Weatherford®

# COMPACT PHOTO DENSITY COMPENSATED NEUTRON LOG

| | |
|---|---|
| COMPANY | MCCOY PETROLEUM CORPORATION |
| WELL | FITZGERALD 'A' #3-30 |
| FIELD | LETTE SE |
| PROVINCE/COUNTY | HASKELL |
| COUNTRY/STATE | U.S.A. / KANSAS |
| LOCATION | 1625' FNL & 1270' FEL |

40 Years of Wireline 1970 2010

| SEC | TWP | RGE | Other Services |
|---|---|---|---|
| 30 | 30S | 31W | MAI/MFE MML |

API Number 15-081-21988
Permit Number

Permanent Datum G.L., Elevation 2845 feet
Log Measured From KB
Drilling Measured From K.B.

| Elevations: | feet |
|---|---|
| KB | 2858.00 |
| DF | 2856.00 |
| GL | 2845.00 |

| | | | | | |
|---|---|---|---|---|---|
| Date | 14-JUN-2012 | | | | |
| Run Number | ONE | | | | |
| Depth Driller | 4810.00 | feet | | | |
| Depth Logger | 4804.00 | feet | | | |
| First Reading | 4784.00 | feet | | | |
| Last Reading | 3800.00 | feet | | | |
| Casing Driller | 1819.00 | feet | | | |
| Casing Logger | 1820.00 | feet | | | |
| Bit Size | 7.875 | inches | | | |
| Hole Fluid Type | FLOWLINE | | | | |
| Density / Viscosity | 9.00 | lb/USg | 44.00 | CP | |
| PH / Fluid Loss | 11.00 | | 8.00 | ml/30Min | |
| Sample Source | FLOWLINE | | | | |
| Rm @ Measured Temp | 0.84 @ 95.0 | ohm-m | | | |
| Rmf @ Measured Temp | 0.67 @ 95.0 | ohm-m | | | |
| Rmc @ Measured Temp | 1.01 @ 95.0 | ohm-m | | | |
| Source Rmf / Rmc | CALC | | CALC | | |
| Rm @ BHT | 0.69 @116.0 | ohm-m | | | |
| Time Since Circulation | 4 HOURS | | | | |
| Max Recorded Temp | 116.00 | deg F | | | |
| Equipment Name | COMPACT | | | | |
| Equipment / Base | 13096 | | LIB | | |
| Recorded By | L. SCOTT | | | | |
| Witnessed By | JERRY SMITH | | | | |
| S.O.# / JOB# | 3534495 | | LB12-149 | | |

## BOREHOLE RECORD

Last Edited: 14-JUN-2012 13:17

| Bit Size inches | Depth From feet | Depth To feet |
|---|---|---|
| 7.875 | 1820.00 | 4804.00 |

## CASING RECORD

| Type | Size inches | Depth From feet | Shoe Depth feet | Weight pounds/ft |
|---|---|---|---|---|
| SURFACE | 8.625 | 0.00 | 1820.00 | 24.00 |

## REMARKS

Tools Run: MAI, MPD, MCG, MDN, MML, MFE
Hardware: MPD: 8 inch profile plate used. MAI and MFE: 0.5 Inch standoffs used. MDN: Dual Eccentraliser used.
2.71 G/CC Limestone density matrix used to calculate porosity.
Borhole rugosity, tight pulls, and washouts will affect data quality.
All intervals logged and scaled per customer's request.
Annular volume with 4.5 inch production casing= 250 cu. ft.
Total hole volume from TD to Surface Casing= 1325 cu. ft.
Service order #3534495
Rig: Sterling #5
Engineer: L. Scott
Operator(s): B. Johnson

# 5 INCH MAIN

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 14-JUN-2012 15:02
Filename: C:\Minimus 11_03_4044\Data\McCoy Petroleum Fitzger...\McCoy Fitzgerald A #3-30_002.dta
Recorded on 14-JUN-2012 13:13
System Versions: Logged with 11.03.4044 Plotted with 11.03.4044

Timing Marks
every 60.0 sec

Gamma Ray
API
0 75 150

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 1:240

Limestone Neutron Por.
percent
30 20 10 0 -10

Limestone Density Por.
percent
30 20 10 0 -10

PE
barns/electron
0 5 10

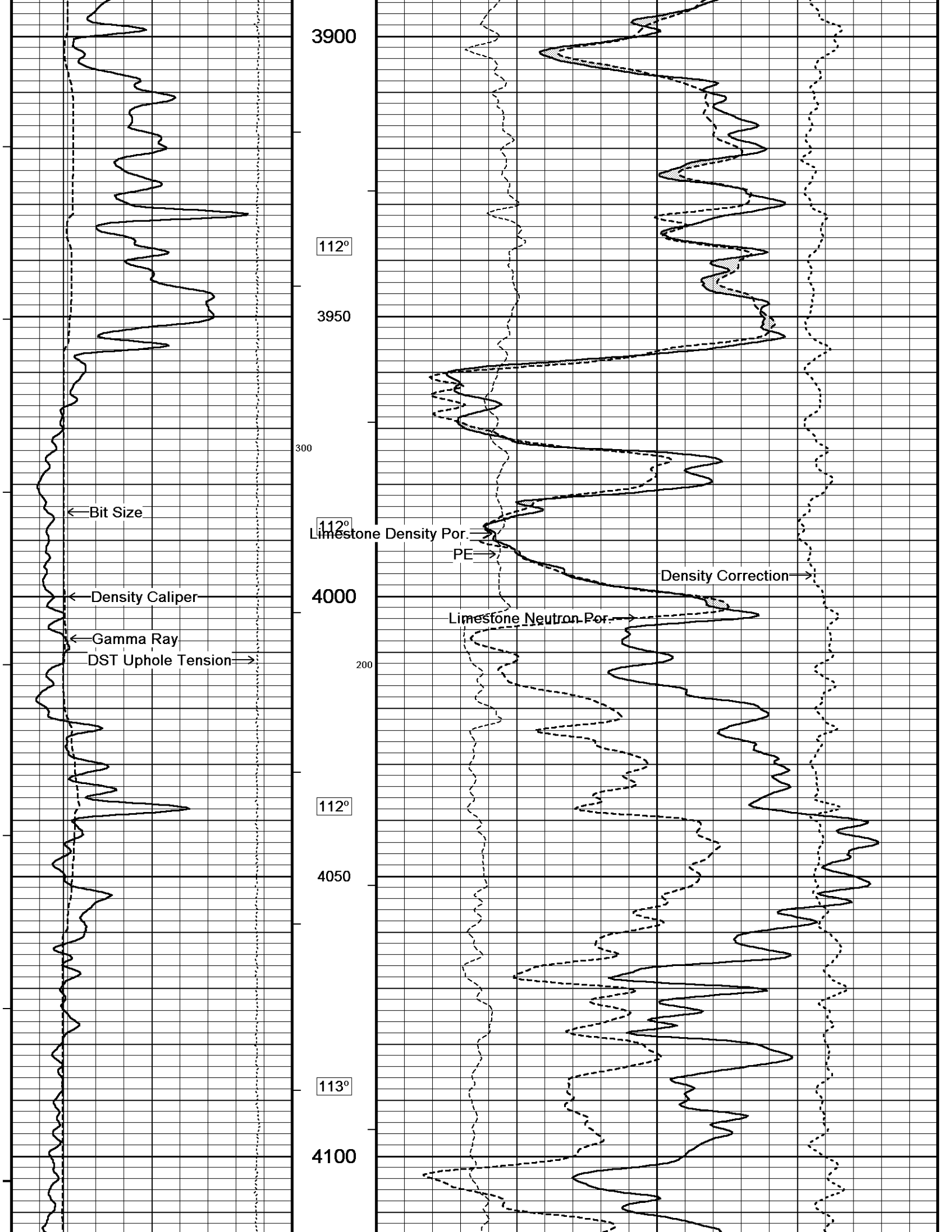
Density Correction
grams/cc
-0.25 0 0.25

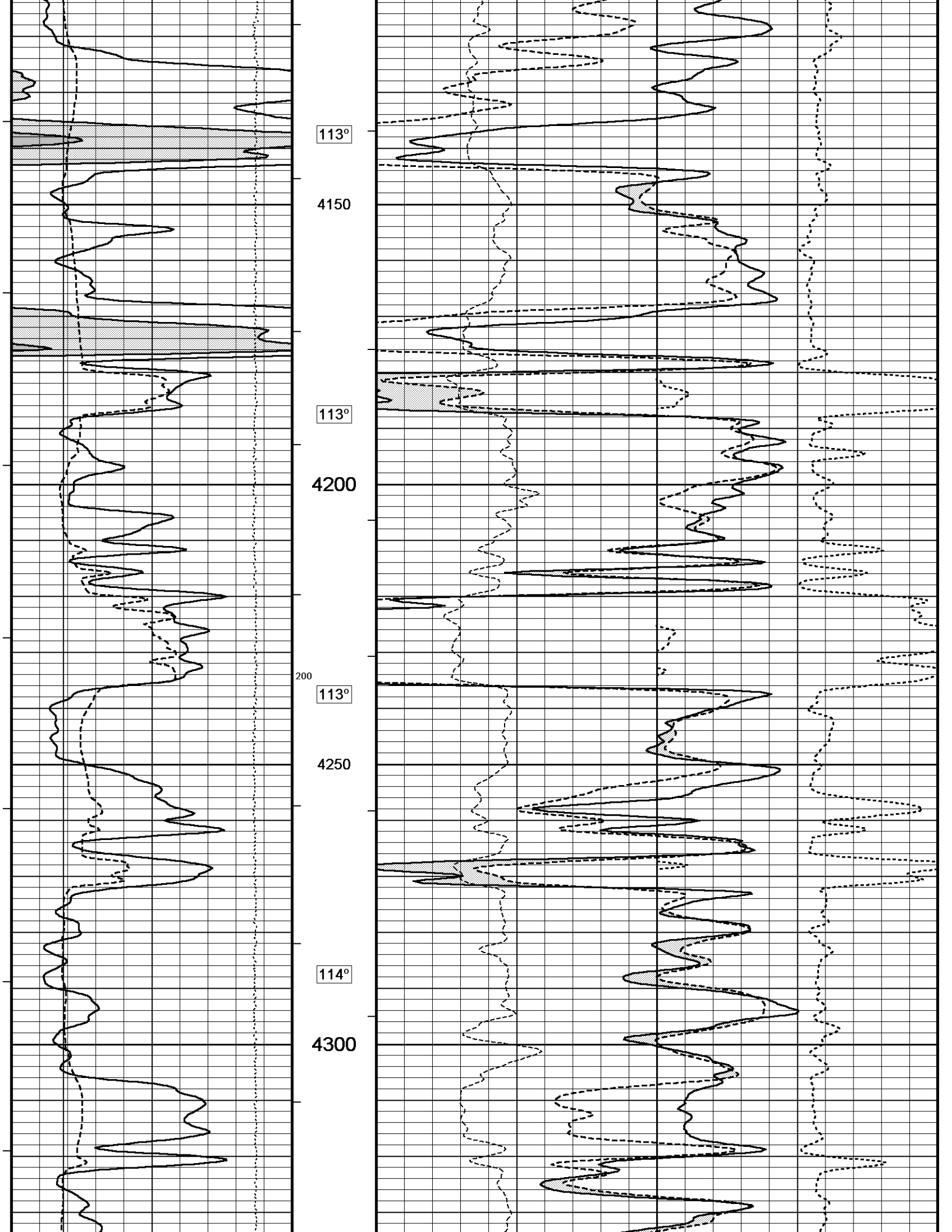
3800

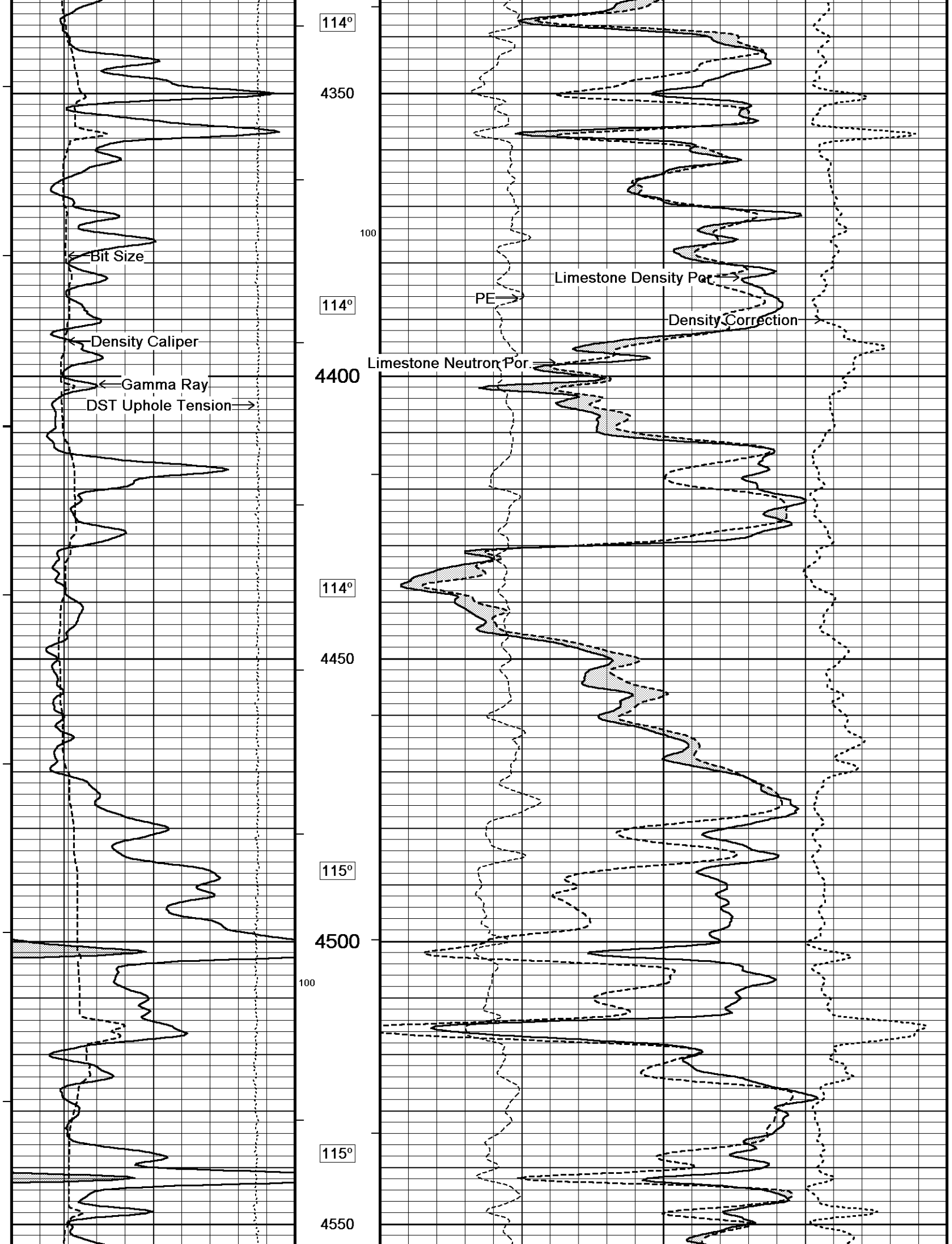
111°

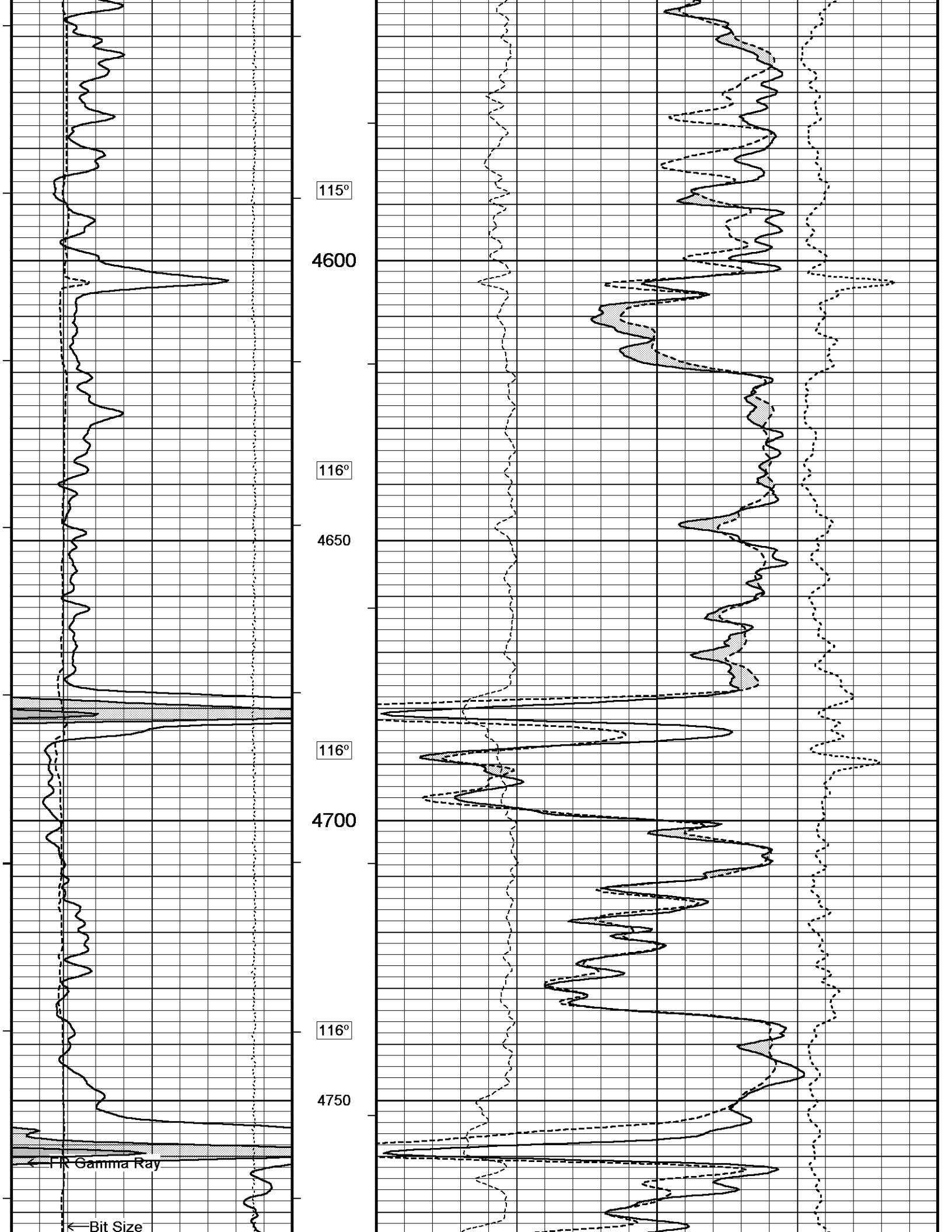
3850

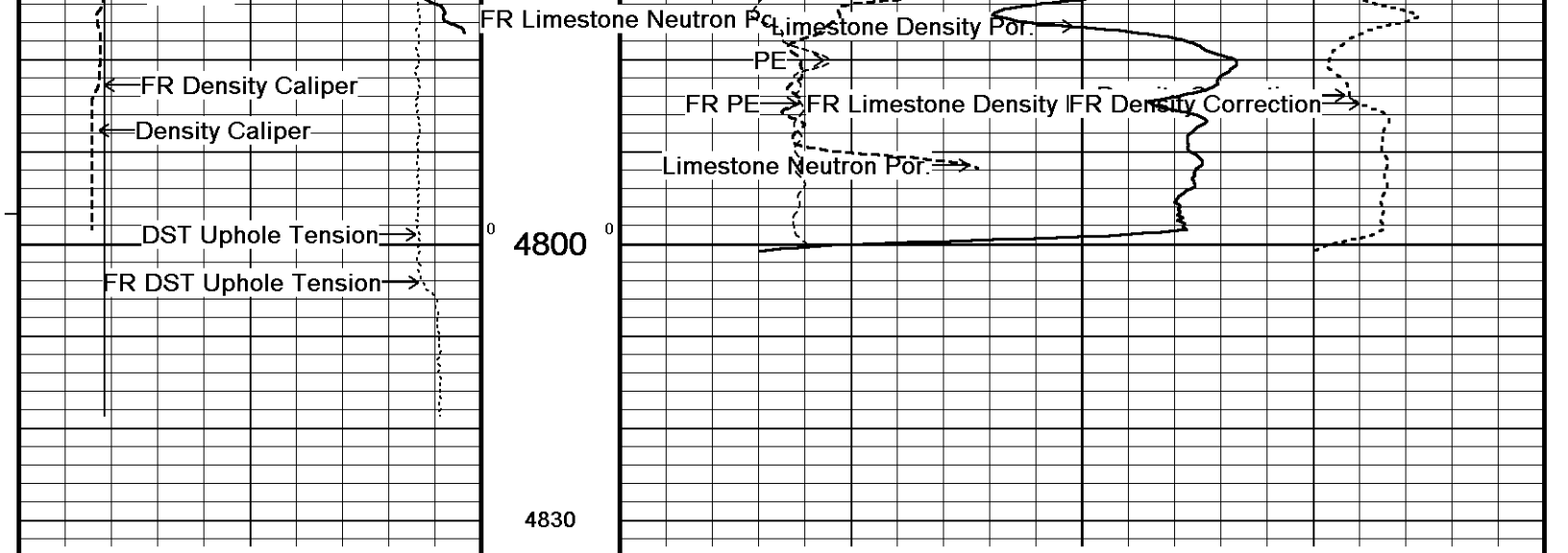
112°


3900
112°
3950
300
Bit Size
112°
Limestone Density Por.
PE
Density Correction
Density Caliper
4000
Limestone Neutron Por.
Gamma Ray
DST Uphole Tension
200
112°
4050
113°
4100


113°
4150
113°
4200
200
113°
4250
114°
4300


114°
4350
100
Bit Size
Limestone Density Por.
PE
114°
Density Correction
Density Caliper
Limestone Neutron Por.
4400
Gamma Ray
DST Uphole Tension
114°
4450
115°
4500
100
115°
4550


115°
4600
116°
4650
116°
4700
116°
4750
← HR Gamma Ray
← Bit Size




4830

Depth in Feet

Timing Marks
every 60.0 sec

Limestone Neutron Por.
percent
30 20 10 0 -10

Gamma Ray
API
0 75 150

Borehole Temp in deg F

Limestone Density Por.
percent
30 20 10 0 -10

Density Caliper
inches
6 11 16

HVI every 10 cu ft

Annular Integral every 10 cu ft

Bit Size
inches
6 11 16

PE
barns/electron
0 5 10

Density Correction
grams/cc
-0.25 0 0.25

DST Uphole Tension
pounds
5000 0

Replay Scale 1:240

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 14-JUN-2012 15:02
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System Versions: Logged with 11.03.4044 Plotted with 11.03.4044

5 INCH MAIN

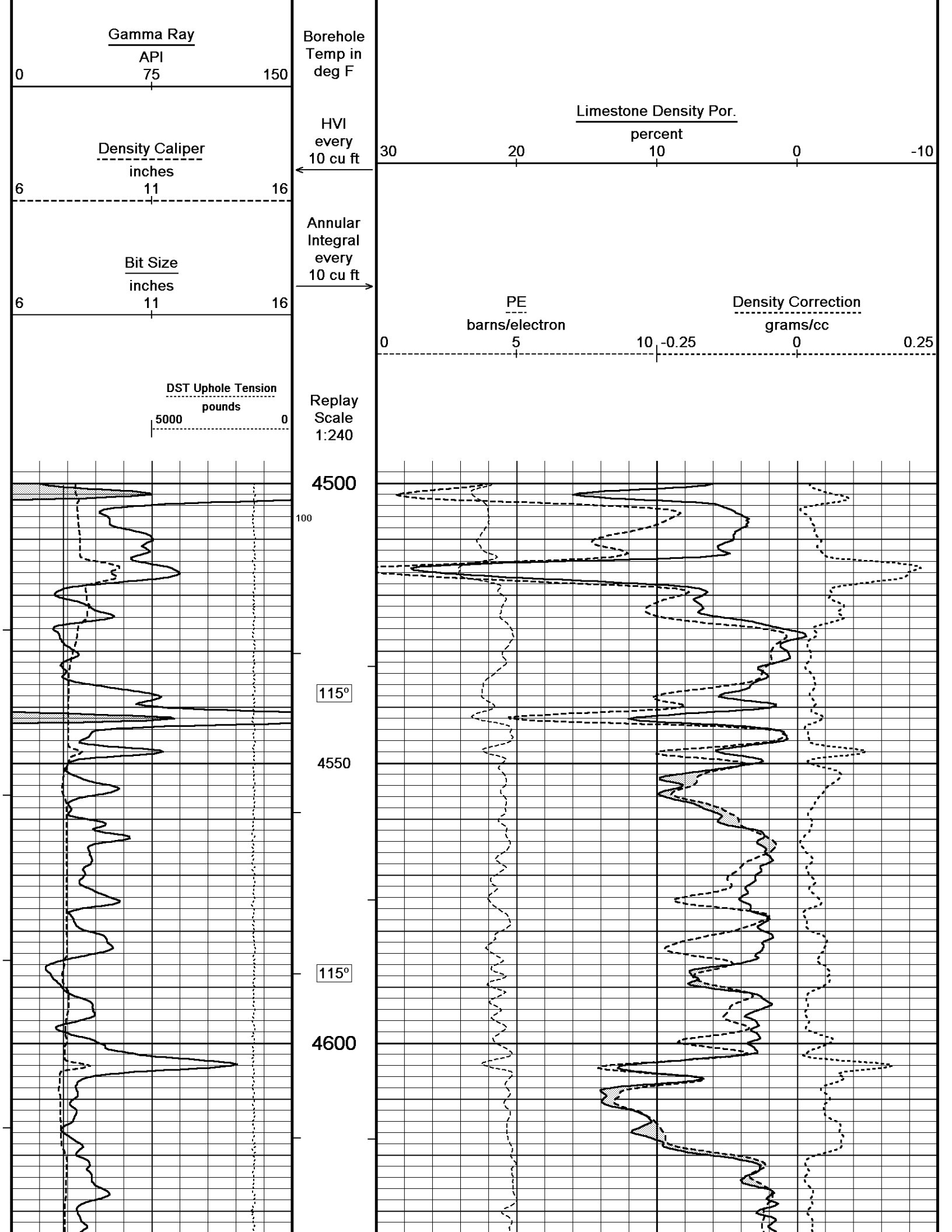
REPEAT SECTION

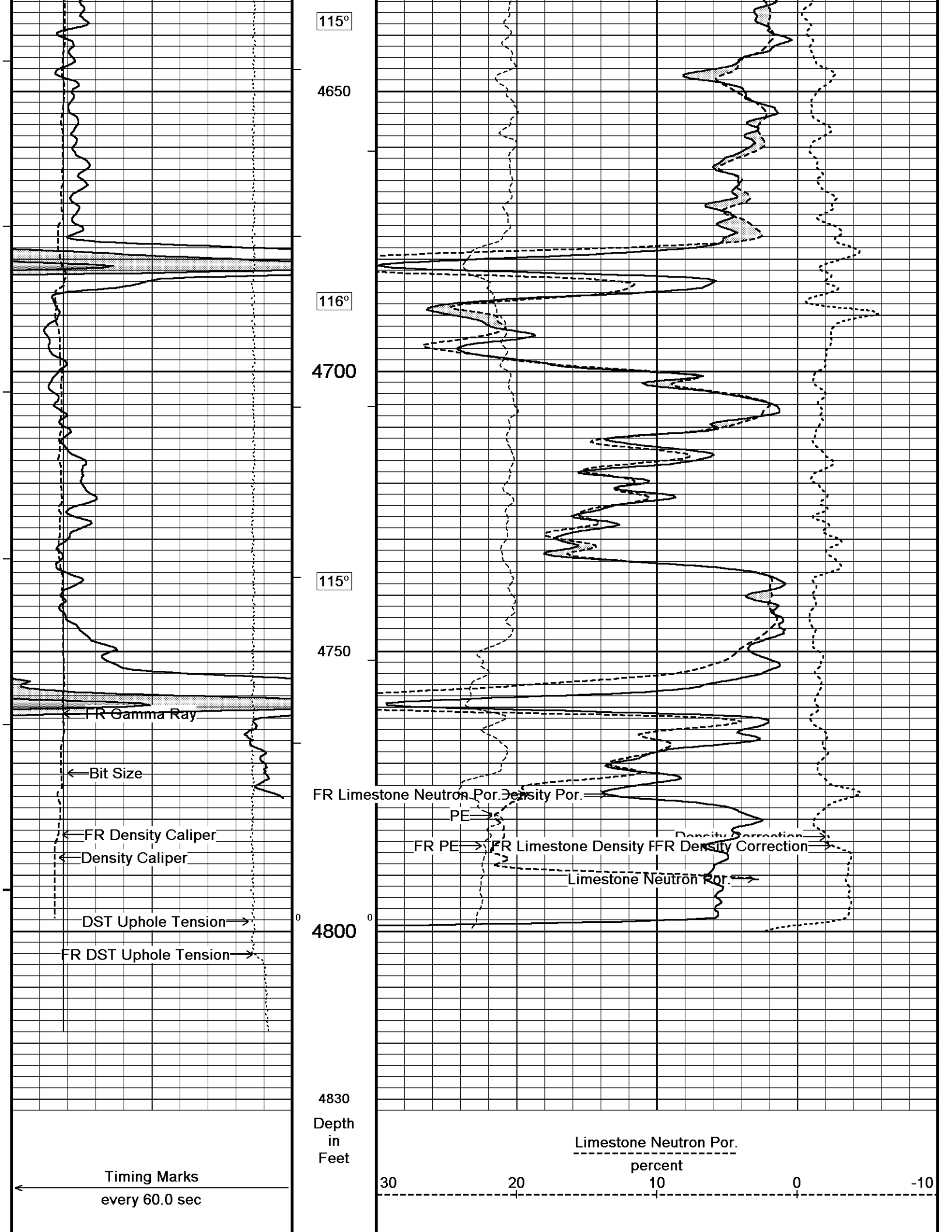
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 14-JUN-2012 15:02
Filename: C:\Minimus 11_03_4044\Data\McCoy Petroleum Fitzger...\McCoy Fitzgerald A #3-30_001.dta — Recorded on 14-JUN-2012 12:54
System Versions: Logged with 11.03.4044 Plotted with 11.03.4044

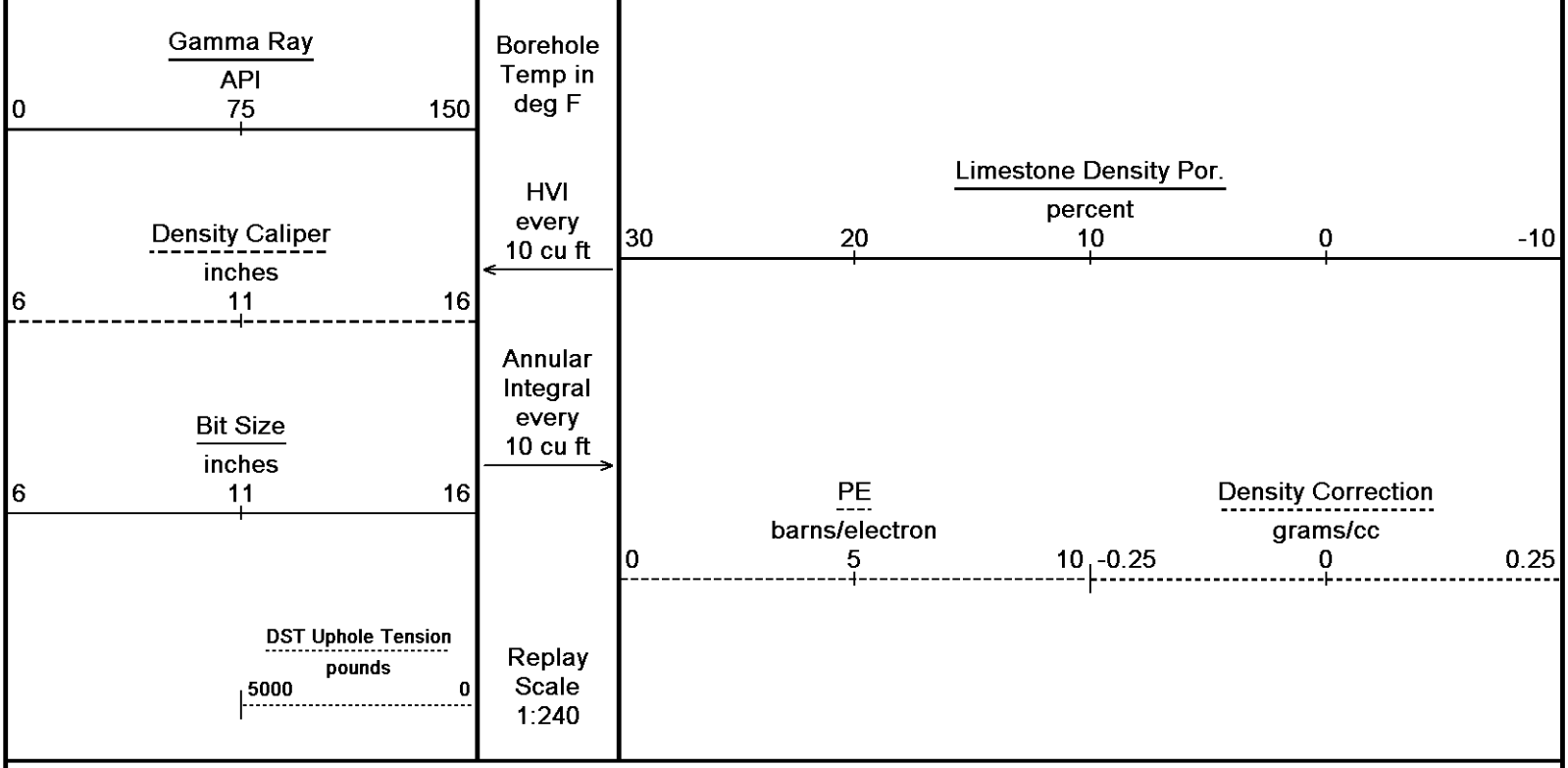
Depth in Feet

Timing Marks
every 60.0 sec

Limestone Neutron Por.
percent
30 20 10 0 -10


Gamma Ray
API
0
75
150
Borehole Temp in deg F
HVI every 10 cu ft
Limestone Density Por.
percent
30
20
10
0
-10
Density Caliper
inches
6
11
16
Annular Integral every 10 cu ft
Bit Size
inches
6
11
16
PE
barns/electron
0
5
10
Density Correction
grams/cc
-0.25
0
0.25
DST Uphole Tension
pounds
5000
0
Replay Scale 1:240
4500
100
115°
4550
115°
4600


115°
4650
116°
4700
115°
4750
4800
4830
FR Gamma Ray
Bit Size
FR Density Caliper
Density Caliper
DST Uphole Tension
FR DST Uphole Tension
0
0
FR Limestone Neutron Por.
Density Por.
PE
FR PE
FR Limestone Density
FR Density Correction
Limestone Neutron Por.
Depth
in
Feet
Timing Marks
every 60.0 sec
Limestone Neutron Por.
percent
30
20
10
0
-10

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REPEAT SECTION

## 5 INCH MAIN

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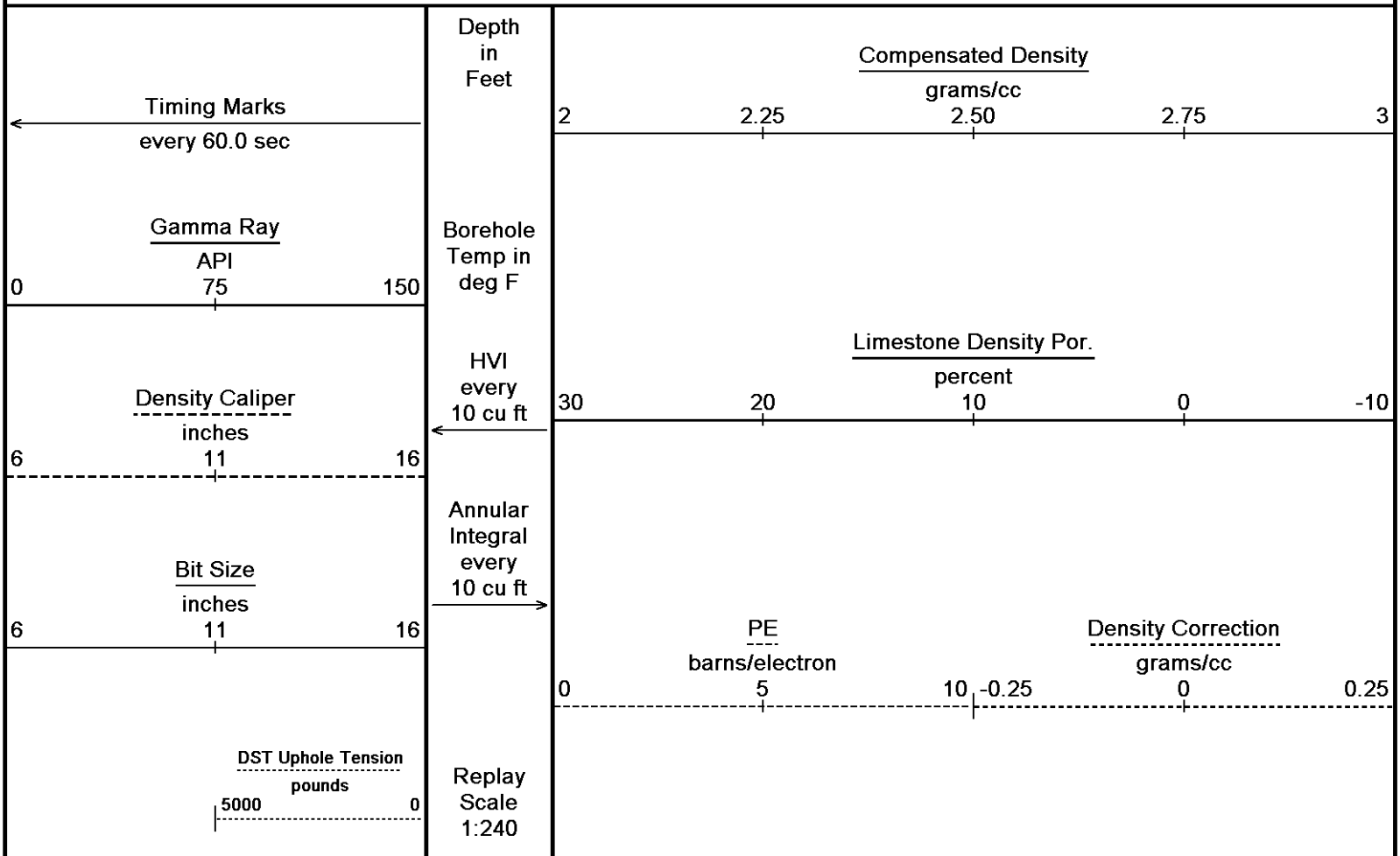
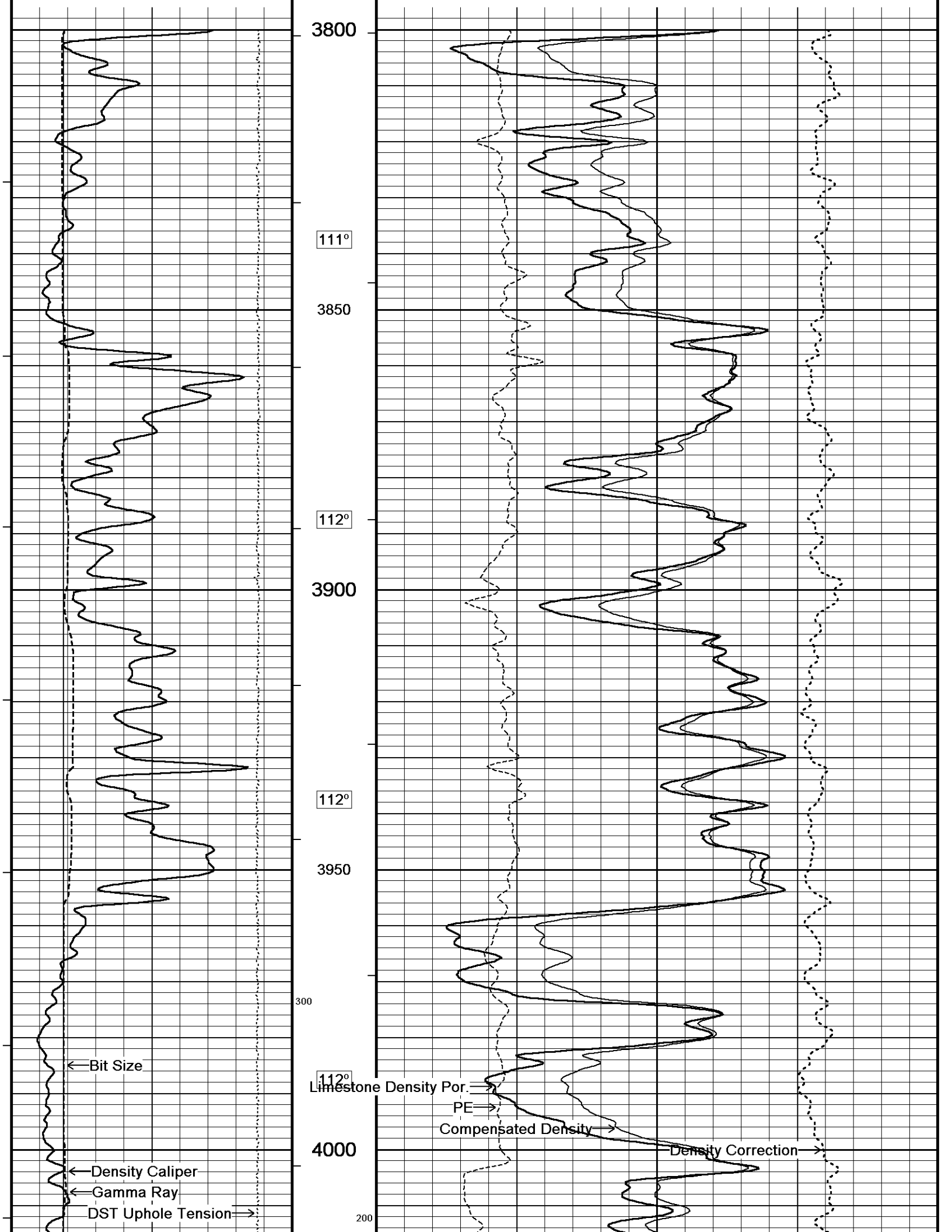
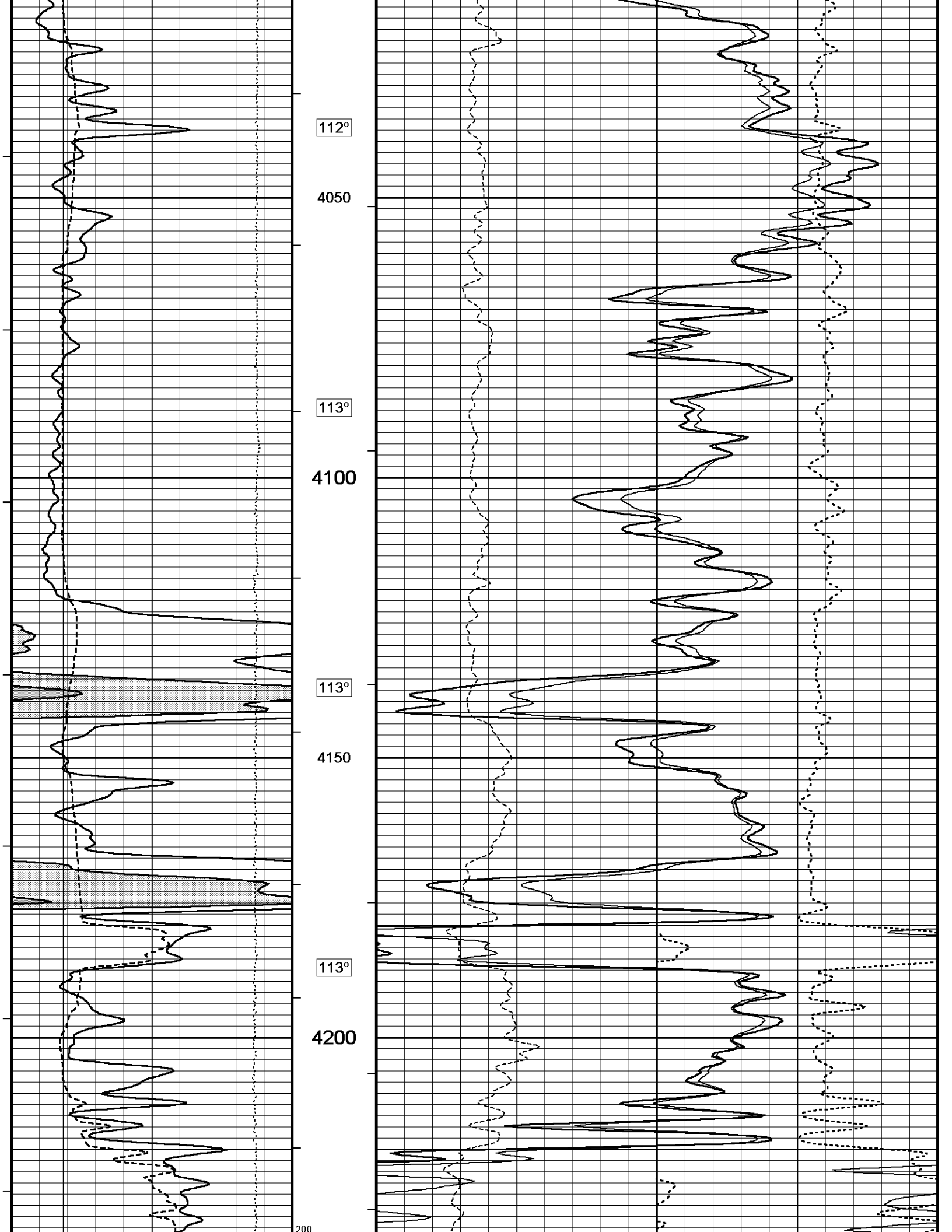
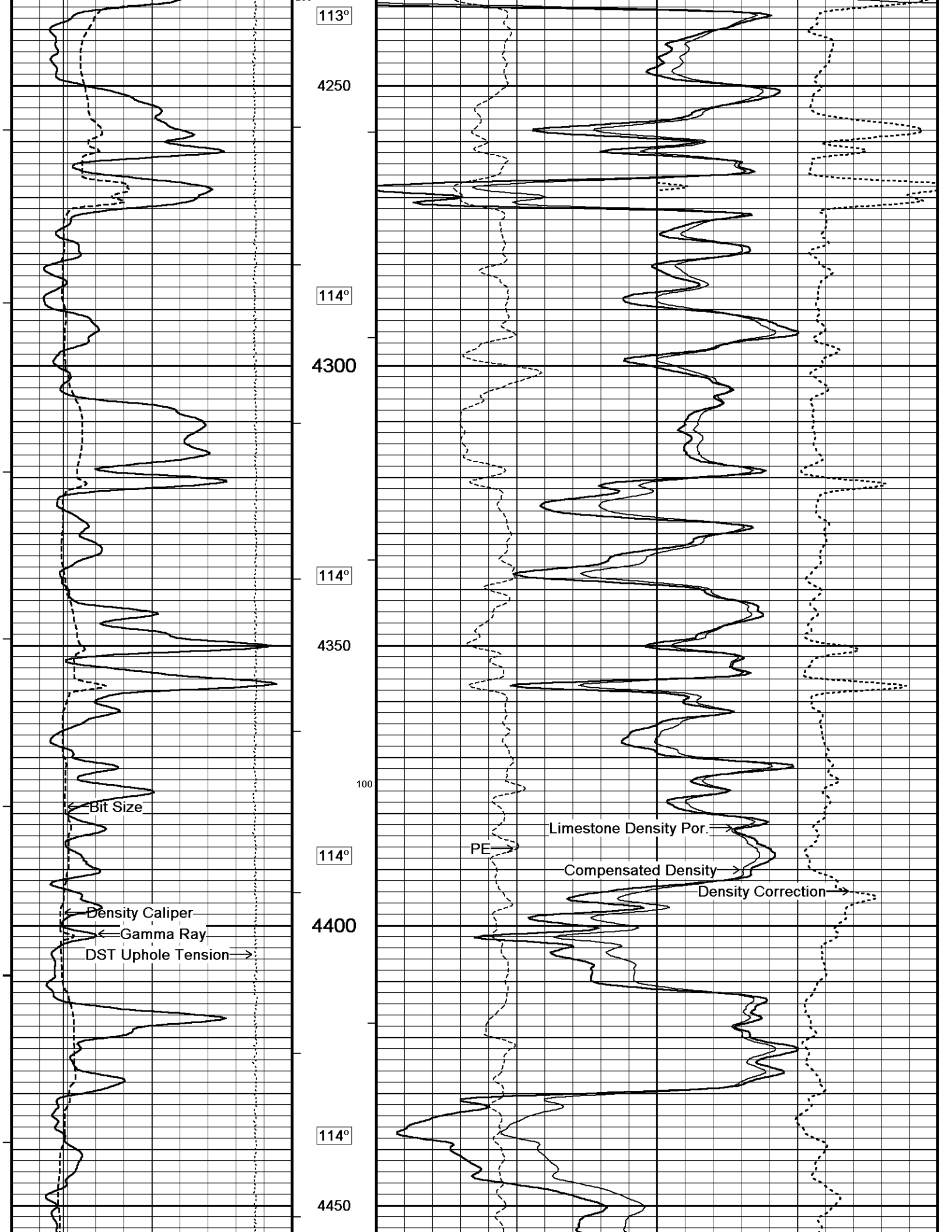
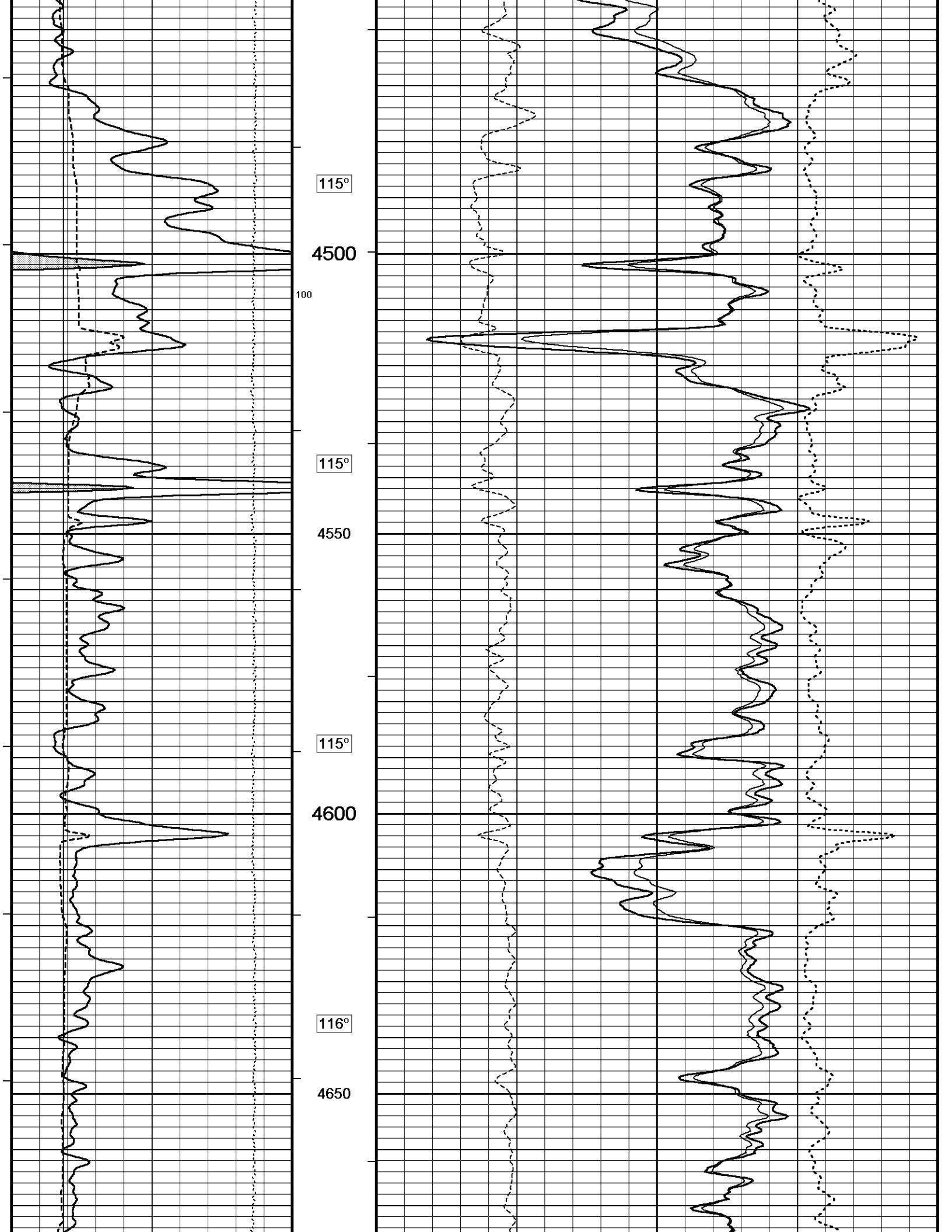
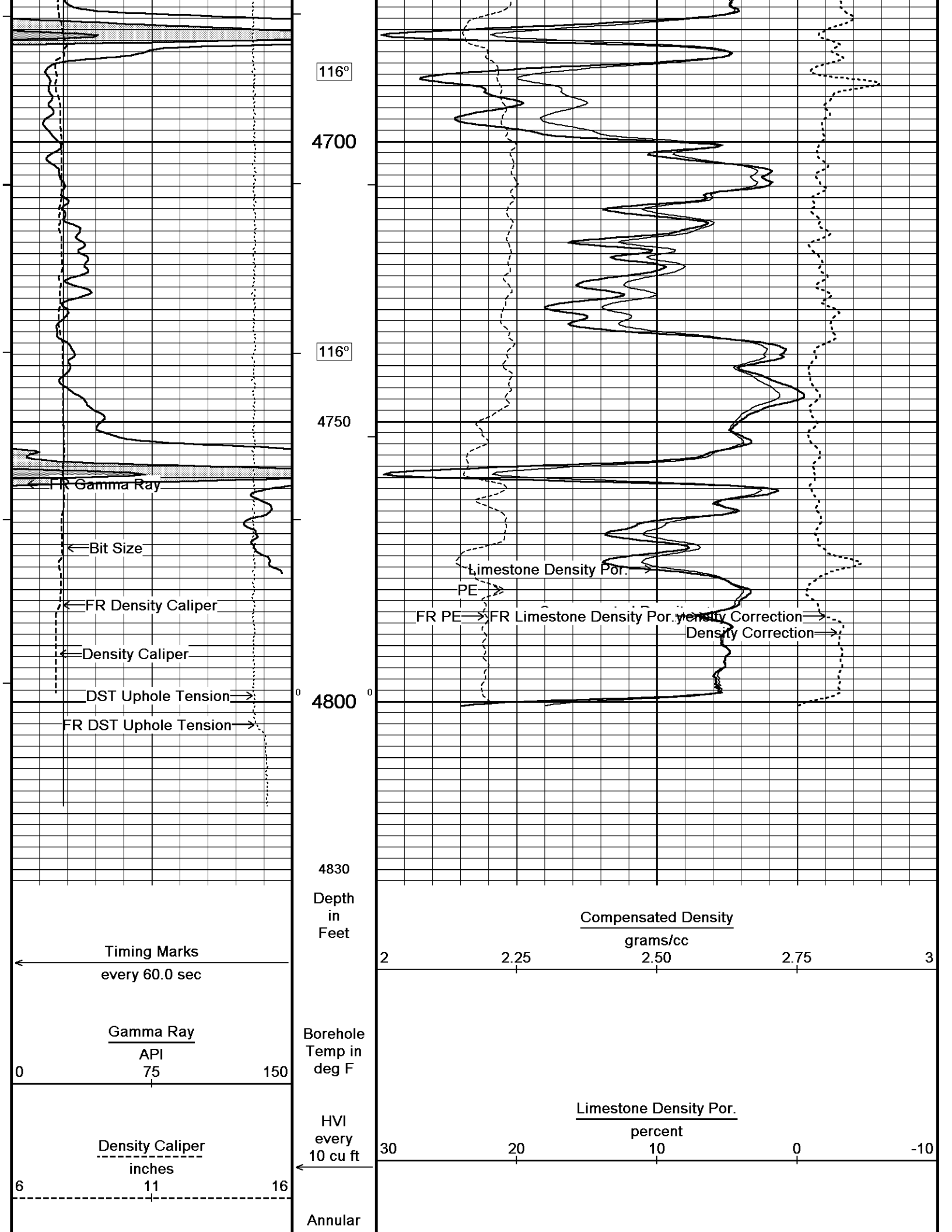


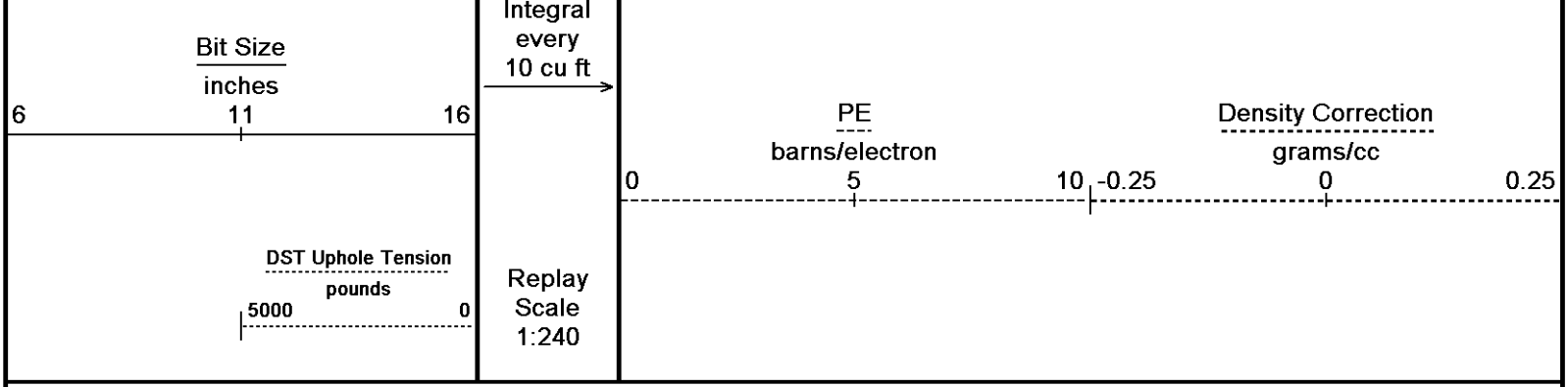

3800
111°
3850
112°
3900
112°
3950
300
112°
4000
200
Bit Size
Density Caliper
Gamma Ray
DST Uphole Tension
Limestone Density Por.
PE
Compensated Density
Density Correction


112°
4050
113°
4100
113°
4150
113°
4200
200


113°
4250
114°
4300
114°
4350
100
114°
4400
114°
4450
Bit Size
Density Caliper
Gamma Ray
DST Uphole Tension
PE
Limestone Density Por.
Compensated Density
Density Correction


115°
4500
100
115°
4550
115°
4600
116°
4650


116°
4700
116°
4750
FR Gamma Ray
Bit Size
FR Density Caliper
Density Caliper
DST Uphole Tension
FR DST Uphole Tension
0
0
4800
Limestone Density Por.
PE
FR PE
FR Limestone Density Por.
Density Correction
Density Correction
4830
Depth in Feet
Timing Marks
every 60.0 sec
Gamma Ray
API
0
75
150
Density Caliper
inches
6
11
16
Borehole Temp in deg F
HVI
every 10 cu ft
Annular
Compensated Density
grams/cc
2
2.25
2.50
2.75
3
Limestone Density Por.
percent
30
20
10
0
-10

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5 INCH MAIN

REPEAT SECTION

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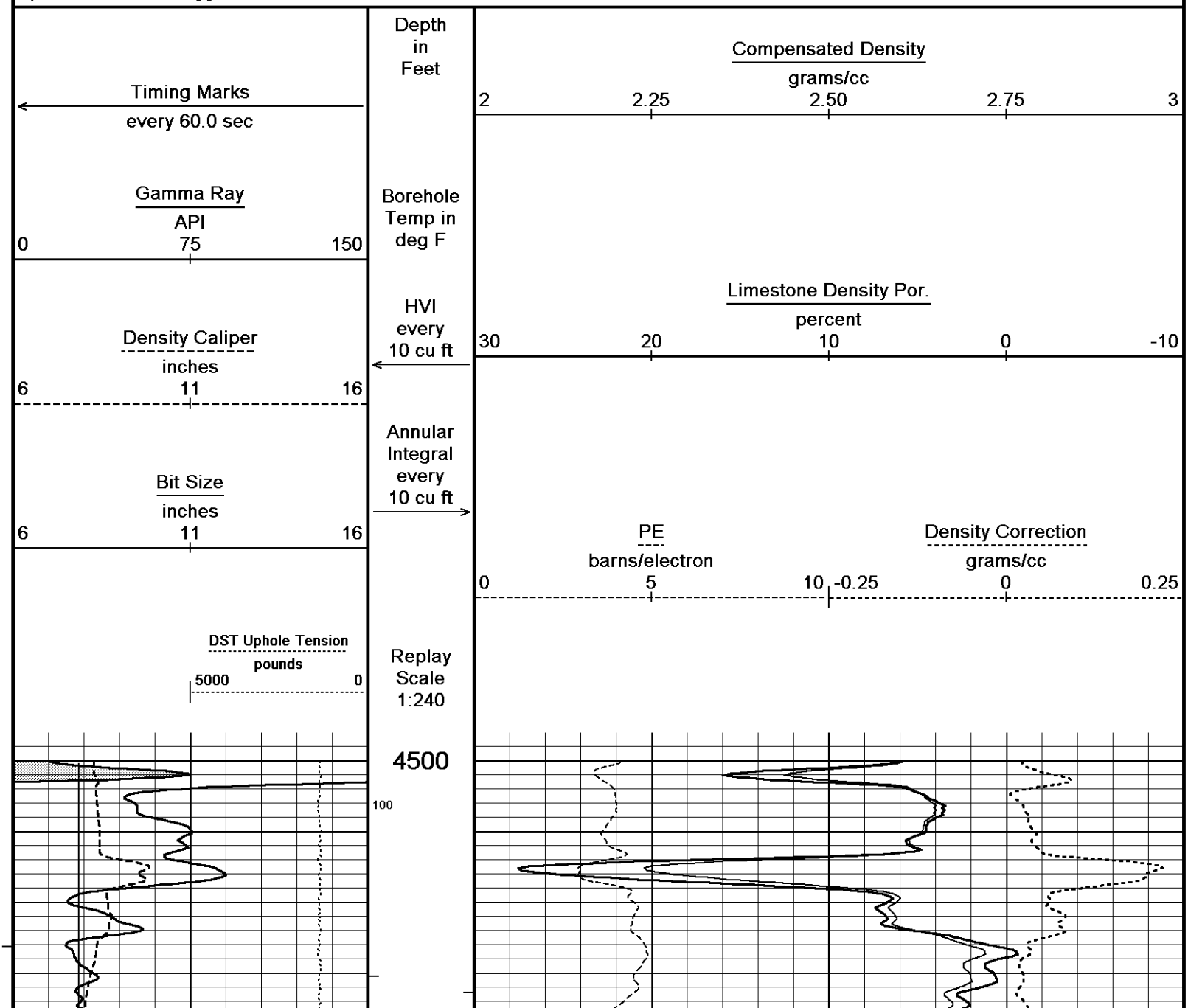
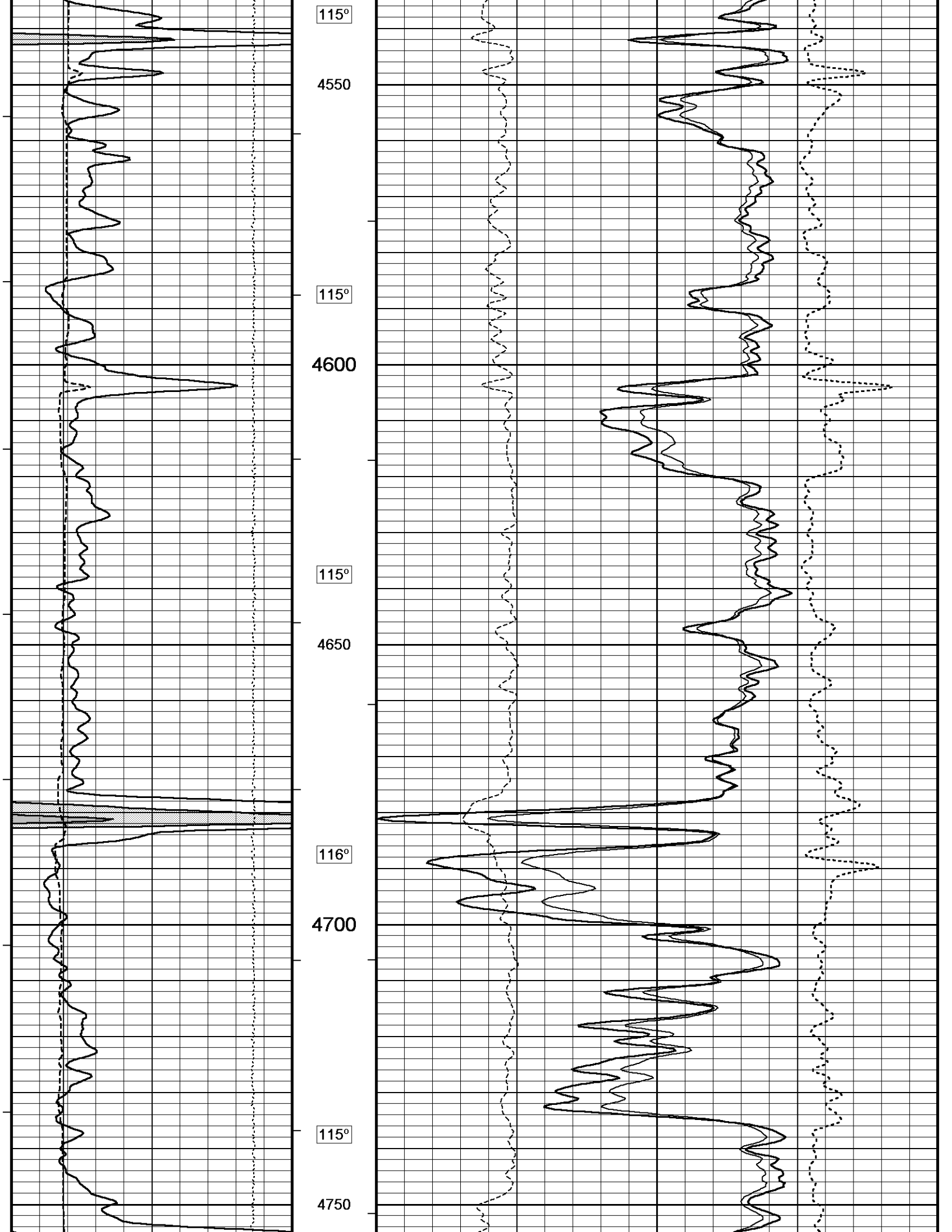
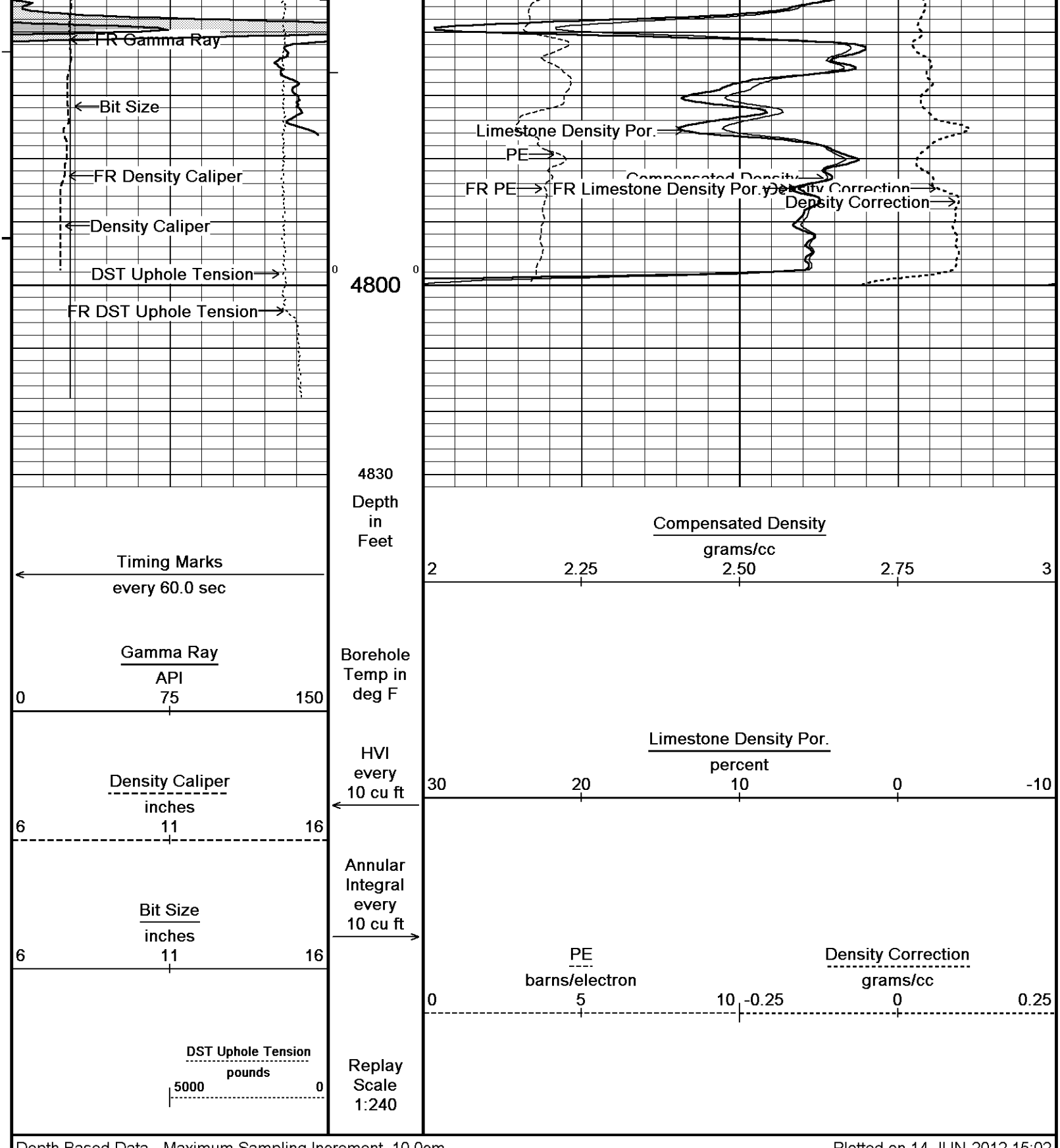



115°
4550
115°
4600
115°
4650
116°
4700
115°
4750

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REPEAT SECTION

## BEFORE SURVEY CALIBRATION

C:\Minimus 11_03_4044\Data\McCoy Petroleum Fitzgerald A #3-30\McCoy Fitzgerald A #3-30.dta

General Constants All 000 — Last Edited on 14-JUN-2012,08:45

General Parameters

| | | |
|---|---|---|
| Mud Resistivity | 0.840 | ohm-metres |
| Mud Resistivity Temperature | 95.000 | 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 | 4.500 | 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 | |

## Down-hole Tension Calibration SMS 0

Field Calibration on 11-JUN-2012 07:01

| Reading No | Measured | Calibrated (lbs) |
|---|---|---|
| 1 | 12381.30 | 0.00 |
| 2 | 13456.91 | 626.10 |

## Gamma Calibration MCG-B 39

Field Calibration on 13-JUN-2012 14:11

| | Measured | Calibrated (API) |
|---|---|---|
| Background | 65 | 43 |
| Calibrator (Gross) | 1147 | 768 |
| Calibrator (Net) | 1082 | 725 |

## Gamma Constants MCG-B 39

Last Edited on 14-JUN-2012,08:31

| | | |
|---|---|---|
| Gamma Calibrator Number | GRC038 | |
| Mud Density | 1.08 | gm/cc |
| Caliper Source for Processing | Density Caliper | |
| Tool Position | Eccentred | |
| Concentration of KCl | 0.00 | kppm |

## SP Calibration MCG-B 39

Field Calibration on 24-MAY-2012 10:26

| | Measured | Calibrated (mV) |
|---|---|---|
| Reference 1 | 103.4 | 100.0 |
| Reference 2 | -97.4 | -100.0 |

## High Resolution Temperature Calibration MCG-B 39

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

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

## High Resolution Temperature Constants MCG-B 39

Last Edited on

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

## Caliper Calibration MML-A 4

Base Calibration on 15-MAY-2012 17:25
Field Calibration on 13-JUN-2012 14:02

Base Calibration

| Reading No | Measured | Calibrator Size (in) |
|---|---|---|
| 1 | 15117 | 5.98 |
| 2 | 18514 | 7.97 |
| 3 | 21781 | 9.86 |
| 4 | 25834 | 11.92 |
| 5 | 0 | 0.00 |
| 6 | N/A | N/A |

Field Calibration

| Measured Caliper (in) | Actual Caliper (in) |
|---|---|
| 6.15 | 5.98 |

## Micro Normal and Micro Inverse Calibration MML-A 4

Base Calibration on 15-MAY-2012 17:31
Field Check on 13-JUN-2012 14:00

Base Calibration

| Channel | Measured Resistor 1 | Measured Resistor 2 | Calibrated (ohm-m) Resistor 1 | Calibrated (ohm-m) Resistor 2 |
|---|---|---|---|---|
| Micro Normal | 12.2 | 60.3 | 5.0 | 25.0 |
| Micro Inverse | 15.7 | 78.5 | 5.0 | 25.0 |

| Channel | Base Check (ohm-m) | Field Check (ohm-m) |
|---|---|---|
| Micro Normal | 62.8 | 62.8 |
| Micro Inverse | 48.2 | 48.2 |

## Micro Normal and Micro Inverse Constants MML-A 4

Last Edited on 13-JUN-2012,13:59

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

## Neutron Calibration MDN-B.J 387

Base Calibration on 15-MAY-2012 16:34
Field Check on 13-JUN-2012 14:16

Base Calibration

| | Measured Near | Measured Far | Calibrated (cps) Near | Calibrated (cps) Far |
|---|---|---|---|---|
| | 2995 | 90 | 3714 | 110 |
| Ratio | 33.447 | | 33.764 | |

Field Calibrator at Base

| | Calibrated (cps) | |
|---|---|---|
| | 1667 | 2508 |
| Ratio | 0.664 | |

Field Check

| | Calibrated (cps) | |
|---|---|---|
| | 1673 | 2530 |
| Ratio | 0.661 | |

## Neutron Constants MDN-B.J 387

Last Edited on 14-JUN-2012,08:45

| | | |
|---|---|---|
| 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 |
| Formation Fluid Salinity Source | Constant Value | |
| Formation Fluid Salinity | 0.00 | kppm |
| Barite Mud Correction | Not Applied | |

## FE Calibration MFE-B.J 352

Base Calibration on 15-MAY-2012 17:11
Field Check on 13-JUN-2012 13:57

Base Calibration

| | Measured | Calibrated (ohm-m) |
|---|---|---|
| Reference 1 | 0.0 | 0.0 |
| Reference 2 | 963.4 | 126.8 |
| Base Check | | 281.4 |
| Field Check | | 281.5 |

## FE Constants MFE-B.J 352

Last Edited on 14-JUN-2012,08:45

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

Base Calibration on 15-MAY-2012,14:15
Field Check on 13-JUN-2012 13:55

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 | 13.0 | 3764.4 |
| 2 | 0.0 | 0.0 | 29.9 | 3468.0 |
| 3 | 0.0 | 0.0 | 27.4 | 3014.6 |
| 4 | 0.0 | 0.0 | 18.8 | 2065.2 |
| Deep | 0.0 | 0.0 | 16.0 | 1995.6 |
| Medium | 0.0 | 0.0 | 40.4 | 3955.7 |
| Shallow | 0.0 | 0.0 | 45.8 | 5083.4 |

Array Temperature 0.0 83.6 Deg F

## Induction Constants MAI-A.A 178

Last Edited on 14-JUN-2012,08:46

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

Borehole Normalisation

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

Calibration Site Corrections

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

Apparent Porosity and Water Saturation Constants

| | | |
|---|---|---|
| Archie Constant (A) | 1.00 | |
| Cementation Exponent (M) | 2.00 | |
| Saturation Exponent (N) | 2.00 | |
| Saturation of Water for Apor | 100.00 | percent |
| Resistivity of Water for Apor and Sw | 0.05 | ohm-m |
| Resistivity of Mud Filtrate for Sw | 0.00 | ohm-m |
| Source for Rt | 0.00 | |
| Source for Rxo | 0.00 | |

## High Resolution Temperature Calibration MAI-A.A 178

Field Calibration on 0C4030110004,

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

## High Resolution Temperature Constants MAI-A.A 178

Last Edited on 0C4060522000,

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

## Caliper Calibration MPD-B 35

Base Calibration on 15-MAY-2012 15:38
Field Calibration on 13-JUN-2012 13:58

Base Calibration

| Reading No | Measured | Calibrator Size (in) |
|---|---|---|
| 1 | 21260 | 3.99 |
| 2 | 31424 | 5.98 |
| 3 | 41761 | 7.97 |
| 4 | 51280 | 9.86 |
| 5 | 61536 | 11.92 |
| 6 | N/A | N/A |

Field Calibration

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

## Photo Density Calibration MPD-B 35

Base Calibration on 15-MAY-2012 15:56
Field Check on 13-JUN-2012 14:06

Density Calibration

| Base Calibration | Measured | | Calibrated (sdu) | |
|---|---|---|---|---|
| | Near | Far | Near | Far |
| Reference 1 | 62707 | 32170 | 59556 | 30836 |
| Reference 2 | 26808 | 2860 | 24941 | 2541 |

Field Check at Base

| | |
|---|---|
| 1145.6 | 1360.5 |

Field Check

| | |
|---|---|
| 1144.7 | 1352.6 |

PE Calibration

| Base Calibration | Measured | | | Calibrated |
|---|---|---|---|---|
| | WS | WH | Ratio | Ratio |
| Background | 206 | 1009 | | |
| Reference 1 | 23065 | 62504 | 0.372 | 0.371 |
| Reference 2 | 7038 | 26659 | 0.266 | 0.272 |

Field Check at Base

| | |
|---|---|
| 206.0 | 1009.0 |

Field Check

| | |
|---|---|
| 205.1 | 1008.6 |

## Density Constants MPD-B 35

Last Edited on 14-JUN-2012,08:33

| | | |
|---|---|---|
| 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 | 1.08 | 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 | |

# DOWNHOLE EQUIPMENT

C:\Minimus 11_03_4044\Data\McCoy Petroleum Fitzgerald A #3-30\McCoy Fitzgerald A #3-30.dta

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

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

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

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

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

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

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

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

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

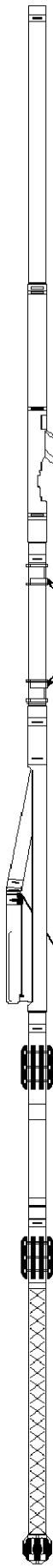
Compact Focussed Electric
MFE-B.J 352 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

Compact 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: 48.16 ft Weight: 383.6 lb

Total Length: 48.16 ft Weight: 383.6 lb



| | |
|---|---|
| 42.87 ft | GRGC - Gamma Ray |
| 42.87 ft | GRGC - Gamma Ray |
| 39.96 ft | CGXT - MCG External Temperature |
| 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 |
| 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. |
| 28.45 ft | NPRL - Limestone Neutron Por. |
| 21.21 ft | HVOL - Hole Volume |
| 21.21 ft | CLDC - Density Caliper |
| 21.21 ft | AVOL - Annular Volume |
| 21.21 ft | HVOL - Hole Volume |
| 21.21 ft | CLDC - Density Caliper |
| 21.21 ft | AVOL - Annular Volume |
| 19.28 ft | DPRL - Limestone Density Por. |
| 19.28 ft | DEN - Compensated Density |
| 19.28 ft | DCOR - Density Correction |
| 19.28 ft | DCOR - Density Correction |
| 19.28 ft | DPRL - Limestone Density Por. |
| 19.28 ft | DEN - Compensated Density |
| 19.22 ft | PDPE - PE |
| 19.22 ft | PDPE - PE |
| 13.72 ft | FEFE - Shallow FE |
| 13.72 ft | FEFE - Shallow FE |
| 3.34 ft | RTAO - Array Ind. One Res Rt |
| 3.34 ft | R60O - Array Ind. One Res 60 |
| 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 |
| 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 | MCCOY PETROLEUM CORPORATION |
| WELL | FITZGERALD 'A' #3-30 |

| | |
|---|---|
| FIELD | LETTE SE |
| PROVINCE/COUNTY | HASKELL |
| COUNTRY/STATE | U.S.A. / KANSAS |

| | | | | | |
|---|---|---|---|---|---|
| Elevation Kelly Bushing | 2858.00 | feet | First Reading | 4784.00 | feet |
| Elevation Drill Floor | 2856.00 | feet | Depth Driller | 4810.00 | feet |
| Elevation Ground Level | 2845.00 | feet | Depth Logger | 4804.00 | feet |

Weatherford®

# COMPACT PHOTO DENSITY COMPENSATED NEUTRON LOG

40 Years of Wireline 1970 2010