PRECISION ENERGY SERVICES

**Compact**

# DLL - SLL - MLL - SONIC
# DENSITY - NEUTRON
## 1:500

| | |
|---|---|
| COMPANY | ORIGIN ENERGY RESOURCES LIMITED |
| WELL | CHILDERS COVE 1 |
| FIELD | ONSHORE OTWAY BASIN |
| PROVINCE/COUNTY | VICTORIA |
| COUNTRY/STATE | AUSTRALIA |
| LOCATION | 38DEG29'31.96"S 142DEG44'46.66"E **FINAL PRINT** |

| LSD | SEC | TWP | RGE | Other Services |
|---|---|---|---|---|
| | | | | |

API Number
Permit Number PEP 154

Permanent Datum GROUND LEVEL, Elevation 46.2 metres
Log Measured From R.T. @ 5.3 METRE above Permanent Datum
Drilling Measured From R.T.

Elevations:
KB 51.50 metres
DF metres
GL 46.20 metres

| | | | | |
|---|---|---|---|---|
| Date | 03-Oct-2005 | | 01-Oct-2005 | |
| Run Number | TWO | | ONE | |
| Depth Driller | 2658.00 | metres | 2545.00 | metres |
| Depth Logger | 2656.80 | metres | 2529.00 | metres |
| First Reading | 2656.80 | metres | 2528.15 | metres |
| Last Reading | 2400.00 | metres | 0.00 | metres |
| Casing Driller | 544.50 | metres | 544.50 | metres |
| Casing Logger | 544.20 | metres | 544.20 | metres |
| Bit Size | 8.50 | inches | 8.50 | inches |
| Hole Fluid Type | KCL/PHPA/POL | | KCL/PHPA/POL | |
| Density / Viscosity | 1.16 g/c3 | 58.00 CP | 1.15 g/c3 | 59.00 CP |
| PH / Fluid Loss | 8.00 | 5.00 | 8.60 | 4.00 |
| Sample Source | FLOWLINE | | FLOWLINE | |
| Rm @ Measured Temp | 0.18 @ 25.0 | ohm-m | 0.65 @ 13.9 | ohm-m |
| Rmf @ Measured Temp | 0.20 @ 25.0 | ohm-m | 1.06 @ 13.9 | ohm-m |
| Rmc @ Measured Temp | 0.13 @ 25.0 | ohm-m | 0.53 @ 14.1 | ohm-m |
| Source Rmf / Rmc | PRESS | FILTER | PRESS | FILTER |
| Rm @ BHT | 0.07 @ 93.5 | ohm-m | 0.09 @ 95.5 | ohm-m |
| Time Since Circulation | 11.8 HOURS | | 18 HOURS | |
| Max Recorded Temp | 93.50 | deg C | 95.50 | deg C |
| Equipment Name | COMPACT | | COMPACT | |
| Equipment / Base | 8 | SALE | 8 | SALE |
| Recorded By | BEN MOSS | | | |
| Witnessed By | JOHN HOBDAY | | | |
| CIRC. STOP | 13:00 3/10 | | 00:00 1/10 | |

## BOREHOLE RECORD

| Bit Size inches | Depth From metres | Depth To metres |
|---|---|---|
| 8.500 | 544.50 | 2658.00 |

## CASING RECORD

| Type | Size inches | Depth From metres | Shoe Depth metres | Weight pounds/ft |
|---|---|---|---|---|
| K-55 | 9.625 | 0.00 | 544.50 | 36.00 |

## REMARKS

1) SOFTWARE ISSUE: JUN 17, 2004.
2) CUSTOMER SCALES AND INTERVALS LOGGED.
3) HFS, MMR, MLE, MUG, MSS, SKJ, MPD,MDN, MCG, MBE RAN IN COMBINATION.
4) HARDWARE: MMR: ONE 25.4MM STANDOFF
MSS: TWO 25.4MM STANDOFF
MUG: ONE 25.4MM STANDOFF
MBE: ONE 25.4MM STANDOFF
5) SERVICE ORDER: 2071
6) RIG:CENTURY 7
PRINTS: 1 FIELD 3 FINALS
7) TOTAL HOLE VOLUME FROM TD TO SURFACE CASING = 79.7 CU.M.
8) TOTAL ANNULAR VOLUME WITH 7 INCH CASING = 27.7 CU.M.
9) SONIC CASING SIGNAL AT 500.5 M.

MAIN LOG 1:500

Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\logs\Origin\Childers Cove 1 Run 2\SUPERCOMBO_COMBINED_MAIN_LOG.dta
System Configuration Dates: Logged : Plotted 17-JUN-2004:

Plotted on 03-NOV-2005 15:40
Recorded on 04-OCT-2005 00:45

Depth in Metres

Timing Marks every 60.0 sec

Borehole Temp in deg C

TR21 1100 100

TR11 1100 100

TR22 1100 100

TR12 1100 100

HVI every 0.1 cu m

Annular Integral every 0.1 cu m

Replay Scale 1:500

Limestone Neutron Por. percent 45 -15

PE barns/electron 0 10

Shallow Laterolog ohm metres 0.20 2000 (1 10 100 1000)

Deep Laterolog ohm metres 0.20 2000 (1 10 100 1000)

Density Correction grams/cc -1.50 0.50

3-5' Compensated Sonic microsec/foot 140 40

Compensated Density grams/cc 1.95 2.95

MicroRes Resistance (S) ohm metres 0.20 2000 (1 10 100 1000)

DST Uphole Tension pounds 0 5000 / 5000 10000

Density Caliper inches 6 16

Spontaneous Potential millivolts 40

MMR Caliper inches 6 16

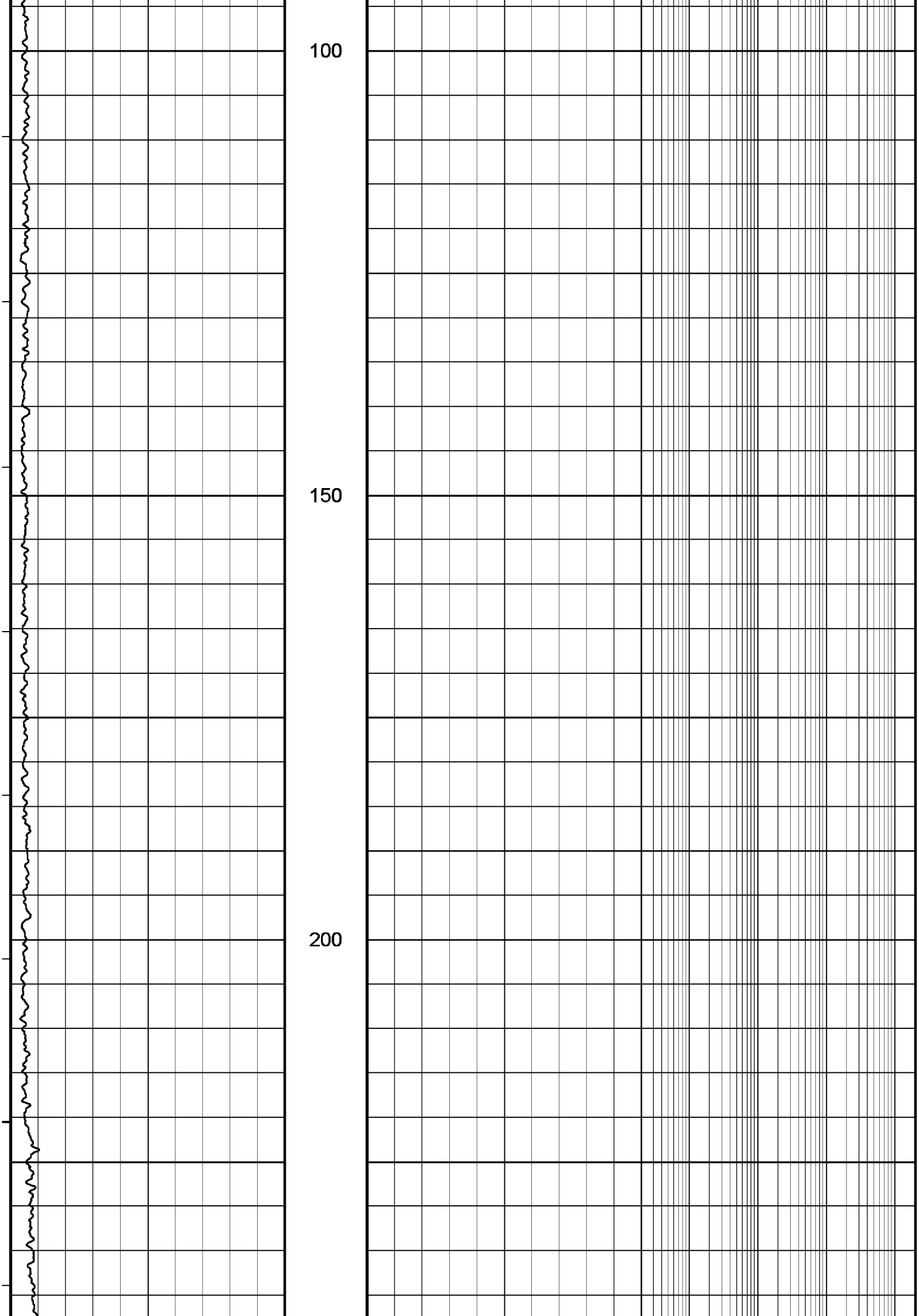
orehole Corrected Gamm API 0 200 / 200 400

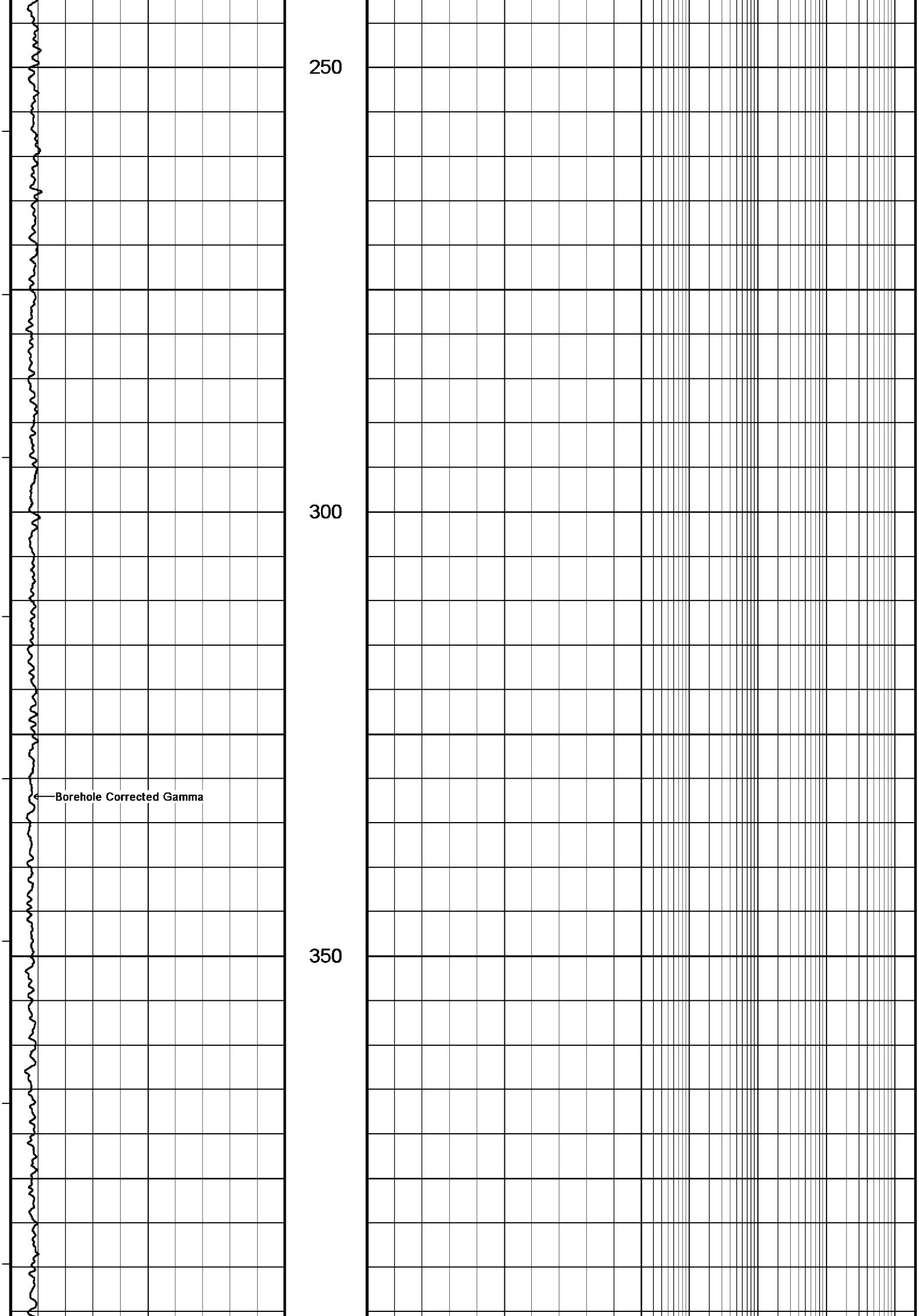
Bit Size inches 6 16

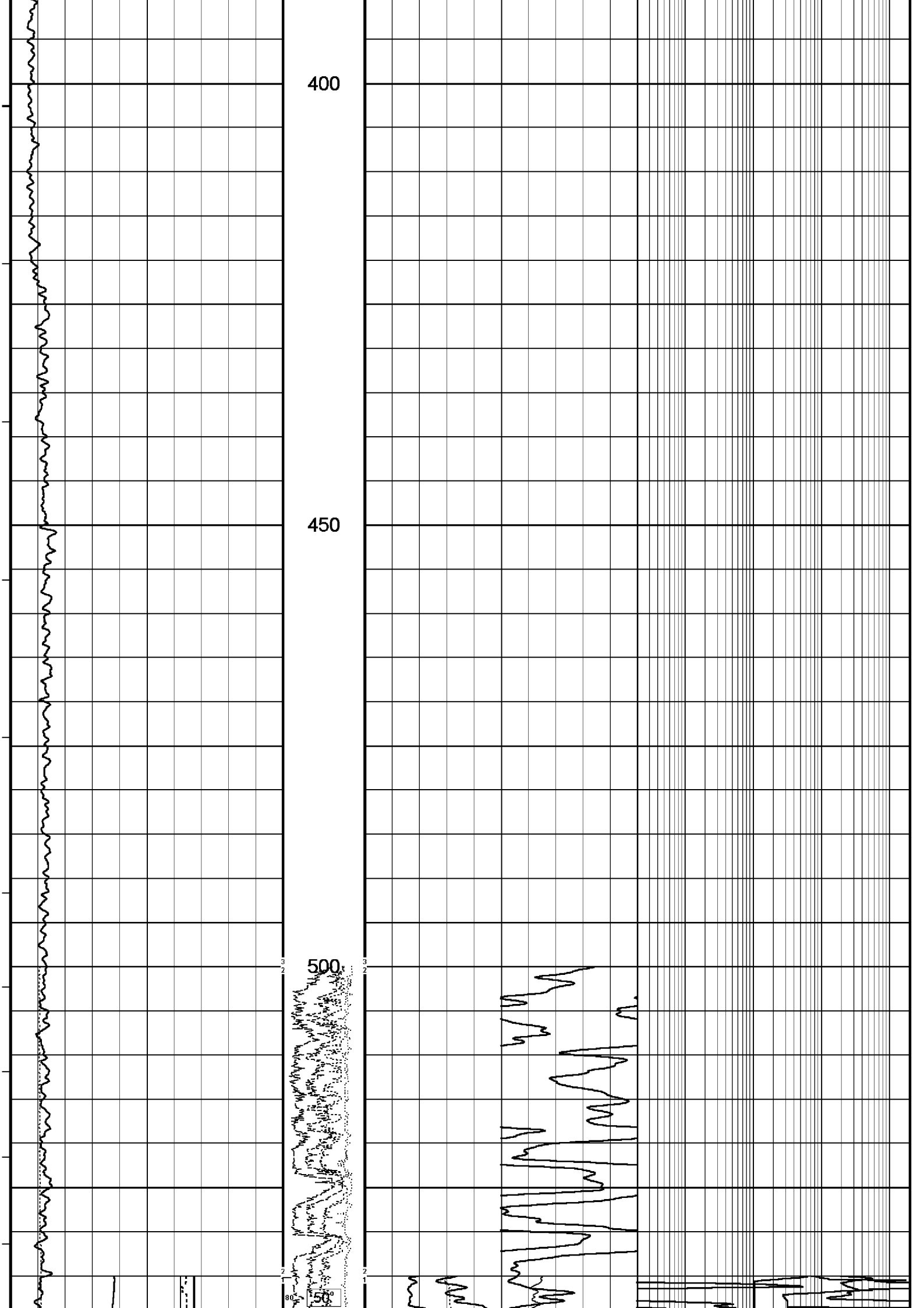
32

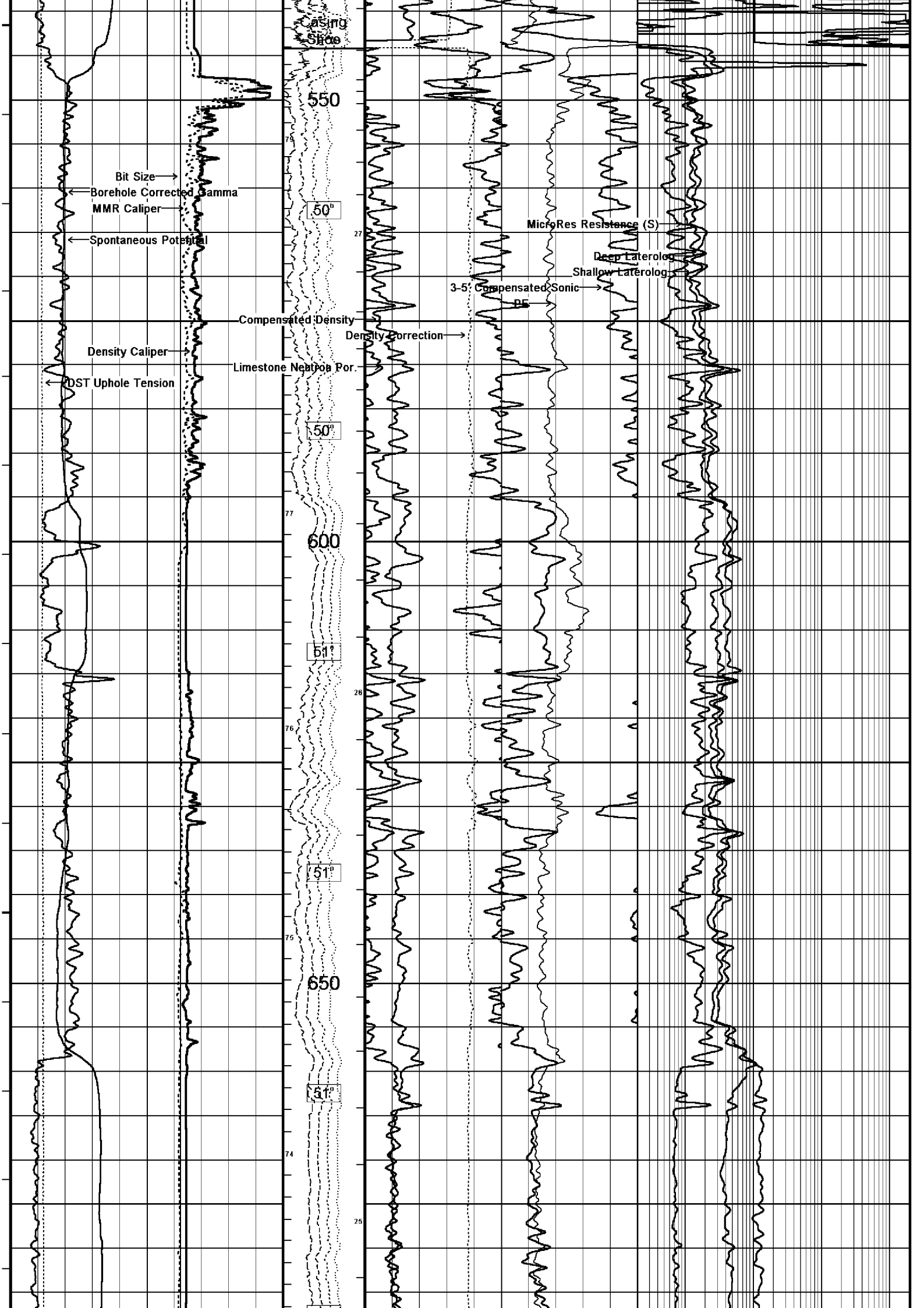
50

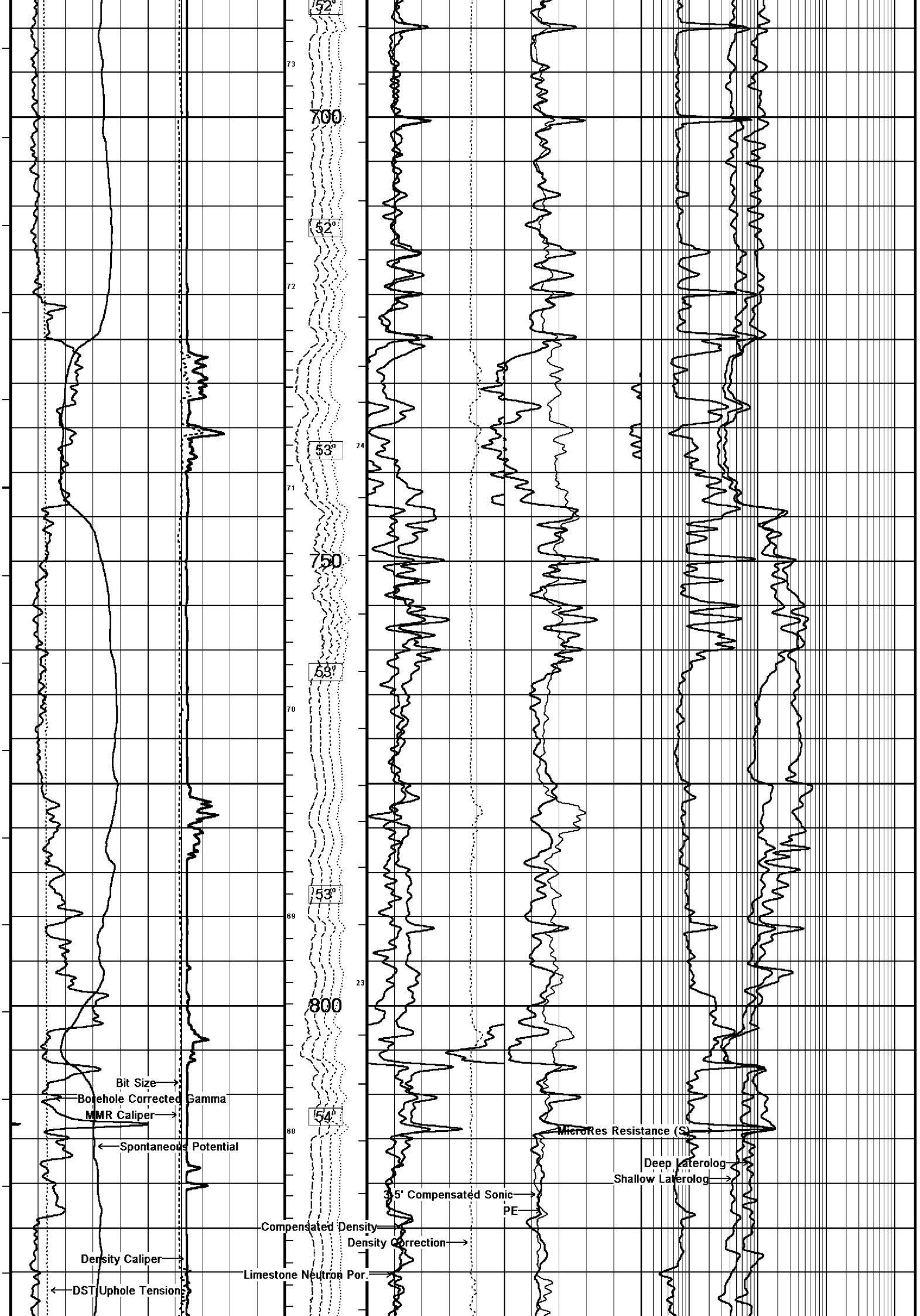
Borehole Corrected Gamma

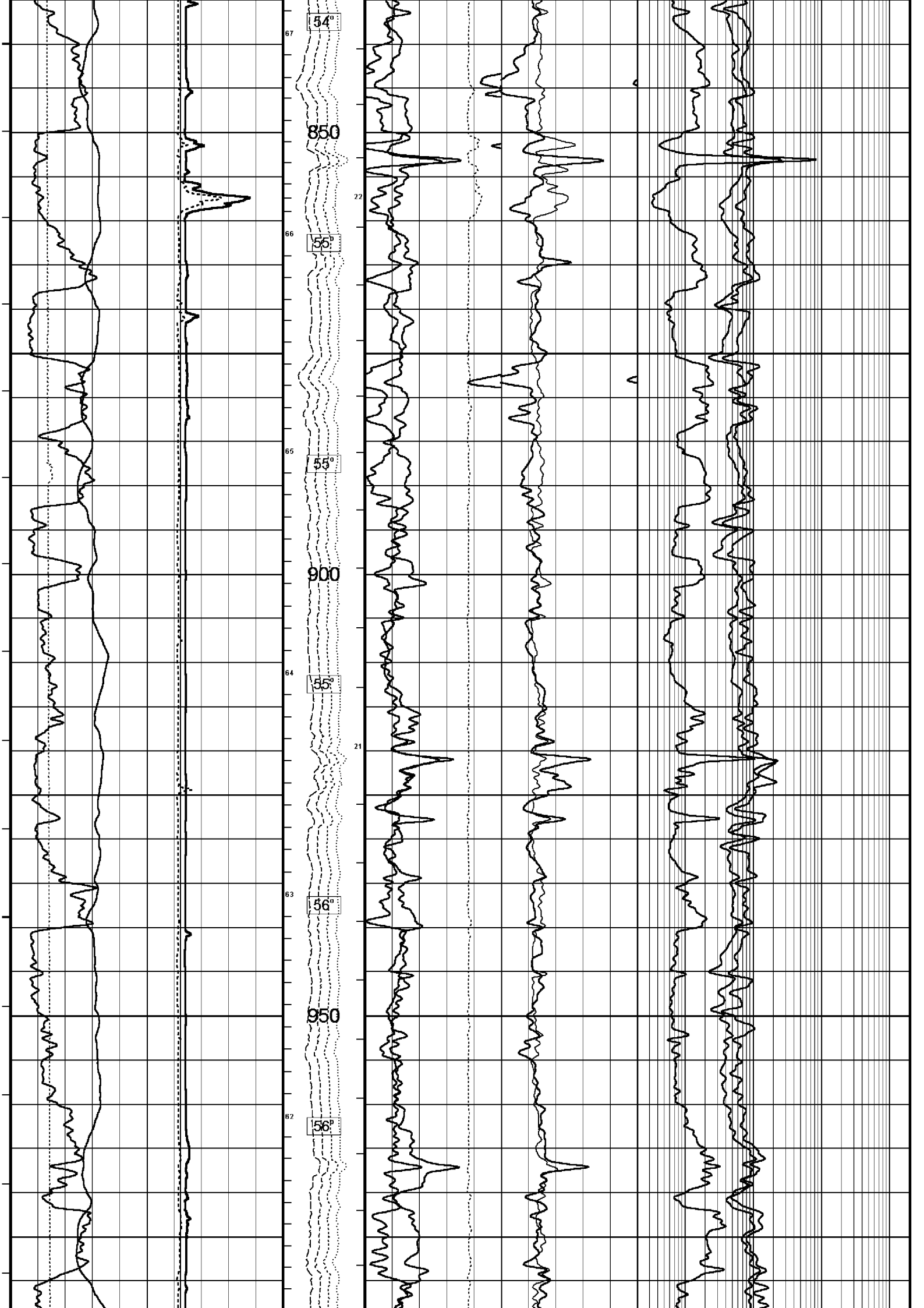

100
150
200

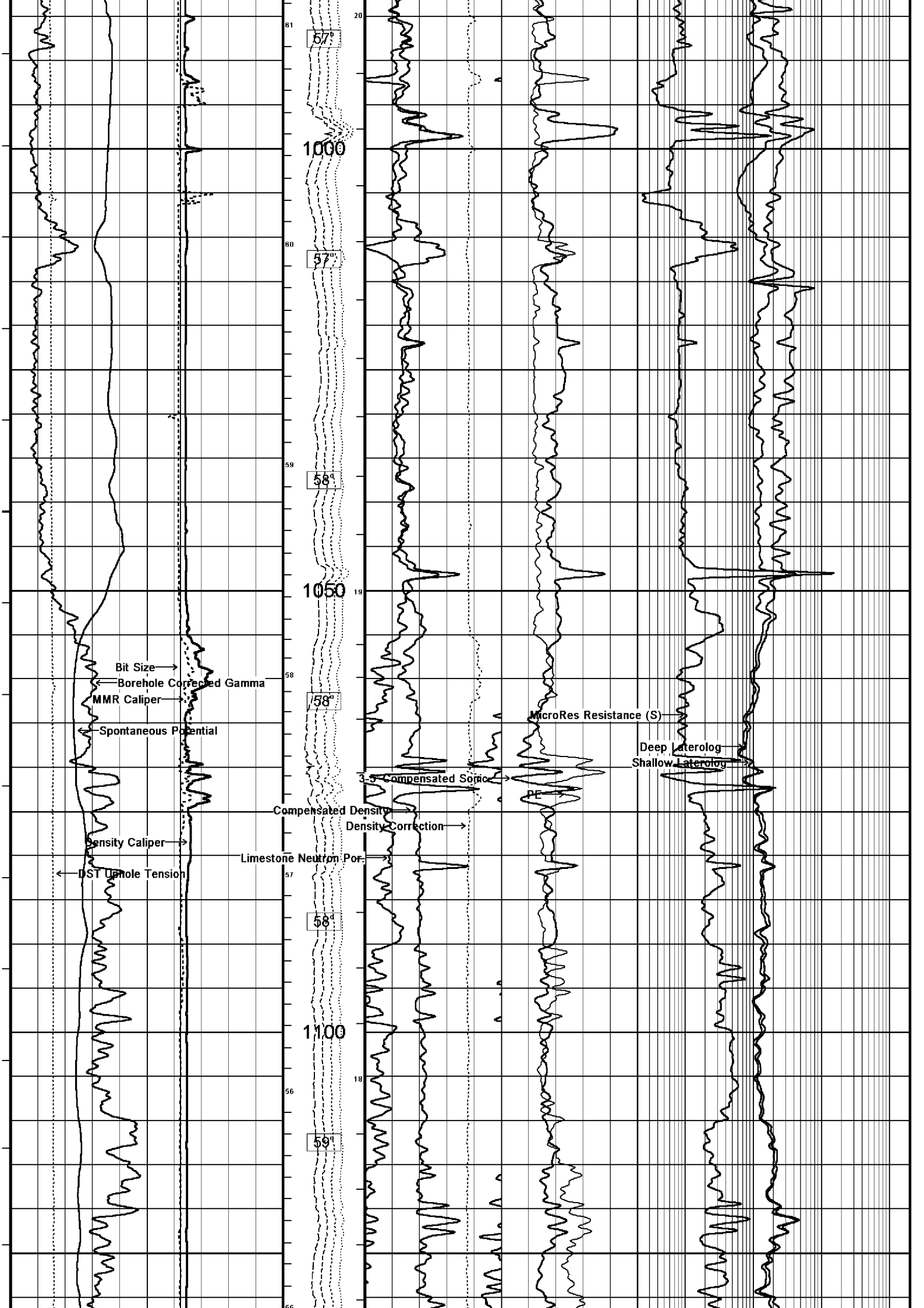

250
300
350
Borehole Corrected Gamma

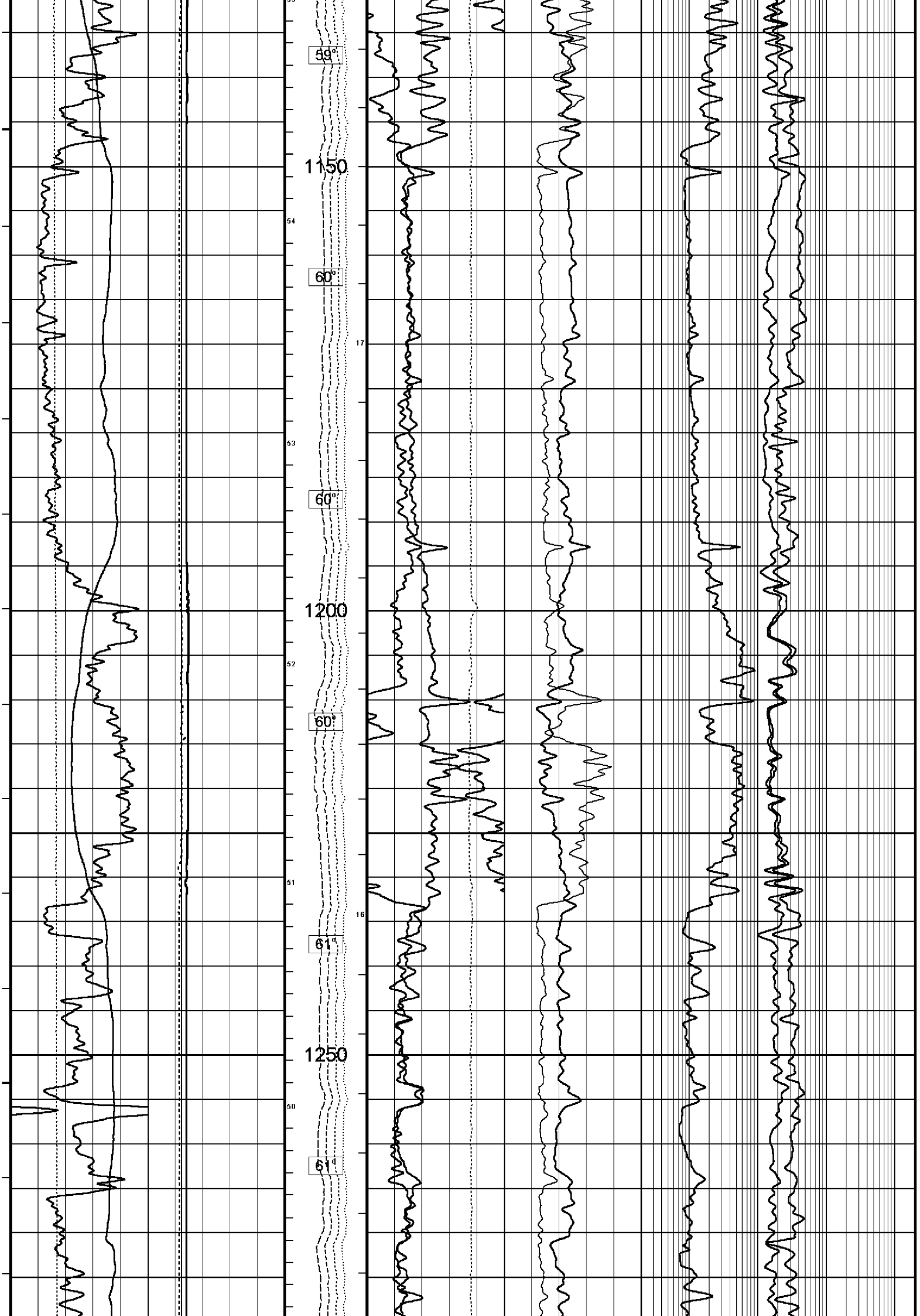

400
450
500

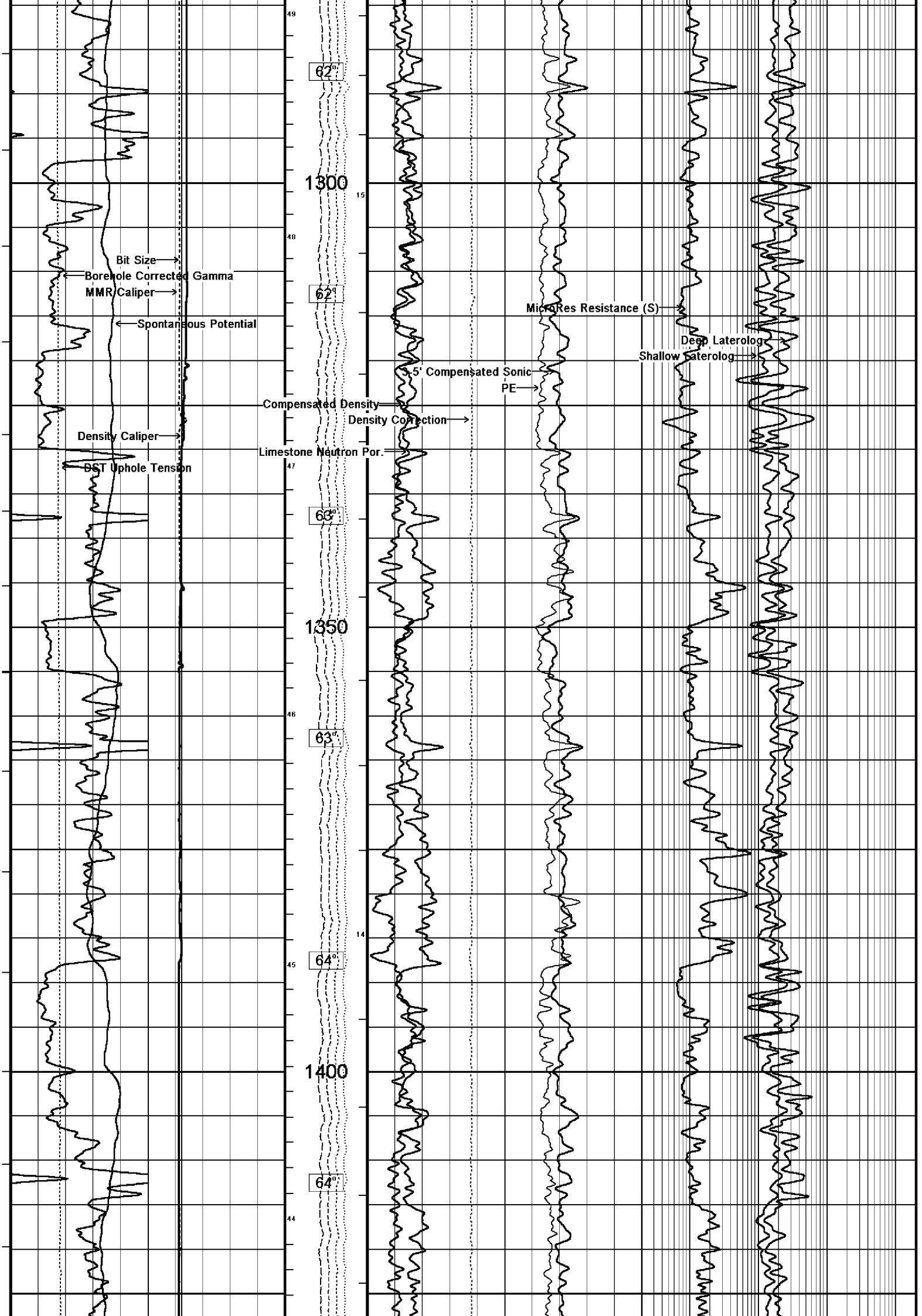

Casing Shoe
550
600
650
Bit Size
Borehole Corrected Gamma
MMR Caliper
Spontaneous Potential
Density Caliper
DST Uphole Tension
Compensated Density
Limestone Neutron Por.
Density Correction
MicroRes Resistance (S)
Deep Laterolog
Shallow Laterolog
3-5' Compensated Sonic
PE
50"
50"
51"
51"
51"

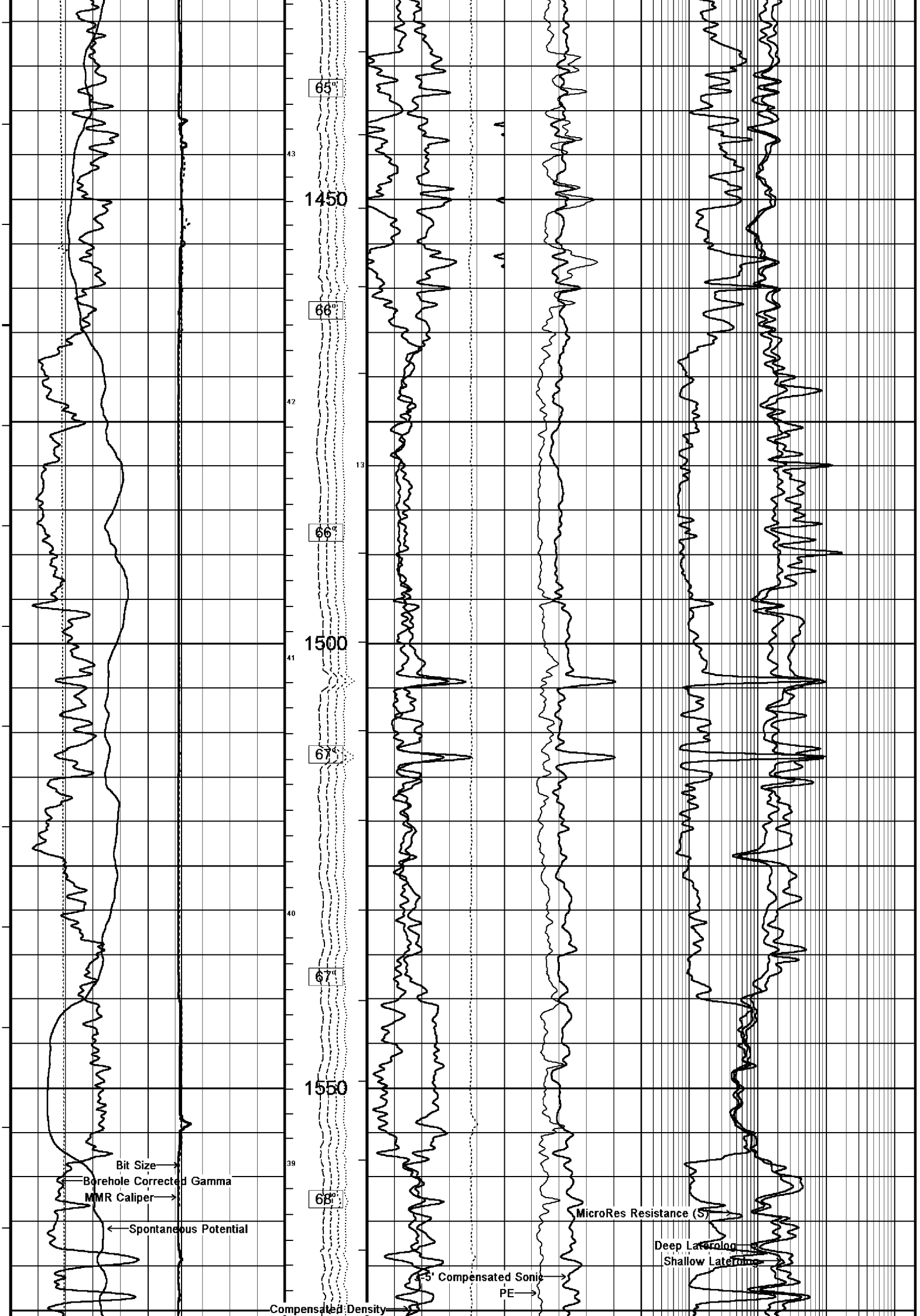

52°
700
52°
53°
750
53°
53°
800
54°
Bit Size
Borehole Corrected Gamma
MMR Caliper
Spontaneous Potential
Density Caliper
DST Uphole Tension
Compensated Density
Density Correction
Limestone Neutron Por.
35' Compensated Sonic
PE
MicroRes Resistance (S)
Deep Laterolog
Shallow Laterolog

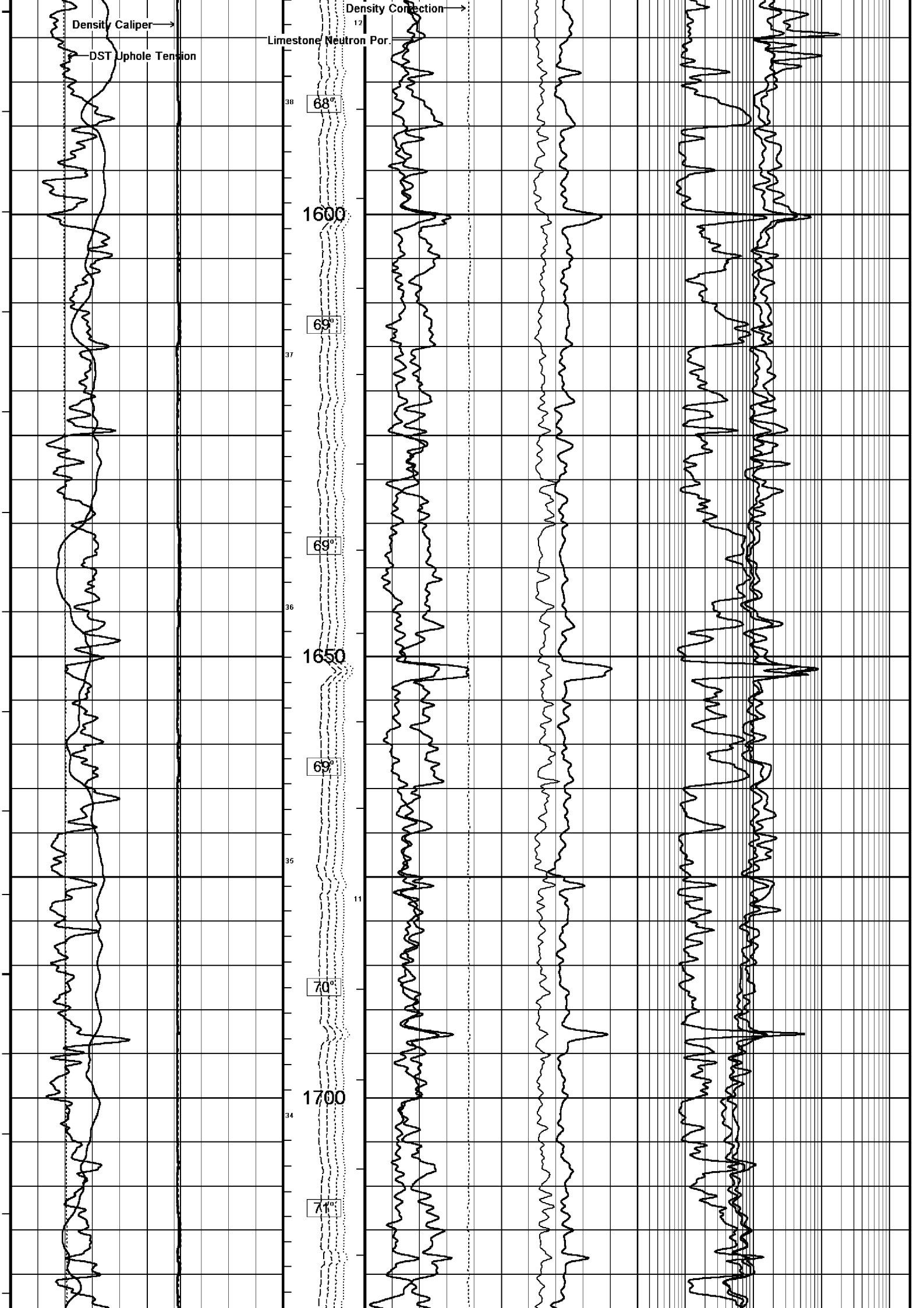

54°
55°
55°
55°
56°
56°
850
900
950
67
66
65
64
63
62
22
21

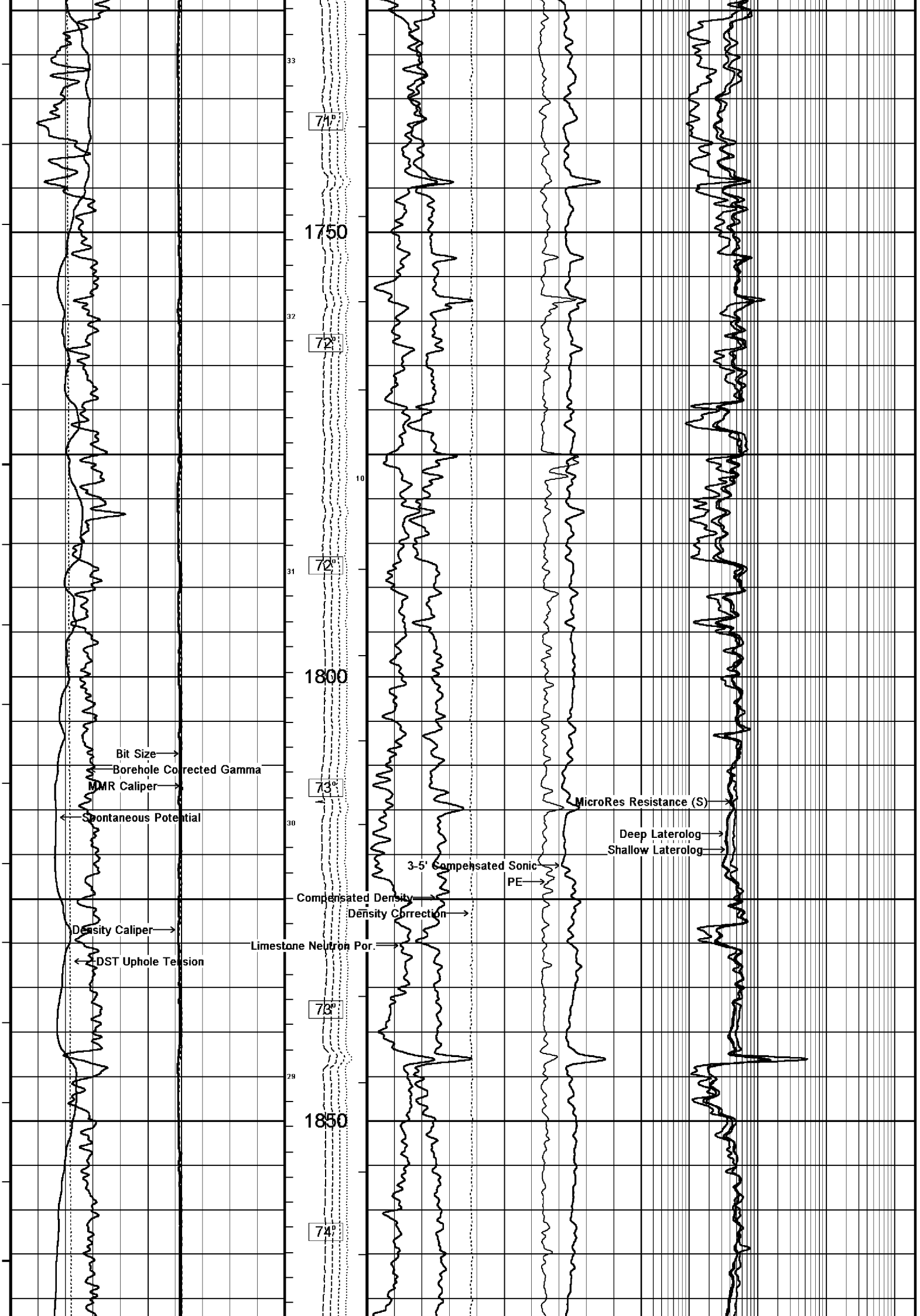

1000
1050
1100
Bit Size
Borehole Corrected Gamma
MMR Caliper
Spontaneous Potential
Density Caliper
DST Uphole Tension
MicroRes Resistance (S)
Deep Laterolog
Shallow Laterolog
3-5 Compensated Sonic
PE
Compensated Density
Density Correction
Limestone Neutron Por

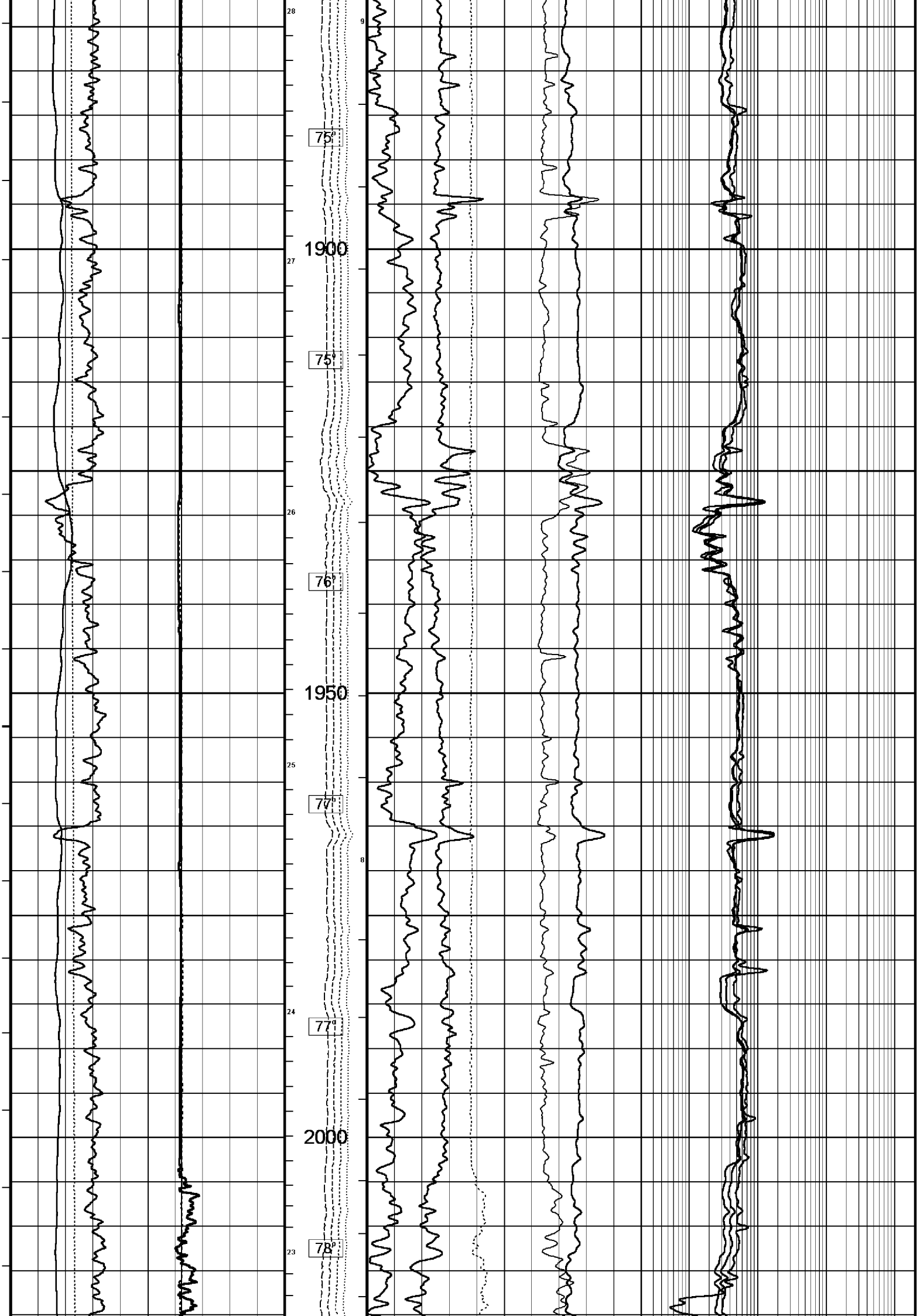

59°
1150
60°
60°
1200
60°
61°
1250
61°

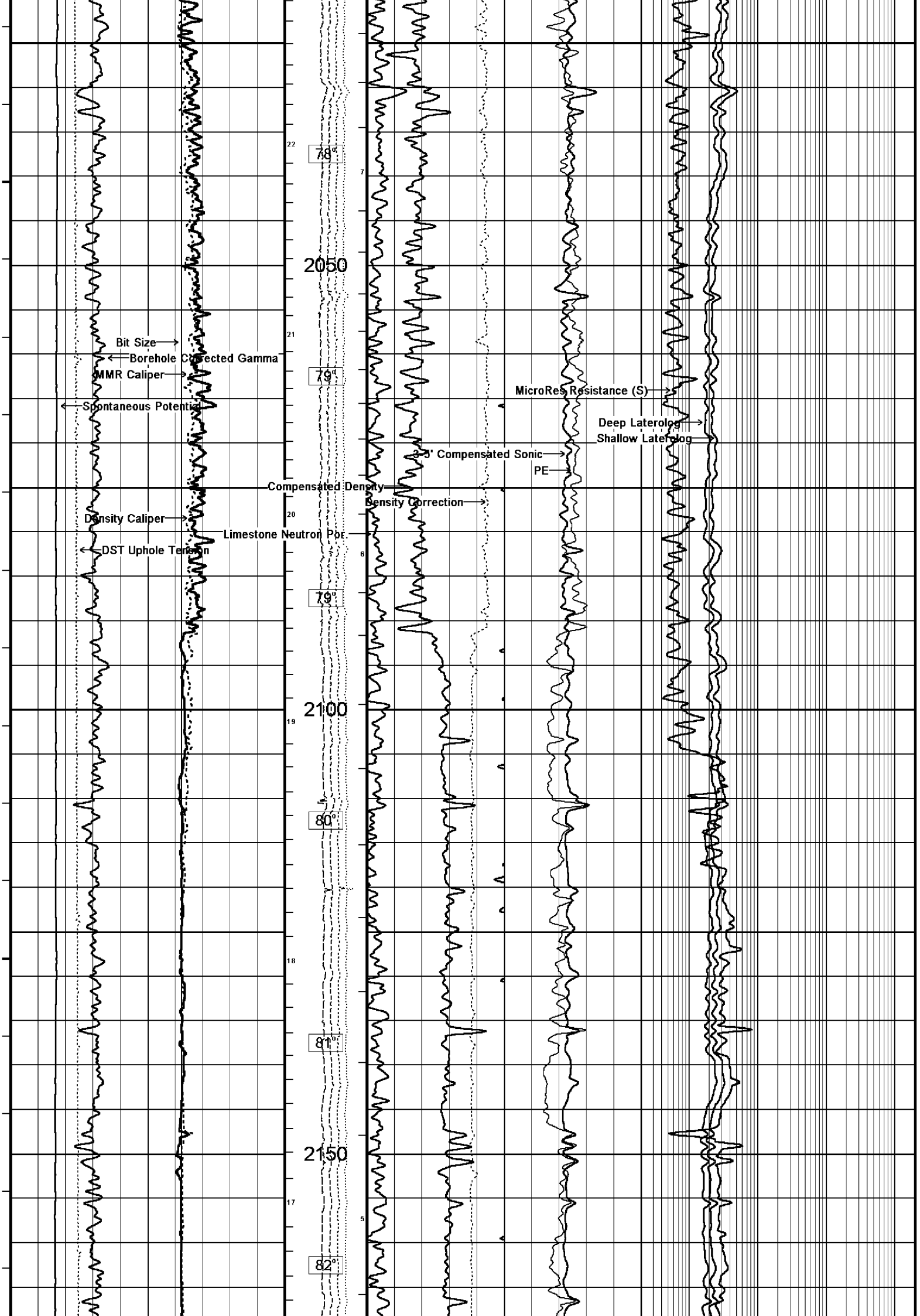

Bit Size
Borehole Corrected Gamma
MMR Caliper
Spontaneous Potential
Density Caliper
DST Uphole Tension
Compensated Density
Density Correction
Limestone Neutron Por.
3.5' Compensated Sonic
PE
MicroRes Resistance (S)
Deep Laterolog
Shallow Laterolog
1300
1350
1400
62°
62°
63°
63°
64°
64°

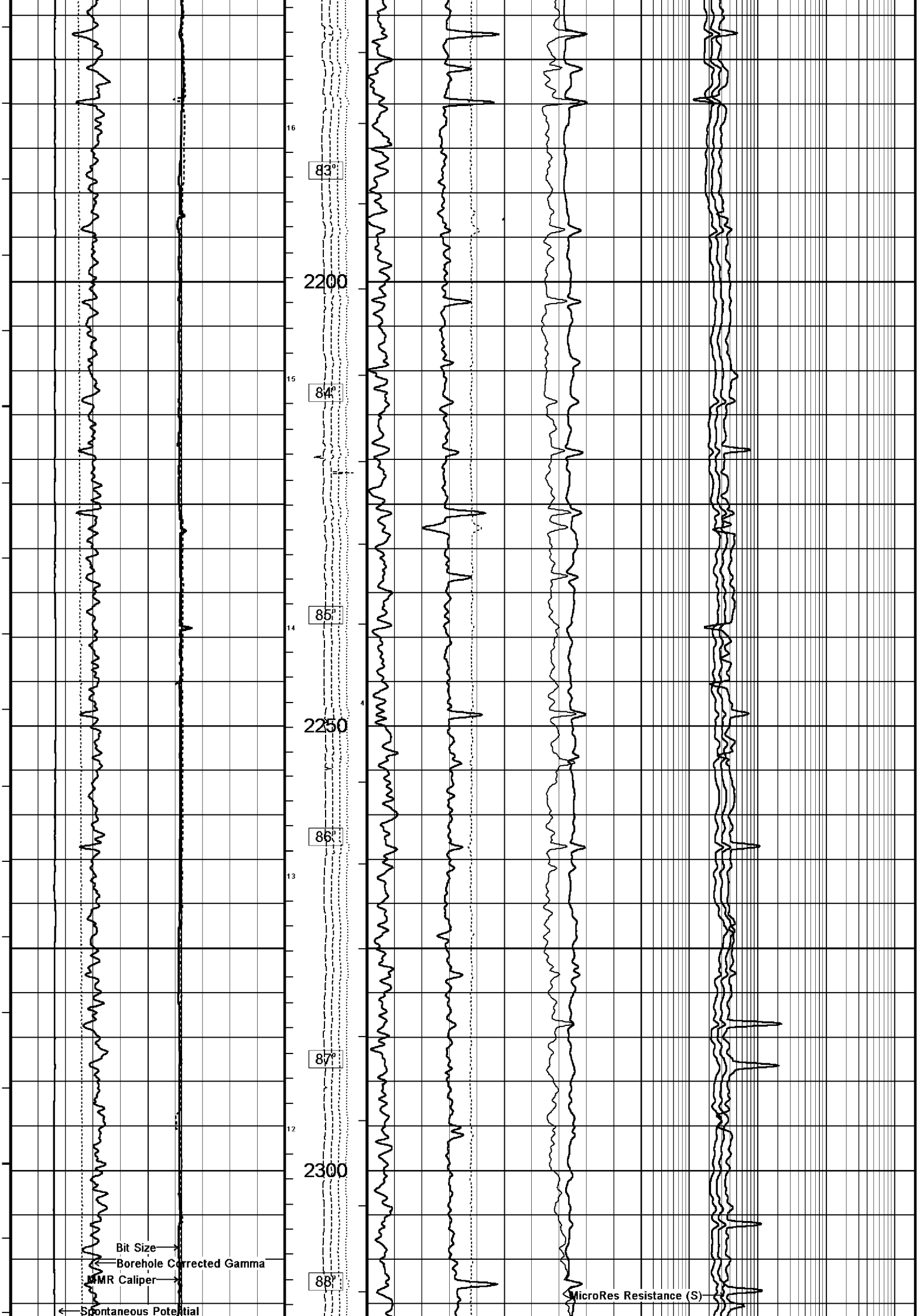

1450
1500
1550
Bit Size
Borehole Corrected Gamma
MMR Caliper
Spontaneous Potential
MicroRes Resistance (S)
Deep Laterolog
Shallow Laterolog
5' Compensated Sonic
PE
Compensated Density

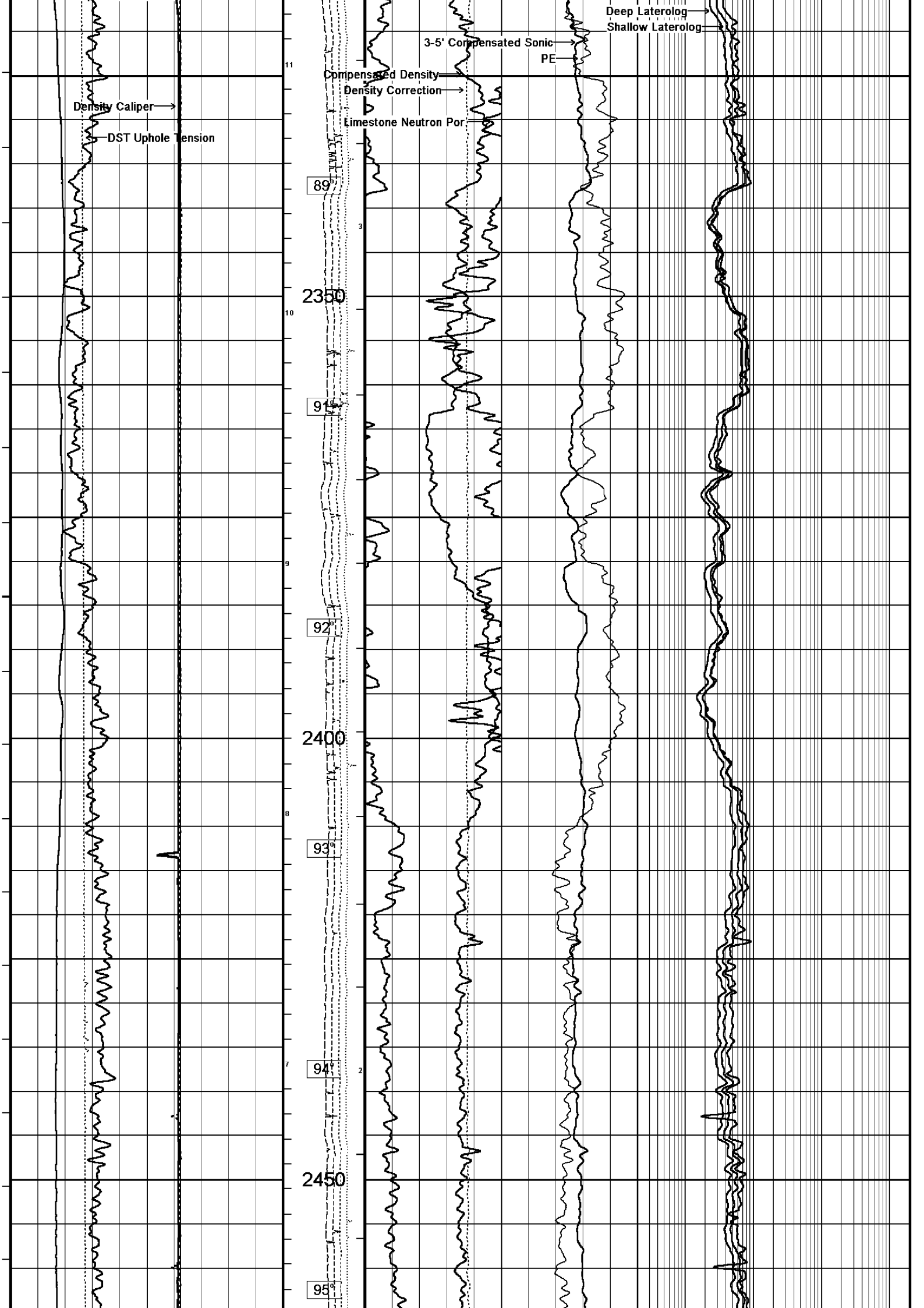

Density Caliper
DST Uphole Tension
Density Correction
Limestone Neutron Por.
38
37
36
35
34
12
11
68°
69°
69°
69°
70°
71°
1600
1650
1700

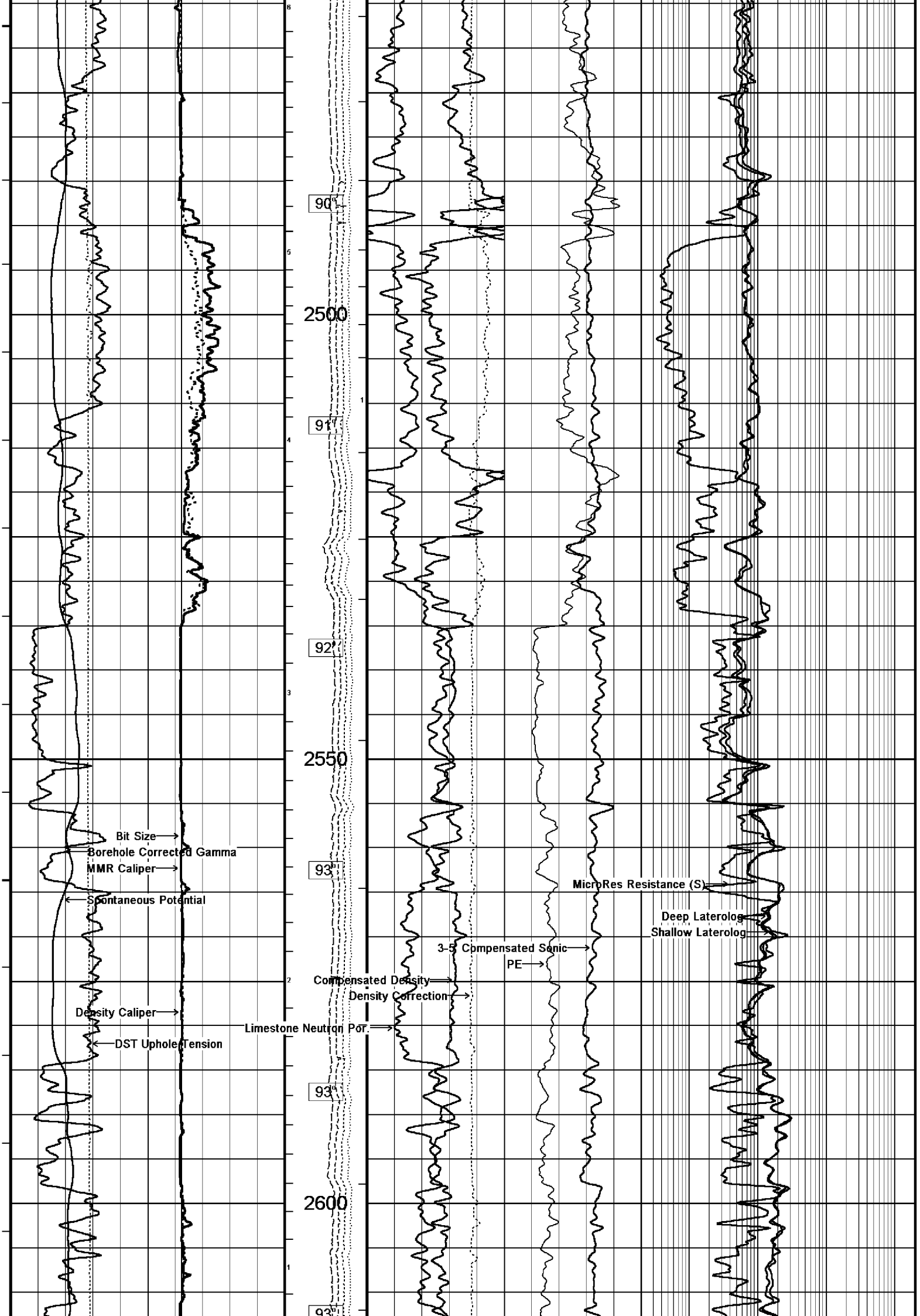

1750
1800
1850
Bit Size
Borehole Corrected Gamma
MMR Caliper
Spontaneous Potential
Density Caliper
DST Uphole Tension
MicroRes Resistance (S)
Deep Laterolog
Shallow Laterolog
3-5' Compensated Sonic
PE
Compensated Density
Density Correction
Limestone Neutron Por.

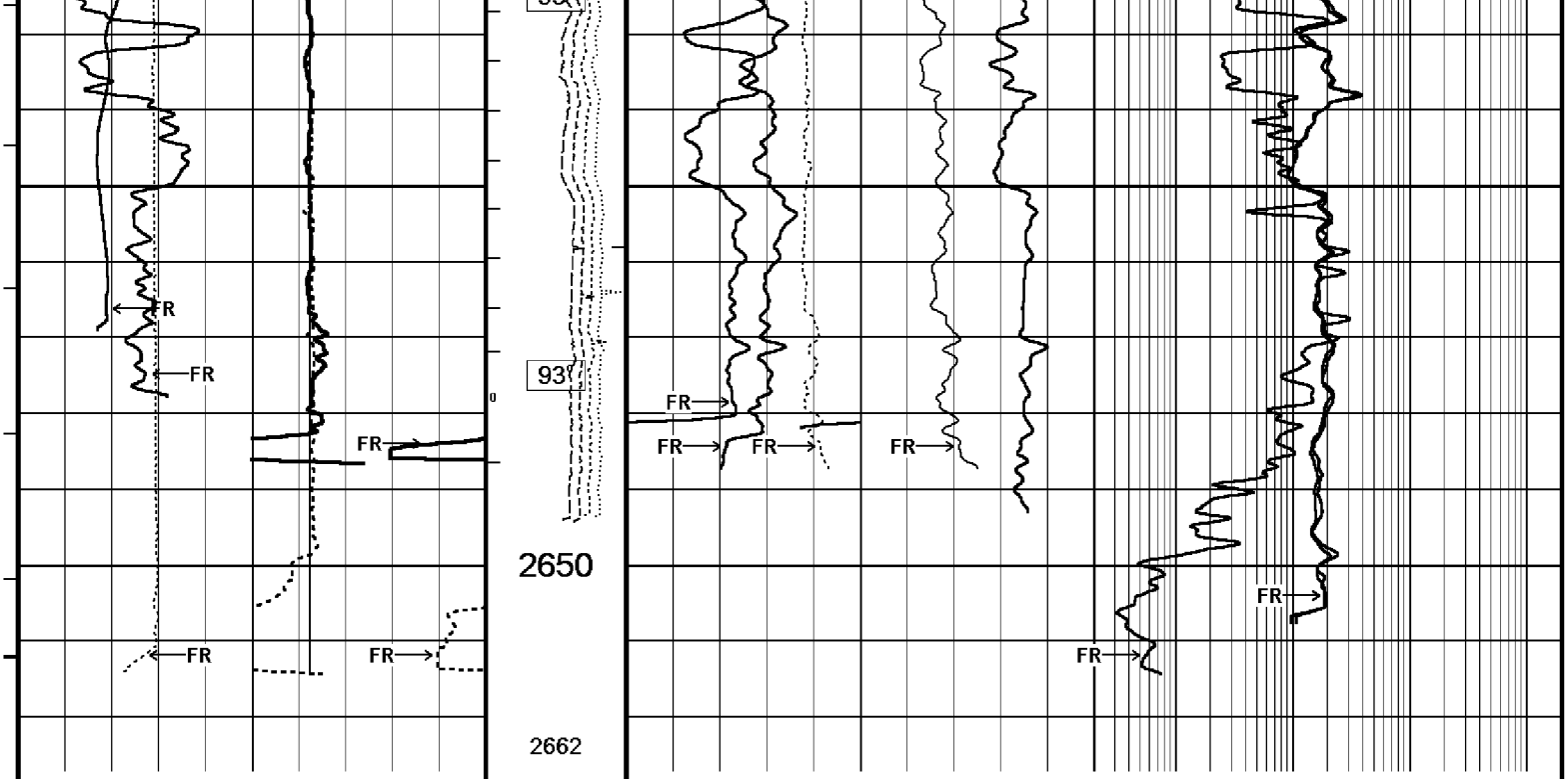

28
75°
1900
27
75°
26
76°
1950
25
77°
24
77°
2000
23
78°


Bit Size
Borehole Corrected Gamma
MMR Caliper
Spontaneous Potential
Density Caliper
DST Uphole Tension
Compensated Density
Density Correction
Limestone Neutron Por.
MicroRes Resistance (S)
Deep Laterolog
Shallow Laterolog
PE
78°
79°
80°
81°
82°
2050
2100
2150


16
83°
2200
15
84°
85°
14
2250
86°
13
87°
12
2300
88°
Bit Size
Borehole Corrected Gamma
MMR Caliper
Spontaneous Potential
MicroRes Resistance (S)


Deep Laterolog
Shallow Laterolog
3-5' Compensated Sonic
PE
Compensated Density
Density Correction
Limestone Neutron Por
Density Caliper
DST Uphole Tension
89°
91°
92°
93°
94°
95°
2350
2400
2450


90
2500
91
92
2550
93
93
2600
93
Bit Size
Borehole Corrected Gamma
MMR Caliper
Spontaneous Potential
Density Caliper
DST Upholetension
Limestone Neutron Por.
Compensated Density
Density Correction
3-5' Compensated Sonic
PE
MicroRes Resistance (S)
Deep Laterolog
Shallow Laterolog




2662

Depth in Metres

Timing Marks every 60.0 sec

Borehole Temp in deg C

TR21 1100 100

TR11 1100 100

TR22 1100 100

TR12 1100 100

HVI every 0.1 cu m

Annular Integral every 0.1 cu m

Replay Scale 1:500

Limestone Neutron Por. percent 45 -15

PE barns/electron 0 10

Shallow Laterolog ohm metres 0.20 2000 1 10 100 1000

DST Uphole Tension pounds 0 5000 5000 10000

Density Caliper inches 6 16

Density Correction grams/cc -1.50 0.50

Deep Laterolog ohm metres 0.20 2000 1 10 100 1000

Spontaneous Potential millivolts − 40 +

MMR Caliper inches 6 16

3-5' Compensated Sonic microsec/foot 140 40

Compensated Density grams/cc 1.95 2.95

MicroRes Resistance (S) ohm metres 0.20 2000 1 10 100 1000

orehole Corrected Gamm API 0 200 200 400

Bit Size inches 6 16

Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\logs\Origin\Childers Cove 1 Run 2\SUPERCOMBO_COMBINED_MAIN_LOG.dta
System Configuration Dates: Logged : Plotted 17-JUN-2004:

Plotted on 03-NOV-2005 15:41
Recorded on 04-OCT-2005 00:45

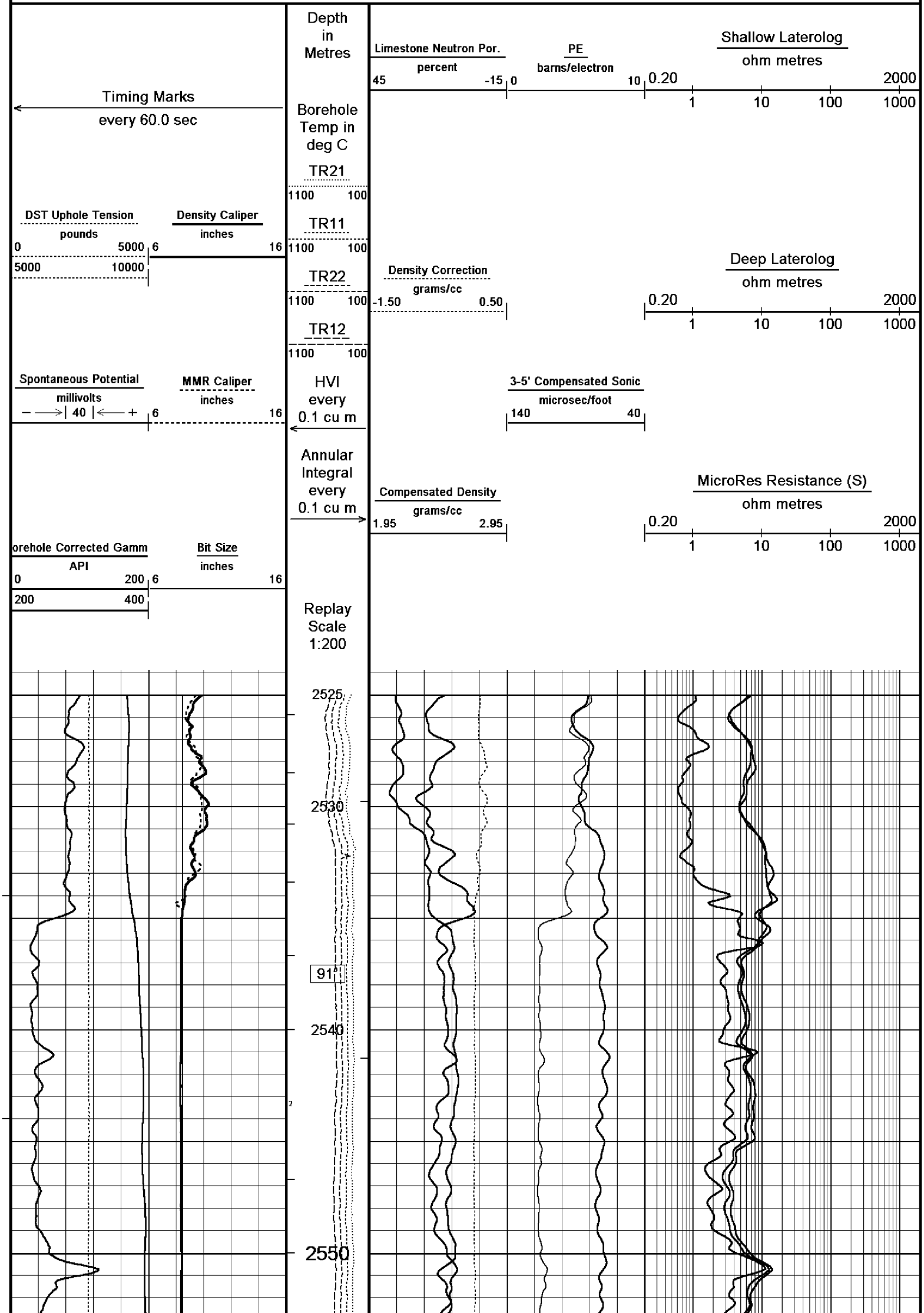
MAIN LOG 1:500

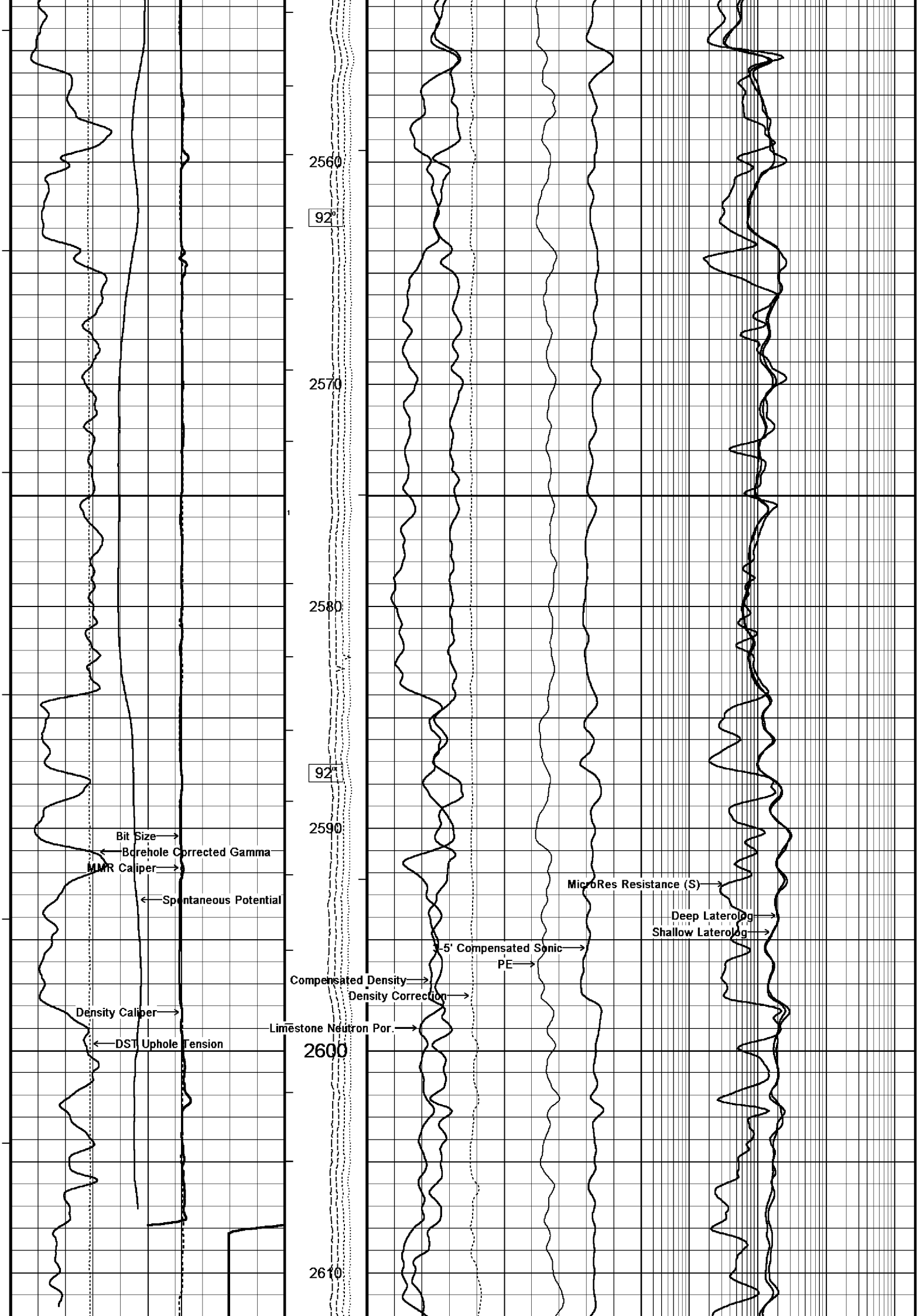
REPEAT SECTION 1:500 RUN 2

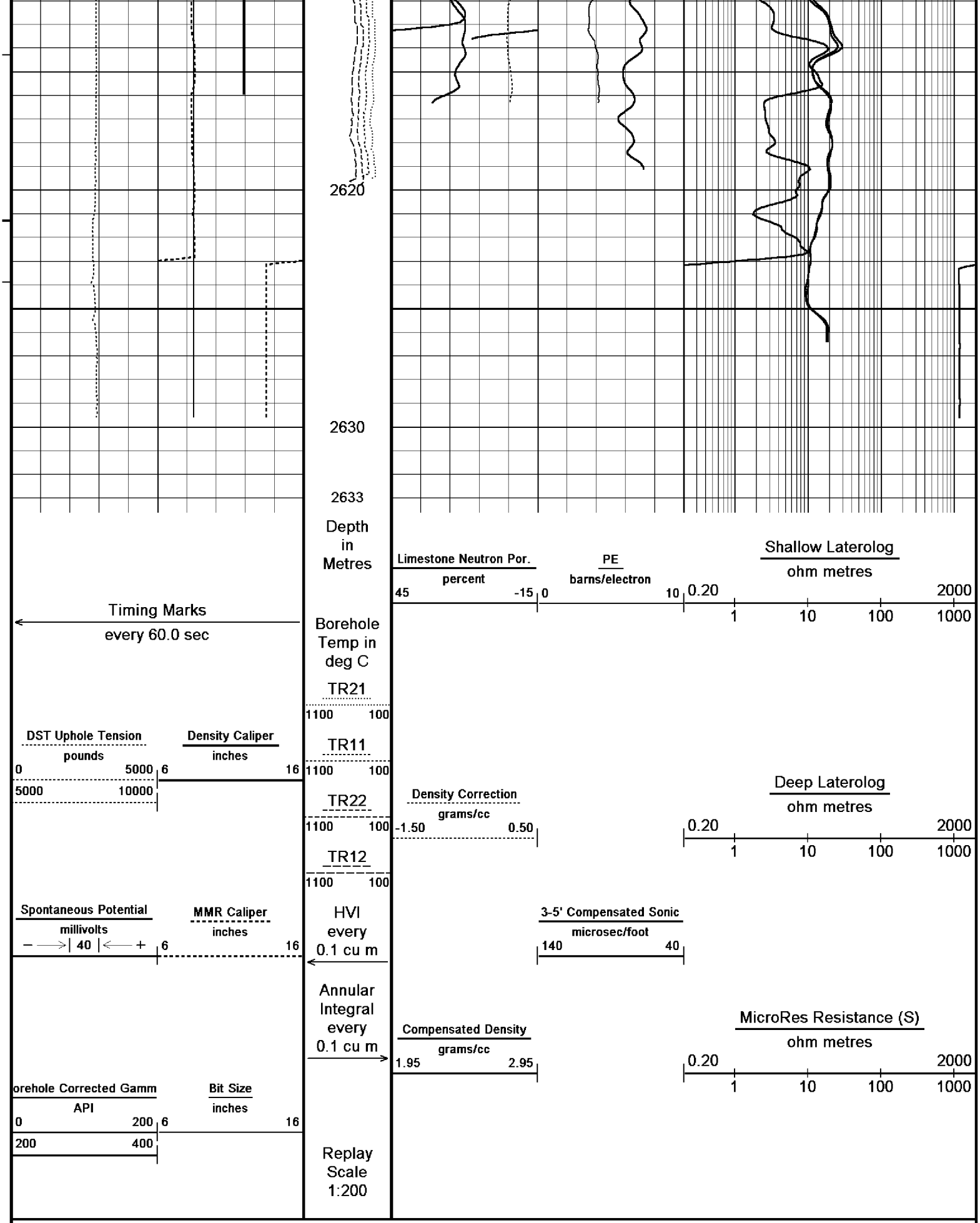
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\logs\Origin\Childers Cove 1 Run 2\SUPERCOMBO_4_002.dta
System Configuration Dates: Logged 17-JUN-2004: Plotted 17-JUN-2004:

Plotted on 03-NOV-2005 15:41
Recorded on 04-OCT-2005 00:11

System Configuration Dates: Logged 17-JUN-2004. Plotted 17-JUN-2004.




2560
92"
2570
2580
92"
2590
Bit Size
Borehole Corrected Gamma
MMR Caliper
Spontaneous Potential
MicroRes Resistance (S)
Deep Laterolog
Shallow Laterolog
5' Compensated Sonic
PE
Compensated Density
Density Correction
Density Caliper
Limestone Neutron Por.
DST Uphole Tension
2600
2610



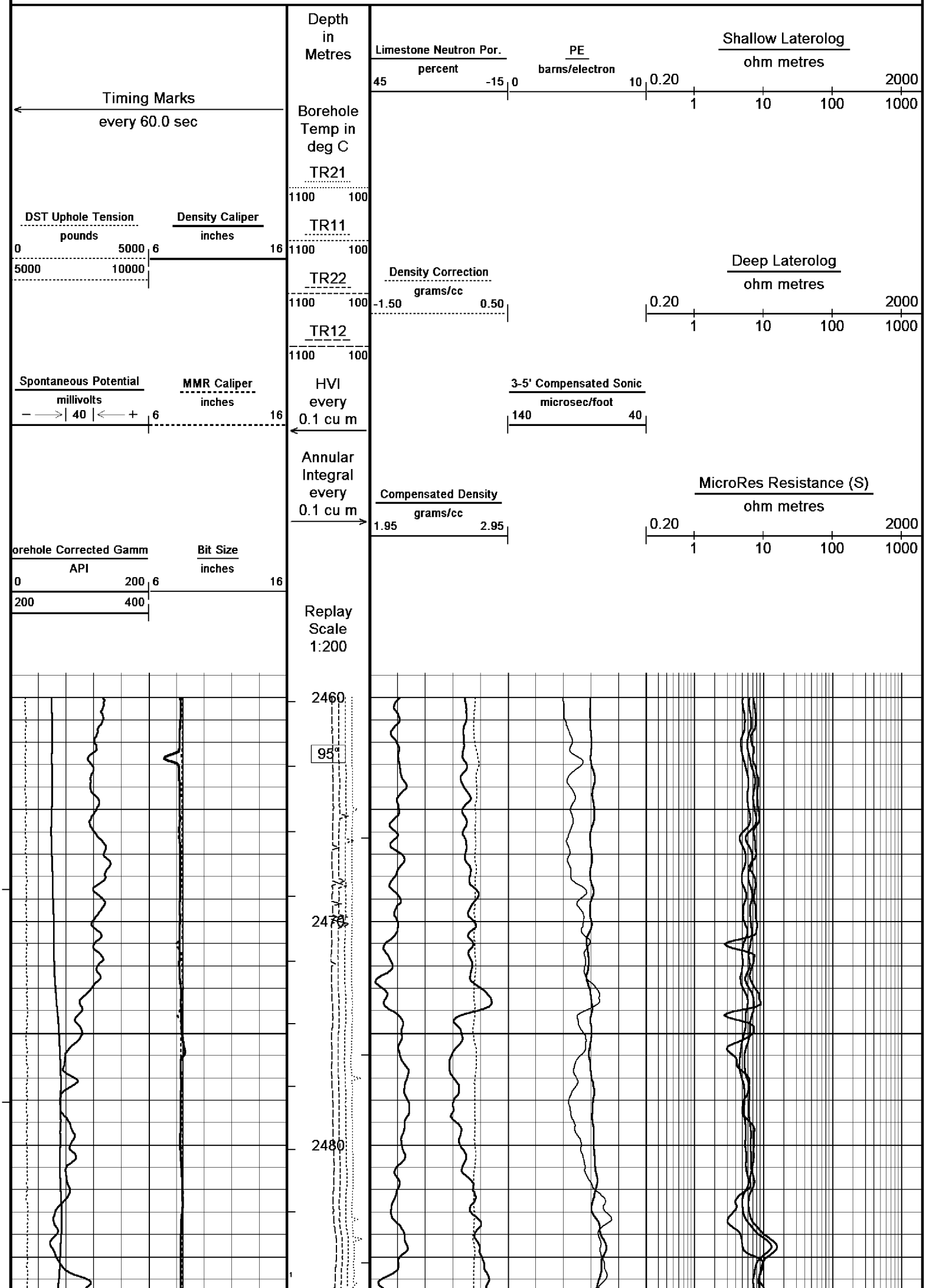

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 03-NOV-2005 15:41
Filename: C:\logs\Origin\Childers Cove 1 Run 2\SUPERCOMBO_4_002.dta
Recorded on 04-OCT-2005 00:11
System Configuration Dates: Logged 17-JUN-2004: Plotted 17-JUN-2004:

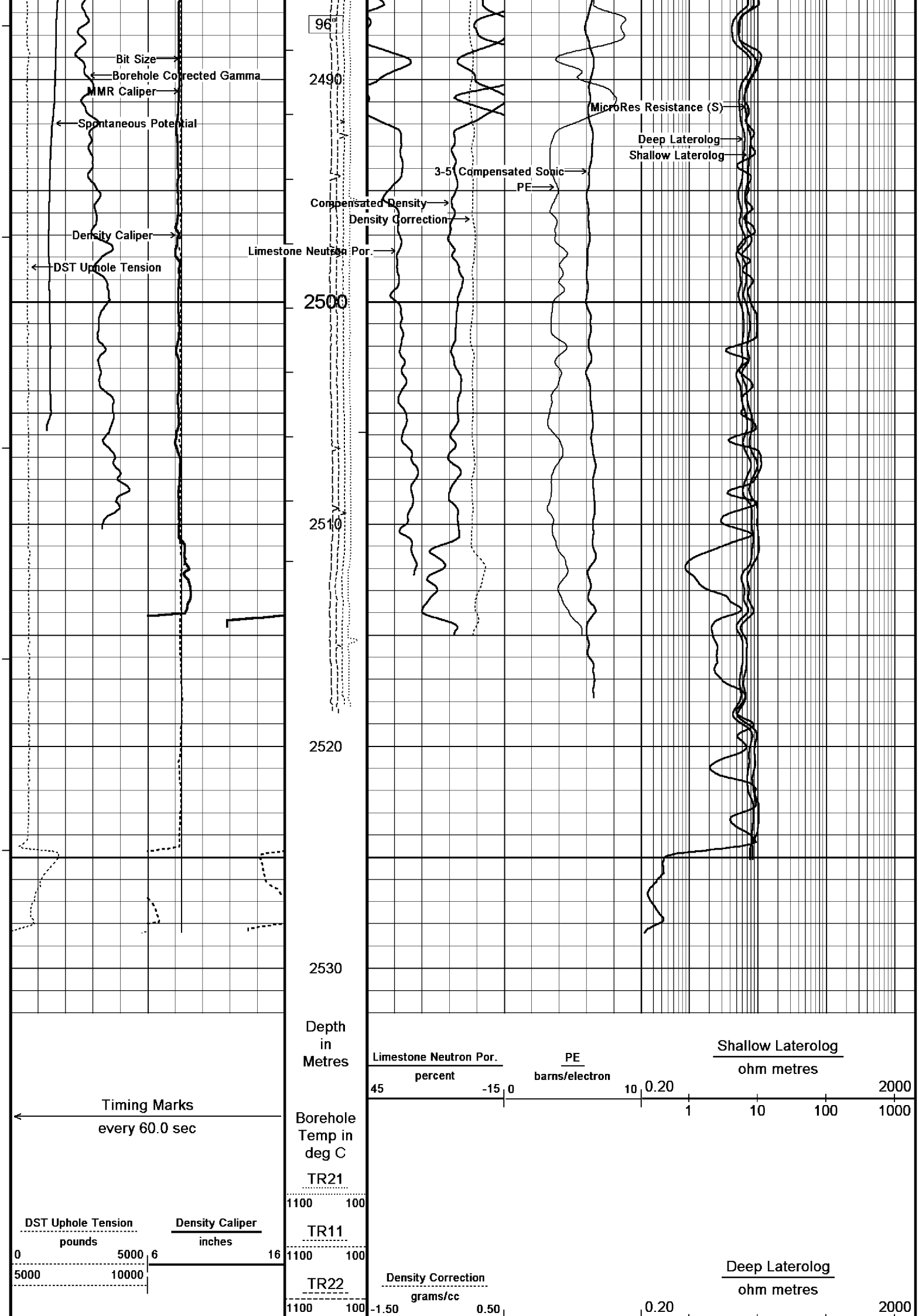
REPEAT SECTION 1:500 RUN 2

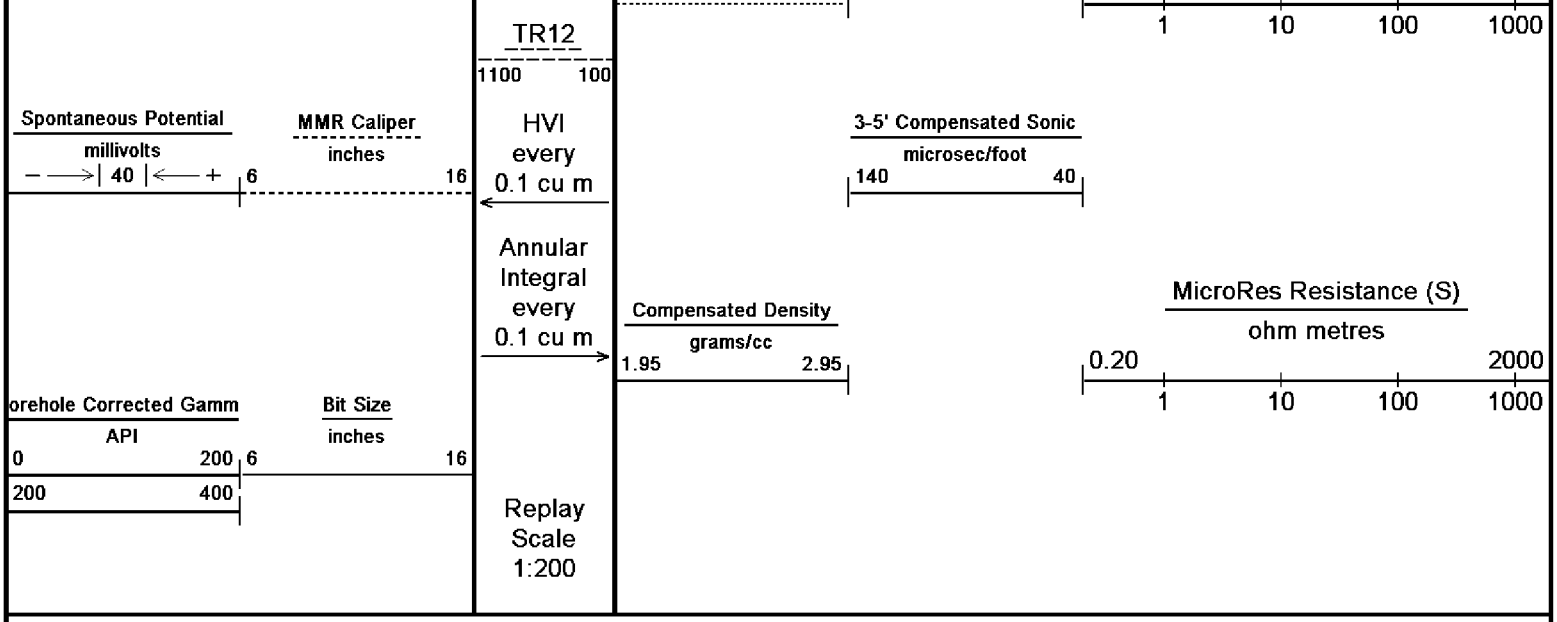
REPEAT SECTION 1:500 RUN 1

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 03-NOV-2005 15:41

Filename: C:\logs\Origin\Childers Cove 1 Run 1\SUPERCOMBO2.dta
Recorded on 01-OCT-2005 18:14
System Configuration Dates: Logged 17-JUN-2004: Plotted 17-JUN-2004:




Bit Size
Borehole Corrected Gamma
MMR Caliper
Spontaneous Potential
Density Caliper
DST Uphole Tension
96
2490
2500
2510
2520
2530
Limestone Neutron Por.
Compensated Density
Density Correction
3-5 Compensated Sonic
PE
MicroRes Resistance (S)
Deep Laterolog
Shallow Laterolog
Depth in Metres
Timing Marks every 60.0 sec
Borehole Temp in deg C
TR21
TR11
TR22
1100 100
DST Uphole Tension
pounds
0 5000
5000 10000
Density Caliper
inches
6 16
Limestone Neutron Por.
percent
45 -15
PE
barns/electron
0 10
Density Correction
grams/cc
-1.50 0.50
Shallow Laterolog
ohm metres
0.20 2000
1 10 100 1000
Deep Laterolog
ohm metres
0.20 2000

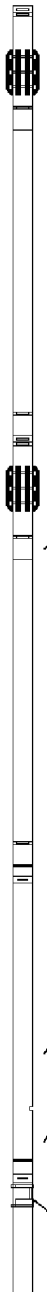



Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 03-NOV-2005 15:41
Filename: C:\logs\Origin\Childers Cove 1 Run 1\SUPERCOMBO2.dta
Recorded on 01-OCT-2005 18:14
System Configuration Dates: Logged 17-JUN-2004: Plotted 17-JUN-2004:

REPEAT SECTION 1:500 RUN 1

## DOWNHOLE EQUIPMENT

C:\logs\Origin\Childers Cove 1 Run 1\SUPERCOMBO2.dta



Compact Stiff Bridle Electrode Sub.
MBE 22 Length: 3.76 m Weight: 94.8 lb

Compact Stiff Bridle Electrode Sub.
MBE 42 Length: 3.76 m Weight: 94.8 lb

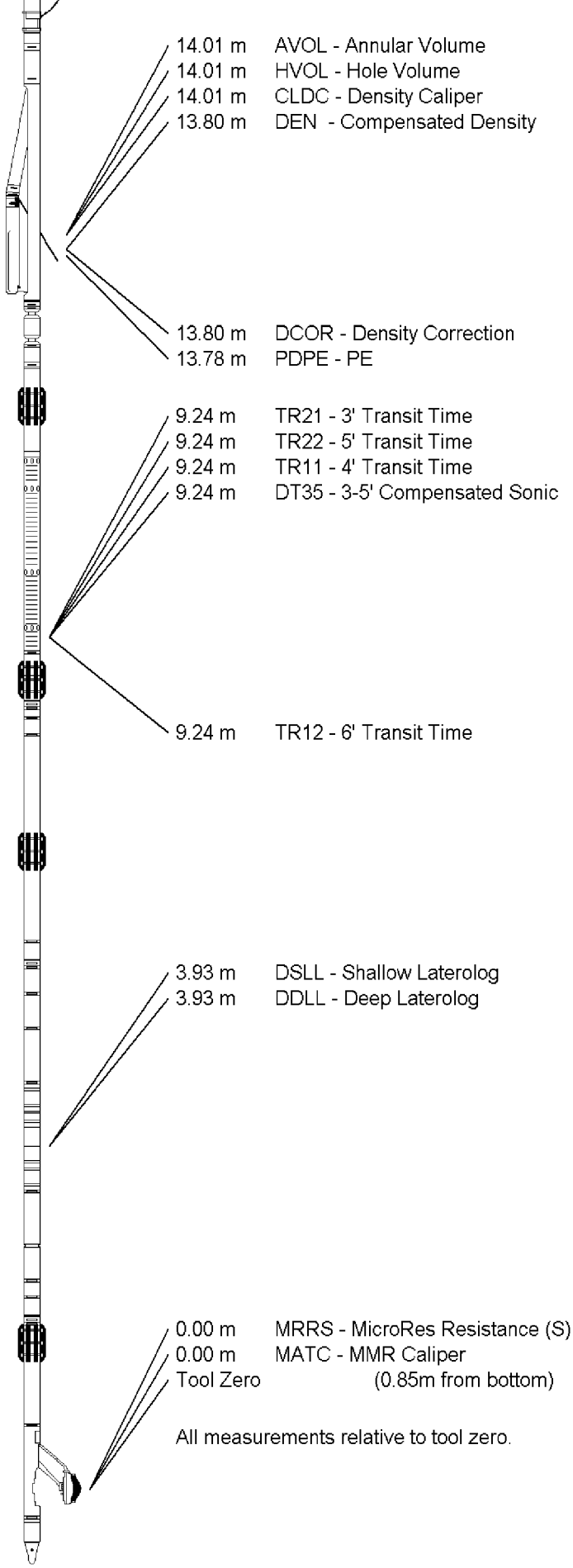
22.90 m SPDL - Spontaneous Potential

Compact Gamma
MCG 98 Length: 2.65 m Weight: 63.9 lb

18.56 m GGCE - Borehole Corrected Gamma
17.67 m CGXT - MCG External Temperature

Compact Neutron
MDN 43 Length: 1.53 m Weight: 50.7 lb

16.69 m NPRL - Limestone Neutron Por.



Compact Density/Caliper
MPD 66 Length: 2.92 m Weight: 90.4 lb

14.01 m AVOL - Annular Volume
14.01 m HVOL - Hole Volume
14.01 m CLDC - Density Caliper
13.80 m DEN - Compensated Density

Compact Knuckle Joint
SKJ 3 Length: 0.66 m Weight: 24.3 lb

13.80 m DCOR - Density Correction
13.78 m PDPE - PE

Compact Sonic
MSS 49 Length: 3.82 m Weight: 72.8 lb

9.24 m TR21 - 3' Transit Time
9.24 m TR22 - 5' Transit Time
9.24 m TR11 - 4' Transit Time
9.24 m DT35 - 3-5' Compensated Sonic

Compact Upper Guard Sub.
MUG 20 Length: 2.74 m Weight: 68.3 lb

9.24 m TR12 - 6' Transit Time

Compact Laterolog Electrode Sub.
MLE 16 Length: 3.76 m Weight: 92.6 lb

3.93 m DSLL - Shallow Laterolog
3.93 m DDLL - Deep Laterolog

Compact Micro-Resistivity
MMR 5 Length: 2.62 m Weight: 81.6 lb

0.00 m MRRS - MicroRes Resistance (S)
0.00 m MATC - MMR Caliper
Tool Zero (0.85m from bottom)

Pressure Bung + Hole Finder
HFS 3 Length: 0.28 m Weight: 6.6 lb

All measurements relative to tool zero.

Total Length: 28.50 m Weight: 740.8 lb

## BEFORE SURVEY CALIBRATION

C:\logs\Origin\Childers Cove 1 Run 2\SUPERCOMBO_COMBINED_MAIN_LOG.dta

### General Constants All 000

General Parameters

| | | |
|---|---|---|
| Mud Resistivity | 3.210 | ohm-metres |
| Mud Resistivity Temperature | 20.000 | degrees C |

| | | |
|---|---|---|
| Mud Resistivity Temperature | 20.000 | degrees C |
| Water Level | 0.000 | metres |
| Density/Neutron Processing | Wet Hole | |

Hole/Annular Volume and Differential Caliper Parameters

| | | |
|---|---|---|
| HVOL Caliper 1 | Density Caliper | |
| HVOL Caliper 2 | Density Caliper | |
| Annular Volume Diameter | 7.000 | inches |
| Caliper for Differential Caliper | Density Caliper | |

Rwa Parameters

| | | |
|---|---|---|
| Porosity used | Limestone Sonic Porosity | |
| Resistivity used | Deep Laterolog | |
| RWA Constant A | 0.610 | |
| RWA Constant M | 2.150 | |

## Gamma Calibration MCG 098

Field Calibration on 3-OCT-2005,19:46

| | Measured | Calibrated (API) |
|---|---|---|
| Background | 29 | 22 |
| Calibrator (Gross) | 1029 | 771 |
| Calibrator (Net) | 1000 | 749 |

## Gamma Constants MCG 098

| | | |
|---|---|---|
| Gamma Calibrator Number | 30 | |
| Mud Density | 1.16 | gm/cc |
| Caliper Source for Processing | Density Caliper | |
| Tool Position | Eccentred | |
| Concentration of KCl | 0.00 | kppm |

## High Resolution Temperature Calibration MCG 098

Field Calibration on 3-OCT-2005,20:14

| | Measured | Calibrated(Deg C) |
|---|---|---|
| Lower | 0.00 | 0.00 |
| Upper | 100.00 | 100.00 |

## High Resolution Temperature Constants MCG 098

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

## Neutron Calibration MDN 043

Base Calibration on 22-AUG-2005 15:53
Field Check on 3-OCT-2005,20:14

Base Calibration

| | Measured | | Calibrated (cps) | |
|---|---|---|---|---|
| | Near | Far | Near | Far |
| | 3021 | 94 | 3714 | 110 |
| Ratio | 32.071 | | 33.764 | |

Field Calibrator at Base

| | Calibrated (cps) | |
|---|---|---|
| | 1674 | 2333 |
| Ratio | 0.717 | |

Field Check

| | Calibrated (cps) | |
|---|---|---|
| | 1647 | 2293 |
| Ratio | 0.718 | |

## Neutron Constants MDN 043

| | | |
|---|---|---|
| Neutron Source Id | NSNE-747 | |
| Neutron Jig Number | 31 | |
| Epithermal Neutron | No | |
| Caliper Source for Processing | Density Caliper | |
| Stand-off | 0.00 | inches |
| Mud Density | 1.16 | 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 | 20.00 | degrees C |
| Mud Salinity | 11.57 | kppm |
| Formation Fluid Salinity Source | Constant Value | |
| Formation Fluid Salinity | 0.00 | kppm |
| Barite Mud Correction | Not Applied | |

## Photo Density Calibration MPD 066

Base Calibration on 22-AUG-2005,12:13

Field Check on 3-OCT-2005,20:15

Density Calibration

| Base Calibration | Measured Near | Measured Far | Calibrated (sdu) Near | Calibrated (sdu) Far |
|---|---|---|---|---|
| Reference 1 | 49825 | 17938 | 53111 | 19310 |
| Reference 2 | 23308 | 2480 | 24951 | 2530 |

Field Check at Base

| | | |
|---|---|---|
| | 918.0 | 1089.7 |

Field Check

| | | |
|---|---|---|
| | 919.8 | 1086.8 |

PE Calibration

| Base Calibration | WS | Measured WH | Measured Ratio | Calibrated Ratio |
|---|---|---|---|---|
| Background | 176 | 793 | | |
| Reference 1 | 15856 | 49650 | 0.321 | 0.320 |
| Reference 2 | 6240 | 23176 | 0.271 | 0.273 |

Field Check at Base

| | | |
|---|---|---|
| 176.0 | 793.2 | |

Field Check

| | | |
|---|---|---|
| 173.6 | 795.1 | |

## Density Constants MPD 066

| | | |
|---|---|---|
| Density Source Id | NSDL250 | |
| Nylon Calibrator Number | DNC-D-536 | |
| Aluminium/Fe Calibrator Number | DAC-D-536 | |
| Density Shoe Profile | 8 inch | |
| Caliper Source for Processing | Density Caliper | |
| PE Correction to Density | Not Applied | |
| Mud Density | 1.16 | gm/cc |
| Mud Density Z/A Correction | 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 |

| Matrix Density (gm/cc) | Depth (m) |
|---|---|
| 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 |

## Caliper Calibration MPD 066

Base Calibration on 22-AUG-2005 11:11
Field Calibration on 3-OCT-2005,20:15

Base Calibration

| Reading No | Measured | Calibrator Size (in) |
|---|---|---|
| 1 | 11983 | 4.01 |
| 2 | 20446 | 5.99 |
| 3 | 29120 | 7.98 |
| 4 | 37568 | 9.94 |
| 5 | 47008 | 12.01 |
| 6 | N/A | N/A |

Field Calibration

| Measured Caliper (in) | Actual Caliper (in) |
|---|---|
| 8.91 | 8.92 |

## Sonic Constants MSS 049

| | | |
|---|---|---|
| Maximum Boundary Contrast | 100.00 | micro-sec/ft |
| Fluid Transit Time | 189.00 | micro-sec/ft |
| Limestone Transit Time | 47.50 | micro-sec/ft |
| Sandstone Transit Time | 55.50 | micro-sec/ft |
| Dolomite Transit Time | 43.50 | micro-sec/ft |
| Sonic used for Porosities | 3-5' Compensated | |
| Correction for Sonde Skew | Applied | |
| Cycle Stretch Algorithm | Applied | |

| | | |
|---|---|---|
| MN3FT | 0.00 | micro-sec |
| MX3FT | 1500.00 | micro-sec |

Fixed Gate Parameters

| Start Time (micro-sec) | End Time (micro-sec) | Discriminator (mV) | Depth (m) |
|---|---|---|---|
| 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 | 0.00 | 0.00 | |

Down Hole Fixed Gate Parameters

| | | |
|---|---|---|
| Gate Start | 0.00 | micro-sec |
| Gate Width | 0.00 | micro-sec |
| Initial Discriminator Level | 0.0000 | mVolts |

Full Waveform Parameters

| | | |
|---|---|---|
| Use 3' Waveform to derive TR | No | |
| Use 4' Waveform to derive TR | No | |
| Use 5' Waveform to derive TR | No | |
| Use 6' Waveform to derive TR | No | |
| 3' Waveform Discriminator Level | 0.30 | mV |
| 4' Waveform Discriminator Level | 0.30 | mV |
| 5' Waveform Discriminator Level | 0.15 | mV |
| 6' Waveform Discriminator Level | 0.15 | mV |
| 3' Waveform Filter | 0 | |
| 4' Waveform Filter | 0 | |
| 5' Waveform Filter | 0 | |
| 6' Waveform Filter | 0 | |
| Semblance Level | 0.50 | |
| Semblance Window Width | 120.00 | micro-sec |
| Sonic 1 Despiker | 100.00 | micro-sec/ft |
| Sonic 2 Despiker | 100.00 | micro-sec/ft |

## Laterolog Calibration MLE 016

Base Calibration on 24-AUG-2005 11:54
Field Check on 3-OCT-2005,20:15

Base Calibration

| | Measured | | Calibrated (ohm-m) | |
|---|---|---|---|---|
| Channel | Resistor 1 | Resistor 2 | Resistor 1 | Resistor 2 |
| Shallow | 9.7 | 965.7 | 13.3 | 1327.3 |
| Deep | 9.7 | 966.0 | 8.5 | 852.7 |
| Groningen | 9.7 | 966.3 | 8.5 | 852.7 |

| Channel | Base Check (ohm-m) | Field Check (ohm-m) |
|---|---|---|
| Shallow | 49.4 | 49.4 |
| Deep | 31.7 | 31.7 |
| Groningen | 253.9 | 253.9 |

## Laterolog Constants MLE 016

| | | |
|---|---|---|
| Squasher Start | 40000 | ohm-m |
| Shallow Laterolog K Factor | 1.3273 | |
| Deep Laterolog K Factor | 0.8527 | |
| Groningen Laterolog K Factor | 0.8527 | |
| Interference Rejection | 50 Hz | |
| SP Connection | SP Bridle Electrode | |
| Groningen Connection | None | |

## SP Calibration MLE 016

Field Calibration on 3-OCT-2005,20:16

| | Measured | Calibrated (mV) |
|---|---|---|
| Reference 1 | 93.1 | 100.0 |
| Reference 2 | -114.1 | -100.0 |

## Micro Laterolog Calibration MMR 005

Base Calibration on 24-AUG-2005 09:35
Field Check on 3-OCT-2005,20:16

Base Calibration

| | Measured | | Calibrated (ohm-m) | |
|---|---|---|---|---|
| | Ref 1 | Ref 2 | Ref 1 | Ref 2 |
| | 0.0 | 9744.7 | 0.0 | 196.0 |

| Base Check (ohm-m) | Field Check (ohm-m) |
|---|---|
| 8.1 | 8.0 |

## Micro Laterolog Constants MMR 005

| | | |
|---|---|---|
| Micro Laterolog K Factor | 0.0196 | |

| | | |
|---|---|---|
| Micro Laterolog K Factor | 0.0196 | |
| Standoff Offset | 0.0000 | inches |

| | |
|---|---|
| COMPANY | ORIGIN ENERGY RESOURCES LIMITED |
| WELL | CHILDERS COVE 1 |
| FIELD | ONSHORE OTWAY BASIN |
| PROVINCE/COUNTY | VICTORIA |
| COUNTRY/STATE | AUSTRALIA |

| | | | | | |
|---|---|---|---|---|---|
| Elevation Kelly Bushing | 51.50 | metres | First Reading | 2656.80 | metres |
| Elevation Drill Floor | | metres | Depth Driller | 2658.00 | metres |
| Elevation Ground Level | 46.20 | metres | Depth Logger | 2656.80 | metres |

PRECISION ENERGY SERVICES

Compact

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DENSITY - NEUTRON

1:500