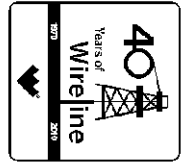




Weatherford[®]

ARRAY INDUCTION
SHALLOW FOCUSED
ELECTRIC LOG

COMPANY SHAKESPEARE OIL COMPANY
 WELL GLASSMAN #5-35
 FIELD UNNAMED
 PROVINCE/COUNTY LOGAN
 COUNTRY/STATE U.S.A. / KANSAS
 LOCATION 335' FNL & 1990' FEL



SEC TWP RGE Other Services
 35 12S 32W MPD/MDN
 API Number 15-109-20992 MML
 Permit Number

Permanent Datum G.L., Elevation 2984 feet
 Log Measured From KB
 Drilling Measured From K.B.

Elevations: feet
 KB 2994.00
 DF 2992.00
 GL 2984.00

| | |
|------------------------|----------------------|
| Date | 04-APR-2011 |
| Run Number | ONE |
| Depth Driller | 4700.00 feet |
| Depth Logger | 4697.00 feet |
| First Reading | 4694.00 feet |
| Last Reading | 225.00 feet |
| Casing Driller | 225.00 feet |
| Casing Logger | 225.00 feet |
| Bit Size | 7.875 inches |
| Hole Fluid Type | CHEMICAL |
| Density / Viscosity | 9.40 lb/USg 54.00 CP |
| PH / Fluid Loss | 9.60 10.00 ml/30Min |
| Sample Source | FLOWLINE |
| Rm @ Measured Temp | 1.83 @ 55.0 ohm-m |
| Rmf @ Measured Temp | 1.46 @ 55.0 ohm-m |
| Rmc @ Measured Temp | 2.20 @ 5.0 ohm-m |
| Source Rmf / Rmc | CALC CALC |
| Rm @ BHT | 0.89 @ 113.0 ohm-m |
| Time Since Circulation | 4 HOURS |
| Max Recorded Temp | 113.00 deg F |
| Equipment Name | COMPACT |
| Equipment / Base | 13057 LIB |
| Recorded By | R.HOFFMAN |
| Witnessed By | DON WILLIAMS |
| S.O. # / JOB # | 3529128 LB11-067 |

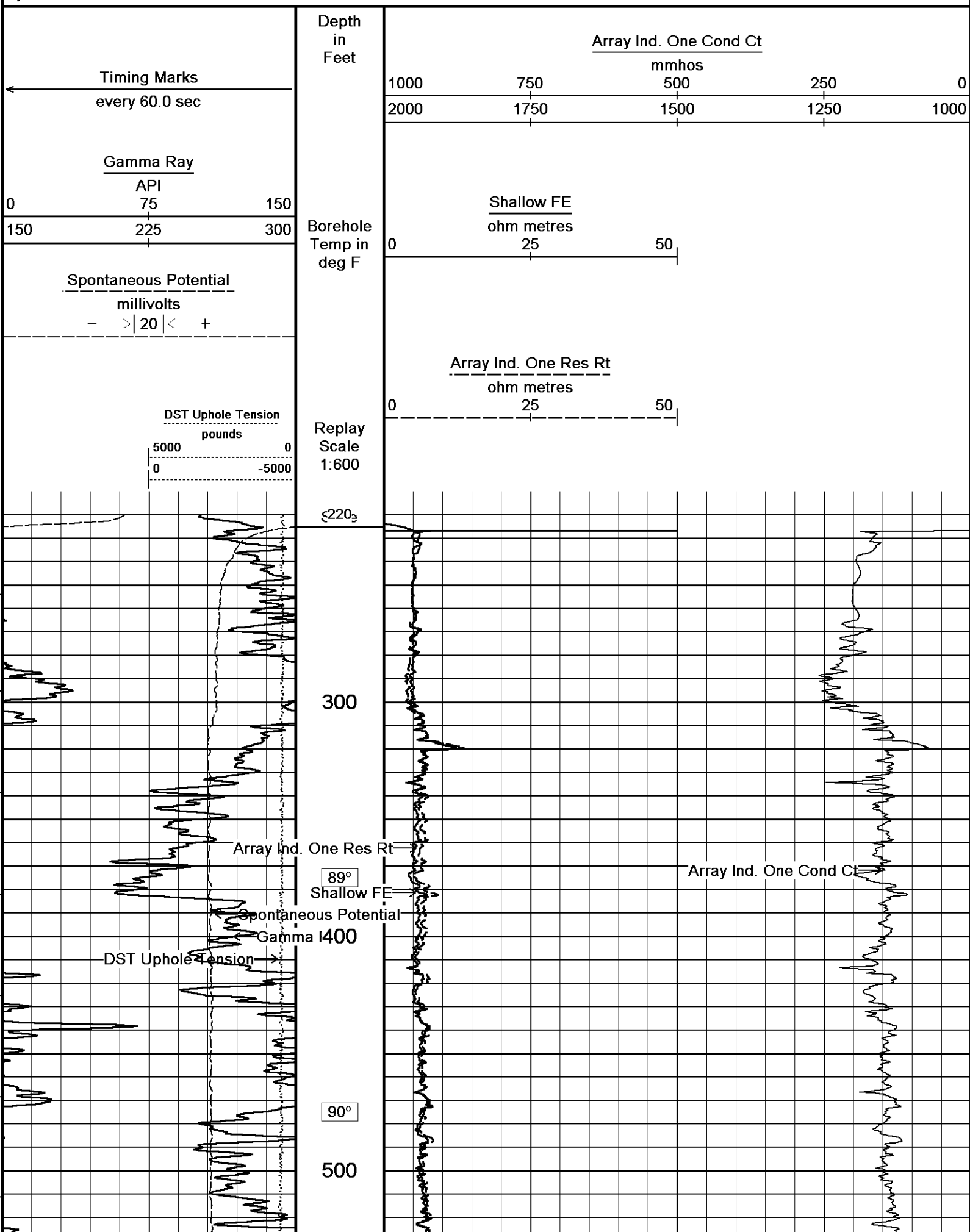
| BOREHOLE RECORD | | | Last Edited: 04-APR-2011 05:41 | |
|-----------------|-----------------|-----------------|--------------------------------|------------------|
| Bit Size inches | Depth From feet | Depth To feet | | |
| 7.875 | 225.00 | 4697.00 | | |
| CASING RECORD | | | | |
| Type | Size inches | Depth From feet | Shoe Depth feet | Weight pounds/ft |
| SURFACE | 8.625 | 0.00 | 225.00 | 24.00 |

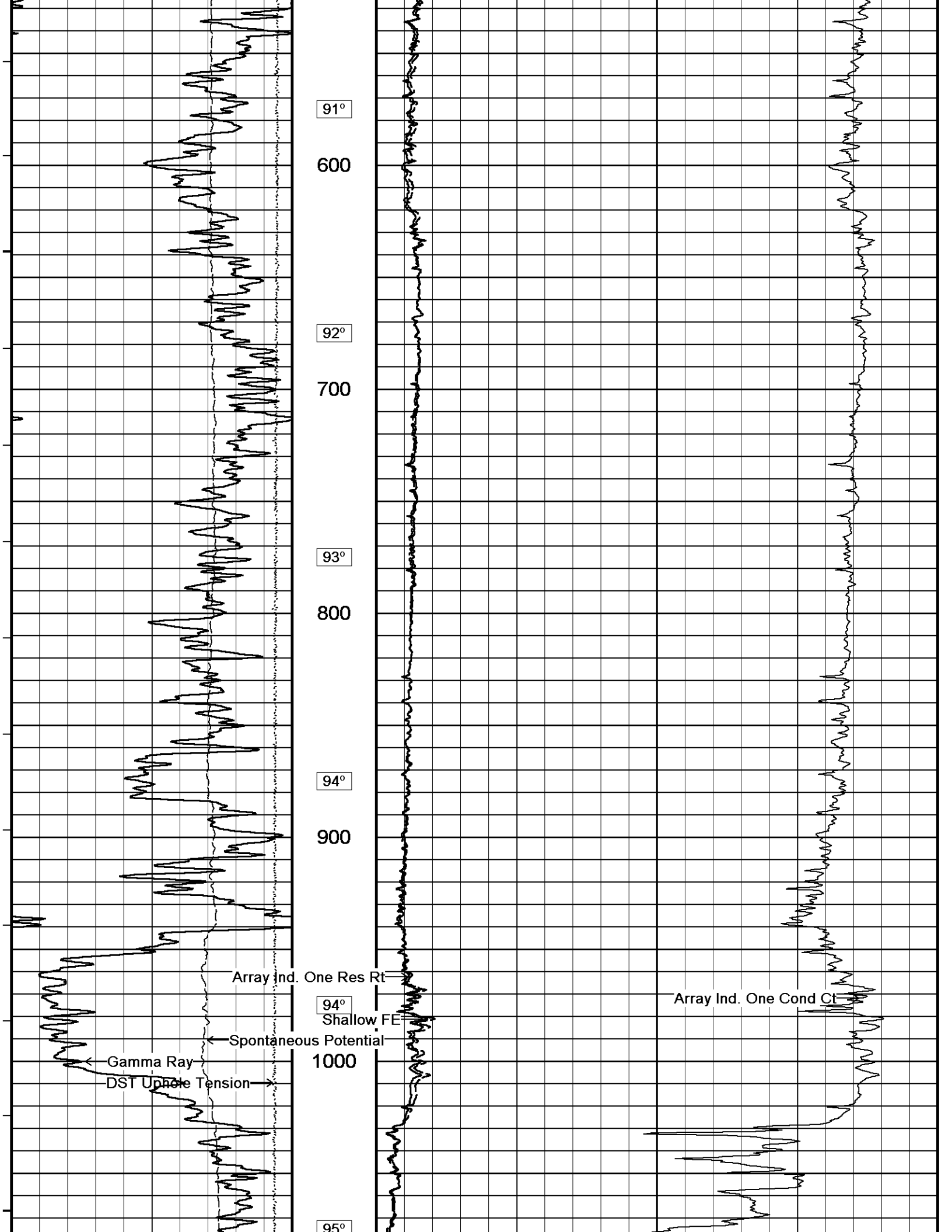
REMARKS

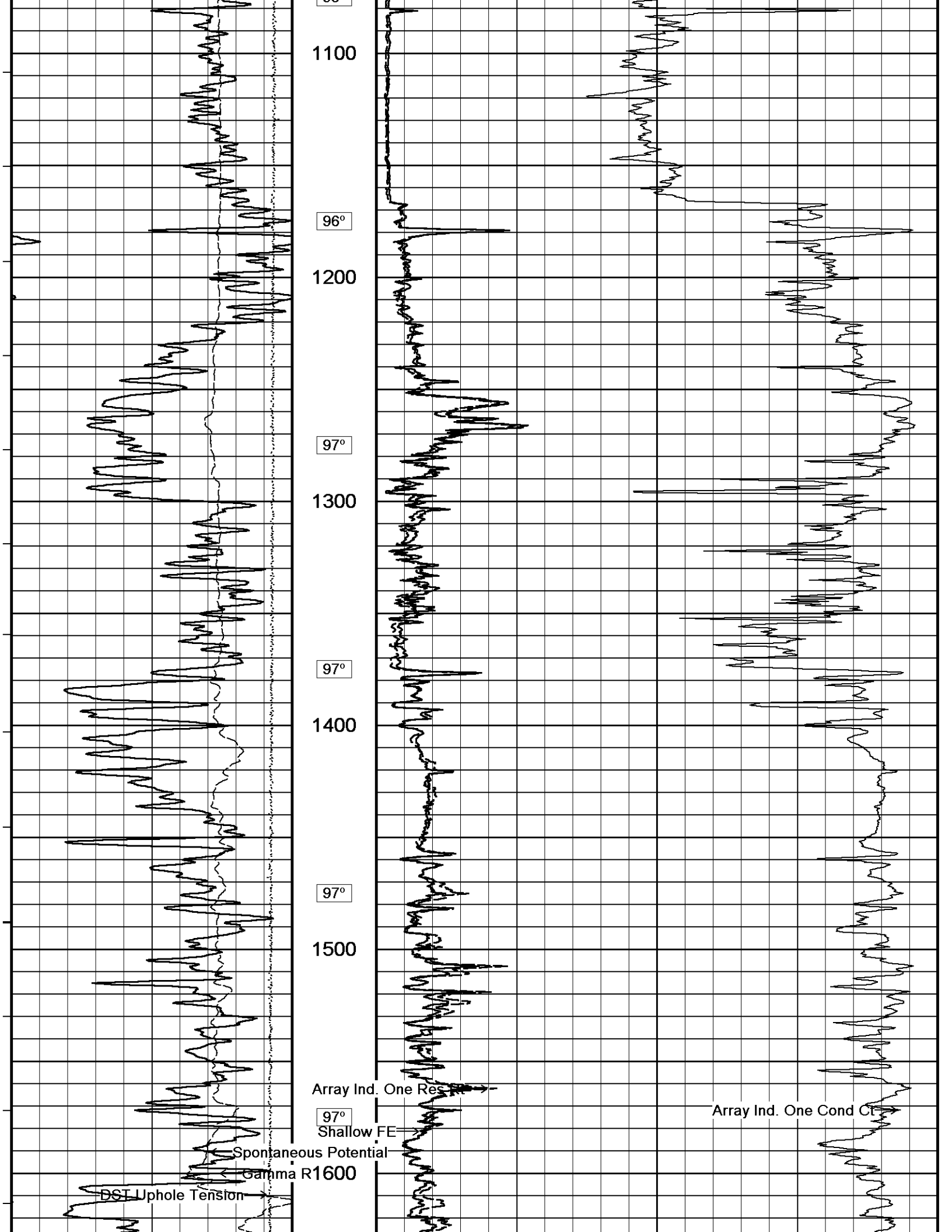
Tools Ran: MCG, MML, MDN, MPD, SKJ, MFE, MAI.
 Hardware Used: MDN Dual Eccentralizer used. MPD 8 inch profile plate used. MFE and MAI 0.5 inch standoffs used.
 2.71 g/cc Limestone Density Matrix used to calculate porosity.
 All intervals logged and scaled per customer's request.
 Annular volume with 5.5 inch production casing= 238 cu. ft.
 Service order #3529128
 Engineer: R. Hoffman
 Operator(s): N. Adame, M. Stegman

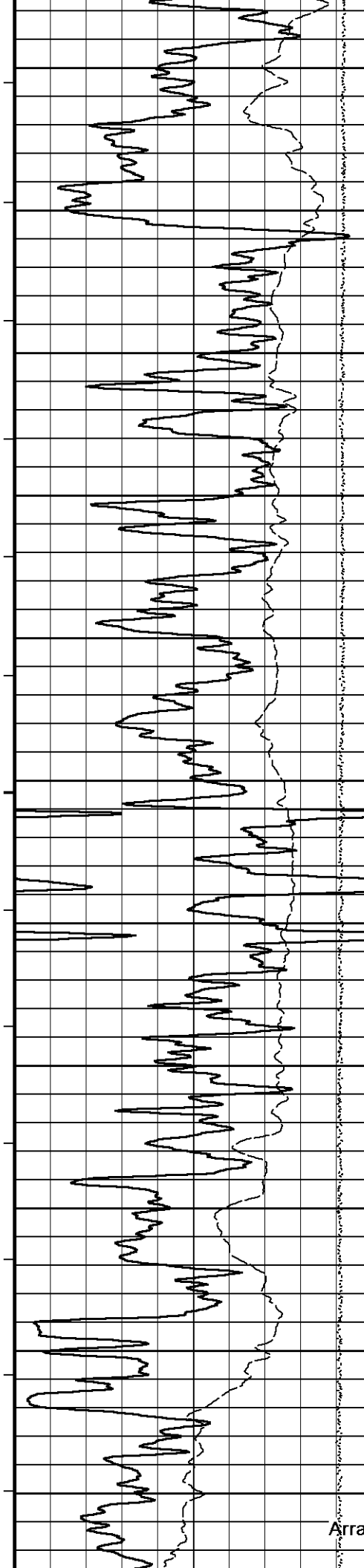
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs, 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 ↘

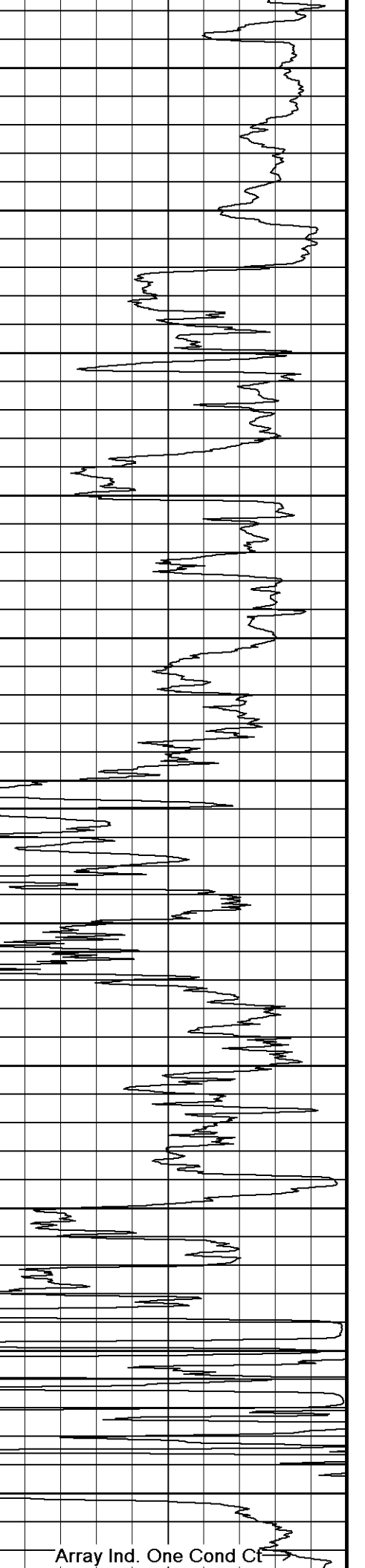
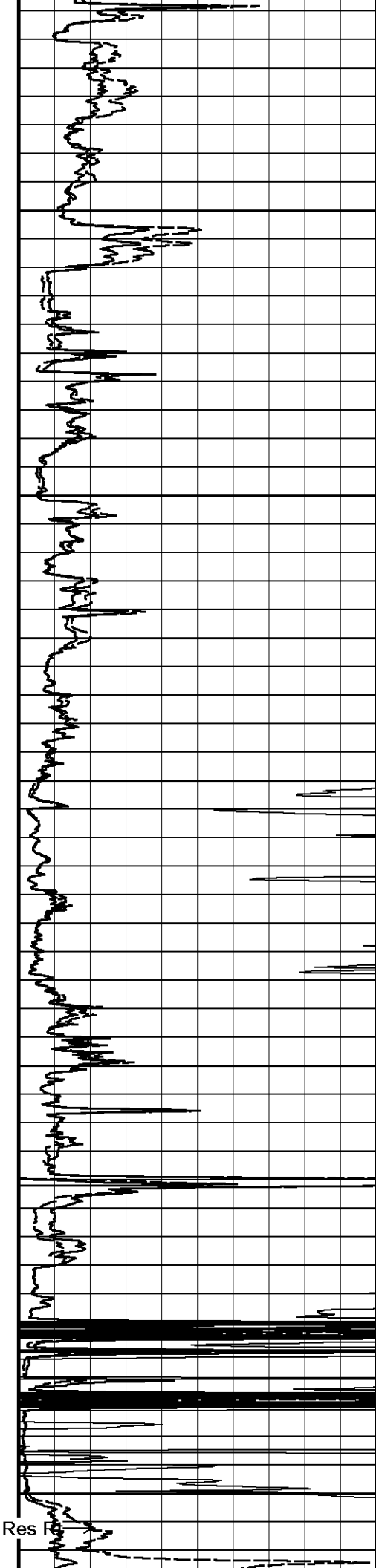






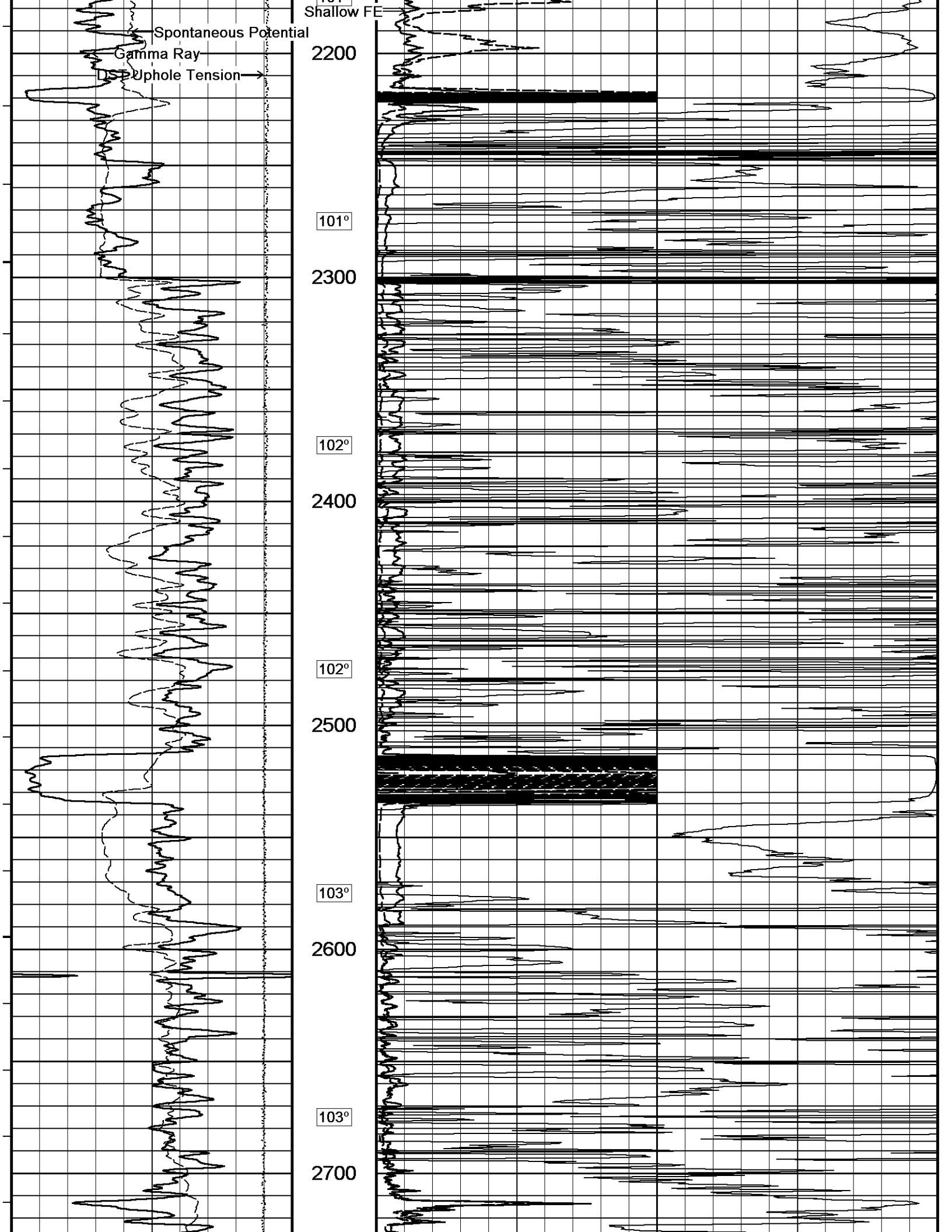


98°
1700
99°
1800
99°
1900
100°
2000
100°
2100
101°



Array Ind. One Res F

Array Ind. One Cond Ct



Shallow FE

Spontaneous Potential

Gamma Ray

Uphole Tension →

2200

101°

2300

102°

2400

102°

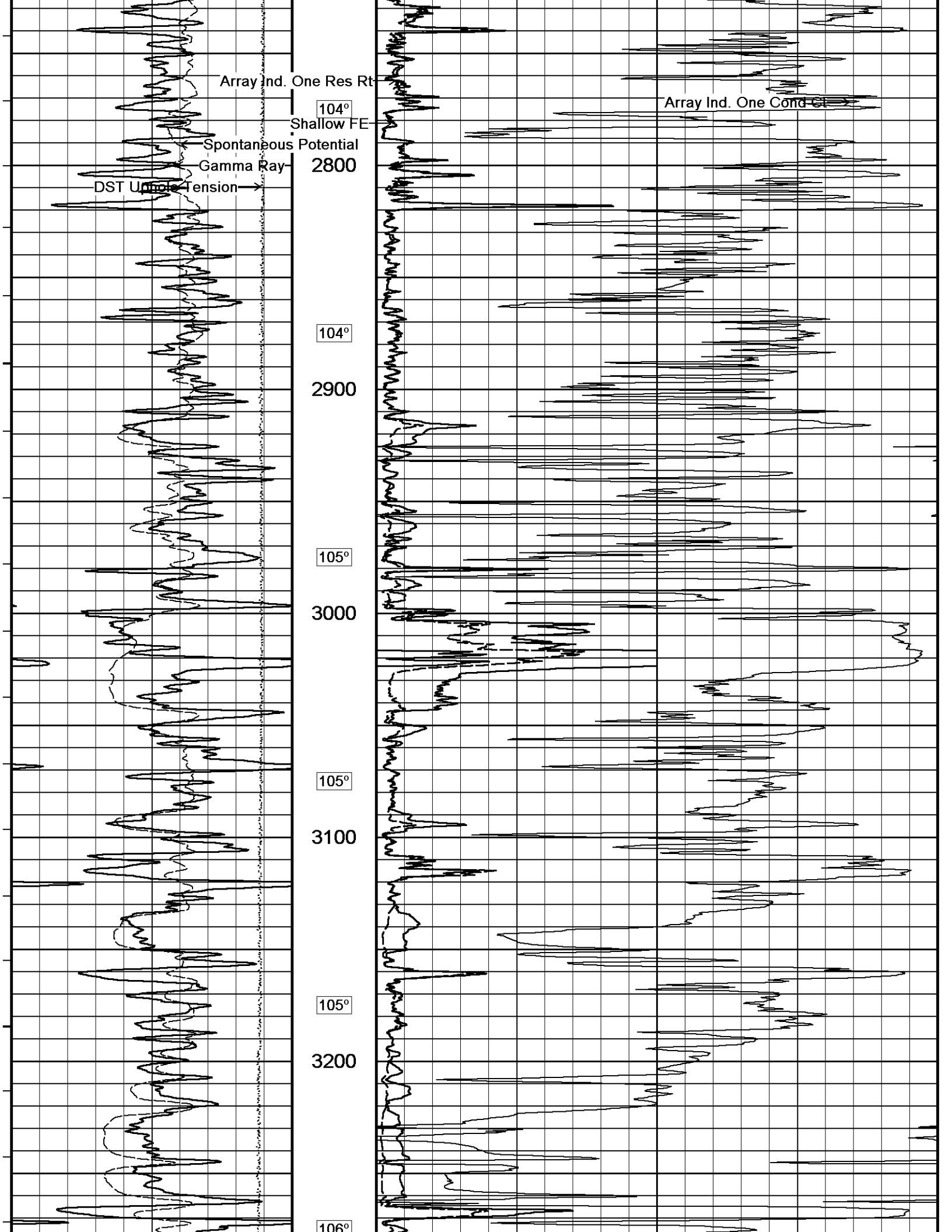
2500

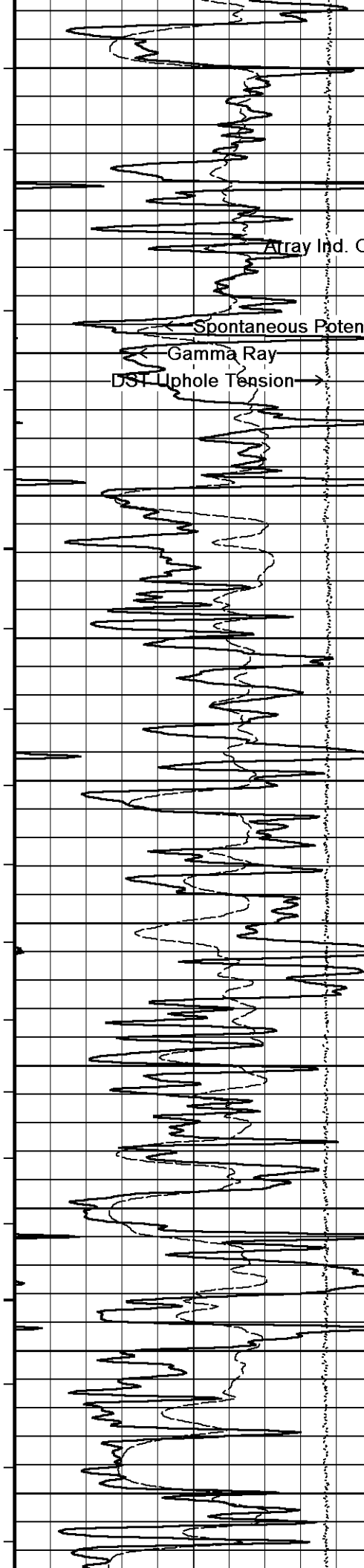
103°

2600

103°

2700

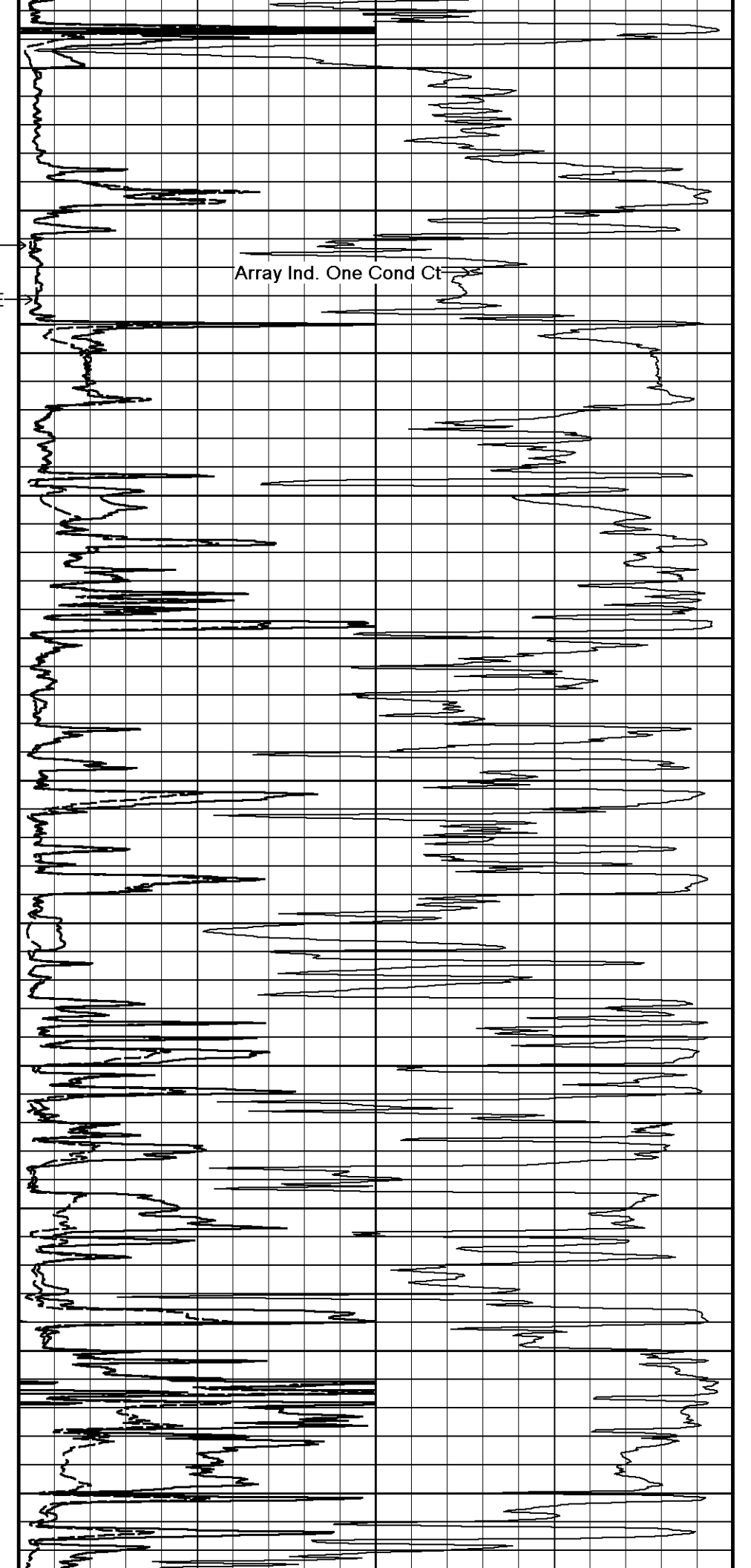




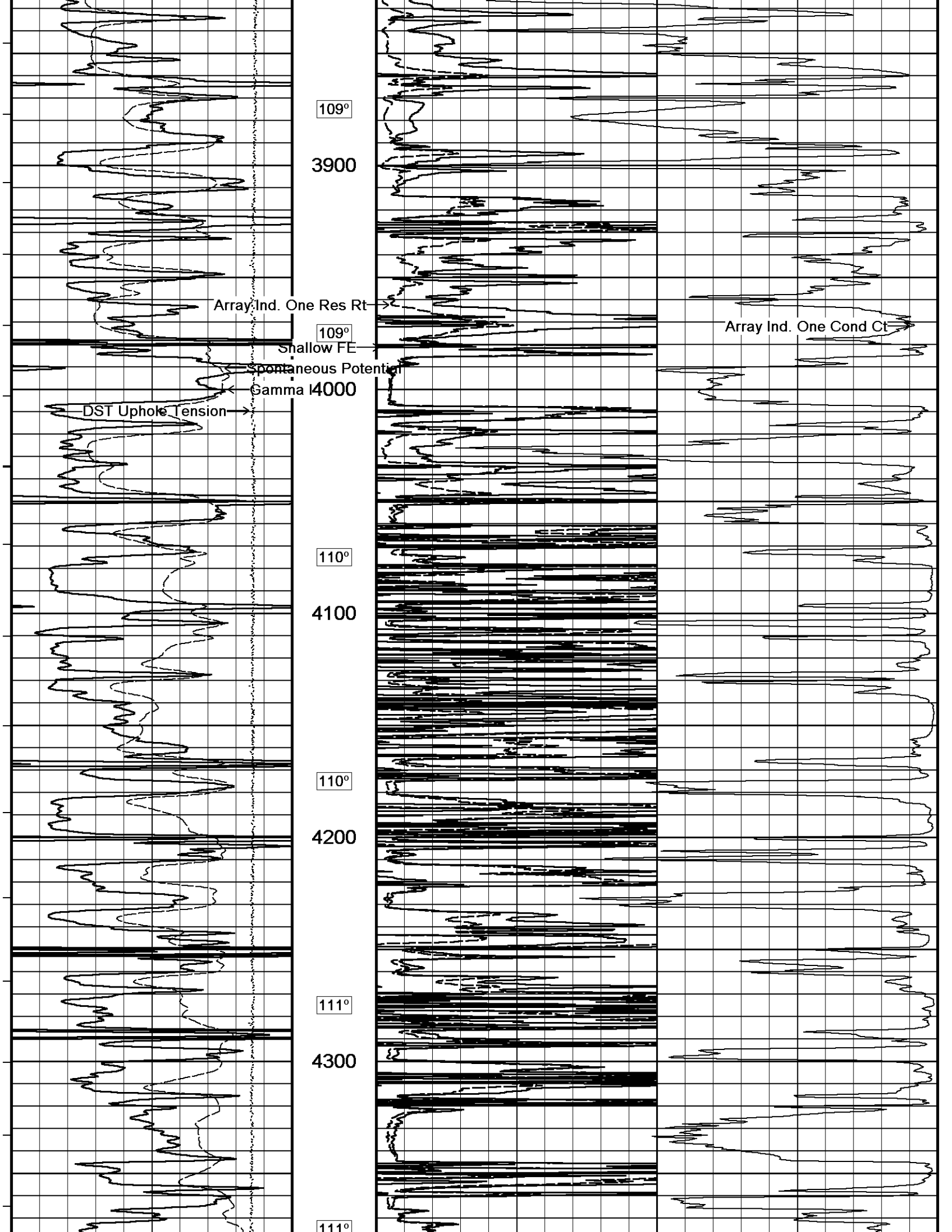
106°
107°
107°
108°
108°

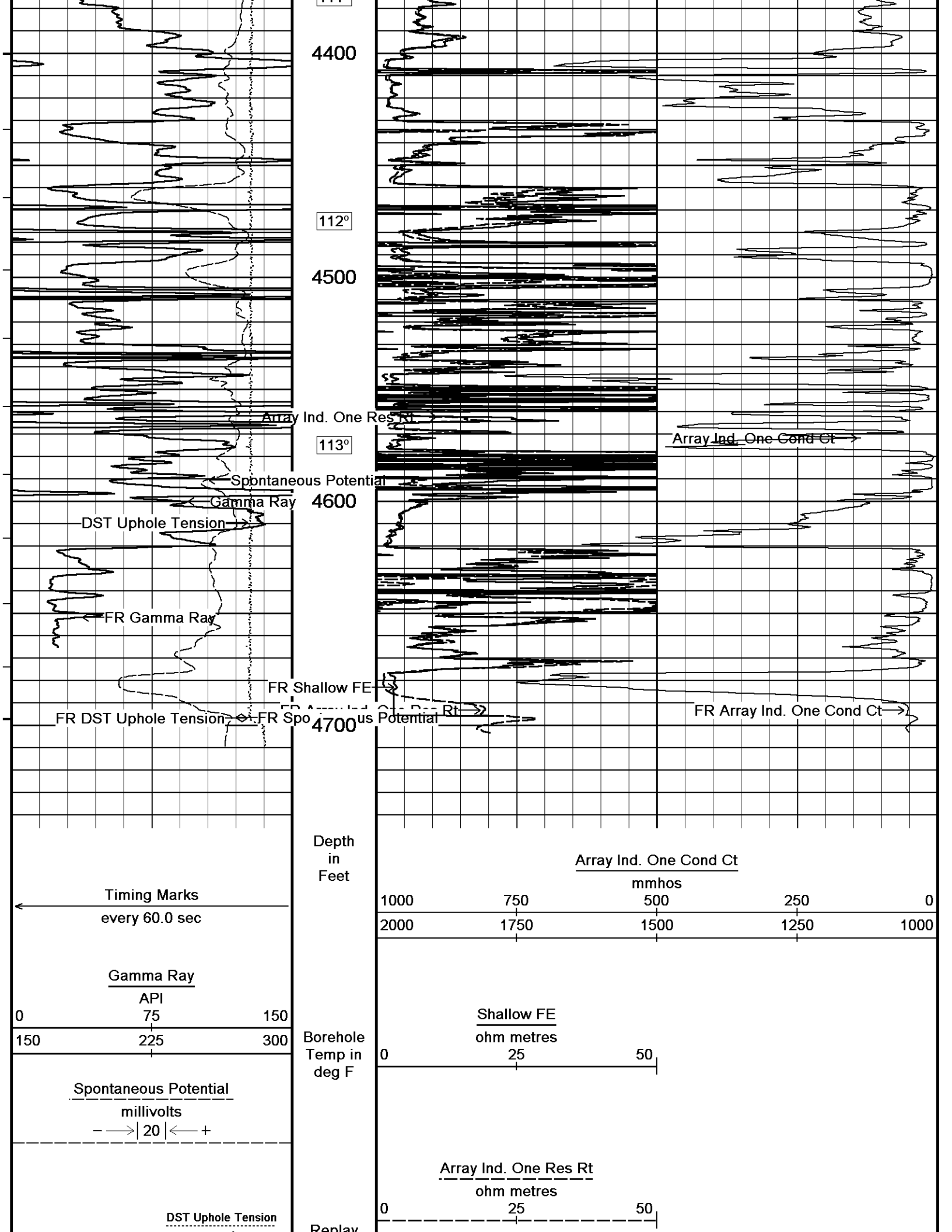
3300
3400
3500
3600
3700
3800

Array Ind. One Res Rt
Shallow FE



Array Ind. One Cond Ct





4400

112°

4500

113°

4600

4700

Array Ind. One Res Rt →

Array Ind. One Cond Ct →

Spontaneous Potential

← Gamma Ray

DST Uphole Tension

← FR Gamma Ray

FR Shallow FE →

FR Spontaneous Potential →

← FR DST Uphole Tension

FR Array Ind. One Cond Ct →

Depth
in
Feet

Array Ind. One Cond Ct

mmhos

| | | | | |
|------|------|------|------|------|
| 1000 | 750 | 500 | 250 | 0 |
| 2000 | 1750 | 1500 | 1250 | 1000 |

Borehole
Temp in
deg F

Shallow FE
ohm metres

| | | |
|---|----|----|
| 0 | 25 | 50 |
|---|----|----|

Array Ind. One Res Rt
ohm metres

| | | |
|---|----|----|
| 0 | 25 | 50 |
|---|----|----|

Timing Marks
every 60.0 sec

Gamma Ray

API

| | | |
|-----|-----|-----|
| 0 | 75 | 150 |
| 150 | 225 | 300 |

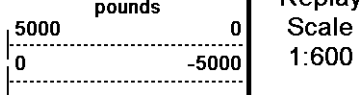
Spontaneous Potential

millivolts

--> | 20 | <-- +

DST Uphole Tension

Replay

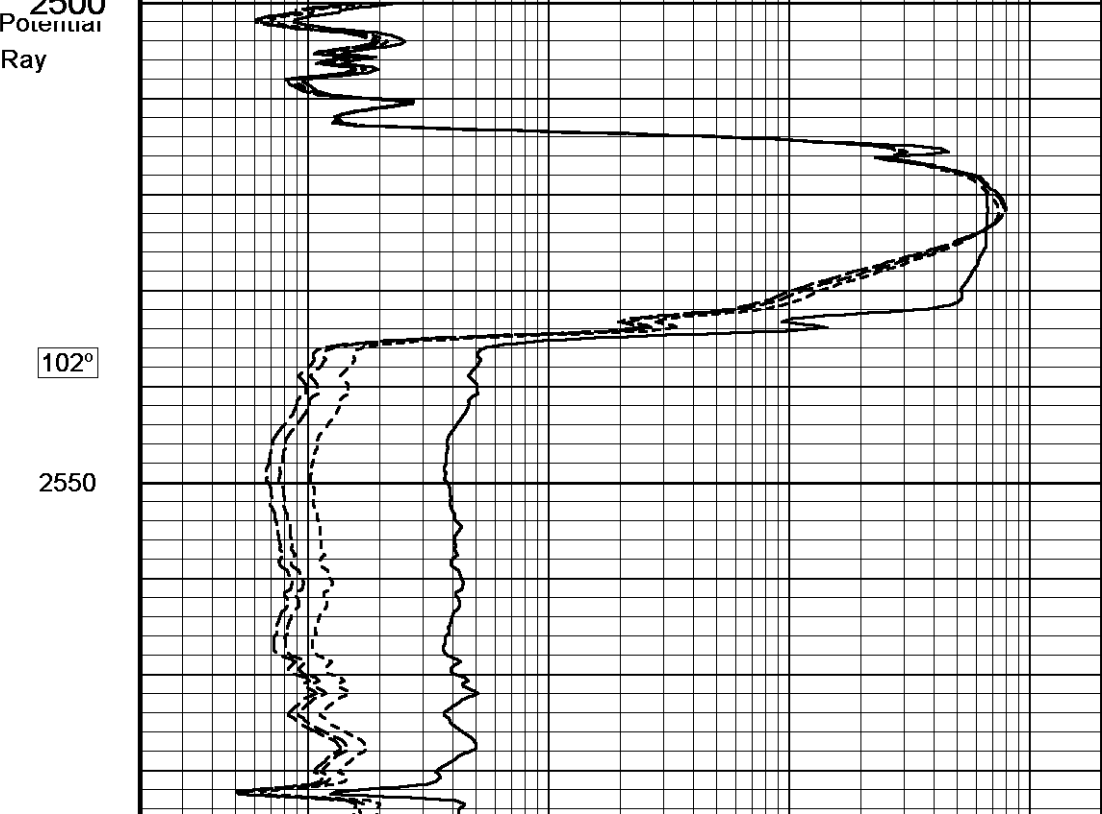
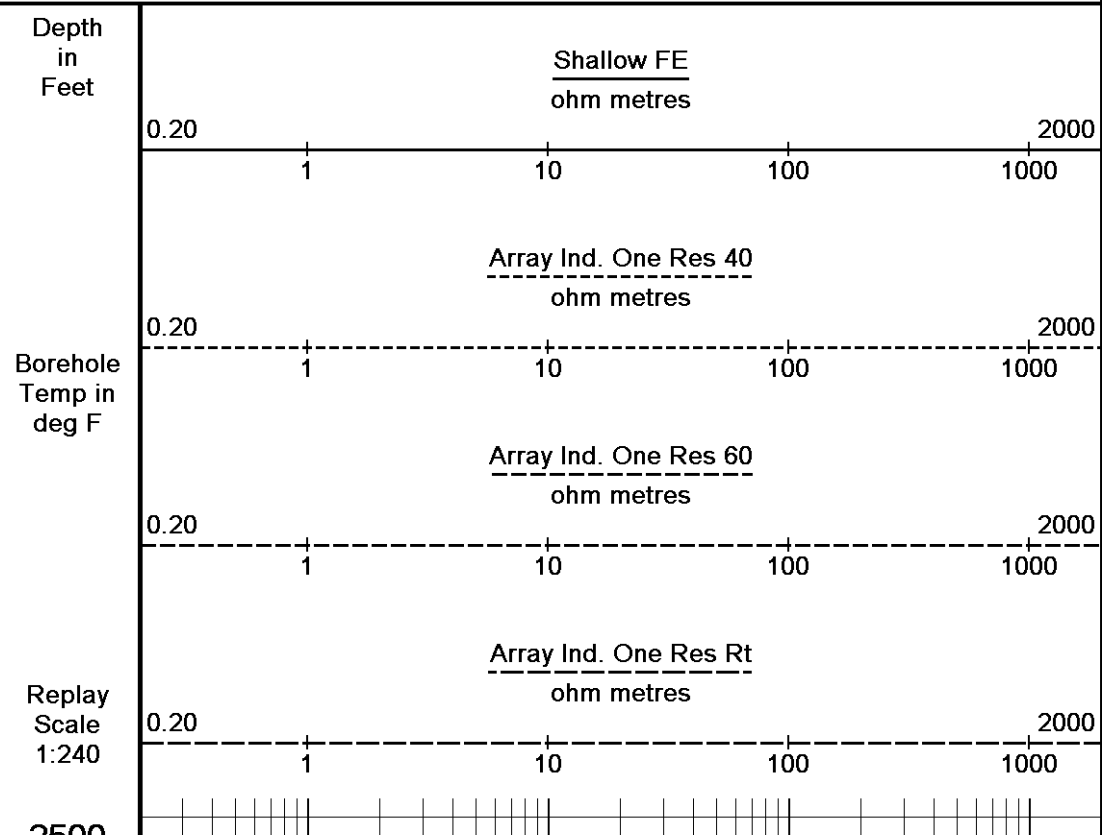
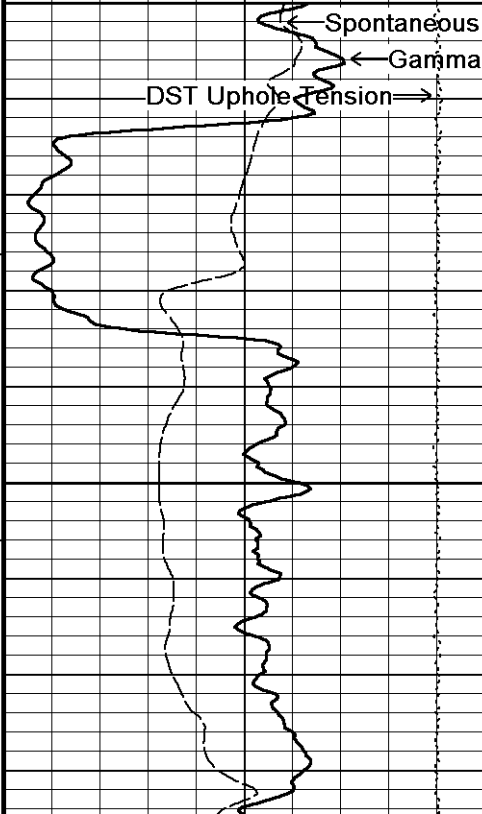
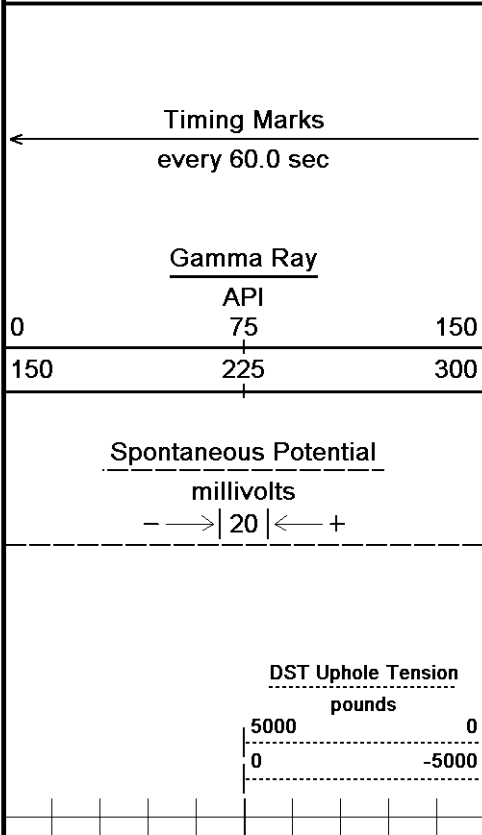


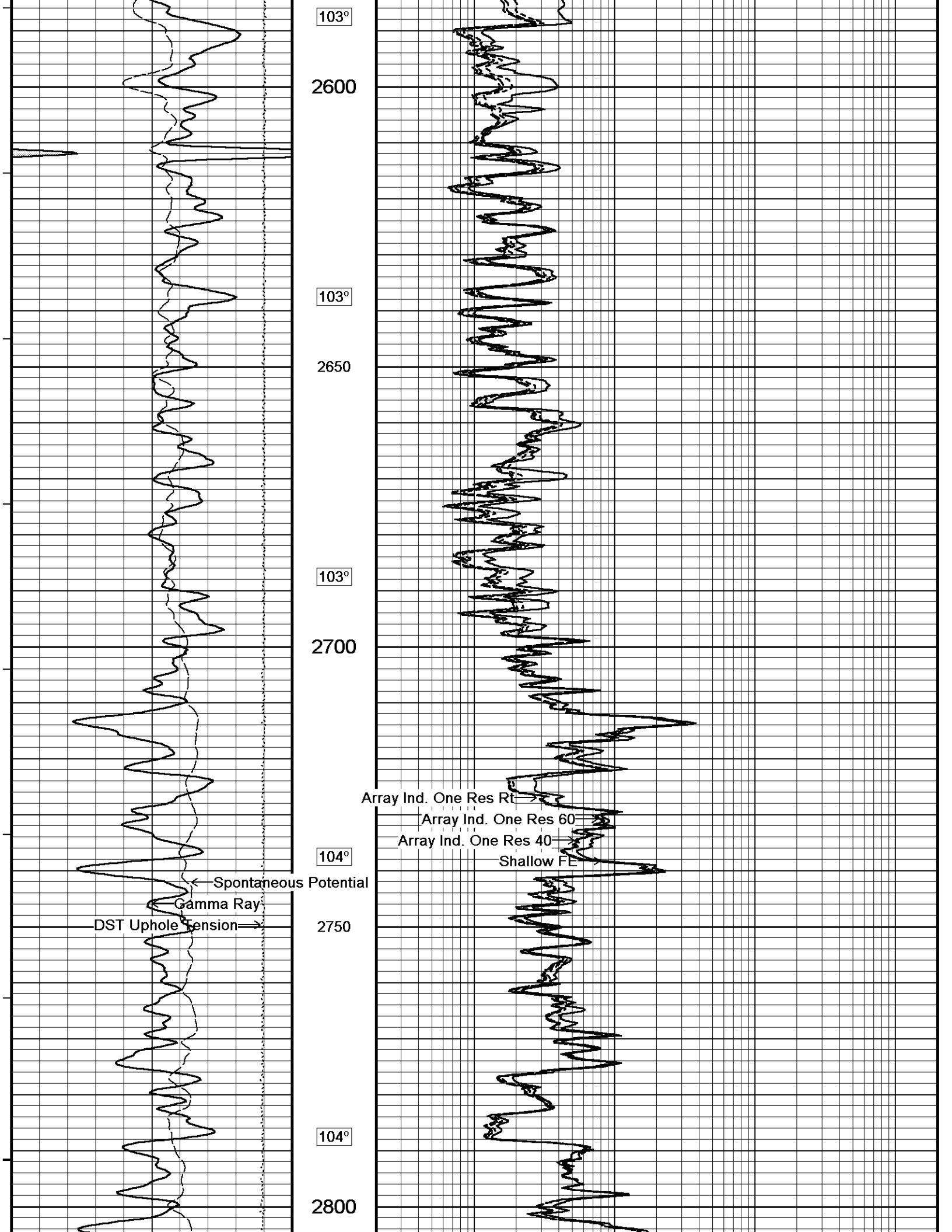
Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 04-APR-2011 06:15
 Filename: C:\Program Files\Weatherford\WLS 11.03\Dat...\Shakespeare Glassman 5-35 Reprocess.dta
 Recorded on 04-APR-2011 02:32
 System Versions: Processed with 11.03.3274 Plotted with 11.03.3274

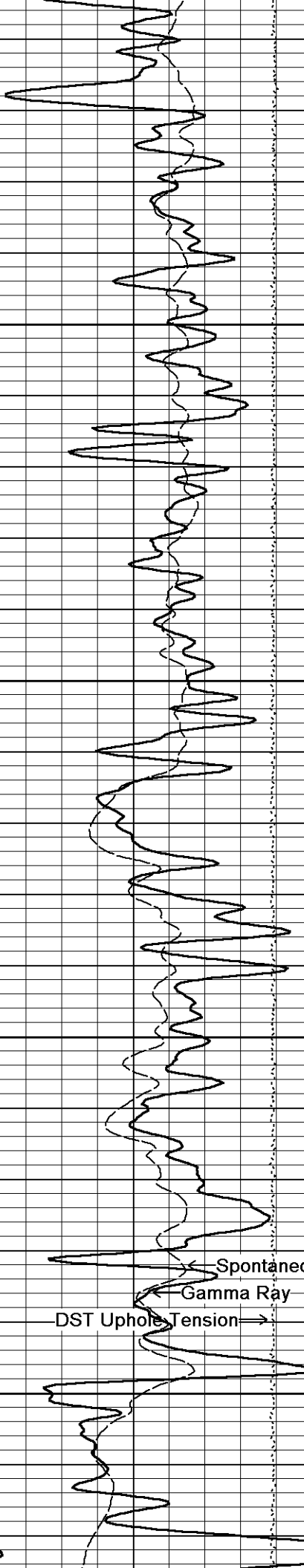
↑ 2 INCH MAIN PASS ↑

↓ 5 INCH MAIN PASS ↓

Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 04-APR-2011 06:15
 Filename: C:\Program Files\Weatherford\WLS 11.03\Dat...\Shakespeare Glassman 5-35 Reprocess.dta
 Recorded on 04-APR-2011 02:32
 System Versions: Processed with 11.03.3274 Plotted with 11.03.3274







104°

2850

104°

2900

104°

2950

Array Ind. One Res B1

Array Ind. One Res 61

Array Ind. One Res 40

Shallow FE

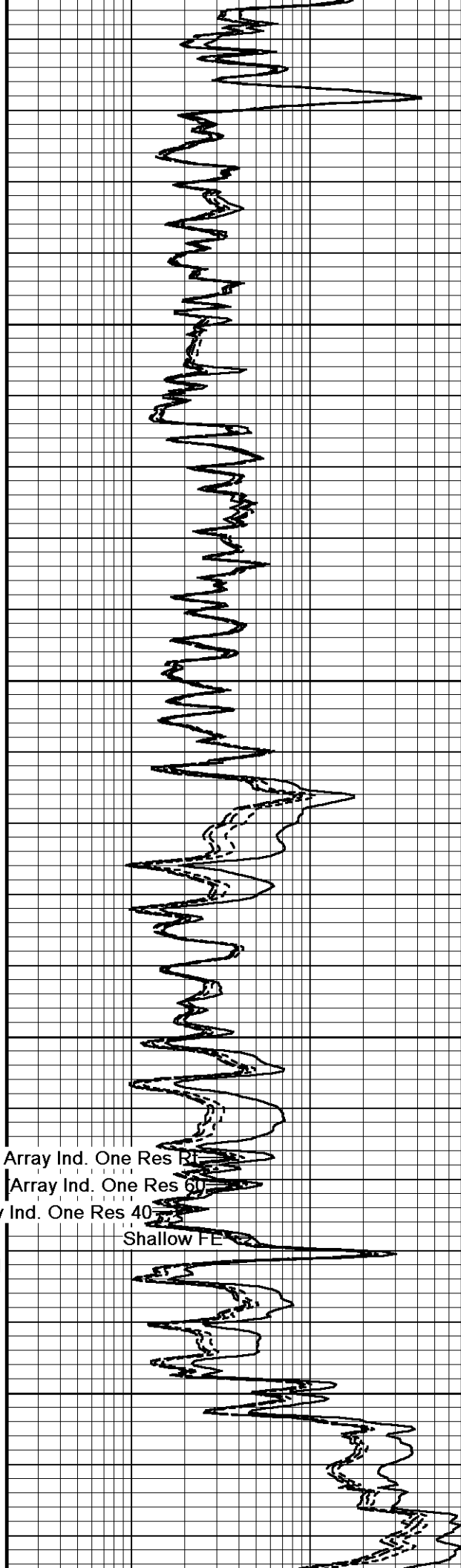
Spontaneous Potential

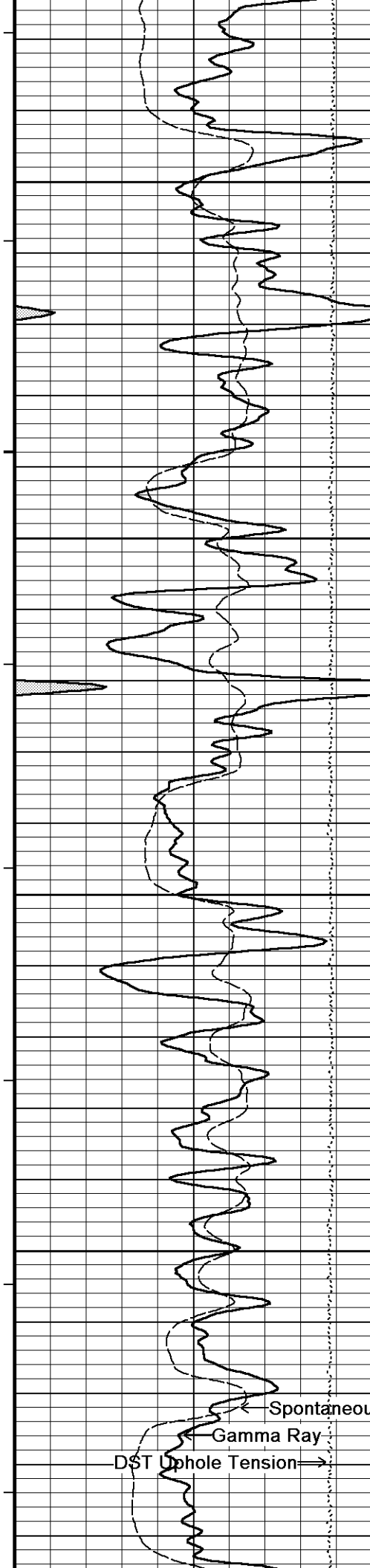
Gamma Ray

DST Uphole Tension

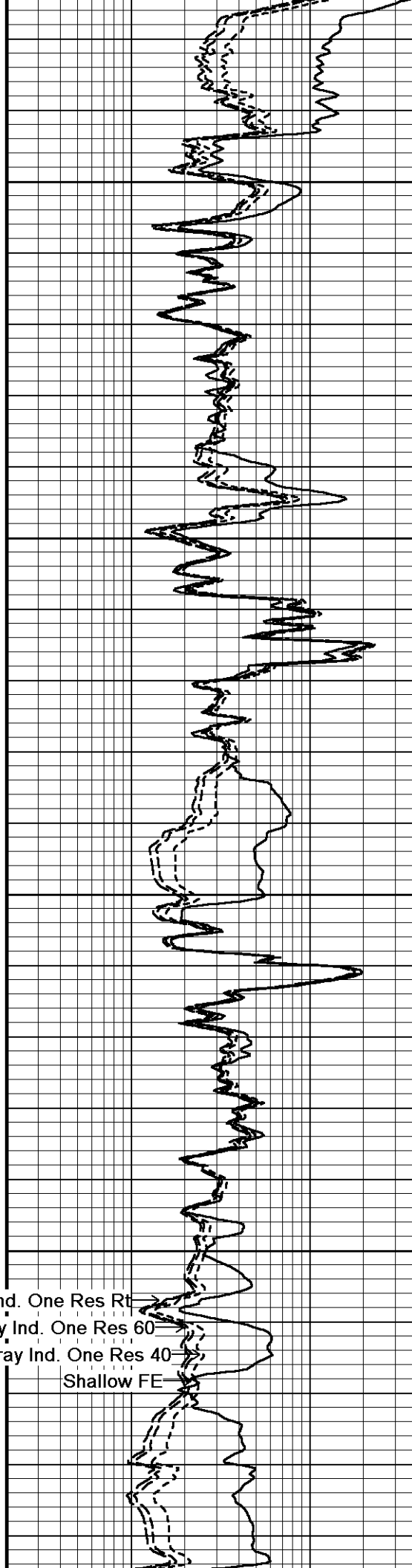
105°

3000



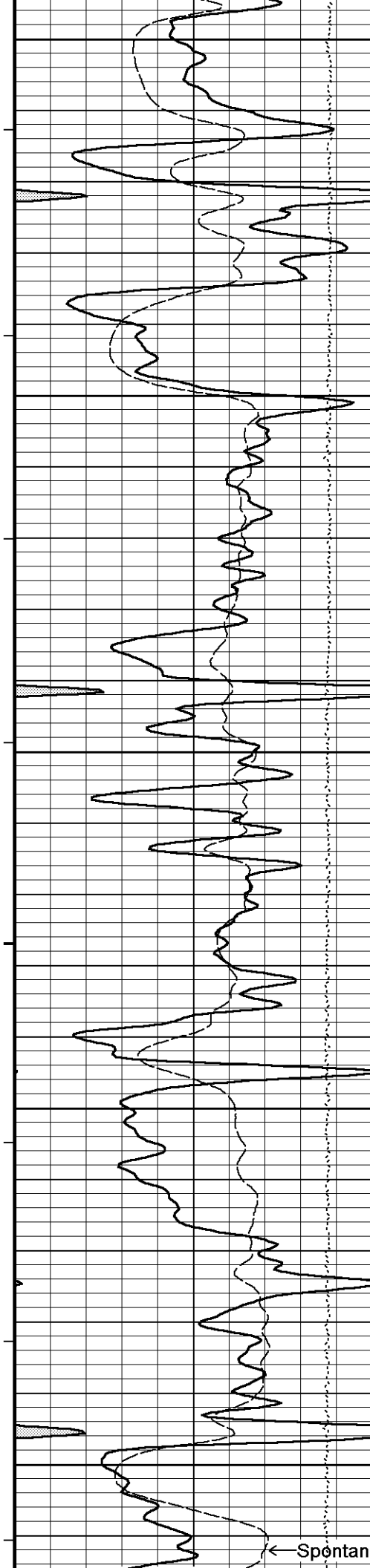


105°
3050
105°
3100
105°
3150
105°
3200
106°



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

← Spontaneous Potential
← Gamma Ray
DST Uphole Tension →



3250

106°

3300

106°

3350

106°

3400

107°

3450

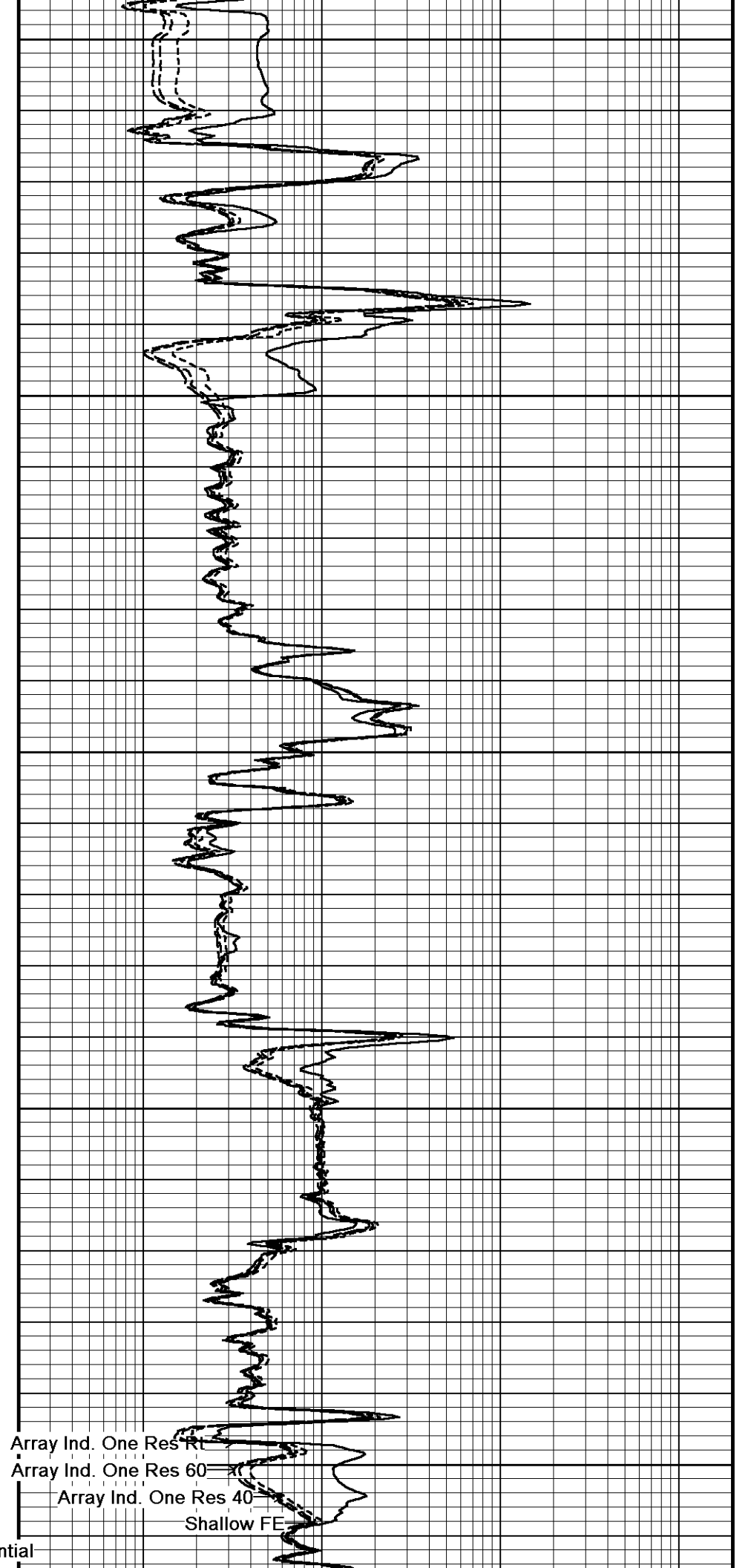
Array Ind. One Res Rt

Array Ind. One Res 60

Array Ind. One Res 40

Shallow FE

← Spontaneous Potential



Gamma Ray
DST Uphole Tension →

107°

3500

107°

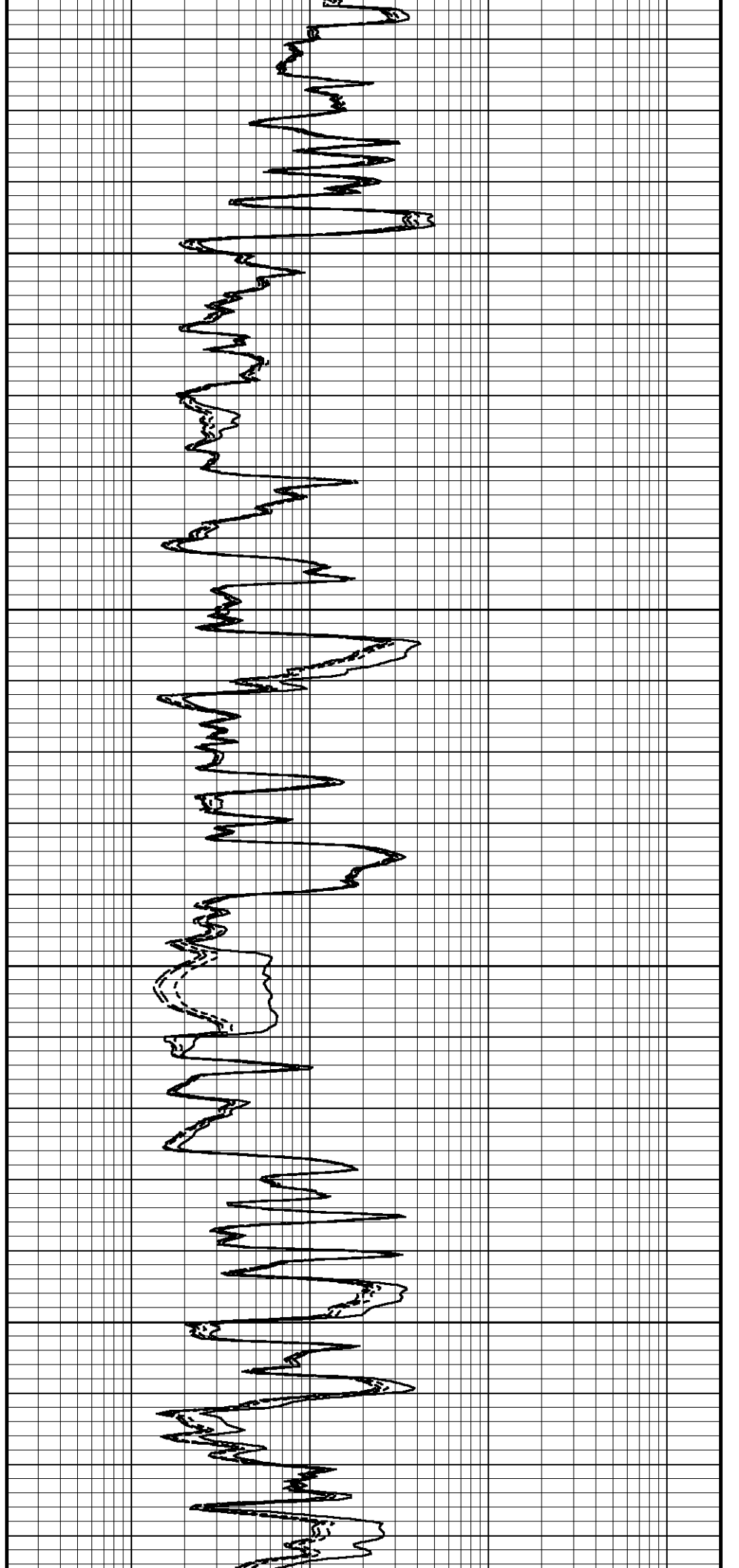
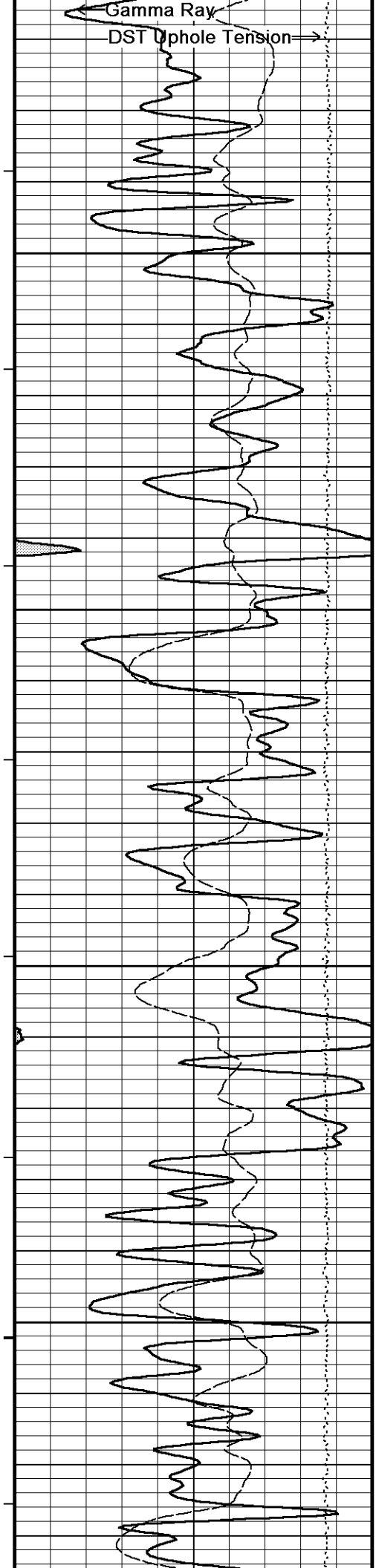
3550

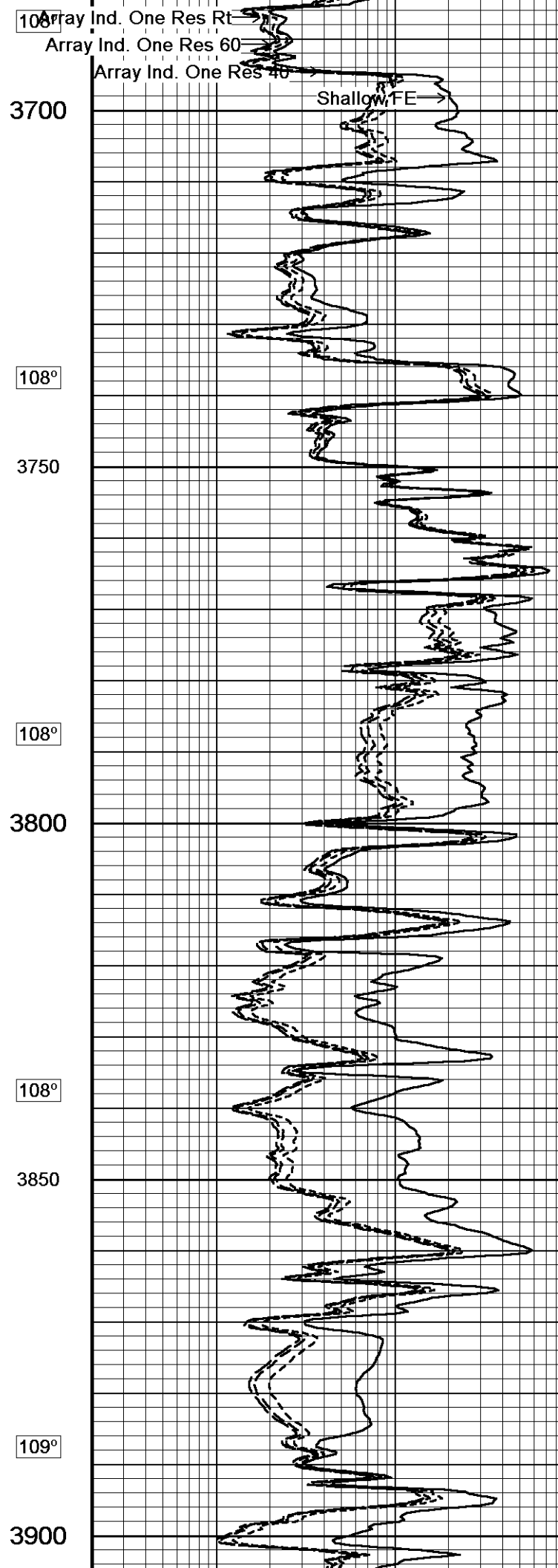
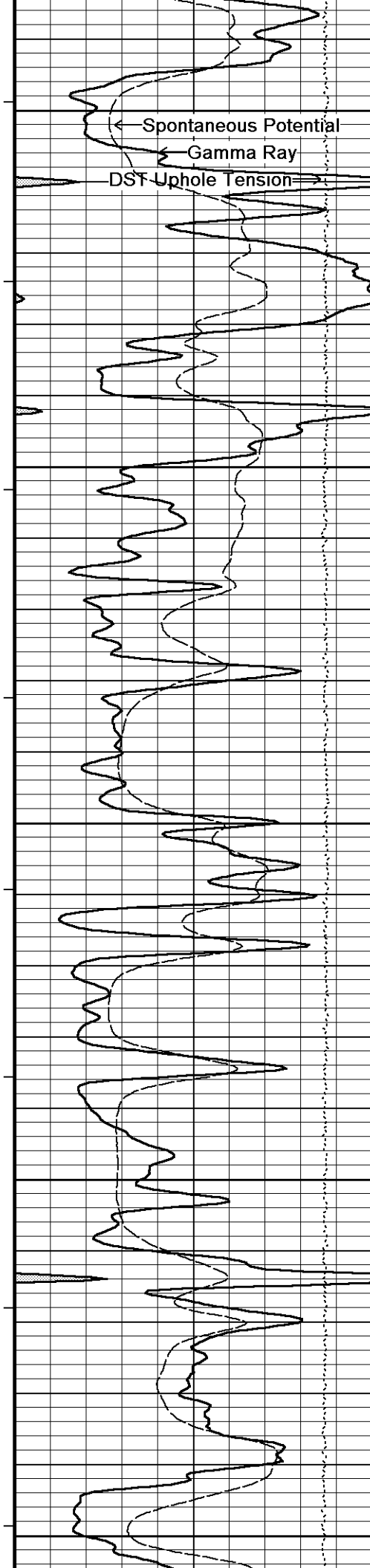
107°

3600

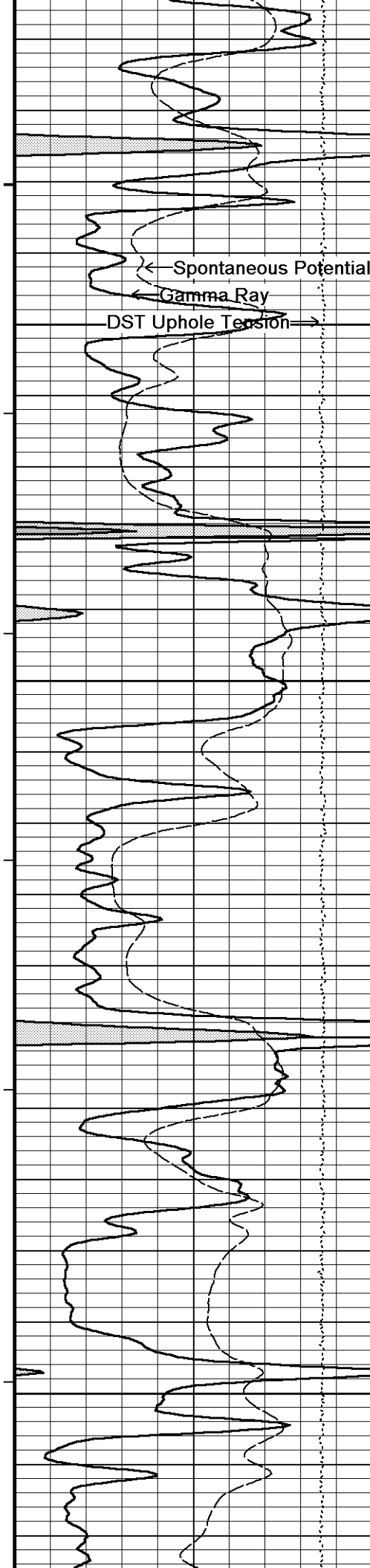
107°

3650





3700
3750
3800
3850
3900



109°

3950

109°

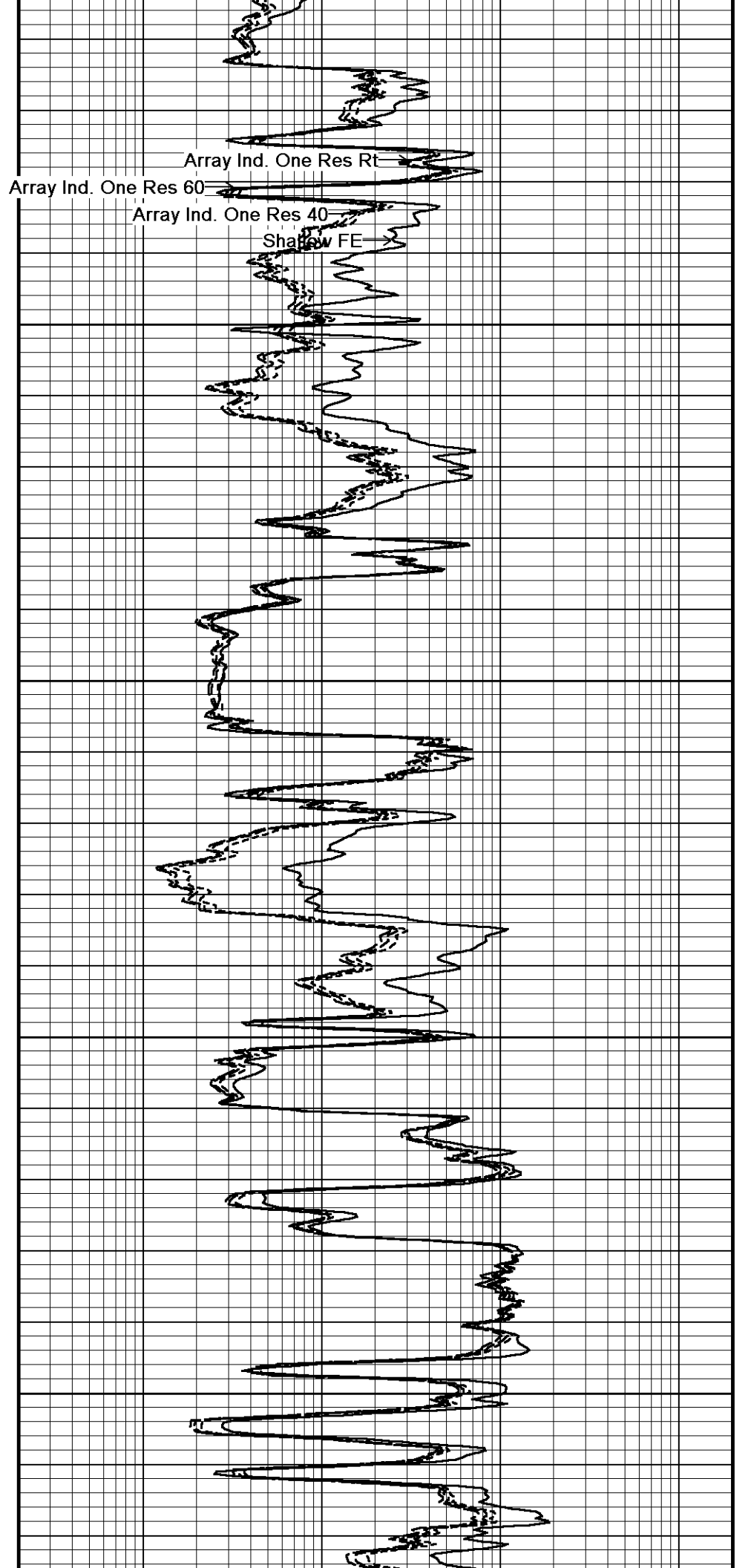
4000

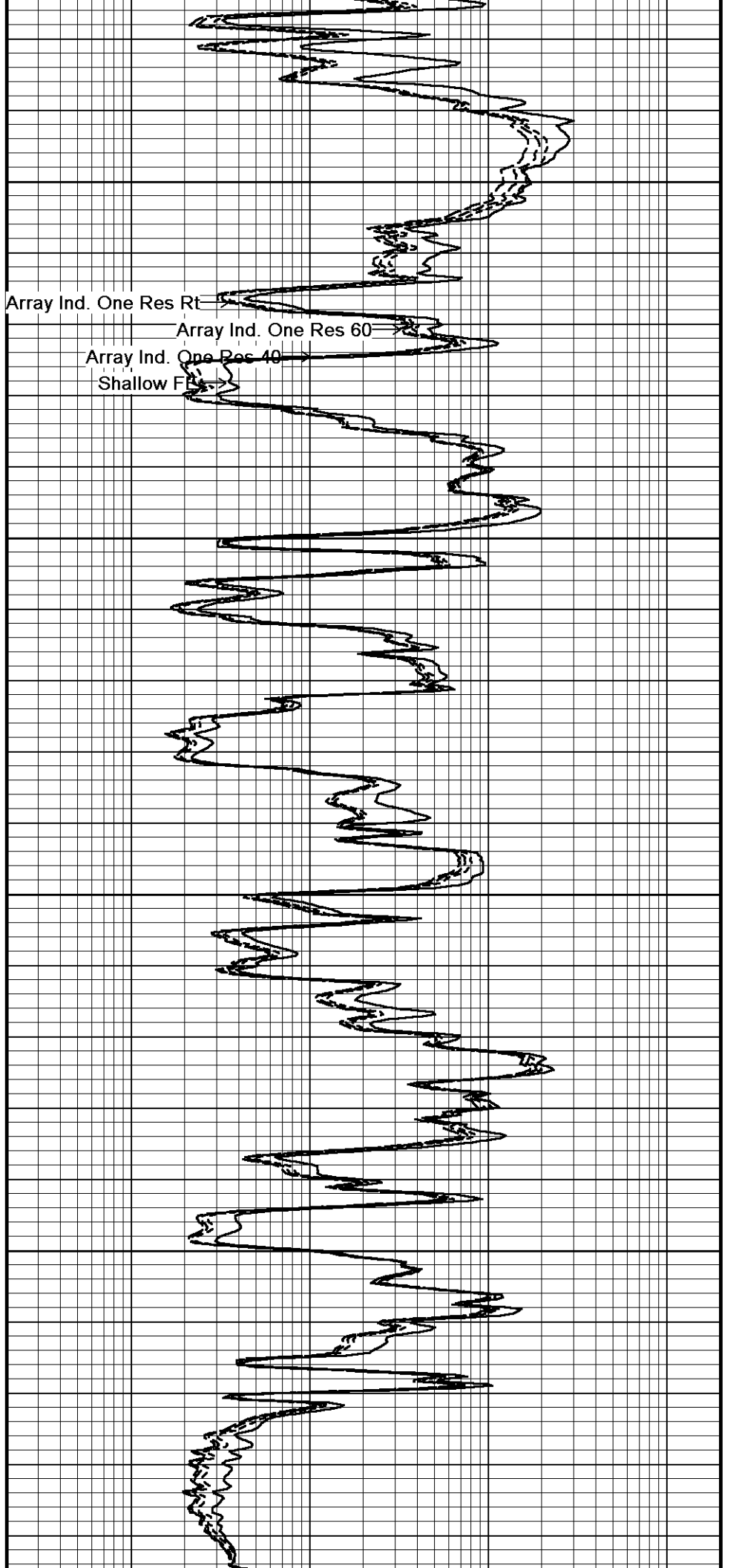
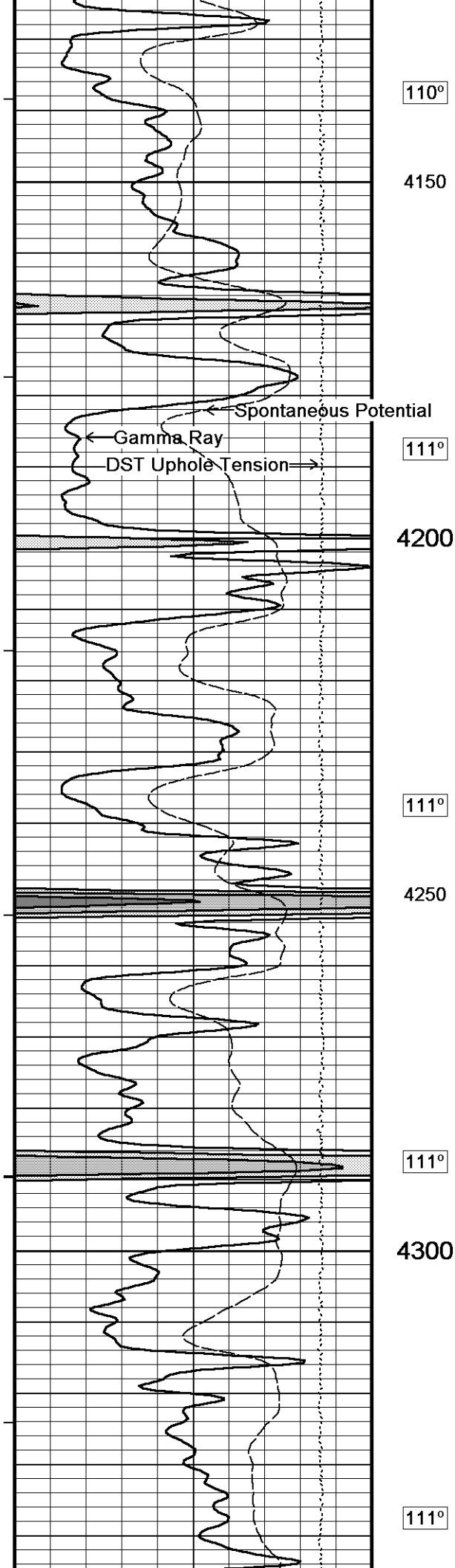
110°

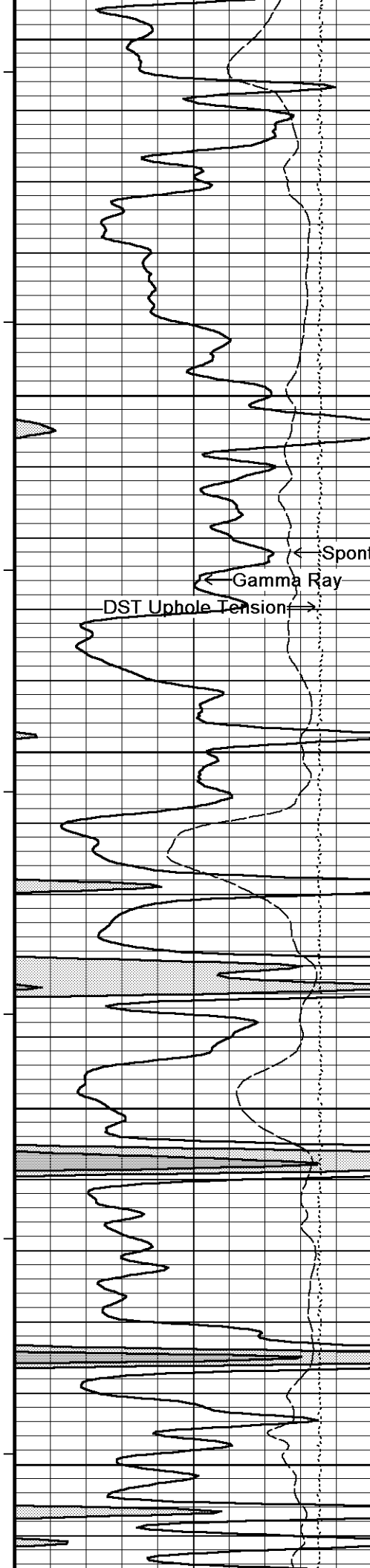
4050

110°

4100







4350

111°

4400

112°

4450

112°

4500

113°

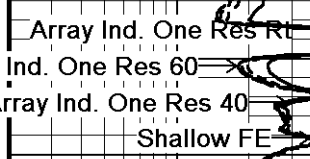
4550

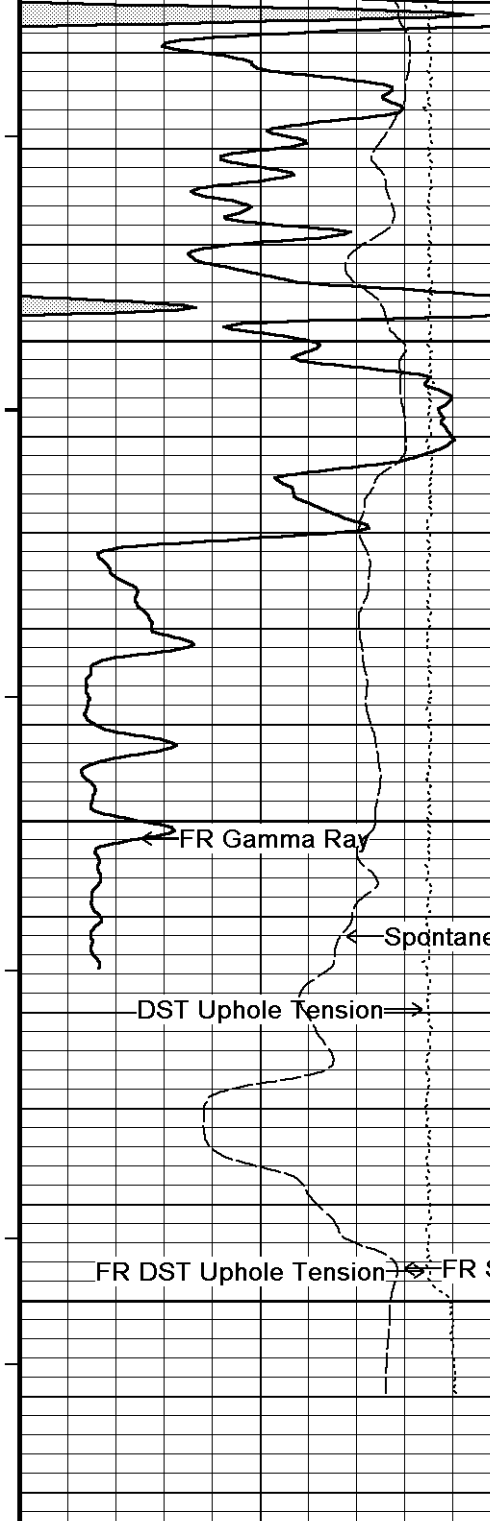
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE

← Spontaneous Potential

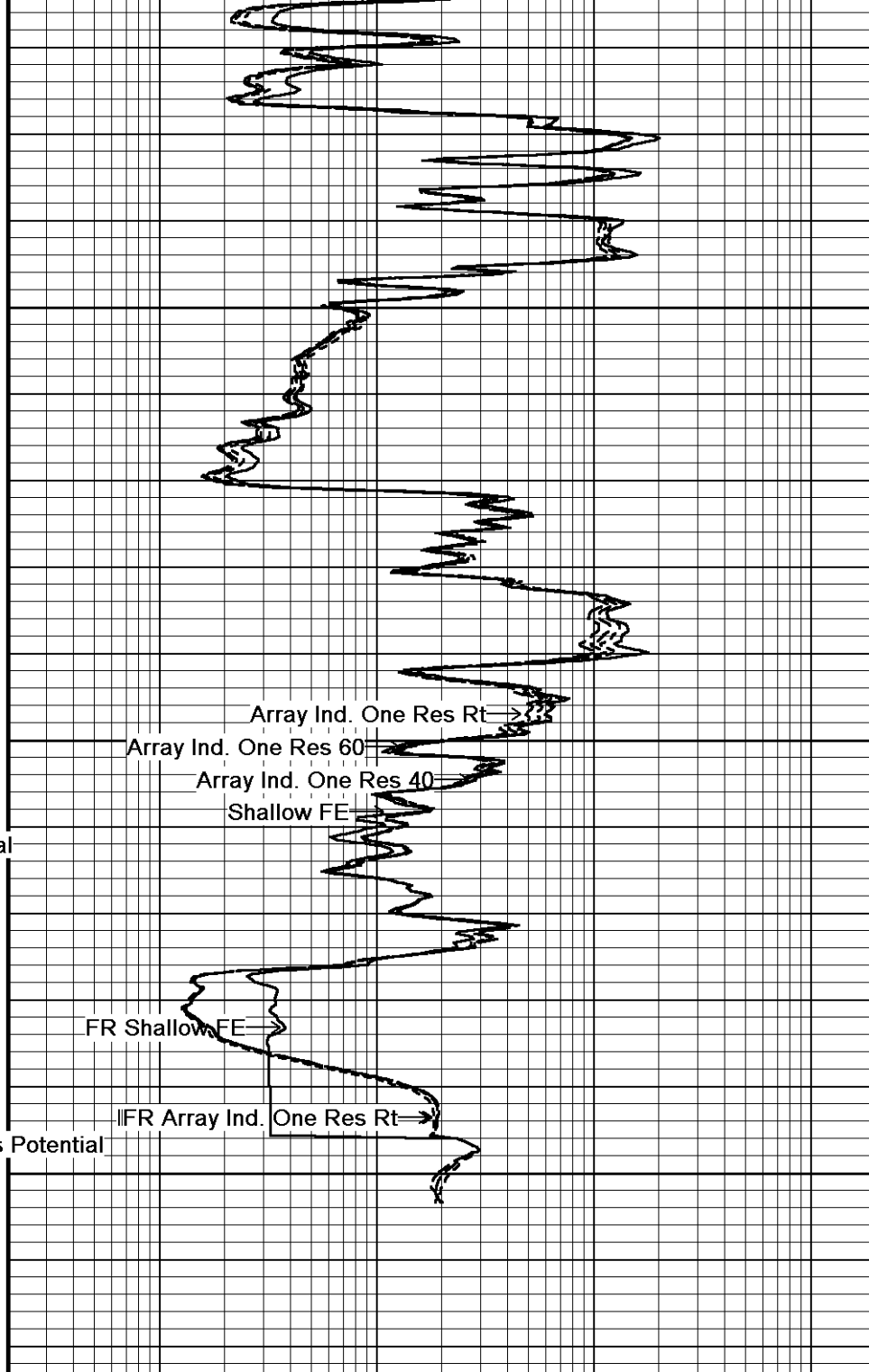
← Gamma Ray

→ DST Uphole Tension





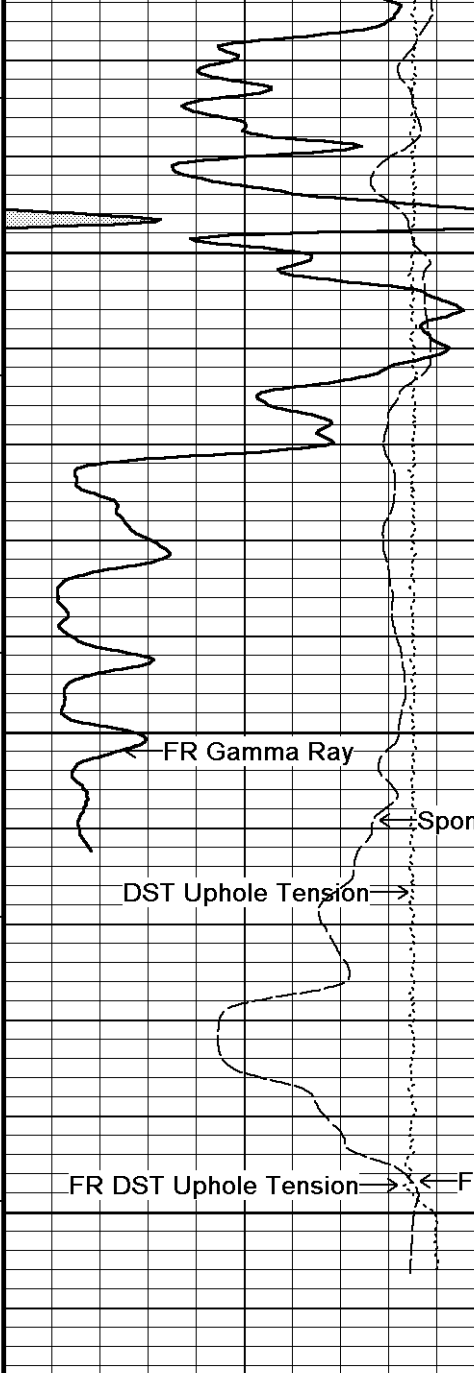
113°
 4600
 113°
 4650
 4700
 4720
 Depth in Feet



← Timing Marks every 60.0 sec
 Gamma Ray
 API
 0 75 150
 150 225 300
 Spontaneous Potential
 millivolts
 - - > | 20 | < - +

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

Borehole Temp in deg F



112°

4600

112°

4650

4700

4714

Depth
in
Feet

Timing Marks
every 60.0 sec

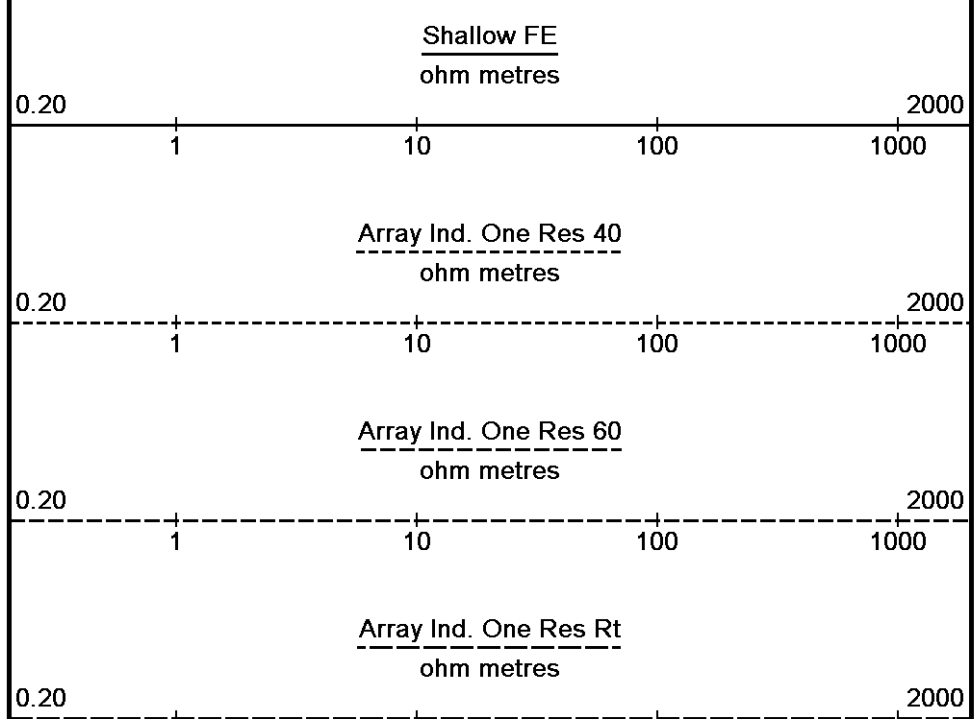
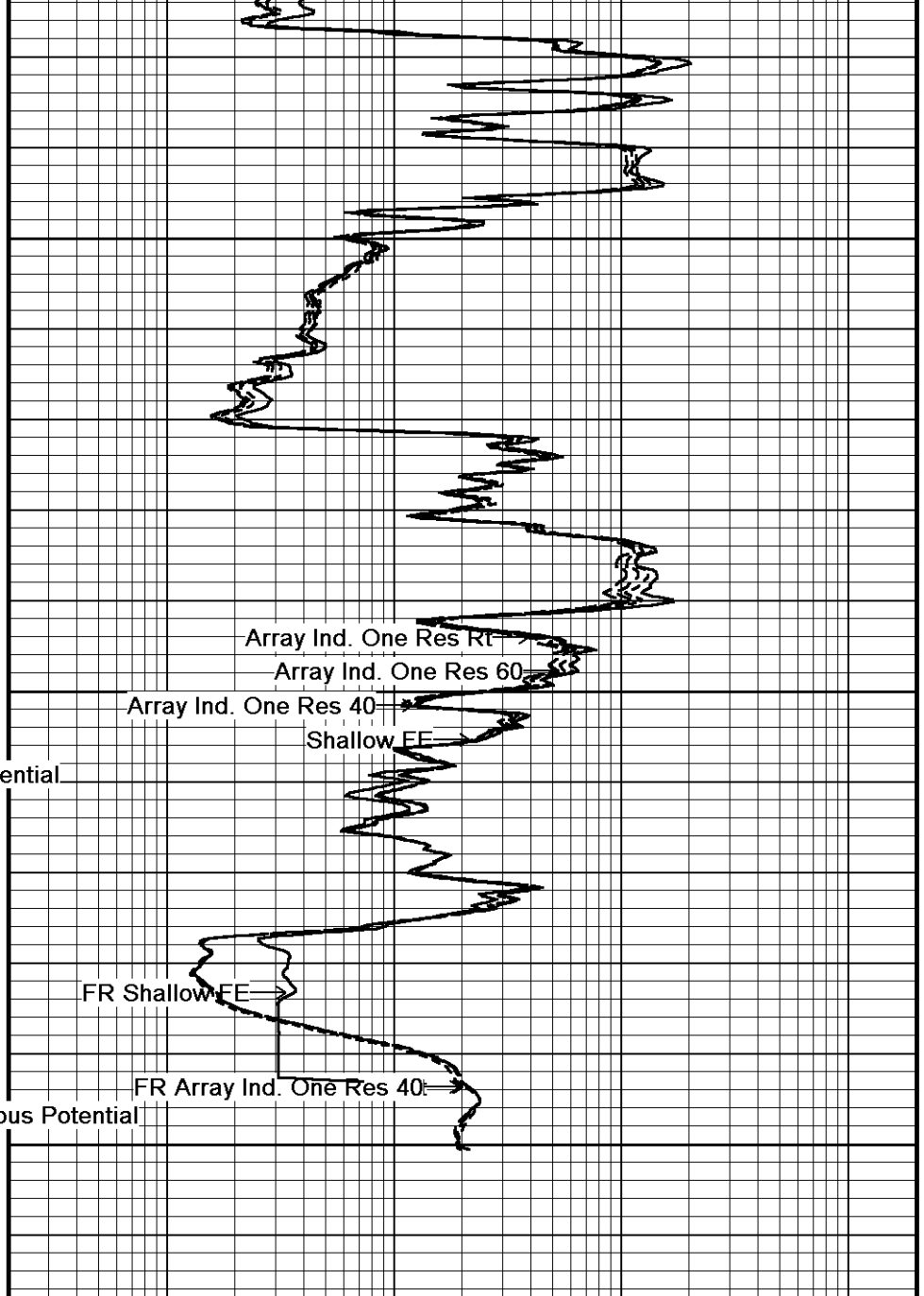
Gamma Ray
API
0 75 150
150 225 300

Spontaneous Potential
millivolts
- -> | 20 | <- +

DST Uphole Tension
pounds
5000 0

Borehole
Temp in
deg F

Replay
Scale



Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 04-APR-2011 06:15
 Filename: C:\Program Files\Weatherford\WLS 11.03\Data\Sh...Shakespeare Glassman #5-35_001.dta Recorded on 04-APR-2011 02:12
 System Versions: Logged with 11.03.3274 Plotted with 11.03.3274

5 INCH REPEAT PASS

BEFORE SURVEY CALIBRATION
 C:\Program Files\Weatherford\WLS 11.03\Data\Shakespeare Glassman #5-35\Shakespeare Glassman #5-35.dta

General Constants All 000 Last Edited on 04-APR-2011,00:33

| | | | |
|--|-----------------------|------------|--|
| General Parameters | | | |
| Mud Resistivity | 1.830 | ohm-metres | |
| Mud Resistivity Temperature | 55.000 | 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. One Res Rt | | |
| RWA Constant A | 1.000 | | |
| RWA Constant M | 2.000 | | |

High Resolution Temperature Calibration MCG-B 34 Field Calibration on 19-OCT-2009,11:45

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

High Resolution Temperature Constants MCG-B 34 Last Edited on

| | |
|-------------------|----|
| Pre-filter Length | 11 |
|-------------------|----|

SP Calibration MCG-B 34 Field Calibration on 9-NOV-2009,18:07

| | Measured | Calibrated (mV) |
|-------------|----------|-----------------|
| Reference 1 | 107.7 | 100.0 |
| Reference 2 | -93.8 | -100.0 |

Gamma Calibration MCG-B 34 Field Calibration on 03-APR-2011 20:44

| | Measured | Calibrated (API) |
|--------------------|----------|------------------|
| Background | 65 | 46 |
| Calibrator (Gross) | 1098 | 771 |
| Calibrator (Net) | 1033 | 725 |

Gamma Constants MCG-B 34 Last Edited on 04-APR-2011,00:34

| | | |
|-------------------------------|----------|-------|
| Gamma Calibrator Number | grc38 | |
| Mud Density | 1.14 | gm/cc |
| Caliper Source for Processing | Bit Size | |
| Tool Position | Centred | |
| Concentration of KCl | 0.00 | kppm |

Micro Normal and Micro Inverse Calibration MML-A 4 Base Calibration on 27-MAR-2011 22:52
Field Check on 03-APR-2011 20:31

Base Calibration

| Channel | Measured | | Calibrated (ohm-m) | |
|---------------|------------|------------|--------------------|------------|
| | Resistor 1 | Resistor 2 | Resistor 1 | Resistor 2 |
| Micro Normal | 12.1 | 60.2 | 2.6 | 12.8 |
| Micro Inverse | 15.7 | 78.4 | 1.7 | 8.4 |

| Channel | Base Check (ohm-m) | Field Check (ohm-m) |
|---------|--------------------|---------------------|
| | | |

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

| | | | | |
|--|---|--|----------------------------------|--|
| Micro Normal and Micro Inverse Constants MML-A 4 | | | Last Edited on 30-MAR-2011,02:15 | |
| 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 4 | | | Base Calibration on 27-MAR-2011 23:01 Field Calibration on 03-APR-2011 20:33 | |
| Base Calibration | | | | |
| Reading No | Measured | Calibrator Size (in) | | |
| 1 | 14539 | 5.98 | | |
| 2 | 18210 | 7.97 | | |
| 3 | 21545 | 9.86 | | |
| 4 | 25509 | 11.92 | | |
| 5 | 0 | 0.00 | | |
| 6 | N/A | N/A | | |
| Field Calibration | | | | |
| | Measured Caliper (in) | Actual Caliper (in) | | |
| | 6.12 | 5.98 | | |

| | | | | |
|--------------------------------|----------|------------------|---|--|
| Neutron Calibration MDN-A.B 65 | | | Base Calibration on 31-MAR-2011 09:35 Field Check on 03-APR-2011 20:38 | |
| Base Calibration | | | | |
| | Measured | Calibrated (cps) | | |
| | Near Far | Near | Far | |
| | 3086 96 | 3714 | 110 | |
| Ratio | 32.144 | 33.764 | | |
| Field Calibrator at Base | | | | |
| | | Calibrated (cps) | | |
| | | 1663 | 2383 | |
| Ratio | | 0.698 | | |
| Field Check | | | | |
| | | Calibrated (cps) | | |
| | | 1661 | 2386 | |
| Ratio | | 0.696 | | |

| | | | | |
|---------------------------------|--------------------------|-----------|----------------------------------|--|
| Neutron Constants MDN-A.B 65 | | | Last Edited on 04-APR-2011,00:34 | |
| Neutron Source Id | 757 | | | |
| Neutron Jig Number | 5824NE | | | |
| Epithermal Neutron | No | | | |
| Caliper Source for Processing | Density Caliper | | | |
| Stand-off | 0.00 | inches | | |
| Mud Density | 1.14 | 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 | MCG External Temperature | | | |
| Temperature | N/A | 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 27-MAR-2011 23:08 Field Check on 03-APR-2011 20:24 | |
| Base Calibration | | | | |
| | Measured | Calibrated (ohm-m) | | |
| Reference 1 | 0.0 | 0.0 | | |
| Reference 2 | 953.4 | 126.8 | | |
| Base Check | | 281.6 | | |
| Field Check | | 281.5 | | |

| | | |
|----------------------------------|--------------------------|--------|
| 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 178

Field Calibration on 28-MAR-2010,00:50

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

High Resolution Temperature Constants MAI-A.A 178

Last Edited on

Pre-filter Length 11

Induction Calibration MAI-A.A 178

Base Calibration on 31-MAR-2011,10:05
Field Check on 03-APR-2011 20:23

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 | 12.5 3763.3 |
| 2 | 0.0 0.0 | 29.8 3466.6 |
| 3 | 0.0 0.0 | 27.2 3014.9 |
| 4 | 0.0 0.0 | 18.7 2063.8 |
| Deep | 0.0 0.0 | 15.8 1995.8 |
| Medium | 0.0 0.0 | 40.3 3957.3 |
| Shallow | 0.0 0.0 | 45.8 5081.2 |
| Array Temperature | 0.0 | 76.7 Deg F |

Induction Constants MAI-A.A 178

Last Edited on 03-APR-2011,20:21

| | | |
|-----------------------------------|--------------------------|------------|
| 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 |

0.00 millimetre

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 65

Base Calibration on 26-MAR-2011 21:35
Field Calibration on 03-APR-2011 20:30

Base Calibration

| Reading No | Measured | Calibrator Size (in) |
|------------|----------|----------------------|
| 1 | 13025 | 3.99 |
| 2 | 21664 | 5.98 |
| 3 | 30144 | 7.97 |
| 4 | 38507 | 9.86 |
| 5 | 47728 | 11.92 |
| 6 | N/A | N/A |

Field Calibration

| Measured Caliper (in) | Actual Caliper (in) |
|-----------------------|---------------------|
| 5.92 | 5.98 |

Photo Density Calibration MPD-B 65

Base Calibration on 26-MAR-2011 21:55
Field Check on 03-APR-2011 20:29

Density Calibration

| Base Calibration | Measured | | Calibrated (sdu) | |
|------------------|----------|-------|------------------|-------|
| | Near | Far | Near | Far |
| Reference 1 | 50493 | 24334 | 59556 | 30836 |
| Reference 2 | 20772 | 2298 | 24941 | 2541 |

Field Check at Base

| | |
|--------|--------|
| 1251.7 | 1197.0 |
|--------|--------|

Field Check

| | |
|--------|--------|
| 1252.6 | 1200.6 |
|--------|--------|

PE Calibration

| Base Calibration | WS | Measured | | Calibrated Ratio |
|------------------|-------|----------|-------|------------------|
| | | WH | Ratio | |
| Background | 228 | 1114 | | |
| Reference 1 | 19703 | 50302 | 0.396 | 0.371 |
| Reference 2 | 5658 | 20626 | 0.278 | 0.272 |

Field Check at Base

| | |
|-------|--------|
| 227.6 | 1114.3 |
|-------|--------|

Field Check

| | |
|-------|--------|
| 226.2 | 1117.6 |
|-------|--------|

Density Constants MPD-B 65

Last Edited on 04-APR-2011,00:33

| | | |
|-------------------------------|-----------------|-------|
| 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 | 1.14 | 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 | 0.00 |

DOWNHOLE EQUIPMENT

C:\Program Files\Weatherford\WLS 11.03\Data\Shakespeare Glassman #5-35\Shakespeare Glassman #5-35.dta

Compact Comms Gamma
MCG-B 34 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in

Compact Comms Gamma
MCG-B 34 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 65 LG: 9.59 ft WT: 90.4 lb OD: 2.45 in

Compact Density/Caliper
MPD-B 65 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

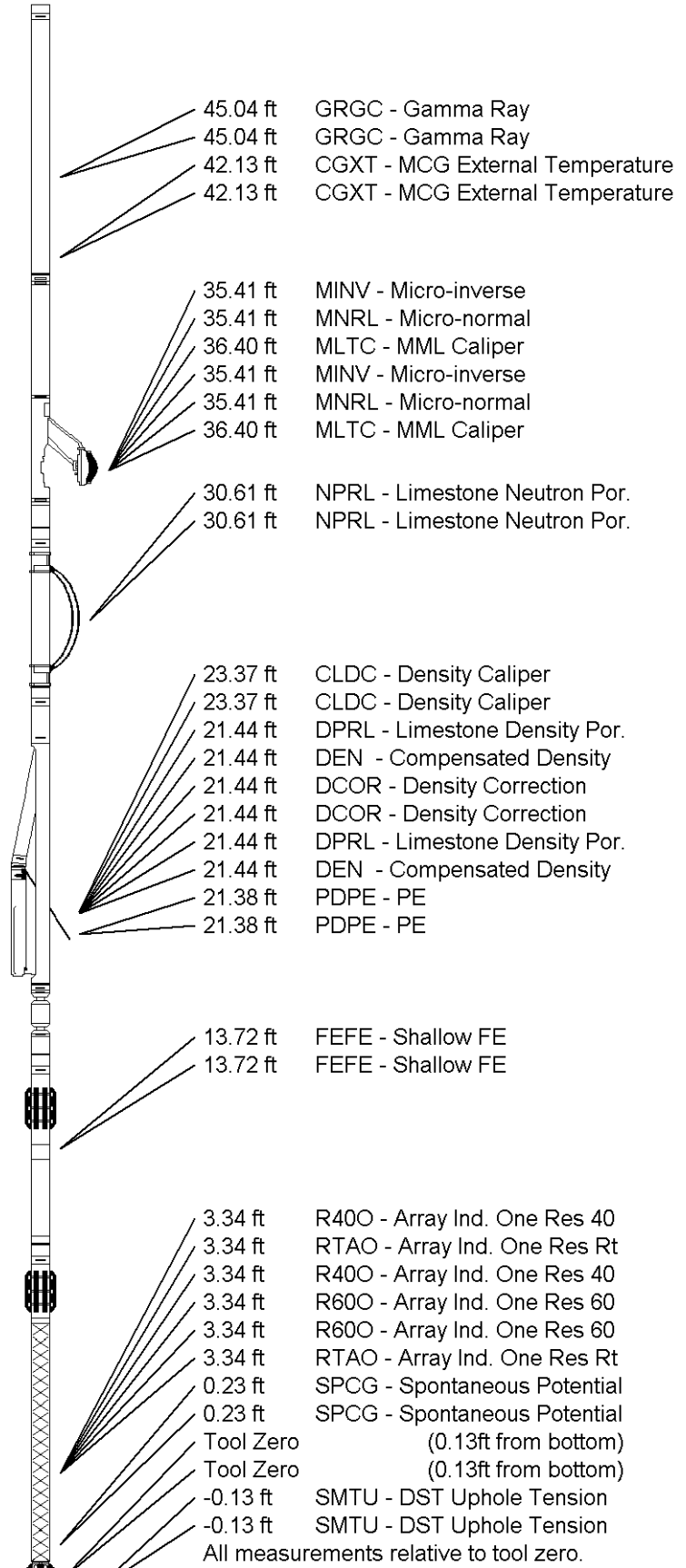
Compact Focussed Electric
MFE-A.A 55 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

Compact Induction
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: 50.32 ft Weight: 407.9 lb

Total Length: 50.32 ft Weight: 407.9 lb



45.04 ft GRGC - Gamma Ray
45.04 ft GRGC - Gamma Ray
42.13 ft CGXT - MCG External Temperature
42.13 ft CGXT - MCG External Temperature

35.41 ft MINV - Micro-inverse
35.41 ft MNRL - Micro-normal
36.40 ft MLTC - MML Caliper
35.41 ft MINV - Micro-inverse
35.41 ft MNRL - Micro-normal
36.40 ft MLTC - MML Caliper

30.61 ft NPRL - Limestone Neutron Por.
30.61 ft NPRL - Limestone Neutron Por.

23.37 ft CLDC - Density Caliper
23.37 ft CLDC - Density Caliper
21.44 ft DPRL - Limestone Density Por.
21.44 ft DEN - Compensated Density
21.44 ft DCOR - Density Correction
21.44 ft DCOR - Density Correction
21.44 ft DPRL - Limestone Density Por.
21.44 ft DEN - Compensated Density
21.38 ft PDPE - PE
21.38 ft PDPE - PE

13.72 ft FEFE - Shallow FE
13.72 ft FEFE - Shallow FE

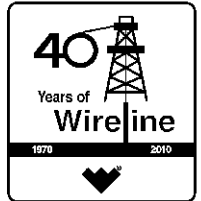
3.34 ft R400 - Array Ind. One Res 40
3.34 ft RTAO - Array Ind. One Res Rt
3.34 ft R400 - Array Ind. One Res 40
3.34 ft R600 - Array Ind. One Res 60
3.34 ft R600 - Array Ind. One Res 60
3.34 ft RTAO - Array Ind. One Res Rt
0.23 ft SPCG - Spontaneous Potential
0.23 ft SPCG - Spontaneous Potential
Tool 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.

COMPANY SHAKESPEARE OIL COMPANY
WELL GLASSMAN #5-35
FIELD UNNAMED
PROVINCE/COUNTY LOGAN
COUNTRY/STATE U.S.A. / KANSAS

| | | | | | |
|-------------------------|---------|------|---------------|---------|------|
| Elevation Kelly Bushing | 2994.00 | feet | First Reading | 4694.00 | feet |
| Elevation Drill Floor | 2992.00 | feet | Depth Driller | 4700.00 | feet |
| Elevation Ground Level | 2984.00 | feet | Depth Logger | 4697.00 | feet |



**ARRAY INDUCTION
 SHALLOW FOCUSED
 ELECTRIC LOG**



Weatherford

COMPANY SHAKESPEARE OIL COMPANY
 WELL GLASSMAN #5-35
 FIELD UNNAMED
 PROVINCE/COUNTY LOGAN
 COUNTRY/STATE U.S.A. / KANSAS
 LOCATION 335' FNL & 1990' FEL
 SEC 35 T1S R2E Other Services
 12S 32W IMPROVISED
 15-108-20992 MML

Permanant Datum O.L. Elevation 2984 feet
 Log Measured From ISB
 Drilling Measured From K.B.

Date 04-APR-2011

Run Number ONE
 Depth Driller 4700.00 feet
 Depth Logger 4697.00 feet
 First Reading 4694.00 feet
 Last Reading 225.00 feet
 Casing Driller 225.00 feet
 Casing Logger 225.00 feet
 Bit Size 7.875 inches
 Hole Fluid Type CHEMICAL
 Density/Viscosity 9.40 IN/USG 54.00 CP
 pH/Fluid Loss 9.60 FLOWLINE 10.00 ml/30min
 Gamma Source FLOWLINE
 Em @ Measured Temp 1.83 @ 56.0 ohm-m
 Em @ Measured Temp 1.48 @ 55.0 ohm-m
 Em @ Measured Temp 2.20 @ 5.0 ohm-m
 Source Fmt/Fric CALC CALC
 Fm @ BHT 0.89 @ 113.0 ohm-m
 Time Since Circulation 4 HOURS deg F
 Max Recorded Temp 113.00 COMPACT LIB
 Equipment Name COMPACT LIB
 Recorded By F.HOFFMAN
 Witnessed By DON WILLIAMS
 O.I.# 1009# 3528128

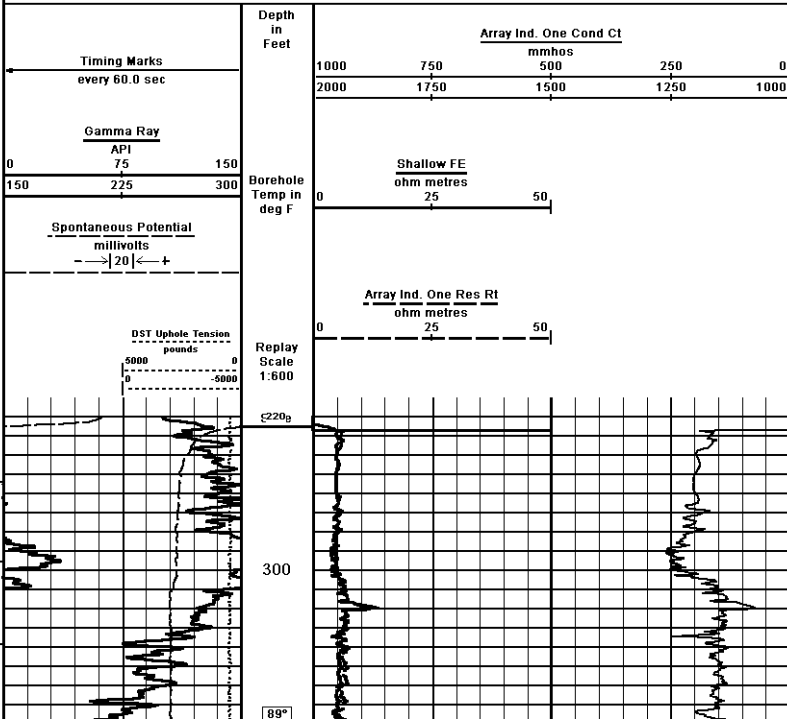
Weatherford

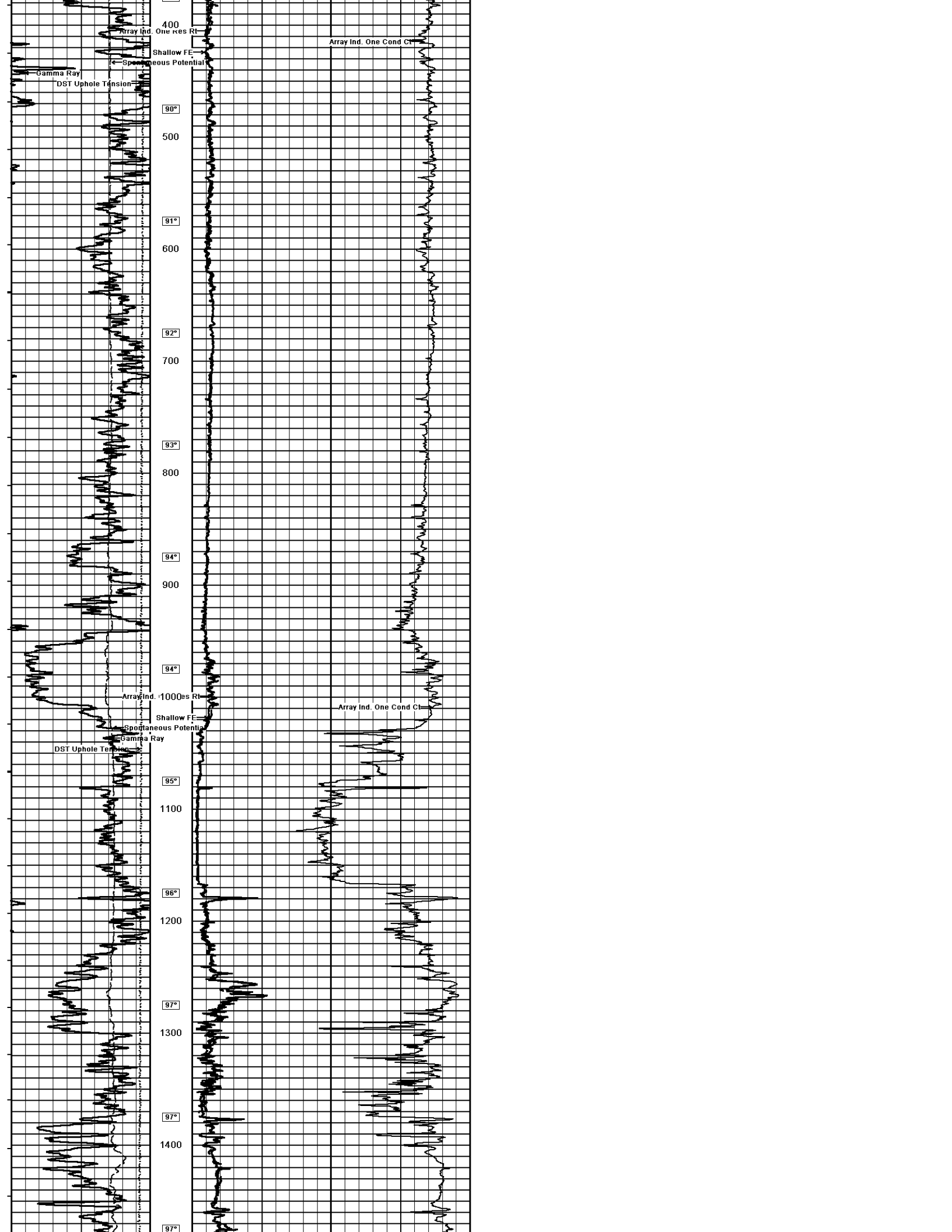
ARRAY INDUCTION
 SHALLOW FOCUSED
 ELECTRIC LOG

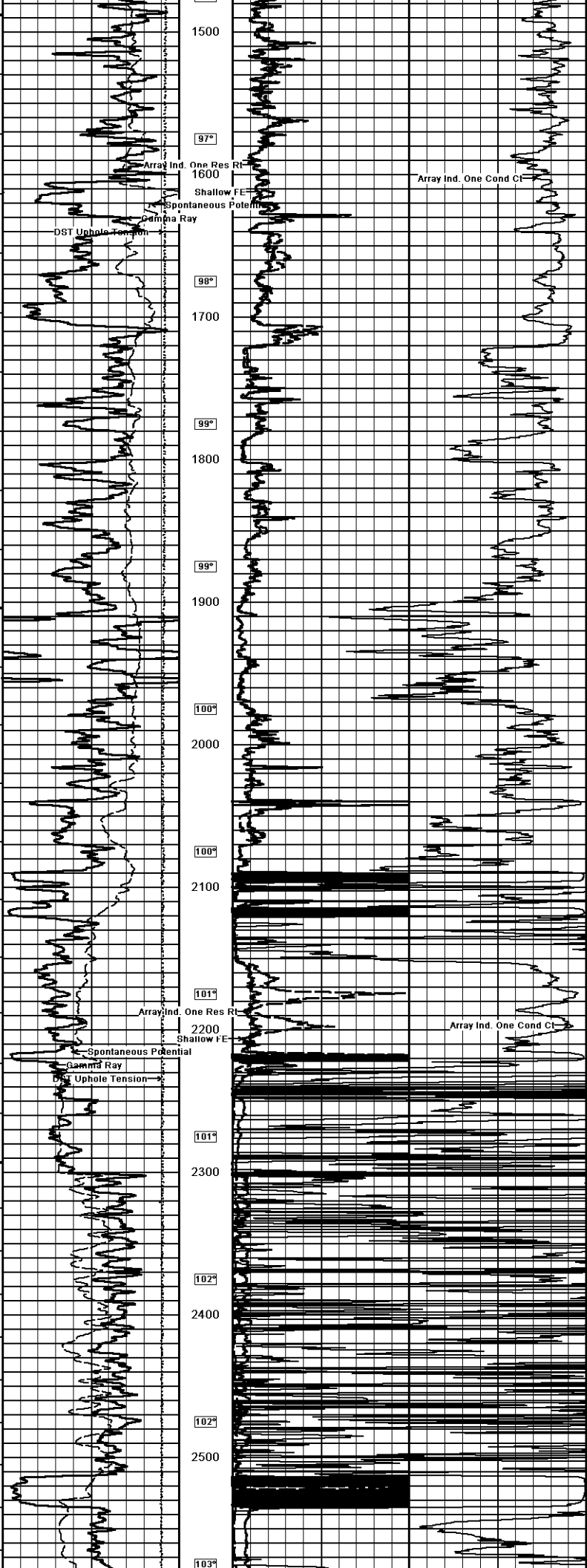
40 Years of Wireline

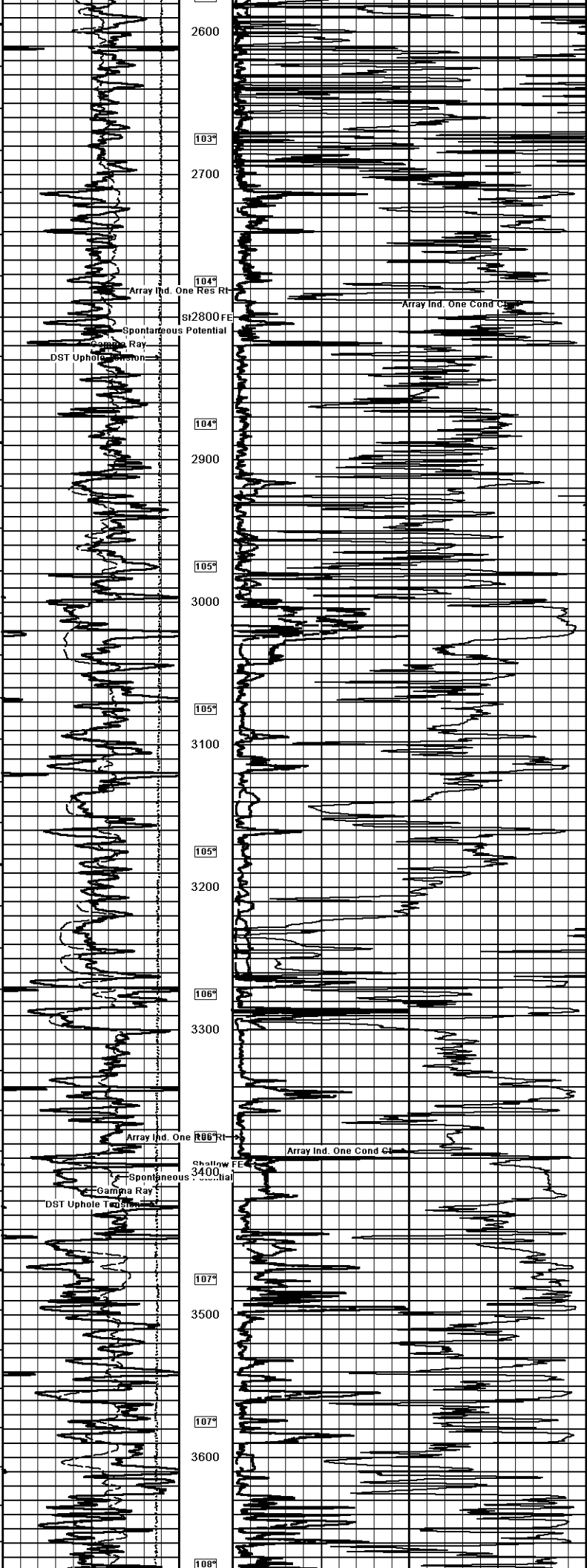
1 INCH MAIN PASS

Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 04-APR-2011 08:15
 Filename: C:\Program Files\Weatherford\WLS 11.03\Data\S...\Shakespeare Glassman 5-35 Reprocess.dta
 Recorded on 04-APR-2011 02:32
 System Versions: Processed with 11.03.3274 Plotted with 11.03.3274









Array Ind. One Res Rt

Array Ind. One Cond Ct

Spontaneous Potential

Gamma Ray

DST Uphole

104°

105°

105°

105°

106°

Array Ind. One Res Rt

Array Ind. One Cond Ct

Spontaneous Potential

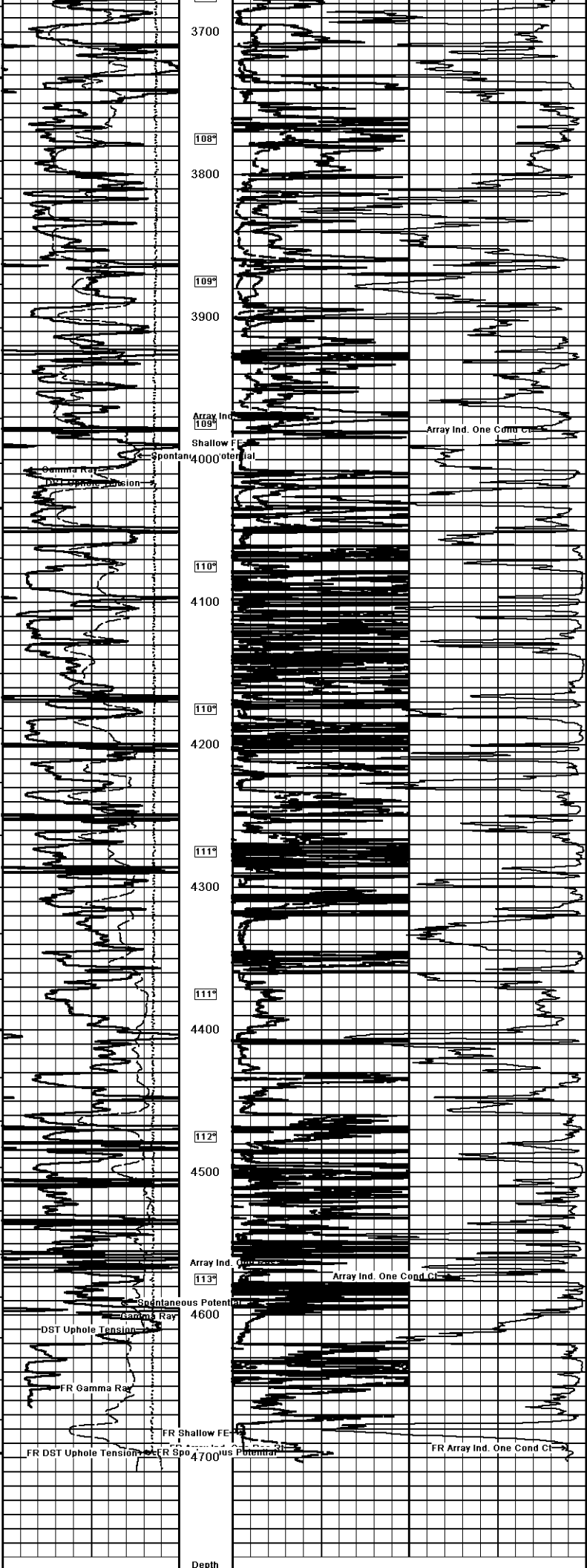
Gamma Ray

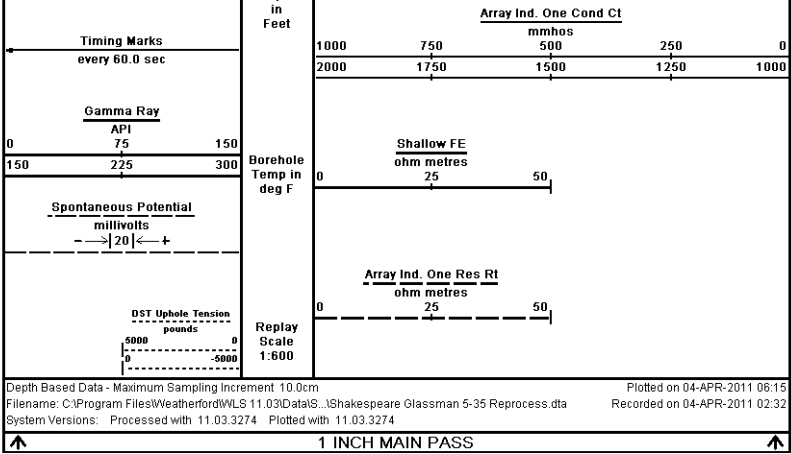
DST Uphole

107°

107°

108°





| | | |
|---|--|--|
| <p>COMPANY SHAKESPEARE OIL COMPANY</p> <p>WELL GLASSMAN #5-35</p> <p>FIELD UNNAMED</p> <p>PROVINCE/COUNTY LOGAN</p> <p>COUNTRY/STATE U.S.A. / KANSAS</p> | <p>Elevation Kelly Busting 2994.00 feet</p> <p>Elevation Drill Floor 2992.00 feet</p> <p>Elevation Ground Level 2984.00 feet</p> | <p>First Reading 4694.00 feet</p> <p>Depth Driller 4700.00 feet</p> <p>Depth Logger 4697.00 feet</p> |
|---|--|--|

Weatherford ARRAY INDUCTION
SHALLOW FOCUSED
ELECTRIC LOG

