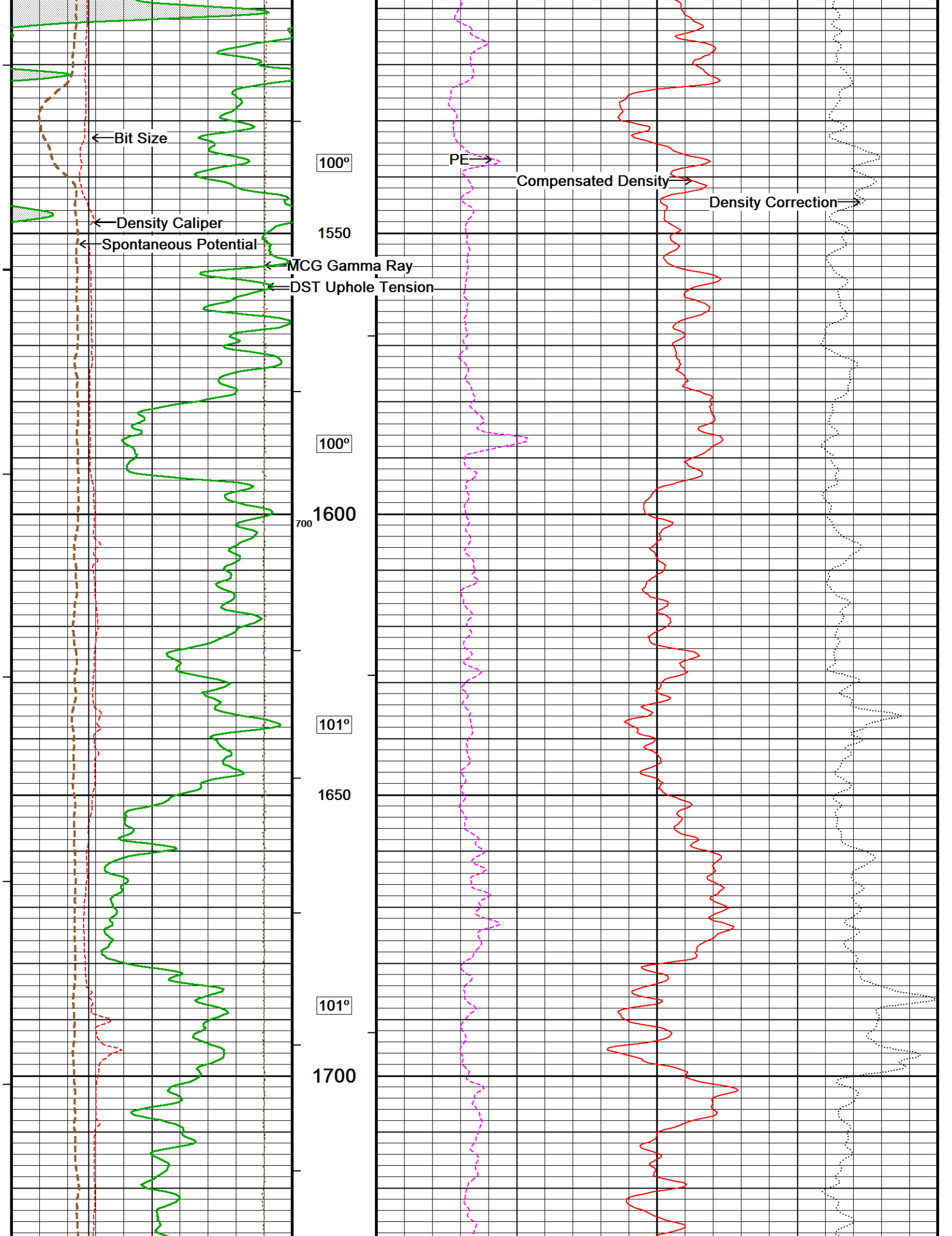


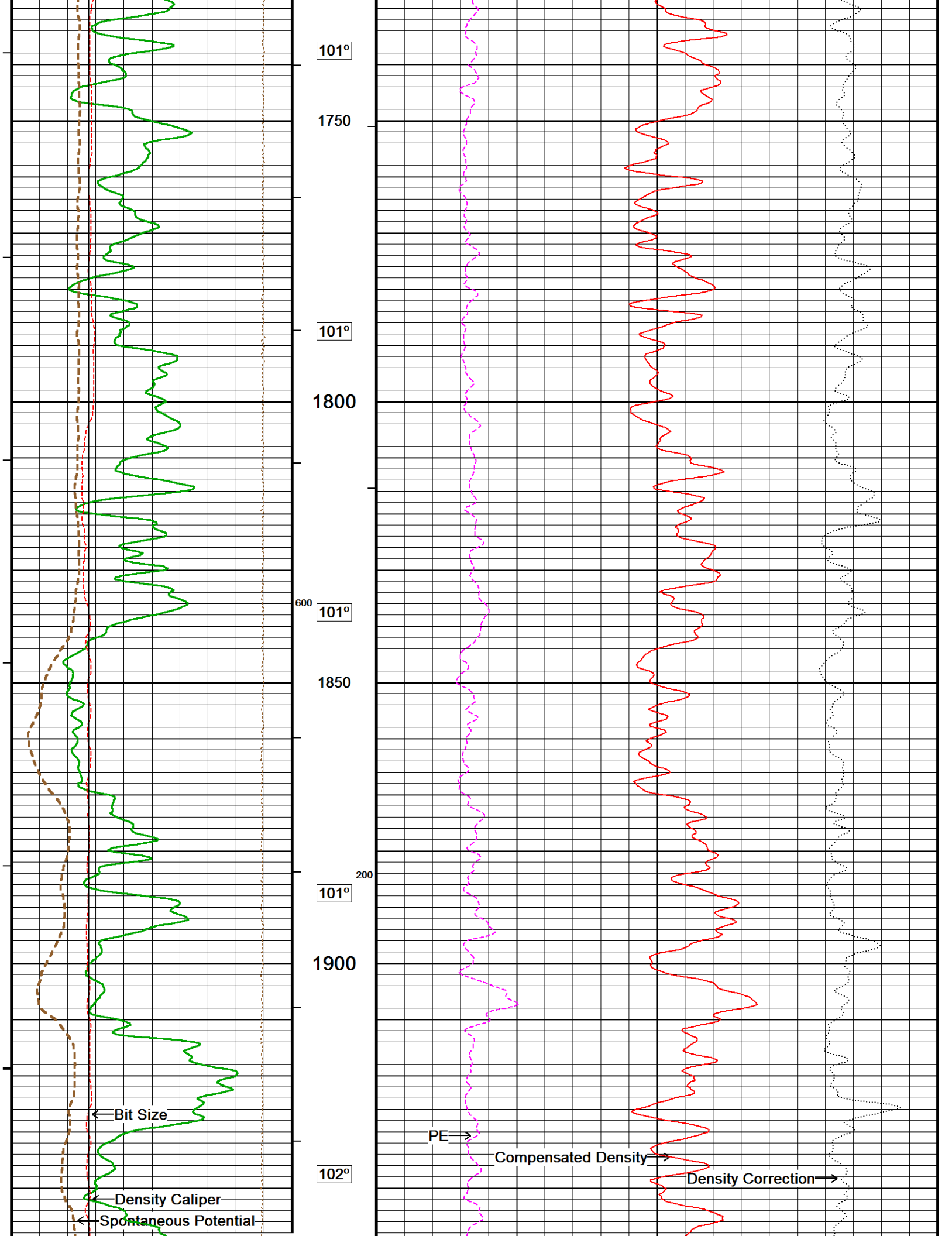


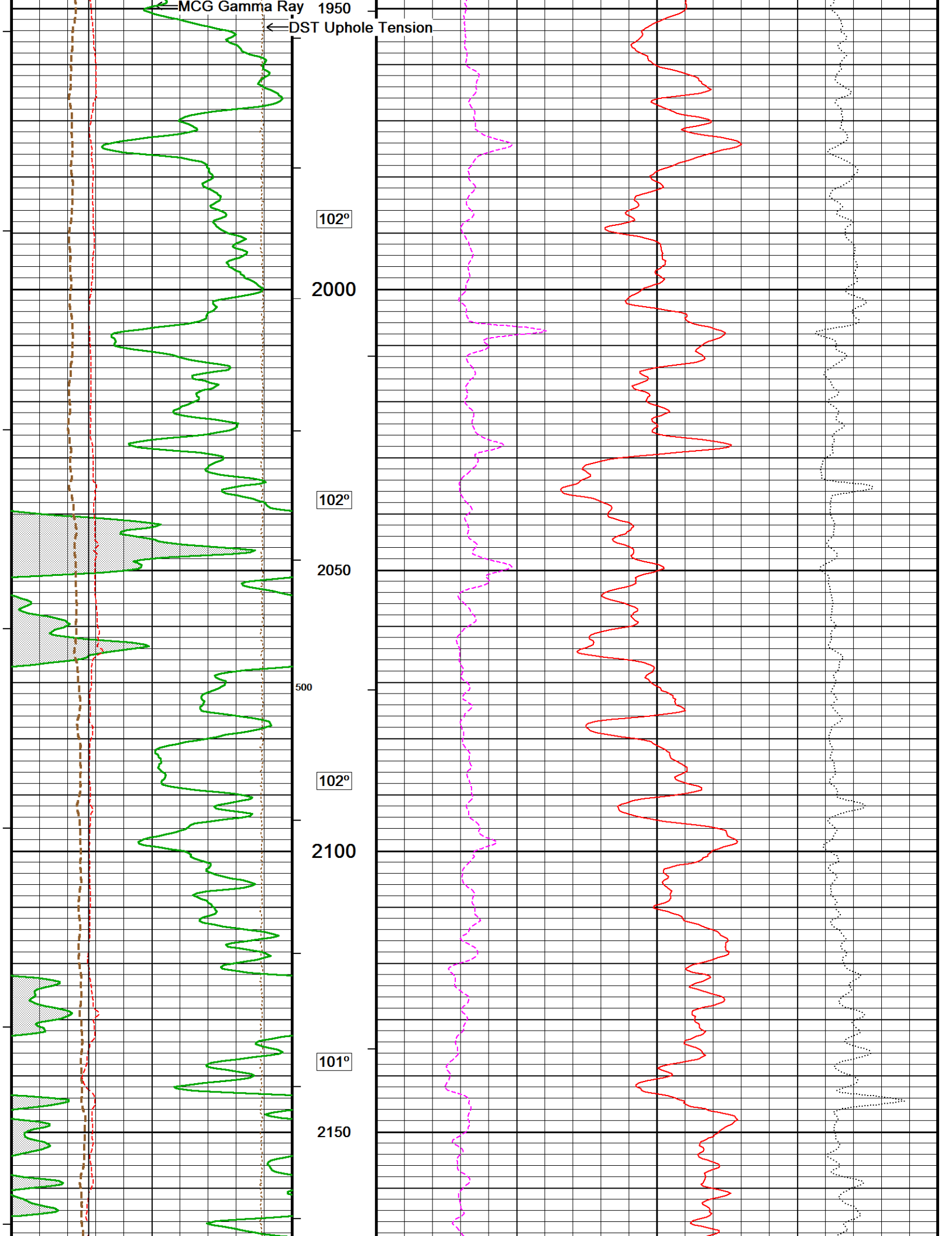


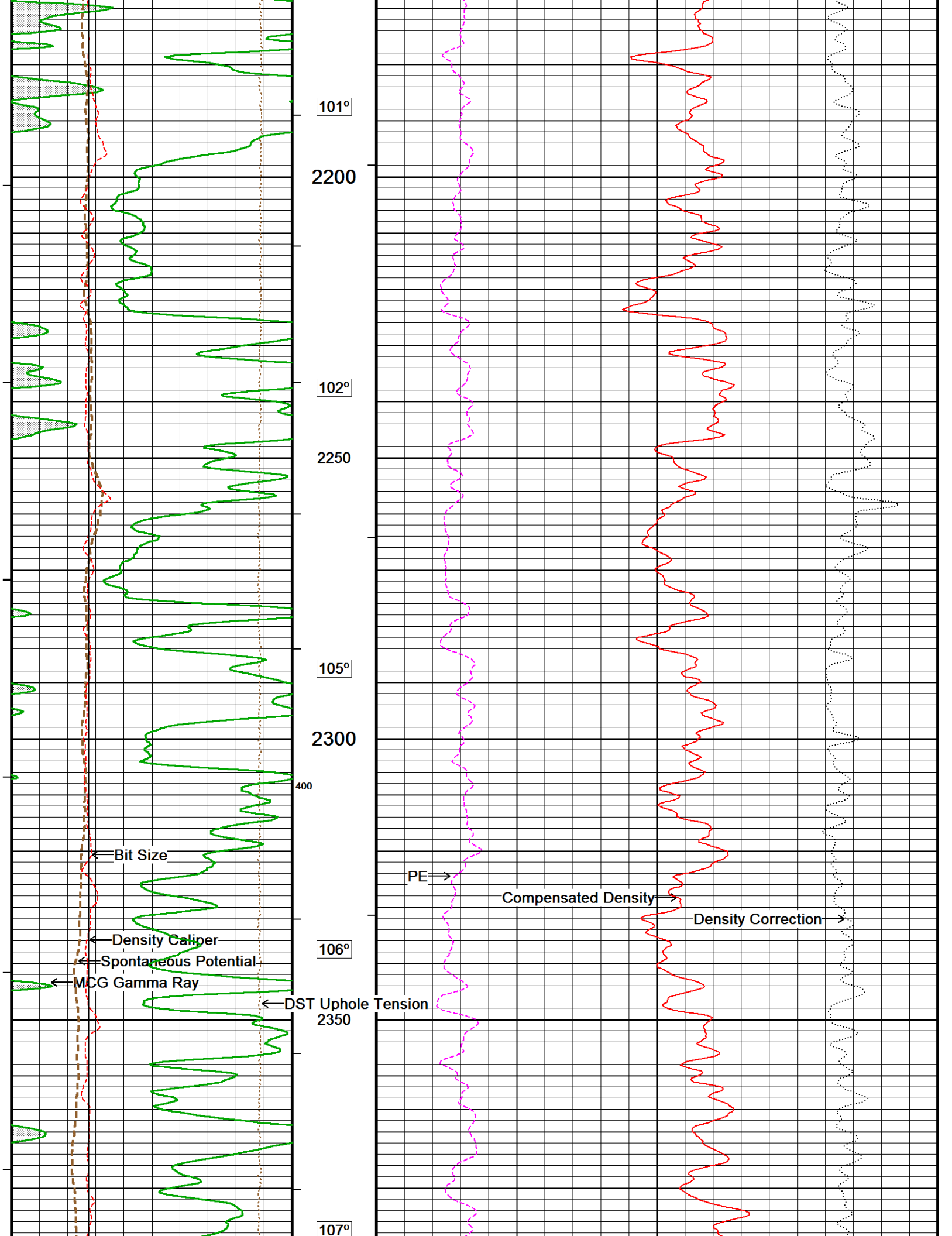


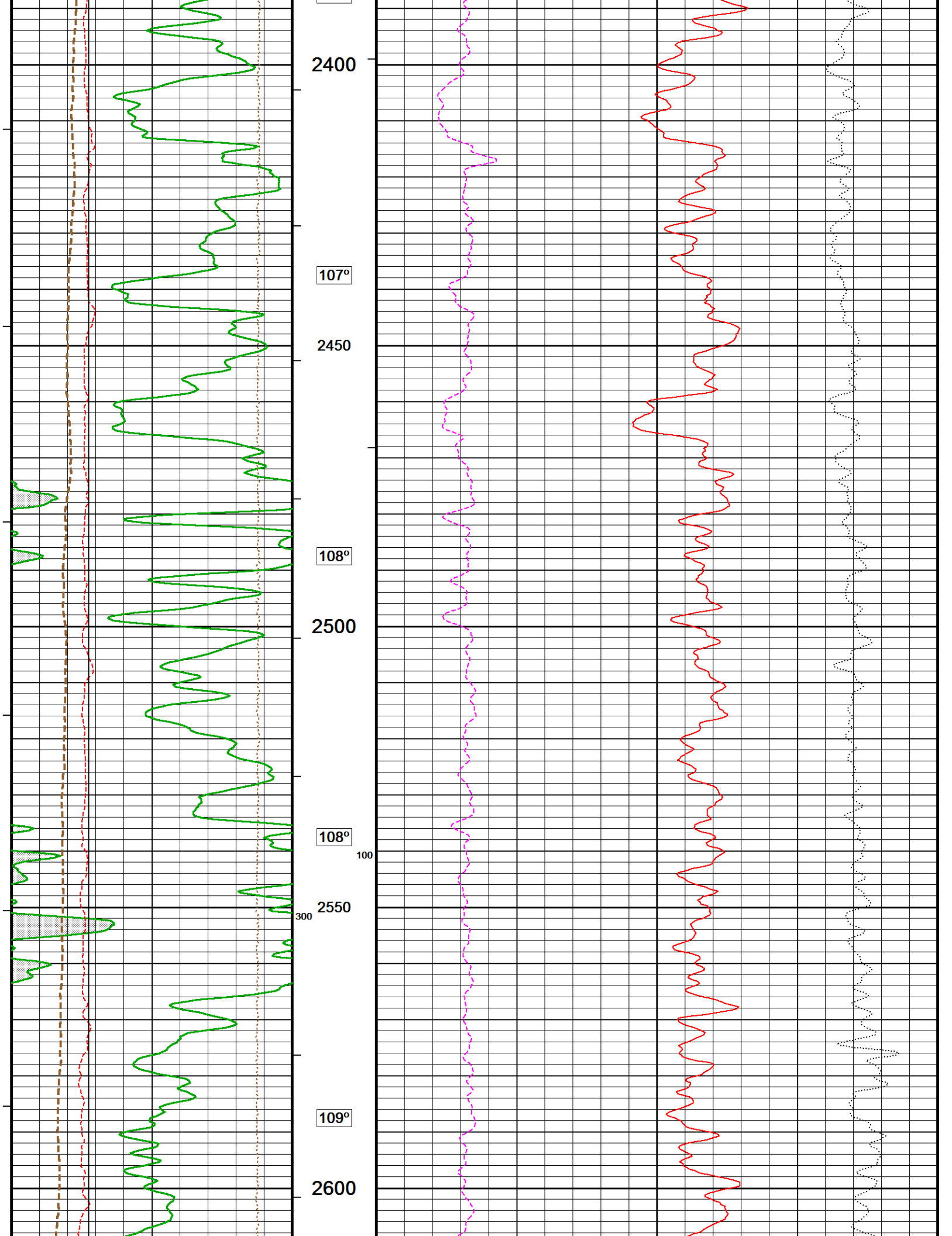


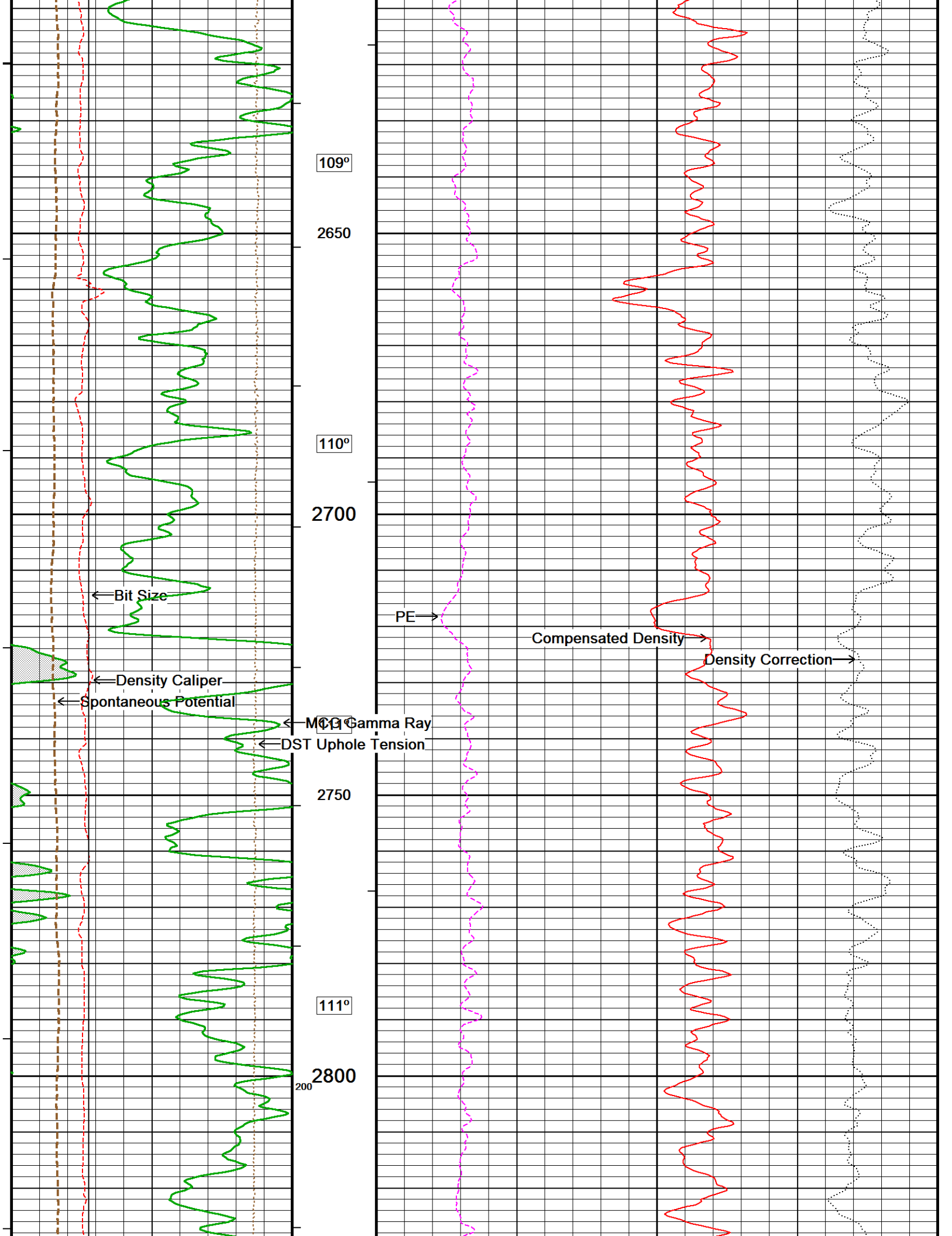


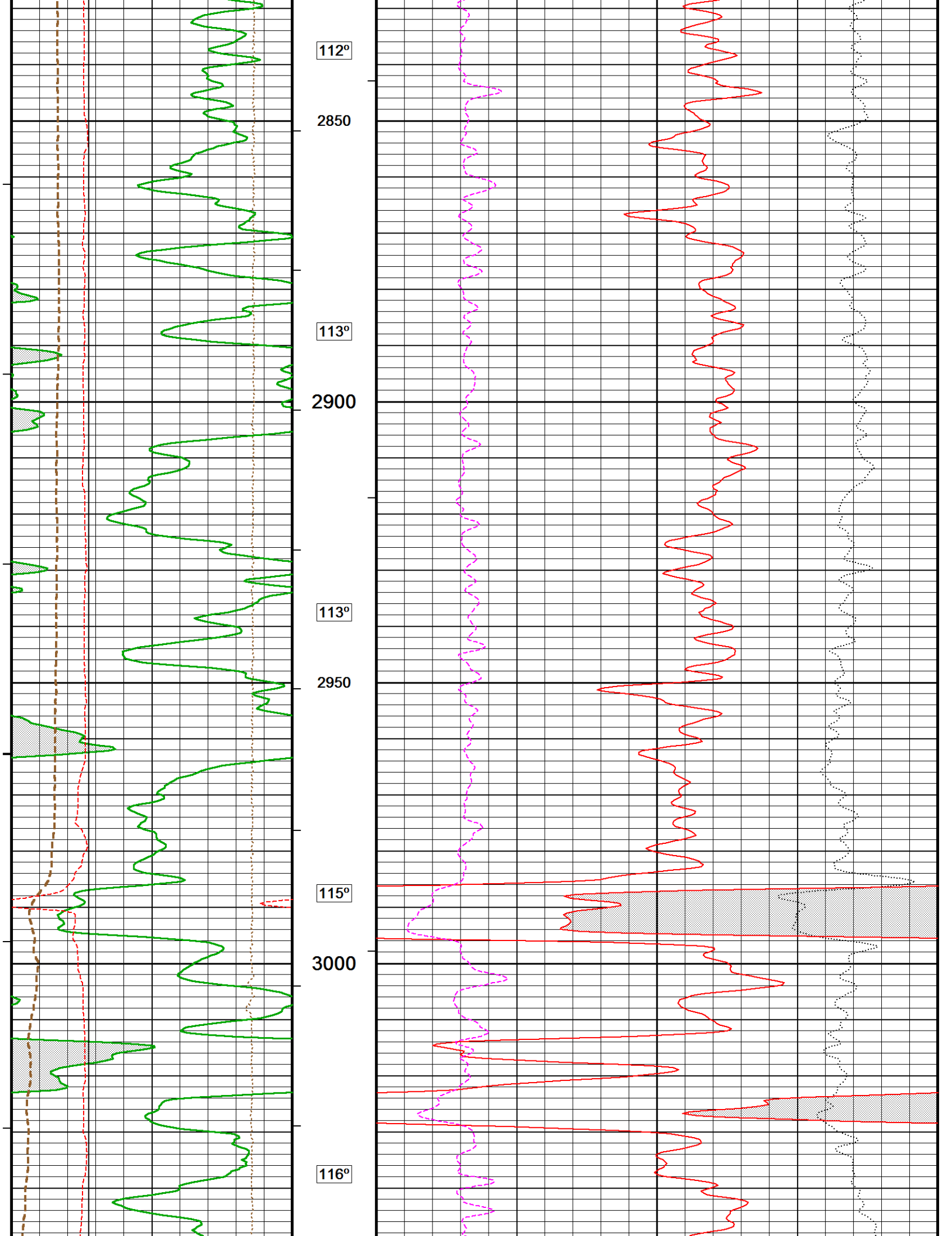


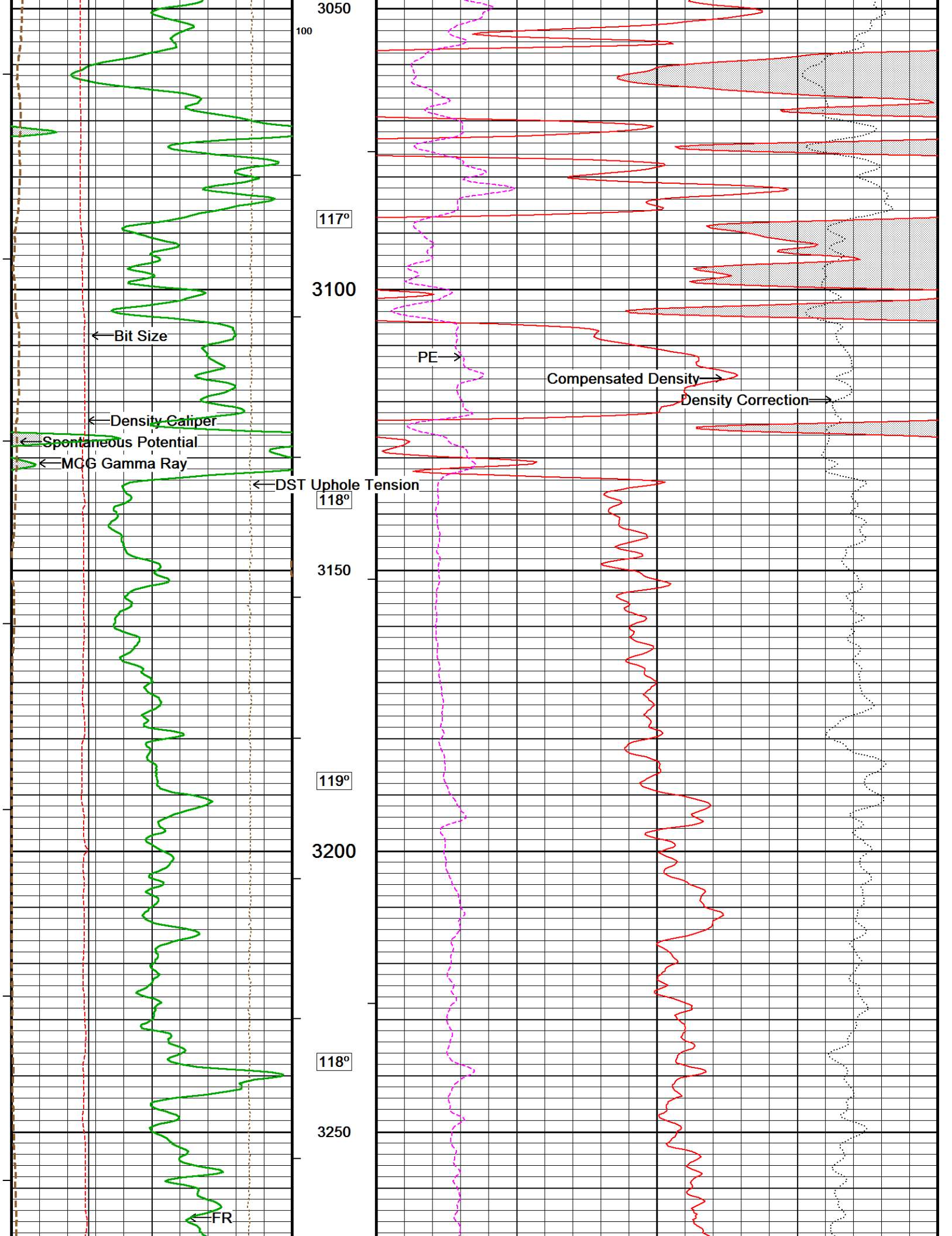


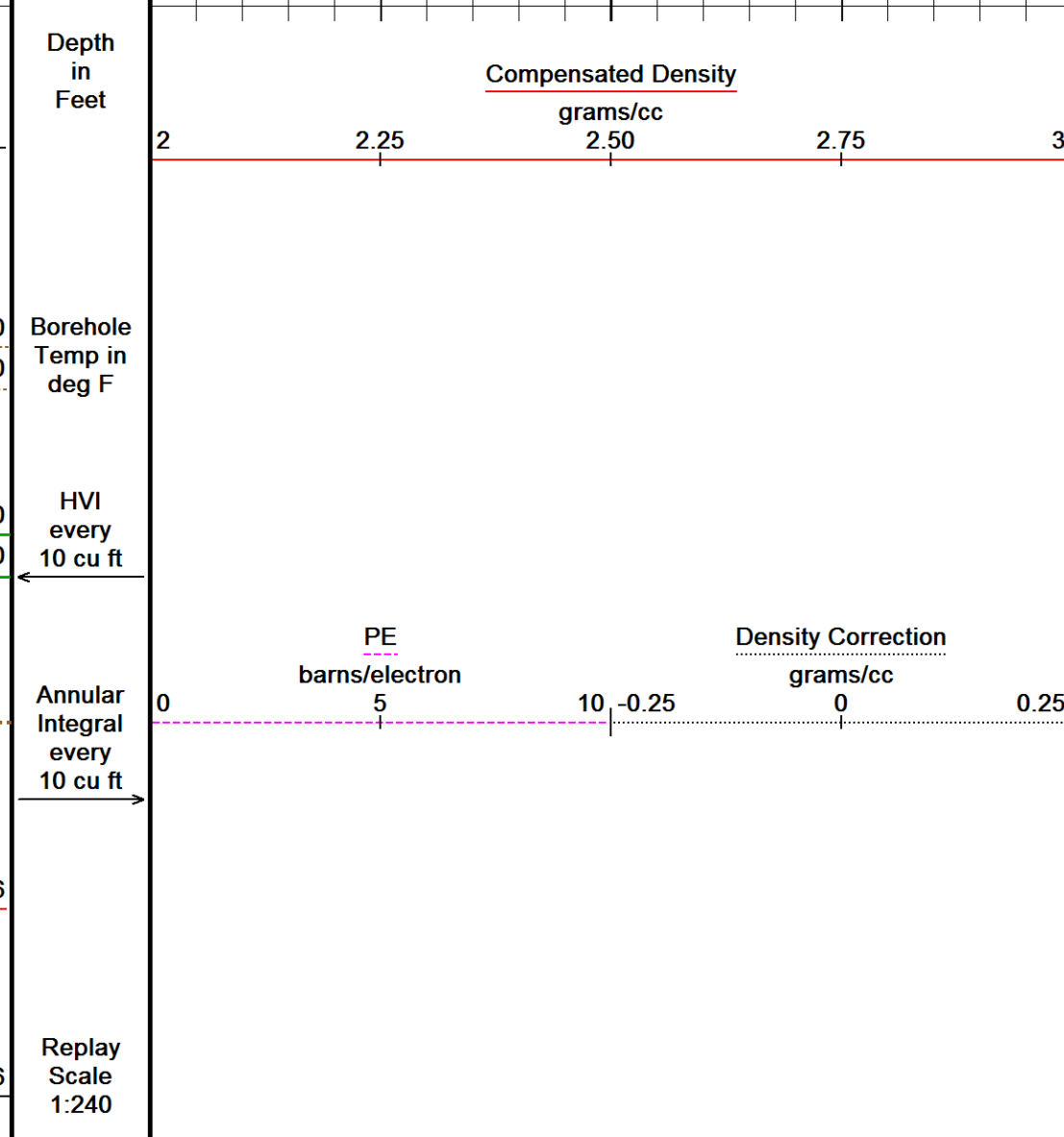
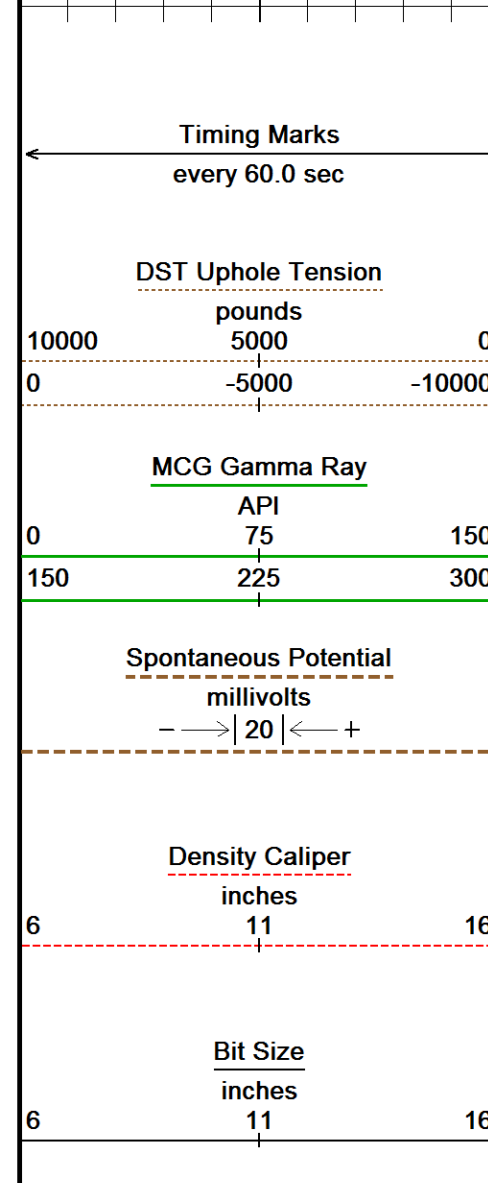
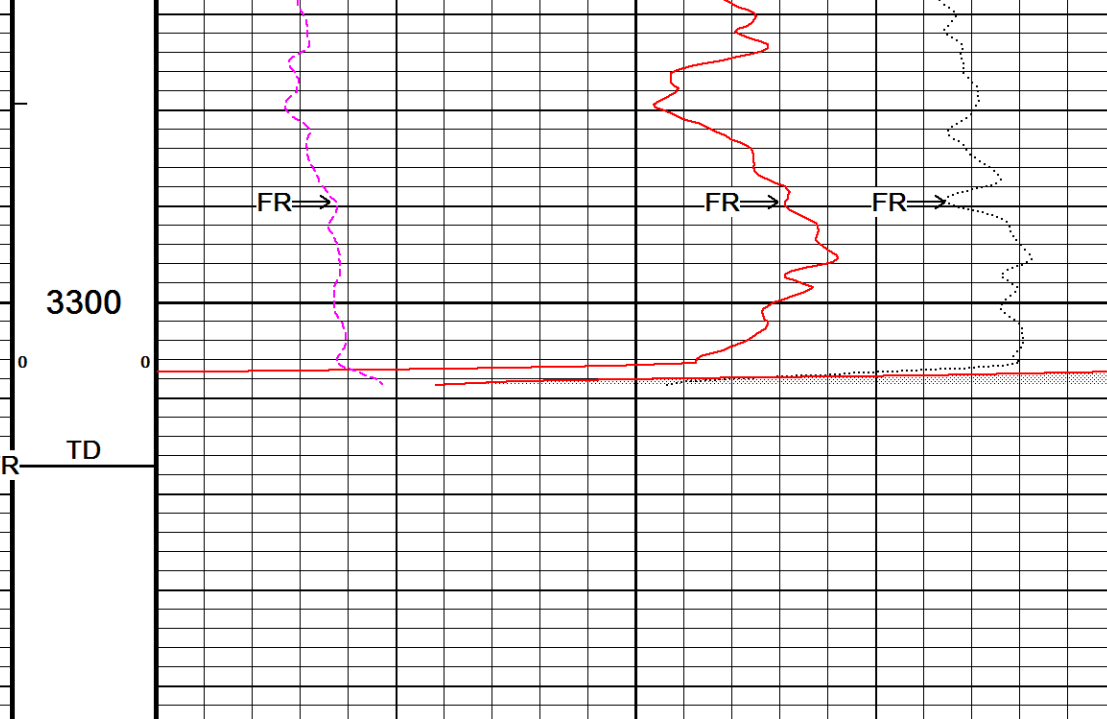
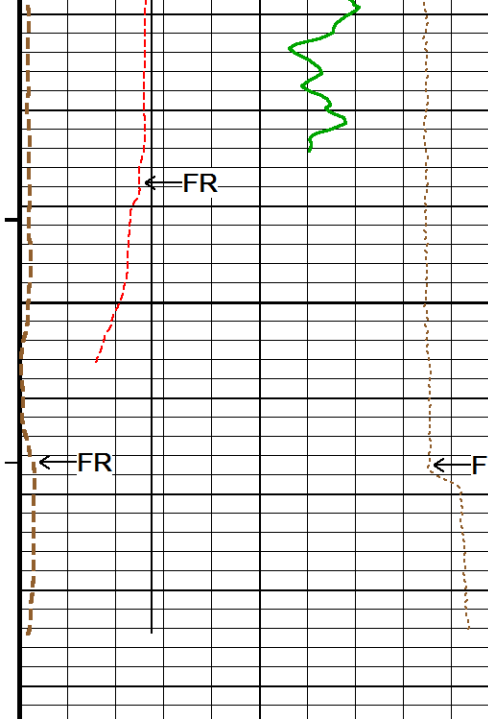












Depth Based Data - Maximum Sampling Increment 10.0cm
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5 INCH MAIN LOG

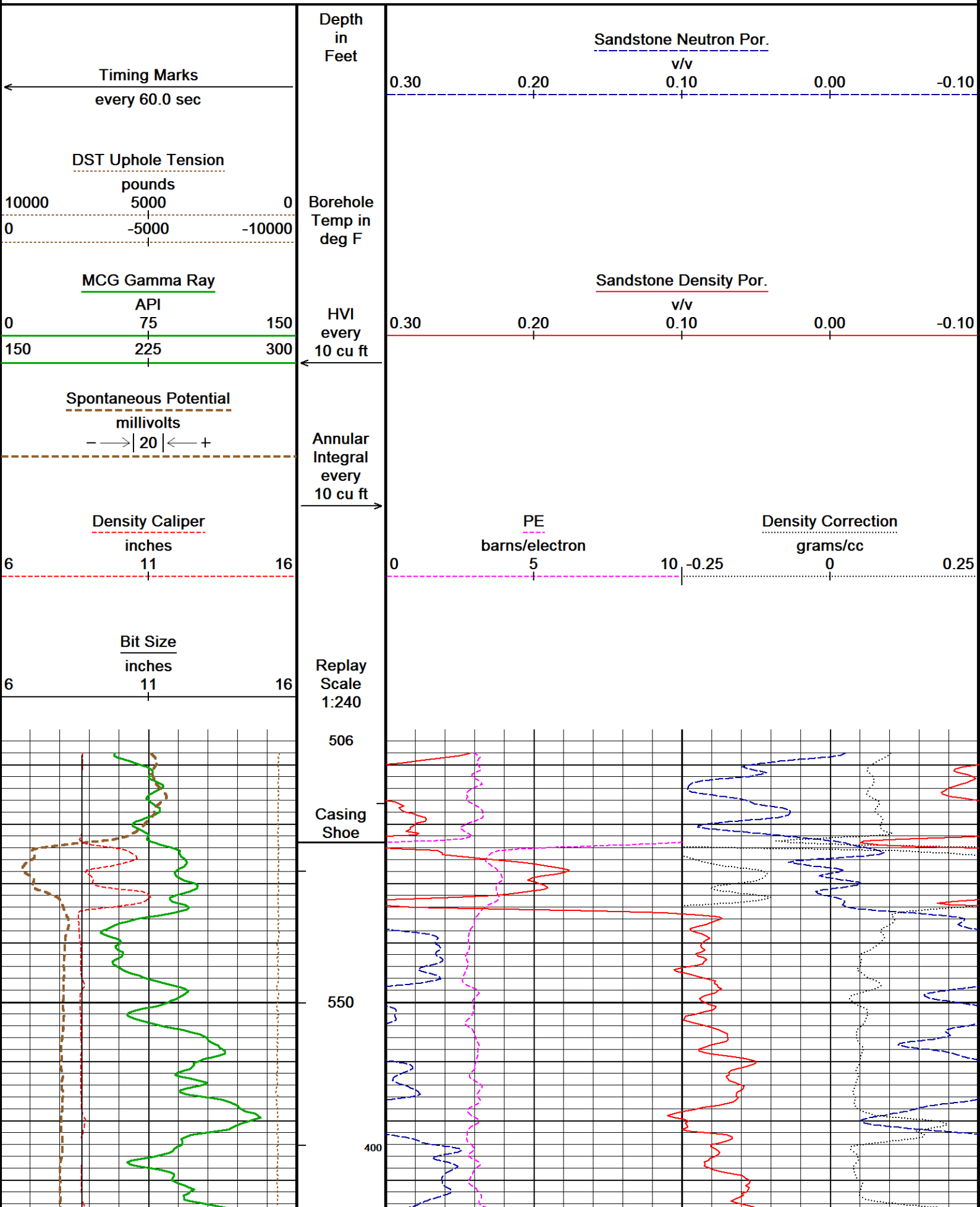
Depth Based Data - Maximum Sampling Increment 10.0cm

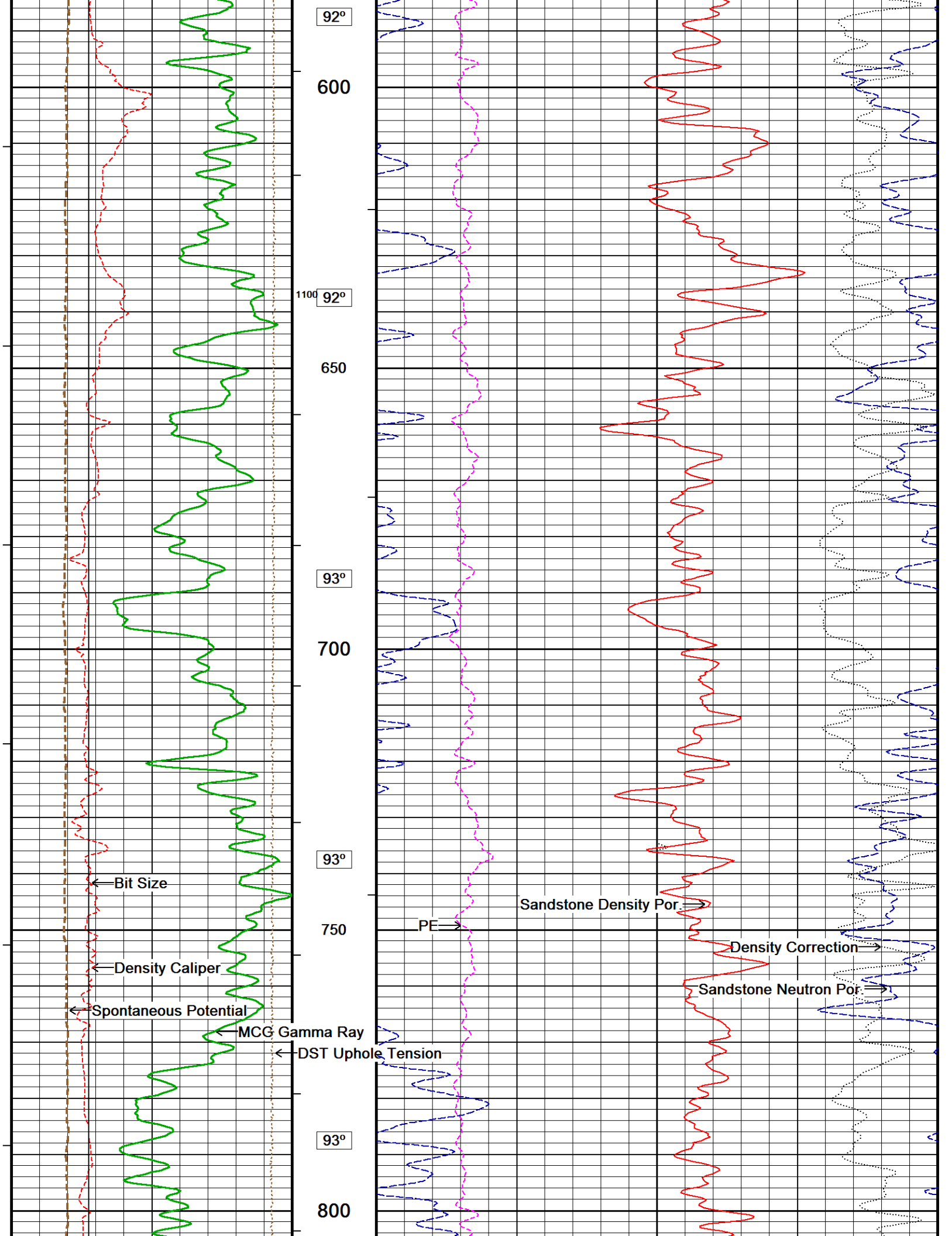
Plotted on 21-MAY-2015 04:18

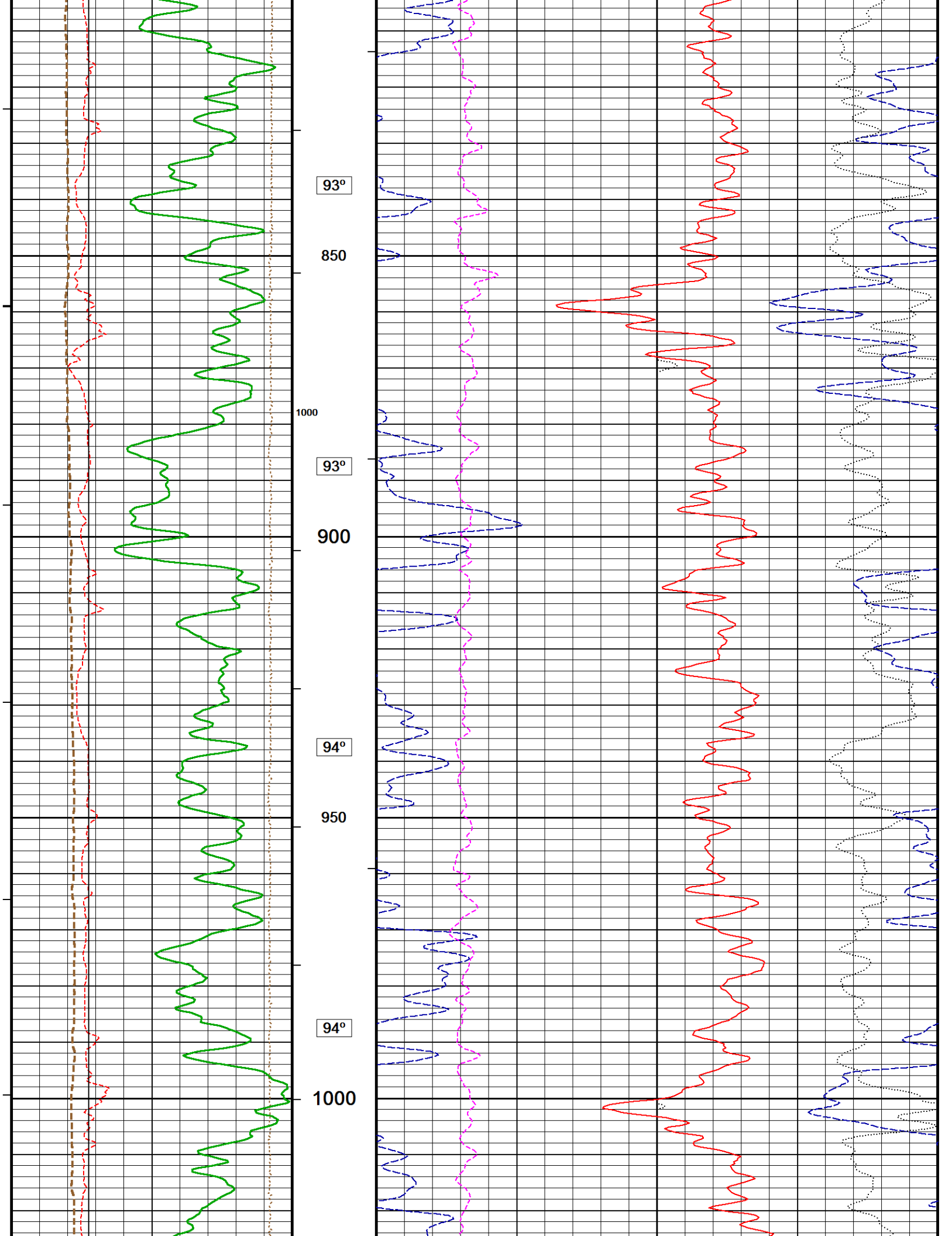
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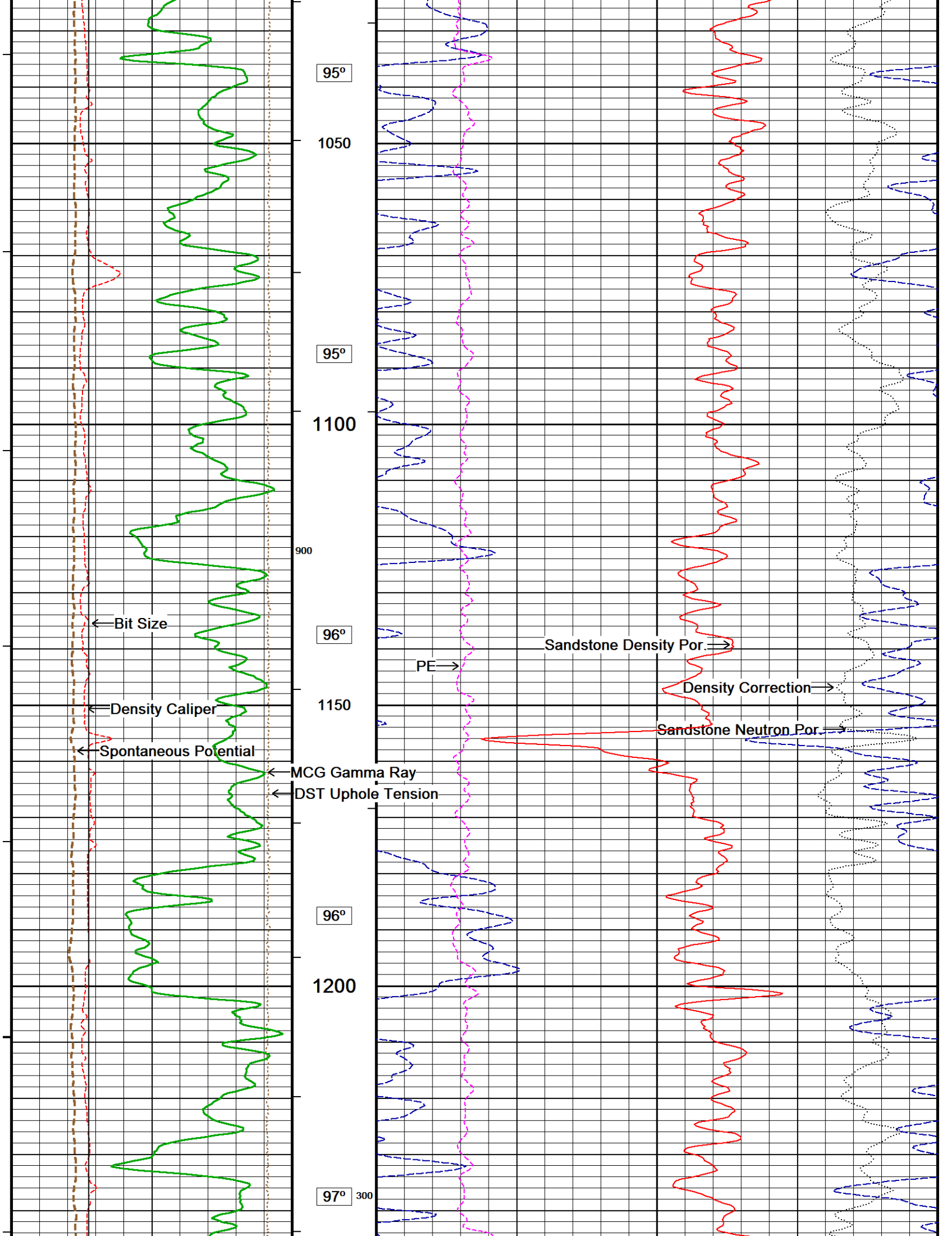
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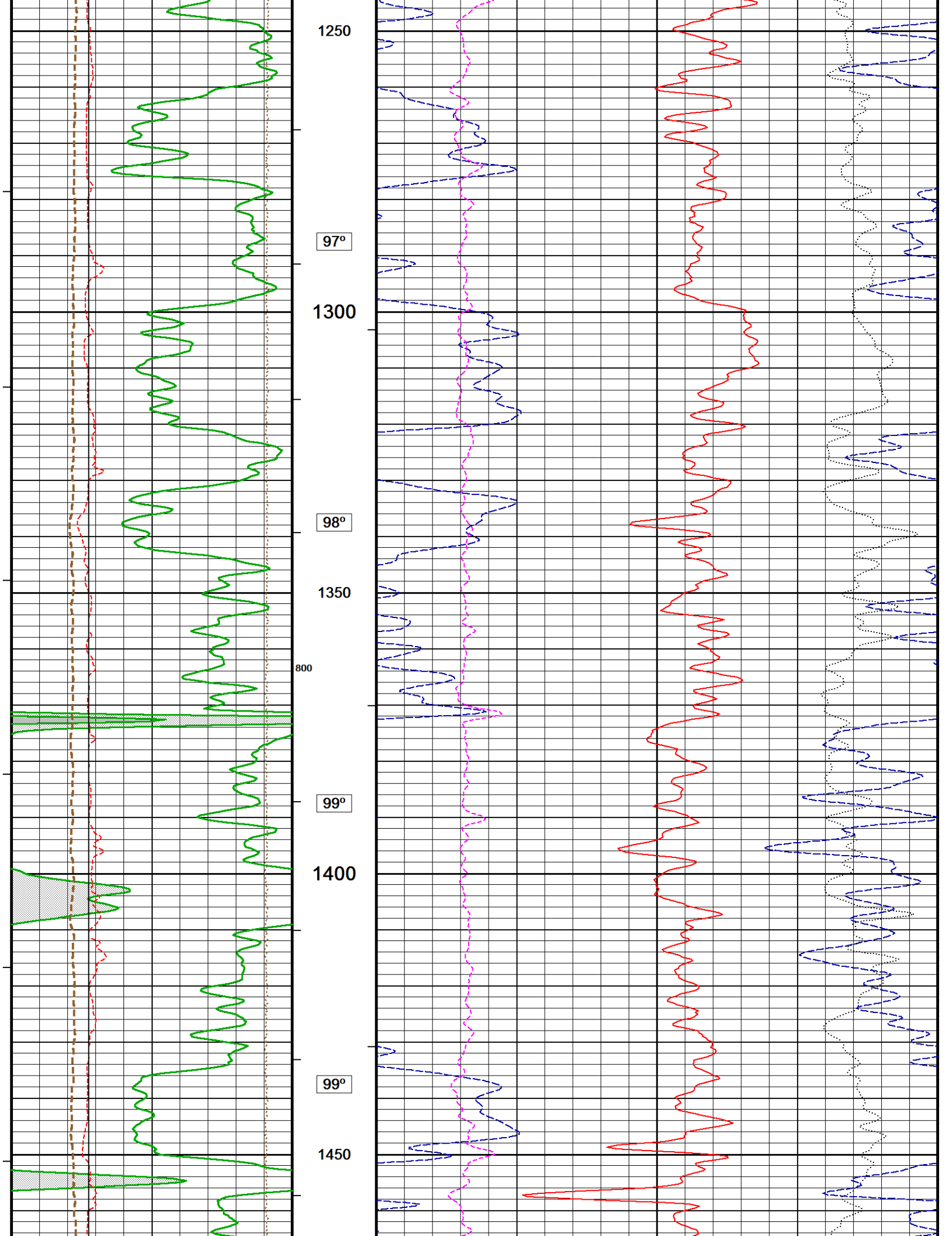
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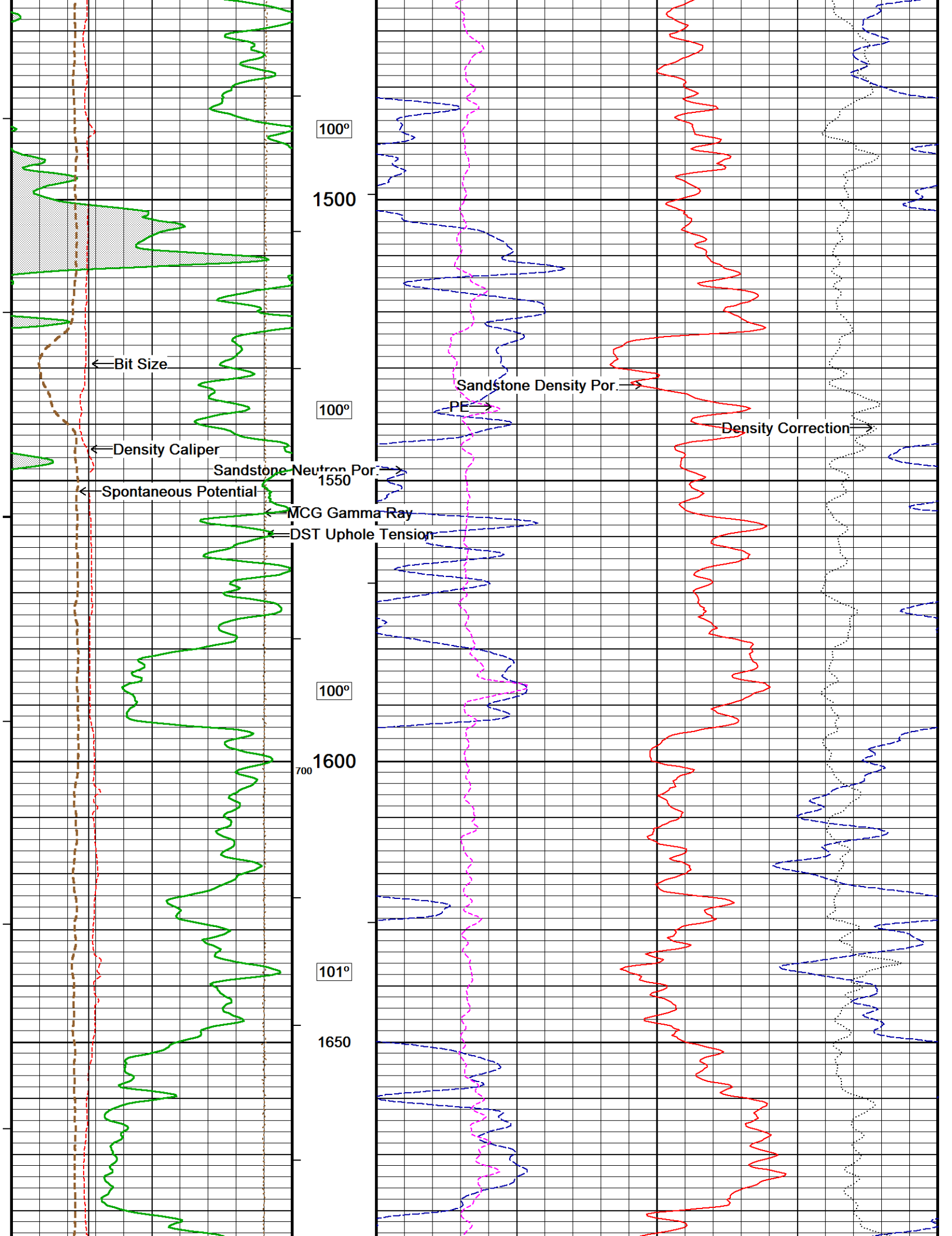


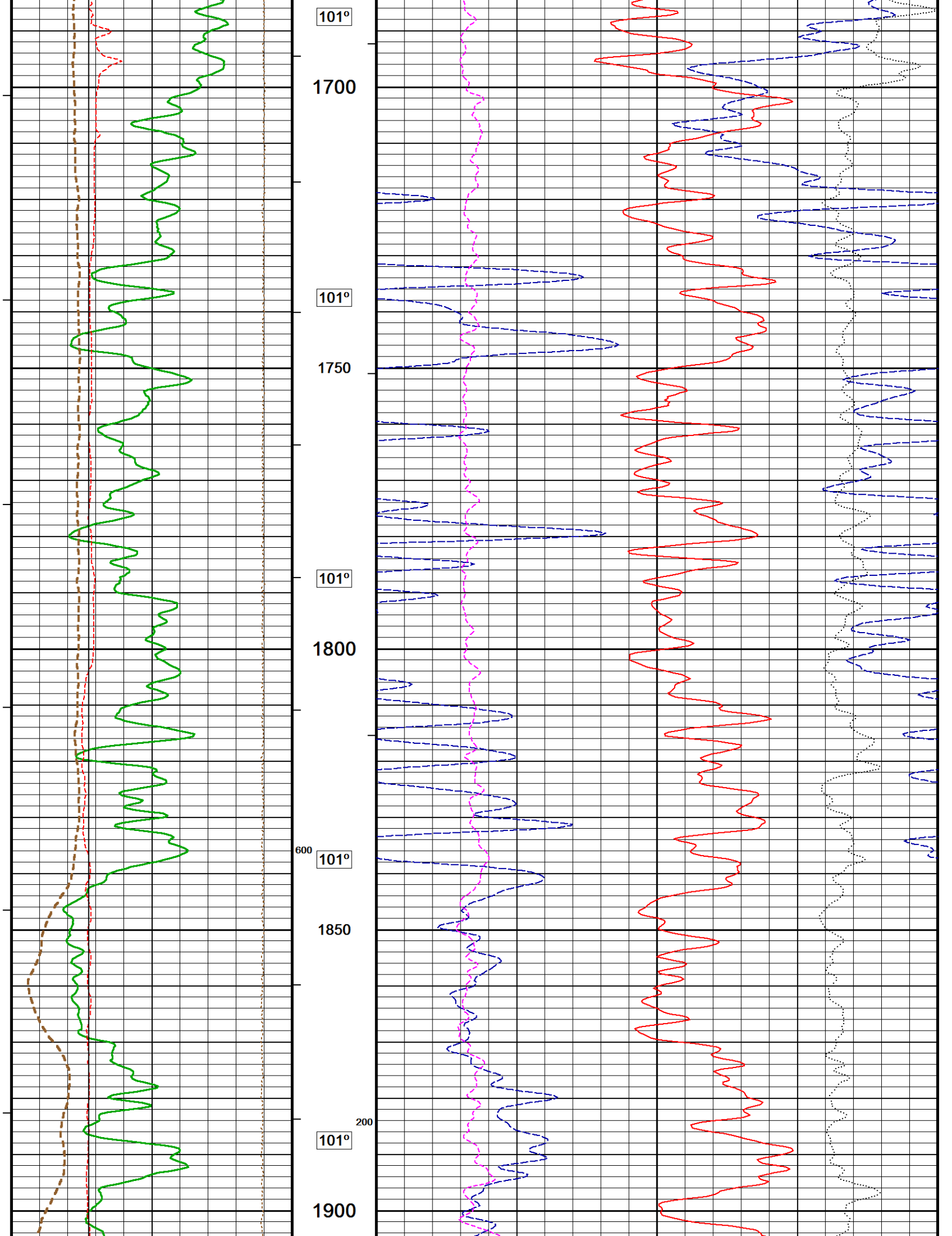


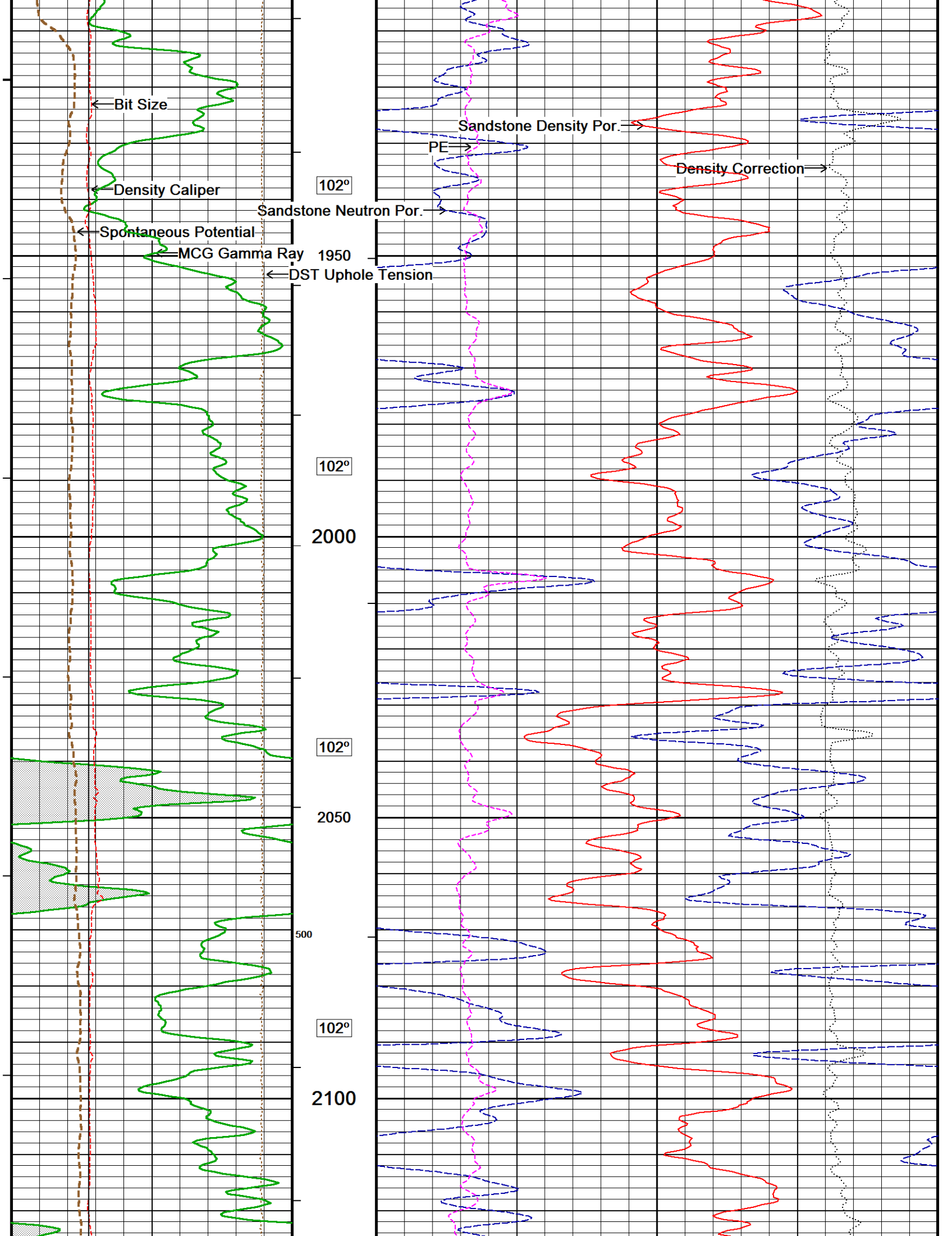


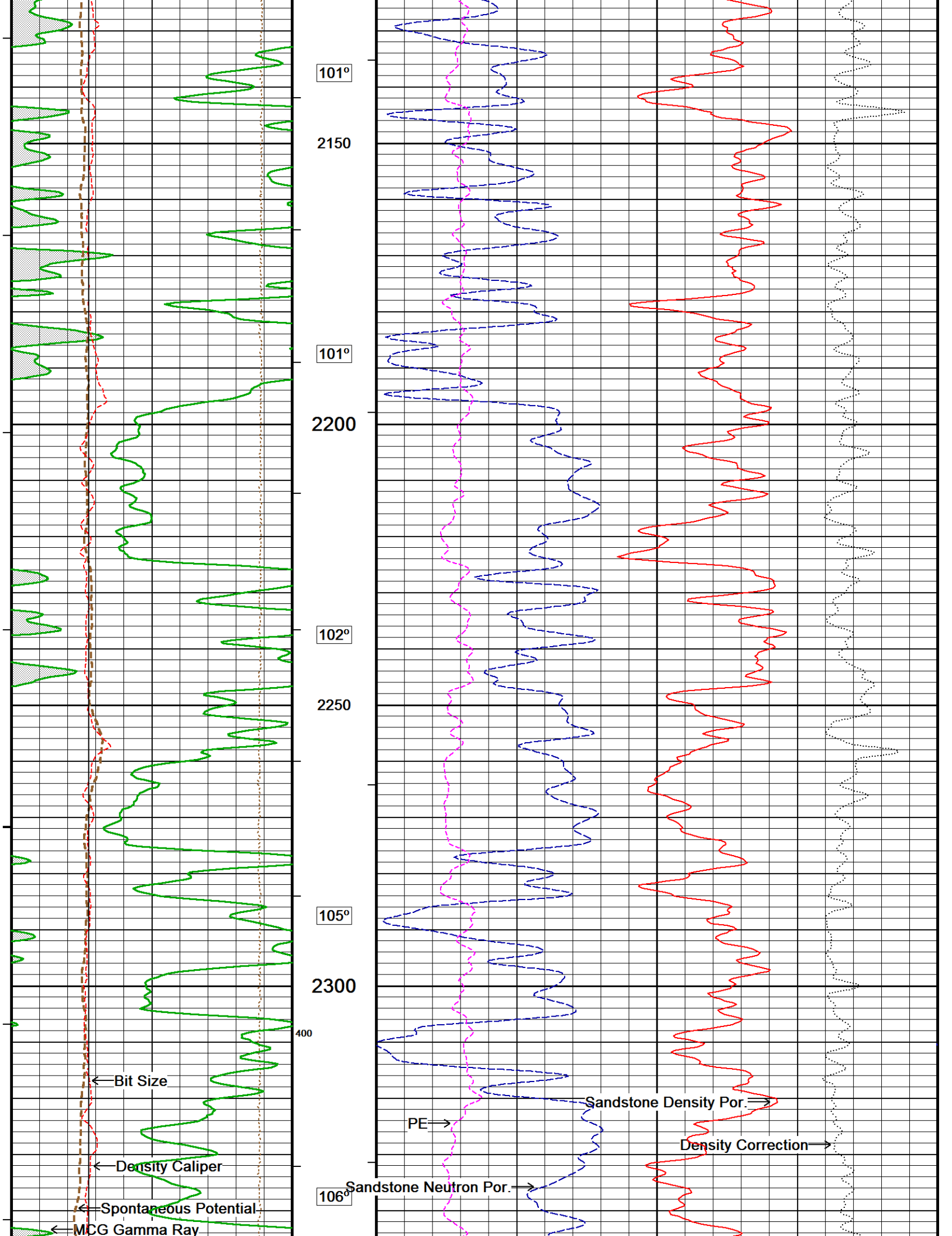


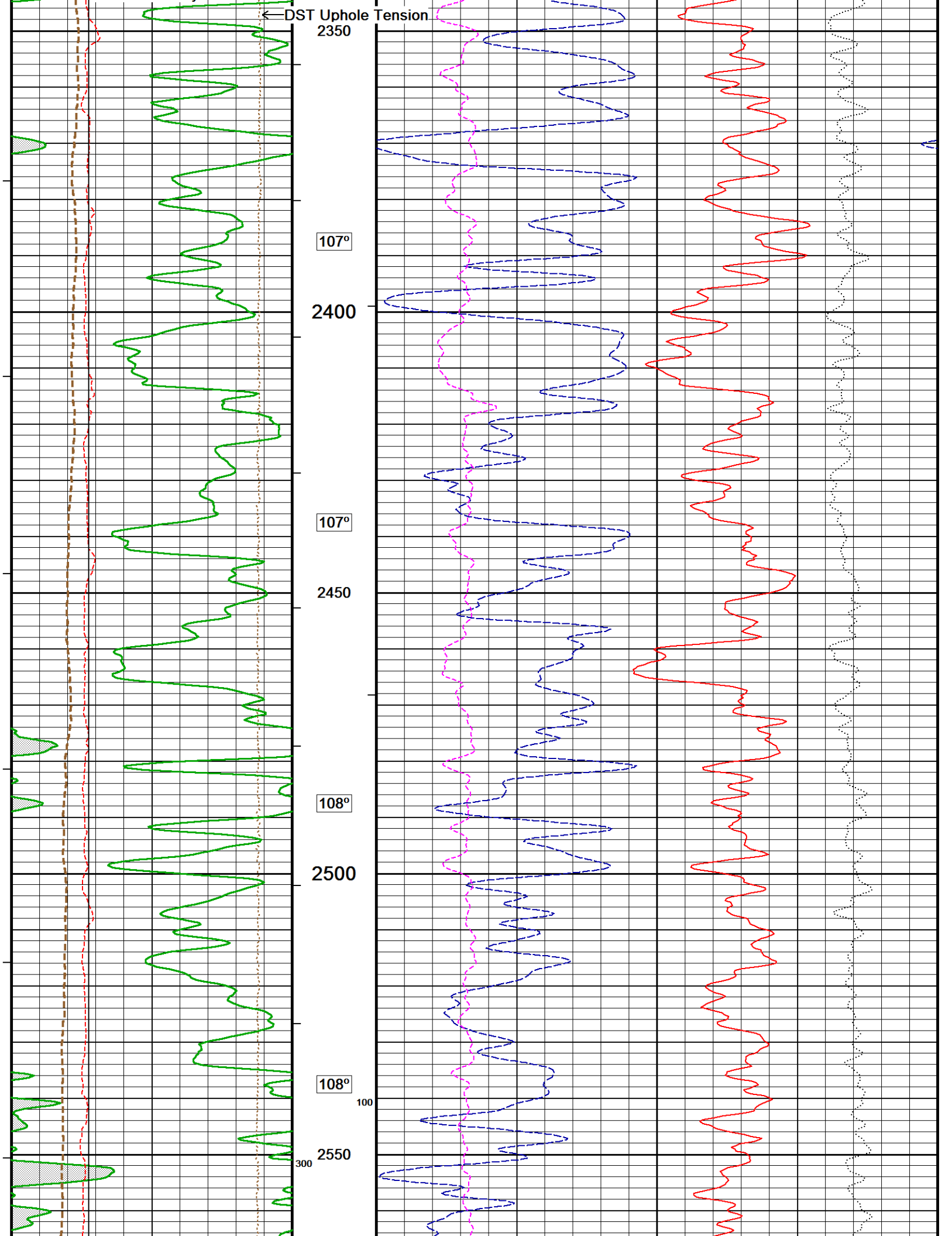


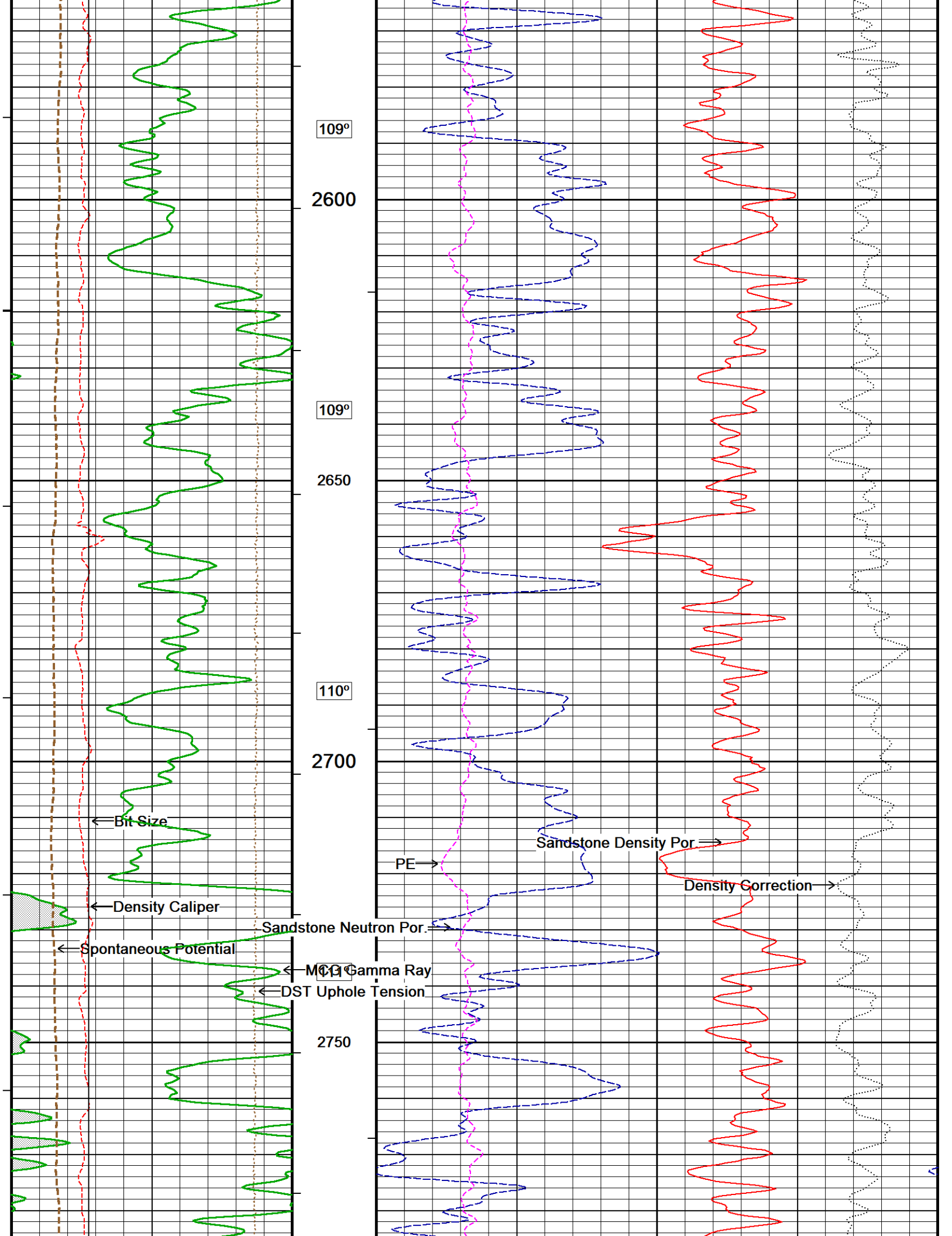


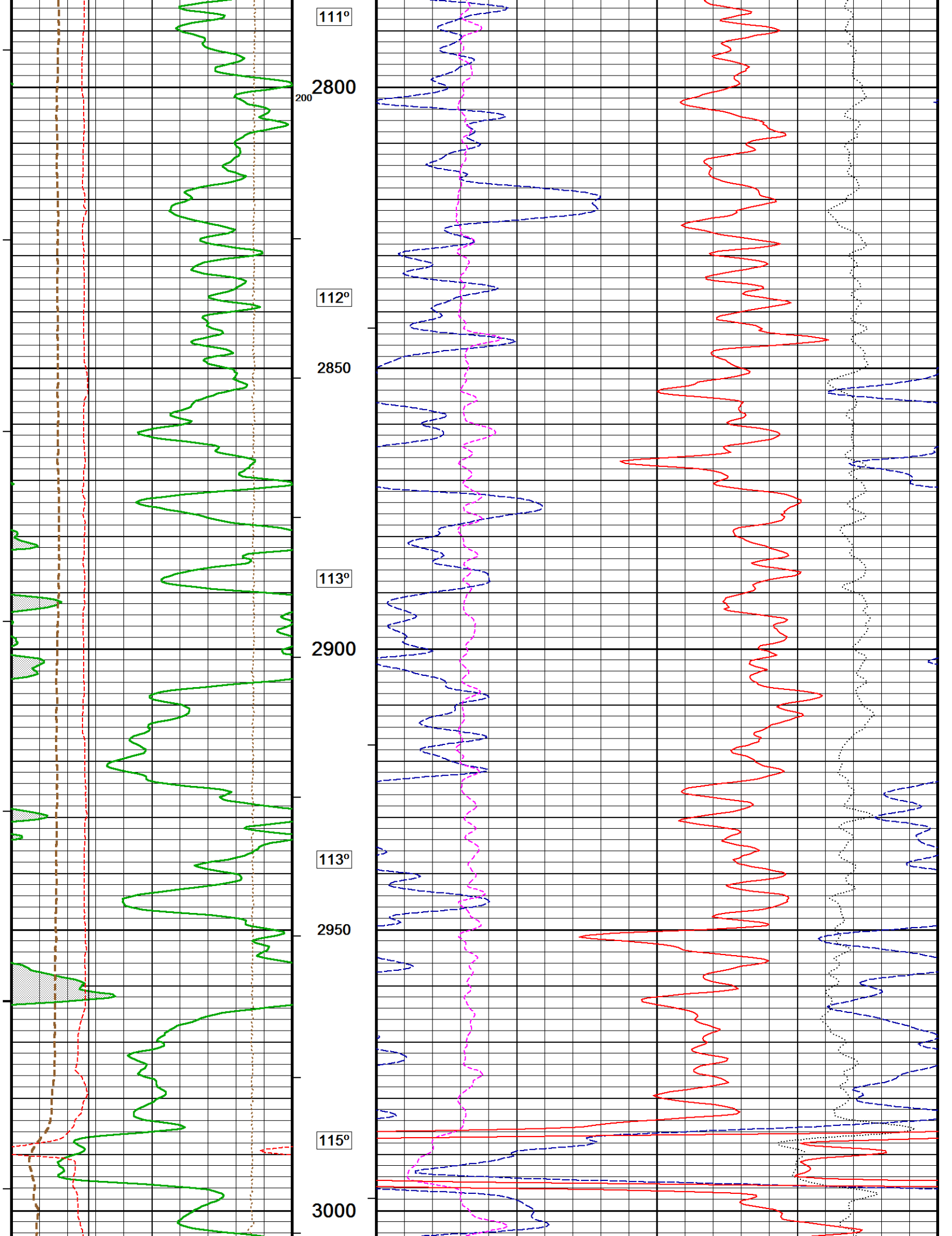


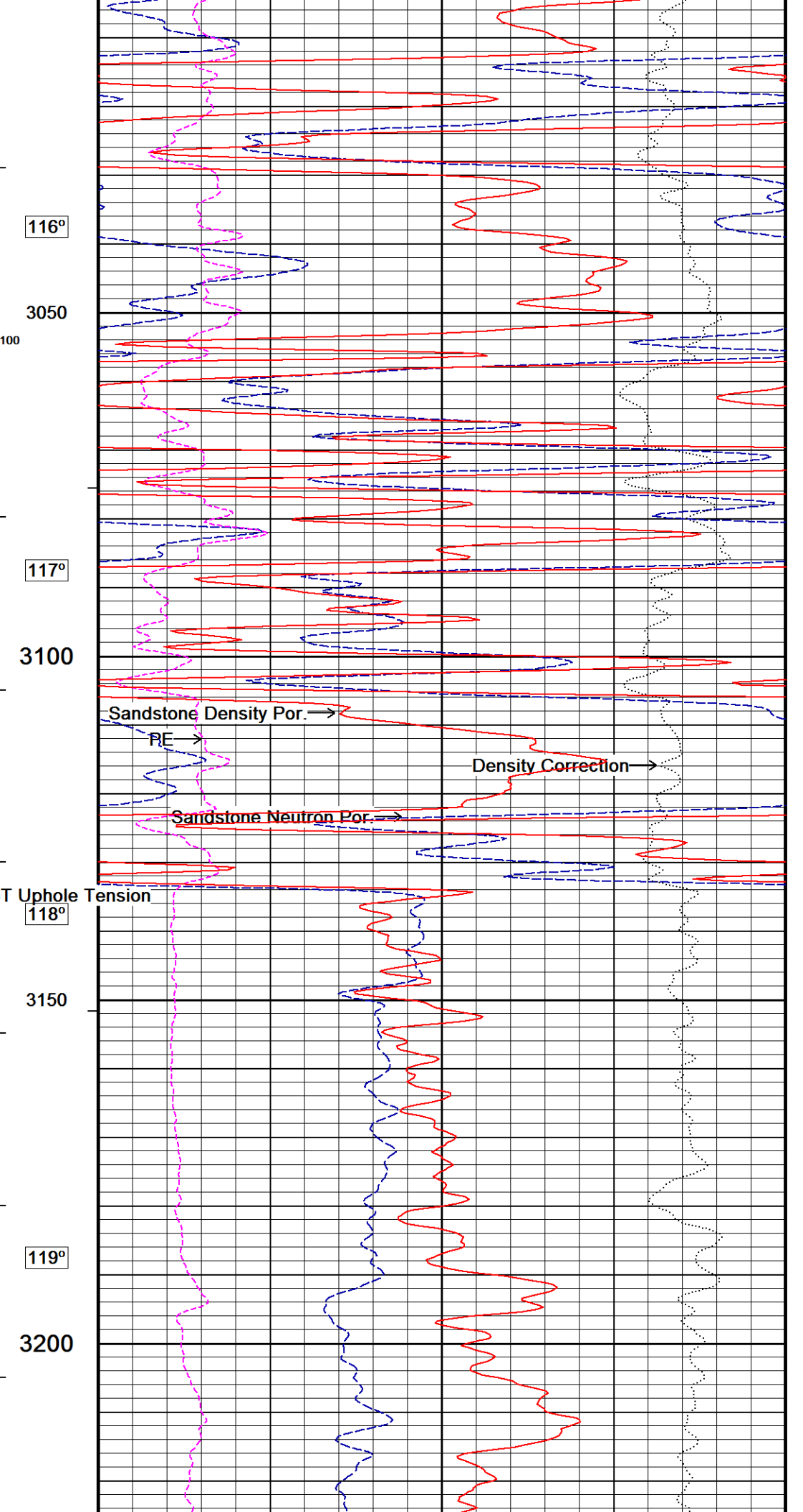
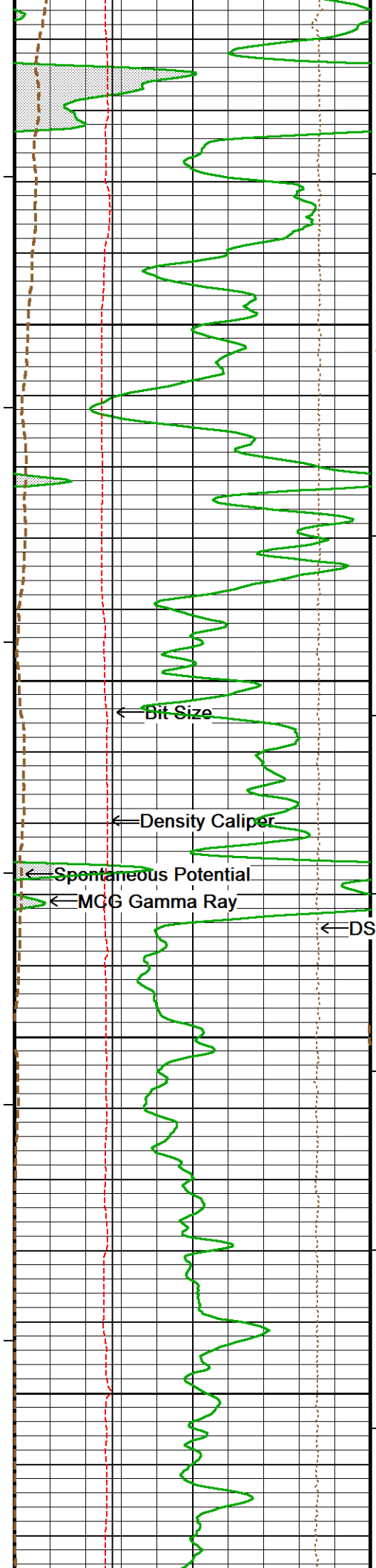












116°

3050

117°

3100

118°

3150

119°

3200

← Bit Size

← Density Caliper

← Spontaneous Potential

← MCG Gamma Ray

← DST Uphole Tension

Sandstone Density Por. →

PE →

Sandstone Neutron Por. →

Density Correction →

Bit Size
inches
6 11 16

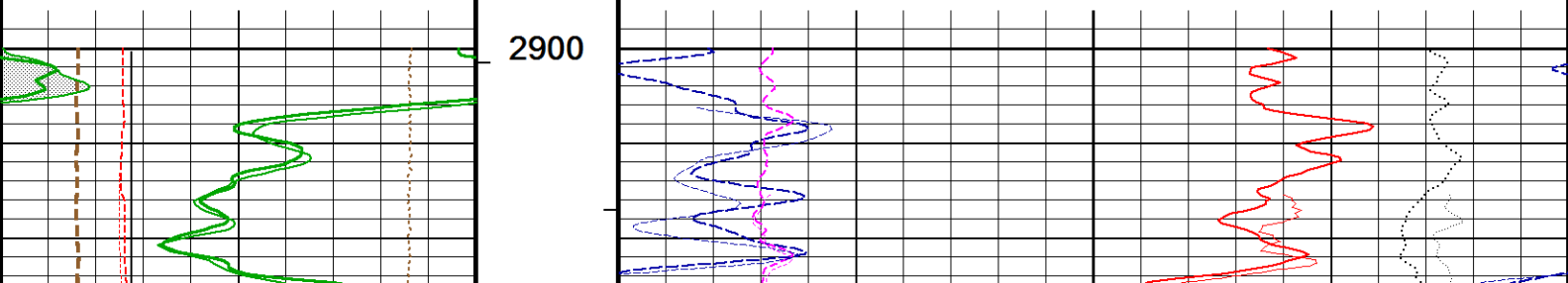
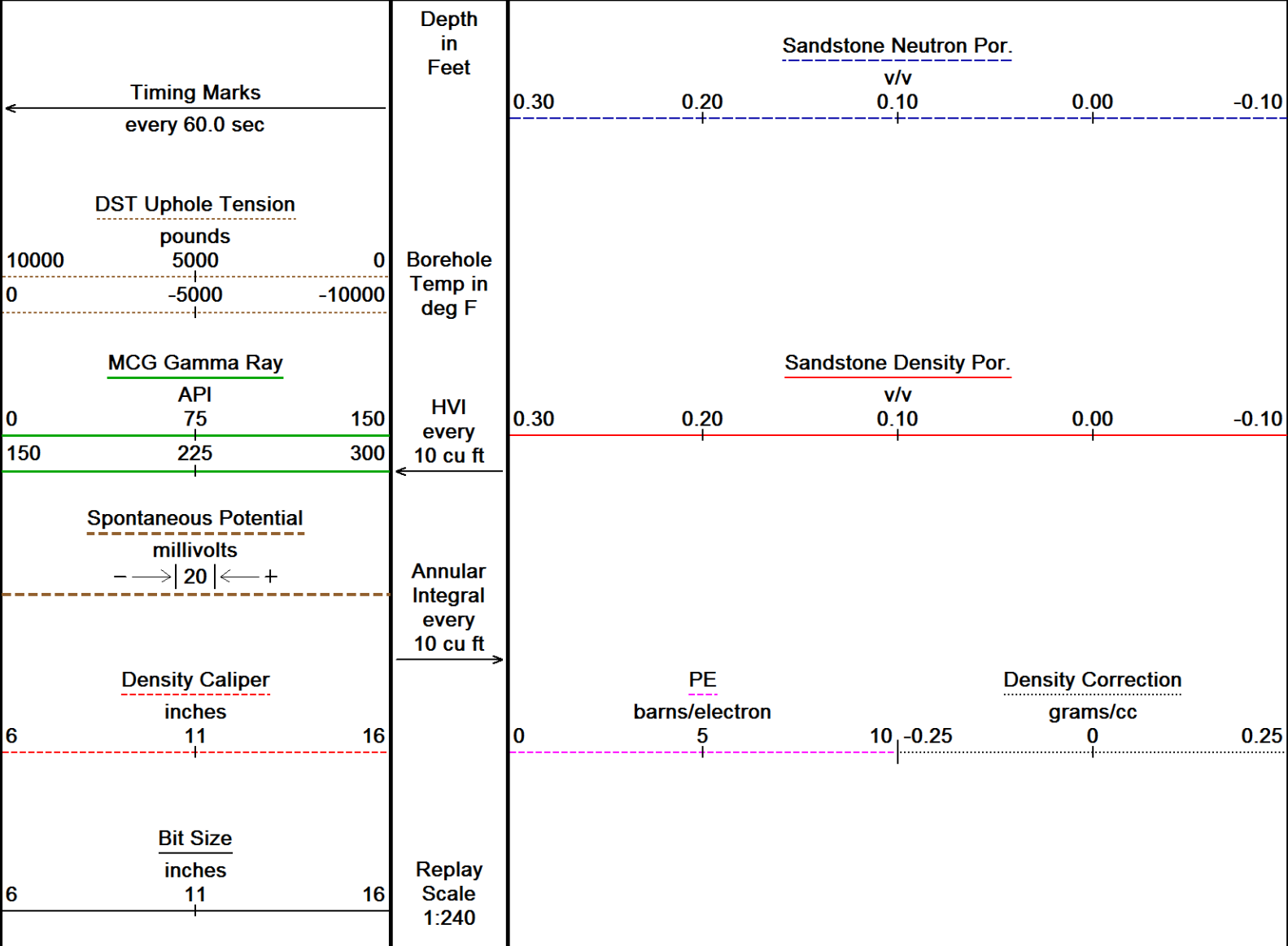
Replay
Scale
1:240

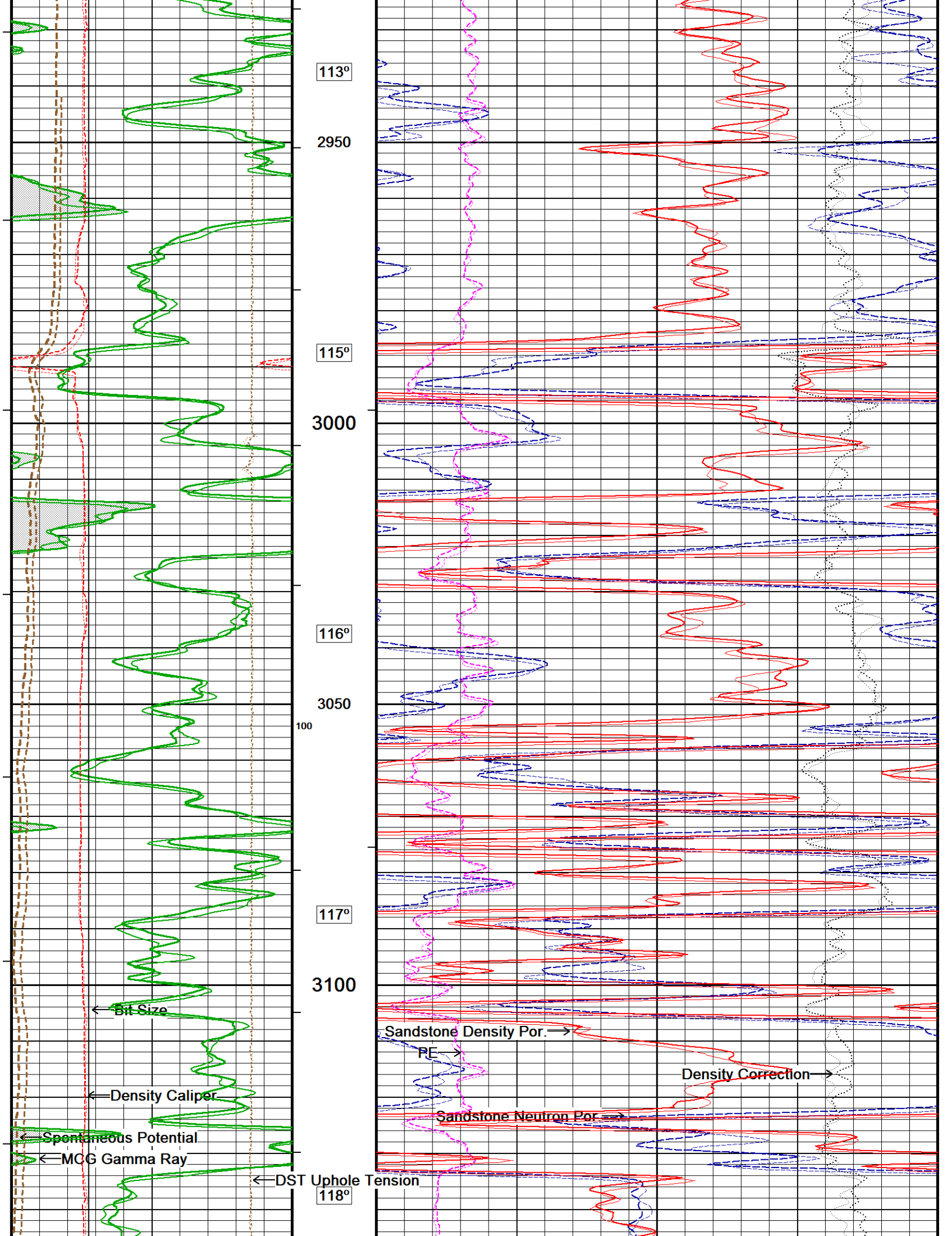
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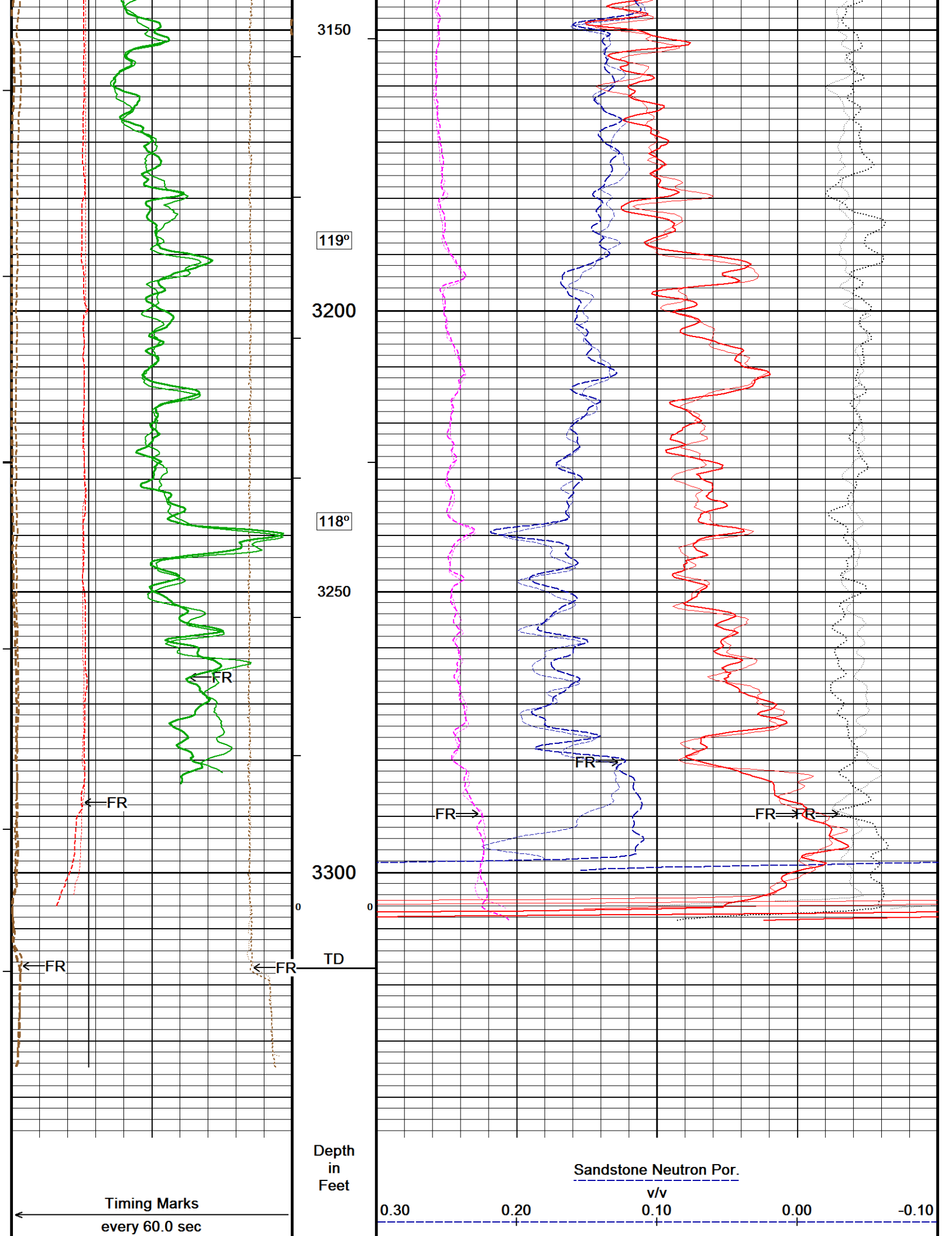
5 INCH MAIN LOG

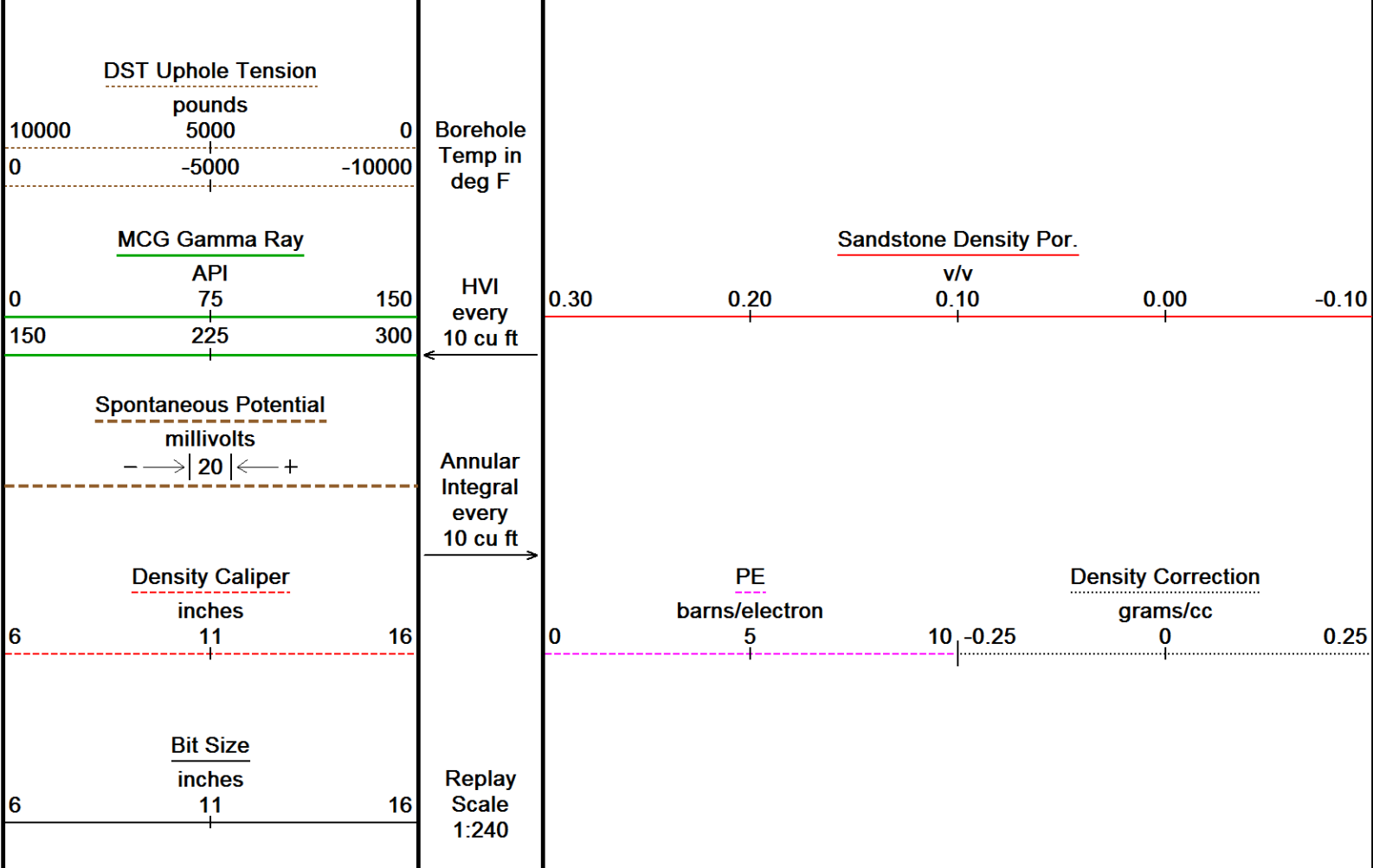
5 INCH MAIN LOG
5 INCH REPEAT LOG

Depth Based Data - Maximum Sampling Increment 10.0cm
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 Recorded on 21-MAY-2015 01:34
 Filename: C:\Logs\Coleman Oil and Gas\La Plata 34-7-33 #1\run_2...\La Plata 34-7-33 #1_REPEAT.dta
 Recorded on 21-MAY-2015 01:15
 System Versions: Logged with 15.01.3109 Processed with 15.01.3109 Plotted with 15.01.3109









Depth Based Data - Maximum Sampling Increment 10.0cm
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 Recorded on 21-MAY-2015 01:34
 Filename: C:\Logs\Coleman Oil and Gas\La Plata 34-7-33 #1\run_2...\La Plata 34-7-33 #1_REPEAT.dta
 Recorded on 21-MAY-2015 01:15
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↑ **5 INCH MAIN LOG** ↑
5 INCH REPEAT LOG

BEFORE SURVEY CALIBRATION
 C:\Logs\Coleman Oil and Gas\La Plata 34-7-33 #1\run_2\8367-119352096\La Plata 34-7-33 #1_MAINPASS.dta

General Constants All 000 Last Edited on 21-MAY-2015,03:41

General Parameters		
Mud Resistivity	4.060	ohm-metres
Mud Resistivity Temperature	77.000	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	7.000	inches
Caliper for Differential Caliper	Density Caliper	
Rwa Parameters		
Porosity used	Base Density Porosity	
Resistivity used	Array Ind. One Res Rt	
RWA Constant A	0.610	
RWA Constant M	2.150	
SW/APOR Tool Source	0.000	

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

High Resolution Temperature Constants MCG-D.K 482

Last Edited on 03-APR-2014,07:59

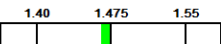
Pre-filter Length 11

Gamma Calibration MCG-D.K 482

Field Calibration on 20-MAY-2015 20:14

	Measured	Calibrated (API)
Background	135	92
Calibrator (Gross)	1471	1004
Calibrator (Net)	1336	912

Gamma Calibration Tolerances MCG-D.K 482

Ratio 1.465  Counts/API

Gamma Constants MCG-D.K 482

Last Edited on 21-MAY-2015,00:43

Gamma Calibrator Number	GRC.C.072	
GRC-M Calibrator Jig in Use?	NO	
Inactive Background Jig in Use?	NO	
Mud Density	1.19	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Potassium Equivalence	Chloride	
K Mud Concentration	0.00	%

Neutron Calibration MDN-B.J 374

Base Calibration on 08-MAY-2015 10:25

Field Check on 20-MAY-2015 19:32

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
Ratio	3130	95	3714	110
	32.998		33.764	

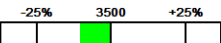
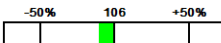
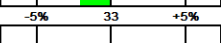
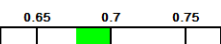
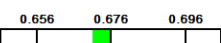
Field Calibrator at Base

	Calibrated (cps)
Ratio	0.676

Field Check

	Calibrated (cps)
Ratio	0.671

Neutron Calibration Tolerances MDN-B.J 374

Near Reading	3130		cps	Far Reading	95		cps
Ratio	32.998						
Base Check	0.676						
Field Check	0.671						

Neutron Constants MDN-B.J 374

Last Edited on 20-MAY-2015,19:32

Neutron Source Id	N-1057	
Neutron Jig Number	5922NE	
Air Hole Processing	Modified Ratio	
Caliper Source for Processing	Density Caliper	
Stand-off	0.00	inches
Mud Density	1.00	gm/cc
Limestone Sigma	7.10	cu
Sandstone Sigma	7.00	cu
Dolomite Sigma	4.70	cu
Formation Pressure Source	None	
Formation Pressure	N/A	kpsi
Temperature Source	None	
Temperature	N/A	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	

Caliper Calibration MPD-C.J 380		Base Calibration on 20-MAY-2015 19:48 Field Calibration on 20-MAY-2015 19:49
Base Calibration		
Reading No	Measured	Calibrator Size (in)
1	14459	3.98
2	22980	5.96
3	31574	7.97
4	39728	9.84
5	48864	11.91
6	N/A	N/A
Field Calibration		
	Measured Caliper (in)	Actual Caliper (in)
	7.97	7.97

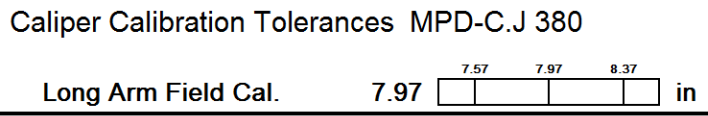
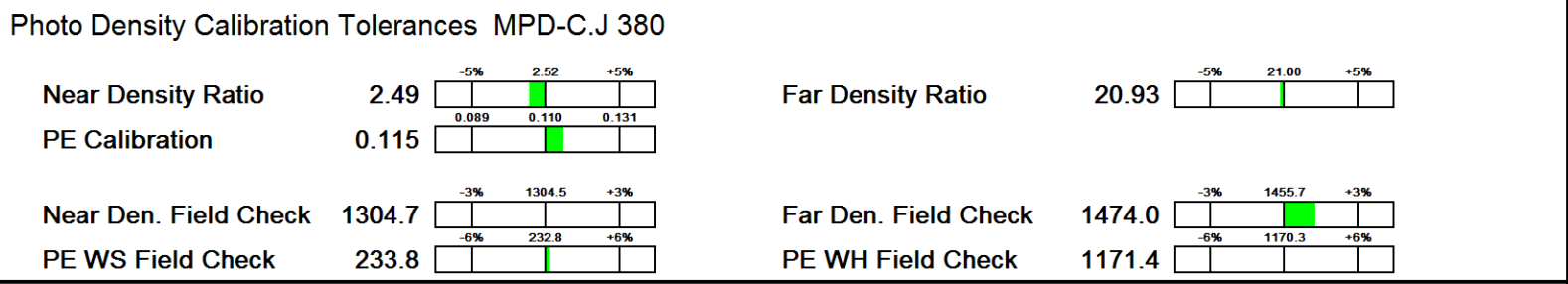


Photo Density Calibration MPD-C.J 380		Base Calibration on 11-MAY-2015 09:34 Field Check on 20-MAY-2015 19:23
Density Calibration		
Base Calibration	Measured	Calibrated (sdu)
	Near Far	Near Far
Background	1305 1456	
Reference 1	58315 28178	59443 30683
Reference 2	24183 2732	25113 2508
Field Check at Base		
	1304.5 1455.7	
Field Check		
	1304.7 1474.0	
PE Calibration		
Base Calibration	Measured	Calibrated
	WS WH Ratio	Ratio
Background	233 1170	
Reference 1	23856 58106 0.415	0.372
Reference 2	6788 24039 0.287	0.268
Field Check at Base		
	232.8 1170.3	
Field Check		
	233.8 1171.4	



Density Constants MPD-C.J 380		Last Edited on 21-MAY-2015,00:42
Density Source Id	P50562B	
Nylon Calibrator Number	DNC.E.652	
Aluminium Calibrator Number	DAC.D.659	
Density Shoe Profile	8 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1.19	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)
2.68	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:\Logs\Coleman Oil and Gas\La Plata 34-7-33 #1\run_2\8367-119352096\La Plata 34-7-33 #1_MAINPASS.dta

CBH-C, Cablehead, 11 pin
 CBH-C 0 LG: 2.40 ft WT: 24.3 lb OD: 2.244 in

SHA-J.A Compact Swivel Head Adaptor
 SHA-J.A 316 LG: 2.30 ft WT: 22.0 lb OD: 2.244 in

Compact Comms Gamma
 MCG-D.K 482 LG: 8.70 ft WT: 63.9 lb OD: 2.244 in

Compact Micro-Resistivity
 MMR-B.A 141 LG: 8.59 ft WT: 81.6 lb OD: 3.819 in

Compact Neutron
 MDN-B.J 374 LG: 5.04 ft WT: 50.7 lb OD: 2.244 in

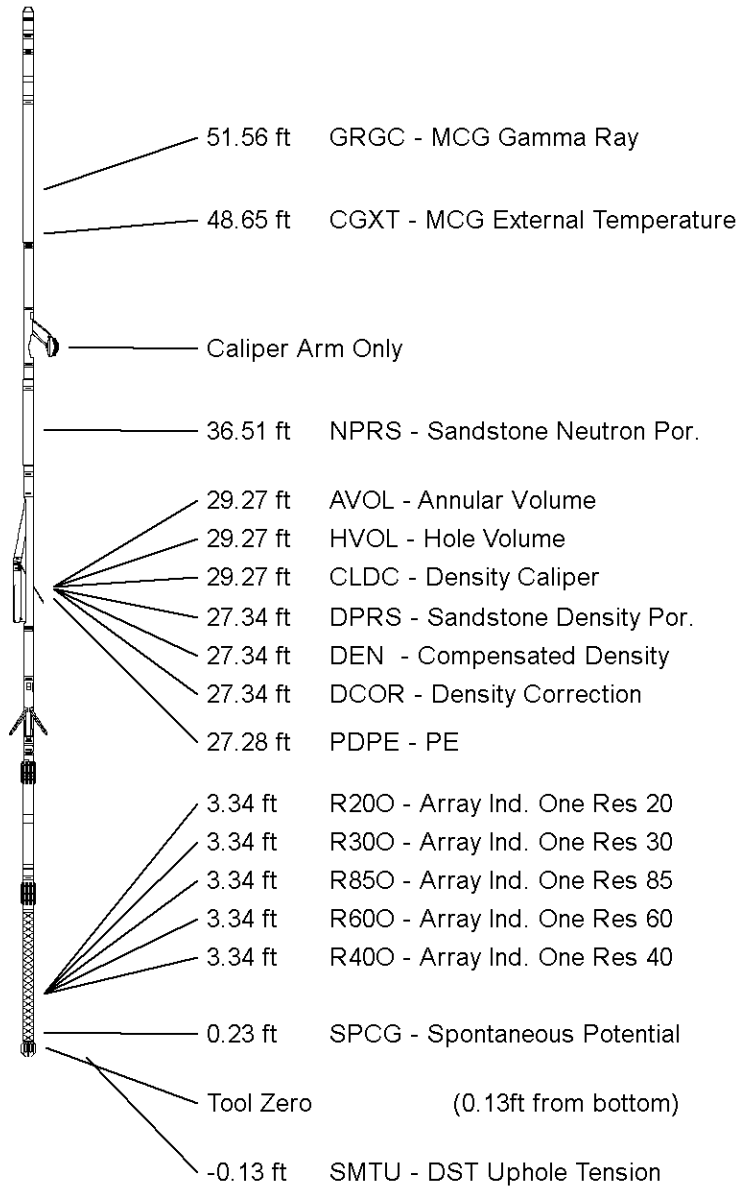
Compact Density/Caliper
 MPD-C.J 380 LG: 9.59 ft WT: 90.4 lb OD: 2.449 in

Compact Vee Arm Caliper
 MVC-A.A 138 LG: 8.06 ft WT: 61.7 lb OD: 2.244 in

Compact Focussed Electric
 MFE-C.A 417 LG: 6.05 ft WT: 48.5 lb OD: 2.244 in

Compact Induction
 MAI-B.J 374 LG: 10.81 ft WT: 48.5 lb OD: 2.240 in

Total Length: 61.54 ft Weight: 491.6 lb



All measurements relative to tool zero.

COMPANY	COLEMAN OIL AND GAS
WELL	LA PLATA 34-7-33 #1
FIELD	IGNACIO BLANCO

PROVINCE/COUNTY LA PLATA
COUNTRY/STATE USA / COLORADO

Elevation Kelly Bushing	6742.00	feet	First Reading	3290.00	feet
Elevation Drill Floor	6742.00	feet	Depth Driller	3334.00	feet
Elevation Ground Level	6726.00	feet	Depth Logger	3317.00	feet



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