



Weatherford

**ARRAY INDUCTION
SHALLOW FOCUSED
ELECTRIC LOG**

COMPANY **O'BRIEN RESOURCES, LLC.**

WELL **SWART #5-1**

FIELD **WILDCAT**

PROVINCE/COUNTY **GOVE**

COUNTRY/STATE **UNITED STATES / KANSAS**

LOCATION **2292' FNL & 87' FEL**

SEC 5 TWP 14S RGE 3W Other Services MPD/MDN MML

API Number 15-063-22118 Permit Number

Permanent Datum G.L., Elevation 2704 feet

Log Measured From KB Elevations: KB 2714.00

Drilling Measured From K.B. @ 10 FEET DF 2712.00

Date 21-AUG-2013 GL 2704.00

Run Number ONE

Service Order 3541071

Depth Driller 4550.00 feet

Depth Logger 4550.00 feet

First Reading 4547.00 feet

Last Reading 3550.00 feet

Casing Driller 260.00 feet

Casing Logger 260.00 feet

Bit Size 7.880 inches

Hole Fluid Type CHEMICAL

Density / Viscosity 9.15 lb/USg 45.00 CP

PH / Fluid Loss 10.50 8.00 ml/30Min

Sample Source MUDPIT

Rm @ Measured Temp 1.84 @ 75.0 ohm-m

Rmf @ Measured Temp 1.47 @ 75.0 ohm-m

Rmc @ Measured Temp 2.21 @ 75.0 ohm-m

Source Rmf / Rmc CALC CALC

Rm @ BHT 1.08 @ 128.0 ohm-m

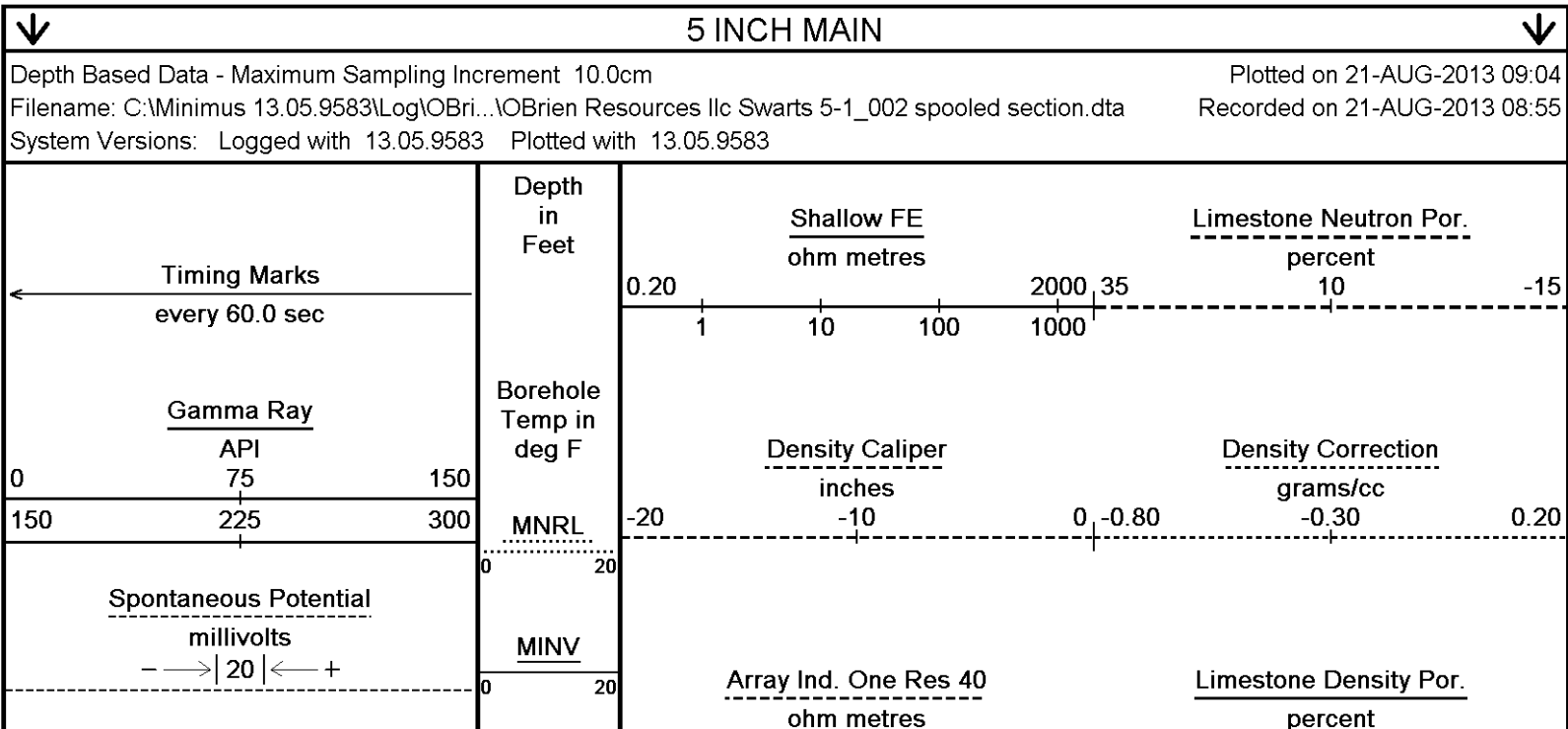
Time Since Circulation 5 HOURS

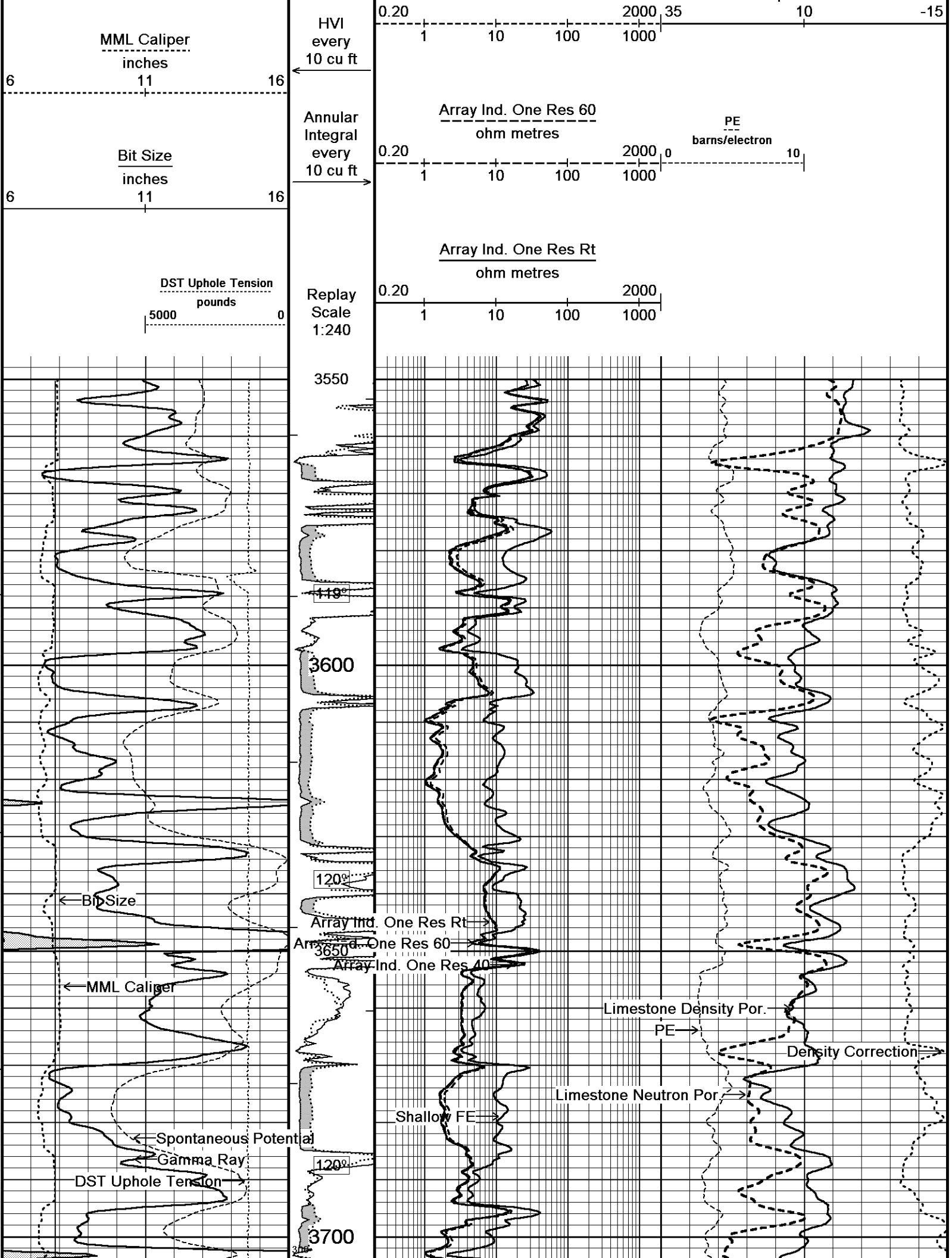
Max Recorded Temp 128.00 deg F

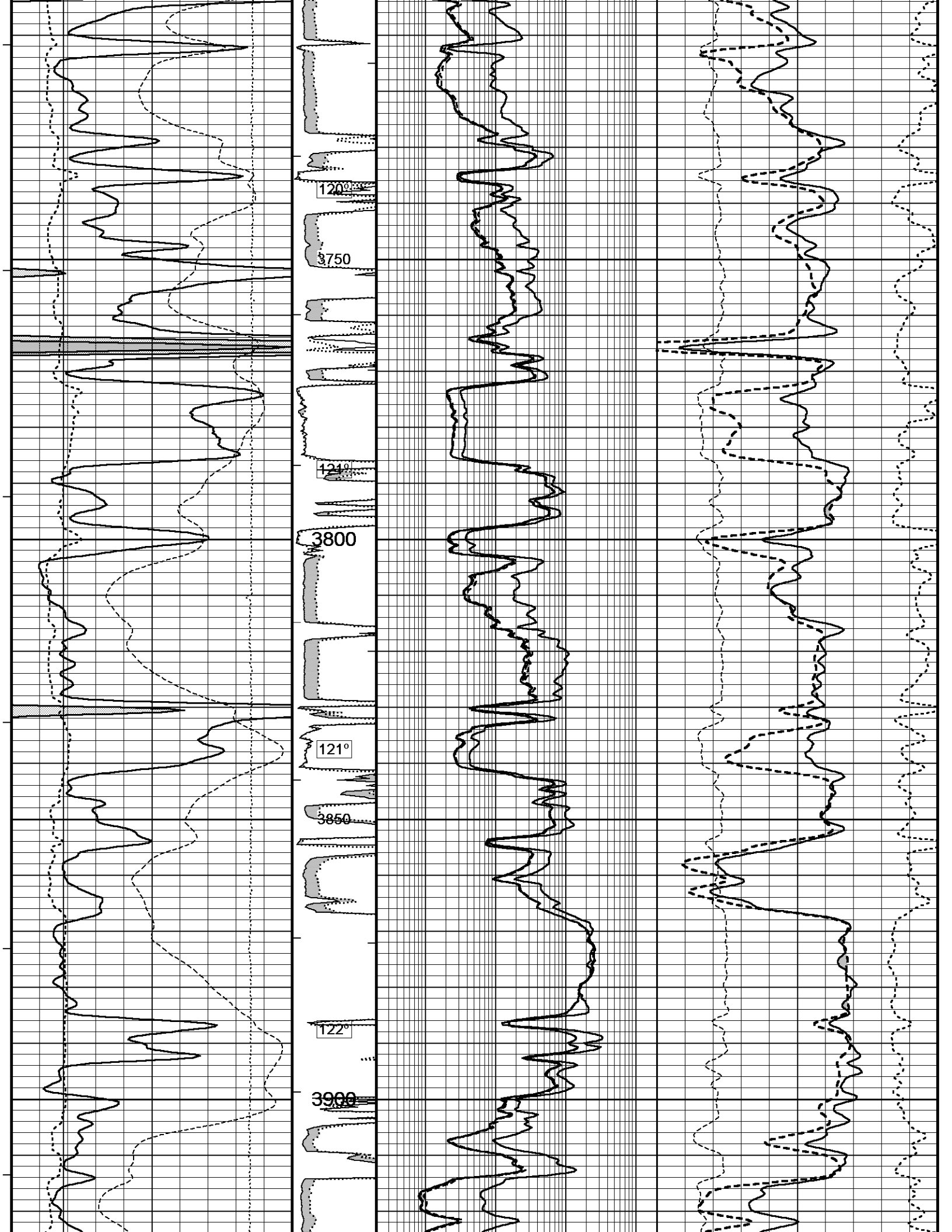
Equipment / Base 13096 LIB

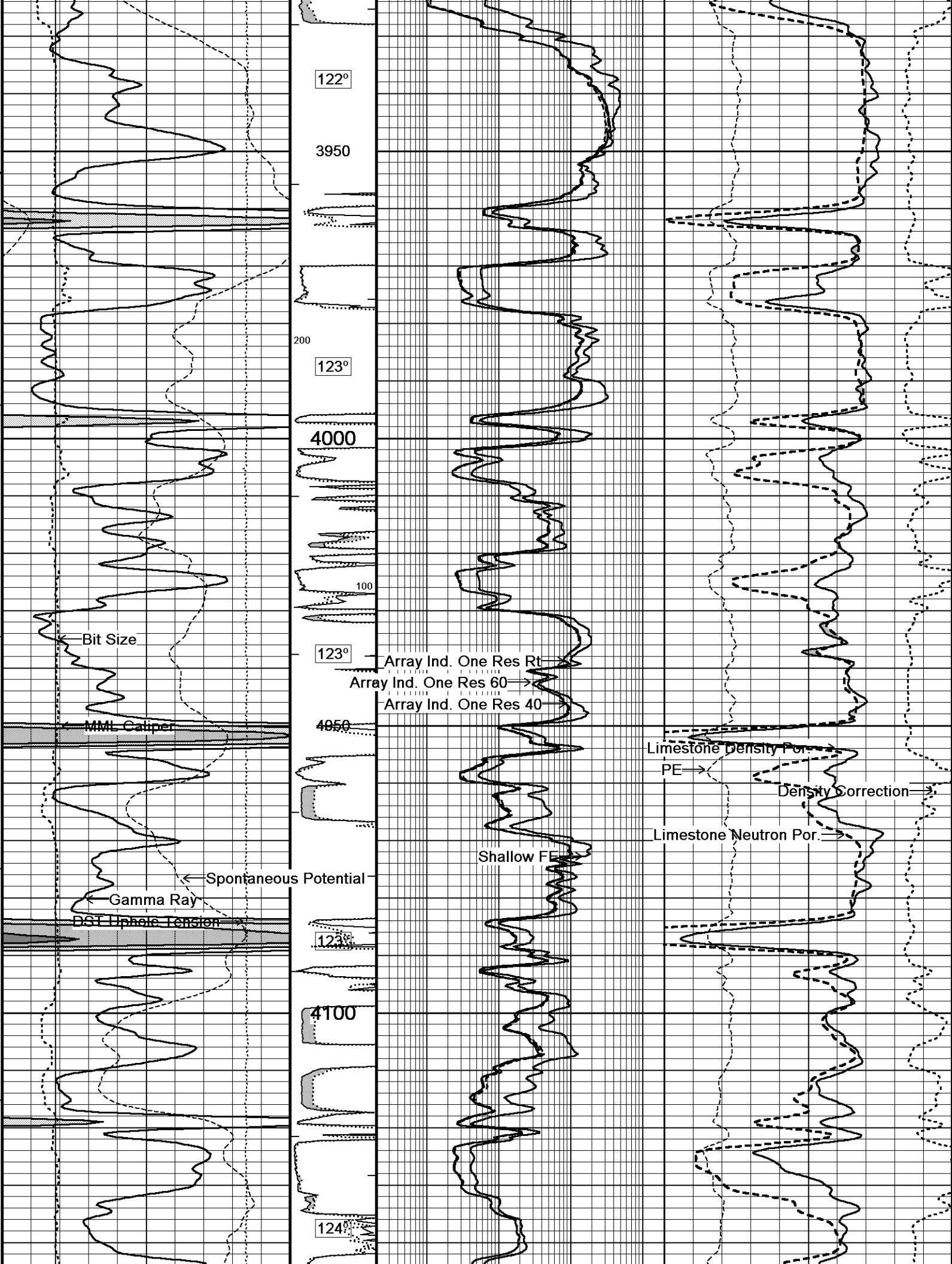
Recorded By W. STAMBAUGH
Witnessed By SEAN DEENIHAN
JOB# LB13-229

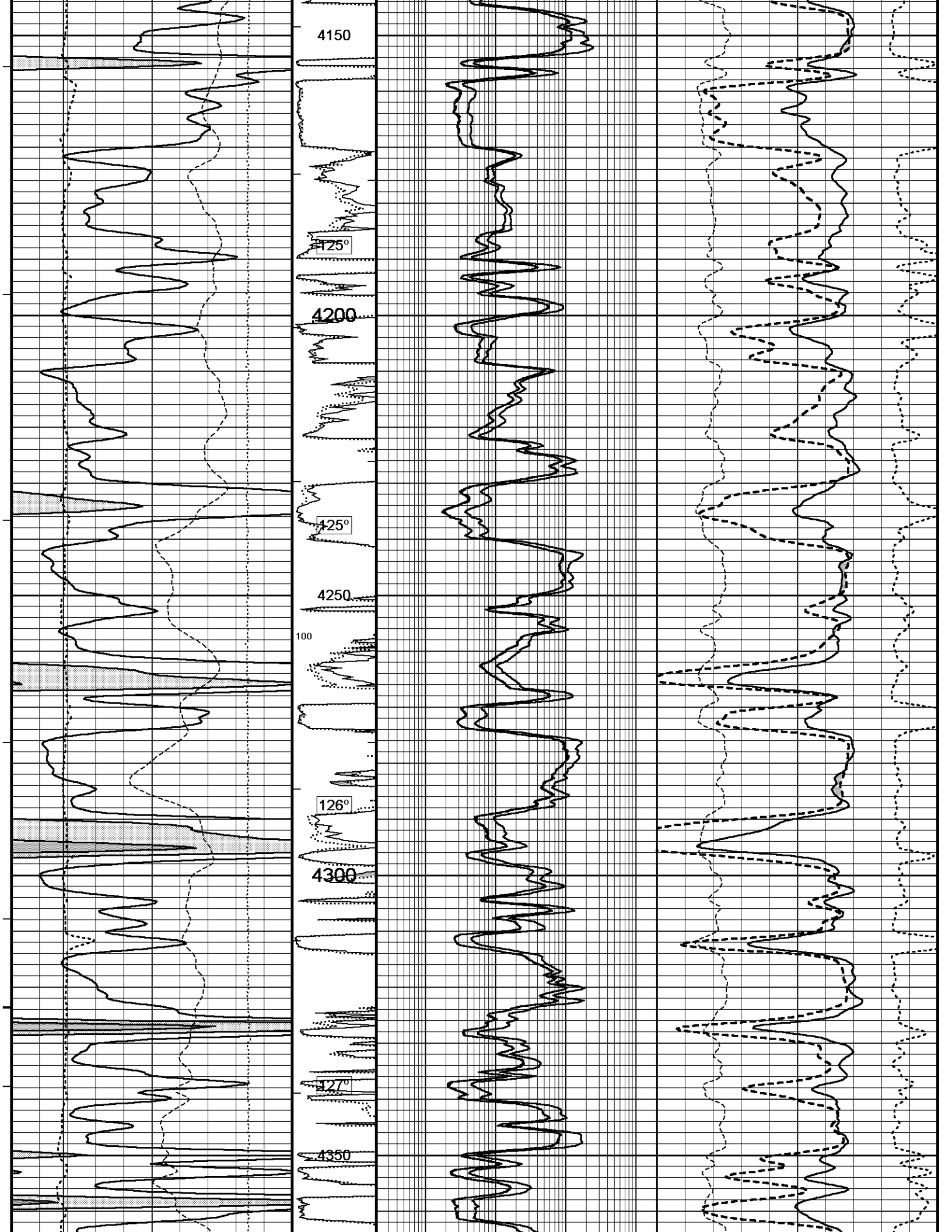
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

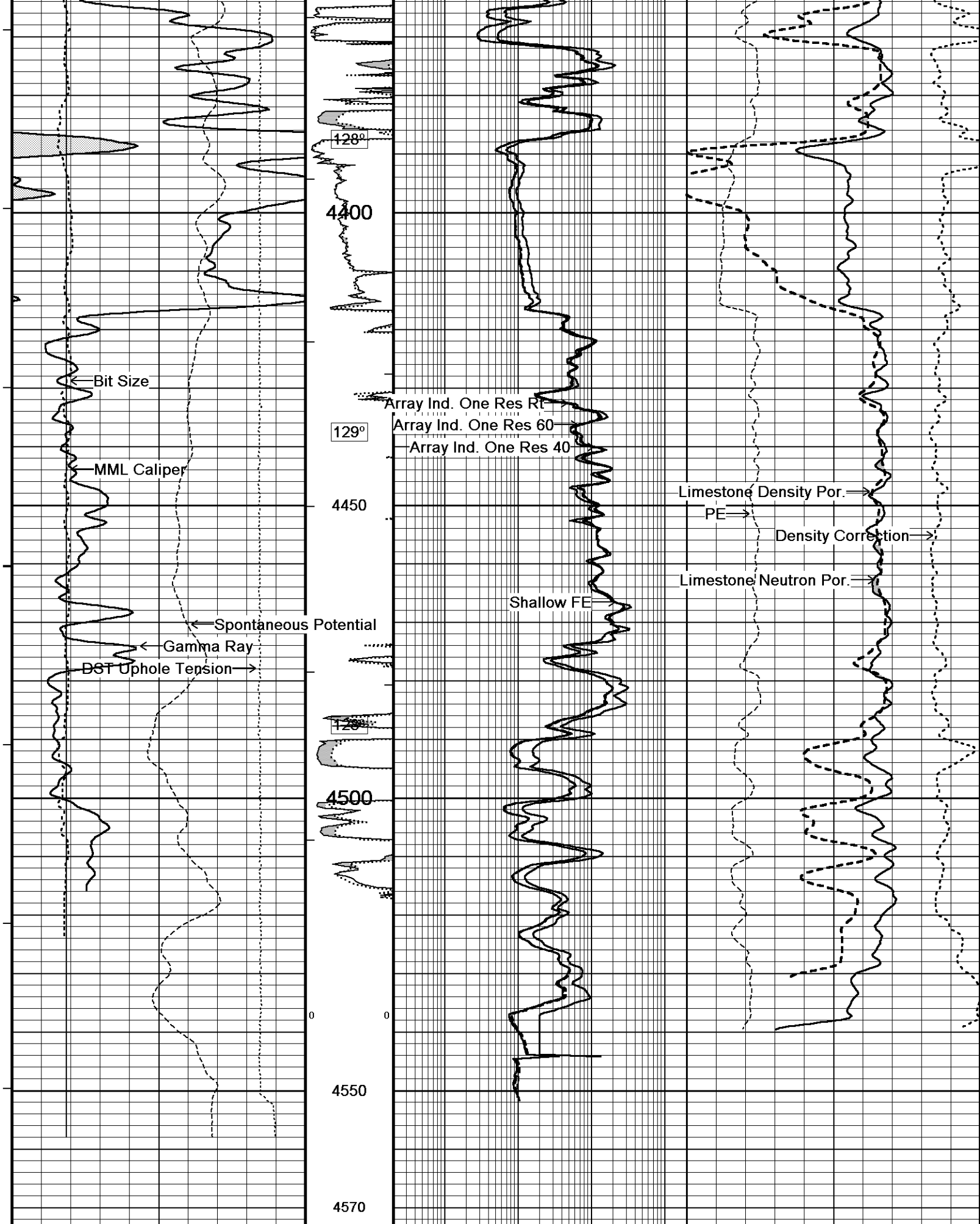














5 INCH MAIN



5 INCH MAIN



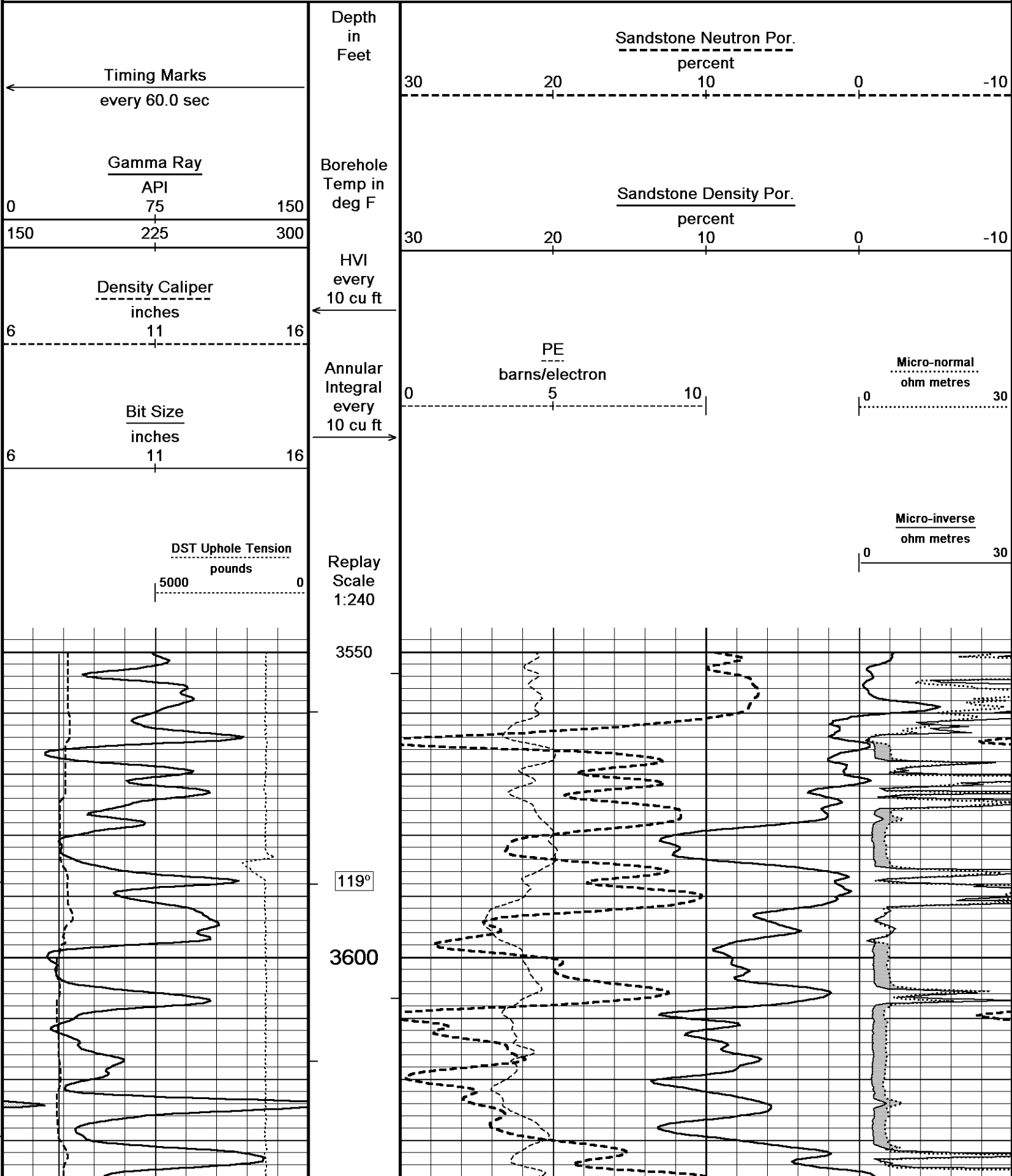
Depth Based Data - Maximum Sampling Increment 10.0cm

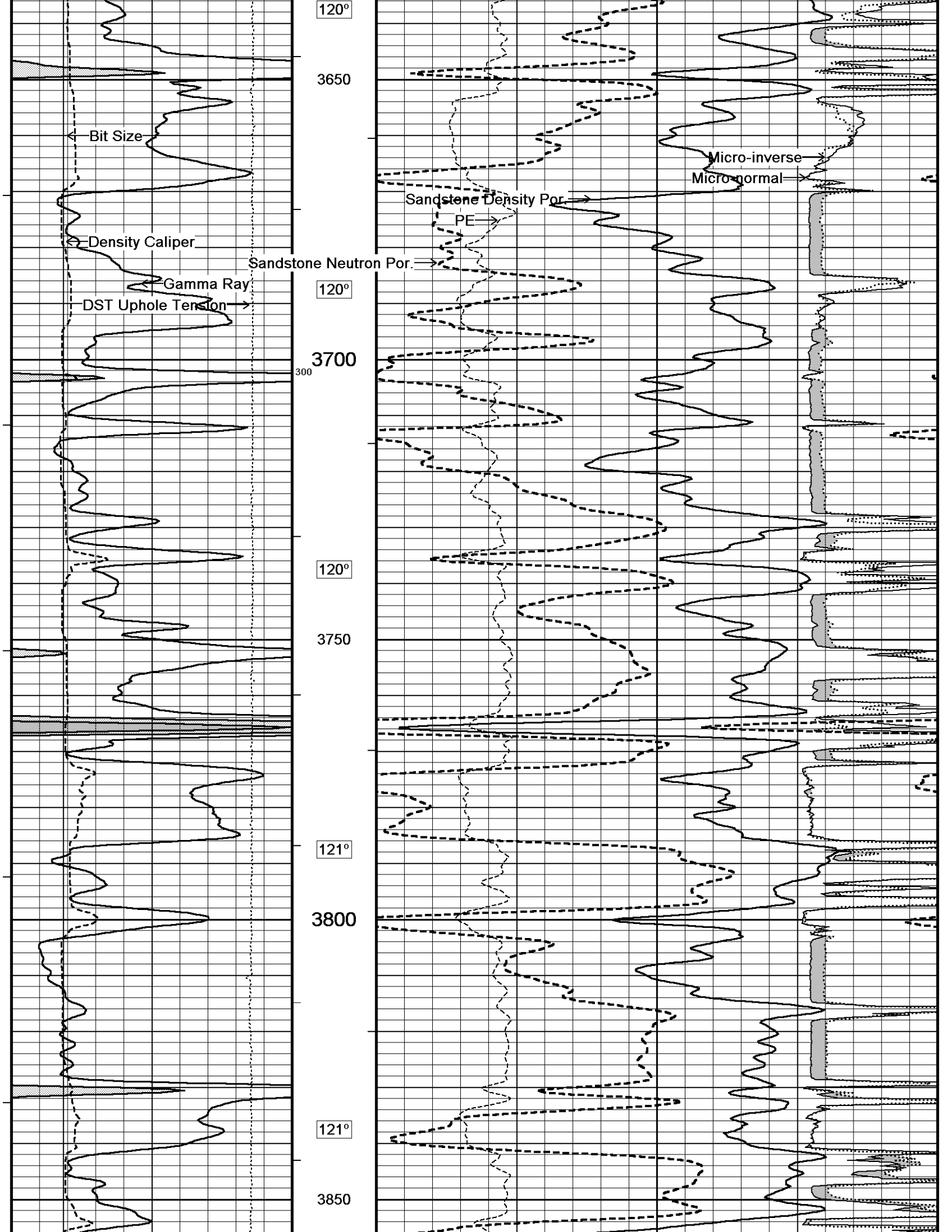
Plotted on 21-AUG-2013 09:04

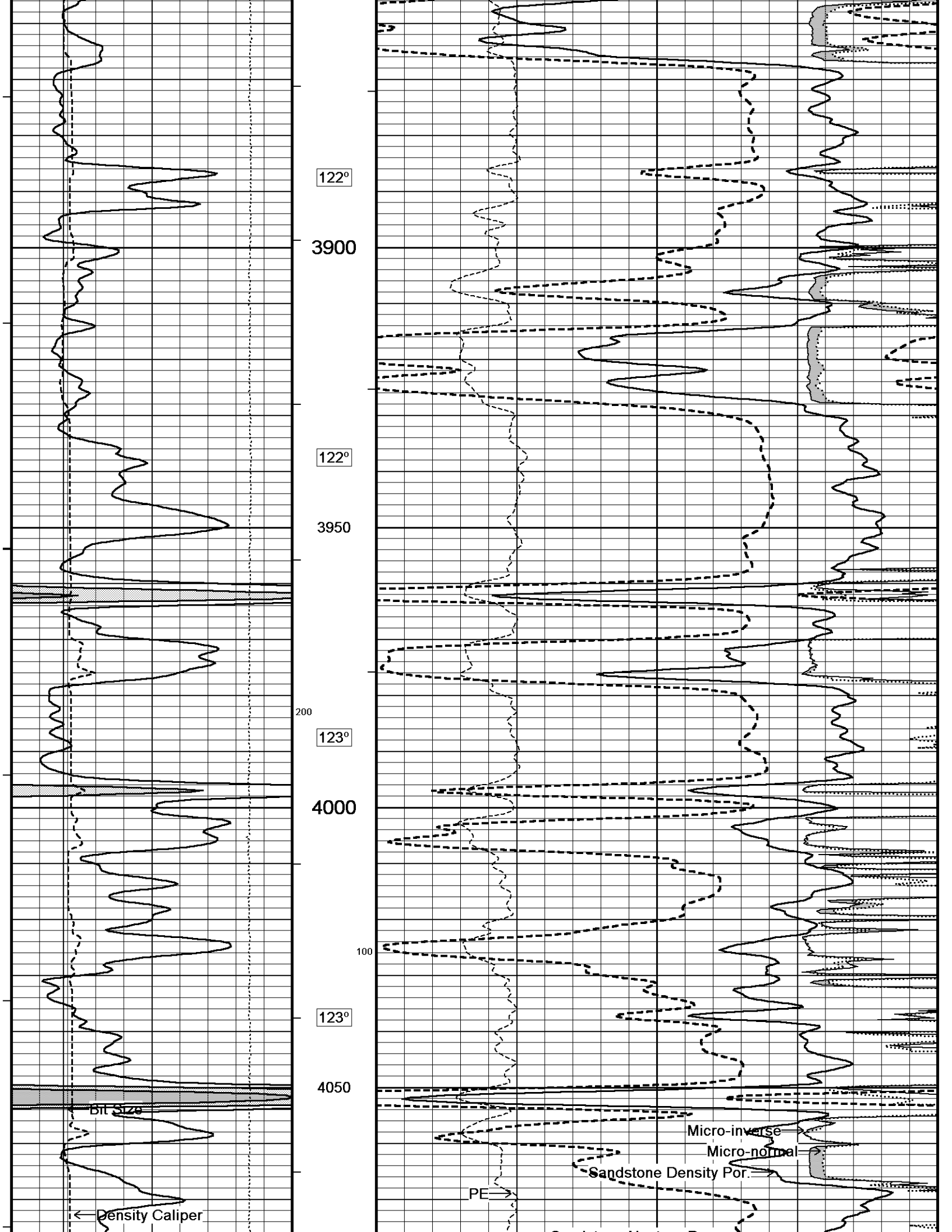
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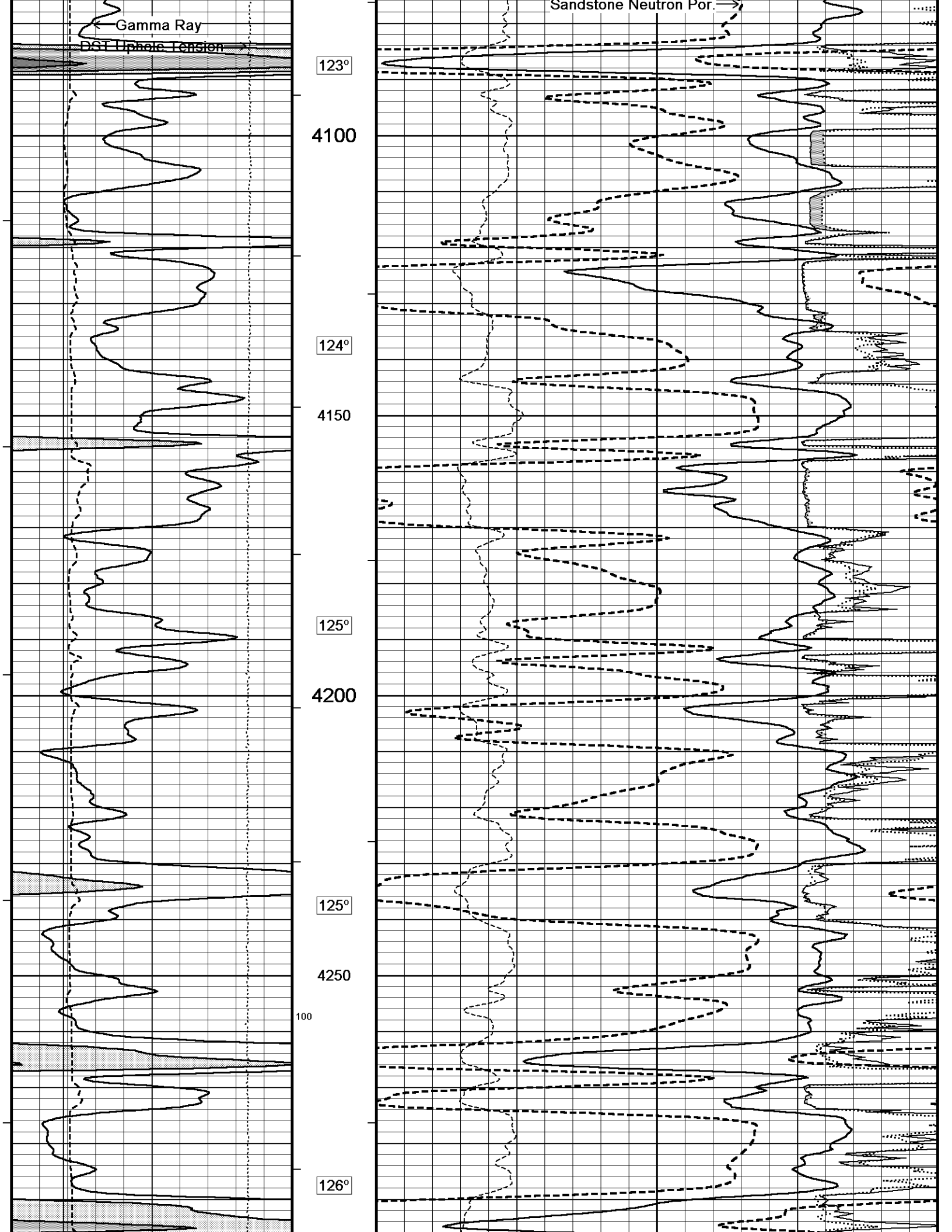
Recorded on 21-AUG-2013 08:55

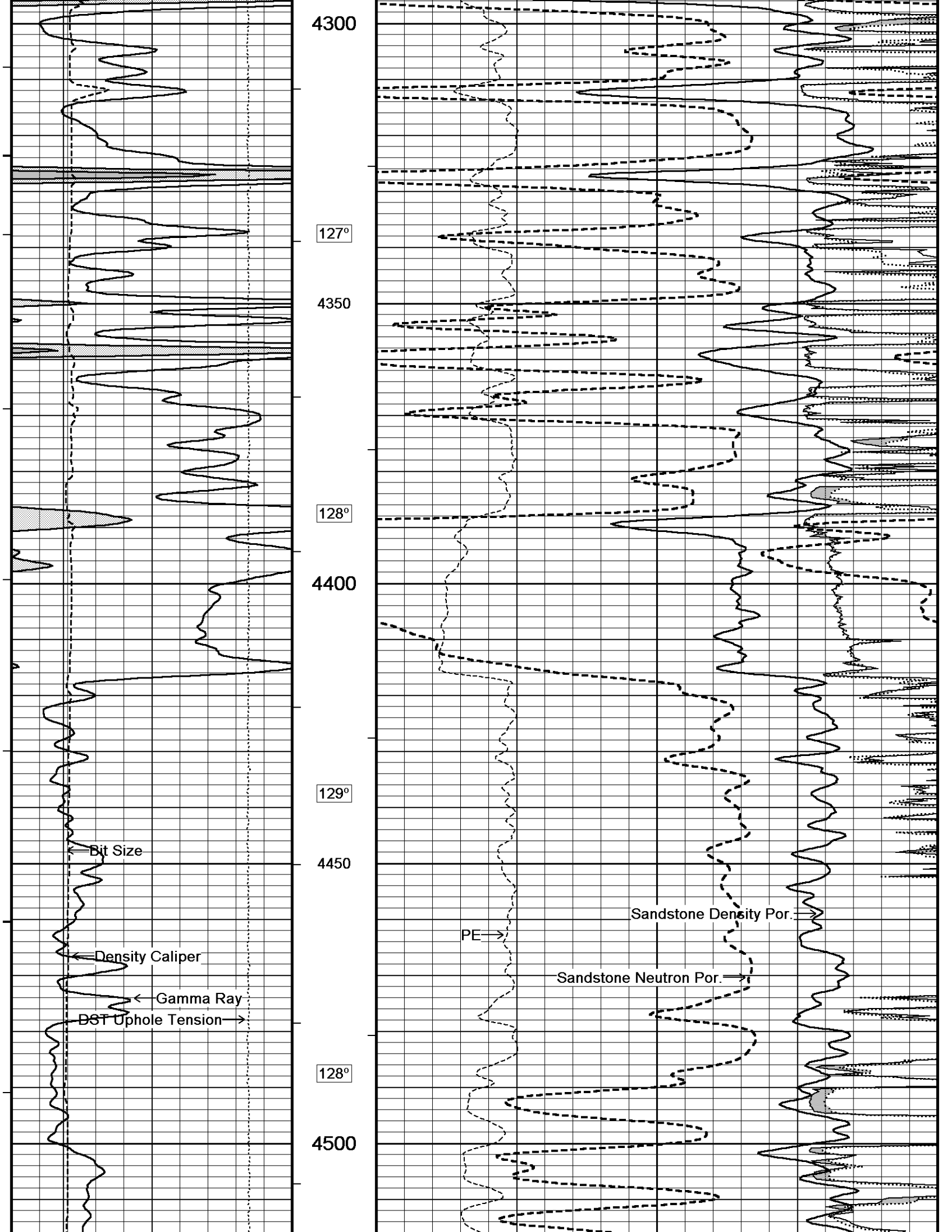
System Versions: Logged with 13.05.9583 Plotted with 13.05.9583

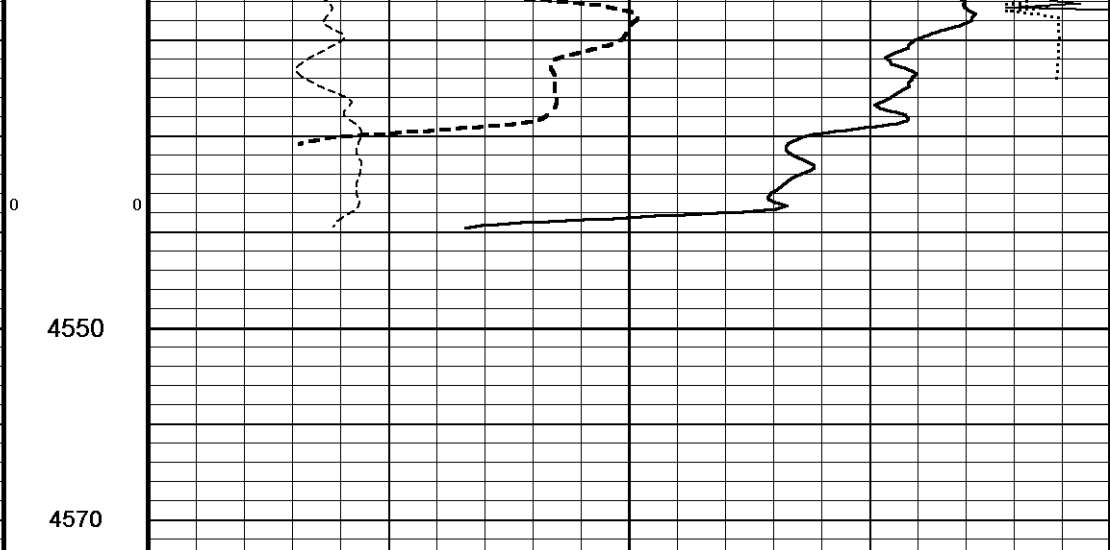
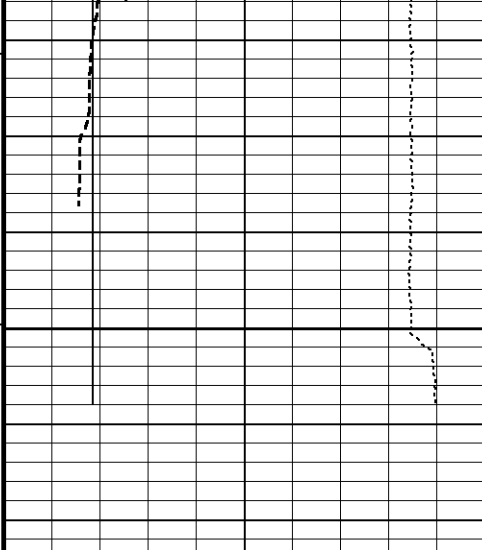










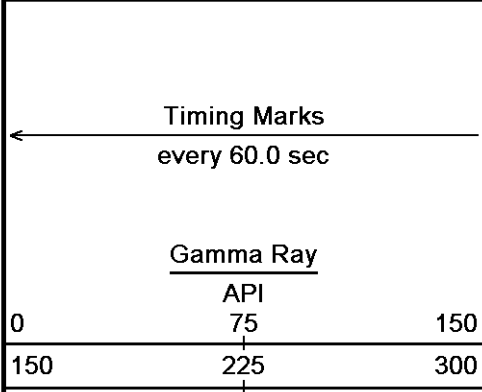


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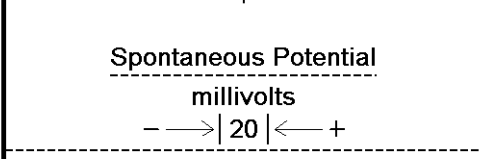
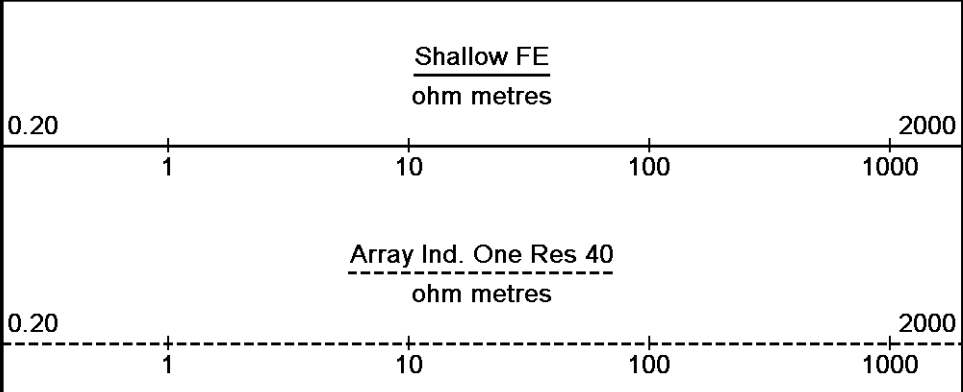
↑ 5 INCH MAIN ↑

↓ 5 INCH MAIN ↓

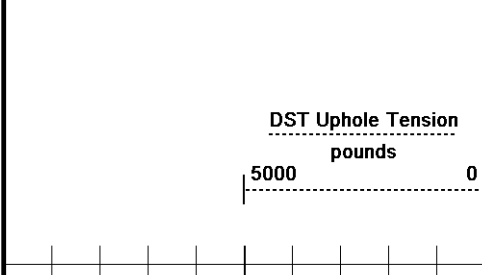
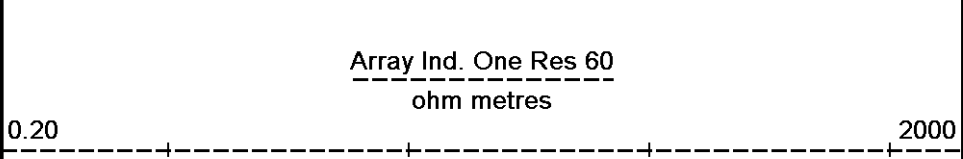
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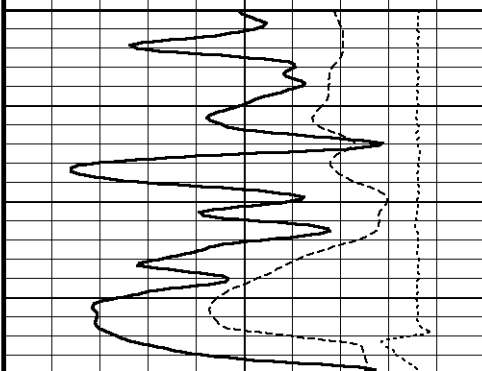
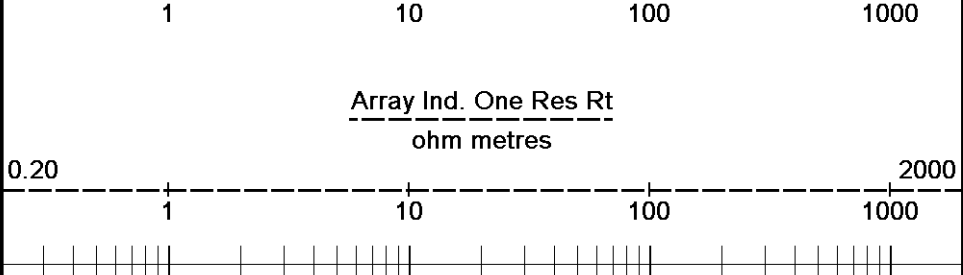
Depth in Feet
 Borehole Temp in deg F
 HVI every 10 cu ft



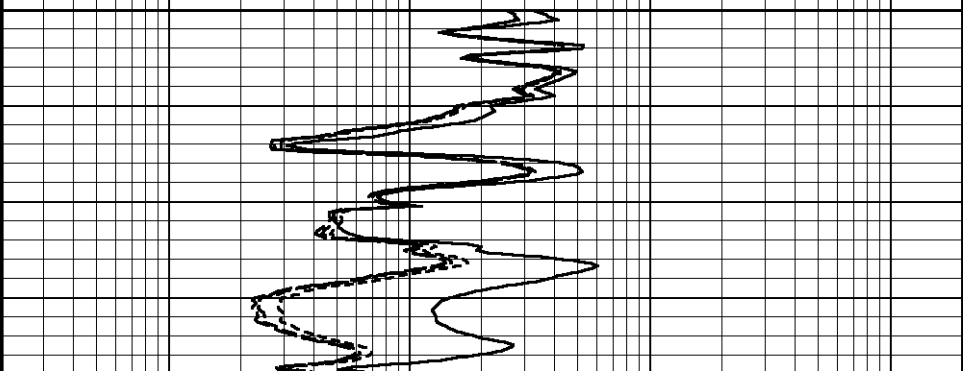
Annular Integral every 10 cu ft

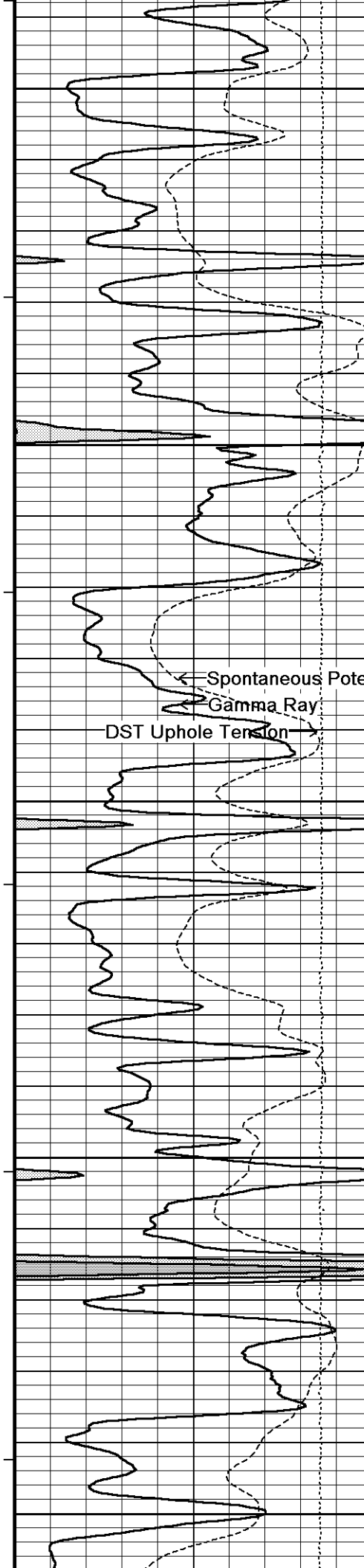


Replay Scale 1:240



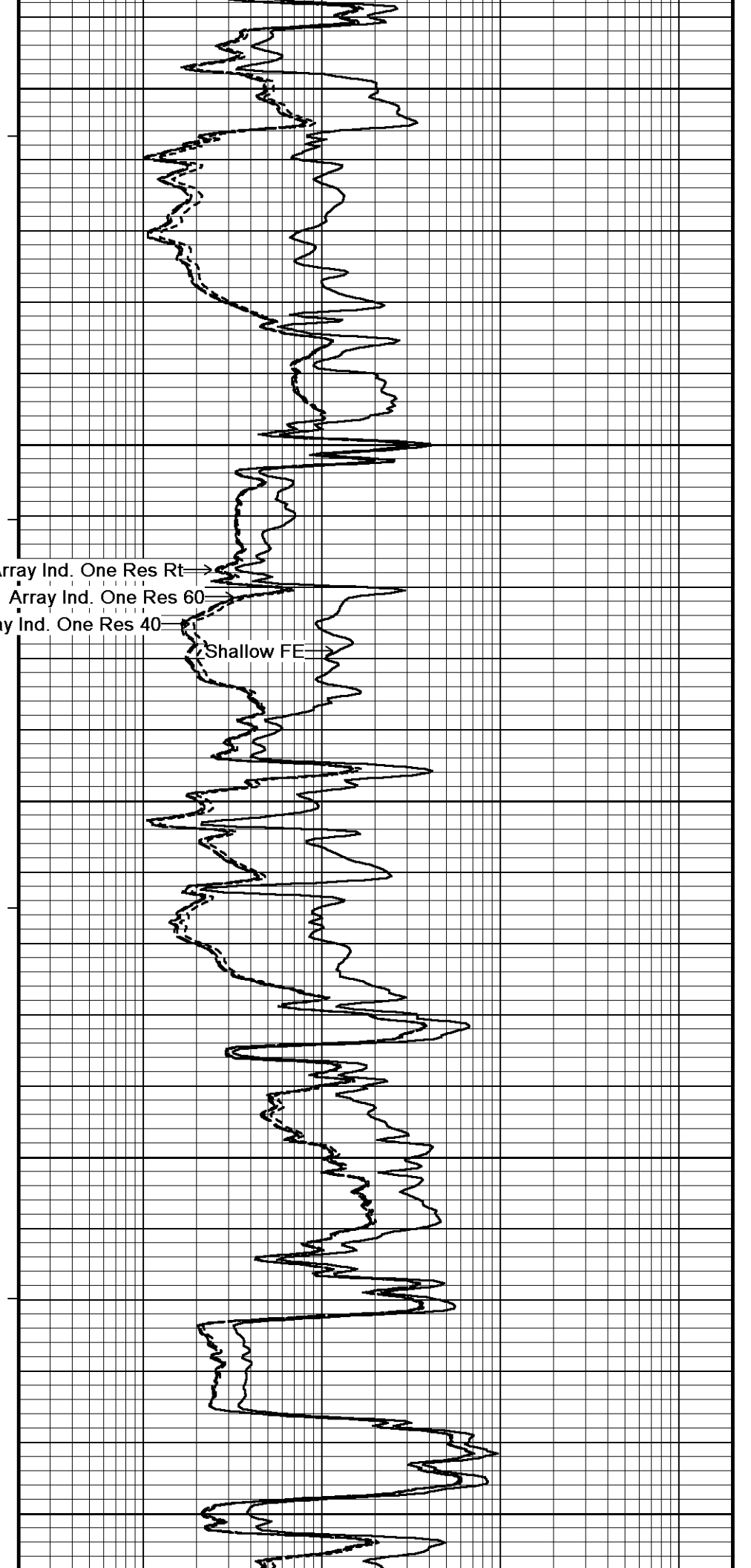
3550

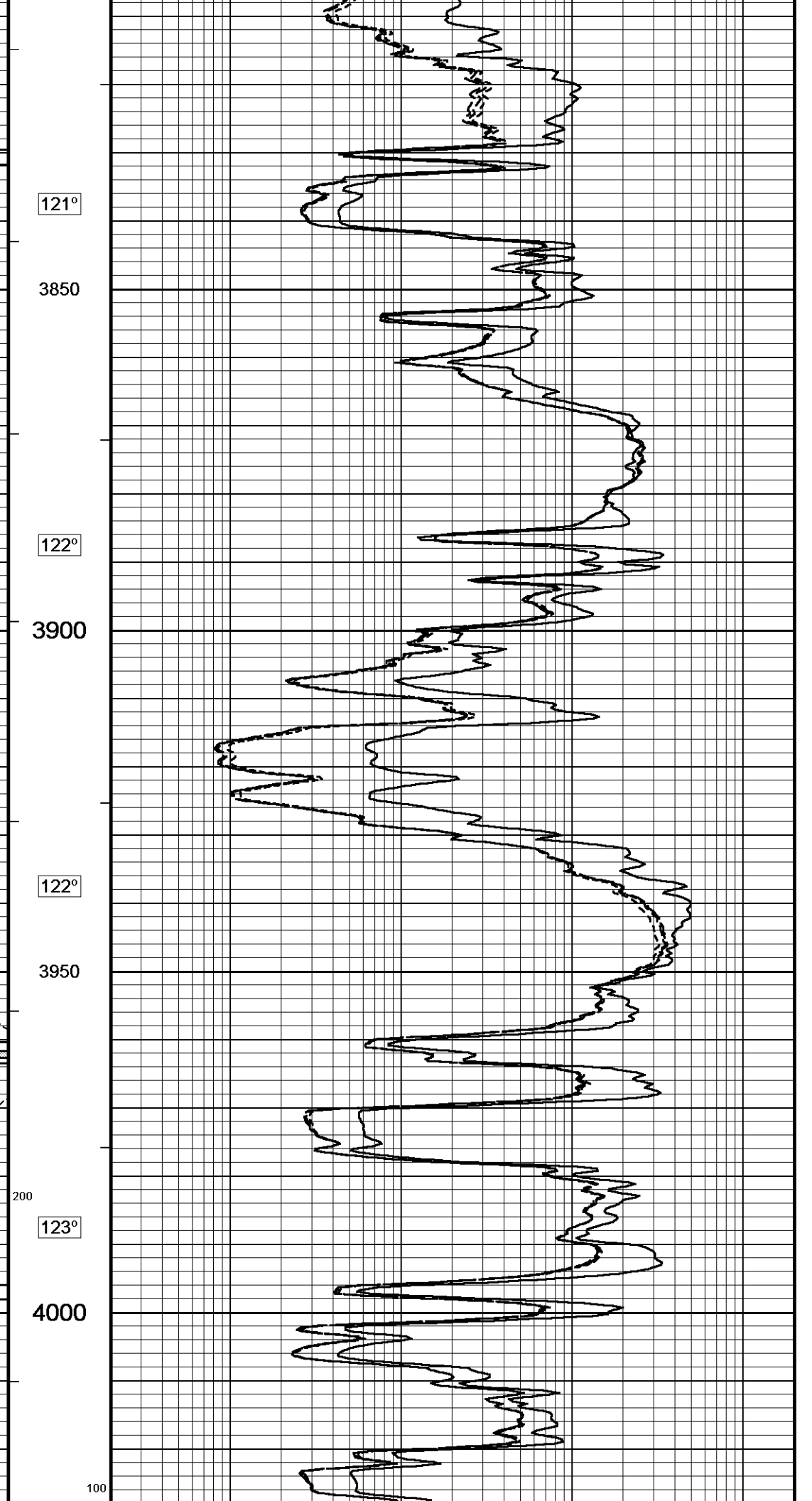
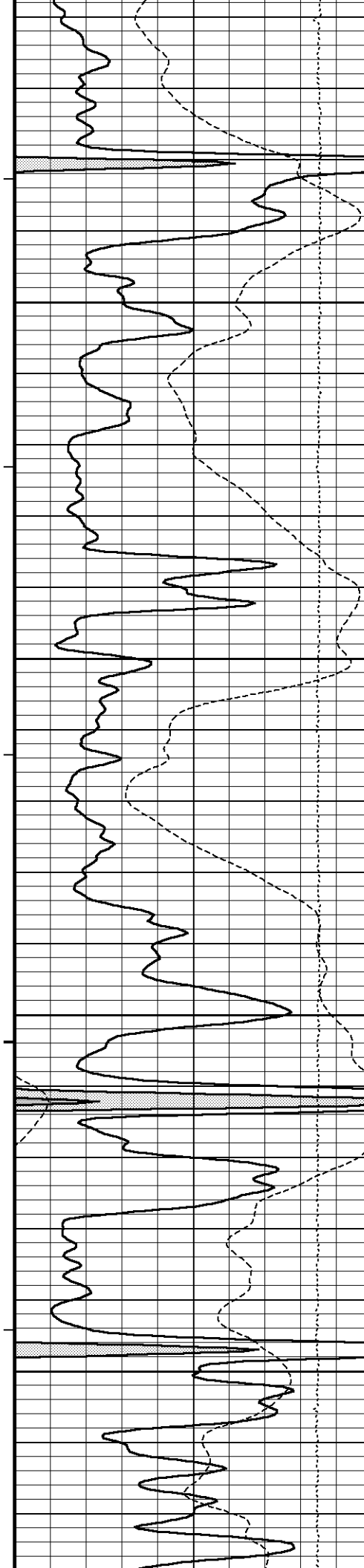


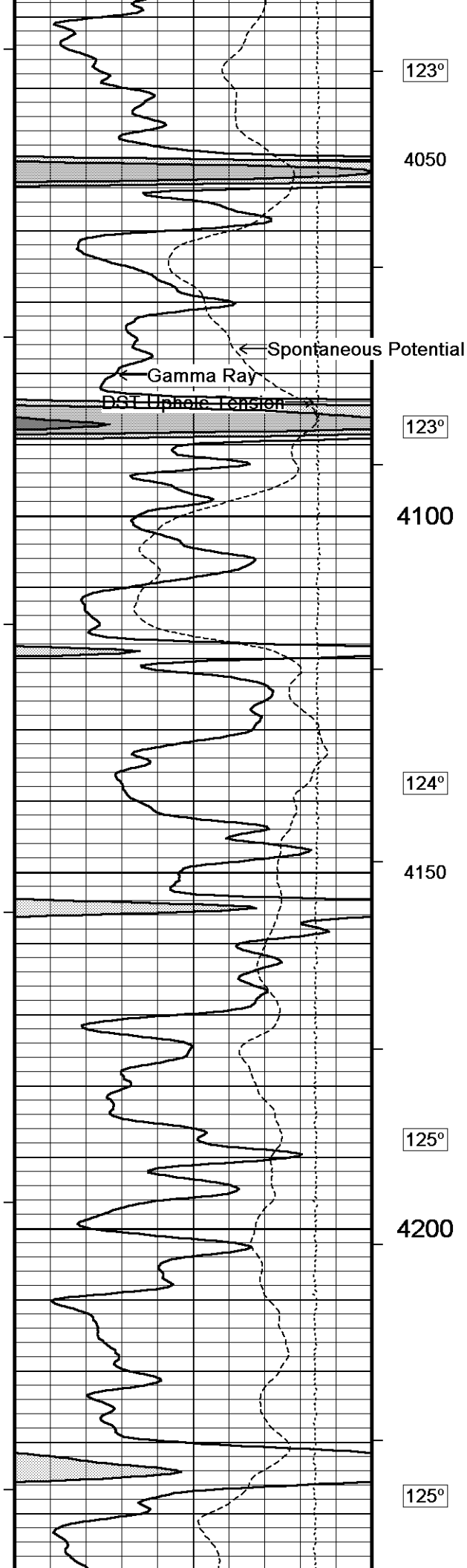


119
3600
120°
3650
120°
3700
300
120°
3750
121°
3800

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







123°

4050

← Spontaneous Potential

← Gamma Ray

DST Uphole Tension

123°

4100

124°

4150

125°

4200

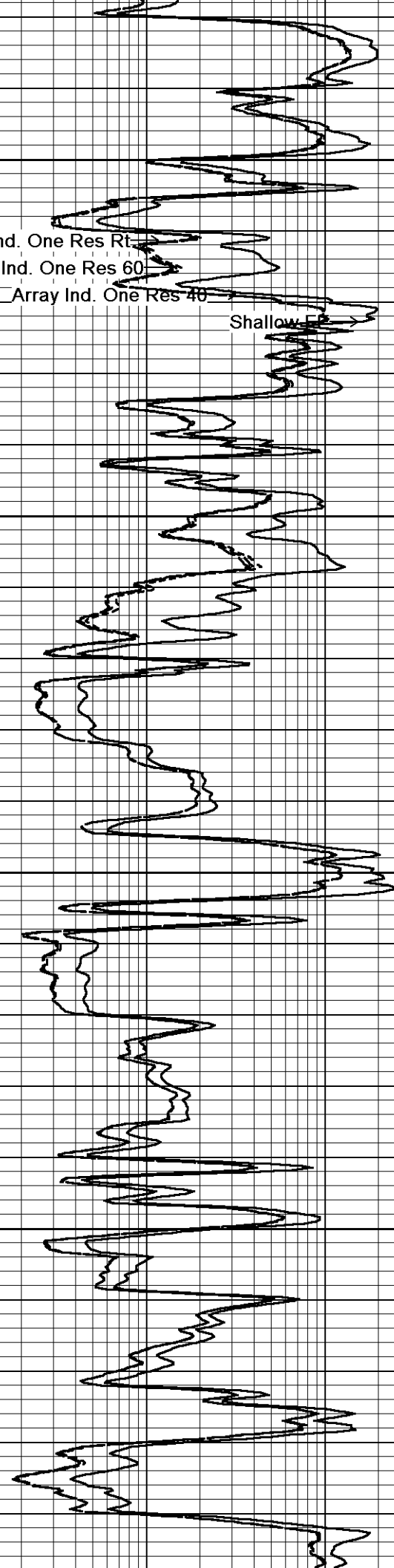
125°

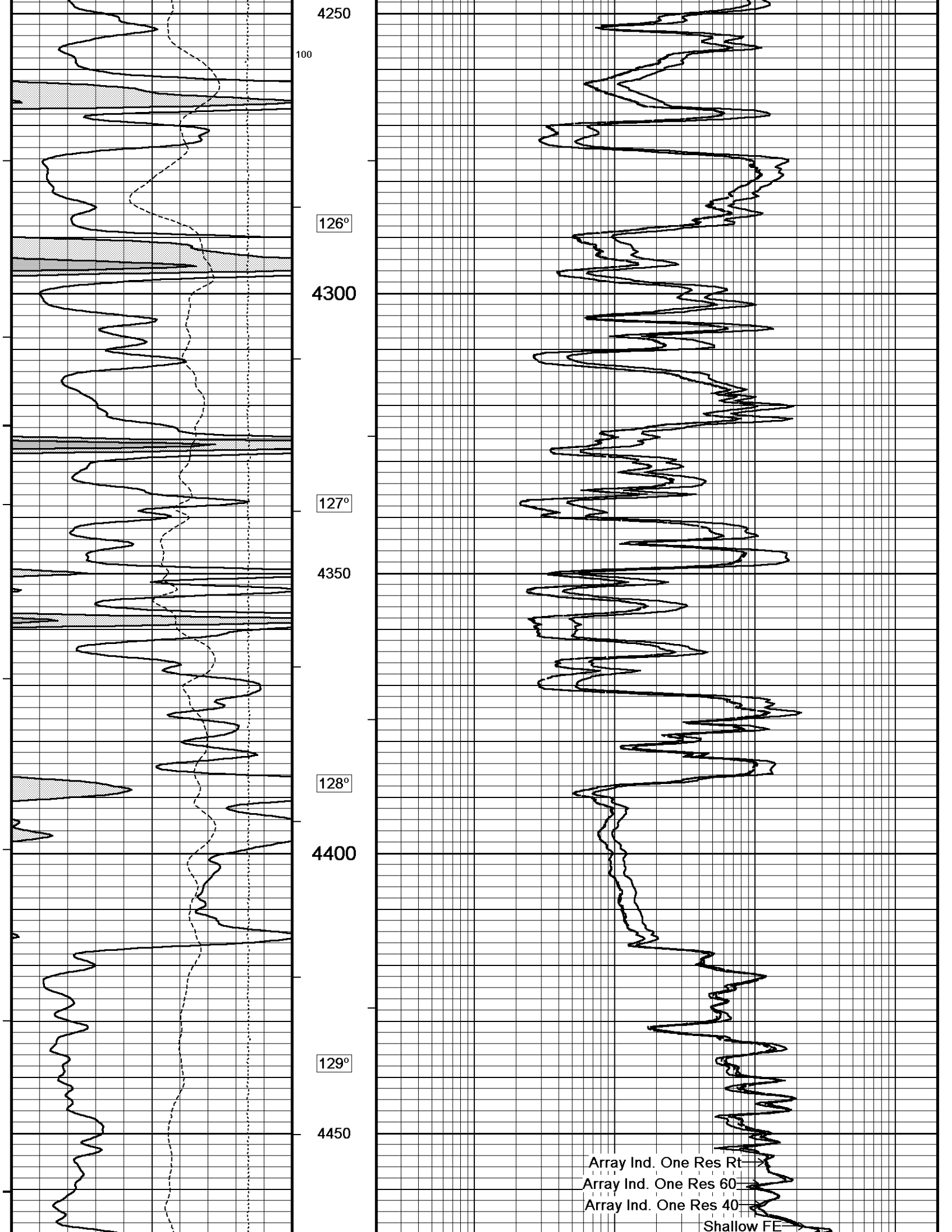
Array Ind. One Res Rt

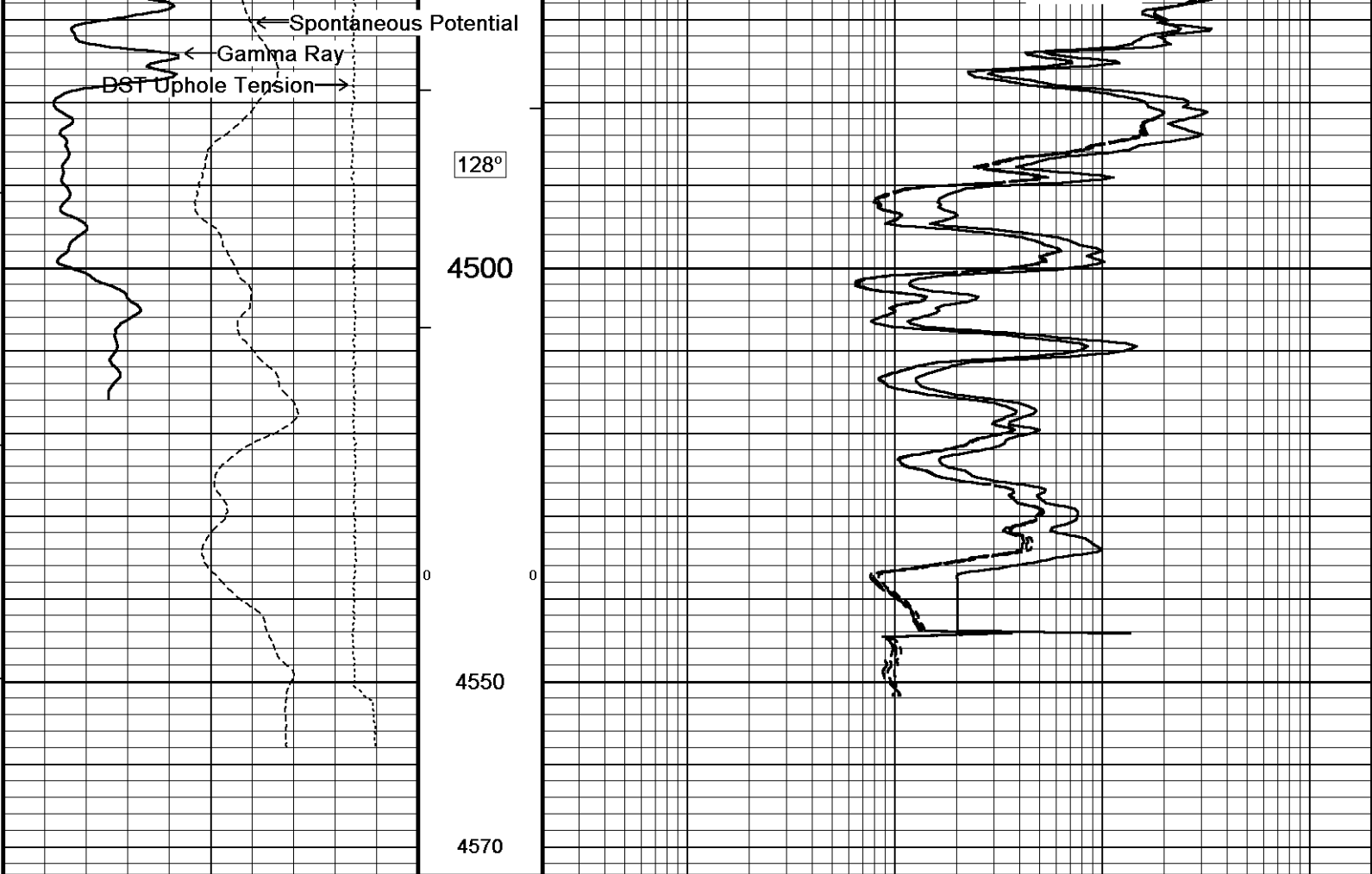
Array Ind. One Res 60

Array Ind. One Res 40

Shallow Fr





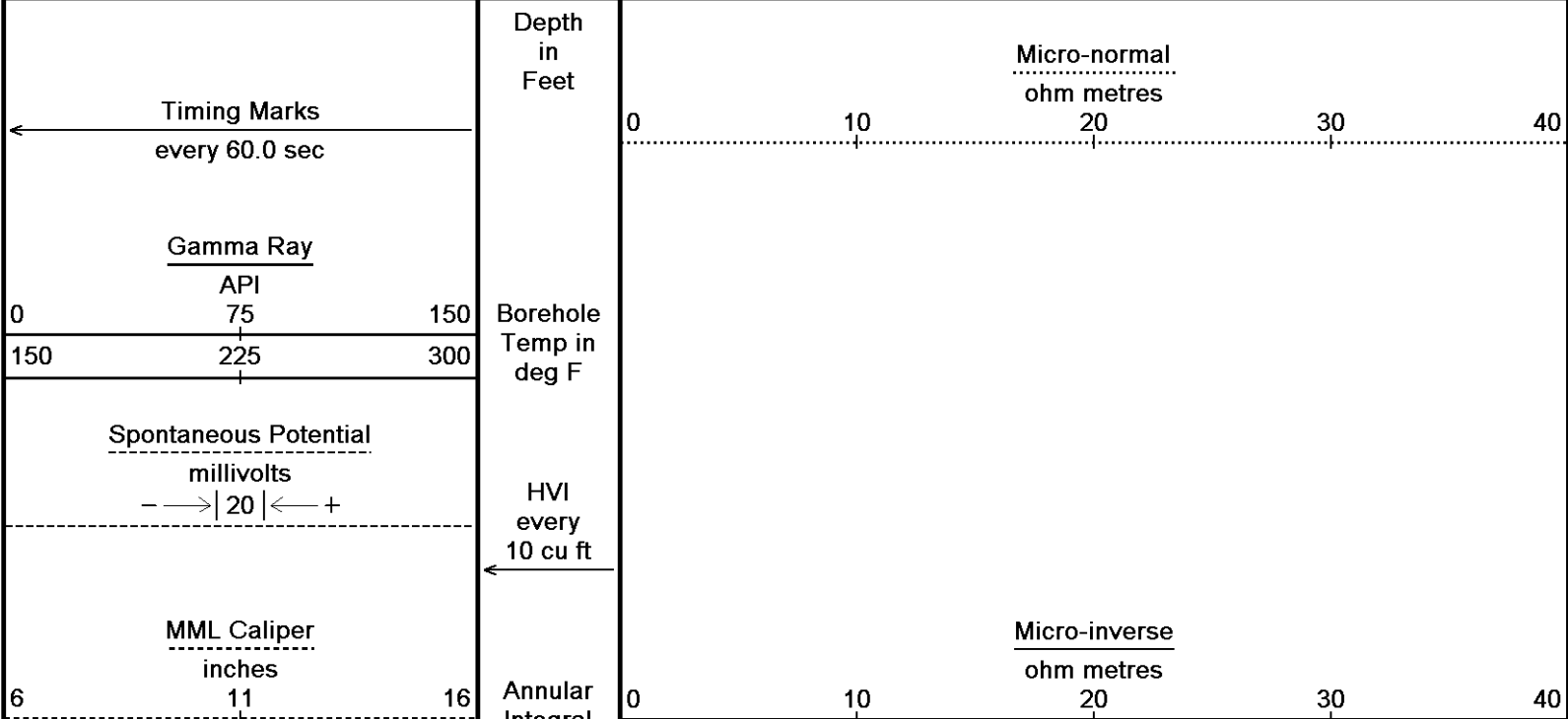


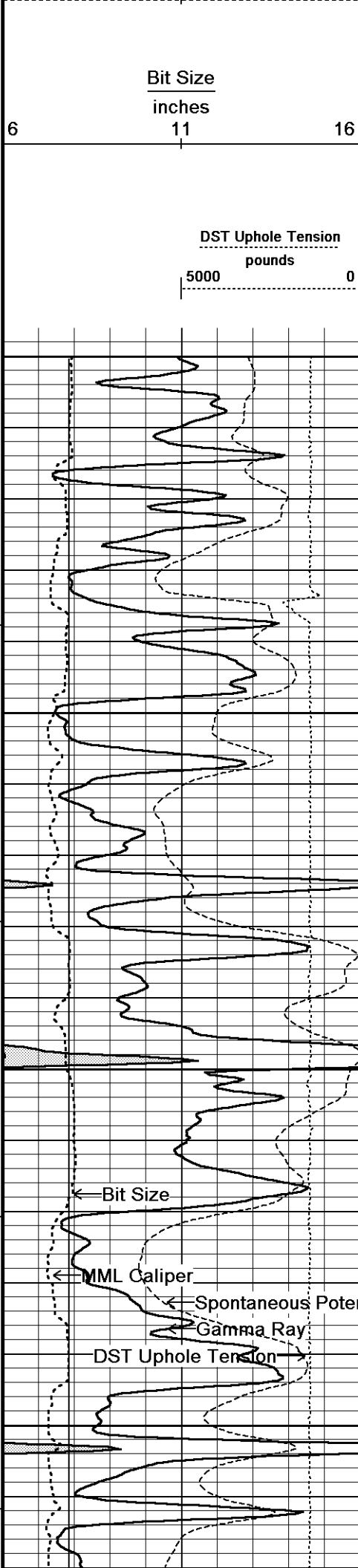
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Integral
every
10 cu ft

Replay
Scale
1:240

3550

119°

3600

120°

3650

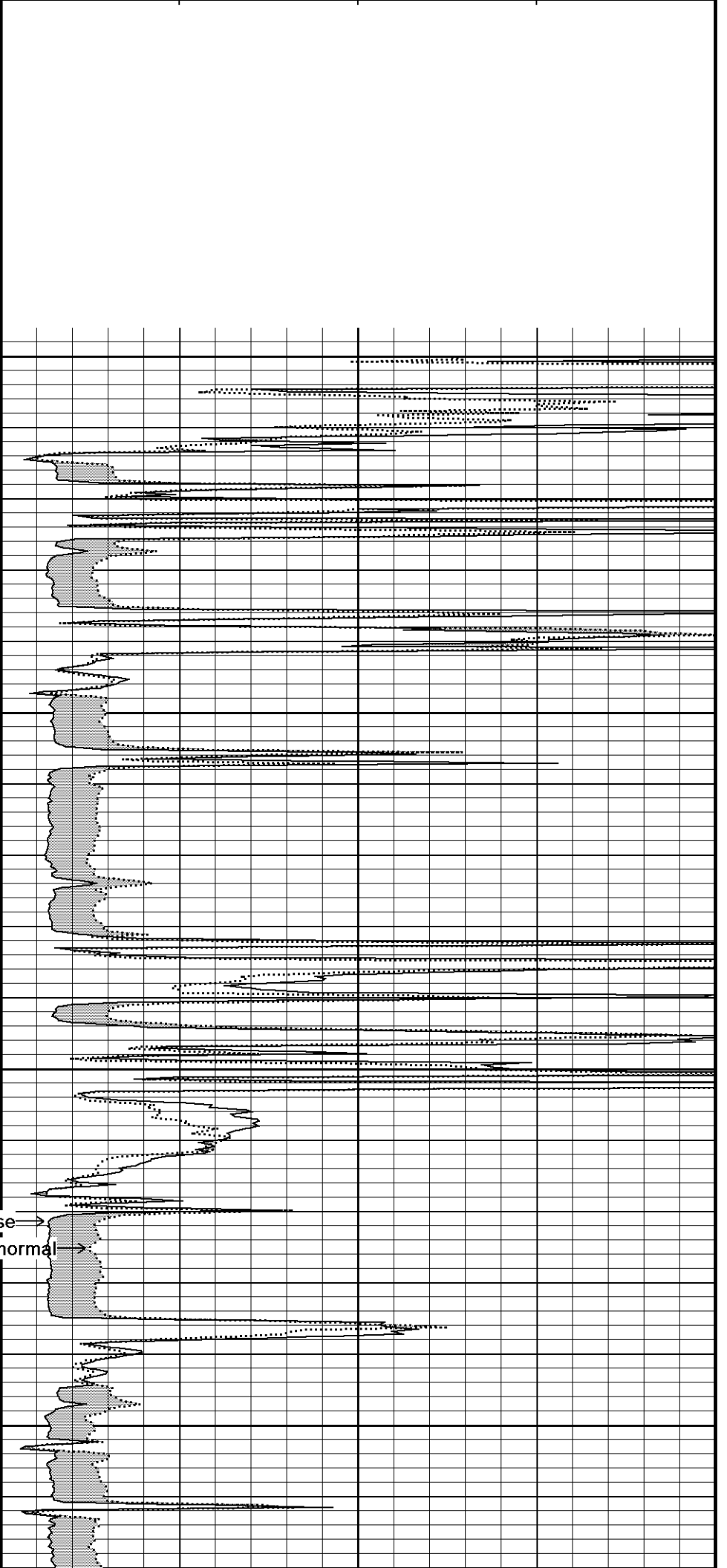
Micro-inverse

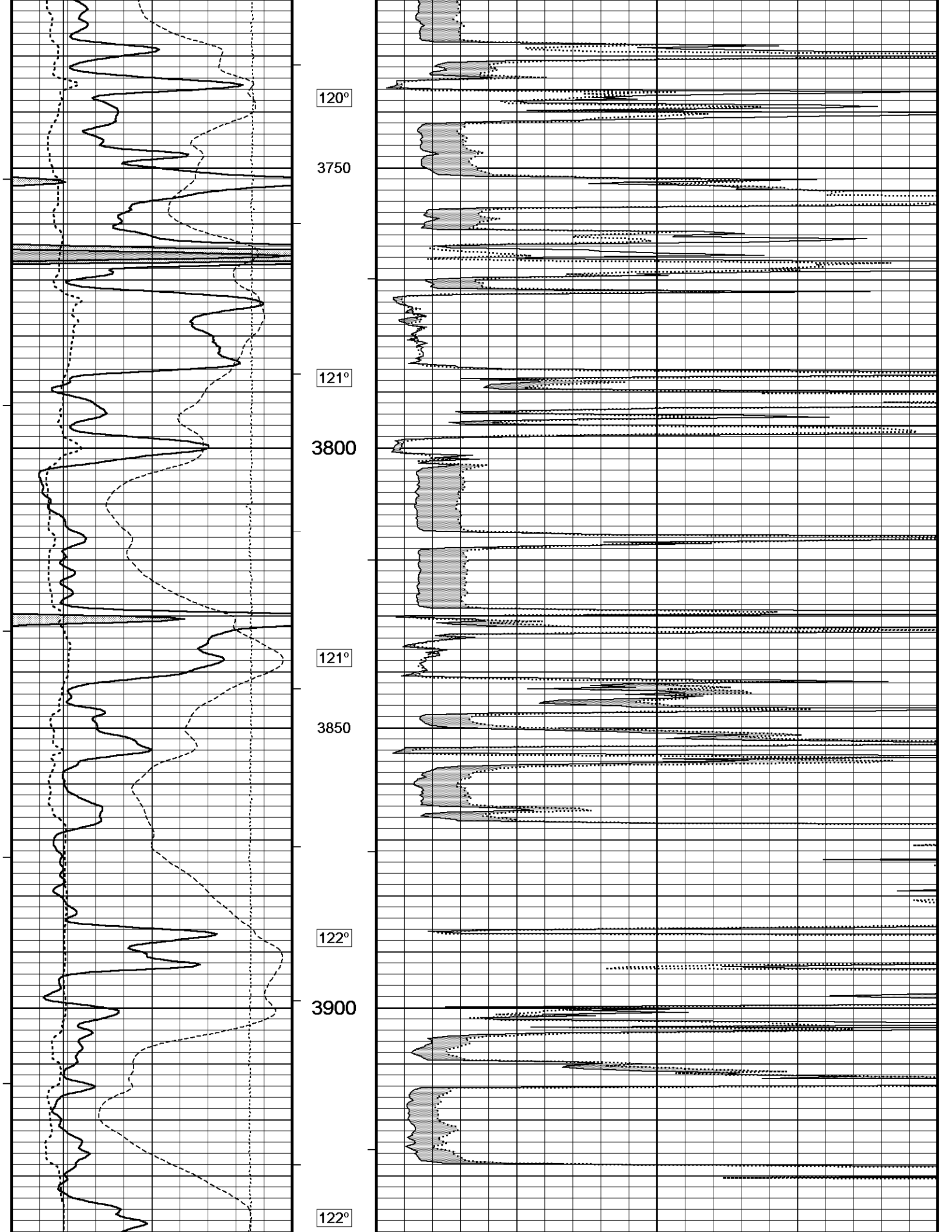
Micro-normal

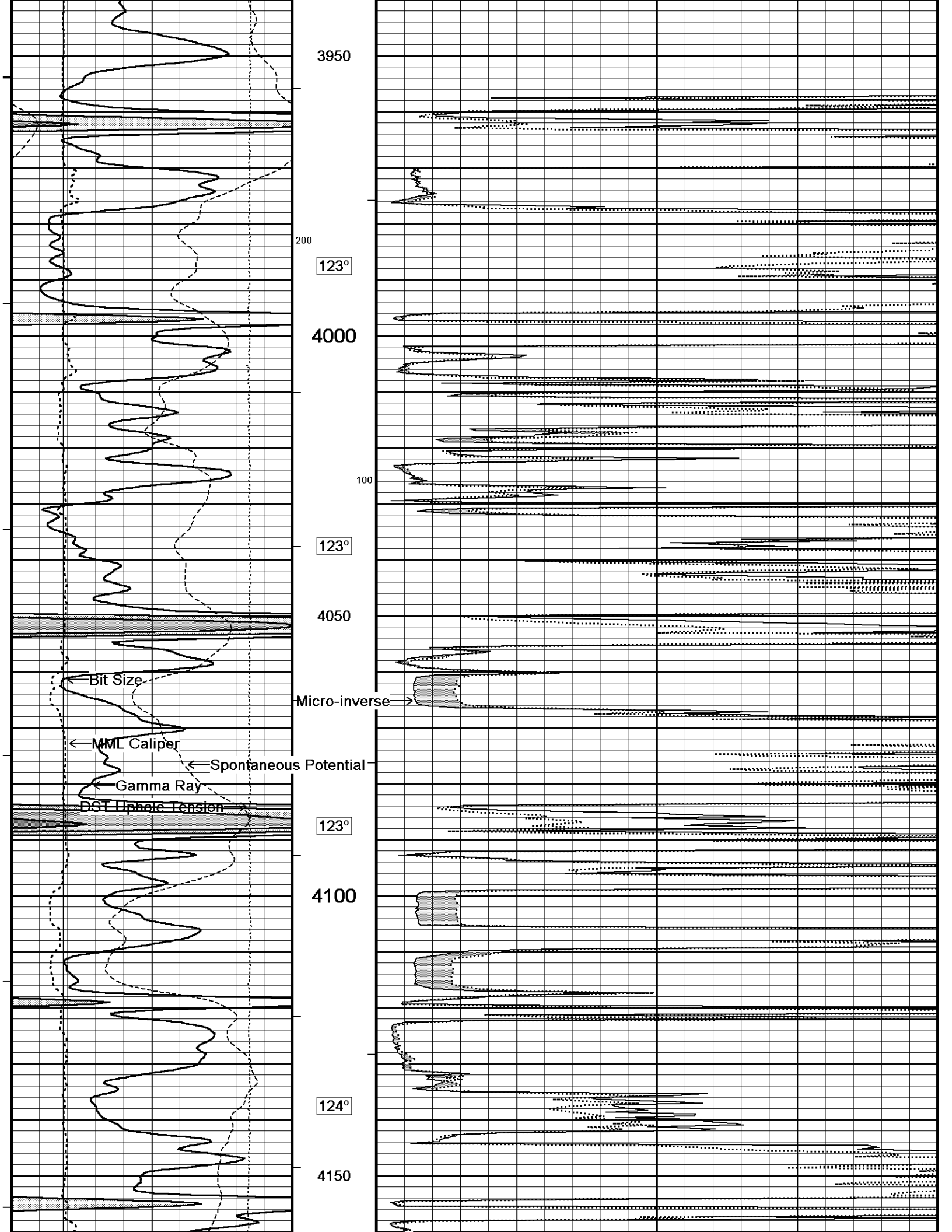
120°

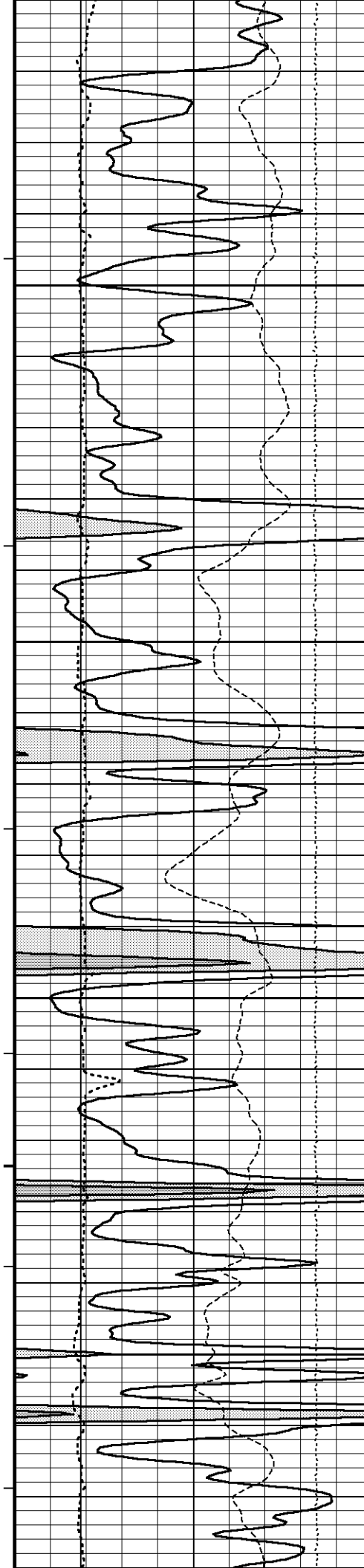
3700

300









125°

4200

125°

4250

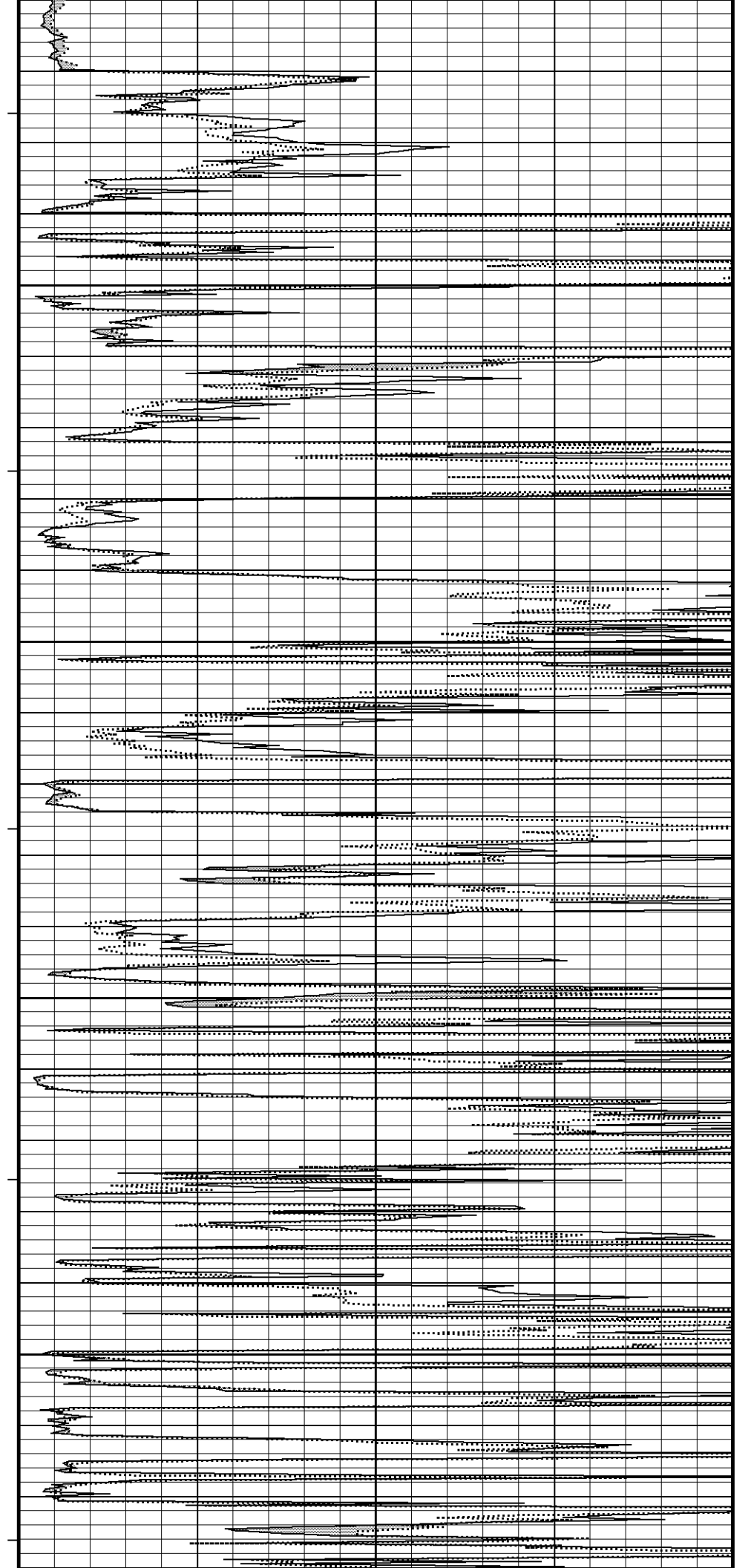
100

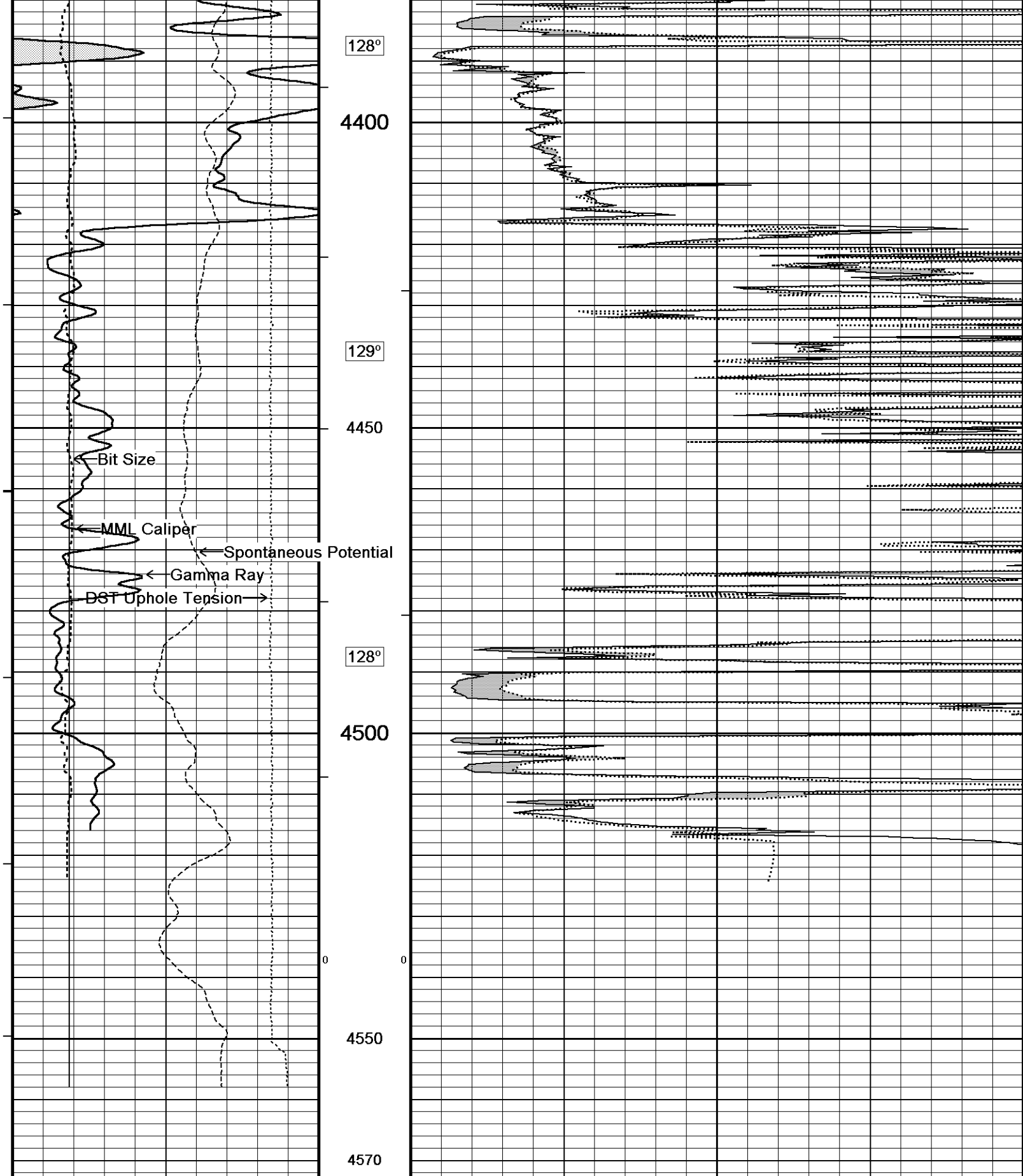
126°

4300

127°

4350

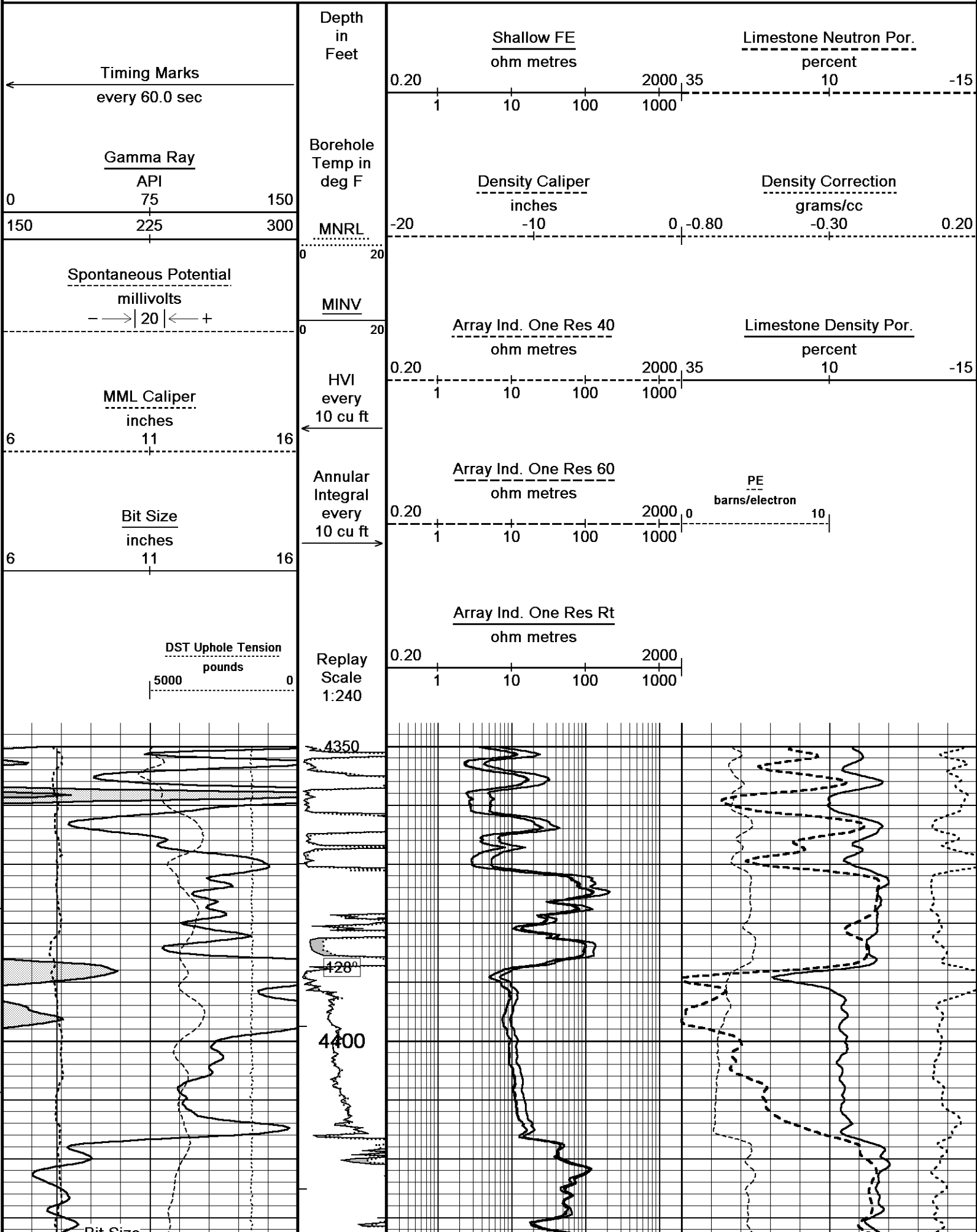


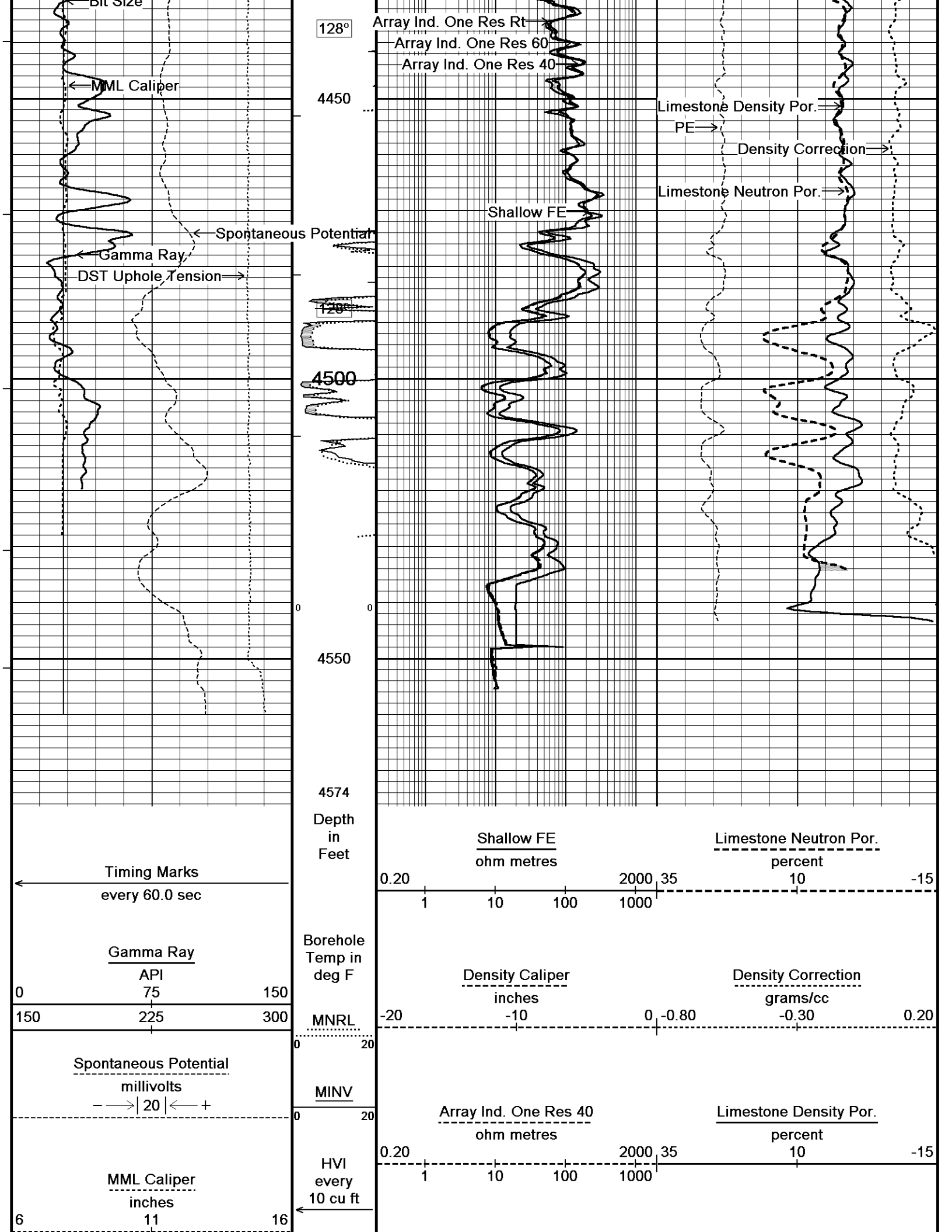


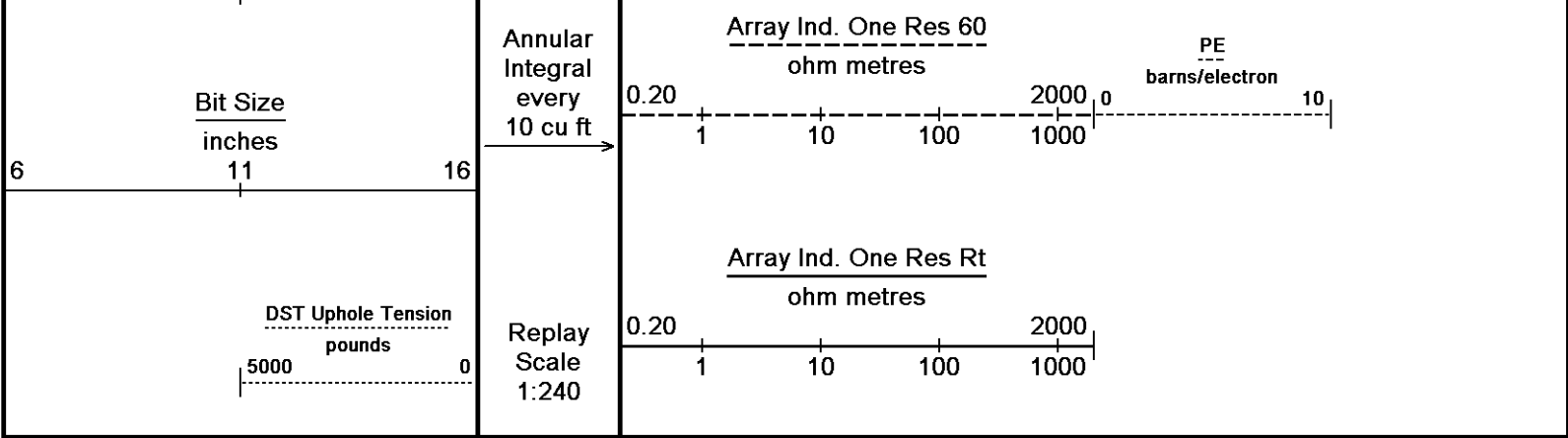
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↑ 5 INCH MAIN ↑

↓ REPEAT SECTION ↓








Depth Based Data - Maximum Sampling Increment 10.0cm
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 Filename: C:\Minimus 13.05.9583\Log\OBrien Resources llc...\OBrien Resources llc Swarts 5-1_001.dta
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↑ REPEAT SECTION ↑

COMPANY O'BRIEN RESOURCES, LLC.
 WELL SWART #5-1
 FIELD WILDCAT
 PROVINCE/COUNTY GOVE
 COUNTRY/STATE UNITED STATES / KANSAS

Elevation Kelly Bushing	2714.00	feet	First Reading	4547.00	feet
Elevation Drill Floor	2712.00	feet	Depth Driller	4550.00	feet
Elevation Ground Level	2704.00	feet	Depth Logger	4550.00	feet



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 SHALLOW FOCUSED
 ELECTRIC LOG