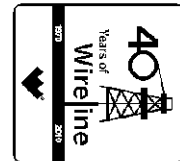




Weatherford[®]

**COMPACT TRIPLE COMBO
QUICKLOOK
LOG**

COMPANY **BILL BARRETT CORPORATION**
WELL **GGU FEDERAL 34A-20-691**
FIELD **GIBSON GULCH**
PROVINCE/COUNTY **GARFIELD**
COUNTRY/STATE **U.S.A. / COLORADO**
LOCATION **SHL: 1212' FNL & 1338' FEL**
BHL: 165' FSL & 1990' FEL



SEC	TWP	RGE	Other Services
20	6S	91W	
API Number 05-045-19805			
Permit Number			
Permanent Datum G.L., Elevation 6104 feet			
Log Measured From K.B. @ 23 FEET above Permanent Datum			
Drilling Measured From K.B.			

Date	28-FEB-2011	Elevations:	feet
Run Number	ONE	KB	6127.00
Depth Driller	7640.00	DF	6126.00
Depth Logger	7642.00	GL	6104.00

Hole Fluid Type	LSND	Density / Viscosity	10.80 lb/USg	55.00 CP
PH / Fluid Loss	10.00		5.60 ml/30Min	
Sample Source	FLOW LINE			
Rm @ Measured Temp	3.50 @ 80.0		ohm-m	
Rmf @ Measured Temp	2.80 @ 80.0		ohm-m	
Rmc @ Measured Temp	4.20 @ 80.0		ohm-m	
Source Rmf / Rmc	CALC		CALC	
Rm @ BHT	1.63 @ 175.0		ohm-m	
Time Since Circulation	6 HOURS			
Max Recorded Temp	175.00		deg F	
Equipment Name	COMPACT			
Equipment / Base	13173		GJCT	
Recorded By	J.GARCIA			
Witnessed By	C.CROW			

BOREHOLE RECORD

Last Edited: 28-FEB-2011 23:20

Bit Size inches	Depth From feet	Depth To feet
8.750	764.00	4258.00
7.880	4258.00	7640.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	9.625	0.00	764.00	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. = 8.99" (9 5/8", 36 LB/FT CASING)

8.75 INCH BIT USED FROM SURFACE CASING TO 4258 FT.

TOTAL HOLE VOLUME FROM TD TO SURFACE CASING = 2840 CU.FT.

ANNULAR VOLUME WITH 4.5 INCH PRODUCTION CASING = 2080 CU.FT.

LOG SPLICED AT 4050

ENGINEER(S): J.GARCIA

OPERATOR: D.DALEY, S.KAISER

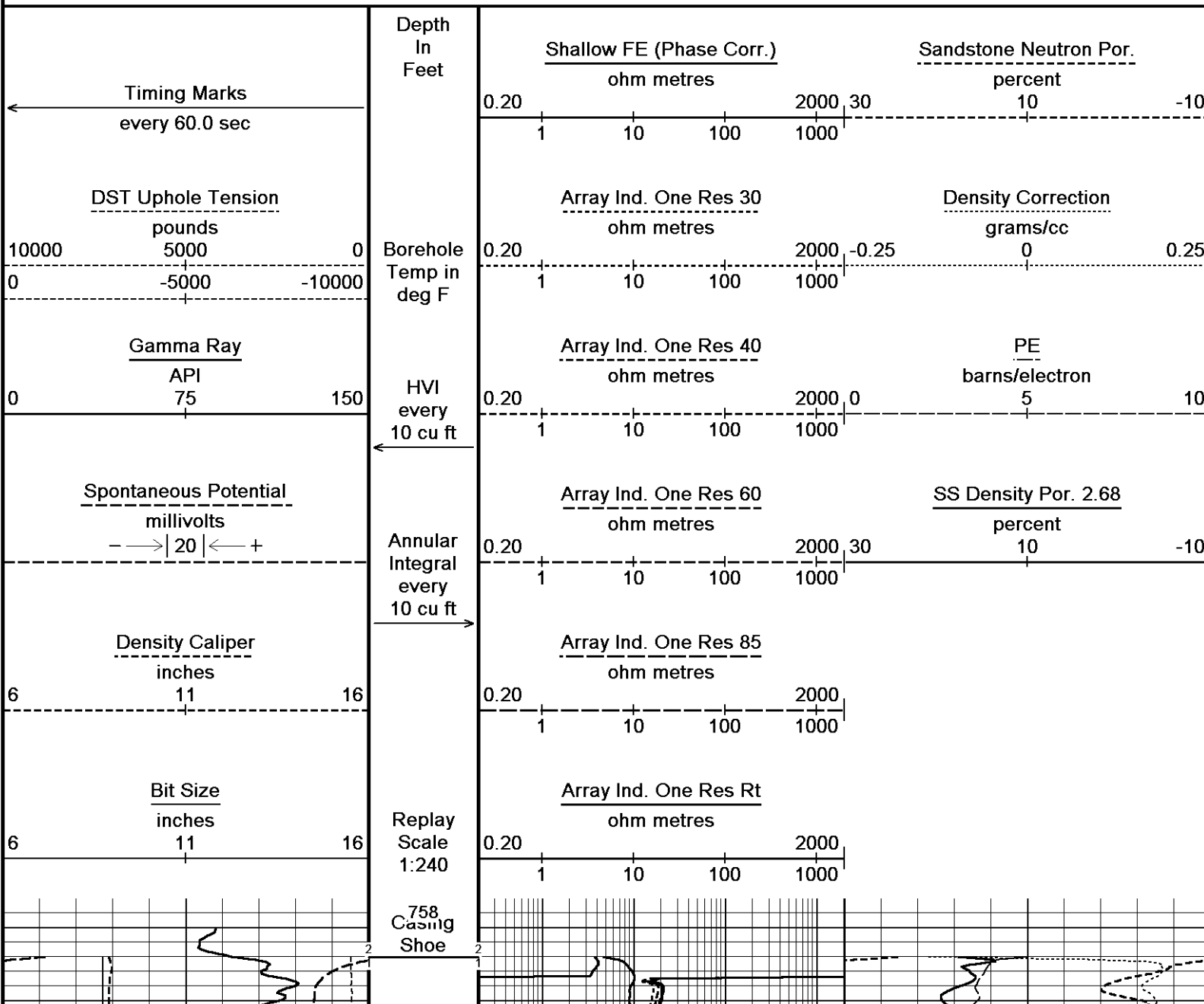
SERVICE ORDER: # 3524853

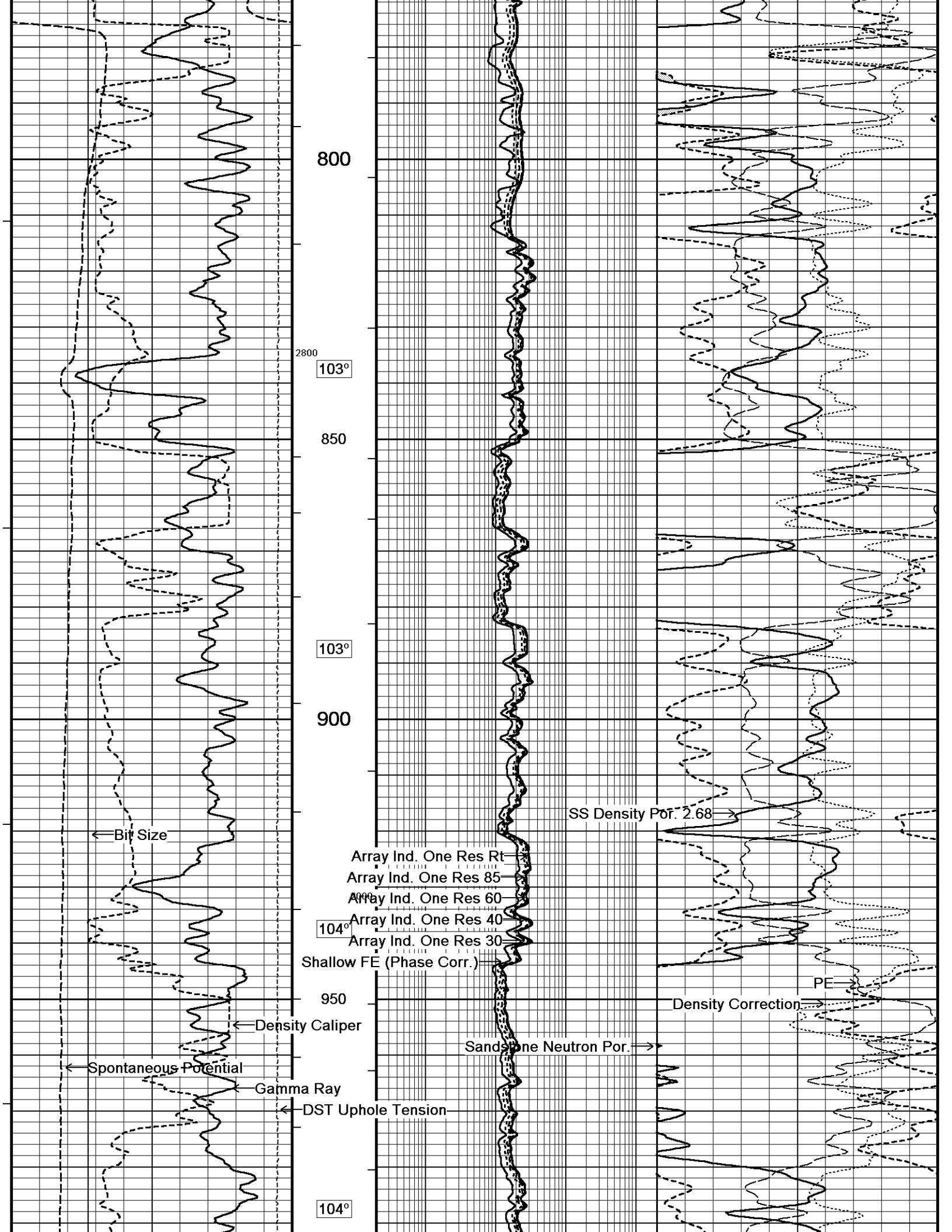
RIG: PATTERSON #307

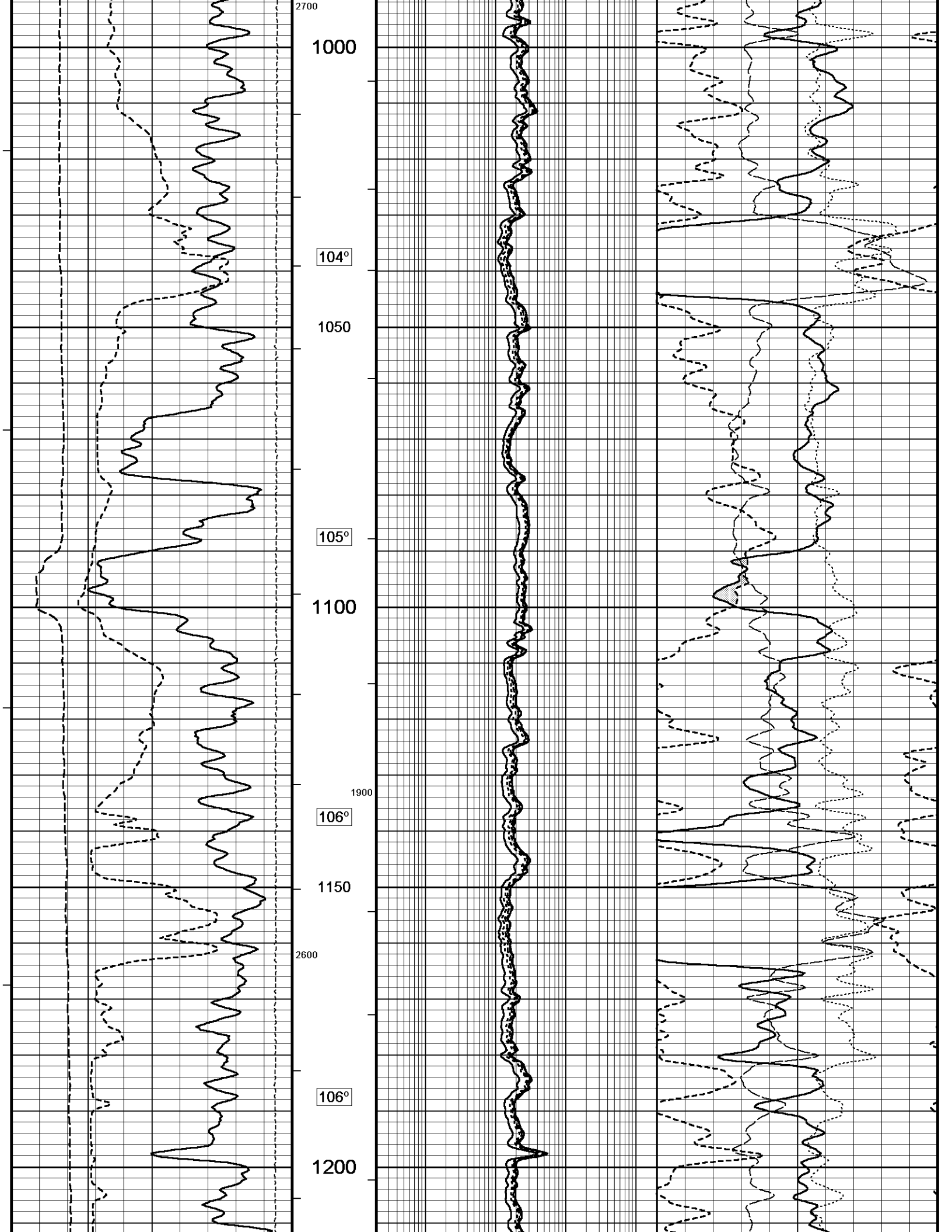
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs, 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.

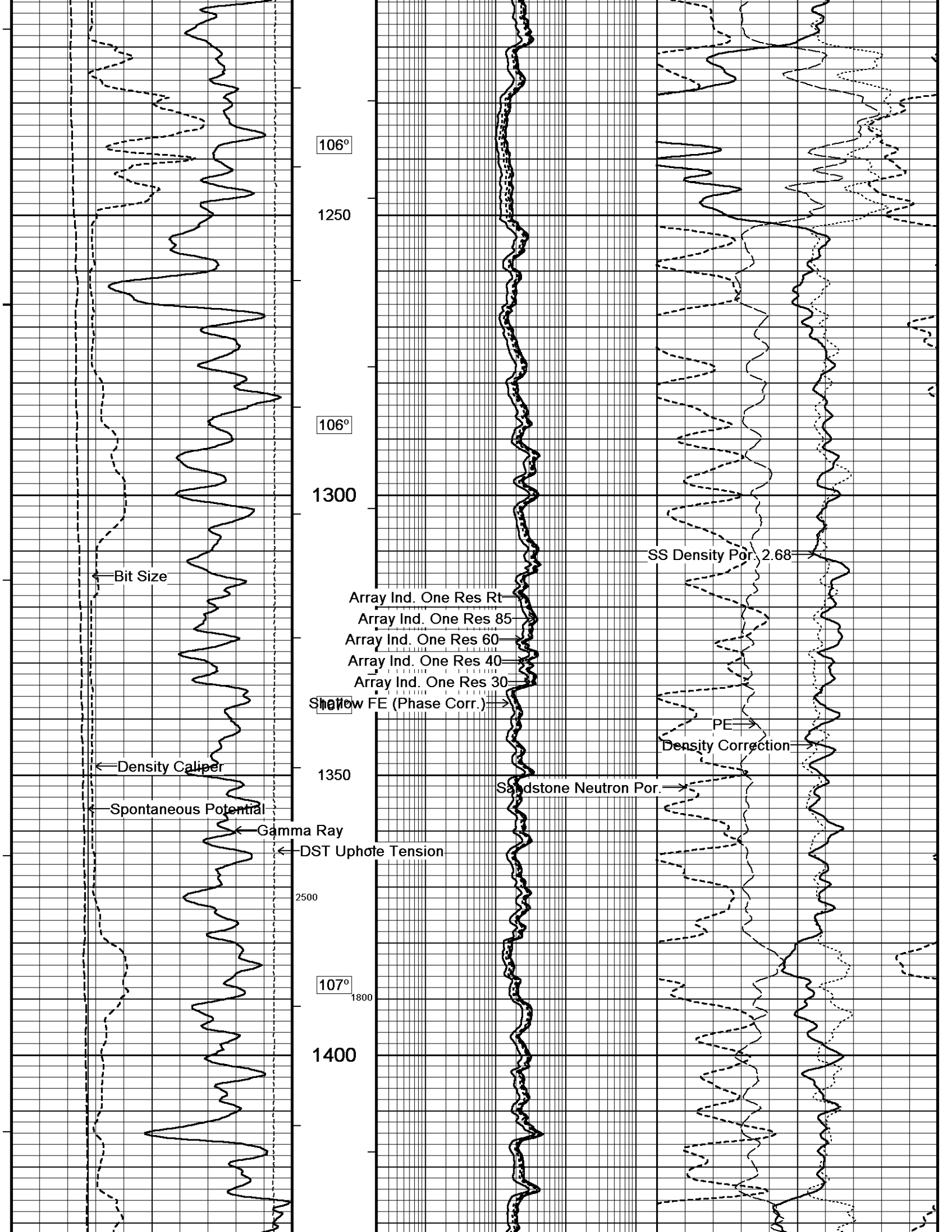
5 INCH MAIN LOG

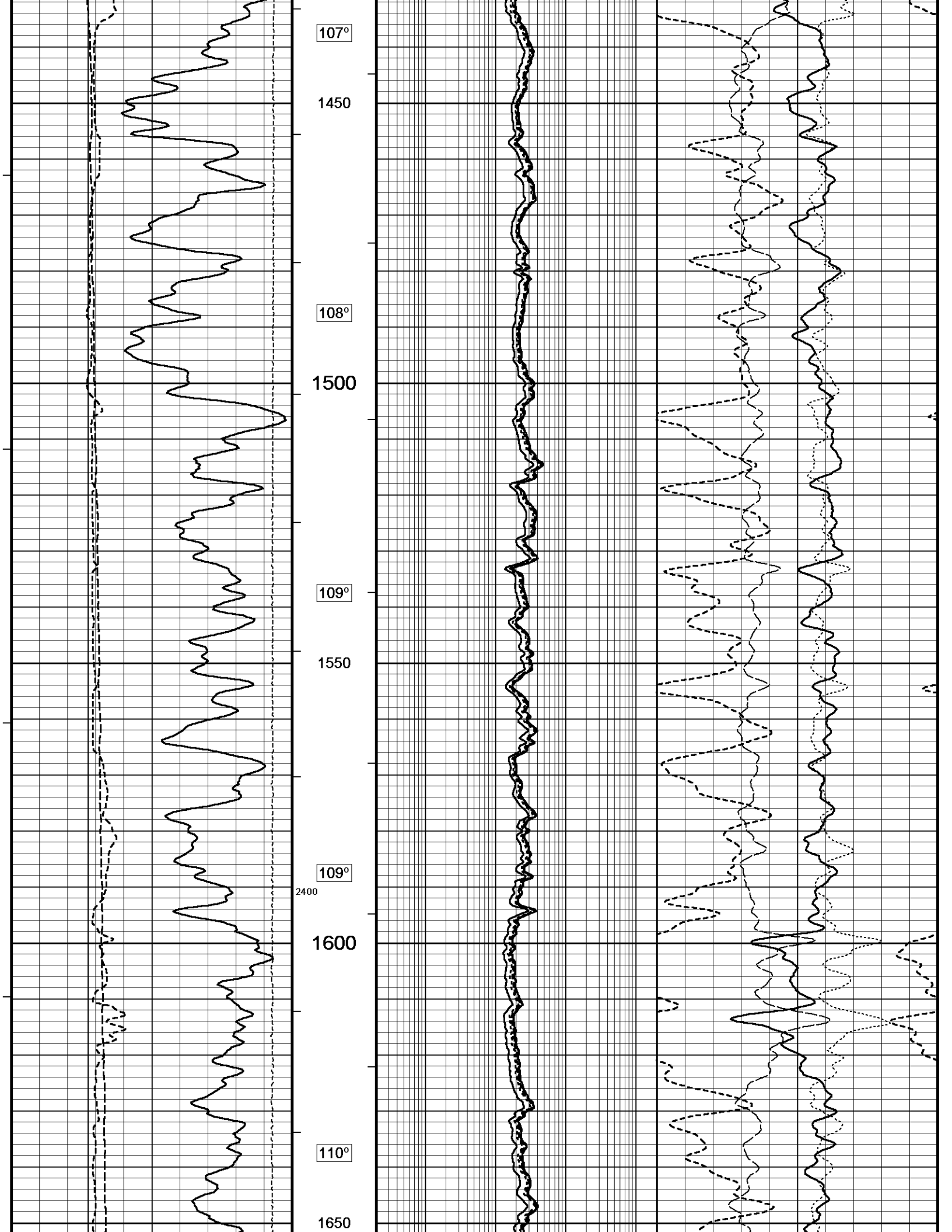
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Documents and Settings\le145895\Desktop\GGU FEDERAL 34A-20-691\SPLICE.dta
System Versions: Processed with 11.01.2198 Plotted with 11.01.2198
Plotted on 01-MAR-2011 17:47
Recorded on 01-MAR-2011 11:46

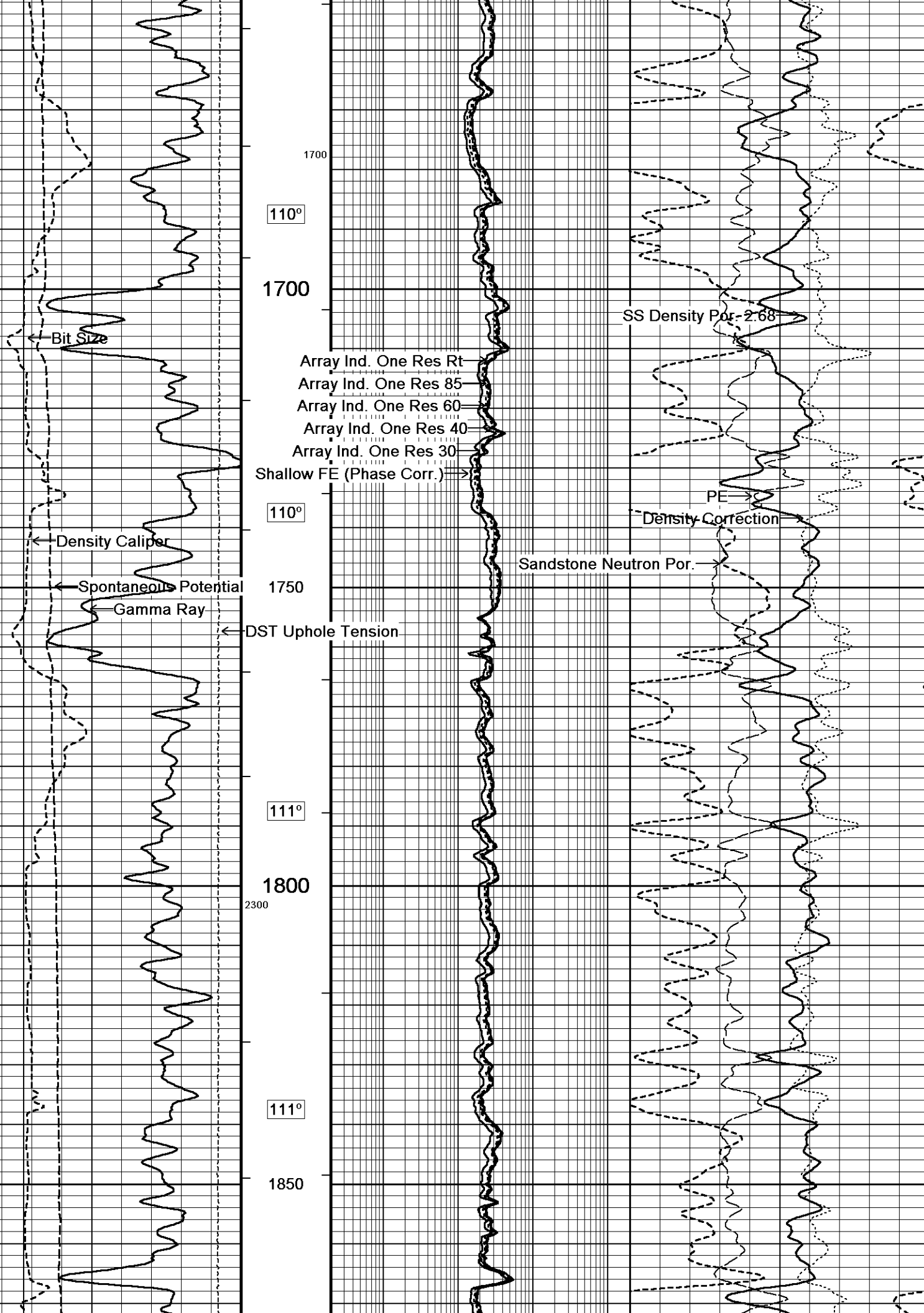


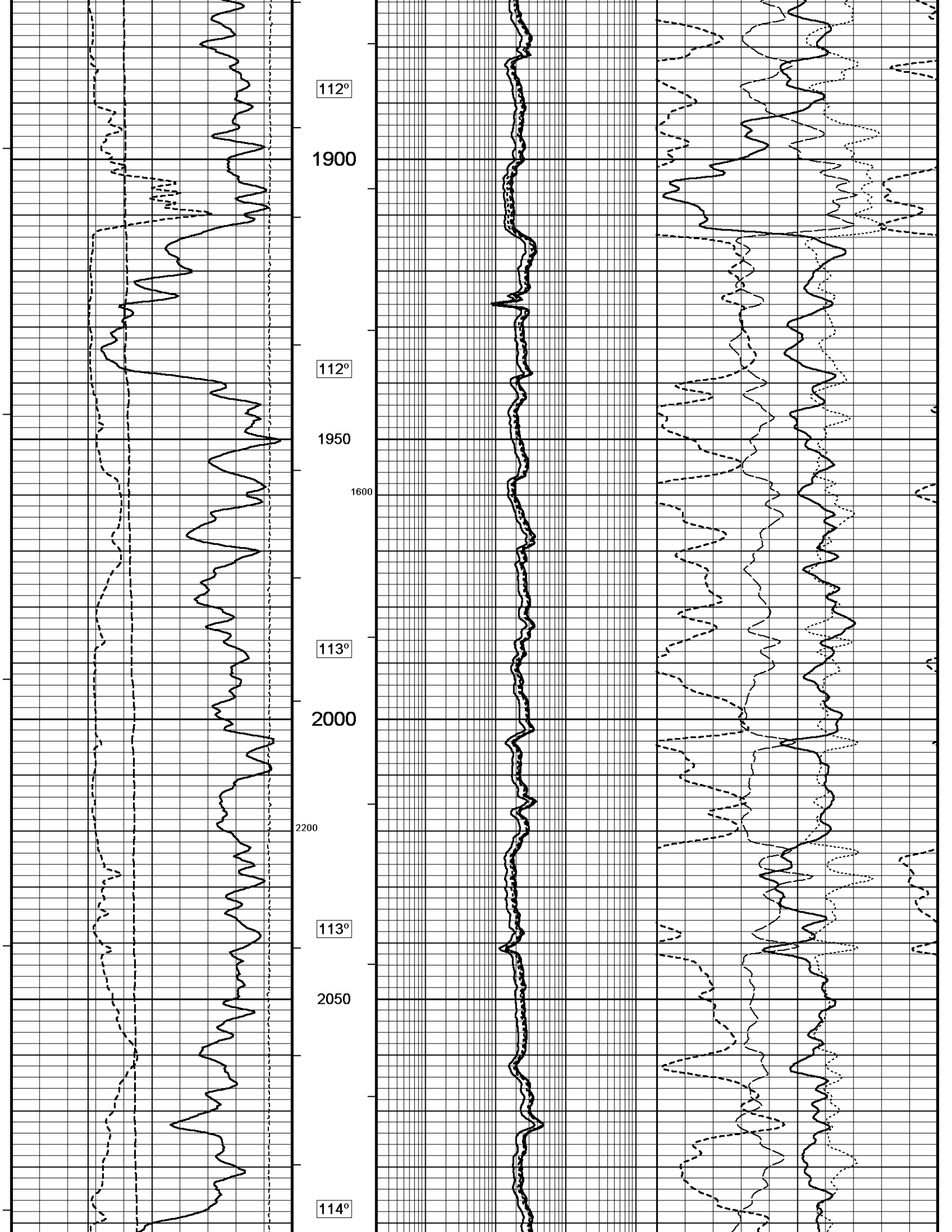


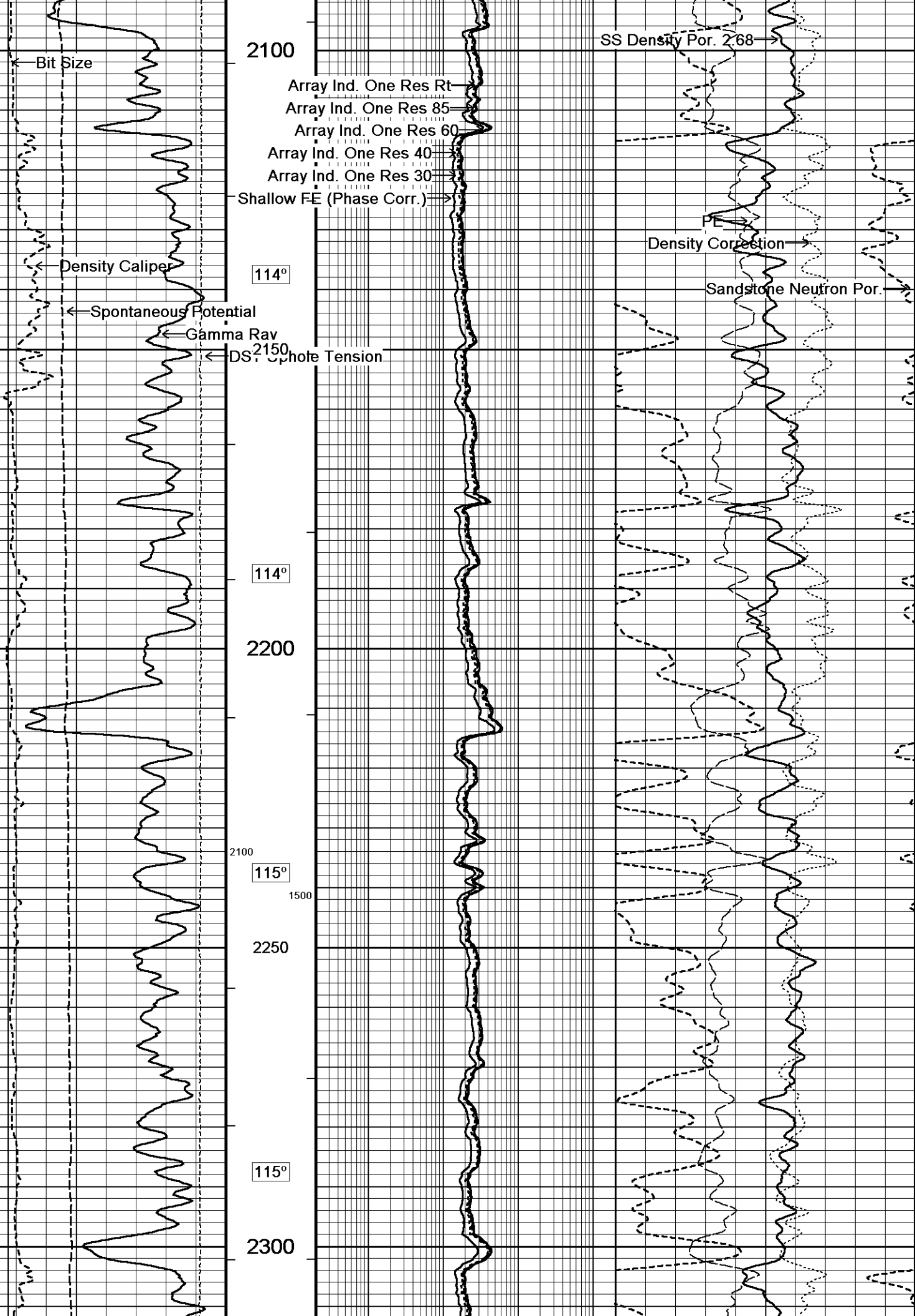


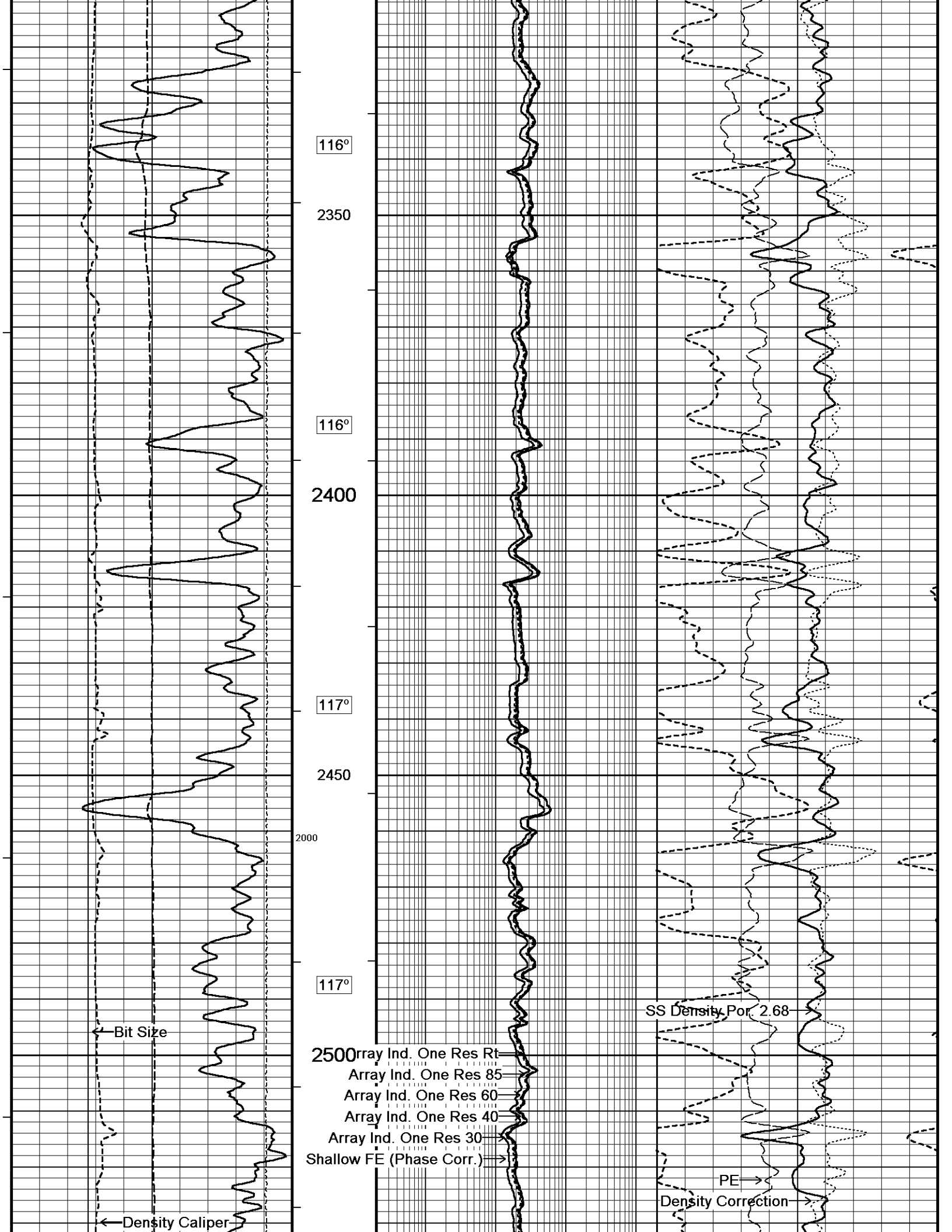












116°

2350

116°

2400

117°

2450

2000

117°

← Bit Size

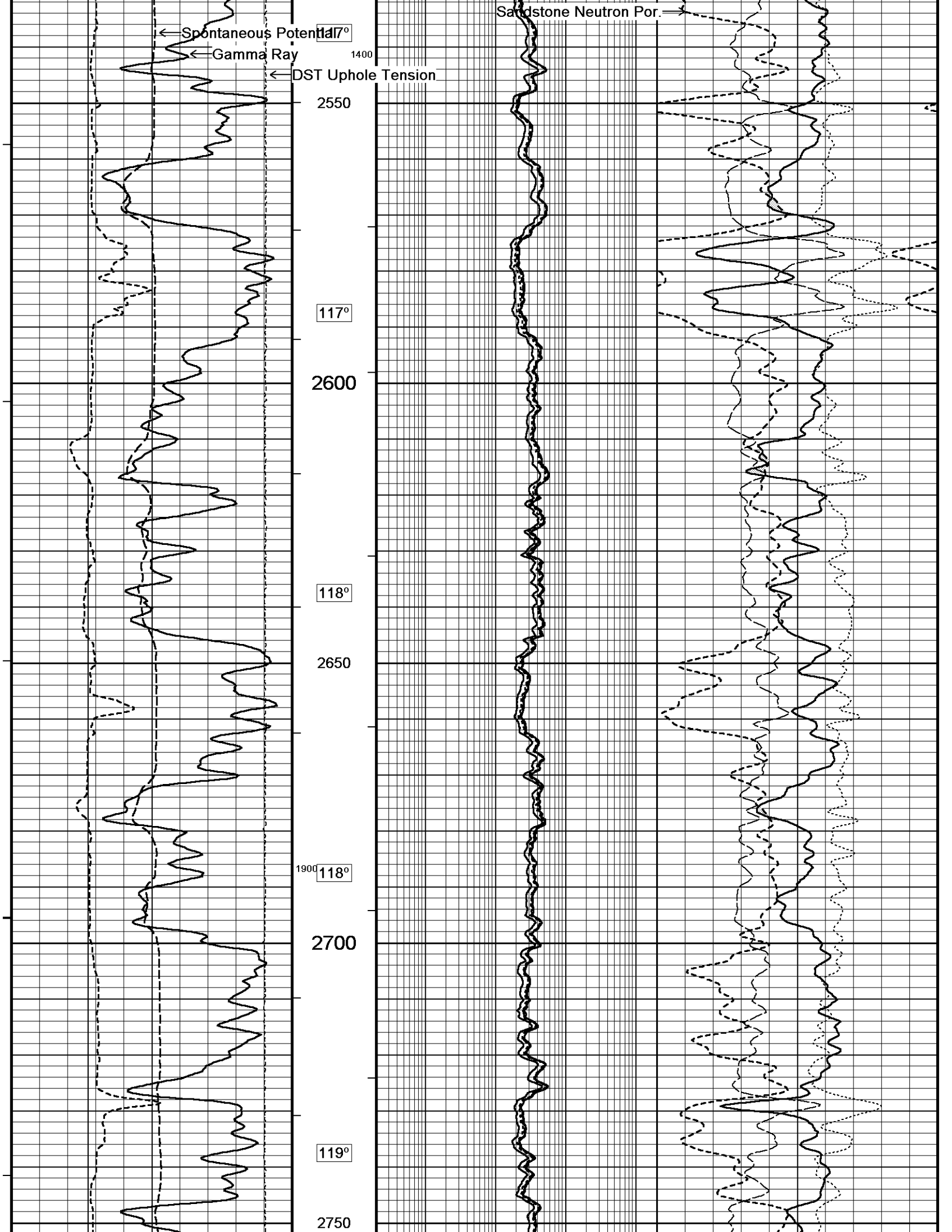
← Density Caliper

2500 array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)

SS Density Por. 2.68

PE

Density Correction



← Spontaneous Potential
← Gamma Ray
← DST Uphole Tension

Sandstone Neutron Por. →

1400

2550

117°

2600

118°

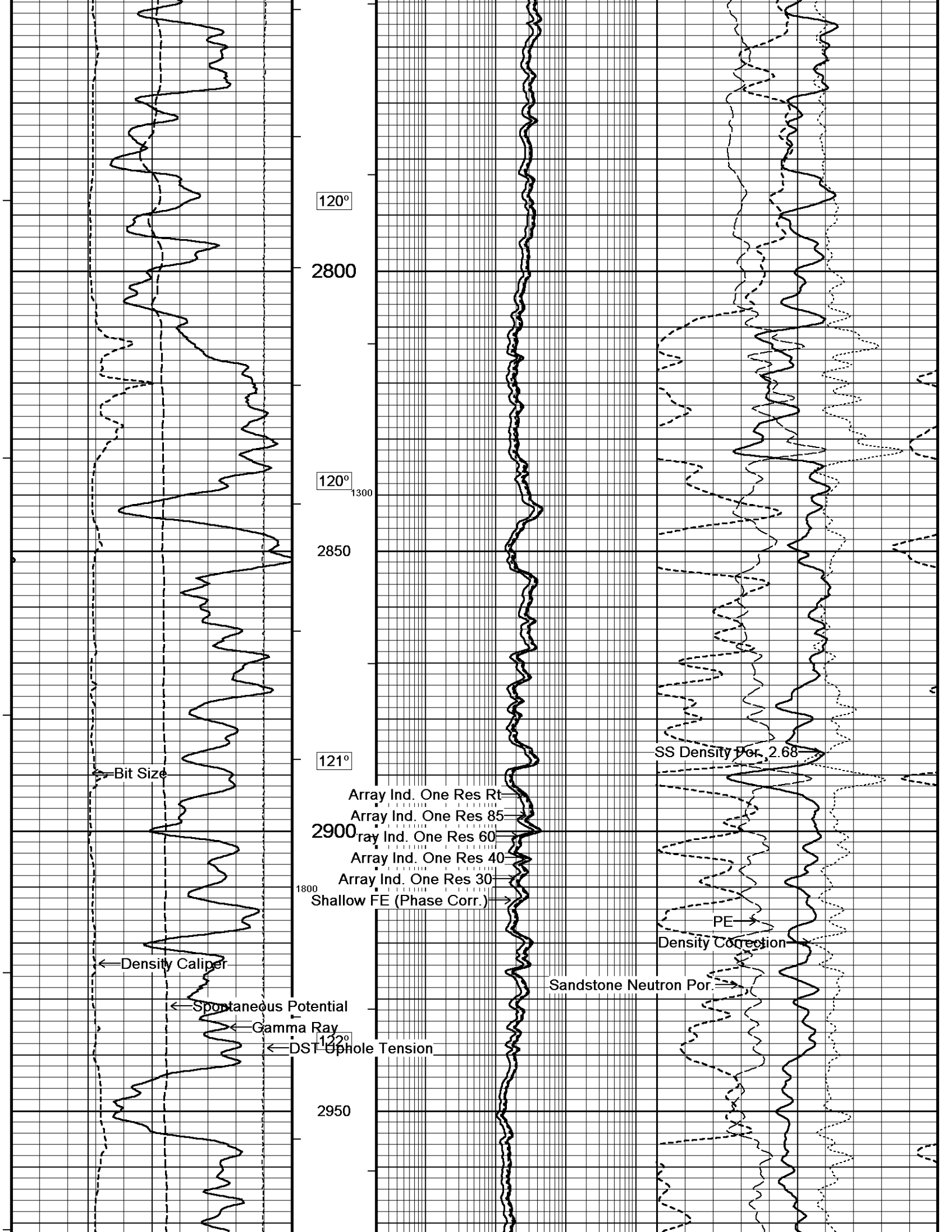
2650

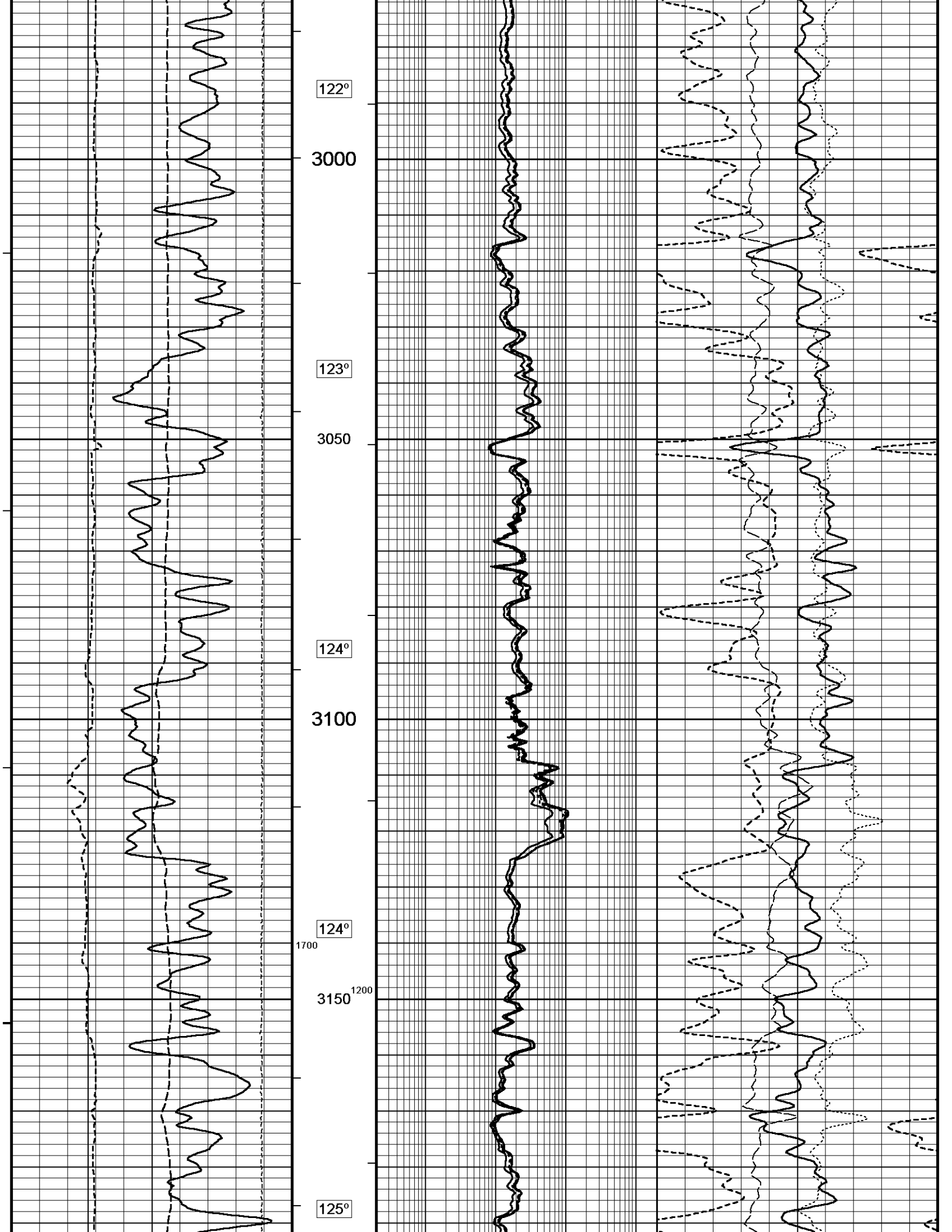
1900 118°

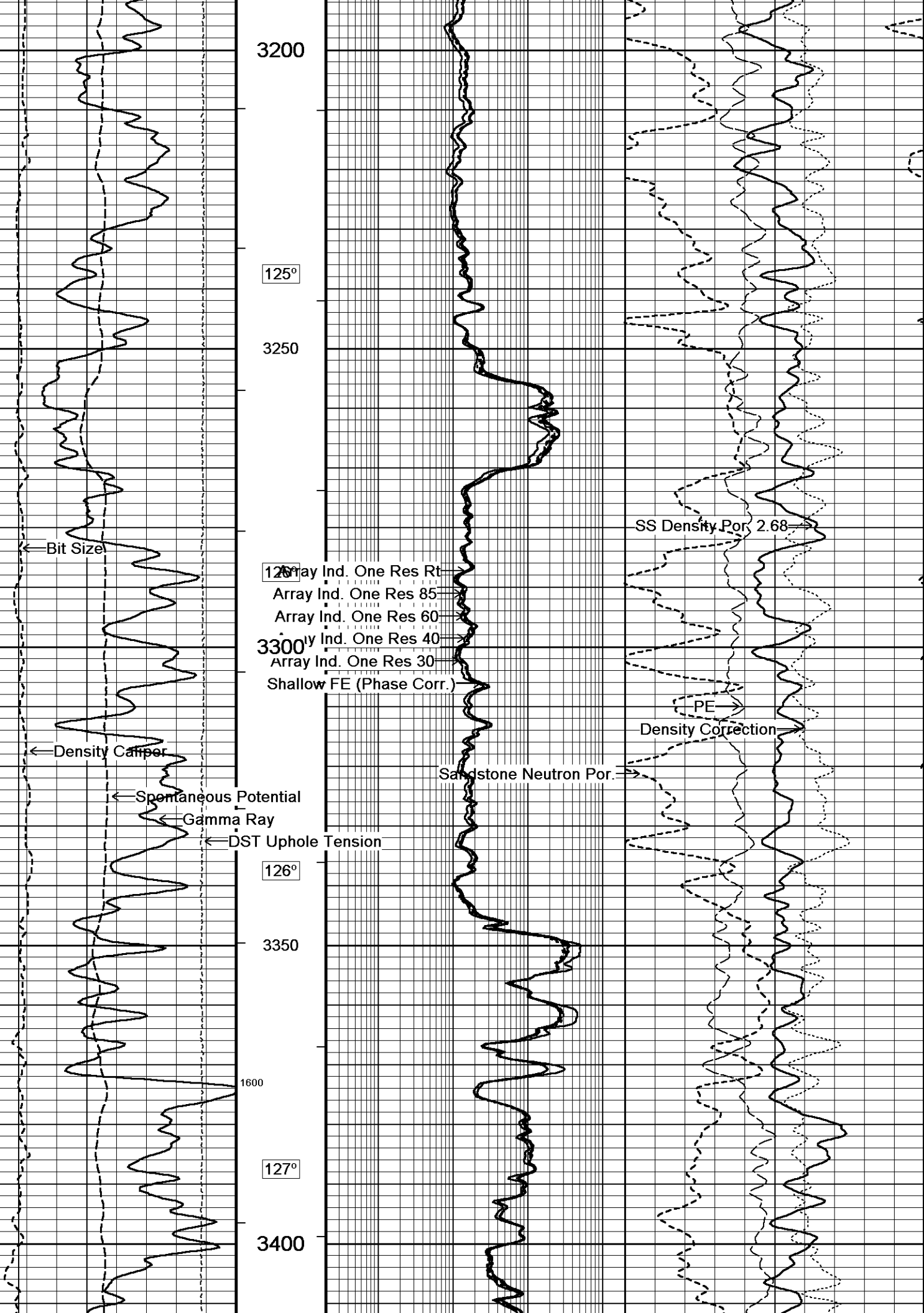
2700

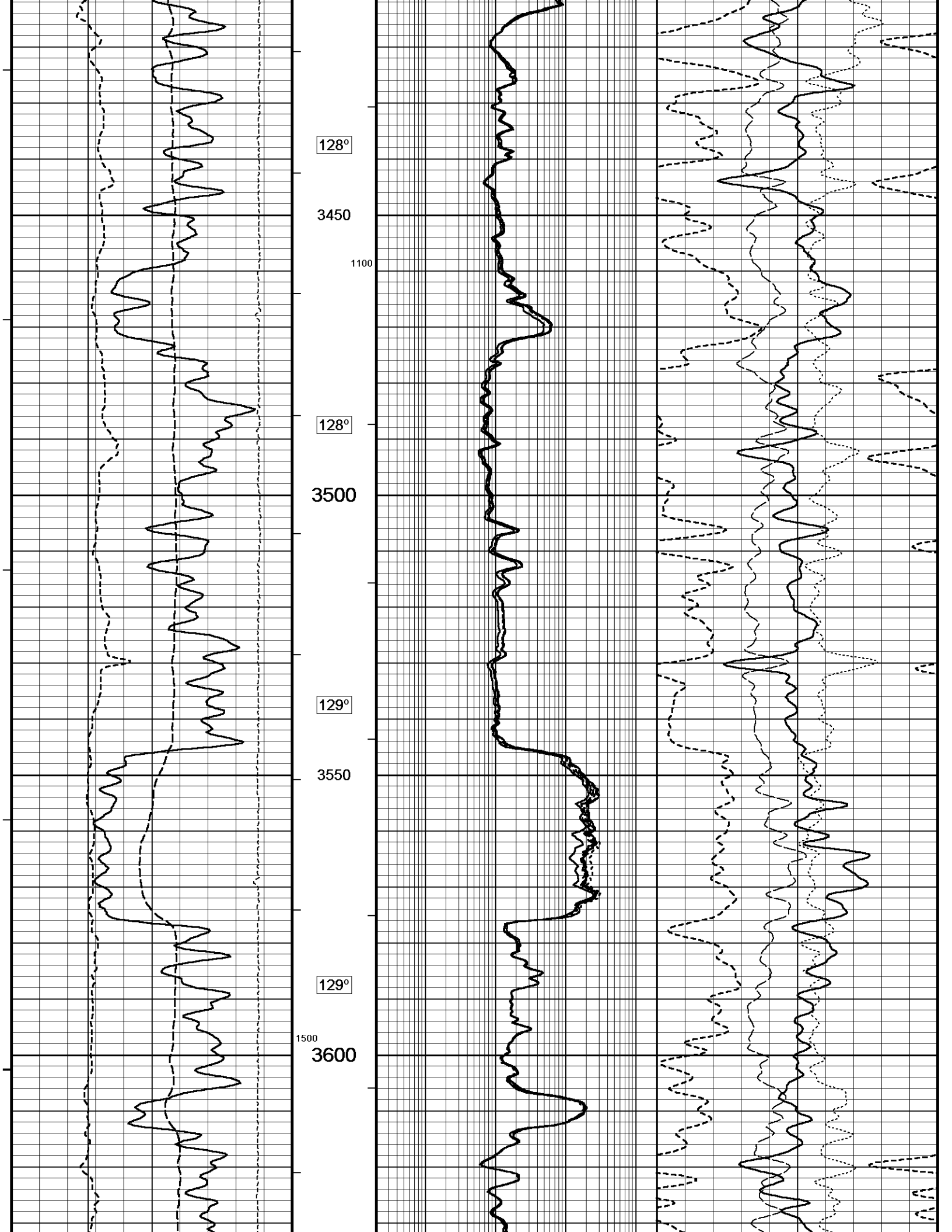
119°

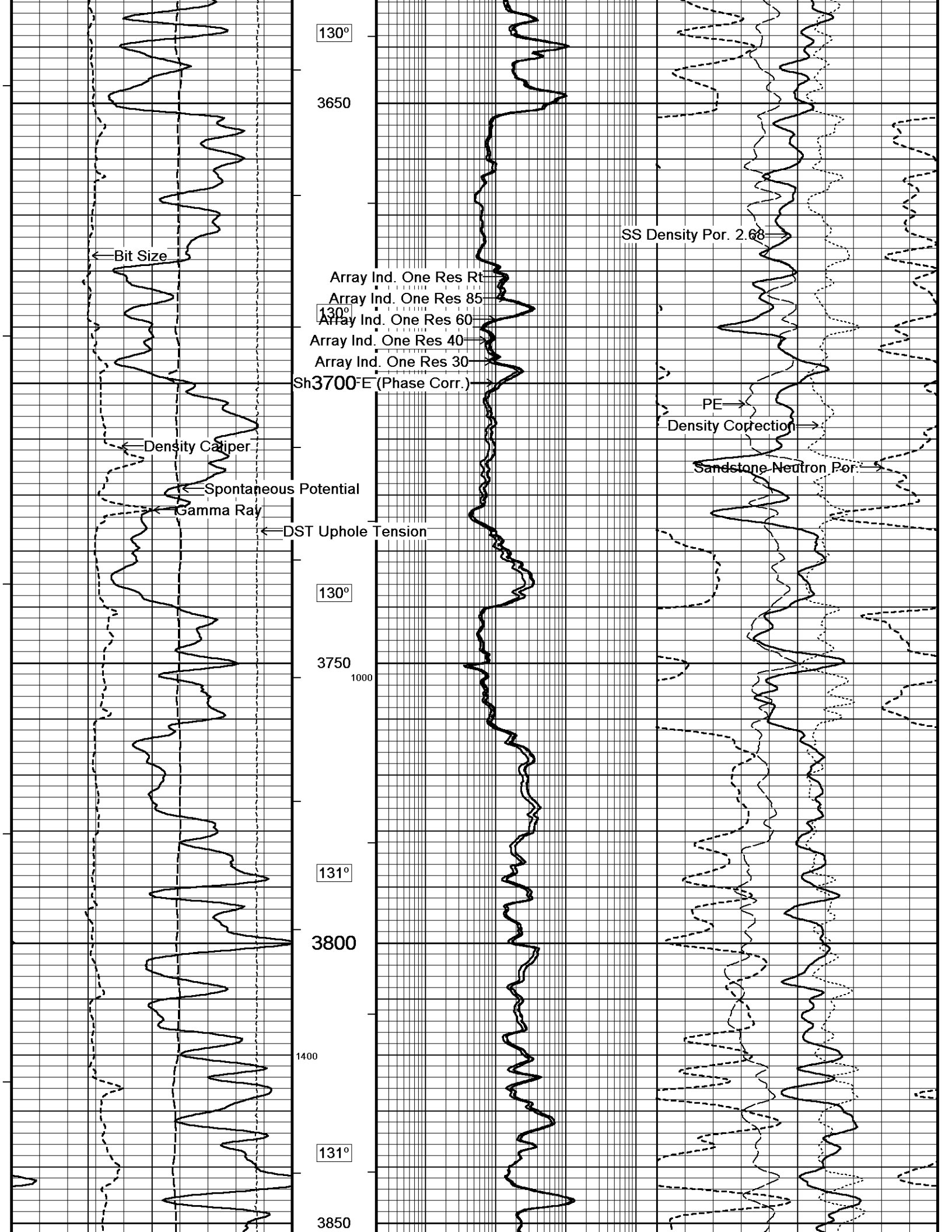
2750

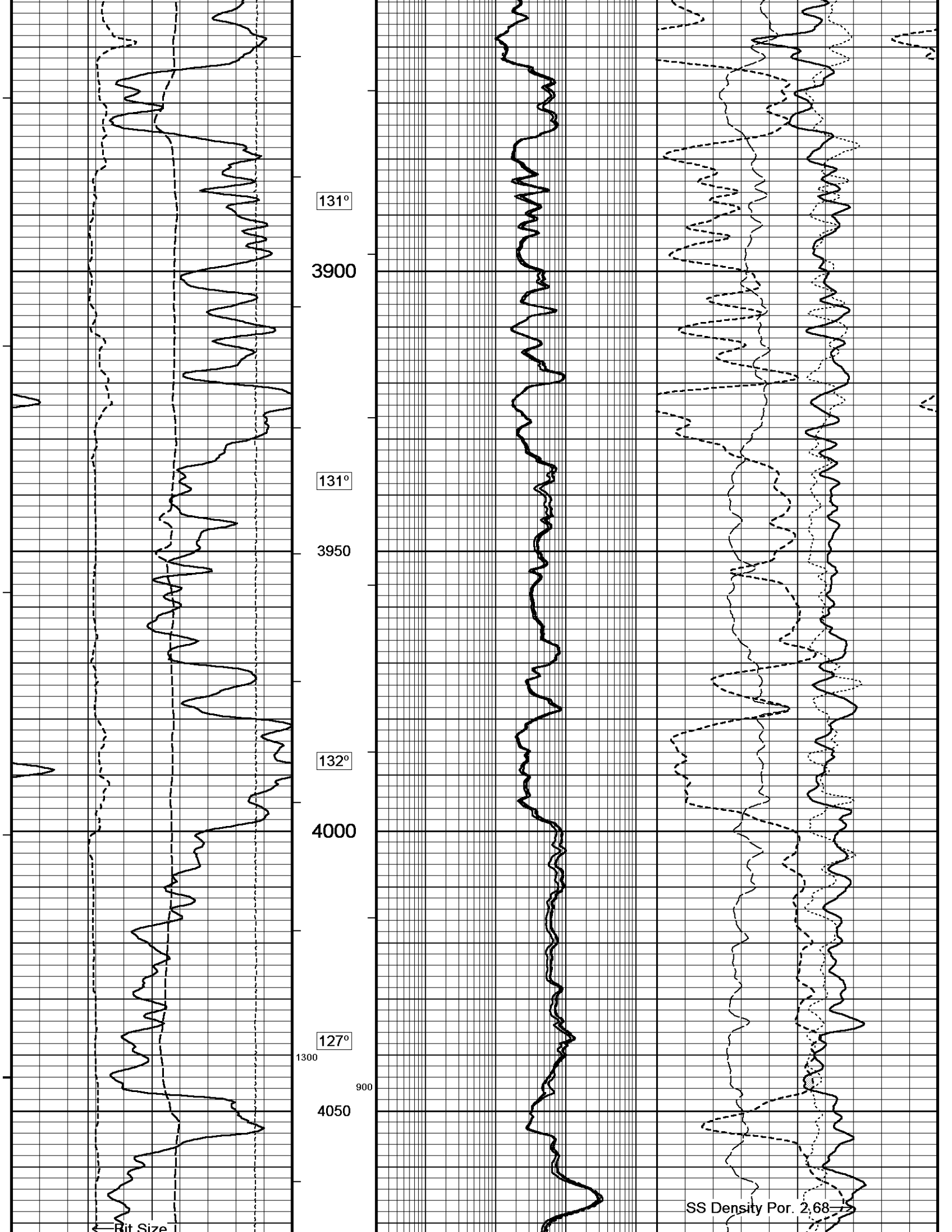












Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
128° Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)

4100

Density Caliper
Spontaneous Potential
Gamma Ray
DST Uphole Tension

PE
Density Correction
Sandstone Neutron Por.

128°

4150

129°

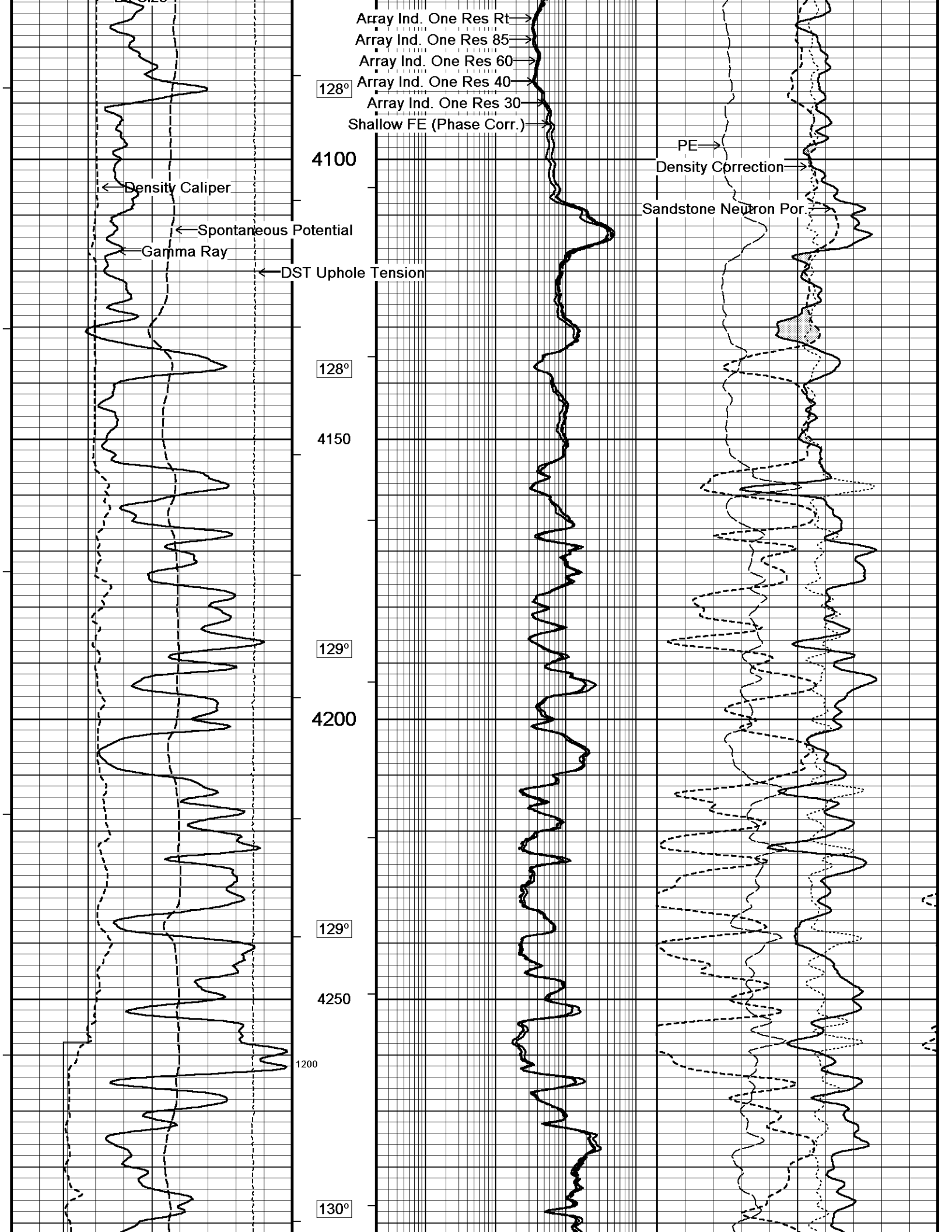
4200

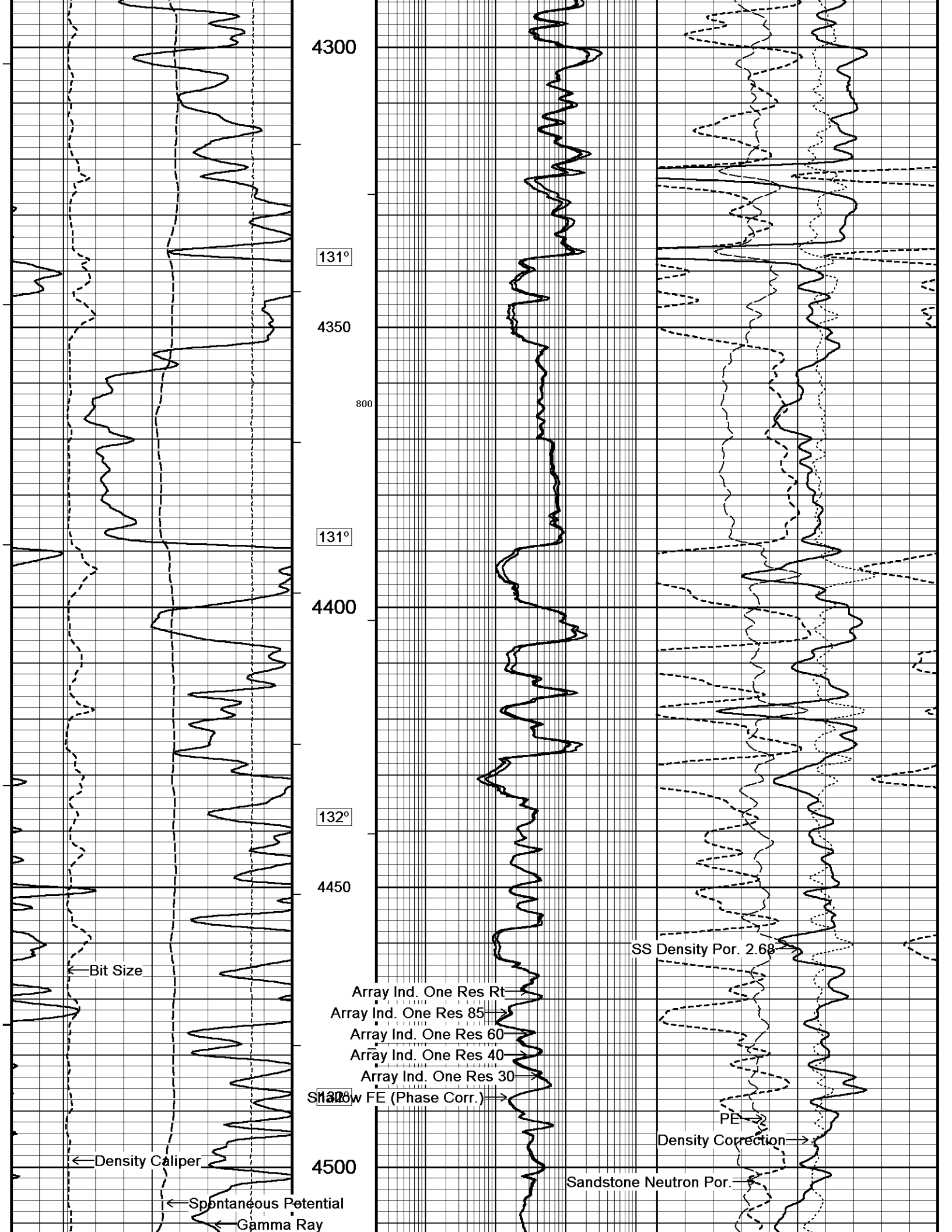
129°

4250

1200

130°





4300

131°

4350

800

131°

4400

132°

4450

SS Density Por. 2.68

Array Ind. One Res Rt

Array Ind. One Res 85

Array Ind. One Res 60

Array Ind. One Res 40

Array Ind. One Res 30

Slow FE (Phase Corr.)

PE

Density Correction

4500

Sandstone Neutron Por.

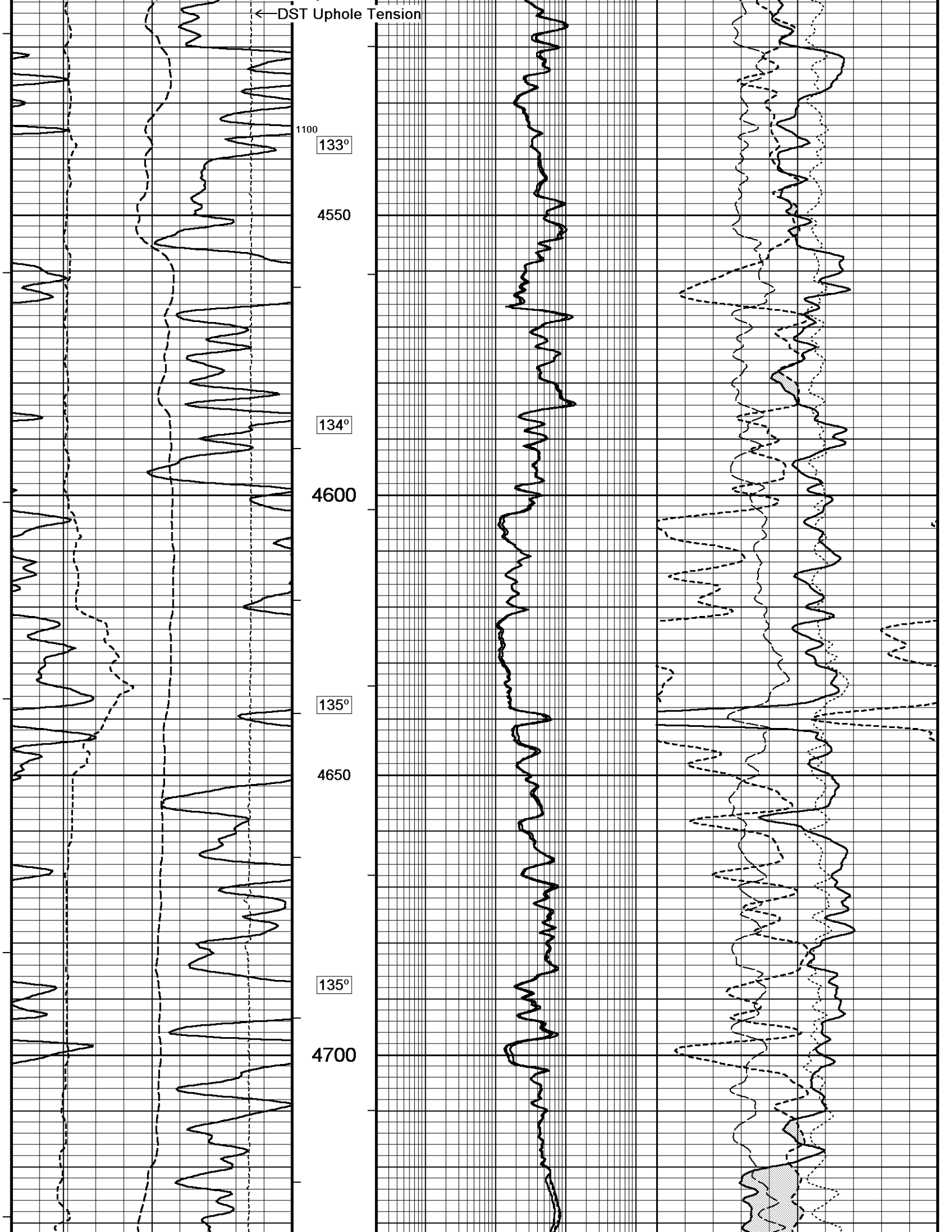
← Bit Size

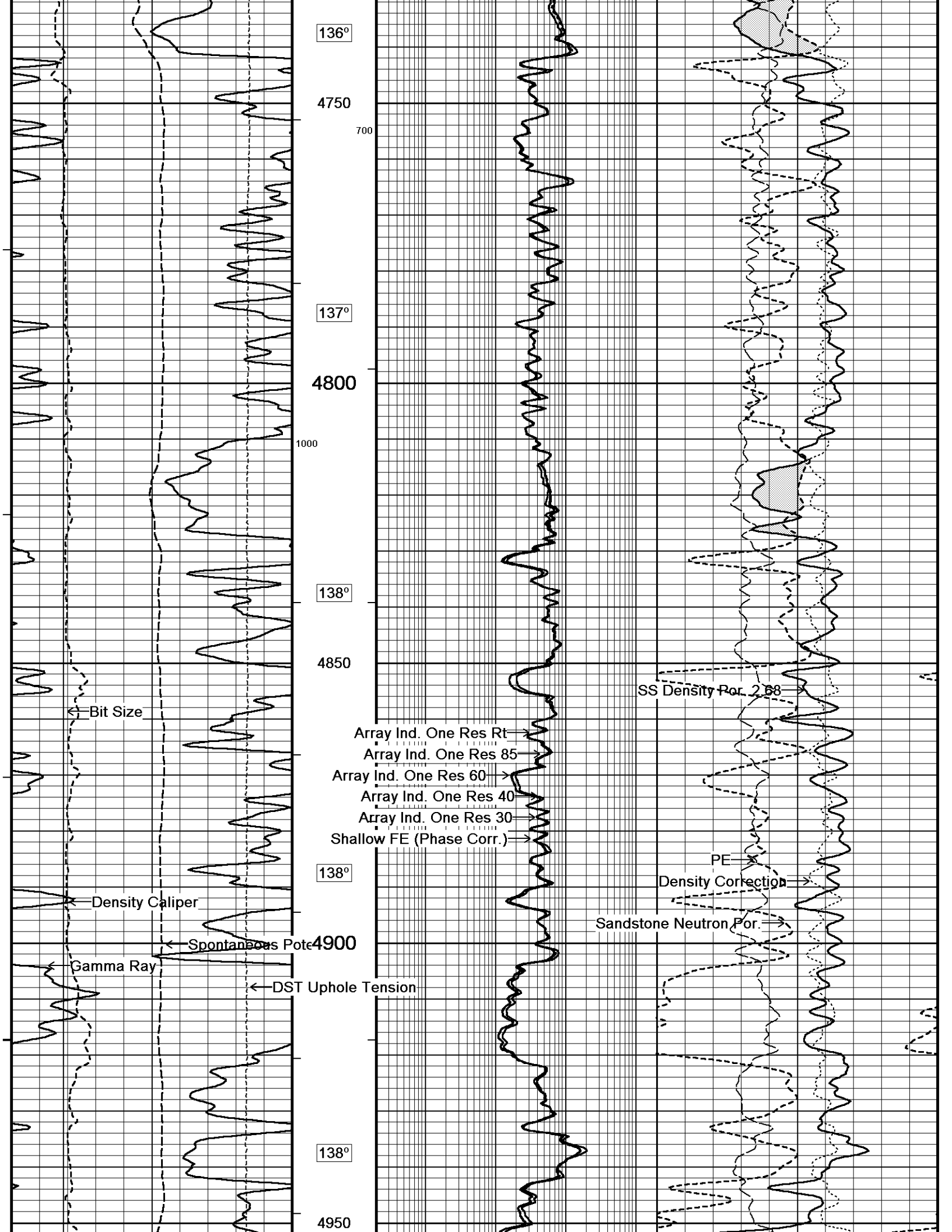
← Density Caliper

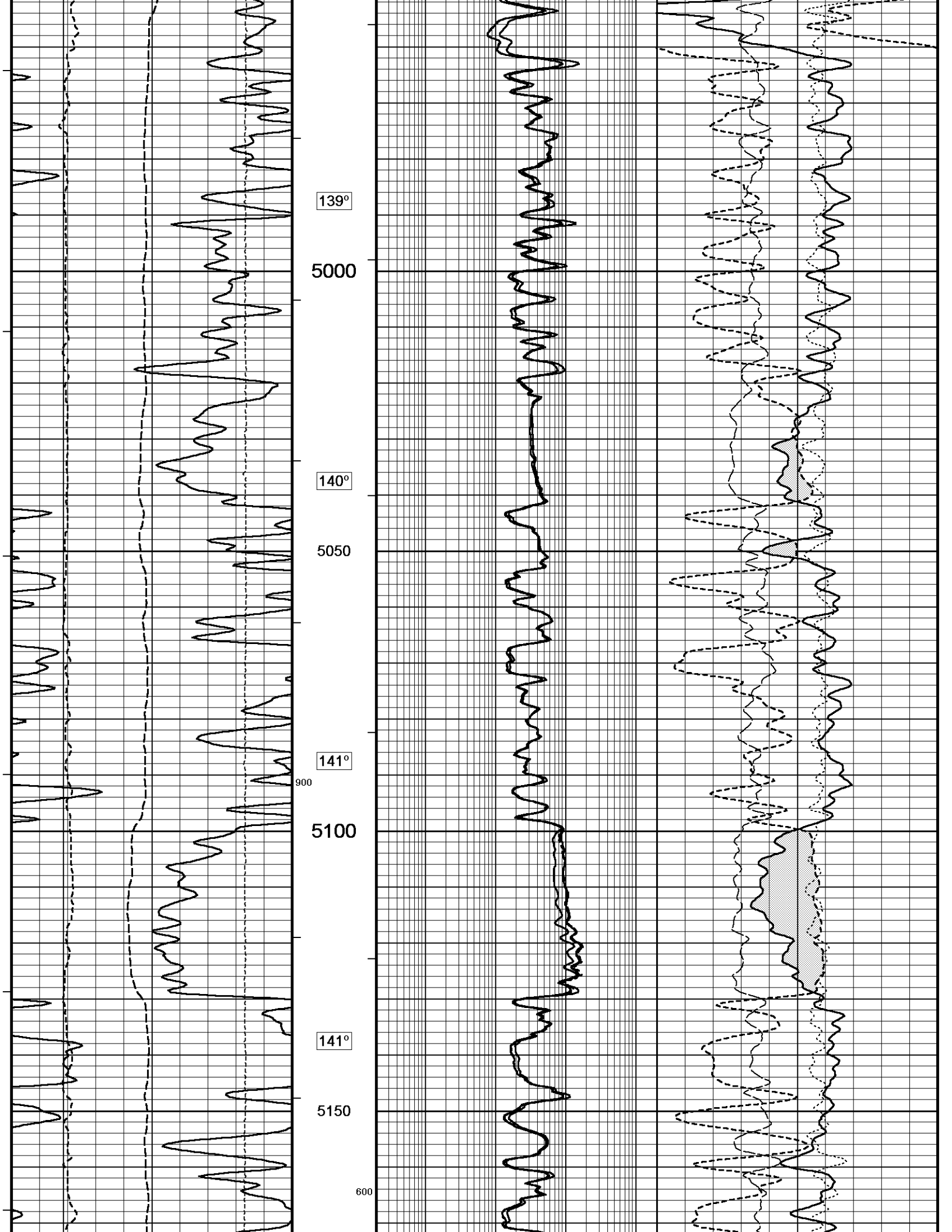
← Spontaneous Potential

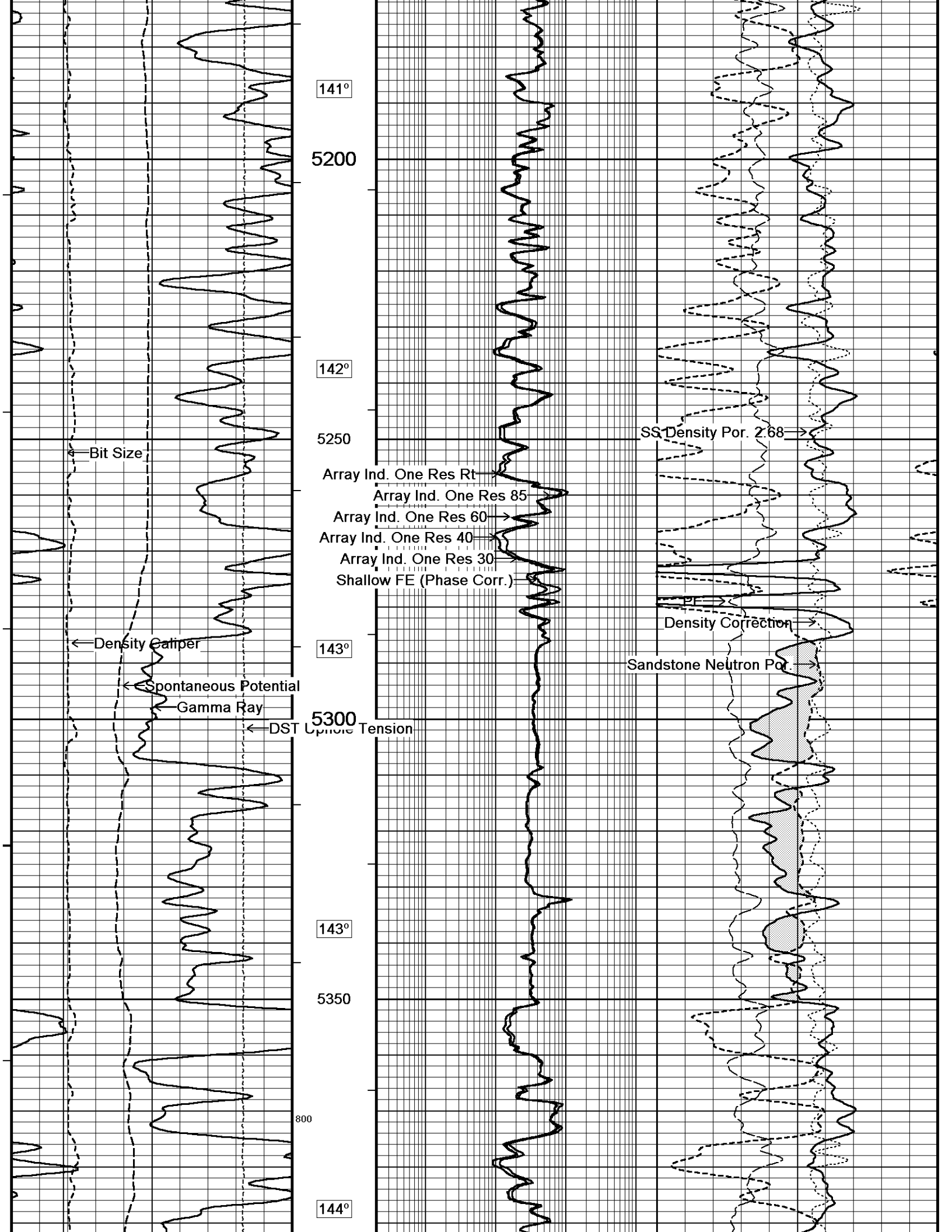
← Gamma Ray

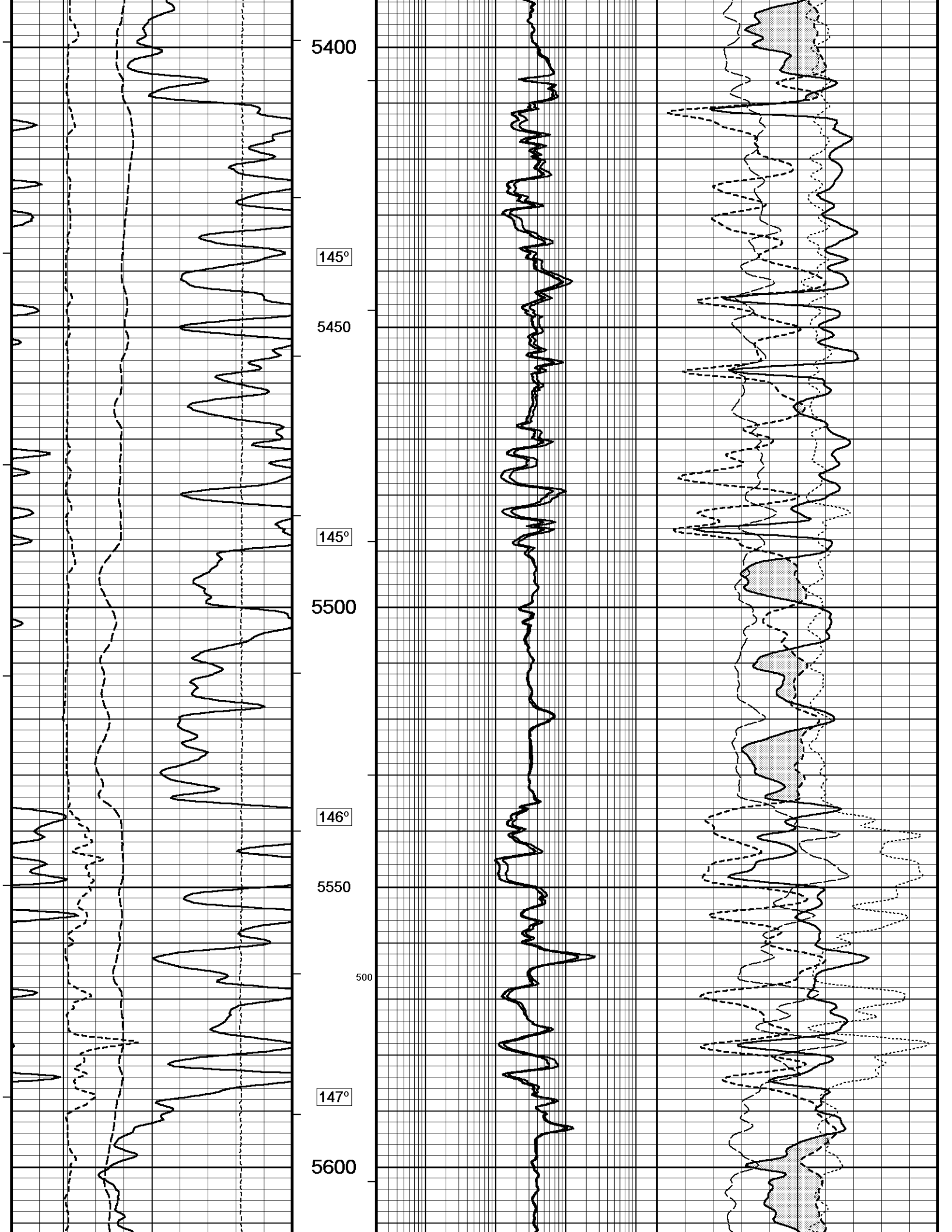
← DST Uphole Tension

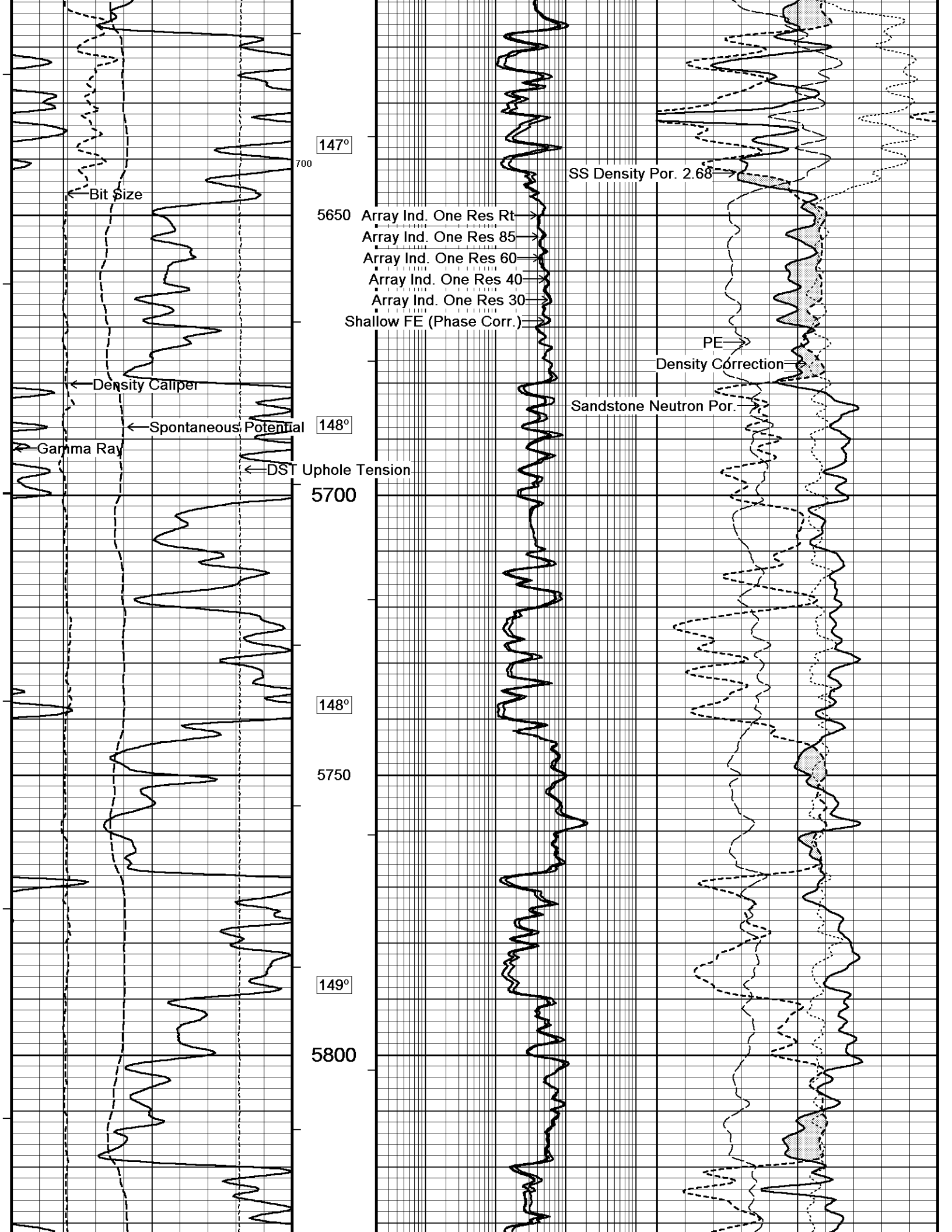


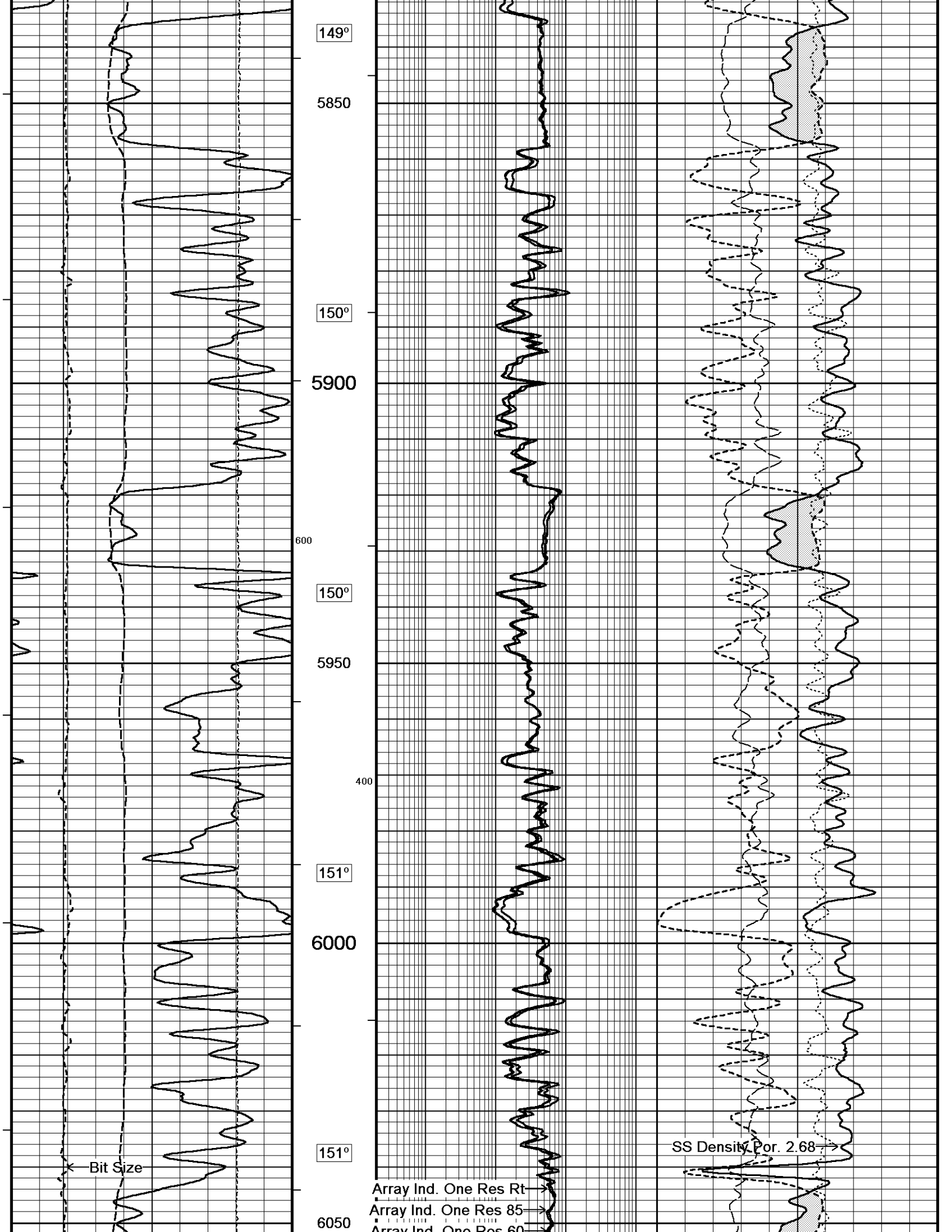


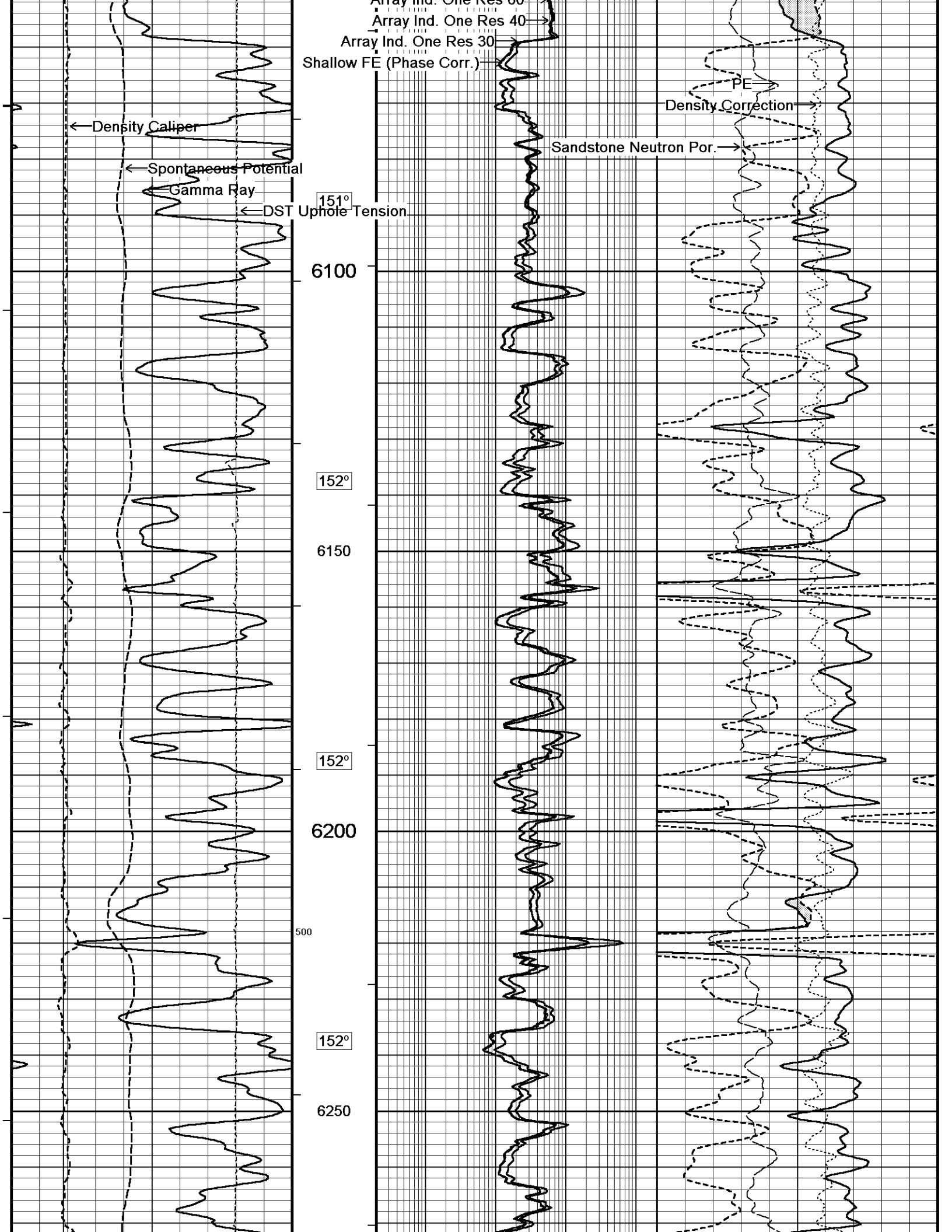


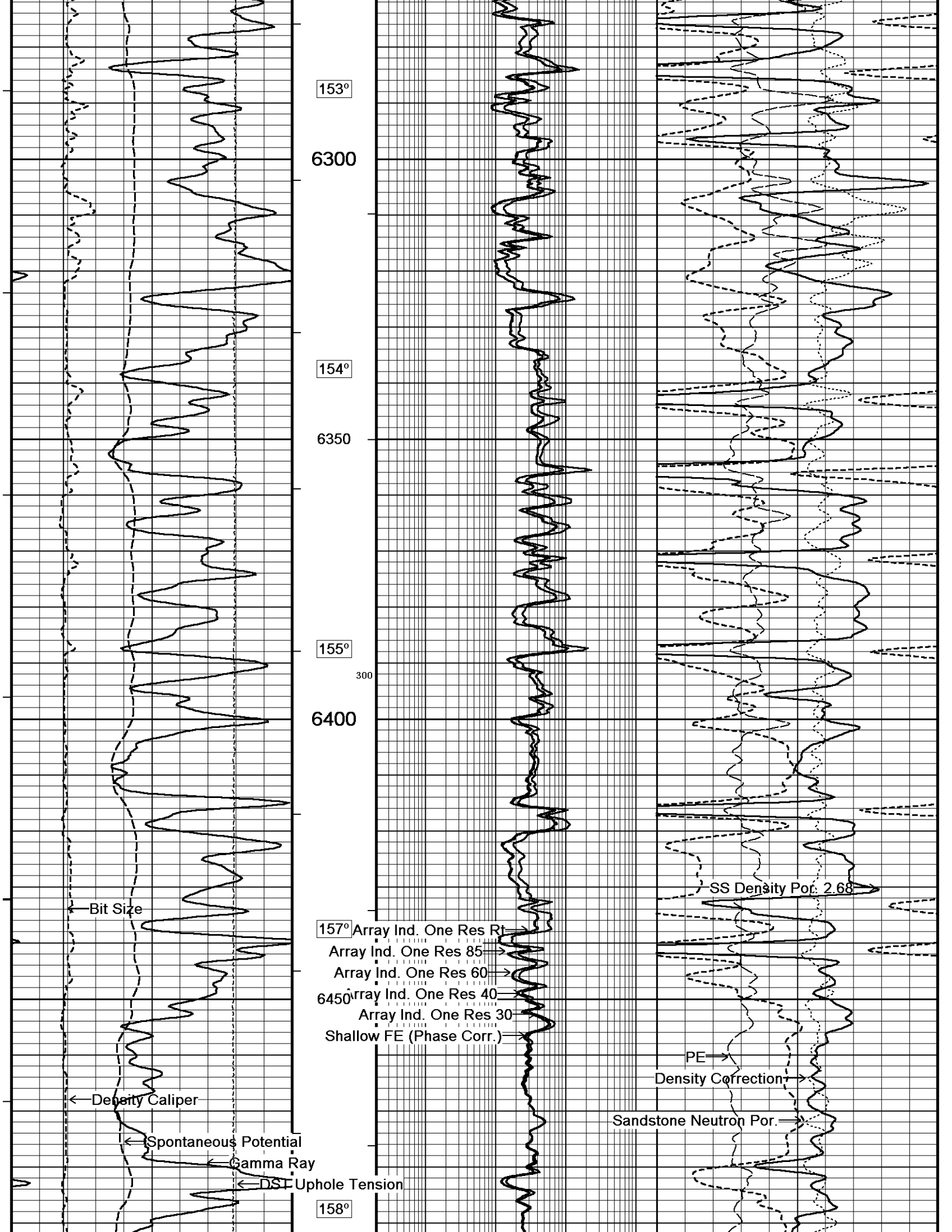












153°

6300

154°

6350

155°

6400

157°

6450

158°

300

← Bit Size

← Density Caliper

← Spontaneous Potential

← Gamma Ray

← DST Uphole Tension

→ Array Ind. One Res 80

→ Array Ind. One Res 60

→ Array Ind. One Res 40

→ Array Ind. One Res 30

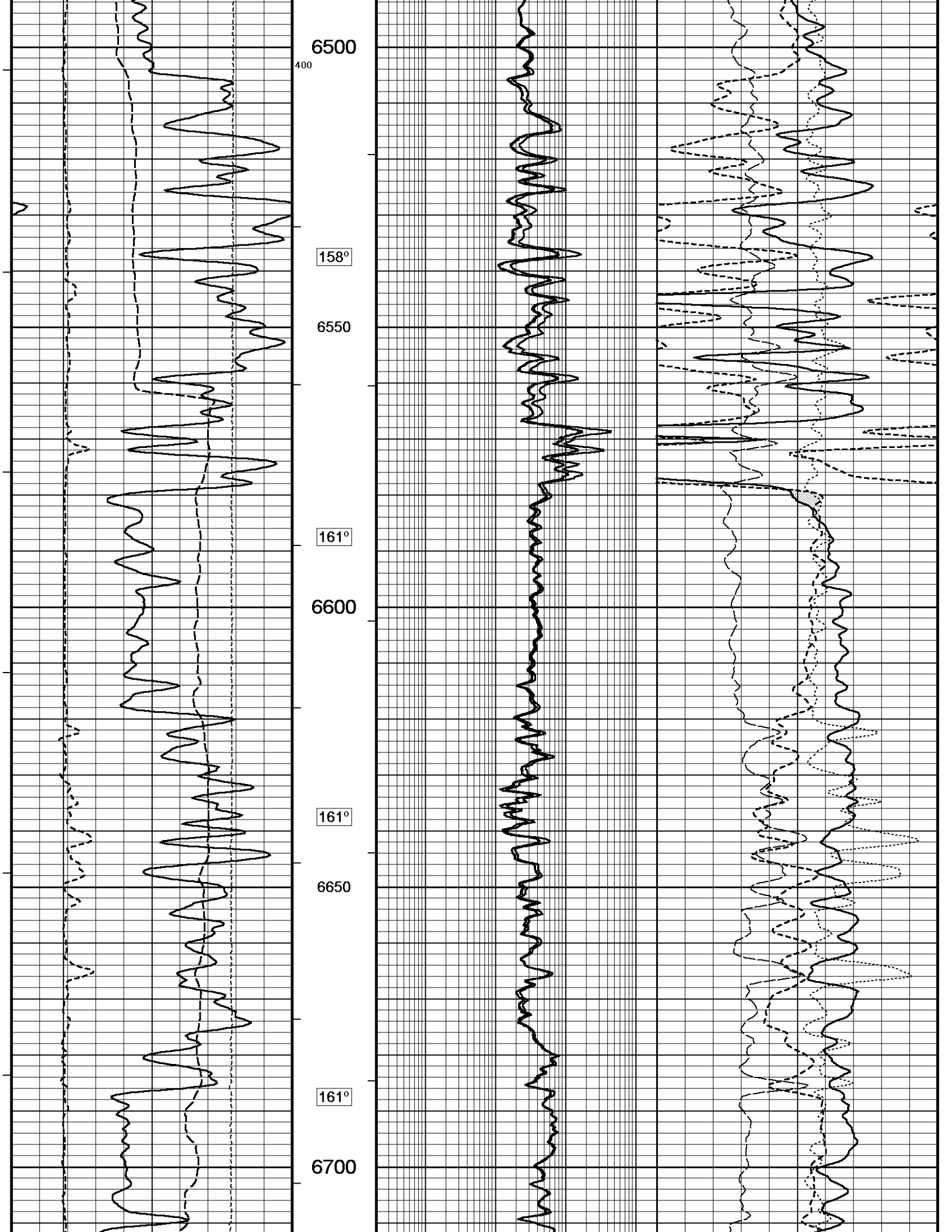
→ Shallow FE (Phase Corr.)

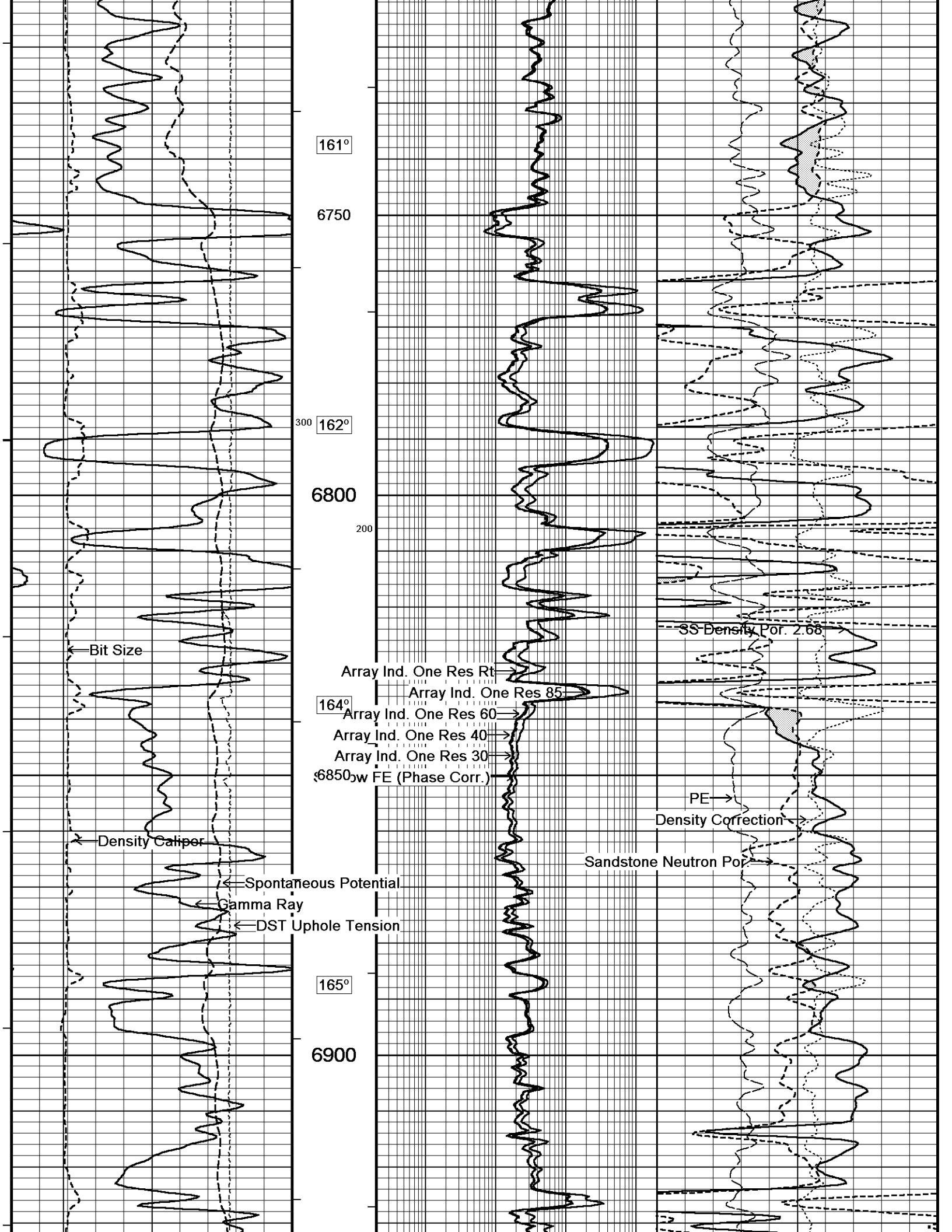
→ SS Density Por. 2.68

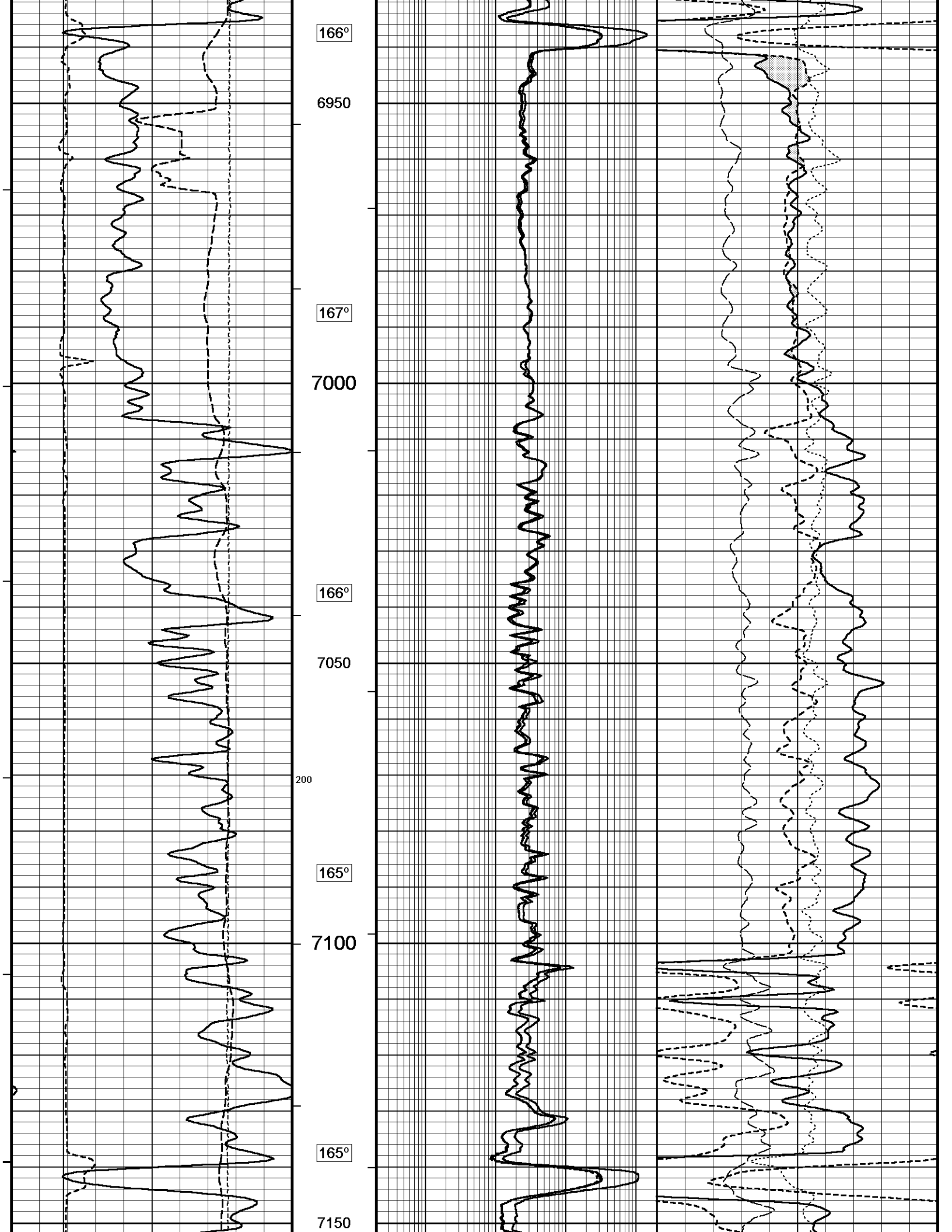
→ PE

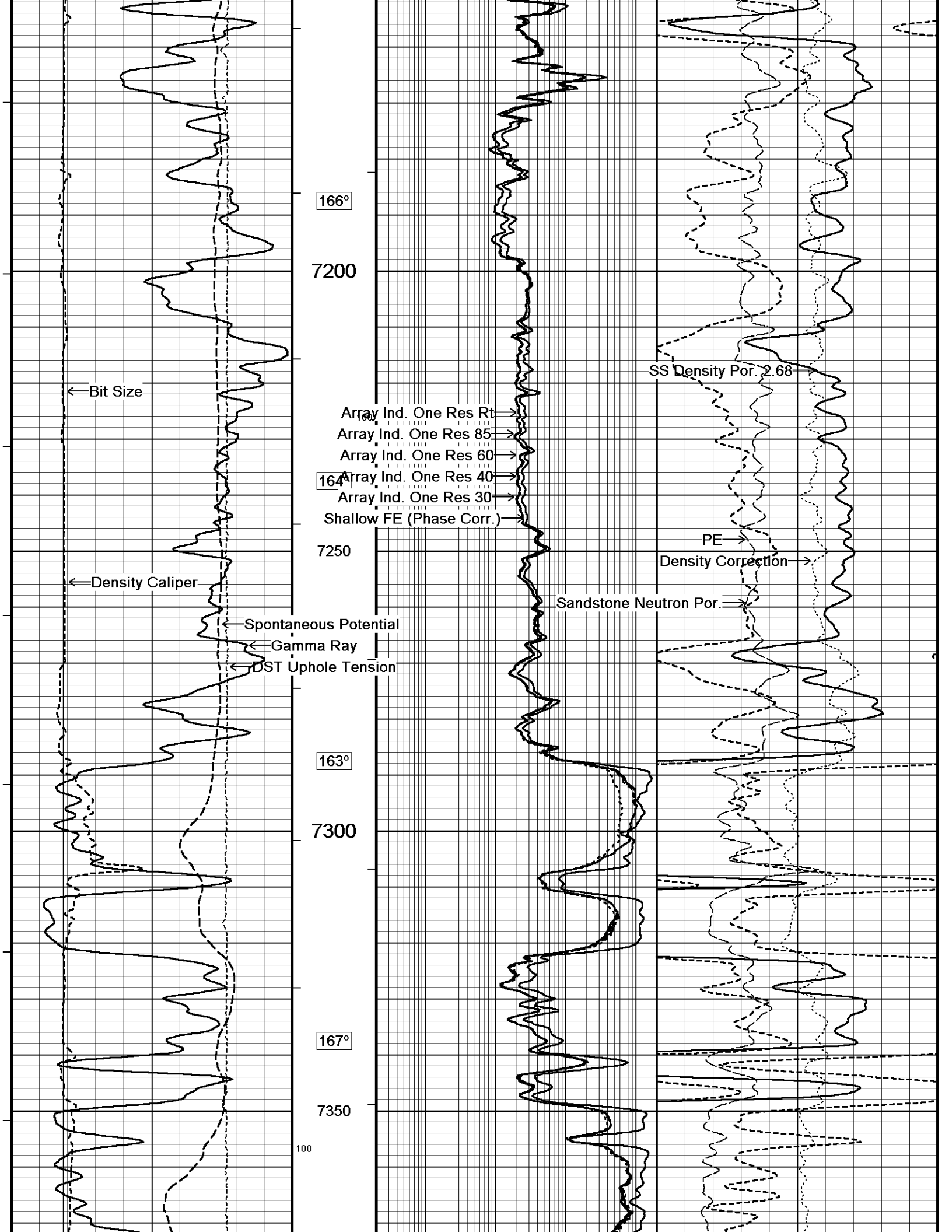
→ Density Correction

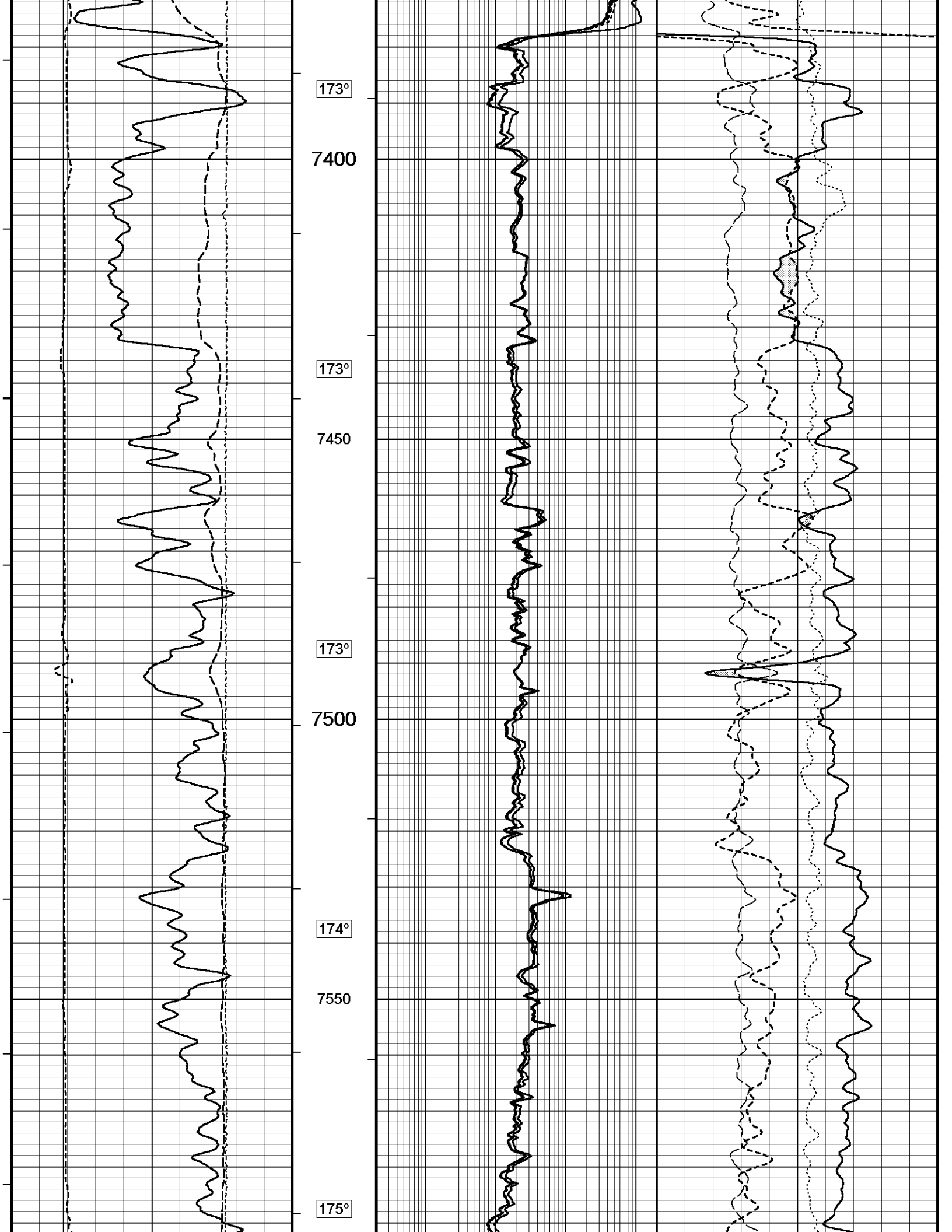
→ Sandstone Neutron Por.

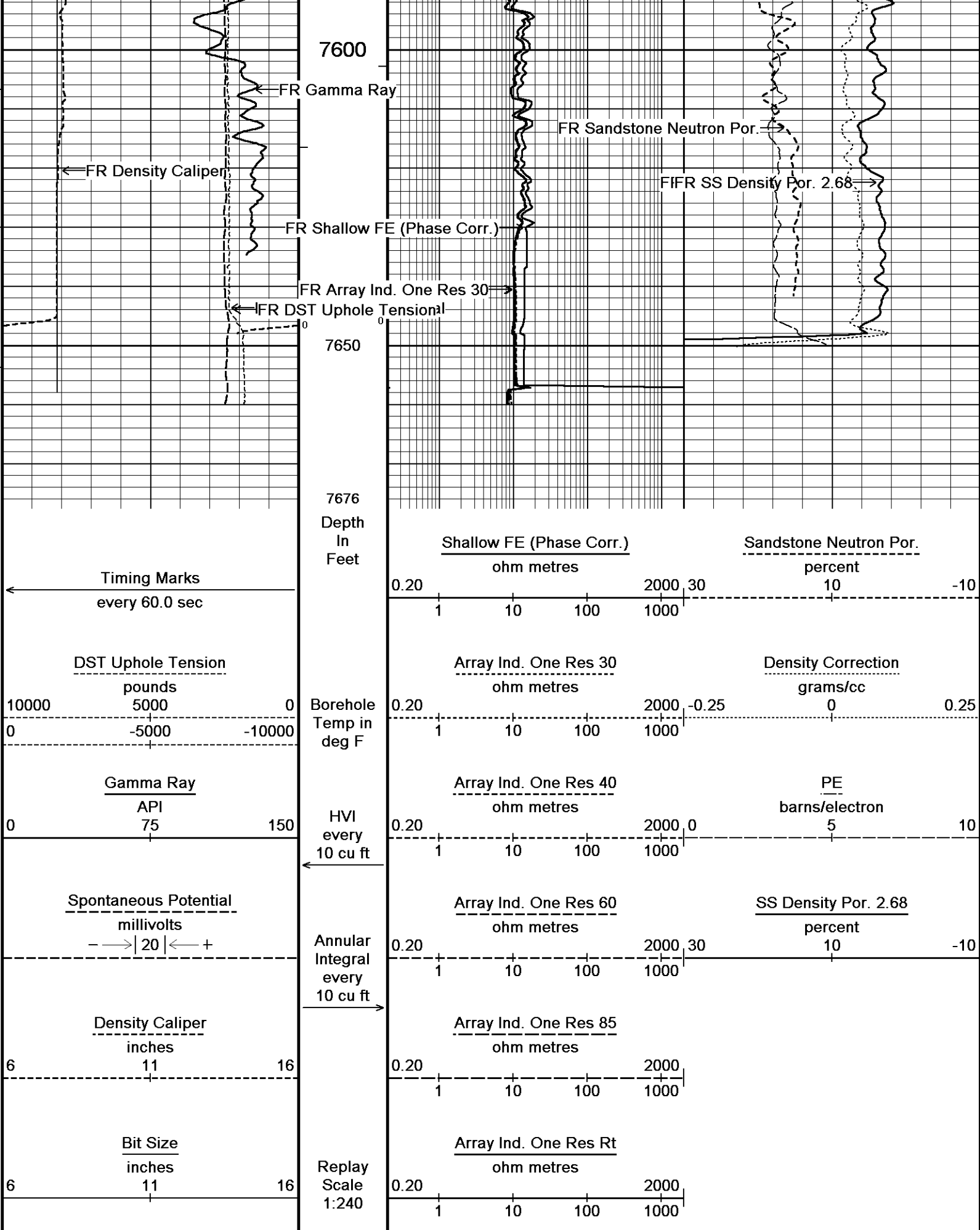












OVERLAY

Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 01-MAR-2011 17:47

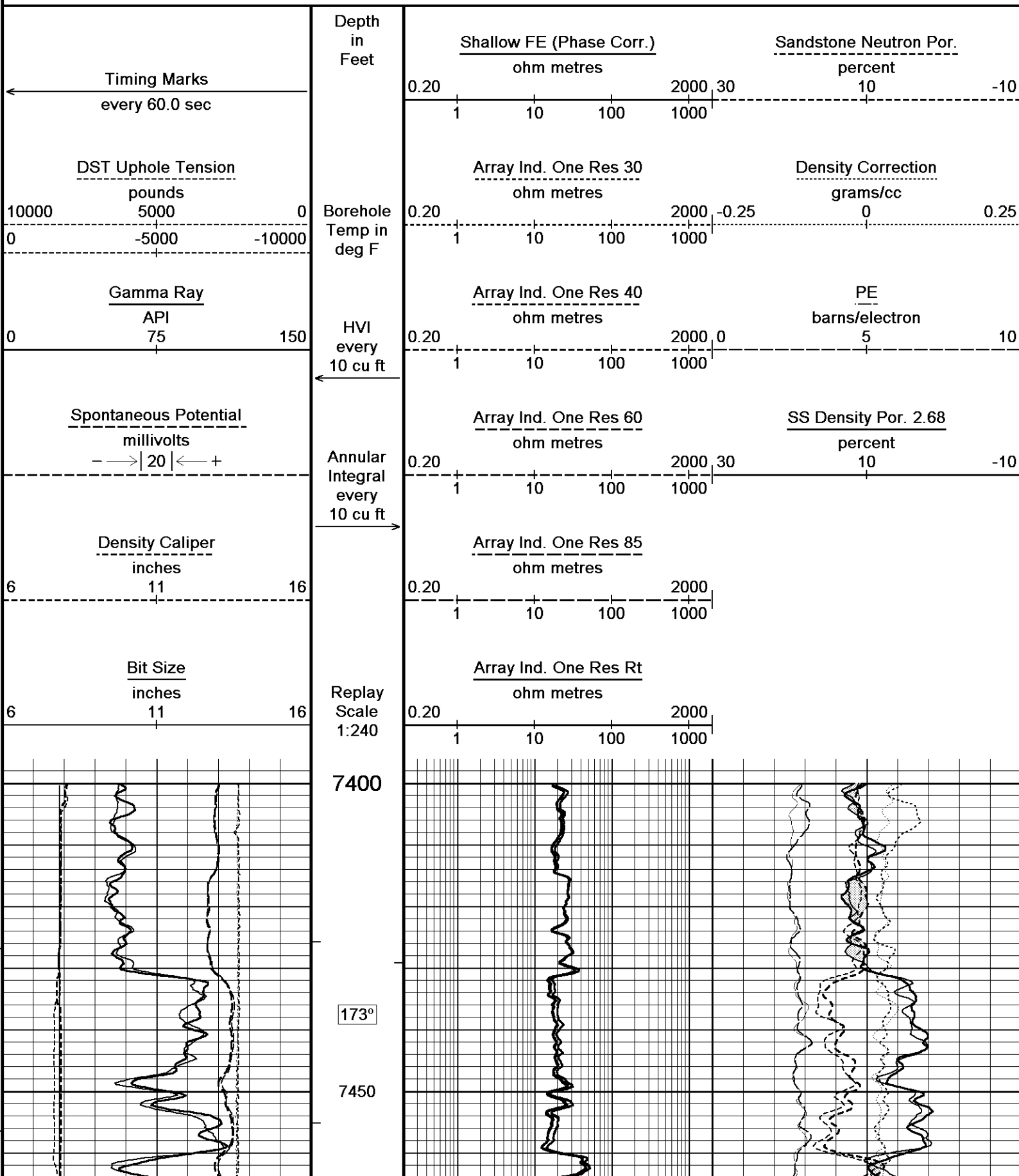
Filename: C:\Documents and Settings\le145895\Desktop\GGU FEDERAL 34A-20-691\SPLICE.dta

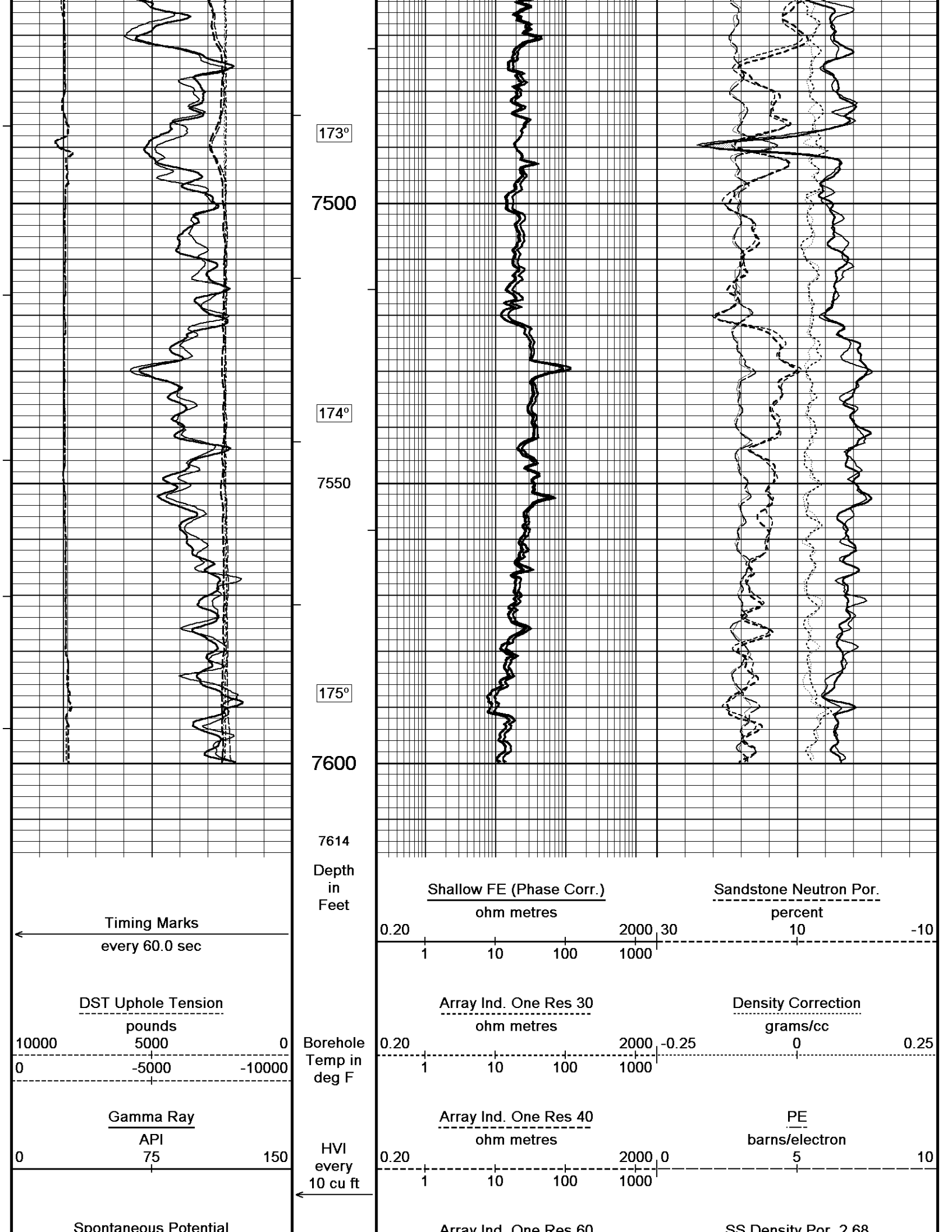
Recorded on 01-MAR-2011 11:46

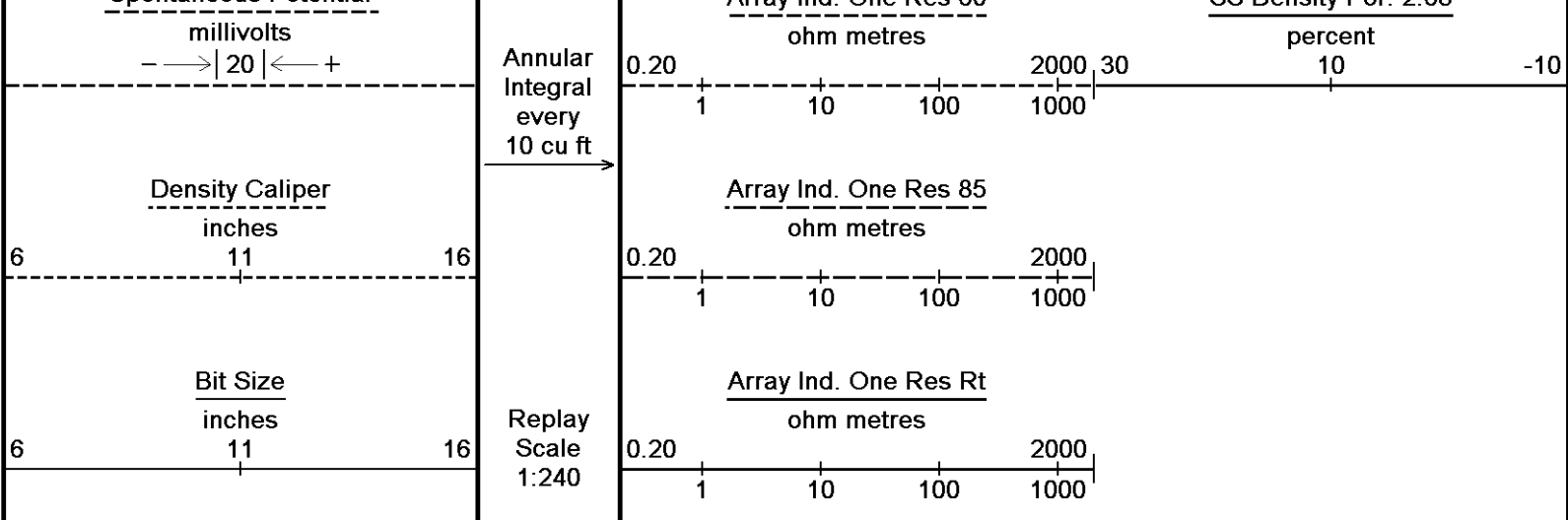
Filename: C:\Documents and Settings\le145895\Desktop\GGU FEDERAL 34A-20...\REPEAT-RUN2.dta

Recorded on 01-MAR-2011 11:24

System Versions: Processed with 11.01.2198 Plotted with 11.01.2198







Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 01-MAR-2011 17:47
 Filename: C:\Documents and Settings\le145895\Desktop\GGU FEDERAL 34A-20-691\SPLICE.dta
 Recorded on 01-MAR-2011 11:46
 Filename: C:\Documents and Settings\le145895\Desktop\GGU FEDERAL 34A-20-... \REPEAT-RUN2.dta
 Recorded on 01-MAR-2011 11:24
 System Versions: Processed with 11.01.2198 Plotted with 11.01.2198

↑ OVERLAY ↑

BEFORE SURVEY CALIBRATION
 C:\Documents and Settings\le145895\Desktop\GGU FEDERAL 34A-20-691\SPLICE.dta

General Constants All 000 Last Edited on 01-MAR-2011,08:52

General Parameters		
Mud Resistivity	3.500	ohm-metres
Mud Resistivity Temperature	80.000	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	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	

Down-hole Tension Calibration SMS 0 Field Calibration on 01-MAR-2011 10:30

Reading No	Measured	Calibrated (lbs)
1	15885.47	0.00
2	16851.46	368.00

High Resolution Temperature Calibration MCG-C 192 Field Calibration on 01-MAR-2011,08:56

	Measured	Calibrated(Deg F)
Lower	50.00	50.00
Upper	75.00	75.00

High Resolution Temperature Constants MCG-C 192 Last Edited on 13-DEC-2010,09:50

Pre-filter Length 11

SP Calibration MCG-C 192 Field Calibration on 01-MAR-2011,08:20

	Measured	Calibrated (mV)
Reference 1	100.9	100.0
Reference 2	-100.2	-100.0

Gamma Calibration MCG-C 192

Field Calibration on 01-MAR-2011 08:20

	Measured	Calibrated (API)
Background	96	66
Calibrator (Gross)	1416	978
Calibrator (Net)	1320	912

Gamma Constants MCG-C 192

Last Edited on 28-FEB-2011,20:00

Gamma Calibrator Number	912	
Mud Density	1.00	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 01-MAR-2011 08:25

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
Ratio	3208	98	3714	110
	32.812		33.764	

Field Calibrator at Base

	Calibrated (cps)
Ratio	1323 1983
	0.667

Field Check

	Calibrated (cps)
Ratio	1310 1960
	0.668

Neutron Constants MDN-A.B 160

Last Edited on 01-MAR-2011,14:52

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	

FE Calibration MFE-A.A 85

Base Calibration on 04-FEB-2011 09:44

Field Check on 01-MAR-2011 08:51

Base Calibration

	Measured	Calibrated (ohm-m)
Reference 1	10.7	1.3
Reference 2	965.5	126.8

Base Check 281.9

Field Check 282.3

FE Constants MFE-A.A 85

Last Edited on 01-MAR-2011,14:08

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

	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

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

Channel	Base Check (mmho/m)		Field Check (mmho/m)	
	Low	High	Low	High
1	12.1	3932.4	0.0	0.0
2	29.6	3538.5	0.0	0.0
3	28.5	3113.0	0.0	0.0
4	18.9	2095.5	0.0	0.0
Deep	17.1	2076.8	0.0	0.0
Medium	42.3	4087.5	0.0	0.0
Shallow	44.6	5158.2	0.0	0.0

Array Temperature 42.3 0.0 Deg F

Induction Constants MAI-B.A 213

Last Edited on 01-MAR-2011,14:06

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	mhos/metre	

Borehole Normalisation

DRM1	0.0000	DRC1	0.0000
DRM2	0.0000	DRC2	0.0000
MRM1	0.0000	MRC1	0.0000
MRM2	0.0000	MRC2	0.0000
SRM1	0.0000	SRC1	0.0000
SRM2	0.0000	SRC2	0.0000

Calibration Site Corrections

Channel 1	0.00	mmhos/metre
Channel 2	0.00	mmhos/metre
Channel 3	0.00	mmhos/metre
Channel 4	0.00	mmhos/metre

Apparent Porosity and Water Saturation Constants

Archie Constant (A)	1.00	
Cementation Exponent (M)	2.00	
Saturation Exponent (N)	2.00	
Saturation of Water for Apor	100.00	percent
Resistivity of Water for Apor and Sw	0.05	ohm-m
Resistivity of Mud Filtrate for Sw	0.00	ohm-m
Source for Rt	0.00	
Source for Rxo	0.00	

Caliper Calibration MPD-B 167

Base Calibration on 10-FEB-2011 10:23
Field Calibration on 28-FEB-2011,19:42

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	18496	4.00
2	27008	5.96
3	34874	7.98
4	43063	9.86
5	52192	11.88
6	N/A	N/A

Field Calibration

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

Photo Density Calibration MPD-B 167

Base Calibration on 13-FEB-2011 15:22
Field Check on 01-MAR-2011 08:47

Density Calibration

Base Calibration	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	48677	18603	53115	19186
Reference 2	22687	3043	25020	2536

Field Check at Base

1173.5 1744.9

Field Check

1169.8 1741.6

PE Calibration

Base Calibration	WS	Measured		Calibrated Ratio
		WH	Ratio	
Background	214	1052		
Reference 1	15293	48508	0.318	0.320
Reference 2	5942	22551	0.266	0.272

Field Check at Base

214.1 1052.3

Field Check

215.7 1048.5

Density Constants MPD-B 167

Last Edited on 28-FEB-2011,19:42

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	1.29 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

Gamma Check MCG-C 192		Field Calibration on 01-MAR-2011 08:20 After Survey Check on 01-MAR-2011 14:51	
	Before (API)	After (API)	
Background	66	68	
Calibrator (Gross)	978	980	
Calibrator (Net)	912	912	

Neutron Check MDN-A.B 160		Before Survey Check on 01-MAR-2011 08:25 After Survey Check on 01-MAR-2011 14:57	
	Near (cps)	Far (cps)	
	Before After	Before After	
	1310 1287	1960 1943	
	Ratio		
	Before After		
	0.668 0.663		

FE Check MFE-A.A 85		Before Survey Check 01-MAR-2011 08:51 After Survey Check on 01-MAR-2011 14:10	
	Before (ohm-m)	After (ohm-m)	
	282.3	281.5	

Induction Check MAI-B.A 213		Before Survey Check on After Survey Check on 01-MAR-2011 14:08	
Channel	Before Survey (mmho/m)	After Survey (mmho/m)	
	Low High	Low High	
1	0.0 0.0	15.2 3936.8	
2	0.0 0.0	30.7 3540.1	
3	0.0 0.0	29.2 3113.7	
4	0.0 0.0	19.3 2096.1	
Deep	0.0 0.0	17.7 2077.3	
Medium	0.0 0.0	42.9 4087.8	
Shallow	0.0 0.0	46.1 5160.6	
Array Temperature	0.0	83.6	Deg F

Photo Density Check MPD-B 167		Before Survey Check on 01-MAR-2011 08:47 After Survey Check on 01-MAR-2011 14:14	
Density Check			
	Before	Near After	Far After
	1169.8	1169.2	1741.6 1744.1
PE Check			
	Before	After	
WS	215.7	215.1	
WH	1048.5	1040.9	

DOWNHOLE EQUIPMENT

3/8" Triple Cone Cable Head (MCB F B)
MCB-F.B 9 LG: 1.58 ft WT: 15.4 lb OD: 2.24 in

SHA-F Compact Swivel Head Adaptor
SHA-F 82 LG: 2.74 ft WT: 26.5 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

SK I F A Compact Knuckle Joint



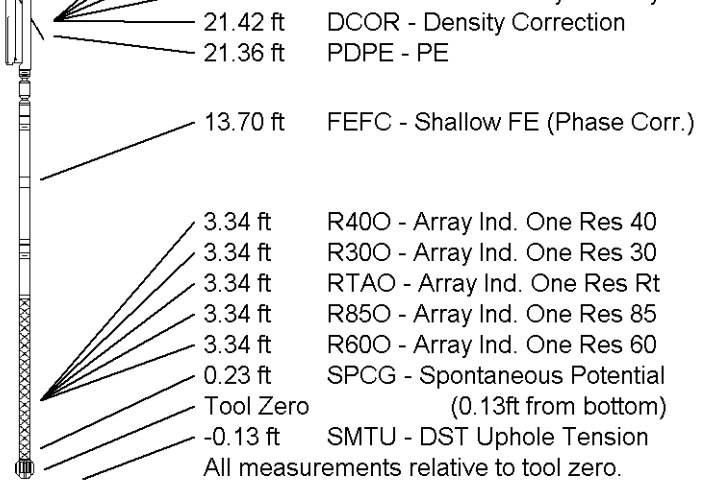
- 37.05 ft GRGC - Gamma Ray
- 34.14 ft CGXT - MCG External Temperature
- 30.59 ft NPRS - Sandstone Neutron Por.
- 23.35 ft AVOL - Annular Volume
- 23.35 ft HVOL - Hole Volume
- 23.35 ft CLDC - Density Caliper
- 21.42 ft DPOR - Base Density Porosity

SKJ-E.A Compact Knuckle Joint
 SKJ-E.A 114 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

Compact Focused Electric
 MFE-A.A 85 LG: 6.03 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: 46.65 ft Weight: 368.2 lb



COMPANY	BILL BARRETT CORPORATION		
WELL	GGU FEDERAL 34A-20-691		
FIELD	GIBSON GULCH		
PROVINCE/COUNTY	GARFIELD		
COUNTRY/STATE	U.S.A. / COLORADO		

Elevation Kelly Bushing	6127.00	feet	First Reading	7642.00	
Elevation Drill Floor	6126.00	feet	Depth Driller	7640.00	feet
Elevation Ground Level	6104.00	feet	Depth Logger	7642.00	feet



COMPACT TRIPLE COMBO
 QUICKLOOK
 LOG

