COMPACT QUAD COMBO
QUICKLOOK
LOG

COMPANY	PATARA OIL & GAS LLC
WELL	ANDY'S MESA FEDERAL #76
FIELD	ANDY'S MESA
PROVINCE/COUNTY	SAN MIGUEL
COUNTRY/STATE	U.S.A. / COLORADO
LOCATION	SHL: 1467' FSL & 528' FEL
	BHL: 1791' FSL & 895' FEL

SEC	TWP	RGE	Other Services
20	44N	16W	

API Number 05-11-06251
Permit Number

Permanent Datum G.L., Elevation 6417 feet
Log Measured From K.B. @ 17 FEET above Permanent Datum
Drilling Measured From K.B.

Elevations:	feet
KB	6434.00
DF	6433.00
GL	6417.00

Date	20-AUG-2010			
Run Number	ONE			
Depth Driller	7118.00	feet		
Depth Logger	7104.00	feet		
First Reading	7101.00			
Last Reading	2571.00			
Casing Driller	2575.00	feet		
Casing Logger	2571.00	feet		
Bit Size	8.750	inches		
Hole Fluid Type	WATER BASED			
Density / Viscosity	9.00 lb/USg	47.00 CP		
PH / Fluid Loss	7.50	6.50 ml/30Min		
Sample Source	FLOW LINE			
Rm @ Measured Temp	1.24 @ 97.2	ohm-m		
Rmf @ Measured Temp	0.99 @ 97.2	ohm-m		
Rmc @ Measured Temp	1.50 @ 97.2	ohm-m		
Source Rmf / Rmc	CALC	CALC		
Rm @ BHT	0.94 @121.0	ohm-m		
Time Since Circulation	6 HOURS			
Max Recorded Temp	121.00	deg F		
Equipment Name	COMPACT			
Equipment / Base	13173	GD JCT		
Recorded By	R. BROWN		M. GOODMAN	
Witnessed By	L. GIRNDT			

Last Edited: 19-AUG-2010 14:01

BOREHOLE RECORD

Bit Size inches	Depth From feet	Depth To feet
8.750	2571.00	7118.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	9.625	0.00	2571.00	36.00

REMARKS

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

HARDWARE: MPD: (1) 8 INCH PROFILE PLATE
MAI: (1) 0.5 INCH STANDOFF
MDN: (1) DUAL BOWSPRING
MSS: (2) 0.5 ONCH STANDOFF

2.71 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.

RUN 1: BRIDGED ENCOUNTERED AT APPROXIMATELY 5577 FEET. LOGS WERE THEN PULLED FROM THIS DEPTH UP TO ATTEMPT ANOTHER LOGGING RUN ONCE RIG PERFORMED WIPER TRIP.

RUN 2: LOGS WENT TO BOTTOM.

RUN 3: FORMATION TESTER.

TOTAL HOLE VOLUME FROM T.D. TO SURFACE CASING = 2074 CU.FT.

ANNULAR VOLUME WITH 5.5 INCH PRODUCTION CASING FROM T.D. TO SURFACE CASING = 1375 CU.FT.

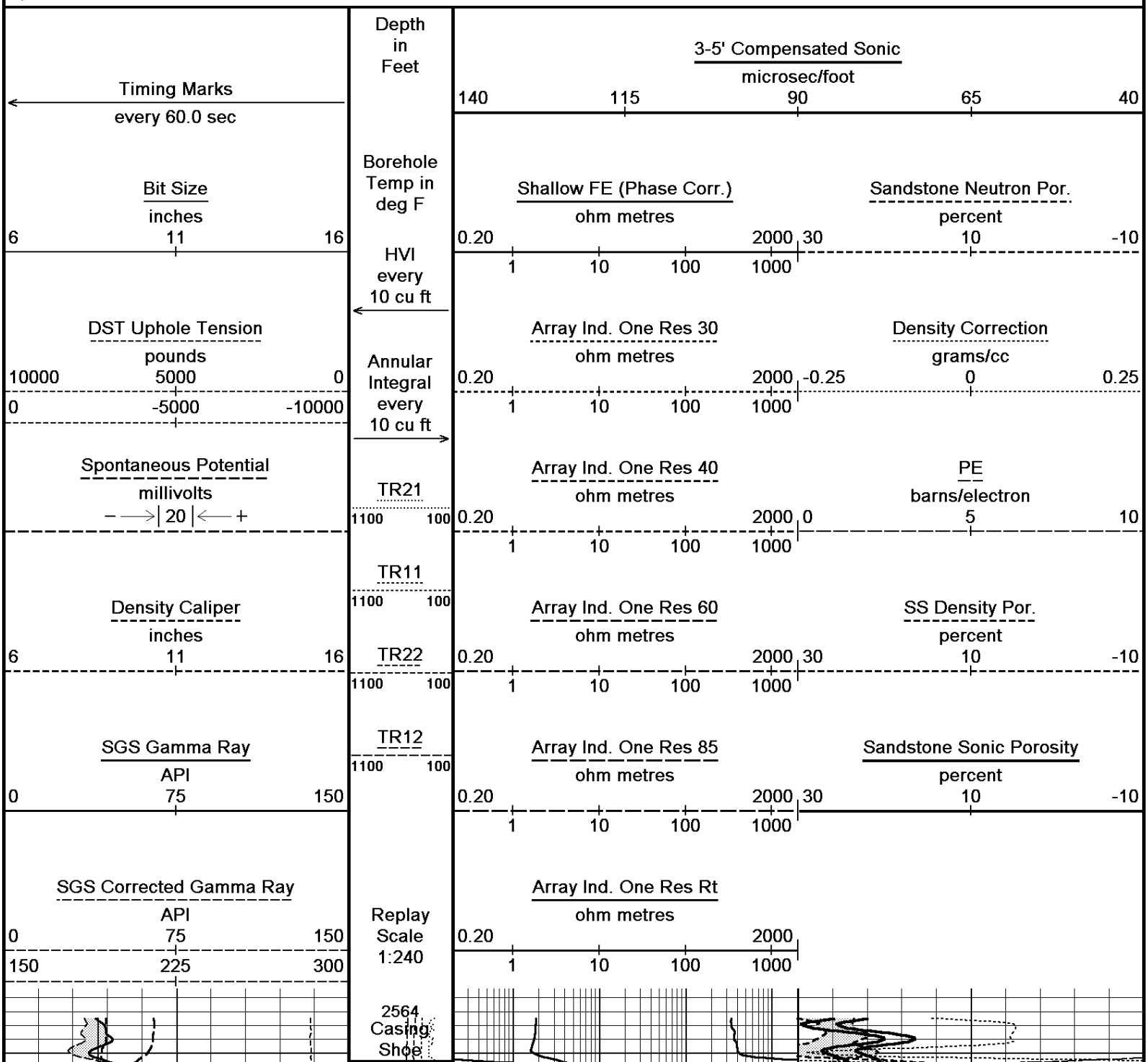
SERVICE ORDER: #3526101

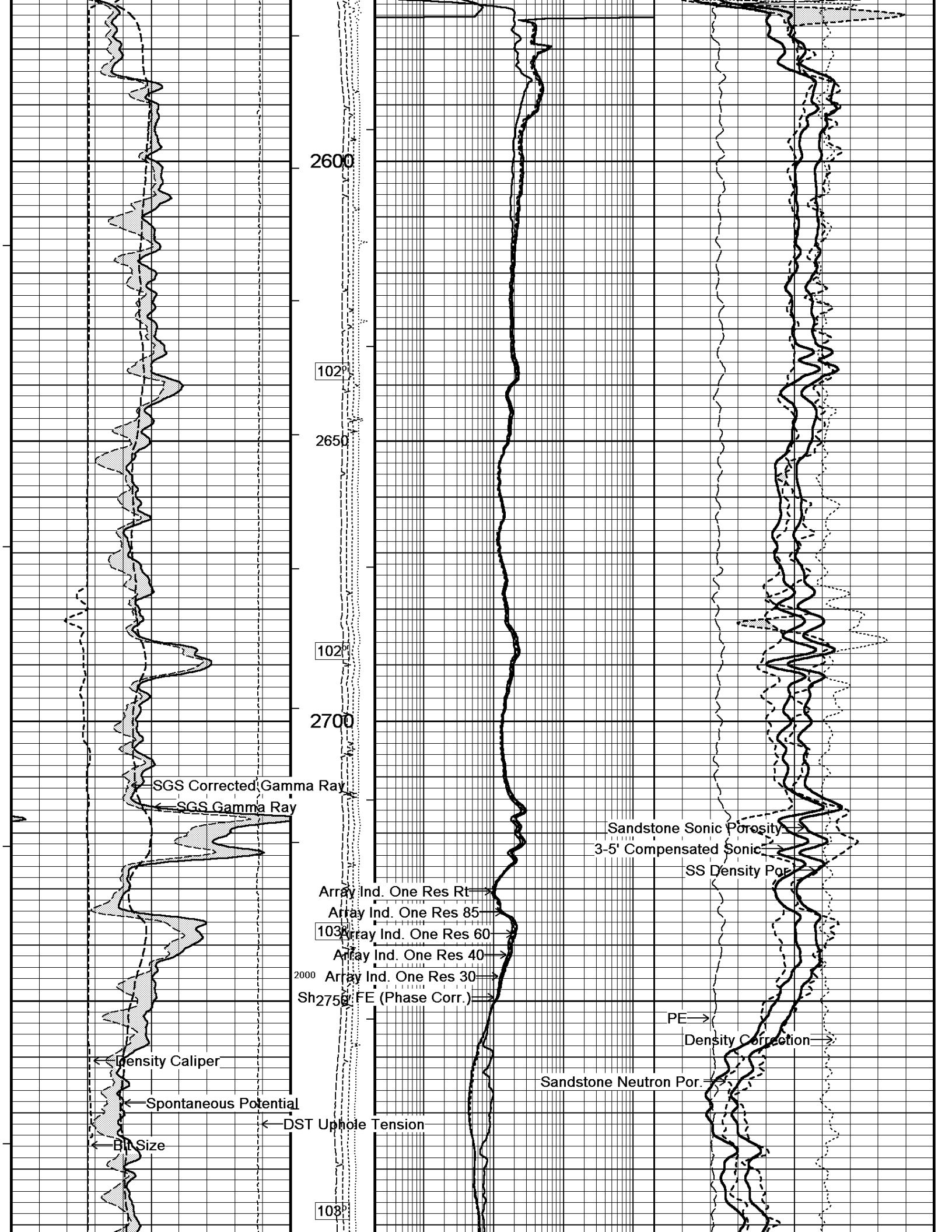
RIG: LW # 1

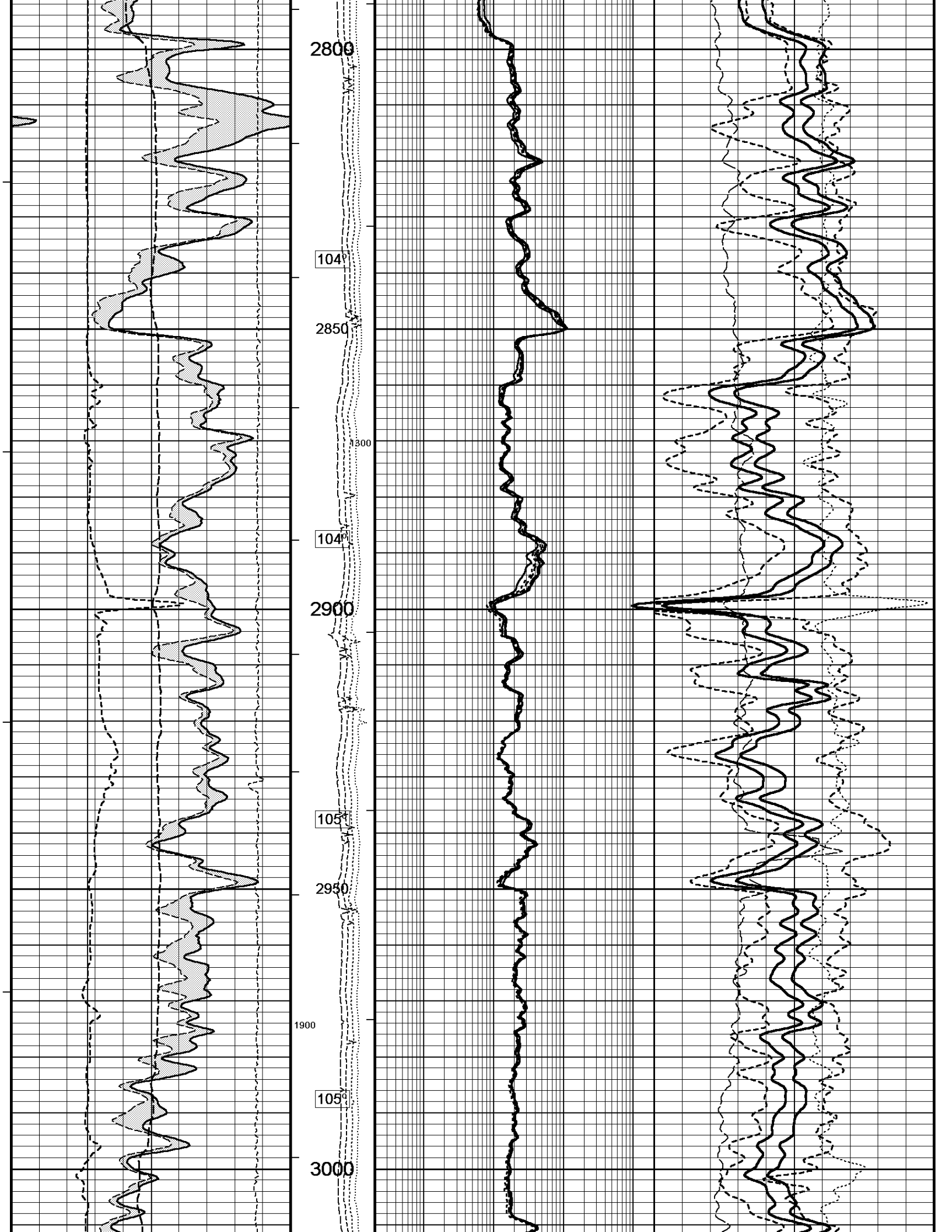
SANDSTONE 5 INCH MAIN LOG

Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Minimus\Logs\Patara\Andy's Mesa Federal #76\SPLICE.dta
System Versions: Plotted with 10.08.1568

Plotted on 20-AUG-2010 13:33
Recorded on 20-AUG-2010 09:22




2600
2650
2700
SGS Corrected Gamma Ray
SGS Gamma Ray
Density Caliper
Spontaneous Potential
DST Uphole Tension
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
FE (Phase Corr.)
Sandstone Sonic Porosity
3-5' Compensated Sonic
SS Density Por.
PE
Density Correction
Sandstone Neutron Por.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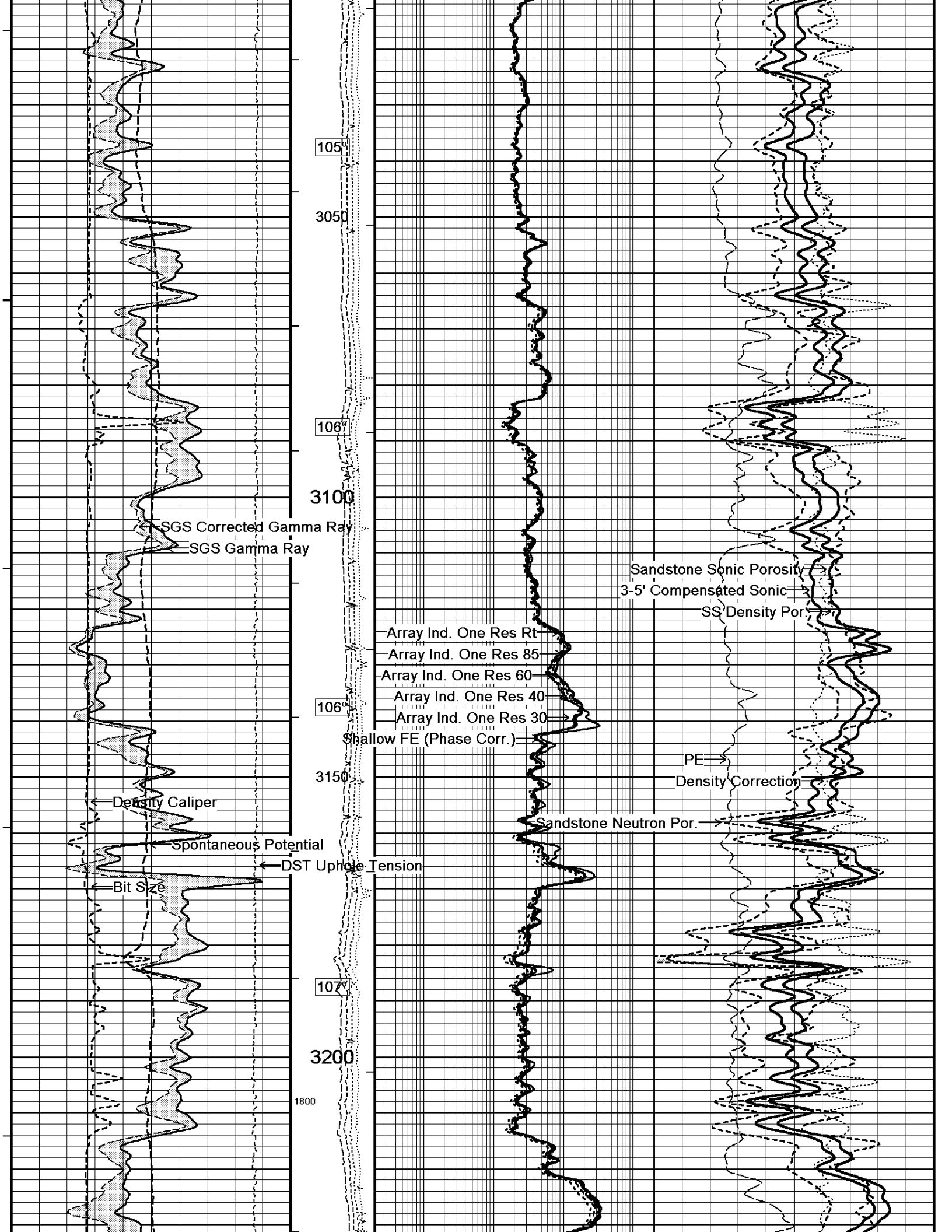
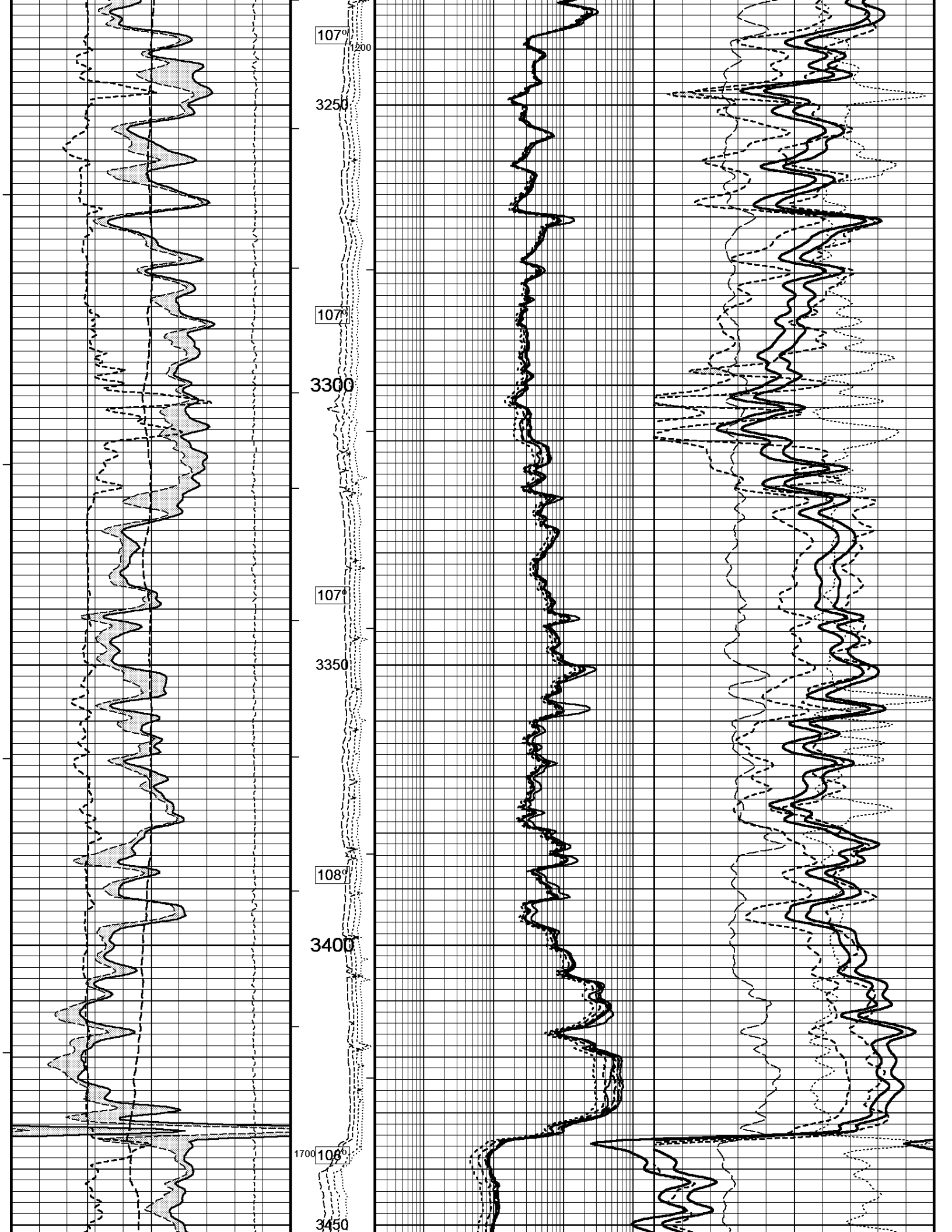
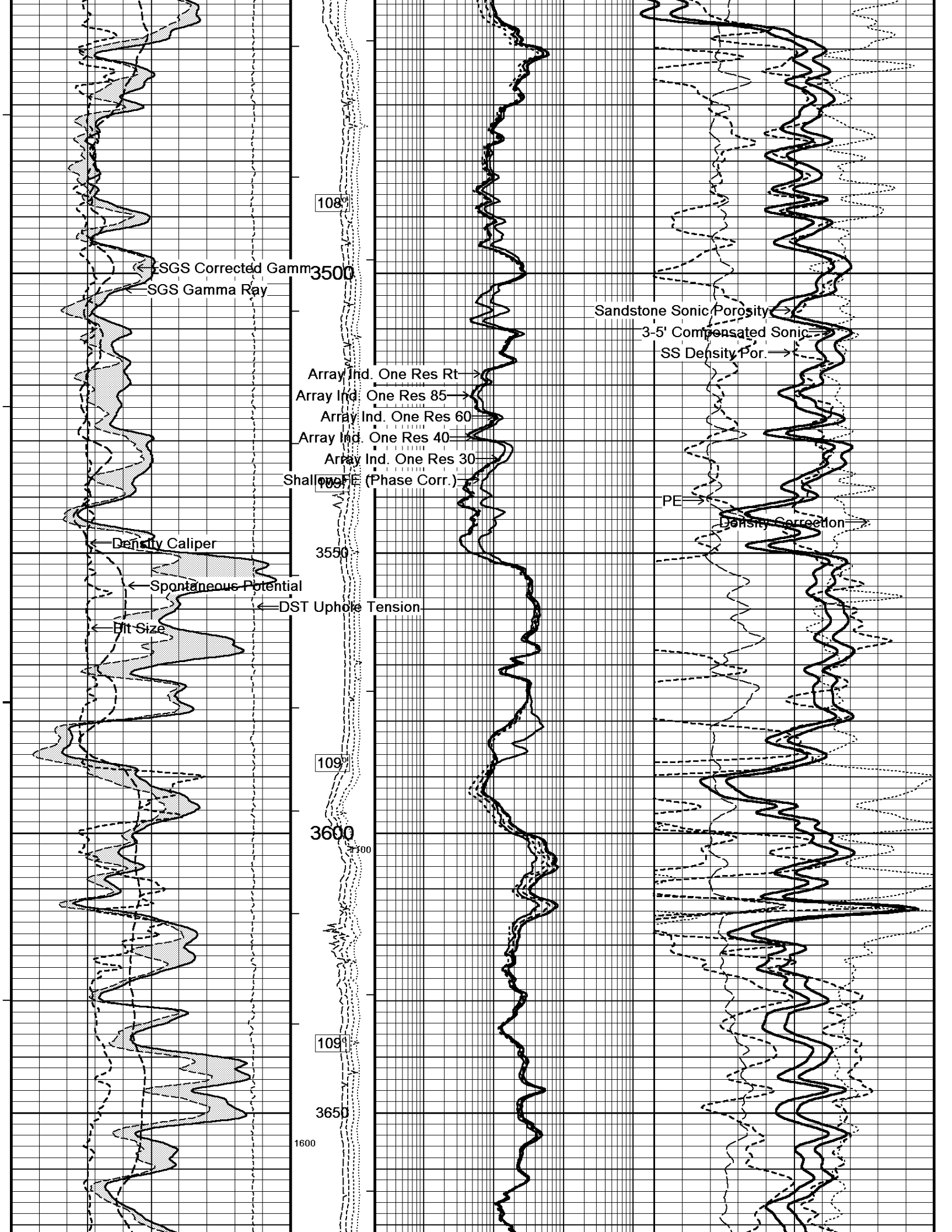
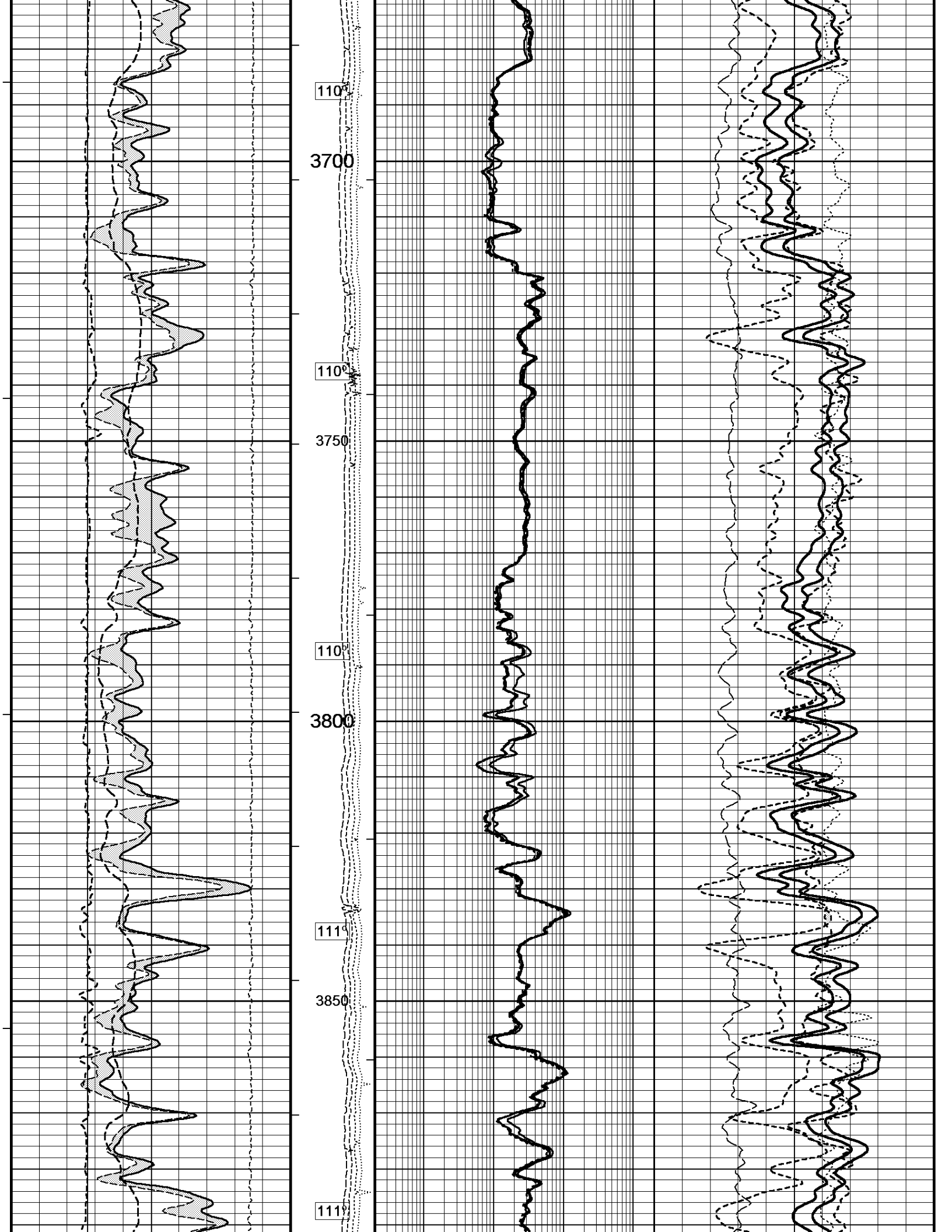
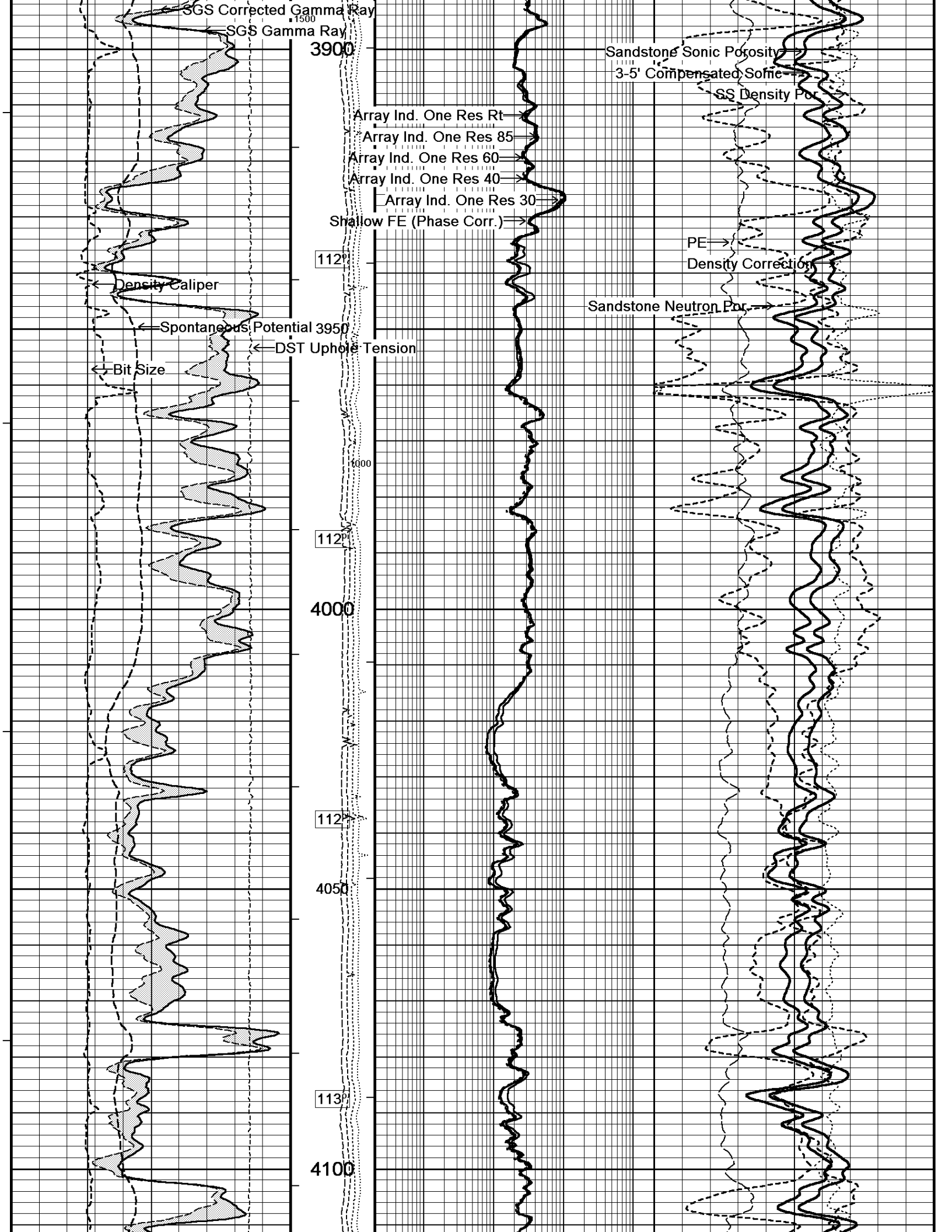
104
2850
1300
104
2900
105
2950
1900
105
3000


105'
3050
106'
3100
SGS Corrected Gamma Ray
SGS Gamma Ray
Sandstone Sonic Porosity
3-5' Compensated Sonic
SS Density Por.
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
106'
Array Ind. One Res 30
Shallow FE (Phase Corr.)
PE
3150
Density Correction
Density Caliper
Sandstone Neutron Por.
Spontaneous Potential
DST Uphole Tension
Bit Size
107'
3200
1800


107°
200
3250
107°
3300
107°
3350
108°
3400
1700
108°
3450


108°
SGS Corrected Gamm
SGS Gamma Ray
3500
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.)
109°
Density Caliper
3550
Spontaneous Potential
DST Uphole Tension
Bit Size
109°
3600
1100
109°
3650
1600
Sandstone Sonic Porosity
3-5' Compensated Sonic
SS Density Por.
PE
Density Correction


110
3700
110
3750
110
3800
111
3850
111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SGS Gamma Ray
1500
3900
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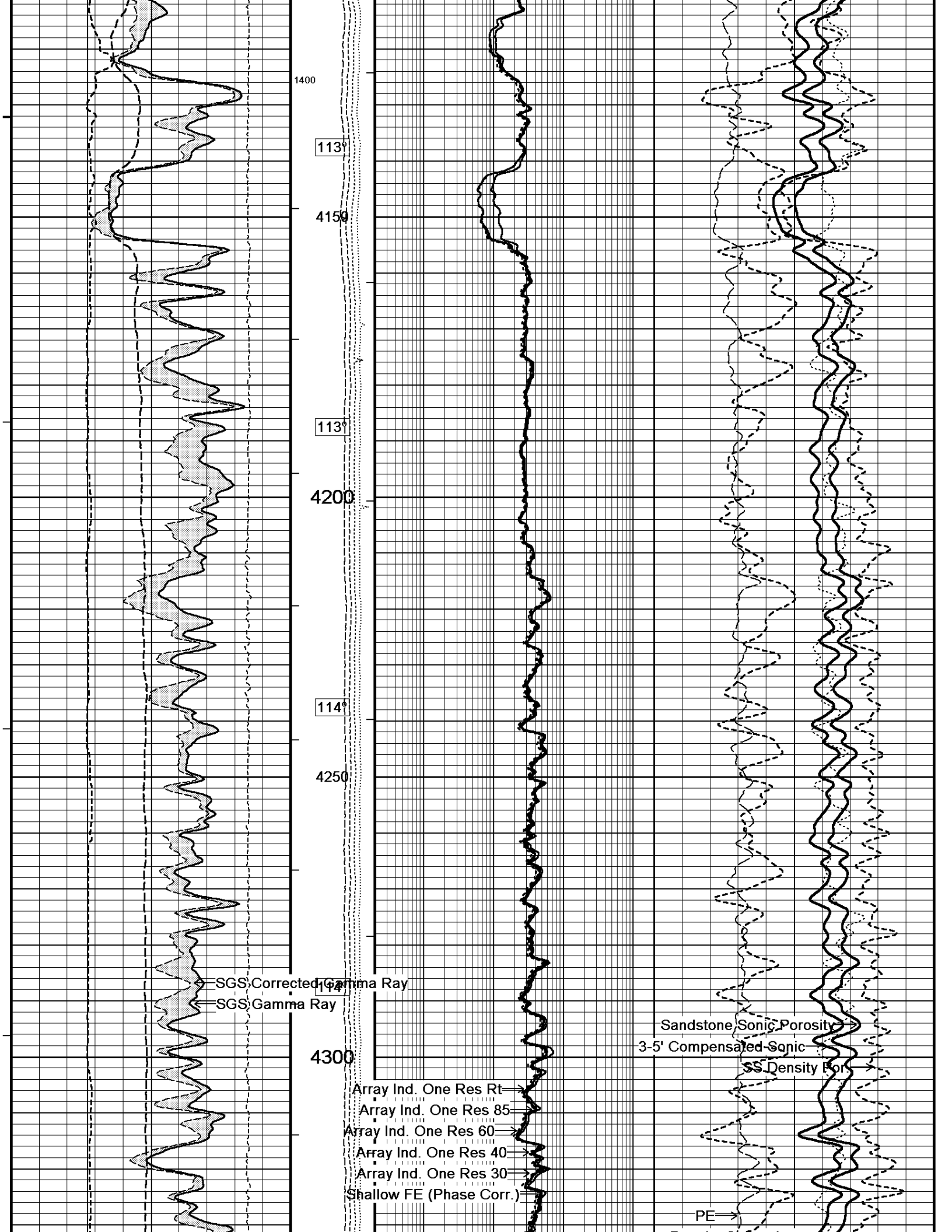
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
Sandstone Sonic Porosity
3-5' Compensated Sonic
SS Density Por
PE
Density Correction
Sandstone Neutron Por
112
Density Caliper
Spontaneous Potential 3950
DST Uphole Tension
Bit Size
1000
112
4000
112
4050
113
4100


1400
113°
4150
113°
4200
114°
4250
114°
4300
SGS Corrected Gamma Ray
SGS Gamma Ray
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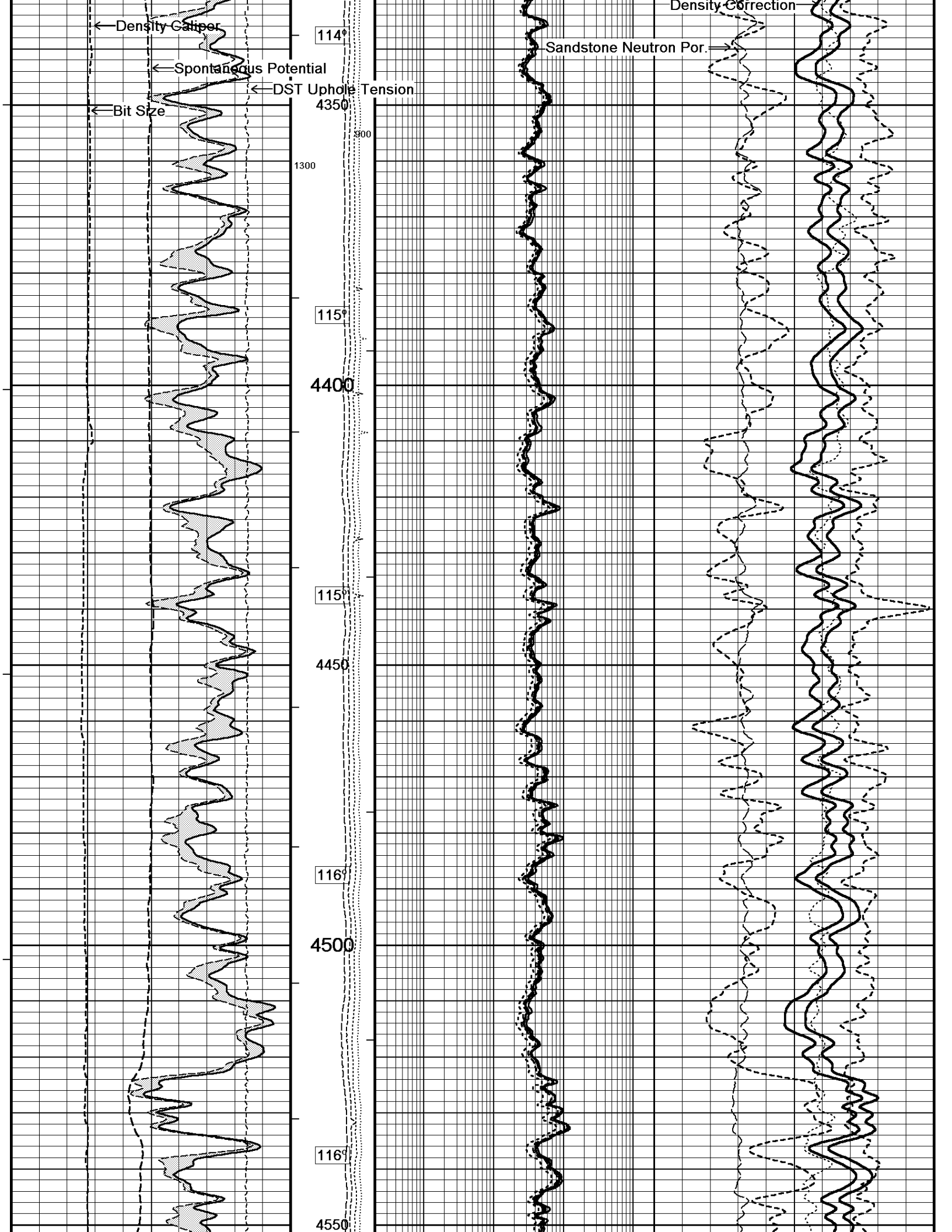
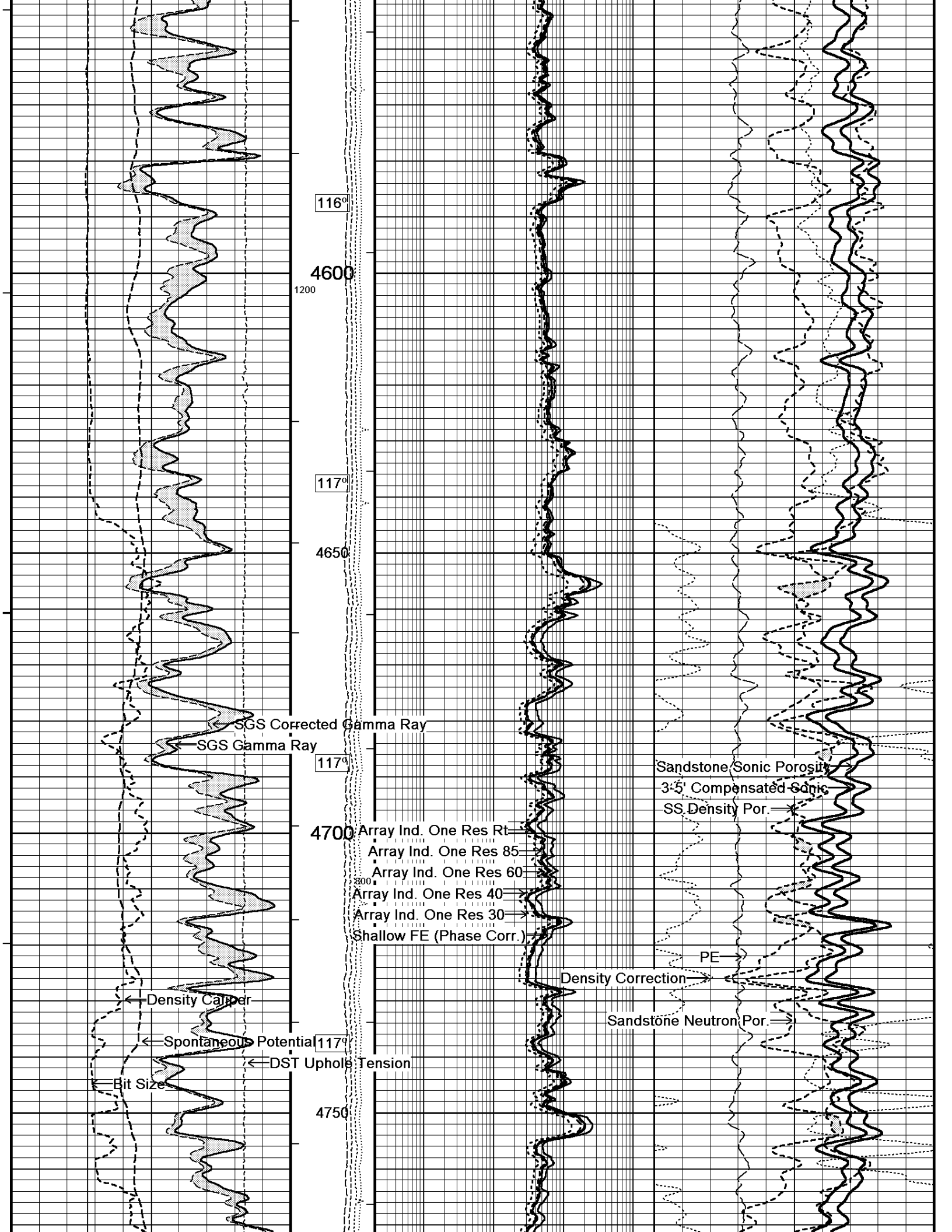
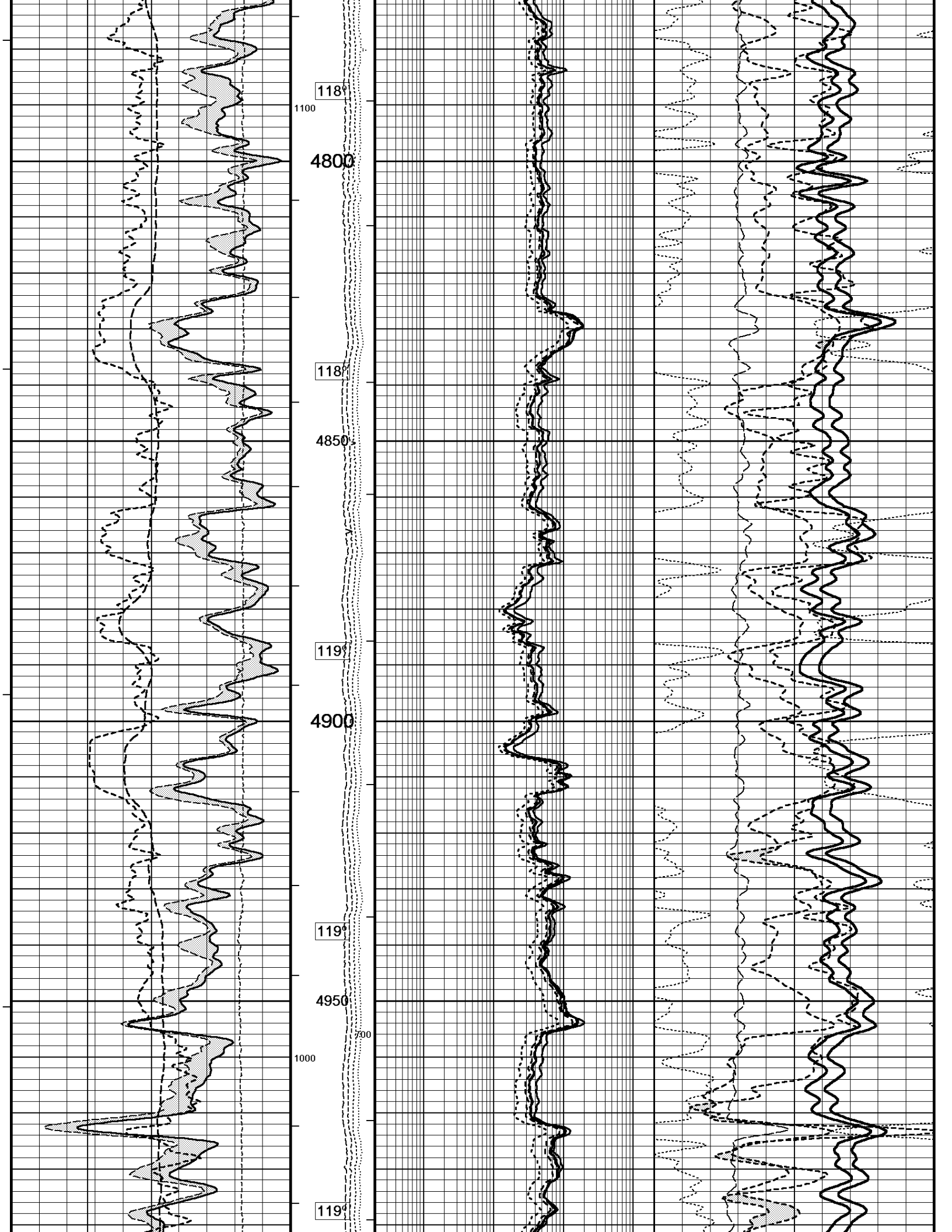
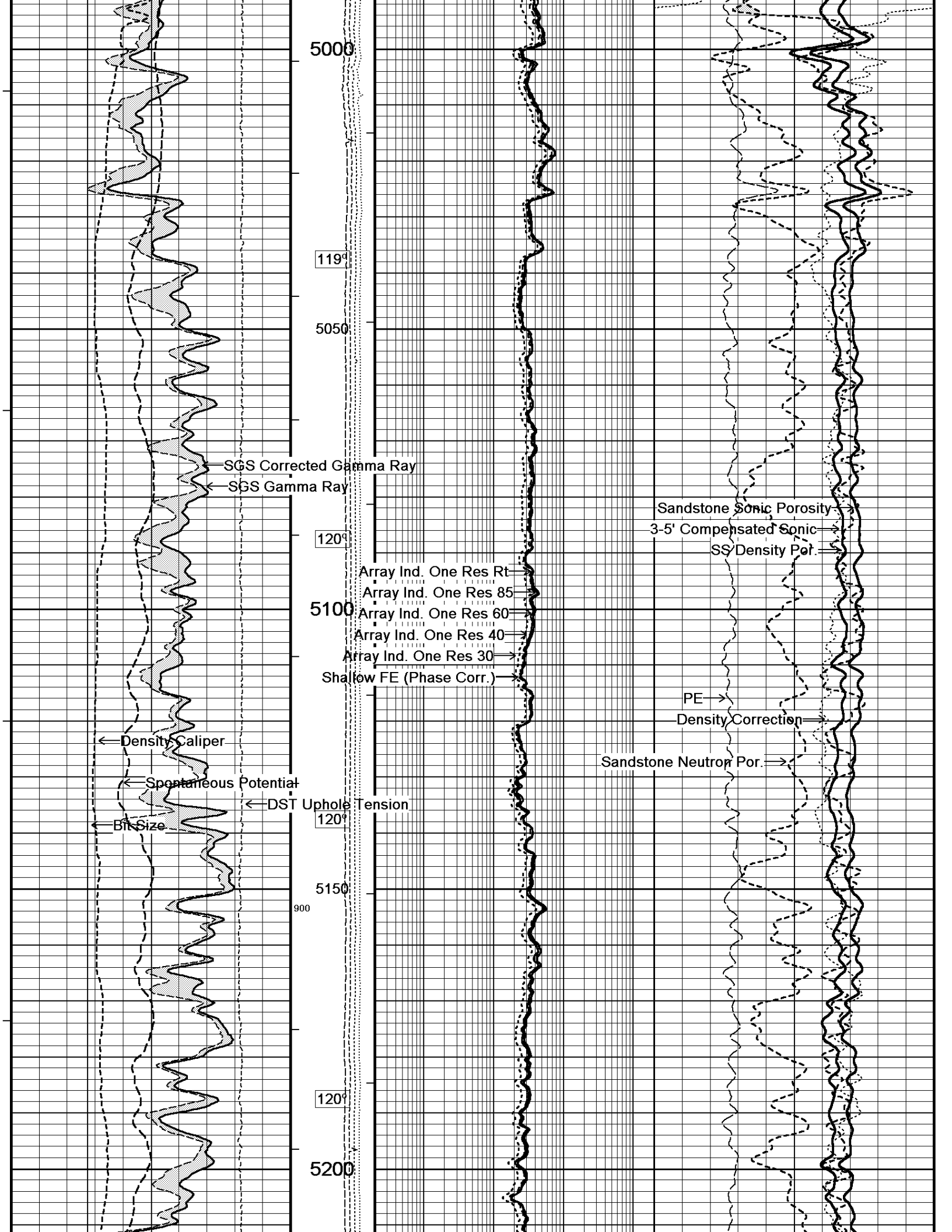
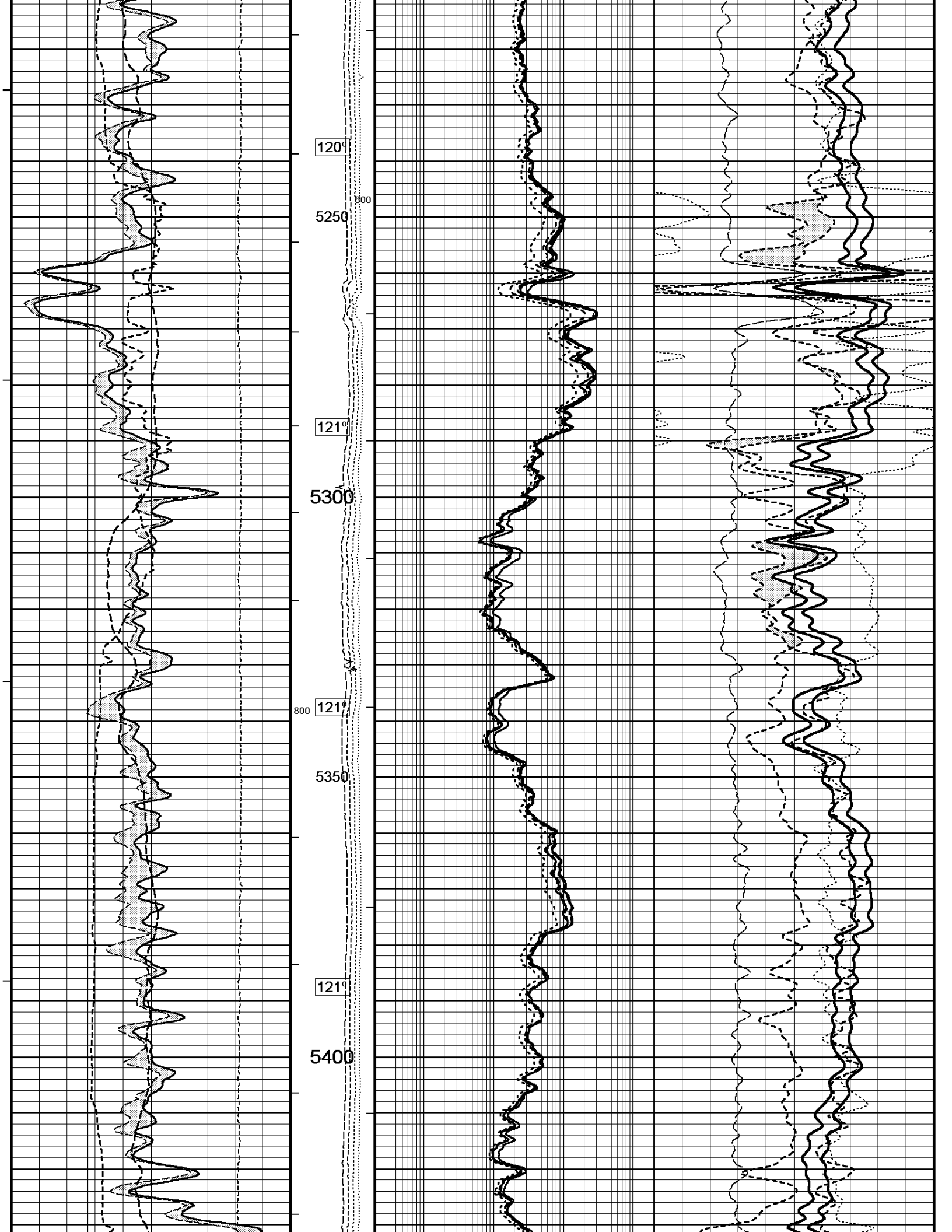
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
Sandstone Sonic Porosity
3-5' Compensated Sonic
SS Density Por
PE

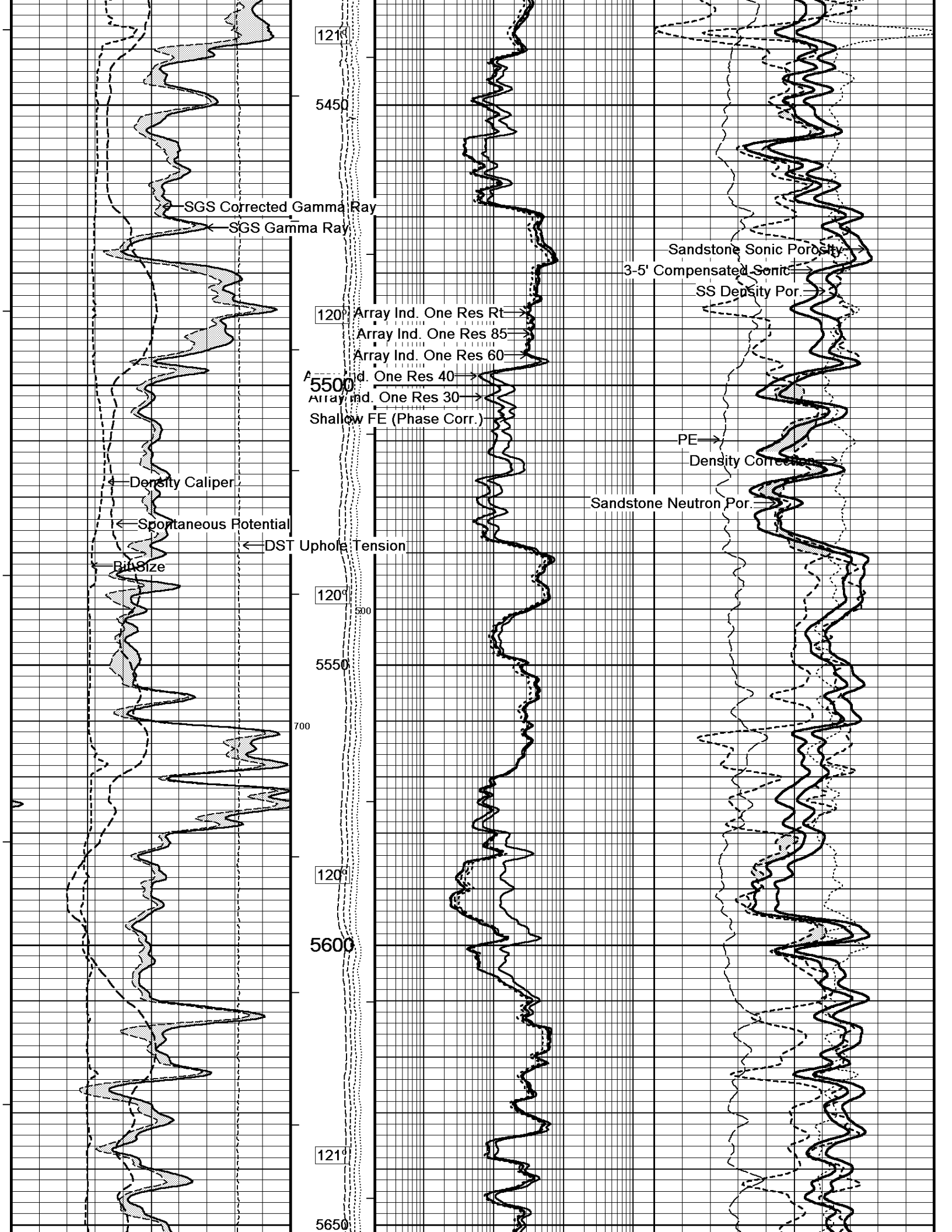

Density Caliper
Spontaneous Potential
DST Uphole Tension
Bit Size
114°
4350
900
1300
115°
4400
115°
4450
116°
4500
116°
4550
Sandstone Neutron Por.
Density Correction

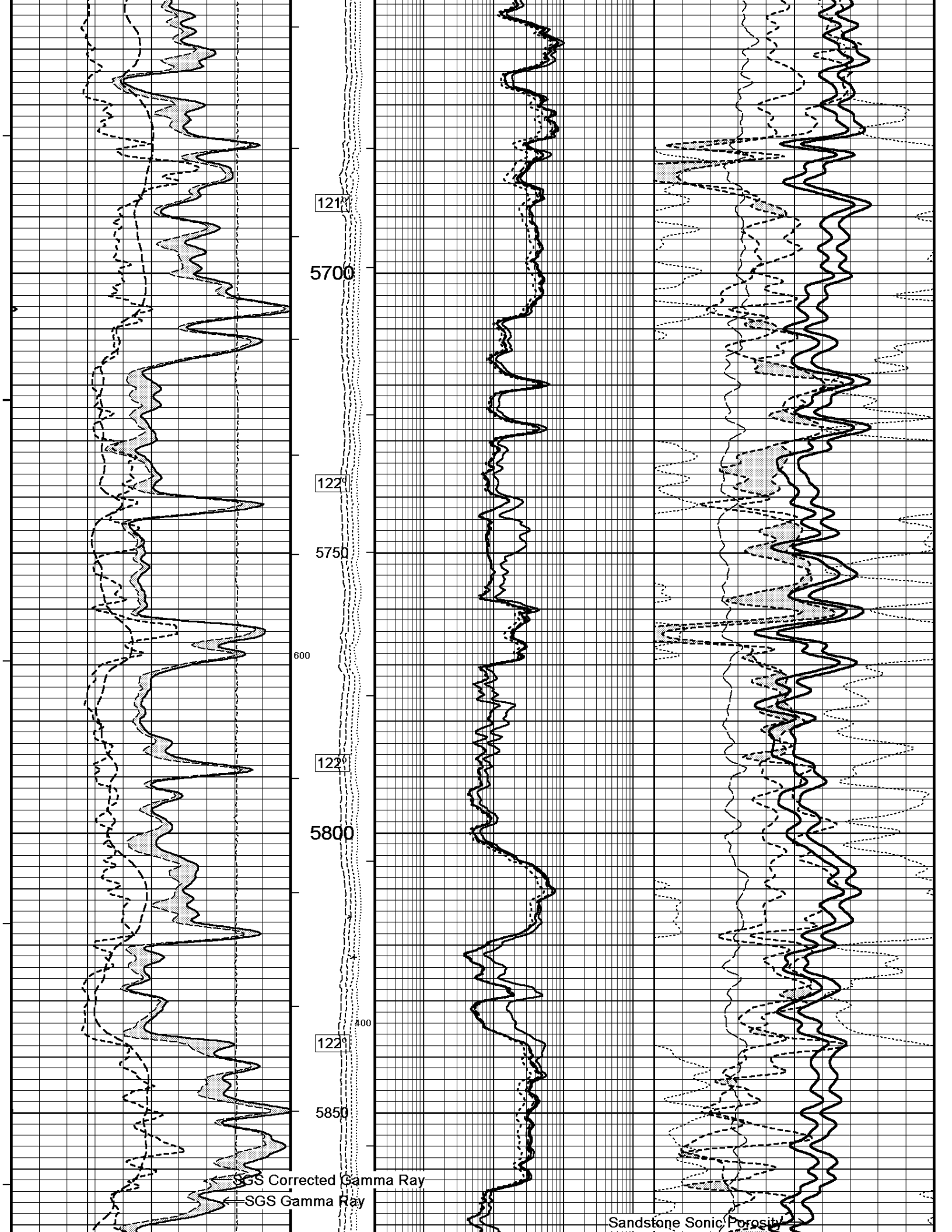

116°
4600
1200
117°
4650
SGS Corrected Gamma Ray
SGS Gamma Ray
117°
4700
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
800
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
Density Caliper
Spontaneous Potential
117°
DST Uphole Tension
Bit Size
4750
Sandstone Sonic Porosity
3-5' Compensated Sonic
SS Density Por.
PE
Density Correction
Sandstone Neutron Por.

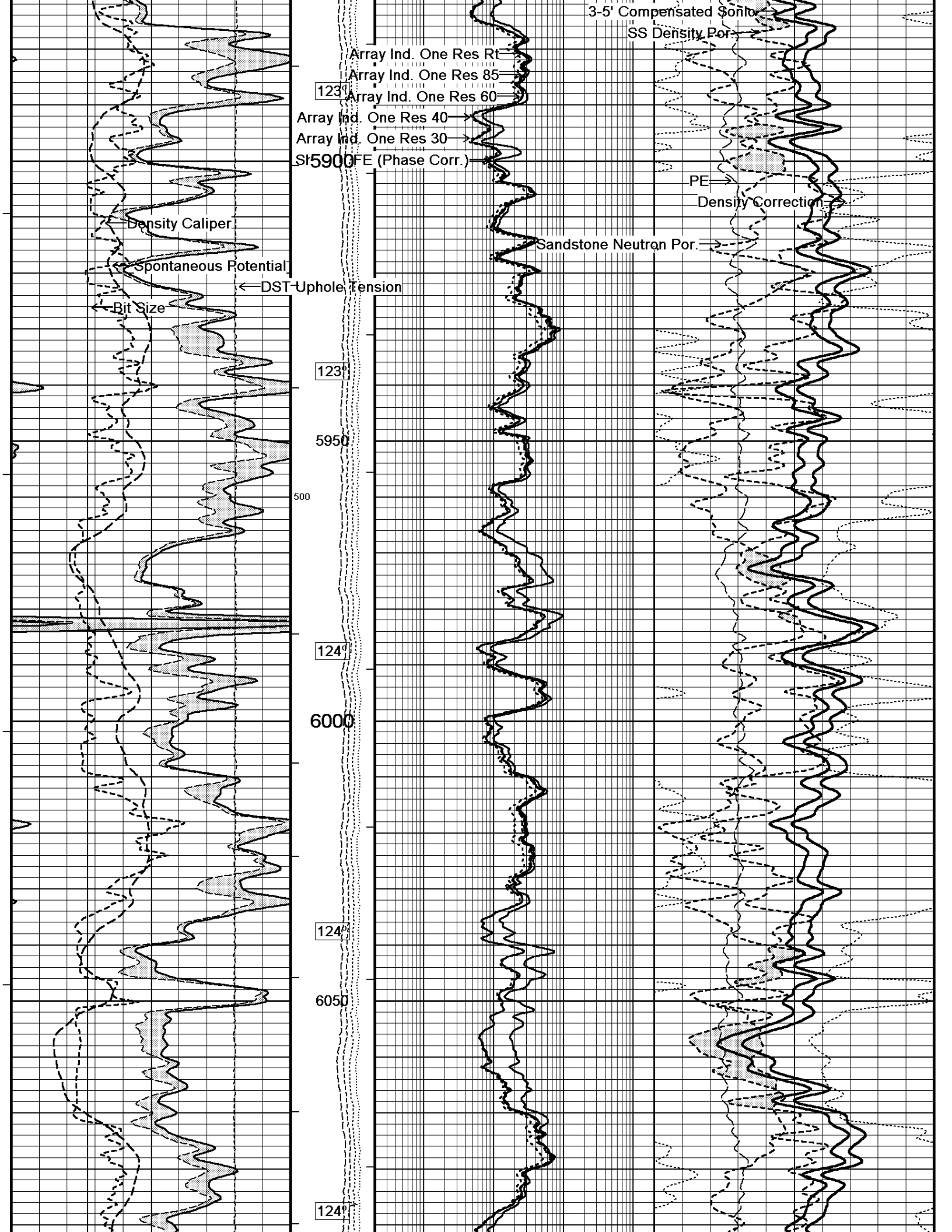

118°
1100
4800
118°
4850
119°
4900
119°
4950
700
1000
119°

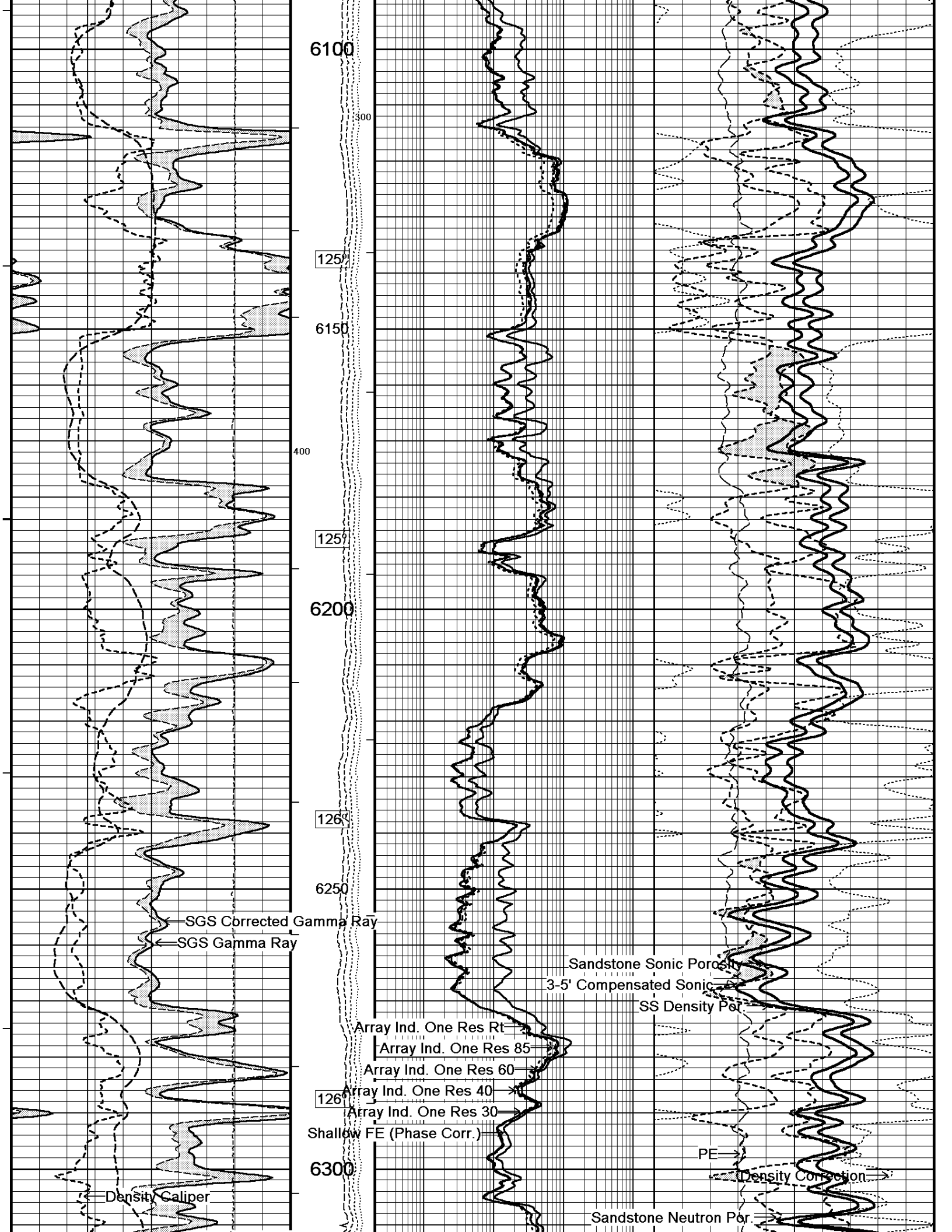

5000
119°
5050
SGS Corrected Gamma Ray
SGS Gamma Ray
120°
Array Ind. One Res Rt
Array Ind. One Res 85
5100
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
Sandstone Sonic Porosity
3-5' Compensated Sonic
SS Density Por.
PE
Density Correction
Sandstone Neutron Por.
Density Caliper
Spontaneous Potential
DST Uphole Tension
120°
Bit Size
5150
900
120°
5200

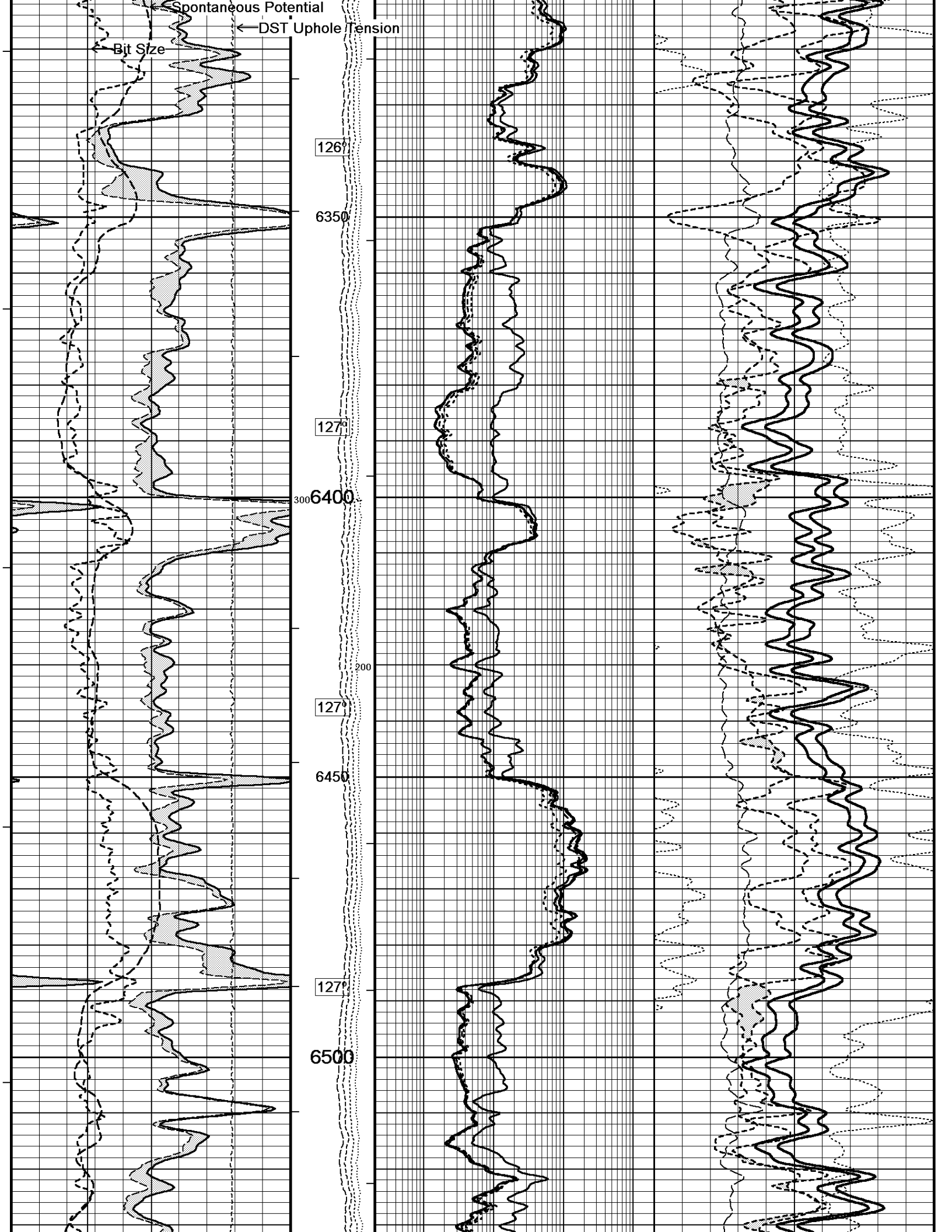

120°
600
5250
121°
5300
800
121°
5350
121°
5400

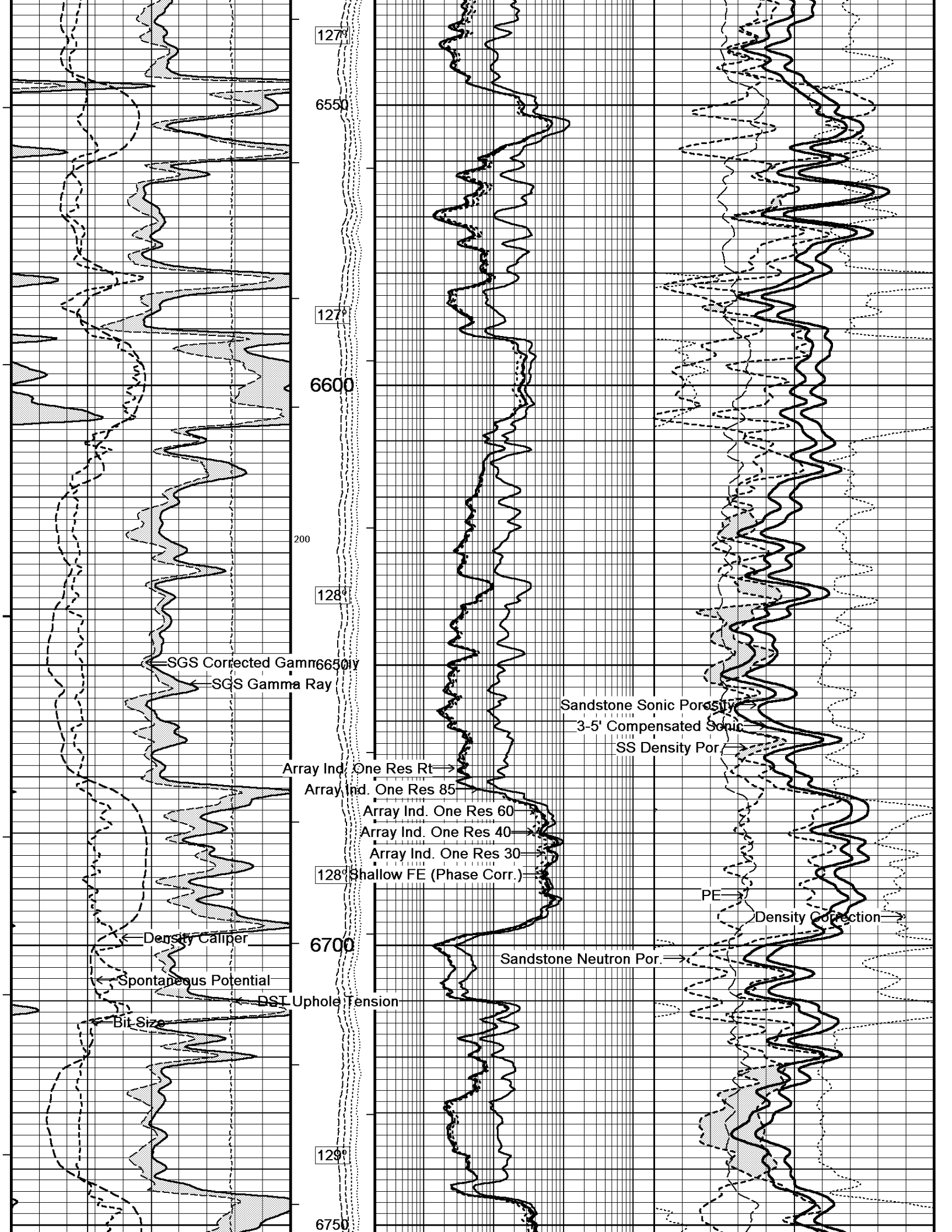

SGS Corrected Gamma Ray
SGS Gamma Ray
Density Caliper
Spontaneous Potential
DST Uphole Tension
Bit Size
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
Sandstone Sonic Porosity
3-5' Compensated Sonic
SS Density Por.
PE
Density Correction
Sandstone Neutron Por.
5450
5500
5550
5600
5650
700
500

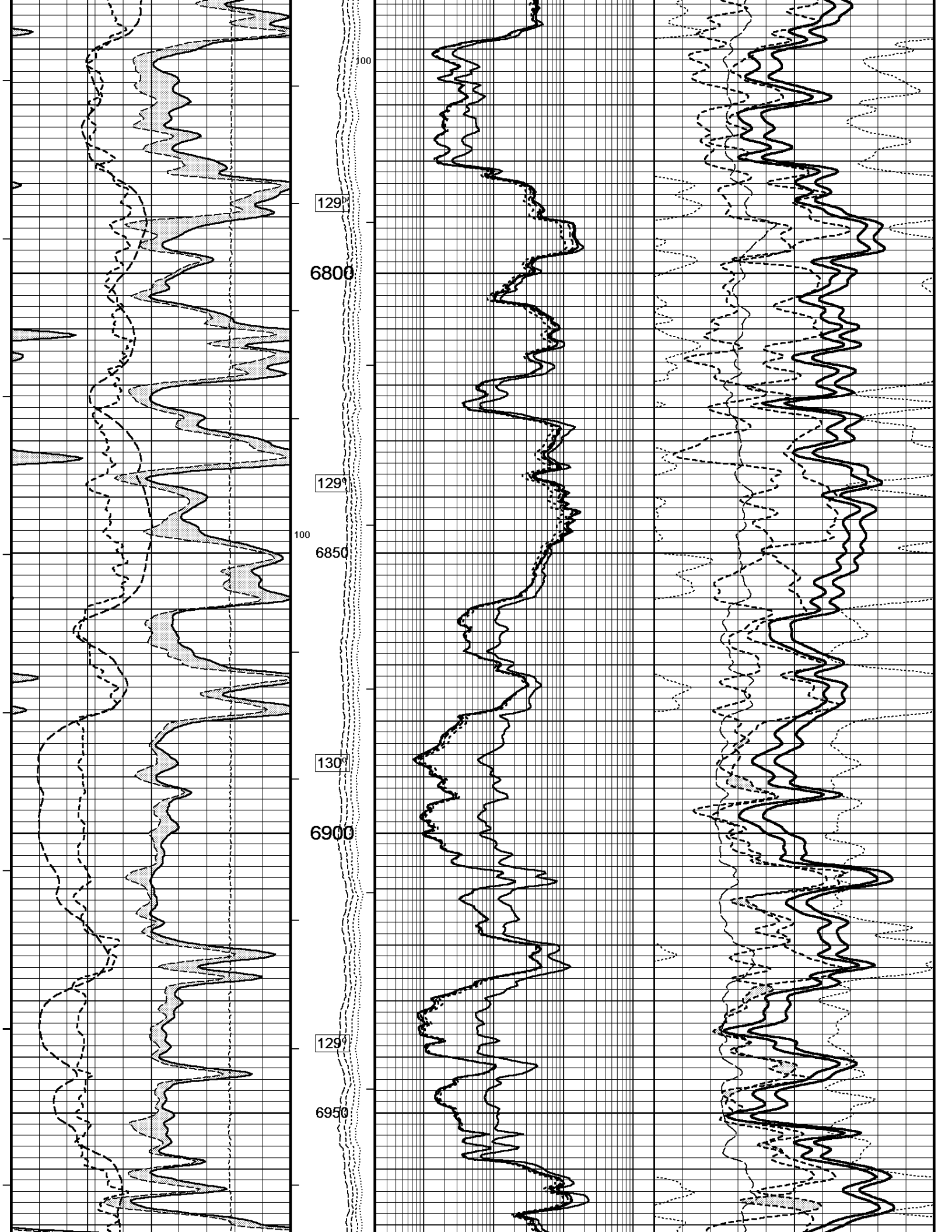

121°
5700
122°
5750
600
122°
5800
400
122°
5850
SGS Corrected Gamma Ray
SGS Gamma Ray
Sandstone Sonic Porosity

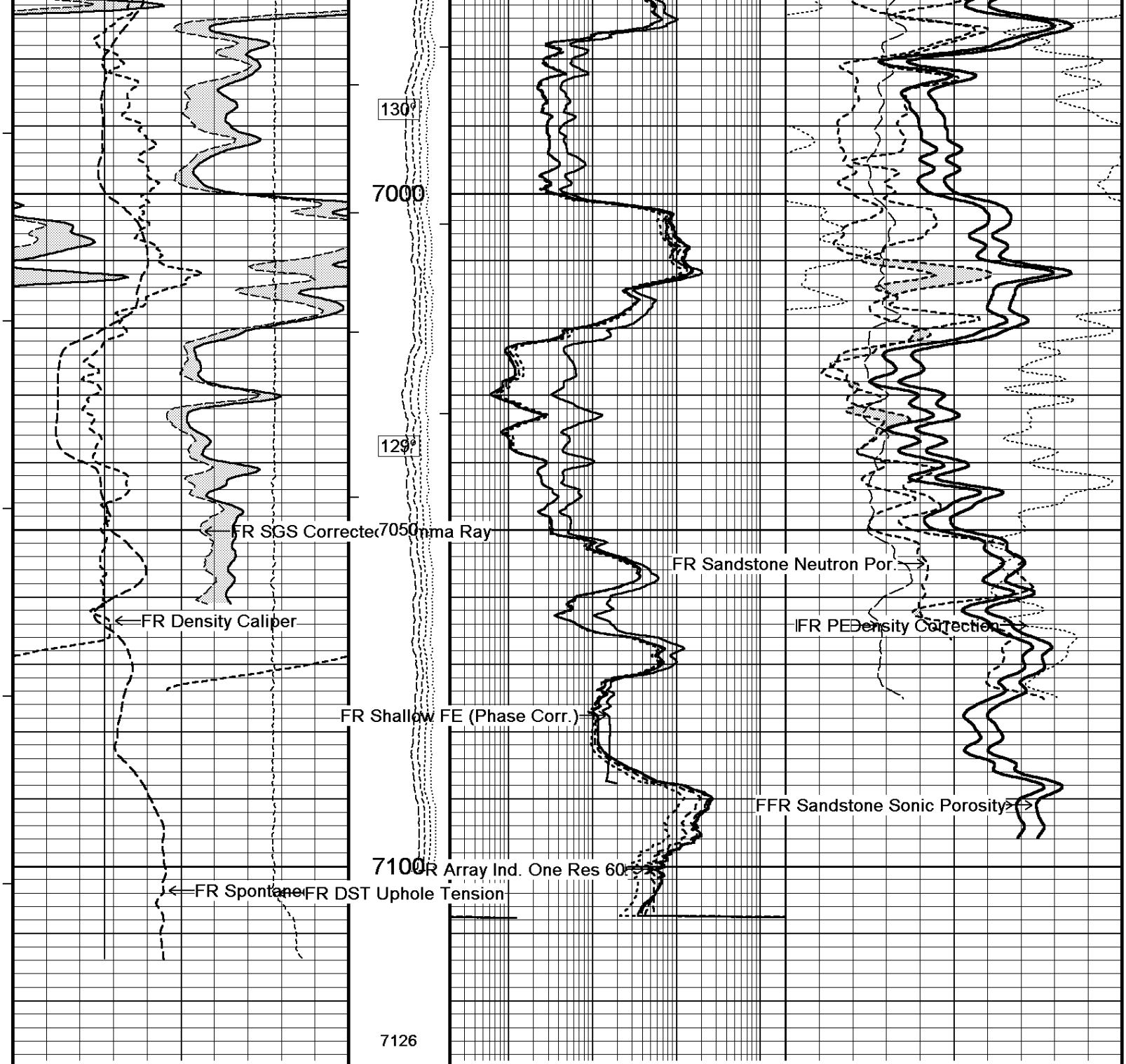

3-5' Compensated Sonic
SS Density Por.
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
SFE (Phase Corr.)
PE
Density Correction
Density Caliper
Sandstone Neutron Por.
Spontaneous Potential
DST Uphole Tension
Bit Size
5900
5950
6000
6050


6100
300
125'
6150
400
125'
6200
126'
6250
SGS Corrected Gamma Ray
SGS Gamma Ray
Sandstone Sonic Porosity
3-5' Compensated Sonic
SS Density Por
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
126'
Array Ind. One Res 30
Shallow FE (Phase Corr.)
PE
6300
Density Correction
Density Caliper
Sandstone Neutron Por


Spontaneous Potential
DST Uphole Tension
Bit Size
126°
6350
127°
300
6400
200
127°
6450
127°
6500


127°
6550
127°
6600
200
128°
SGS Corrected Gamma
6650ay
SGS Gamma Ray
Sandstone Sonic Porosity
3-5' Compensated Sonic
SS Density Por
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
128° Shallow FE (Phase Corr.)
PE
Density Correction
Density Caliper
6700
Sandstone Neutron Por.
Spontaneous Potential
DST Uphole Tension
Bit Size
129°
6750


100
129
6800
129
100
6850
130
6900
129
6950



7126

Depth in Feet

Timing Marks every 60.0 sec

3-5' Compensated Sonic
microsec/foot
140 115 90 65 40

Bit Size
inches
6 11 16

Borehole Temp in deg F

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

Sandstone Neutron Por.
percent
30 10 -10

HVI every 10 cu ft

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

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

Density Correction
grams/cc
-0.25 0 0.25

Annular Integral every 10 cu ft

Spontaneous Potential
millivolts
− → | 20 | ← +

Density Caliper
inches
6 11 16

SGS Gamma Ray
API
0 75 150

SGS Corrected Gamma Ray
API
0 75 150
150 225 300

TR21
1100 100

TR11
1100 100

TR22
1100 100

TR12
1100 100

Replay Scale 1:240

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

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

Array Ind. One Res 85
ohm metres
0.20 2000
1 10 100 1000

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

PE
barns/electron
0 5 10

SS Density Por.
percent
30 10 -10

Sandstone Sonic Porosity
percent
30 10 -10

Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Minimus\Logs\Patara\Andy's Mesa Federal #76\SPLICE.dta
System Versions: Plotted with 10.08.1568

Plotted on 20-AUG-2010 13:33
Recorded on 20-AUG-2010 09:22

SANDSTONE 5 INCH MAIN LOG

LIMESTONE 5 INCH MAIN LOG

Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Minimus\Logs\Patara\Andy's Mesa Federal #76\SPLICE.dta
System Versions: Plotted with 10.08.1568

Plotted on 20-AUG-2010 13:33
Recorded on 20-AUG-2010 09:22

Timing Marks
every 60.0 sec

Bit Size
inches
6 11 16

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

Gamma Ray
API
0 75 150

Spontaneous Potential
millivolts
− → | 20 | ← +

Depth in Feet

Borehole Temp in deg F

HVI every 10 cu ft

Annular Integral every 10 cu ft

TR21
1100 100

TR11
1100 100

3-5' Compensated Sonic
microsec/foot
140 115 90 65 40

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

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

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

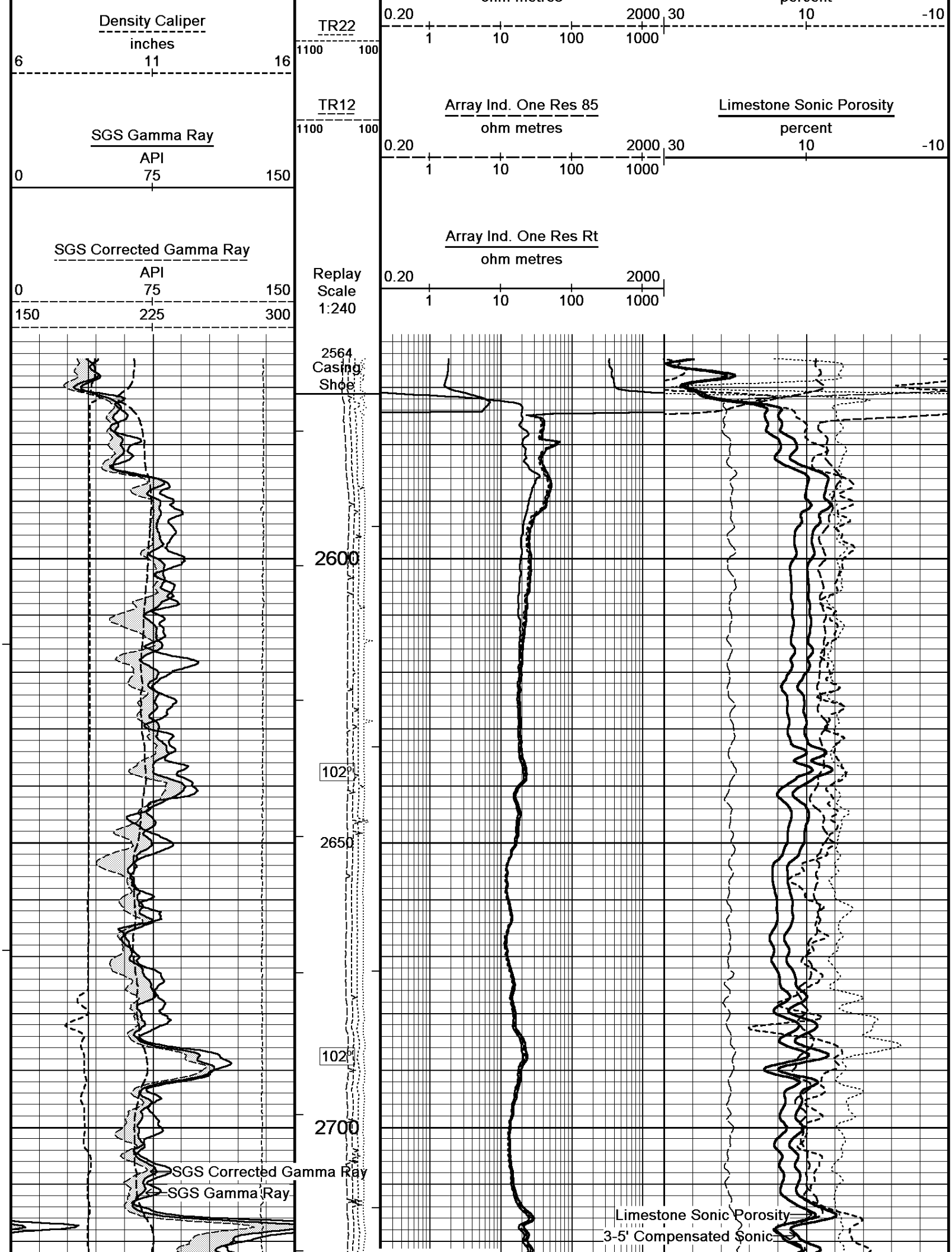
Array Ind. One Res 60
ohm metres

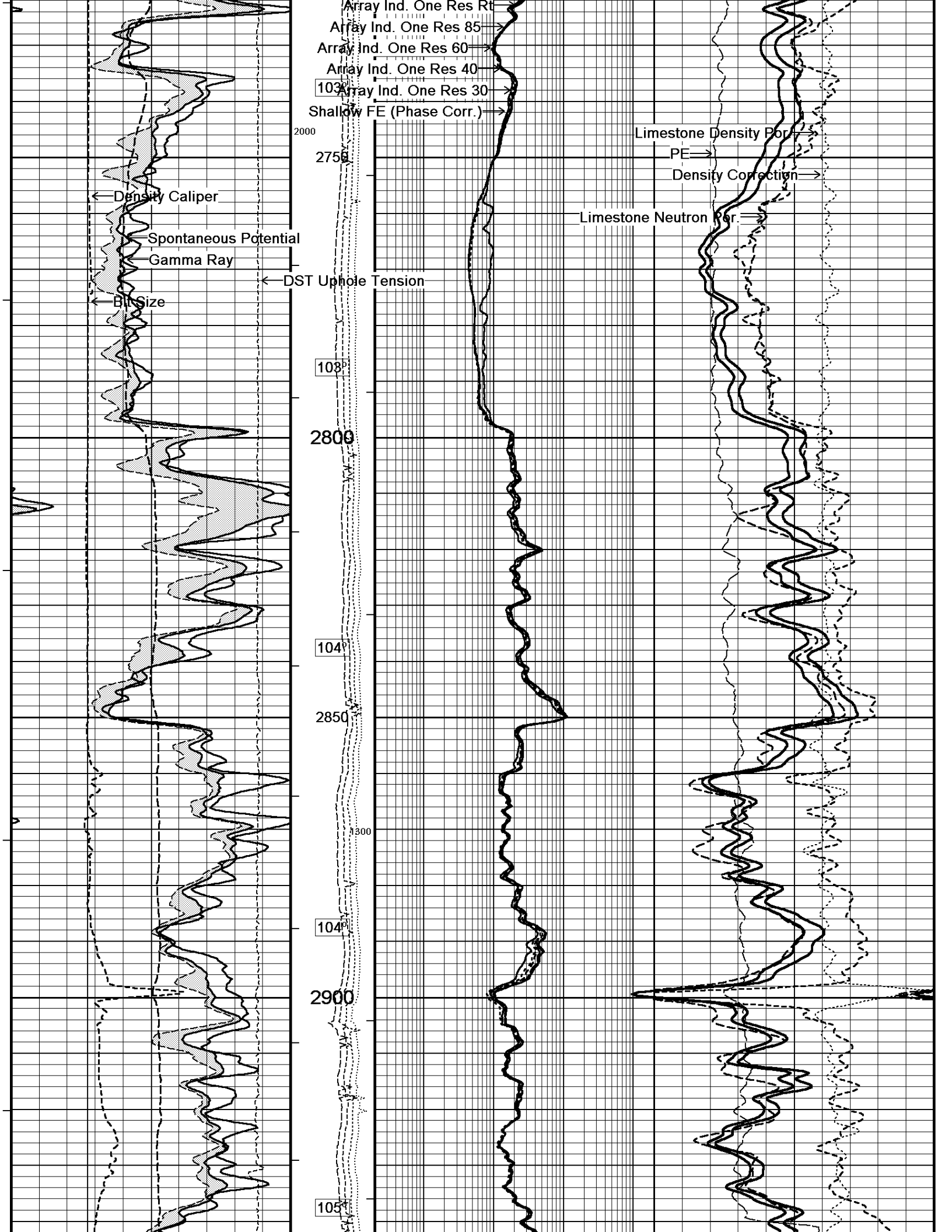
Limestone Neutron Por.
percent
30 10 -10

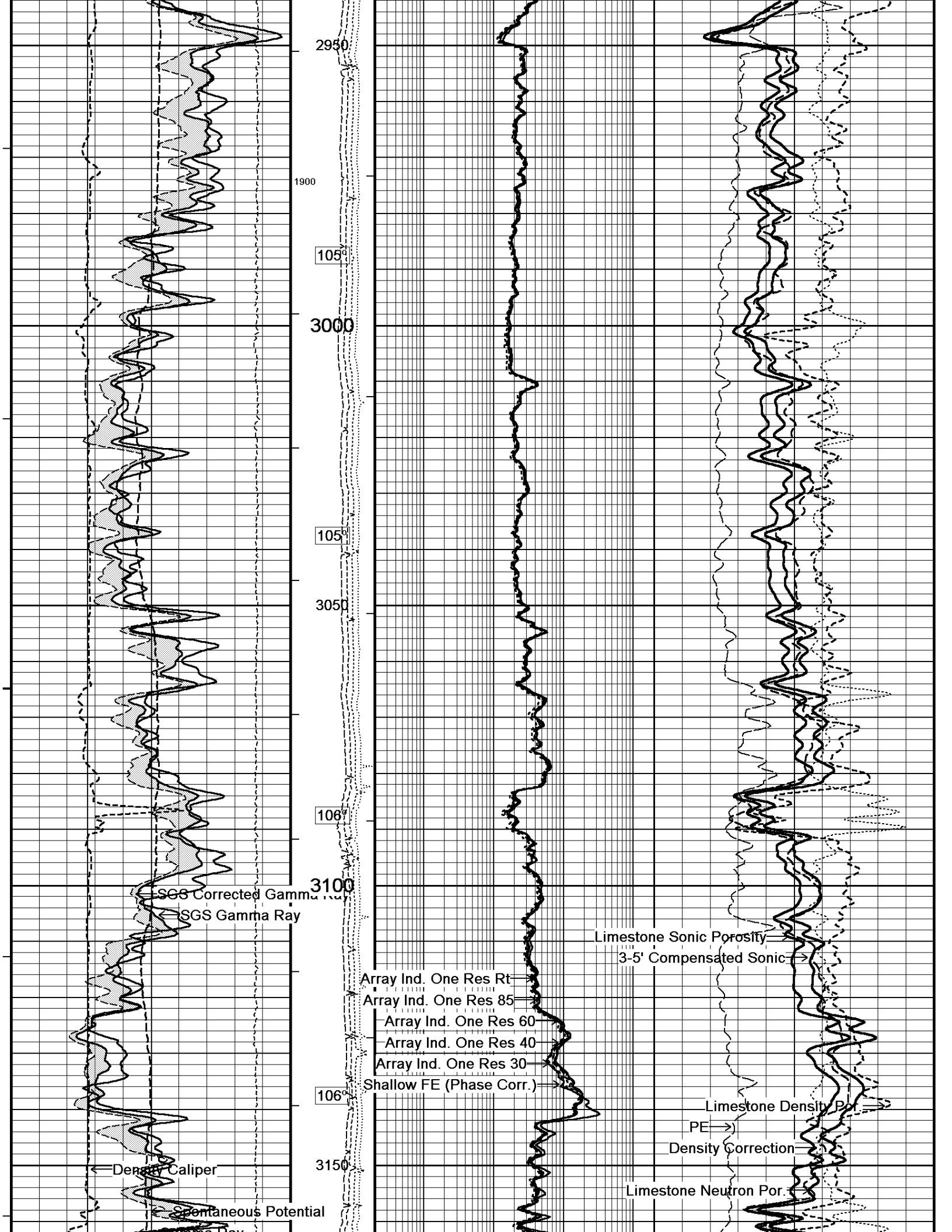
Density Correction
grams/cc
-0.25 0 0.25

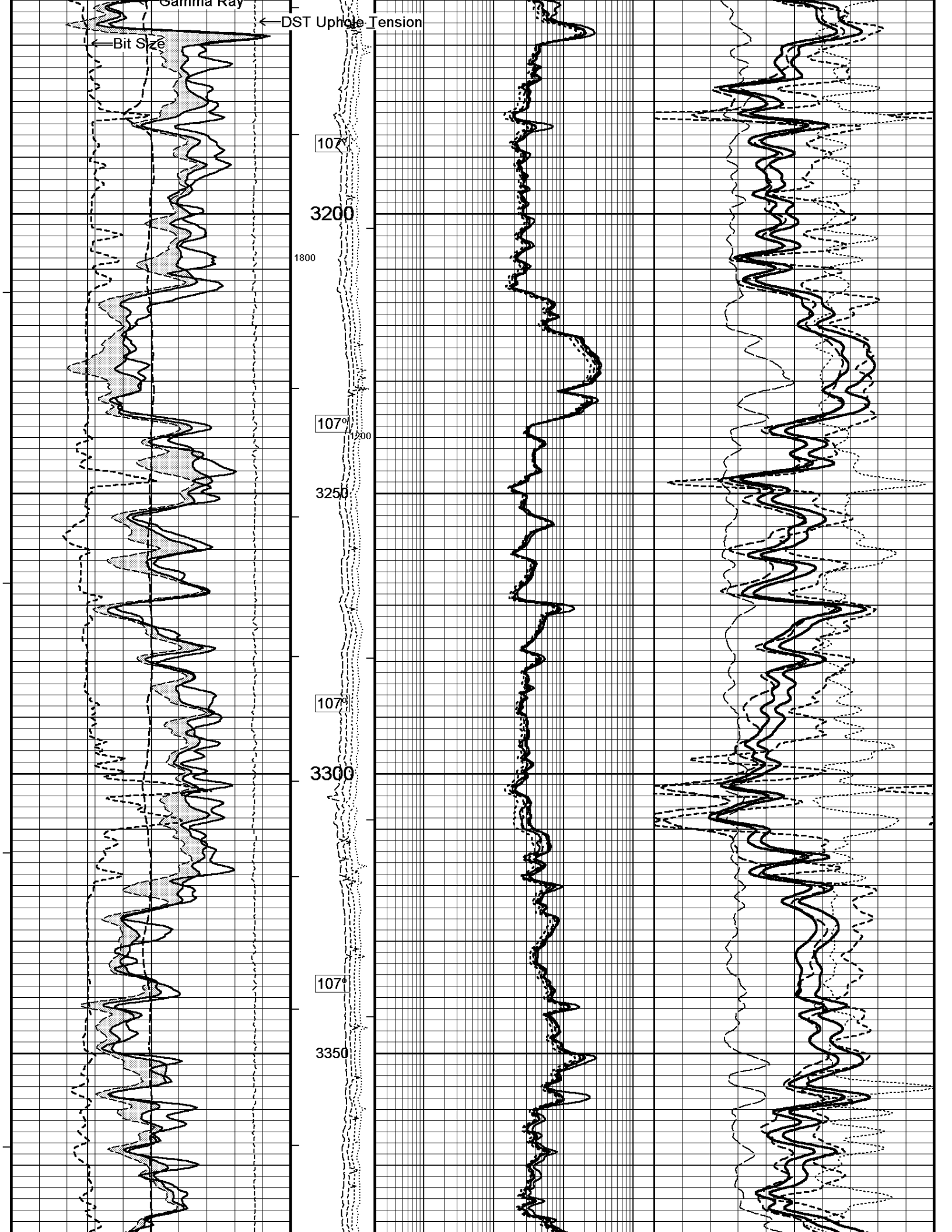
PE
barns/electron
0 5 10

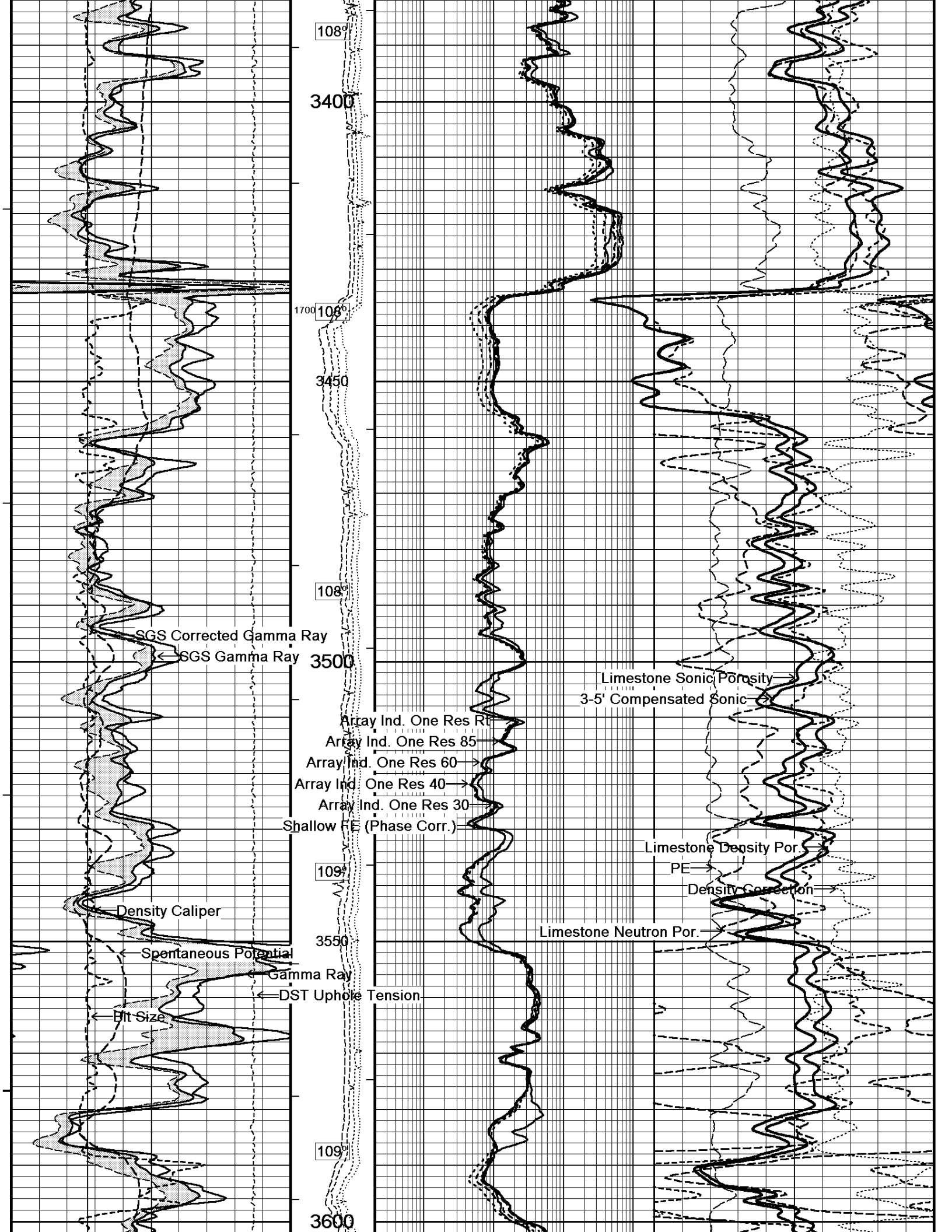
Limestone Density Por.
percent

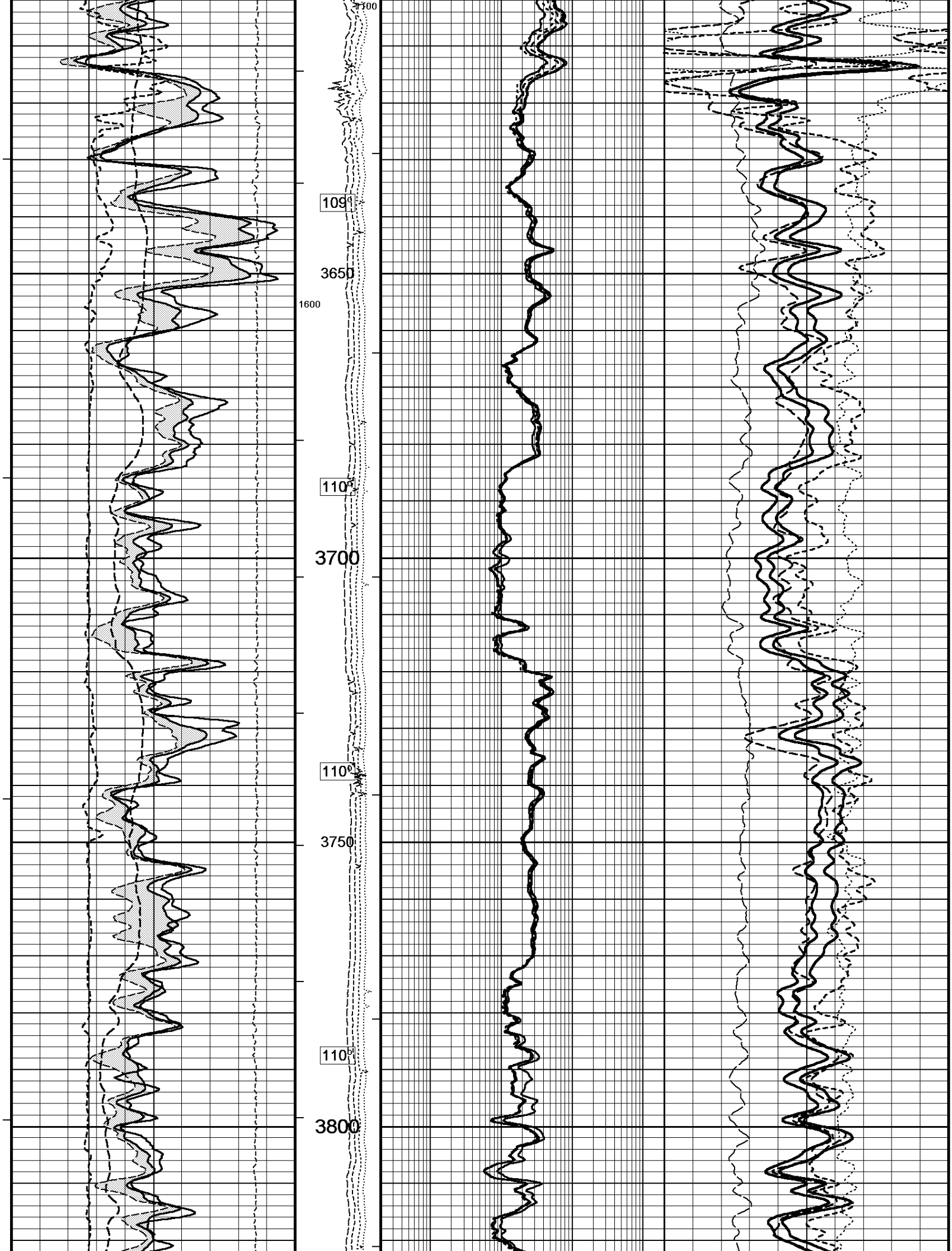

Density Caliper
inches
6
11
16
TR22
1100
100
TR12
1100
100
SGS Gamma Ray
API
0
75
150
SGS Corrected Gamma Ray
API
0
75
150
150
225
300
Replay
Scale
1:240
0.20
2000
1
10
100
1000
Array Ind. One Res 85
ohm metres
0.20
2000
1
10
100
1000
Array Ind. One Res Rt
ohm metres
0.20
2000
1
10
100
1000
30
10
-10
Limestone Sonic Porosity
percent
30
10
-10
2564
Casing
Shoe
2600
2650
2700
SGS Corrected Gamma Ray
SGS Gamma Ray
Limestone Sonic Porosity
3-5' Compensated Sonic

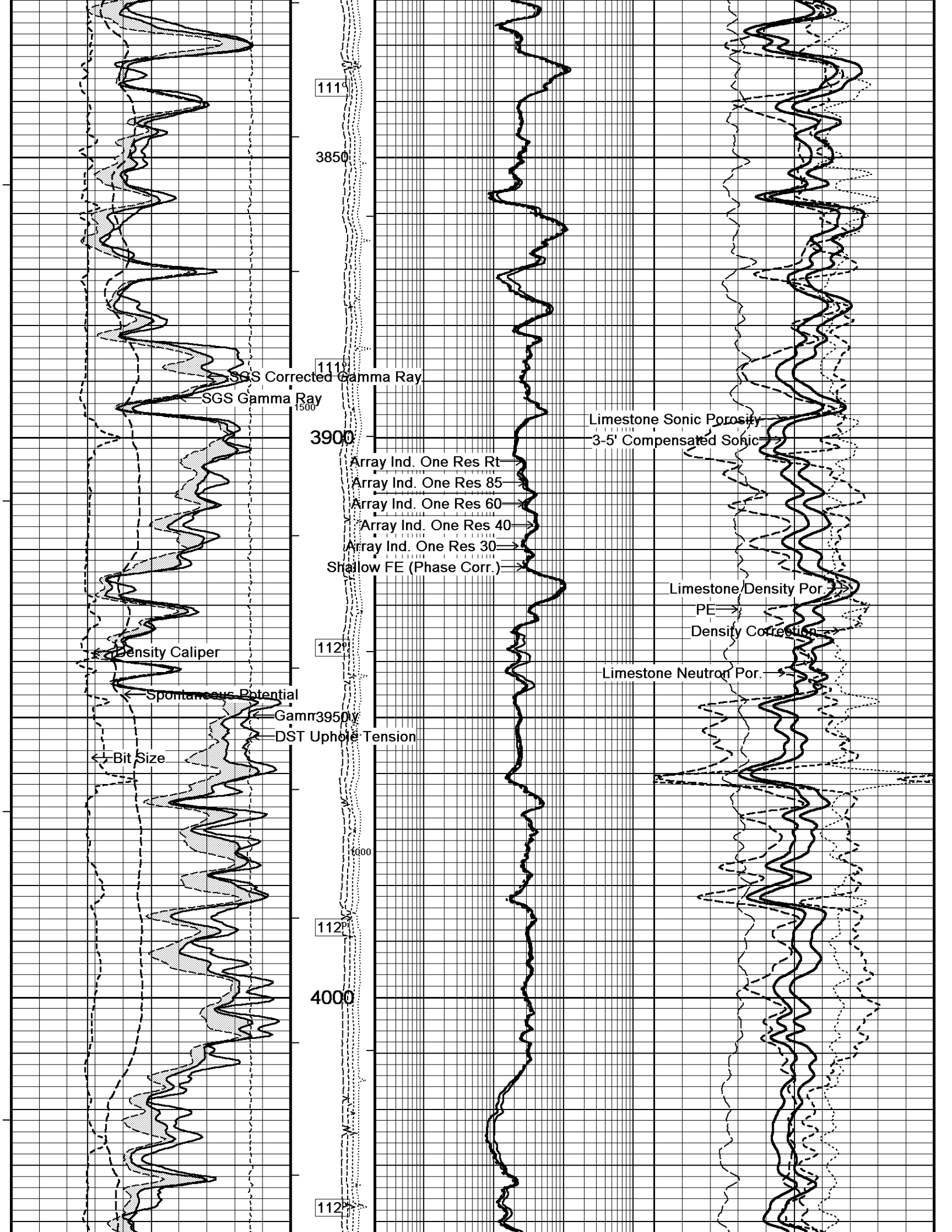

Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por.
Density Caliper
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Bit Size
2000
2750
2800
2850
2900
1300

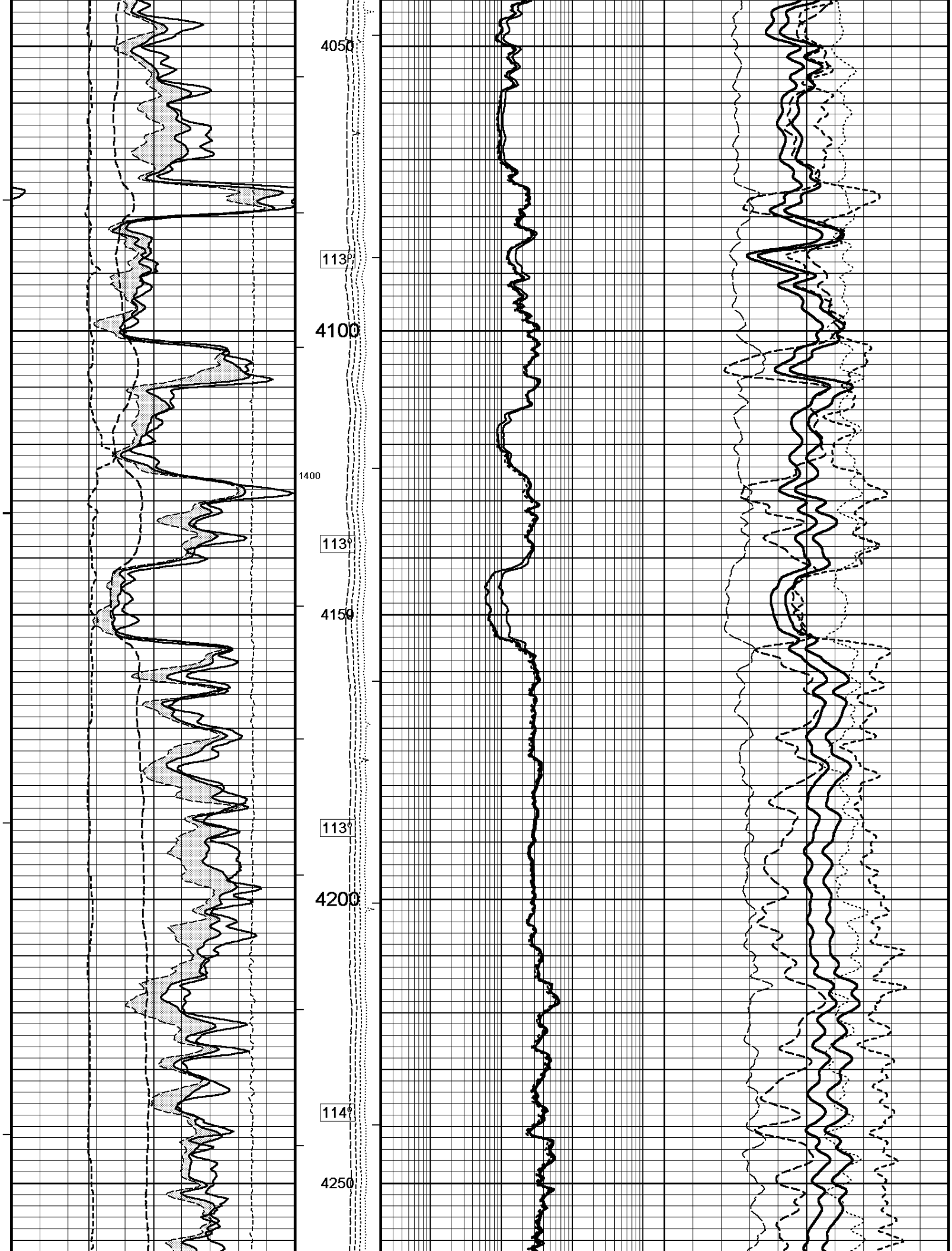

2950
1900
105
3000
105
3050
106
3100
SGS Corrected Gamma Ray
SGS Gamma Ray
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
106
3150
Density Caliper
Spontaneous Potential
Limestone Sonic Porosity
3-5' Compensated Sonic
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por.

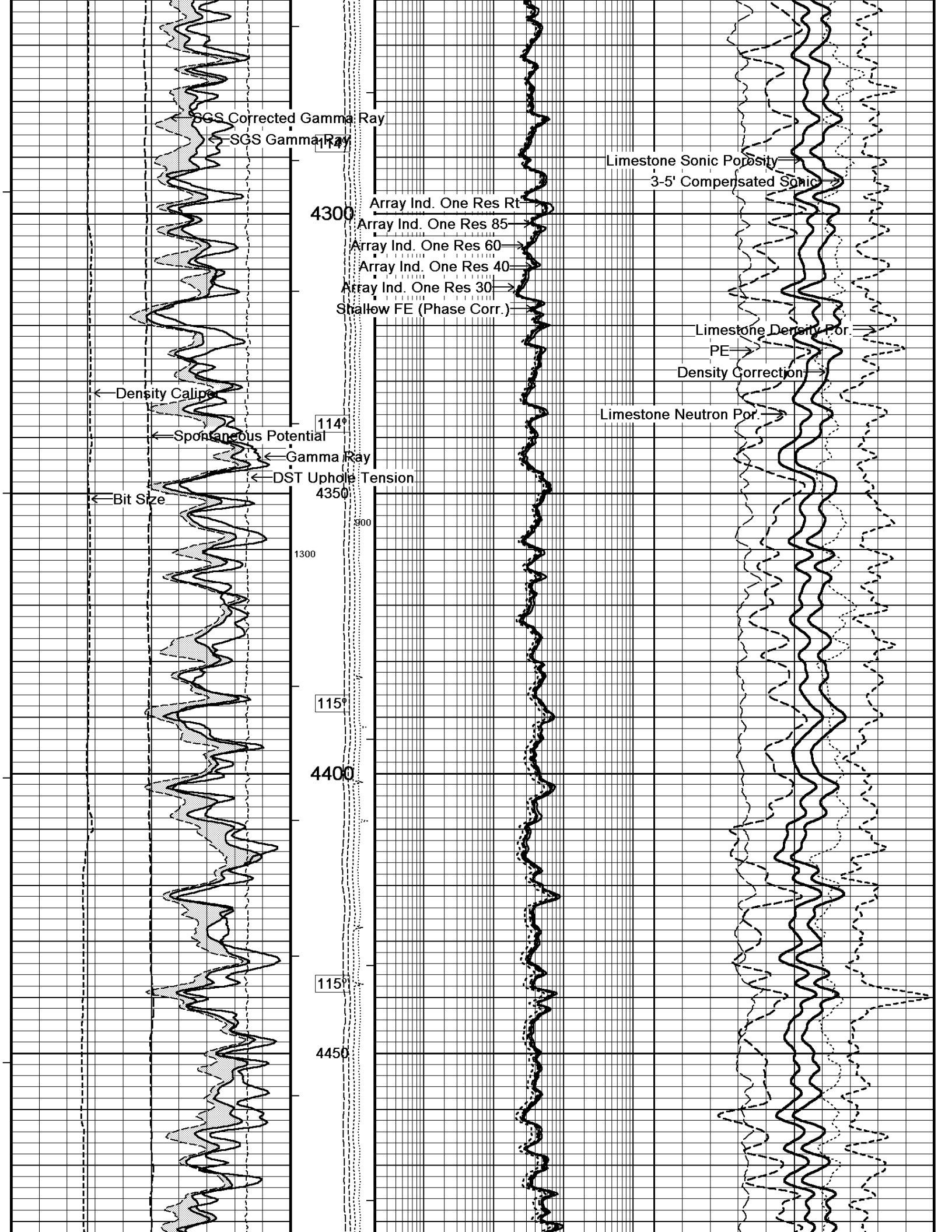

Gamma Ray
DST Uphole Tension
Bit Size
107°
3200
1800
107°
1200
3250
107°
3300
107°
3350

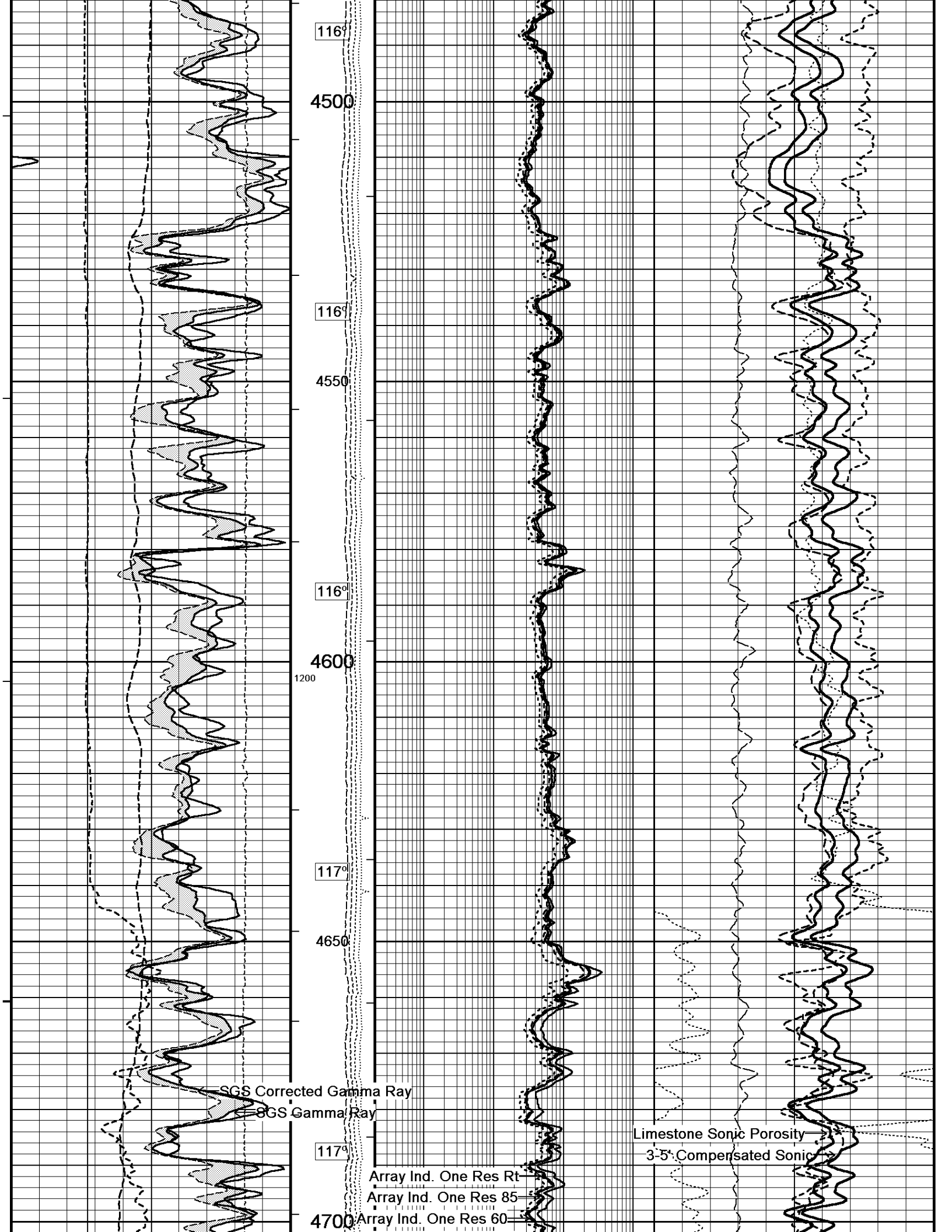

108°
3400
1700
108°
3450
108°
SGS Corrected Gamma Ray
SGS Gamma Ray
3500
Limestone Sonic Porosity
3-5' Compensated Sonic
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
109°
Limestone Density Por.
PE
Density Correction
Density Caliper
3550
Limestone Neutron Por.
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Bit Size
109°
3600

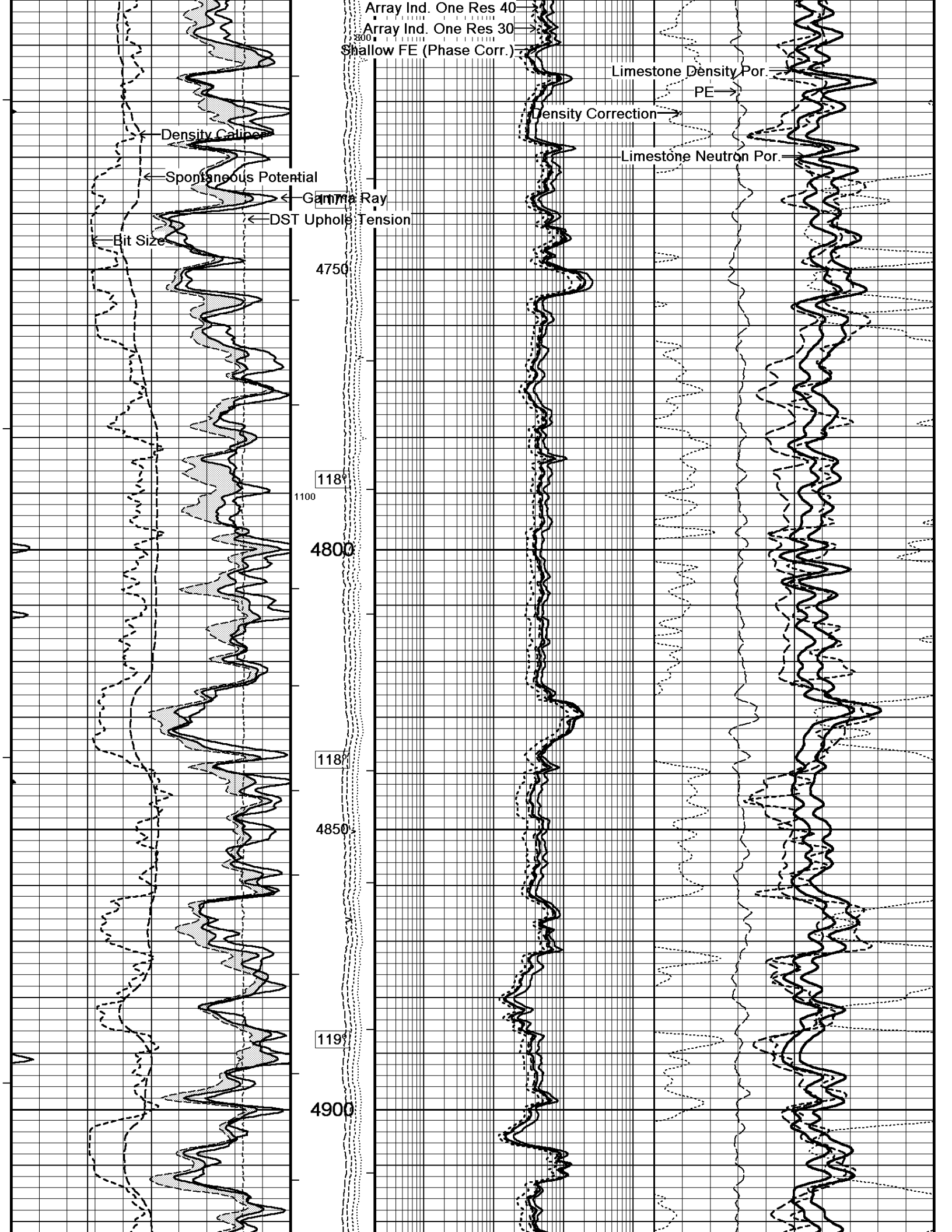

1100
1600
3650
3700
3750
3800

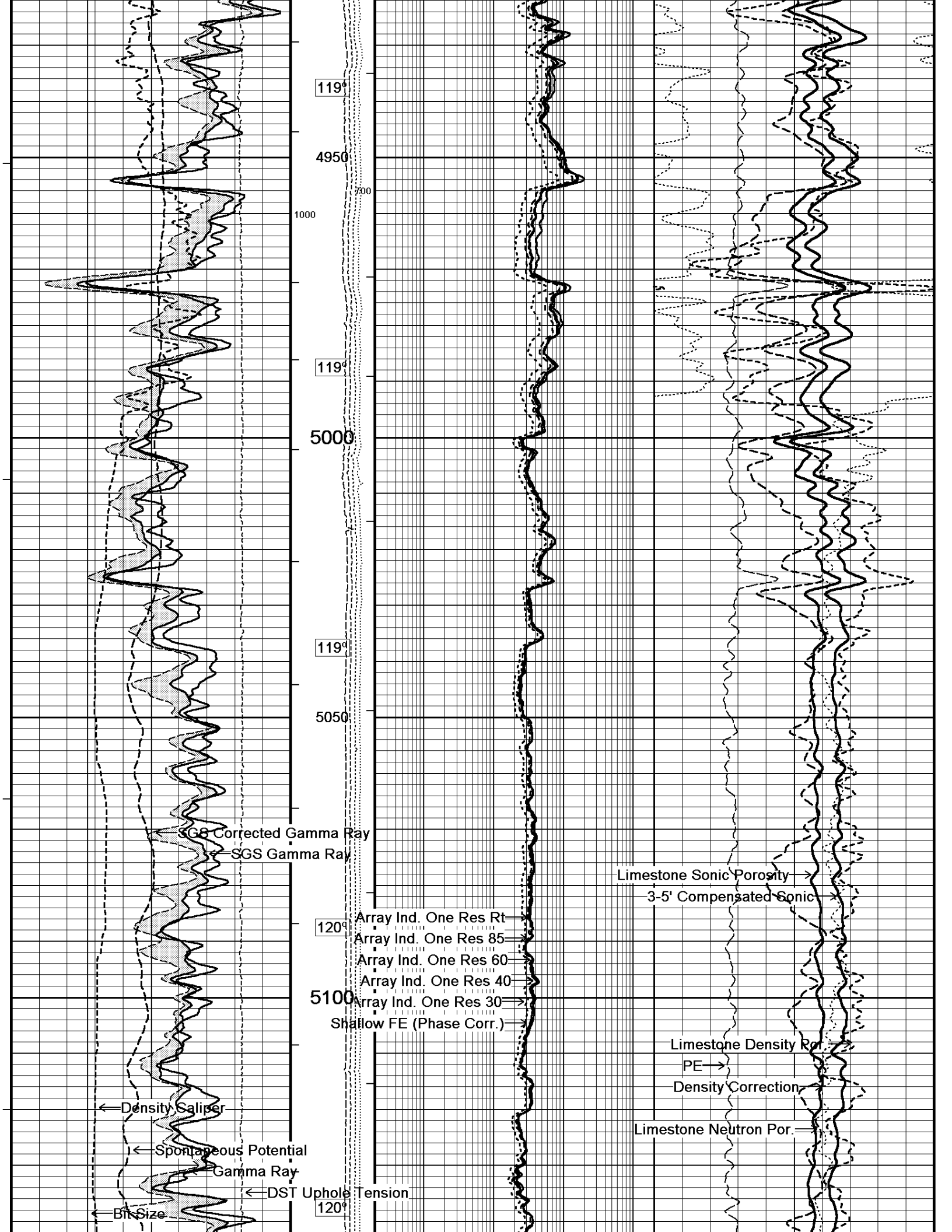

111
3850
111
SGS Corrected Gamma Ray
SGS Gamma Ray
1500
3900
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
Limestone Sonic Porosity
3-5' Compensated Sonic
Limestone Density Por.
PE
Density Correction
112
Density Caliper
Limestone Neutron Por.
Spontaneous Potential
Gamm3950y
DST Uphole Tension
Bit Size
1000
112
4000
112

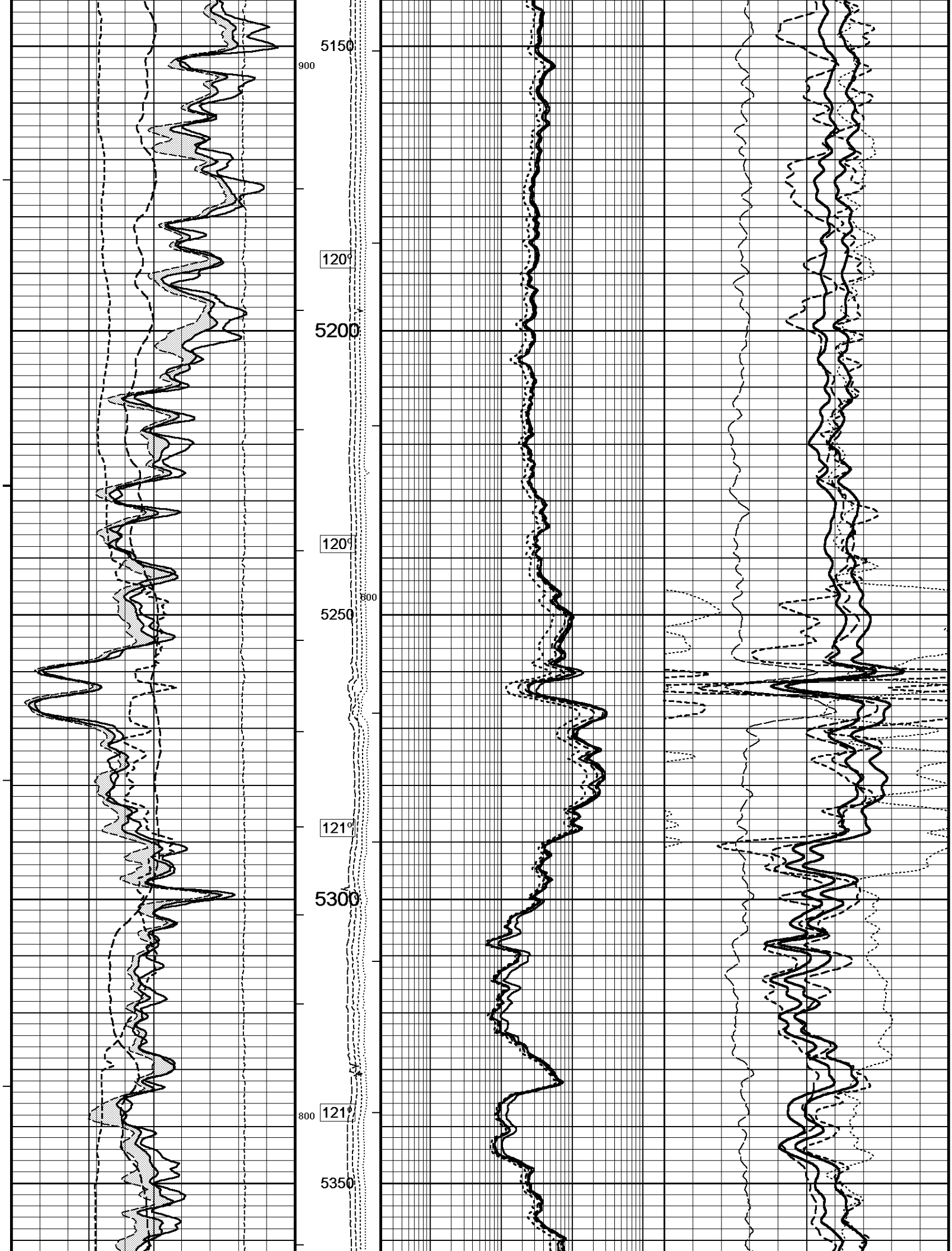

4050
113°
4100
1400
113°
4150
113°
4200
114°
4250

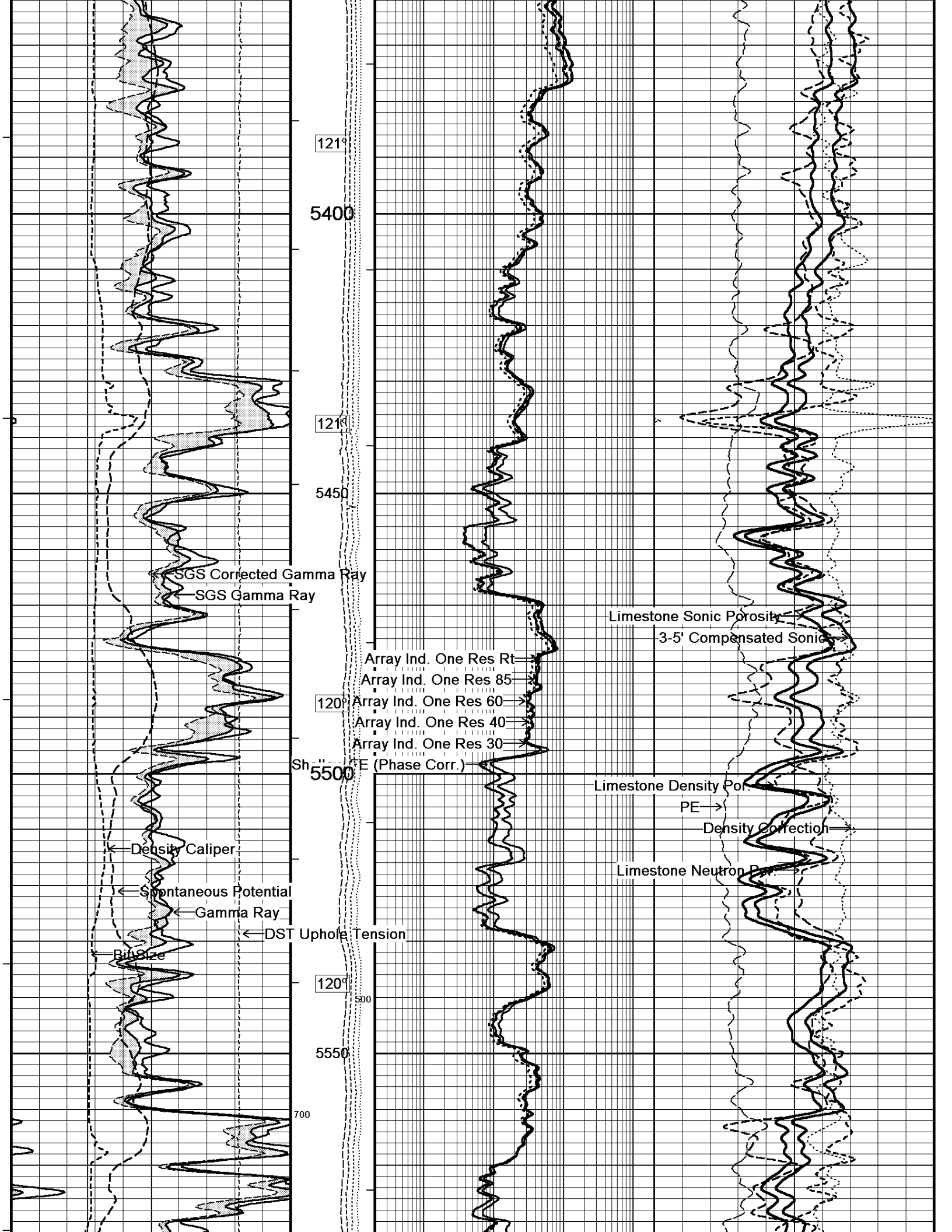

SGS Corrected Gamma Ray
SGS Gamma Ray
114°
Limestone Sonic Porosity
3-5' Compensated Sonic
4300
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
Limestone Density Por.
PE
Density Correction
Density Caliper
Limestone Neutron Por.
114°
Spontaneous Potential
Gamma Ray
DST Uphole Tension
4350
Bit Size
900
1300
115°
4400
115°
4450

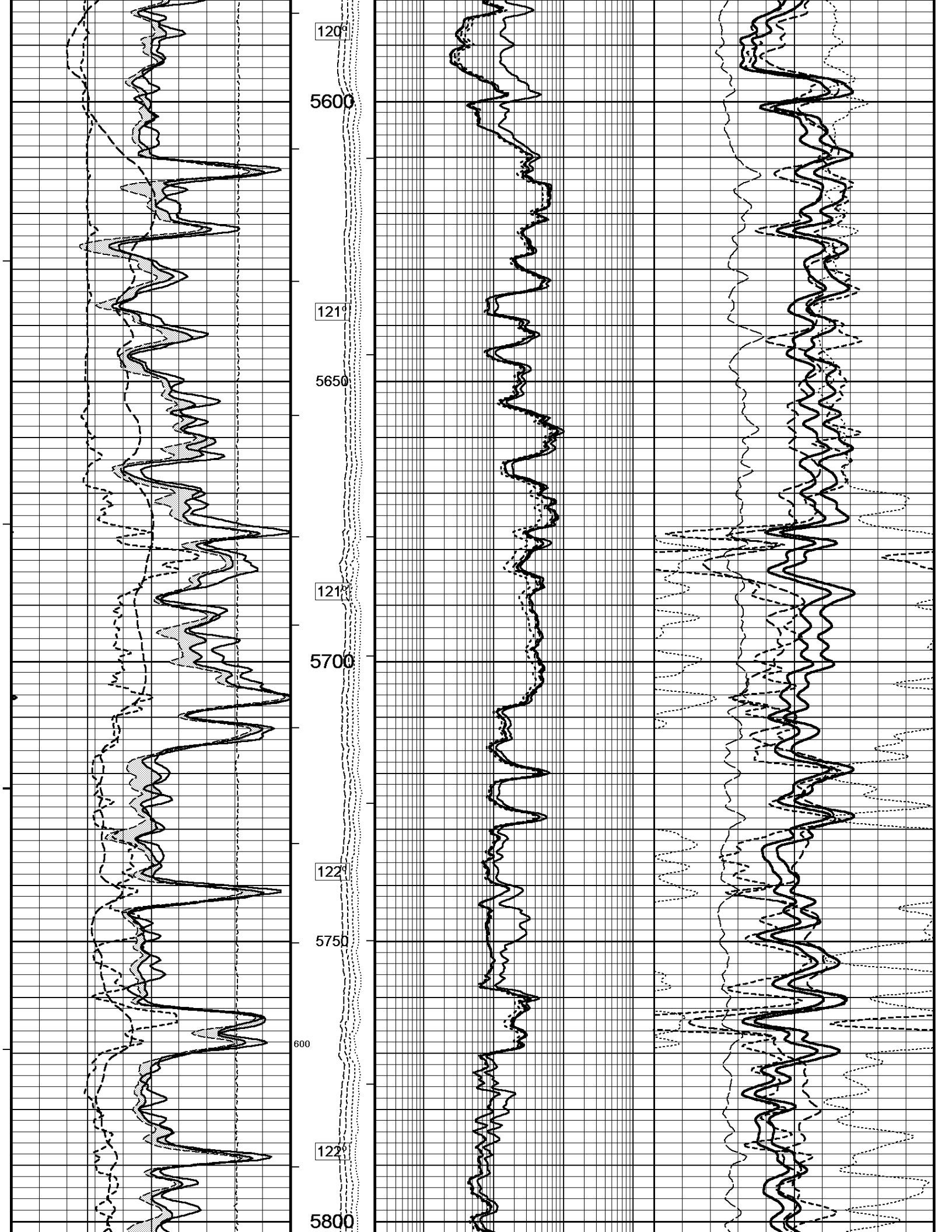

116°
4500
116°
4550
116°
4600
1200
117°
4650
117°
4700
SGS Corrected Gamma Ray
SGS Gamma Ray
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Limestone Sonic Porosity
3-5' Compensated Sonic

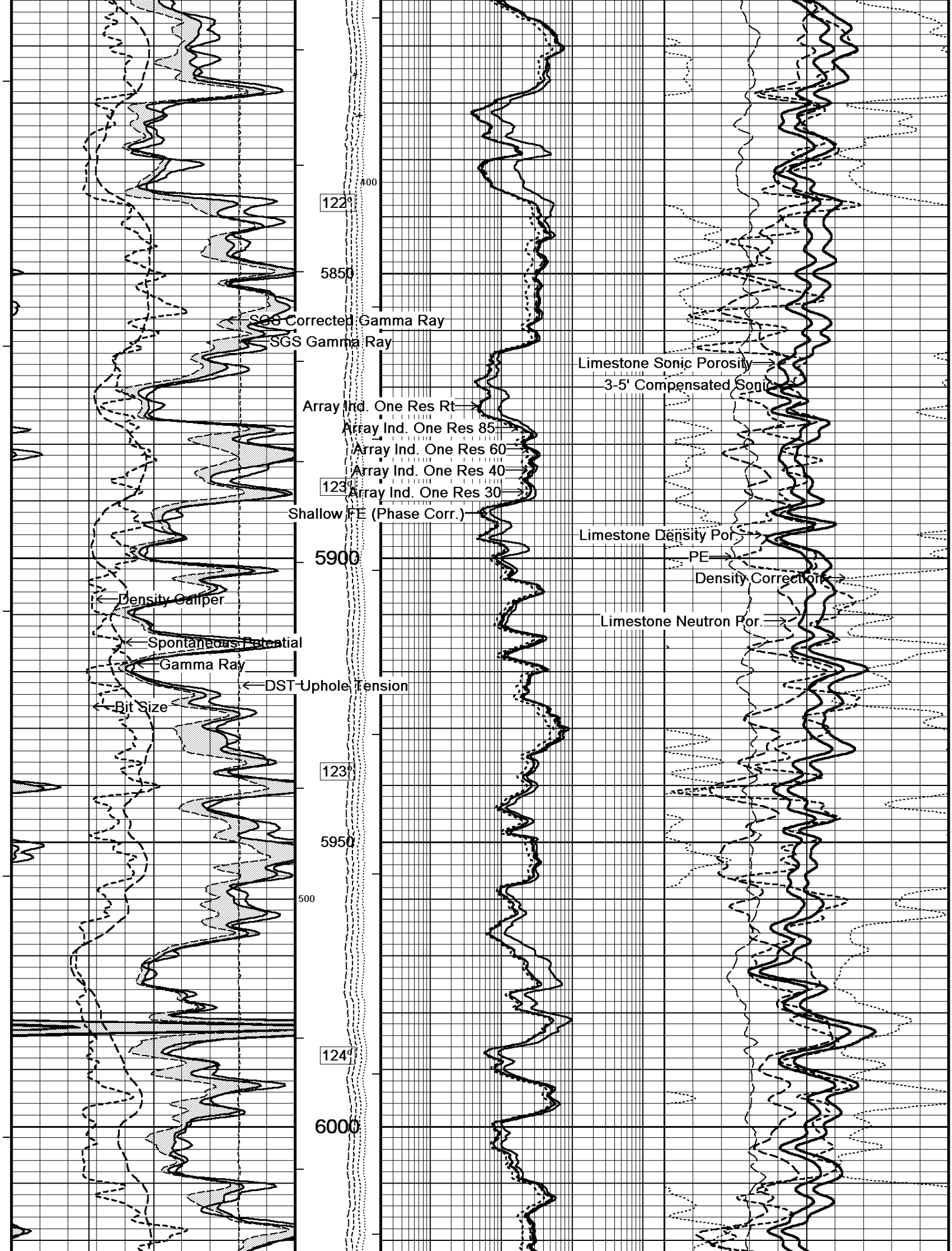

Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por.
Density Caliper
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Bit Size
200
1100
4750
118°
4800
118°
4850
119°
4900

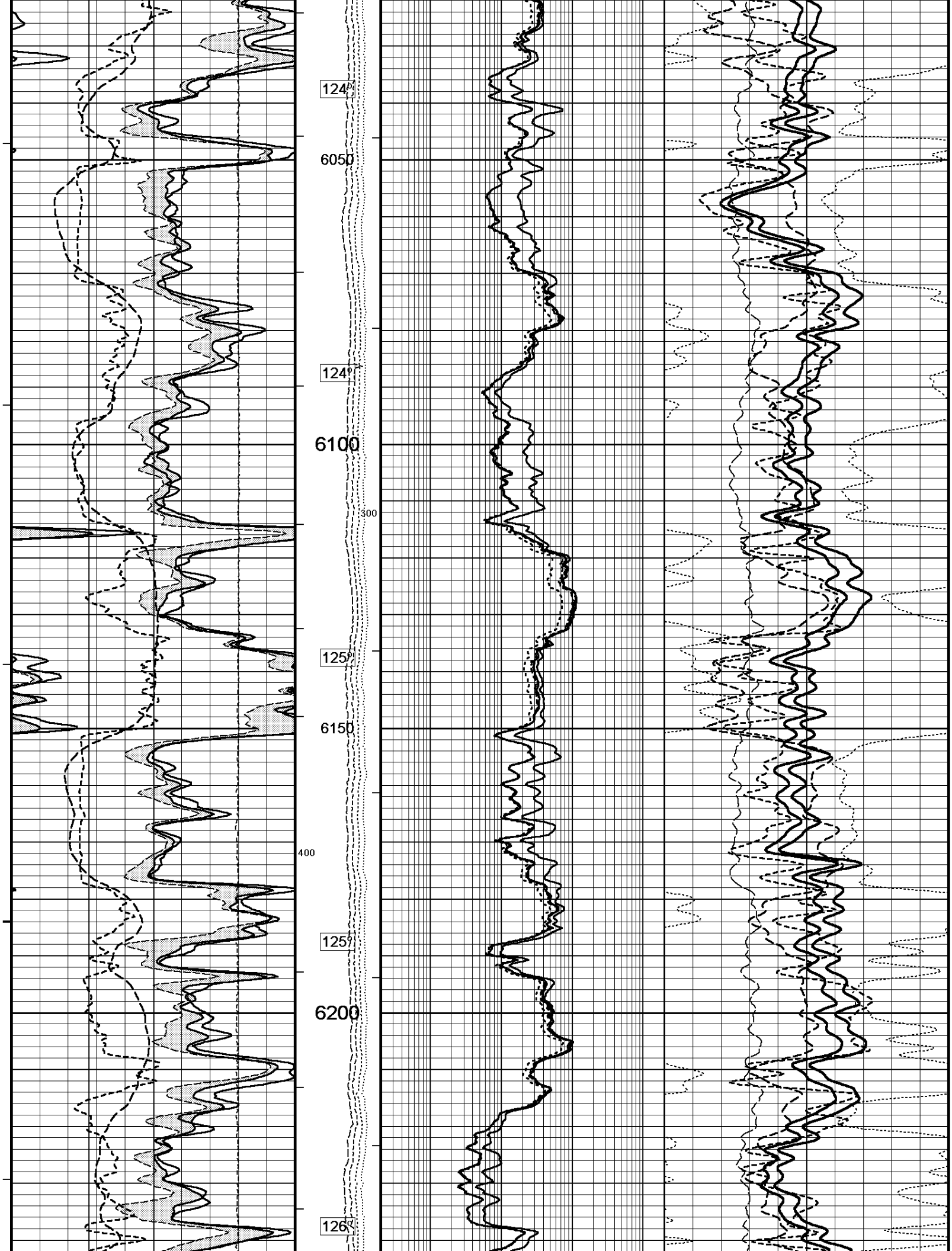

119°
4950
700
1000
119°
5000
119°
5050
SGS Corrected Gamma Ray
SGS Gamma Ray
120°
5100
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
Shallow FE (Phase Corr.)
Limestone Sonic Porosity
3-5' Compensated Sonic
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por.
Density Caliper
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Bit Size
120°

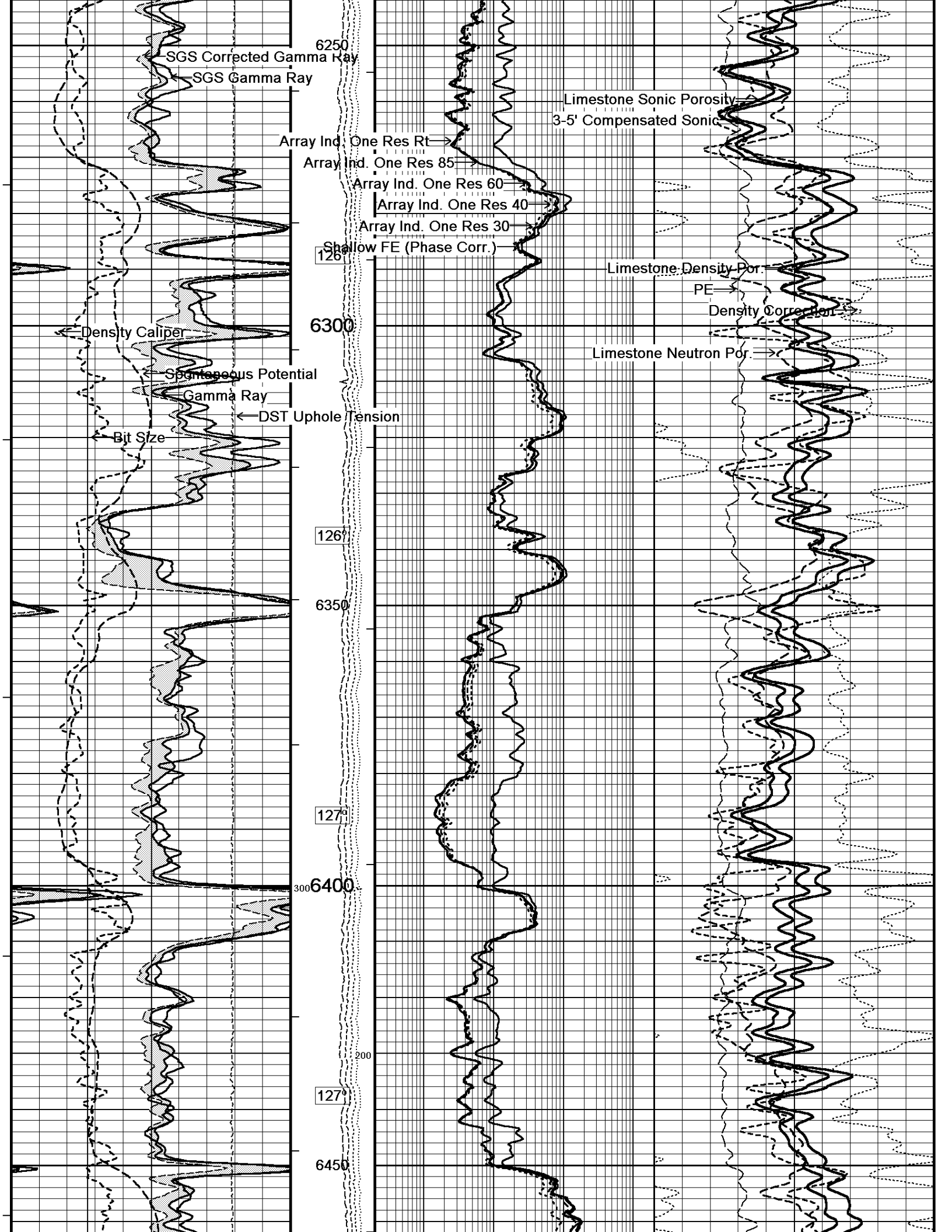

5150
900
120°
5200
120°
600
5250
121°
5300
800
121°
5350

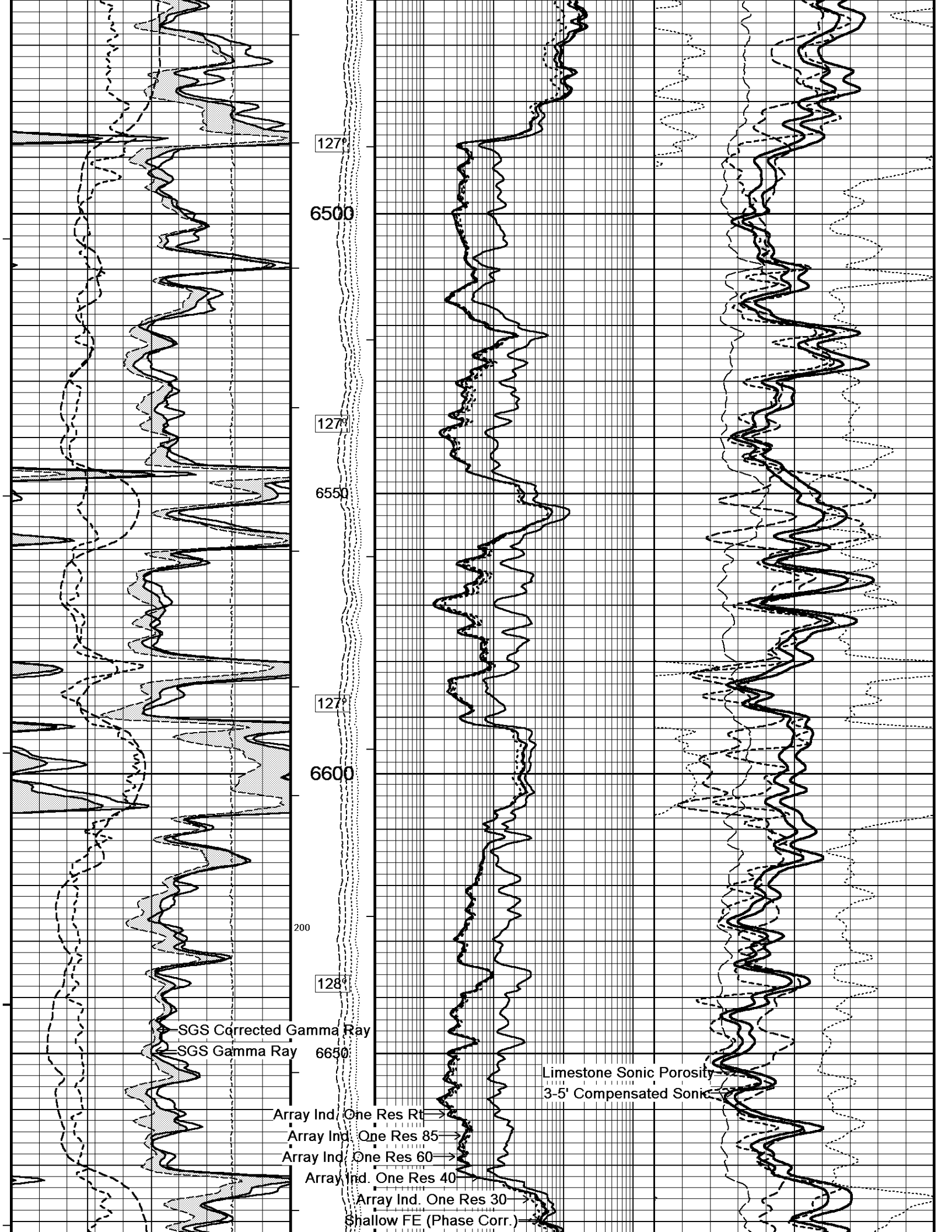

121
5400
121
5450
SGS Corrected Gamma Ray
SGS Gamma Ray
Limestone Sonic Porosity
3-5' Compensated Sonic
Array Ind. One Res Rt
Array Ind. One Res 85
120
Array Ind. One Res 60
Array Ind. One Res 40
Array Ind. One Res 30
E (Phase Corr.)
5500
Limestone Density Por.
PE
Density Correction
Density Caliper
Limestone Neutron Por.
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Bit Size
120
500
5550
700

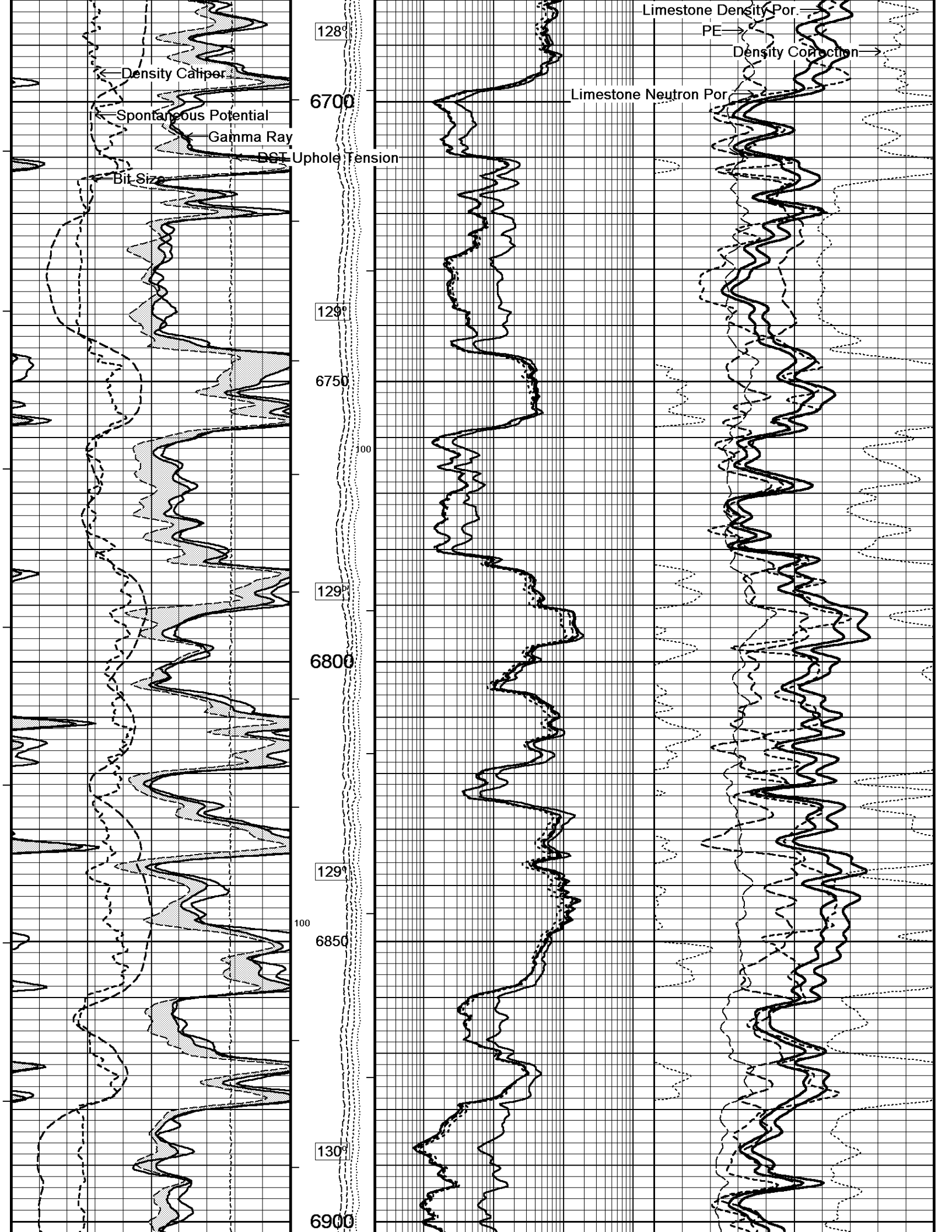

120°
5600
121°
5650
121°
5700
122°
5750
600
122°
5800

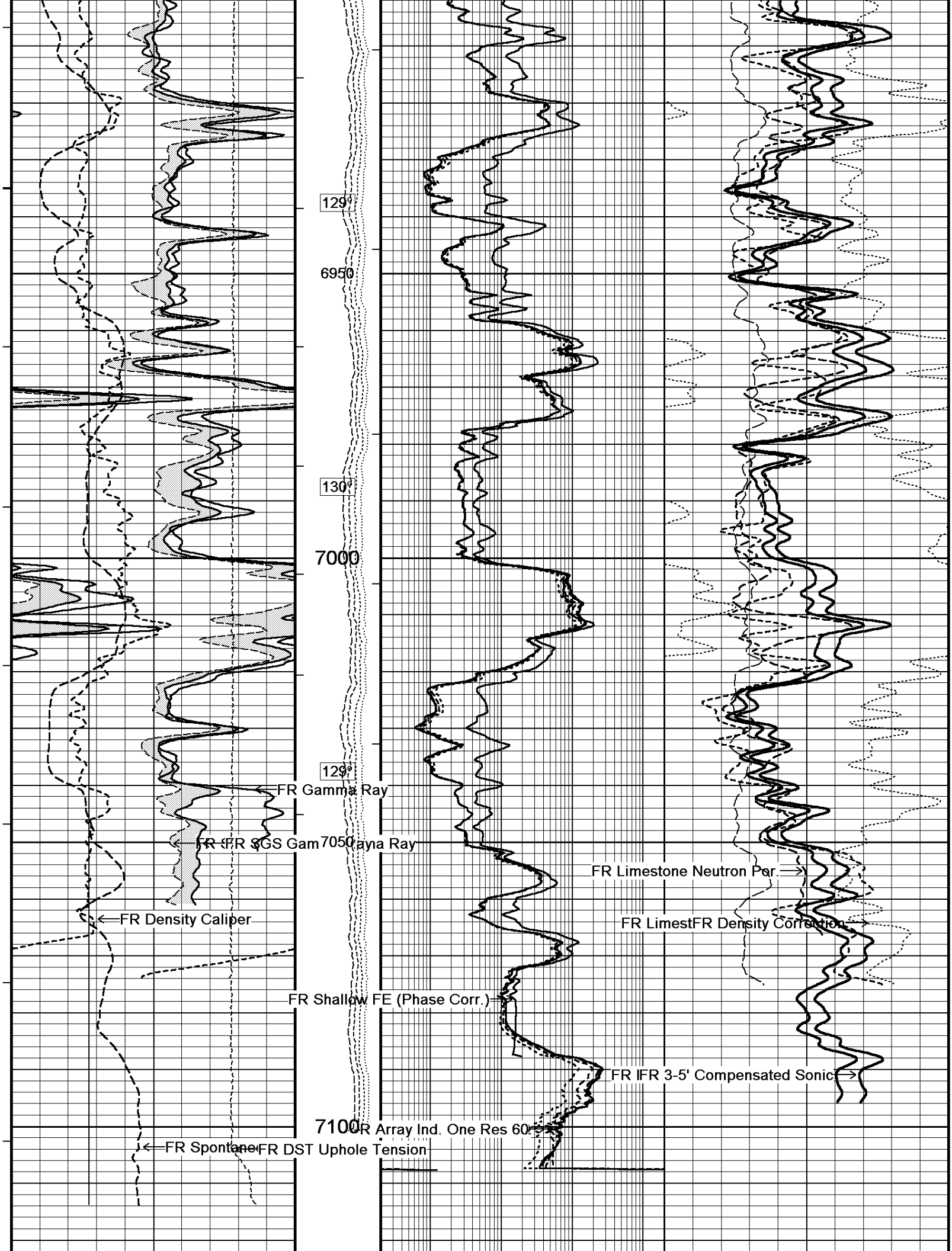

400
122°
5850
SGS Corrected Gamma Ray
SGS Gamma Ray
Limestone Sonic Porosity
3-5' Compensated Sonic
Array Ind. One Res Rt
Array Ind. One Res 85
Array Ind. One Res 60
Array Ind. One Res 40
123°
Array Ind. One Res 30
Shallow FE (Phase Corr.)
Limestone Density Por
5900
PE
Density Correction
Density Caliper
Limestone Neutron Por.
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Bit Size
123°
5950
500
124°
6000

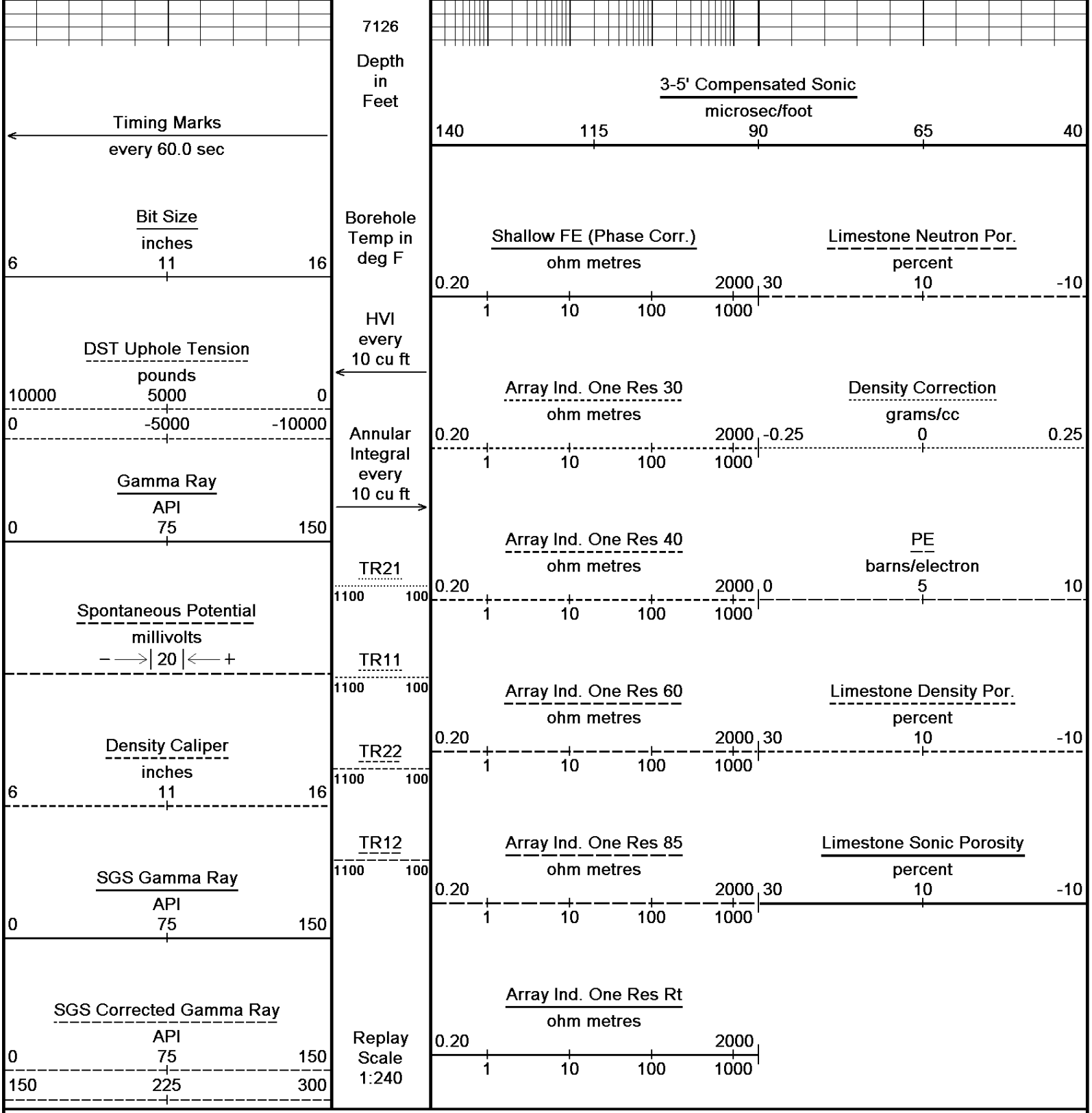

124°
6050
124°
6100
300
125°
6150
400
125°
6200
126°


6250
SGS Corrected Gamma Ray
SGS Gamma Ray
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.)
126°
Limestone Sonic Porosity
3-5' Compensated Sonic
Limestone Density Por.
PE
Density Correction
6300
Density Caliper
Limestone Neutron Por.
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Bit Size
126°
6350
127°
300
6400
200
127°
6450


127°
6500
127°
6550
127°
6600
200
128°
SGS Corrected Gamma Ray
SGS Gamma Ray
6650
Limestone Sonic Porosity
3-5' Compensated Sonic
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.)


Density Caliper
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Bit Size
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por
128°
129°
129°
129°
130°
6700
6750
6800
6850
6900
100
100


129°
6950
130°
7000
129°
FR Gamma Ray
FR FR SGS Gam
7050
ayna Ray
FR Limestone Neutron Por.
FR Density Caliper
FR LimestFR Density Correction
FR Shallow FE (Phase Corr.)
FR IFR 3-5' Compensated Sonic
7100
R Array Ind. One Res 60
FR Spontane
FR DST Uphole Tension



Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 20-AUG-2010 13:33
Filename: C:\Minimus\Logs\Patara\Andy's Mesa Federal #76\SPLICE.dta
Recorded on 20-AUG-2010 09:22
System Versions: Plotted with 10.08.1568

LIMESTONE 5 INCH MAIN LOG

BEFORE SURVEY CALIBRATION

C:\Minimus\Logs\Patara\Andy's Mesa Federal #76\SETUP.dta

General Constants All 000
Last Edited on 19-AUG-2010,08:17

General Parameters

Mud Resistivity	1.240	ohm-metres
Mud Resistivity Temperature	97.200	degrees F
Water Level	0.000	feet

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	5.000	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 000

Field Calibration on 19-AUG-2010 10:31

Reading No	Measured	Calibrated (lbs)
1	13860.36	0.00
2	15208.13	560.00

High Resolution Temperature Calibration MCG 247

Field Calibration on 19-AUG-2010,08:19

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

High Resolution Temperature Constants MCG 247

Last Edited on 01-AUG-2010,13:09

Pre-filter Length	11

SP Calibration MCG 247

Field Calibration on 19-AUG-2010,08:19

	Measured	Calibrated (mV)
Reference 1	100.8	100.0
Reference 2	-99.0	-100.0

Gamma Calibration MCG 247

Field Calibration on 19-AUG-2010,08:19

	Measured	Calibrated (API)
Background	36	24
Calibrator (Gross)	1387	936
Calibrator (Net)	1351	912

Gamma Constants MCG 247

Last Edited on 13-AUG-2010,12:52

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

Neutron Calibration MDN 143

Base Calibration on 04-JUN-2010 16:46
Field Check on 19-AUG-2010,08:20

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
	3016	94	3714	110
Ratio	32.095		33.764	

Field Calibrator at Base

	Calibrated (cps)	
	1428	2141
Ratio	0.667	

Field Check

	Calibrated (cps)	
	1382	2007
Ratio	0.689	

Neutron Constants MDN 143

Last Edited on 19-AUG-2010,08:20

Neutron Source Id	734	
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	Constant Value	
Temperature	20.00	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 178

Base Calibration on 15-JUL-2010 10:54
Field Check on 19-AUG-2010 10:35

Base Calibration

	Measured	Calibrated (ohm-m)
Reference 1	10.1	1.3
Reference 2	968.4	126.8
Base Check		281.0
Field Check		281.2

FE Constants MFE 178

Last Edited on 19-AUG-2010,08:21

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

Sonic Constants MSS 096

Last Edited on 19-AUG-2010,08:21

Maximum Boundary Contrast	100.00	micro-sec/ft
Fluid Transit Time	189.00	micro-sec/ft
Limestone Transit Time	47.50	micro-sec/ft
Sandstone Transit Time	55.50	micro-sec/ft
Dolomite Transit Time	43.50	micro-sec/ft
Sonic used for Porosities	3-5' Compensated Sonic	
Correction for Sonde Skew	Applied	
Cycle Stretch Algorithm	Applied	
MN3FT	N/A	micro-sec
MX3FT	N/A	micro-sec
Hunt-Raymer Constant	83.13	micro-sec/ft
Sonde Mode	Compensated	
Hole Type	Open Hole	

Sonde Parameters

	Measured	Calibrated
Offset	N/A	0.0000
Free Pipe	N/A	N/A

Peak Amplitude Source N/A

Waveform	Start Time (micro-sec)	Width (micro-sec)	Pre Gain	Start Gain	Discriminator (mV)
3'	N/A	N/A	N/A	N/A	N/A
4'	N/A	N/A	N/A	N/A	N/A
5'	N/A	N/A	N/A	N/A	N/A
6'	N/A	N/A	N/A	N/A	N/A

Processed Fixed Gate Parameters

Waveform Used For Processing N/A

Start Time (micro-sec)	End Time (micro-sec)	Discriminator (mV)	N/A
N/A	N/A	N/A	
N/A	N/A	N/A	N/A
N/A	N/A		N/A

N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	

Full Waveform Parameters

Use 3' Waveform to derive TR	N/A	
Use 4' Waveform to derive TR	N/A	
Use 5' Waveform to derive TR	N/A	
Use 6' Waveform to derive TR	N/A	
3' Waveform Discriminator Level	N/A	mV
4' Waveform Discriminator Level	N/A	mV
5' Waveform Discriminator Level	N/A	mV
6' Waveform Discriminator Level	N/A	mV
3' Waveform Filter	N/A	
4' Waveform Filter	N/A	
5' Waveform Filter	N/A	
6' Waveform Filter	N/A	
Semblance Level	N/A	
Semblance Window Width	N/A	micro-sec
Sonic 1 Despiker	N/A	N/A
Sonic 2 Despiker	N/A	N/A

High Resolution Temperature Calibration MAI 213

Field Calibration on 19-AUG-2010,08:21

	Measured	Calibrated(Deg F)
Lower	10.00	50.00
Upper	100.00	100.00

High Resolution Temperature Constants MAI 213

Last Edited on 29-JUL-2010,03:41

Pre-filter Length	11

Induction Calibration MAI 213

Base Calibration on 01-JUL-2010,22:36
Field Check on 19-AUG-2010 10:37

Base Calibration

Test Loop Calibration

Channel	Measured Low	Measured High	Calibrated (mmho/m) Low	Calibrated (mmho/m) 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) Low	Base Check (mmho/m) High	Field Check (mmho/m) Low	Field Check (mmho/m) High
1	0.0	0.0	14.8	3935.5
2	0.0	0.0	30.6	3539.3
3	0.0	0.0	29.2	3113.7
4	0.0	0.0	19.2	2096.5
Deep	0.0	0.0	17.6	2078.2
Medium	0.0	0.0	42.9	4087.5
Shallow	0.0	0.0	45.9	5158.2
Array Temperature	0.0		77.5	Deg F

Induction Constants MAI 213

Last Edited on 19-AUG-2010,08:21

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	Constant Value	
Temp. for Rm Corr.	N/A	
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 296

Base Calibration on 16-JUL-2010 10:35
Field Calibration on 19-AUG-2010,08:20

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	17267	4.00
2	25312	5.96
3	33397	7.98
4	41456	9.86
5	50656	11.88
6	N/A	N/A

Field Calibration

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

Photo Density Calibration MPD 296

Base Calibration on 16-JUL-2010 10:20
Field Check on 19-AUG-2010 10:34

Density Calibration

Base Calibration	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	45248	17783	53115	19186
Reference 2	21507	2662	25020	2536

Field Check at Base

1173.6	1410.4

Field Check

1165.8	1403.9

PE Calibration

Base Calibration	Measured			Calibrated
	WS	WH	Ratio	Ratio
Background	214	1029		
Reference 1	12501	45063	0.279	0.320
Reference 2	5235	21356	0.247	0.272

Field Check at Base

214.0	1029.1

Field Check

211.7	1026.4

Density Constants MPD 296

Last Edited on 19-AUG-2010,08:18

Density Source Id	238
Nylon Calibrator Number	507
Aluminium Calibrator Number	507

Aluminium Calibrator Number	001	
Density Shoe Profile	8 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1.08	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)
2.71	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

Spectral Gamma Calibration SGS 010

Base Calibration on 16-JUN-2010 10:33
Field Calibration on 19-AUG-2010,08:19

Base Calibration

Potassium Calibrator

	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5
Background	102.2	37.2	4.2	2.2	4.4
Calibrator (Gross)	228.2	123.3	29.1	2.1	4.1
Calibrator (Net)	125.9	86.1	25.0	-0.1	-0.3

	K %	U ppm	Th ppm
Concentrations	4.4	-0.7	3.0

Uranium Calibrator

	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5
Background	102.2	37.2	4.2	2.2	4.4
Calibrator (Gross)	489.9	179.2	16.2	11.7	7.2
Calibrator (Net)	387.7	142.0	12.0	9.6	2.8

	K %	U ppm	Th ppm
Concentrations	1.0	10.7	2.8

Thorium Calibrator

	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5
Background	102.2	37.2	4.2	2.2	4.4
Calibrator (Gross)	419.4	159.8	12.4	7.6	19.3
Calibrator (Net)	317.1	122.6	8.2	5.5	14.9

	K %	U ppm	Th ppm
Concentrations	0.6	-2.3	31.5

Mixture Calibrator

	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5
Background	102.2	37.2	4.2	2.2	4.4
Calibrator (Gross)	907.0	376.8	49.4	16.2	21.6
Calibrator (Net)	804.8	339.6	45.2	14.0	17.3

Field Calibration

Gamma Ray

	Measured	Calibrated (API)
Background	160	29
Calibrator (Gross)	1381	254
Calibrator (Net)	1221	225

Mixture Calibrator

	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5
Background	102.2	37.2	4.2	2.2	4.4
Calibrator (Gross)	907.0	376.8	49.4	16.2	21.6
Calibrator (Net)	804.8	339.6	45.2	14.0	17.3

Spectral Gamma Constants SGS 010

Last Edited on 06-AUG-2010,05:07

Mud Density	1.00	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

DOWNHOLE EQUIPMENT

C:\Minimus\Logs\Patara\Andy's Mesa Federal #76\SETUP.dta

SHA-J.A Compact Swivel Head Adaptor
SHA 214 Length: 2.30 ft Weight: 22.0 lb

Compact Gamma
MCG 247 Length: 8.70 ft Weight: 63.9 lb

Spectral Gamma Ray Sub
SGS 10 Length: 7.78 ft Weight: 105.8 lb

Compact Neutron
MDN 143 Length: 5.04 ft Weight: 50.7 lb

Compact Density/Caliper
MPD 296 Length: 9.59 ft Weight: 90.4 lb

MIS-D.A Compact Inline Bowspring sub
MIS 442 Length: 5.70 ft Weight: 33.1 lb

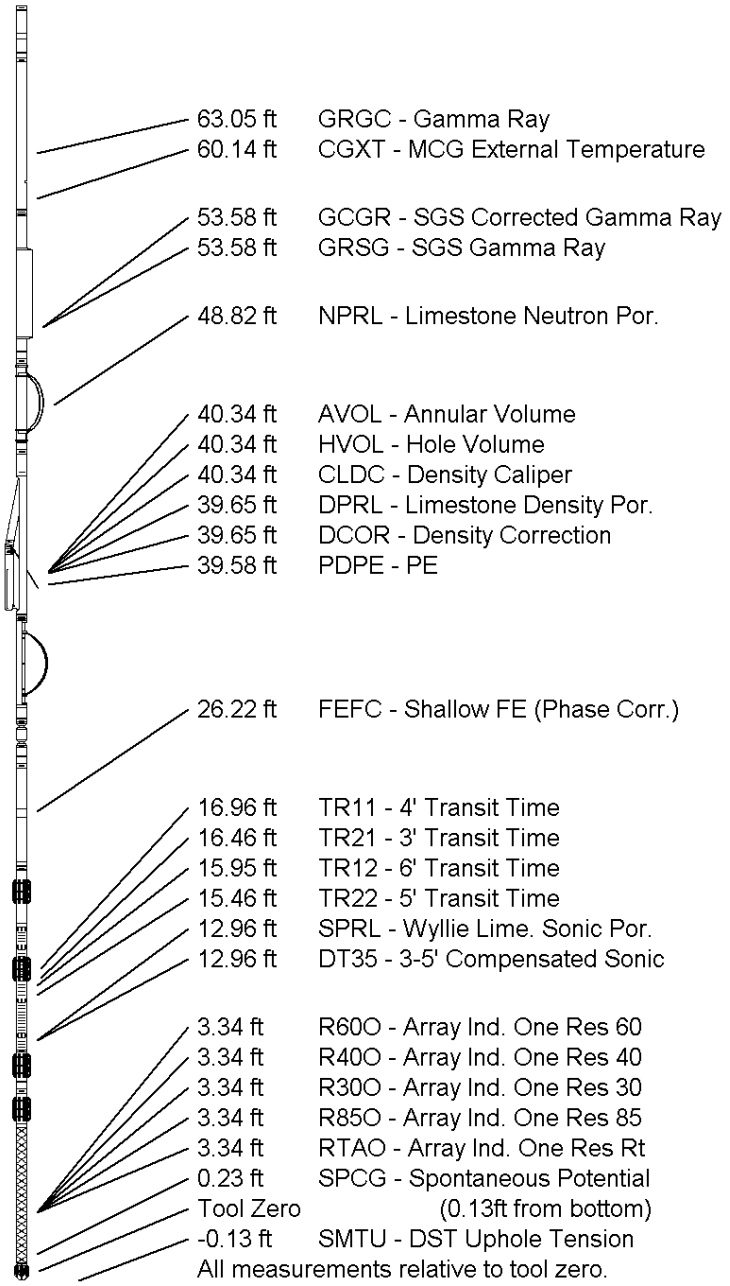
SKJ-D.A Compact Knuckle Joint
SKJ 172 Length: 2.17 ft Weight: 24.3 lb

Compact Focussed Electric
MFE 178 Length: 6.03 ft Weight: 48.5 lb

Compact Sonic
MSS 96 Length: 12.52 ft Weight: 72.8 lb

Compact Induction
MAI 213 Length: 10.81 ft Weight: 48.5 lb

Total Length: 70.63 ft Weight: 560.0 lb



All measurements relative to tool zero.

COMPANY	PATARA OIL & GAS LLC
WELL	ANDY'S MESA FEDERAL #76
FIELD	ANDY'S MESA
PROVINCE/COUNTY	SAN MIGUEL
COUNTRY/STATE	U.S.A. / COLORADO

Elevation Kelly Bushing	6434.00	feet	First Reading	7101.00	
Elevation Drill Floor	6433.00	feet	Depth Driller	7118.00	feet
Elevation Ground Level	6417.00	feet	Depth Logger	7104.00	feet

COMPACT QUAD COMBO

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