

COMPACT TRIPLE COMBO

QUICKLOOK

LOG

COMPANY BILL BARRETT CORPORATION
WELL GGU FEDERAL 31C-29-691
FIELD GIBSON GULCH
PROVINCE/COUNTY GARFIELD
COUNTRY/STATE U.S.A. / COLORADO
LOCATION SHL: 1200' FNL & 1367' FEL
 BHL: 492' FNL & 1990' FEL

SEC TWP 6S RGE 91W Other Services
API Number 05-045-19807
Permit Number
Permanent Datum G.L., Elevation 6104 feet
Log Measured From K.B. @ 23 FEET above Permanent Datum
Drilling Measured From K.B.

Elevations:
 KB 6127.00 feet
 DF
 GL 6104.00 feet

Date	24-MAR-2011	
Run Number	ONE	
Depth Driller	7475.00	feet
Depth Logger	7474.00	feet
First Reading	7470.50	
Last Reading	761.00	
Casing Driller	760.00	feet
Casing Logger	761.00	feet
Bit Size	7.875	inches
Hole Fluid Type	LSND	
Density / Viscosity	10.70 lb/USg	55.00 CP
PH / Fluid Loss	9.80	6.00 ml/30Min
Sample Source	FLOW LINE	
Rm @ Measured Temp	3.0 @ 90.0	ohm-m
Rmf @ Measured Temp	2.40 @ 90.0	ohm-m
Rmc @ Measured Temp	3.60 @ 90.0	ohm-m
Source Rmf / Rmc	CALC	CALC
Rm @ BHT	1.81 @ 182.0	ohm-m
Time Since Circulation	5 HOURS	
Max Recorded Temp	182.00	deg F
Equipment Name	COMPACT	
Equipment / Base	13173	GD JCT
Recorded By	M. RICHINS, K. SALLER	
Witnessed By	C. CROW	

BOREHOLE RECORD

Last Edited: 24-MAR-2011 20:53

Bit Size inches	Depth From feet	Depth To feet
8.750	760.00	3412.00
7.880	3412.00	7475.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	9.625	0.00	760.00	36.00

REMARKS

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

HARDWARE: MPD: 8 INCH PROFILE PLATE USED.
 ONE 0.5 INCH STANDOFFS USED ON INDUCTION.
 ONE 0.5 INCH STANDOFFS USED ON MFE.
 DUAL BOWSPRING USED ON NEUTRON.

2.68 G/CC DENSITY MATRIX USED TO CALCULATE POROSITY.

ALL INTERVALS LOGGED AND SCALED PER CUSTOMER'S REQUEST.

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

CALIPER CHECK IN CASING PRESENTED, REFERENCE I.D. = 8.93" (9 5/8", 36 LB/FT CASING)

MAXIMUM WELL DEVIATION 17 DEG

TOTAL HOLE VOLUME FROM TD TO SURFACE CASING = 2560 CU.FT.

ANNULAR VOLUME WITH 4.5 INCH PRODUCTION CASING = 1830 CU.FT.

SERVICE ORDER: # 3524873

RIG: PATTERSON #307

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 MAIN LOG

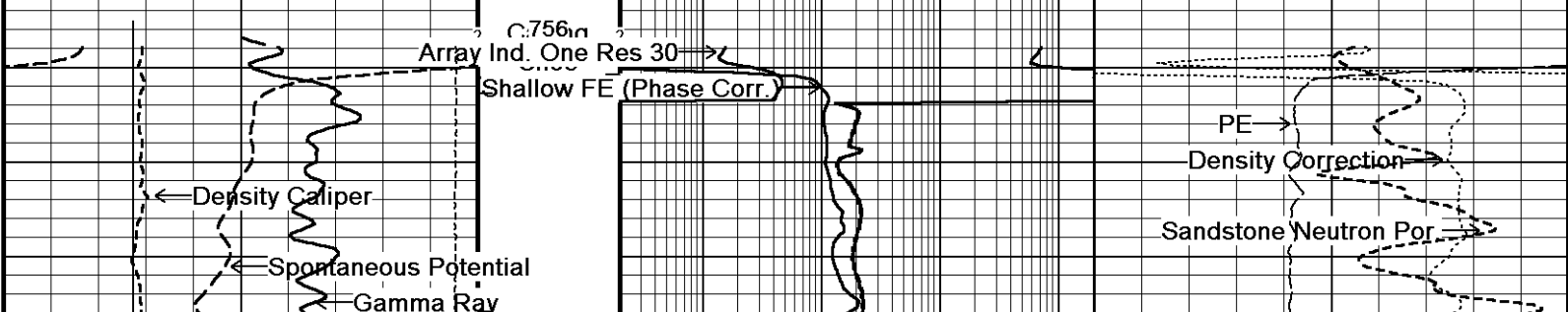
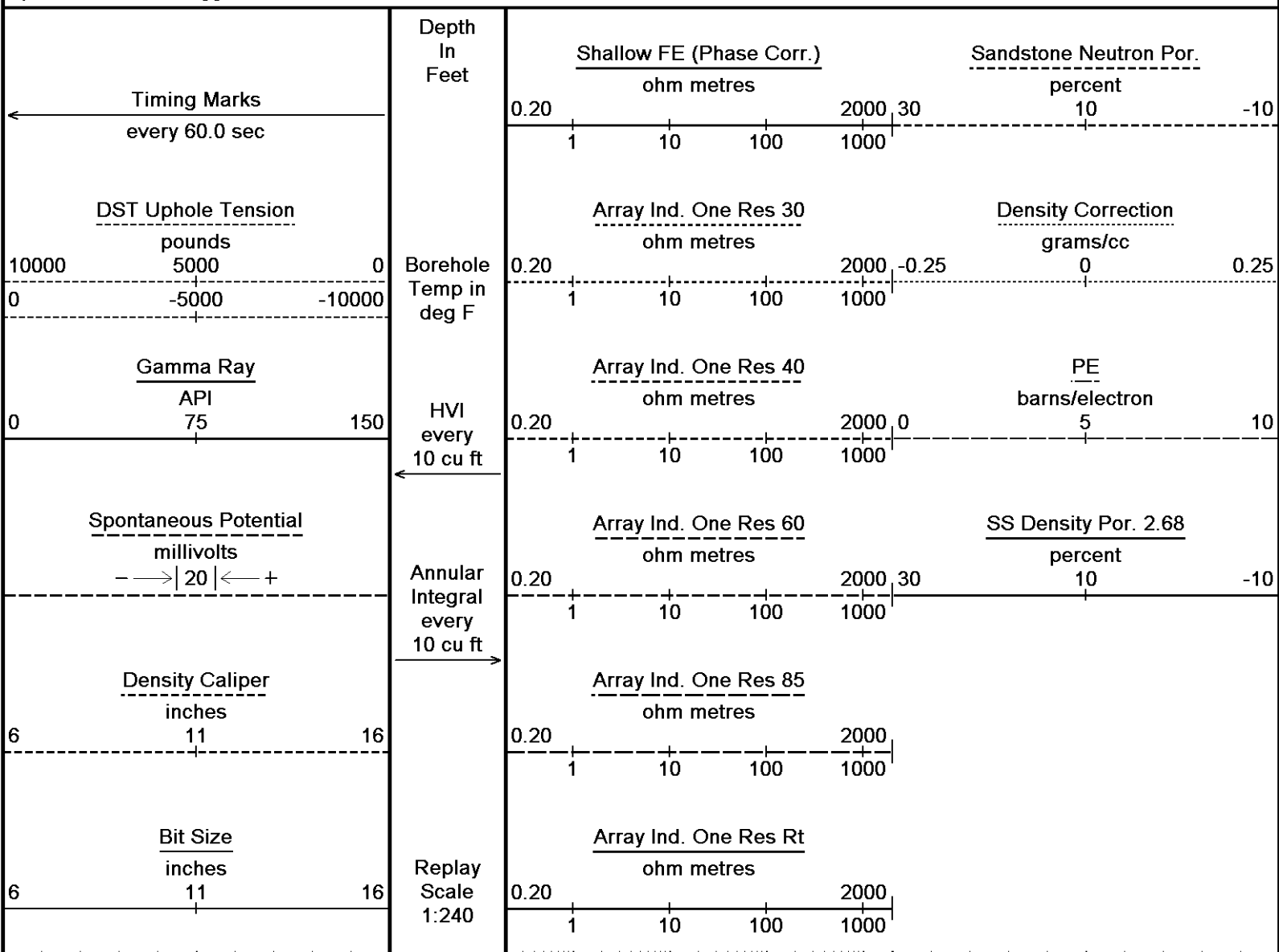
Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 25-MAR-2011 05:23

Filename: C:\LOGS\GJ11-037\main.dta

Recorded on 24-MAR-2011 21:50

System Versions: Logged with 11.02.2782 Plotted with 11.01.1914



← DST Uphole Tension

800

1800

100°

850

2500

101°

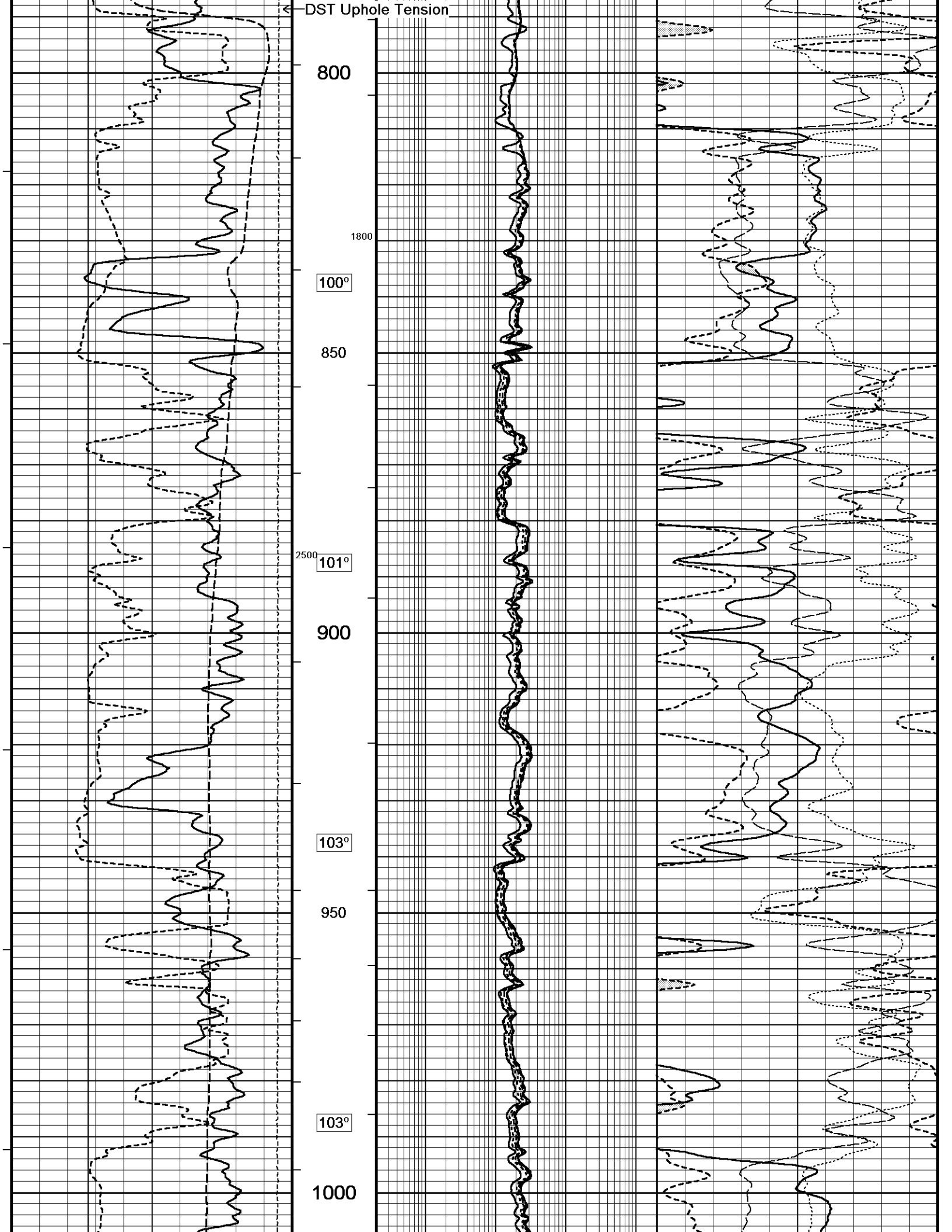
900

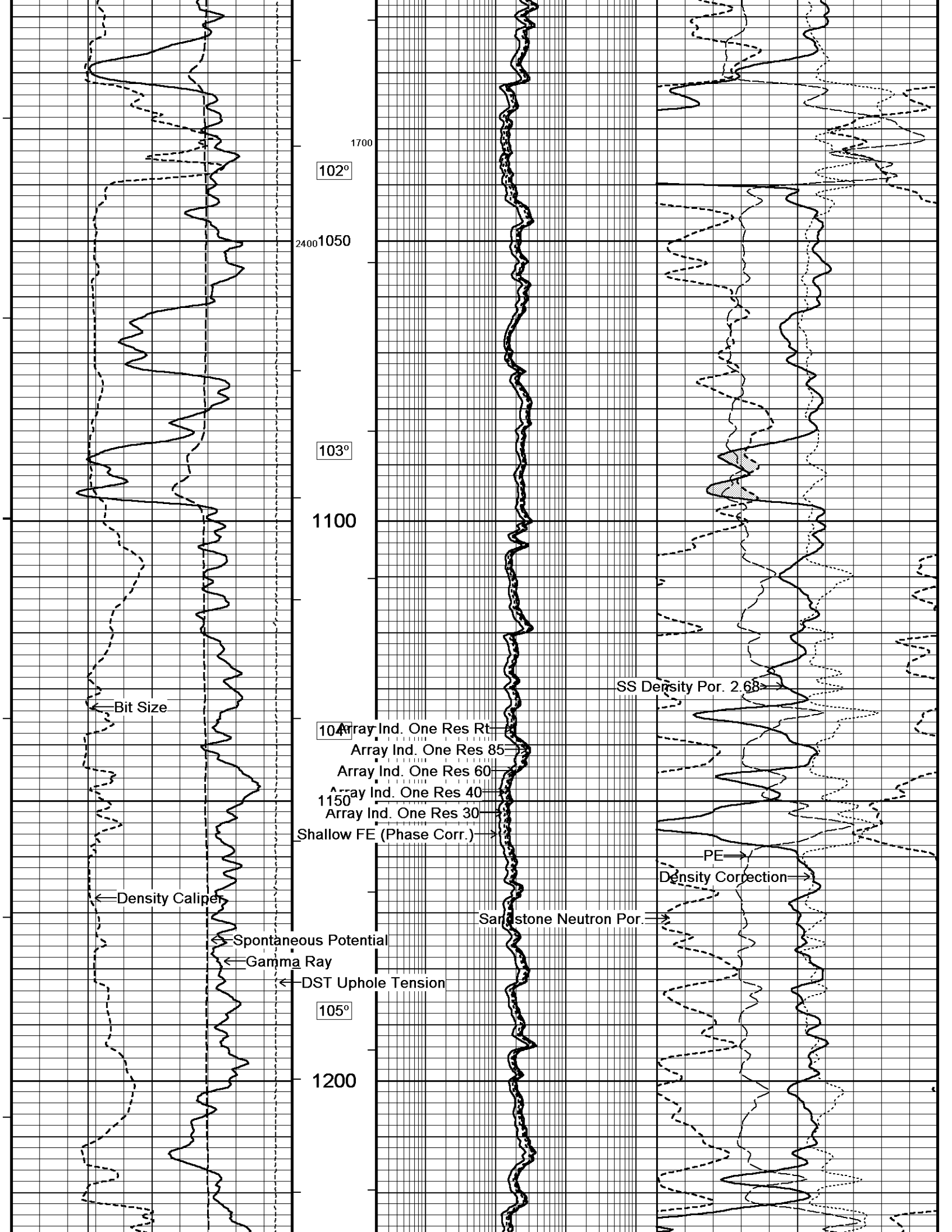
103°

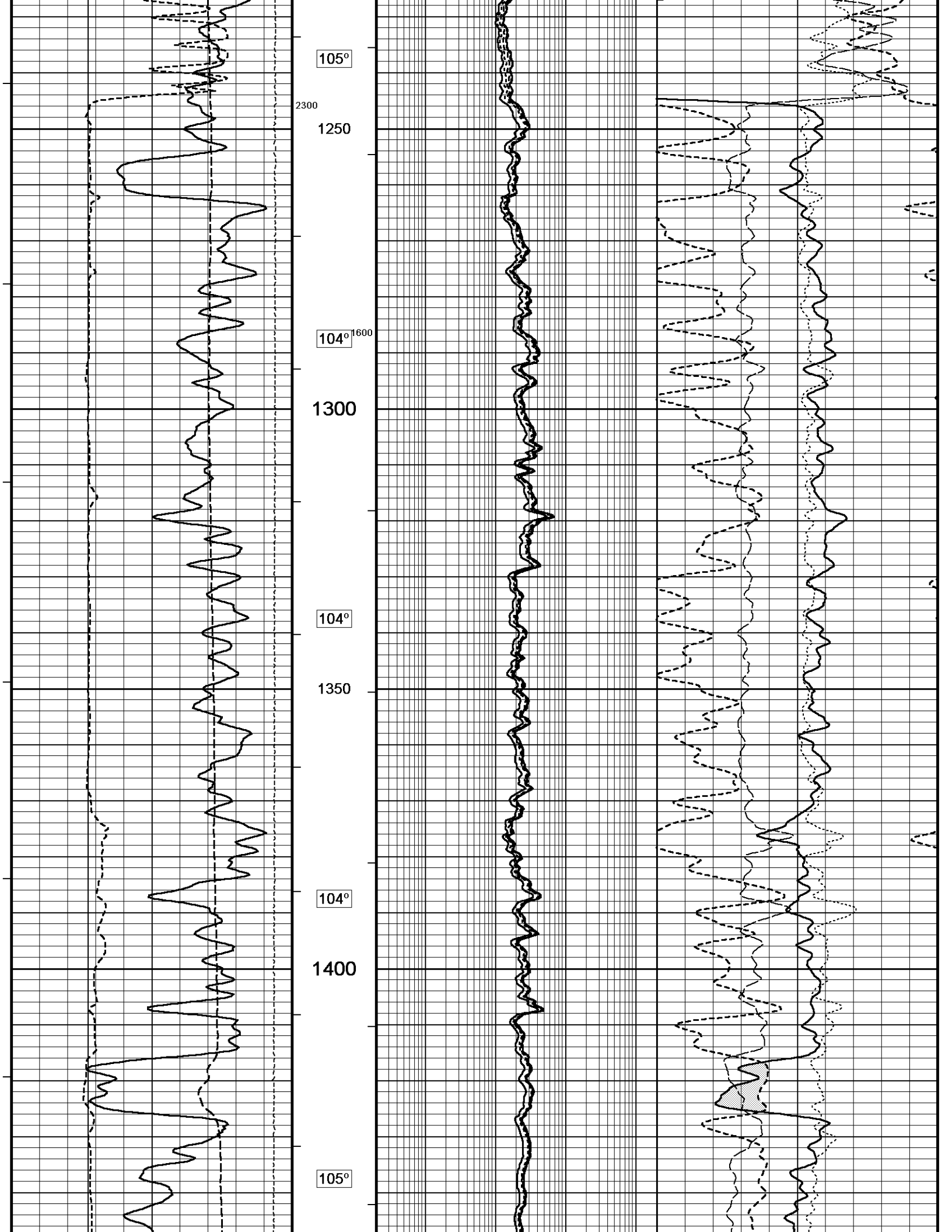
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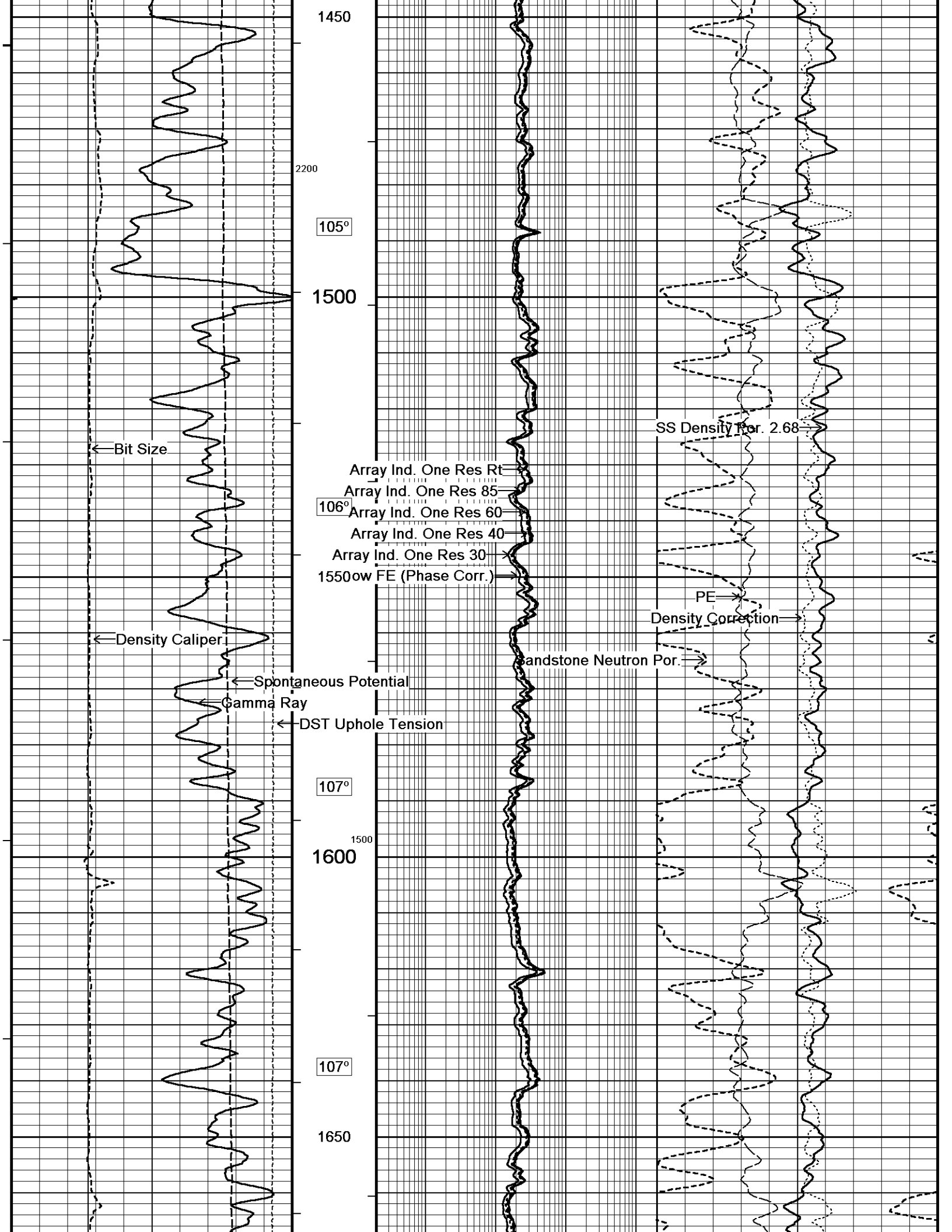
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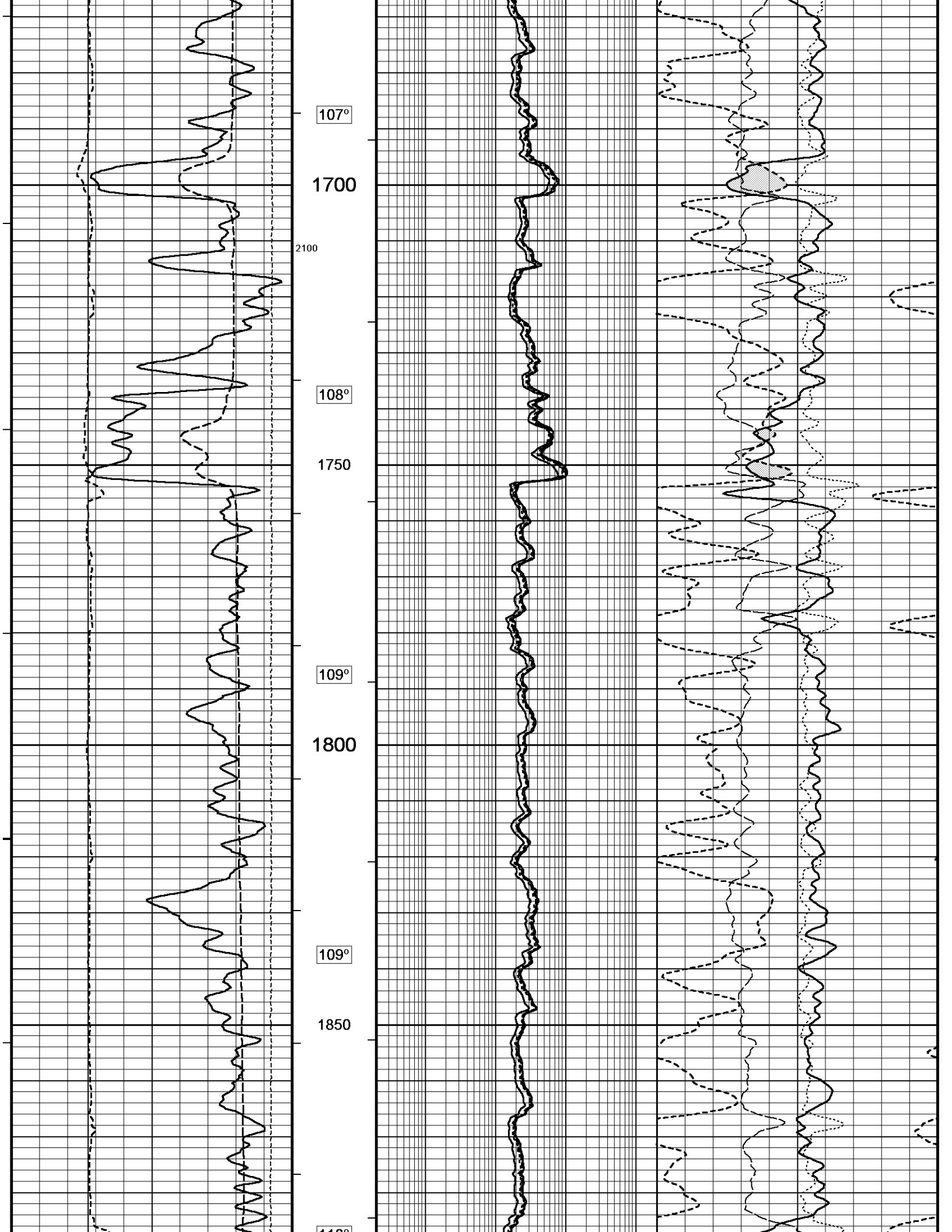
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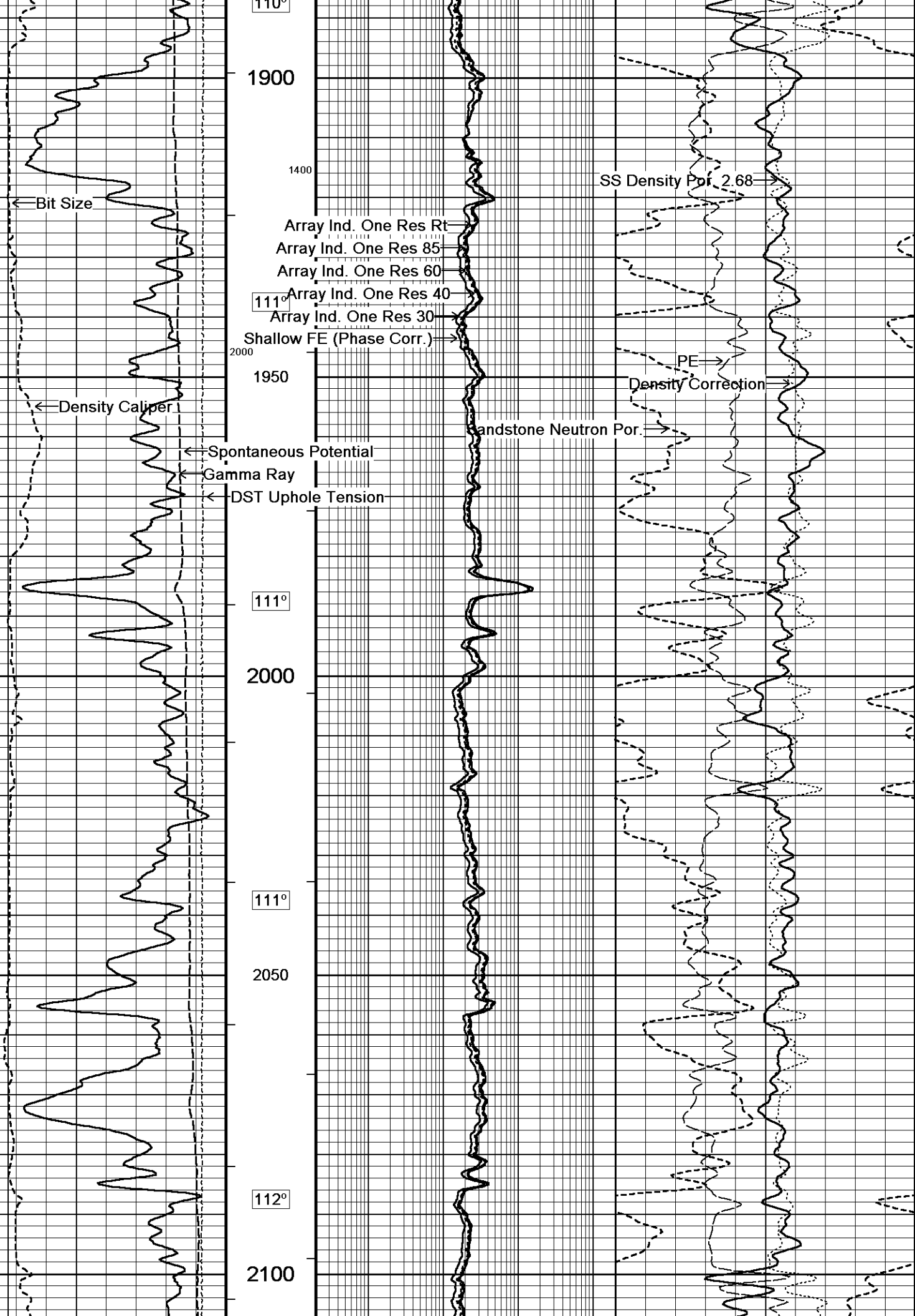


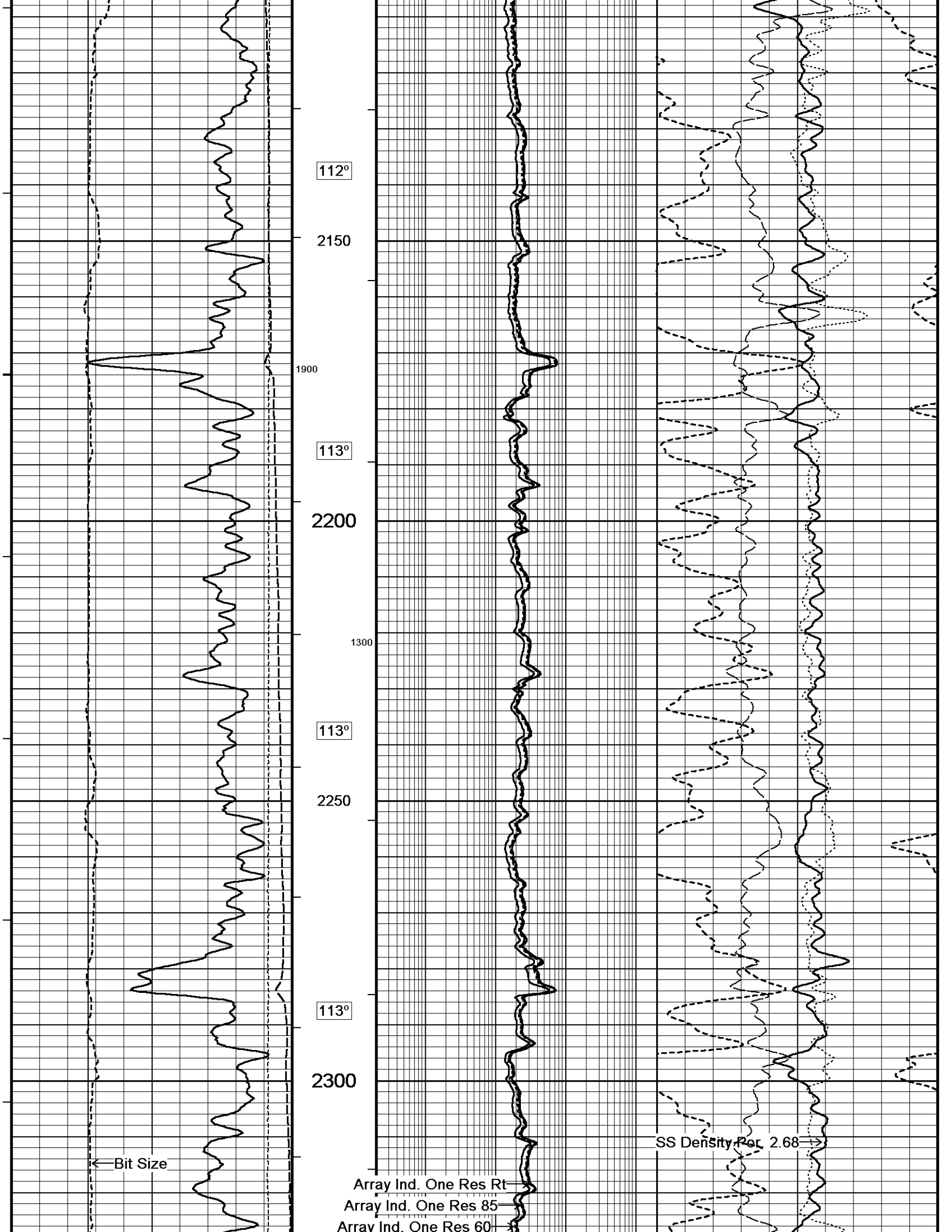












112°

2150

1900

113°

2200

1300

113°

2250

113°

2300

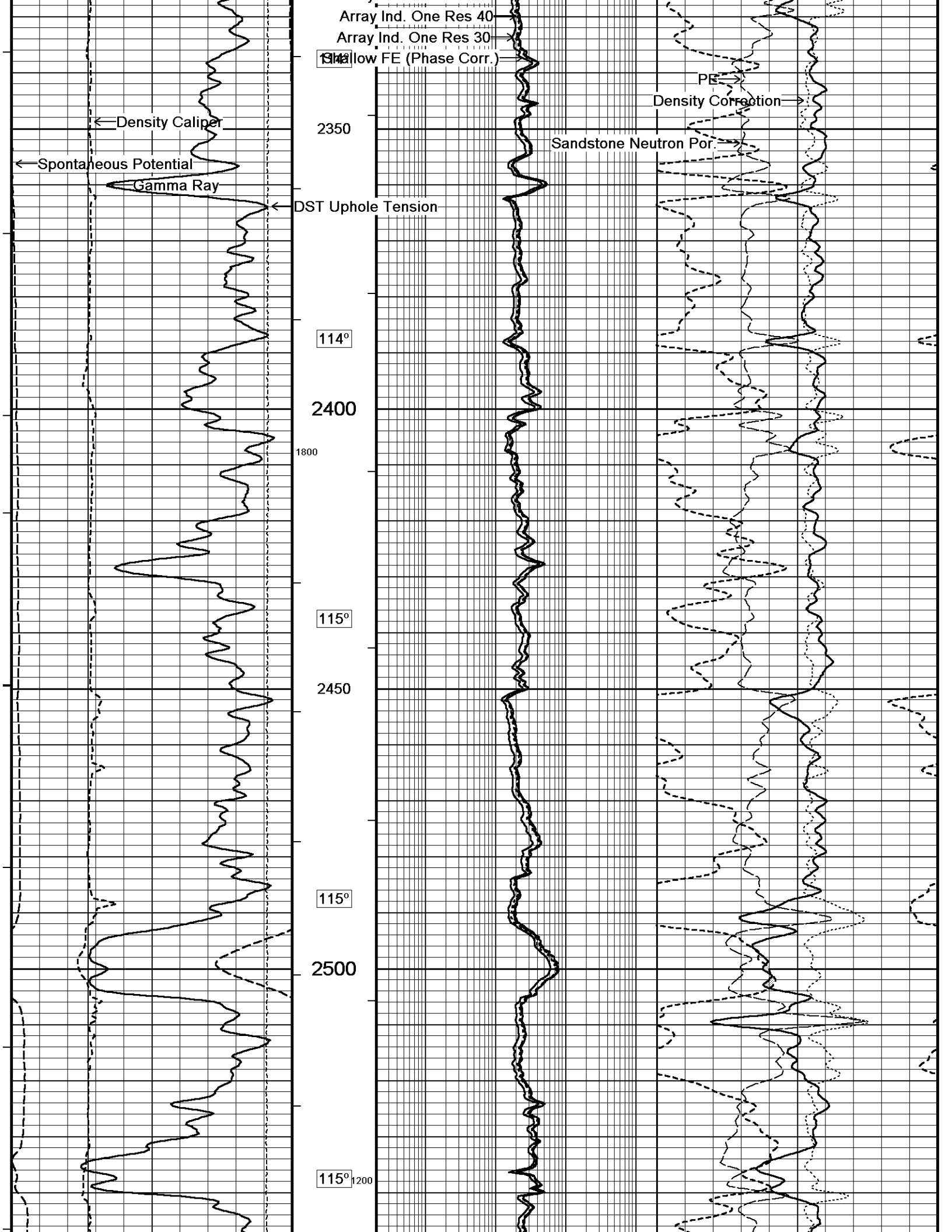
← Bit Size

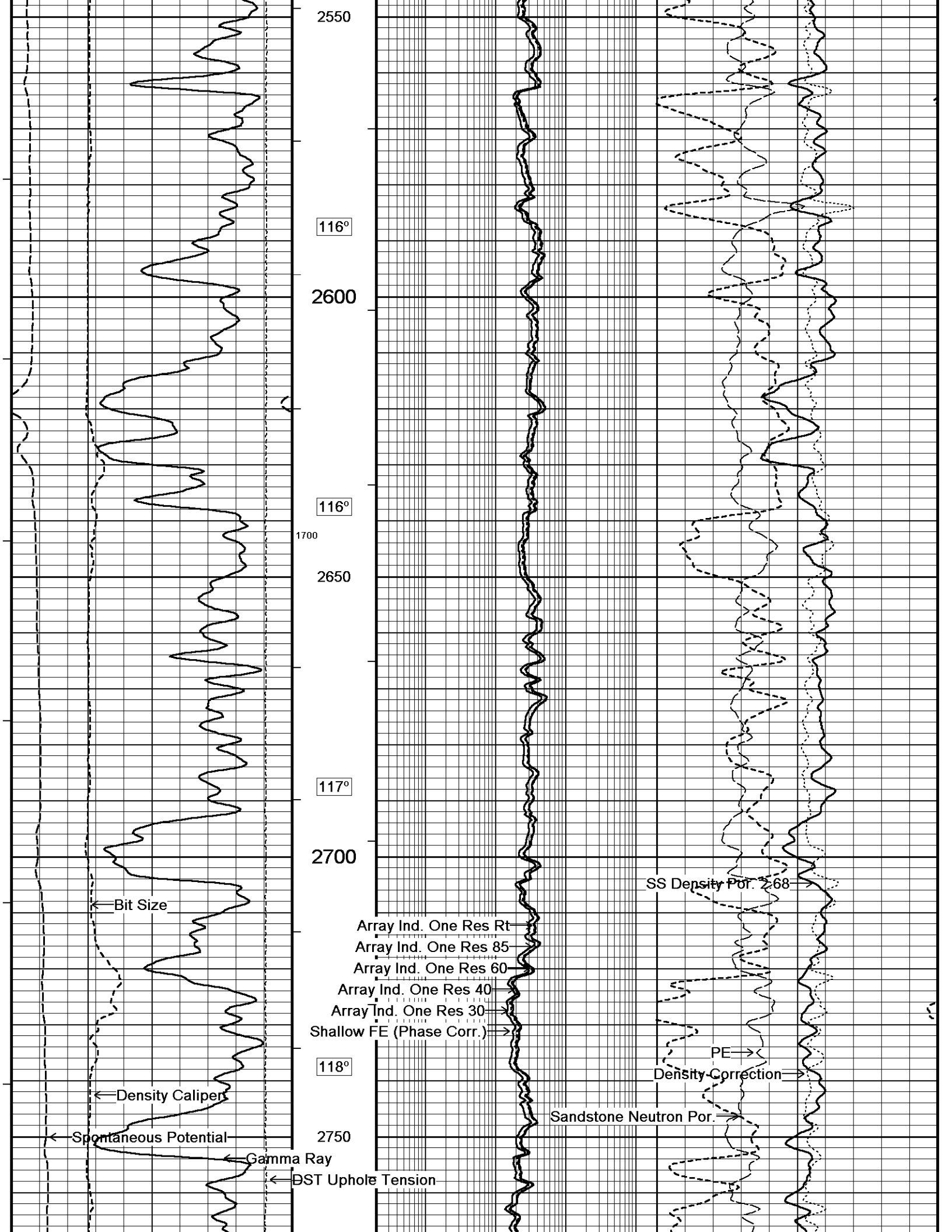
SS Density Rec. 2.68 →

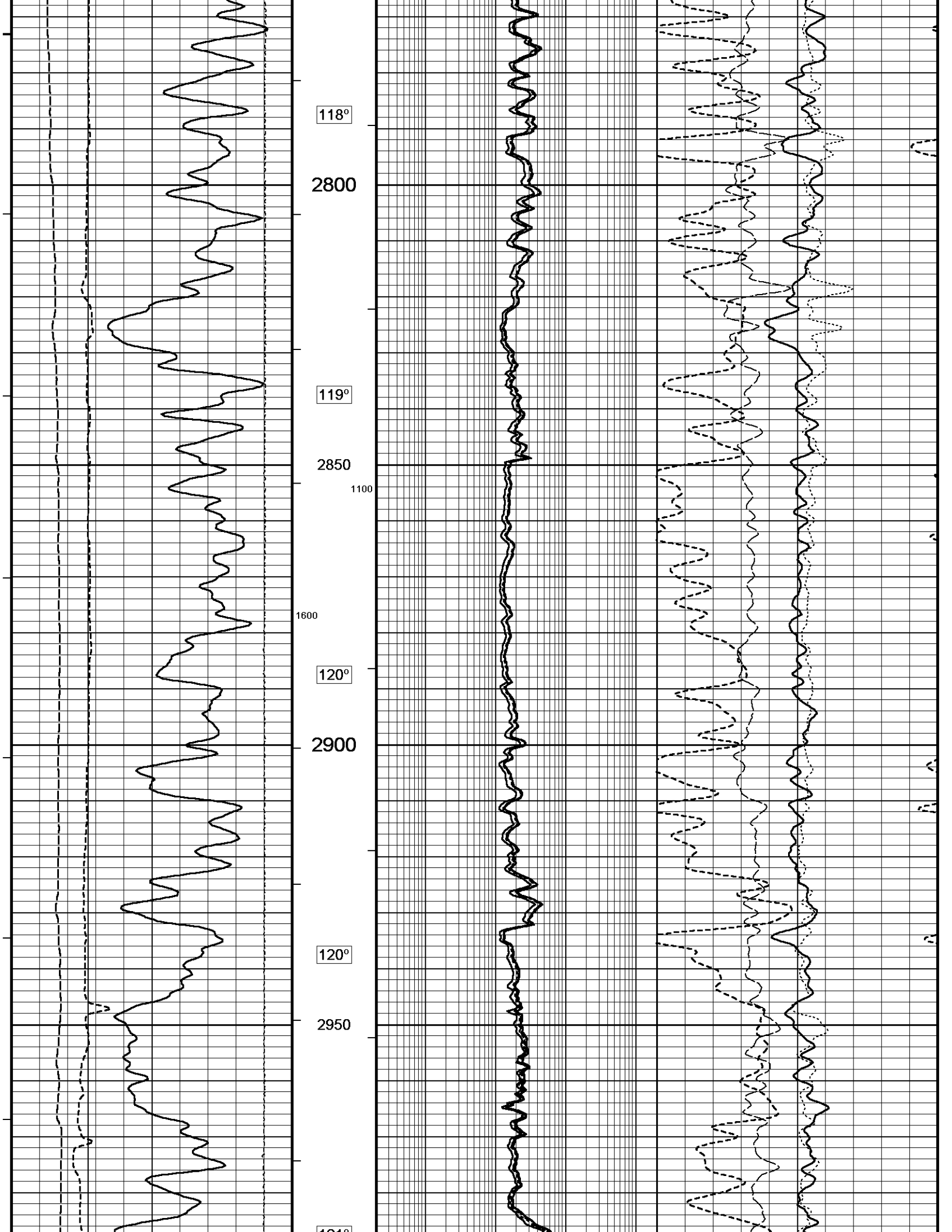
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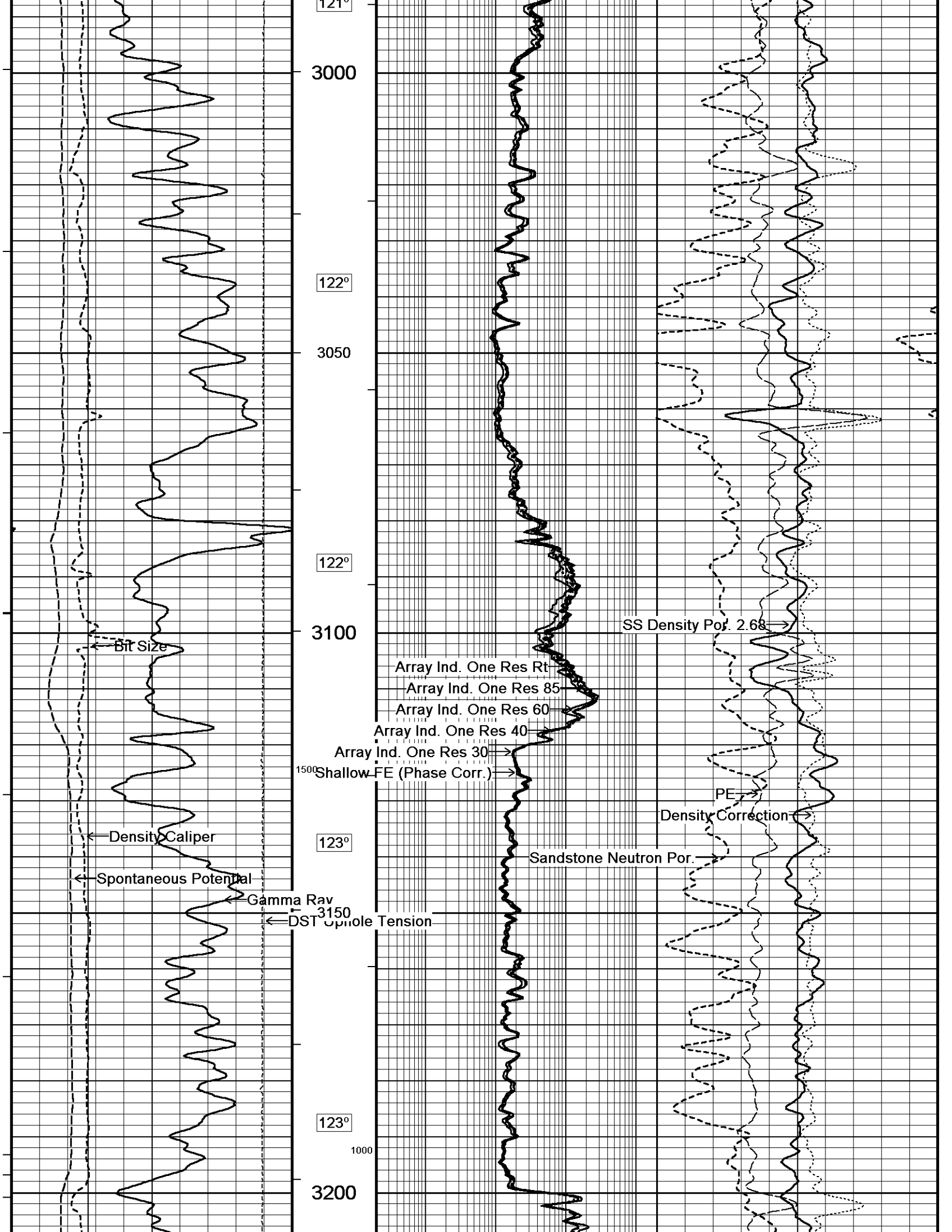
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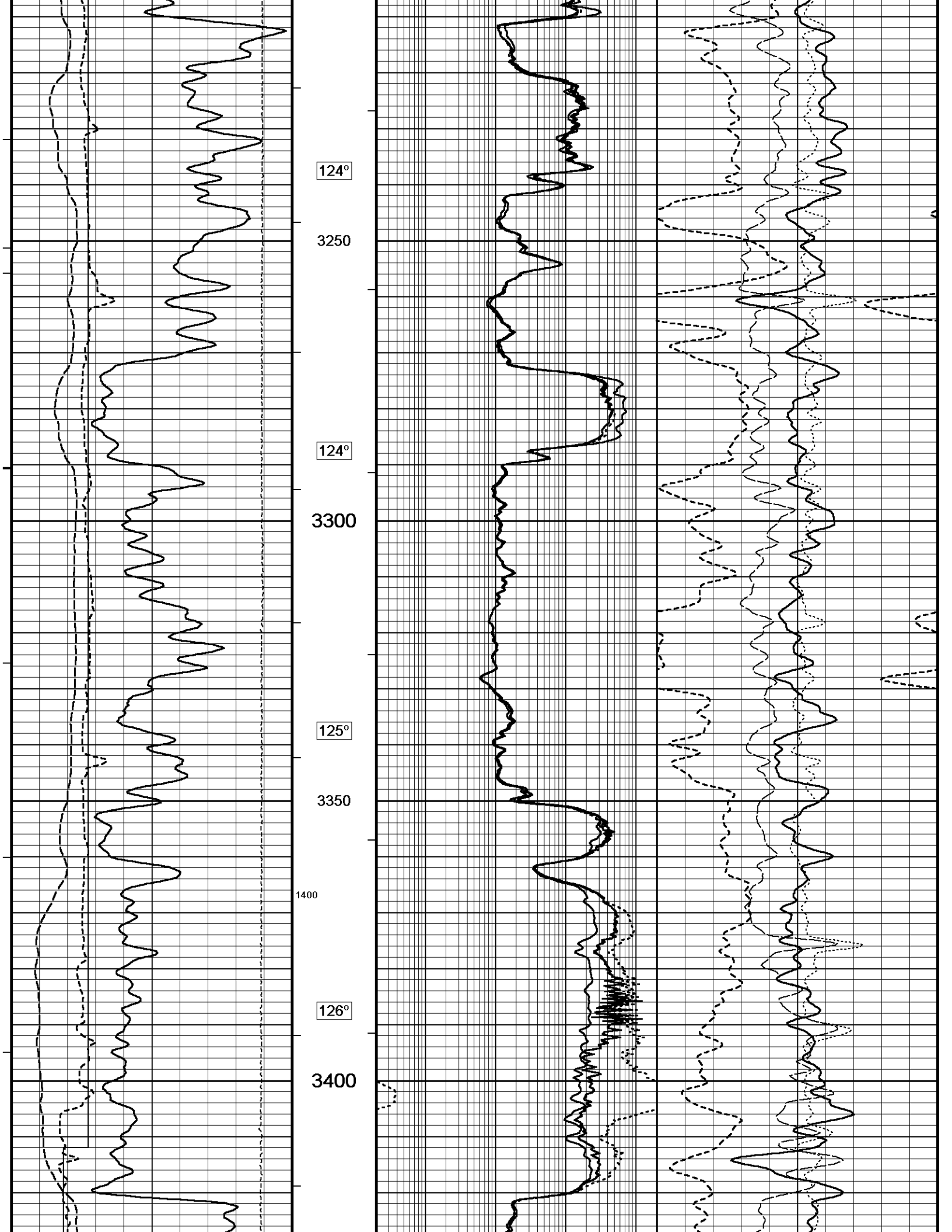
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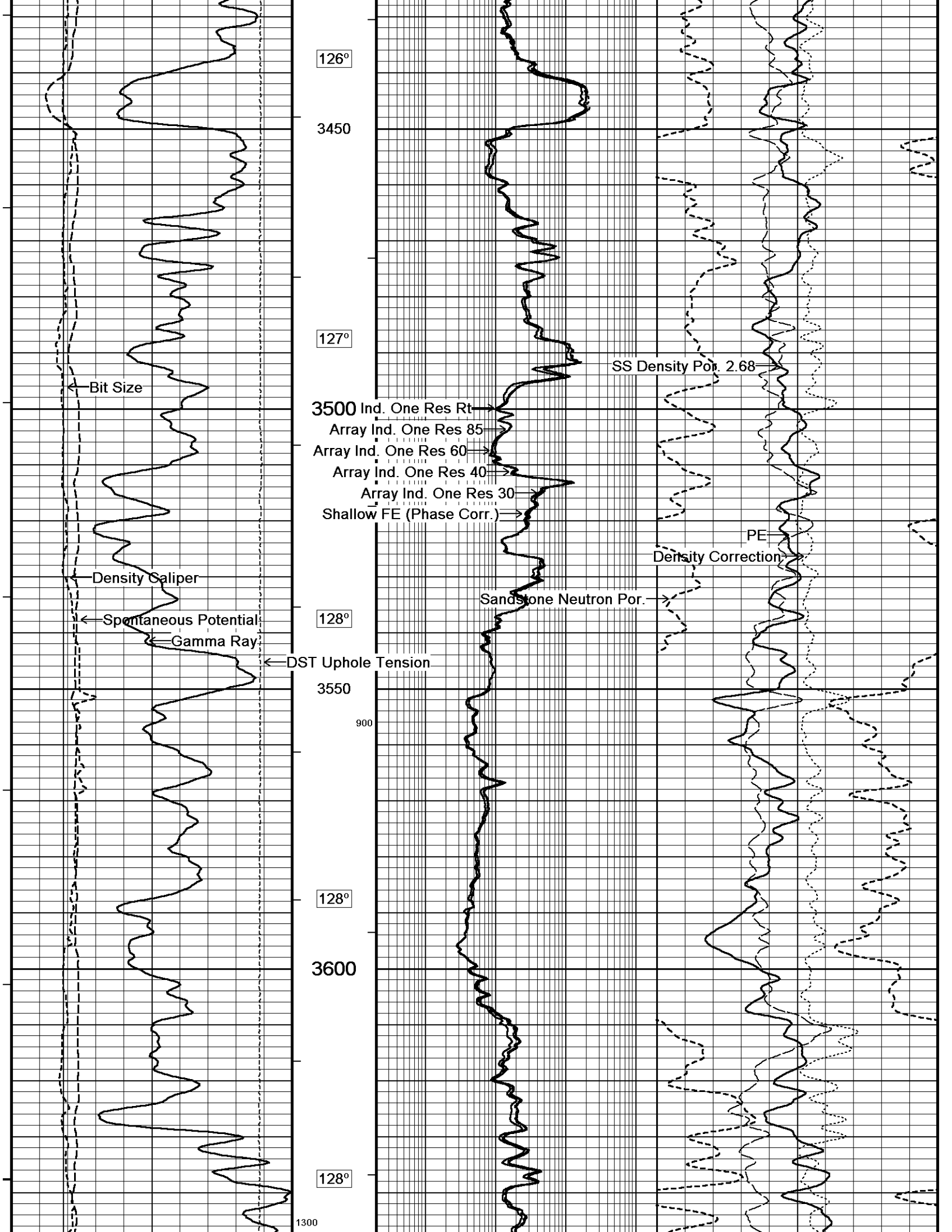


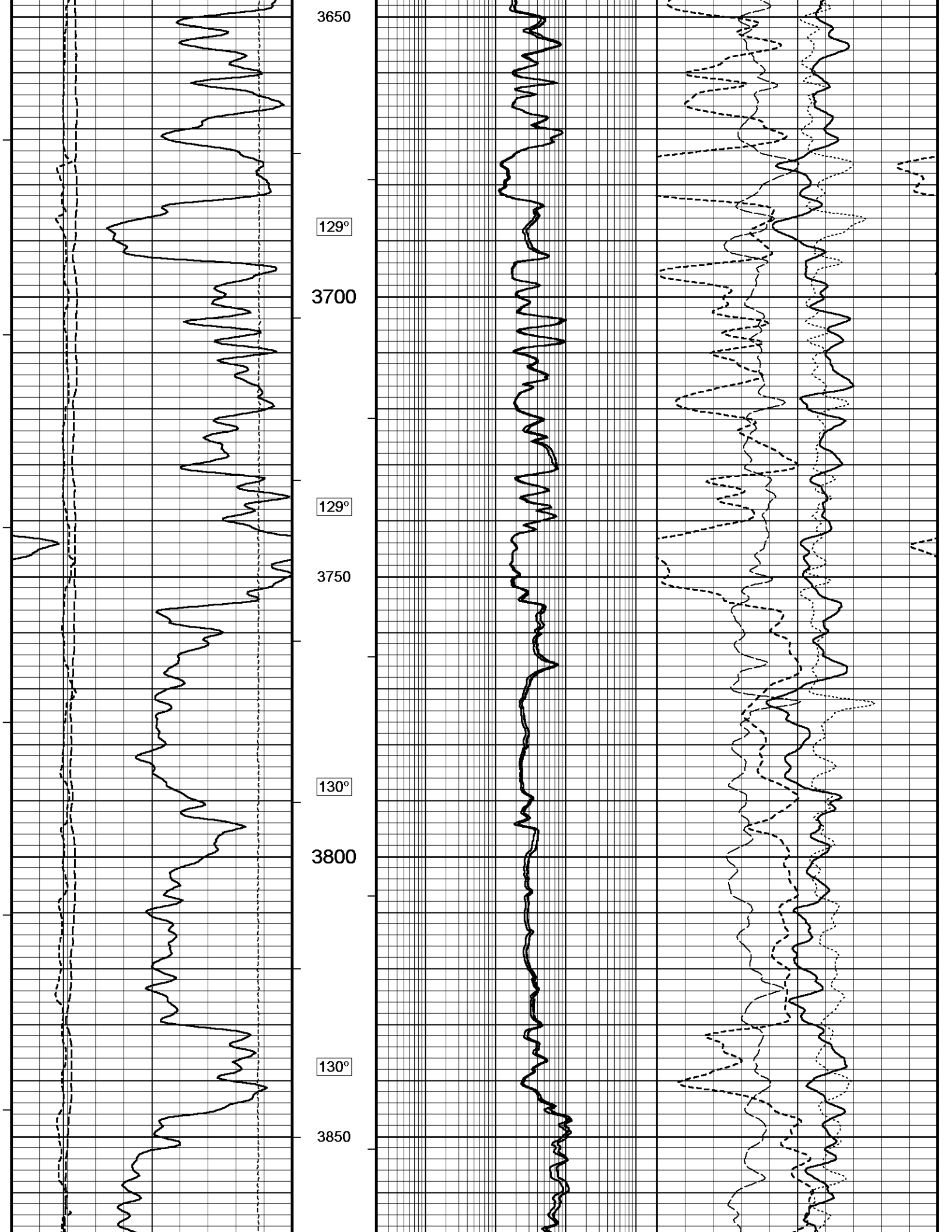


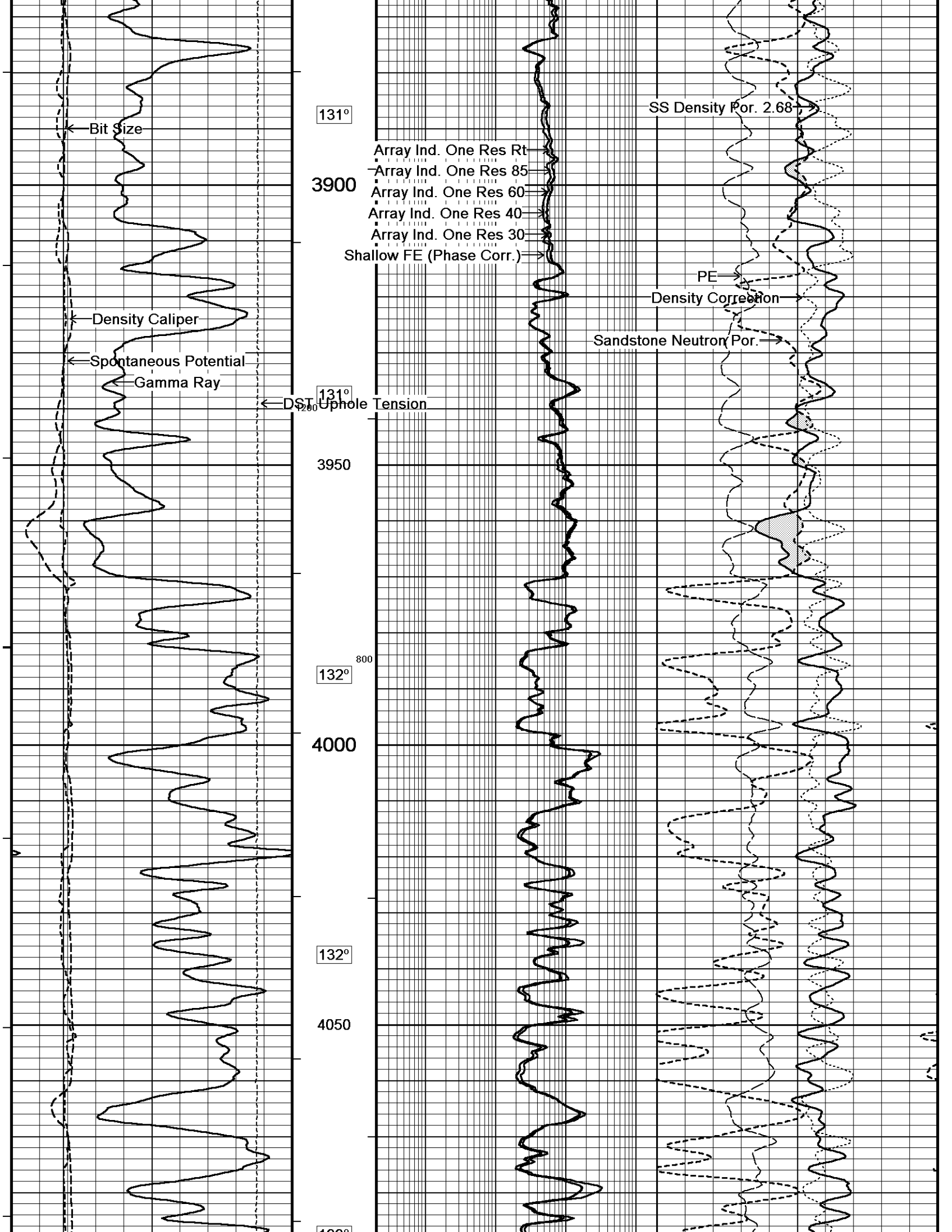


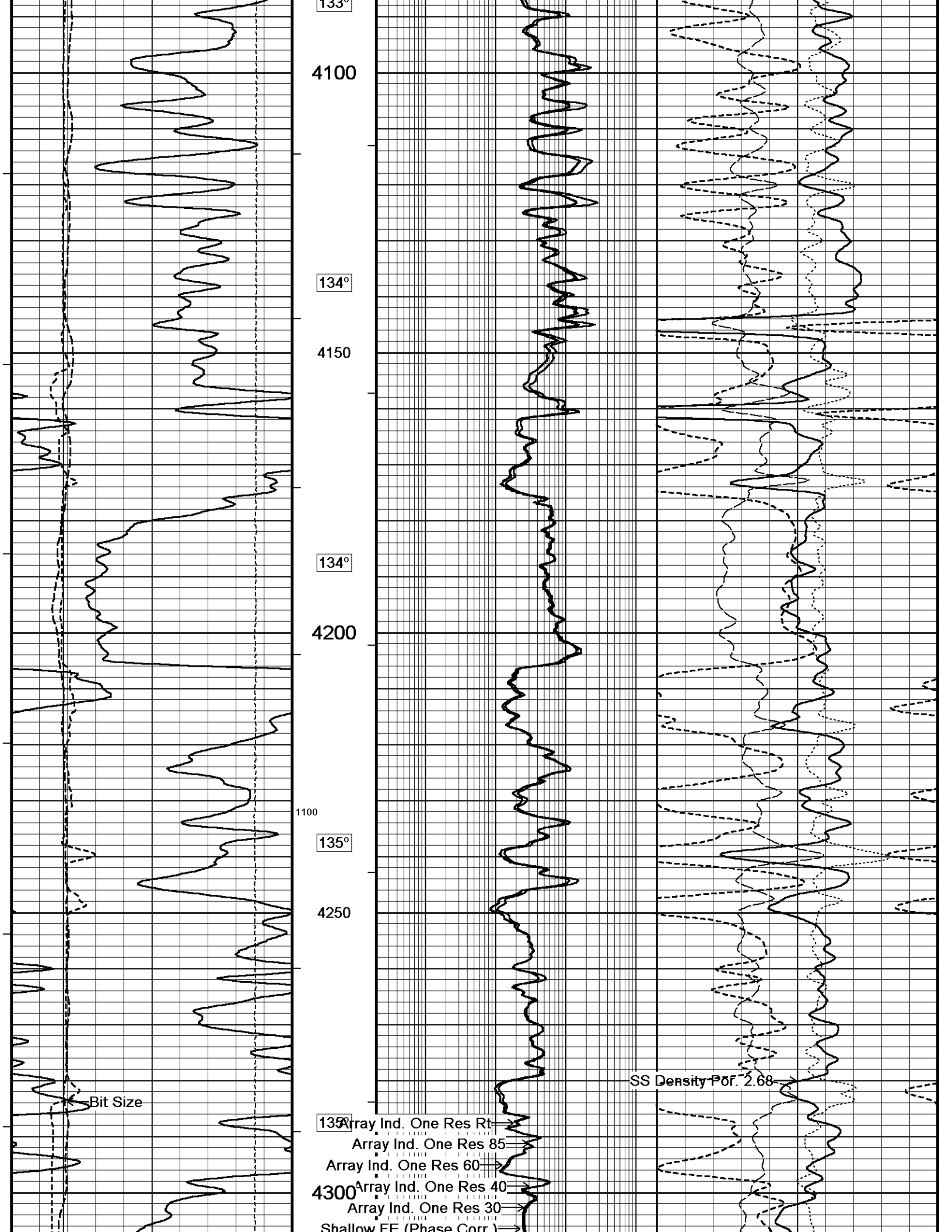


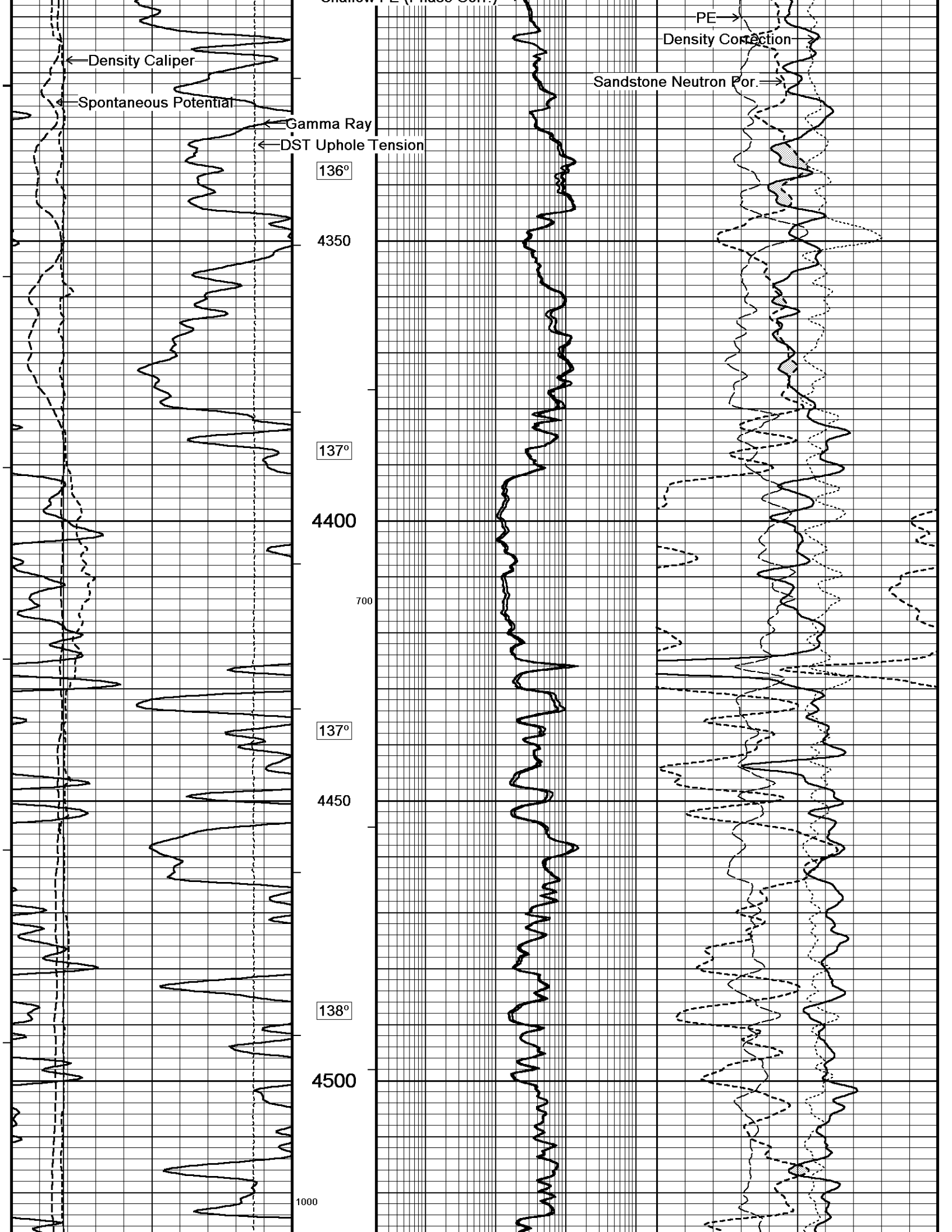


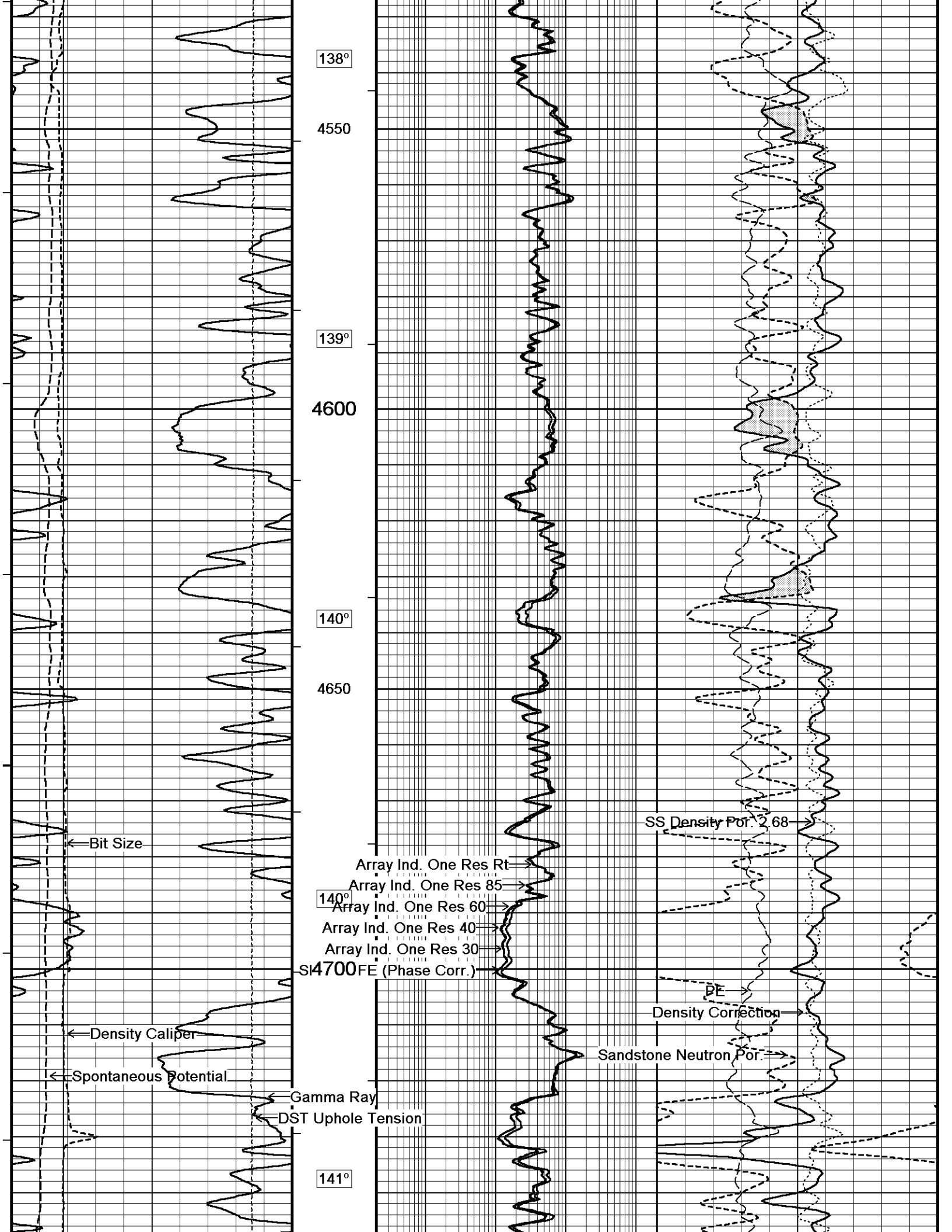


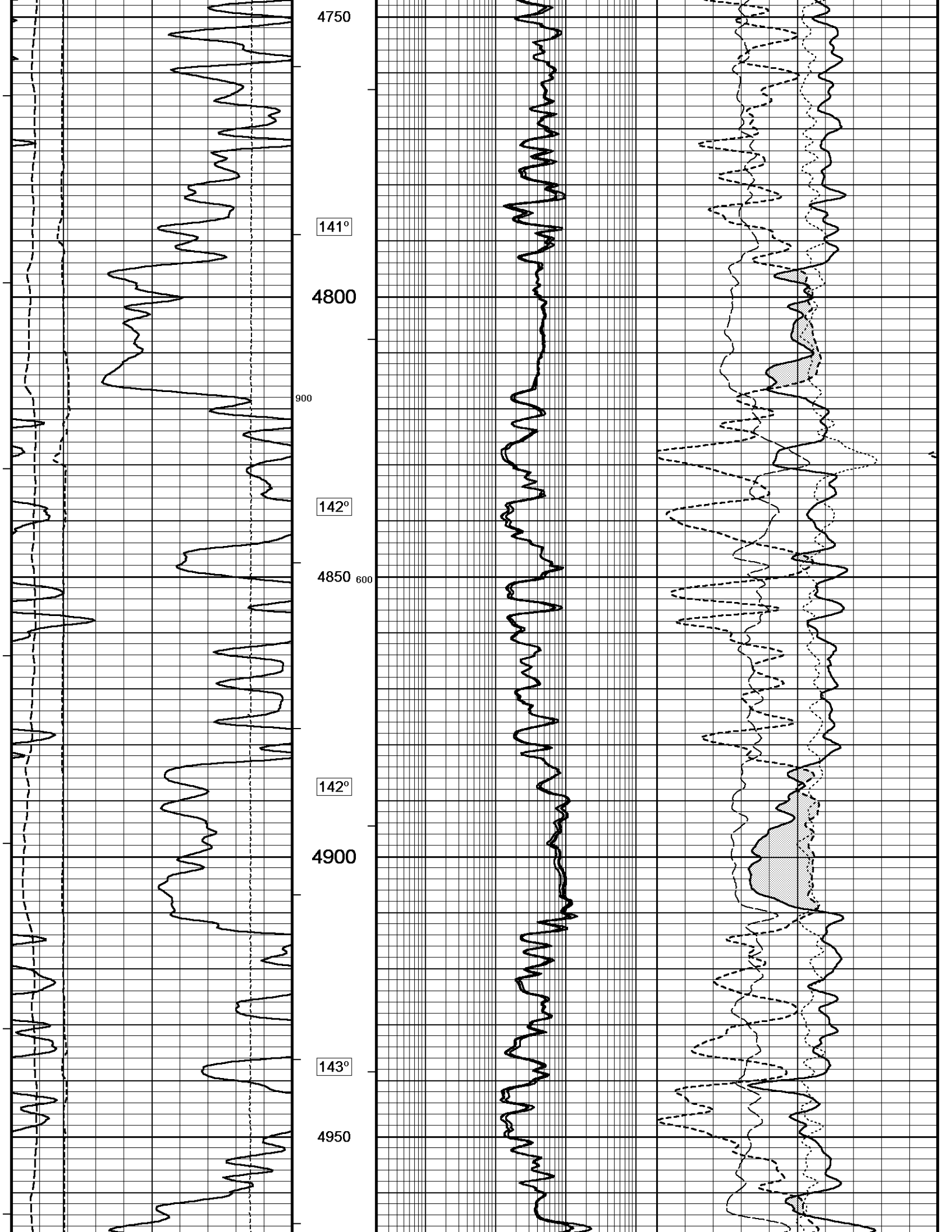


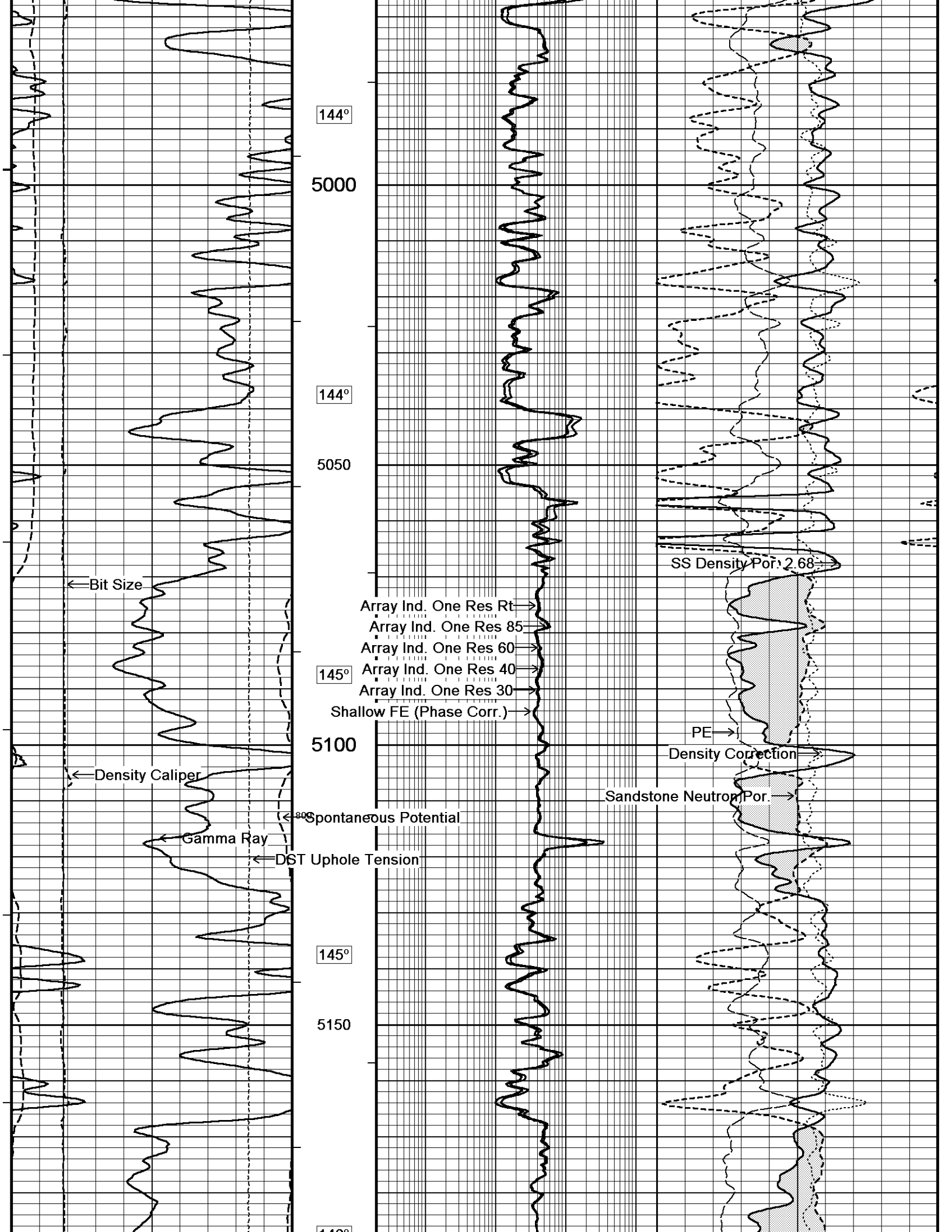


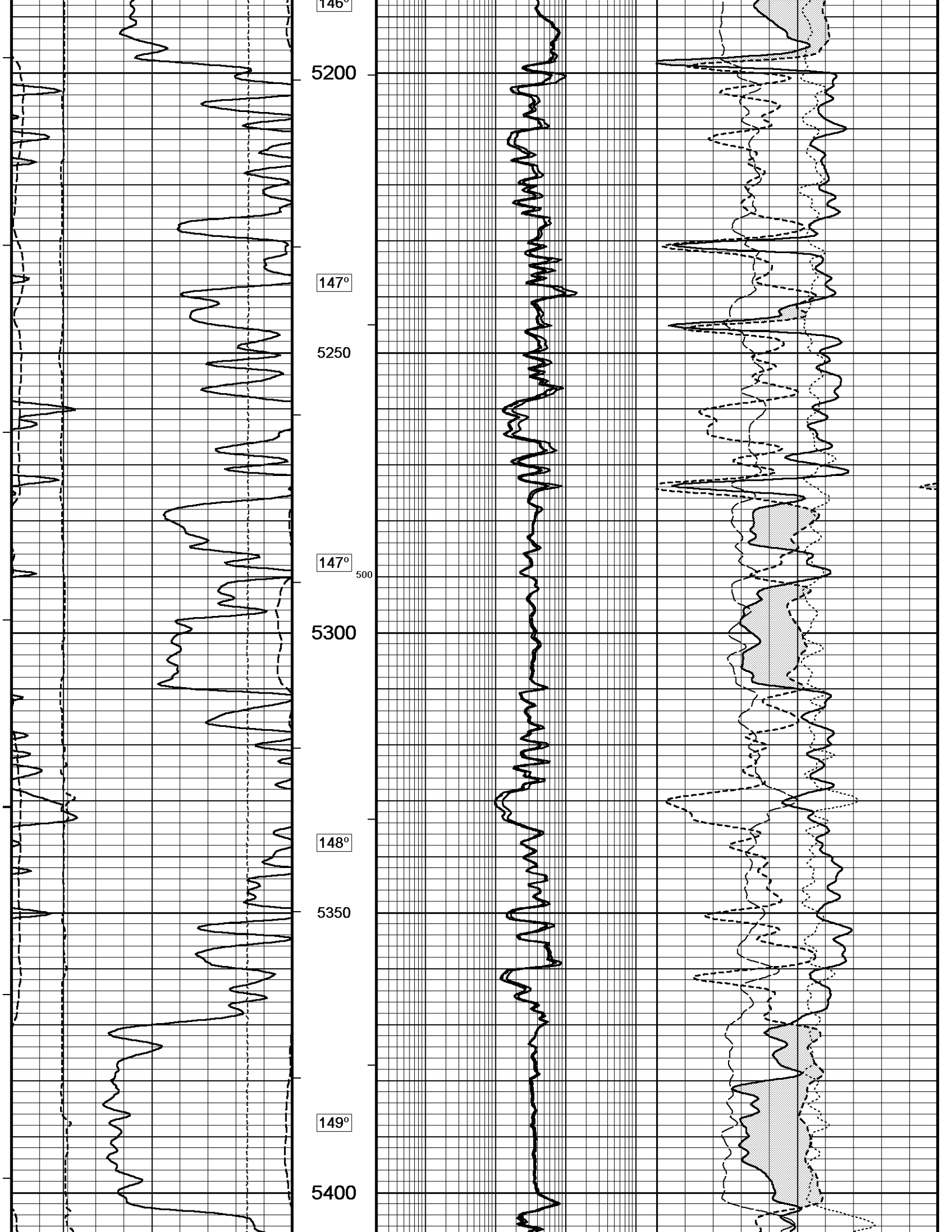


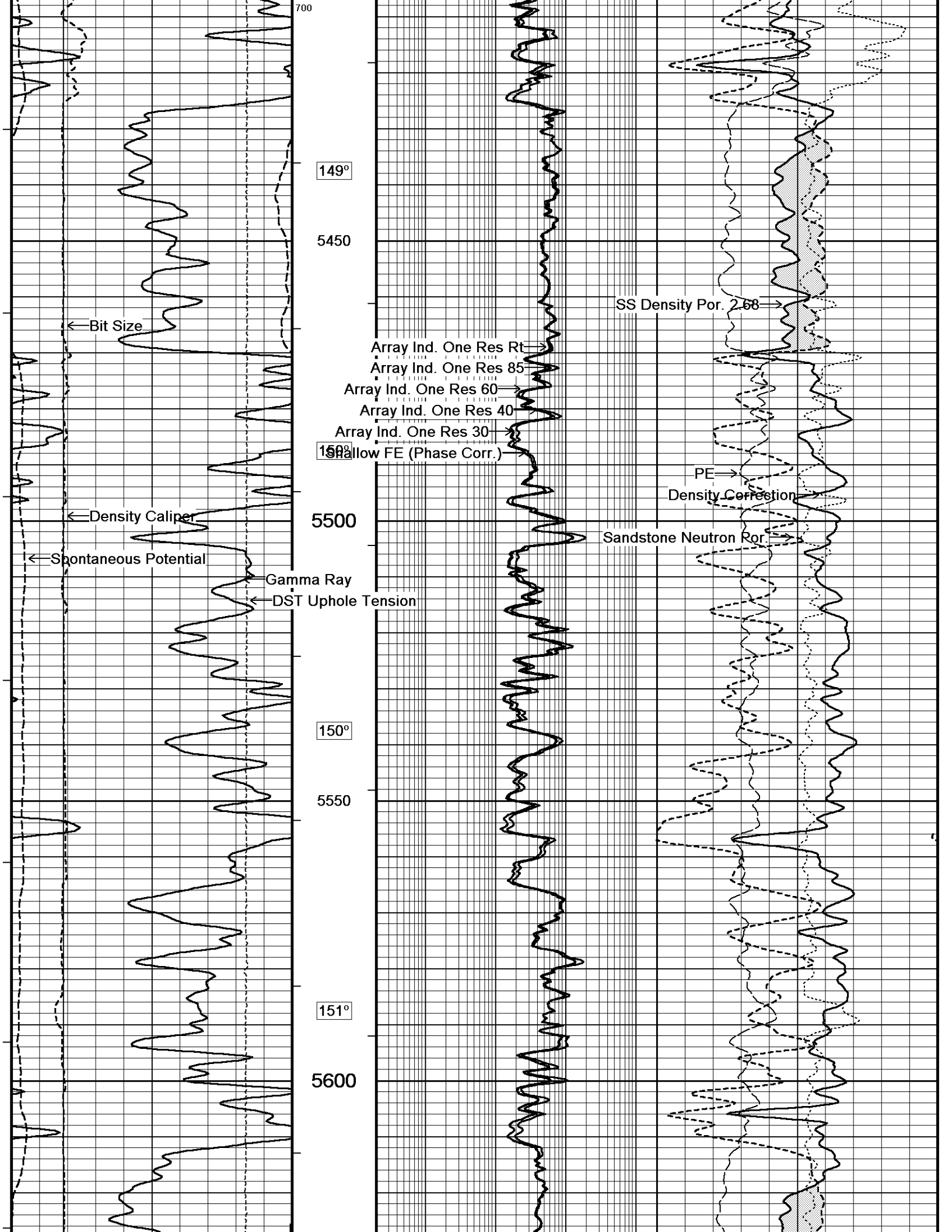


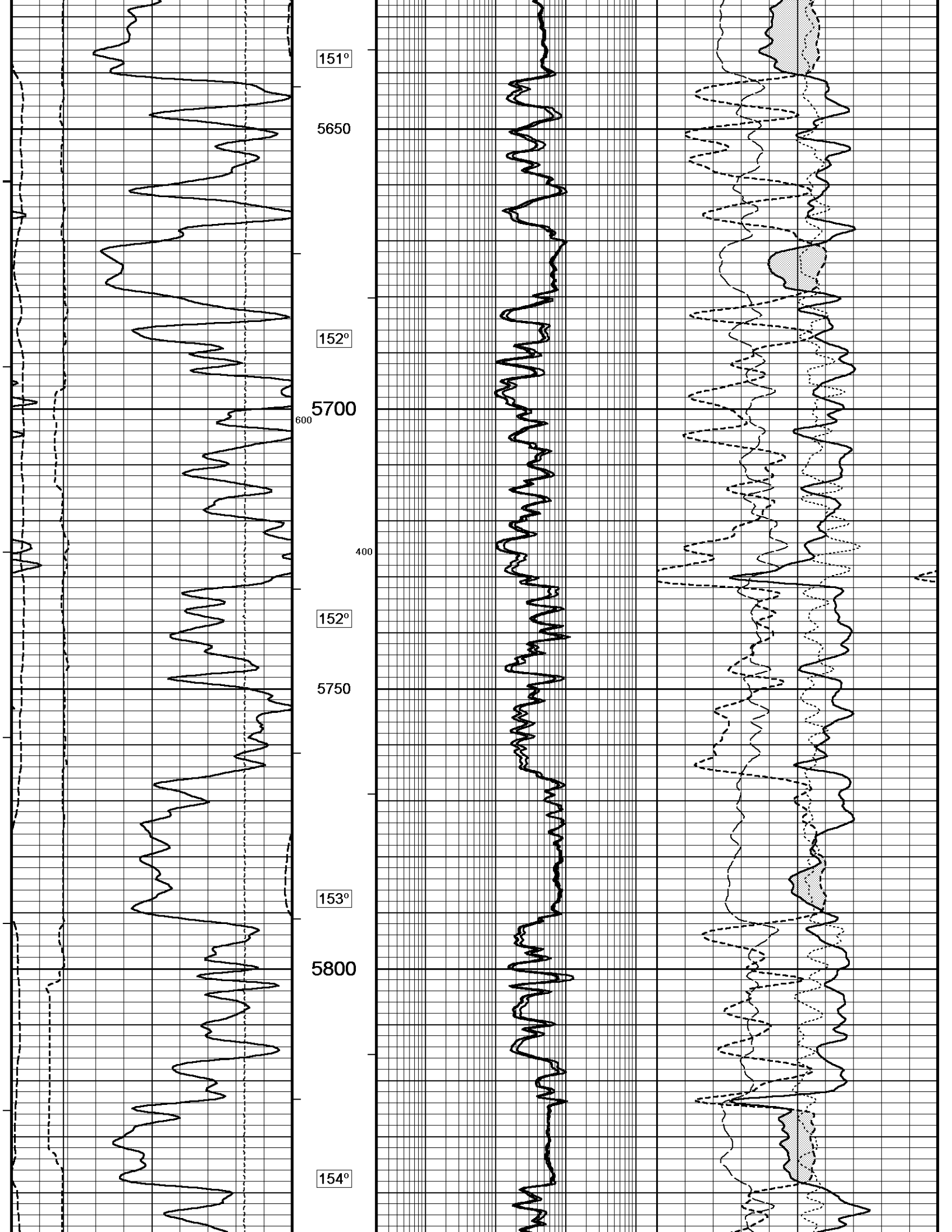


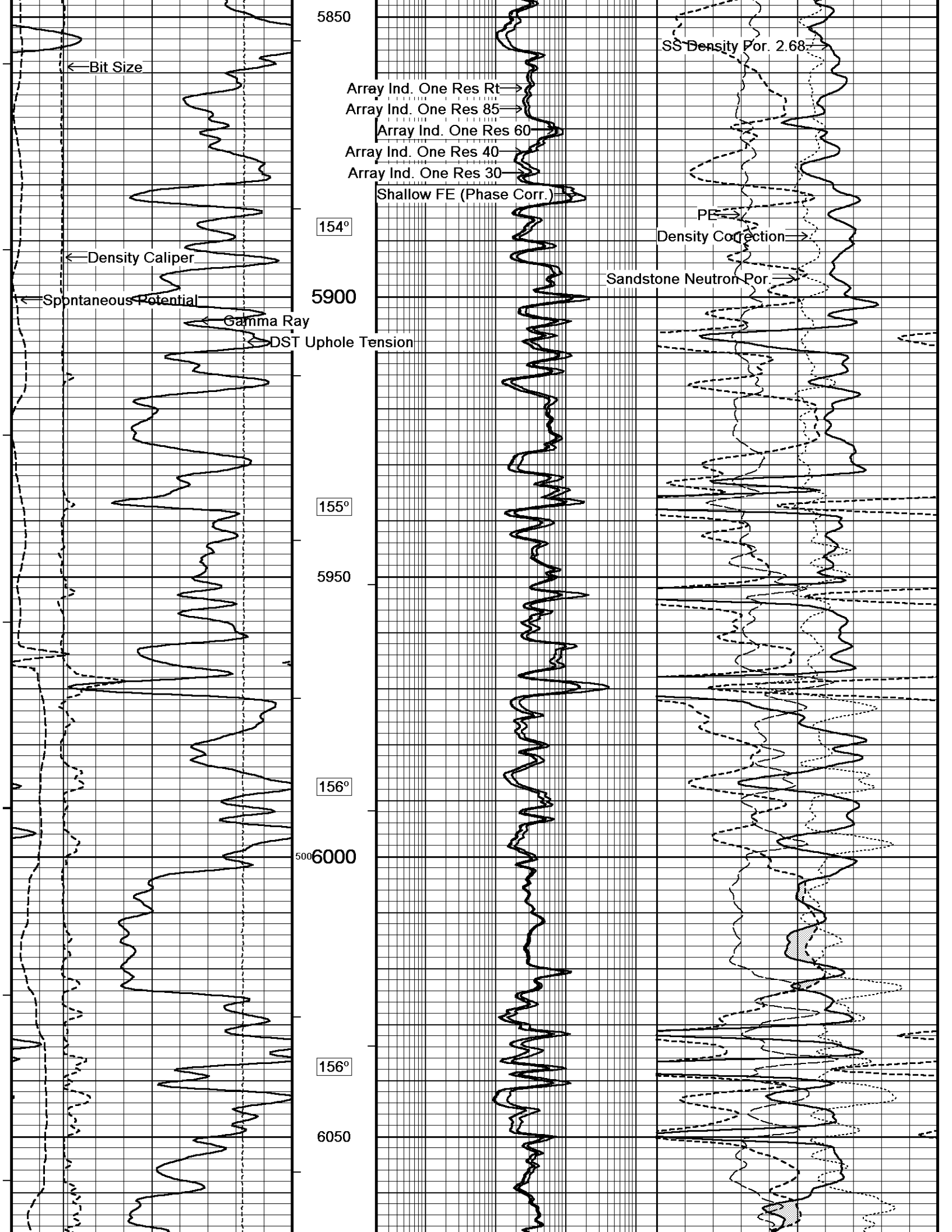


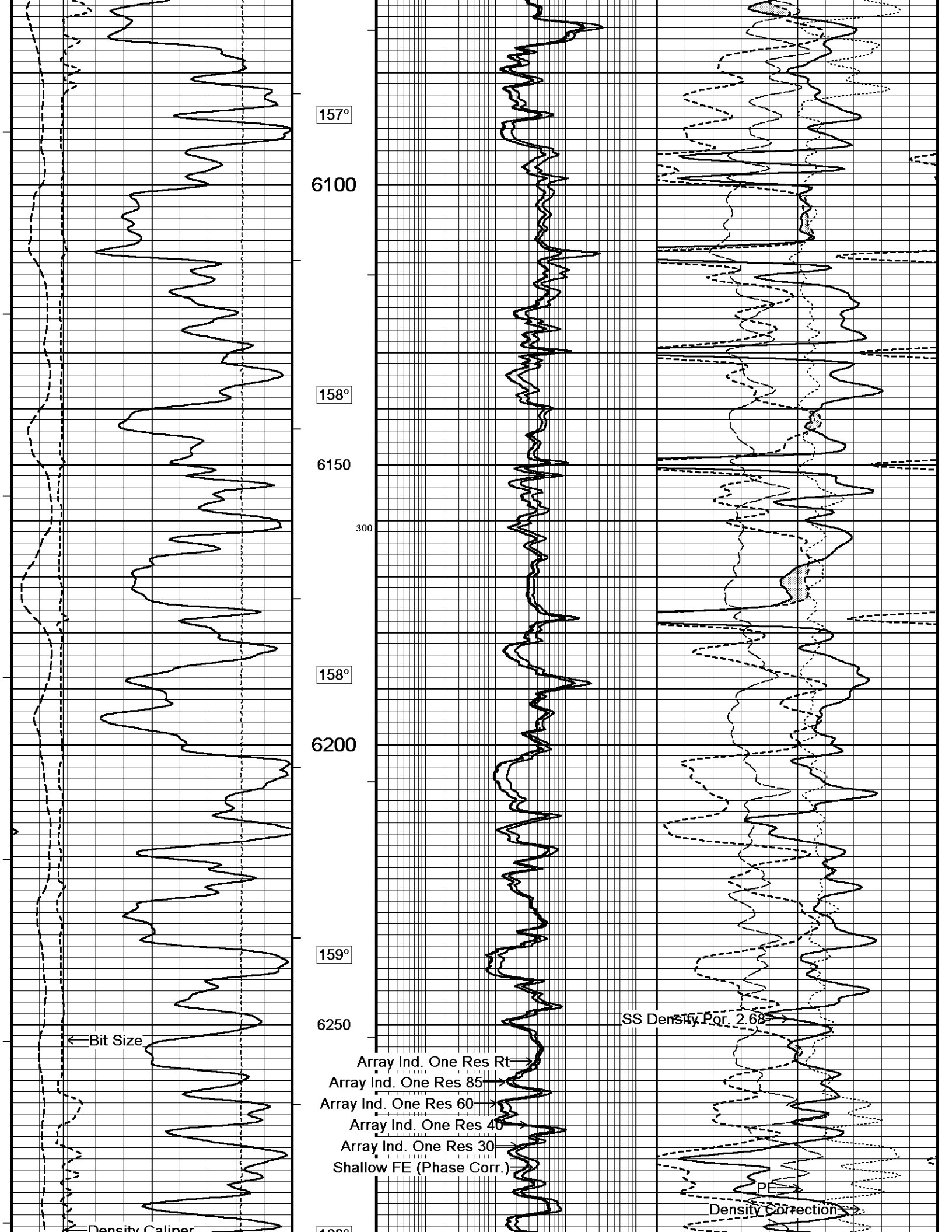


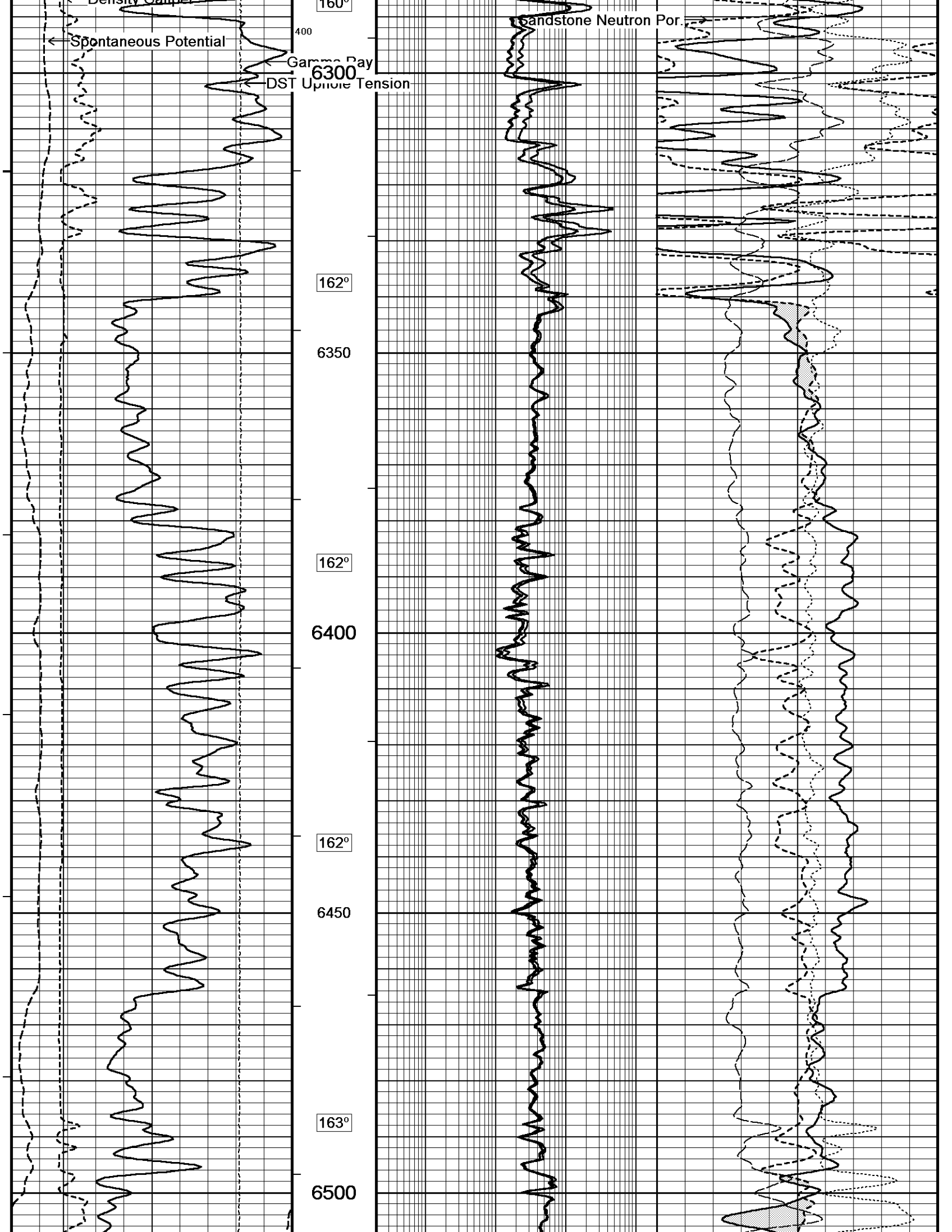


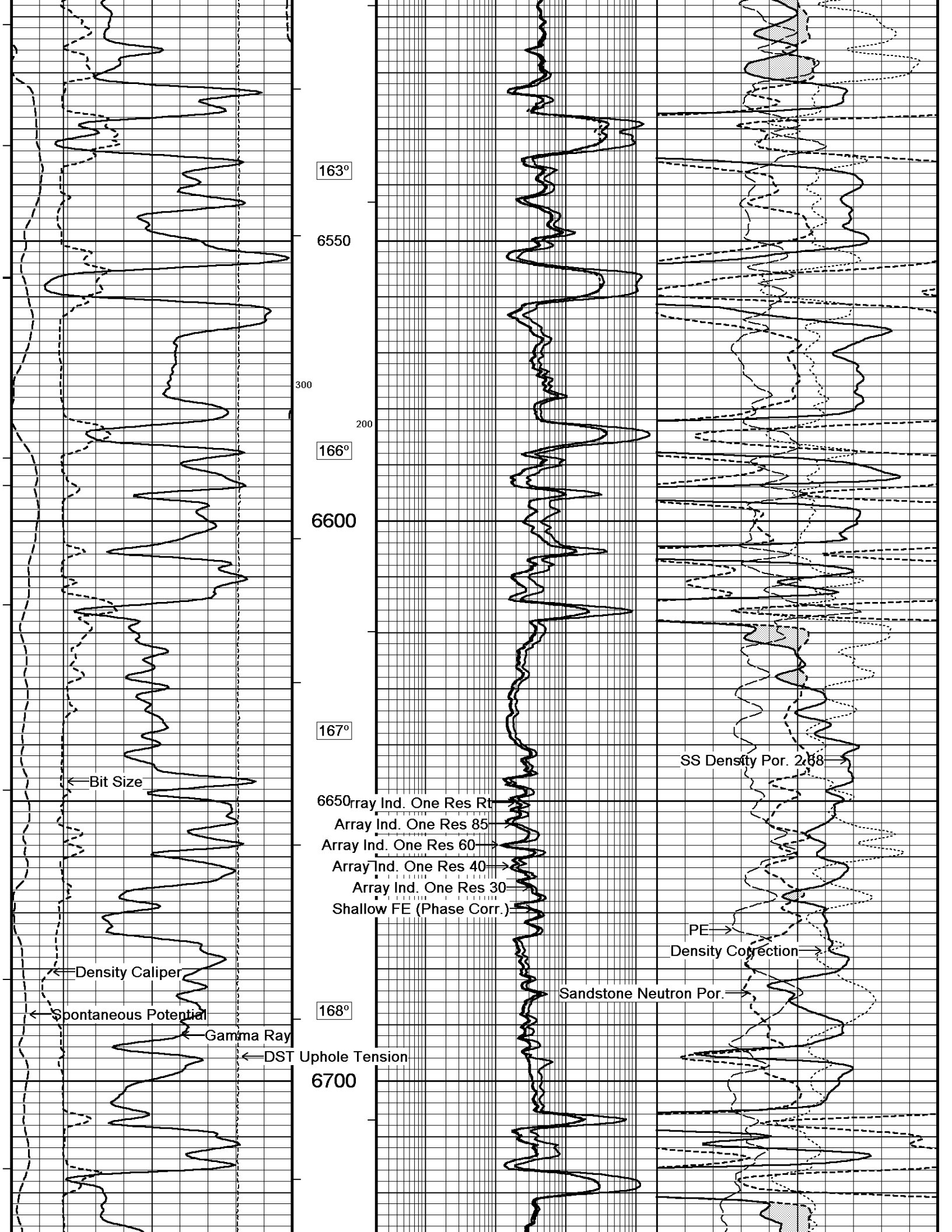


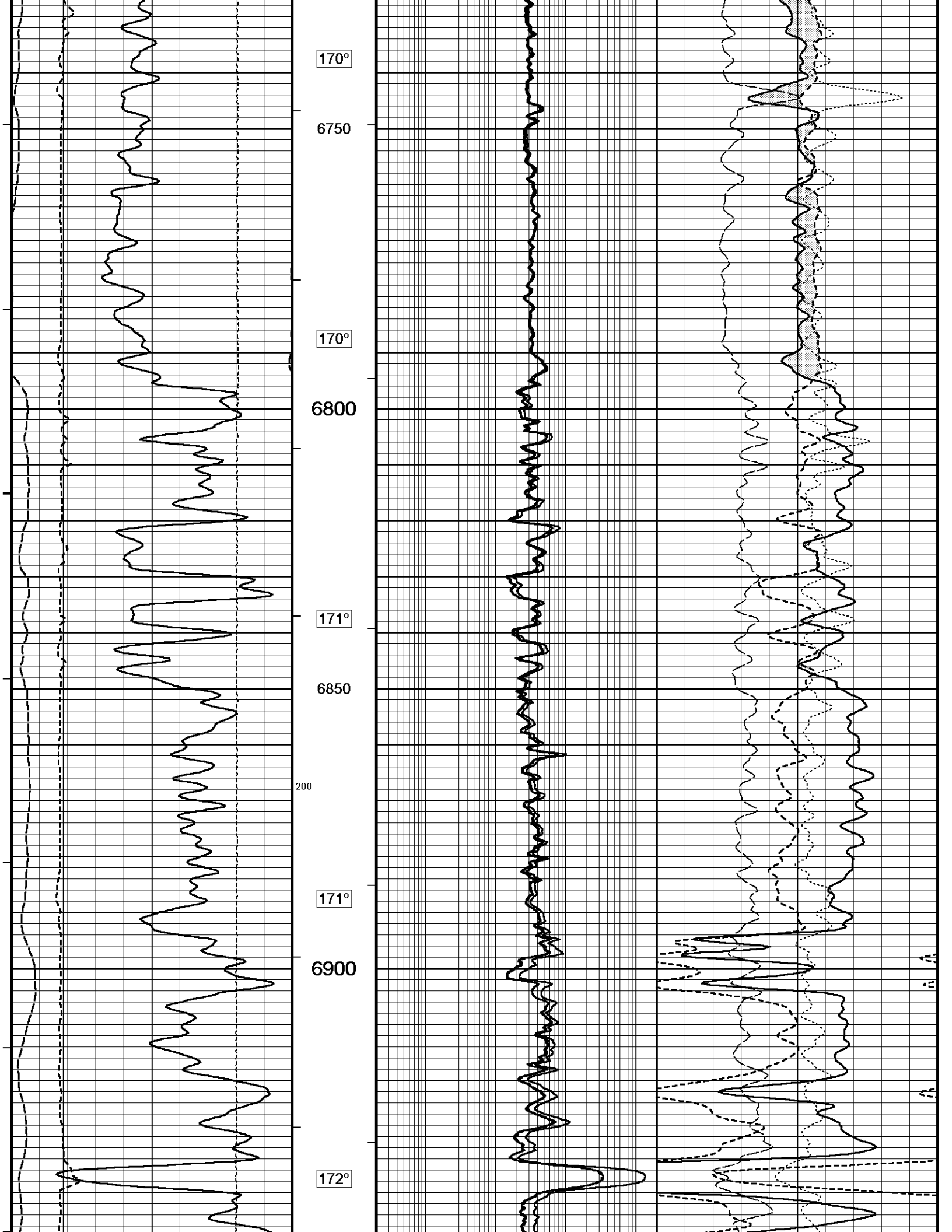


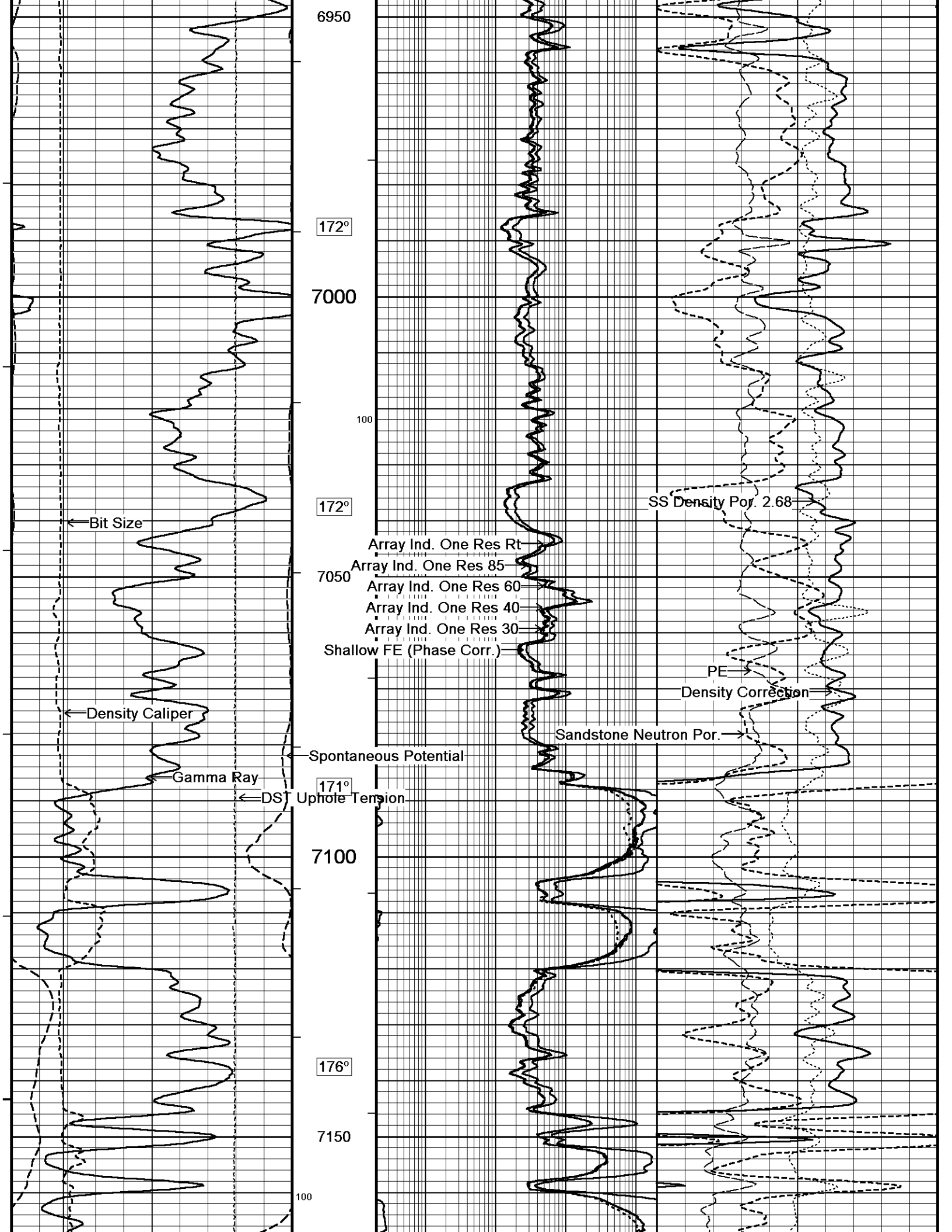


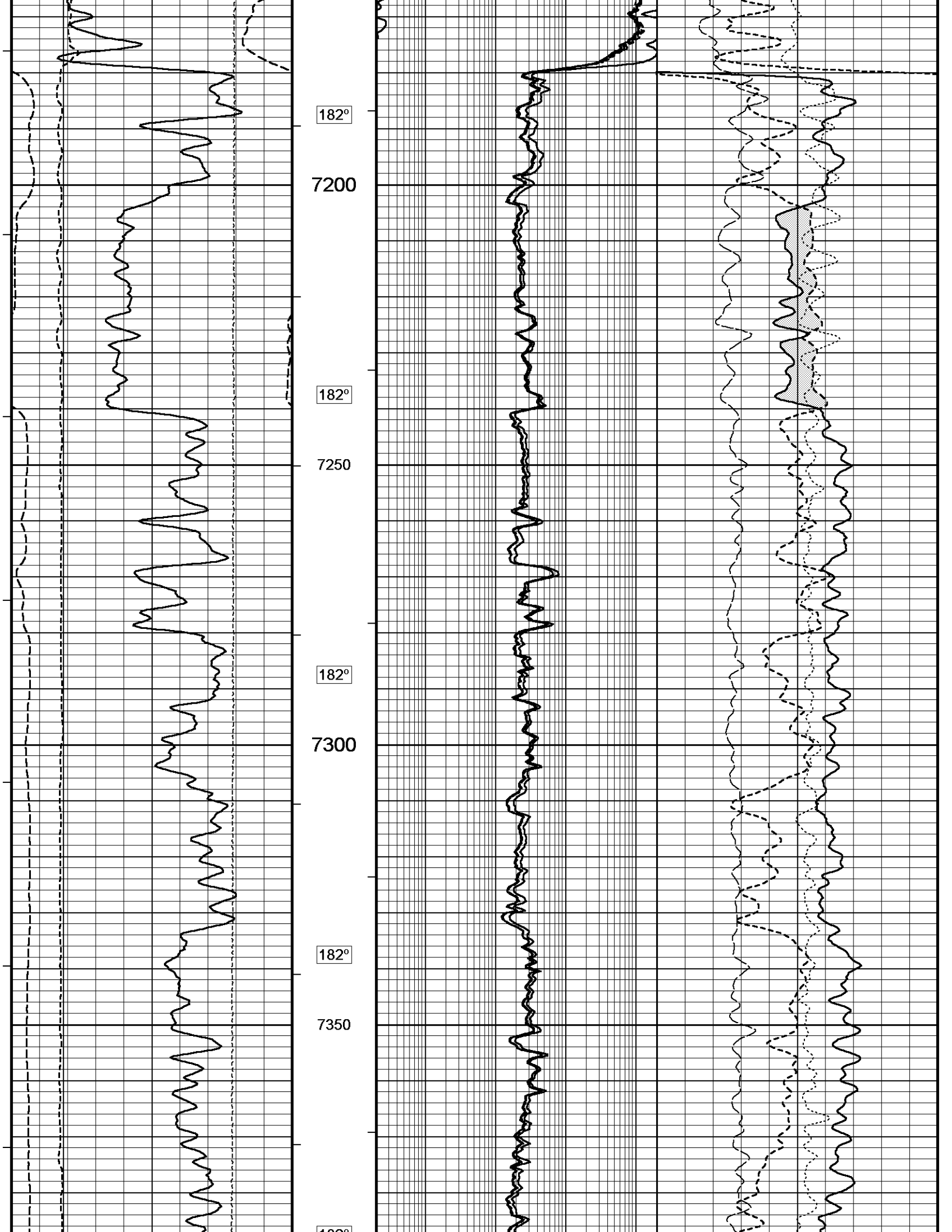


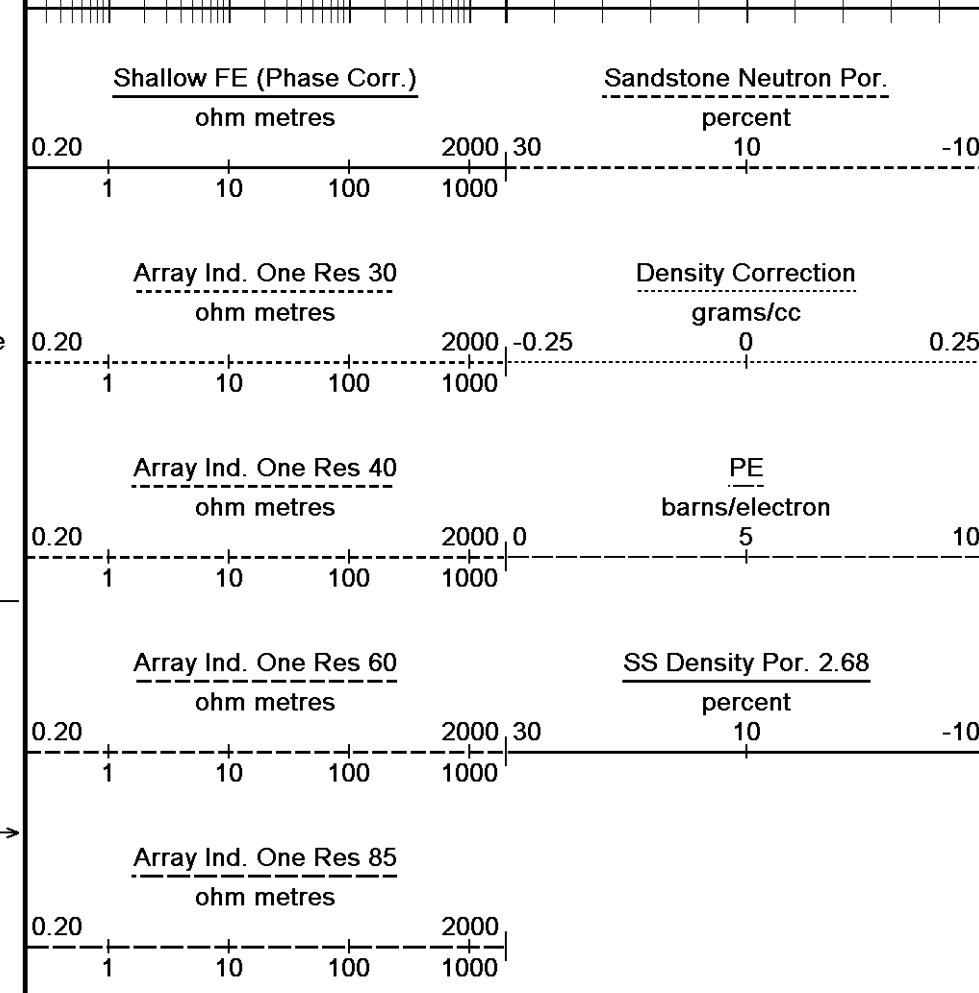
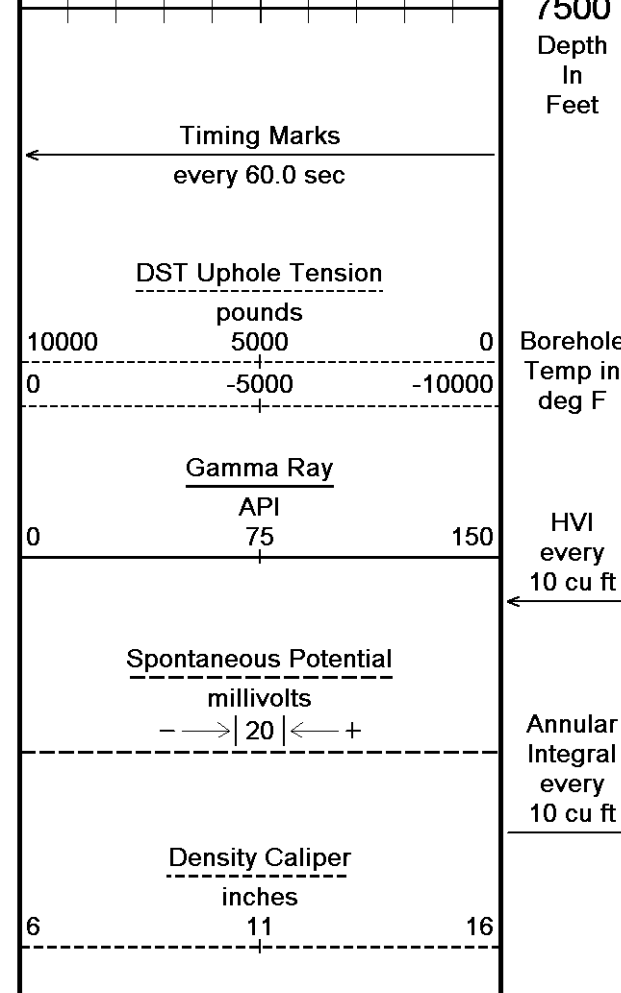
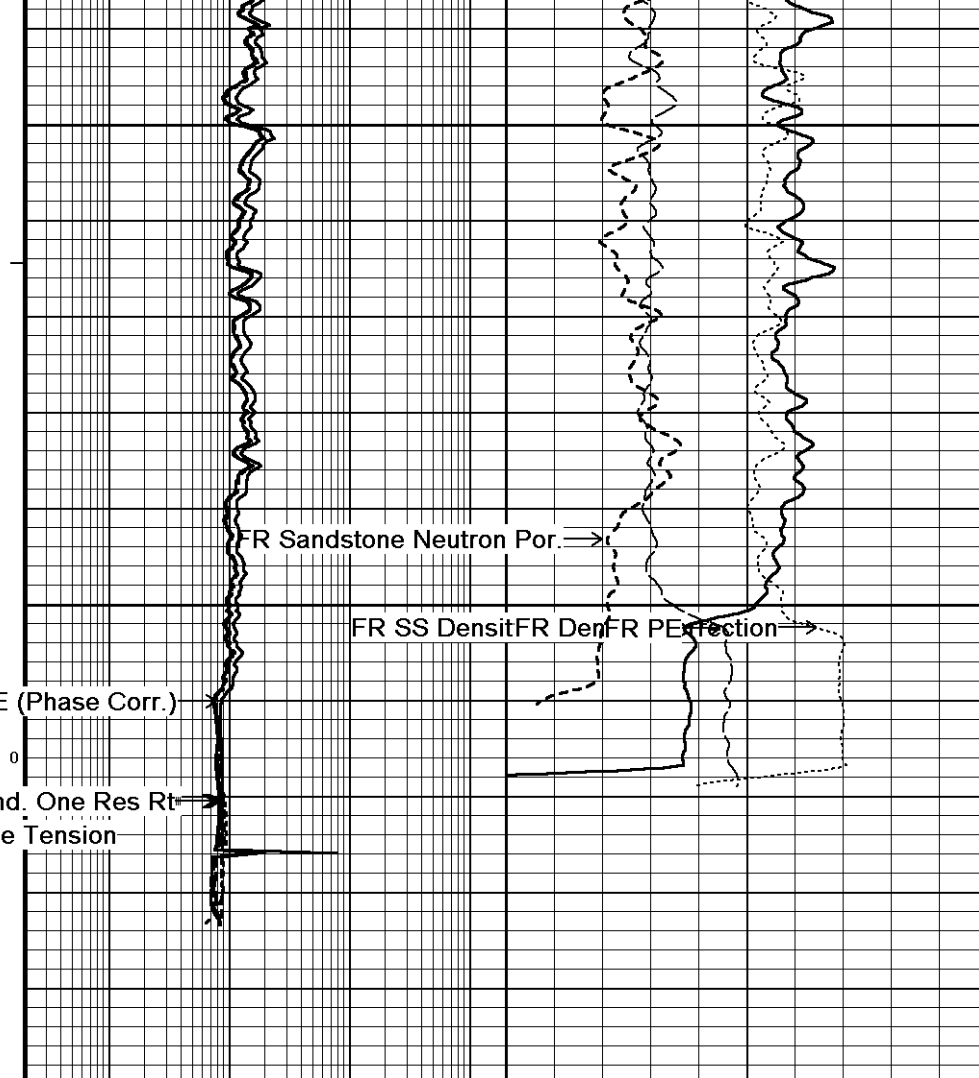
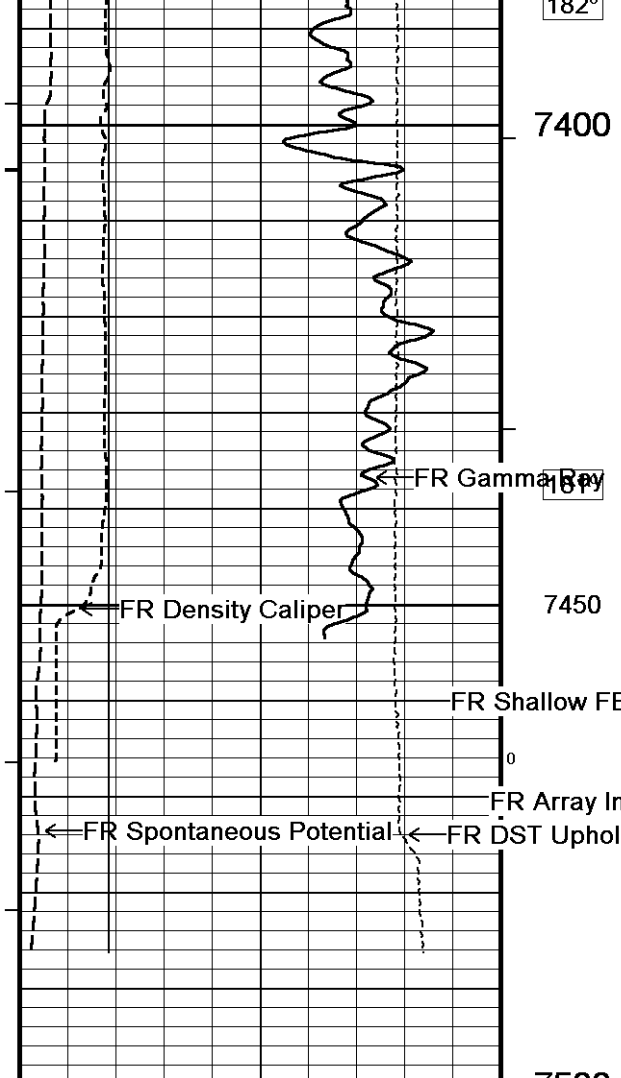


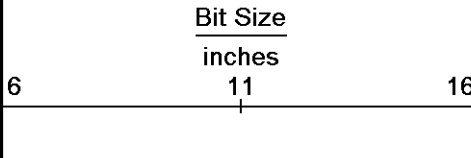




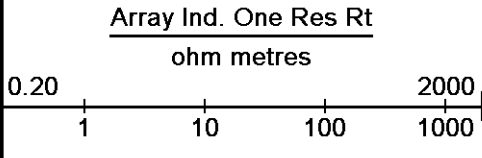








Replay
Scale
1:240

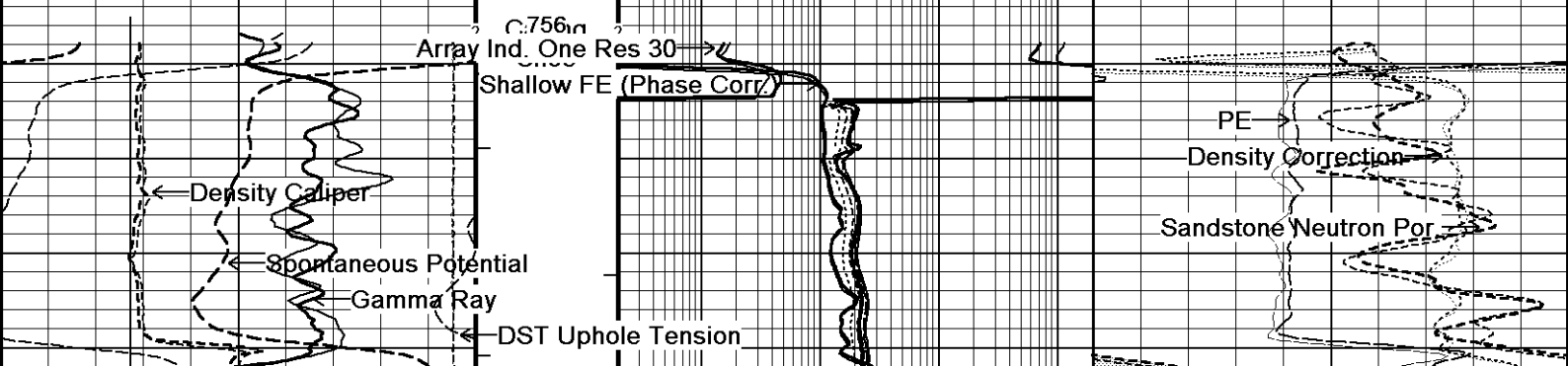
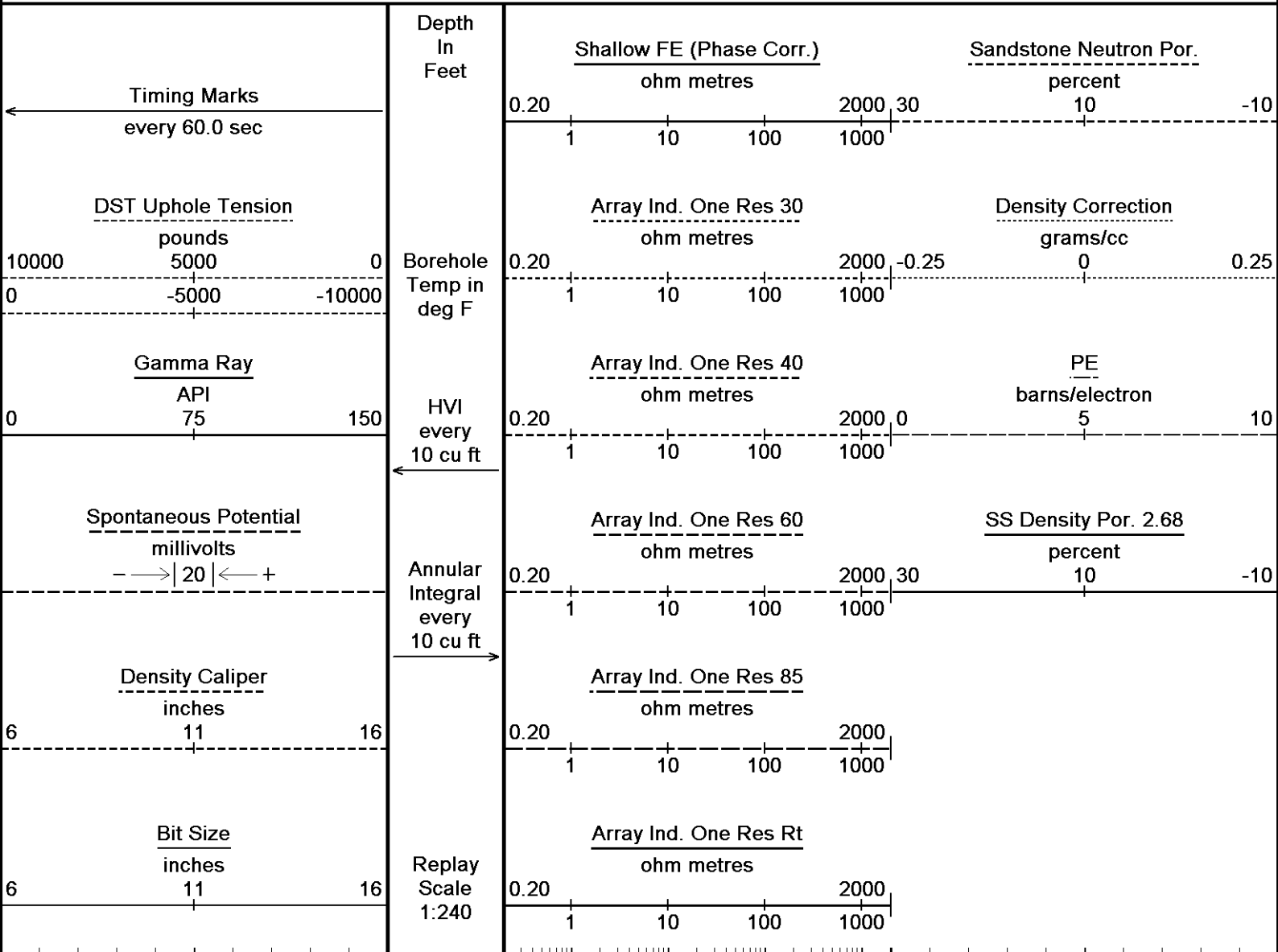


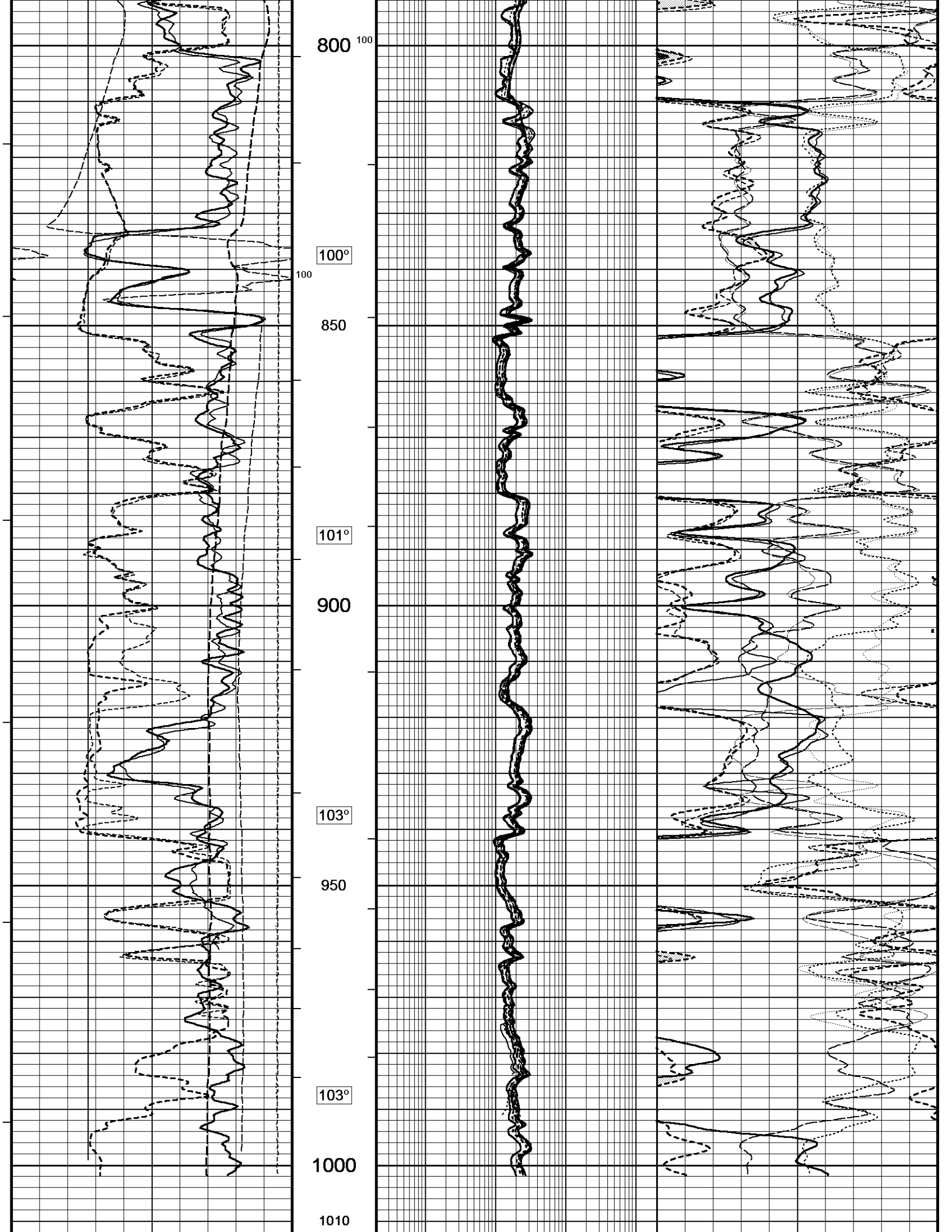
Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 25-MAR-2011 05:23
 Filename: C:\LOGS\GJ11-037\main.dta
 Recorded on 24-MAR-2011 21:50
 System Versions: Logged with 11.02.2782 Plotted with 11.01.1914

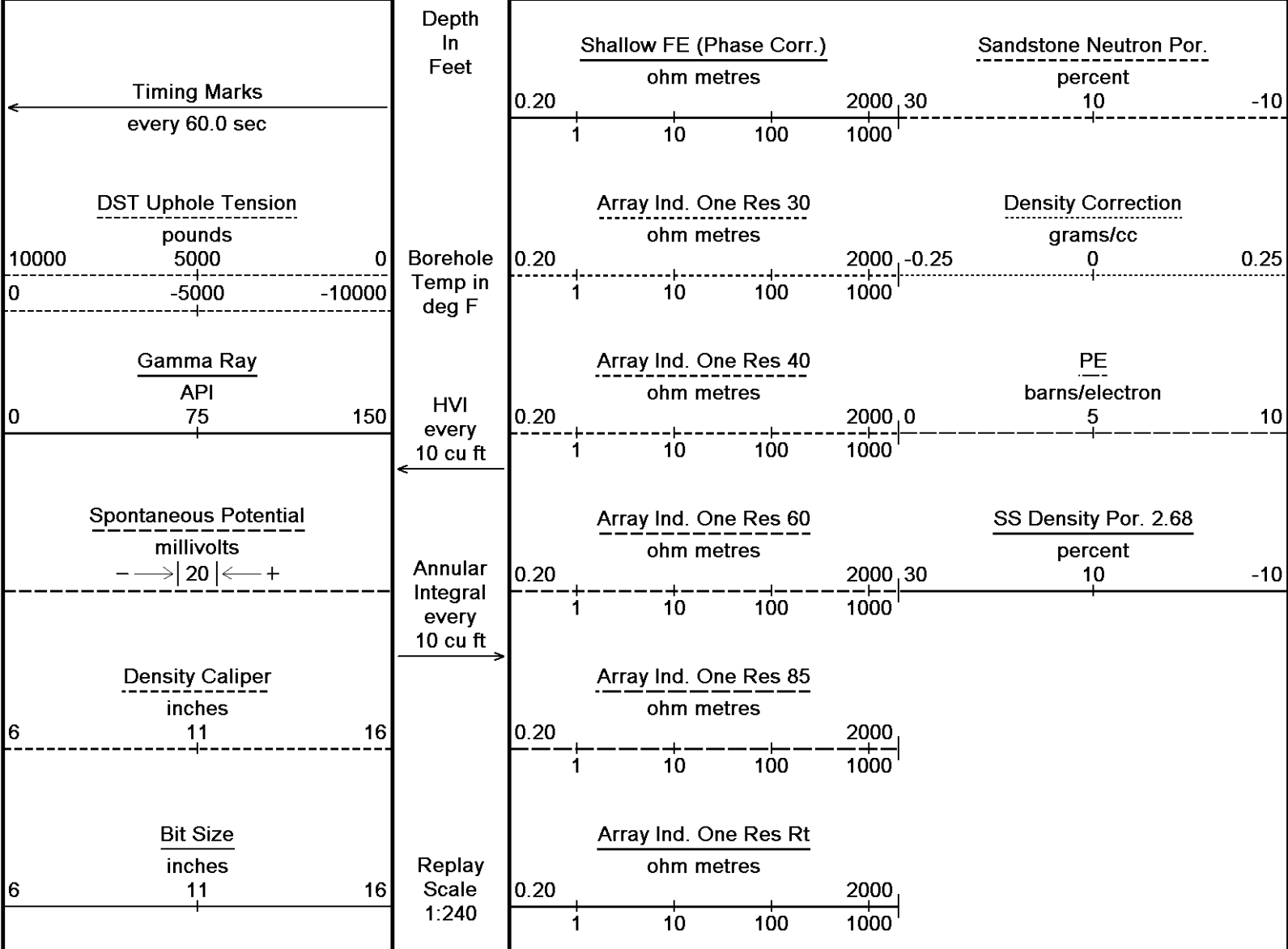
5 INCH MAIN LOG

OVERLAY

Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 25-MAR-2011 05:23
 Filename: C:\LOGS\GJ11-037\main.dta
 Recorded on 24-MAR-2011 21:50
 Filename: C:\LOGS\GJ11-037\Casing2.dta
 Recorded on 24-MAR-2011 20:58
 System Versions: Logged with 11.02.2782 Plotted with 11.01.1914







Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 25-MAR-2011 05:23
 Filename: C:\LOGS\GJ11-037\main.dta
 Recorded on 24-MAR-2011 21:50
 Filename: C:\LOGS\GJ11-037\Casing2.dta
 Recorded on 24-MAR-2011 20:58
 System Versions: Logged with 11.02.2782 Plotted with 11.01.1914

↑ OVERLAY ↑

BEFORE SURVEY CALIBRATION

C:\LOGS\GJ11-037\main.dta

General Constants All 000 Last Edited on 24-MAR-2011,20:53

General Parameters
 Mud Resistivity 3.000 ohm-metres
 Mud Resistivity Temperature 90.000 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 4.500 inches
 Caliper for Differential Caliper None

Rwa Parameters
 Porosity used Base Density Porosity
 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 24-MAR-2011 20:35		
Reading No	Measured	Calibrated (lbs)			
1	15606.31	0.00			
2	16566.65	350.00			
High Resolution Temperature Calibration MCG-C 192			Field Calibration on 11-MAR-2011,06:06		
	Measured	Calibrated(Deg F)			
Lower	50.00	50.00			
Upper	75.00	75.00			
High Resolution Temperature Constants MCG-C 192			Last Edited on 11-MAR-2011,06:06		
Pre-filter Length	11				
SP Calibration MCG-C 192			Field Calibration on 11-MAR-2011,06:06		
	Measured	Calibrated (mV)			
Reference 1	100.9	100.0			
Reference 2	-100.2	-100.0			
Gamma Calibration MCG-C 192			Field Calibration on 24-MAR-2011 18:41		
	Measured	Calibrated (API)			
Background	150	104			
Calibrator (Gross)	1466	1016			
Calibrator (Net)	1316	912			
Gamma Constants MCG-C 192			Last Edited on 24-MAR-2011,18:35		
Gamma Calibrator Number	GRC-072				
Mud Density	1.28	gm/cc			
Caliper Source for Processing	Density Caliper				
Tool Position	Eccentred				
Concentration of KCl	0.00	kppm			
Neutron Calibration MDN-A.B 160			Base Calibration on 22-FEB-2011,05:29 Field Check on 24-MAR-2011 18:51		
Base Calibration					
	Measured	Calibrated (cps)			
	Near	Far	Near	Far	
	3208	98	3714	110	
Ratio	32.812		33.764		
Field Calibrator at Base			Calibrated (cps)		
			1323	1983	
Ratio			0.667		
Field Check			Calibrated (cps)		
			1316	1980	
Ratio			0.665		
Neutron Constants MDN-A.B 160			Last Edited on 24-MAR-2011,18:52		
Neutron Source Id	1056				
Neutron Jig Number	5922				
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	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			
Formation Fluid Salinity Source	None				
Formation Fluid Salinity	N/A	kppm			
Barite Mud Correction	Not Applied				

Base Calibration

	Measured	Calibrated (ohm-m)
Reference 1	10.7	1.3
Reference 2	965.5	126.8
Base Check		281.9
Field Check		0.0

FE Constants MFE-A.A 85

Last Edited on 24-MAR-2011,19:06

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

High Resolution Temperature Calibration MAI-B.A 213

Field Calibration on 22-DEC-2010,21:10

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

High Resolution Temperature Constants MAI-B.A 213

Last Edited on 13-DEC-2010,09:54

Pre-filter Length	11
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Induction Calibration MAI-B.A 213

Base Calibration on 22-FEB-2011,05:28
Field Check on

Base Calibration

Test Loop Calibration Channel	Measured		Calibrated (mmho/m)	
	Low	High	Low	High
1	16.8	462.4	9.3	966.2
2	6.2	381.7	7.6	821.4
3	3.6	254.8	5.2	566.0
4	2.3	132.3	2.6	279.2

Array Temperature	73.6	Deg F
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Channel	Base Check (mmho/m)		Field Check (mmho/m)	
	Low	High	Low	High
1	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0
Deep	0.0	0.0	0.0	0.0
Medium	0.0	0.0	0.0	0.0
Shallow	0.0	0.0	0.0	0.0

Array Temperature	0.0	Deg F
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Induction Constants MAI-B.A 213

Last Edited on 23-MAR-2011,15:22

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	mhos/metre

Borehole Normalisation

DDM1	0.0000	DDC1	0.0000
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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	

Caliper Calibration MPD-B 167

Base Calibration on 24-MAR-2011 14:48
Field Calibration on 24-MAR-2011 14:49

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	18272	4.00
2	26728	5.96
3	35183	7.98
4	43312	9.86
5	52336	11.88
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
7.99	7.98

Photo Density Calibration MPD-B 167

Base Calibration on 24-MAR-2011 14:37
Field Check on 24-MAR-2011 19:01

Density Calibration

Base Calibration	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	50013	18682	53115	19186
Reference 2	23150	3037	25020	2536

Field Check at Base

1169.0	1734.7
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Field Check

1171.0	1736.4
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PE Calibration

Base Calibration	WS	Measured		Calibrated Ratio
		WH	Ratio	
Background	210	1040		
Reference 1	15507	49836	0.313	0.320
Reference 2	6038	23013	0.265	0.272

Field Check at Base

209.6	1039.8
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Field Check

214.4	1046.2
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Density Constants MPD-B 167

Last Edited on 24-MAR-2011,18:54

Density Source Id	P50561B
Nylon Calibrator Number	507
Aluminium Calibrator Number	507
Density Shoe Profile	8 inch
Caliper Source for Processing	Density Caliper

PE Correction to Density	Not Applied	
Mud Density	1.28	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

AFTER SURVEY CALIBRATION

C:\LOGS\GJ11-037\main.dta

FE Check MFE-A.A 85

Before Survey Check
After Survey Check on 25-MAR-2011 01:56

Before (ohm-m)	After (ohm-m)
0.0	281.8

Induction Check MAI-B.A 213

Before Survey Check on
After Survey Check on 25-MAR-2011 01:58

Channel	Before Survey (mmho/m)		After Survey (mmho/m)	
	Low	High	Low	High
1	0.0	0.0	13.7	3935.5
2	0.0	0.0	30.1	3539.9
3	0.0	0.0	28.8	3113.9
4	0.0	0.0	19.0	2096.2
Deep	0.0	0.0	17.4	2077.5
Medium	0.0	0.0	42.6	4088.3
Shallow	0.0	0.0	45.3	5160.2
Array Temperature	0.0		63.3	

Photo Density Check MPD-B 167

Before Survey Check on 24-MAR-2011 19:01
After Survey Check on 25-MAR-2011 01:55

Density Check

		Near		Far	
	Before	After	Before	After	
	1171.0	1169.3	1736.4	1740.6	

PE Check

	Before	After
WS	214.4	212.1
WH	1046.2	1041.9

DOWNHOLE EQUIPMENT

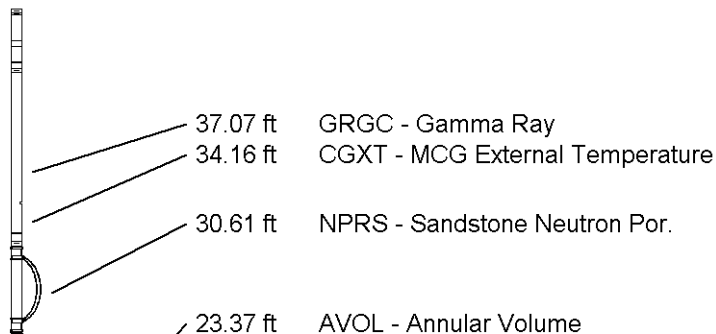
C:\LOGS\GJ11-037\main.dta

SHA-J.A Compact Swivel Head Adaptor
SHA-J.A 316 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in

Compact Comms Gamma
MCG-C 192 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in

Compact Neutron
MDN-A.B 160 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

Compact Density/Caliper



MPD-B 167 LG: 9.59 ft WT: 90.4 lb OD: 2.45 in

SKJ-D.A Compact Knuckle Joint

SKJ-D.A 114 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

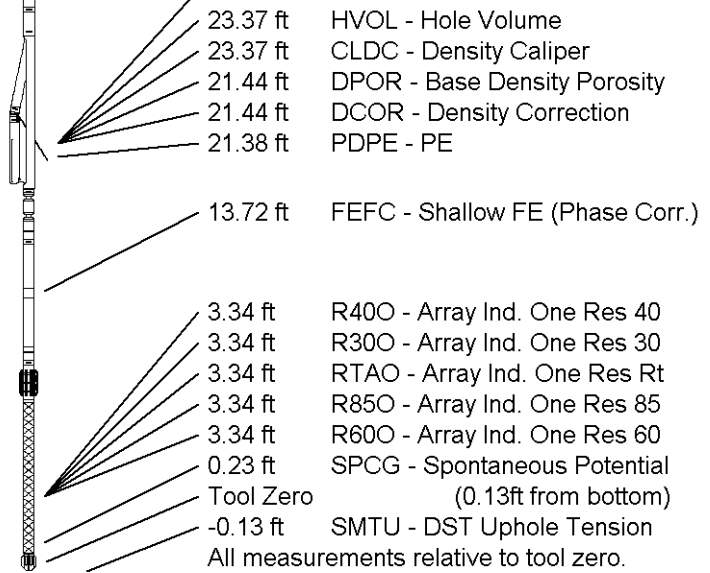
Compact Focused Electric

MFE-A.A 85 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

Compact Induction

MAI-B.A 213 LG: 10.81 ft WT: 48.5 lb OD: 2.24 in

Total Length: 44.66 ft Weight: 348.3 lb



COMPANY	BILL BARRETT CORPORATION
WELL	GGU FEDERAL 31C-29-691
FIELD	GIBSON GULCH
PROVINCE/COUNTY	GARFIELD
COUNTRY/STATE	U.S.A. / COLORADO

Elevation Kelly Bushing	6127.00	feet	First Reading	7470.50
Elevation Drill Floor		feet	Depth Driller	7475.00 feet
Elevation Ground Level	6104.00	feet	Depth Logger	7474.00 feet



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