

**Weatherford®****COMPACT DROP OFF
COMPACT TRIPLE COMBO
QUICKLOOK LOG**

COMPANY **ENCANA OIL & GAS**
WELL **SG 8514A-22 N22 496**
FIELD **STORY GULCH**
PROVINCE/COUNTY **GARFIELD**
COUNTRY/STATE **U.S.A. / COLORADO**
LOCATION **SHL: 1183' FSL & 1951' FWL**
BHL: 1299' FSL & 1339 FWL



LSD SEC TWP RGE Other Services

22 4S 96W

API Number 05-045-21040-00
Permit Number 05-045-21040-00

Permanent Datum G.L., Elevation 7585 feet

Log Measured From KB

Drilling Measured From K.B. @ 22 FEET

Elevations:
KB 7607.00
DF 7607.00
GL 7585.00

Date	11-JUN-2012	
Run Number	ONE	
Depth Driller	12178.00	feet
Depth Logger	12178.00	feet
First Reading	12164.00	feet
Last Reading	2136.00	feet
Casing Driller	2135.00	feet
Casing Logger	2136.00	feet
Bit Size	7.880	inches
Hole Fluid Type	LSND	
Density / Viscosity	10.80 lb/USg	59.00
PH / Fluid Loss	8.70	4.10 ml/30Min
Sample Source	FLOWLINE	
Rm @ Measured Temp	1.98 @ 83.0	ohm-m
Rmf @ Measured Temp	1.58 @ 83.0	ohm-m
Rmc @ Measured Temp	2.38 @ 83.0	ohm-m
Source Rmf / Rmc	CALC	CALC
Rm @ BHT	0.692 @244.0	ohm-m
Time Since Circulation	2 HOURS	
Max Recorded Temp	244.00	deg F
Equipment Name	COMPACT	
Equipment / Base	13038	GDUCT
Recorded By	M.RICHINS	D. KUNTZ
Witnessed By	R. ESCOJEDA	

BOREHOLE RECORD

Last Edited: 12-JUN-2012 13:12

Bit Size inches	Depth From feet	Depth To feet
8.750	2136.00	9554.00
7.880	9554.00	12178.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	9.625	0.00	2136.00	36.00

REMARKS

COMPACT DROP OFF CONVEYANCE METHOD USED TO LOG THE WELL.

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

SOFTWARE VERSION 12.02.4401 USED TO LOG WELL.

HARDWARE RAN: MPD: 4 INCH PROFILE PLATE USED.

MFE: 0.5 INCH INLINE STANDOFF

MAI: 0.5 INCH INLINE STANDOFF

MIS D: DUAL BOWSPRINGS USED TO SIDEWALL POROSITY TOOLS

MIS-D. DUAL BOWDRINGS USED TO SIDEWALL POROSITY TOOLS.

CALIPER READS UNDERGAUGE FROM 10120 - 10160 FEET.

TOTAL HOLE VOLUME MEASURED TO SURFACE CASING SHOE (2136 FEET) = 4540 CUBIC FEET

ANNULAR HOLE VOLUME WITH 4.5 INCH PRODUCTION CASING = 3440 CUBIC FEET

2.68 G/CC DENSITY MATRIX USED TO CALCULATE POROSITY.

TIGHT PULLS, TRIP SPEED, AND BOREHOLE RUGOSITY WILL AFFECT DATA QUALITY.

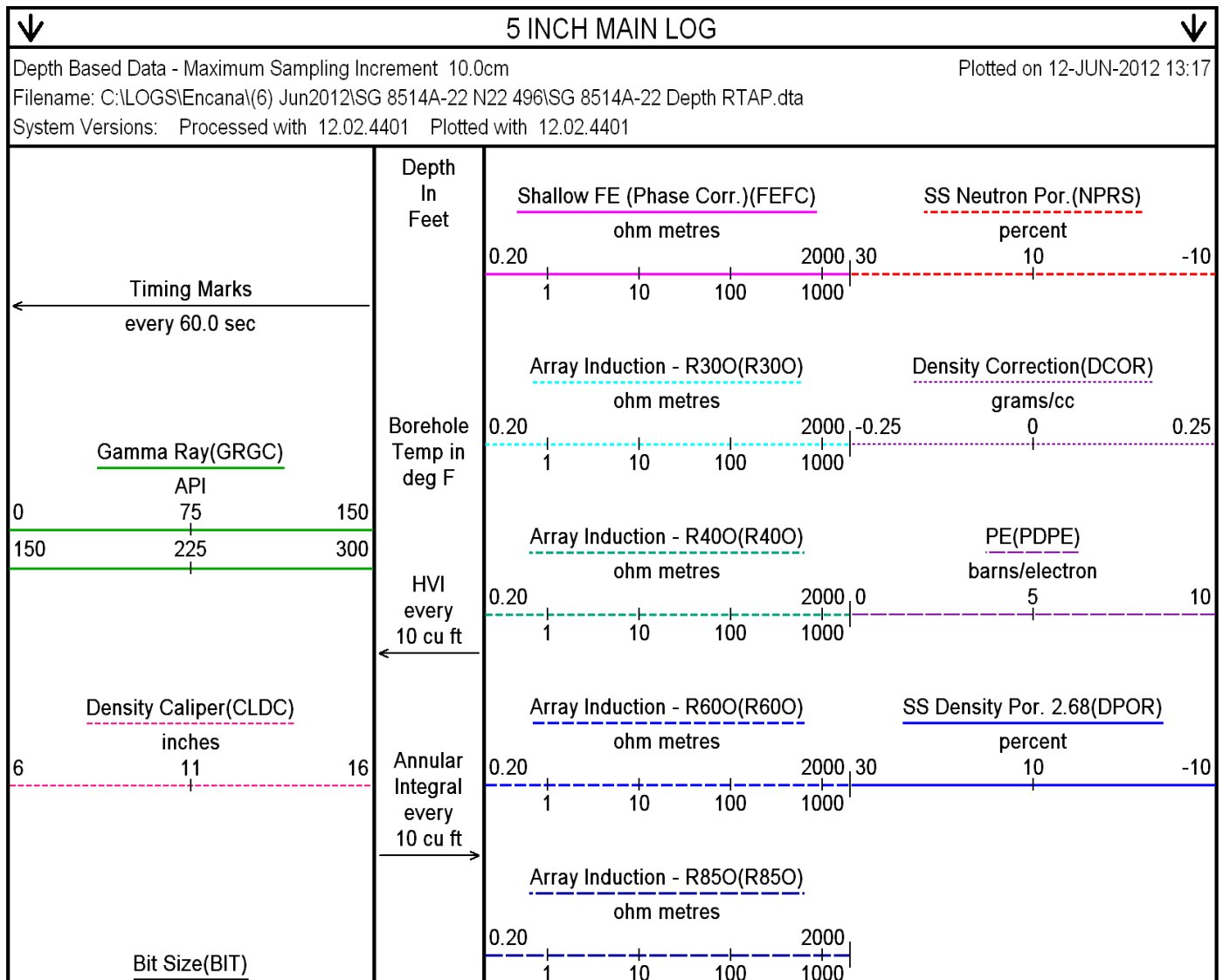
ENGINEER(S): M.RICHINS, D. KUNTZ

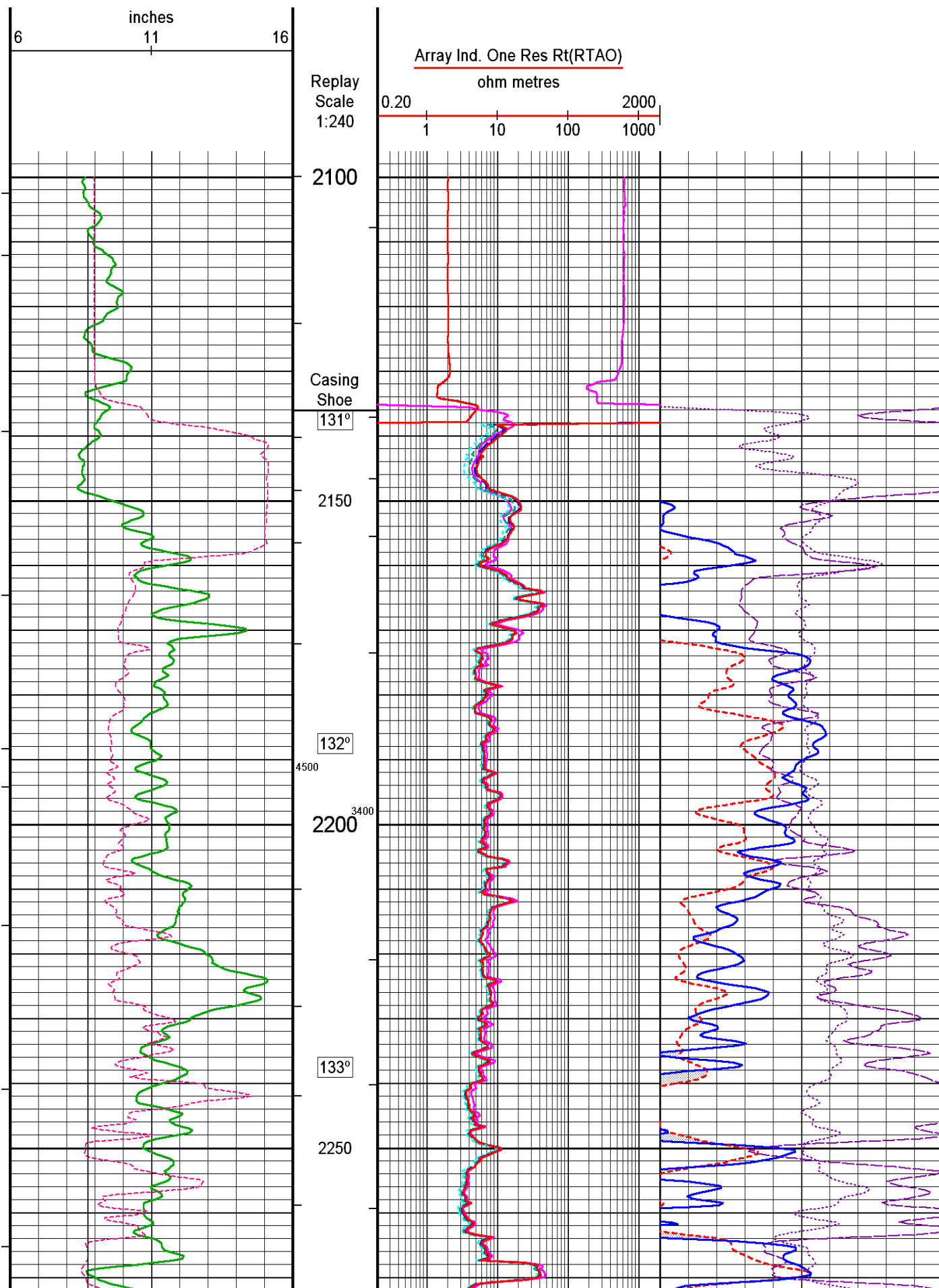
OPERATOR(S): C.STAAKE, A. ALLRED

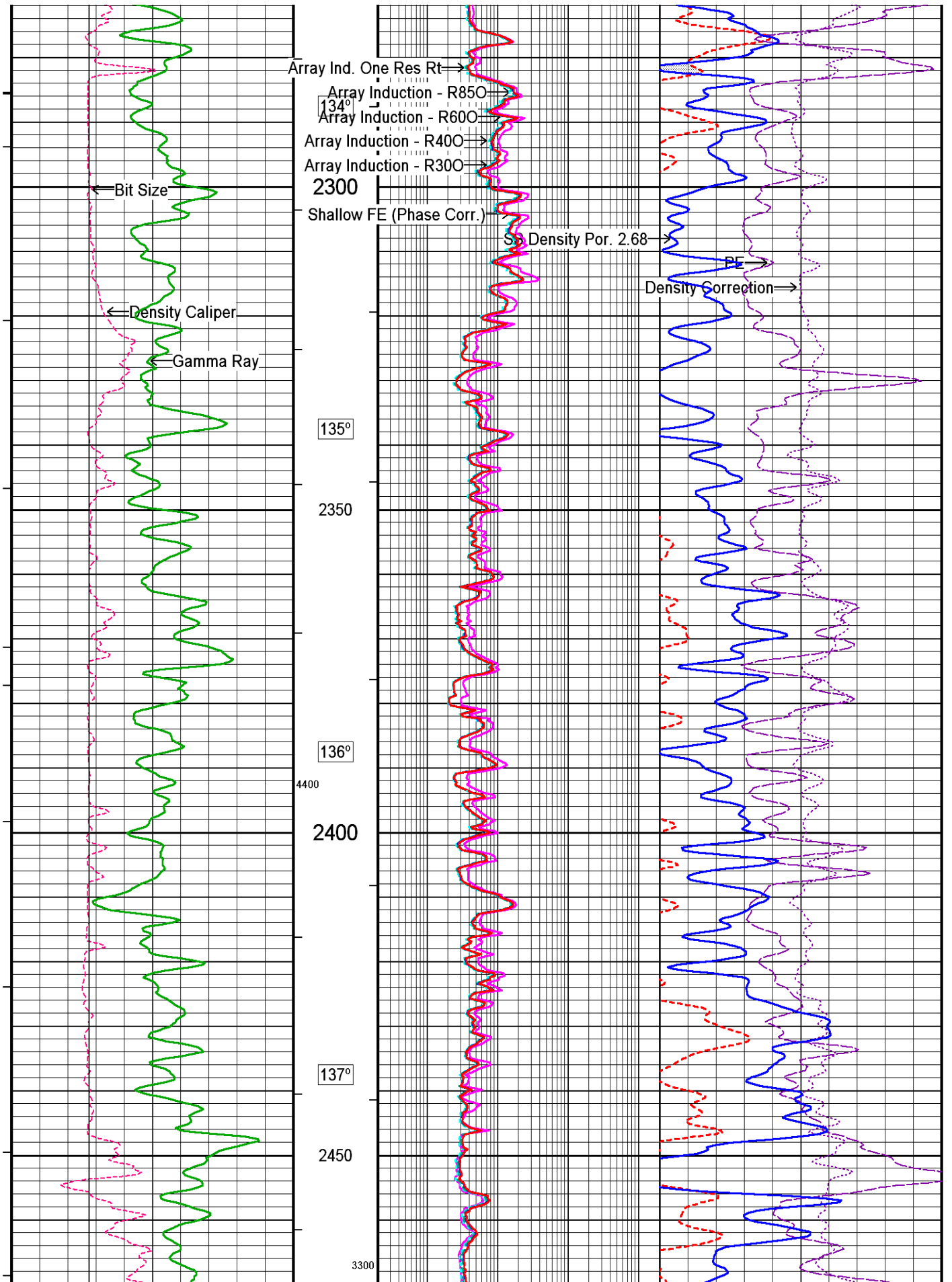
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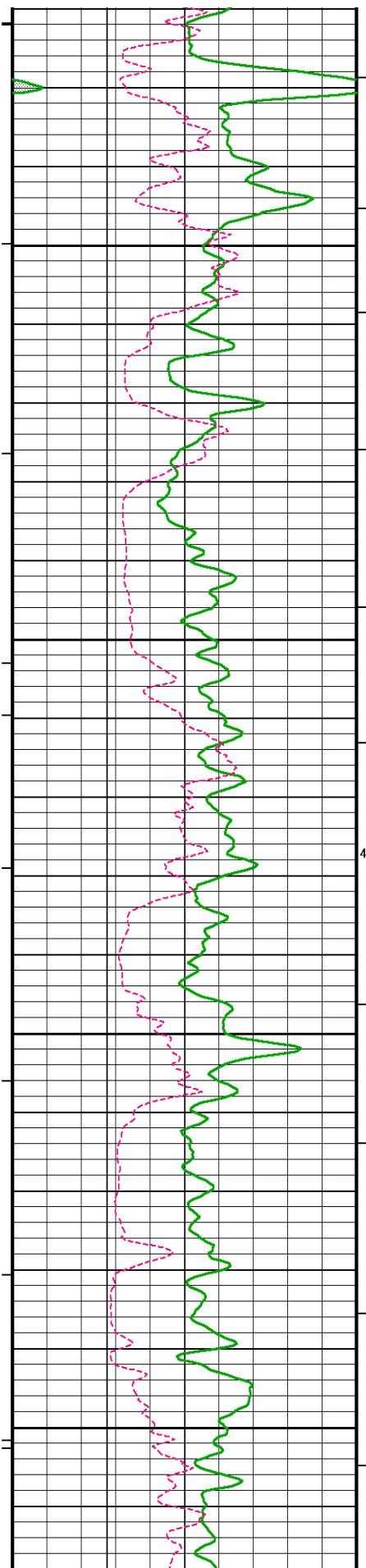
RIG: PATTERSON # 306

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.









138°

2500

138°

2550

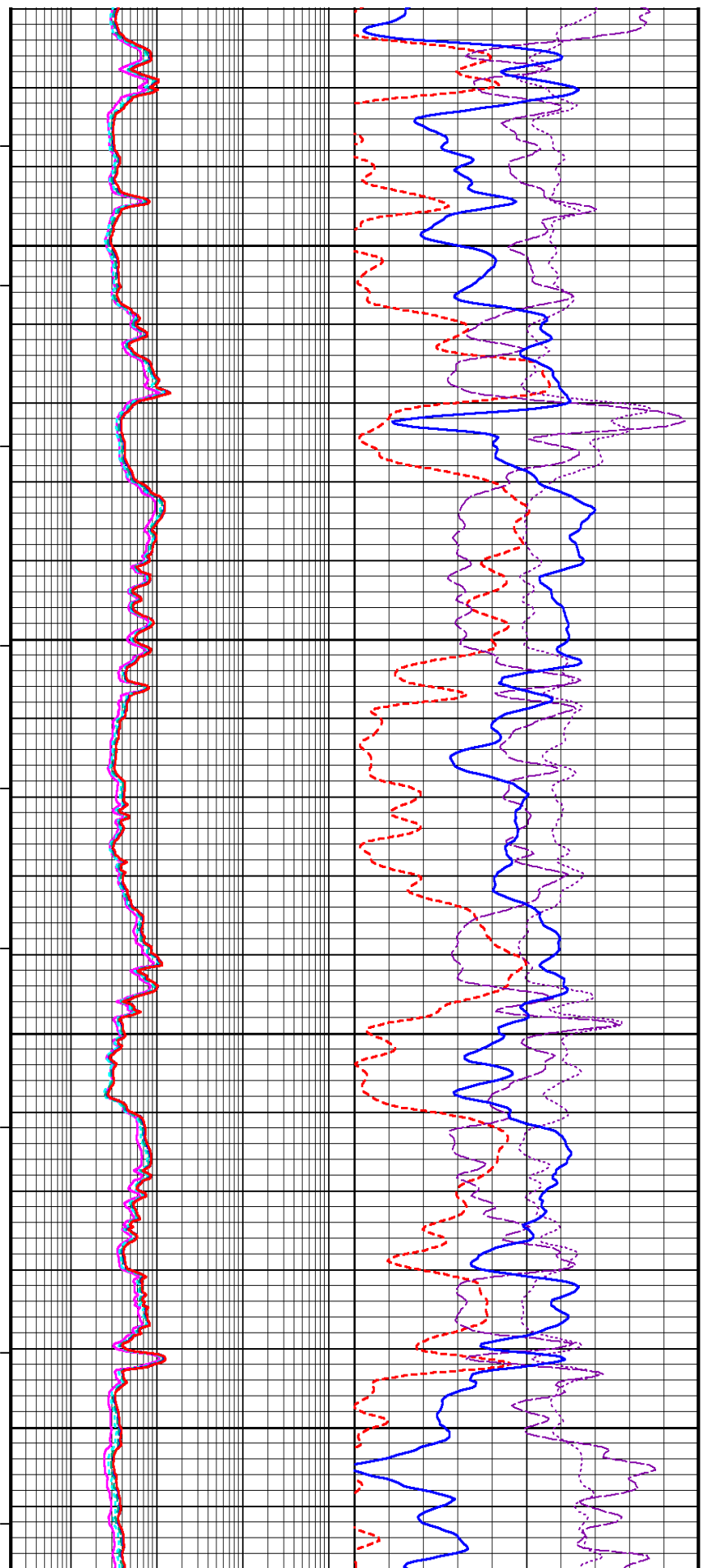
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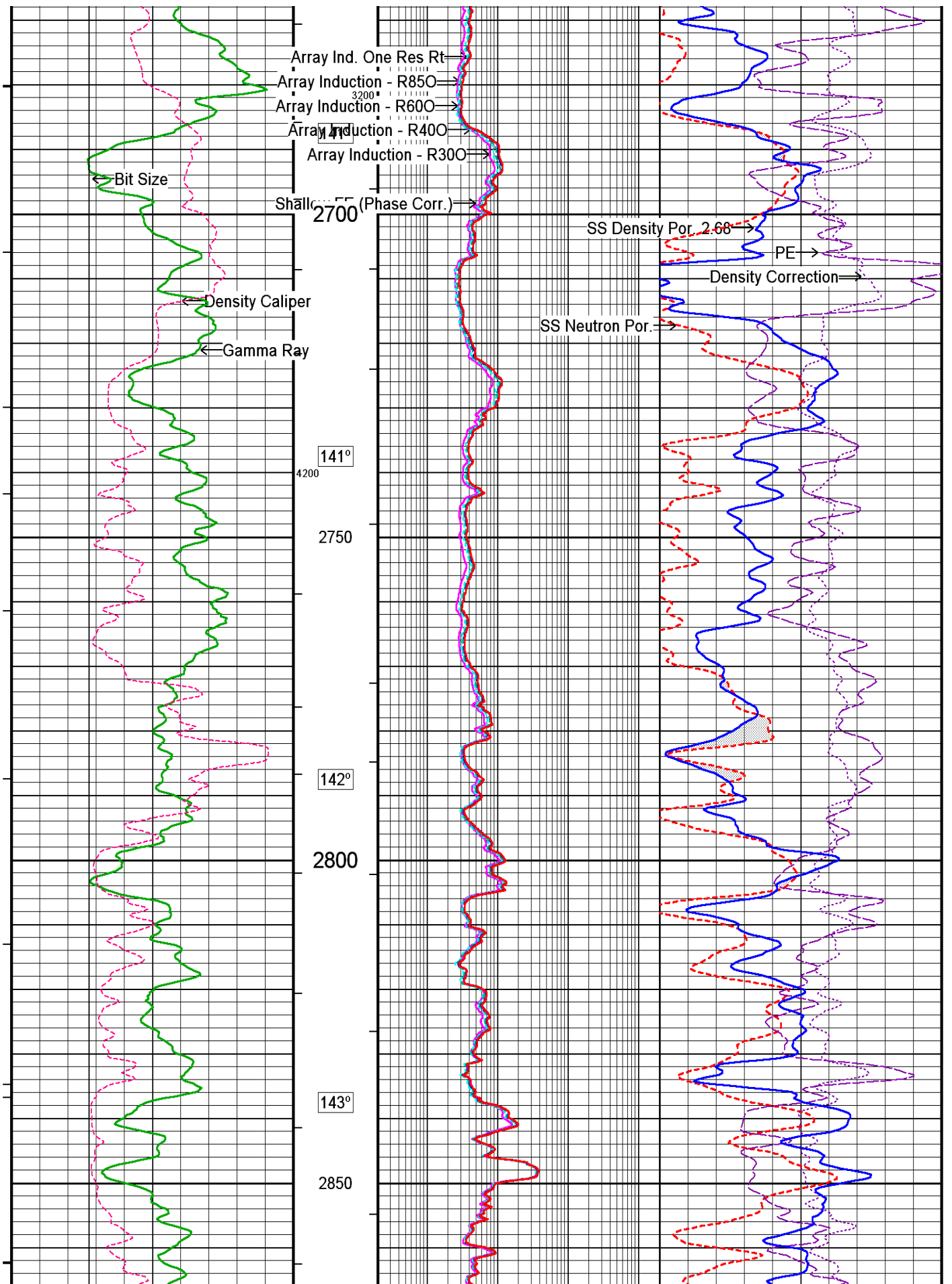
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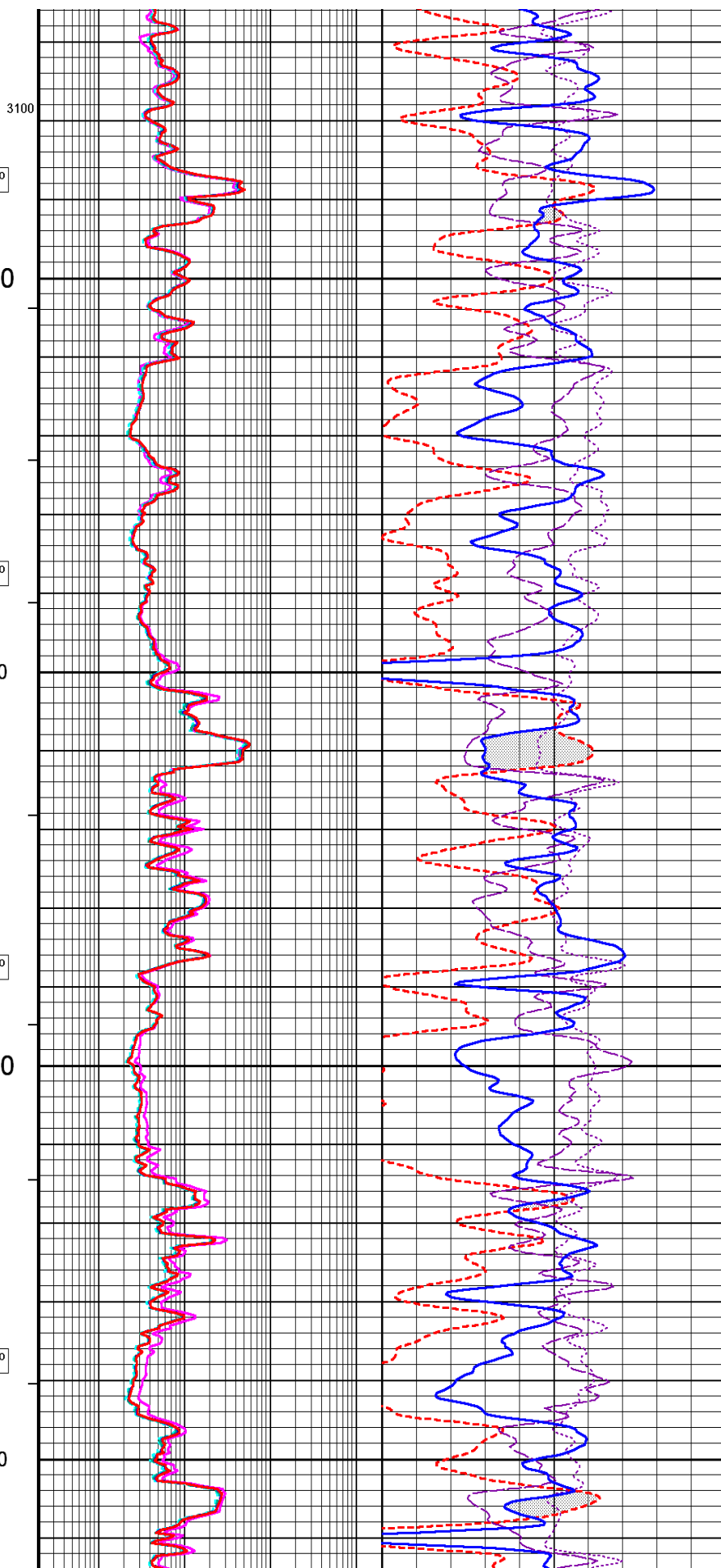
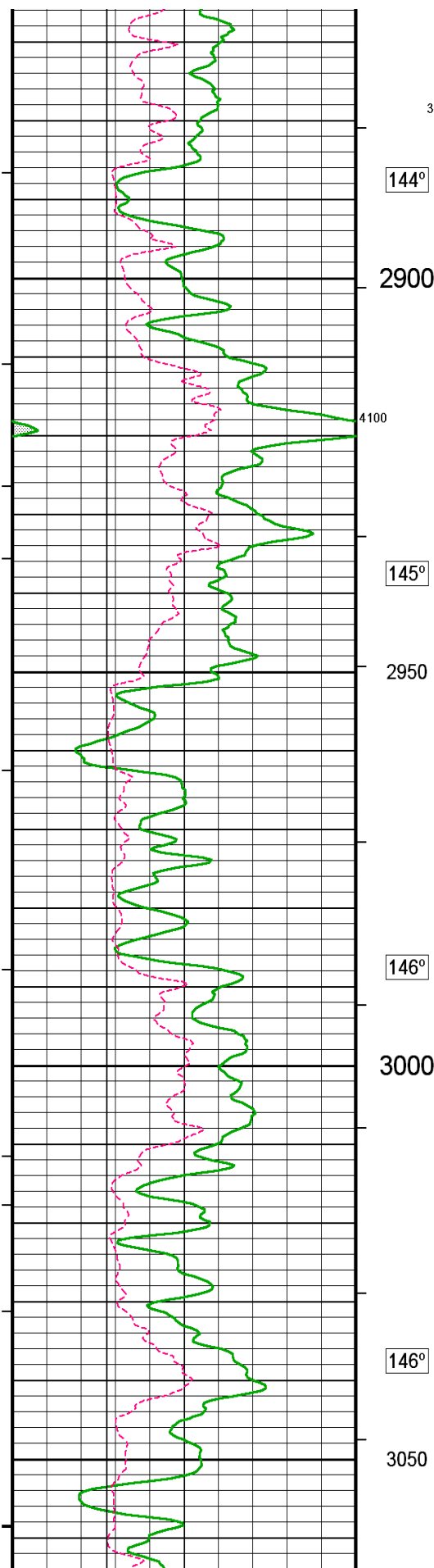
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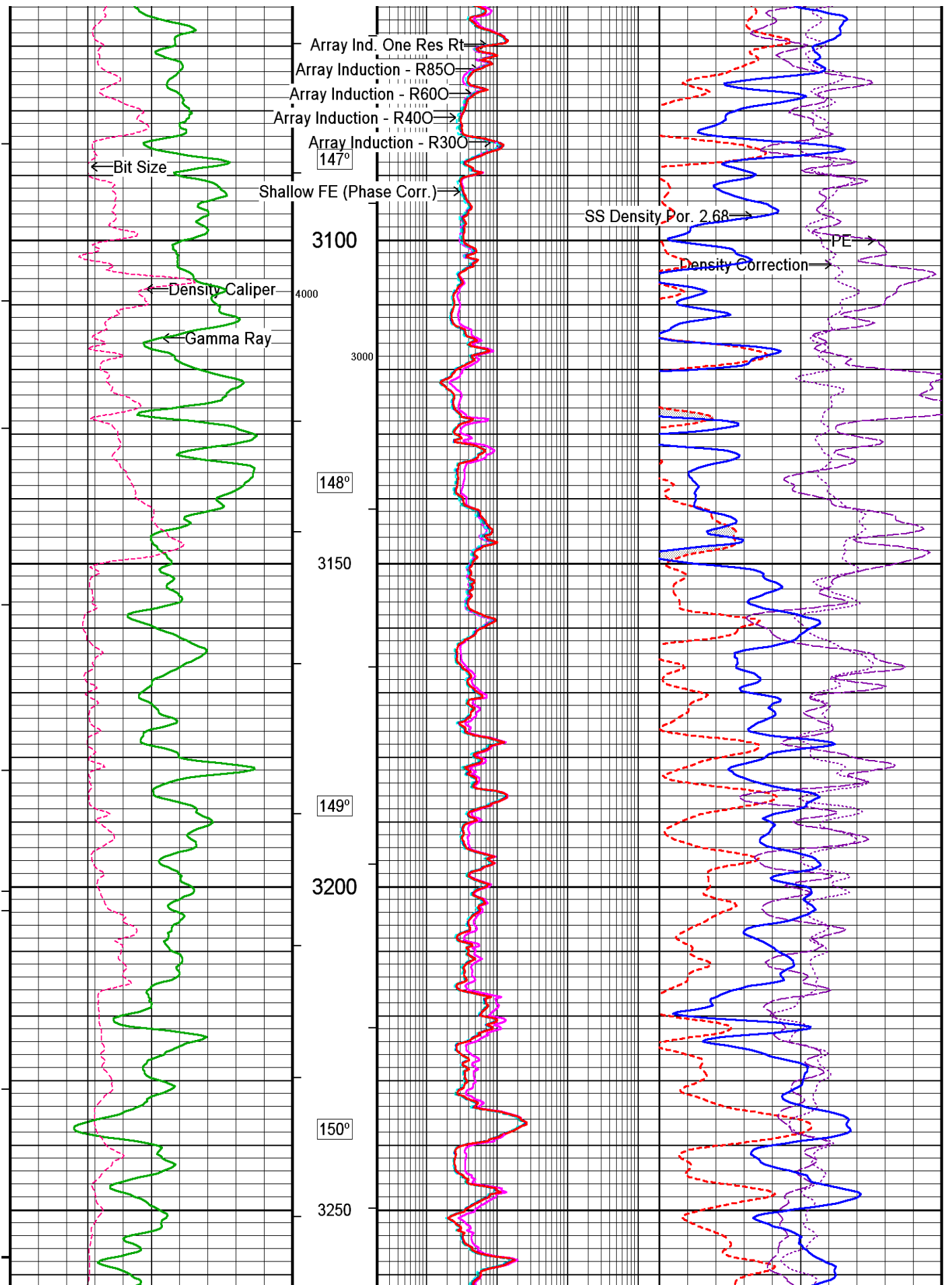
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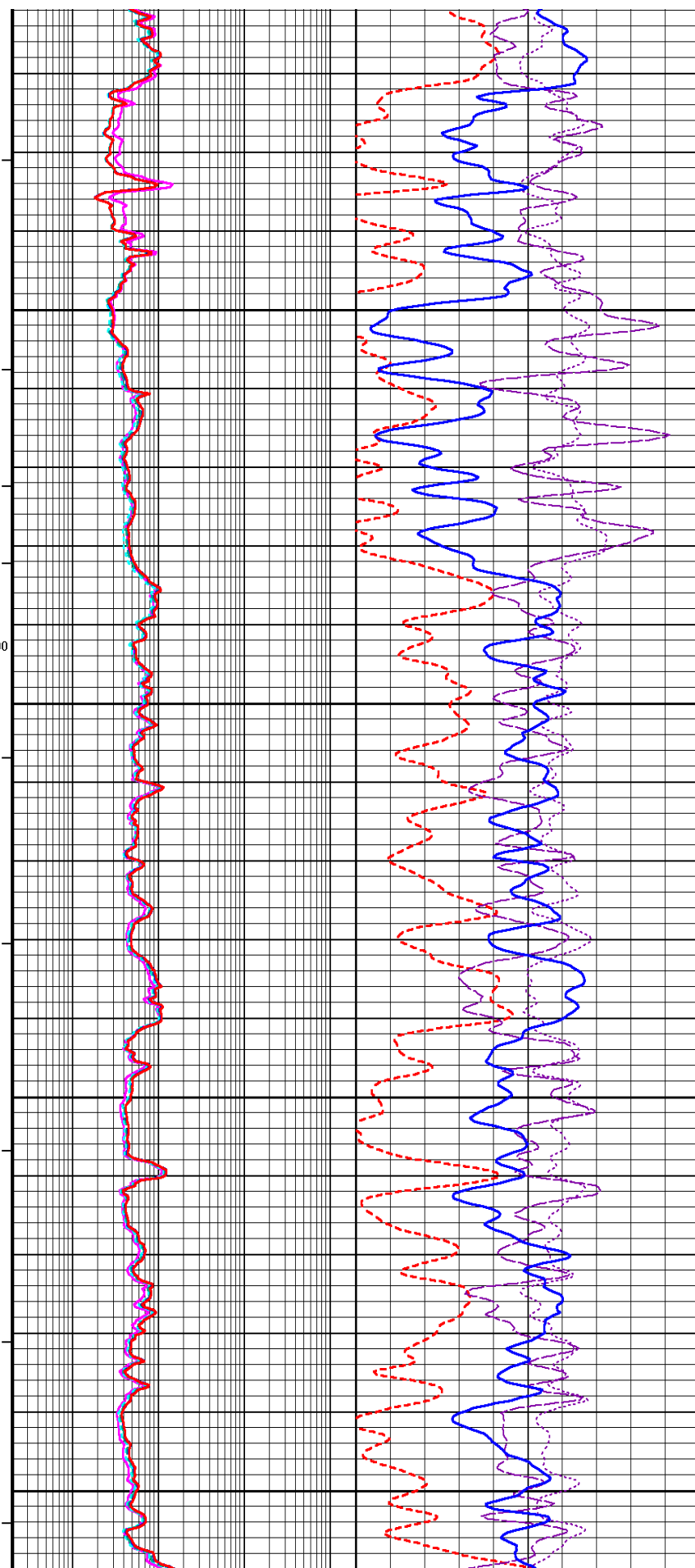
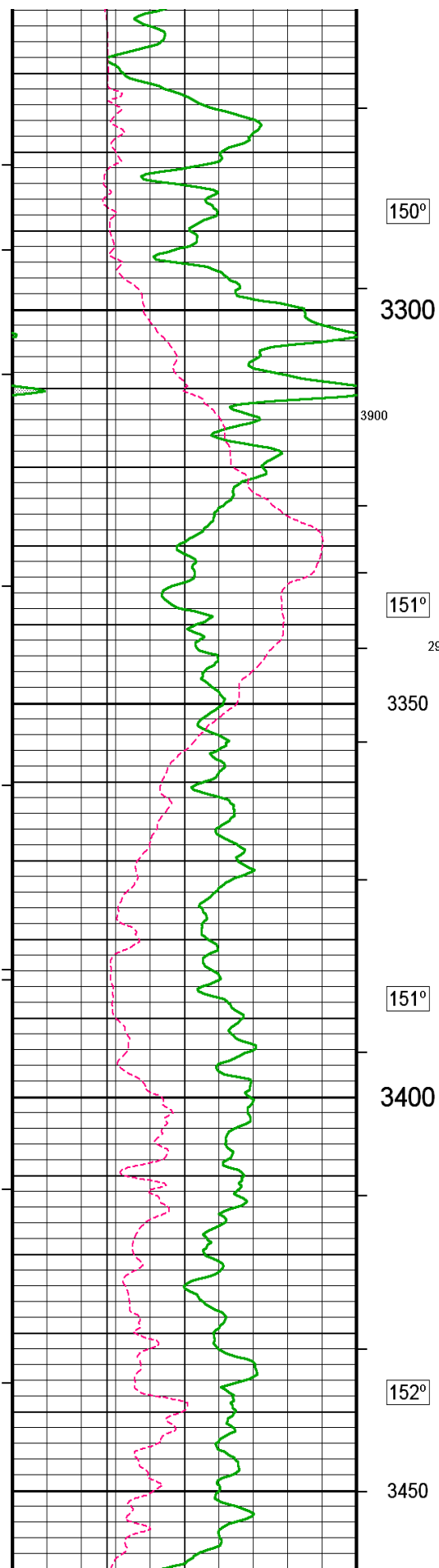
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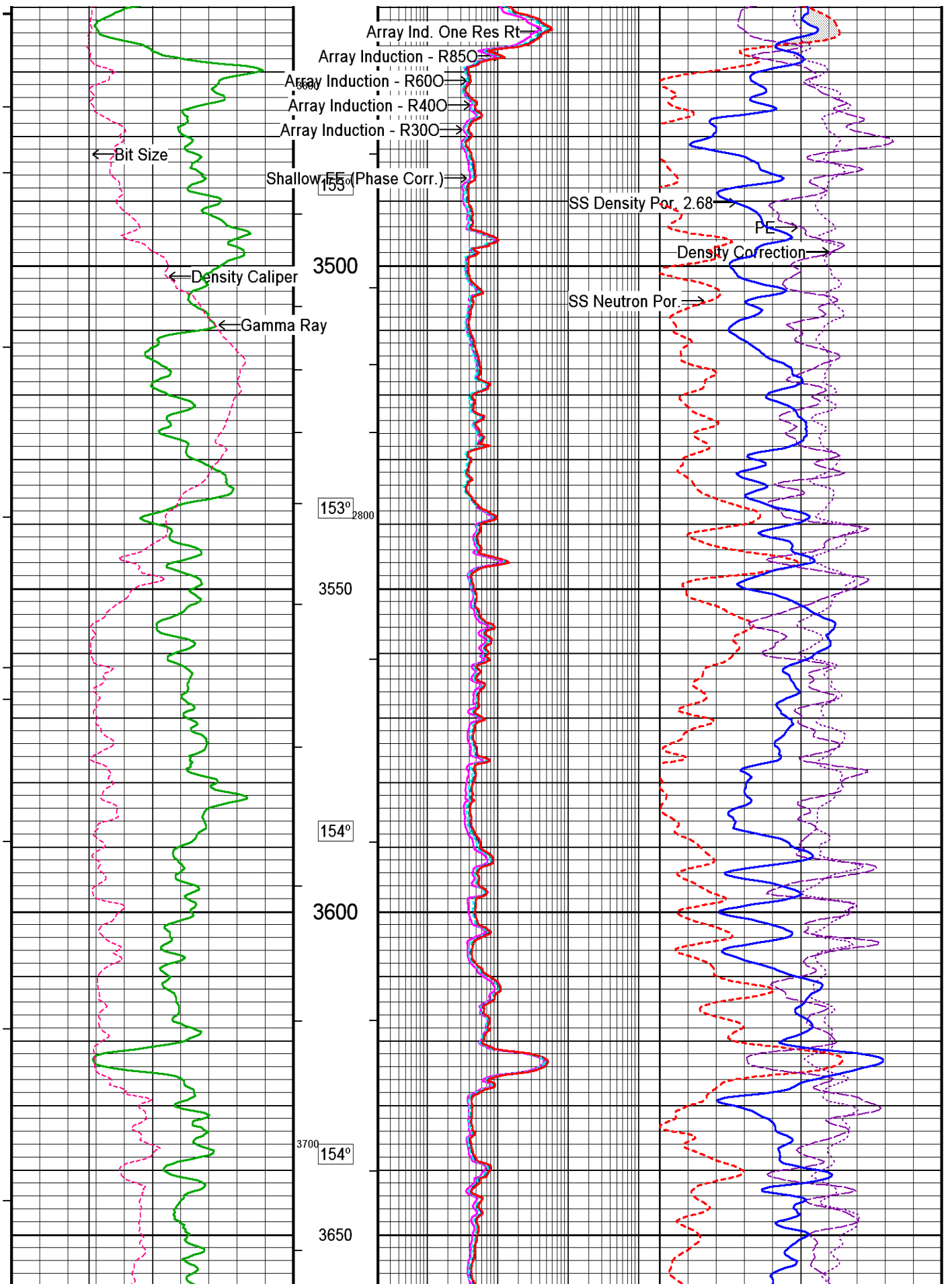


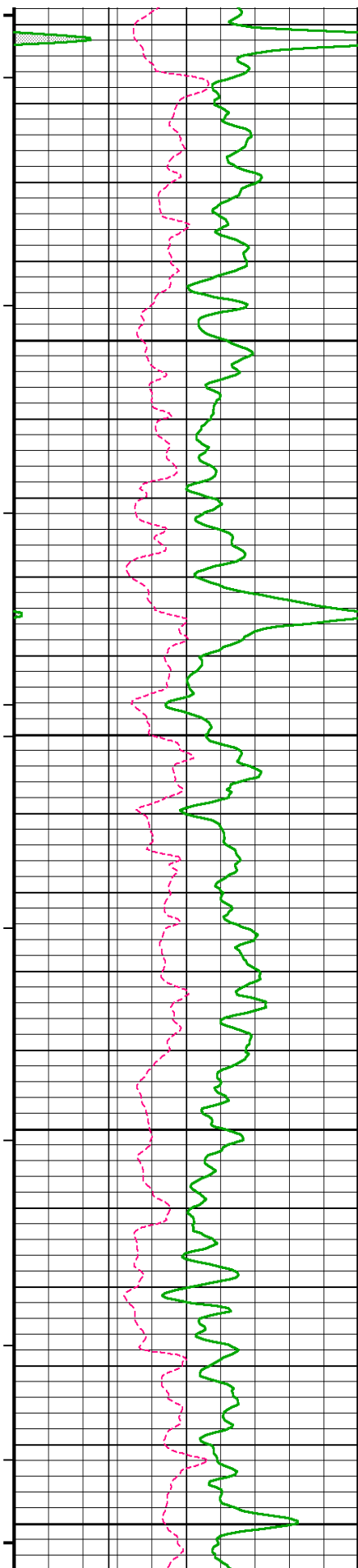












155°

3700

155°

3750

2700

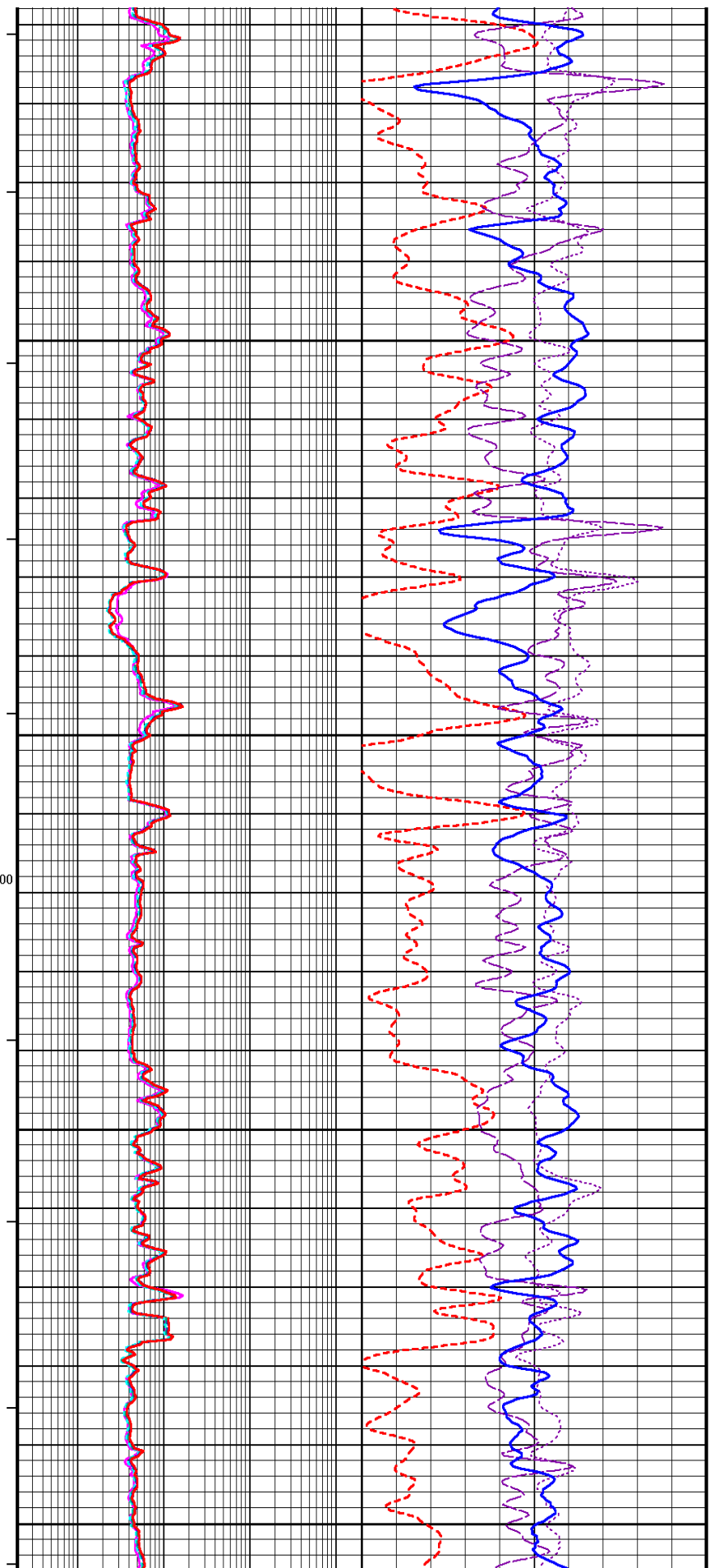
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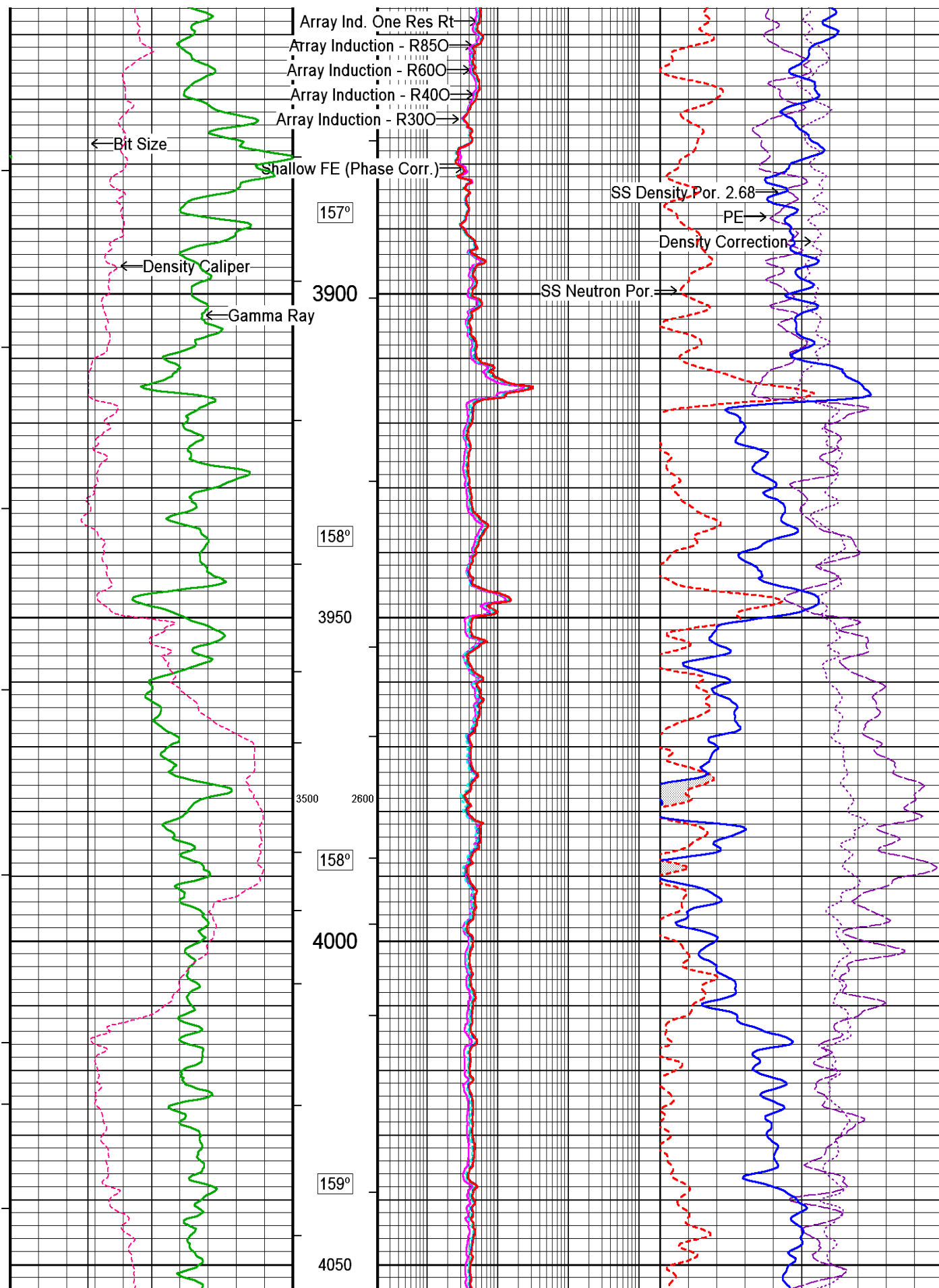
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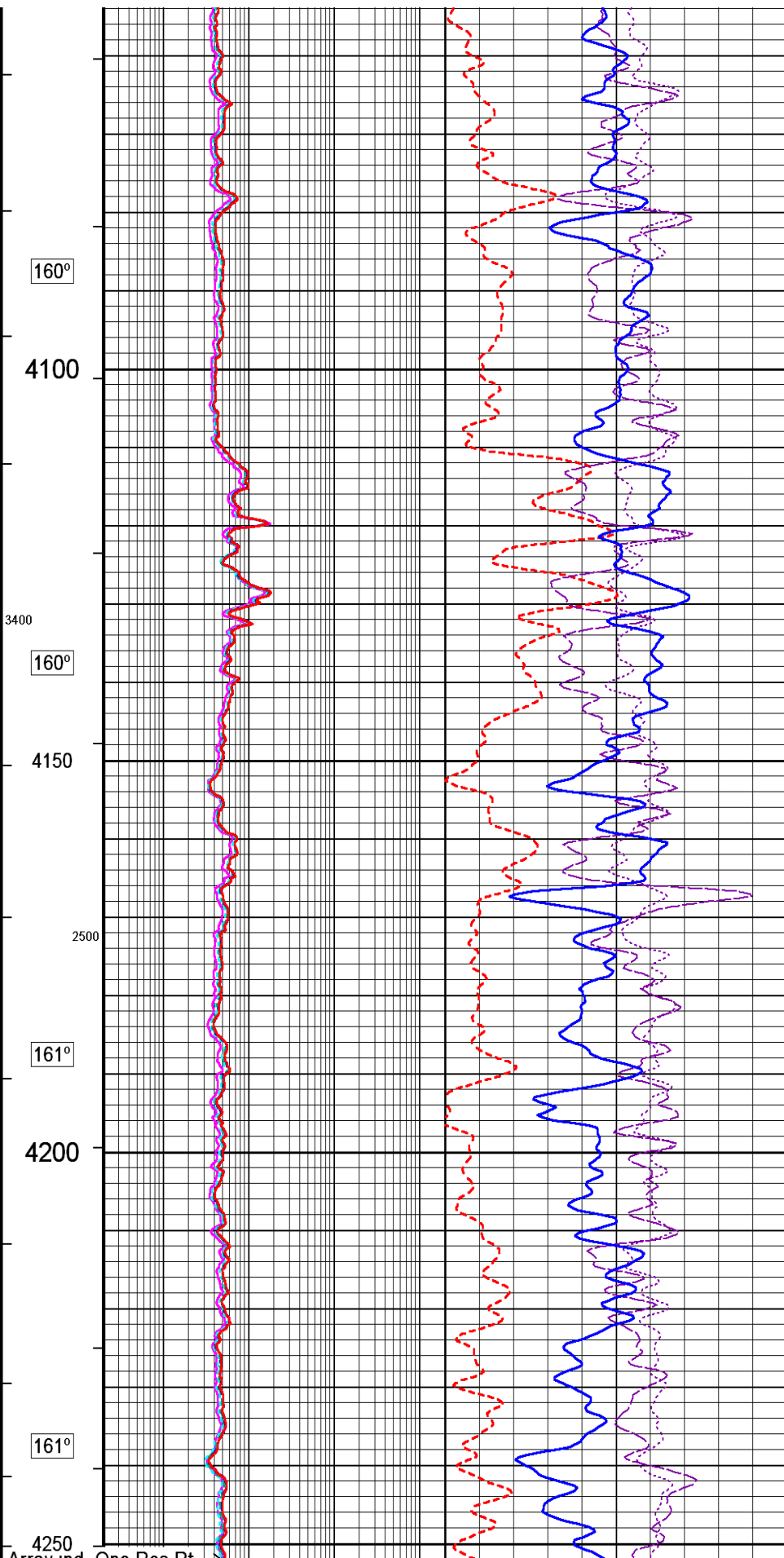
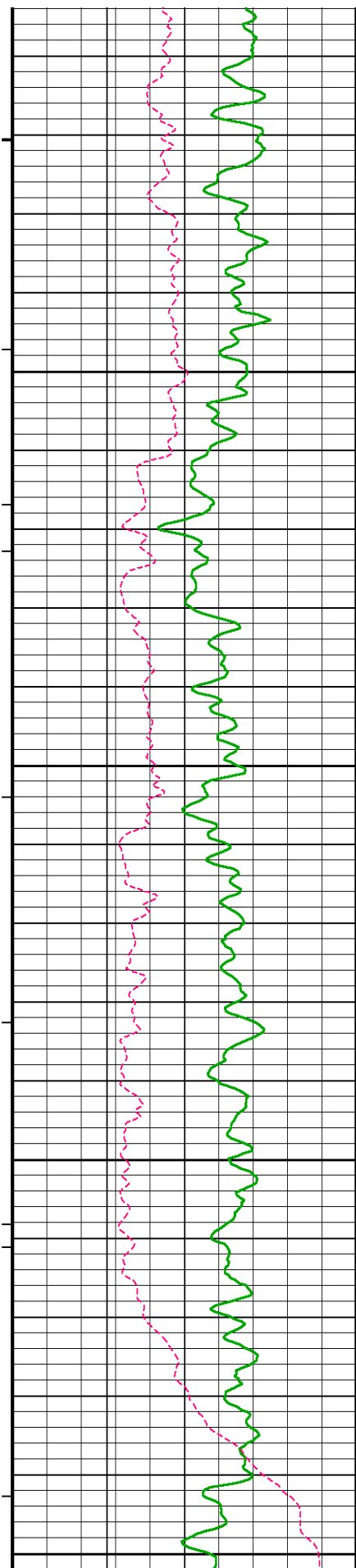
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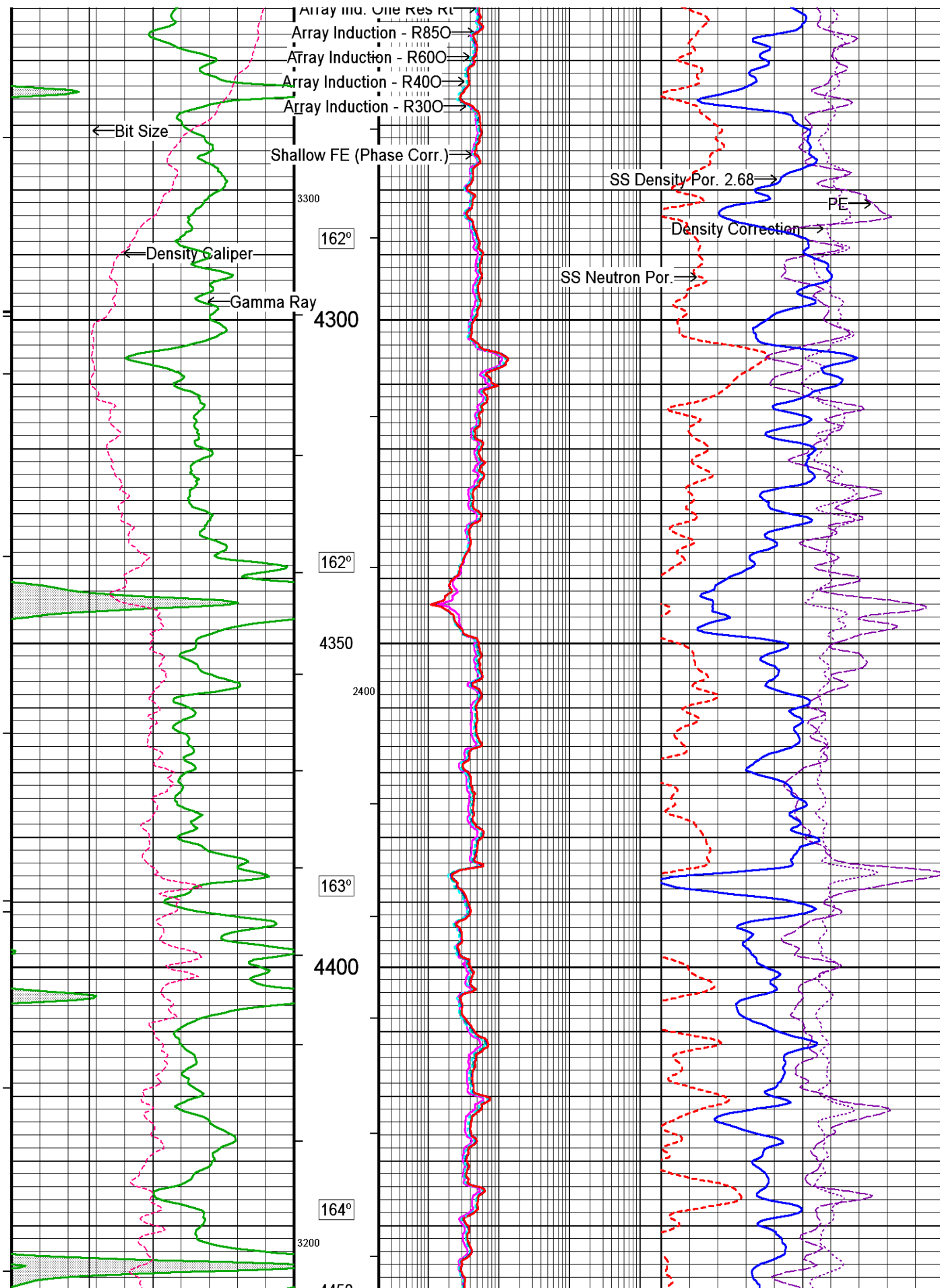
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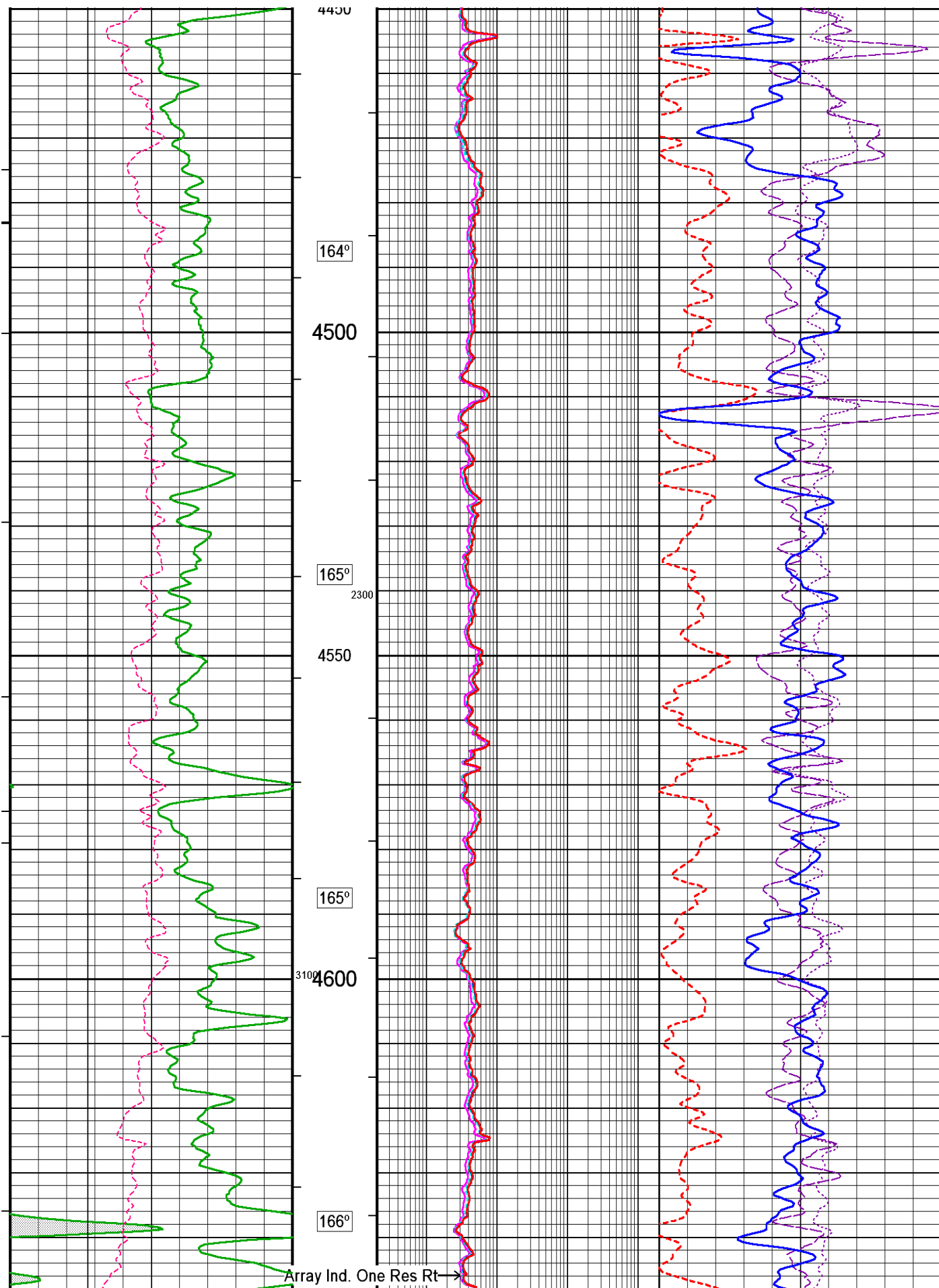
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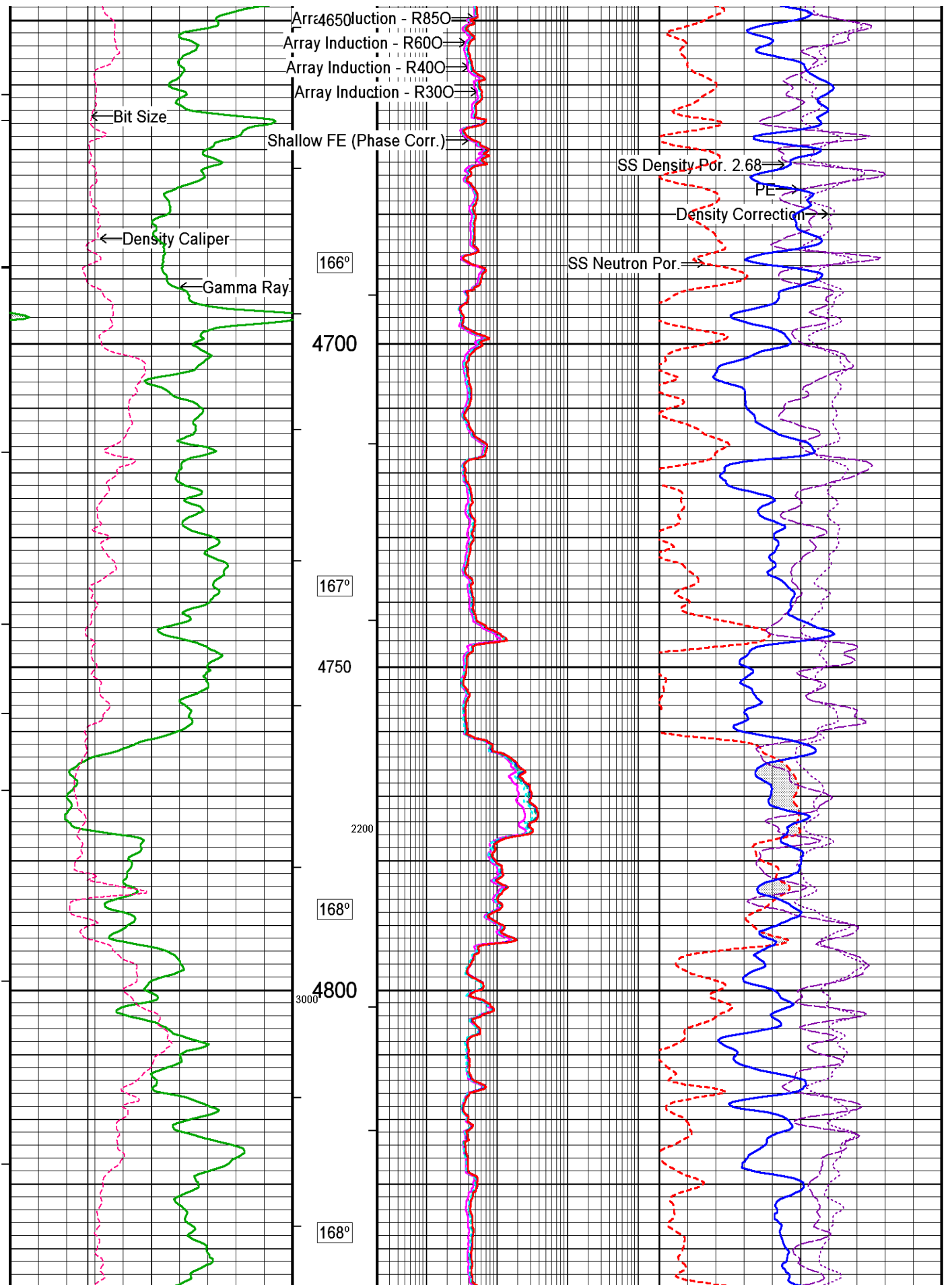


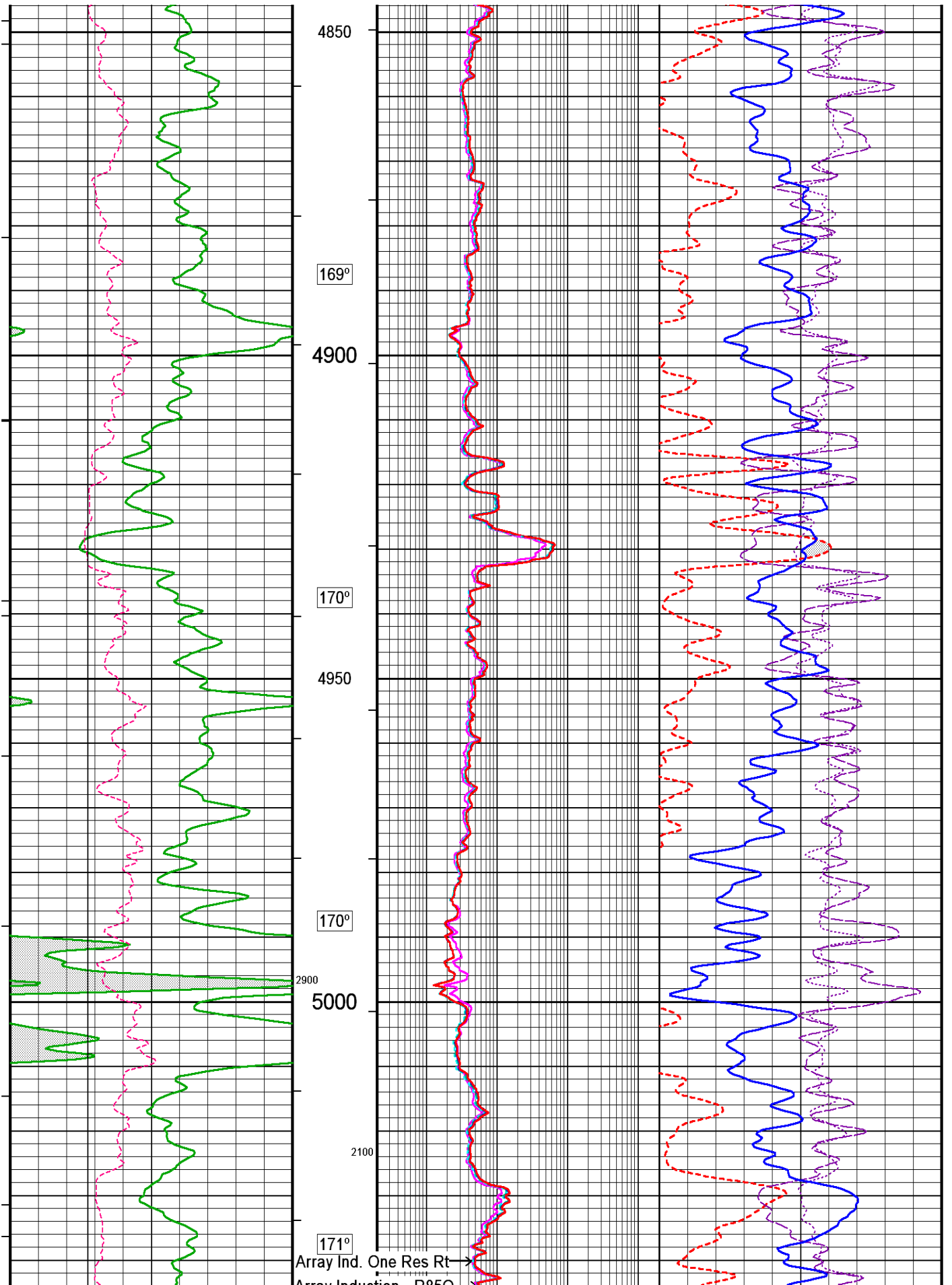


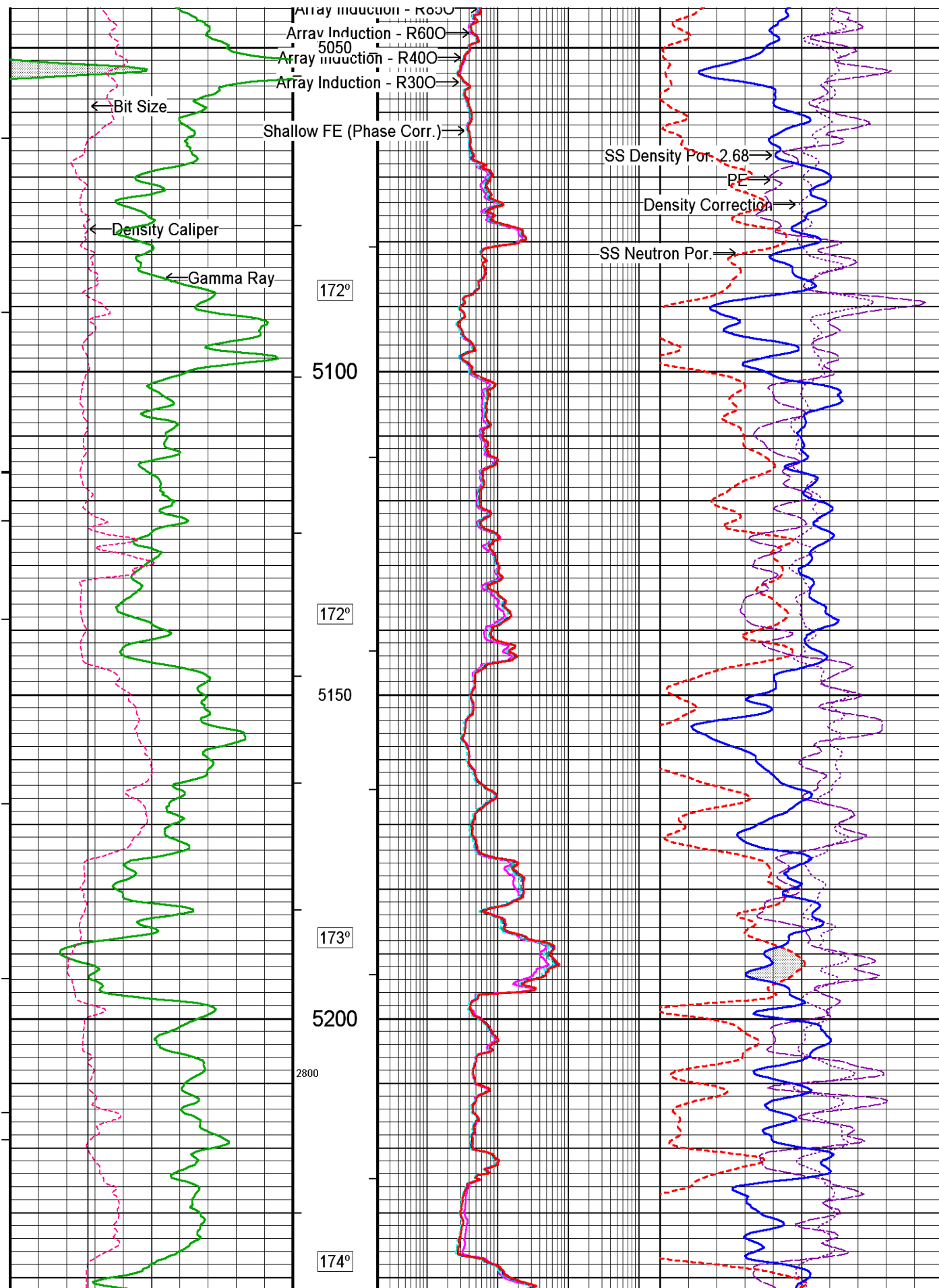


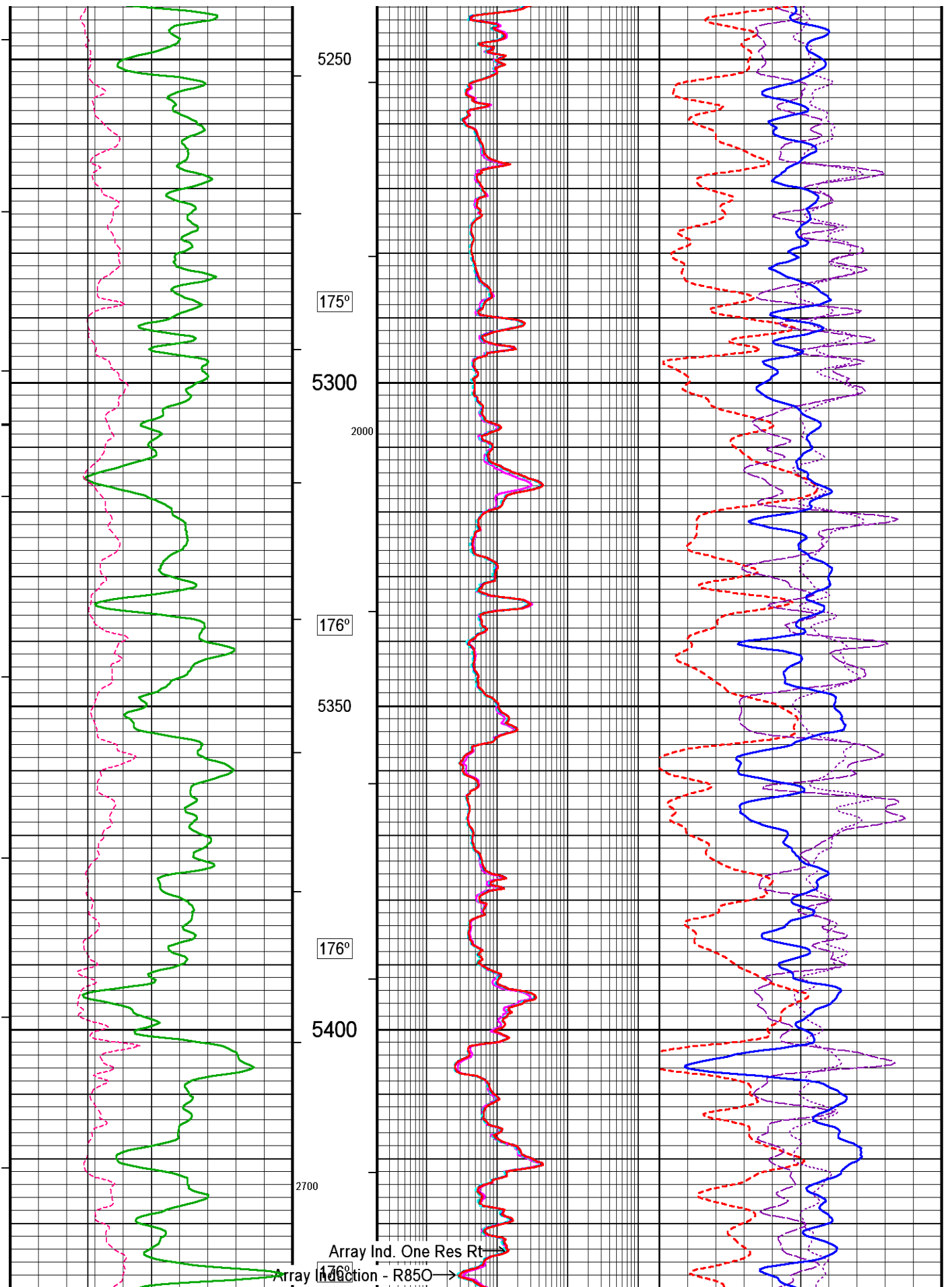


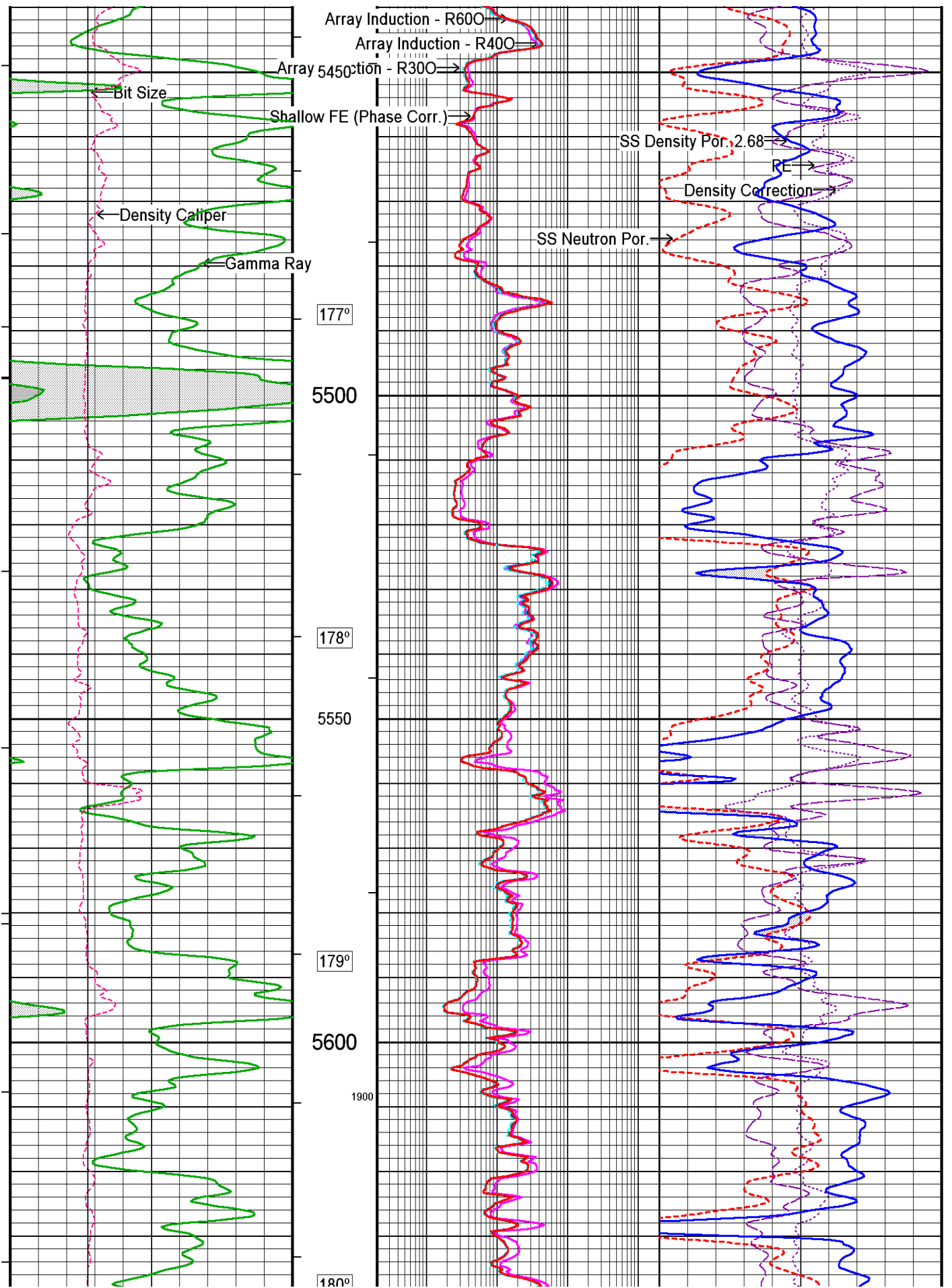


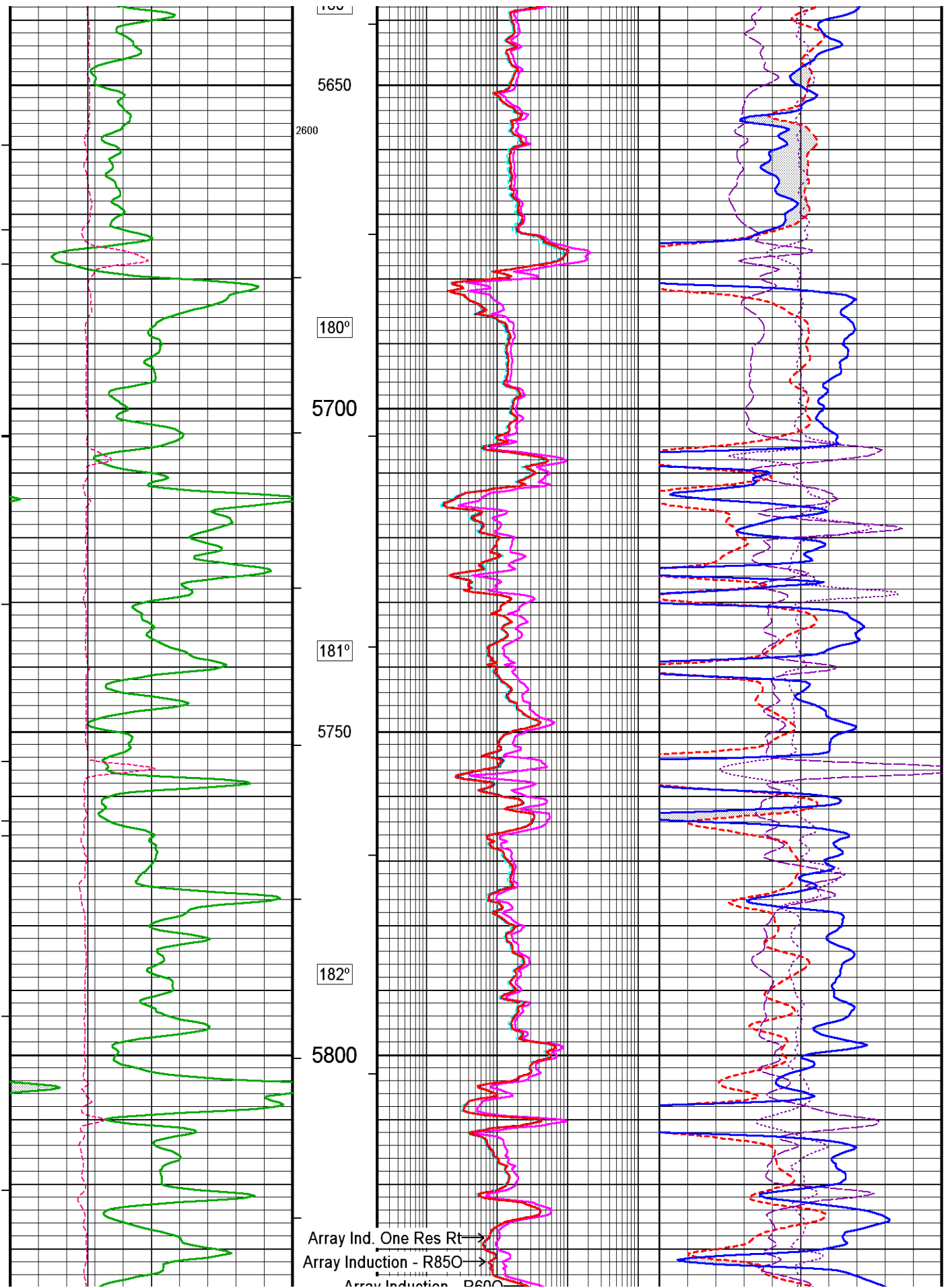


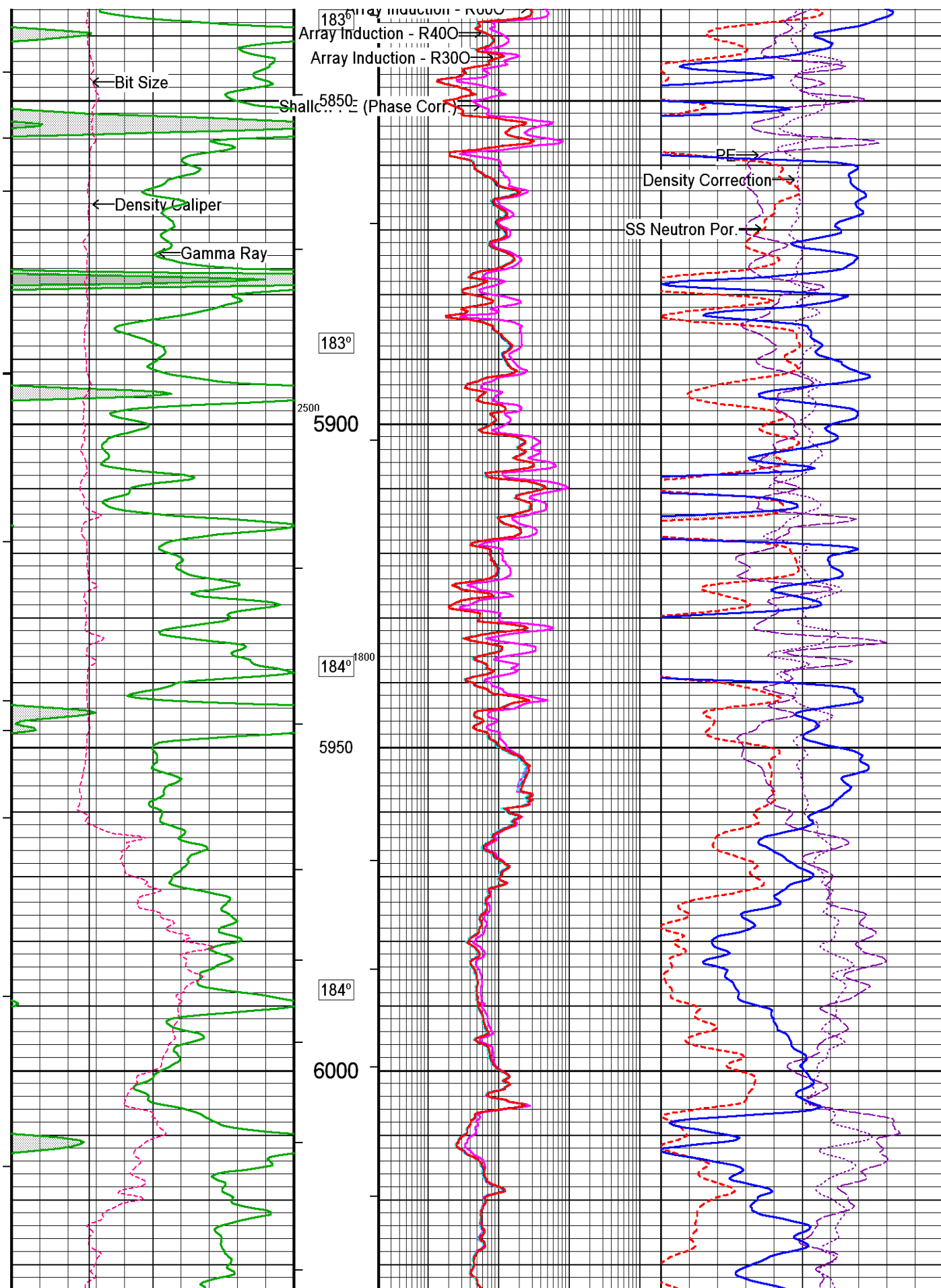


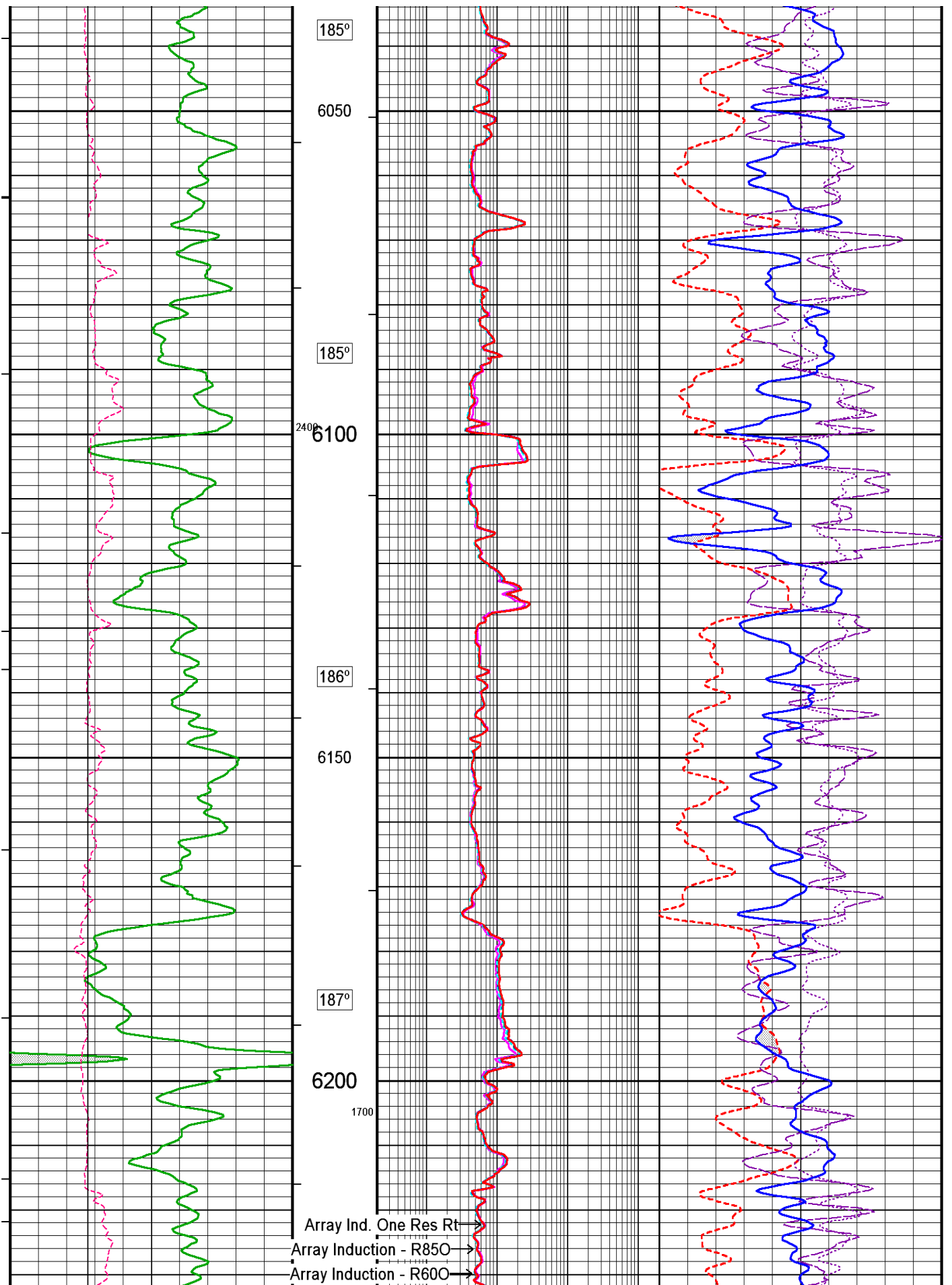


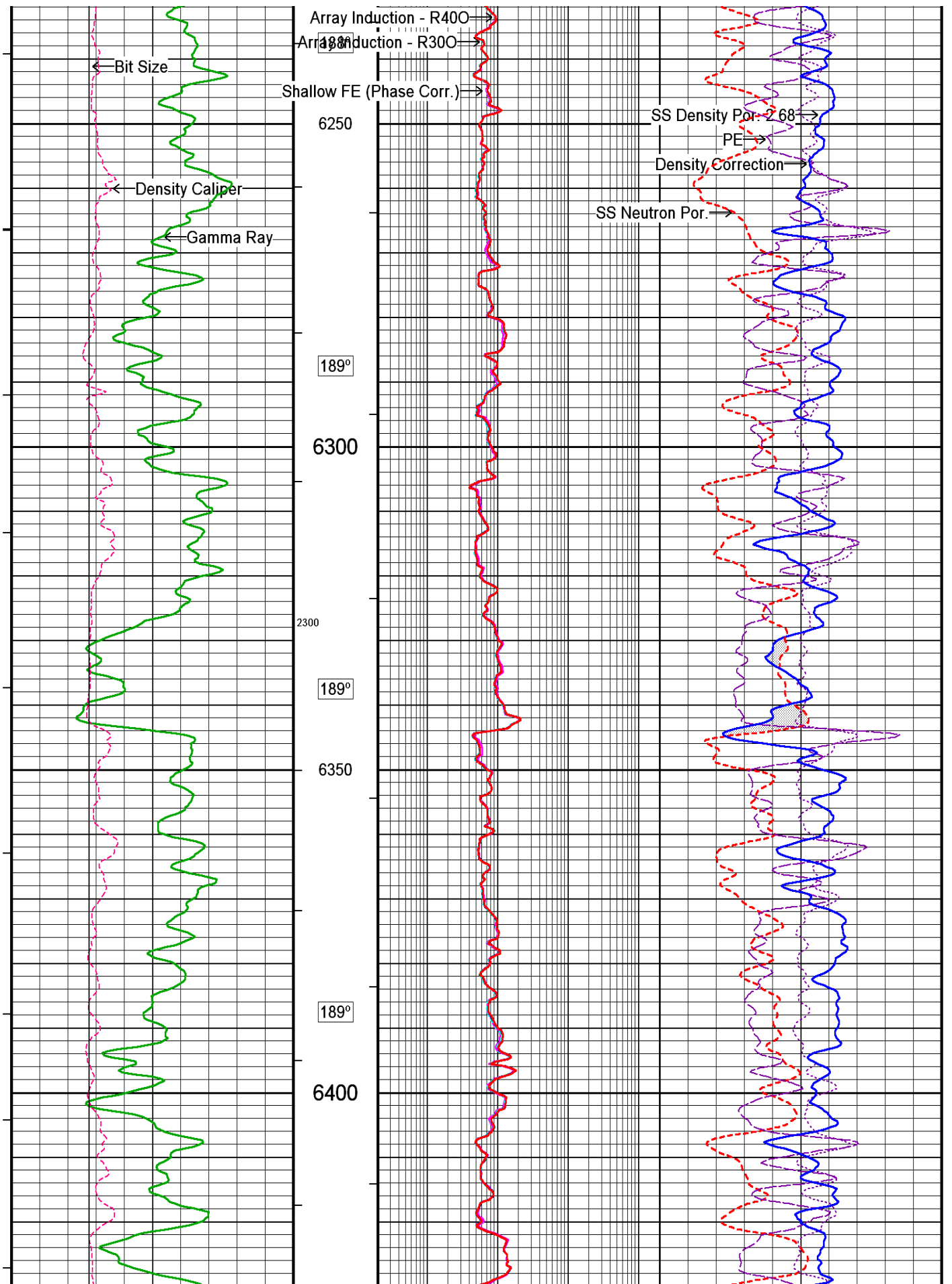


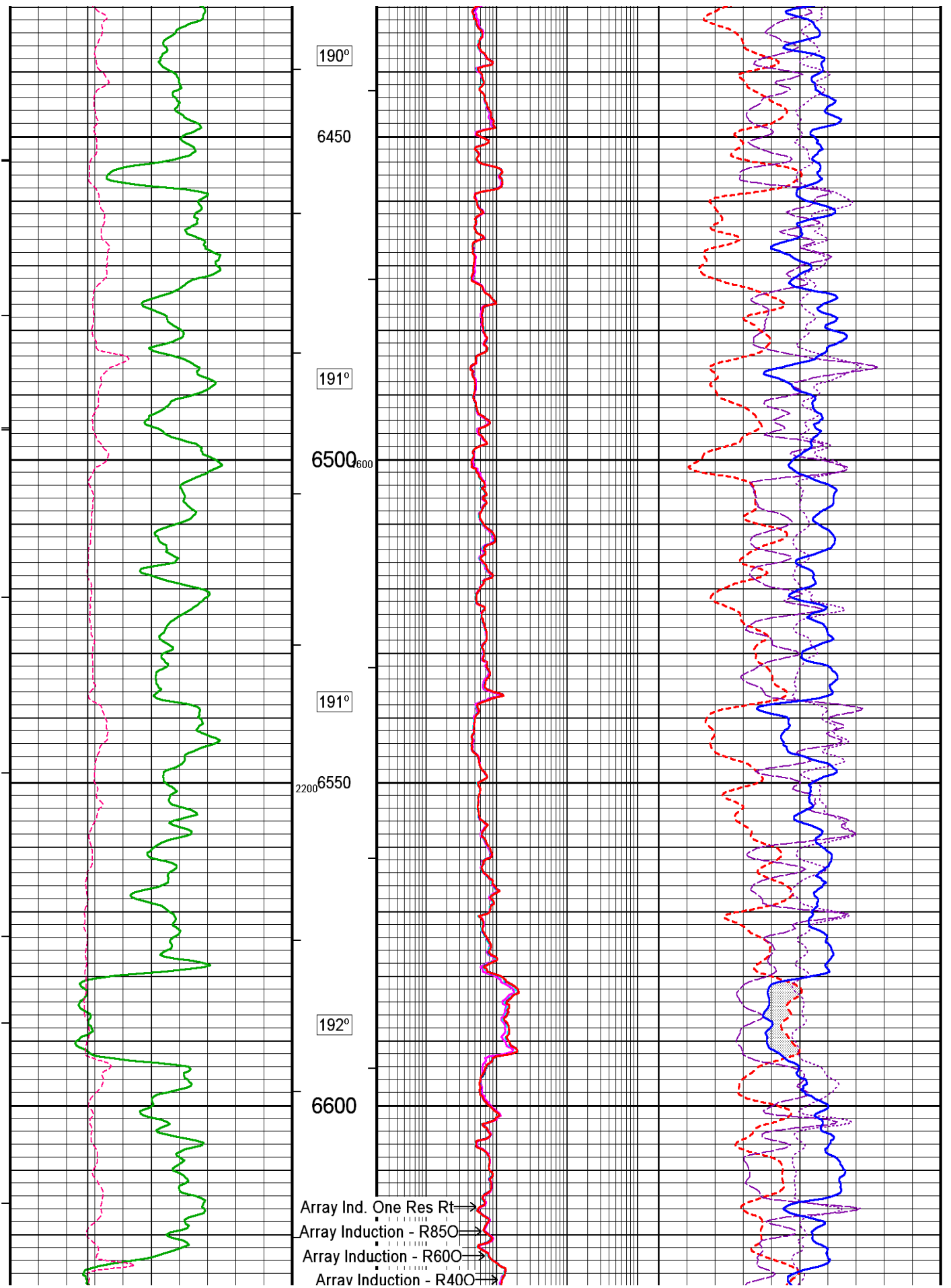


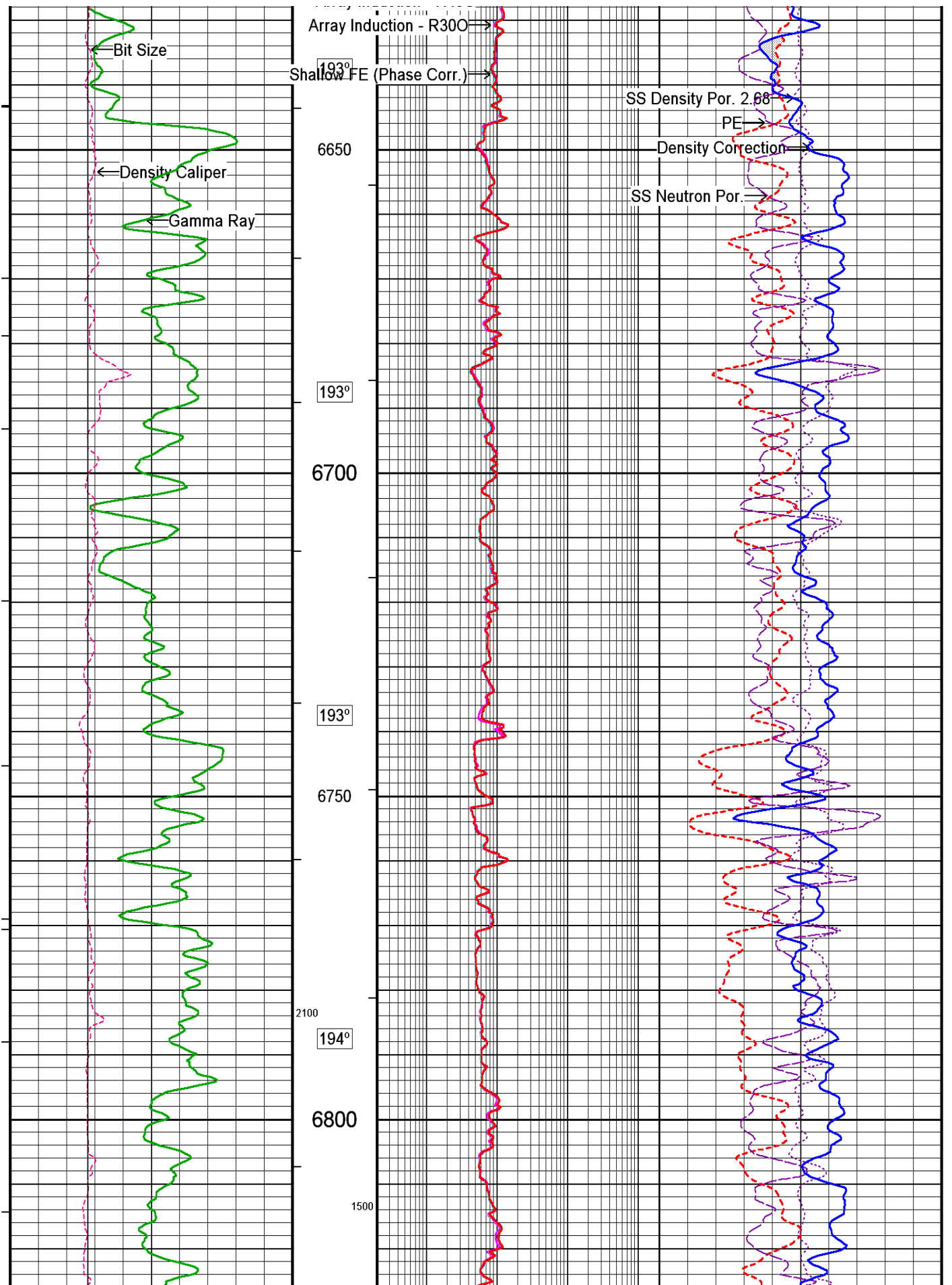


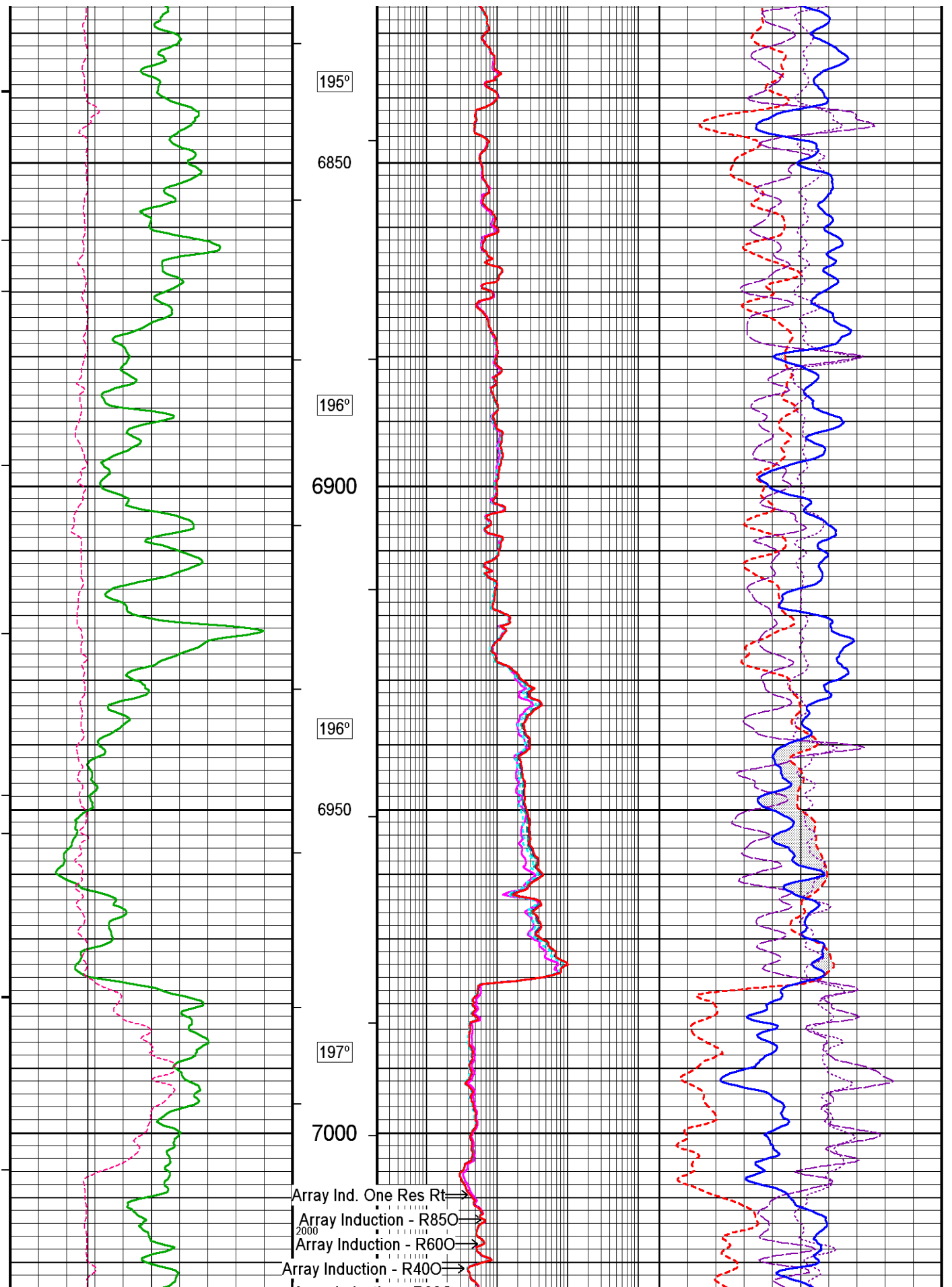


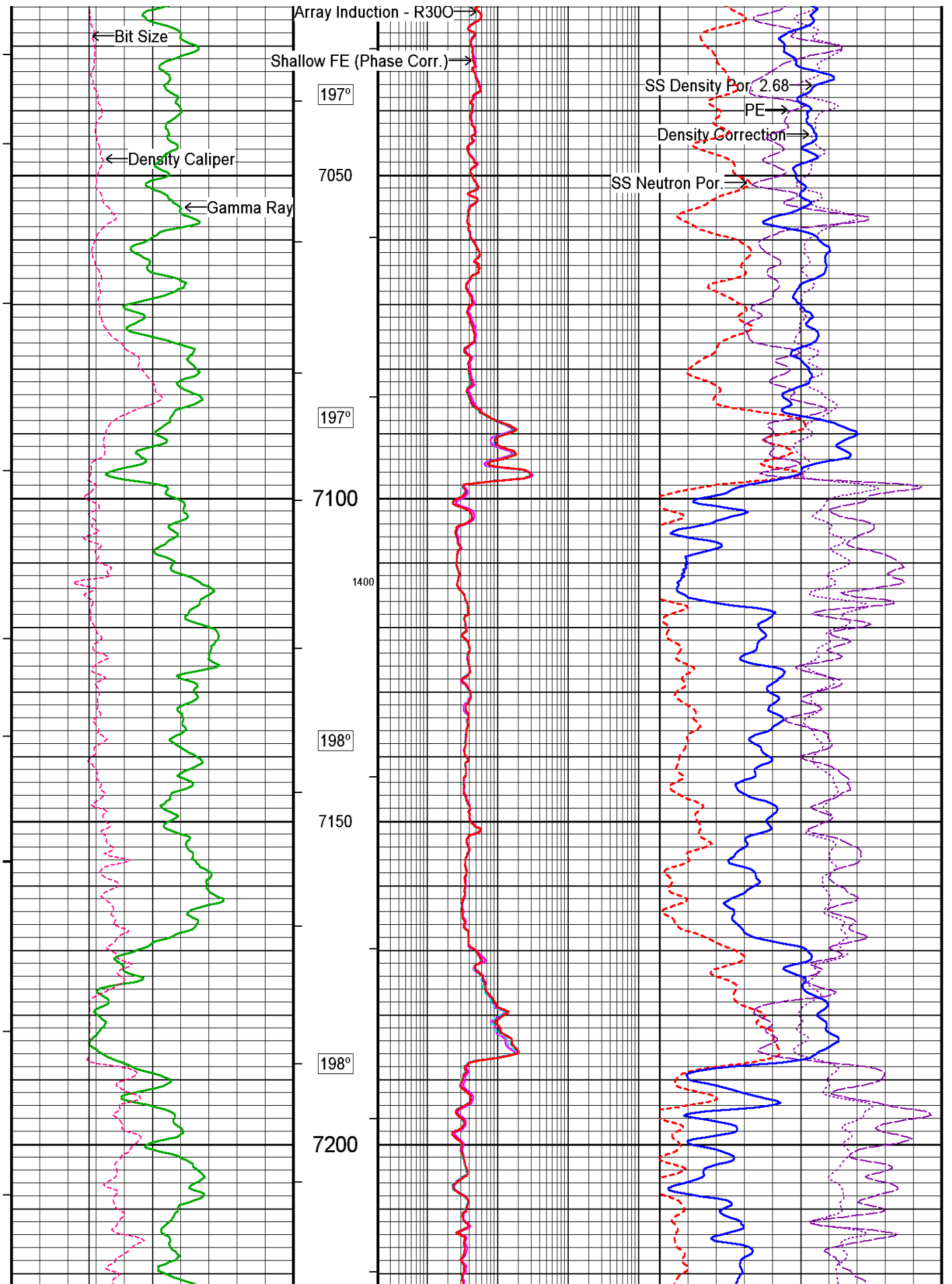


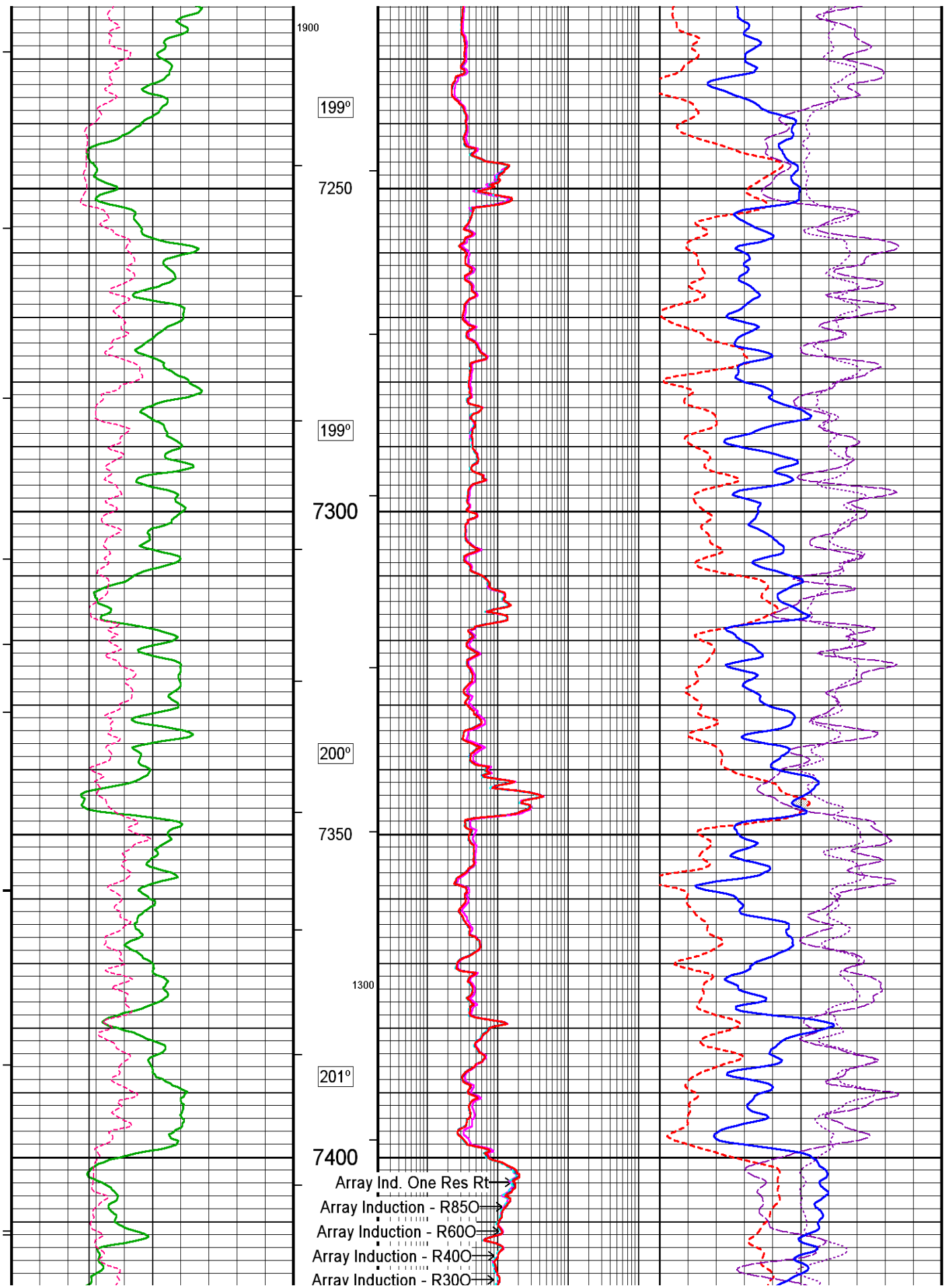


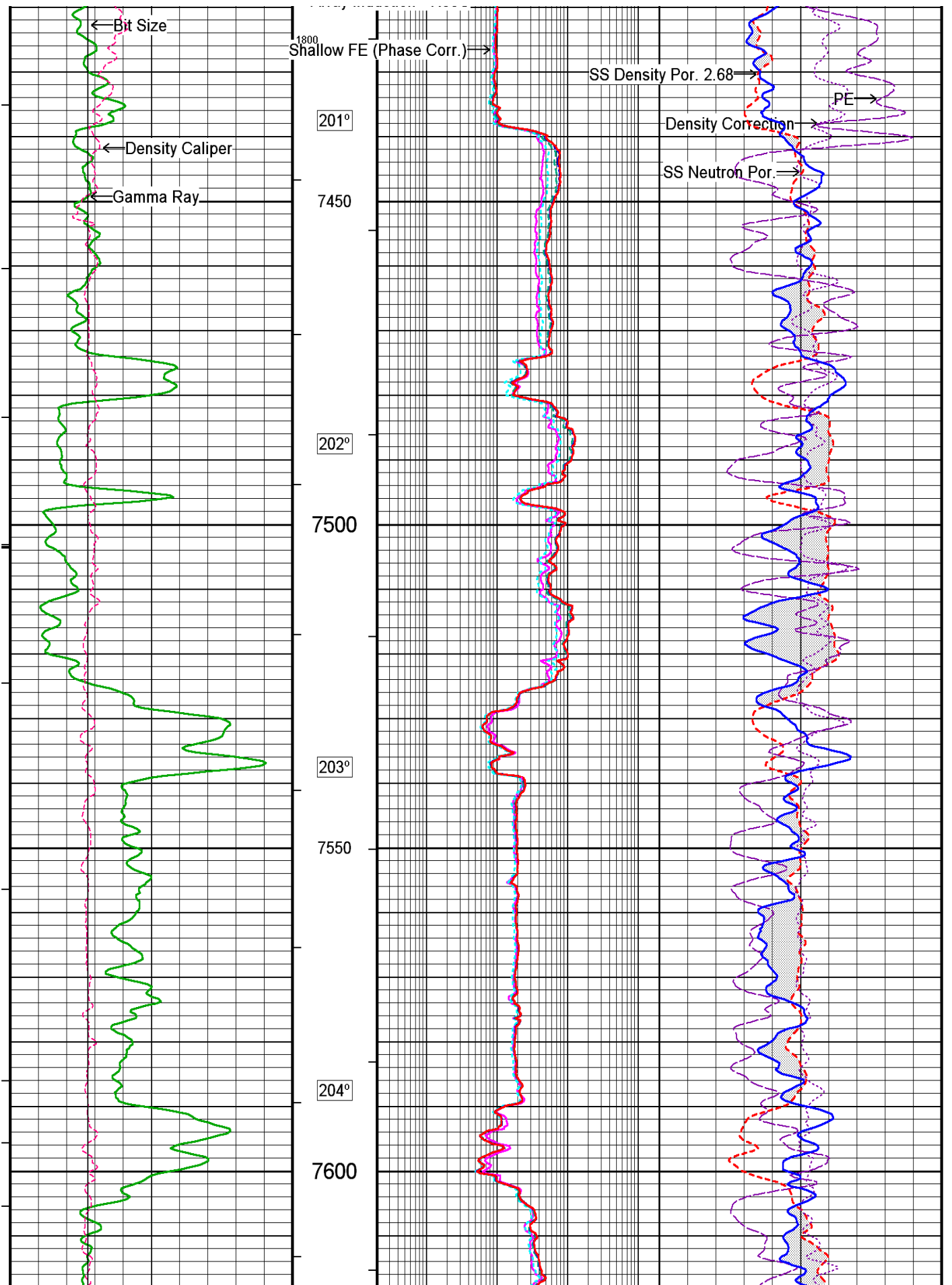


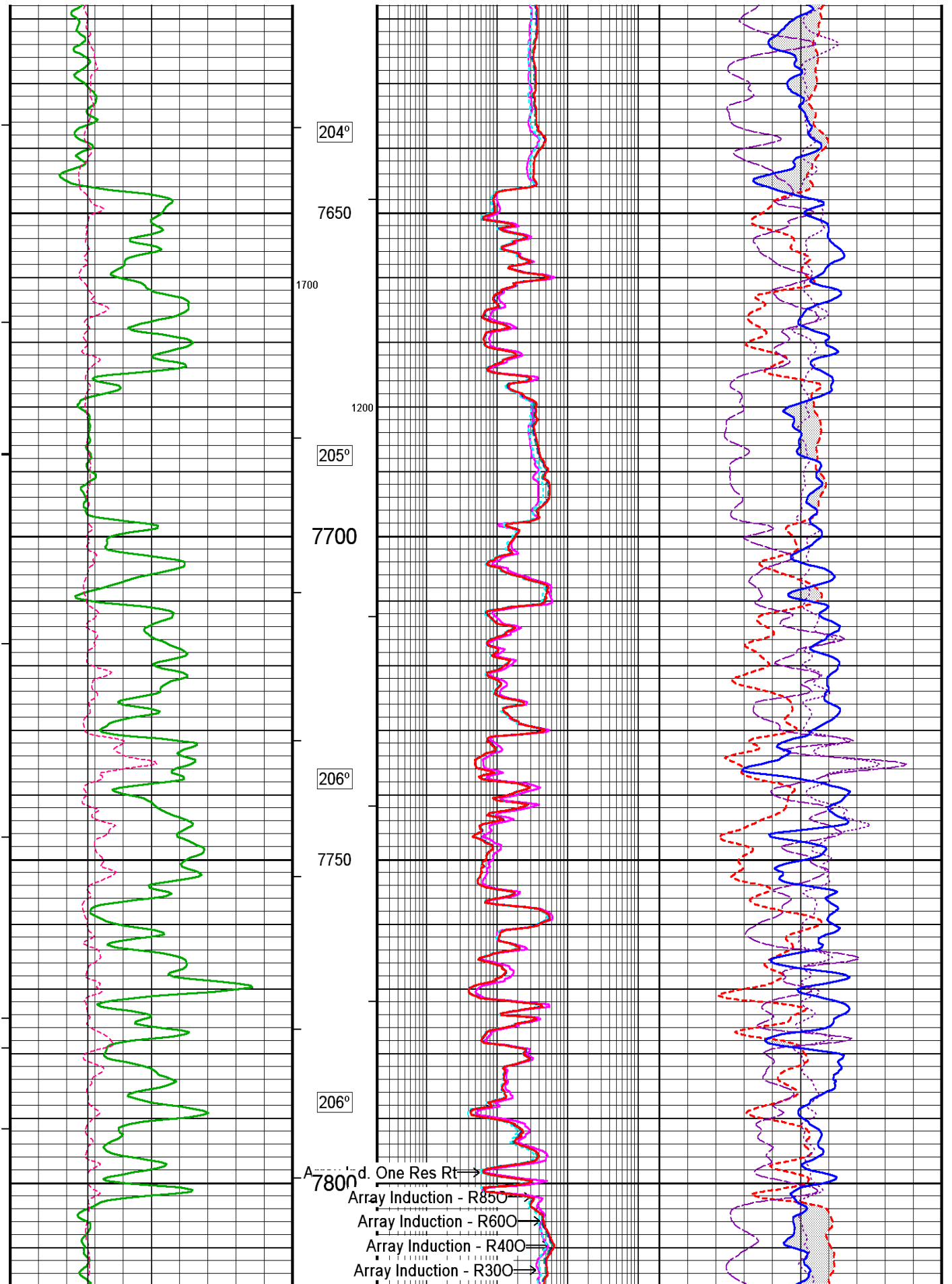


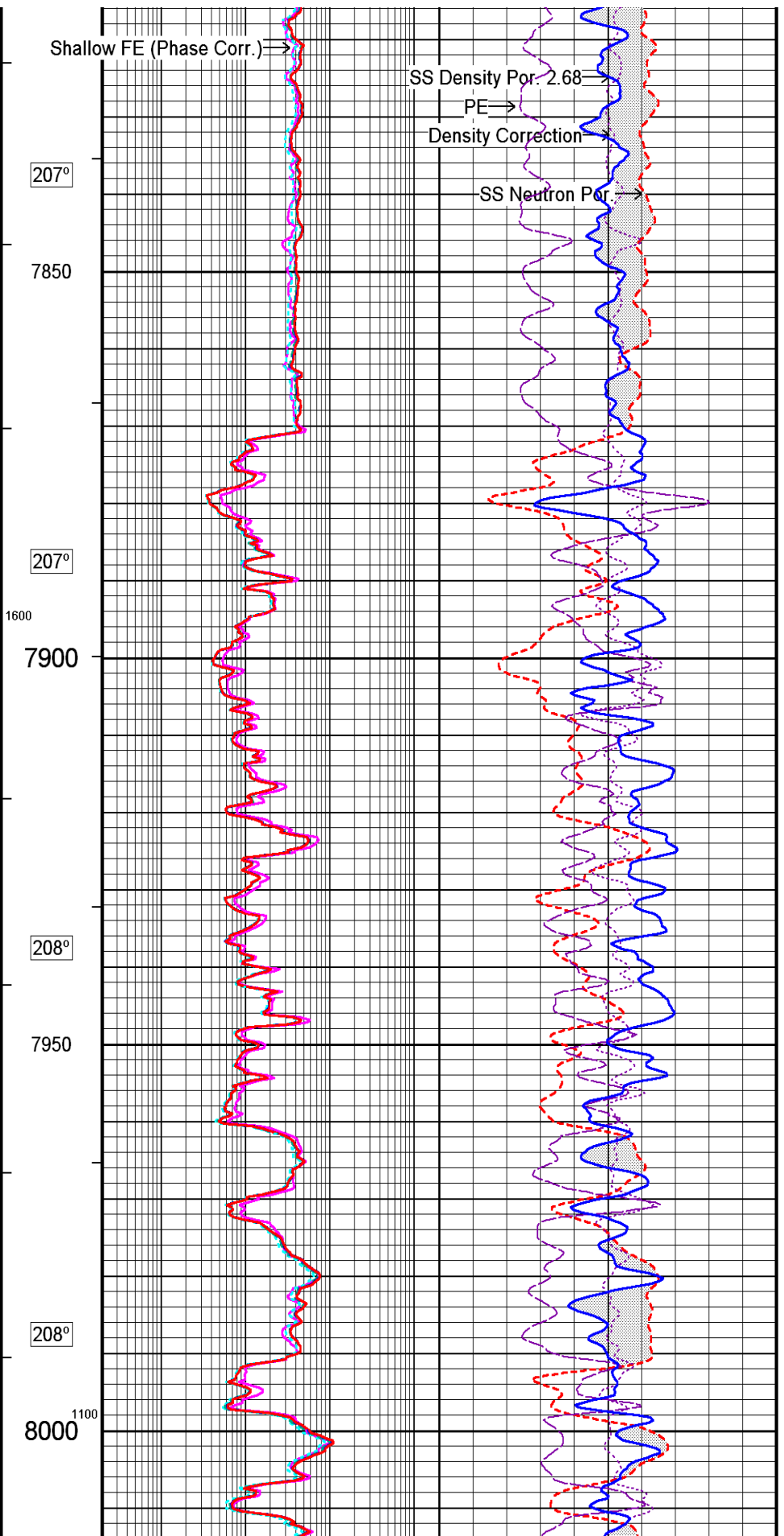
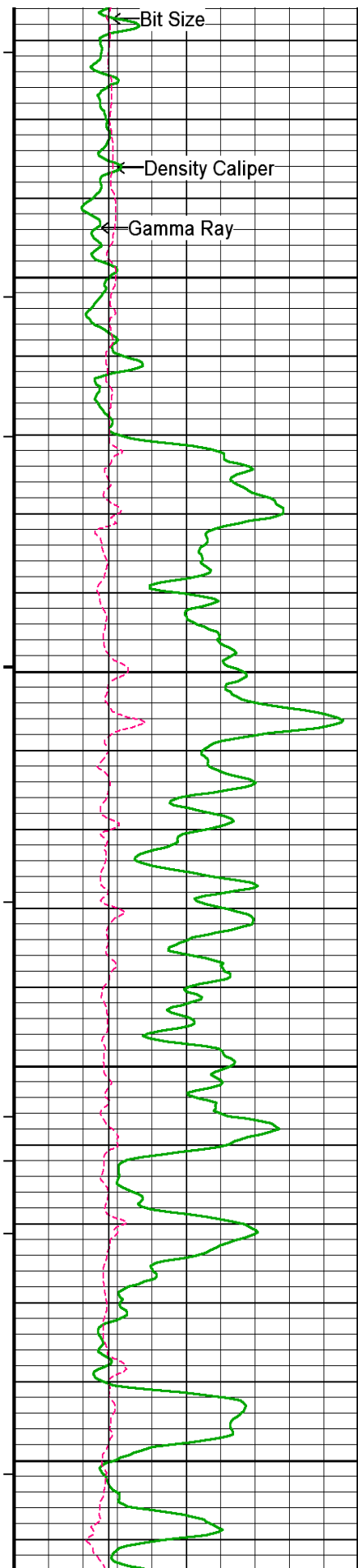


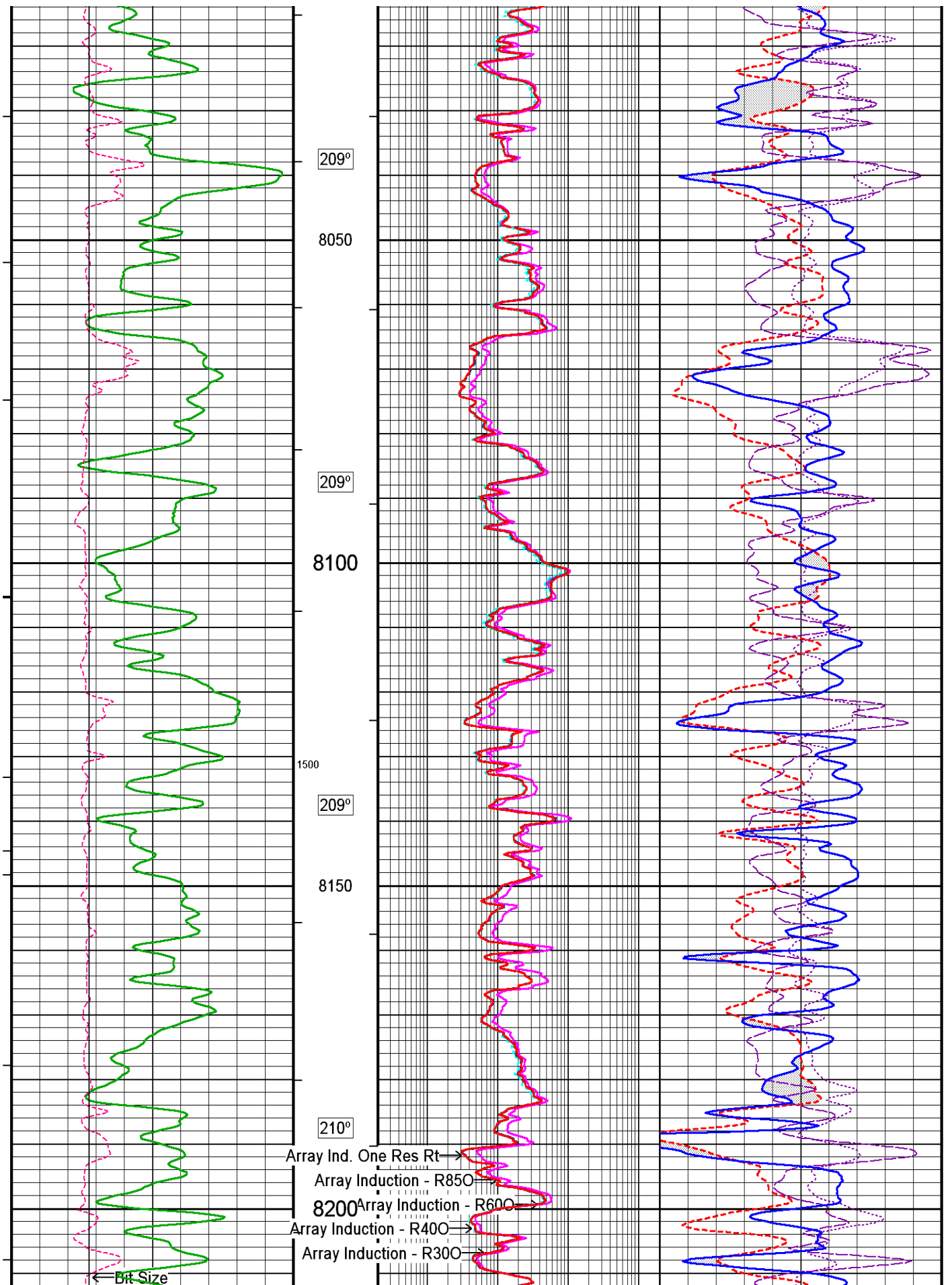


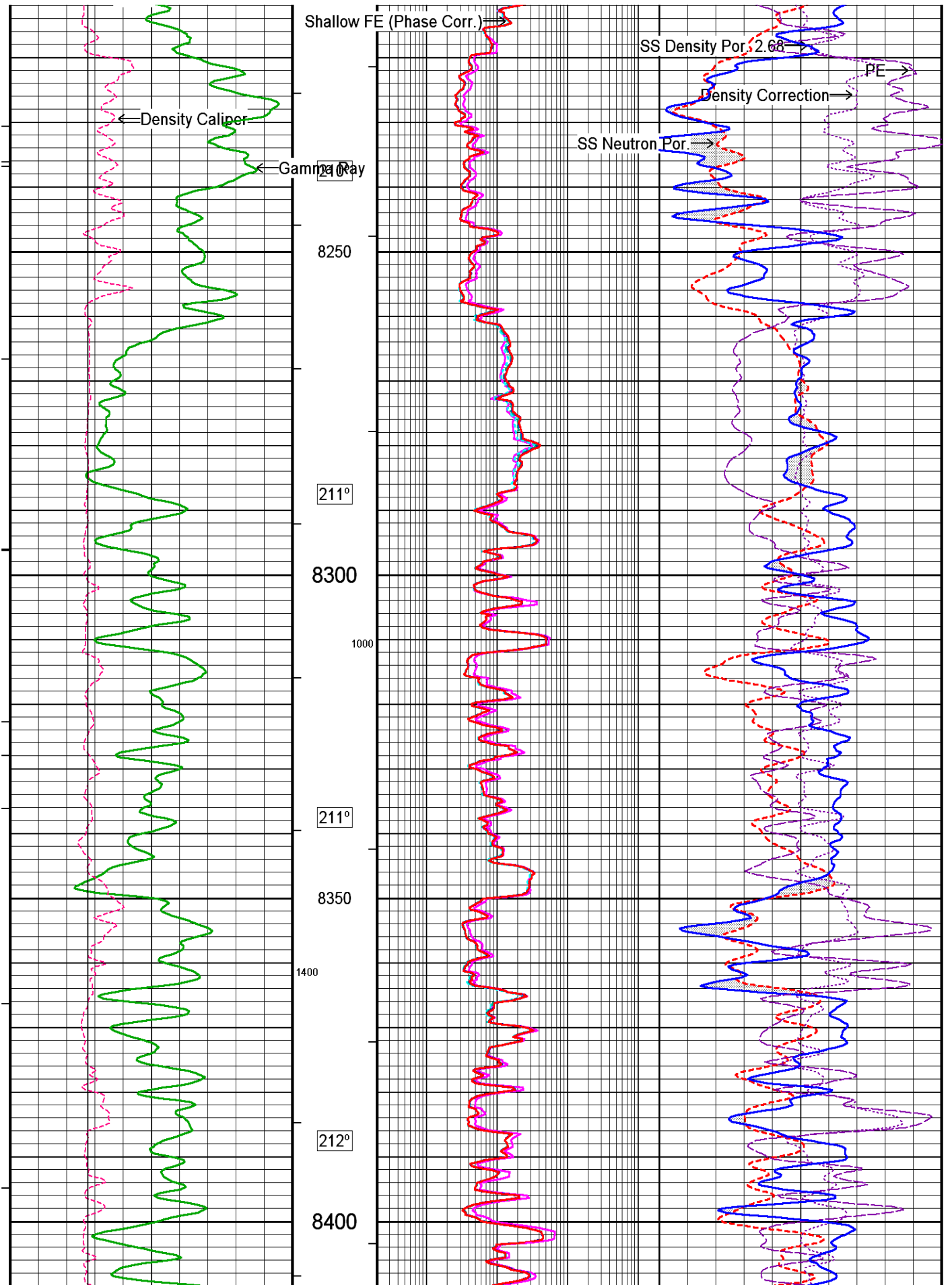


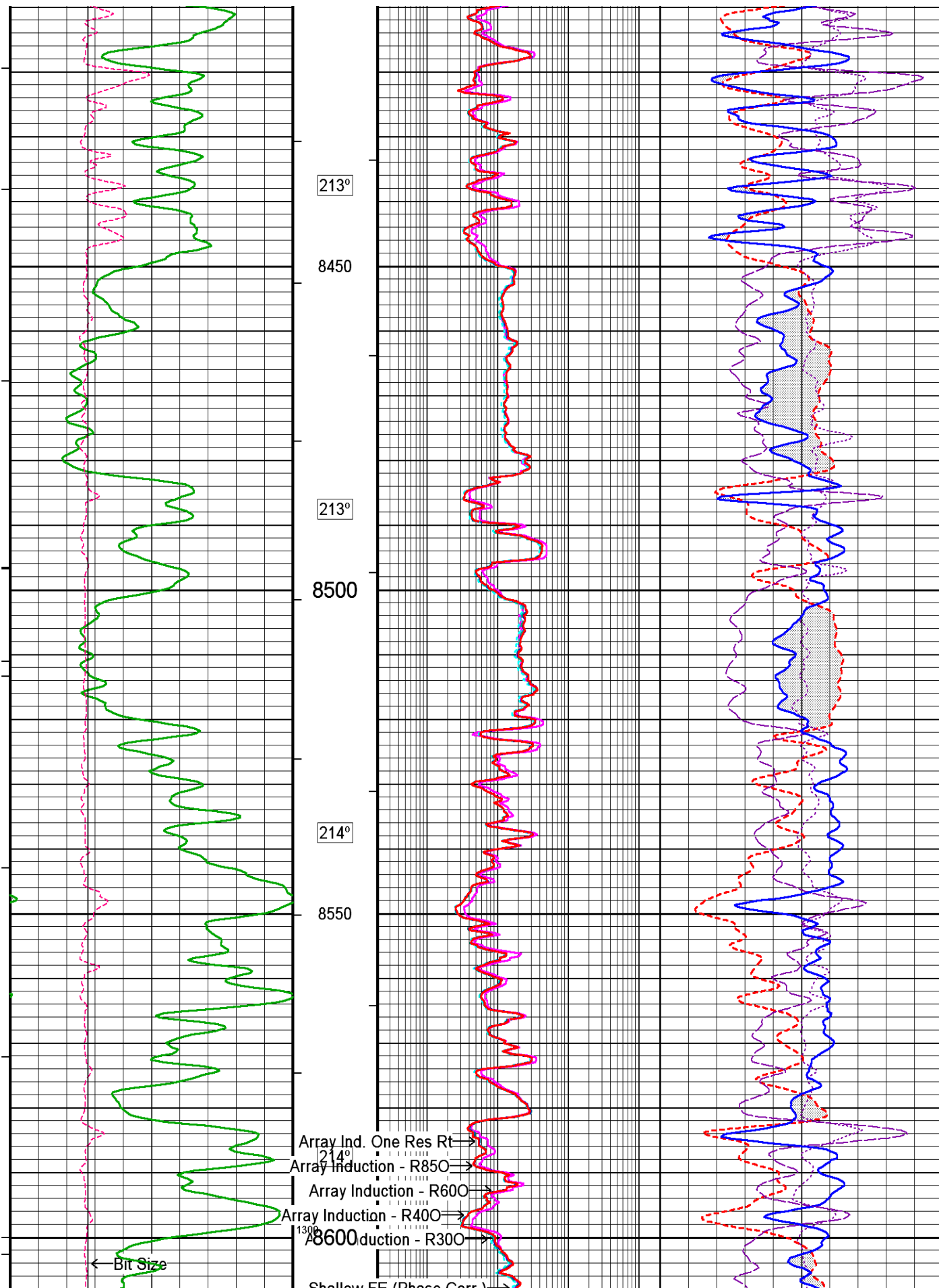


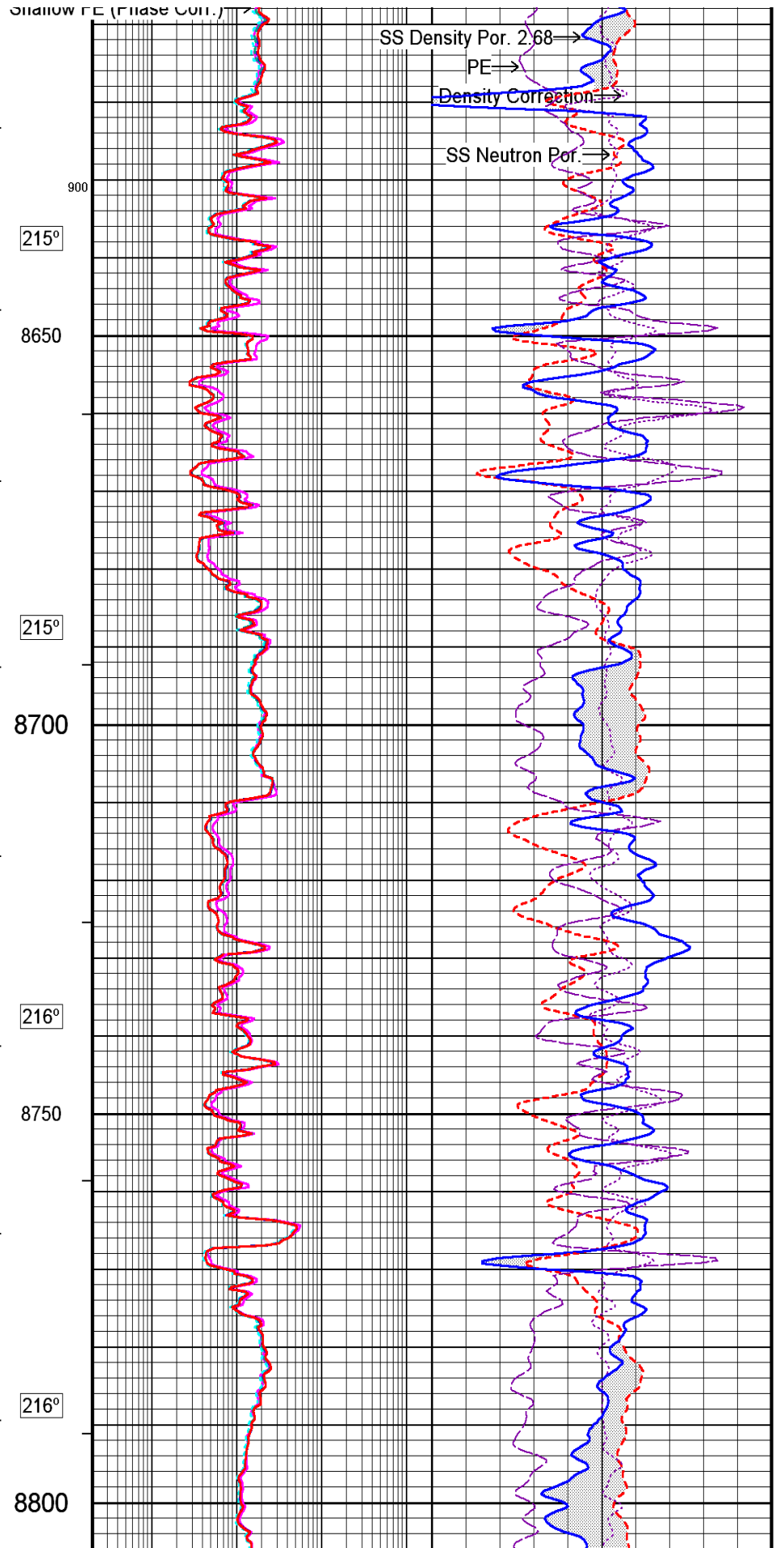
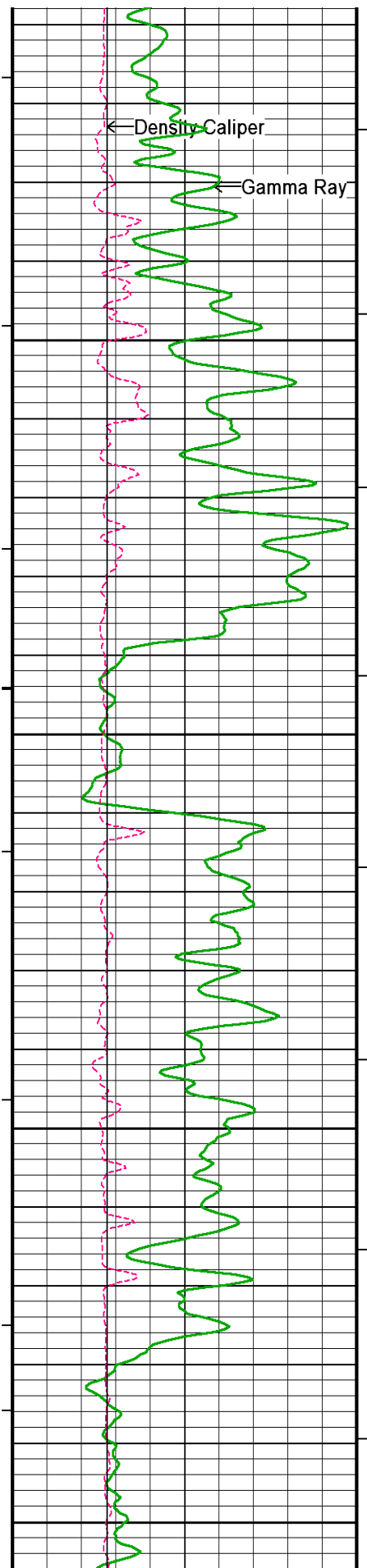


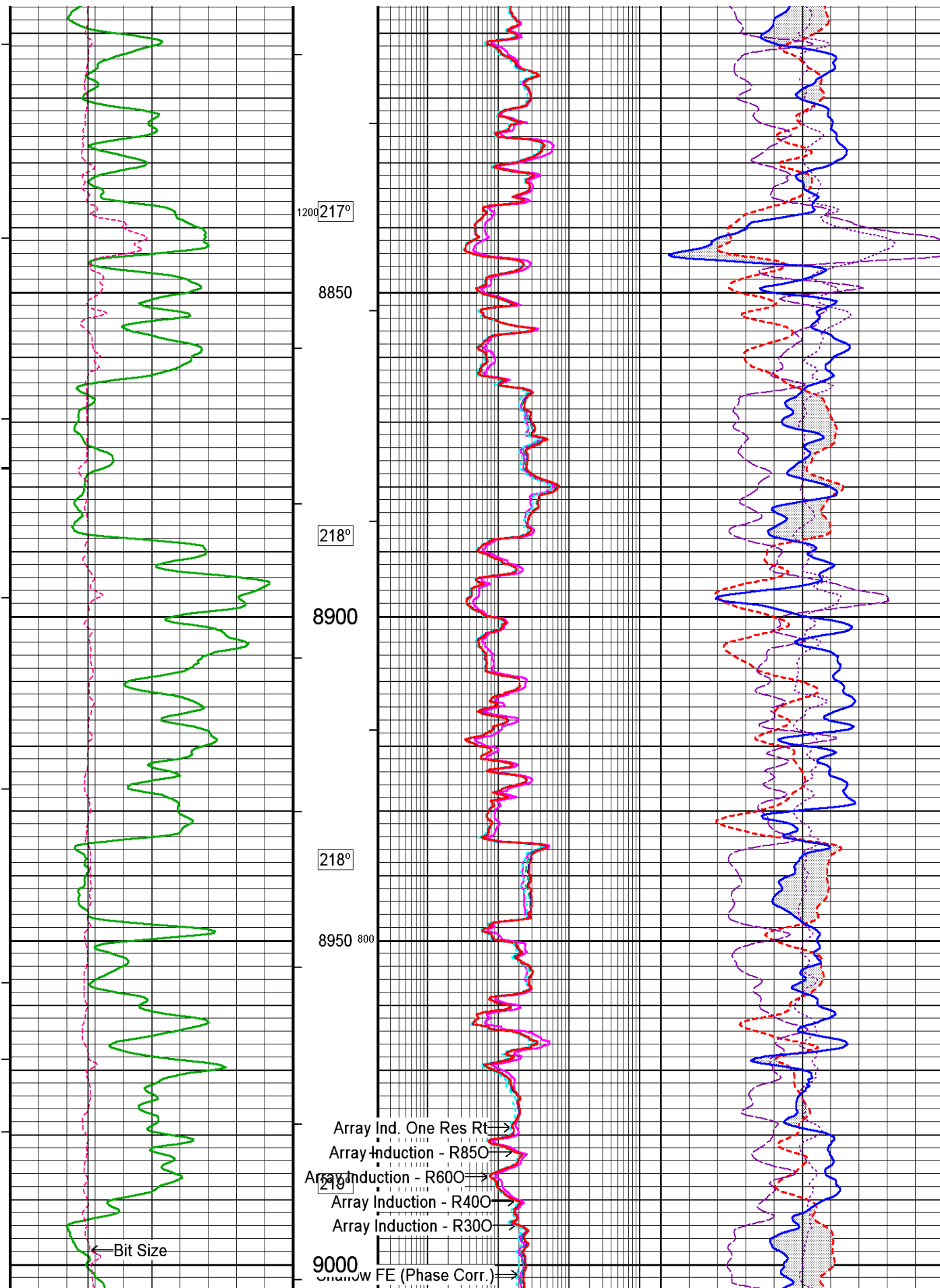


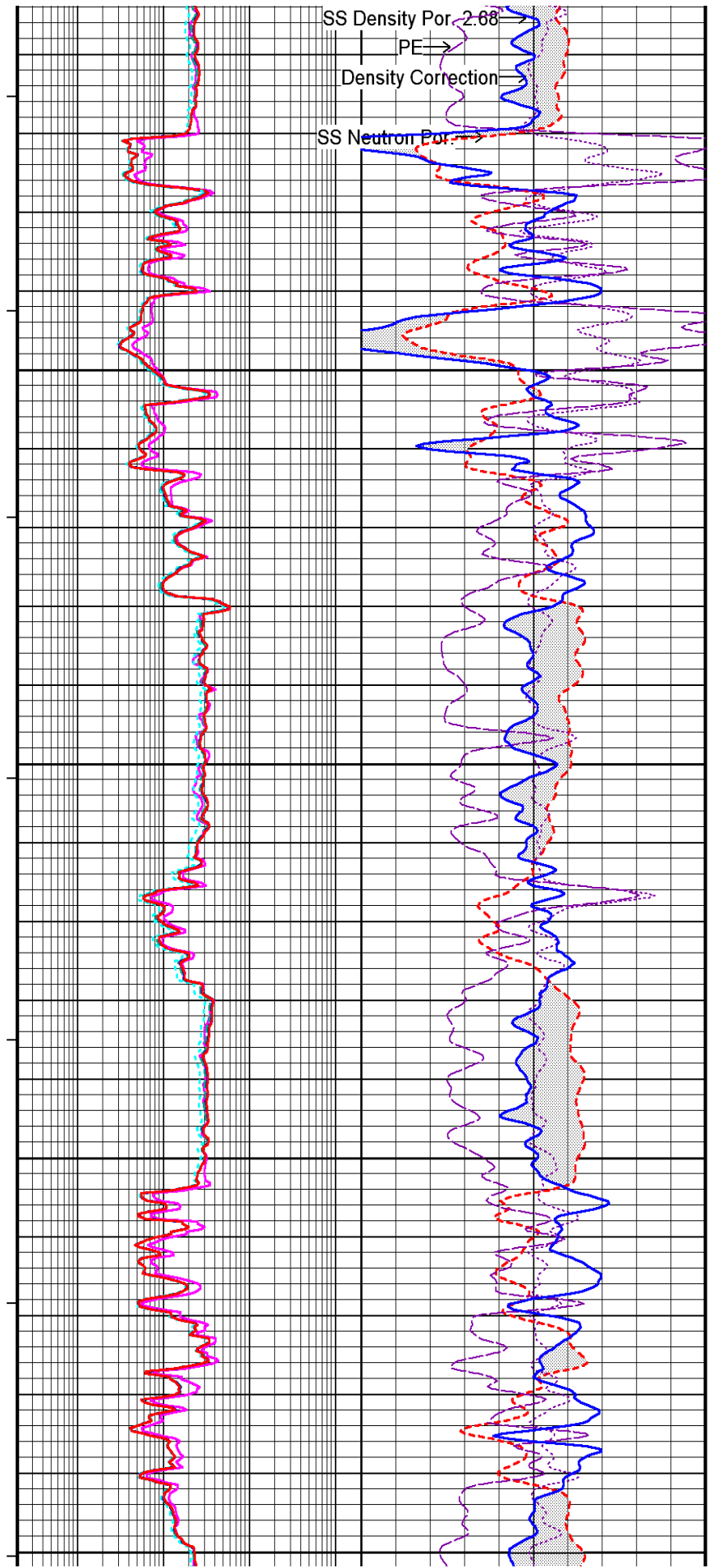
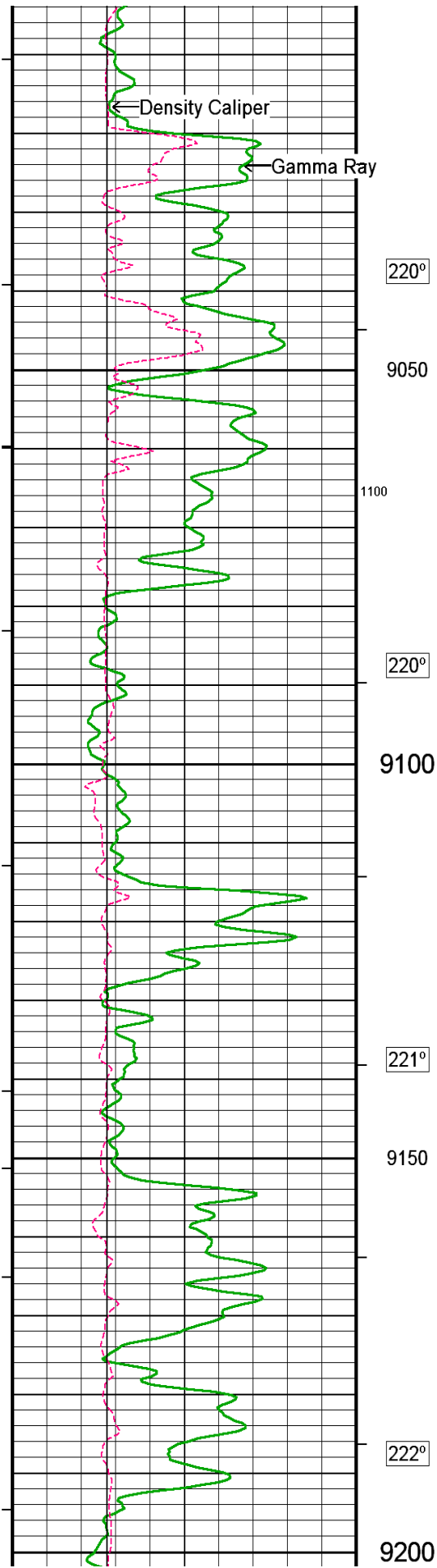


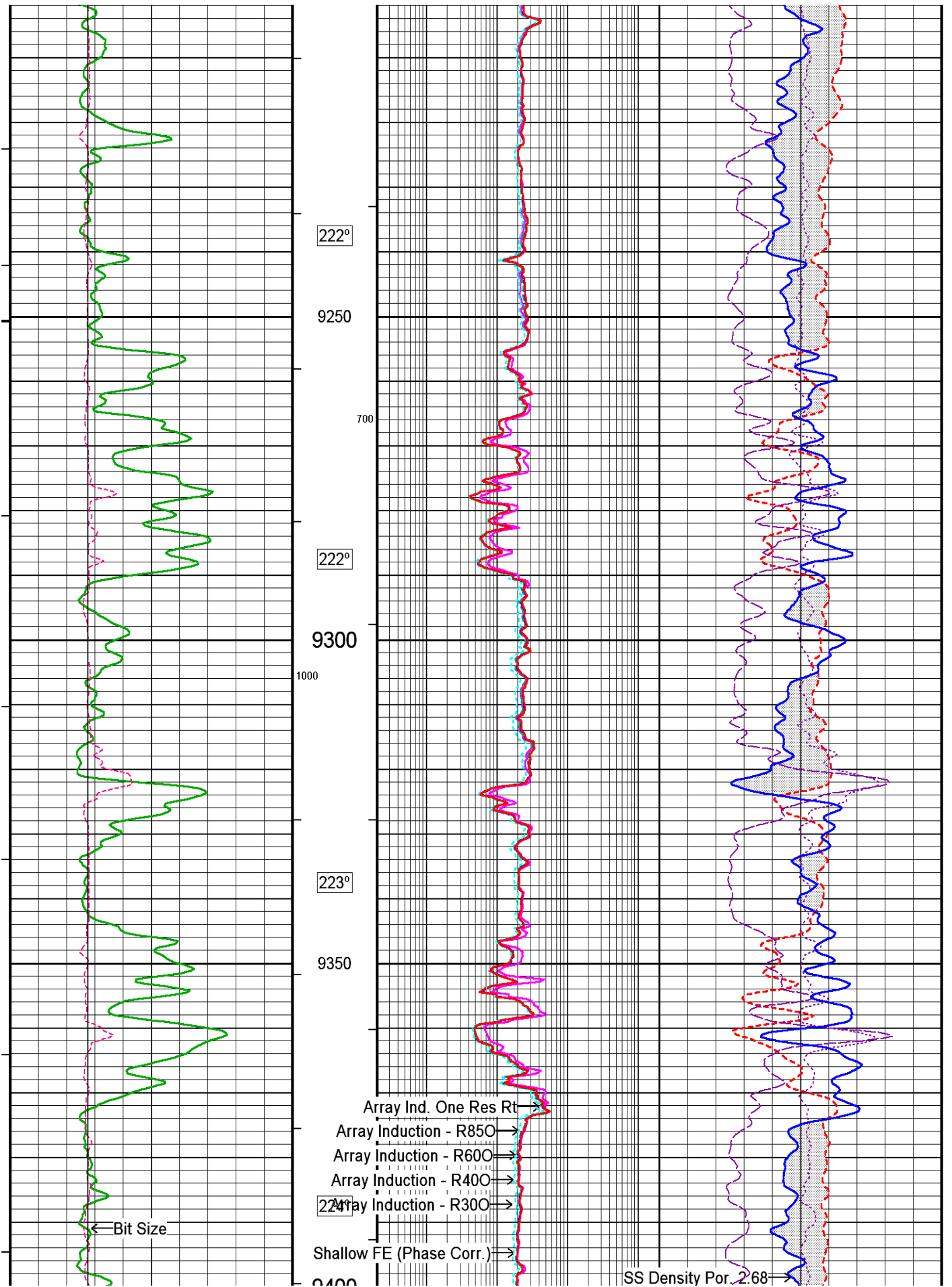


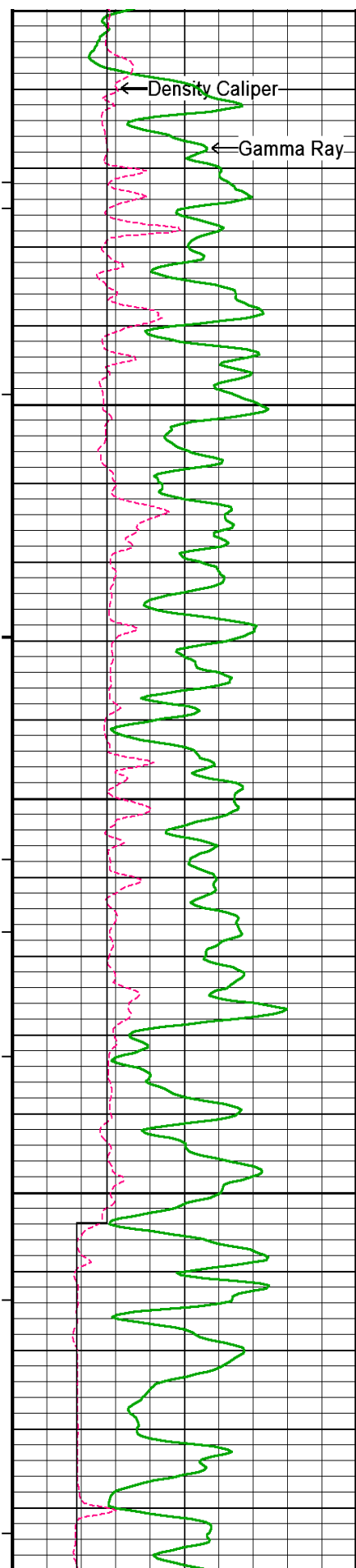












9400

224°

9450

225°

9500

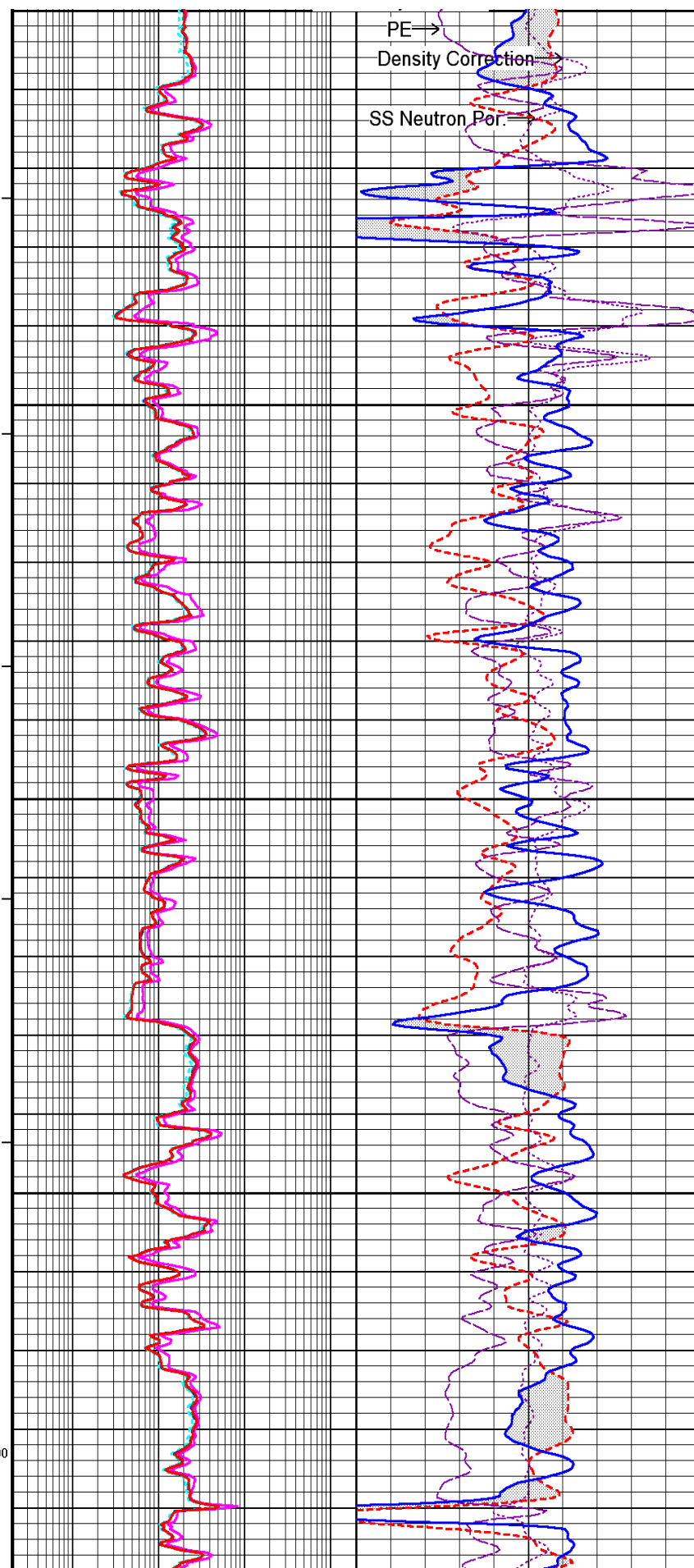
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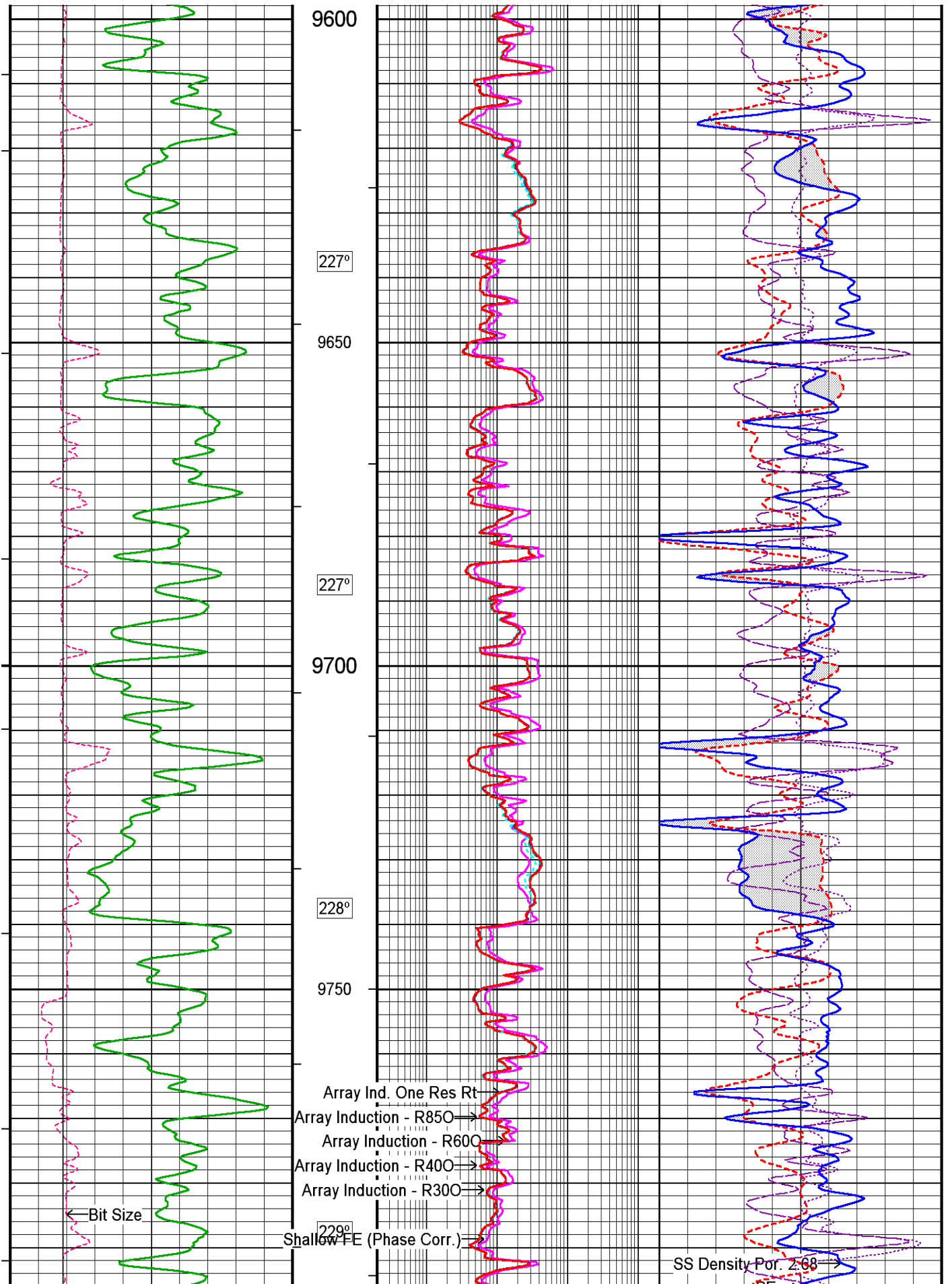
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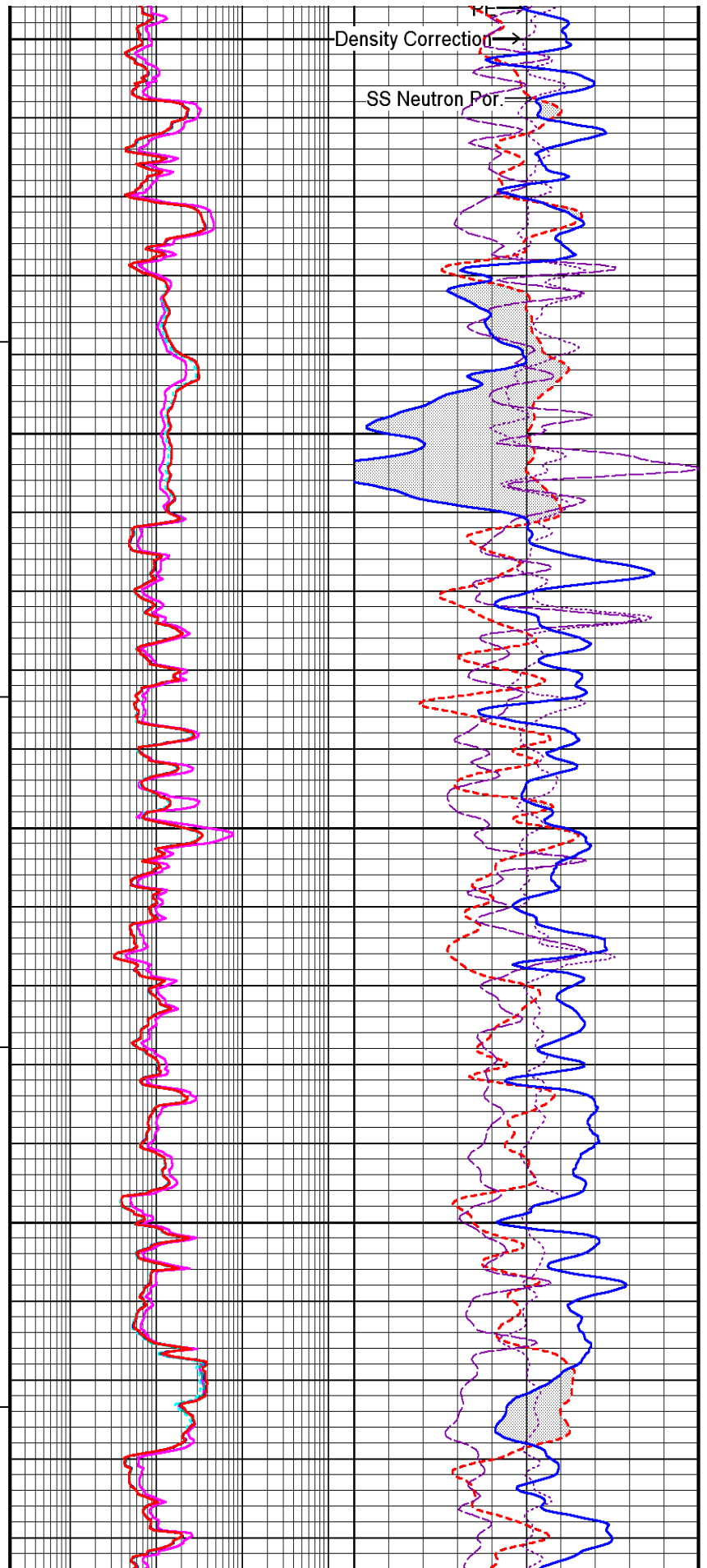
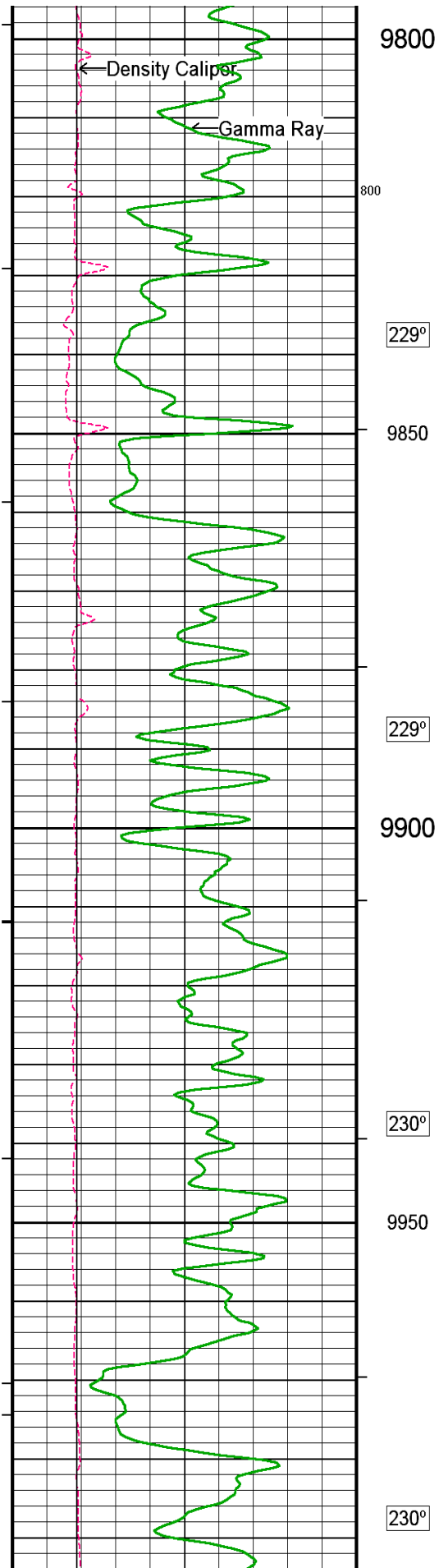
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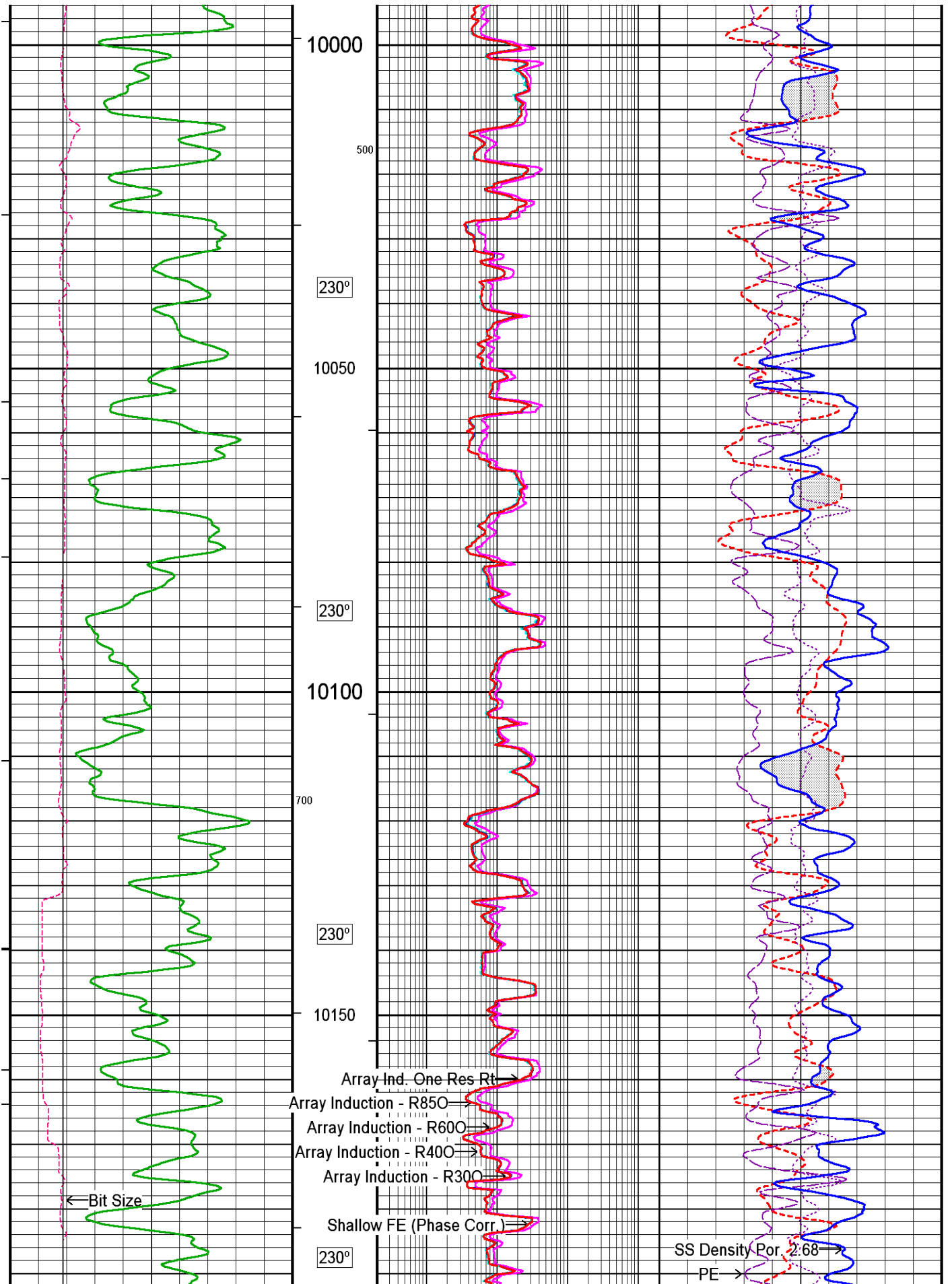
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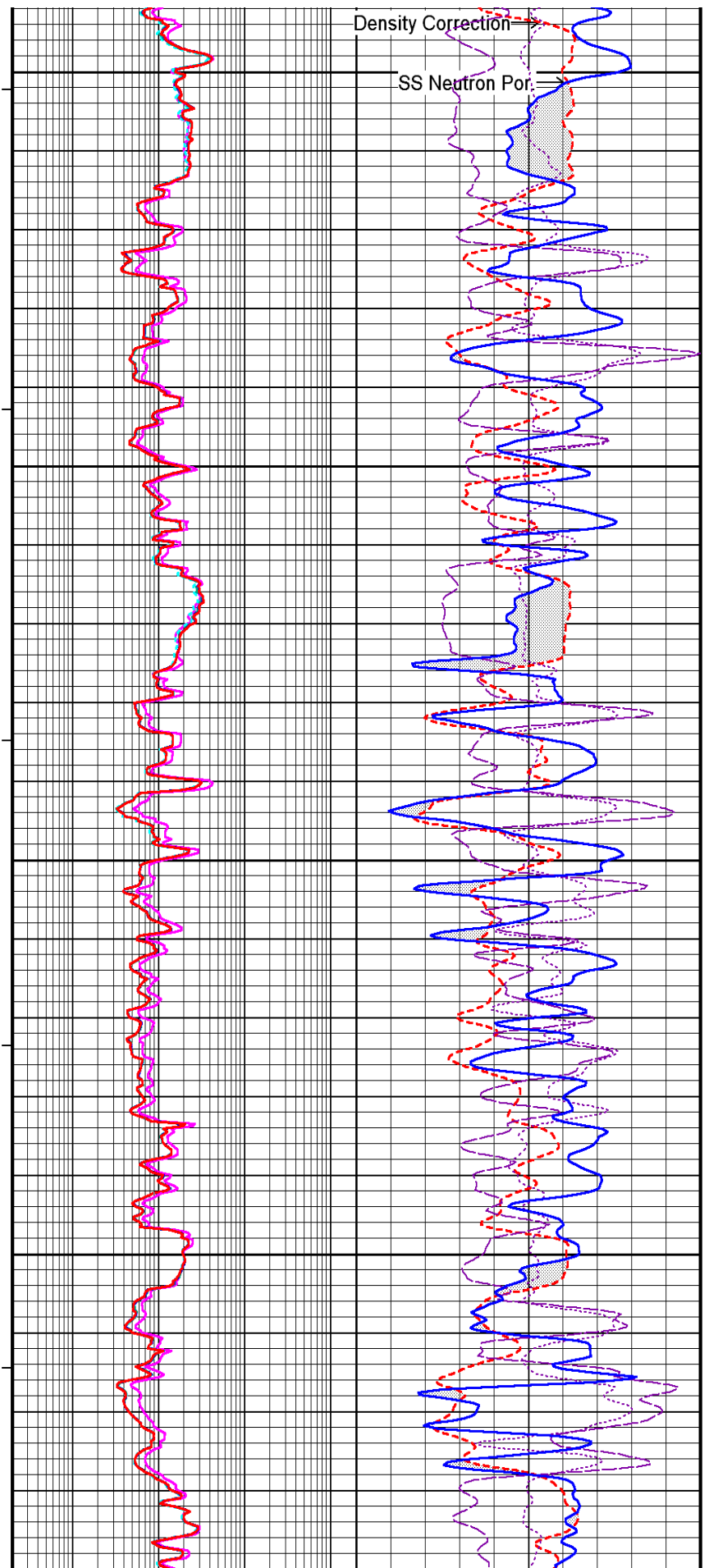
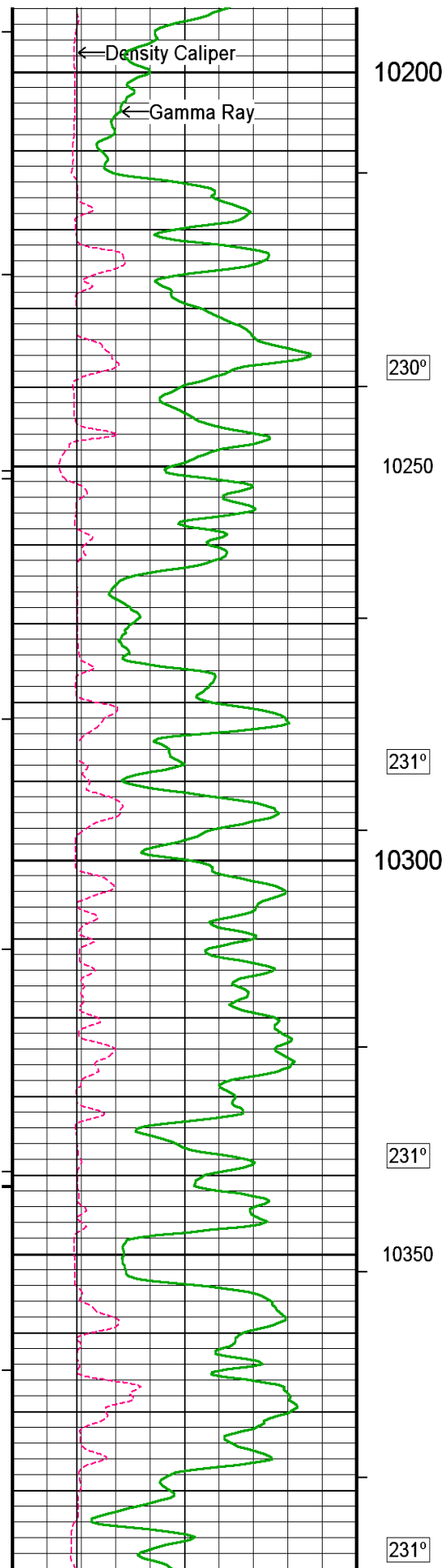
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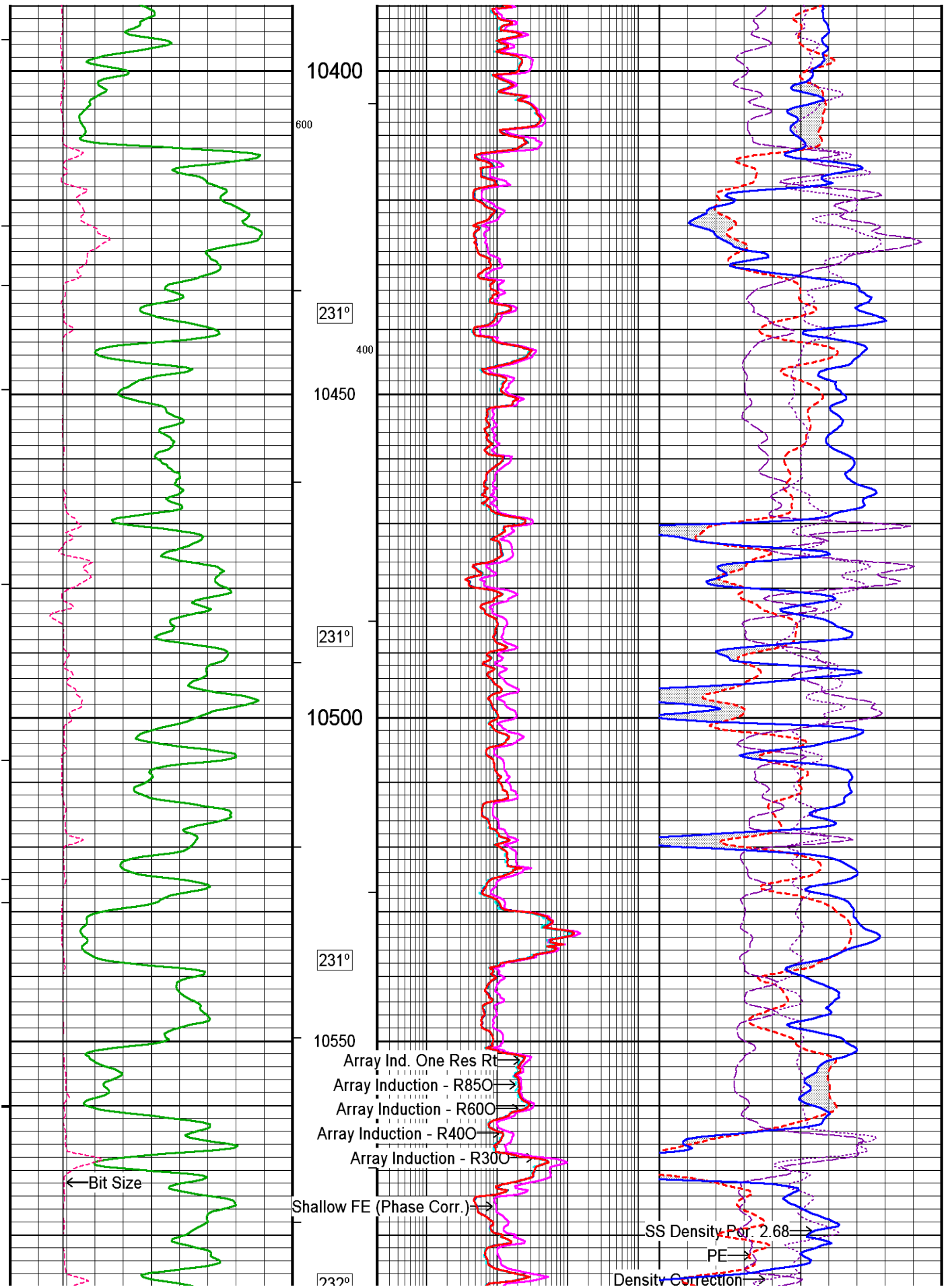


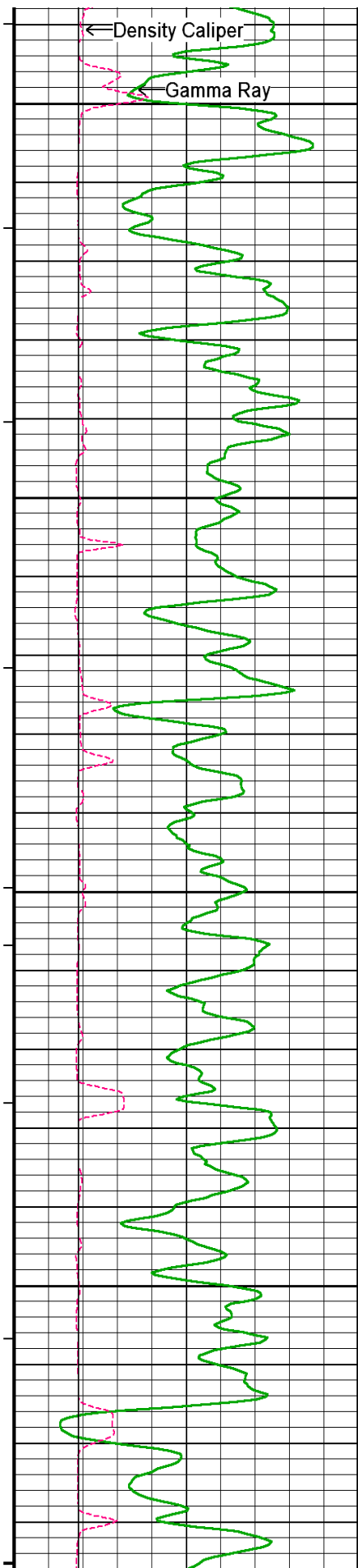




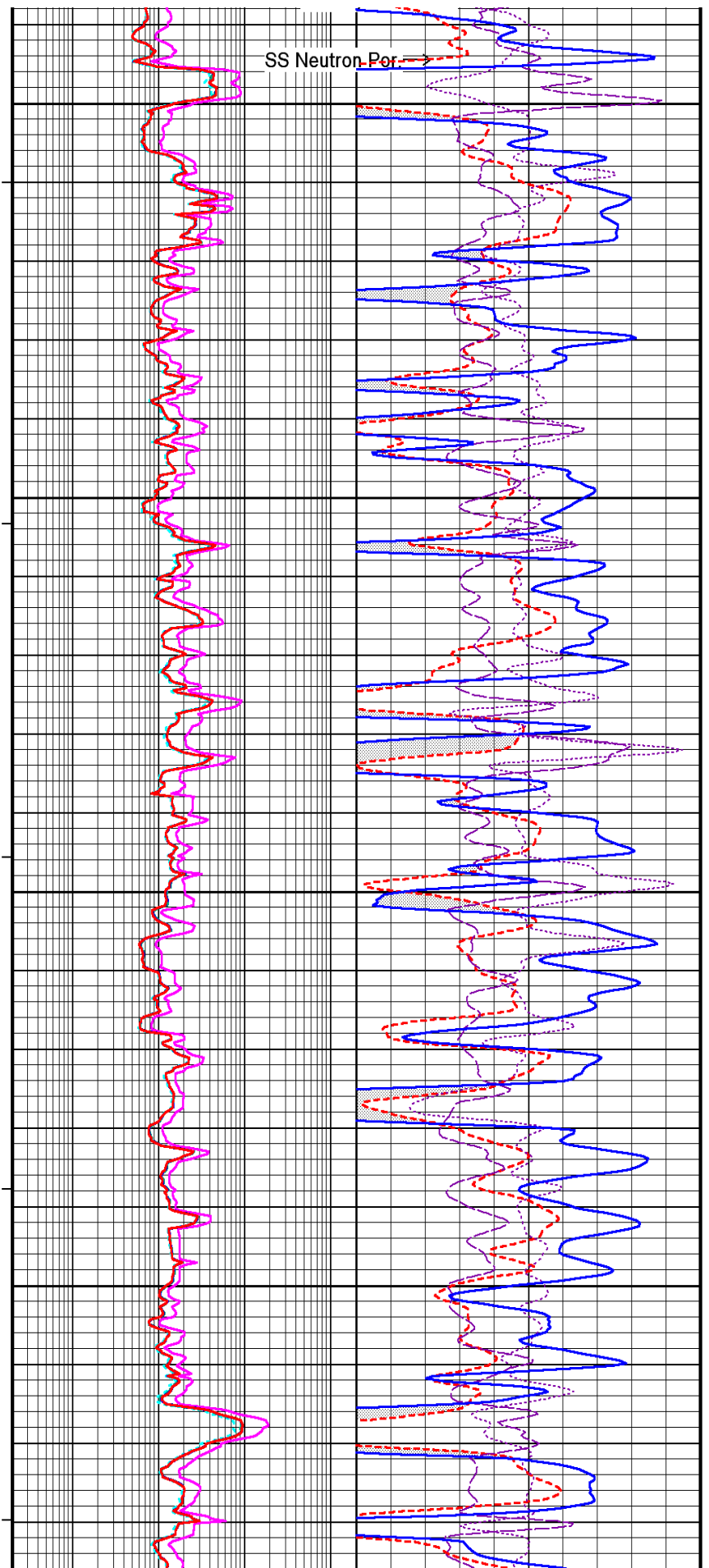


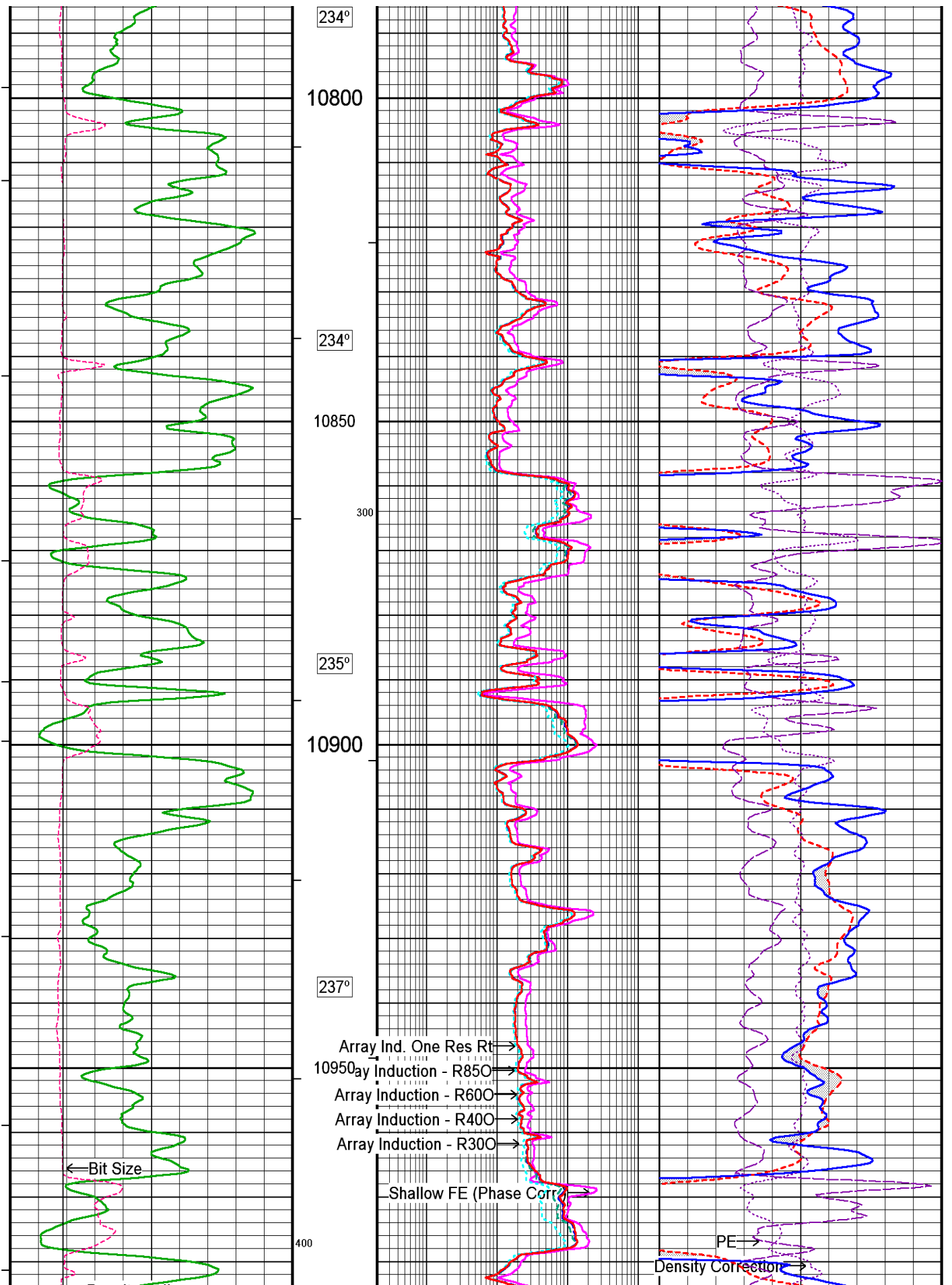


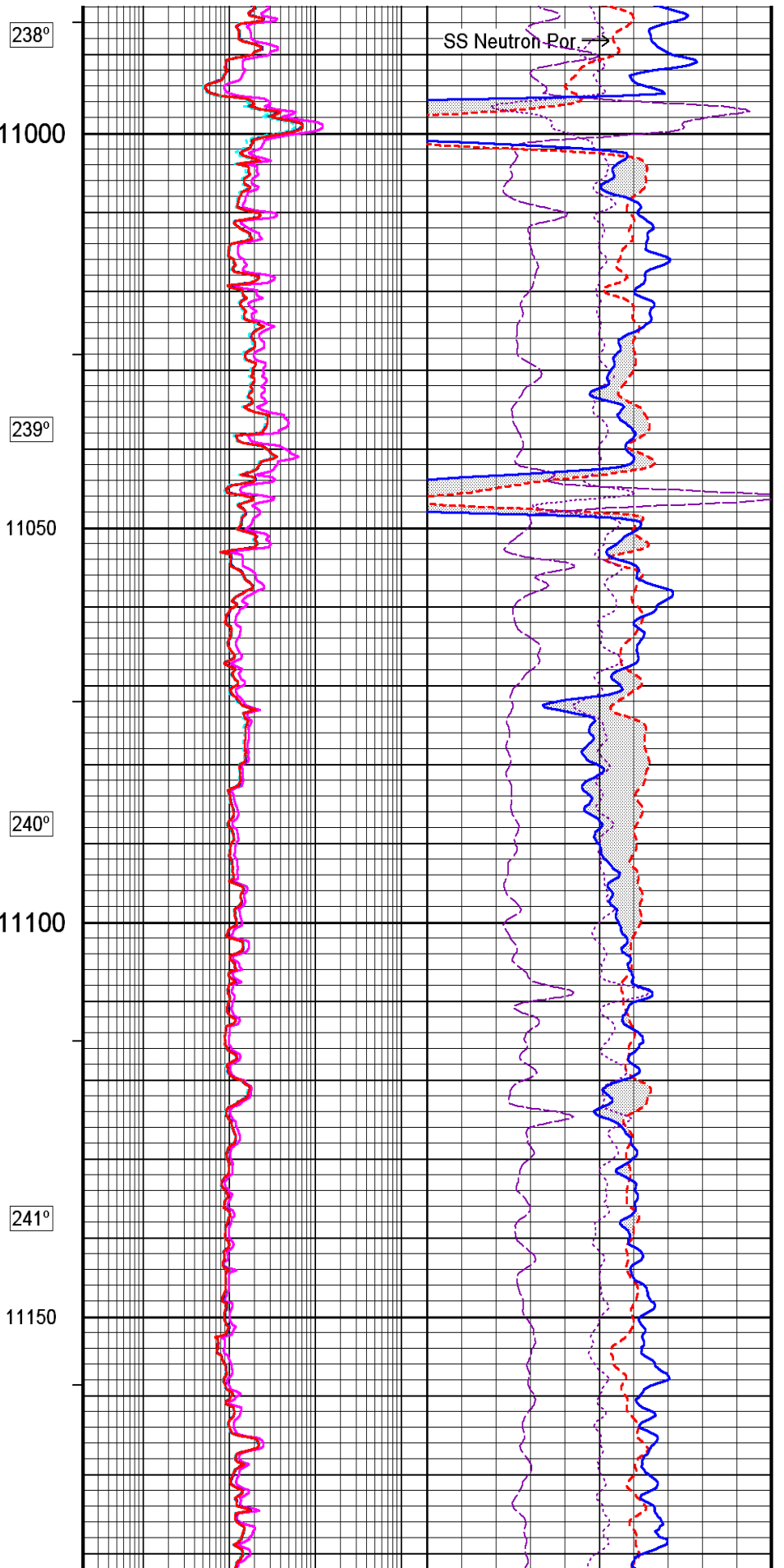
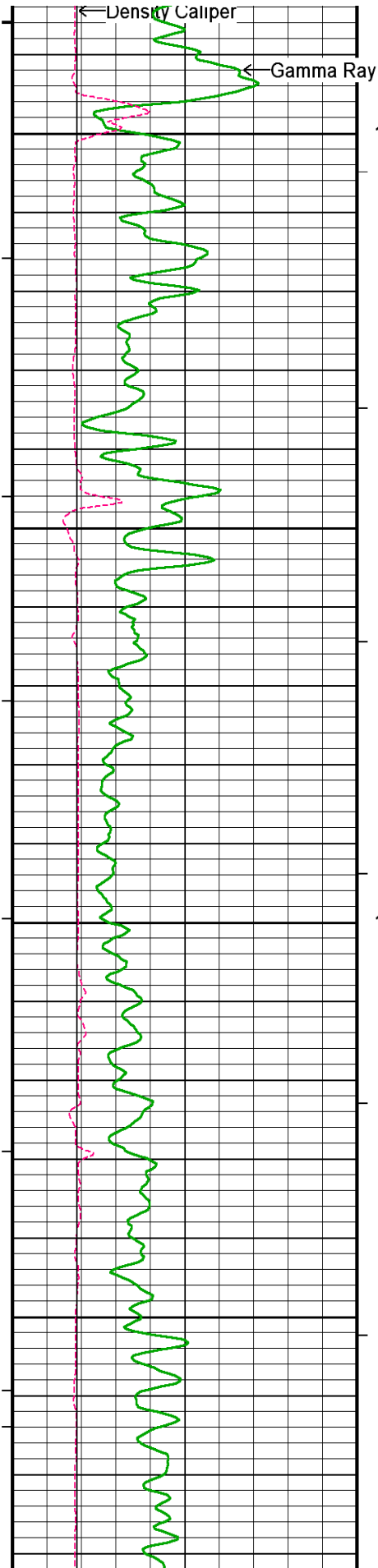


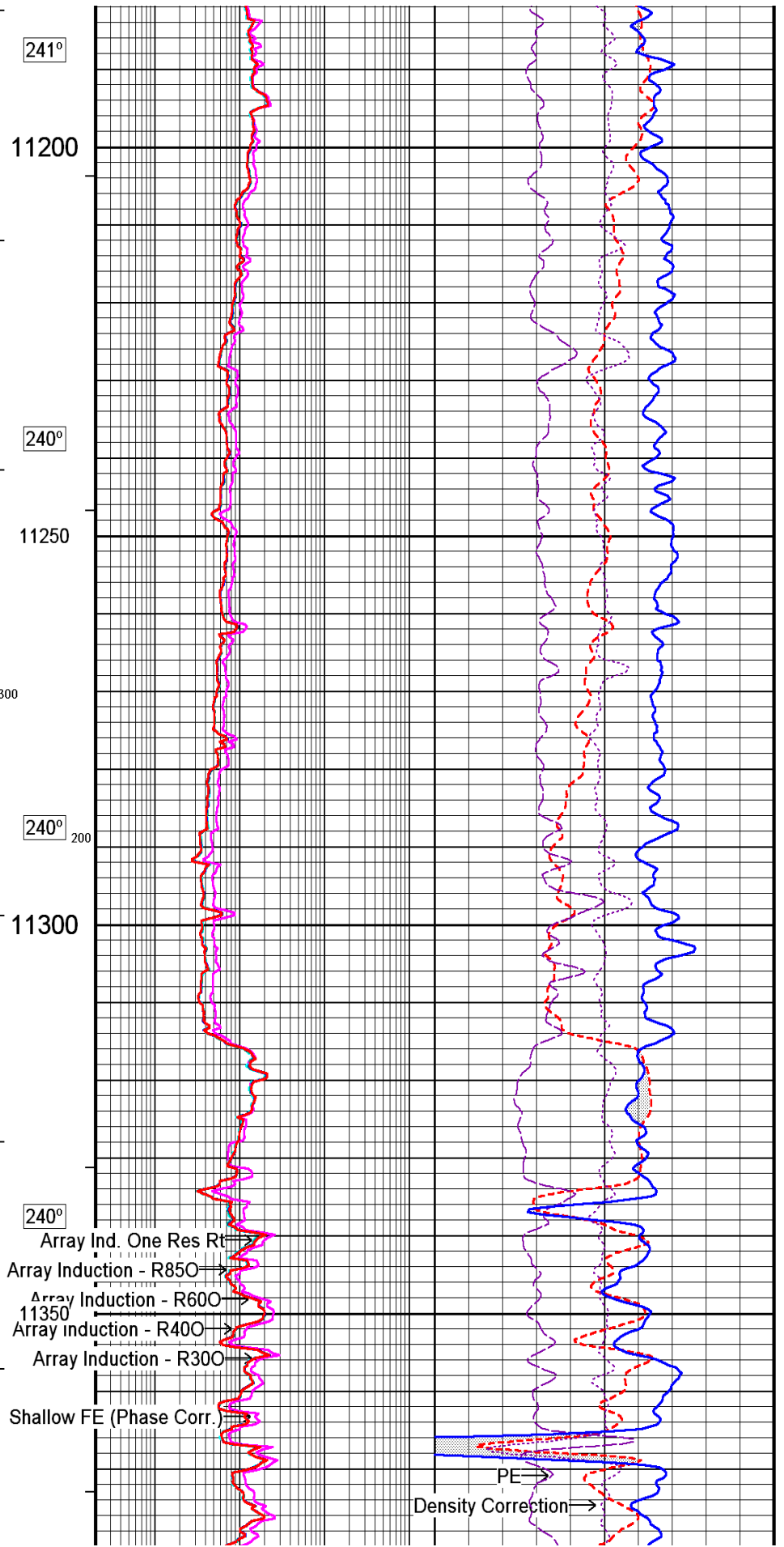
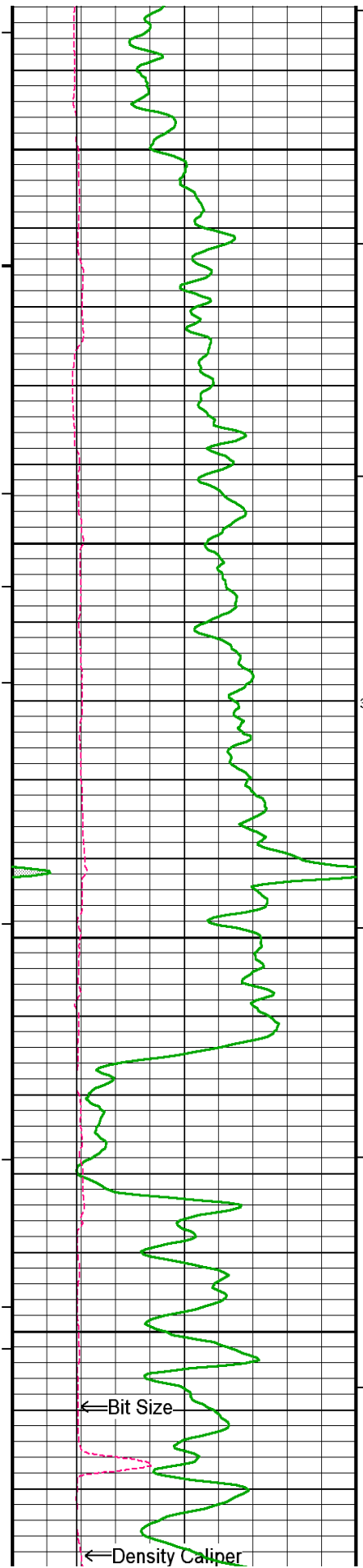


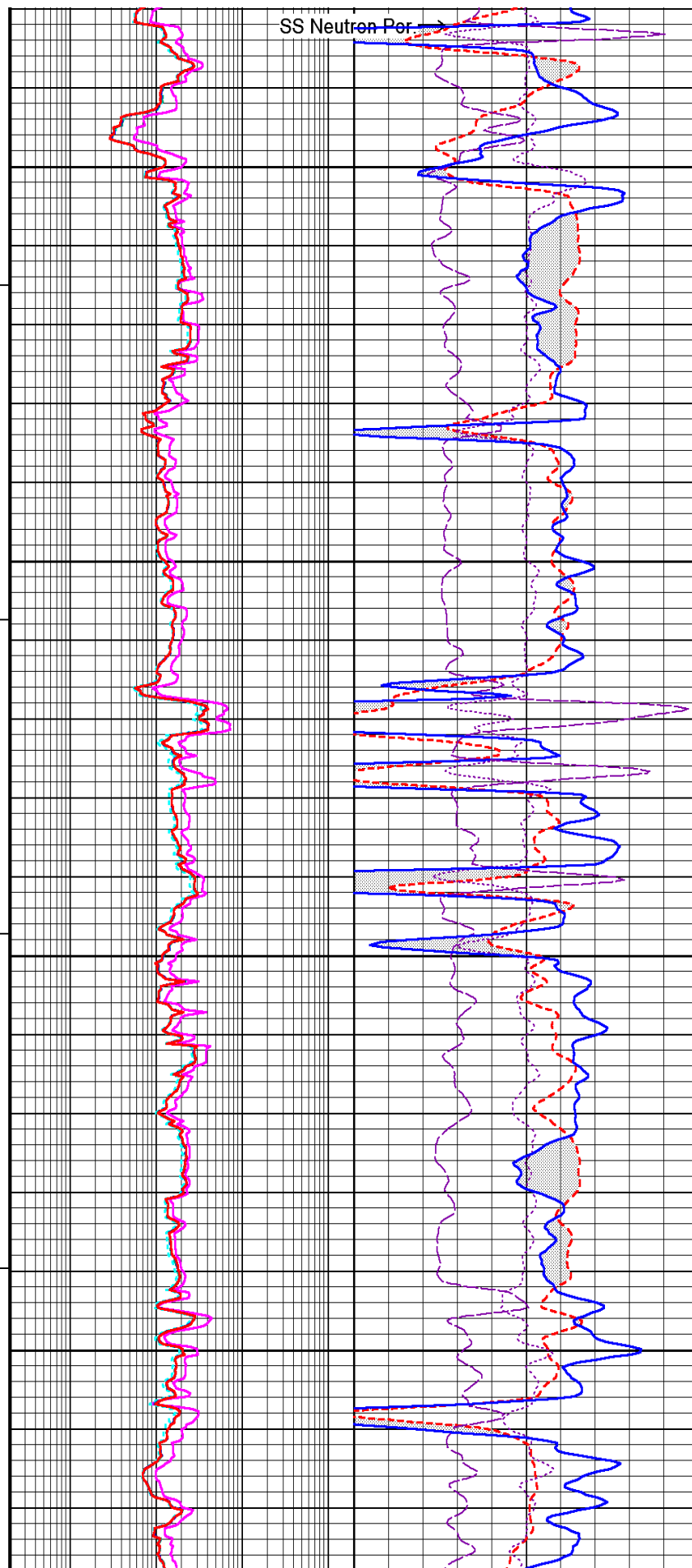
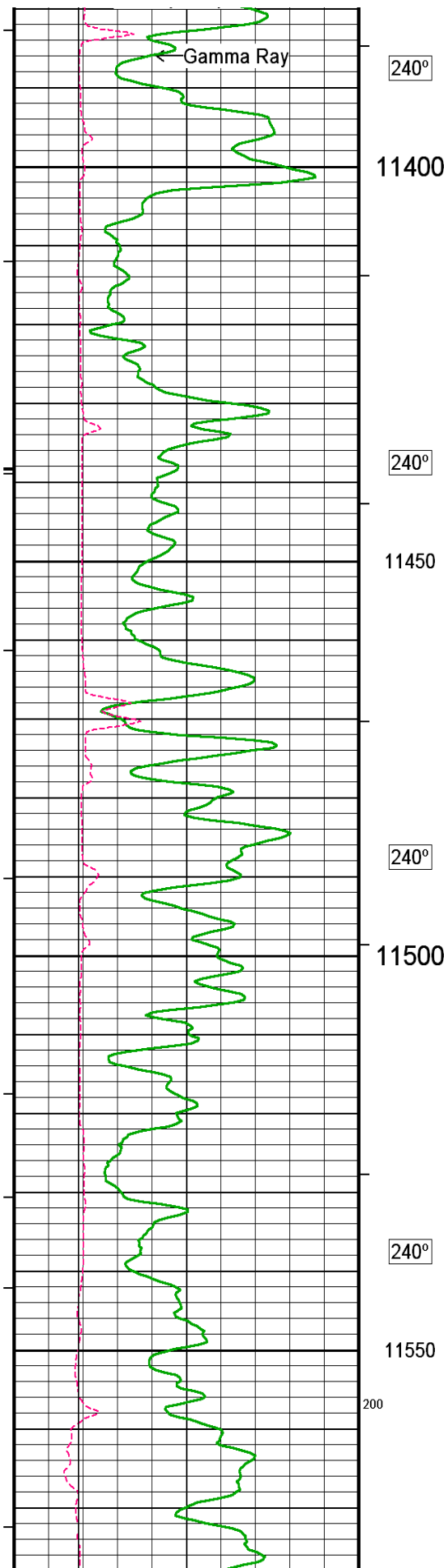
10600
232°
10650
233°
500
10700
234°
10750

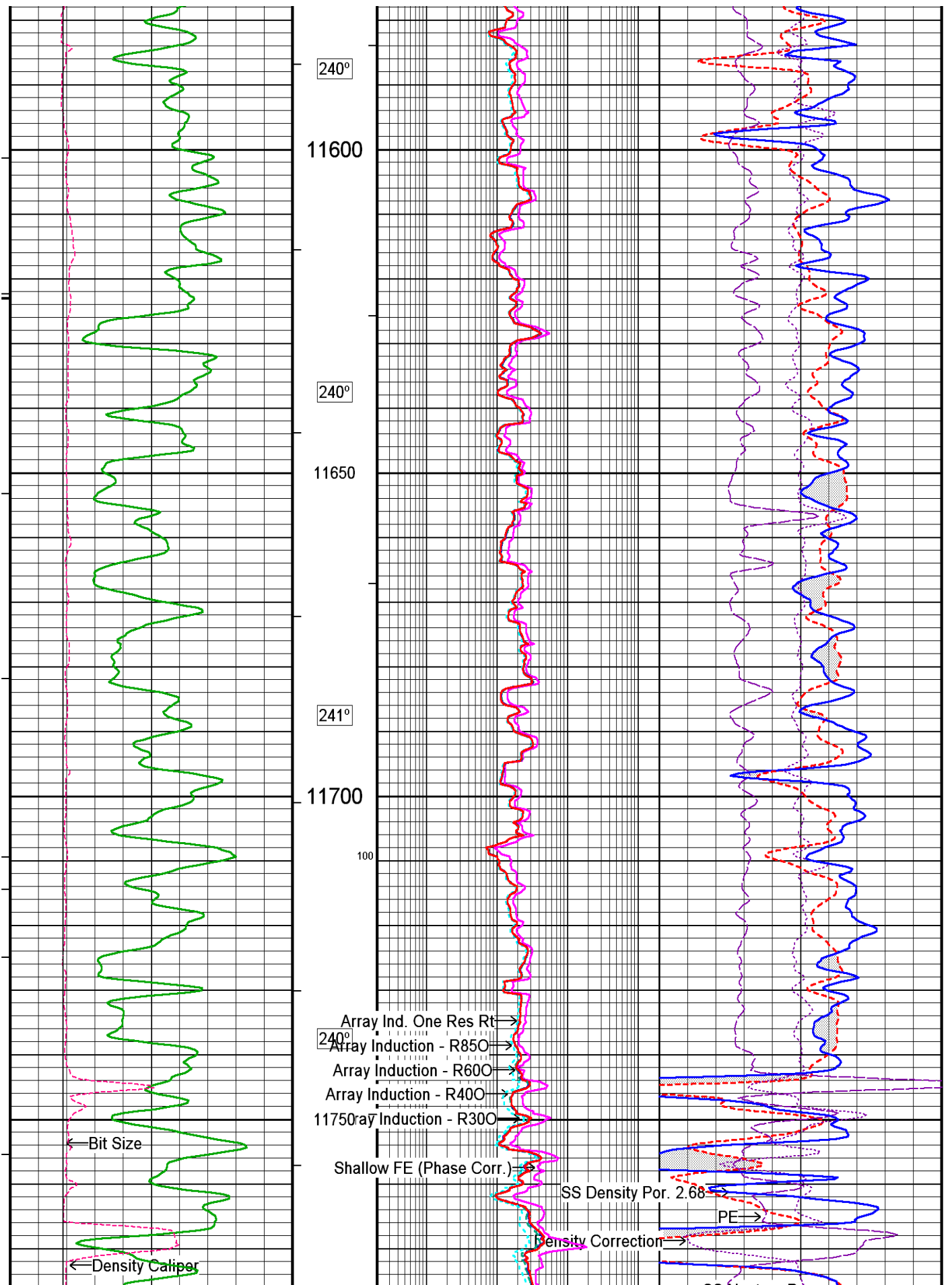


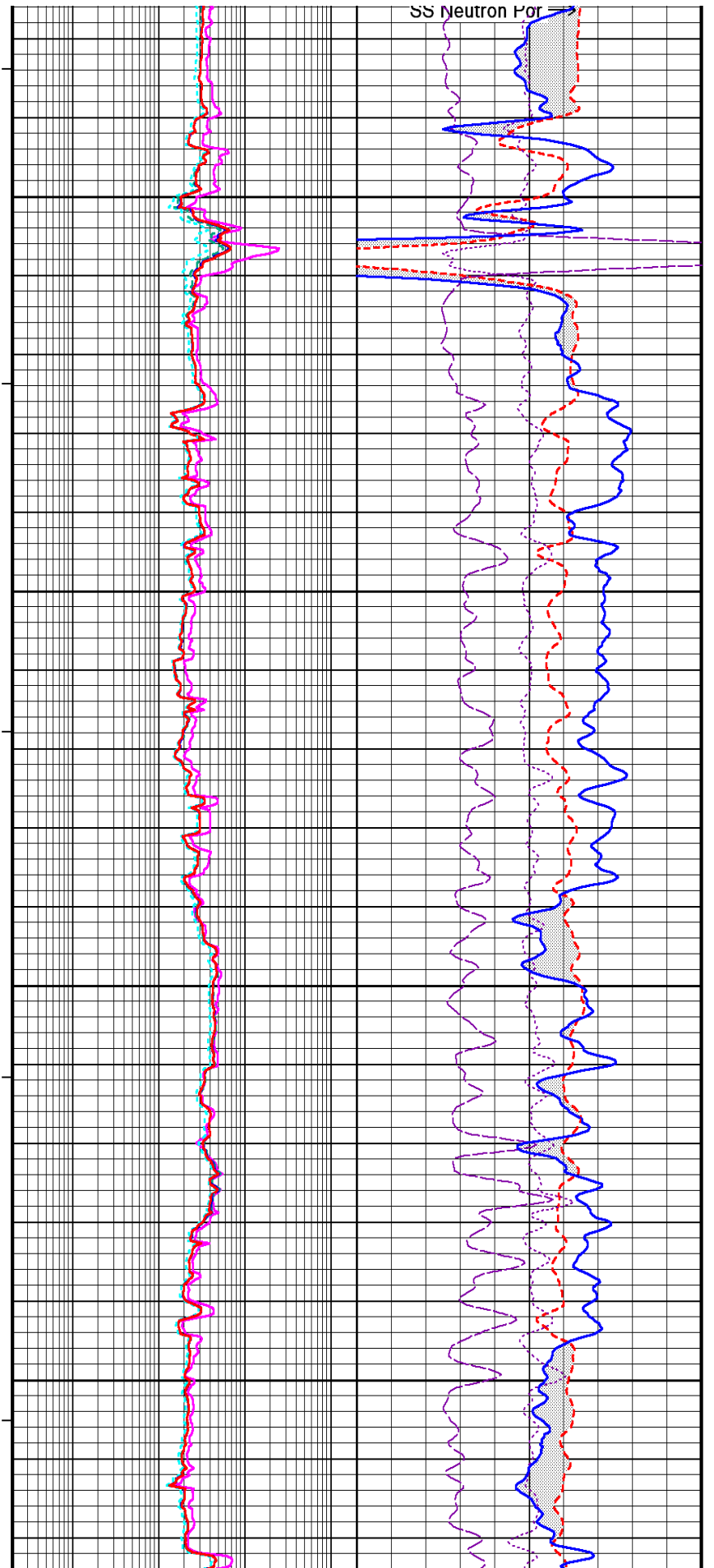
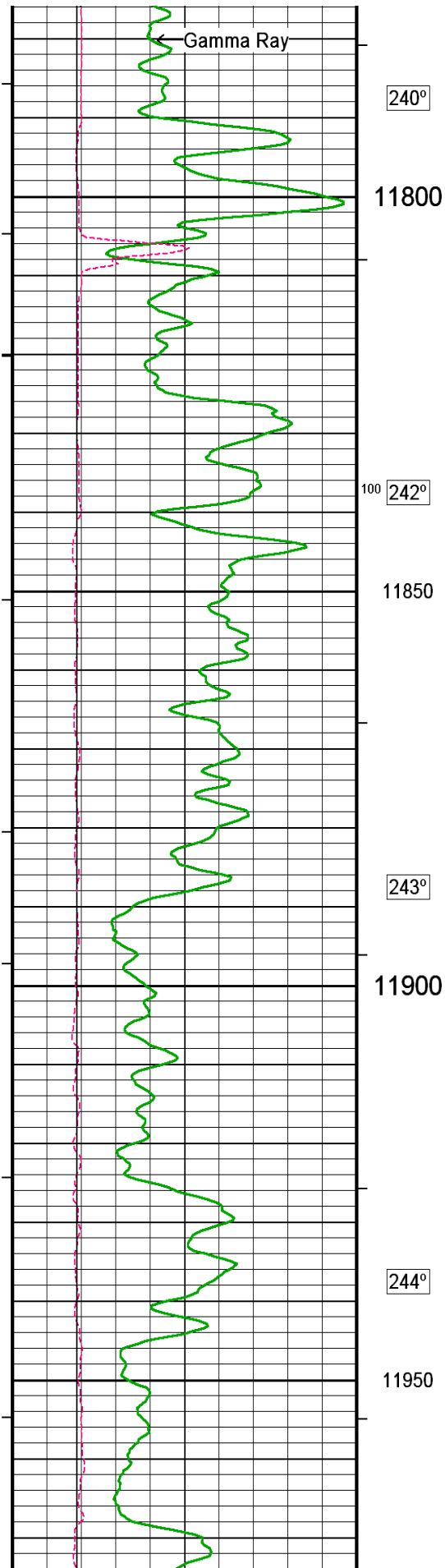


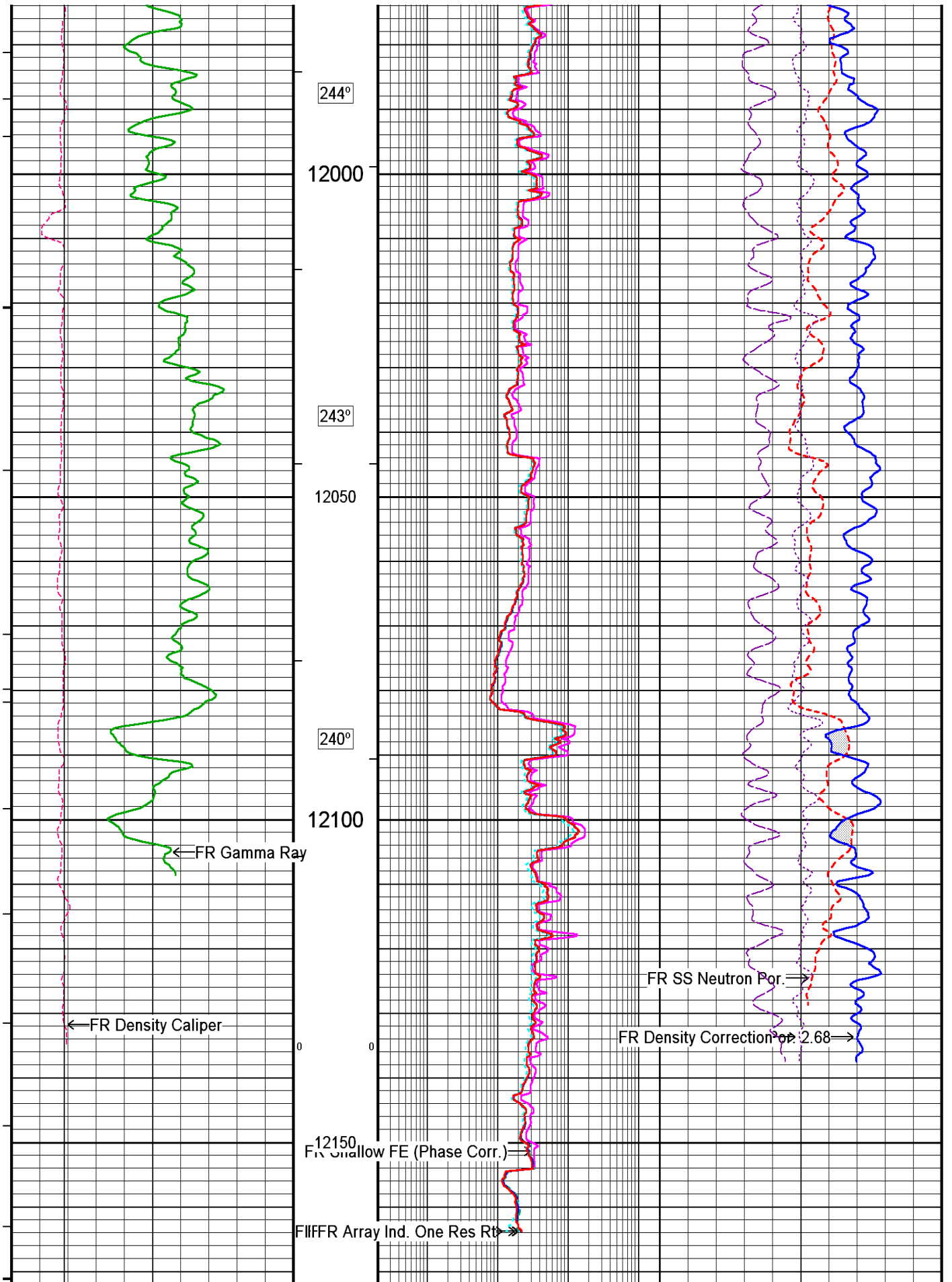


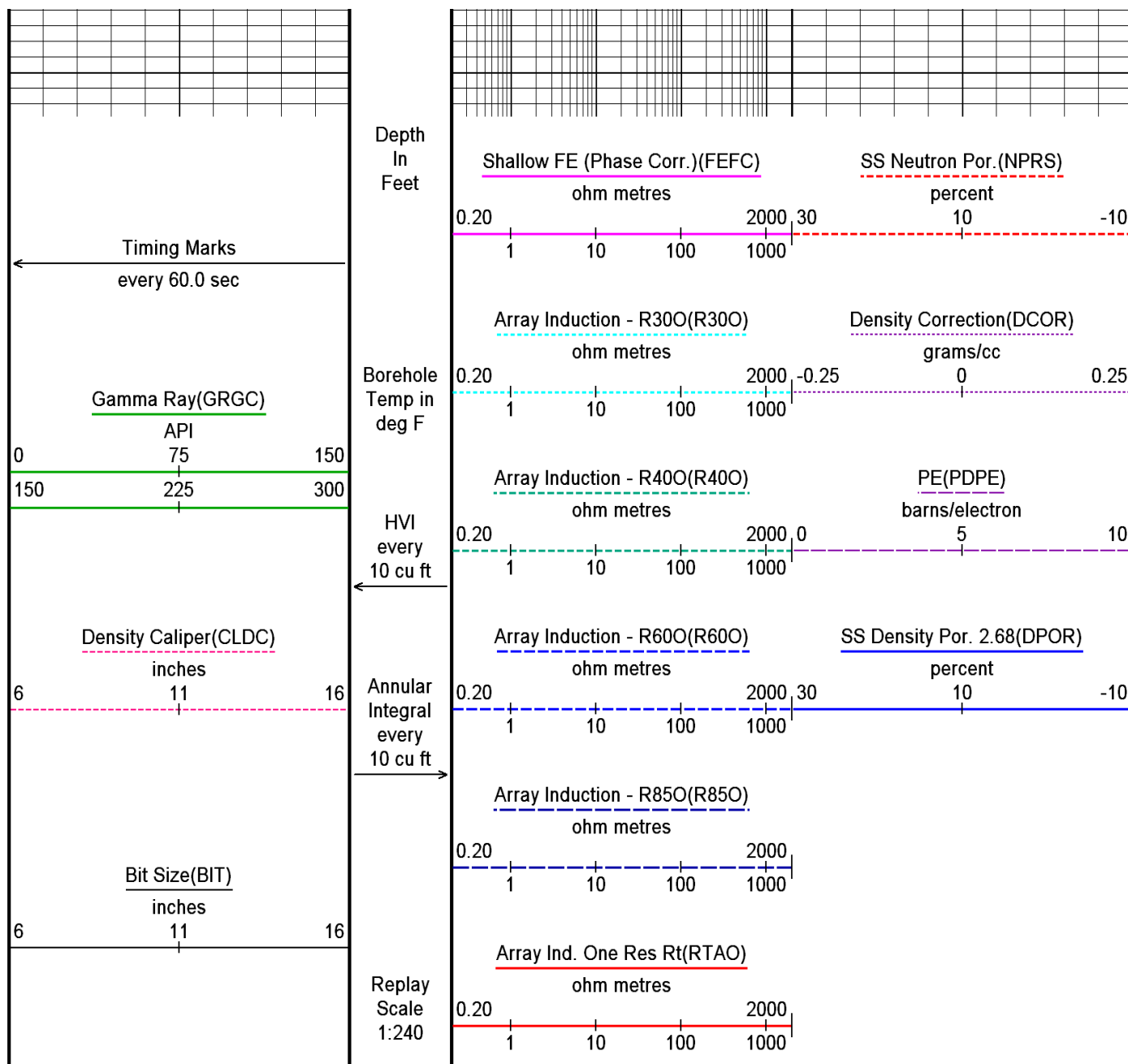












Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 12-JUN-2012 13:18

Filename: C:\LOGS\Encana\6 Jun2012\SG 8514A-22 N22 496\SG 8514A-22 Depth RTAP.dta

System Versions: Processed with 12.02.4401 Plotted with 12.02.4401

5 INCH MAIN LOG

BEFORE SURVEY CALIBRATION

C:\LOGS\Encana\6 Jun2012\SG 8514A-22 N22 496\Depth RTAP.dta

Down-hole Tension Calibration All 000

Field Calibration on 24-OCT-2010 03:34

Reading No	Measured	Calibrated (lbs)
1	15659.85	0.00
2	15734.68	370.00

General Constants All 000

Last Edited on 06-JUN-2012 00:20

General Parameters		
Mud Resistivity	1.880	ohm-metres

Mud Resistivity Temperature	86.400	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 25-APR-2012 00:53
Reading No	Measured	Calibrated (lbs)
1	15798.71	0.00
2	16790.33	350.00
Gamma Calibration MCG-D.A 342		
		Field Calibration on 11-JUN-2012 11:24
	Measured	Calibrated (API)
Background	123	81
Calibrator (Gross)	1074	707
Calibrator (Net)	952	626
Gamma Constants MCG-D.A 342		
		Last Edited on 11-JUN-2012 14:25
Gamma Calibrator Number	GRC-005	
Mud Density	1.29	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm
High Resolution Temperature Calibration MCG-D.A 342		
		Field Calibration on 11-JUN-2012 11:11
	Measured	Calibrated(Deg F)
Lower	10.00	10.00
Upper	75.00	75.00
High Resolution Temperature Constants MCG-D.A 342		
		Last Edited on 04-MAR-2012 17:28
Pre-filter Length	11	
SP Calibration MCG-D.A 342		
		Field Calibration on 10-MAY-2012 16:46
	Measured	Calibrated (mV)
Reference 1	105.8	100.1
Reference 2	-94.9	-99.9
Neutron Calibration MDN-C.A 426		
		Base Calibration on 04-JUN-2012 17:48
		Field Check on 11-JUN-2012 11:10
Base Calibration		
	Measured	Calibrated (cps)
	Near Far	Near Far
	3114 76	3714 110
Ratio	41.020	33.764
Field Calibrator at Base		
		Calibrated (cps)
		1536 2821
Ratio		0.544

Field Check	Calibrated (cps)		
	1577	2909	
Ratio	0.542		
Neutron Constants MDN-C.A 426			
Last Edited on 11-JUN-2012 11:11			
Neutron Source Id	PN-295		
Neutron Jig Number	6532NK		
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	Constant Value		
Formation Pressure	0.00	kpsi	
Temperature Source	None		
Temperature	N/A	degrees F	
Mud Salinity	0.00	kppm	
Formation Fluid Salinity Source	Constant Value		
Formation Fluid Salinity	0.00	kppm	
Barite Mud Correction	Not Applied		
Salinity Correction	Not Applied		
FE Calibration MFE-B.J 313			
Base Calibration on 13-APR-2012 15:47			
Field Check on 11-JUN-2012 10:53			
Base Calibration	Measured	Calibrated (ohm-m)	
Reference 1	9.8	1.3	
Reference 2	964.2	126.8	
Base Check		281.9	
Field Check		281.8	
FE Constants MFE-B.J 313			
Last Edited on 11-JUN-2012 10:53			
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-C.A 431			
Base Calibration on 30-NOV-2011 15:25			
Field Check on 11-JUN-2012 10:51			
Base Calibration			
Test Loop Calibration			
Channel	Low	High	Calibrated (mmho/m)
			Low High
1	15.8	447.5	9.3 966.2
2	5.4	370.1	7.6 821.4
3	3.1	246.5	5.2 566.0
4	1.7	127.6	2.6 279.2
Array Temperature	73.9	Deg F	
Channel	Base Check (mmho/m)		Field Check (mmho/m)
	Low	High	Low High
1	16.5	4058.6	16.6 4058.6
2	32.6	3639.4	32.6 3639.4
3	30.7	3208.1	30.7 3208.0
4	20.7	2164.9	20.8 2164.9
Deep	18.8	2151.9	18.8 2152.0

Medium	44.6	4202.1	44.7	4202.0	
Shallow	48.7	5289.0	48.7	5288.8	
Array Temperature		71.9		73.1	Deg F
Induction Constants MAI-C.A 431					Last Edited on 11-JUN-2012 14:47
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			
High Resolution Temperature Calibration MAI-C.A 431					Field Calibration on 11-JUN-2012 10:52
	Measured	Calibrated(Deg F)			
Lower	10.00	50.00			
Upper	100.00	212.00			
High Resolution Temperature Constants MAI-C.A 431					Last Edited on
Pre-filter Length		11			
Caliper Calibration MPD-C.A 281					Base Calibration on 12-MAY-2012 13:10 Field Calibration on 11-JUN-2012 11:02
Base Calibration					
Reading No	Measured	Calibrator Size (in)			
1	15792	4.00			
2	23840	5.96			
3	32320	7.98			
4	40448	9.86			
5	49456	11.88			
6	N/A	N/A			

Field Calibration					
	Measured Caliper (in)		Actual Caliper (in)		
	7.90		7.98		
Photo Density Calibration MPD-C.A 281			Base Calibration on 19-MAY-2012 14:08 Field Check on 11-JUN-2012 10:57		
Density Calibration					
Base Calibration		Measured		Calibrated (sdu)	
		Near	Far	Near	Far
	Reference 1	55112	27472	59720	30898
	Reference 2	22423	2570	24621	2513
Field Check at Base					
		1113.8	1330.7		
Field Check					
		1108.8	1330.0		
PE Calibration					
Base Calibration		Measured		Calibrated	
	WS	WH	Ratio	Ratio	
	Background	197	980		
	Reference 1	22245	54916	0.409	0.370
	Reference 2	6206	22279	0.282	0.271
Field Check at Base					
		197.4	980.3		
Field Check					
		197.1	978.2		
Density Constants MPD-C.A 281			Last Edited on 11-JUN-2012 14:25		
Density Source Id			271		
Nylon Calibrator Number			628		
Aluminium Calibrator Number			628		
Density Shoe Profile			4 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		

DOWNHOLE EQUIPMENT	
C:\LOGS\Encana\6) Jun2012\SG 8514A-22 N22 496\Depth RTAP.dta	
Drop off Running Tool	FE

Drop-on Running Tool

DRT-B.A 104 LG: 9.42 ft WT: 66.1 lb OD: 2.60 in

MBS-A 400v Compact Battery Sub

MBS-A 11 LG: 7.84 ft WT: 57.3 lb OD: 2.24 in

Compact Comms Gamma

MCG-D.A 342 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in

Compact Memory Sub A.C

MMS-A.C 30 LG: 3.12 ft WT: 30.9 lb OD: 2.24 in

SKJ-E.B Compact Knuckle Joint

SKJ-E.B 533 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

SHA-J.A Compact Swivel Head Adaptor

SHA-J.A 313 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in

MIS-D.A Compact Inline Bowspring sub

MIS-D.A 655 LG: 5.70 ft WT: 33.1 lb OD: 2.24 in

Compact Neutron

MDN-C.A 426 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

Compact Density/Caliper

MPD-C.A 281 LG: 9.59 ft WT: 90.4 lb OD: 2.24 in

MIS-D.A Compact Inline Bowspring sub

MIS-D.A 438 LG: 5.70 ft WT: 33.1 lb OD: 2.24 in

SHA-J.A Compact Swivel Head Adaptor

SHA-J.A 314 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in

SKJ-E.A Compact Knuckle Joint

SKJ-E.A 260 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

MIS-E.A Compact Inline Standoff sub

MIS-E.A 364 LG: 2.14 ft WT: 15.4 lb OD: 2.24 in

Compact Focussed Electric

MFE-B.J 313 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

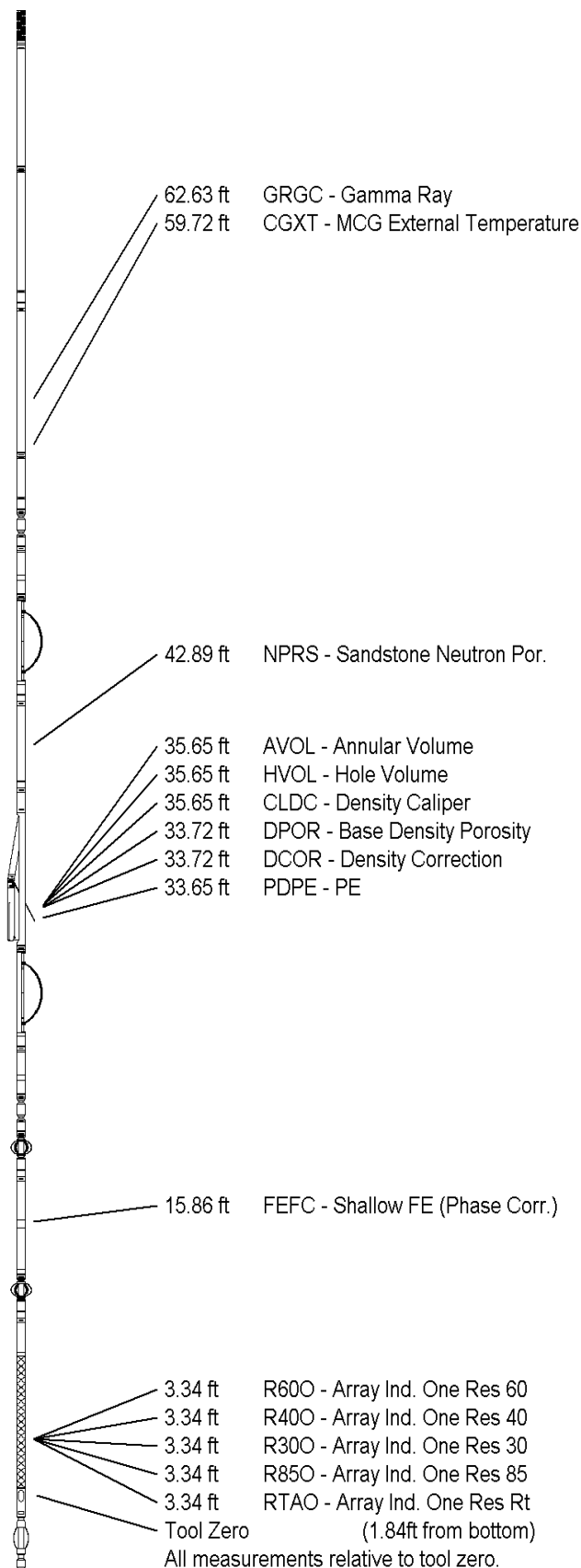
MIS-E.A Compact Inline Standoff sub

MIS-E.A 365 LG: 2.14 ft WT: 15.4 lb OD: 2.24 in

Compact Induction

MAI-C.A 431 LG: 12.52 ft WT: 48.5 lb OD: 2.24 in

Total Length: 86.88 ft Weight: 646.0 lb



COMPANY
WELL

ENCANA OIL & GAS
SG 8514A-22 N22 496

FIELD	STORY GULCH
PROVINCE/COUNTY	GARFIELD
COUNTRY/STATE	U.S.A. / COLORADO

Elevation Kelly Bushing	7607.00	feet	First Reading	12164.00	feet
Elevation Drill Floor	7607.00	feet	Depth Driller	12178.00	feet
Elevation Ground Level	7585.00	feet	Depth Logger	12178.00	feet



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COMPACT DROP OFF
COMPACT TRIPLE COMBO
QUICKLOOK LOG

