Weatherford®

ARRAY INDUCTION SHALLOW FOCUSED ELECTRIC LOG

COMPANY	MCCOY PETROLEUM CORPORATION
WELL	M-M DIEL UNIT "A" # 1-8
FIELD	WILDCAT
PROVINCE/COUNTY	LANE
COUNTRY/STATE	U.S.A. / KANSAS
LOCATION	2310' FSL & 2310' FEL NW NW SE

SEC	TWP	RGE	Other Services
8	20S	27W	MPD/MDN MML

API Number 15-101-22334
Permit Number

Permanent Datum G.L., Elevation 2733 feet
Log Measured From KB
Drilling Measured From K.B. @ 10 FEET

Elevations:	feet
KB	2743.00
DF	2741.00
GL	2733.00

Date	16-DEC-2011		
Run Number	ONE		
Depth Driller	4730.00 feet		
Depth Logger	4735.00 feet		
First Reading	4732.00 feet		
Last Reading	227.00 feet		
Casing Driller	228.00 feet		
Casing Logger	227.00 feet		
Bit Size	7.875 inches		
Hole Fluid Type	CHEMICAL		
Density / Viscosity	9.40 lb/USg	54.00 CP	
PH / Fluid Loss	10.50	7.60 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	1.45 @ 67.0 ohm-m		
Rmf @ Measured Temp	1.16 @ 67.0 ohm-m		
Rmc @ Measured Temp	1.74 @ 67.0 ohm-m		
Source Rmf / Rmc	CALC	CALC	
Rm @ BHT	0.80 @125.0 ohm-m		
Time Since Circulation	5 HOURS		
Max Recorded Temp	126.00 deg F		
Equipment Name	COMPACT		
Equipment / Base	13096	LIB	
Recorded By	A. GIAMBALVO		
Witnessed By	JERRY SMITH		
S.O. / JOB #	3534684	LB11-319	

BOREHOLE RECORD

Last Edited: 16-DEC-2011 07:22

Bit Size inches	Depth From feet	Depth To feet
7.875	227.00	4735.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	8.625	10.00	227.00	24.00

REMARKS

Tools Used: MPD, MCG, MDN, MFE, MAI, MML.
Hardware: MPD: 8 inch profile plate used. MAI, MSS and MFE: 0.5 Inch standoffs used. MDN: Dual Bowspring used.
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 volume with 5.5 inch production casing from TD to 3800 ft = 158 cu. ft
Service Order #3534684
Rig: Val # 7
Engineer: A. Giambalvo
Operator(s): K. Rinehart

2 INCH MAIN PASS

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 16-DEC-2011 07:43
Filename: C:\Minimus 11.02.3186\Data\McCoy M-M Diel Unit ...\McCoy M-M Diel Unit A # 1-8 Splice.dta
Recorded on 16-DEC-2011 04:15
System Versions: Plotted with 12.03.5032

Timing Marks
every 60.0 sec

Gamma Ray
API
0 75 150

Spontaneous Potential
millivolts
− → | 20 | ← +

DST Uphole Tension
pounds
5000 0

Depth in Feet

Borehole Temp in deg F

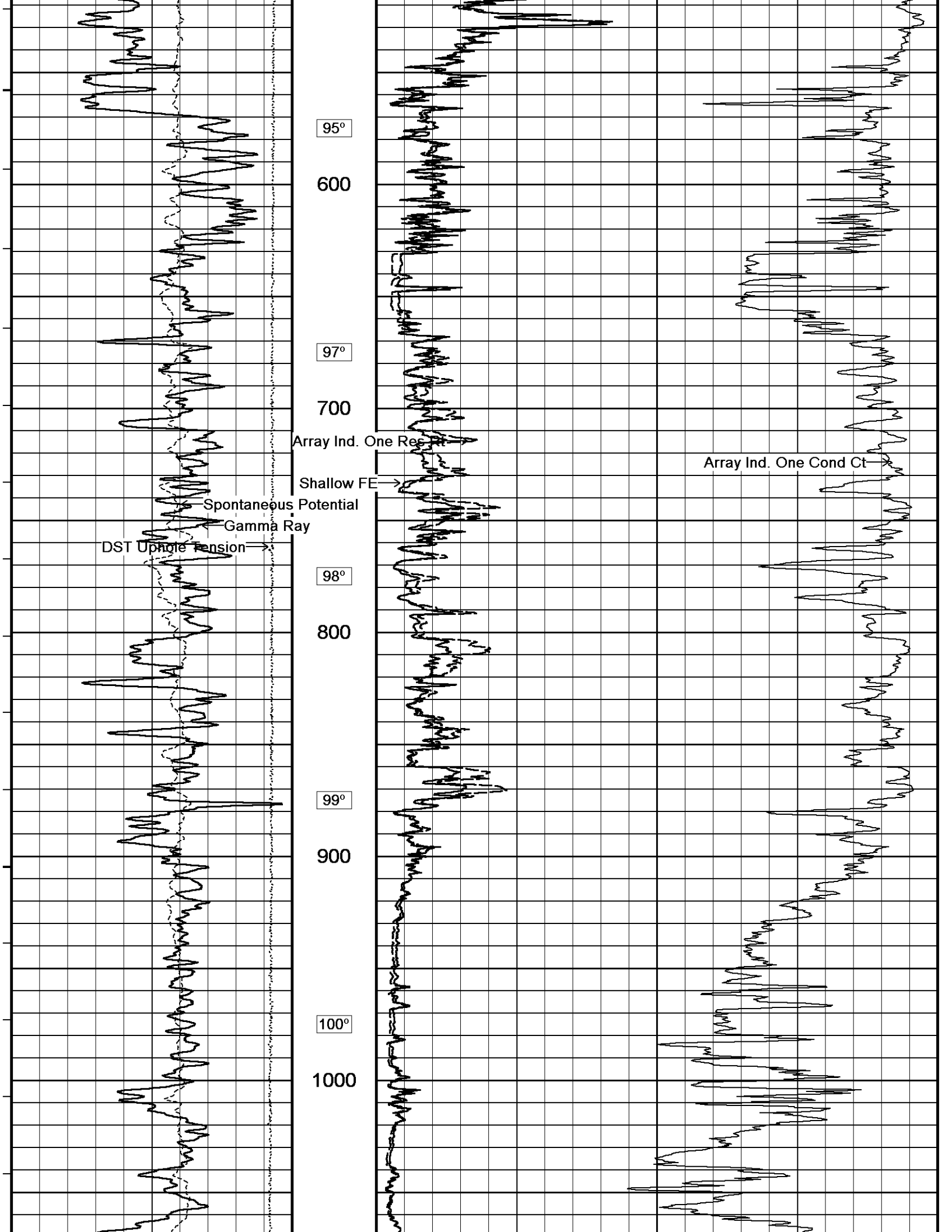
Replay Scale 1:600

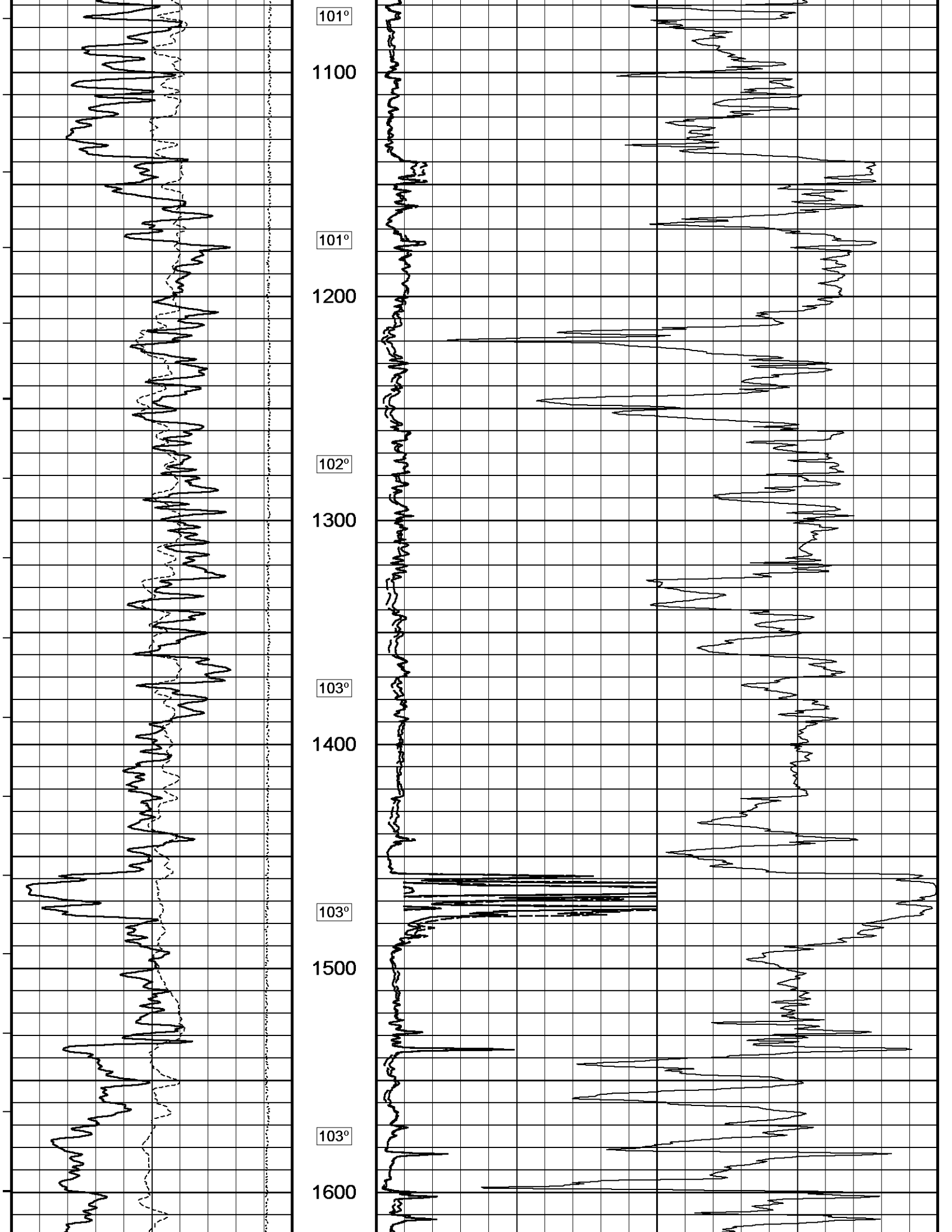
Array Ind. One Cond Ct
mmhos
1000 750 500 250 0
2000 1750 1500 1250 1000

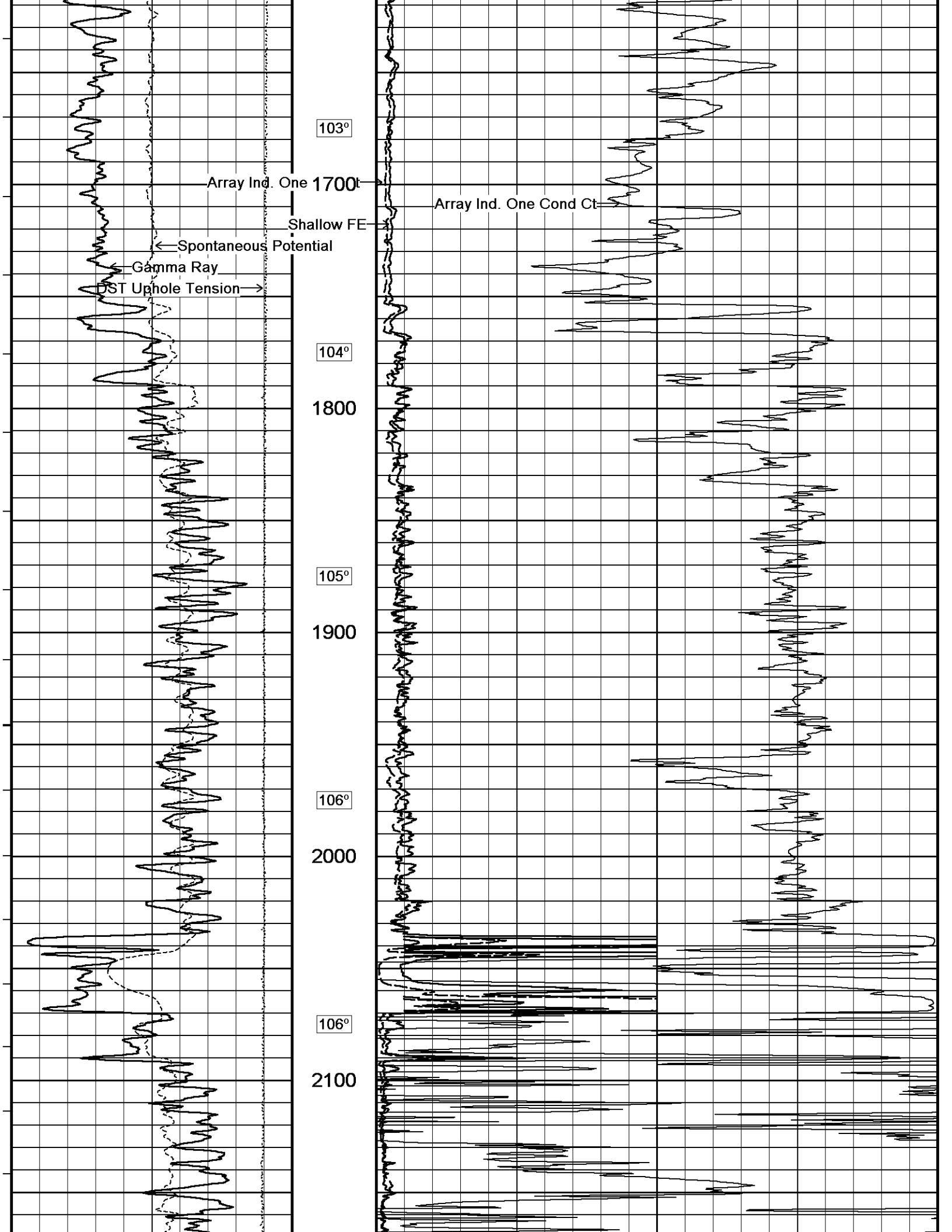
Shallow FE
ohm metres
0 25 50
0 250 500

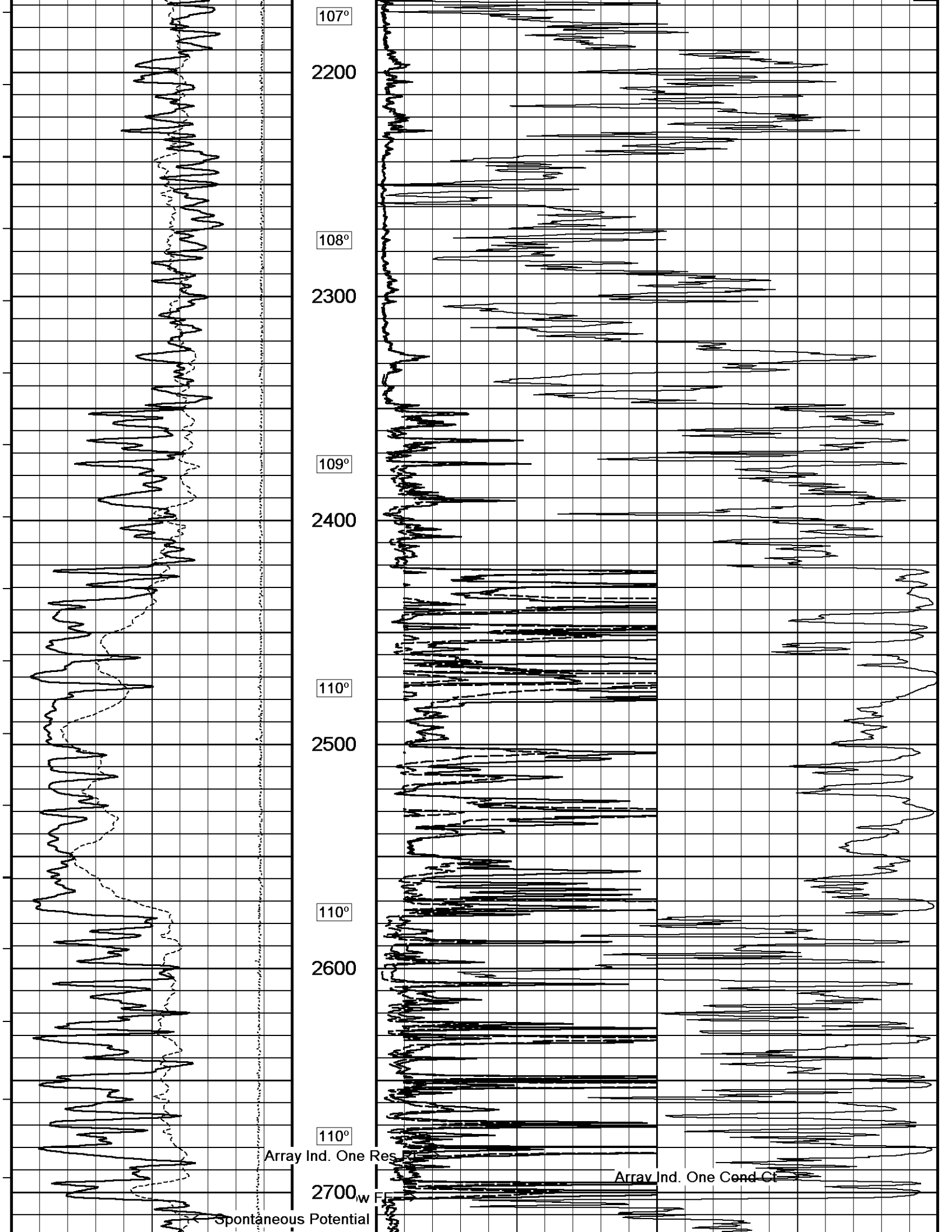
Array Ind. One Res Rt
ohm metres
0 25 50
0 250 500

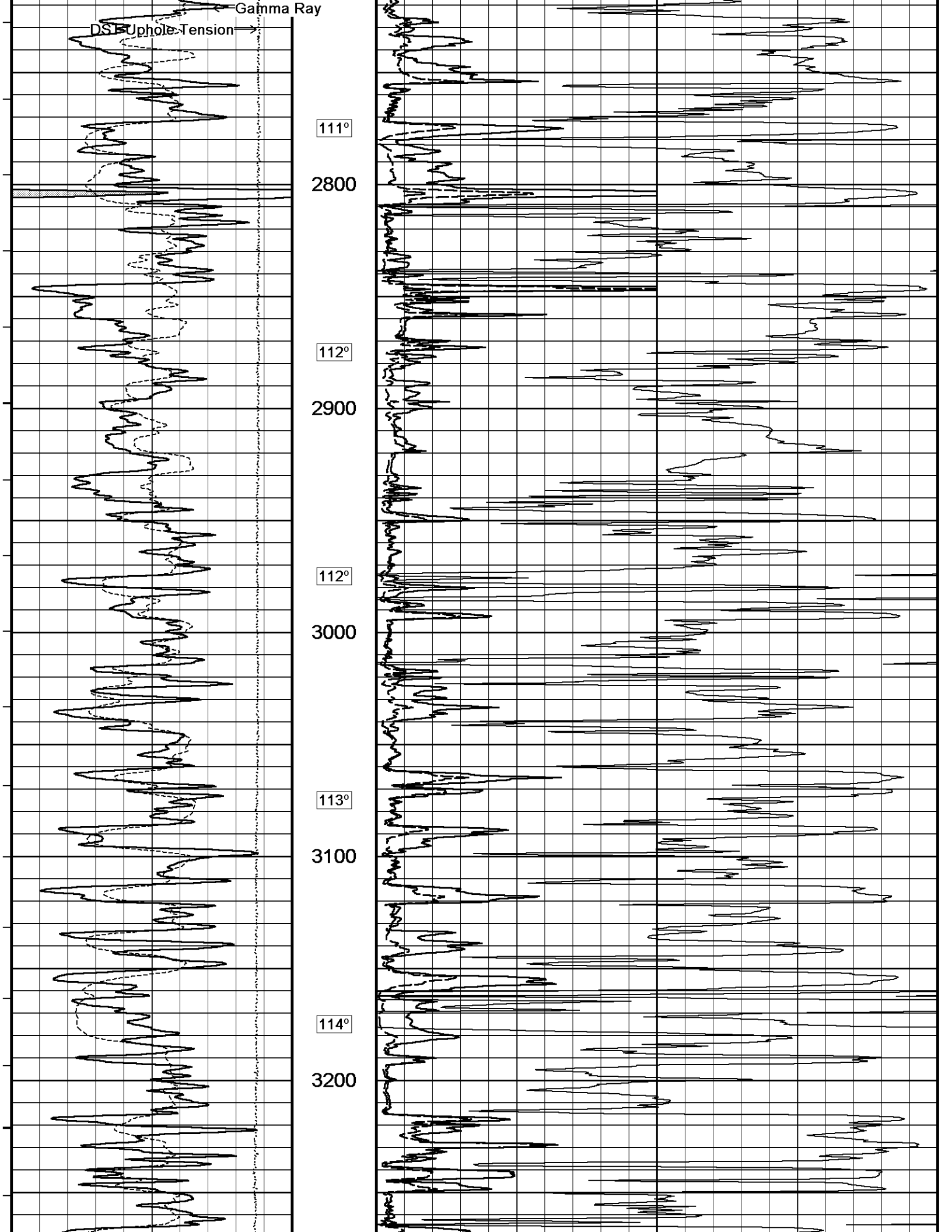
230
300
90°
400
92°
500

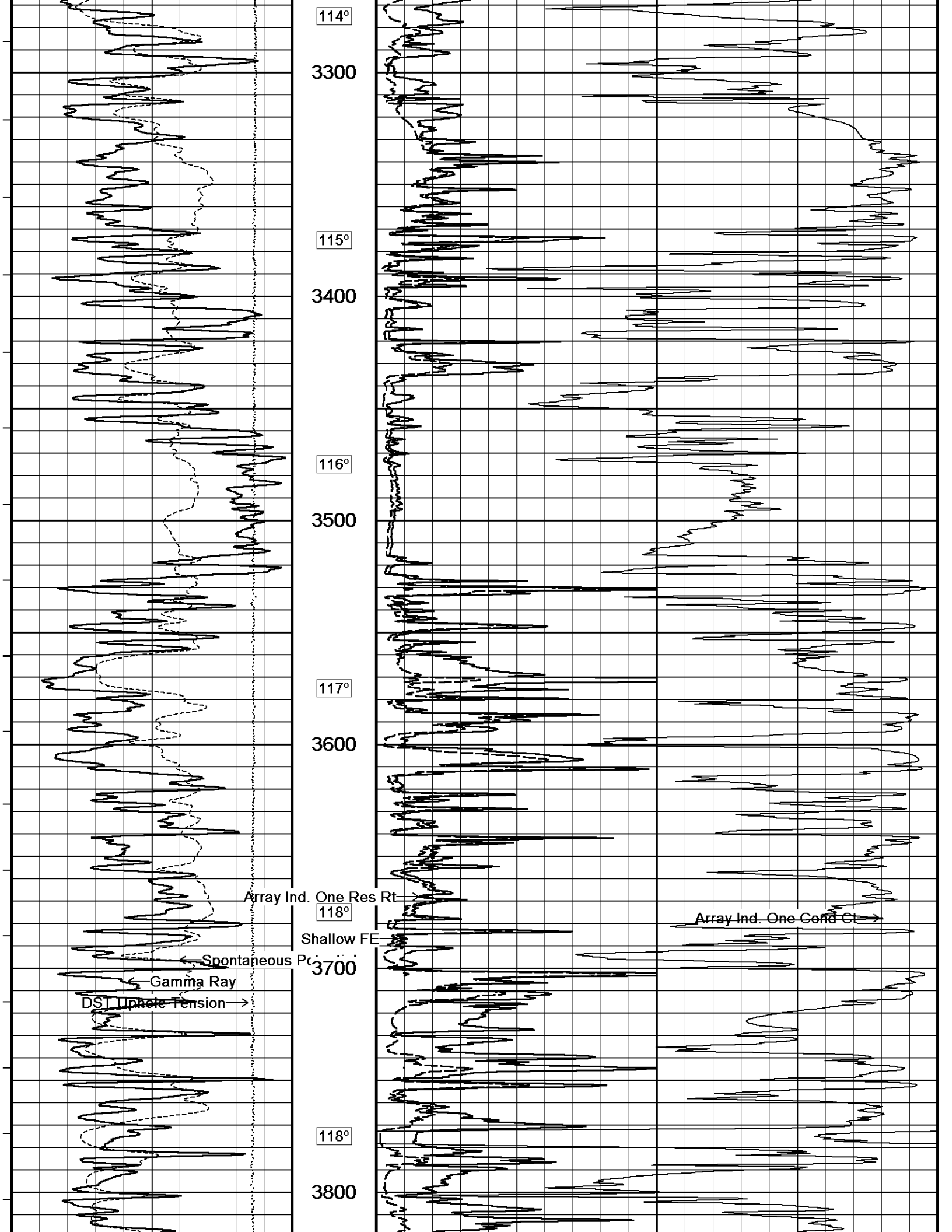

95°
600
97°
700
Array Ind. One Res Rt
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
98°
800
99°
900
100°
1000
Array Ind. One Cond Ct

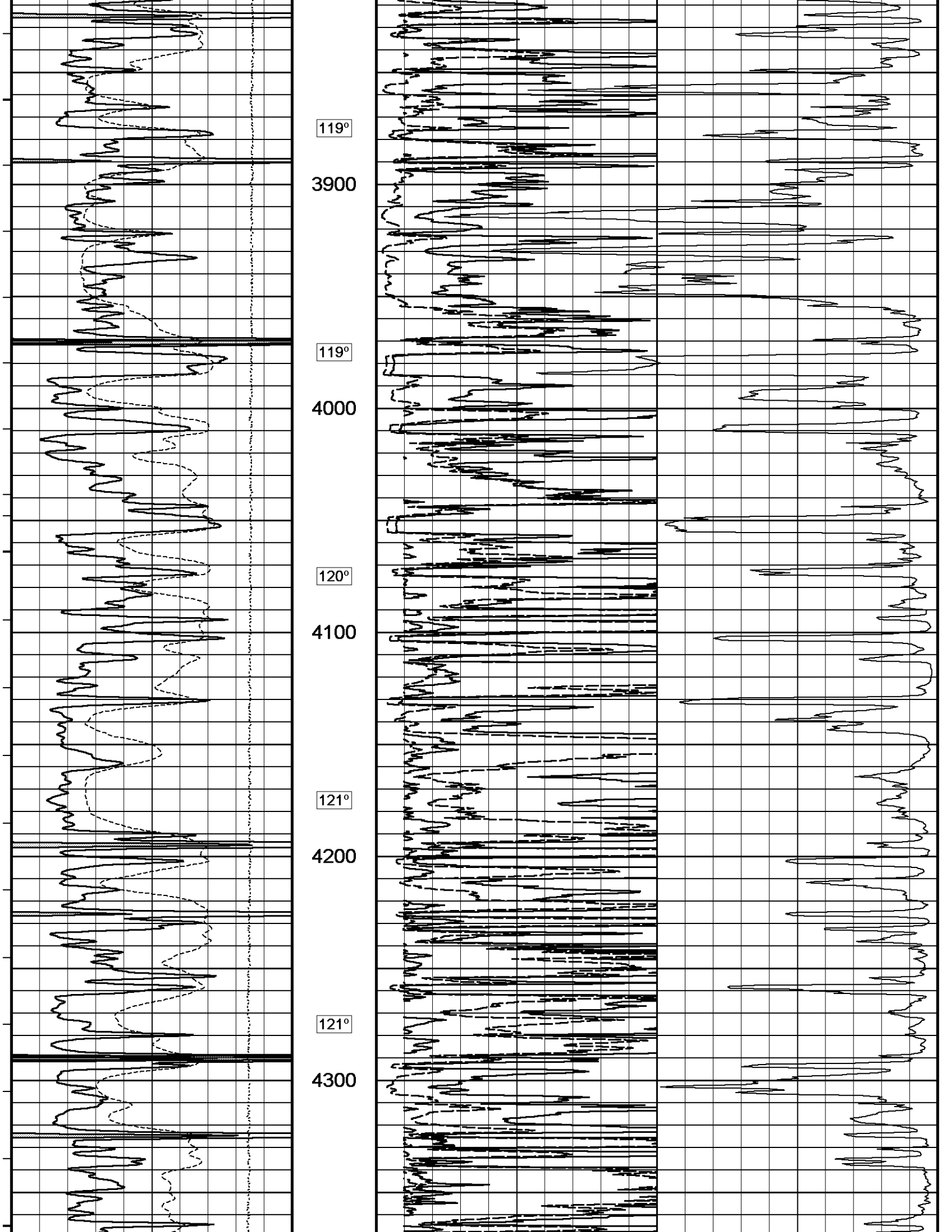

101°
1100
101°
1200
102°
1300
103°
1400
103°
1500
103°
1600

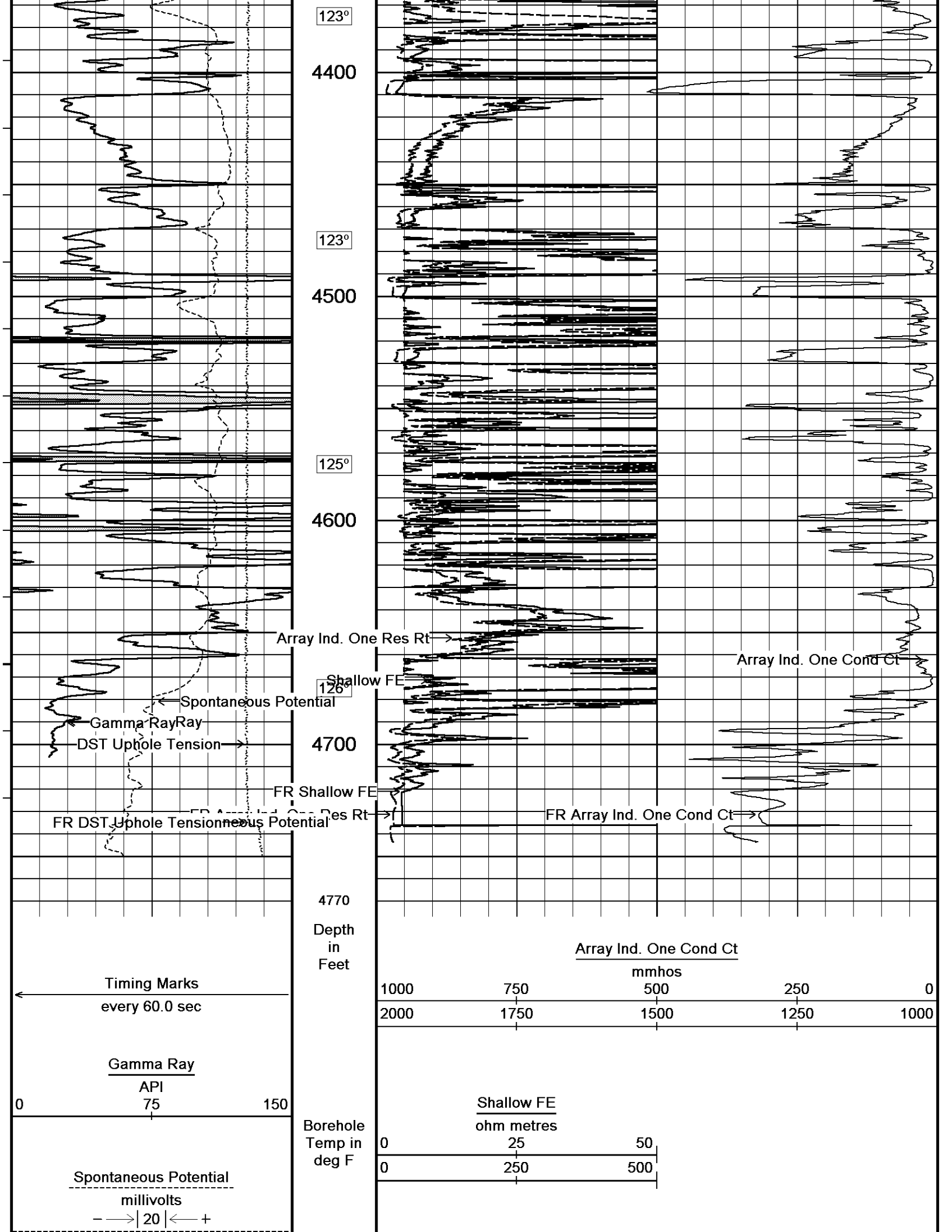

103°
Array Ind. One
1700
Array Ind. One Cond Ct
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
104°
1800
105°
1900
106°
2000
106°
2100


107°
2200
108°
2300
109°
2400
110°
2500
110°
2600
110°
2700
Array Ind. One Res Ft
Array Ind. One Cond Ct
w Ft
Spontaneous Potential


Gamma Ray
DST Uphole Tension
111°
2800
112°
2900
112°
3000
113°
3100
114°
3200


114°
3300
115°
3400
116°
3500
117°
3600
Array Ind. One Res Rt
118°
Shallow FE
Spontaneous Po
3700
Gamma Ray
DST Uphole Tension
Array Ind. One Cond Ct
118°
3800


119°
3900
119°
4000
120°
4100
121°
4200
121°
4300


123°
4400
123°
4500
125°
4600
126°
4700
Array Ind. One Res Rt
Shallow FE
Spontaneous Potential
Gamma RayRay
DST Uphole Tension
FR Shallow FE
FR DST Uphole Tensionneous Potential
FR Array Ind. One Cond Ct
Array Ind. One Cond Ct
4770
Depth
in
Feet
Timing Marks
every 60.0 sec
Gamma Ray
API
0
75
150
Spontaneous Potential
millivolts
20
Borehole
Temp in
deg F
Array Ind. One Cond Ct
mmhos
1000
750
500
250
0
2000
1750
1500
1250
1000
Shallow FE
ohm metres
0
25
50
0
250
500

DST Uphole Tension
pounds
5000 0

Replay
Scale
1:600

Array Ind. One Res Rt
ohm metres
0 25 50
0 250 500

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 16-DEC-2011 07:43
Filename: C:\Minimus 11.02.3186\Data\McCoy M-M Diel Unit ...\McCoy M-M Diel Unit A # 1-8 Splice.dta
Recorded on 16-DEC-2011 04:15
System Versions: Plotted with 12.03.5032

2 INCH MAIN PASS

5 INCH MAIN PASS

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 16-DEC-2011 07:43
Filename: C:\Minimus 11.02.3186\Data\McCoy M-M Diel Unit ...\McCoy M-M Diel Unit A # 1-8 Splice.dta
Recorded on 16-DEC-2011 04:15
System Versions: Plotted with 12.03.5032

Timing Marks
every 60.0 sec

Gamma Ray
API
0 75 150

Spontaneous Potential
millivolts
− → | 20 | ← +

DST Uphole Tension
pounds
5000 0

Depth
in
Feet

Borehole
Temp in
deg F

Replay
Scale
1:240

Shallow FE
ohm metres
0.20 2000
1 10 100 1000

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

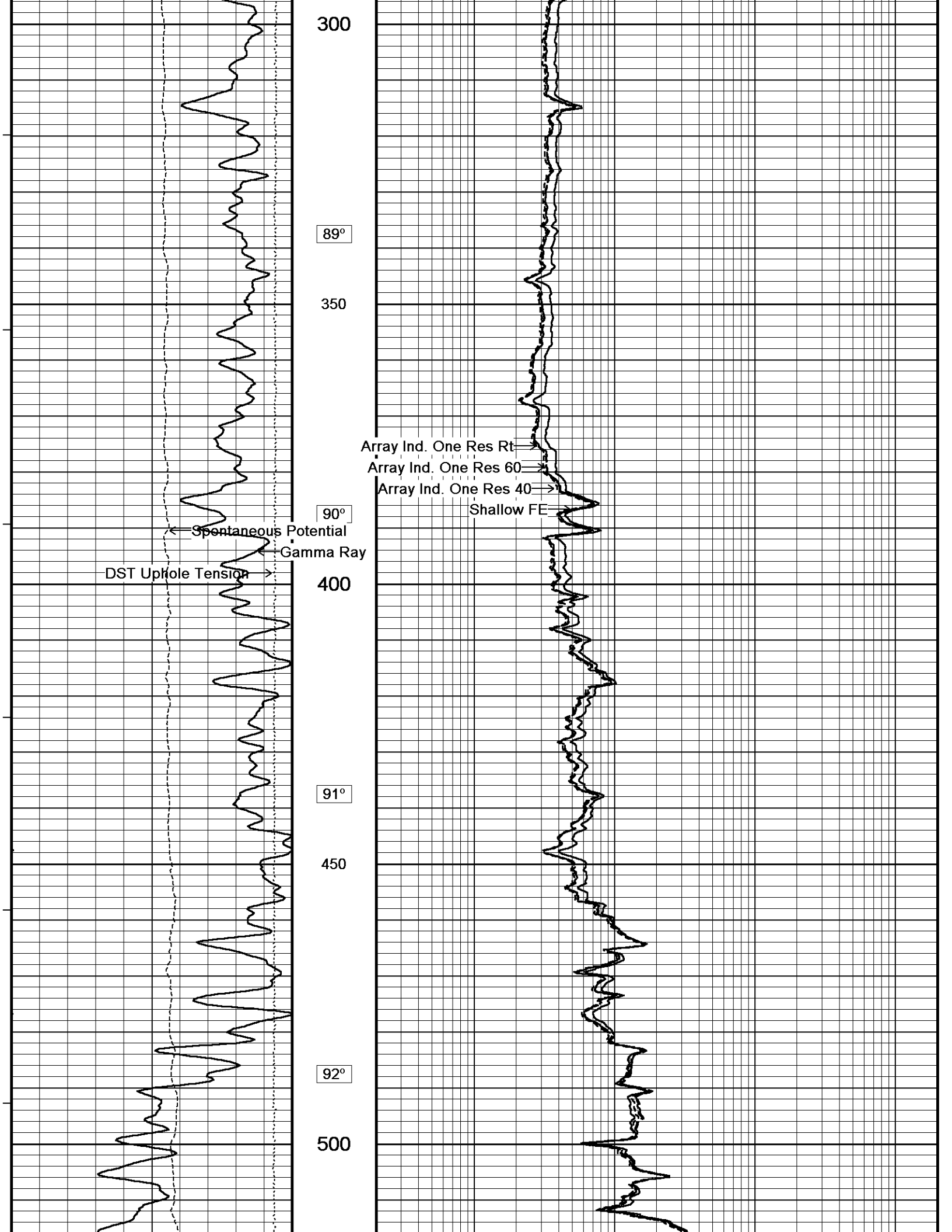
Array Ind. One Res 60
ohm metres
0.20 2000
1 10 100 1000

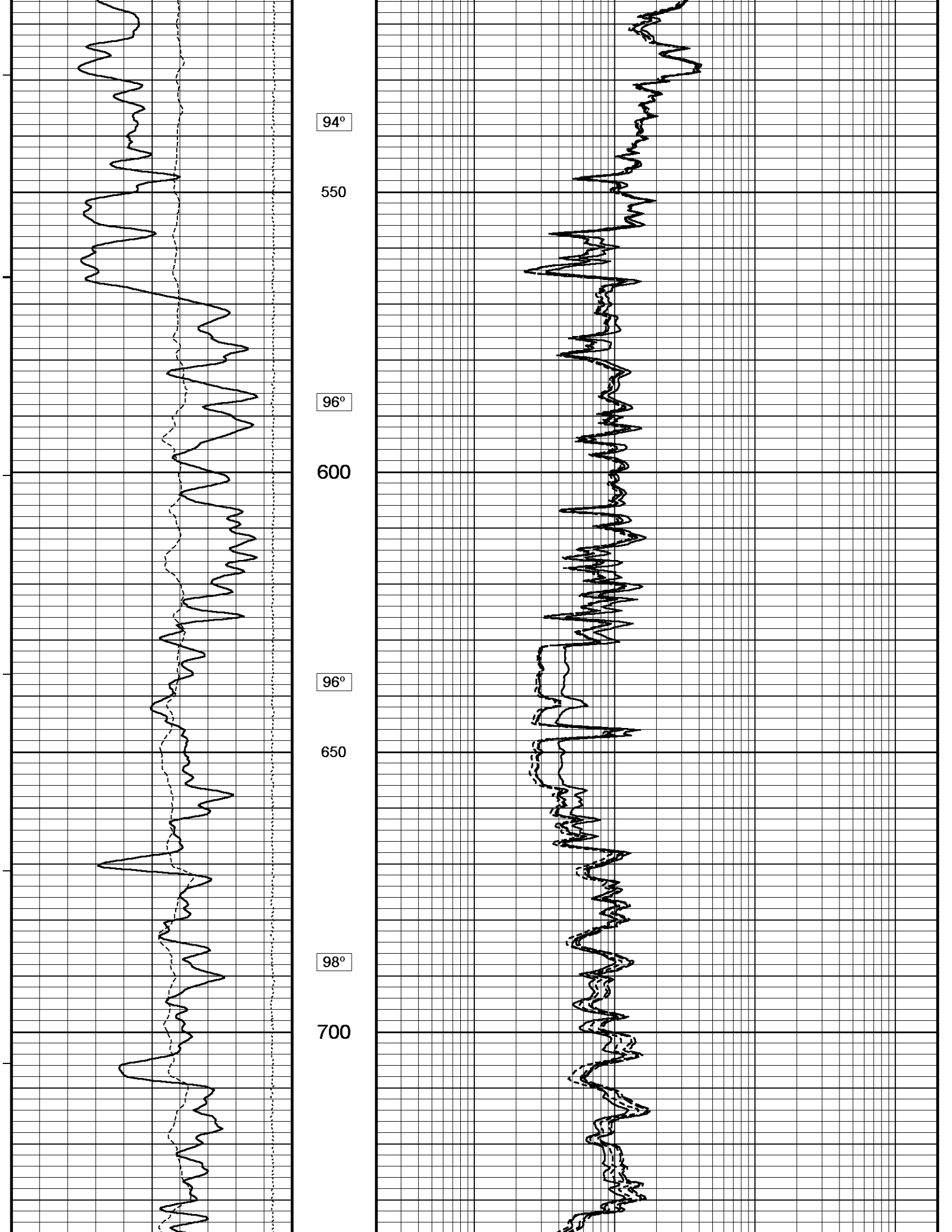
Array Ind. One Res Rt
ohm metres
0.20 2000
1 10 100 1000

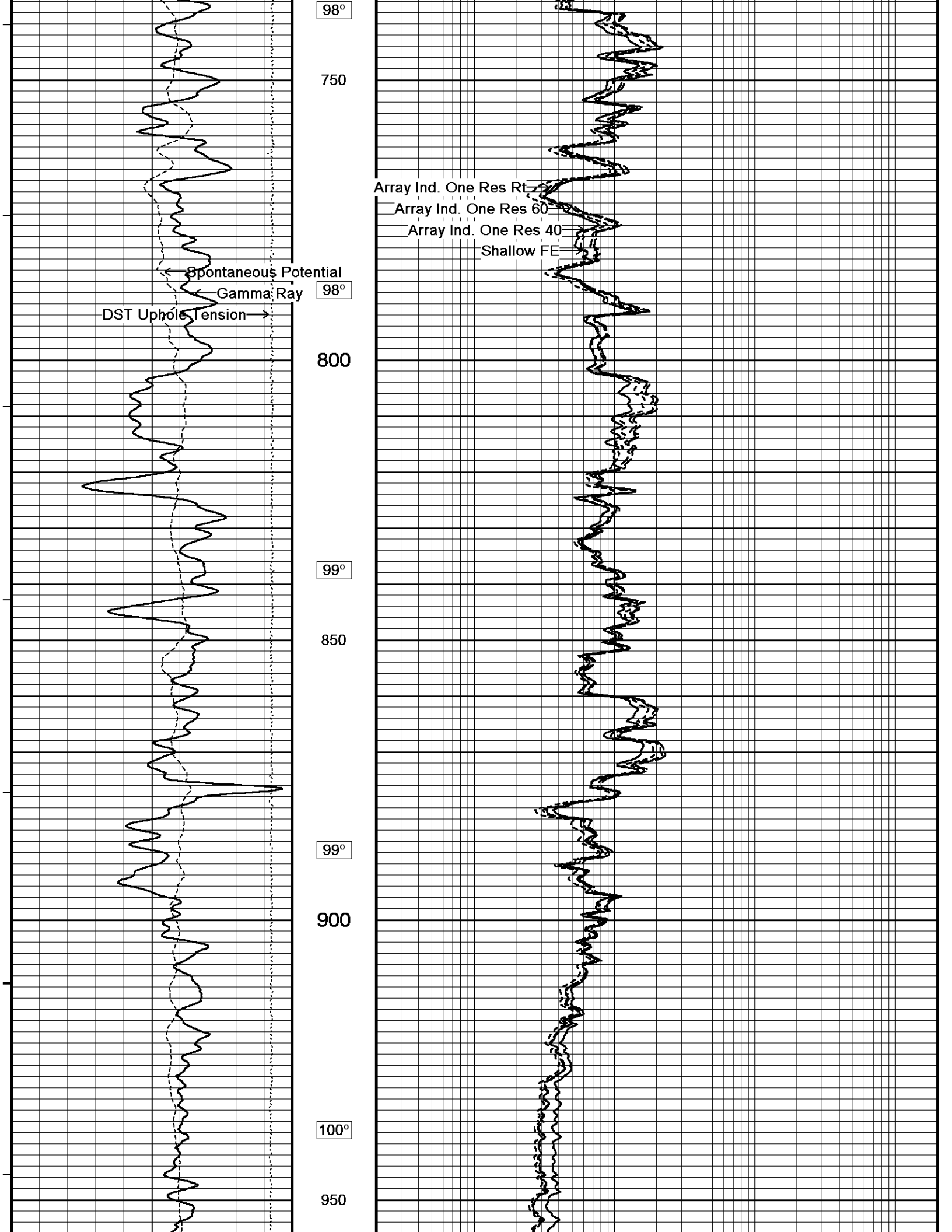
226

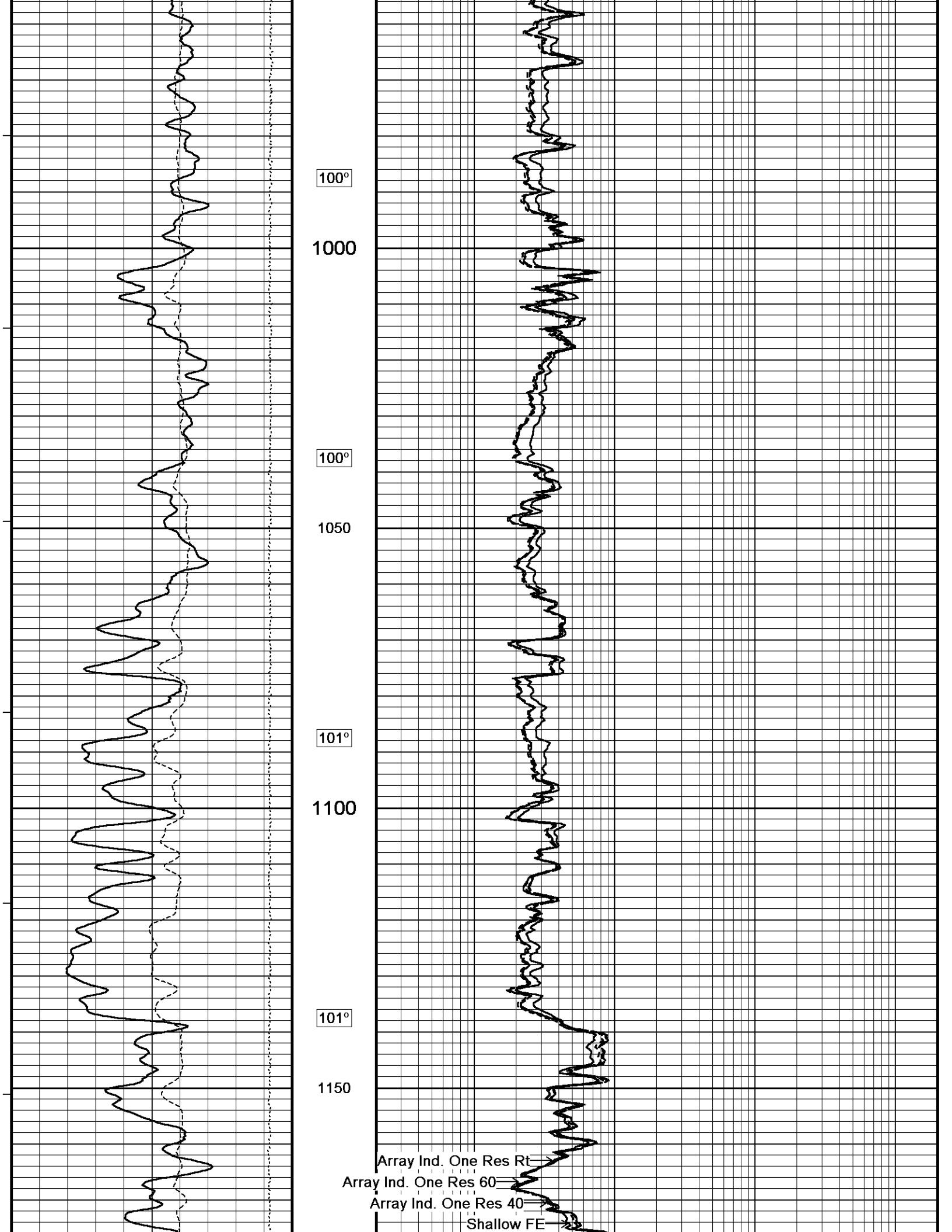
250

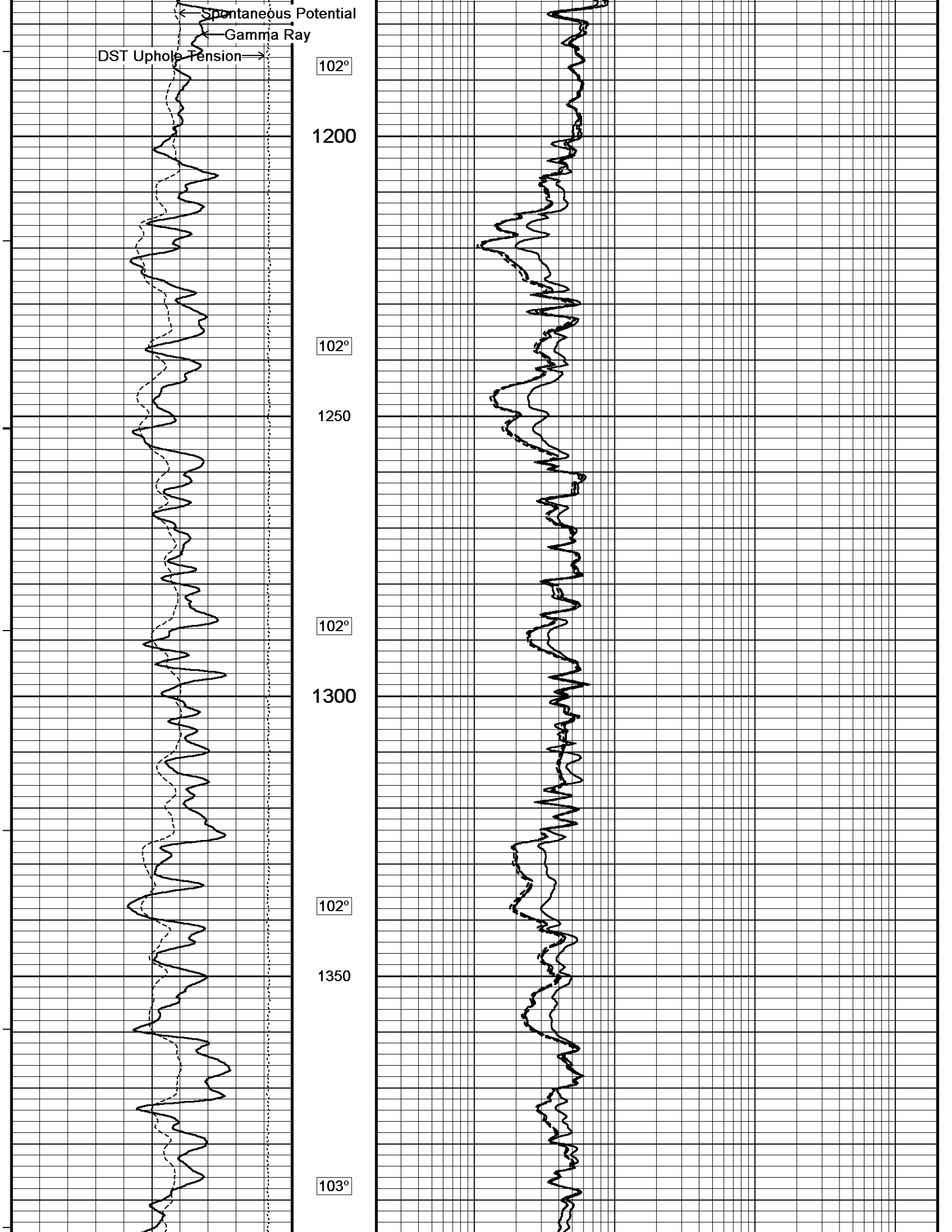
88°

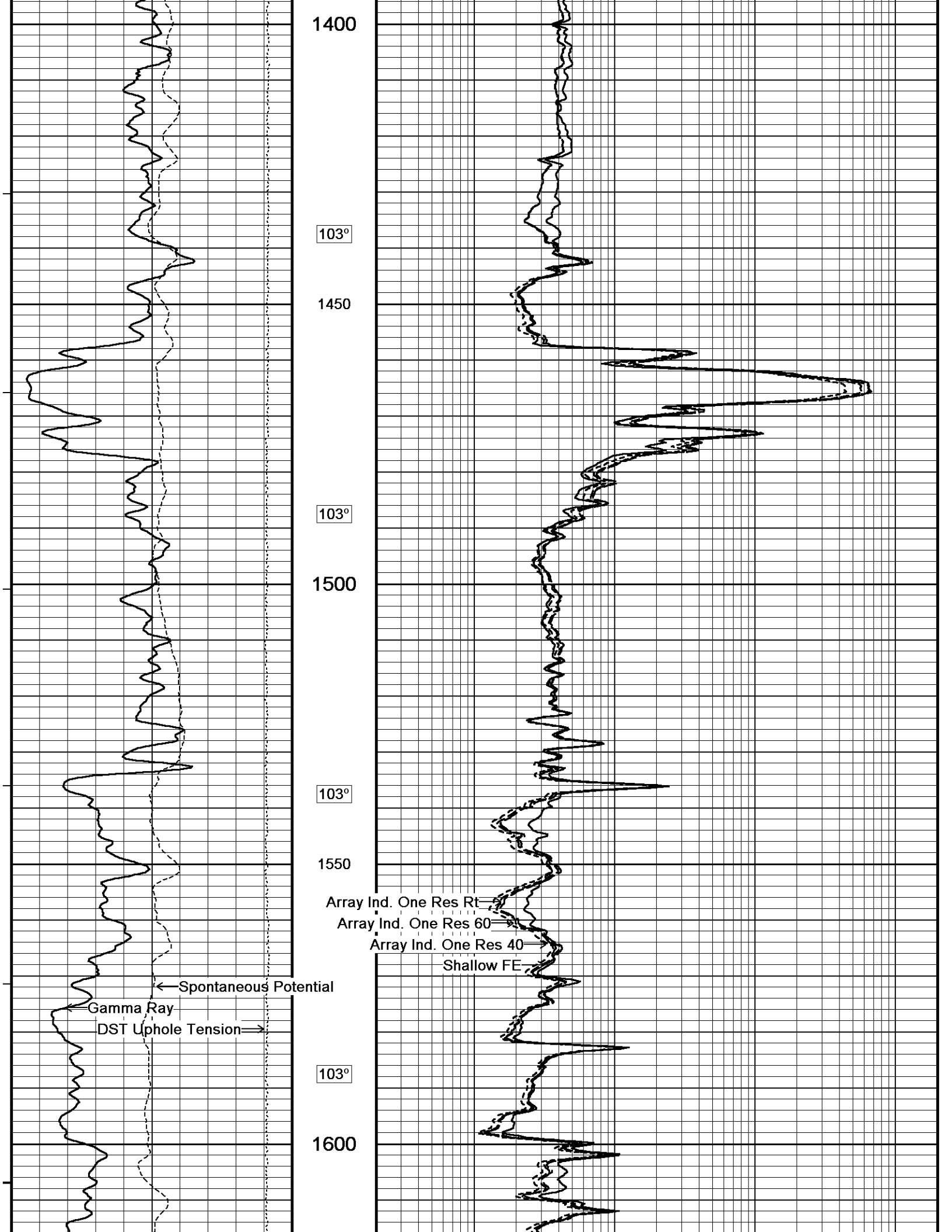

300
89°
350
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
90°
Spontaneous Potential
Gamma Ray
DST Uphole Tension
400
91°
450
92°
500

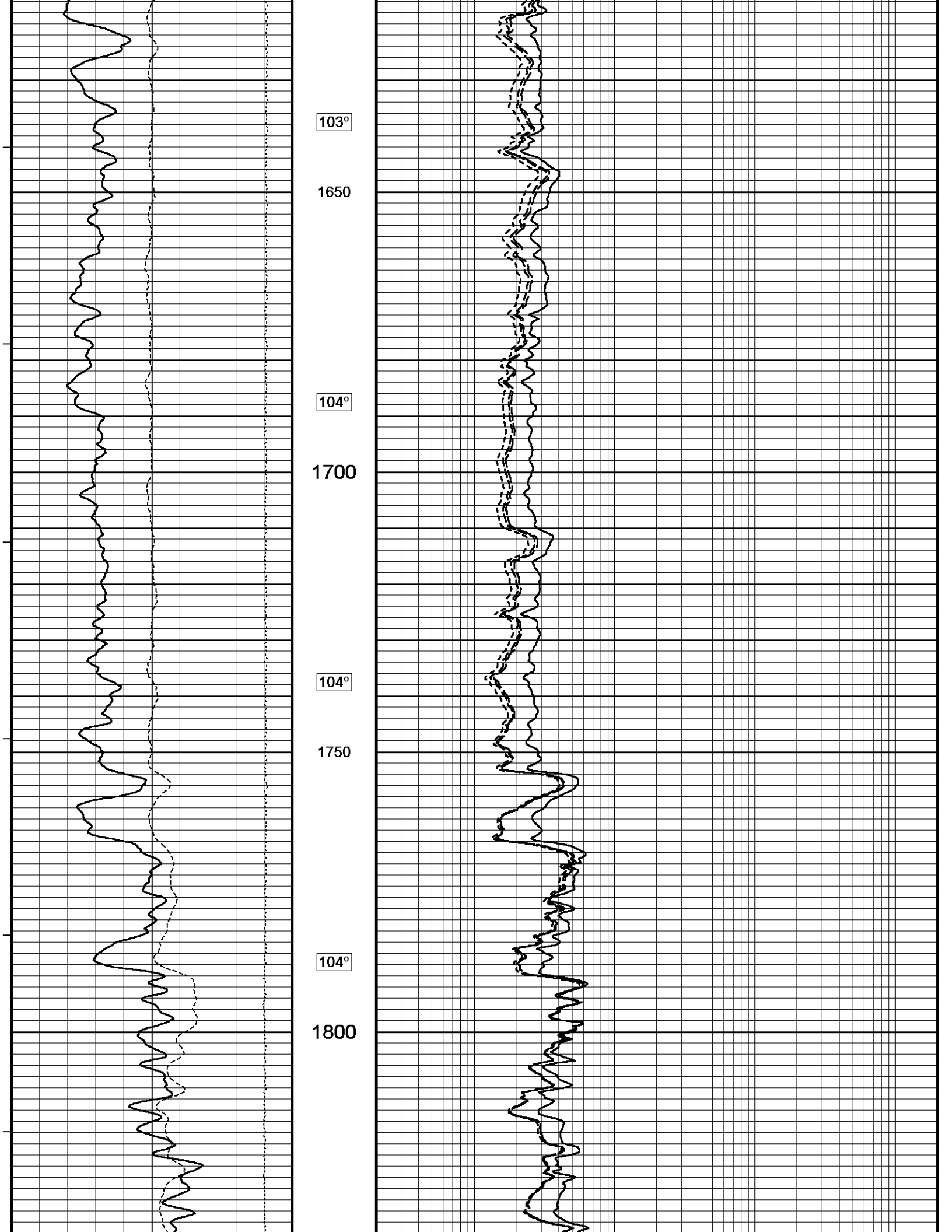

94°
550
96°
600
96°
650
98°
700

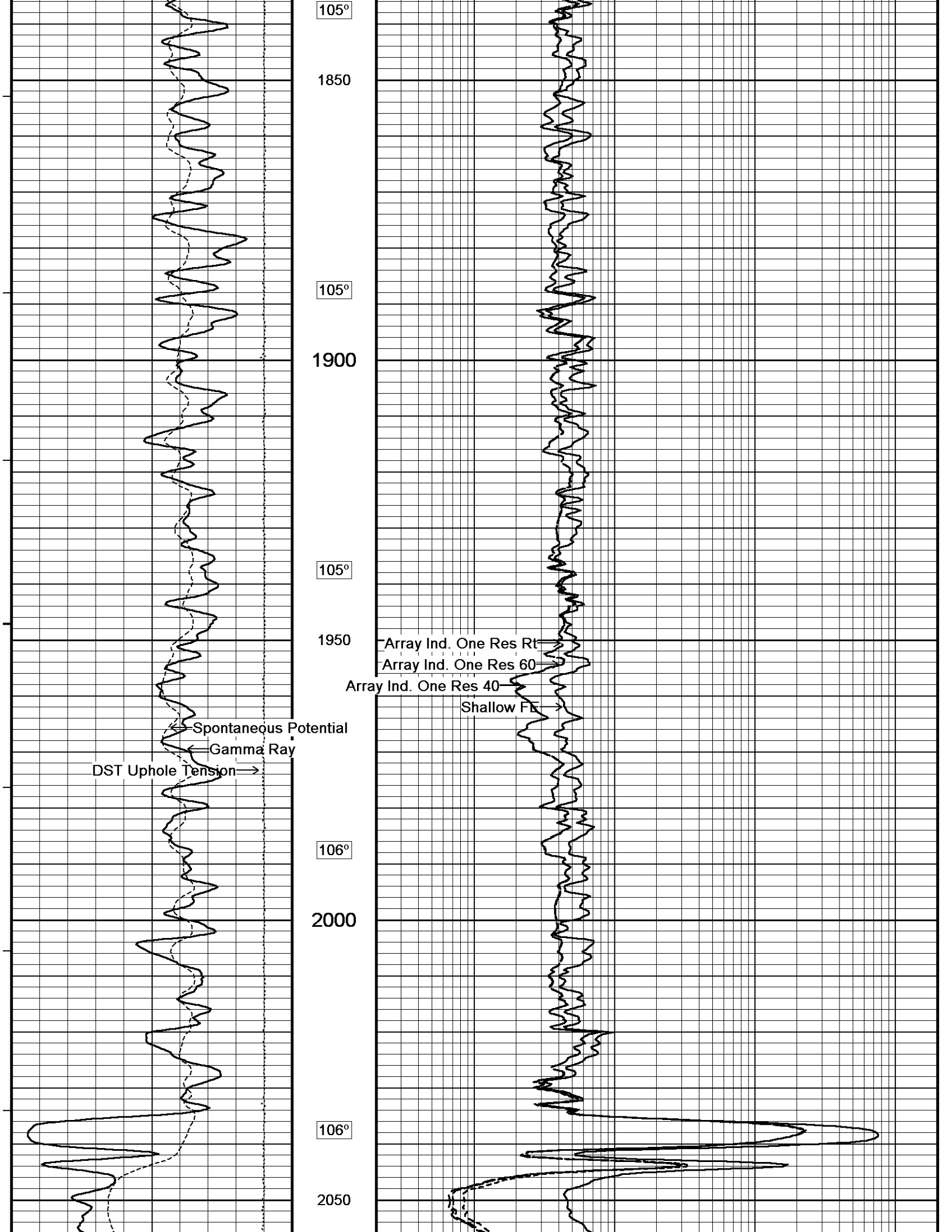

98°
750
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
Gamma Ray
98°
DST Uphole Tension
800
99°
850
99°
900
100°
950

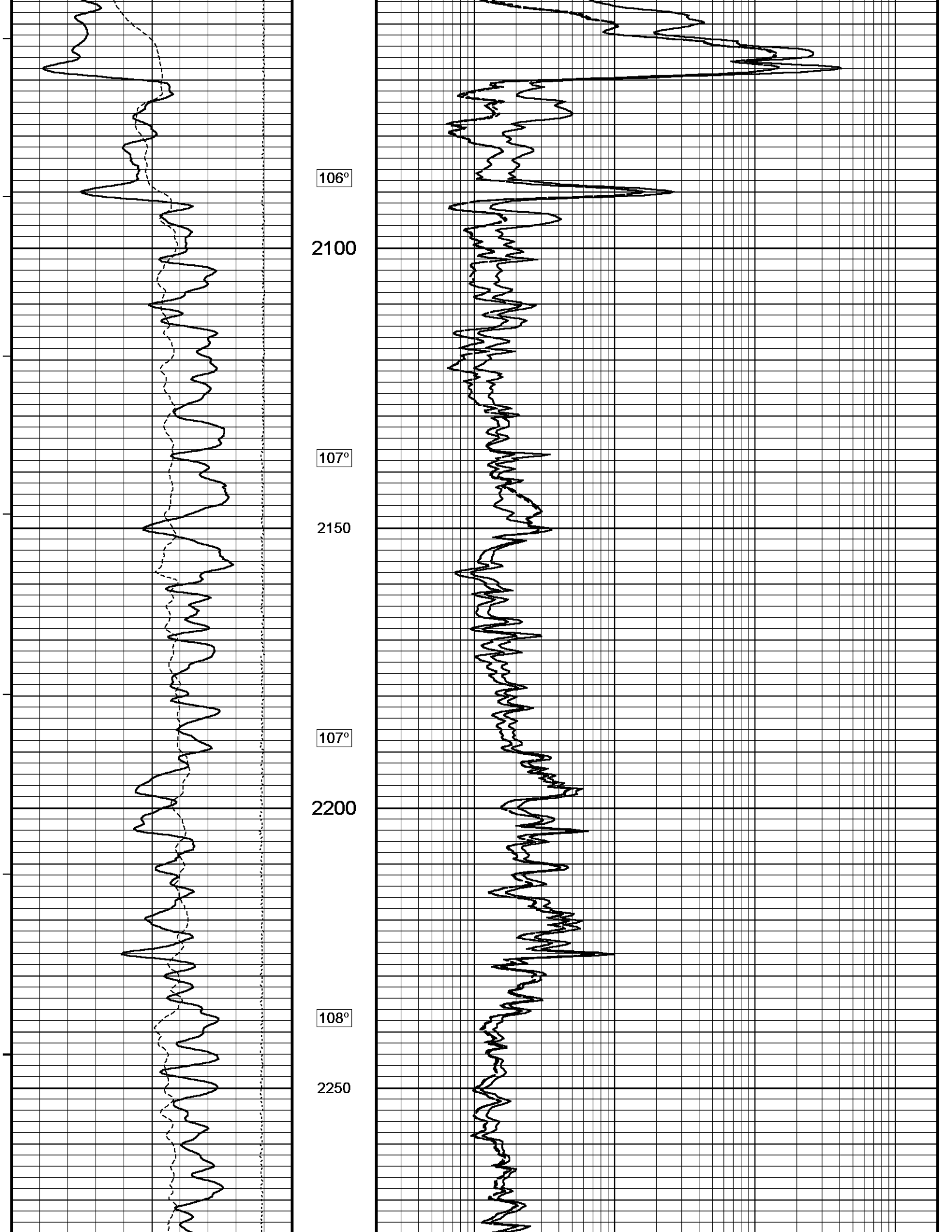

100°
1000
100°
1050
101°
1100
101°
1150
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE

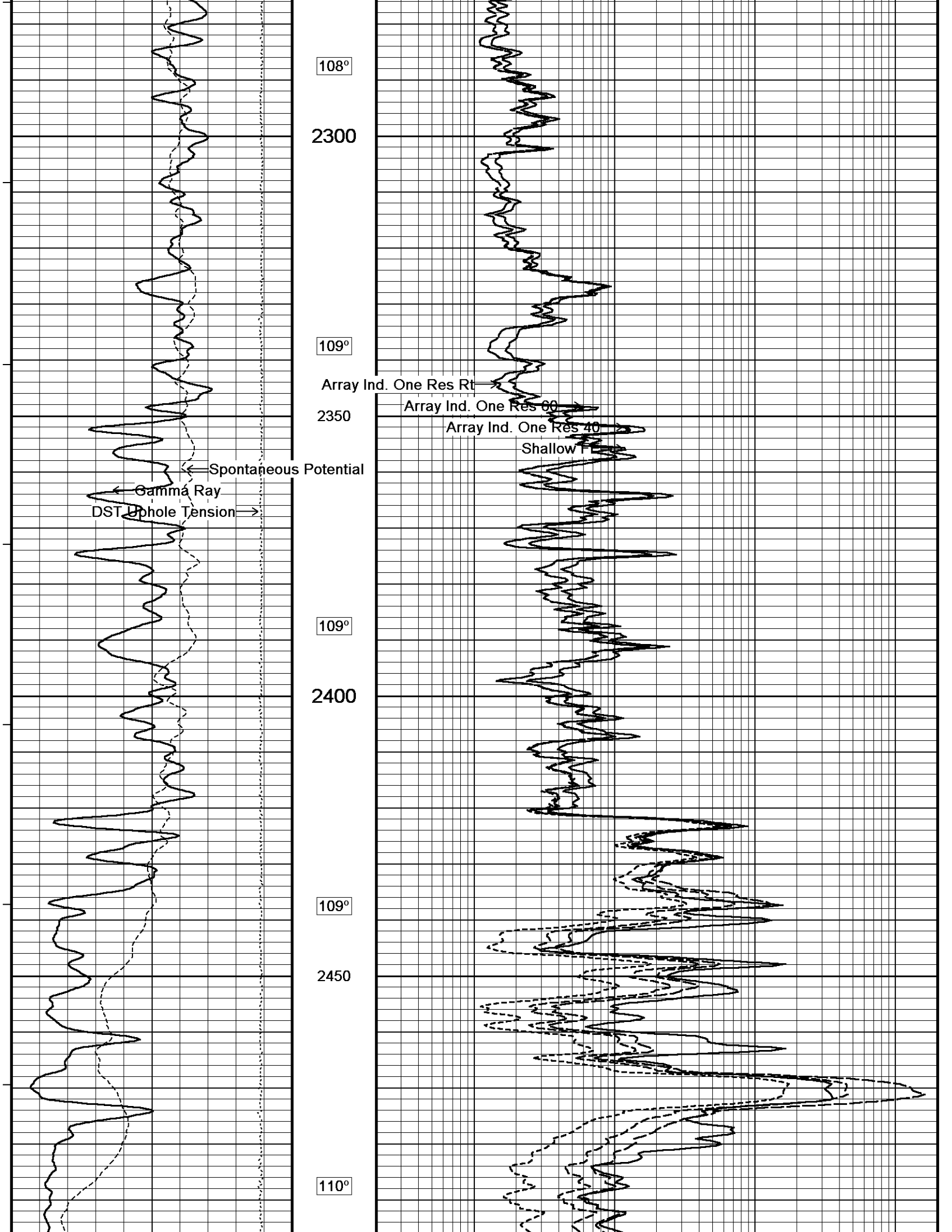

Spontaneous Potential
Gamma Ray
DST Uphole Tension
102°
1200
102°
1250
102°
1300
102°
1350
103°

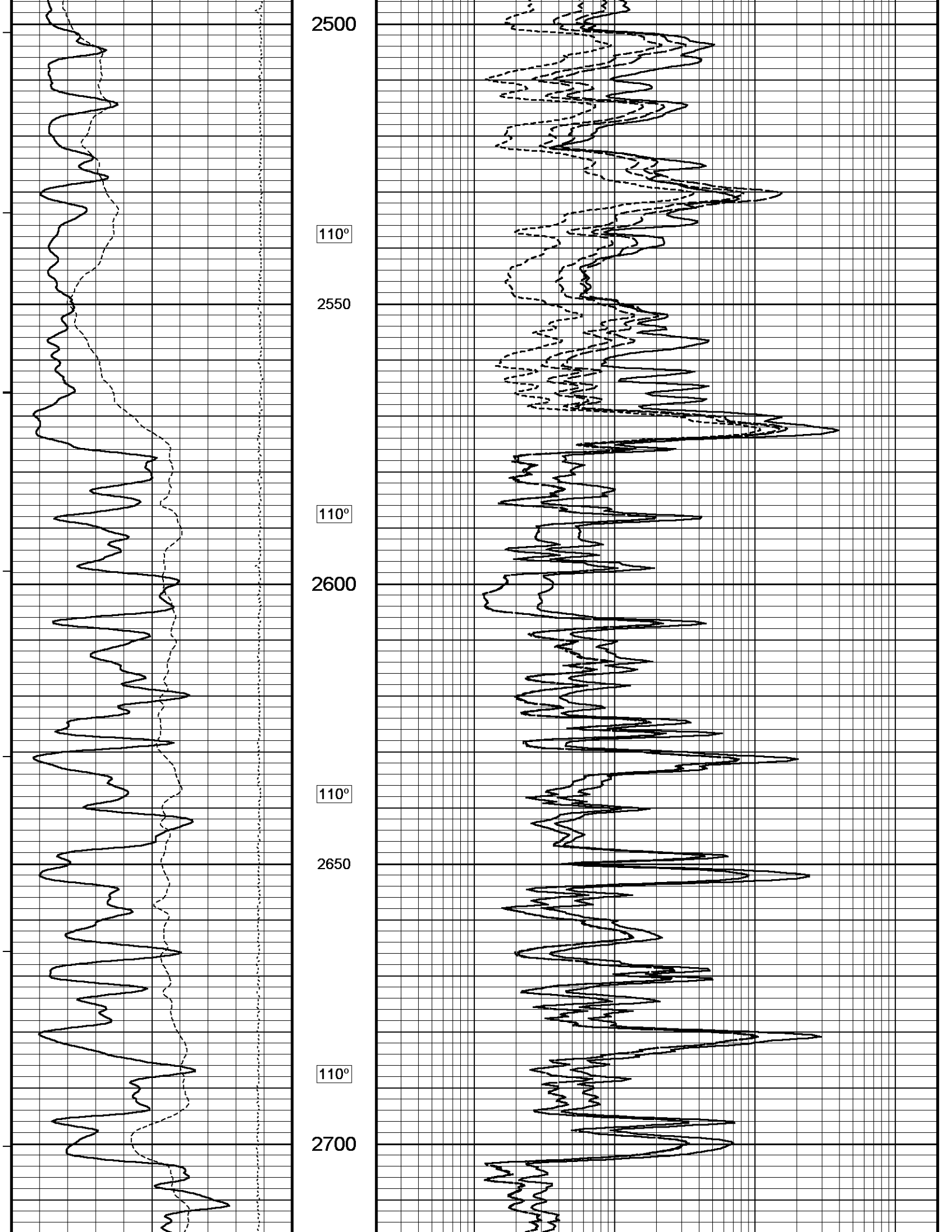

1400
103°
1450
103°
1500
103°
1550
1600
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension

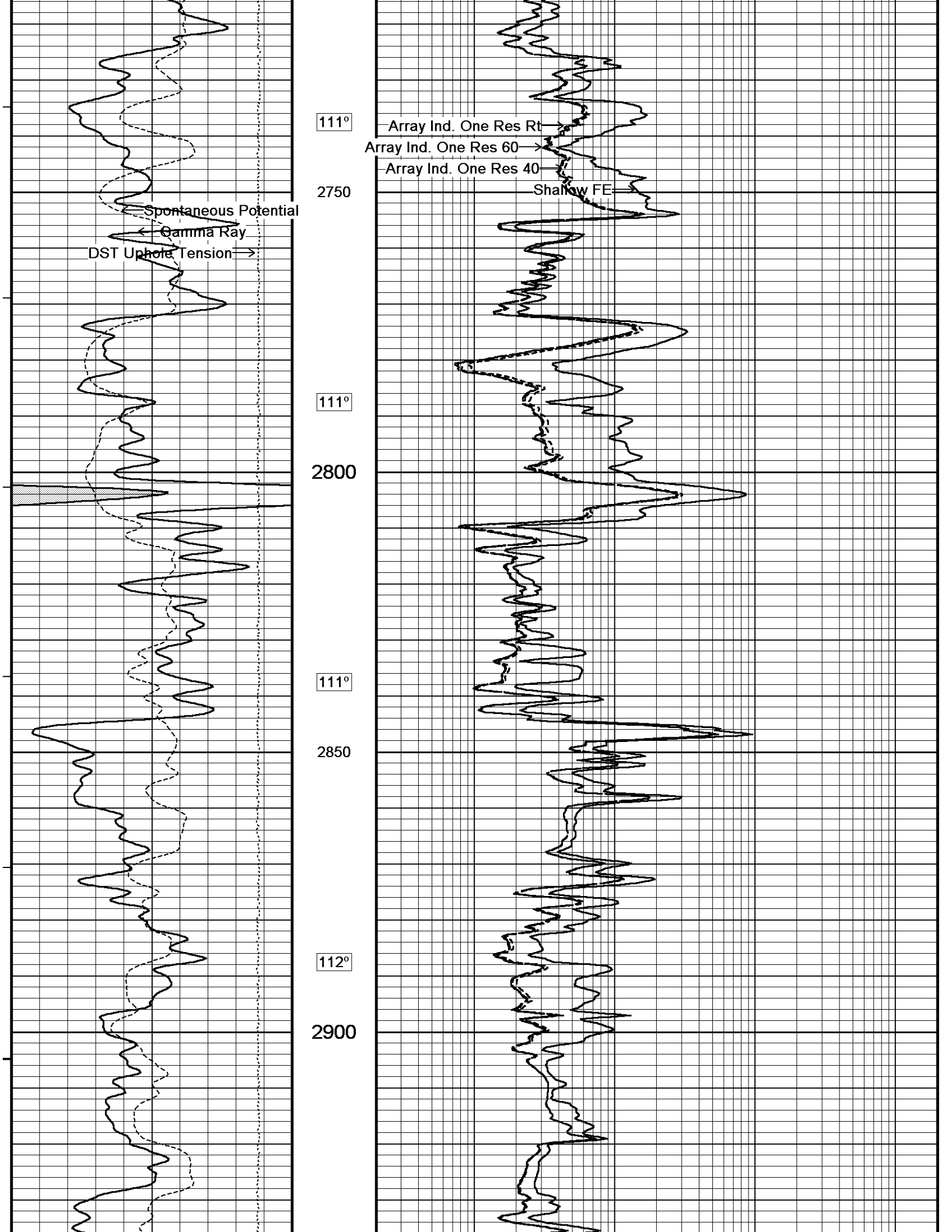

103°
1650
104°
1700
104°
1750
104°
1800

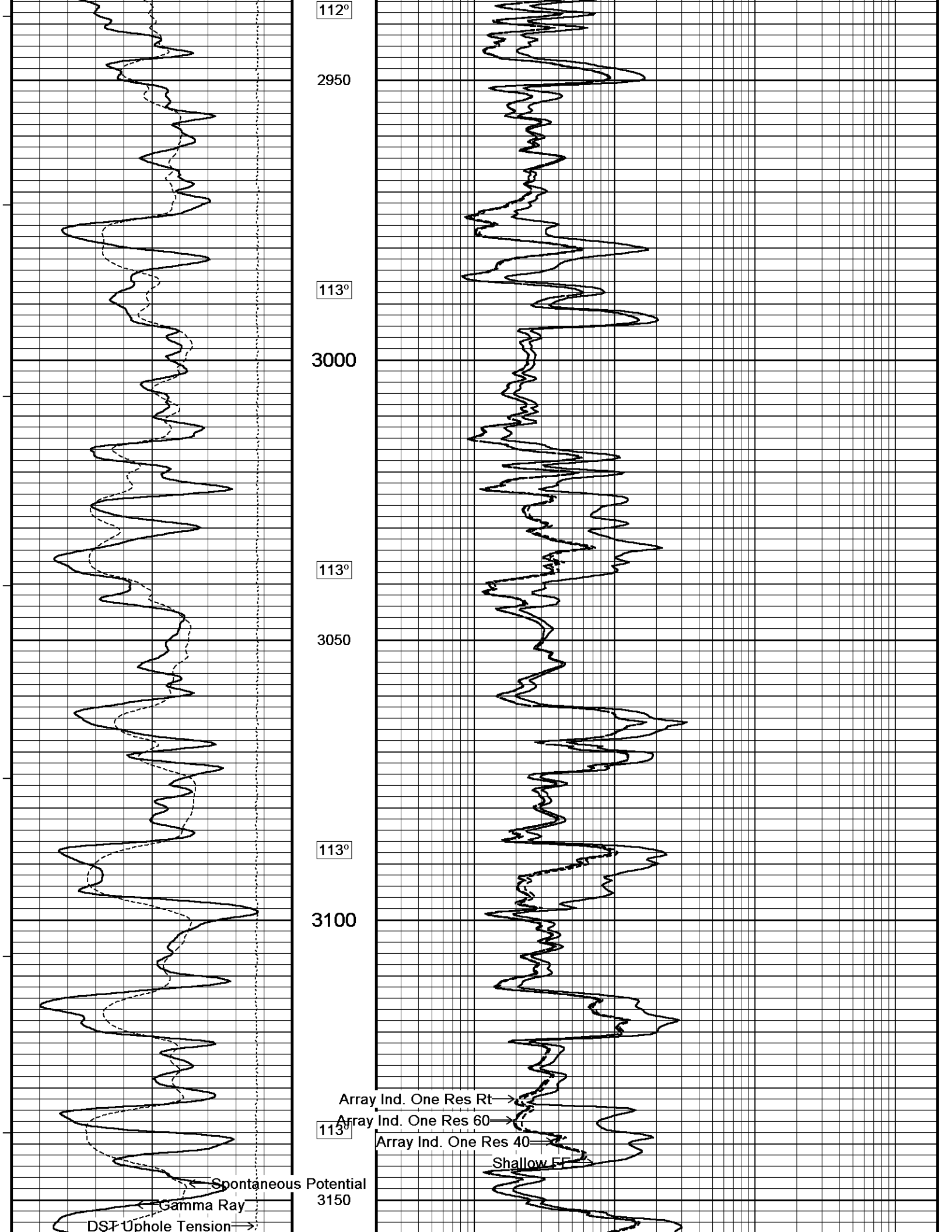

105°
1850
105°
1900
105°
1950
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
106°
2000
106°
2050

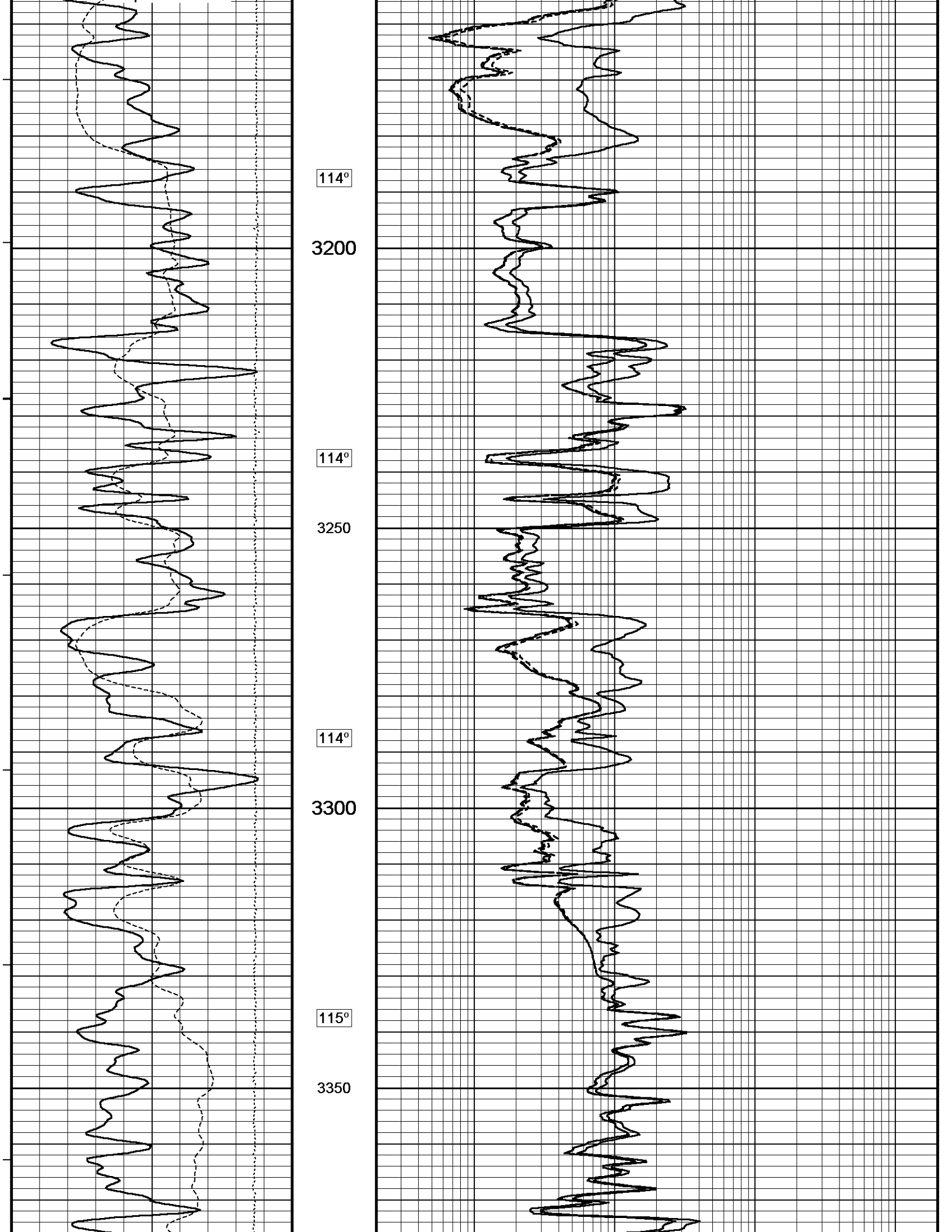

106°
2100
107°
2150
107°
2200
108°
2250

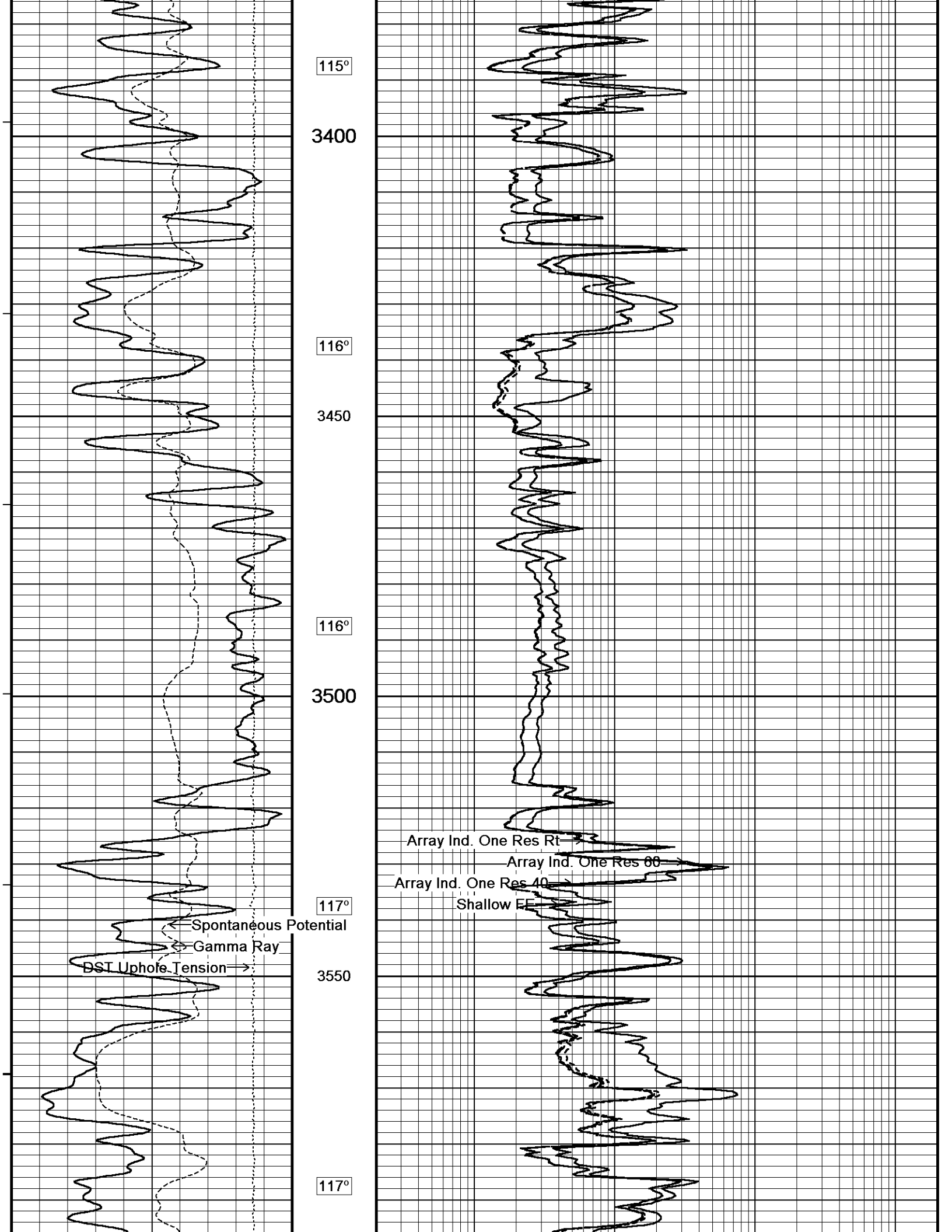

108°
2300
109°
Array Ind. One Res Rt
Array Ind. One Res 60
2350
Array Ind. One Res 40
Shallow
Spontaneous Potential
Gamma Ray
DST Uphole Tension
109°
2400
109°
2450
110°

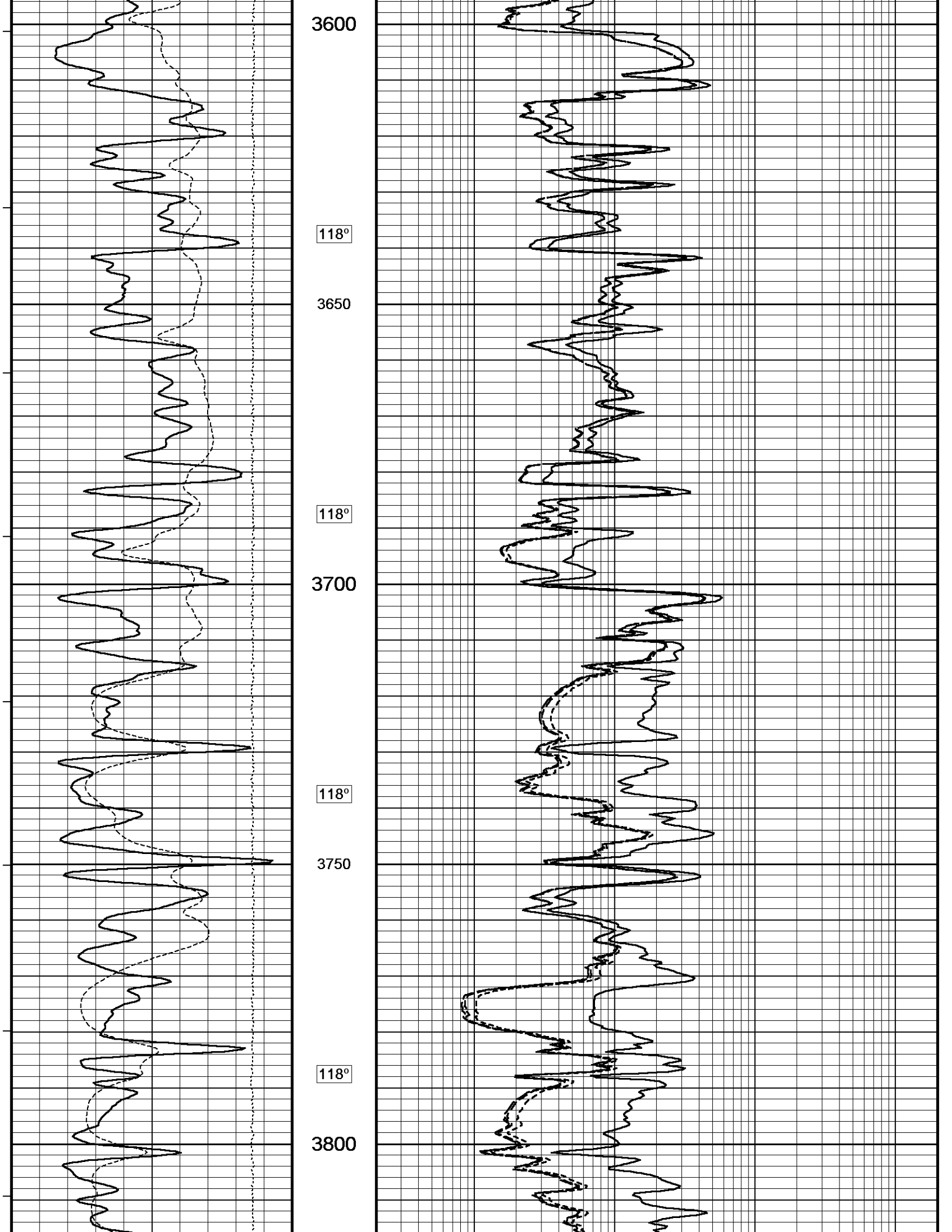

2500
110°
2550
110°
2600
110°
2650
110°
2700

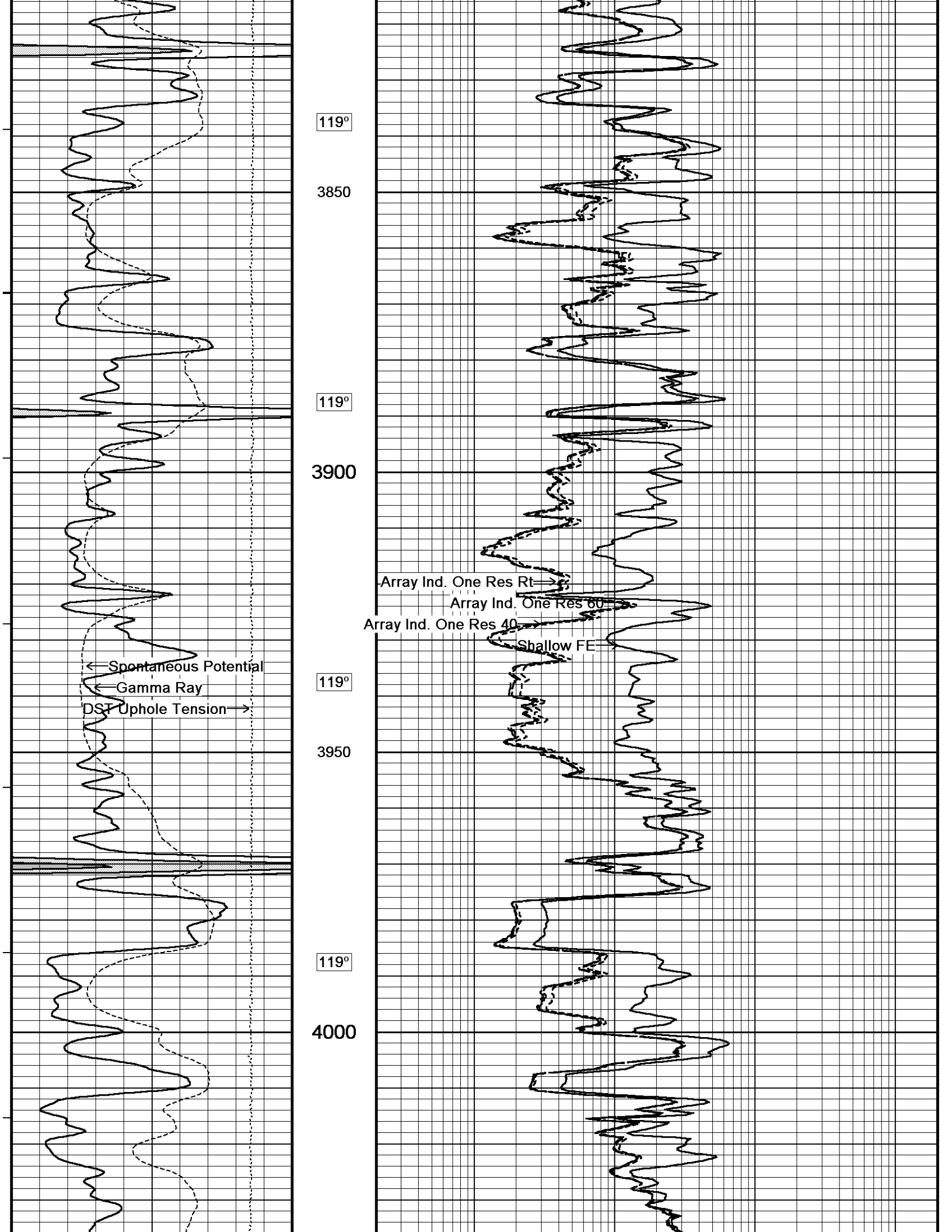

111°
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
2750
Spontaneous Potential
Gamma Ray
DST Uphole Tension
111°
2800
111°
2850
112°
2900

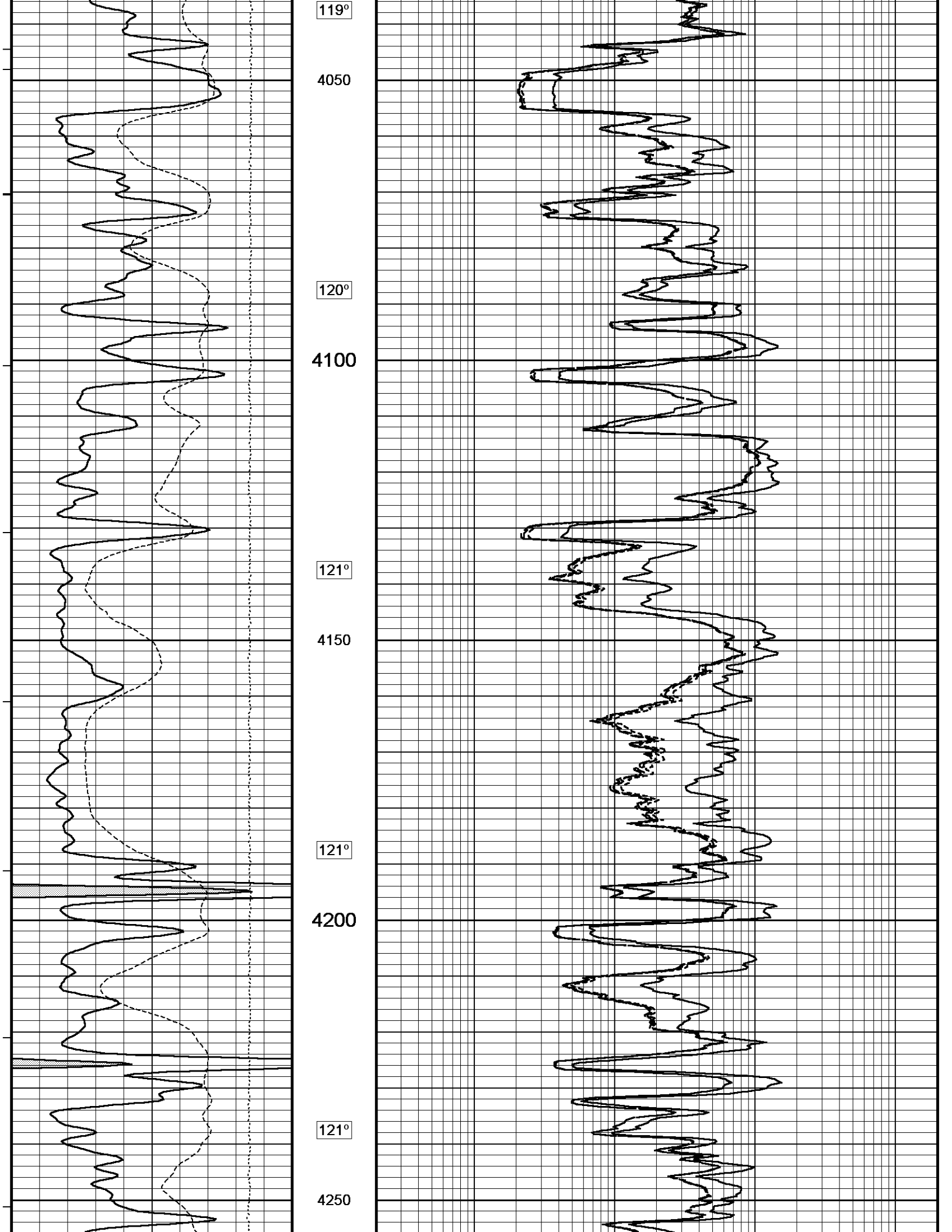

112°
2950
113°
3000
113°
3050
113°
3100
113°
3150
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FF
Spontaneous Potential
Gamma Ray
DST Uphole Tension

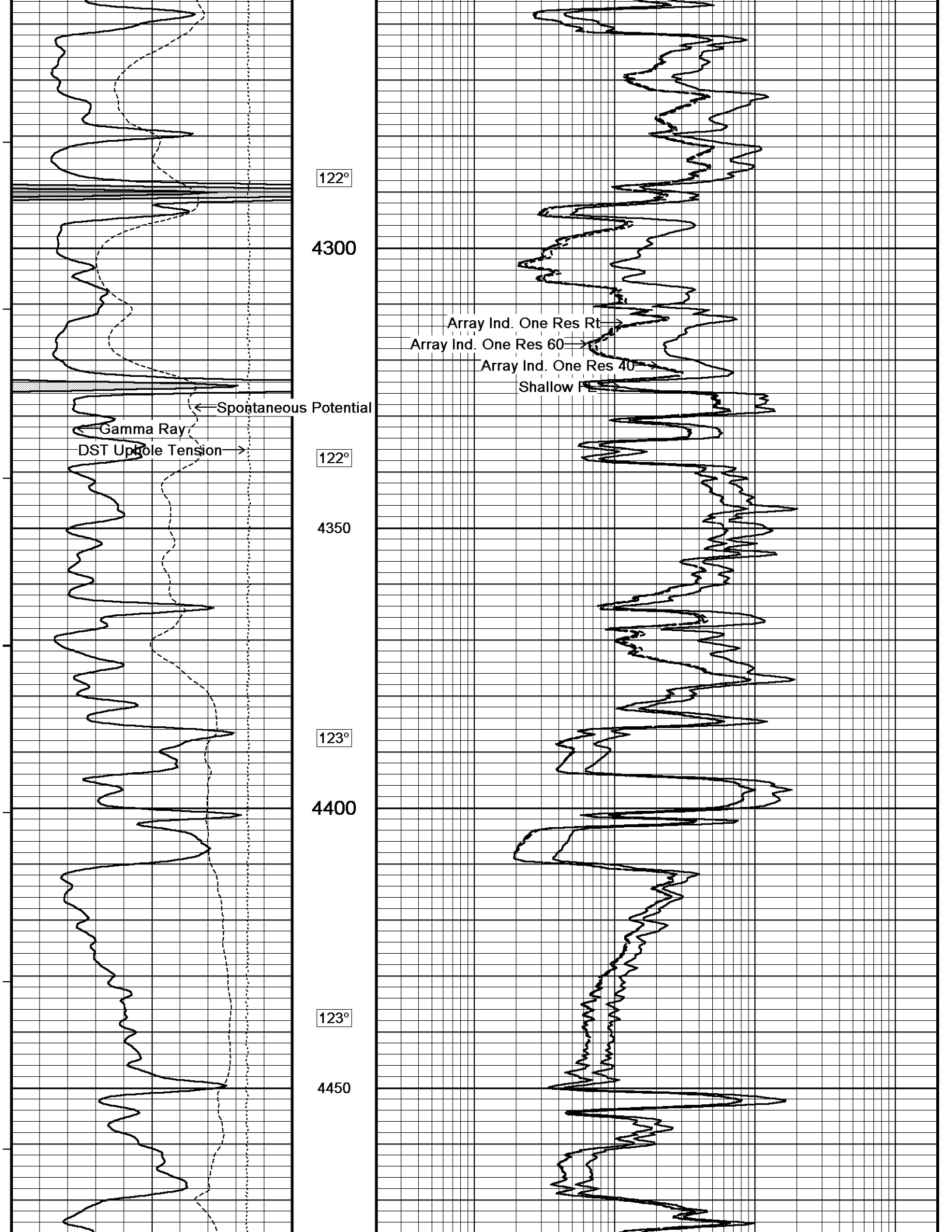

114°
3200
114°
3250
114°
3300
115°
3350

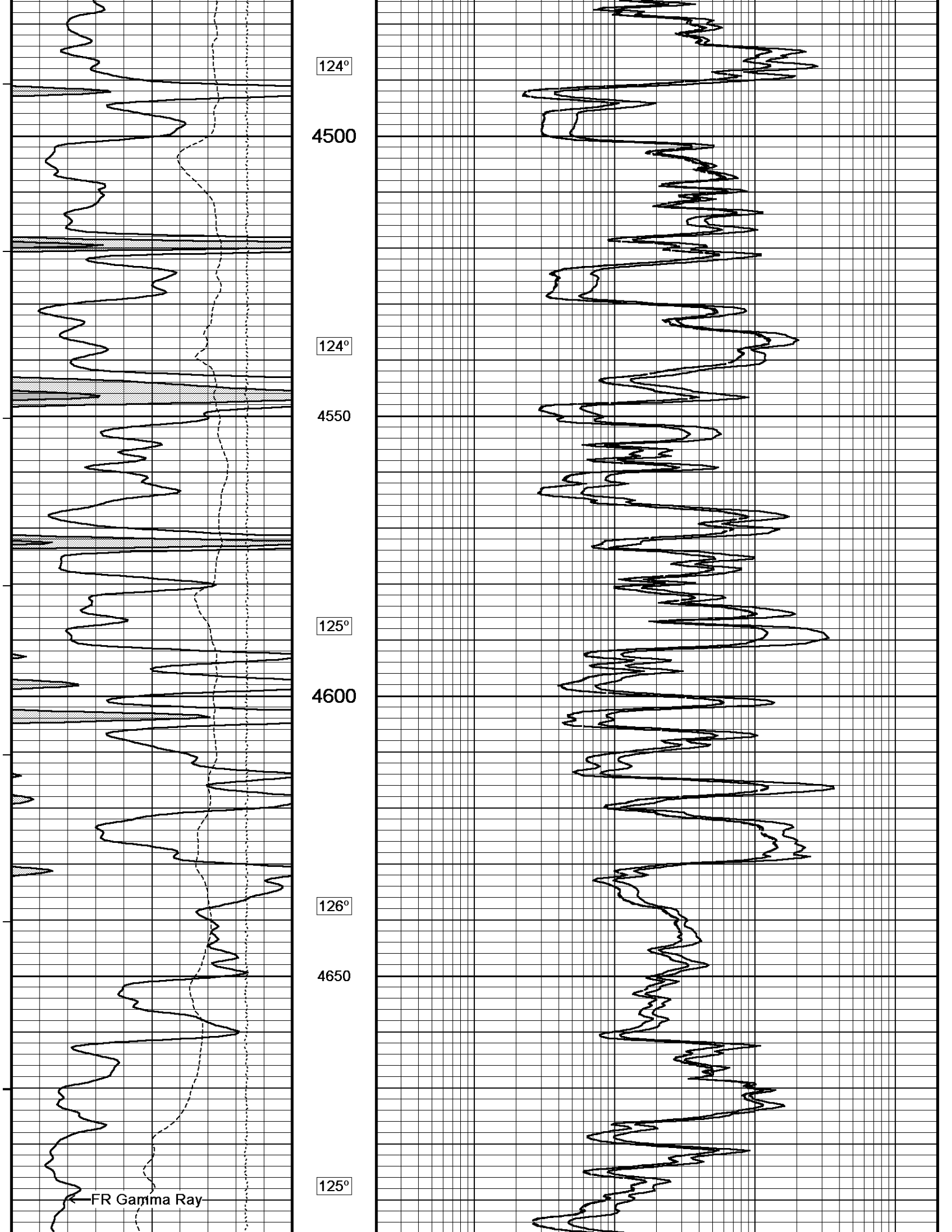

115°
3400
116°
3450
116°
3500
117°
3550
117°
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE

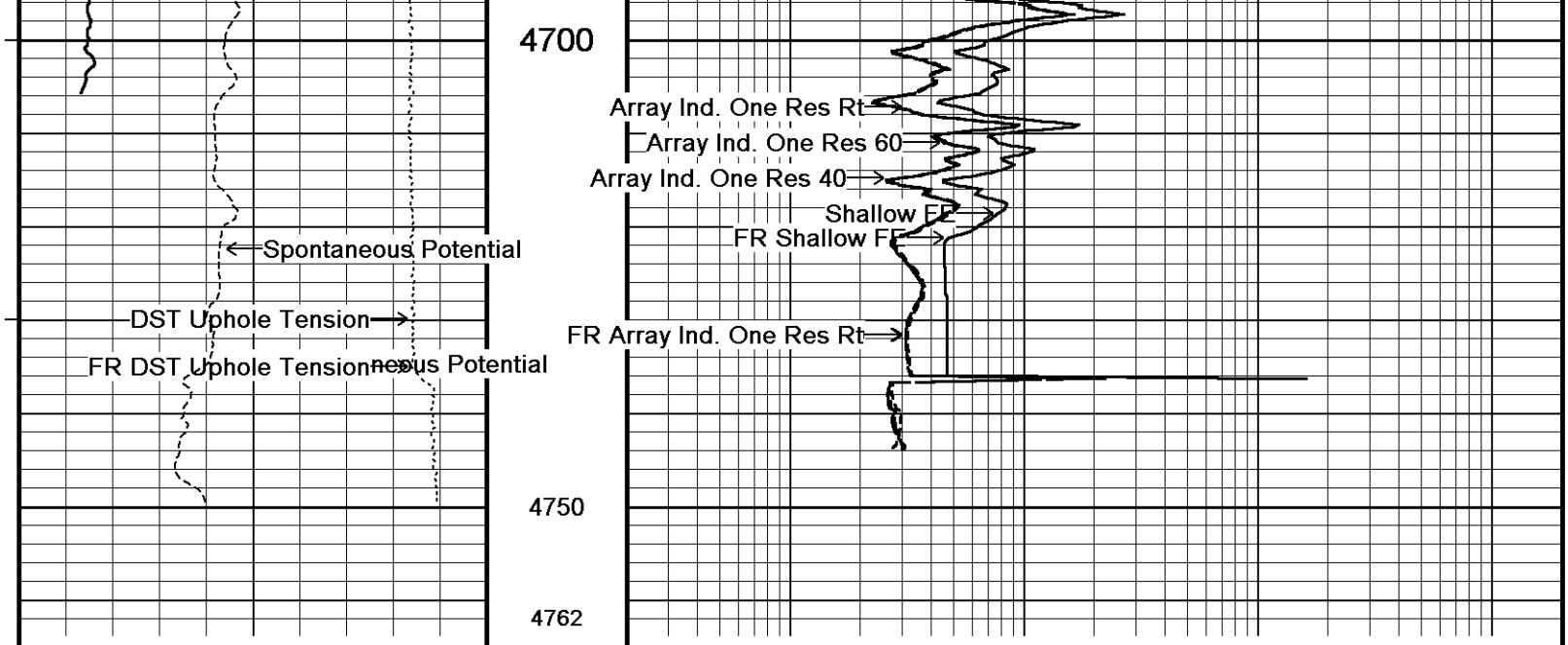

3600
118°
3650
118°
3700
118°
3750
118°
3800


119°
3850
119°
3900
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
119°
3950
119°
4000


119°
4050
120°
4100
121°
4150
121°
4200
121°
4250


122°
4300
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow R
Spontaneous Potential
Gamma Ray
DST Uphole Tension
122°
4350
123°
4400
123°
4450


124°
4500
124°
4550
125°
4600
126°
4650
125°
FR Gamma Ray



4762

Depth in Feet

Timing Marks
every 60.0 sec

Gamma Ray
API
0 75 150

Spontaneous Potential
millivolts
− 20 +

DST Uphole Tension
pounds
5000 0

Borehole Temp in deg F

Replay Scale 1:240

Shallow FE
ohm metres
0.20 1 10 100 2000

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

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

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

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 16-DEC-2011 07:43
Filename: C:\Minimus 11.02.3186\Data\McCoy M-M Diel Unit ...\McCoy M-M Diel Unit A # 1-8 Splice.dta
Recorded on 16-DEC-2011 04:15
System Versions: Plotted with 12.03.5032

5 INCH MAIN PASS

5 INCH REPEAT PASS

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 16-DEC-2011 07:43
Filename: C:\Minimus 11.02.3186\Data\McCoy M-M Diel Unit A ...\McCoy M-M Diel Unit A # 1-8_002.dta
Recorded on 16-DEC-2011 03:50
System Versions: Logged with 12.03.5032 Processed with 12.03.5032 Plotted with 12.03.5032

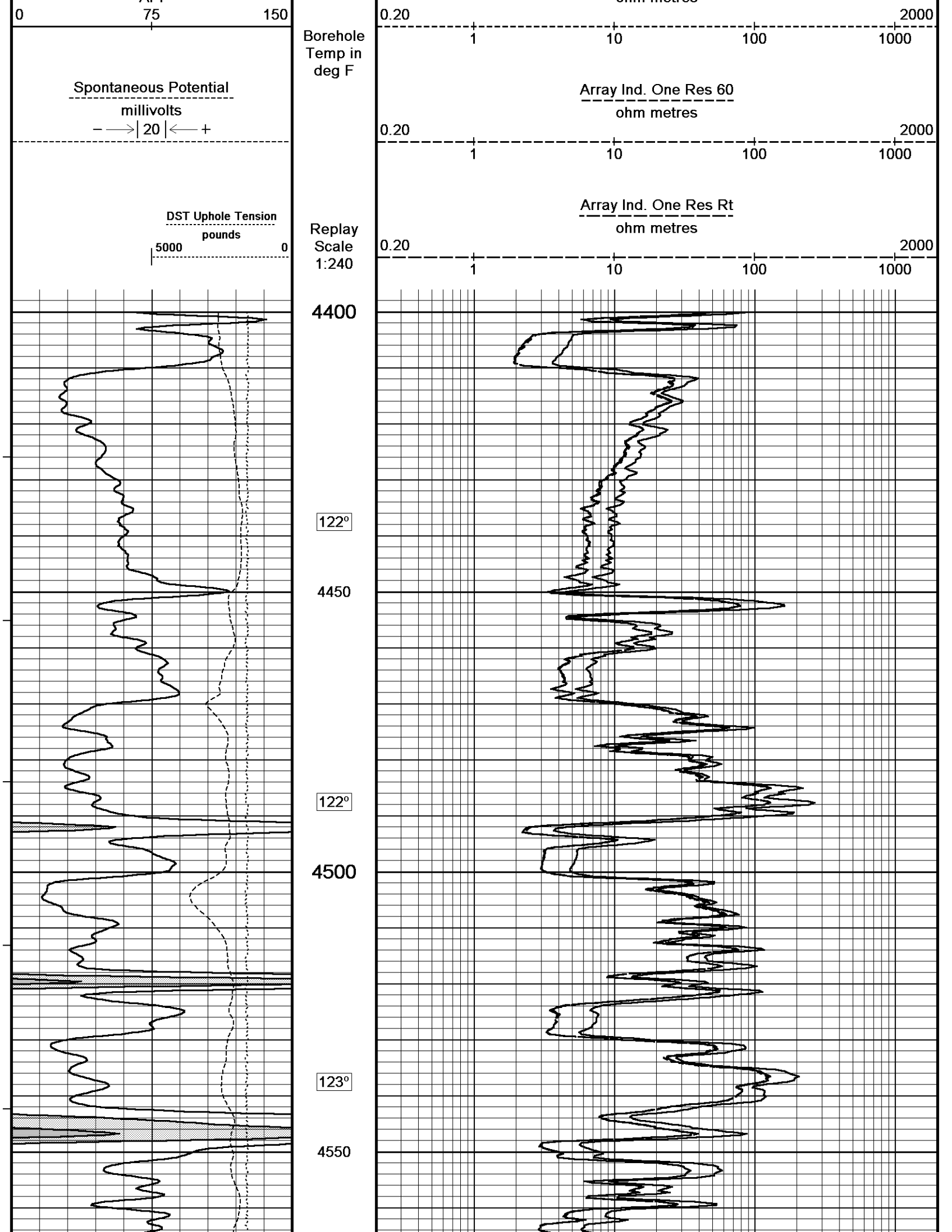
Depth in Feet

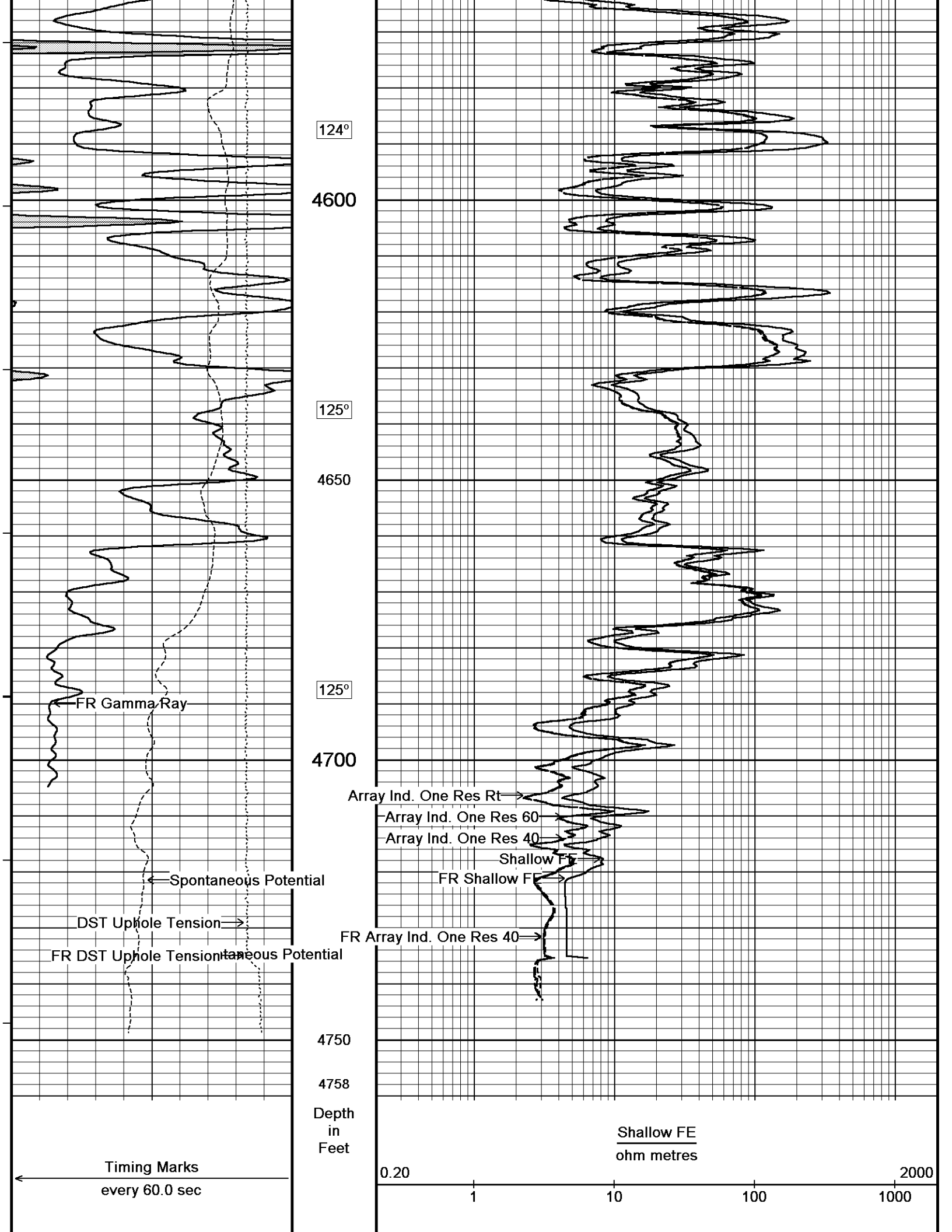
Timing Marks
every 60.0 sec

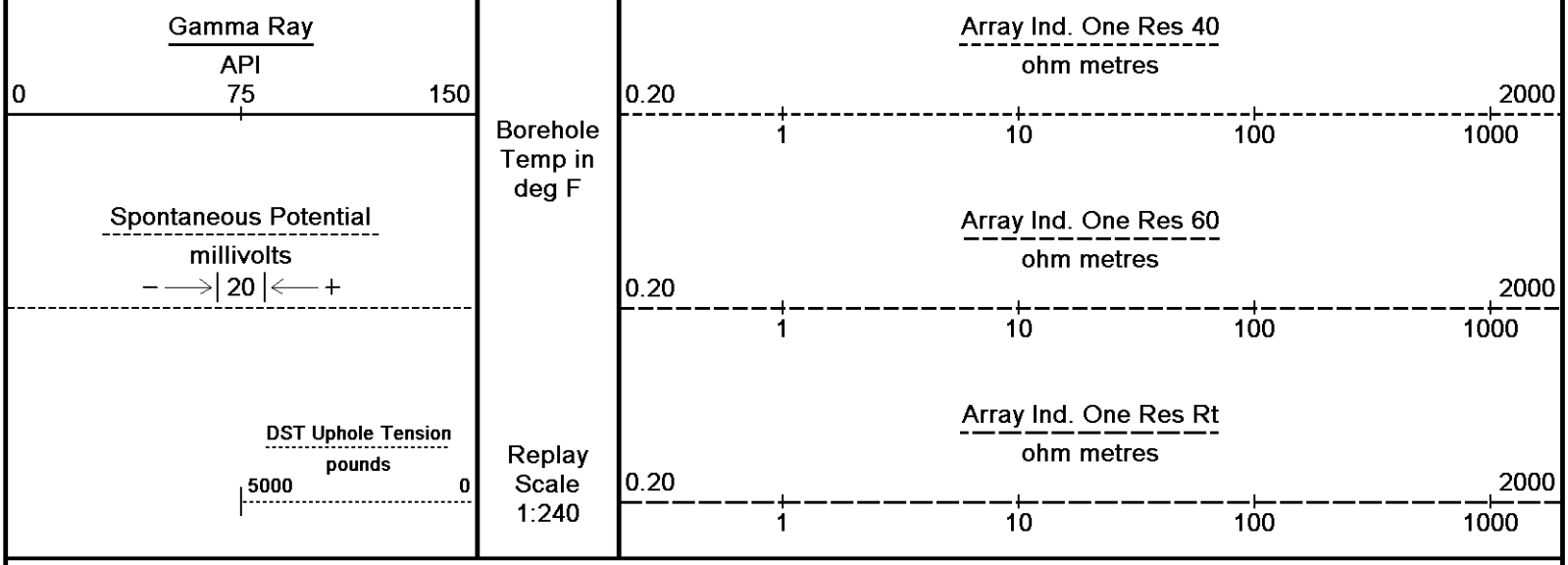
Gamma Ray
API

Shallow FE
ohm metres
0.20 1 10 100 2000

Array Ind. One Res 40
ohm metres


0
75
150
Borehole Temp in deg F
Spontaneous Potential
millivolts
– 20 +
0.20
2000
1
10
100
1000
Array Ind. One Res 60
ohm metres
Array Ind. One Res Rt
ohm metres
DST Uphole Tension
pounds
5000
0
Replay Scale 1:240
4400
122°
4450
122°
4500
123°
4550


124°
4600
125°
4650
125°
FR Gamma Ray
4700
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
FR Shallow FE
Spontaneous Potential
DST Uphole Tension
FR Array Ind. One Res 40
FR DST Uphole Tension
taneous Potential
4750
4758
Depth
in
Feet
Timing Marks
every 60.0 sec
Shallow FE
ohm metres
0.20
2000
1
10
100
1000



Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 16-DEC-2011 07:43

Filename: C:\Minimus 11.02.3186\Data\McCoy M-M Diel Unit A ...\McCoy M-M Diel Unit A # 1-8_002.dta — Recorded on 16-DEC-2011 03:50

System Versions: Logged with 12.03.5032 Processed with 12.03.5032 Plotted with 12.03.5032

5 INCH REPEAT PASS

BEFORE SURVEY CALIBRATION

C:\Minimus 11.02.3186\Data\McCoy M-M Diel Unit A # 1-8\McCoy M-M Diel Unit A # 1-8 Splice.dta

General Constants All 000

Last Edited on 16-DEC-2011,02:42

General Parameters		
Mud Resistivity	1.450	ohm-metres
Mud Resistivity Temperature	67.000	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		
Porosity used	Base Density Porosity	
Resistivity used	Array Ind. Six Res Rt	
RWA Constant A	0.610	
RWA Constant M	2.150	

Down-hole Tension Calibration SMS 0

Field Calibration on 23-OCT-2011 03:19

Reading No	Measured	Calibrated (lbs)
1	12734.06	0.00
2	13523.27	454.00

Gamma Calibration MCG-C 84

Field Calibration on 14-DEC-2011 10:22

	Measured	Calibrated (API)
Background	70	46
Calibrator (Gross)	756	502
Calibrator (Net)	686	456

Gamma Constants MCG-C 84

Last Edited on 16-DEC-2011,02:54

Gamma Calibrator Number	grc141	
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 84

SP Calibration MCG-C 84

Field Calibration on 28-DEC-2010 11:28

	Measured	Calibrated (mV)
Reference 1	100.3	100.0
Reference 2	-99.7	-100.0

High Resolution Temperature Calibration MCG-C 84

Field Calibration on 24-JUN-2010,13:02

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

High Resolution Temperature Constants MCG-C 84

Last Edited on

Pre-filter Length	11

Micro Normal and Micro Inverse Calibration MML-A 9

Base Calibration on 21-NOV-2011 11:00
Field Check on 28-NOV-2011 19:50

Base Calibration

	Measured		Calibrated (ohm-m)	
Channel	Resistor 1	Resistor 2	Resistor 1	Resistor 2
Micro Normal	12.1	59.5	2.6	12.8
Micro Inverse	15.6	77.7	1.7	8.4

Channel	Base Check (ohm-m)	Field Check (ohm-m)
Micro Normal	32.5	32.5
Micro Inverse	16.4	16.4

Micro Normal and Micro Inverse Constants MML-A 9

Last Edited on 29-NOV-2011,00:10

Pad Type	8-12 in Soft Rubber Inflatable 006-9011-159	
Micro Normal K Factor	0.5110	
Micro Inverse K Factor	0.3380	
Standoff Offset	N/A	inches

Caliper Calibration MML-A 9

Base Calibration on 21-NOV-2011 11:11
Field Calibration on 28-NOV-2011 19:54

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	15045	5.98
2	18517	7.97
3	21877	9.86
4	25857	11.92
5	0	0.00
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
7.96	7.97

Neutron Calibration MDN-A.B 39

Base Calibration on 22-NOV-2011 10:41
Field Check on 14-DEC-2011 10:28

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
	2737	86	3714	110
Ratio	31.919		33.764	

Field Calibrator at Base	Calibrated (cps)	
	2423	3477
Ratio	0.697	

Field Check	Calibrated (cps)	
	2406	3408
Ratio	0.706	

Neutron Constants MDN-A.B 39

Last Edited on 16-DEC-2011,02:55

Neutron Source Id	N1095	
Neutron Jig Number	NECD117	
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	Constant Value	
Formation Fluid Salinity	0.00	kppm
Barite Mud Correction	Not Applied	

FE Calibration MFE-A.A 67

Base Calibration on 21-NOV-2011 10:35
Field Check on 14-DEC-2011 10:40

Base Calibration

	Measured	Calibrated (ohm-m)
Reference 1	0.0	0.0
Reference 2	959.4	126.8
Base Check		281.1
Field Check		281.0

FE Constants MFE-A.A 67

Last Edited on 16-DEC-2011,02:55

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 188

Base Calibration on 14-JUN-2006 13:48
Field Check on 14-DEC-2011 10:42

Base Calibration

Test Loop Calibration

Channel	Measured Low	Measured High	Calibrated (mmho/m) Low	Calibrated (mmho/m) High
1	16.5	472.3	9.3	966.2
2	6.0	378.3	7.6	821.4
3	3.5	260.7	5.2	566.0
4	1.1	135.1	2.6	279.2

Array Temperature 82.2 Deg F

Channel	Base Check (mmho/m) Low	Base Check (mmho/m) High	Field Check (mmho/m) Low	Field Check (mmho/m) High
1	0.0	0.0	13.9	3846.8
2	0.0	0.0	30.5	3568.4
3	0.0	0.0	28.2	3039.7
4	0.0	0.0	20.8	2038.0
Deep	0.0	0.0	17.9	1922.9
Medium	0.0	0.0	39.9	4053.9
Shallow	0.0	0.0	44.8	5360.2
Array Temperature	0.0		65.6	Deg F

Induction Constants MAI-A.A 188

Last Edited on 16-DEC-2011,02:59

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 188

Field Calibration on 14-JUN-2006,13:48

	Measured	Calibrated(Deg F)
Lower	1.00	33.80
Upper	11.00	51.80

High Resolution Temperature Constants MAI-A.A 188

Last Edited on

Pre-filter Length	11

Caliper Calibration MPD-B 65

Base Calibration on 21-NOV-2011 14:58
Field Calibration on 14-DEC-2011 10:36

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	13999	3.99
2	22481	5.98
3	30982	7.97
4	39297	9.86
5	48432	11.92
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
6.04	5.98

Photo Density Calibration MPD-B 65

Base Calibration on 21-NOV-2011 14:42
Field Check on 14-DEC-2011 10:33

Density Calibration

Base Calibration

	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	60841	28249	59556	30836
Reference 2	24364	2437	24941	2541

Field Check at Base

1234.7	1185.8

Field Check

1233.5	1181.3

PE Calibration

Base Calibration

	Measured			Calibrated
	WS	WH	Ratio	Ratio
Background	223	1098		
Reference 1	22974	60634	0.382	0.371
Reference 2	6577	24217	0.275	0.272

Field Check at Base		
	223.4	1098.4
Field Check		
	223.3	1095.5

Density Constants MPD-B 65

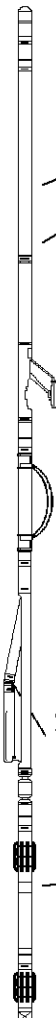
Last Edited on 16-DEC-2011,02:55

Density Source Id	P57072B	
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	1.11	
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
0.00	

DOWNHOLE EQUIPMENT

C:\Minimus 11.02.3186\Data\McCoy M-M Diel Unit A # 1-8\McCoy M-M Diel Unit A # 1-8 Splice.dta



MCB-A.A 11B Tension Cablehead
MCB-A.A 161 LG: 2.40 ft WT: 19.8 lb OD: 2.24 in

Compact Comms Gamma
MCG-C 84 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in
- 45.04 ft GRGC - Gamma Ray
- 42.13 ft CGXT - MCG External Temperature

Compact Micro-log
MML-A 9 LG: 7.97 ft WT: 81.6 lb OD: 2.24 in
- 35.41 ft MINV - Micro-inverse
- 35.41 ft MNRL - Micro-normal
- 36.40 ft MLTC - MML Caliper

Compact Neutron
MDN-A.B 39 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in
- 30.61 ft NPRL - Limestone Neutron Por.

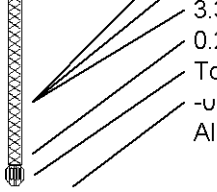
Compact Density/Caliper
MPD-B 65 LG: 9.59 ft WT: 90.4 lb OD: 2.45 in
- 23.37 ft CLDC - Density Caliper
- 21.44 ft DPRL - Limestone Density Por.
- 21.44 ft DCOR - Density Correction
- 21.38 ft PDPE - PE

SKJ-D.A Compact Knuckle Joint
SKJ-D.A 91 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

Compact Focussed Electric
MFE-A.A 67 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in
- 13.72 ft FEFE - Shallow FE

Compact Induction
MAI-A.A 188 LG: 10.81 ft WT: 48.5 lb OD: 2.24 in
- 3.34 ft R40O - Array Ind. One Res 40
- 3.34 ft RTAO - Array Ind. One Res Rt

Total	Length: 52.72 ft	Weight: 427.7 lb



3.34 ft	R60O - Array Ind. One Res 60
0.23 ft	SPCG - Spontaneous Potential
Tool Zero	(0.13ft from bottom)
-0.13 ft	SMTU - DST Uphole Tension

All measurements relative to tool zero.

COMPANY	MCCOY PETROLEUM CORPORATION
WELL	M-M DIEL UNIT "A" # 1-8
FIELD	WILDCAT
PROVINCE/COUNTY	LANE
COUNTRY/STATE	U.S.A. / KANSAS

Elevation Kelly Bushing	2743.00	feet	First Reading	4732.00	feet
Elevation Drill Floor	2741.00	feet	Depth Driller	4730.00	feet
Elevation Ground Level	2733.00	feet	Depth Logger	4735.00	feet

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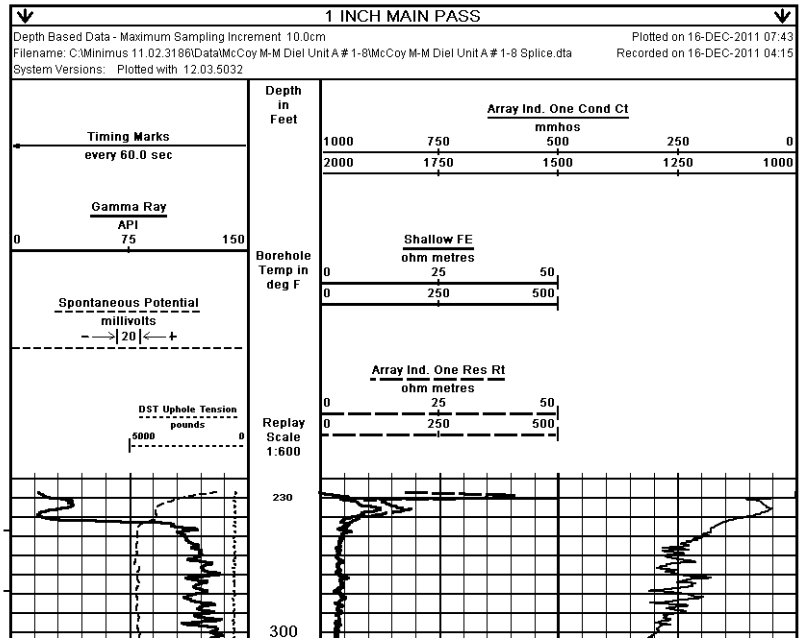
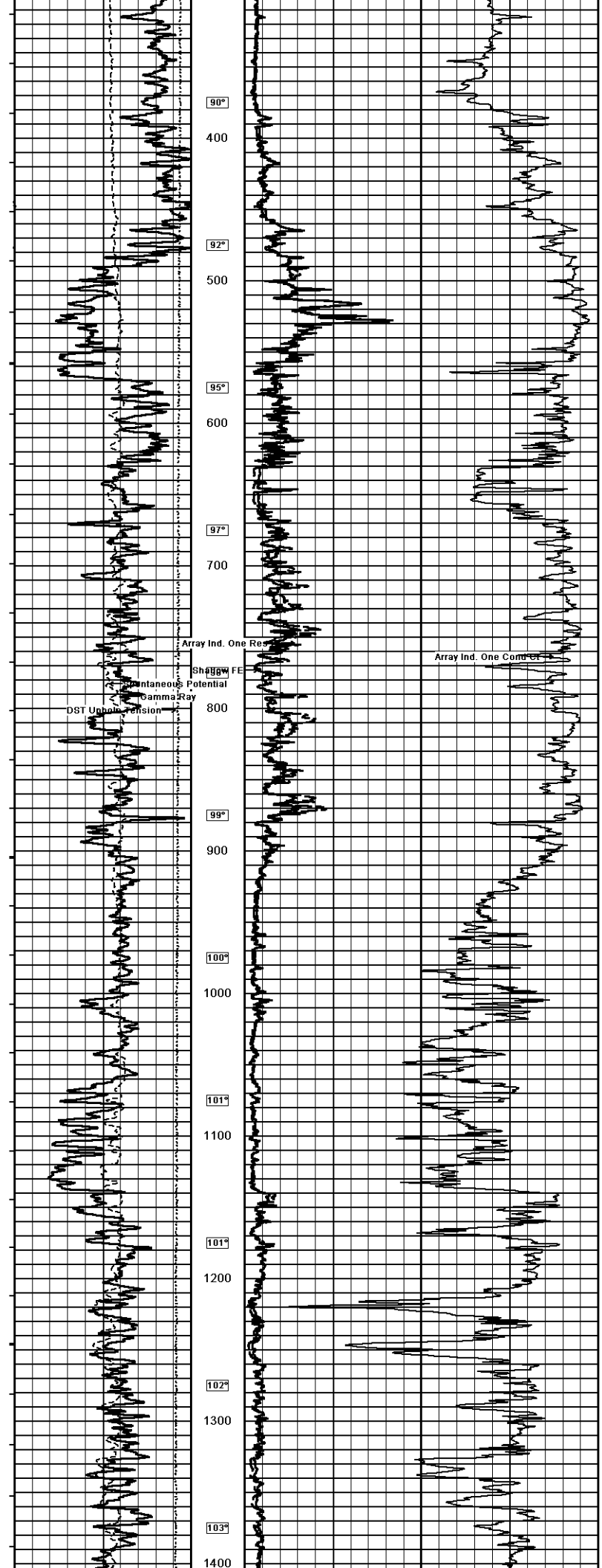
ELECTRIC LOG

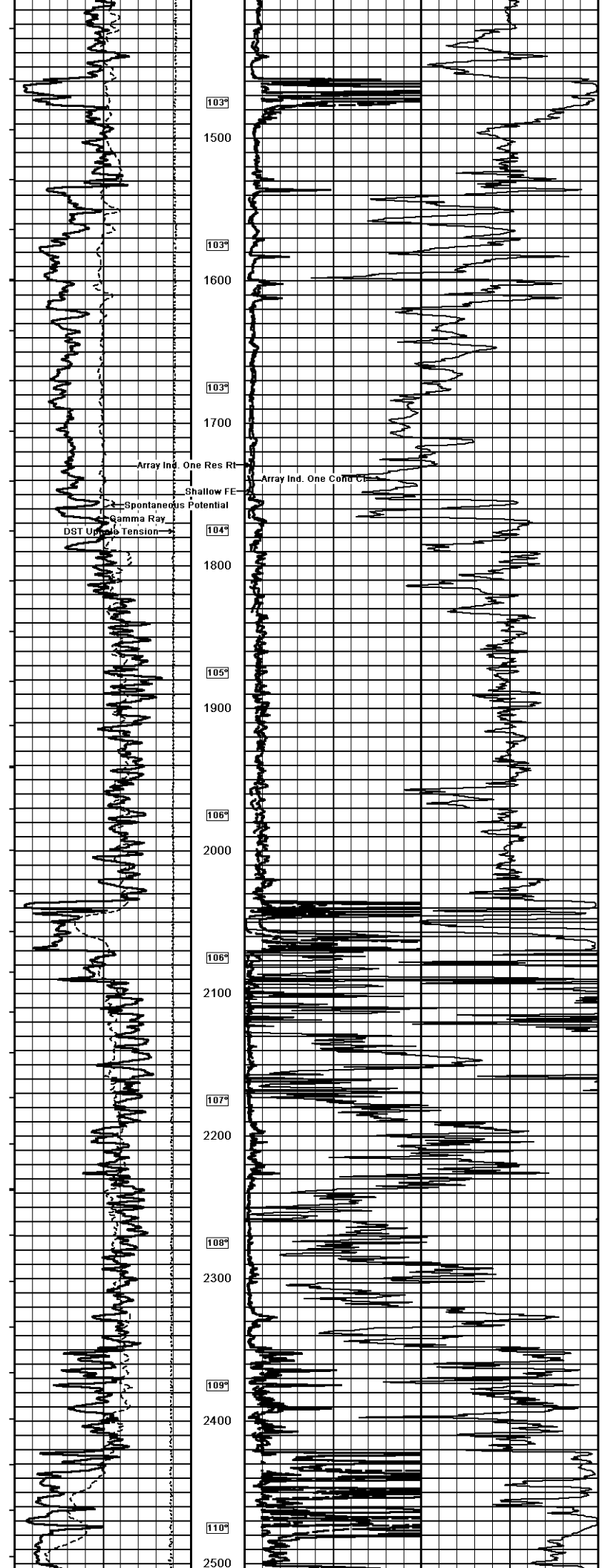
40 Years of Wireline 1970 2010

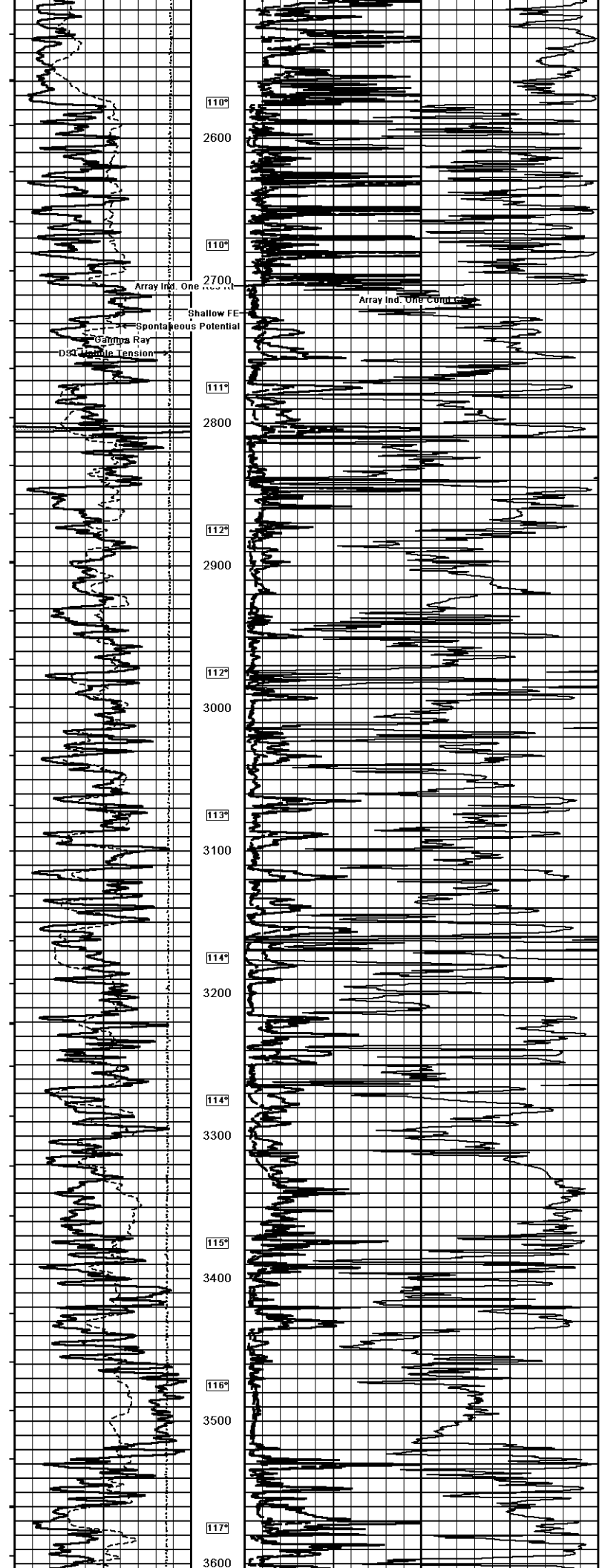
COMPANY	MCCOY PETROLEUM CORPORATION
WELL	M-M DIEL UNIT "A" # 1-8
FIELD	WILDCAT
PROVINCE/COUNTY	LANE
COUNTRY/STATE	U.S.A. / KANSAS
LOCATION	2310' FSL & 2310' FEL
	NW NW SE
SEC	8
TWP	20S
RGE	27W
API Number	15-101-22334
Permanent Datum G.L. Elevation 2733 feet	
Log Measured From KB	10 FEET
Drilling Measured From K.B.	@ 10 FEET
Other Services	MFD/MDN MML
Elevations: KB	2743.00 feet
DF	2741.00
GL	2733.00
Date	16-DEC-2011
Run Number	ONE
Depth Driller	4730.00 feet
Depth Logger	4735.00 feet
First Reading	4732.00 feet
Last Reading	227.00 feet
Casing Driller	228.00 feet
Casing Logger	227.00 feet
Bit Size	7.875 inches
Hole Fluid Type	CHEMICAL
Density/Viscosity	9.40 lbs/USg 54.00 CP
PH/Fluid Loss	10.50 7.60 ml/30Min
Sample Source	FLOWLINE
Rm @ Measured Temp	1.45 @ 67.0 ohm-m
Rmf @ Measured Temp	1.16 @ 67.0 ohm-m
Rmc @ Measured Temp	1.74 @ 67.0 ohm-m
Source Rmf/ Rmc	CALC CALC
Rm @ BHT	0.80 @ 125.0 ohm-m
Time Since Circulation	5 HOURS
Max Recorded Temp	126.00 deg F
Equipment Name	COMPACT
Equipment / Base	13096 LIB
Recorded By	A. GIAMBALVO
Witnessed By	JERRY SMITH
S.O. / JOB #	3534684
	LB11-319

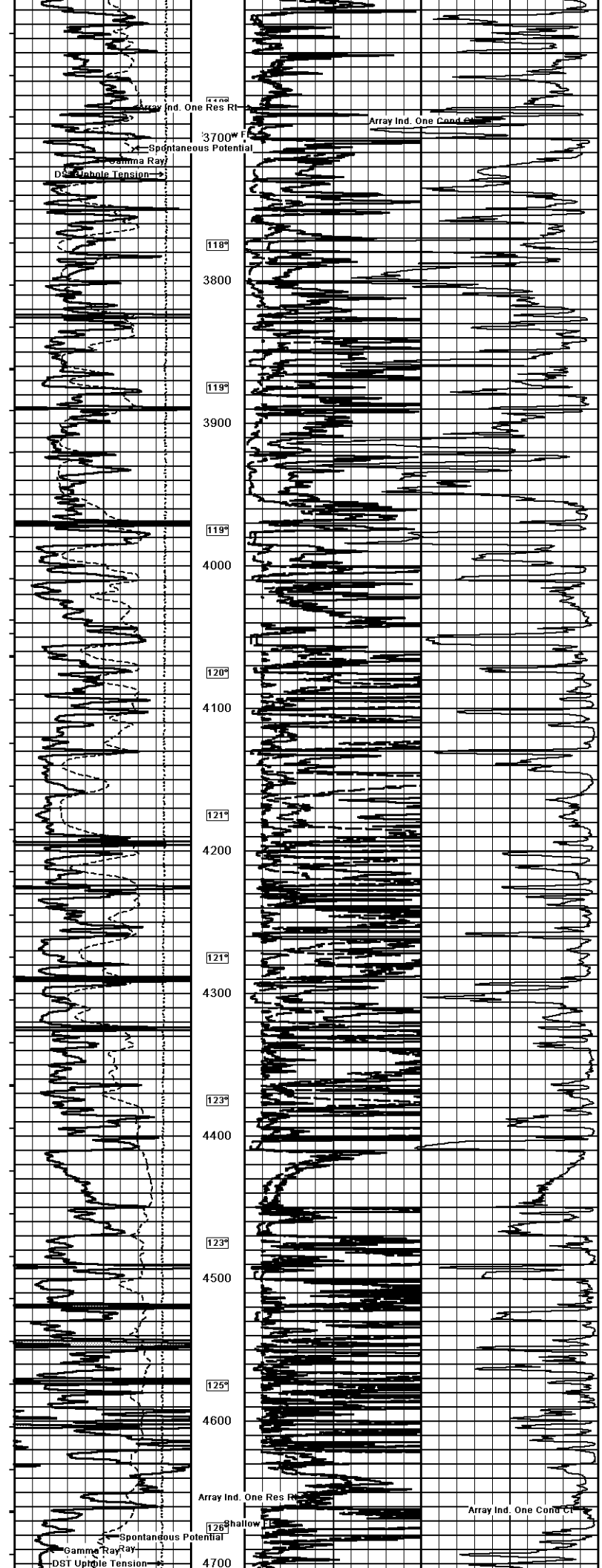
ARRAY INDUCTION
SHALLOW FOCUSED
ELECTRIC LOG

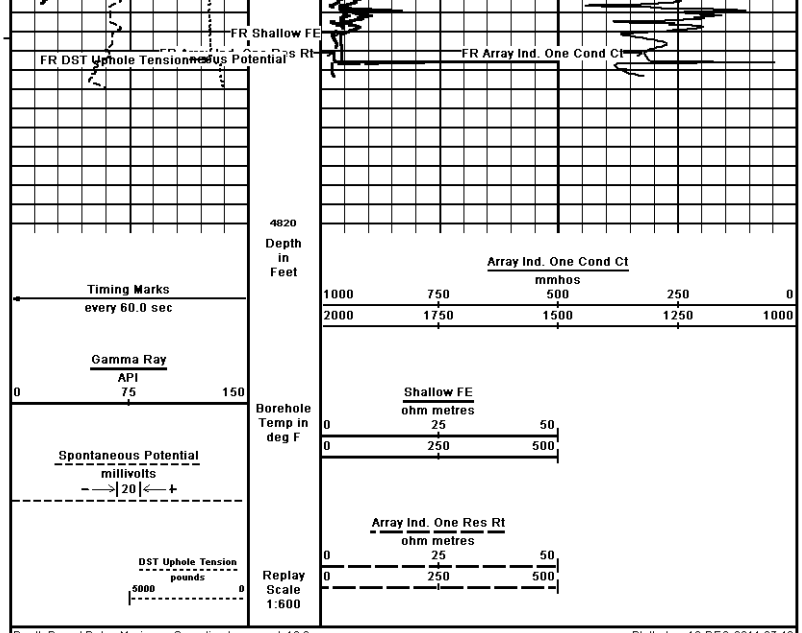



90°
400
92°
500
95°
600
97°
700
Array Ind. One Res
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
800
99°
900
100°
1000
101°
1100
101°
1200
102°
1300
103°
1400


103°
1500
103°
1600
103°
1700
Array Ind. One Res Rt
Array Ind. One Cond Ct
Shallow FE
Spontaneous Potential
Gamma Ray
DST Upper Tension
104°
1800
105°
1900
106°
2000
106°
2100
107°
2200
108°
2300
109°
2400
110°
2500


110°
2600
110°
2700
Array Ind. One
Array Ind. One Conv Cond
Shallow FE
Spontaneous Potential
Gamma Ray
DSI Cable Tension
111°
2800
112°
2900
112°
3000
113°
3100
114°
3200
114°
3300
115°
3400
116°
3500
117°
3600


Array Ind. One Res Rt
Array Ind. One Cond Ct
3700' F
Spontaneous Potential
Gamma Ray
DST Uphole Tension
118"
3800
119"
3900
119"
4000
120"
4100
121"
4200
121"
4300
123"
4400
123"
4500
125"
4600
Array Ind. One Res Rt
Array Ind. One Cond Ct
Shallow
126"
Spontaneous Potential
Gamma Ray
DST Uphole Tension
4700



Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 16-DEC-2011 07:43

Filename: C:\Minimus 11.02.3186\Data\McCoy M-M Diel Unit A # 1-8\McCoy M-M Diel Unit A # 1-8 Splice.dta — Recorded on 16-DEC-2011 04:15

System Versions: Plotted with 12.03.5032

1 INCH MAIN PASS

COMPANY	MCCOY PETROLEUM CORPORATION
WELL	M-M DIEL UNIT "A" # 1-8
FIELD	WILDCAT
PROVINCE/COUNTY	LANE
COUNTRY/STATE	U.S.A. / KANSAS

Elevation Kelly Bushing	2743.00	feet	First Reading	4732.00	feet
Elevation Drill Floor	2741.00	feet	Depth Driller	4730.00	feet
Elevation Ground Level	2733.00	feet	Depth Logger	4735.00	feet

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