



Weatherford
LOG

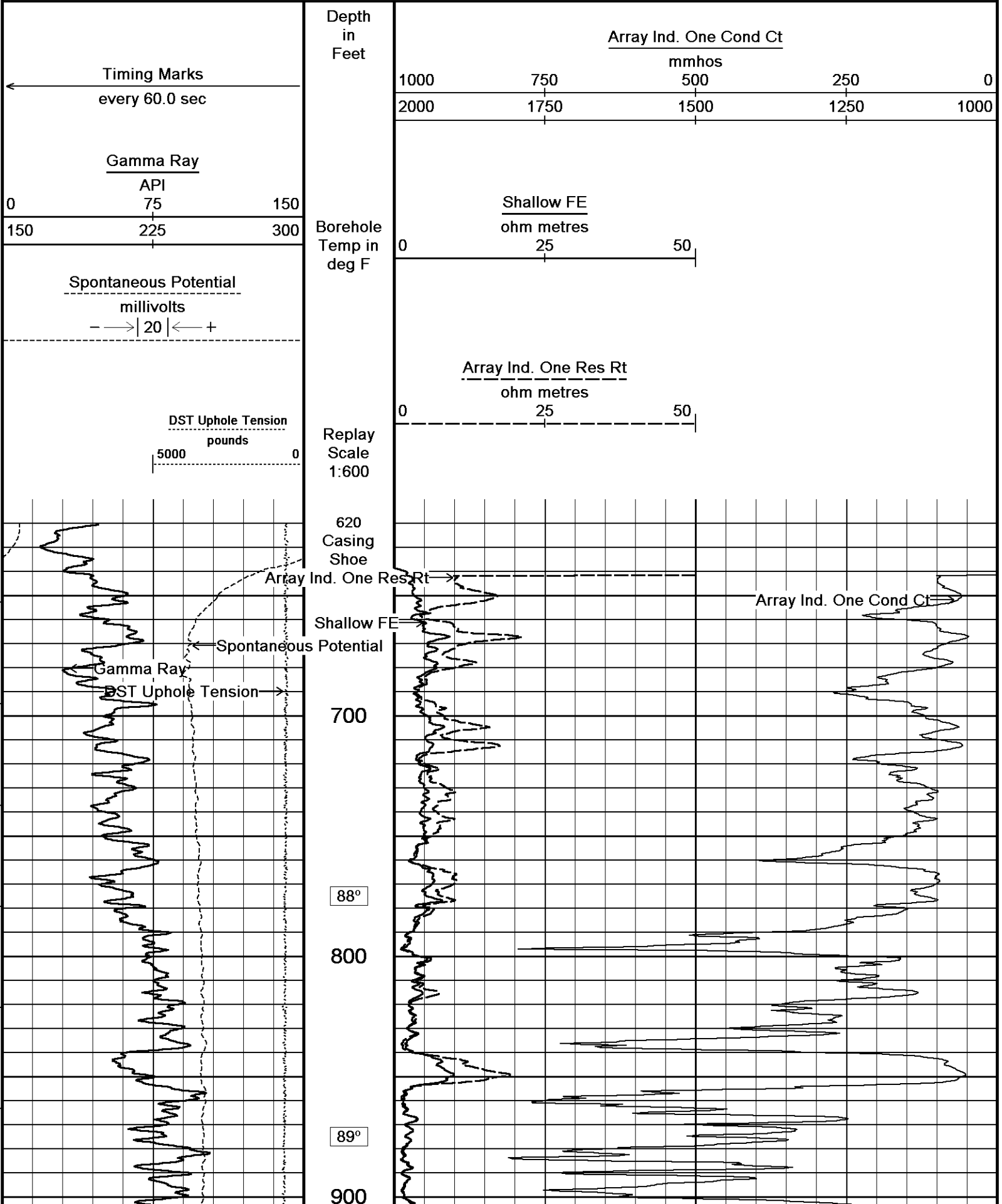
ARRAY INDUCTION
SHALLOW FOCUSED
ELECTRIC LOG

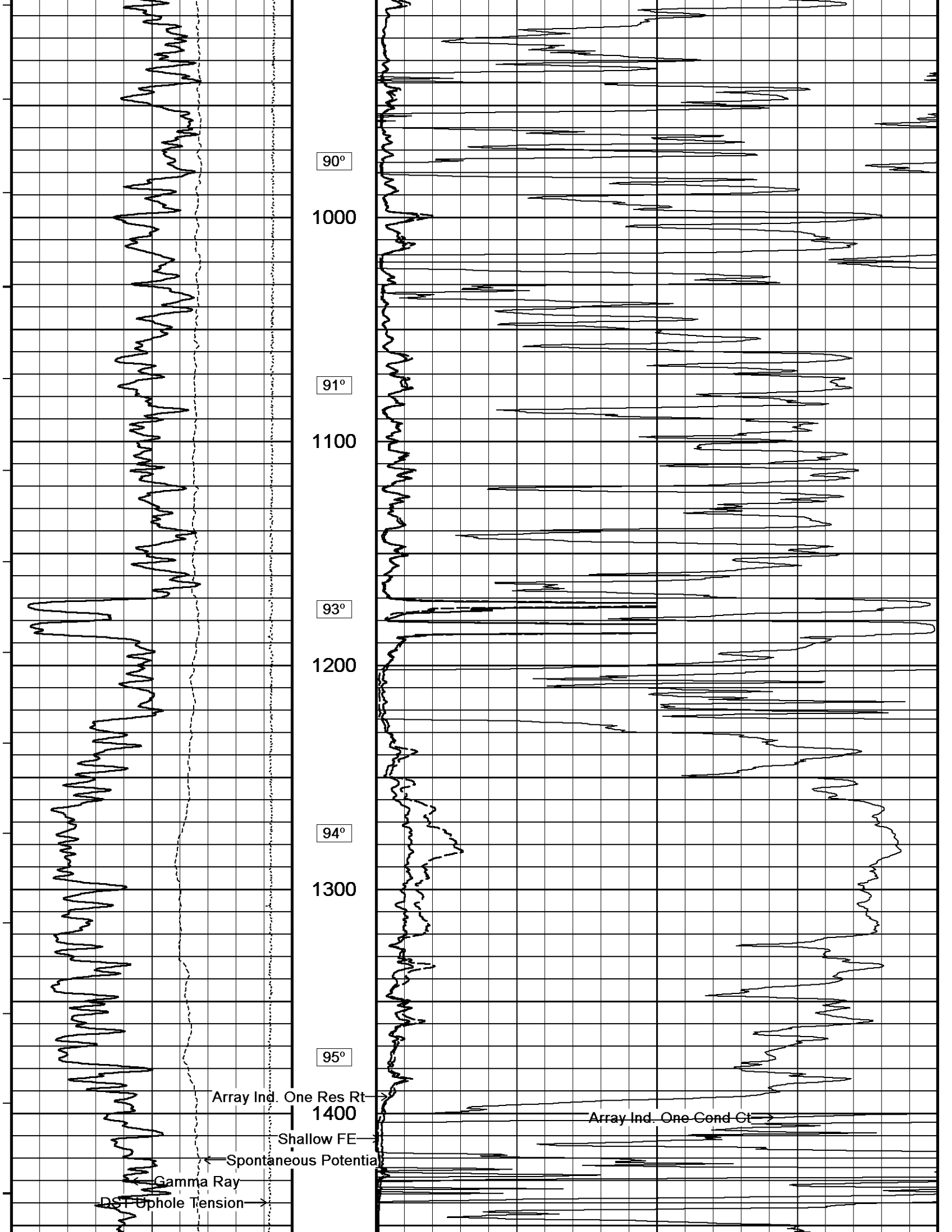
COMPANY	MCCOY PETROLEUM CORP.									
WELL	MCKINNEY TRUST 'A' #1-23									
FIELD	ALFORD									
PROVINCE/COUNTY	KIOWA									
COUNTRY/STATE	U.S.A. / KANSAS									
LOCATION	1980' FSL & 2310' FEL									
SEC	TWP	RGE	Other Services							
23	30S	19W	MPD/MDN							
API Number	15-097-21735		MML							
Permit Number										
Permanent Datum G.L., Elevation 2232 feet										
Log Measured From KB										
Drilling Measured From K.B. @ 9 FEET										
Date	02-SEP-2012					Elevations: feet				
Run Number	ONE					KB 2241.00				
Depth Driller	5225.00					DF 2239.00				
Depth Logger	5226.00					GL 2232.00				
First Reading	5223.00									
Last Reading	639.00									
Casing Driller	640.00									
Casing Logger	639.00									
Bit Size	7.875									
Hole Fluid Type	CHEMICAL									
Density / Viscosity	1.13 g/cc		49.00 CP							
PH / Fluid Loss	9.00		11.00 ml/30Min							
Sample Source	FLOWLINE									
Rm @ Measured Temp	0.56 @ 88.0					ohm-m				
Rmf @ Measured Temp	0.45 @ 88.0					ohm-m				
Rmc @ Measured Temp	0.67 @ 88.0					ohm-m				
Source Rmf / Rmc	CALC	CALC								
Rm @ BHT	0.44 @ 113.0					ohm-m				
Time Since Circulation	4 HOURS									
Max Recorded Temp	113.00					deg F				
Equipment Name	COMPACT									
Equipment / Base	13057	LIB								
Recorded By	R.HOFFMAN									
Witnessed By	ROBERT HENDRIX									
S.O. # / JOB #	3537837					LB12-239				

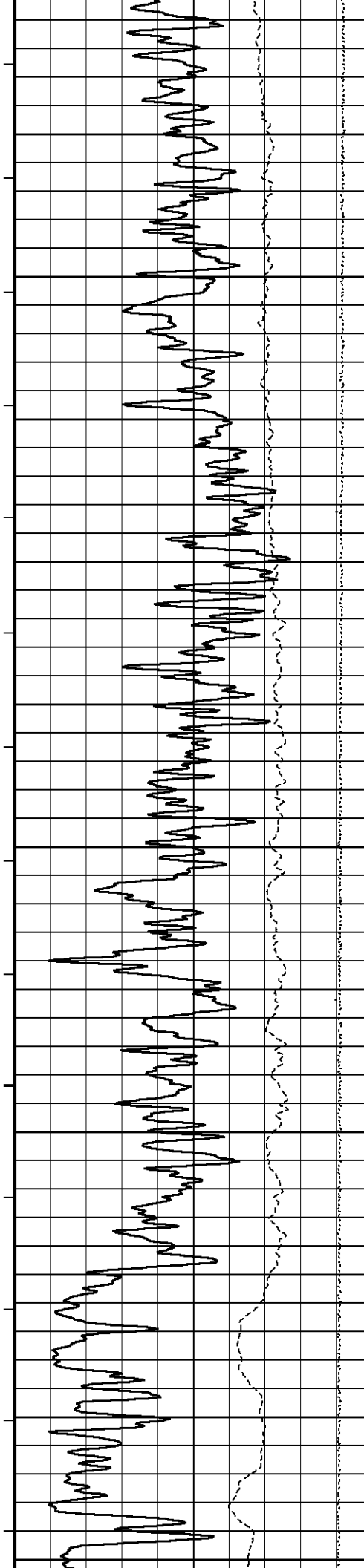
BOREHOLE RECORD				Last Edited: 02-SEP-2012 10:37
Bit Size inches		Depth From feet		Depth To feet
7.875		639.00		5226.00
CASING RECORD				
Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	8.625	0.00	639.00	24.00

REMARKS
Tools Ran: MCG, MML, MDN, MPD, MFE, MAI. Hardware Used: MDN Dual Eccentralizer used. MPD 8 inch profile plate used. MFE and MAI 0.5 inch standoffs used. 2.71 g/cc Limestone Density Matrix used to calculate porosity. All intervals logged and scaled per customer's request. Tight pulls, washouts and borehole rugosity will affect data quality. Total hole volume from TD to Surface casing = 2552 cu. ft. Annular volume with 5.5 inch production casing TD to 3900ft = 286 cu. ft. Service order: #3537837 Rig: Sterling Drilling Rig #4 Engineer: R. Hoffman Operator(s): B. Reeves

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.







94°

1500

94°

1600

94°

1700

95°

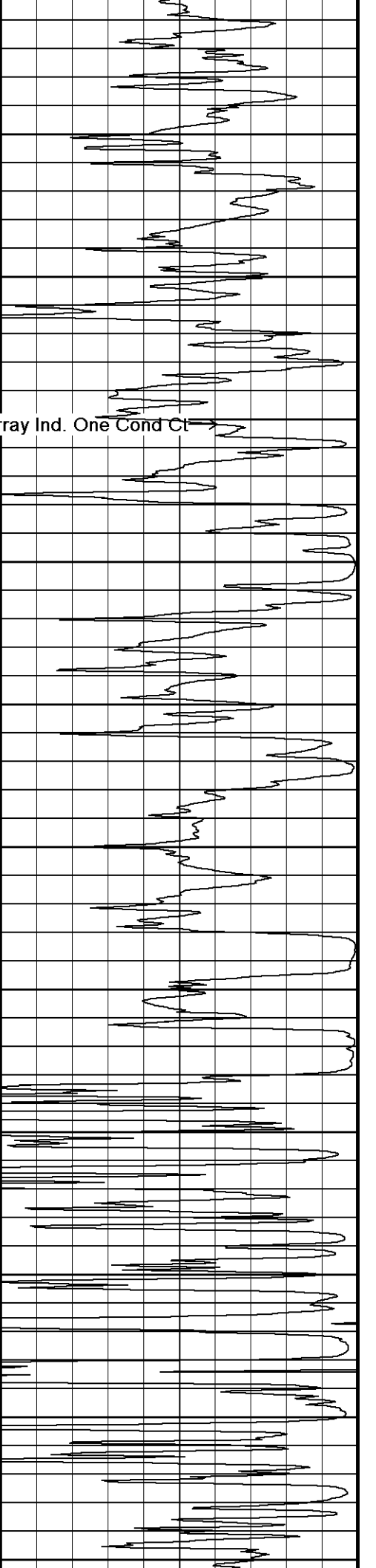
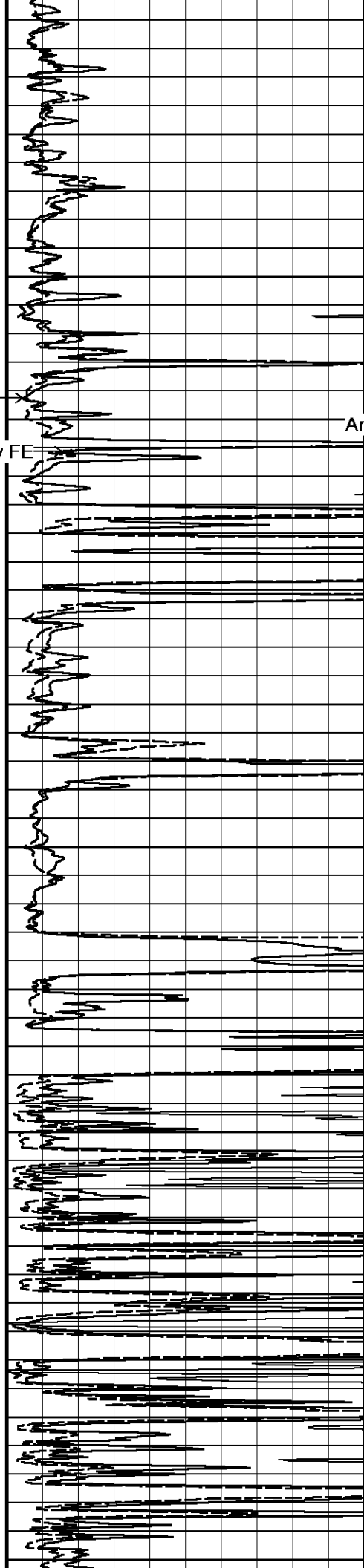
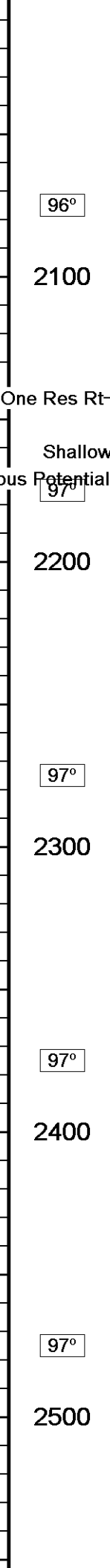
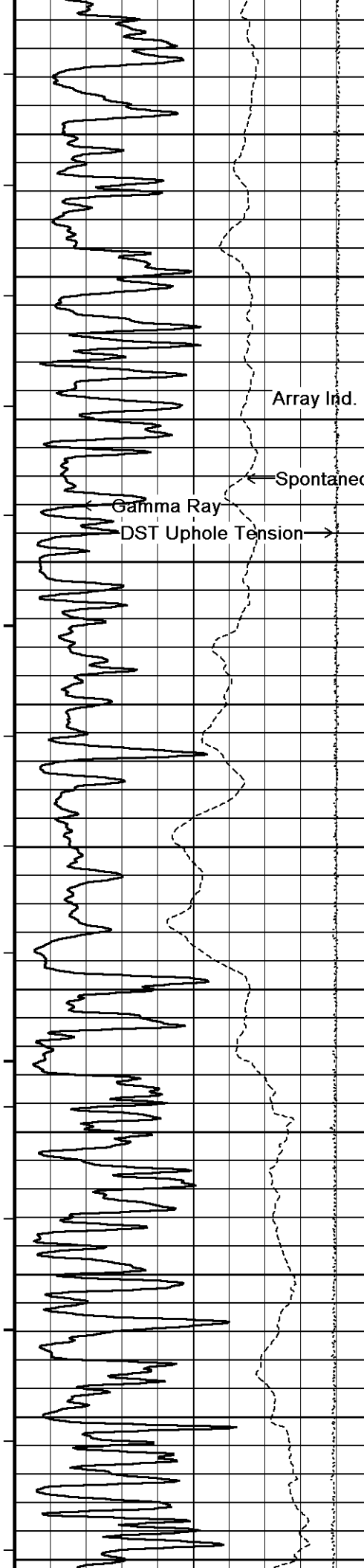
1800

95°

1900

96°

2000



96°

2100

Array Ind. One Res Rt

Shallow FE

97°

2200

Gamma Ray

DST Uphole Tension

Spontaneous Potential

Array Ind. One Cond Ct

97°

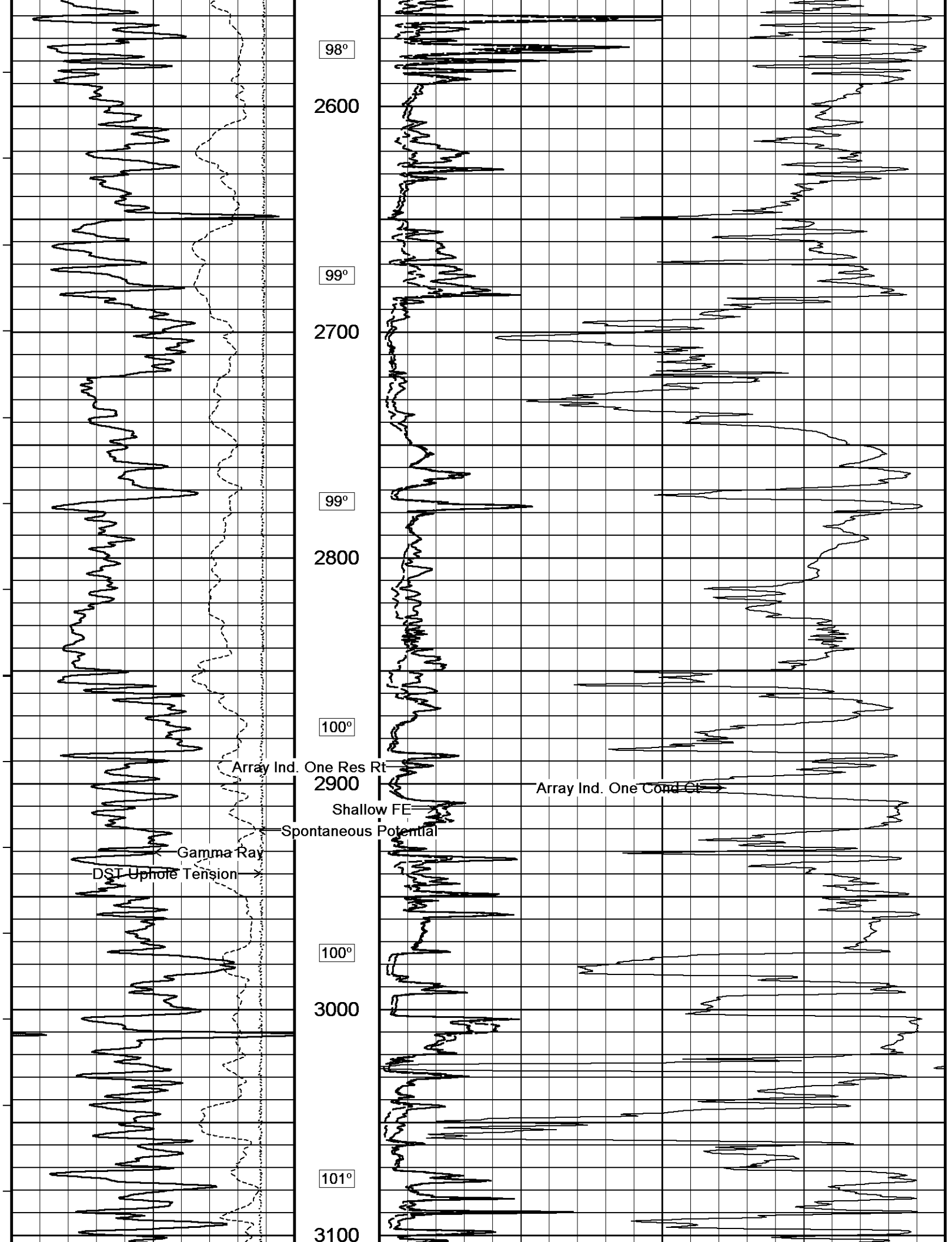
2300

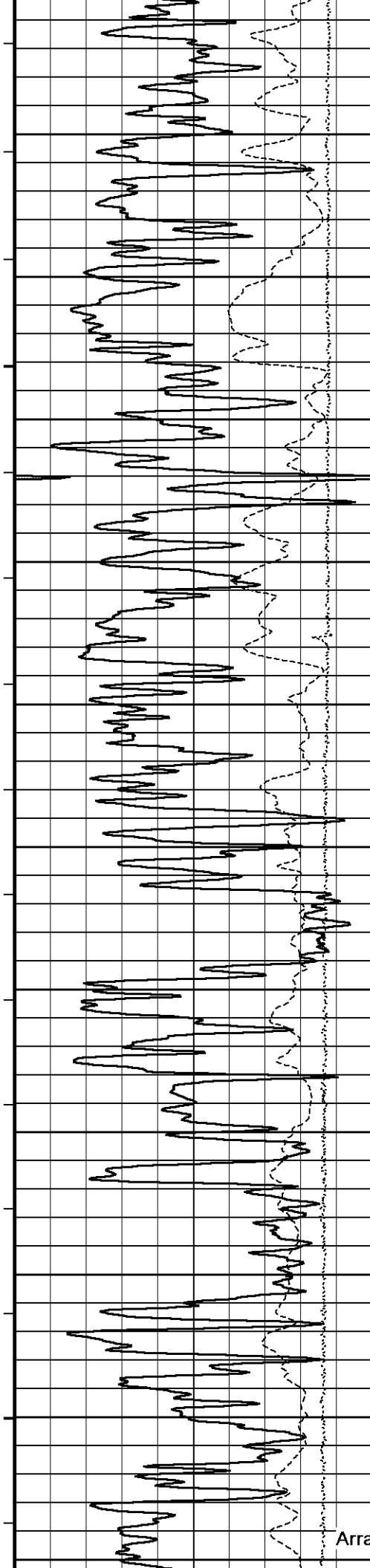
97°

2400

97°

2500





Array Ind. One Res Rt

102°

3200

102°

3300

102°

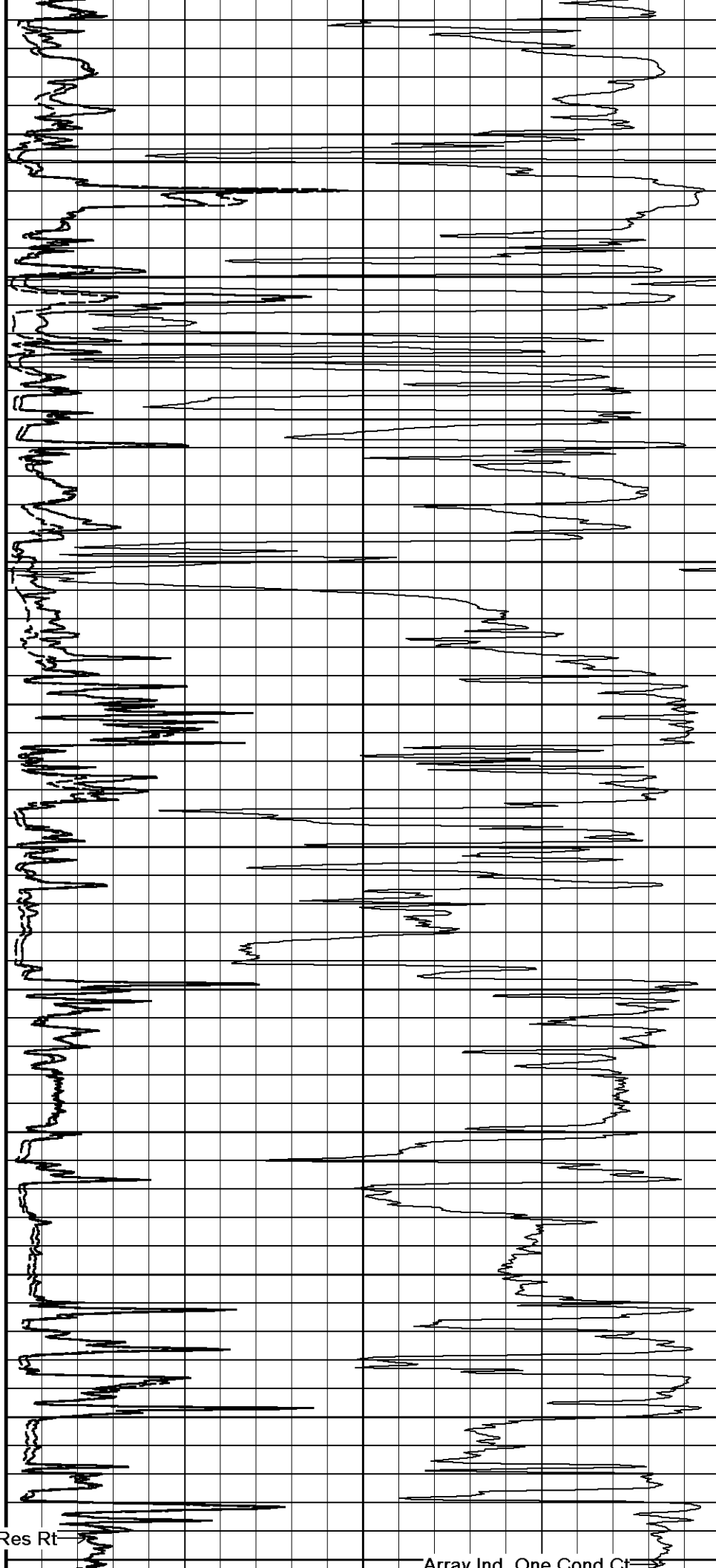
3400

103°

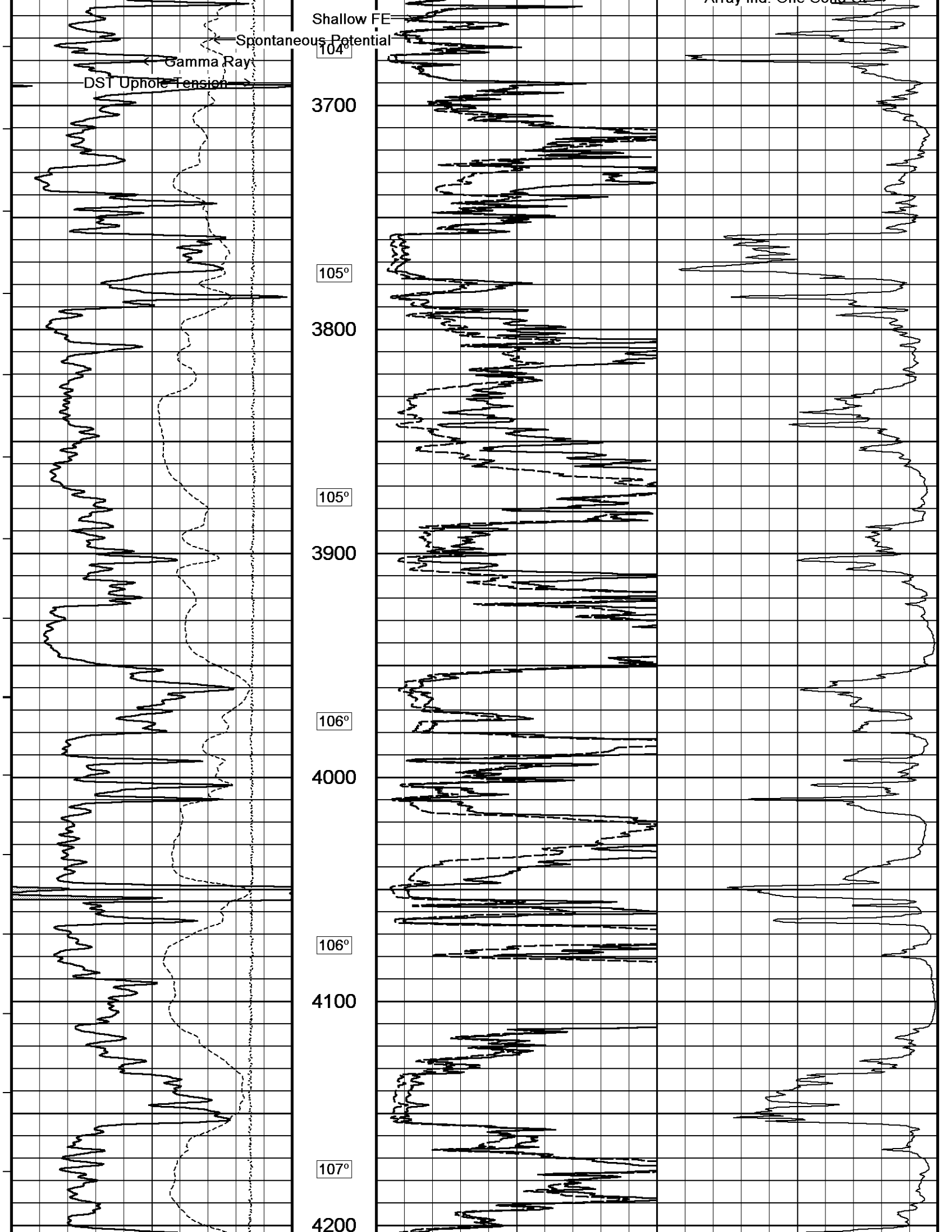
3500

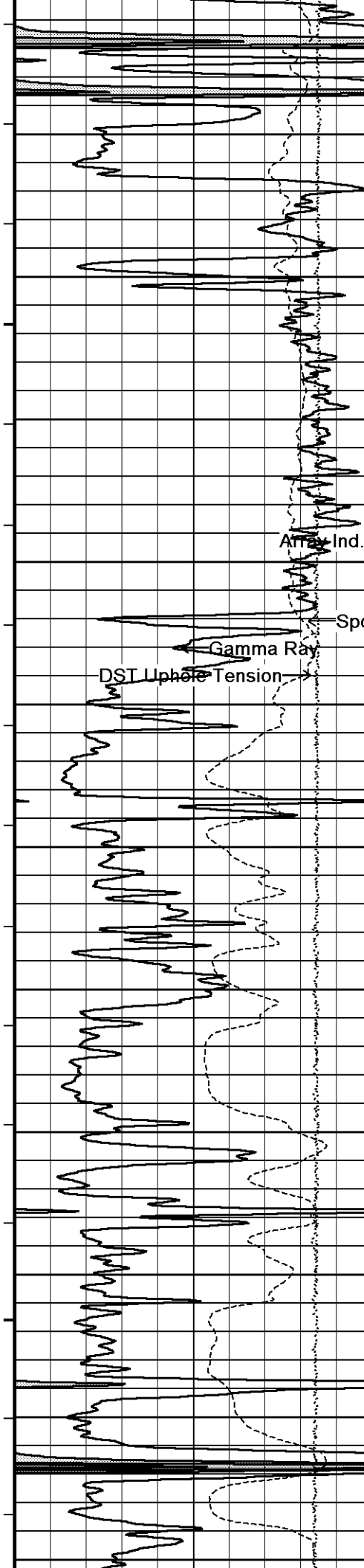
104°

3600



Array Ind. One Cond Ct





107°

4300

108°

4400

Shallow FE

108°

4500

109°

4600

109°

4700

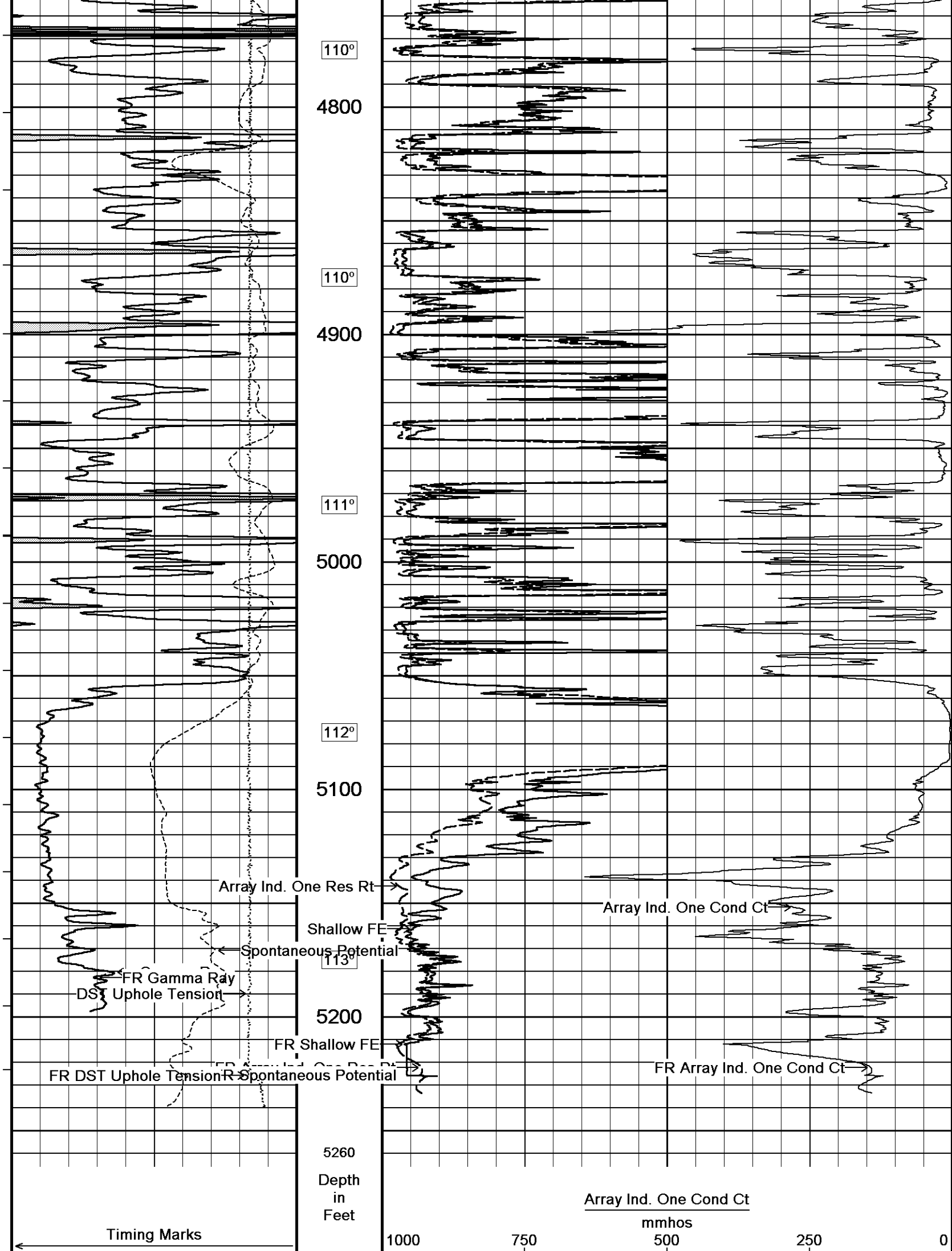
Array Ind. One Res Rt

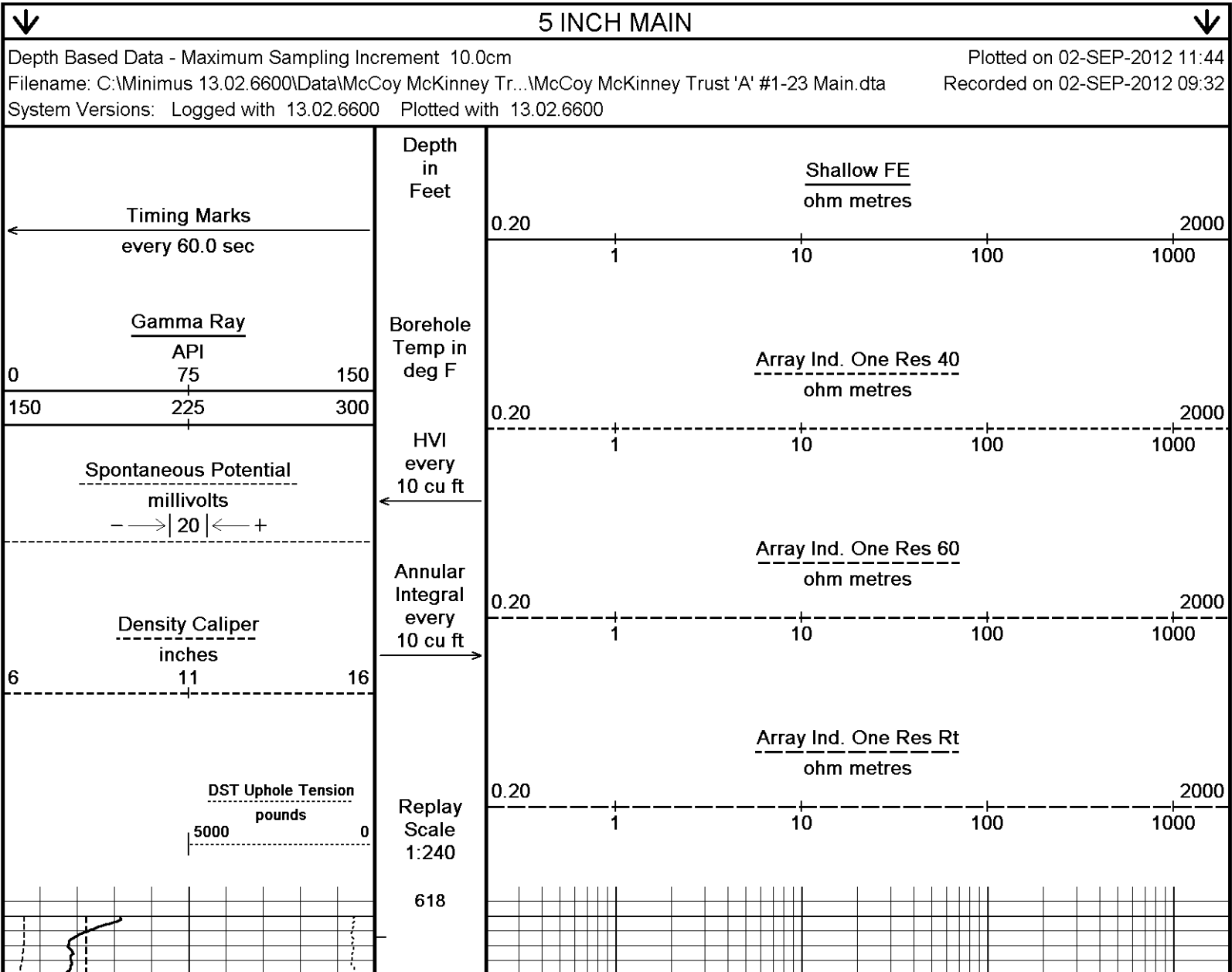
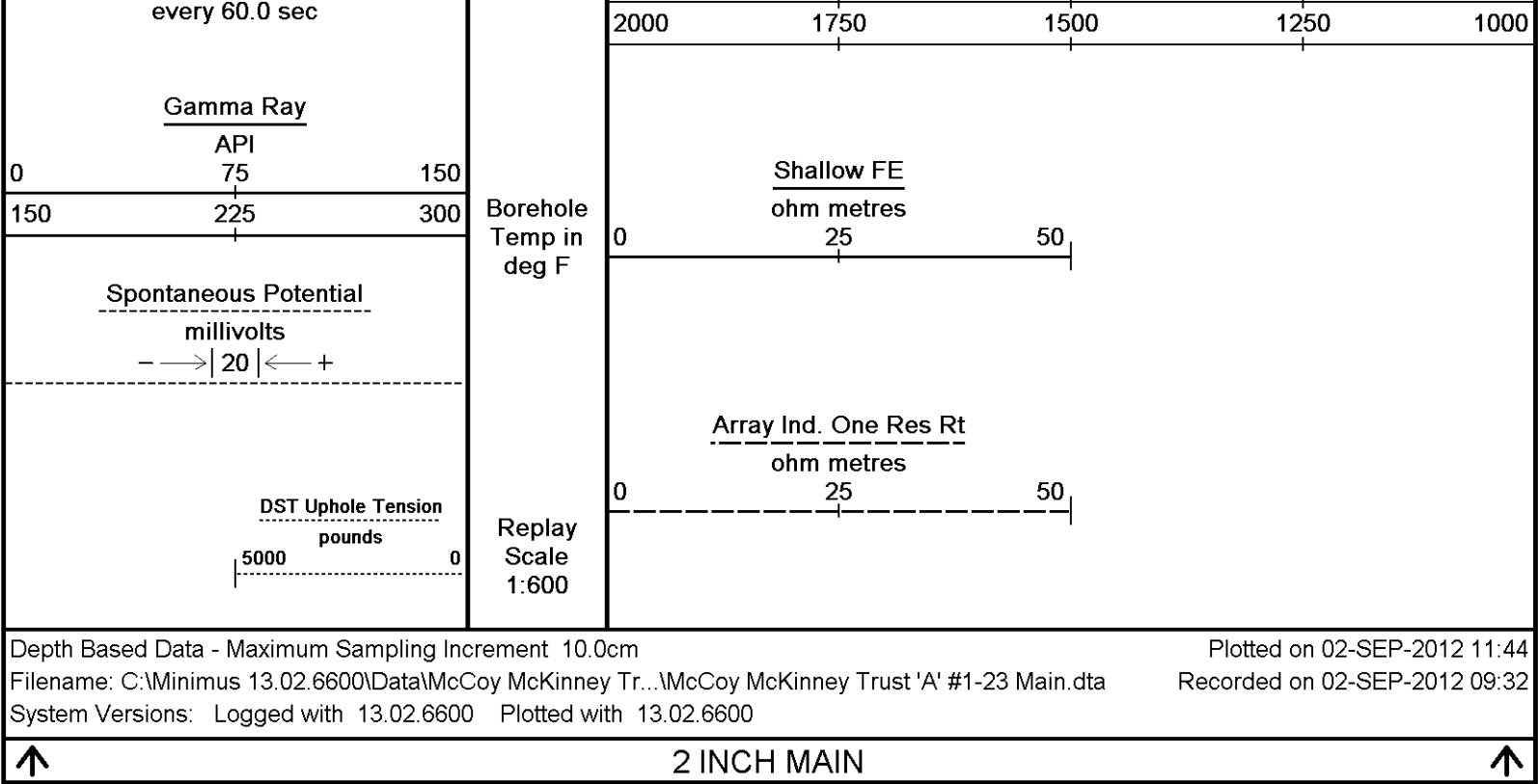
Spontaneous Potential

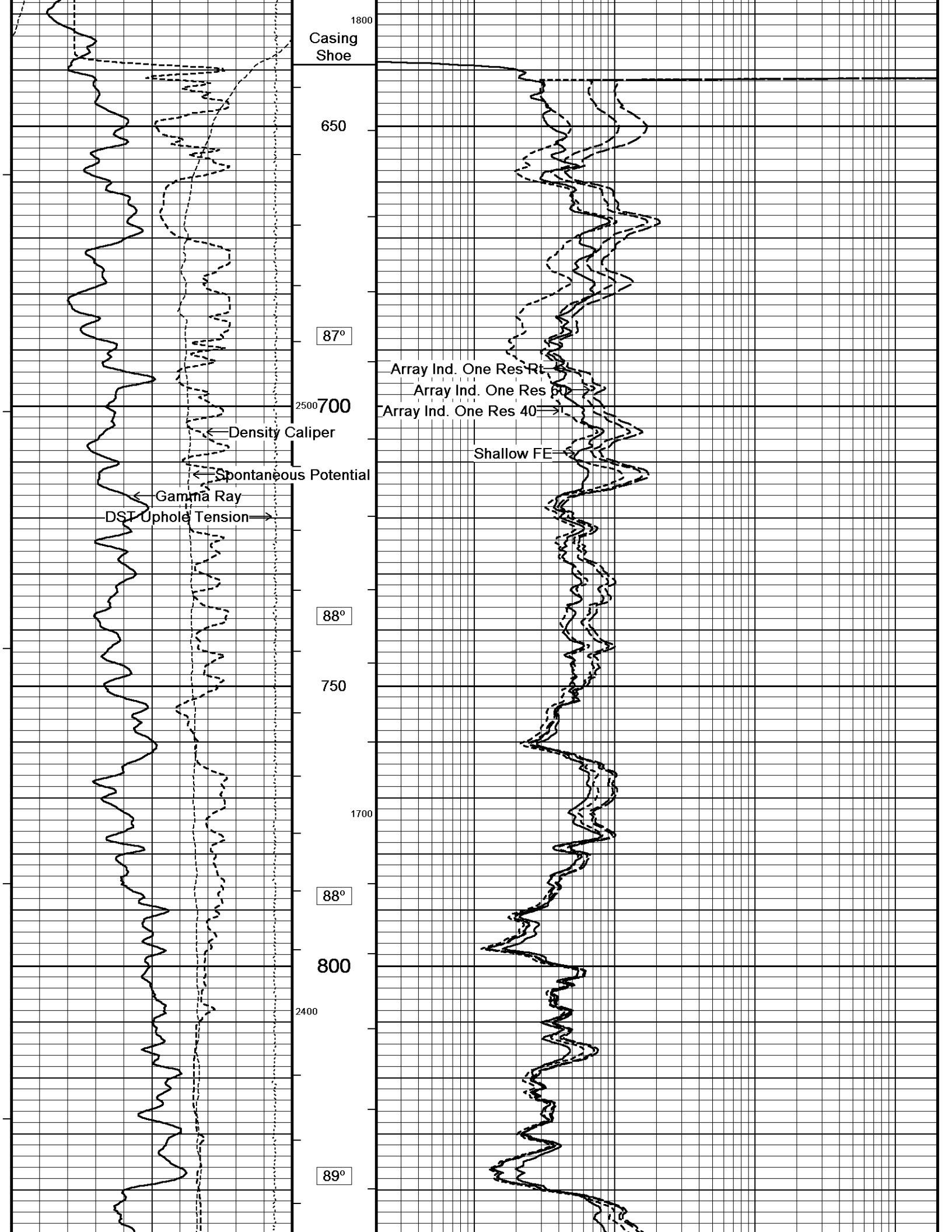
Gamma Ray

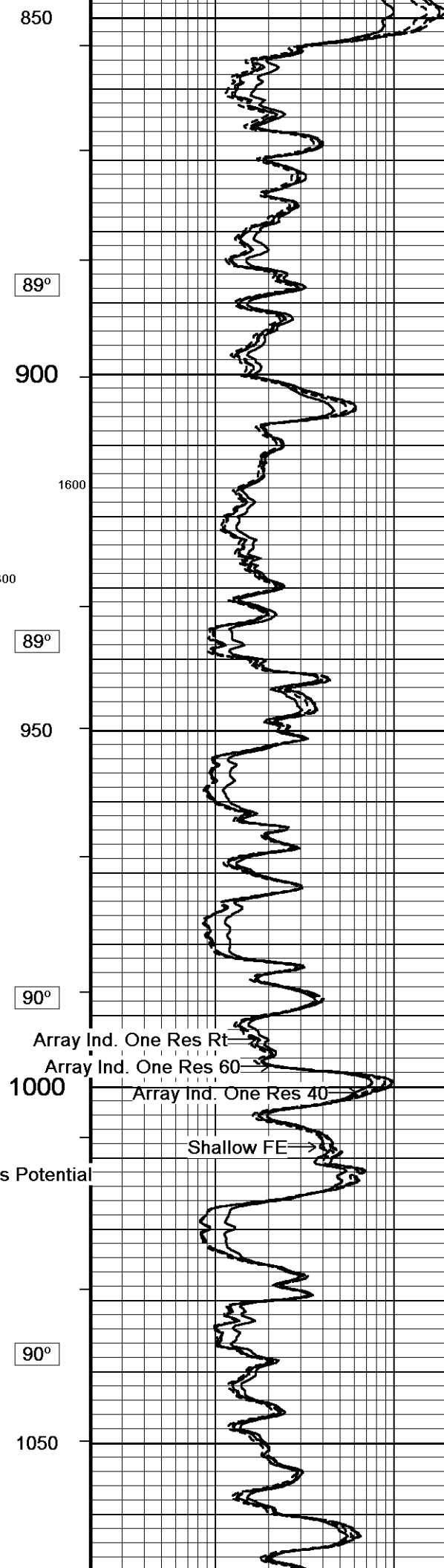
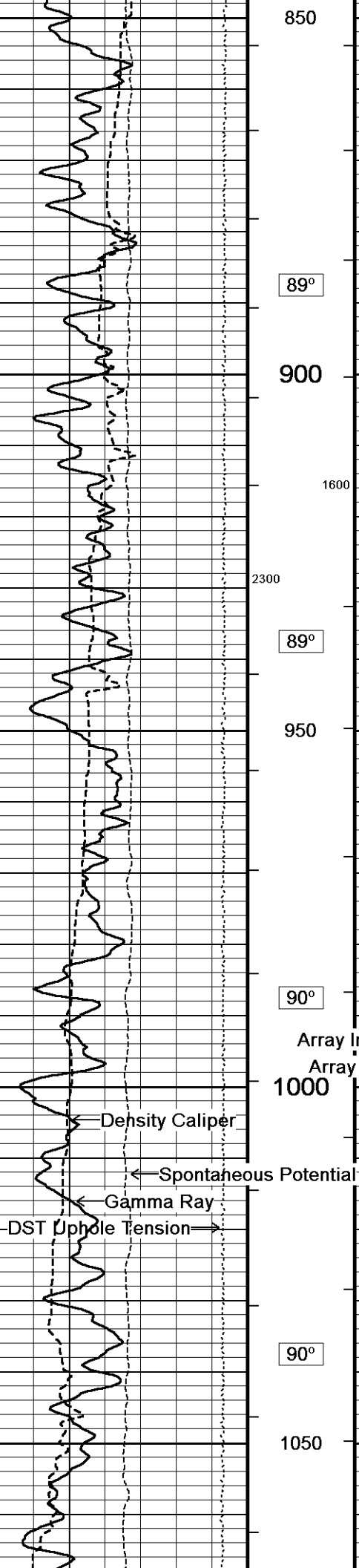
DST Up-hole Tension

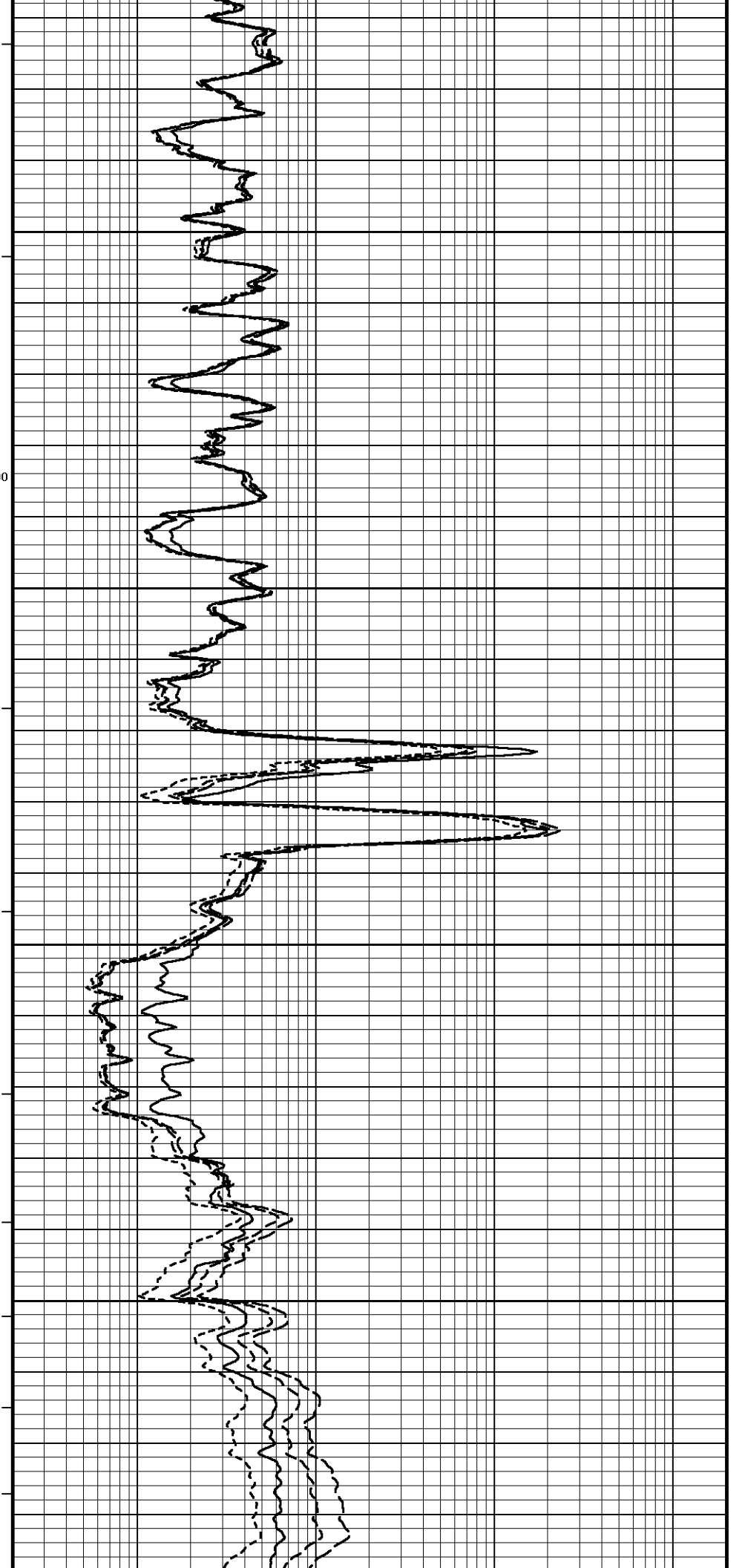
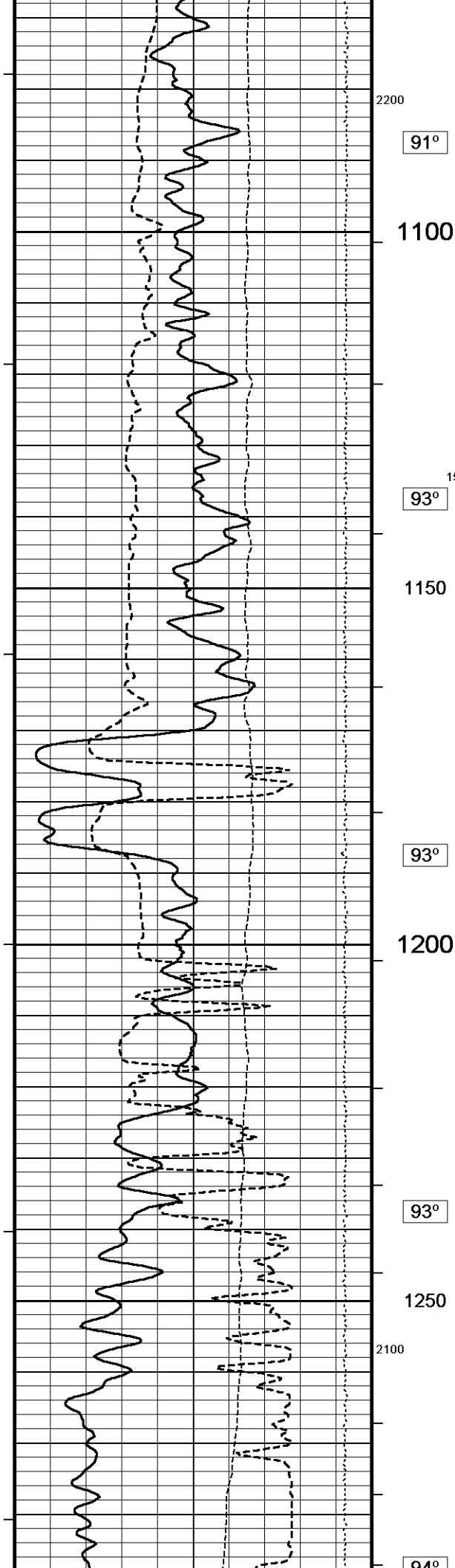
Array Ind. One Cond C

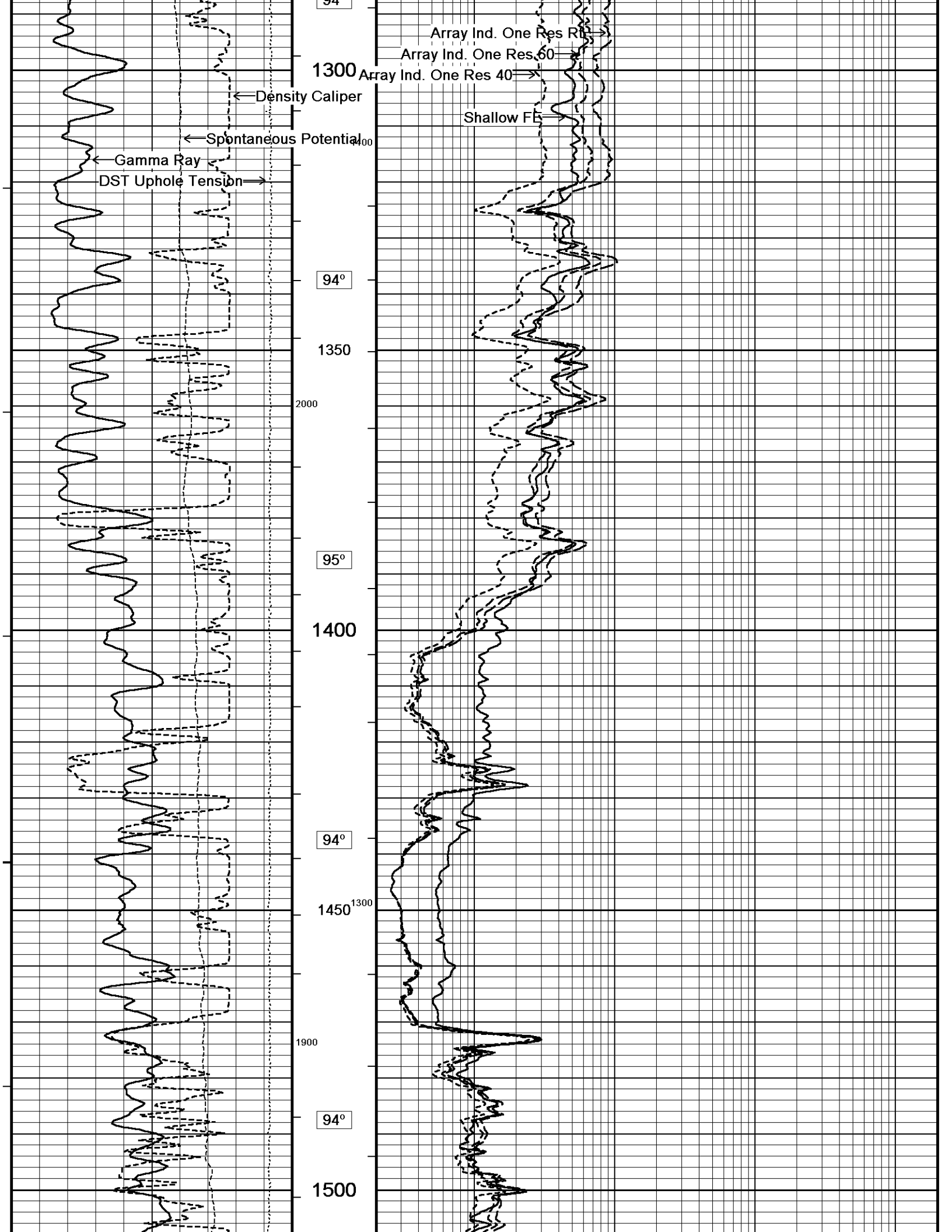


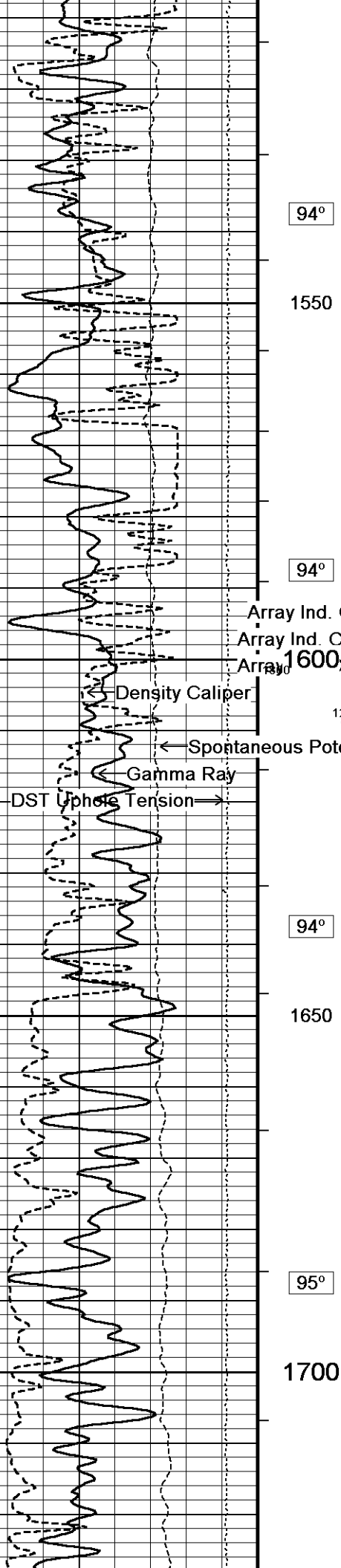












Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE

94°

1550

94°

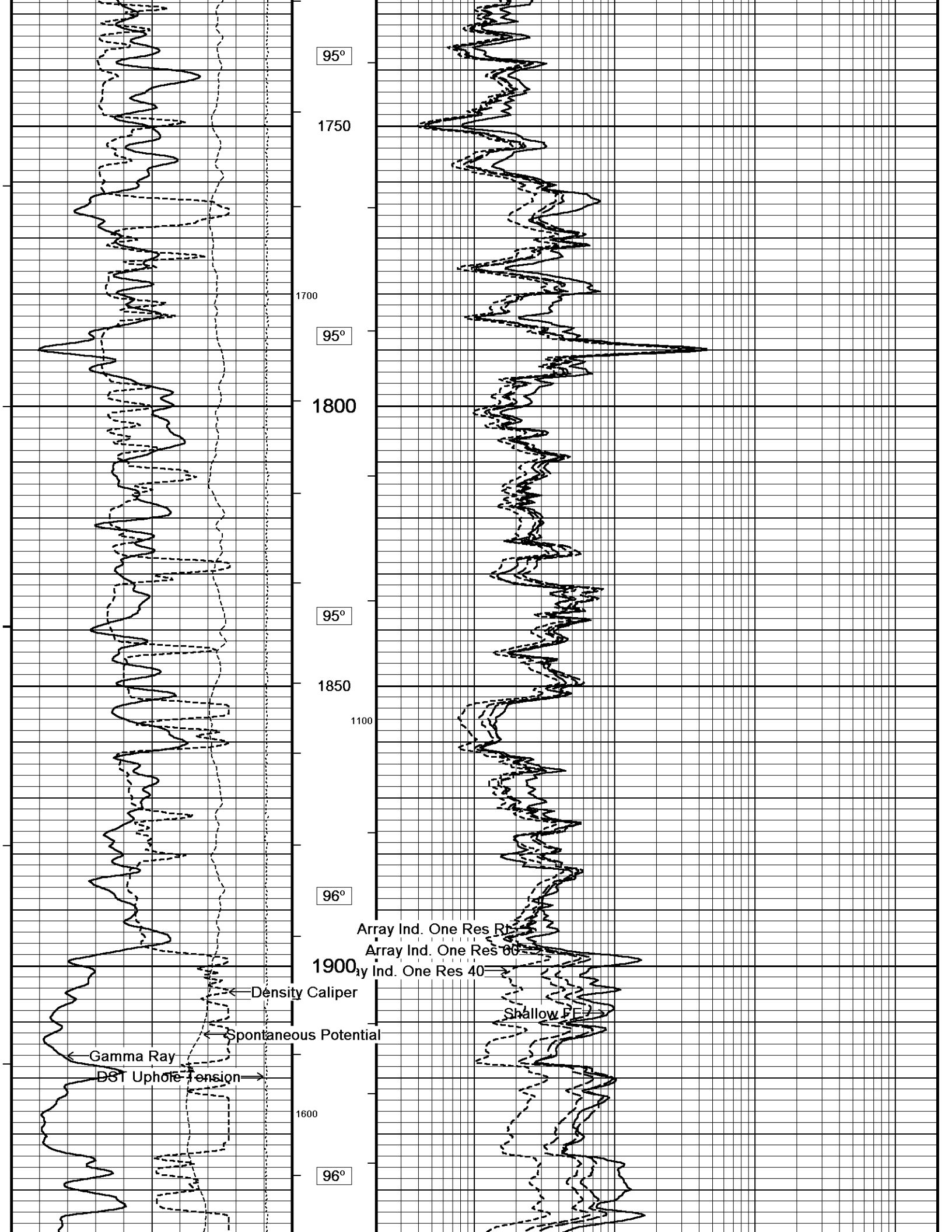
1600

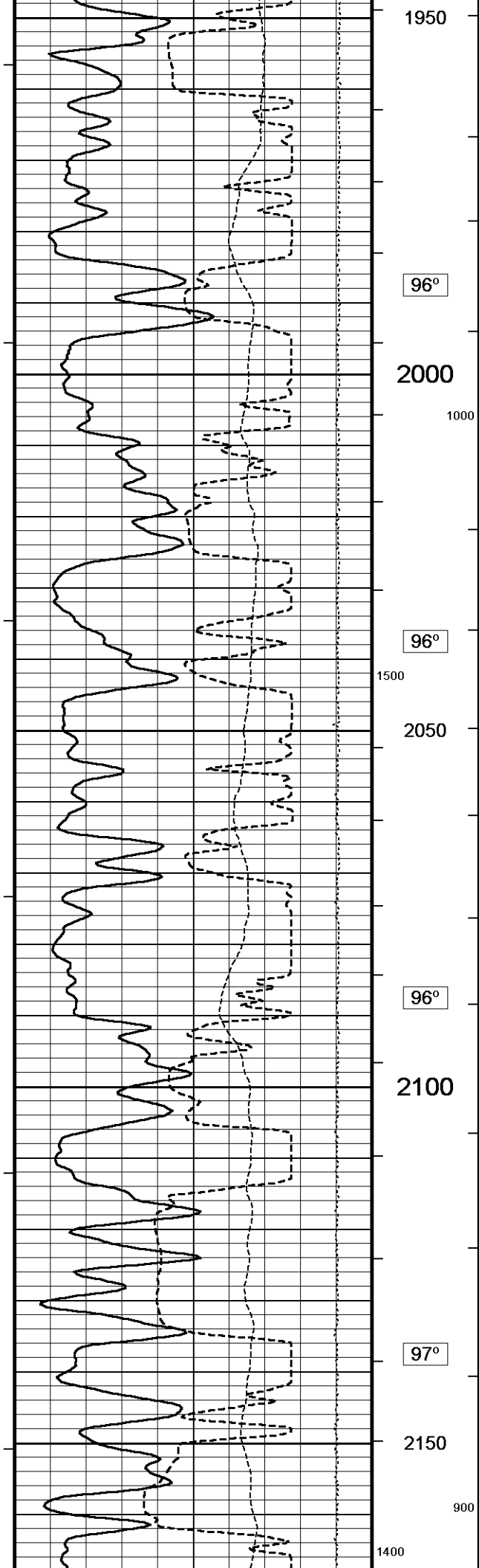
94°

1650

95°

1700





1950

96°

2000

1000

96°

1500

2050

96°

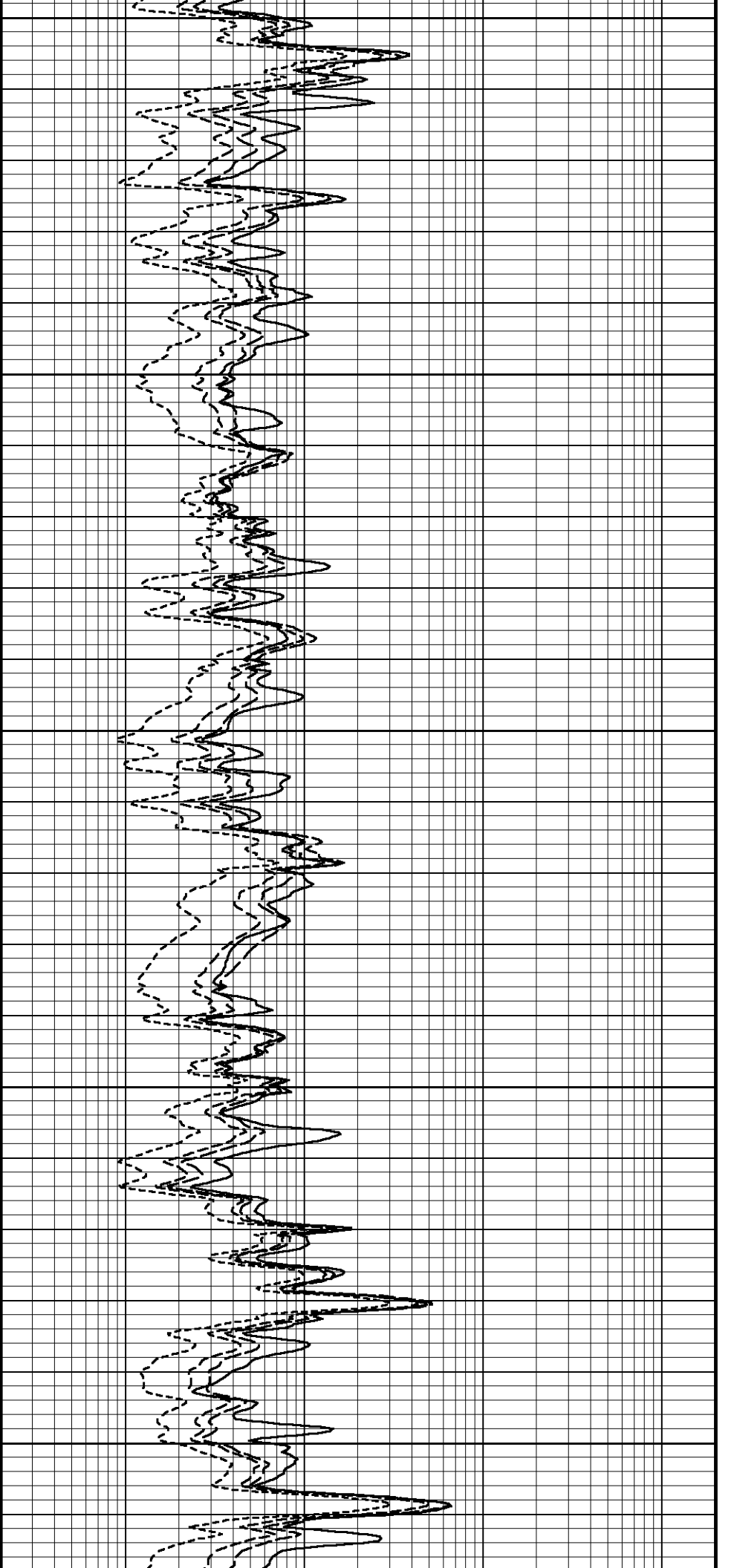
2100

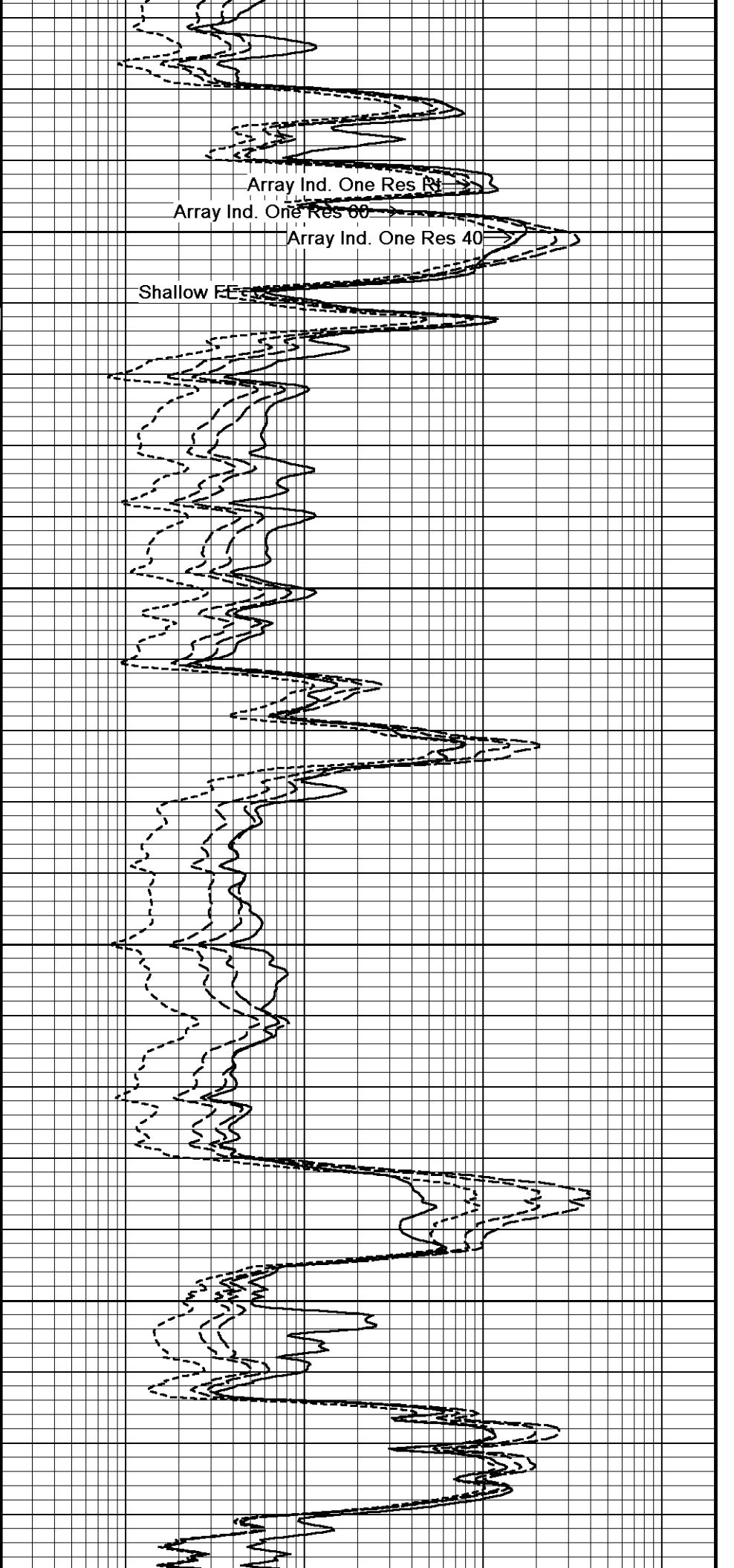
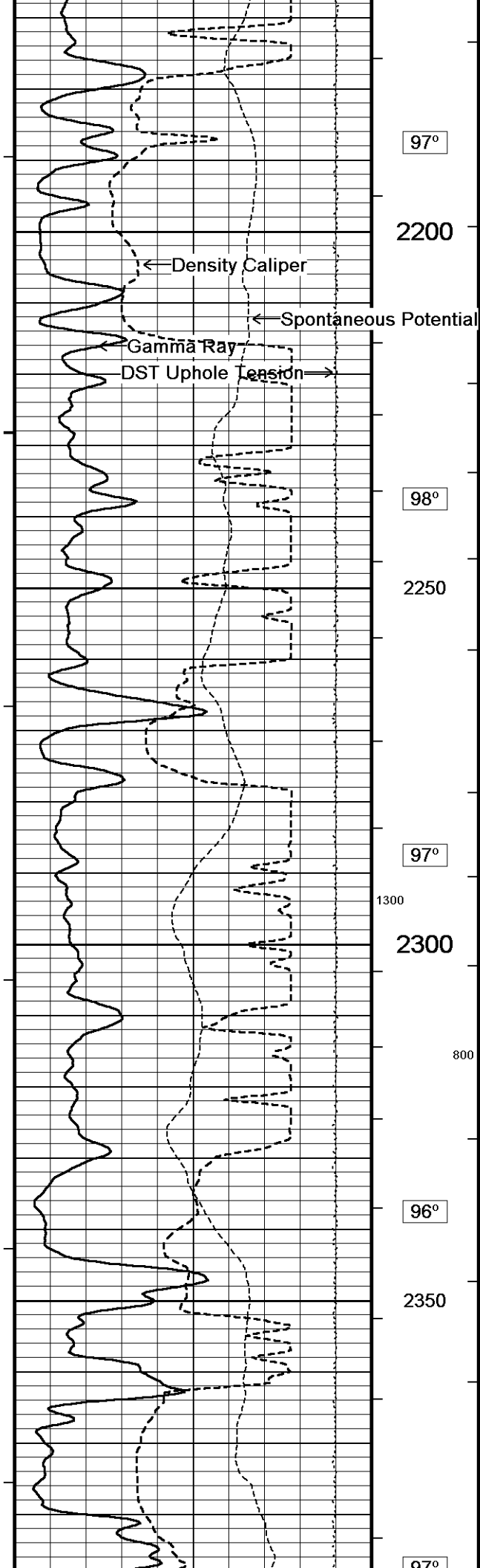
97°

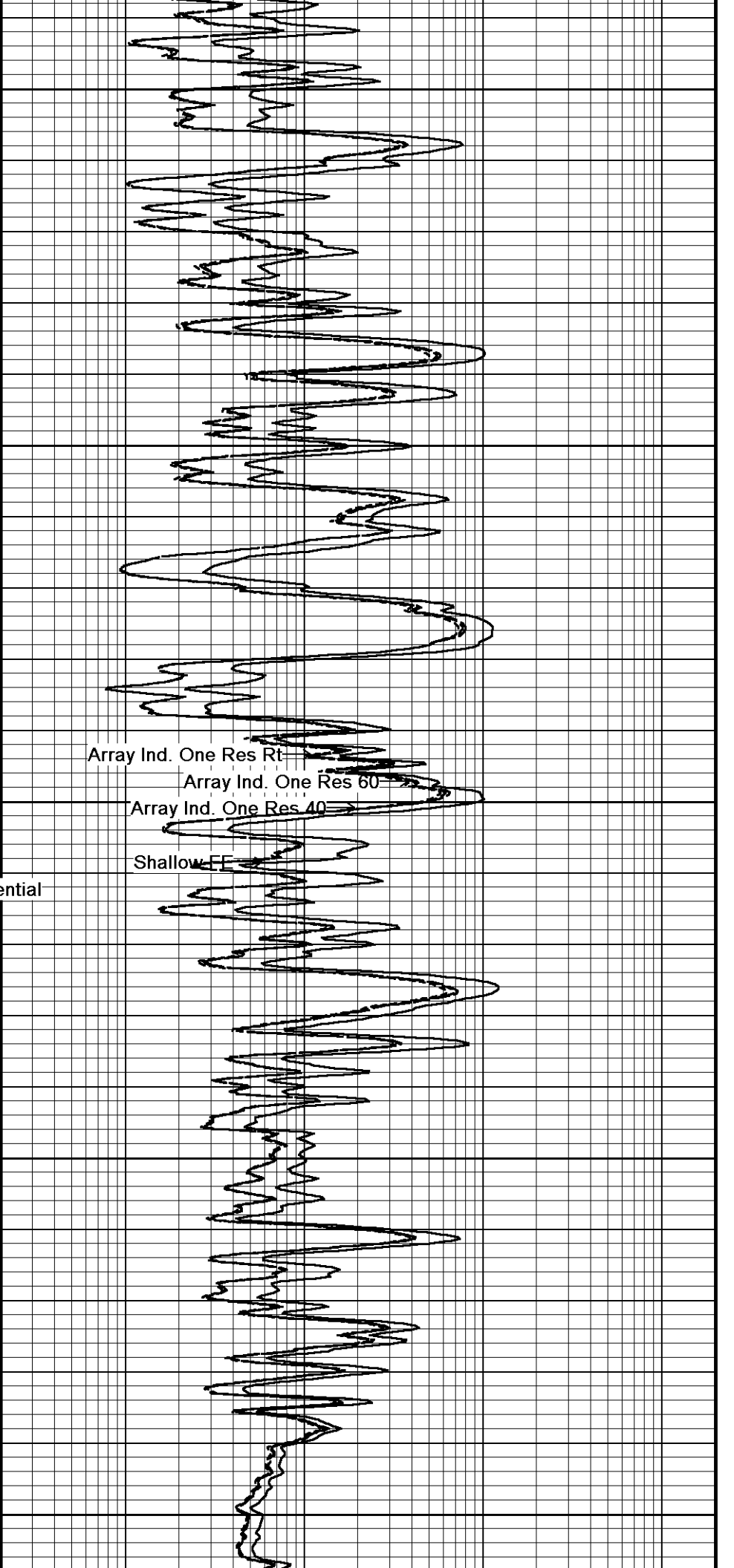
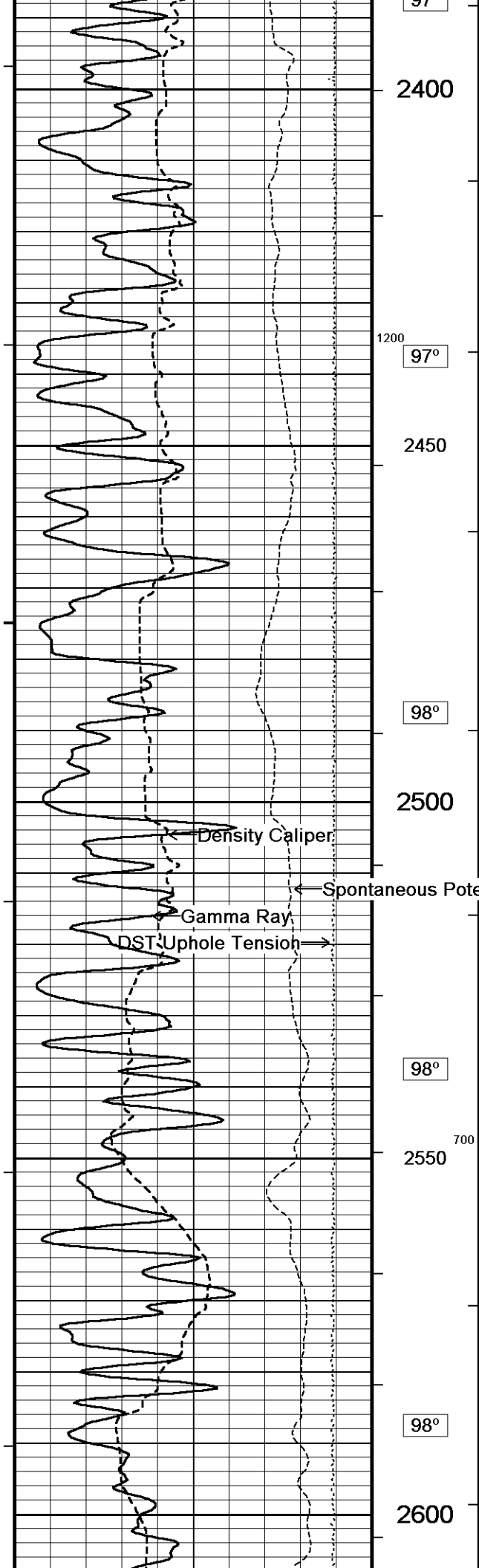
2150

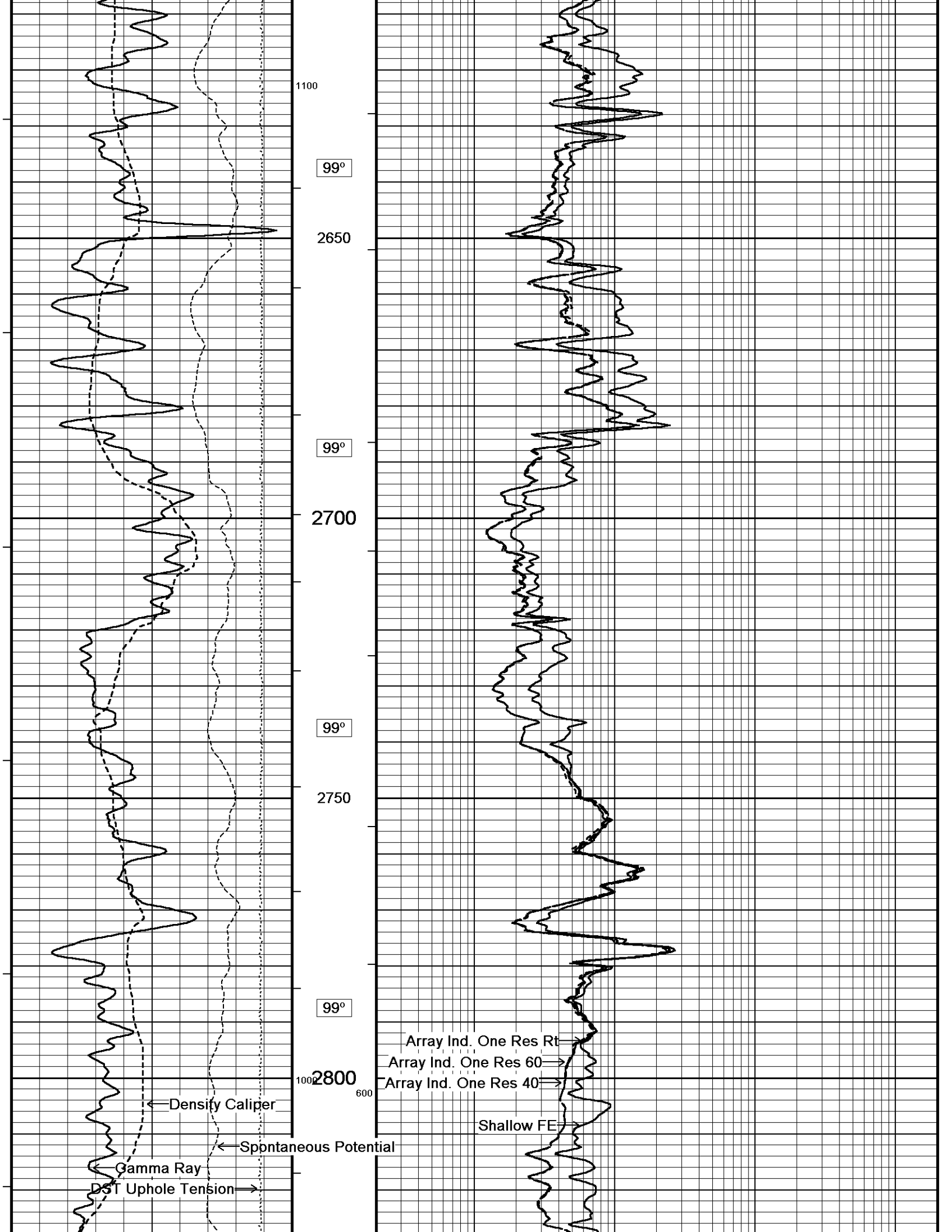
900

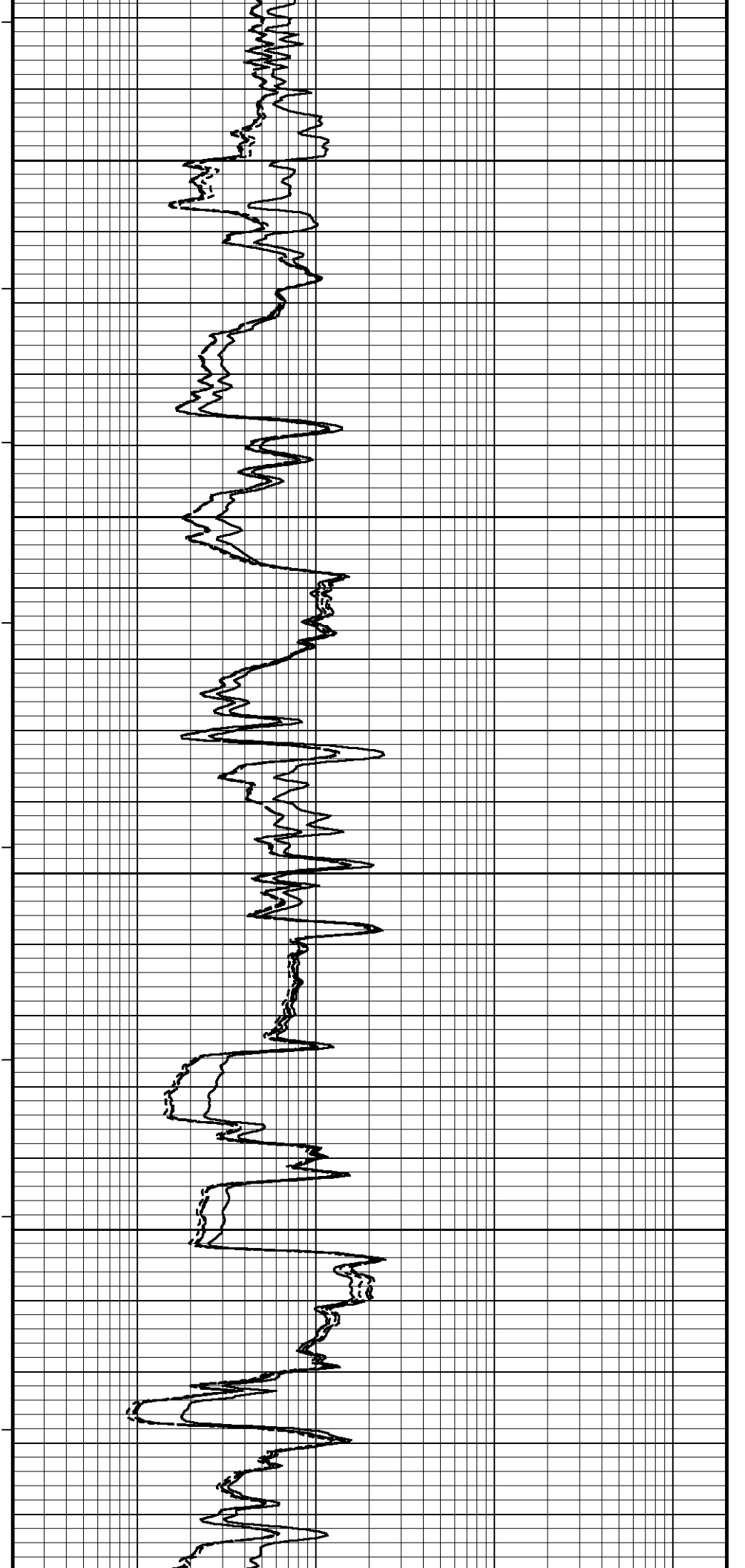
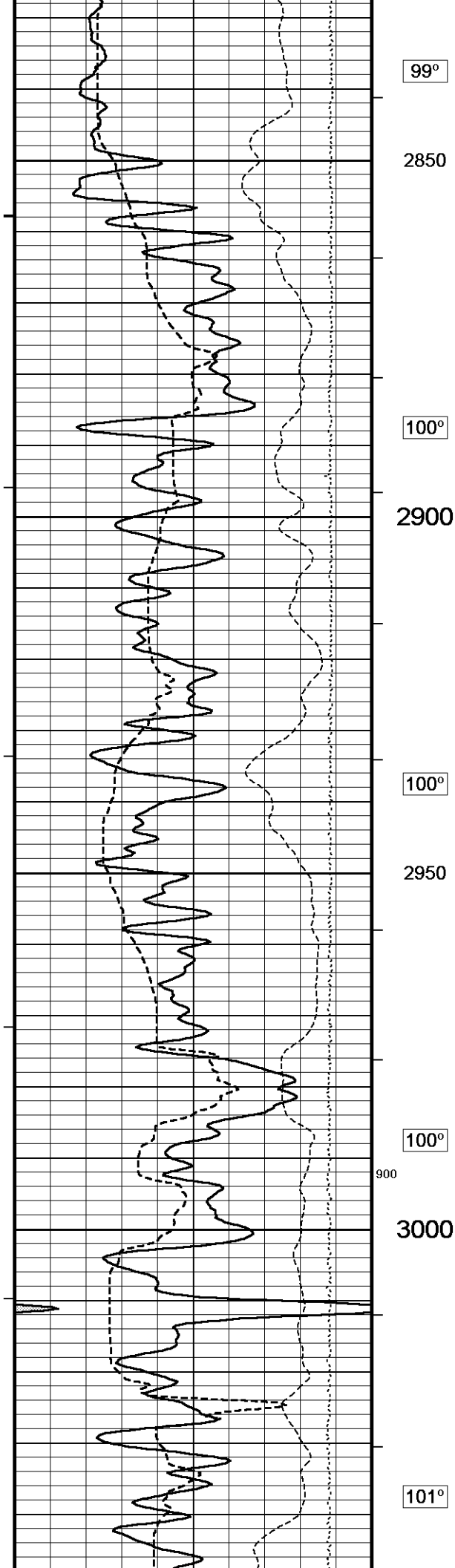
1400











3050
500
101°
3100
102°
3150
102°
800
3200
102°
3250

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

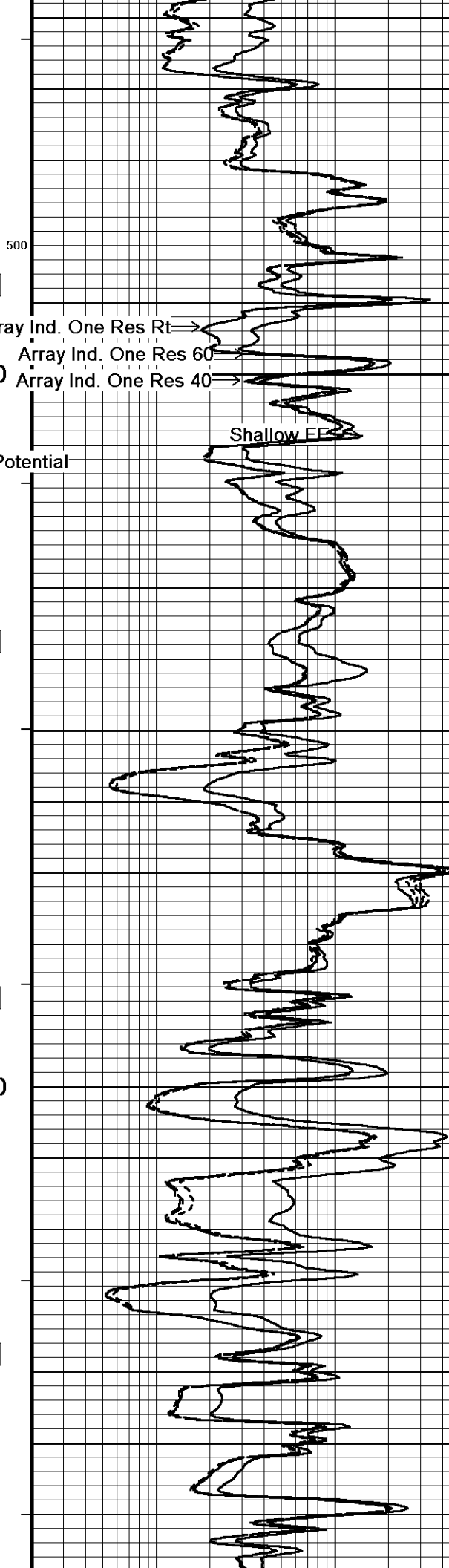
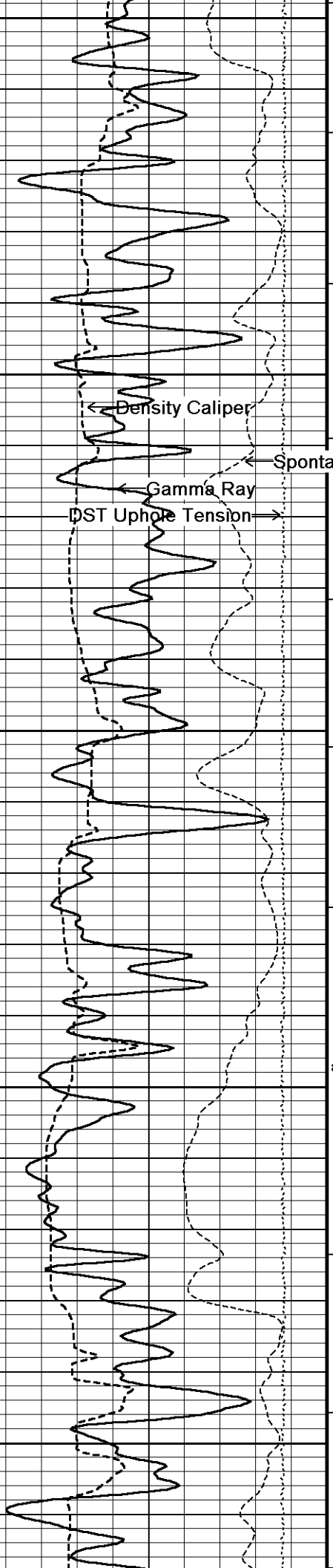
Shallow FF

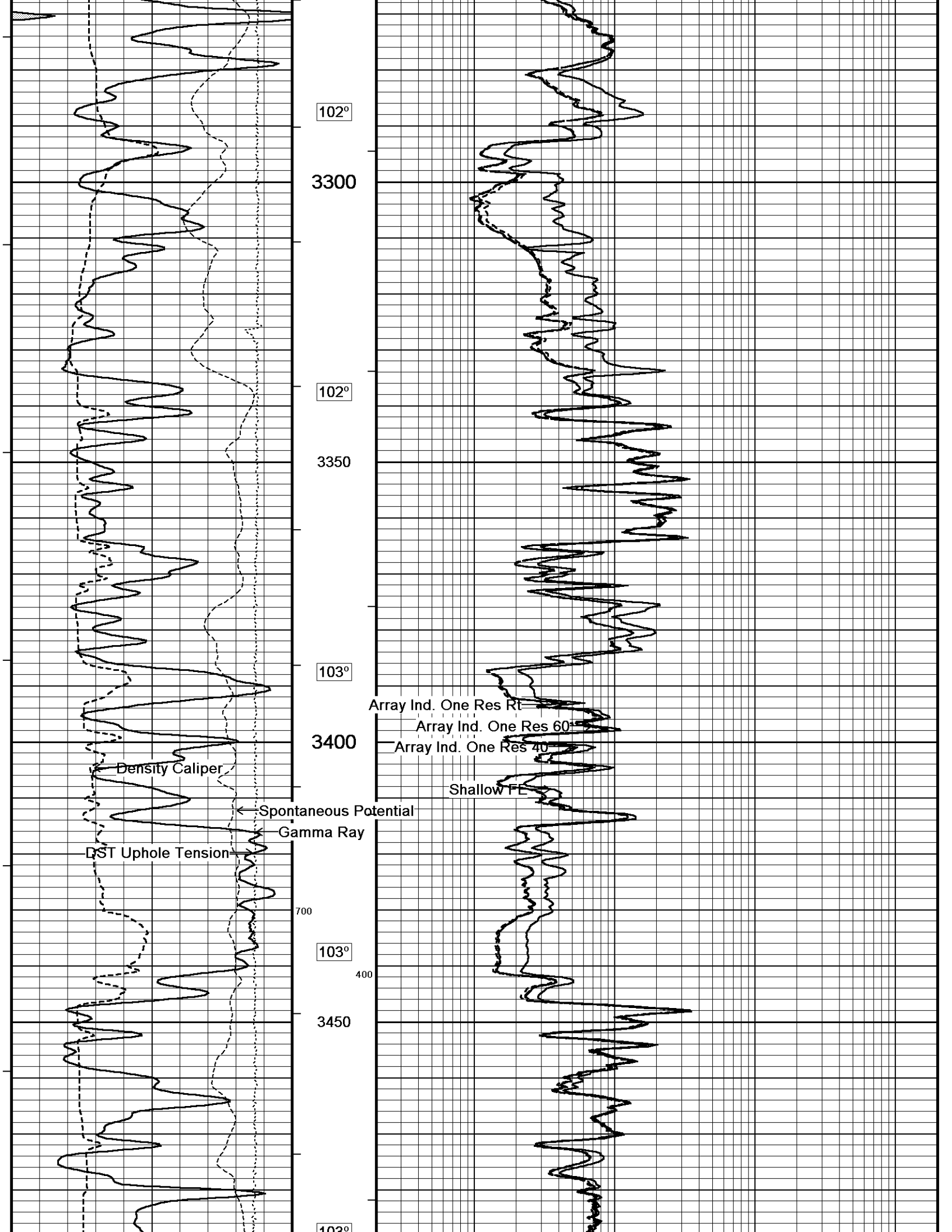
Density Caliper

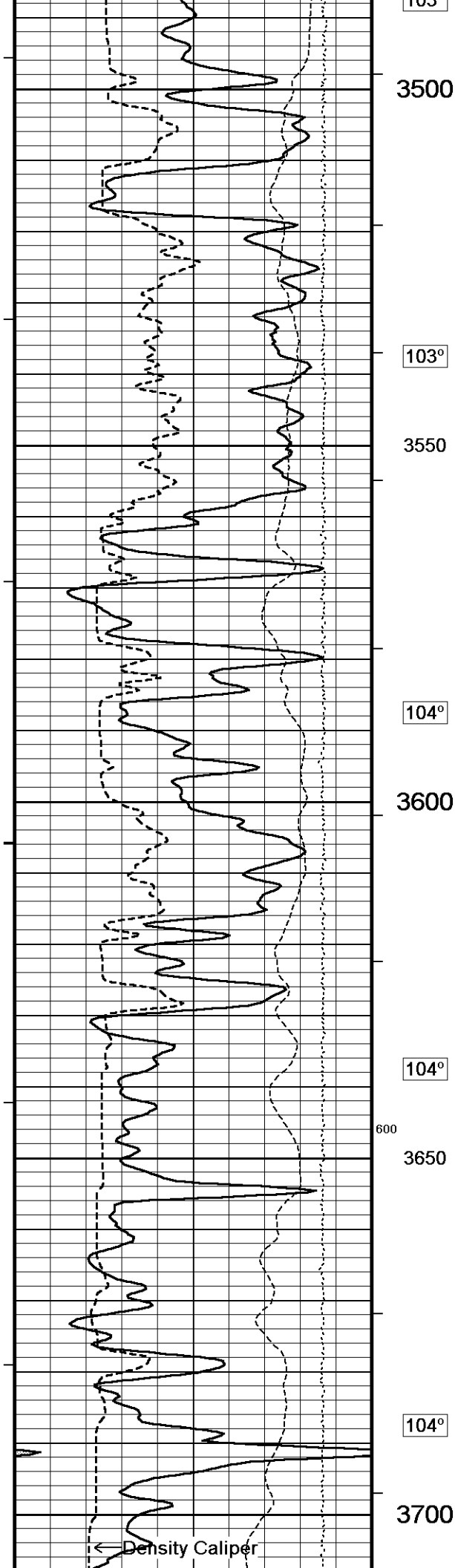
Spontaneous Potential

Gamma Ray

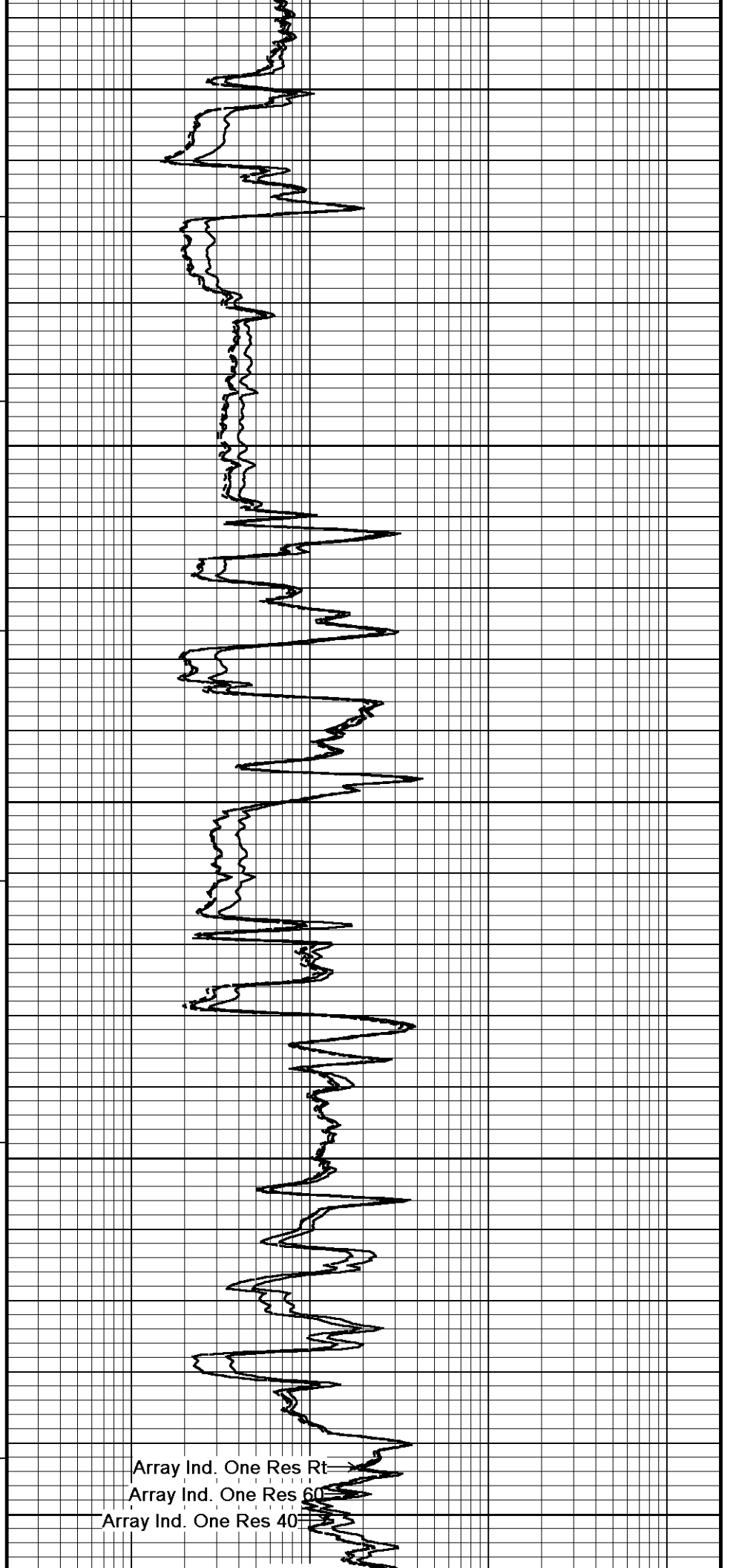
DST Uphole Tension



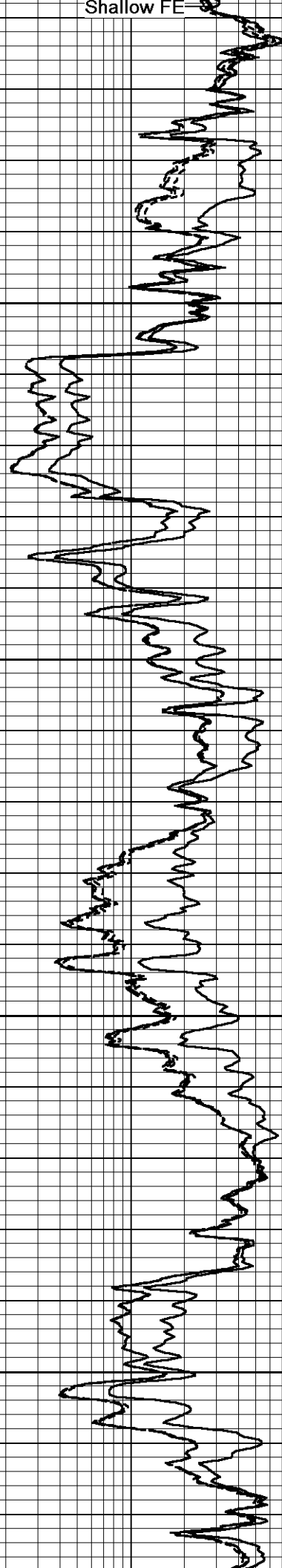
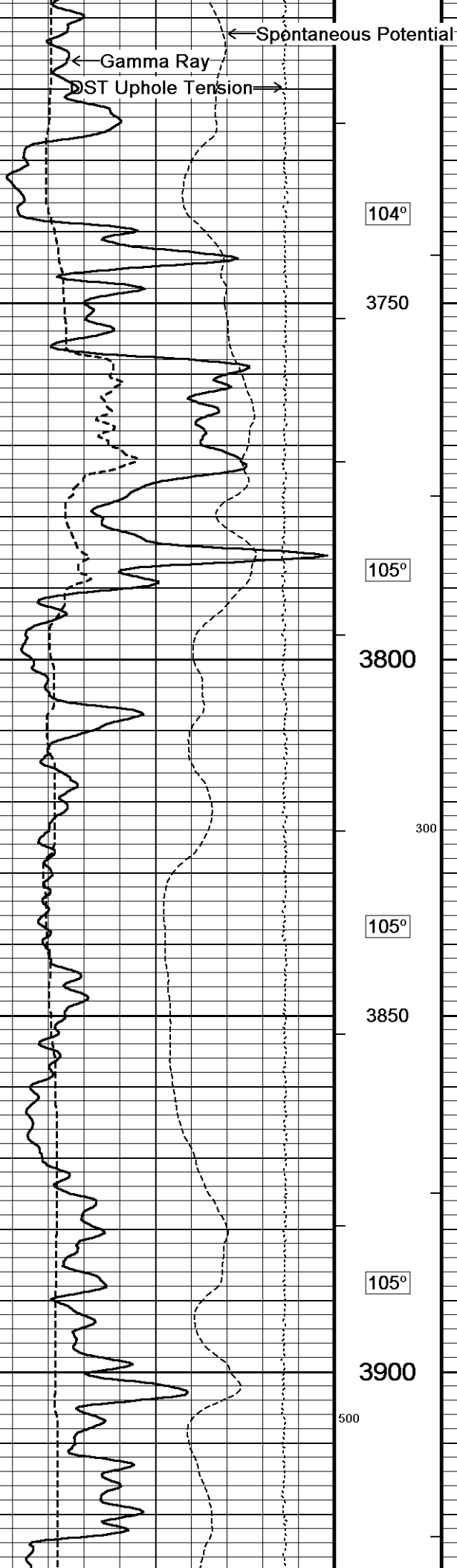


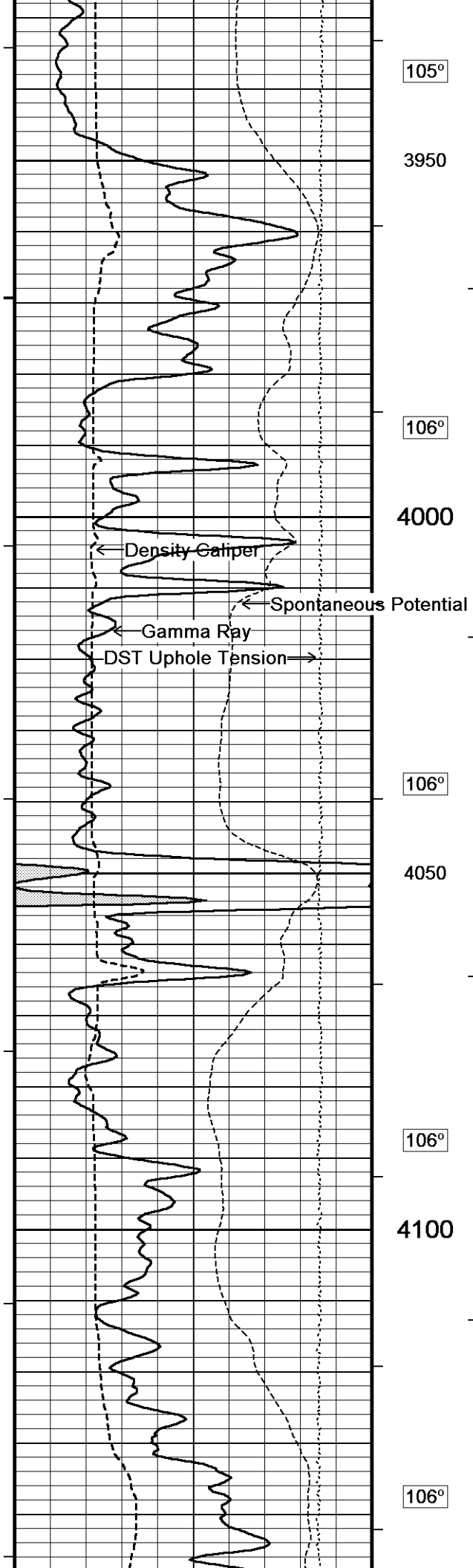


103
3500
103°
3550
104°
3600
104°
600
3650
104°
3700



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





105°

3950

106°

4000

Density Caliper

Spontaneous Potential

Gamma Ray

DST Uphole Tension

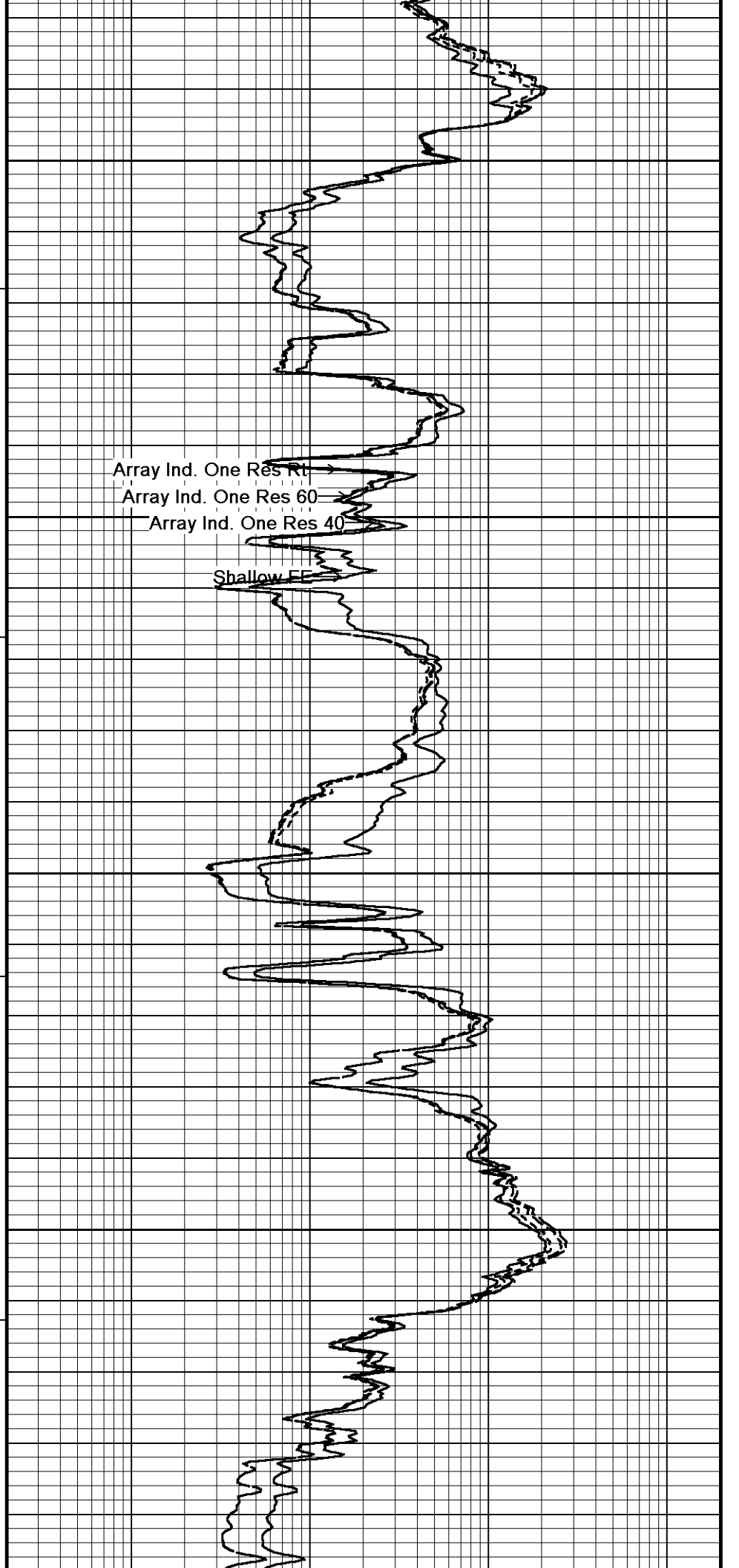
106°

4050

106°

4100

106°

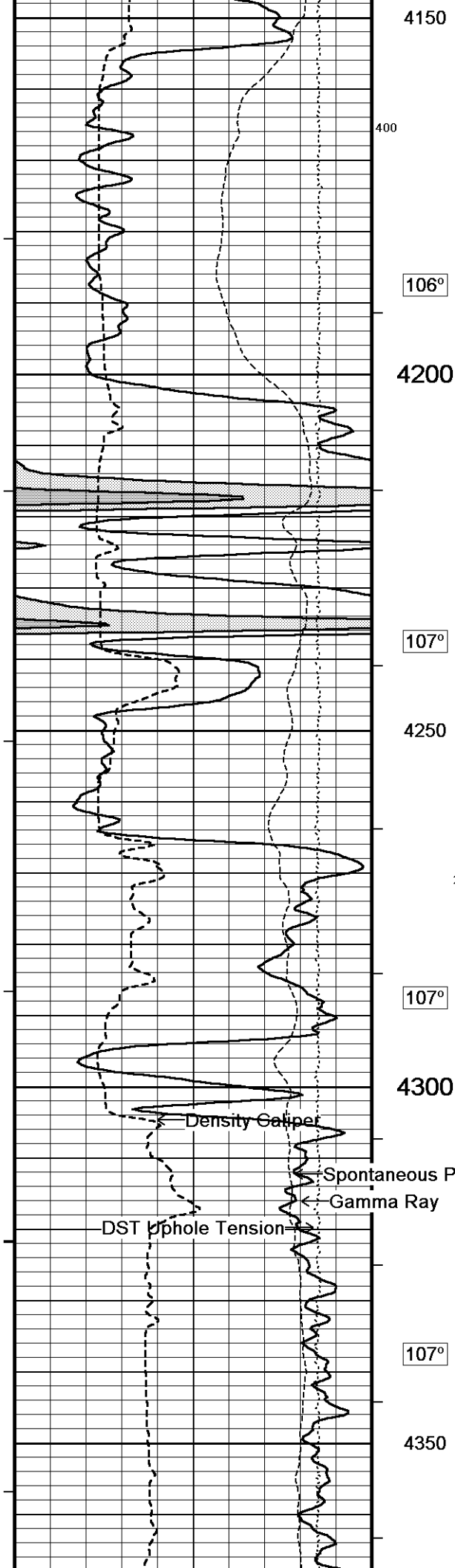


Array Ind. One Res Rt

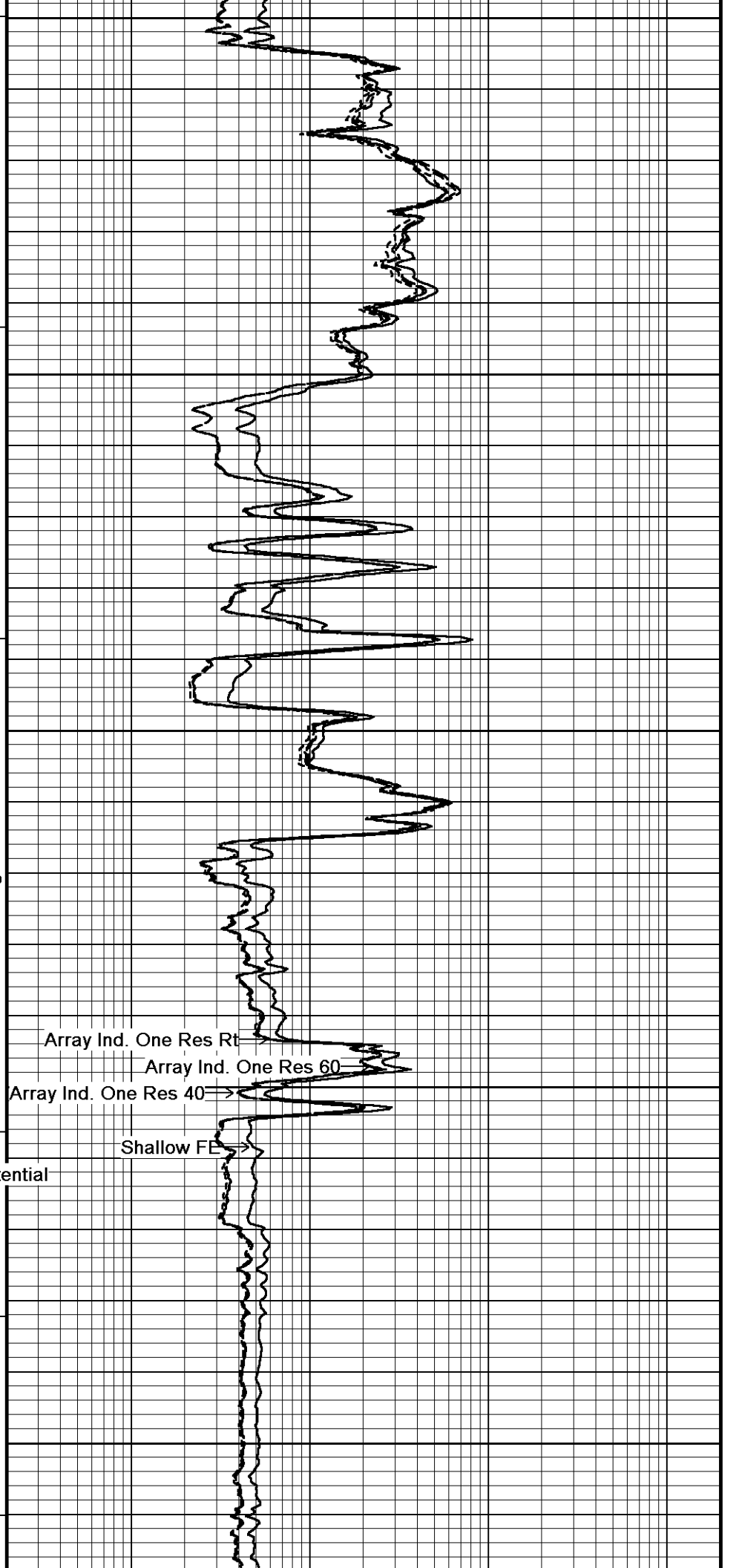
Array Ind. One Res 60

Array Ind. One Res 40

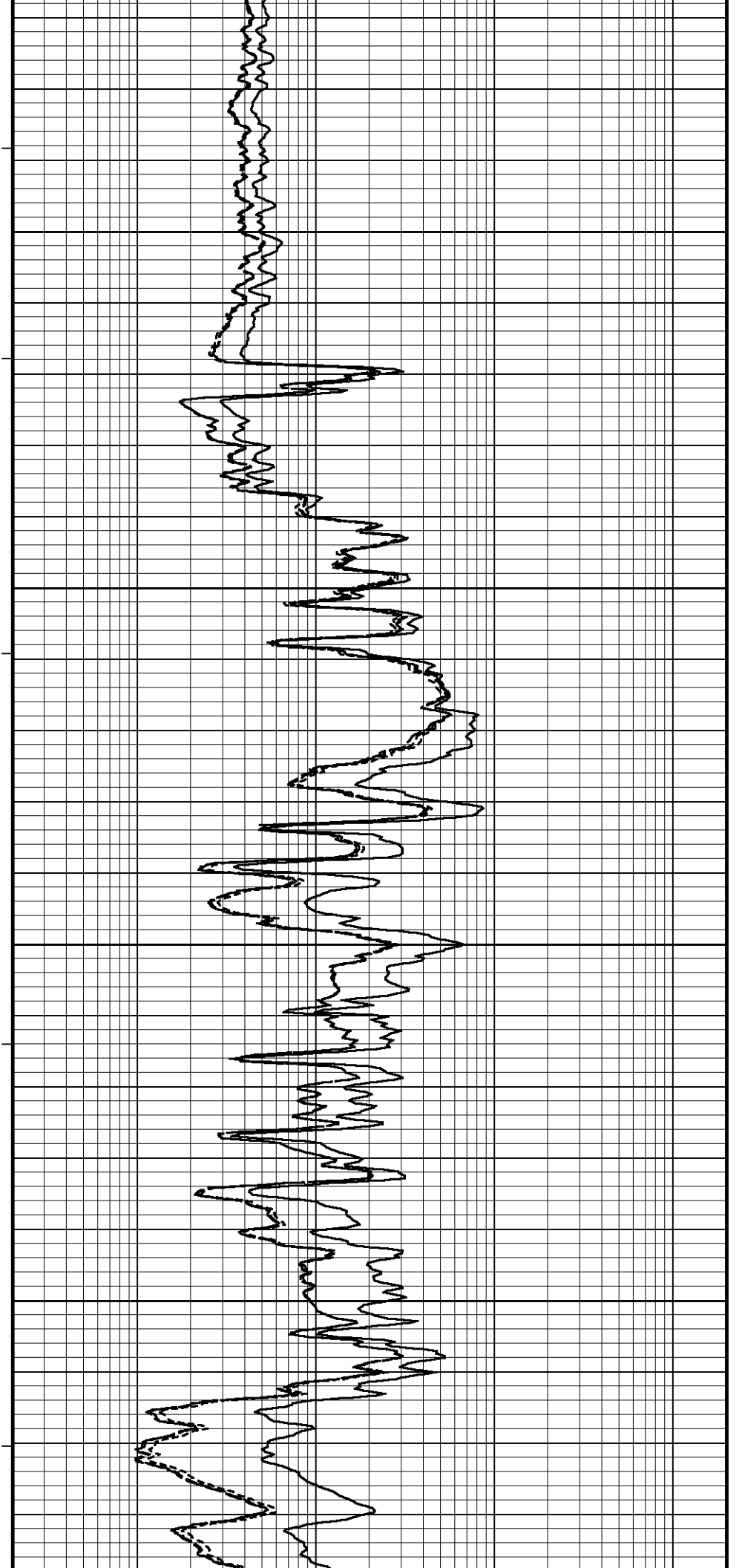
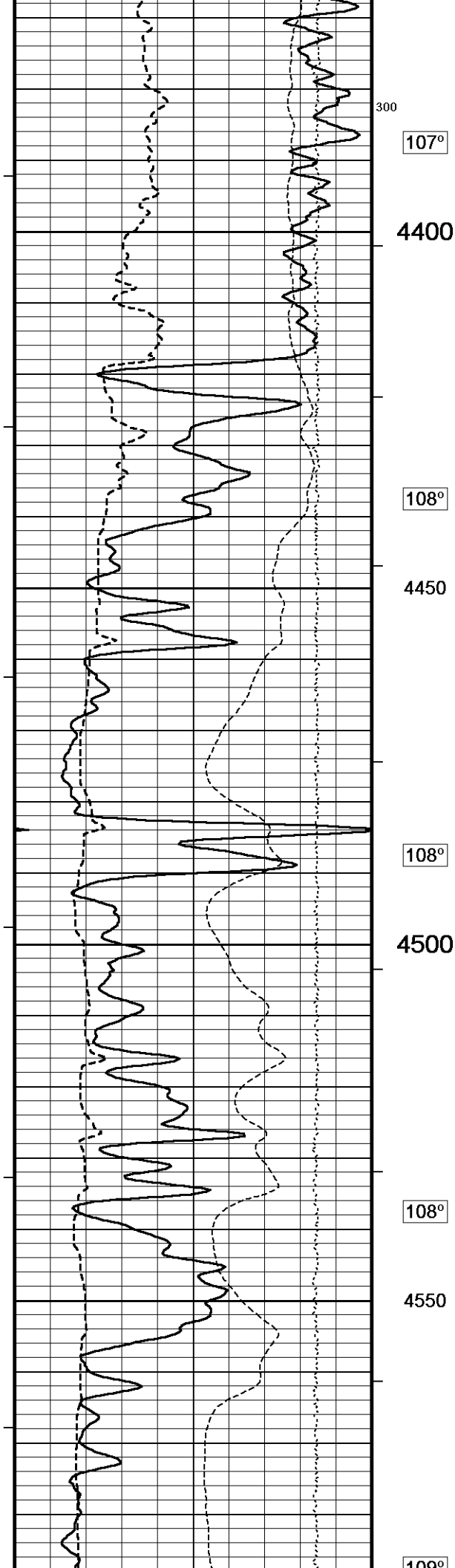
Shallow FF

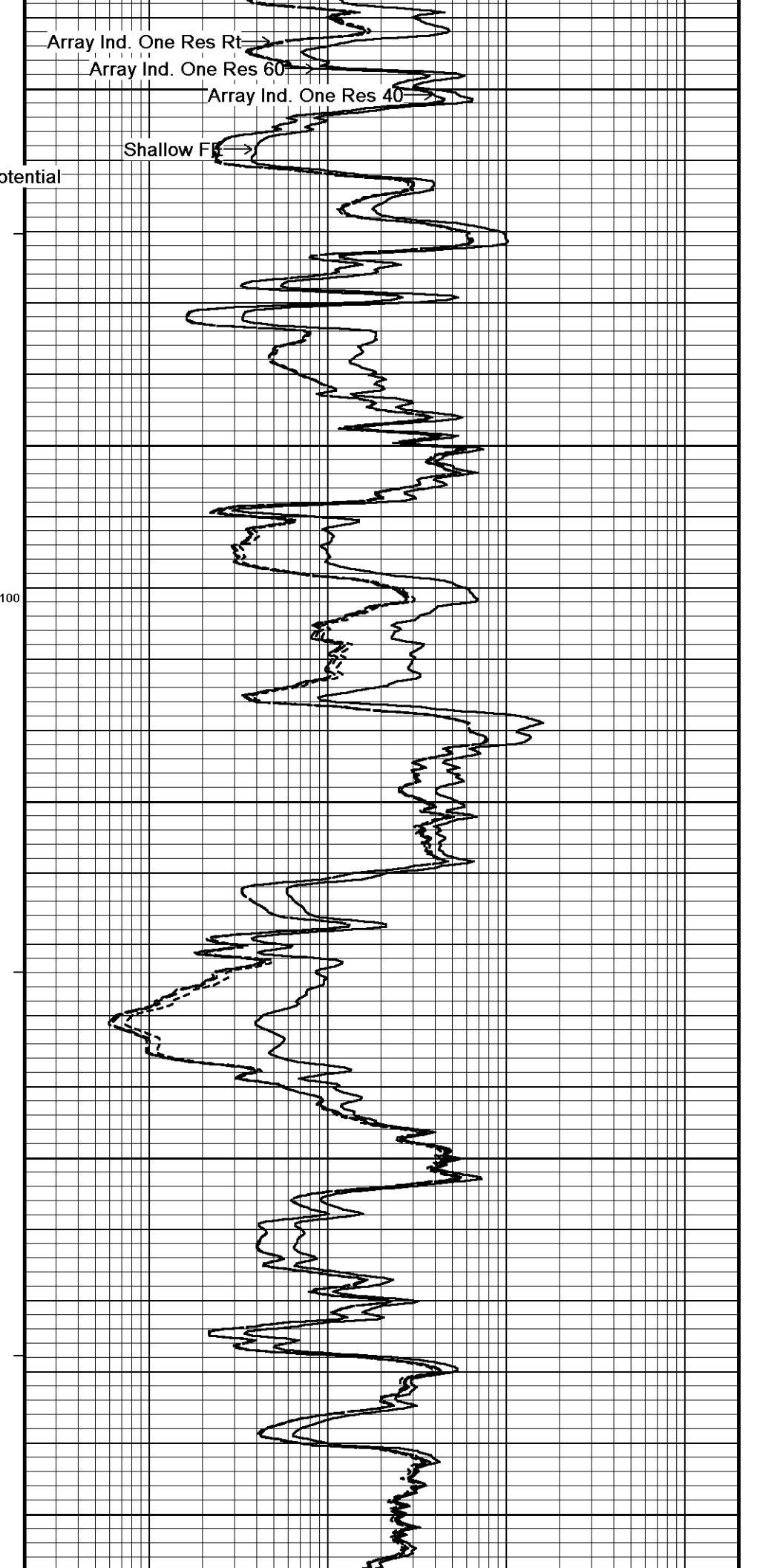
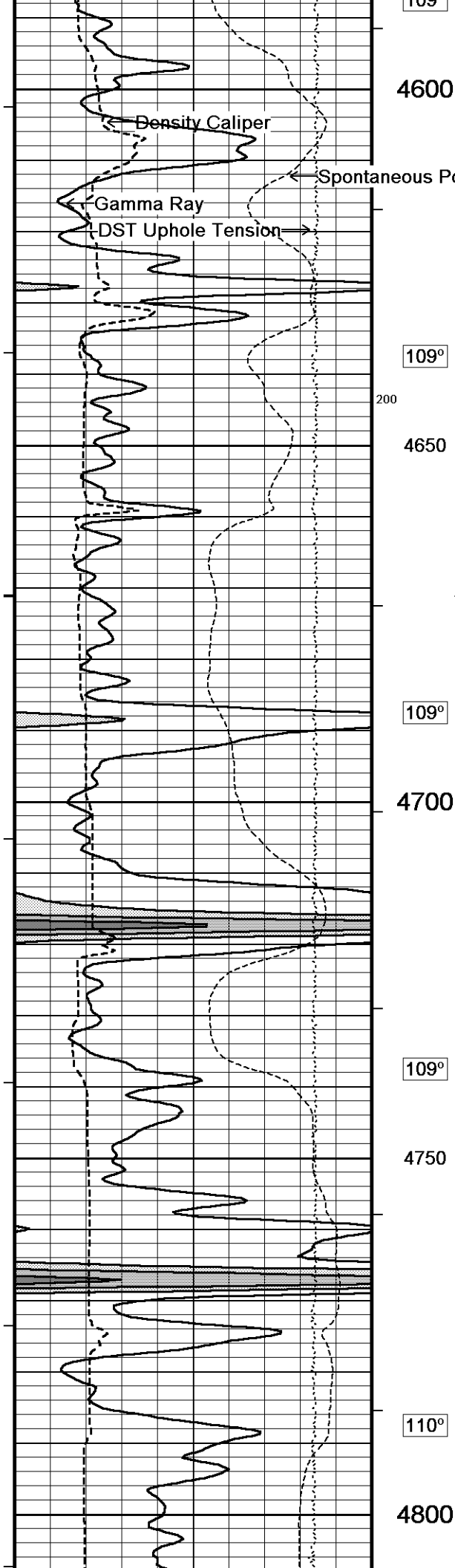


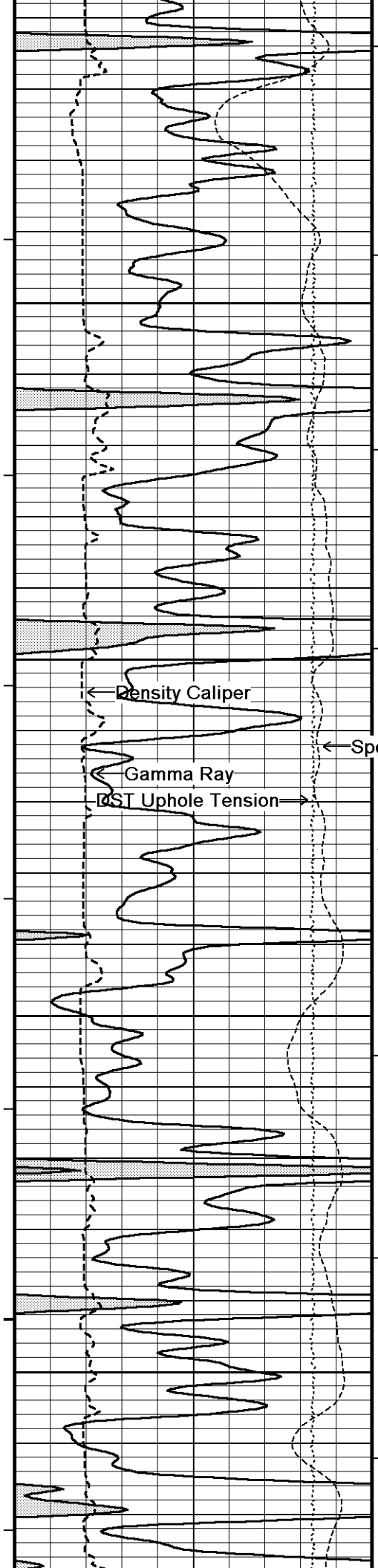
4150
400
106°
4200
107°
4250
200
107°
4300
107°
4350



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

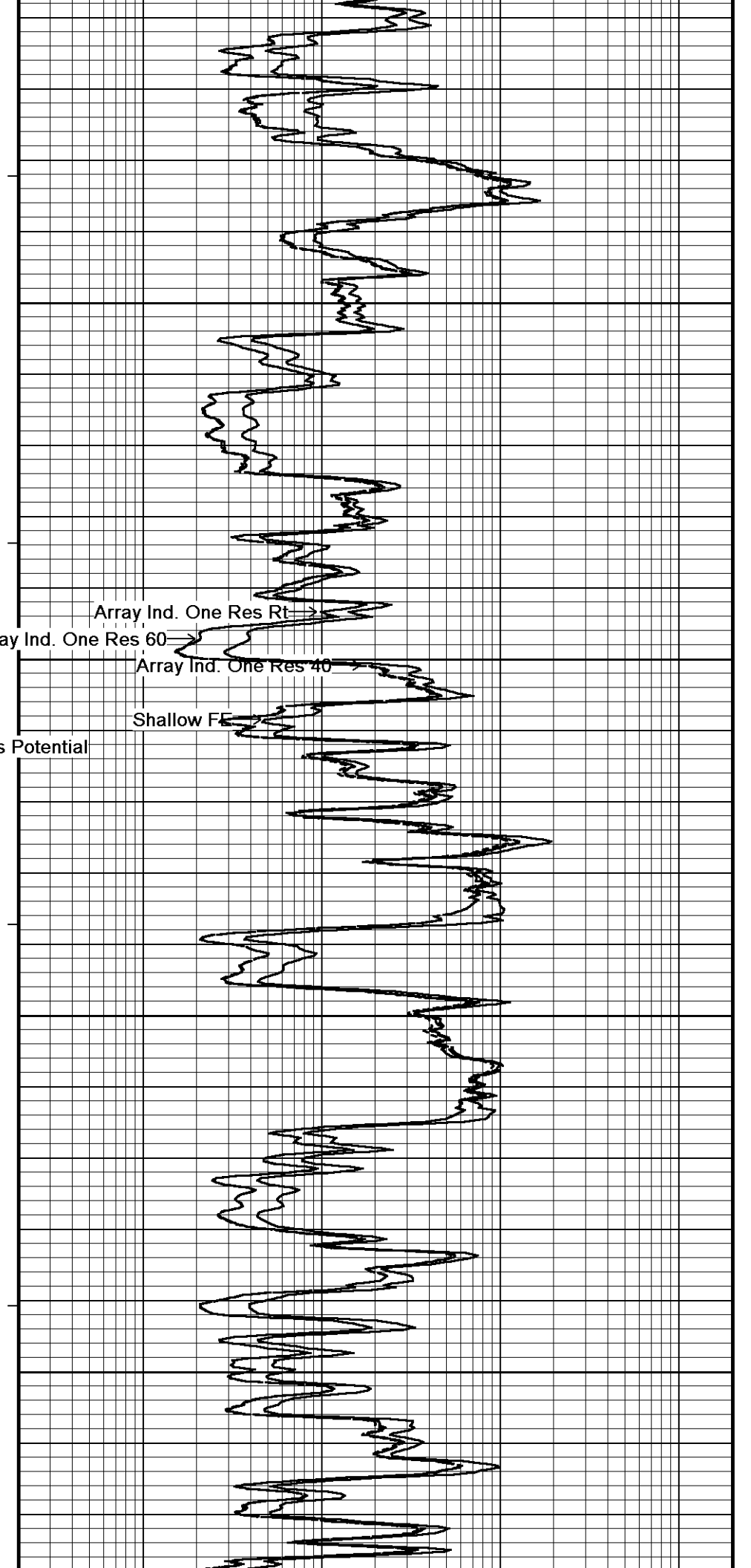




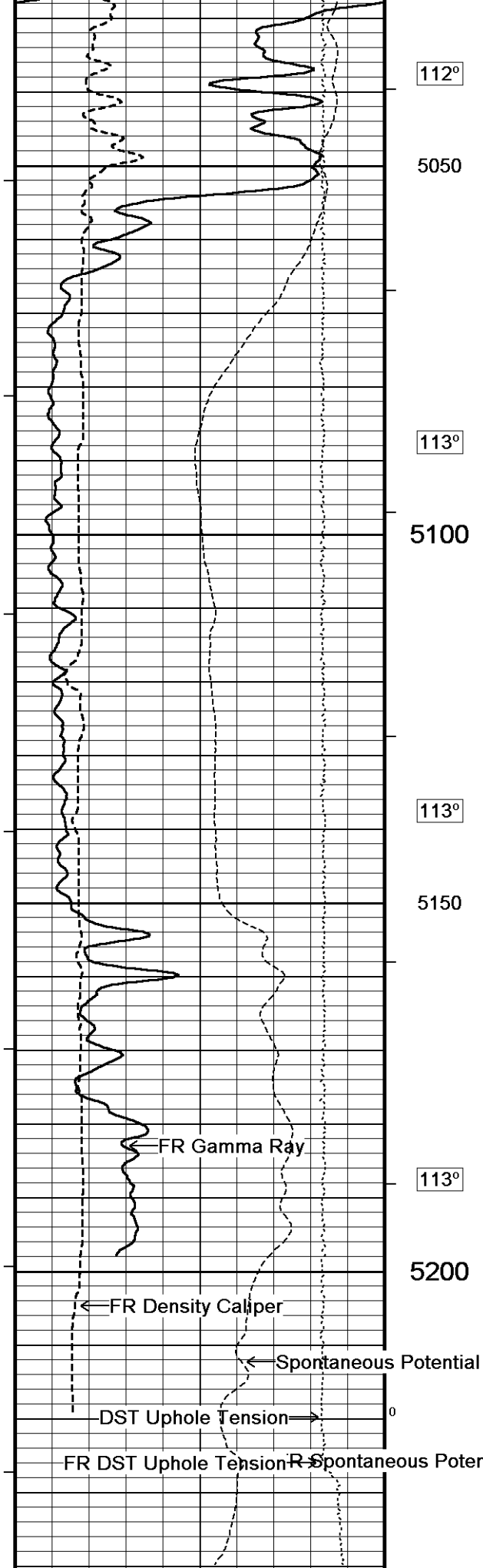


110°
4850
110°
4900
100
111°
4950
111°
5000

Density Caliper
Gamma Ray
DST Uphole Tension
Spontaneous Potential



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



112°

5050

113°

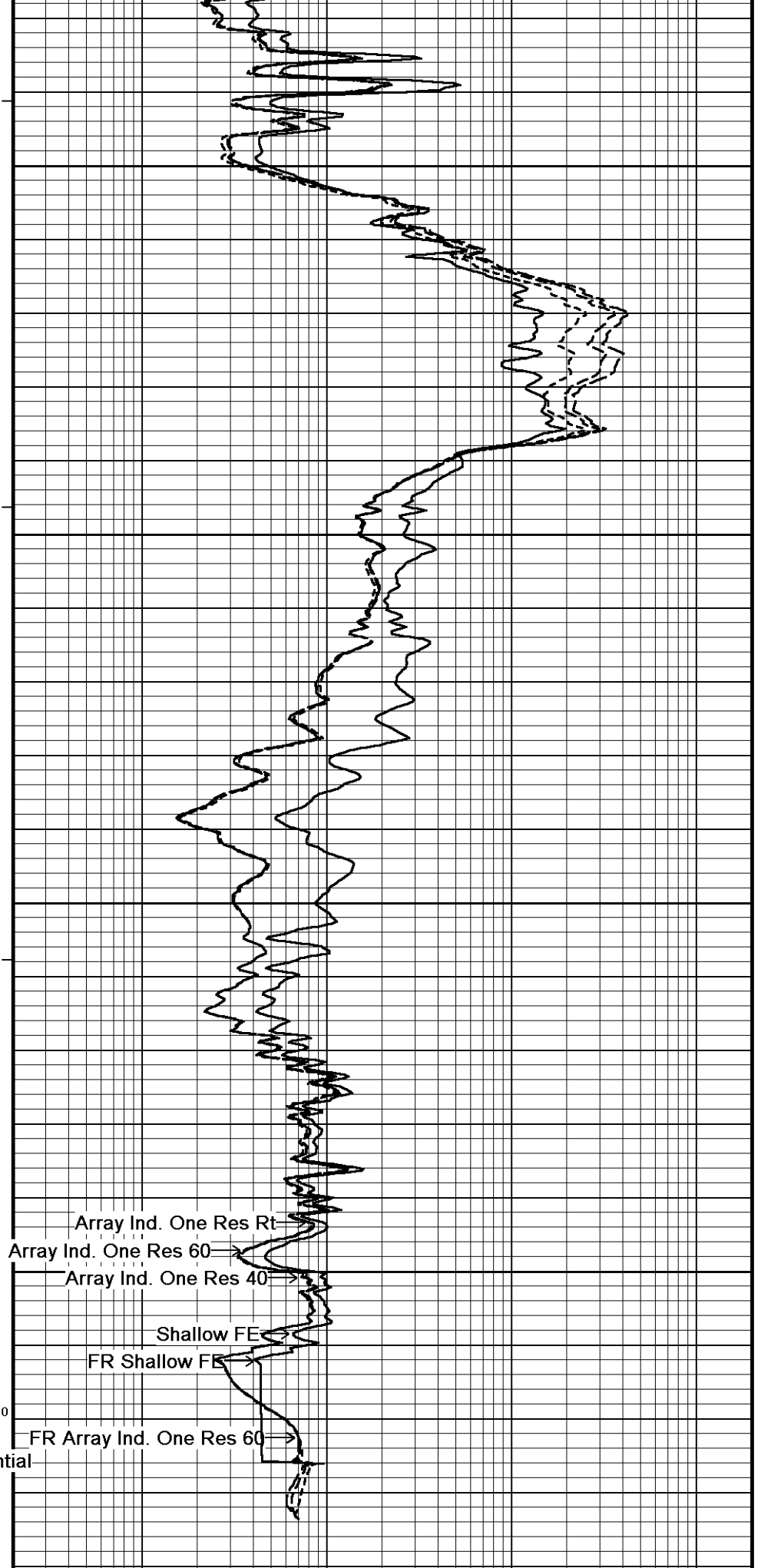
5100

113°

5150

113°

5200



Array Ind. One Res Rt

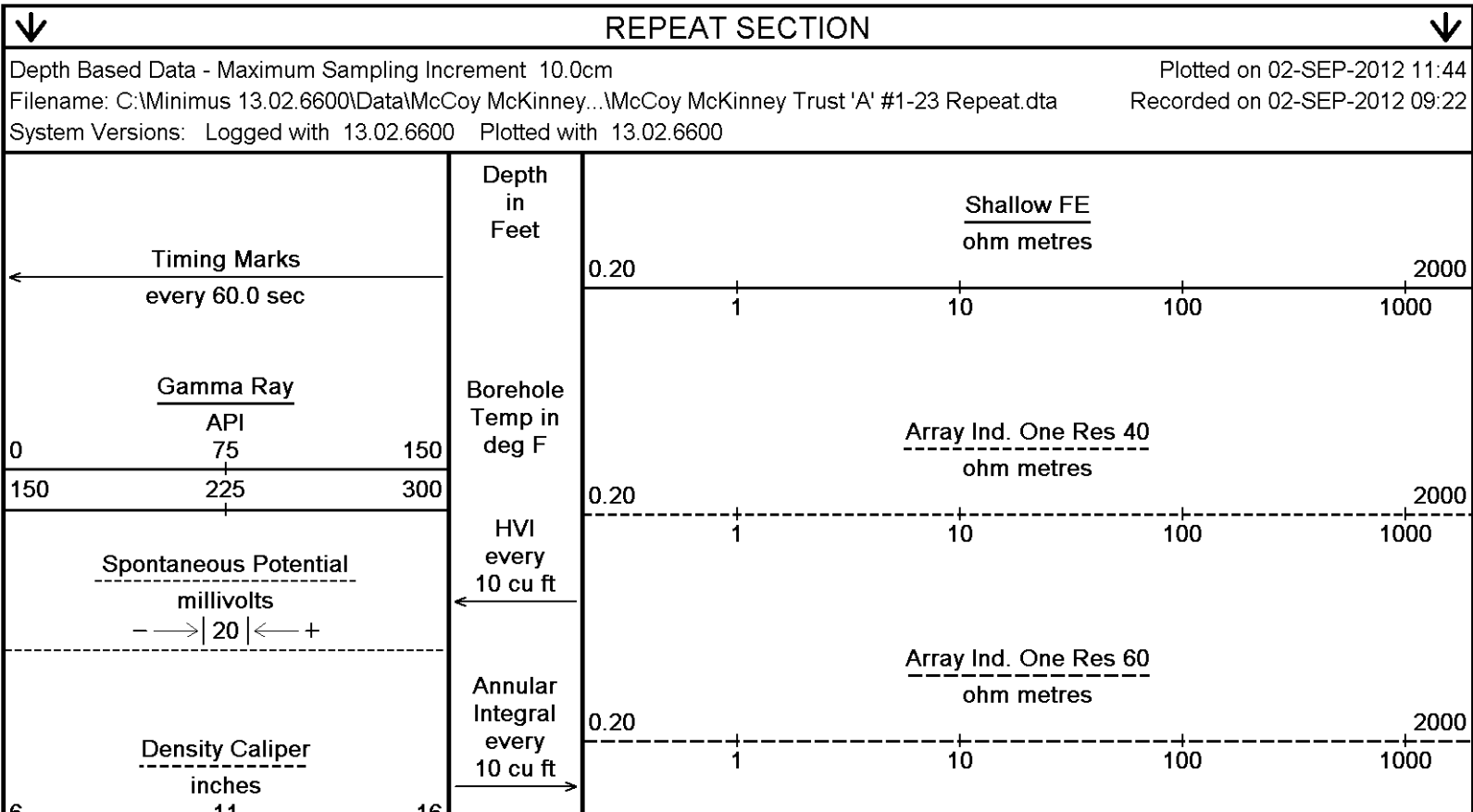
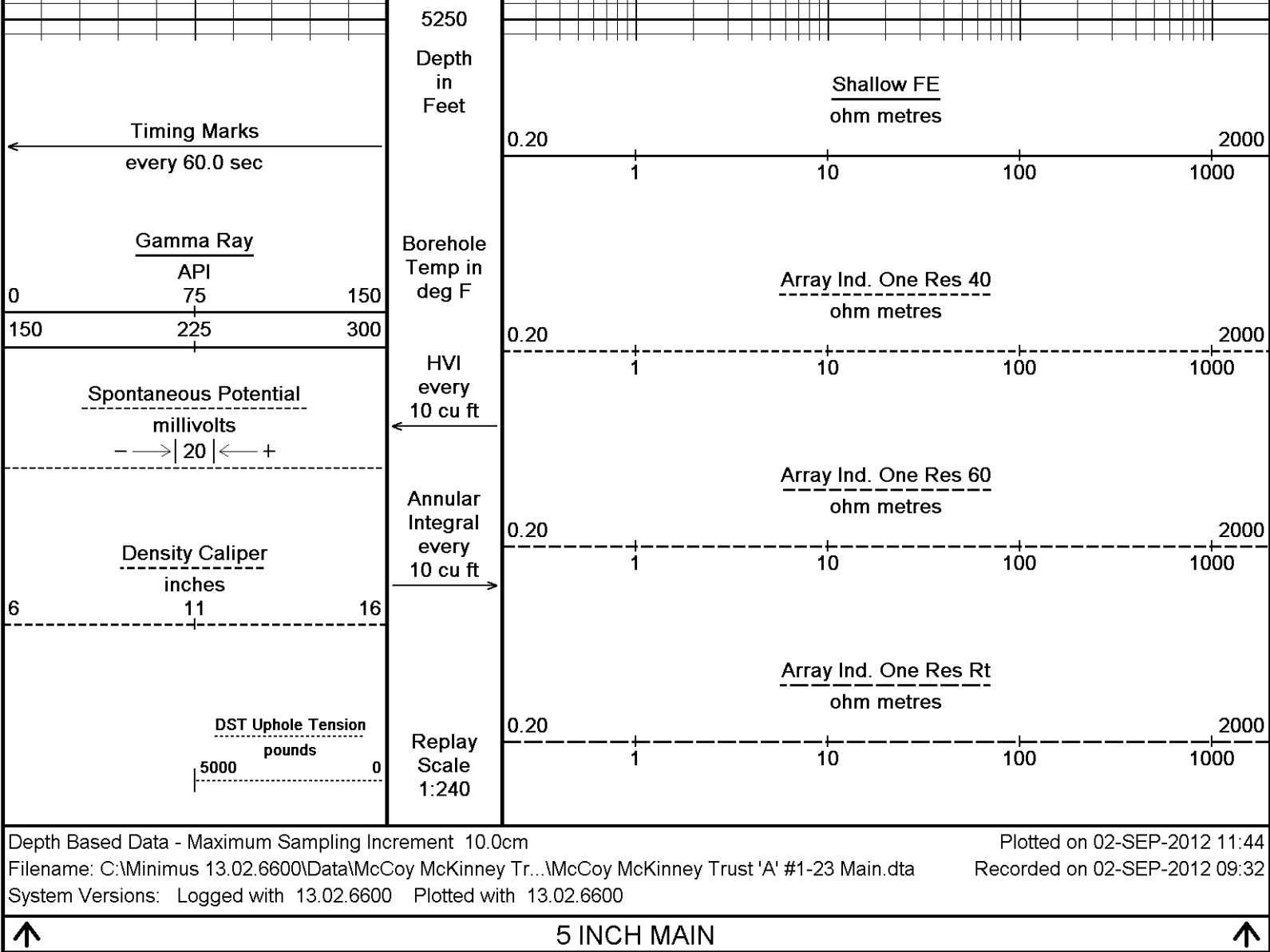
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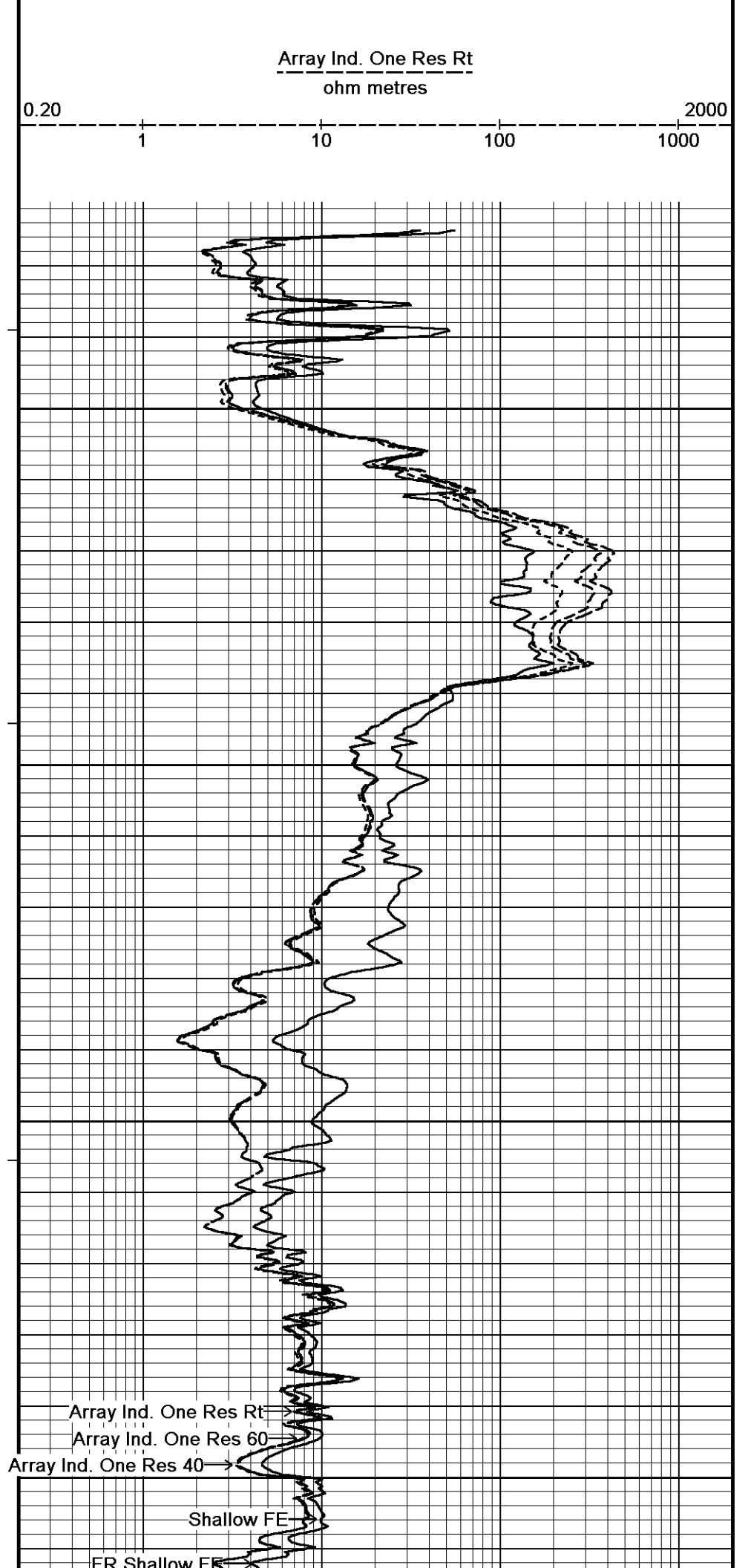
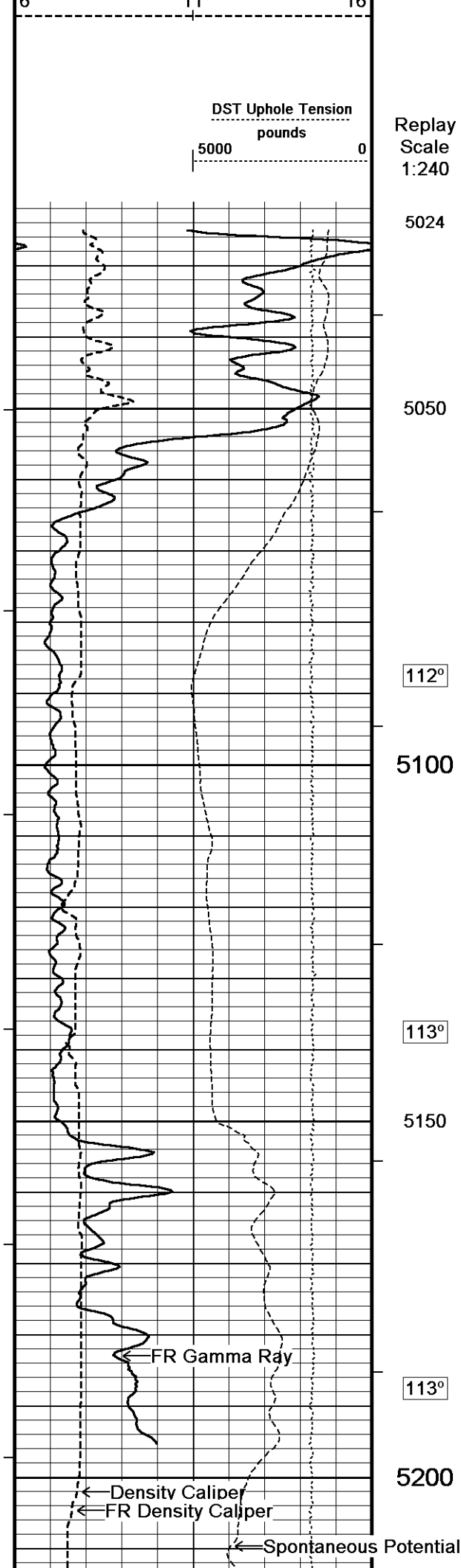
Array Ind. One Res 40

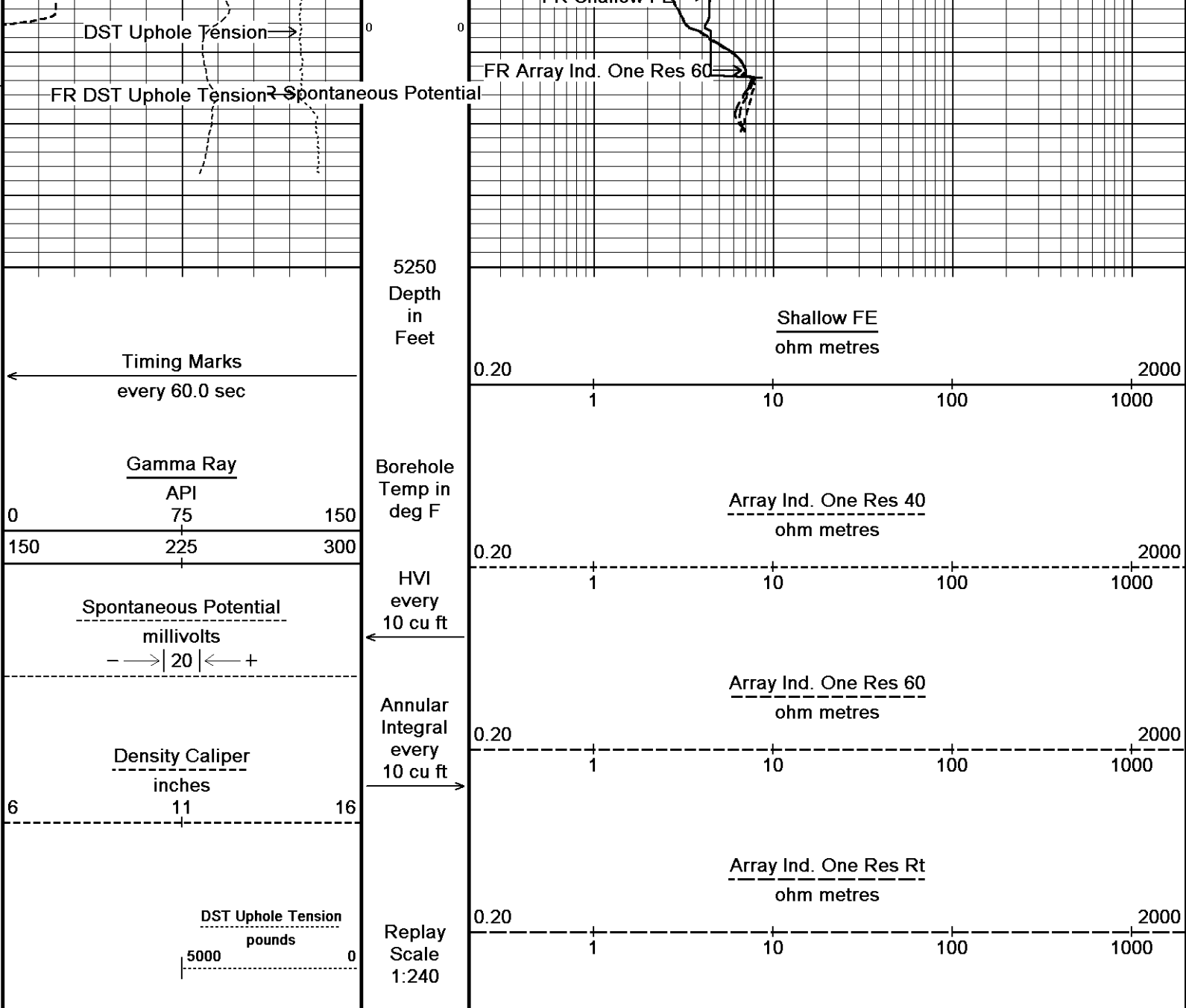
Shallow FE

FR Shallow FE

FR Array Ind. One Res 60







Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Minimus 13.02.6600\Data\McCoy McKinney Trust 'A' #1-23 Repeat.dta
System Versions: Logged with 13.02.6600 Plotted with 13.02.6600
Plotted on 02-SEP-2012 11:44
Recorded on 02-SEP-2012 09:22

↑ REPEAT SECTION ↑

BEFORE SURVEY CALIBRATION		
C:\Minimus 13.02.6600\Data\McCoy McKinney Trust 'A' #1-23\McCoy McKinney Trust 'A' #1-23 Main.dta		
General Constants All 000		Last Edited on 02-SEP-2012,07:56
General Parameters		
Mud Resistivity	0.560	ohm-metres
Mud Resistivity Temperature	88.000	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	5.500	inches
Caliper for Differential Caliper	Density Caliper	

Rwa Parameters		Base Density Porosity	
Porosity used		Array Ind. One Res Rt	
Resistivity used		0.610	
RWA Constant A		2.150	
RWA Constant M			
Down-hole Tension Calibration SMS 0			
		Field Calibration on 02-SEP-2012 08:42	
Reading No	Measured	Calibrated (lbs)	
1	15850.66	0.00	
2	16330.28	400.00	
Gamma Calibration MCG-C 208			
		Field Calibration on 02-SEP-2012 04:38	
	Measured	Calibrated (API)	
Background	75	53	
Calibrator (Gross)	1095	778	
Calibrator (Net)	1020	725	
Gamma Constants MCG-C 208			
		Last Edited on 02-SEP-2012,07:53	
Gamma Calibrator Number	GR38		
Mud Density	1.13	gm/cc	
Caliper Source for Processing	Density Caliper		
Tool Position	Eccentred		
Concentration of KCl	0.00	kppm	
SP Calibration MCG-C 208			
		Field Calibration on 03-AUG-2012 22:37	
	Measured	Calibrated (mV)	
Reference 1	100.2	101.0	
Reference 2	-101.3	-101.0	
High Resolution Temperature Calibration MCG-C 208			
		Field Calibration on 03-AUG-2012,16:18	
	Measured	Calibrated(Deg F)	
Lower	50.00	50.00	
Upper	75.00	75.00	
High Resolution Temperature Constants MCG-C 208			
		Last Edited on	
Pre-filter Length	11		
Caliper Calibration MML-A 16			
		Base Calibration on 25-AUG-2012 22:52	
		Field Calibration on 02-SEP-2012 04:33	
Base Calibration			
Reading No	Measured	Calibrator Size (in)	
1	14118	5.98	
2	17457	7.97	
3	20732	9.86	
4	24642	11.92	
5	0	0.00	
6	N/A	N/A	
Field Calibration			
	Measured Caliper (in)	Actual Caliper (in)	
	5.96	5.98	
Micro Normal and Micro Inverse Calibration MML-A 16			
		Base Calibration on 25-AUG-2012 22:42	
		Field Check on 02-SEP-2012 04:32	
Base Calibration			
	Measured	Calibrated (ohm-m)	
Channel	Resistor 1 Resistor 2	Resistor 1	Resistor 2
Micro Normal	12.2 60.2	5.0	25.0
Micro Inverse	15.6 78.3	5.0	25.0
Channel	Base Check (ohm-m)	Field Check (ohm-m)	
Micro Normal	62.9	62.9	
Micro Inverse	48.2	48.2	
Micro Normal and Micro Inverse Constants MML-A 16			
		Last Edited on 28-AUG-2012,21:01	
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	N/A	inches
Neutron Calibration MDN-A.B 65		Base Calibration on 28-AUG-2012 10:35 Field Check on 02-SEP-2012 04:43
Base Calibration		
	Measured	Calibrated (cps)
	Near Far	Near Far
	3134 97	3714 110
Ratio	32.240	33.764
Field Calibrator at Base		
		Calibrated (cps)
		1654 2401
Ratio		0.689
Field Check		
		Calibrated (cps)
		1646 2373
Ratio		0.694
Neutron Constants MDN-A.B 65		Last Edited on 02-SEP-2012,04:38
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	Constant Value	
Formation Pressure	0.00	kpsi
Temperature Source	Constant Value	
Temperature	68.00	degrees F
Mud Salinity	0.00	kppm
Salinity Correction	Not Applied	
Formation Fluid Salinity Source	Constant Value	
Formation Fluid Salinity	0.00	kppm
Barite Mud Correction	Not Applied	
FE Calibration MFE-B.J 352		Base Calibration on 27-AUG-2012 14:50 Field Check on 02-SEP-2012 04:24
Base Calibration		
	Measured	Calibrated (ohm-m)
Reference 1	0.0	0.0
Reference 2	963.9	126.8
Base Check		281.2
Field Check		281.3
FE Constants MFE-B.J 352		Last Edited on 02-SEP-2012,04:23
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-A.A 45		Base Calibration on 26-JUL-2012,09:22 Field Check on 02-SEP-2012 04:22
Base Calibration		
Test Loop Calibration	Measured	Calibrated (mmho/m)
Channel	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	78.4	Deg F

Channel	Base Check (mmho/m)		Field Check (mmho/m)	
	Low	High	Low	High
1	0.0	0.0	19.8	3852.7
2	0.0	0.0	32.2	3629.9
3	0.0	0.0	29.0	3049.9
4	0.0	0.0	18.5	2079.5
Deep	0.0	0.0	16.3	1911.6
Medium	0.0	0.0	42.8	4061.0
Shallow	0.0	0.0	50.4	5483.9
Array Temperature		0.0	79.1	Deg F

Induction Constants MAI-A.A 45

Last Edited on 02-SEP-2012,07:55

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		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	

High Resolution Temperature Calibration MAI-A.A 45

Field Calibration on 26-JUL-2012,09:09

	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

Pre-filter Length	11
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Caliper Calibration MPD-B 31

Base Calibration on 28-AUG-2012 11:03

Field Calibration on 02-SEP-2012 04:26

Base Calibration		
Reading No	Measured	Calibrator Size (in)
1	18576	3.99
2	27056	5.98
3	35613	7.97
4	44032	9.86
5	53360	11.92
6	N/A	N/A

Field Calibration

Measured Caliper (in)
5.89

Actual Caliper (in)
5.98

Photo Density Calibration MPD-B 31

Base Calibration on 28-AUG-2012 11:22

Field Check on 02-SEP-2012 04:31

Density Calibration

Base Calibration

	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	46103	23728	59556	30836
Reference 2	19270	1960	24941	2541

Field Check at Base

688.3 844.7

Field Check

692.1 851.1

PE Calibration

Base Calibration

	WS	Measured WH	Ratio	Calibrated Ratio
Background	127	604		
Reference 1	18457	45978	0.404	0.371
Reference 2	5504	19174	0.290	0.272

Field Check at Base

127.0 604.2

Field Check

127.8 607.3

Density Constants MPD-B 31

Last Edited on 02-SEP-2012,07:52

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	1.13 gm/cc
Mud Density Z/A Multiplier	1.13
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 (m)
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

DOWNHOLE EQUIPMENT

C:\Minimus 13.02.6600\Data\McCoy McKinney Trust 'A' #1-23\McCoy McKinney Trust 'A' #1-23 Main.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-C 208 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in



42.87 ft
39.96 ft

GRGC - Gamma Ray
CGXT - MCG External Temperature

Weatherford		ARRAY INDUCTION SHALLOW FOCUSED ELECTRIC LOG	
COMPANY	MCCOY PETROLEUM CORP.		
WELL	MCKINNEY TRIST A. #1-23		
FIELD	ALFORD		
COUNTY	KIOWA		
COUNTY/STATE	U.S.A. / KANSAS		
LOCATION	1980' FSL & 2310' FEL		
SEC	TWP	RGE	Other Services
23	19W		MPD/MCN
API Number	15-097-21735		MML
Percent Depth			
Permanent Datum (G.L. Elevation 2232 feet)			
Log Measured From (KB)			
Drilling Measured From (KB @ 9 FEET)			
DATE	02-SEP-2012		Elevations: KB DF OL
Run Number	ONE	5225.00	feet
Depth Driller		5225.00	feet
Depth Logger		5223.00	feet
First Reading		5223.00	feet
Last Reading		639.00	feet
Casing Driller		640.00	feet
Casing Logger		639.00	feet
Bit Size		7.875	inches
Whole Fluid Type	CHEMICAL		
Density/Viscosity	1.13 g/cc	49.00 CP	
PH/Fluid Loss	9.00	11.00 ml/30min	
Sample Source	FLO/LINE		
Rm @ Measured Temp	0.56 @ 88.0	ohm-in	
Rm @ Measured Temp	0.45 @ 88.0	ohm-in	
Rm @ Measured Temp	0.67 @ 88.0	ohm-in	
Source Rm/Temp	CALC	CALC	
Rm @ BHT	0.44 @ 113.0	ohm-in	
Time Since Circulation	4 HOURS		
Max Recorded Temp	113.00	deg F	
Equipment Name	COMPACT		
Equipment Base	13057	LB	
Recorded By	R HOFFMAN		
Witnessed By	R HOFFMAN		
LOG # JOB #	3537837		
		LB1-239	

Depth Based Data - Maximum Sampling Increment: 10.0cm
 Filename: C:\Minimus 13.02.6600\Data\McCoy McKinney Trust 'A' \McCoy McKinney Trust 'A' #1-23 Main.dta
 System Versions: Logged with 13.02.6600 Plotted with 13.02.6600

Plotted on 02-SEP-2012 11:44
 Recorded on 02-SEP-2012 09:32

1 INCH MAIN

Depth in Feet

Timing Marks
every 60.0 sec

Gamma Ray
API 75

Spontaneous Potential
millivolts

DST Uphole Tension
pounds

Array Ind. One Res Rt
ohm metres

Array Ind. One Cond Ct
mmhos

Shallow FE
ohm metres

620 Casing Shoe

Replay Scale 1:600

Depth in Meters

88°

89°

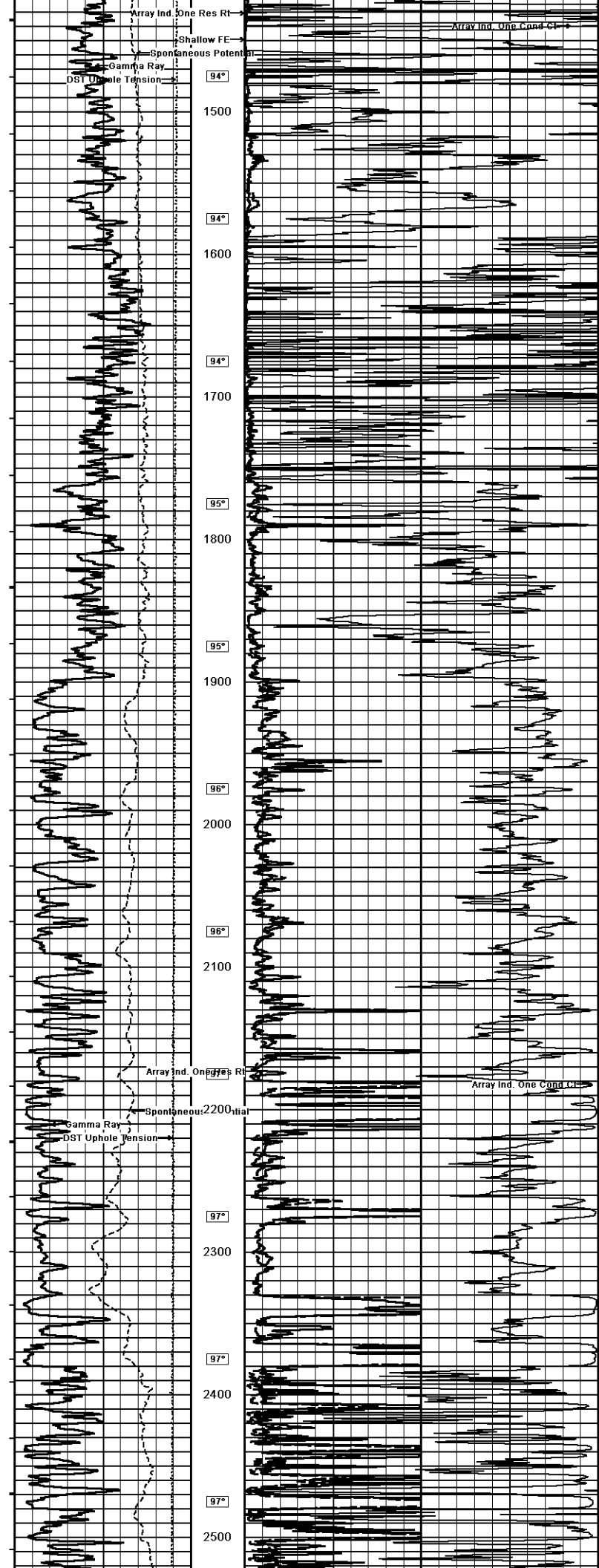
90°

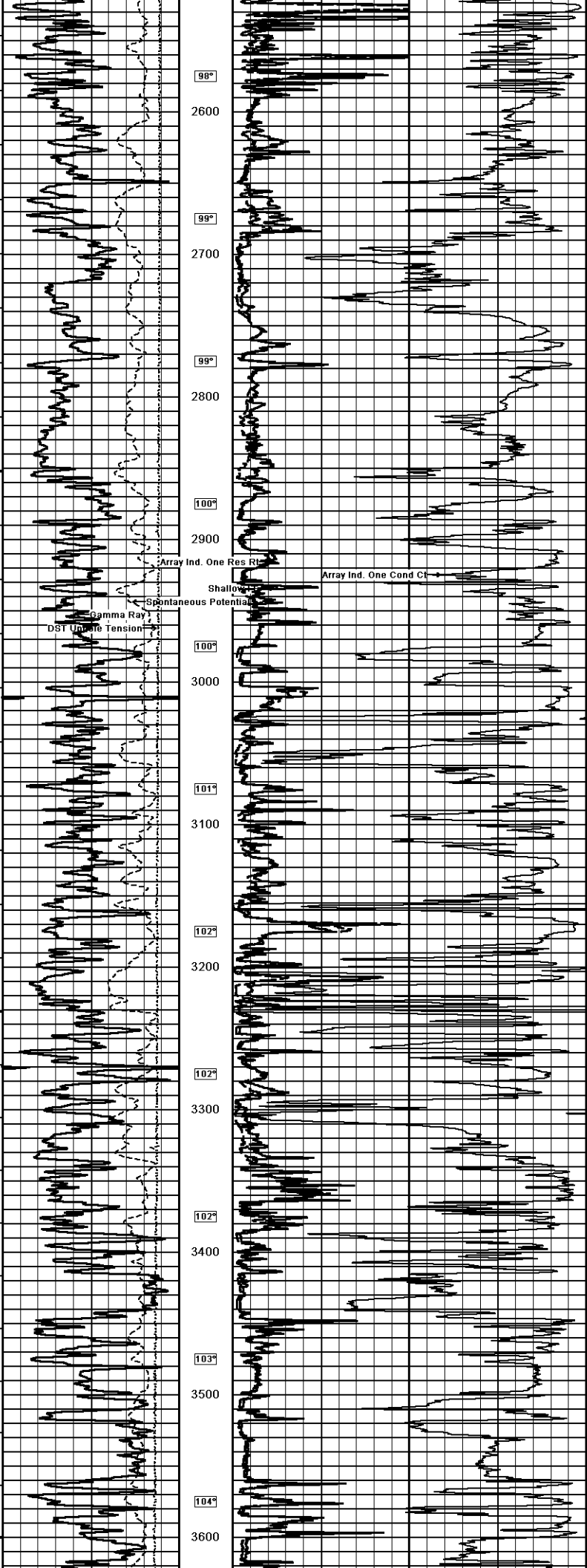
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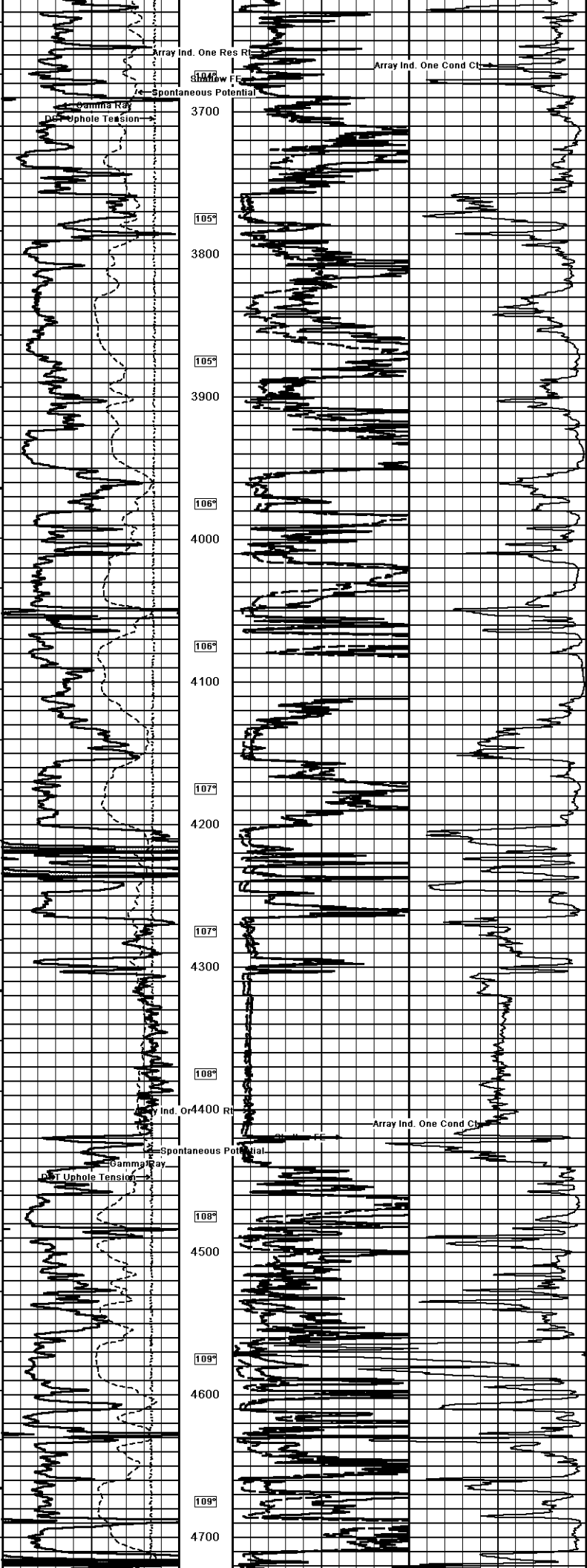
93°

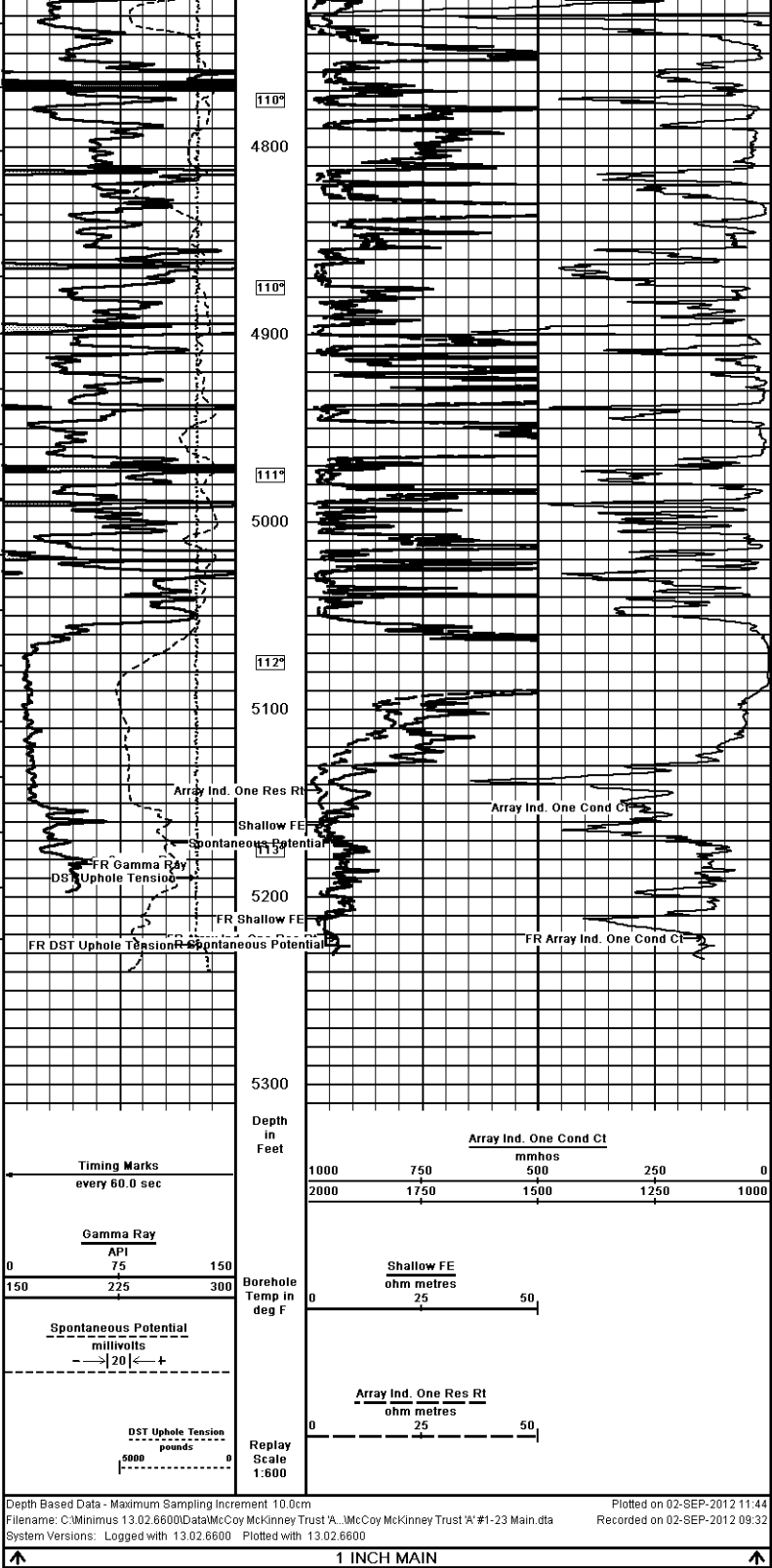
94°

95°









COMPANY		MCCOY PETROLEUM CORP.			
WELL		MCKINNEY TRUST 'A' #1-23			
FIELD		ALFORD			
PROVINCE/COUNTY		KIOWA			
COUNTRY/STATE		U.S.A. / KANSAS			
Elevation Kelly Bushing	2241.00	feet	First Reading	5223.00	feet
Elevation Drill Floor	2239.00	feet	Depth Driller	5225.00	feet
Elevation Ground Level	2232.00	feet	Depth Logger	5226.00	feet
			ARRAY INDUCTION SHALLOW FOCUSED ELECTRIC LOG		

