



Weatherford[®]

COMPACT TRIPLE COMBO

QUICKLOOK

LOG

COMPANY BILL BARRETT CORPORATION

WELL GGU DALEY 31B-30-691

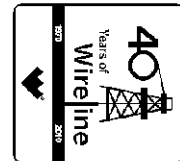
FIELD GIBSON GULCH

PROVINCE/COUNTY GARFIELD

COUNTRY/STATE U.S.A. / COLORADO

LOCATION SHL: 252' FSL & 2018' FWL

BHL: 850 FNL & 1983 FEL



SEC TWP 6S RGE 91W Other Services

API Number 05-045-19583

Permit Number Permanent Datum G.L., Elevation 5824 feet

Log Measured From K.B. @ 23 FEET above Permanent Datum

Drilling Measured From K.B.

Date 19-APR-2011

Run Number ONE

Depth Driller 7678.00 feet

Depth Logger 7687.00 feet

First Reading 7683.50

Last Reading 849.00

Casing Driller 849.00 feet

Casing Logger 850.00 feet

Bit Size 7.875 inches

Hole Fluid Type LSND

Density / Viscosity 10.70 lb/USg 55.00 CP

PH / Fluid Loss 8.90 6.00 ml/30Min

Sample Source FLOW LINE

Rm @ Measured Temp 2.40 @ 99.0 ohm-m

Rmf @ Measured Temp 1.92 @ 99.0 ohm-m

Rmc @ Measured Temp 2.88 @ 99.0 ohm-m

Source Rmf / Rmc CALC CALC

Rm @ BHT 1.29 @ 186.0 ohm-m

Time Since Circulation 5 HOURS

Max Recorded Temp 186.00 deg F

Equipment Name COMPACT

Equipment / Base 13173 GD JCT

Recorded By M.RICHINS

Witnessed By C.CROW

Elevations:
KB 5847.00 feet
DF 5847.00
GL 5824.00

BOREHOLE RECORD

Last Edited: 19-APR-2011 17:44

Bit Size inches	Depth From feet	Depth To feet
8.750	849.00	5386.00
7.875	5386.00	7678.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	9.625	0.00	849.00	36.00

REMARKS

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 MAI.
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.

VARIABILITY IN REPEAT SECTION DUE TO DIFFERENCE IN CALIPER AXIS ORIENTATION

CALIPER CHECK IN CASING PRESENTED, REFERENCE I.D. = 9.03" (9 5/8", 36 LB/FT CASING)

8.75 INCH BIT CHANGE AT 5386 FT.

TOTAL HOLE VOLUME FROM TD TO SURFACE CASING = 2950 CU.FT.

ANNULAR VOLUME WITH 4.5 INCH PRODUCTION CASING = 2200 CU.FT.

ENGINEER(S): M.RICHINS, O. GOYZUETA(JFE), K. SALLER (JFE)

OPERATOR(S): D. DALEY, J. YOAKUM

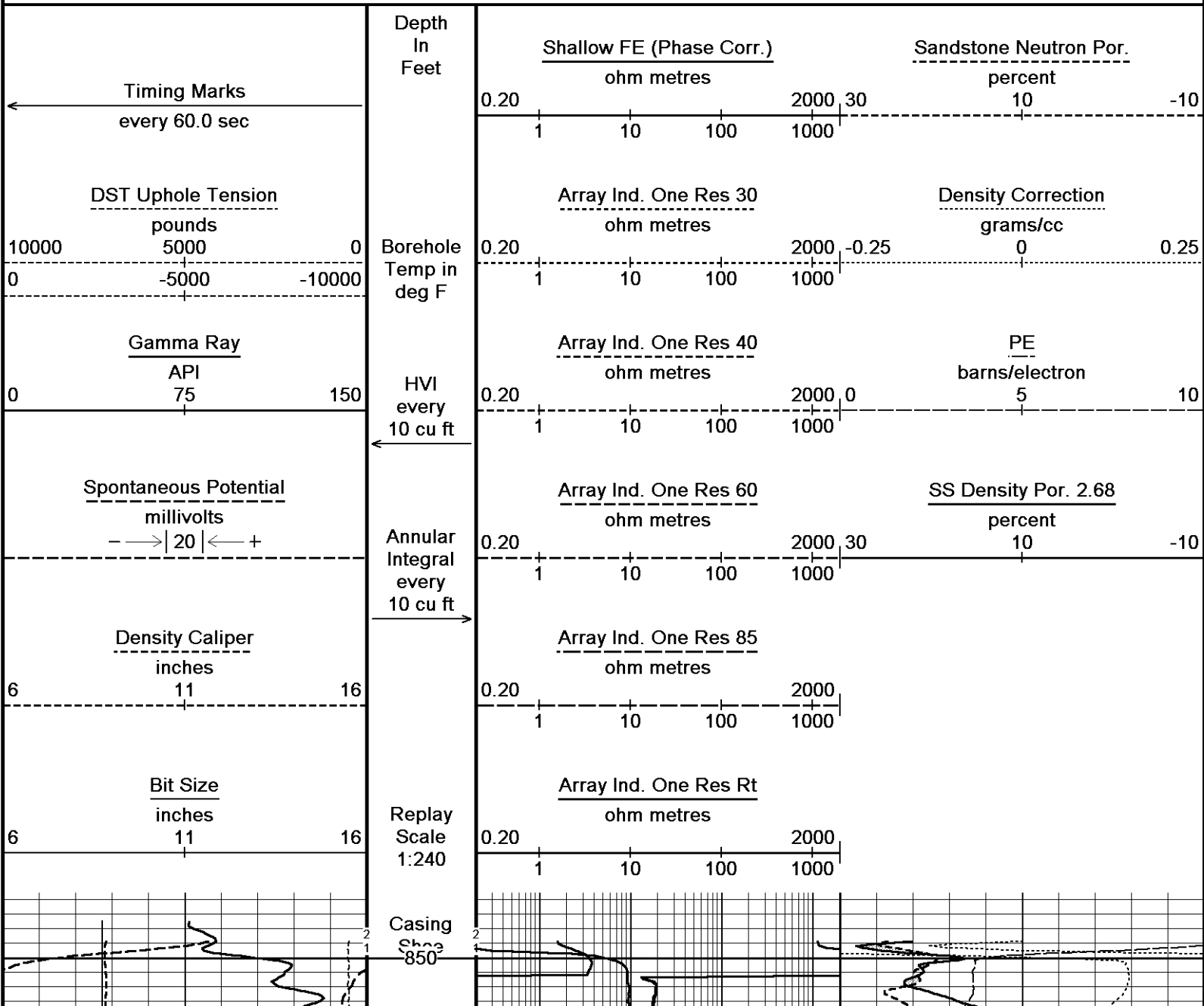
SERVICE ORDER: # 3524877

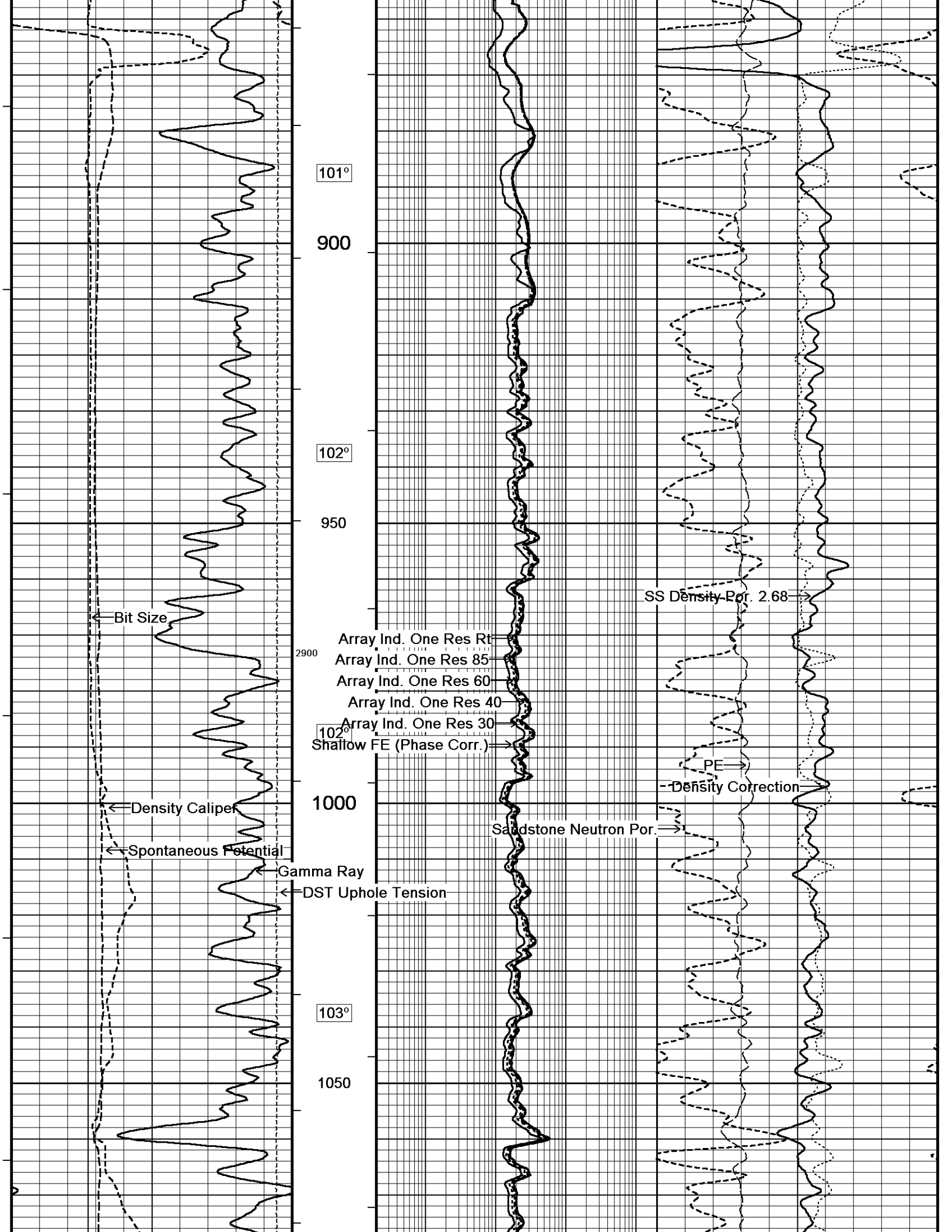
RIG: PATTERSON #307

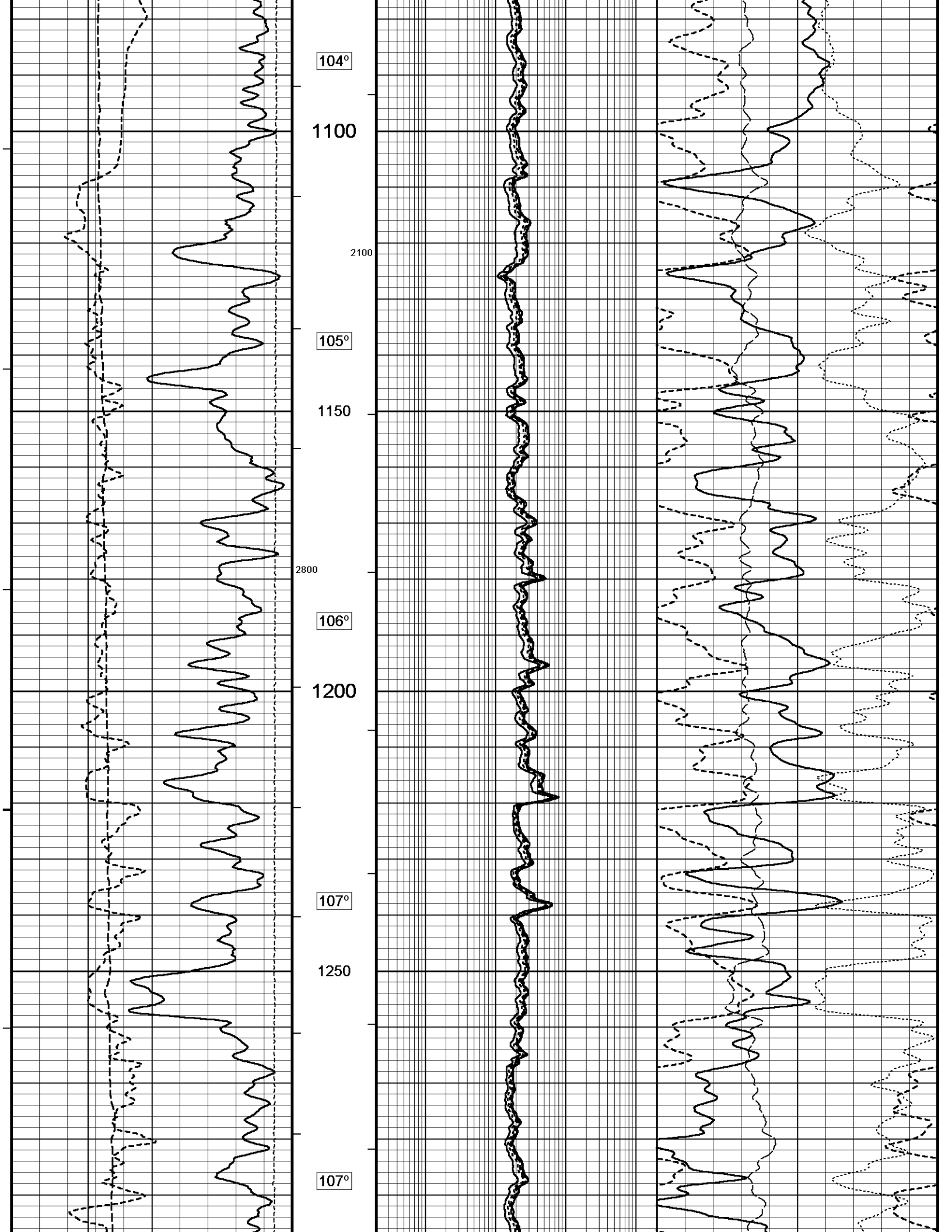
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

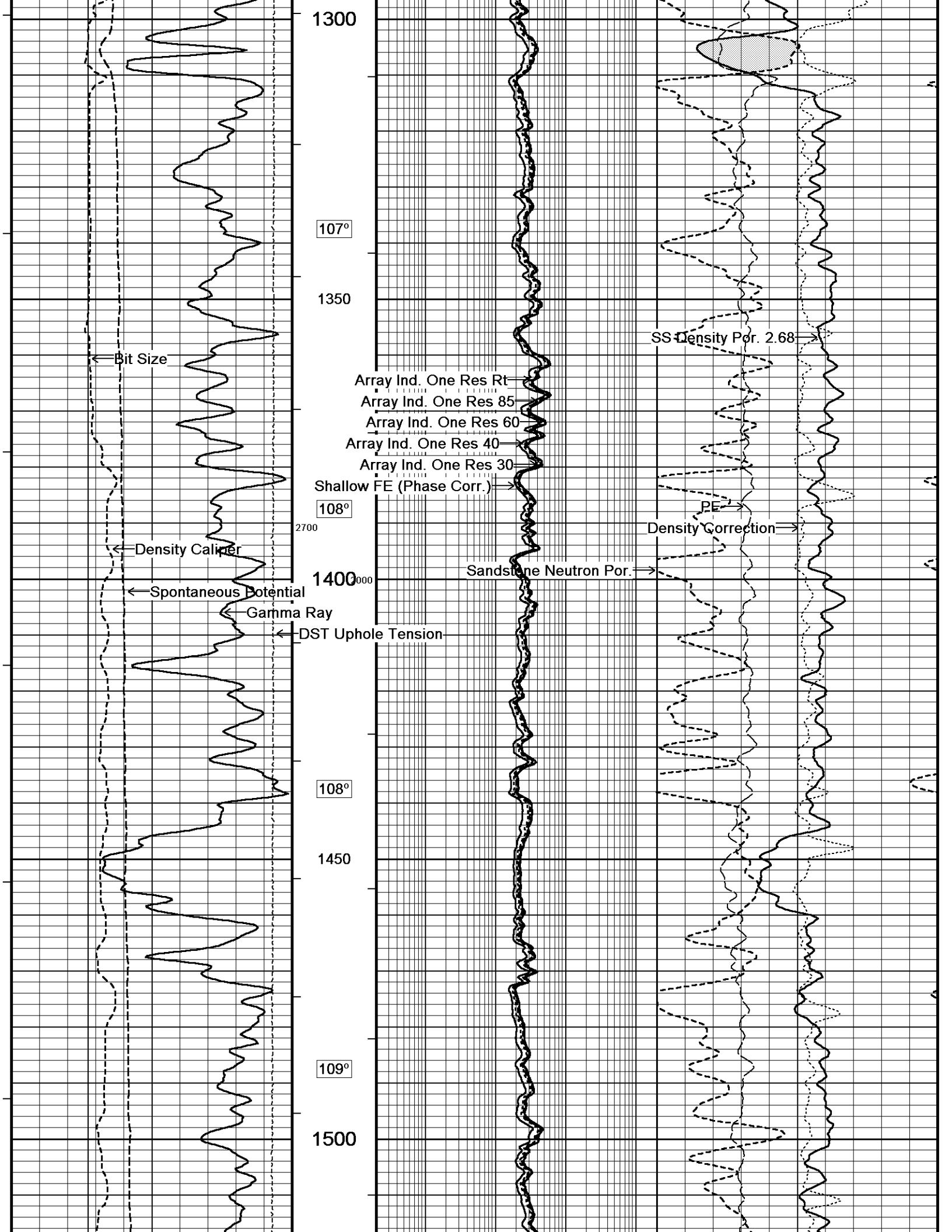
5 INCH MAIN LOG

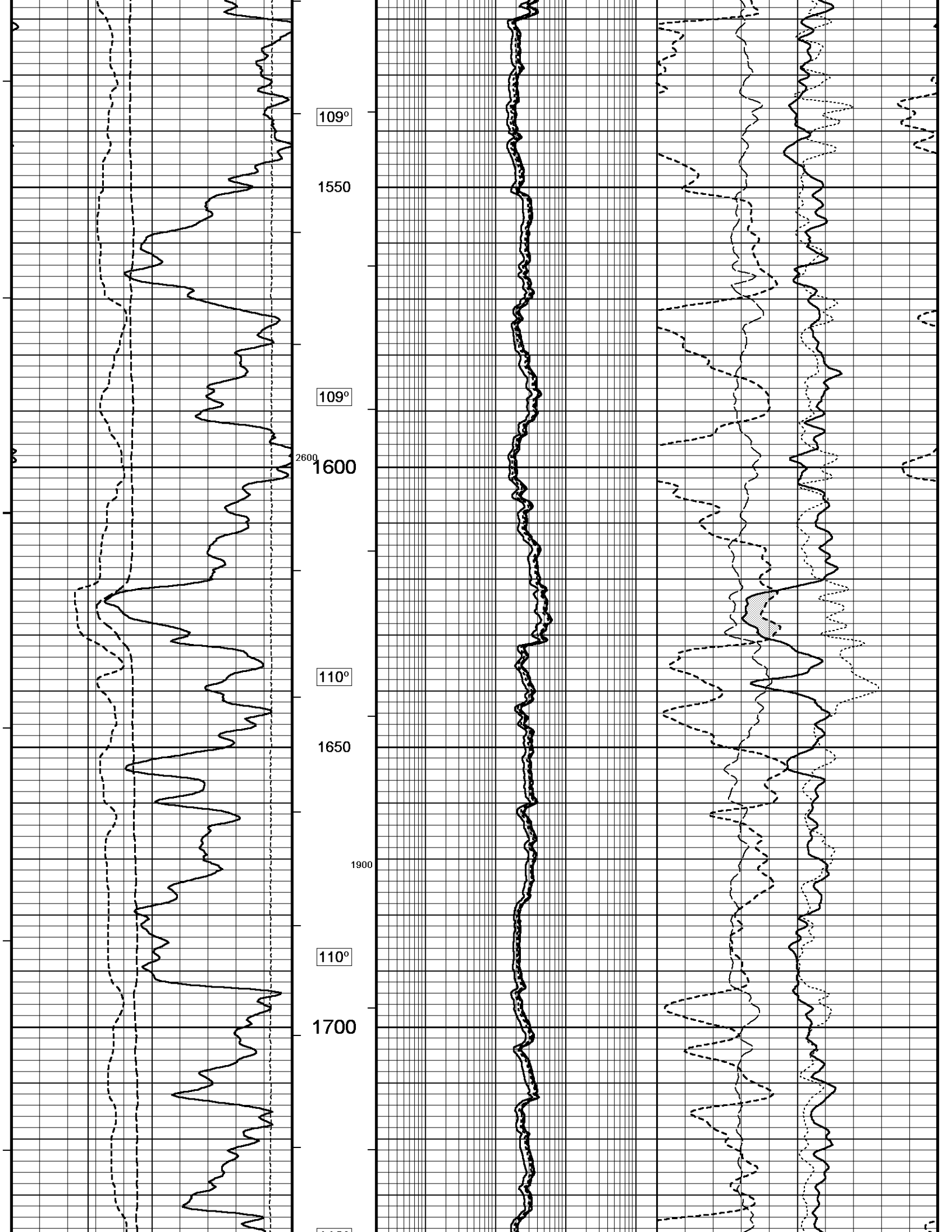
Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 20-APR-2011 01:04
 Filename: C:\LOGS\Bill Barrett\GGU Daley 31B-30-691\main.dta Recorded on 19-APR-2011 20:35
 System Versions: Logged with 11.02.2782 Plotted with 11.02.2782

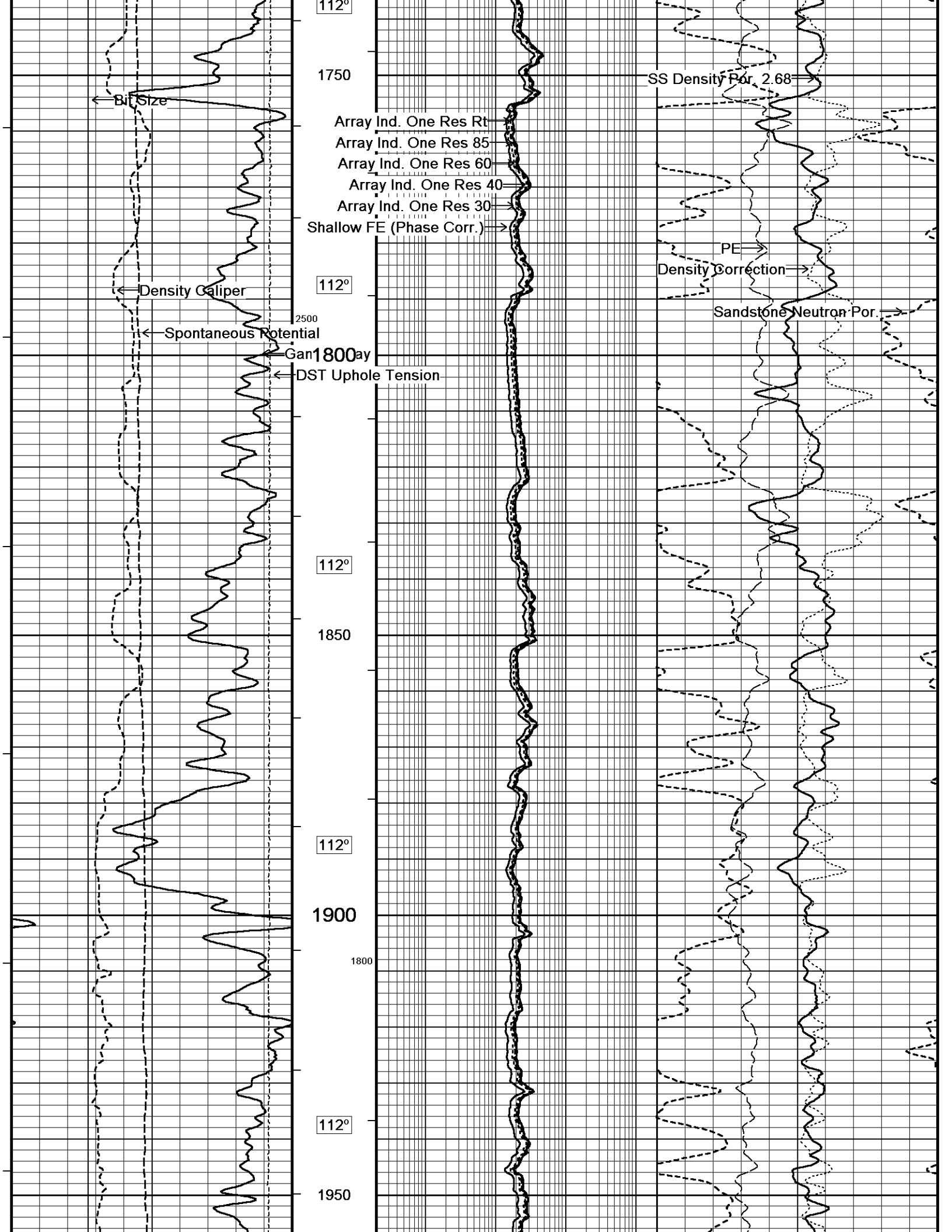


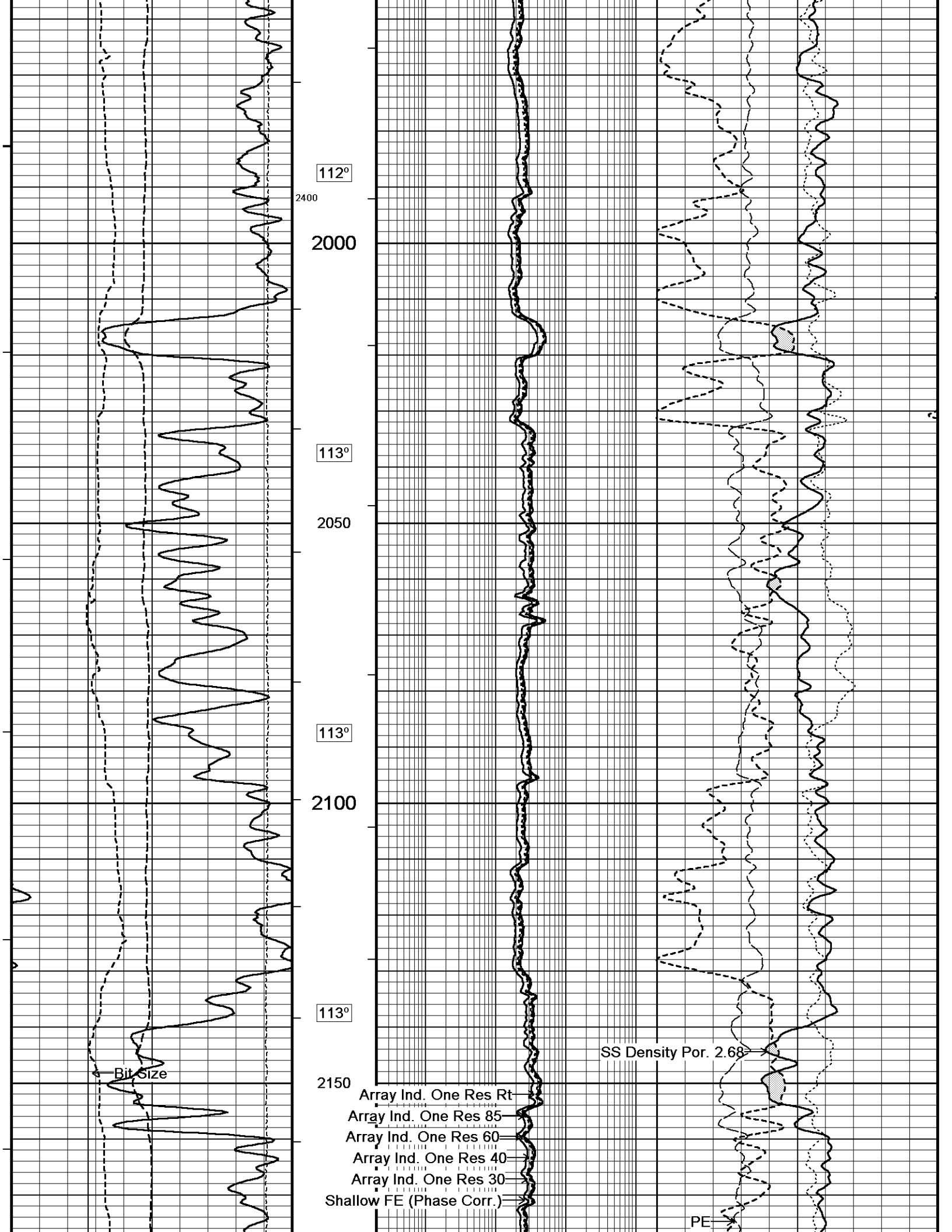


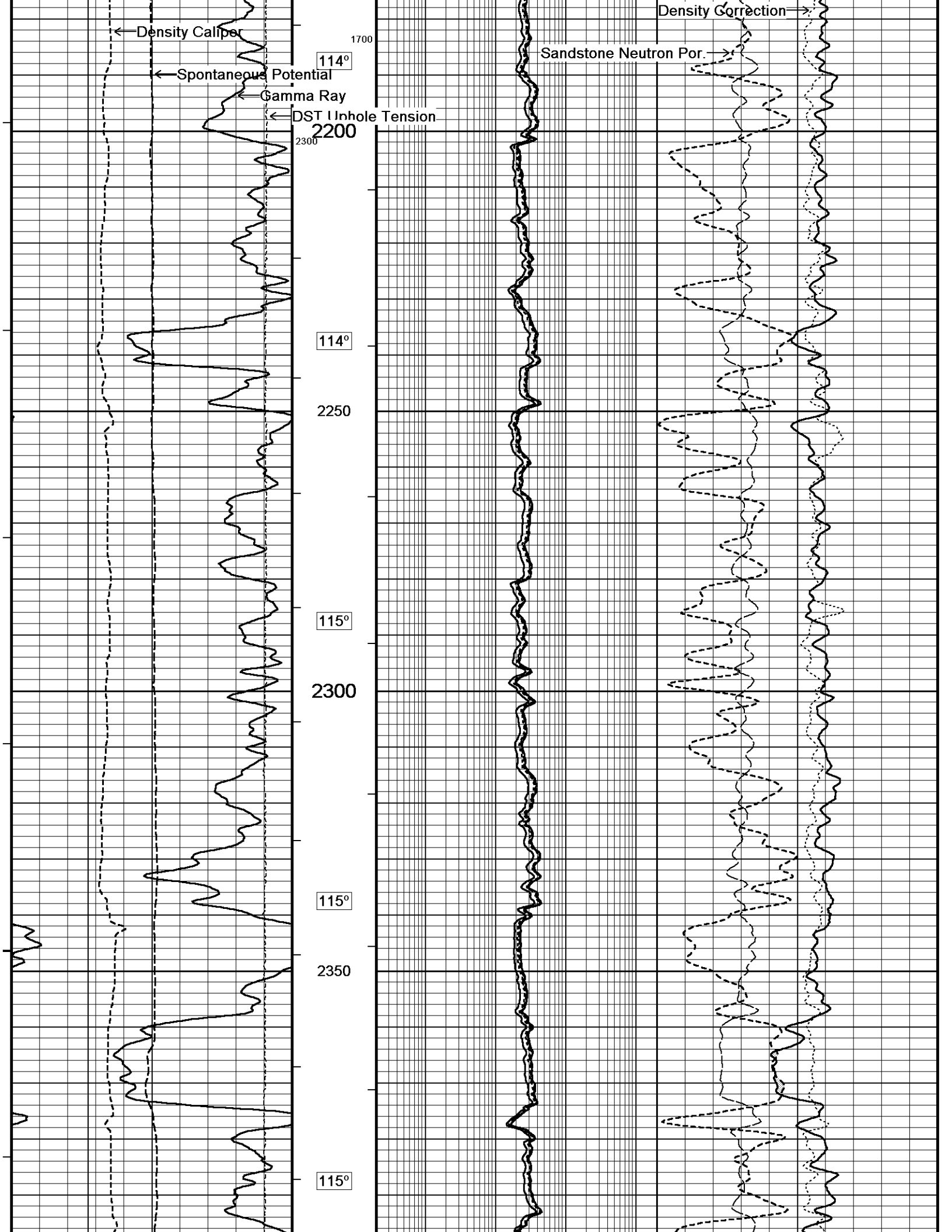


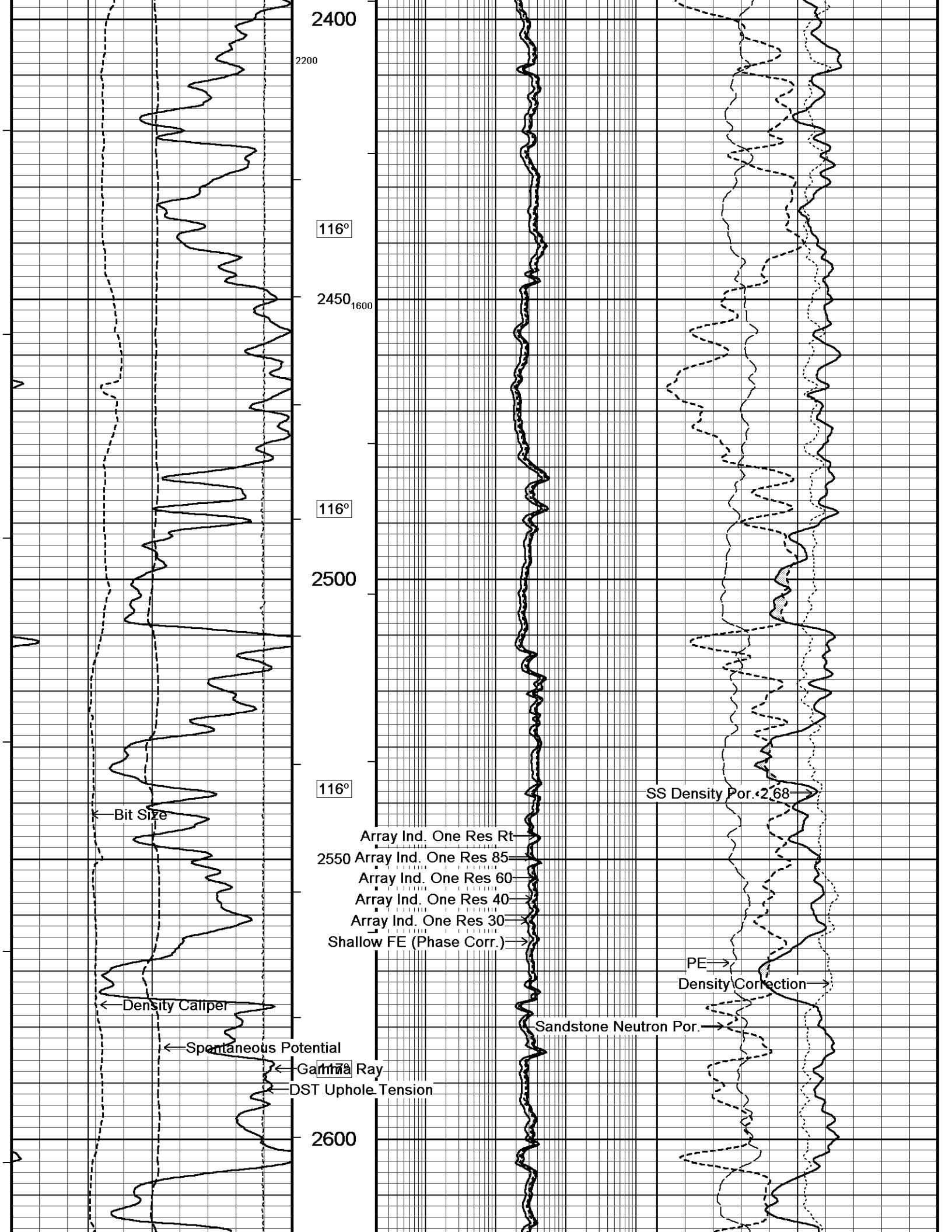


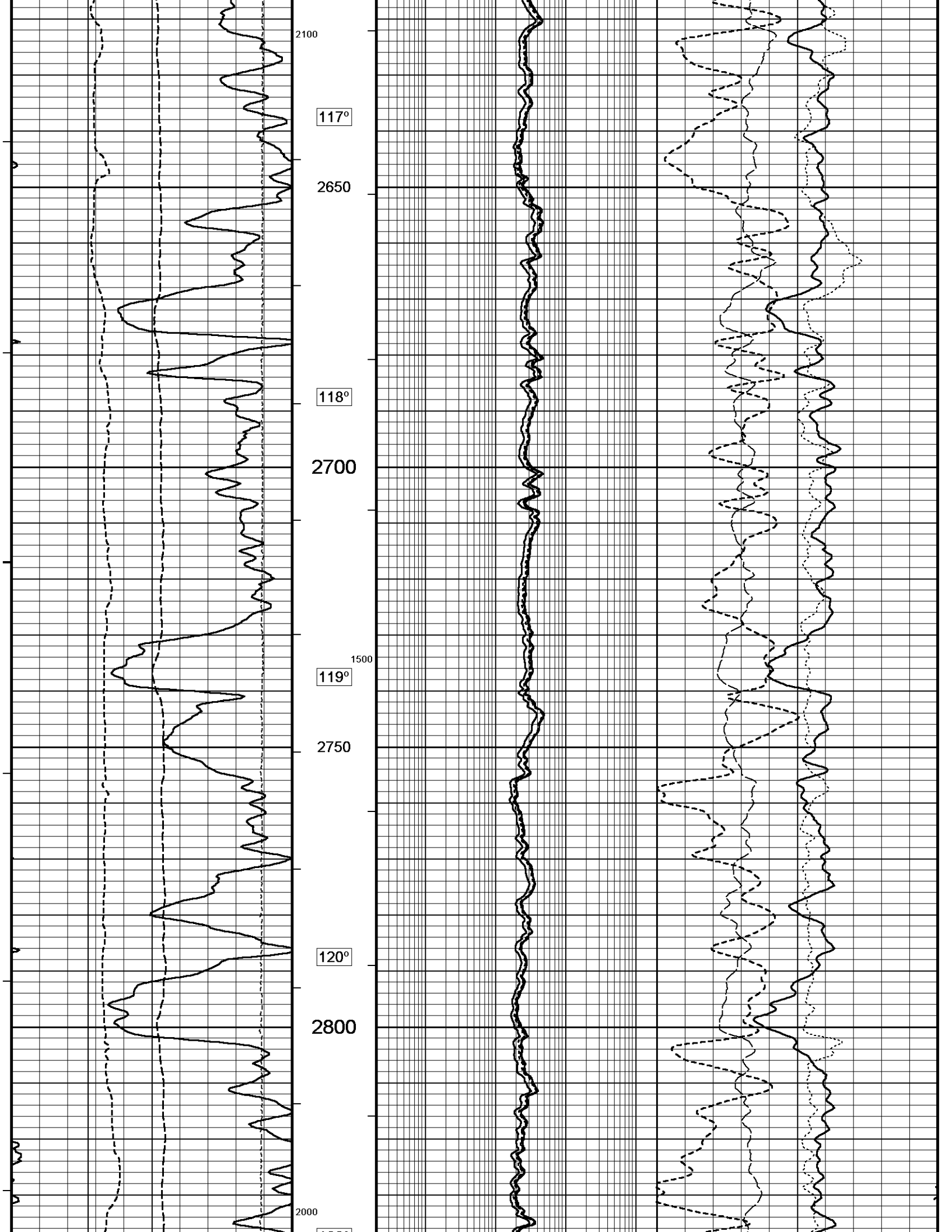


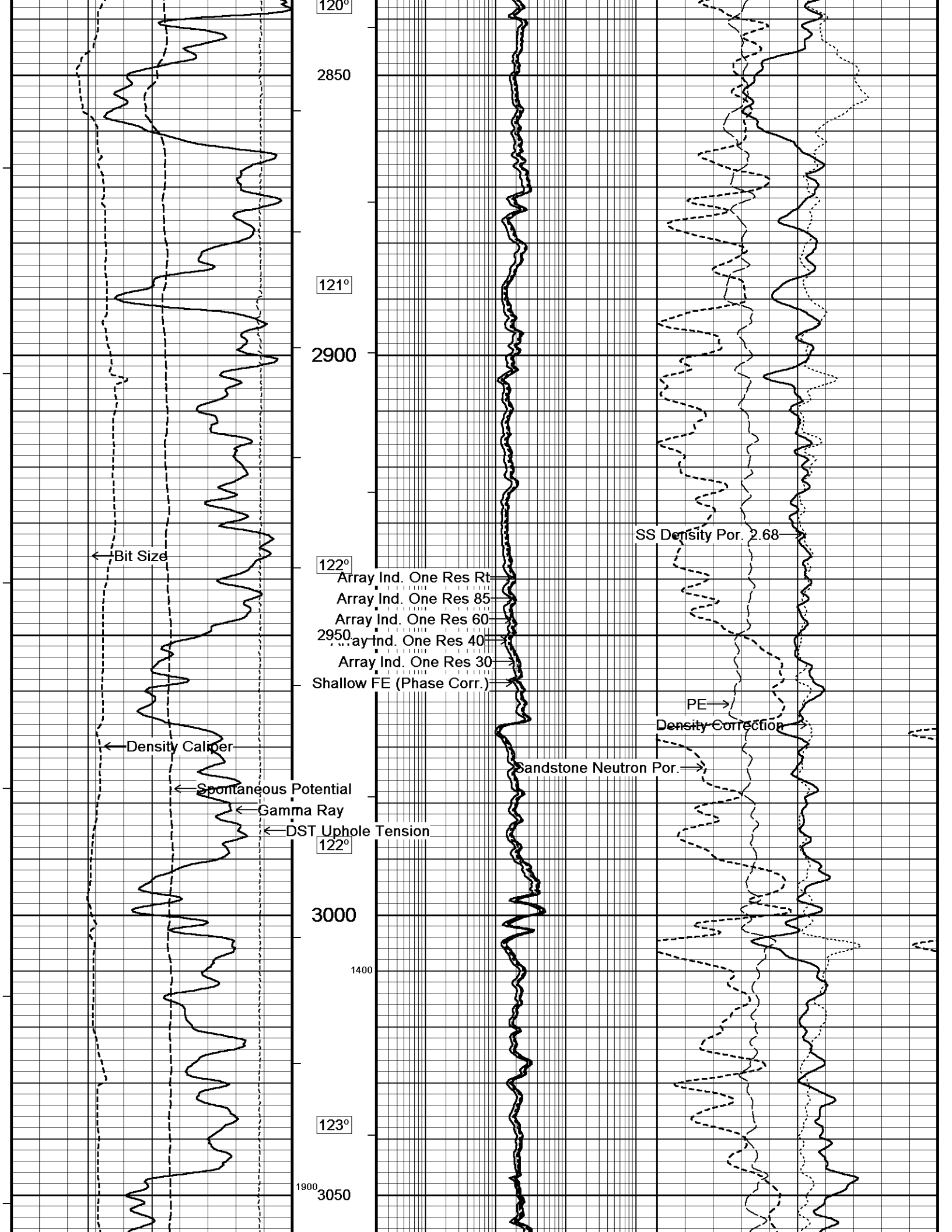


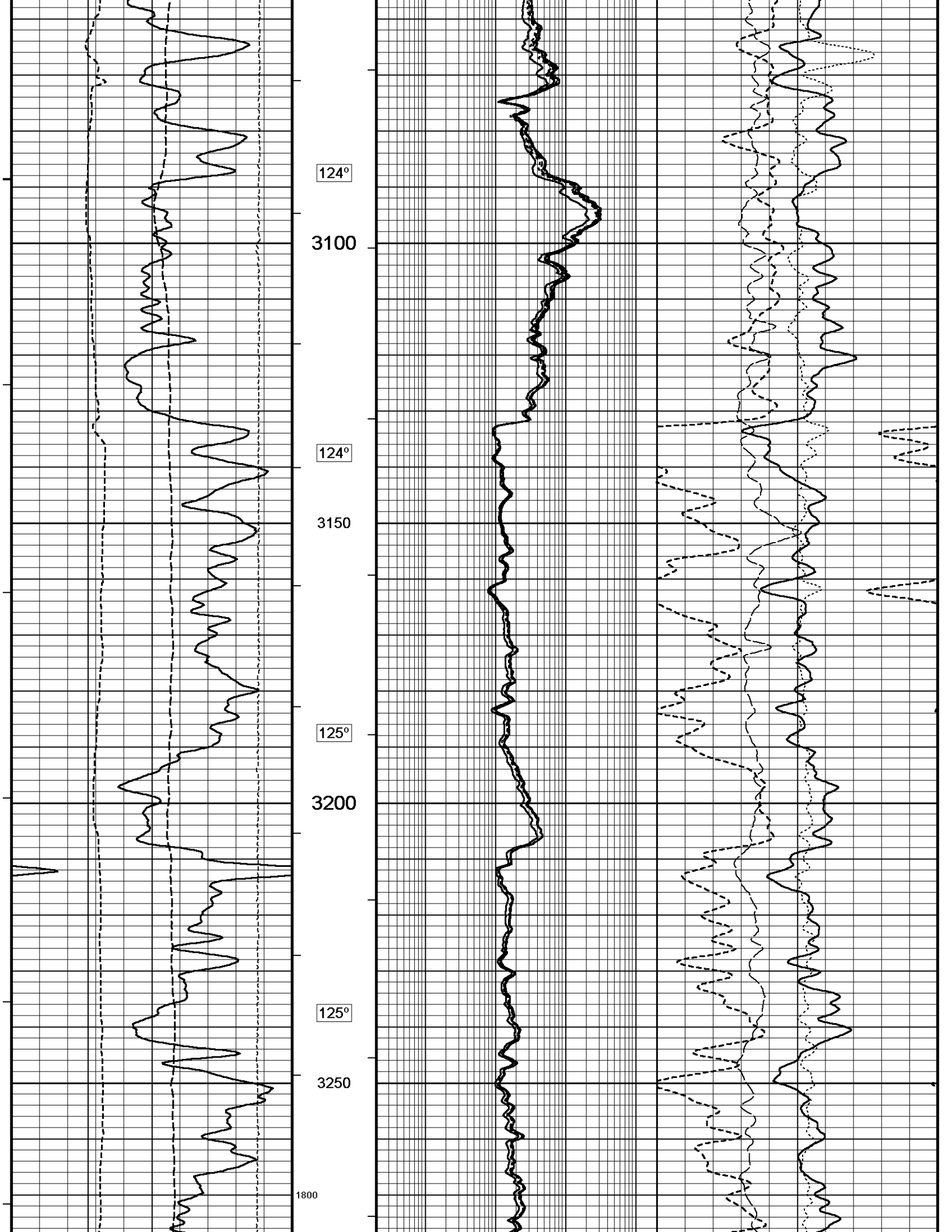


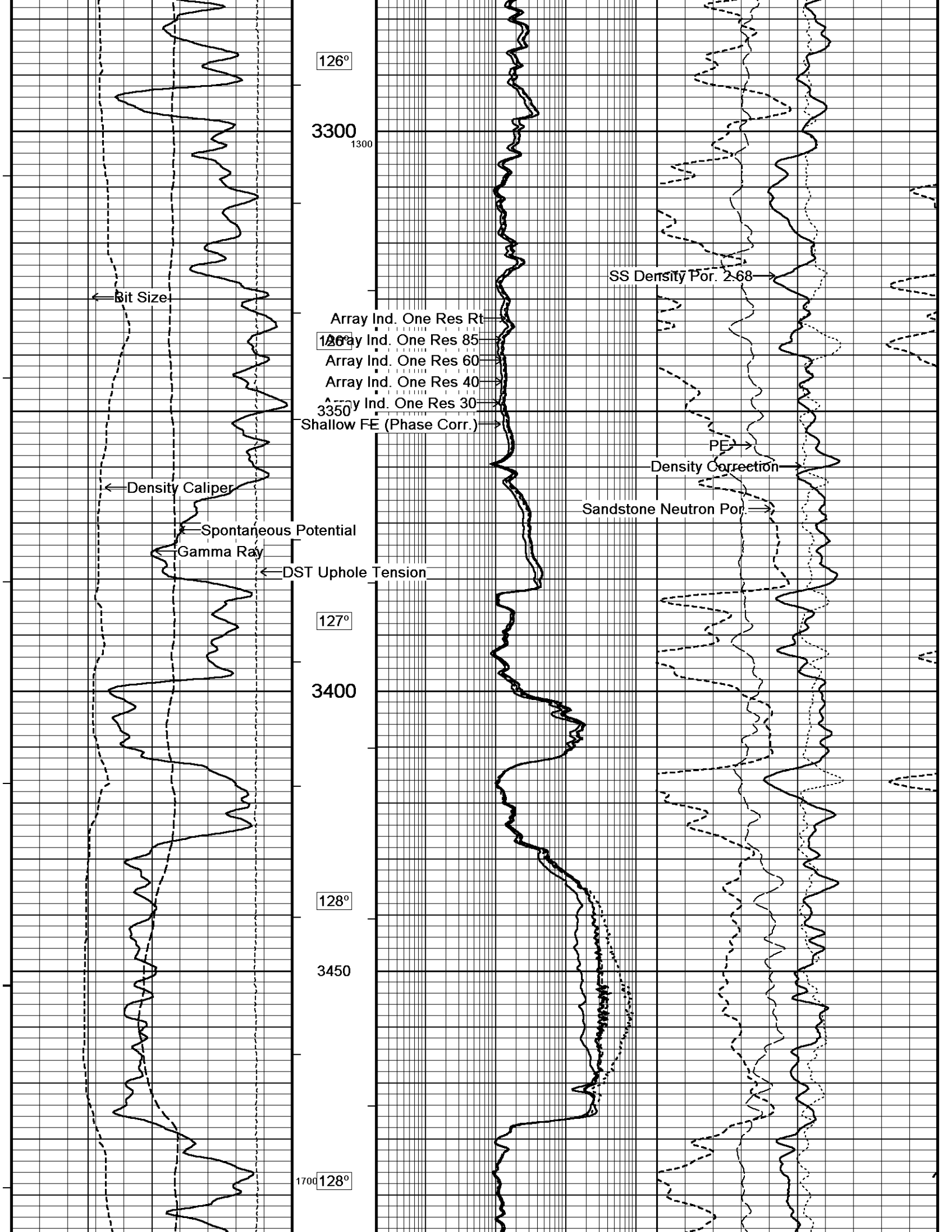


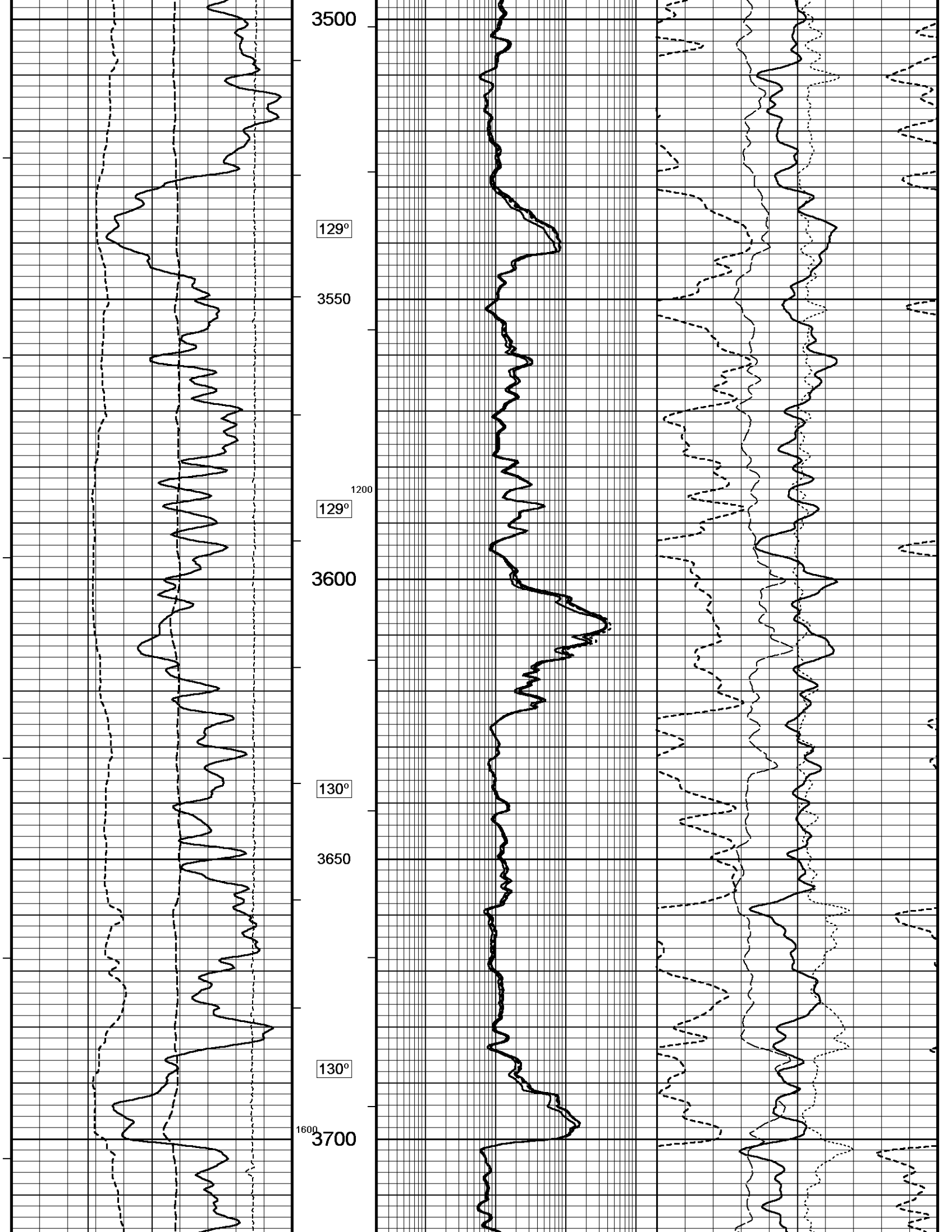


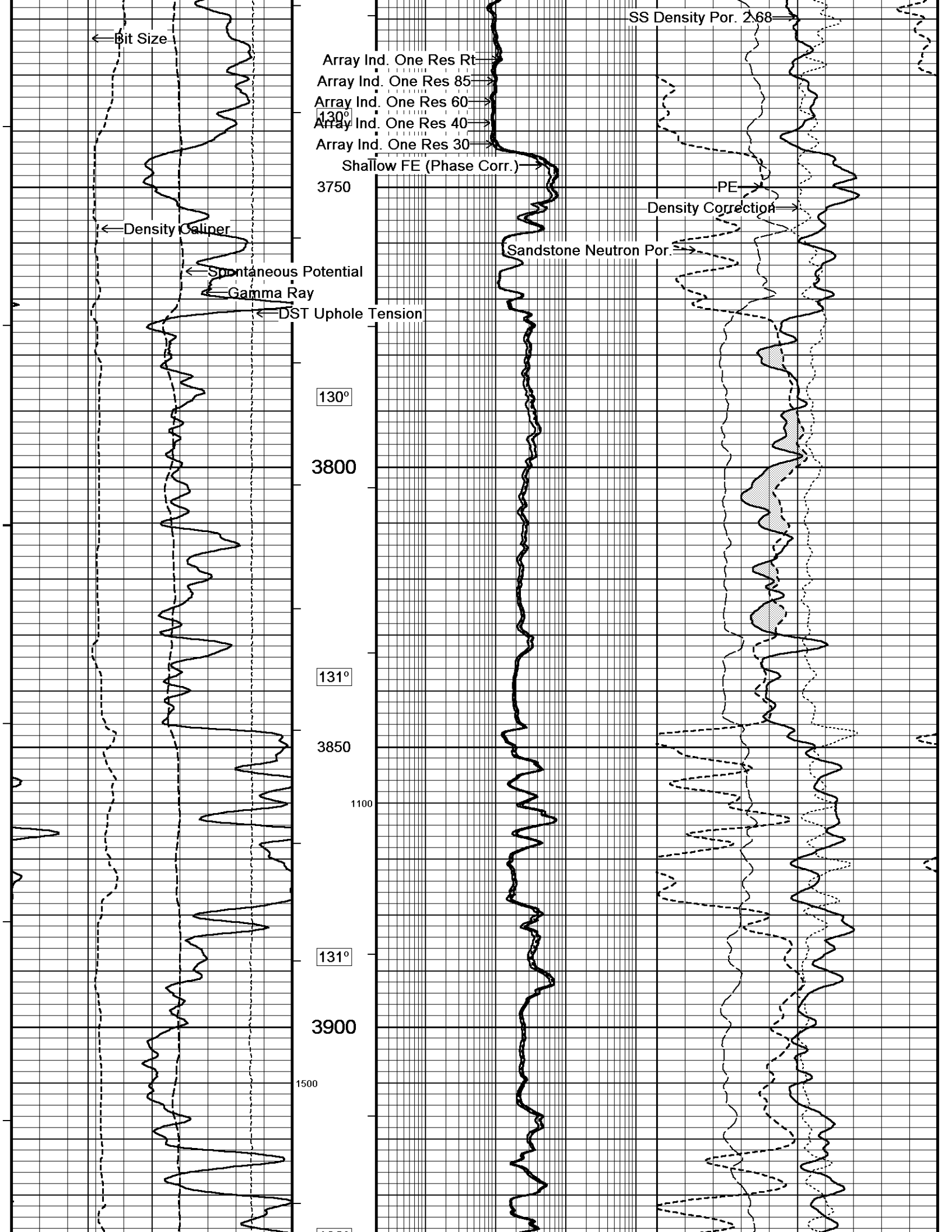


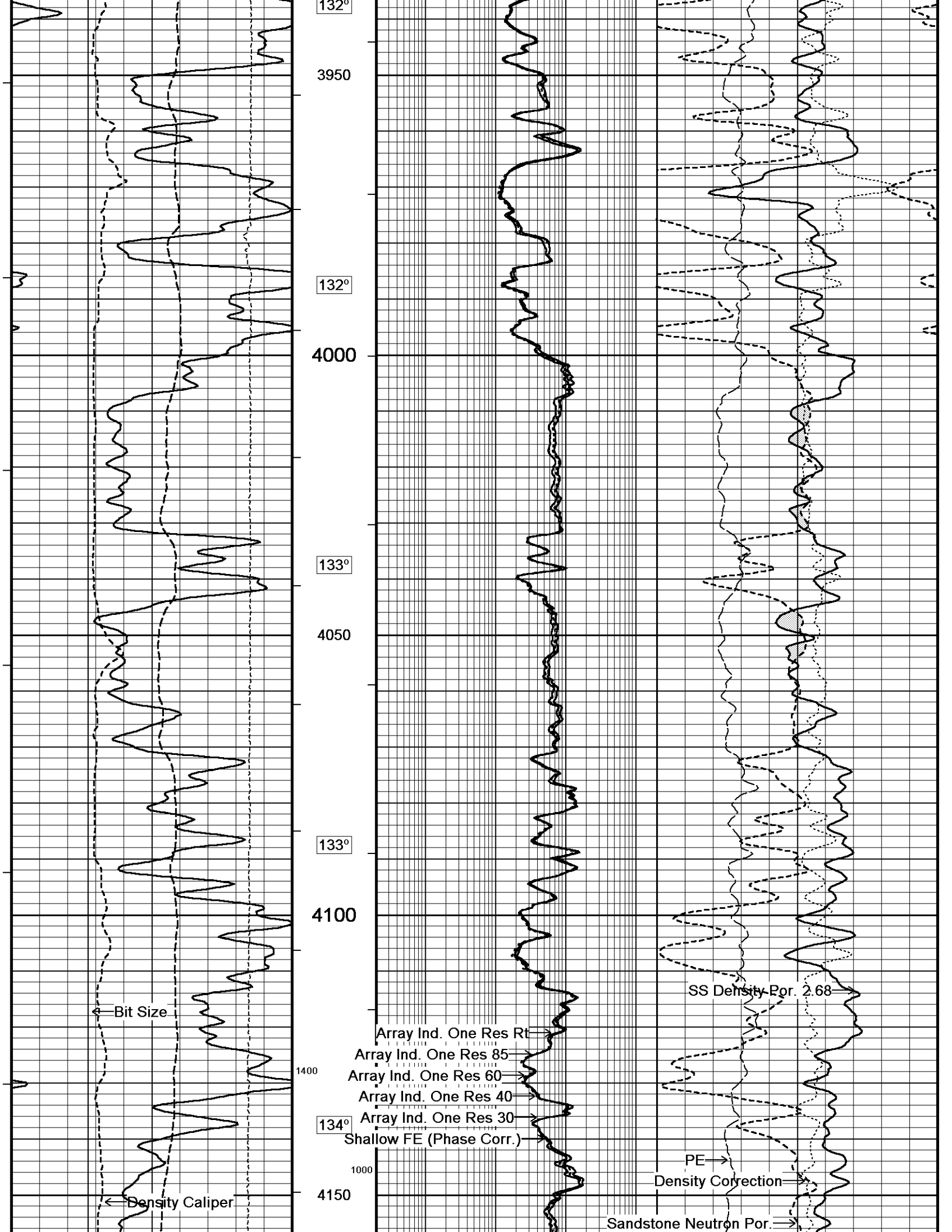


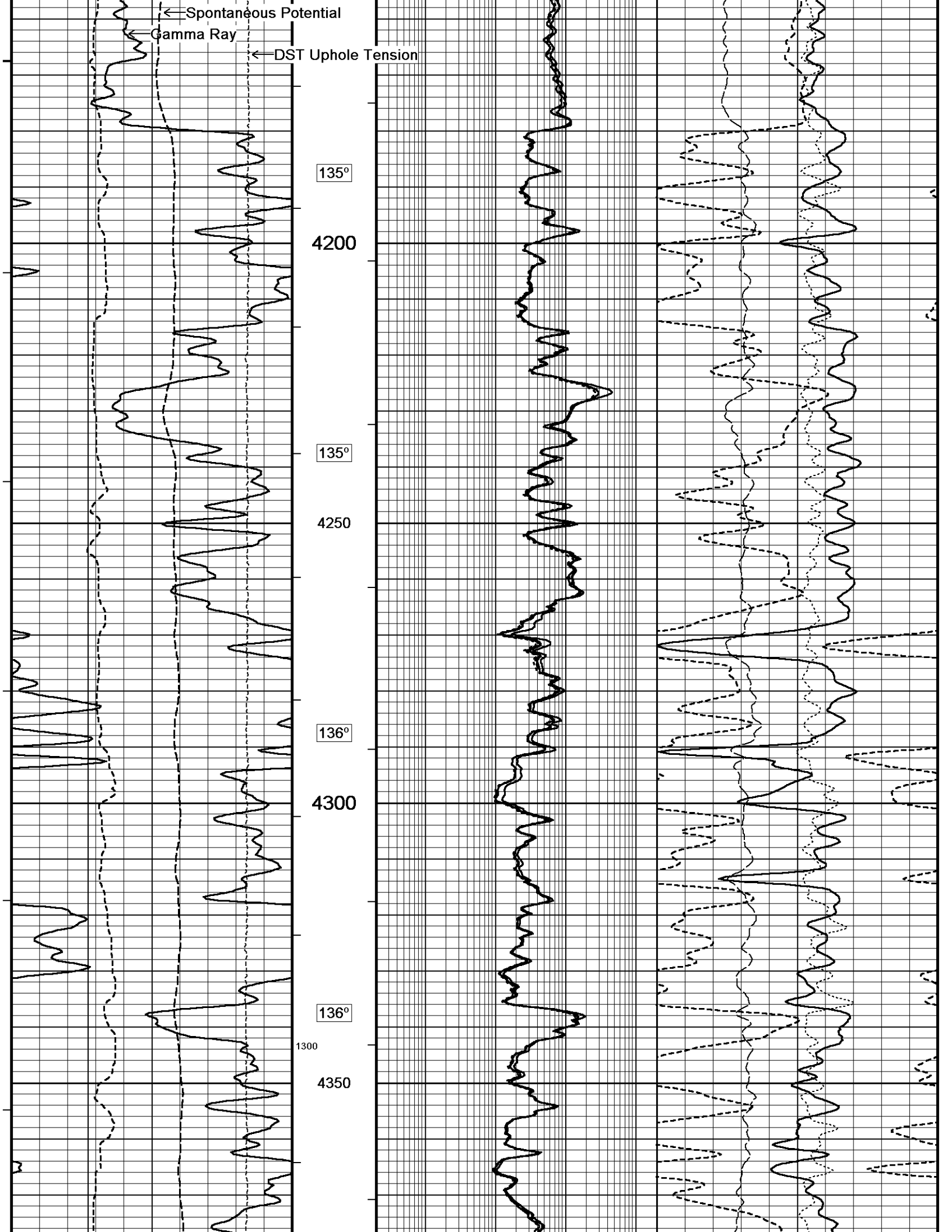


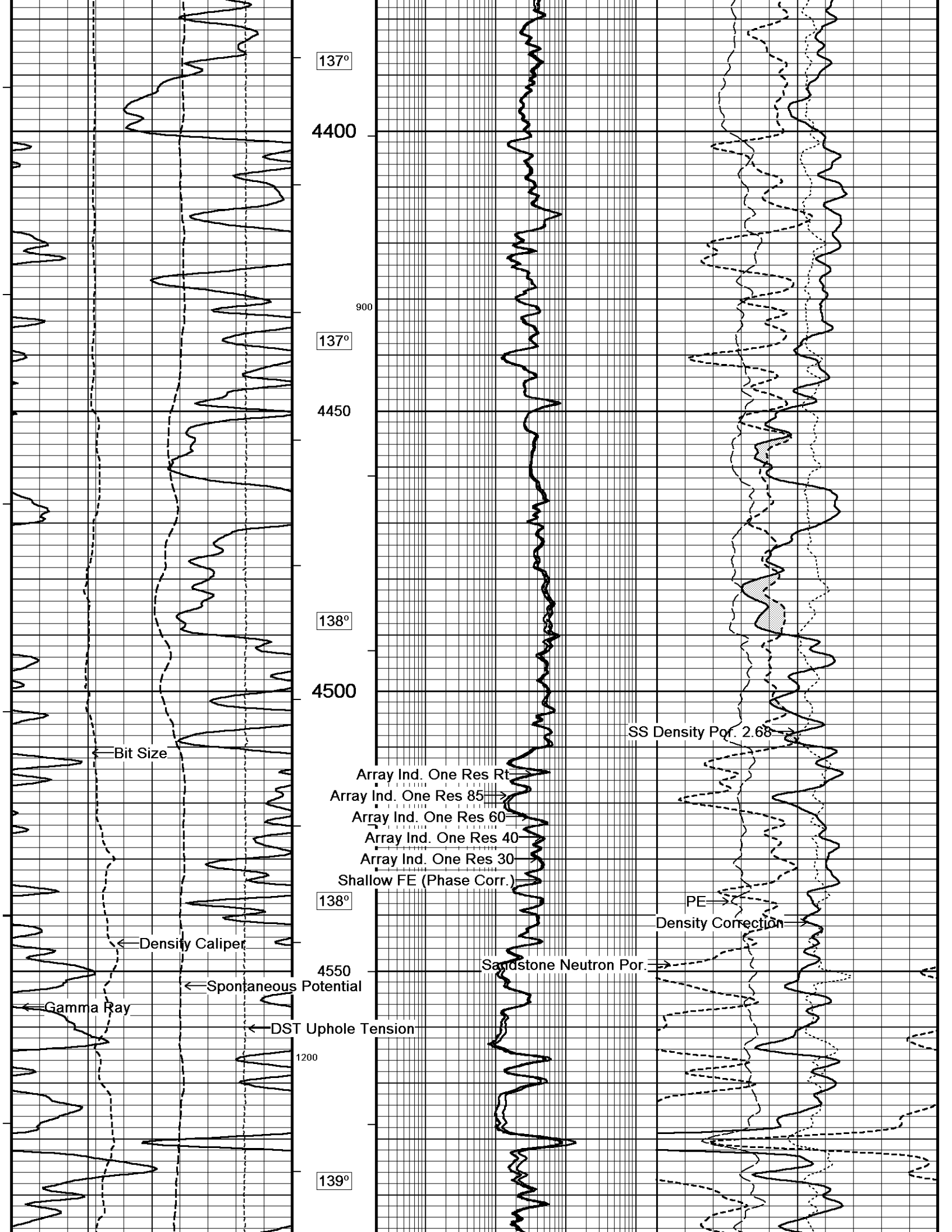


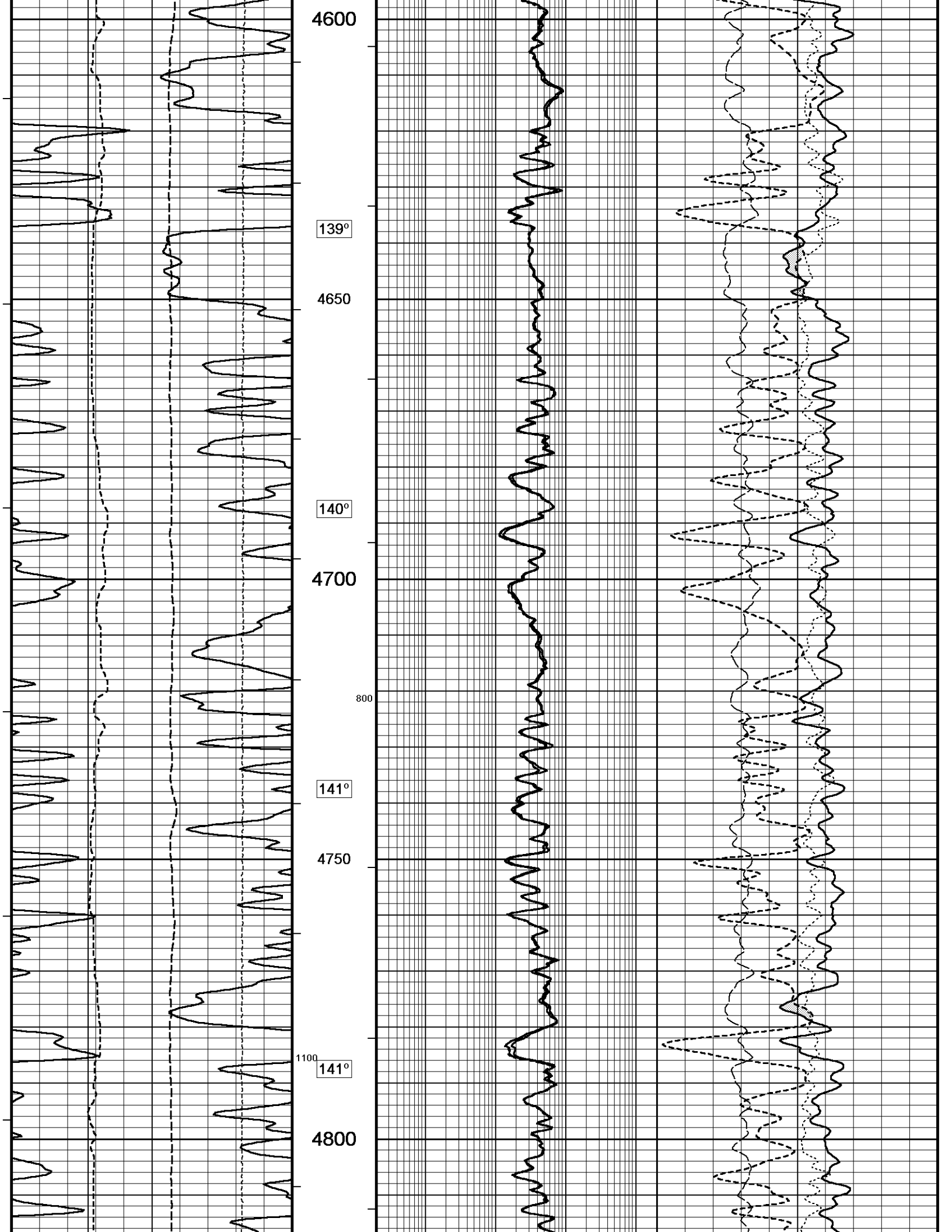


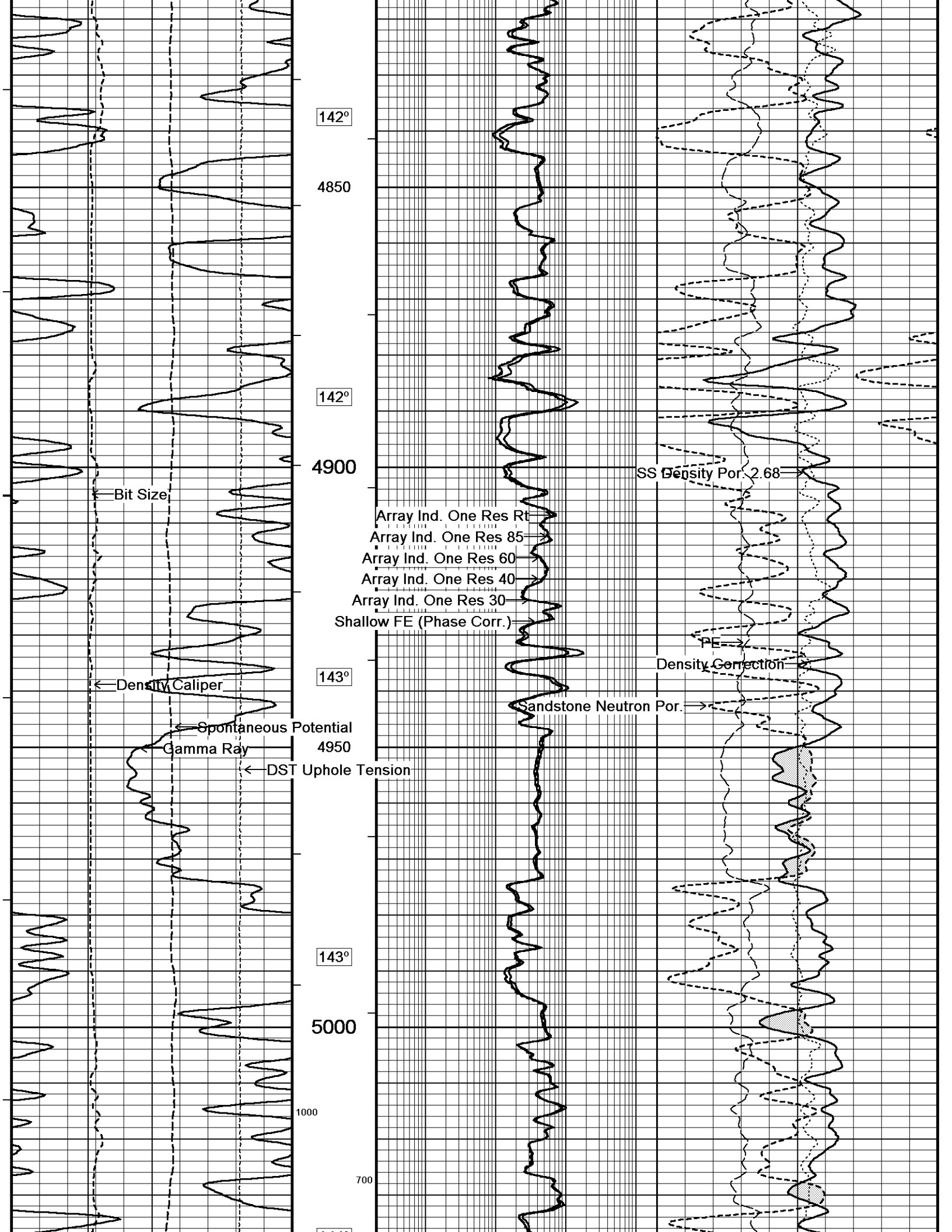


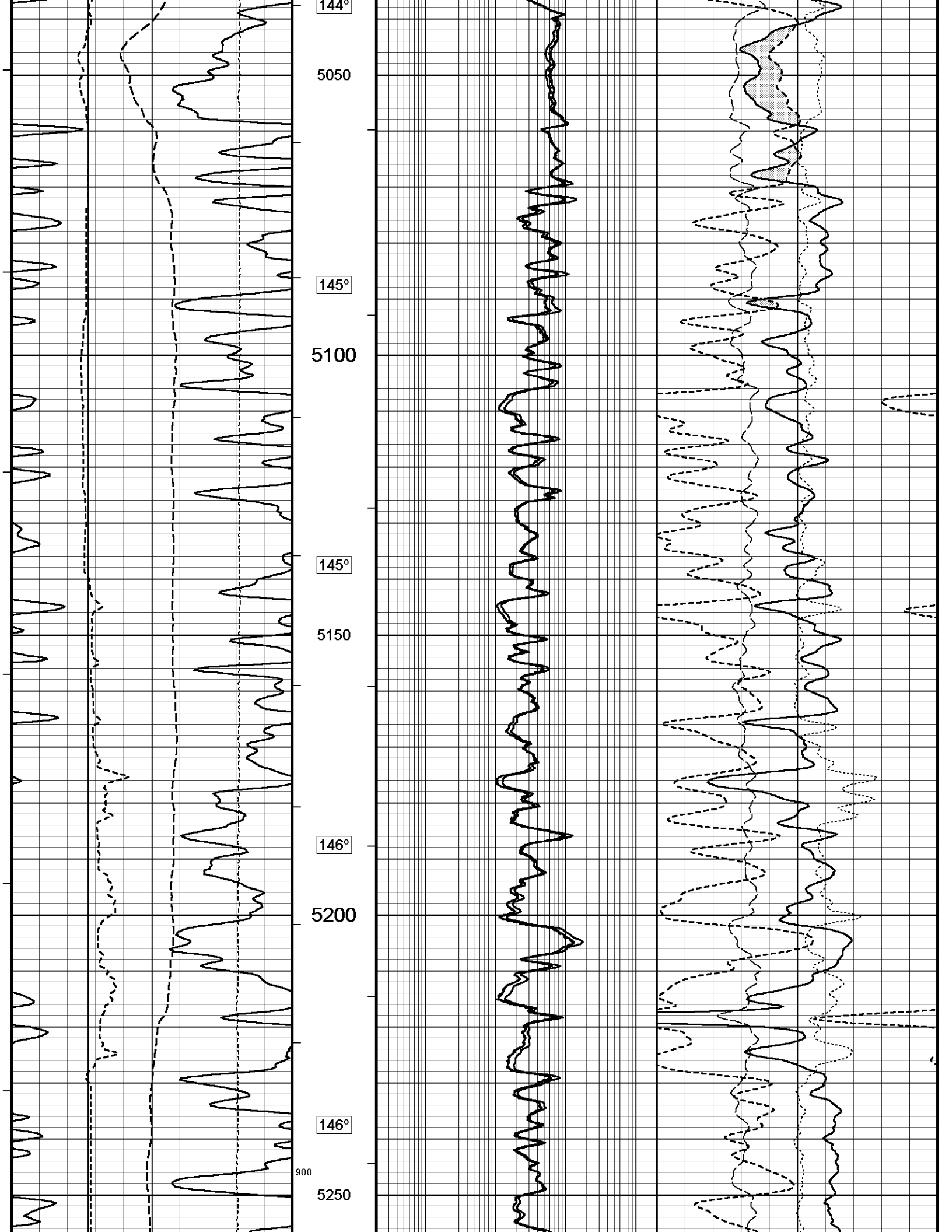


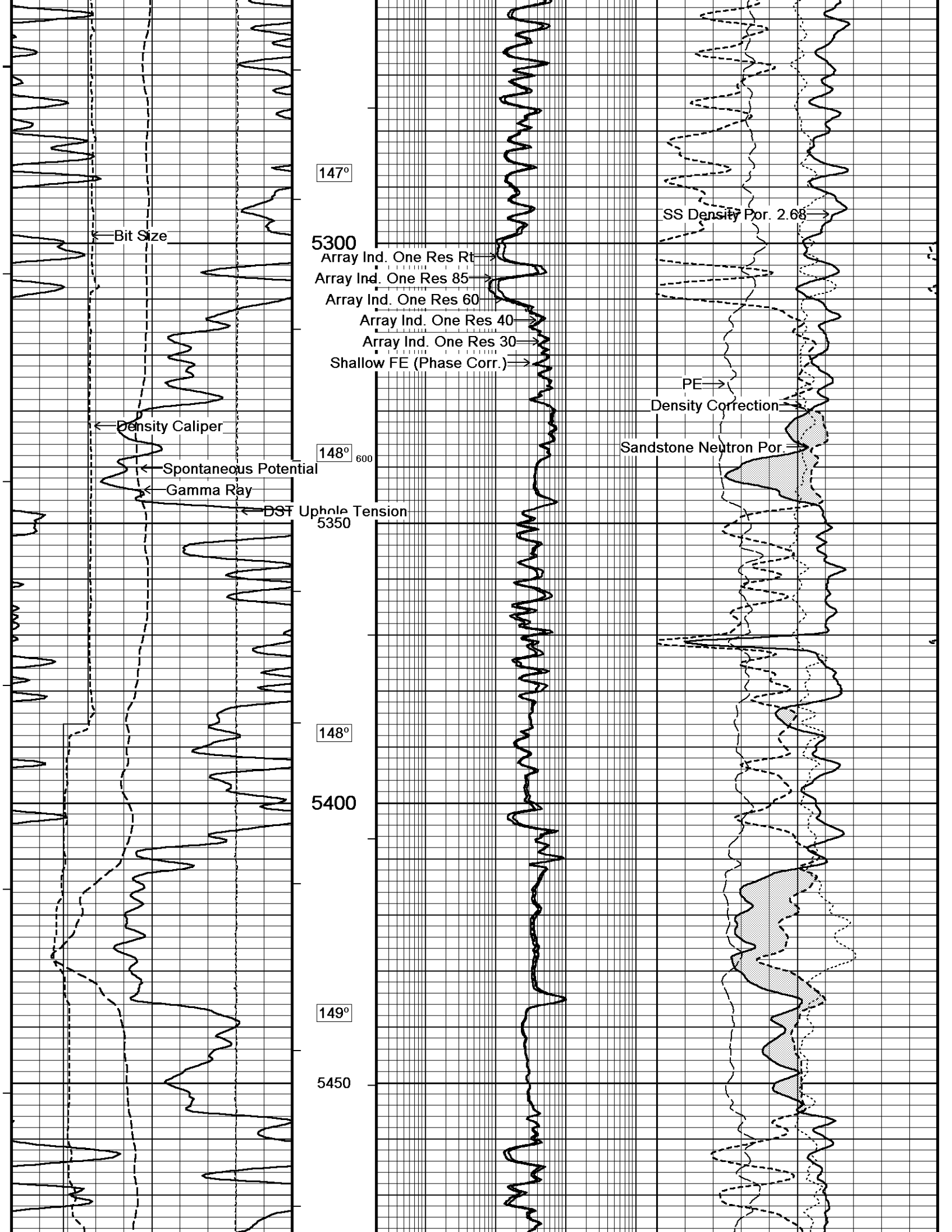


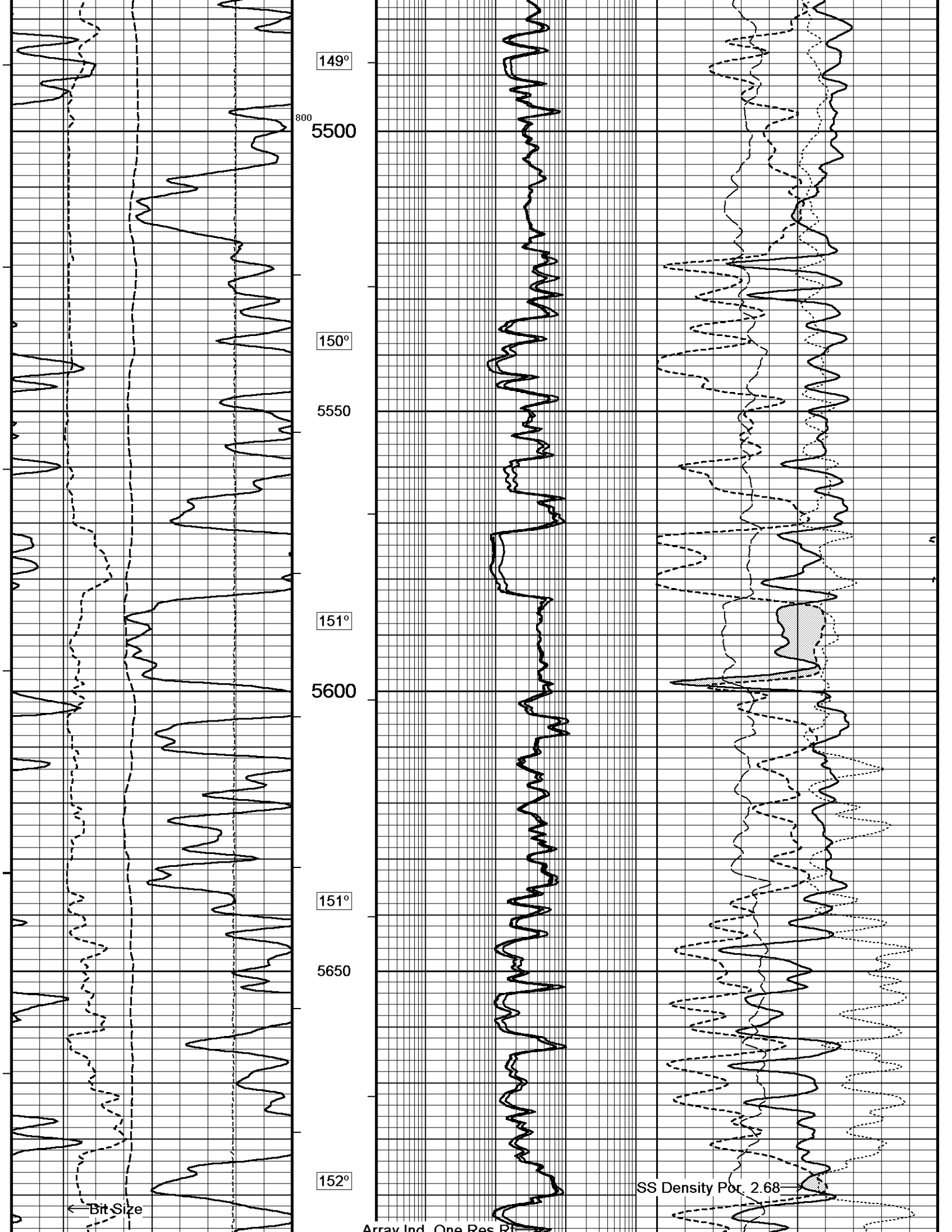












149°

800
5500

150°

5550

151°

5600

151°

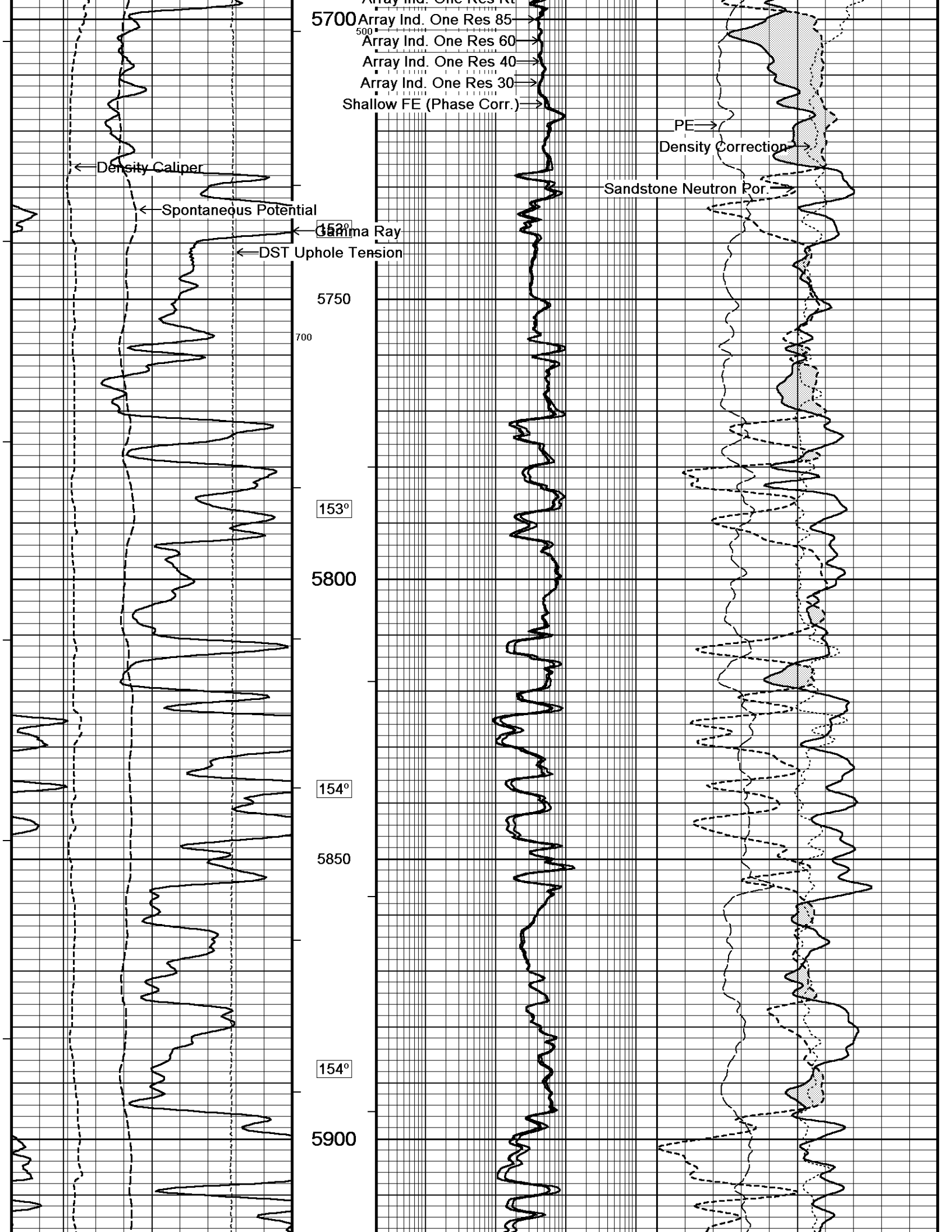
5650

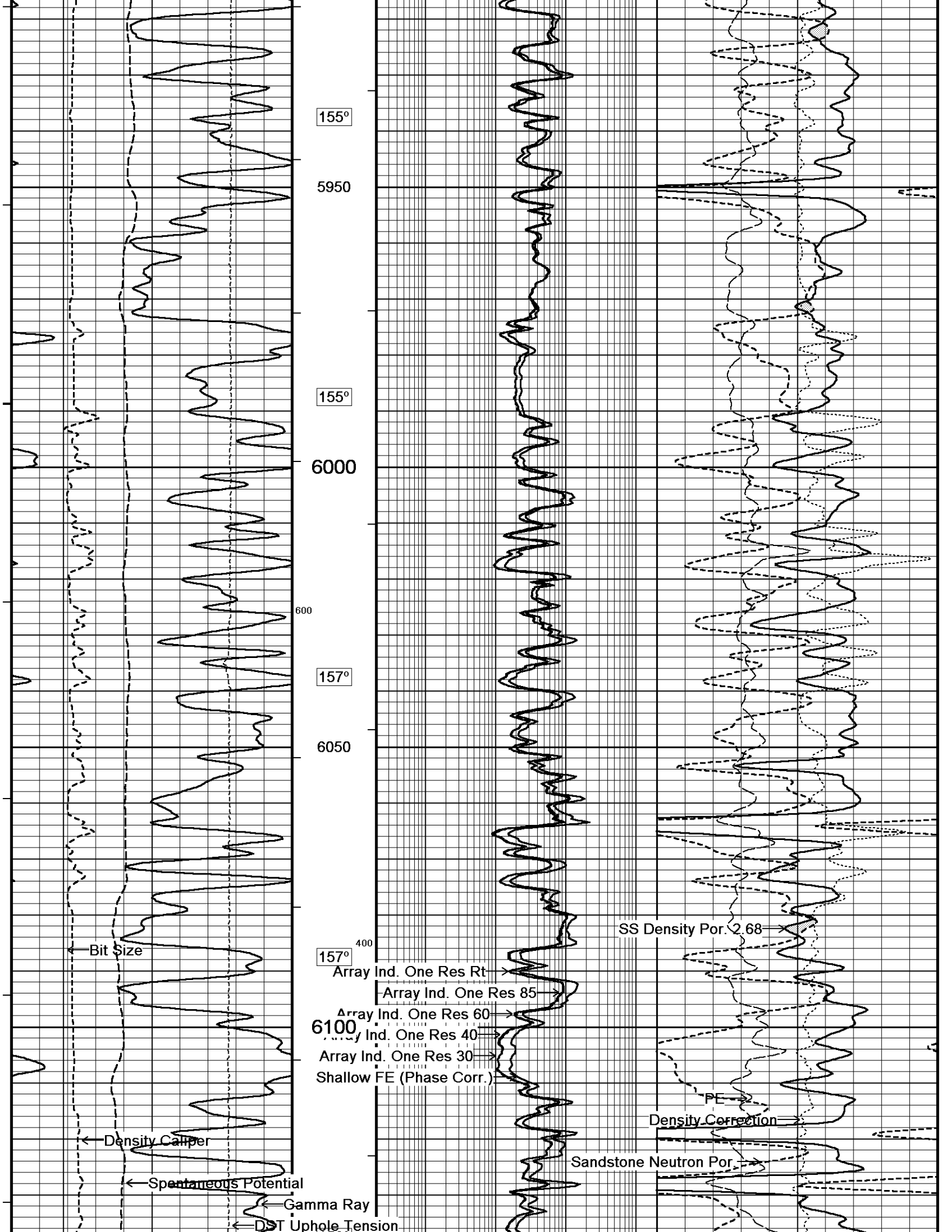
152°

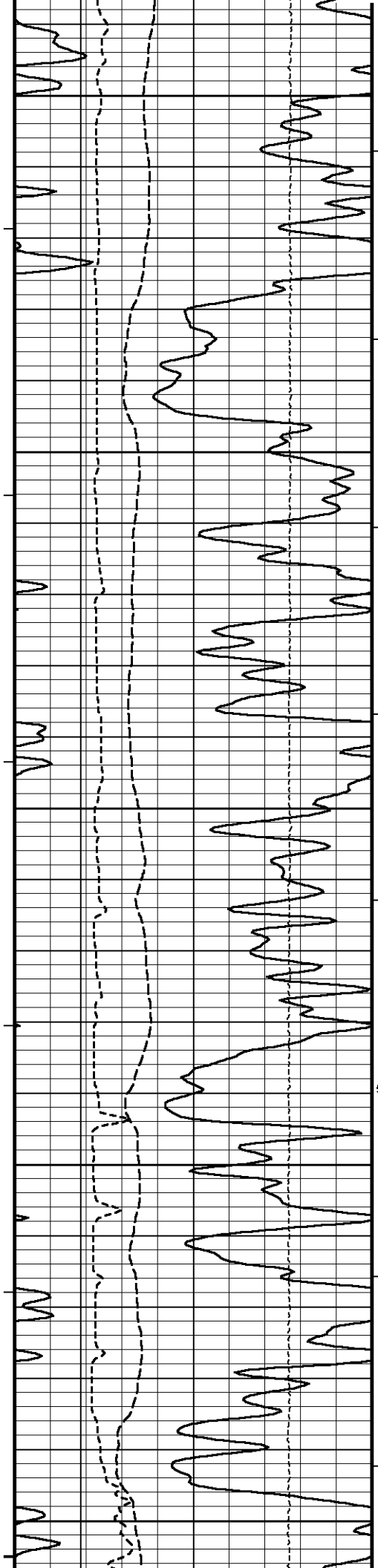
← Bit Size

SS Density Por. 2.68

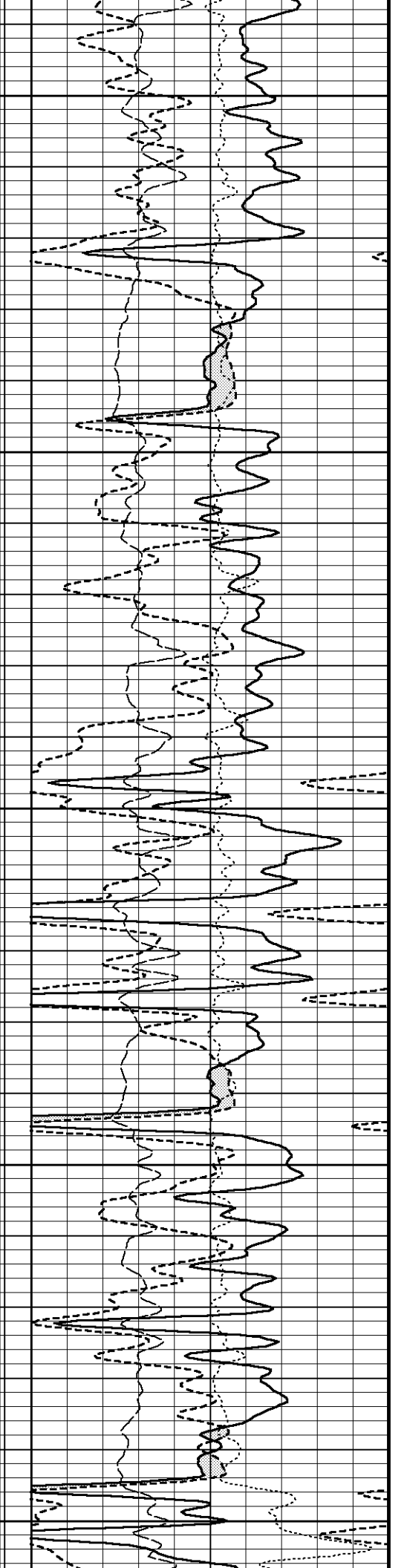
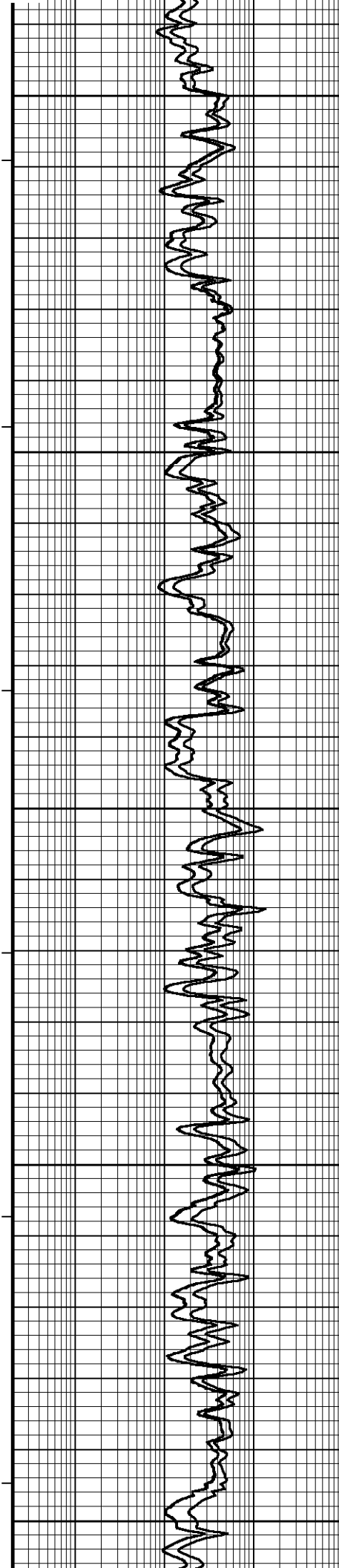
Array Ind. One Res Bit

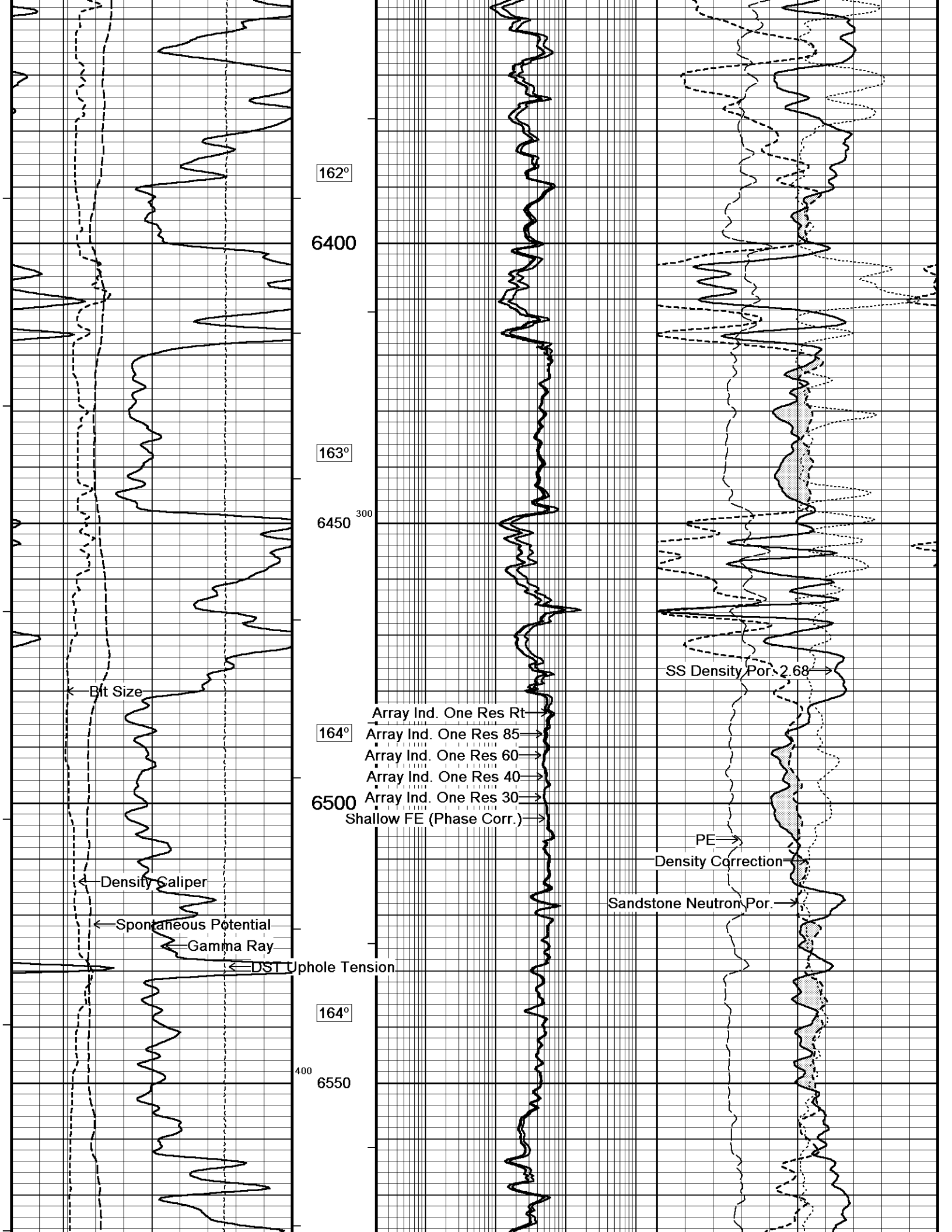






158°
6150
159°
6200
160°
6250
500
160°
6300
161°
6350





162°

6400

163°

6450

164°

6500

164°

6550

Bit Size

Density Saliper

Spontaneous Potential

Gamma Ray

DST Uphole Tension

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

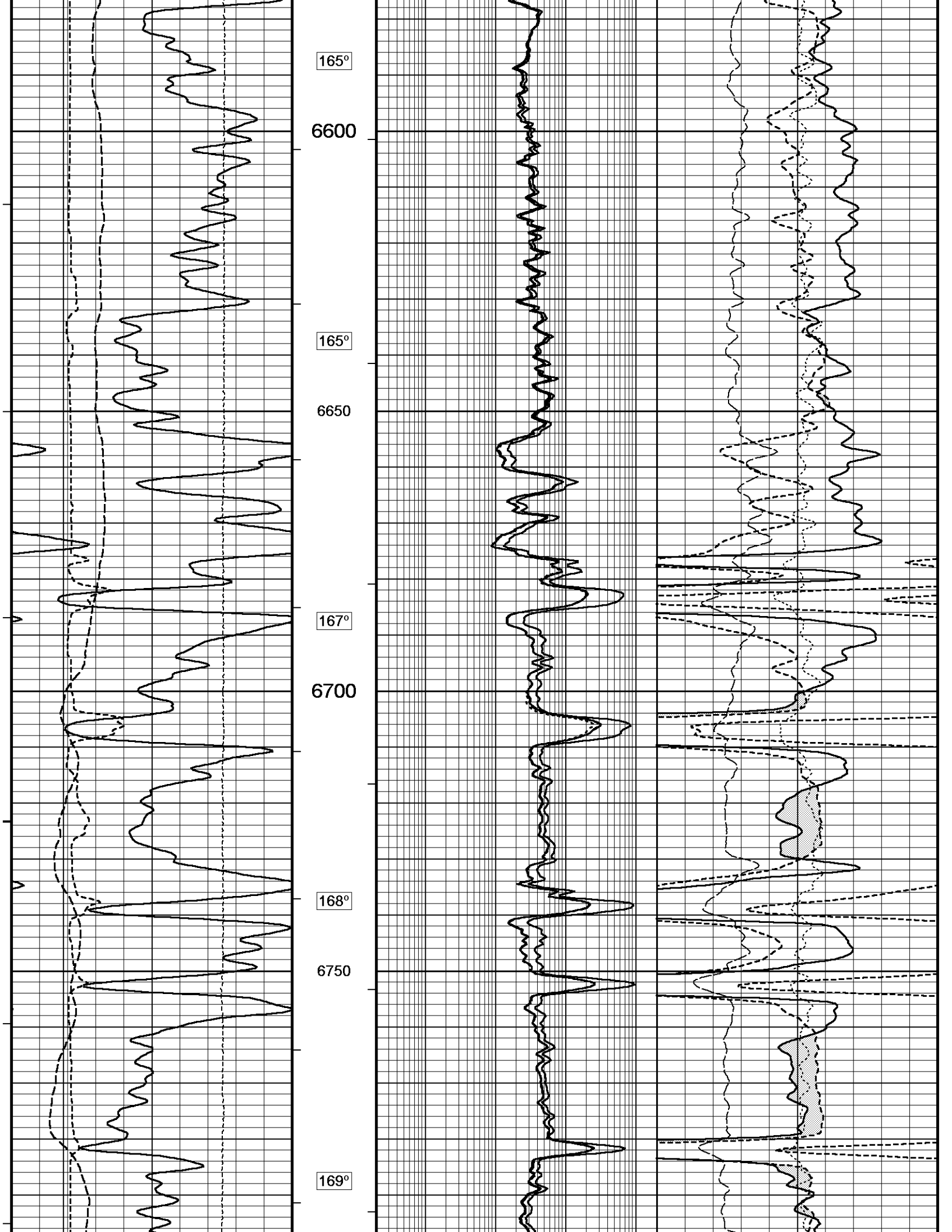
Shallow FE (Phase Corr.)

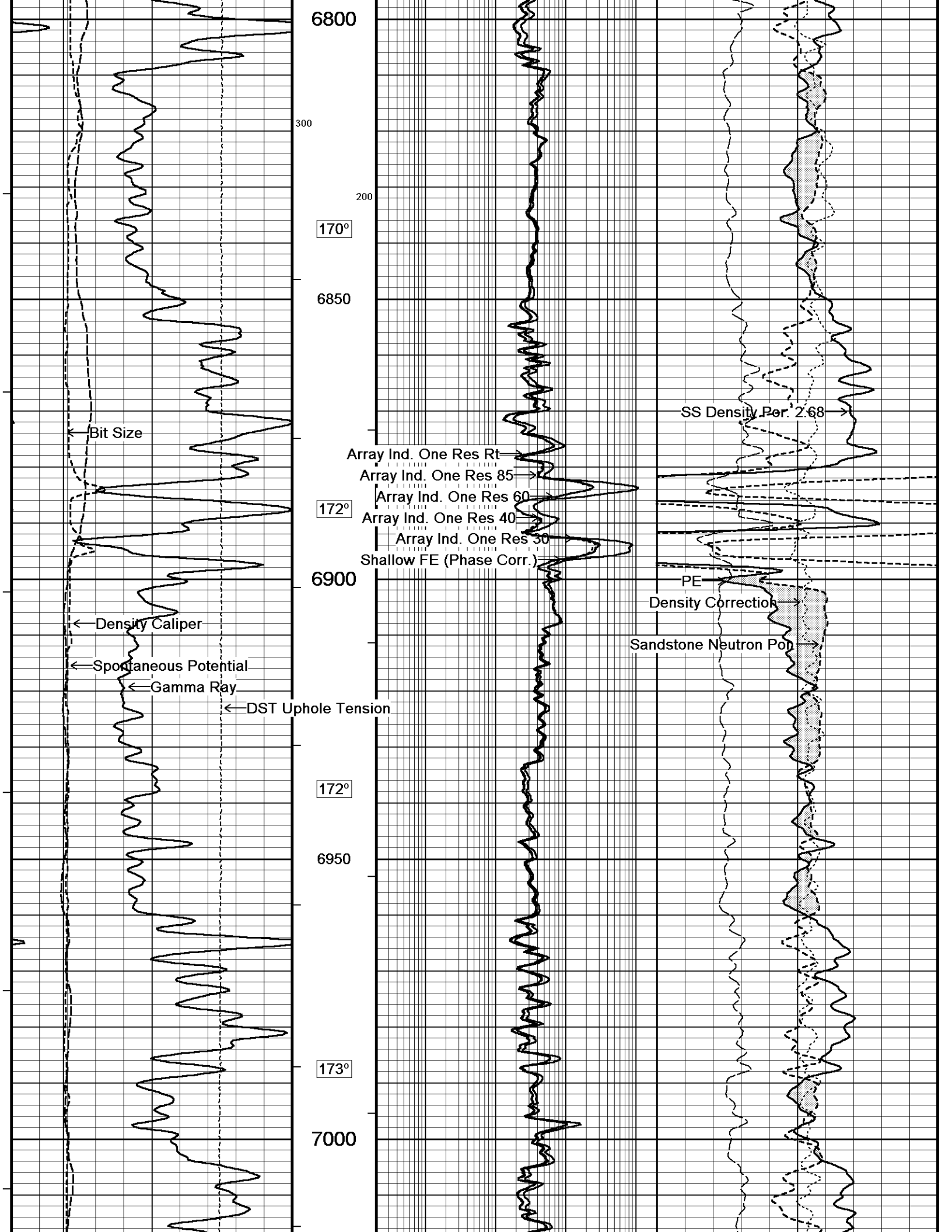
SS Density Por. 2.68

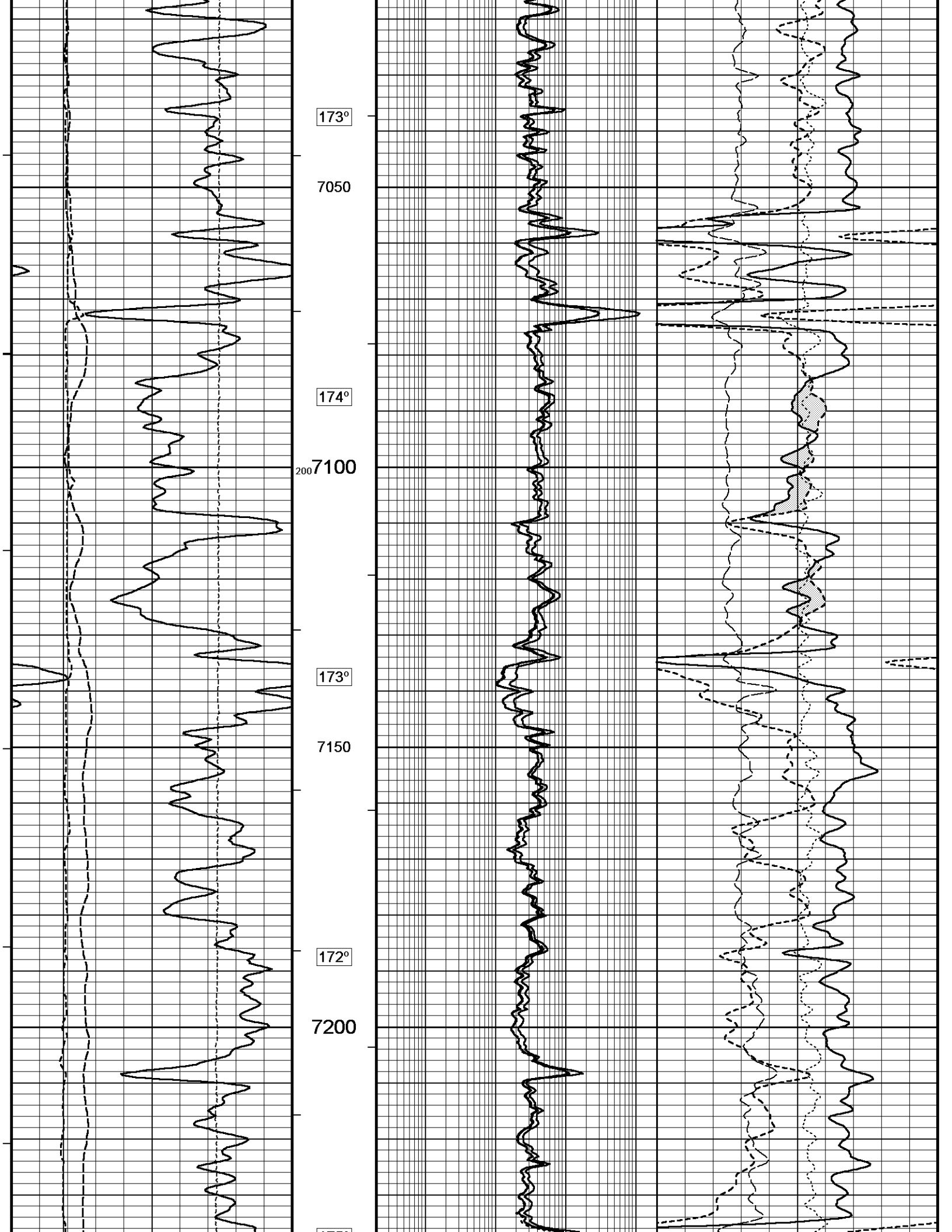
PE

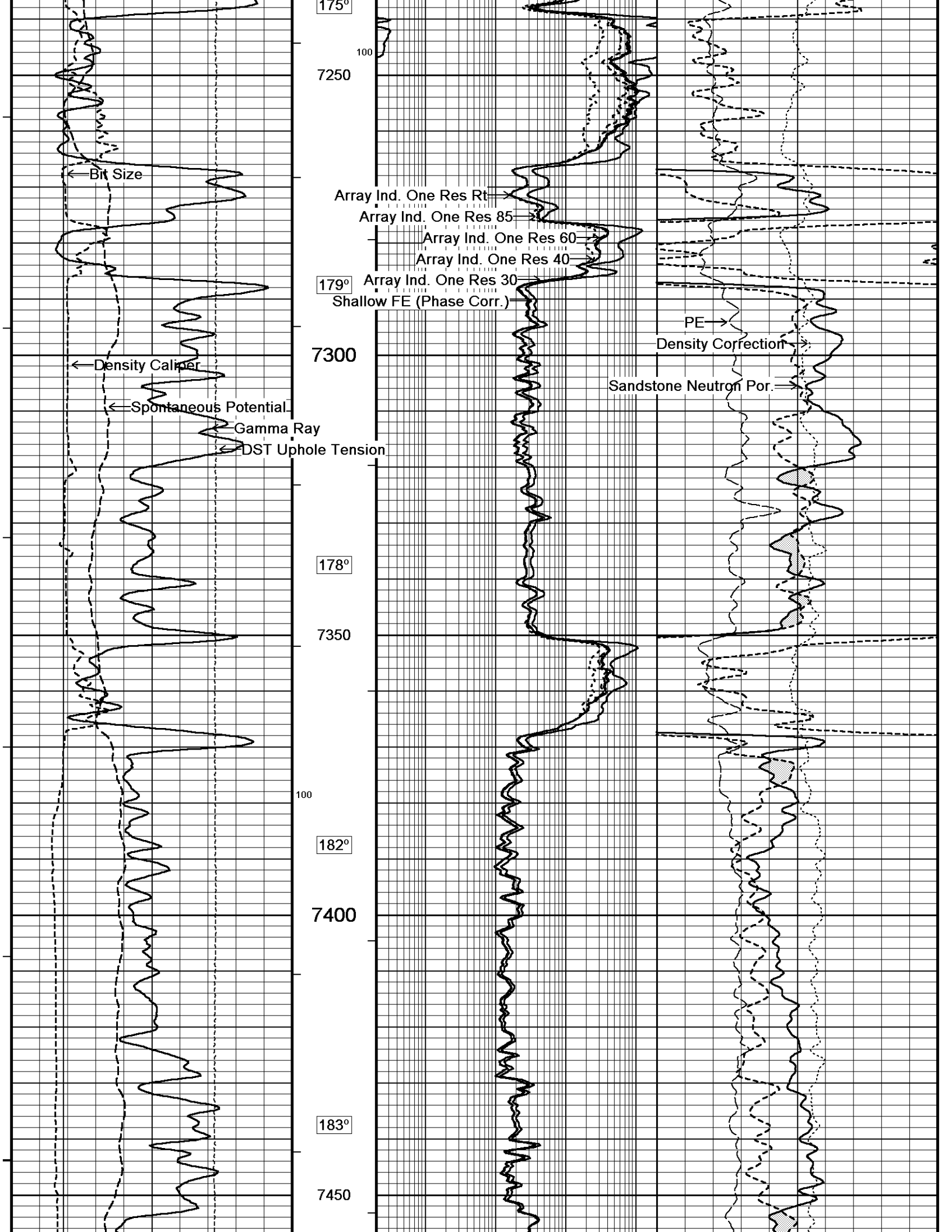
Density Correction

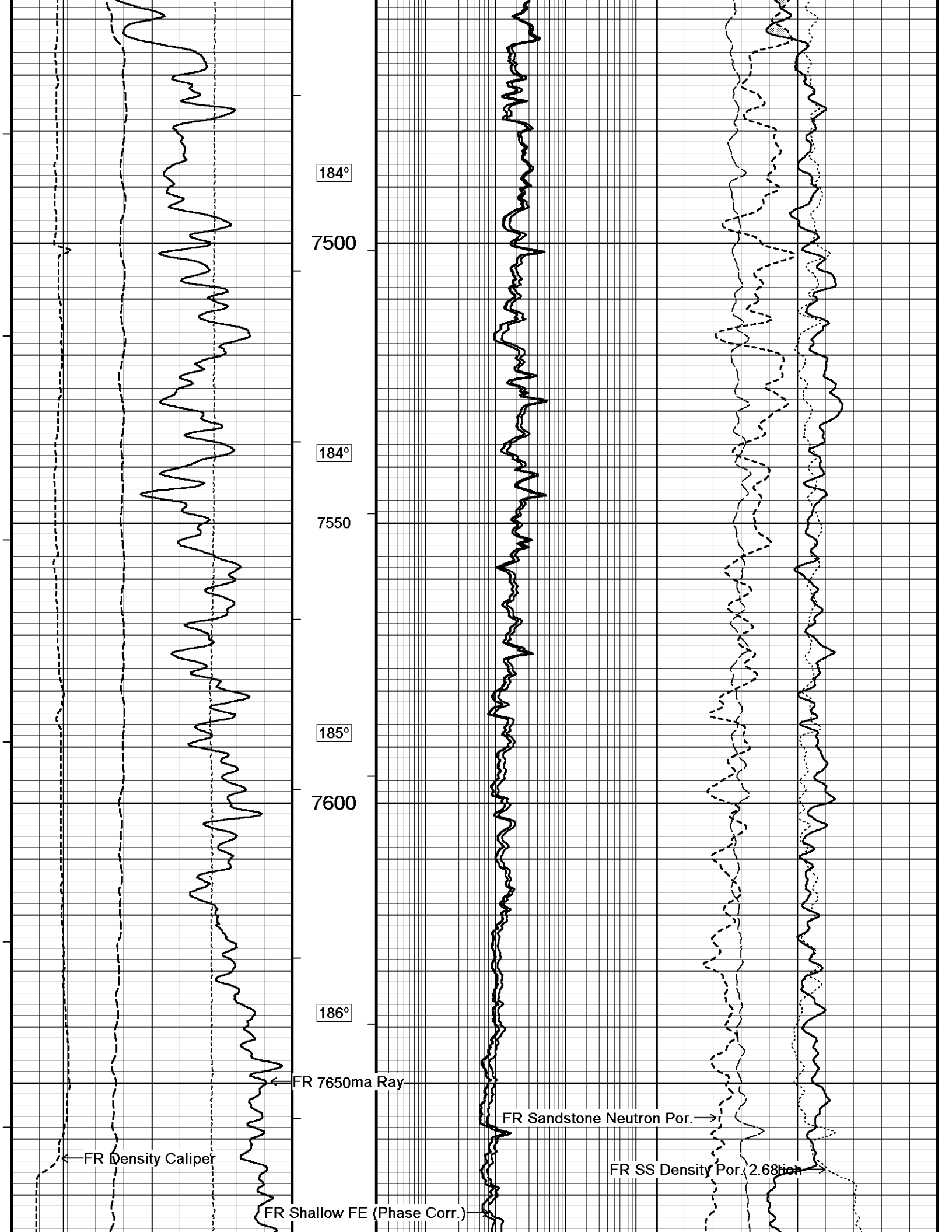
Sandstone Neutron Por.

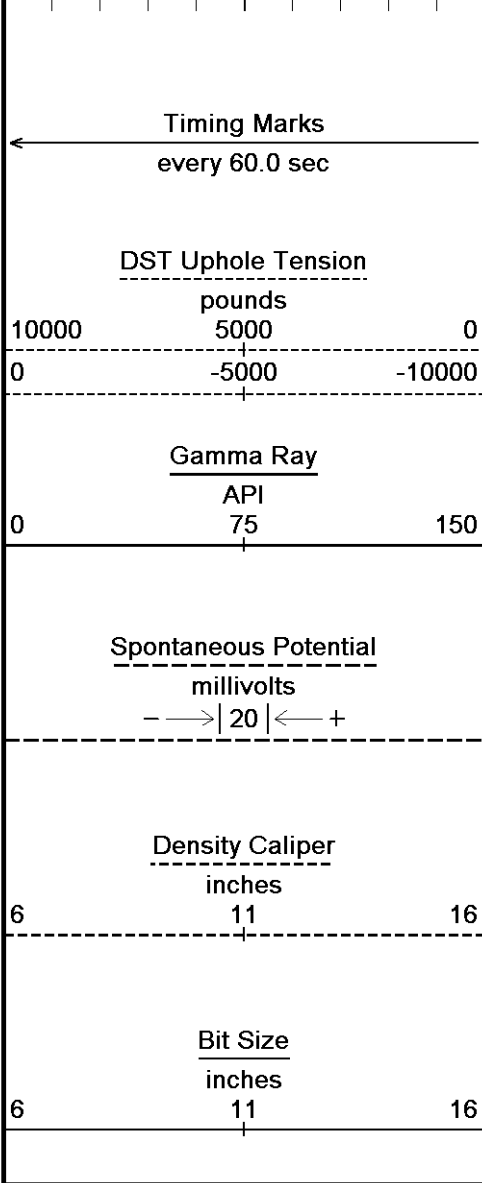
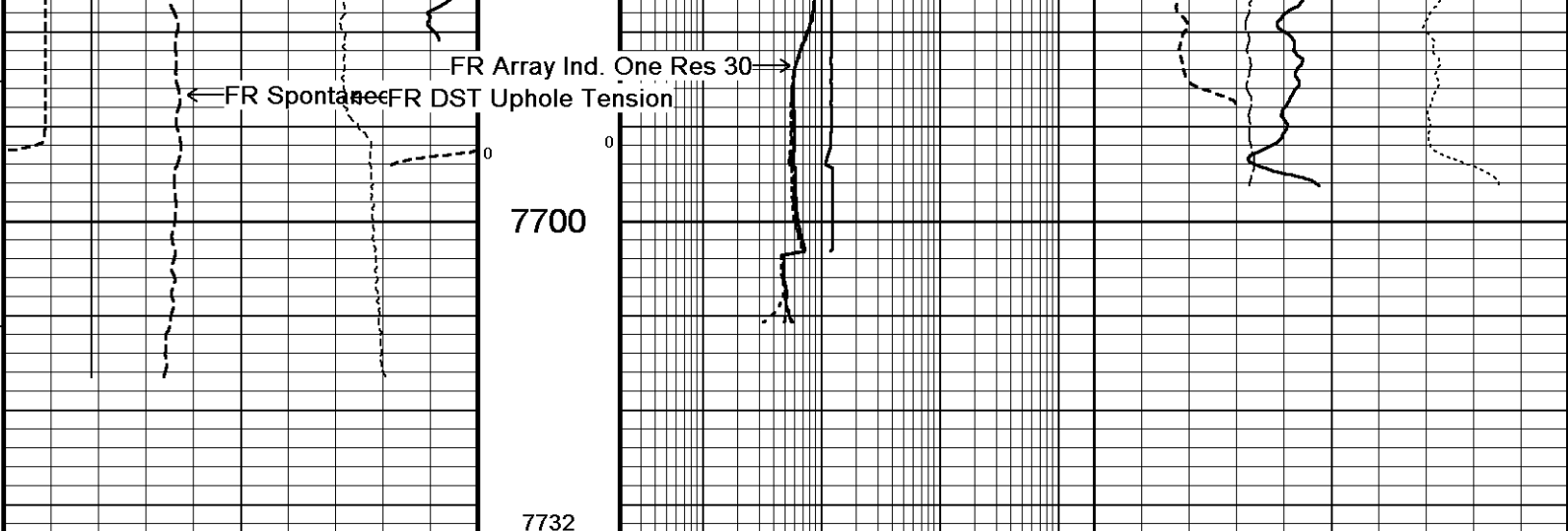












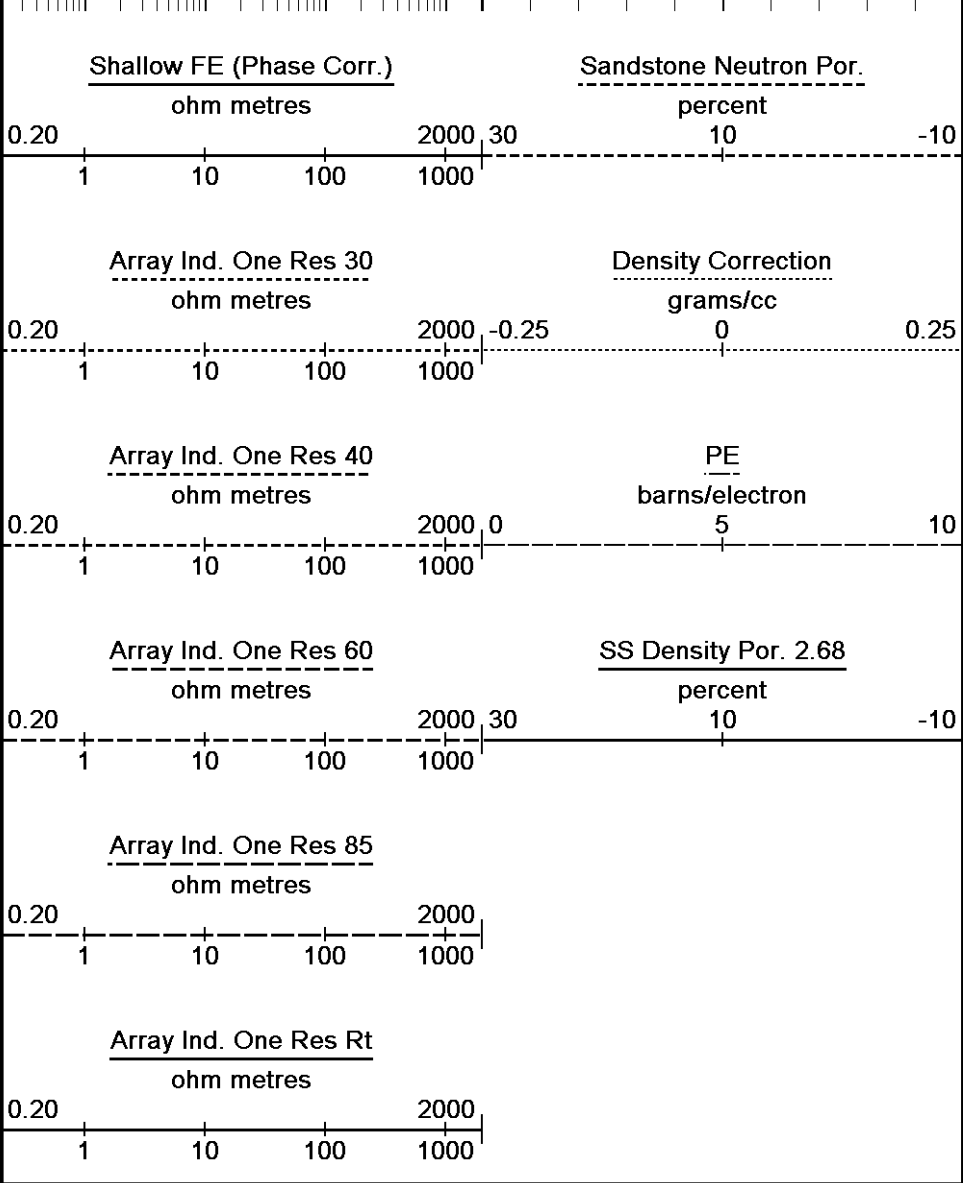
7700
7732
Depth
In
Feet

Borehole
Temp in
deg F

HVI
every
10 cu ft

Annular
Integral
every
10 cu ft

Replay
Scale
1:240

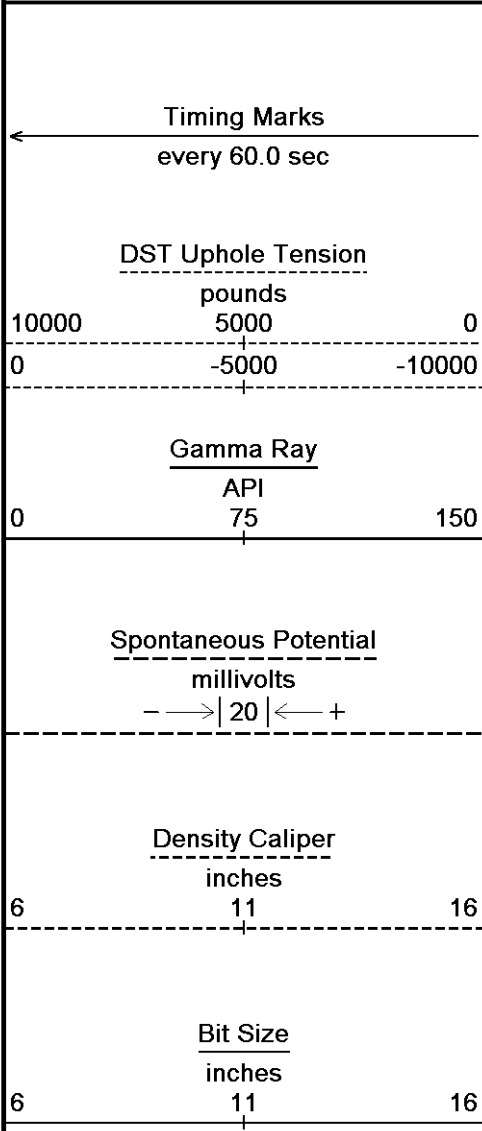


Depth Based Data - Maximum Sampling Increment 10.0cm
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 System Versions: Logged with 11.02.2782 Plotted with 11.02.2782
 Plotted on 20-APR-2011 01:04
 Recorded on 19-APR-2011 20:35

↑ 5 INCH MAIN LOG ↑

↓ OVERLAY ↓

Depth Based Data - Maximum Sampling Increment 10.0cm
 Filename: C:\LOGS\Bill Barrett\GGU Daley 31B-30-691\main.dta
 Filename: C:\LOGS\Bill Barrett\GGU Daley 31B-30-691\CASING.dta
 System Versions: Logged with 11.02.2782 Plotted with 11.02.2782
 Plotted on 20-APR-2011 01:04
 Recorded on 19-APR-2011 20:35
 Recorded on 19-APR-2011 19:42



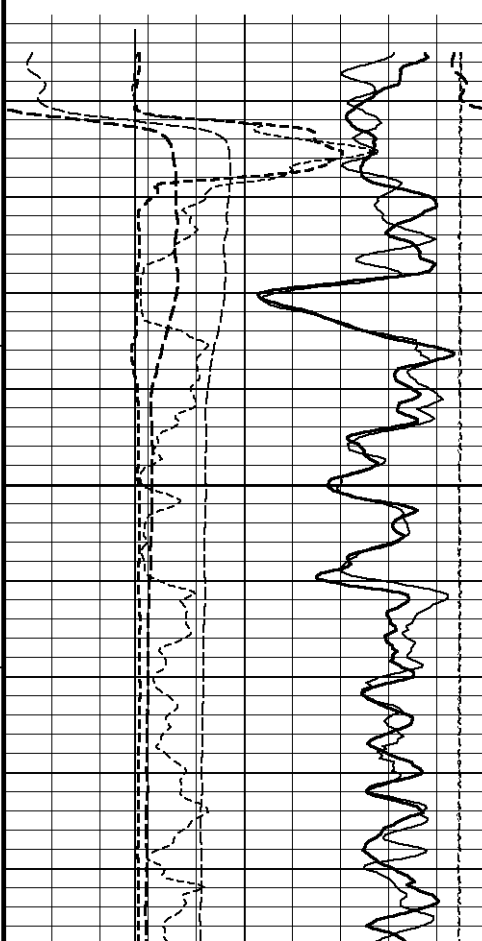
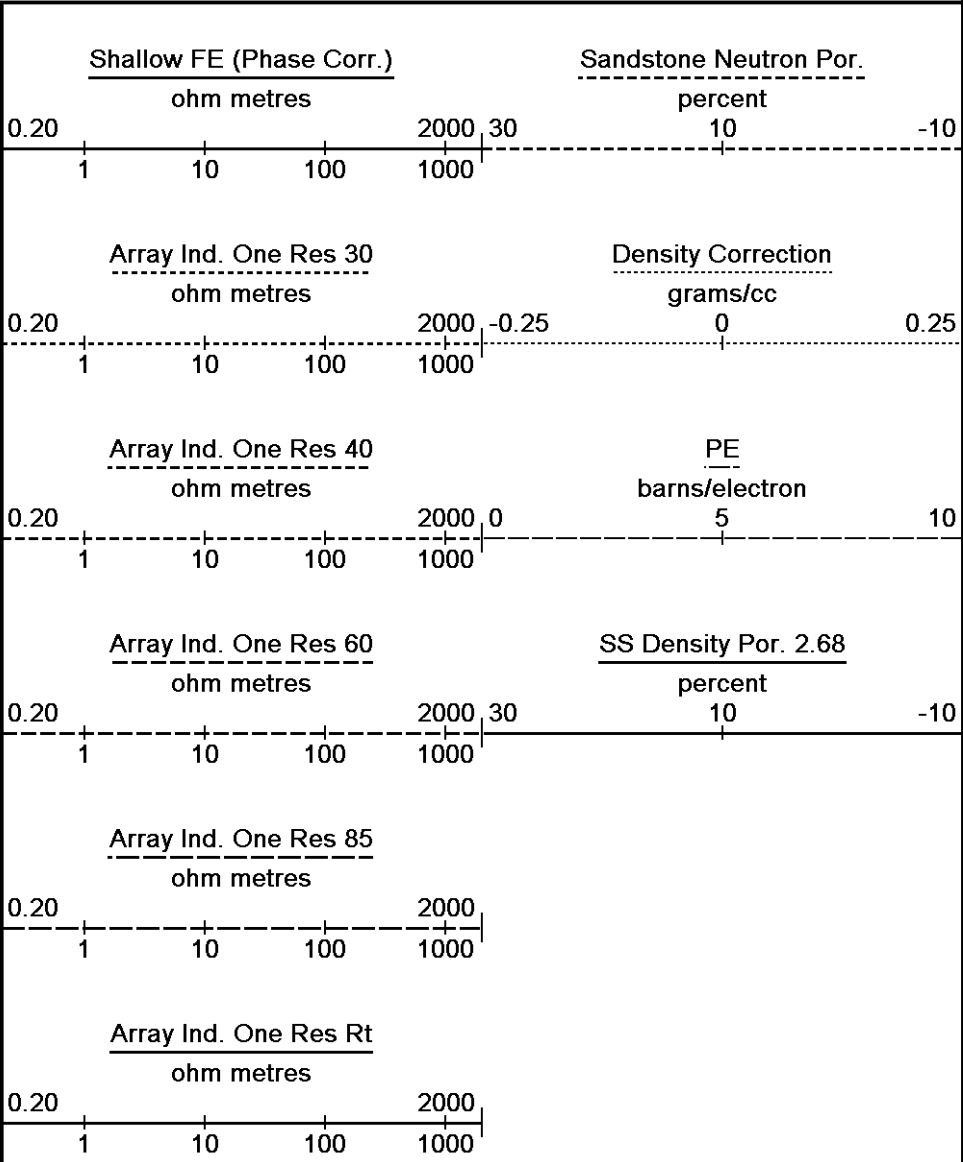
Depth
In
Feet

Borehole
Temp in
deg F

HVI
every
10 cu ft

Annular
Integral
every
10 cu ft

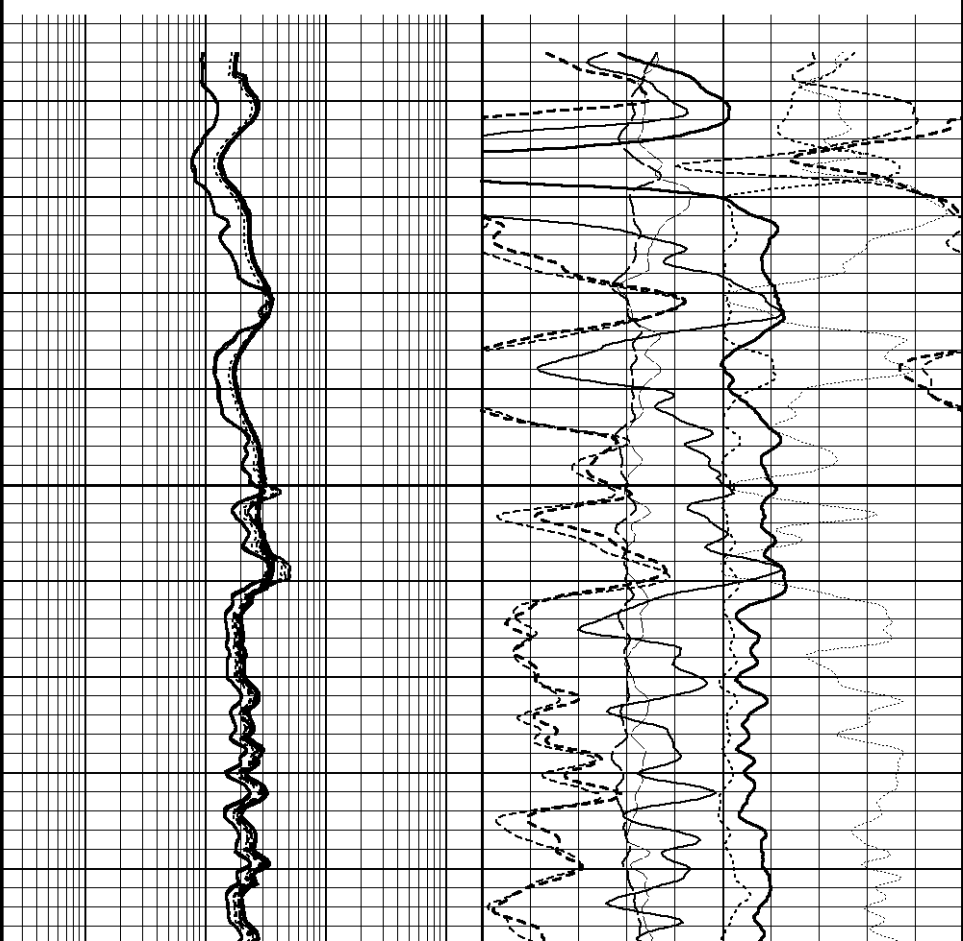
Replay
Scale
1:240

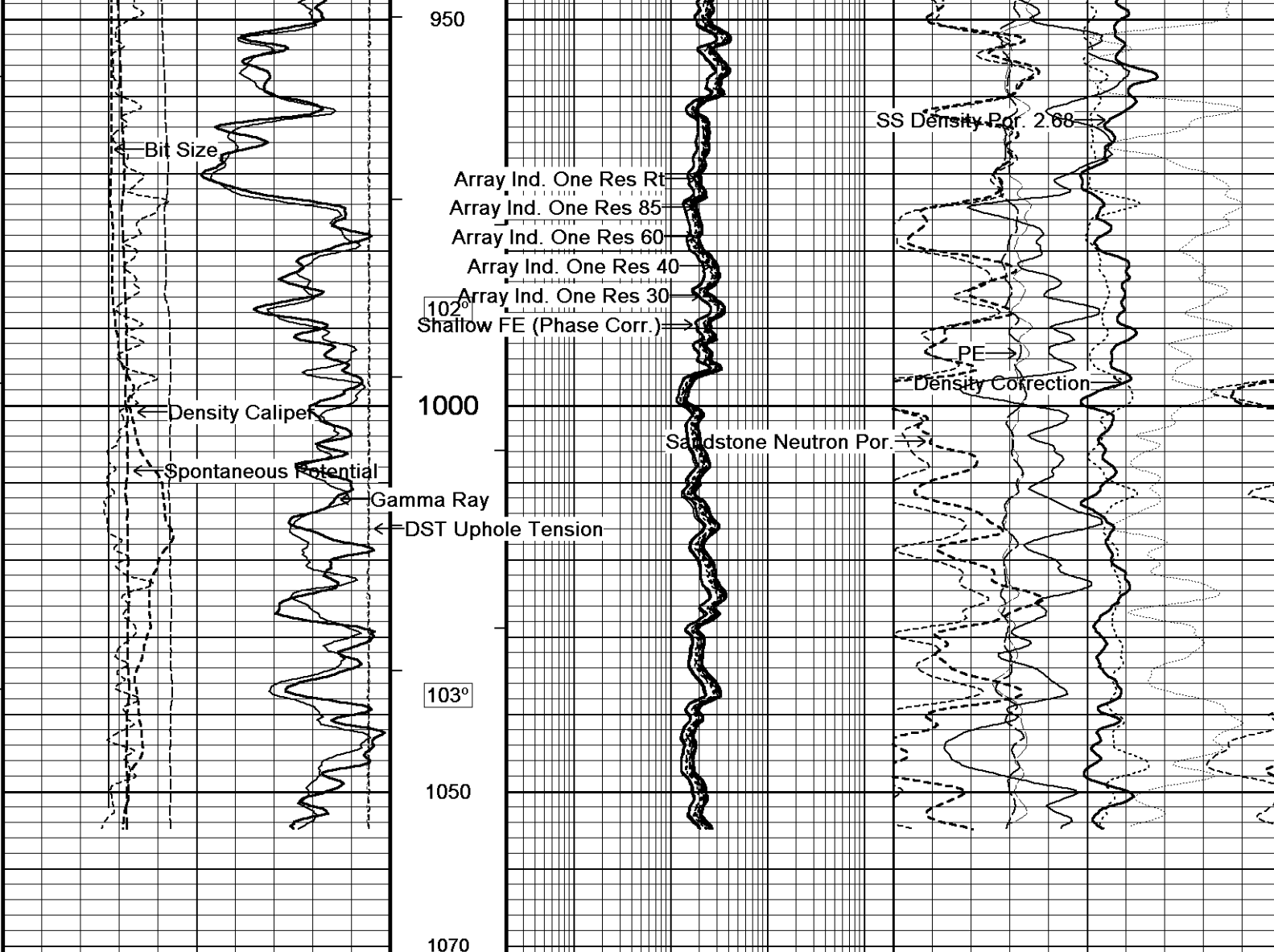


854

900

102°





Timing Marks
every 60.0 sec

DST Uphole Tension
pounds
10000 5000 0
0 -5000 -10000

Gamma Ray
API
0 75 150

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

Density Caliper
inches
6 11 16

Depth In Feet

Borehole Temp in deg F

HVI every 10 cu ft

Annular Integral every 10 cu ft

Shallow FE (Phase Corr.)
ohm metres
0.20 2000 30
1 10 100 1000

Array Ind. One Res 30
ohm metres
0.20 2000 -0.25
1 10 100 1000

Array Ind. One Res 40
ohm metres
0.20 2000 0
1 10 100 1000

Array Ind. One Res 60
ohm metres
0.20 2000 30
1 10 100 1000

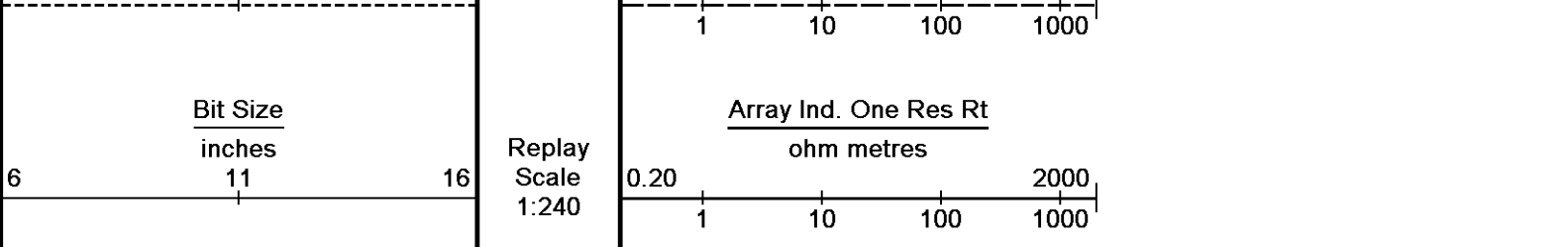
Array Ind. One Res 85
ohm metres
0.20 2000

Sandstone Neutron Por.
percent
10 -10

Density Correction
grams/cc
0 0.25

PE
barns/electron
5 10

SS Density Por. 2.68
percent
10 -10



Depth Based Data - Maximum Sampling Increment 10.0cm
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 Recorded on 19-APR-2011 20:35
 Filename: C:\LOGS\Bill Barrett\GGU Daley 31B-30-691\CASING.dta
 Recorded on 19-APR-2011 19:42
 System Versions: Logged with 11.02.2782 Plotted with 11.02.2782

OVERLAY

BEFORE SURVEY CALIBRATION
 C:\LOGS\Bill Barrett\GGU Daley 31B-30-691\main.dta

General Constants All 000 Last Edited on 19-APR-2011,19:06

General Parameters

Mud Resistivity	2.400	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	

Down-hole Tension Calibration SMS 0 Field Calibration on 19-APR-2011 19:24

Reading No	Measured	Calibrated (lbs)
1	15606.71	0.00
2	16431.76	330.00

High Resolution Temperature Calibration MCG-C 192 Field Calibration on 07-APR-2011,01:22

	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
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SP Calibration MCG-C 192 Field Calibration on 07-APR-2011,01:22

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

Gamma Calibration MCG-C 192 Field Calibration on 19-APR-2011 16:55

	Measured	Calibrated (API)
Background	105	72
Calibrator (Gross)	1425	984
Calibrator (Net)	1320	912

Gamma Constants MCG-C 192 Last Edited on 17-APR-2011,11:56

Gamma Calibrator Number	GRC-072
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Mud Density	1.19	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 30-MAR-2011 10:45 Field Check on 19-APR-2011 17:01	
Base Calibration			
	Measured	Calibrated (cps)	
	Near Far	Near	Far
	3133 97	3714	110
Ratio	32.392	33.764	
Field Calibrator at Base			
		Calibrated (cps)	
		1341	2027
Ratio		0.661	
Field Check			
		Calibrated (cps)	
		1325	1957
Ratio		0.677	

Neutron Constants MDN-A.B 160		Last Edited on 19-APR-2011,19:09	
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 29-MAR-2011 15:03 Field Check on 17-APR-2011 12:06	
Base Calibration			
	Measured	Calibrated (ohm-m)	
Reference 1	9.7	1.3	
Reference 2	965.2	126.8	
Base Check		281.8	
Field Check		281.7	

FE Constants MFE-A.A 85		Last Edited on 19-APR-2011,19:07	
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 07-APR-2011,01:27	
	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	
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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	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

Induction Constants MAI-B.A 213

Last Edited on 19-APR-2011,17:45

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 24-MAR-2011 14:48
Field Calibration on 07-APR-2011,01:24

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	50000	11.80

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 19-APR-2011 17:10

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

Field Check
1165.0 1741.9

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

Field Check
217.8 1044.0

Density Constants MPD-B 167

Last Edited on 19-APR-2011,17:44

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	0.00

AFTER SURVEY CALIBRATION

C:\LOGS\Bill Barrett\GGU Daley 31B-30-691\main.dta

FE Check MFE-A.A 85

Before Survey Check 17-APR-2011 12:06
After Survey Check on 20-APR-2011 00:11

Before (ohm-m) After (ohm-m)
281.7 281.7

Induction Check MAI-B.A 213

Before Survey Check on
After Survey Check on 20-APR-2011 00:14

Channel	Before Survey (mmho/m)		After Survey (mmho/m)	
	Low	High	Low	High
1	0.0	0.0	14.3	3935.2
2	0.0	0.0	30.4	3539.5
3	0.0	0.0	29.0	3114.5
4	0.0	0.0	19.2	2097.0
Deep	0.0	0.0	17.5	2079.0
Medium	0.0	0.0	42.8	4088.4
Shallow	0.0	0.0	45.7	5157.9
Array Temperature		0.0		71.1

Photo Density Check MPD-B 167 Before Survey Check on 19-APR-2011 17:10
After Survey Check on 20-APR-2011 00:10

Density Check

	Near		Far	
	Before	After	Before	After
	1165.0	1163.4	1741.9	1746.1

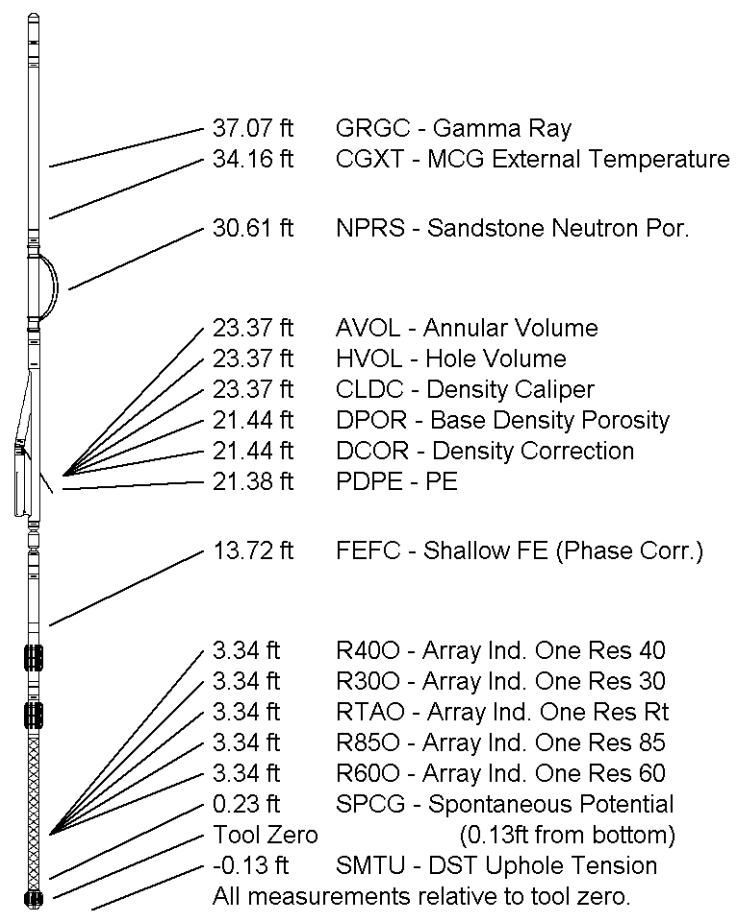
PE Check

	Before	After
WS	217.8	212.5
WH	1044.0	1035.9

DOWNHOLE EQUIPMENT

C:\LOGS\Bill Barrett\GGU Daley 31B-30-691\main.dta

- MCB-A 11B Tension Cablehead
MCB-A 1 LG: 2.18 ft WT: 19.8 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-E.A Compact Knuckle Joint
SKJ-E.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 Induction
MAI-B.A 213 LG: 10.81 ft WT: 48.5 lb OD: 2.24 in
- Total Length: 44.53 ft Weight: 346.1 lb



COMPANY **BILL BARRETT CORPORATION**

WELL **GGU DALEY 31B-30-691**

FIELD **GIBSON GULCH**

PROVINCE/COUNTY **GARFIELD**

COUNTRY/STATE **U.S.A. / COLORADO**

Elevation Kelly Bushing 5847.00 feet
Elevation Drill Floor 5847.00 feet
Elevation Ground Level 5824.00 feet

First Reading 7683.50
Depth Driller 7678.00 feet
Depth Logger 7687.00 feet



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