Weatherford®

ARRAY INDUCTION SHALLOW FOCUSED ELECTRIC LOG

COMPANY	SANDRIDGE EXPL. & PRODUCTION, LLC.
WELL	MACY 1-34 SWD
FIELD	KANSAS WALDRON-WEST
PROVINCE/COUNTY	HARPER
COUNTRY/STATE	U.S.A. / KANSAS
LOCATION	249' FSL & 967' FWL
	SW SE SW SW



SEC	TWP	RGE
34	34S	8W

Other Services
MPD/MDN MML
MSS

API Number 15-077-21770
Permit Number

Permanent Datum G.L., Elevation 1261 feet
Log Measured From KB
Drilling Measured From K.B.

Elevations:	feet
KB	1277.00
DF	1275.00
GL	1261.00

Date	21-FEB-2012		
Run Number	ONE		
Depth Driller	5570.00 feet		
Depth Logger	5575.00 feet		
First Reading	5572.00 feet		
Last Reading	791.00 feet		
Casing Driller	791.00 feet		
Casing Logger	791.00 feet		
Bit Size	8.750 inches		
Hole Fluid Type	CHEMICAL		
Density / Viscosity	9.30 lb/USg	42.00 CP	
PH / Fluid Loss	9.50	6.20 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	0.42 @ 71.0 ohm-m		
Rmf @ Measured Temp	0.34 @ 71.0 ohm-m		
Rmc @ Measured Temp	0.50 @ 71.0 ohm-m		
Source Rmf / Rmc	CALC	CALC	
Rm @ BHT	0.22 @134.0 ohm-m		
Time Since Circulation	8 HOURS		
Max Recorded Temp	134.00 deg F		
Equipment Name	COMPACT		
Equipment / Base	13057	LIB	
Recorded By	L. SCOTT		
Witnessed By	TAMMY ALCORN		
S.O.# / JOB#	3534610	LB12-036	

BOREHOLE RECORD

Last Edited: 21-FEB-2012 11:41

Bit Size inches	Depth From feet	Depth To feet
8.750	791.00	5575.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
COND.	20.000	0.00	90.00	94.00
SURFACE	9.625	0.00	791.00	29.30

REMARKS

Tools Ran: MCG, MML, MDN, MPD, SKJ, MFE, MSS, MAI.
Hardware Used: MDN Dual Eccentralizer used. MPD 8 inch profile plate used. MFE, MSS and MAI 0.5 inch standoffs used.
2.71 g/cc Limestone Density Matrix used to calculate porosity.
Sonic porosity calculated using a Limestone scale (47.5 usec/ft).
All intervals logged and scaled per customer's request.
Annular volume with 7 inch production casing = 363 cu. ft.
Total hole volume from TD to Surface Casing= 2187 cu. ft.
Service order: #3534610
Rig: LaMunyon #1
Engineer: L. Scott
Operator(s): J. LaPoint

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.

2 INCH MAIN PASS

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 02-MAR-2012 15:12
Filename: C:\DOCUME~1\E168018\LOCALS~1\Temp\Weatherf...\SandRidge Macy 1-34 SWD_002.dta
Recorded on 21-FEB-2012 10:12
System Versions: Logged with 11.03.4044 Plotted with 12.01.3513

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

770
Casing Shoe

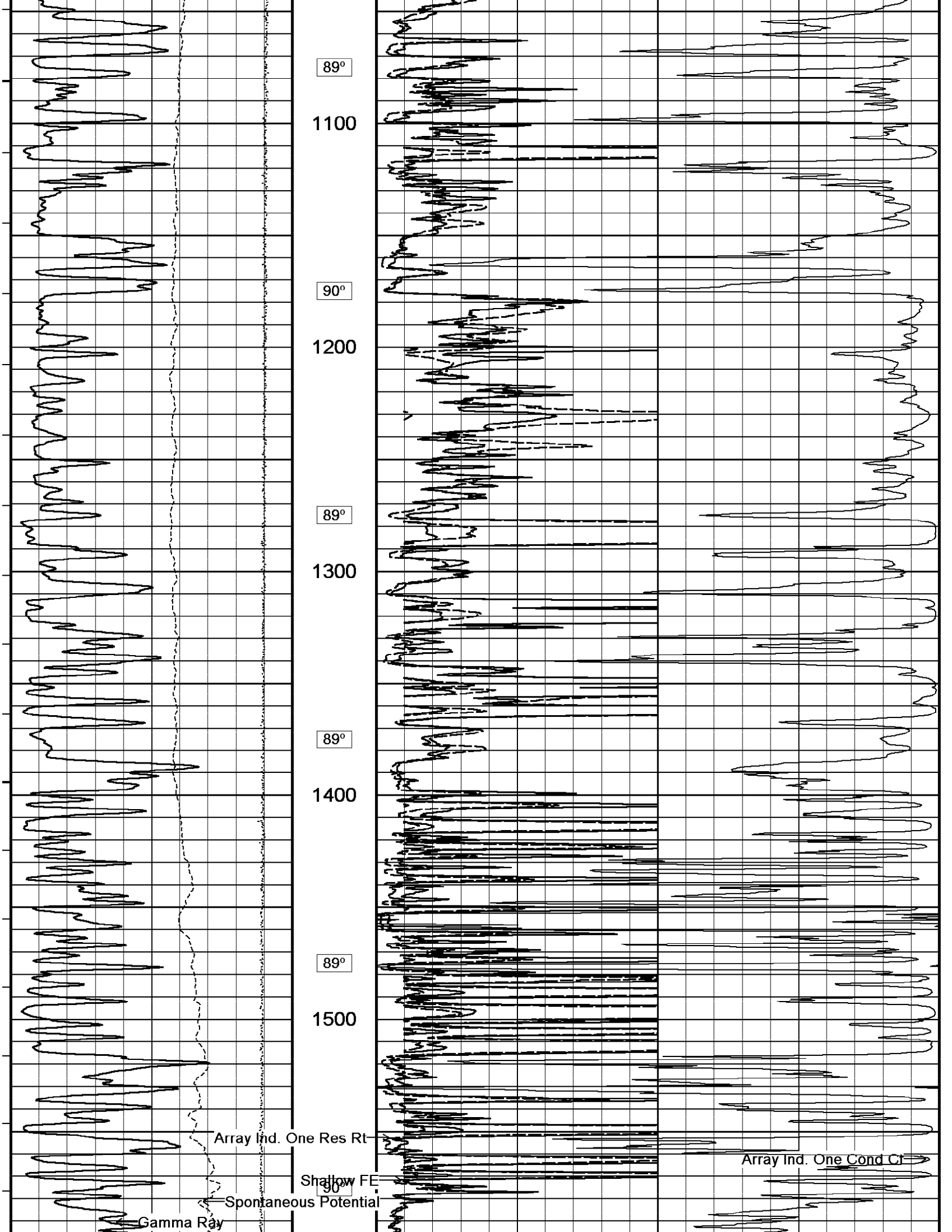
800

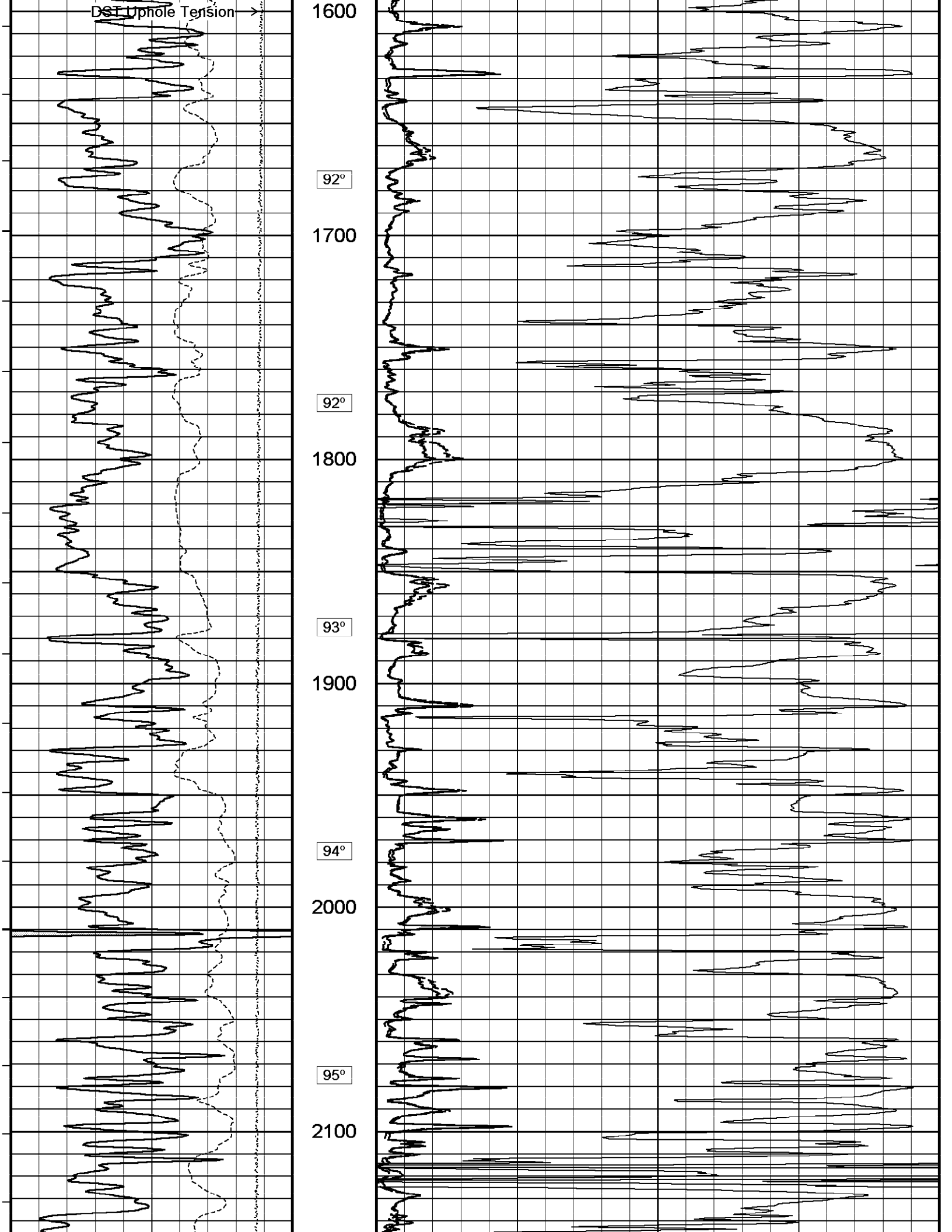
86°

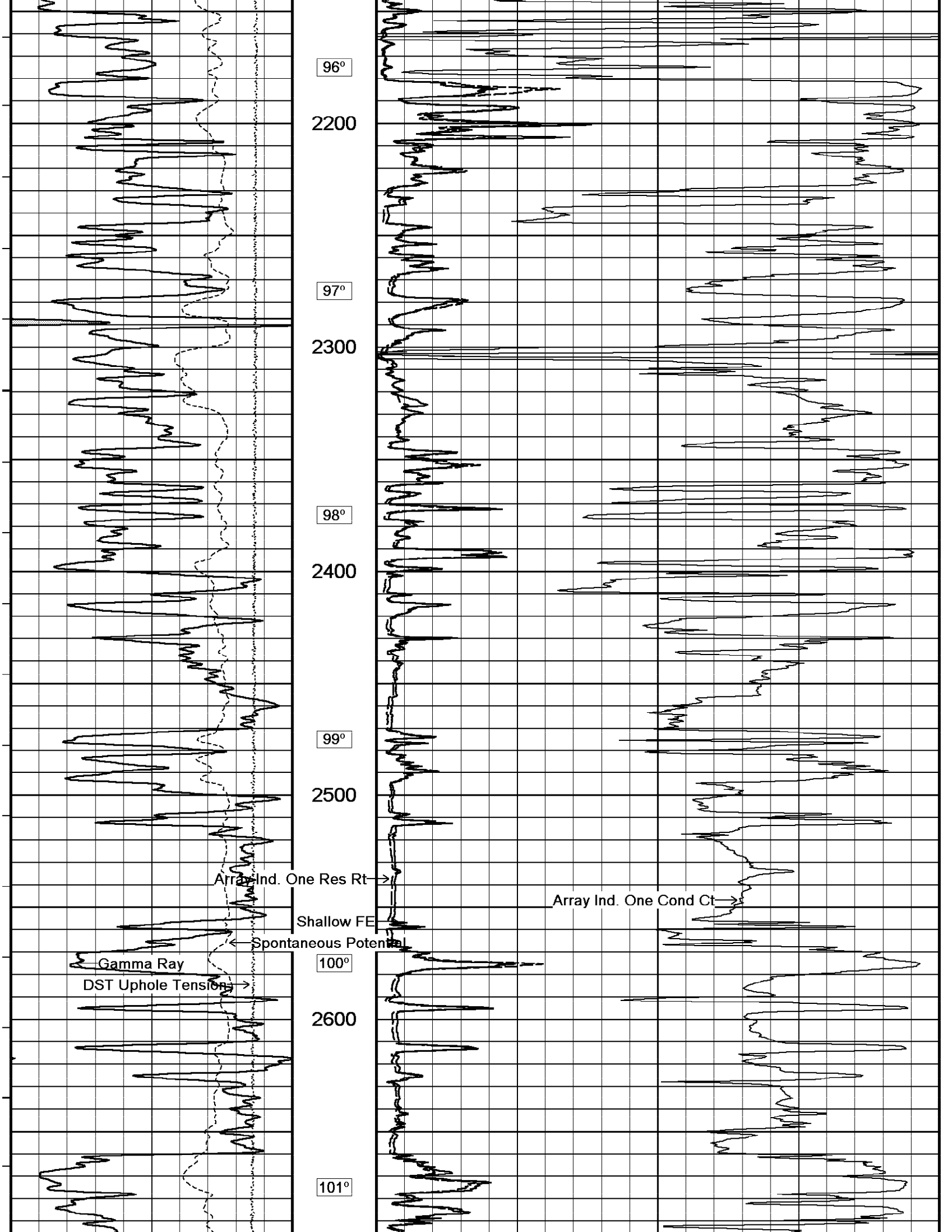
900

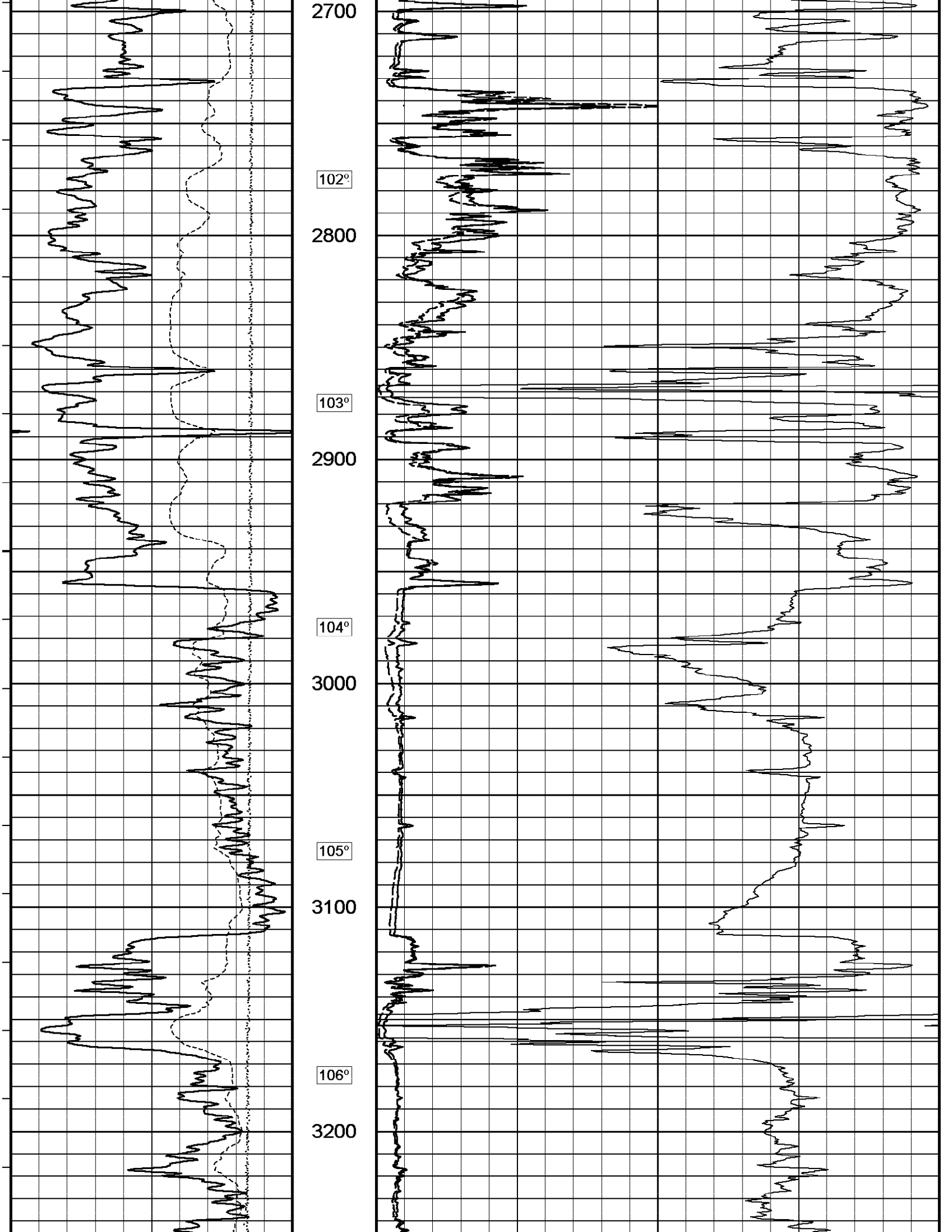
88°

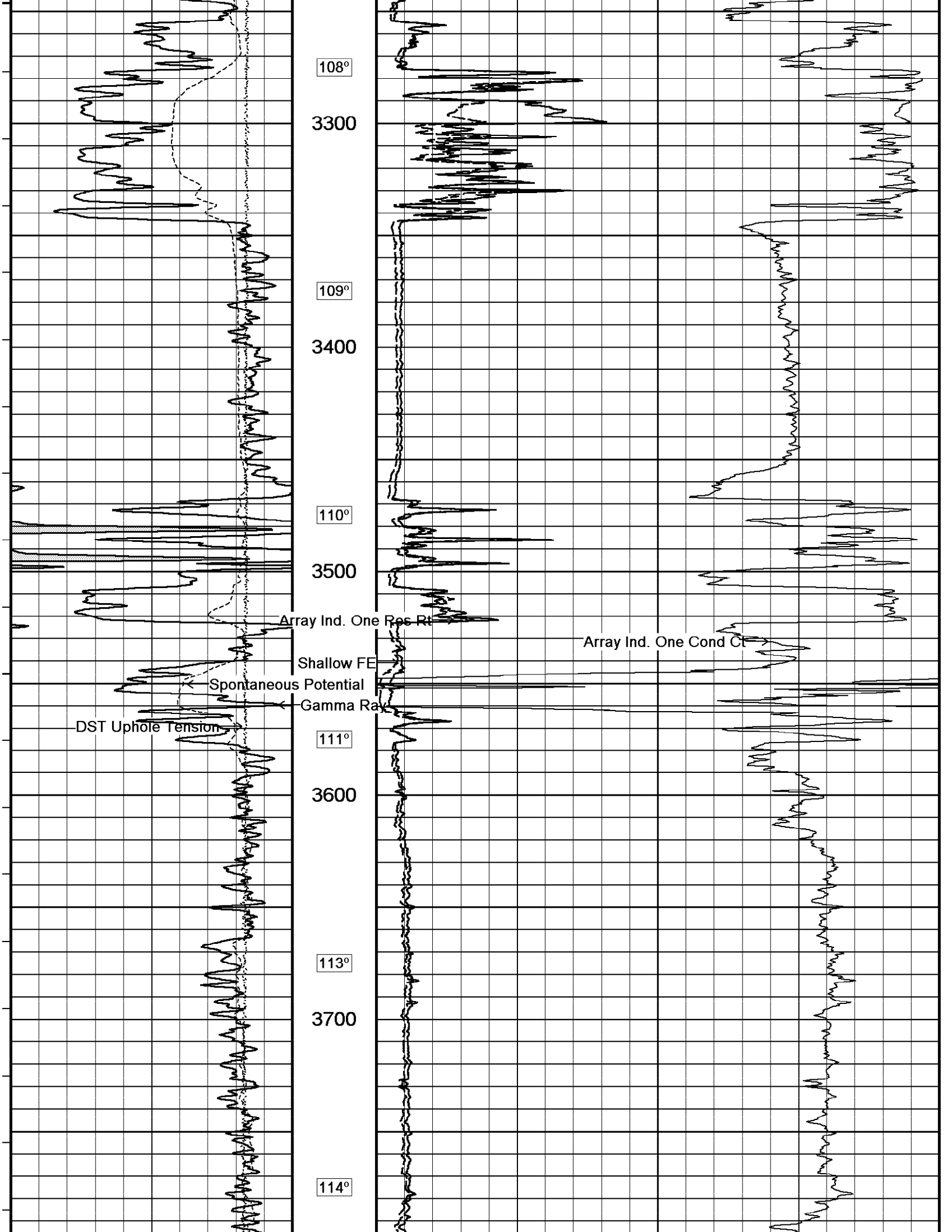
1000

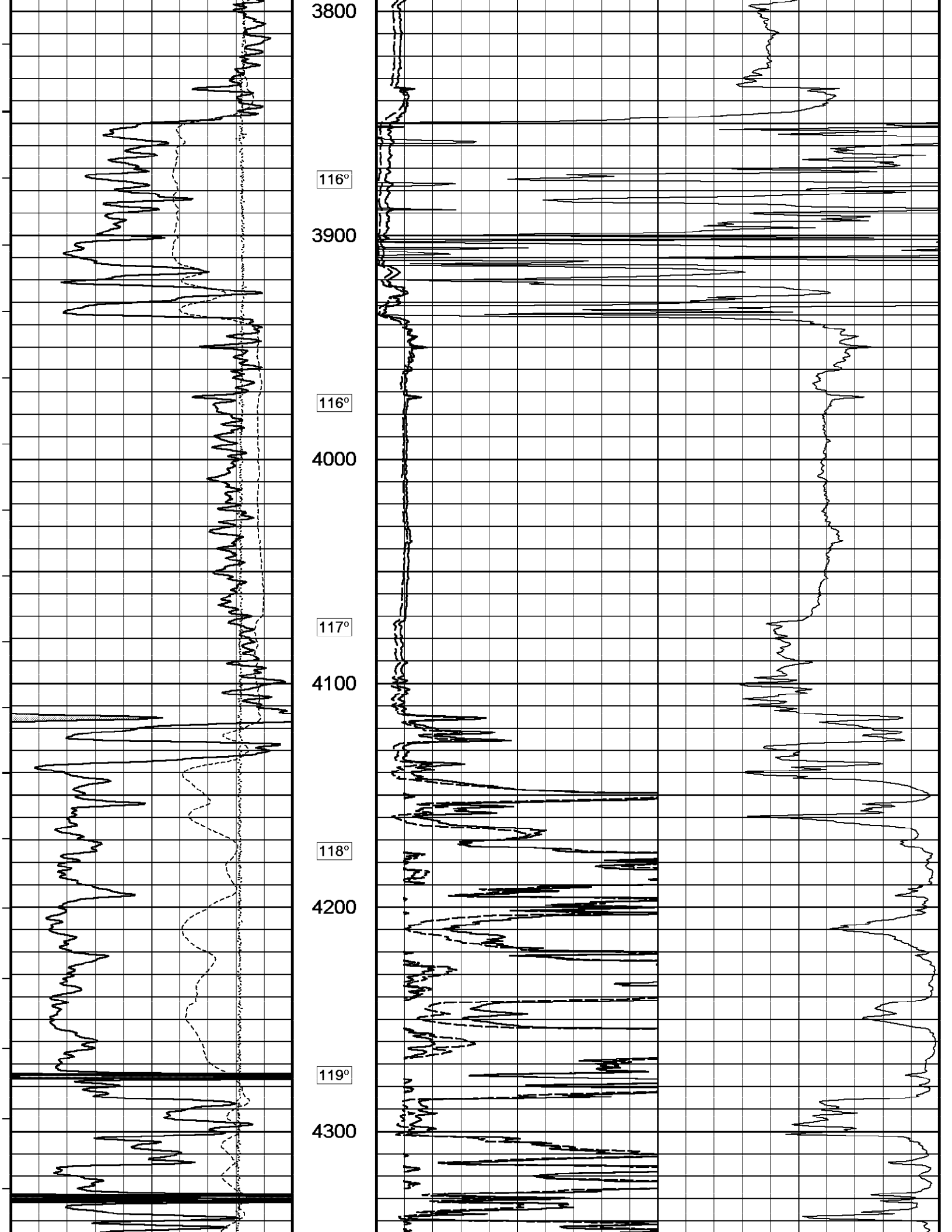

89°
1100
90°
1200
89°
1300
89°
1400
89°
1500
90°
Array Ind. One Res Rt
Shallow FE
Spontaneous Potential
Gamma Ray
Array Ind. One Cond Ct

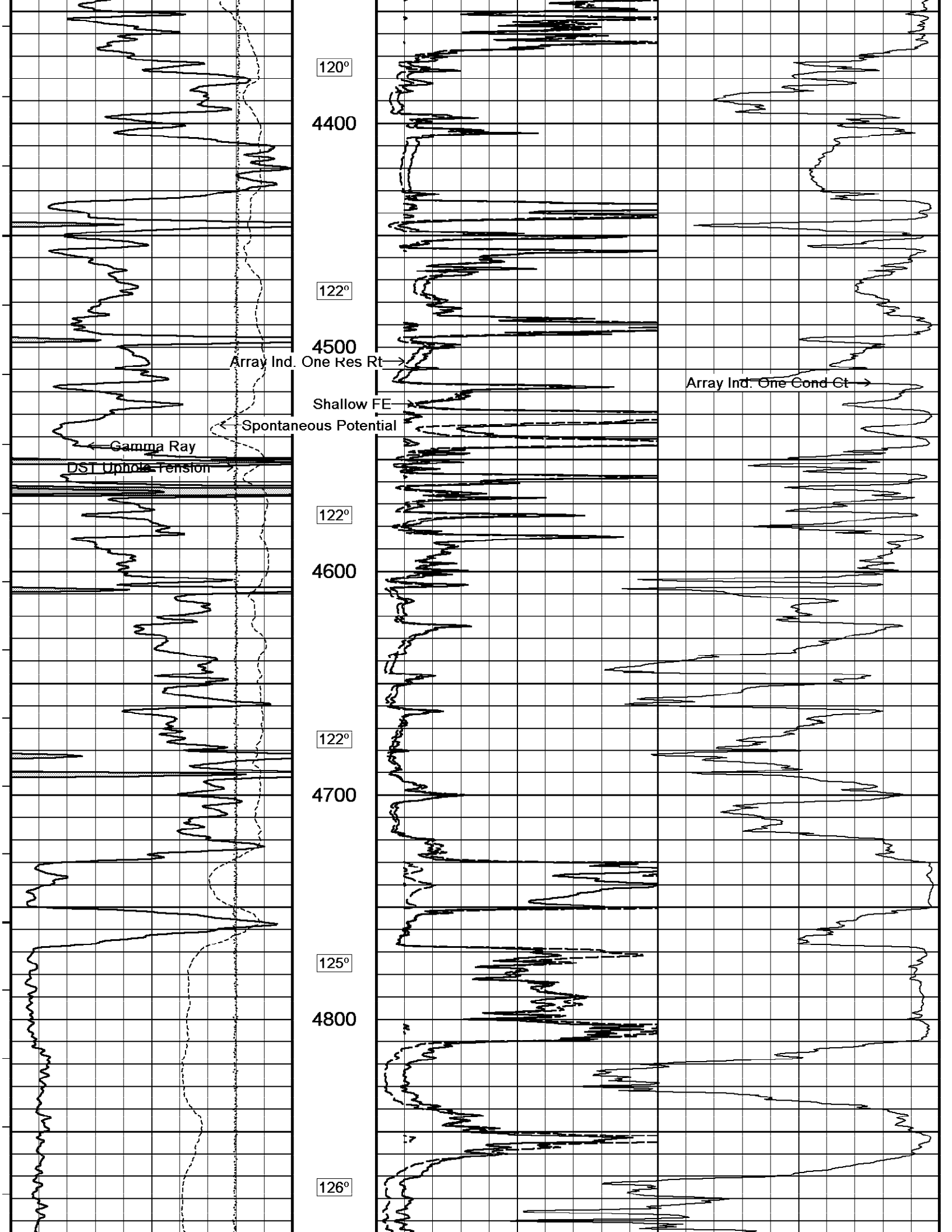

DST Uphole Tension
1600
92°
1700
92°
1800
93°
1900
94°
2000
95°
2100

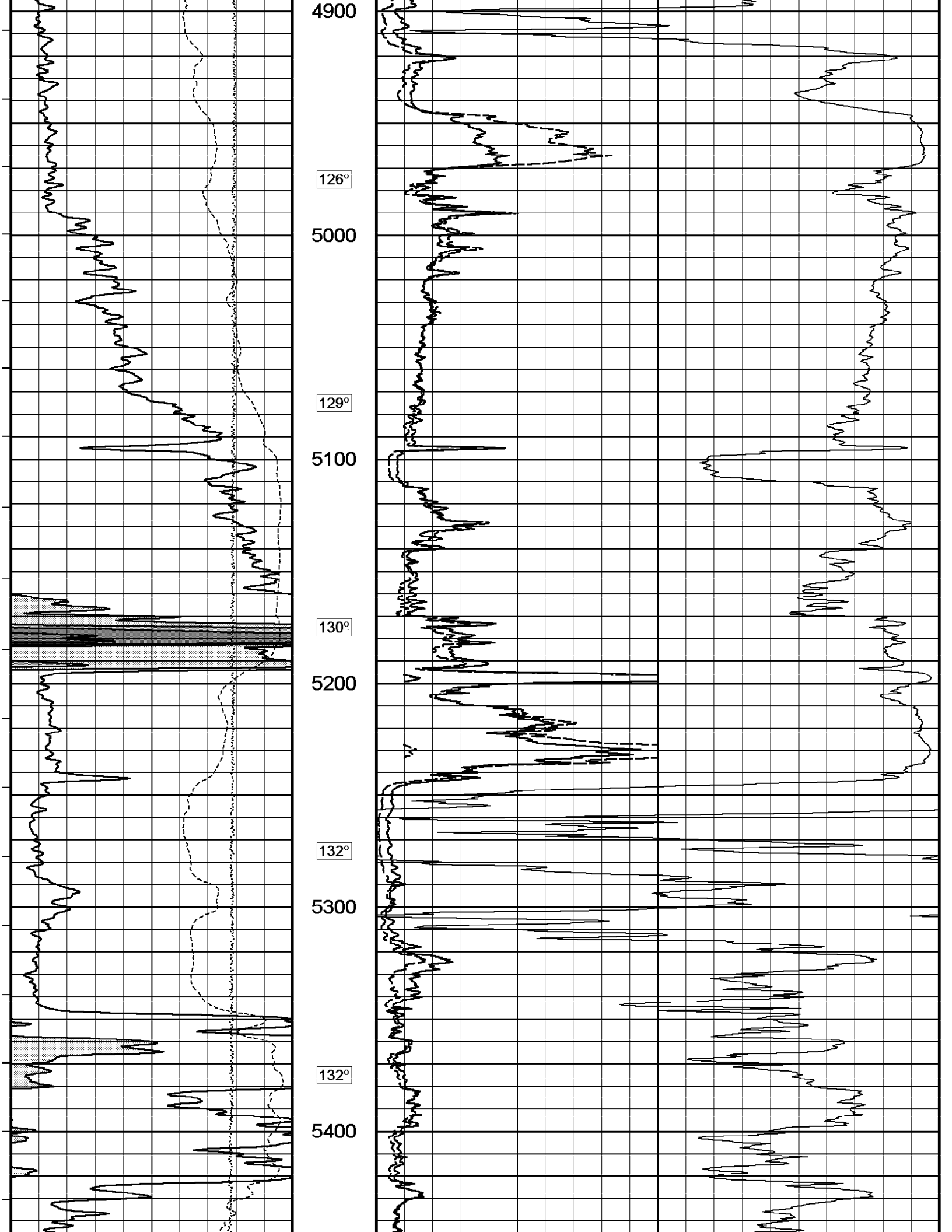

96°
2200
97°
2300
98°
2400
99°
2500
Array Ind. One Res Rt
Array Ind. One Cond Ct
Shallow FE
Spontaneous Potential
100°
Gamma Ray
DST Uphole Tension
2600
101°

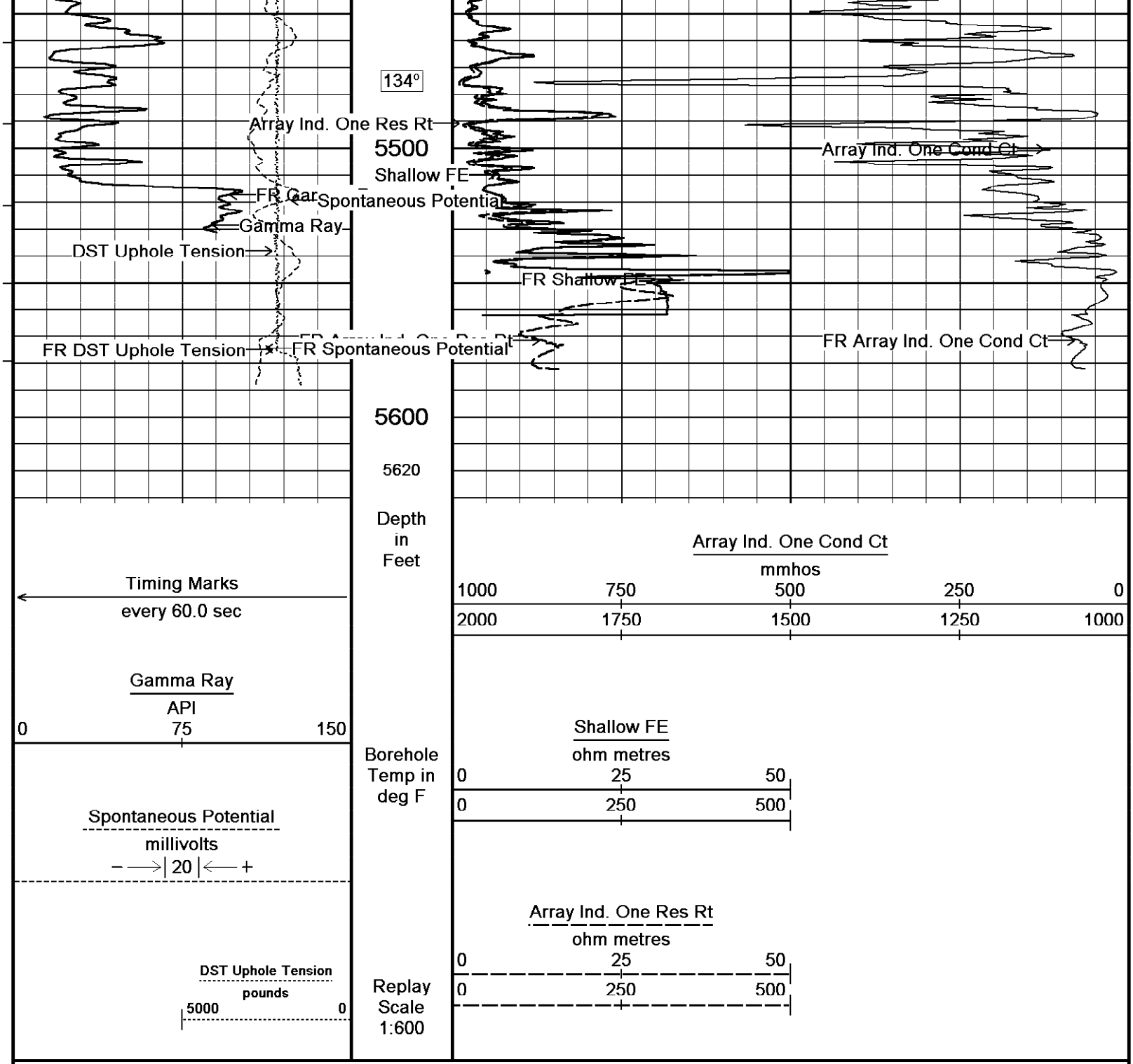

2700
102°
2800
103°
2900
104°
3000
105°
3100
106°
3200


108°
3300
109°
3400
110°
3500
Array Ind. One Res Rt
Array Ind. One Cond Ct
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
111°
3600
113°
3700
114°


3800
116°
3900
116°
4000
117°
4100
118°
4200
119°
4300


120°
4400
122°
4500
Array Ind. One Res Rt
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Array Ind. One Cond Ct
122°
4600
122°
4700
125°
4800
126°


4900
126°
5000
129°
5100
130°
5200
132°
5300
132°
5400

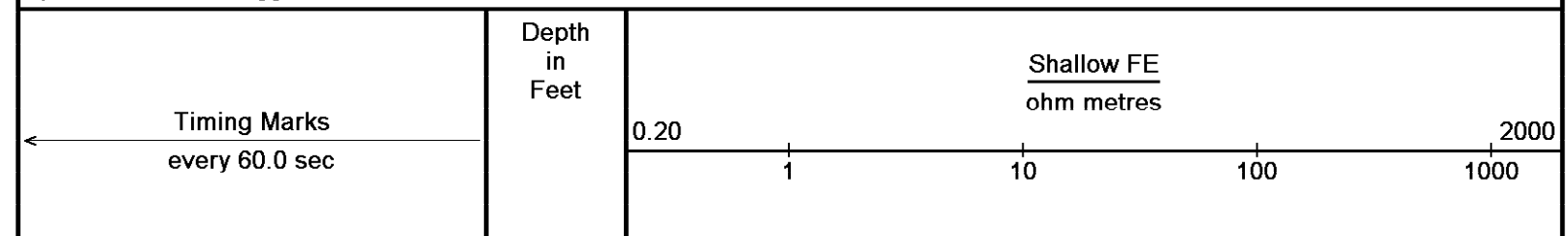


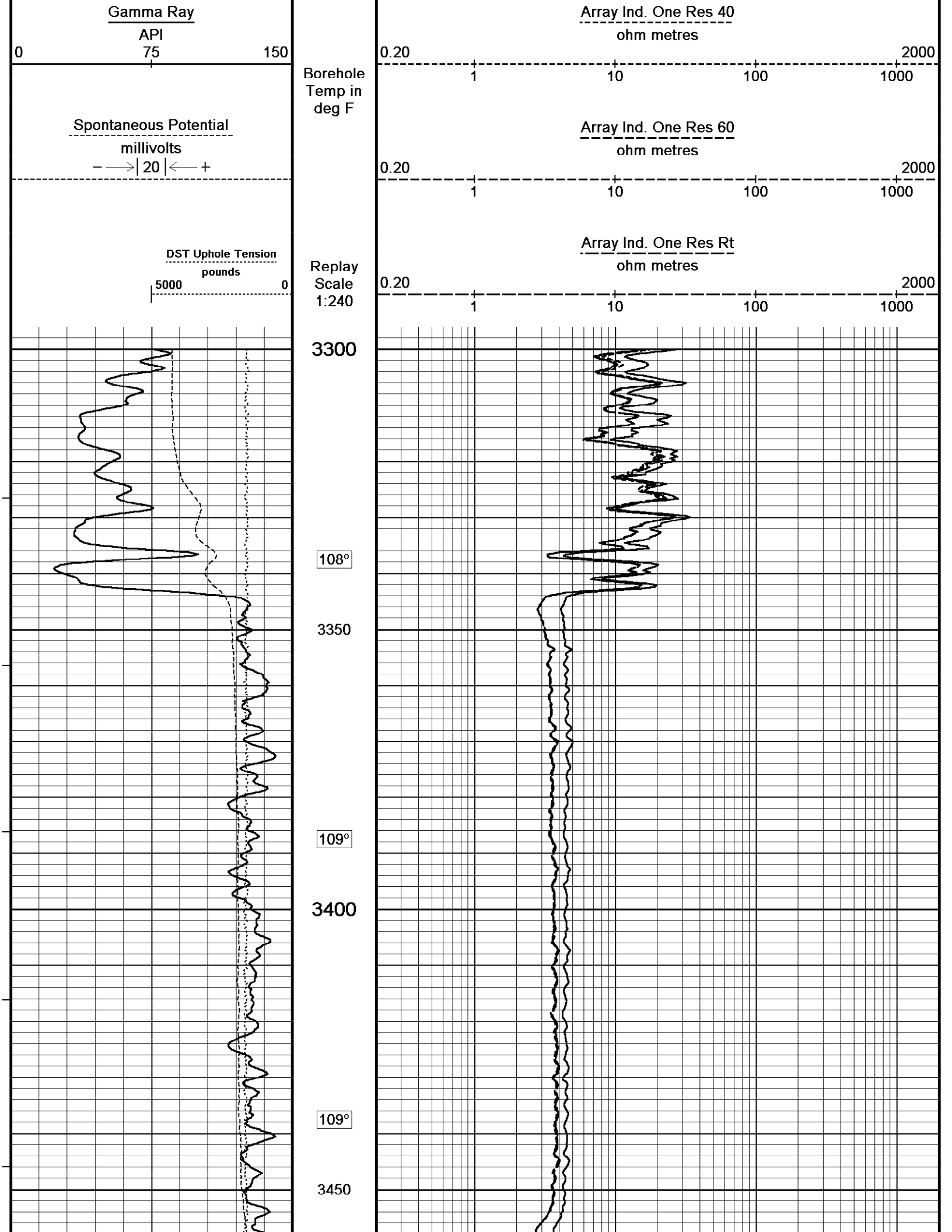
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 02-MAR-2012 15:12
Filename: C:\DOCUME~1\E168018\LOCALS~1\Temp\Weatherf...\SandRidge Macy 1-34 SWD_002.dta — Recorded on 21-FEB-2012 10:12
System Versions: Logged with 11.03.4044 Plotted with 12.01.3513

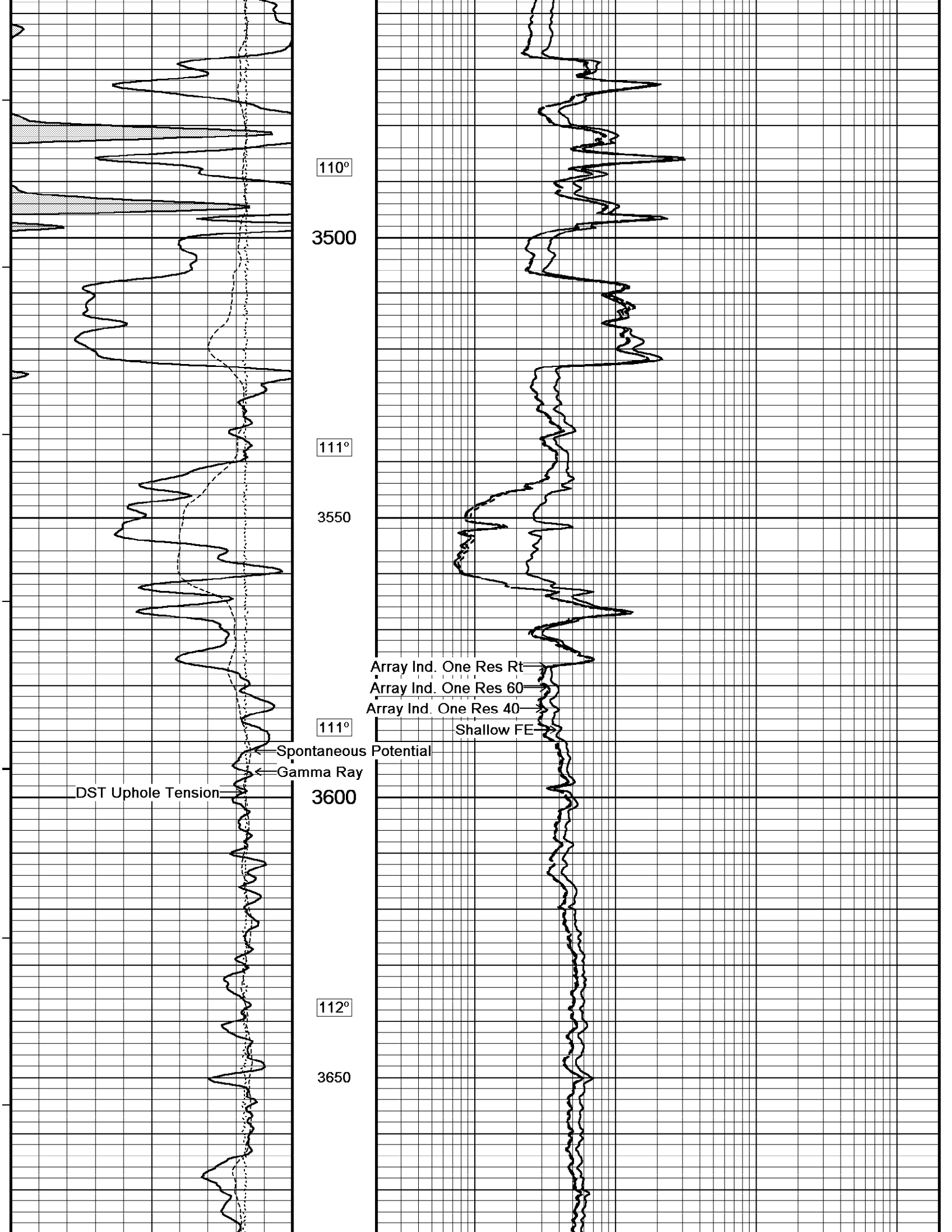
2 INCH MAIN PASS

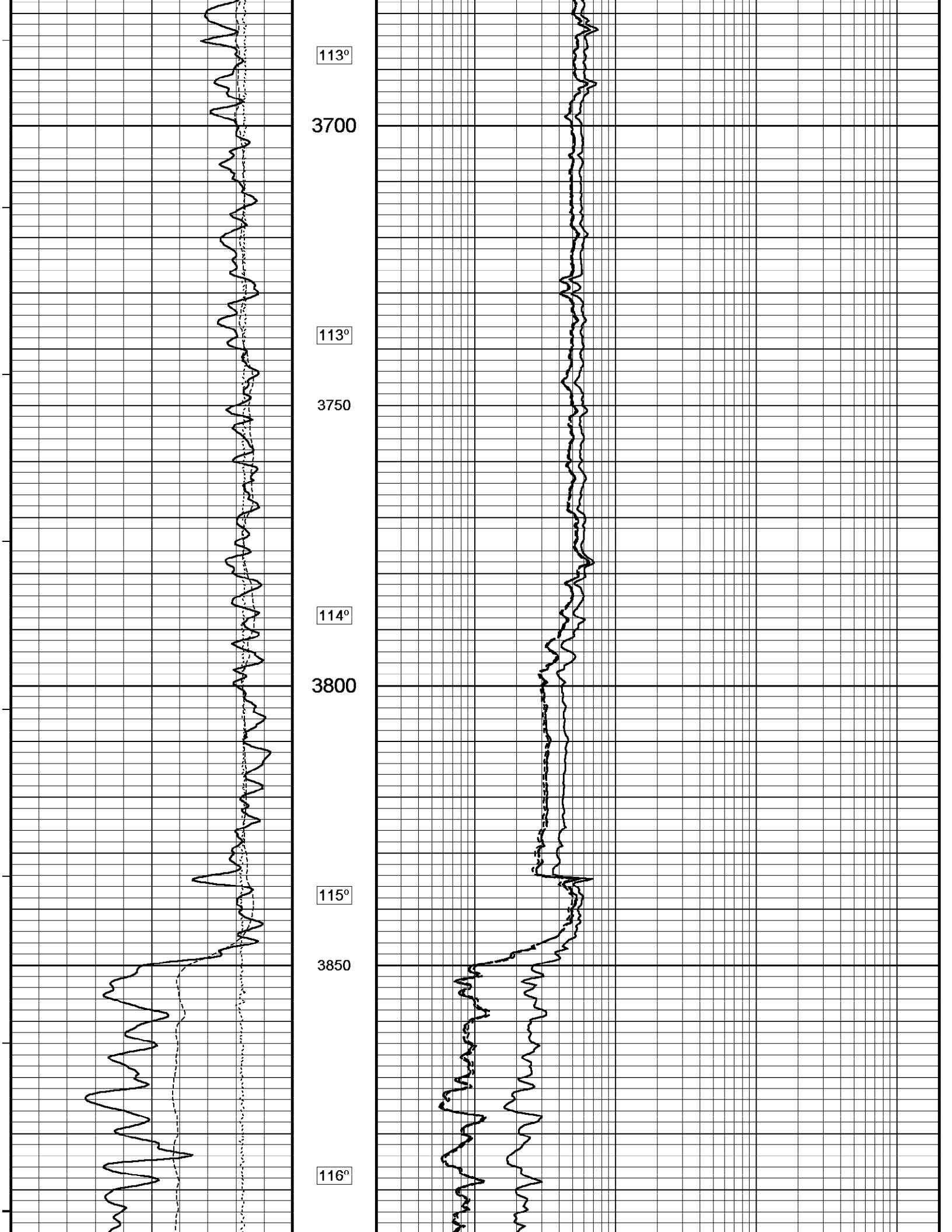
5 INCH MAIN

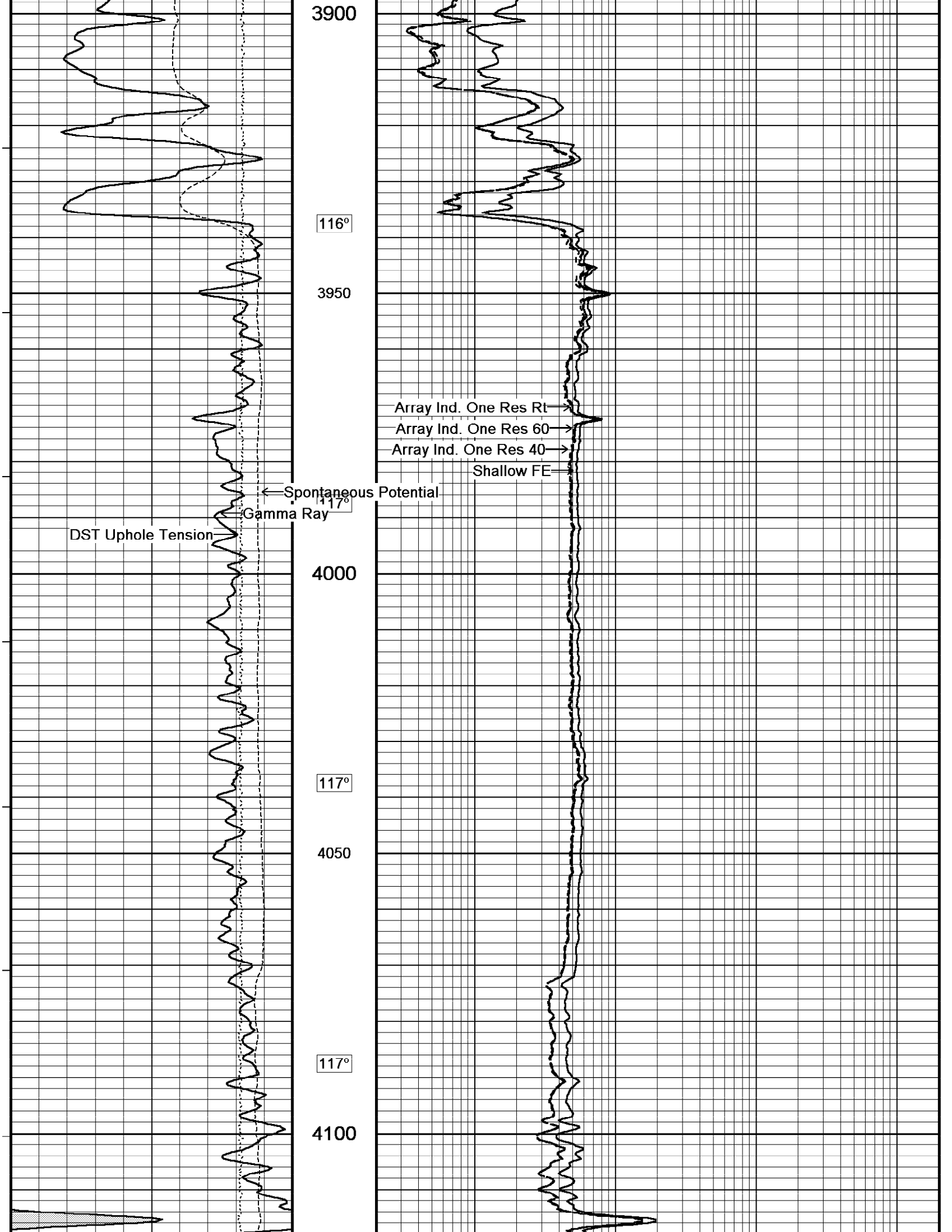
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 02-MAR-2012 15:12
Filename: C:\DOCUME~1\E168018\LOCALS~1\Temp\Weatherf...\SandRidge Macy 1-34 SWD_002.dta — Recorded on 21-FEB-2012 10:12
System Versions: Logged with 11.03.4044 Plotted with 12.01.3513

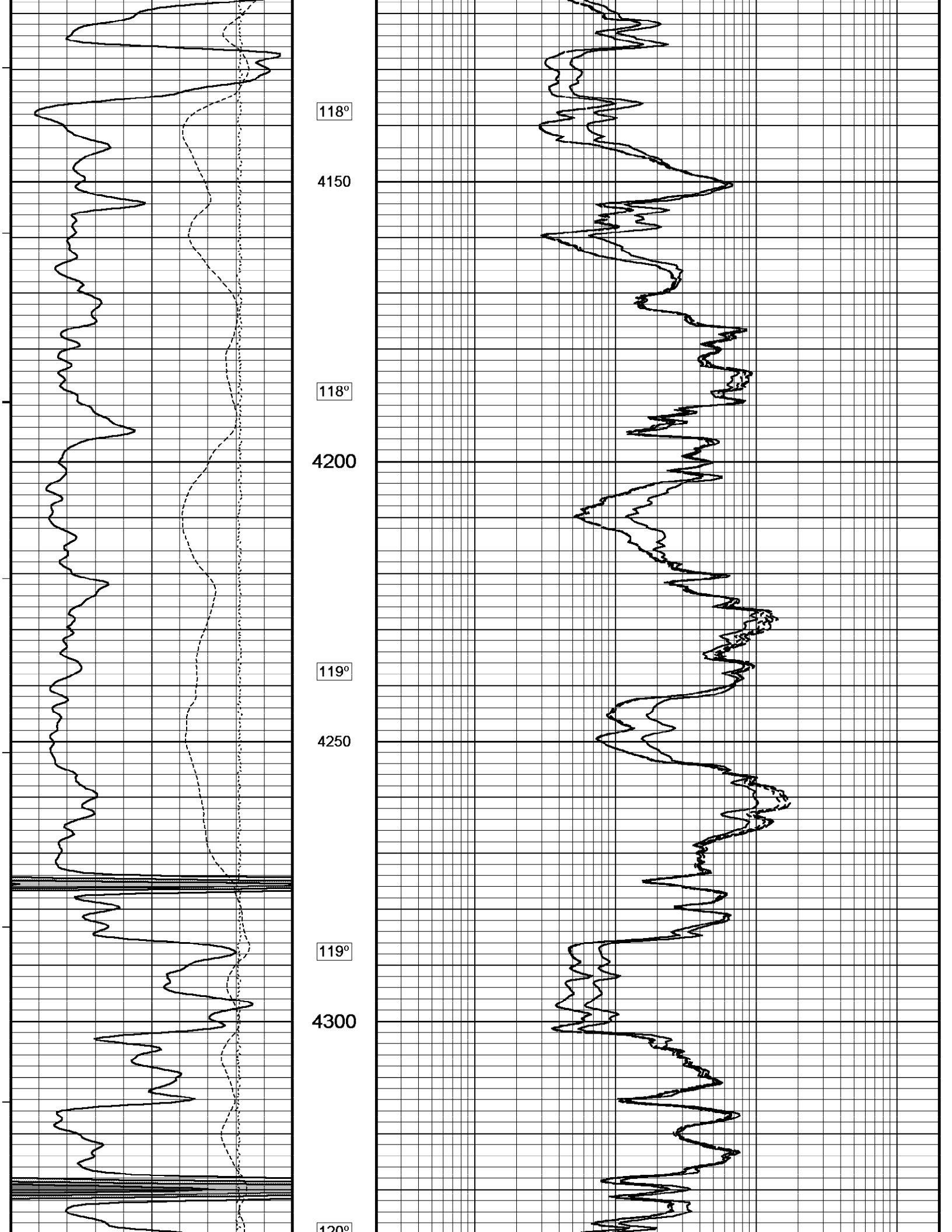


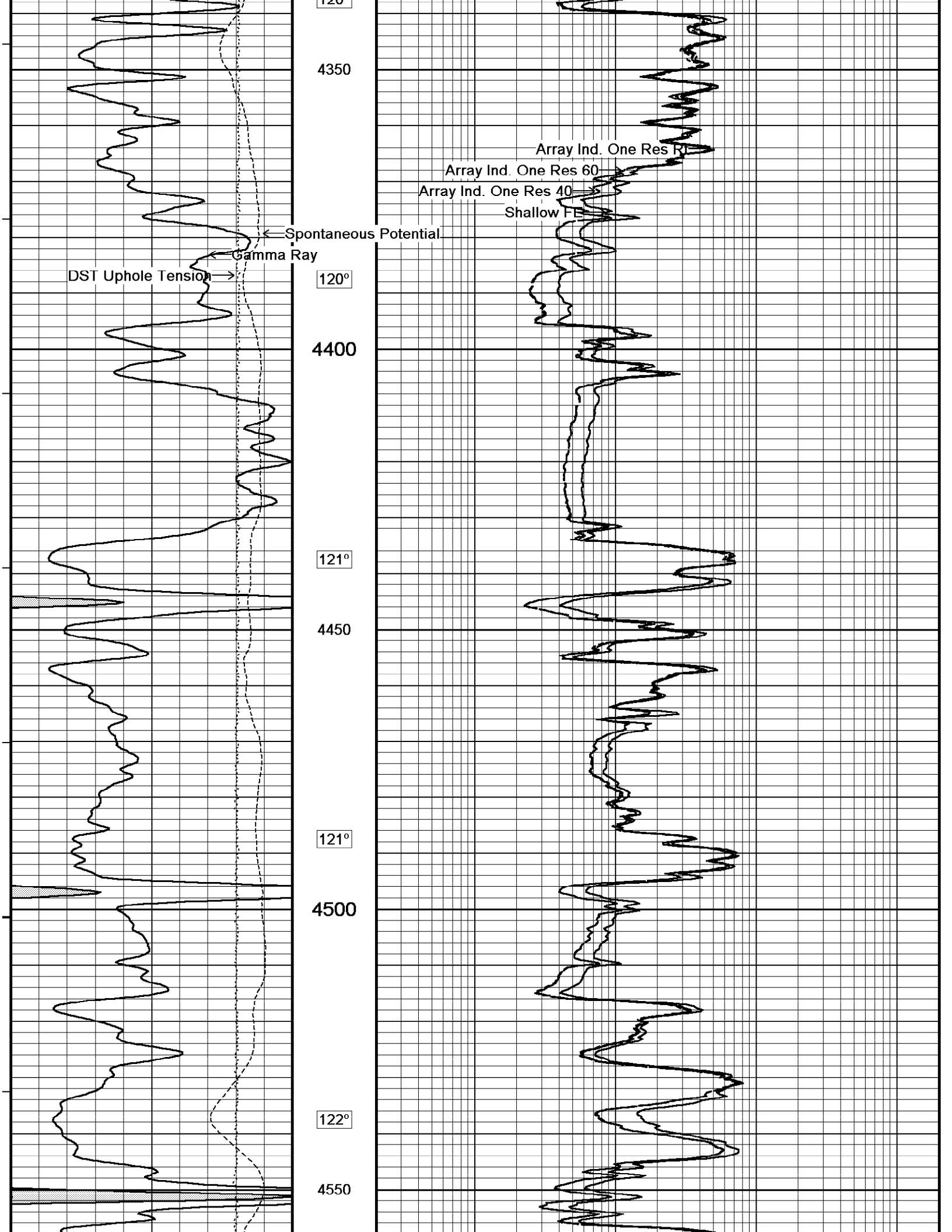

Gamma Ray
API
0
75
150
Spontaneous Potential
millivolts
20
DST Uphole Tension
pounds
5000
0
Borehole Temp in deg F
Replay Scale 1:240
Array Ind. One Res 40
ohm metres
0.20
2000
1
10
100
1000
Array Ind. One Res 60
ohm metres
0.20
2000
1
10
100
1000
Array Ind. One Res Rt
ohm metres
0.20
2000
1
10
100
1000
3300
108°
3350
109°
3400
109°
3450

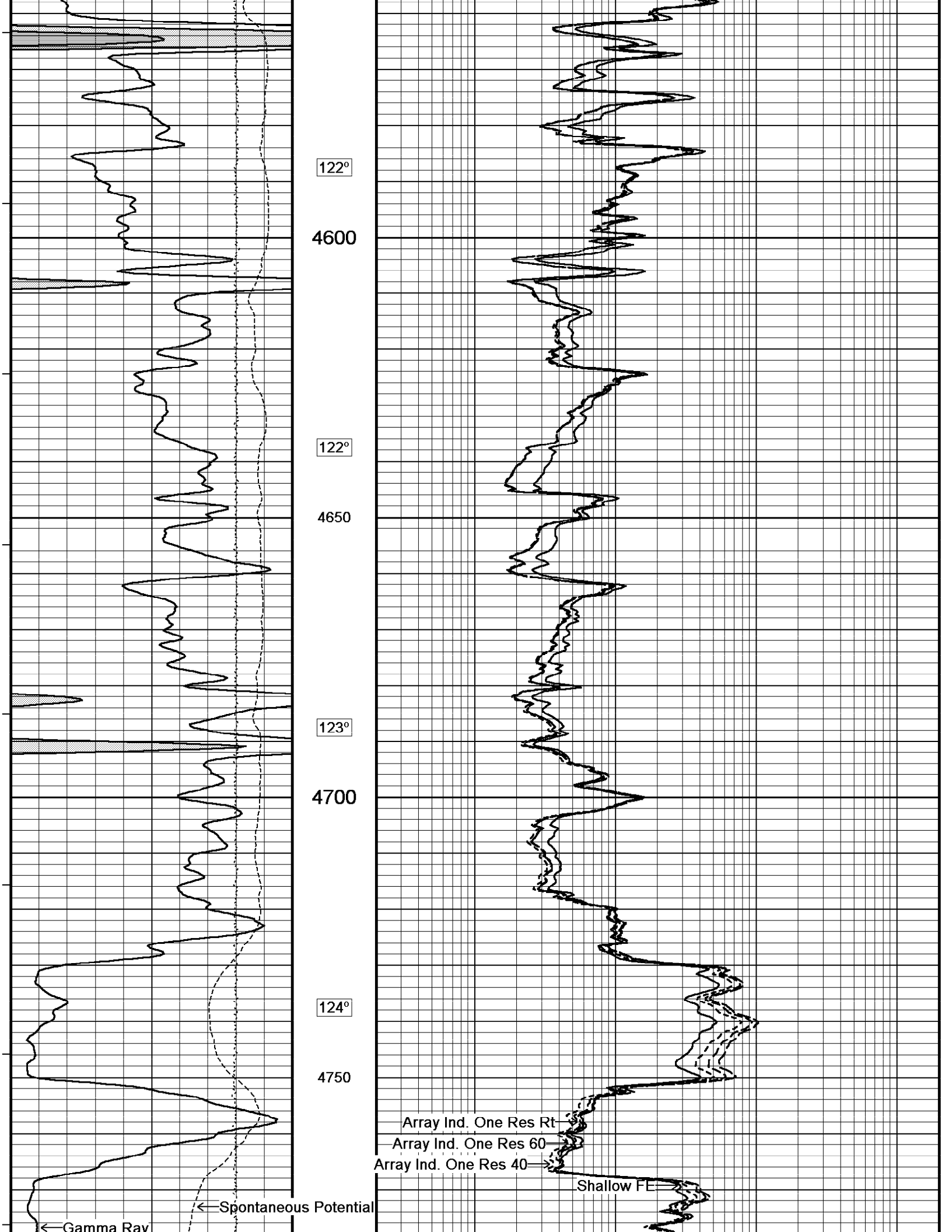

110°
3500
111°
3550
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
111°
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
3600
112°
3650

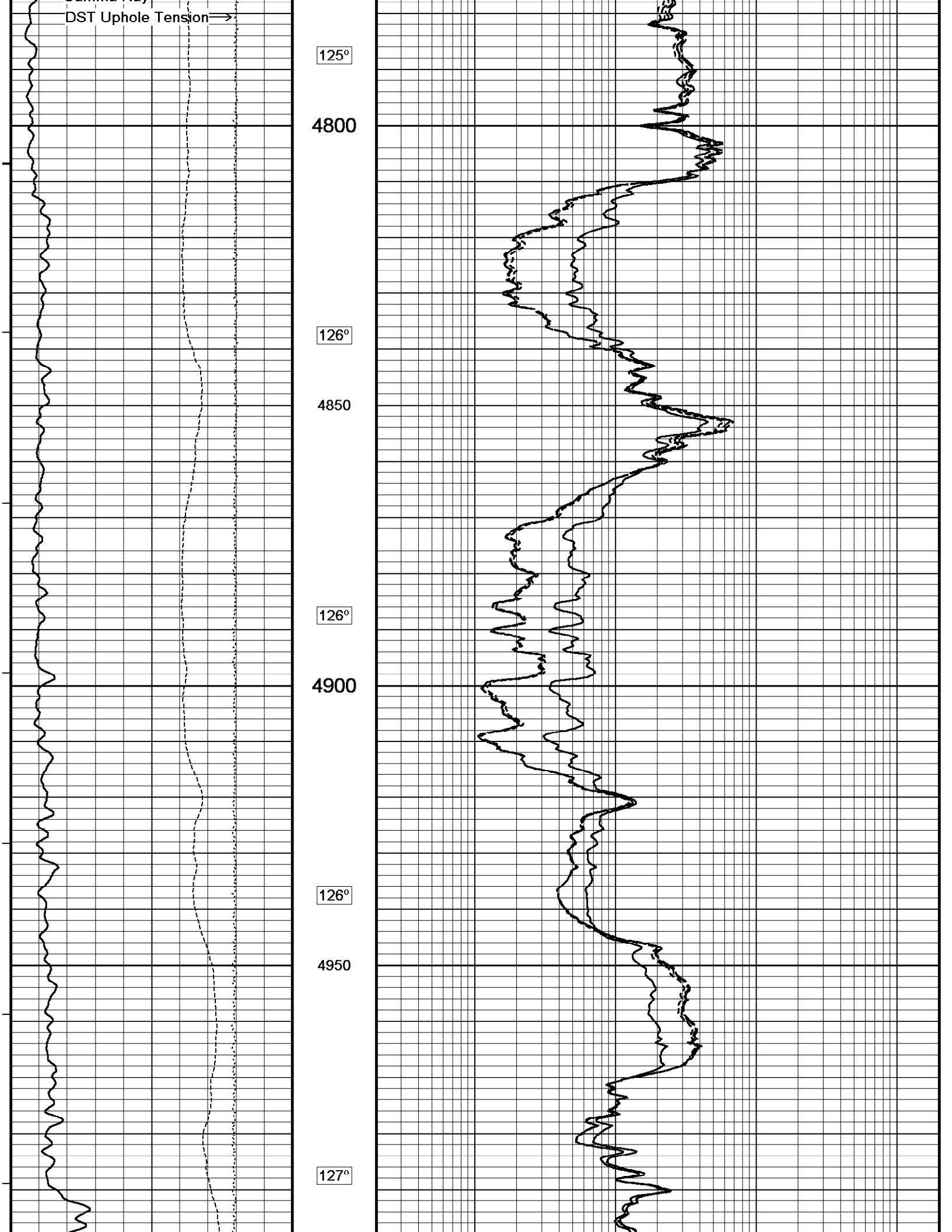

113°
3700
113°
3750
114°
3800
115°
3850
116°

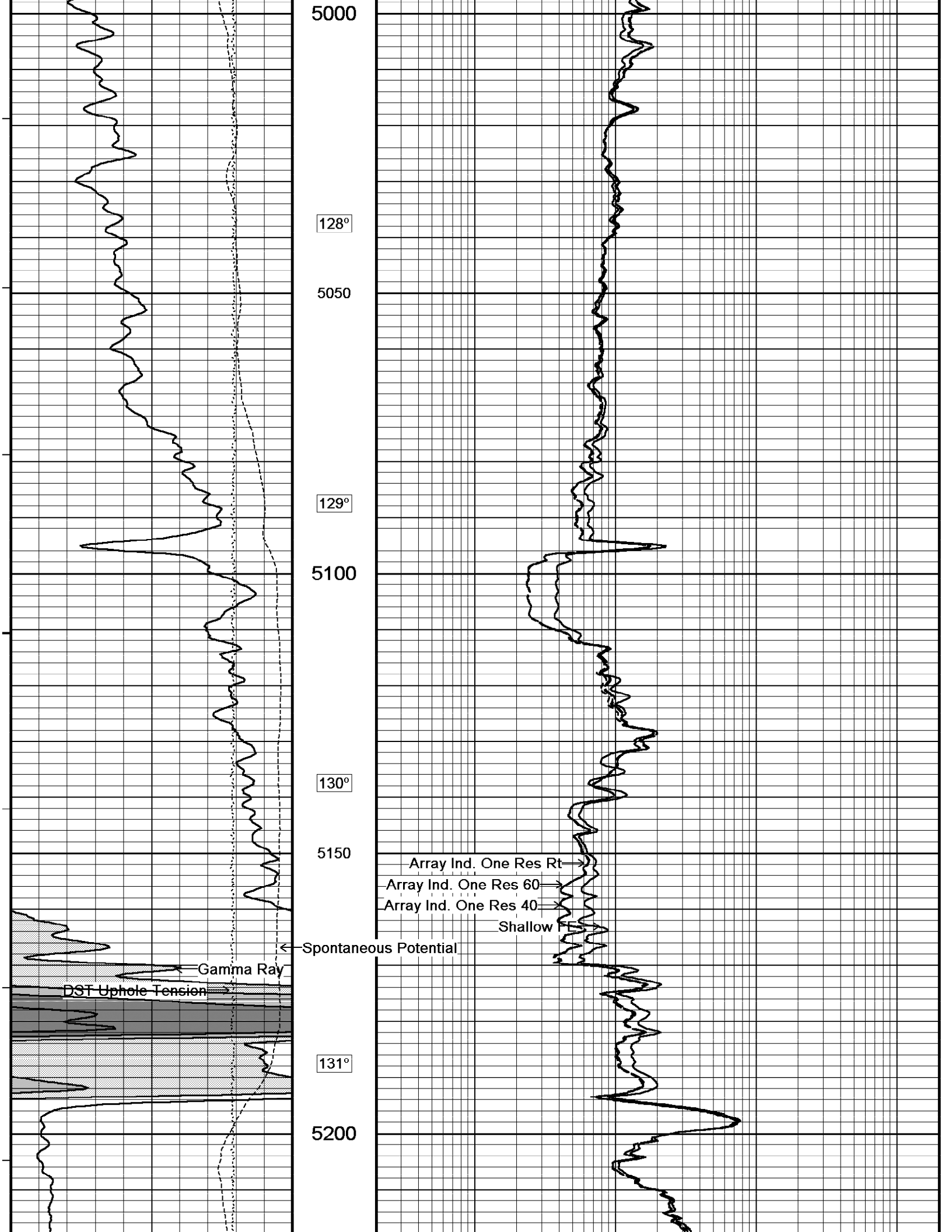

3900
116°
3950
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
117°
Gamma Ray
DST Uphole Tension
4000
117°
4050
117°
4100

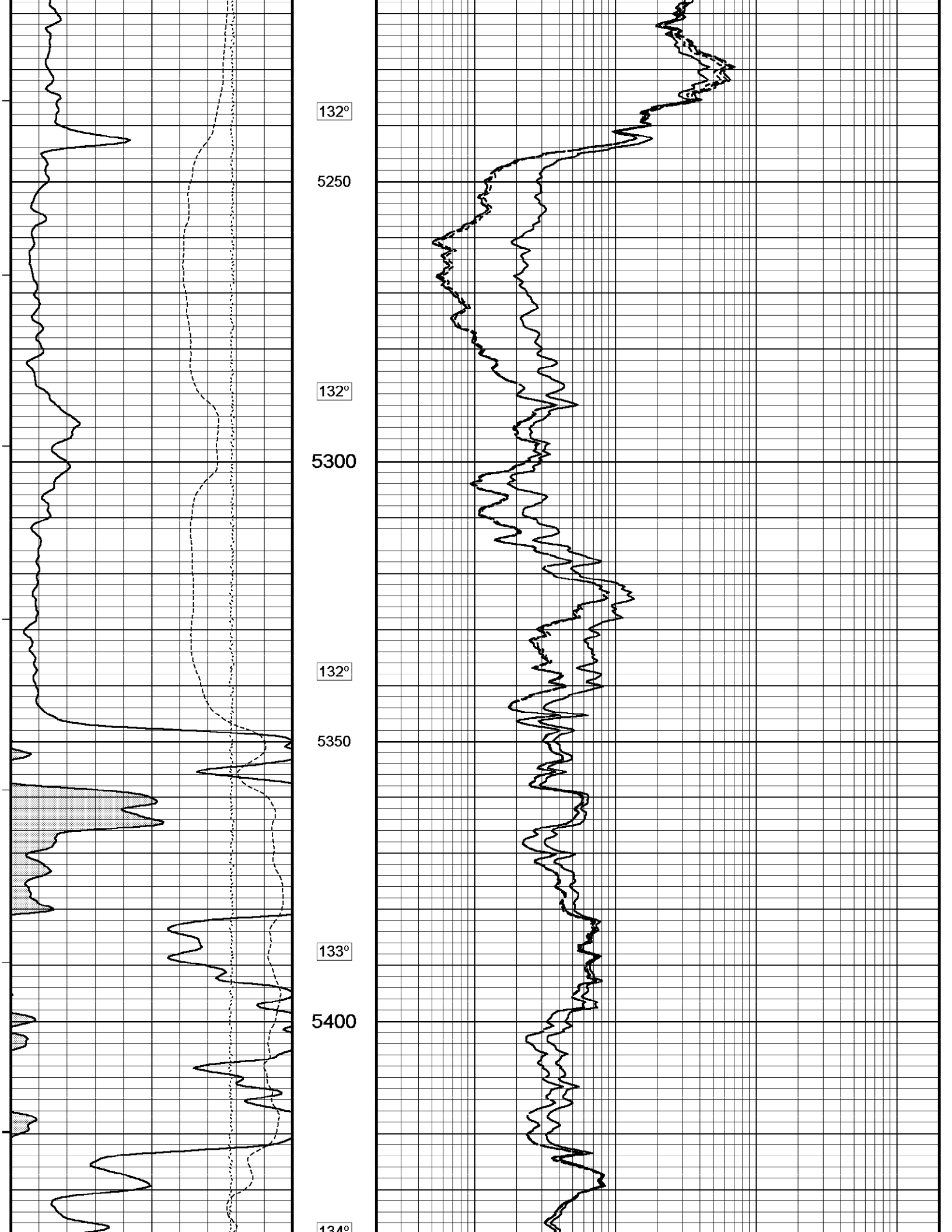

118°
4150
118°
4200
119°
4250
119°
4300
120°

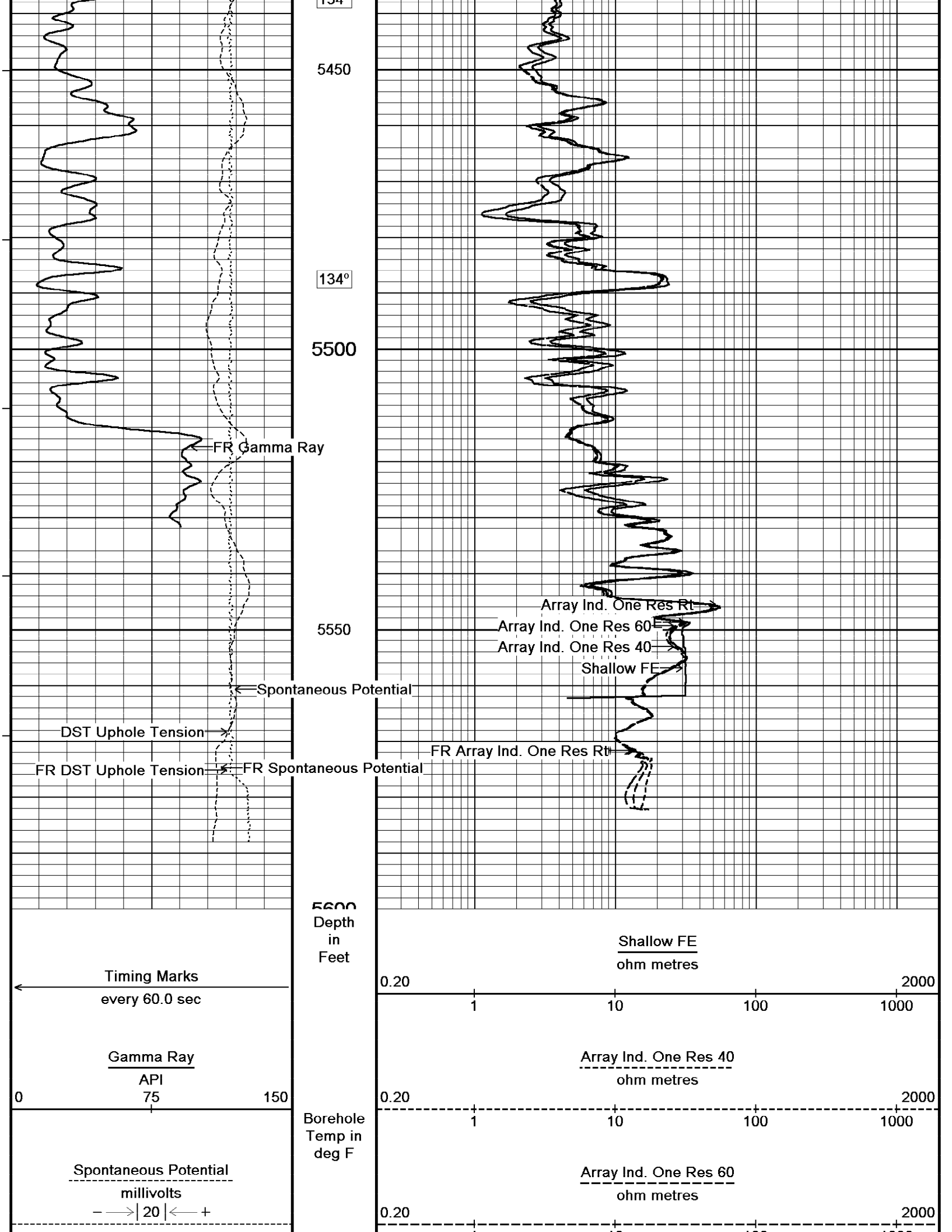

4350
Array Ind. One Res RT
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
120°
4400
121°
4450
121°
4500
122°
4550

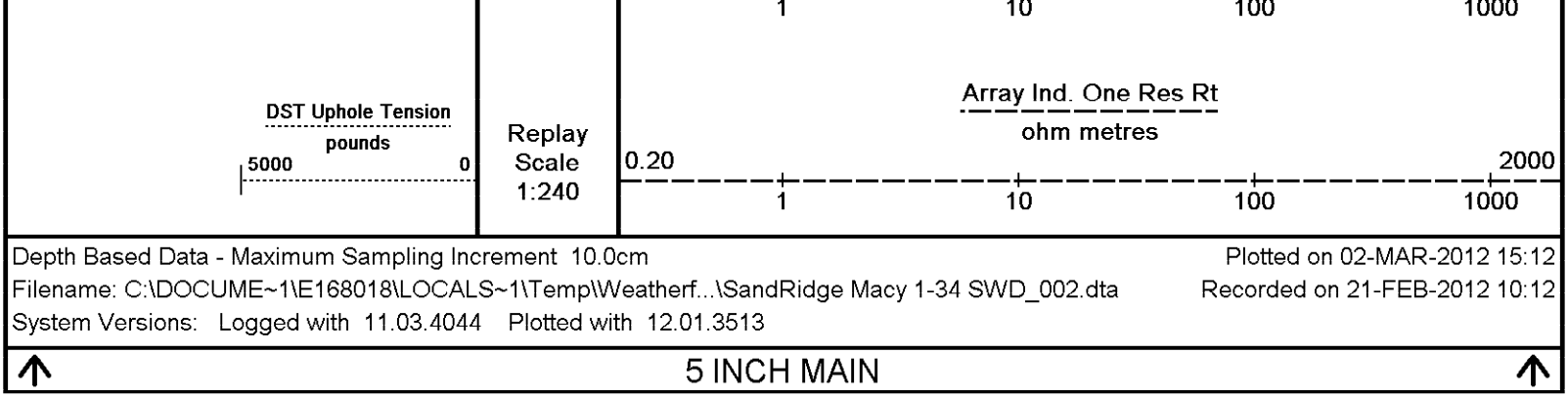

122°
4600
122°
4650
123°
4700
124°
4750
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
Gamma Ray


DST Uphole Tension
125°
4800
126°
4850
126°
4900
126°
4950
127°


5000
128°
5050
129°
5100
130°
5150
131°
5200
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension


132°
5250
132°
5300
132°
5350
133°
5400
134°


134°
5450
134°
5500
FR Gamma Ray
Array Ind. One Res Rt
5550
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
DST Uphole Tension
FR Array Ind. One Res Rt
FR DST Uphole Tension
FR Spontaneous Potential
5600
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
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

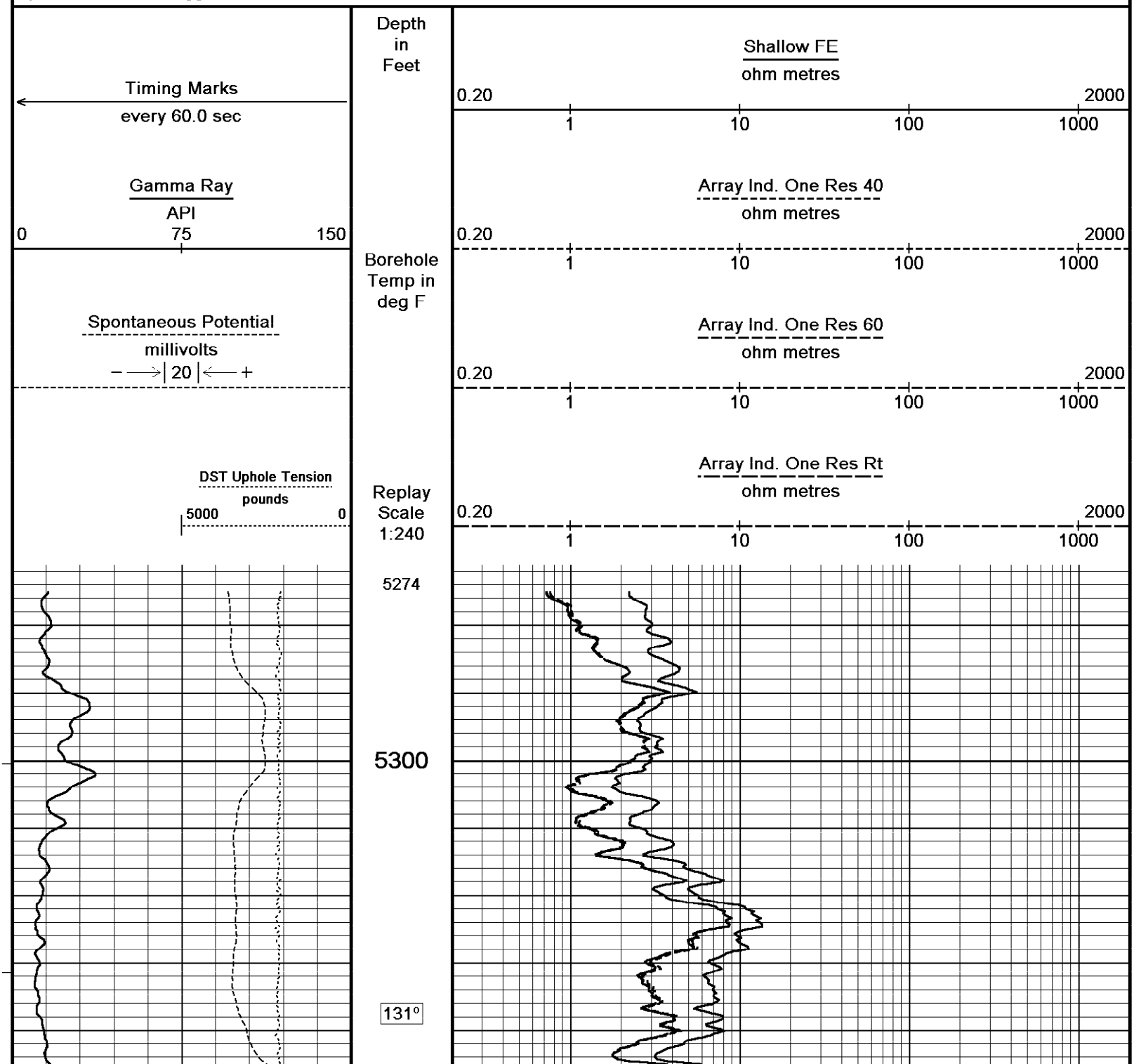


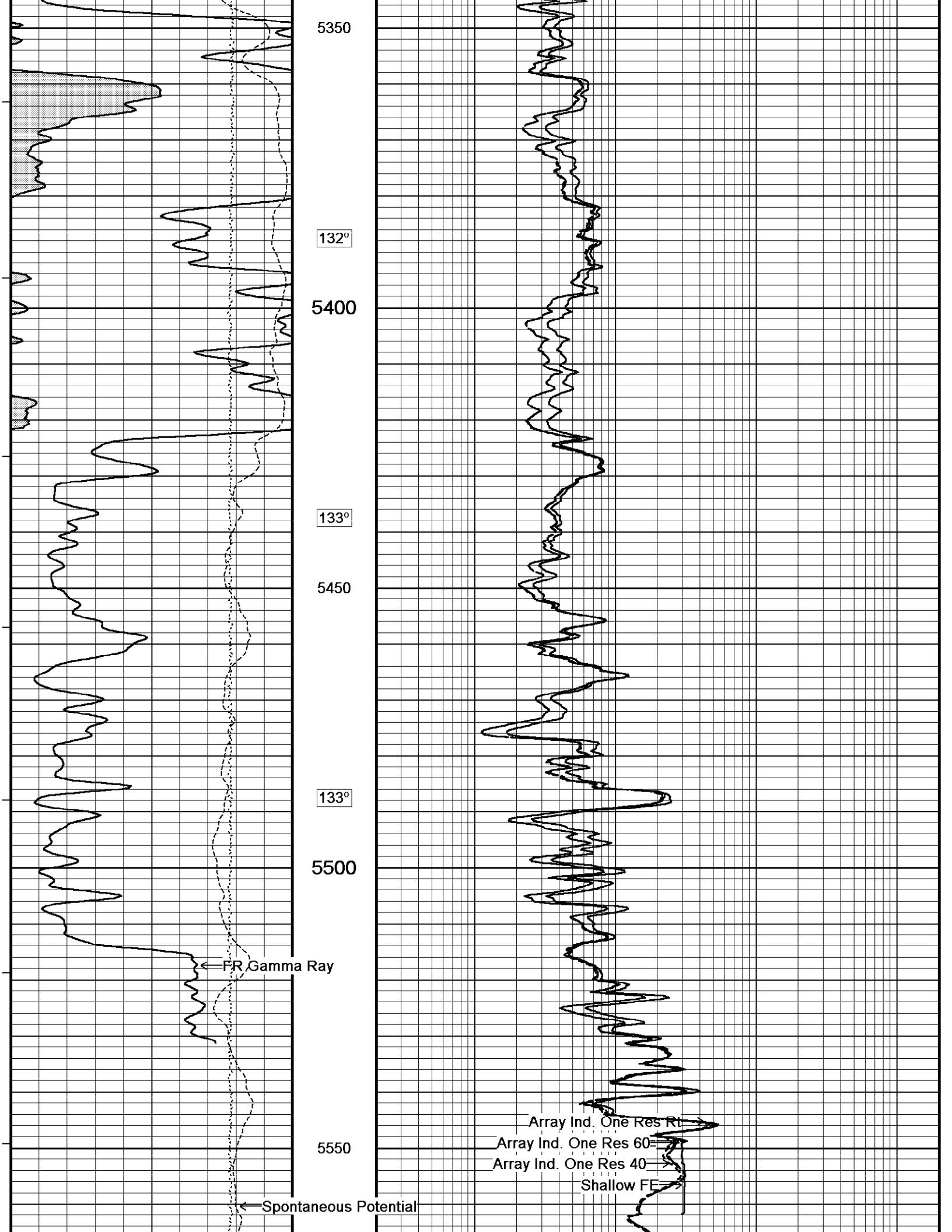
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 02-MAR-2012 15:12
Filename: C:\DOCUME~1\E168018\LOCALS~1\Temp\Weatherf...\SandRidge Macy 1-34 SWD_002.dta — Recorded on 21-FEB-2012 10:12
System Versions: Logged with 11.03.4044 Plotted with 12.01.3513

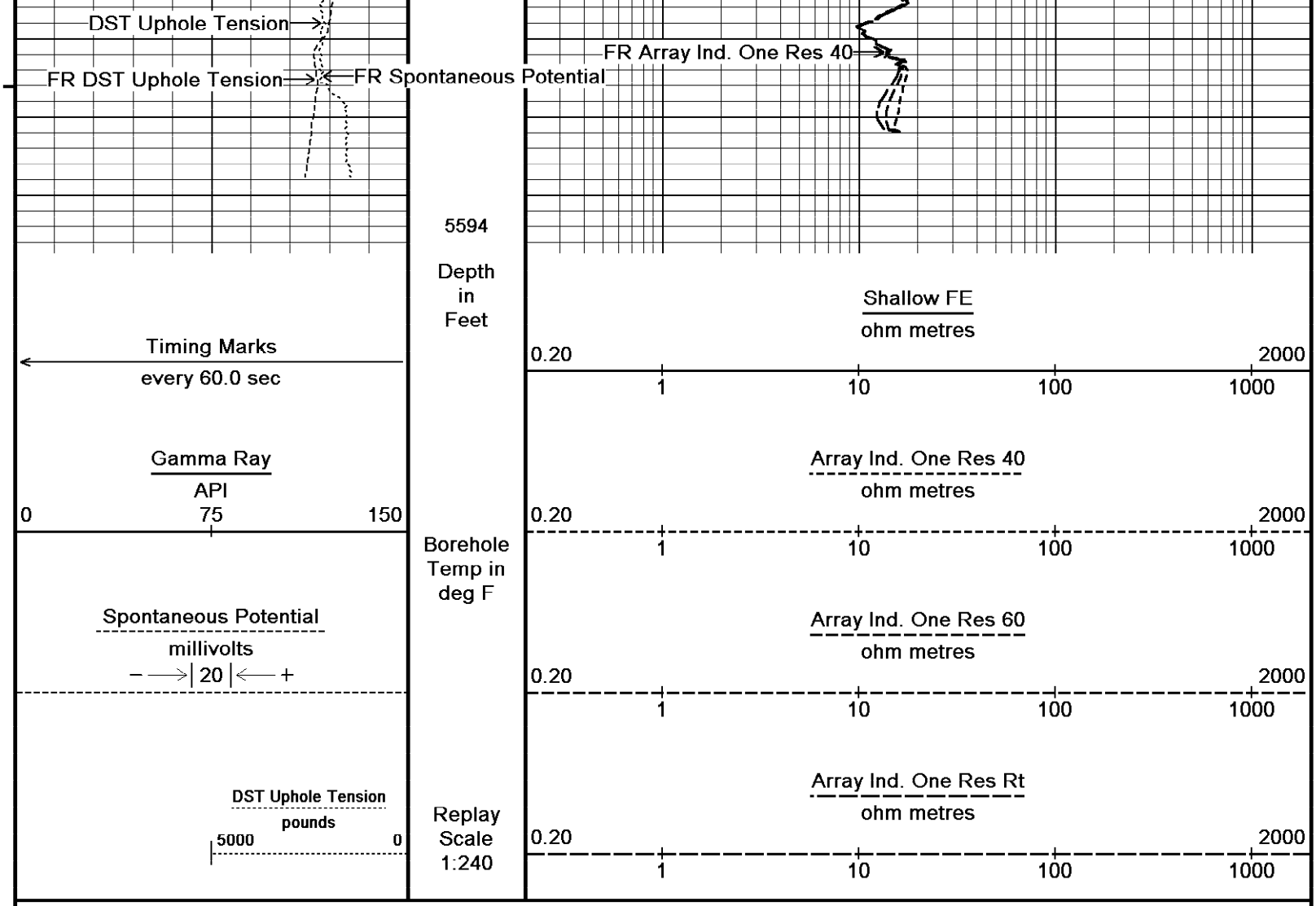
5 INCH MAIN

5 INCH REPEAT PASS

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 02-MAR-2012 15:12
Filename: C:\DOCUME~1\E168018\LOCALS~1\Temp\Weatherf...\SandRidge Macy 1-34 SWD_001.dta — Recorded on 21-FEB-2012 09:56
System Versions: Logged with 11.03.4044 Plotted with 12.01.3513




5350
132°
5400
133°
5450
133°
5500
FR Gamma Ray
5550
Spontaneous Potential
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE



Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 02-MAR-2012 15:12
Filename: C:\DOCUME~1\E168018\LOCALS~1\Temp\Weatherf...\SandRidge Macy 1-34 SWD_001.dta
Recorded on 21-FEB-2012 09:56
System Versions: Logged with 11.03.4044 Plotted with 12.01.3513

5 INCH REPEAT PASS

BEFORE SURVEY CALIBRATION

C:\DOCUME~1\E168018\LOCALS~1\Temp\Weatherford PreView\0\SandRidge Macy 1-34 SWD.dta

General Constants All 000

Last Edited on 21-FEB-2012 07:38

General Parameters		
Mud Resistivity	0.420	ohm-metres
Mud Resistivity Temperature	71.000	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	7.000	inches
Caliper for Differential Caliper	None	
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 24-DEC-2011 19:14

Reading No	Measured	Calibrated (lbs)

Reading No	Measured	Calibrated (lbs)
1	13180.10	0.00
2	14049.87	408.00

Gamma Calibration MCG-D.K 442

Field Calibration on 20-FEB-2012 13:20

	Measured	Calibrated (API)
Background	67	45
Calibrator (Gross)	1145	770
Calibrator (Net)	1078	725

Gamma Constants MCG-D.K 442

Last Edited on 21-FEB-2012 07:15

Gamma Calibrator Number	grc38	
Mud Density	1.12	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

SP Calibration MCG-D.K 442

Field Calibration on 06-FEB-2012 10:17

	Measured	Calibrated (mV)
Reference 1	101.0	100.0
Reference 2	-99.9	-100.0

High Resolution Temperature Calibration MCG-D.K 442

Field Calibration on 02-DEC-2011 12:34

	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 25-SEP-2011 22:25

Pre-filter Length	11

Caliper Calibration MML-A 4

Base Calibration on 13-FEB-2012 09:03
Field Calibration on 20-FEB-2012 13:14

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)
6.02	5.98

Micro Normal and Micro Inverse Calibration MML-A 4

Base Calibration on 13-FEB-2012 09:11
Field Check on 20-FEB-2012 13:03

Base Calibration

	Measured		Calibrated (ohm-m)	
Channel	Resistor 1	Resistor 2	Resistor 1	Resistor 2
Micro Normal	12.2	60.2	2.6	12.8
Micro Inverse	15.7	78.3	1.7	8.4

Channel	Base Check (ohm-m)	Field Check (ohm-m)
Micro Normal	32.1	32.1
Micro Inverse	16.3	16.3

Micro Normal and Micro Inverse Constants MML-A 4

Last Edited on 13-FEB-2012 09:08

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

Neutron Calibration MDN-A.B 65

Base Calibration on 13-FEB-2012 14:25
Field Check on 20-FEB-2012 13:26

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
	3053	95	3714	110

Ratio	32.113	33.764

Field Calibrator at Base	Calibrated (cps)	
	1672	2379
Ratio		0.703

Field Check	Calibrated (cps)	
	1680	2421
Ratio		0.694

Neutron Constants MDN-A.B 65

Last Edited on 20-FEB-2012 13:21

Neutron Source Id	14035B	
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
Formation Fluid Salinity Source	Constant Value	
Formation Fluid Salinity	0.00	kppm
Barite Mud Correction	Not Applied	

FE Calibration MFE-A.A 55

Base Calibration on 13-FEB-2012 09:17
Field Check on 20-FEB-2012 13:01

Base Calibration

	Measured	Calibrated (ohm-m)
Reference 1	0.0	0.0
Reference 2	951.6	126.8
Base Check		281.6
Field Check		281.6

FE Constants MFE-A.A 55

Last Edited on 20-FEB-2012 13:00

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 21-FEB-2012 07:15

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

High Resolution Temperature Calibration MAI-A.A 45

Field Calibration on 12-JAN-2012 13:36

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

High Resolution Temperature Constants MAI-A.A 45

Last Edited on 12-JAN-2012 11:13

Pre-filter Length	11

Induction Calibration MAI-A.A 45

Base Calibration on 12-JAN-2012 13:34
Field Check on 20-FEB-2012 12:59

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		79.4	Deg F	

Channel	Base Check (mmho/m)		Field Check (mmho/m)		
	Low	High	Low	High	
1	18.4	3850.7	18.4	3851.4	
2	31.7	3629.3	31.7	3629.5	
3	28.7	3049.6	28.6	3049.5	
4	18.3	2079.5	18.3	2079.4	
Deep	16.0	1911.5	16.0	1911.4	
Medium	42.6	4060.8	42.5	4060.7	
Shallow	49.7	5482.7	49.5	5483.1	
Array Temperature		53.8		68.0	Deg F

Induction Constants MAI-A.A 45

Last Edited on 21-FEB-2012 07:15

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	

Caliper Calibration MPD-B 64

Base Calibration on 13-FEB-2012 10:56
Field Calibration on 20-FEB-2012 13:02

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	13425	3.99
2	22192	5.98
3	30768	7.97
4	39024	9.86
5	48432	11.92
6	N/A	N/A

Field Calibration

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

Photo Density Calibration MPD-B 64

Base Calibration on 13-FEB-2012 11:14
Field Check on 20-FEB-2012 13:13

Density Calibration

Base Calibration	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	47670	25060	59556	30836
Reference 2	19597	2525	24941	2541

Field Check at Base

1199.0	1386.9

Field Check

1202.2	1389.9

PE Calibration

Base Calibration	Measured	Calibrated

	WS	WH	Ratio	Ratio
Background	218	1072		
Reference 1	18017	47489	0.383	0.371
Reference 2	5304	19465	0.276	0.272

Field Check at Base	218.3	1071.8
Field Check	216.2	1073.7

Density Constants MPD-B 64

Last Edited on 21-FEB-2012 07:15

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	1.12	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:\DOCUME~1\E168018\LOCALS~1\Temp\Weatherford PreView\0\SandRidge Macy 1-34 SWD.dta

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

Compact Comms Gamma
MCG-D.K 442 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

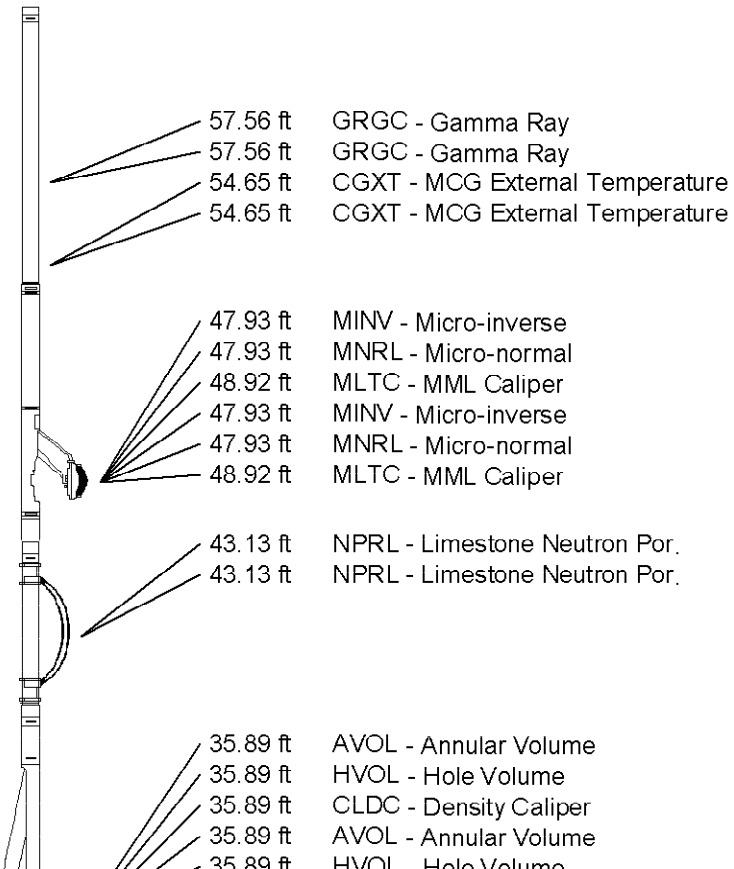
Compact Neutron
MDN-A.B 65 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

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

Compact Density/Caliper
MPD-B 64 LG: 9.59 ft WT: 90.4 lb OD: 2.45 in

Compact Density/Caliper
MPD-B 64 LG: 9.59 ft WT: 90.4 lb OD: 2.45 in

SKJ-D.A Compact Knuckle Joint



SKJ-D.A 37 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

SKJ-D.A Compact Knuckle Joint
SKJ-D.A 37 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

Compact Focussed Electric
MFE-A.A 55 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

Compact Focussed Electric
MFE-A.A 55 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

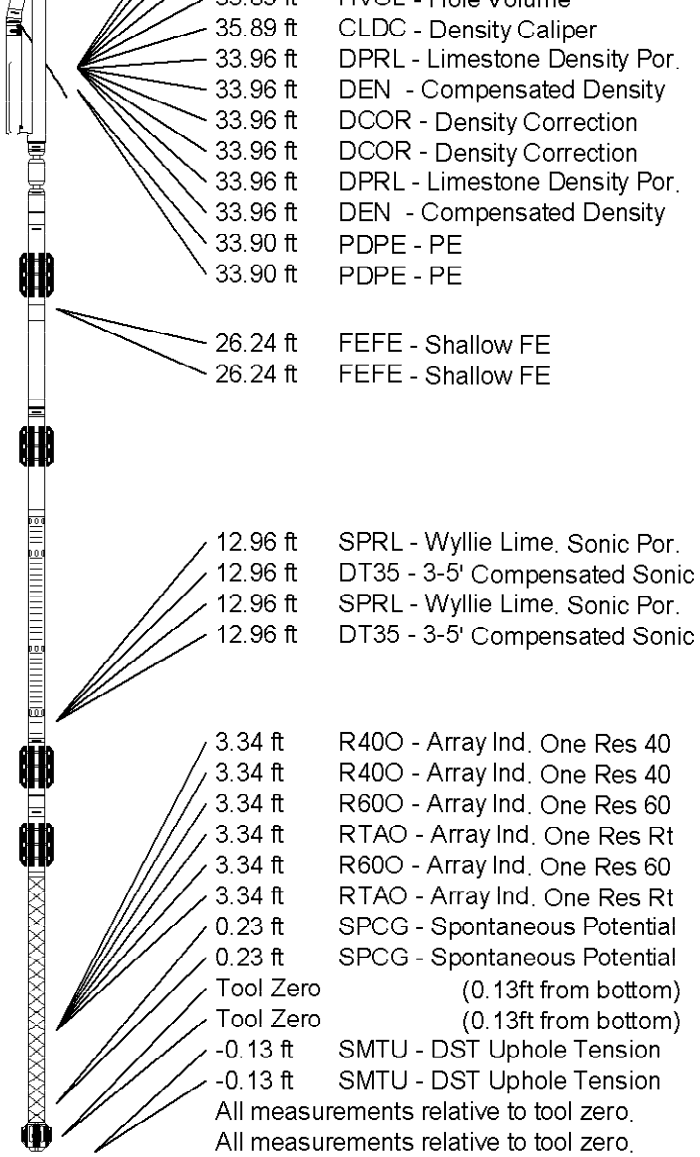
Compact Sonic
MSS-C.K 330 LG: 12.52 ft WT: 72.8 lb OD: 2.24 in

Compact Induction
MAI-A.A 45 LG: 10.81 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: 62.84 ft Weight: 480.6 lb

Total Length: 62.84 ft Weight: 480.6 lb



35.89 ft	CLDC - Density Caliper
33.96 ft	DPRL - Limestone Density Por.
33.96 ft	DEN - Compensated Density
33.96 ft	DCOR - Density Correction
33.96 ft	DCOR - Density Correction
33.96 ft	DPRL - Limestone Density Por.
33.96 ft	DEN - Compensated Density
33.90 ft	PDPE - PE
33.90 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
3.34 ft	R40O - Array Ind. One Res 40
3.34 ft	R40O - Array Ind. One Res 40
3.34 ft	R60O - Array Ind. One Res 60
3.34 ft	RTAO - Array Ind. One Res Rt
3.34 ft	R60O - Array Ind. One Res 60
3.34 ft	RTAO - Array Ind. One Res Rt
0.23 ft	SPCG - Spontaneous Potential
0.23 ft	SPCG - Spontaneous Potential
Tool Zero	(0.13ft from bottom)
Tool Zero	(0.13ft from bottom)
-0.13 ft	SMTU - DST Uphole Tension
-0.13 ft	SMTU - DST Uphole Tension

All measurements relative to tool zero.
All measurements relative to tool zero.

COMPANY	SANDRIDGE EXPL. & PRODUCTION, LLC.
WELL	MACY 1-34 SWD
FIELD	KANSAS WALDRON-WEST
PROVINCE/COUNTY	HARPER
COUNTRY/STATE	U.S.A. / KANSAS

Elevation Kelly Bushing	1277.00	feet	First Reading	5572.00	feet
Elevation Drill Floor	1275.00	feet	Depth Driller	5570.00	feet
Elevation Ground Level	1261.00	feet	Depth Logger	5575.00	feet

Weatherford®

ARRAY INDUCTION
SHALLOW FOCUSED
ELECTRIC LOG

40 Years of Wireline 1970 2010

Weatherford

COMPANY	SANDRIDGE EX
WELL	MACY 1-34 SWI
FIELD	KANSAS WALDI
PROVINCE/COUNTY	HARPER
COUNTRY/STATE	U.S.A. / KANSA
LOCATION	249' FSL & 967'
	SW SE SW SW
SEC	34
TWP	34S
RGE	8W
Other Ser	MFD/MDI
	MSS
API Number	15-077-21770
Permanent Datum G.L. Elevation 1261 feet	
Log Measured From KE	
Drilling Measured From K.B.	
Date	21-FEB-2012
Run Number	ONE
Depth Driller	5570.00
Depth Logger	5575.00
First Reading	5572.00
Last Reading	791.00
Casing Driller	791.00
Casing Logger	791.00
Bit Size	8.750
Hole Fluid Type	CHEMICAL
Density / Viscosity	9.30 lbm/USg
PH / Fluid Loss	9.50 FLOWLINE
Sample Source	
Rm @ Measured Temp	0.42 @ 71.0
Rmf @ Measured Temp	0.34 @ 71.0
Rmc @ Measured Temp	0.50 @ 71.0
Source Rmf / Rmc	CALC
Rm @ BHT	0.22 @ 134.0
Time Since Circulation	8 HOURS
Max Recorded Temp	134.00
Equipment Name	COMPACT
Equipment / Base	1305'
Recorded By	L. SCOTT
Witnessed By	TAMMY ALCORN
S.O.# / JOE#	3534610

ARRAY INDUCTION
SHALLOW FOCUSED
ELECTRIC LOG

PL. & PRODUCTION, LLC.
O
RON-WEST
S
FWL

Elevations: feet
KB 1277.00
DF 1275.00
GL 1261.00

MML

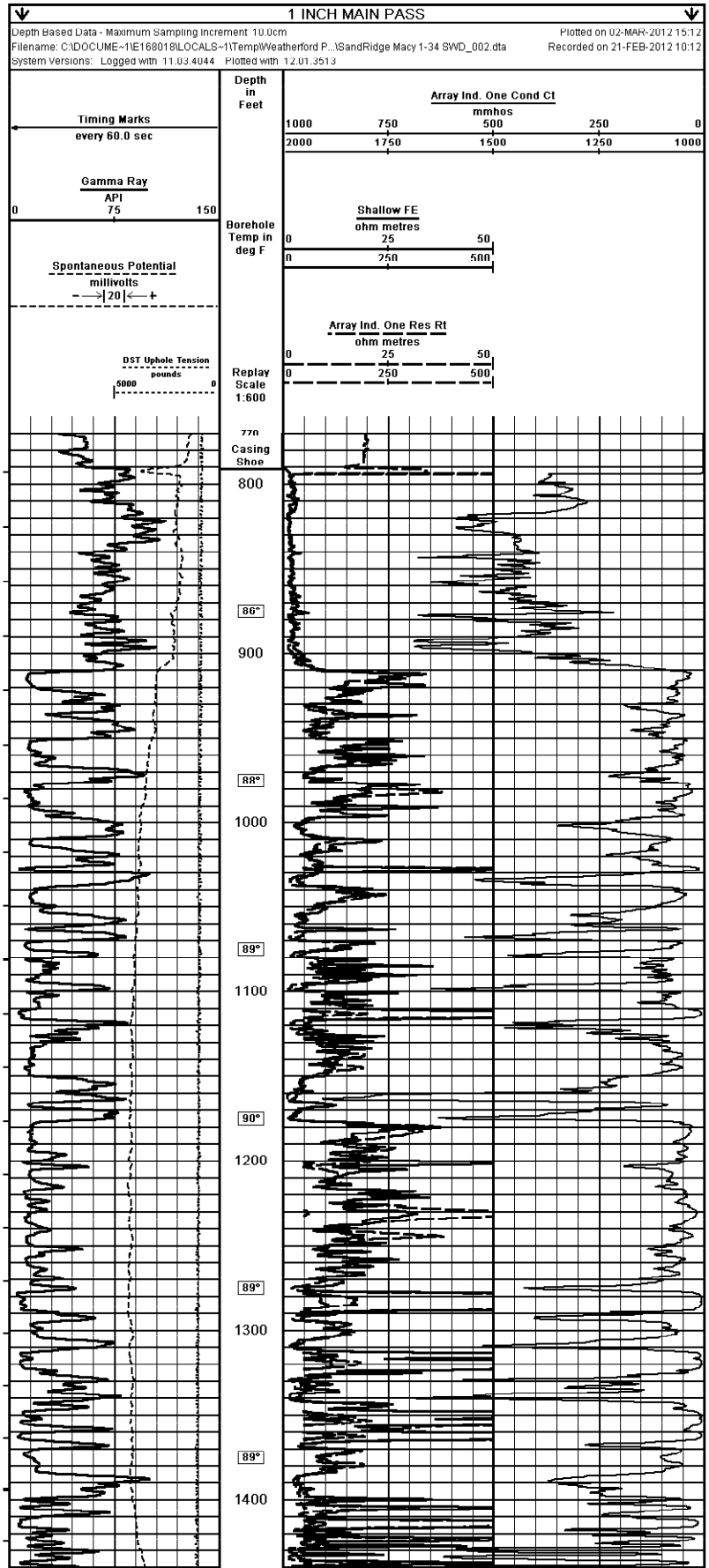
feet	
feet	
feet	
feet	
feet	
inches	
42.00 CP	
6.20 ml/30Min	
ohm-m	
ohm-m	
ohm-m	
CALC	
ohm-m	
deg F	
LIB	

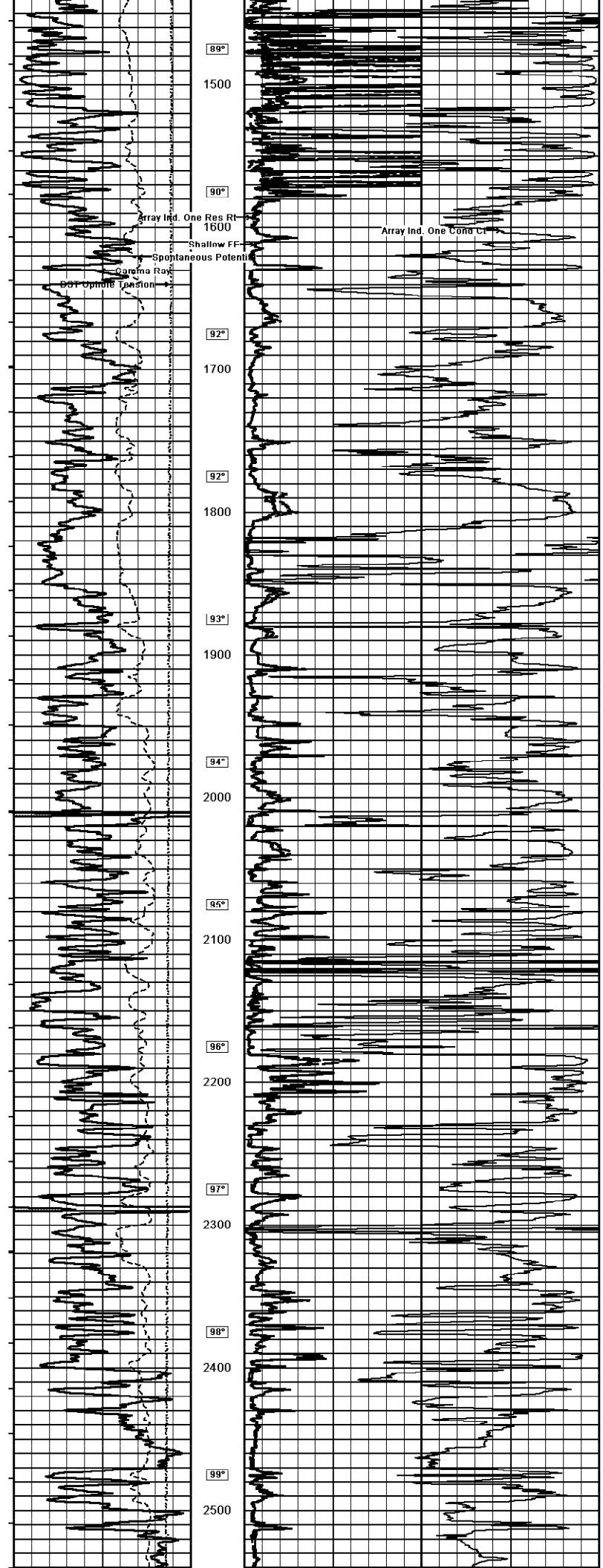
LB12-036

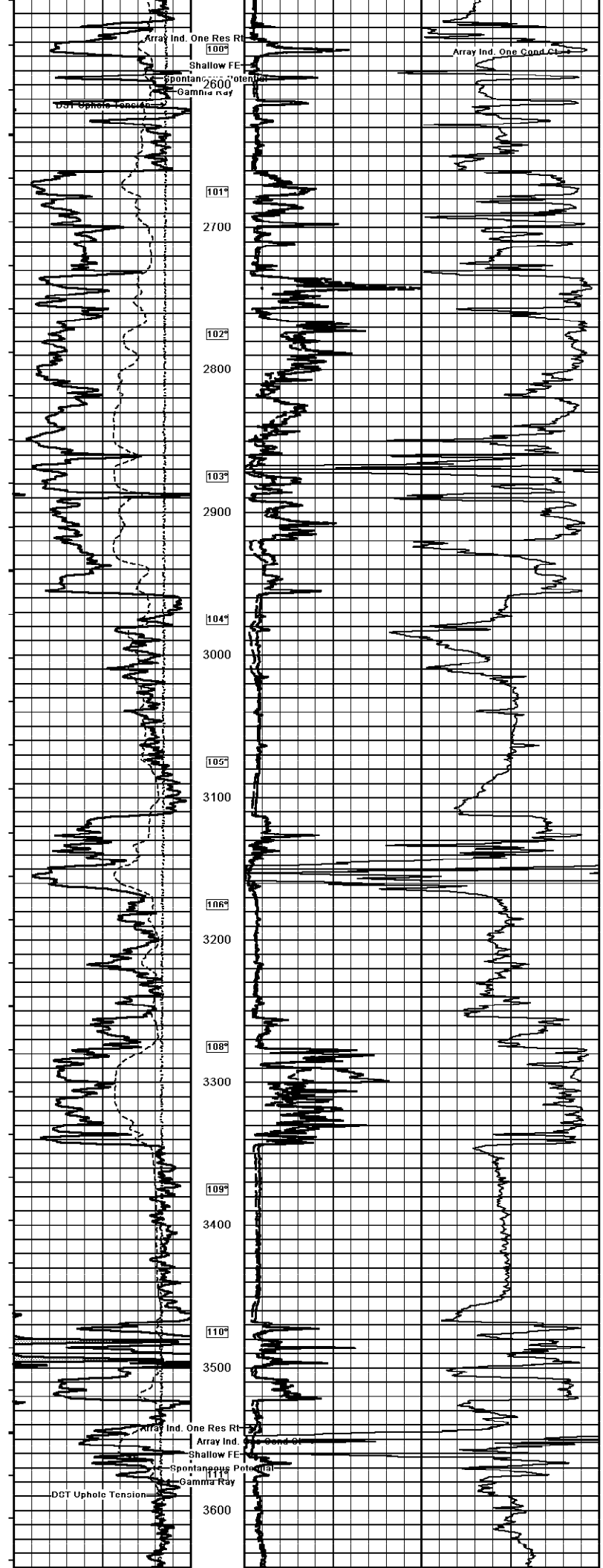
1 INCH MAIN PASS

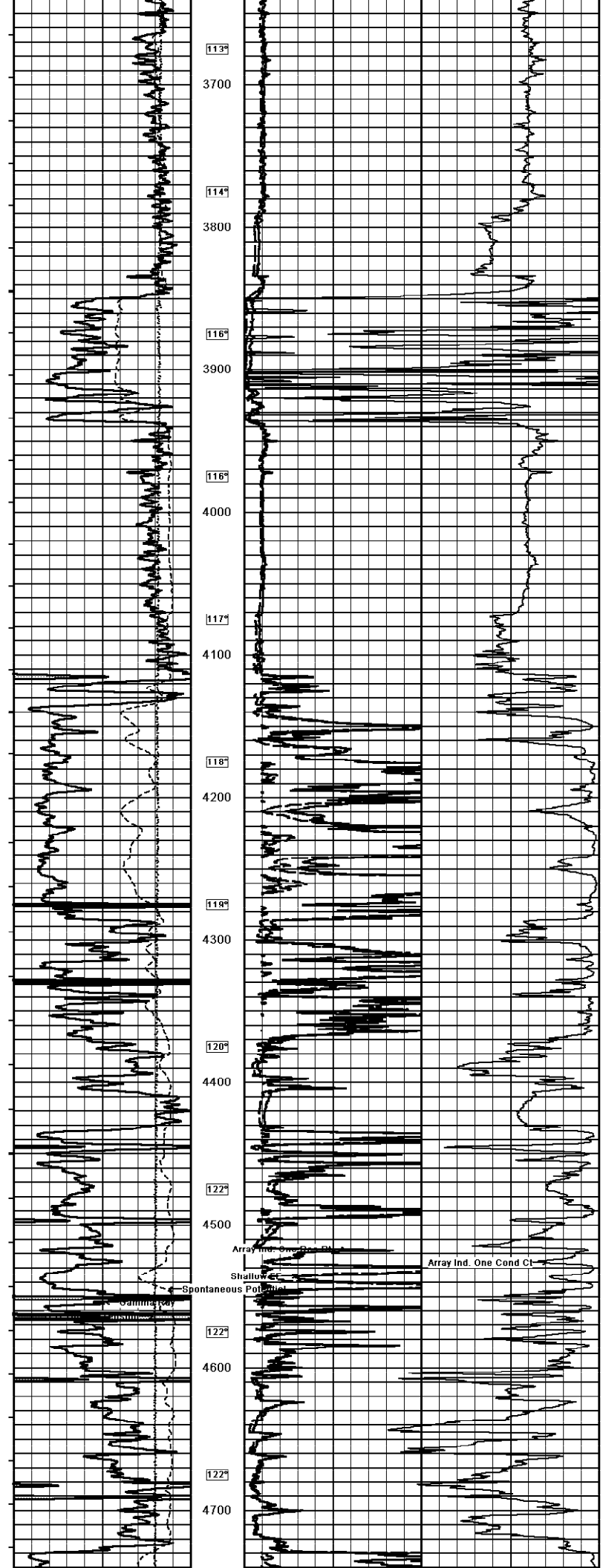
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\DOCUME~1\E168018\LOCALS~1\Temp\Weatherford P...\SandRidge Macy 1-34 SWD_002.dta
System Versions: Logged with 11.03.4044 Plotted with 12.01.3513

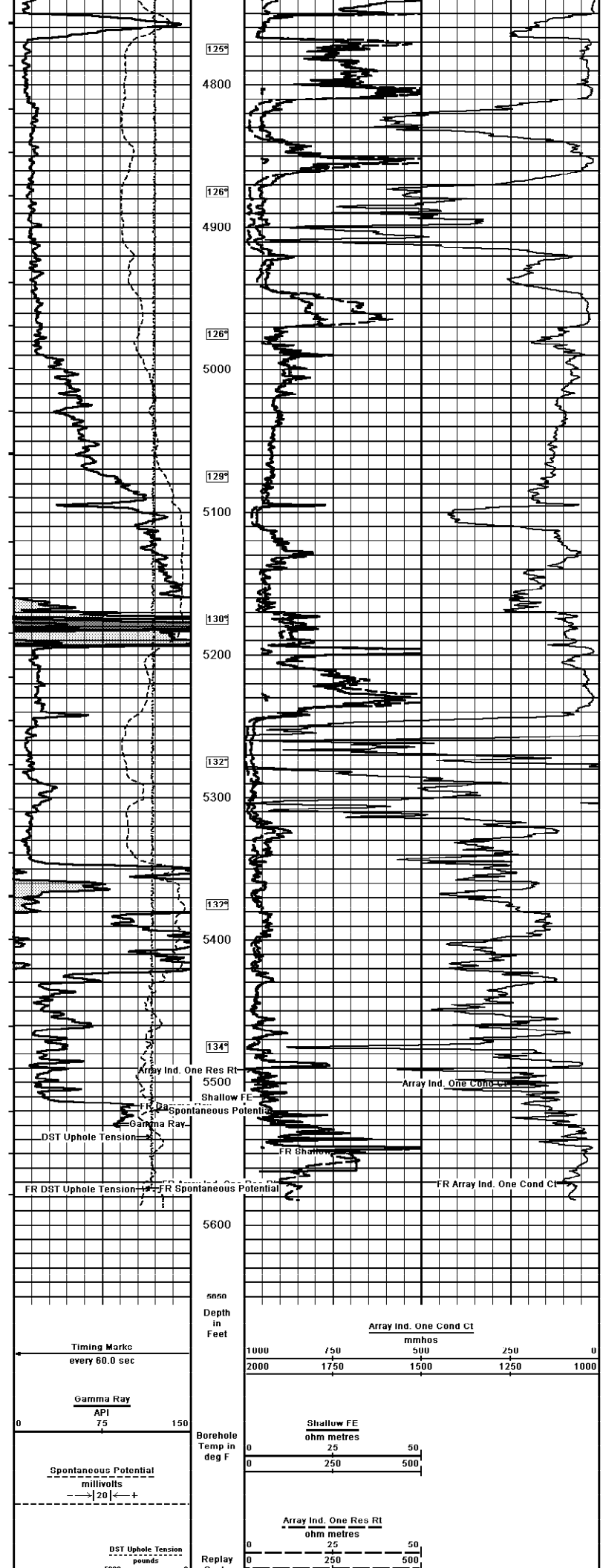
Plotted on 02-MAR-2012 15:12
Recorded on 21-FEB-2012 10:12

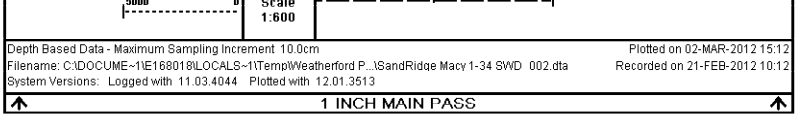



89°
1500
90°
Array Ind. One Res Rt
1600
Array Ind. One Cond Ct
Shallow FF
Spontaneous Potenti
Gamma Ray
DST Cphole Tension
92°
1700
92°
1800
93°
1900
94°
2000
95°
2100
96°
2200
97°
2300
98°
2400
99°
2500


Array Ind. One Res Rt
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Array Ind. One Cond Ct
100
2600
101
2700
102
2800
103
2900
104
3000
105
3100
106
3200
108
3300
109
3400
110
3500
111
3600


113°
3700
114°
3800
116°
3900
116°
4000
117°
4100
118°
4200
119°
4300
120°
4400
122°
4500
Array Ind. One Cond Ct
Spontaneous Potential
122°
4600
122°
4700


125°
4800
126°
4900
126°
5000
129°
5100
130°
5200
132°
5300
132°
5400
134°
5500
5600
5660
Array Ind. One Res Rt
Shallow FE
FR Spontaneous Potential
Gamma Ray
DST Uphole Tension
FR Shallow
FR DST Uphole Tension
FR Spontaneous Potential
Array Ind. One Cond Ct
FR Array Ind. One Cond Ct
Depth in Feet
Timing Marks every 60.0 sec
Gamma Ray API 0 75 150
Spontaneous Potential millivolts 20
DST Uphole Tension pounds
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
Borehole Temp in deg F
Array Ind. One Res Rt ohm metres 0 25 50 0 250 500
Replay



Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 02-MAR-2012 15:12
Filename: C:\DOCUME~1\E168018\LOCALS~1\Temp\Weatherford P...\SandRidge Macy 1-34 SWD 002.dta — Recorded on 21-FEB-2012 10:12
System Versions: Logged with 11.03.4044 Plotted with 12.01.3513

1 INCH MAIN PASS

COMPANY	SANDRIDGE EXPL. & PRODUCTION, LLC.
WELL	MACY 1-34 SWD
FIELD	KANSAS WALDRON-WEST
PROVINCE/COUNTY	HARPER
COUNTRY/STATE	U.S.A. / KANSAS

Elevation Kelly Bushing	1277.00	feet	First Reading	5572.00	feet
Elevation Drill Floor	1275.00	feet	Depth Driller	5570.00	feet
Elevation Ground Level	1261.00	feet	Depth Logger	5575.00	feet

Weatherford

ARRAY INDUCTION
SHALLOW FOCUSED
ELECTRIC LOG

Schlumberger BlueView :