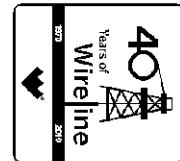




**Weatherford**<sup>®</sup>

**COMPACT TRIPLE COMBO  
QUICKLOOK  
LOG**

COMPANY **BILL BARRETT CORPORATION**  
WELL **KAUFMAN 13B-25-692**  
FIELD **MAMM CREEK**  
PROVINCE/COUNTY **GARFIELD**  
COUNTRY/STATE **U.S.A. / COLORADO**  
LOCATION **SHL: 2185' FSL & 1609' FWL**  
**BHL: 1770' FSL & 644' FWL**



SEC	TWP	RGE	Other Services
25	6S	92W	
API Number	05-045-19655		
Permit Number			

Permanent Datum G.L., Elevation 5922 feet  
Log Measured From KB  
Drilling Measured From K.B. @ 23 FT.

Elevations:	feet
KB	5945.00
DF	5944.00
GL	5922.00

Date	27-JUNE-2011
Run Number	ONE
Depth Driller	7525.00 feet
Depth Logger	7140.00 feet
First Reading	7137.00
Last Reading	803.00
Casing Driller	805.00 feet
Casing Logger	803.00 feet
Bit Size	7.875 inches
Hole Fluid Type	LSND
Density / Viscosity	10.50 lb/USg 44.00 CP
PH / Fluid Loss	9.60 6.00 ml/30Min
Sample Source	FLOW LINE
Rm @ Measured Temp	2.20 @ 99.0 ohm-m
Rmf @ Measured Temp	1.76 @ 99.0 ohm-m
Rmc @ Measured Temp	2.64 @ 99.0 ohm-m
Source Rmf / Rmc	CALC CALC
Rm @ BHT	1.28 @ 173.0 ohm-m
Time Since Circulation	5 HOURS
Max Recorded Temp	173.00 deg F
Equipment Name	COMPACT
Equipment / Base	13173 GD JCT
Recorded By	D. KUNTZ
Witnessed By	C. CROWTON

**BOREHOLE RECORD**

Last Edited: 28-JUN-2011 02:13

Bit Size inches	Depth From feet	Depth To feet
8.750	803.00	5483.00
7.880	5483.00	7525.00

**CASING RECORD**

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	9.625	0.00	803.00	36.00

**REMARKS**

LOGGING SOFTWARE USED: 11.03.3657

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

HARDWARE: MPD: 8 INCH PROFILE PLATE USED.  
TWO 0.5 INCH STANDOFFS USED ON INDUCTION.  
ONE 0.5 INCH STANDOFF 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.

BRIDGED OFF AT 7150 FEET AND PULLED 1000 LBS OVER REGULAR TENSION. LOGGED OUT AS PER CUSTOMERS REQUEST.



Array Inc. Res 40  
Array Inc. Res 30

Shallow EE (Phase Corr.)

Density Caliper

PP

Density Correction

Spontaneous Potential

Gamma Ray

Sandstone Neutron Por.

DST Uphole Tension

104°

850

2700

104°

900

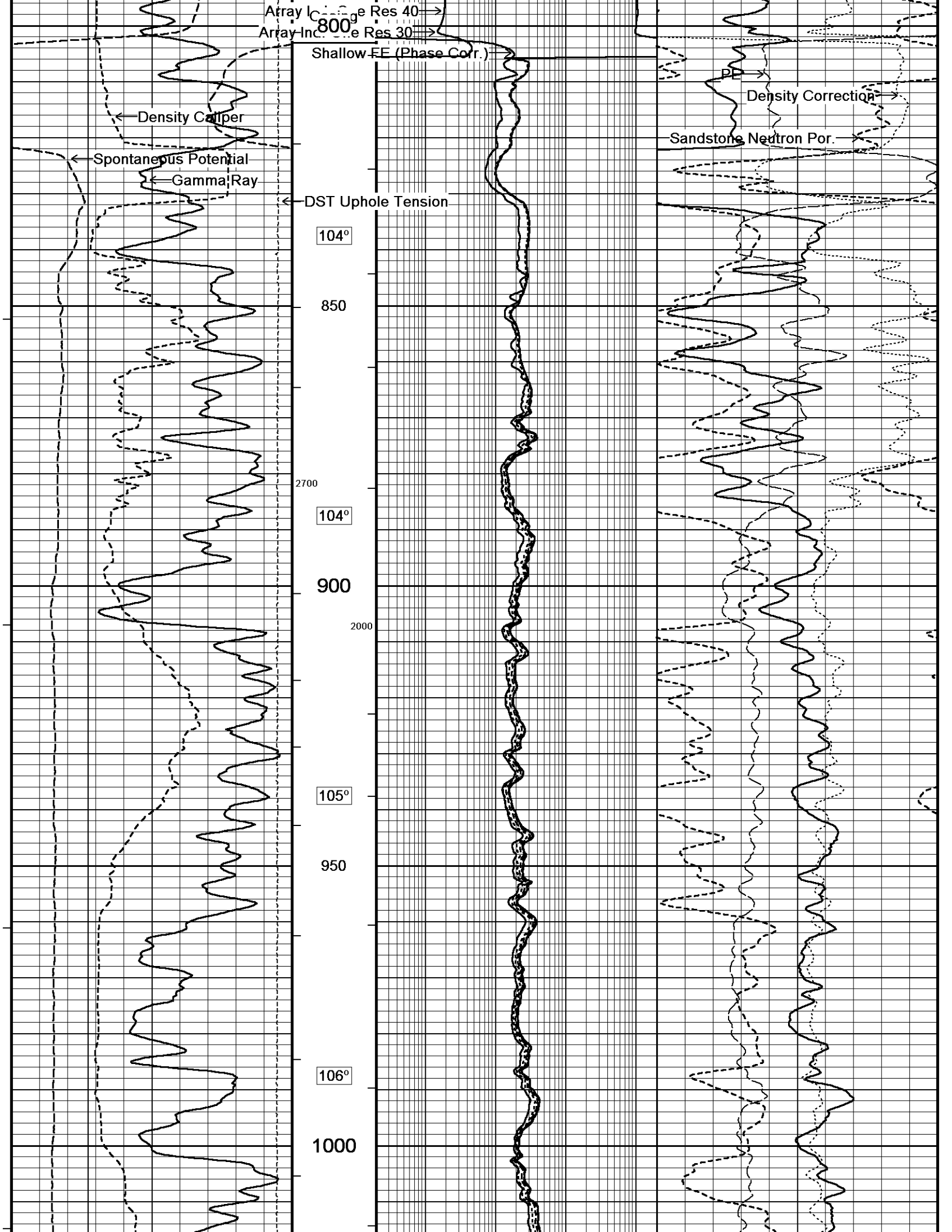
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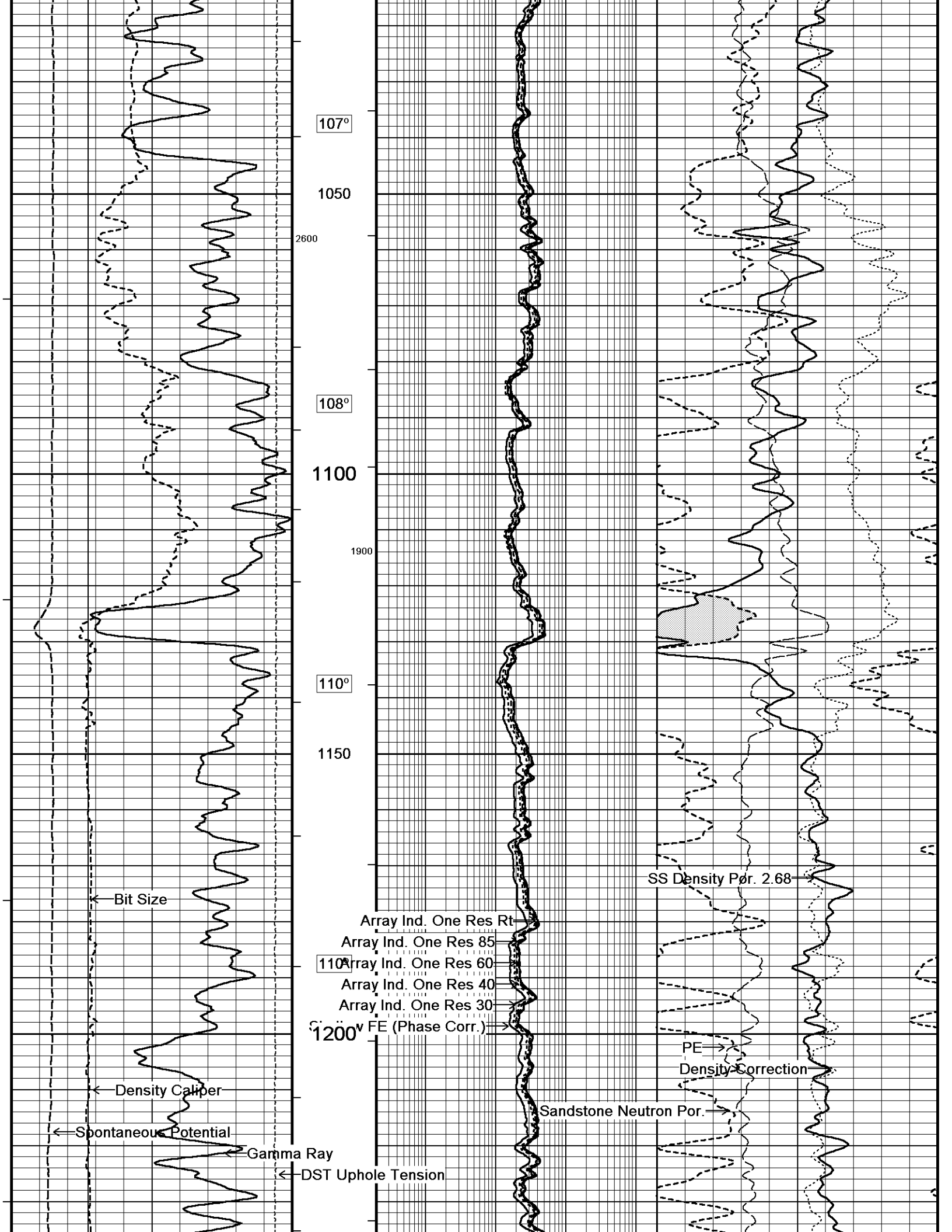
105°

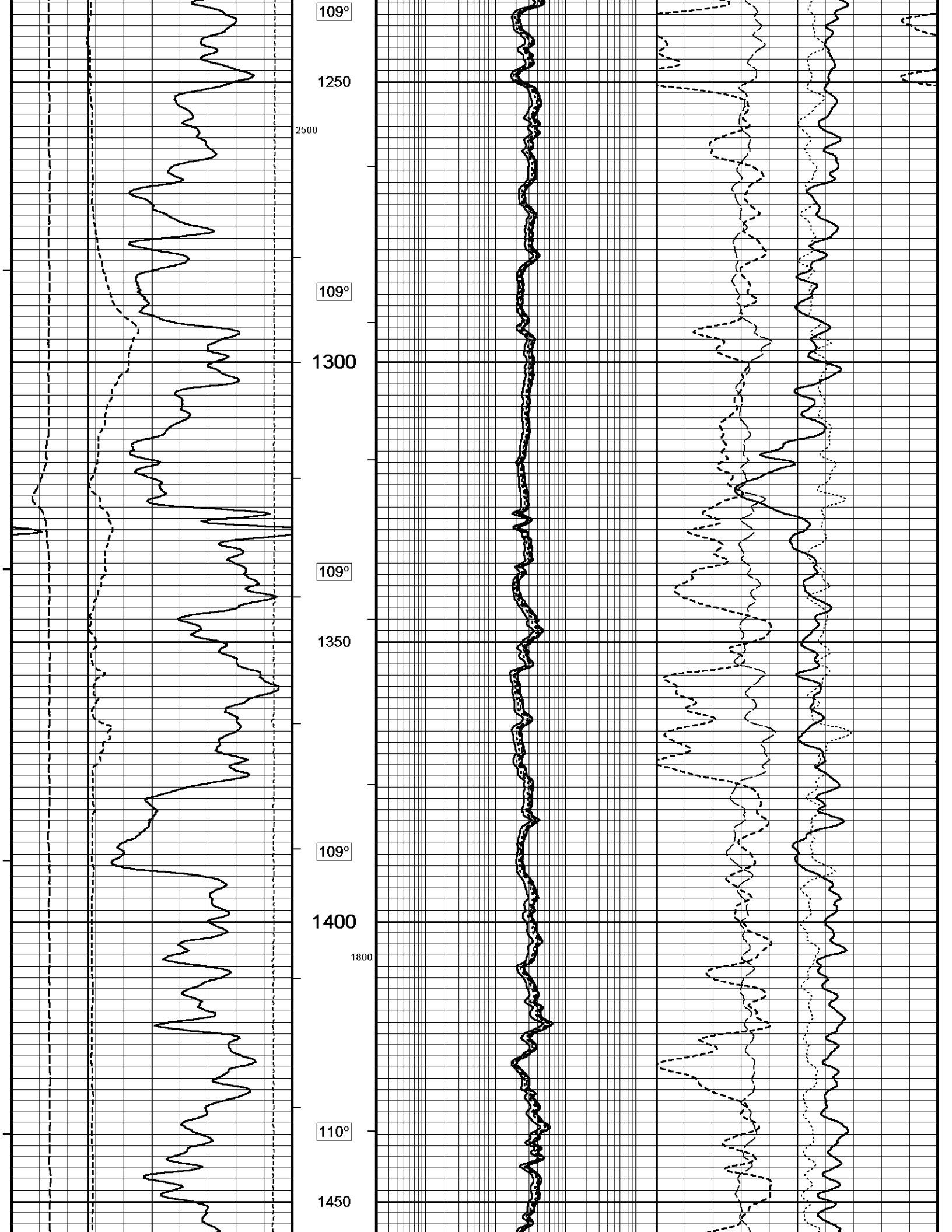
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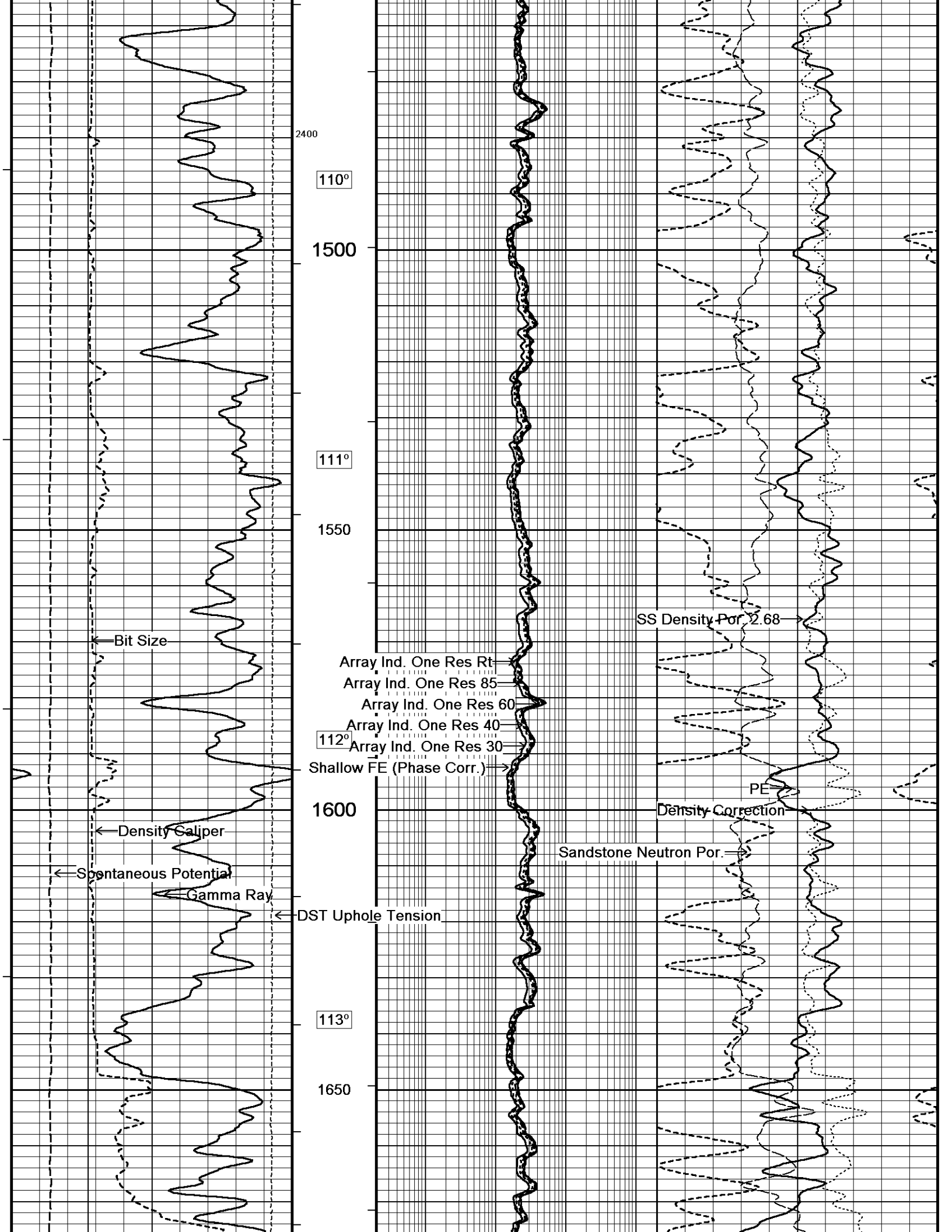
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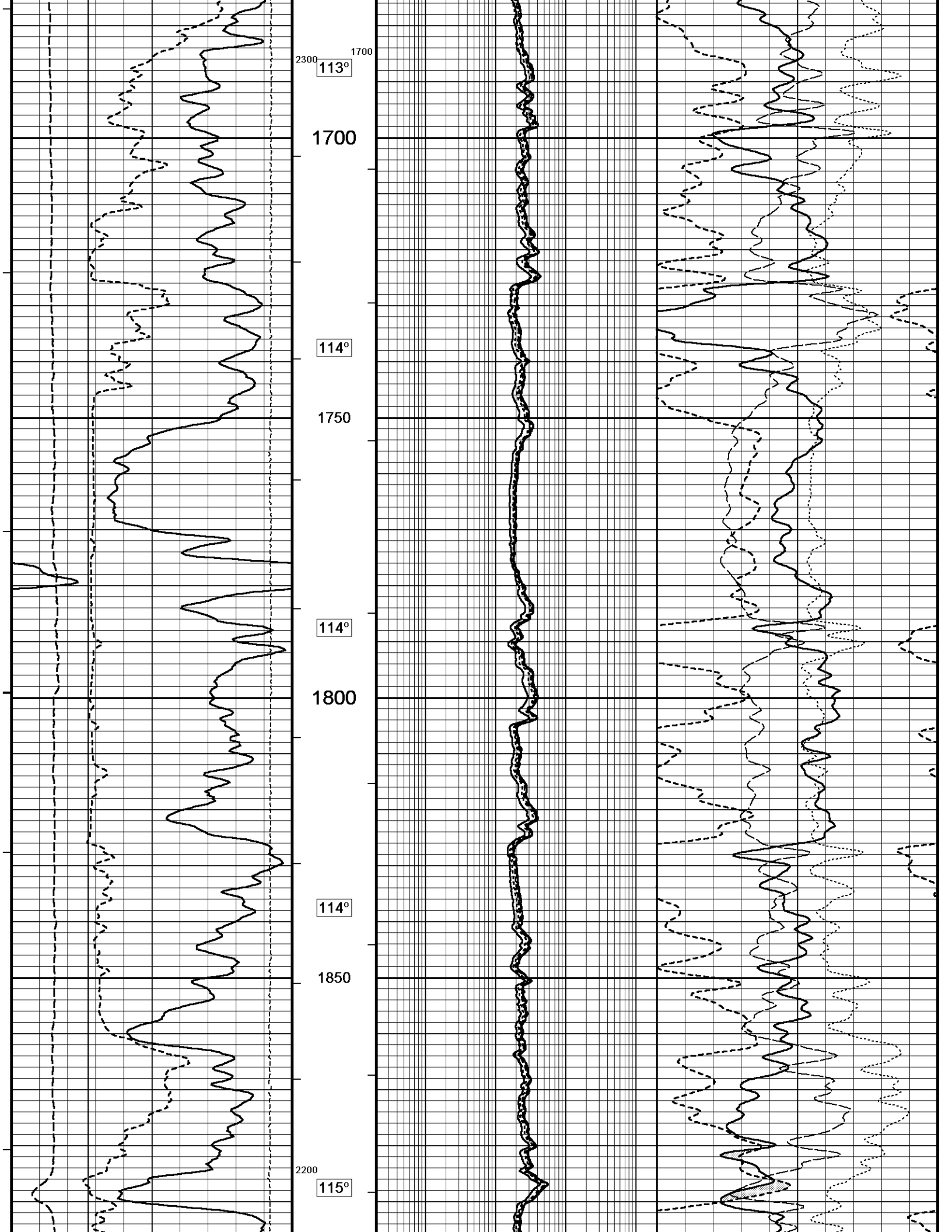
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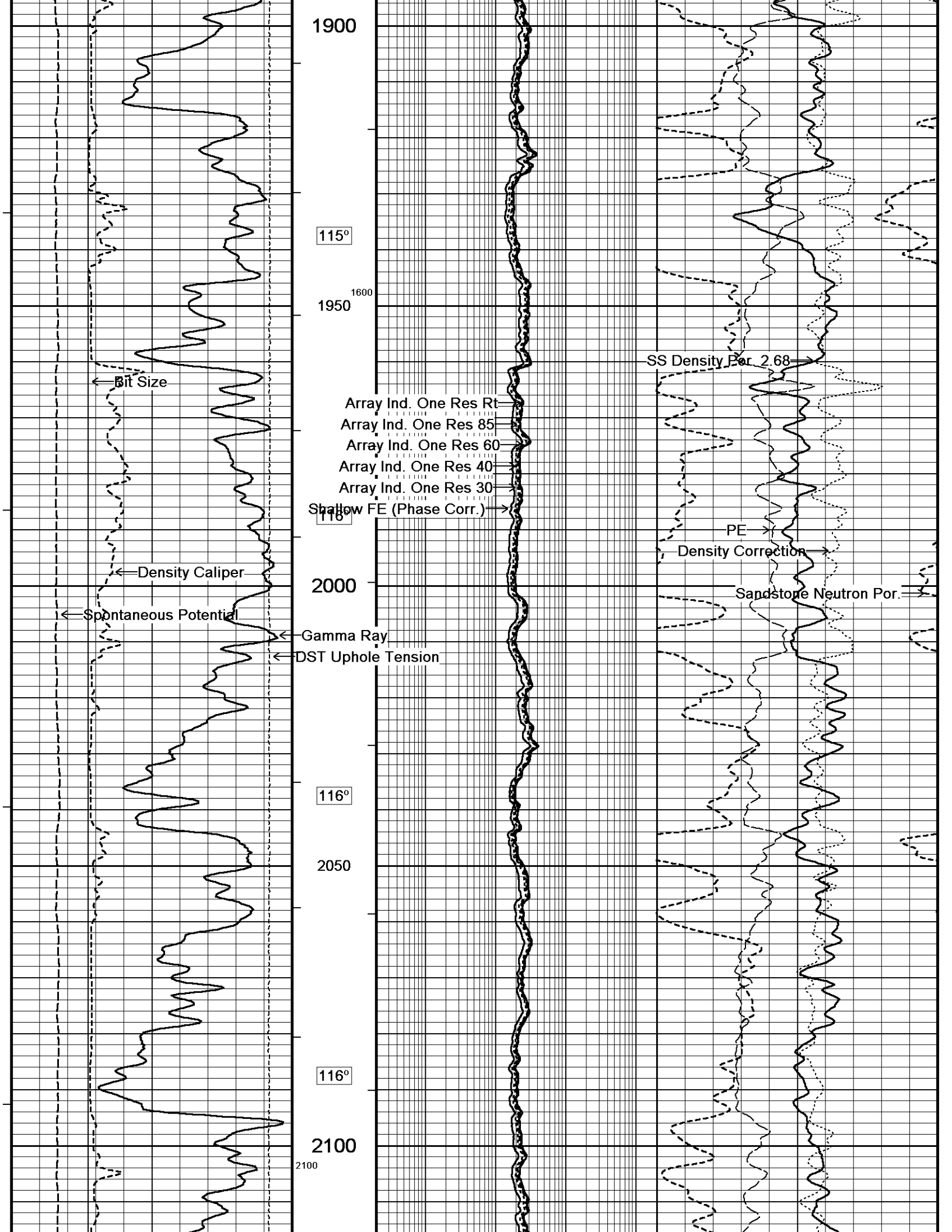












1900

115°

1600  
1950

← Bit Size

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

← Density Caliper

PE

Density Correction

2000

Sandstone Neutron Por.

← Spontaneous Potential

← Gamma Ray

← DST Uphole Tension

116°

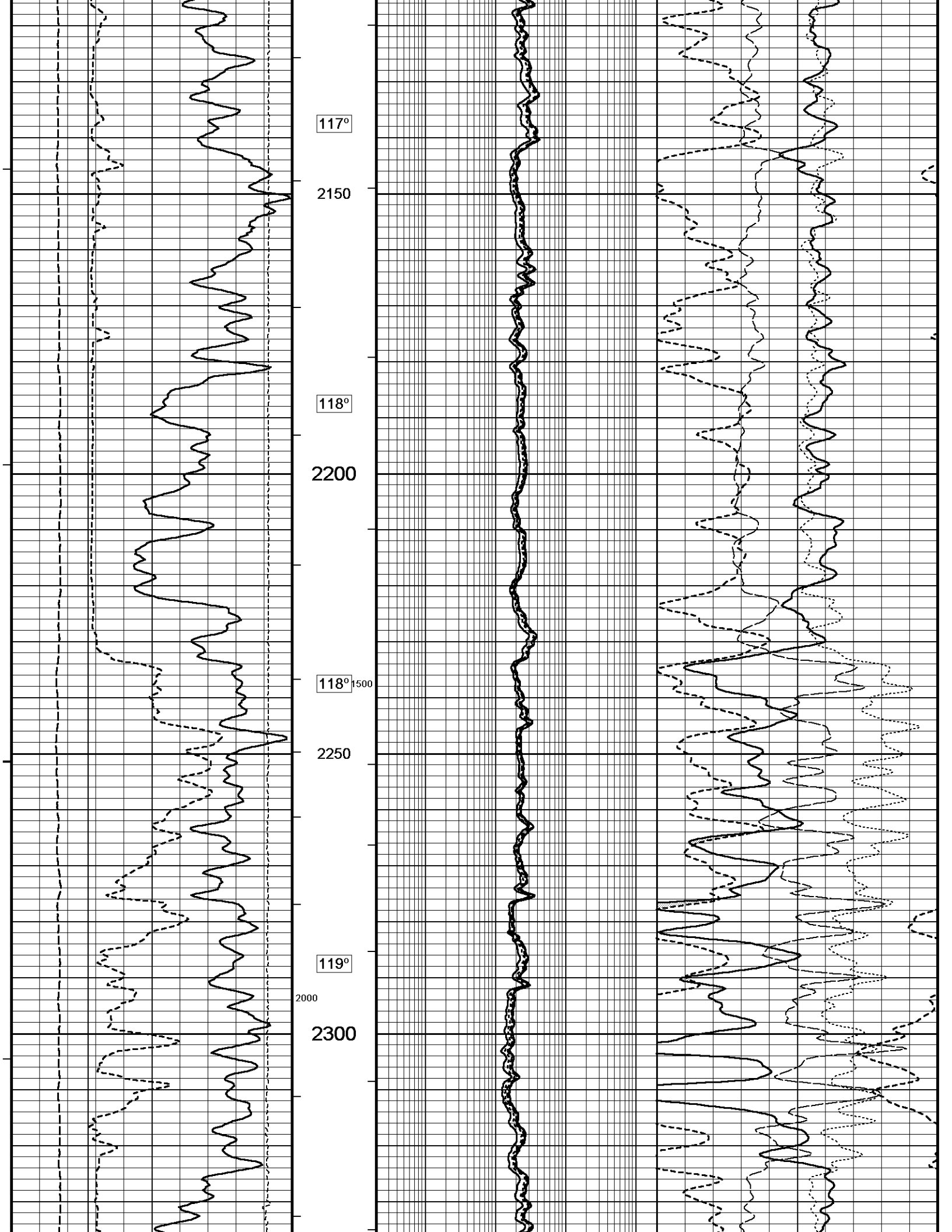
2050

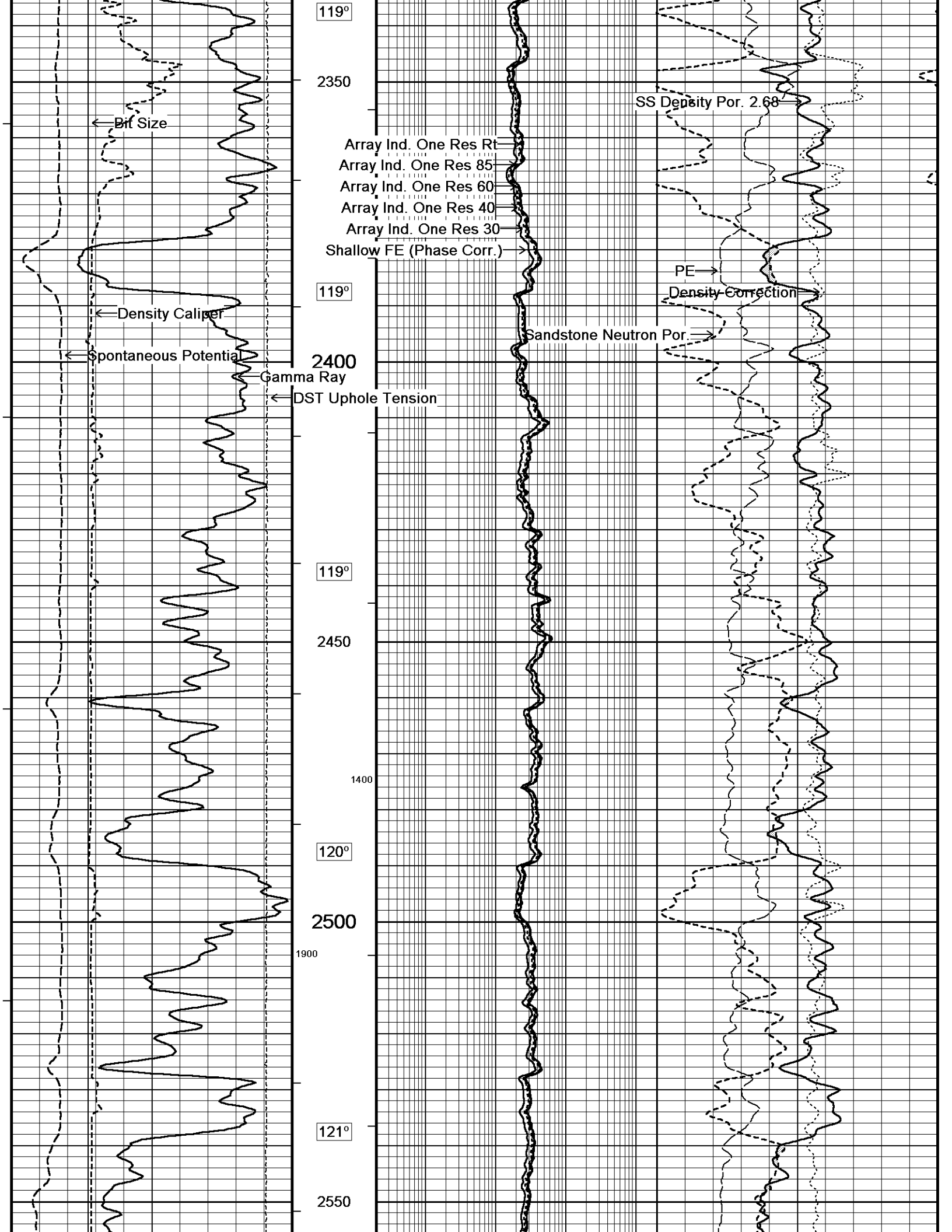
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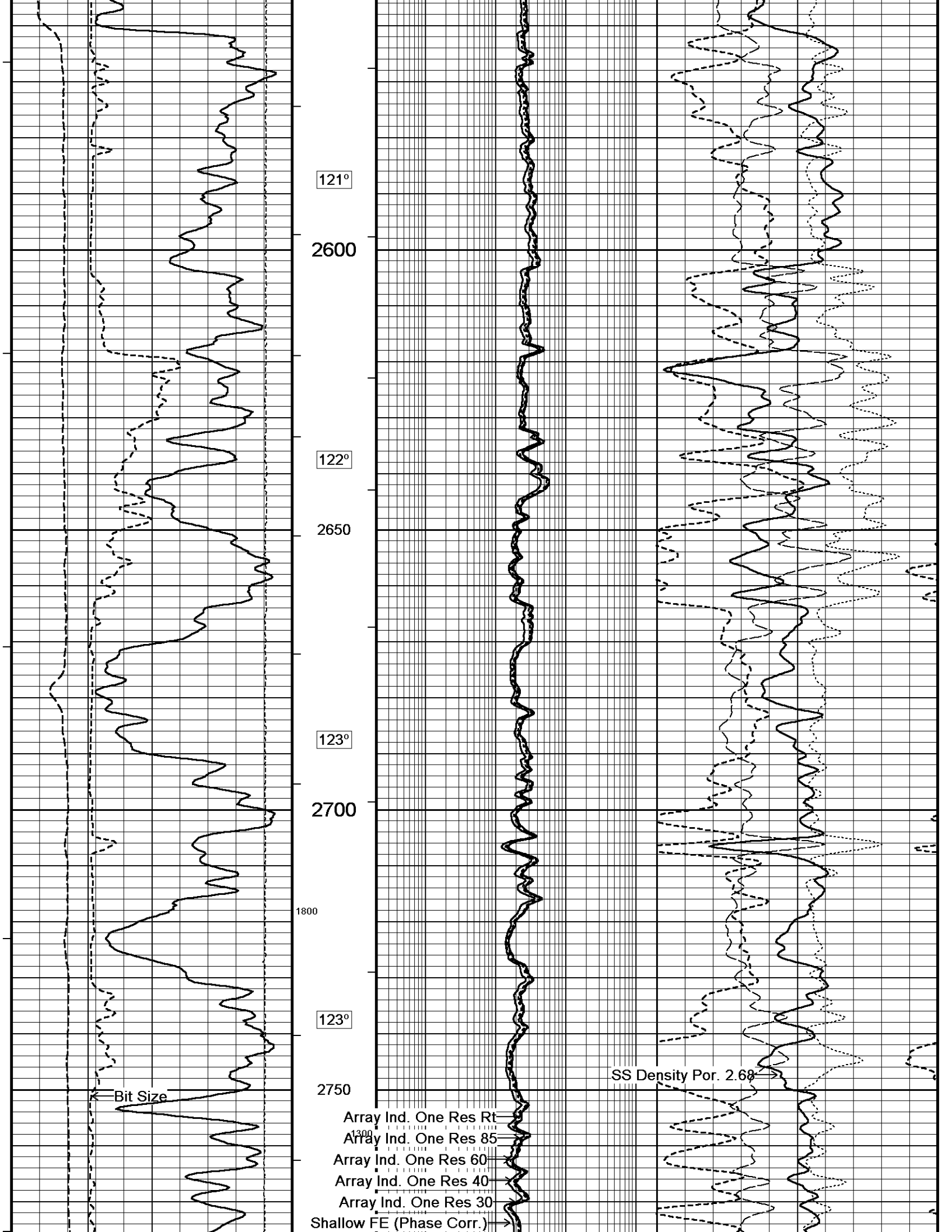
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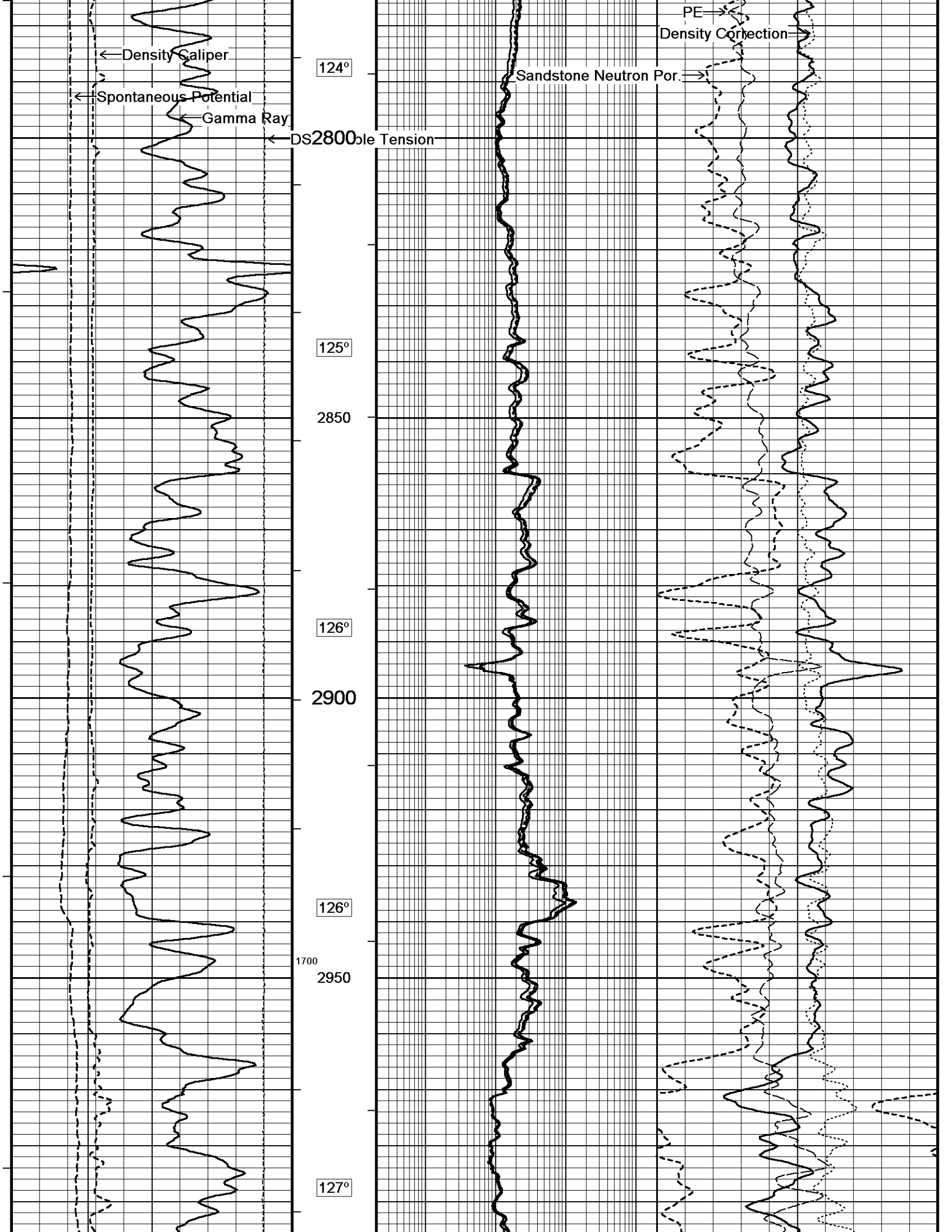
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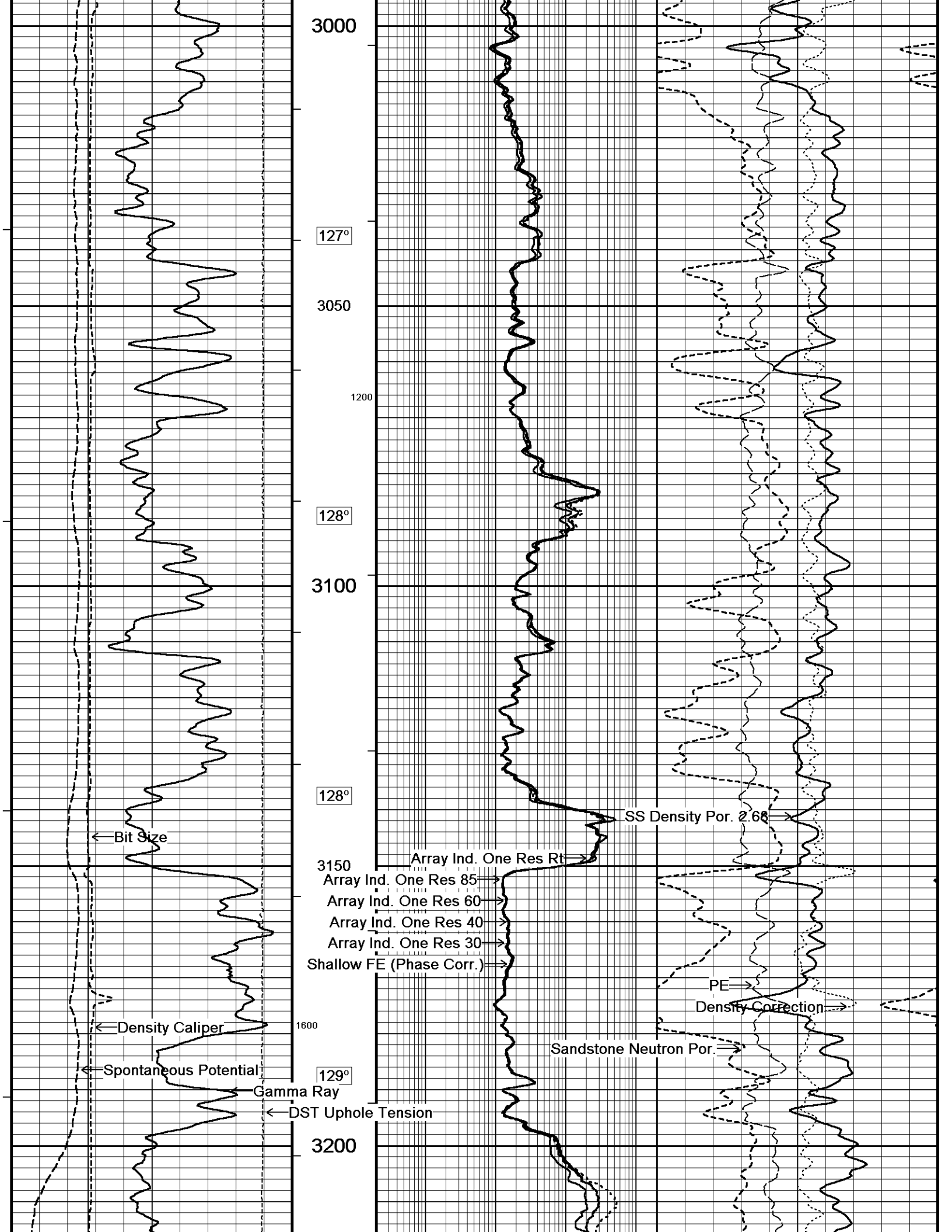


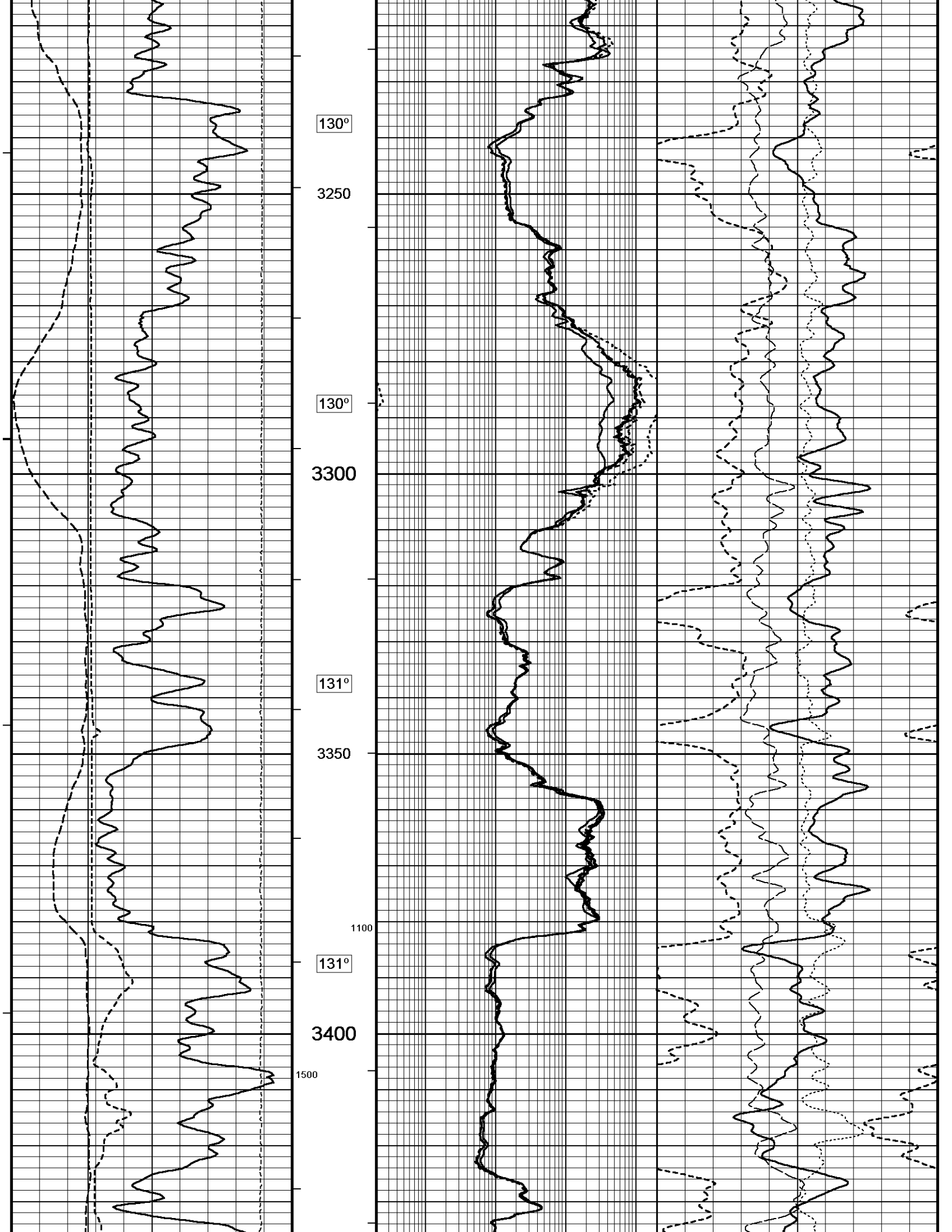


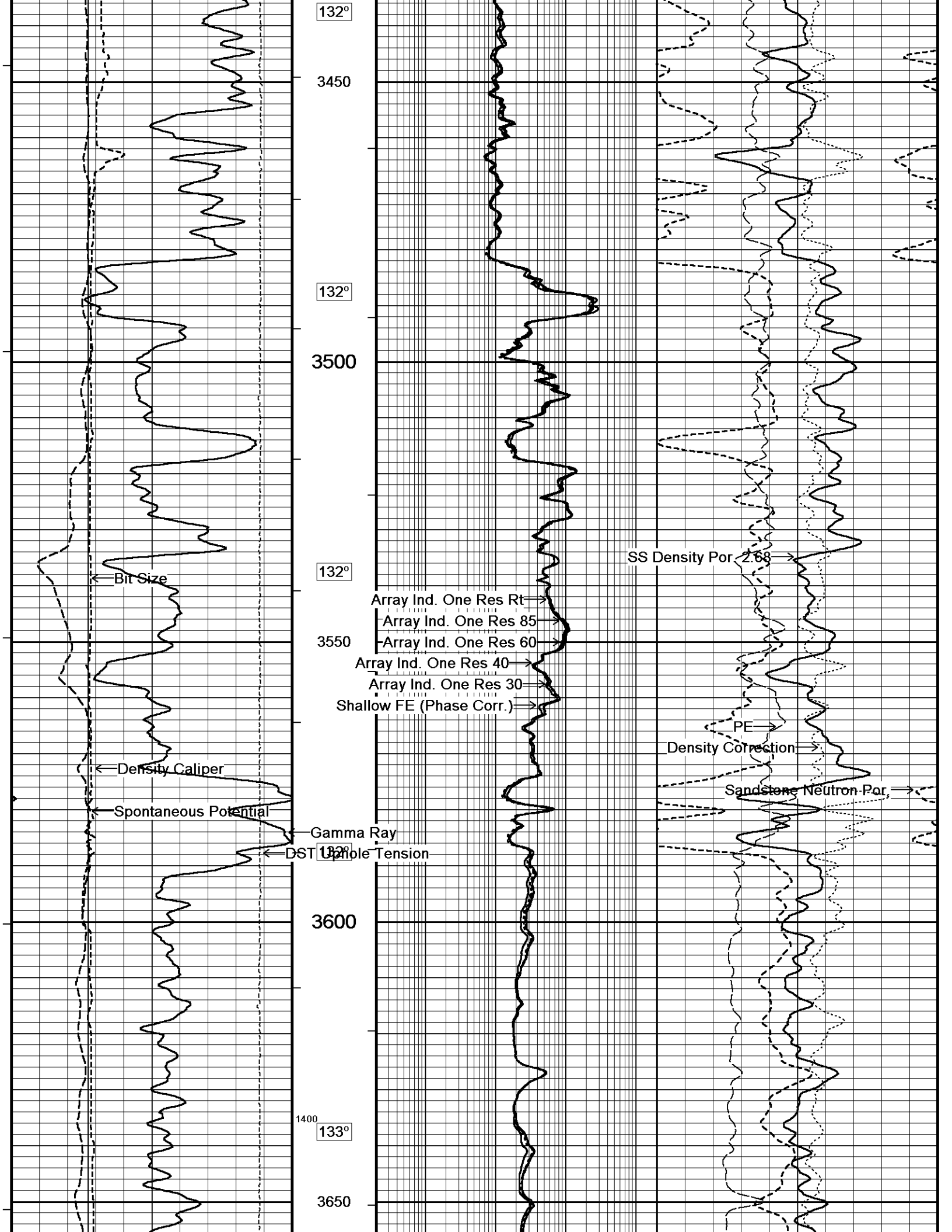


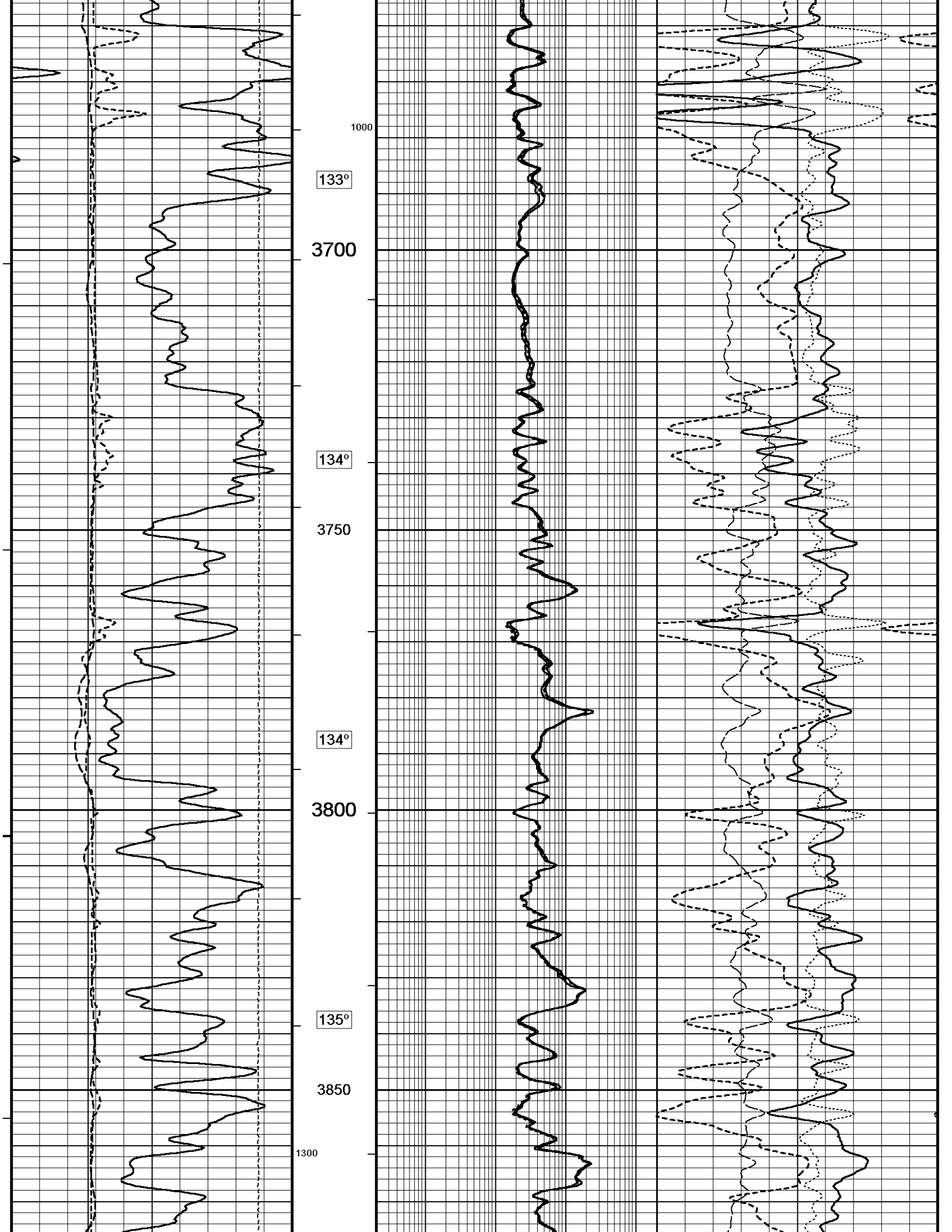




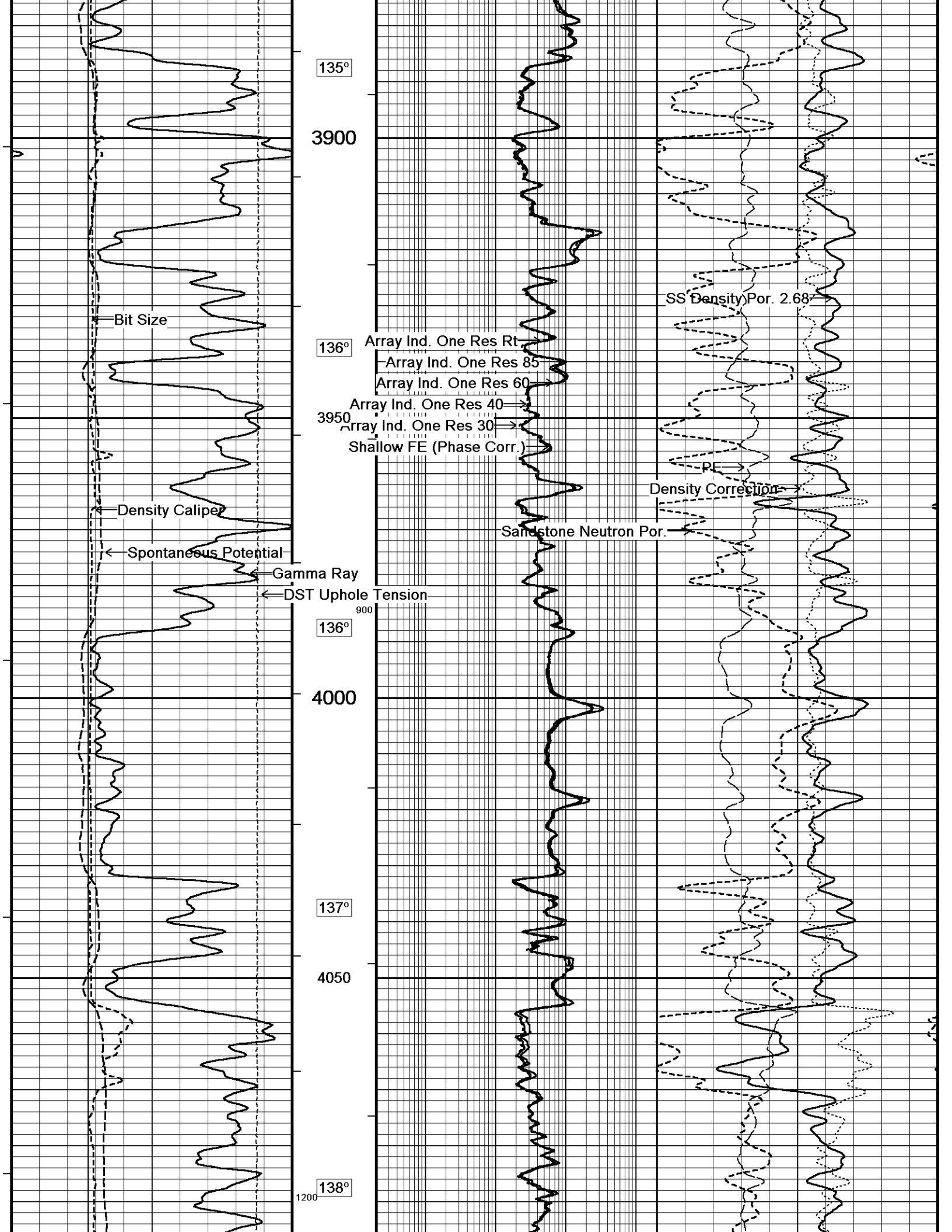


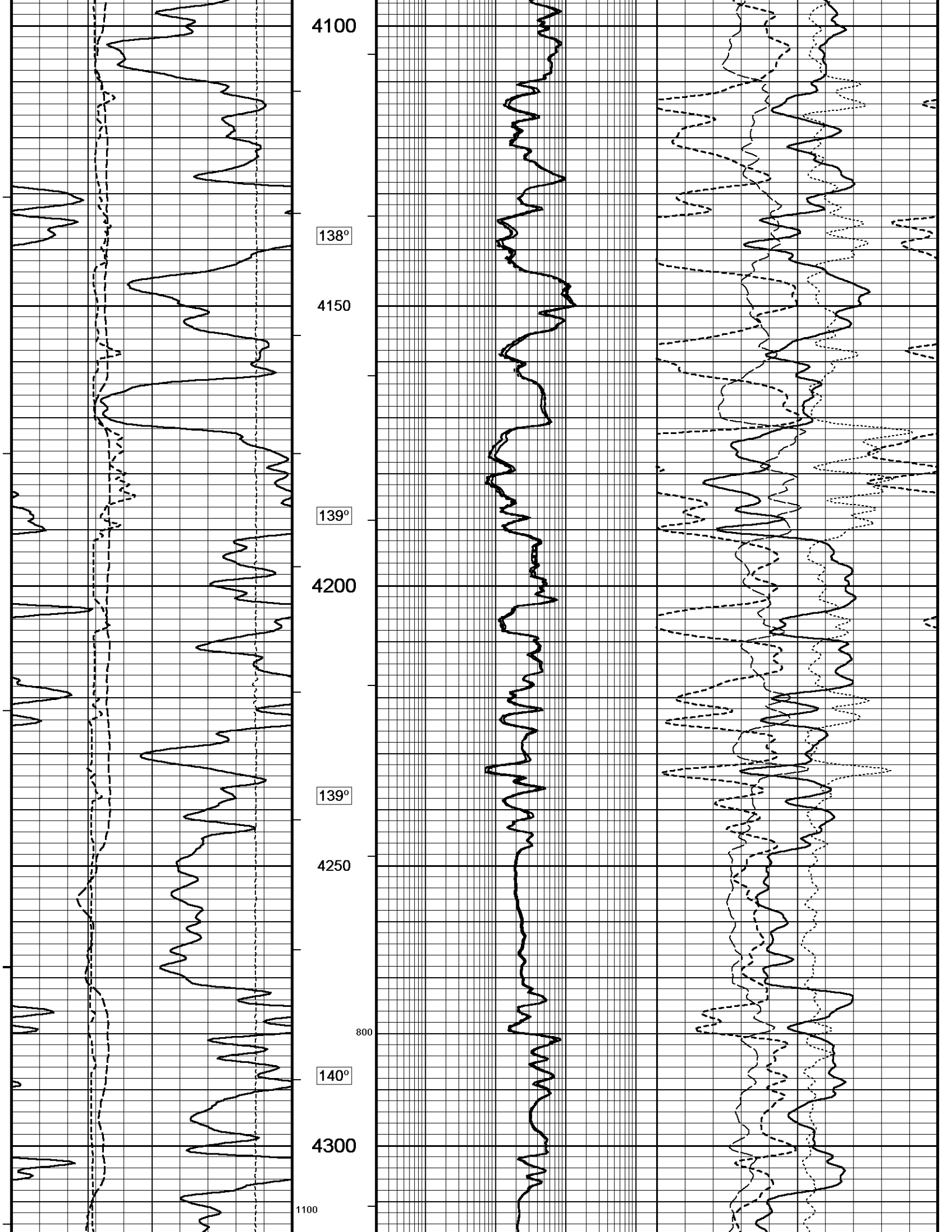


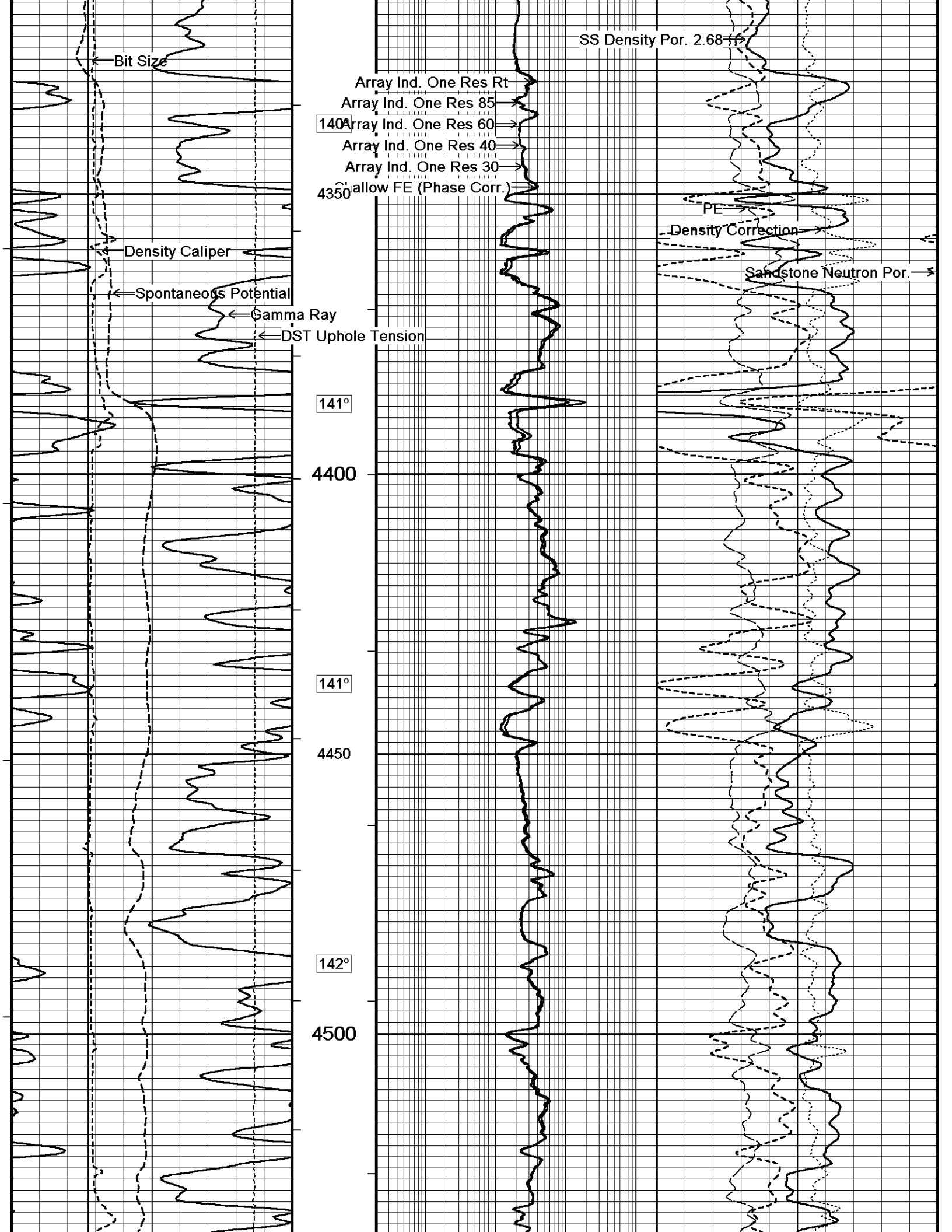


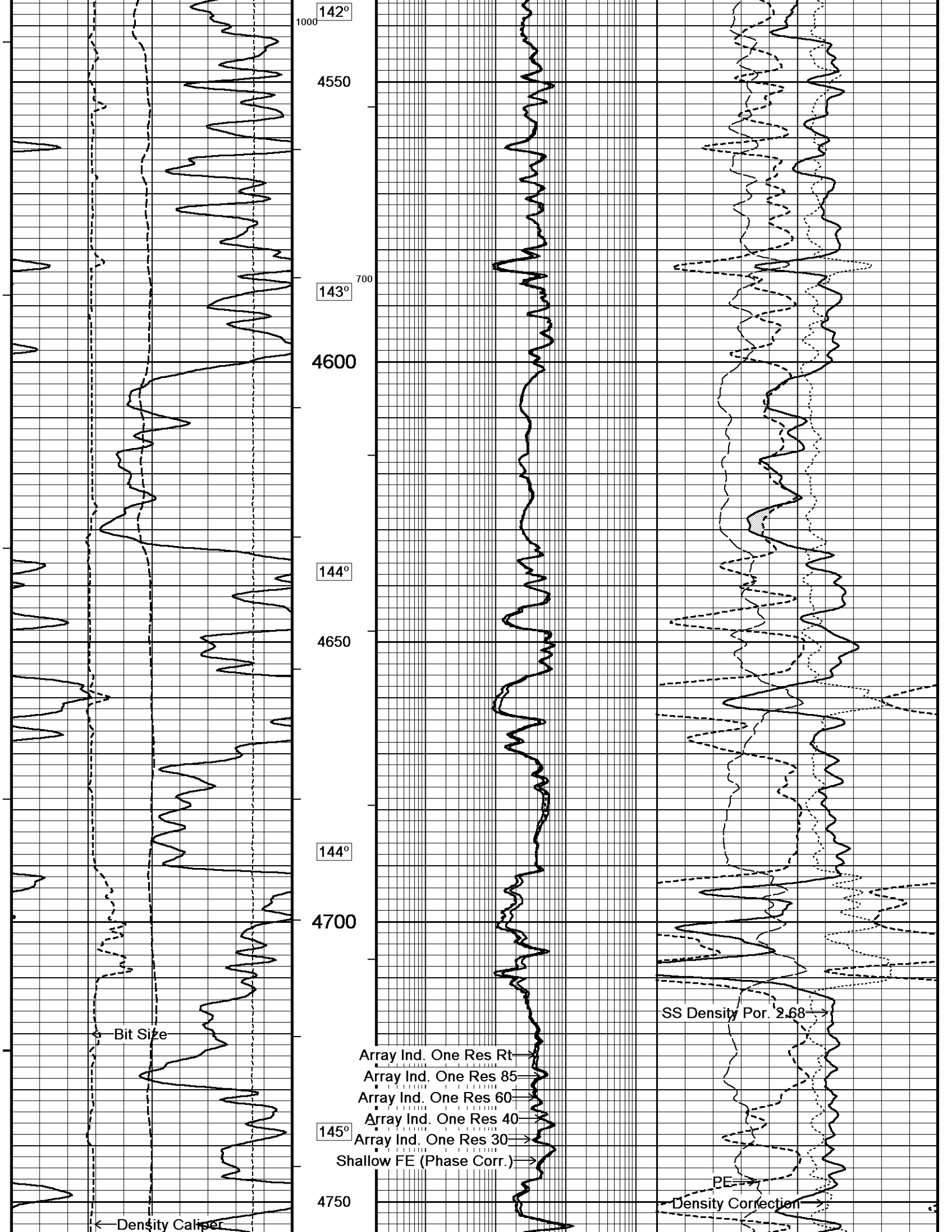


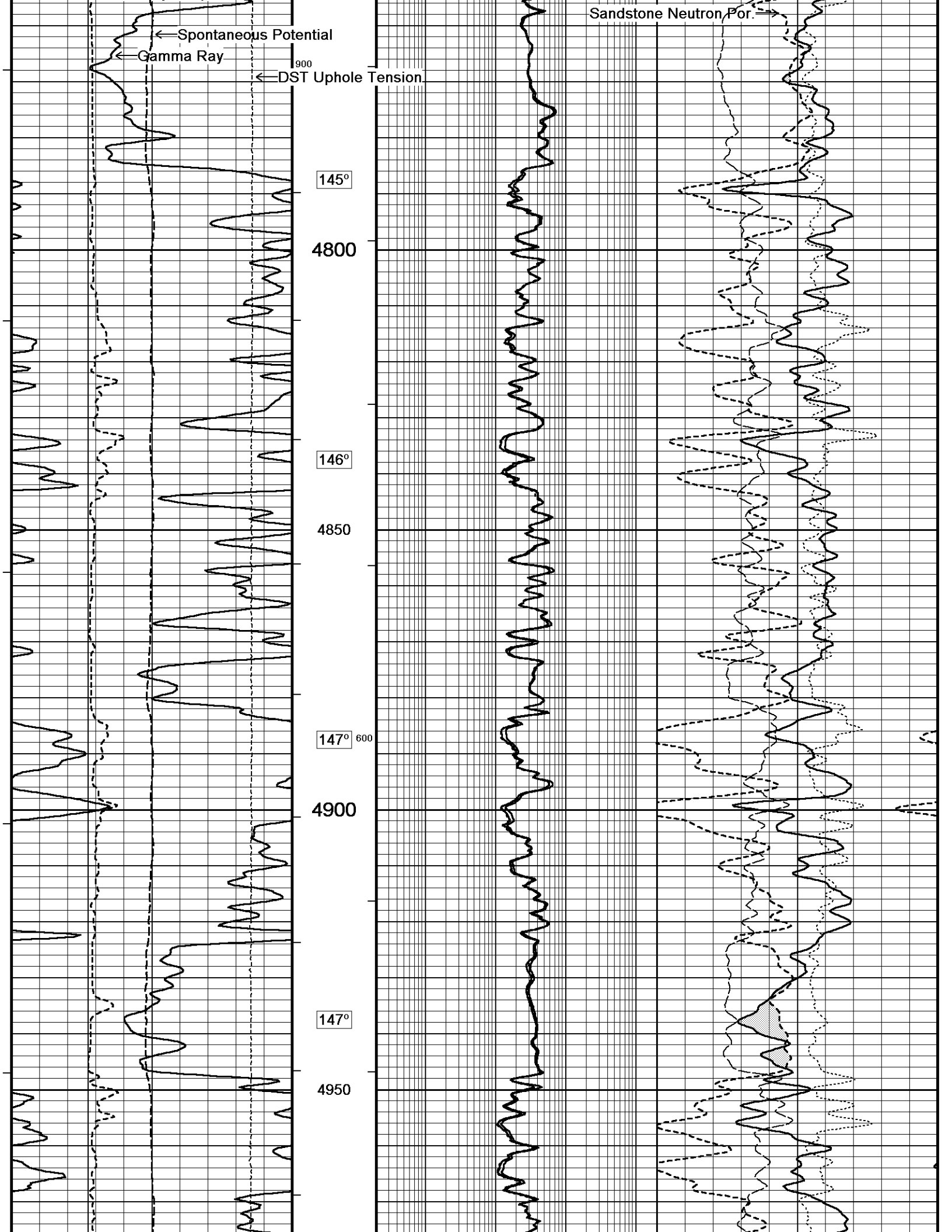




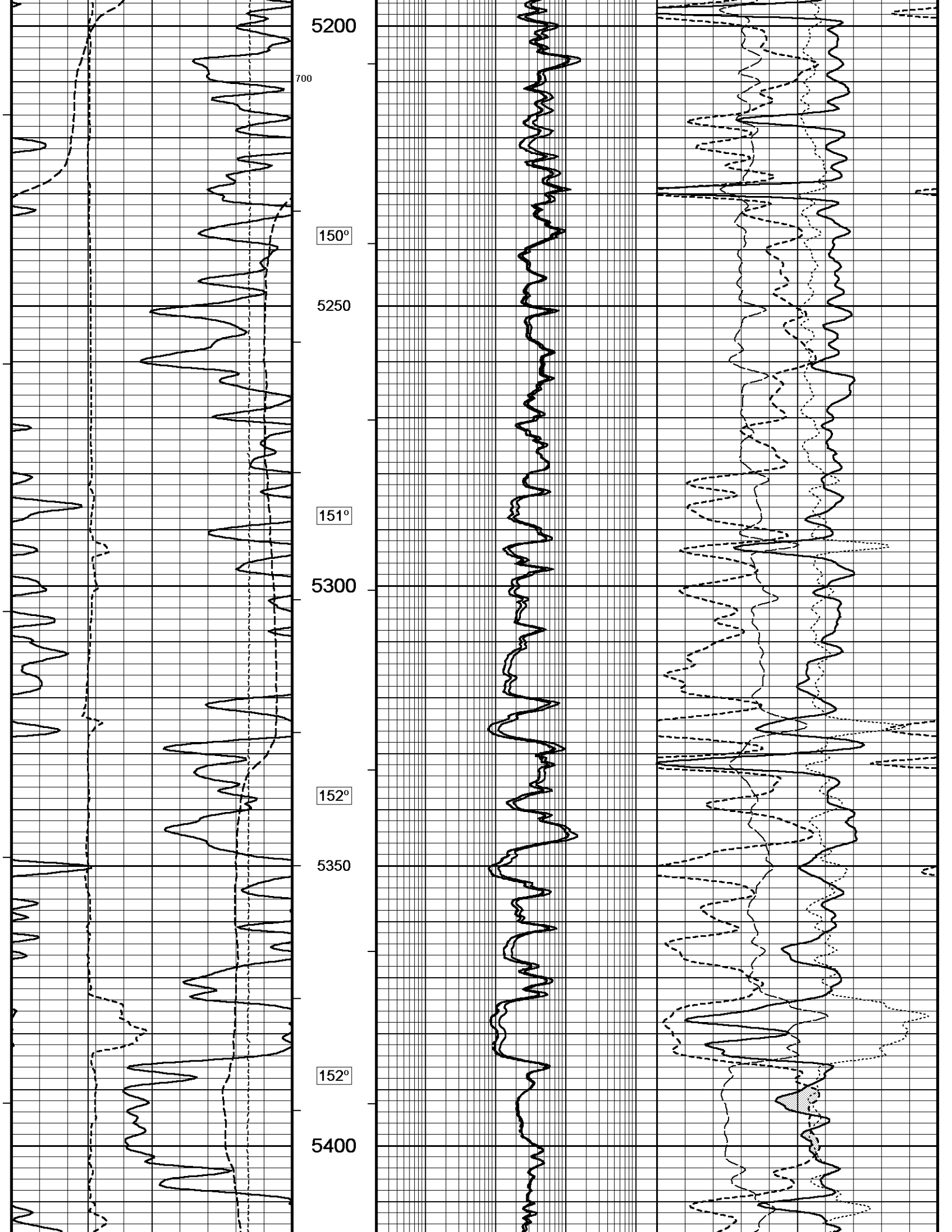


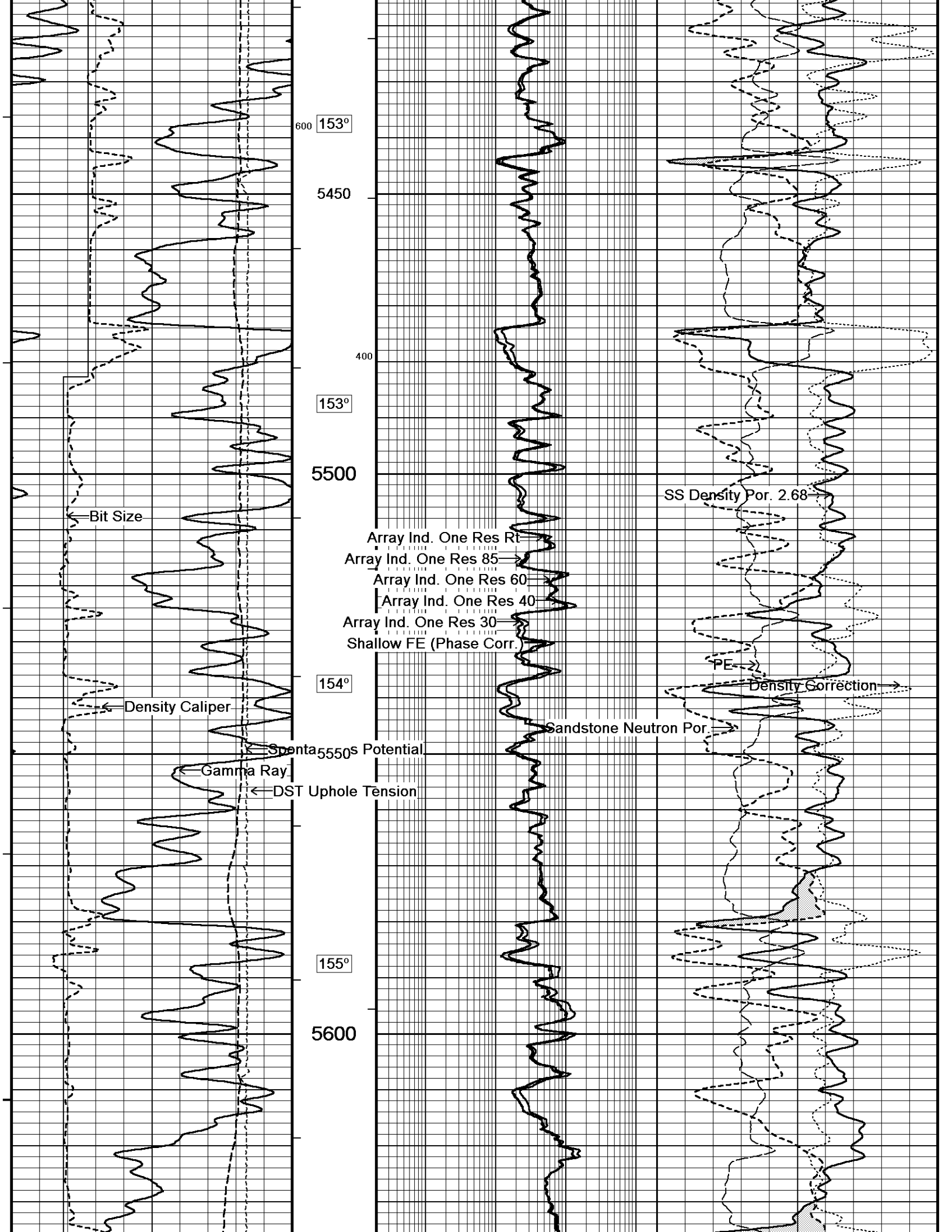




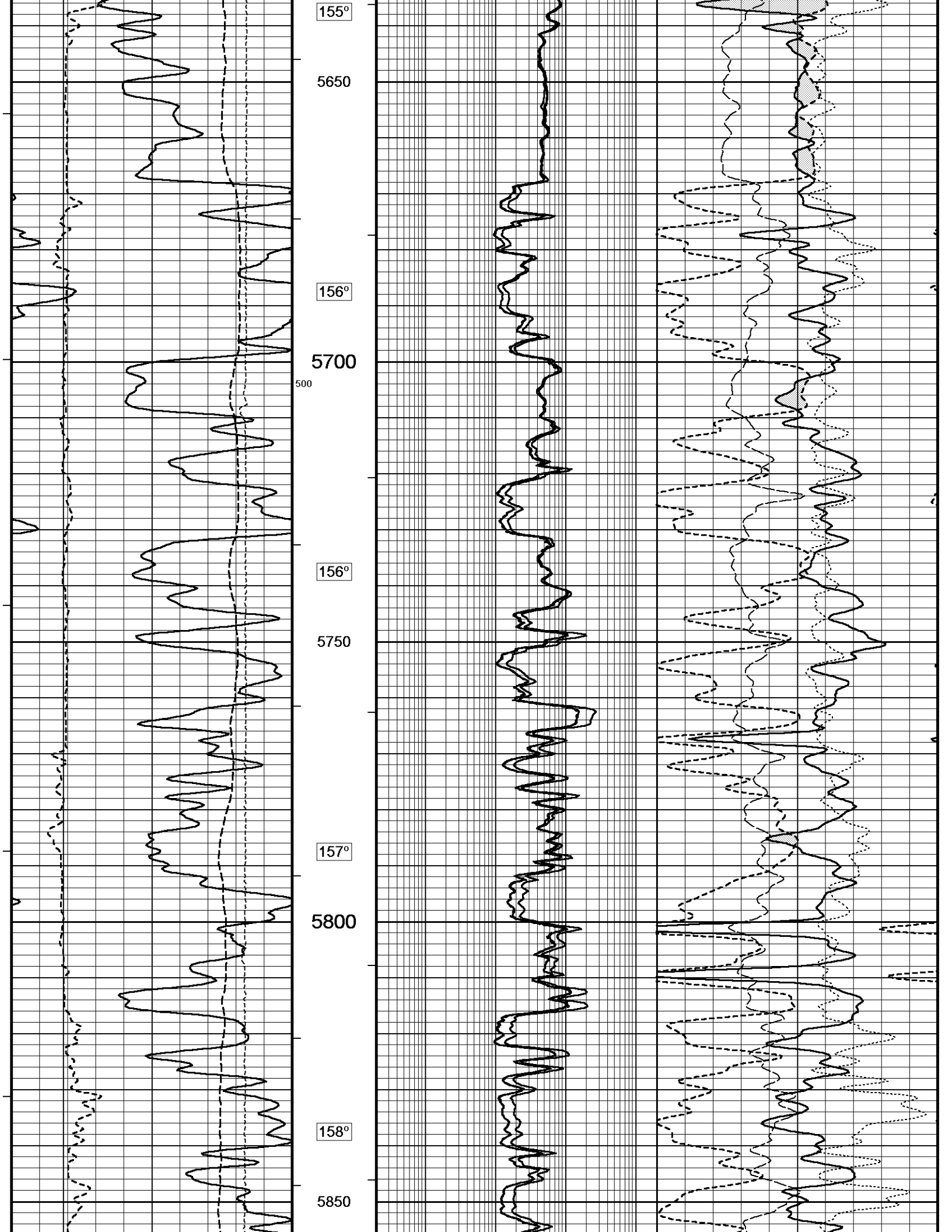


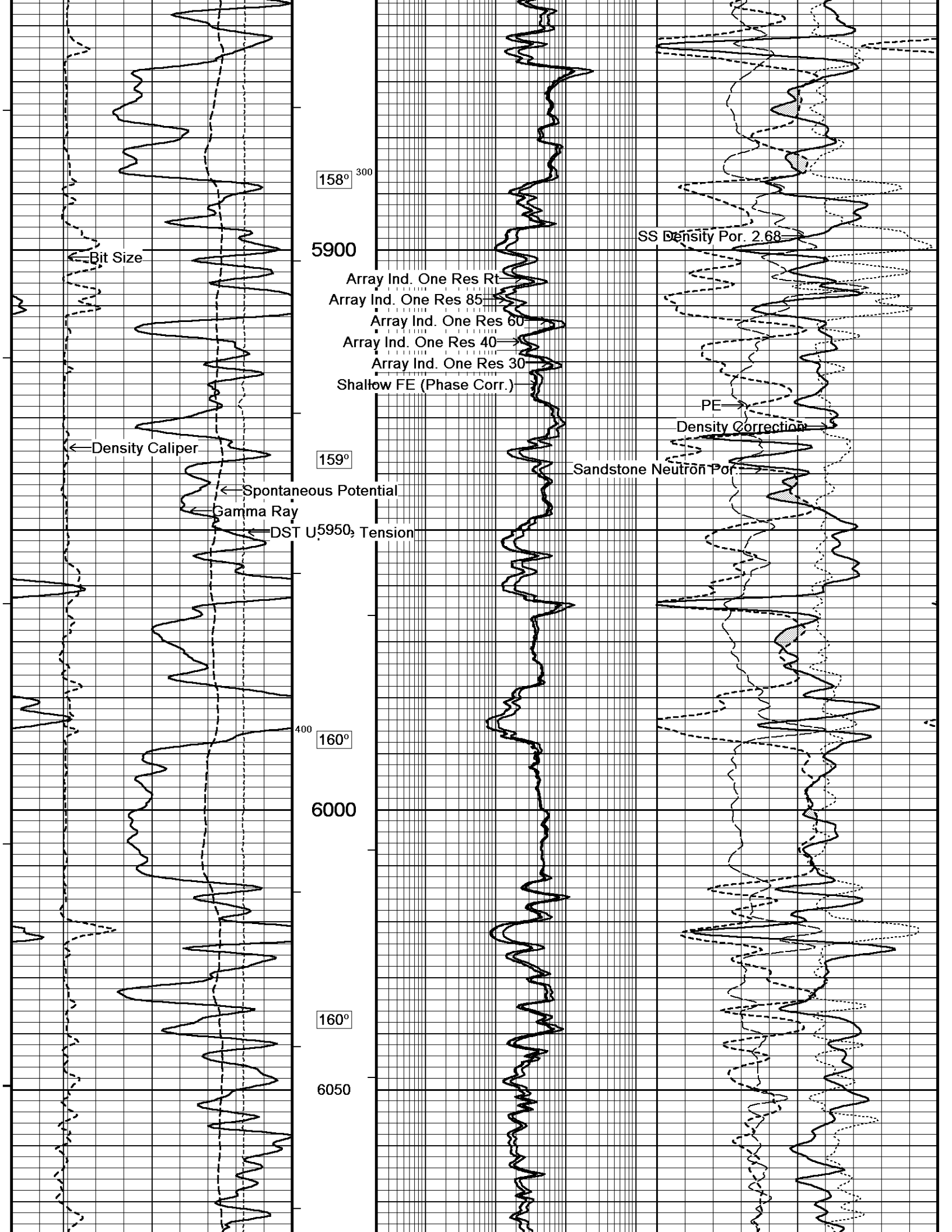


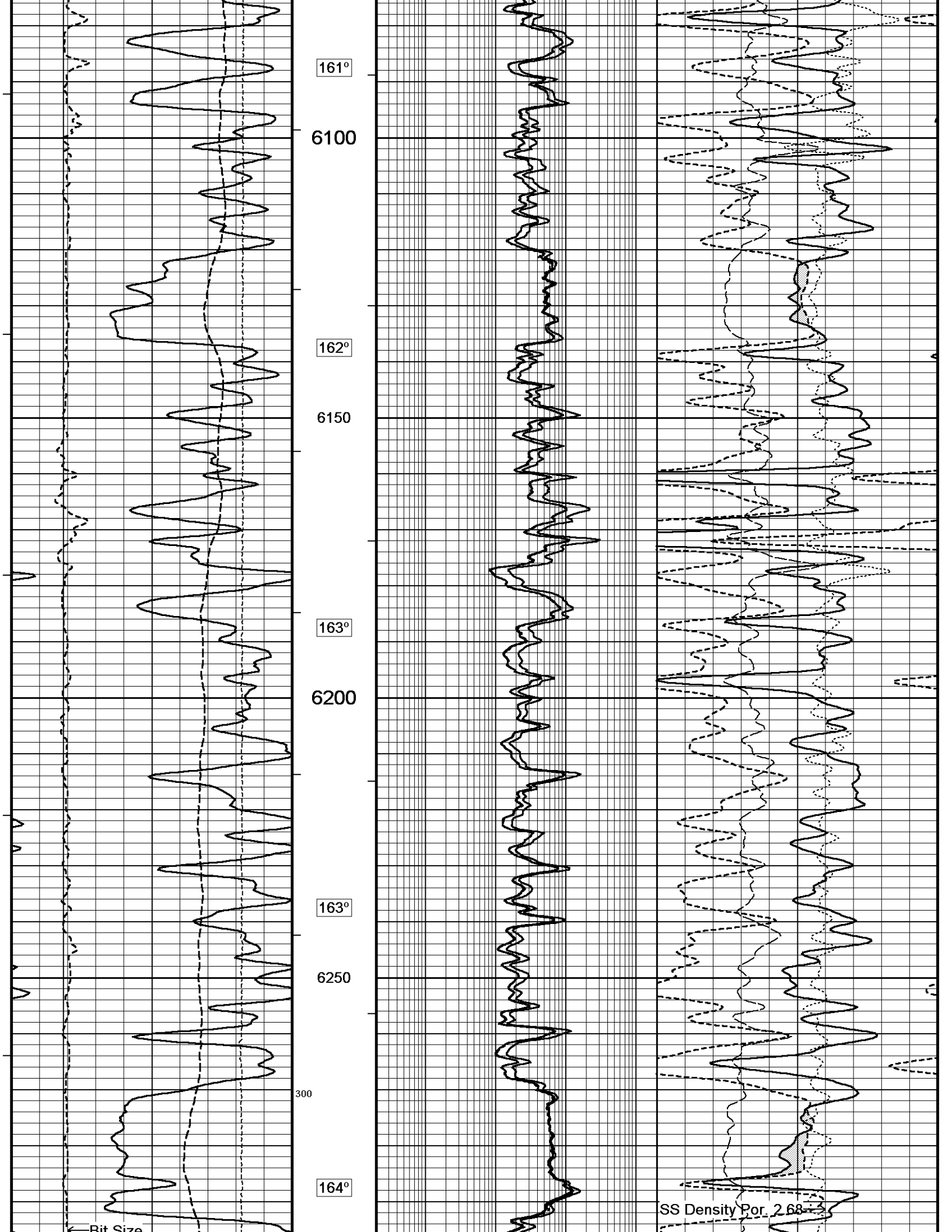












161°

6100

162°

6150

163°

6200

163°

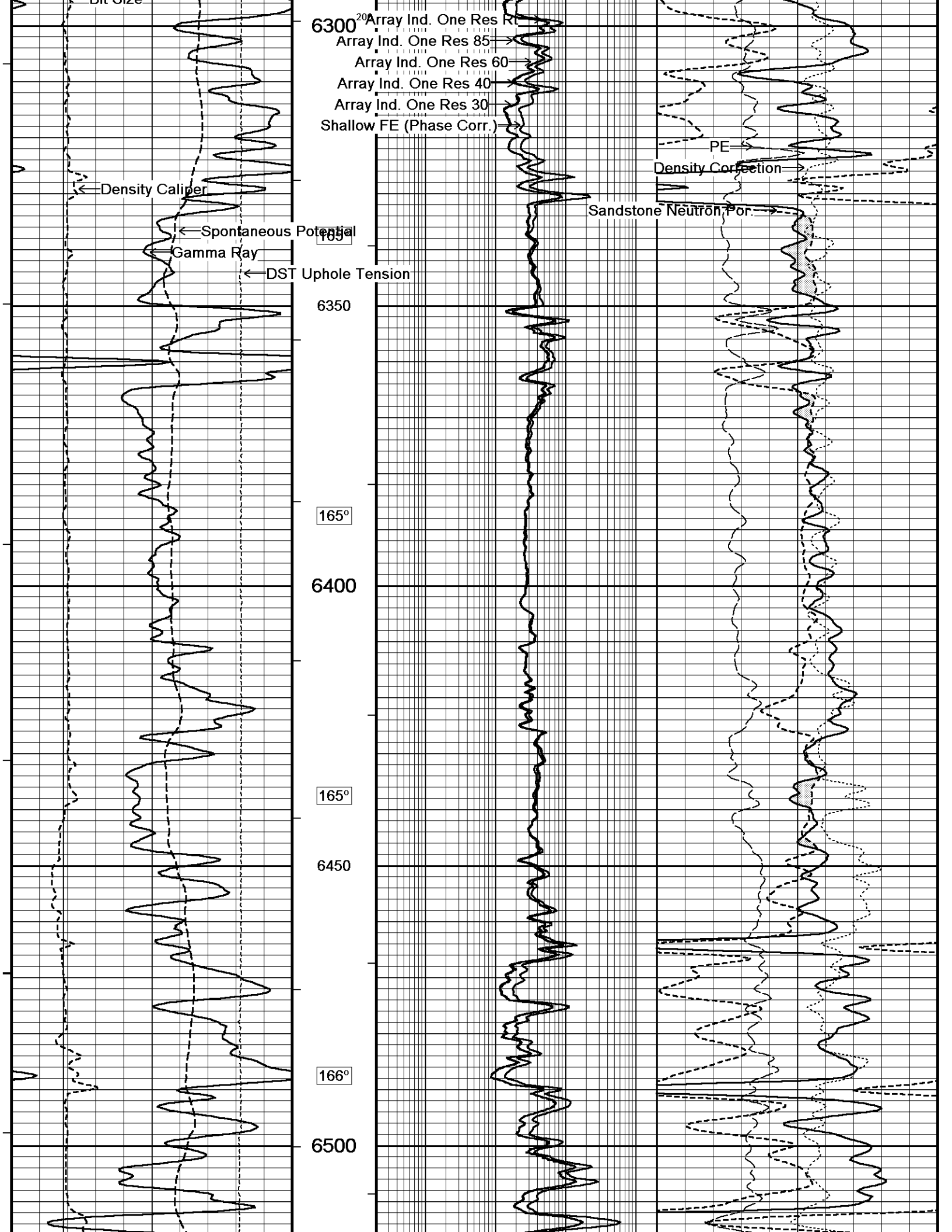
6250

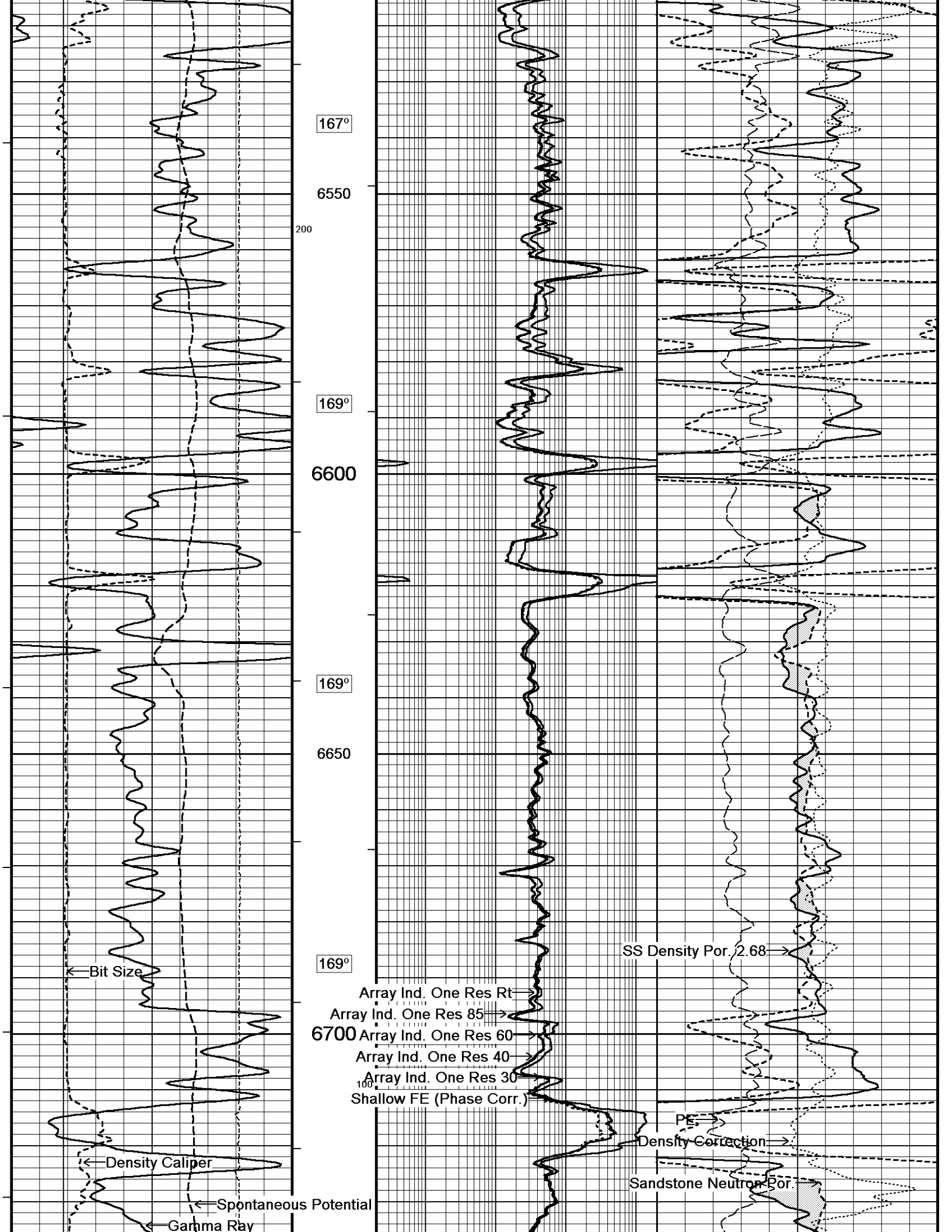
300

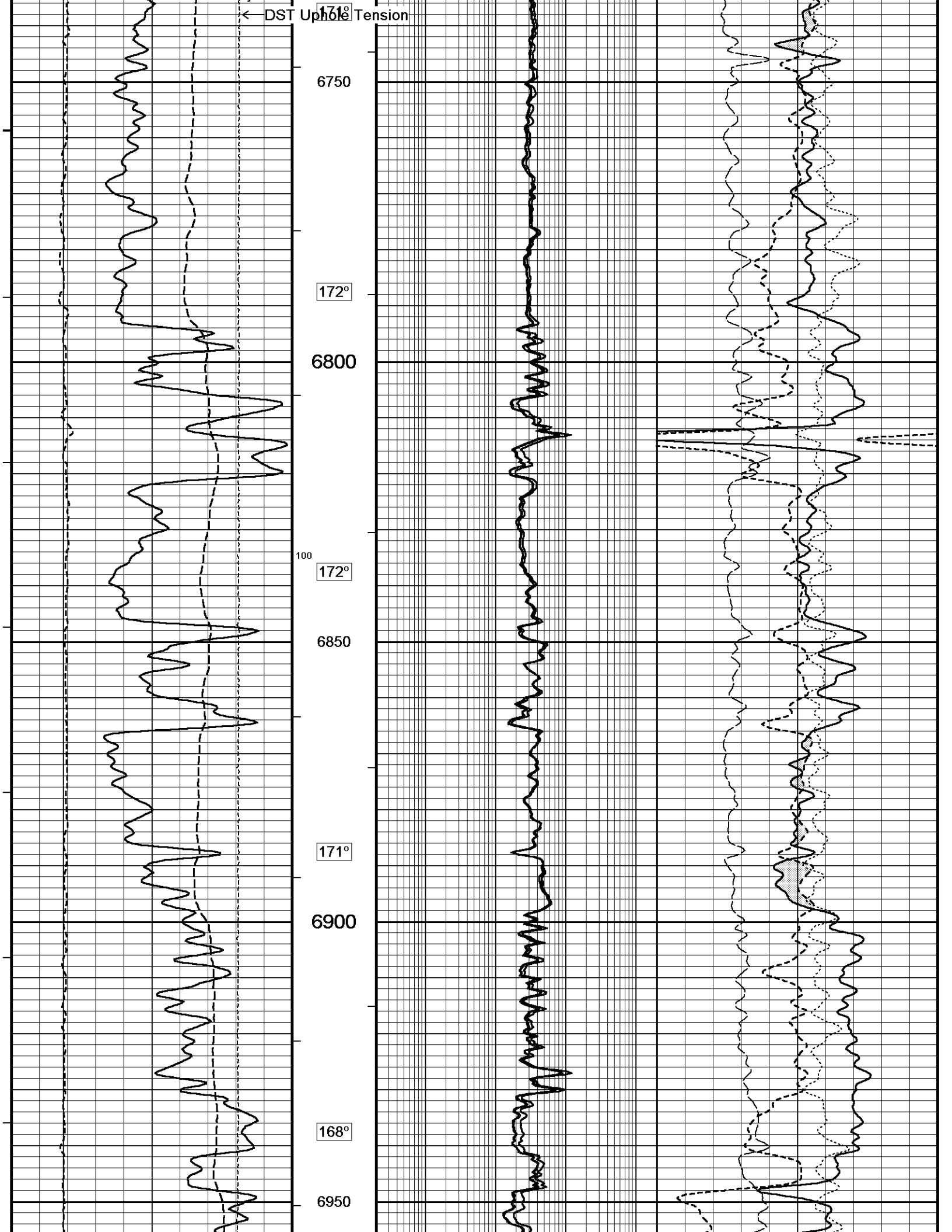
164°

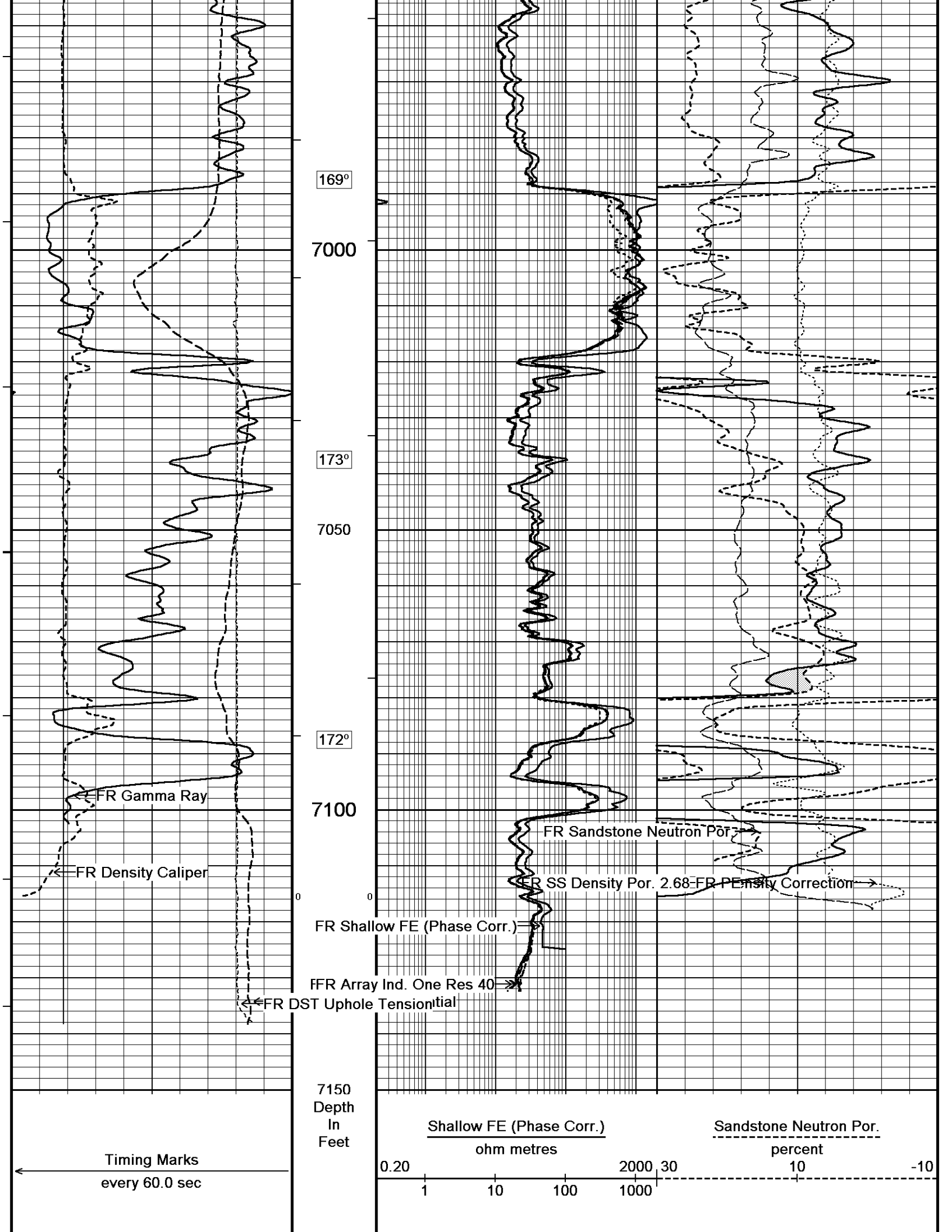
← Bit Size

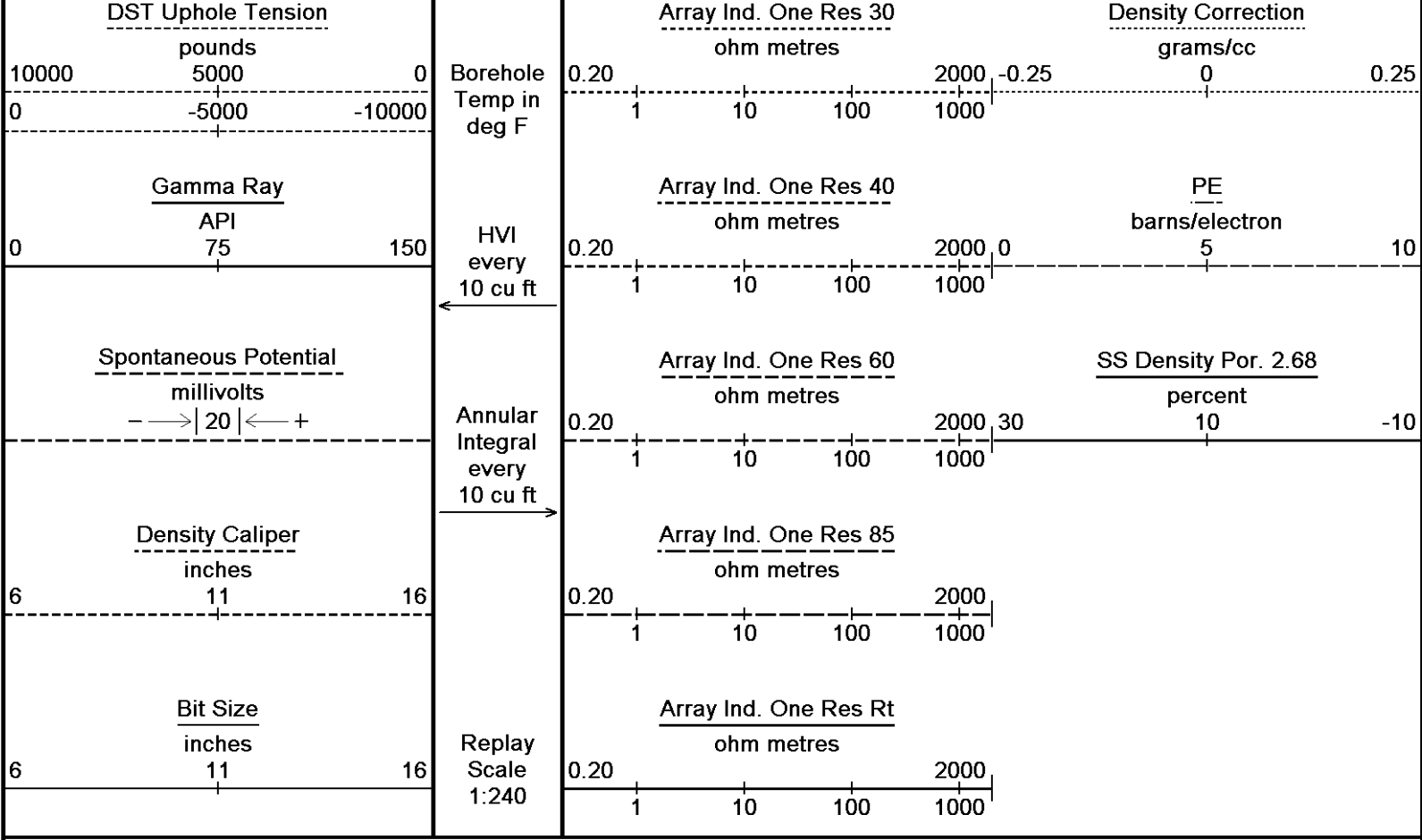
SS Density Por. 2.68-3









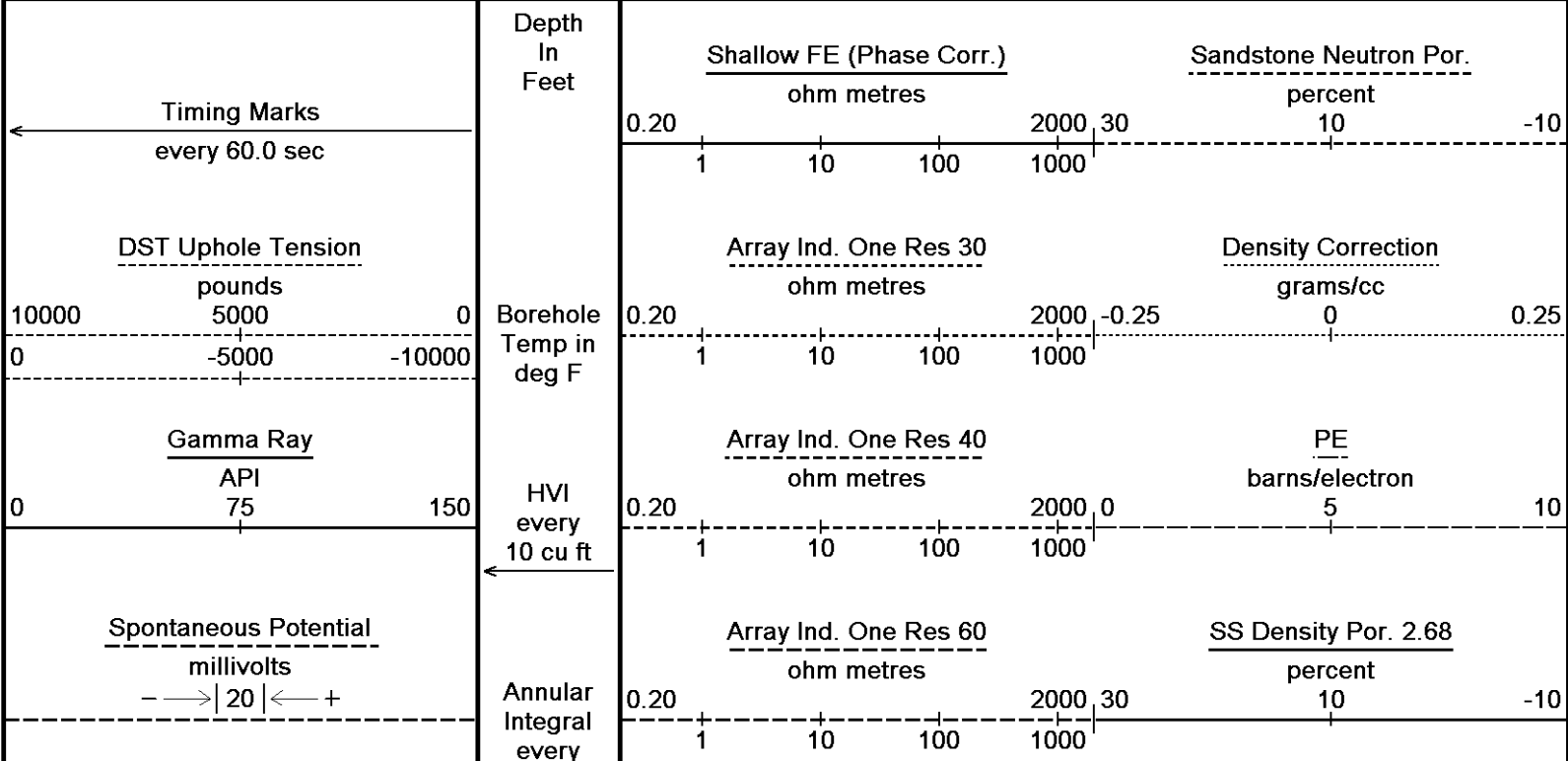


Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 28-JUN-2011 02:29  
 Filename: C:\LOGS\Bill Barrett\Kaufman 13B-25-692\Main.dta Recorded on 27-JUN-2011 22:51  
 System Versions: Logged with 11.03.3657 Plotted with 11.03.3657

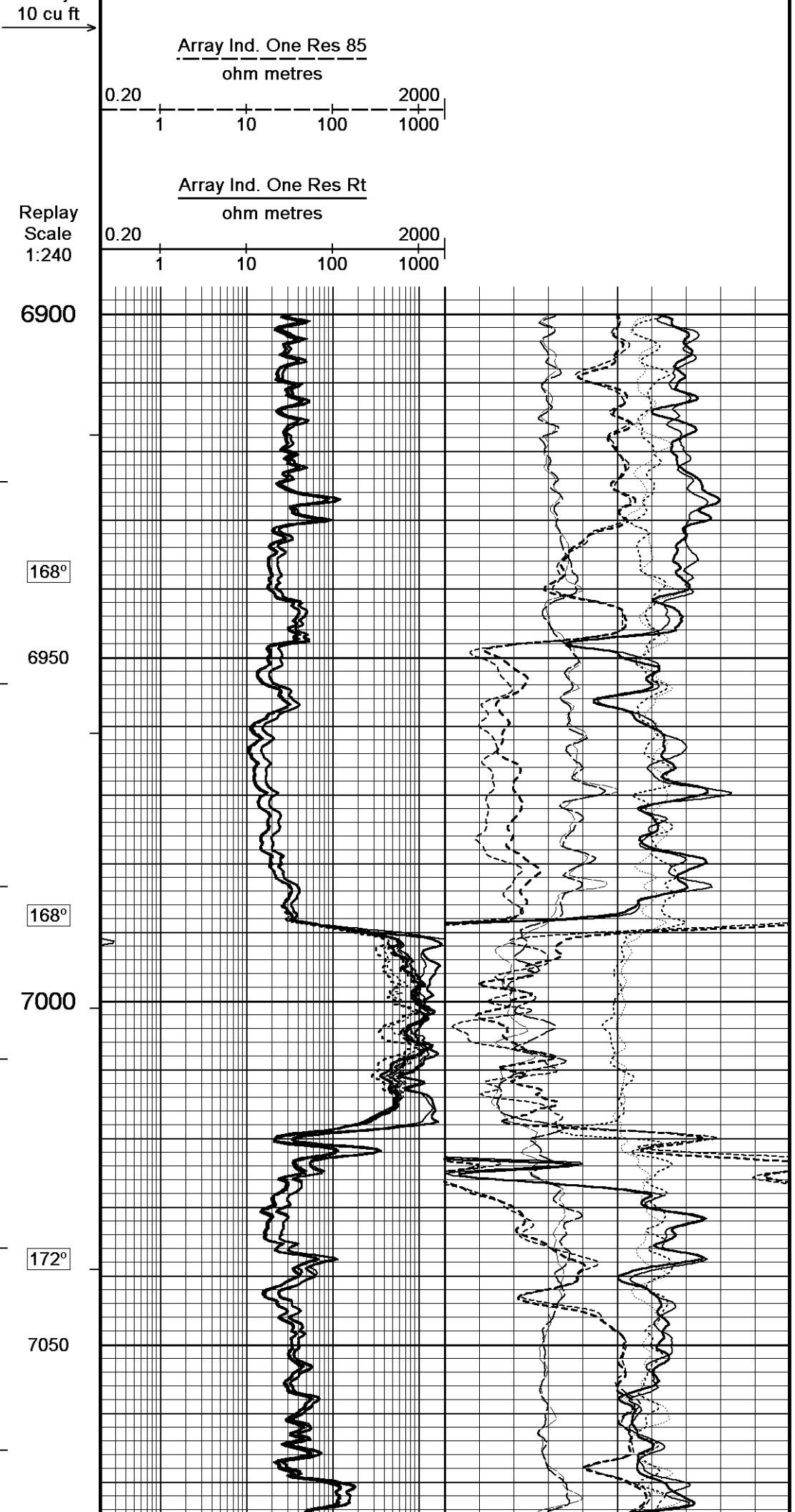
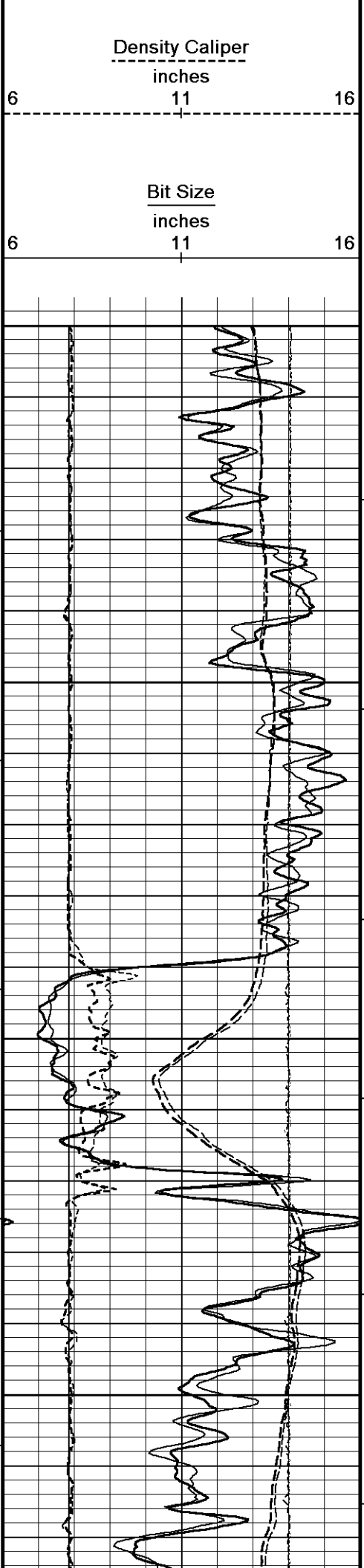
↑ **5 INCH MAIN LOG** ↑

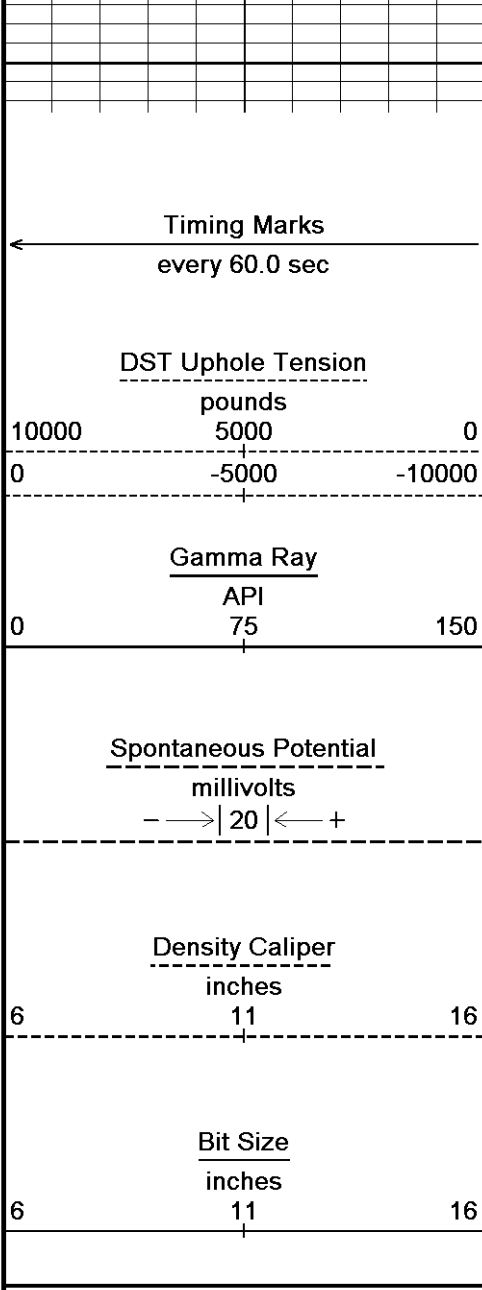
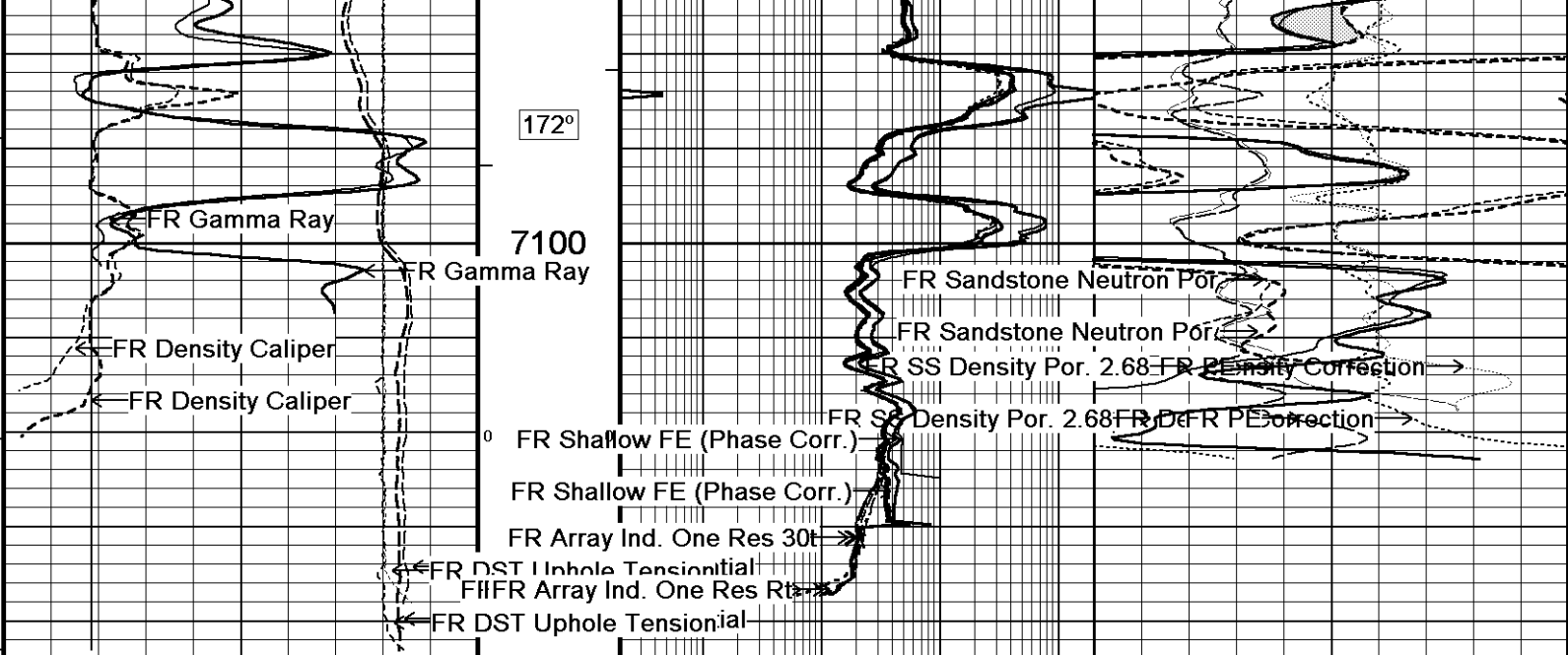
↓ **OVERLAY** ↓

Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 28-JUN-2011 02:29  
 Filename: C:\LOGS\Bill Barrett\Kaufman 13B-25-692\Repeat.dta Recorded on 27-JUN-2011 22:31  
 Filename: C:\LOGS\Bill Barrett\Kaufman 13B-25-692\Main.dta Recorded on 27-JUN-2011 22:51  
 System Versions: Logged with 11.03.3657 Plotted with 11.03.3657

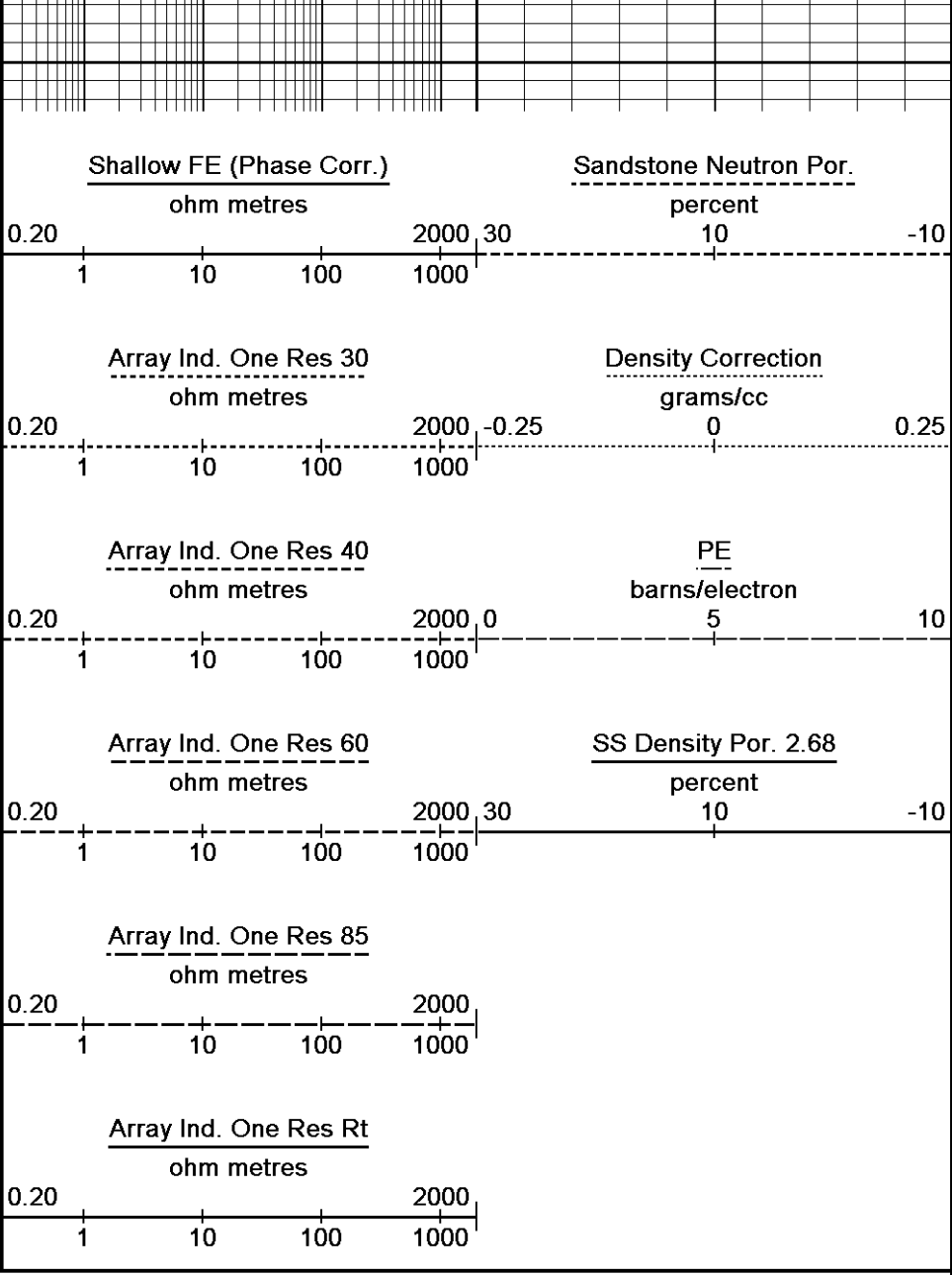








7150  
 Depth In Feet  
 Borehole Temp in deg F  
 HVI every 10 cu ft  
 Annular Integral every 10 cu ft  
 Replay Scale 1:240



## BEFORE SURVEY CALIBRATION

C:\LOGS\Bill Barrett\Kaufman 13B-25-692\Main.dta

## General Constants All 000

Last Edited on 27-JUN-2011,19:29

## General Parameters

Mud Resistivity	2.200	ohm-metres
Mud Resistivity Temperature	99.000	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

## Gamma Calibration MCG-D.A 287

Field Calibration on 27-JUN-2011 09:57

	Measured	Calibrated (API)
Background	143	96
Calibrator (Gross)	1499	1008
Calibrator (Net)	1356	912

## Gamma Constants MCG-D.A 287

Last Edited on 27-JUN-2011,10:01

Gamma Calibrator Number	GRC-072	
Mud Density	1.00	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

## High Resolution Temperature Calibration MCG-D.A 287

Field Calibration on 27-JUN-2011,10:01

	Measured	Calibrated(Deg F)
Lower	10.00	10.00
Upper	50.00	50.00

## High Resolution Temperature Constants MCG-D.A 287

Last Edited on 16-JUN-2011,01:48

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

## Neutron Calibration MDN-A.B 160

Base Calibration on 09-MAY-2011 11:52

Field Check on 27-JUN-2011 09:39

## Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
Ratio	3186	99	3714	110
	32.247		33.764	

## Field Calibrator at Base

	Calibrated (cps)
Ratio	1296 1921
	0.675

## Field Check

	Calibrated (cps)
Ratio	1360 2011
	0.677

## Neutron Constants MDN-A.B 160

Last Edited on 27-JUN-2011,19:23

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-MAY-2011 15:19  
Field Check on 27-JUN-2011 09:49

Base Calibration	
	Measured      Calibrated (ohm-m)
Reference 1	0.0              0.0
Reference 2	965.0            126.8
Base Check	281.4
Field Check	281.9

**FE Constants MFE-A.A 85**

Last Edited on 27-JUN-2011,19:24

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

**Induction Calibration MAI-B.A 213**

Base Calibration on 22-JUN-2011,04:47  
Field Check on 27-JUN-2011 09:34

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	14.1      3936.2      14.2      3936.9
2	30.2      3539.7      30.2      3539.8
3	28.8      3114.2      28.8      3113.9
4	19.0      2096.8      19.0      2096.7
Deep	17.3      2078.6      17.4      2078.3
Medium	42.4      4088.0      42.4      4087.5
Shallow	45.4      5158.7      45.3      5159.1
Array Temperature	73.3                      74.5      Deg F

**Induction Constants MAI-B.A 213**

Last Edited on 27-JUN-2011,19:24

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	0.0020	mhos/metre
Squasher Start		N/A	mhos/metre
Squasher Offset			
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 24-MAR-2011 14:48  
Field Calibration on 27-JUN-2011,10:02

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 05-MAY-2011 20:30  
Field Check on 27-JUN-2011 09:46

Density Calibration					
Base Calibration		Measured		Calibrated (sdu)	
	Near	Far	Near	Far	
Reference 1	48387	18472	53115	19186	
Reference 2	22628	3021	25020	2536	
Field Check at Base					
	1161.5	1739.6			
Field Check					
	1164.9	1733.8			
PE Calibration					
Base Calibration		Measured		Calibrated	
	WS	WH	Ratio	Ratio	
Background	212	1037			
Reference 1	14983	48216	0.313	0.320	
Reference 2	5889	22492	0.265	0.272	
Field Check at Base					
	212.3	1037.3			
Field Check					
	211.3	1046.5			

### Density Constants MPD-B 167

Last Edited on 27-JUN-2011,19:24

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	1.26	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

### AFTER SURVEY CALIBRATION

C:\LOGS\Bill Barrett\Kaufman 13B-25-692\Main.dta

FE Check MFE-A.A 85

Before Survey Check 27-JUN-2011 09:49  
After Survey Check on 28-JUN-2011 01:42

Before (ohm-m)	After (ohm-m)
281.9	281.5

Induction Check MAI-B.A 213

Before Survey Check on 27-JUN-2011 09:34  
After Survey Check on 28-JUN-2011 01:44

Channel	Before Survey (mmho/m)		After Survey (mmho/m)		
	Low	High	Low	High	
1	14.2	3936.9	15.0	3936.9	
2	30.2	3539.8	30.5	3540.4	
3	28.8	3113.9	29.0	3114.5	
4	19.0	2096.7	19.1	2096.7	
Deep	17.4	2078.3	17.5	2078.4	
Medium	42.4	4087.5	42.6	4088.7	
Shallow	45.3	5159.1	45.8	5160.2	
Array Temperature	74.5		86.1		Deg F

Photo Density Check MPD-B 167

Before Survey Check on 27-JUN-2011 09:46  
After Survey Check on 28-JUN-2011 01:48

Density Check

	Near		Far	
	Before	After	Before	After
	1164.9	1165.7	1733.8	1730.7

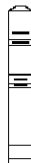
PE Check

	Before	After
WS	211.3	212.7
WH	1046.5	1038.2

### DOWNHOLE EQUIPMENT

C:\LOGS\Bill Barrett\Kaufman 13B-25-692\Setup.dta

3/8" Triple Cone Cable Head (MCB C A)  
MCB-C.A 5 LG: 1.58 ft WT: 15.4 lb OD: 2.24 in



3/8" Triple Cone Cable Head (MCB C A)  
MCB-C.A 5 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

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-D.A 287 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in

Compact Comms Gamma  
MCG-D.A 287 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 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

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

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

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

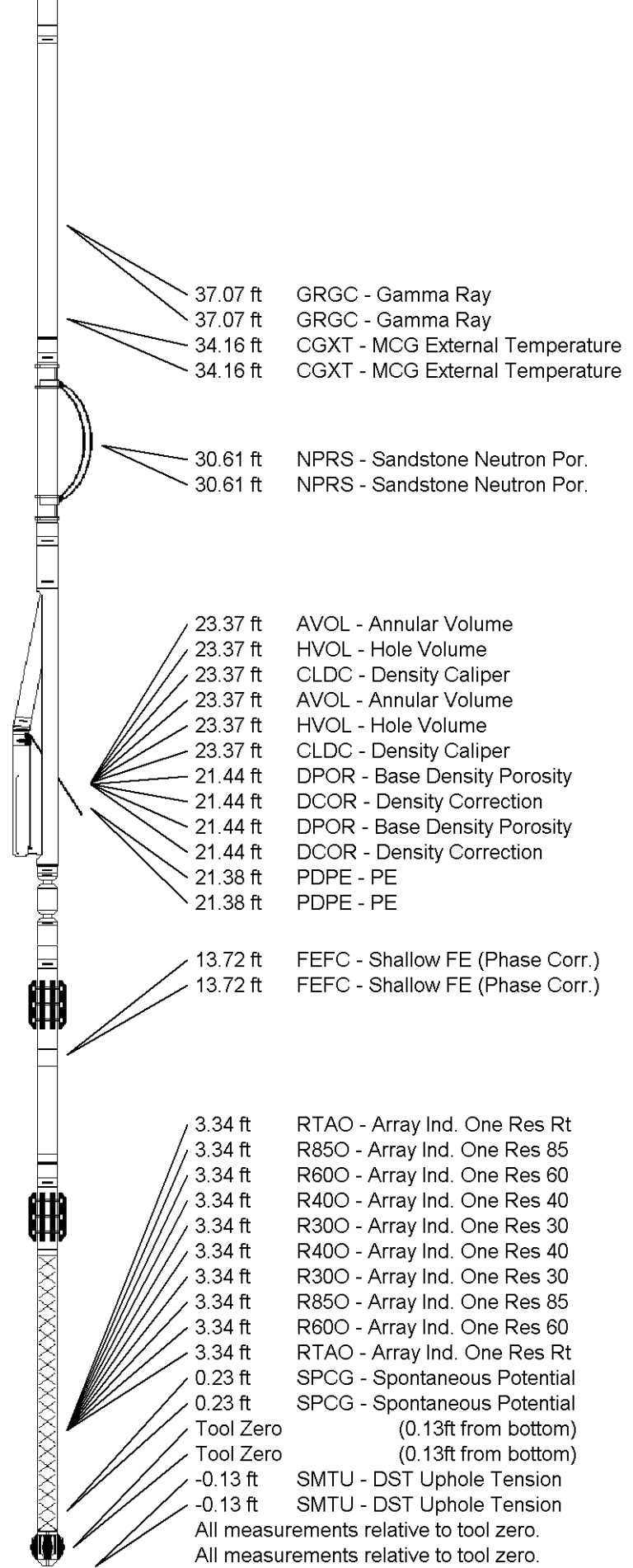
Compact Focussed Electric  
MFE-A.A 85 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

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

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

Total Length: 46.67 ft Weight: 368.2 lb

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COMPANY

WELL

FIELD

BILL BARRETT CORPORATION

KAUFMAN 13B-25-692

MAMM CREEK

FIELD MAMMI CREEK  
PROVINCE/COUNTY GARFIELD  
COUNTRY/STATE U.S.A. / COLORADO

Elevation Kelly Bushing	5945.00	feet	First Reading	7137.00	
Elevation Drill Floor	5944.00	feet	Depth Driller	7525.00	feet
Elevation Ground Level	5922.00	feet	Depth Logger	7140.00	feet



**Weatherford**<sup>®</sup>

COMPACT TRIPLE COMBO  
QUICKLOOK  
LOG

