



Weatherford
180

ARRAY INDUCTION
SHALLOW FOCUSED
ELECTRIC LOG

COMPANY				SANDRIDGE EXPLORATION AND PRODUCTION LLC.			
WELL				ALTON 3306 1-23			
FIELD				STOHRVILLE			
PROVINCE/COUNTY				HARPER			
COUNTRY/STATE				U.S.A / KANSAS			
LOCATION				660' FNL & 560' FWL			
SEC	TWP	RGE	Other Services				
23	33S	6W	MPD/MDN				
API Number	15-077-219520000		MML				
Permit Number	DC13109		SGS				
Permanent Datum G.L., Elevation 1308 feet						Elevations:	
Log Measured From KB						KB 1317.00	
Drilling Measured From K.B. @ 9 FEET						DF 1316.00	
Date	27-JUL-2013					GL 1308.00	
Run Number	ONE						
Service Order	3539902						
Depth Driller	4920.00					feet	
Depth Logger	4918.00					feet	
First Reading	4915.00					feet	
Last Reading	628.00					feet	
Casing Driller	630.00					feet	
Casing Logger	628.00					feet	
Bit Size	7.875					inches	
Hole Fluid Type	CHEMICAL						
Density / Viscosity	8.80 lb/USg		43.00 CP				
PH / Fluid Loss	9.80		8.60 ml/30Min				
Sample Source	FLOWLINE						
Rm @ Measured Temp	0.66 @ 83.0		ohm-m				
Rmf @ Measured Temp	0.48 @ 83.0		ohm-m				
Rmc @ Measured Temp	0.80 @ 83.0		ohm-m				
Source Rmf / Rmc	CALC	CALC					
Rm @ BHT	0.41 @134.0		ohm-m				
Time Since Circulation	4 HOURS						
Max Recorded Temp	134.00		deg F				
Equipment / Base	13057		LIB				
Recorded By	ROB HOFFMAN						
Witnessed By	TAMMY ALCORN					GREG RAVERA	
JOB #	LB13-215						

BOREHOLE RECORD

Last Edited: 27-JUL-2013 23:40

Bit Size inches	Depth From feet	Depth To feet
7.875	630.00	4920.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	8.625	0.00	630.00	24.00

REMARKS

- SOFTWARE ISSUE: WLS 13.05.9583.

MCG, SGS, MML, MDN, MPD, MFE, MAI RUN IN COMBINATION.

- HARDWARE: DUAL BOWSPRING USED ON MDN.
0.5 INCH STANDOFF USED ON MFE.
0.5 INCH STANDOFF USED ON MAI.

- 2.71 G/CC LIMESTONE DENSITY MATRIX USED TO CALCULATE POROSITY.

- BOREHOLE RUGOSITY, TIGHT PULLS, AND WASHOUTS WILL AFFECT DATA QUALITY.

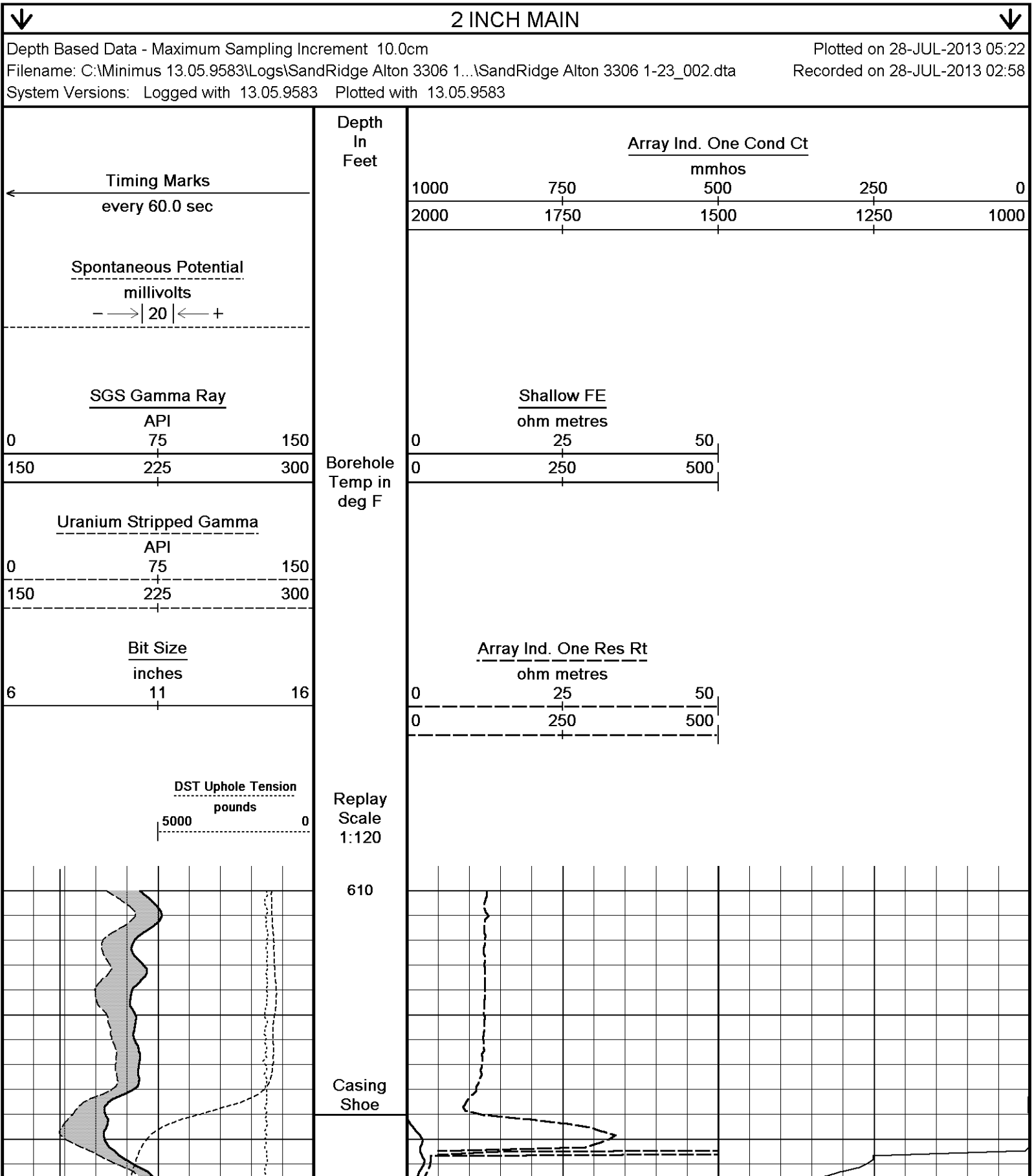
- ALL INTERVALS LOGGED AND SCALED PER CUSTOMER'S REQUEST.

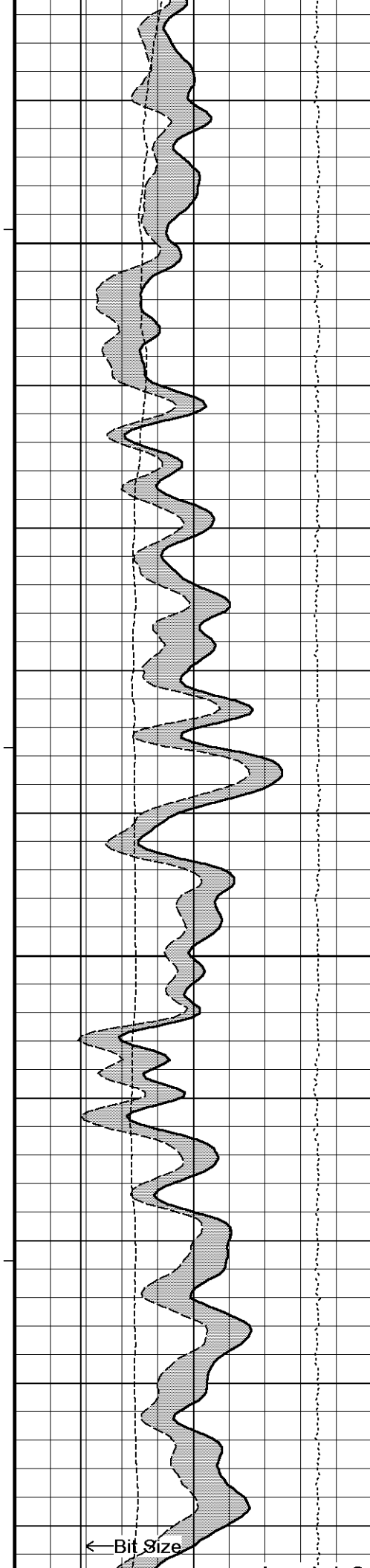
- ANNULAR HOLE VOLUME WITH 5.5 INCH PRODUCTION CASING FROM TD TO SURFACE CASING: 442 CU.FT.

- RIG: HORIZON RIG #3

- ENGINEER: ROB HOFFMAN

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.



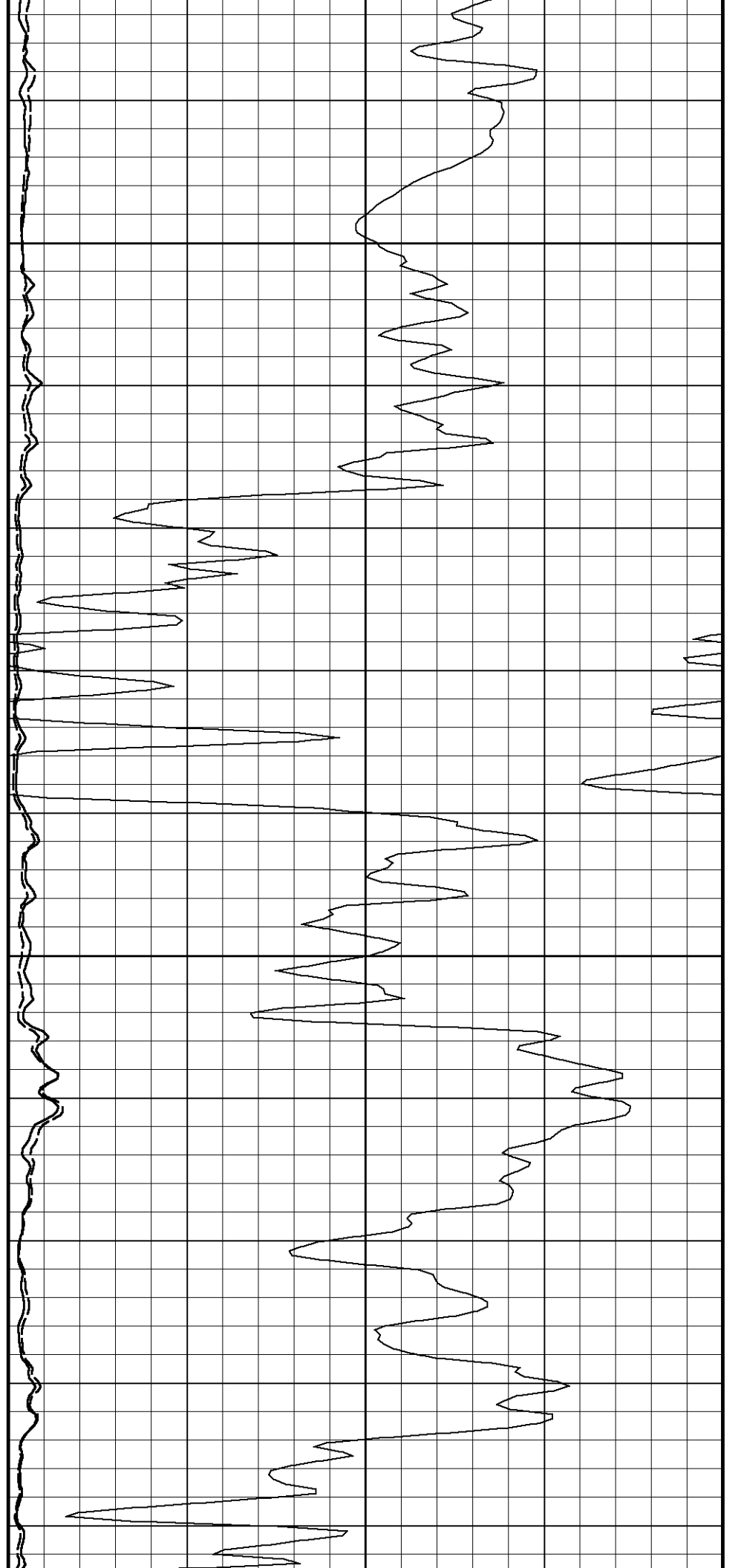


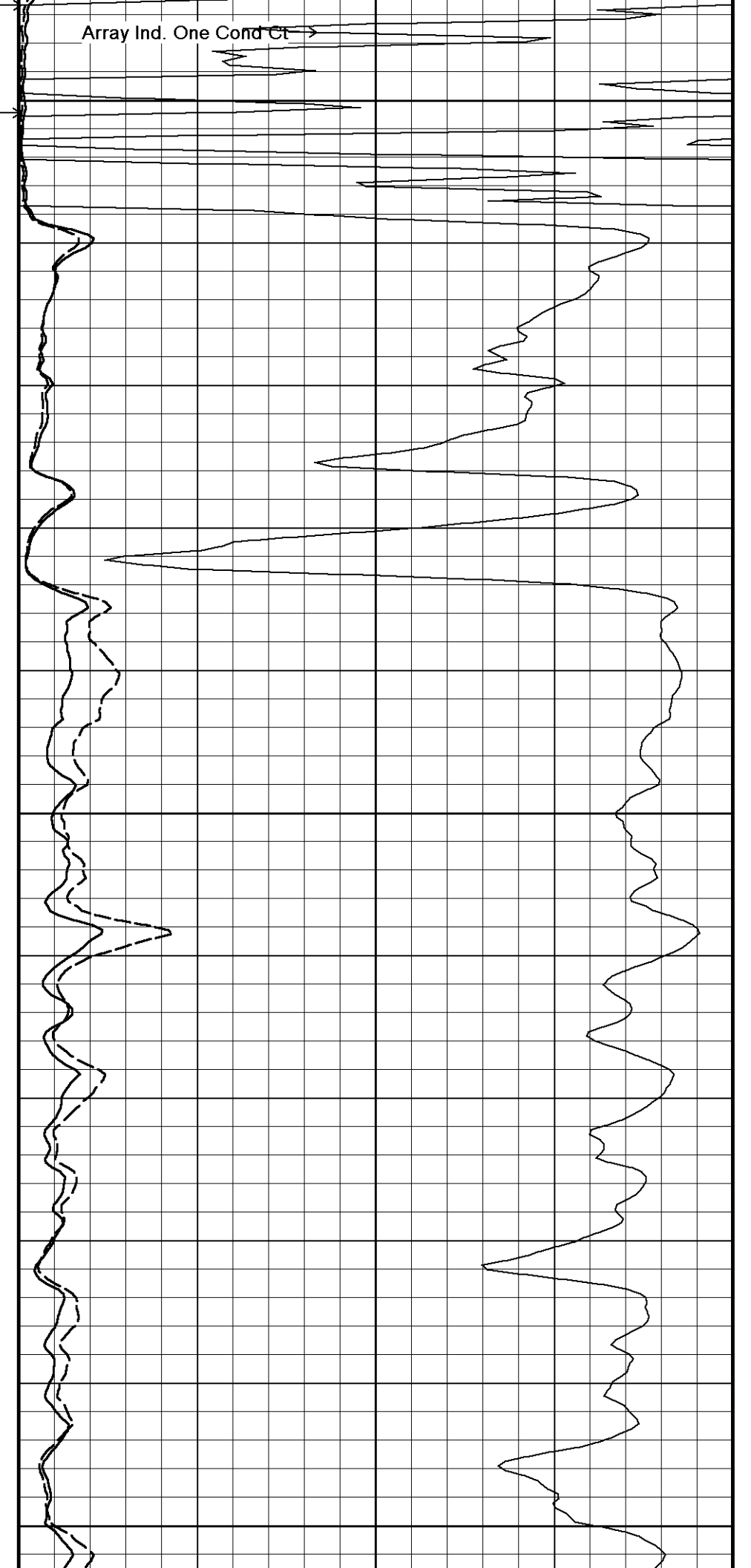
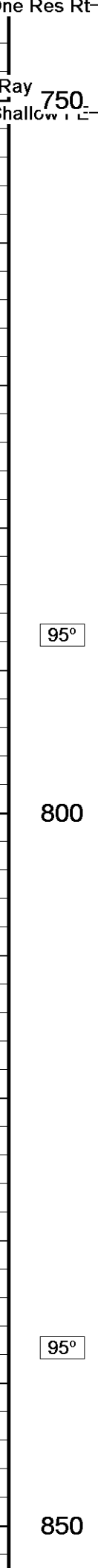
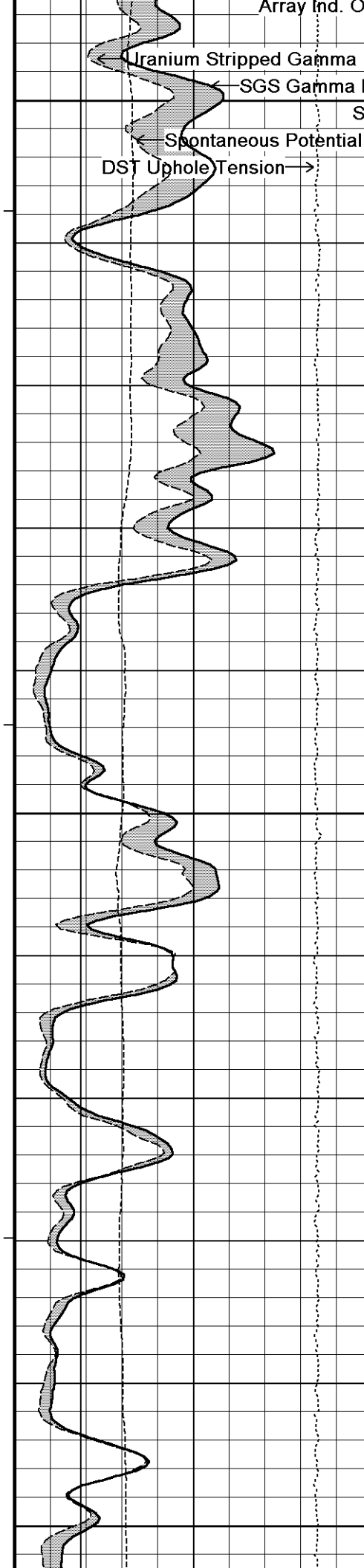
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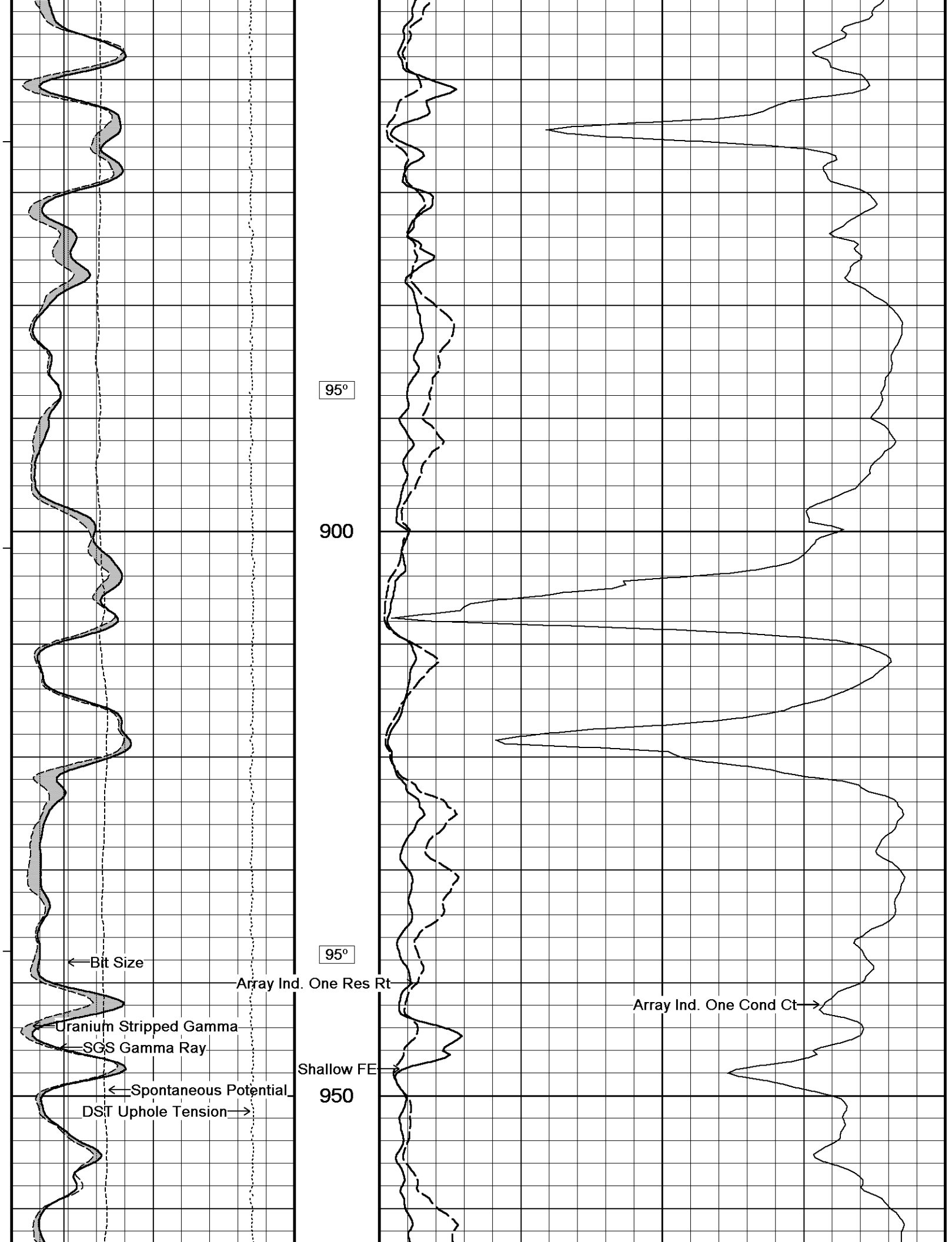
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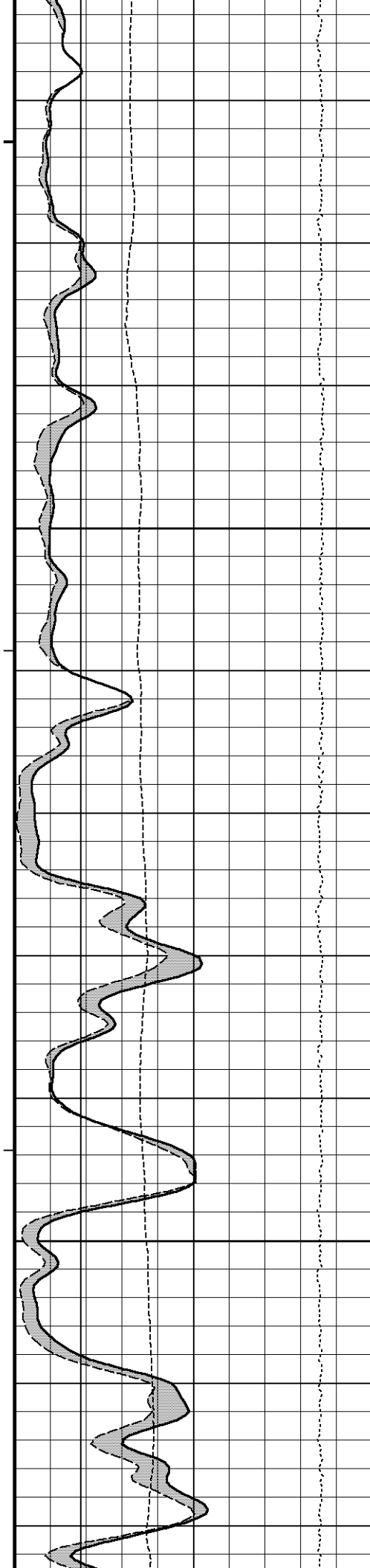
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94°







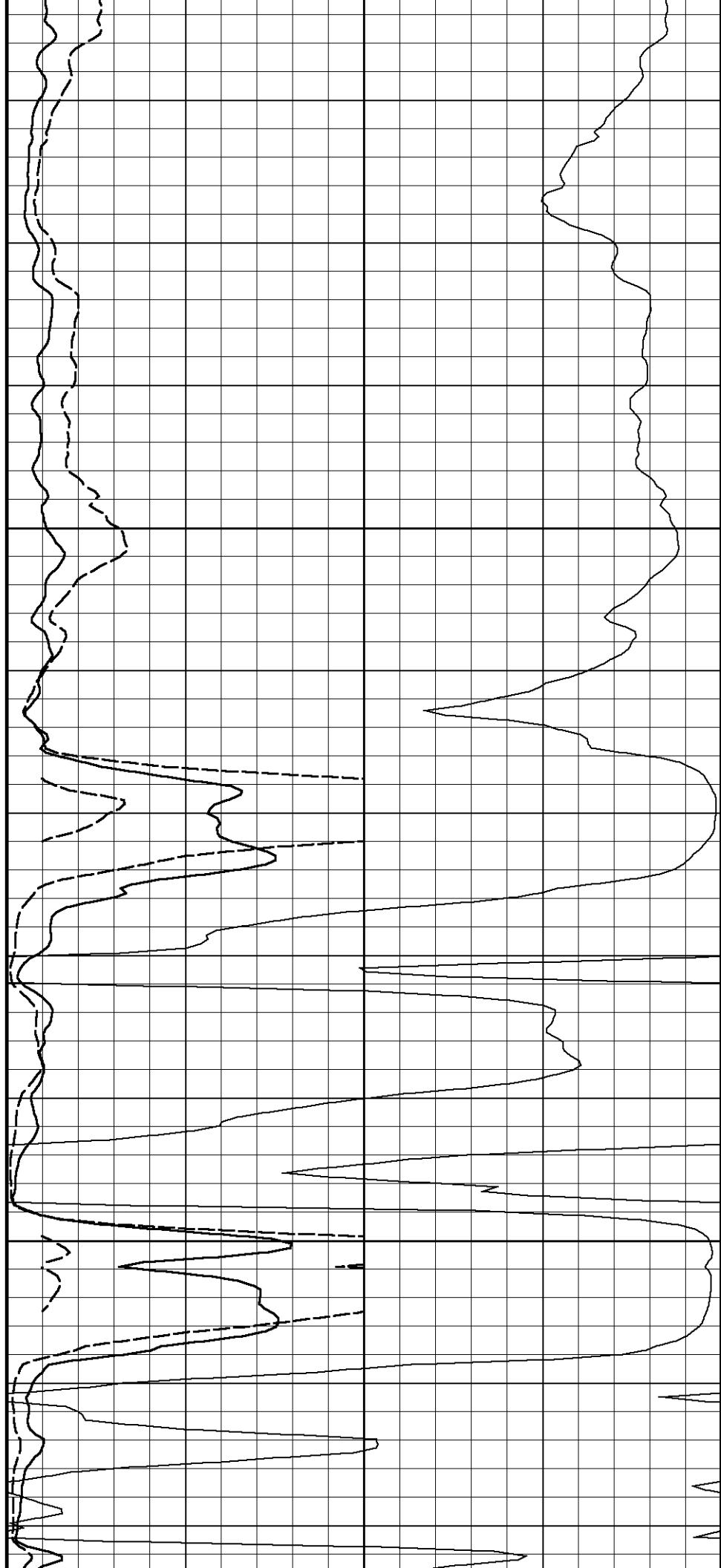


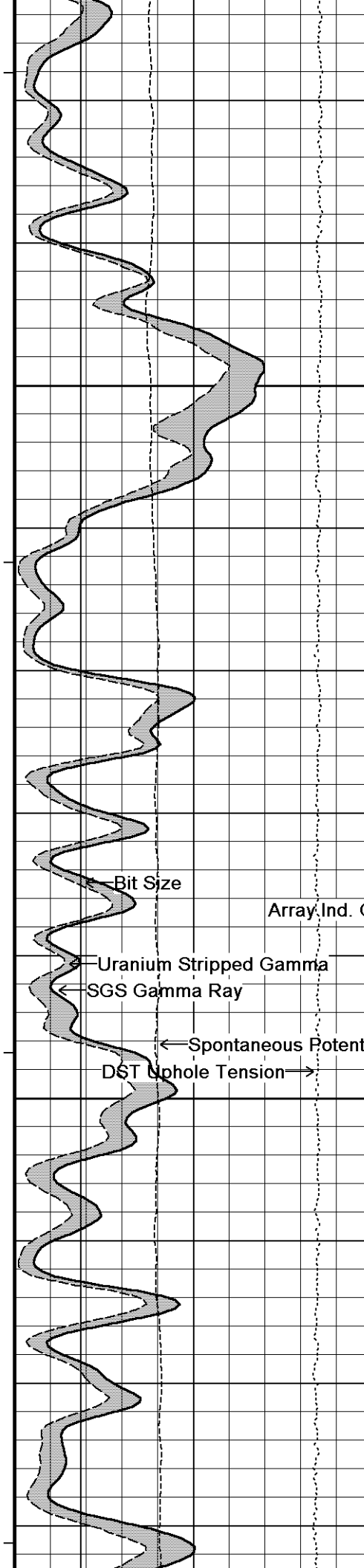
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1000

95°

1050



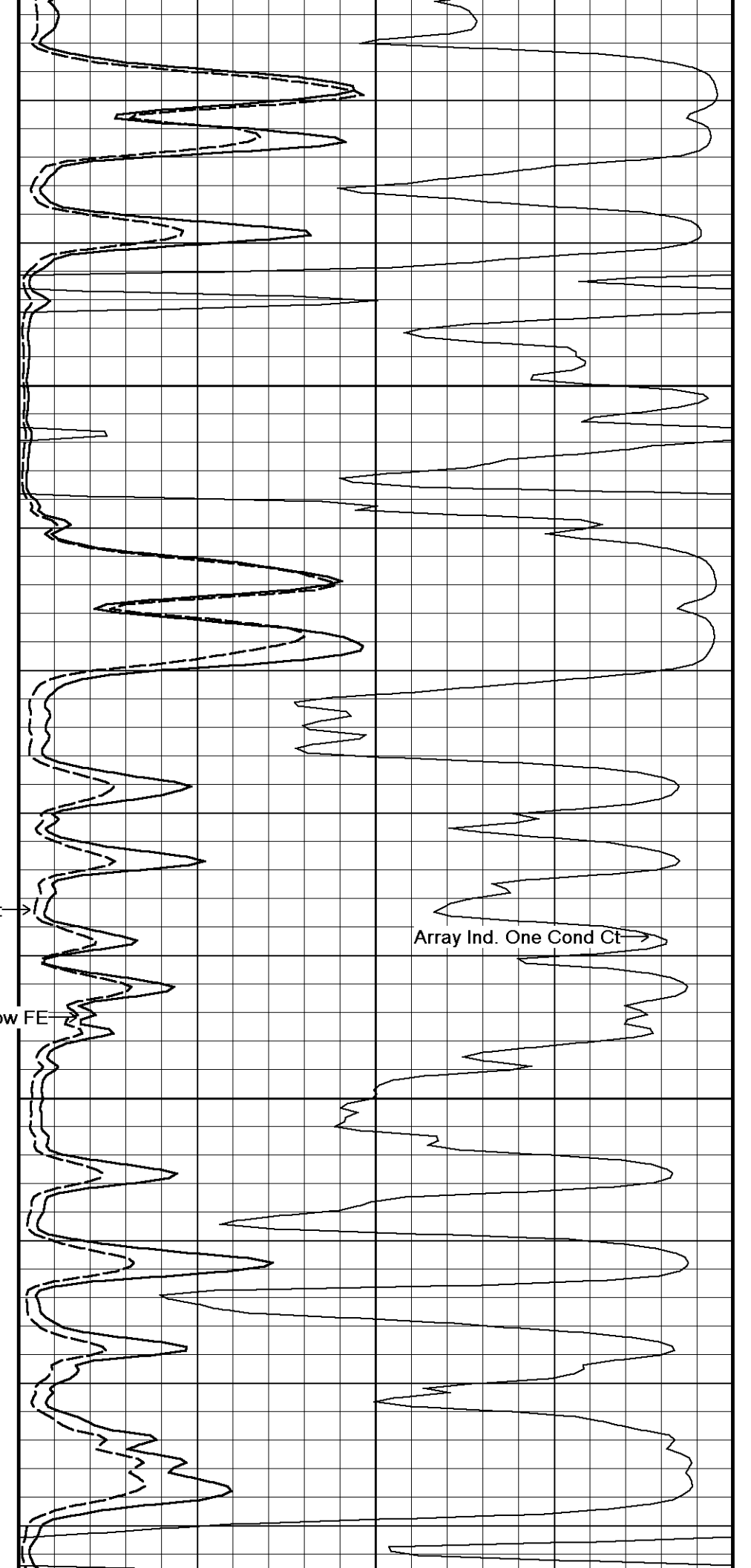


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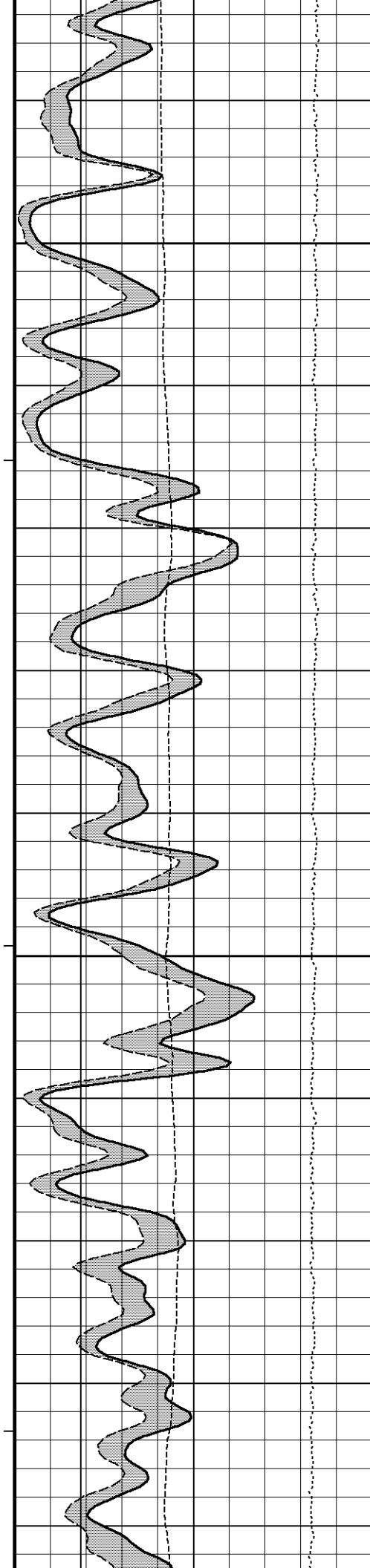
1100

95°

1150



Array Ind. One Cond Ct



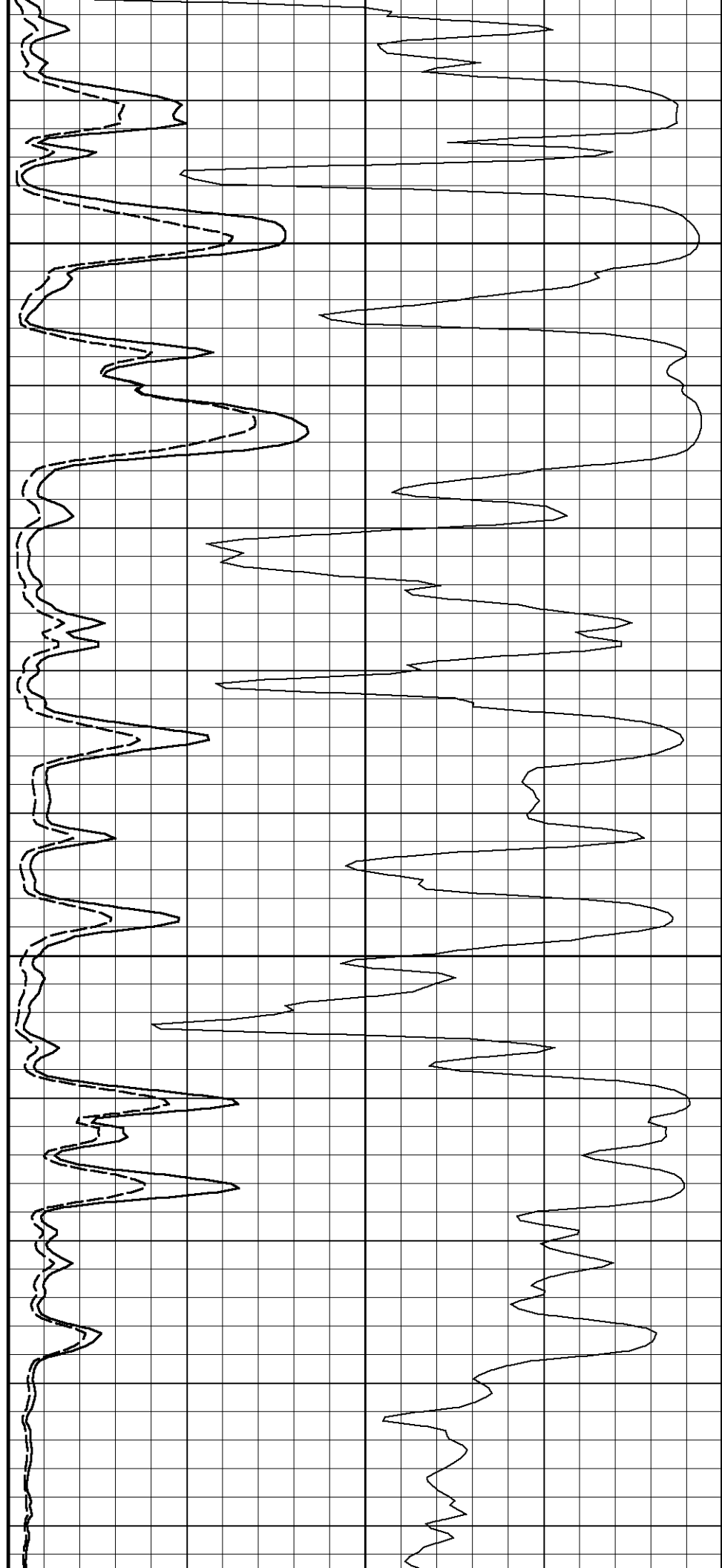
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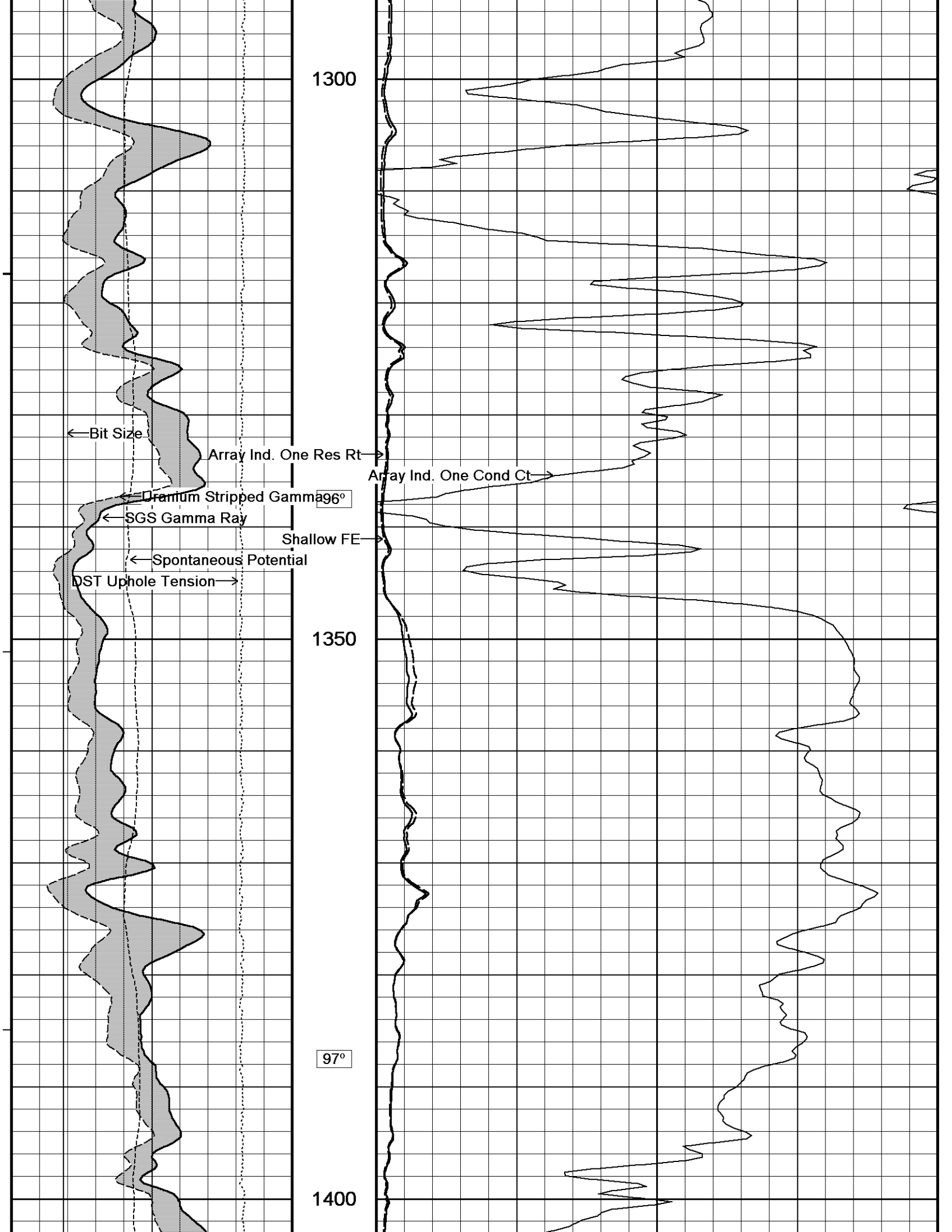
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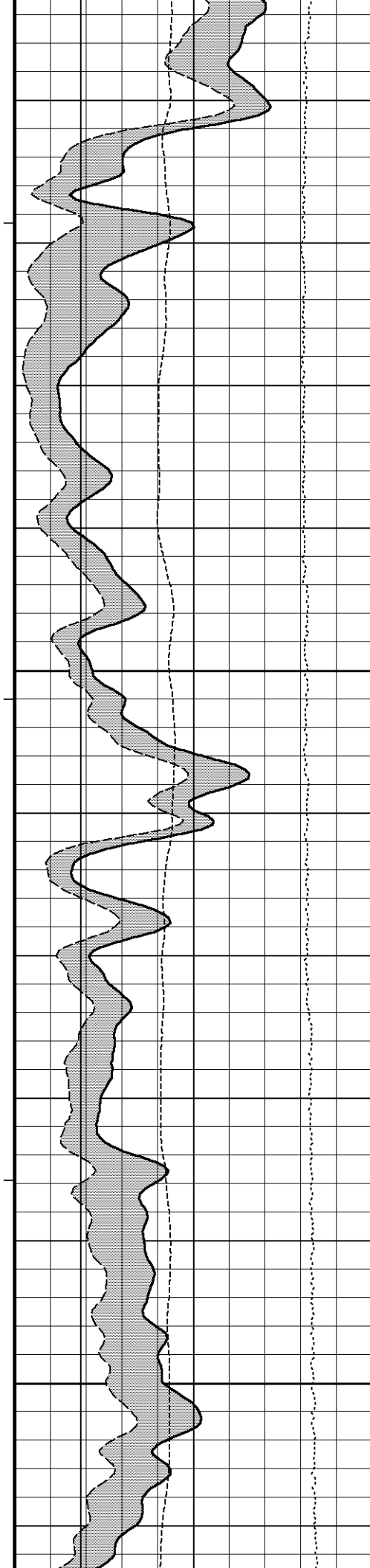
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1250

96°





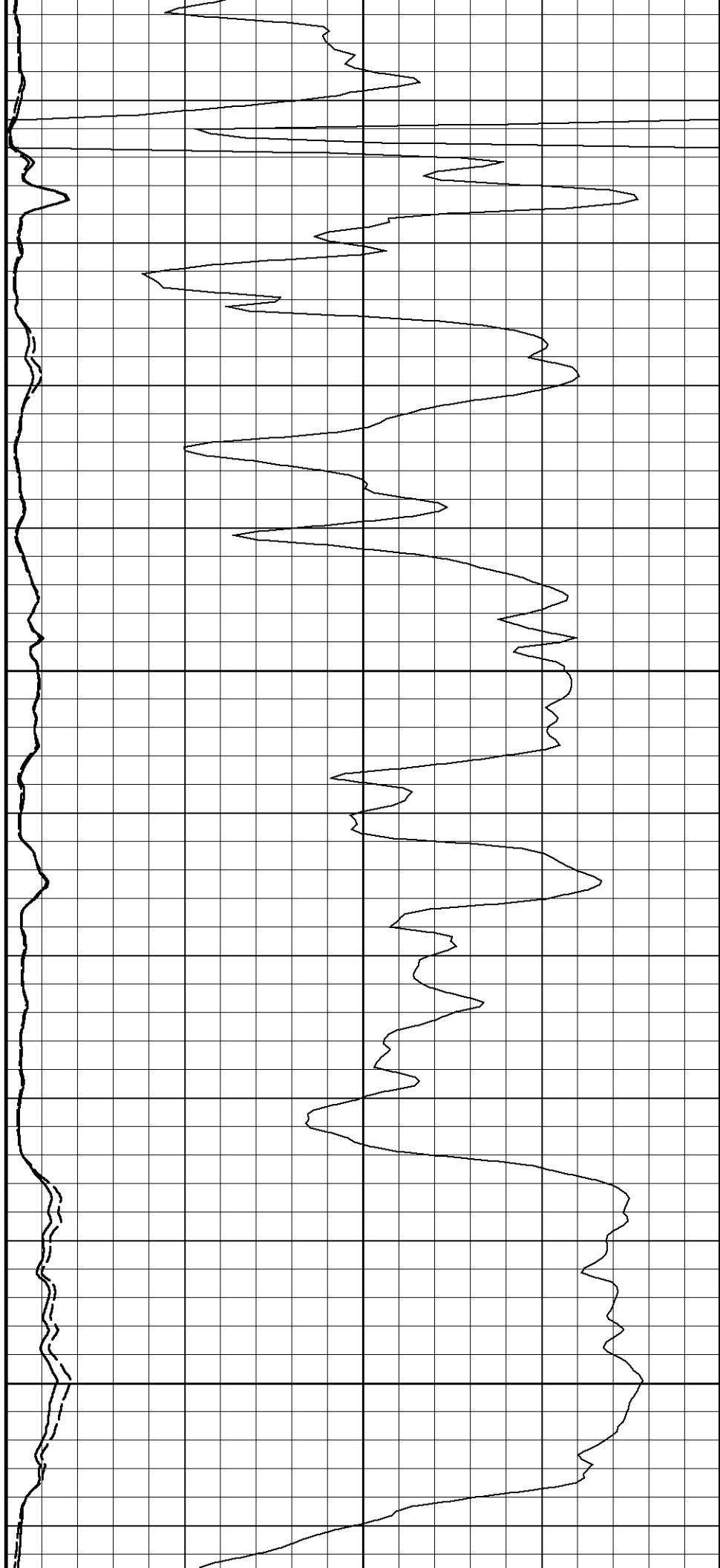


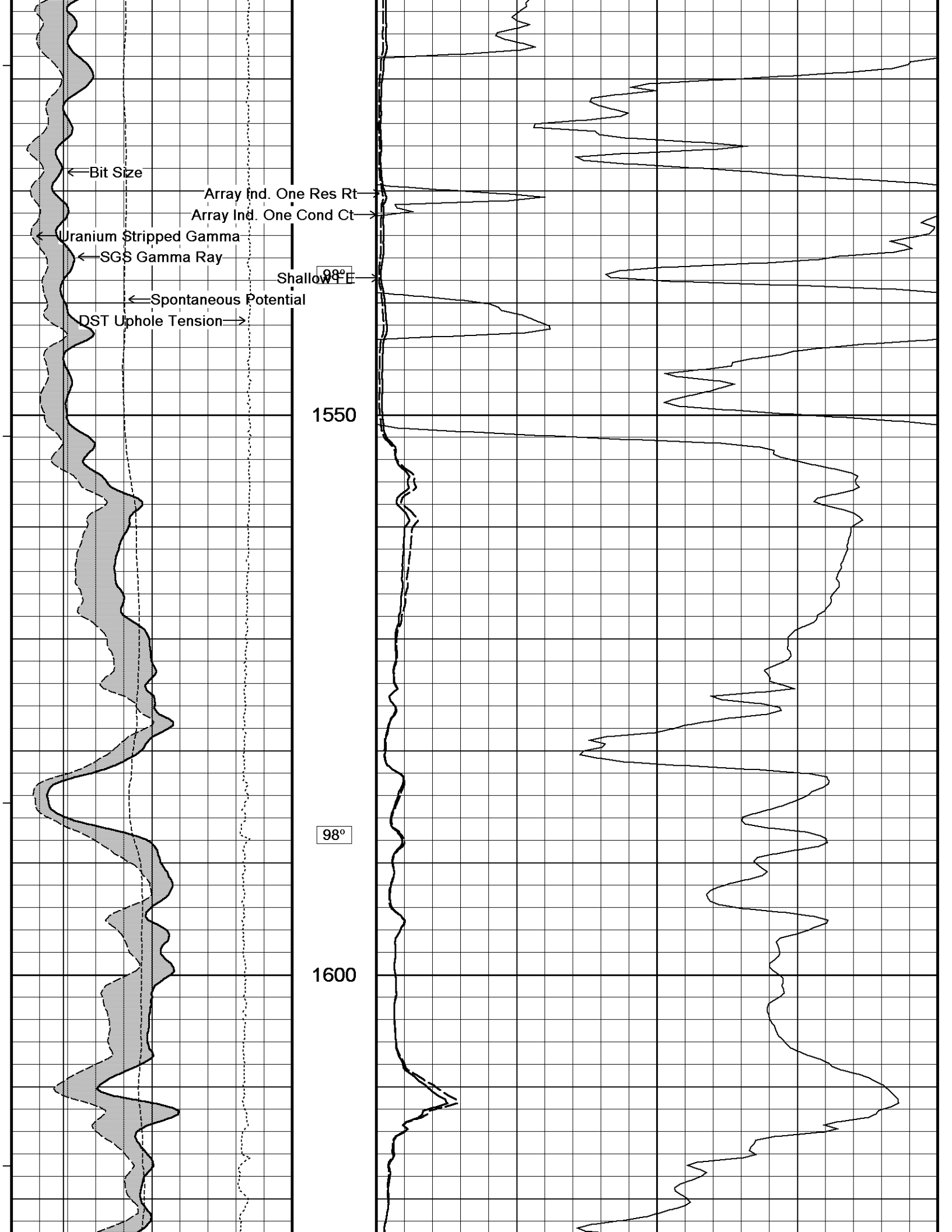
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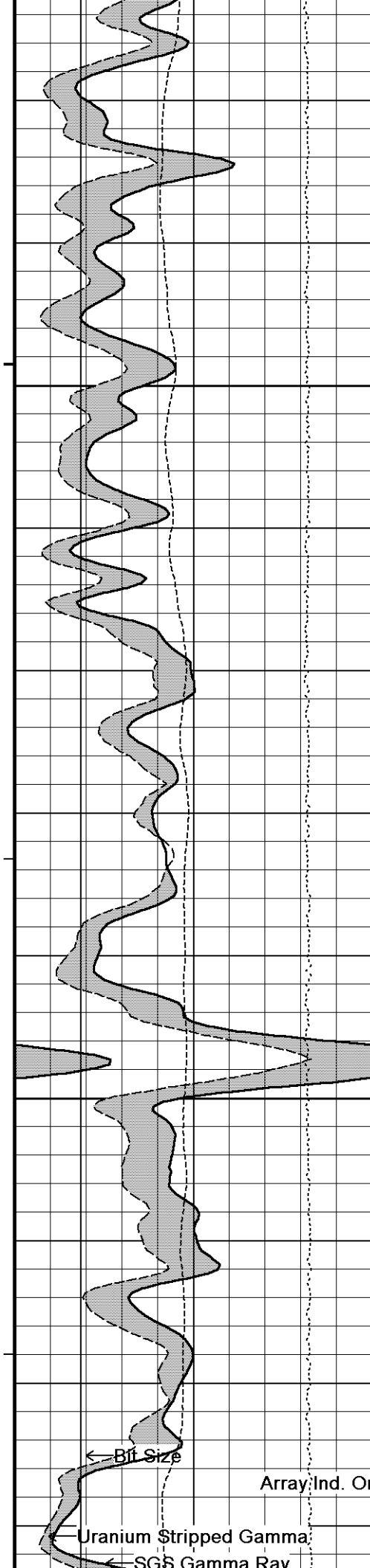
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97°

1500





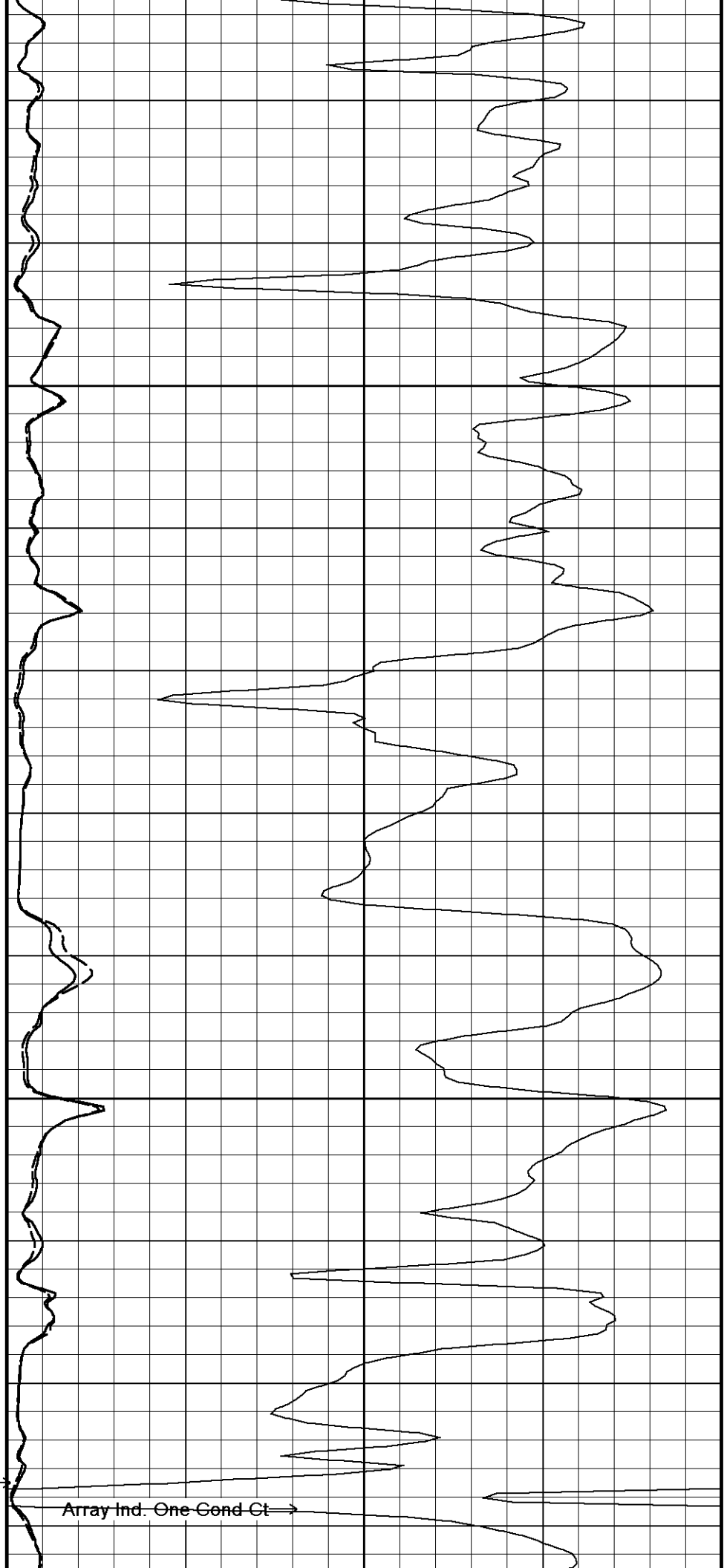


99°

1650

99°

1700



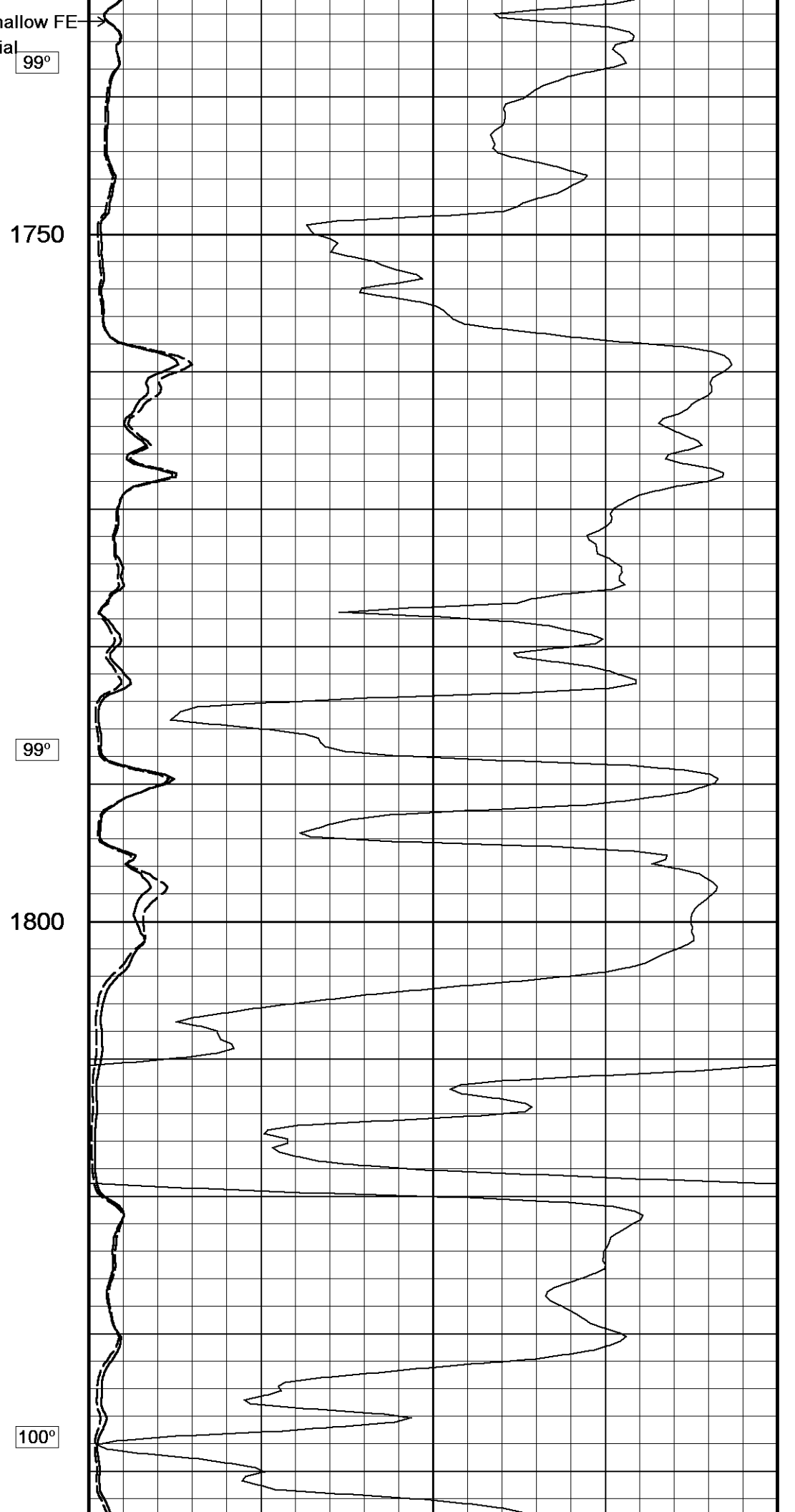
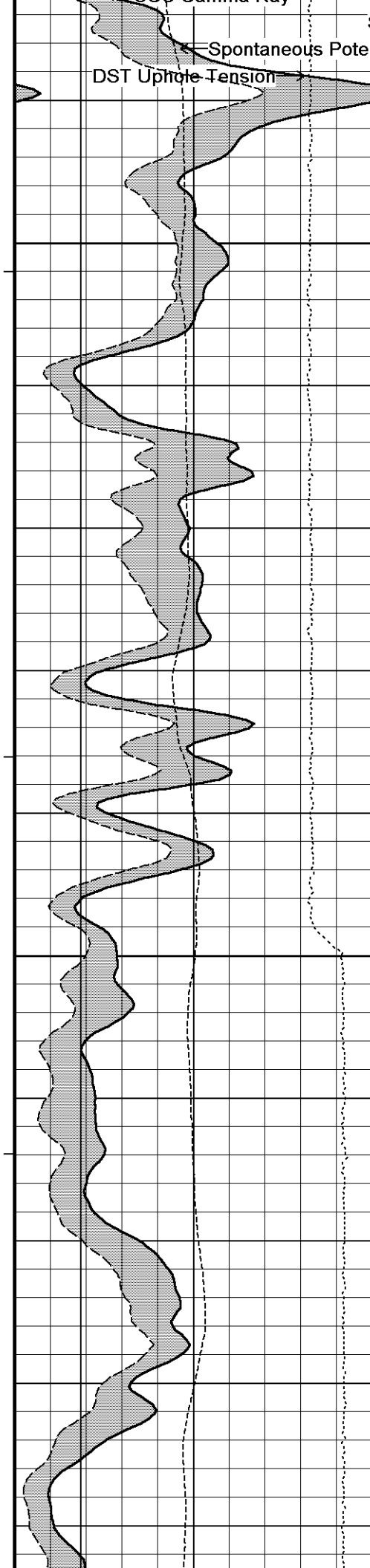
Array Ind. One Res Rt

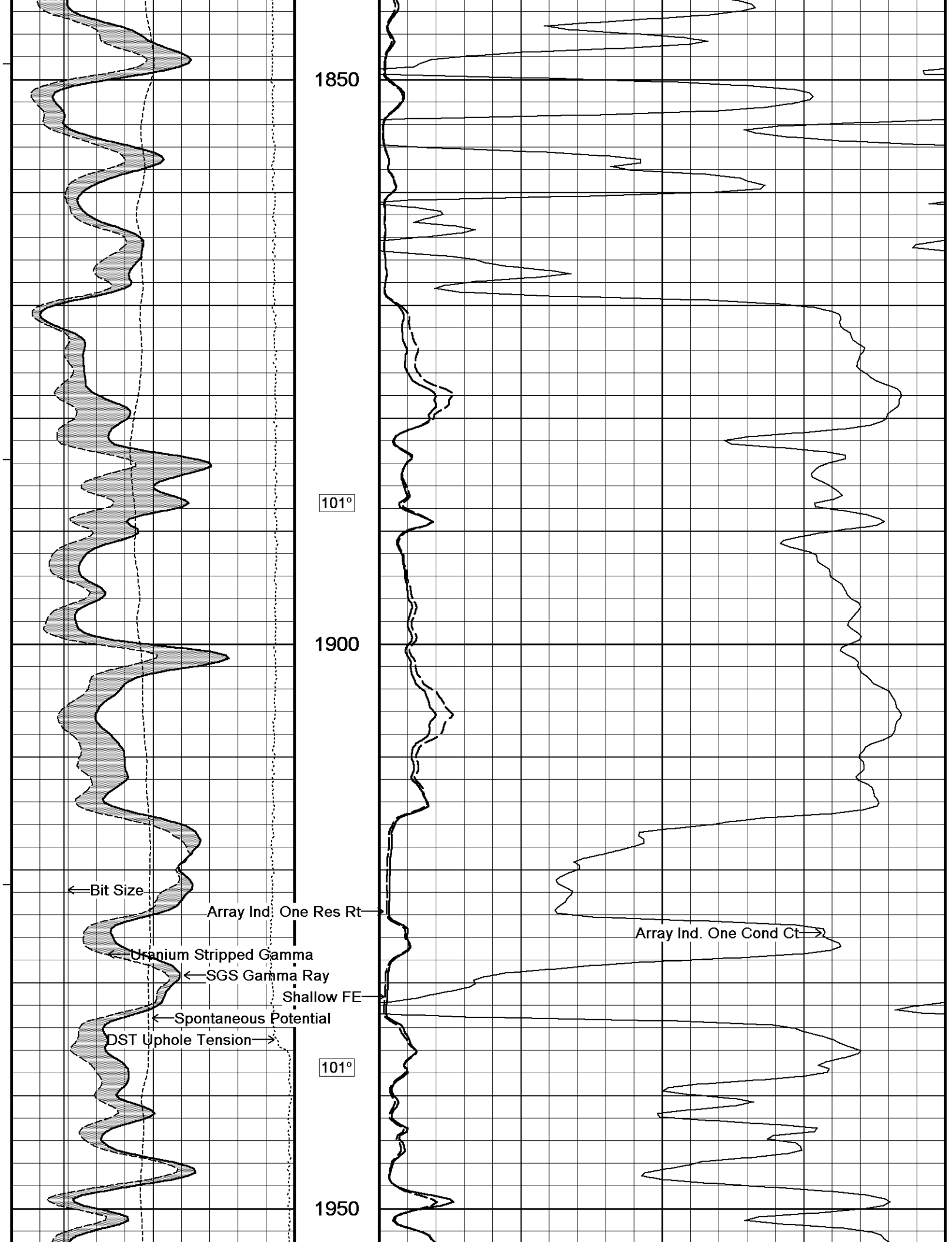
Array Ind. One Cond Ct

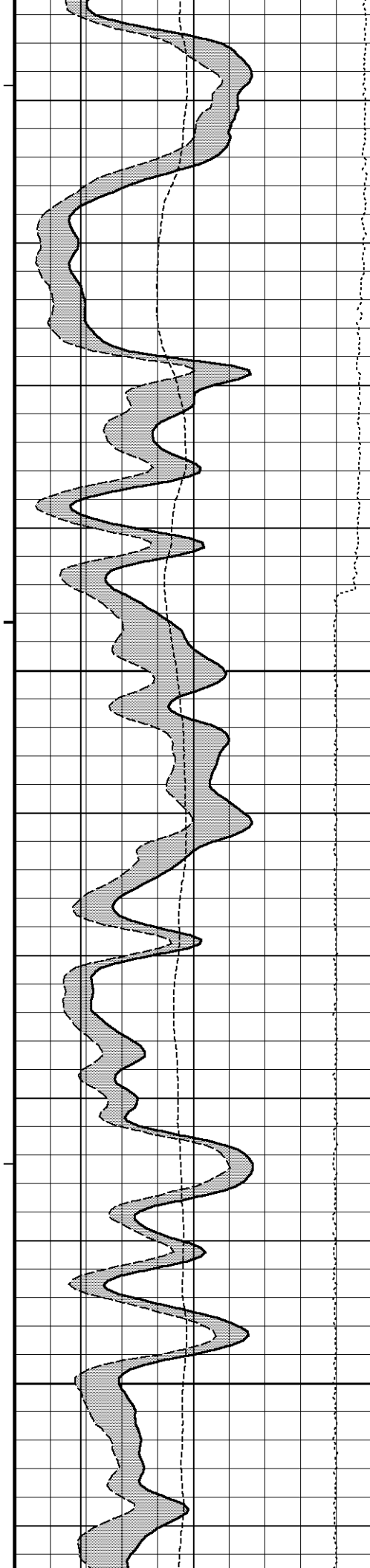
Bit Size

Uranium Stripped Gamma

SGS Gamma Ray





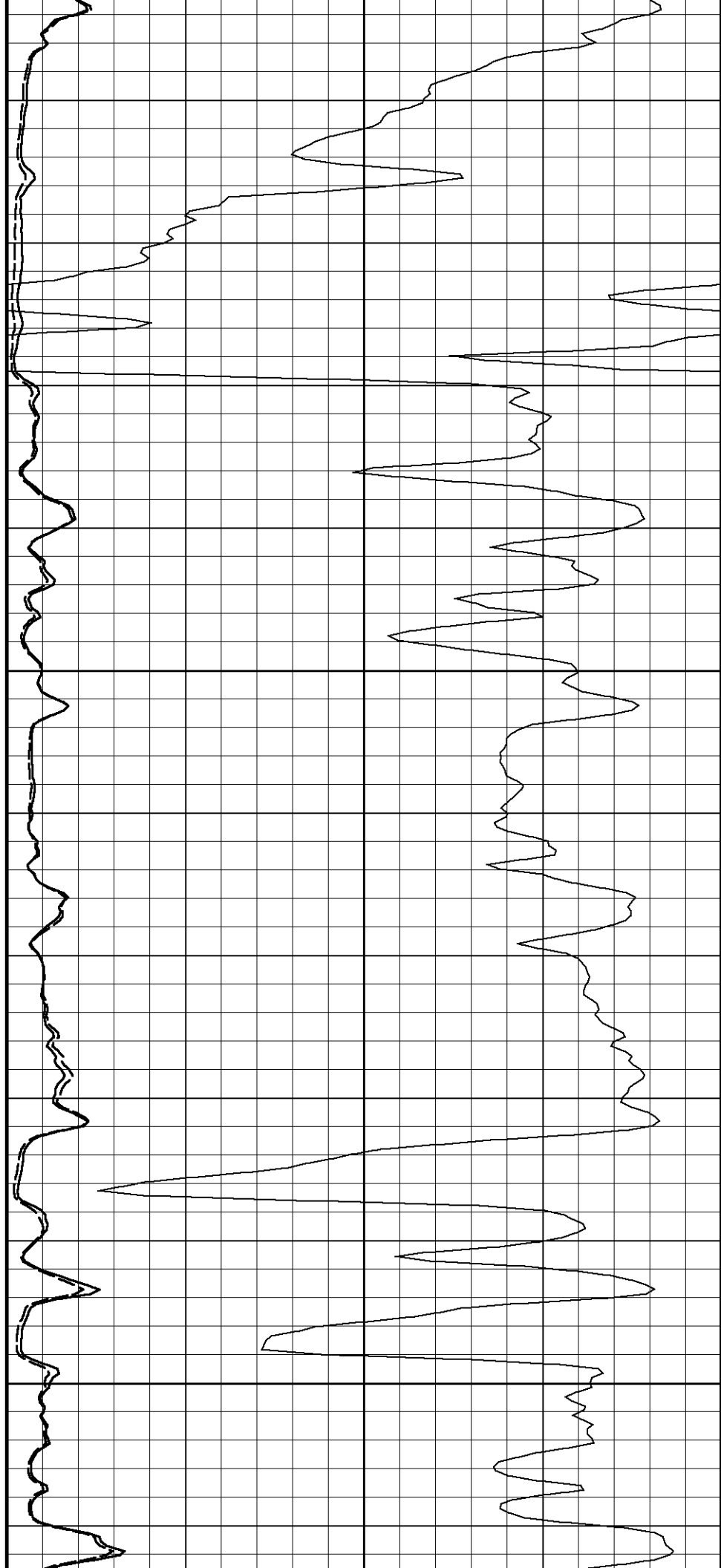


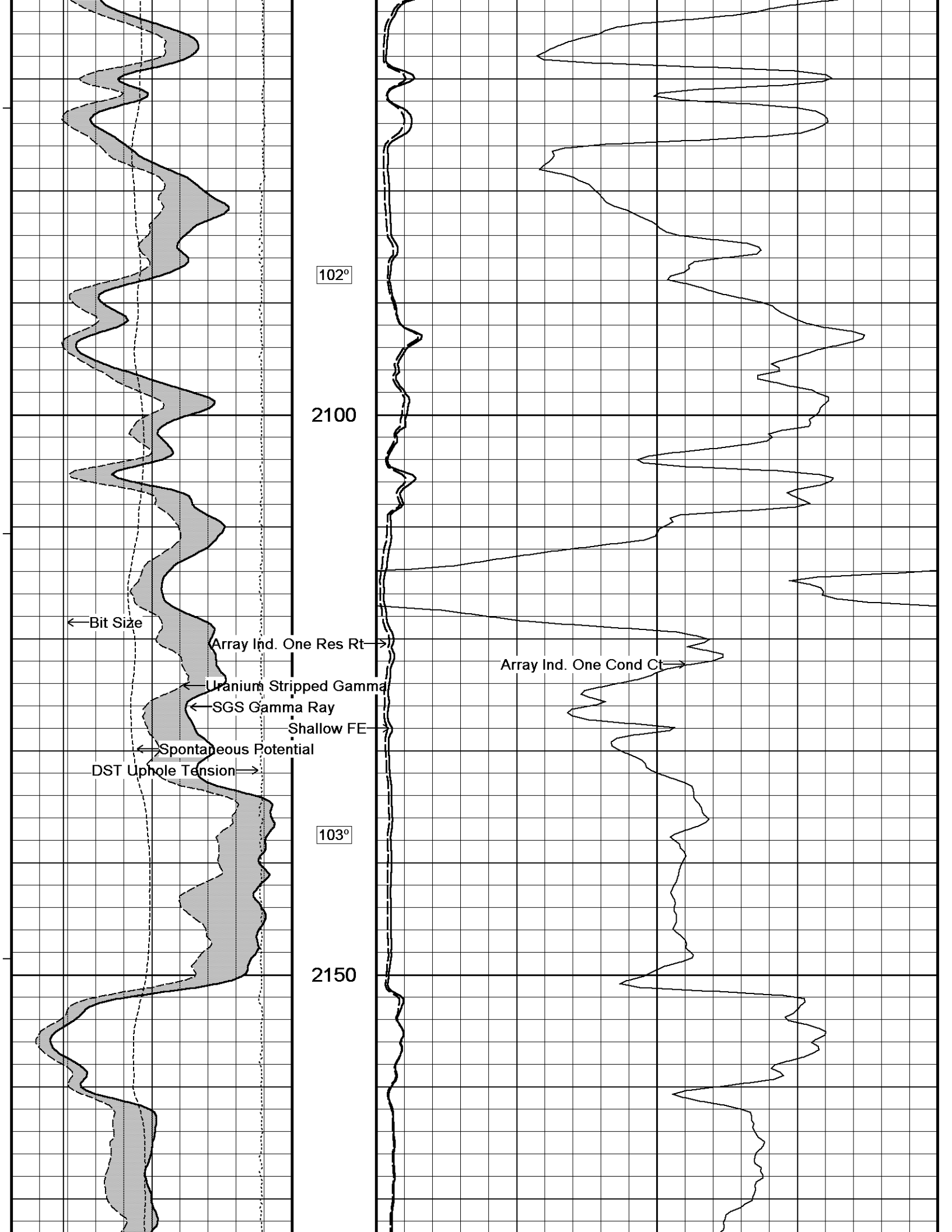
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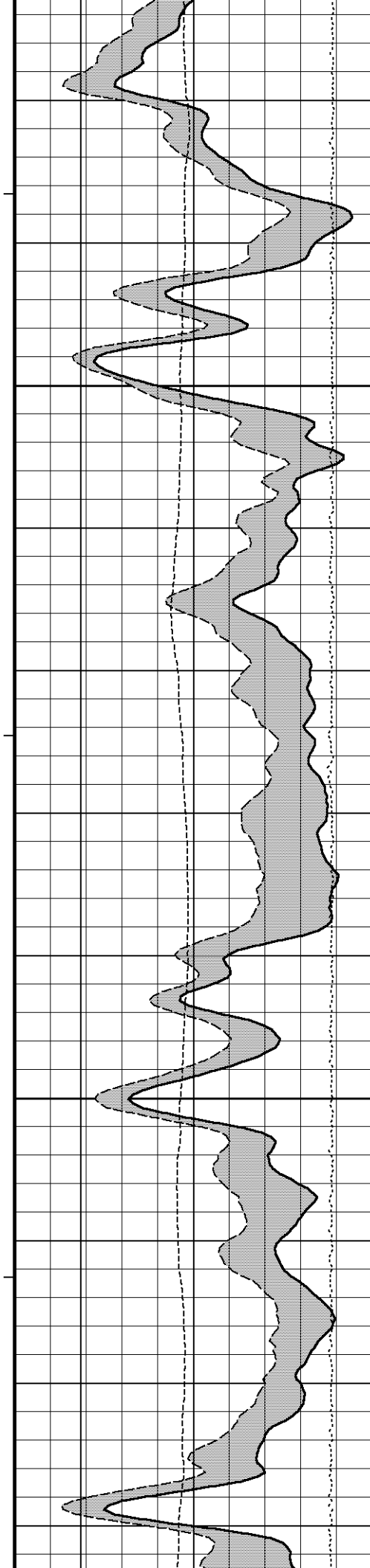
2000

102°

2050





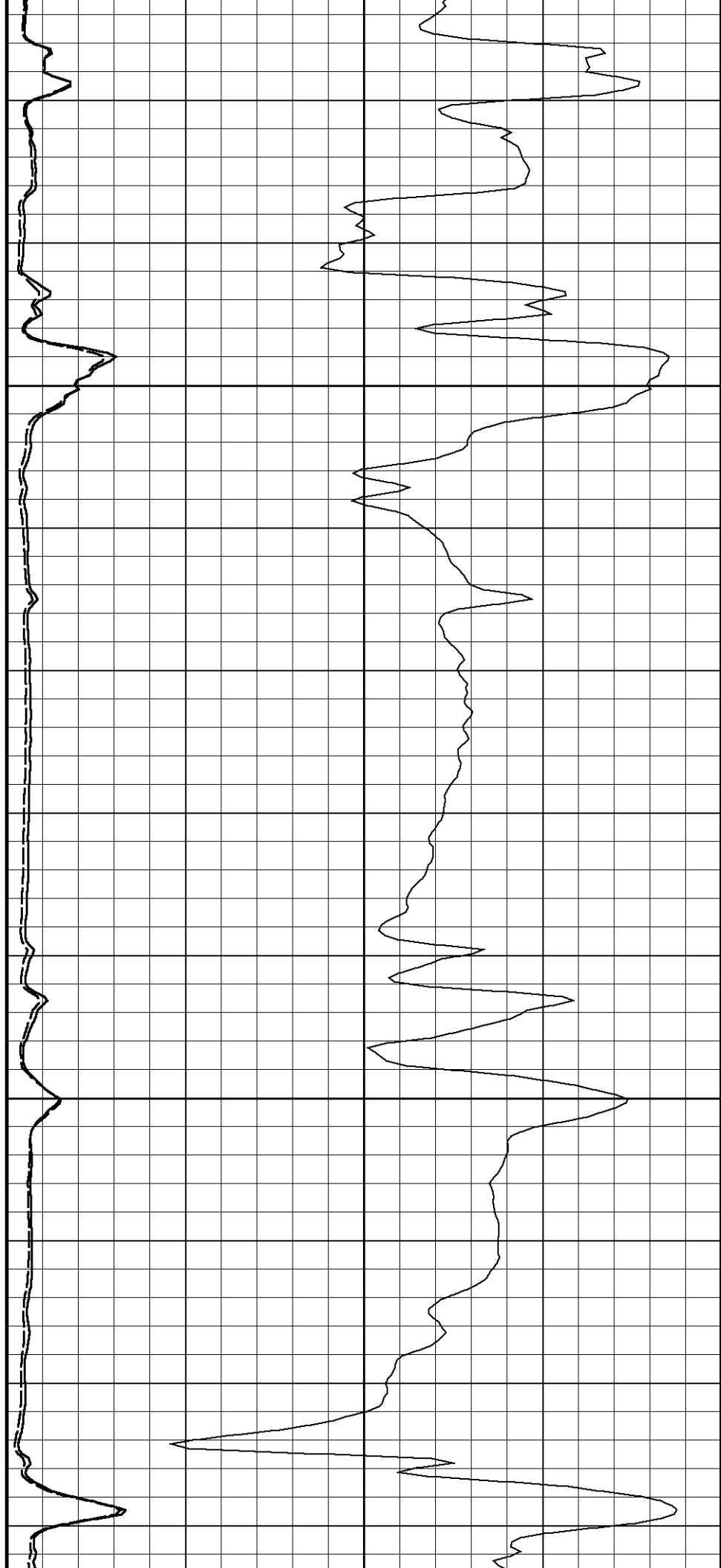


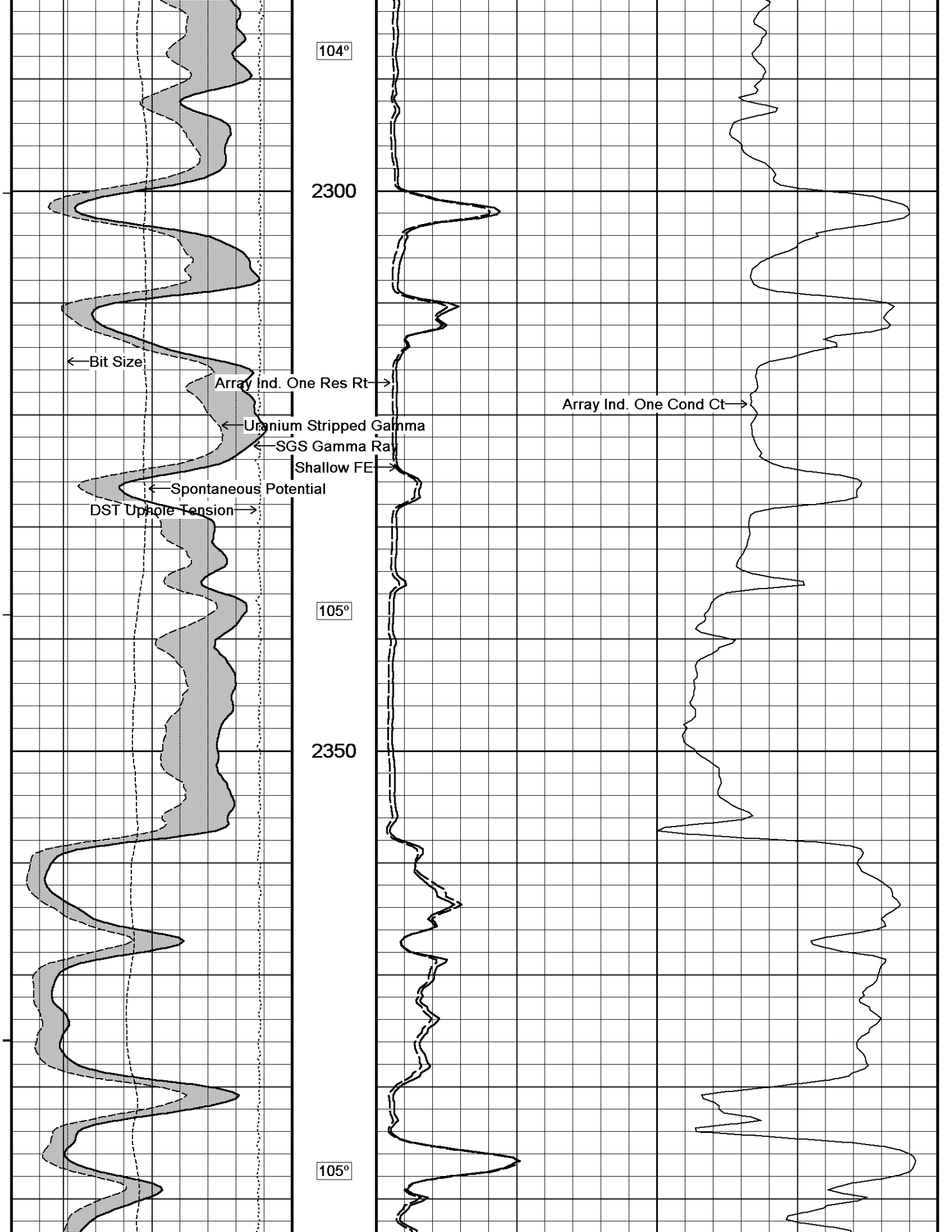
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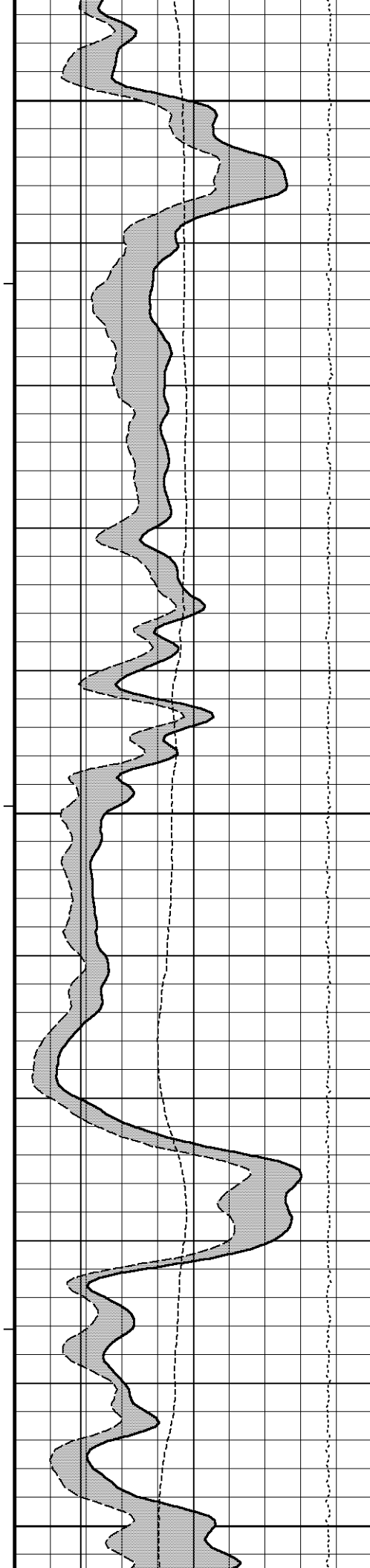
2200

104°

2250







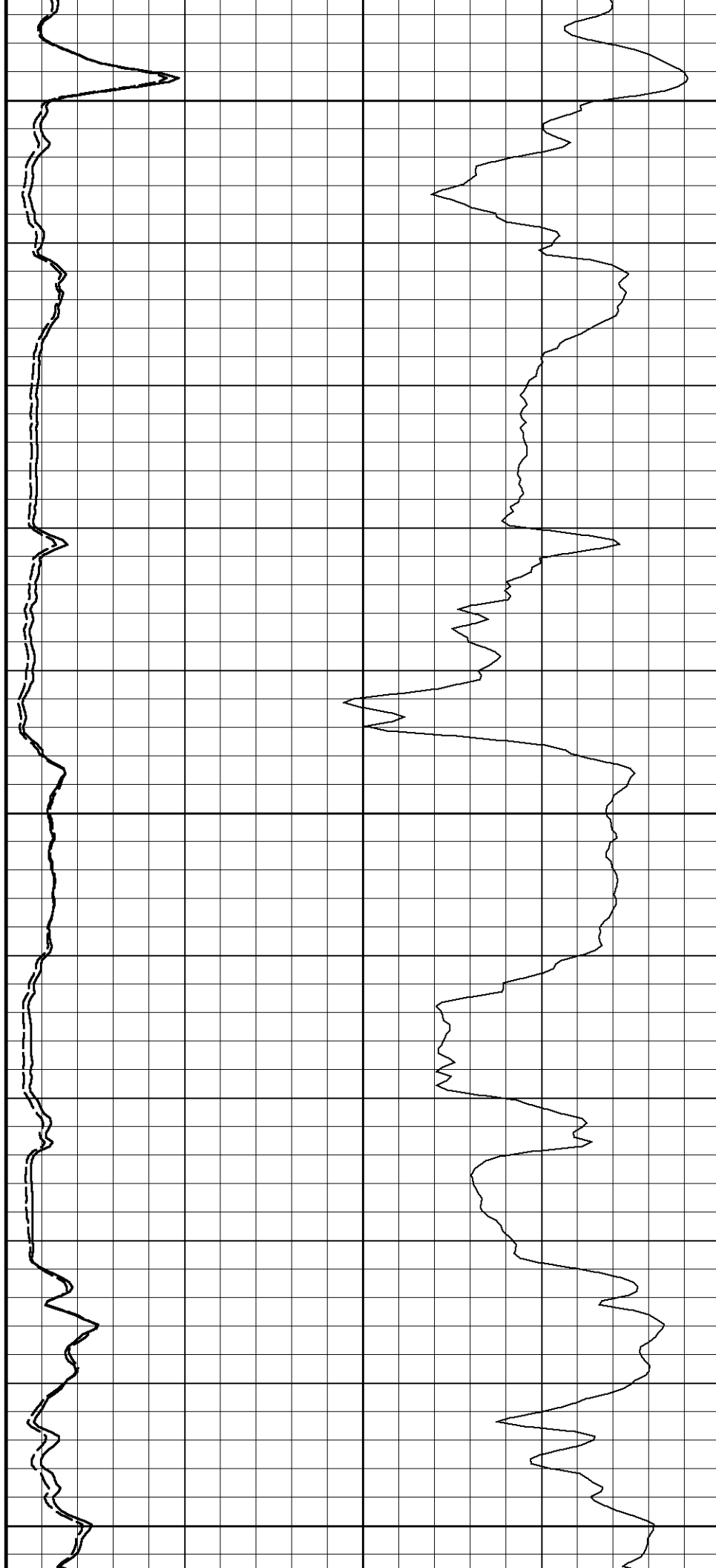
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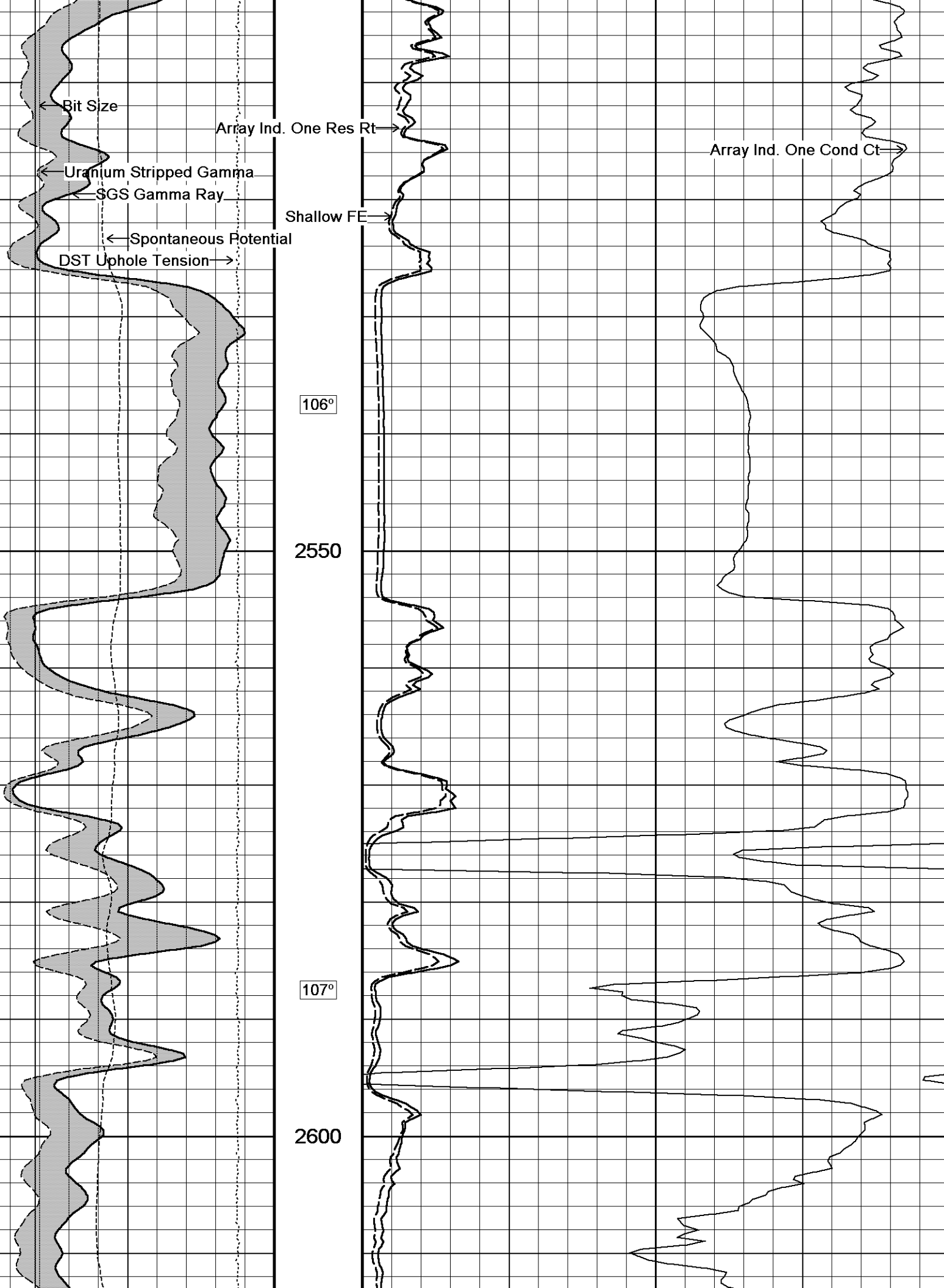
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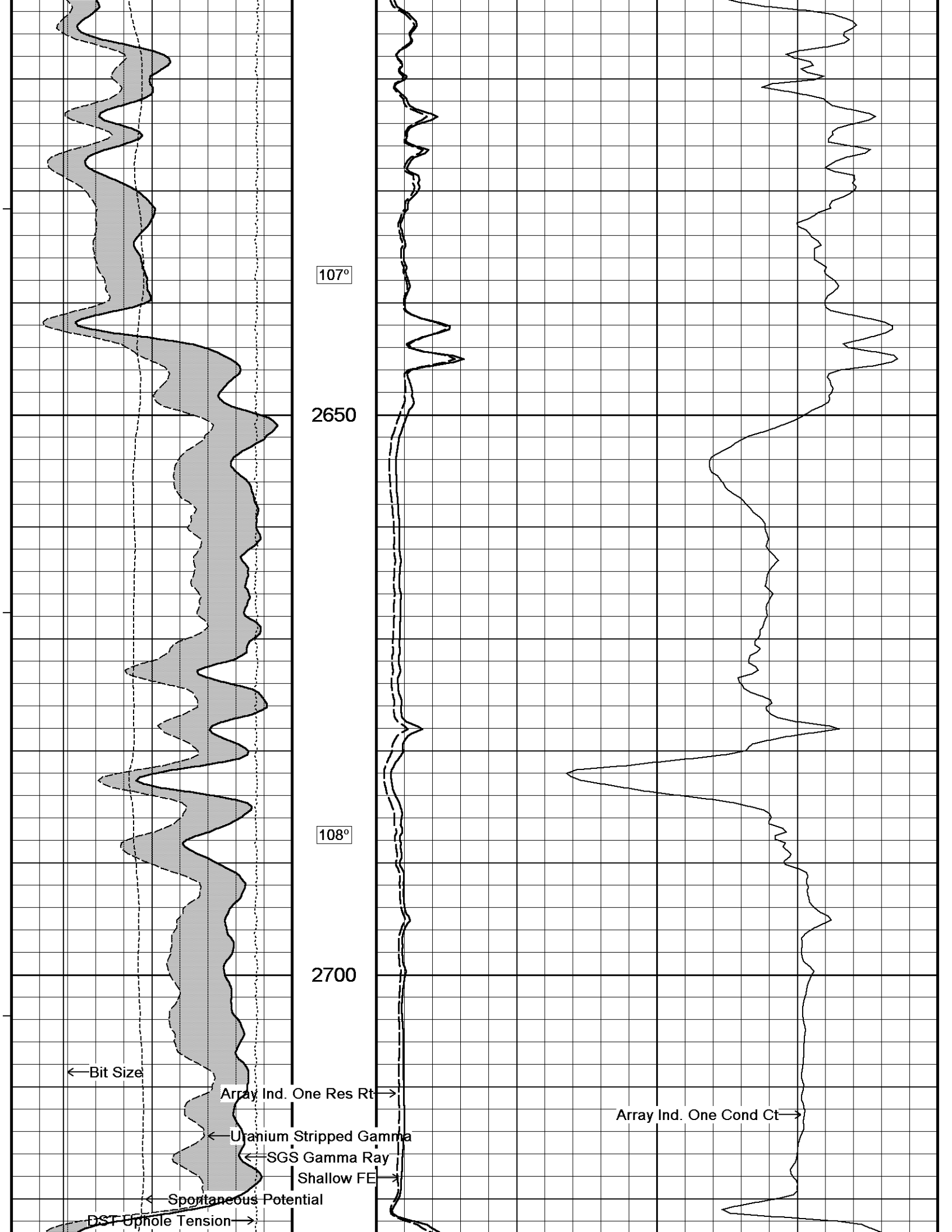
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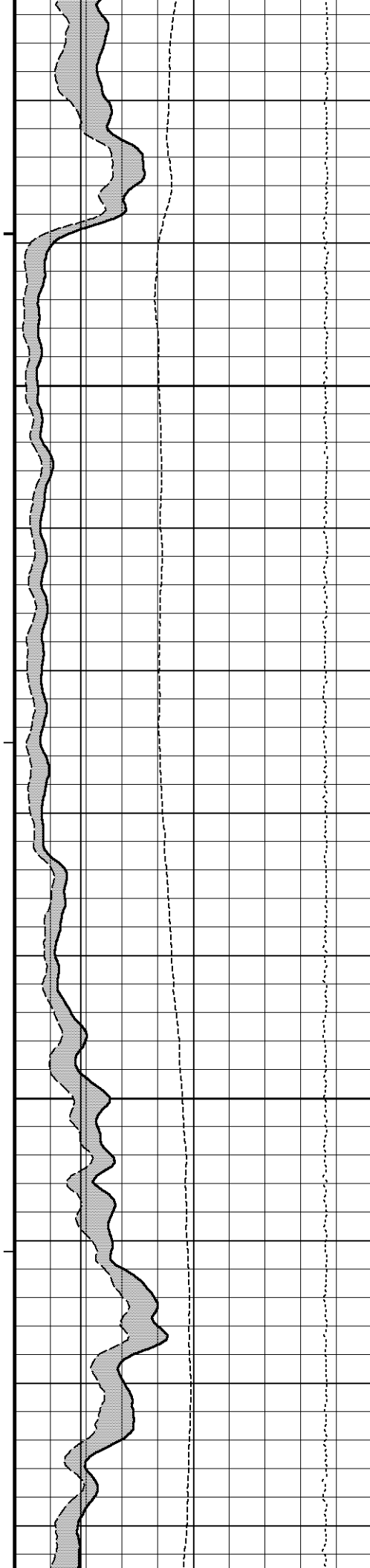
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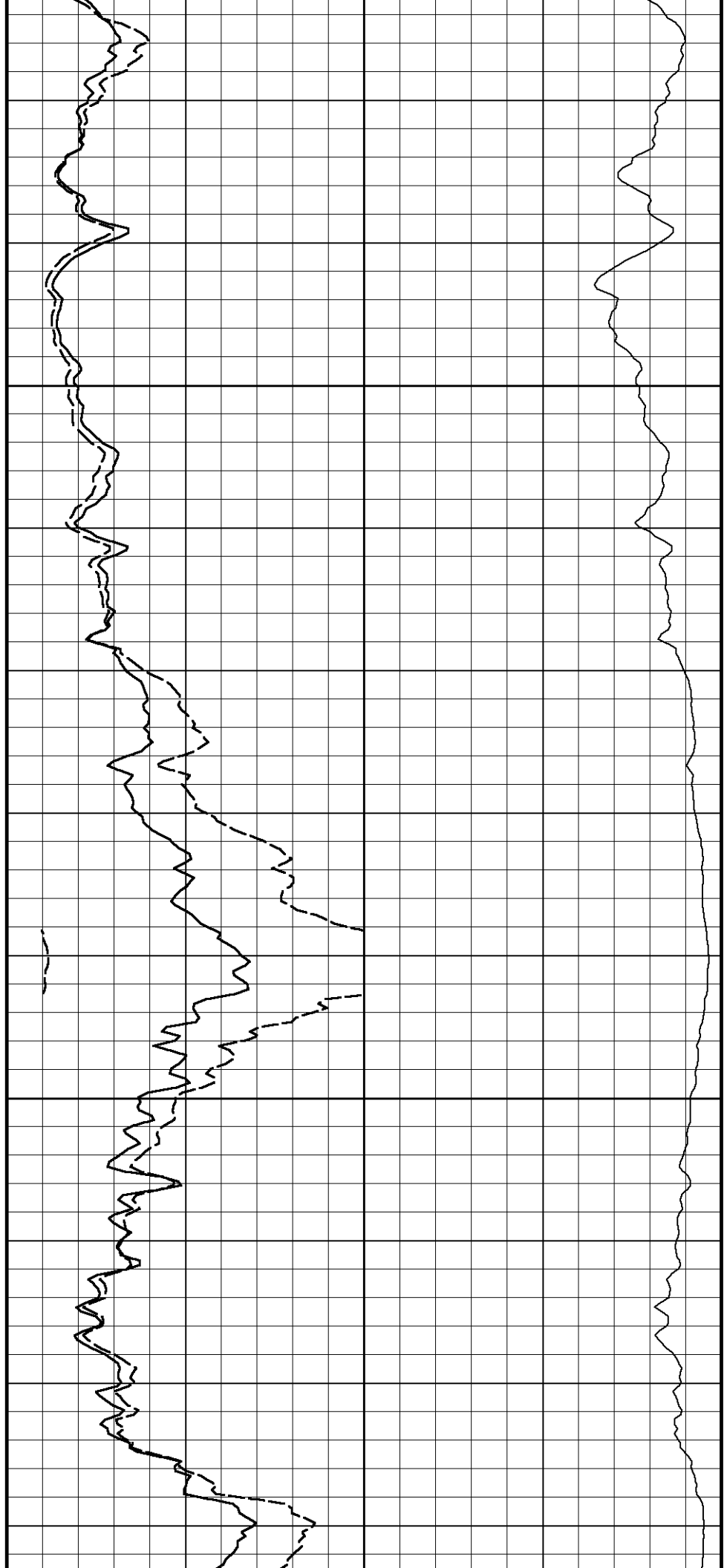


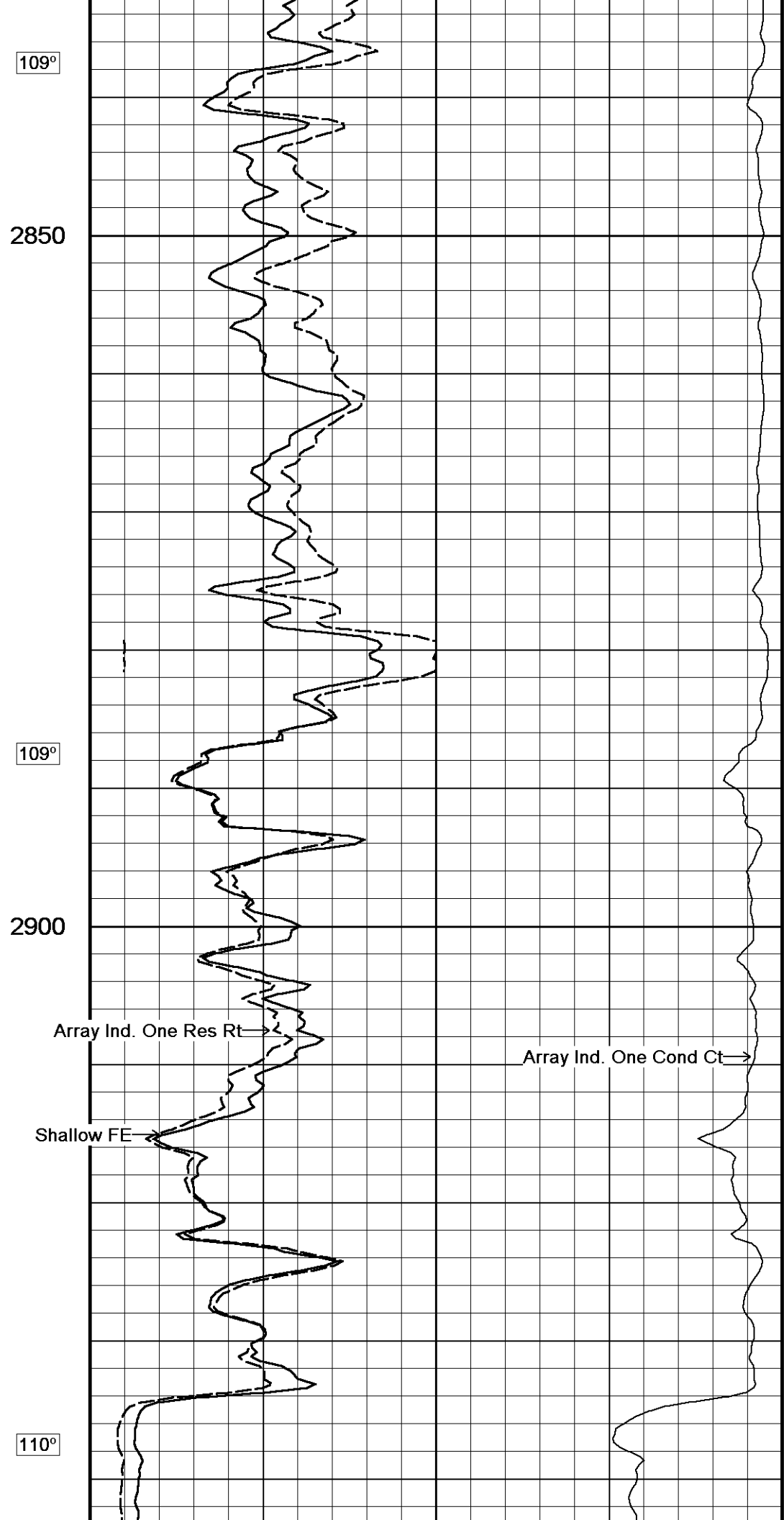
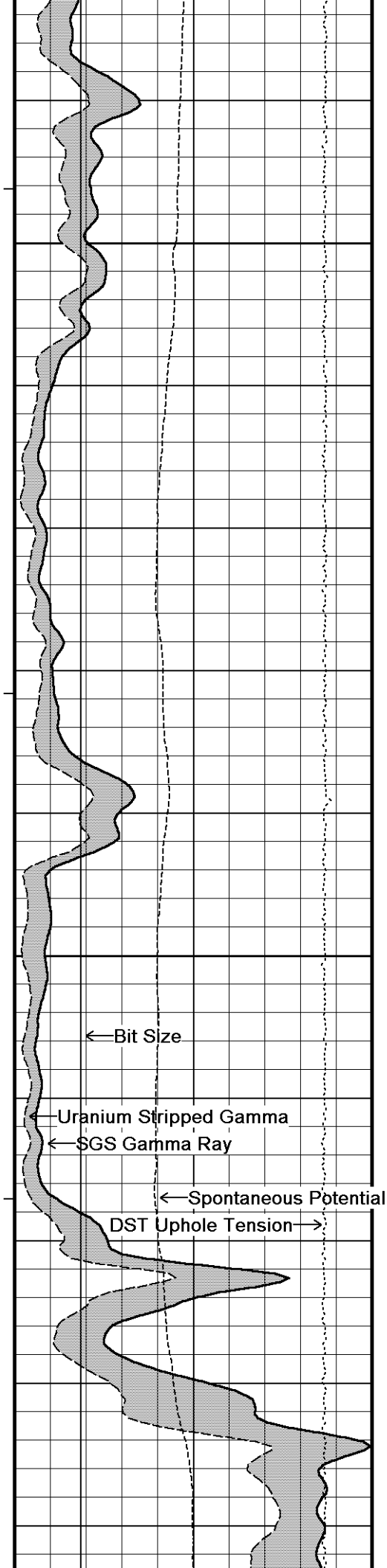
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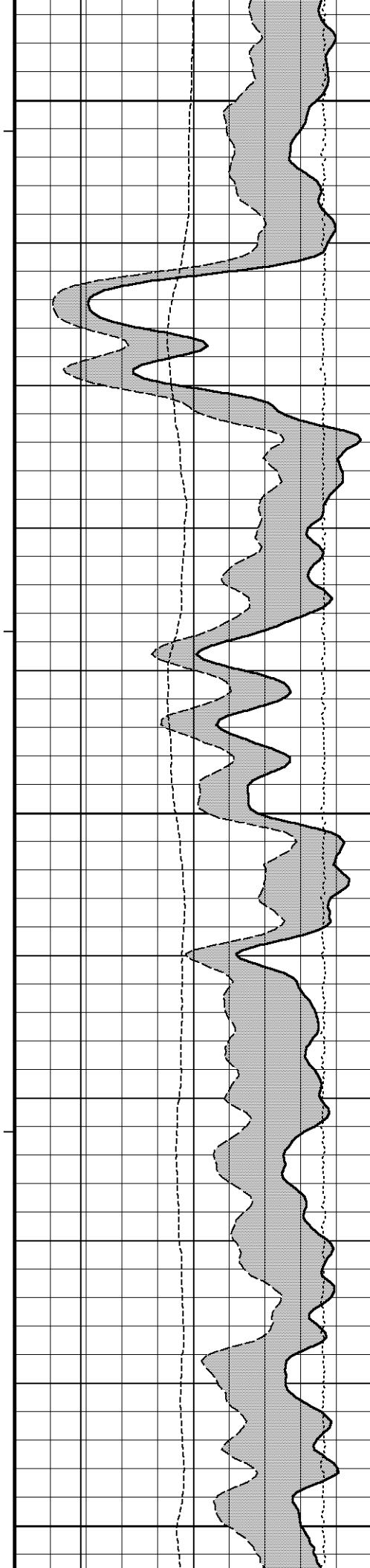
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108°

2800







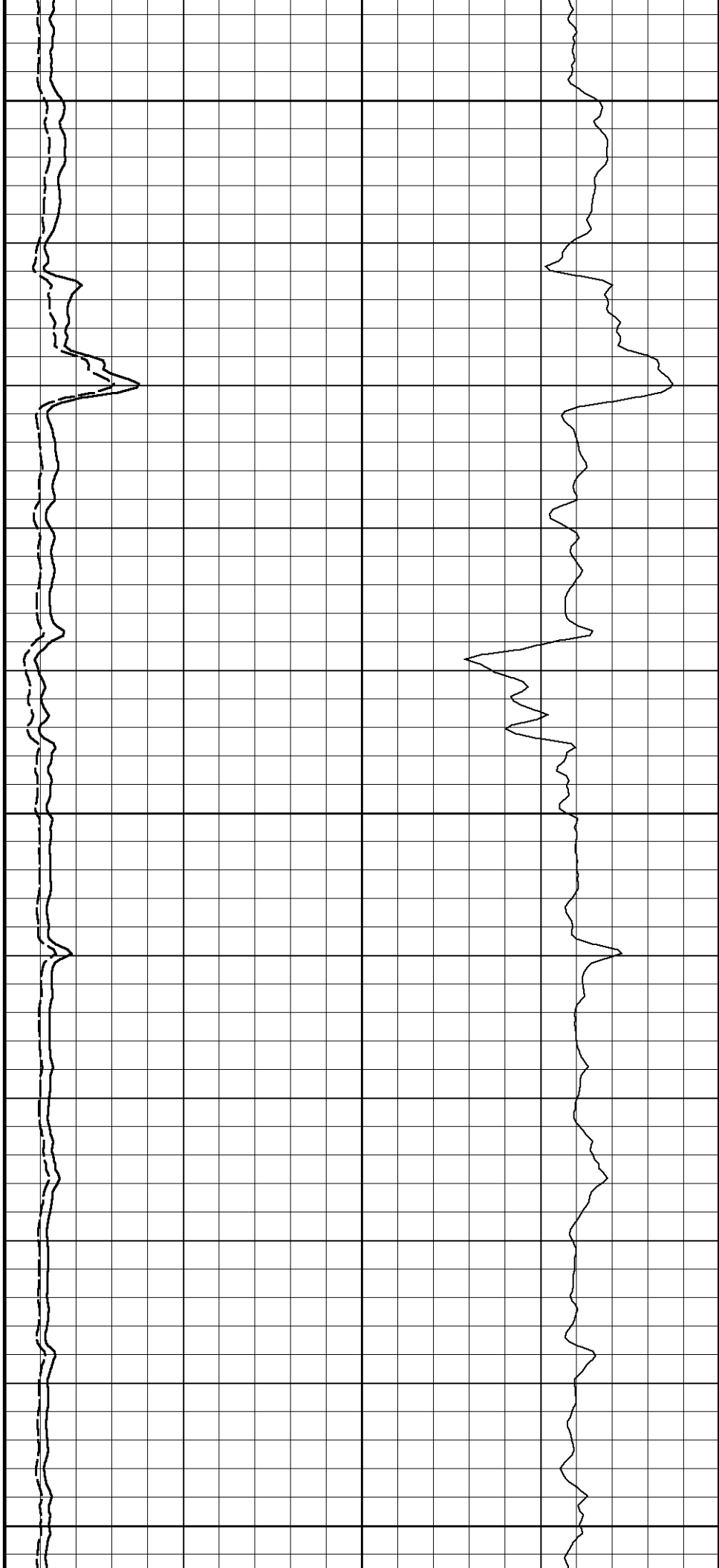
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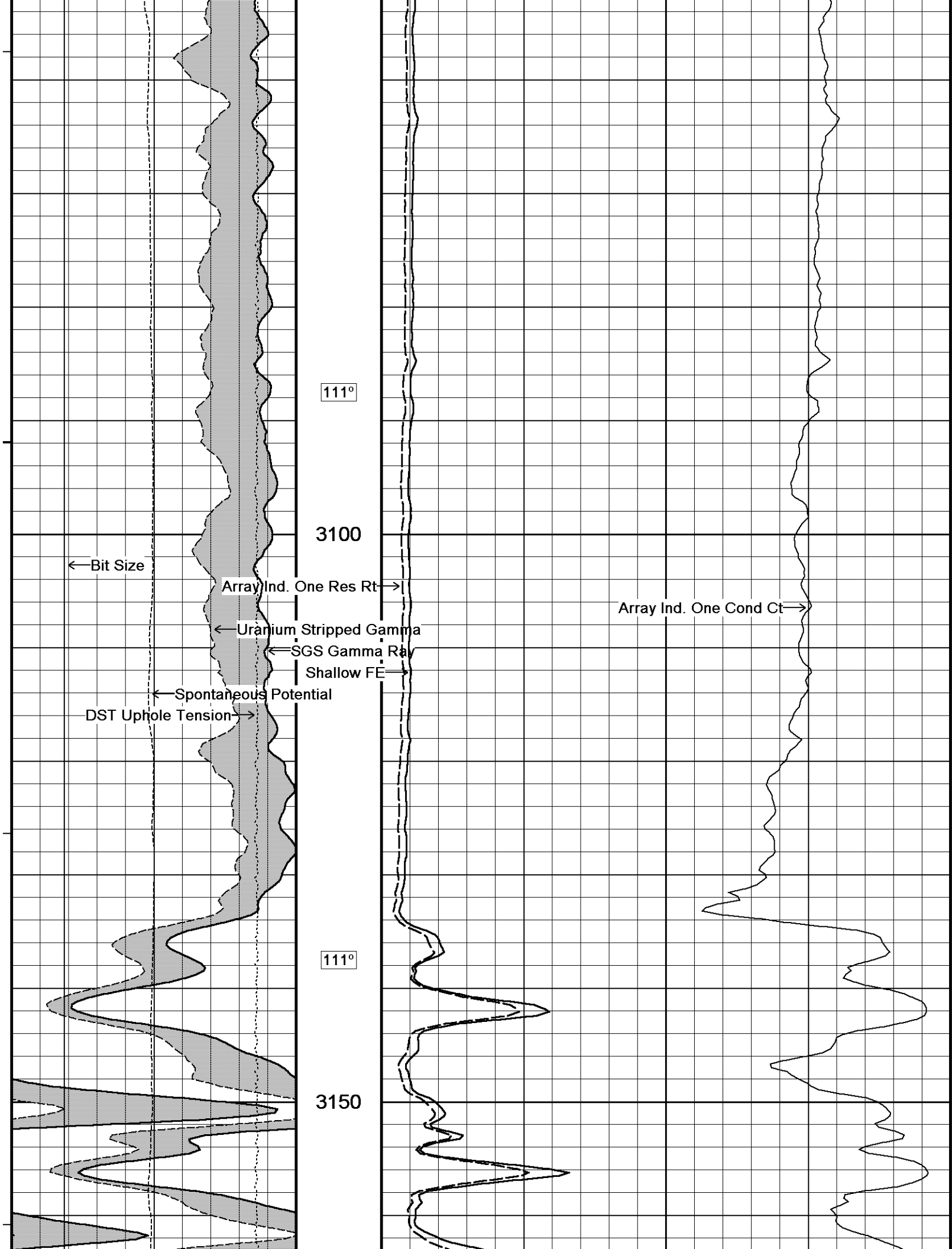
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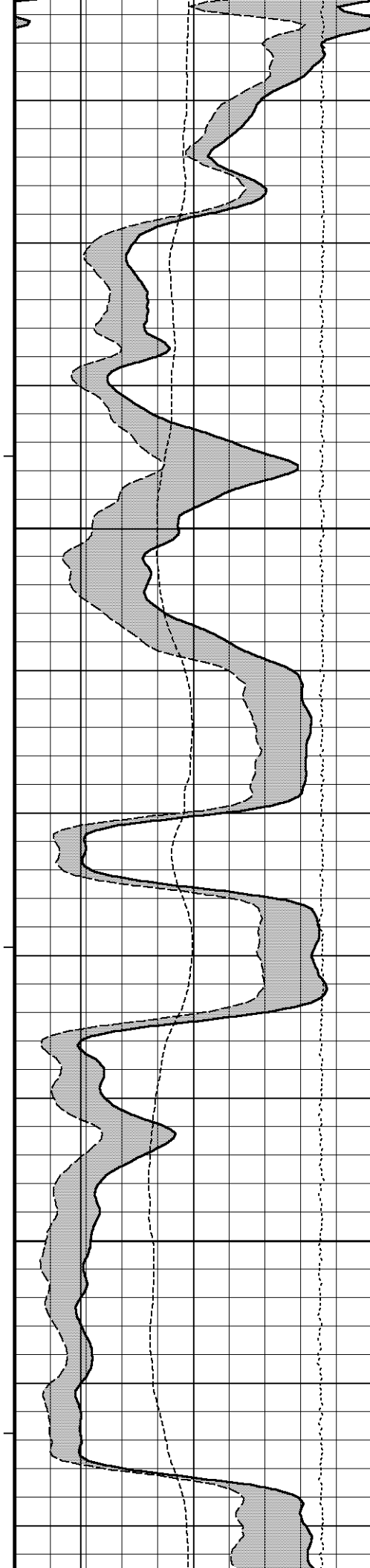
3000

111°

3050





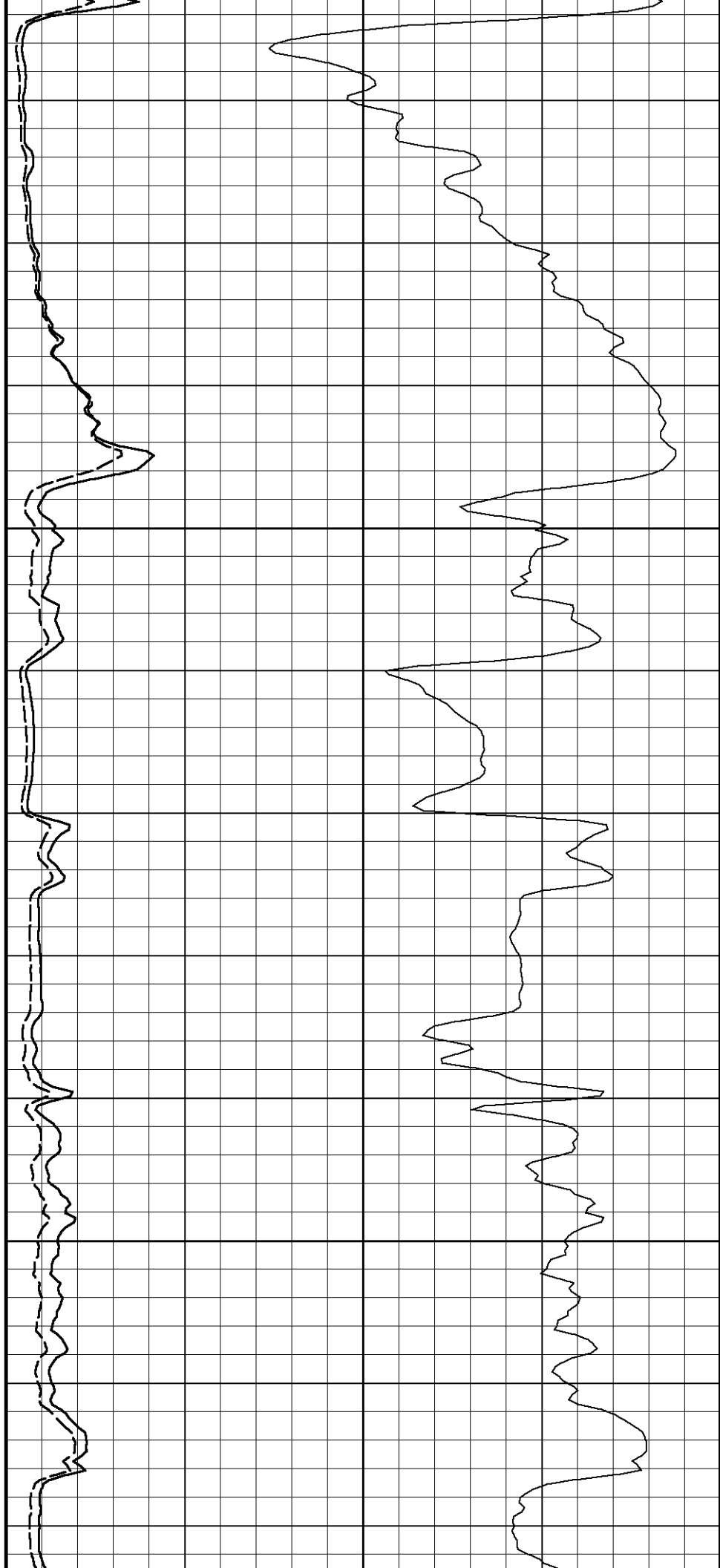


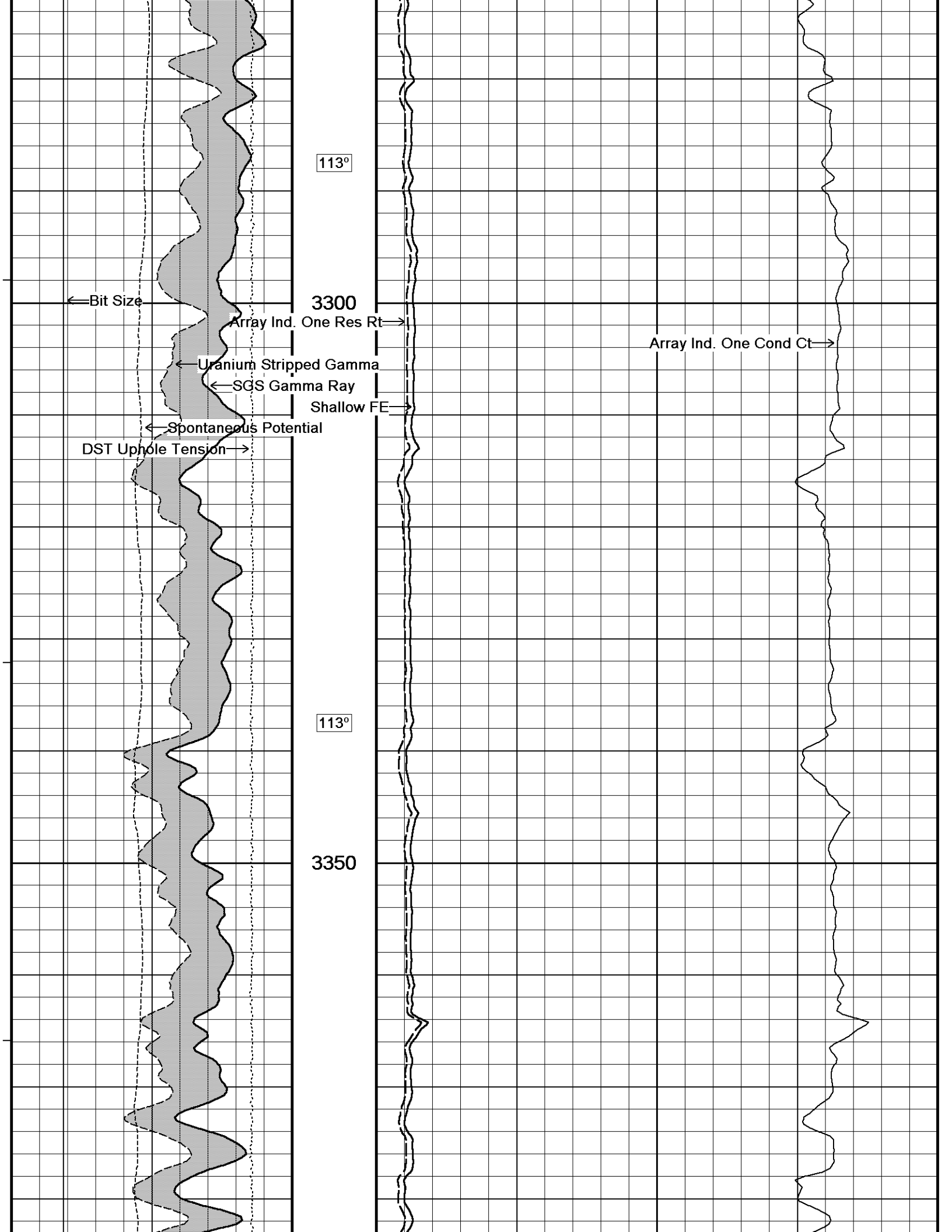
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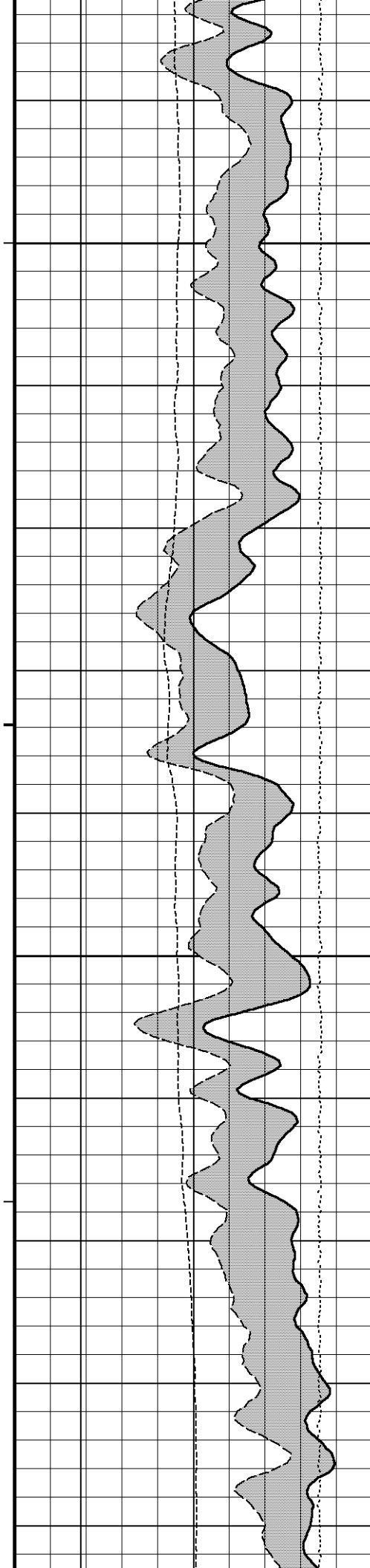
3200

113°

3250







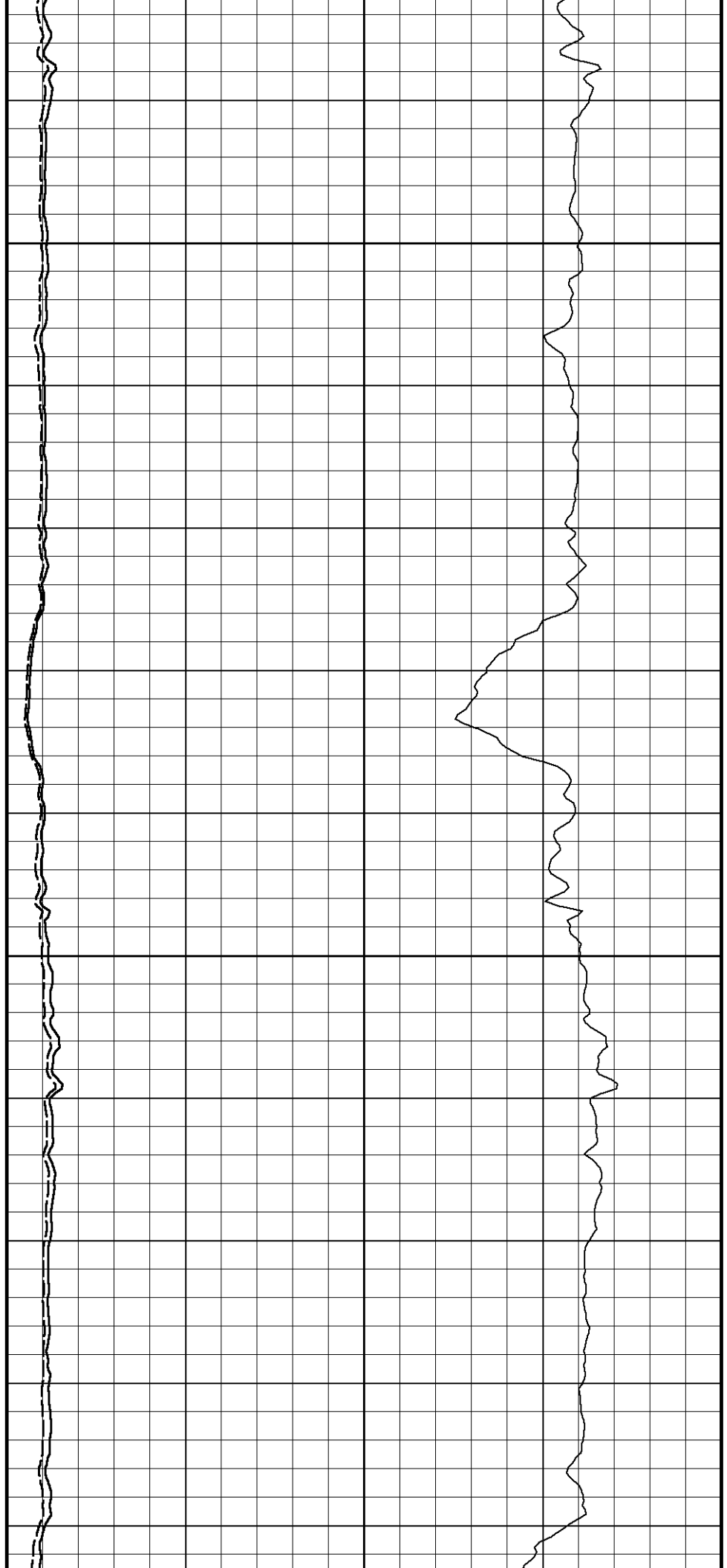
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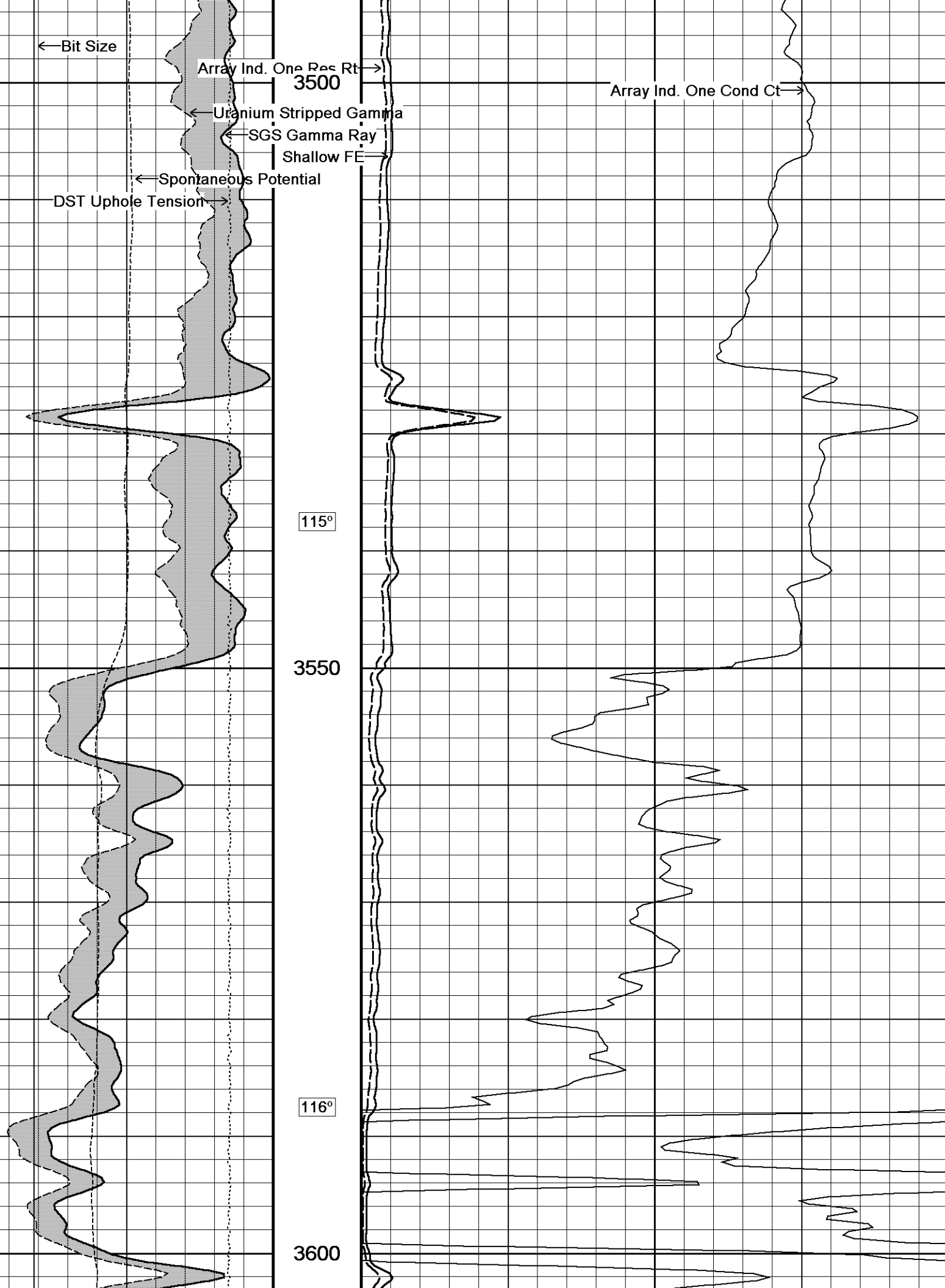
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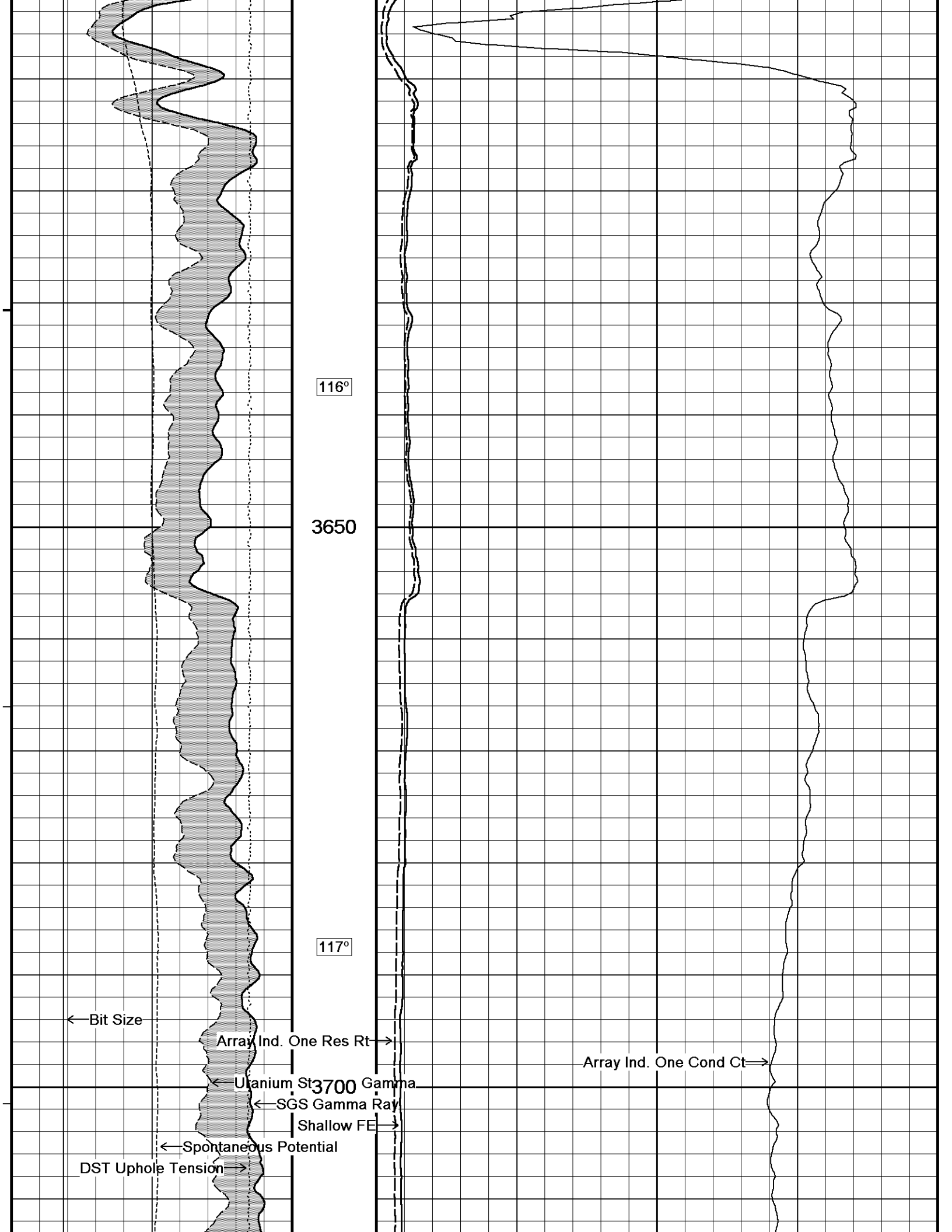
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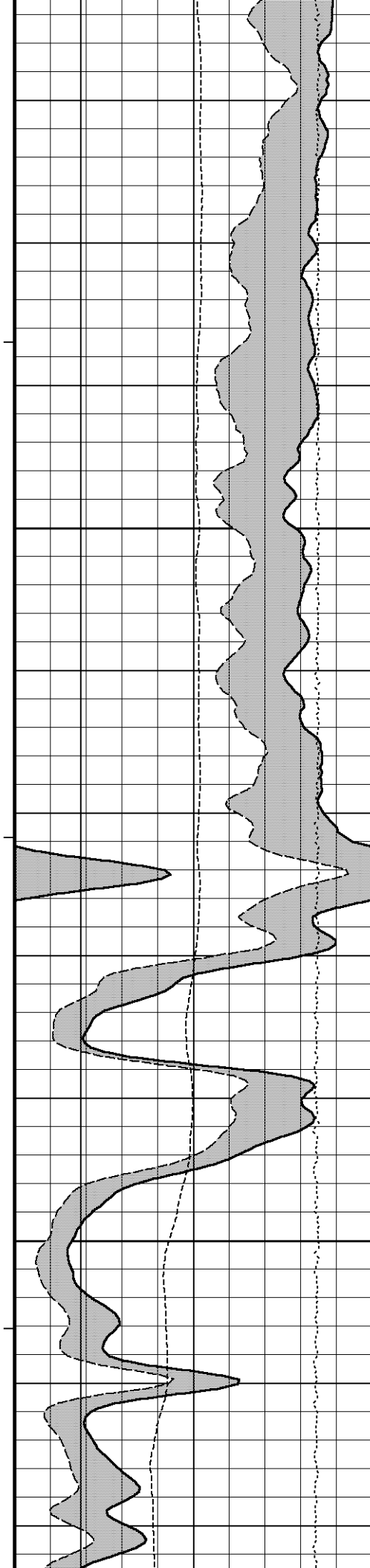
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115°







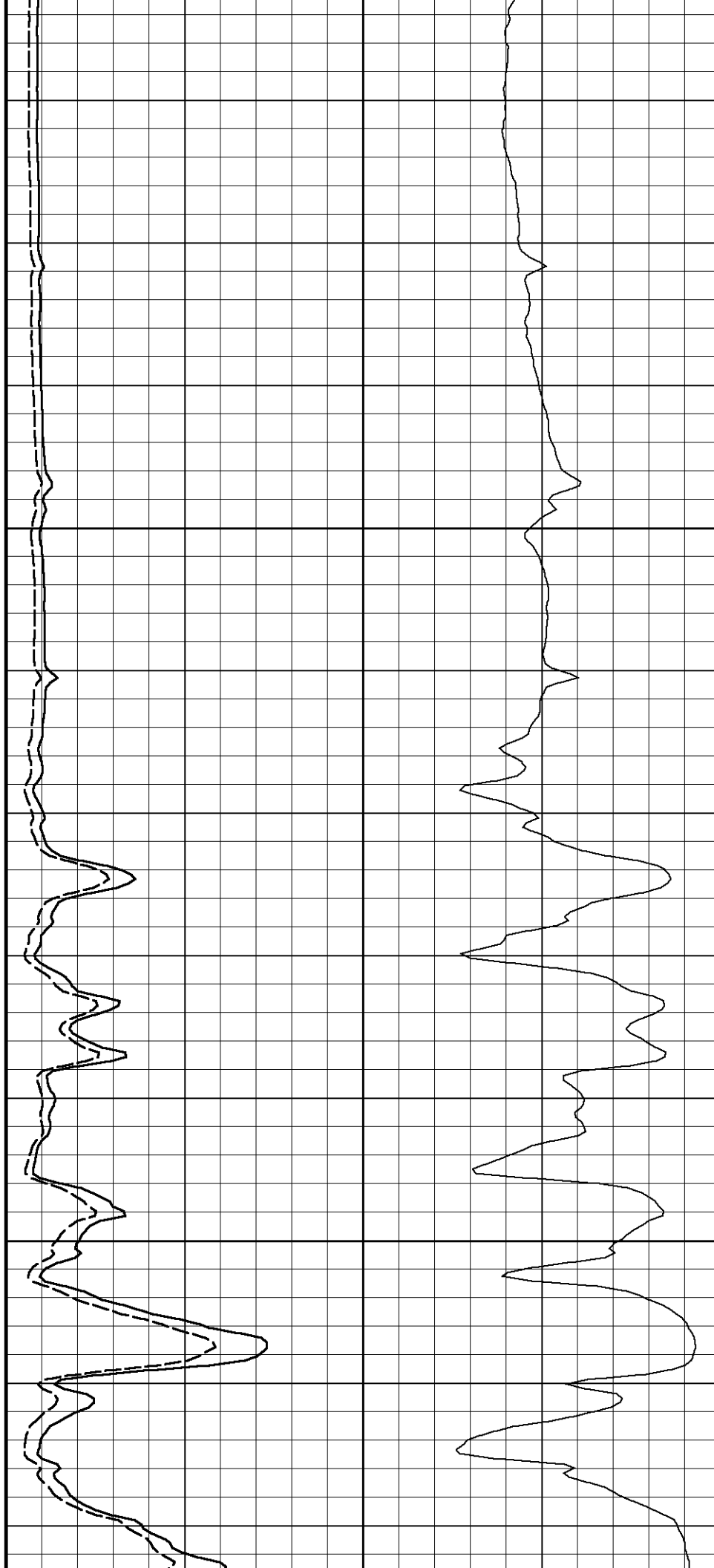


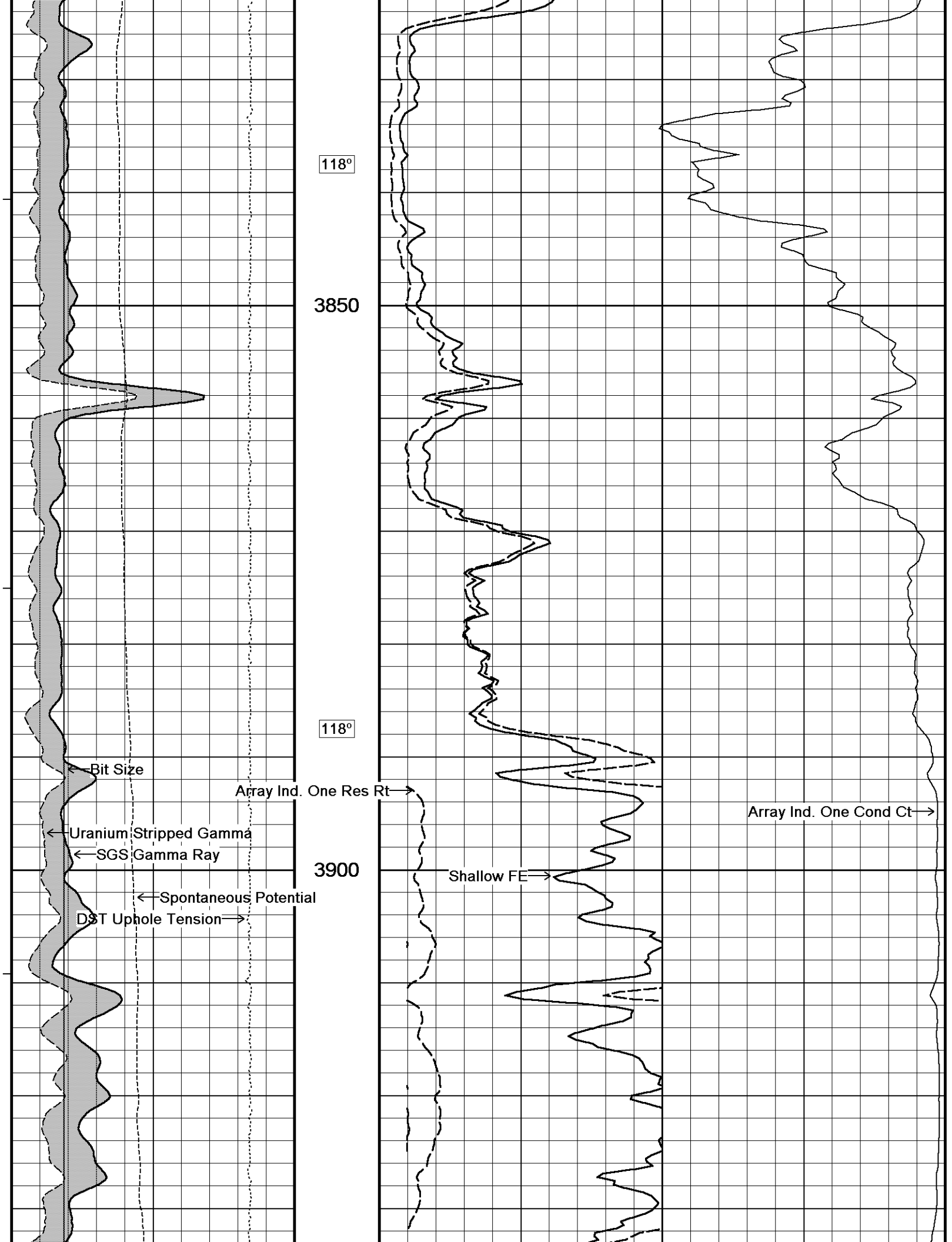
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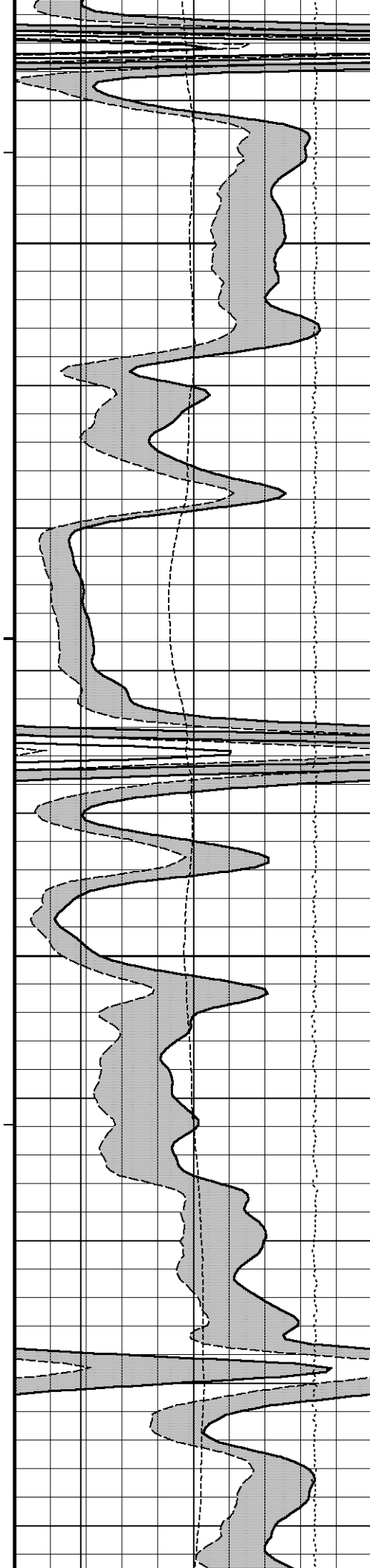
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118°

3800







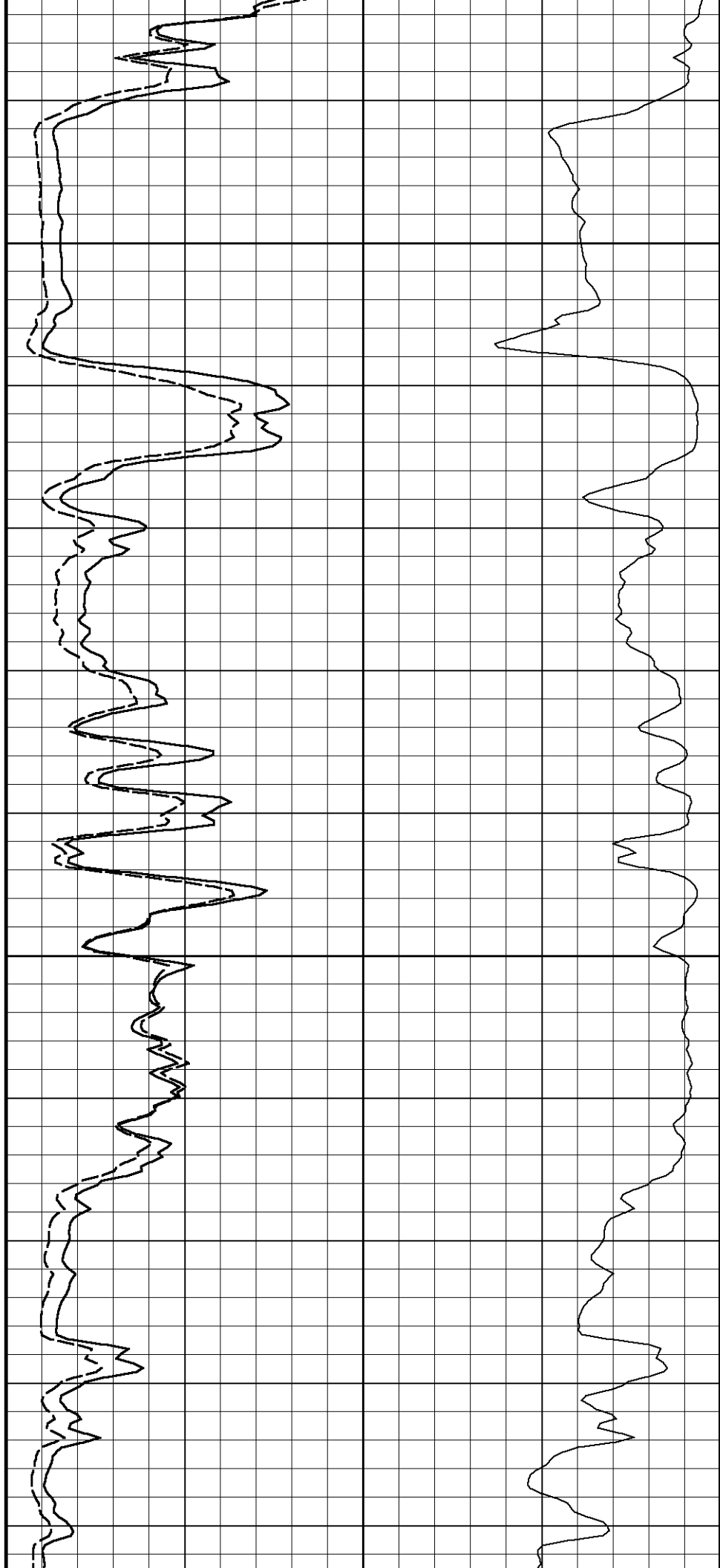
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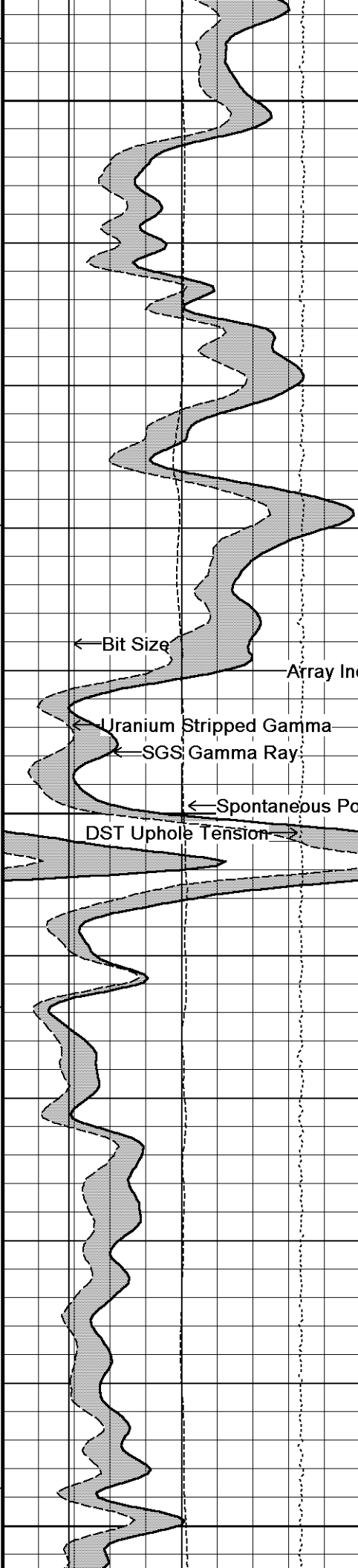
3950

119°

4000

119°





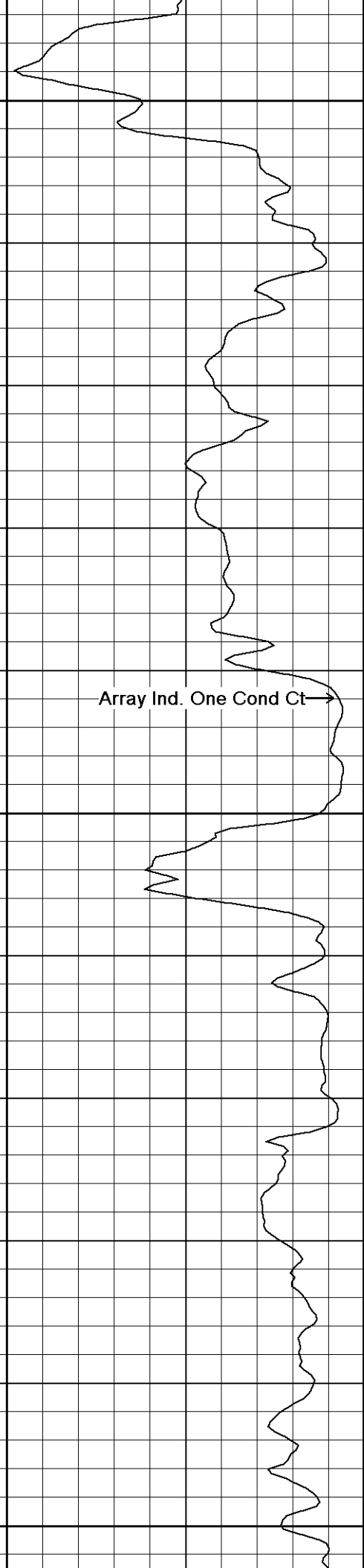
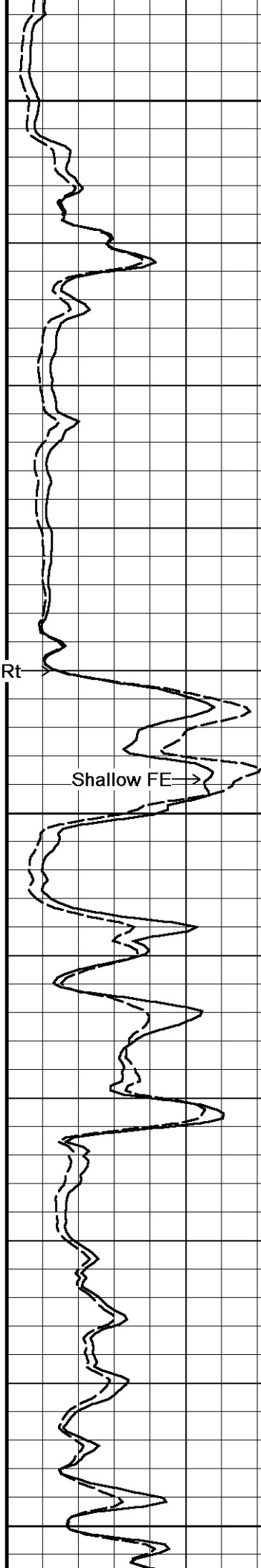
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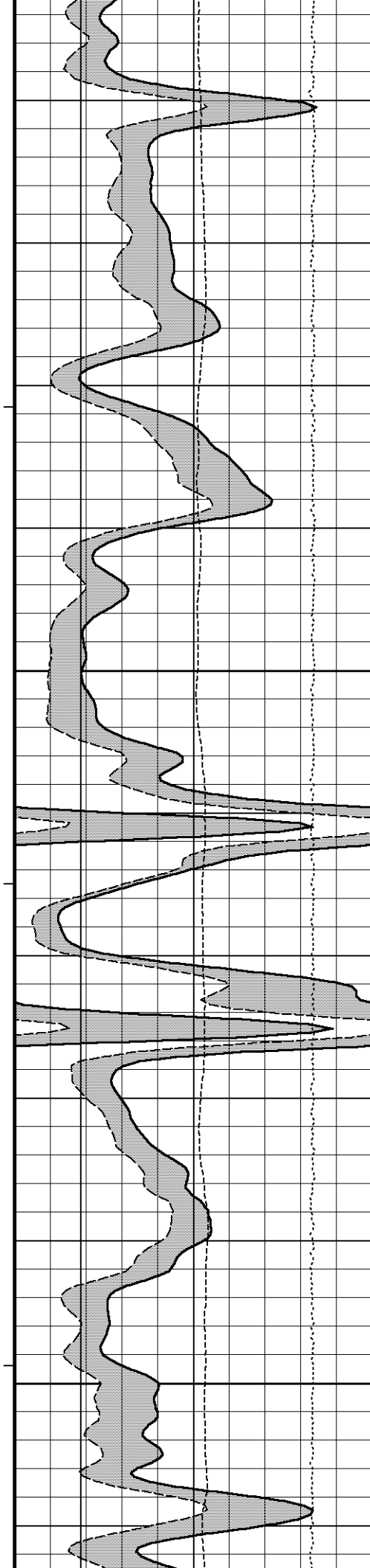
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120°

4150



Array Ind. One Cond Ct

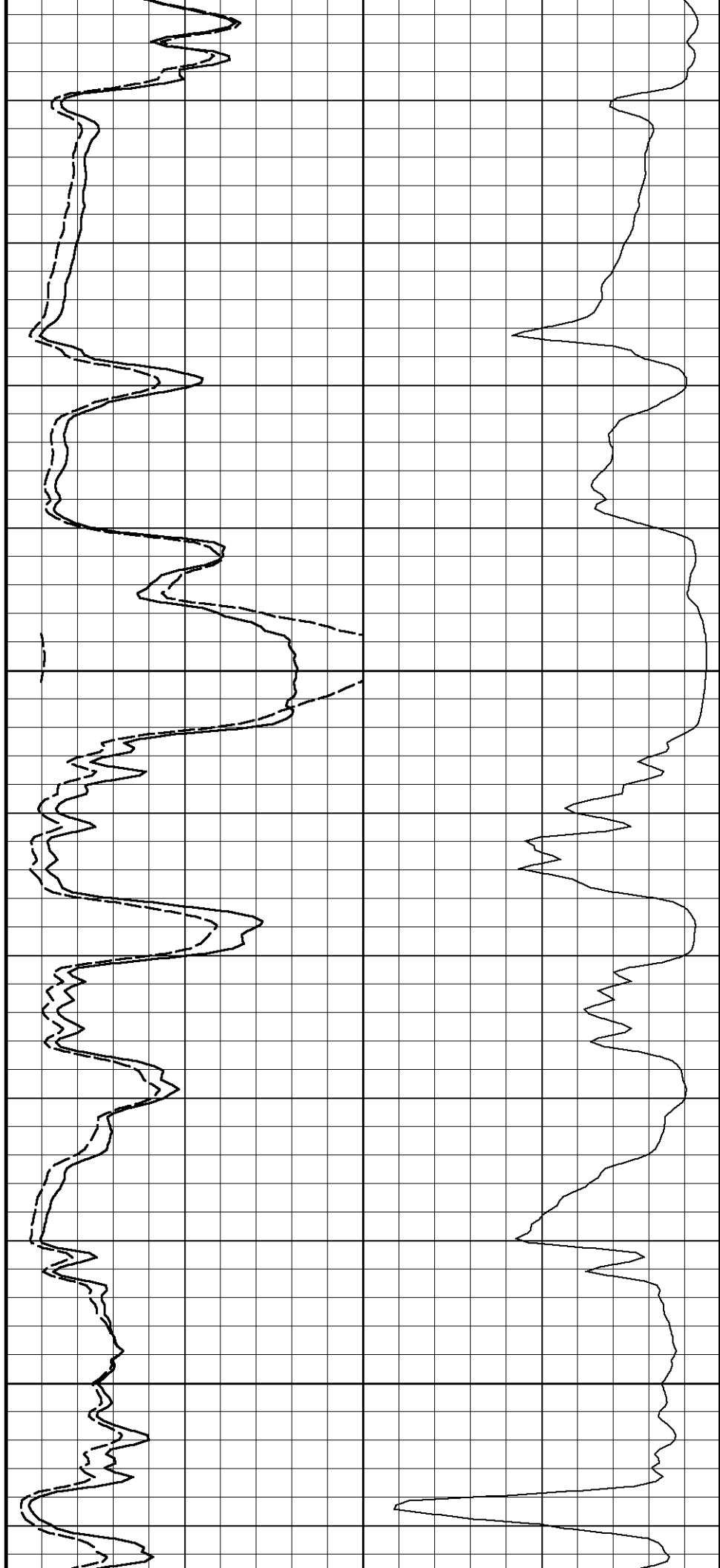


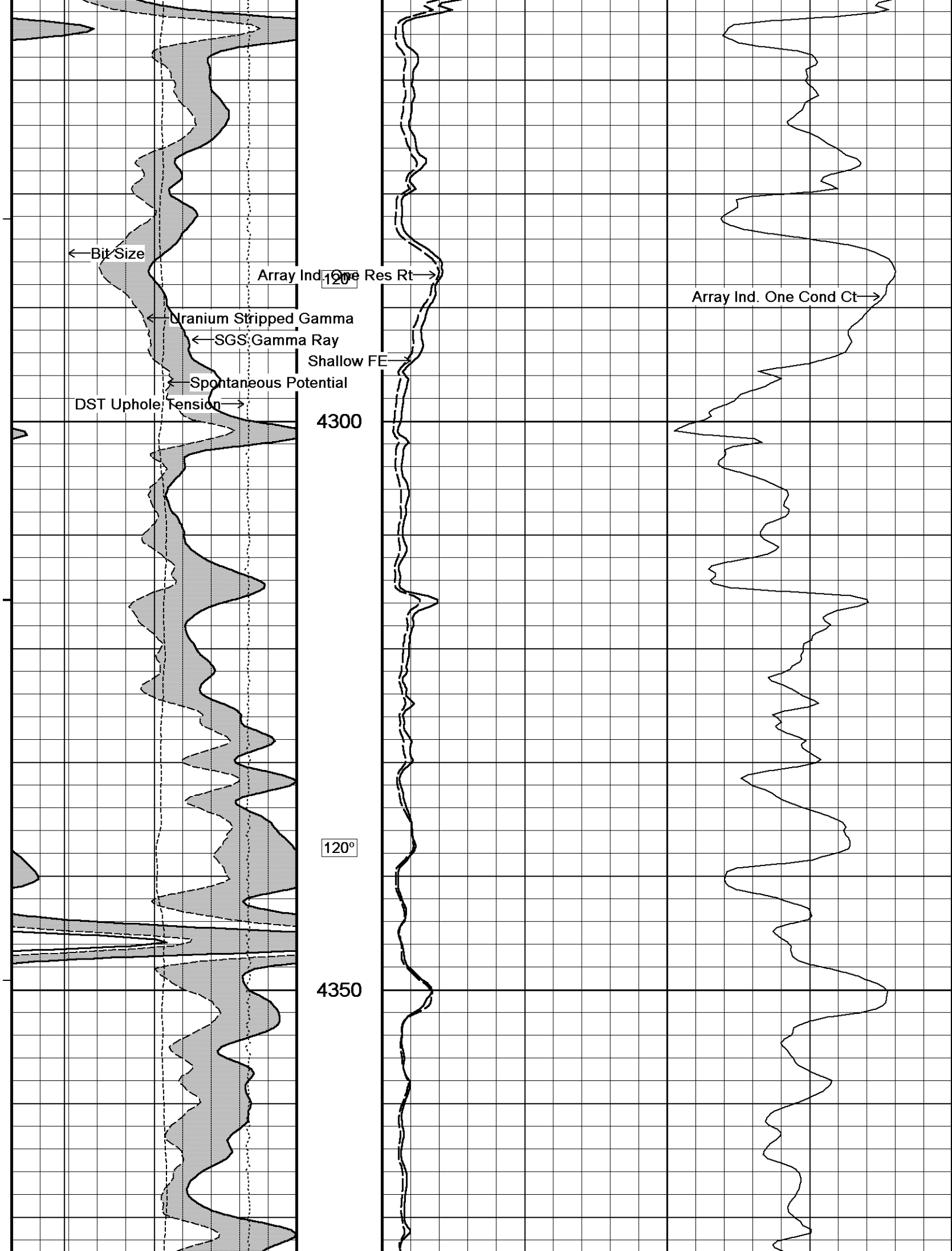
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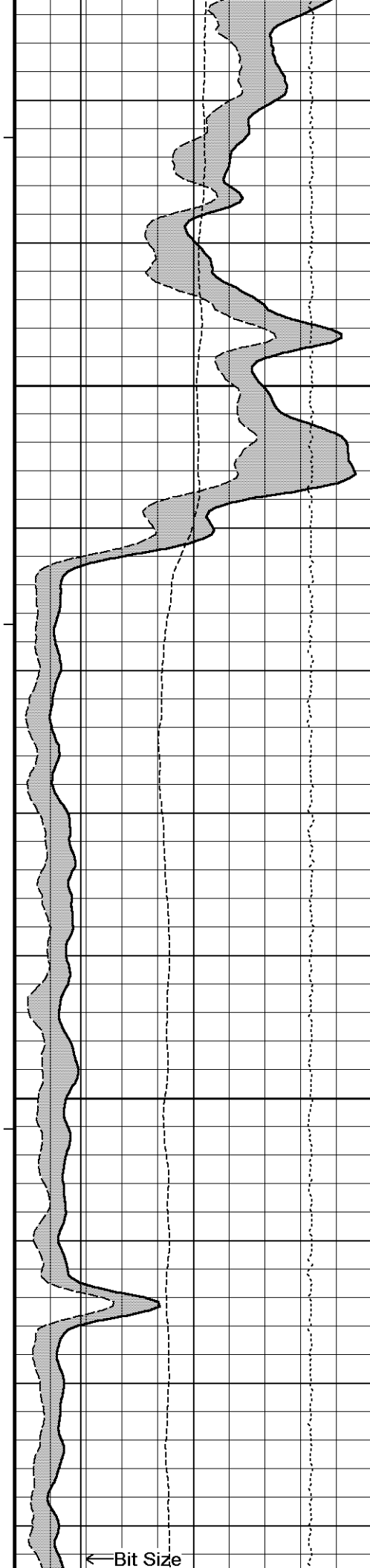
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121°

4250





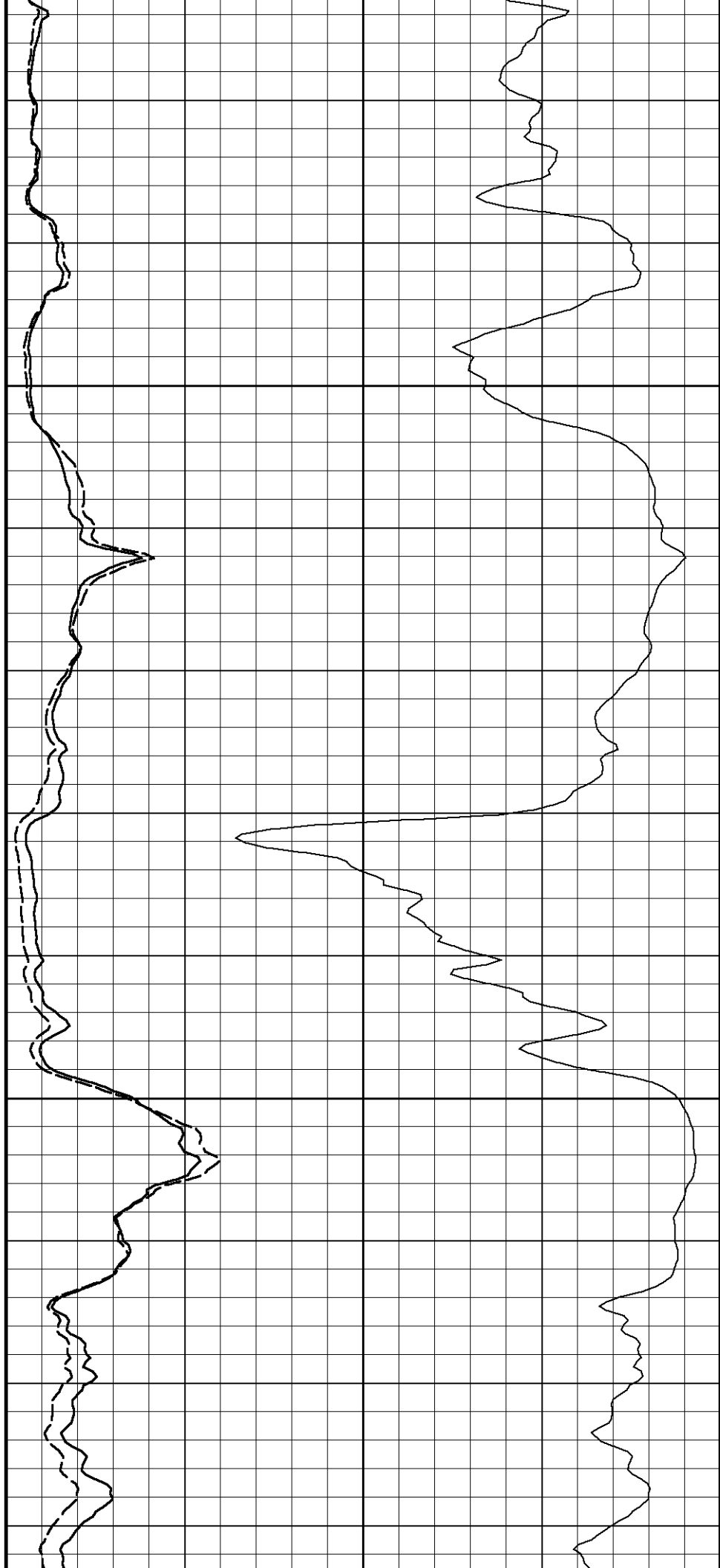


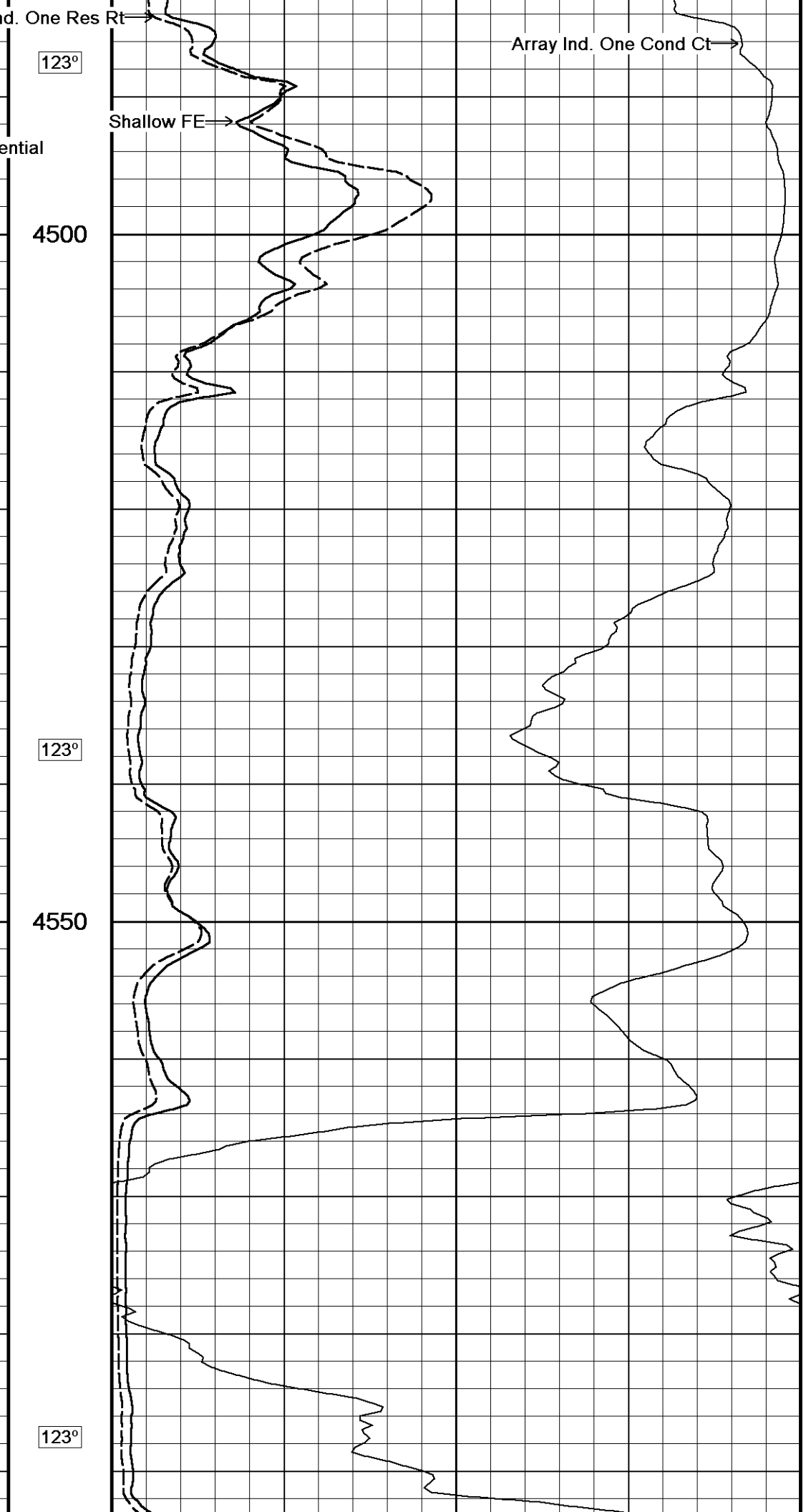
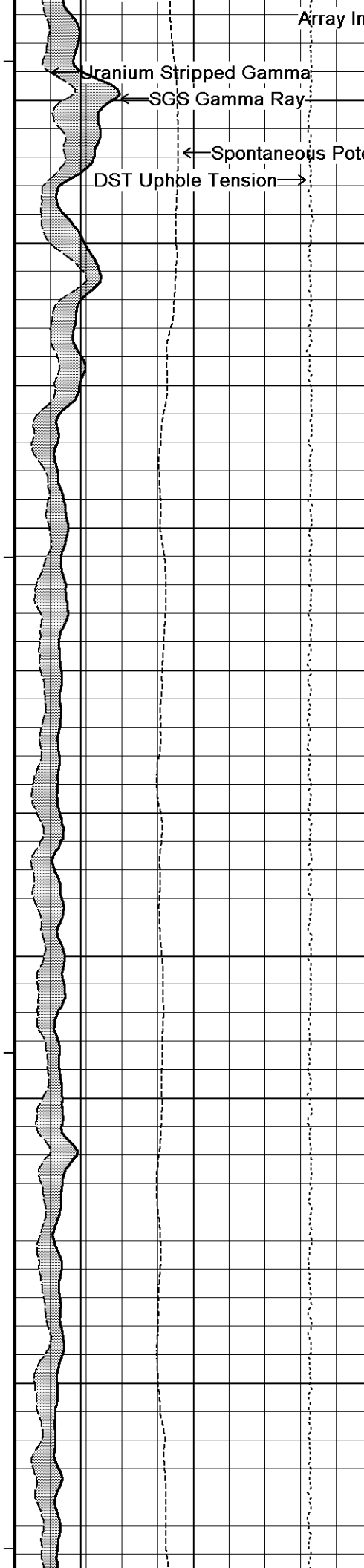
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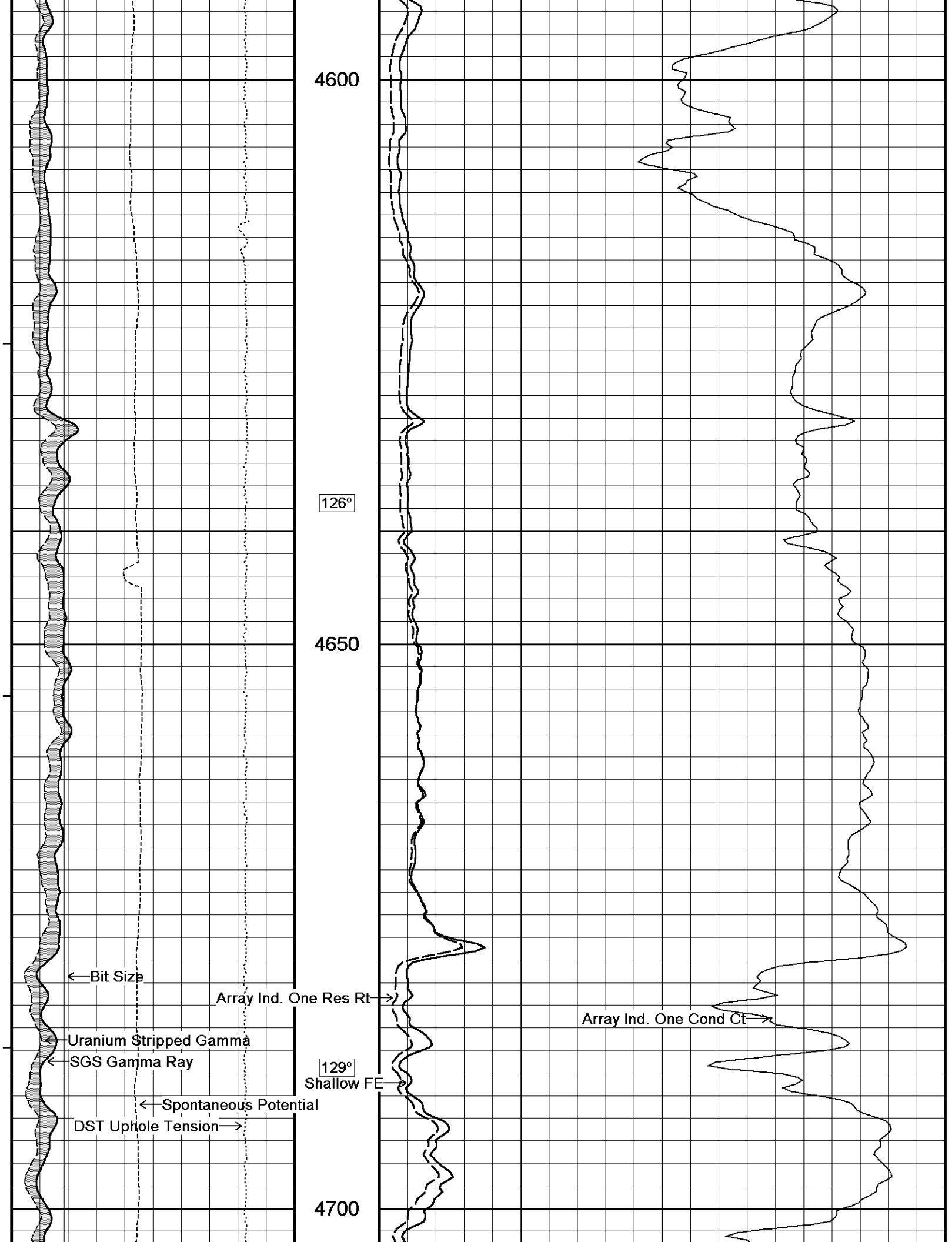
4400

122°

4450







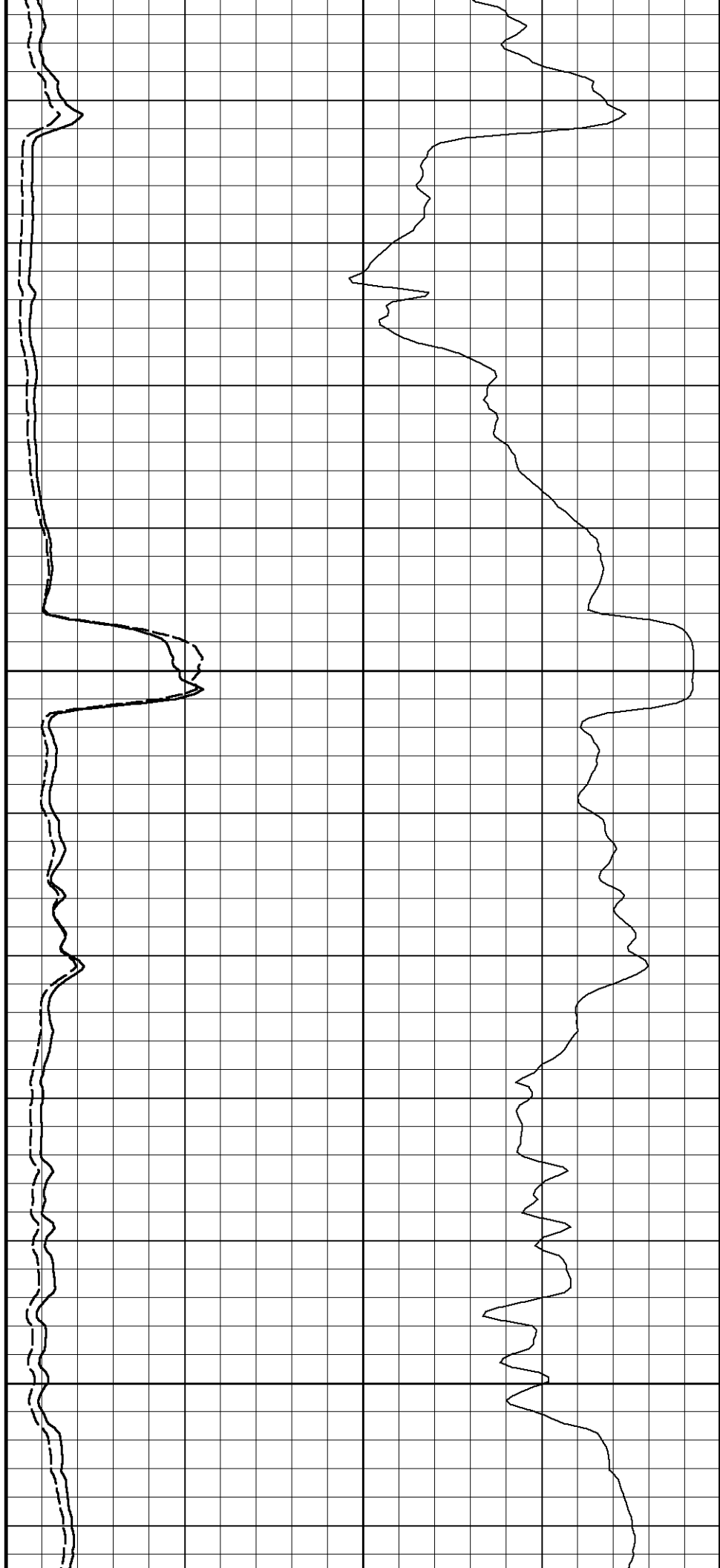


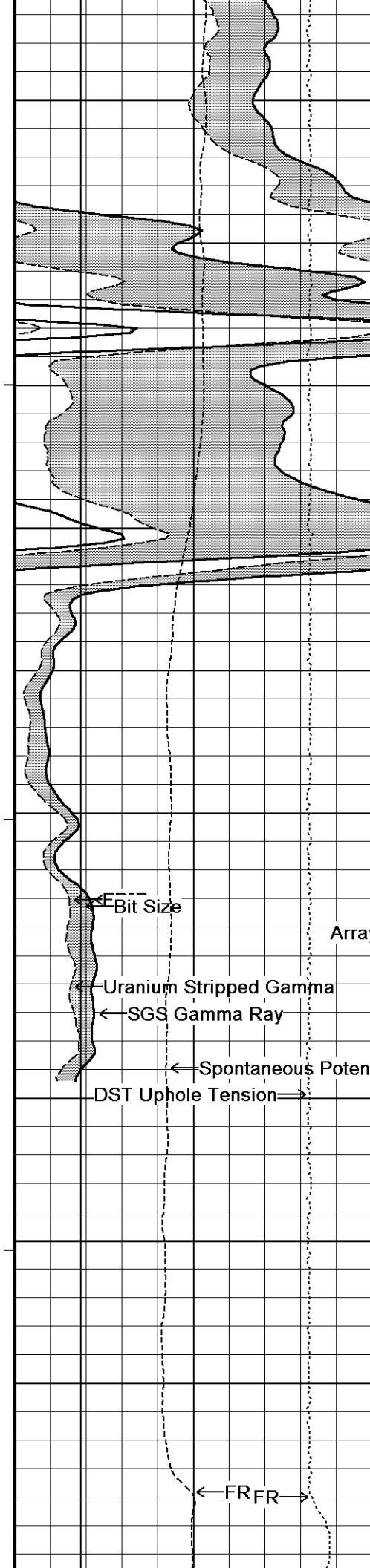
131°

4750

133°

4800





135°

4850

4900

FR

FR

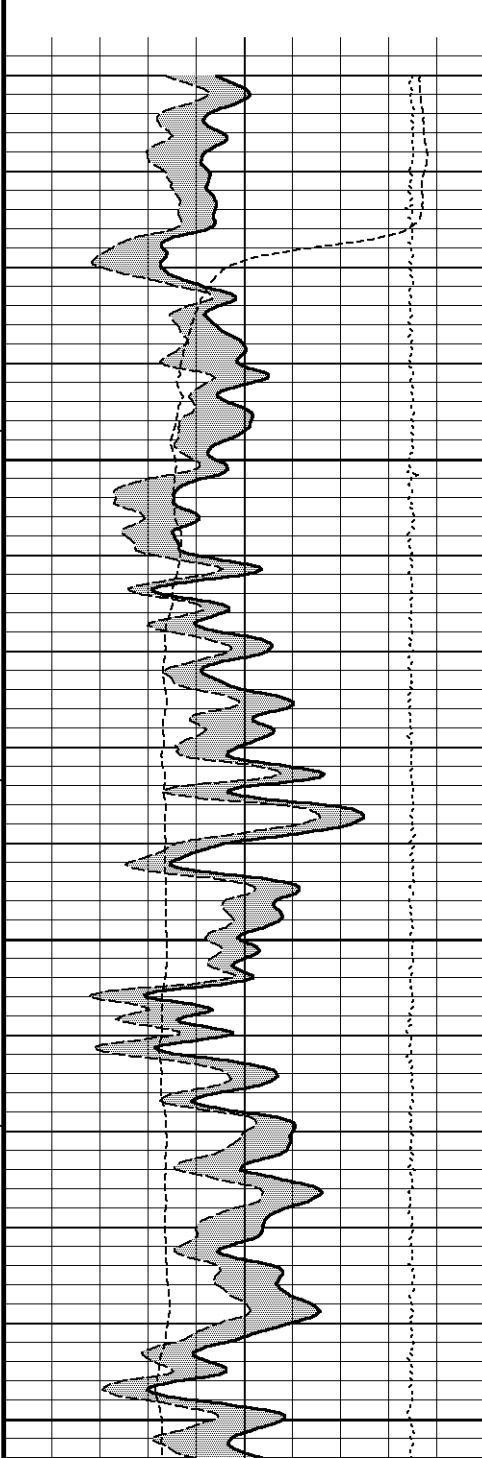
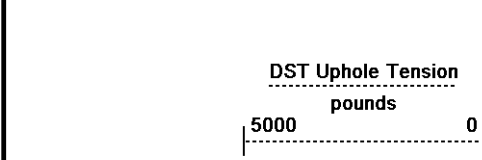
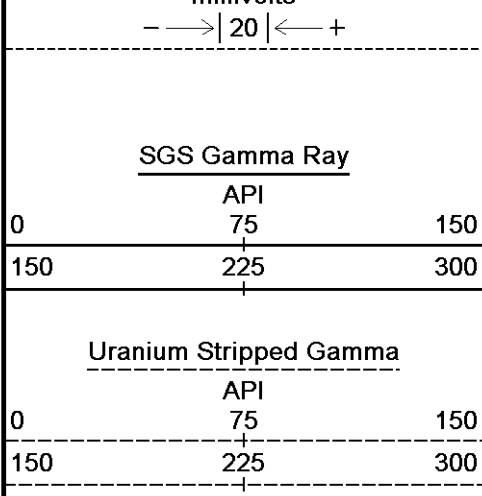
Array Ind. One Res Rt

Shallow FE

Array Ind. One Cond Ct

FR

FR FR



deg F

HVI
every
10 cu ft

←

Annular
Integral
every
10 cu ft

→

Replay
Scale
1:240

608

Casing
Shoe

650

93°

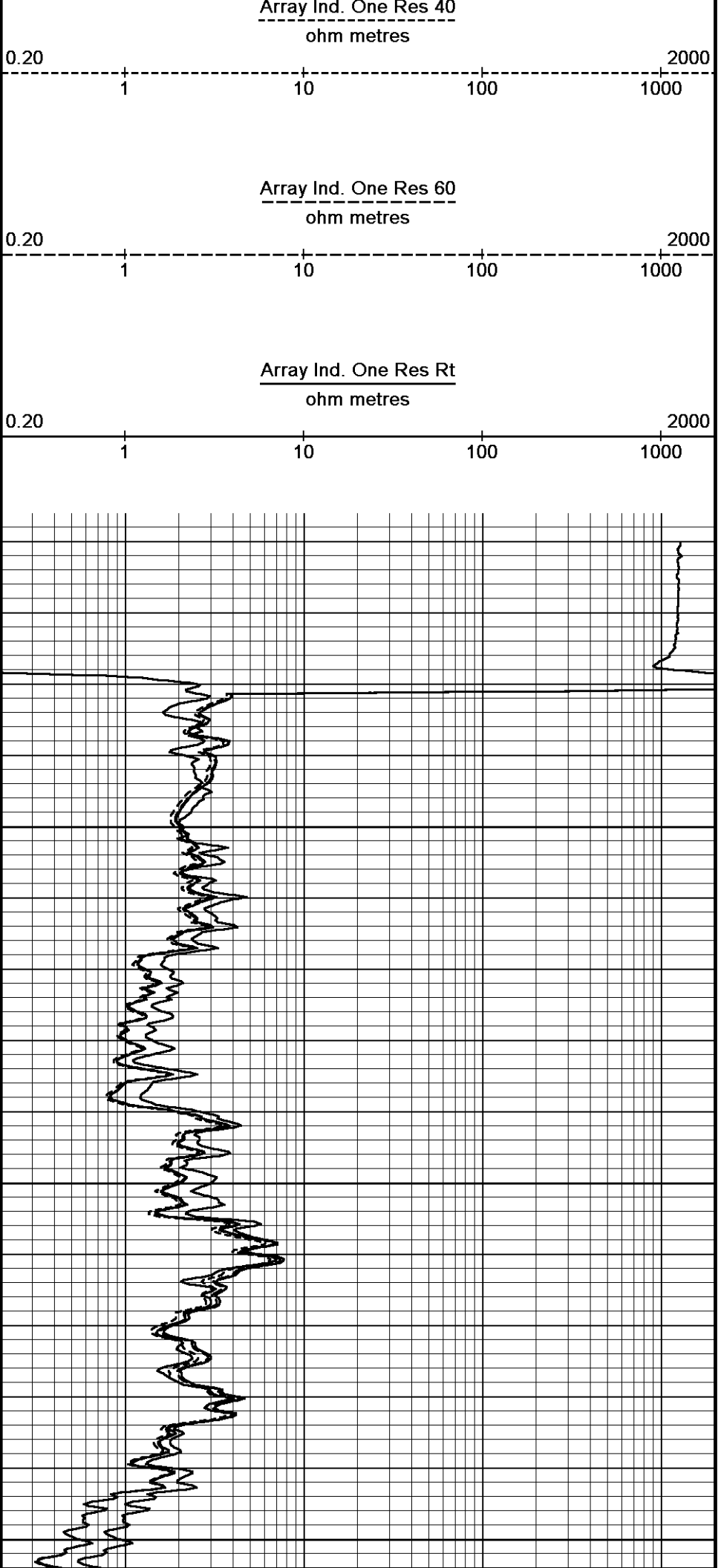
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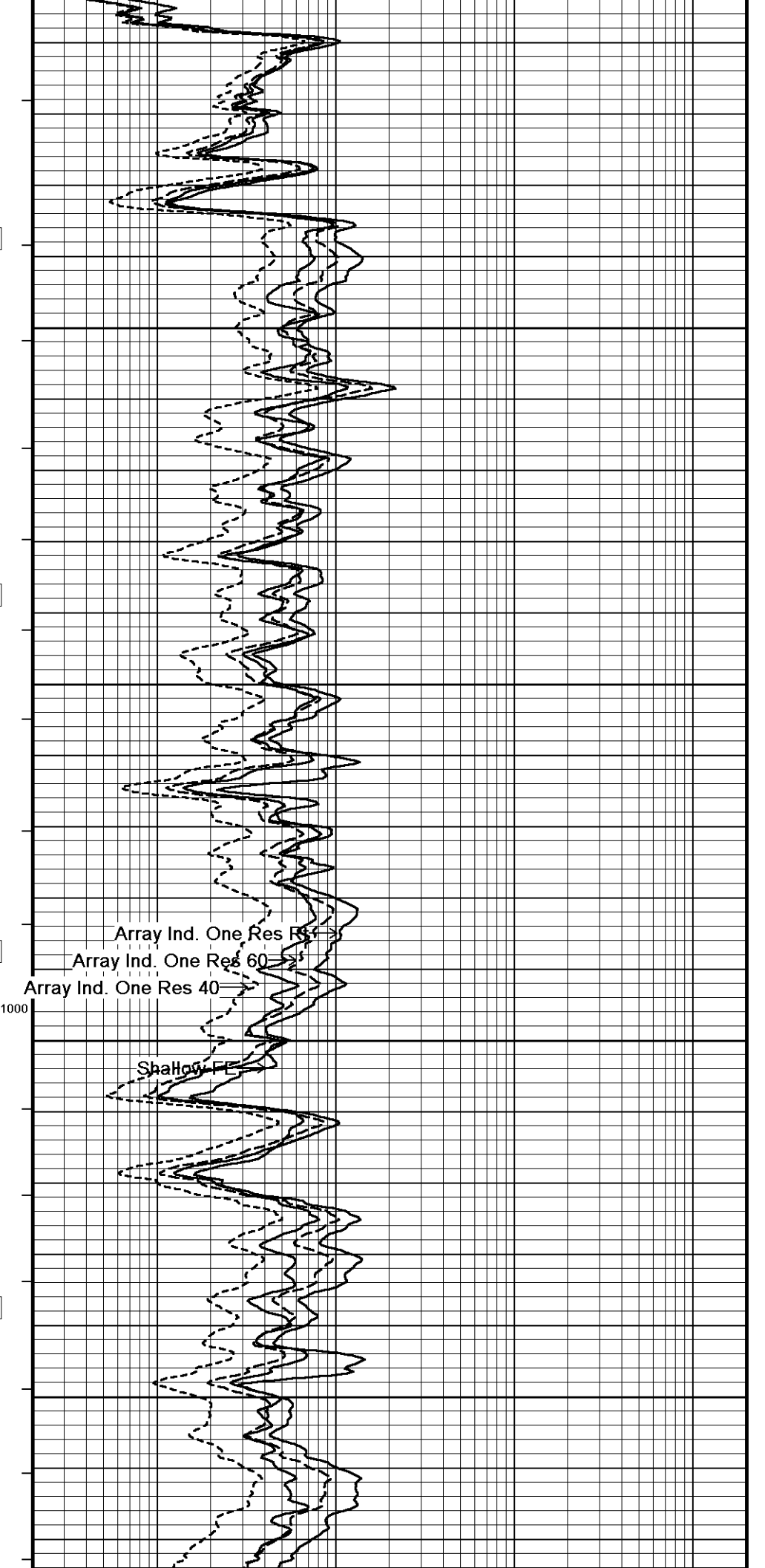
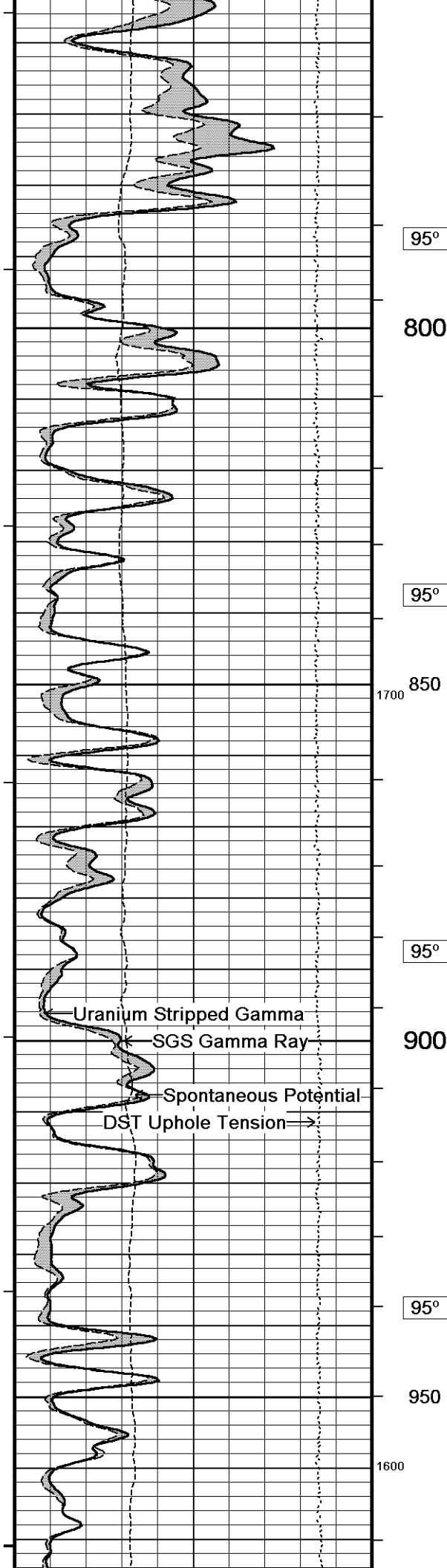
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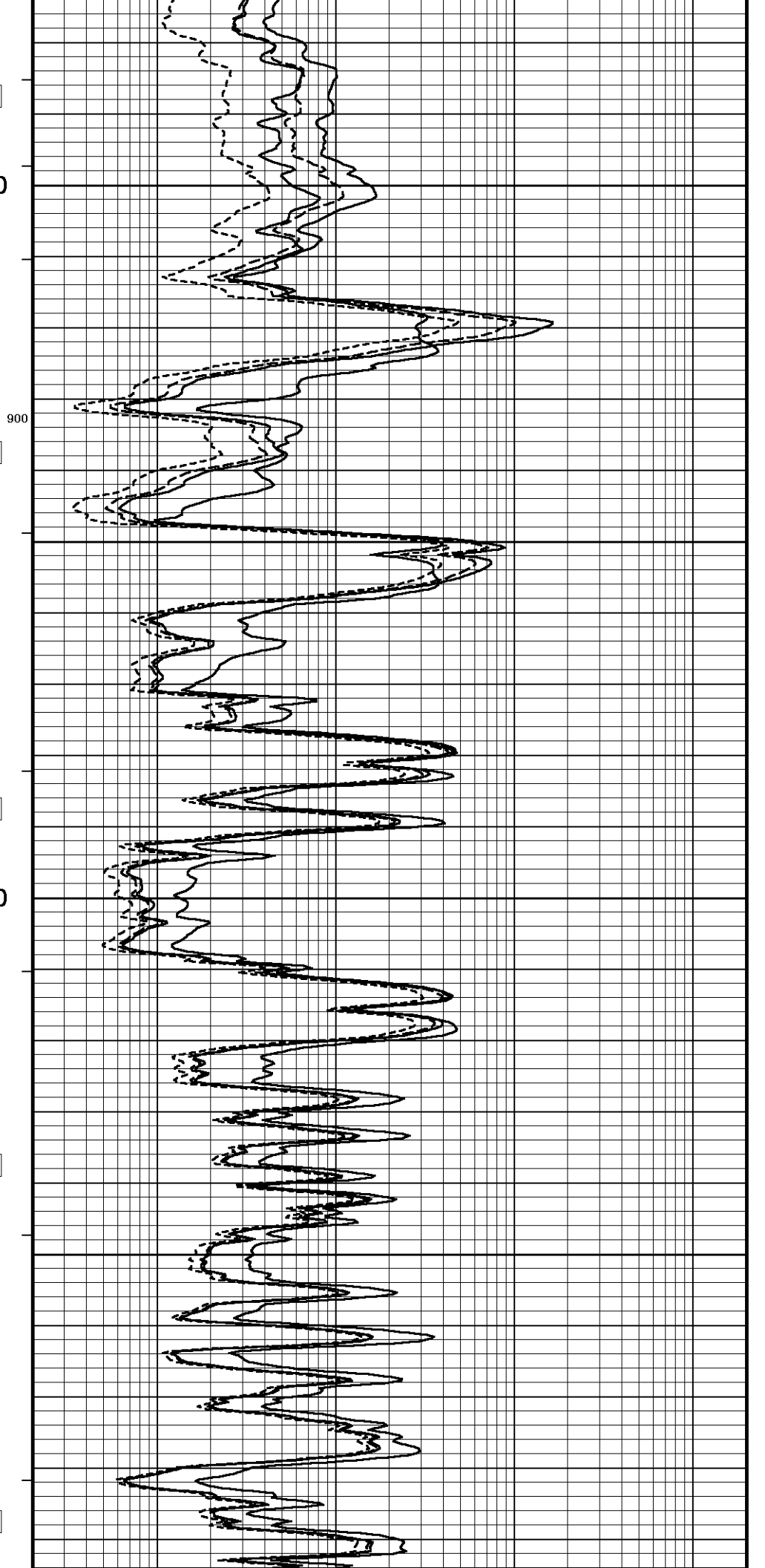
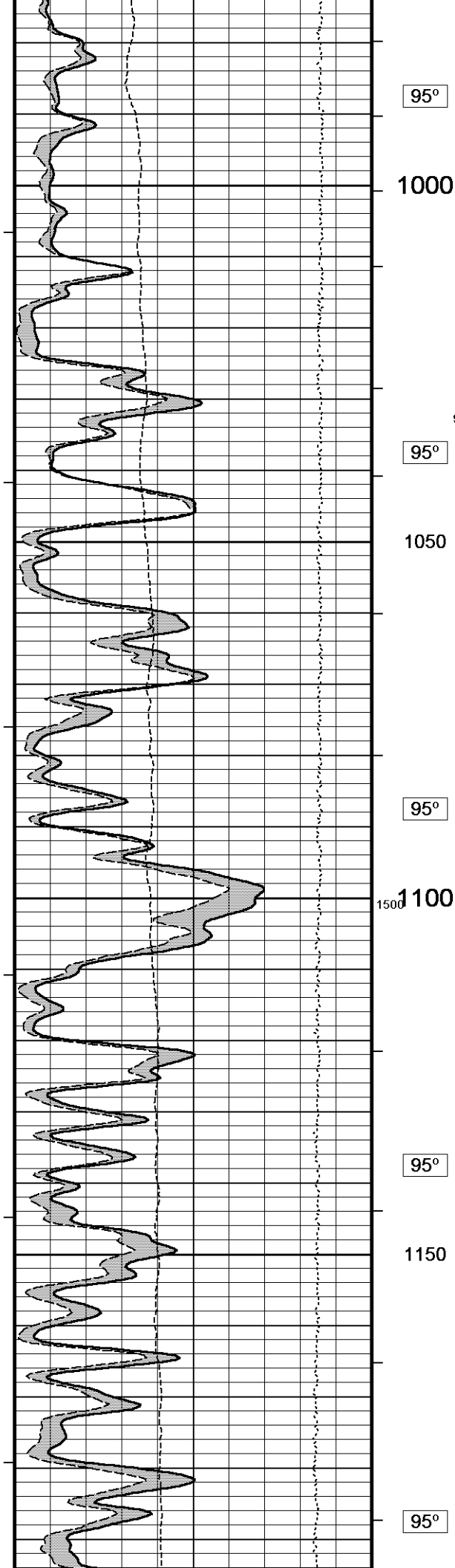
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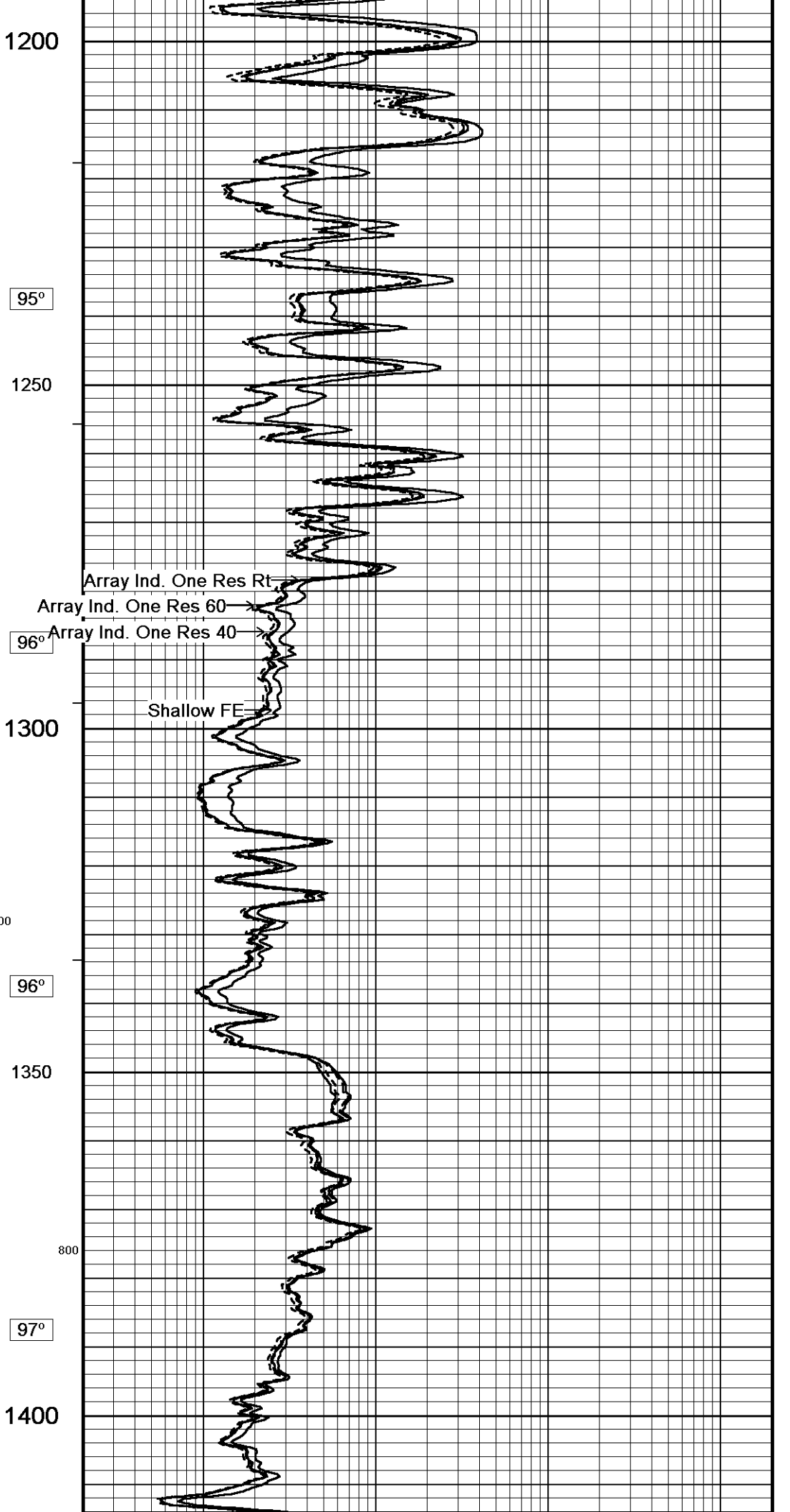
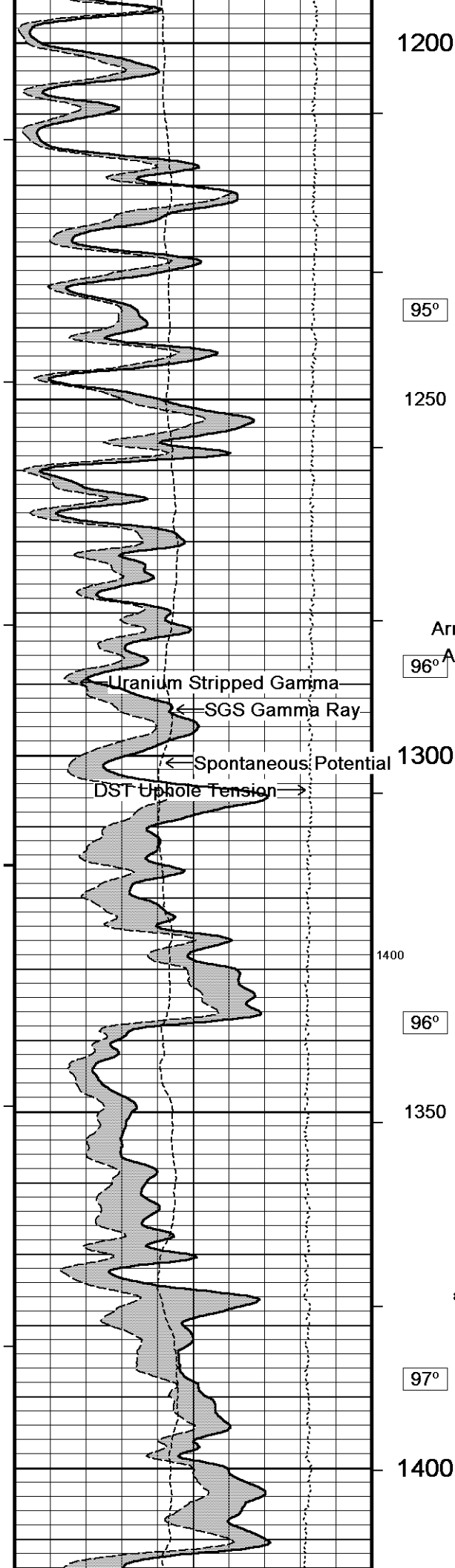
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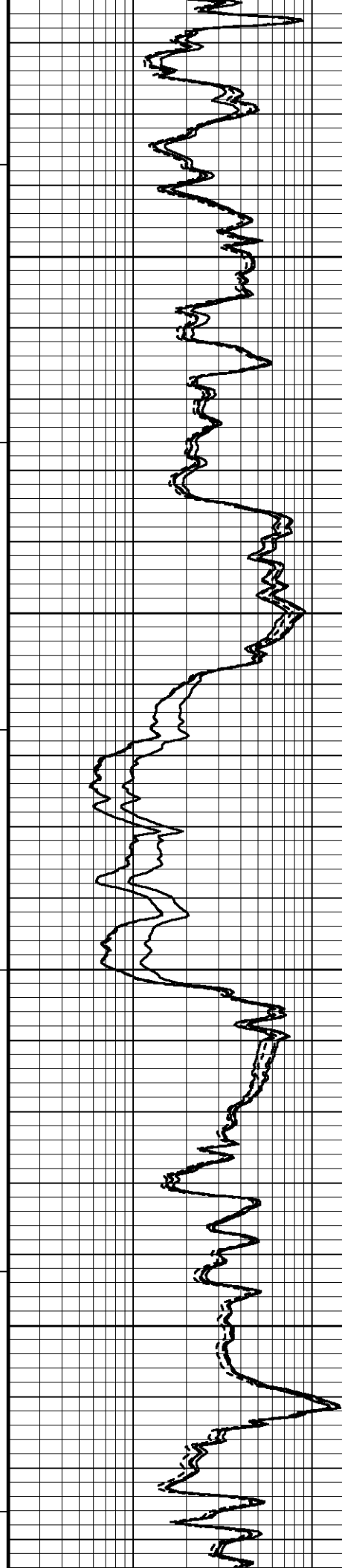
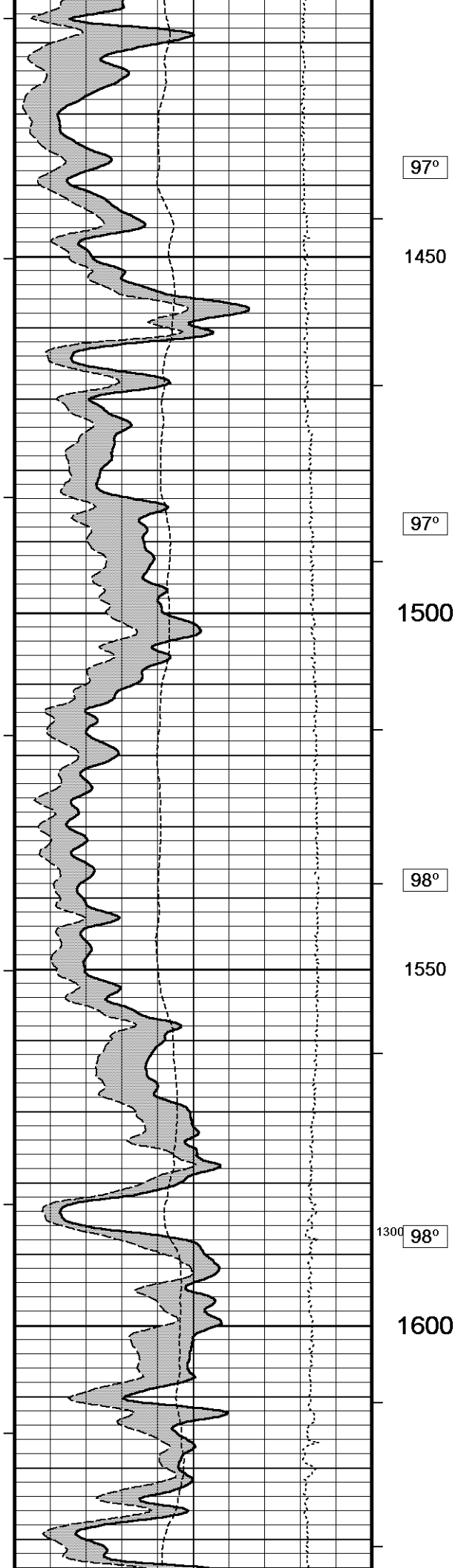
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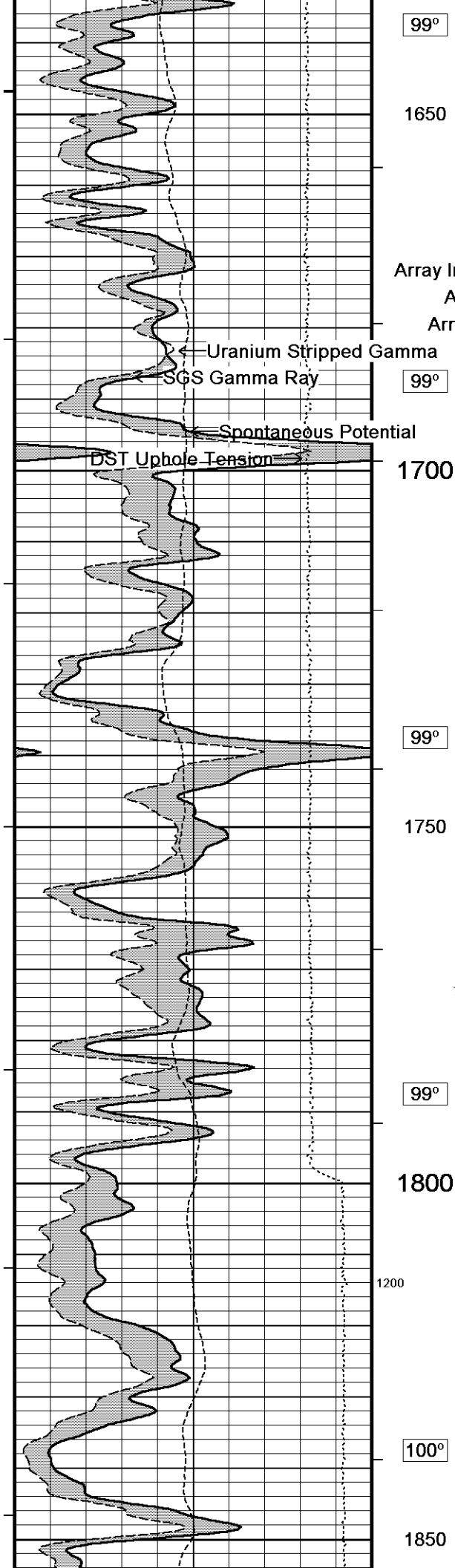












99°

1650

99°

1700

99°

1750

99°

1800

1200

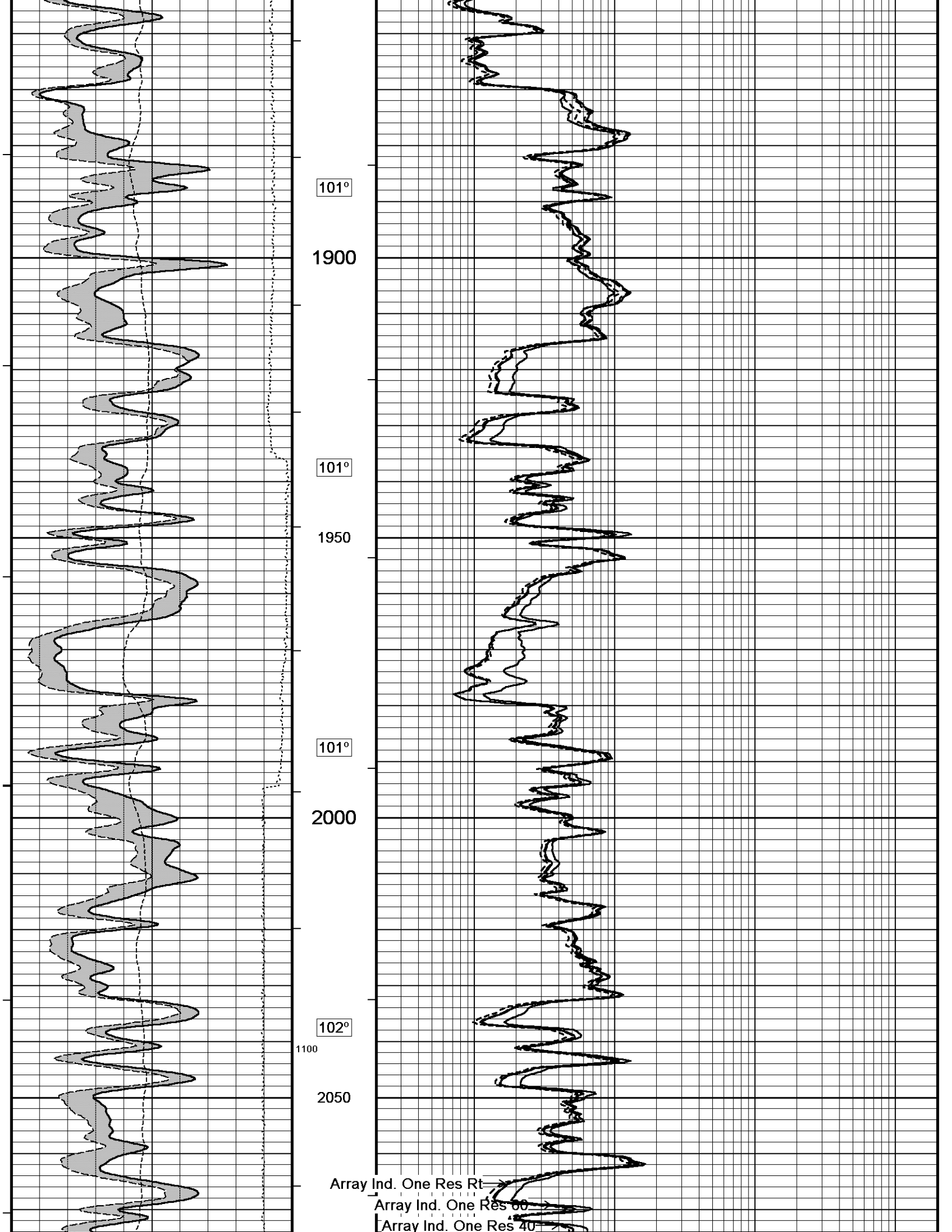
100°

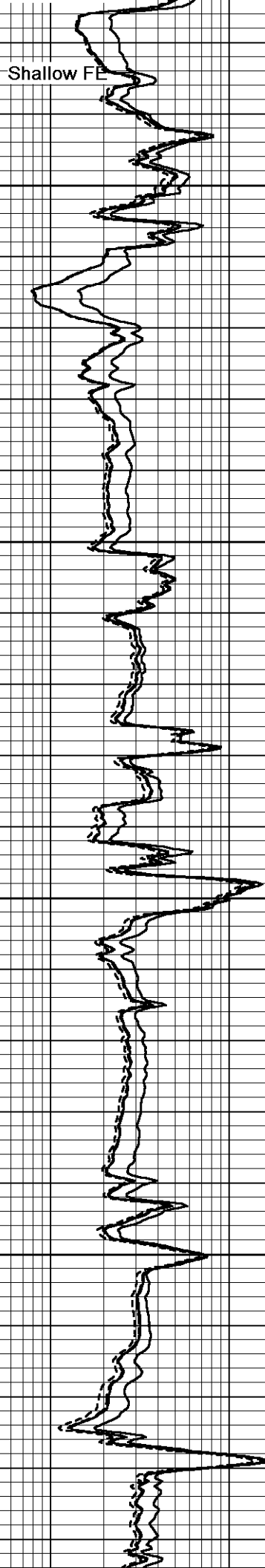
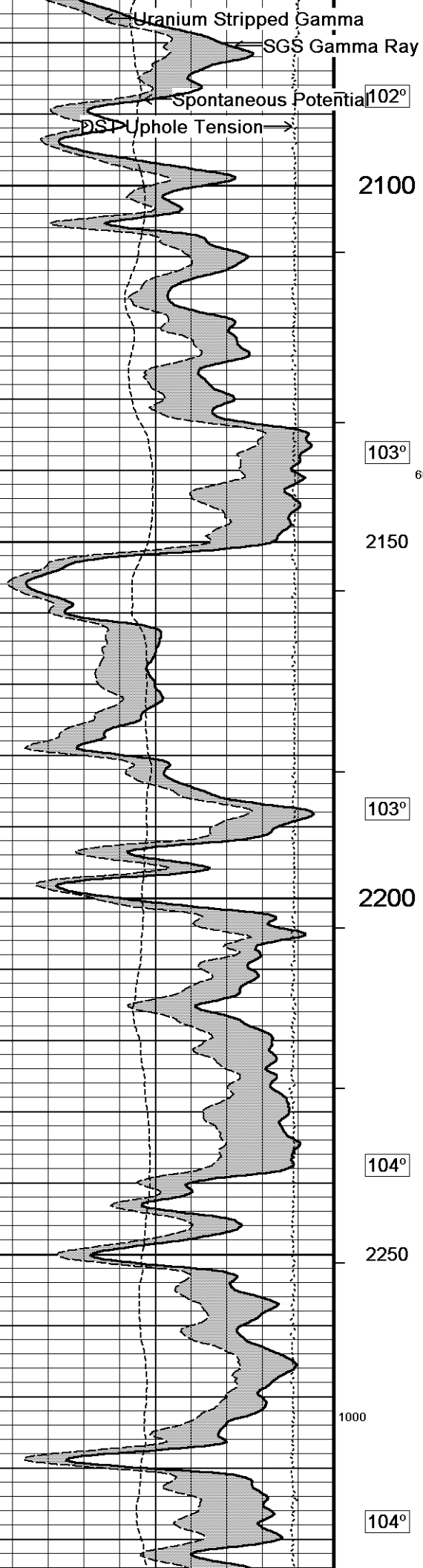
1850

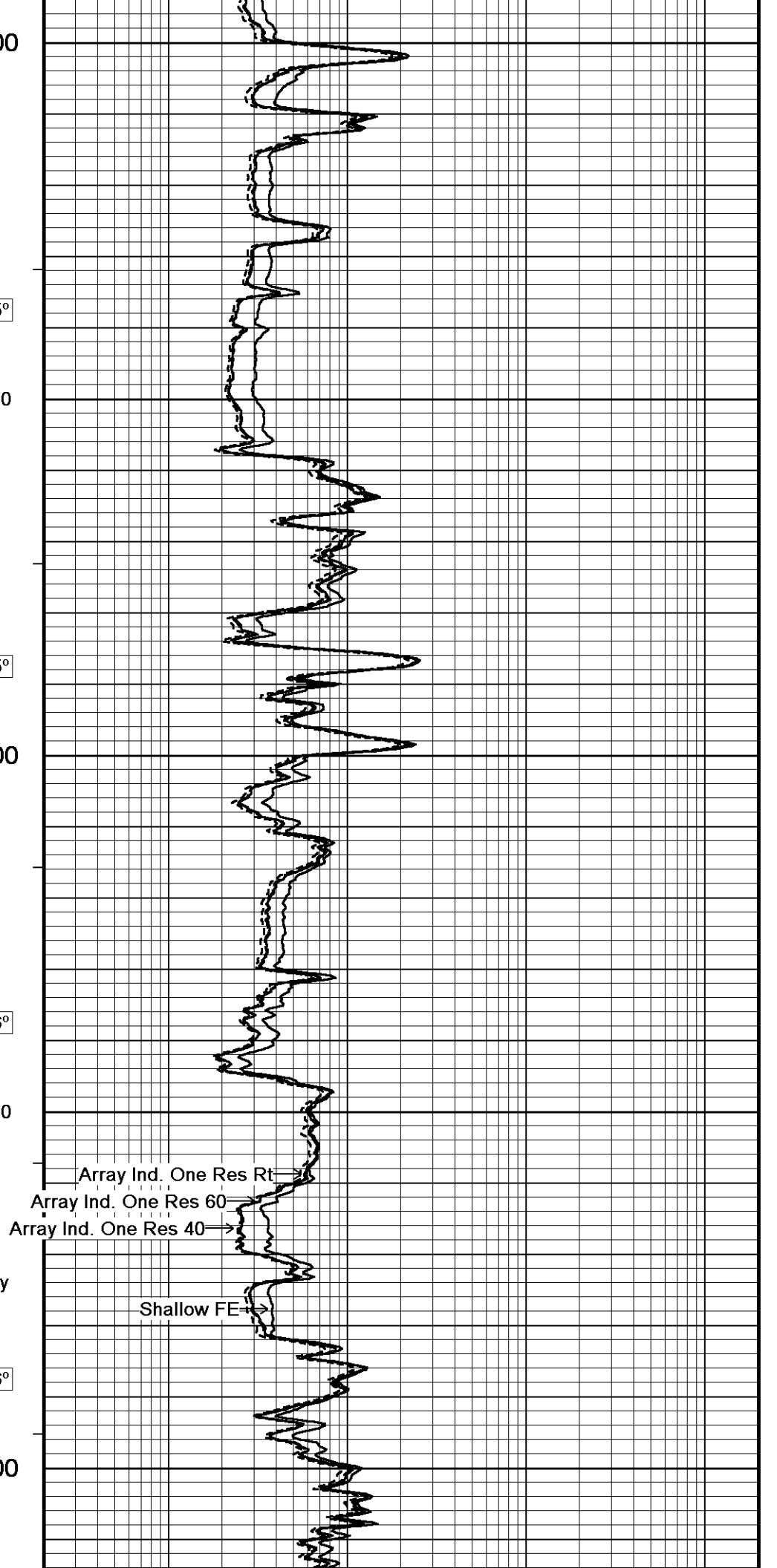
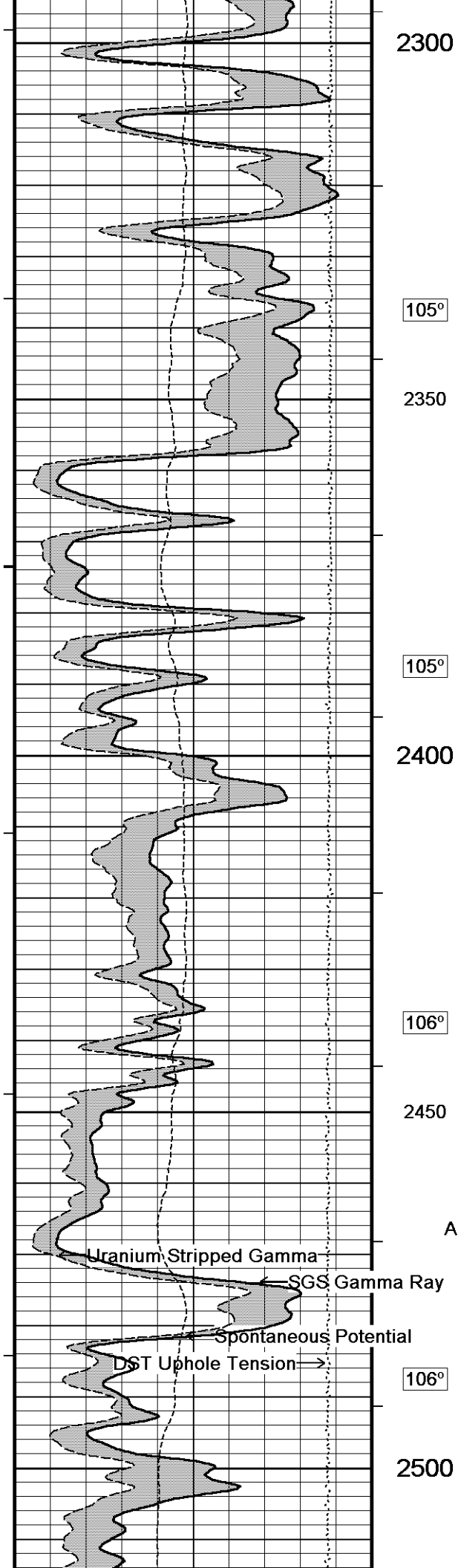
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40

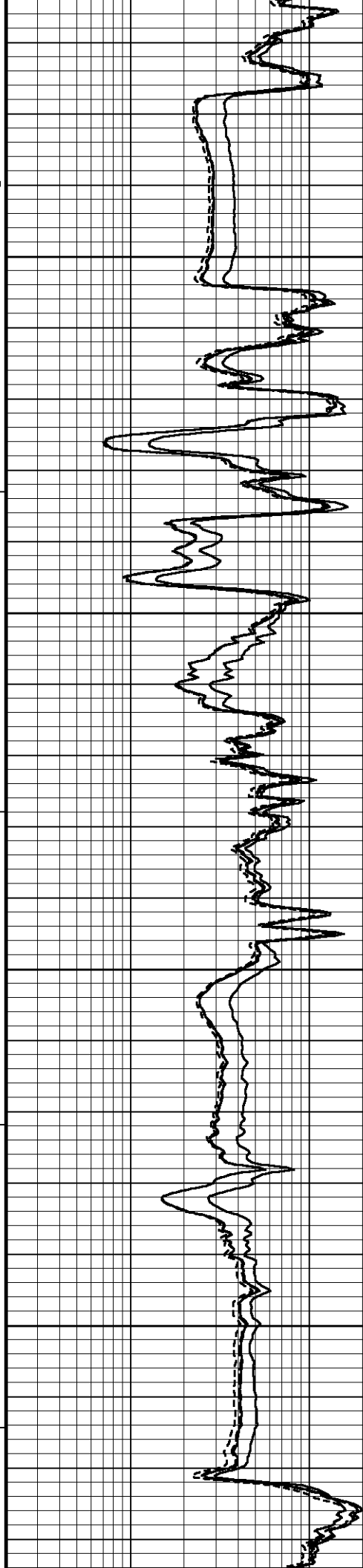
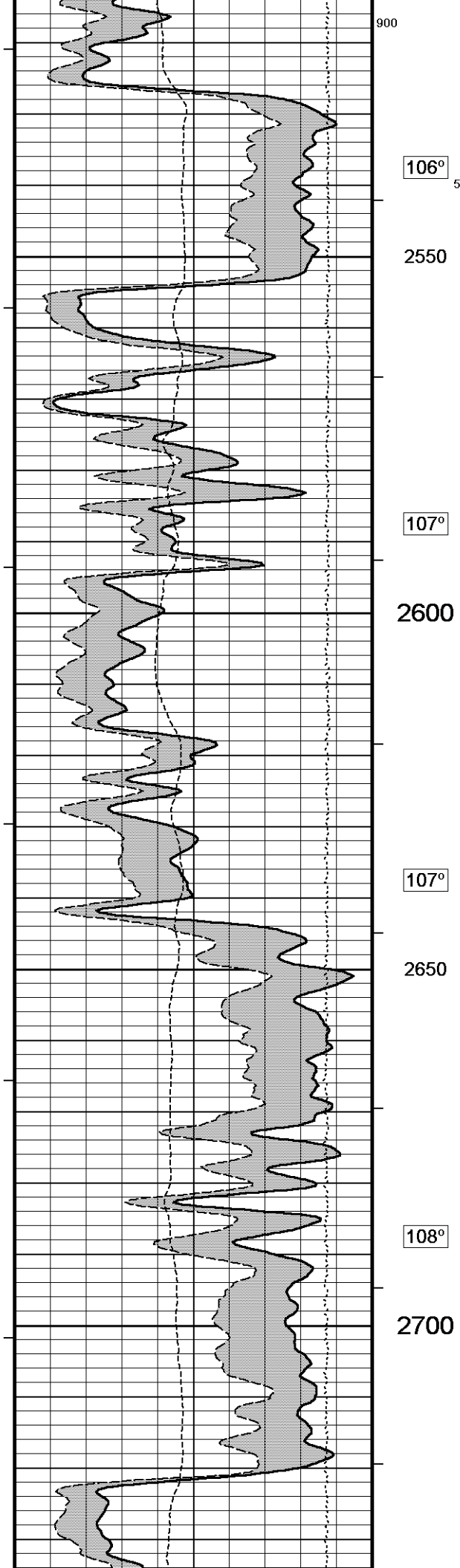
Shallow FE

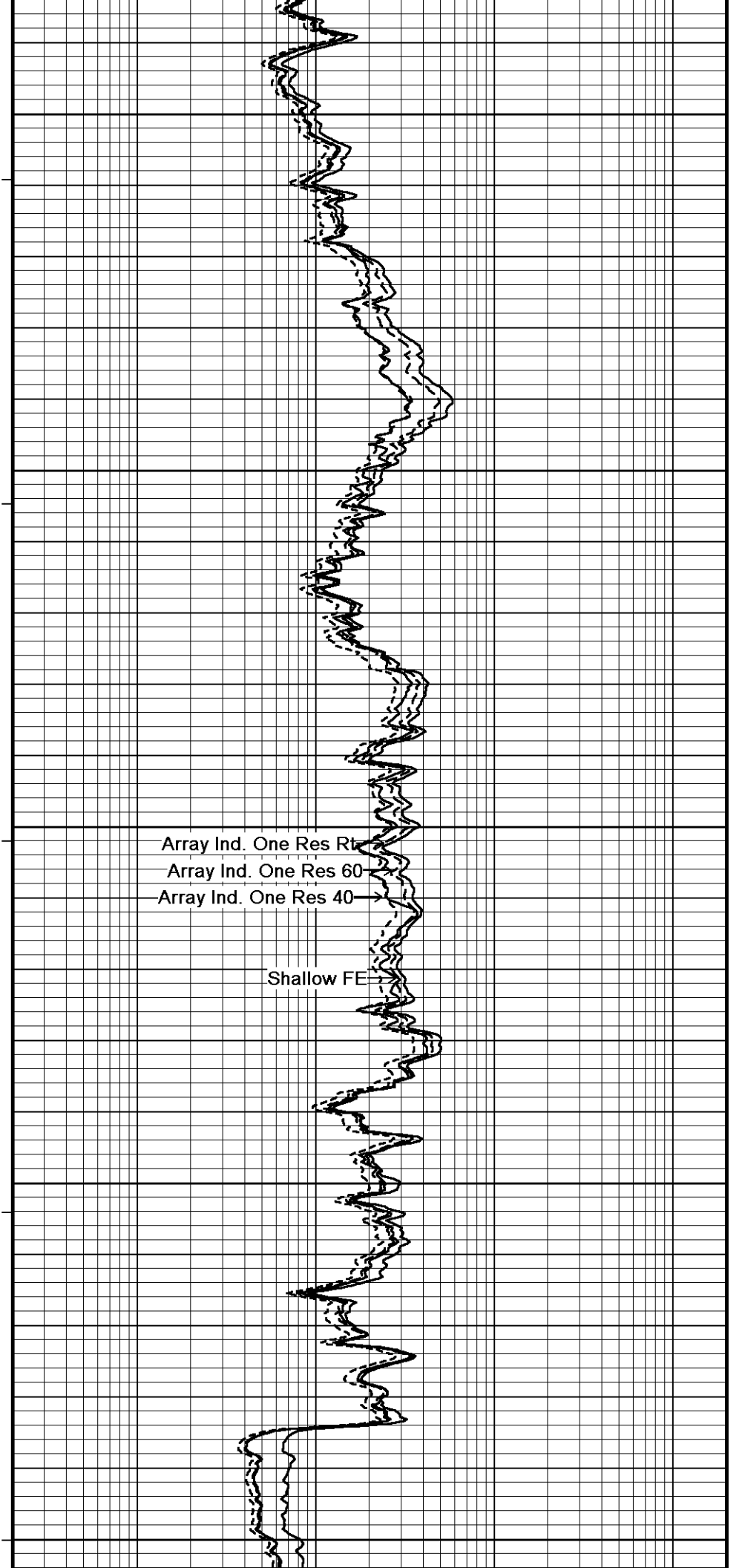
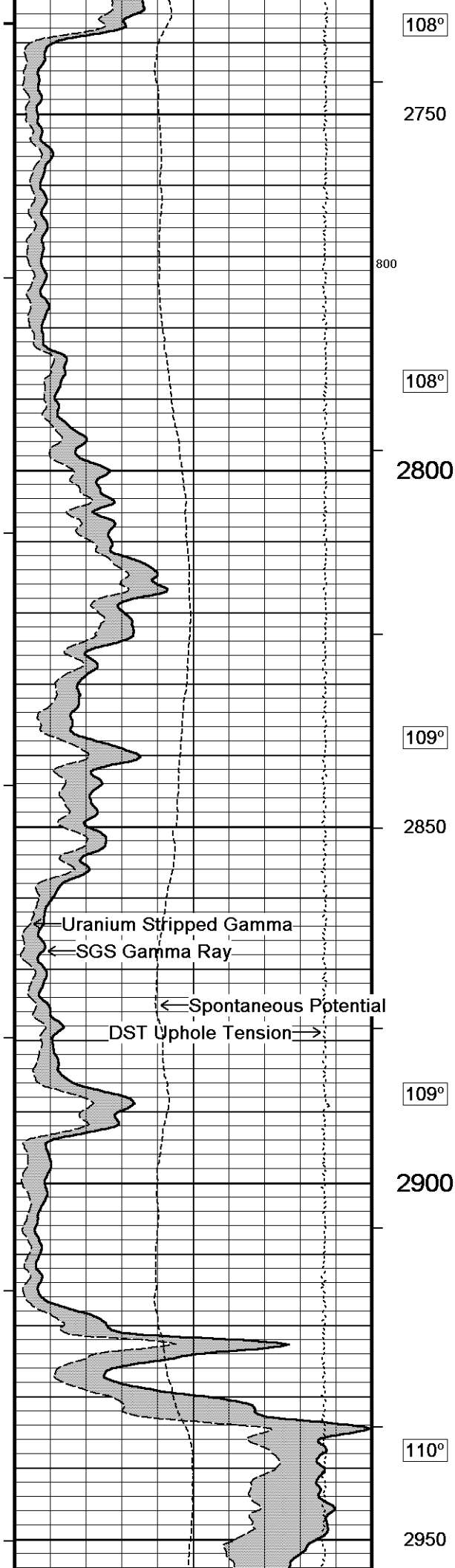
700

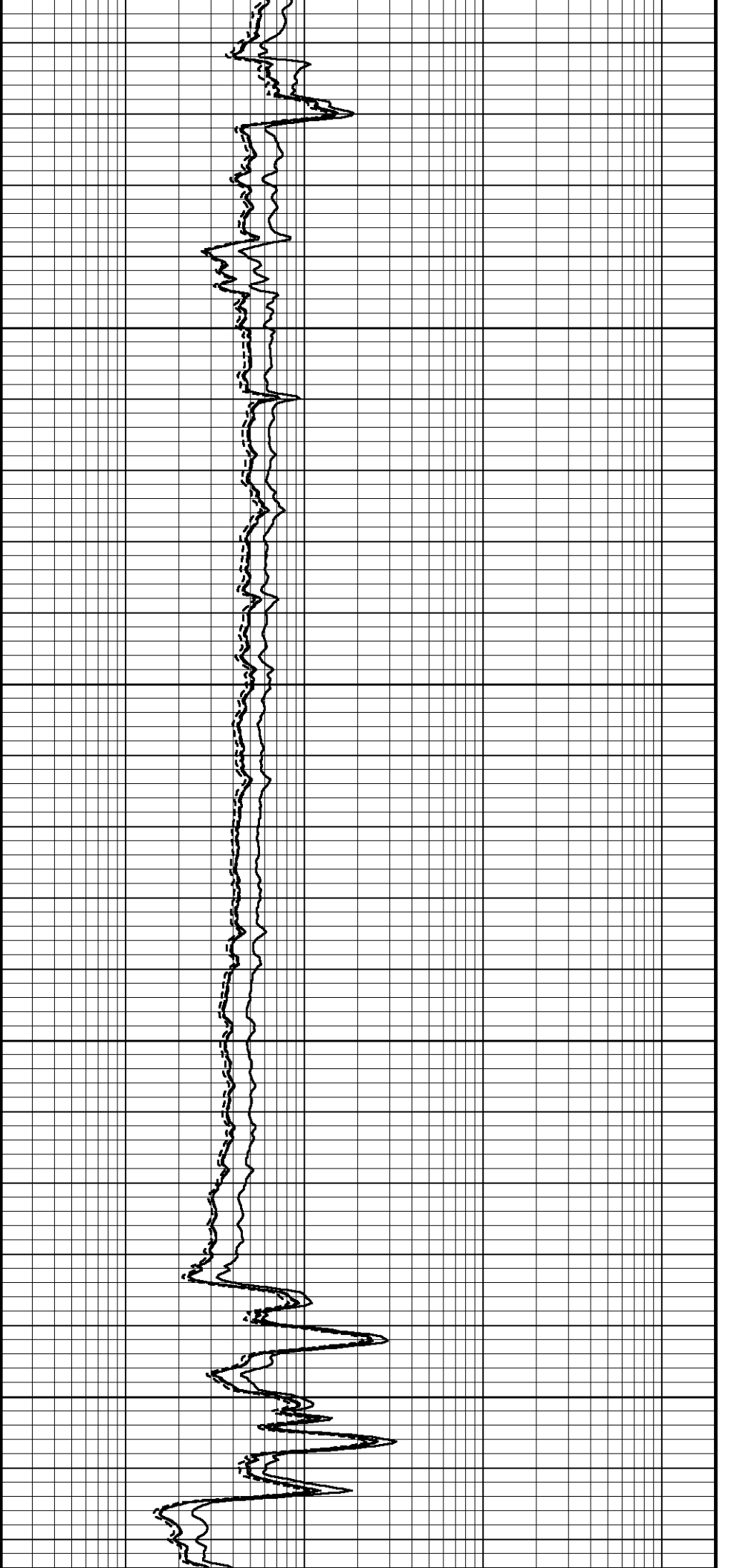
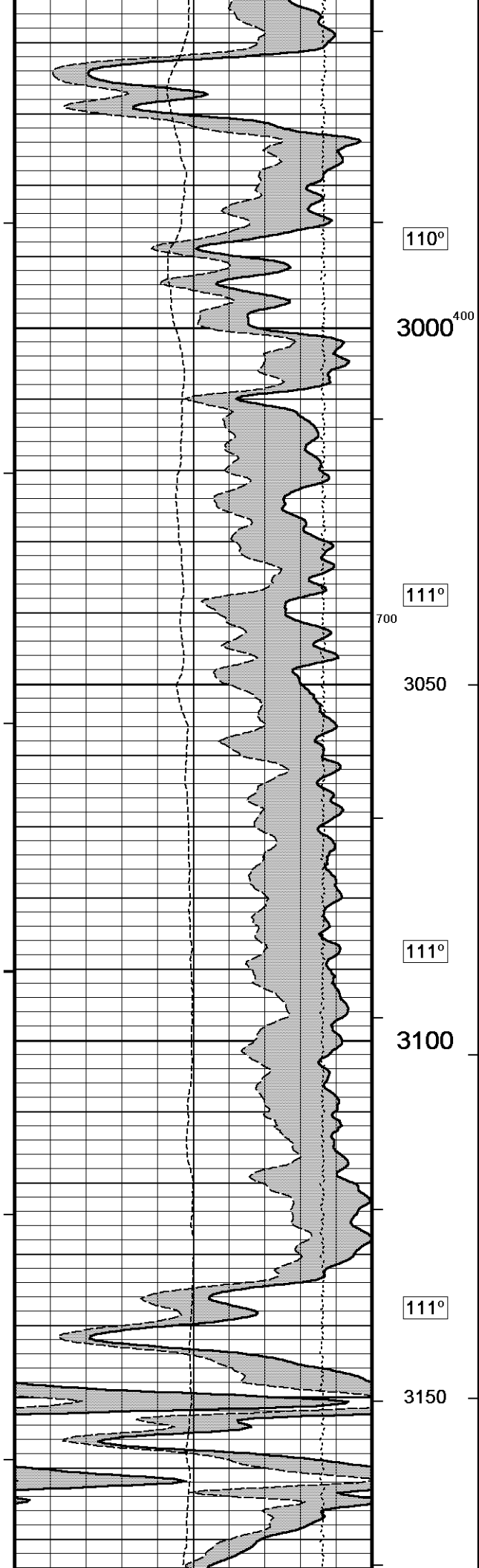


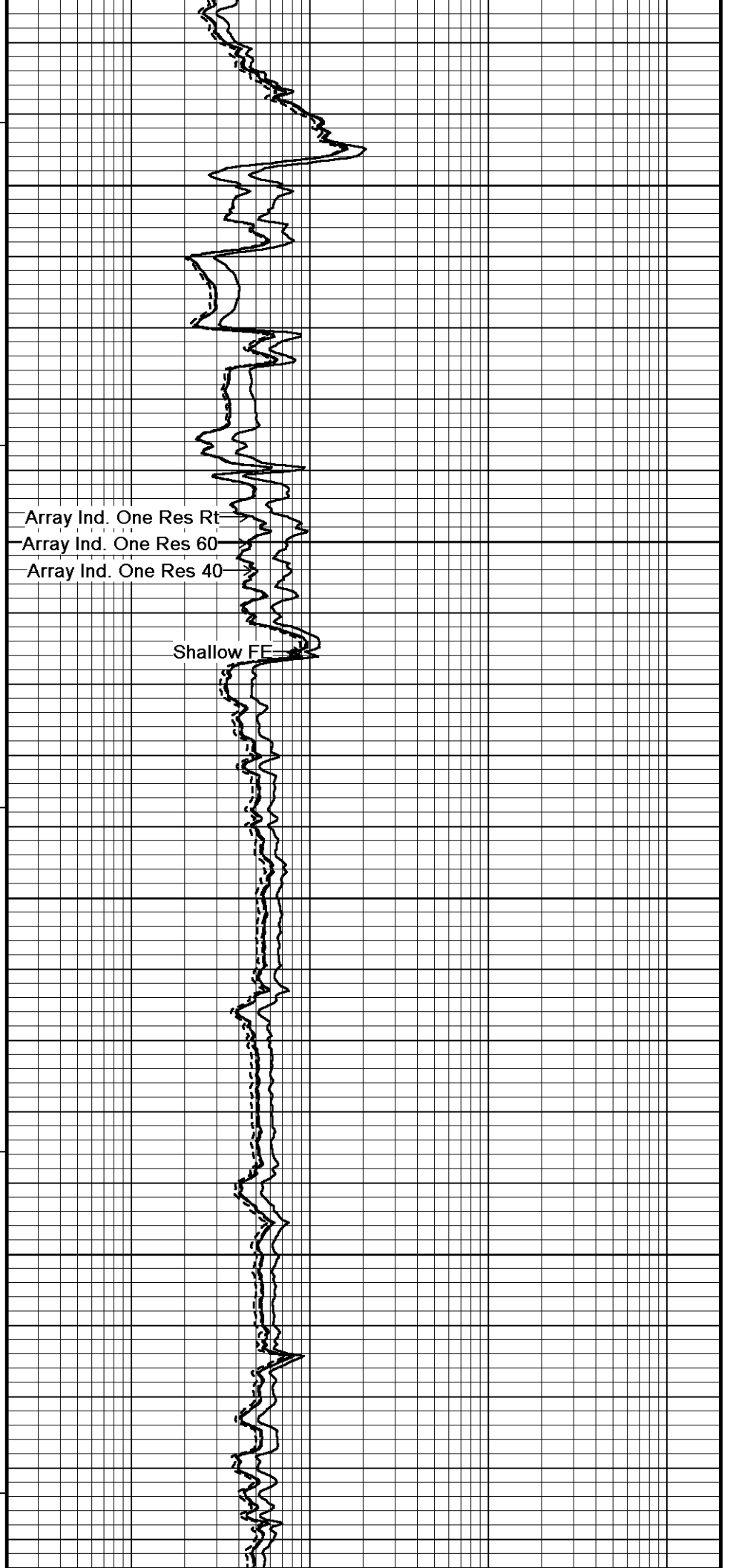
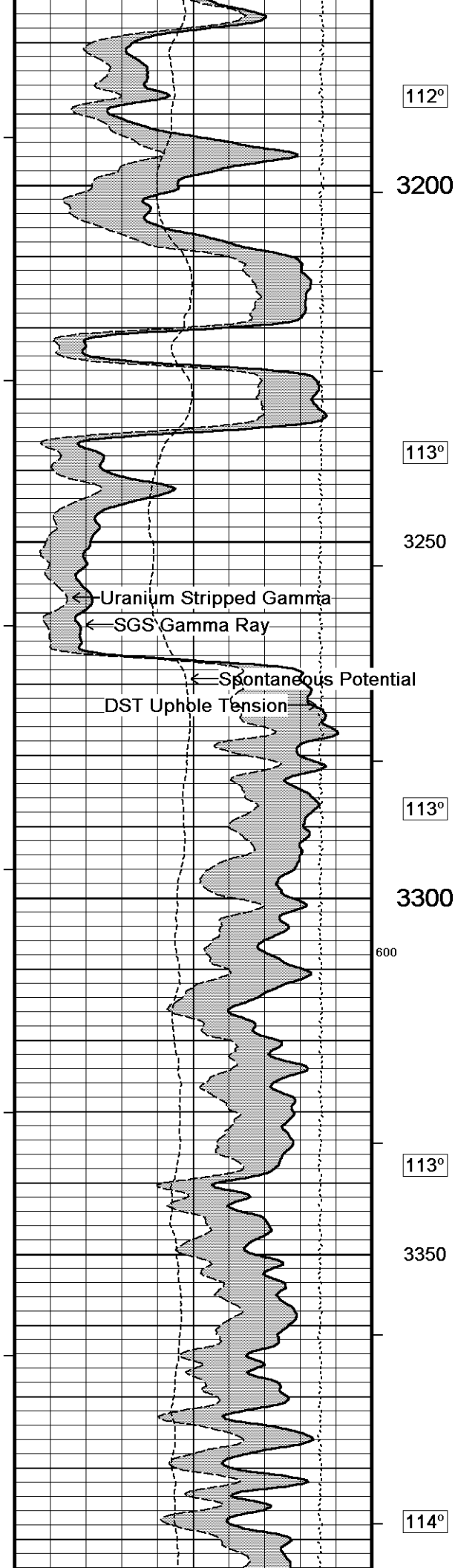


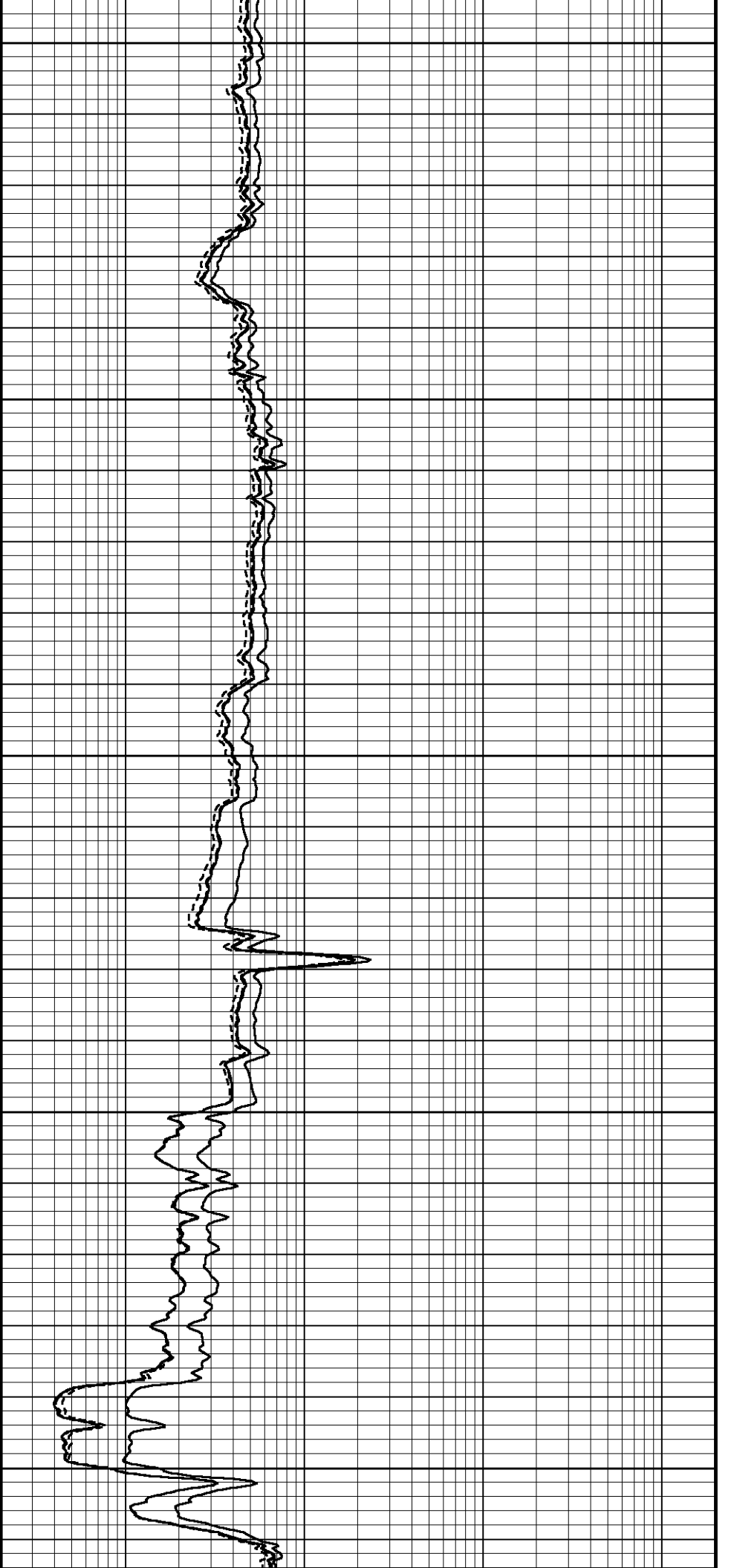
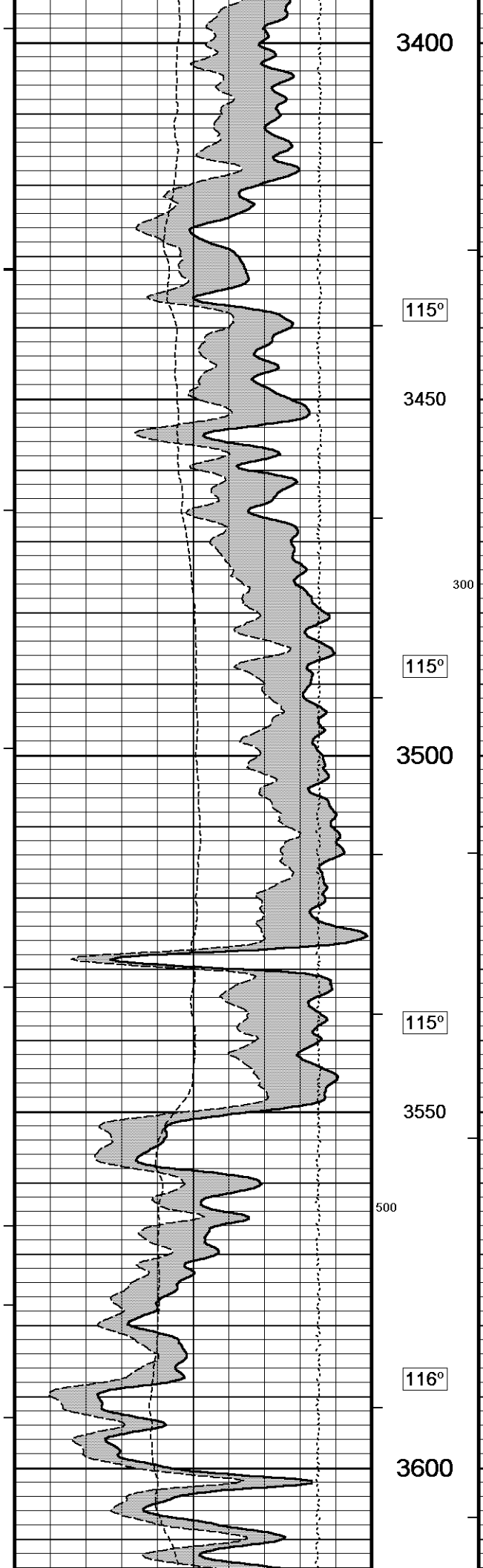


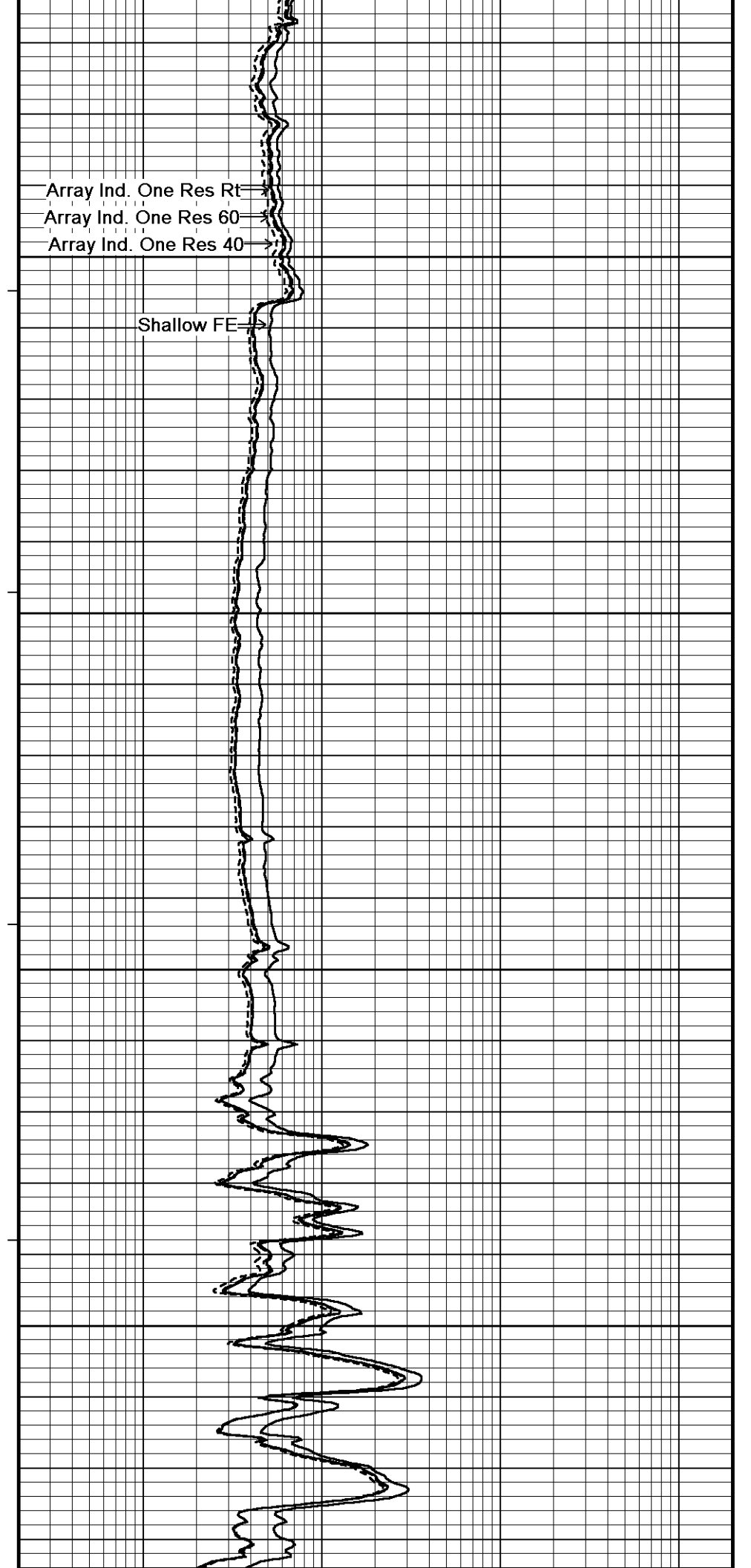
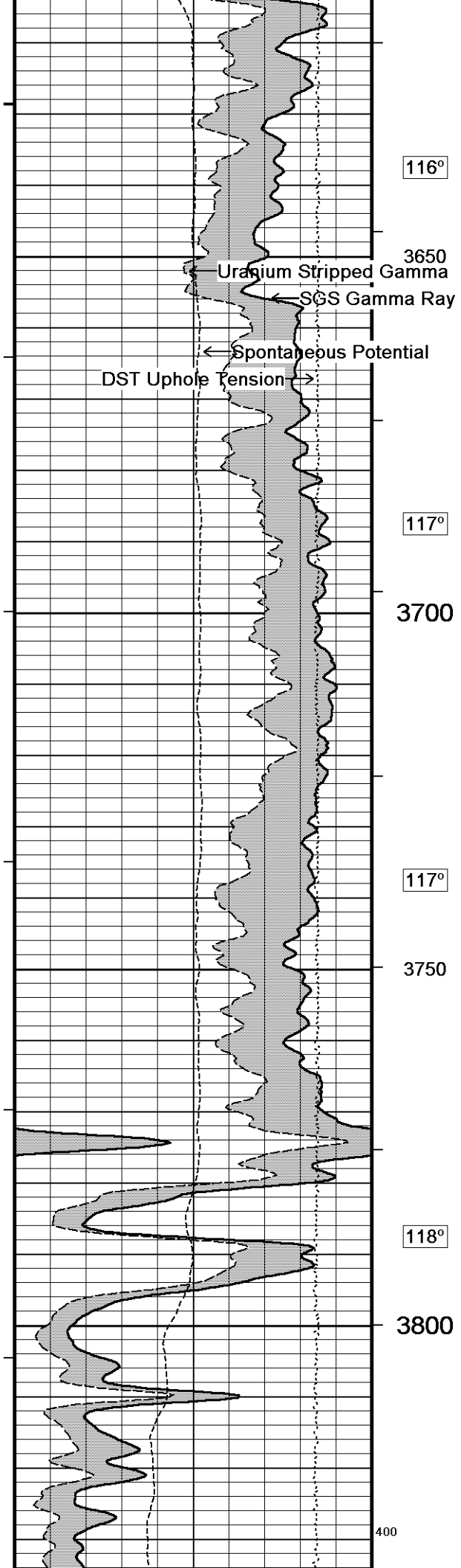


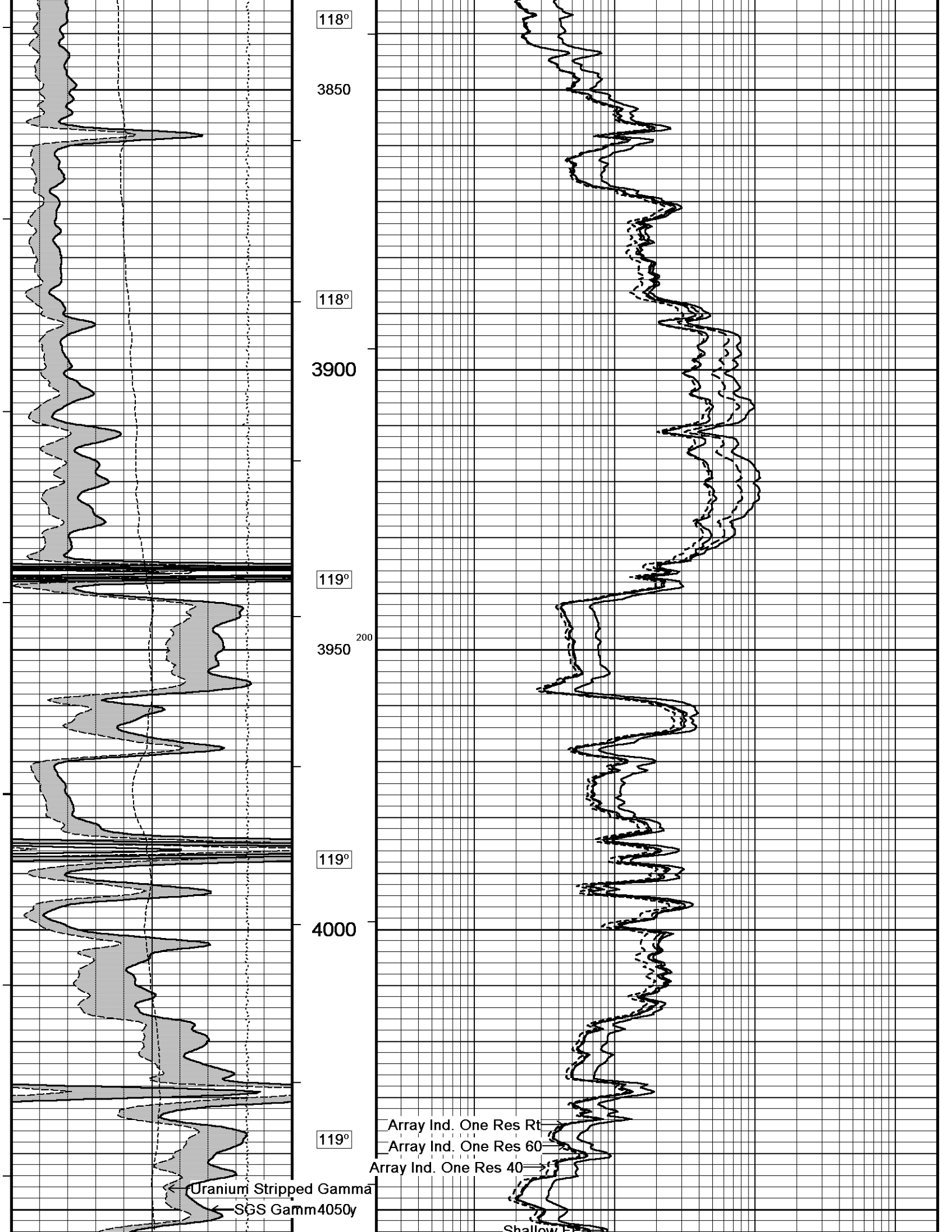


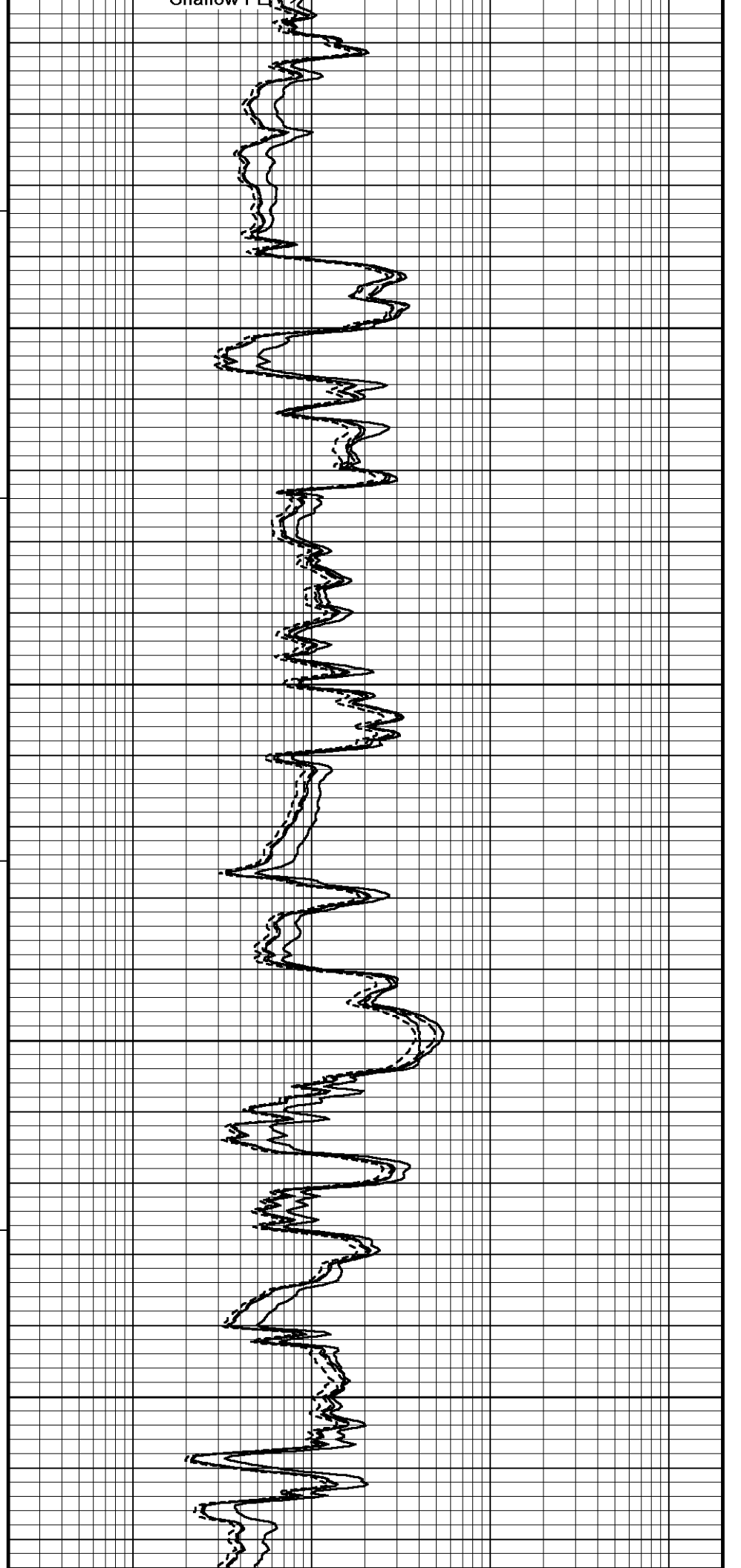
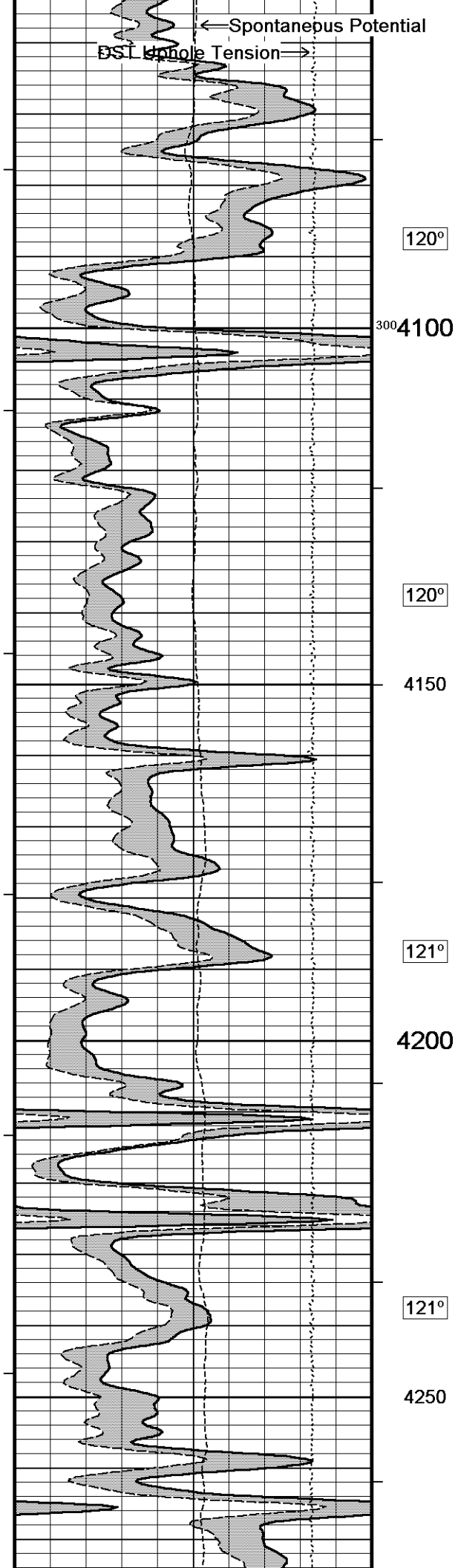


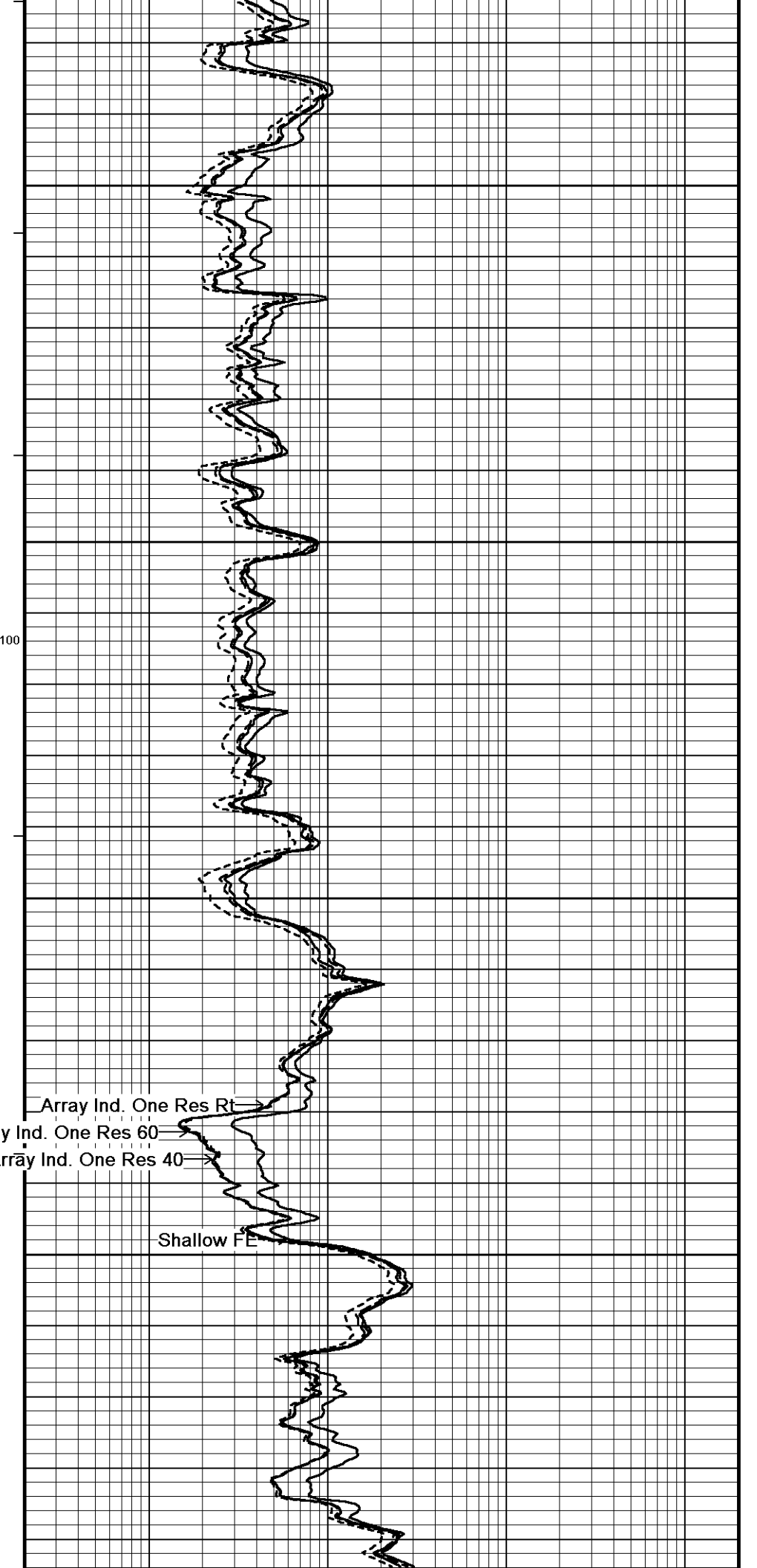
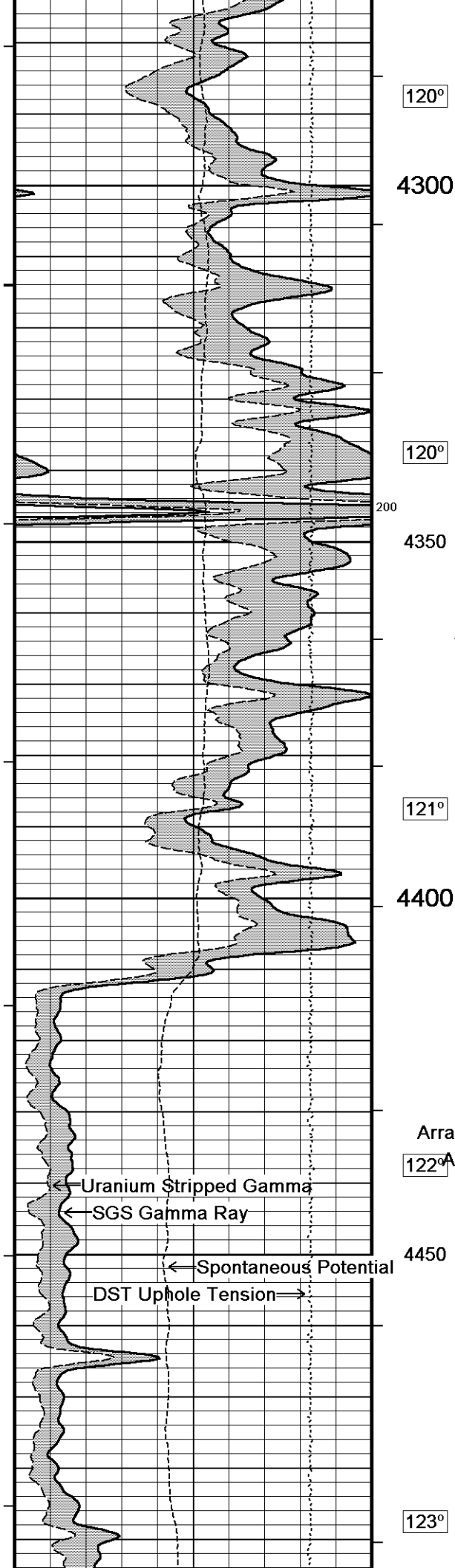


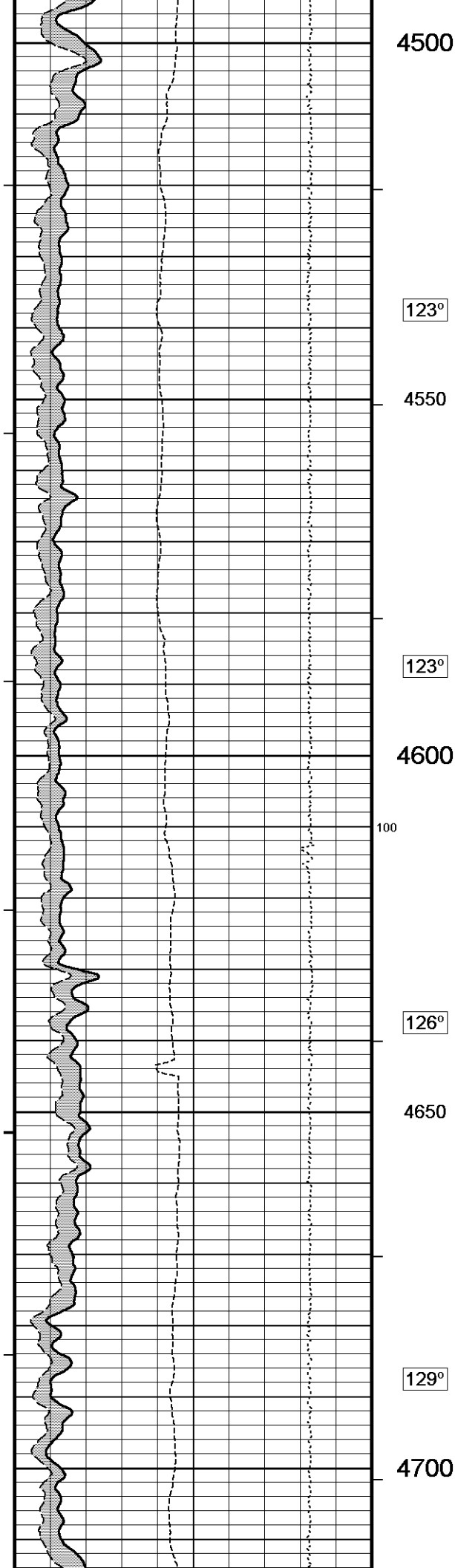












4500

123°

4550

123°

4600

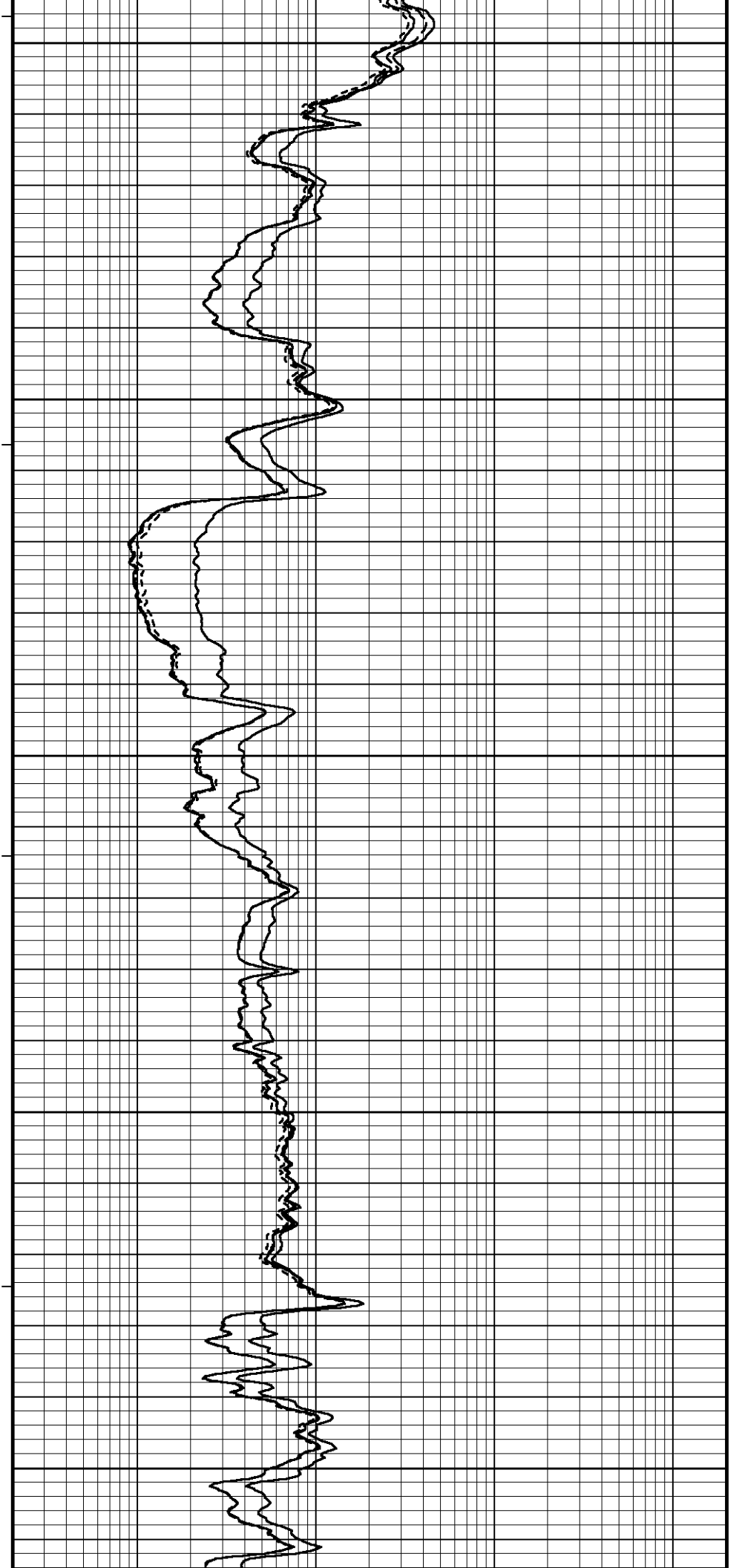
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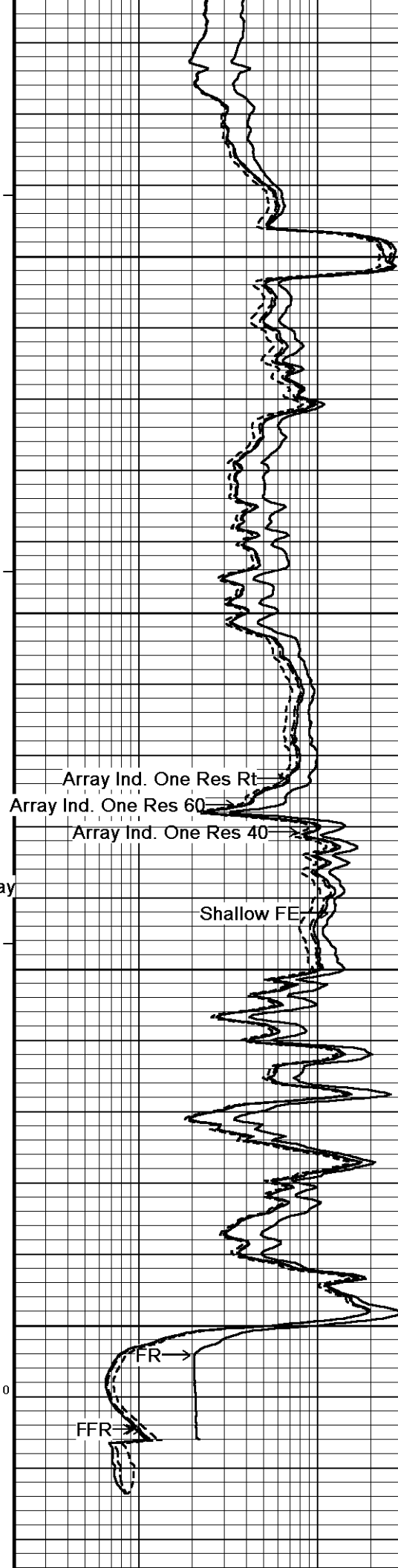
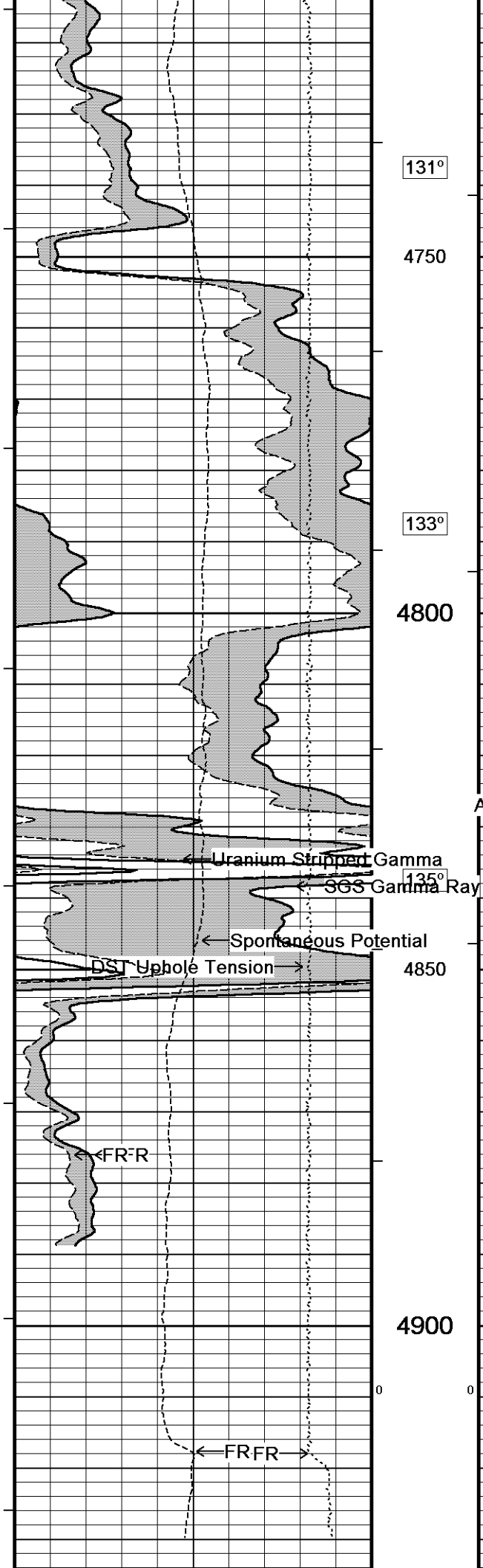
126°

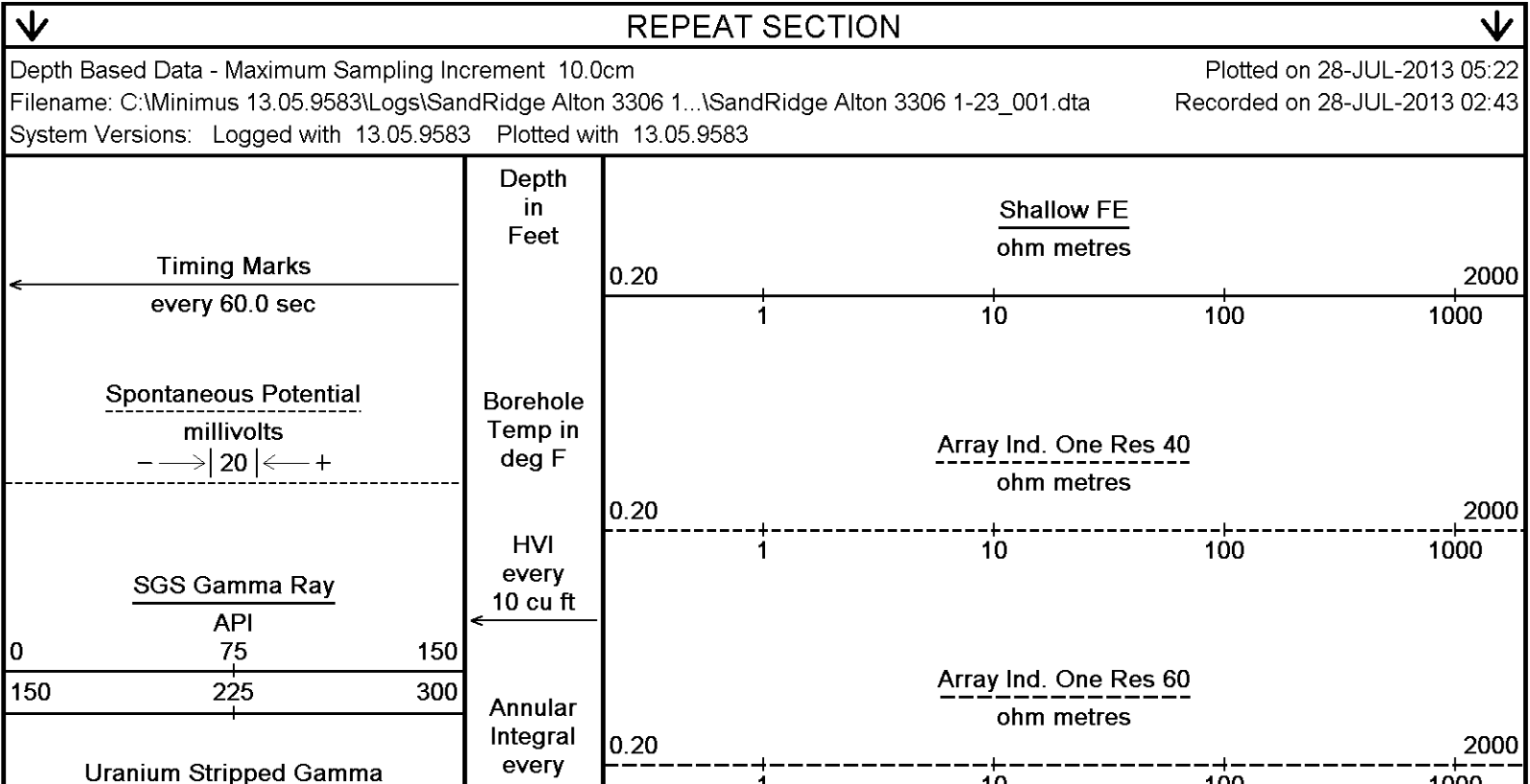
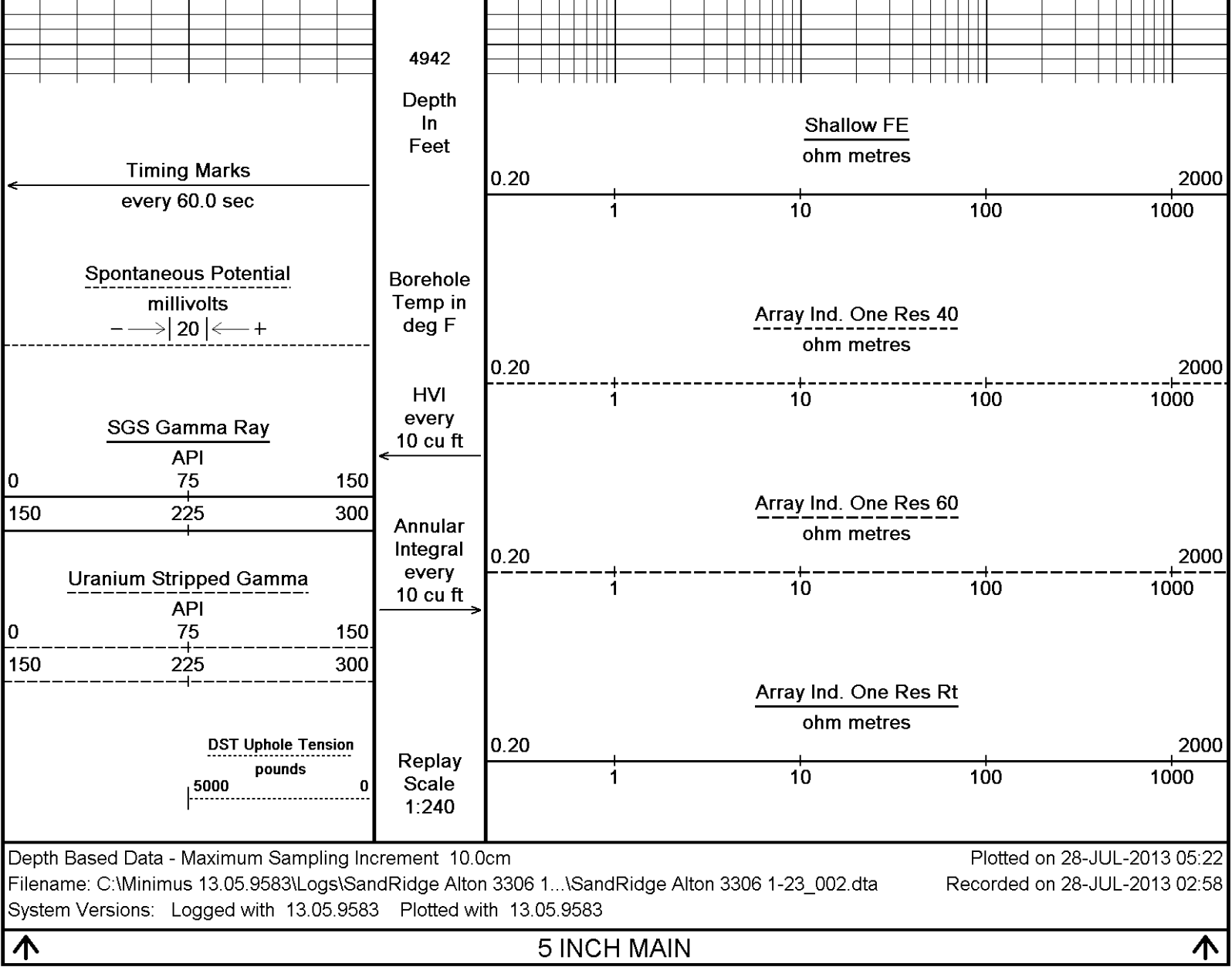
4650

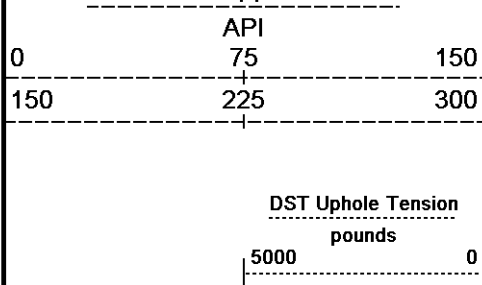
129°

4700



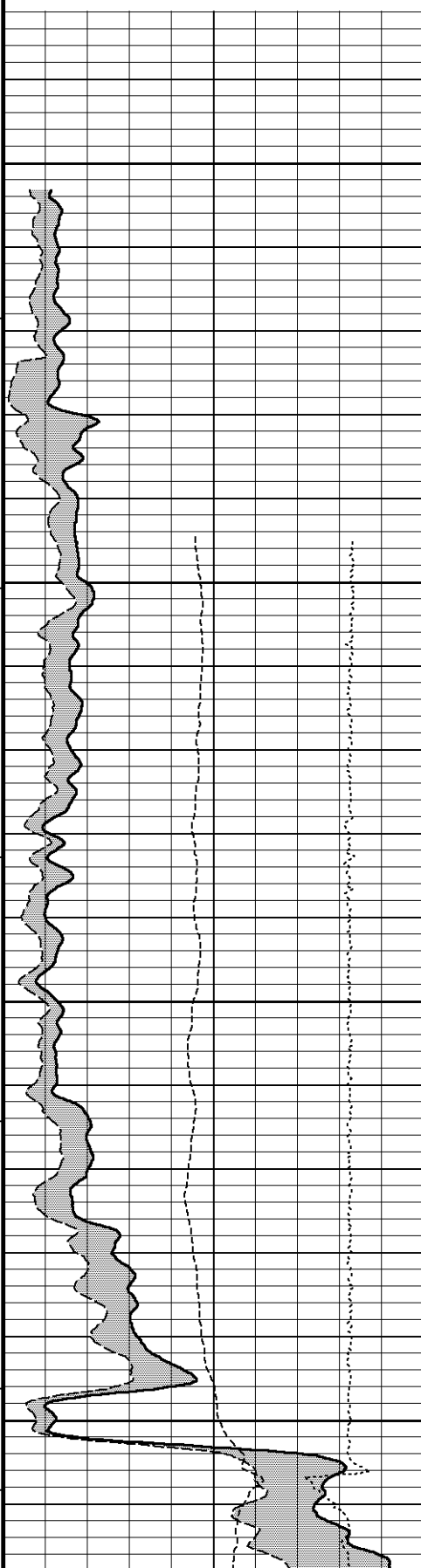






10 cu ft →

Replay
Scale
1:240



4584

4600

125°

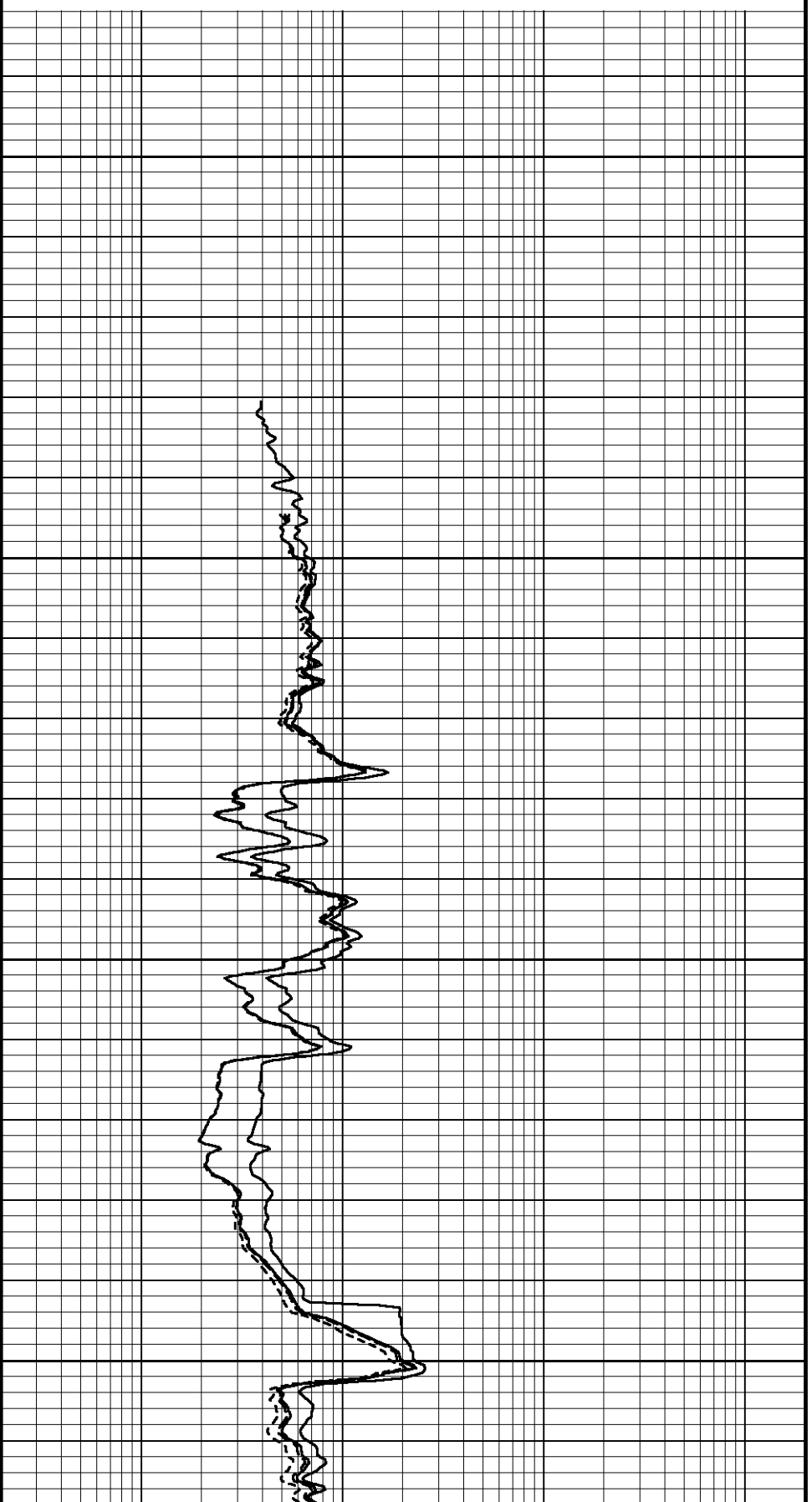
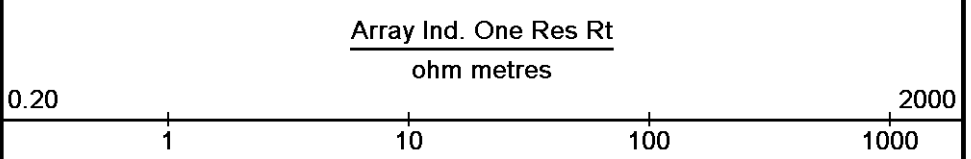
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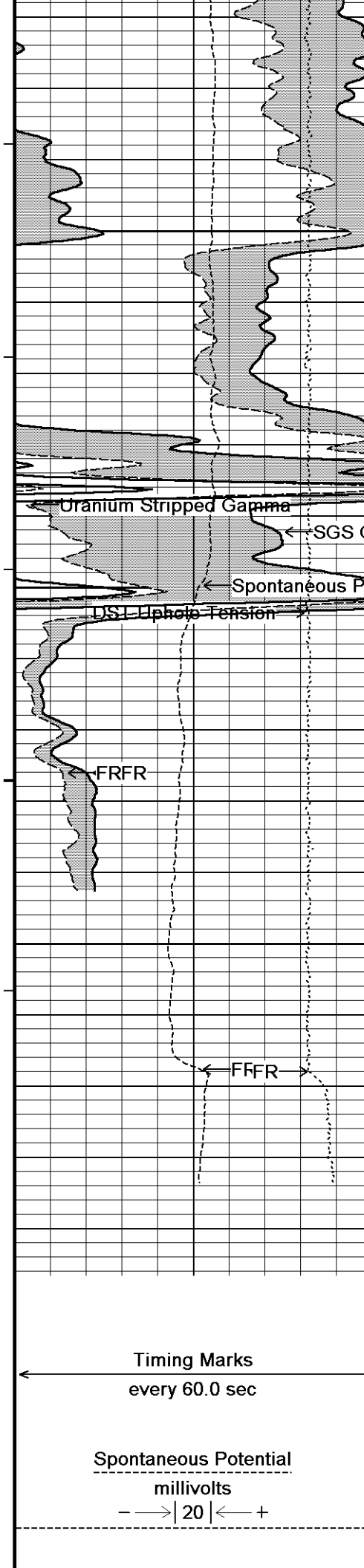
128°

4700

130°

4750





132°

4800

134°

4850

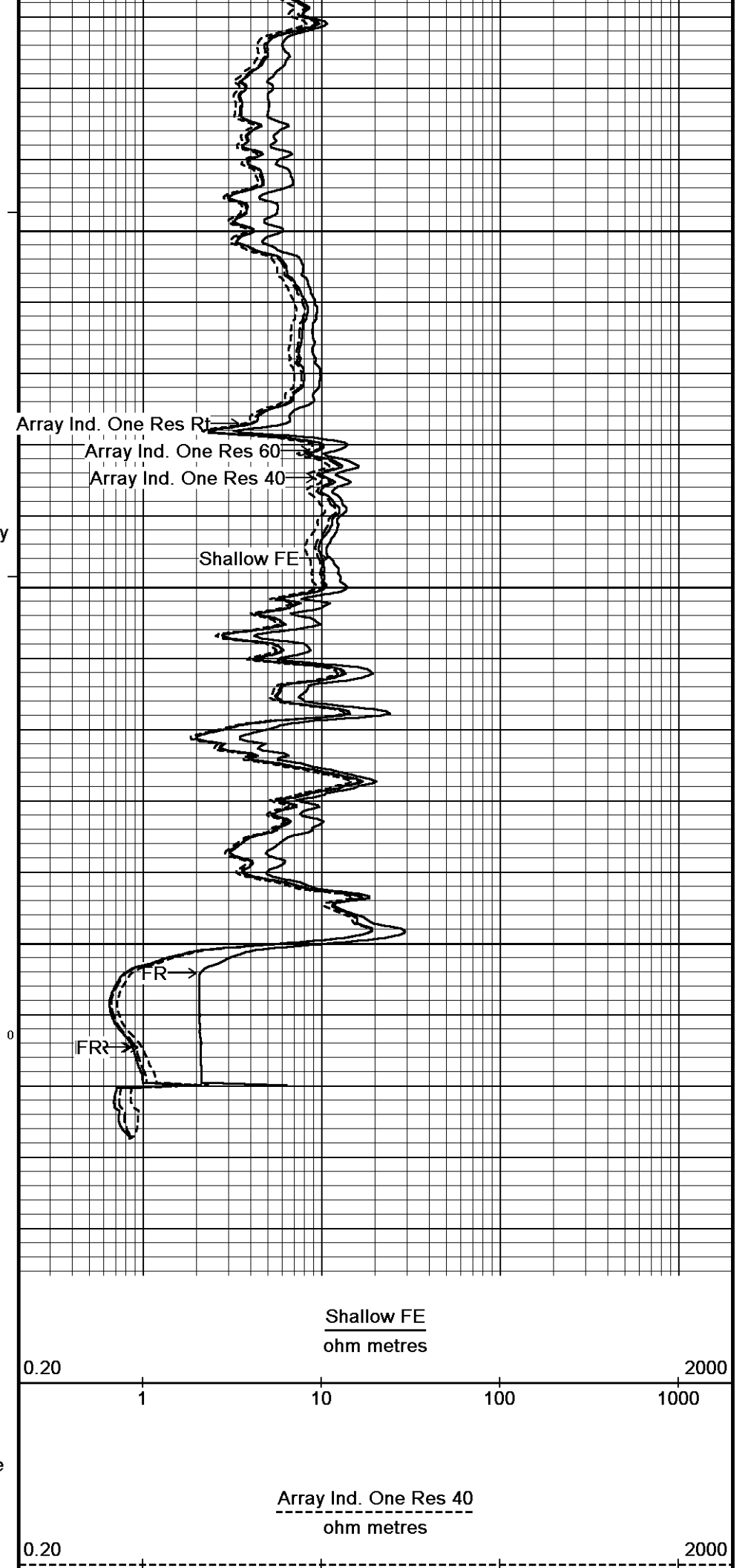
4900

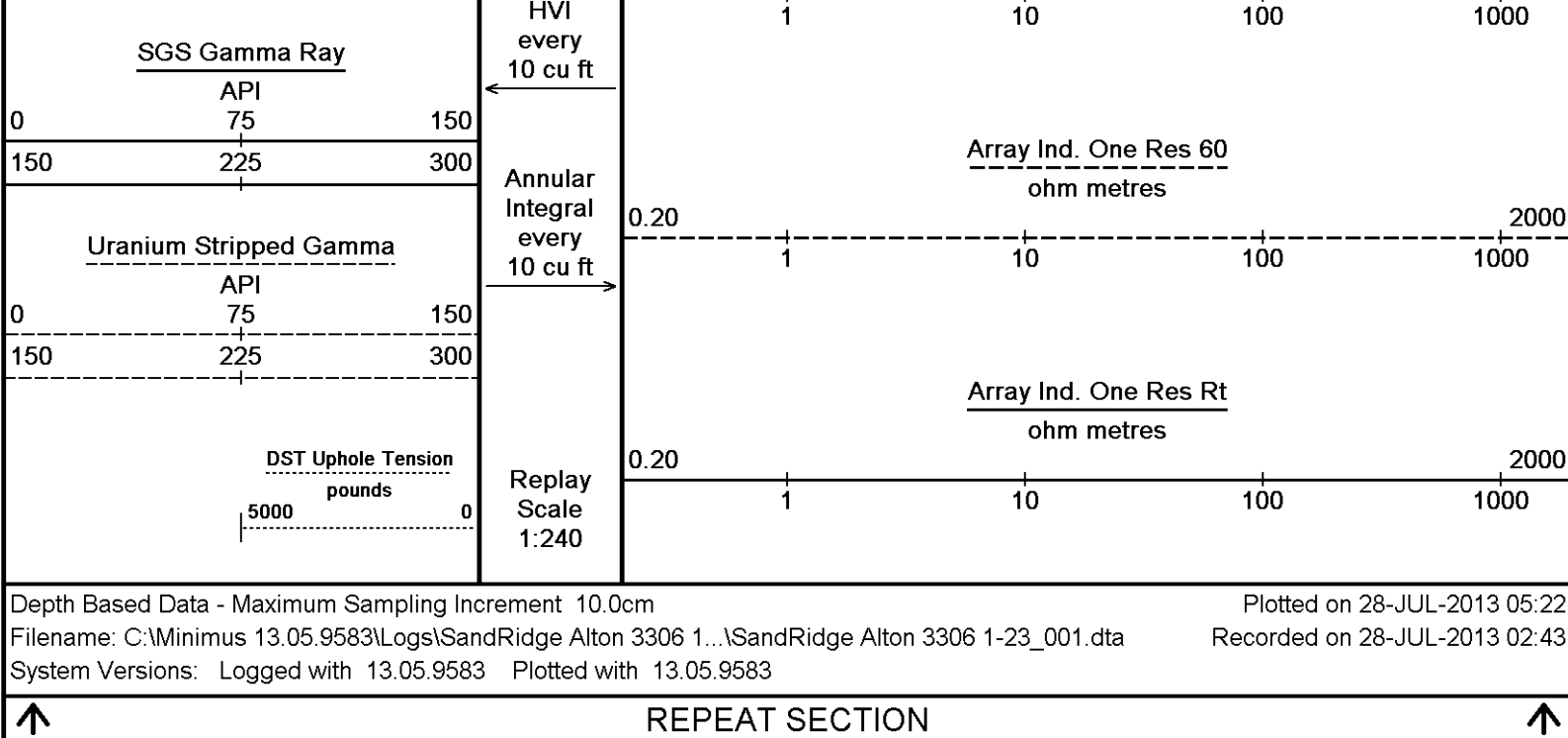
0

4944

Depth in Feet

Borehole Temp in deg F





BEFORE SURVEY CALIBRATION			
C:\Minimus 13.05.9583\Logs\SandRidge Alton 3306 1-23\SandRidge Alton 3306 1-23_002.dta			
General Constants All 000		Last Edited on 27-JUL-2013,23:43	
General Parameters			
Mud Resistivity	0.660	ohm-metres	
Mud Resistivity Temperature	83.000	degrees F	
Water Level	0.000	feet	
Borehole Fluid 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	5.500	inches	
Caliper for Differential Caliper	Density Caliper		
Rwa Parameters			
Porosity used	Crossplot Porosity		
Resistivity used	Array Ind. Six Res Rt		
RWA Constant A	1.000		
RWA Constant M	2.000		
SW/APOR Tool Source	0.000		
Down-hole Tension Calibration SMS 0		Field Calibration on 28-JUL-2013 02:06	
Reading No	Measured	Calibrated (lbs)	
1	15849.59	0.00	
2	16785.44	500.00	
SP Calibration MCG-D.K 442		Field Calibration on 15-JUL-2013,14:26	
	Measured	Calibrated (mV)	
Reference 1	100.9	100.0	
Reference 2	-100.5	-100.0	
High Resolution Temperature Calibration MCG-D.K 442		Field Calibration on 15-JUL-2013,14:26	
	Measured	Calibrated(Deg F)	
Lower	50.00	50.00	
Upper	75.00	75.00	
High Resolution Temperature Constants MCG-D.K 442		Last Edited on 15-JUL-2013,14:26	

Gamma Calibration MCG-D.K 442

Field Calibration on 27-JUL-2013 17:50

	Measured	Calibrated (API)
Background	67	45
Calibrator (Gross)	1142	770
Calibrator (Net)	1074	725

Gamma Constants MCG-D.K 442

Last Edited on 27-JUL-2013,23:41

Gamma Calibrator Number	GRC38	
Mud Density	1.06	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl		kppm
K Mud Type	Chloride	
K Mud Concentration	0.00	%

Micro Laterolog Calibration MMR-A 11

Base Calibration on 31-DEC-1999 00:00

Field Check on 31-DEC-1999 00:00

Base Calibration

	Measured		Calibrated (ohm-m)	
	Ref 1	Ref 2	Ref 1	Ref 2
	0.0	0.0	0.0	0.0
Base Check (ohm-m)			Field Check (ohm-m)	
	0.0		0.0	

Micro Laterolog Constants MMR-A 11

Last Edited on

Pad Type	6 in Solid Nylon B23059	
Micro Laterolog K Factor	0.0128	
Standoff Offset	0.0000	inches
Mudcake Thickness Correction Constants		
Mud Cake Source	Constant Value	
Mud Cake Thickness	0.4000	inches
Mud Cake Thickness Caliper		
Mud Cake Resistivity	0.1500	ohm-m
Mud Cake Resistivity Temp.	68.00	Deg F
Mud Cake Resistivity Source	Constant Value	
Temp. Source Rmc Correc.	MCG External Temperature	

Caliper Calibration MMR-A 11

Base Calibration on 27-JUL-2013 17:35

Field Calibration on 27-JUL-2013 17:36

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	14109	5.98
2	17244	7.97
3	20444	9.86
4	24103	11.92
5	0	0.00
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
5.99	5.98

Micro Normal and Micro Inverse Calibration MMR-A 11

Base Calibration on 07-JUL-2013 11:25

Field Check on 27-JUL-2013 17:38

Base Calibration

	Measured		Calibrated (ohm-m)	
Channel	Resistor 1	Resistor 2	Resistor 1	Resistor 2
Micro Normal	12.0	58.0	5.0	25.0
Micro Inverse	15.3	75.4	5.0	25.0
Channel	Base Check (ohm-m)		Field Check (ohm-m)	
Micro Normal	79.0		79.0	
Micro Inverse	60.5		60.5	

Micro Normal and Micro Inverse Constants MMR-A 11

Last Edited on 18-APR-2013,13:52

Pad Type	8-12 in Soft Rubber Inflatable	006-9011-159	
Micro Normal K Factor	1.0000		
Micro Inverse K Factor	1.0000		
Standoff Offset	0.0000	inches	

Neutron Calibration MDN-A.B 65				Base Calibration on 15-JUL-2013,14:09	
				Field Check on 27-JUL-2013 17:57	
Base Calibration					
		Measured		Calibrated (cps)	
	Near	Far		Near	Far
	3104	96		3714	110
Ratio		32.242		33.764	
Field Calibrator at Base					
				Calibrated (cps)	
				1652	2397
Ratio				0.689	
Field Check					
				Calibrated (cps)	
				1659	2389
Ratio				0.693	

Neutron Constants MDN-A.B 65			Last Edited on 27-JUL-2013,17:50	
Neutron Source Id	PN-521			
Neutron Jig Number	5824NE			
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	4.26	cu		
Dolomite Sigma	4.70	cu		
Formation Pressure Source	None			
Formation Pressure	N/A	kpsi		
Temperature Source	Constant Value			
Temperature	68.00	degrees F		
Mud Salinity	0.00	kppm		
Salinity Correction	Not Applied			
Formation Fluid Salinity Source	None			
Formation Fluid Salinity	N/A	kppm		
Barite Mud Correction	Not Applied			

FE Calibration MFE-B.J 352			Base Calibration on 07-JUL-2013 11:12	
			Field Check on 27-JUL-2013 17:45	
Base Calibration				
	Measured	Calibrated (ohm-m)		
Reference 1	0.0	0.0		
Reference 2	962.8	126.8		
Base Check		281.6		
Field Check		281.6		

FE Constants MFE-B.J 352			Last Edited on 27-JUL-2013,17:44	
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-A.A 45			Field Calibration on 15-JUL-2013,10:21	
		Measured	Calibrated(Deg F)	
Lower		50.00		50.00
Upper		75.00		75.00

High Resolution Temperature Constants MAI-A.A 45		Last Edited on 15-JUL-2013,10:21
Pre-filter Length	11	

Base Calibration

Test Loop Calibration

Channel	Measured		Calibrated (mmho/m)	
	Low	High	Low	High
1	14.4	472.6	9.3	966.2
2	5.7	374.0	7.6	821.4
3	3.4	261.2	5.2	566.0
4	2.5	133.9	2.6	279.2

Array Temperature 0.0 Deg F

Channel	Base Check (mmho/m)		Field Check (mmho/m)	
	Low	High	Low	High
1			20.0	3852.6
2			32.0	3629.5
3			28.8	3049.3
4			18.3	2078.9
Deep			16.2	1911.0
Medium			42.5	4060.4
Shallow			50.0	5483.5

Array Temperature 88.6 Deg F

Induction Constants MAI-A.A 45

Last Edited on 27-JUL-2013,17:42

Induction Model	RtAP-WBM		
Caliper for Borehole Corr.	Density Caliper		
Hole Size for Borehole Correction	2.500	inches	
Tool Centred	No		
Stand-off Type	Fins		
Stand-off	0.50	inches	
Number of Fins on Stand-off	8.0000		
Stand-off Fin Angle	45.00	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 31

Base Calibration on 19-MAY-2013 17:48

Field Calibration on 27-JUL-2013 17:31

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	17088	3.99
2	25888	5.98
3	34607	7.97
4	42944	9.86

5	52301	11.92
6	N/A	N/A

Field Calibration	Measured Caliper (in)	Actual Caliper (in)
	6.05	5.98

Photo Density Calibration MPD-B 31				Base Calibration on 15-JUL-2013 11:39 Field Check on 27-JUL-2013 17:42	
Density Calibration					
Base Calibration		Measured		Calibrated (sdu)	
		Near	Far	Near	Far
Reference 1		44616	22757	59556	30836
Reference 2		18262	1889	24941	2541
Field Check at Base					
		672.4	838.4		
Field Check					
		673.6	828.9		
PE Calibration					
Base Calibration		Measured		Calibrated	
	WS	WH	Ratio	Ratio	
Background	126	597			
Reference 1	18938	44504	0.428	0.371	
Reference 2	5515	18179	0.307	0.272	
Field Check at Base					
	125.7	597.4			
Field Check					
	125.9	597.6			

Density Constants MPD-B 31				Last Edited on 27-JUL-2013,23:41	
Density Source Id		254			
Nylon Calibrator Number		DNCE695			
Aluminium Calibrator Number		DACD698			
Density Shoe Profile		8 inch			
Caliper Source for Processing		Density Caliper			
PE Correction to Density		Not Applied			
Mud Density		1.06	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-E.J 149				Base Calibration on 19-APR-2013,12:59 Field Calibration on 19-APR-2013,12:59	
Base Calibration					
Potassium Calibrator					
	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5
Background	76.7	23.0	2.3	0.9	1.5
Calibrator (Gross)	202.1	106.6	25.2	0.8	1.4
Calibrator (Net)	125.3	83.6	23.0	-0.1	-0.1
	K %	U ppm	Th ppm		
Concentrations	5.8	0.0	0.0		

Uranium Calibrator

	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5
Background	76.7	23.0	2.3	0.9	1.5
Calibrator (Gross)	473.2	163.3	14.0	8.5	3.9
Calibrator (Net)	396.5	140.3	11.7	7.6	2.4

	K %	U ppm	Th ppm
Concentrations	0.0	9.8	0.0

Thorium Calibrator

	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5
Background	76.7	23.0	2.3	0.9	1.5
Calibrator (Gross)	389.8	138.7	11.1	6.4	15.6
Calibrator (Net)	313.1	115.7	8.8	5.5	14.1

	K %	U ppm	Th ppm
Concentrations	0.0	0.0	44.3

Mixture Calibrator

	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5
Background	76.7	23.0	2.3	0.9	1.5
Calibrator (Gross)	902.4	361.7	45.0	13.8	18.8
Calibrator (Net)	825.6	338.7	42.7	12.9	17.3

Field Calibration

Gamma Ray

	Measured	Calibrated (API)
Background	109	22
Calibrator (Gross)	1346	272
Calibrator (Net)	1237	250

Mixture Calibrator

	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5
Background	76.7	23.0	2.3	0.9	1.5
Calibrator (Gross)	902.4	361.7	45.0	13.8	18.8
Calibrator (Net)	825.6	338.7	42.7	12.9	17.3

Spectral Gamma Constants SGS-E.J 149

Last Edited on 27-JUL-2013,23:43

Background Calibrator Number	000	
Mixture Calibrator Number	147-1	
Potassium Calibrator Number	148-1	
Uranium Calibrator Number	150-1	
Thorium Calibrator Number	149-1	
Mud Density	1.06	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl		kppm
K Mud Type	Chloride	
K Mud Concentration	0.00	%

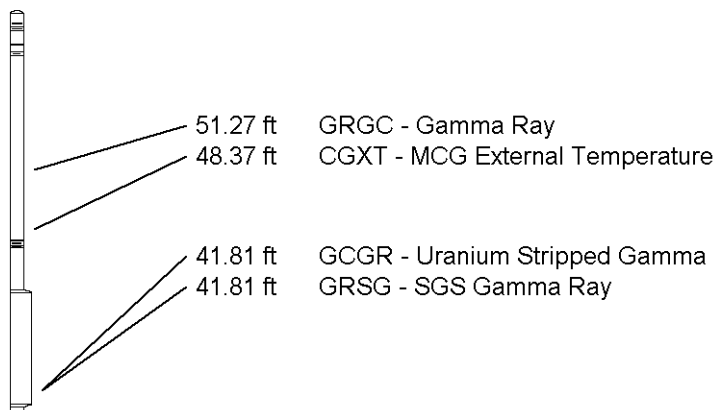
DOWNHOLE EQUIPMENT

C:\Minimus 13.05.9583\Logs\SandRidge Alton 3306 1-23\SandRidge Alton 3306 1-23_002.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

Compact Comms Gamma
MCG-D.K 442 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in

Spectral Gamma Ray Sub
SGS-E.J 149 LG: 7.78 ft WT: 105.8 lb OD: 3.54 in



Compact Micro-Resistivity
MMR-A 11 LG: 8.59 ft WT: 81.6 lb OD: 4.88 in

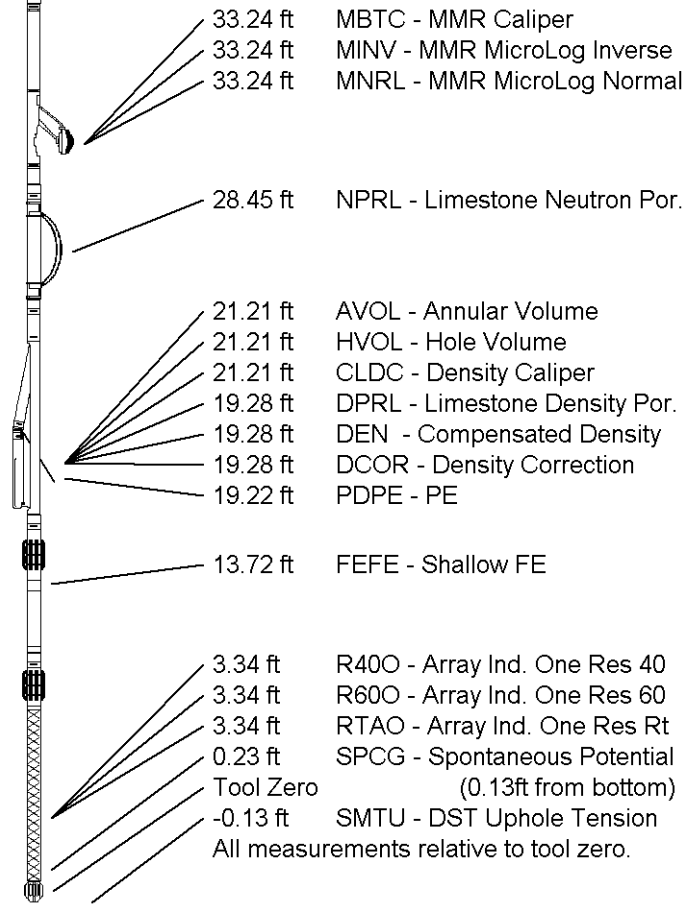
Compact Neutron
MDN-A.B 65 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

Compact Density/Caliper
MPD-B 31 LG: 9.59 ft WT: 90.4 lb OD: 2.45 in

Compact Focused Electric
MFE-B.J 352 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

Compact Induction
MAI-A.A 45 LG: 10.81 ft WT: 48.5 lb OD: 2.24 in

Total Length: 58.14 ft Weight: 504.9 lb



COMPANY SANDRIDGE EXPLORATION AND PRODUCTION LLC.
WELL ALTON 3306 1-23
FIELD STOHRVILLE
PROVINCE/COUNTY HARPER
COUNTRY/STATE U.S.A / KANSAS

Elevation Kelly Bushing	1317.00	feet	First Reading	4915.00	feet
Elevation Drill Floor	1316.00	feet	Depth Driller	4920.00	feet
Elevation Ground Level	1308.00	feet	Depth Logger	4918.00	feet



**ARRAY INDUCTION
SHALLOW FOCUSED
ELECTRIC LOG**

Weatherford®

Weatherford

ARRAY INDUCTION

SHALLOW FOCUSED

ELECTRIC LOG

COMPANY

WELL

FIELD

PROVINCE/COUNTY

COUNTRY/STATE

LOCATION

SEC

TWP

RGE

API Number

Permit Number

Log Measured From

Drilling Measured From

SANDRIDGE EXPLORATION AND PRODUCTION

ALTON 3306 1-23

STOHRVILLE

HARPER

U.S.A / KANSAS

680° E.N.L. & 560° E.W.L.

23

33S

6W

15-077-2852000

DC03709

K.B. @ 9 FEET

K.B. @ 9 FEET

Date

Run Number

Service Order

Depth Driller

Depth Logger

First Reading

Last Reading

Casing Driller

Casing Logger

Bit Size

Hole Fluid Type

Density/Viscosity

PH/Furt Loss

Sample Source

Run @ Measured Temp

Run @ Measured Temp

Run @ Measured Temp

Source Rmt/ Rintc

Rmt @ BHT

Time Since Circulation

Max Recorded Temp

Equipment Base

Recorded By

Witnessed By

Log #

27-JUL-2013

ONE

3539902

4920.00

4918.00

4915.00

628.00

628.00

630.00

7.875

CHEMICAL

8.80

lb/USg

9.60

mb/30Min

FLOWLINE

0.86 @ 53.0

0.46 @ 53.0

0.80 @ 53.0

0.80 @ 53.0

CALC

0.41 @ 34.0

4 HOURS

134.00

13057

ROB HOFFMAN

TAMMY ALCOORN

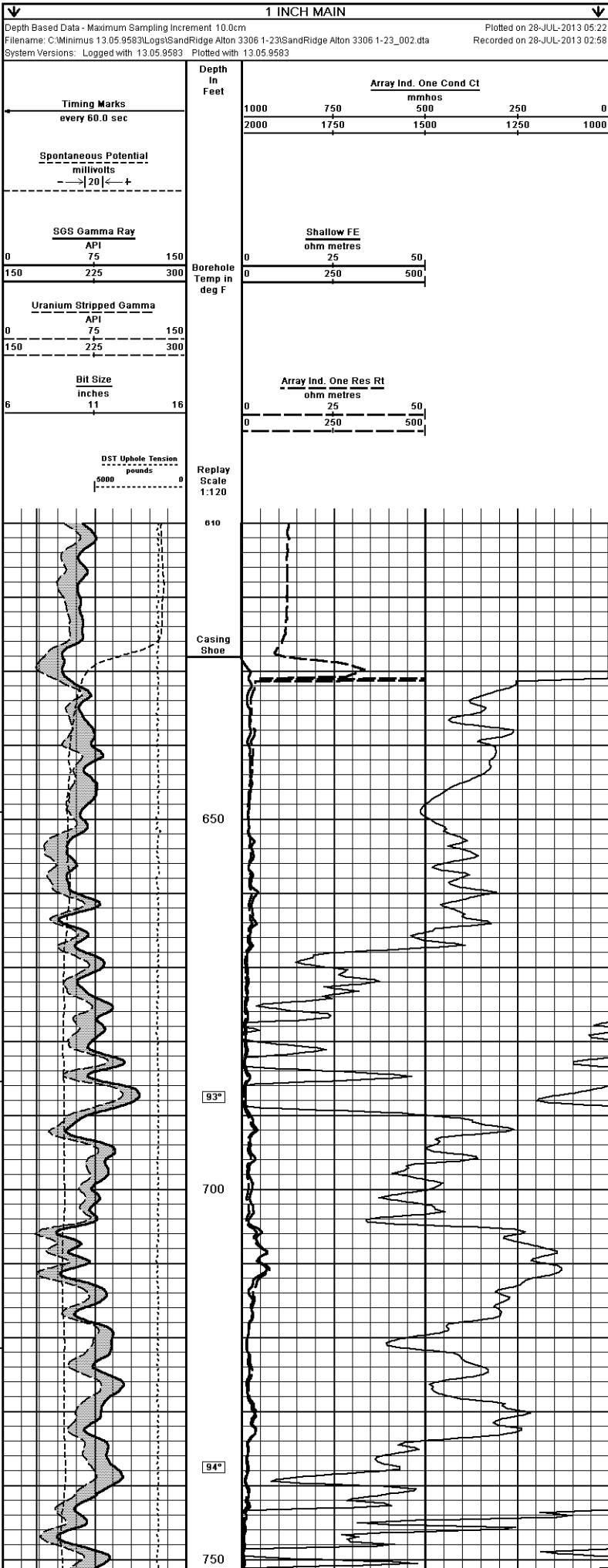
LB13-215

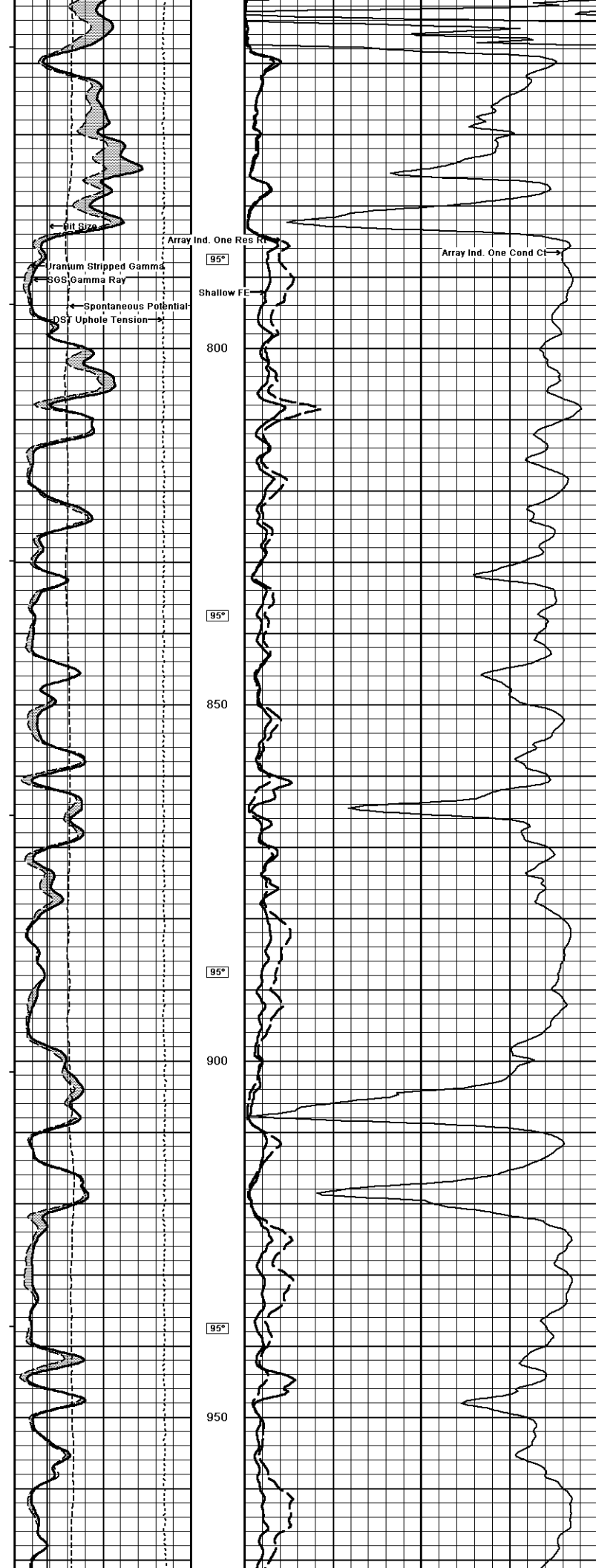
Eleven-tones

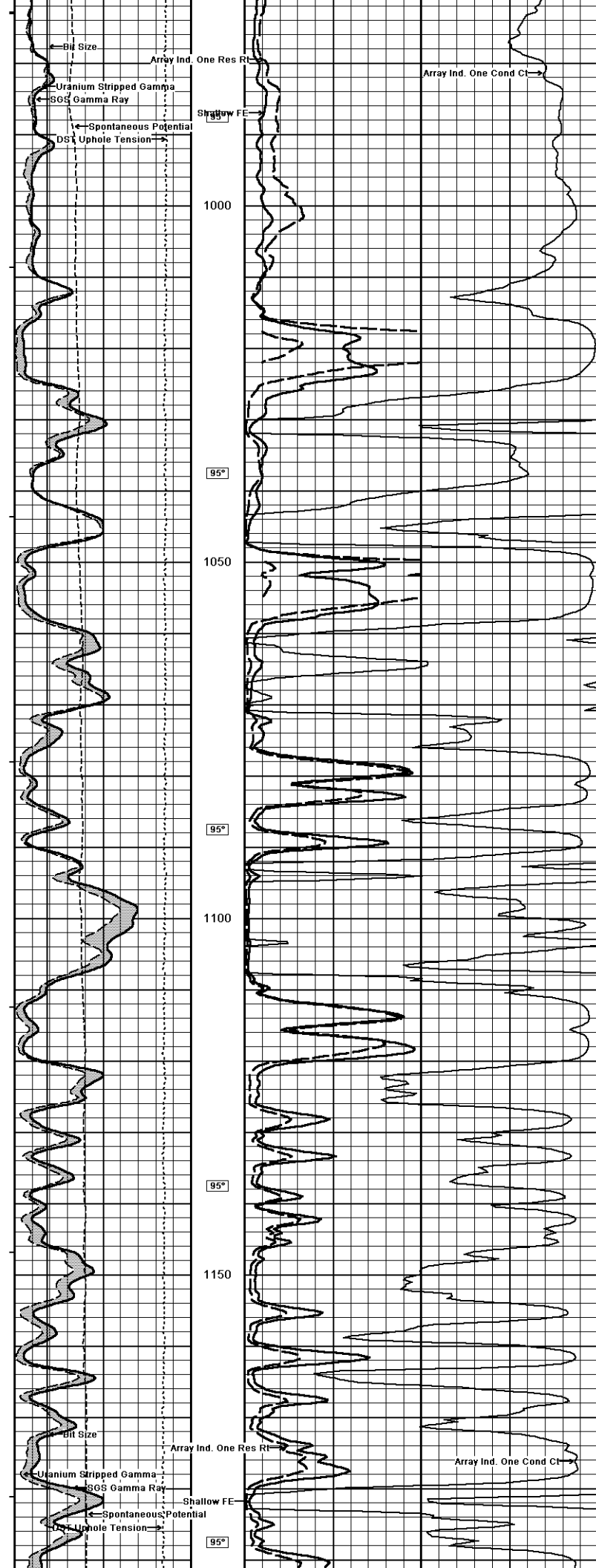
KB

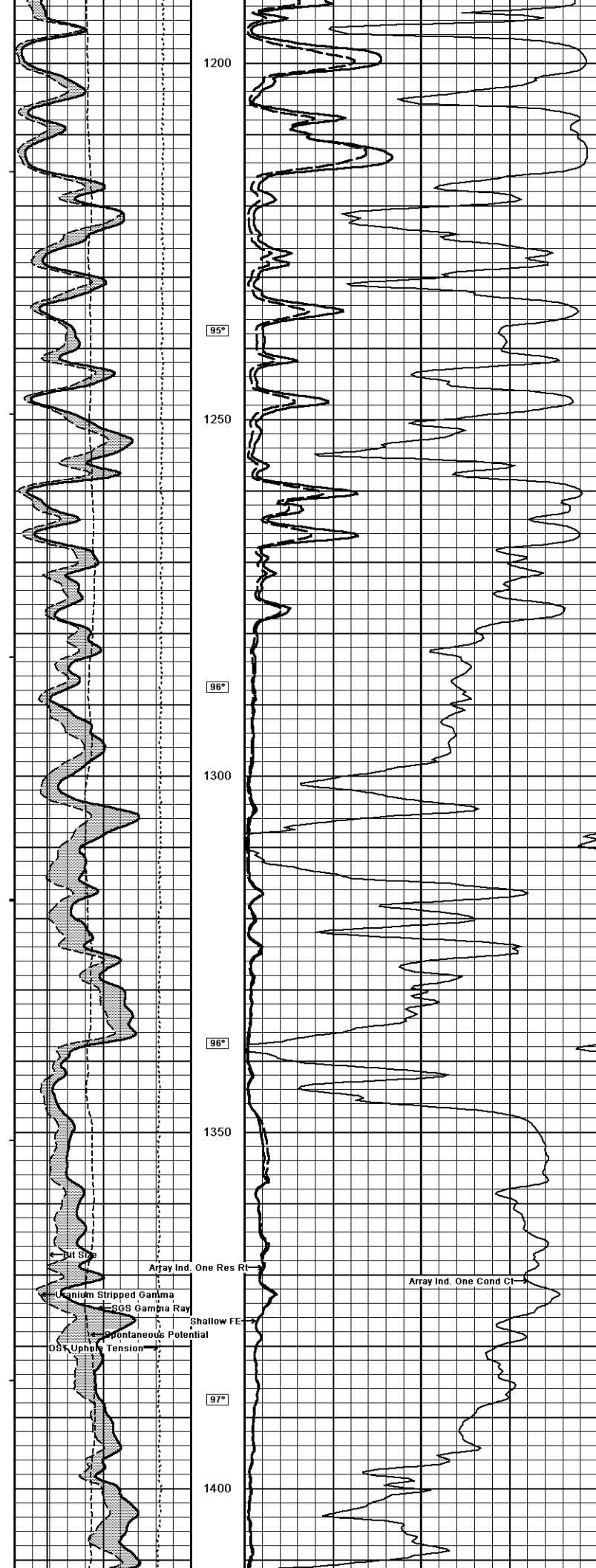
DP

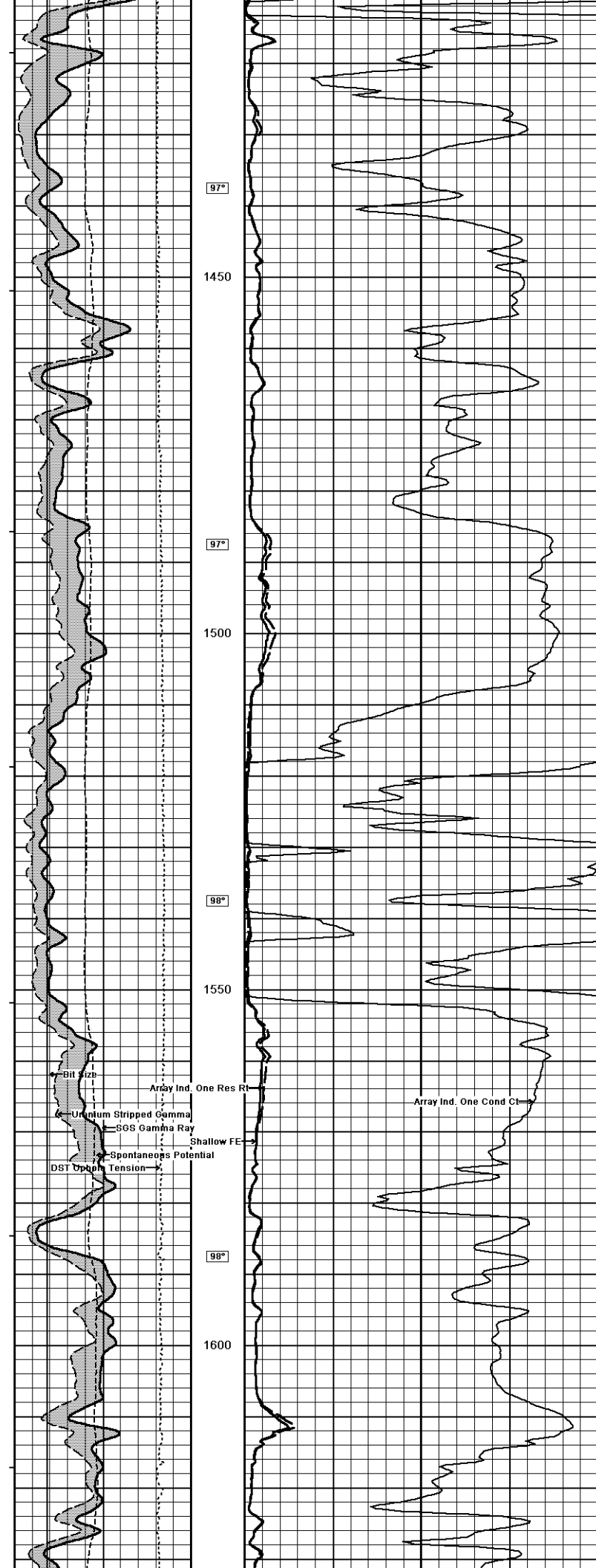
DL

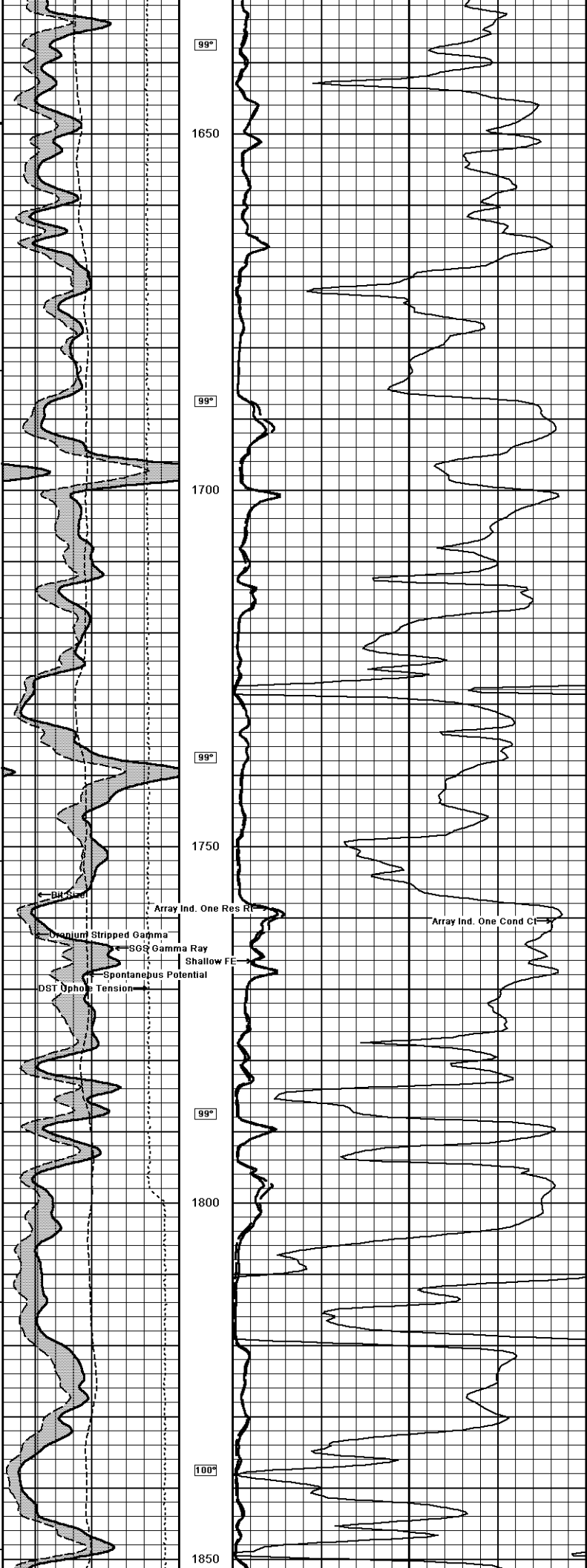


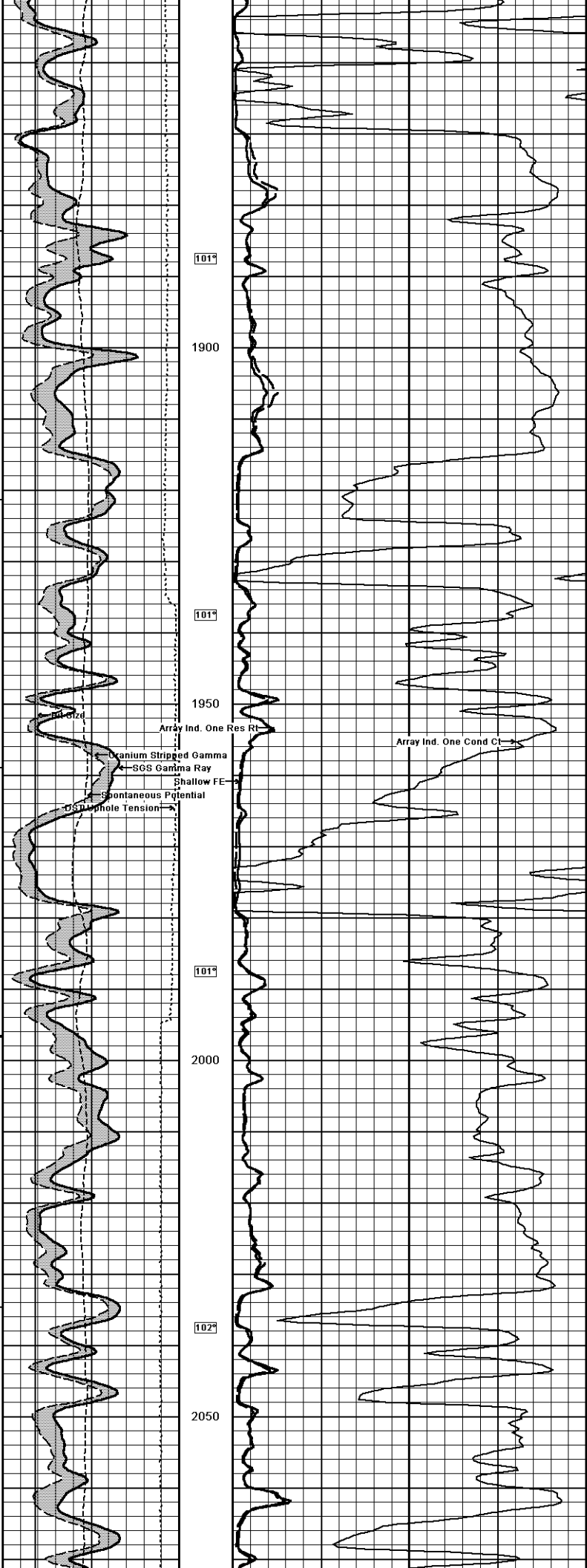


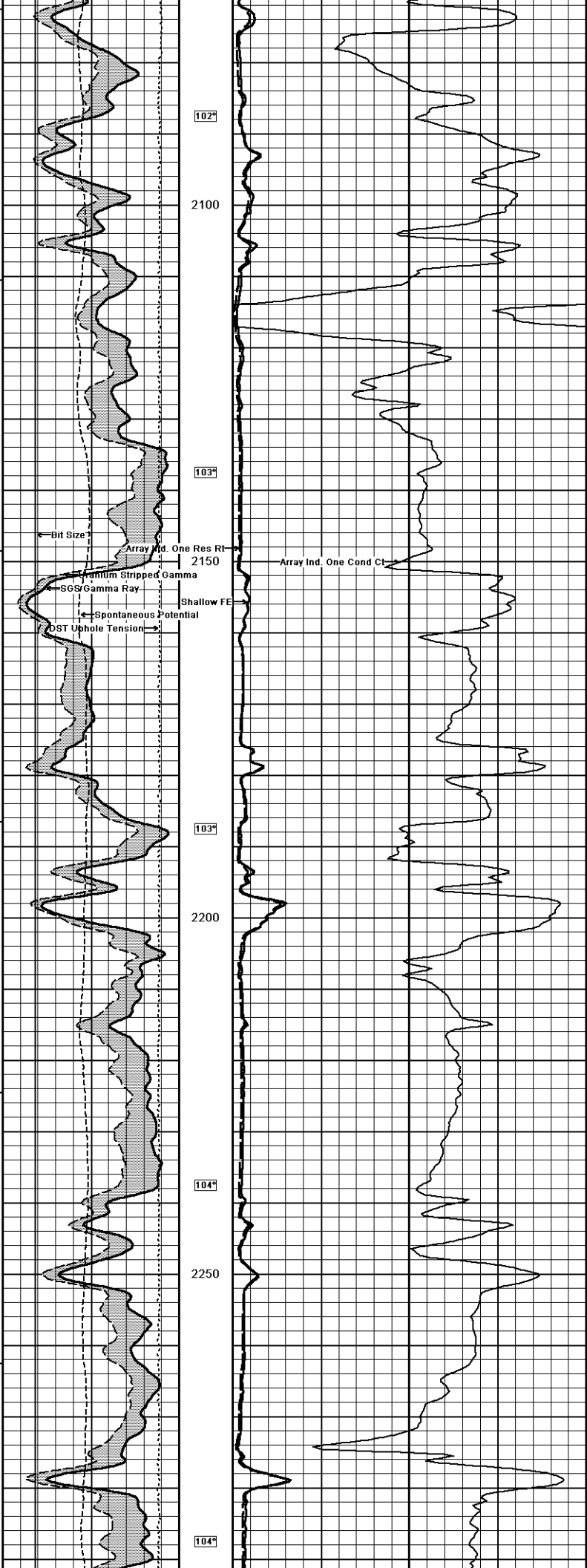


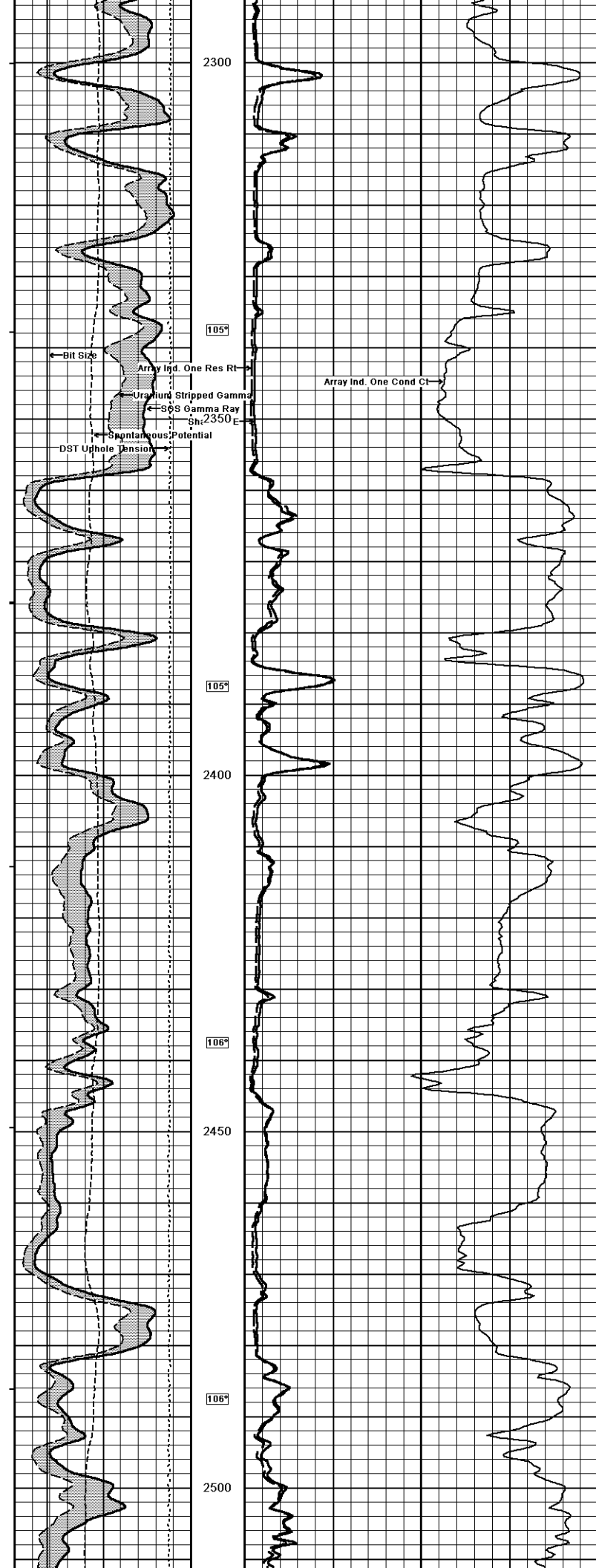


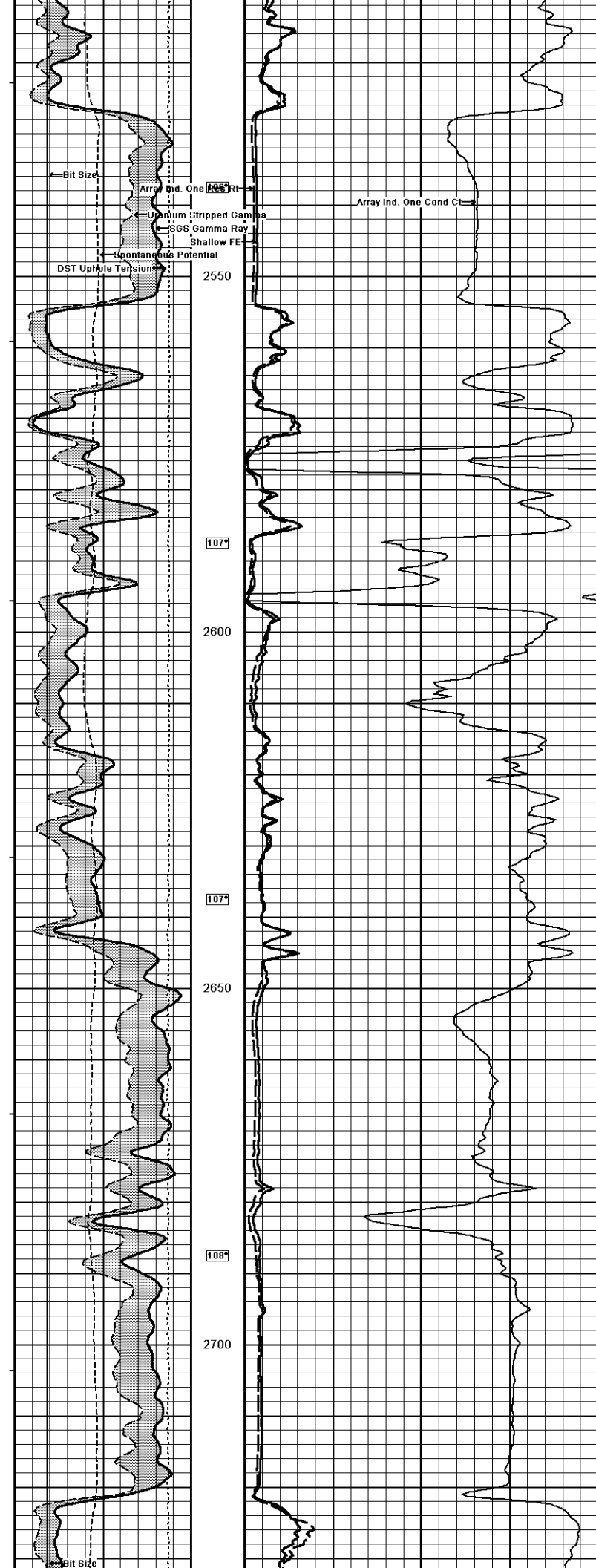


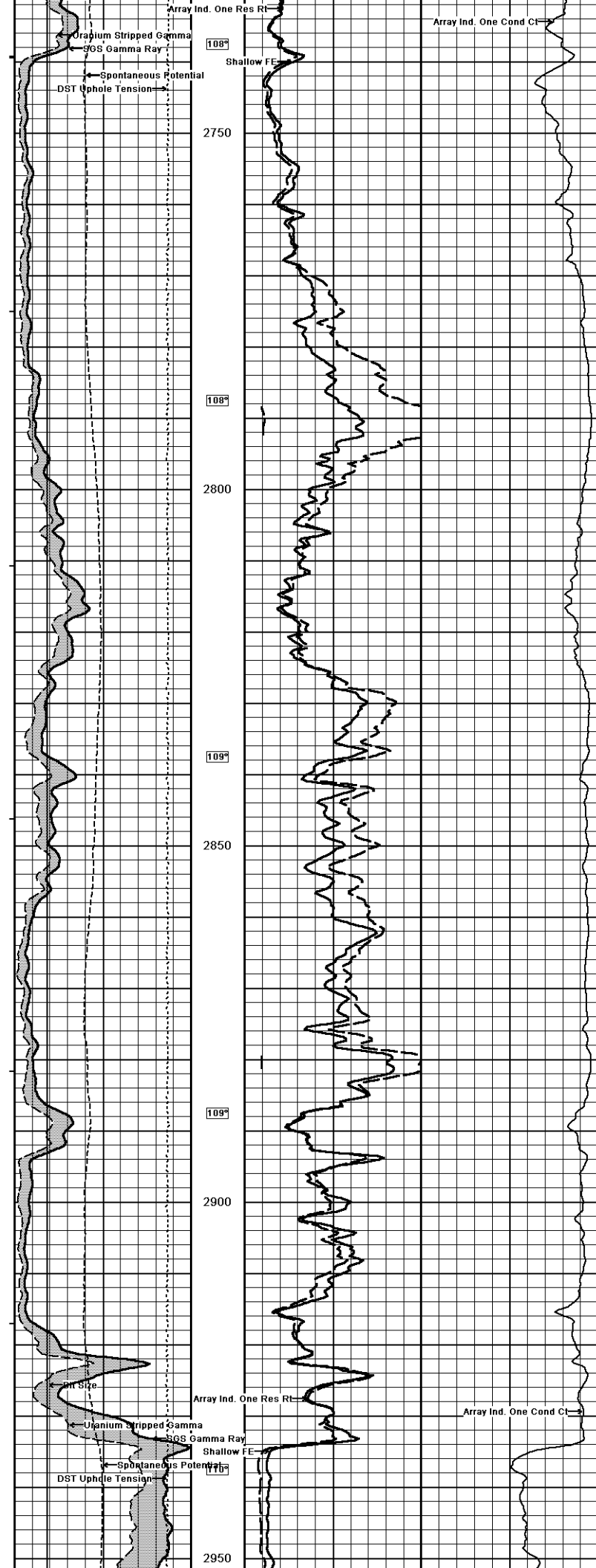


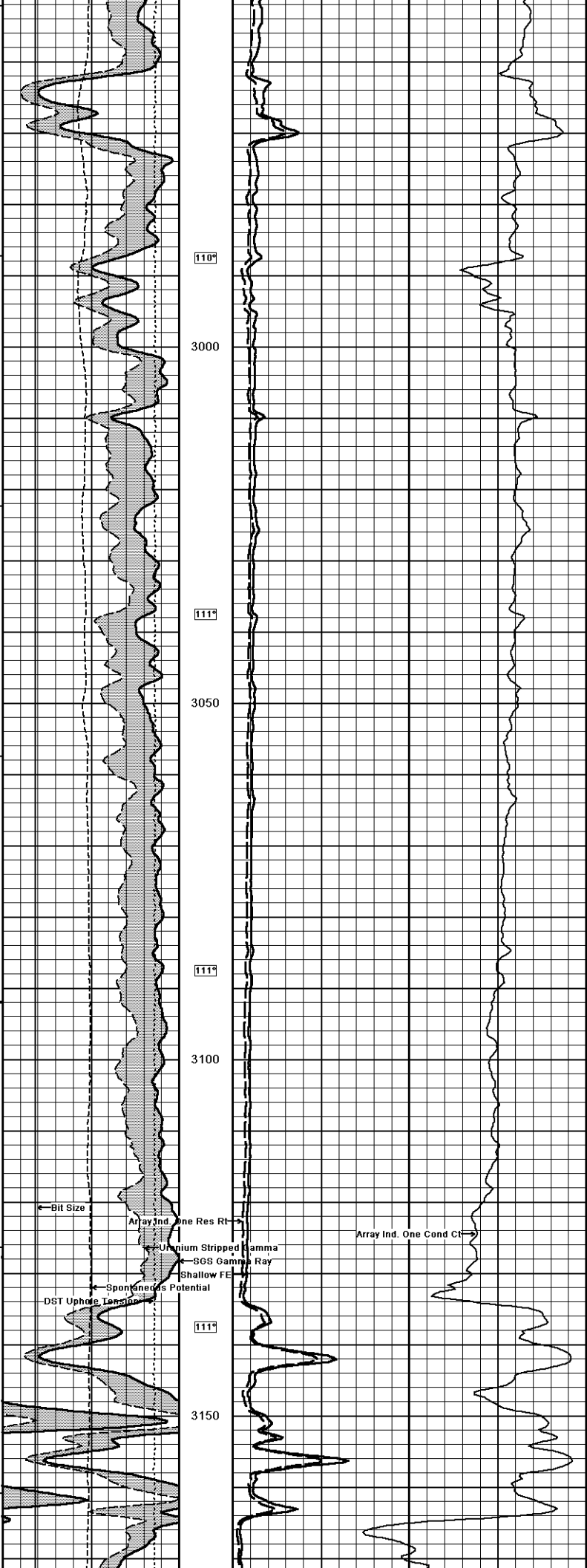


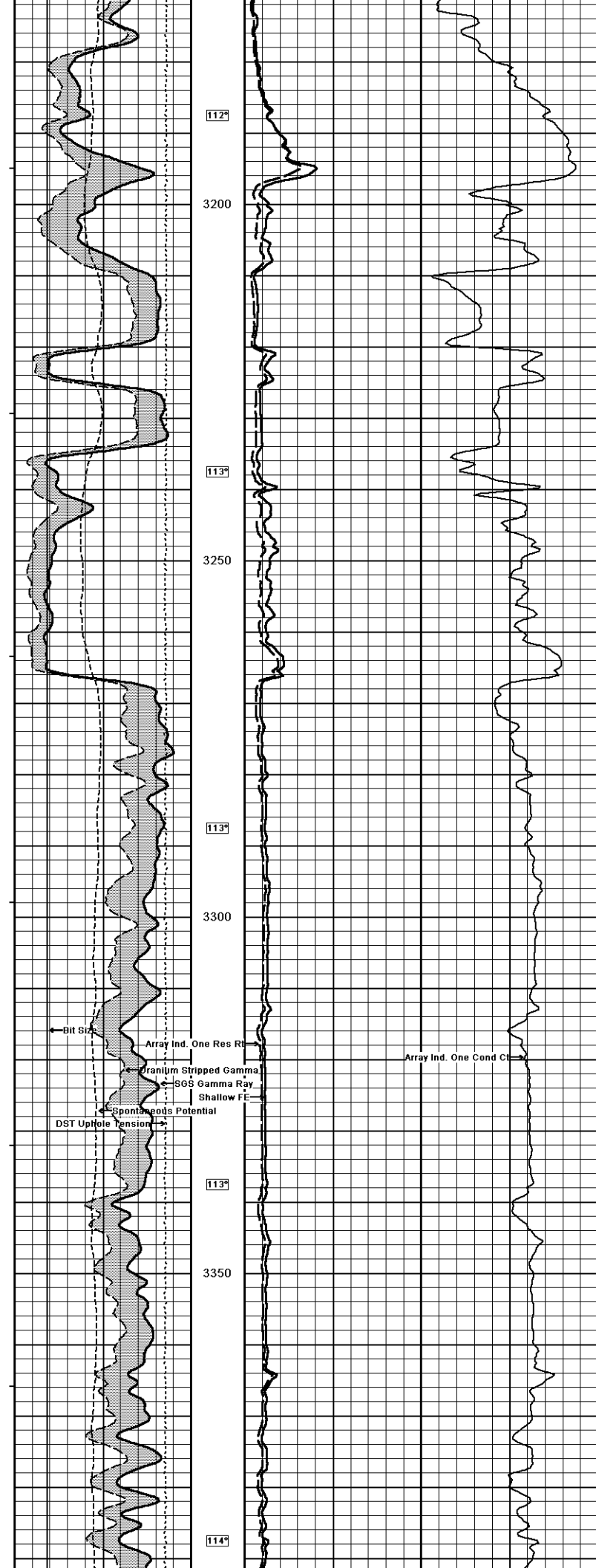


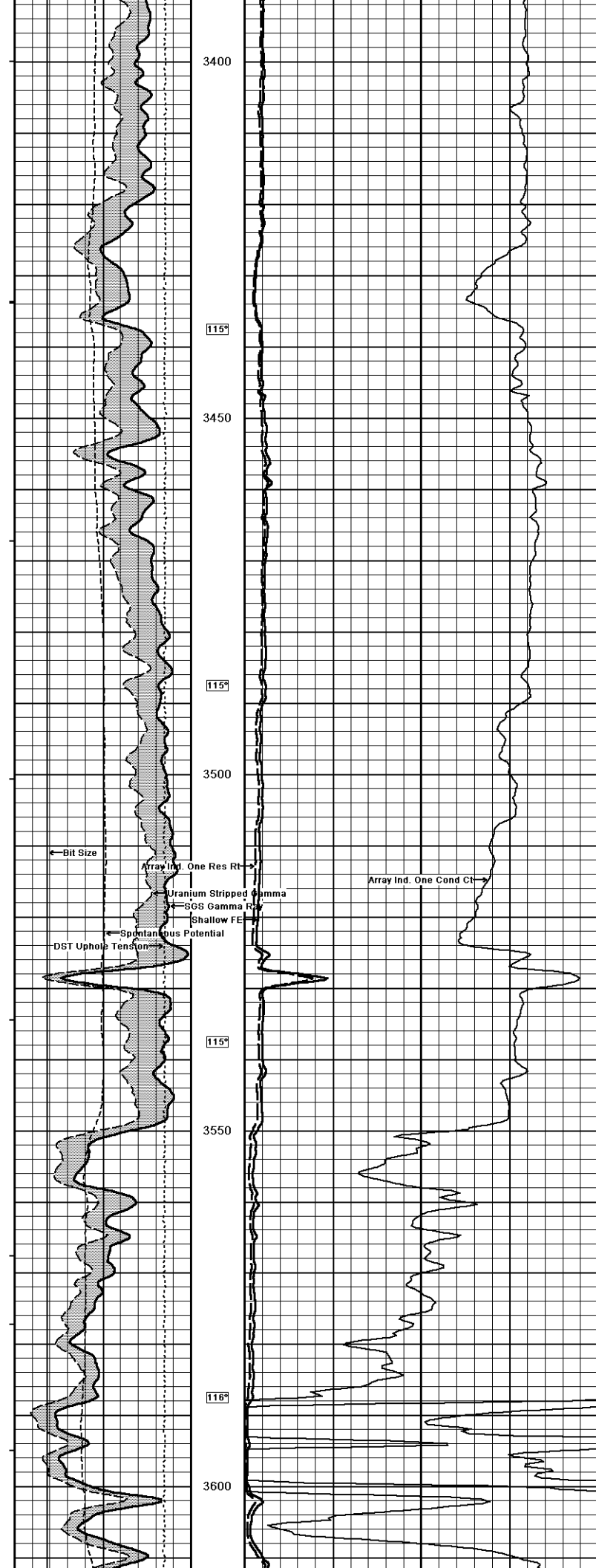


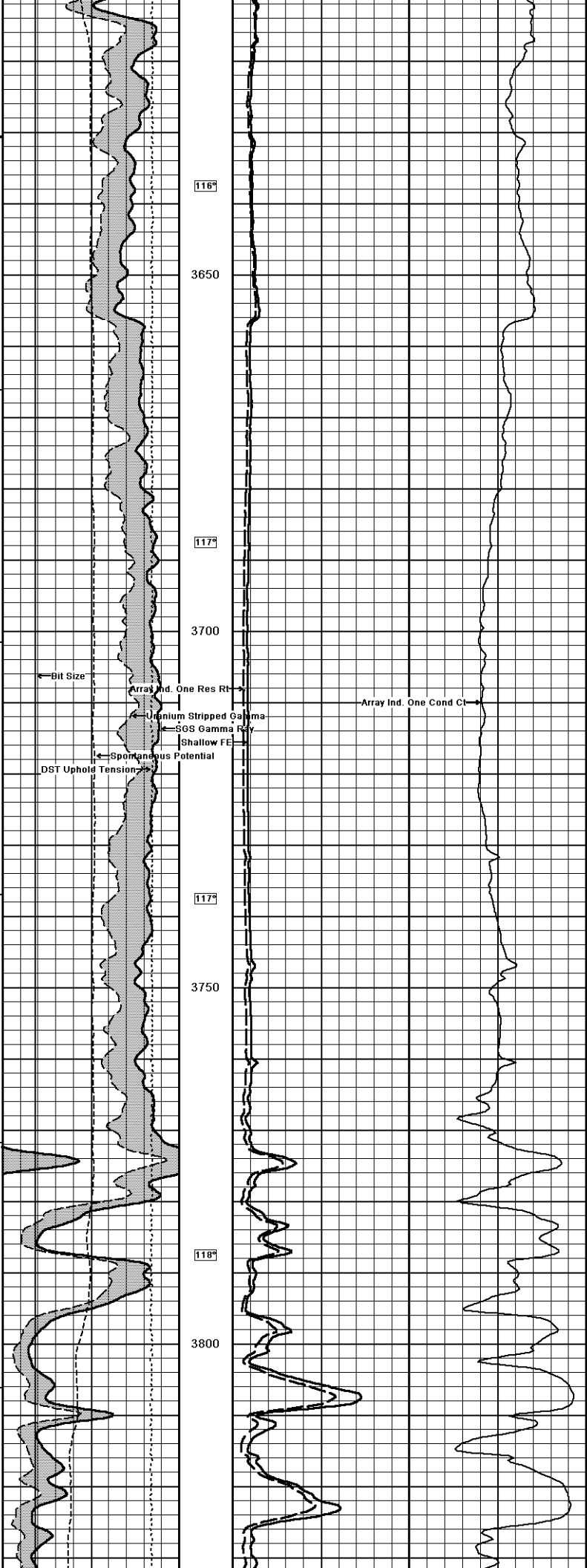


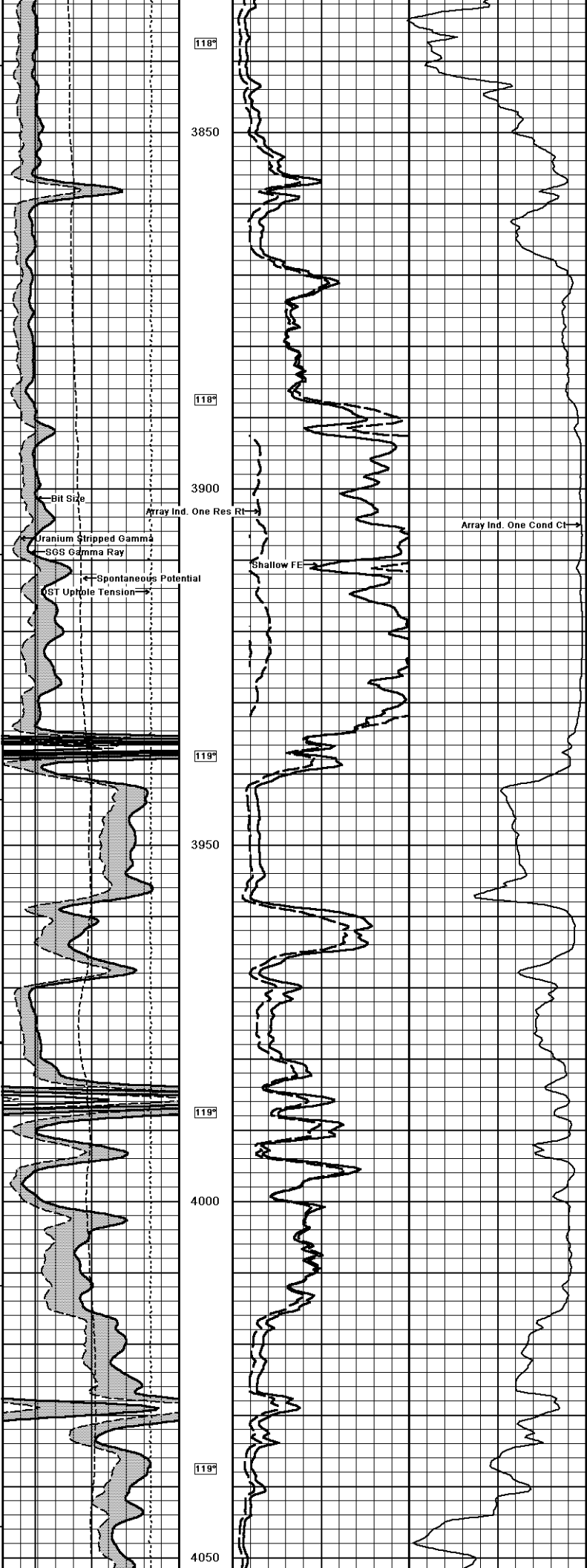


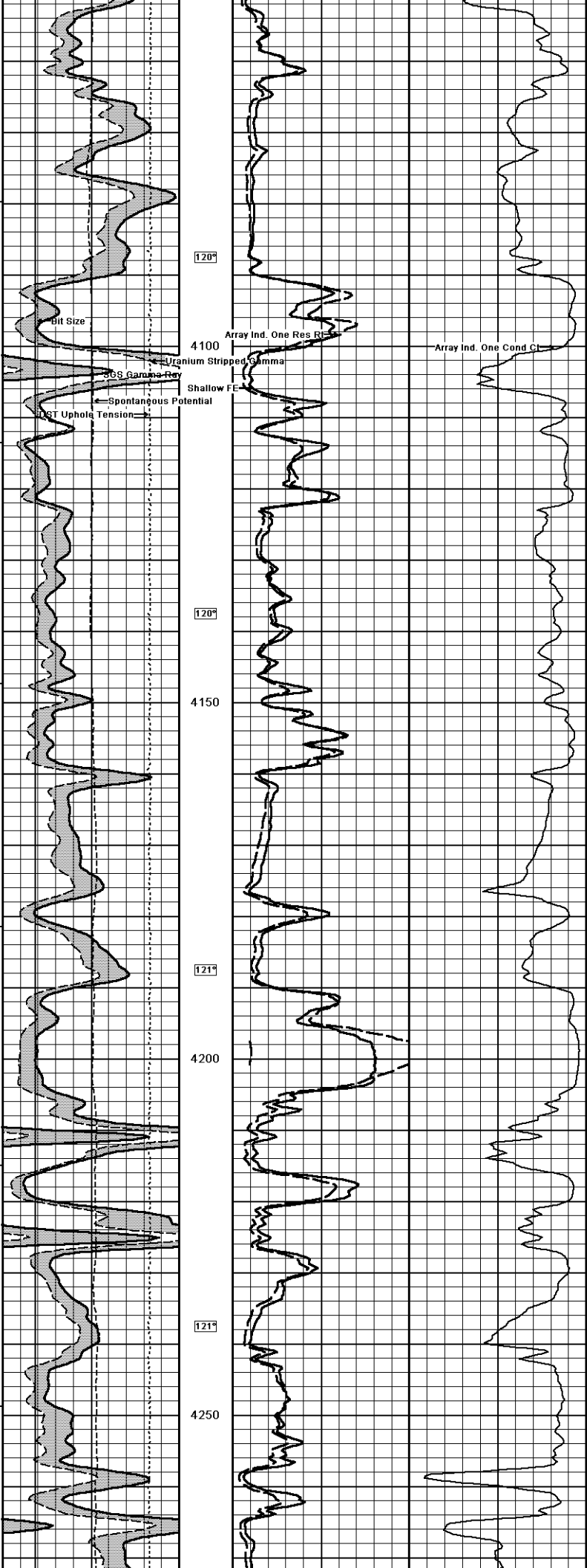


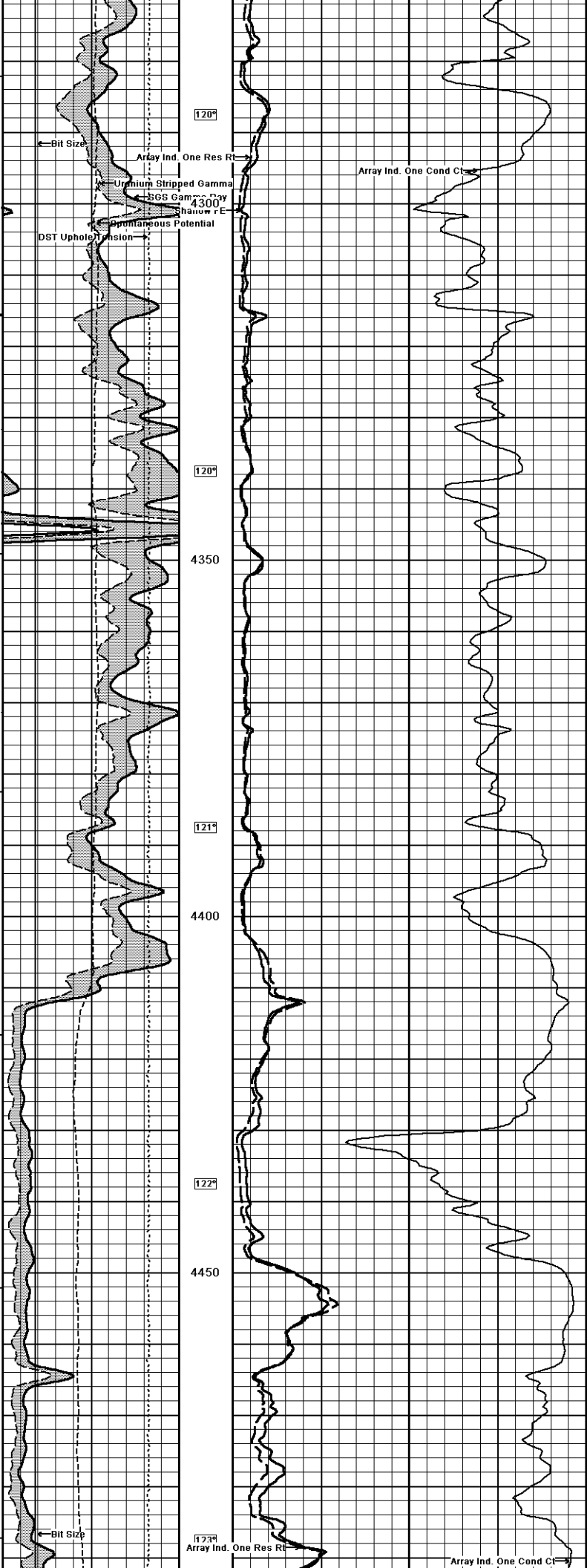


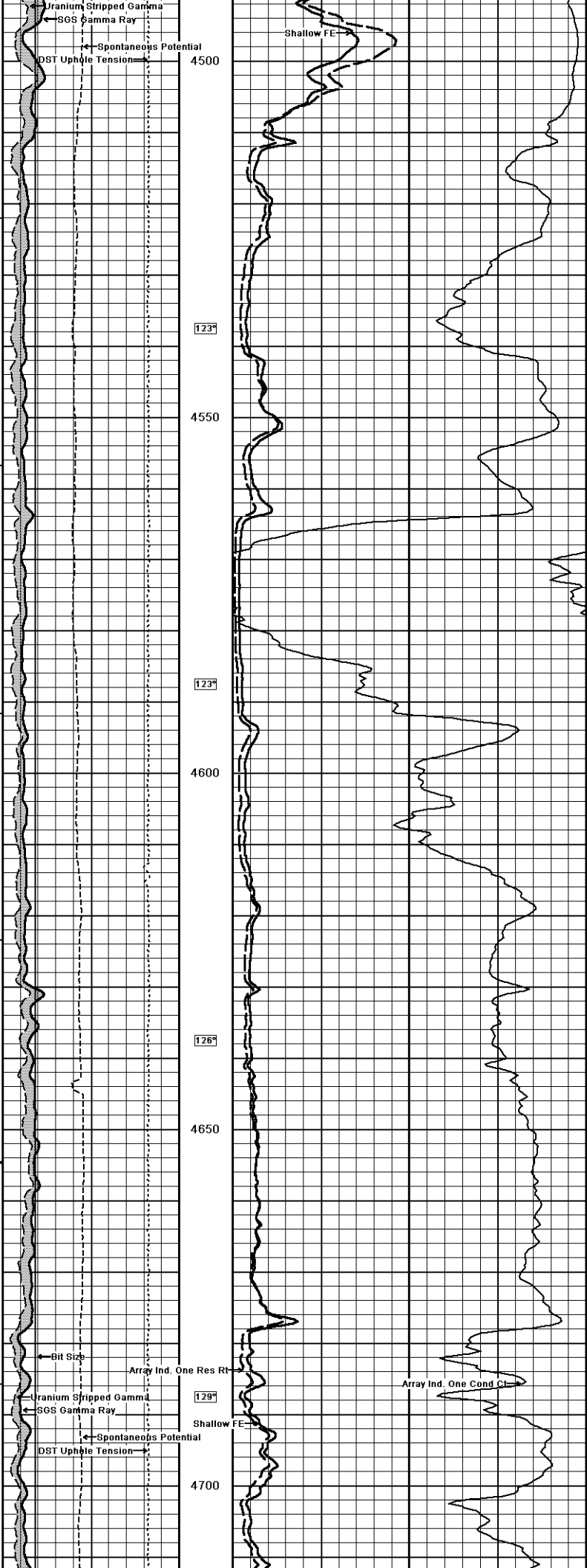


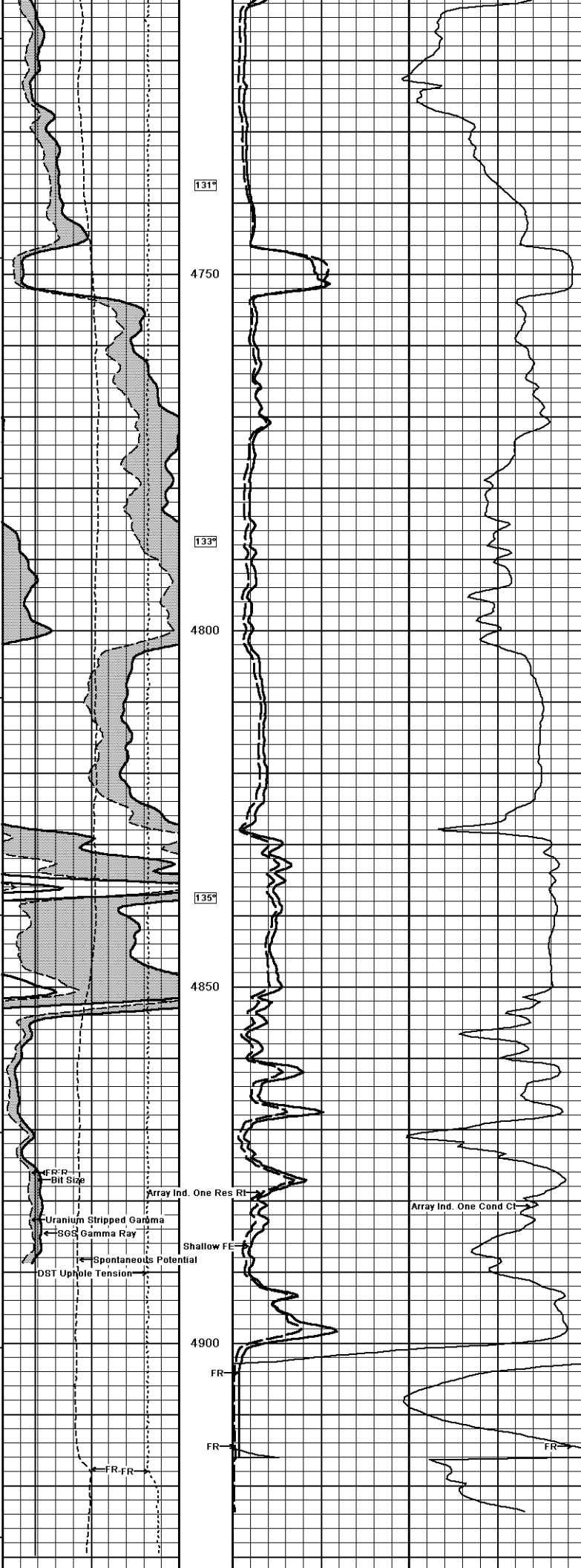


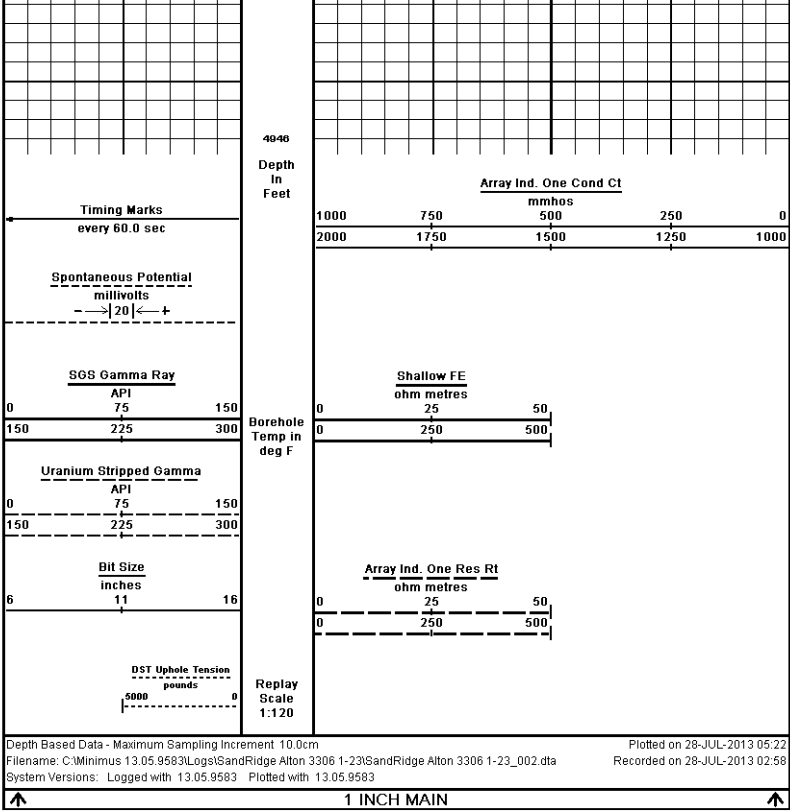












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