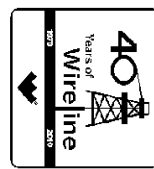




**Weatherford**

**COMPACT TRIPLE COMBO  
QUICKLOOK  
LOG**

COMPANY **BILL BARRETT CORPORATION**  
WELL **CB-TG LAND 22D-20-692**  
FIELD **MAMM CREEK**  
PROVINCE/COUNTY **GARFIELD**  
COUNTRY/STATE **U.S.A. / COLORADO**  
LOCATION **SHL: 750' FNL & 2547' FEL  
BHL: 1561' FNL & 1972' FWL**



SEC **20** TWP **6S** RGE **92W** Other Services  
API Number **05-045-19778**  
Permit Number

Permanent Datum G.L., Elevation 5529 feet  
Log Measured From K.B. @ 23 FT above Permanent Datum  
Drilling Measured From K.B. Elevations: KB 5552.00  
DF 5529.00  
GL

Date	09-MAY-2011
Run Number	ONE
Depth Driller	7645.00 feet
Depth Logger	7640.00 feet
First Reading	7640.00
Last Reading	813.00
Casing Driller	816.00 feet
Casing Logger	813.00 feet
Bit Size	7.875 inches
Hole Fluid Type	LSND
Density / Viscosity	10.60 lb/USg 52.00 CP
PH / Fluid Loss	9.50 6.00 ml/30Min
Sample Source	FLOW LINE
Rm @ Measured Temp	2.70 @ 82.0 ohm-m
Rmf @ Measured Temp	2.16 @ 82.0 ohm-m
Rmc @ Measured Temp	3.24 @ 82.0 ohm-m
Source Rmf / Rmc	CALC CALC
Rm @ BHT	1.84 @191.0 ohm-m
Time Since Circulation	6 HOURS
Max Recorded Temp	191.00 deg F
Equipment Name	COMPACT
Equipment / Base	13038 GD JCT
Recorded By	S. LACKEY
Witnessed By	J. BOYD

BOREHOLE RECORD			Last Edited: 10-MAY-2011 06:24
Bit Size inches	Depth From feet	Depth To feet	
8.750	816.00	4958.00	
7.875	4958.00	7645.00	

CASING RECORD				
Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	9.625	0.00	816.00	36.00

**REMARKS**

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

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

2.68 G/CC DENSITY MATRIX USED TO CALCULATE POROSITY.

ALL INTERVALS LOGGED AND SCALED PER CUSTOMER'S REQUEST.

TIGHT PULLS, BOREHOLE SIZE, AND RUGOSITY WILL AFFECT REPEATABILITY AND DATA QUALITY.

CALIPER CHECK IN CASING PRESENTED, REFERENCE I.D. = 9.02" (9 5/8", 36 LB/FT CASING)

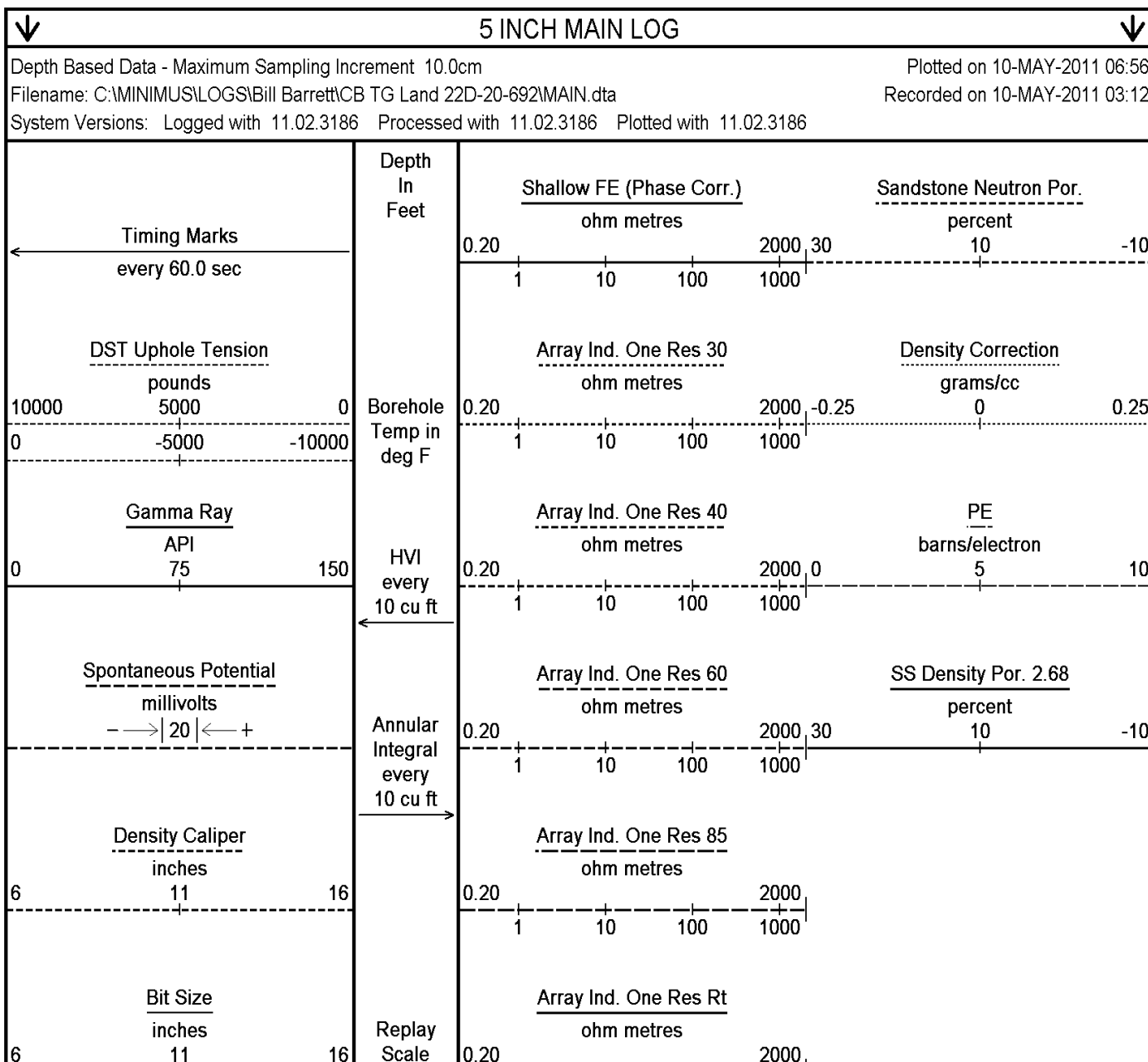
TOTAL HOLE VOLUME FROM TD TO SURFACE CASING = 2880 CU.FT.

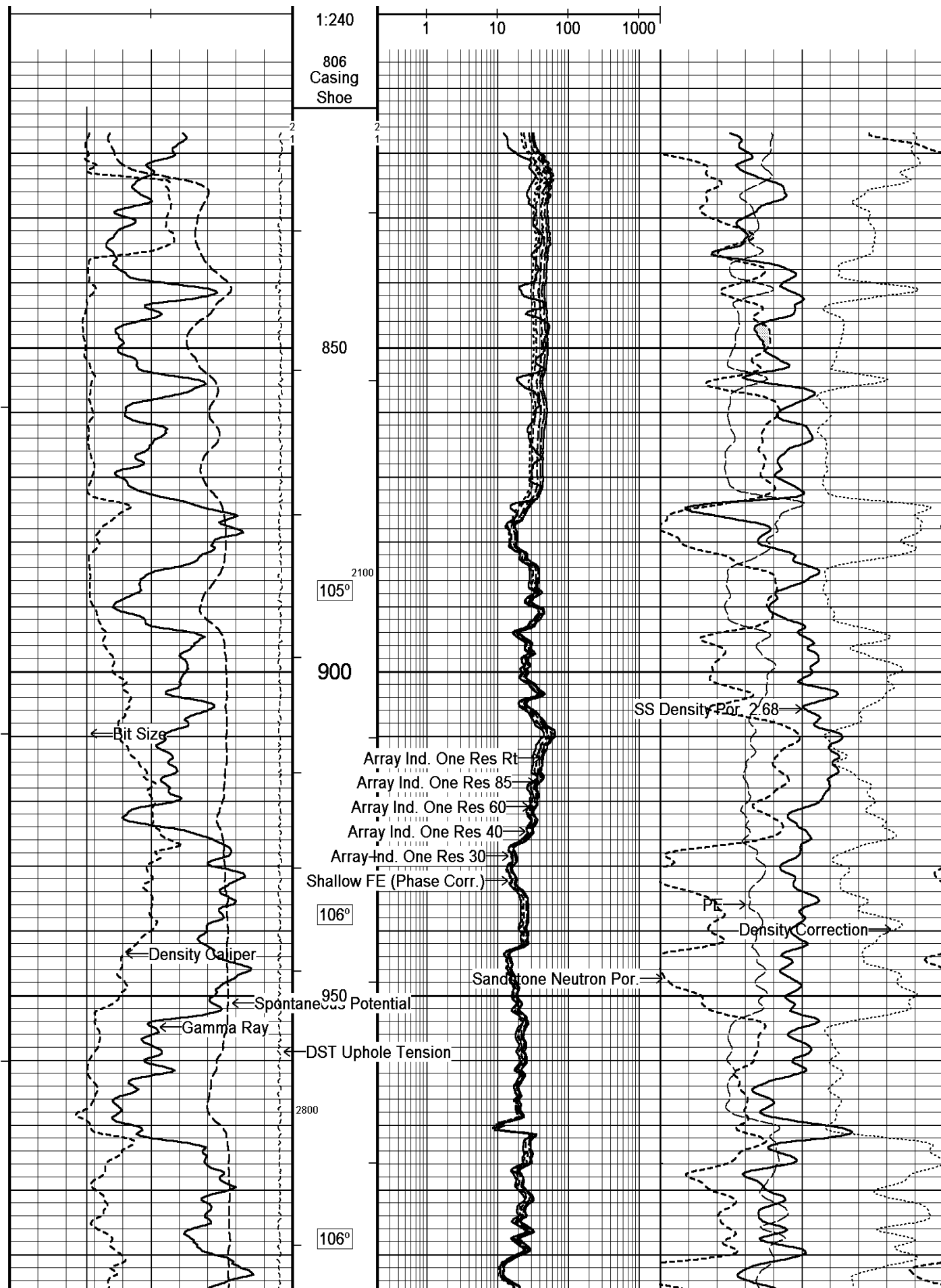
ANNULAR VOLUME WITH 4.5 INCH PRODUCTION CASING = 2130 CU.FT.

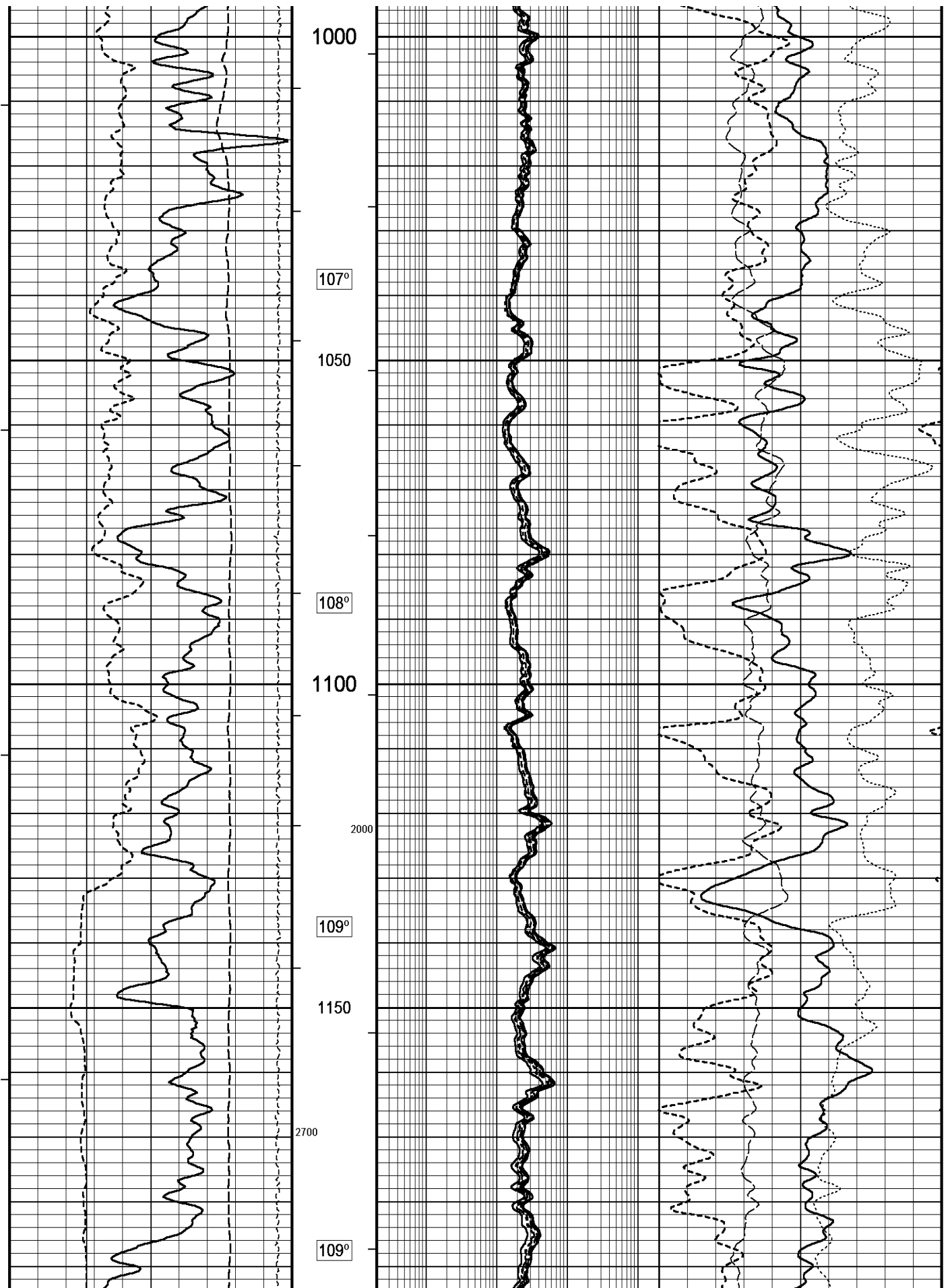
SERVICE ORDER: #3526180

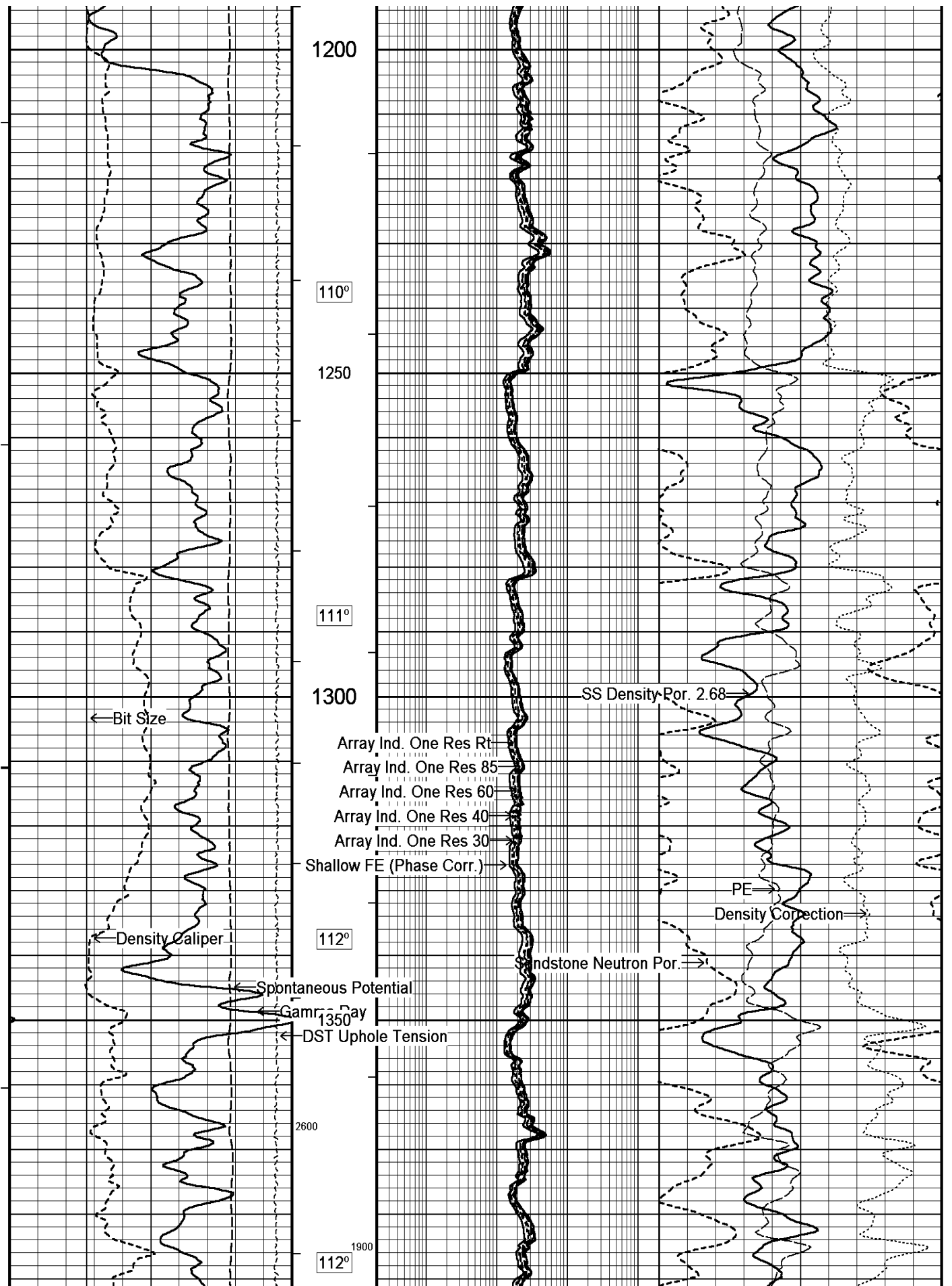
RIG: NABORS #37

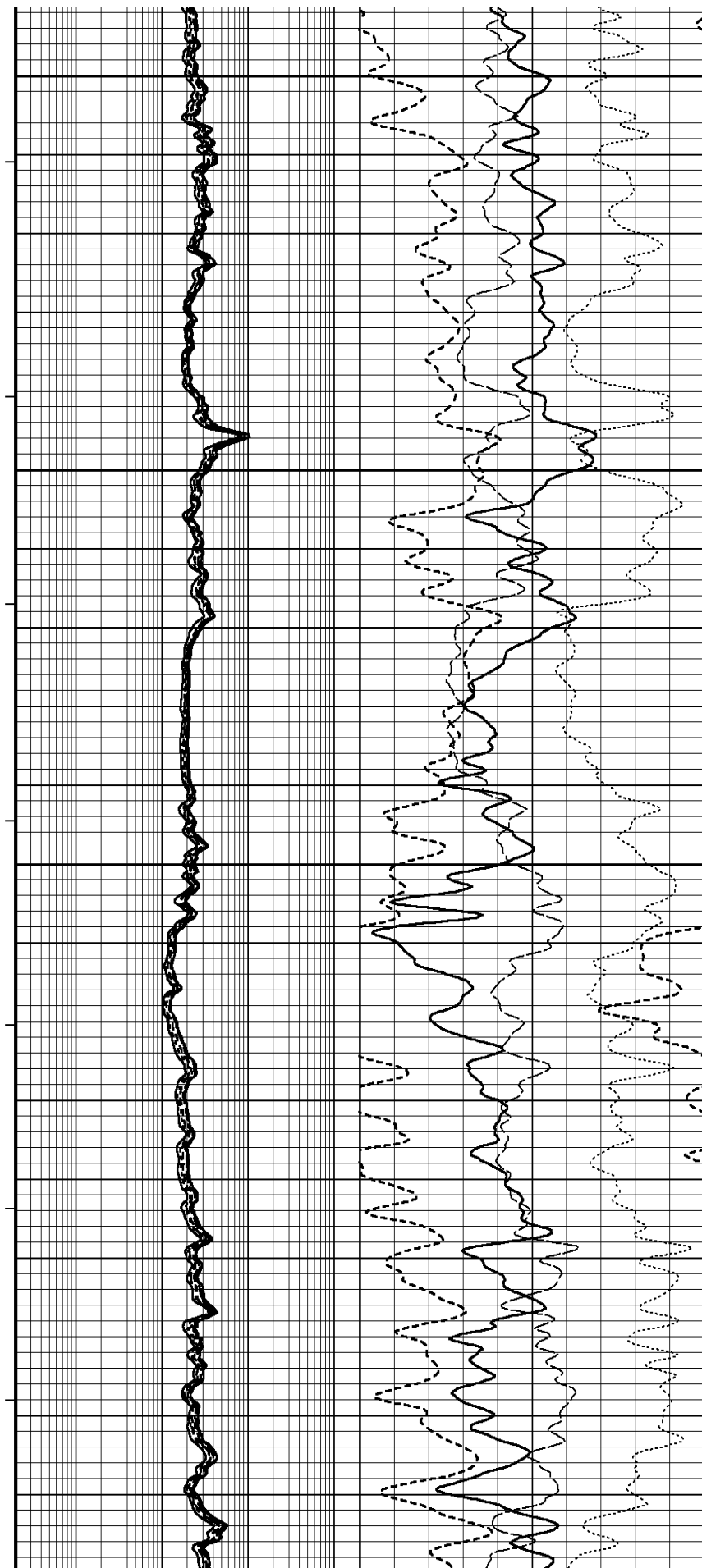
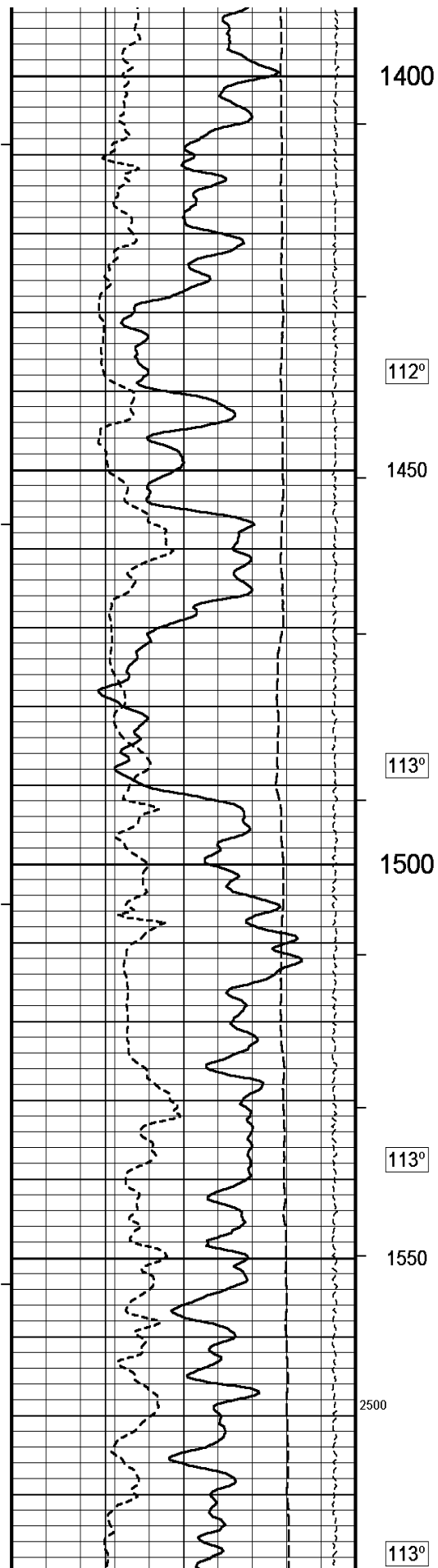
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

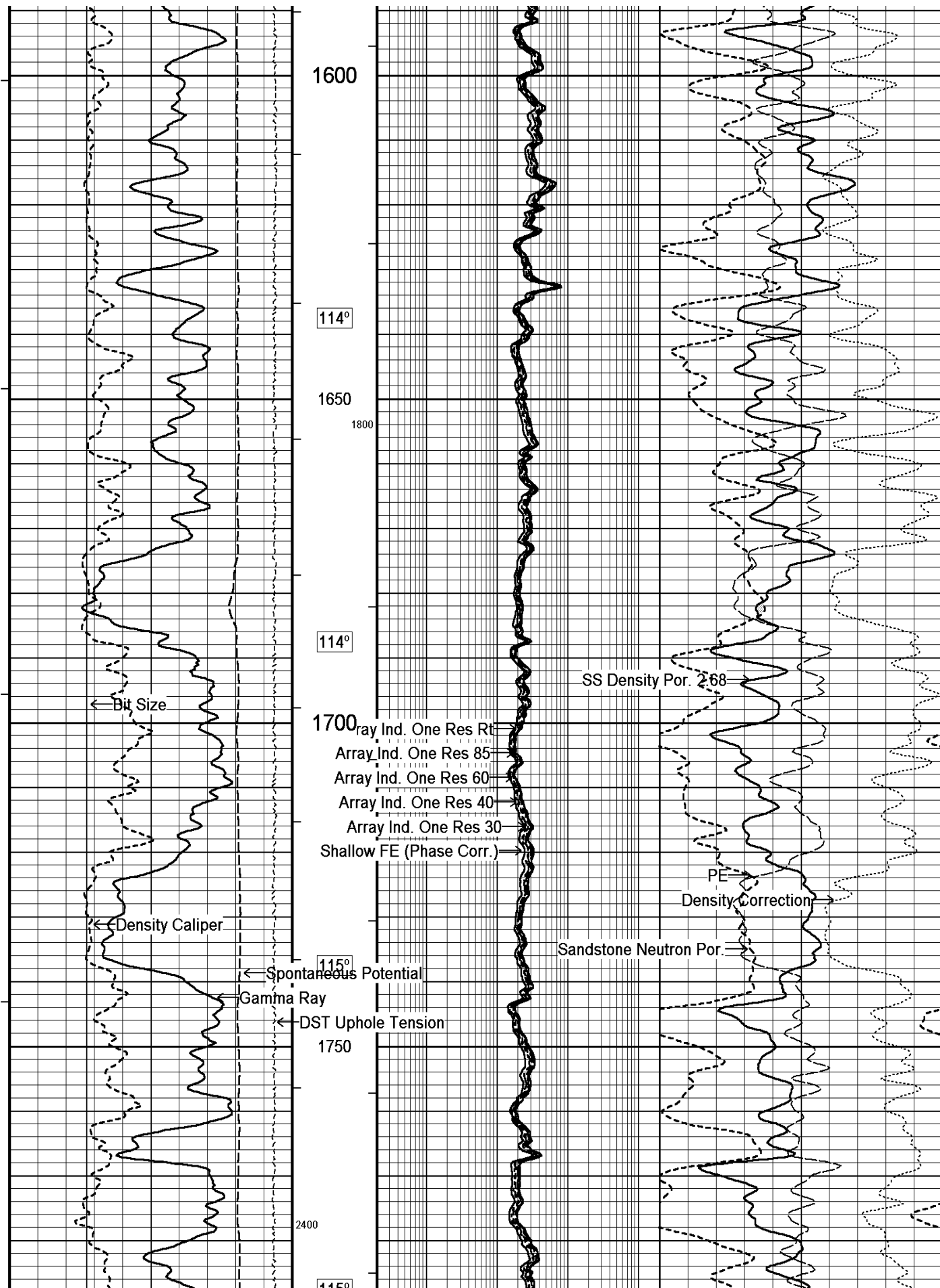


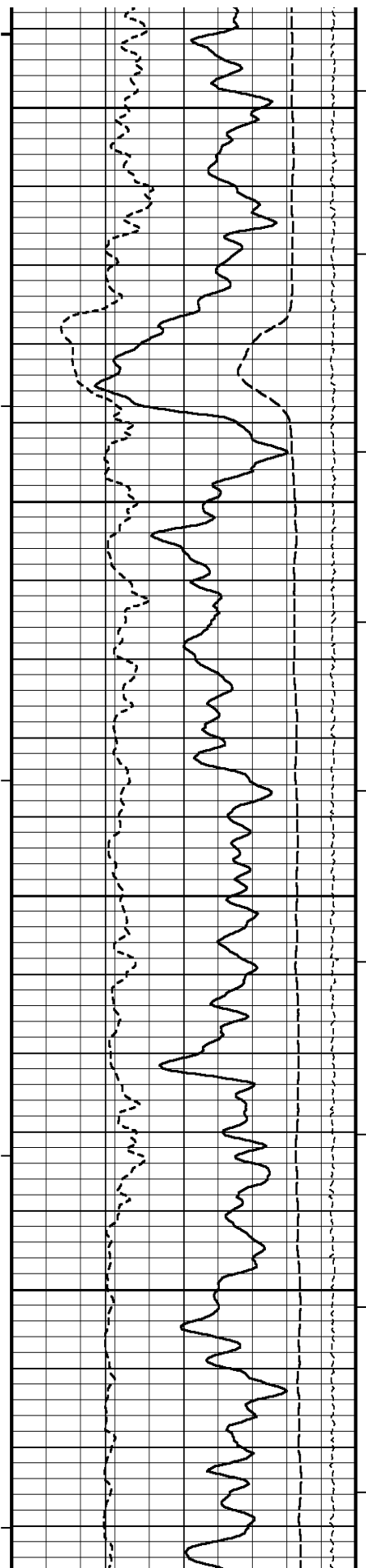




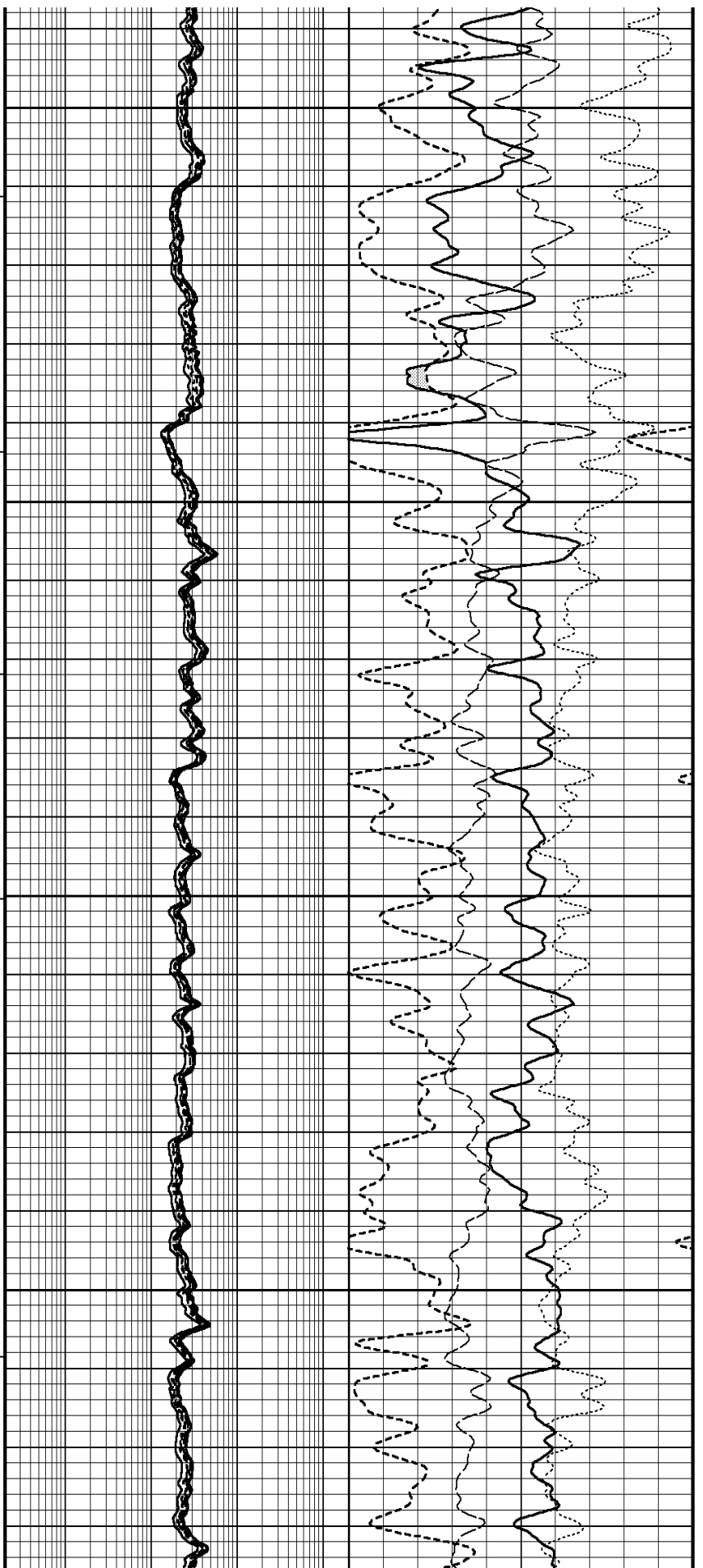


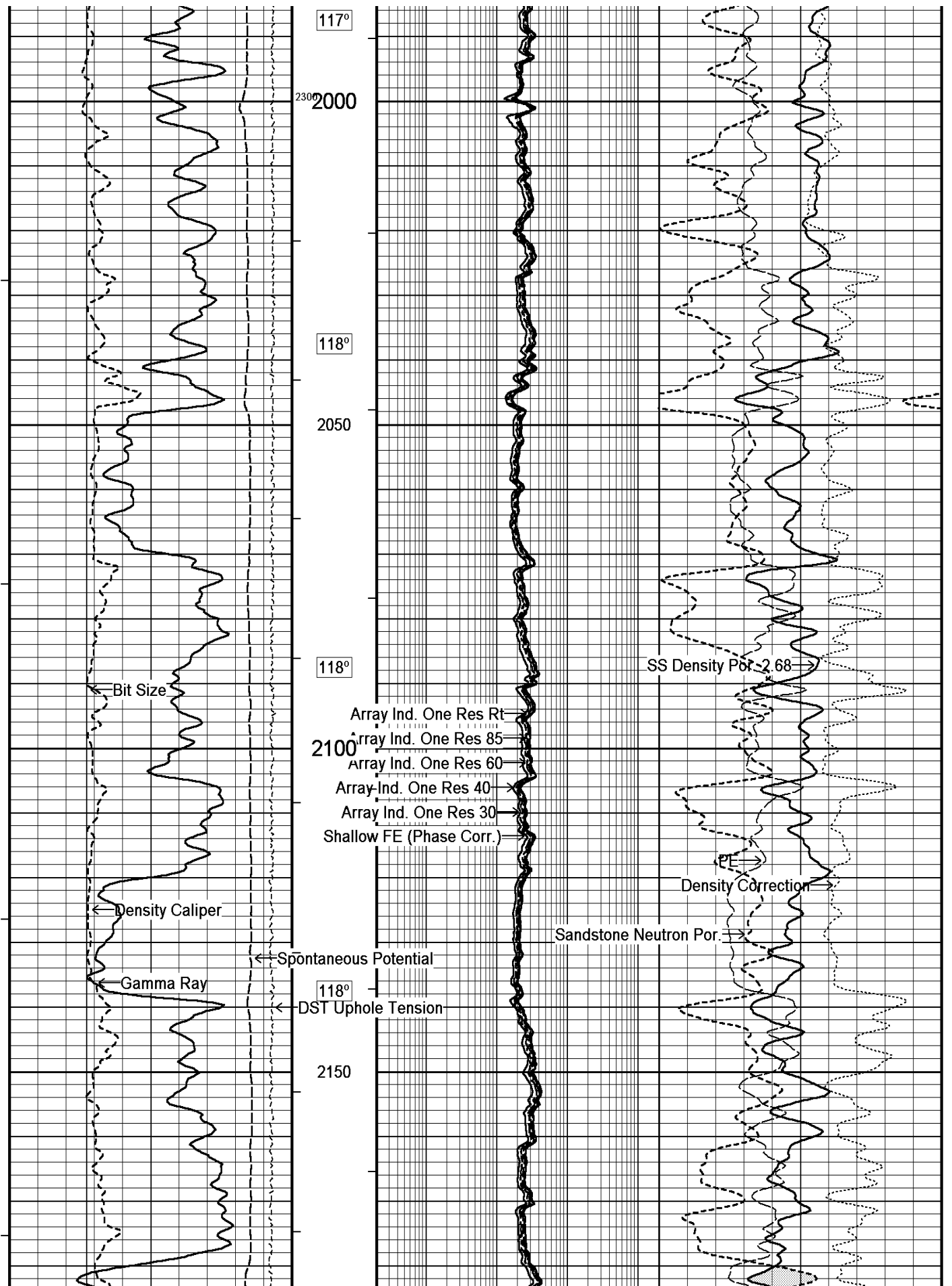


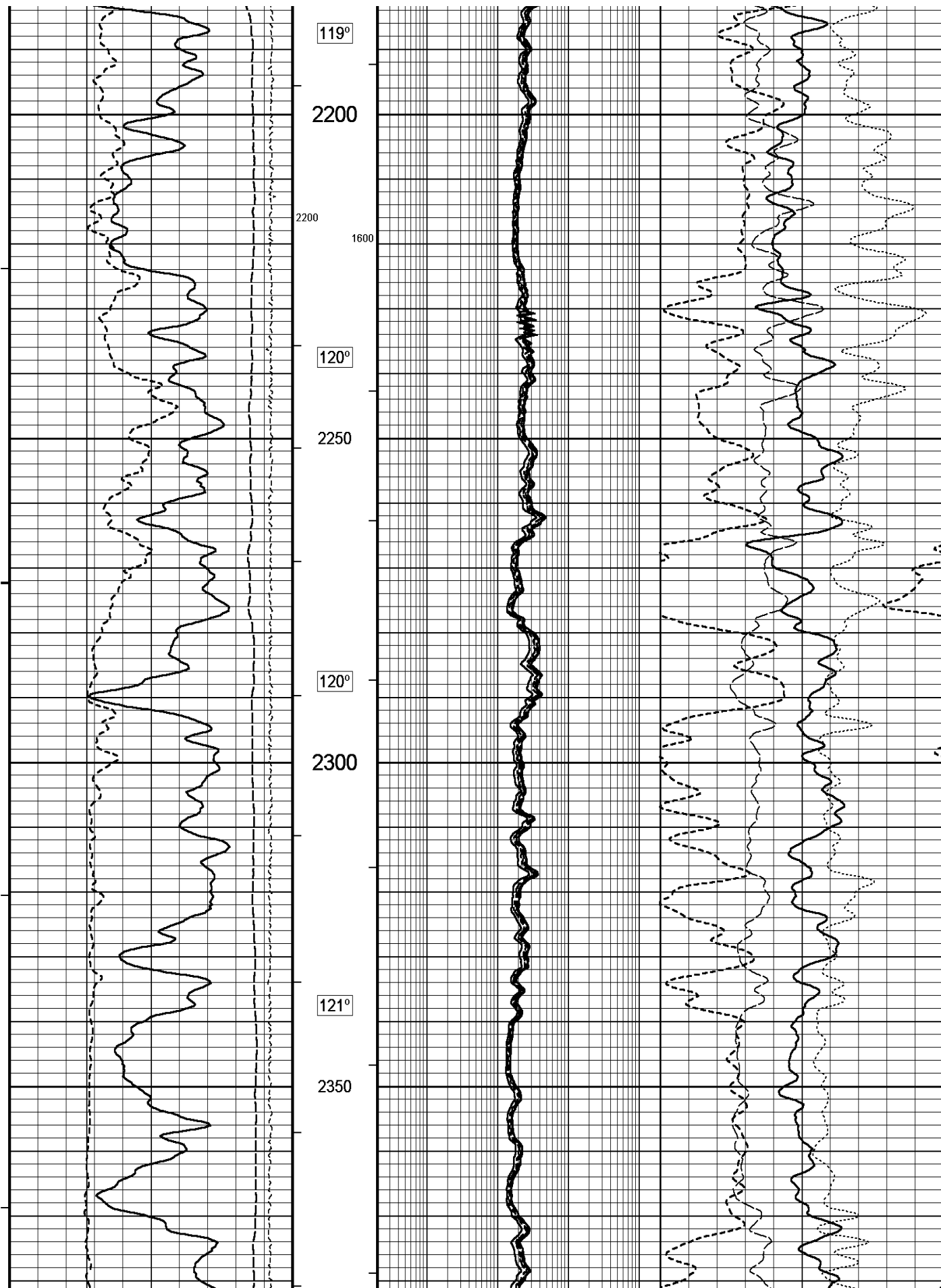


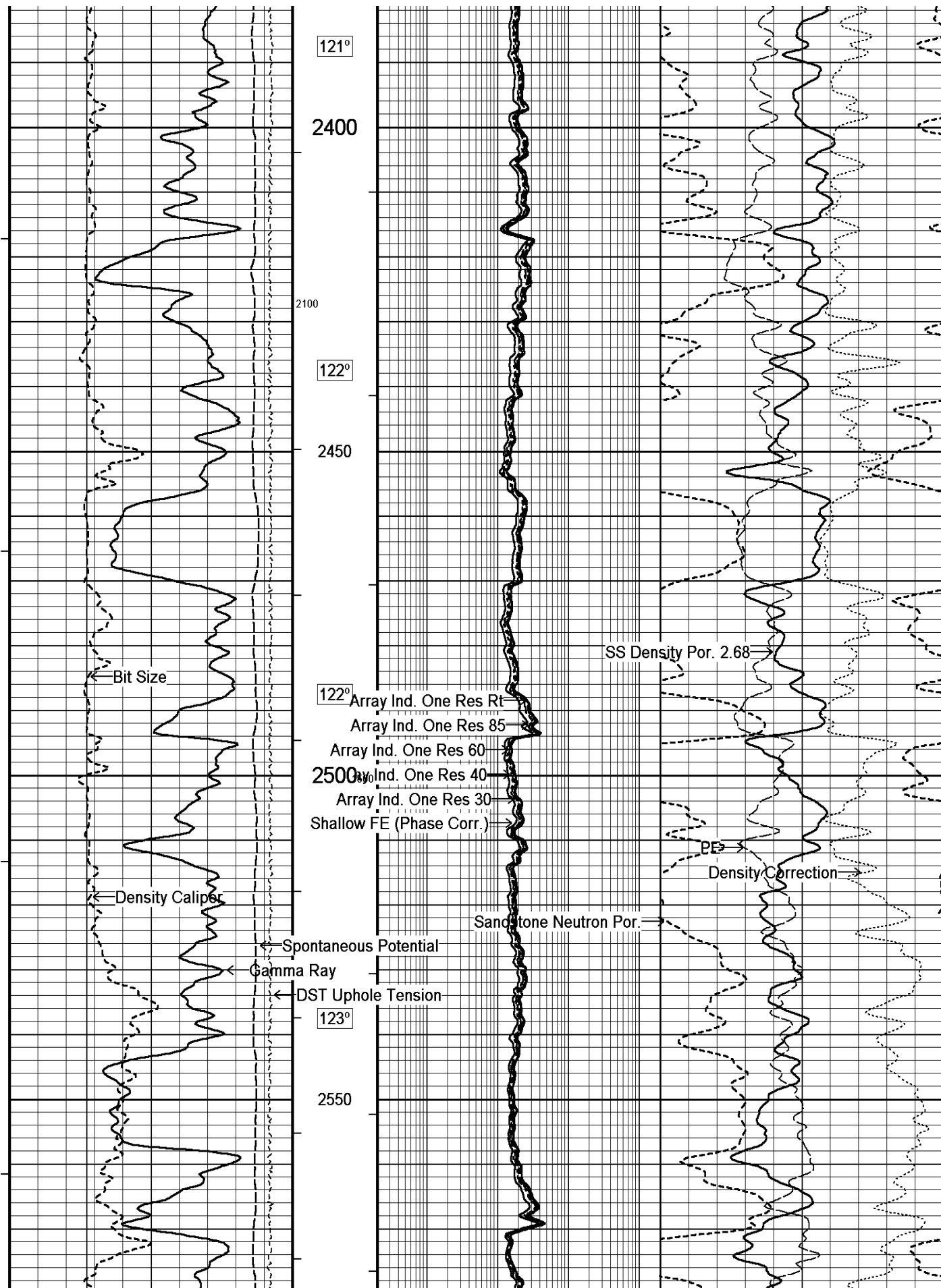


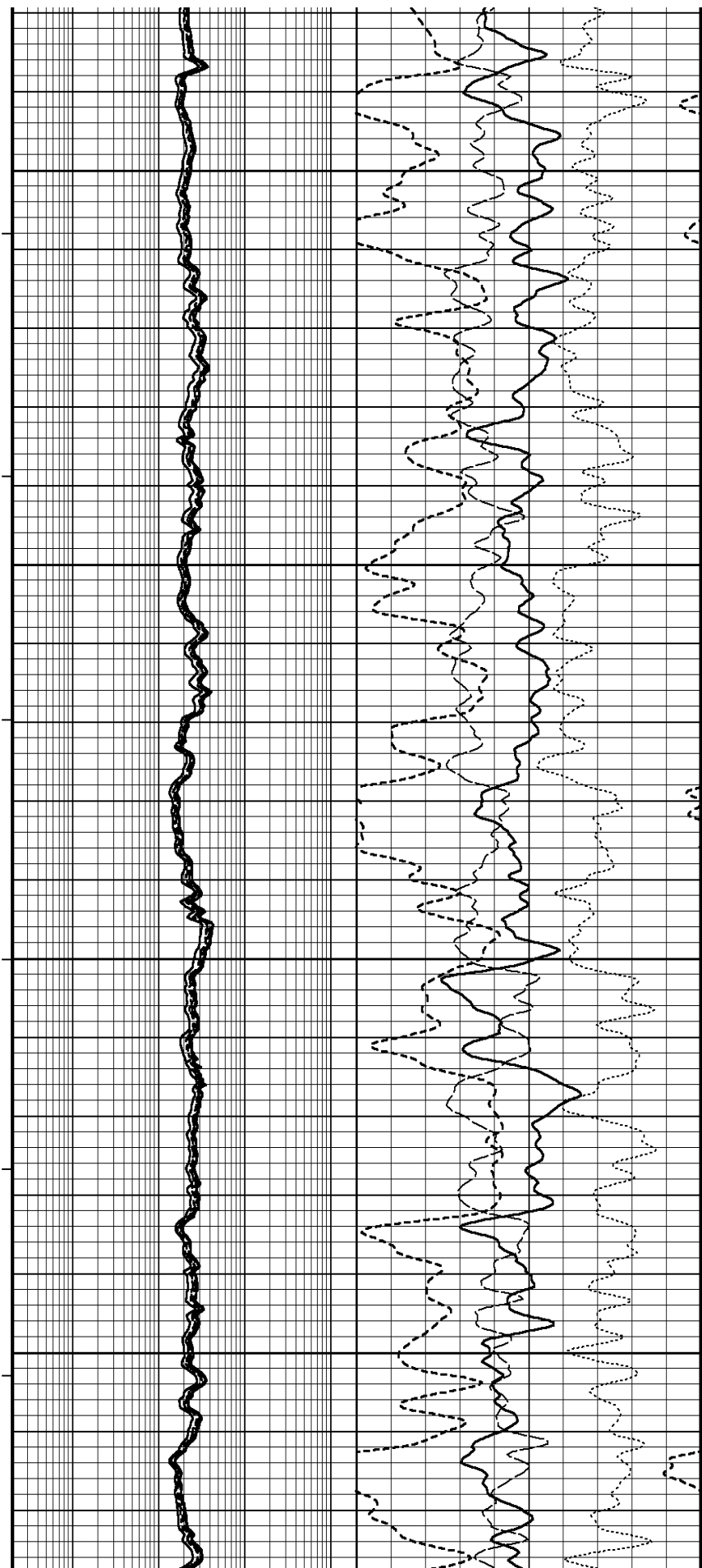
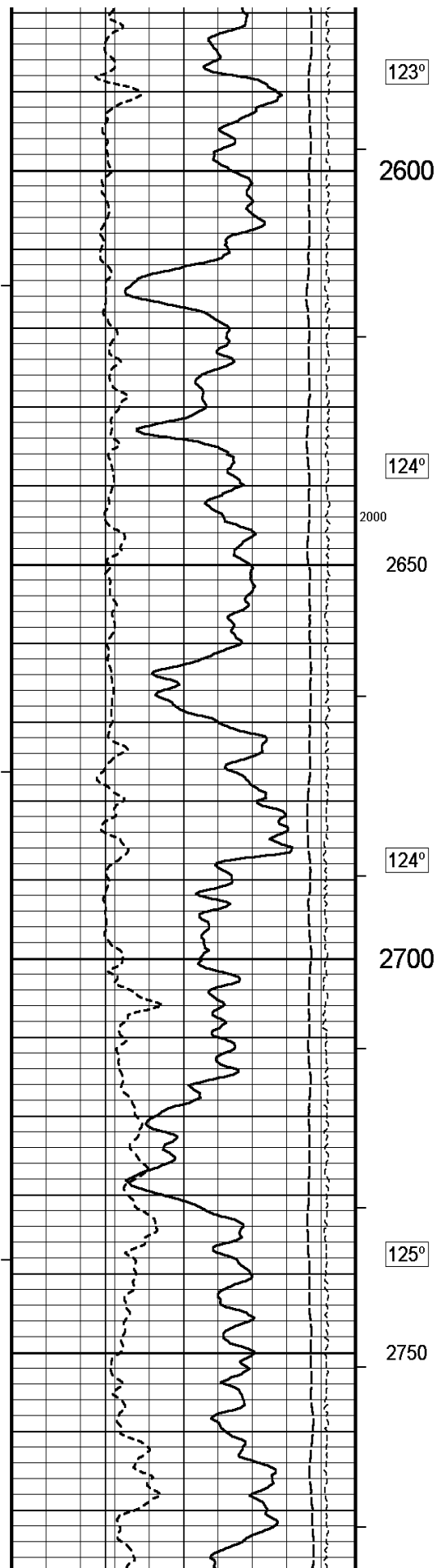
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1800  
116°  
1850  
116°  
1900  
1700  
117°  
1950

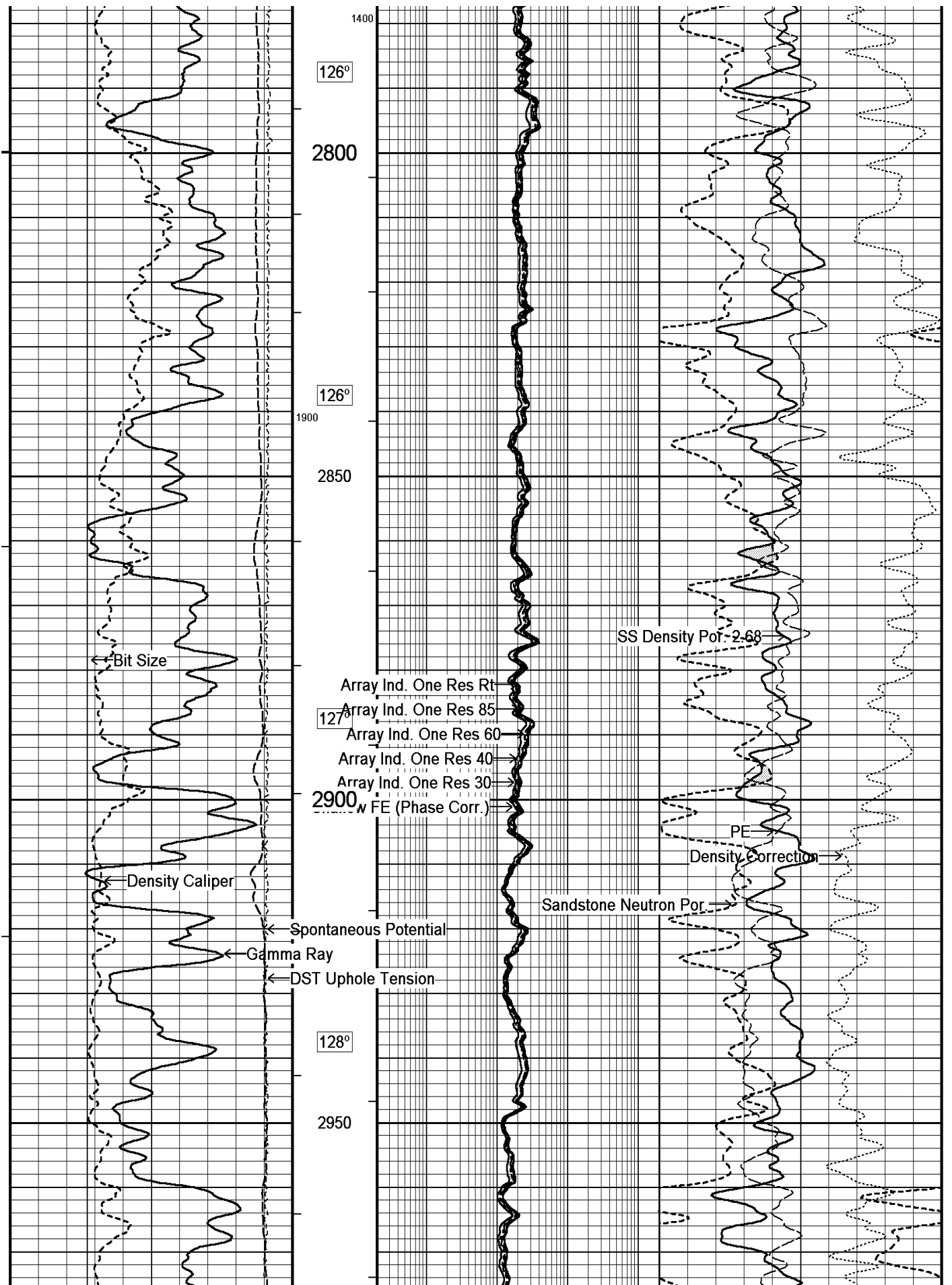


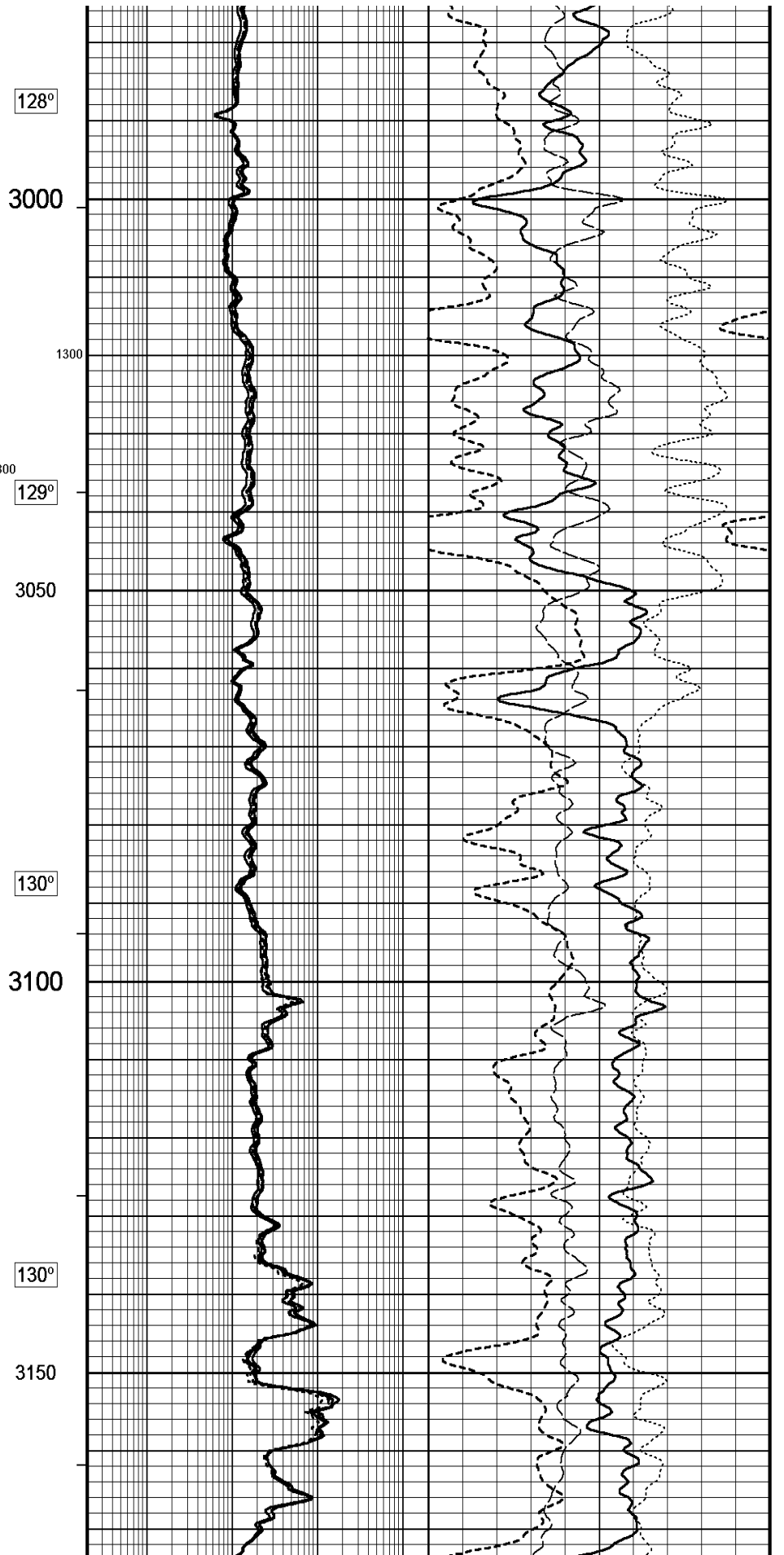
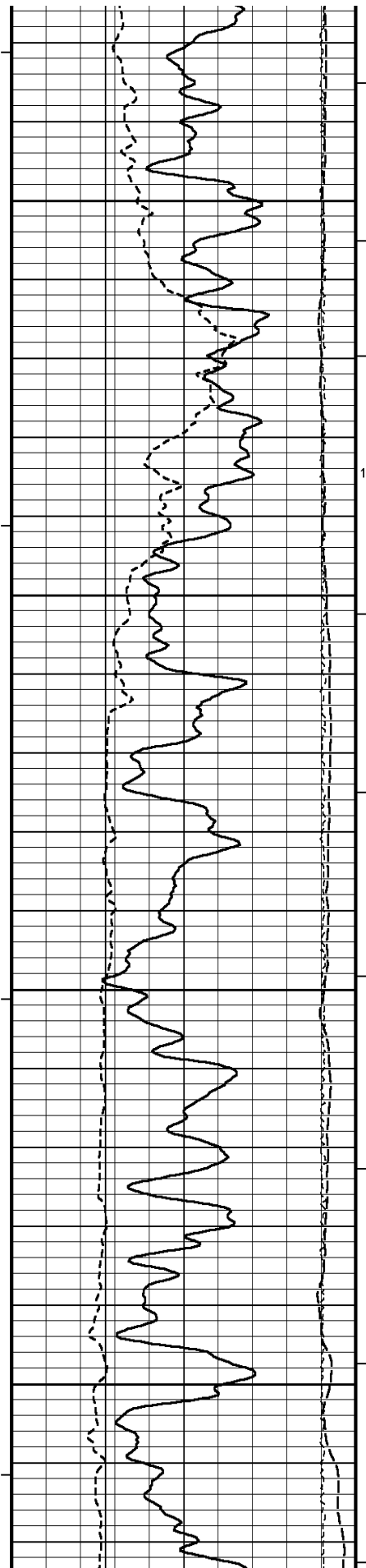


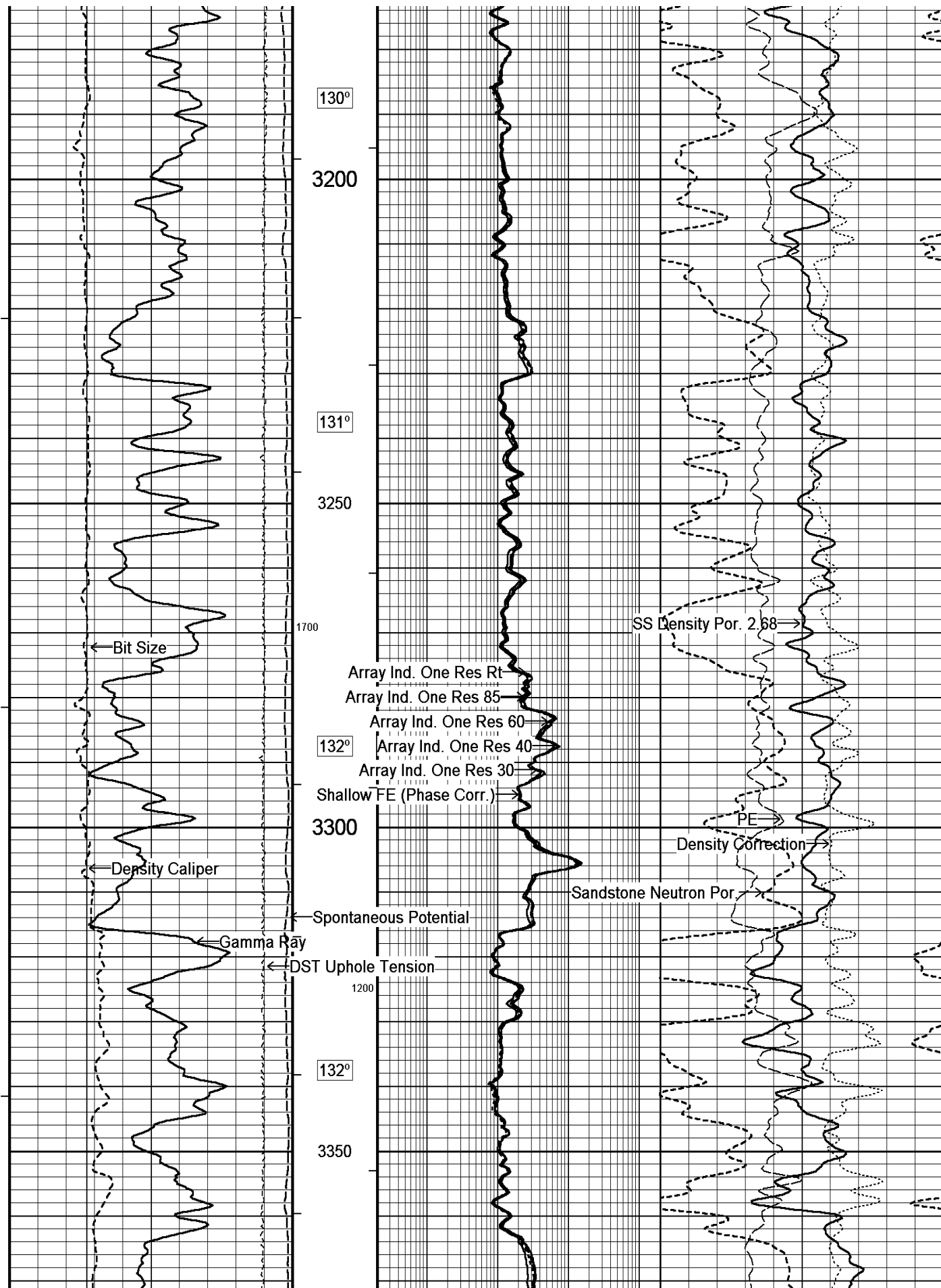


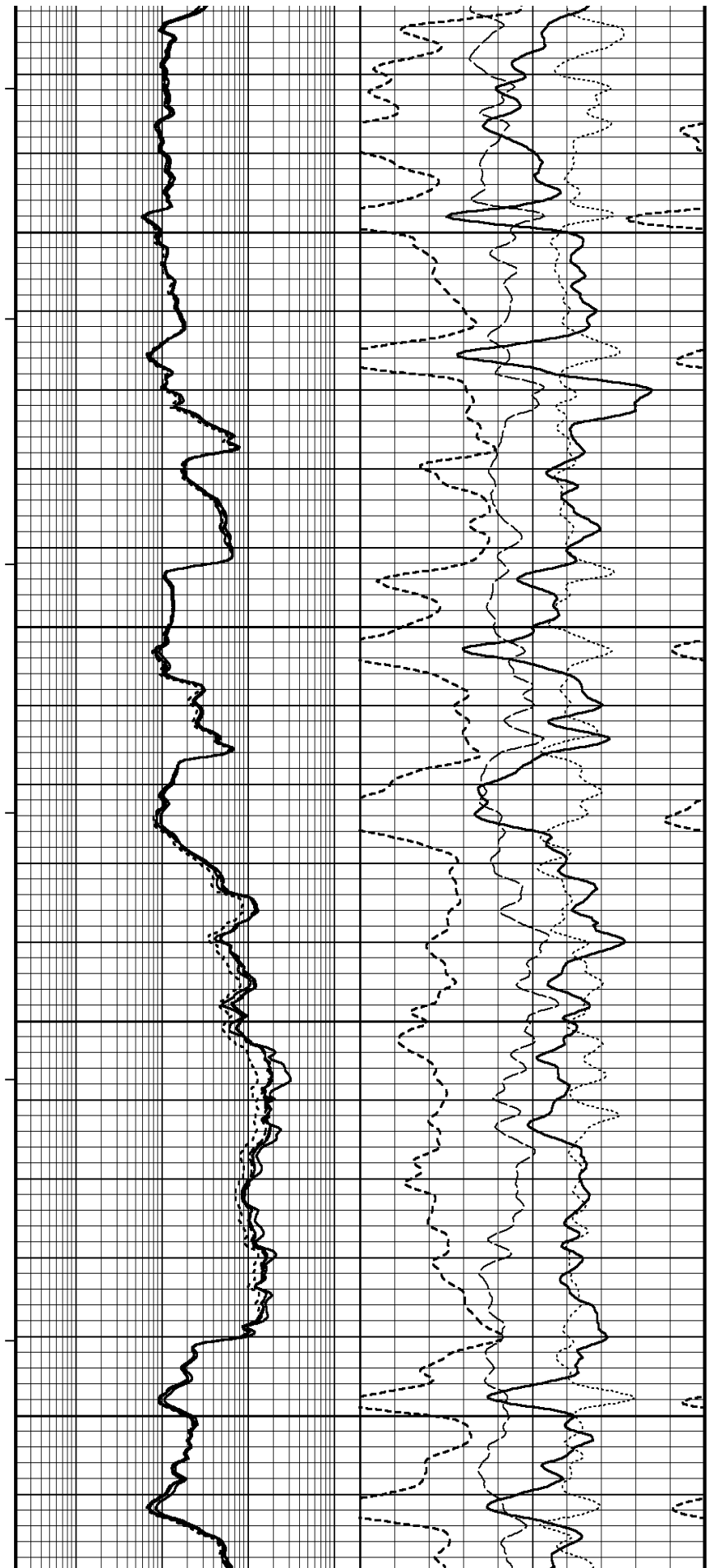
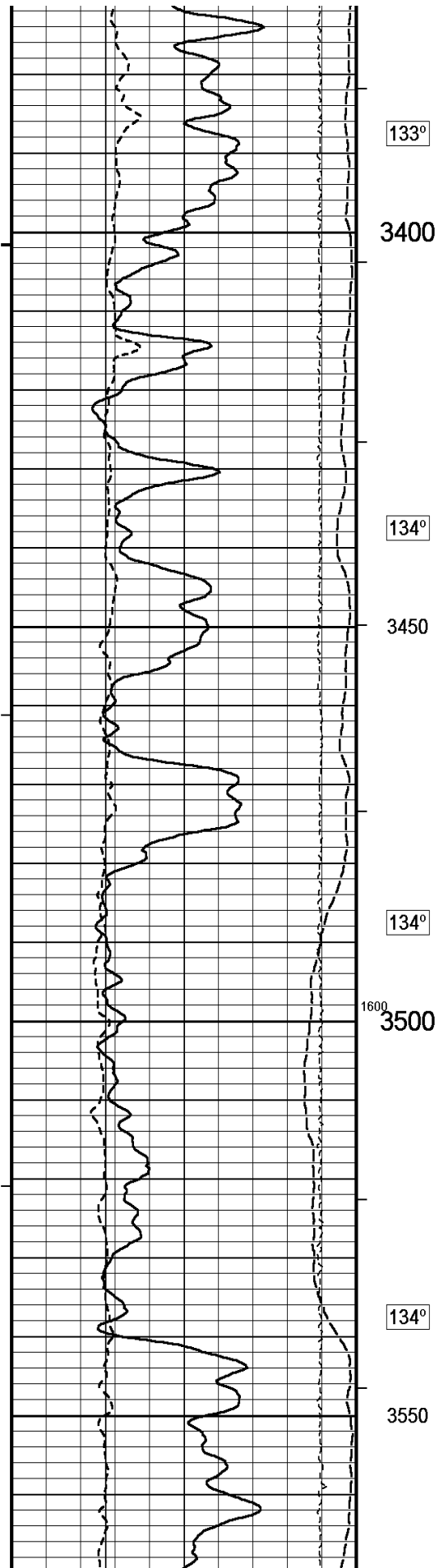


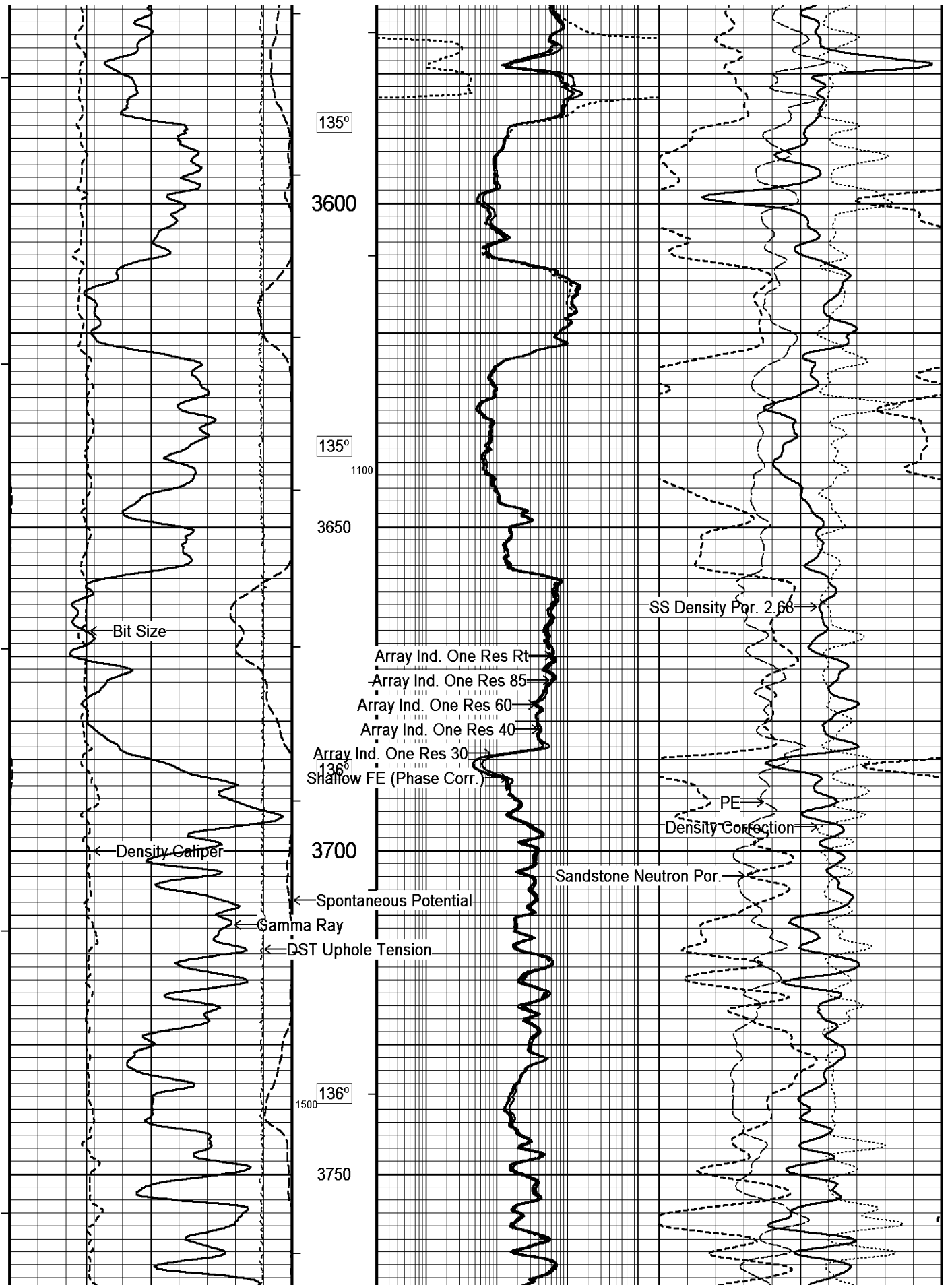


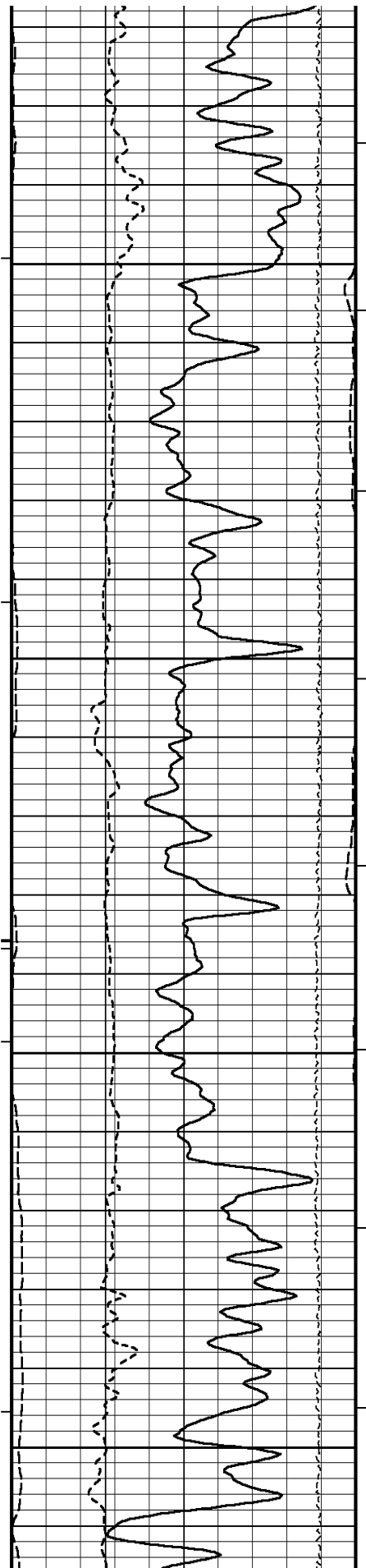












136°

3800

137°

3850

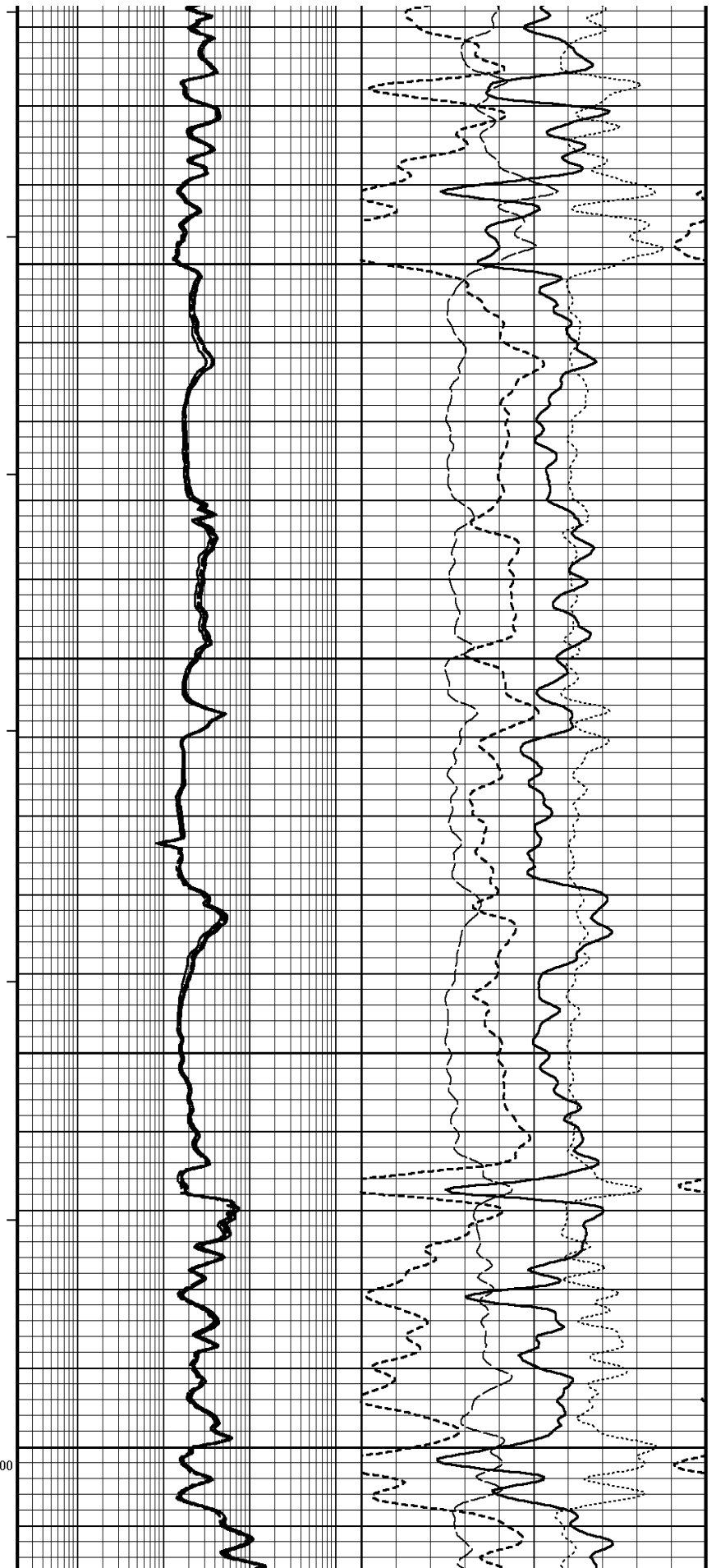
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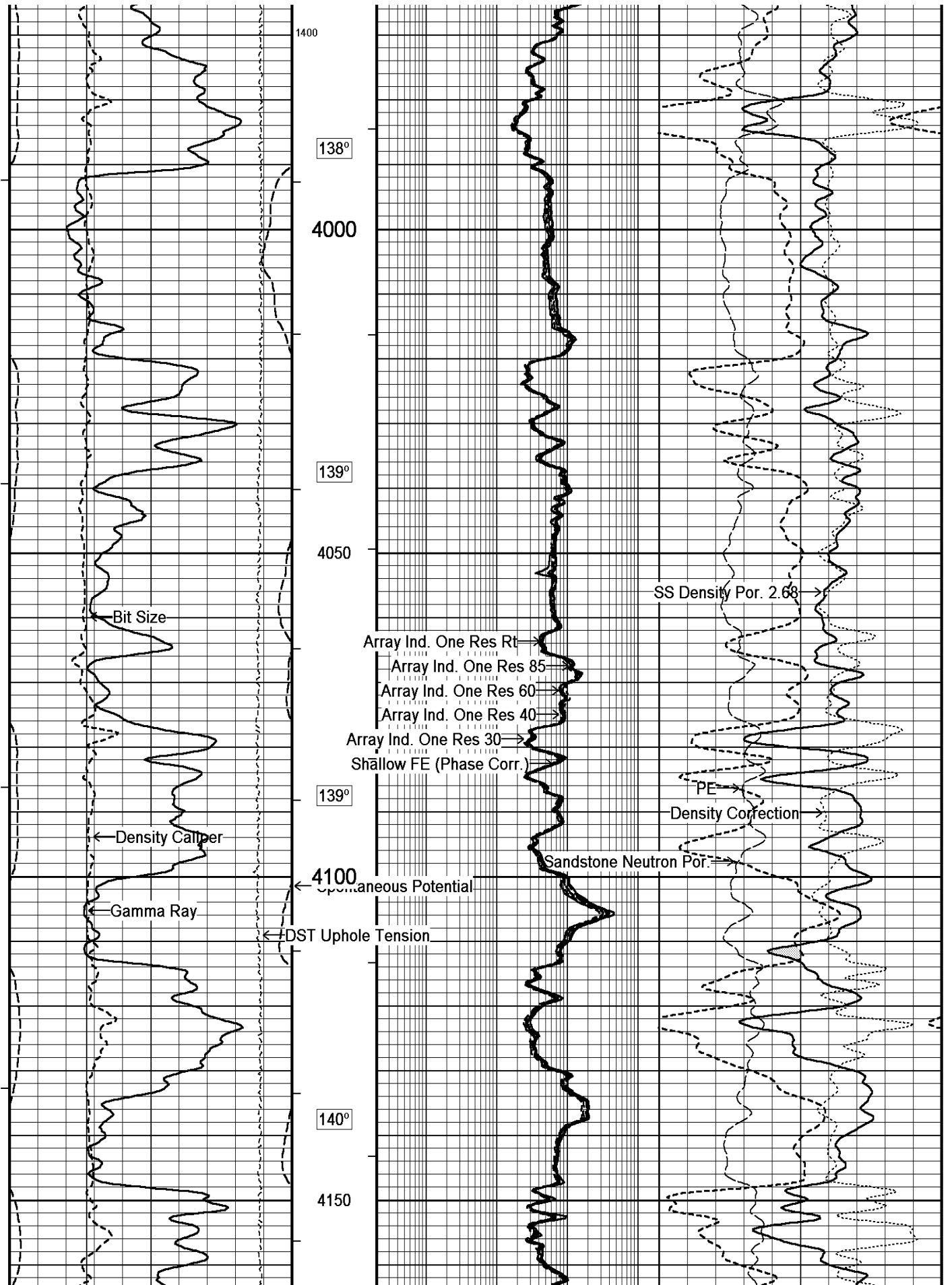
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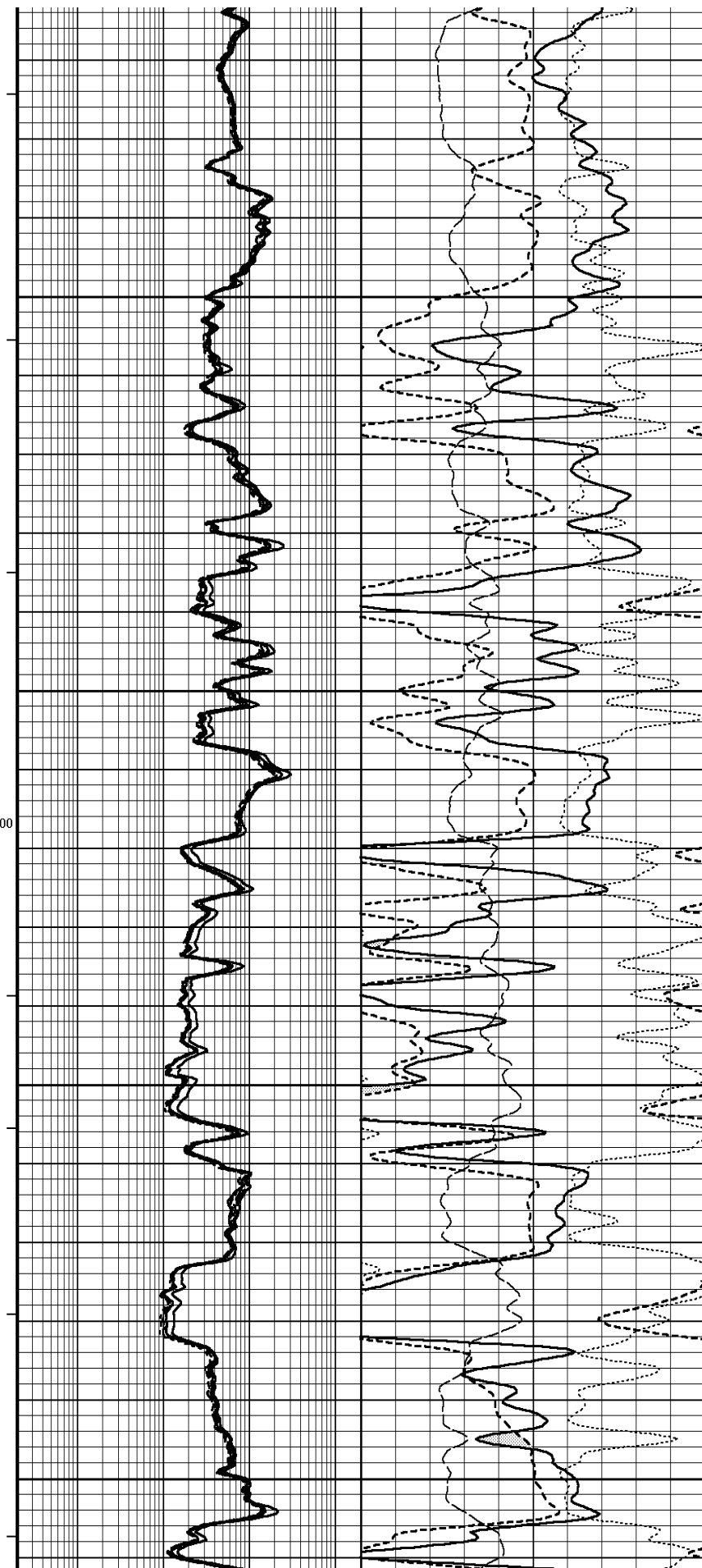
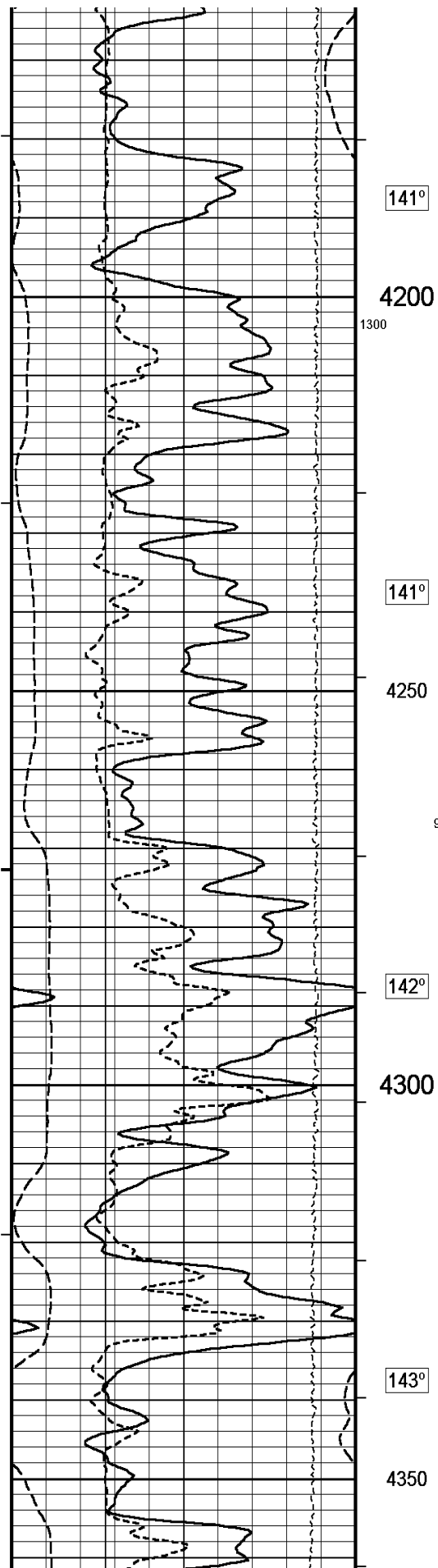
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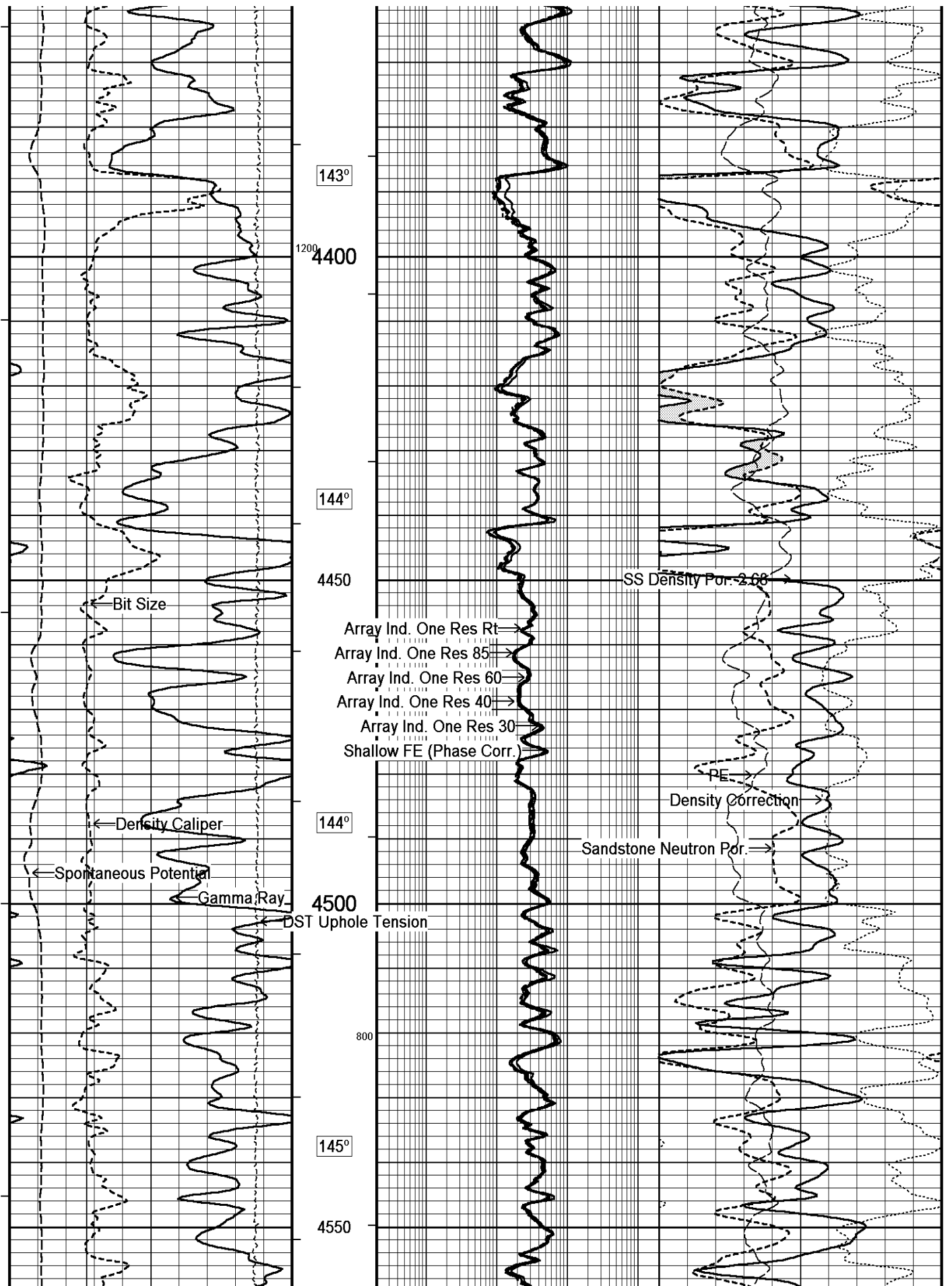
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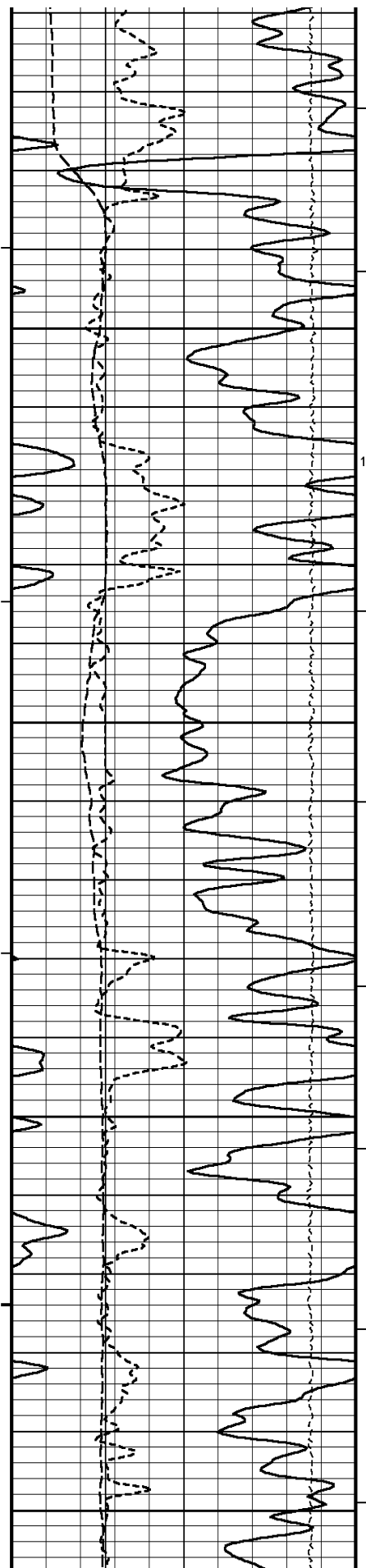
1000











146°

4600

1100

146°

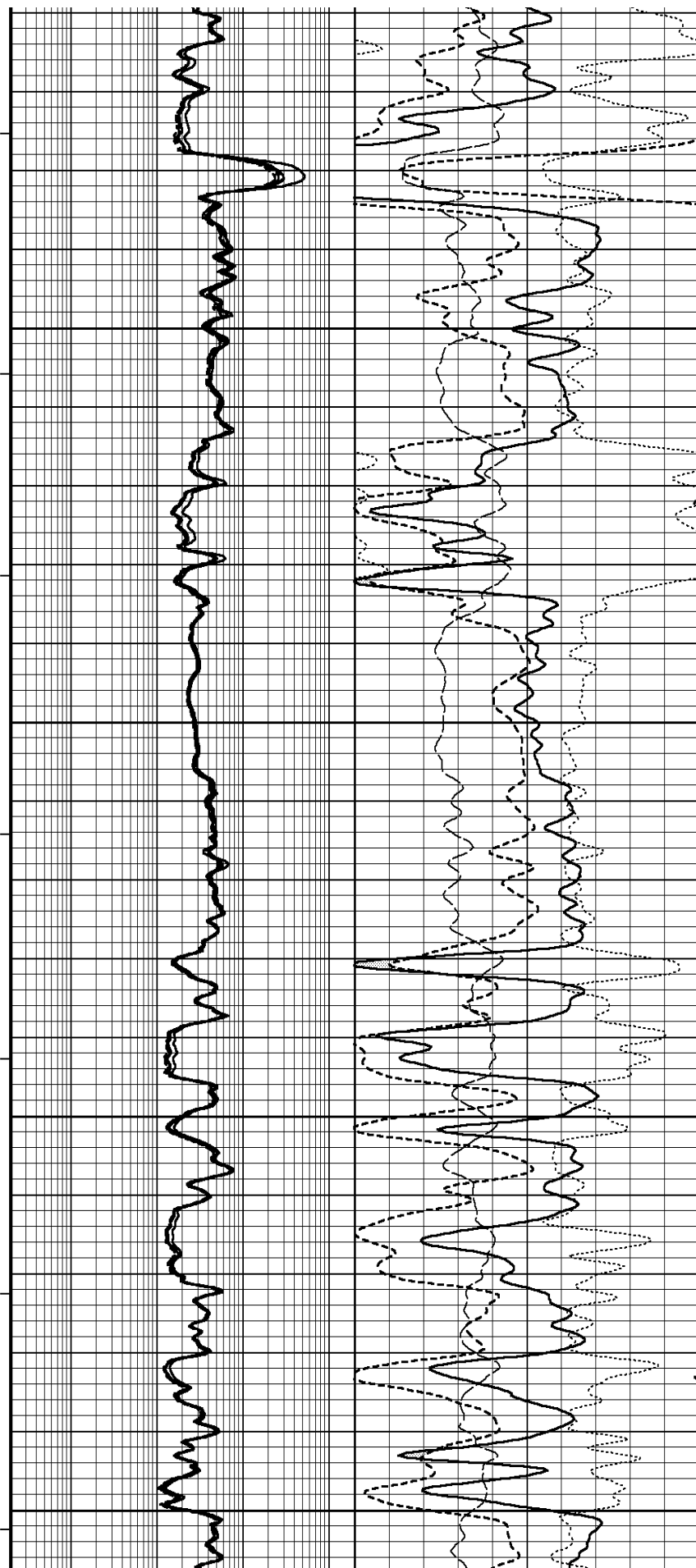
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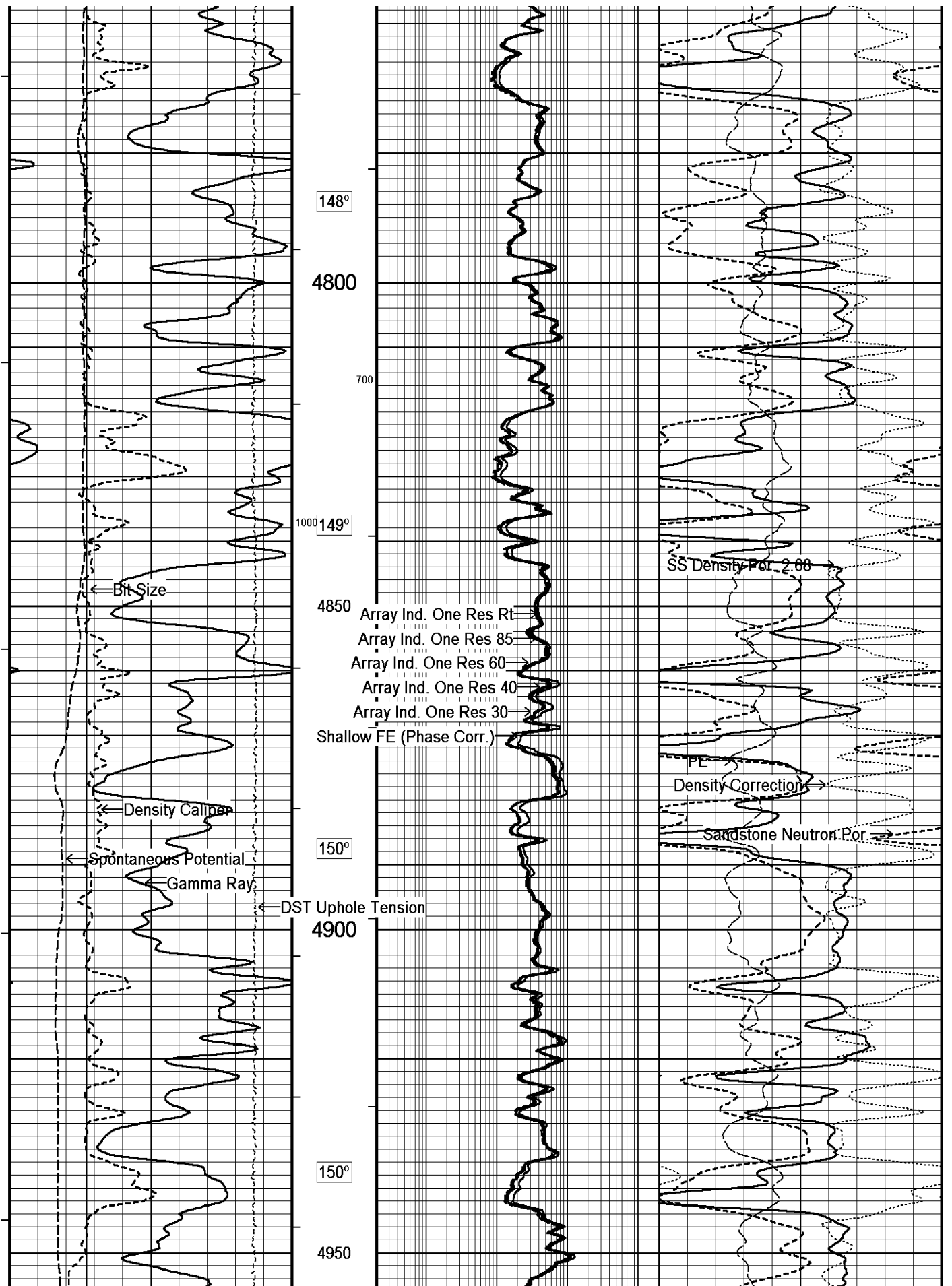
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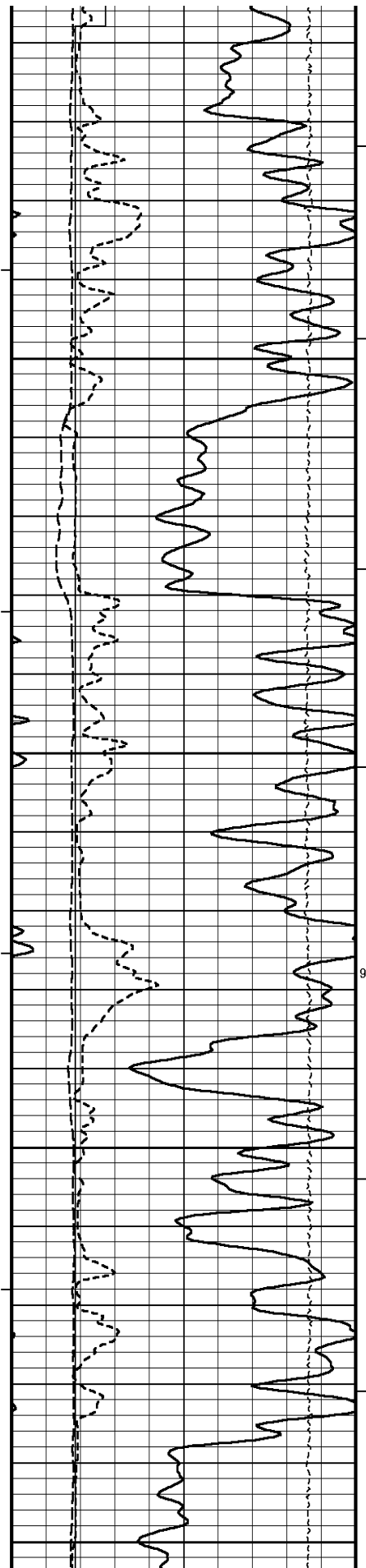
4700

147°

4750







151°

5000

152°

5050

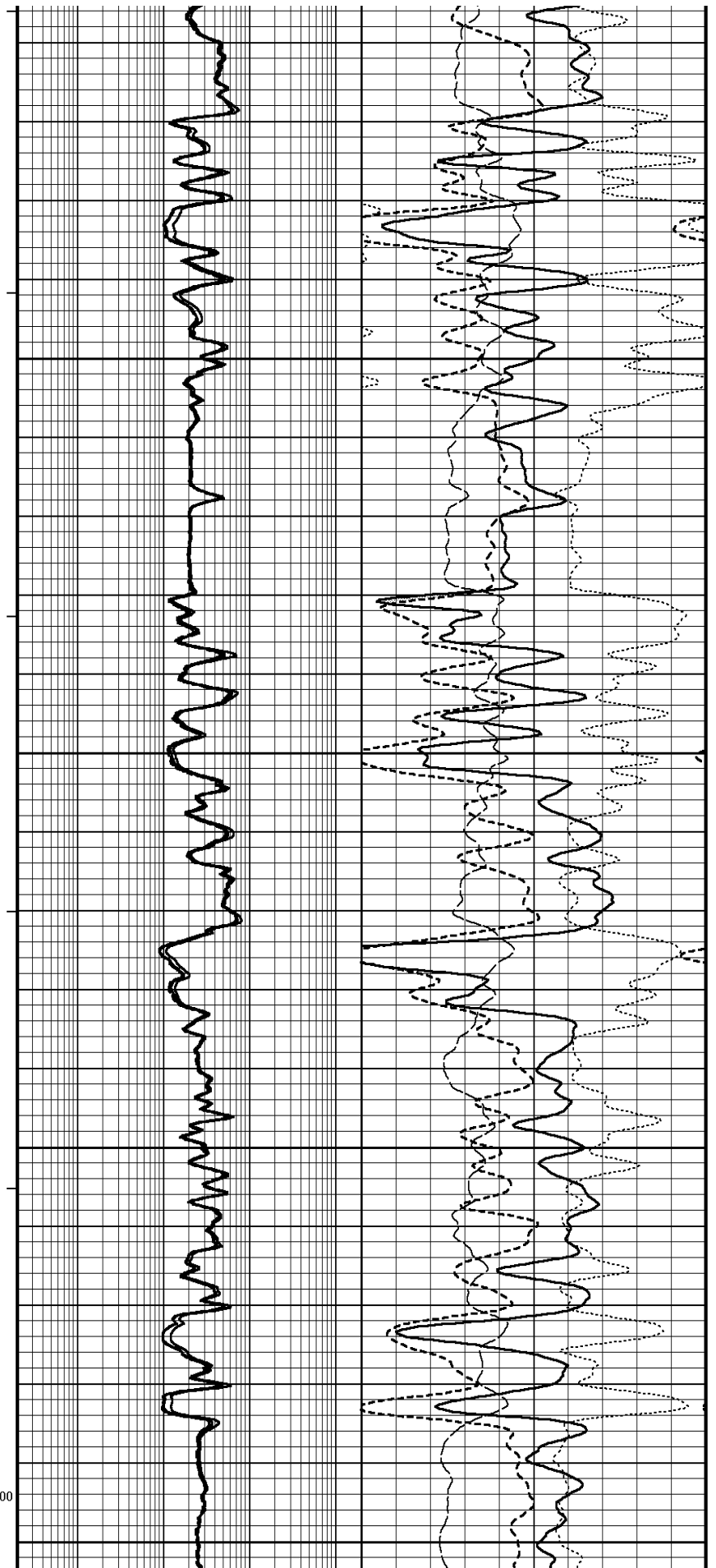
152°

5100

153°

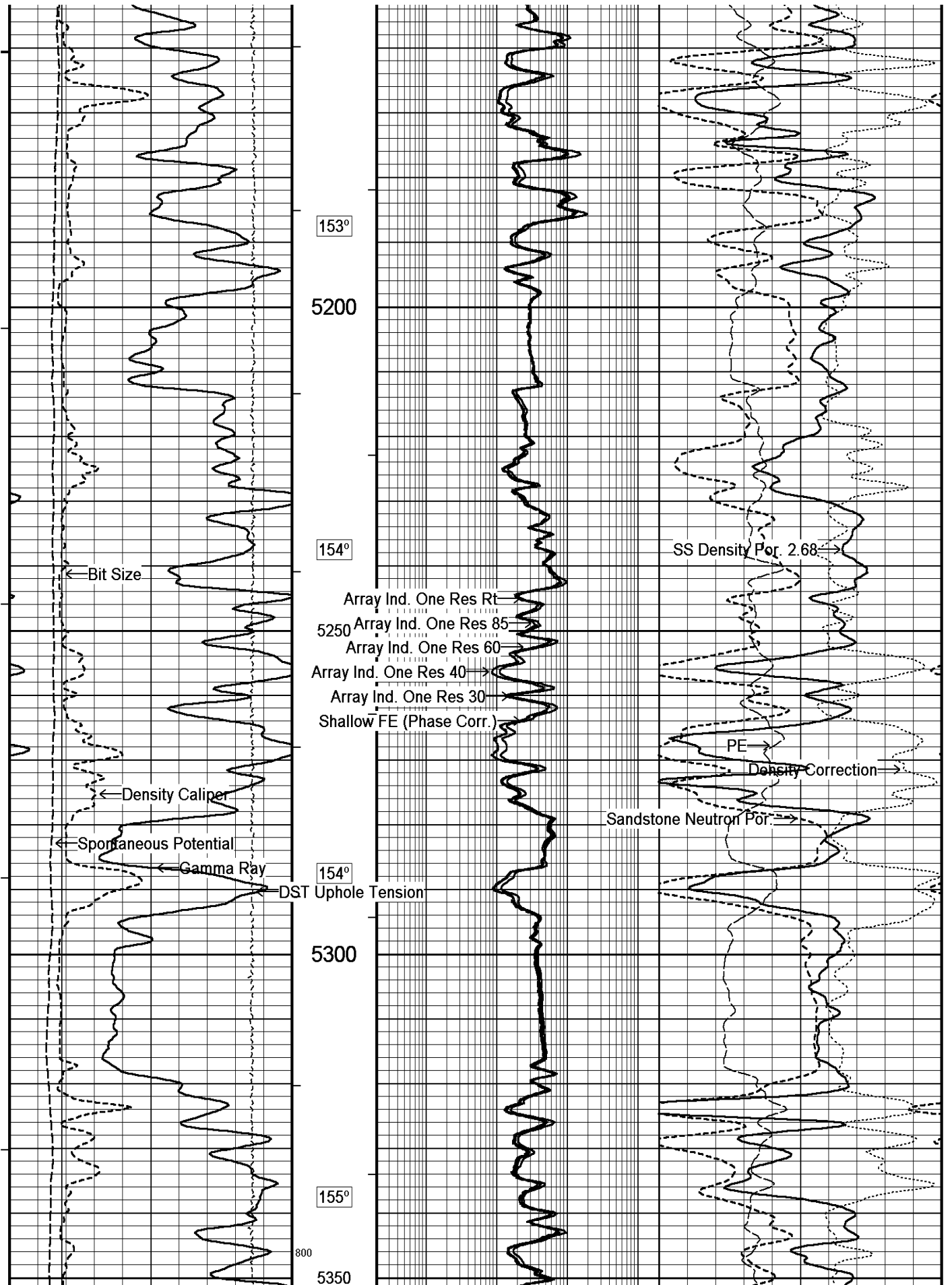
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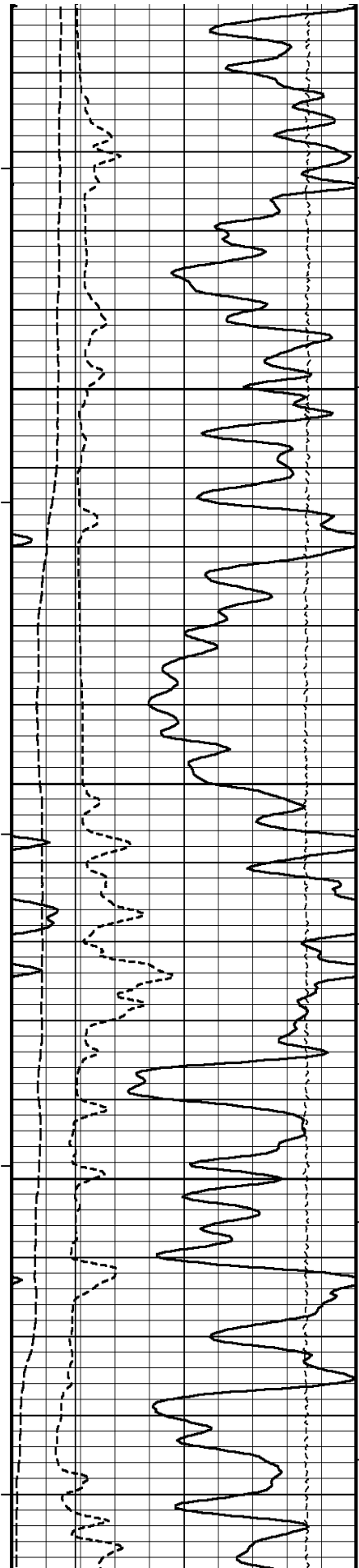
900



600

5150





155°

5400

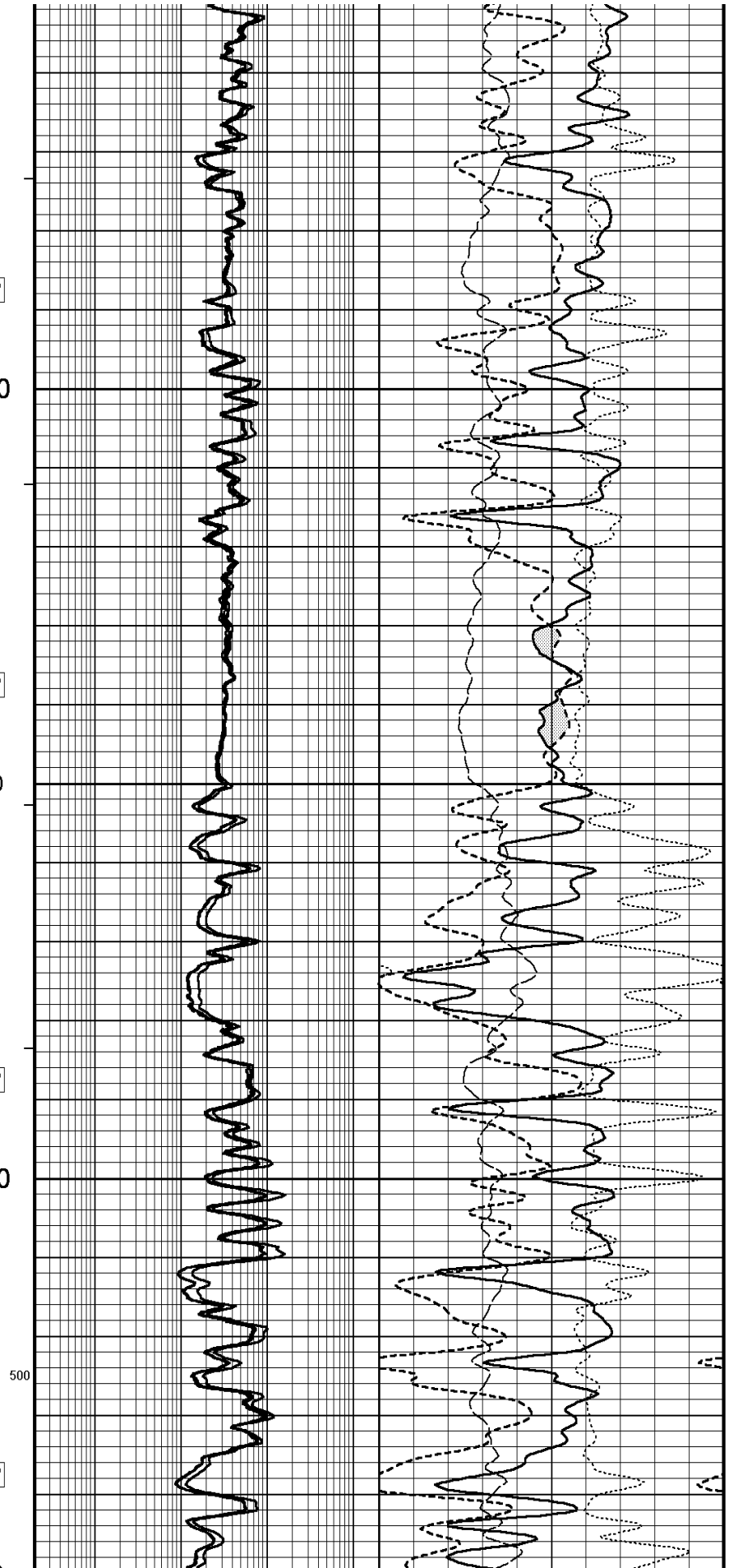
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5450

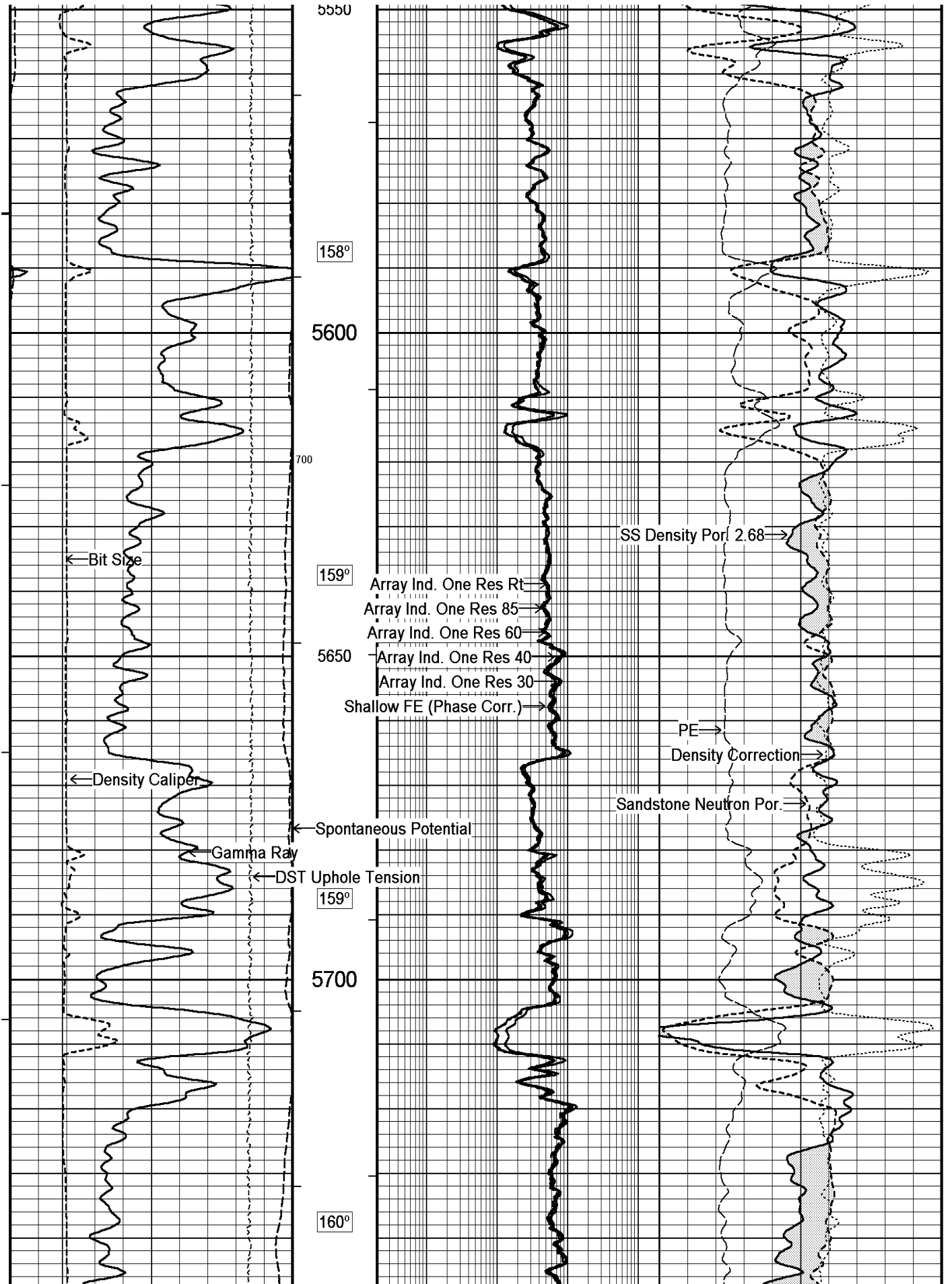
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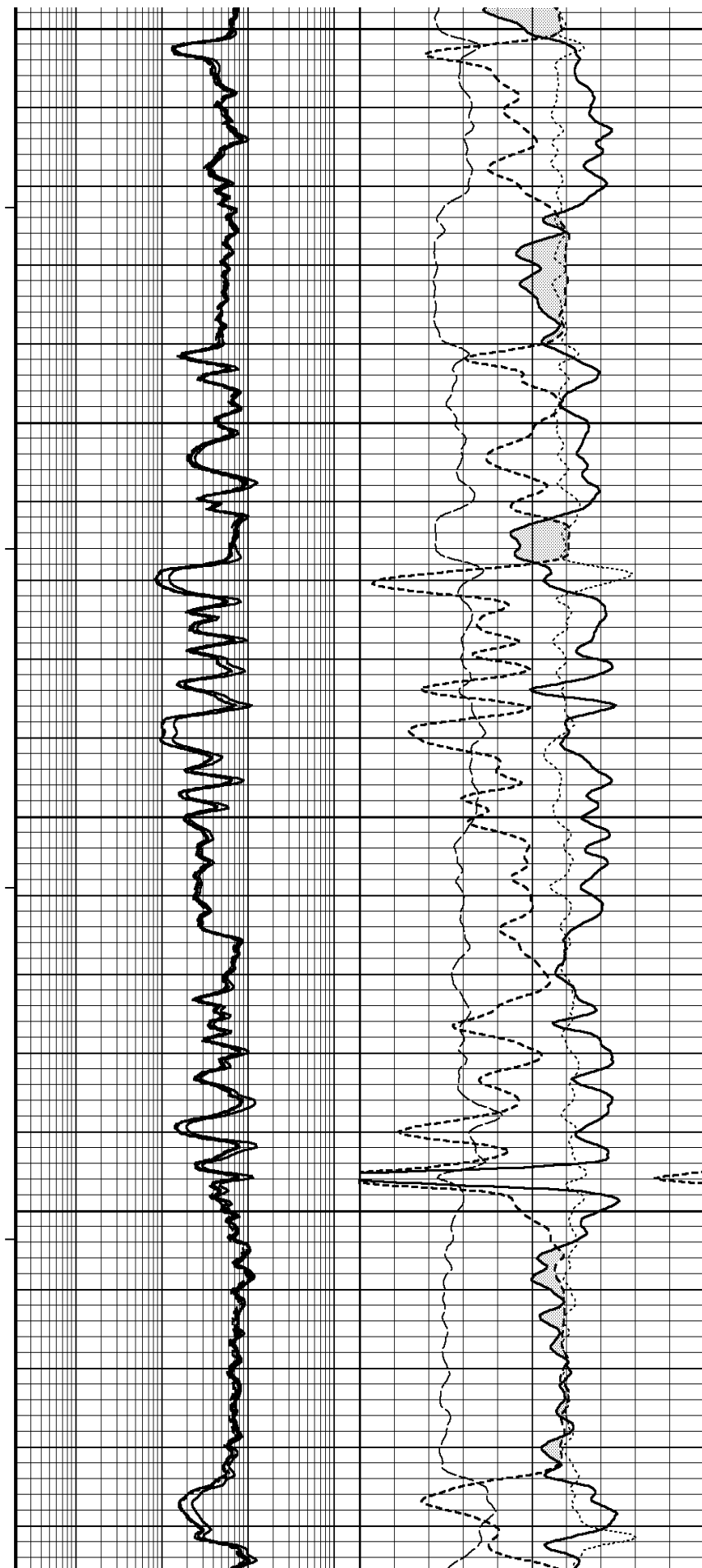
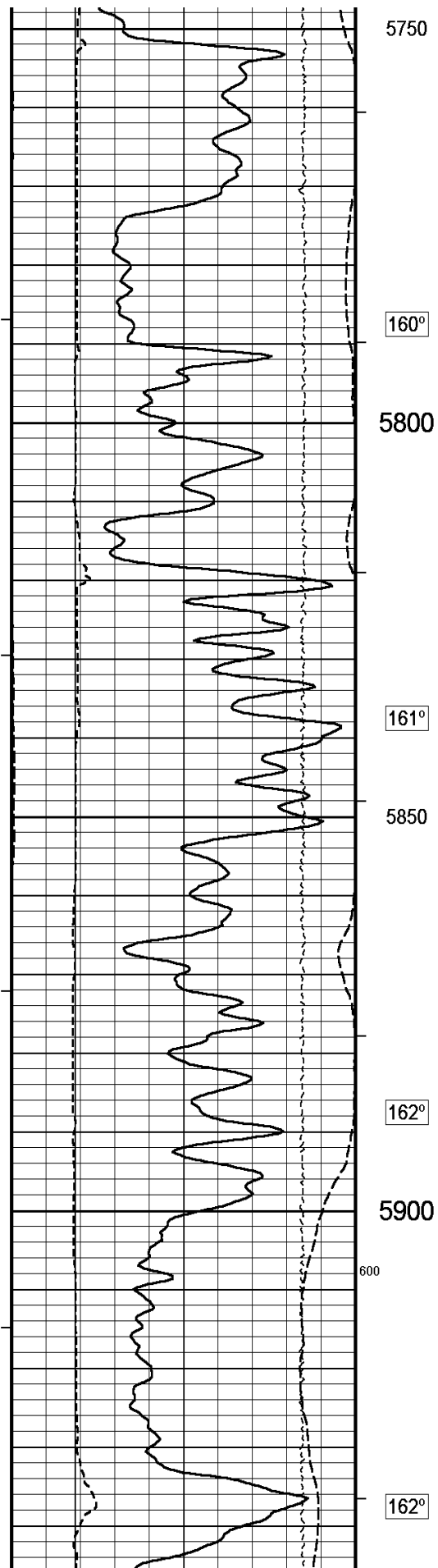
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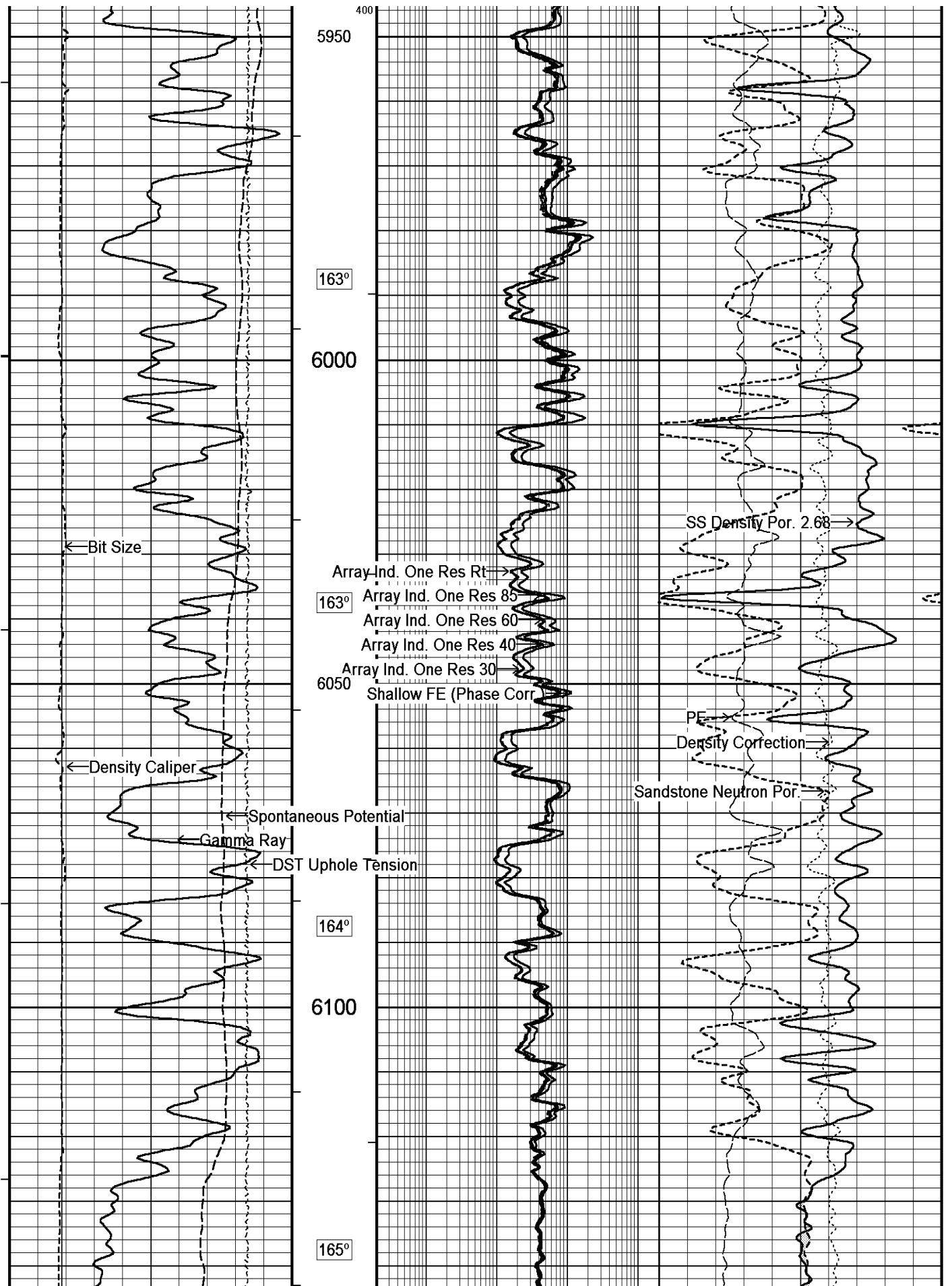
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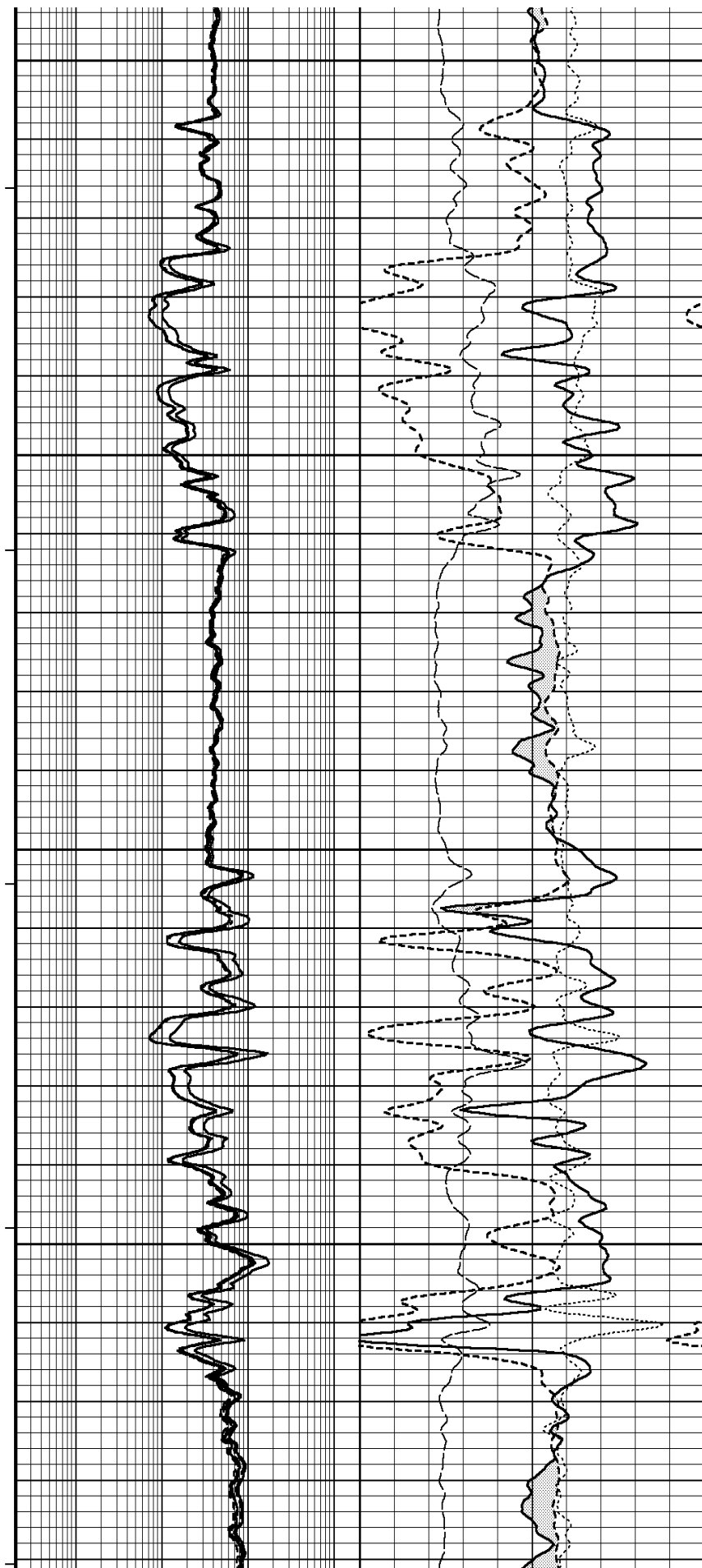
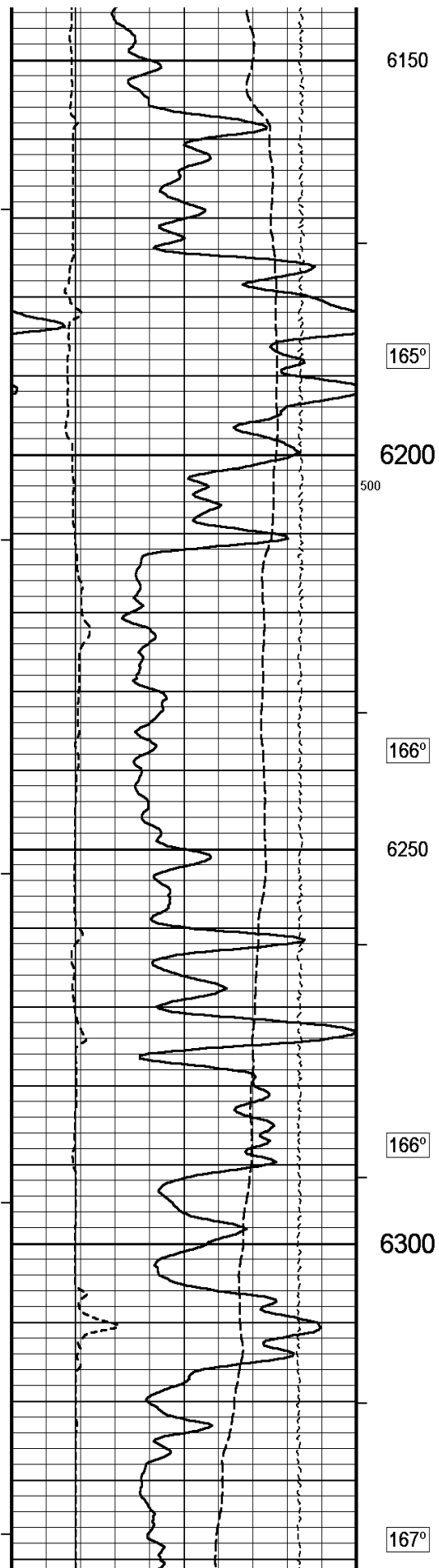


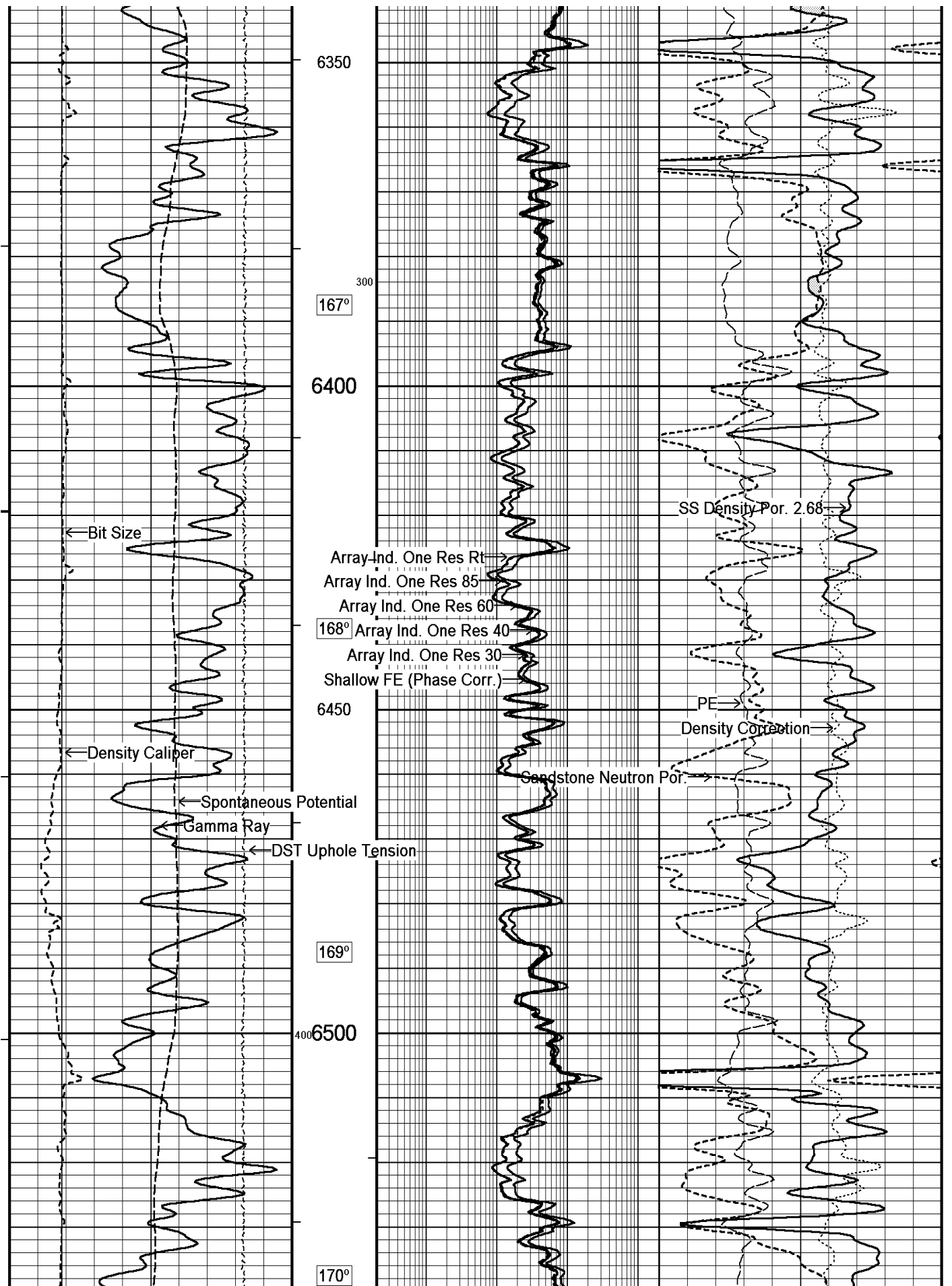
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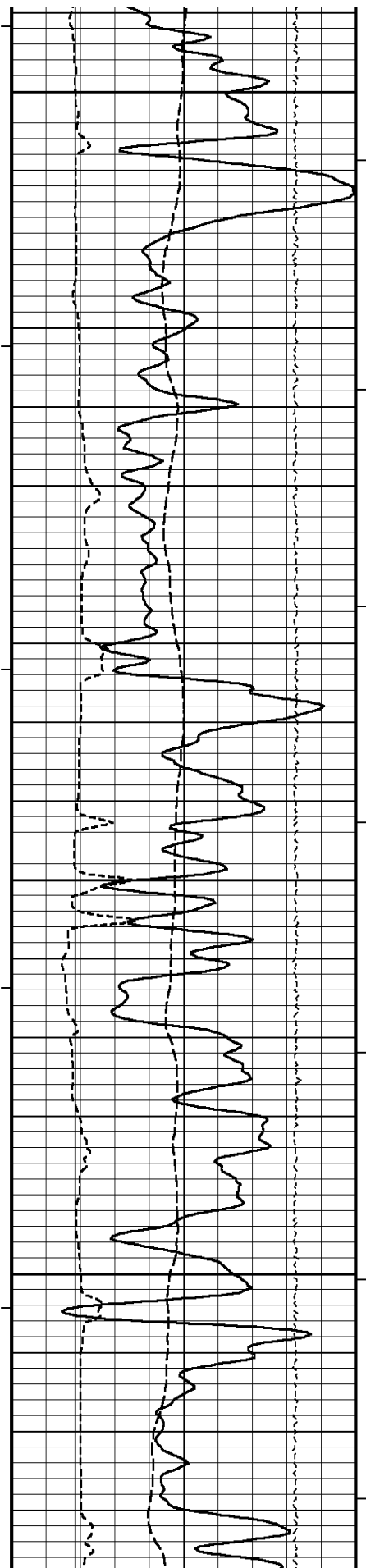












6550

171°

6600

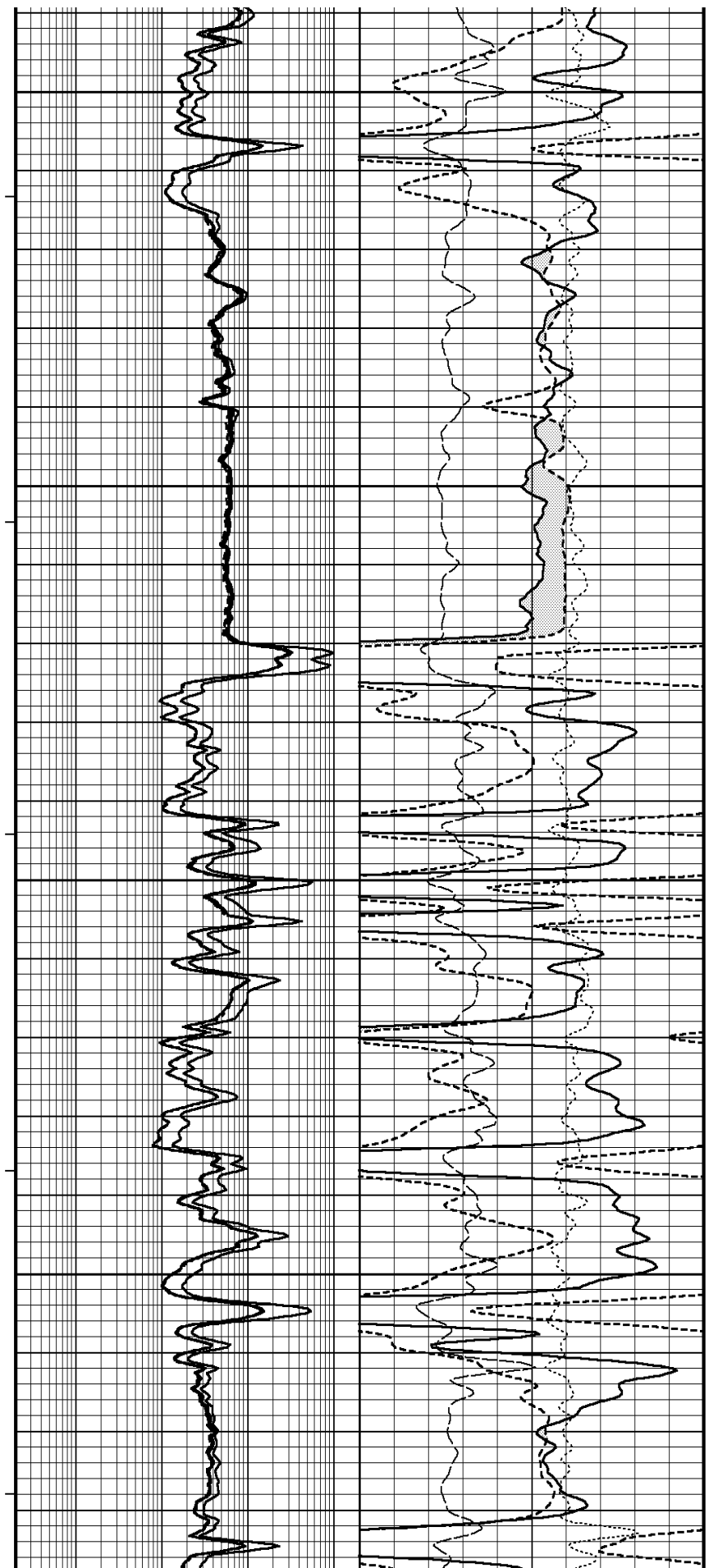
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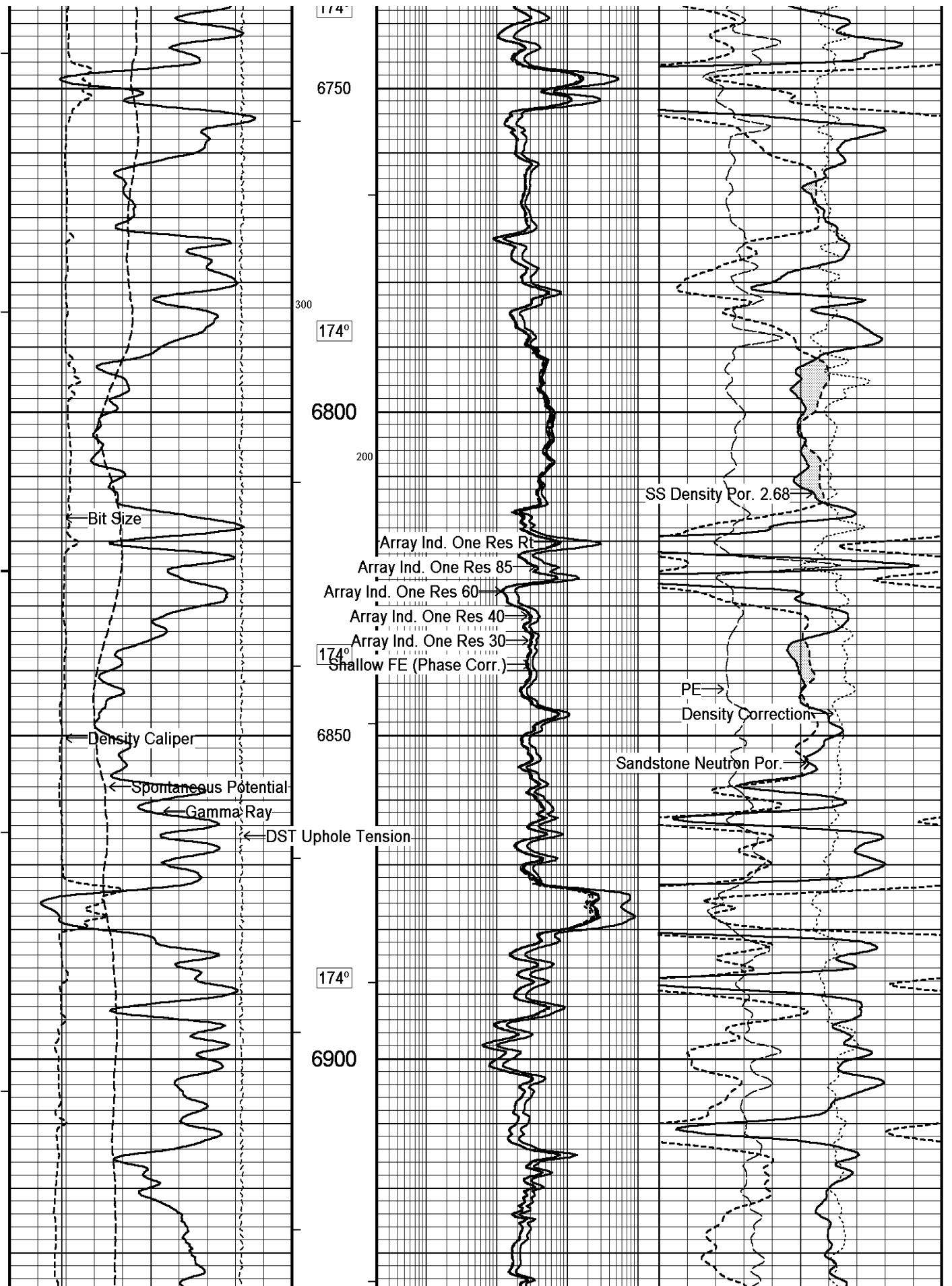
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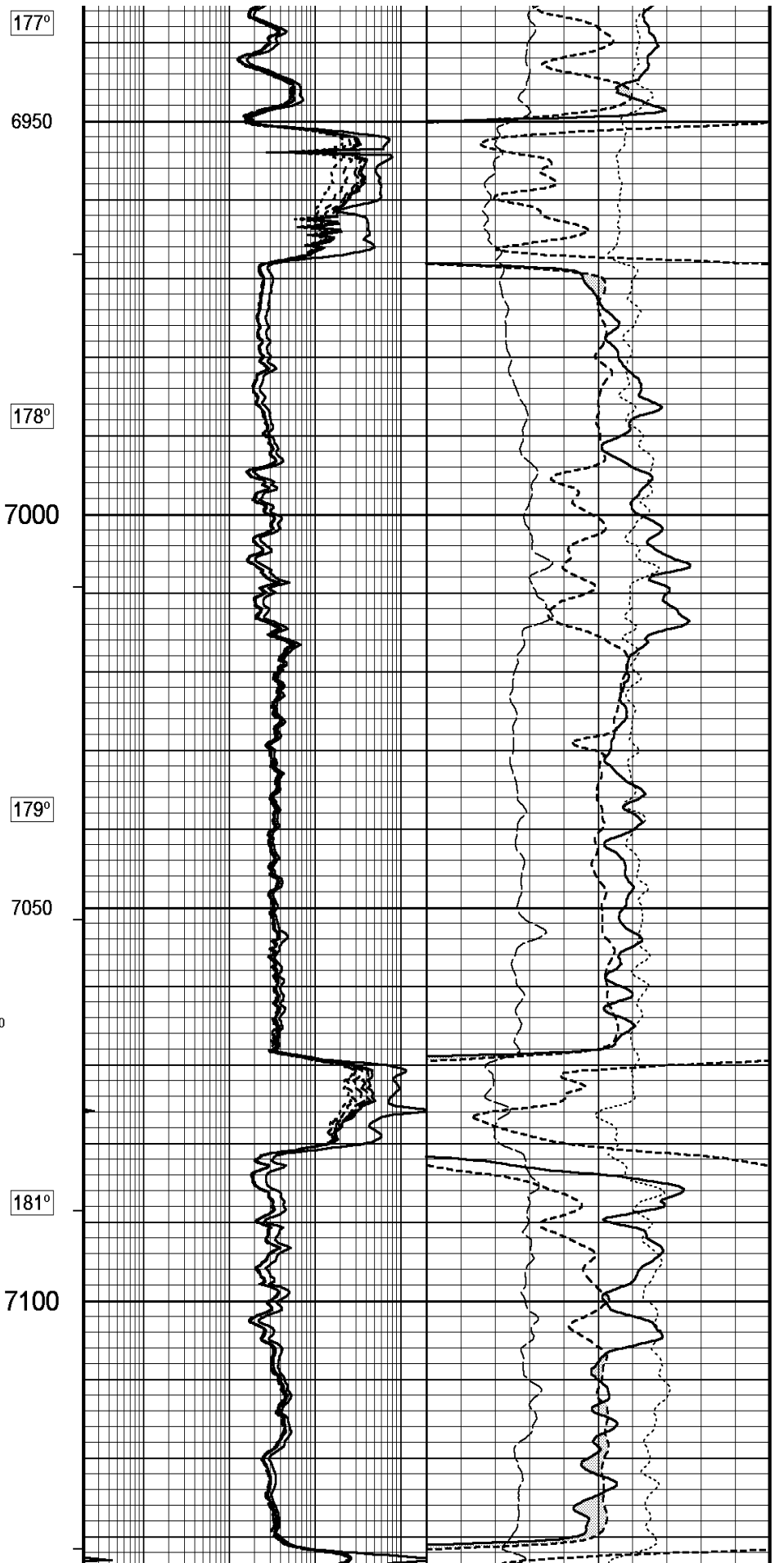
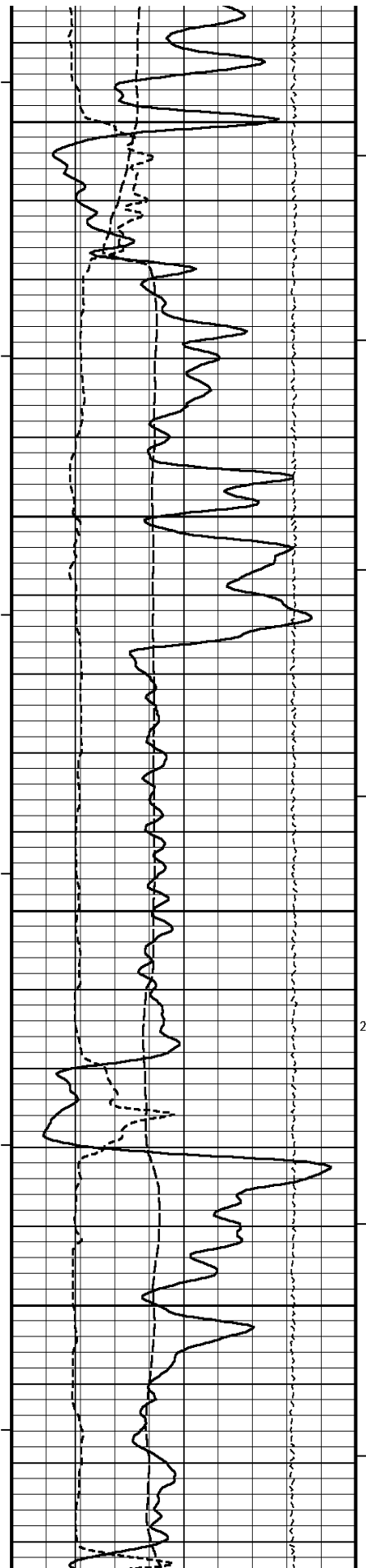
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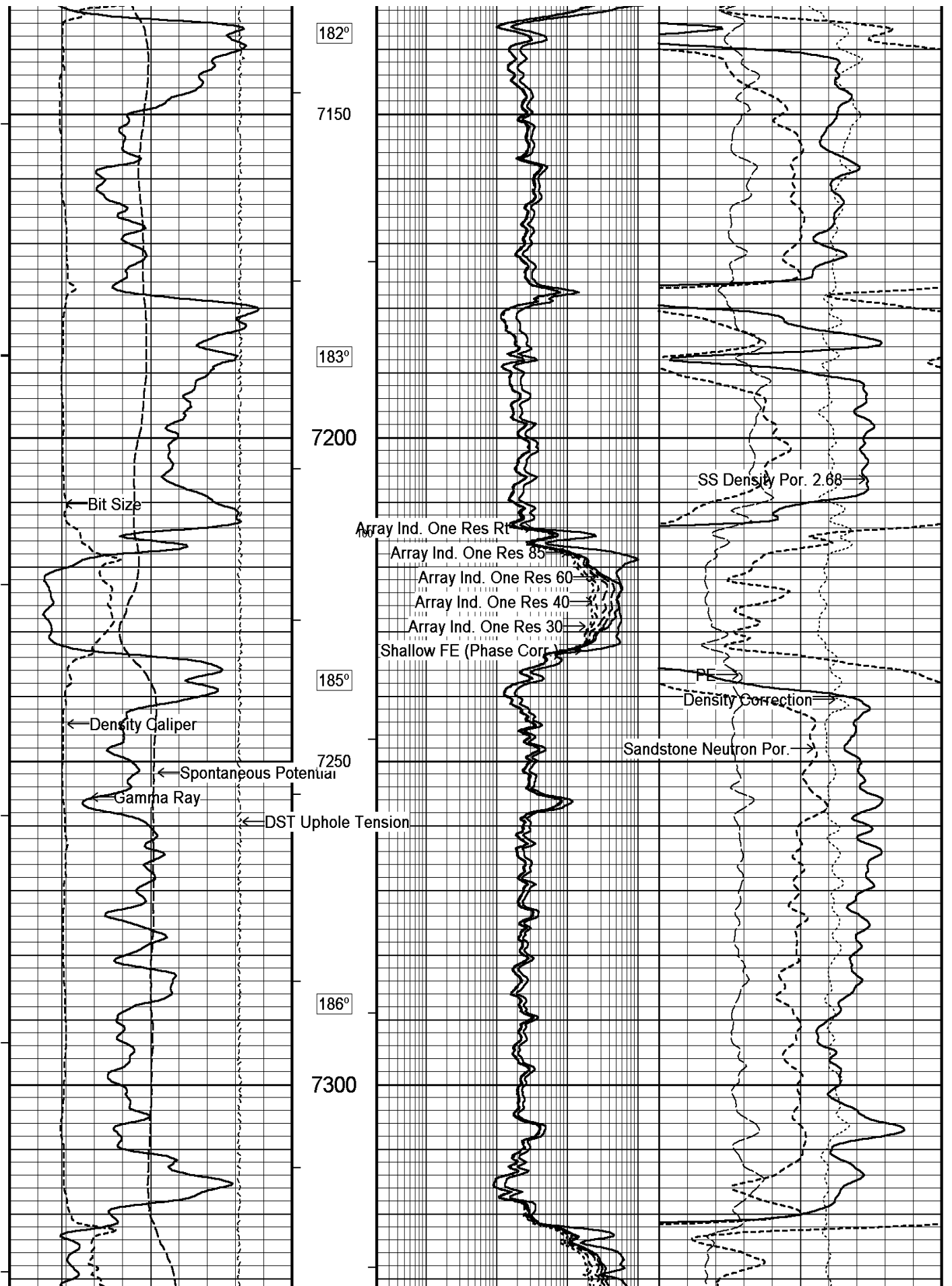
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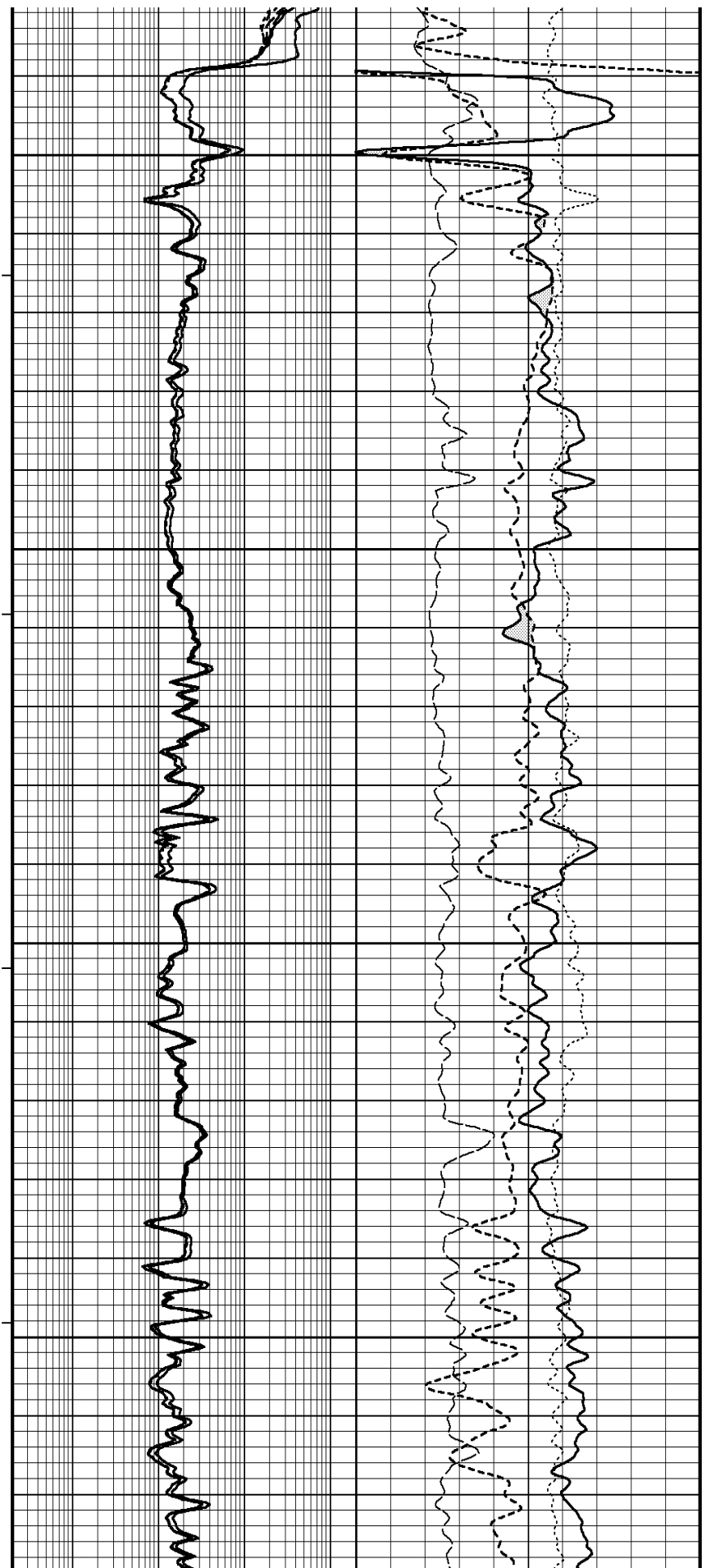
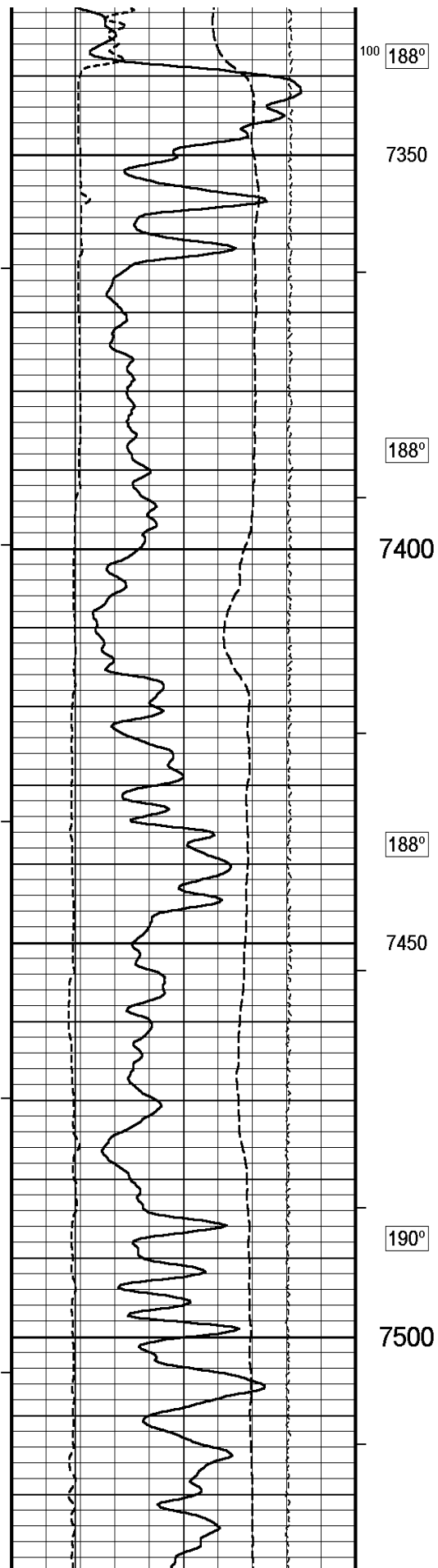
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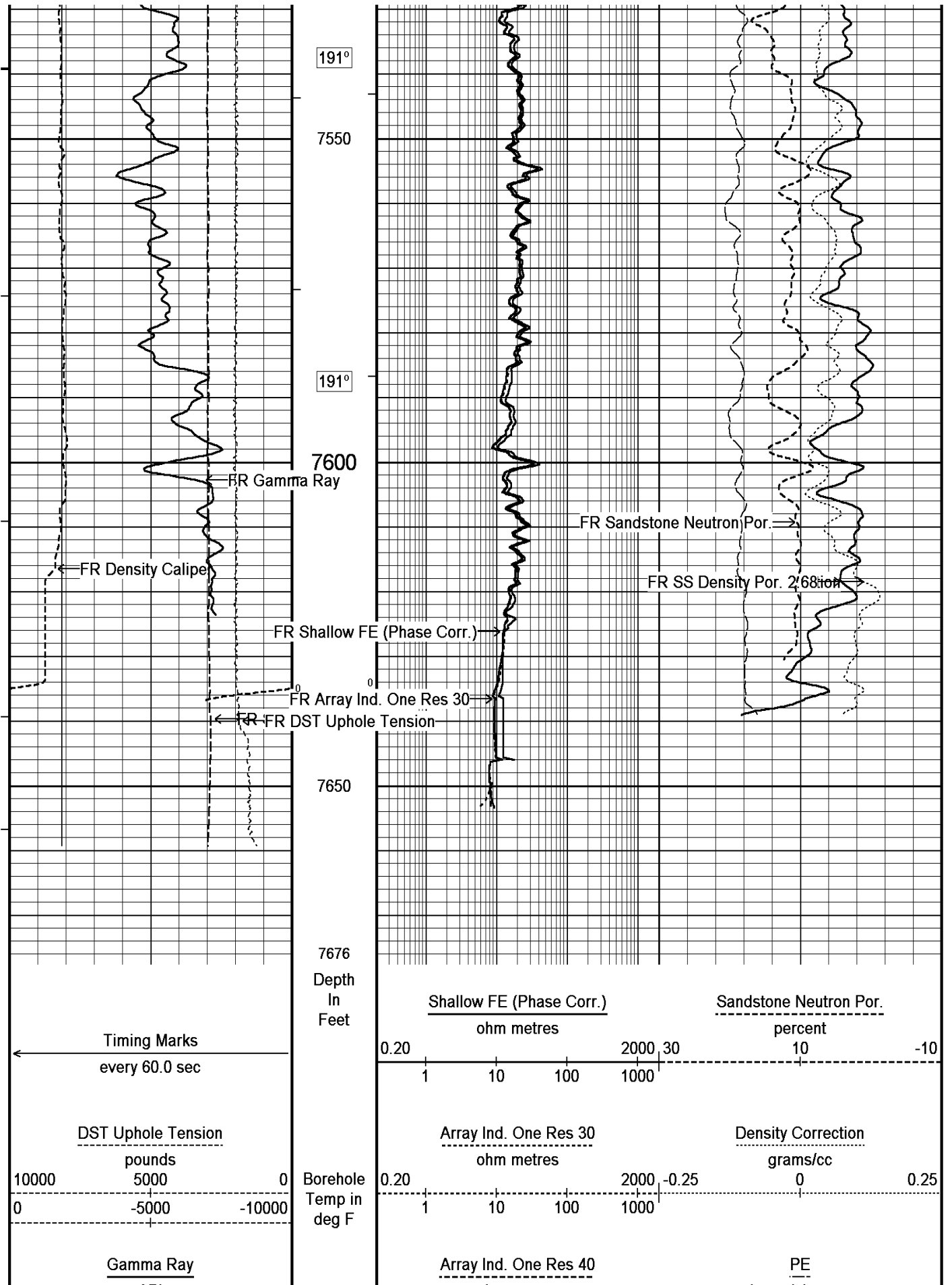


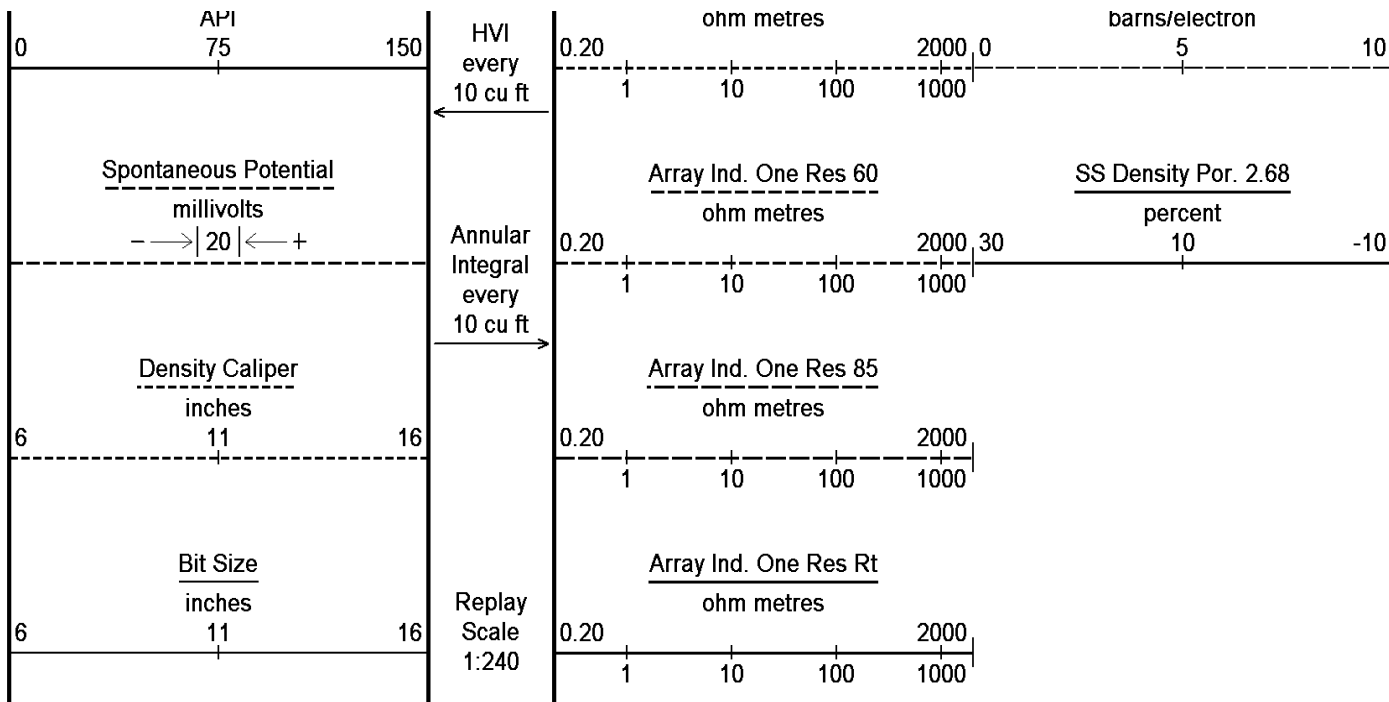










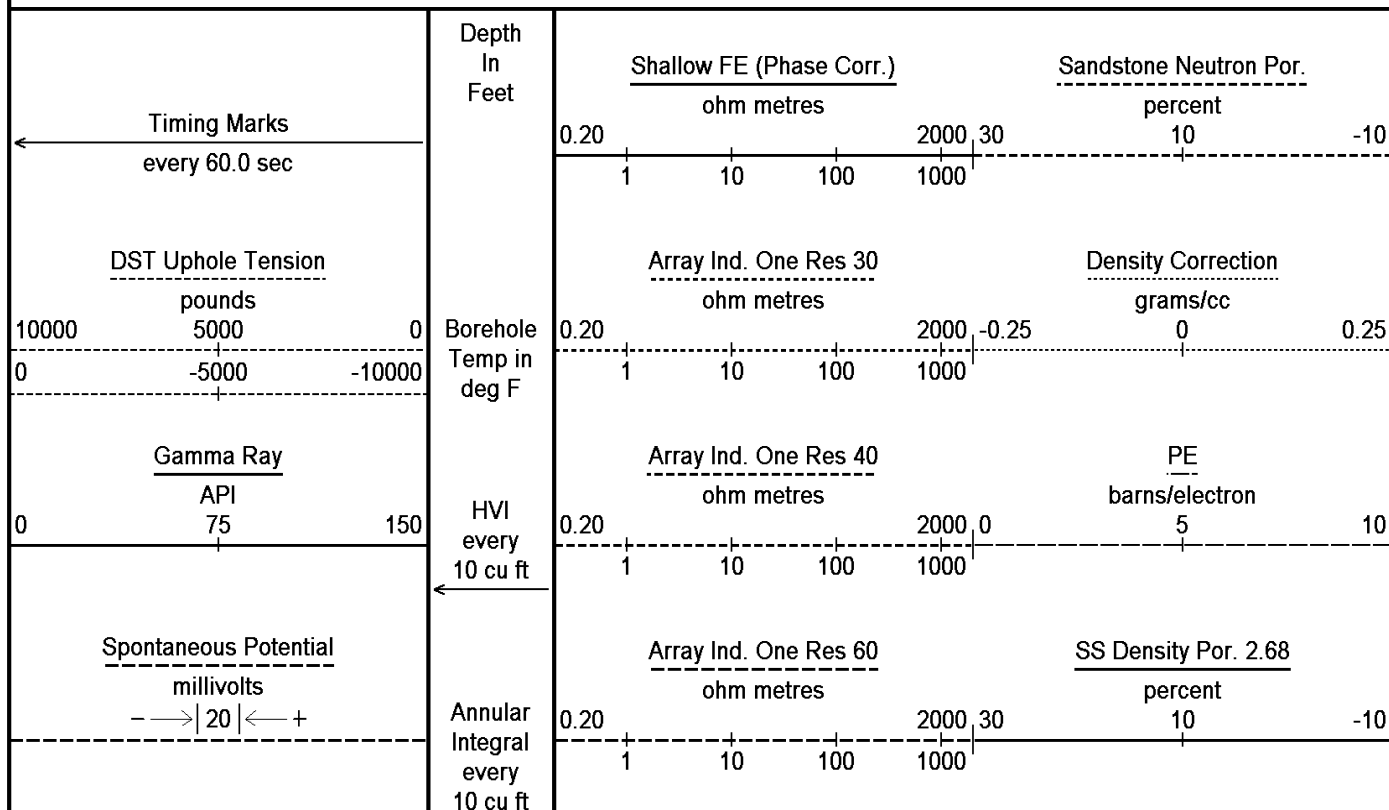


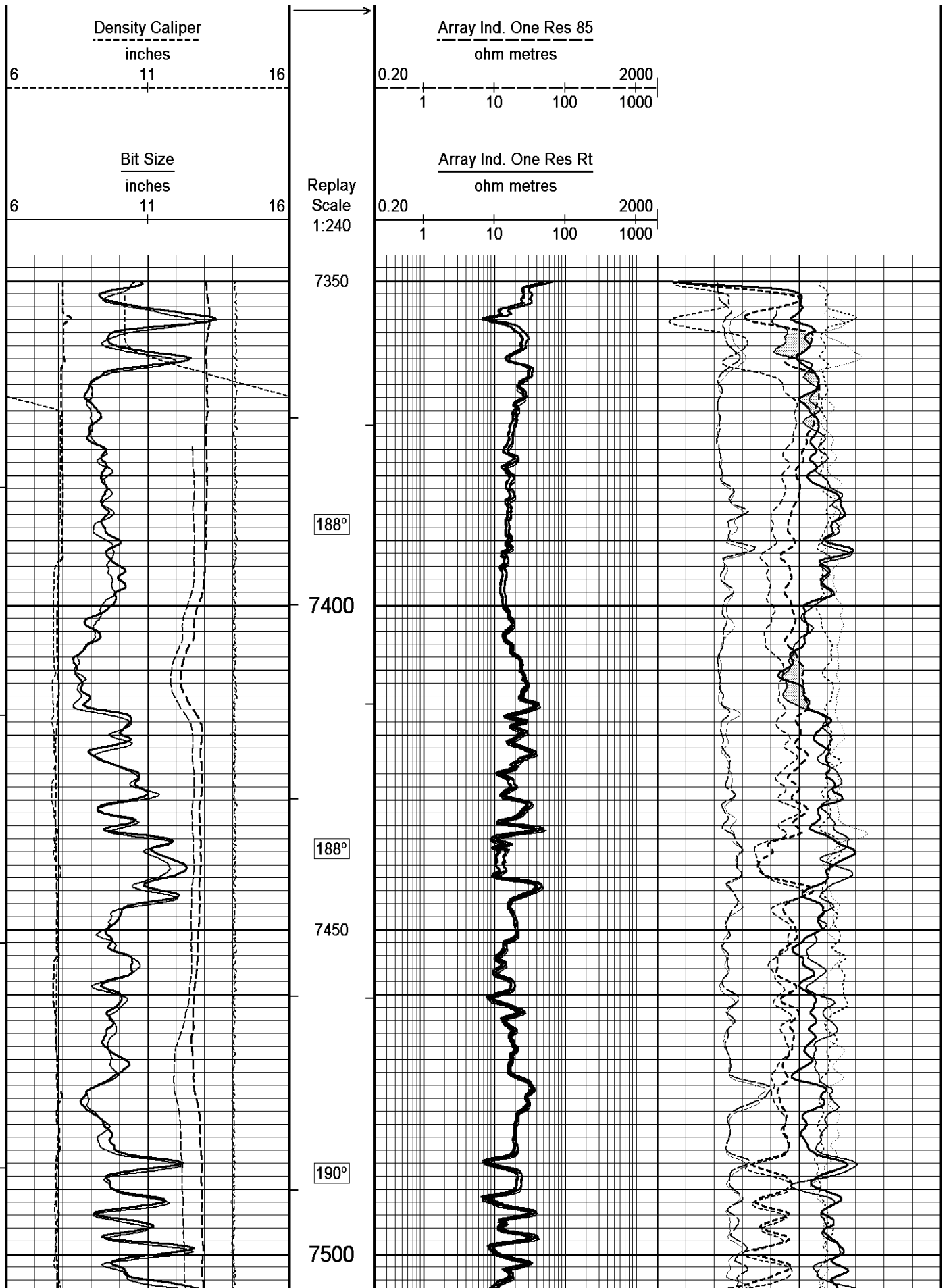
Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 10-MAY-2011 06:56  
 Filename: C:\MINIMUS\LOGS\Bill Barrett\CB TG Land 22D-20-692\MAIN.dta Recorded on 10-MAY-2011 03:12  
 System Versions: Logged with 11.02.3186 Processed with 11.02.3186 Plotted with 11.02.3186

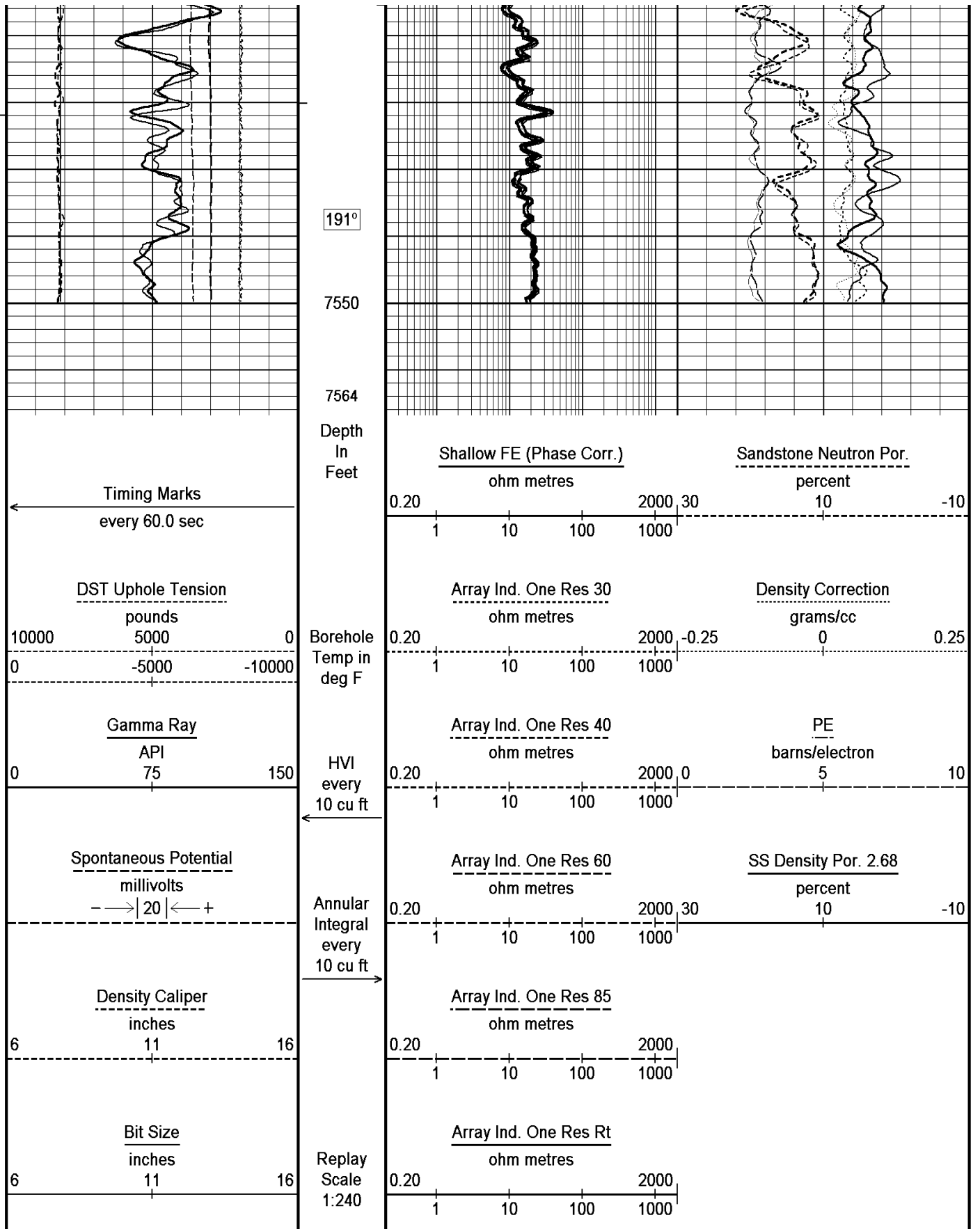
↑ **5 INCH MAIN LOG** ↑

↓ **OVERLAY** ↓

Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 10-MAY-2011 06:56  
 Filename: C:\MINIMUS\LOGS\Bill Barrett\CB TG Land 22D-20-692\MAIN.dta Recorded on 10-MAY-2011 03:12  
 Filename: C:\MINIMUS\LOGS\Bill Barrett\CB TG Land 22D-20-692\REPEAT2.dta Recorded on 10-MAY-2011 02:02  
 System Versions: Logged with 11.02.3186 Processed with 11.02.3186 Plotted with 11.02.3186







Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 10-MAY-2011 06:56

Filename: C:\MINIMUS\LOGS\Bill Barrett\CB TG Land 22D-20-692\MAIN.dta

Recorded on 10-MAY-2011 03:12

Filename: C:\MINIMUS\LOGS\Bill Barrett\CB TG Land 22D-20-692\REPEAT2.dta

Recorded on 10-MAY-2011 02:02

System Versions: Logged with 11.02.3186 Processed with 11.02.3186 Plotted with 11.02.3186



## BEFORE SURVEY CALIBRATION

C:\MINIMUS\LOGS\Bill Barrett\CB TG Land 22D-20-692\SETUP.dta

## General Constants All 000

Last Edited on 10-MAY-2011,00:16

## General Parameters

Mud Resistivity	2.700	ohm-metres
Mud Resistivity Temperature	82.000	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 10-MAY-2011 00:47

Reading No	Measured	Calibrated (lbs)
1	15586.83	0.00
2	16481.04	390.00

## High Resolution Temperature Calibration MCG-D.J 422

Field Calibration on 10-MAY-2011,00:18

	Measured	Calibrated(Deg F)
Lower	10.00	10.00
Upper	75.00	75.00

## High Resolution Temperature Constants MCG-D.J 422

Last Edited on

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

## SP Calibration MCG-D.J 422

Field Calibration on 10-MAY-2011,00:17

	Measured	Calibrated (mV)
Reference 1	102.1	100.0
Reference 2	-98.4	-100.0

## Gamma Calibration MCG-D.J 422

Field Calibration on 09-MAY-2011 23:22

	Measured	Calibrated (API)
Background	114	64
Calibrator (Gross)	1057	591
Calibrator (Net)	943	527

## Gamma Constants MCG-D.J 422

Last Edited on 10-MAY-2011,00:17

Gamma Calibrator Number	GRC-005	
Mud Density	1.27	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

## Neutron Calibration MDN-B.A 216

Base Calibration on 07-APR-2011,15:32

## Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
Ratio	3000	91	3714	110
	32.854		33.764	

## Field Calibrator at Base

	Calibrated (cps)	
Ratio	1653	2384
	0.693	

## Field Check

	Calibrated (cps)	
Ratio	1699	2358
	0.720	

## Neutron Constants MDN-B.A 216

Last Edited on 10-MAY-2011,02:15

Neutron Source Id	755	
Neutron Jig Number	6532	
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 53

Base Calibration on 05-APR-2011 11:14

Field Check on 10-MAY-2011,00:13

## Base Calibration

	Measured	Calibrated (ohm-m)
Reference 1	9.7	1.3
Reference 2	964.8	126.8

Base Check 280.5

Field Check 280.5

## FE Constants MFE-A.A 53

Last Edited on 10-MAY-2011,00:21

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

## High Resolution Temperature Calibration MAI-B.A 286

Field Calibration on 10-MAY-2011,00:27

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

## High Resolution Temperature Constants MAI-B.A 286

Last Edited on

Pre-filter Length 11

Induction Calibration MAI-B.A 286

Base Calibration on 15-APR-2011,20:48  
Field Check on 10-MAY-2011 00:49

Base Calibration

Test Loop Calibration Channel	Measured		Calibrated (mmho/m)	
	Low	High	Low	High
1	17.8	471.4	9.3	966.2
2	6.8	387.0	7.6	821.4
3	3.2	259.6	5.2	566.0
4	2.0	136.1	2.6	279.2

Array Temperature 75.2 Deg F

Channel	Base Check (mmho/m)		Field Check (mmho/m)	
	Low	High	Low	High
1	0.0	0.0	12.4	3856.5
2	0.0	0.0	29.1	3483.9
3	0.0	0.0	29.6	3043.9
4	0.0	0.0	19.3	2028.7
Deep	0.0	0.0	18.9	1995.7
Medium	0.0	0.0	43.4	4025.1
Shallow	0.0	0.0	42.0	5128.5

Array Temperature 0.0 73.5 Deg F

Induction Constants MAI-B.A 286

Last Edited on 10-MAY-2011,00:21

Induction Model	RtAP-WBM		
Caliper for Borehole Corr.	Bit Size		
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	



0.00  
0.00

0.00  
0.00

### AFTER SURVEY CALIBRATION

C:\MINIMUS\LOGS\Bill Barrett\CB TG Land 22D-20-692\SETUP.dta

#### Gamma Check MCG-D.J 422

Field Calibration on 09-MAY-2011 23:22  
After Survey Check on 10-MAY-2011 06:47

	Before (API)	After (API)
Background	64	88
Calibrator (Gross)	591	714
Calibrator (Net)	527	626

#### Neutron Check MDN-B.A 216

Before Survey Check on 09-MAY-2011 23:28  
After Survey Check on 10-MAY-2011 06:53

Near (cps)		Far (cps)	
Before	After	Before	After
1699	1596	2358	2359
Ratio		Before	After
		0.720	0.677

#### FE Check MFE-A.A 53

Before Survey Check 10-MAY-2011,00:13  
After Survey Check on 10-MAY-2011 05:54

Before (ohm-m)	After (ohm-m)
280.5	280.2

#### Photo Density Check MPD-B 157

Before Survey Check on  
After Survey Check on 10-MAY-2011 05:58

##### Density Check

Near		Far	
Before	After	Before	After
0.0	1007.3	0.0	1220.0

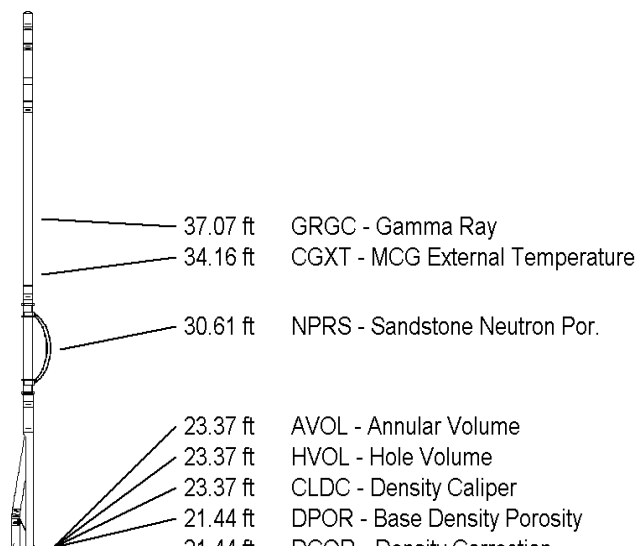
##### PE Check

	Before	After
WS	0.0	180.8
WH	0.0	881.2

### DOWNHOLE EQUIPMENT

C:\MINIMUS\LOGS\Bill Barrett\CB TG Land 22D-20-692\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
- SHA-J.A Compact Swivel Head Adaptor  
SHA-J.A 316 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in
- Compact Comms Gamma  
MCG-D.J 422 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in
- Compact Neutron  
MDN-B.A 216 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in
- Compact Density/Caliper  
MPD-B 157 LG: 9.59 ft WT: 90.4 lb OD: 2.45 in
- SKJ-E.A Compact Knuckle Joint

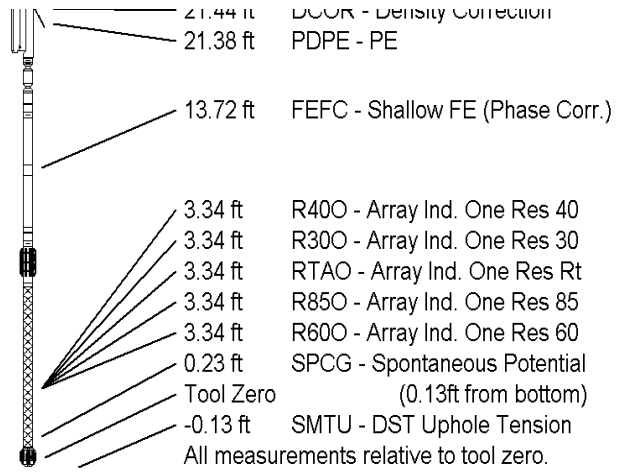


SKJ-E.A 260 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

Compact Focussed Electric  
MFE-A.A 53 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

Compact Induction  
MAI-B.A 286 LG: 10.81 ft WT: 48.5 lb OD: 2.24 in

Total Length: 46.23 ft Weight: 363.8 lb



COMPANY	BILL BARRETT CORPORATION
WELL	CB-TG LAND 22D-20-692
FIELD	MAMM CREEK
PROVINCE/COUNTY	GARFIELD
COUNTRY/STATE	U.S.A. / COLORADO

Elevation Kelly Bushing	5552.00	feet	First Reading	7640.00
Elevation Drill Floor		feet	Depth Driller	7645.00 feet
Elevation Ground Level	5529.00	feet	Depth Logger	7640.00 feet



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