Weatherford®

ARRAY INDUCTION SHALLOW FOCUSED ELECTRIC LOG

COMPANY	GRAND MESA OPERATING COMPANY
WELL	GLENNIS #1-27
FIELD	WILDCAT
PROVINCE/COUNTY	GOVE
COUNTRY/STATE	U.S.A. / KANSAS
LOCATION	2141' FSL & 541' FEL SW NE NE SE

SEC	TWP	RGE	Other Services
27	13S	31W	MPD/MDN MML

API Number 15-063-22030
Permit Number

Permanent Datum G.L., Elevation 2848 feet
Log Measured From KB
Drilling Measured From K.B.

Elevations:	feet
KB	2853.00
DF	2852.00
GL	2848.00

Date	16-AUG-2012		
Run Number	ONE		
Depth Driller	4630.00 feet		
Depth Logger	4626.00 feet		
First Reading	4623.00 feet		
Last Reading	218.00 feet		
Casing Driller	219.00 feet		
Casing Logger	218.00 feet		
Bit Size	7.875 inches		
Hole Fluid Type	CHEMICAL		
Density / Viscosity	9.10 g/c3	50.00 CP	
PH / Fluid Loss	10.00	8.00 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	0.97 @ 97.0 ohm-m		
Rmf @ Measured Temp	0.78 @ 97.0 ohm-m		
Rmc @ Measured Temp	1.16 @ 97.0 ohm-m		
Source Rmf / Rmc	CALC	CALC	
Rm @ BHT	0.79 @119.0 ohm-m		
Time Since Circulation	4 HOURS		
Max Recorded Temp	119.00 deg F		
Equipment Name	COMPACT		
Equipment / Base	13096	LIB	
Recorded By	L. SCOTT		
Witnessed By	KENT MATSON		
S.O.# / JOB#	3534518	LB12-217	

BOREHOLE RECORD

Last Edited: 16-AUG-2012 16:42

Bit Size inches	Depth From feet	Depth To feet
7.875	218.00	4626.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	8.625	0.00	218.00	24.00

REMARKS

Tools Ran: MCG, MML, MDN, MPD, MFE, MAI RAN IN COMBINATION.
2.71 G/CC Limestone Density porosity used to calculate porosity
Borehole Rugosity, Tight pulls, and washouts will affect data quality.
All intervals logged and scaled per customer's request.
Total hole volume from TD to Surface casing= cubic feet
Annular hole volume with 5.5 Inch casing= cubic feet
Service order: 3534518
Rig: Murfin #24
Engineer: L. Scott
Operator(s): R. Venegas

2 INCH MAIN

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 16-AUG-2012 18:06
Filename: C:\Minimus 13.02.6600\Data\Grand Mesa Op...\Grand Mesa Operating Glennis 1-27_002.dta
Recorded on 16-AUG-2012 15:54
System Versions: Logged with 13.02.6600 Plotted with 13.02.6600

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

Casing Shoe 210'

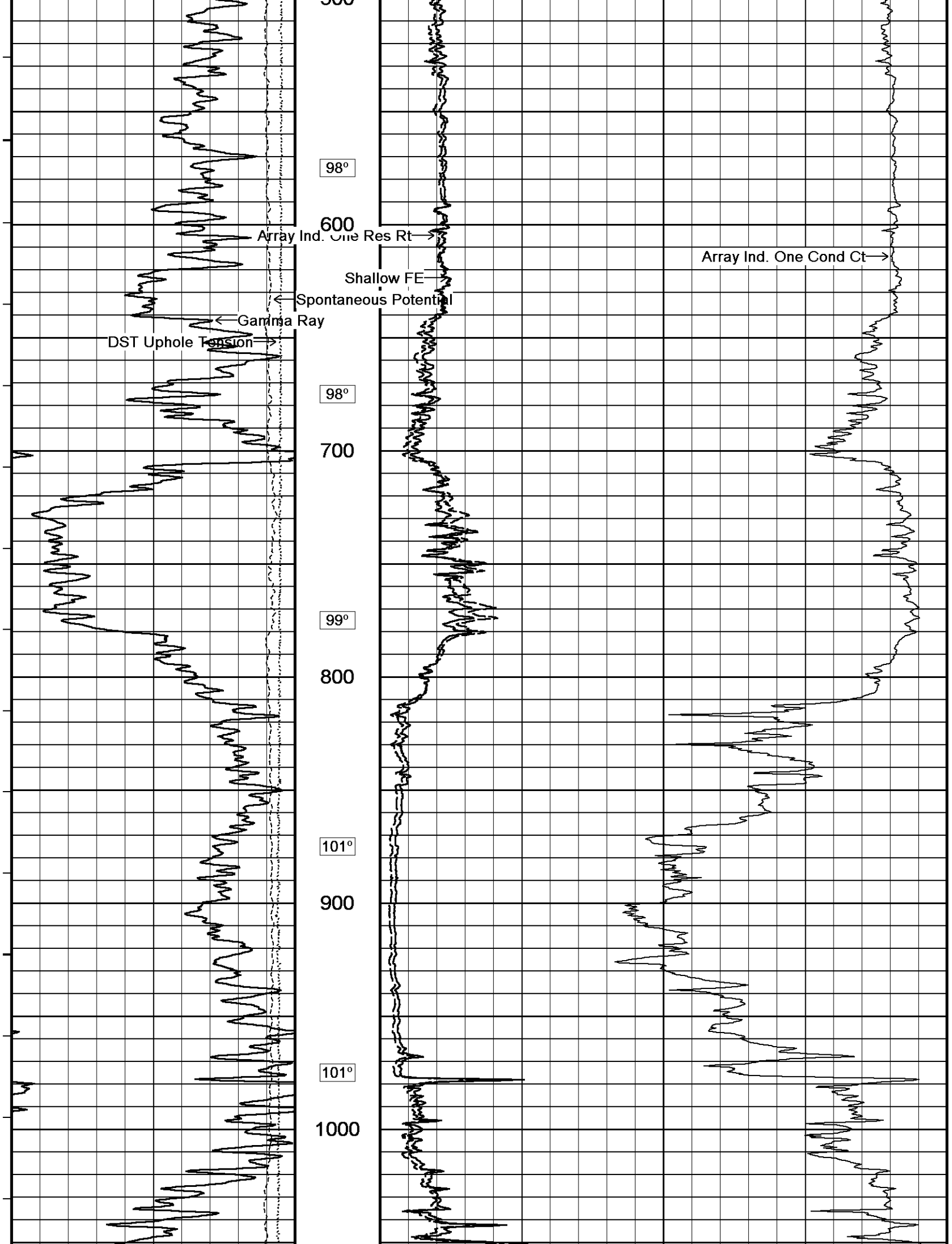
300

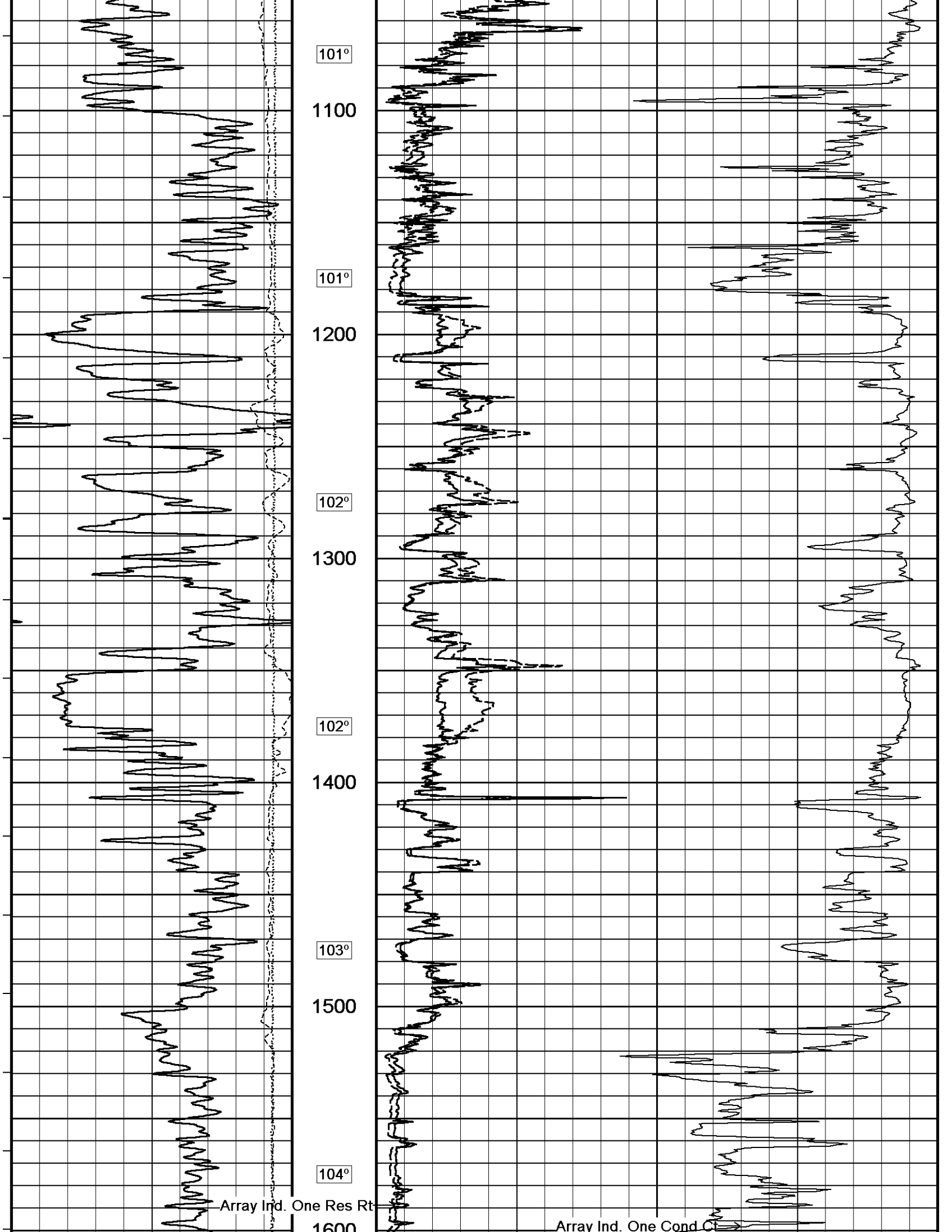
98°

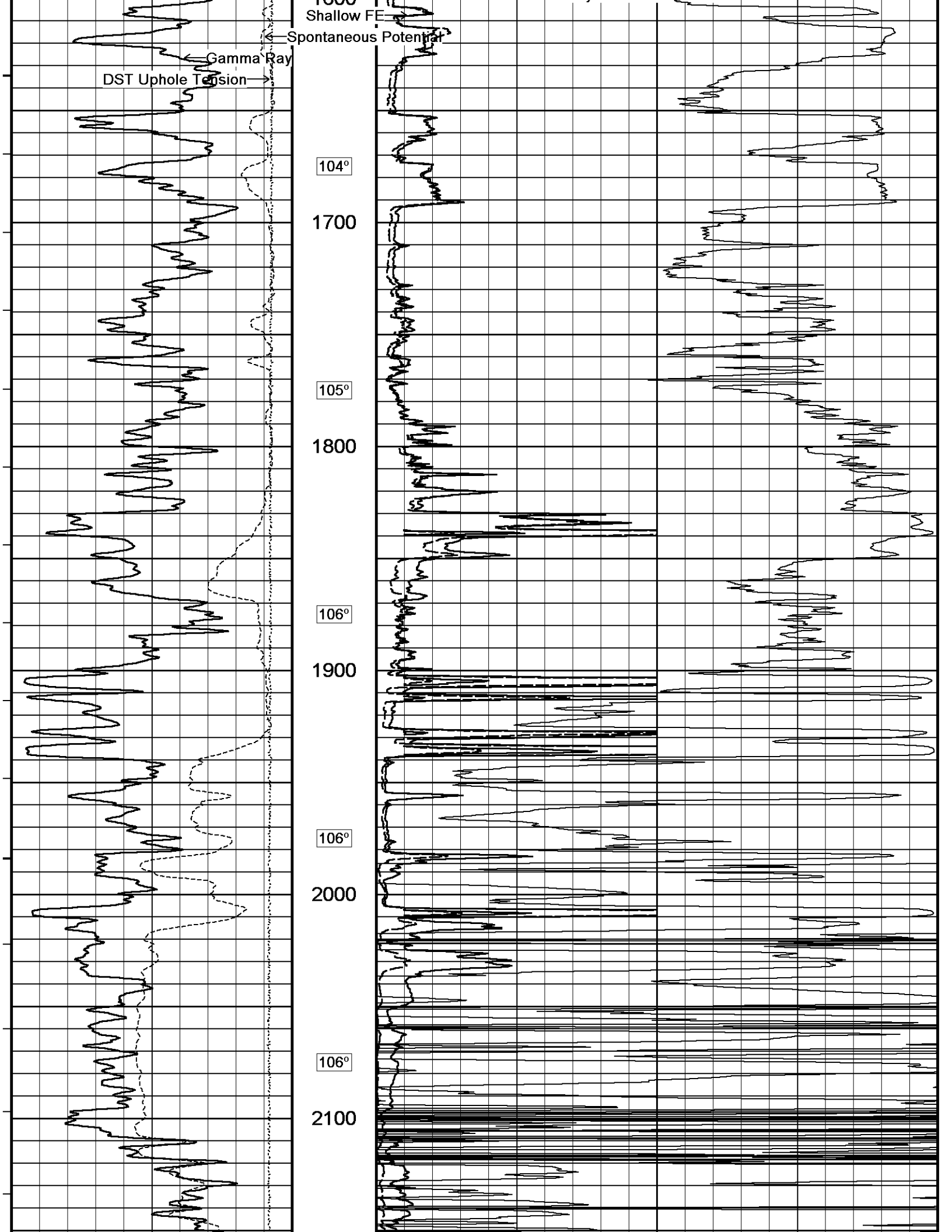
400

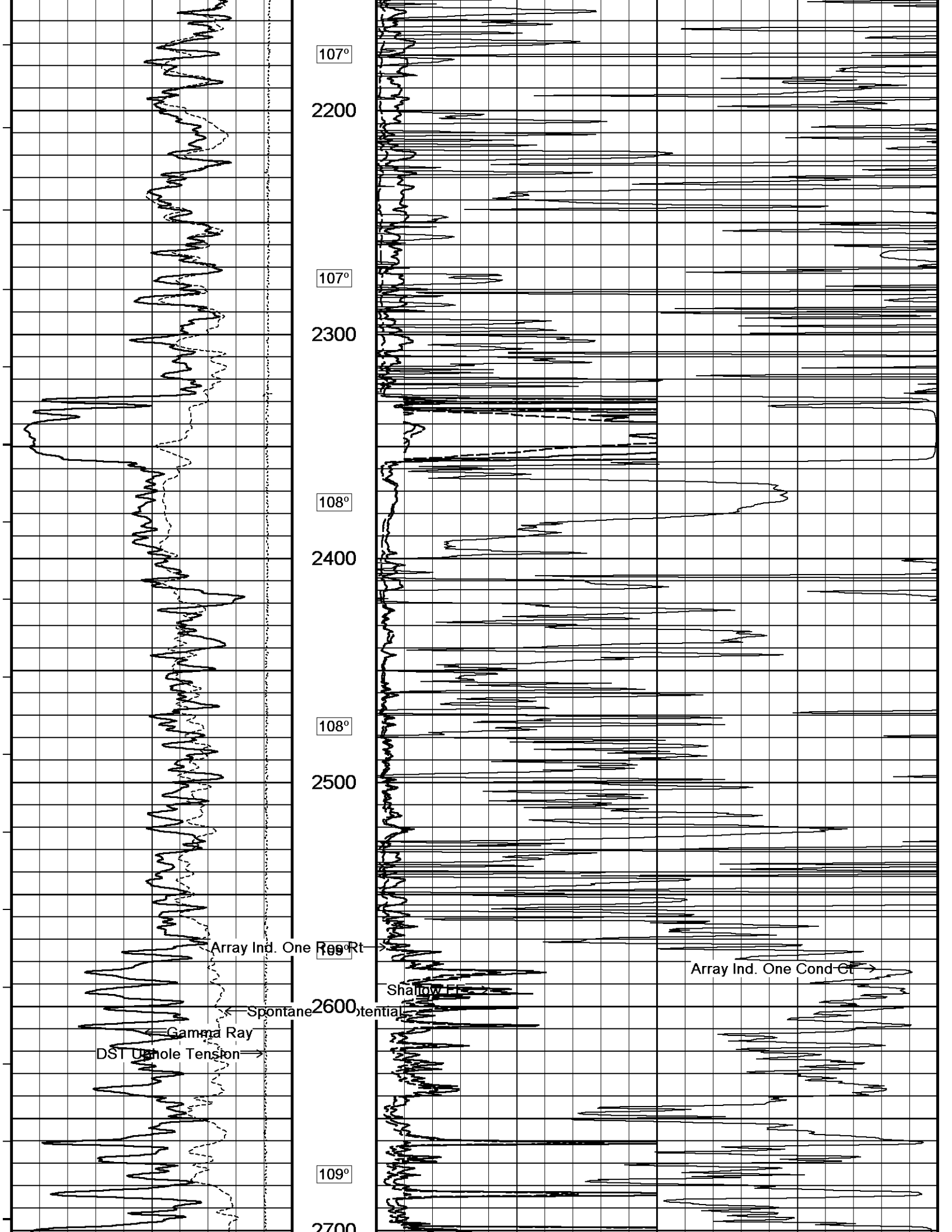
99°

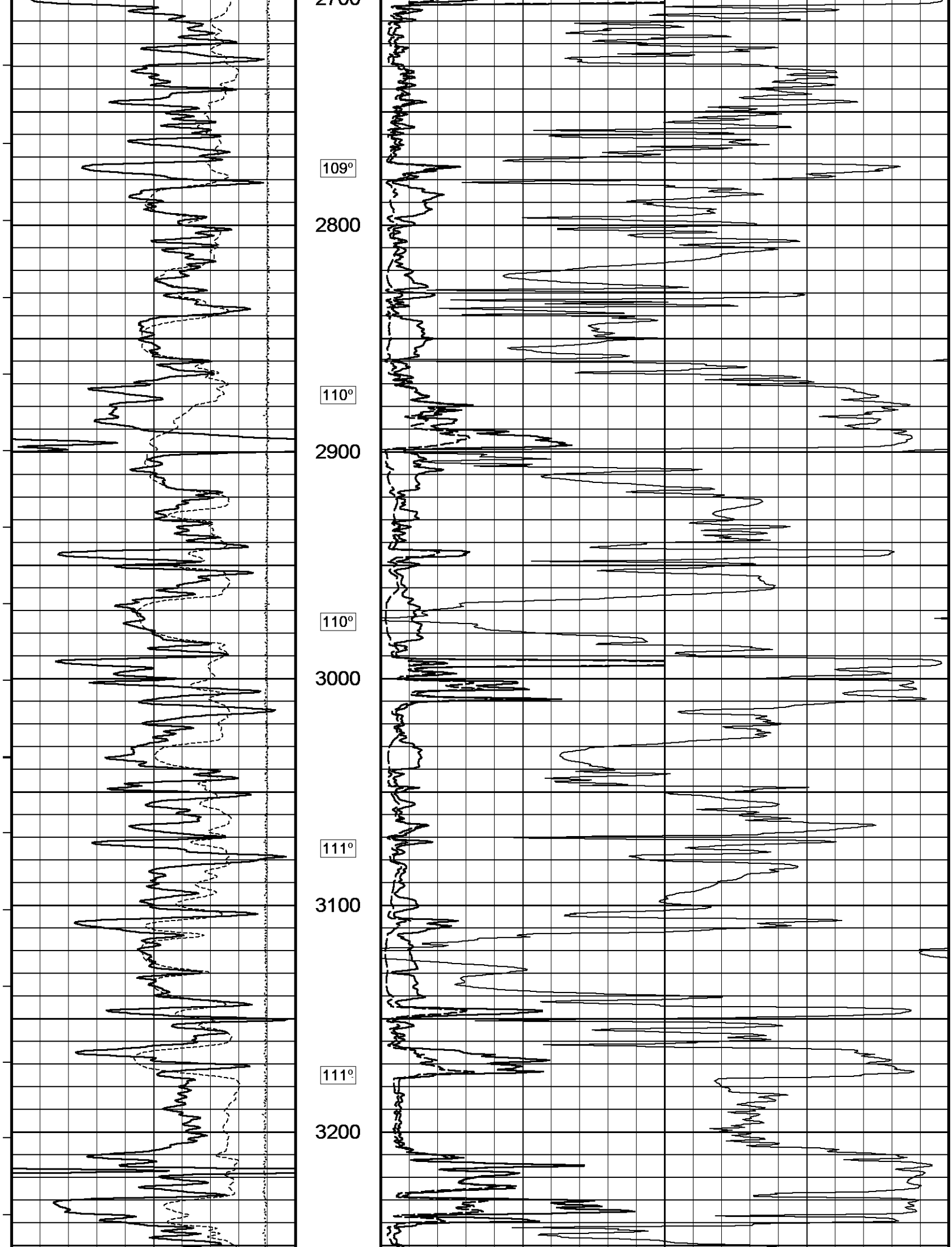
500

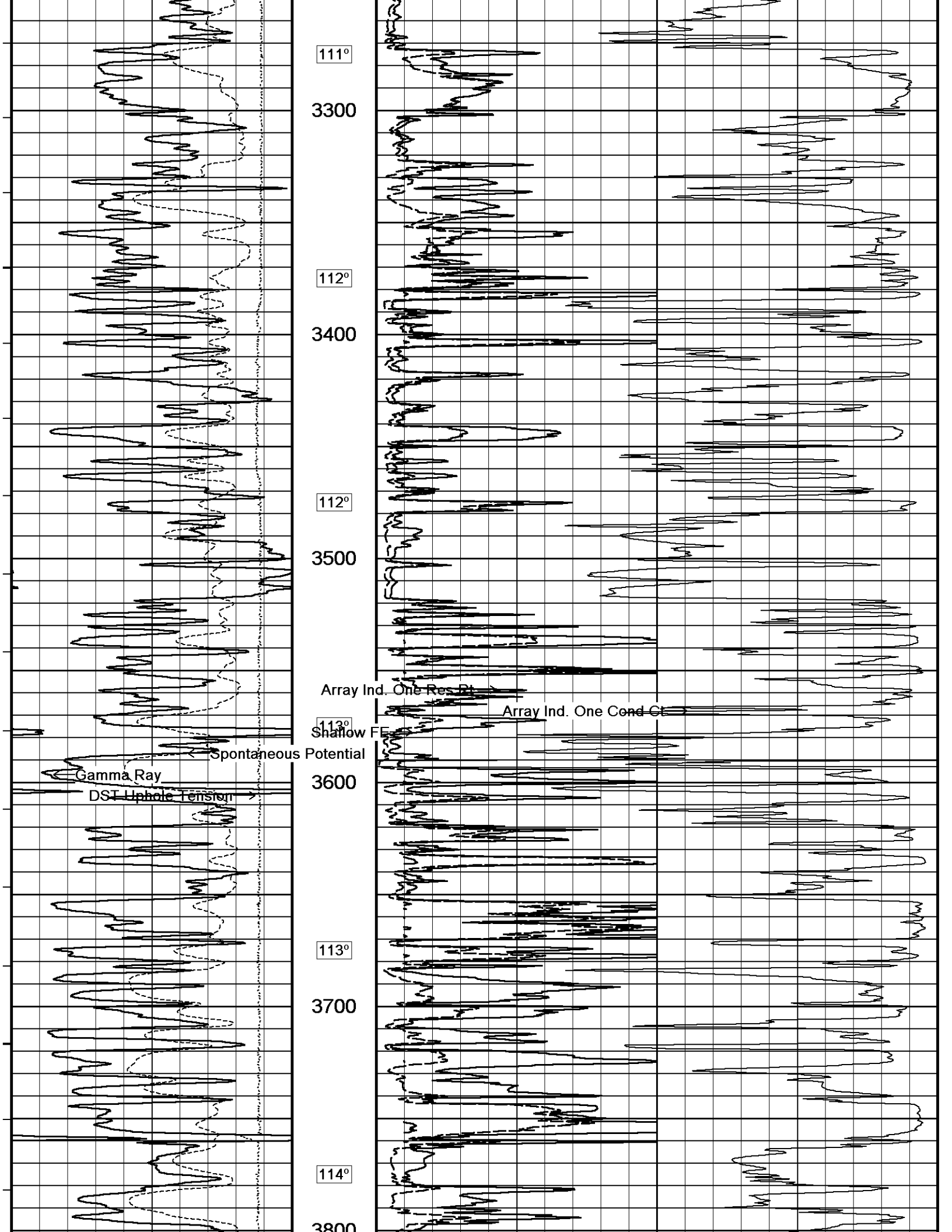

98°
600
Array Ind. One Res Rt
Array Ind. One Cond Ct
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
98°
700
99°
800
101°
900
101°
1000

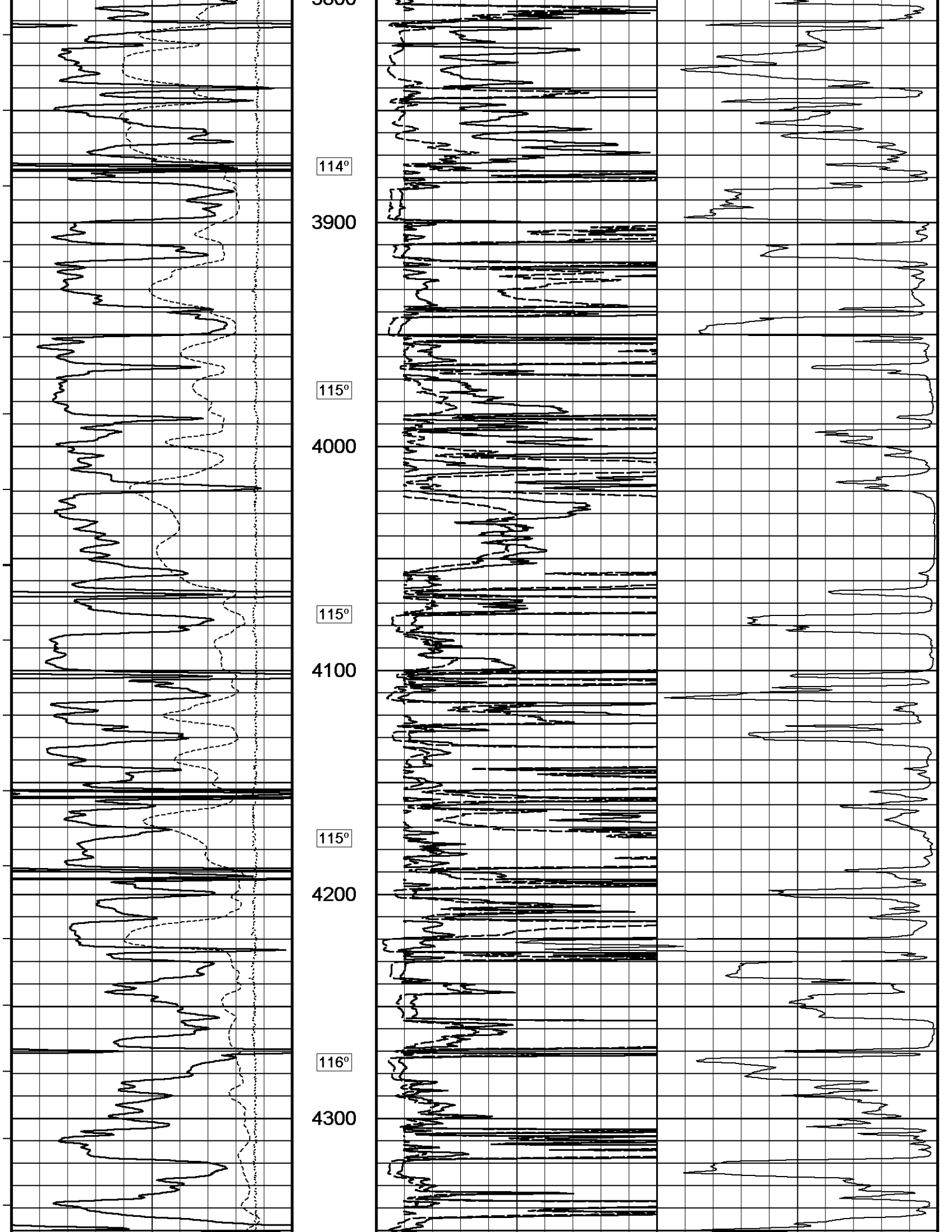

101°
1100
101°
1200
102°
1300
102°
1400
103°
1500
104°
1600
Array Ind. One Res Rt
Array Ind. One Cond Ct

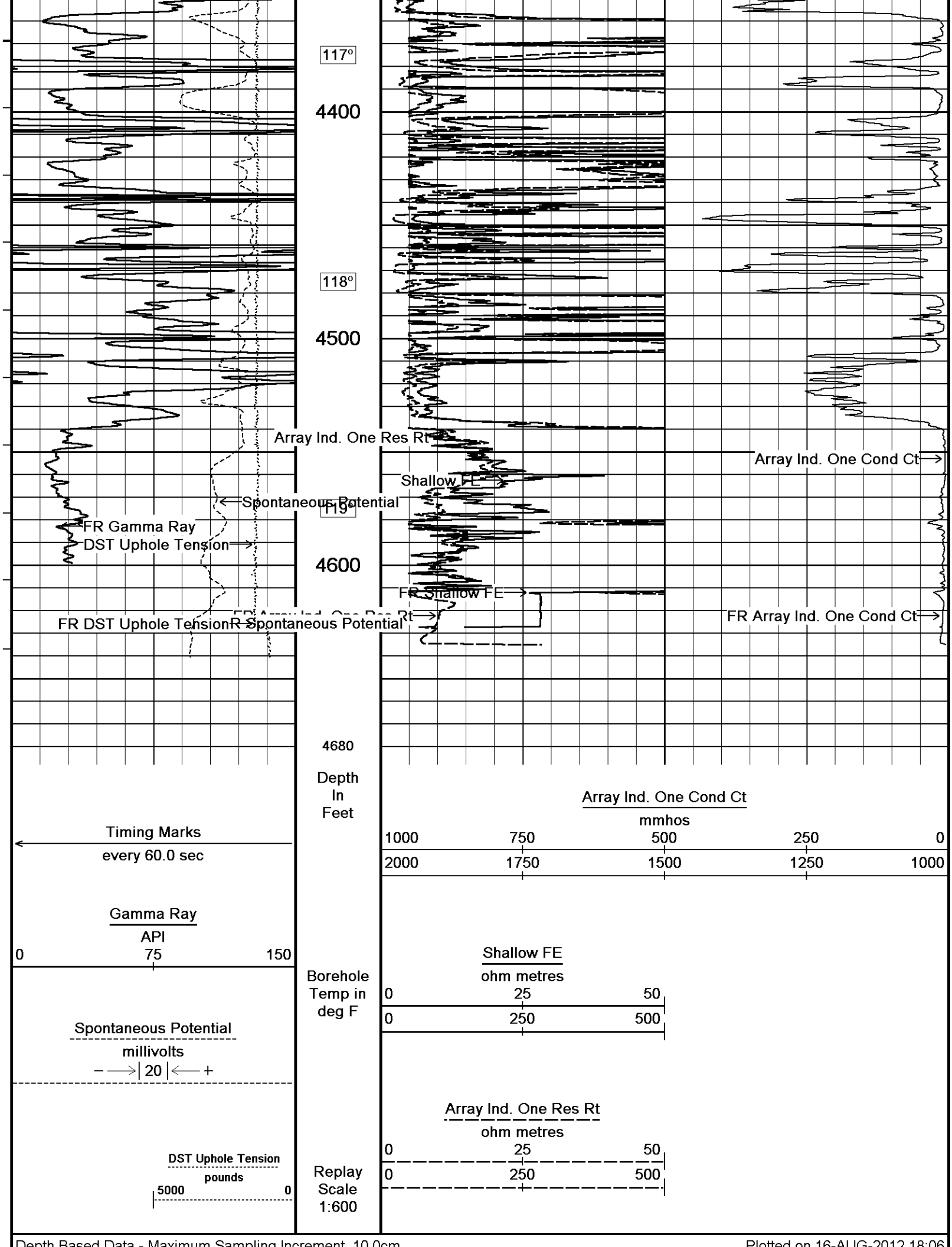

Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
104°
1700
105°
1800
106°
1900
106°
2000
106°
2100


107°
2200
107°
2300
108°
2400
108°
2500
109°
2600
109°
2700
Array Ind. One Res Rt
Array Ind. One Cond Ct
Shallow Ft
Spontane tential
Gamma Ray
DST Uphole Tension


2700
109°
2800
110°
2900
110°
3000
111°
3100
111°
3200


111°
3300
112°
3400
112°
3500
Array Ind. One Res Rt
Array Ind. One Cond Ct
113°
Shallow FE
Spontaneous Potential
Gamma Ray
3600
DST Uphole Tension
113°
3700
114°
3800


114°
3900
115°
4000
115°
4100
115°
4200
116°
4300



Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 16-AUG-2012 18:06

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 16-AUG-2012 18:06
Filename: C:\Minimus 13.02.6600\Data\Grand Mesa Op...\Grand Mesa Operating Glennis 1-27_002.dta — Recorded on 16-AUG-2012 15:54
System Versions: Logged with 13.02.6600 Plotted with 13.02.6600

2 INCH MAIN

5 INCH MAIN

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 16-AUG-2012 18:06
Filename: C:\Minimus 13.02.6600\Data\Grand Mesa Op...\Grand Mesa Operating Glennis 1-27_002.dta — Recorded on 16-AUG-2012 15:54
System Versions: Logged with 13.02.6600 Plotted with 13.02.6600

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 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

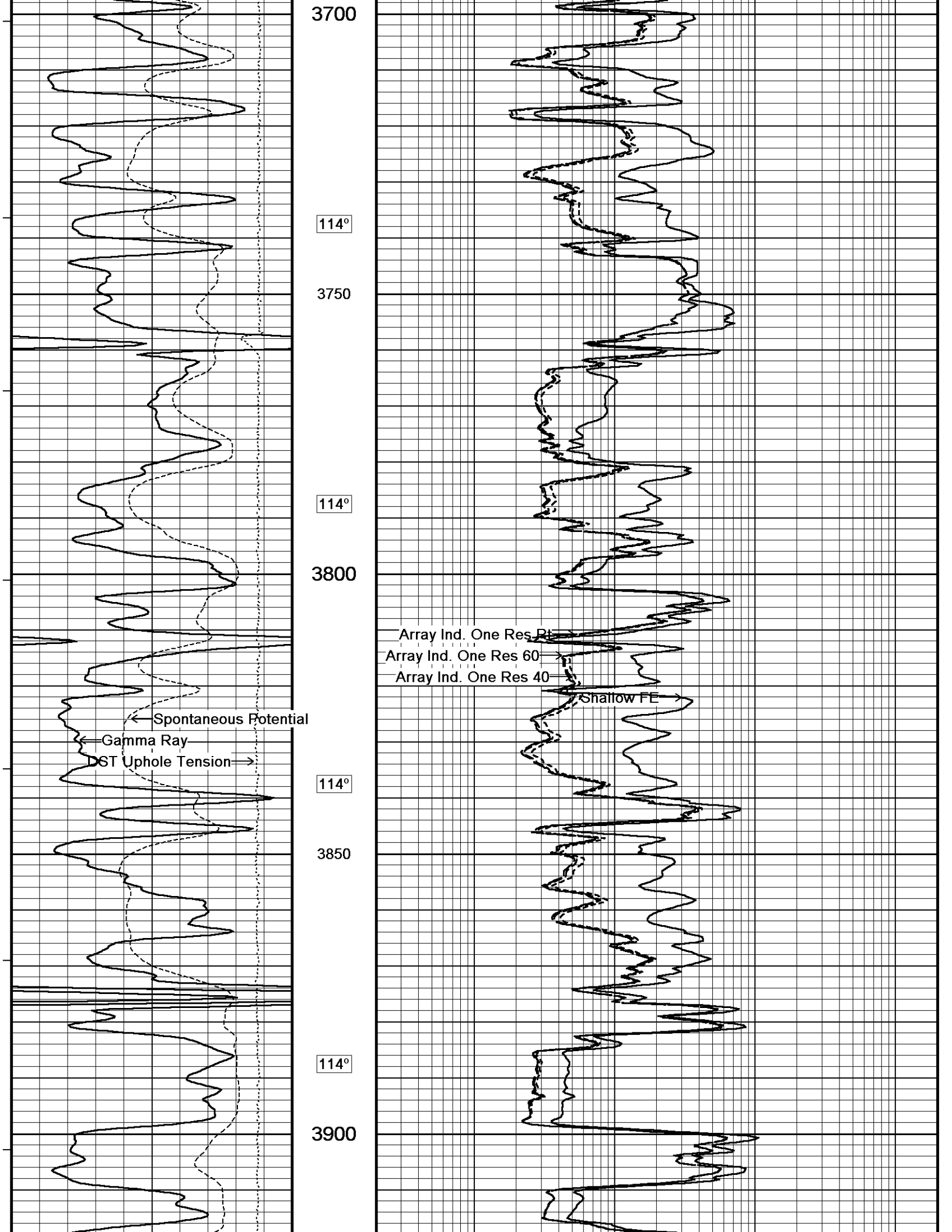
Array Ind. One Res Rt
ohm metres
0.20 1 10 100 2000

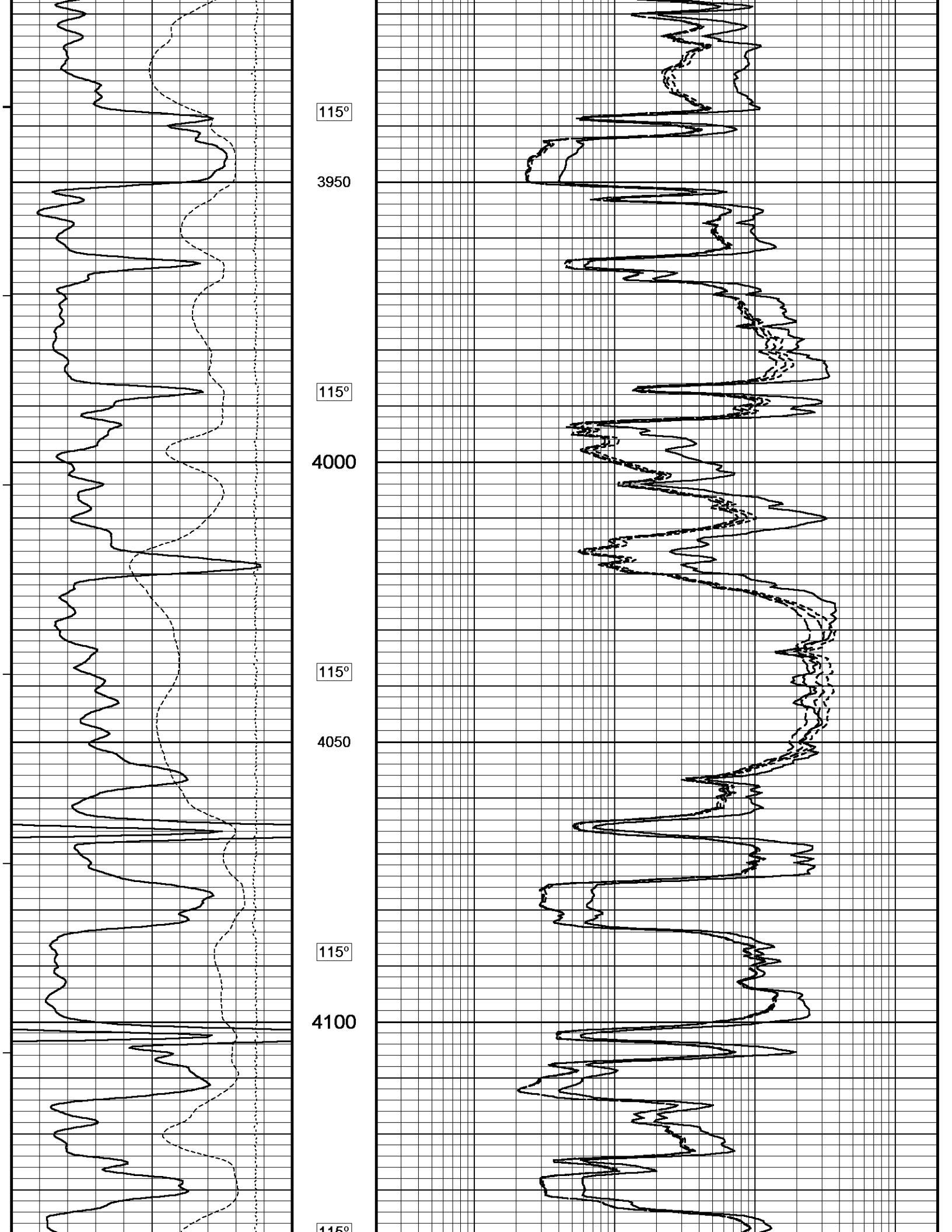
3600

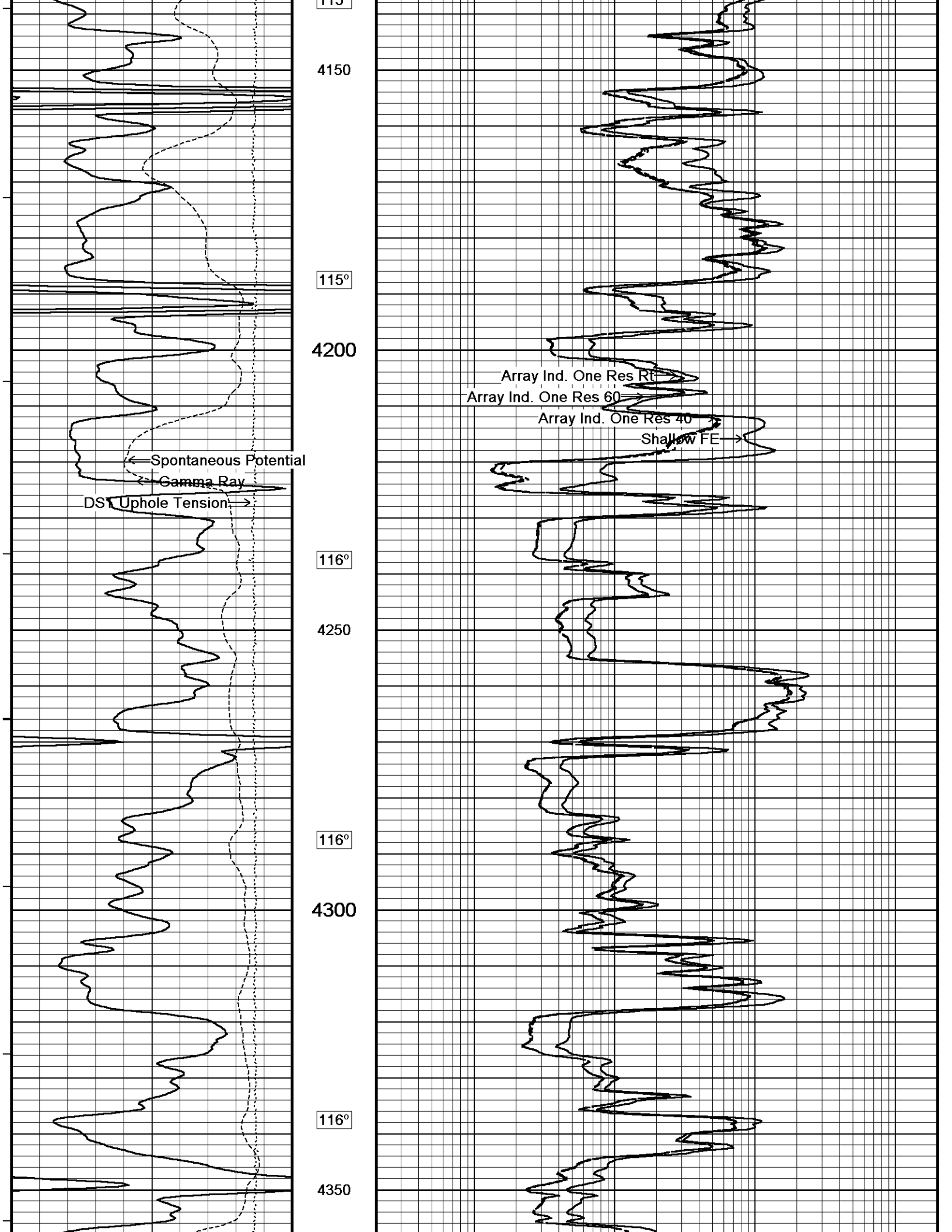
113°

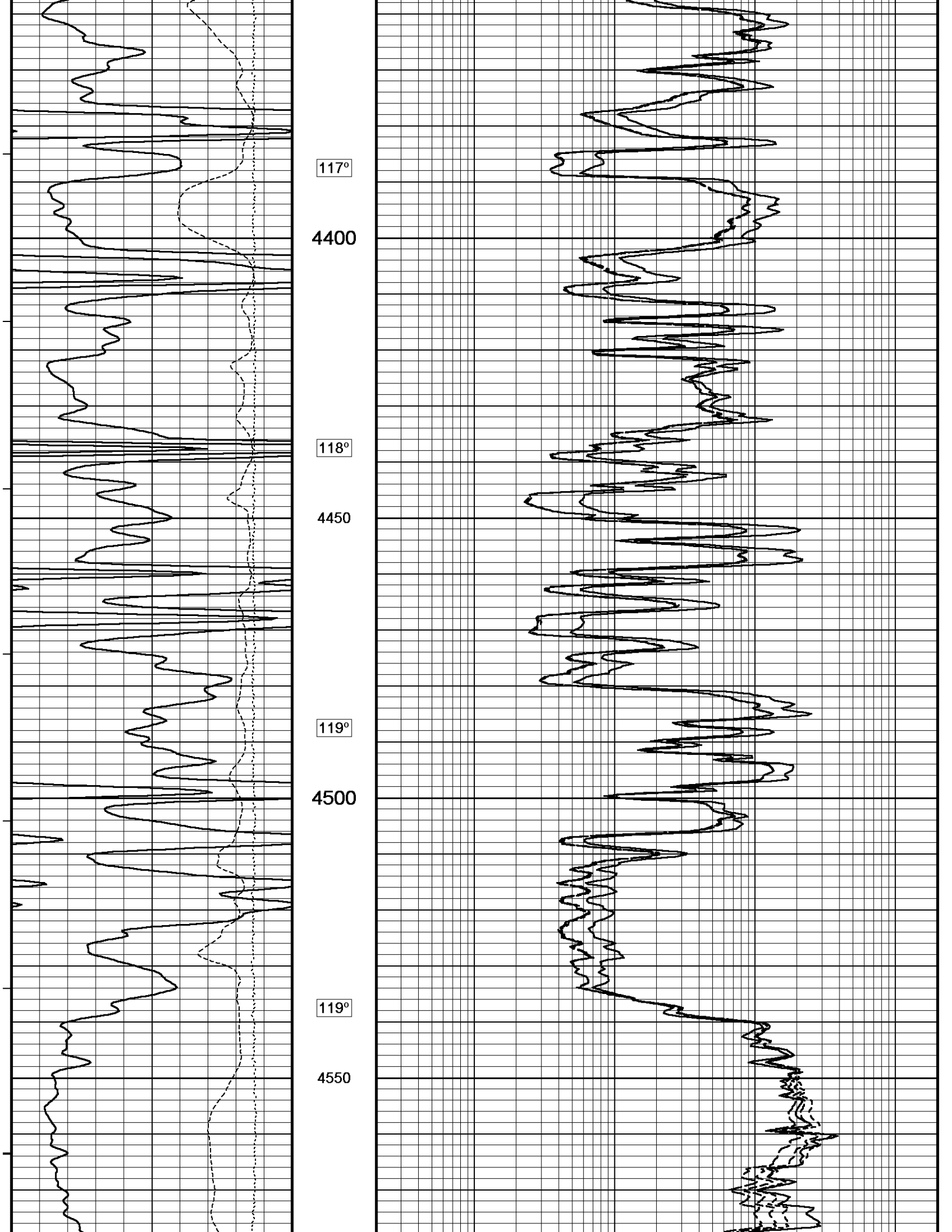
3650

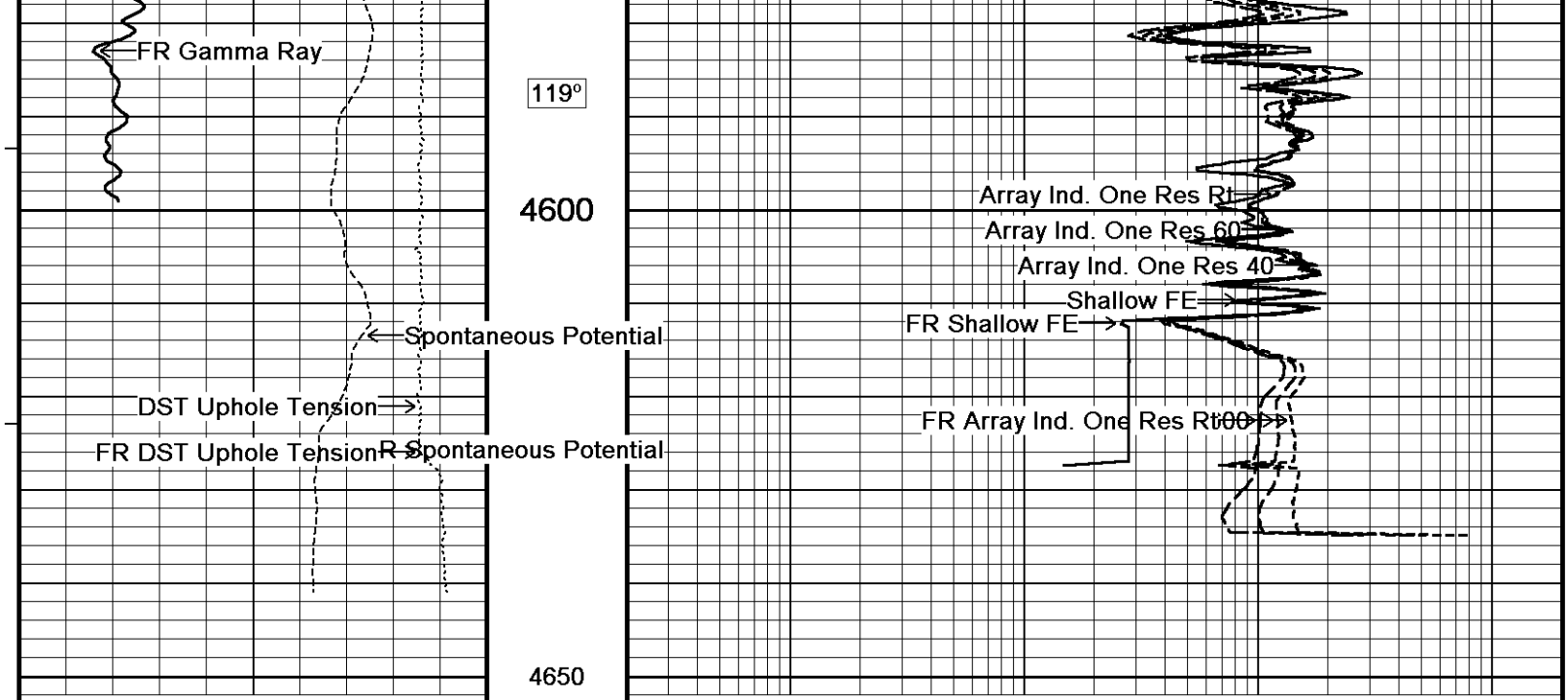
113°


3700
114°
3750
114°
3800
Array Ind. One Res RI
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
114°
3850
114°
3900


115°
3950
115°
4000
115°
4050
115°
4100
115°


115
4150
115°
4200
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
116°
4250
116°
4300
116°
4350


117°
4400
118°
4450
119°
4500
119°
4550



4650

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 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 1 10 100 1000 2000

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

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 16-AUG-2012 18:06
Filename: C:\Minimus 13.02.6600\Data\Grand Mesa Op...\Grand Mesa Operating Glennis 1-27_002.dta
Recorded on 16-AUG-2012 15:54
System Versions: Logged with 13.02.6600 Plotted with 13.02.6600

5 INCH MAIN

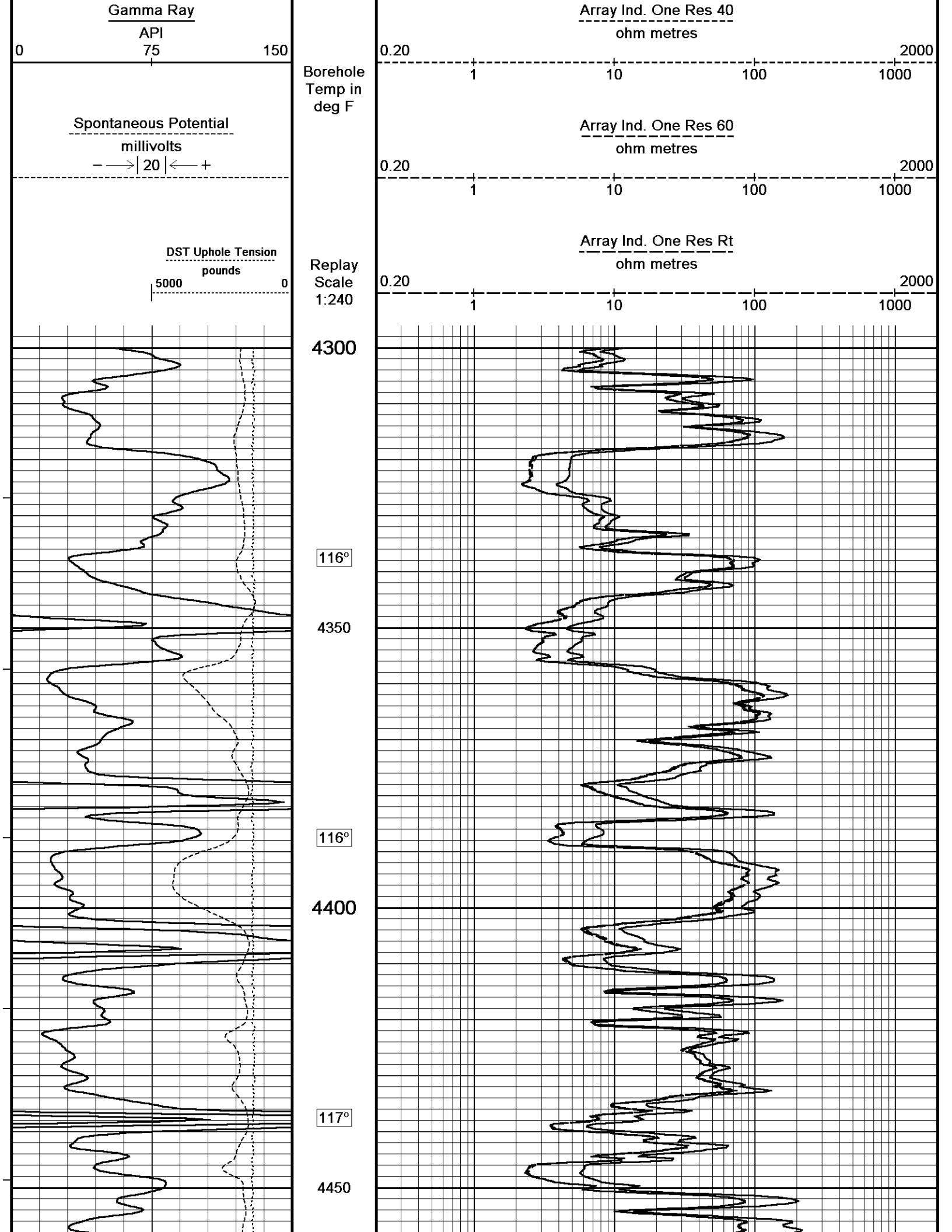
REPEAT SECTION

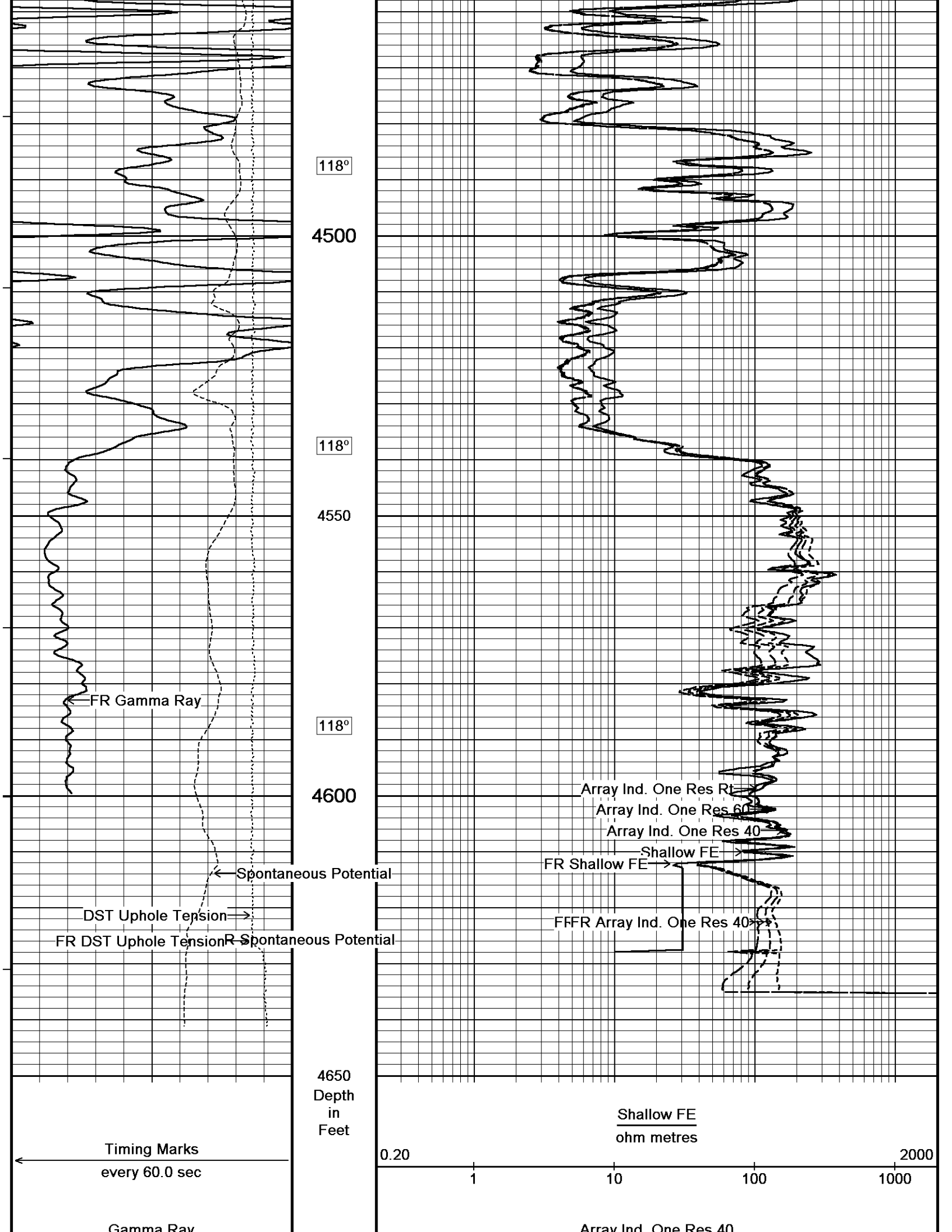
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 16-AUG-2012 18:06
Filename: C:\Minimus 13.02.6600\Data\Grand Mesa Op...\Grand Mesa Operating Glennis 1-27_001.dta
Recorded on 16-AUG-2012 15:35
System Versions: Logged with 13.02.6600 Plotted with 13.02.6600

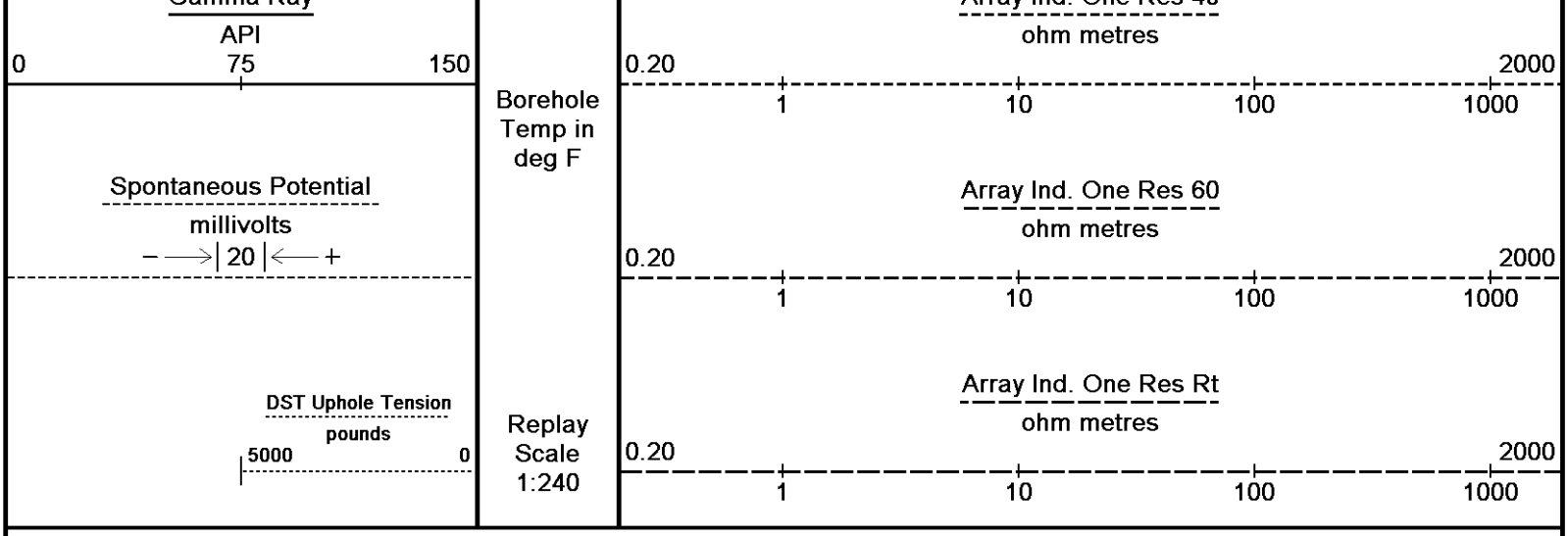
Depth in Feet

Timing Marks
every 60.0 sec

Shallow FE
ohm metres
0.20 1 10 100 1000 2000


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
1
10
100
1000
2000
Array Ind. One Res 60
ohm metres
0.20
1
10
100
1000
2000
Array Ind. One Res Rt
ohm metres
0.20
1
10
100
1000
2000
4300
116°
4350
116°
4400
117°
4450


118°
4500
118°
4550
118°
4600
FR Gamma Ray
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 DST Uphole Tension
R Spontaneous Potential
FFR Array Ind. One Res 40
4650
Depth
in
Feet
Timing Marks
every 60.0 sec
Shallow FE
ohm metres
0.20
1
10
100
1000
2000
Gamma Ray
Array Ind. One Res 40



Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 16-AUG-2012 18:06

Filename: C:\Minimus 13.02.6600\Data\Grand Mesa Op...\Grand Mesa Operating Glennis 1-27_001.dta — Recorded on 16-AUG-2012 15:35

System Versions: Logged with 13.02.6600 Plotted with 13.02.6600

REPEAT SECTION

BEFORE SURVEY CALIBRATION

C:\Minimus 13.02.6600\Data\Grand Mesa Operating Glennis #1-27\Grand Mesa Operating Glennis 1-27_001.dta

General Constants All 000

Last Edited on 16-AUG-2012,14:05

General Parameters		
Mud Resistivity	0.970	ohm-metres
Mud Resistivity Temperature	97.000	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. Four Res Rt	
RWA Constant A	0.610	
RWA Constant M	2.150	

Down-hole Tension Calibration SMS 0

Field Calibration on 25-JUL-2012 21:44

Reading No	Measured	Calibrated (lbs)
1	15962.51	0.00
2	17047.62	562.20

Gamma Calibration MCG-D.K 442

Field Calibration on 13-AUG-2012 09:24

	Measured	Calibrated (API)
Background	69	46
Calibrator (Gross)	1150	771
Calibrator (Net)	1081	725

Gamma Constants MCG-D.K 442

Last Edited on 16-AUG-2012,14:05

Gamma Calibrator Number	GRC38	
Mud Density	1.09	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 17-JUL-2012 16:34

	Measured	Calibrated (mV)
Reference 1	100.2	100.0
Reference 2	-99.9	-100.0

High Resolution Temperature Calibration MCG-D.K 442

Field Calibration on 17-JUL-2012,16:35

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

High Resolution Temperature Constants MCG-D.K 442

Last Edited on

Pre-filter Length	11

Caliper Calibration MML-A 4

Base Calibration on 24-JUL-2012 08:53
Field Calibration on 13-AUG-2012 09:01

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	15504	5.98
2	18771	7.97
3	22124	9.86
4	25894	11.92
5	0	0.00
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
5.88	5.98

Micro Normal and Micro Inverse Calibration MML-A 4

Base Calibration on 24-JUL-2012 08:59
Field Check on 13-AUG-2012 09:03

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	78.4	5.0	25.0

Channel	Base Check (ohm-m)	Field Check (ohm-m)
Micro Normal	62.9	62.9
Micro Inverse	48.2	48.2

Micro Normal and Micro Inverse Constants MML-A 4

Last Edited on 16-AUG-2012,14:06

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

Neutron Calibration MDN-A.B 66

Base Calibration on 17-JUL-2012 10:54
Field Check on 13-AUG-2012 09:29

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
	3220	101	3714	110
Ratio	31.859		33.764	

Field Calibrator at Base

	Calibrated (cps)	
	1595	2289
Ratio	0.696	

Field Check

	Calibrated (cps)	
	1598	2276
Ratio	0.702	

Neutron Constants MDN-A.B 66

Last Edited on 16-AUG-2012,14:05

Neutron Source Id	P0204NN	
Neutron Jig Number	5824NE	
Epithermal Neutron	No	
Caliper Source for Processing	Density Caliper	
Stand-off	0.00	inches
Mud Density	1.00	gm/cc
Limestone Sigma	7.10	cu

Sandstone Sigma	4.26	cu
Dolomite Sigma	4.70	cu
Formation Pressure Source	Constant Value	
Formation Pressure	0.00	kpsi
Temperature Source	Constant Value	
Temperature	68.00	degrees F
Mud Salinity	0.00	kppm
Salinity Correction	Not Applied	
Formation Fluid Salinity Source	Constant Value	
Formation Fluid Salinity	0.00	kppm
Barite Mud Correction	Not Applied	

FE Calibration MFE-B.J 353

Base Calibration on 17-JUL-2012 15:58
Field Check on 13-AUG-2012 09:00

Base Calibration

	Measured	Calibrated (ohm-m)
Reference 1	0.0	0.0
Reference 2	964.8	126.8
Base Check		280.6
Field Check		280.9

FE Constants MFE-B.J 353

Last Edited on 16-AUG-2012,14:06

Running Mode	No Sleeve	
MFE K Factor	0.1268	
Caliper Source for FE correction	Density Caliper	
Caliper Value for FE correction	N/A	inches
Rm Source for FE correction	Temperature Corr	
Temp. for Rm Corr.	MCG External Temperature	
Stand-off	0.5	inches

High Resolution Temperature Calibration MAI-A.A 167

Field Calibration on 17-JUL-2012,13:53

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

High Resolution Temperature Constants MAI-A.A 167

Last Edited on 17-JUL-2012,13:49

Pre-filter Length	11

Induction Calibration MAI-A.A 167

Base Calibration on 17-JUL-2012,13:55
Field Check on 13-AUG-2012 08:59

Base Calibration

Test Loop Calibration

Channel	Measured Low	Measured High	Calibrated (mmho/m) Low	Calibrated (mmho/m) High
1	17.3	474.2	9.3	966.2
2	6.3	388.4	7.6	821.4
3	3.3	259.4	5.2	566.0
4	1.9	133.0	2.6	279.2

Array Temperature 76.8 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	13.3	3838.4
2	0.0	0.0	29.6	3476.3
3	0.0	0.0	29.1	3052.2
4	0.0	0.0	19.8	2081.0
Deep	0.0	0.0	18.6	2048.1
Medium	0.0	0.0	42.2	3990.5
Shallow	0.0	0.0	43.0	5053.7
Array Temperature	0.0		79.3	Deg F

Induction Constants MAI-A.A 167

Last Edited on 16-AUG-2012,14:06

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 04-AUG-2012 20:18
Field Calibration on 13-AUG-2012 09:10

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	11106	3.99
2	20221	5.98
3	28496	7.97
4	37105	9.86
5	46524	11.92
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
5.94	5.98

Photo Density Calibration MPD-B 64

Base Calibration on 17-JUL-2012 15:04
Field Check on 13-AUG-2012 09:08

Density Calibration

Base Calibration	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	59921	33969	59556	30836
Reference 2	25388	2962	24941	2541

Field Check at Base

1193.4	1388.8

Field Check

1183.8	1378.0

PE Calibration

Base Calibration	Measured			Calibrated
	WS	WH	Ratio	Ratio
Background	214	1064		
Reference 1	22602	59722	0.382	0.371
Reference 2	6872	25249	0.275	0.272

Field Check at Base

	214.1	1063.8
Field Check		
	213.4	1055.9

Density Constants MPD-B 64

Last Edited on 16-AUG-2012,14:06

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	1.09	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)
2.87	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00

DOWNHOLE EQUIPMENT

C:\Minimus 13.02.6600\Data\Grand Mesa Operating Glennis #1-27\Grand Mesa Operating Glennis 1-27_001.dta

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

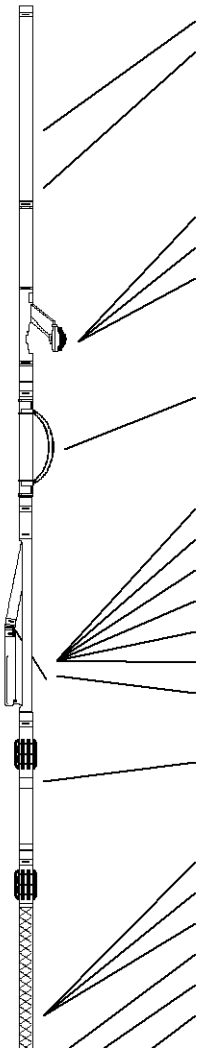
Compact Neutron
MDN-A.B 66 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

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

Compact Focussed Electric
MFE-B.J 353 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

Compact Induction
MAI-A.A 167 LG: 10.81 ft WT: 48.5 lb OD: 2.24 in

Total Length: 48.16 ft Weight: 383.6 lb



42.87 ft	GRGC - Gamma Ray
39.96 ft	CGXT - MCG External Temperature
33.24 ft	MINV - Micro-inverse
33.24 ft	MNRL - Micro-normal
34.24 ft	MLTC - MML Caliper
28.45 ft	NPRL - Limestone Neutron Por.
21.21 ft	AVOL - Annular Volume
21.21 ft	HVOL - Hole Volume
21.21 ft	CLDC - Density Caliper
19.28 ft	DEN - Compensated Density
19.28 ft	DCOR - Density Correction
19.28 ft	DPRL - Limestone Density Por.
19.22 ft	PDPE - PE
13.72 ft	FEFE - Shallow FE
3.34 ft	R40O - Array Ind. One Res 40
3.34 ft	RTAO - Array Ind. One Res Rt
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

All measurements relative to tool zero.

COMPANY	GRAND MESA OPERATING COMPANY
WELL	GLENNIS #1-27
FIELD	WILDCAT
PROVINCE/COUNTY	GOVE
COUNTRY/STATE	U.S.A. / KANSAS

Elevation Kelly Bushing	2853.00	feet	First Reading	4623.00	feet
Elevation Drill Floor	2852.00	feet	Depth Driller	4630.00	feet
Elevation Ground Level	2848.00	feet	Depth Logger	4626.00	feet

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SHALLOW FOCUSED
ELECTRIC LOG

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ARRAY INDUCTION SHALLOW FOCUSED ELECTRIC LOG

COMPANY	GRAND MESA OPERATING COMPANY
WELL	GLENNIS #1-27
FIELD	WILDCAT
PROVINCE/COUNTY	GOVE
COUNTRY/STATE	U.S.A. / KANSAS
LOCATION	2141' FSL & 541' FEL SW NE NE SE
SEC / TWP / RGE	27 / 13S / 31W
Other Services	MPD/MDN MML
API Number / Permit Number	15-063-22030
Permanent Datum	G.L., Elevation 2848 feet
Log Measured From	KB
Drilling Measured From	K.B.
Elevations (feet)	KB 2853.00, DF 2852.00, GL 2848.00

Date	16-AUG-2012		
Run Number	ONE		
Depth Driller	4630.00	feet	
Depth Logger	4626.00	feet	
First Reading	4623.00	feet	
Last Reading	218.00	feet	
Casing Driller	219.00	feet	
Casing Logger	218.00	feet	
Bit Size	7.875	inches	
Hole Fluid Type	CHEMICAL		
Density / Viscosity	9.10 g/c3	50.00 CP	
PH / Fluid Loss	10.00	8.00 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	0.97 @ 97.0	ohm-m	
Rmf @ Measured Temp	0.78 @ 97.0	ohm-m	
Rmc @ Measured Temp	1.16 @ 97.0	ohm-m	
Source Rmf / Rmc	CALC	CALC	
Rm @ BHT	0.79 @ 119.0	ohm-m	
Time Since Circulation	4 HOURS		
Max Recorded Temp	119.00	deg F	
Equipment Name	COMPACT		
Equipment / Base	13096	LIB	
Recorded By	L. SCOTT		
Witnessed By	KENT MATSON		
S.O.# / JOB#	3534518		LB12-217

2 INCH MAIN

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 16-AUG-2012 18:06

Filename: C:\Minimus 13.02.6600\Data\Grand Mesa Operat...\Grand Mesa Operating Glennis 1-27_002.dta — Recorded on 16-AUG-2012 15:54

System Versions: Logged with 13.02.6600 Plotted with 13.02.6600

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

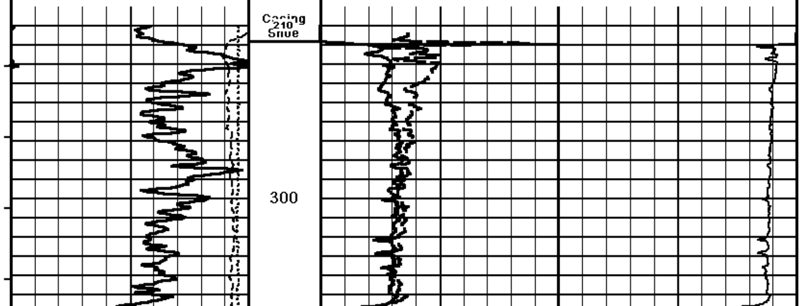
Borehole Temp in deg F

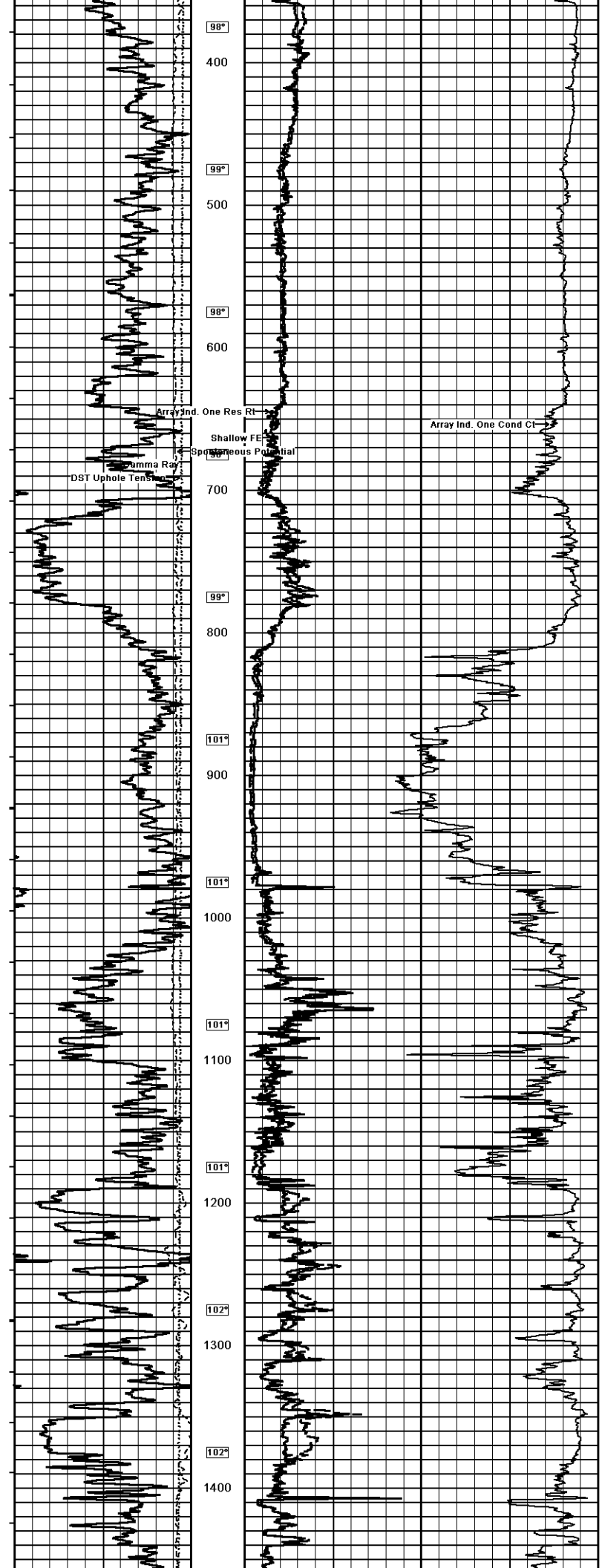
Replay Scale 1:600

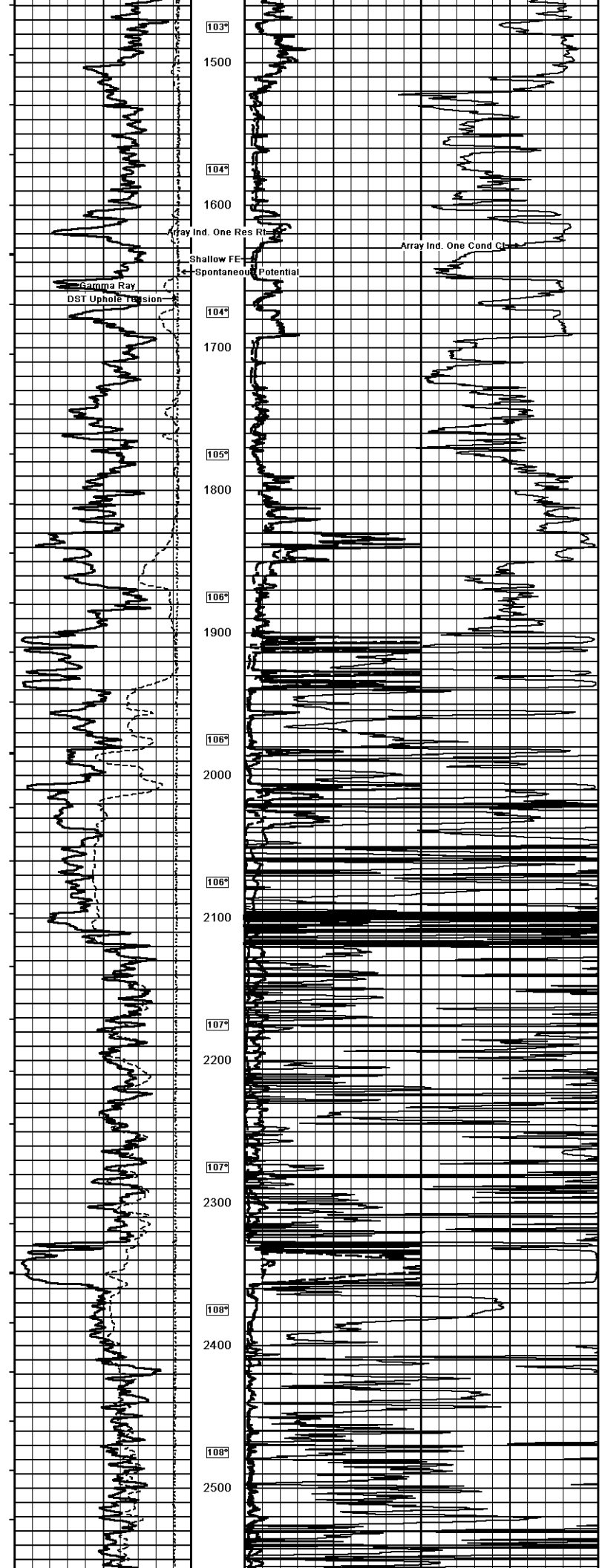
Array Ind. One Cond Ct mmhos 1000 750 500 250 0 / 2000 1750 1500 1250 1000

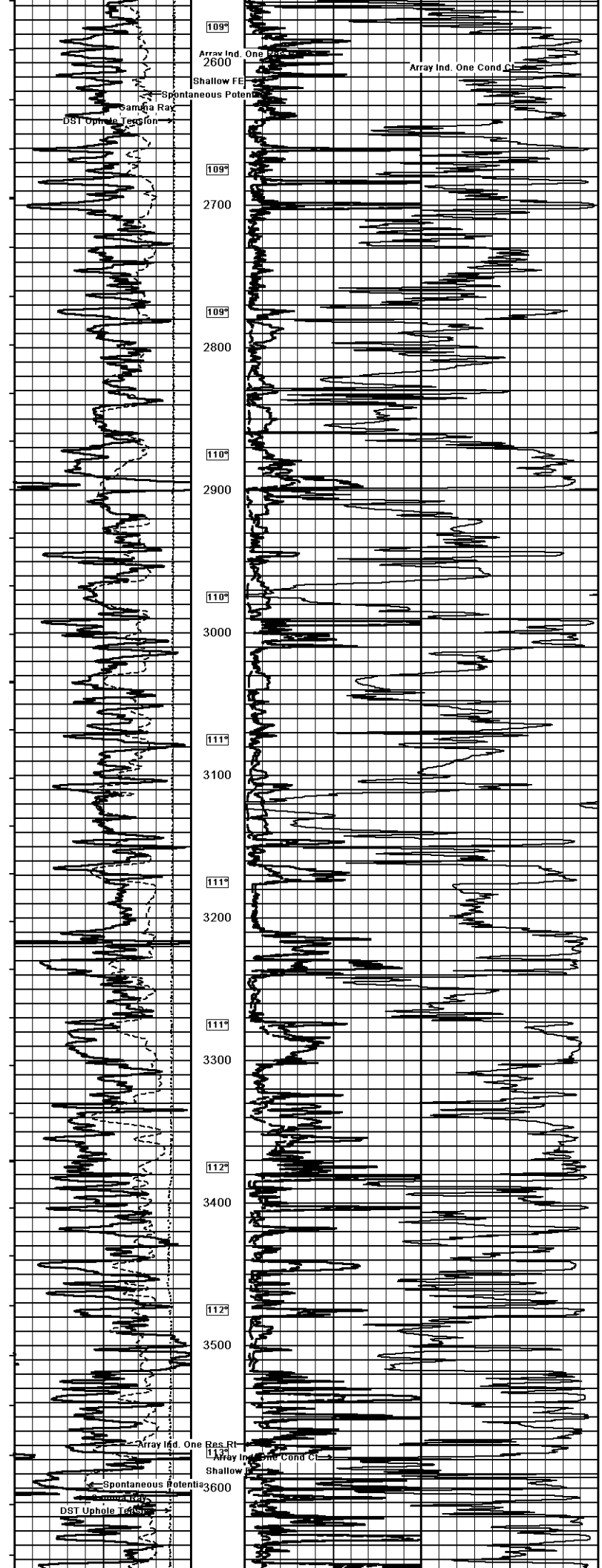
Shallow FE ohm metres 0 25 50 / 0 250 500

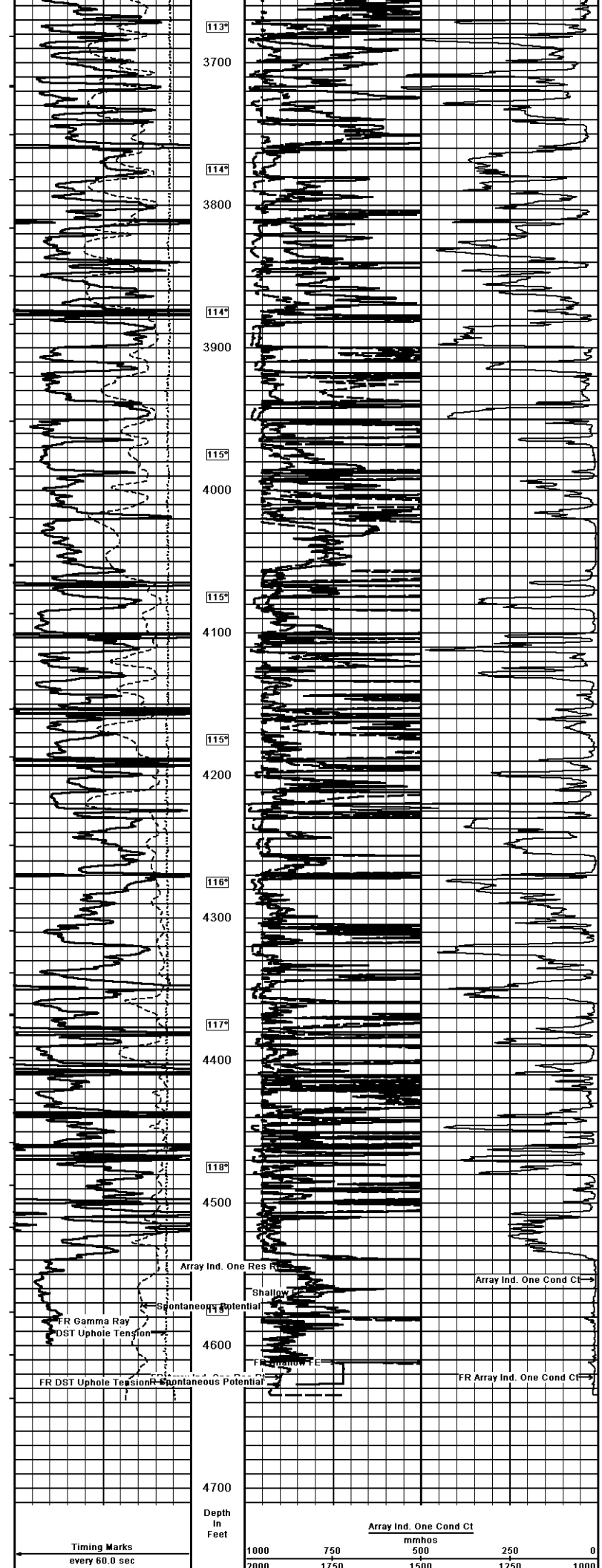
Array Ind. One Res Rt ohm metres 0 25 50 / 0 250 500

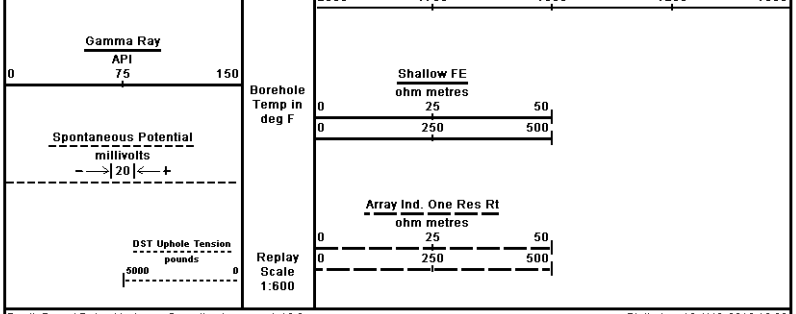



98°
400
99°
500
98°
600
Array Ind. One Res Rt
Shallow FE
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Array Ind. One Cond Ct
700
99°
800
101°
900
101°
1000
101°
1100
101°
1200
102°
1300
102°
1400


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


109°
Array Ind. One Res Rt
2600
Array Ind. One Cond Ct
Shallow FE
Spontaneous Potenti
Gamma Ray
DST Uphole Tension
109°
2700
109°
2800
110°
2900
110°
3000
111°
3100
111°
3200
111°
3300
112°
3400
112°
3500
Array Ind. One Res Rt
113°
Array Ind. One Cond Ct
Shallow F
Spontaneous Potentia
3600
Gamma Ray
DST Uphole Tension


113"
3700
114"
3800
114"
3900
115"
4000
115"
4100
115"
4200
116"
4300
117"
4400
118"
4500
4600
4700
Array Ind. One Res R
Shallow
Spontaneous Potential
FR Gamma Ray
DST Uphole Tension
FR Shallow Re
FR DST Uphole Tension
FR Spontaneous Potential
Array Ind. One Cond Ct
FR Array Ind. One Cond Ct
Timing Marks
every 60.0 sec
Depth
In
Feet
Array Ind. One Cond Ct
mmhos
1000
750
500
250
0
2000
1750
1500
1250
1000



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Filename: C:\Minimus 13.02.6600\Data\Grand Mesa Operat...\Grand Mesa Operating Glennis 1-27_002.dta — Recorded on 16-AUG-2012 15:54

System Versions: Logged with 13.02.6600 Plotted with 13.02.6600

2 INCH MAIN

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WELL	GLENNIS #1-27
FIELD	WILDCAT
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