



Weatherford[®]

MICRORESISTIVITY LOG

COMPANY **MCCOY PETROLEUM CORP.**
 WELL **RICHARDSON TRUST #1-15 'A'**
 FIELD **WILDCAT**
 PROVINCE/COUNTY **GRAY**
 COUNTRY/STATE **U.S.A. / KANSAS**
 LOCATION **2310' FNL & 2010' FWL**

SEC **TWP** **RGE** Other Services
15 **27S** **29W** **MAI/MFE**
 API Number **15-069-20414** MPPDMDN
 Permit Number

Permanent Datum GL, Elevation 2741 feet
 Log Measured From KB Elevations: KB 2754.00
 Drilling Measured From KB DF 2752.00
 GL 2741.00

Date	26-NOV-2012
Run Number	ONE
Service Order	3537783
Depth Driller	5150.00 feet
Depth Logger	5151.00 feet
First Reading	5118.00 feet
Last Reading	2500.00 feet
Casing Driller	1837.00 feet
Casing Logger	1833.00 inches
Bit Size	7.875
Hole Fluid Type	CHEMICAL lb/USg
Density / Viscosity	8.95 lb/USg 65.00 CP
PH / Fluid Loss	9.00 9.00
Sample Source	FLOWLINE
Rm @ Measured Temp	1.42 @ 84.0 ohm-m
Rmf @ Measured Temp	1.14 @ 84.0 ohm-m
Rmc @ Measured Temp	1.70 @ 84.0 ohm-m
Source Rmf / Rmc	CALC CALC
Rm @ BHT	1.11 @109.0 ohm-m
Time Since Circulation	4 HOURS
Max Recorded Temp	109.00 deg F
Equipment / Base	13096 LIB
Recorded By	ADAM SILL
Witnessed By	EVAN STONE
JOB #	LB12-309

BOREHOLE RECORD

Last Edited: 26-NOV-2012 07:10

Bit Size inches	Depth From feet	Depth To feet
7.875	1837.00	5150.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	8.625	0.00	1837.00	24.00

REMARKS

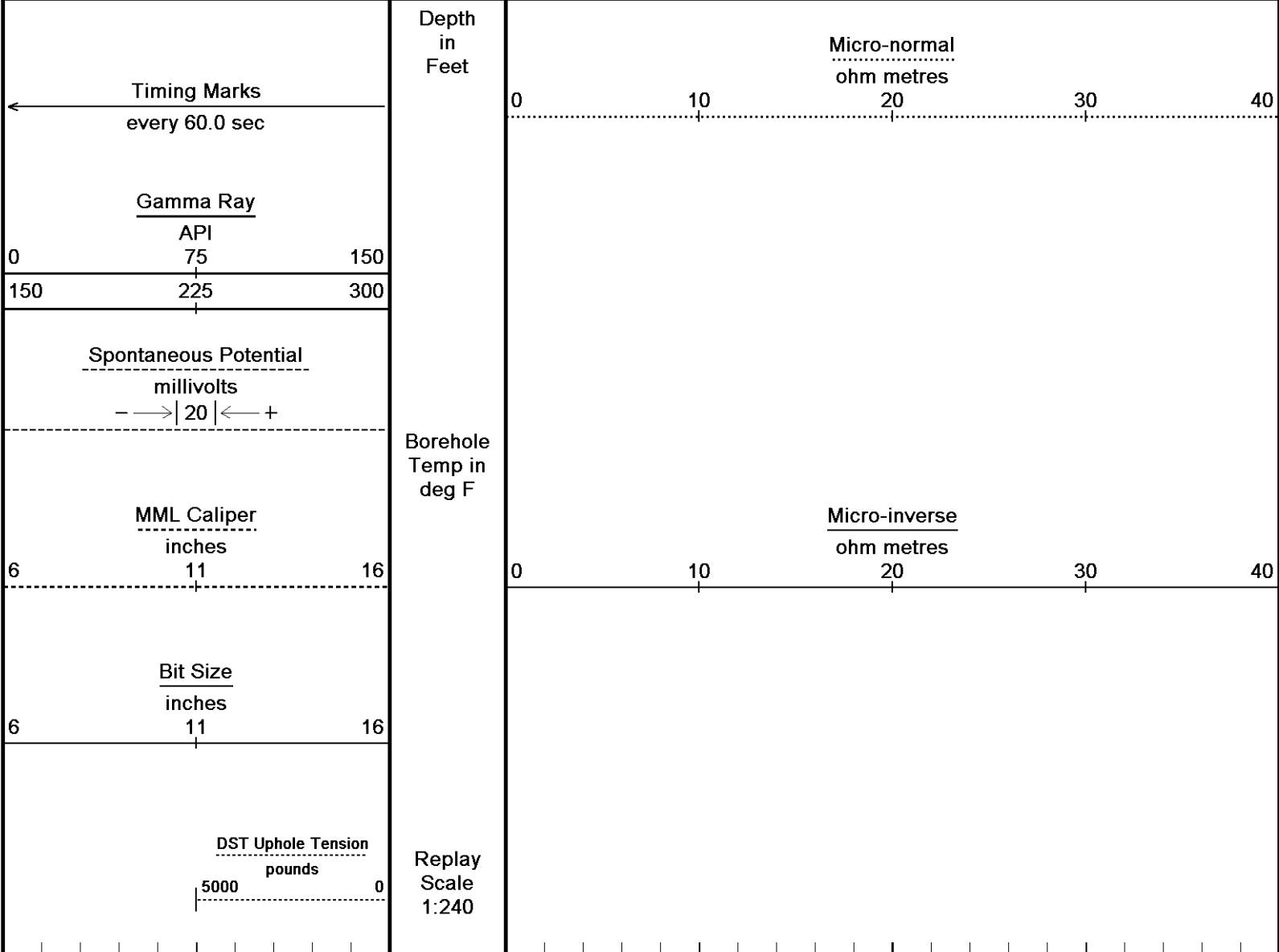
- SOFTWARE ISSUE: WLS 13.04.8492.
- MCG, MML, MDN, MPD, MFE, MAI RAN IN COMBINATION.
 - HARDWARE: DUAL BOWSPRING USED ON MDN.
 - 0.5 INCH STANDOFF USED ON MFE.
 - 0.5 INCH STANDOFF USED ON MAI.
- 2.71 G/CC LIMESTONE DENSITY MATRIX USED TO CALCULATE POROSITY.
- BOREHOLE RUGOSITY, TIGHT PULLS, AND WASHOUTS WILL AFFECT DATA QUALITY.
- ALL INTERVALS LOGGED AND SCALED PER CUSTOMER'S REQUEST.
- TOTAL HOLE VOLUME FROM TD TO SURFACE CASING: 1390 CU. FT.
- ANNULAR HOLE VOLUME WITH 4.5 INCH CASING FROM TD TO 2500 FT: 660 CU. FT.
- SERVICE ORDER # 3537783

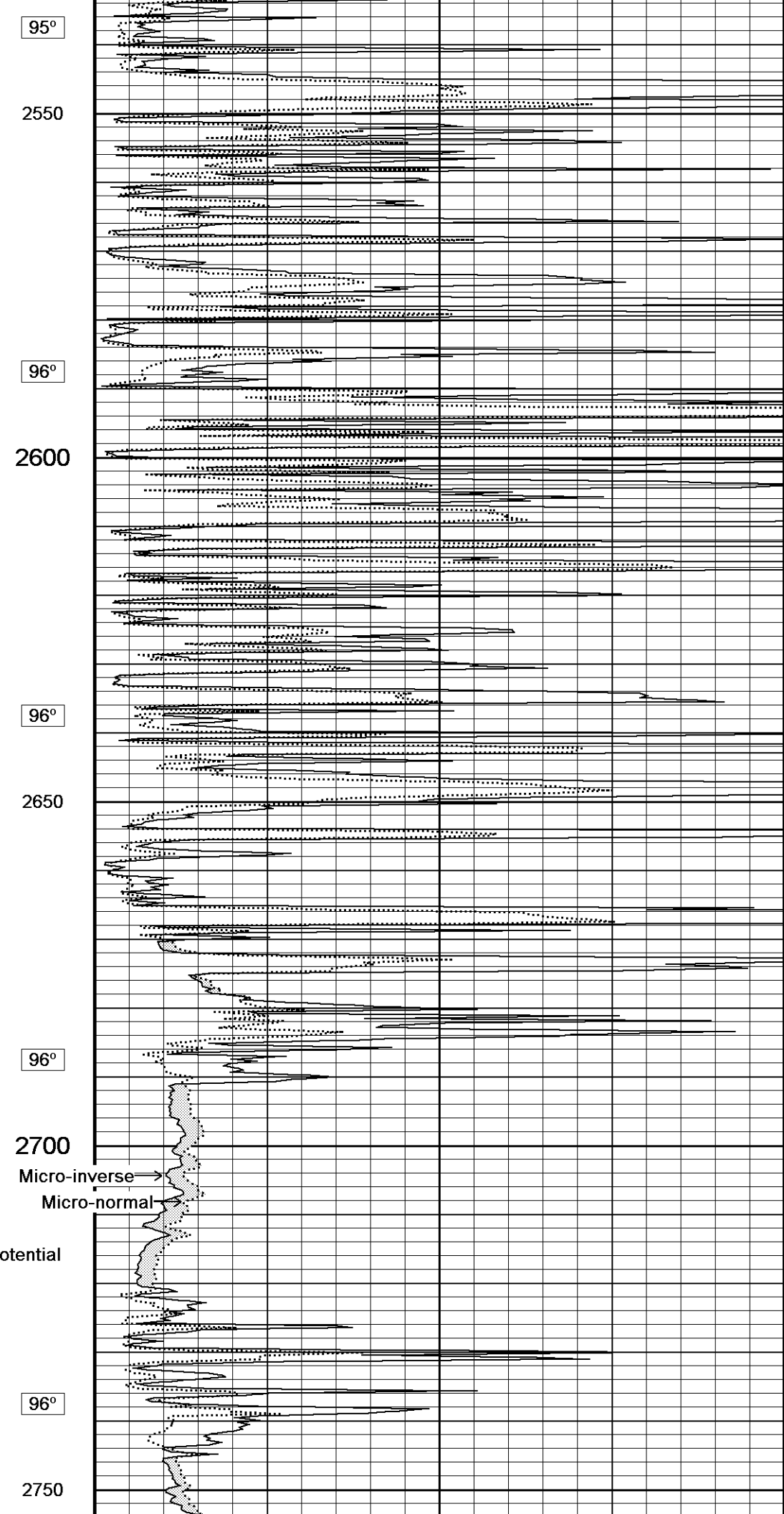
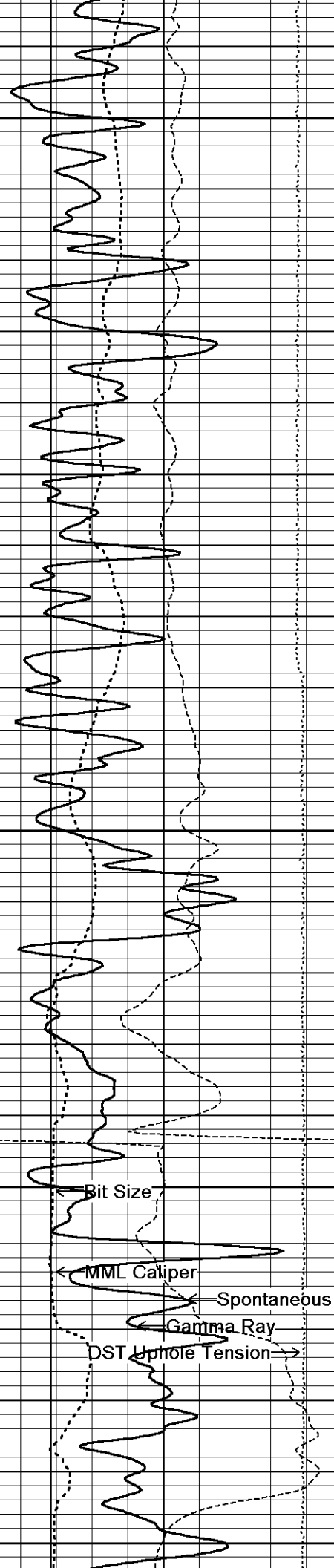
- RIG: STERLING #5.
 - ENGINEER: A. SILL.
 - OPERATOR(S): M. STEGMAN.

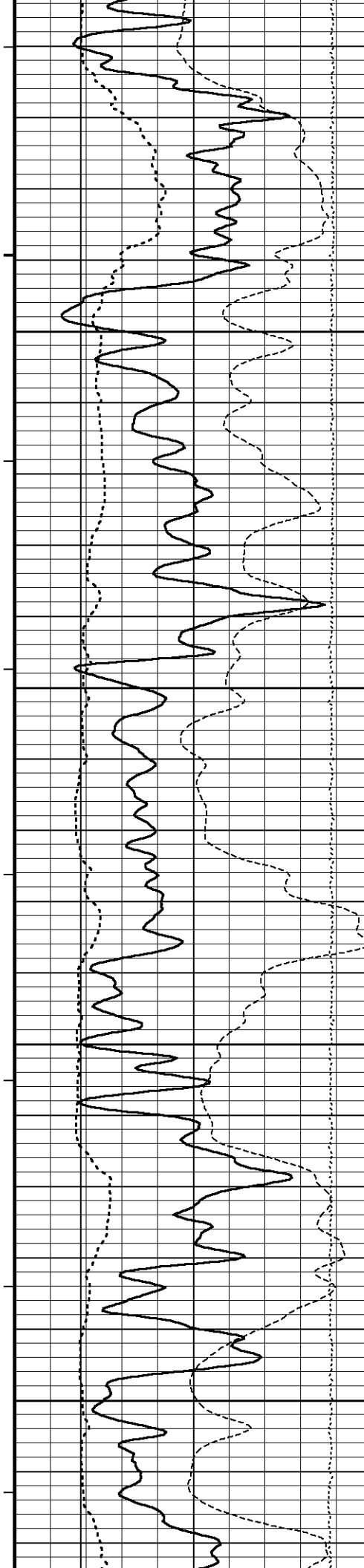
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

5 INCH MAIN

Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 26-NOV-2012 14:47
 Filename: C:\Minimus 13.04.8492\Data\McCoy ...\McCoy Petroleum Richardson Trust #1-15 'A'_002.dta Recorded on 26-NOV-2012 12:29
 System Versions: Logged with 13.04.8492 Plotted with 13.04.8492







97°

2800

97°

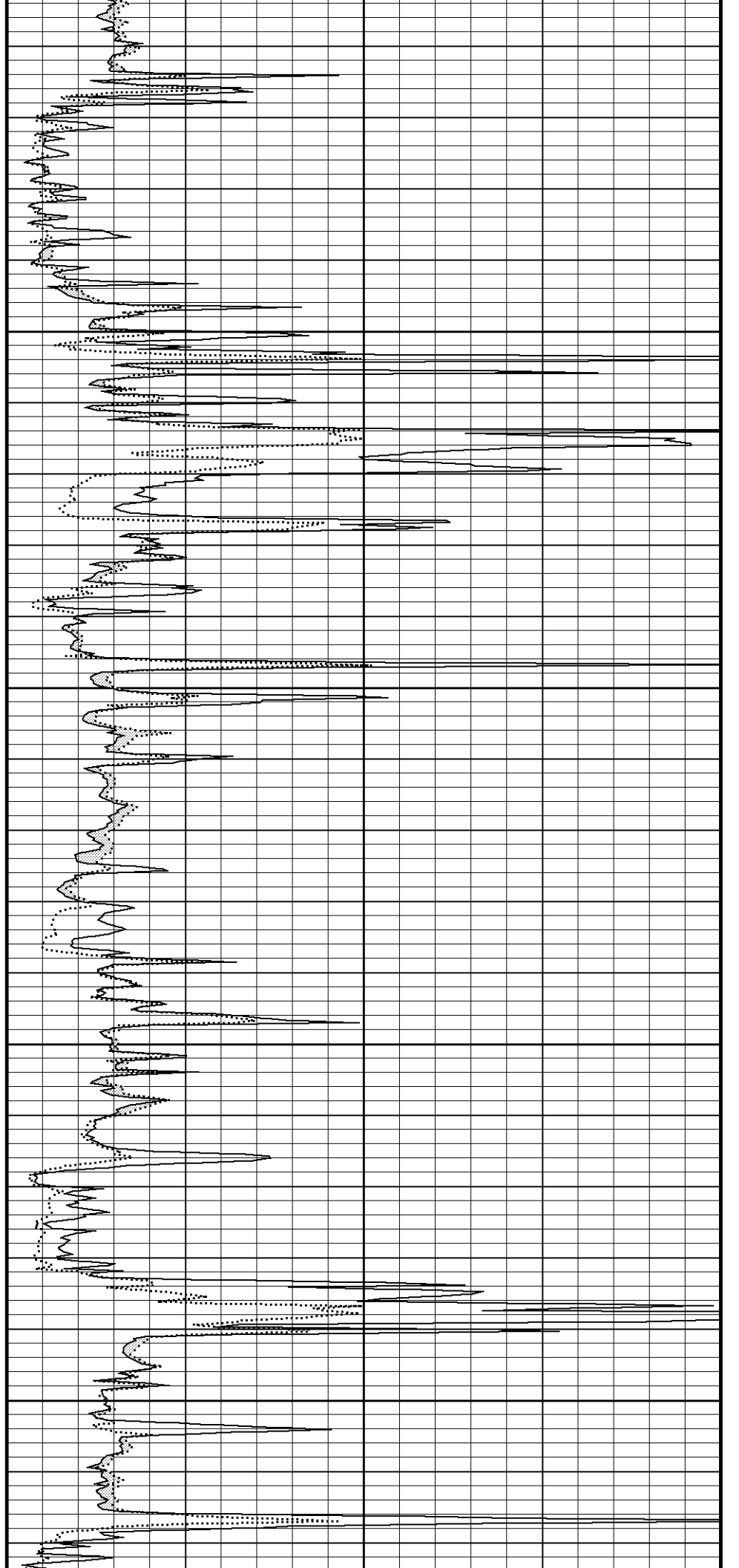
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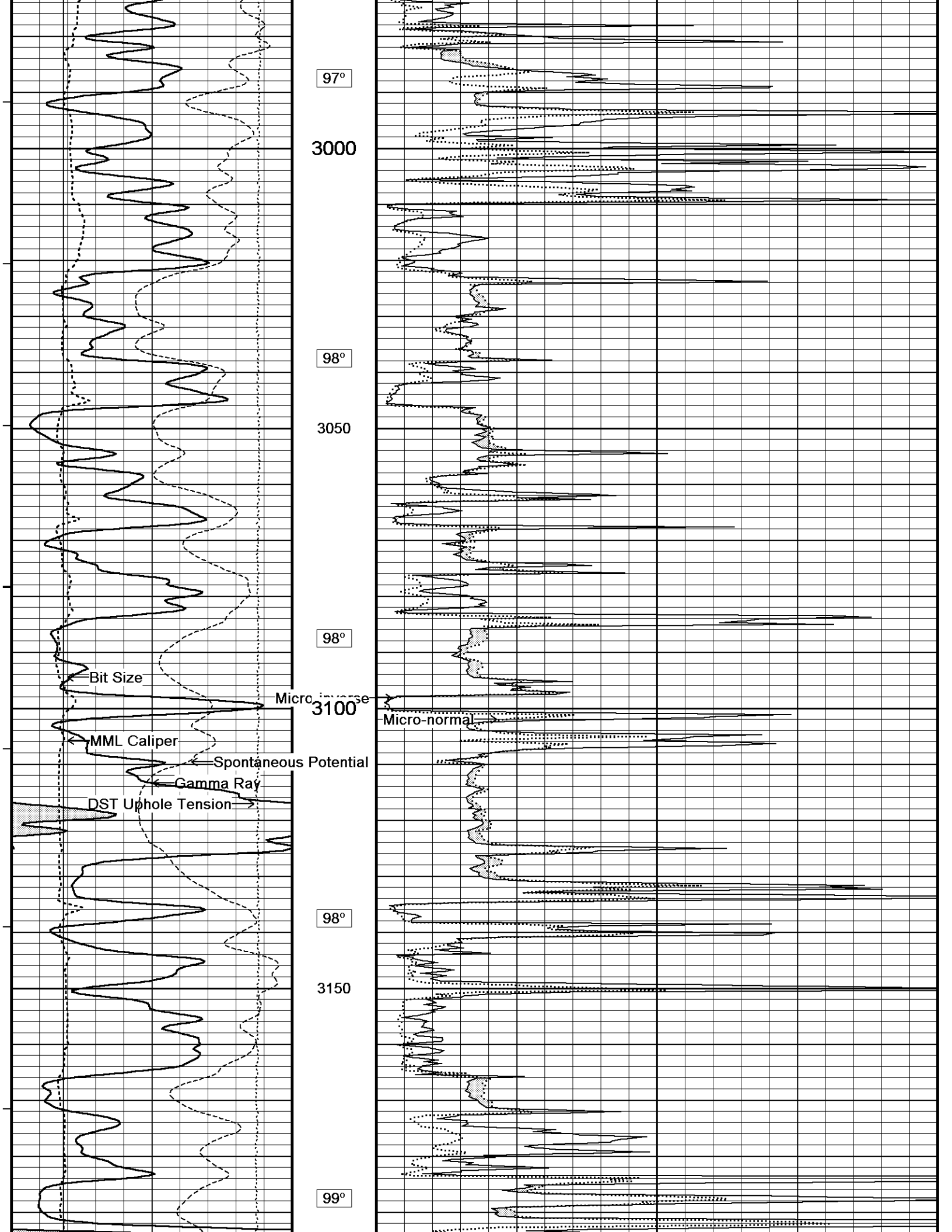
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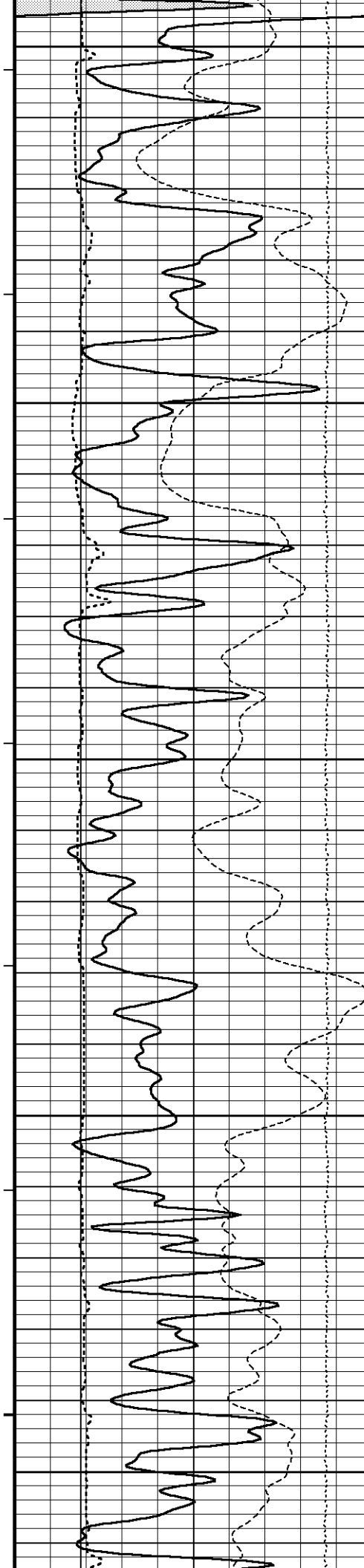
2900

97°

2950







3200

99°

3250

99°

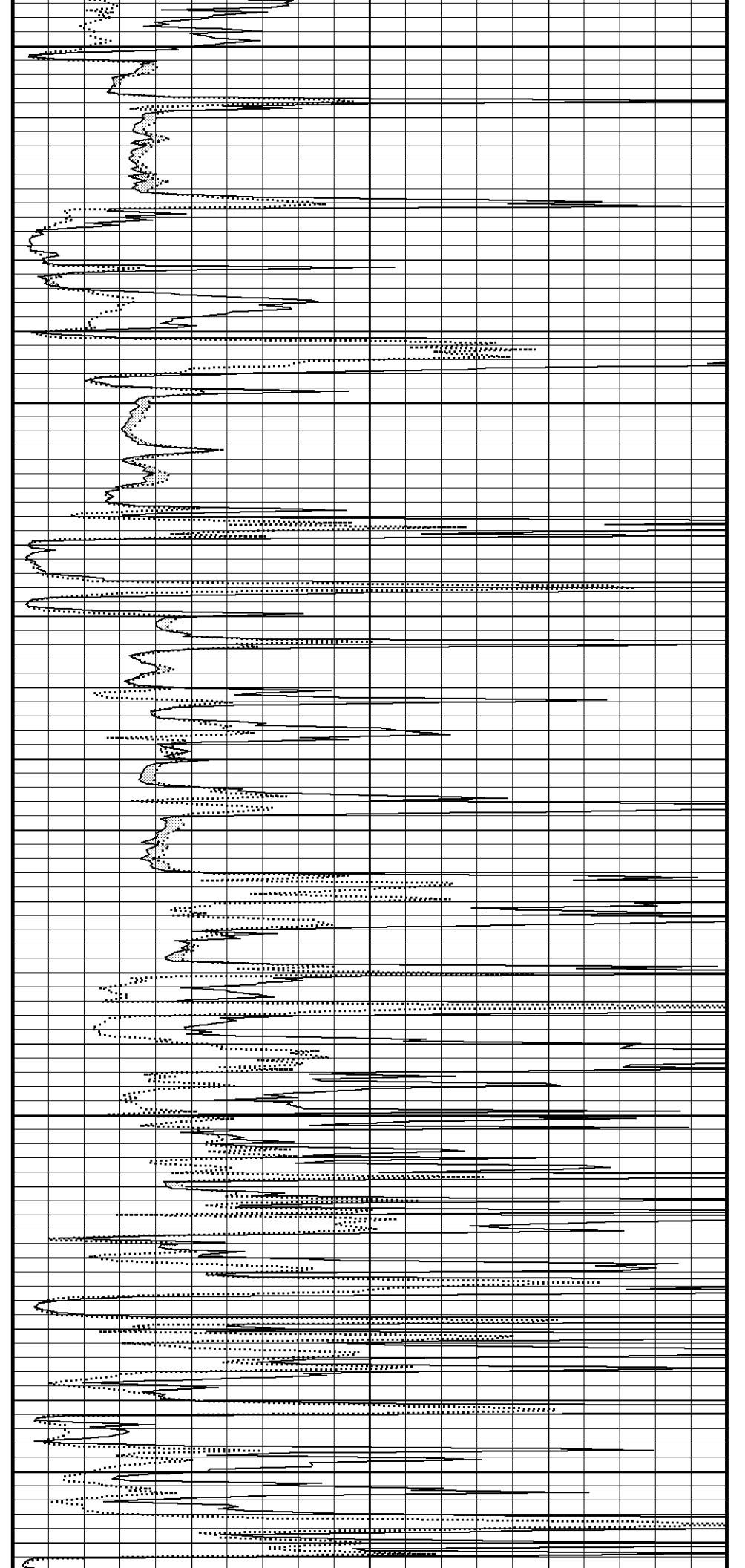
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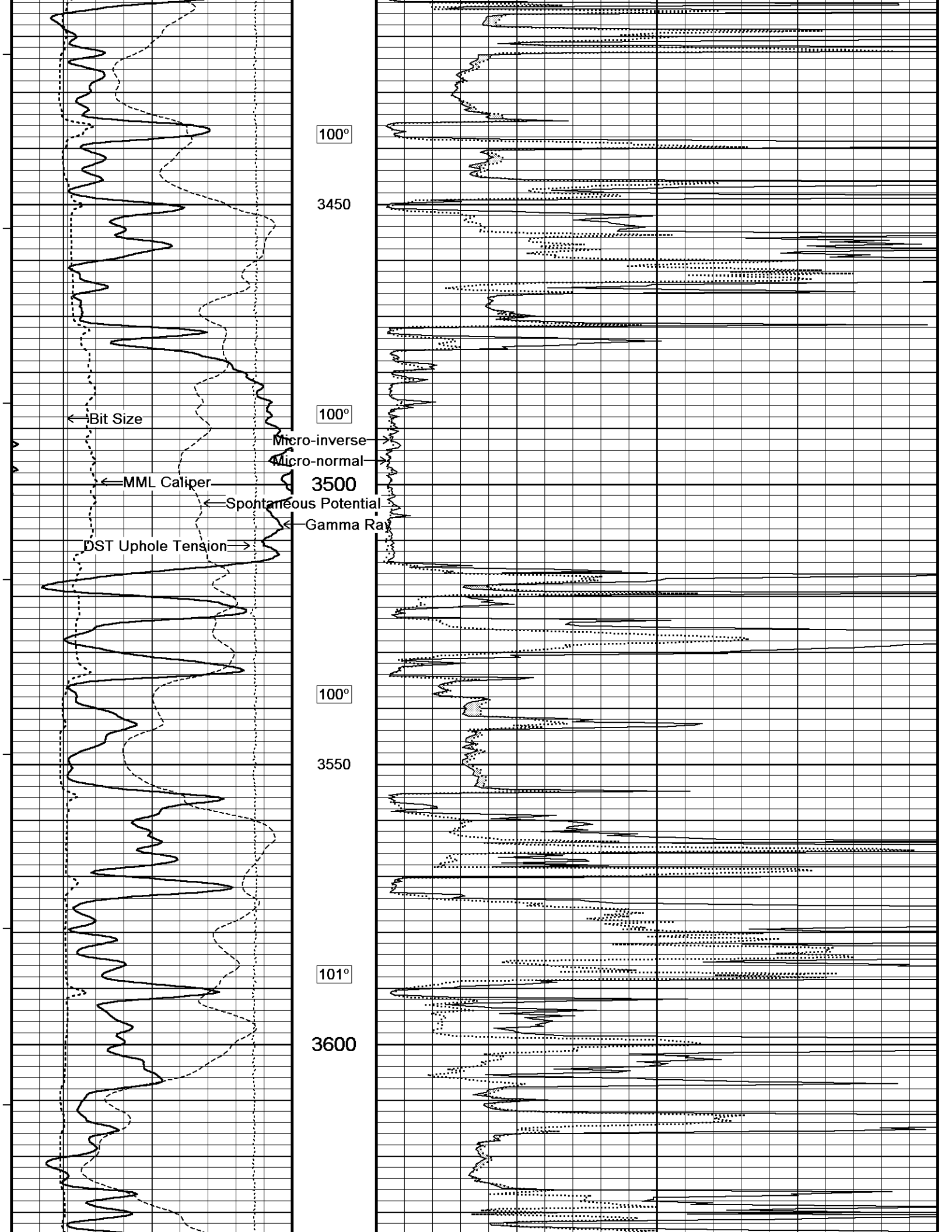
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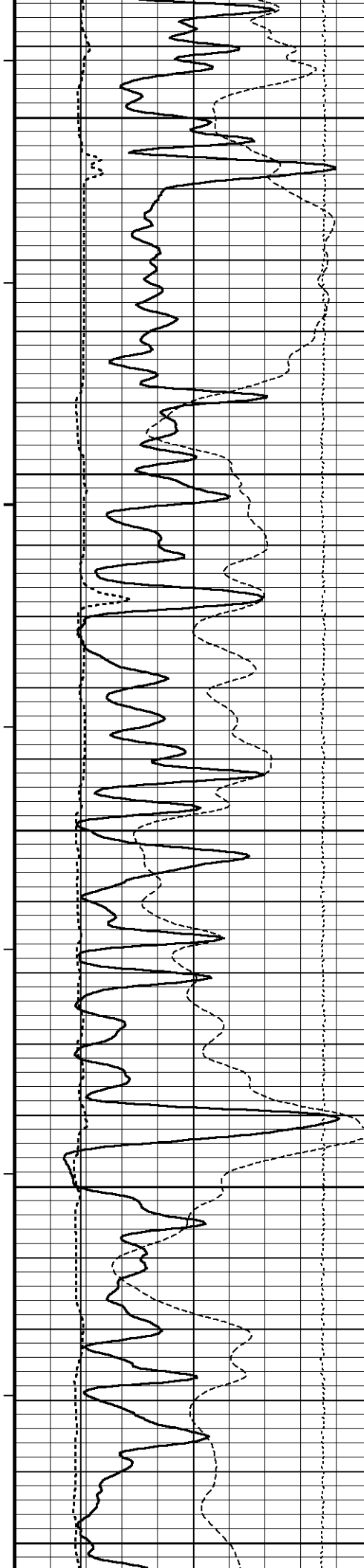
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100°

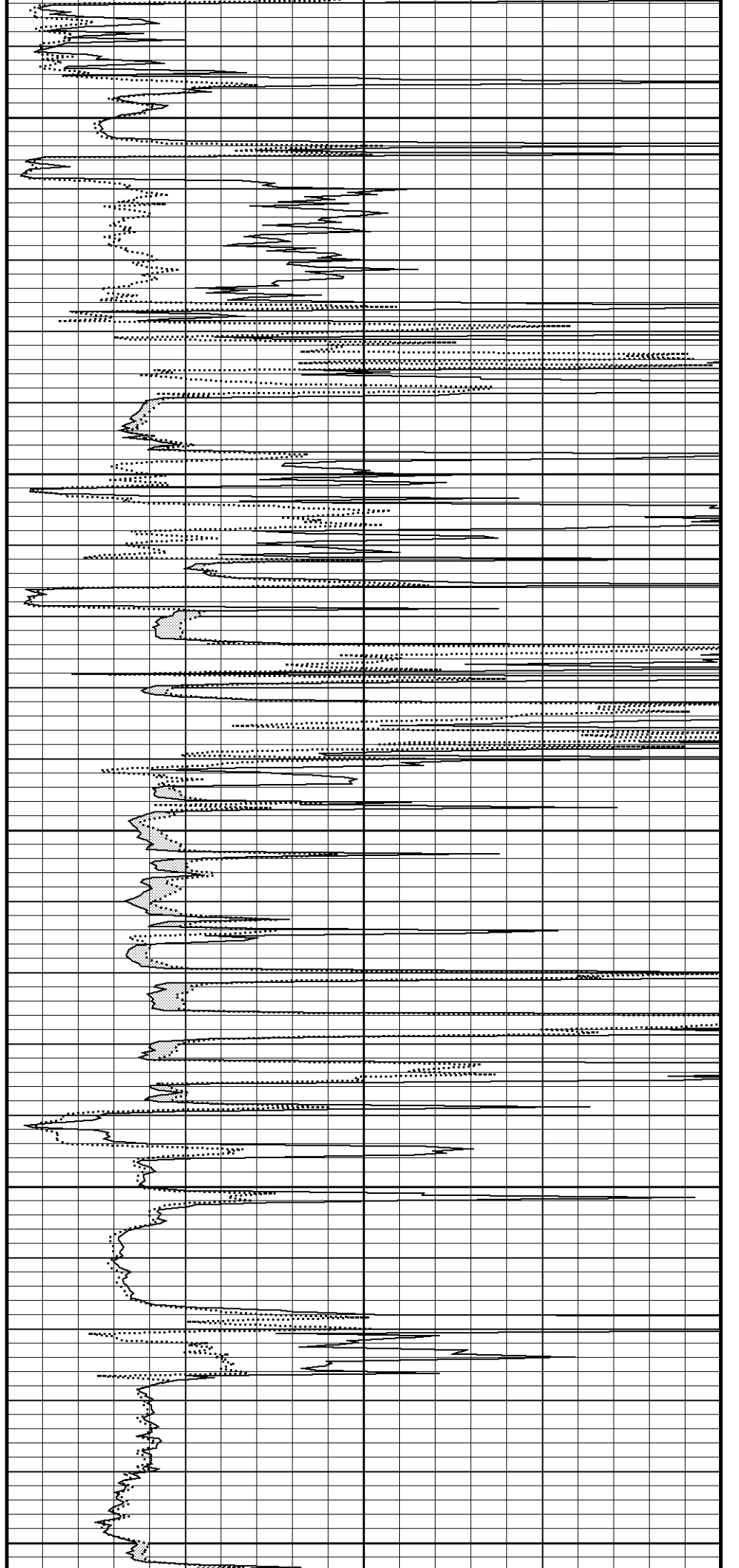
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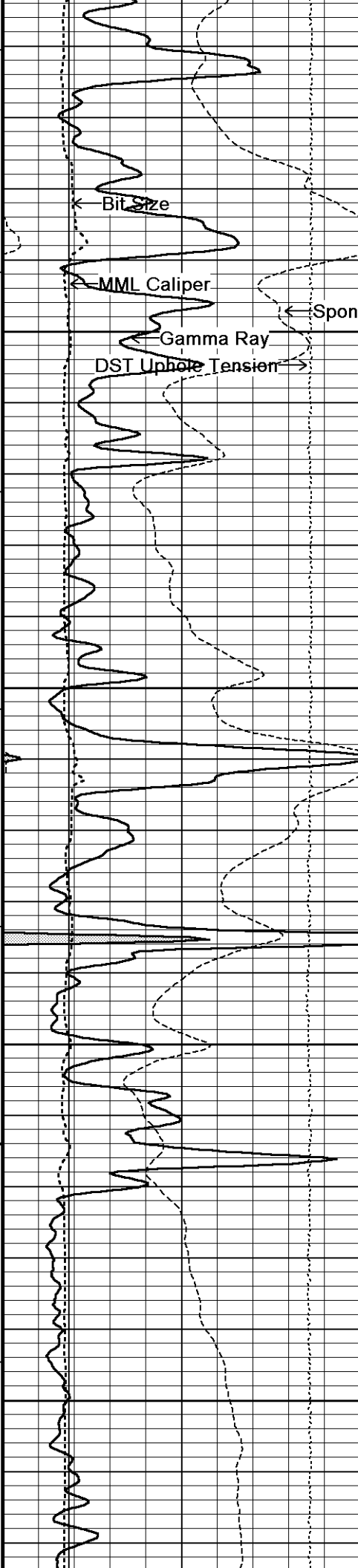






101°
3650
101°
3700
101°
3750
102°
3800
102°
3850



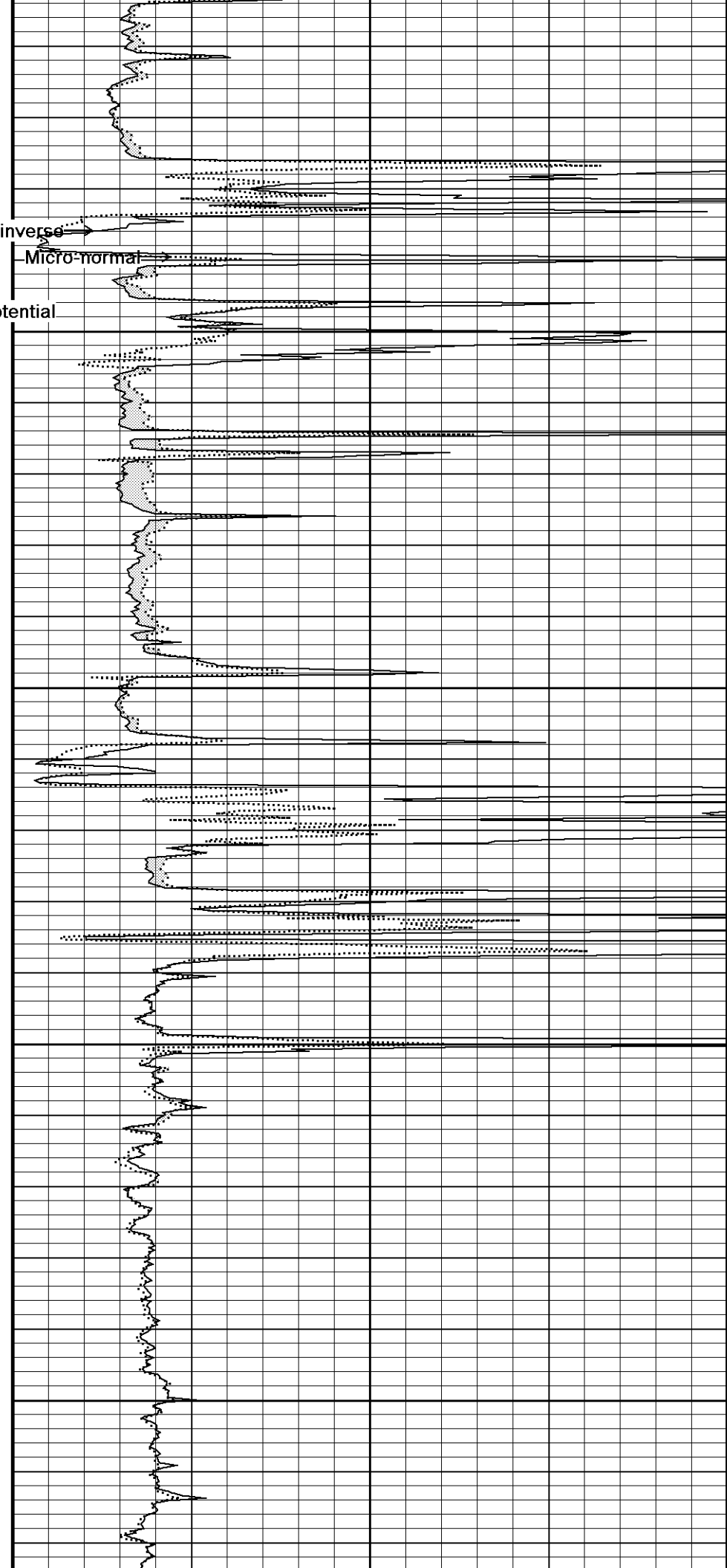


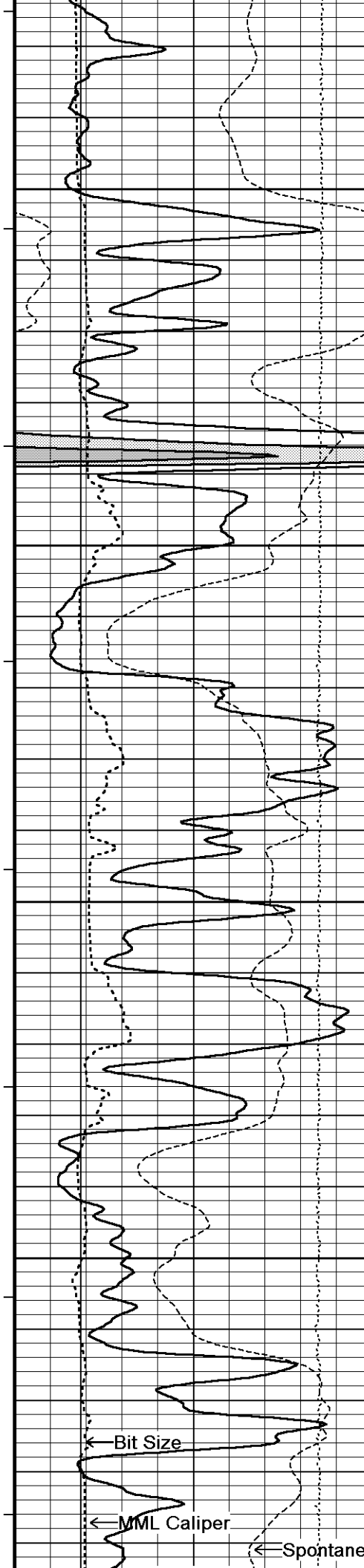
Micro-inverse
102°
Micro-normal
3900
Spontaneous Potential

103°
3950

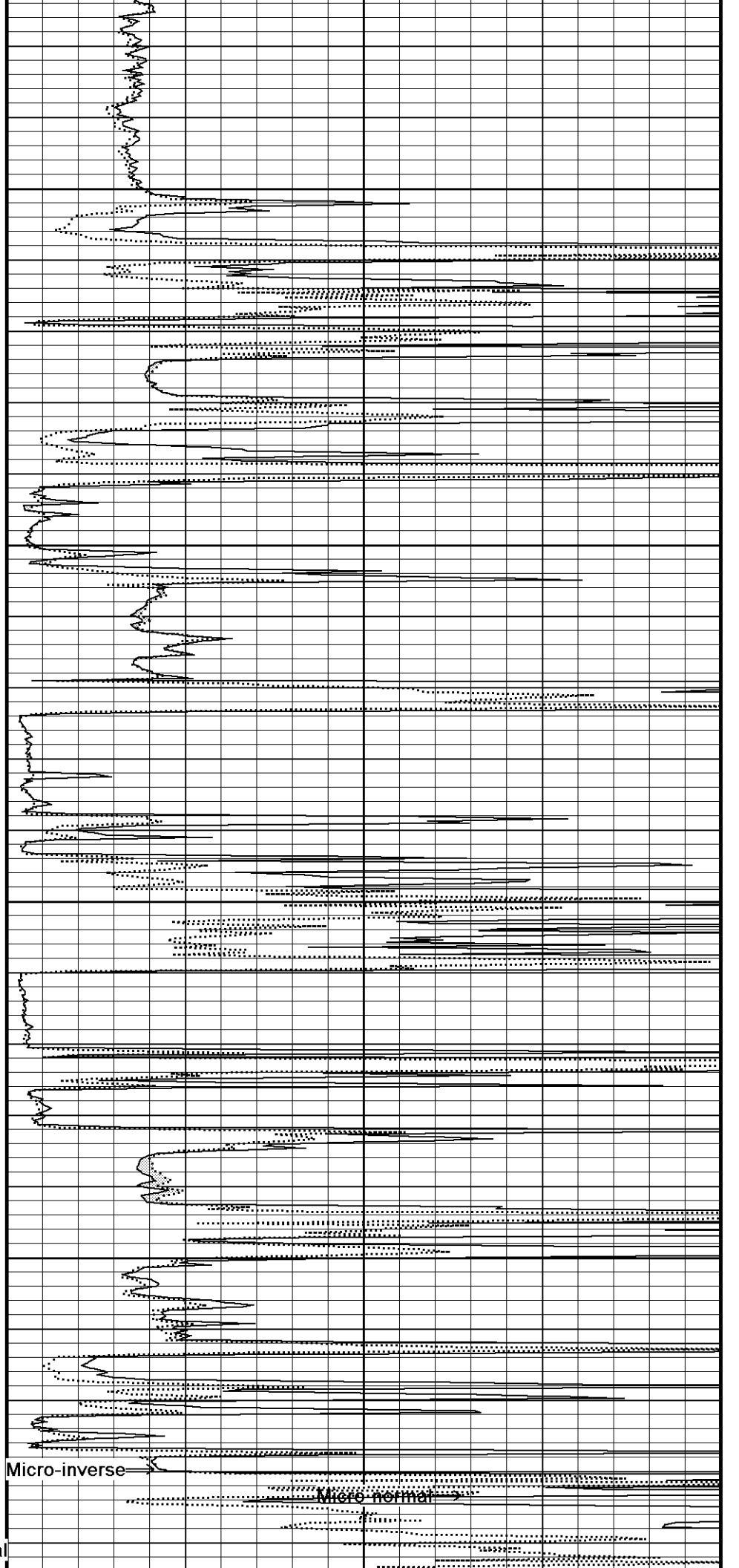
103°
4000

104°
4050





103°
4100
104°
4150
104°
4200
104°
4250
104°



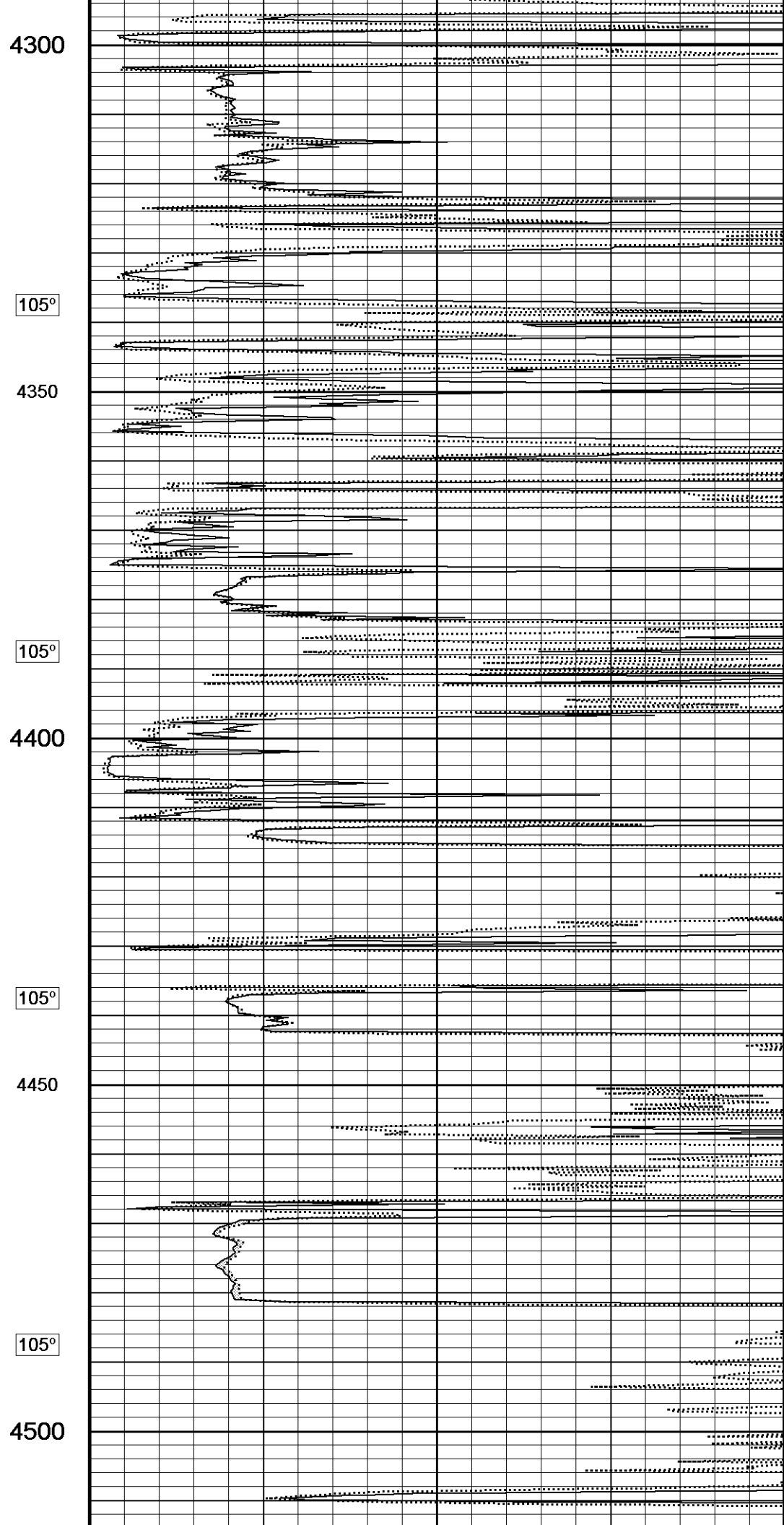
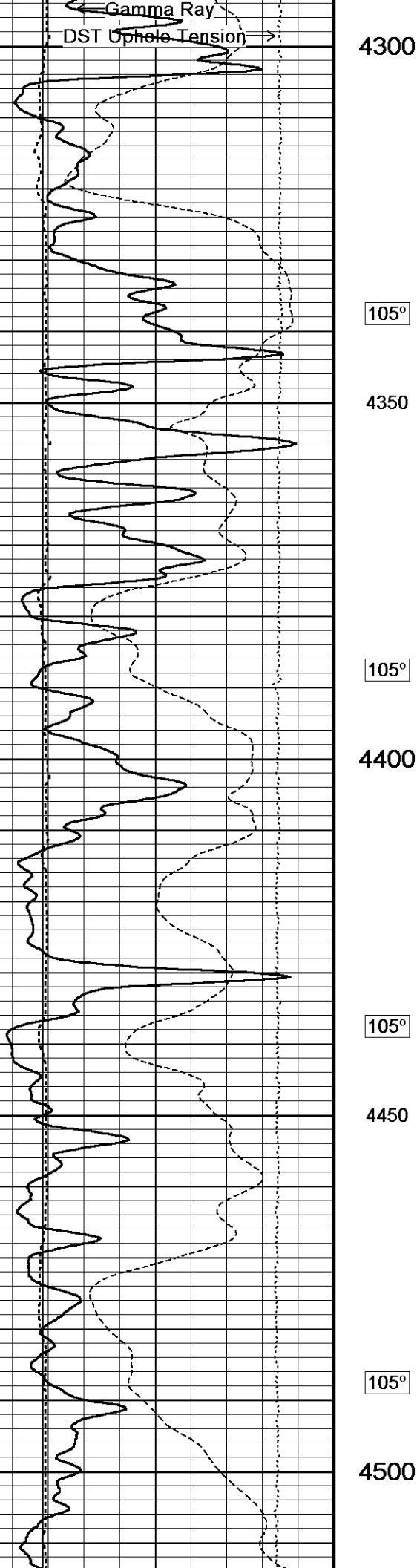
← Bit Size

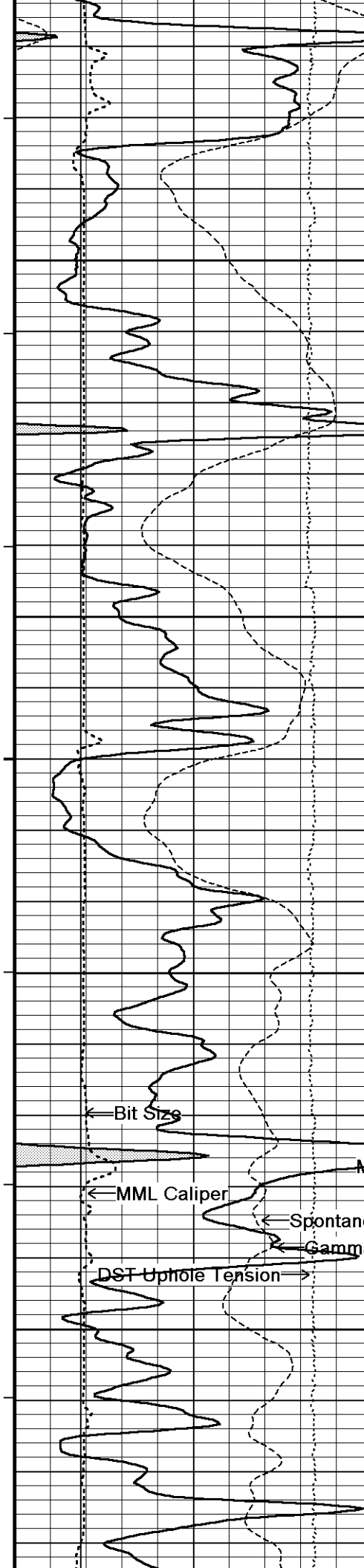
← MML Caliper

← Spontaneous Potential

Micro-inverse →

← Micro-normal





106°

4550

106°

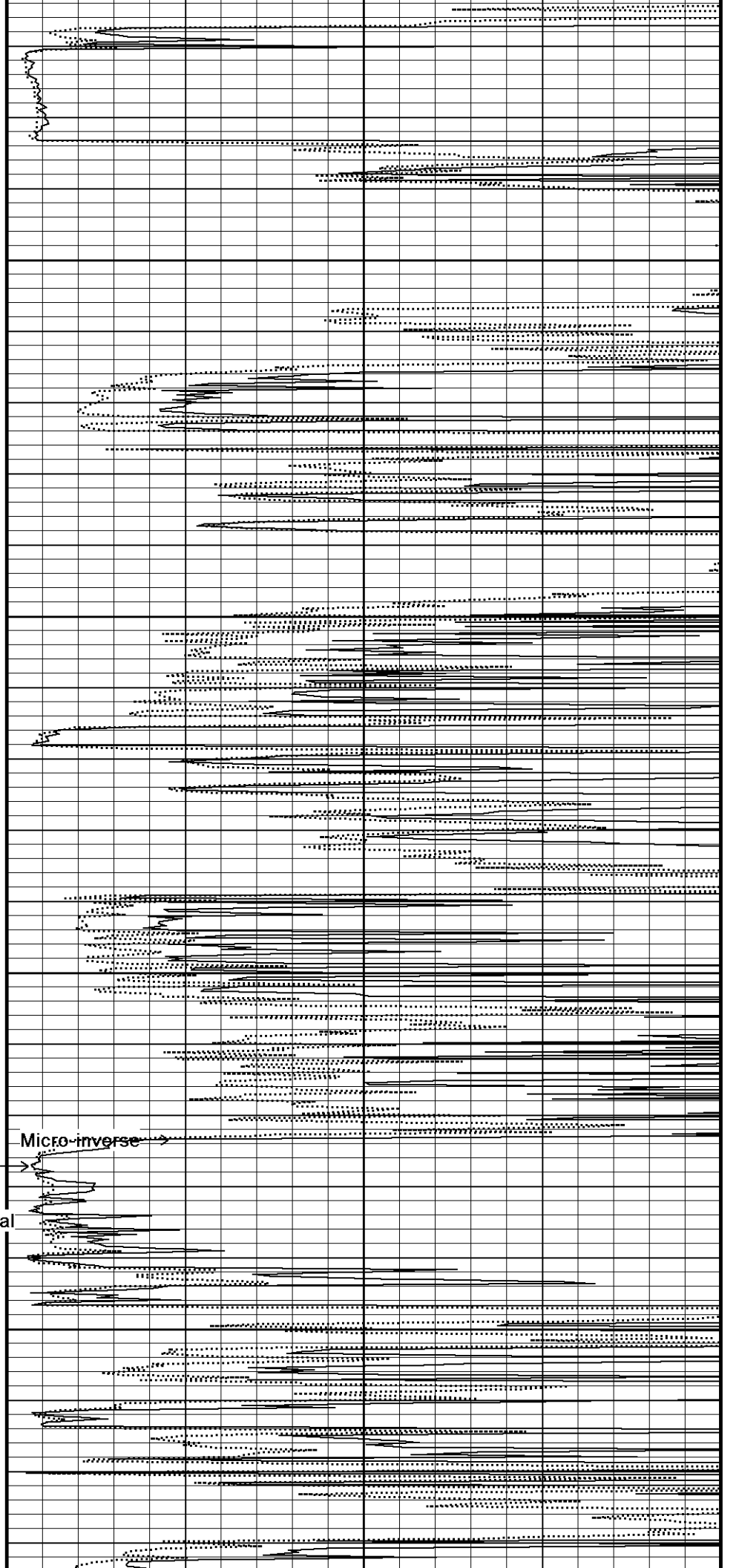
4600

106°

4650

106°

4700



← Bit Size

← MML Caliper

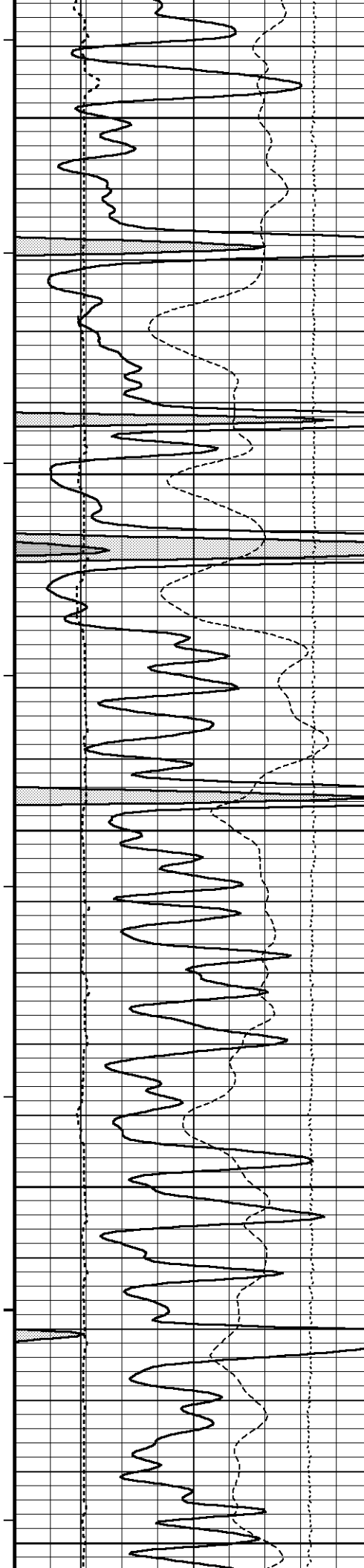
← Spontaneous Potential

← Gamma Ray

← DST Uphole Tension

Micro-normal →

Micro-inverse →



106°

4750

106°

4800

107°

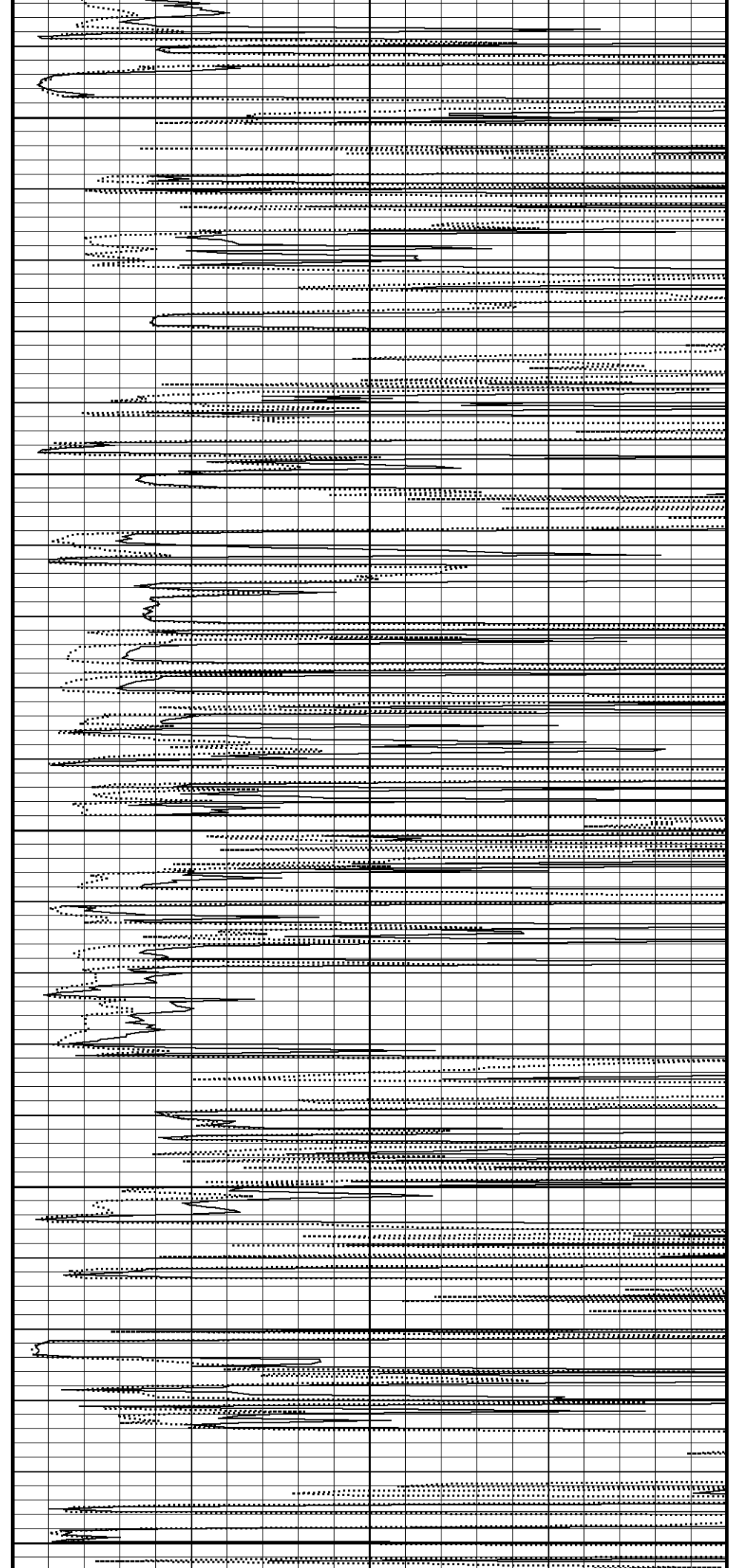
4850

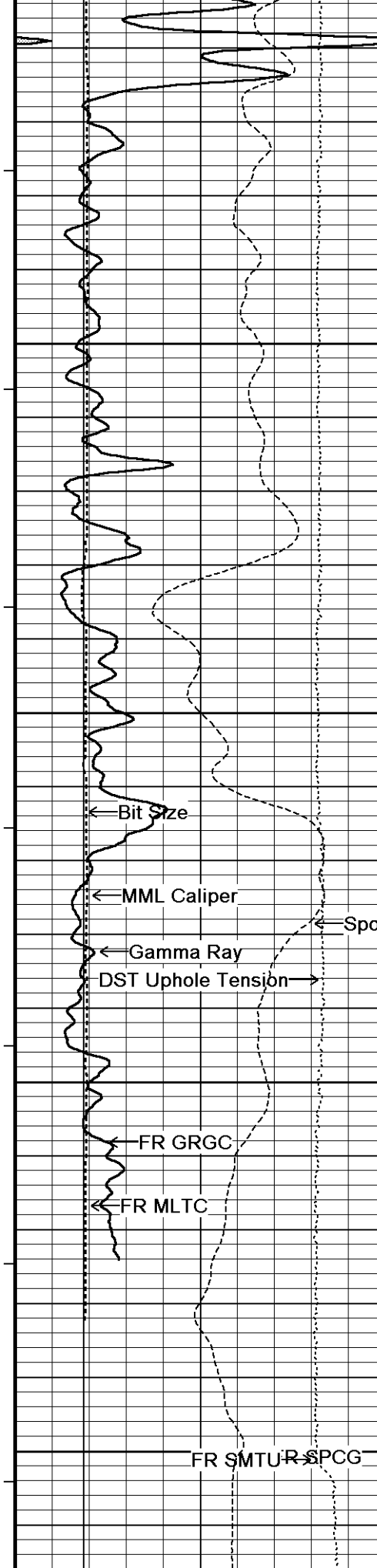
107°

4900

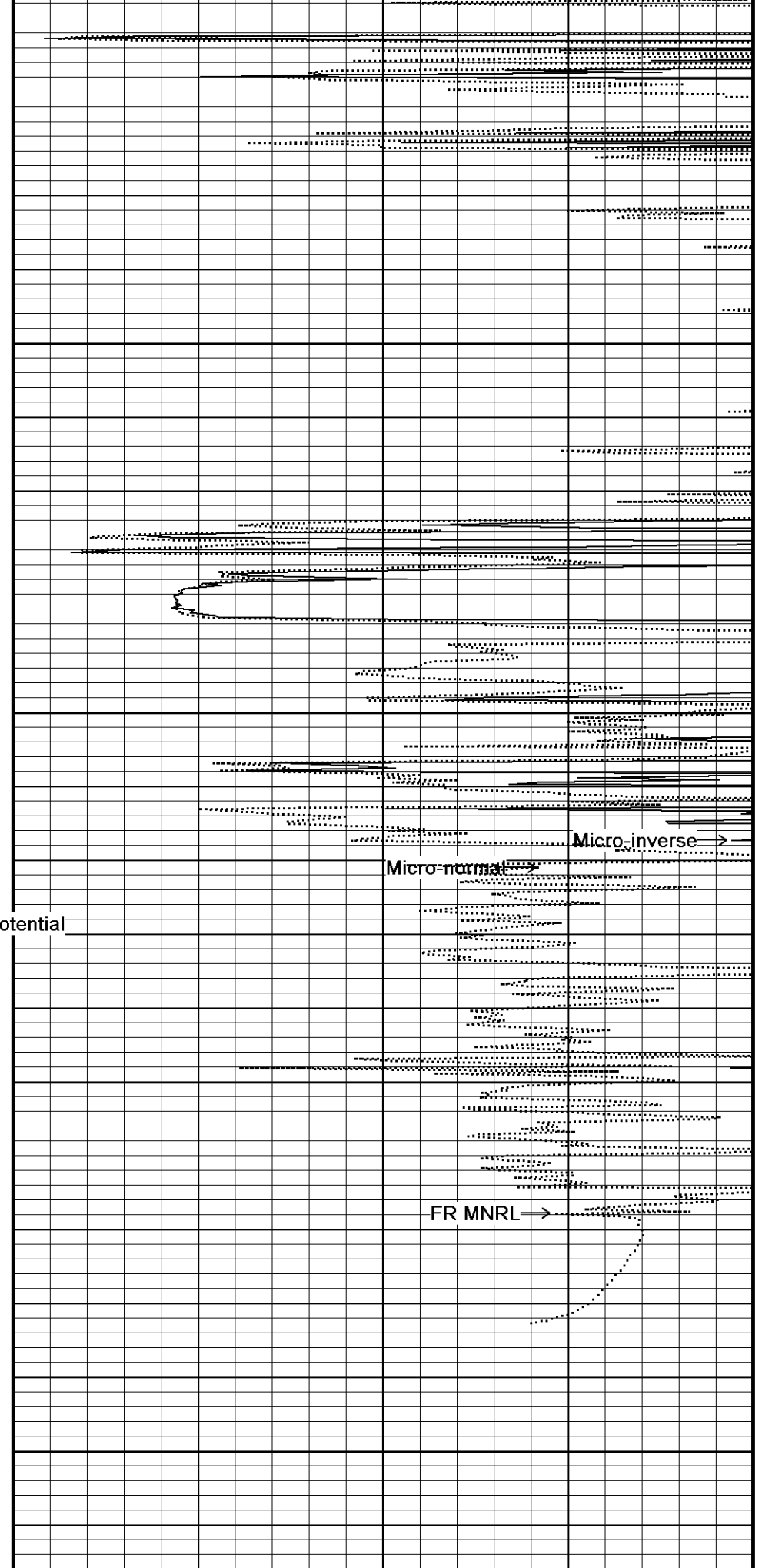
108°

4950

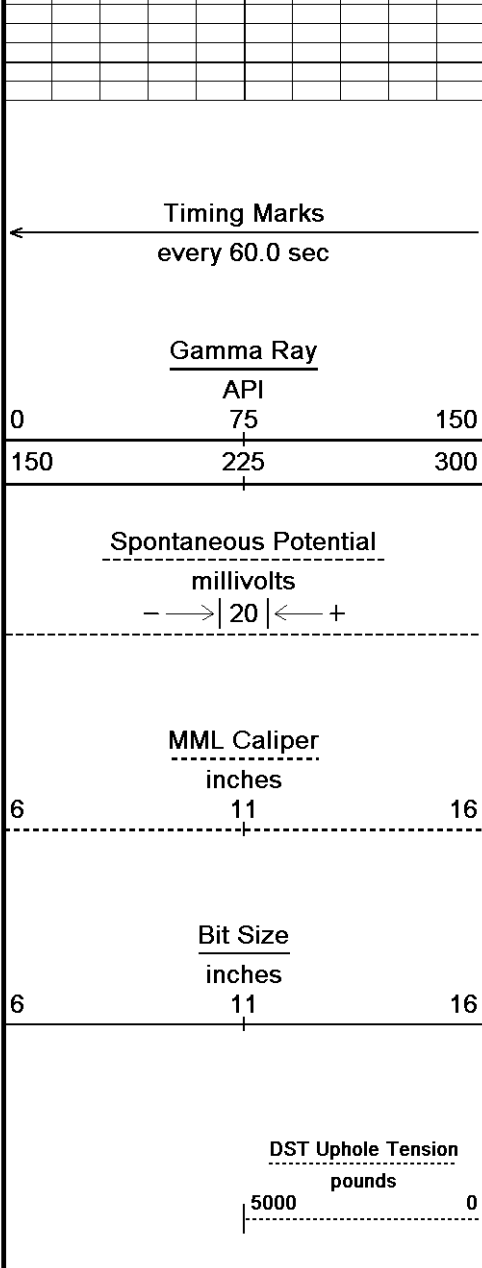




109°
5000
109°
5050
109°
5100
5150



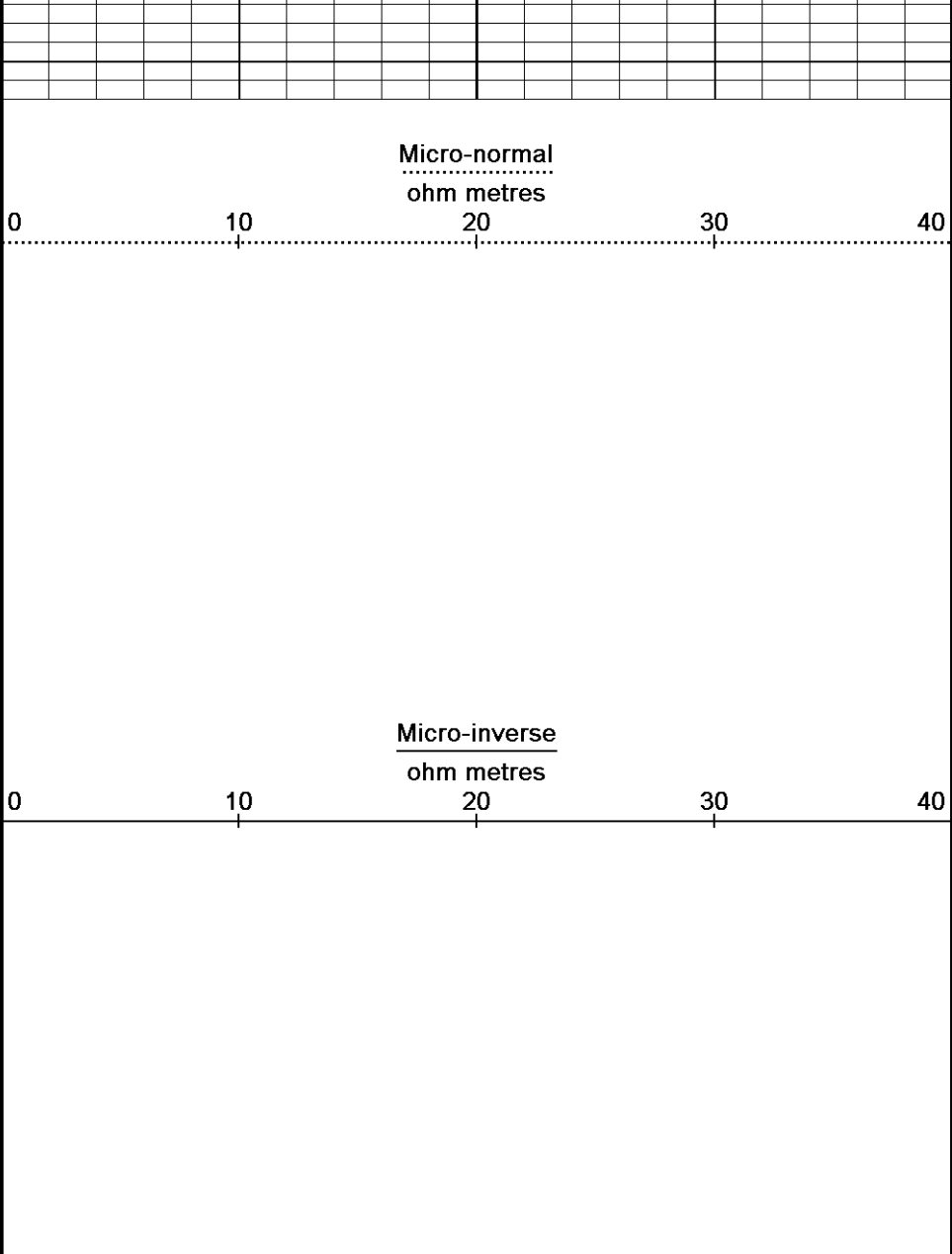
Micro-normal →
Micro-inverse →
FR MNRL →



5182
Depth in Feet

Borehole Temp in deg F

Replay Scale 1:240

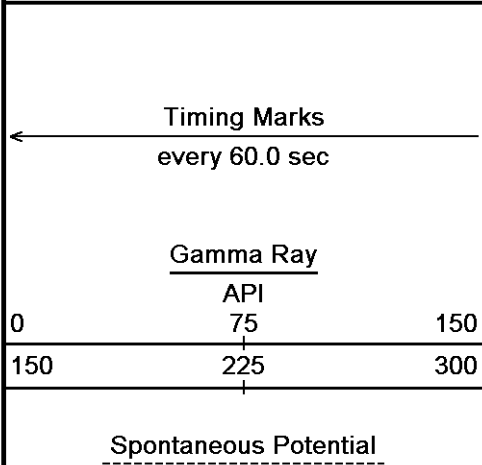


Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 26-NOV-2012 14:47
 Filename: C:\Minimus 13.04.8492\Data\McCoy ...\McCoy Petroleum Richardson Trust #1-15 'A'_002.dta
 Recorded on 26-NOV-2012 12:29
 System Versions: Logged with 13.04.8492 Plotted with 13.04.8492

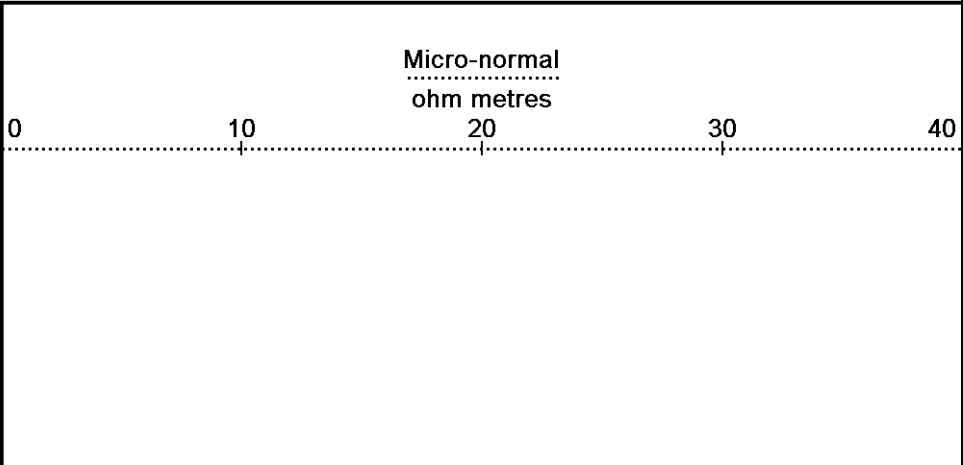
↑ 5 INCH MAIN ↑

↓ REPEAT SECTION ↓

Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 26-NOV-2012 14:47
 Filename: C:\Minimus 13.04.8492\Data\McCoy ...\McCoy Petroleum Richardson Trust #1-15 'A'_001.dta
 Recorded on 26-NOV-2012 11:37
 System Versions: Logged with 13.04.8492 Plotted with 13.04.8492



Depth in Feet



millivolts

- -> | 20 | <- - +

MML Caliper
inches

6 11 16

Bit Size
inches

6 11 16

DST Uphole Tension
pounds

5000 0

Borehole
Temp in
deg F

Micro-inverse
ohm metres

0 10 20 30 40

Replay
Scale
1:240

4100

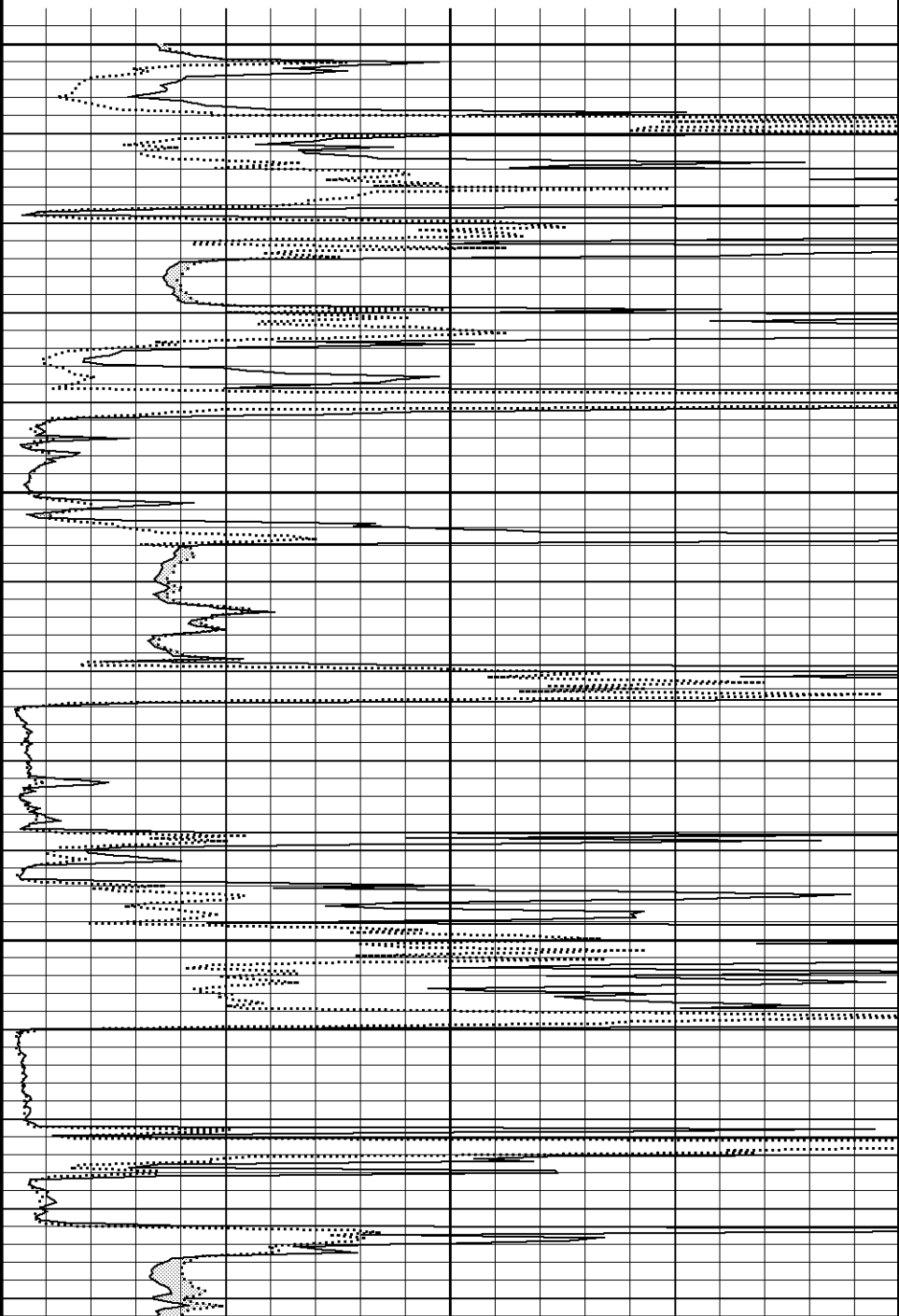
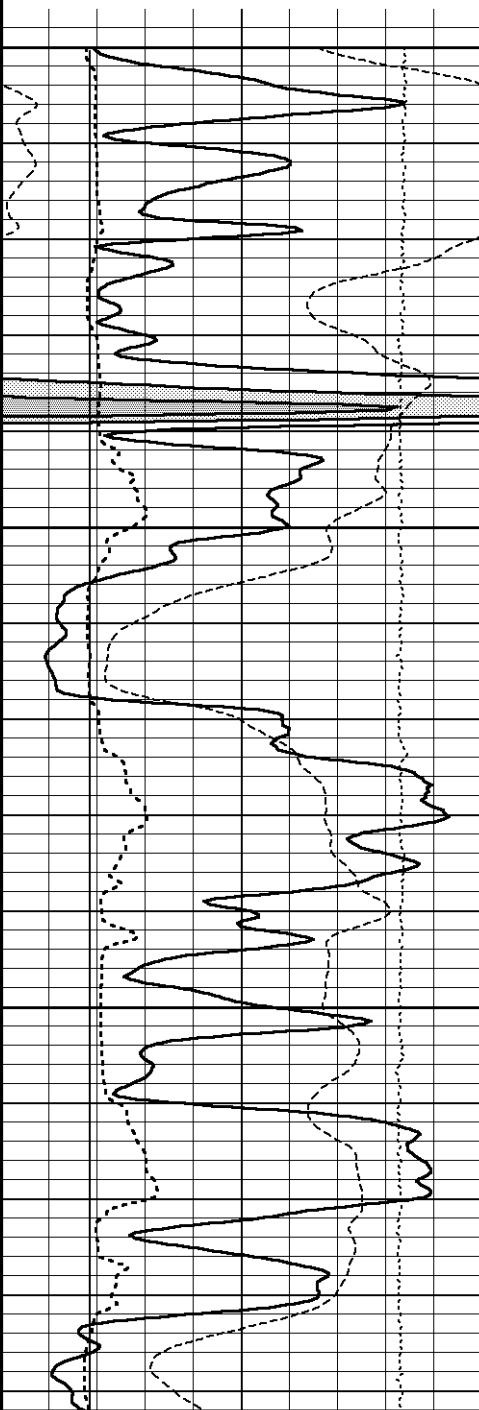
103°

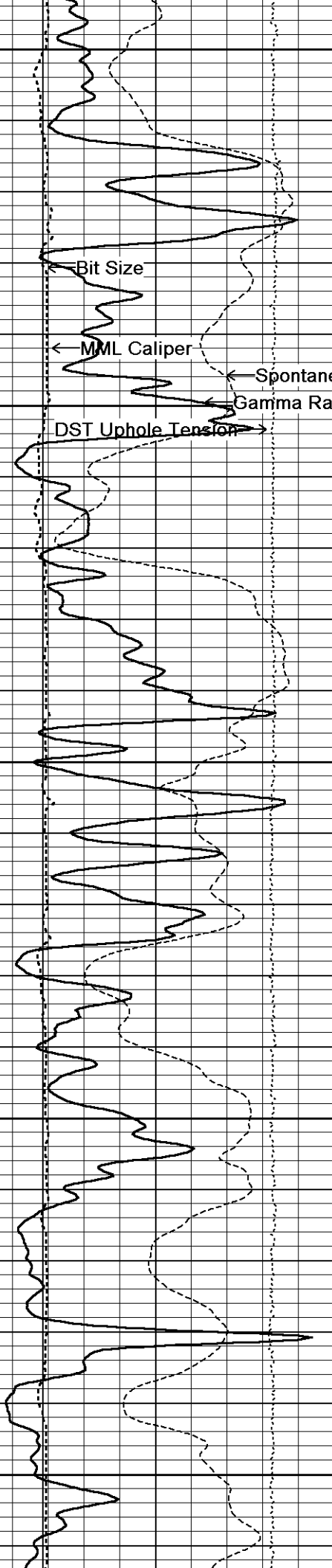
4150

103°

4200

103°





4250

104°

4300

104°

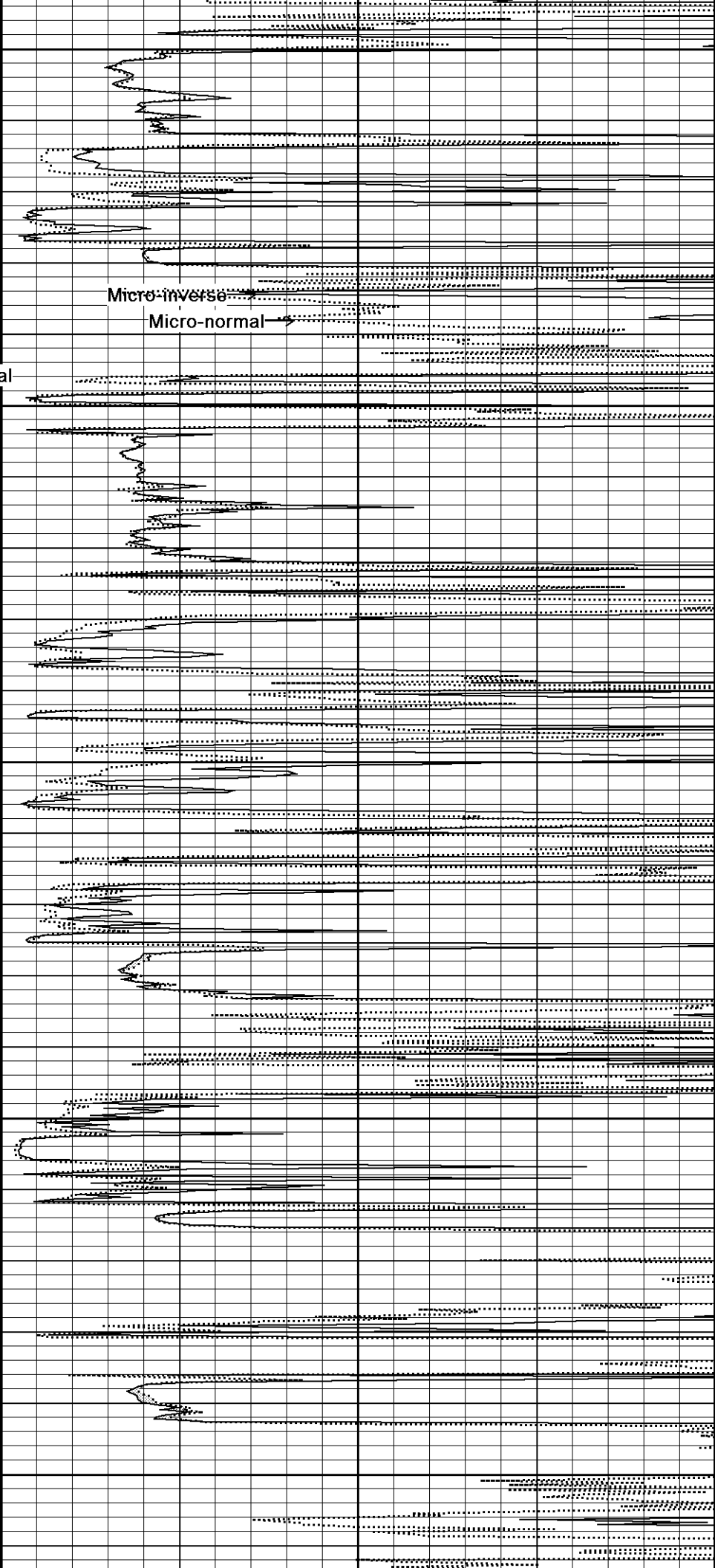
4350

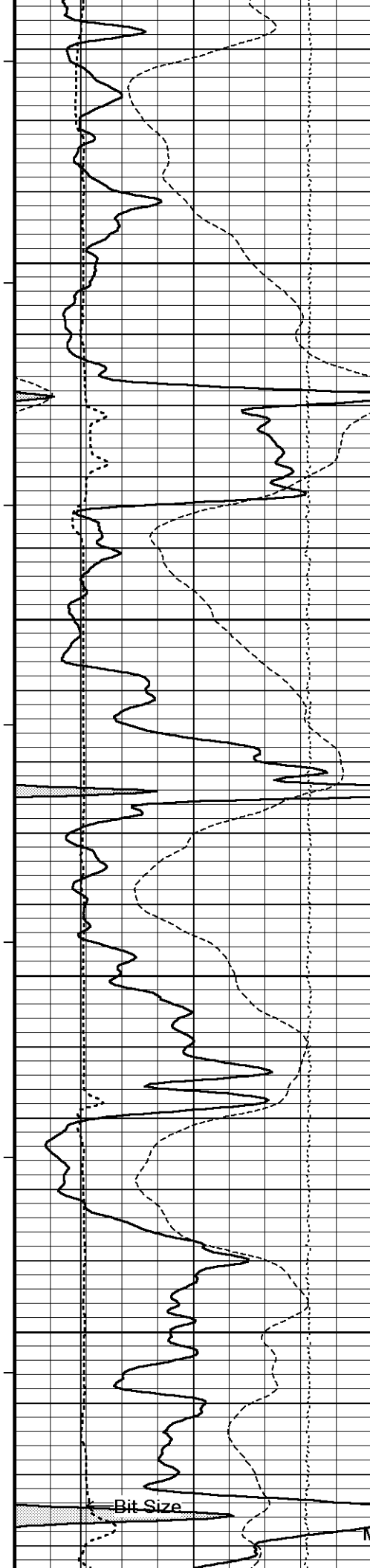
104°

4400

104°

4450





104°

4500

104°

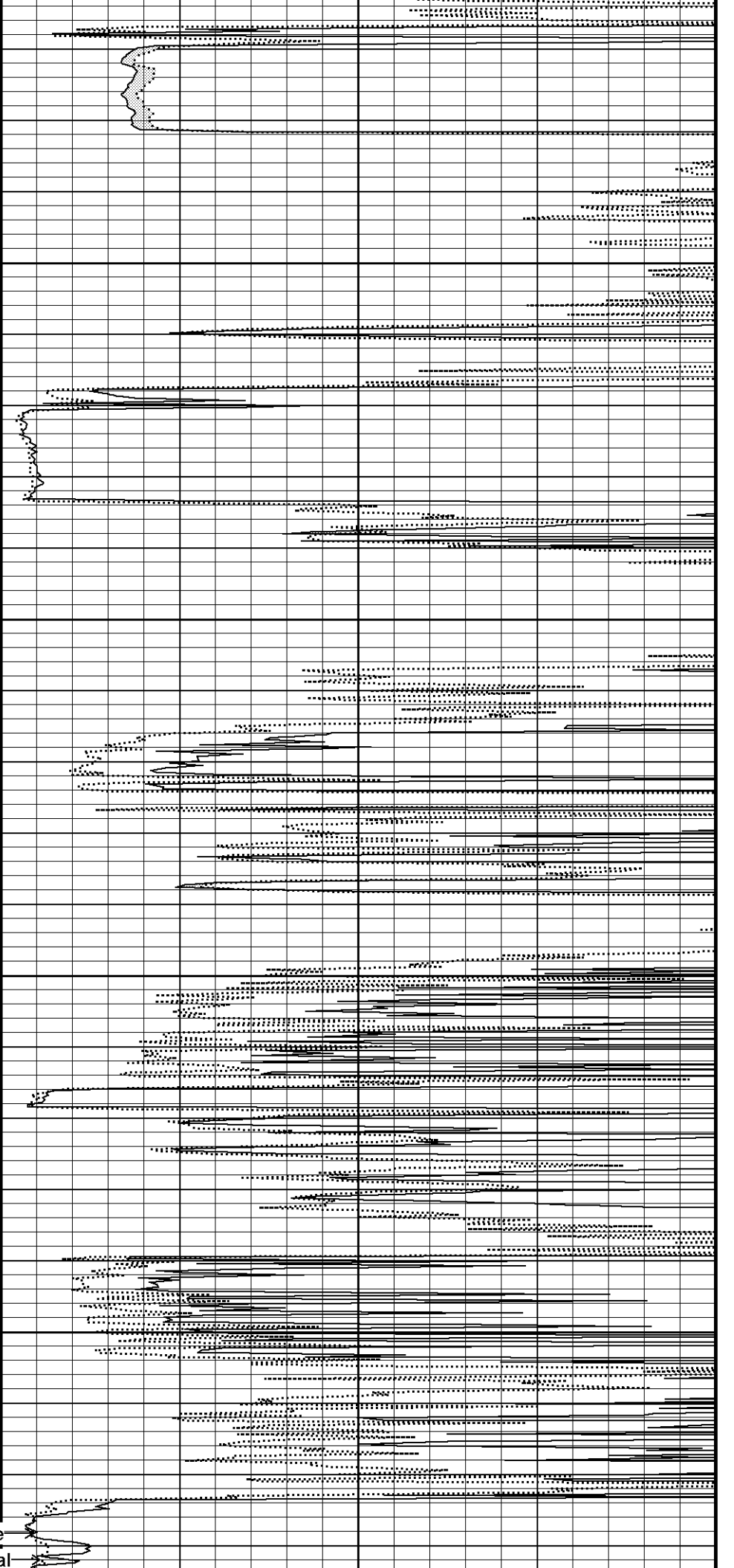
4550

104°

4600

104°

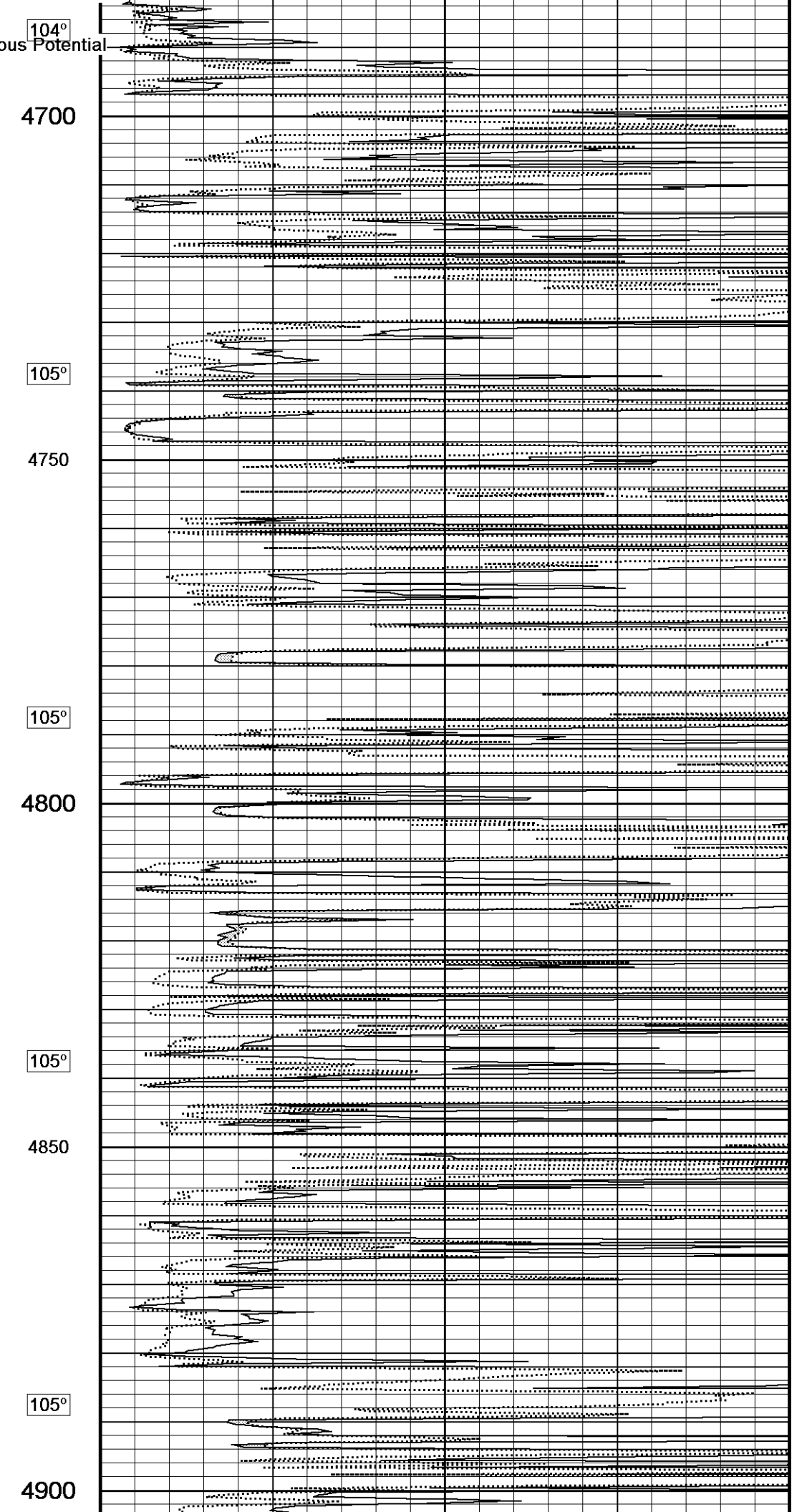
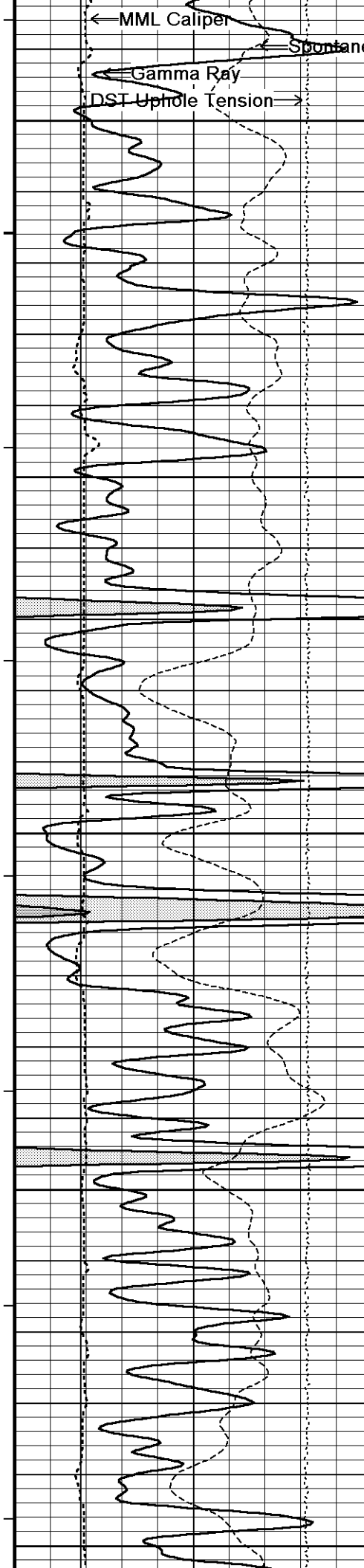
4650

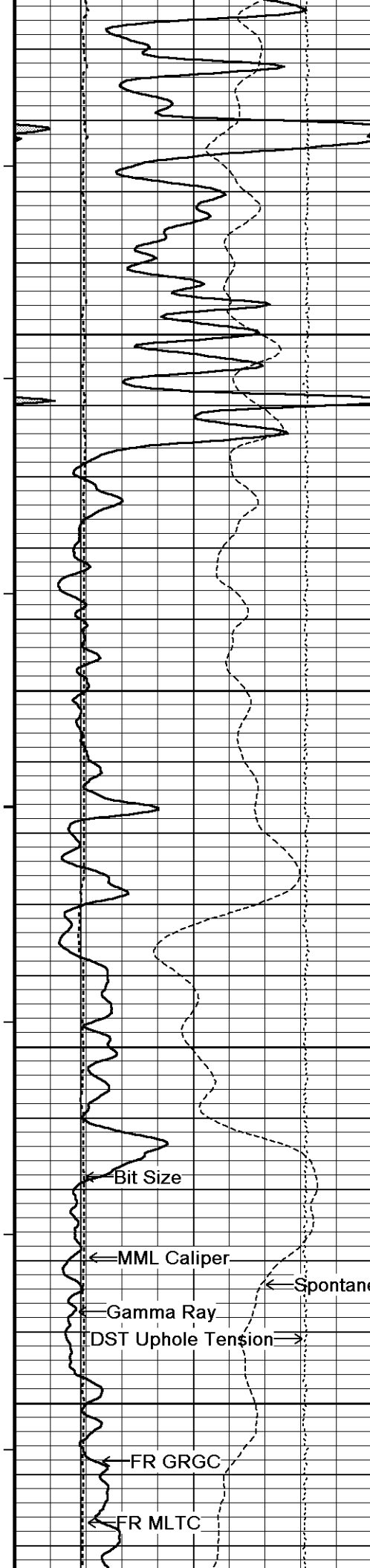


Bit Size

Micro-inverse

Micro-normal





106°

4950

106°

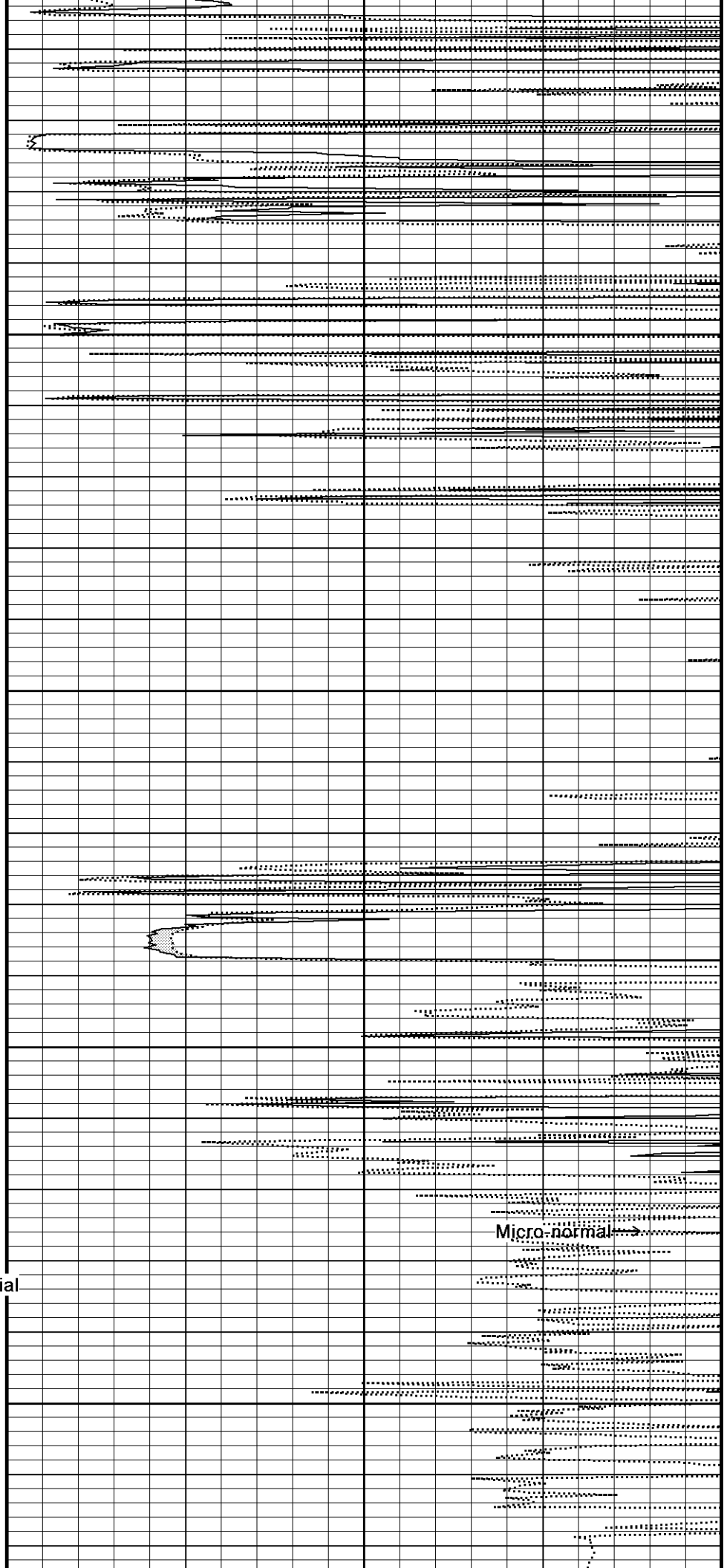
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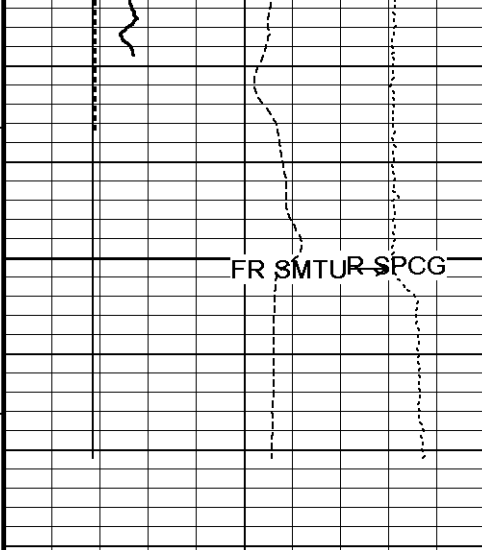
107°

5050

107°

5100





FR SMTUR SPCG

5150

5178

Depth
in
Feet

← Timing Marks
every 60.0 sec

Gamma Ray
API
0 75 150
150 225 300

Spontaneous Potential
millivolts
- → | 20 | ← +

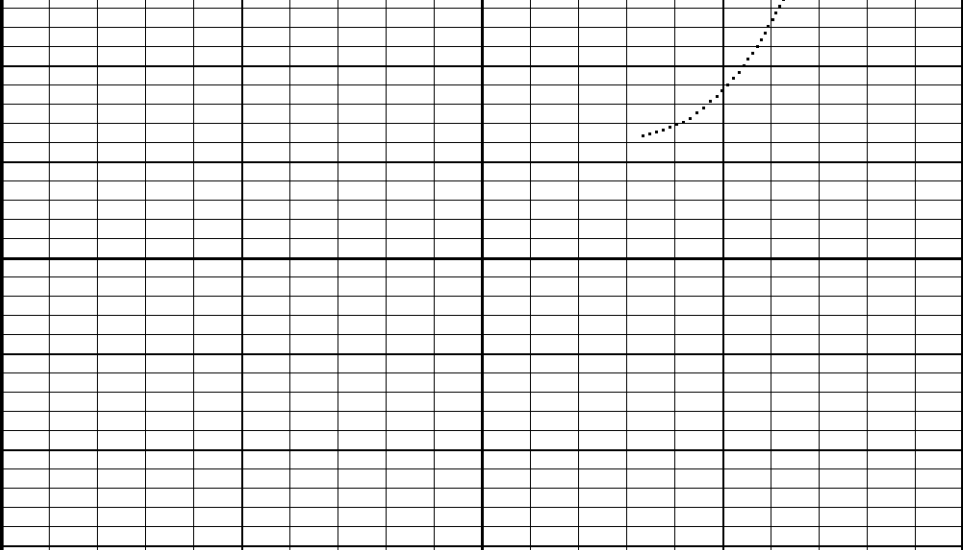
MML Caliper
inches
6 11 16

Bit Size
inches
6 11 16

DST Uphole Tension
pounds
5000 0

Borehole
Temp in
deg F

Replay
Scale
1:240



Micro-normal
ohm metres

0 10 20 30 40

Micro-inverse
ohm metres

0 10 20 30 40

Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 26-NOV-2012 14:47

Filename: C:\Minimus 13.04.8492\Data\McCoy Petroleum Richardson Trust #1-15 'A'\McCoy Petroleum Richardson Trust #1-15 'A'_001.dta

Recorded on 26-NOV-2012 11:37

System Versions: Logged with 13.04.8492 Plotted with 13.04.8492



REPEAT SECTION



BEFORE SURVEY CALIBRATION

C:\Minimus 13.04.8492\Data\McCoy Petroleum Richardson Trust #1-15 'A'\McCoy Petroleum Richardson Trust #1-15 'A'_002.dta

General Constants All 000

Last Edited on 26-NOV-2012,08:21

General Parameters

General Parameters		
Mud Resistivity	1.420	ohm-metres
Mud Resistivity Temperature	84.000	degrees F
Water Level	0.000	feet
Borehole Fluid 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. Four Res Rt
RWA Constant A	1.000
RWA Constant M	2.000

High Resolution Temperature Calibration MCG-D.K 442

Field Calibration on 08-NOV-2012,09:48

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

High Resolution Temperature Constants MCG-D.K 442

Last Edited on 08-NOV-2012,09:48

Pre-filter Length	11
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Gamma Calibration MCG-D.K 442

Field Calibration on 21-NOV-2012 08:45

	Measured	Calibrated (API)
Background	70	47
Calibrator (Gross)	1151	772
Calibrator (Net)	1082	725

Gamma Constants MCG-D.K 442

Last Edited on 26-NOV-2012,07:12

Gamma Calibrator Number	GRC38	
Mud Density	1.07	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

Micro Normal and Micro Inverse Calibration MML-A 16

Base Calibration on 08-NOV-2012 09:16
Field Check on 21-NOV-2012 08:37

Base Calibration

		Measured		Calibrated (ohm-m)	
Channel		Resistor 1	Resistor 2	Resistor 1	Resistor 2
Micro Normal		12.2	59.9	5.0	25.0
Micro Inverse		15.6	78.0	5.0	25.0

Channel	Base Check (ohm-m)	Field Check (ohm-m)
Micro Normal	63.3	63.3
Micro Inverse	48.5	48.5

Micro Normal and Micro Inverse Constants MML-A 16

Last Edited on 26-NOV-2012,07:11

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

Caliper Calibration MML-A 16

Base Calibration on 08-NOV-2012 09:06
Field Calibration on 21-NOV-2012 08:39

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	13968	5.98
2	17082	7.97
3	20284	9.86
4	24165	11.92
5	0	0.00
6	N/A	N/A

DOWNHOLE EQUIPMENT

C:\Minimus 13.04.8492\Data\McCoy Petroleum Richardson Trust #1-15 'A'\McCoy Petroleum Richardson Trust #1-15 'A'_002.dta

Compact Comms Gamma
MCG-D.K 442 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

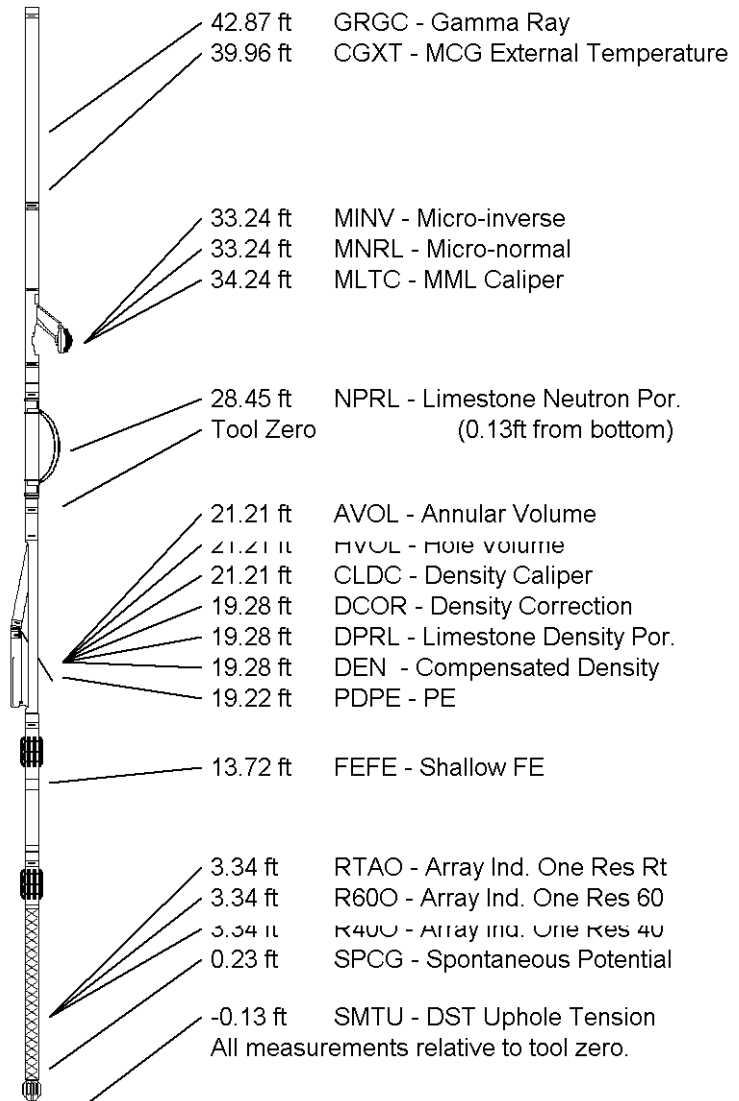
Compact Neutron
MDN-A.B 66 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

Compact Density/Caliper
MPD-B 64 LG: 9.59 ft WT: 90.4 lb OD: 2.45 in

Compact Focussed Electric
MFE-B.J 353 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

Compact Induction
MAI-A.A 167 LG: 10.81 ft WT: 48.5 lb OD: 2.24 in

Total Length: 48.16 ft Weight: 383.6 lb



COMPANY	MCCOY PETROLEUM CORP.
WELL	RICHARDSON TRUST #1-15 'A'
FIELD	WILDCAT
PROVINCE/COUNTY	GRAY
COUNTRY/STATE	U.S.A. / KANSAS

Elevation Kelly Bushing	2754.00	feet	First Reading	5118.00	feet
Elevation Drill Floor	2752.00	feet	Depth Driller	5150.00	feet
Elevation Ground Level	2741.00	feet	Depth Logger	5151.00	feet



Weatherford®

MICRORESISTIVITY LOG

