Weatherford®

ARRAY INDUCTION SHALLOW FOCUSED ELECTRIC LOG

COMPANY	COMANCHE RESOURCES COMPANY
WELL	SAVOLT # 30-1
FIELD	WILDCAT
PROVINCE/COUNTY	SCOTT
COUNTRY/STATE	U.S.A. / KANSAS
LOCATION	3200' FSL & 400' FEL
	NW SE SE NE

SEC	TWP	RGE	Other Services
30	19S	34W	MPD/MDN
			MSS
API Number 15-171-20876			MML
Permit Number			

Permanent Datum G.L., Elevation 3131 feet	Elevations:	feet
Log Measured From KB	KB	3141.00
Drilling Measured From K.B.	DF	3139.00
	GL	3131.00

Date	11-MAY-2012			
Run Number	ONE			
Depth Driller	5020.00	feet		
Depth Logger	5015.00	feet		
First Reading	5012.00	feet		
Last Reading	359.00	feet		
Casing Driller	367.00	feet		
Casing Logger	359.00	feet		
Bit Size	7.875	inches		
Hole Fluid Type	CHEMICAL			
Density / Viscosity	8.90 lb/USg	65.00 CP		
PH / Fluid Loss	12.00	4.40 ml/30Min		
Sample Source	FLOWLINE			
Rm @ Measured Temp	0.78 @ 70.0	ohm-m		
Rmf @ Measured Temp	0.62 @ 70.0	ohm-m		
Rmc @ Measured Temp	0.94 @ 70.0	ohm-m		
Source Rmf / Rmc	CALC	CALC		
Rm @ BHT	0.48 @118.0	ohm-m		
Time Since Circulation	5 HOURS			
Max Recorded Temp	118.00	deg F		
Equipment Name	COMPACT			
Equipment / Base	13096	LIB		
Recorded By	A. GIAMBALVO			
Witnessed By	JIM SPELLMAN		TROY FOWLER	
S.O. / JOB #	3534538		LB12-120	

BOREHOLE RECORD

Last Edited: 11-MAY-2012 03:45

Bit Size inches	Depth From feet	Depth To feet
7.875	359.00	5015.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	8.625	10.00	359.00	24.00

REMARKS

Tools Used: MPD, MCG, MDN, MFE, MAI, MSS, MML.
Hardware: MPD: 8 inch profile plate used. MAI, MFE, MSS: 0.5 Inch standoffs used. MDN: Dual Bowspring used.
2.71 G/CC Limestone density matrix used to calculate porosity.
Sonic porosity calculated using 47.5 usec/ft Limestone scale.
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 = 200 cu. ft.
Service order #3534538
Rig: Murfin Drilling Rig #2
Engineer: A. Giambalvo
Operator(s): N. Adame

2 INCH MAIN

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 11-MAY-2012 03:59
Filename: C:\Minimus 11_03_4044\Data\Com...\Comanche Resources Company Savolt # 30-1_004.dta
Recorded on 11-MAY-2012 00:53
System Versions: Logged with 11.03.4044 Plotted with 11.03.4044

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

Shoe
360

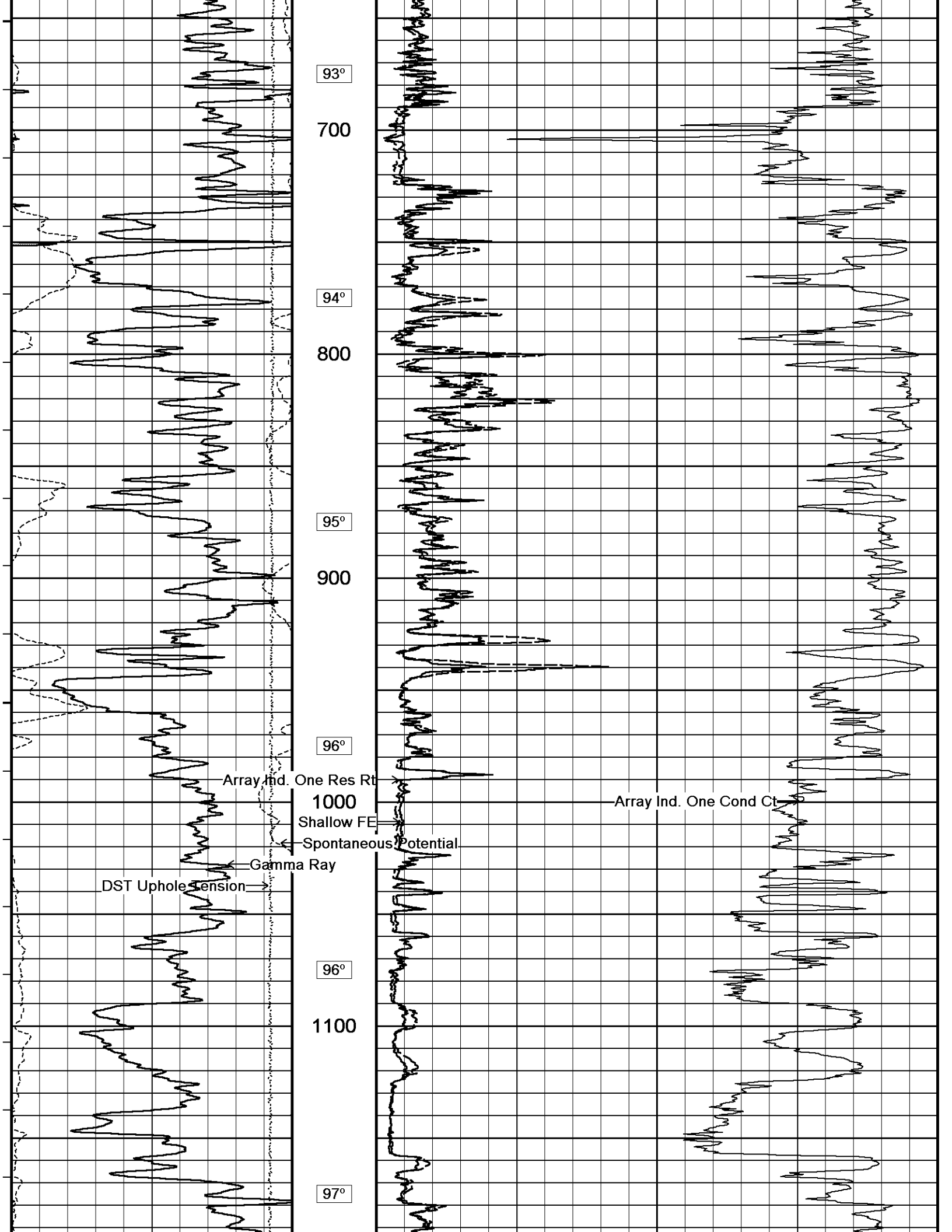
400

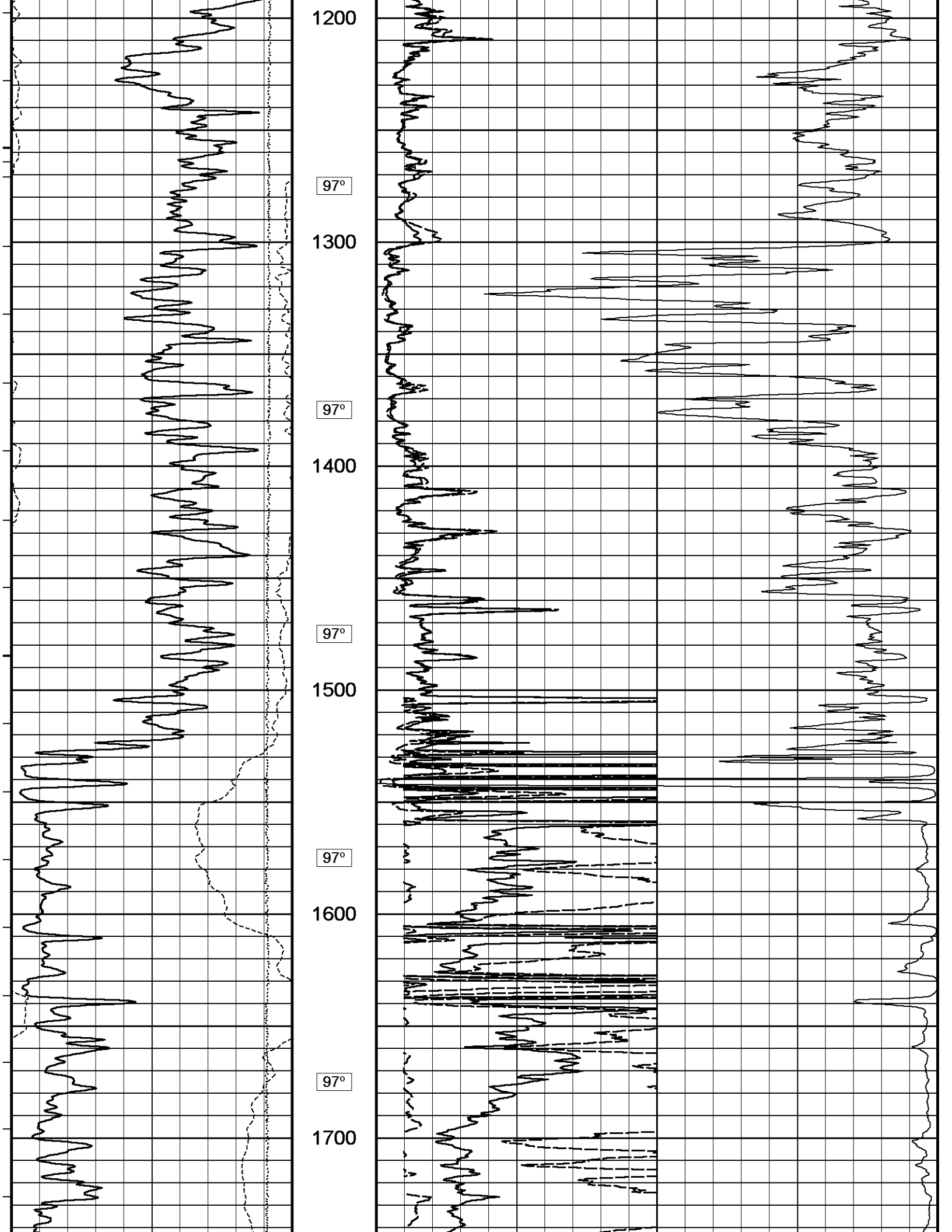
92°

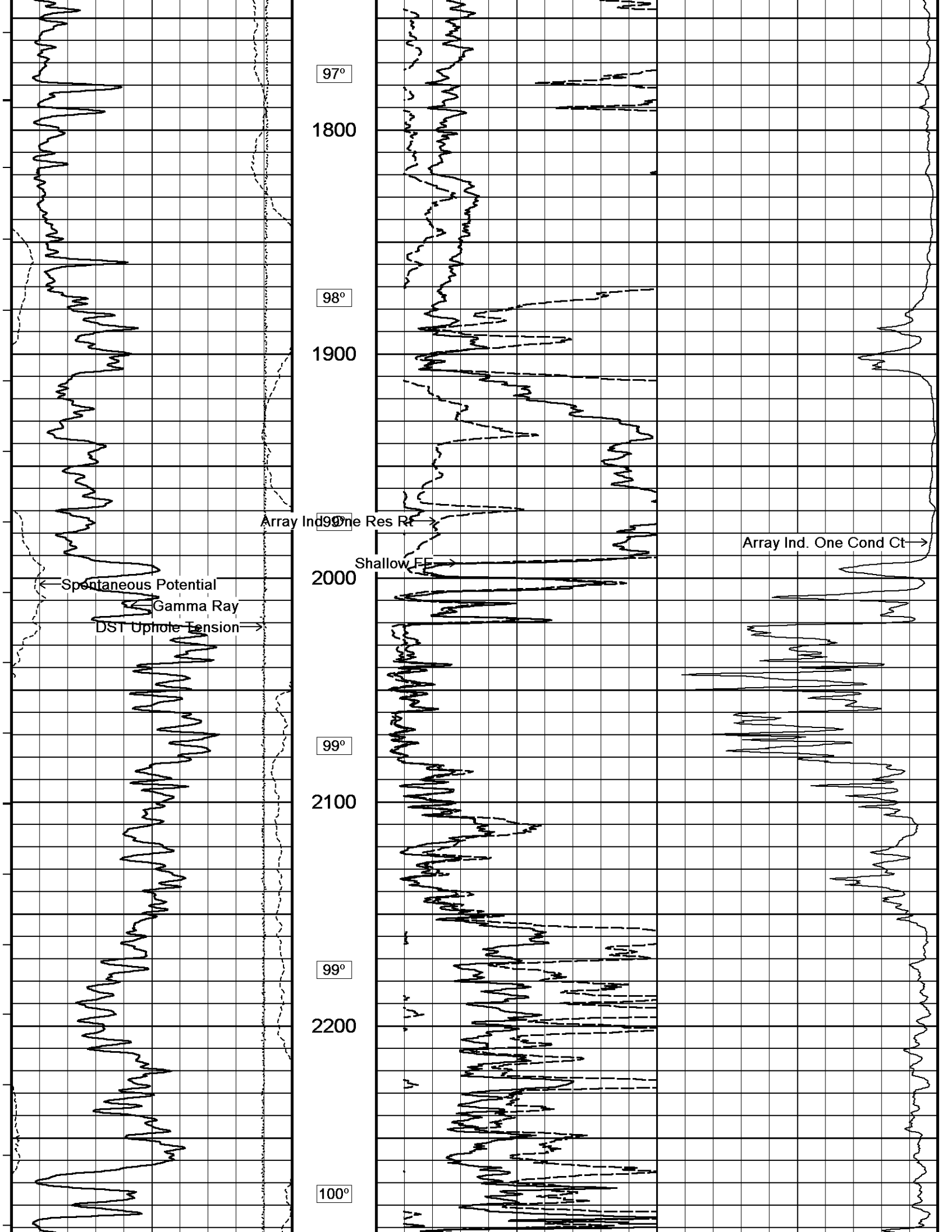
500

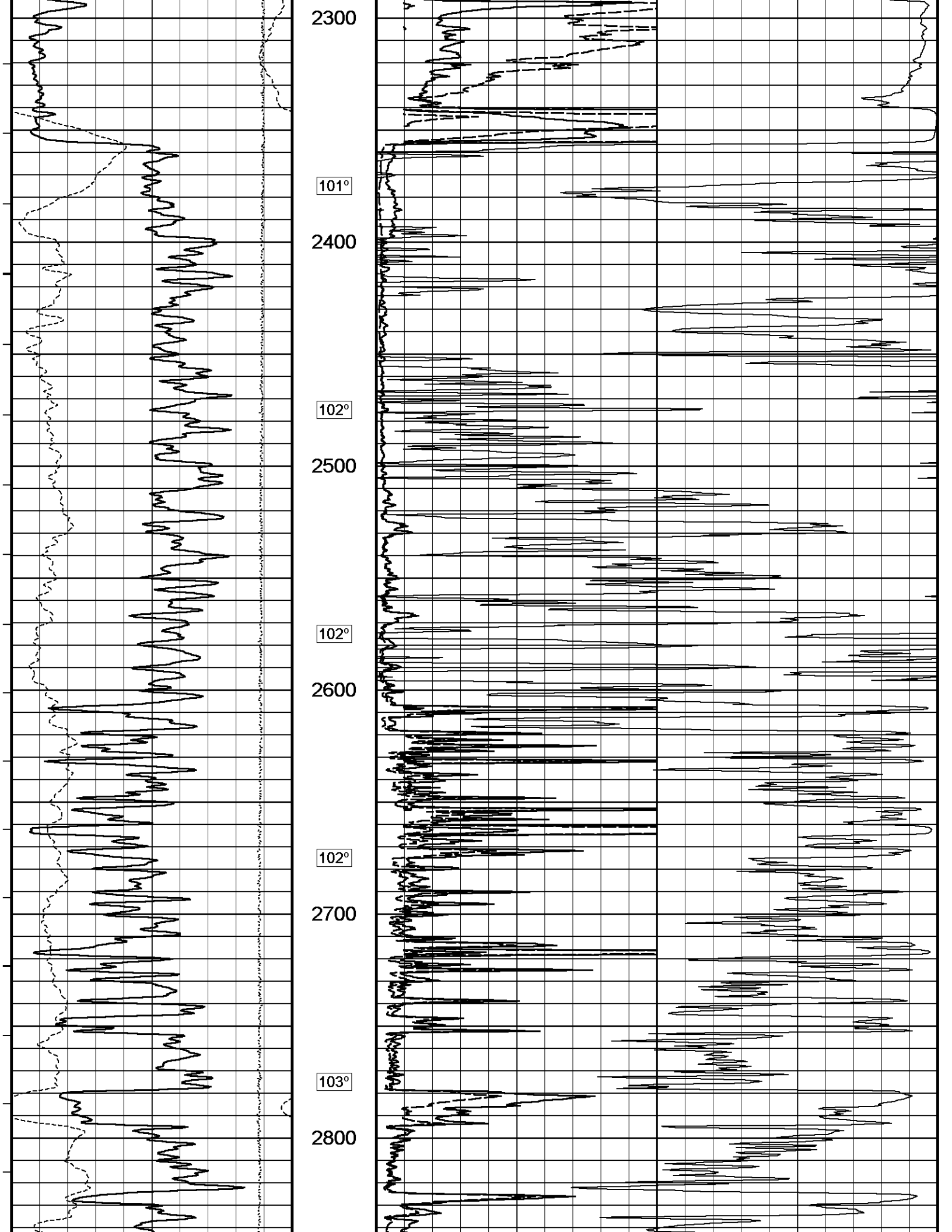
93°

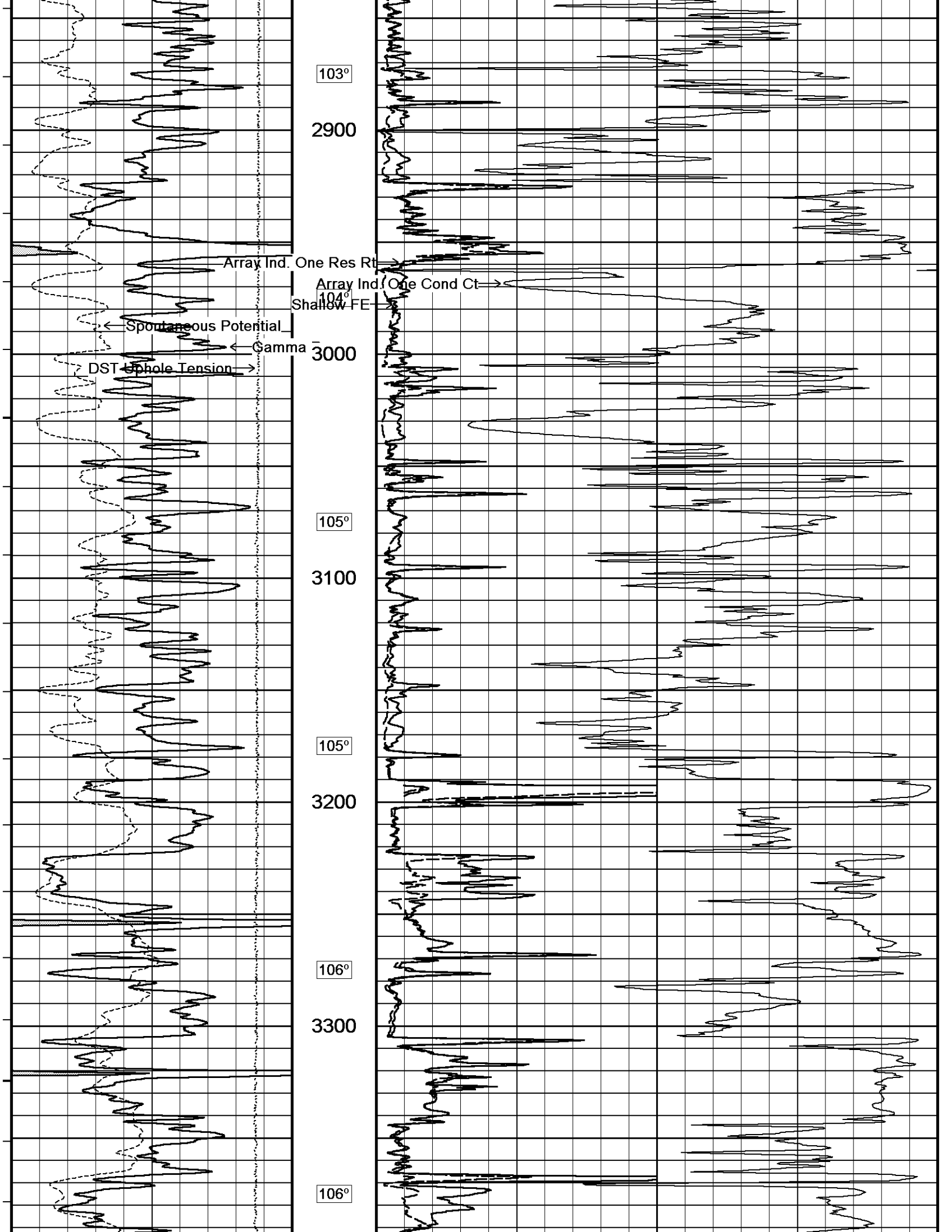
600

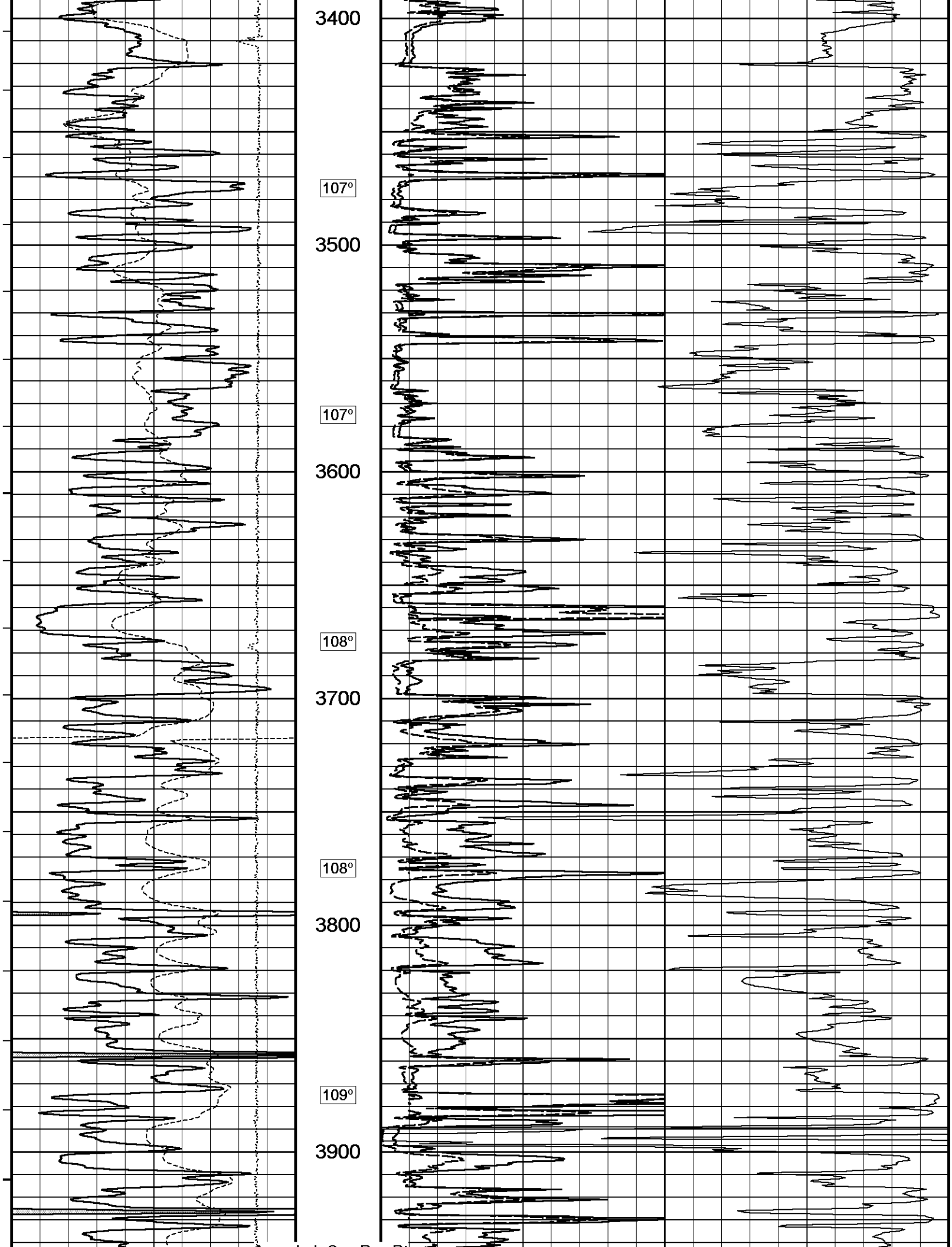

93°
700
94°
800
95°
900
96°
Array Ind. One Res Rt
1000
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Array Ind. One Cond Ct
96°
1100
97°

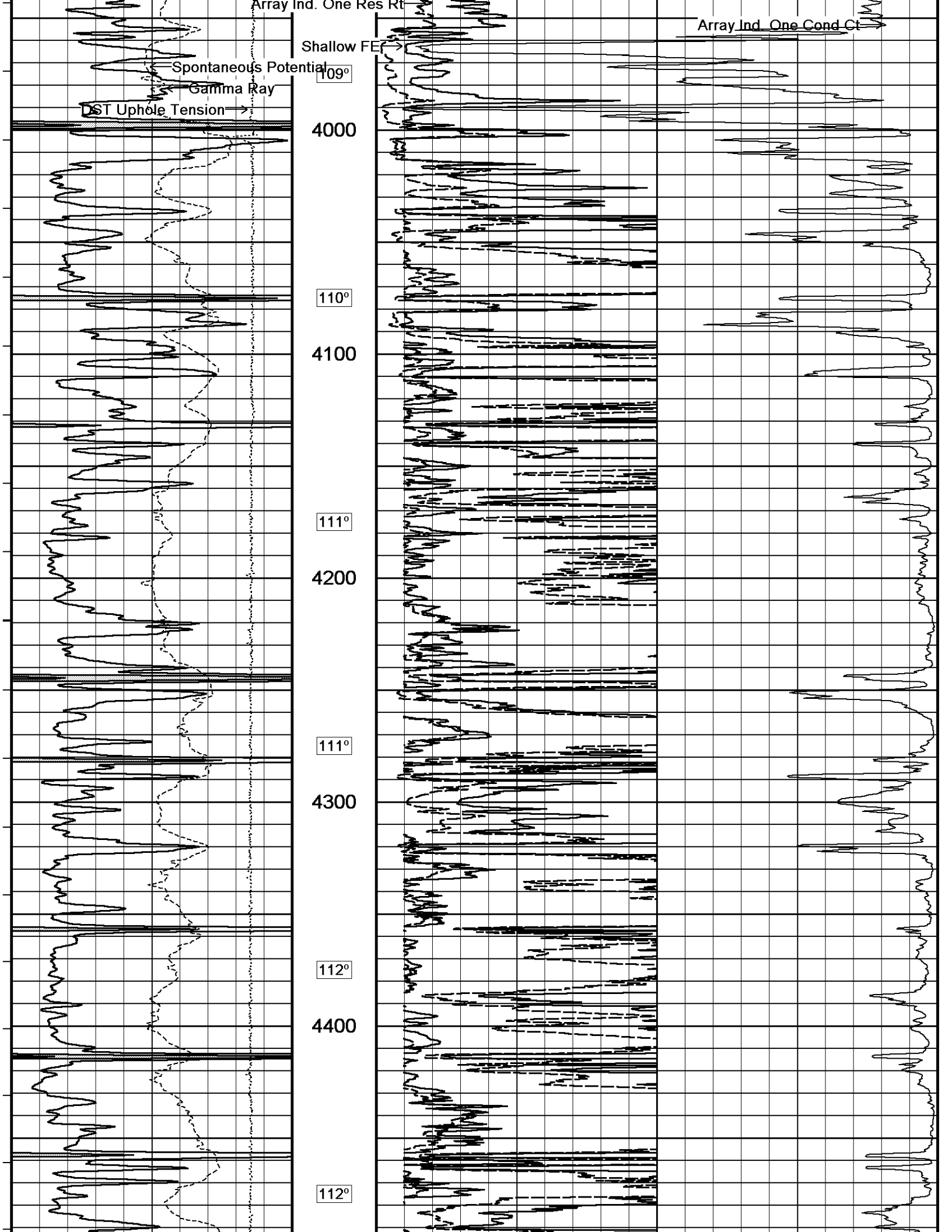

1200
97°
1300
97°
1400
97°
1500
97°
1600
97°
1700

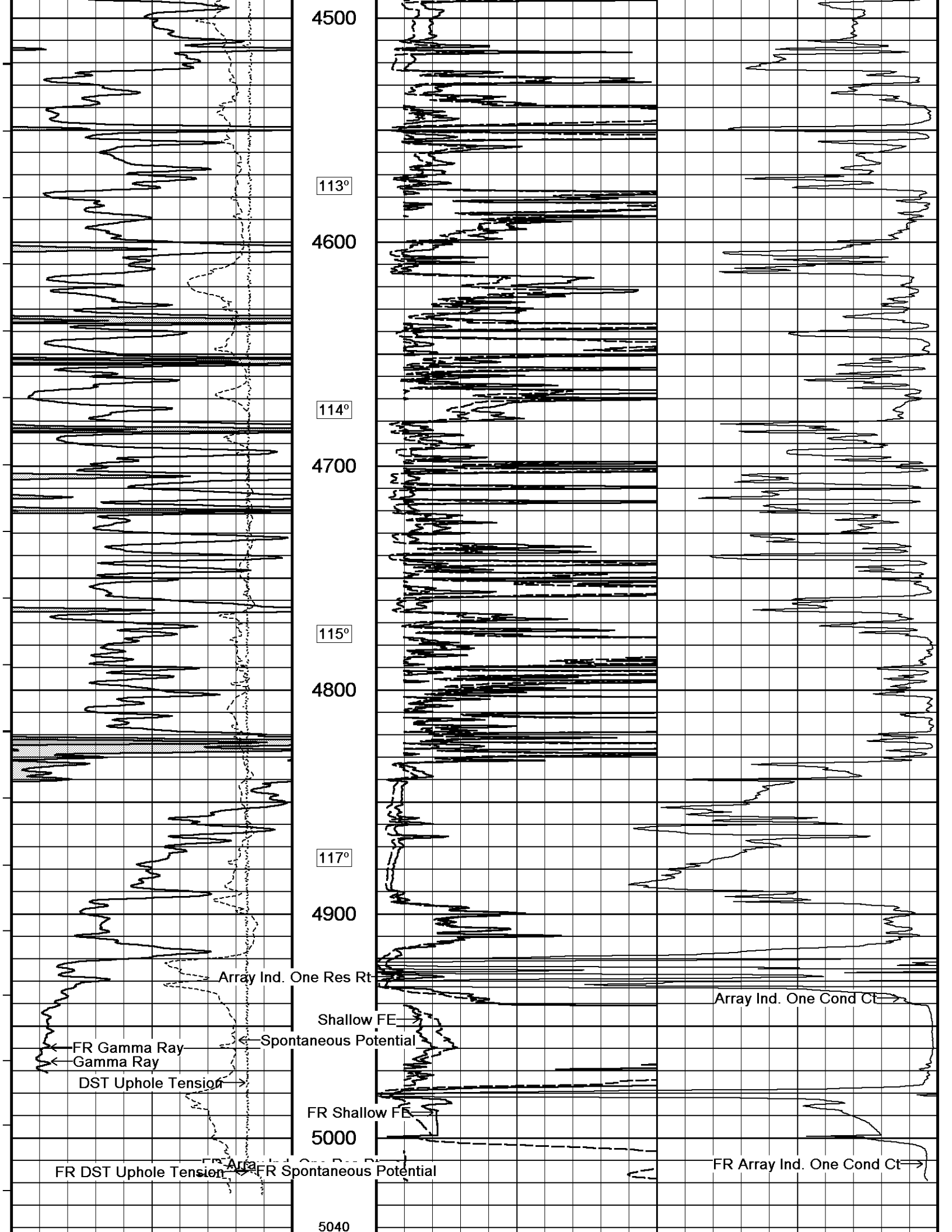

97°
1800
98°
1900
99°
Array Ind One Res Rt
Shallow FE
2000
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Array Ind. One Cond Ct
99°
2100
99°
2200
100°

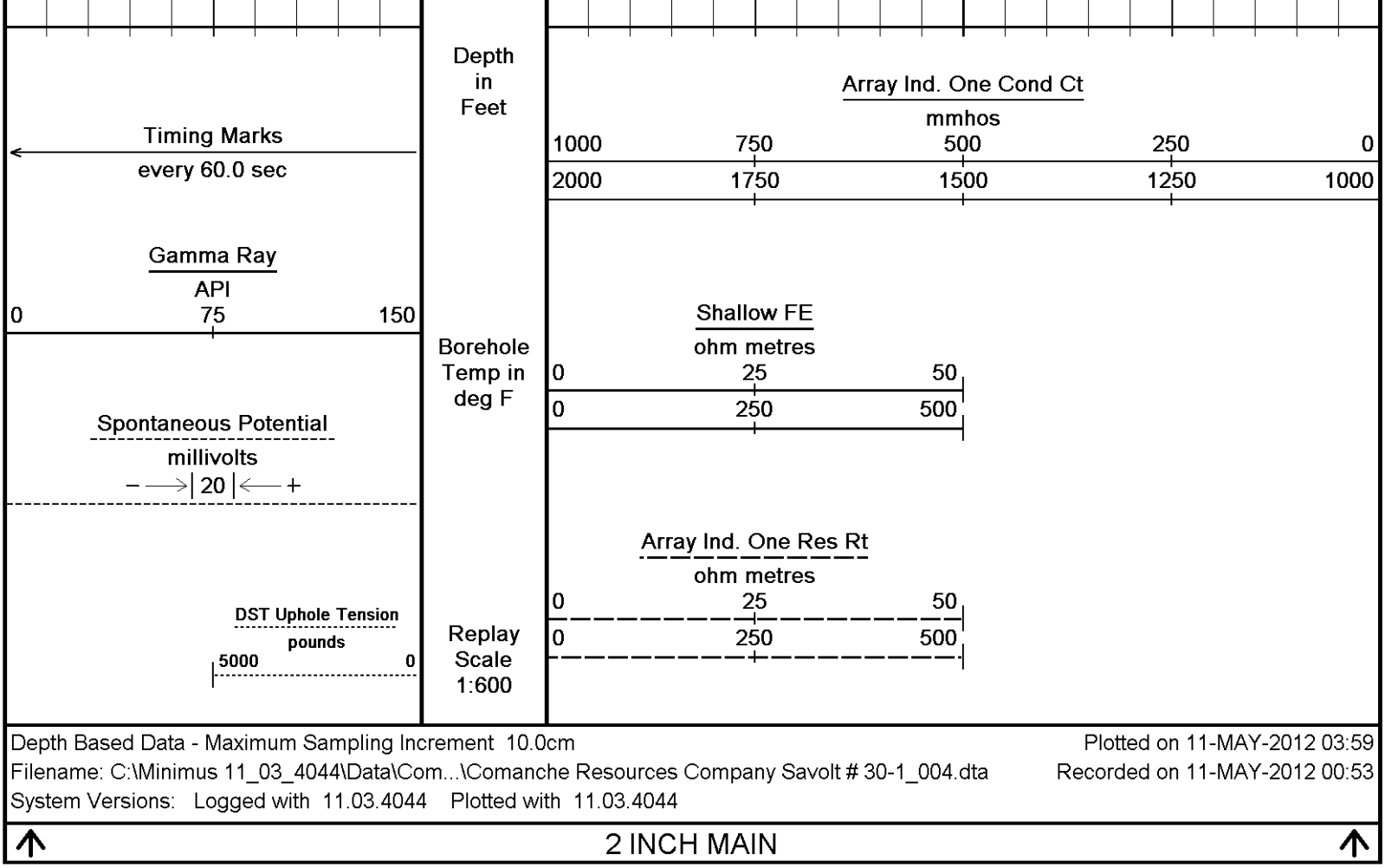

2300
101°
2400
102°
2500
102°
2600
102°
2700
103°
2800


103°
2900
Array Ind. One Res Rt
Array Ind. One Cond Ct
104°
Shallow FE
Spontaneous Potential
Gamma
3000
DST Uphole Tension
105°
3100
105°
3200
106°
3300
106°


3400
107°
3500
107°
3600
108°
3700
108°
3800
109°
3900


Array Ind. One Res Rt
Shallow FE
Array Ind. One Cond Ct
Spontaneous Potential
Gamma Ray
DST Uphole Tension
109°
4000
110°
4100
111°
4200
111°
4300
112°
4400
112°


4500
113°
4600
114°
4700
115°
4800
117°
4900
Array Ind. One Res Rt
Shallow FE
Spontaneous Potential
FR Gamma Ray
Gamma Ray
DST Uphole Tension
FR Shallow FE
5000
FR DST Uphole Tension
FR Spontaneous Potential
Array Ind. One Cond Ct
FR Array Ind. One Cond Ct
5040

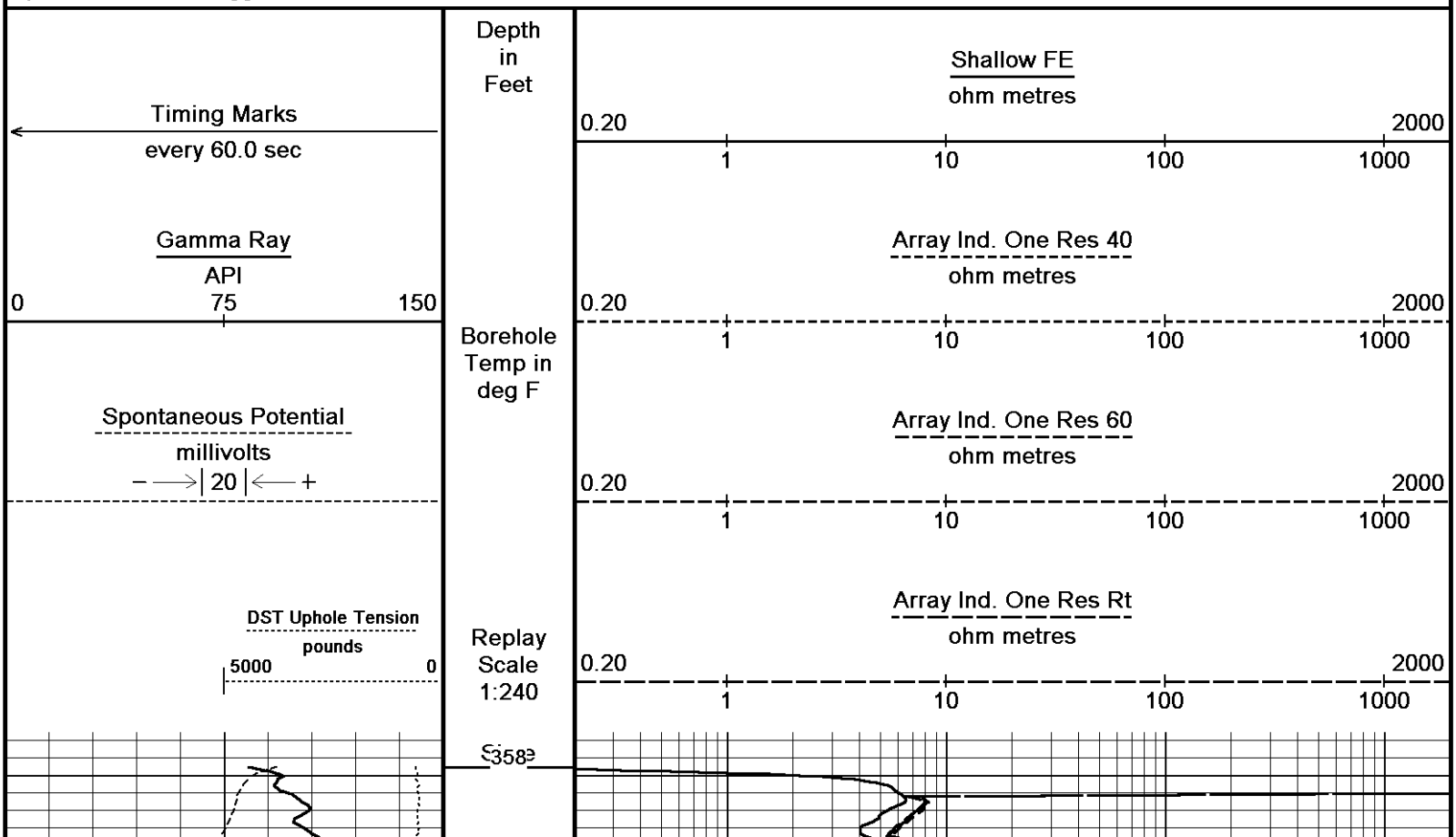


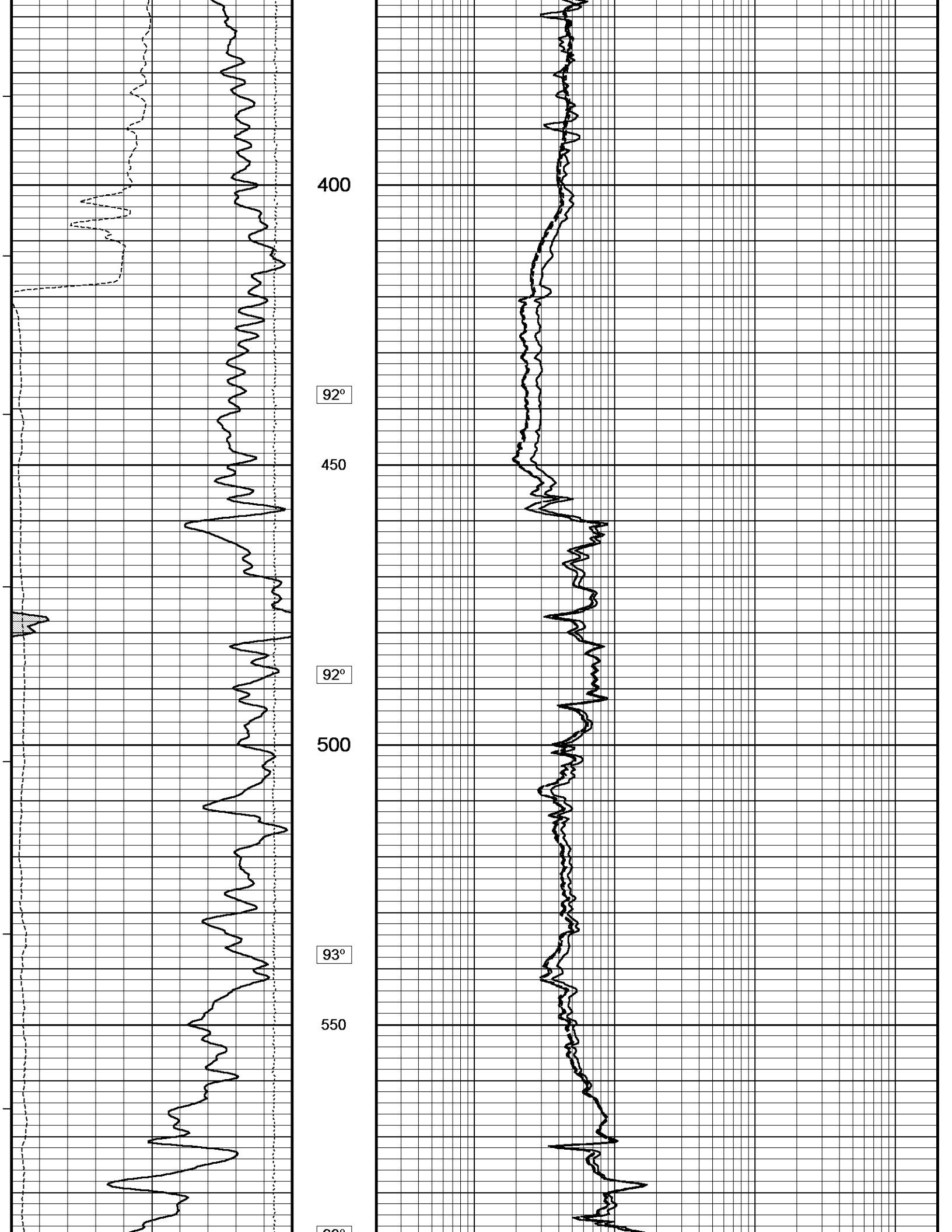
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 11-MAY-2012 03:59
Filename: C:\Minimus 11_03_4044\Data\Com...\Comanche Resources Company Savolt # 30-1_004.dta — Recorded on 11-MAY-2012 00:53
System Versions: Logged with 11.03.4044 Plotted with 11.03.4044

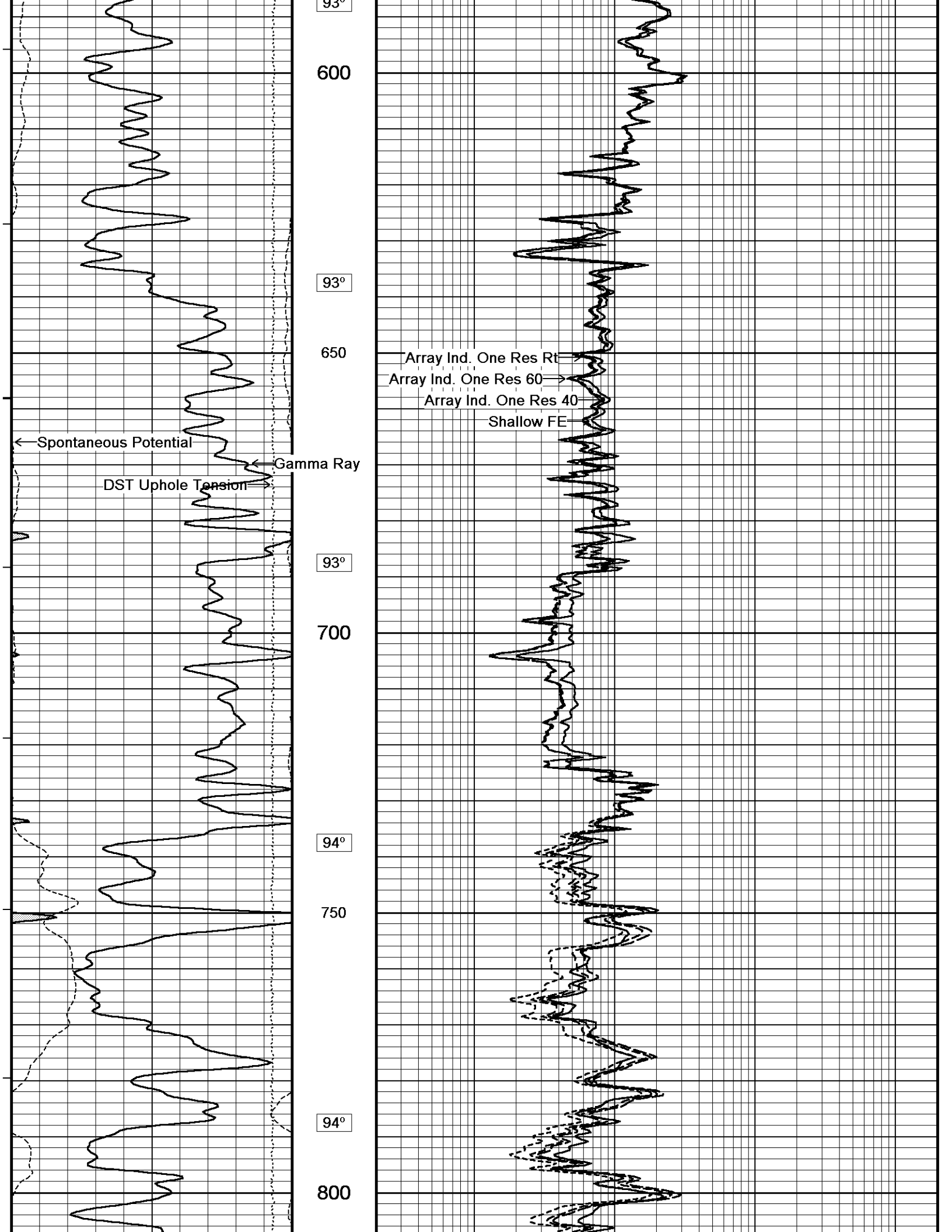
2 INCH MAIN

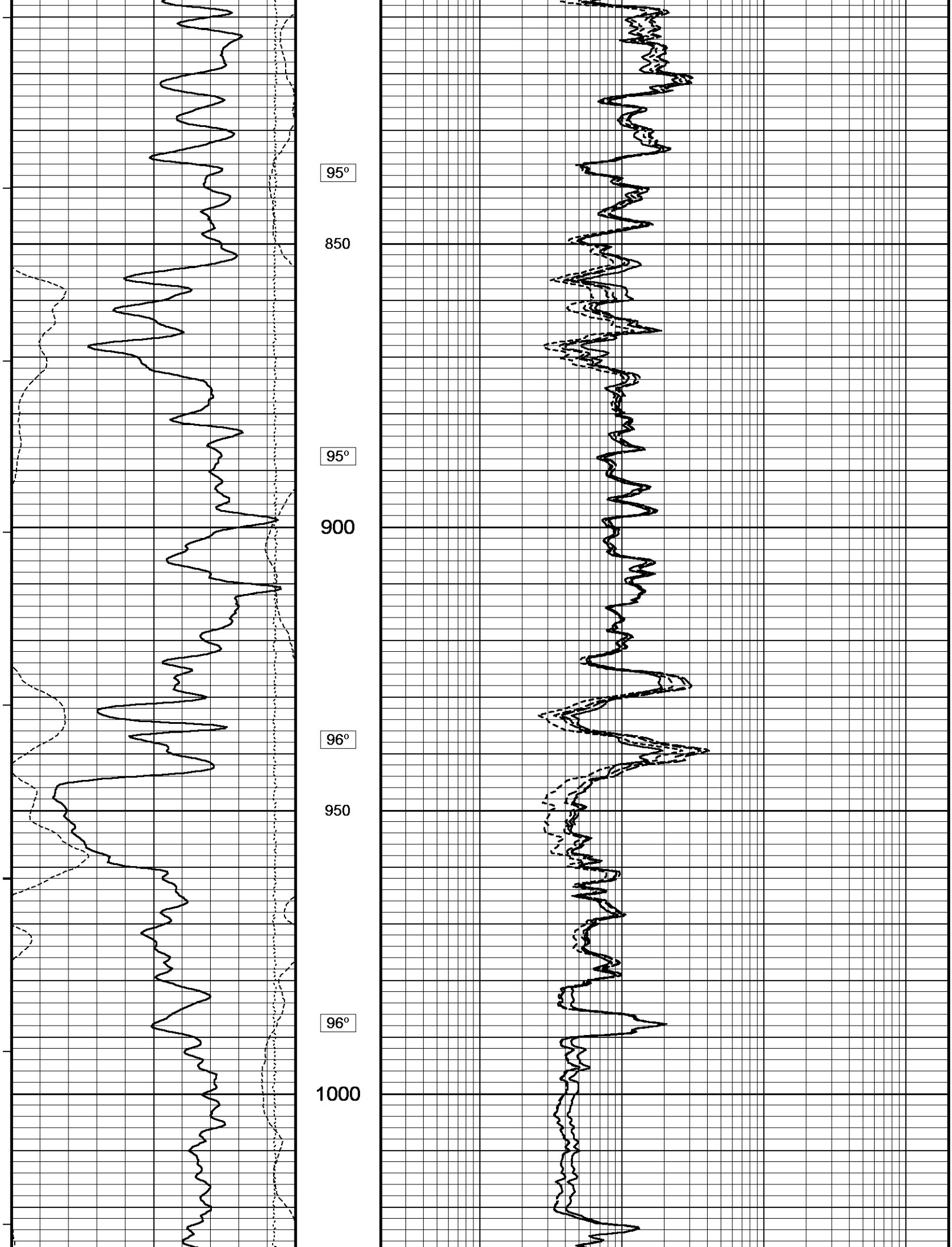
5 INCH MAIN

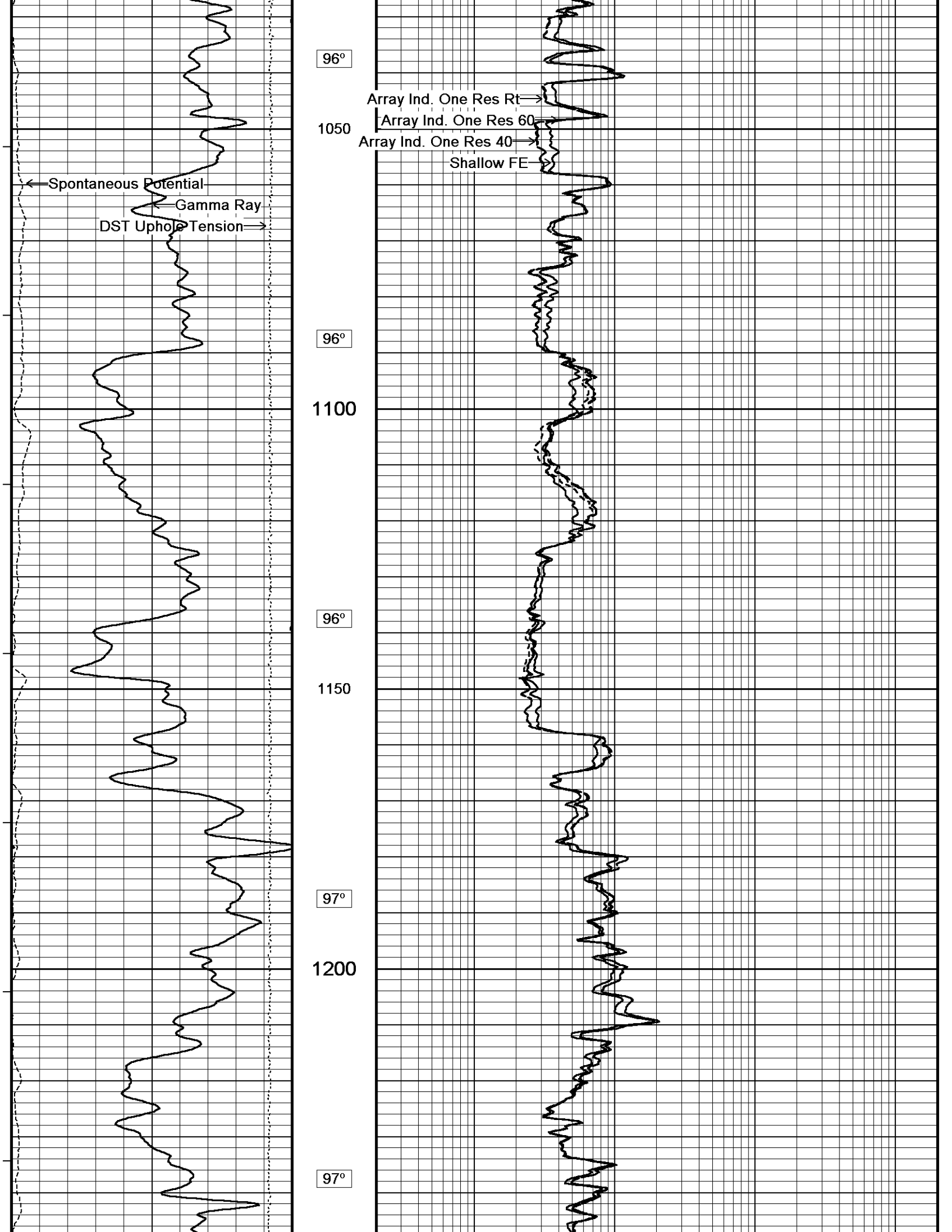
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 11-MAY-2012 03:59
Filename: C:\Minimus 11_03_4044\Data\Com...\Comanche Resources Company Savolt # 30-1_004.dta — Recorded on 11-MAY-2012 00:53
System Versions: Logged with 11.03.4044 Plotted with 11.03.4044

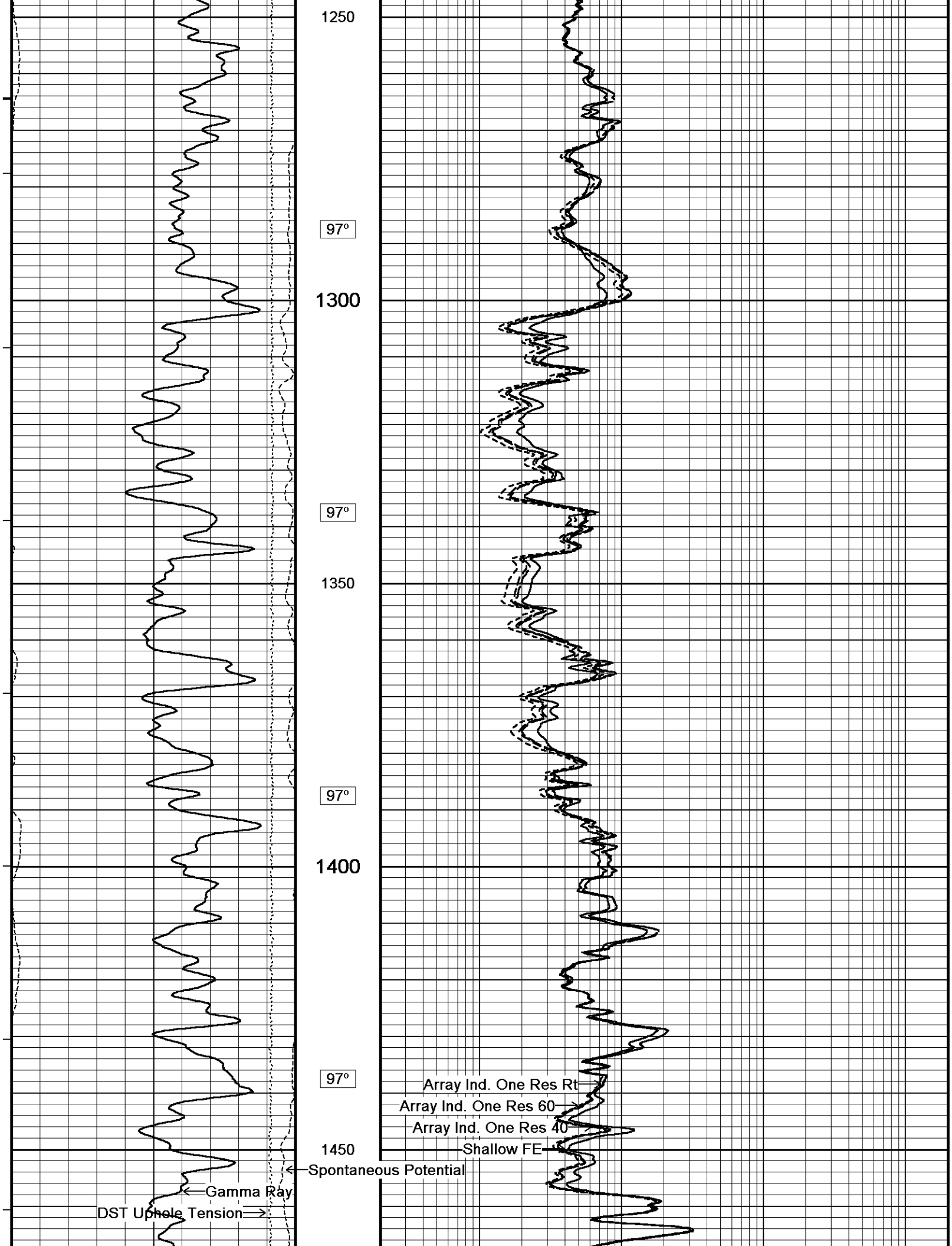


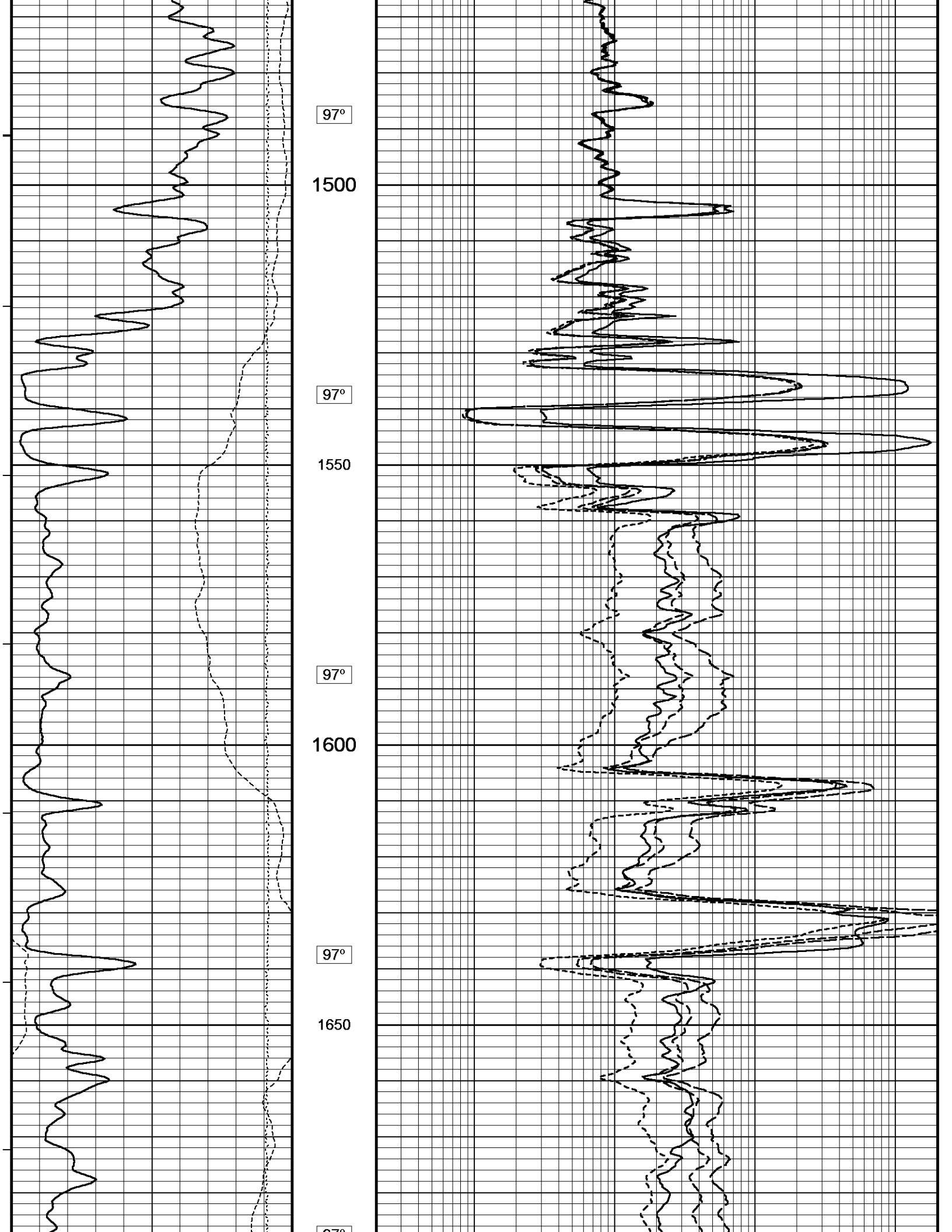

400
92°
450
92°
500
93°
550

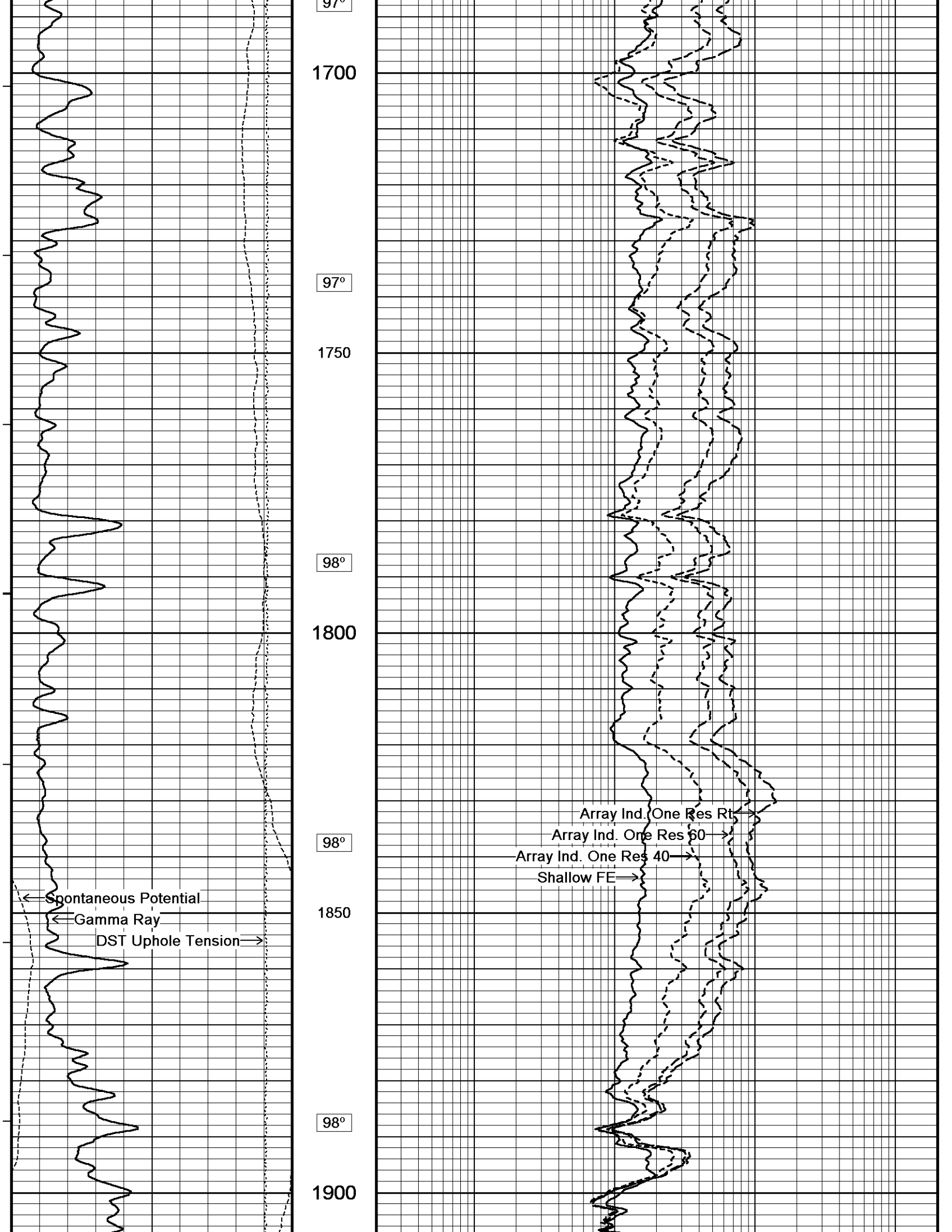

93°
600
93°
650
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
93°
700
94°
750
94°
800

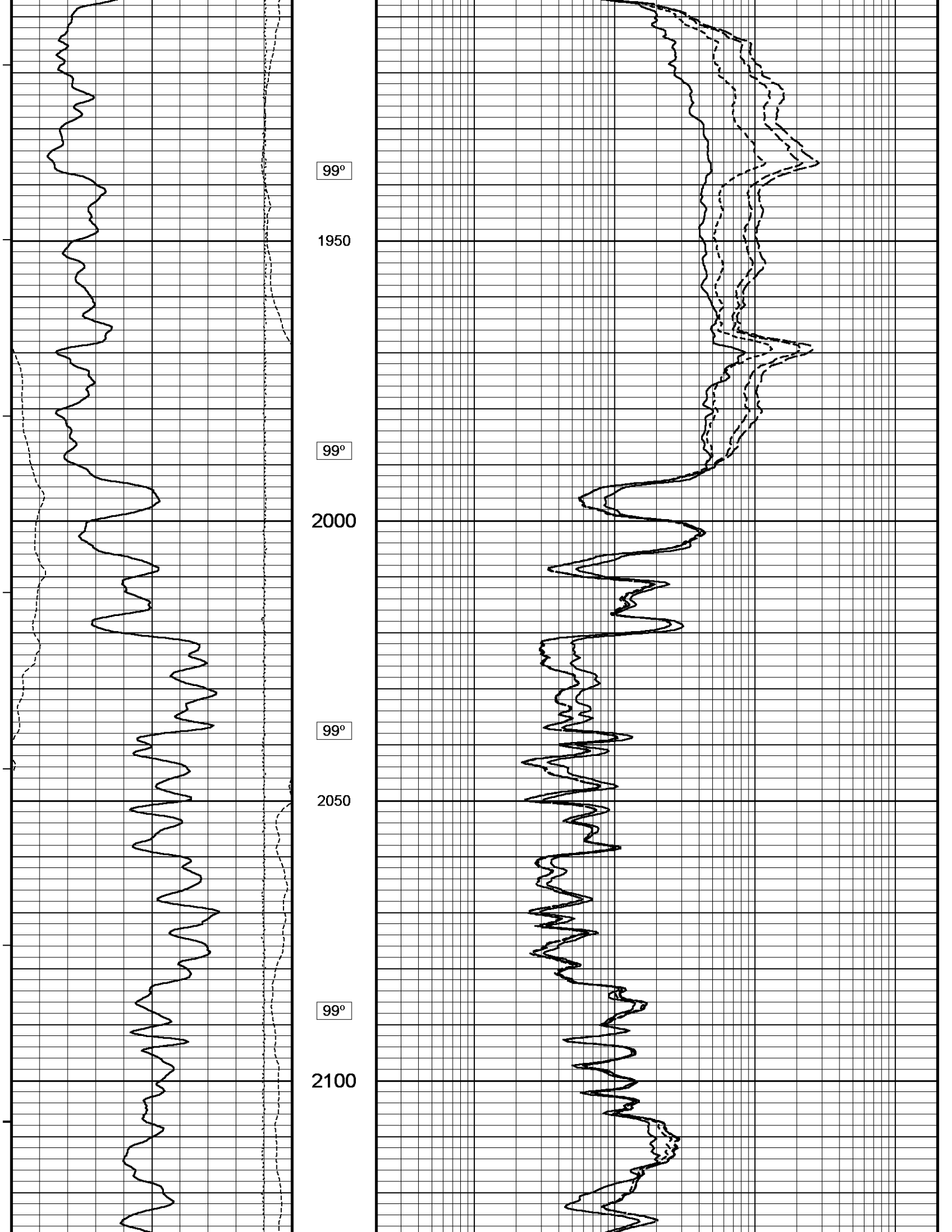

95°
850
95°
900
96°
950
96°
1000

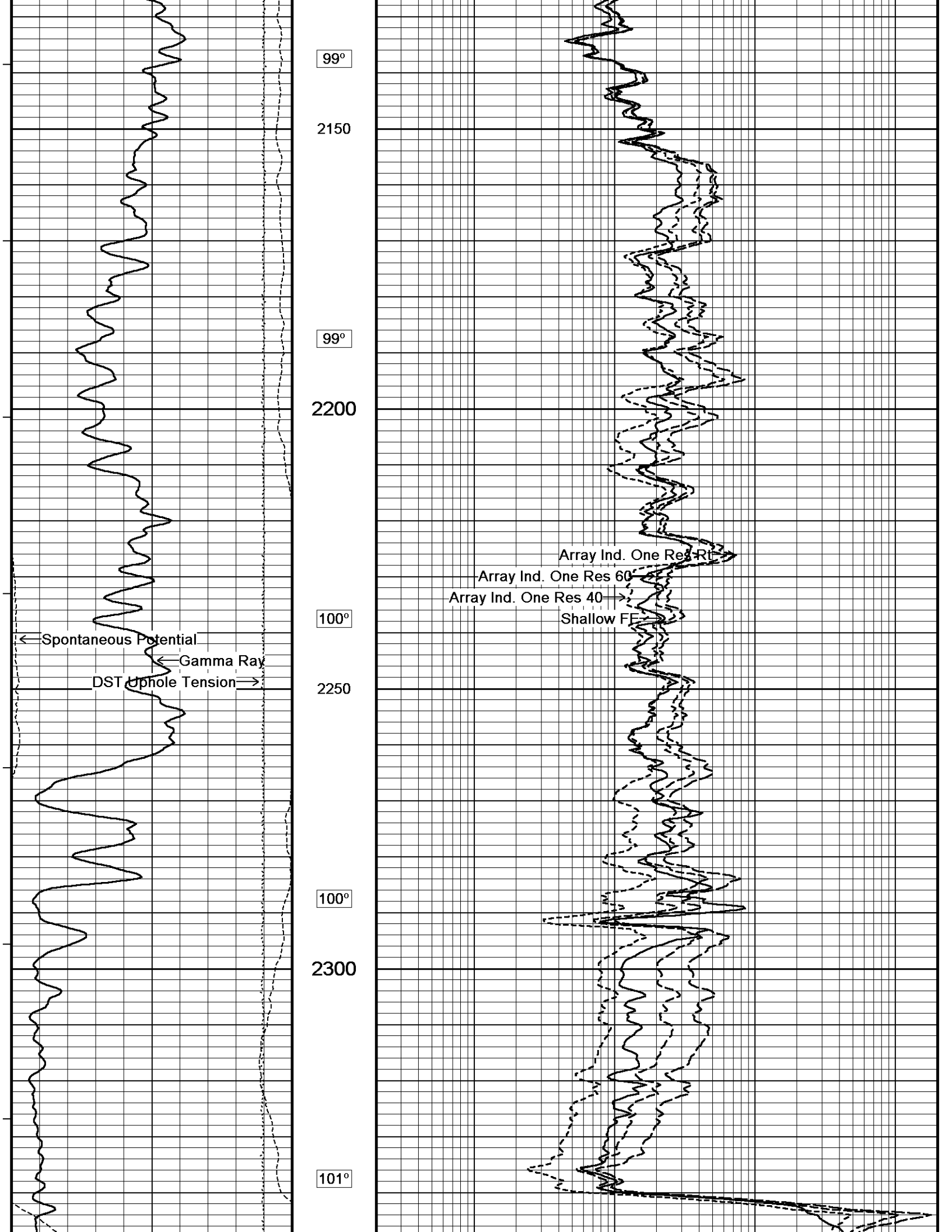

96°
Array Ind. One Res Rt
Array Ind. One Res 60
1050
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
96°
1100
96°
1150
97°
1200
97°

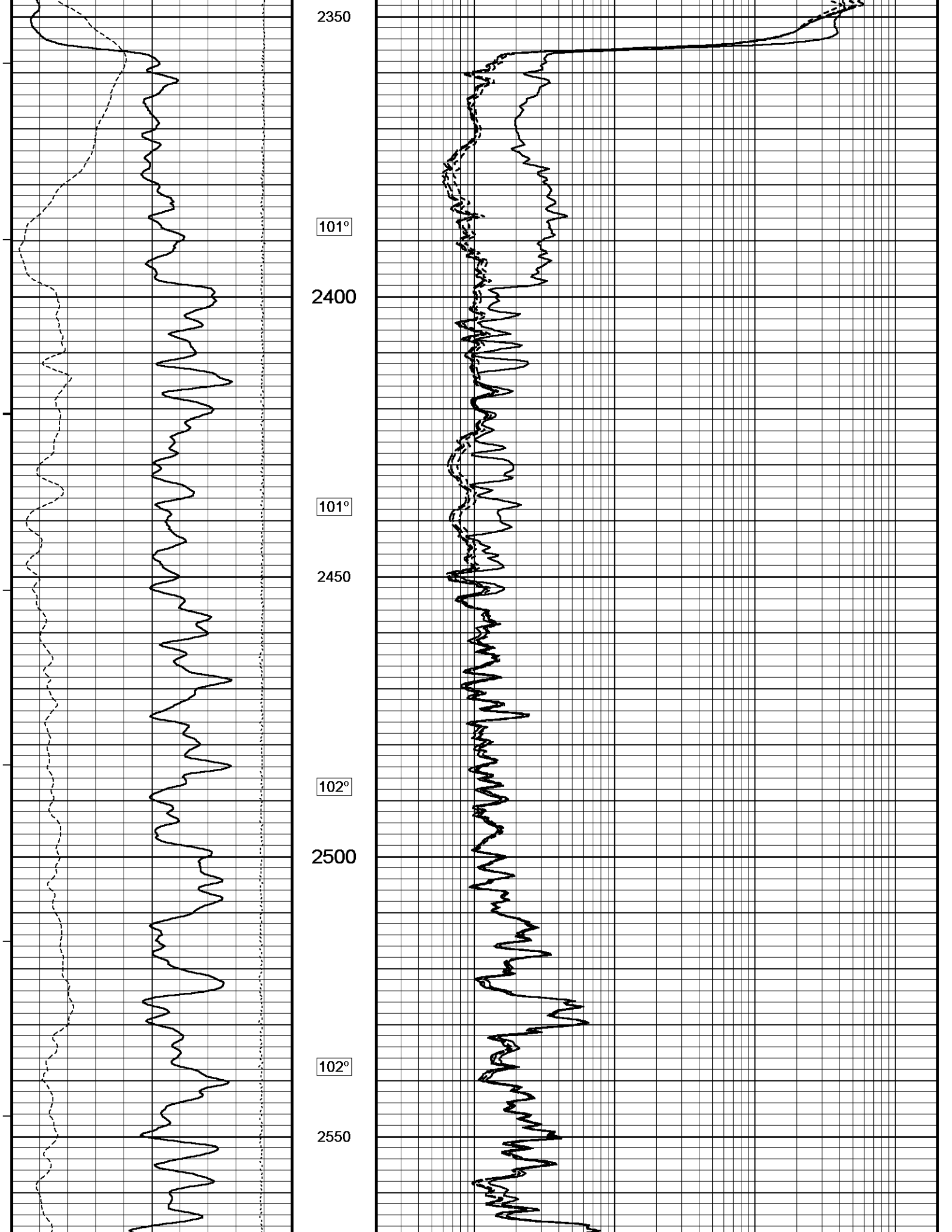

1250
97°
1300
97°
1350
97°
1400
97°
1450
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension

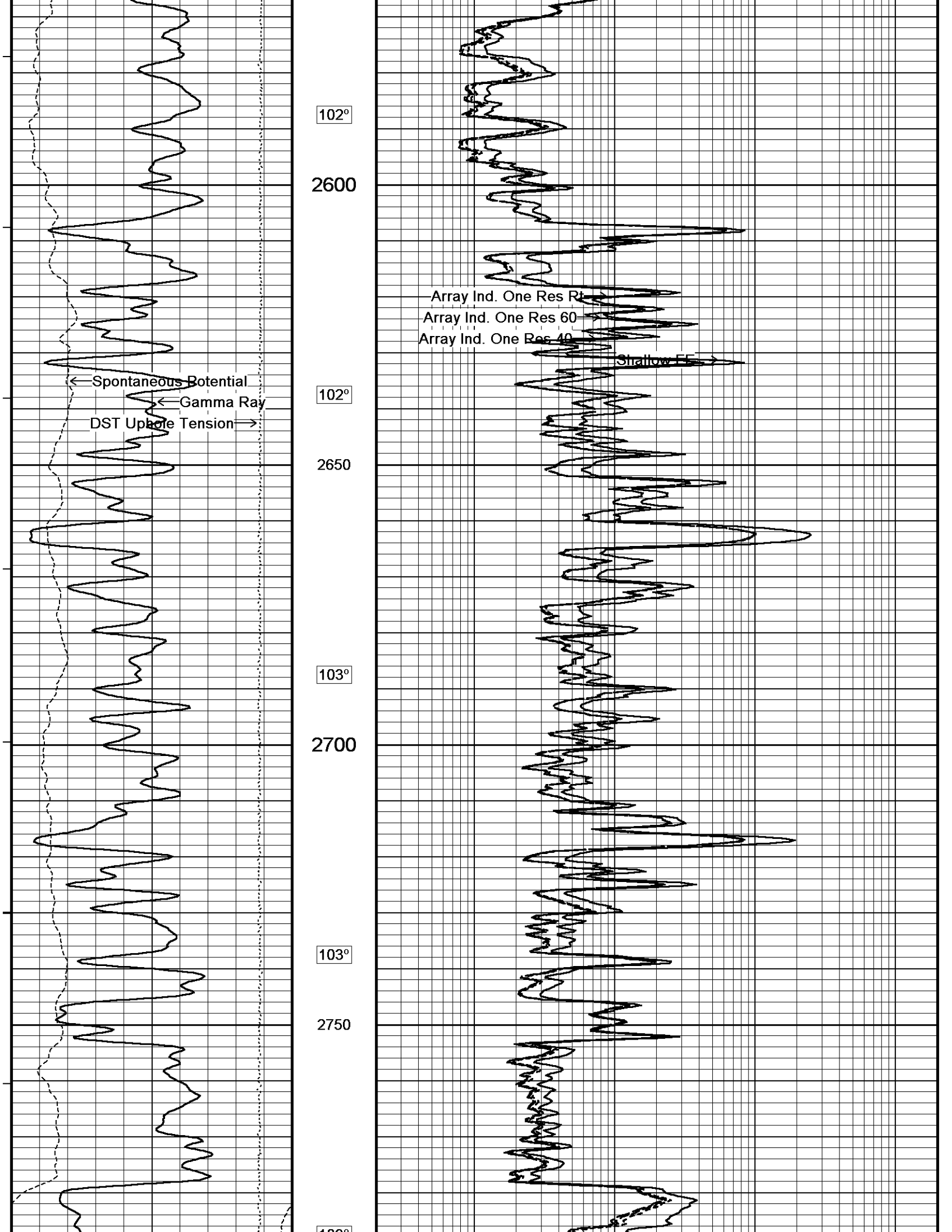

97°
1500
97°
1550
97°
1600
97°
1650

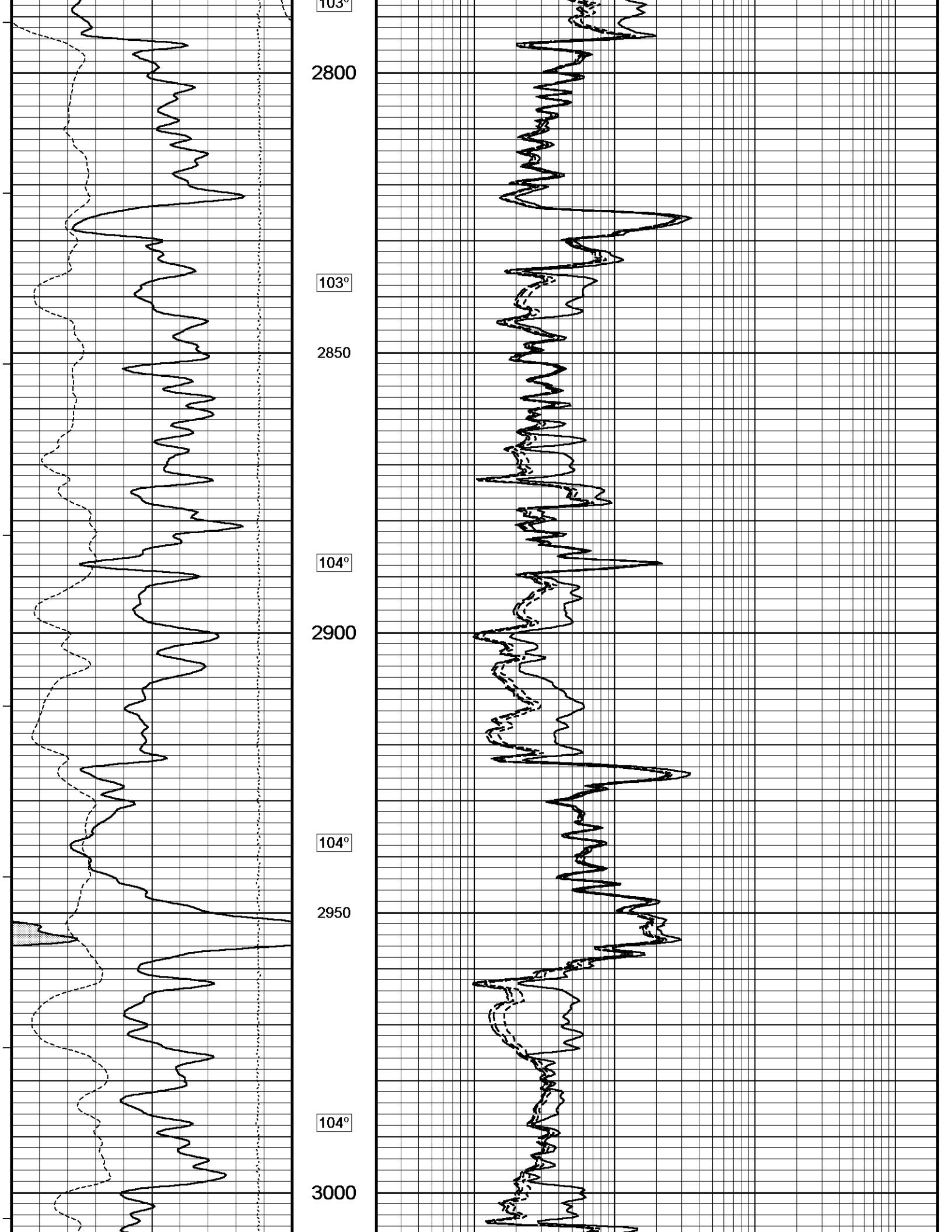

97°
1700
97°
1750
98°
1800
98°
1850
98°
1900
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE

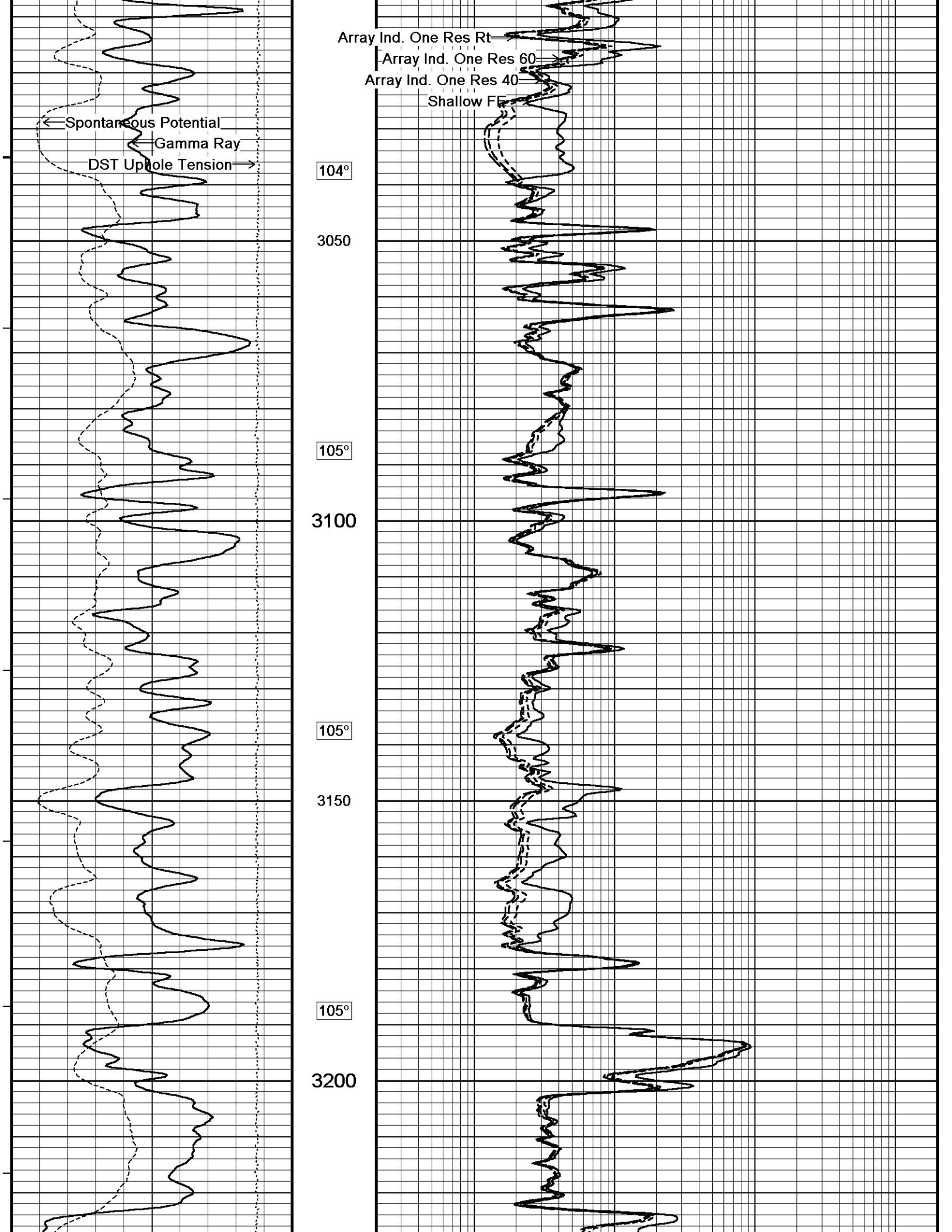

99°
1950
99°
2000
99°
2050
99°
2100

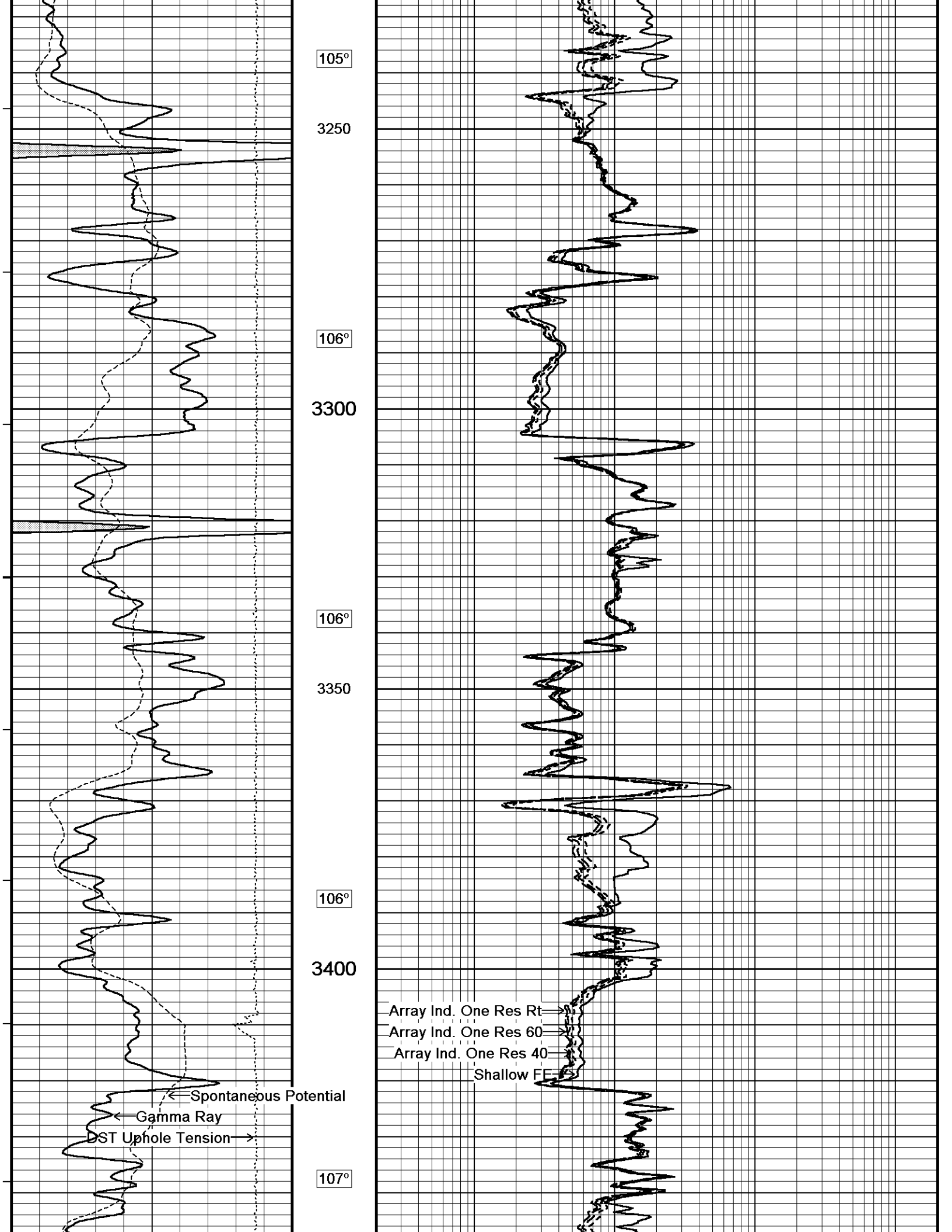

99°
2150
99°
2200
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
100°
Spontaneous Potential
Gamma Ray
DST Uphole Tension
2250
100°
2300
101°

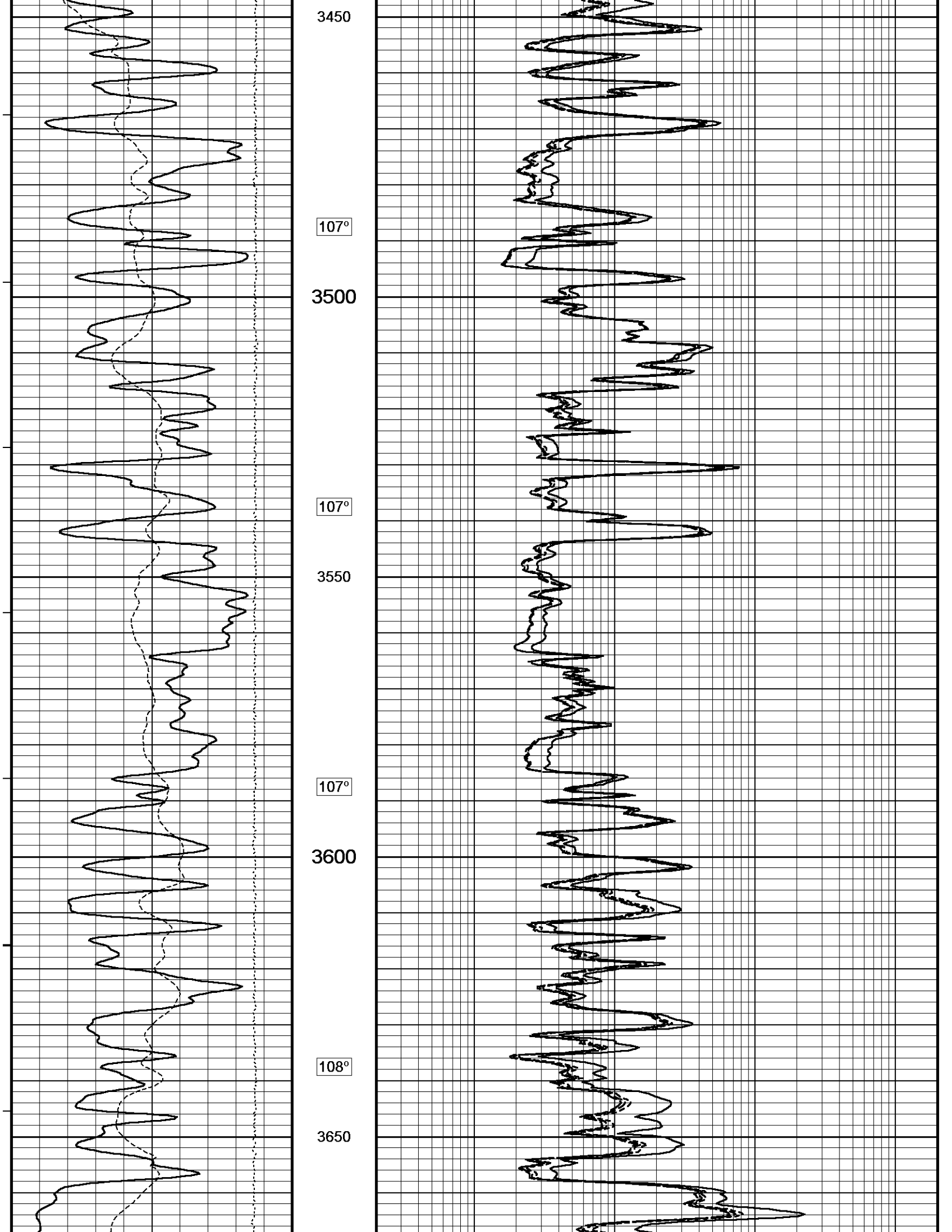

2350
101°
2400
101°
2450
102°
2500
102°
2550

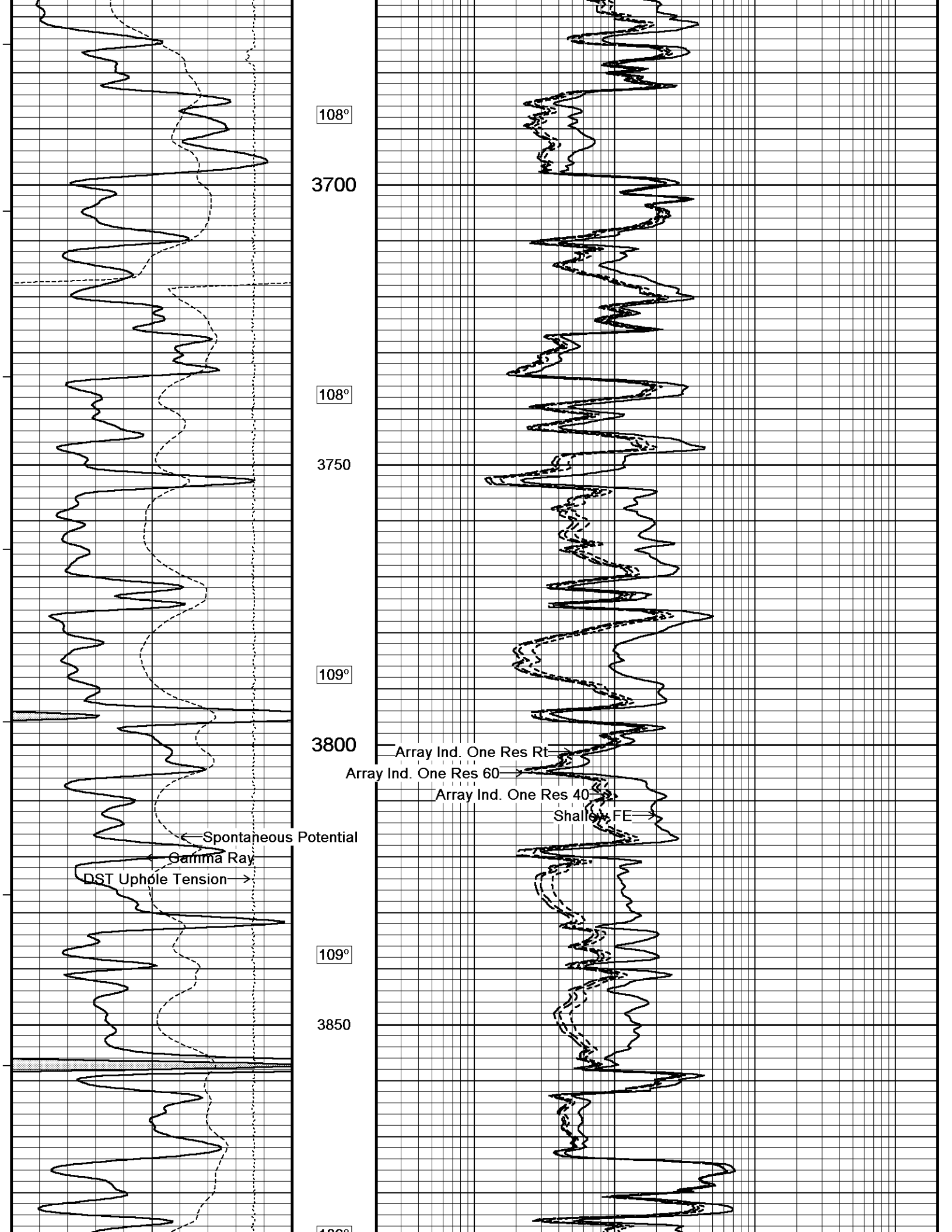

102°
2600
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
102°
2650
103°
2700
103°
2750

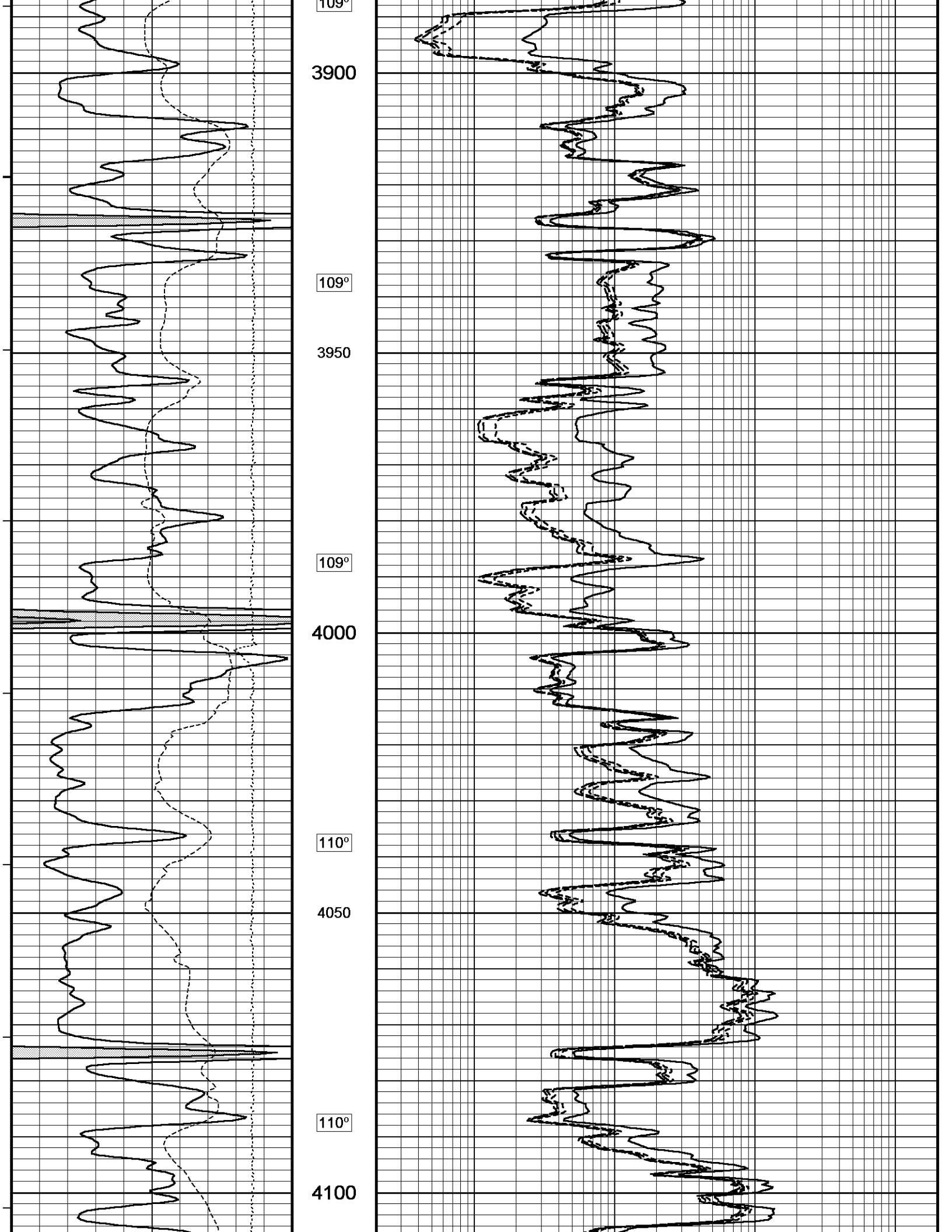

103°
2800
103°
2850
104°
2900
104°
2950
104°
3000

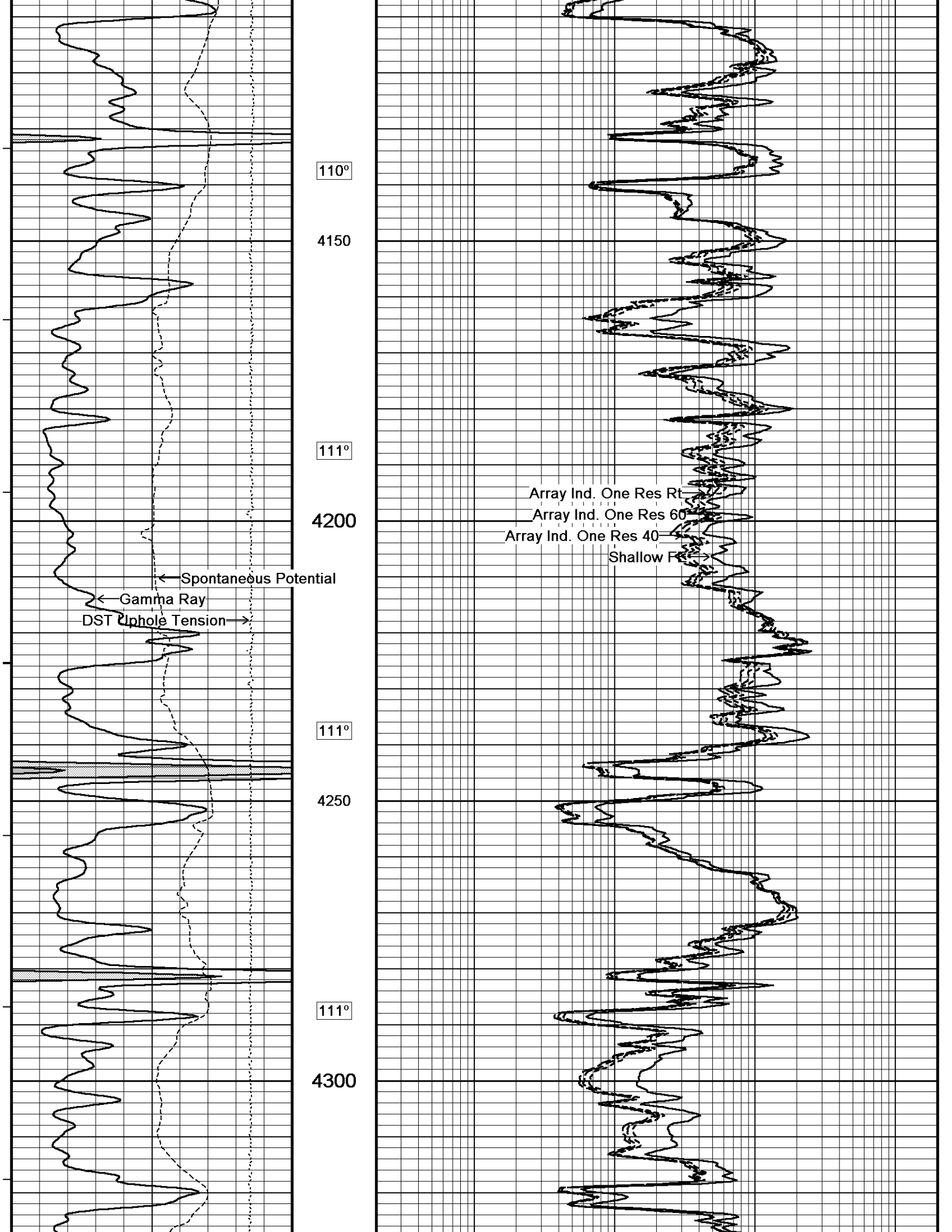

Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
104°
3050
105°
3100
105°
3150
105°
3200

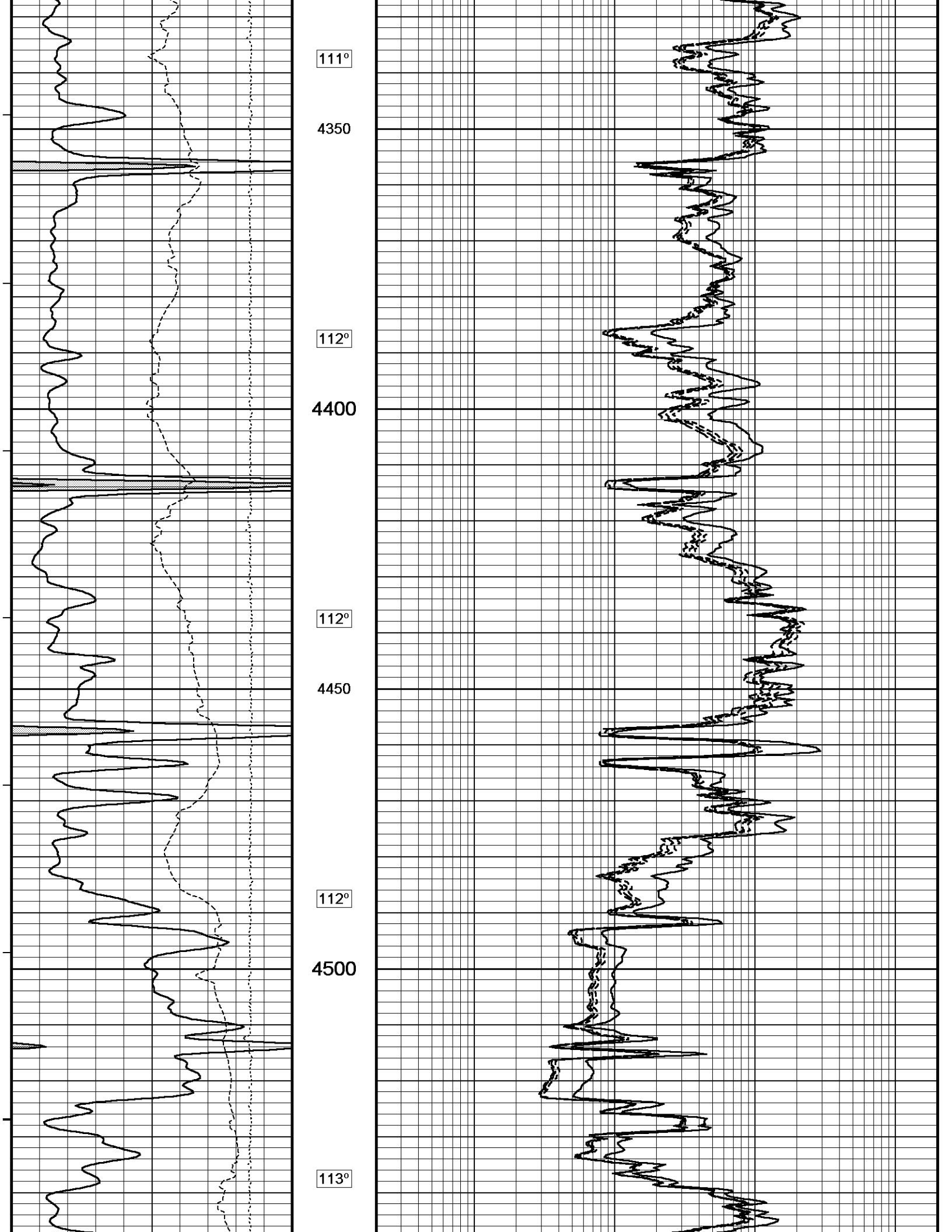

105°
3250
106°
3300
106°
3350
106°
3400
107°
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension

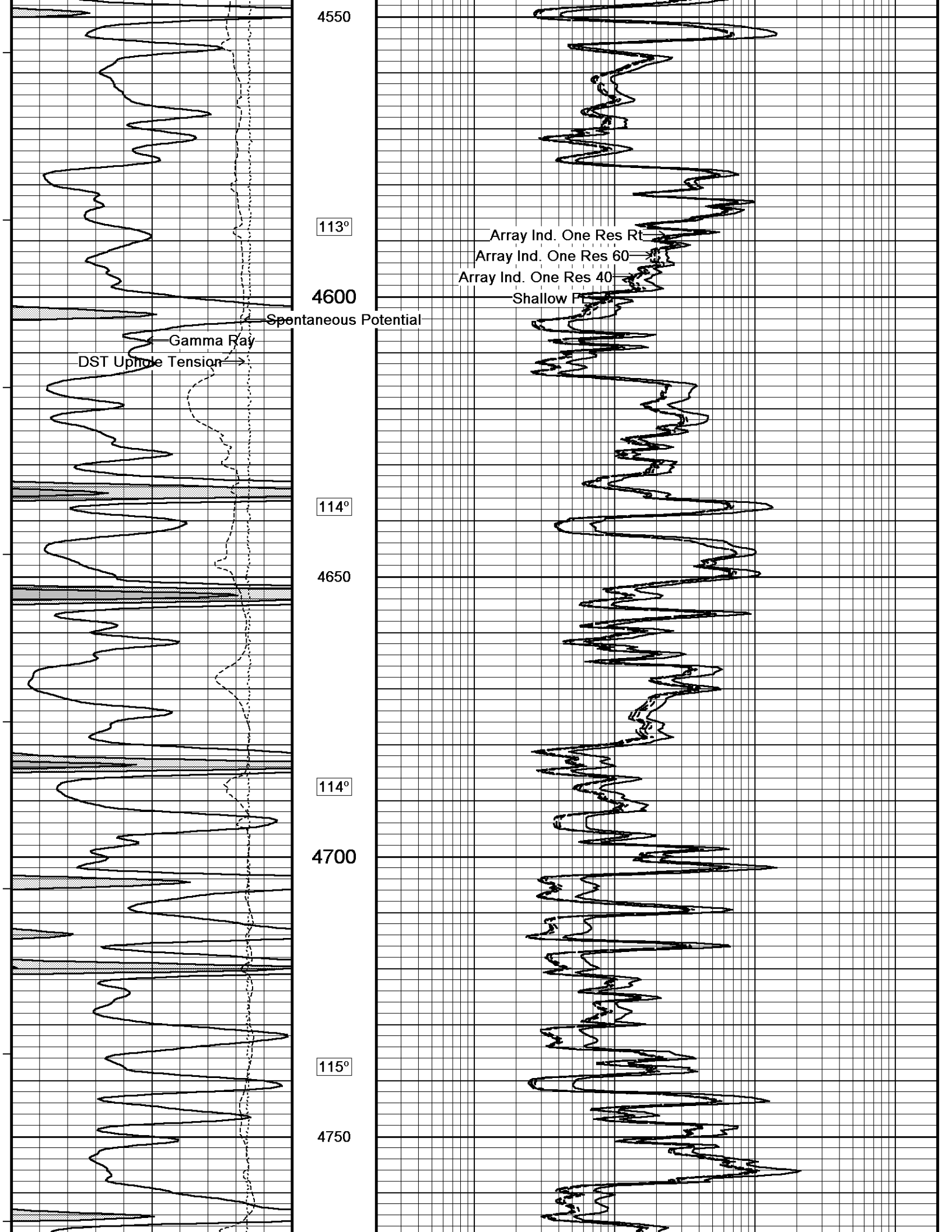

3450
107°
3500
107°
3550
107°
3600
108°
3650

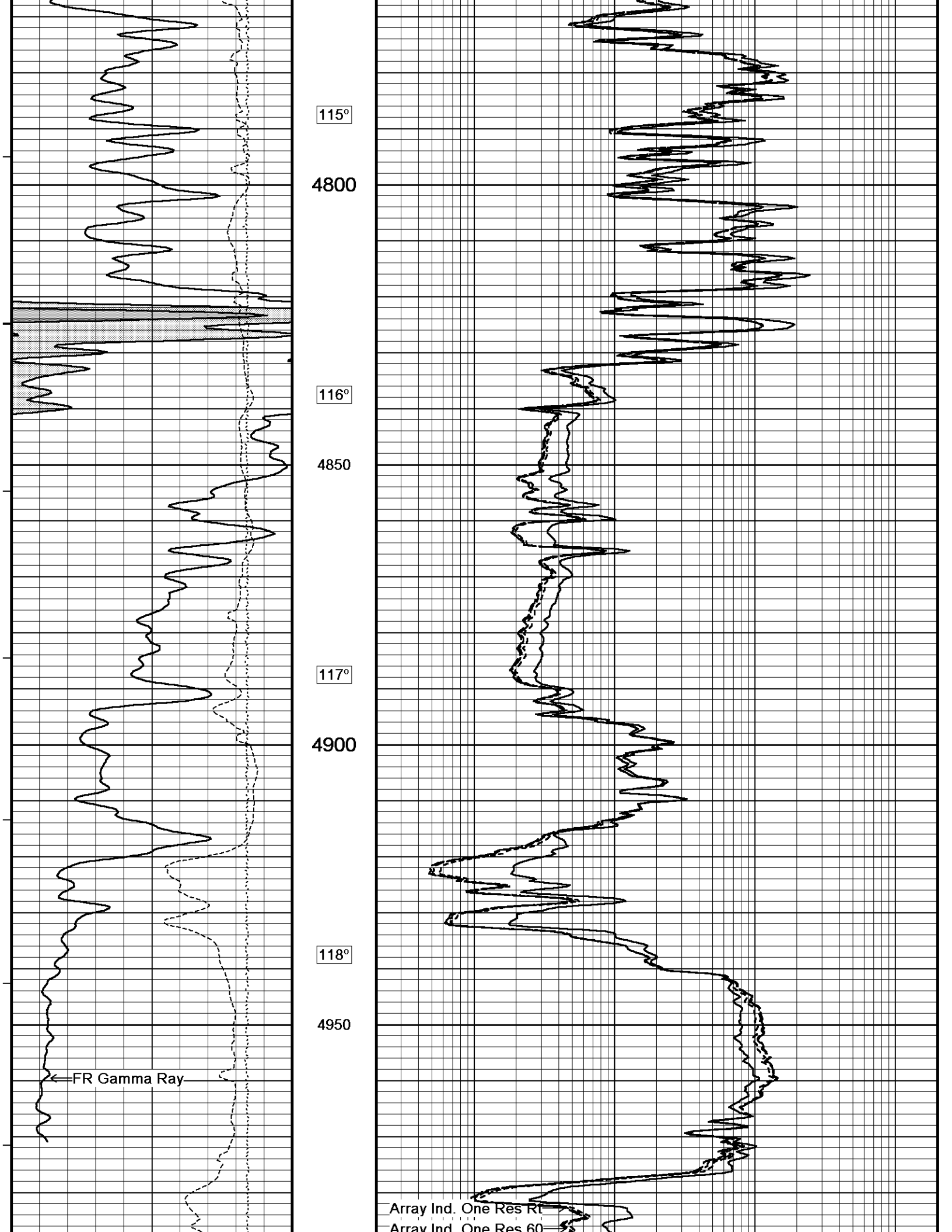

108°
3700
108°
3750
109°
3800
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
109°
3850

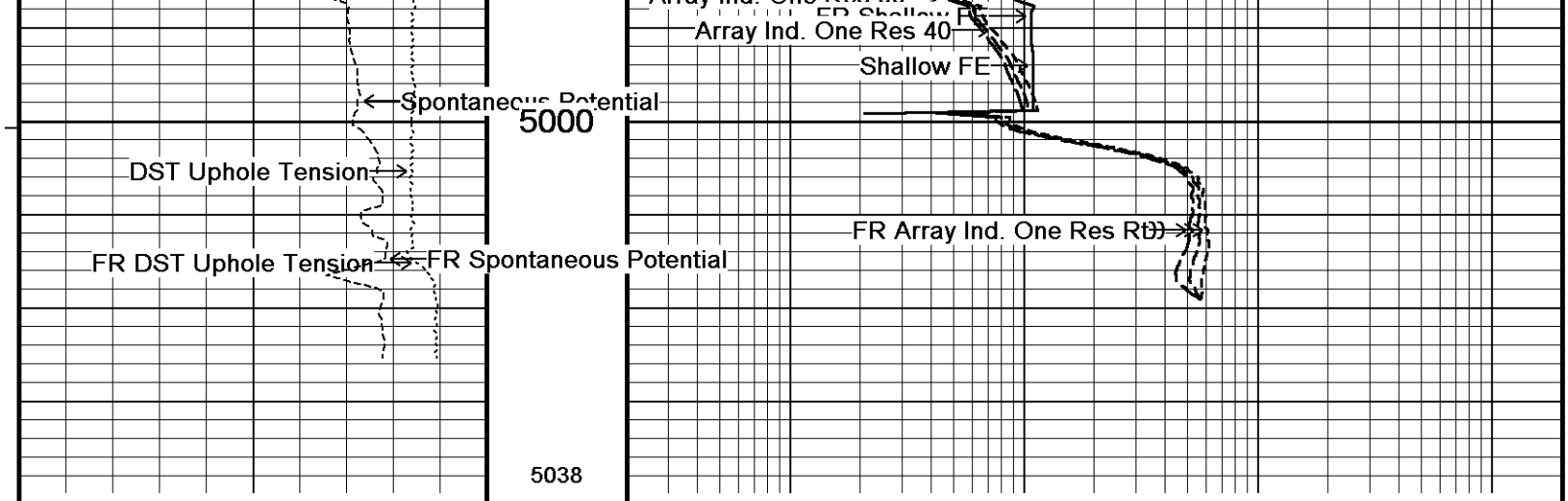

109°
3900
109°
3950
109°
4000
110°
4050
110°
4100


110°
4150
111°
4200
111°
4250
111°
4300
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow Fo


111°
4350
112°
4400
112°
4450
112°
4500
113°


4550
113°
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow Pt
4600
Spontaneous Potential
Gamma Ray
DST Uphole Tension
114°
4650
114°
4700
115°
4750


115°
4800
116°
4850
117°
4900
118°
4950
FR Gamma Ray
Array Ind. One Res Rt
Array Ind. One Res 60



5038

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 11-MAY-2012 03:59
Filename: C:\Minimus 11_03_4044\Data\Com...\Comanche Resources Company Savolt # 30-1_004.dta
Recorded on 11-MAY-2012 00:53
System Versions: Logged with 11.03.4044 Plotted with 11.03.4044

5 INCH MAIN

REPEAT SECTION

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 11-MAY-2012 03:59
Filename: C:\Minimus 11_03_4044\Data\Com...\Comanche Resources Company Savolt # 30-1_003.dta
Recorded on 11-MAY-2012 00:27
System Versions: Logged with 11.03.4044 Plotted with 11.03.4044

Depth in Feet

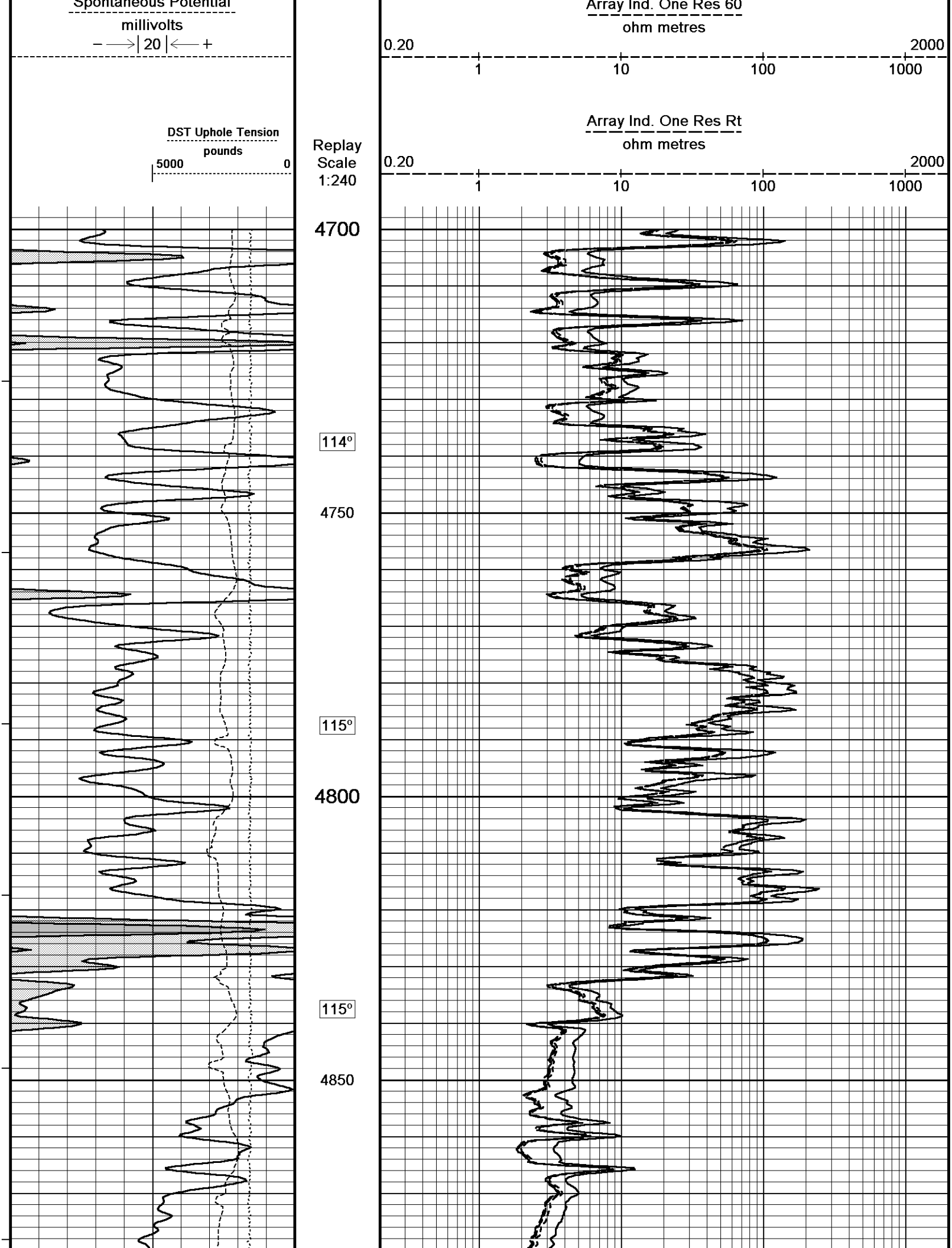
Timing Marks
every 60.0 sec

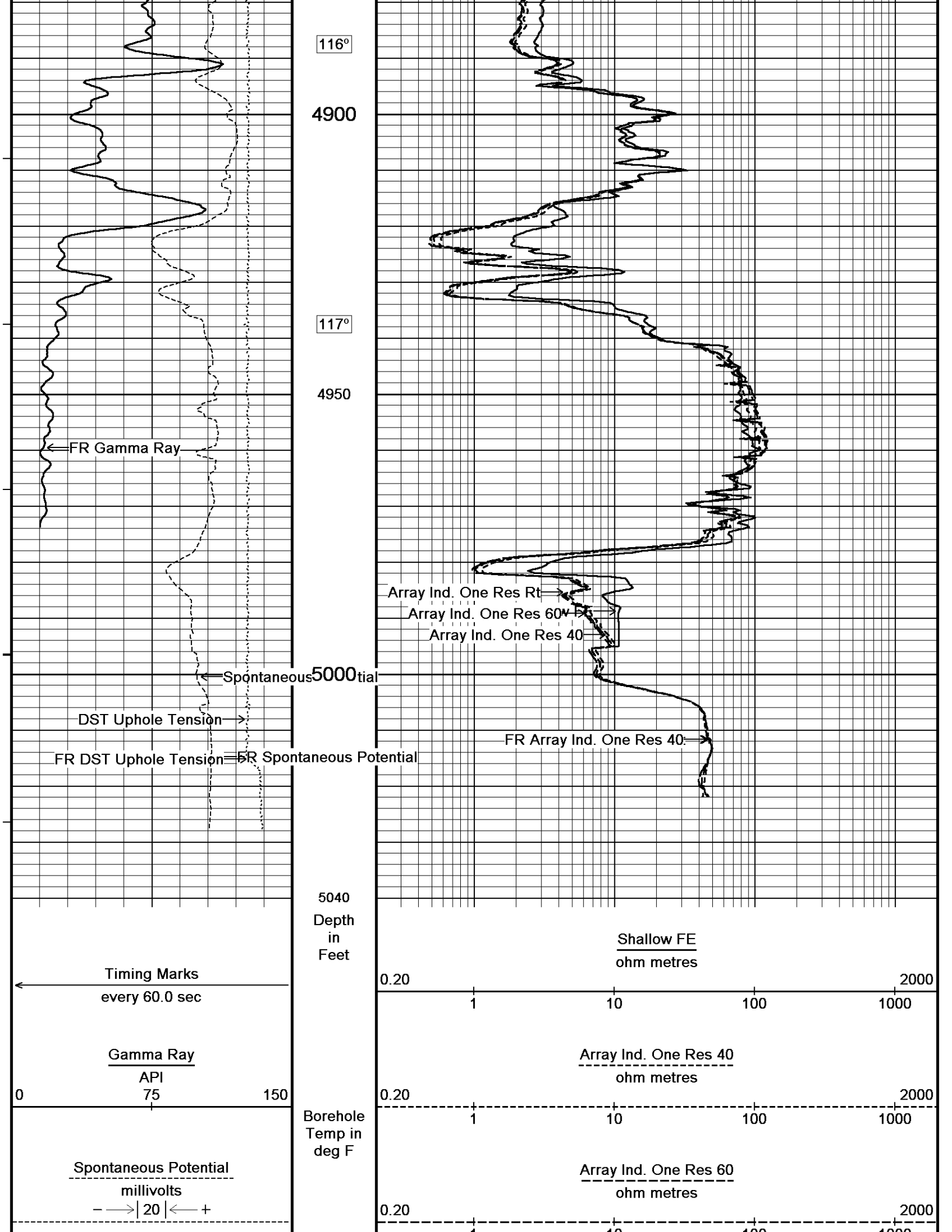
Gamma Ray
API
0 75 150

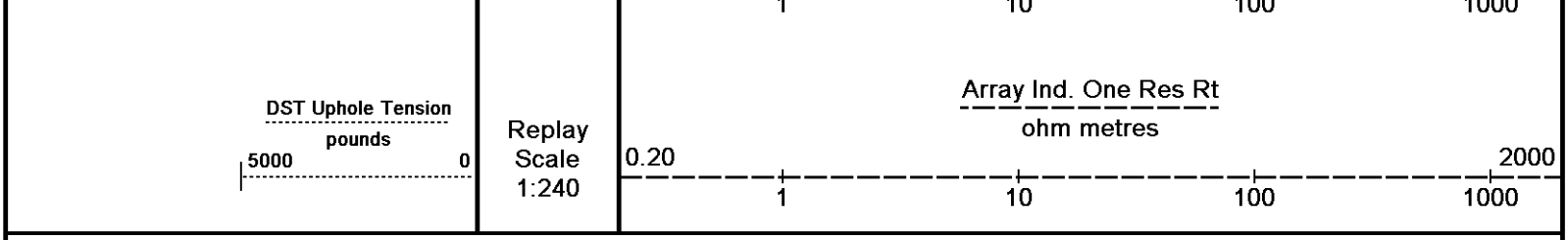
Borehole Temp in deg F

Shallow FE
ohm metres
0.20 1 10 100 2000

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


Spontaneous Potential
millivolts
– 20 +
DST Uphole Tension
pounds
5000
0
Replay
Scale
1:240
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
4700
114°
4750
115°
4800
115°
4850


116°
4900
117°
4950
FR Gamma Ray
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Spontaneous
5000
tial
DST Uphole Tension
FR DST Uphole Tension
FR Spontaneous Potential
FR Array Ind. One Res 40
5040
Depth
in
Feet
Timing Marks
every 60.0 sec
Gamma Ray
API
0
75
150
Spontaneous Potential
millivolts
− → | 20 | ← +
Borehole
Temp in
deg F
Shallow FE
ohm metres
0.20
1
10
100
1000
2000
Array Ind. One Res 40
ohm metres
0.20
1
10
100
1000
2000
Array Ind. One Res 60
ohm metres
0.20
2000



Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 11-MAY-2012 03:59
Filename: C:\Minimus 11_03_4044\Data\Com...\Comanche Resources Company Savolt # 30-1_003.dta — Recorded on 11-MAY-2012 00:27
System Versions: Logged with 11.03.4044 Plotted with 11.03.4044

REPEAT SECTION

BEFORE SURVEY CALIBRATION

C:\Minimus 11_03_4044\Data\Comanche Resources Company Savolt # 30-1\Comanche Resources Company Savolt # 30-1_004.dta

General Constants All 000

Last Edited on 10-MAY-2012,23:08

General Parameters		
Mud Resistivity	0.780	ohm-metres
Mud Resistivity Temperature	70.000	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	Limestone Density Por.	
Resistivity used	Array Ind. One Res Rt	
RWA Constant A	1.000	
RWA Constant M	2.000	

Down-hole Tension Calibration SMS 0

Field Calibration on 09-MAY-2012 17:14

Reading No	Measured	Calibrated (lbs)
1	12472.43	0.00
2	13803.95	582.00

Gamma Calibration MCG-B 39

Field Calibration on 02-APR-2012 14:02

	Measured	Calibrated (API)
Background	74	49
Calibrator (Gross)	752	505
Calibrator (Net)	678	456

Gamma Constants MCG-B 39

Last Edited on 10-MAY-2012,23:08

Gamma Calibrator Number	GRC141	
Mud Density	1.07	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

SP Calibration MCG-B 39

Field Calibration on 02-APR-2012,14:02

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

High Resolution Temperature Calibration MCG-B 39

Field Calibration on 02-APR-2012,14:03

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

High Resolution Temperature Constants MCG-B 39

Last Edited on

High Resolution Temperature Constants MCG-B 39 — Last Edited on

Pre-filter Length	11

Caliper Calibration MML-A 4

Base Calibration on 0C3170021008,
Field Calibration on 0C4060524000

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	15017	5.98
2	18447	7.97
3	21786	9.86
4	25801	11.92
5	0	0.00
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
6.08	5.98

Micro Normal and Micro Inverse Calibration MML-A 4

Base Calibration on 0C3170023008,
Field Check on 0C4060525000

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	15.7	78.3	5.0	25.0

Channel	Base Check (ohm-m)	Field Check (ohm-m)
Micro Normal	62.9	62.9
Micro Inverse	48.3	48.3

Micro Normal and Micro Inverse Constants MML-A 4

Last Edited on 10-MAY-2012,23:09

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-B.J 387

Base Calibration on 09-MAY-2012,12:48
Field Check on 09-MAY-2012,12:53

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
	2956	91	3714	110
Ratio	32.635		33.764	

Field Calibrator at Base

	Calibrated (cps)	
	2214	3169
Ratio	0.699	

Field Check

	Calibrated (cps)	
	2175	3193
Ratio	0.681	

Neutron Constants MDN-B.J 387

Last Edited on 10-MAY-2012,23:13

Neutron Source Id	P0204NN	
Neutron Jig Number	NEDC117	
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
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 0C31B0831004
Field Check on 0C4060523000

Base Calibration

	Measured	Calibrated (ohm-m)
Reference 1	0.0	0.0
Reference 2	963.7	126.8
Base Check		281.5
Field Check		281.5

FE Constants MFE-B.J 352

Last Edited on 10-MAY-2012,23:19

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

Sonic Constants MSS-C.K 330

Last Edited on 09-MAY-2012,12:47

Maximum Boundary Contrast	100.00	micro-sec/ft
Fluid Transit Time	189.00	micro-sec/ft
Limestone Transit Time	47.50	micro-sec/ft
Sandstone Transit Time	55.50	micro-sec/ft
Dolomite Transit Time	43.50	micro-sec/ft
Sonic used for Porosities	3-5' Compensated Sonic	
Correction for Sonde Skew	Applied	
Cycle Stretch Algorithm	Applied	
MN3FT	N/A	micro-sec
MX3FT	N/A	micro-sec
Hunt-Raymer Constant	83.13	micro-sec/ft
Sonde Mode	Compensated	
Hole Type	Open Hole	

Sonde Parameters

	Measured	Calibrated
Offset	N/A	0.0000
Free Pipe	N/A	N/A

Peak Amplitude Source N/A

Waveform	Start Time (micro-sec)	Width (micro-sec)	Pre Gain	Start Gain	Discriminator (mV)
3'	N/A	N/A	N/A	N/A	N/A
4'	N/A	N/A	N/A	N/A	N/A
5'	N/A	N/A	N/A	N/A	N/A
6'	N/A	N/A	N/A	N/A	N/A

Processed Fixed Gate Parameters

Waveform Used For Processing N/A

Start Time (micro-sec)	End Time (micro-sec)	Discriminator (mV)	N/A
N/A	N/A	N/A	
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	

Full Waveform Parameters

Use 3' Waveform to derive TR	N/A	
Use 4' Waveform to derive TR	N/A	
Use 5' Waveform to derive TR	N/A	
Use 6' Waveform to derive TR	N/A	
3' Waveform Discriminator Level	N/A	mV
4' Waveform Discriminator Level	N/A	mV
5' Waveform Discriminator Level	N/A	mV
6' Waveform Discriminator Level	N/A	mV
3' Waveform Filter	N/A	

4' Waveform Filter	N/A	
5' Waveform Filter	N/A	
6' Waveform Filter	N/A	
Semblance Level	N/A	
Semblance Window Width	N/A	micro-sec
Sonic 1 Despiker	N/A	N/A
Sonic 2 Despiker	N/A	N/A

Induction Calibration MAI-A.A 178

Base Calibration on 0C31B0B06000,
Field Check on 0C4060521000

Base Calibration

Test Loop Calibration	Measured		Calibrated (mmho/m)	
Channel	Low	High	Low	High
1	17.6	484.7	9.3	966.2
2	6.2	391.4	7.6	821.4
3	4.0	264.5	5.2	566.0
4	2.3	135.1	2.6	279.2

Array Temperature	77.0	Deg F

Channel	Base Check (mmho/m)		Field Check (mmho/m)		
	Low	High	Low	High	
1	0.0	0.0	12.3	3762.6	
2	0.0	0.0	29.6	3466.9	
3	0.0	0.0	27.3	3014.1	
4	0.0	0.0	18.8	2064.7	
Deep	0.0	0.0	15.9	1995.3	
Medium	0.0	0.0	40.3	3955.3	
Shallow	0.0	0.0	45.3	5081.7	
Array Temperature	0.0		72.7		Deg F

Induction Constants MAI-A.A 178

Last Edited on 10-MAY-2012,23:20

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 178

Field Calibration on 0C4030110004,

	Measured	Calibrated(Deg F)
Lower	32.00	32.00
Upper	68.00	68.00

High Resolution Temperature Constants MAI-A.A 178

Last Edited on 0C4060522000,

Pre-filter Length	11

Caliper Calibration MPD-B 35

Base Calibration on 0C31C0A2C008
Field Calibration on 0C4060527000

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	20688	3.99
2	30944	5.98
3	41312	7.97
4	50976	9.86
5	61184	11.92
6	N/A	N/A

Field Calibration

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

Photo Density Calibration MPD-B 35

Base Calibration on 0C31C0B00008
Field Check on 0C406052B000

Density Calibration

Base Calibration

	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	62298	31871	59556	30836
Reference 2	26887	2863	24941	2541

Field Check at Base

1142.9	1359.1

Field Check

1145.7	1361.2

PE Calibration

Base Calibration

		Measured		Calibrated
	WS	WH	Ratio	Ratio
Background	204	1008		
Reference 1	23049	62096	0.374	0.371
Reference 2	7079	26739	0.267	0.272

Field Check at Base

204.4	1008.1

Field Check

206.4	1011.8

Density Constants MPD-B 35

Last Edited on 10-MAY-2012,23:15

Density Source Id	18235B	
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	1.07	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	

DOWNHOLE EQUIPMENT

C:\Minimus 11_03_4044\Data\Comanche Resources Company Savolt # 30-1\Comanche Resources Company Savolt # 30-1_004.dta

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

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-B 39 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in

Compact Comms Gamma
MCG-B 39 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in

Compact Micro-log
MML-A 4 LG: 7.97 ft WT: 81.6 lb OD: 2.24 in

Compact Micro-log
MML-A 4 LG: 7.97 ft WT: 81.6 lb OD: 2.24 in

Compact Neutron
MDN-B.J 387 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

Compact Neutron
MDN-B.J 387 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

Compact Density/Caliper
MPD-B 35 LG: 9.59 ft WT: 90.4 lb OD: 2.45 in

Compact Density/Caliper
MPD-B 35 LG: 9.59 ft WT: 90.4 lb OD: 2.45 in

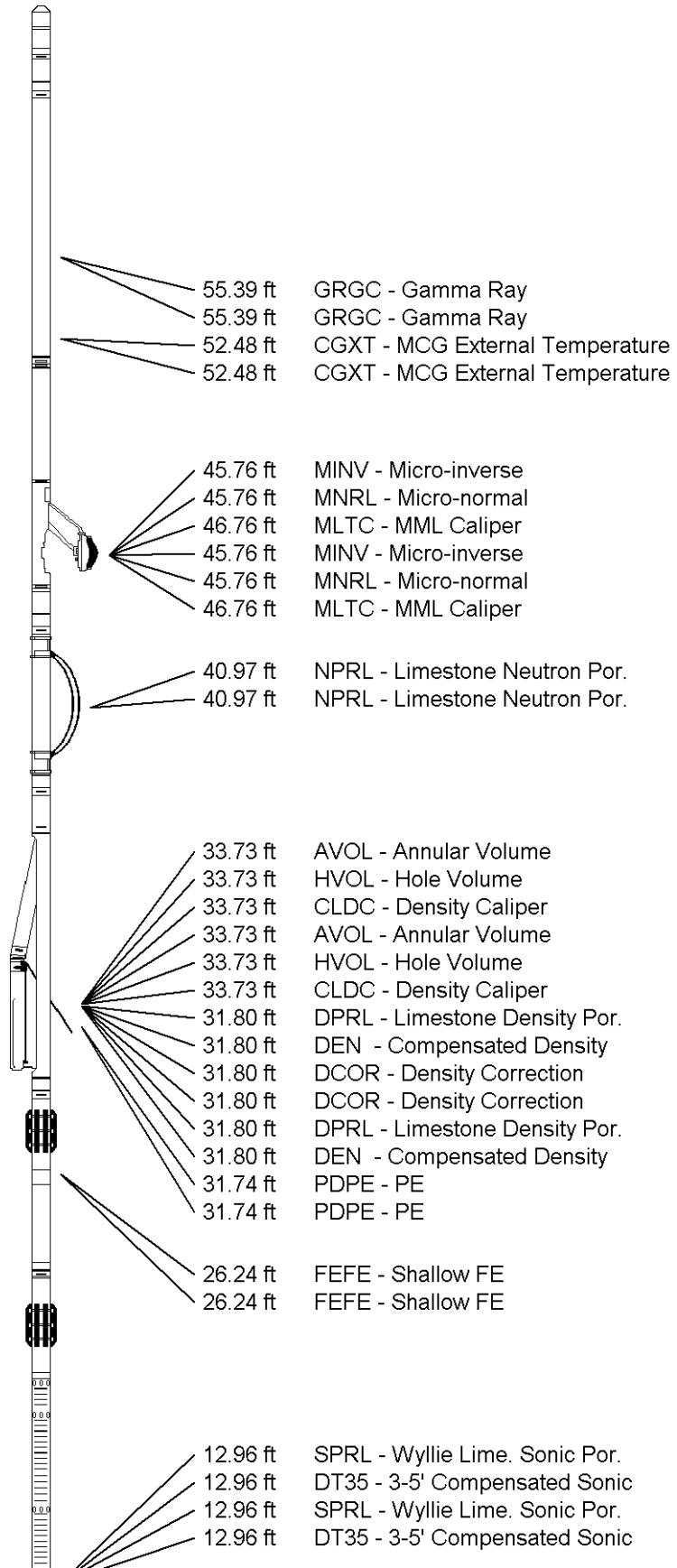
Compact Focussed Electric
MFE-B.J 352 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

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

Compact Sonic
MSS-C.K 330 LG: 12.52 ft WT: 72.8 lb OD: 2.24 in

Compact Sonic
MSS-C.K 330 LG: 12.52 ft WT: 72.8 lb OD: 2.24 in

Compact Induction



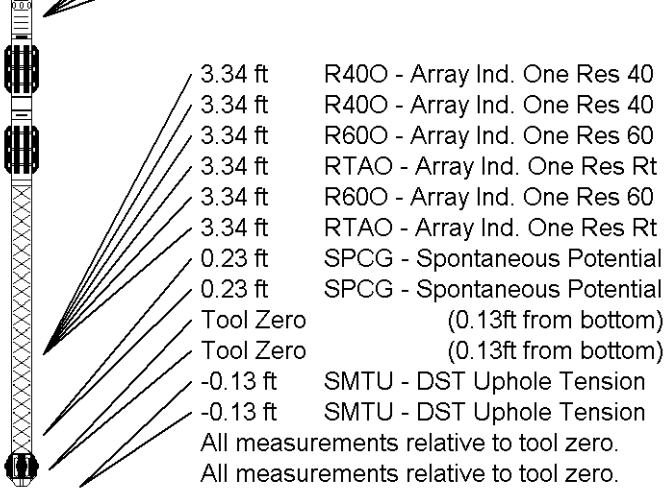
55.39 ft	GRGC - Gamma Ray
55.39 ft	GRGC - Gamma Ray
52.48 ft	CGXT - MCG External Temperature
52.48 ft	CGXT - MCG External Temperature
45.76 ft	MINV - Micro-inverse
45.76 ft	MNRL - Micro-normal
46.76 ft	MLTC - MML Caliper
45.76 ft	MINV - Micro-inverse
45.76 ft	MNRL - Micro-normal
46.76 ft	MLTC - MML Caliper
40.97 ft	NPRL - Limestone Neutron Por.
40.97 ft	NPRL - Limestone Neutron Por.
33.73 ft	AVOL - Annular Volume
33.73 ft	HVOL - Hole Volume
33.73 ft	CLDC - Density Caliper
33.73 ft	AVOL - Annular Volume
33.73 ft	HVOL - Hole Volume
33.73 ft	CLDC - Density Caliper
31.80 ft	DPRL - Limestone Density Por.
31.80 ft	DEN - Compensated Density
31.80 ft	DCOR - Density Correction
31.80 ft	DCOR - Density Correction
31.80 ft	DPRL - Limestone Density Por.
31.80 ft	DEN - Compensated Density
31.74 ft	PDPE - PE
31.74 ft	PDPE - PE
26.24 ft	FEFE - Shallow FE
26.24 ft	FEFE - Shallow FE
12.96 ft	SPRL - Wyllie Lime. Sonic Por.
12.96 ft	DT35 - 3-5' Compensated Sonic
12.96 ft	SPRL - Wyllie Lime. Sonic Por.
12.96 ft	DT35 - 3-5' Compensated Sonic

MAI-A.A 178 LG: 10.81 ft WT: 48.5 lb OD: 2.24 in

Compact Induction
MAI-A.A 178 LG: 10.81 ft WT: 48.5 lb OD: 2.24 in

Total Length: 63.07 ft Weight: 476.2 lb

Total Length: 63.07 ft Weight: 476.2 lb



COMPANY	COMANCHE RESOURCES COMPANY
WELL	SAVOLT # 30-1
FIELD	WILDCAT
PROVINCE/COUNTY	SCOTT
COUNTRY/STATE	U.S.A. / KANSAS

Elevation Kelly Bushing	3141.00	feet	First Reading	5012.00	feet
Elevation Drill Floor	3139.00	feet	Depth Driller	5020.00	feet
Elevation Ground Level	3131.00	feet	Depth Logger	5015.00	feet

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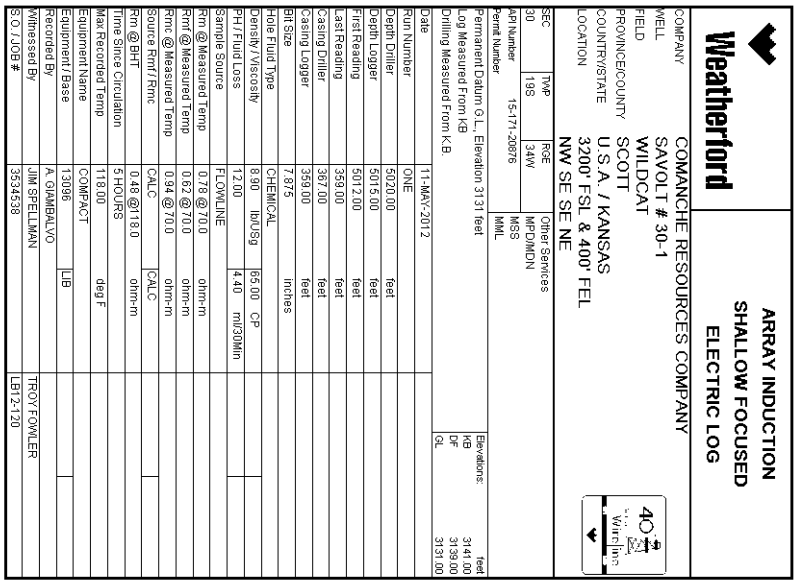
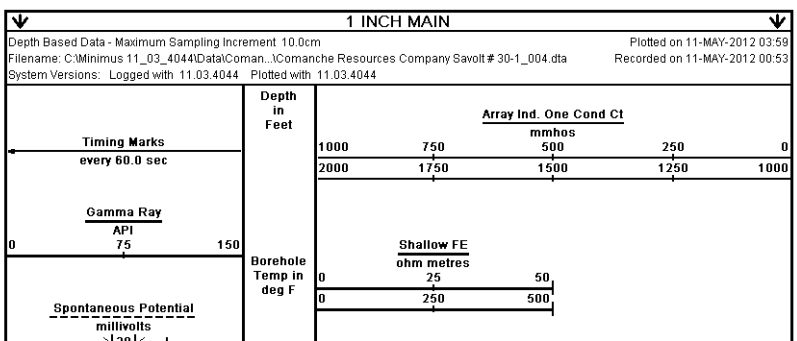
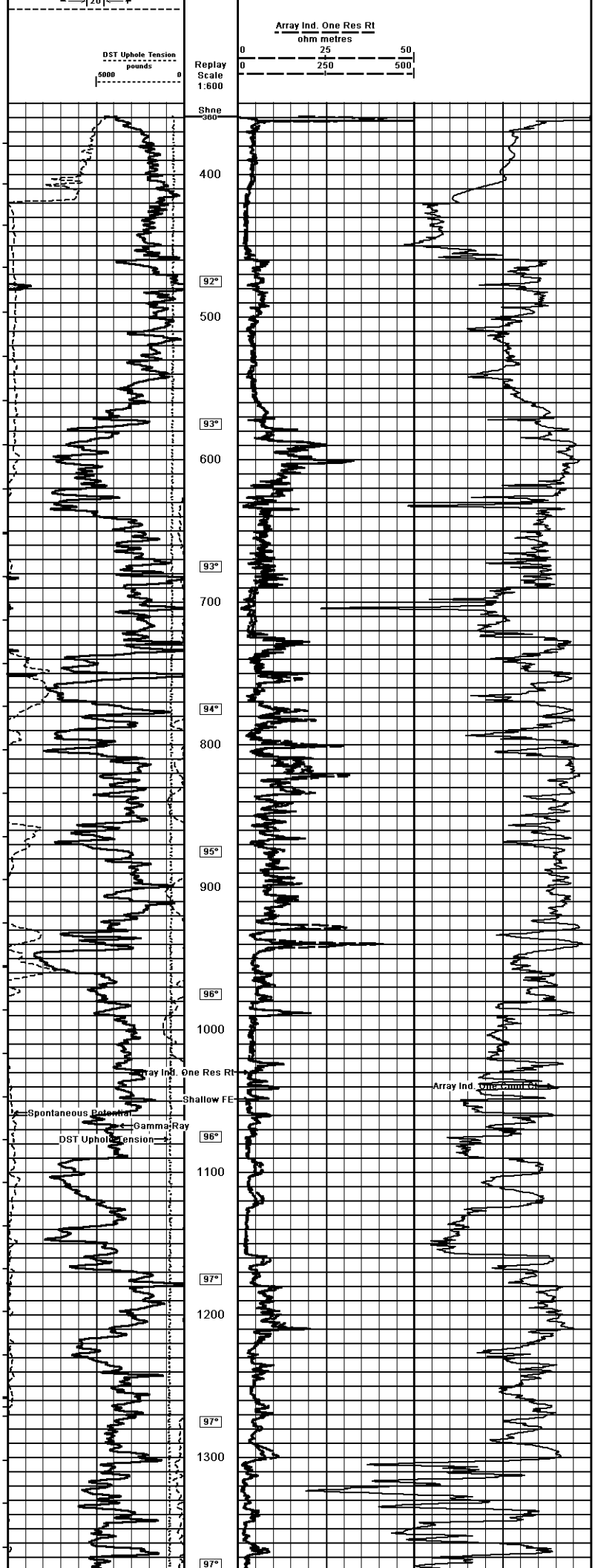
ELECTRIC LOG

40 Years of Wireline 1970 2010



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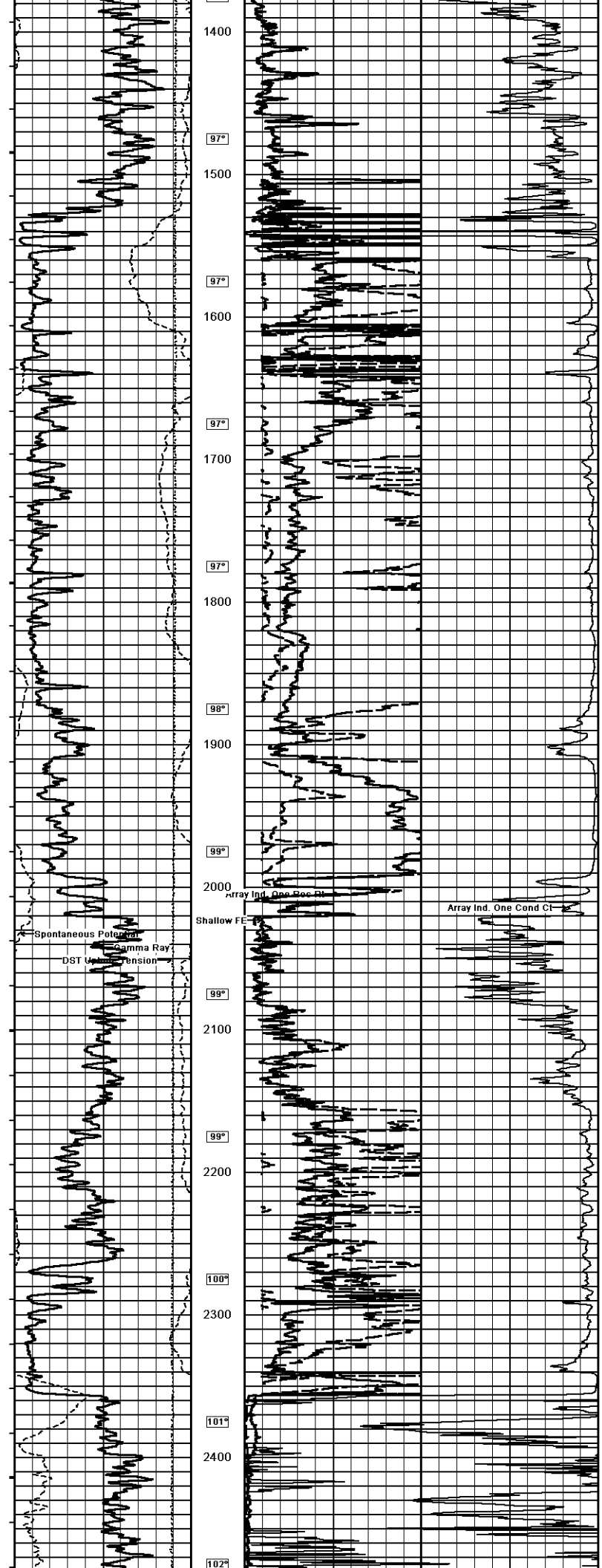
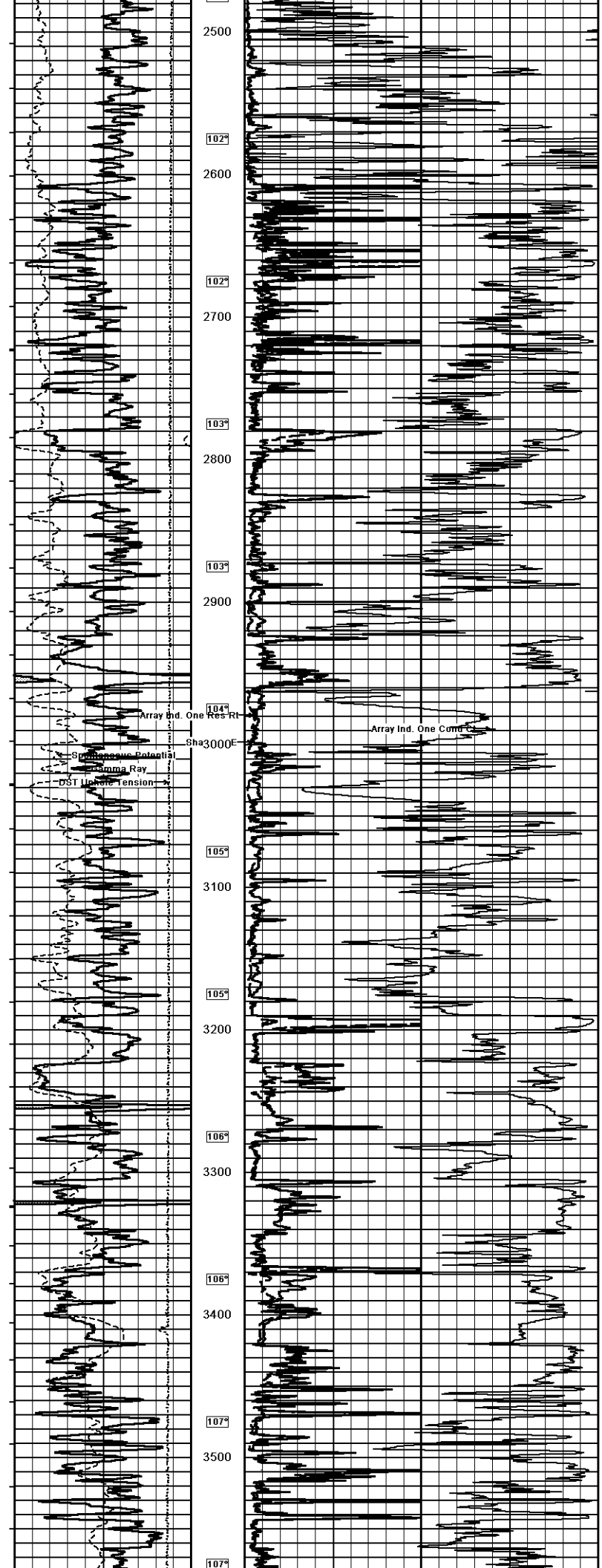
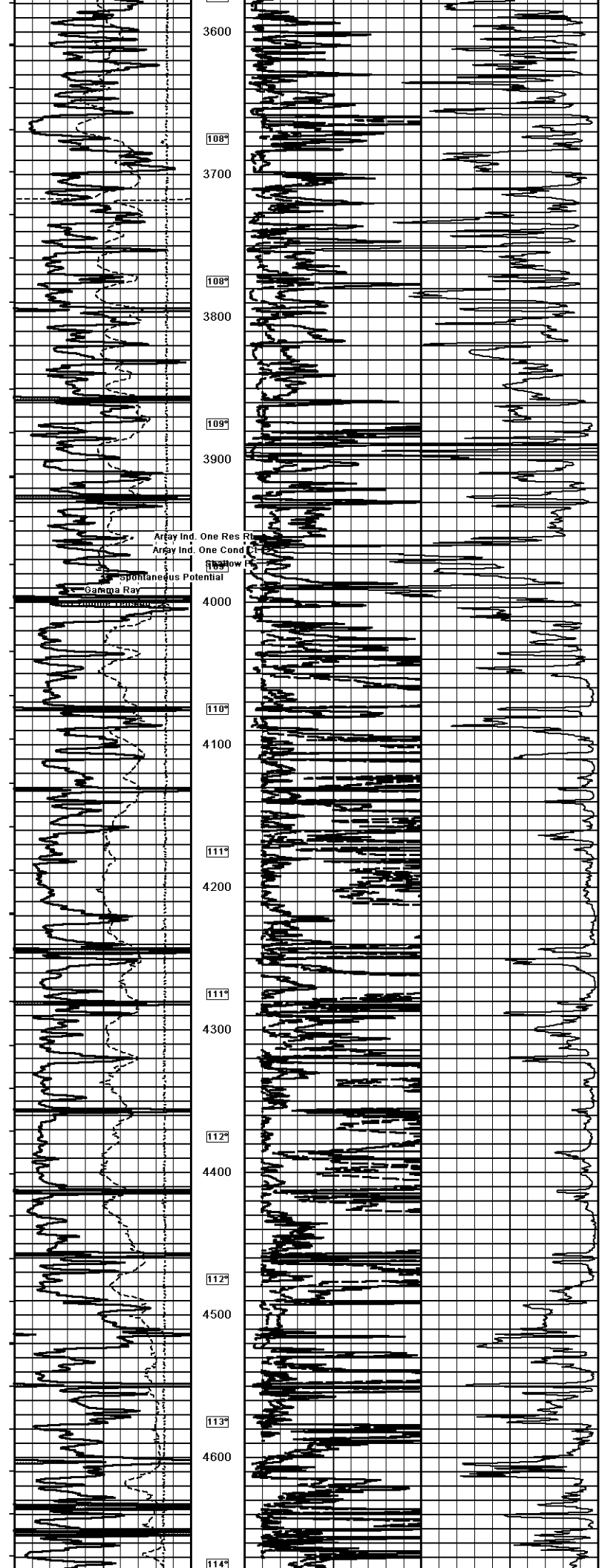
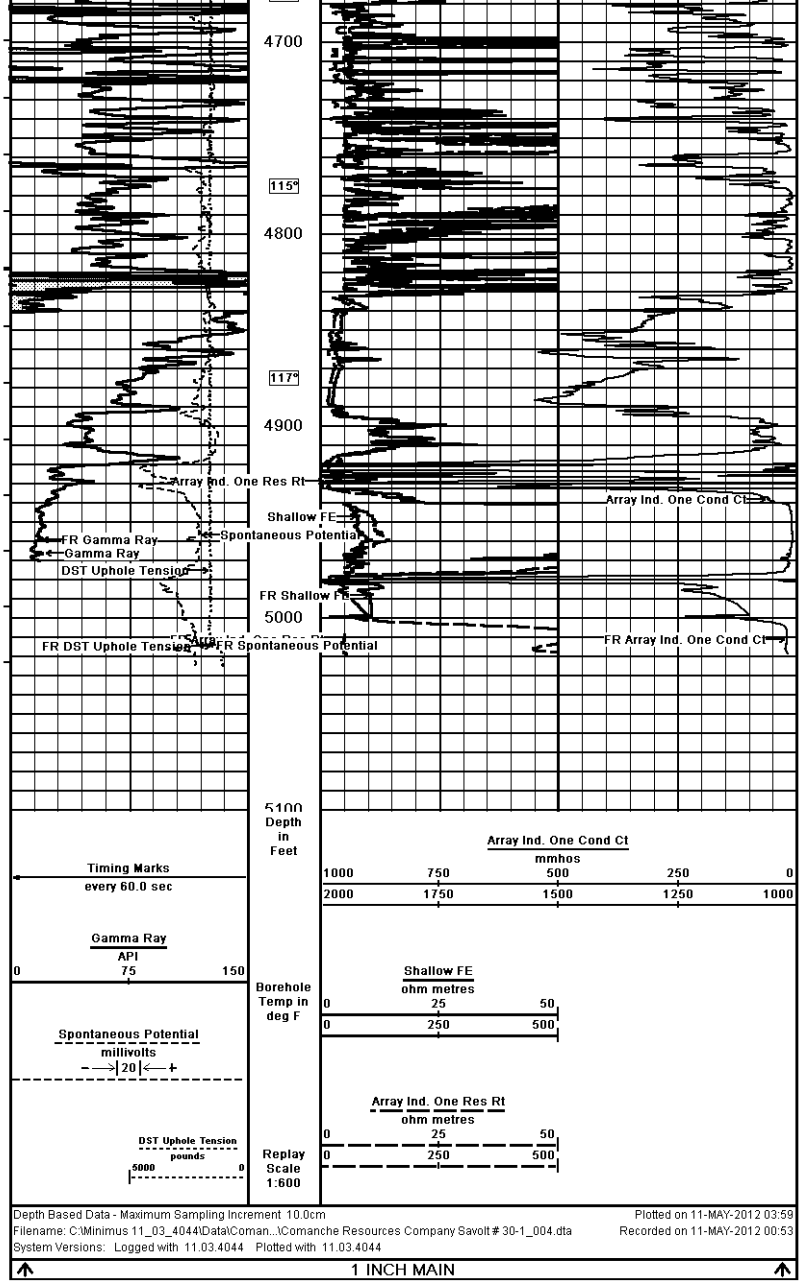
ohm metres
0
25
50
0
250
500
DST Uphole Tension
pounds
5000
0
Replay
Scale
1:600
Shne
360
400
92°
500
93°
600
93°
700
94°
800
95°
900
96°
1000
Array Ind. One Res Rt
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
96°
1100
97°
1200
97°
1300
97°
Array Ind. One Cond Rt


1400
97°
1500
97°
1600
97°
1700
97°
1800
98°
1900
99°
2000
Array Ind. One Rec Rt
Array Ind. One Cond Ct
Shallow FE
Spontaneous Potential
Gamma Ray
DST Up
Tension
99°
2100
99°
2200
100°
2300
101°
2400
102°


2500
102°
2600
102°
2700
103°
2800
103°
2900
104°
Array Ind. One Res Rt
Array Ind. One Cond
Sha
3000
Spontaneous Potential
Gamma Ray
DST Uphole Tension
105°
3100
105°
3200
106°
3300
106°
3400
107°
3500
107°


3600
108°
3700
108°
3800
109°
3900
Array Ind. One Res Rt
Array Ind. One Cond Rt
Shallow Re
Spontaneous Potential
Gamma Ray
Cable Tension
4000
110°
4100
111°
4200
111°
4300
112°
4400
112°
4500
113°
4600
114°



Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 11-MAY-2012 03:59

Filename: C:\Minimus 11_03_4044\Data\Coman...\Comanche Resources Company Savolt # 30-1_004.dta — Recorded on 11-MAY-2012 00:53

System Versions: Logged with 11.03.4044 Plotted with 11.03.4044

1 INCH MAIN

COMPANY	COMANCHE RESOURCES COMPANY
WELL	SAVOLT # 30-1
FIELD	WILDCAT
PROVINCE/COUNTY	SCOTT
COUNTRY/STATE	U.S.A. / KANSAS

Elevation Kelly Bushing	3141.00	feet	First Reading	5012.00	feet
Elevation Drill Floor	3139.00	feet	Depth Driller	5020.00	feet
Elevation Ground Level	3131.00	feet	Depth Logger	5015.00	feet

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