



Weatherford

**COMPACT PHOTO DENSITY
COMPENSATED NEUTRON
MICRORESISTIVITY LOG**

COMPANY	MCCOY PETROLEUM CORPORATION				
WELL	SEALEY "A" #1-15				
FIELD	ALFORD				
PROVINCE/COUNTY	SCOTT				
COUNTRY/STATE	U.S.A. / KANSAS				
LOCATION	990' FSL & 1980' FEL				
PERMIT NUMBER	N2 SW SE				
SEC 15	TWP 30S	RGE 19W	Other Services		
Latitude	15-097-21809		Elevations: KB 2273.00 DF 2271.00 GL 2264.00		
Longitude					
API Number					
Permanent Datum GL, Elevation 2264 feet					
Log Measured From KB					
Drilling Measured From KB @ 9 FEET					
Date	18-OCT-2013				
Run Number	ONE				
Service Order	7036-100817902				
Depth Driller	5225.00		feet		
Depth Logger	5225.00		feet		
First Reading	5205.78		feet		
Last Reading	3900.00		feet		
Casing Driller	644.00		feet		
Casing Logger	646.00		feet		
Bit Size	7.875		inches		
Hole Fluid Type	WBM				
Density / Viscosity	9.40	lb/USg	88.00	CP	
PH / Fluid Loss	10.50		12.00	ml/30Min	
Sample Source	MUDPIT				
Rm @ Measured Temp	0.31 @ 75.0		ohm-m		
Rmf @ Measured Temp	0.25 @ 75.0		ohm-m		
Rmc @ Measured Temp	0.37 @ 75.0		ohm-m		
Source Rmf / Rmc	CALC		CALC		
Rm @ BHT	0.21 @ 113.0		ohm-m		
Time Since Circulation	4 HOURS				
Max Recorded Temp	113.00		deg F		
Equipment / Base	13096		LIB		
Recorded By	DEREK CARTER				
Witnessed By	ZACH WIELE				
IOB #	LB14-323				

BOREHOLE RECORD

Last Edited: 18-OCT-2014 09:17

Bit Size inches	Depth From feet	Depth To feet
7.875	644.00	5225.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	8.625	0.00	644.00	24.00

REMARKS

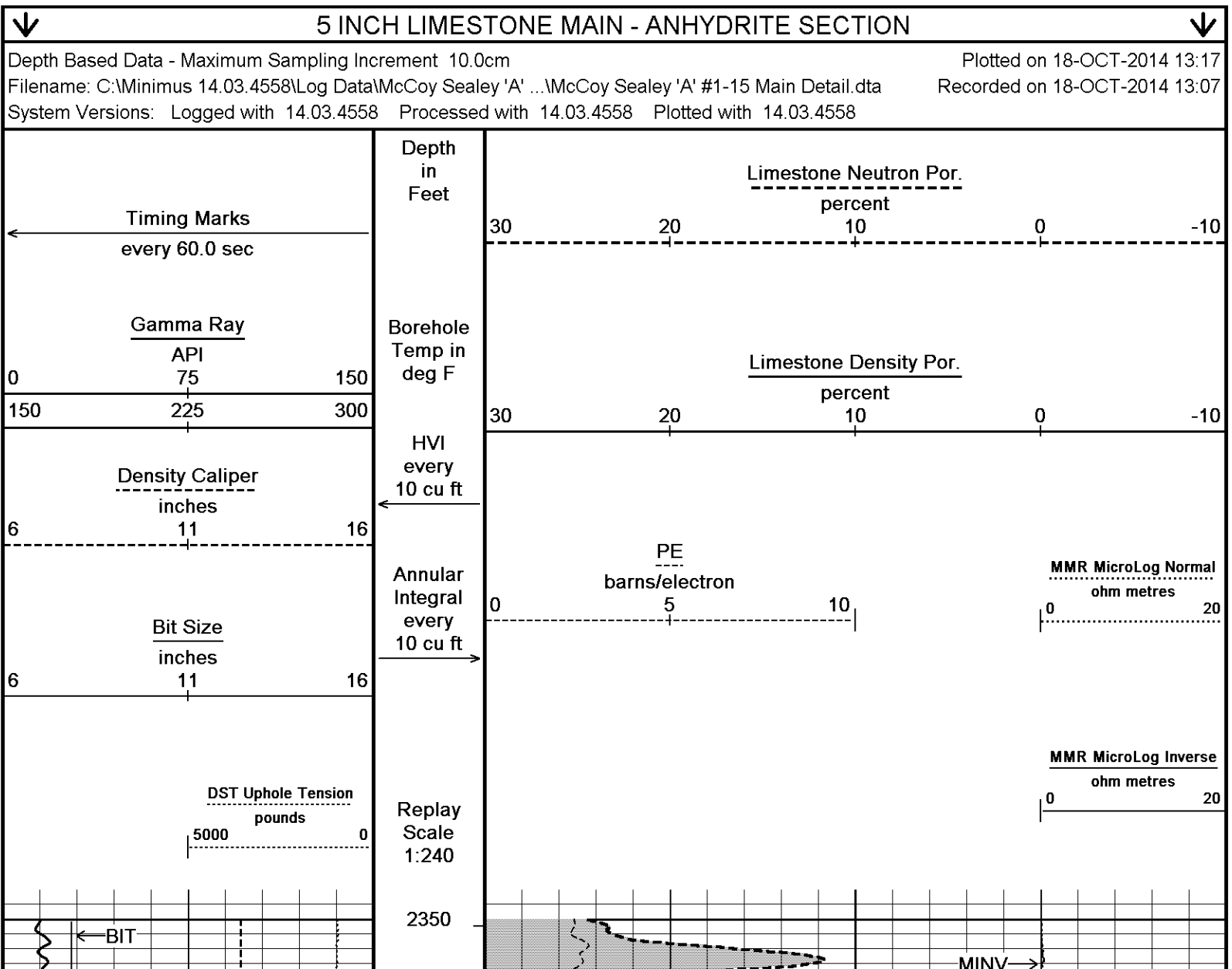
- SOFTWARE ISSUE: WLS 14.03.4558
- TOOL STRING: MCG, MML, MDN, MPD, MFE, MAI RUN IN COMBINATION
- HARDWARE:
 - MDN: DUAL BOWSPRING ECCENTRALIZER
 - MFE: 1 X 0.5 INCH STANDOFF
 - MAI: 2 X 0.5 INCH STANDOFF
- 2.71 G/CC LIMESTONE DENSITY MATRIX USED TO CALCULATE POROSITY
- BOREHOLE RUGOSITY, TIGHT PULLS, AND WASHOUTS WILL AFFECT DATA QUALITY
- ALL INTERVALS LOGGED AND SCALED PER CUSTOMER'S REQUEST
- HIGH RESOLUTION LOGGED FOR CUSTOMER FROM TD TO 4975 FT.

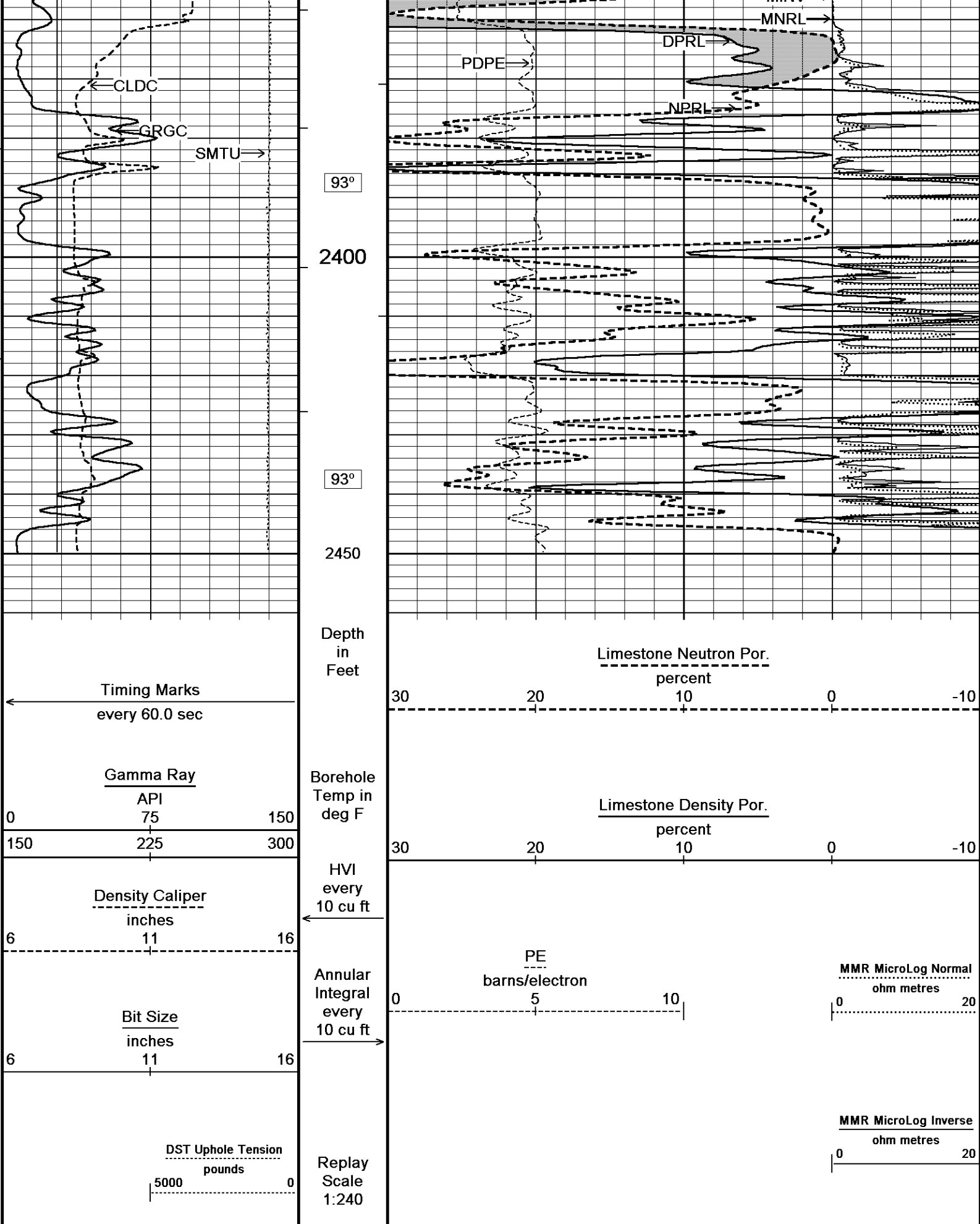
- TOTAL HOLE VOLUME FROM TD TO 3900 FT = 450 CU FT

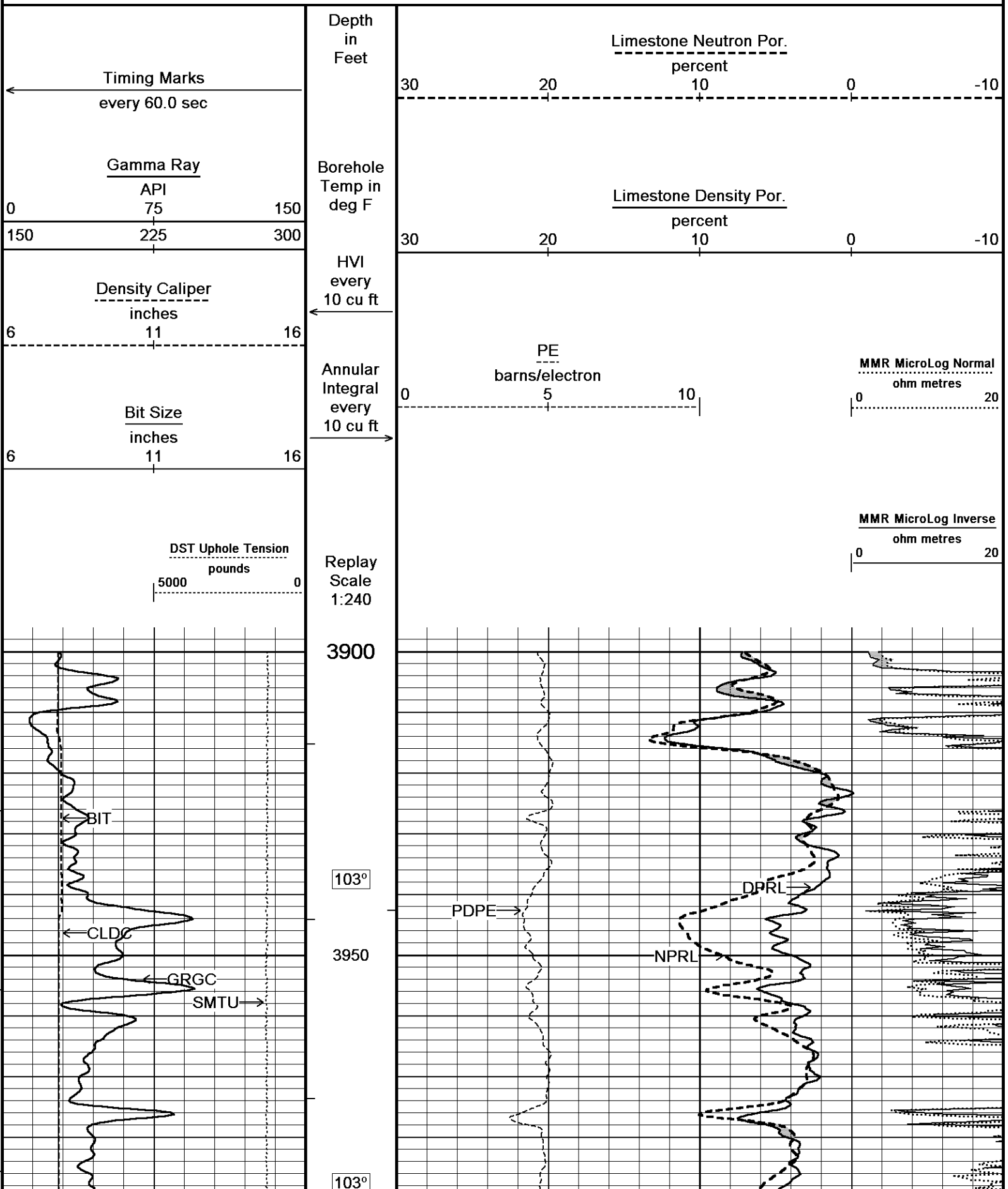
ANNUAL HOLE VOLUME FROM TD TO 3900 FT.: 100 CU. FT.

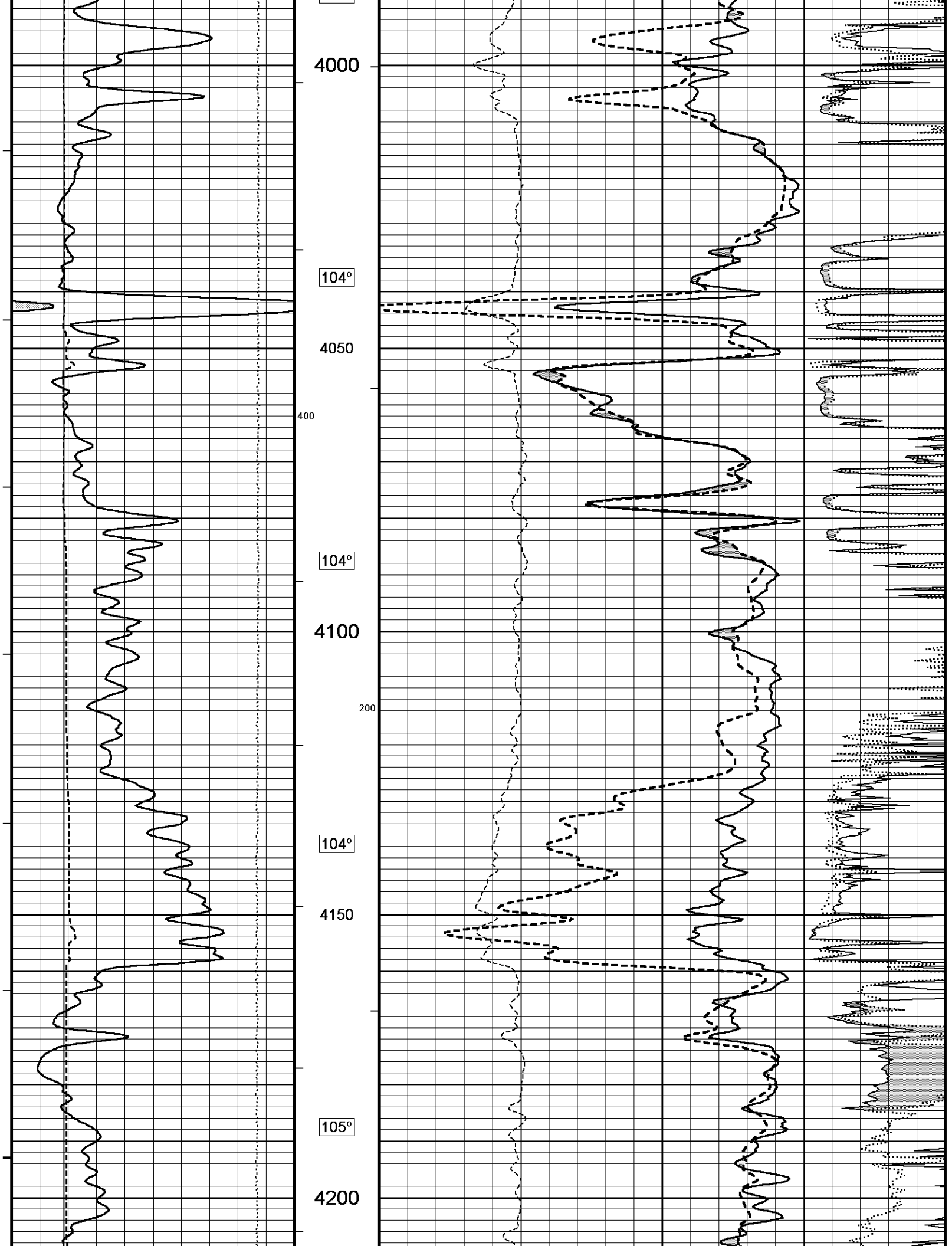
- ANNULAR HOLE VOLUME WITH 5.5 INCH CASING FROM TD TO 3900 FT.: 230 CU. FT.
- SERVICE ORDER # 7036-100817902
- RIG: STERLING #4
- ENGINEER: DEREK CARTER
- OPERATORS: JOHN DUNLAP
- CHLORIDE LEVEL: 12,000 PPM

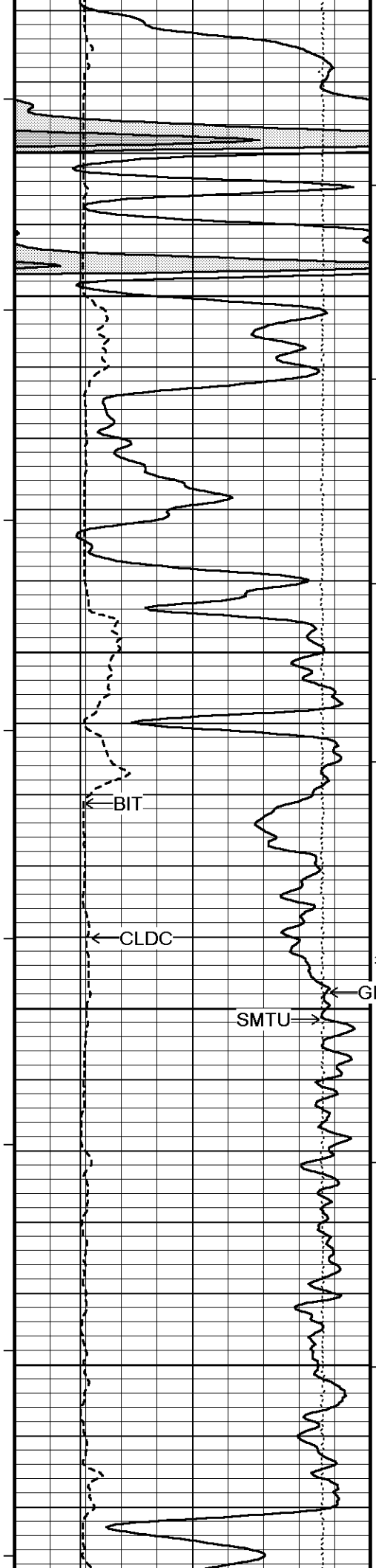
In interpreting, communicating or providing information and/or making recommendations, either written or oral, as to logs or test or other data, type or amount of material, or Work or other service to be furnished, or manner of performance, or in predicting results to be obtained, the Contractor will give the Company the benefit of the Contractor's best judgment based on its experience and will perform all such Work in a good and workmanlike manner. Any interpretation of test or other data, and any recommendation or reservoir description based upon such interpretations, are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and assumptions are not infallible, and with respect to which professional engineers and analysts may differ. ACCORDINGLY ANY INTERPRETATION OR RECOMMENDATION RESULTING FROM THE SERVICES WILL BE AT THE SOLE RISK OF THE COMPANY, AND THE CONTRACTOR CANNOT AND DOES NOT WARRANT THE ACCURACY, CORRECTNESS OR COMPLETENESS OF ANY SUCH INTERPRETATION OR RECOMMENDATION, WHICH INTERPRETATIONS AND RECOMMENDATIONS SHOULD NOT, THEREFORE, UNDER ANY CIRCUMSTANCES BE RELIED UPON AS THE SOLE OR MAIN BASIS FOR ANY DRILLING, COMPLETION, WELL TREATMENT, PRODUCTION OR FINANCIAL DECISION, OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING ACTIVITY, DRILLING RIG OR ITS CREW OR ANY OTHER INDIVIDUAL. THE COMPANY HAS FULL RESPONSIBILITY FOR ALL DECISIONS CONCERNING THE SERVICES.











105°

4250

106°

4300

106°

4350

106°

4400

BIT

CLDC

SMTU

300

GRGC

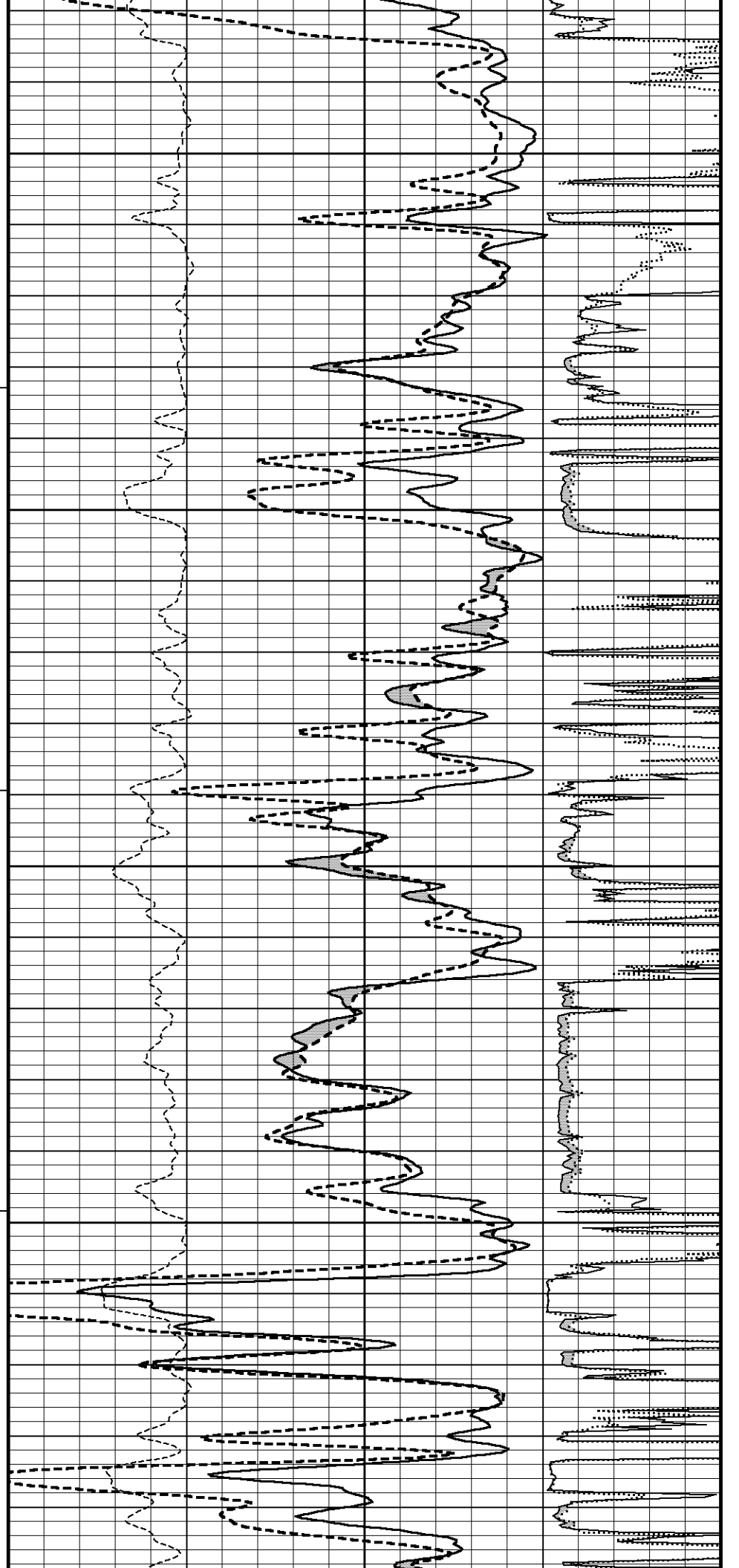
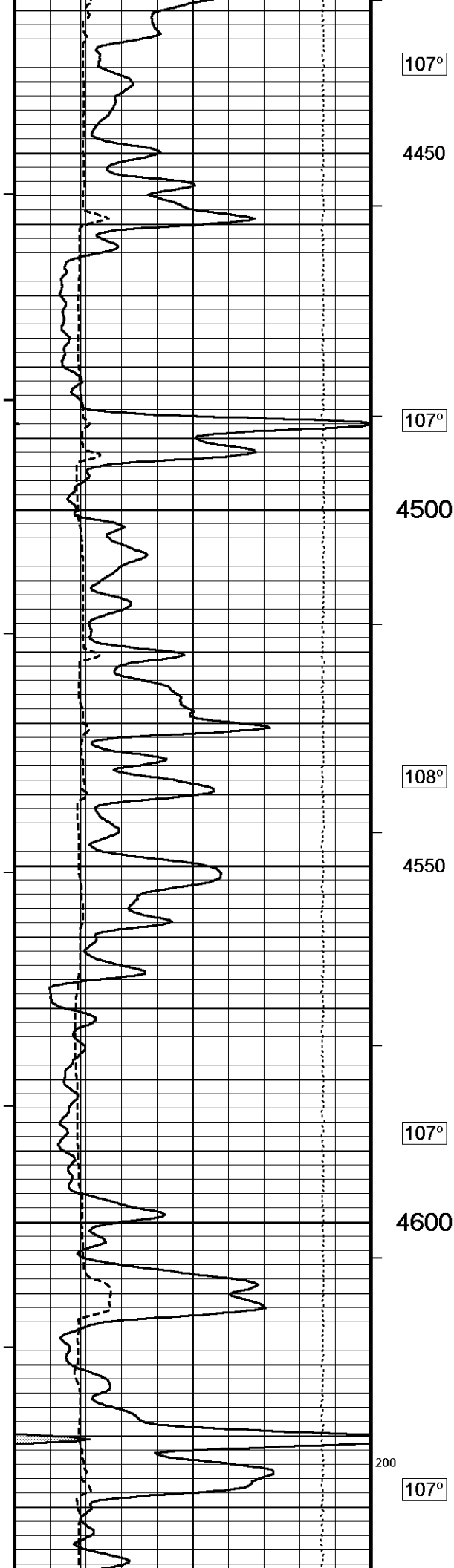
NPRL

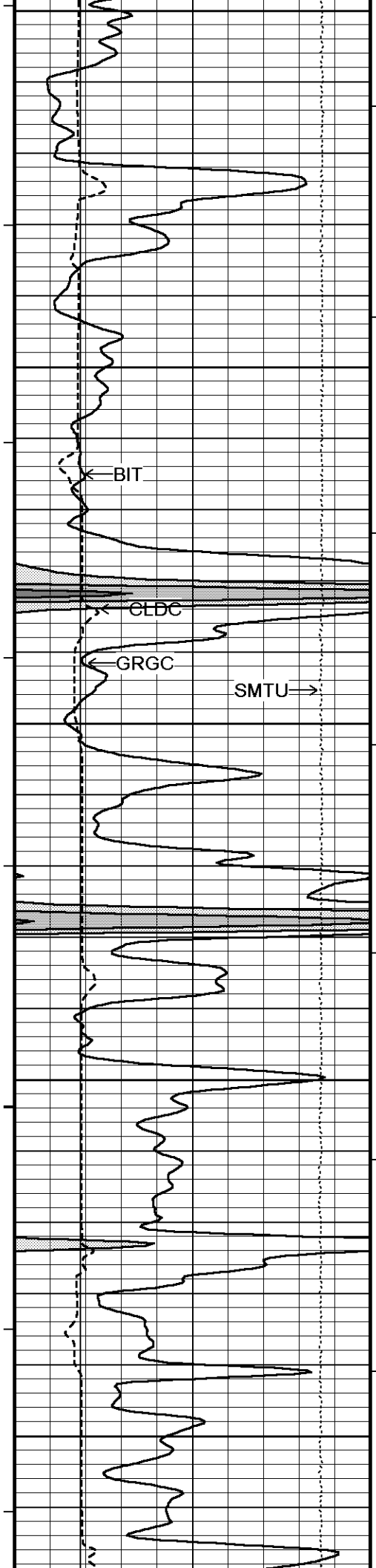
PDP

DPRL

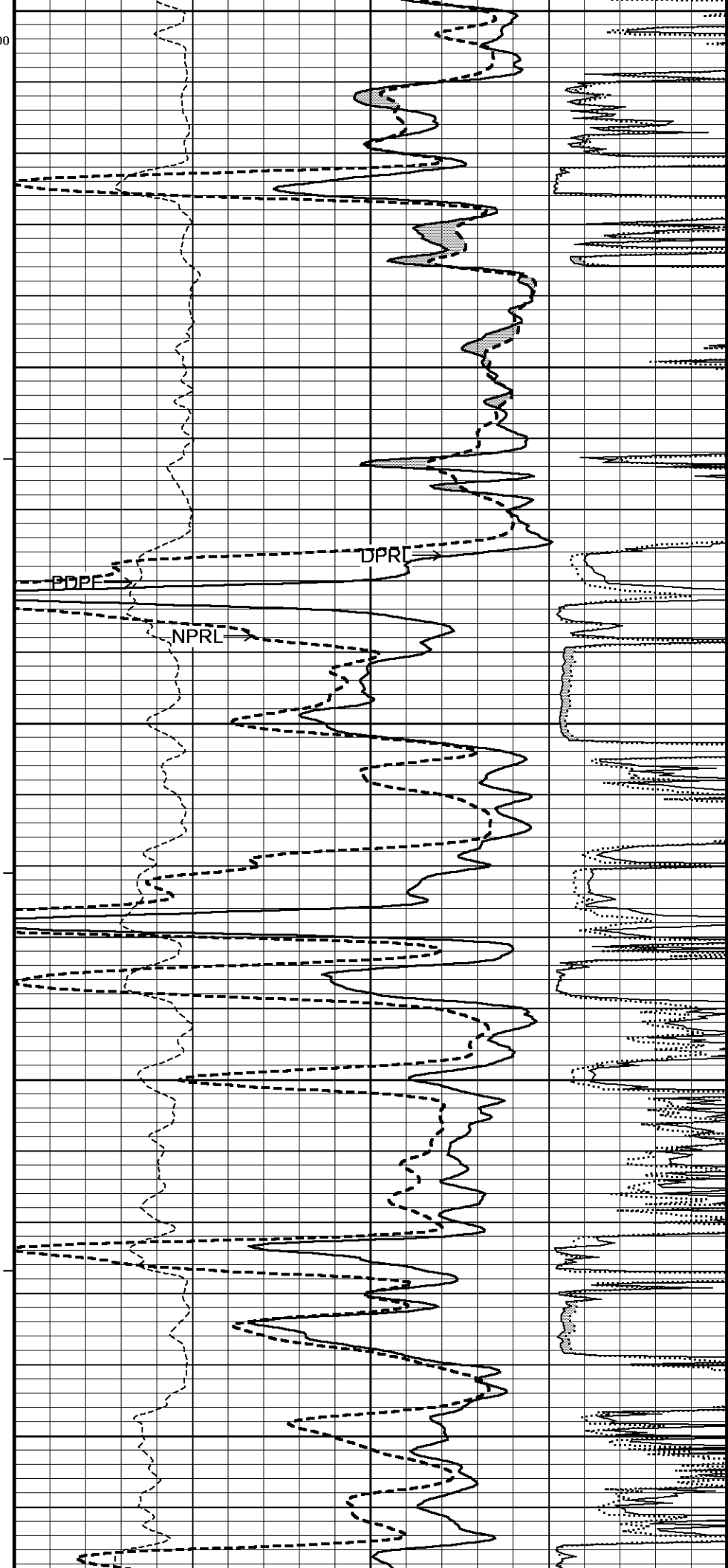
MINV

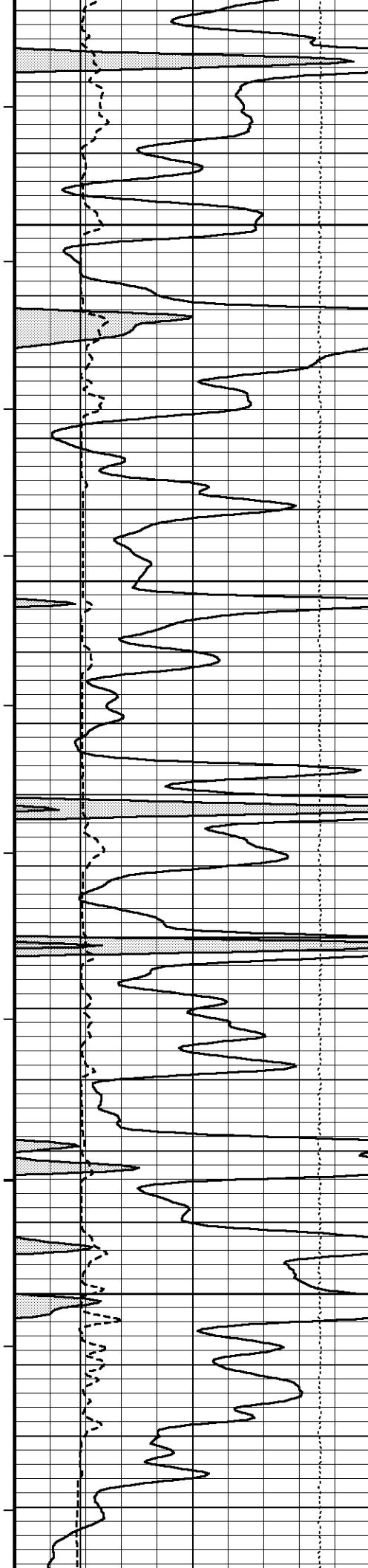
MNRL





4650
100
107°
4700
108°
4750
108°
4800
109°
4850





109°

4900

100

110°

4950

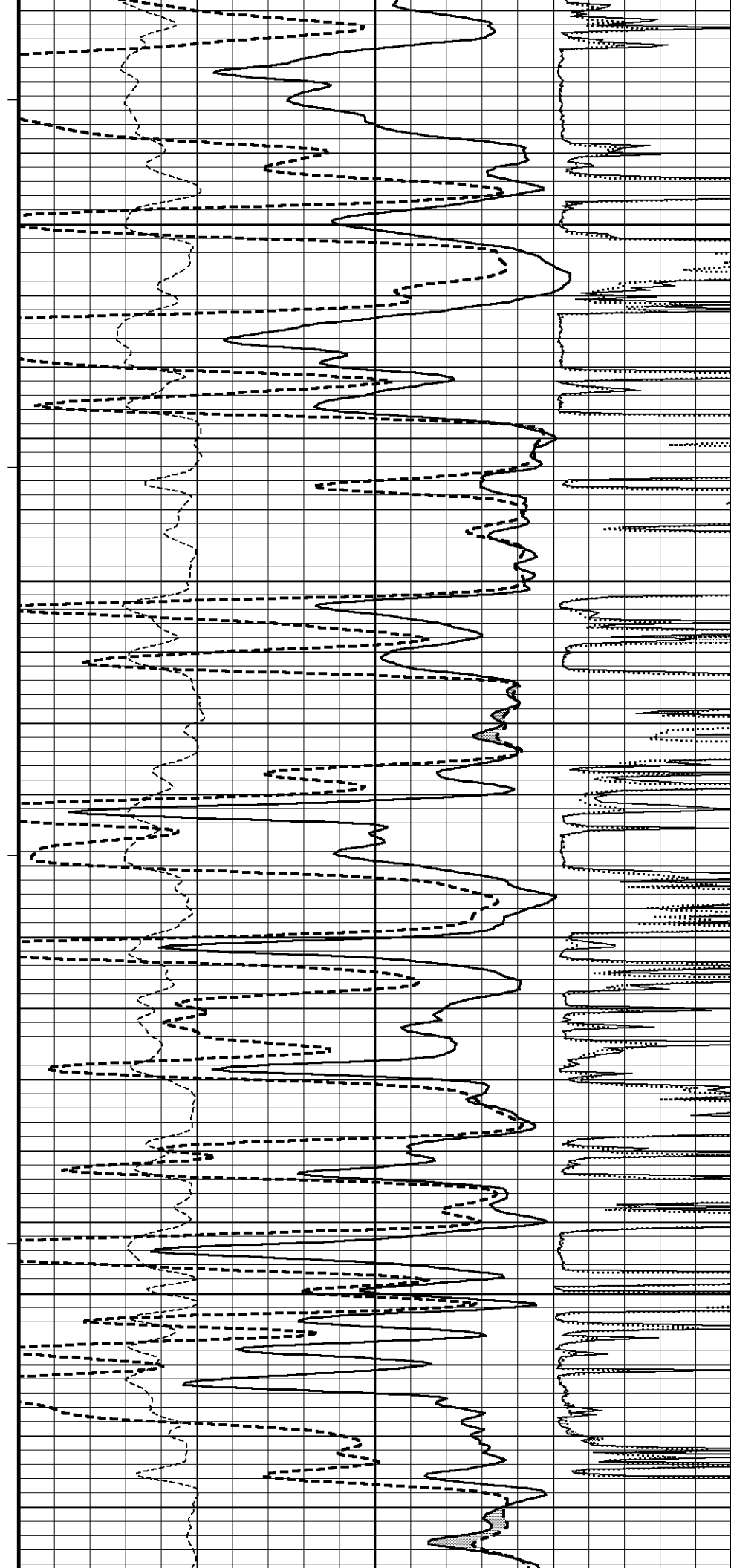
110°

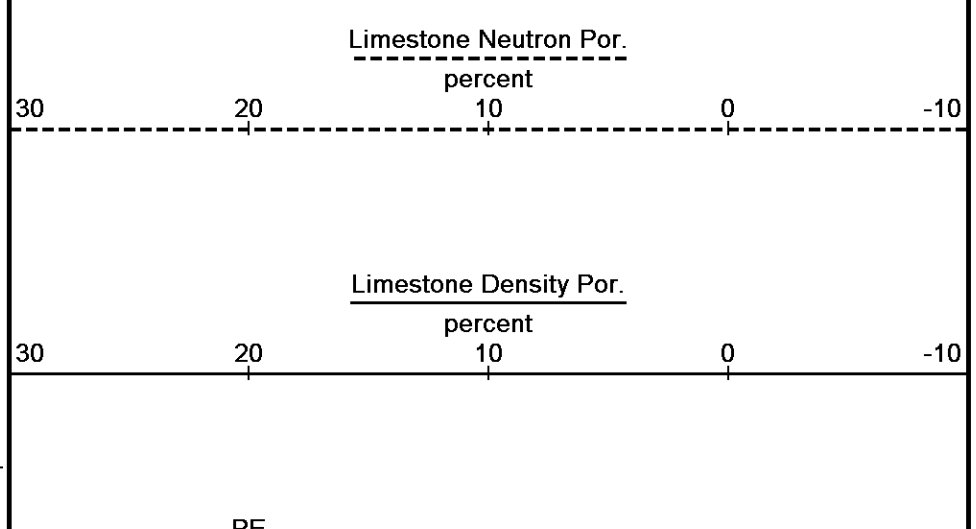
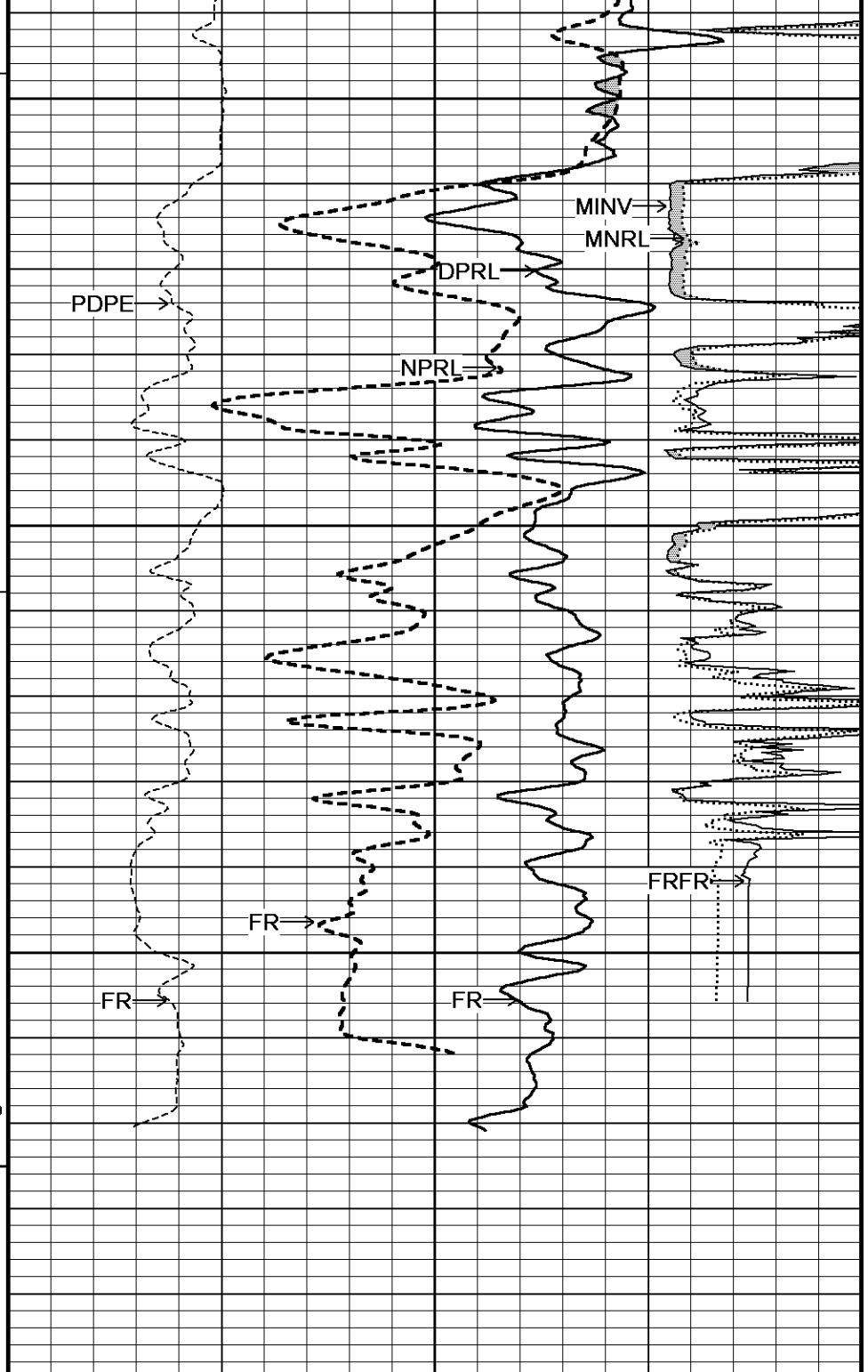
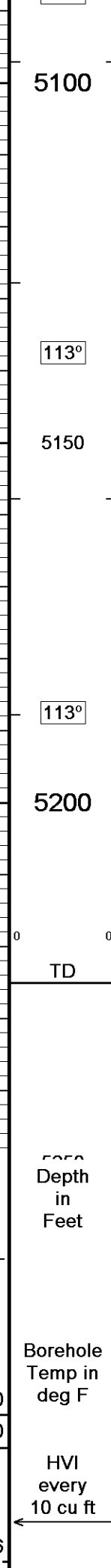
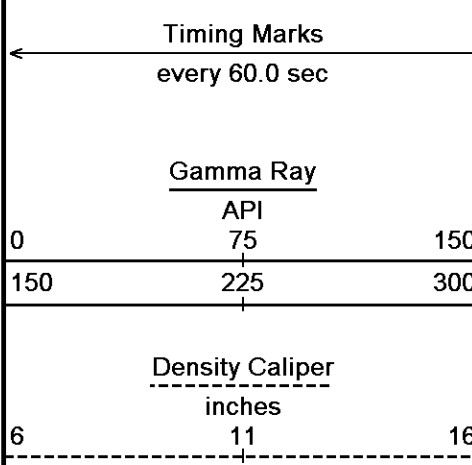
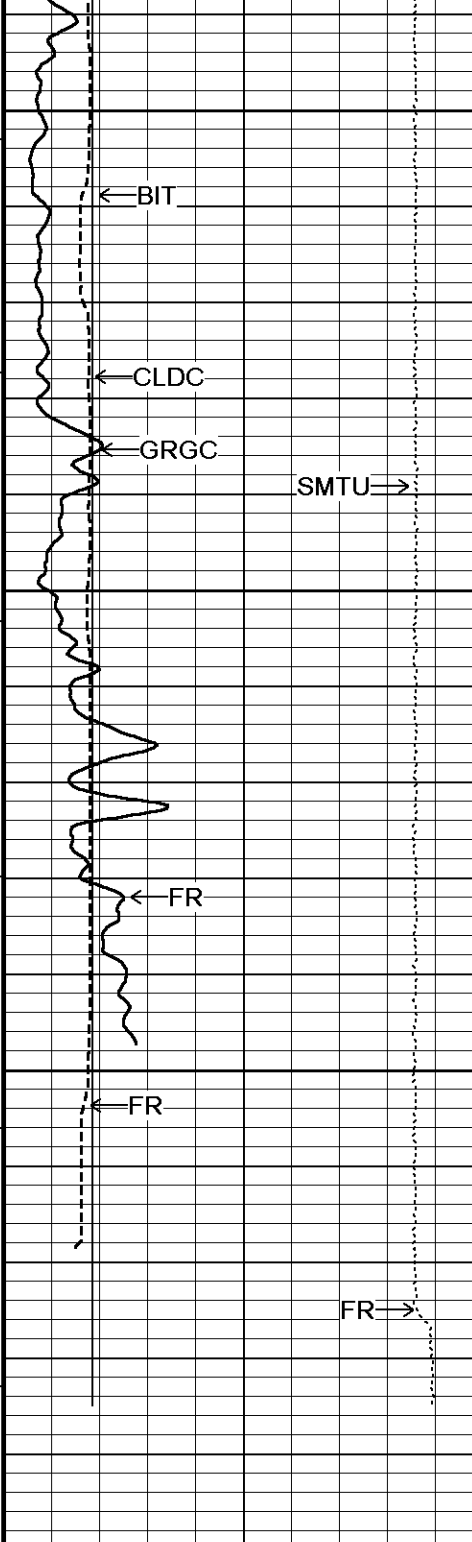
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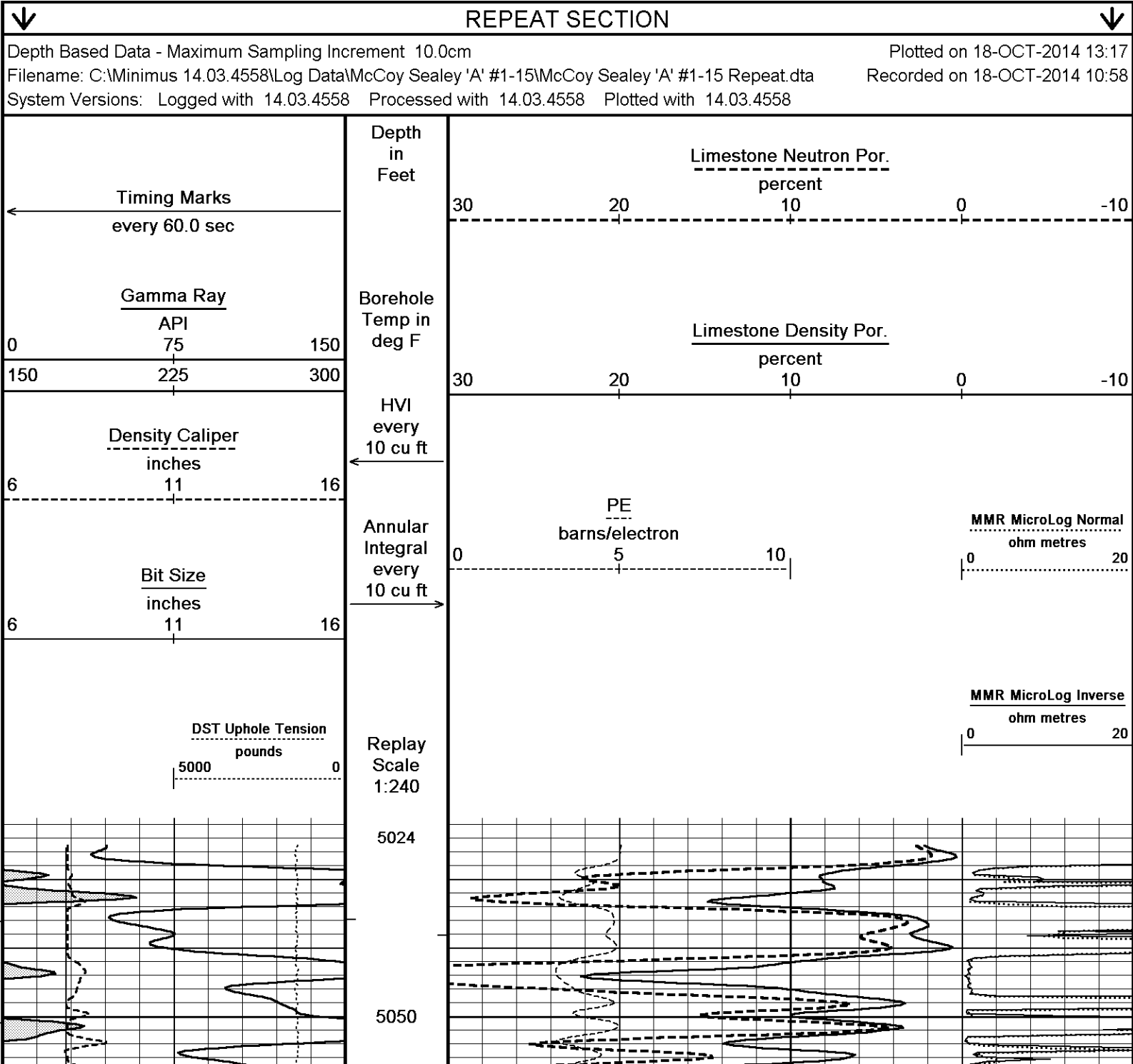
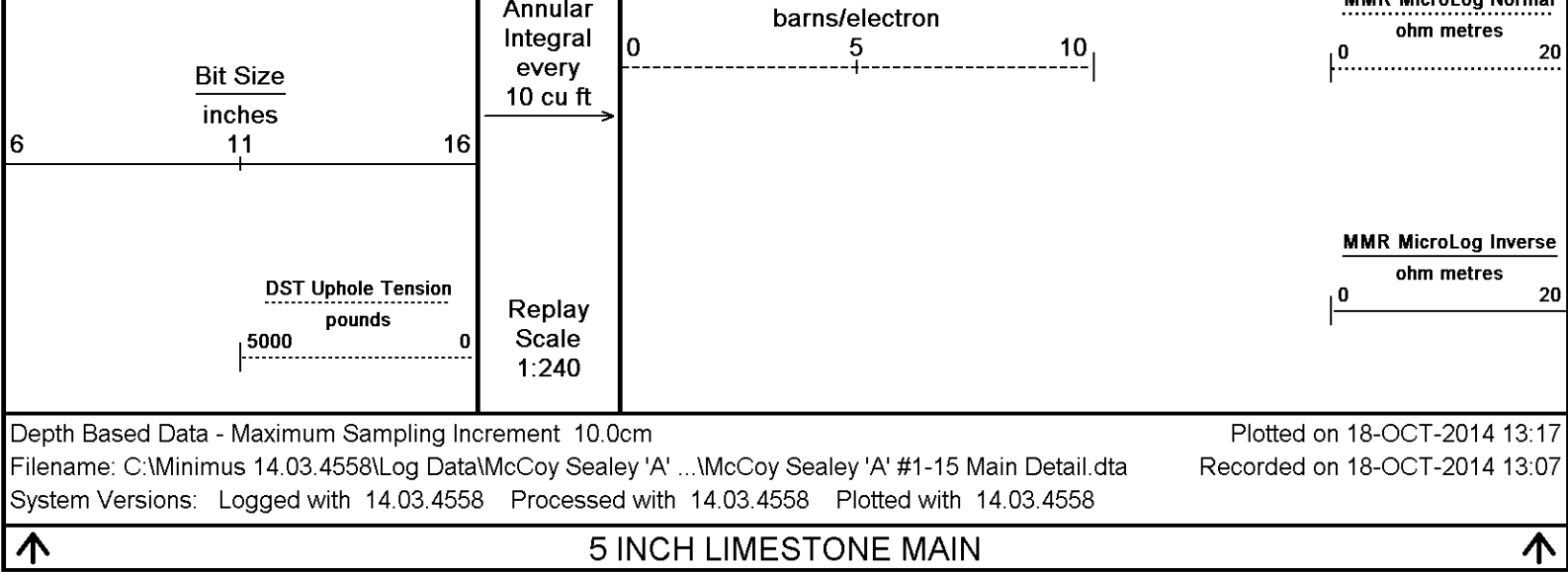
111°

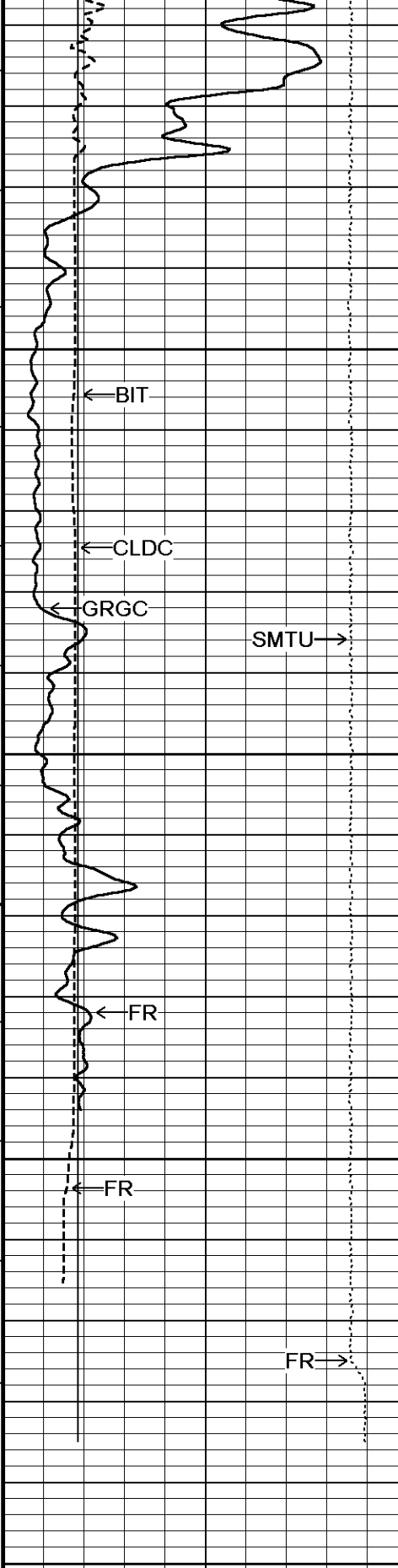
5050

112°









110°

5100

112°

5150

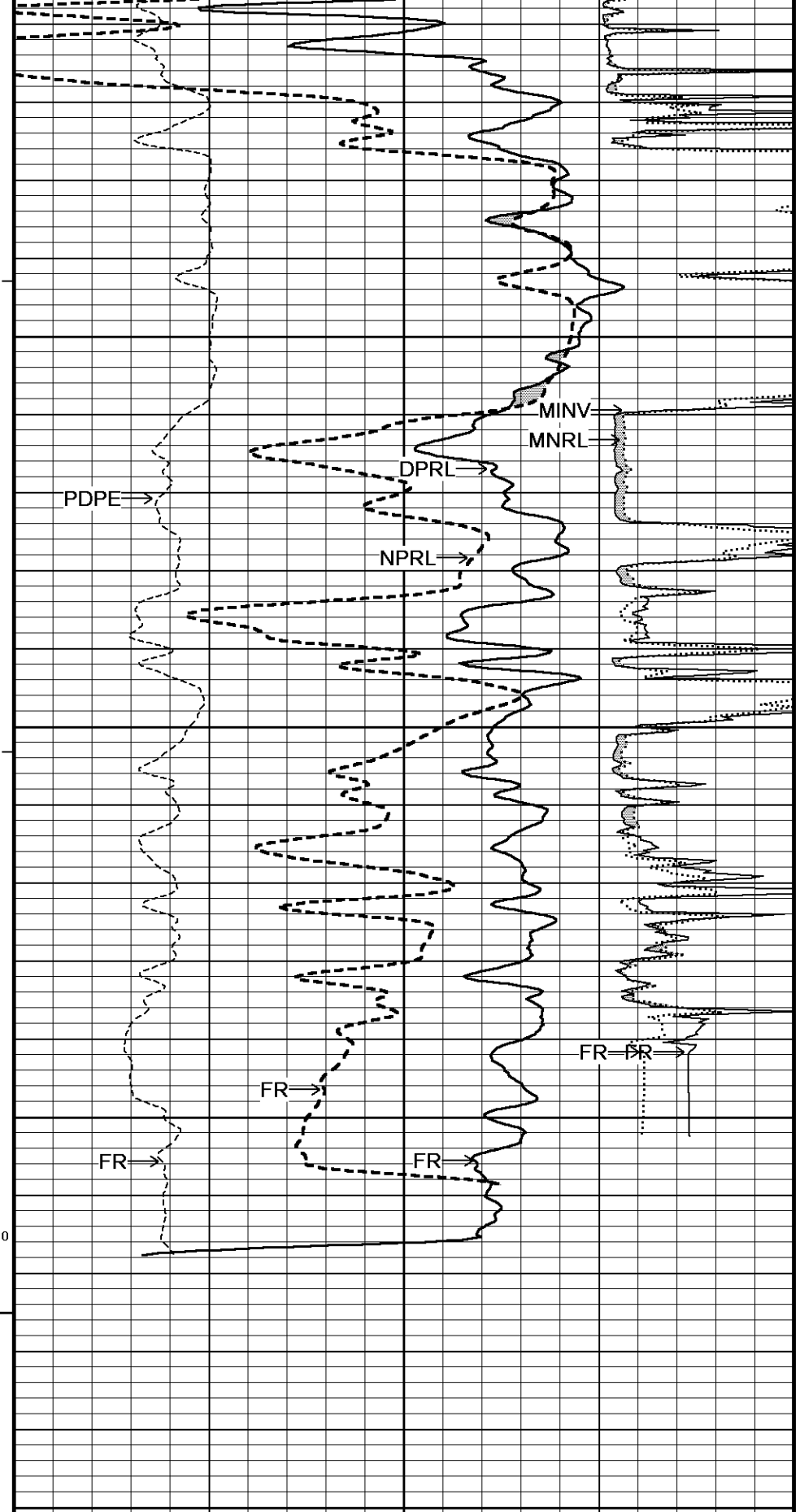
111°

5200

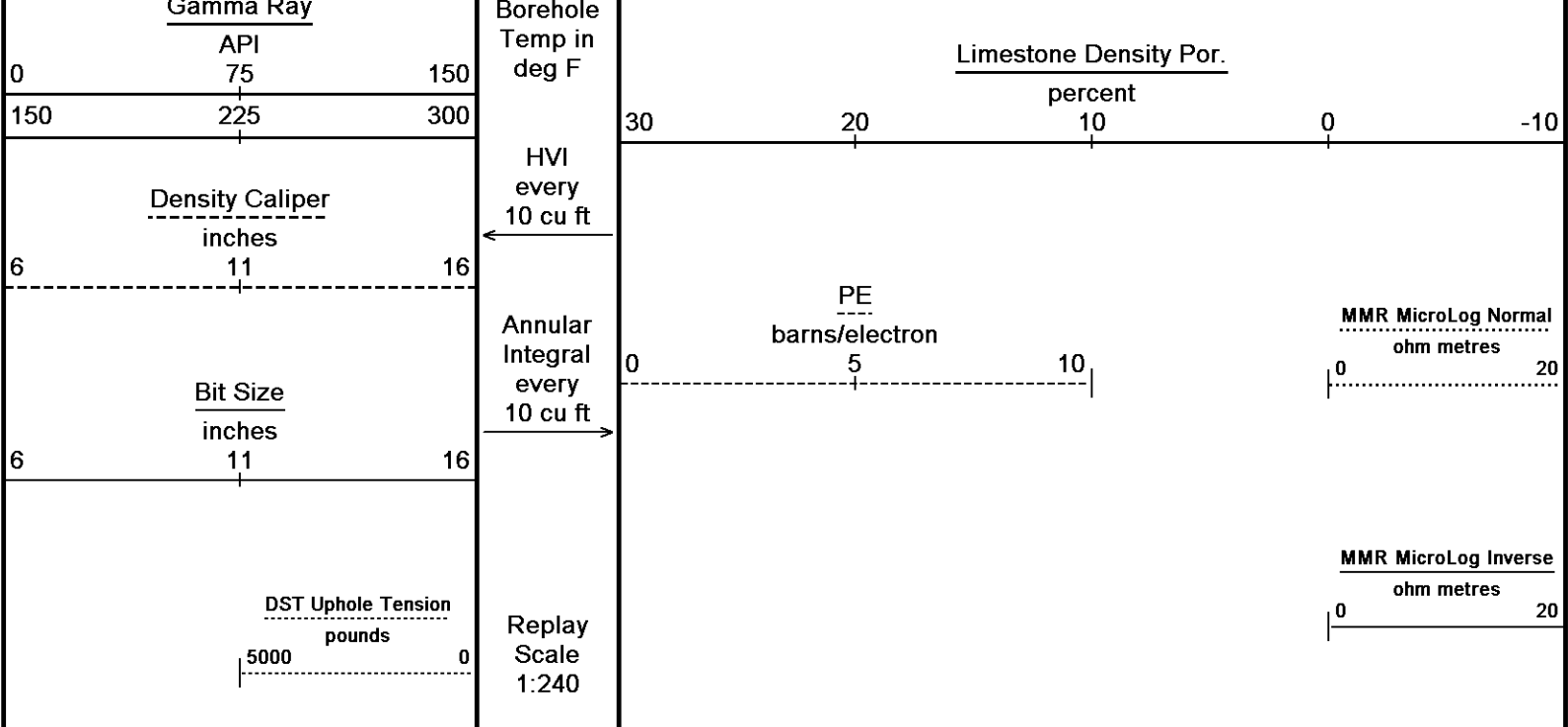
TD

5250
Depth
in
Feet

Timing Marks
every 60.0 sec



Limestone Neutron Por.
percent
30 20 10 0 -10

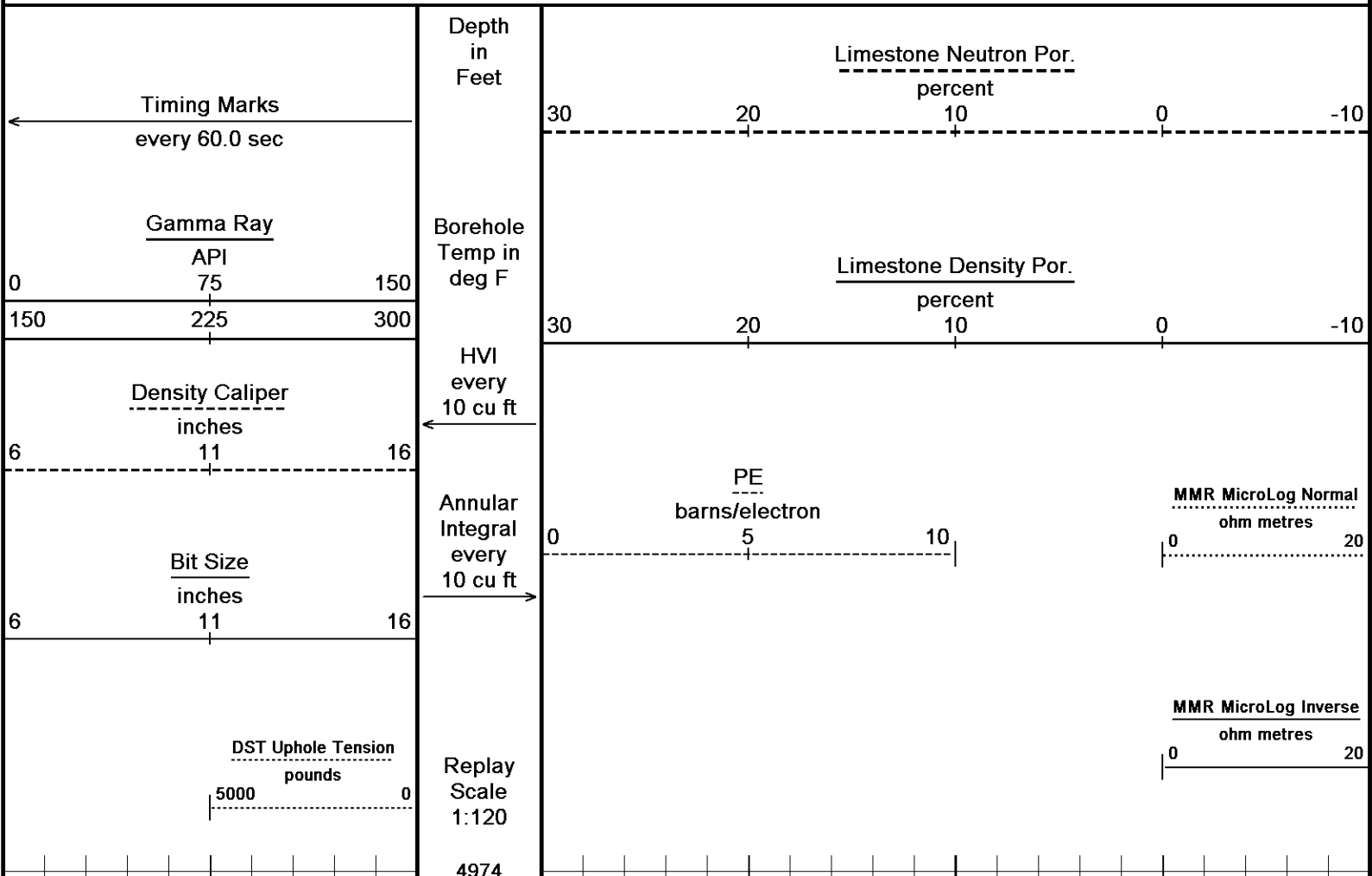


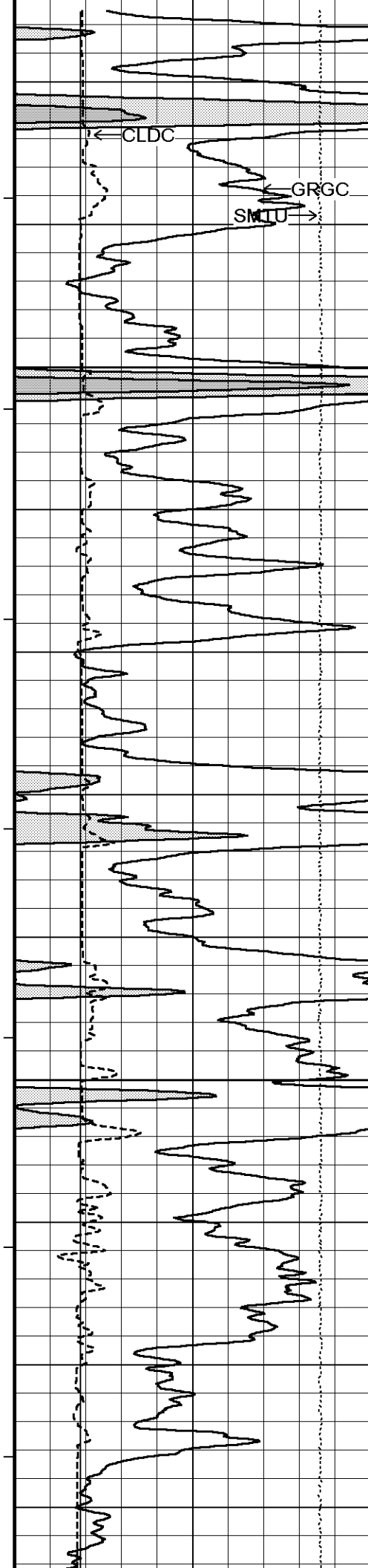
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 18-OCT-2014 13:17
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Recorded on 18-OCT-2014 10:58
System Versions: Logged with 14.03.4558 Processed with 14.03.4558 Plotted with 14.03.4558

↑ REPEAT SECTION ↑

↓ 10 INCH HIGH RESOLUTION ↓

Depth Based Data - Maximum Sampling Increment 2.5cm
Plotted on 18-OCT-2014 13:17
Filename: C:\Minimus 14.03.4558\Log Data\McCoy Sealey 'A' #1-15 High Resolution.dta
Recorded on 18-OCT-2014 10:58
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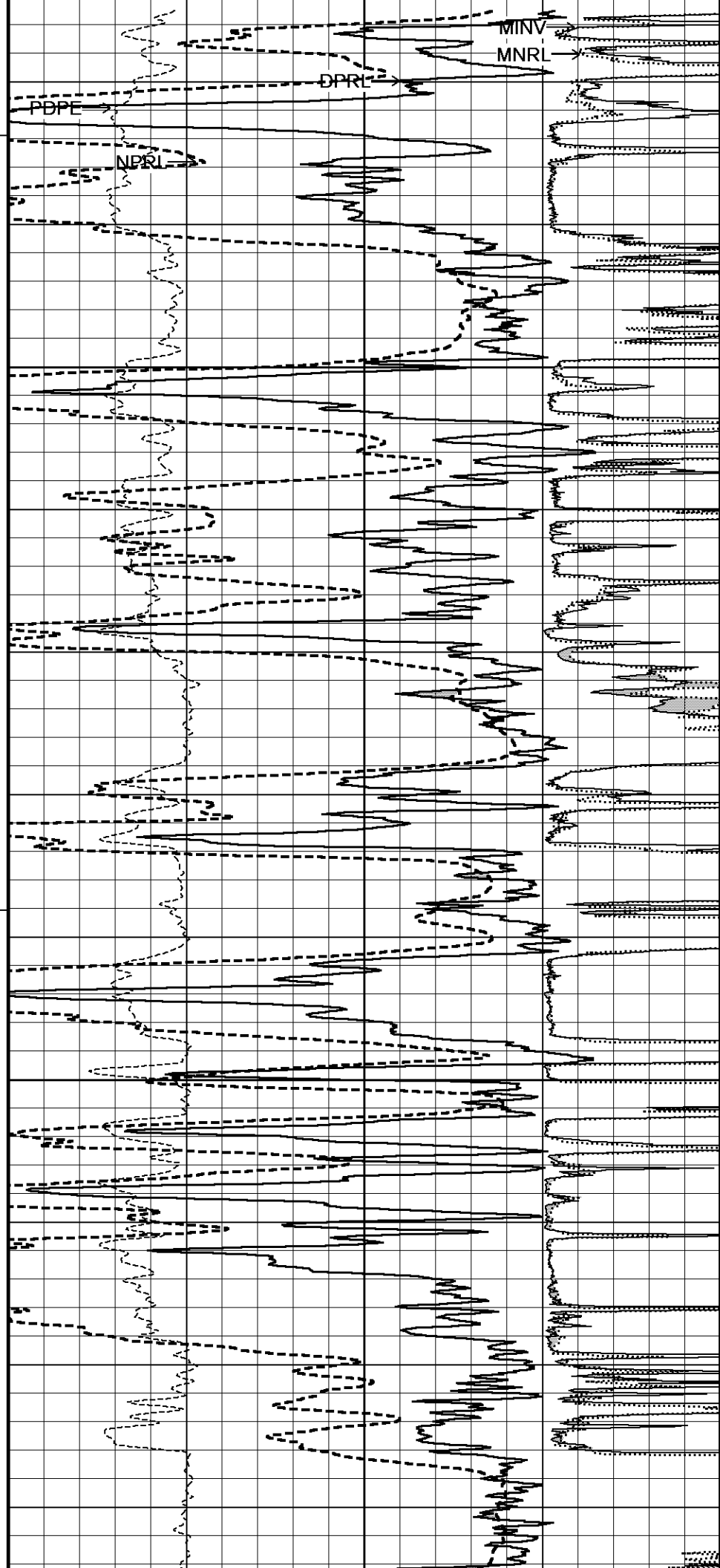


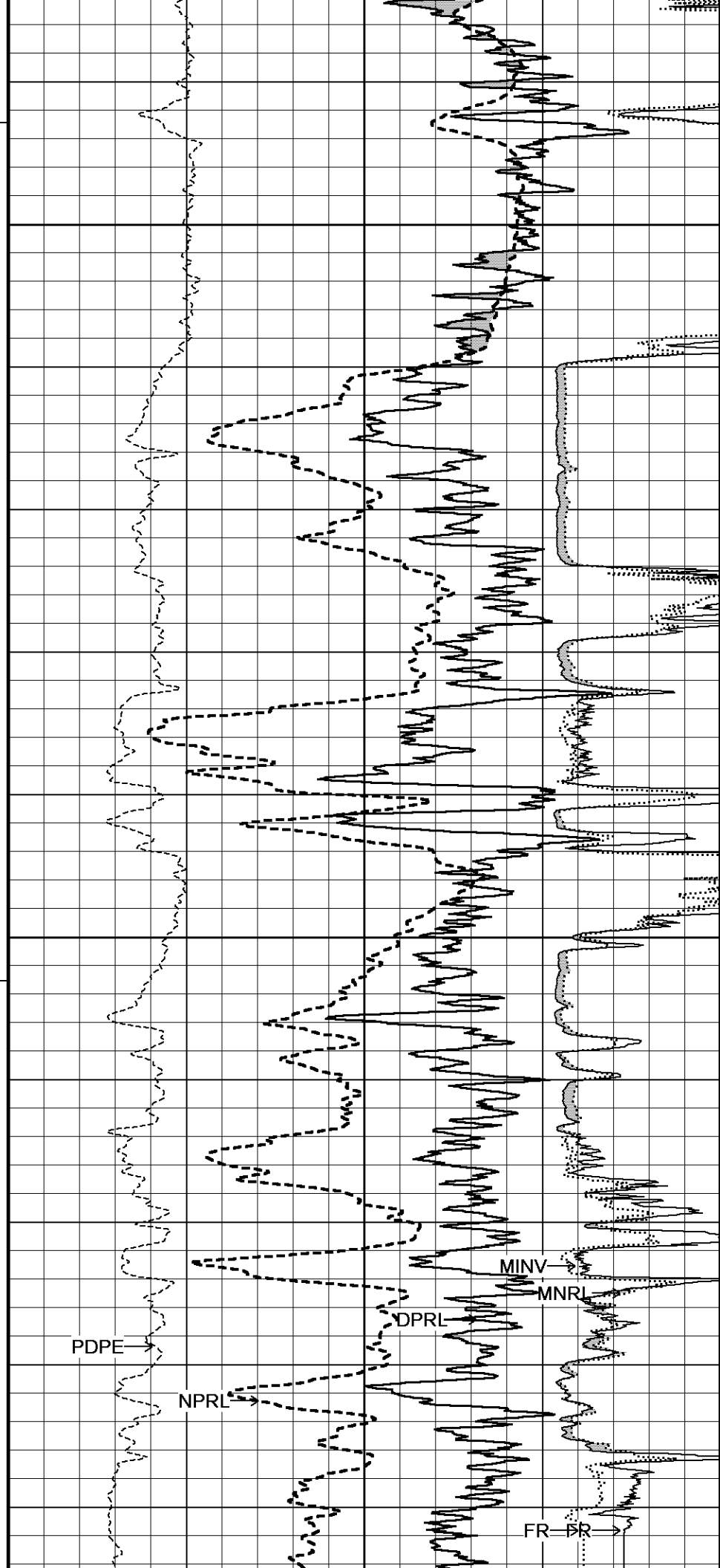
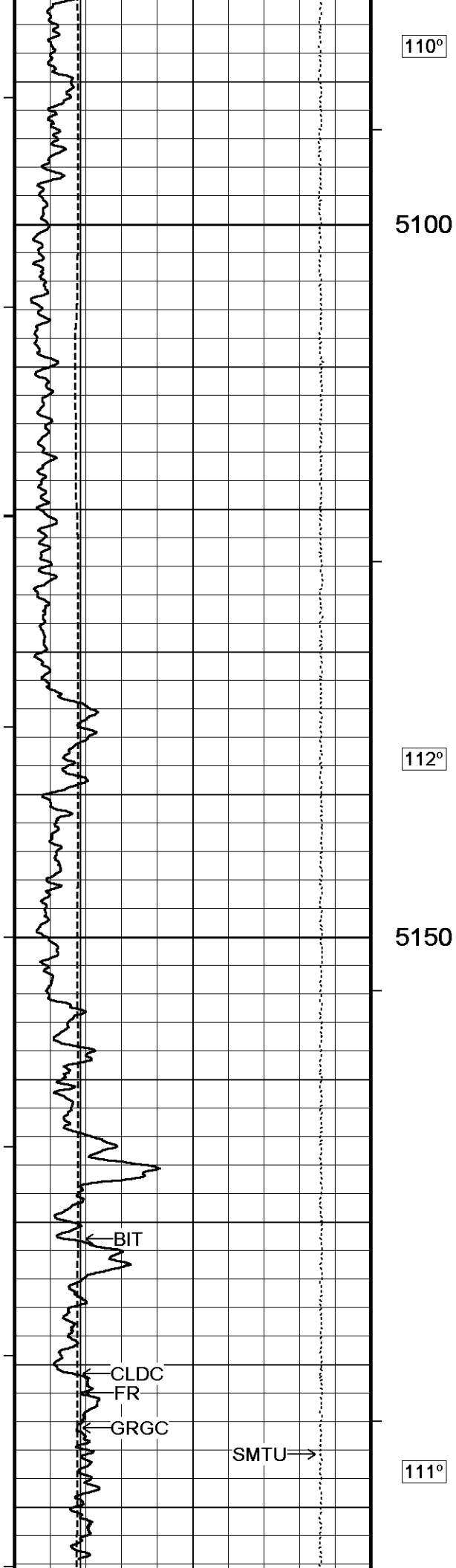


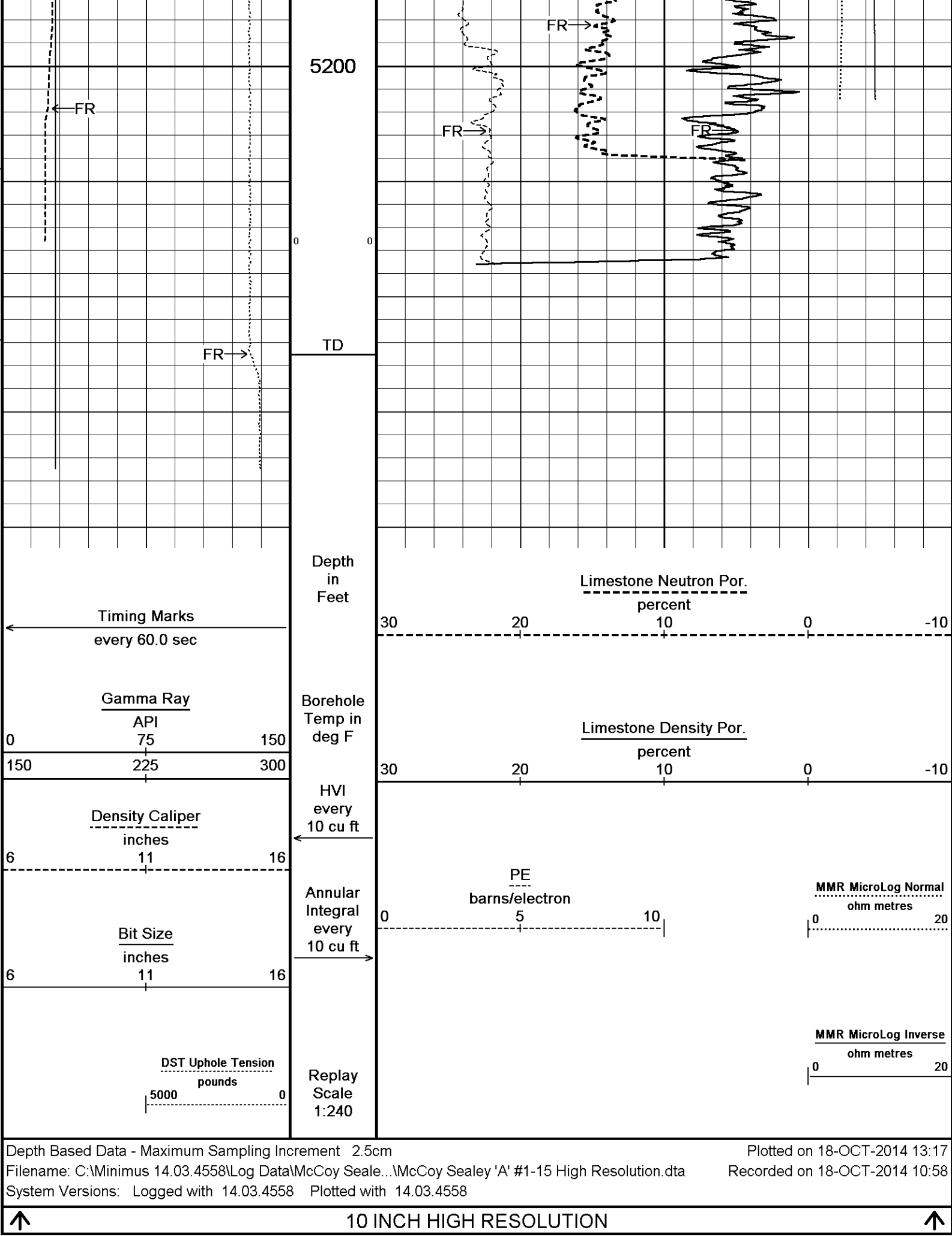
5000

109°

5050





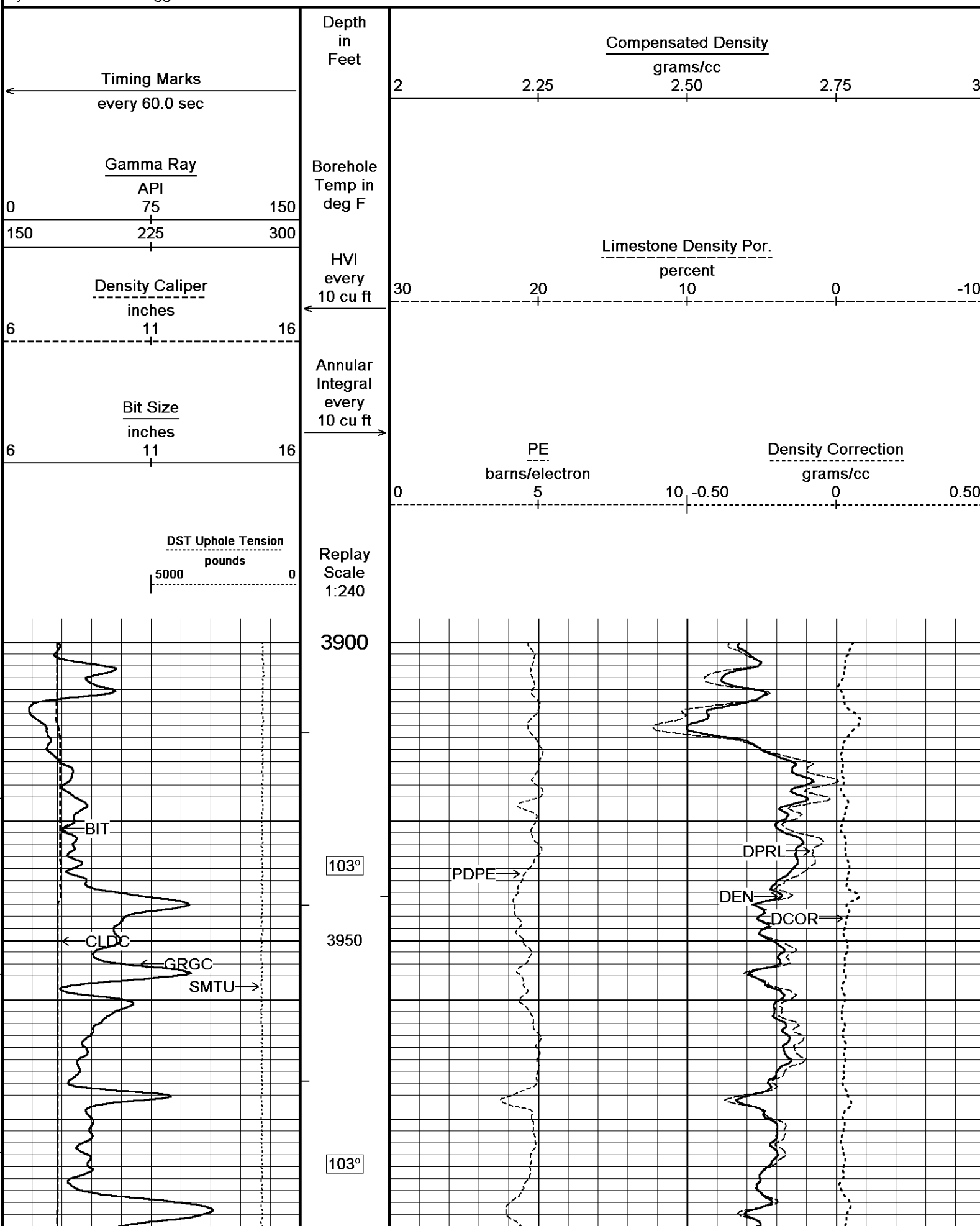


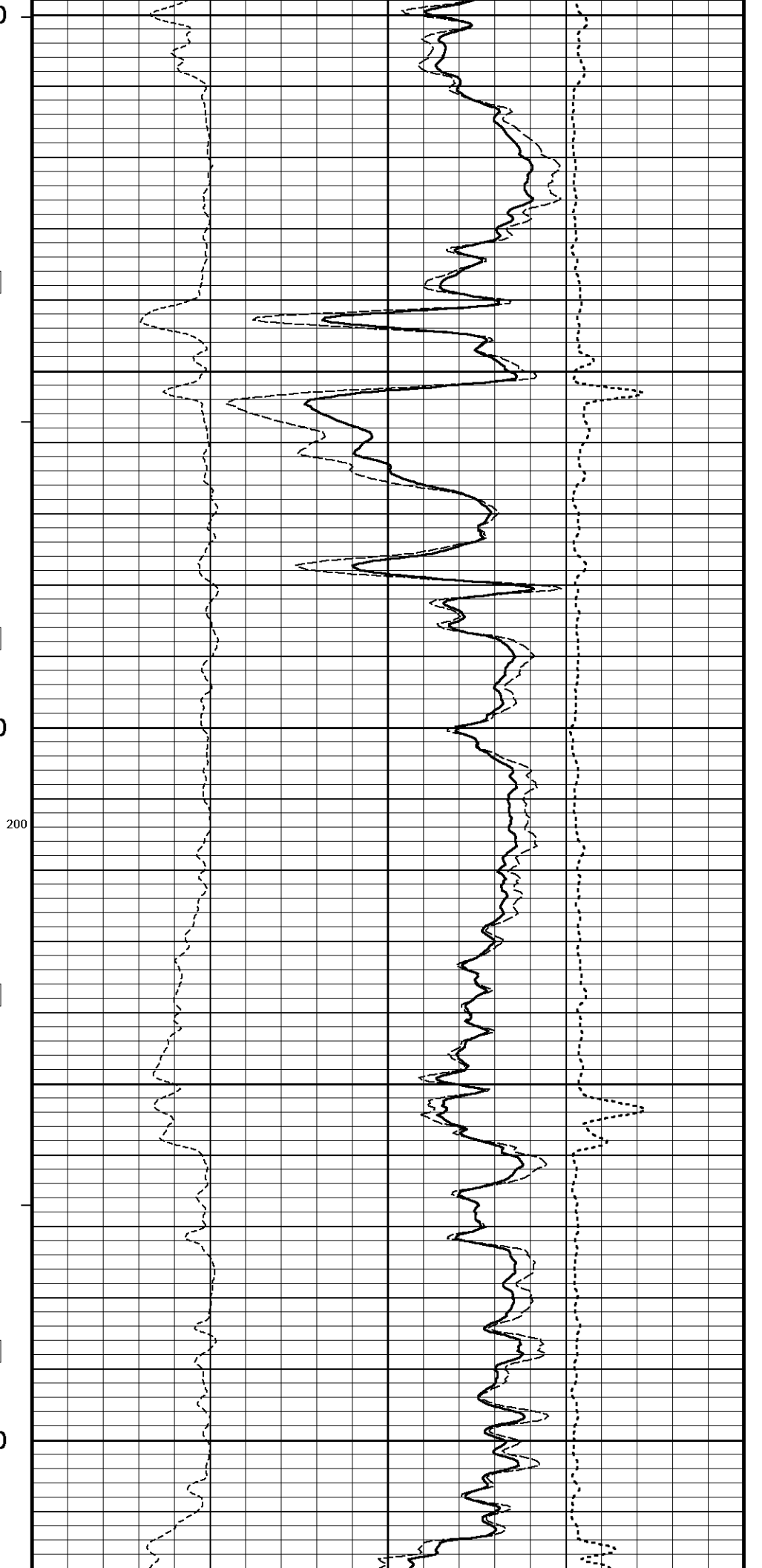
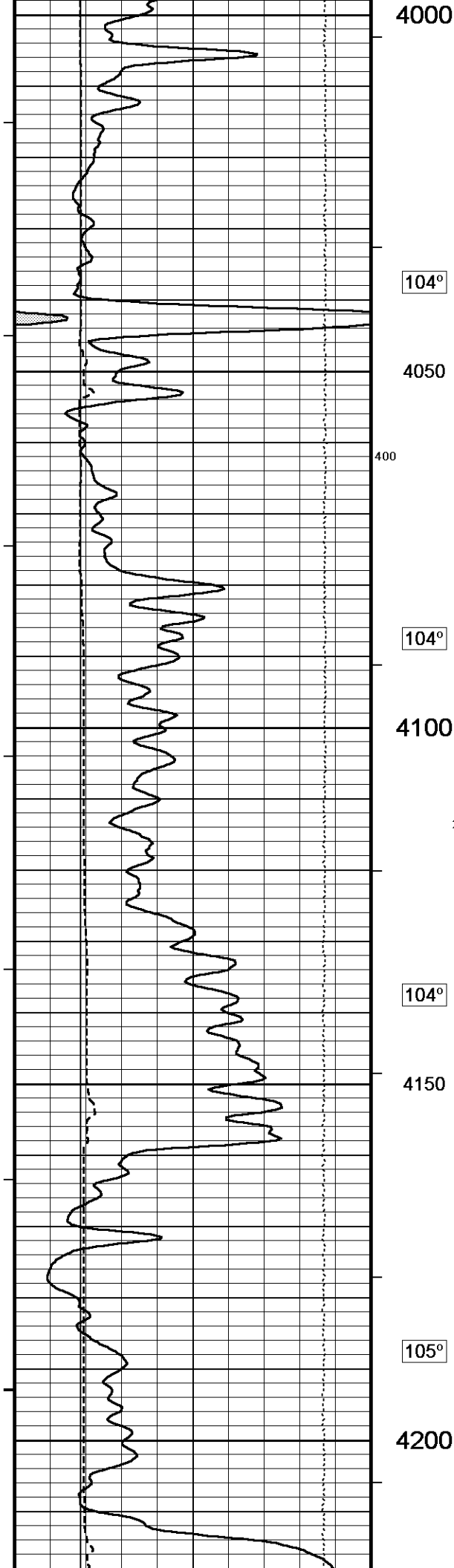
↓ 5 INCH BULK DENSITY MAIN ↓

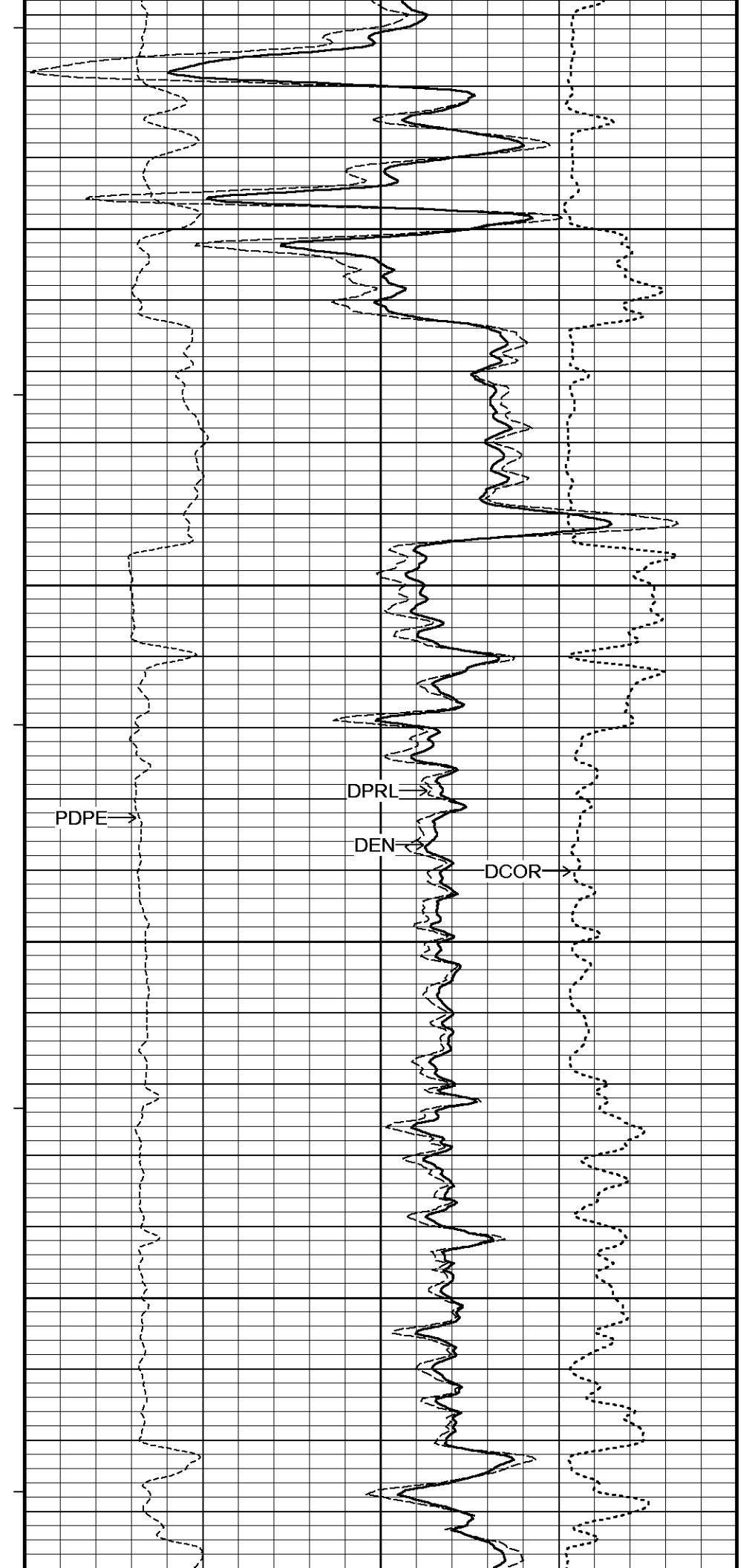
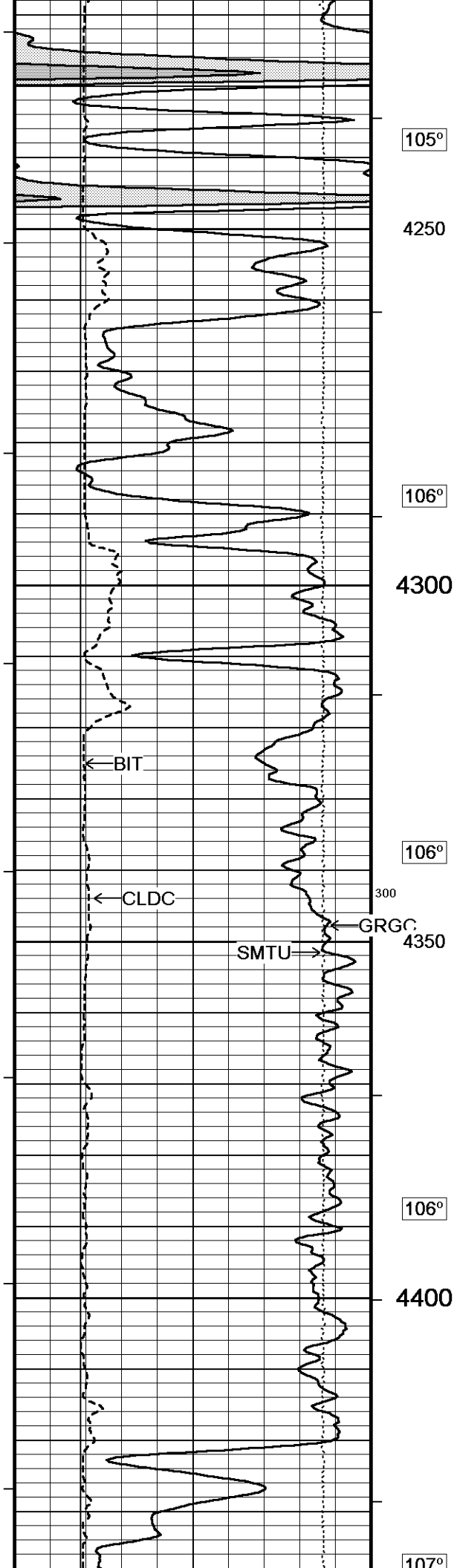
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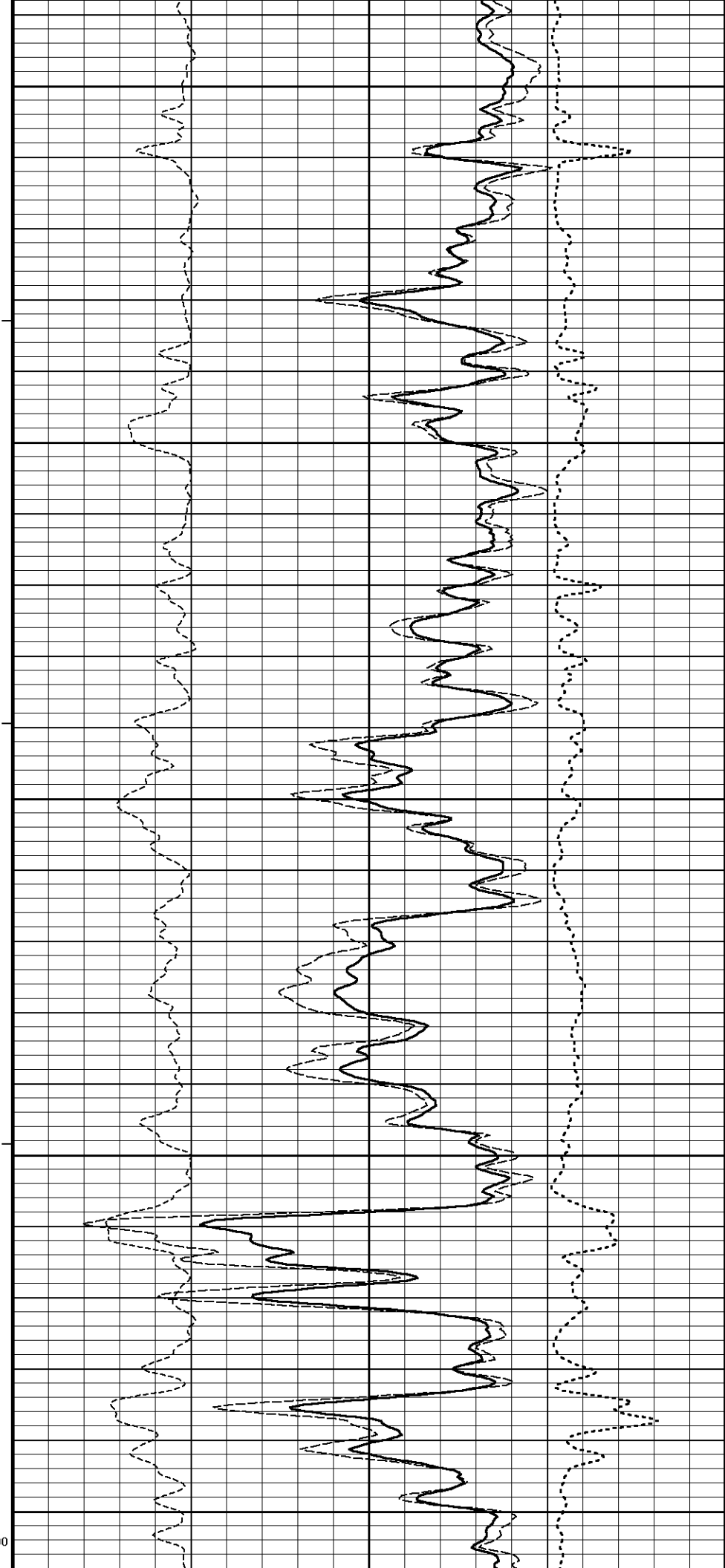
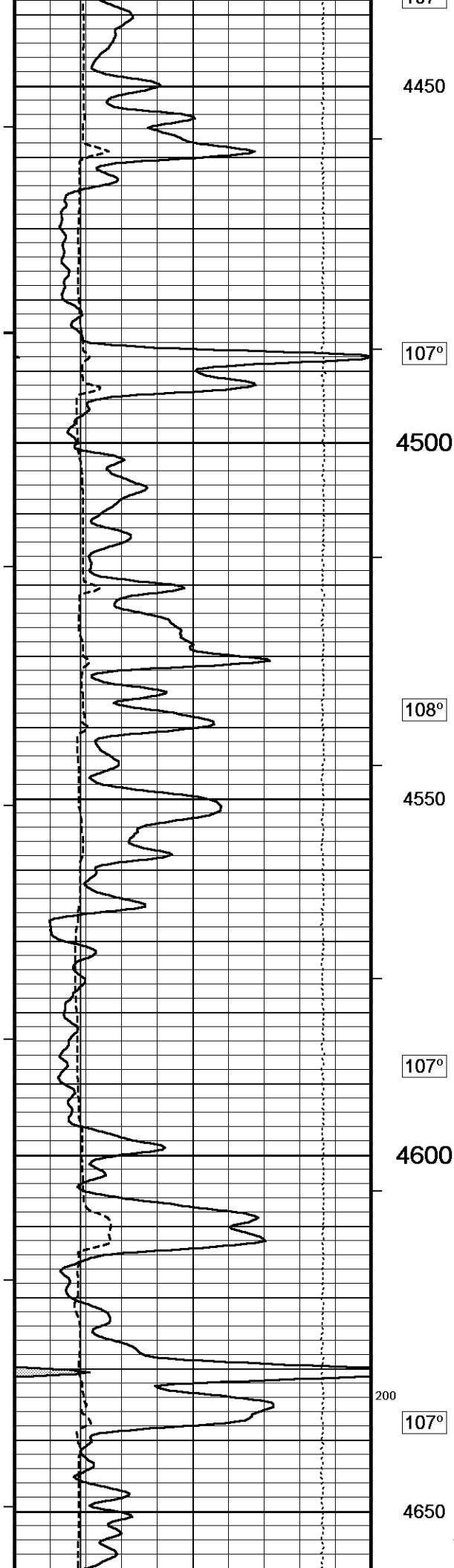
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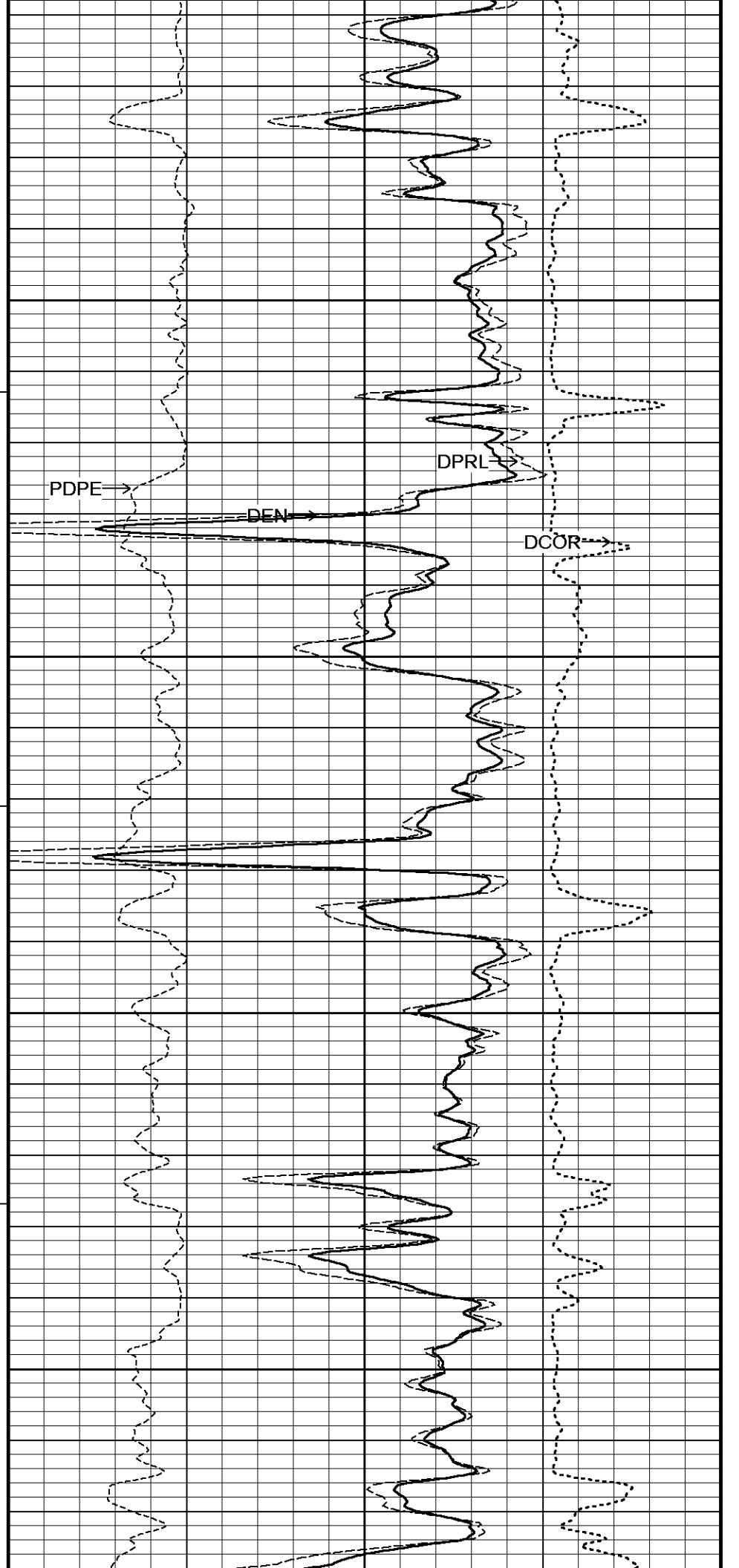
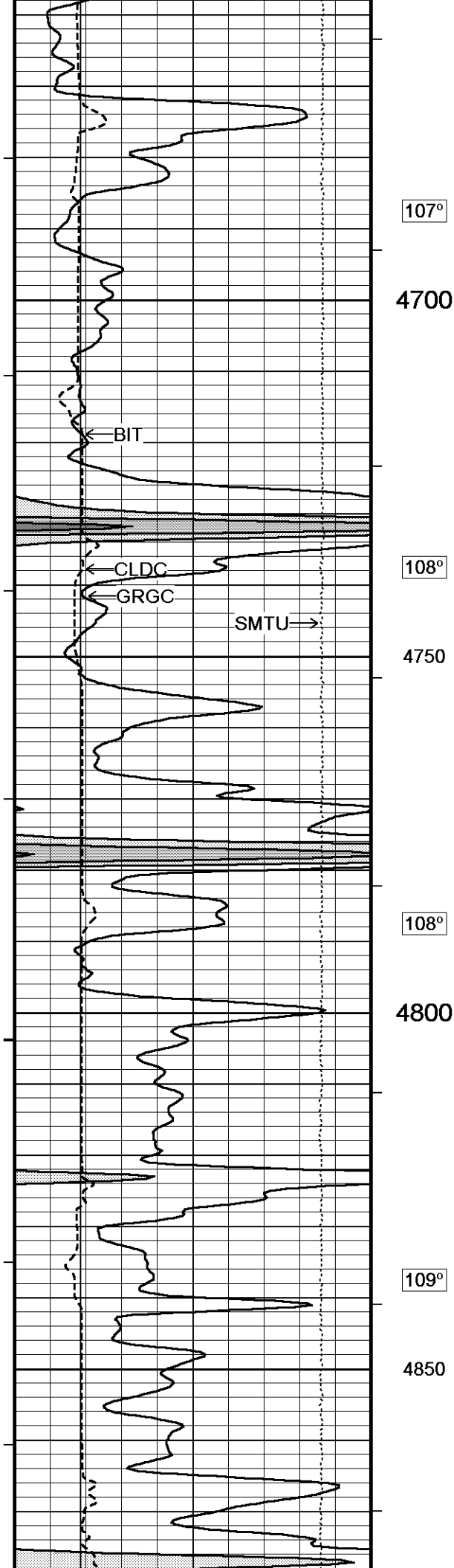
System Versions: Logged with 14.03.4558 Processed with 14.03.4558 Plotted with 14.03.4558

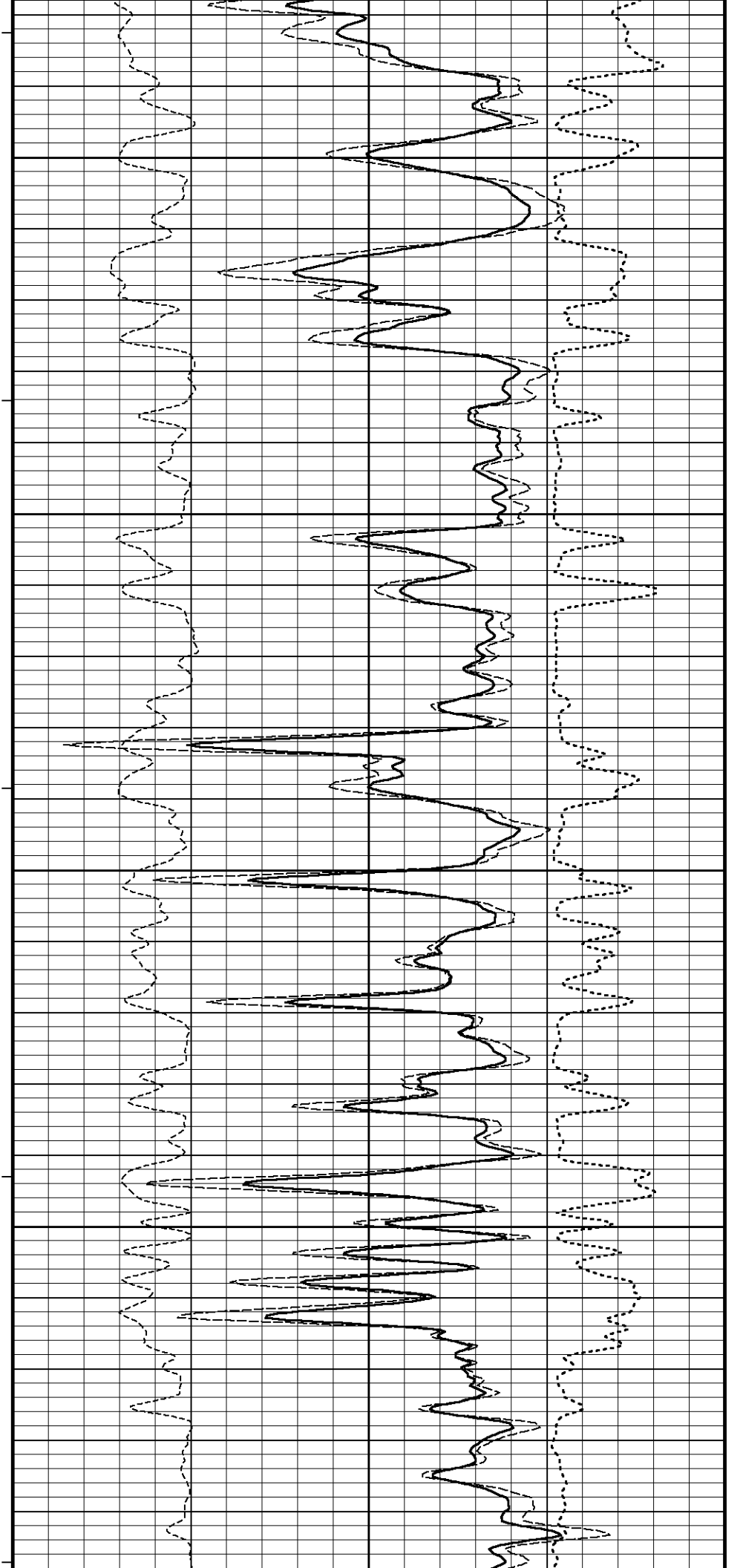
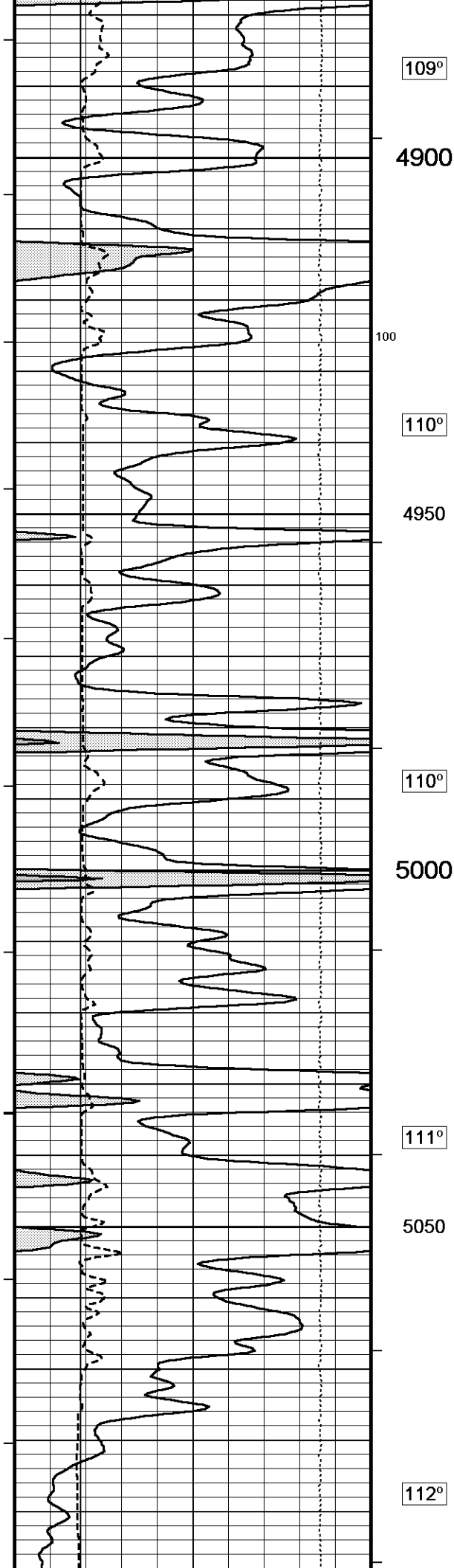


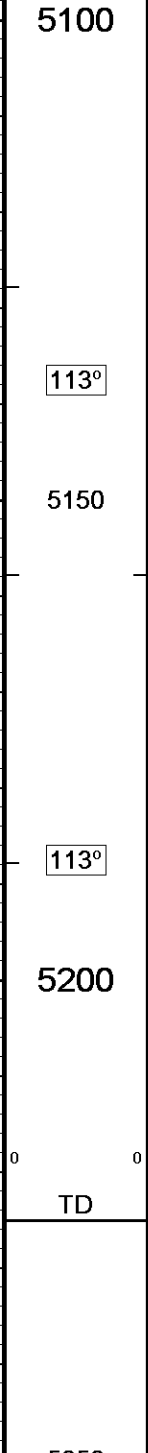
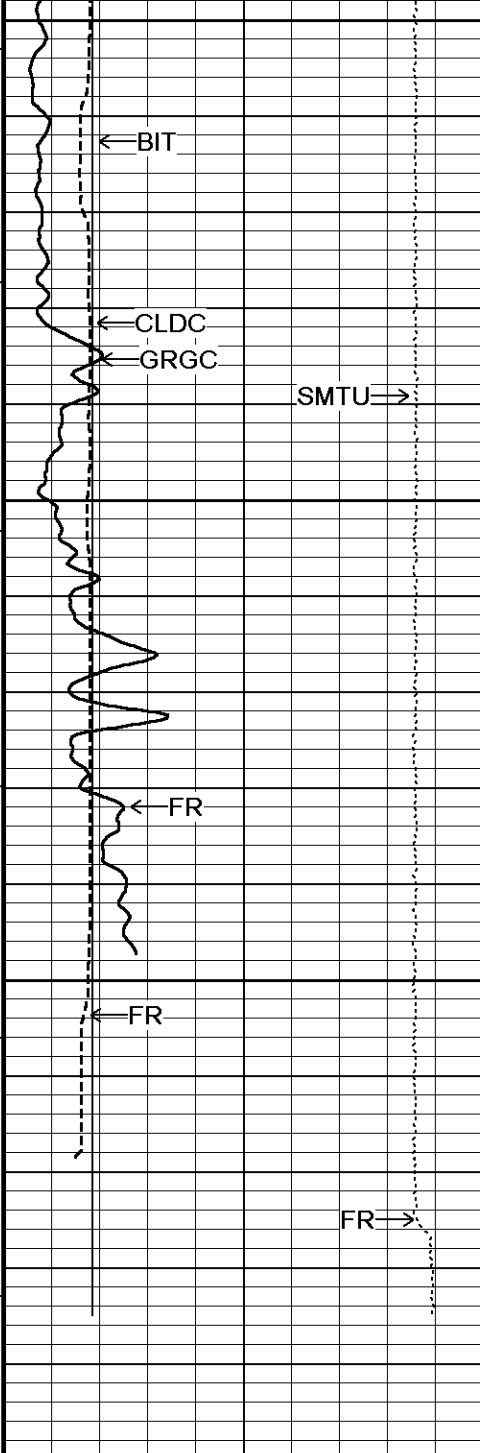




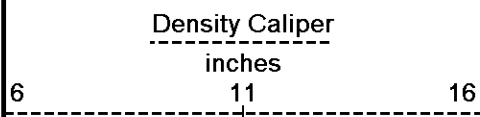
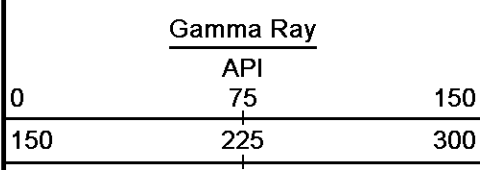








Timing Marks
every 60.0 sec

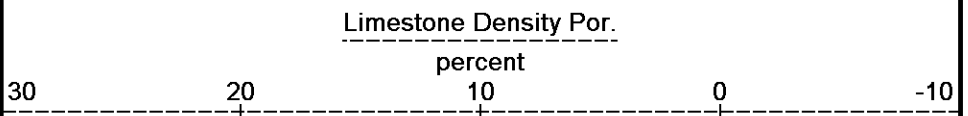
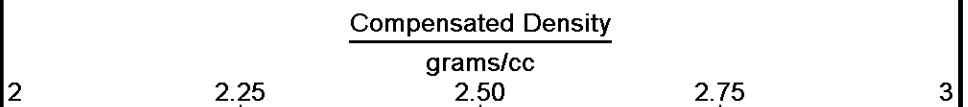
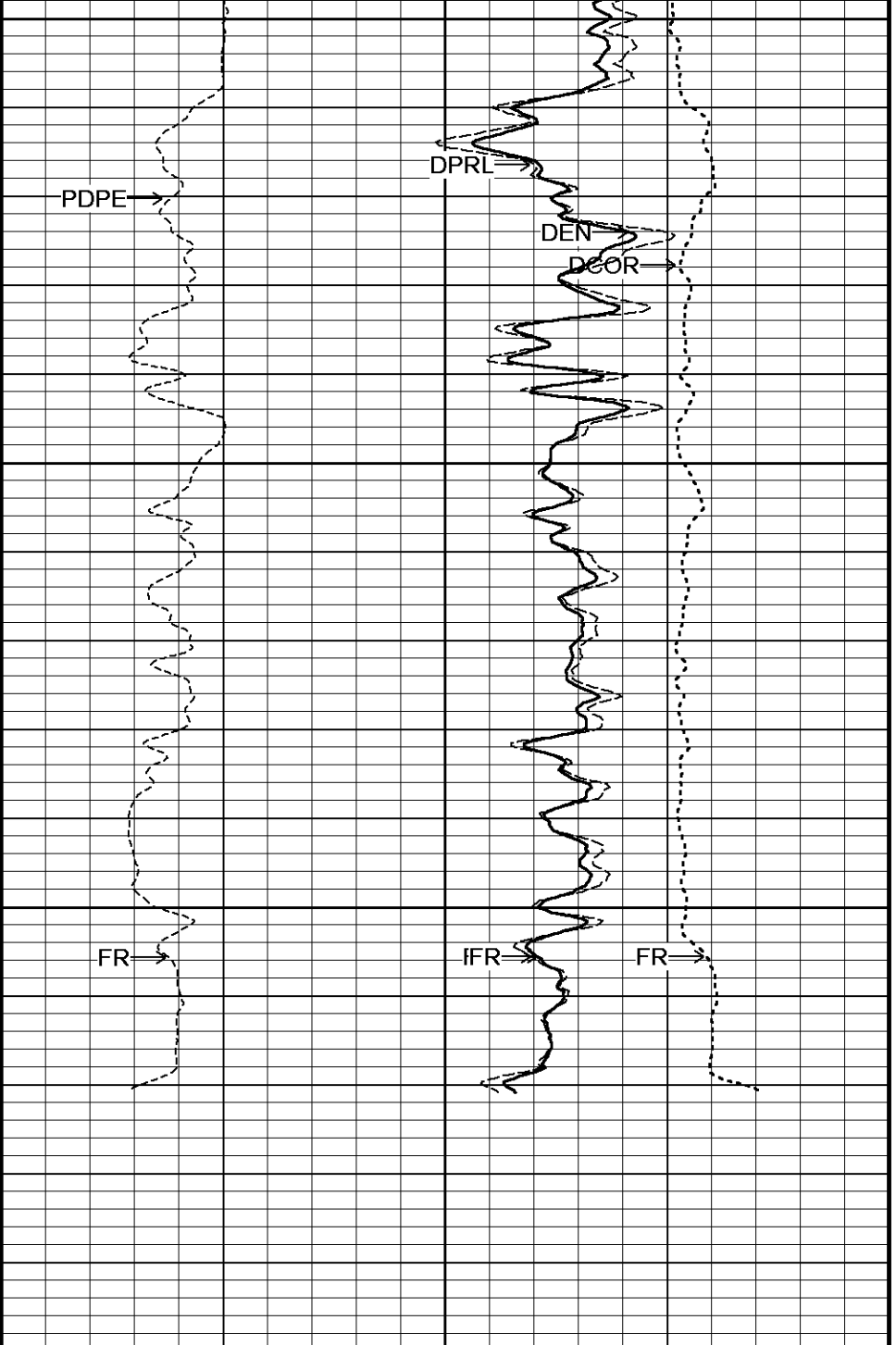


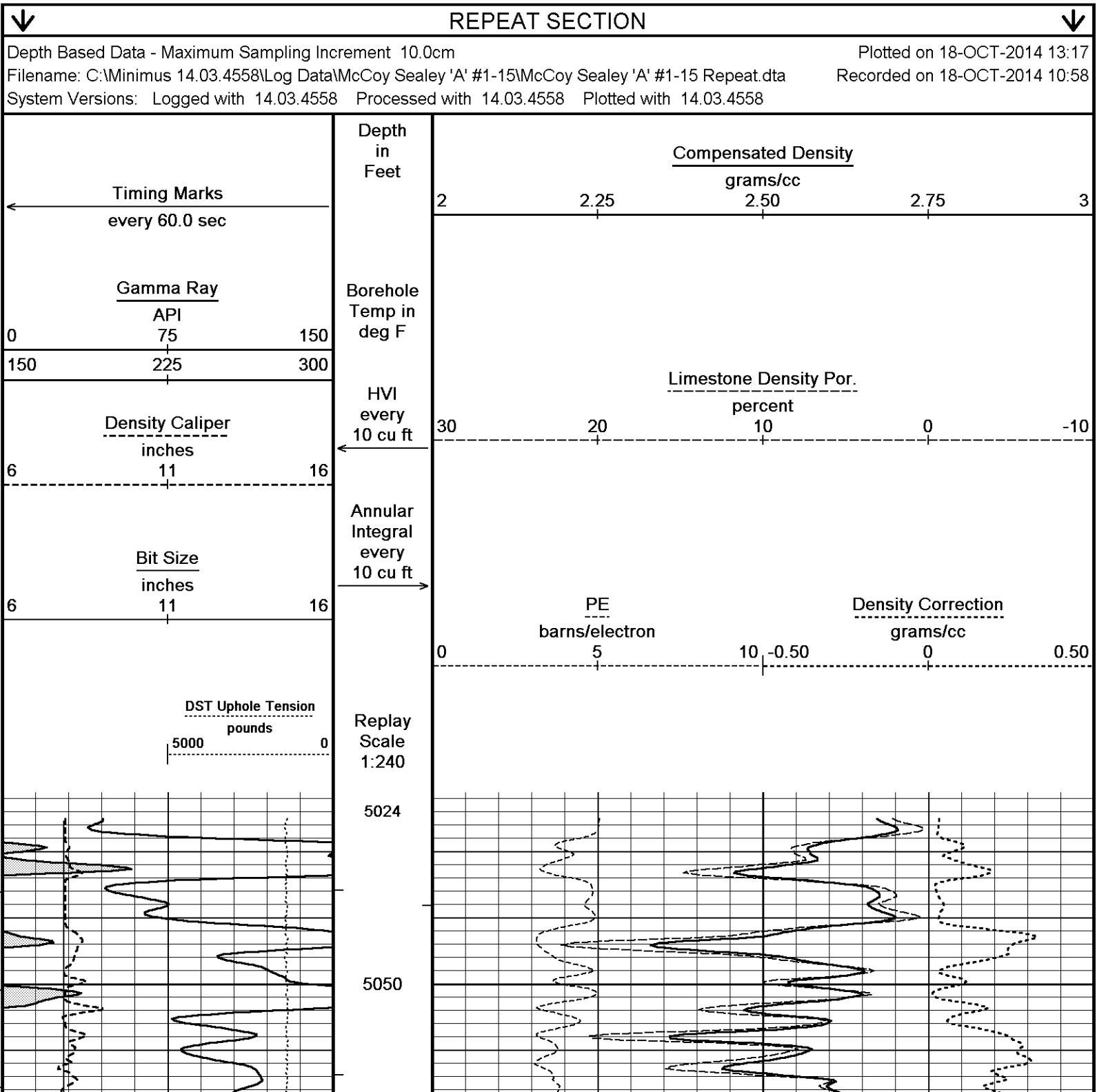
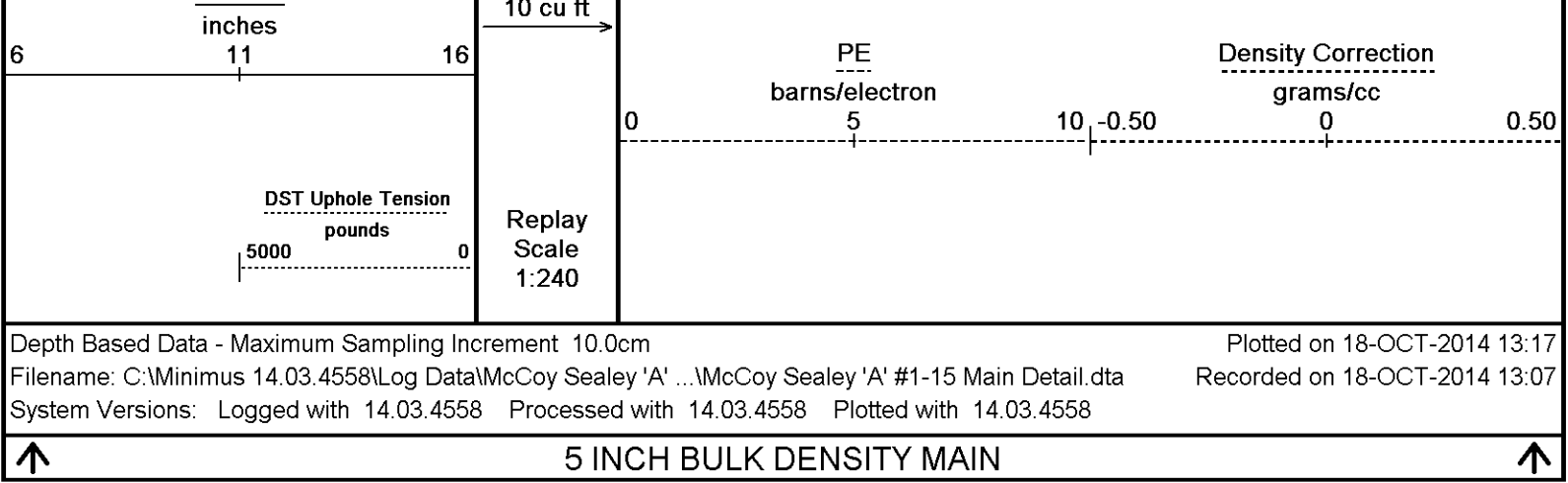
Bit Size

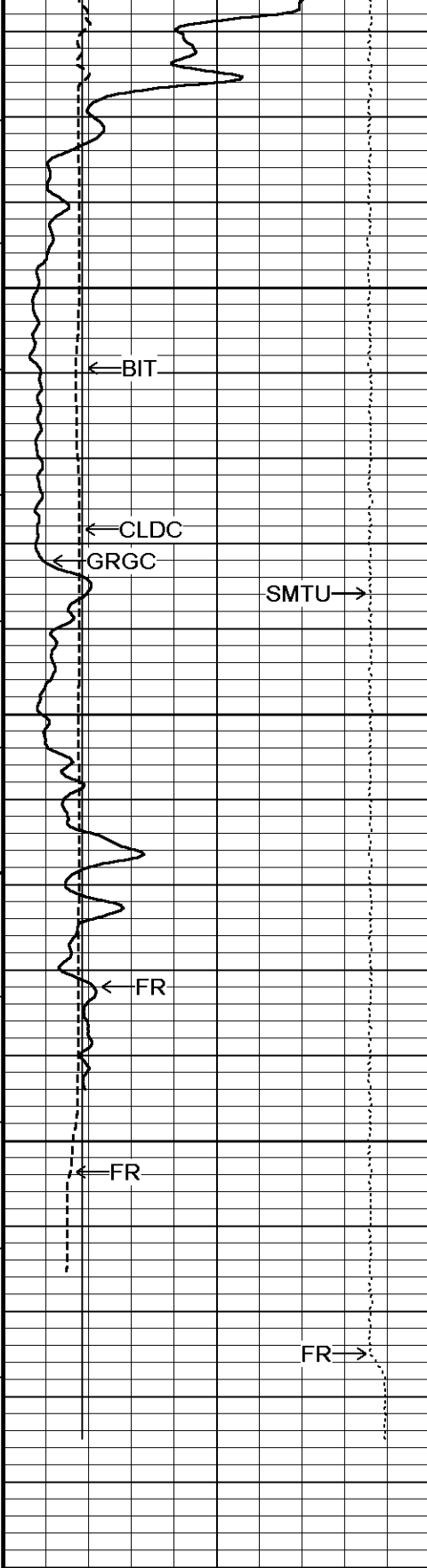
Borehole
Temp in
deg F

HVI
every
10 cu ft

Annular
Integral
every







110°

5100

112°

5150

111°

5200

0

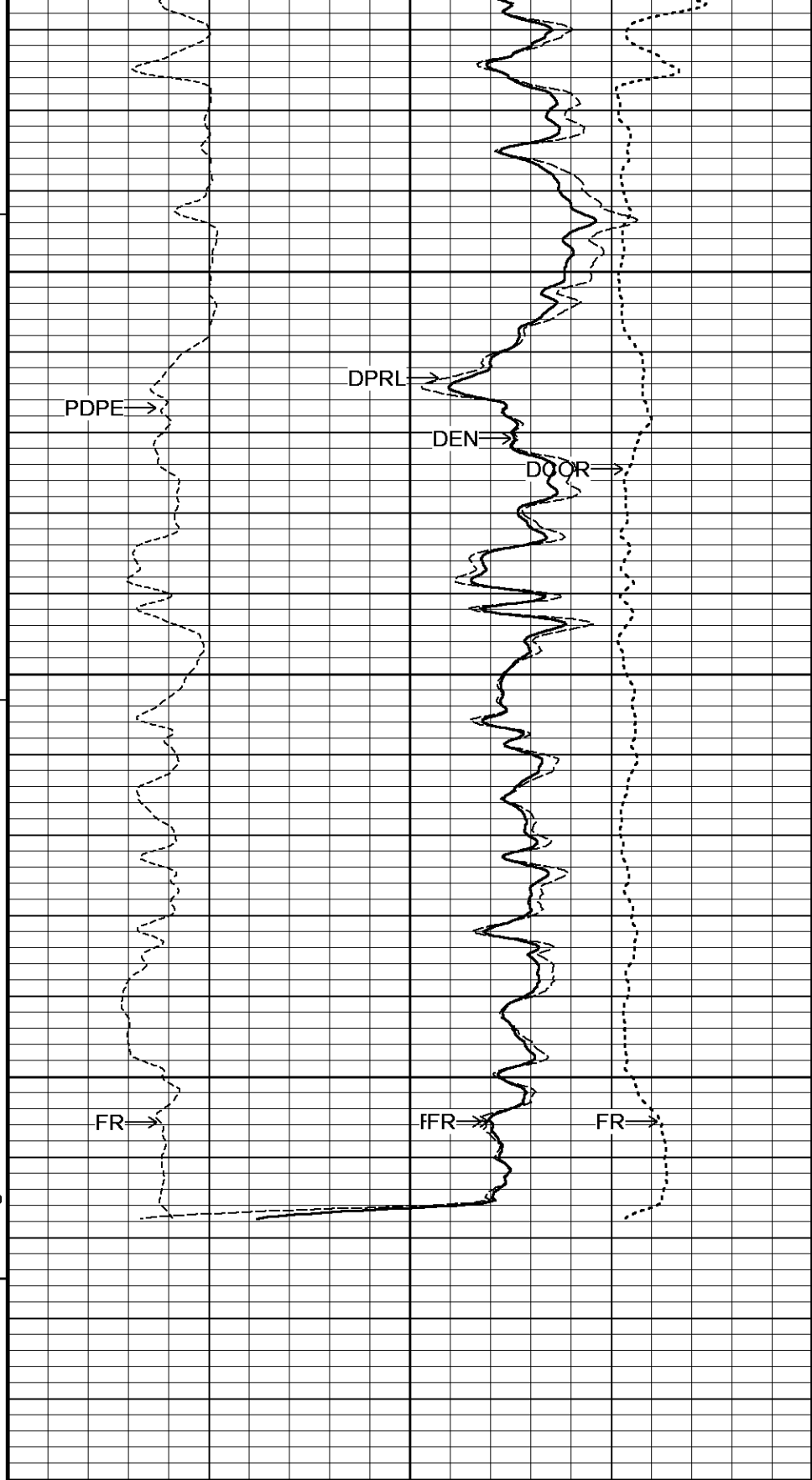
TD

5250
Depth
in
Feet

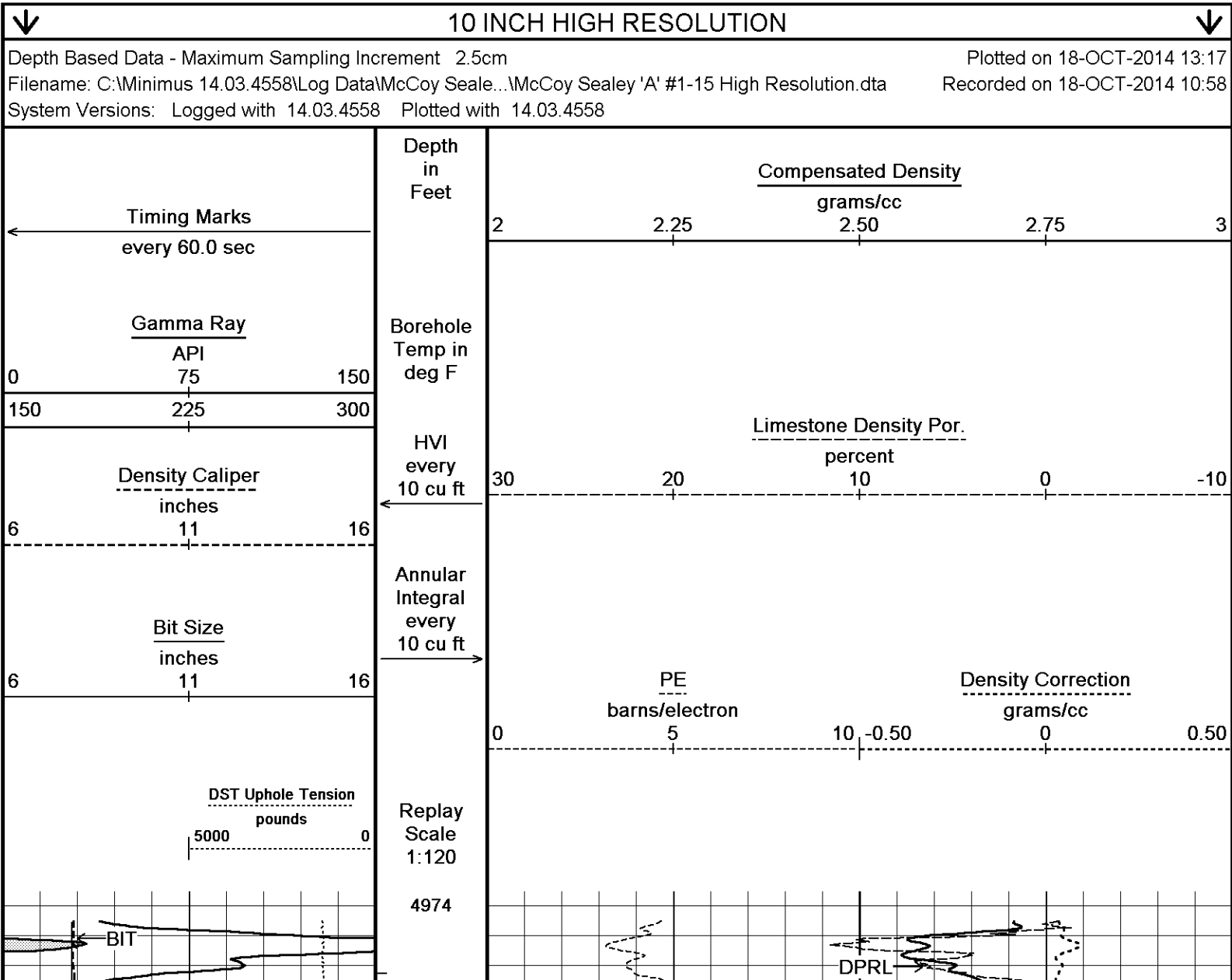
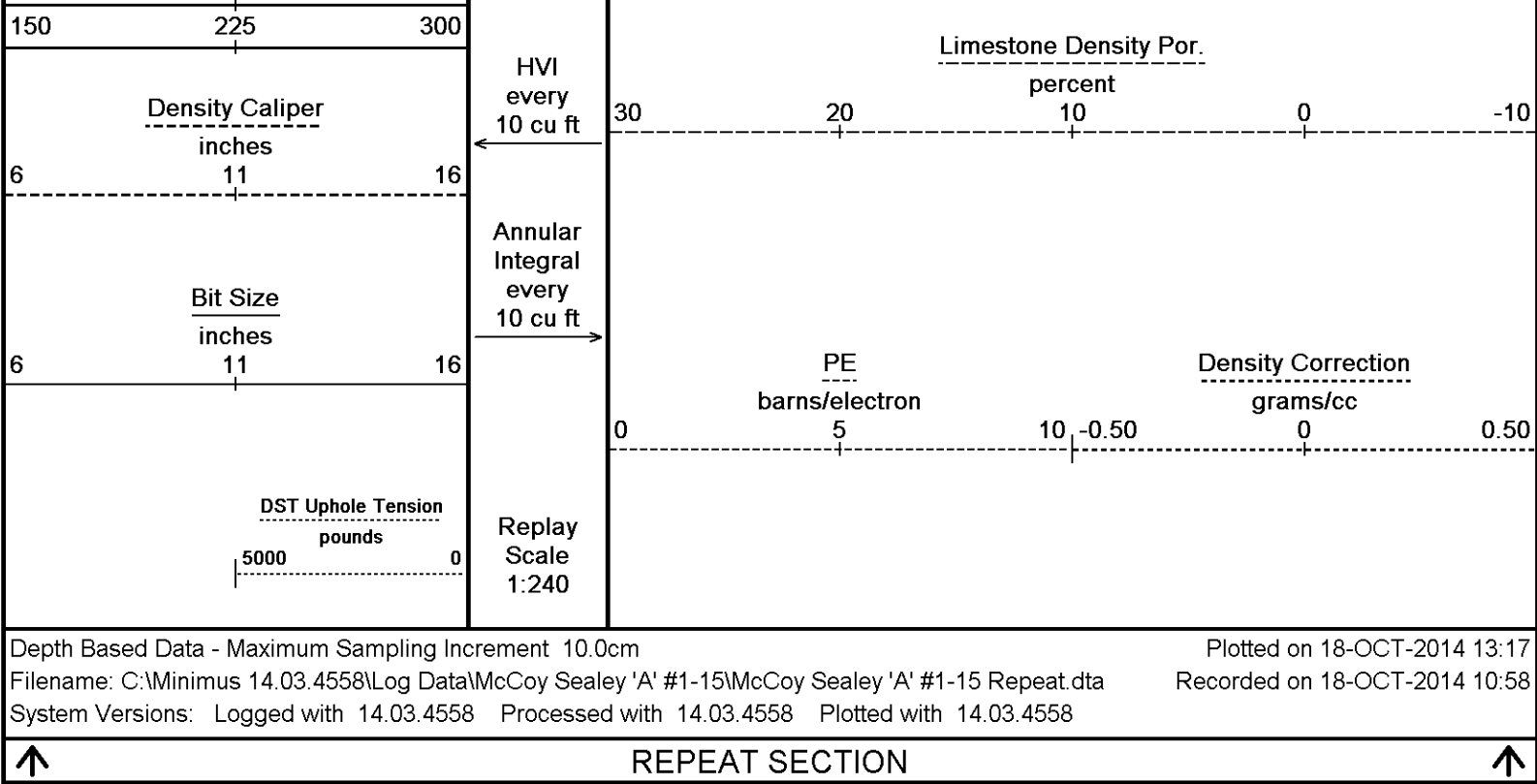
Timing Marks
every 60.0 sec

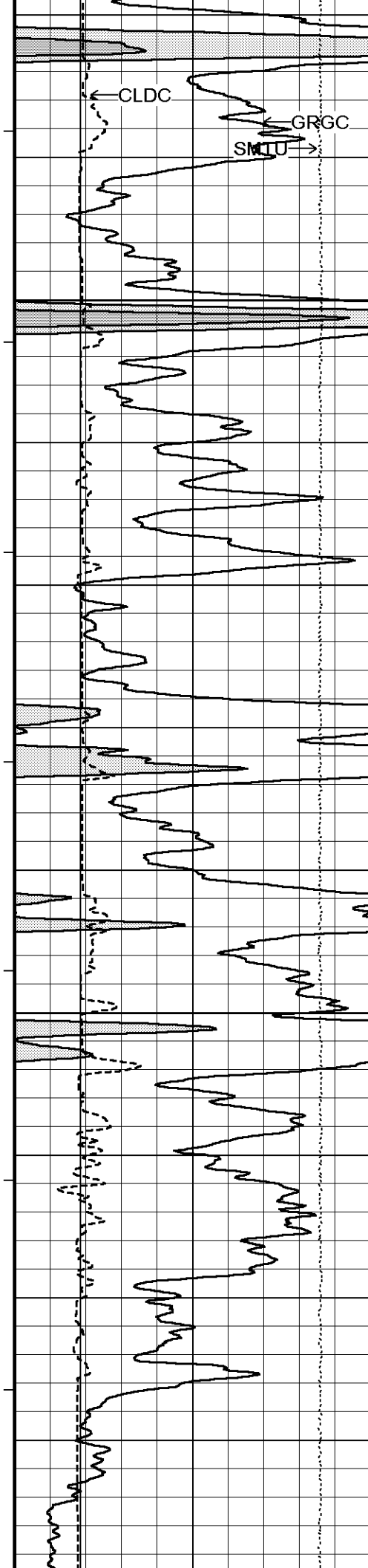
Gamma Ray
API
0 75 150

Borehole
Temp in
deg F



Compensated Density
grams/cc
2 2.25 2.50 2.75 3



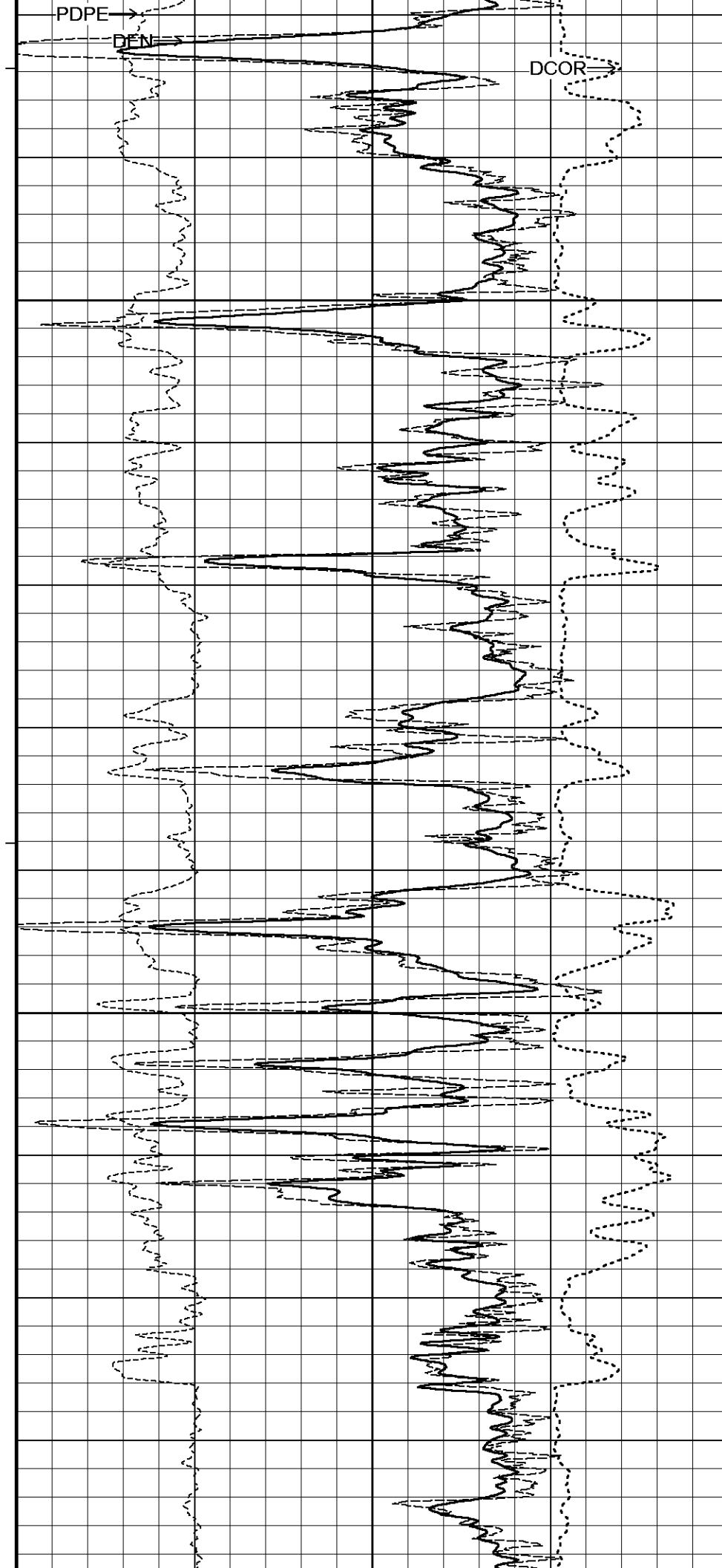


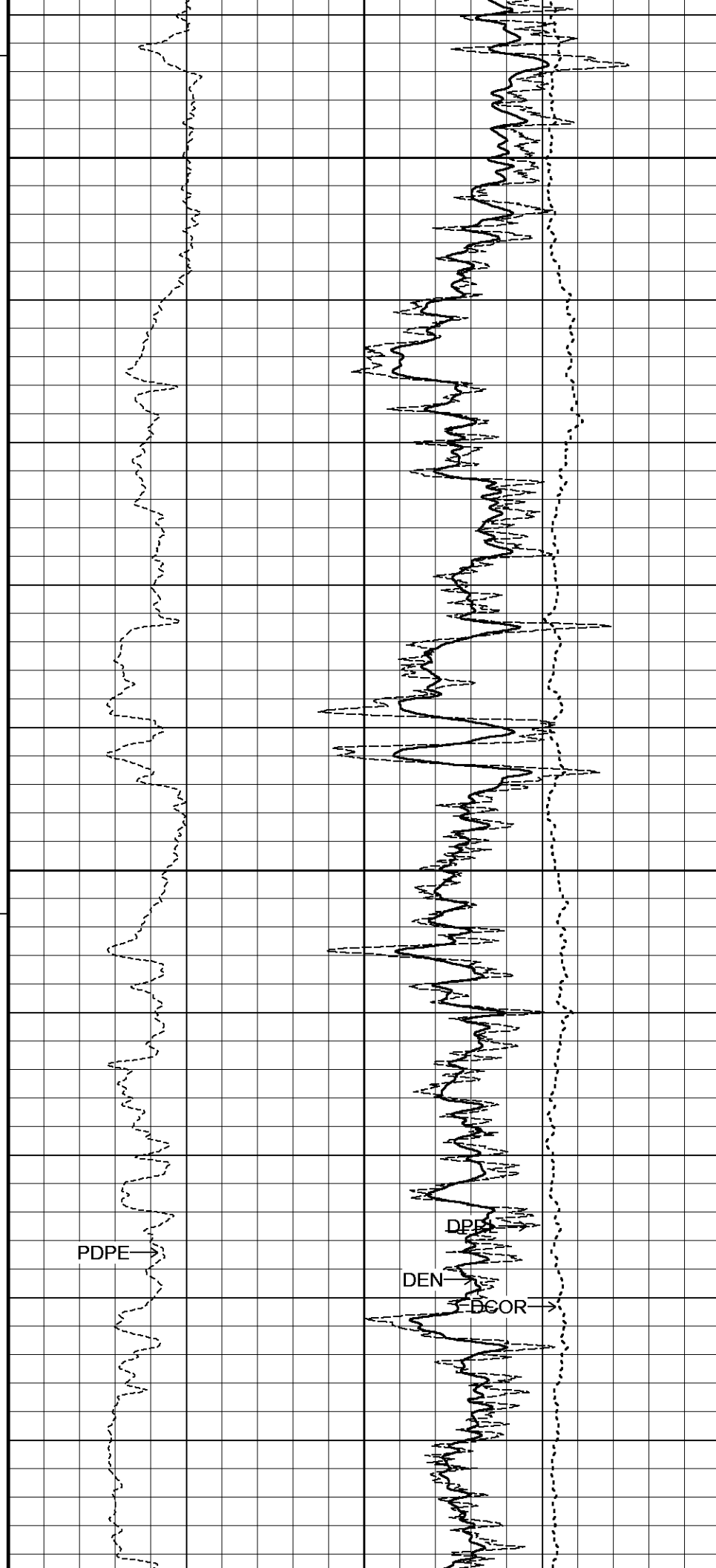
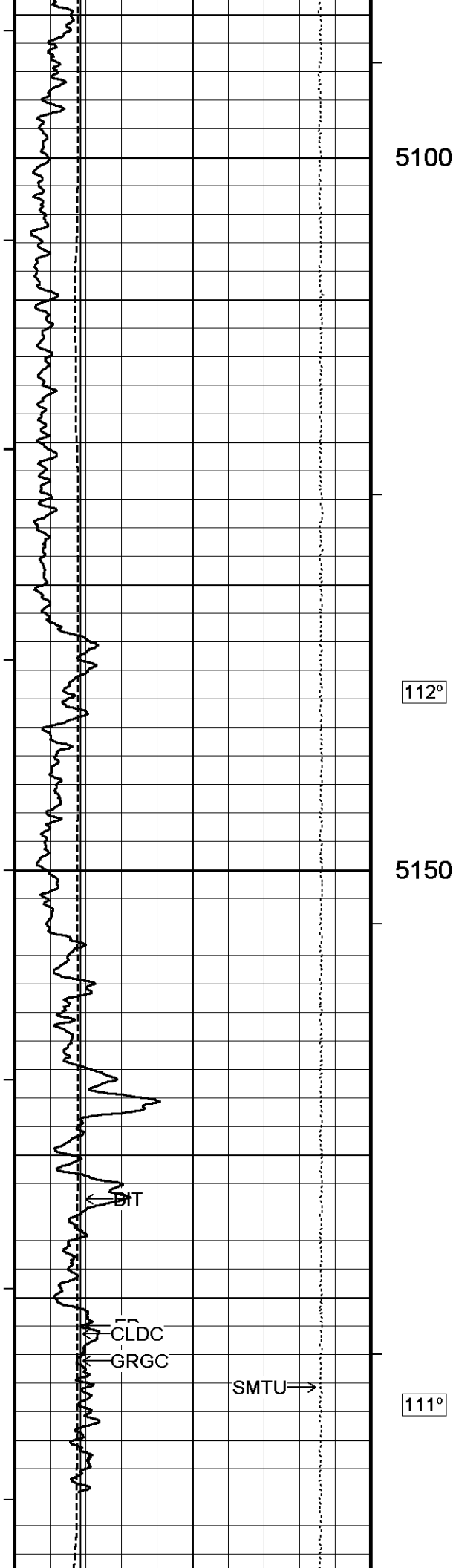
5000

109°

5050

110°





General Parameters

Mud Resistivity	0.310	ohm-metres
Mud Resistivity Temperature	75.000	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	5.500	inches
Caliper for Differential Caliper	None	

Rwa Parameters

Porosity used	Crossplot Porosity
Resistivity used	Array Ind. One Res Rt
RWA Constant A	0.610
RWA Constant M	2.150
SW/APOR Tool Source	0.000

Gamma Calibration MCG-B 39

Field Calibration on 16-OCT-2014 00:23

	Measured	Calibrated (API)
Background	68	45
Calibrator (Gross)	1152	770
Calibrator (Net)	1084	725

Gamma Calibration Tolerances MCG-B 39

Ratio	1.495		Counts/API
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Gamma Constants MCG-B 39

Last Edited on 18-OCT-2014,09:18

Gamma Calibrator Number	GRC038	
GRC-M Calibrator Jig in Use?	NO	
Inactive Background Jig in Use?	NO	
Mud Density	1.13	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl		kppm
K Mud Type	Chloride	
K Mud Concentration	0.00	%

High Resolution Temperature Calibration MCG-B 39

Field Calibration on 02-MAY-2014,08:37

	Measured	Calibrated(Deg F)
Lower	10.00	10.00
Upper	100.00	100.00

High Resolution Temperature Constants MCG-B 39

Last Edited on 28-AUG-2014,01:02

Pre-filter Length	11
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Caliper Calibration MPD-C.A 216

Base Calibration on 02-OCT-2014 09:56

Field Calibration on 16-OCT-2014 00:00

Base Calibration		
Reading No	Measured	Calibrator Size (in)
1	18336	3.99
2	28304	5.98
3	38368	7.97
4	48128	9.86
5	59280	11.92
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
7.94	7.97

Caliper Calibration Tolerances MPD-C.A 216

7.77	7.97	8.17
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Photo Density Calibration MPD-C.A 216

Base Calibration on 02-OCT-2014 10:33
Field Check on 16-OCT-2014 00:04

Density Calibration

Base Calibration

	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Background	1095	1299		
Reference 1	60263	31183	59556	30836
Reference 2	25122	2740	24941	2541

Field Check at Base

1094.8 1298.9

Field Check

1100.6 1293.2

PE Calibration

Base Calibration

	Measured			Calibrated
	WS	WH	Ratio	Ratio
Background	197	971		
Reference 1	24950	60067	0.419	0.371
Reference 2	7154	24989	0.290	0.272

Field Check at Base

197.4 971.2

Field Check

200.4 980.2

Photo Density Calibration Tolerances MPD-C.A 216

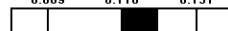
Near Density Ratio

2.46



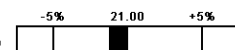
PE Calibration

0.120



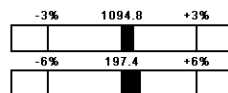
Far Density Ratio

20.73



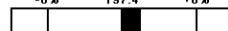
Near Den. Field Check

1100.6



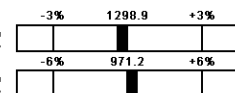
PE WS Field Check

200.4



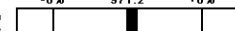
Far Den. Field Check

1293.2



PE WH Field Check

980.2



Density Constants MPD-C.A 216

Last Edited on 18-OCT-2014,09:18

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	1.13	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 (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	
0.00	0.00	

DOWNHOLE EQUIPMENT

C:\Minimus 14.03.4558\Log Data\McCoy Sealey 'A' #1-15\McCoy Sealey 'A' #1-15 Main.dta

3/8" Triple Cone Cable Head (MCB-C.A.)
MCB-C.A 234 LG: 1.58 ft WT: 15.4 lb OD: 2.240 in

Compact Comms Gamma
MCG-B 39 LG: 8.70 ft WT: 63.9 lb OD: 2.244 in

Compact Micro-log
MML-A 3 LG: 7.97 ft WT: 81.6 lb OD: 2.240 in

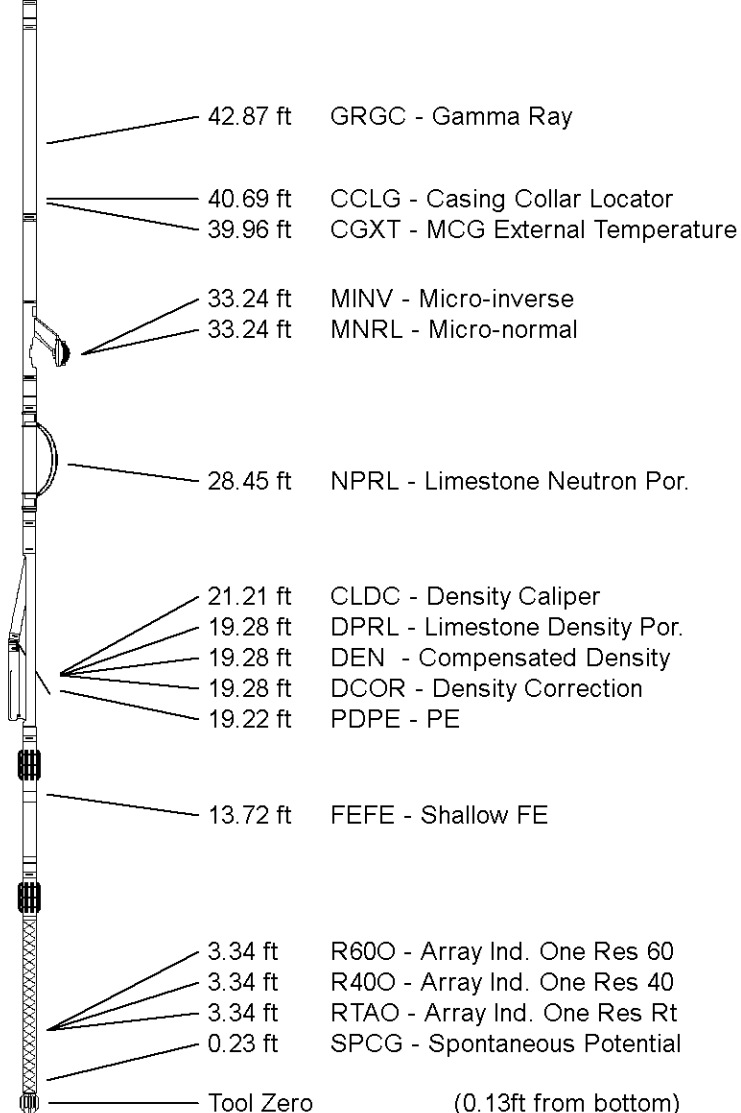
Compact Neutron
MDN-A.B 66 LG: 5.04 ft WT: 50.7 lb OD: 2.244 in

Compact Density/Caliper
MPD-C.A 216 LG: 9.59 ft WT: 90.4 lb OD: 2.449 in

Compact Focussed Electric
MFE-B.J 353 LG: 6.05 ft WT: 48.5 lb OD: 2.244 in

Compact Induction
MAI-A.A 111 LG: 10.81 ft WT: 48.5 lb OD: 2.244 in

Total Length: 49.73 ft Weight: 399.0 lb



COMPANY	MCCOY PETROLEUM CORPORATION
WELL	SEALEY "A" #1-15
FIELD	ALFORD
PROVINCE/COUNTY	SCOTT
COUNTRY/STATE	U.S.A. / KANSAS

Elevation Kelly Bushing	2273.00	feet	First Reading	5205.78	feet
Elevation Drill Floor	2271.00	feet	Depth Driller	5225.00	feet
Elevation Ground Level	2264.00	feet	Depth Logger	5225.00	feet



Weatherford®

COMPACT PHOTO DENSITY
COMPENSATED NEUTRON
MICRORESISTIVITY LOG