Weatherford®

# ARRAY INDUCTION

| | |
|---|---|
| COMPANY | McCoy Petroleum Corp |
| WELL | Schmidt 'A' #7-29 |
| FIELD | |
| PROVINCE/COUNTY | Haskell |
| COUNTRY/STATE | U.S.A. / Kansas |
| LOCATION | 1140' FSL & 1980' FWL |

**FINAL PRINT**

| SEC | TWP | RGE |
|---|---|---|
| 29 | 30S | 31W |

API Number
Permit Number 15-081-21987

Other Services
MML MPD/MDN
MFE
MCG

Permanent Datum G.L., Elevation 2843 feet
Log Measured From KB
Drilling Measured From KB

| Elevations: | feet |
|---|---|
| KB | 2856.00 |
| DF | 2858.00 |
| GL | 2843.00 |

| | | | | |
|---|---|---|---|---|
| Date | 24-JUN-2012 | | | |
| Run Number | One | | | |
| Depth Driller | 4805.00 | feet | | |
| Depth Logger | 4806.00 | feet | | |
| First Reading | 4806.00 | feet | | |
| Last Reading | 3800.00 | feet | | |
| Casing Driller | 1822.00 | feet | | |
| Casing Logger | 1822.00 | feet | | |
| Bit Size | 7.875 | inches | | |
| Hole Fluid Type | Chemical | | | |
| Density / Viscosity | 8.95 g/c3 | 52.00 CP | | |
| PH / Fluid Loss | 10.50 | | | |
| Sample Source | Flowline | | | |
| Rm @ Measured Temp | 1.18 @ 97.2 | ohm-m | | |
| Rmf @ Measured Temp | 0.94 @ 97.2 | ohm-m | | |
| Rmc @ Measured Temp | 1.40 @ 97.2 | ohm-m | | |
| Source Rmf / Rmc | Calc | | | |
| Rm @ BHT | 0.99 @116.0 | ohm-m | | |
| Time Since Circulation | 4 Hrs | | | |
| Max Recorded Temp | 116.00 | deg F | | |
| Equipment Name | Compact | | | |
| Equipment / Base | 13057 | Libera | | |
| Recorded By | Roger Burns | | | |
| Witnessed By | Jerry Smith | | | |
| Field Ticket | 3529325 | | | |

## BOREHOLE RECORD

Last Edited: 24-JUN-2012 11:26

| Bit Size inches | Depth From feet | Depth To feet |
|---|---|---|
| 7.875 | 1822.00 | 4806.00 |

## CASING RECORD

| Type | Size inches | Depth From feet | Shoe Depth feet | Weight pounds/ft |
|---|---|---|---|---|
| | 8.625 | 0.00 | 1822.00 | 0.00 |

## REMARKS

- SOFTWARE ISSUE: WLS 11.03.4044.
- MCG, MML, MDN, MPD, MFE, MAI RAN IN COMBINATION.
  - HARDWARE: DUAL BOWSPRING USED ON MDN.
  0.5 INCH STANDOFF USED ON MAI.
  0.5 INCH STANDOFF USED ON MFE.
- 2.71 G/CC LIMESTONE DENSITY MATRIX USED TO CALCULATE POROSITY.
- BOREHOLE RUGOSITY, TIGHT PULLS, AND WASHOUTS WILL AFFECT DATA QUALITY.
- ALL INTERVALS LOGGED AND SCALED PER CUSTOMER'S REQUEST.
- TOTAL HOLE VOLUME:1310 CU.FT.
- ANNULAR HOLE VOLUME WITH 4.5 INCH CASING: 950 CU. FT.
- SERVICE ORDER # 3529325

- SERVICE ORDER # 3020020.

- RIG: Sterling #1

- ENGINEER:R. BURNS.

- OPERATOR: B. REEVES



## 2 INCH MAIN

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 24-JUN-2012 15:16
Filename: C:\Minimus\Data\McCoy Schmidt A 7-29\Schmidt A 7 29_005.dta
Recorded on 24-JUN-2012 08:44
System Versions: Processed with 11.03.4044 Plotted with 13.02.6600

Timing Marks
every 60.0 sec

Gamma Ray
API
0 75 150

Spontaneous Potential
millivolts
− → | 20 | ← +

Density Caliper
inches
6 11 16

Bit Size
inches
6 11 16

DST Uphole Tension
pounds
5000 0

Depth in Feet

Borehole Temp in deg F

HVI every 10 cu ft

Annular Integral every 10 cu ft

Replay Scale 1:600

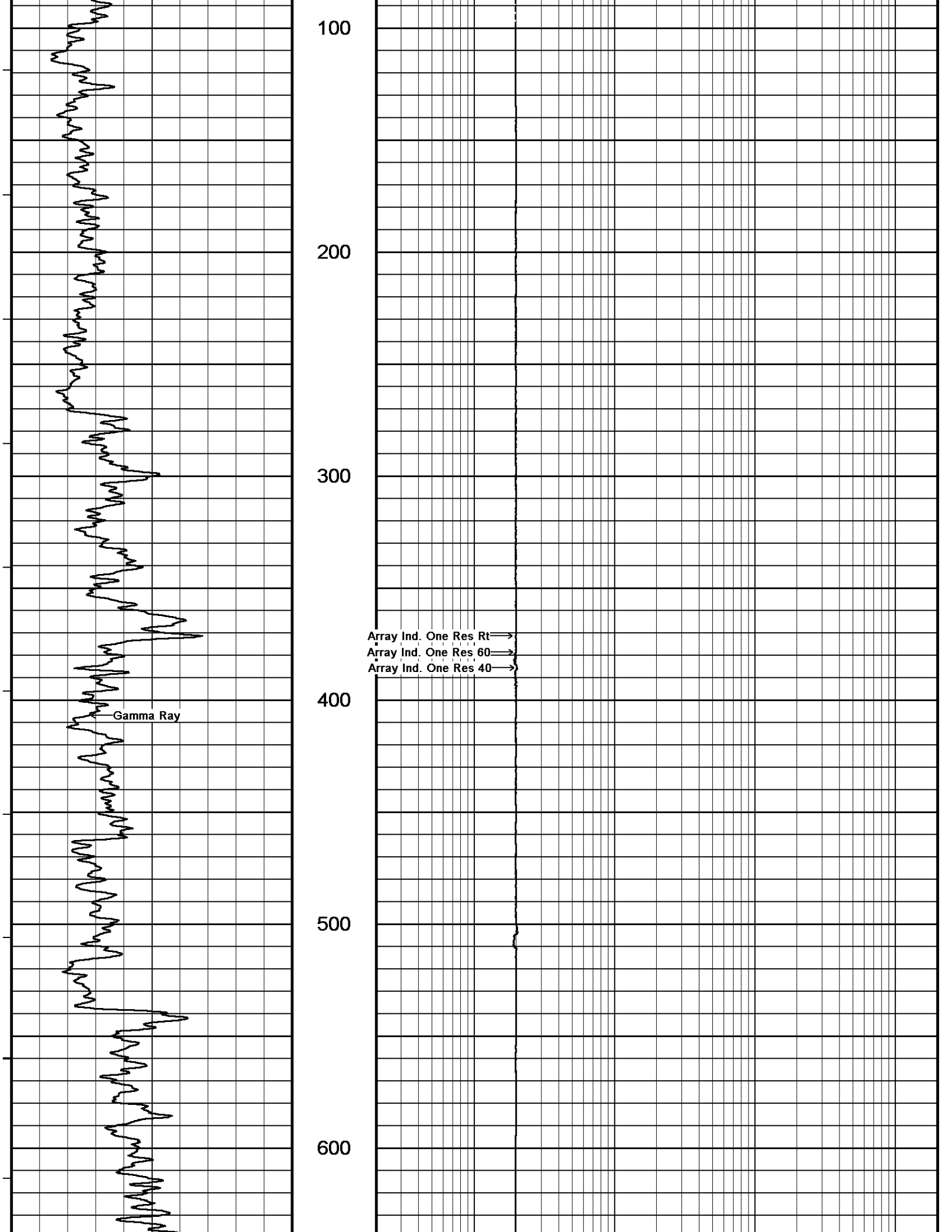
0

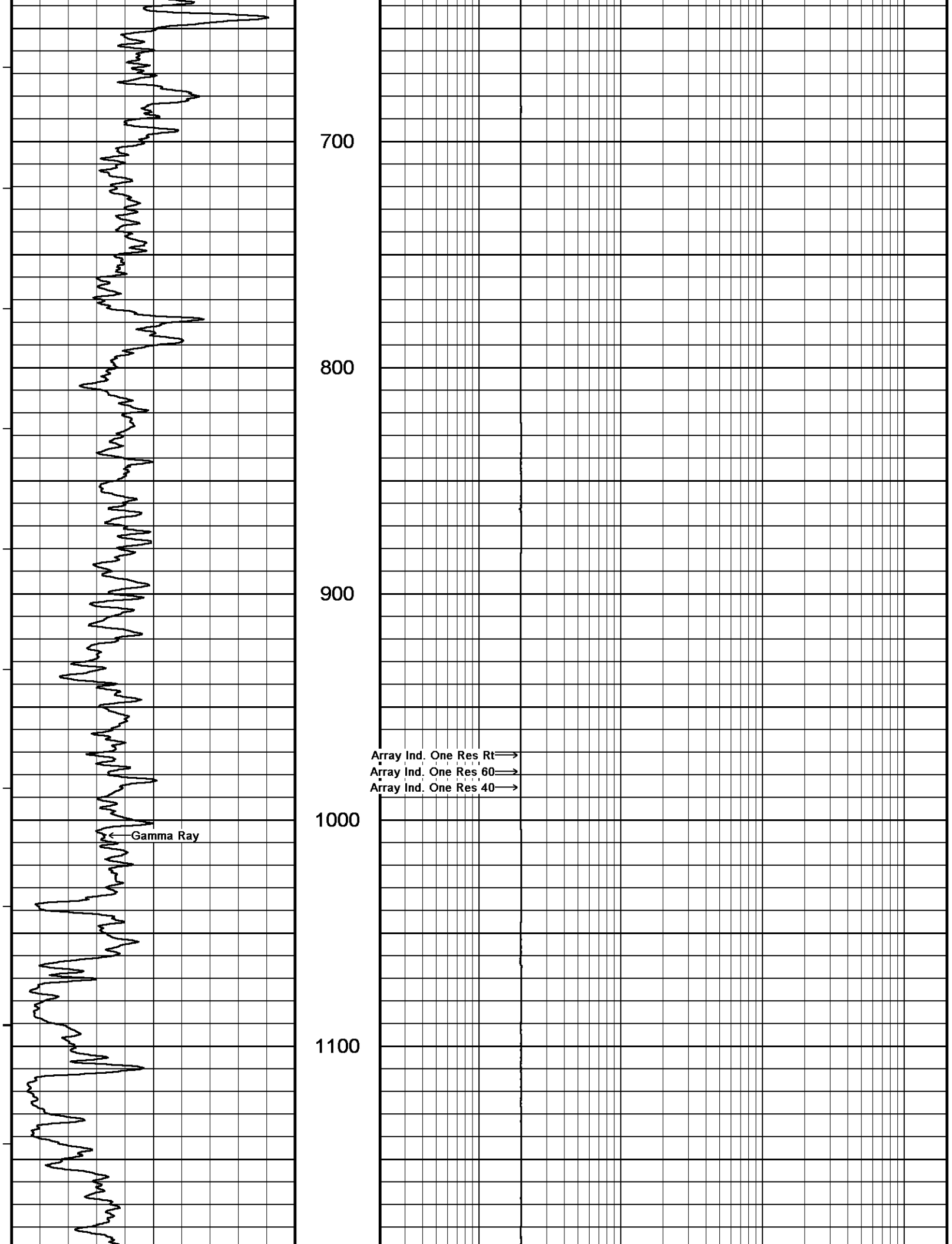
Shallow FE
ohm metres
0.20 2000
1 10 100 1000

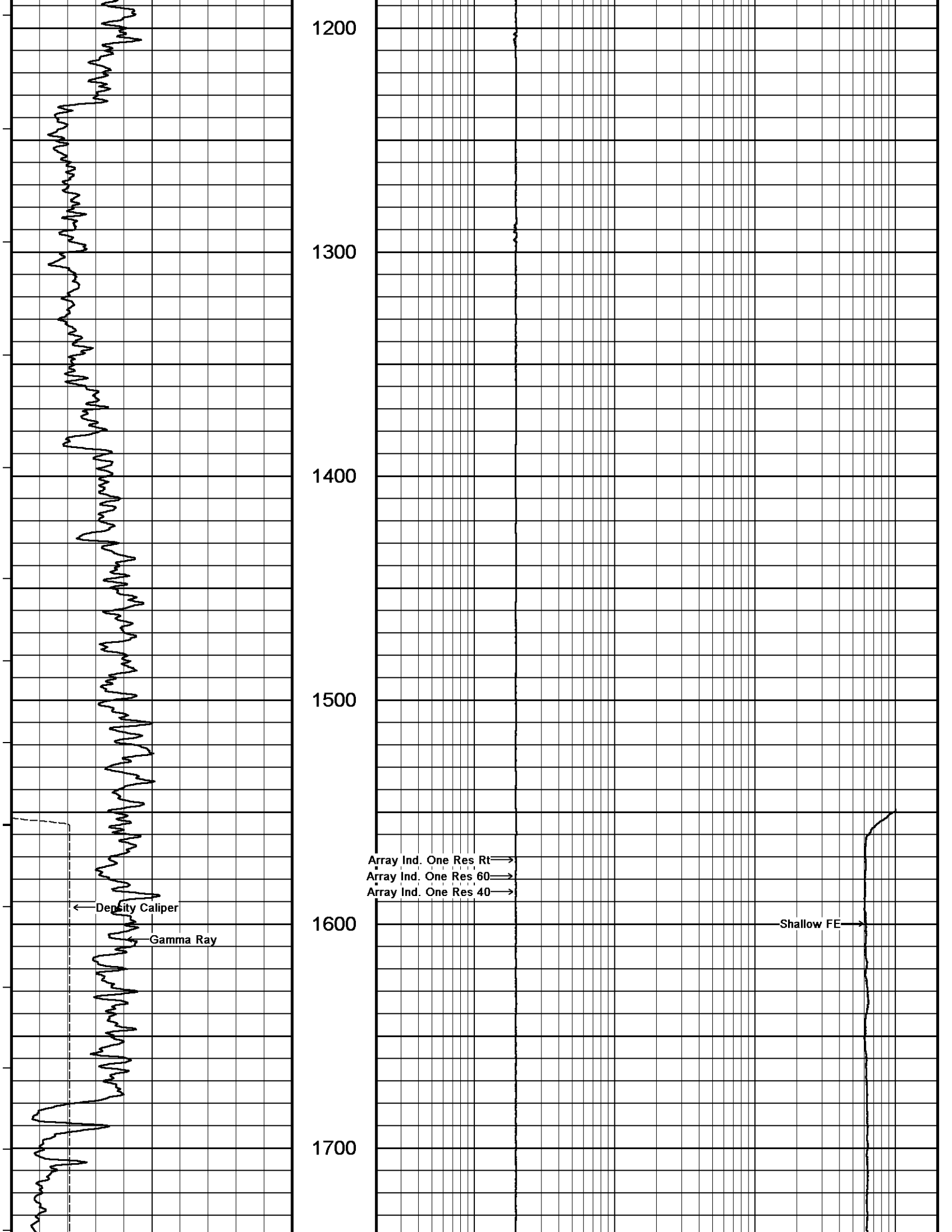
Array Ind. One Res 40
ohm metres
0.20 2000
1 10 100 1000

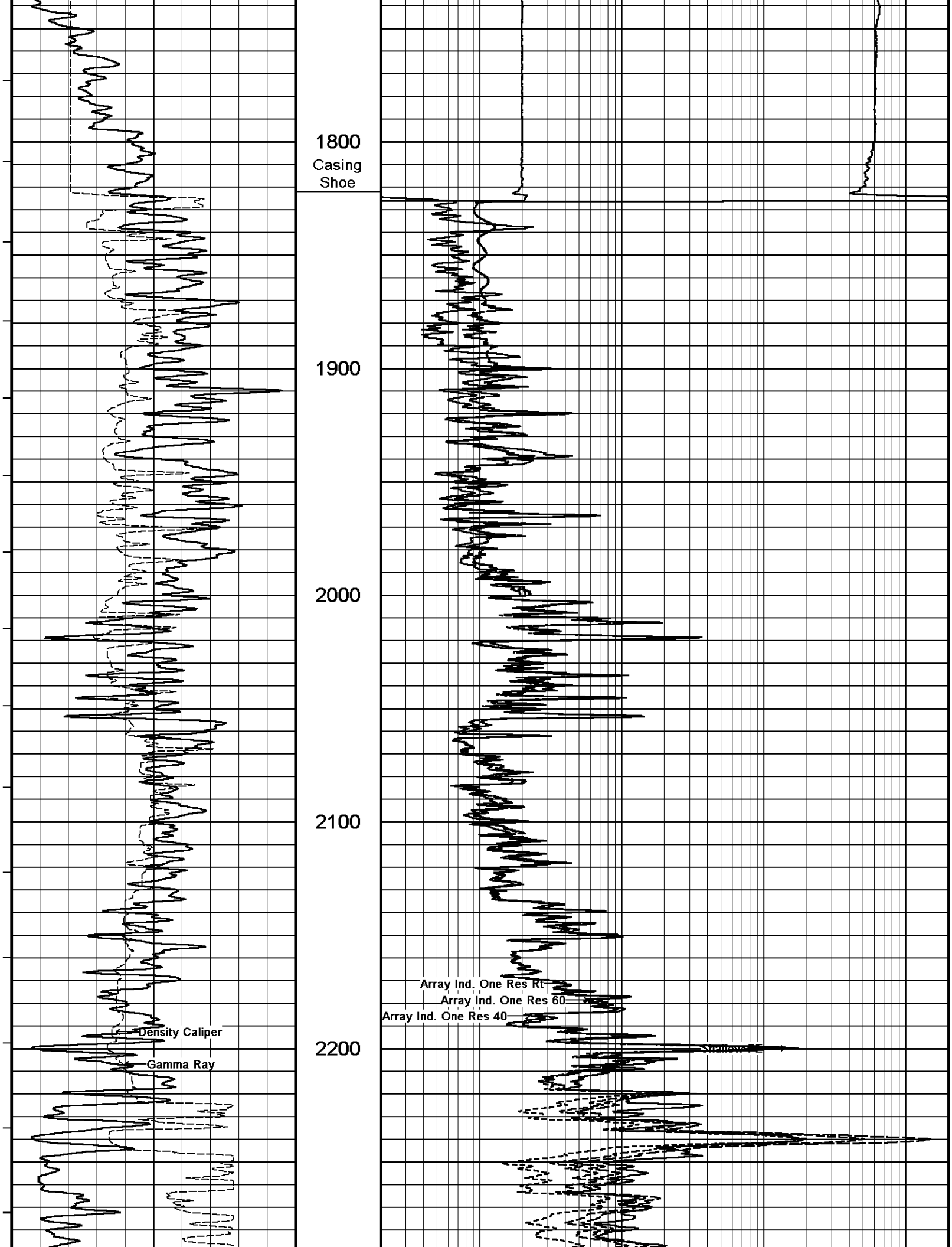
Array Ind. One Res 60
ohm metres
0.20 2000
1 10 100 1000

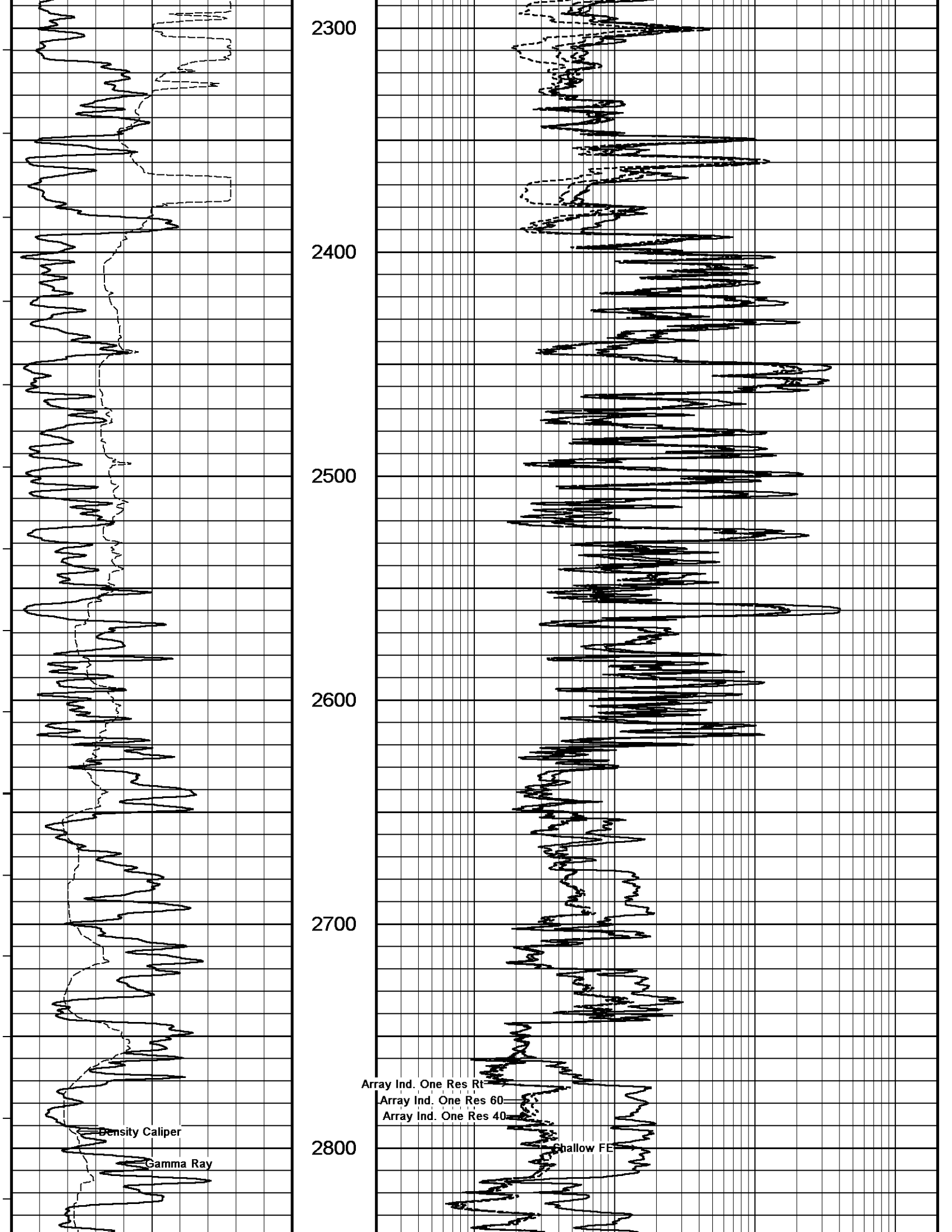
Array Ind. One Res Rt
ohm metres
0.20 2000
1 10 100 1000

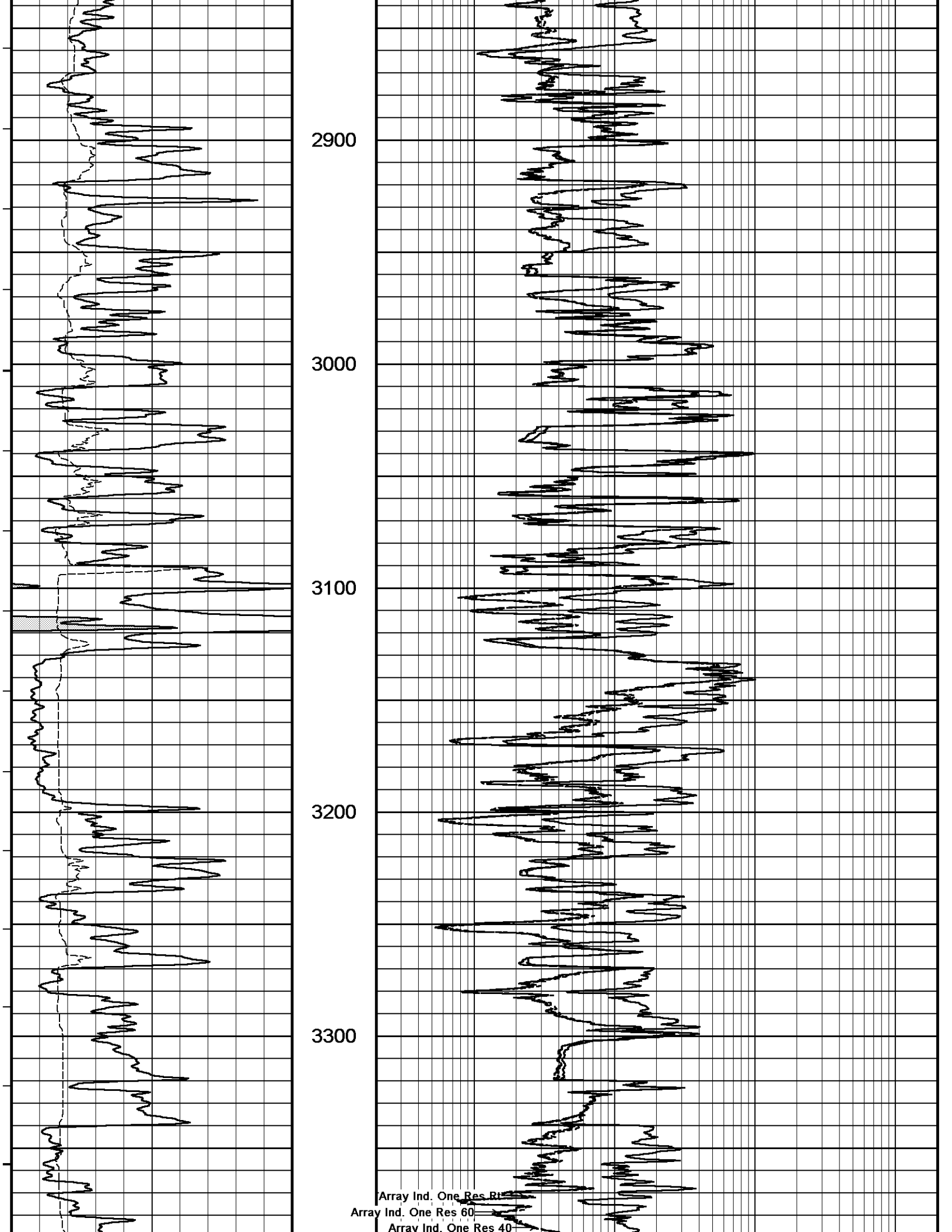

100
200
300
400
500
600
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Gamma Ray

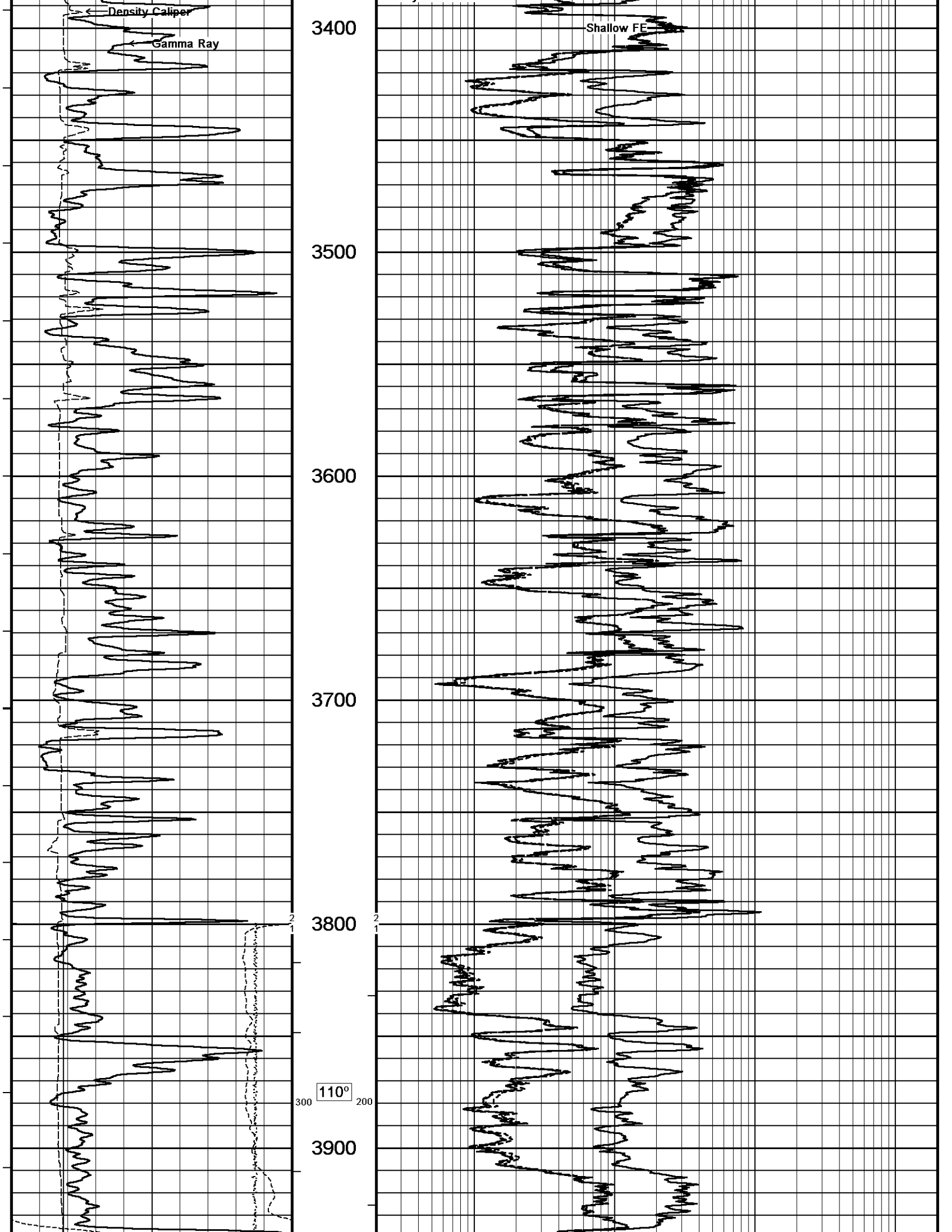

700
800
900
1000
1100
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Gamma Ray

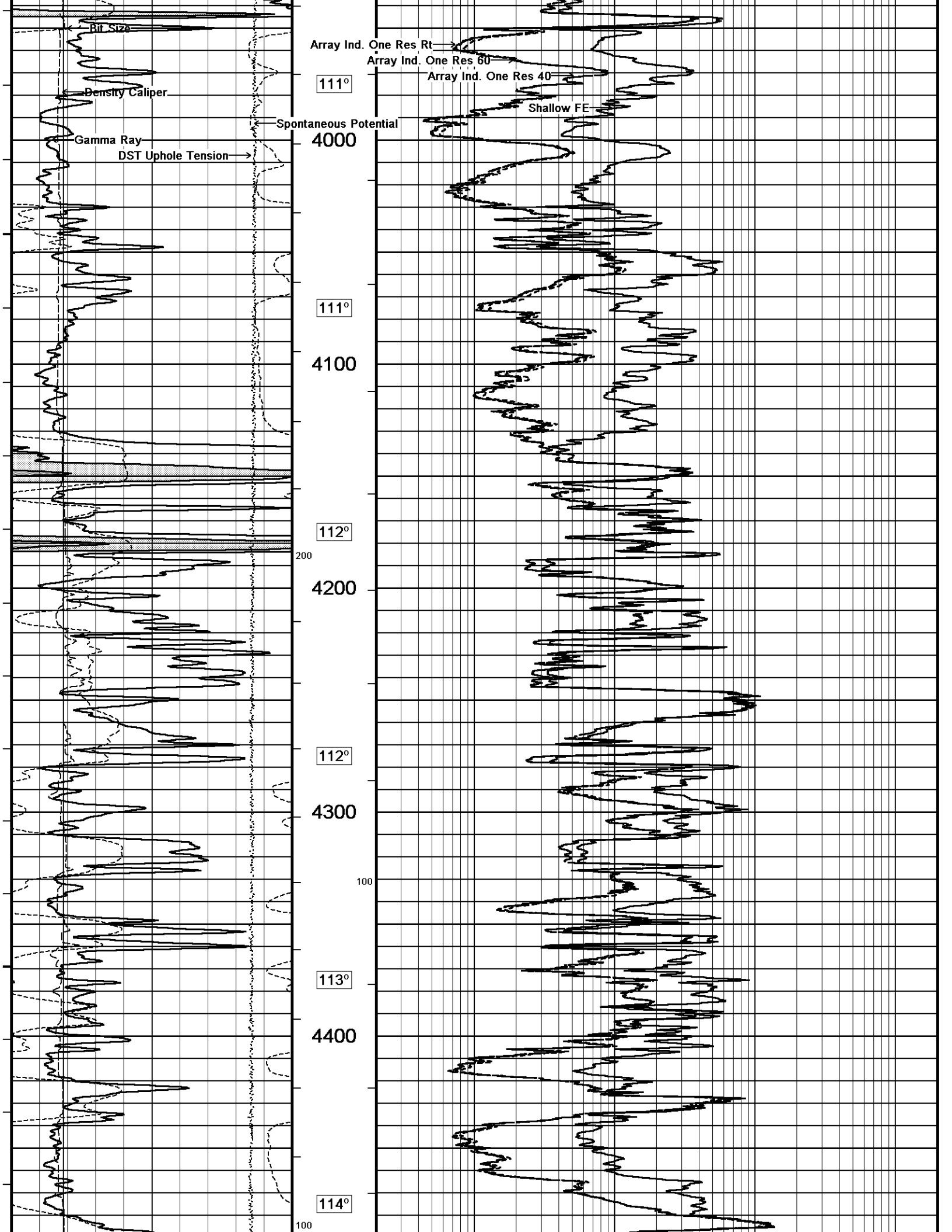

1200
1300
1400
1500
1600
1700
Density Caliper
Gamma Ray
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE

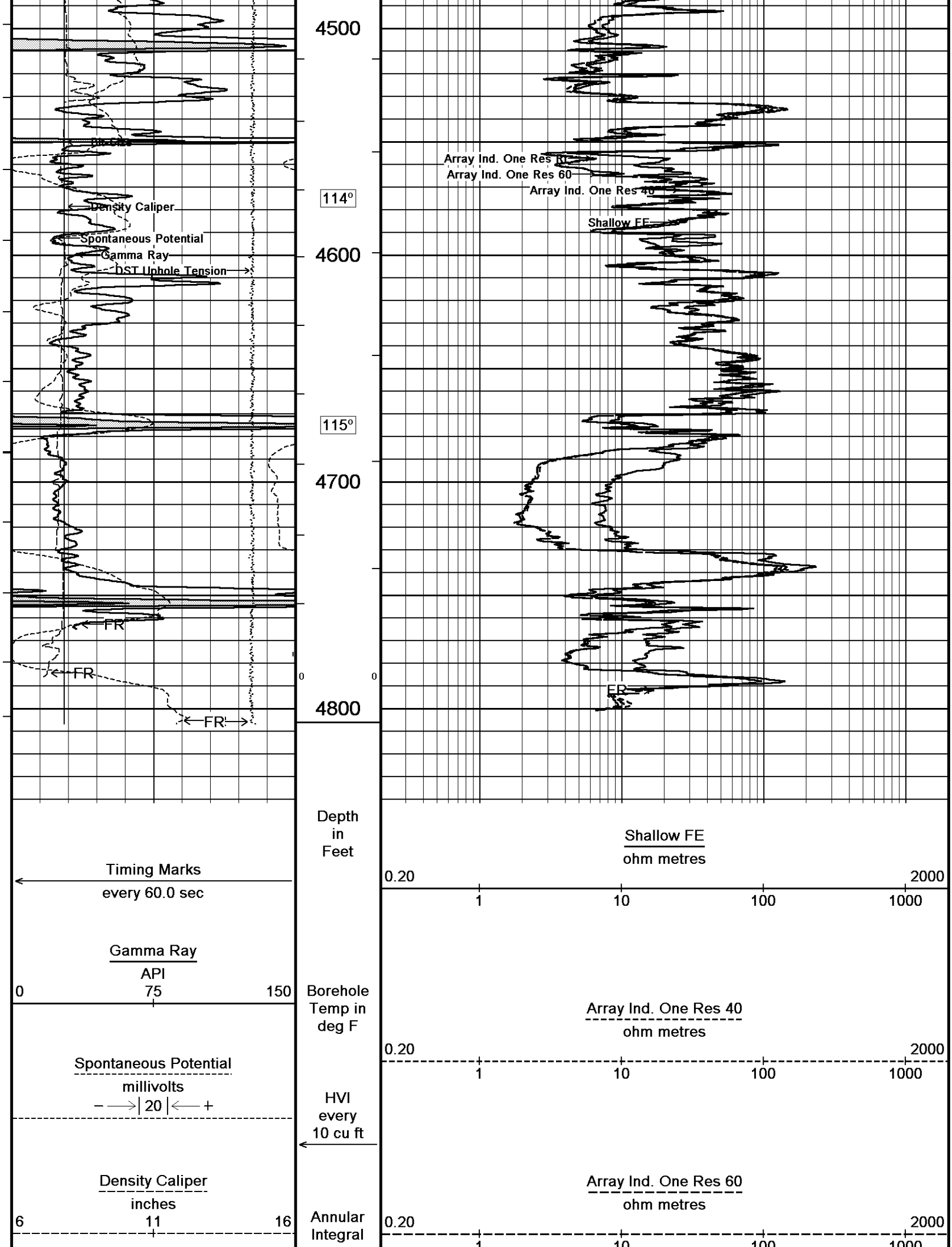

1800
Casing
Shoe
1900
2000
2100
2200
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Density Caliper
Gamma Ray

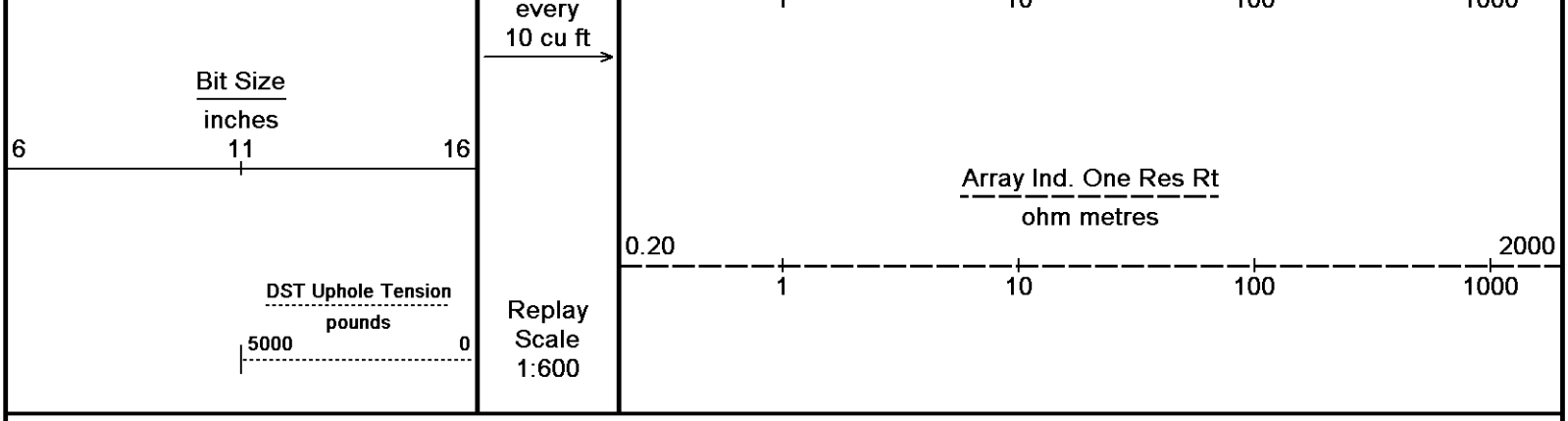

2300
2400
2500
2600
2700
2800
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
Density Caliper
Gamma Ray


2900
3000
3100
3200
3300
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40


Density Caliper
Gamma Ray
Shallow FE
3400
3500
3600
3700
3800
3900
2
1
2
1
300
110°
200


Bit Size
Density Caliper
Gamma Ray
DST Uphole Tension
Spontaneous Potential
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
111°
111°
112°
112°
113°
114°
4000
4100
4200
4300
4400
200
100
100


4500
4600
4700
4800
114°
115°
Density Caliper
Spontaneous Potential
Gamma Ray
bST Uphole Tension
FR
FR
FR
Array Ind. One Res RT
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
FR
0
0
Timing Marks
every 60.0 sec
Gamma Ray
API
0
75
150
Spontaneous Potential
millivolts
20
Density Caliper
inches
6
11
16
Depth
in
Feet
Borehole
Temp in
deg F
HVI
every
10 cu ft
Annular
Integral
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

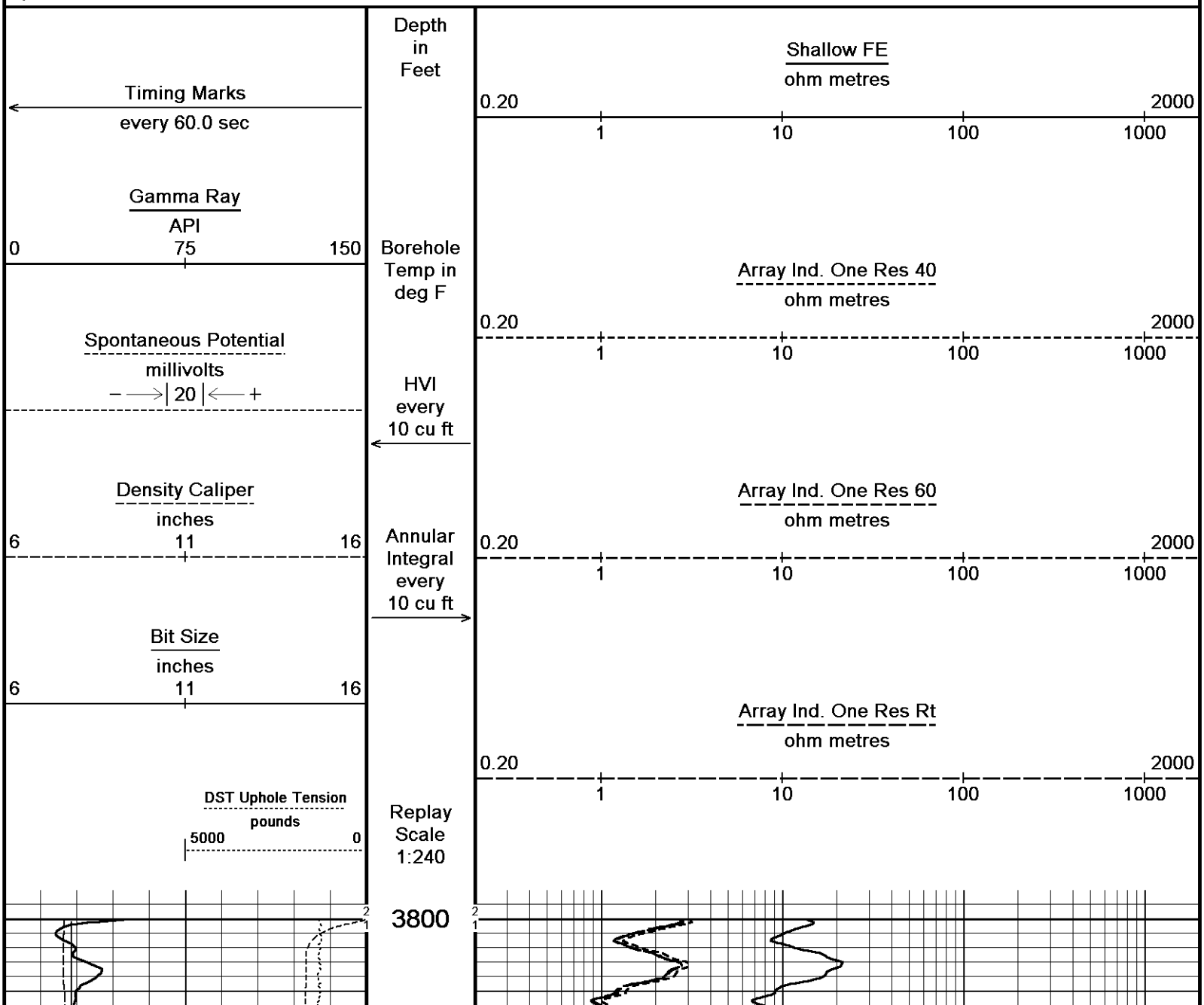


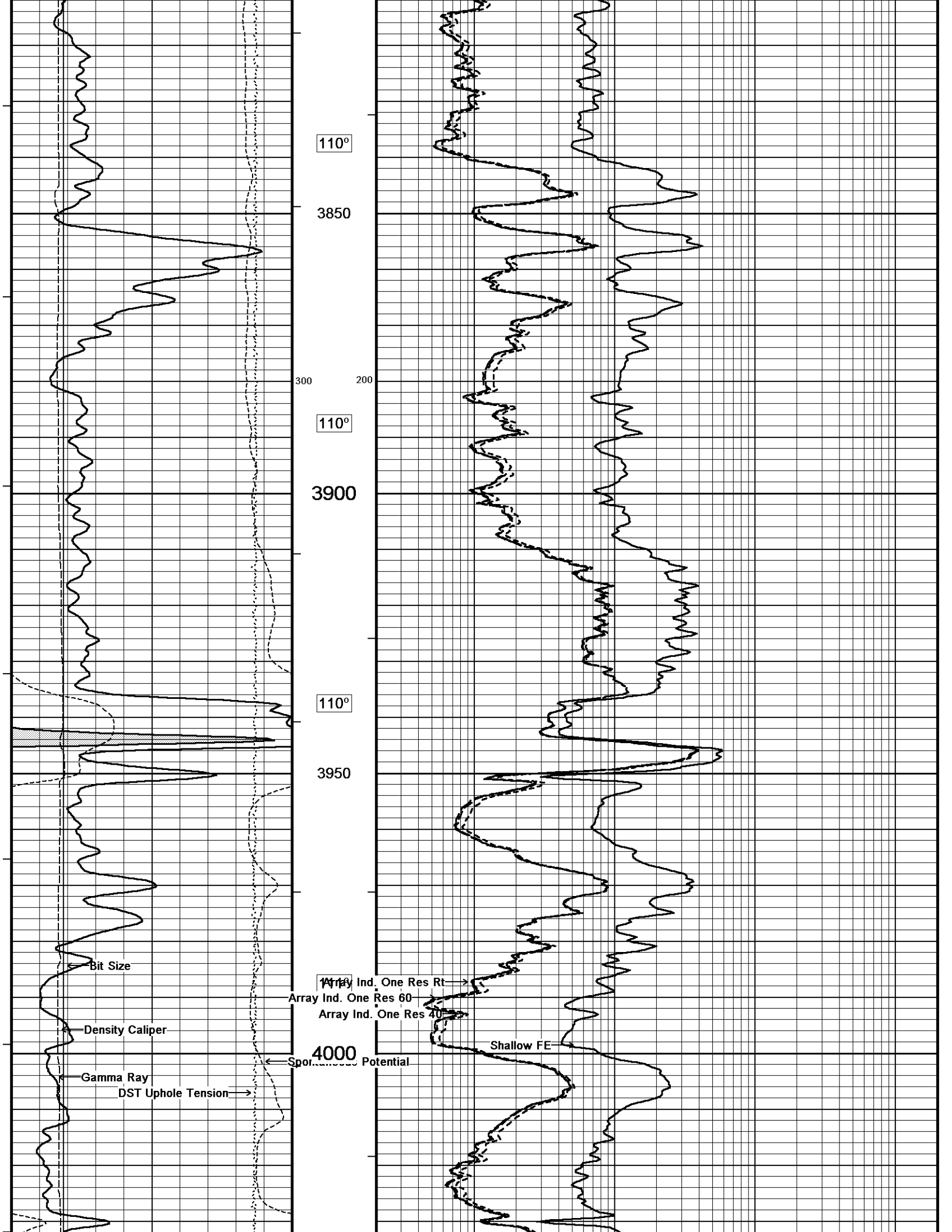

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 24-JUN-2012 15:16
Filename: C:\Minimus\Data\McCoy Schmidt A 7-29\Schmidt A 7 29_005.dta
Recorded on 24-JUN-2012 08:44
System Versions: Processed with 11.03.4044 Plotted with 13.02.6600

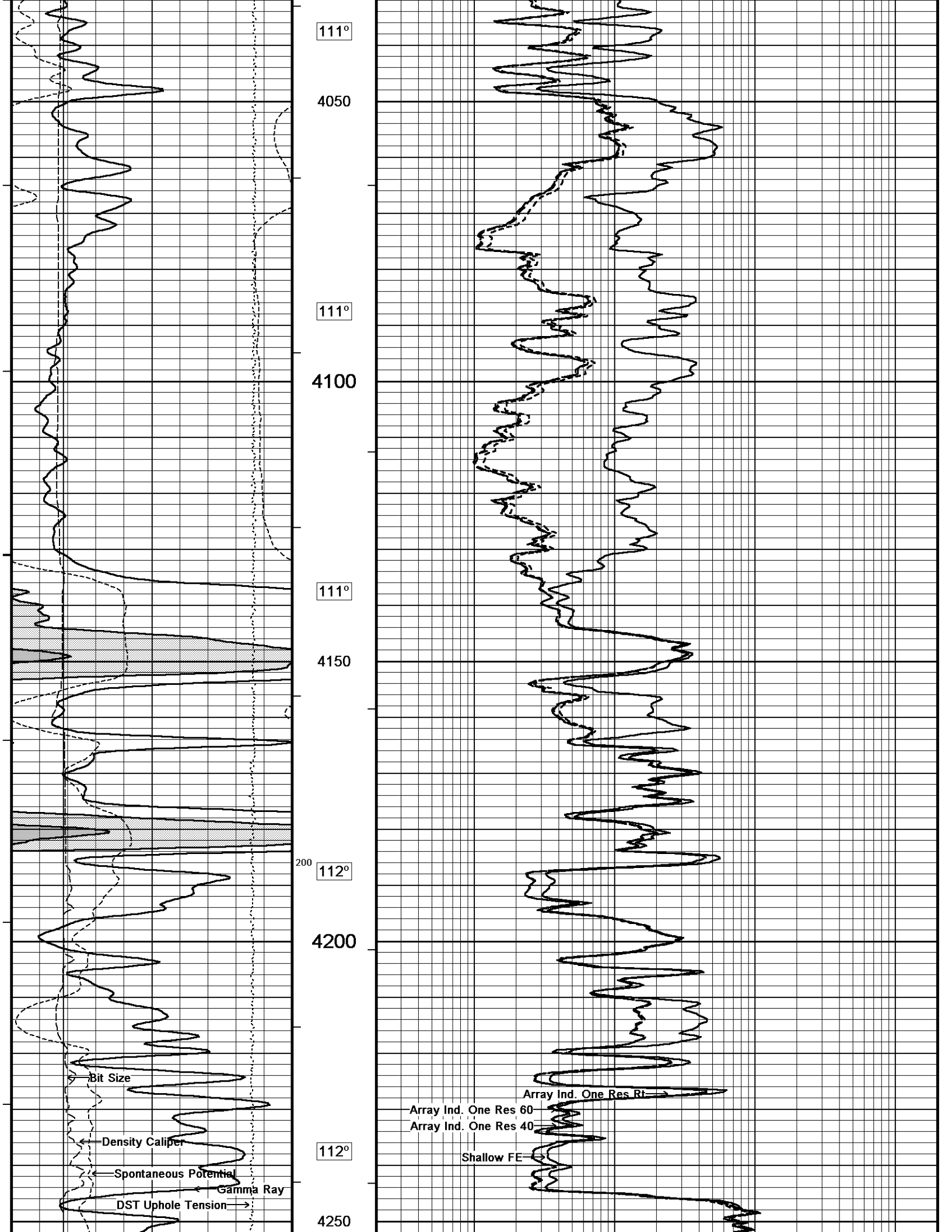
2 INCH MAIN

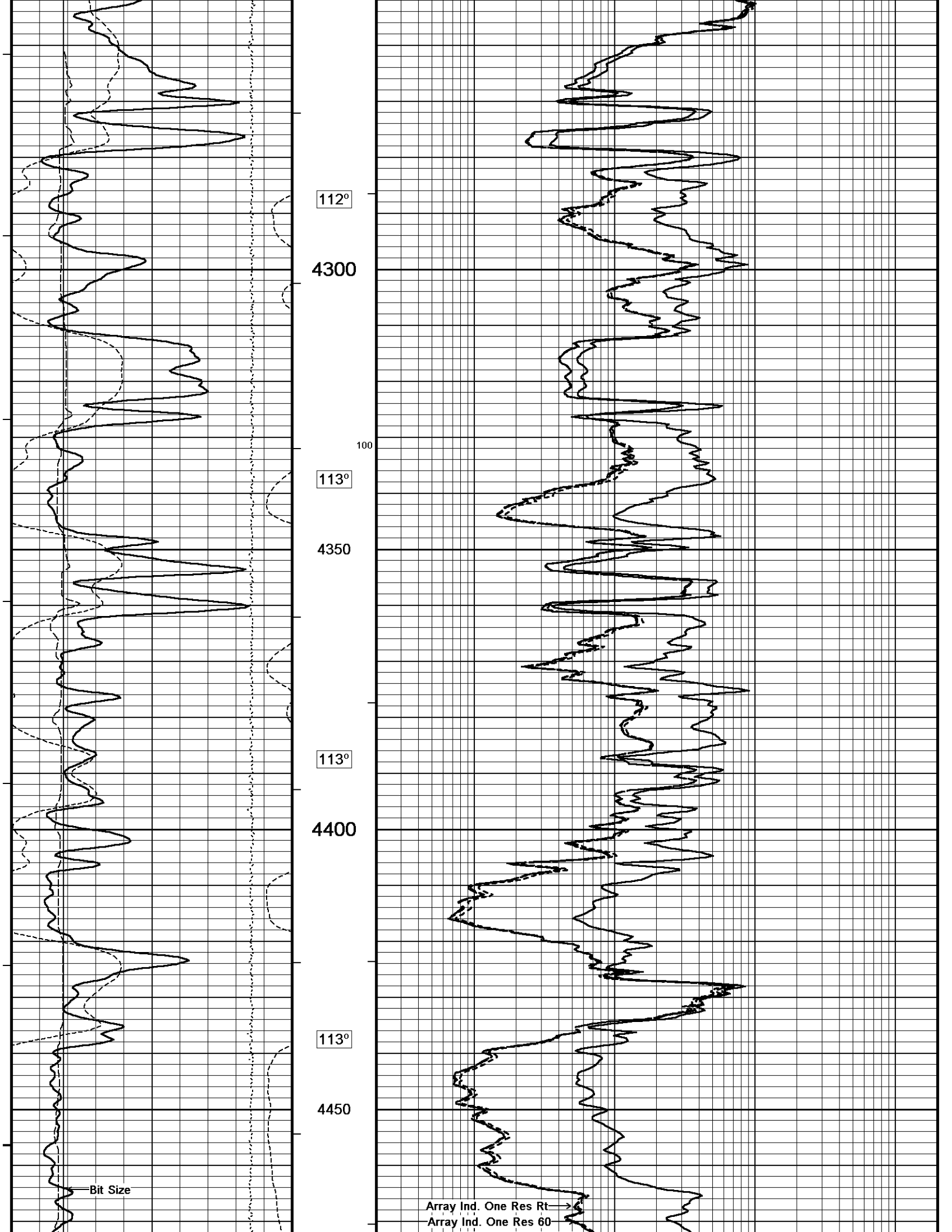
5 INCH MAIN

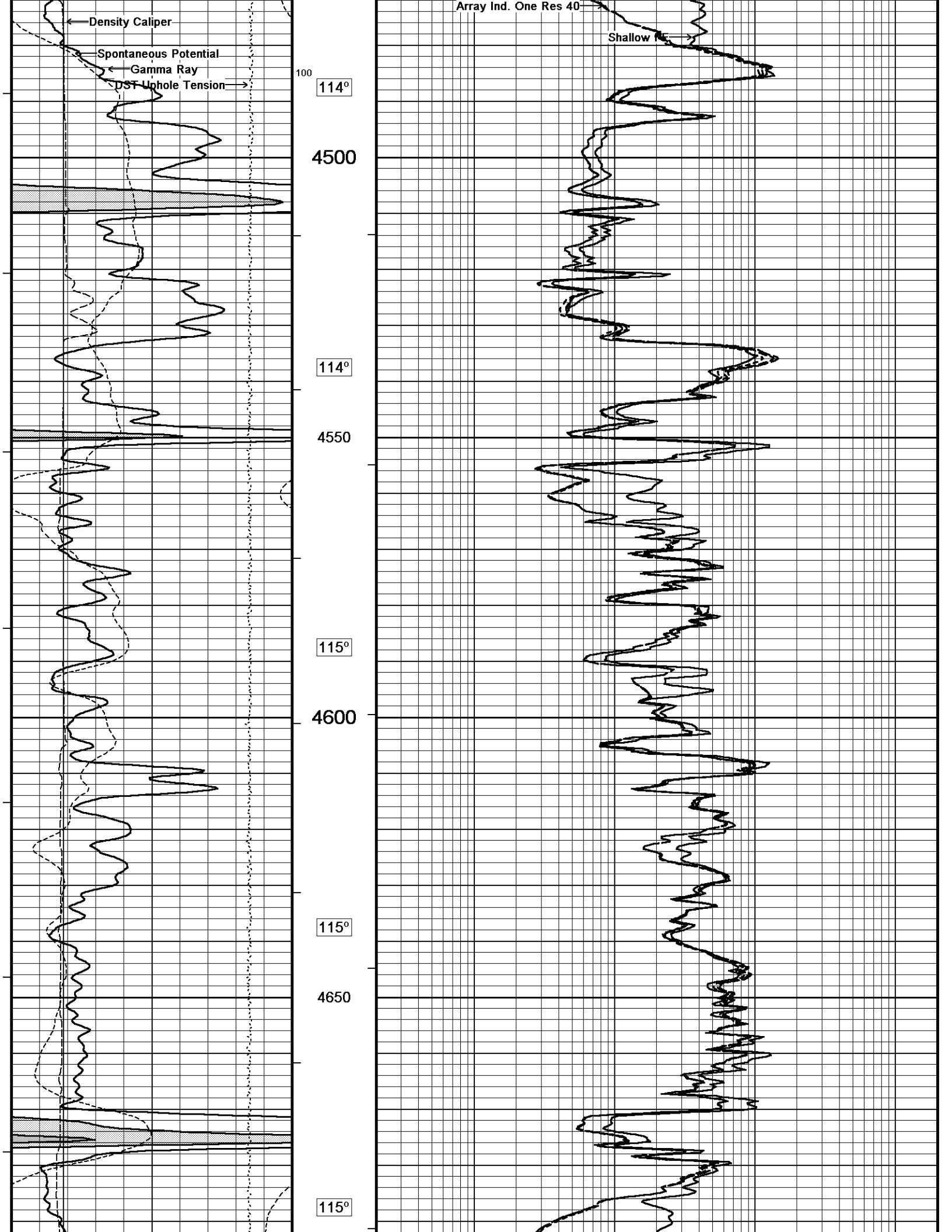
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 24-JUN-2012 15:16
Filename: C:\Minimus\Data\McCoy Schmidt A 7-29\Schmidt A 7 29_005.dta
Recorded on 24-JUN-2012 08:44
System Versions: Processed with 11.03.4044 Plotted with 13.02.6600

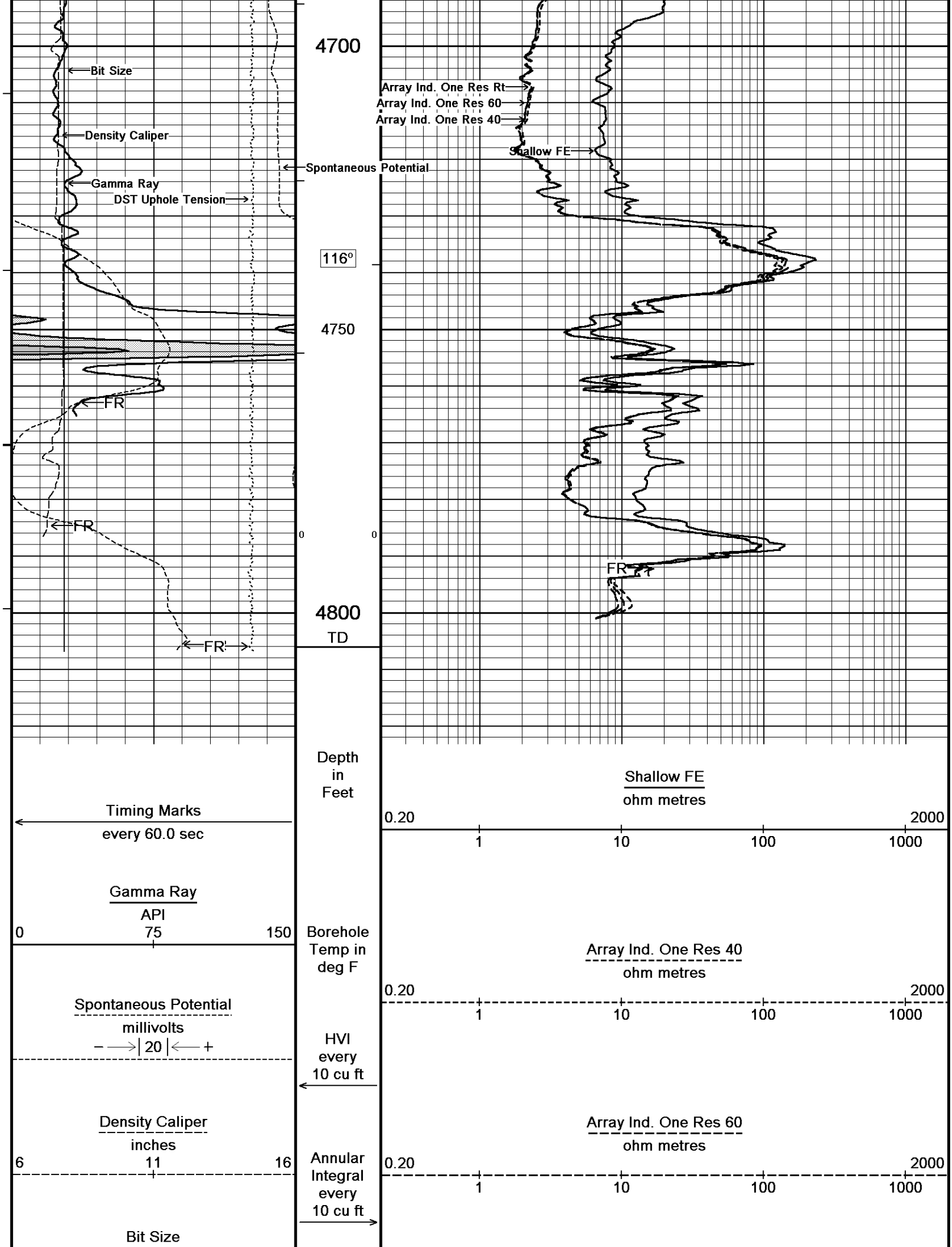



110°
3850
300
200
110°
3900
110°
3950
Bit Size
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Density Caliper
Shallow FE
4000
Potential
Gamma Ray
DST Uphole Tension


111°
4050
111°
4100
111°
4150
200
112°
4200
112°
4250
Bit Size
Density Caliper
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE


112°
4300
100
113°
4350
113°
4400
113°
4450
Bit Size
Array Ind. One Res Rt
Array Ind. One Res 60


Density Caliper
Spontaneous Potential
Gamma Ray
DST Uphole Tension
100
114°
4500
114°
4550
115°
4600
115°
4650
115°
Array Ind. One Res 40
Shallow Res


4700
Bit Size
Density Caliper
Gamma Ray
DST Uphole Tension
Spontaneous Potential
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE
116°
4750
FR
FR
FR
FR
0
0
4800
TD
Depth
in
Feet
Timing Marks
every 60.0 sec
Shallow FE
ohm metres
0.20
2000
1
10
100
1000
Gamma Ray
API
0
75
150
Borehole
Temp in
deg F
Array Ind. One Res 40
ohm metres
0.20
2000
1
10
100
1000
Spontaneous Potential
millivolts
– 20 +
HVI
every
10 cu ft
Density Caliper
inches
6
11
16
Annular
Integral
every
10 cu ft
Array Ind. One Res 60
ohm metres
0.20
2000
1
10
100
1000
Bit Size

inches
6 11 16

DST Uphole Tension
pounds
5000 0

Replay
Scale
1:240

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

Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Minimus\Data\McCoy Schmidt A 7-29\Schmidt A 7 29_005.dta
System Versions: Processed with 11.03.4044 Plotted with 13.02.6600

Plotted on 24-JUN-2012 15:16
Recorded on 24-JUN-2012 08:44

5 INCH MAIN

REPEAT SECTION

Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Minimus\Data\McCoy Schmidt A 7-29\Schmidt A 7 29_003.dta
System Versions: Logged with 11.03.4044 Processed with 11.03.4044 Plotted with 13.02.6600

Plotted on 24-JUN-2012 15:16

Timing Marks
every 60.0 sec

Depth
in
Feet

Shallow FE
ohm metres
0.20 2000
1 10 100 1000

Gamma Ray
API
0 75 150

Borehole
Temp in
deg F

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

Spontaneous Potential
millivolts
− 20 +

HVI
every
10 cu ft

Density Caliper
inches
6 11 16

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

Annular
Integral
every
10 cu ft

Bit Size
inches
6 11 16

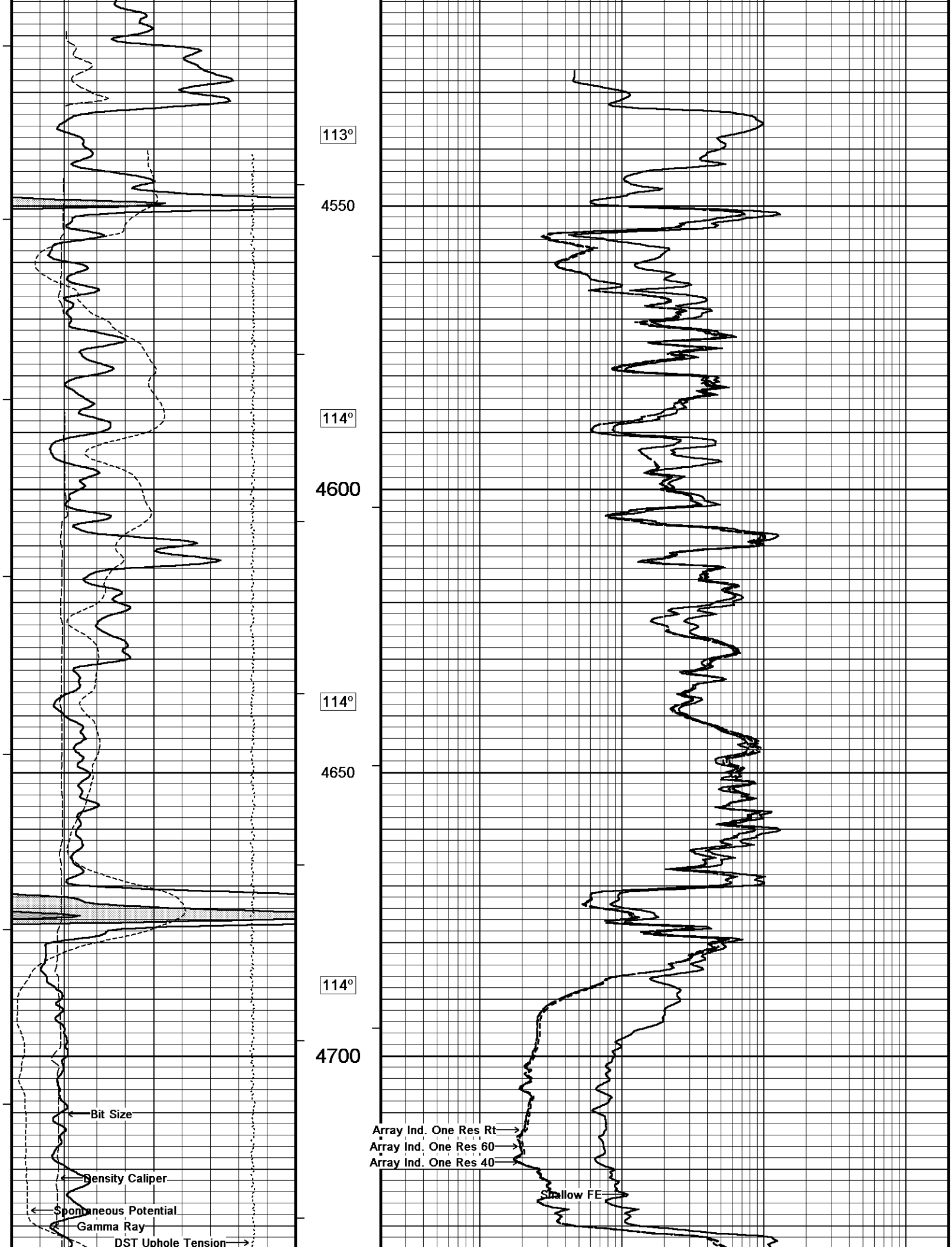
Array Ind. One Res Rt
ohm metres
0.20 2000
1 10 100 1000

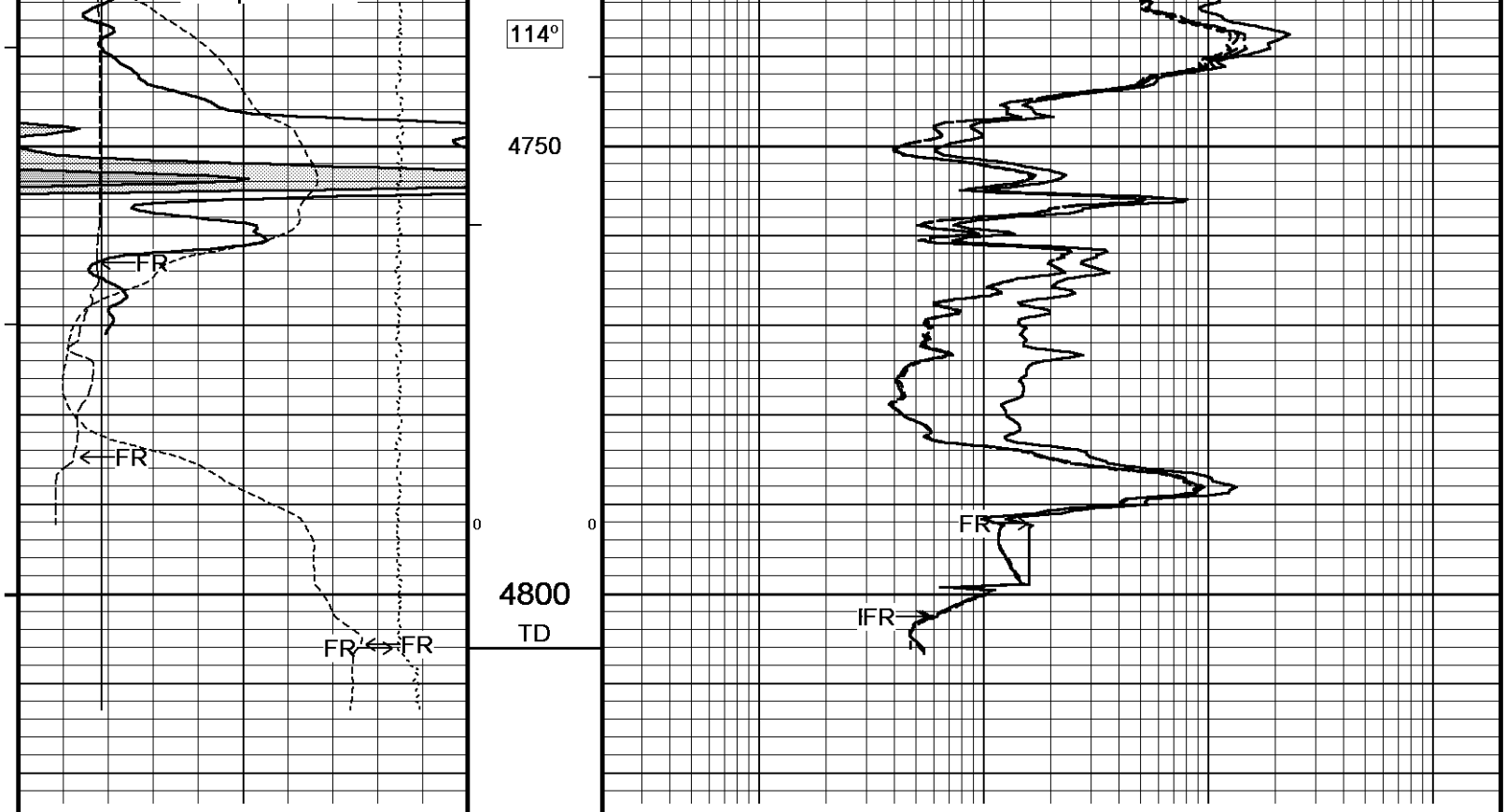
DST Uphole Tension
pounds
5000 0

Replay
Scale
1:240

4490

4500


113°
4550
114°
4600
114°
4650
114°
4700
Bit Size
Density Caliper
Spontaneous Potential
Gamma Ray
DST Uphole Tension
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40
Shallow FE




Depth in Feet

Timing Marks
every 60.0 sec

Gamma Ray
API
0 75 150

Spontaneous Potential
millivolts
– → | 20 | ← +

Density Caliper
inches
6 11 16

Bit Size
inches
6 11 16

DST Uphole Tension
pounds
5000 0

Borehole Temp in deg F

HVI every 10 cu ft

Annular Integral every 10 cu ft

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 24-JUN-2012 15:16
Filename: C:\Minimus\Data\McCoy Schmidt A 7-29\Schmidt A 7 29_003.dta

System Versions: Logged with 11.03.4044 Processed with 11.03.4044 Plotted with 13.02.6600

REPEAT SECTION

## BEFORE SURVEY CALIBRATION

C:\Minimus\Data\McCoy Schmidt A 7-29\Schmidt A 7 29_005.dta

### General Constants All 000

Last Edited on 24-JUN-2012,10:50

| | | |
|---|---|---|
| General Parameters | | |
| Mud Resistivity | 1.180 | ohm-metres |
| Mud Resistivity Temperature | 97.200 | 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 | 4.500 | inches |
| Caliper for Differential Caliper | Density Caliper | |
| Rwa Parameters | | |
| Porosity used | Limestone Density Por. | |
| Resistivity used | Array Ind. One Res Rt | |
| RWA Constant A | 0.610 | |
| RWA Constant M | 2.150 | |

### Down-hole Tension Calibration SMS 0

Field Calibration on 21-JUN-2012 06:37

| Reading No | Measured | 0 |
|---|---|---|
| 1 | 13740.45 | 0.00 |
| 2 | 13781.97 | 403.40 |

### Gamma Calibration MCG-C 84

Field Calibration on 19-JUN-2012 09:17

| | Measured | Calibrated (API) |
|---|---|---|
| Background | 70 | 47 |
| Calibrator (Gross) | 1142 | 772 |
| Calibrator (Net) | 1072 | 725 |

### Gamma Constants MCG-C 84

Last Edited on 24-JUN-2012,07:58

| | | |
|---|---|---|
| Gamma Calibrator Number | GR38 | |
| Mud Density | 1.07 | gm/cc |
| Caliper Source for Processing | Density Caliper | |
| Tool Position | Eccentred | |
| Concentration of KCl | 0.00 | kppm |

### SP Calibration MCG-C 84

Field Calibration on 28-MAY-2012,07:31

| | Measured | Calibrated (mV) |
|---|---|---|
| Reference 1 | 103.5 | 100.0 |
| Reference 2 | -96.9 | -100.0 |

### High Resolution Temperature Calibration MCG-C 84

Field Calibration on 28-MAY-2012,07:32

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

### High Resolution Temperature Constants MCG-C 84

Last Edited on

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

### Caliper Calibration MML-A 16

Base Calibration on 19-JUN-2012 08:49
Field Calibration on 19-JUN-2012 08:50

Base Calibration

| Reading No | Measured | Calibrator Size (in) |
|---|---|---|
| 1 | 14508 | 5.98 |
| 2 | 17799 | 7.97 |
| 3 | 21144 | 9.86 |
| 4 | 25027 | 11.92 |

| | | |
|---|---|---|
| 4 | 25027 | 11.92 |
| 5 | 0 | 0.00 |
| 6 | N/A | N/A |

Field Calibration

| Measured Caliper (in) | Actual Caliper (in) |
|---|---|
| 6.01 | 5.98 |

## Micro Normal and Micro Inverse Calibration MML-A 16

Base Calibration on 19-JUN-2012 08:56
Field Check on 19-JUN-2012 08:58

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 | 15.6 | 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 16

Last Edited on 24-JUN-2012,06:45

| | | |
|---|---|---|
| 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 65

Base Calibration on 23-MAY-2012 14:31
Field Check on 19-JUN-2012 10:25

Base Calibration

| | Measured | | Calibrated (cps) | |
|---|---|---|---|---|
| | Near | Far | Near | Far |
| | 3164 | 98 | 3714 | 110 |
| Ratio | 32.187 | | 33.764 | |

Field Calibrator at Base

| | Calibrated (cps) | |
|---|---|---|
| | 1615 | 2315 |
| Ratio | 0.697 | |

Field Check

| | Calibrated (cps) | |
|---|---|---|
| | 1643 | 2366 |
| Ratio | 0.694 | |

## Neutron Constants MDN-A.B 65

Last Edited on 24-JUN-2012,07:58

| | | |
|---|---|---|
| Neutron Source Id | PN-521 | |
| Neutron Jig Number | 5824NE | |
| Epithermal Neutron | No | |
| Caliper Source for Processing | Density Caliper | |
| Stand-off | 0.00 | inches |
| Mud Density | 1.07 | 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 | 0 | |
| 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 19-JUN-2012 09:07
Field Check on 19-JUN-2012 09:11

Base Calibration

| | Measured | Calibrated (ohm-m) |
|---|---|---|
| Reference 1 | 0.0 | 0.0 |
| Reference 2 | 952.0 | 126.8 |
| Base Check | | 281.3 |

| | |
|---|---|
| Field Check | 281.4 |

## FE Constants MFE-A.A 55

Last Edited on 24-JUN-2012,06:46

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

## Induction Calibration MAI-A.A 45

Base Calibration on 12-JAN-2012,13:34
Field Check on 19-JUN-2012 10:18

Base Calibration

Test Loop Calibration

| Channel | Measured Low | Measured High | Calibrated (mmho/m) Low | Calibrated (mmho/m) 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) Low | Base Check (mmho/m) High | Field Check (mmho/m) Low | Field Check (mmho/m) High |
|---|---|---|---|---|
| 1 | 0.0 | 0.0 | 18.3 | 3851.8 |
| 2 | 0.0 | 0.0 | 31.6 | 3629.7 |
| 3 | 0.0 | 0.0 | 28.6 | 3049.6 |
| 4 | 0.0 | 0.0 | 18.3 | 2079.1 |
| Deep | 0.0 | 0.0 | 16.0 | 1911.0 |
| Medium | 0.0 | 0.0 | 42.5 | 4061.0 |
| Shallow | 0.0 | 0.0 | 49.5 | 5483.9 |
| Array Temperature | 0.0 | | 80.9 | Deg F |

## Induction Constants MAI-A.A 45

Last Edited on 24-JUN-2012,07:59

| | | |
|---|---|---|
| Induction Model | RtAP-WBM | |
| Caliper for Borehole Corr. | Density Caliper | |
| Hole Size for Borehole Correction | N/A | inches |
| Tool Centred | No | |
| Stand-off Type | Fins | |
| Stand-off | 0.50 | inches |
| Number of Fins on Stand-off | 8.0000 | |
| Stand-off Fin Angle | 45.00 | degrees |
| Stand-off Fin Width | 0.5000 | inches |
| Borehole Corr. Rm Source | Temperature Corr | |
| Temp. for Rm Corr. | MCG External Temperature | |
| Squasher Start | 0.0020 | mhos/metre |
| Squasher Offset | N/A | mhos/metre |

Borehole Normalisation

| | | | |
|---|---|---|---|
| DRM1 | 0.0000 | DRC1 | 0.0000 |
| DRM2 | 0.0000 | DRC2 | 0.0000 |
| MRM1 | 0.0000 | MRC1 | 0.0000 |
| MRM2 | 0.0000 | MRC2 | 0.0000 |
| SRM1 | 0.0000 | SRC1 | 0.0000 |
| SRM2 | 0.0000 | SRC2 | 0.0000 |

Calibration Site Corrections

| | | |
|---|---|---|
| Channel 1 | 0.00 | mmhos/metre |
| Channel 2 | 0.00 | mmhos/metre |
| Channel 3 | 0.00 | mmhos/metre |
| Channel 4 | 0.00 | mmhos/metre |

Apparent Porosity and Water Saturation Constants

| | | |
|---|---|---|
| Archie Constant (A) | 1.00 | |
| Cementation Exponent (M) | 2.00 | |
| Saturation Exponent (N) | 2.00 | |
| Saturation of Water for Apor | 100.00 | percent |
| Resistivity of Water for Apor and Sw | 0.05 | ohm-m |

| | | |
|---|---|---|
| Resistivity of Water for Xpor 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 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 |

## Caliper Calibration MPD-B 31

Base Calibration on 17-JUN-2012 20:26
Field Calibration on 17-JUN-2012 20:27

Base Calibration

| Reading No | Measured | Calibrator Size (in) |
|---|---|---|
| 1 | 17360 | 3.99 |
| 2 | 25891 | 5.98 |
| 3 | 34800 | 7.97 |
| 4 | 43168 | 9.86 |
| 5 | 52528 | 11.92 |
| 6 | N/A | N/A |

Field Calibration

| Measured Caliper (in) | Actual Caliper (in) |
|---|---|
| 6.00 | 5.98 |

## Photo Density Calibration MPD-B 31

Base Calibration on 17-JUN-2012 20:49
Field Check on 17-JUN-2012 21:02

Density Calibration

| Base Calibration | Measured | | Calibrated (sdu) | |
|---|---|---|---|---|
| | Near | Far | Near | Far |
| Reference 1 | 48464 | 24458 | 59556 | 30836 |
| Reference 2 | 19785 | 1991 | 24941 | 2541 |

Field Check at Base

| | |
|---|---|
| 695.5 | 853.6 |

Field Check

| | |
|---|---|
| 696.0 | 855.6 |

PE Calibration

| Base Calibration | Measured | | | Calibrated |
|---|---|---|---|---|
| | WS | WH | Ratio | Ratio |
| Background | 128 | 610 | | |
| Reference 1 | 19401 | 48326 | 0.404 | 0.371 |
| Reference 2 | 5740 | 19688 | 0.294 | 0.272 |

Field Check at Base

| | |
|---|---|
| 128.0 | 610.0 |

Field Check

| | |
|---|---|
| 128.1 | 605.4 |

## Density Constants MPD-B 31

Last Edited on 24-JUN-2012,07:58

| | | |
|---|---|---|
| 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 | 1.07 | 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\Data\McCoy Schmidt A 7-29\Schmidt A 7 29_005.dta

Compact Comms Gamma
MCG-C 84 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in

Compact Micro-log
MML-A 16 LG: 7.97 ft WT: 81.6 lb OD: 2.24 in

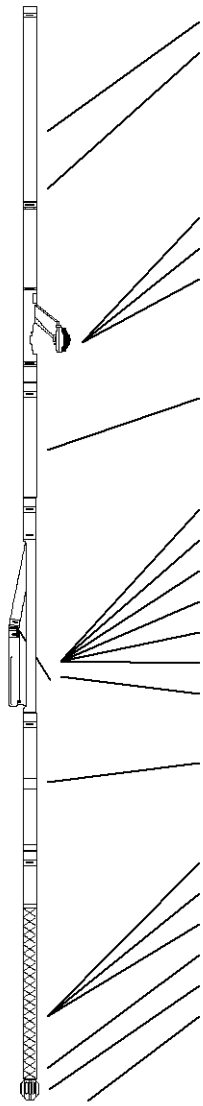
Compact Neutron
MDN-A.B 65 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

Compact Density/Caliper
MPD-B 31 LG: 9.59 ft WT: 90.4 lb OD: 2.45 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 45 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.

| | |
|---|---|
| COMPANY | McCoy Petroleum Corp |
| WELL | Schmidt 'A' #7-29 |
| FIELD | |
| PROVINCE/COUNTY | Haskell |
| COUNTRY/STATE | U.S.A. / Kansas |

| | | | | | |
|---|---|---|---|---|---|
| Elevation Kelly Bushing | 2856.00 | feet | First Reading | 4806.00 | feet |
| Elevation Drill Floor | 2858.00 | feet | Depth Driller | 4805.00 | feet |
| Elevation Ground Level | 2843.00 | feet | Depth Logger | 4806.00 | feet |

ARRAY INDUCTION