



PHOTO DENSITY
DUAL SPACED NEUTRON

COMPANY **PARAMOUNT RESOURCES LTD.**
WELL **PARA ET AL CAMERON L-29**
FIELD **CAMERON HILLS**
PROVINCE/COUNTY **NORTHWEST TERRITORIES**
COUNTRY/STATE **CANADA**
LOCATION **300L296010117300** **FIELD PRINT**

LSD SEC TWP RGE Other Services
API Number **2041** **ARRAY INDUCTION**
Permit Number **2041** **COMPENSTATED SONIC**
MICROLOG

Permanent Datum GROUND LEVEL, Elevation 754.1 metres
Log Measured From 5.4 M above Permanent Datum
Drilling Measured From KB

Elevations:
KB 759.50
DF 754.10
GL

Date	05-FEB-2006	
Run Number	1	
Depth Driller	1515.50	metres
Depth Logger	1516.70	metres
First Reading	1508.40	metre
Last Reading	0.00	metre
Casing Driller	435.50	metres
Casing Logger	436.00	metres
Bit Size	200.00	mm
Hole Fluid Type	GEL CHEM	
Density / Viscosity	1135.0 kg/M3	80.00 CP
PH / Fluid Loss	10.50	10.00 ml/30Min
Sample Source	FLOWLINE	
Rm @ Measured Temp	0.92 @ 25.0	ohm-m
Rmf @ Measured Temp	0.69 @ 25.0	ohm-m
Rmc @ Measured Temp	1.12 @ 25.0	ohm-m
Source Rmf / Rmc	PRESS	FILTER
Rm @ BHT	0.60 @ 49.0	ohm-m
Time Since Circulation	7.0 HRS	
Max Recorded Temp	49.00	deg C
Equipment Name	COMPACT	
Equipment / Base	QUINT	GPR
Recorded By	M. BONNELL	
Witnessed By	B. POWELL	
CIRC. STOP TIME	FEB-05 21:00	Last Line

BOREHOLE RECORD

Last Edited: 5-FEB-2007 23:19

Bit Size millimetres	Depth From metres	Depth To metres
311.000	0.00	435.50
200.000	435.50	1515.50

CASING RECORD

Type	Size millimetres	Depth From metres	Shoe Depth metres	Weight Kg/metre
SURFACE	219.100	0.00	435.50	35.72

REMARKS

- 1) SOFTWARE ISSUE: WLS 7.01.0195.
- 2) CUSTOMER SCALES AND LOGGED INTERVALS USED
- 3) TOOLS RUN: MAI, MSS, MPD, MDN, MML, ISC, MGS, MTC, MFE, MCG RUN IN COMBINATION
- 4) HARDWARE: MAI: TWO 25.4 MM STANDOFFS
MSS: THREE 25.4 MM STANDOFFS
MDN: DUAL BOWSPRING AND INTERSONDE CRANK
MTC: SIX LEAF CENTRALIZER

5) SERVICE ORDER #: 30073223

SAP #: 4146696

FIELD PRINTS = 1

6) RIG: PD 220

7) SONIC FREE PIPE: FOUND FROM 382-386M

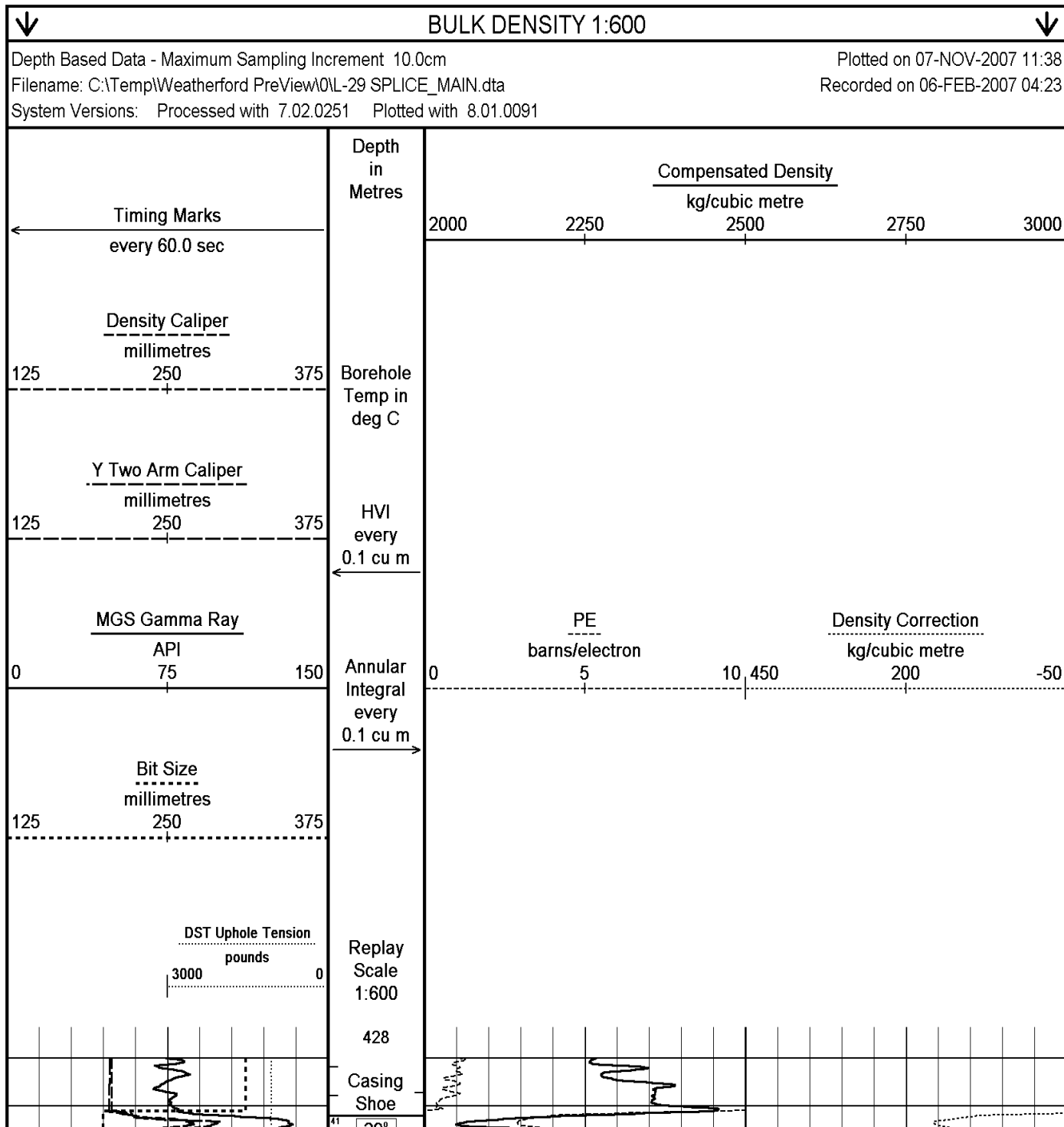
8) HOLE AND CEMENT VOLUMES FROM TD-SURFACE CASING CALCULATED USING DENSITY AND 2-ARM CALIPERS :

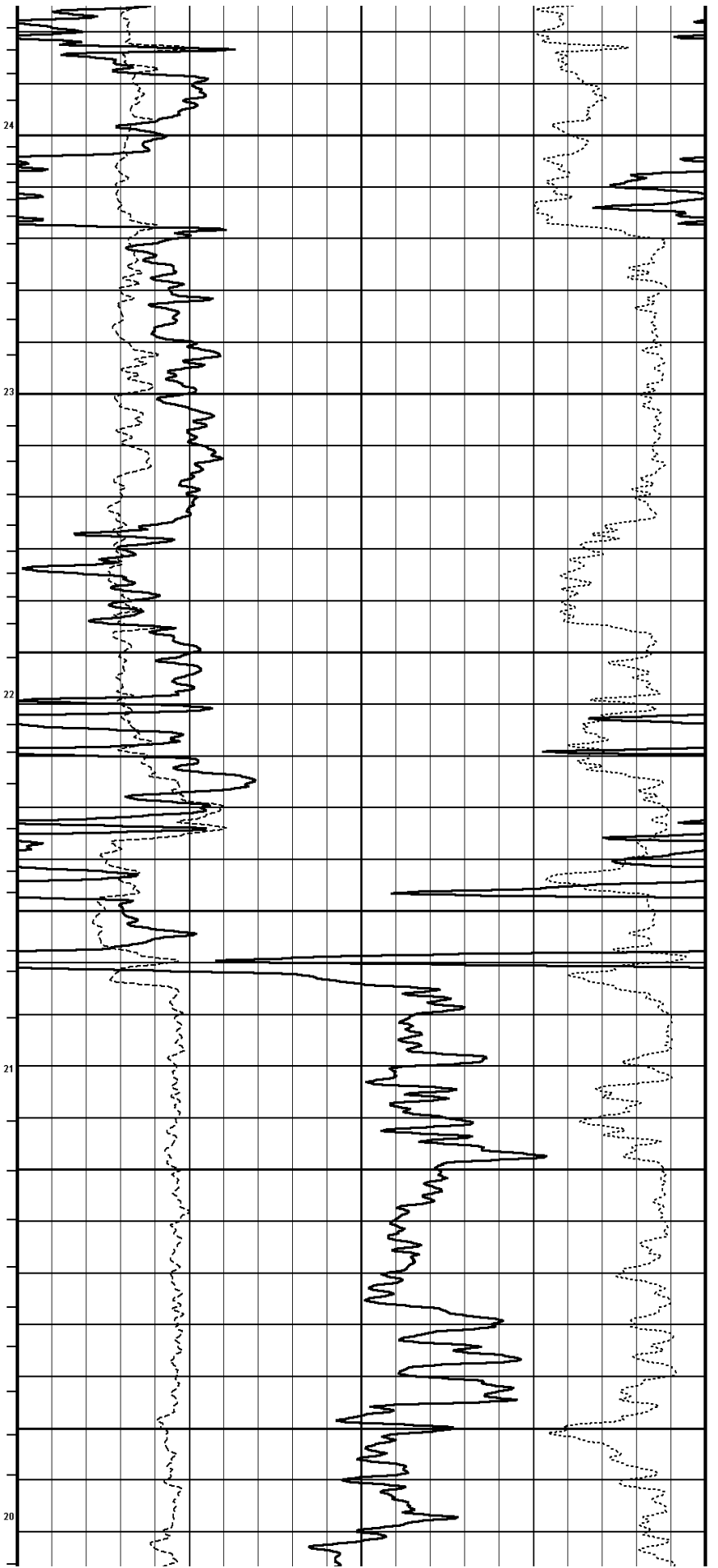
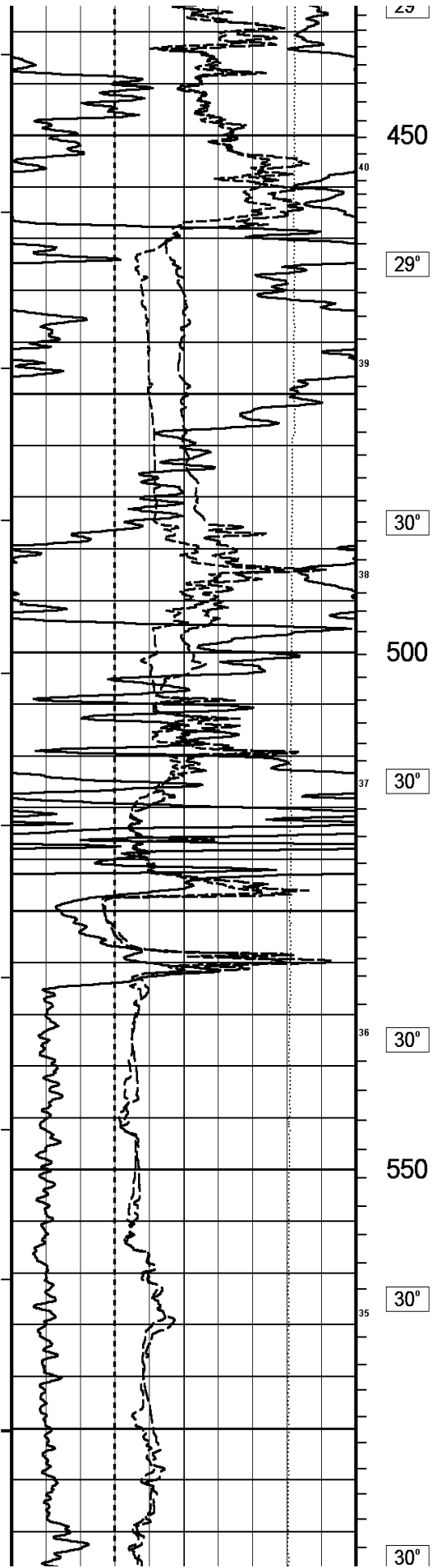
HOLE VOLUME = 41.0 CU.M.

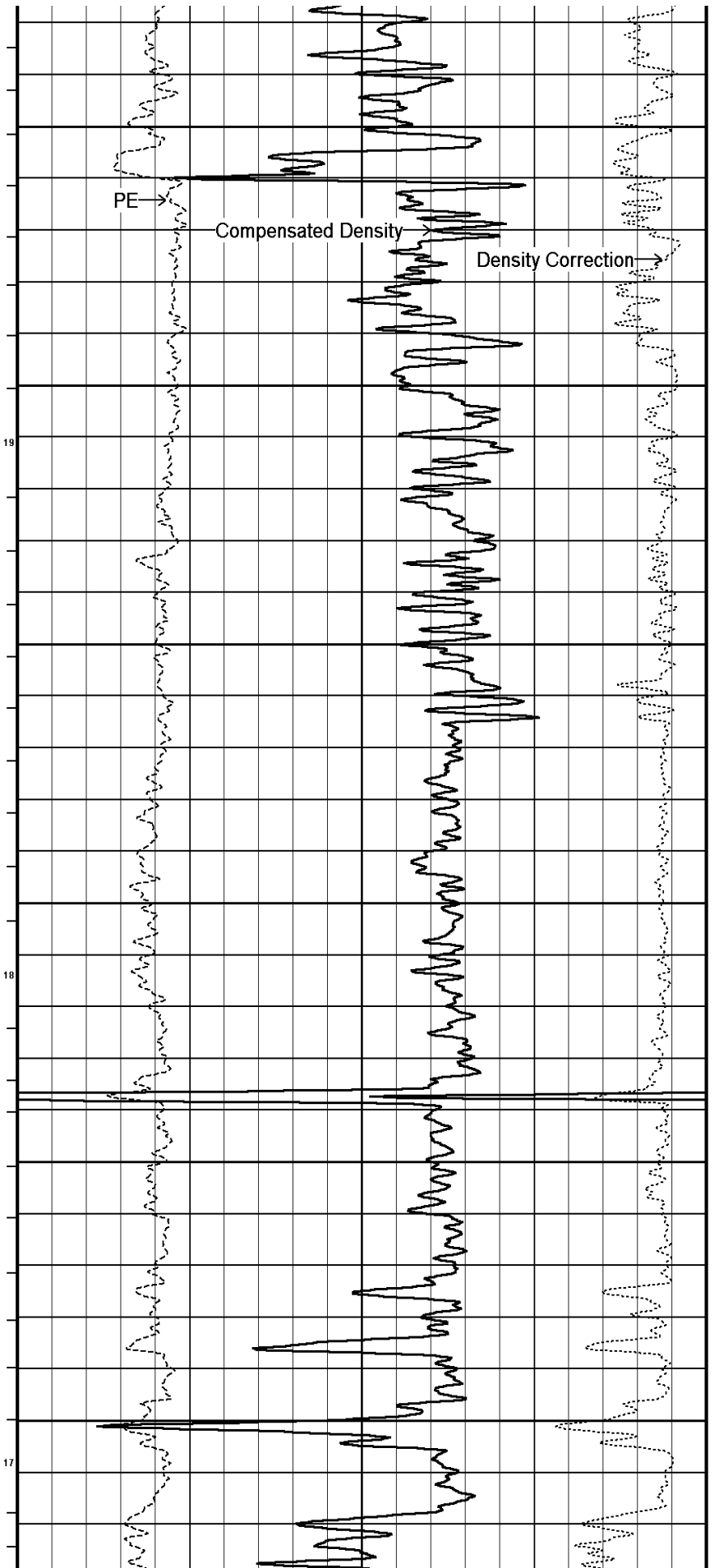
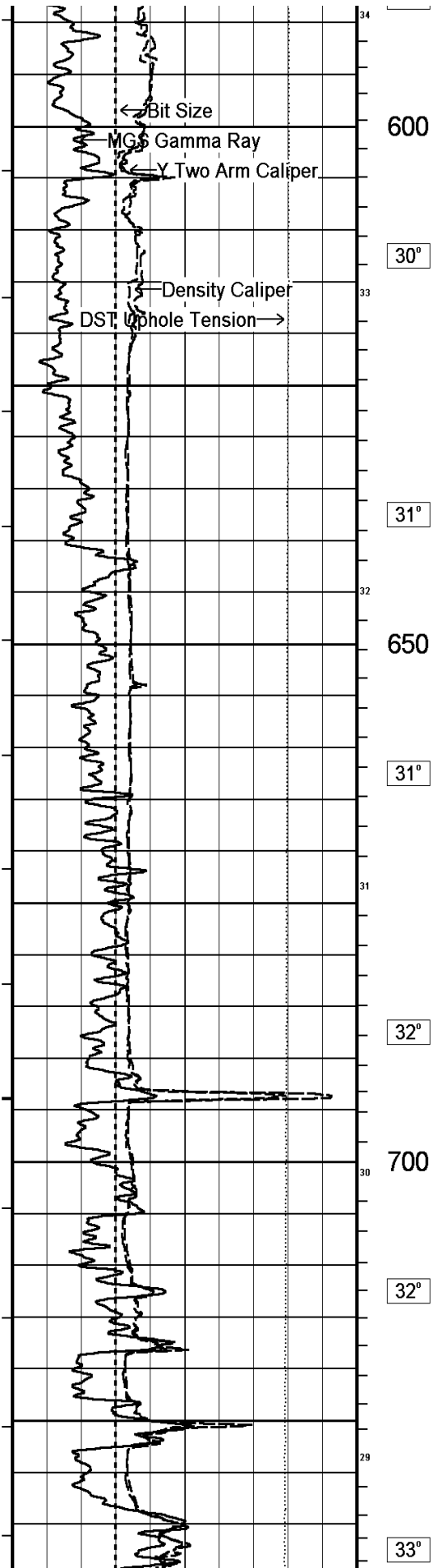
ANNULAR VOLUME USING 139.7 MM PRODUCTION CASING = 24.6 CU.M

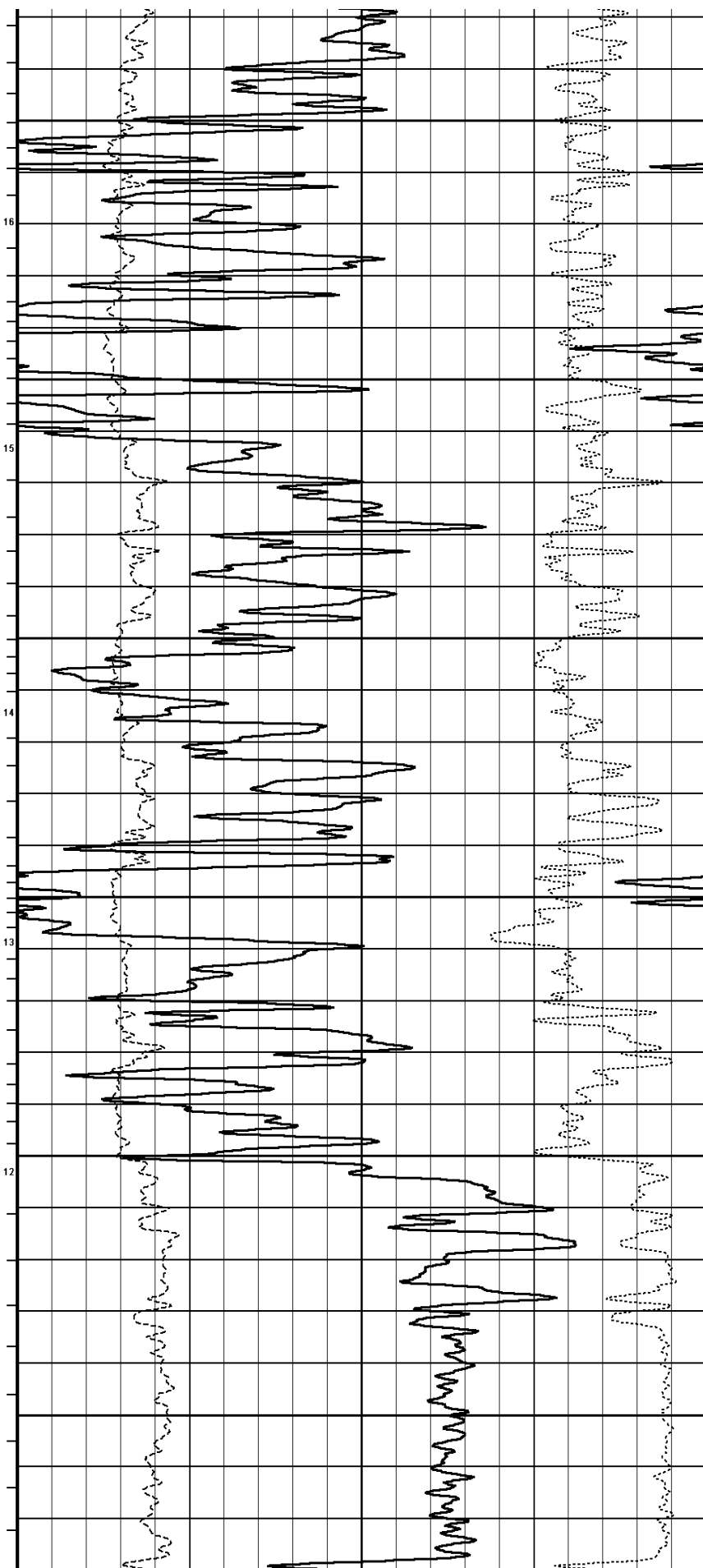
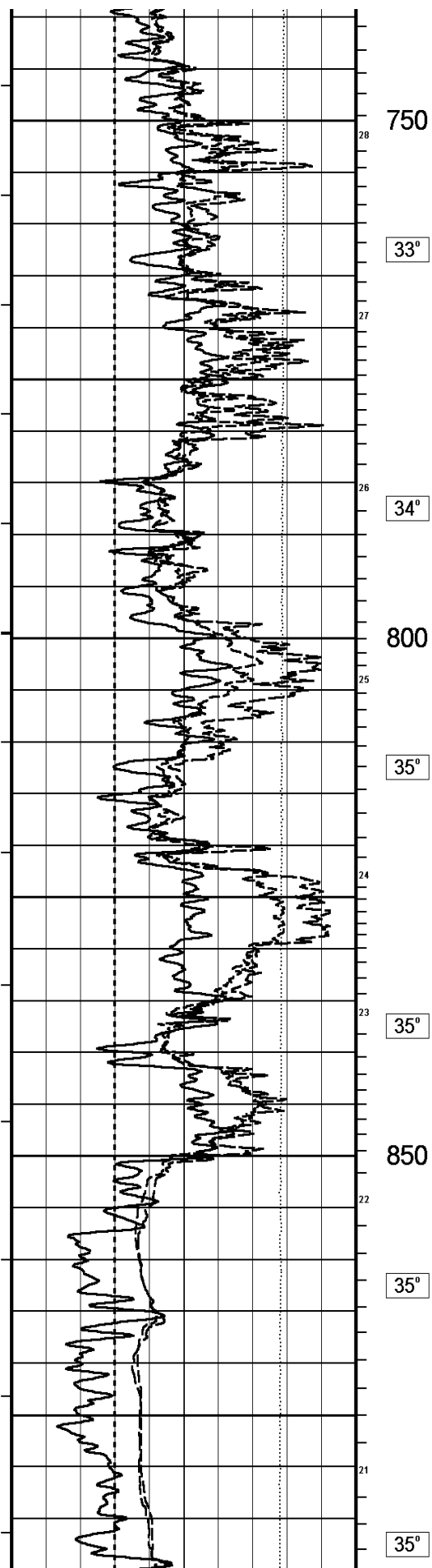
9) SALTY INDUCTION MODEL PRESENTED OFF BOTTOM.

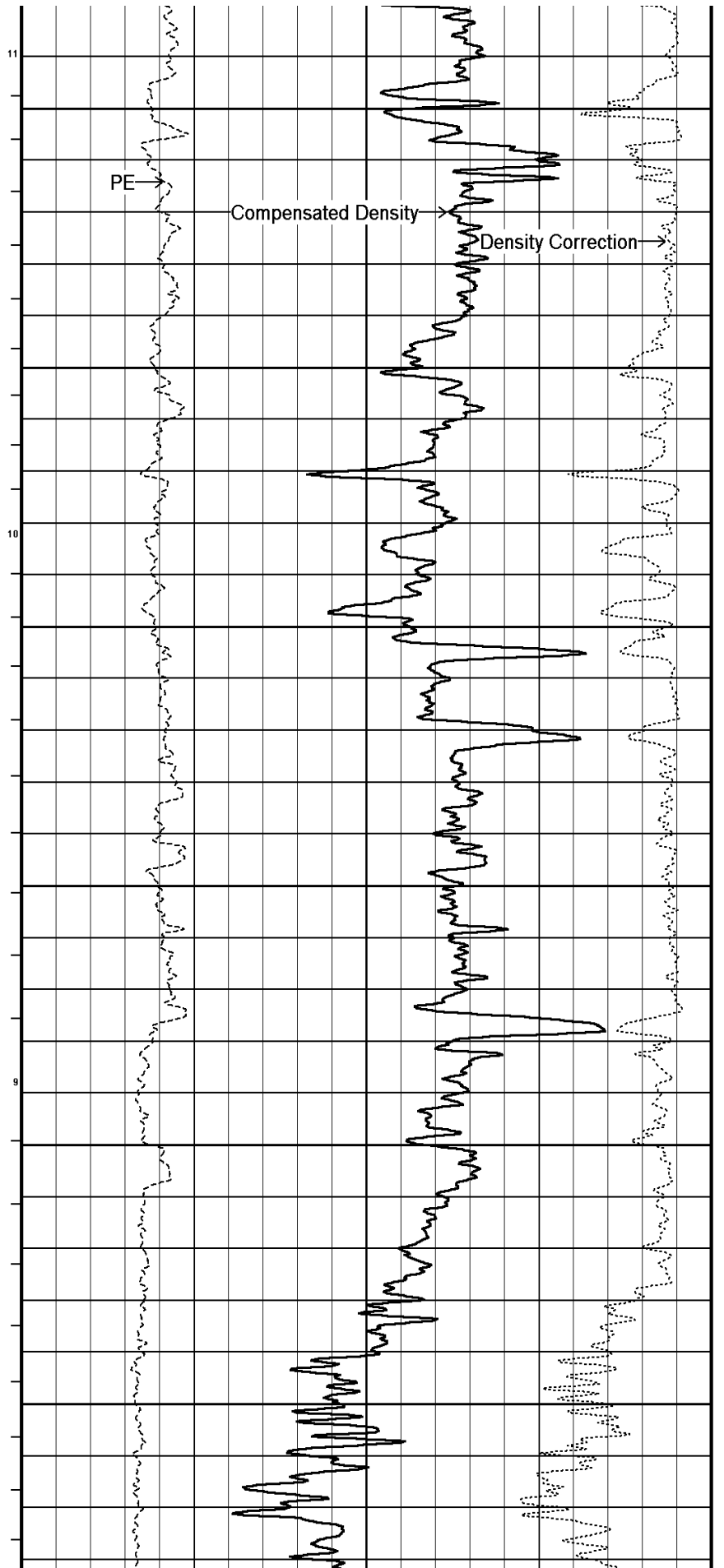
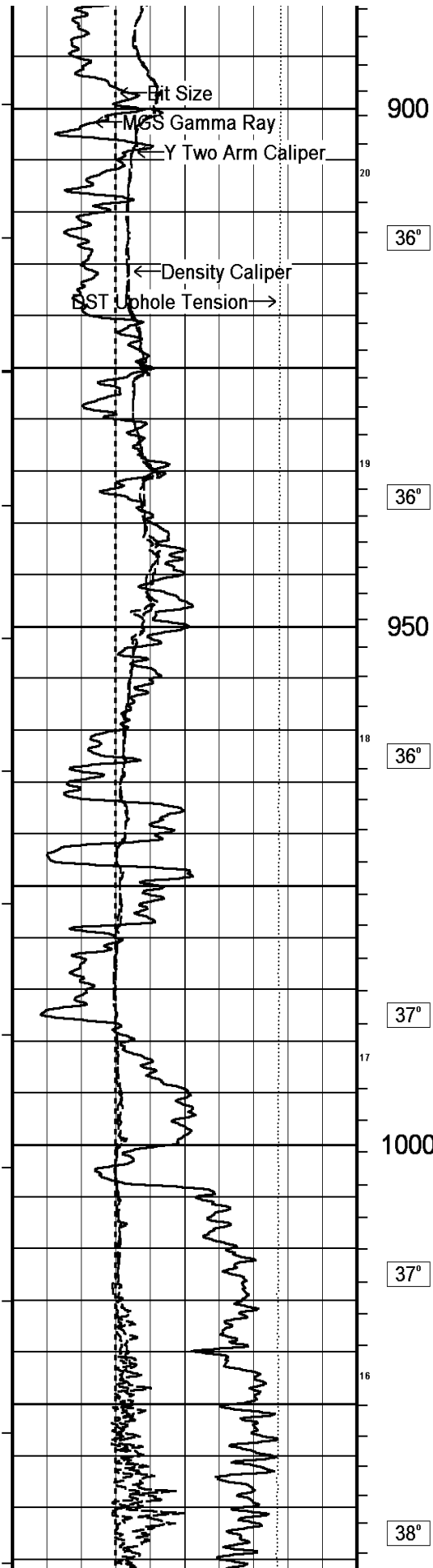
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

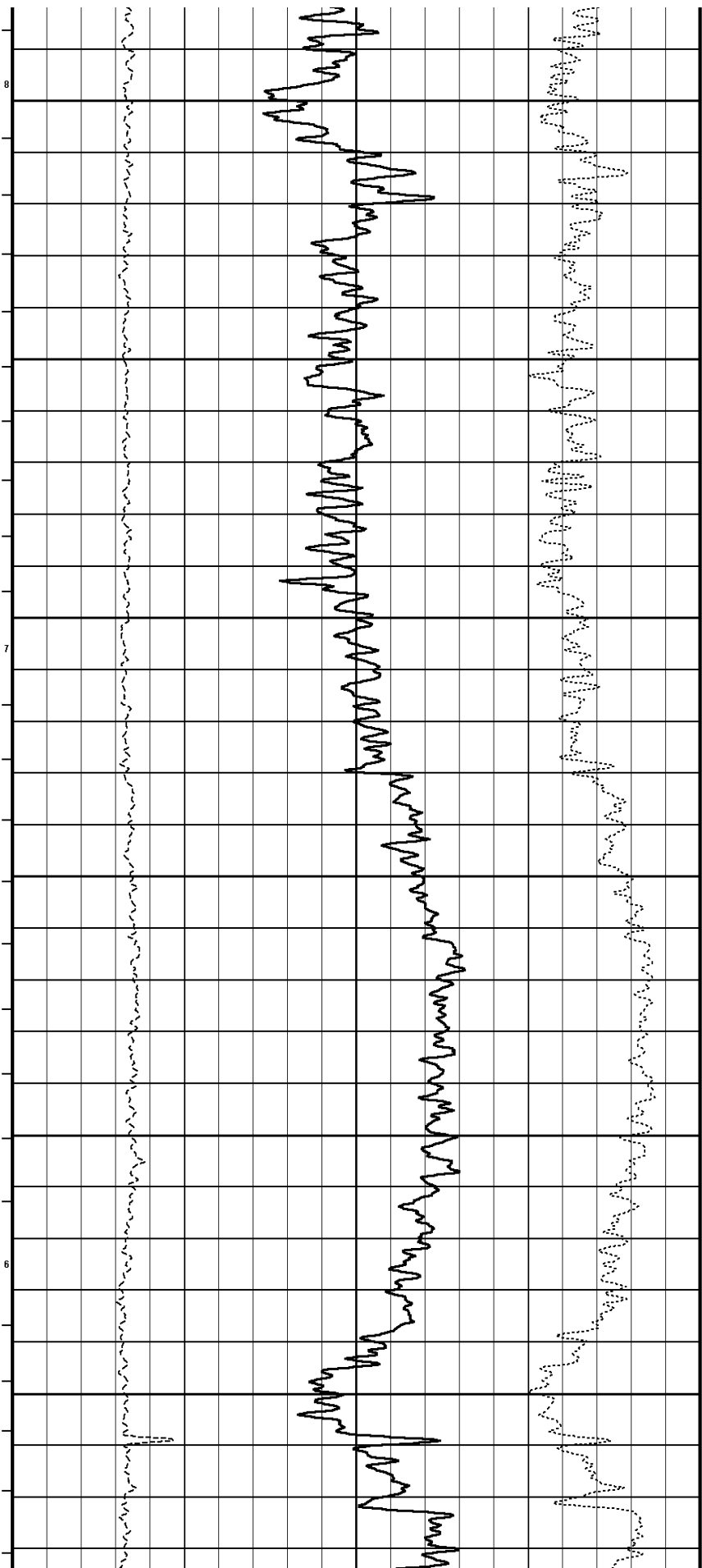
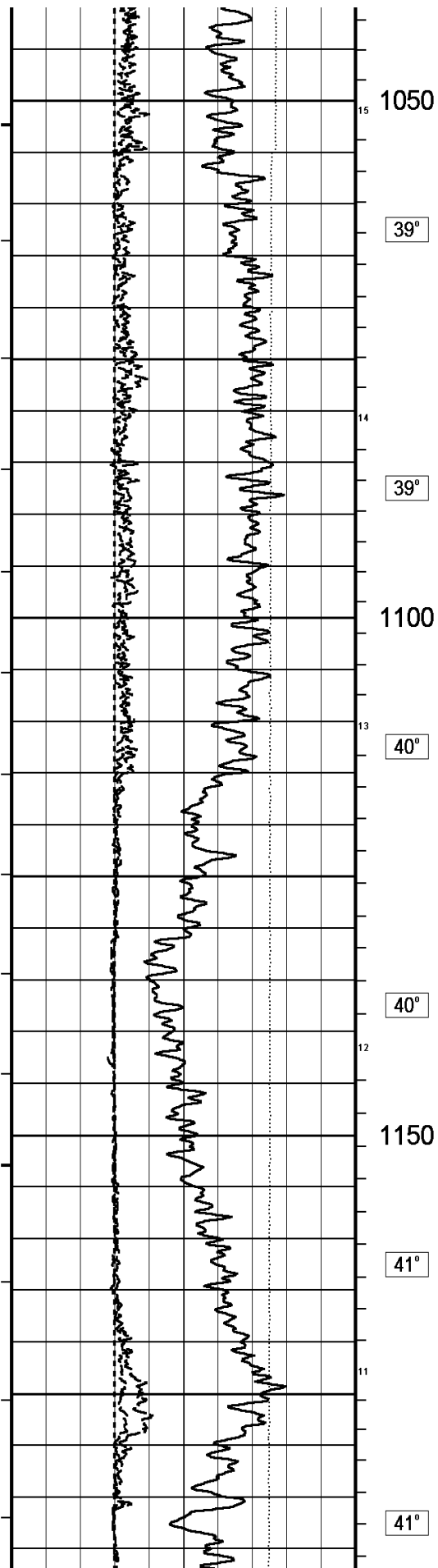


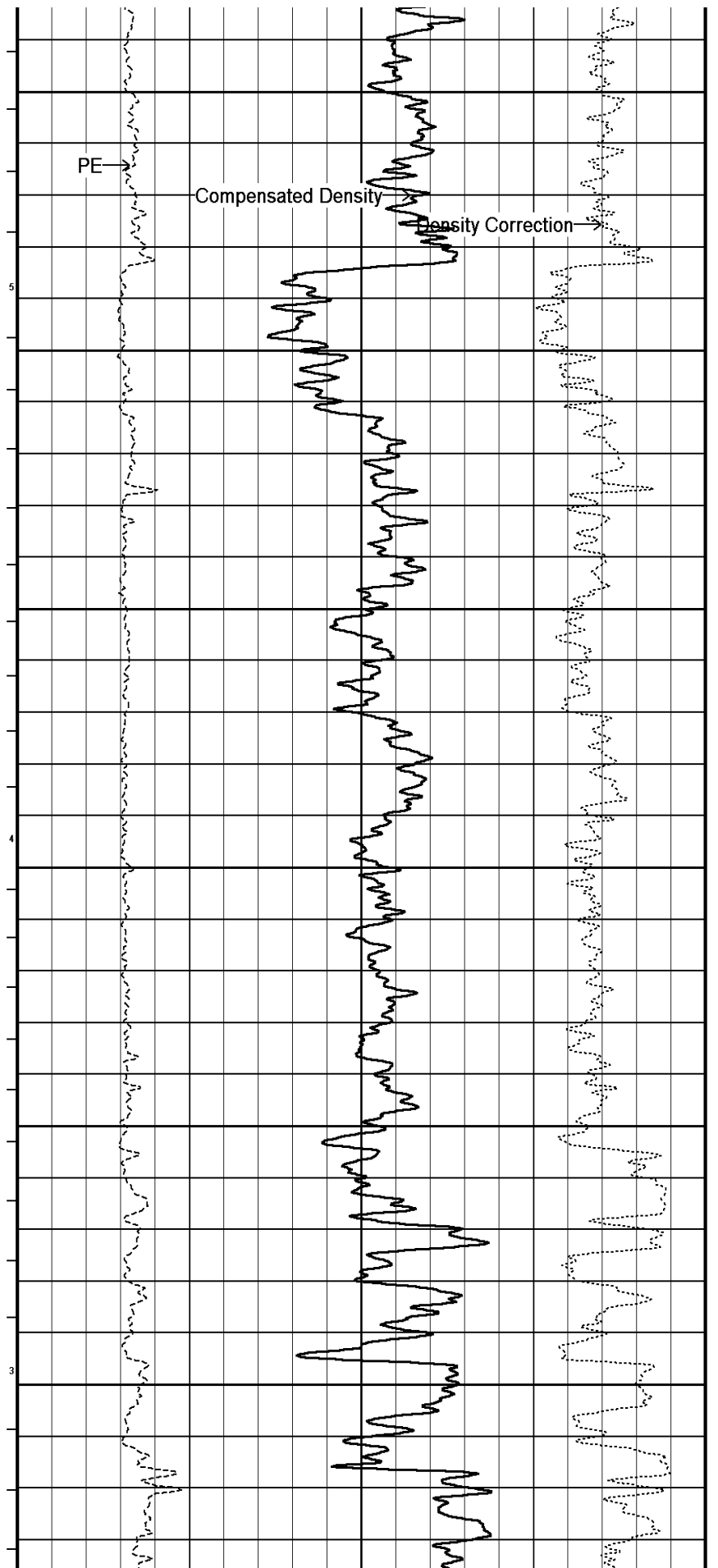
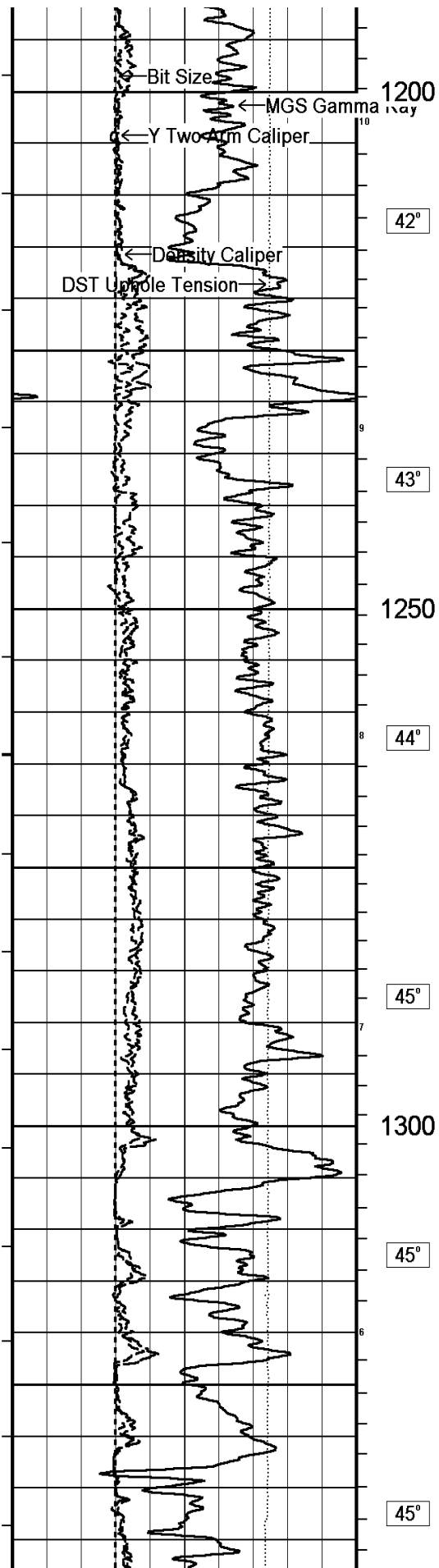


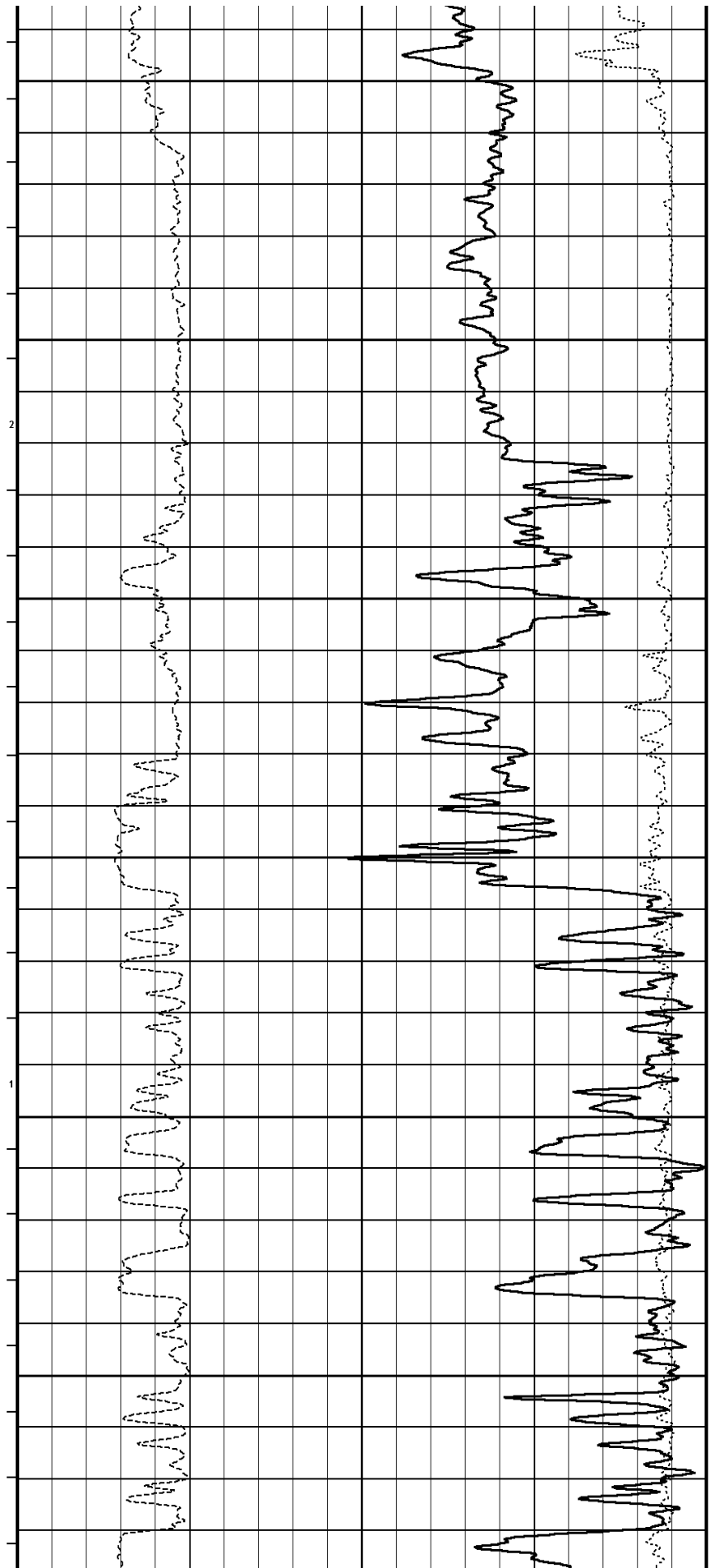
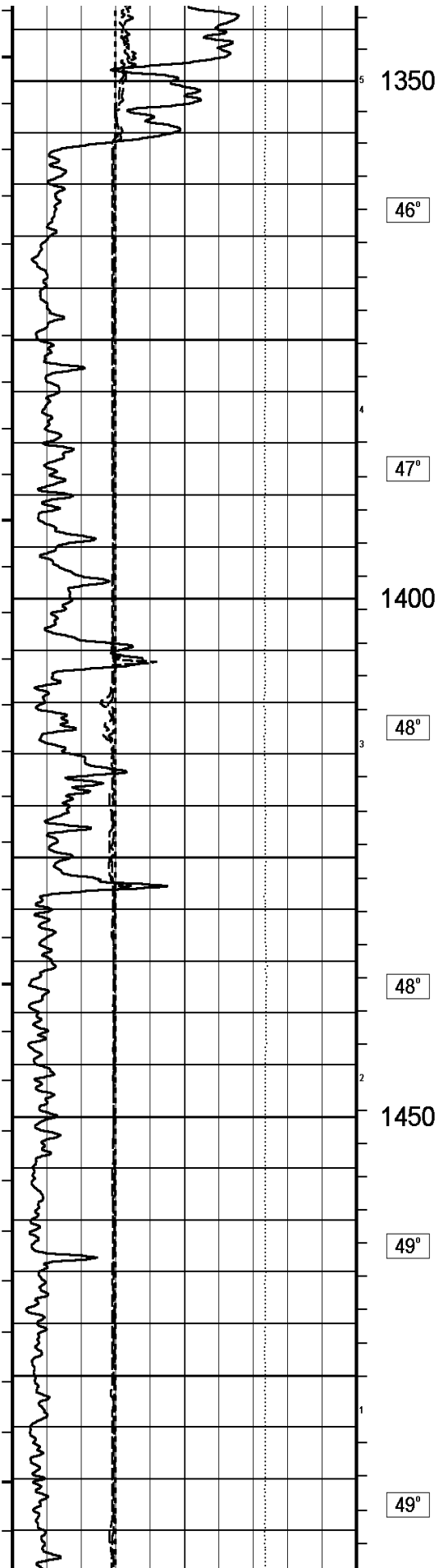


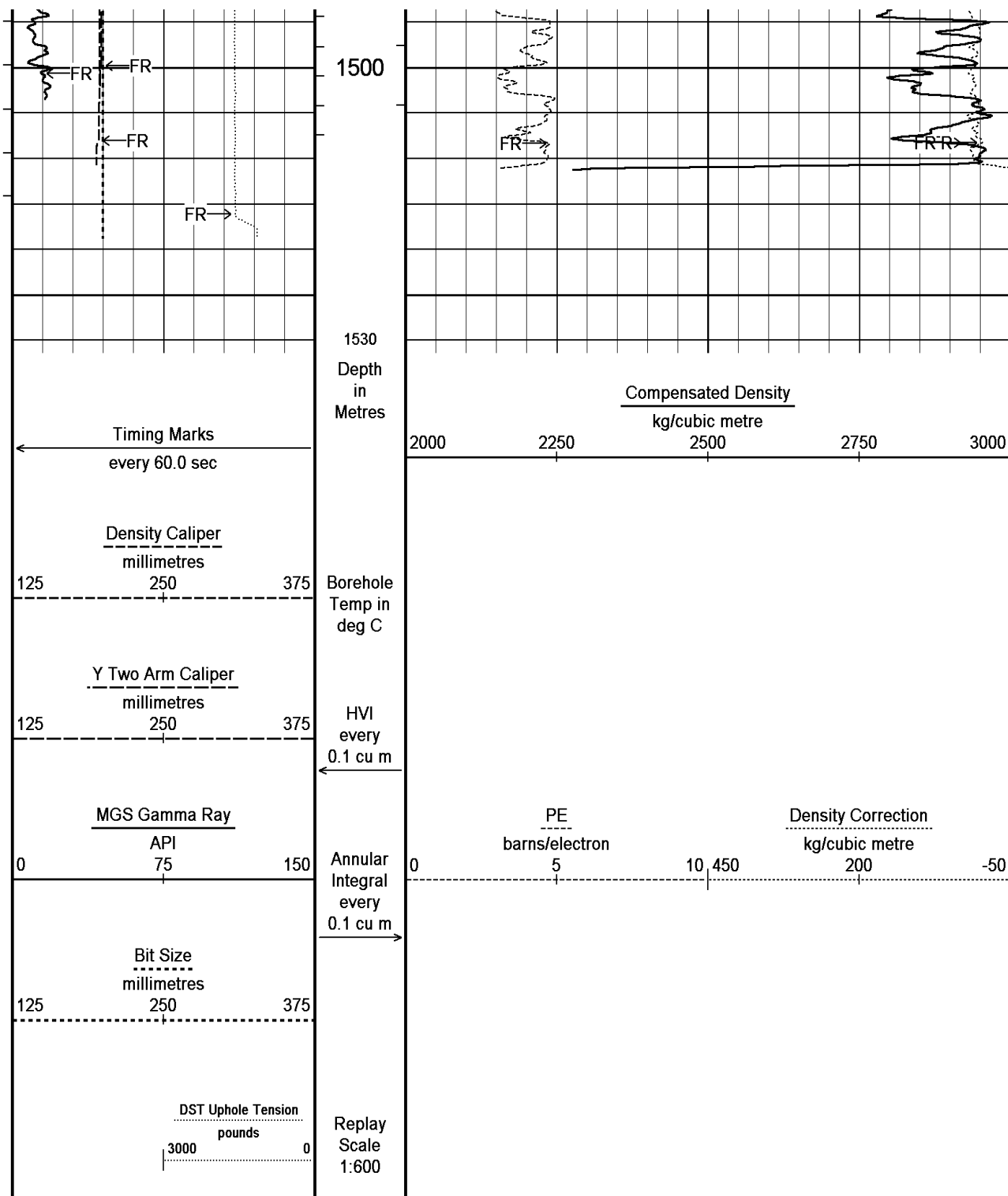


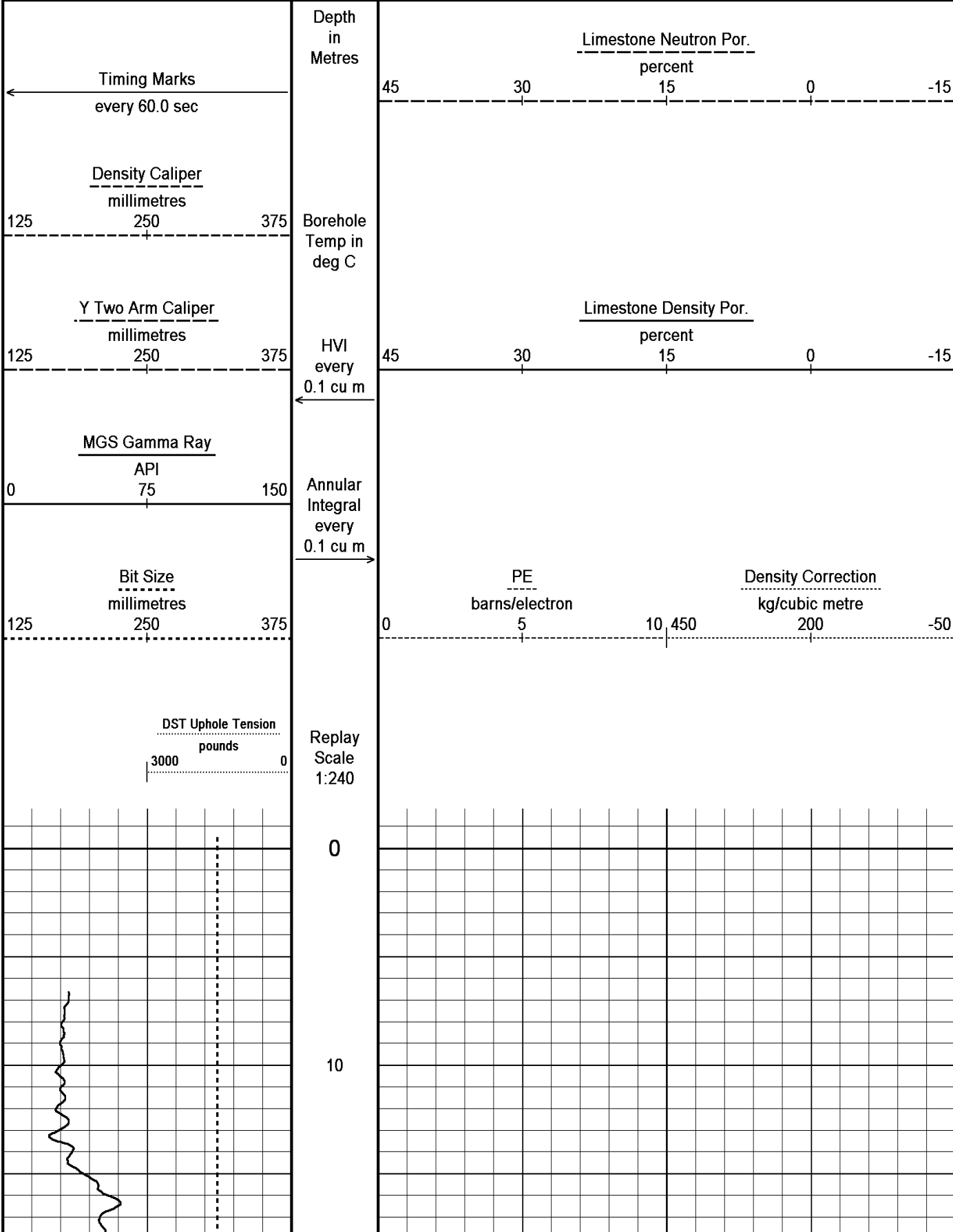


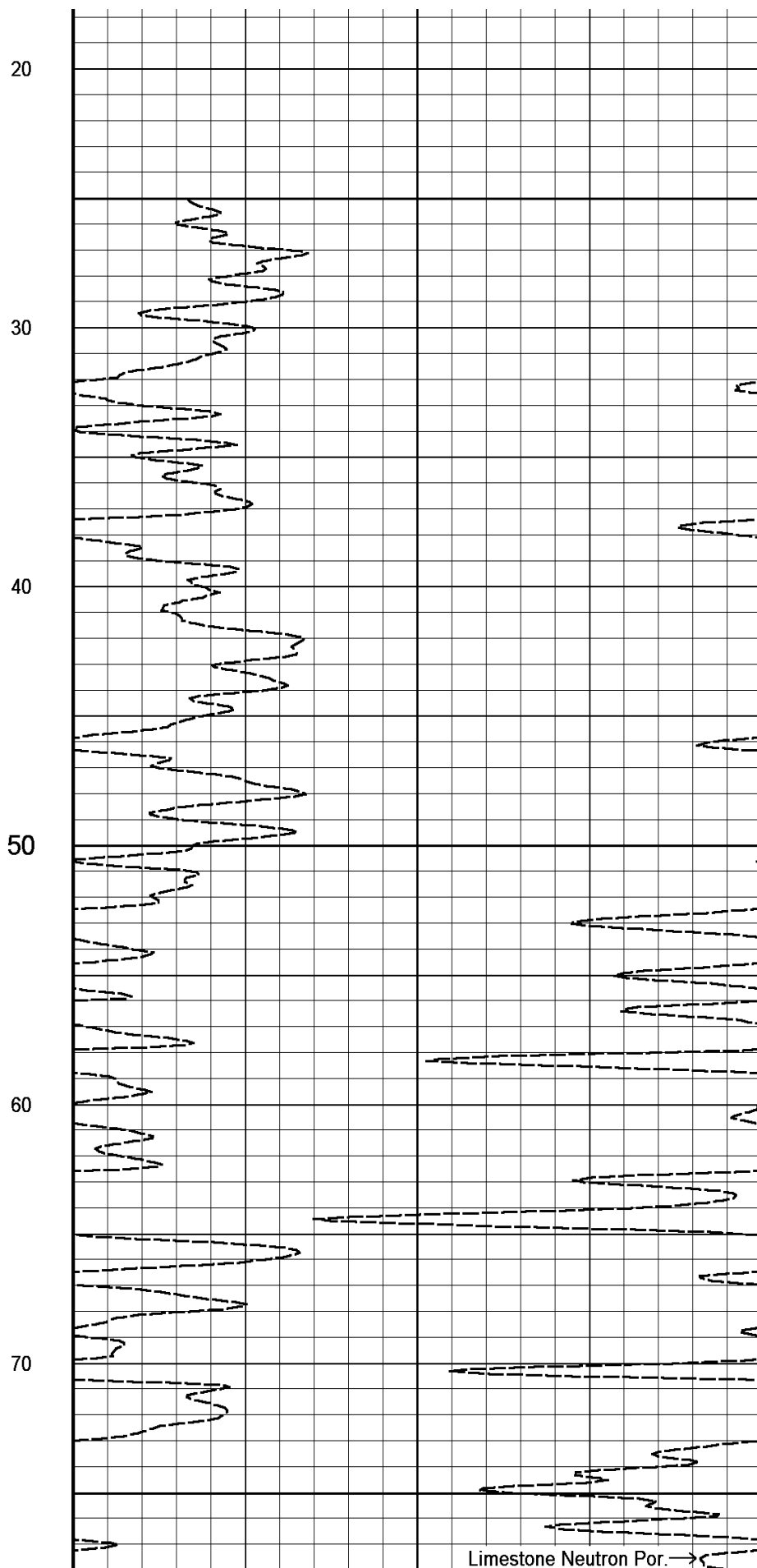
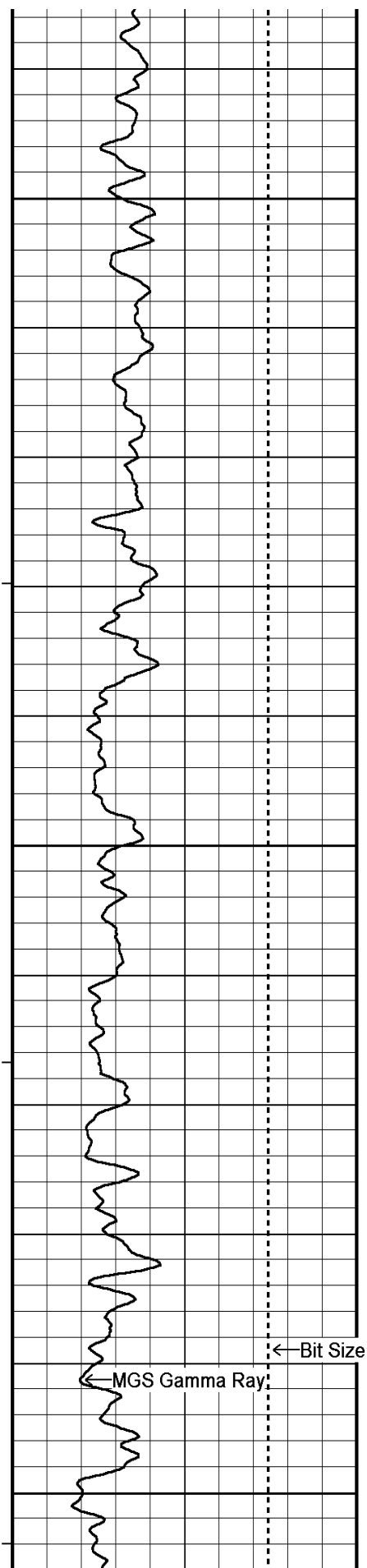


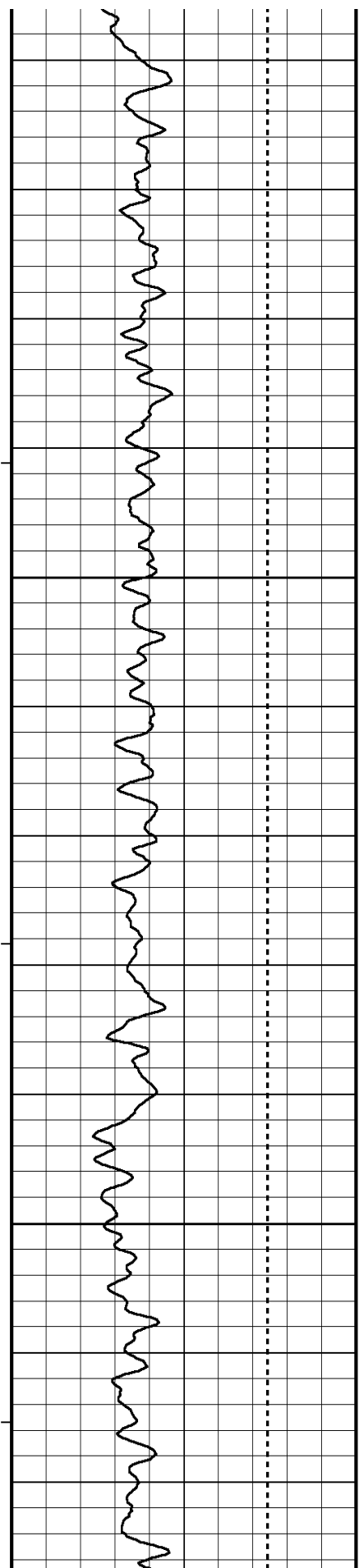












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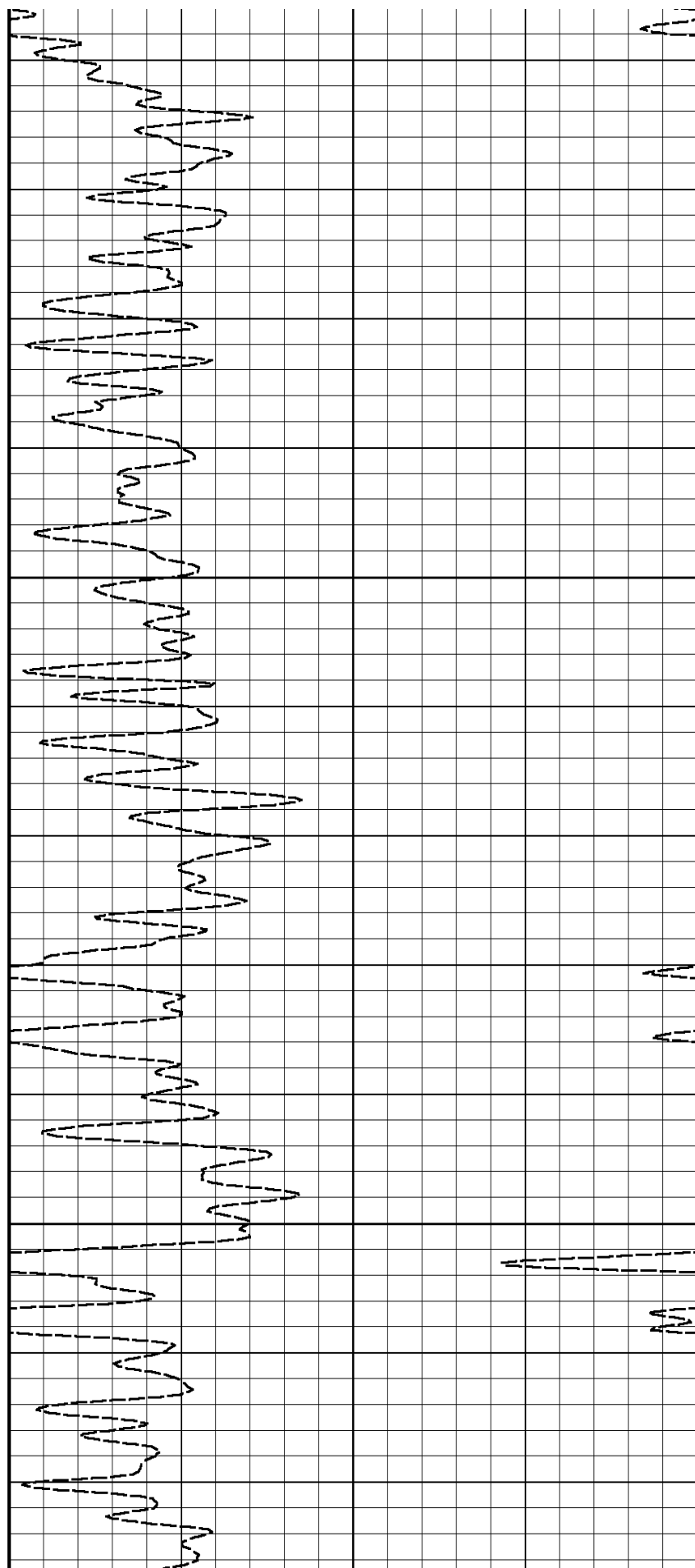
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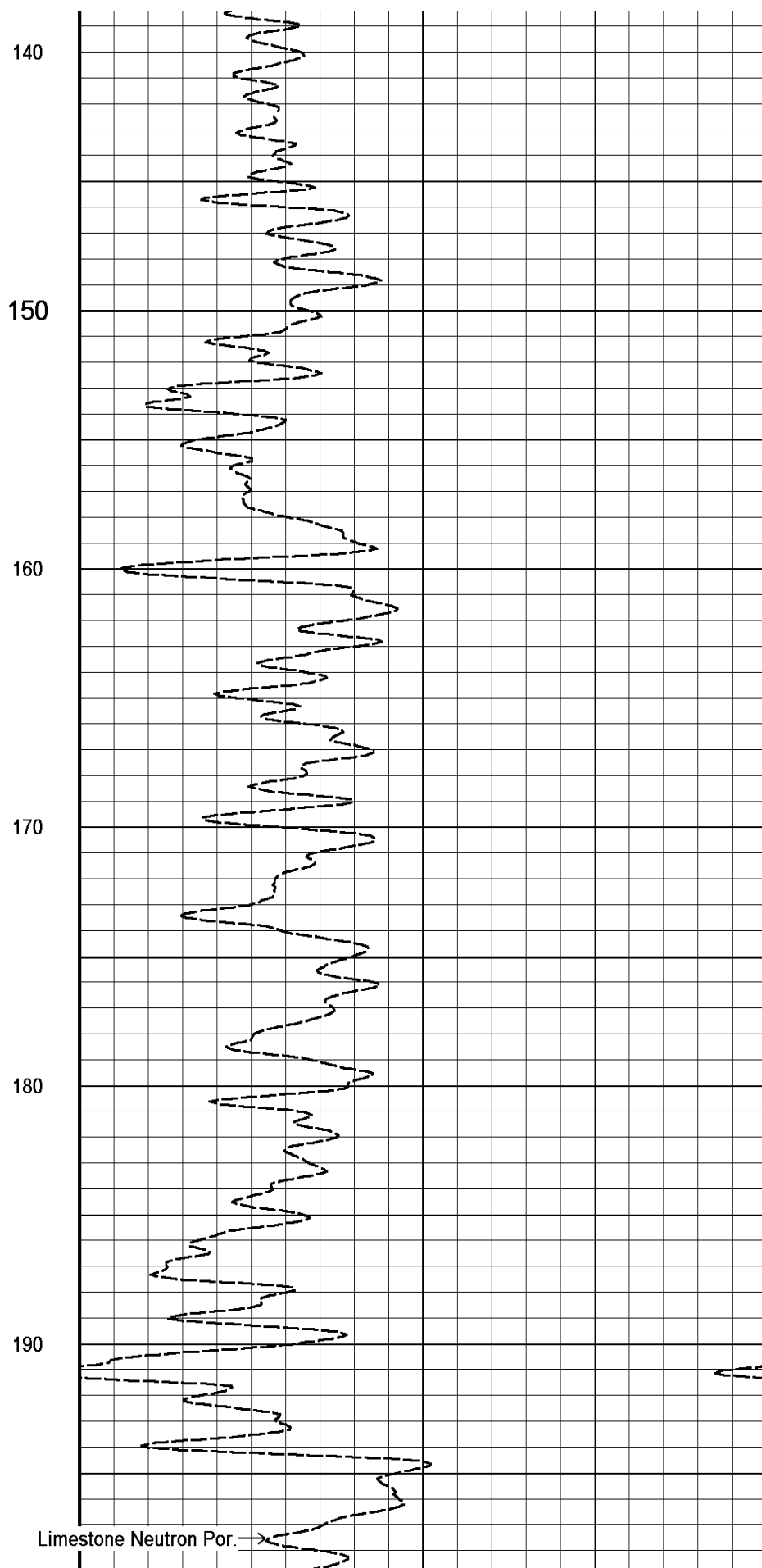
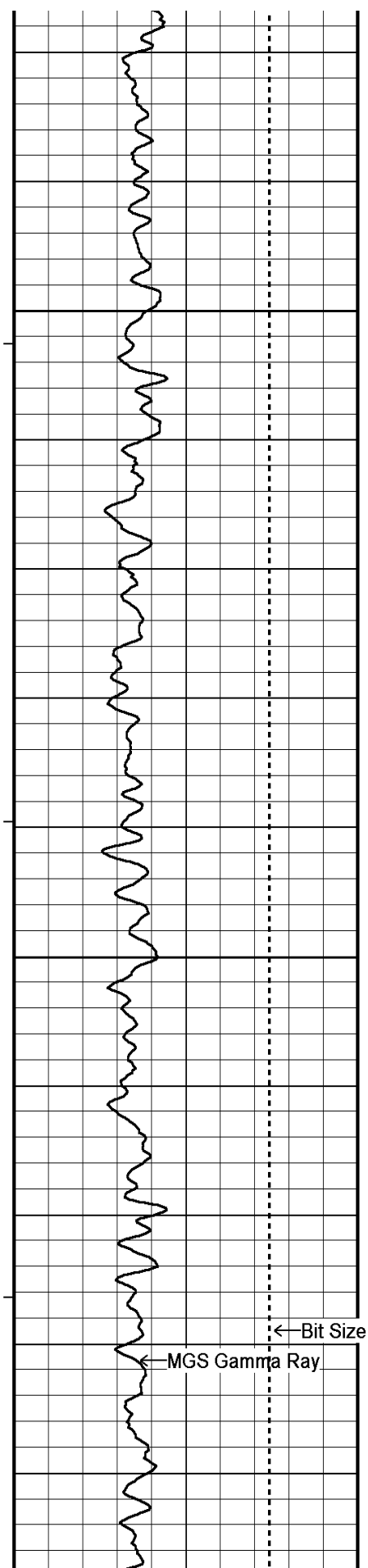
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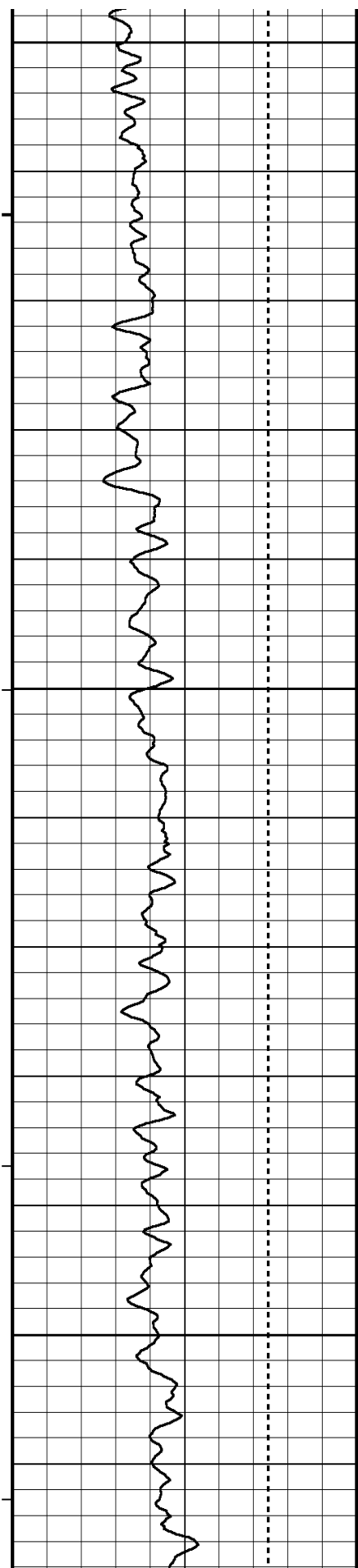
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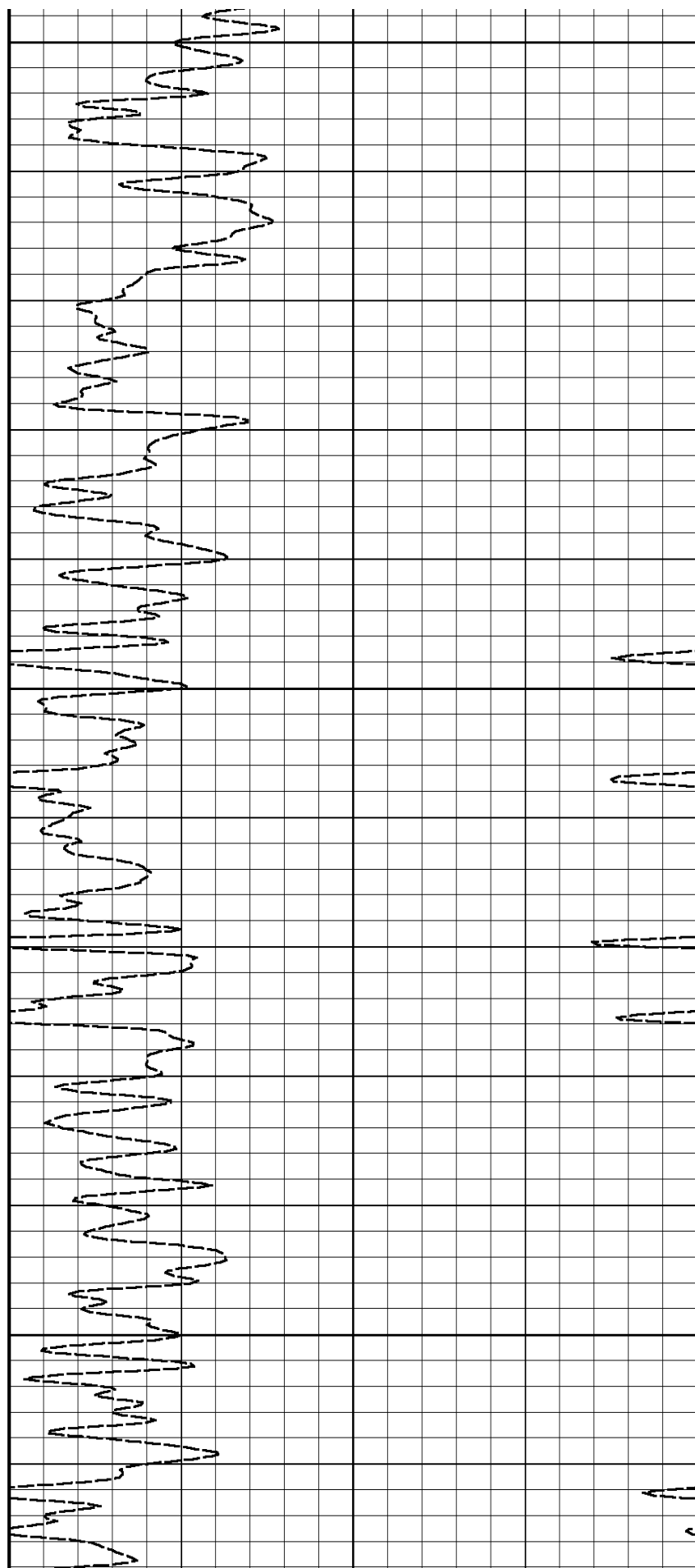
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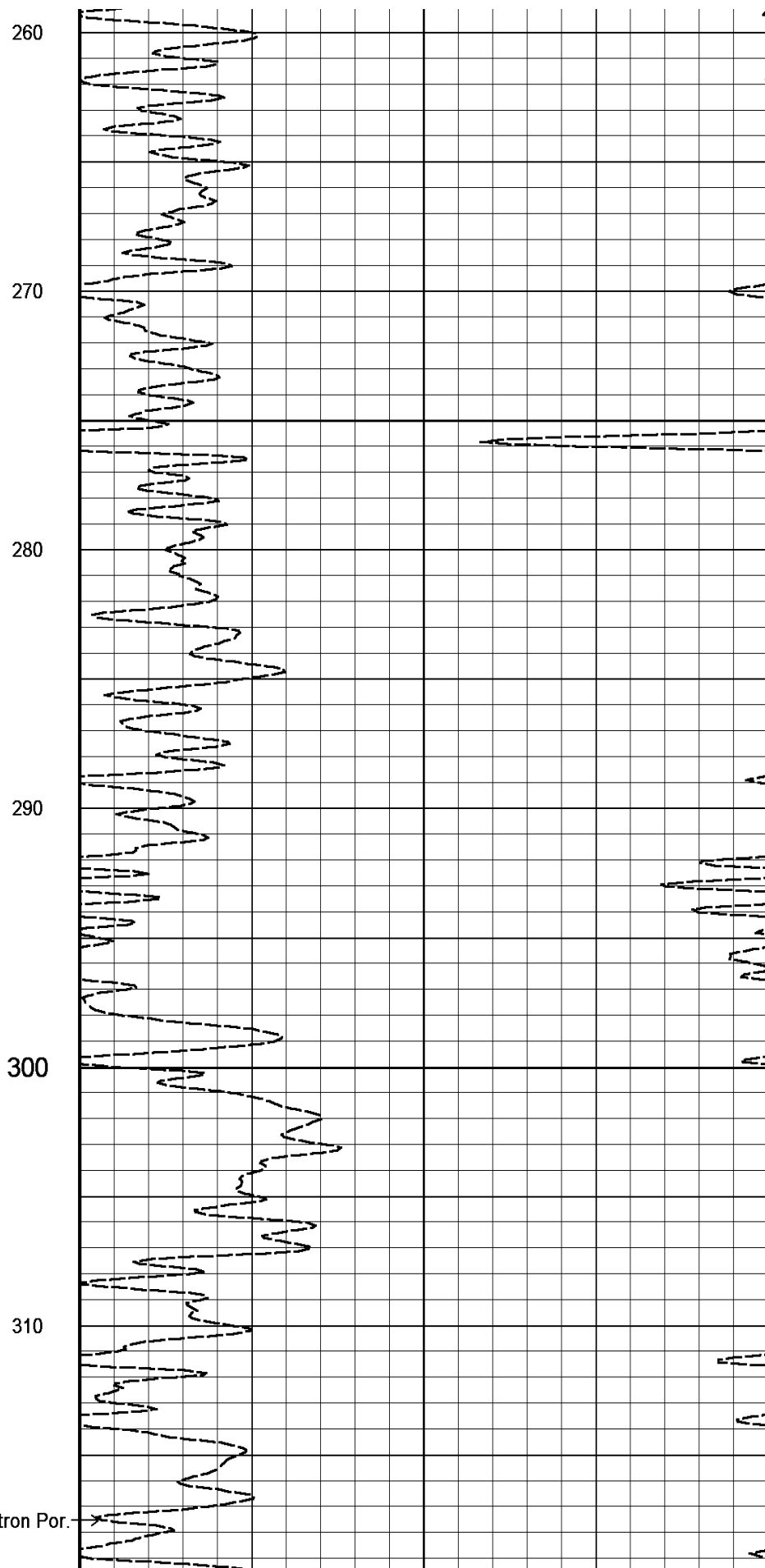
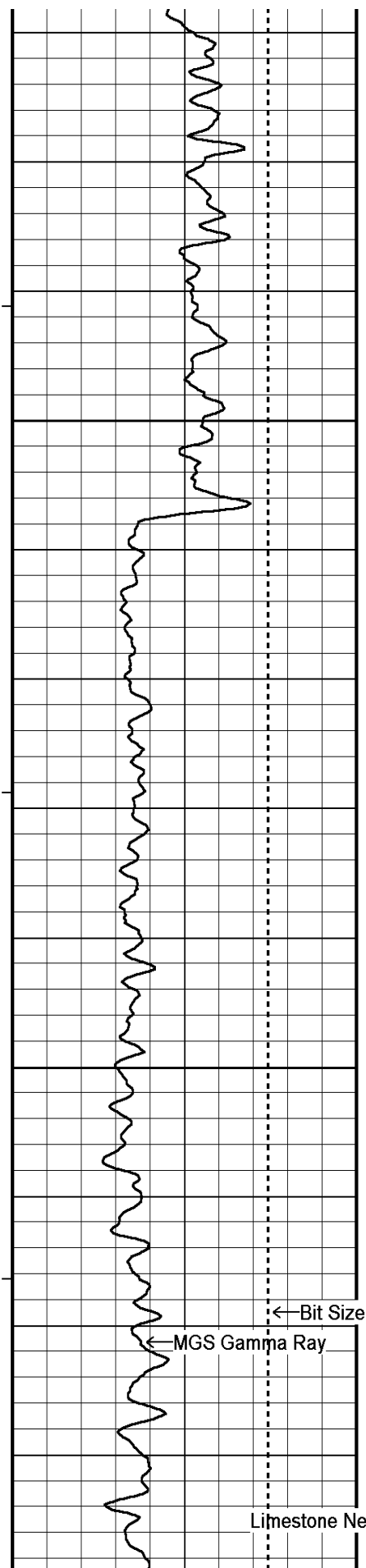
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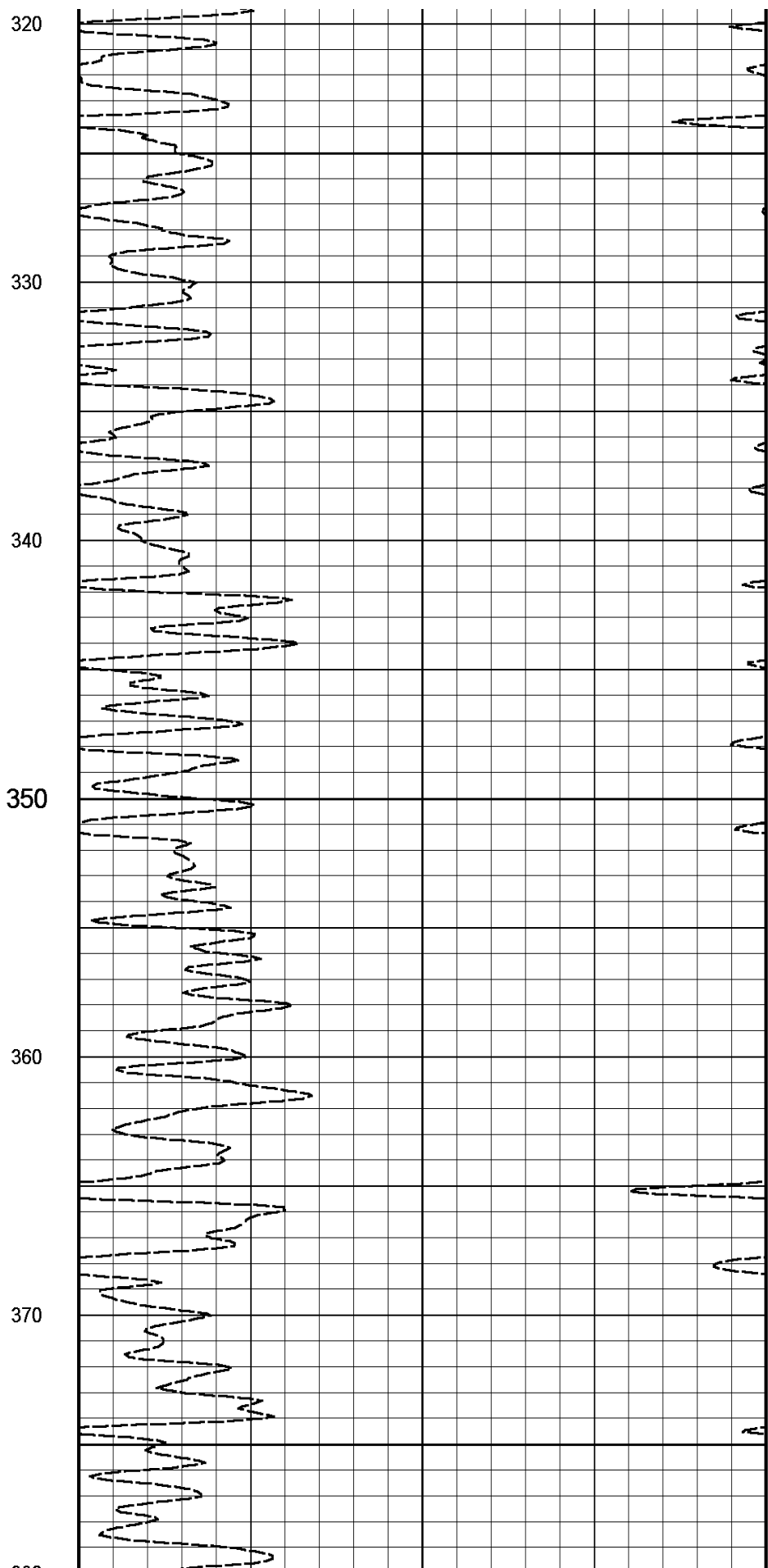
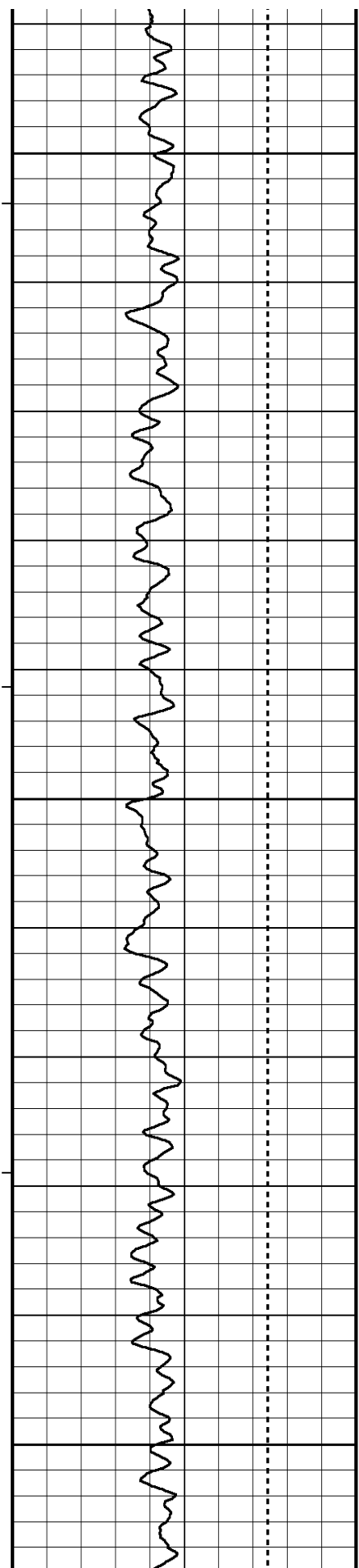
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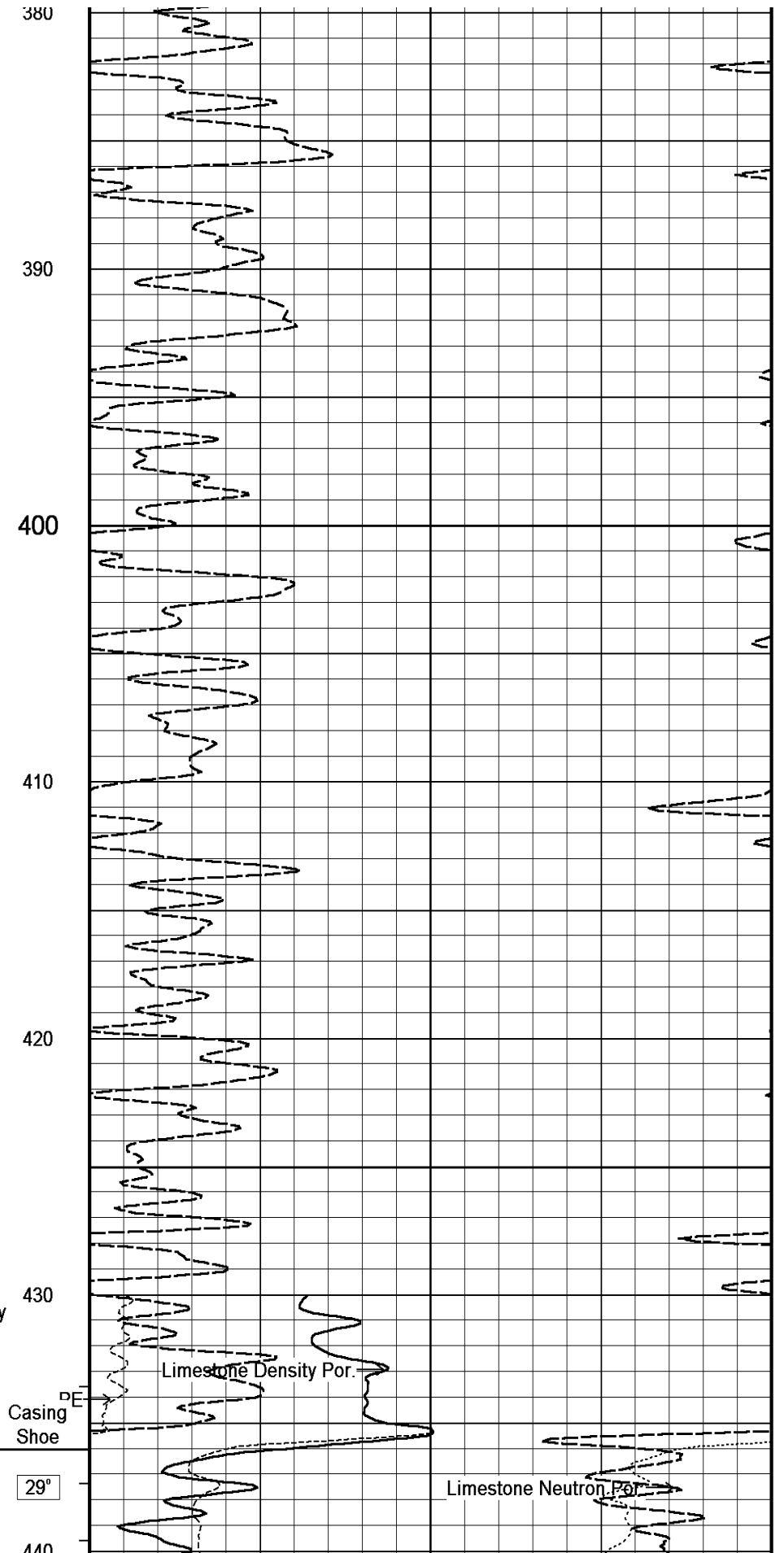
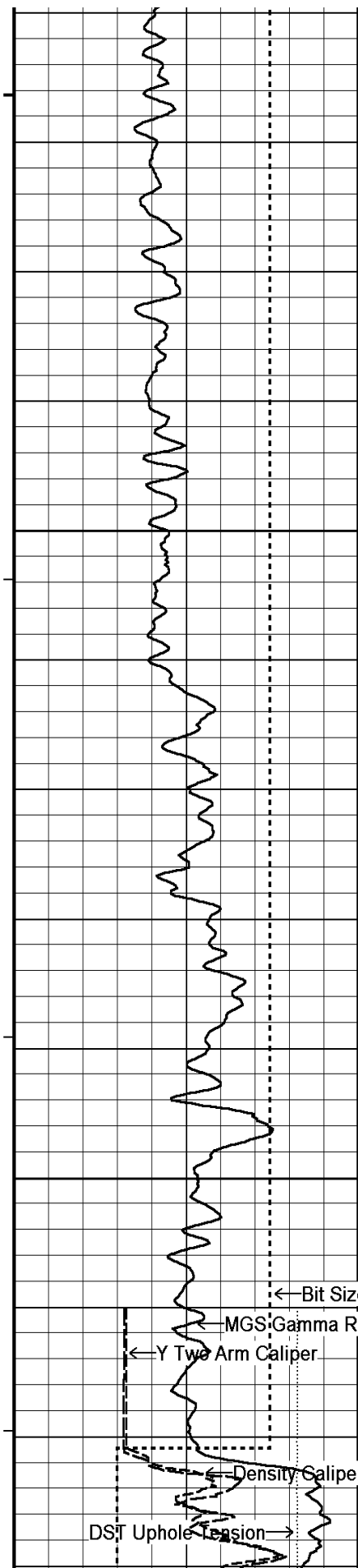
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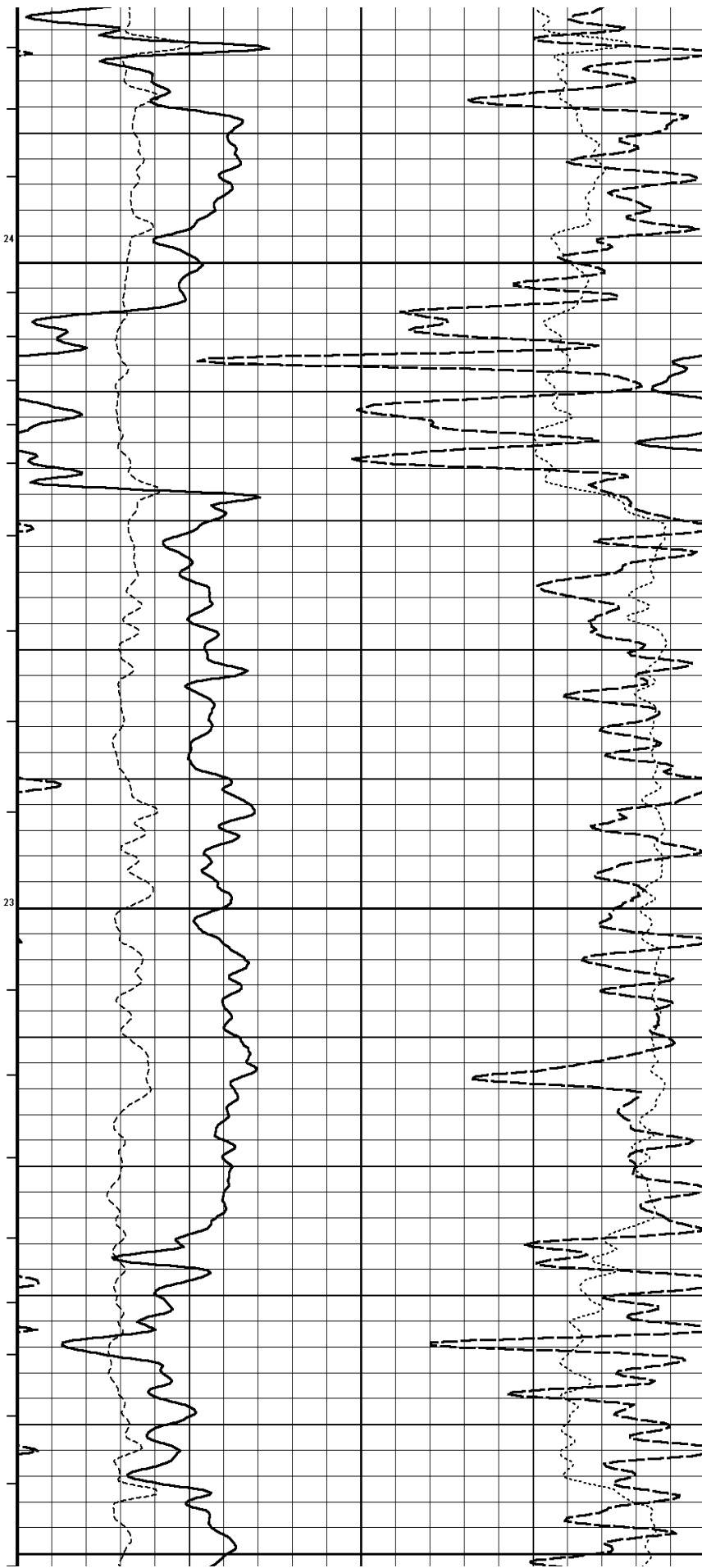
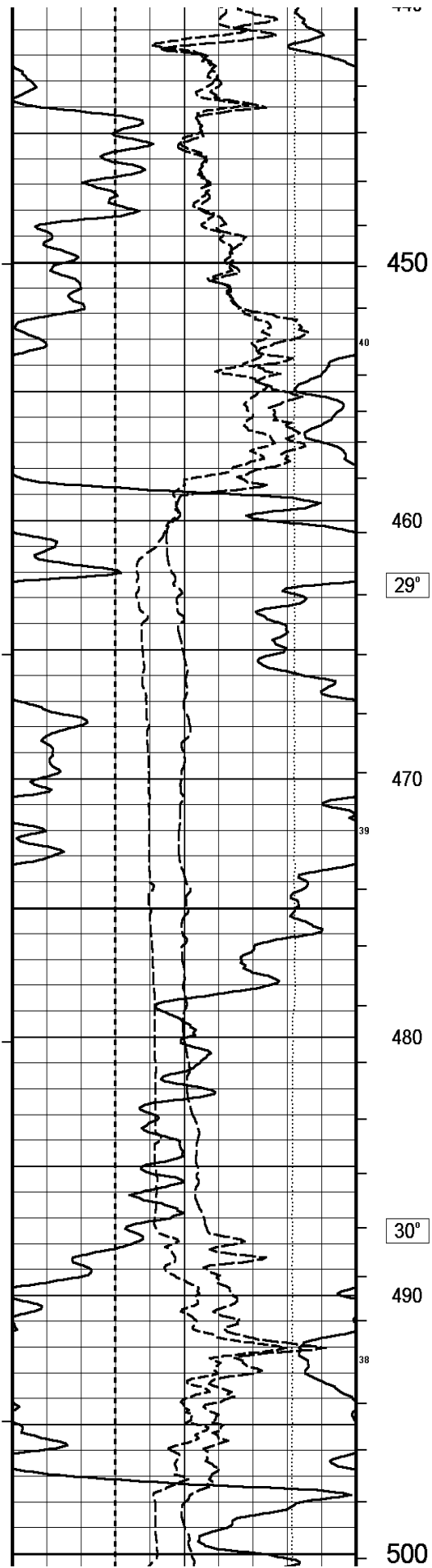
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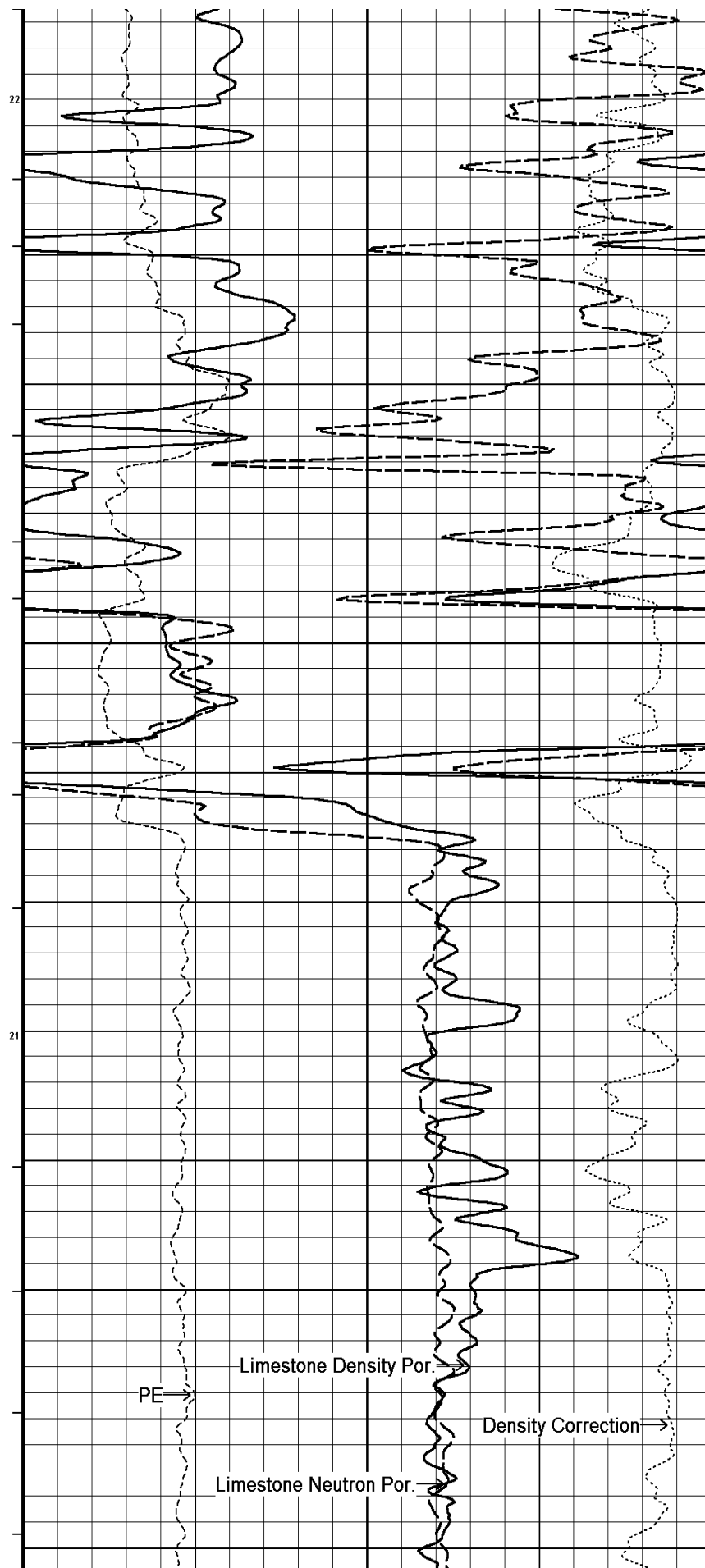
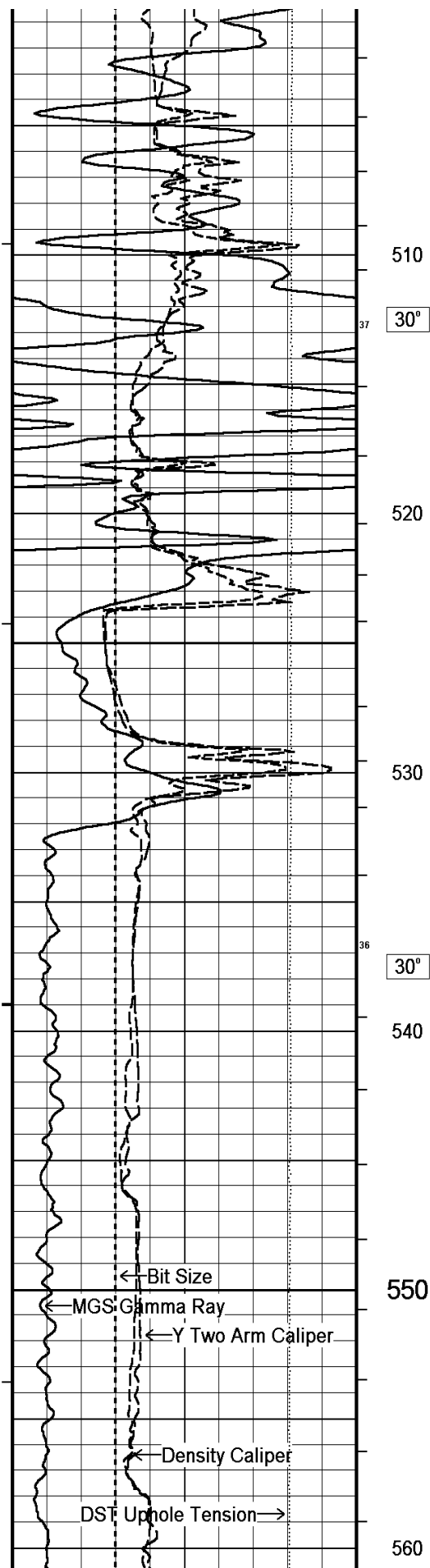


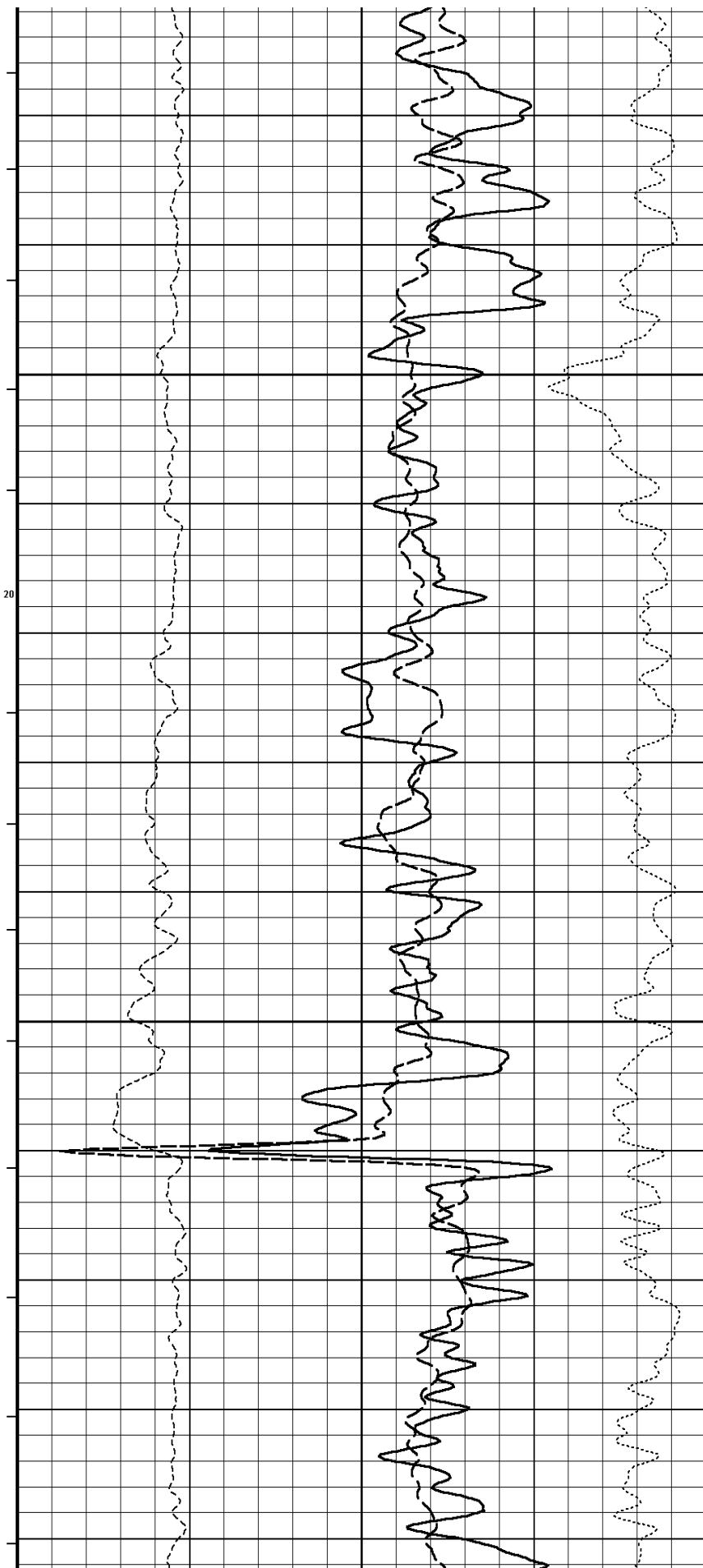
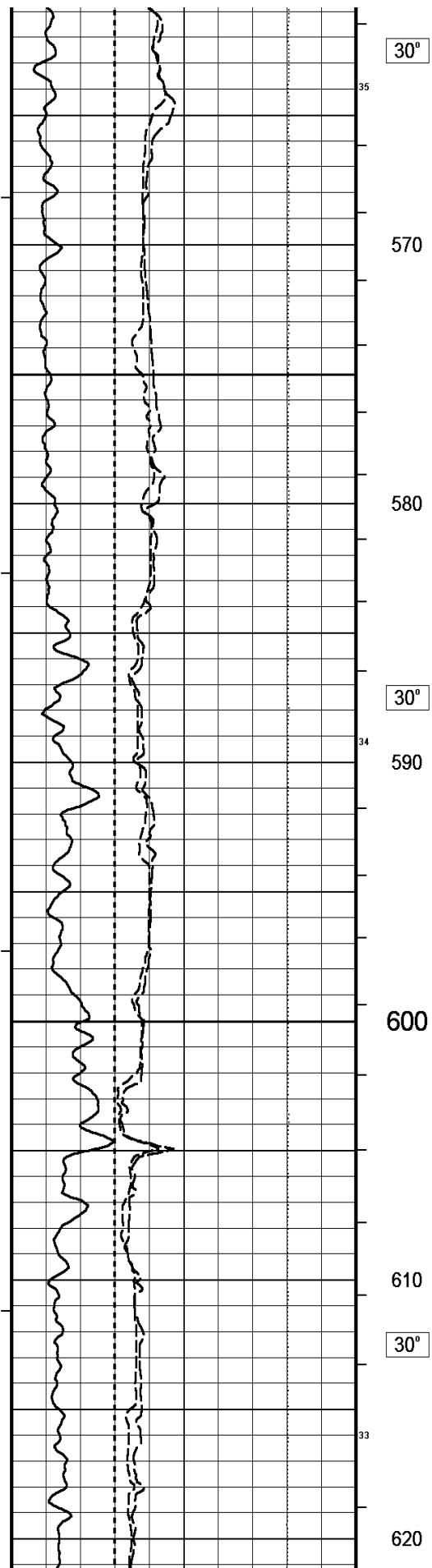


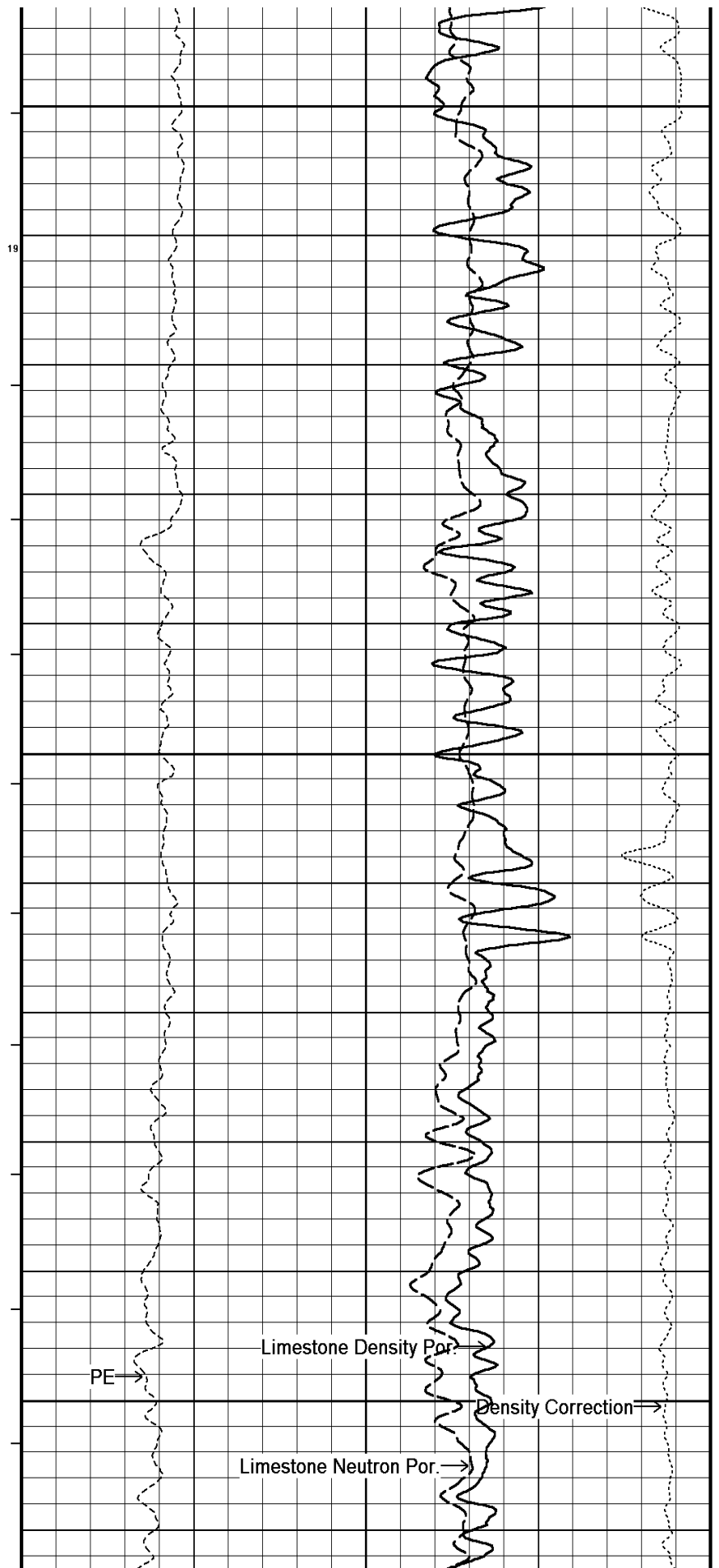
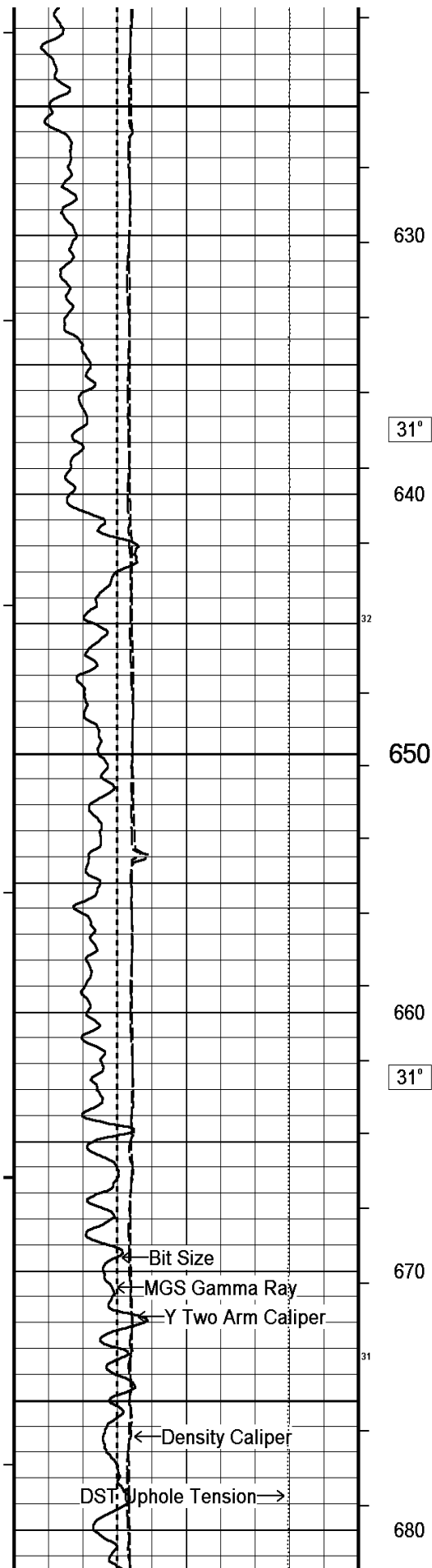


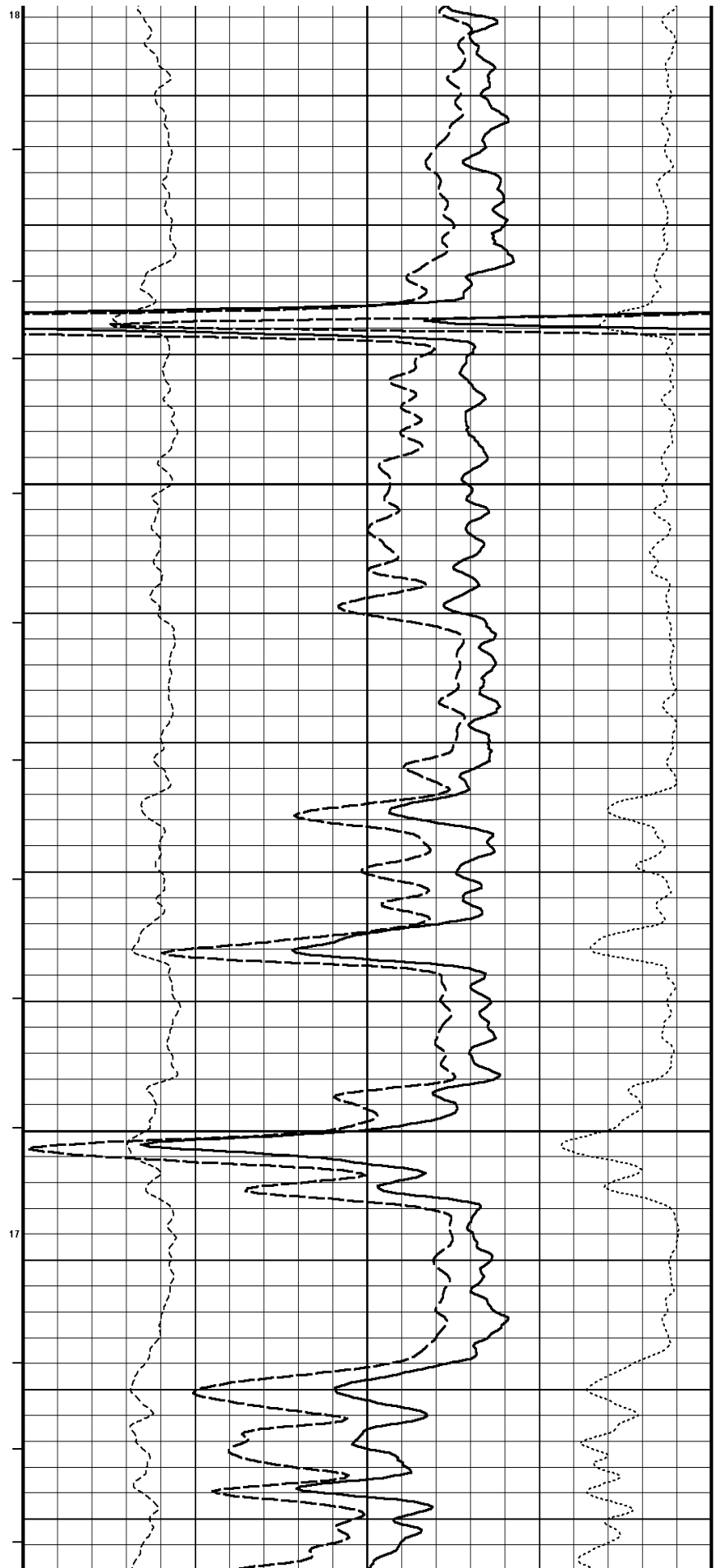
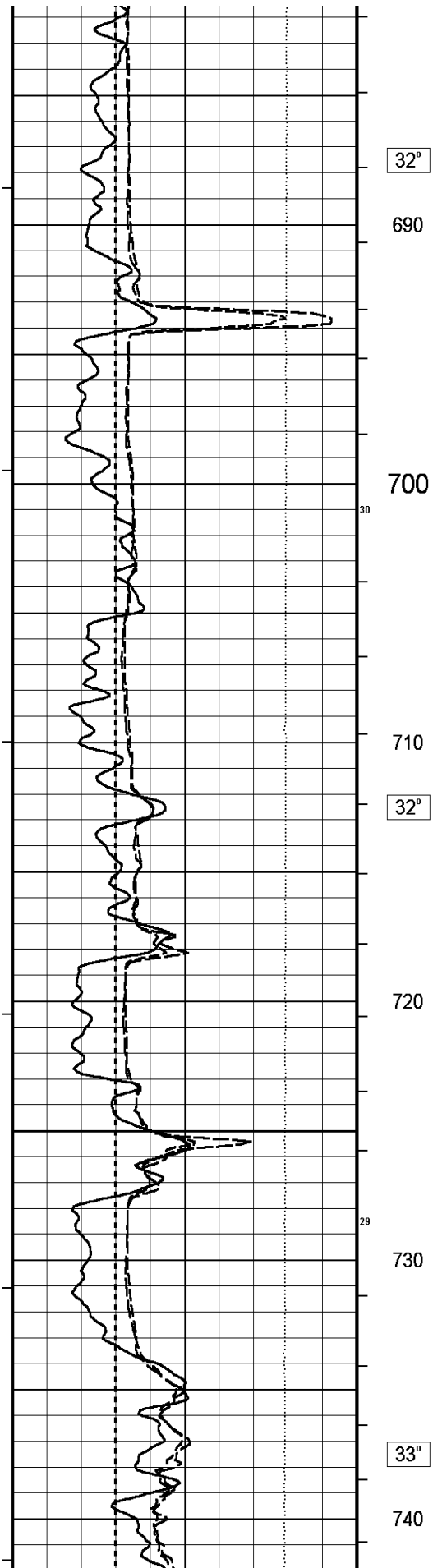


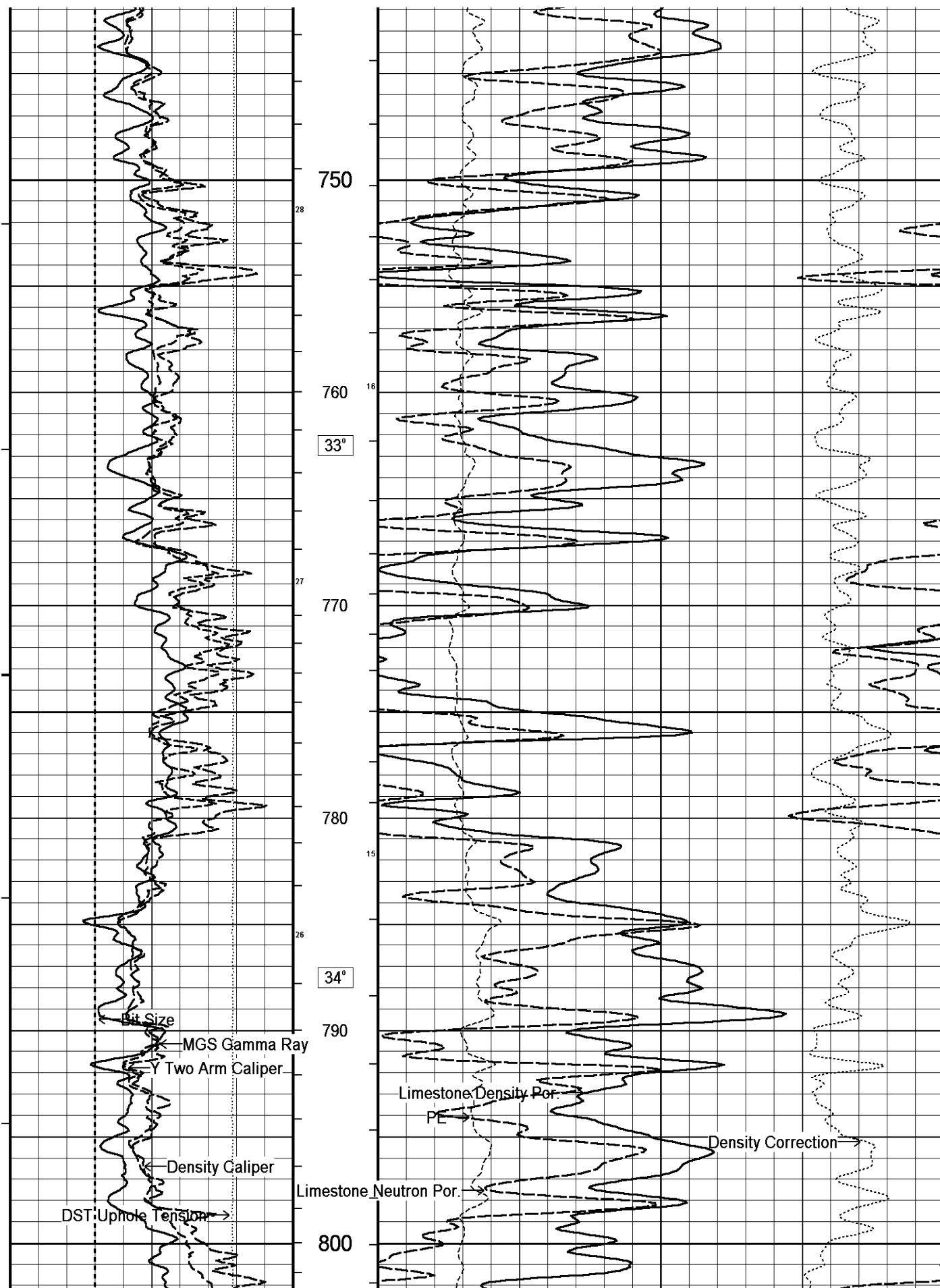


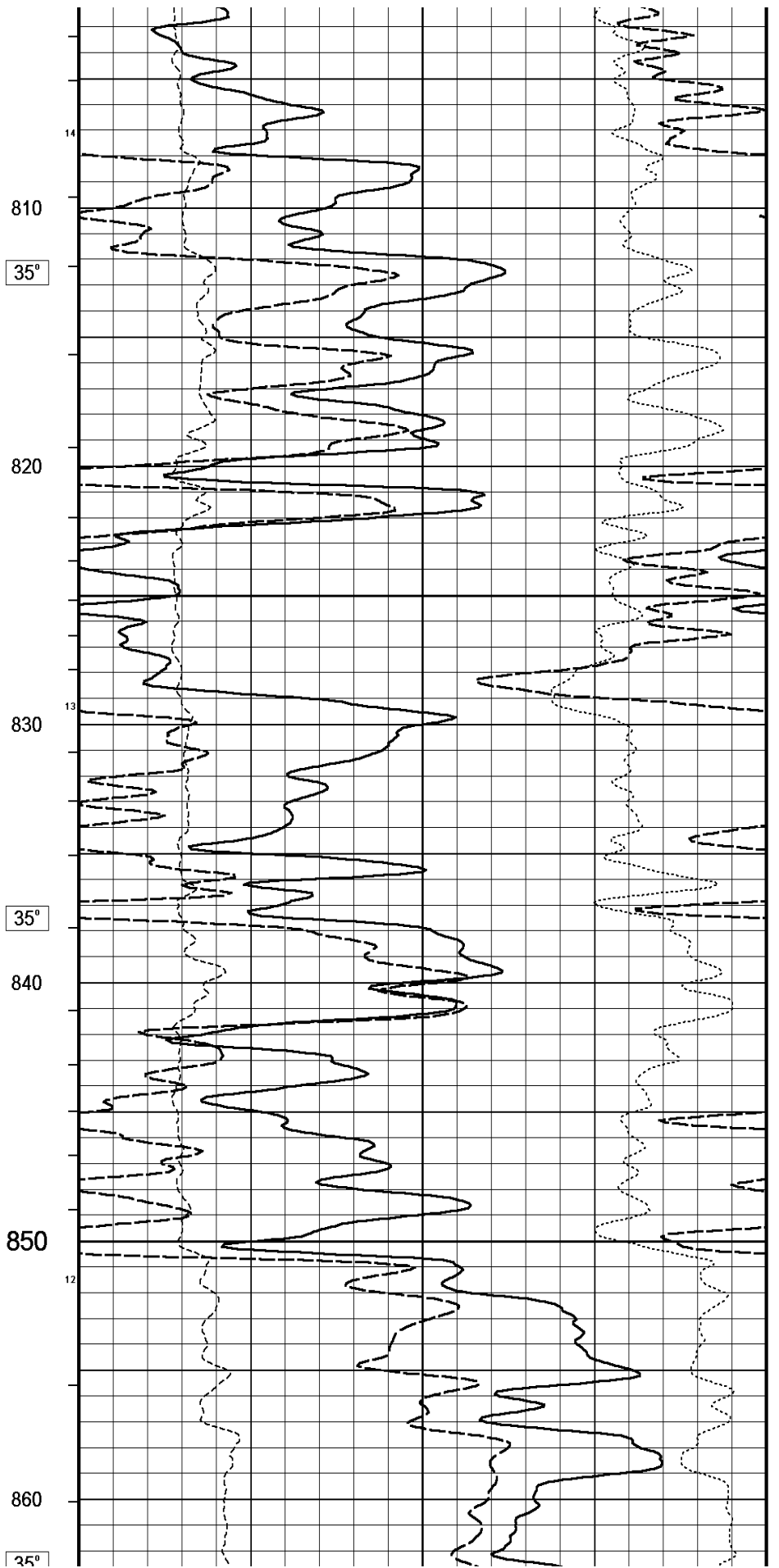
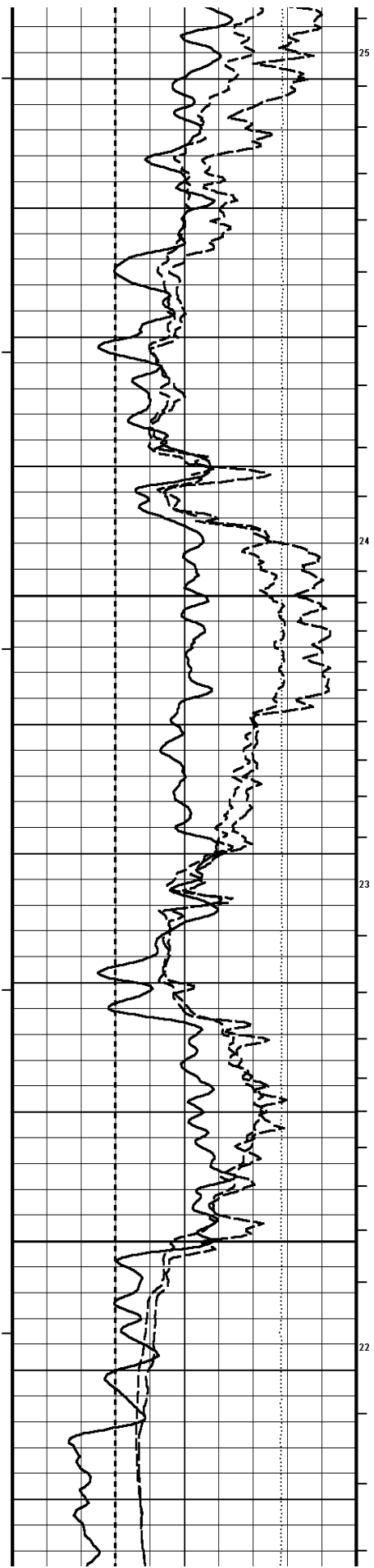


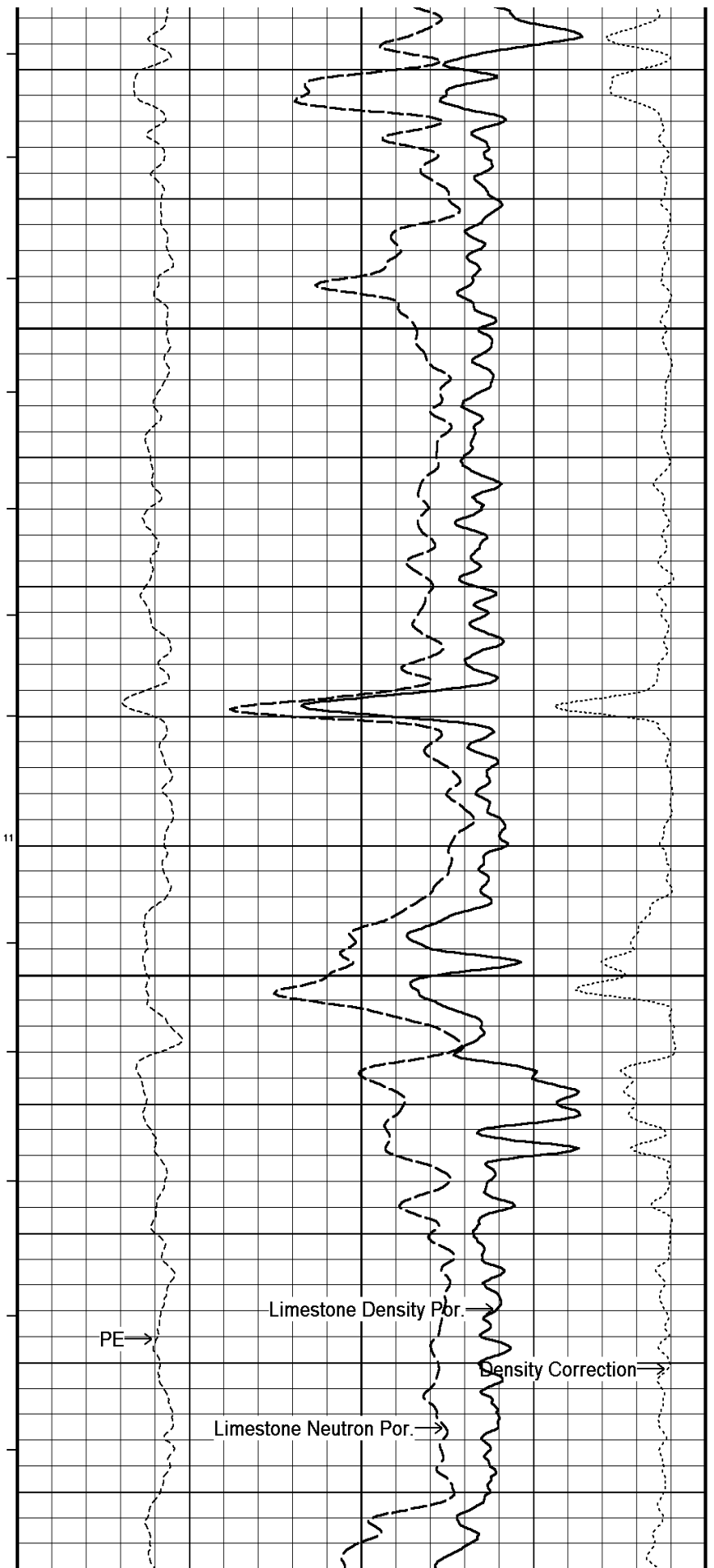
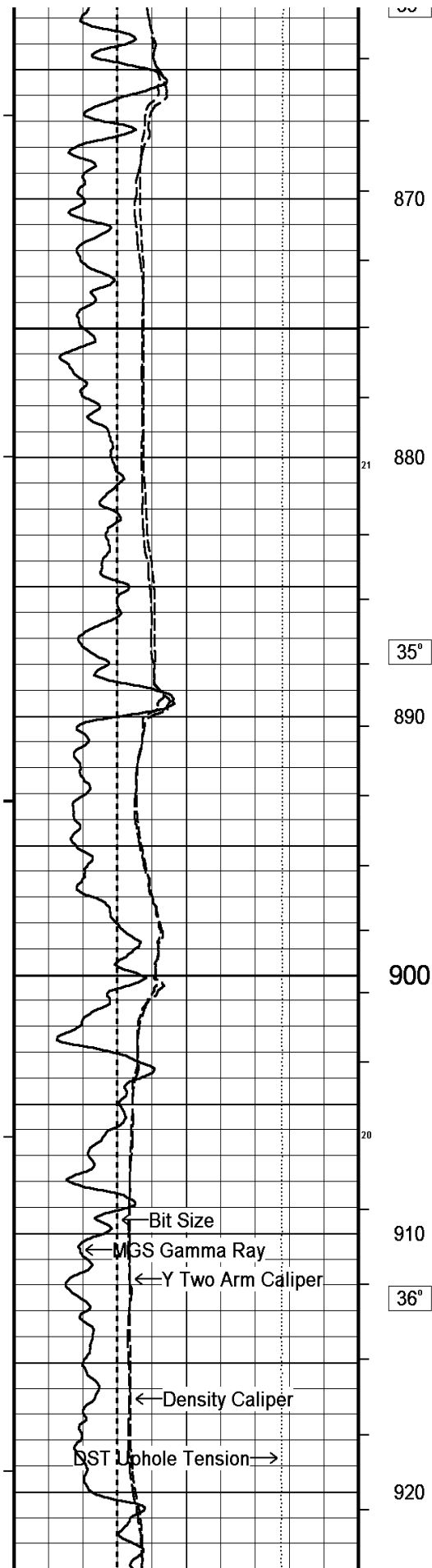


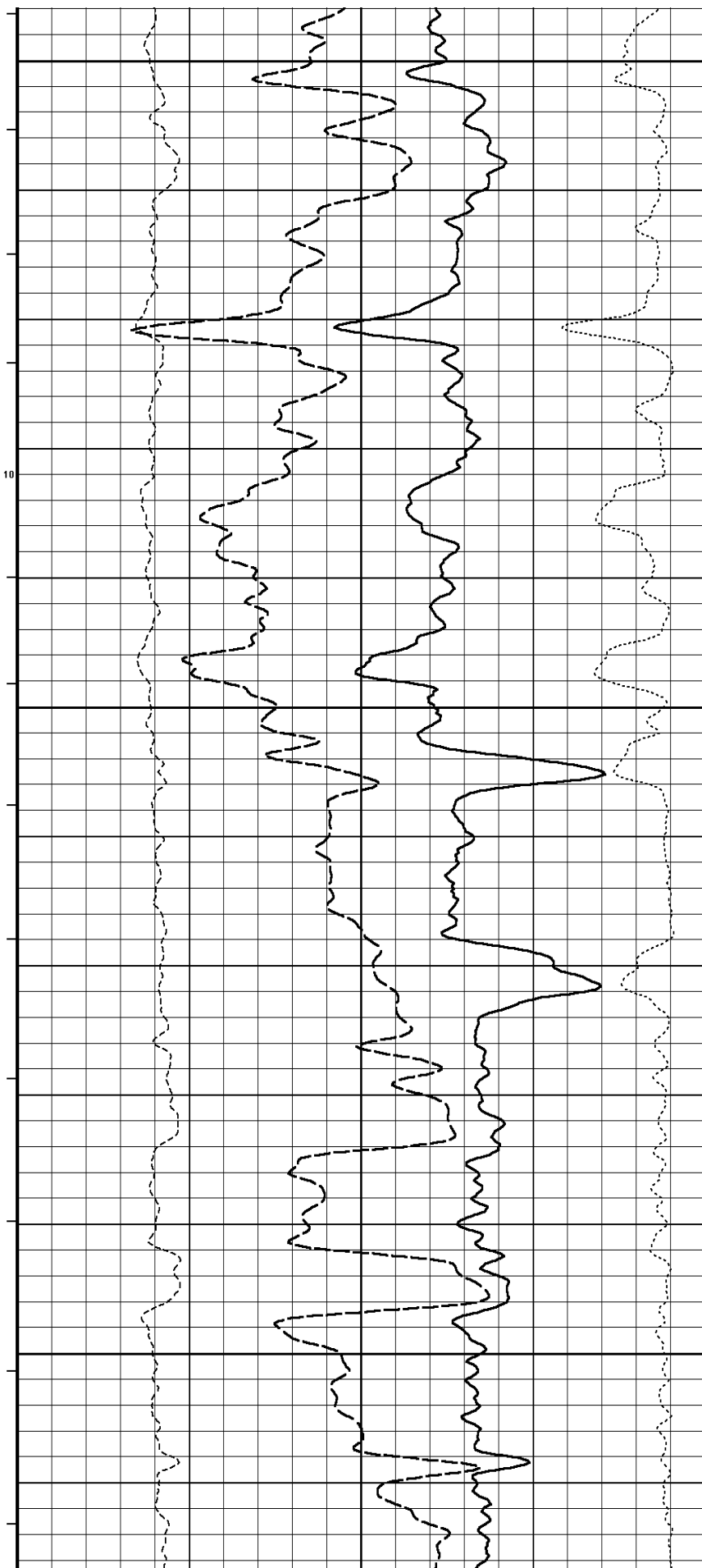
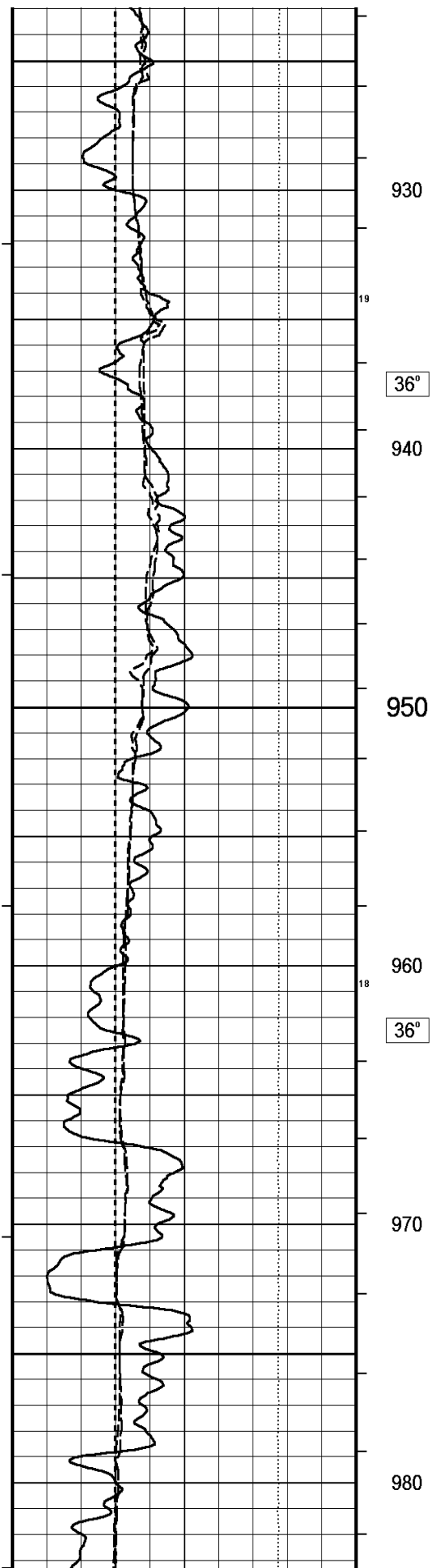


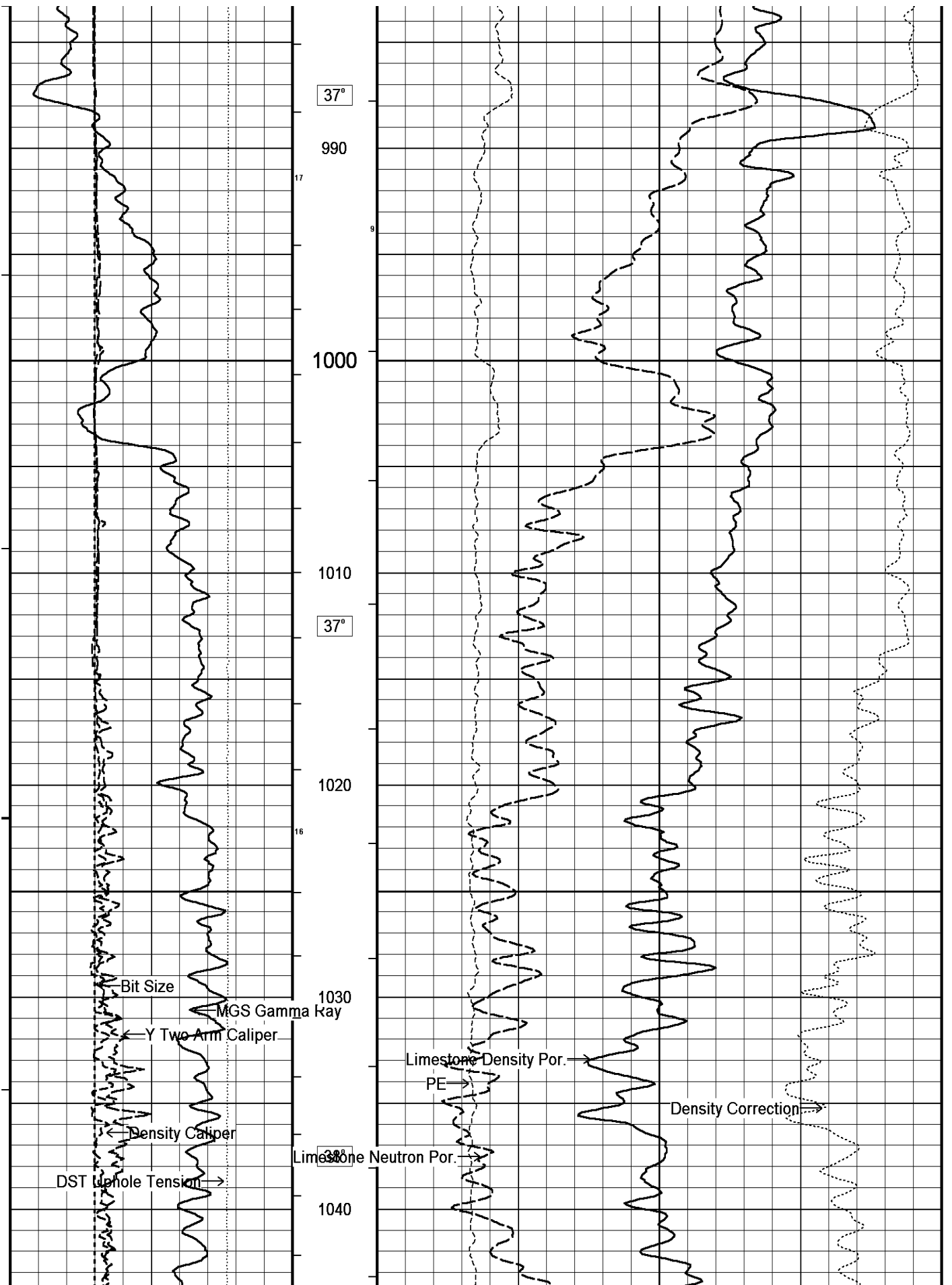


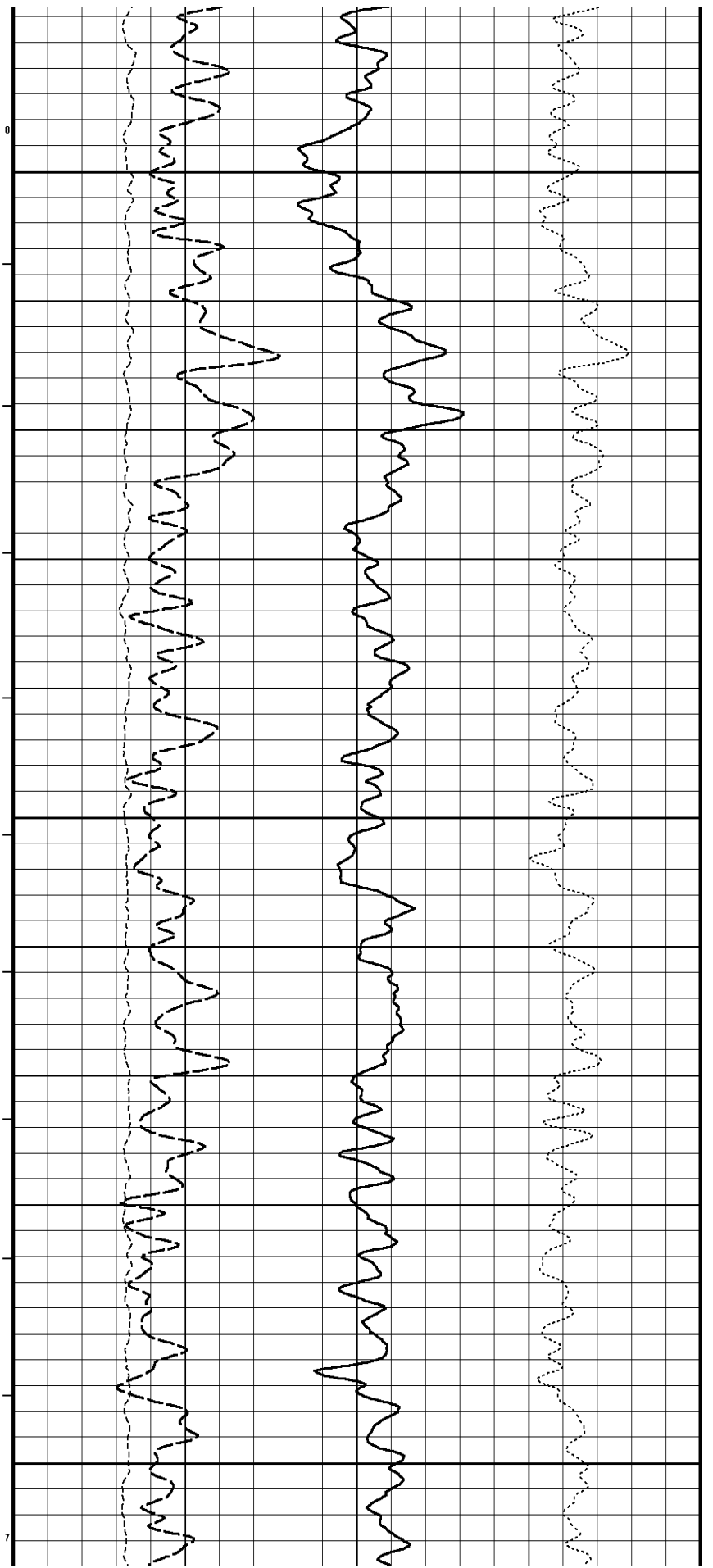
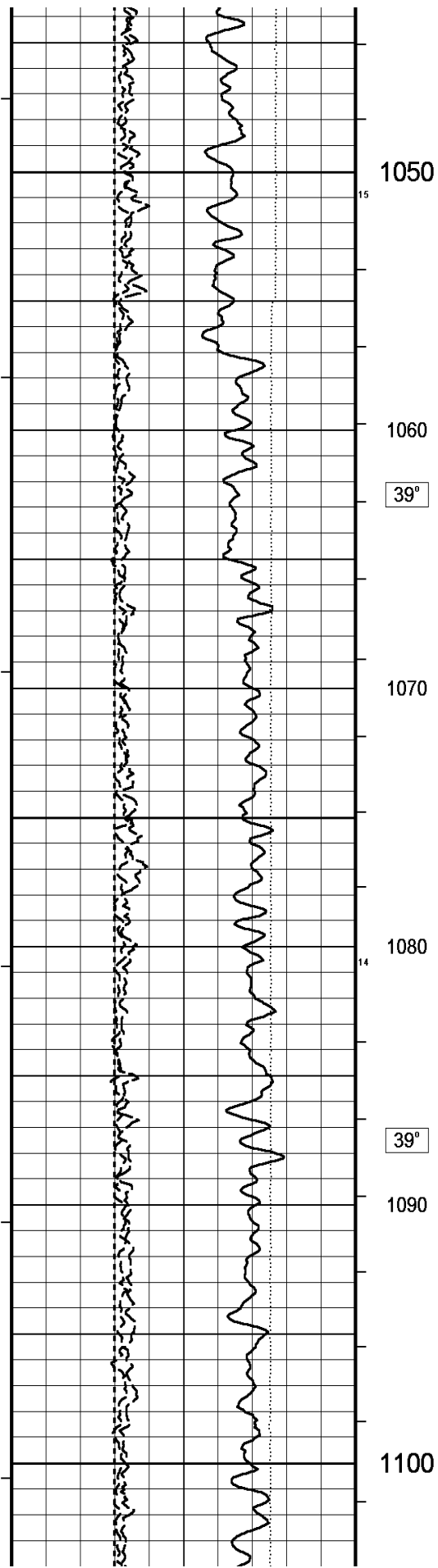


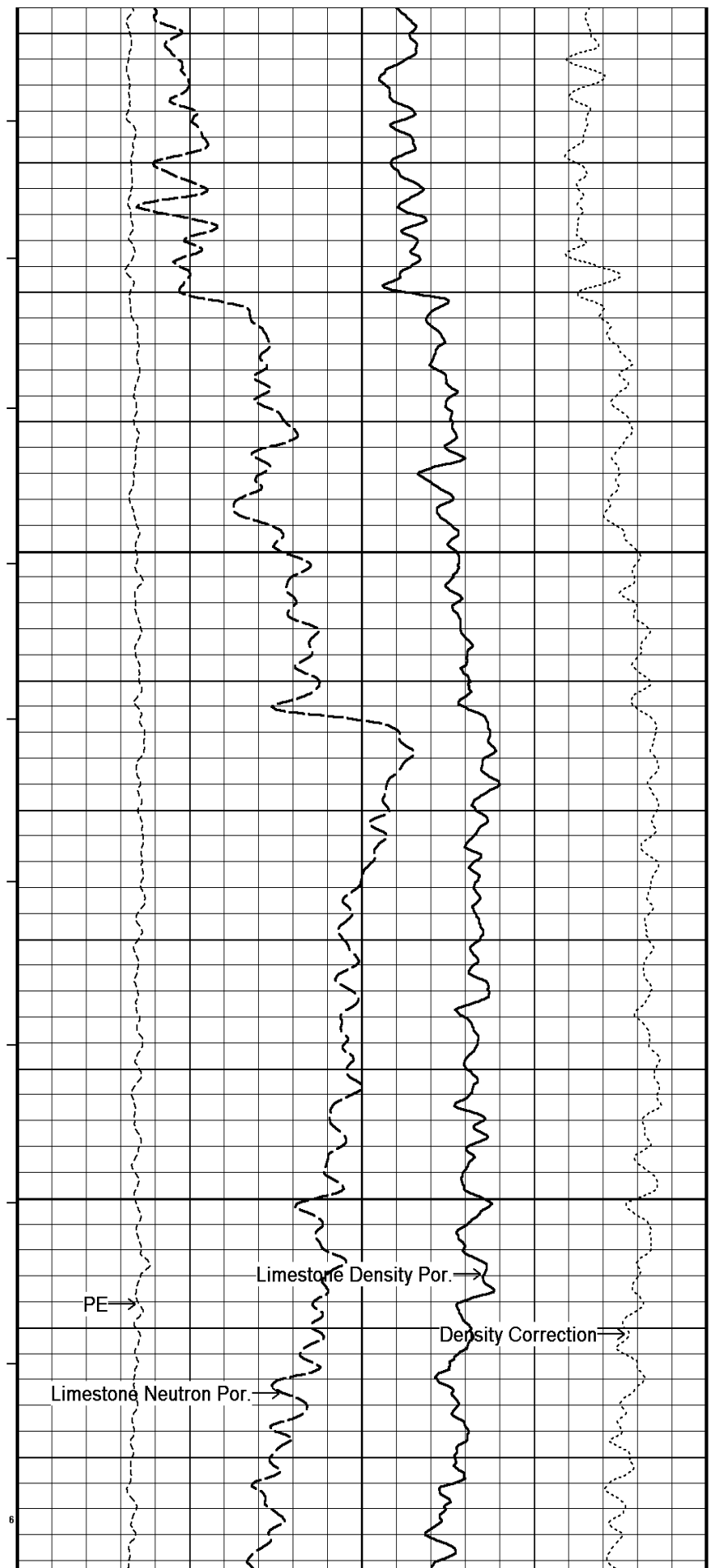
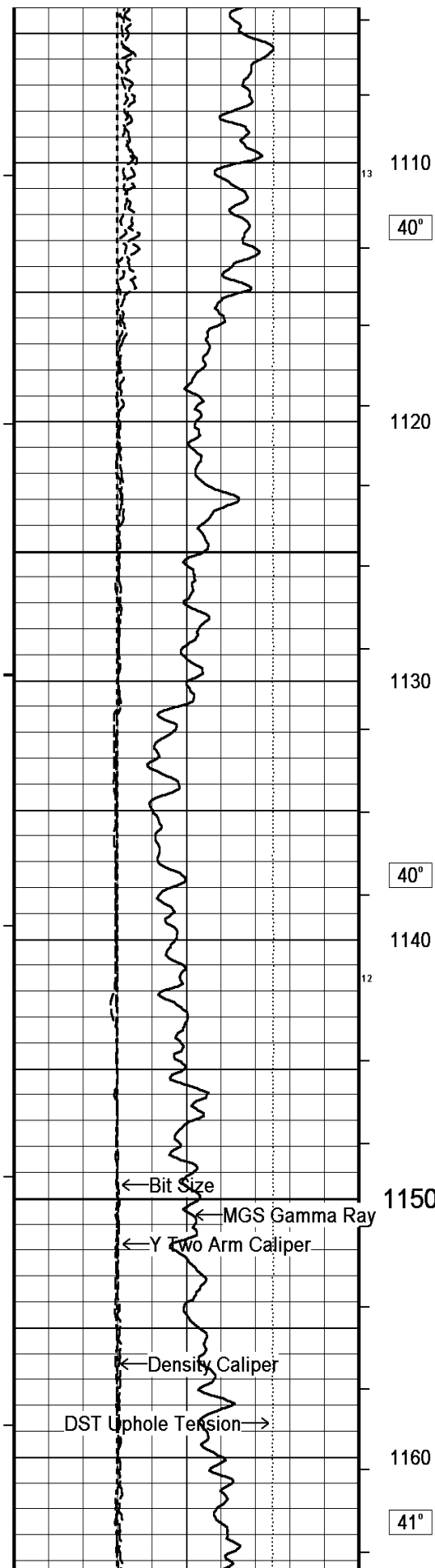


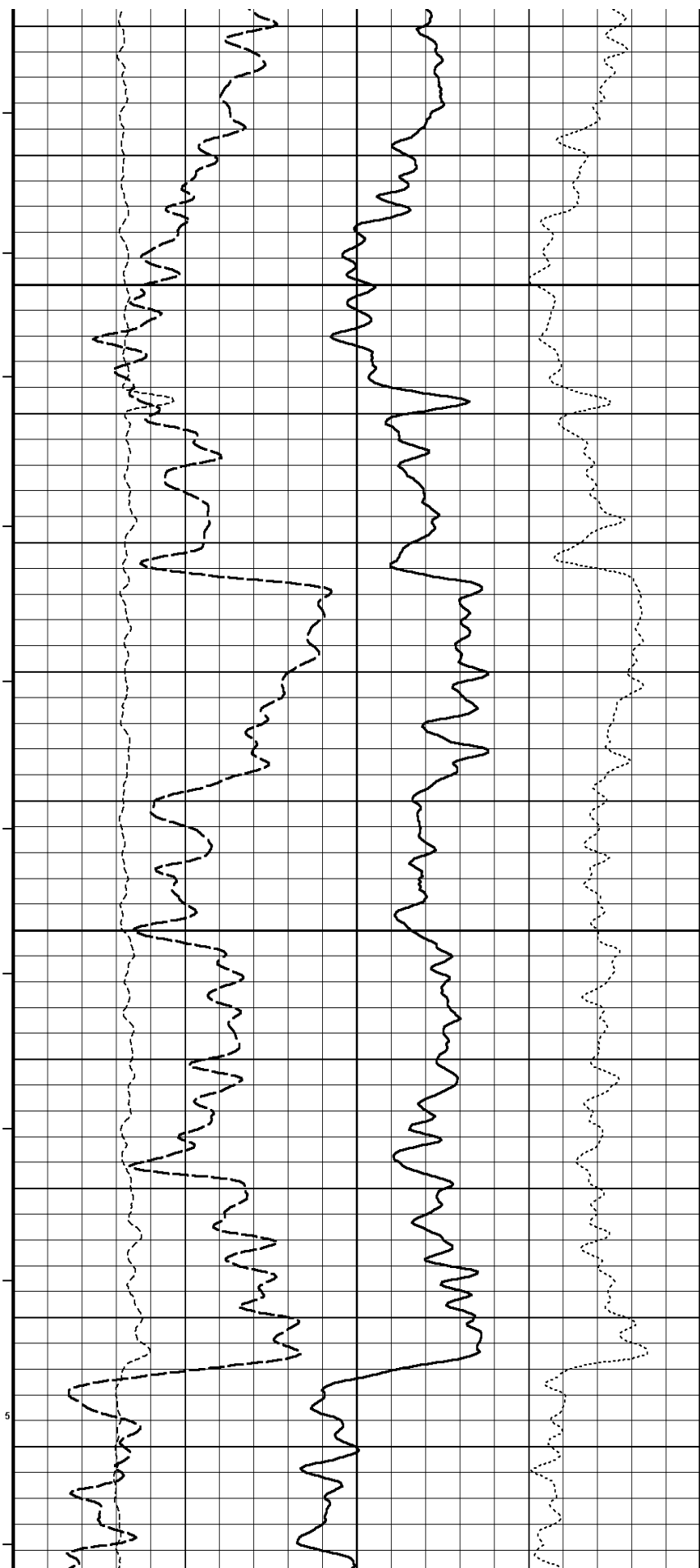
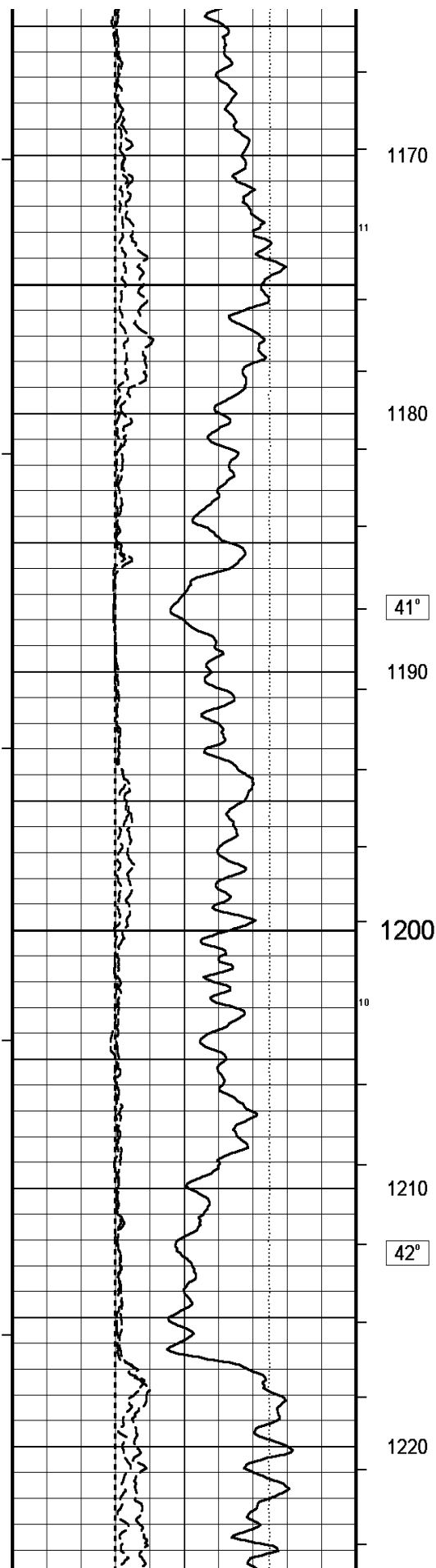


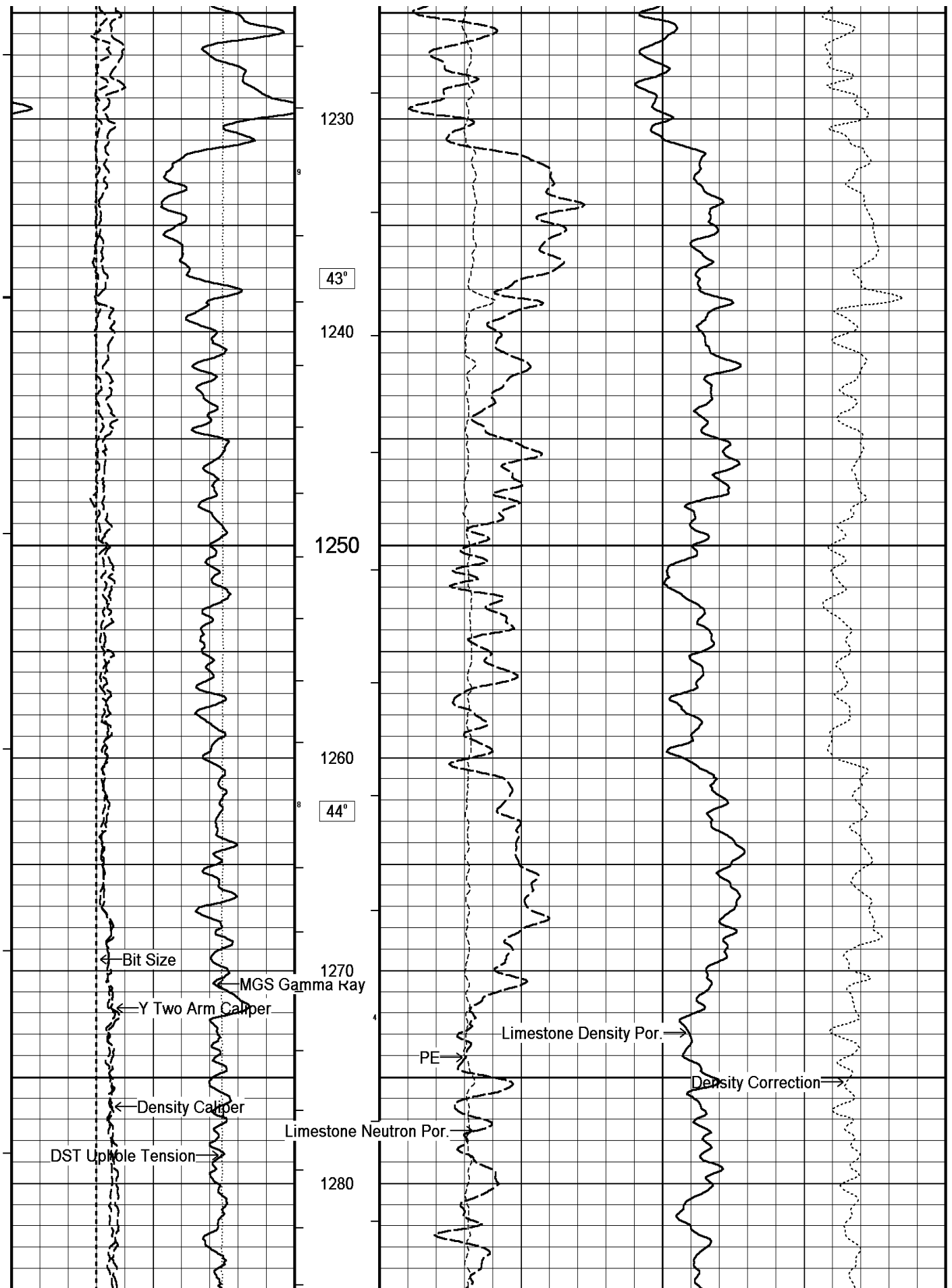


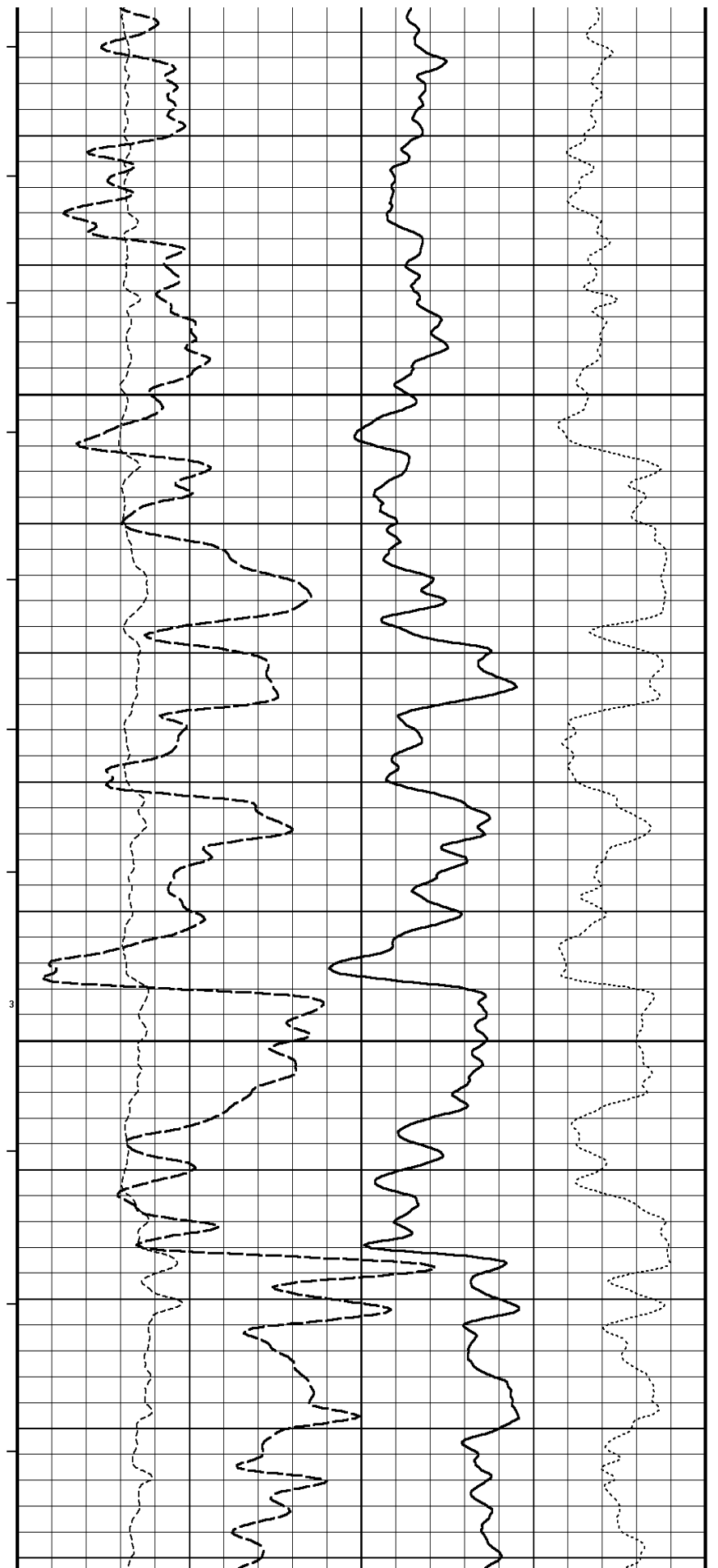
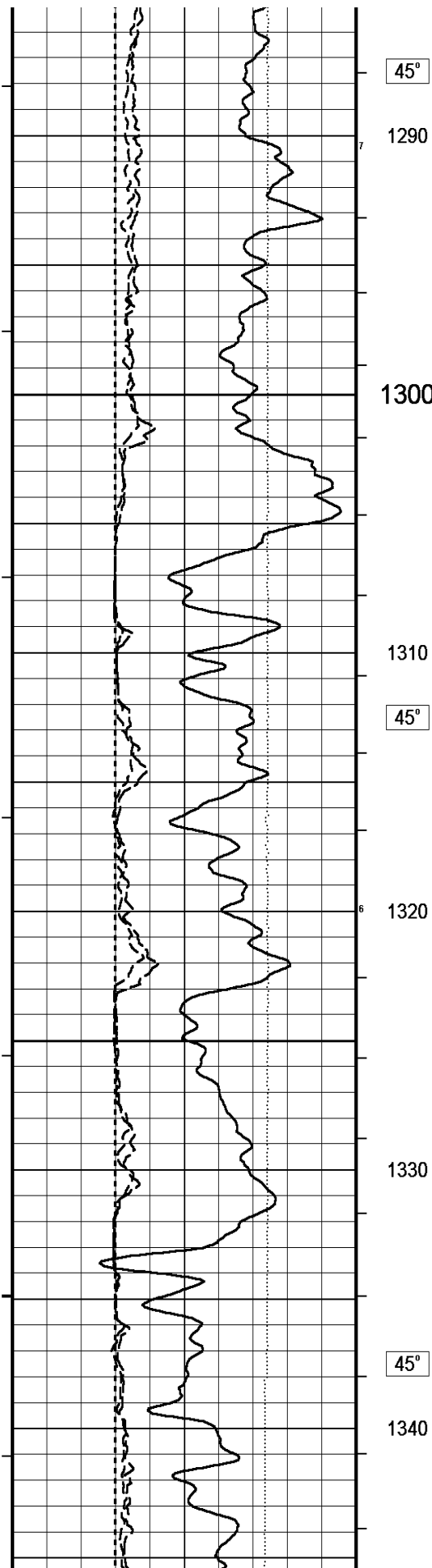


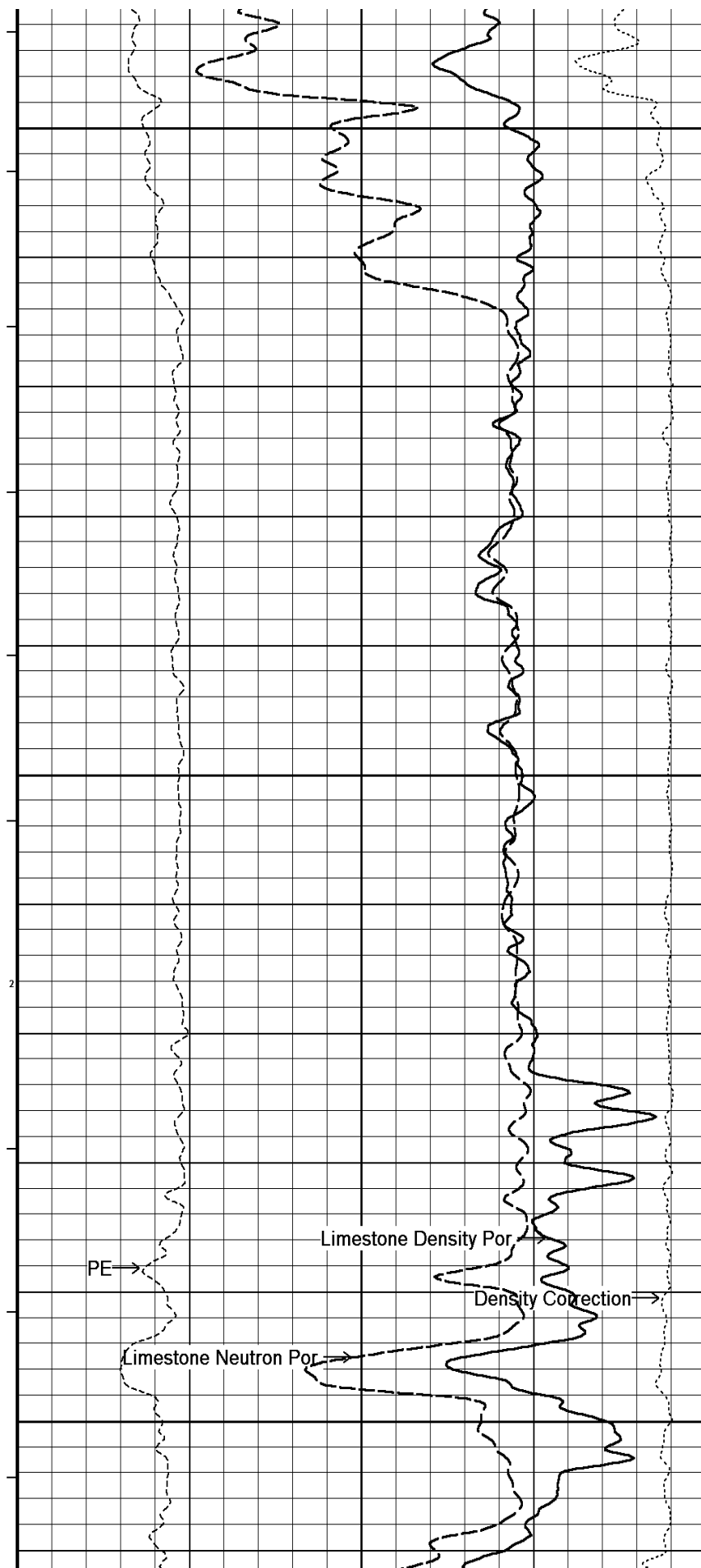
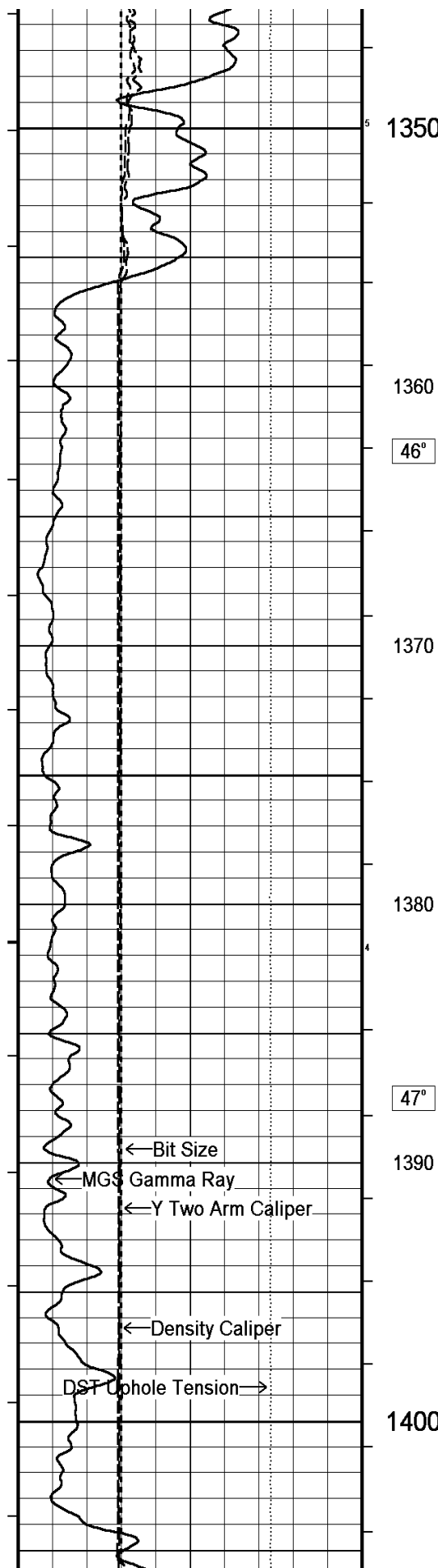


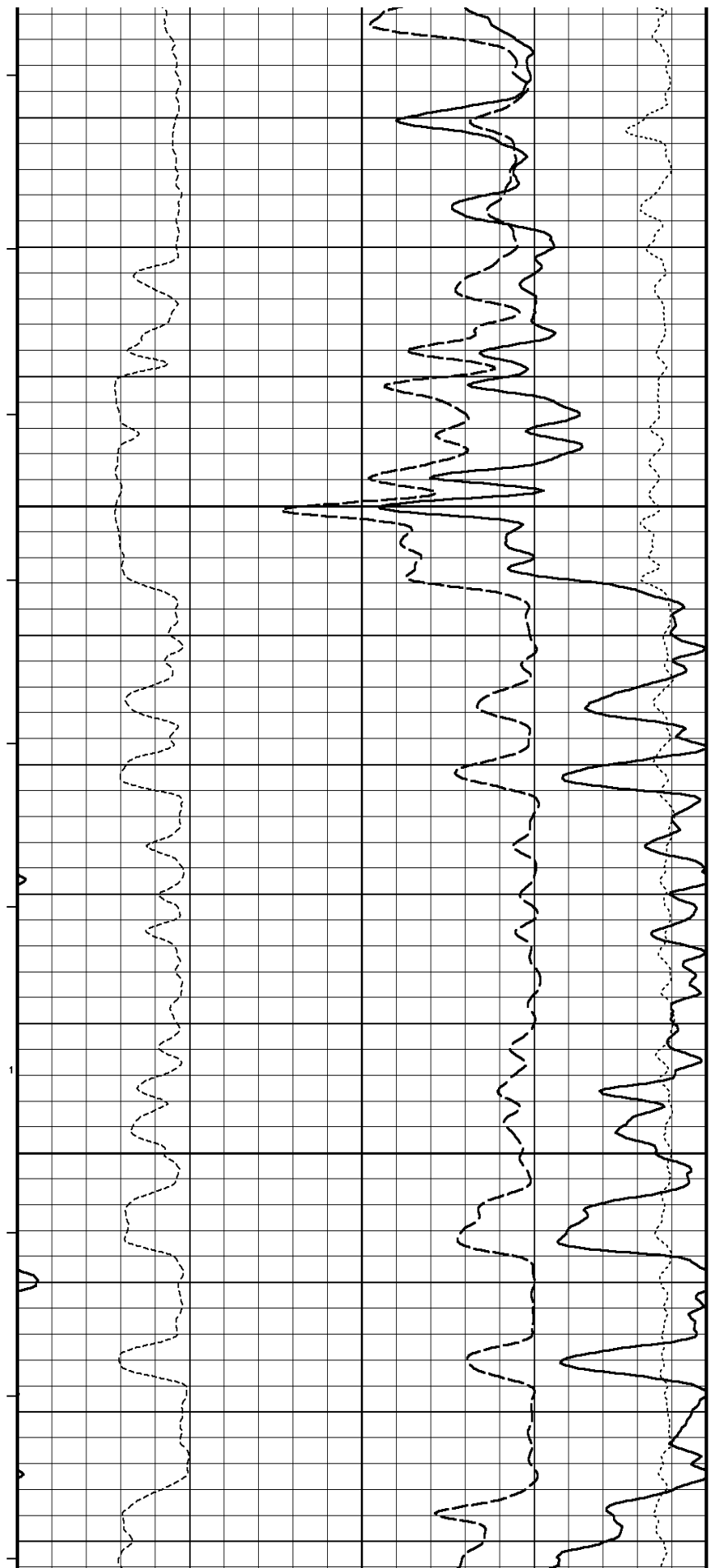
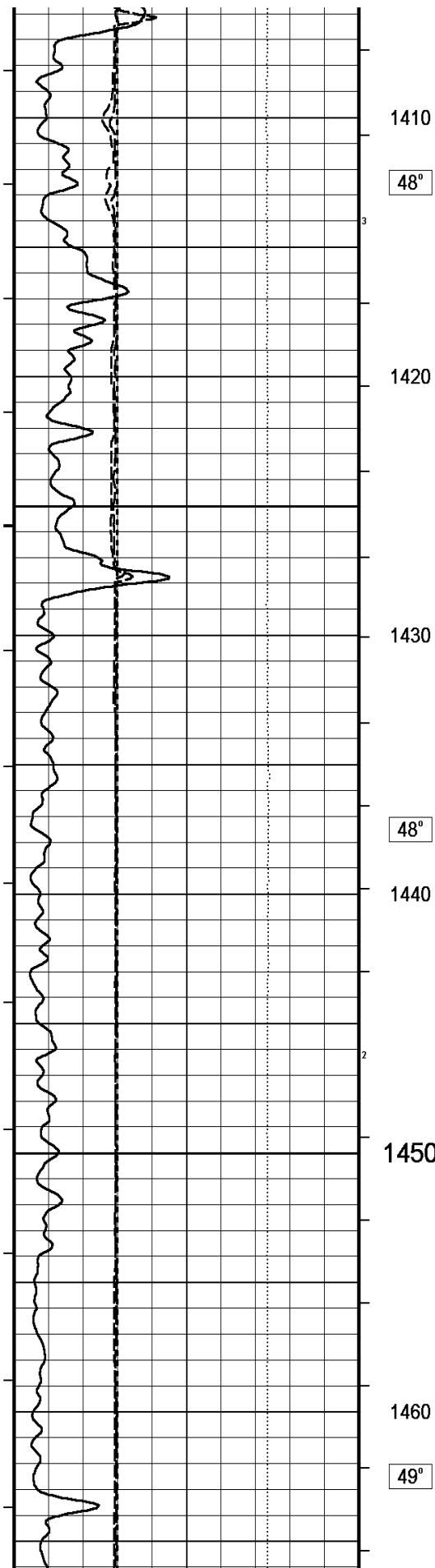


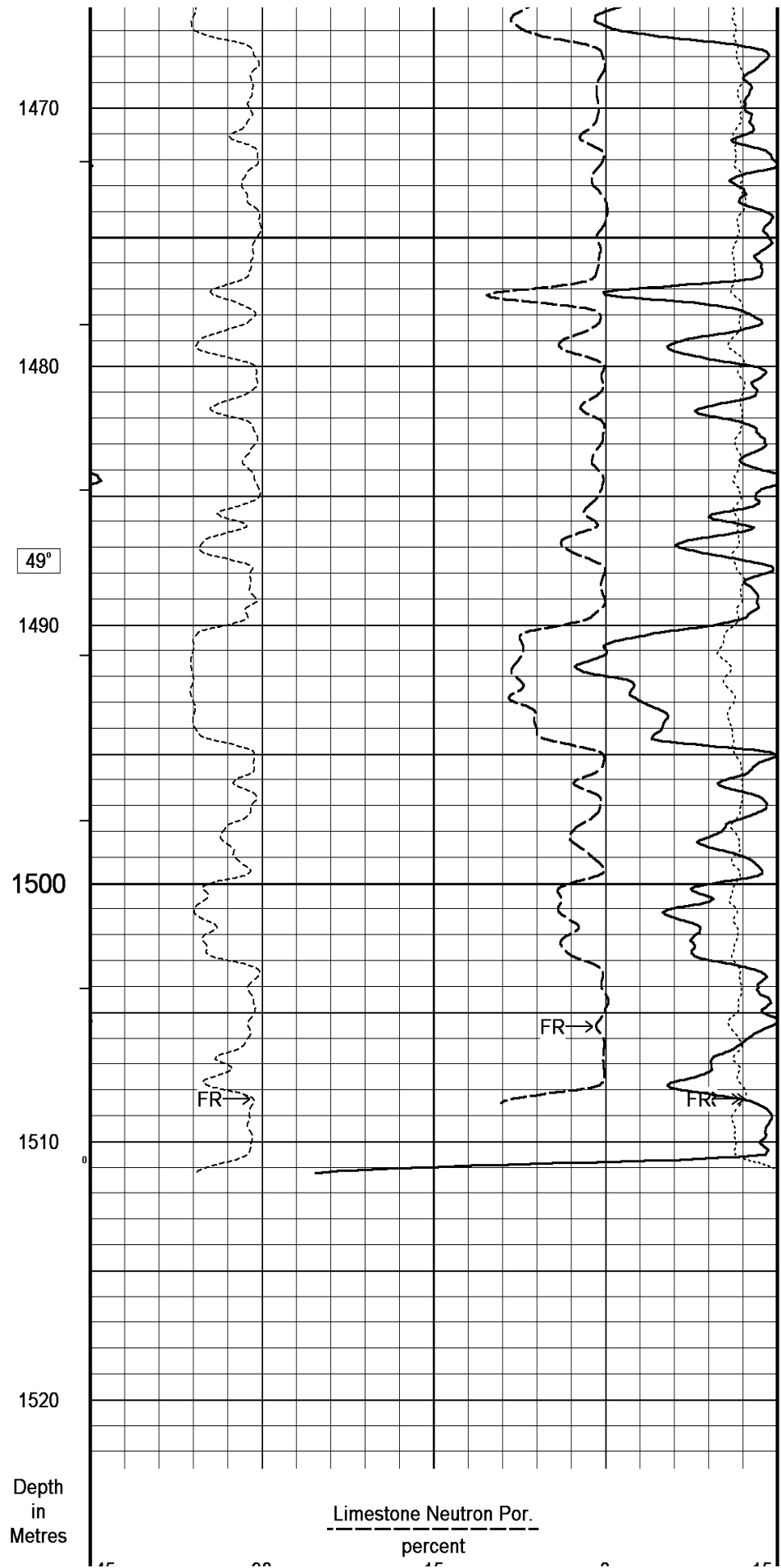
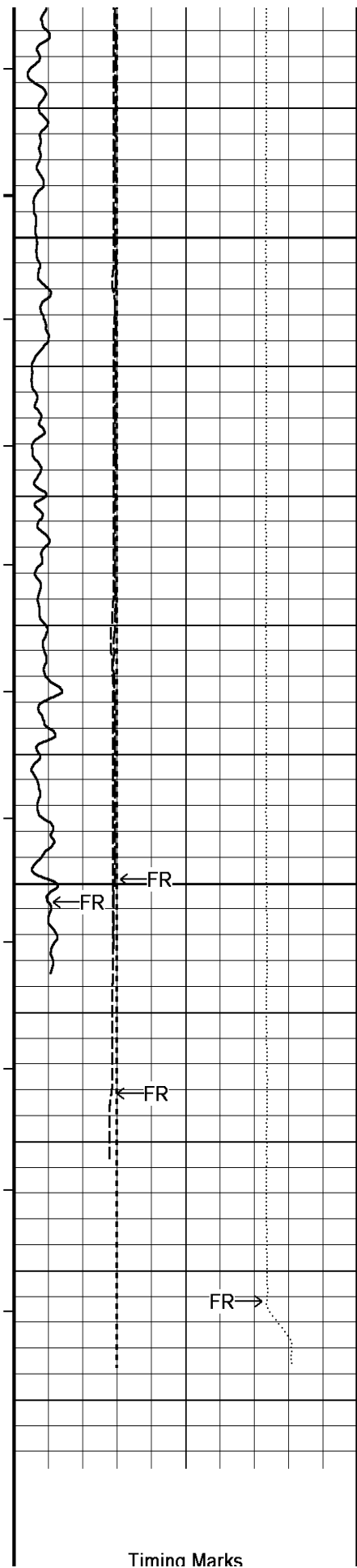


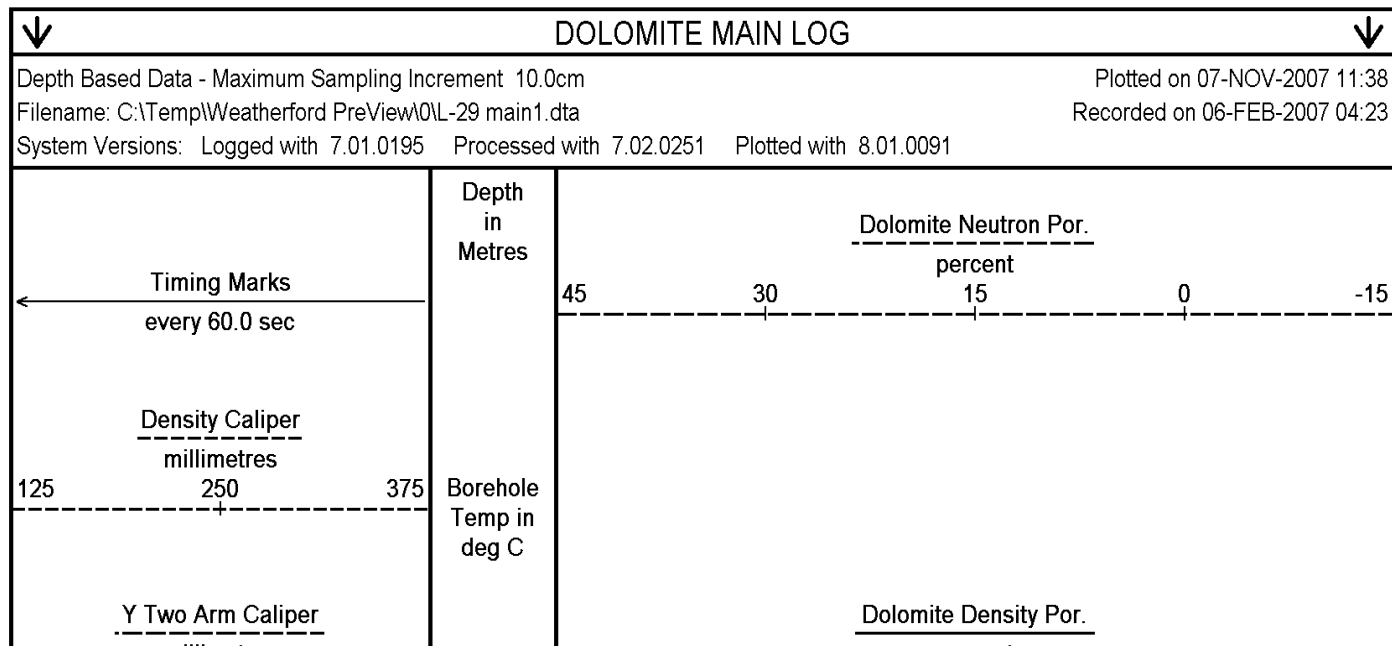
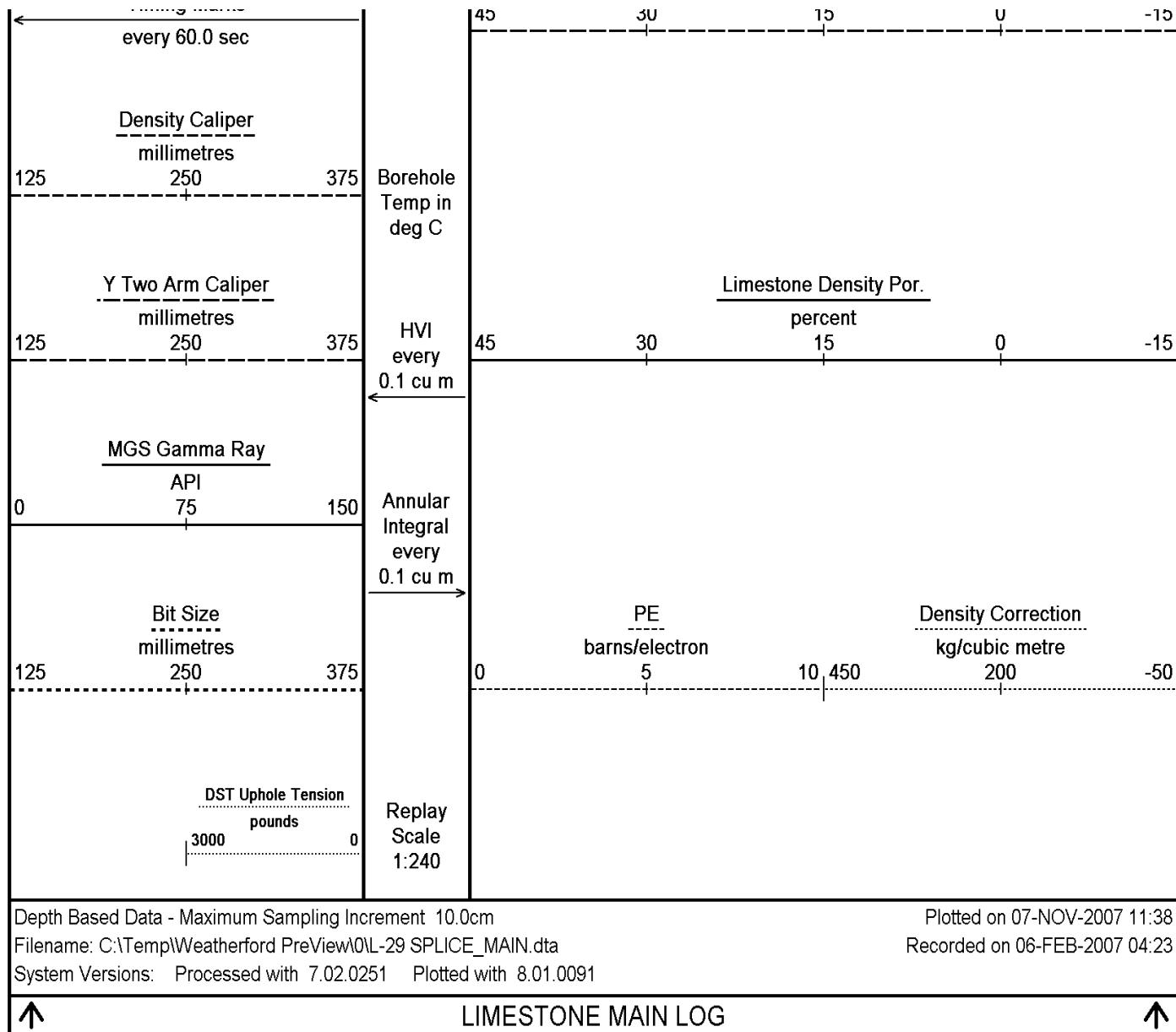


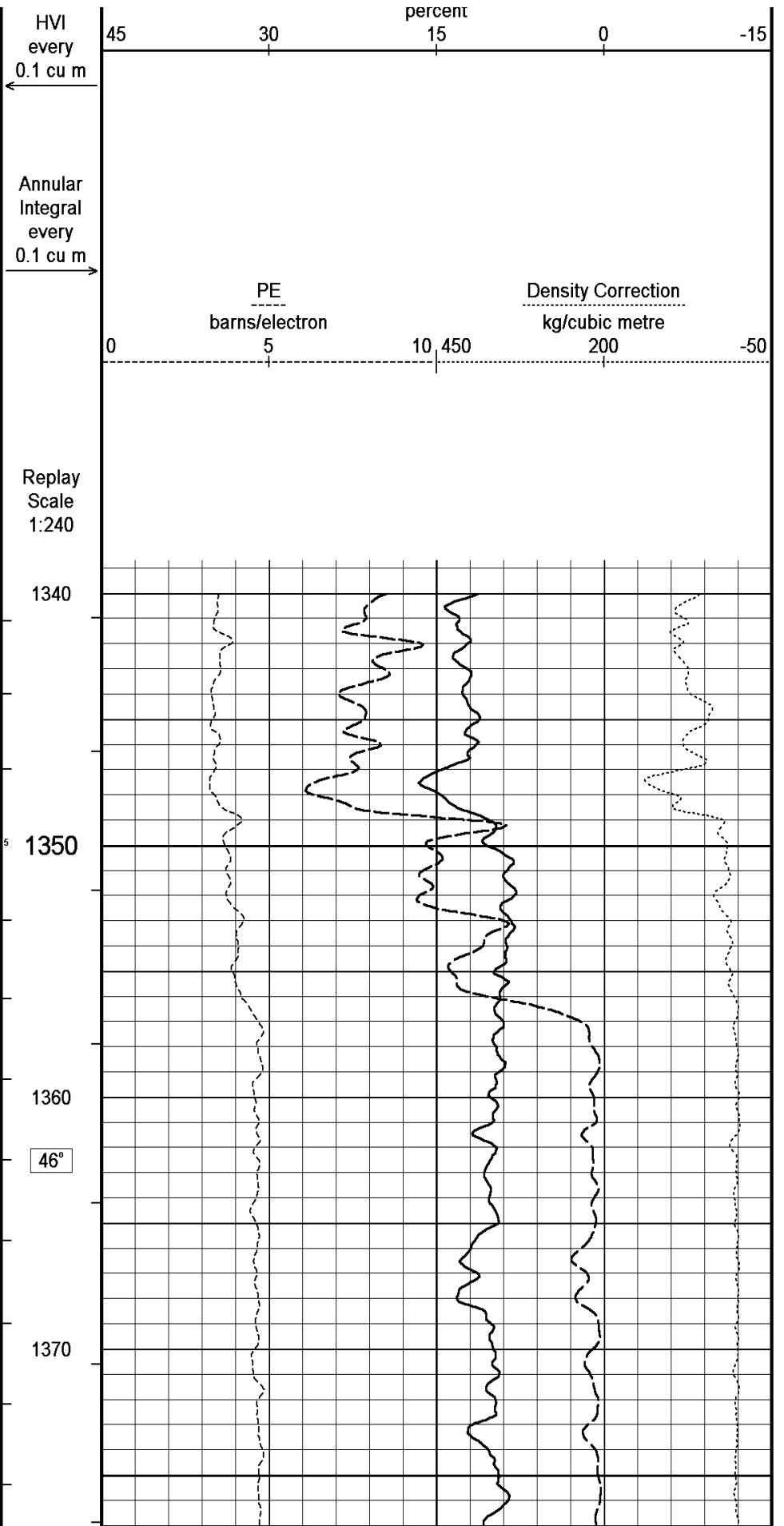
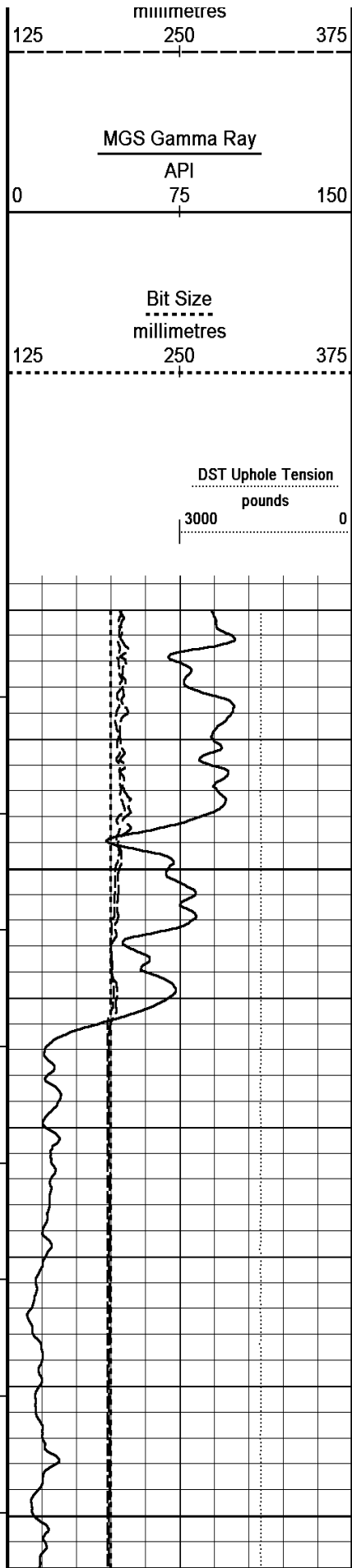


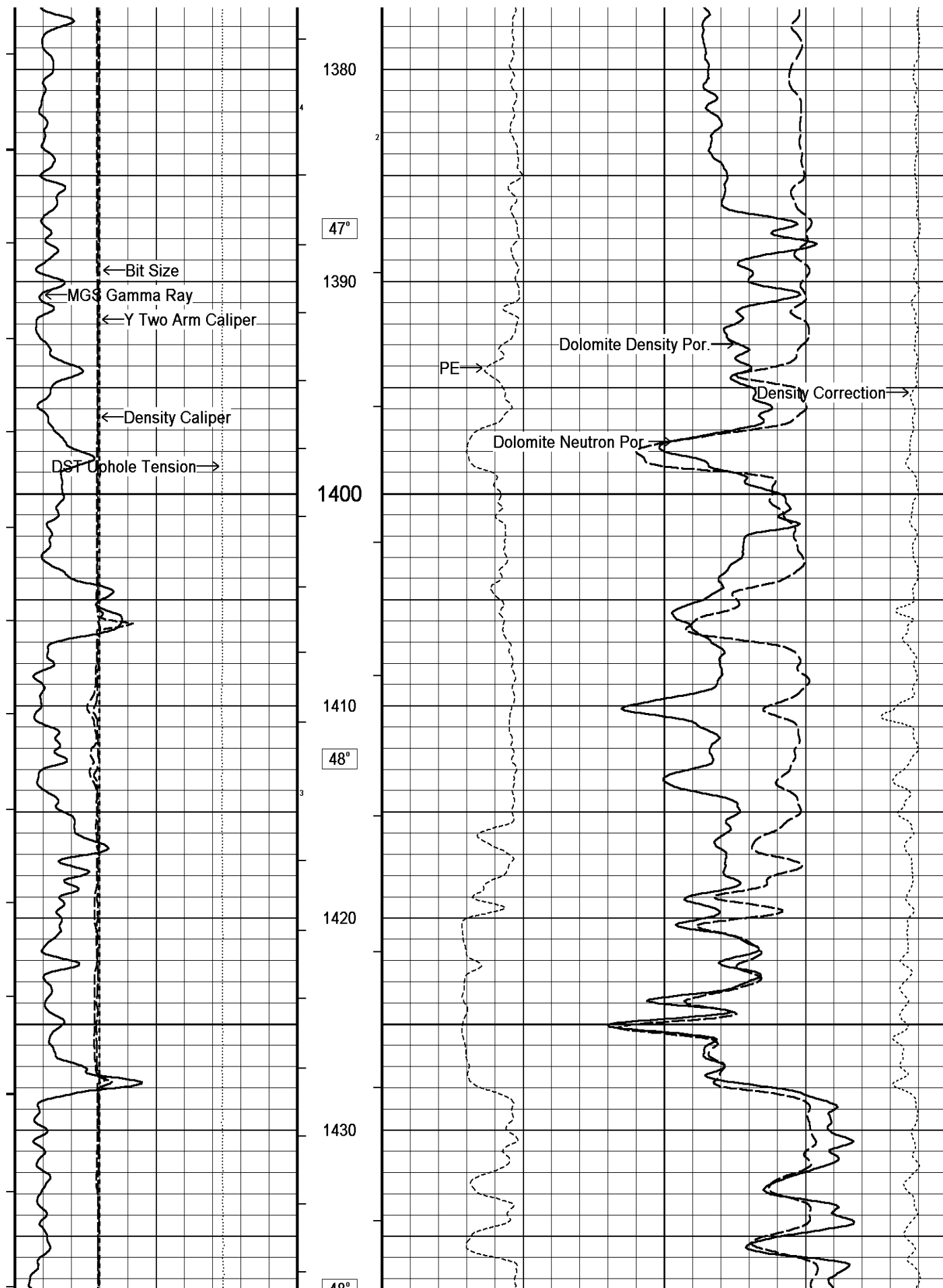


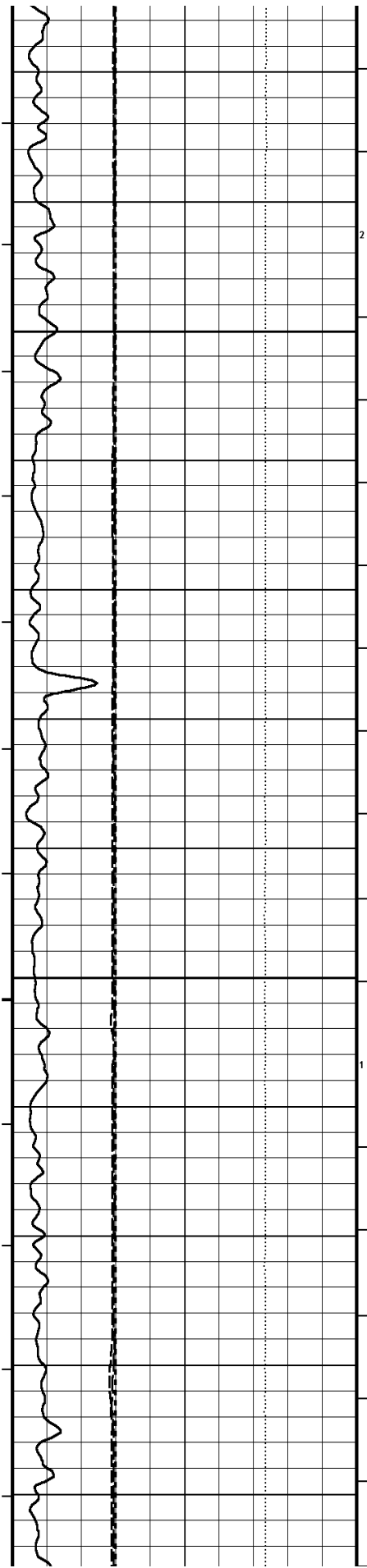












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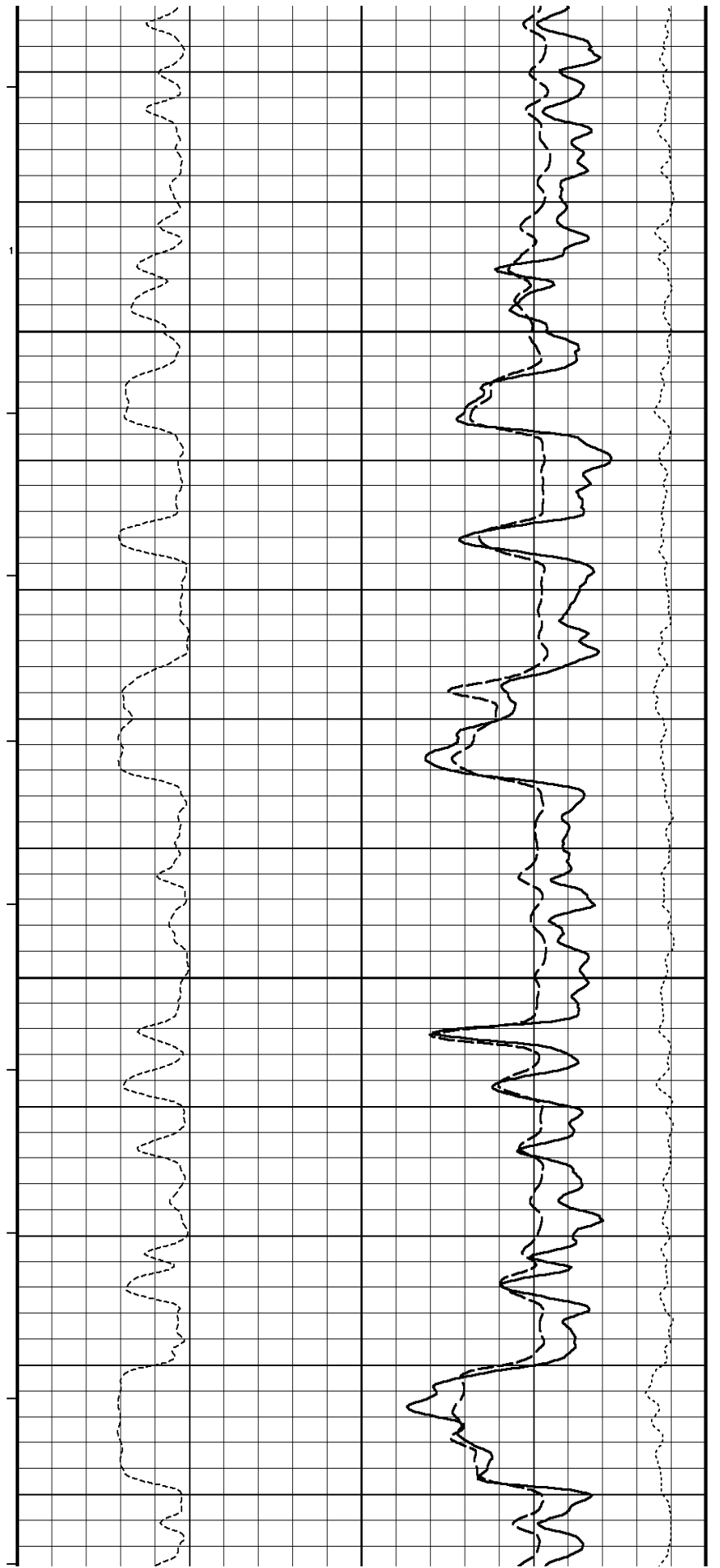
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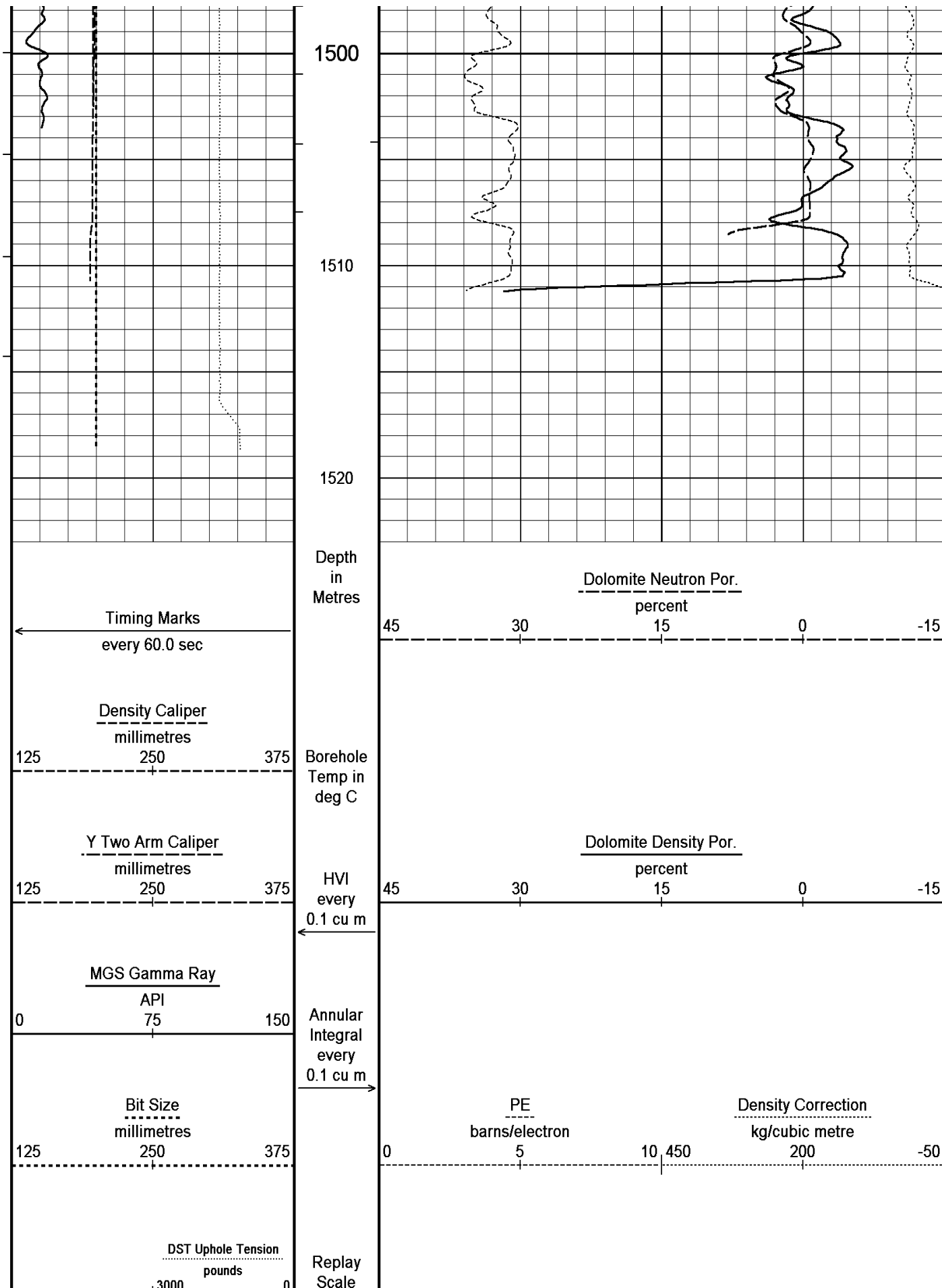
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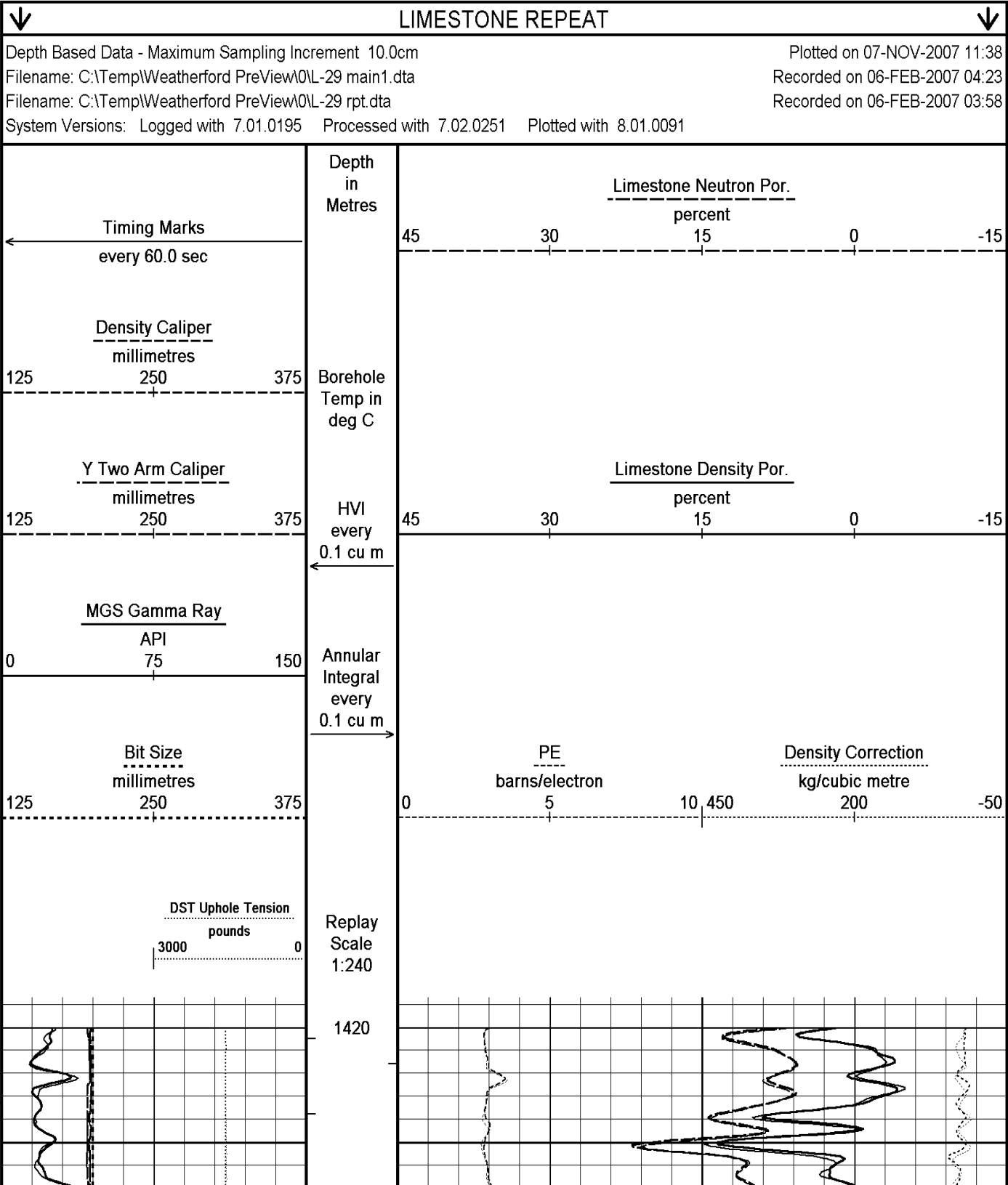
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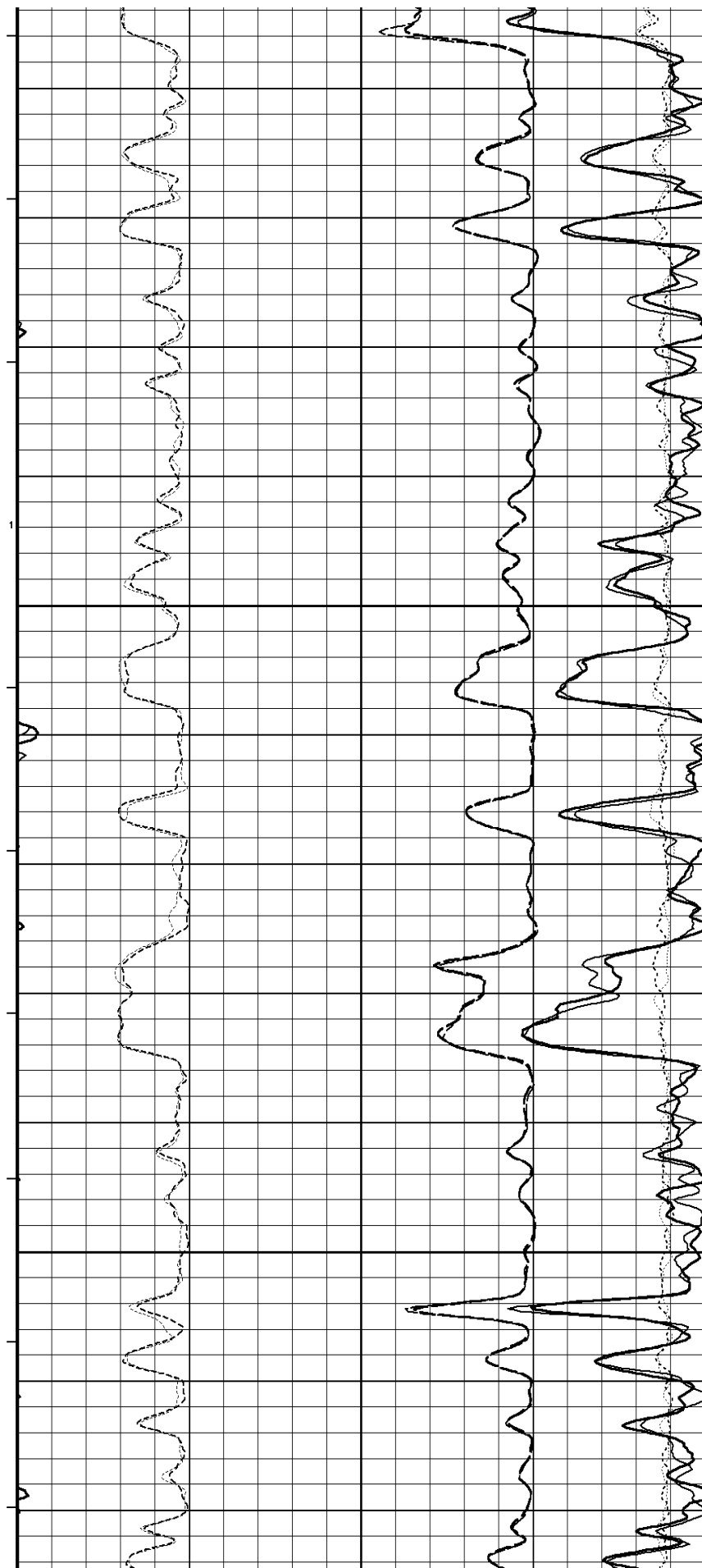
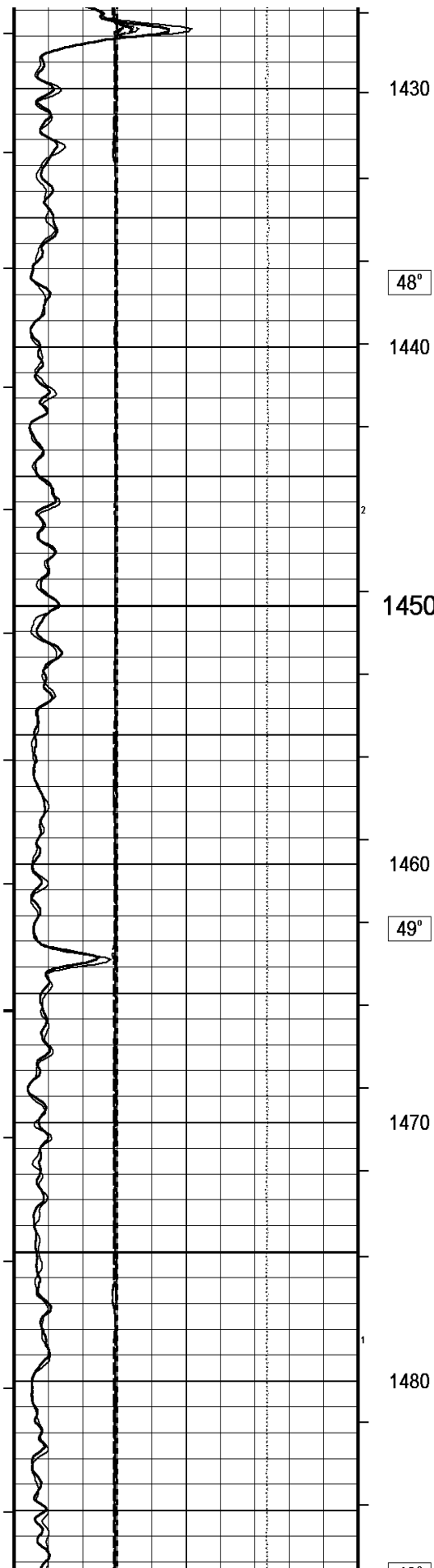
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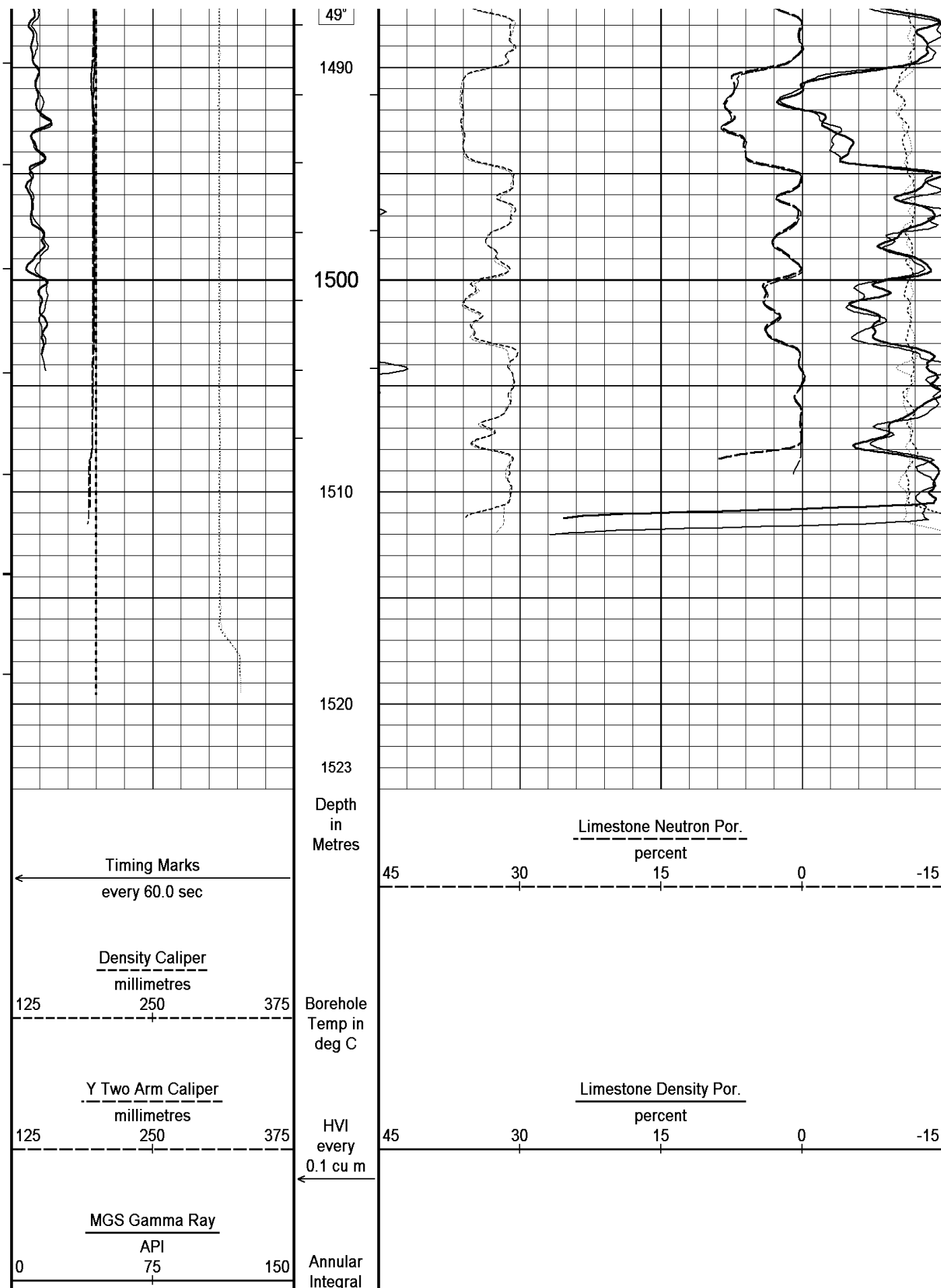


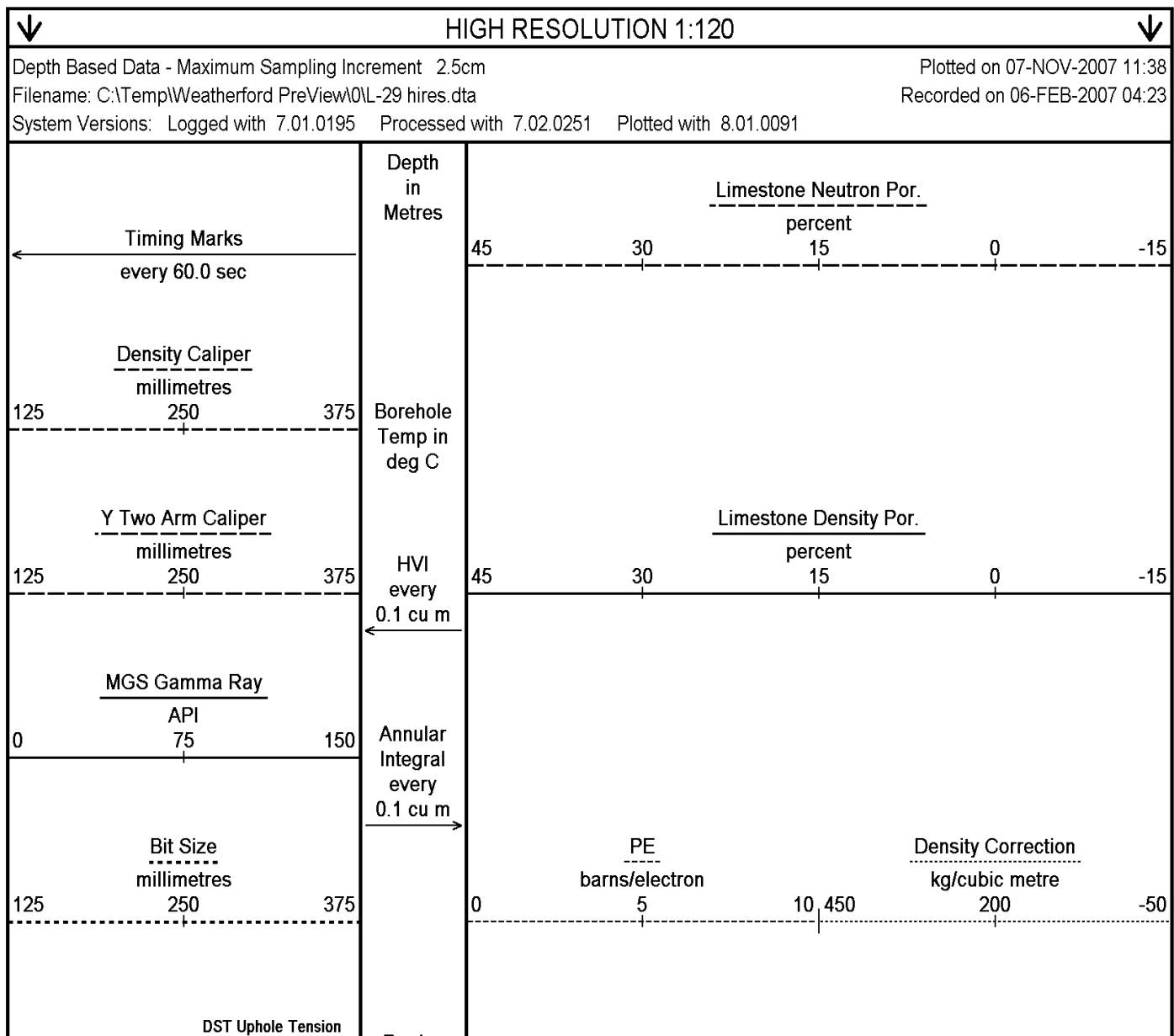
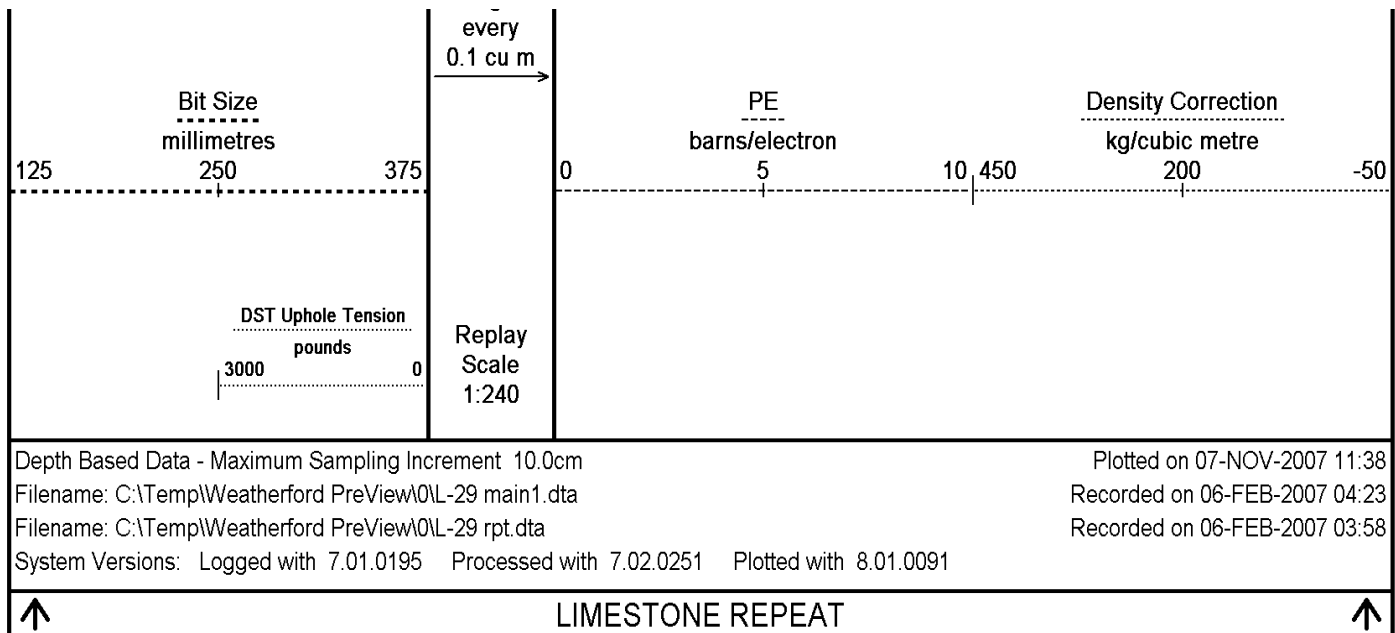


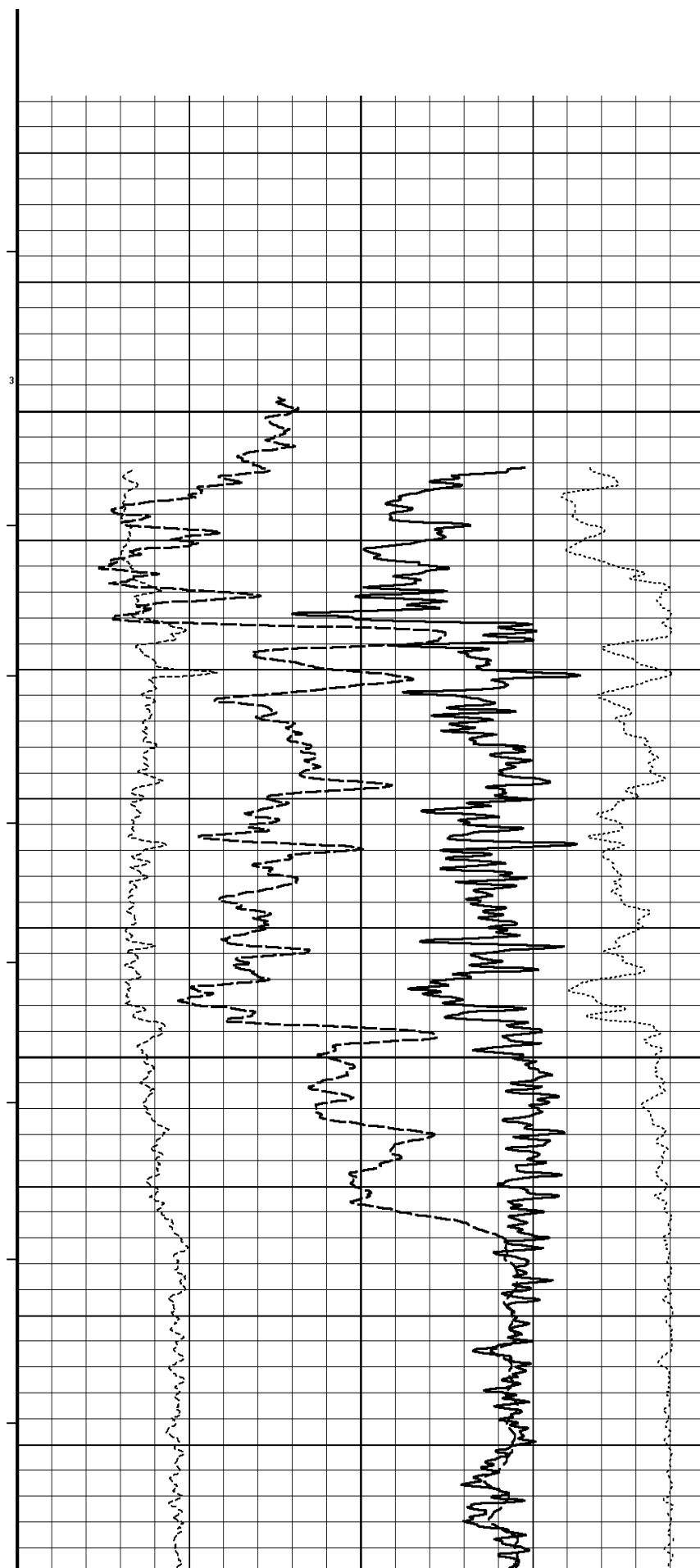
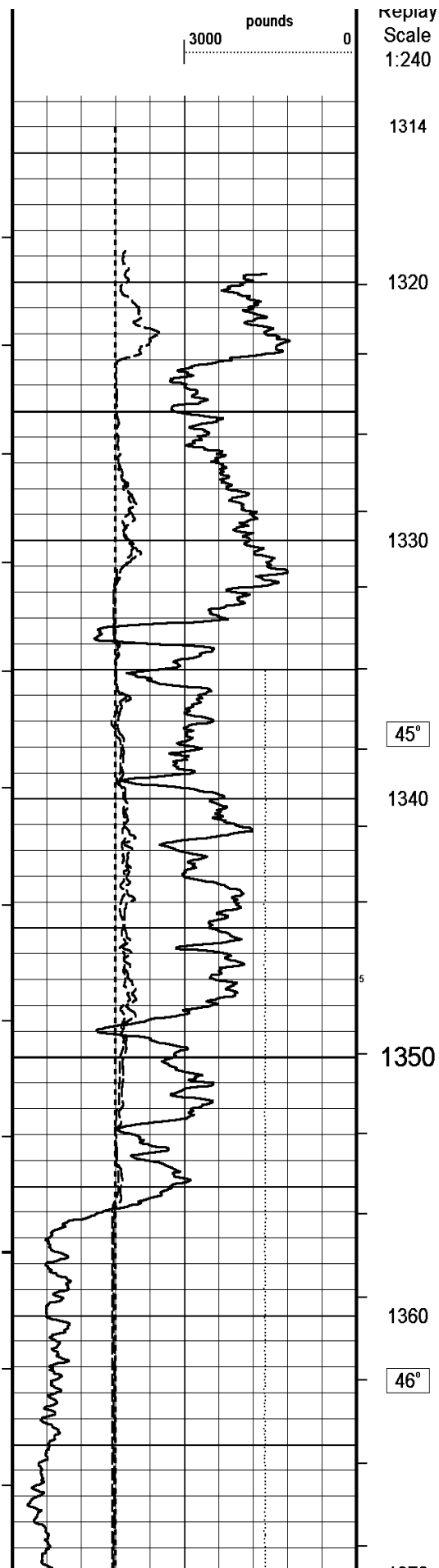
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Depth Based Data - Maximum Sampling Increment 10.0cm		Plotted on 07-NOV-2007 11:38
Filename: C:\Temp\Weatherford PreView\0\L-29 main1.dta		Recorded on 06-FEB-2007 04:23
System Versions: Logged with 7.01.0195 Processed with 7.02.0251 Plotted with 8.01.0091		
↑	DOLOMITE MAIN LOG	↑

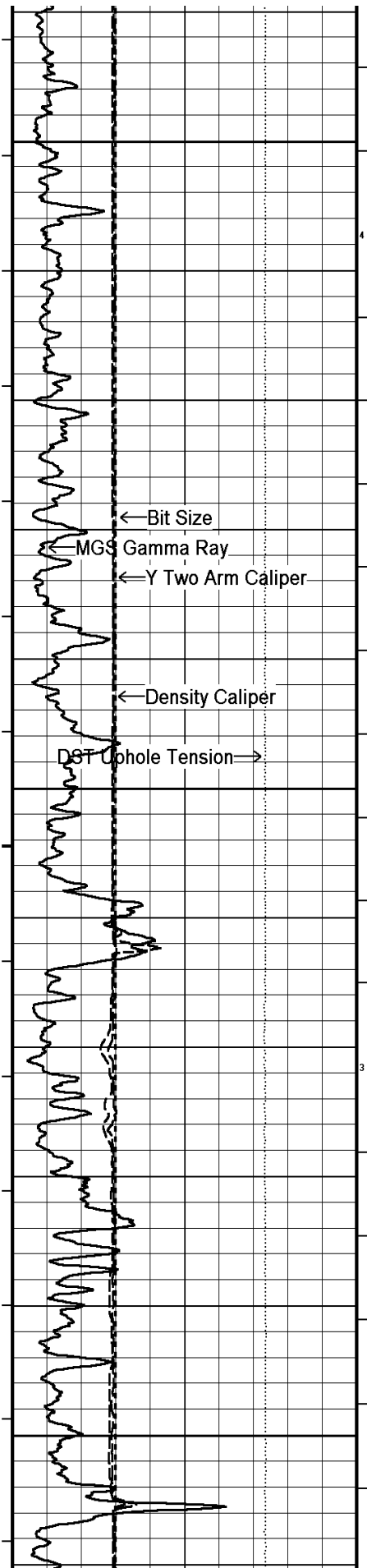












1370

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1400

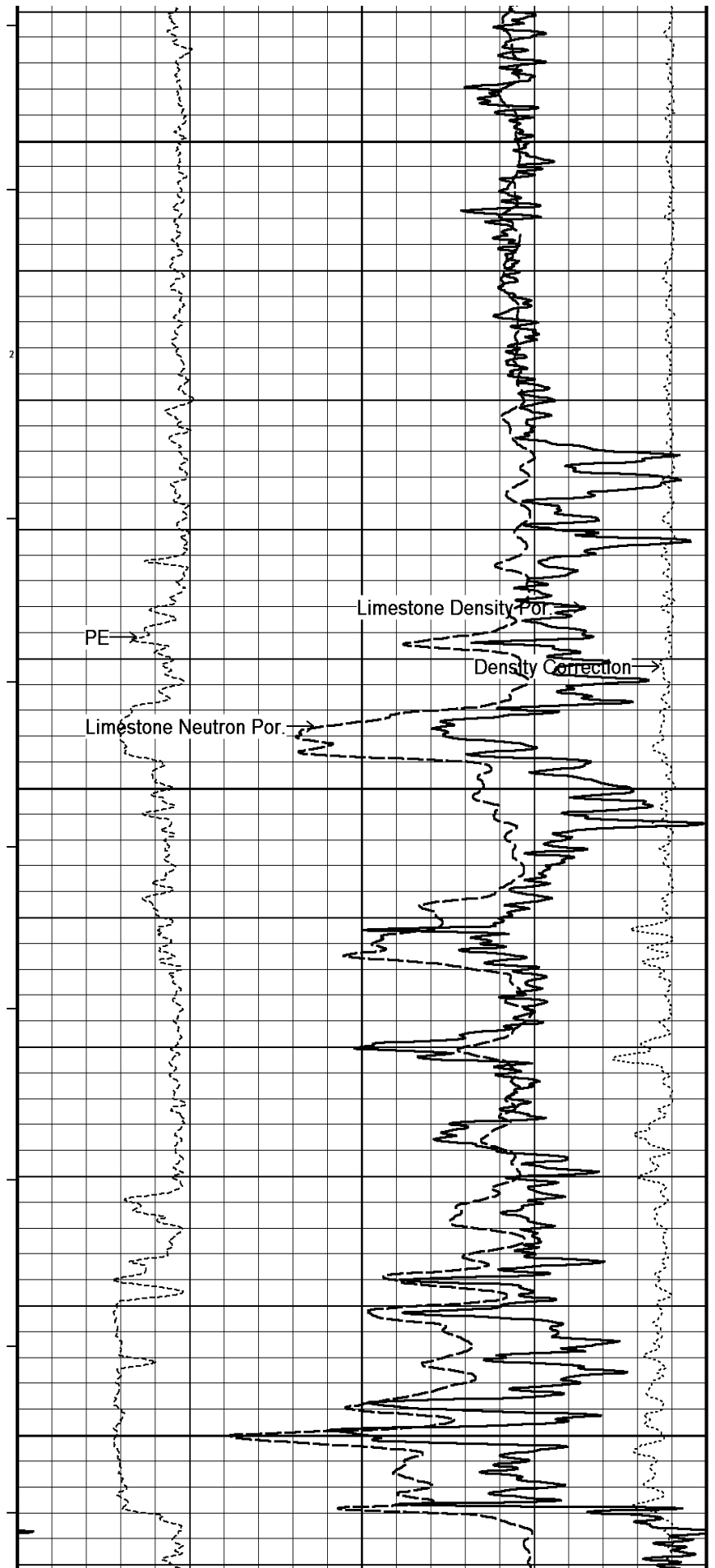
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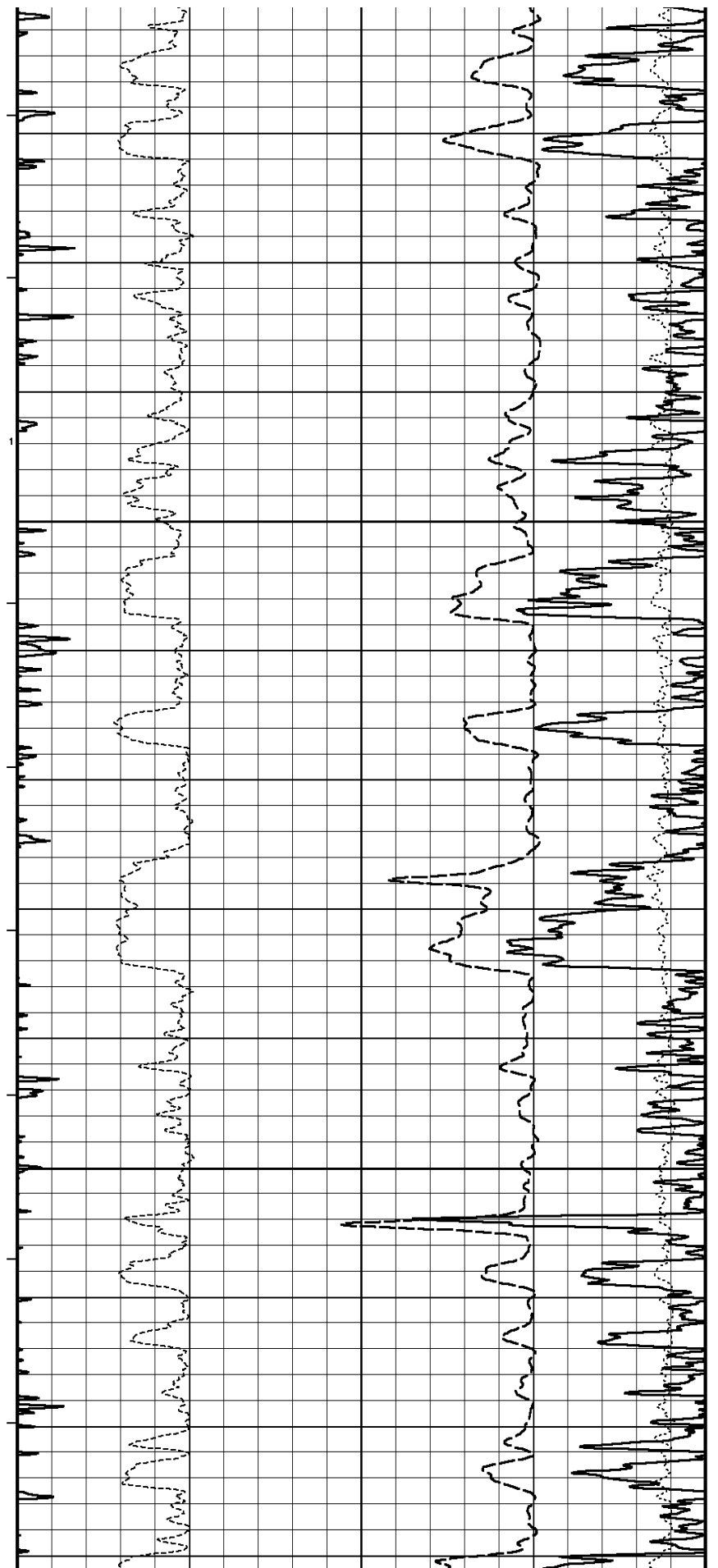
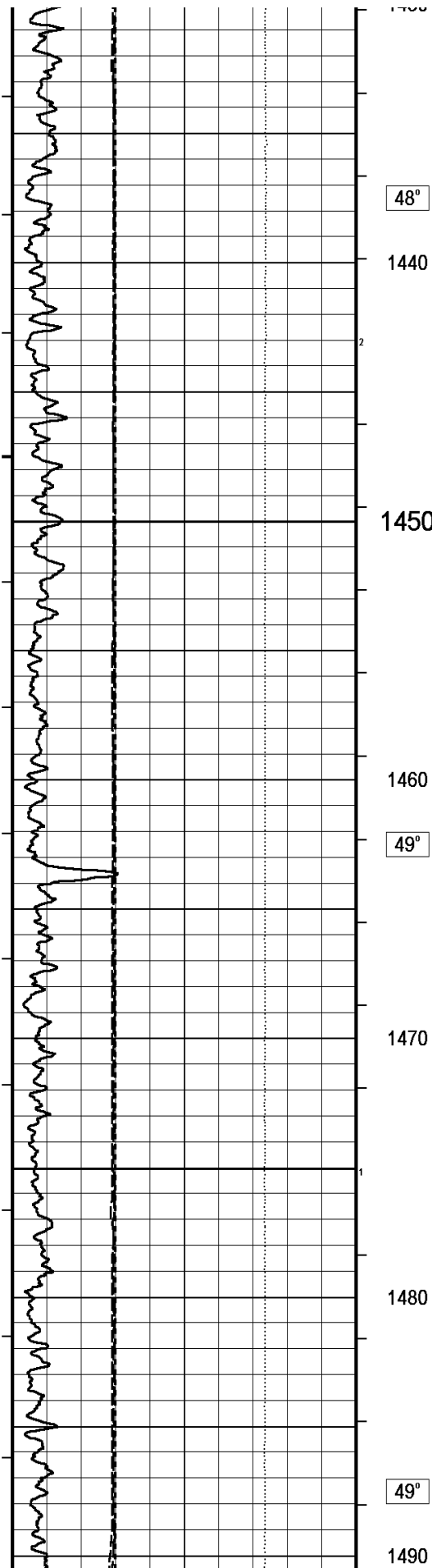
1420

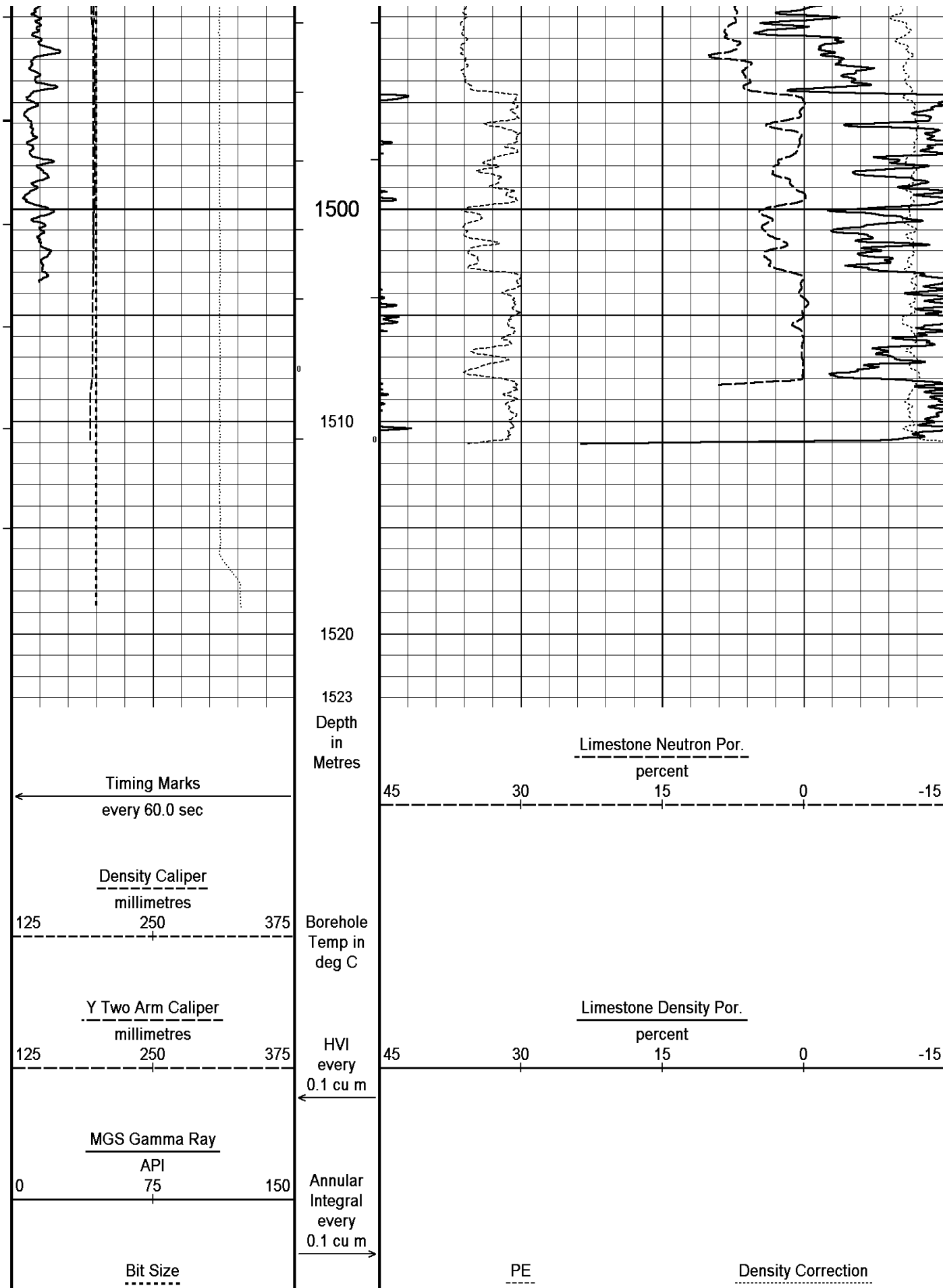
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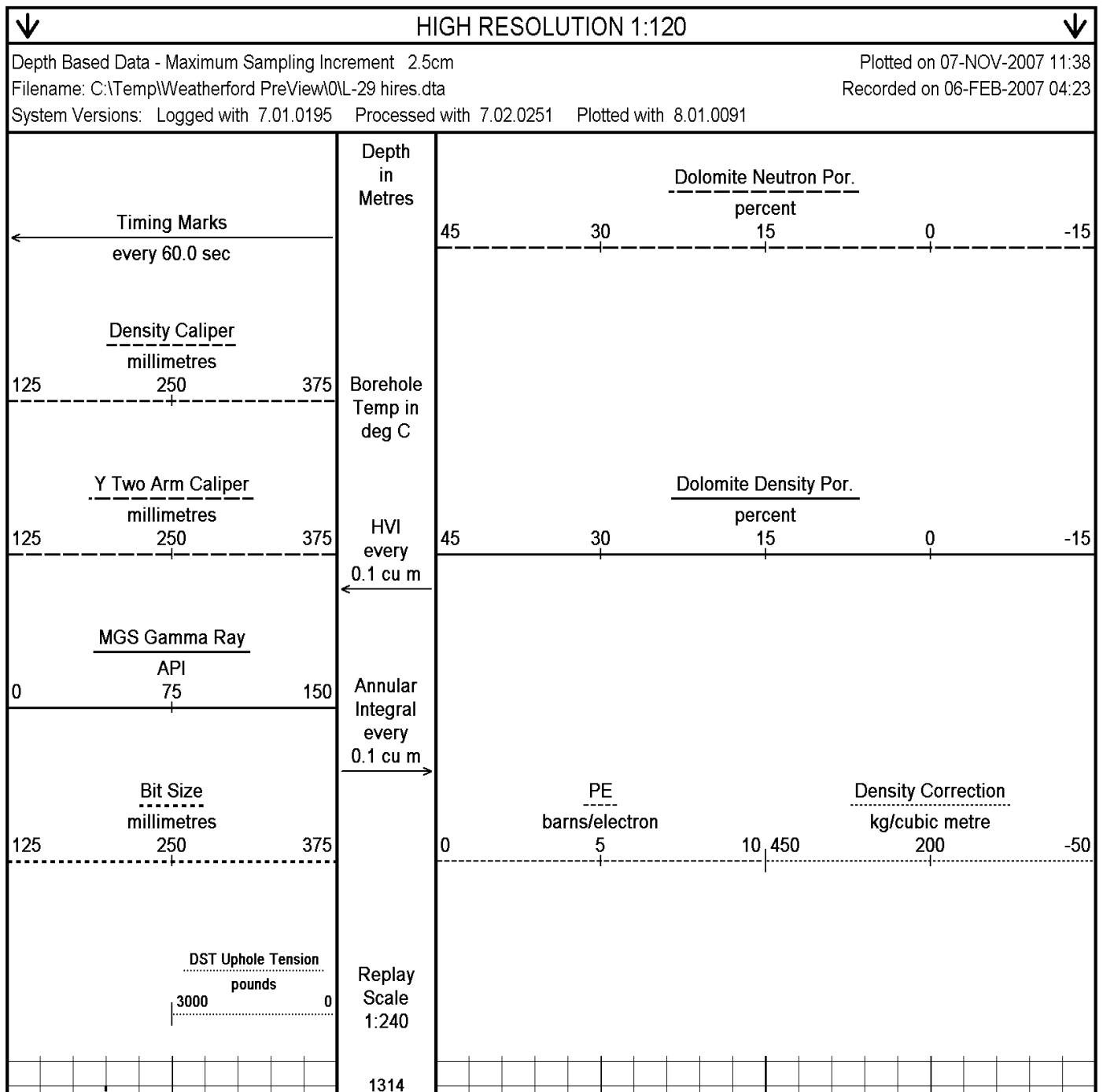
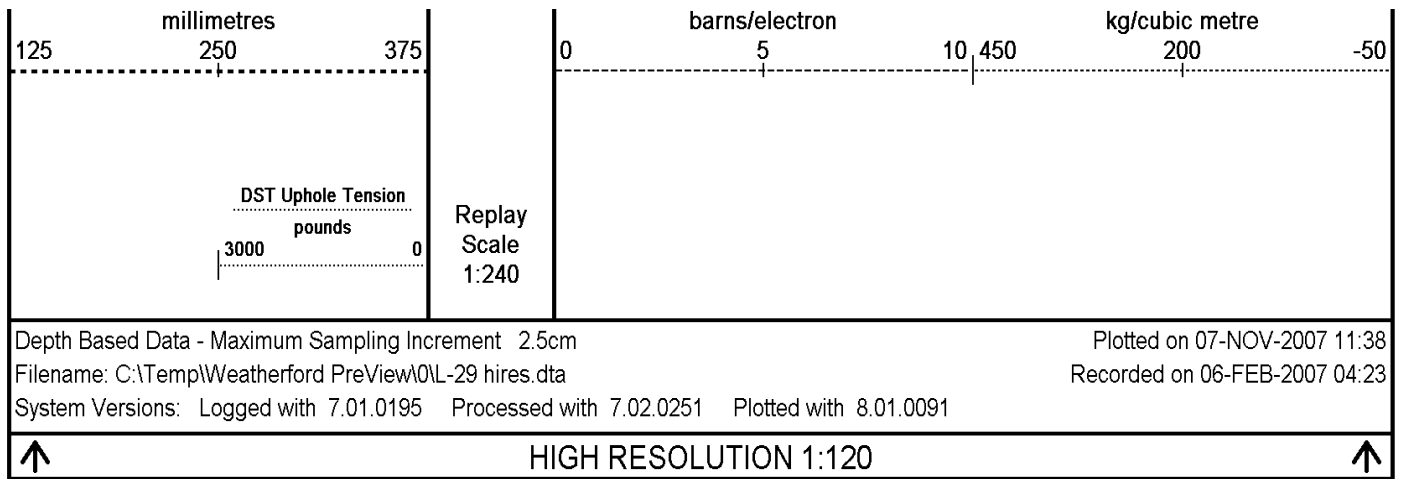
47°

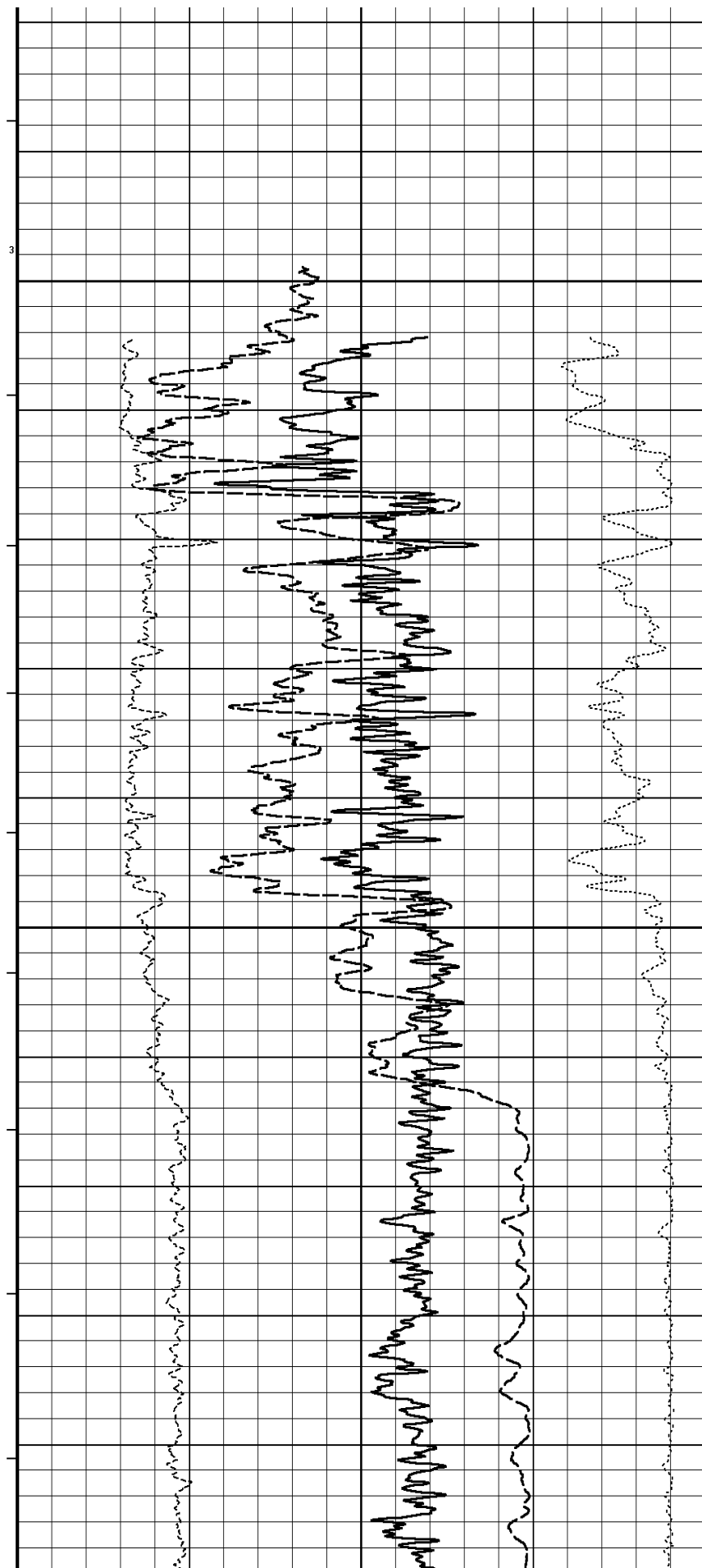
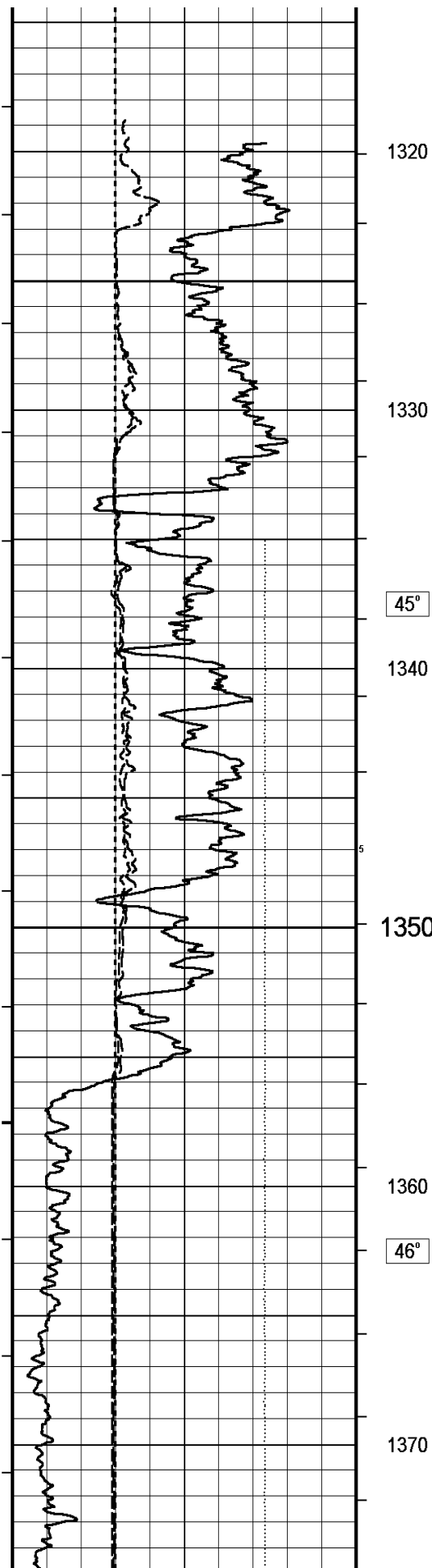
48°

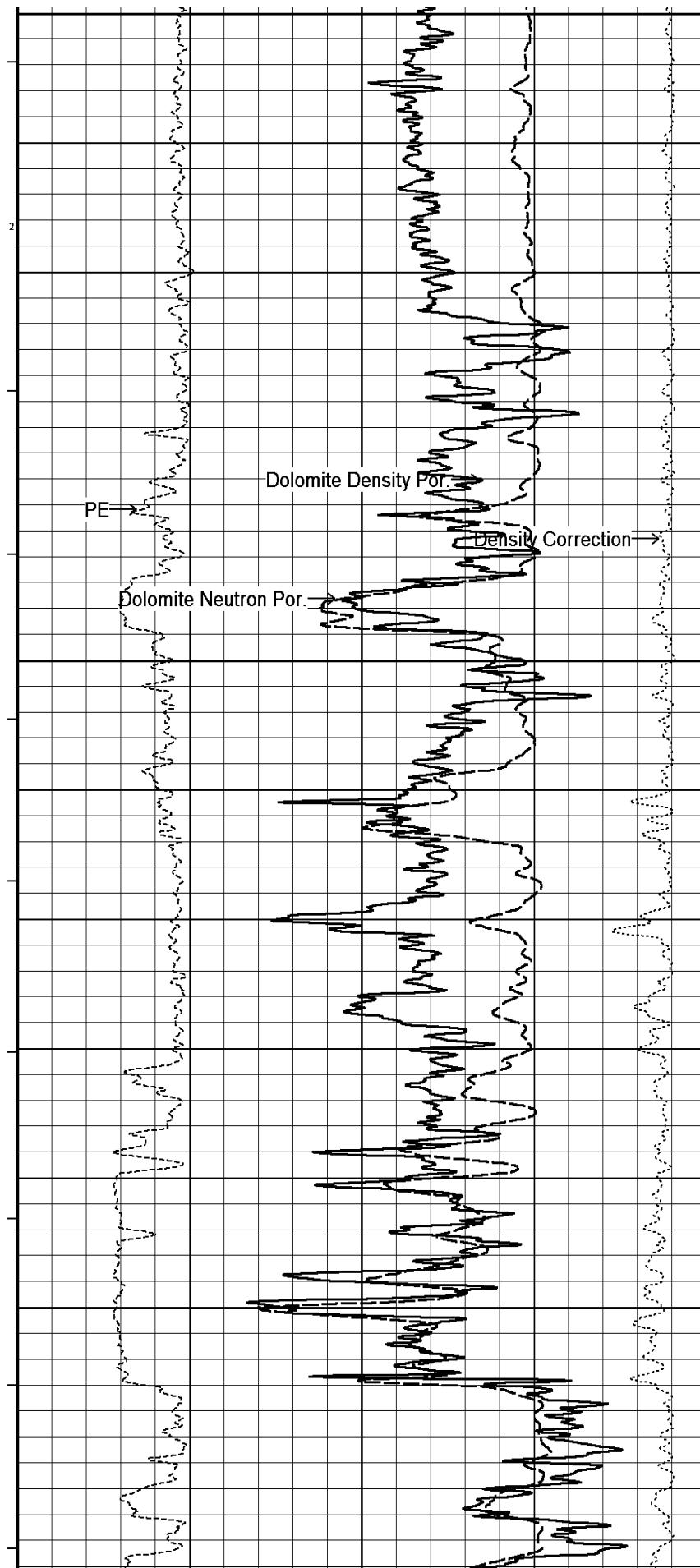
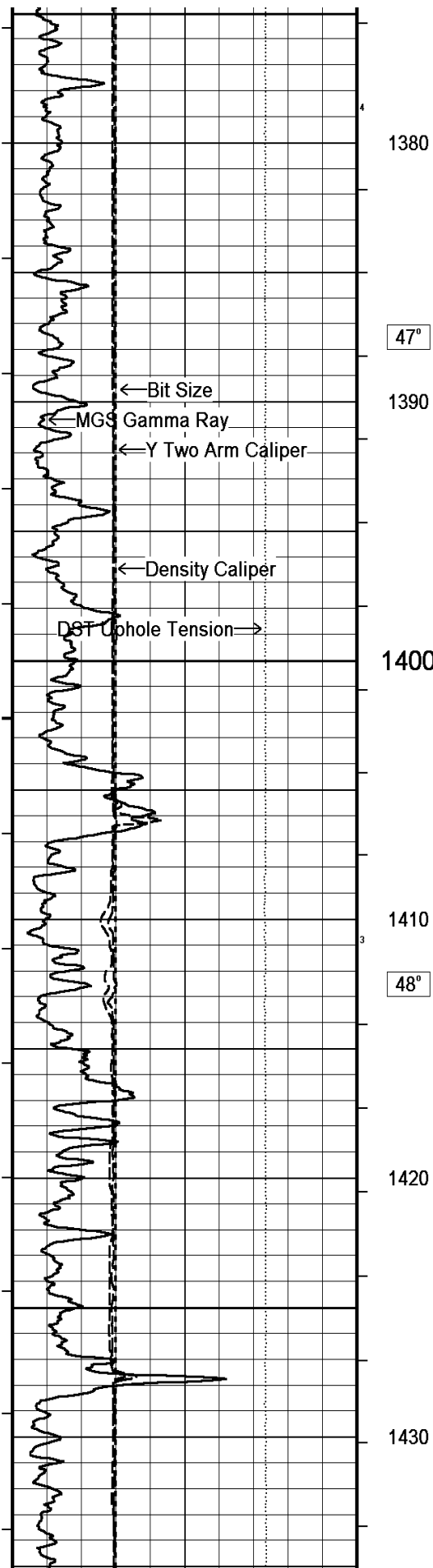


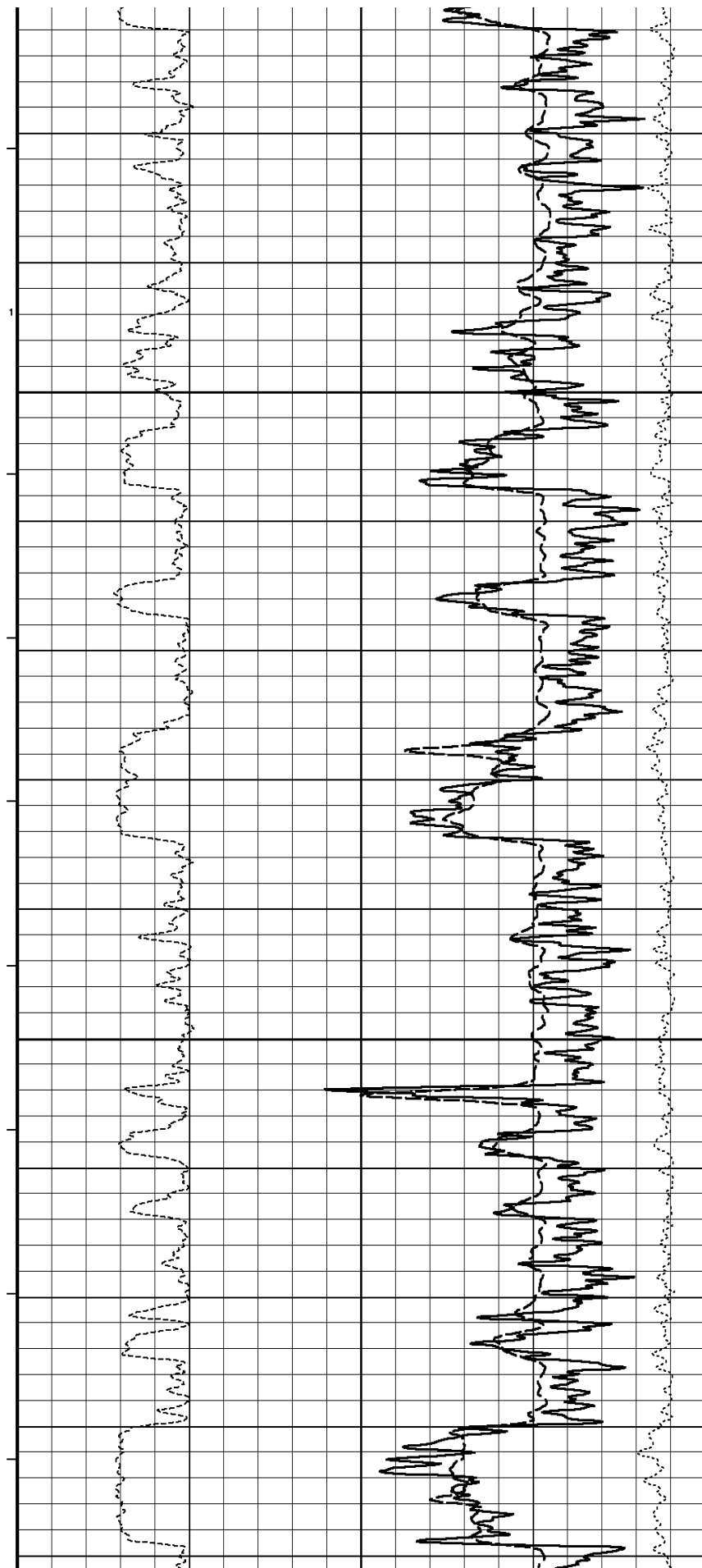
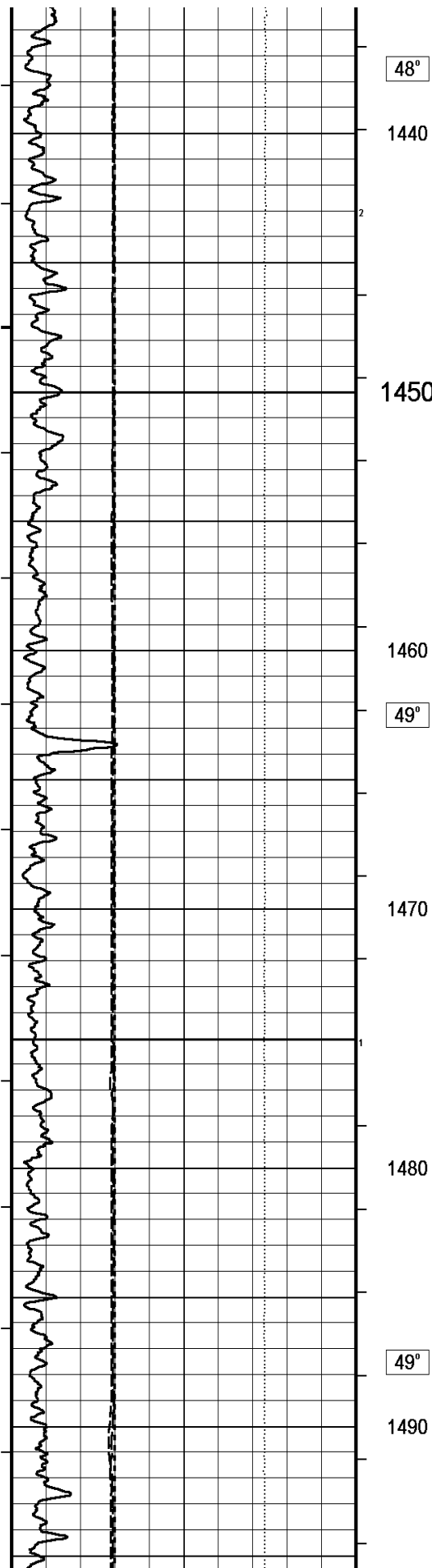


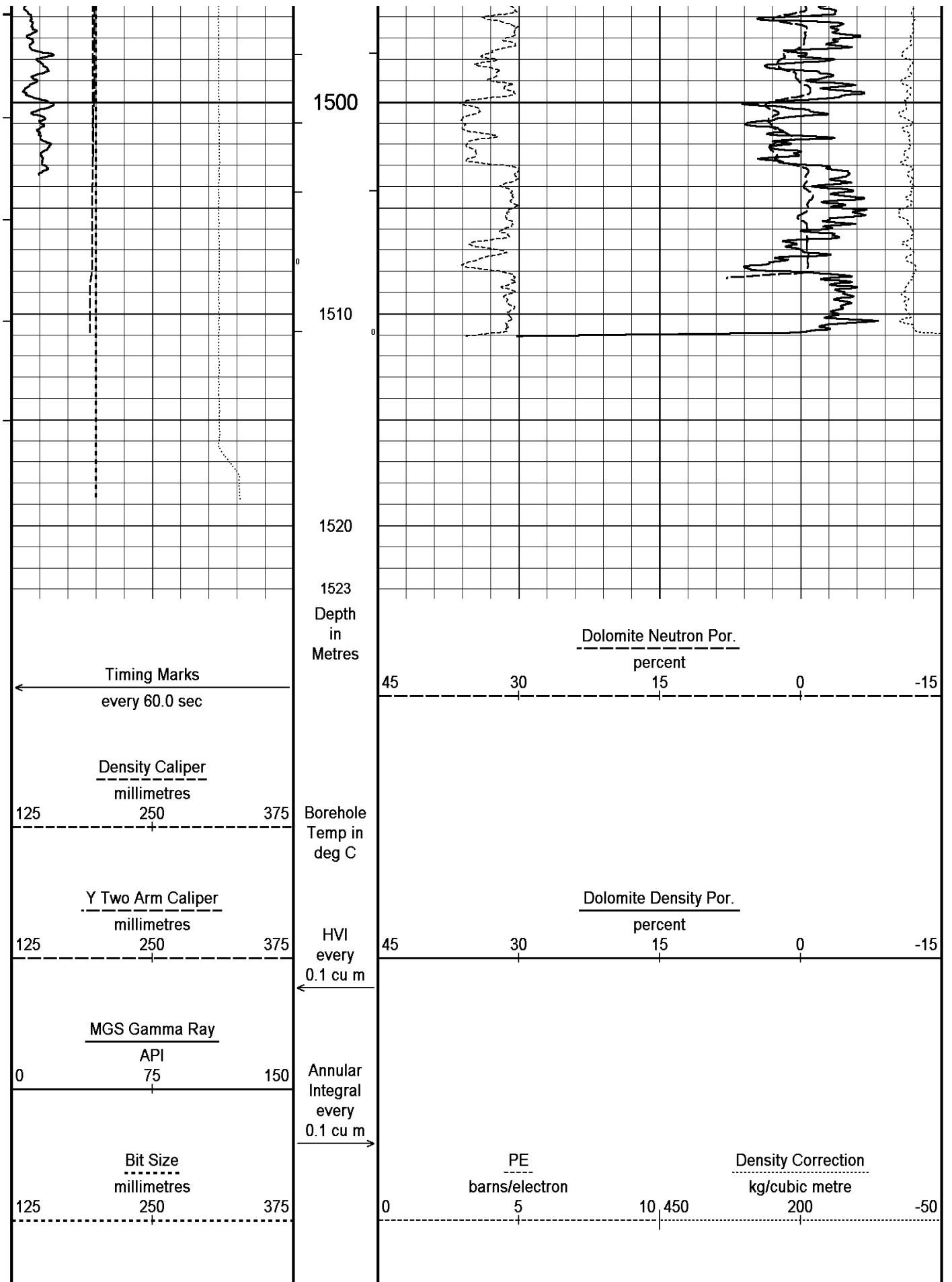


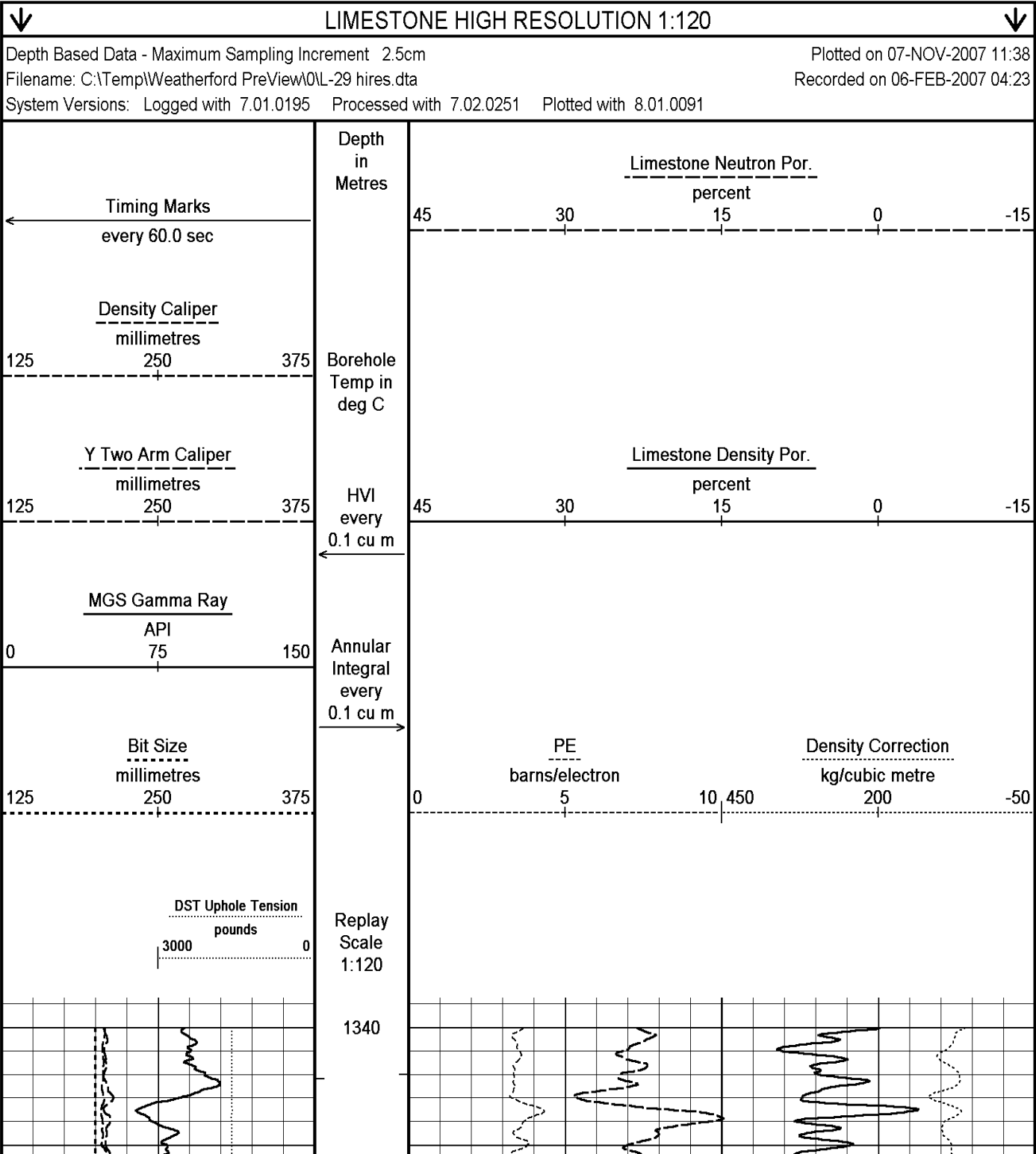
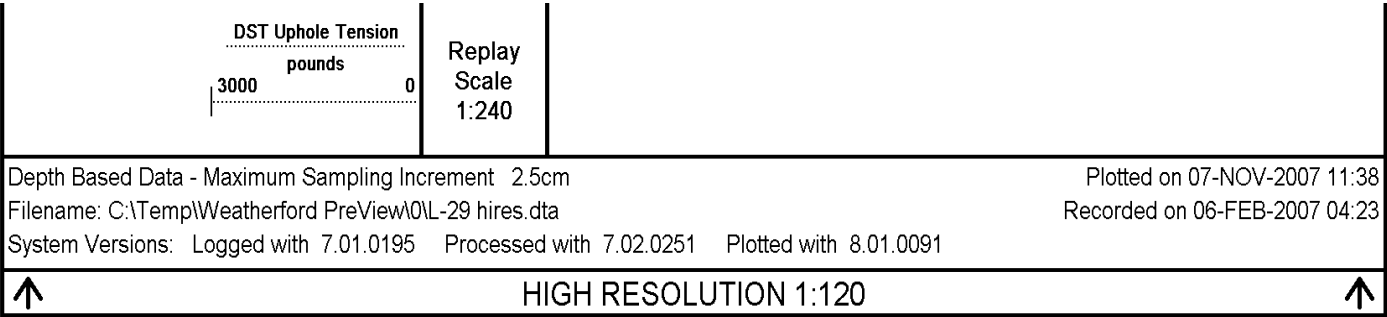


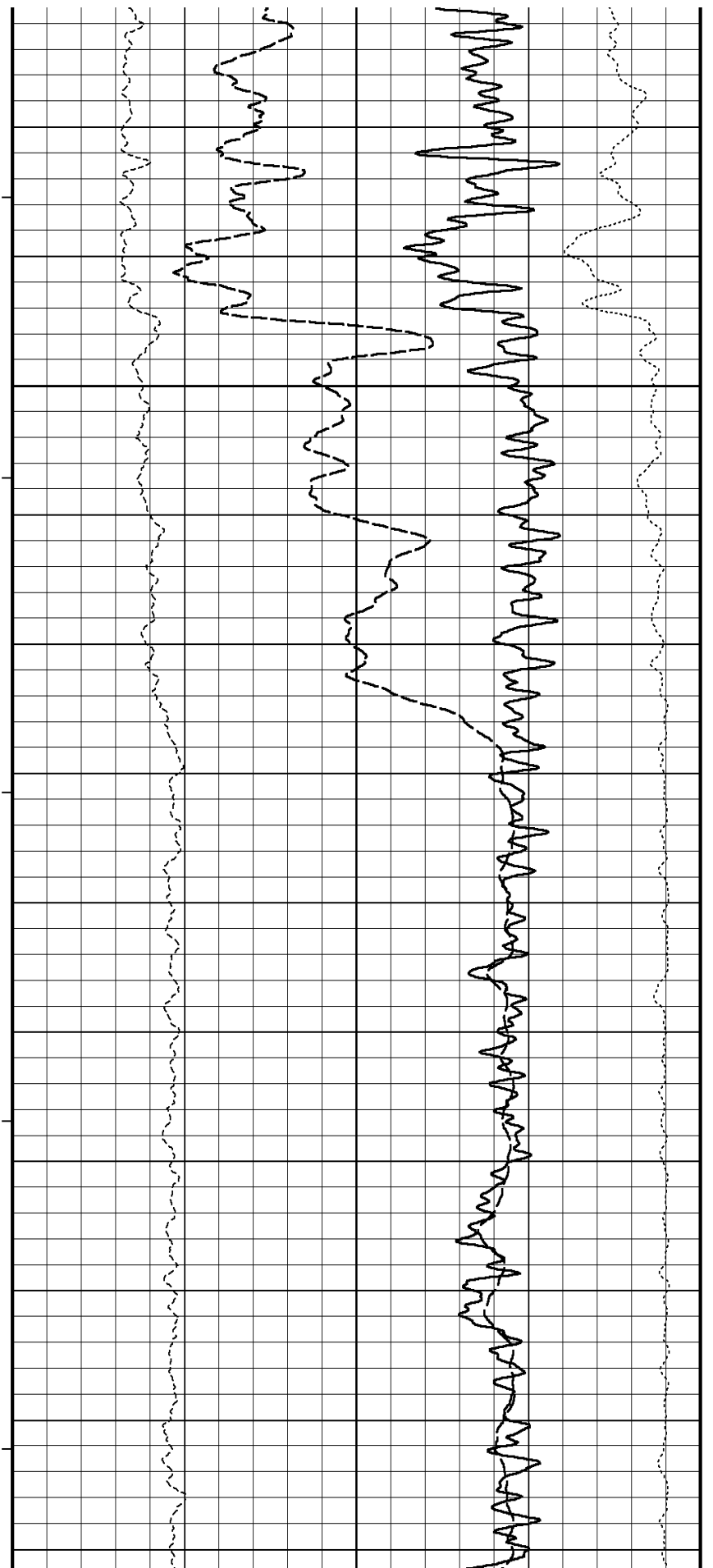
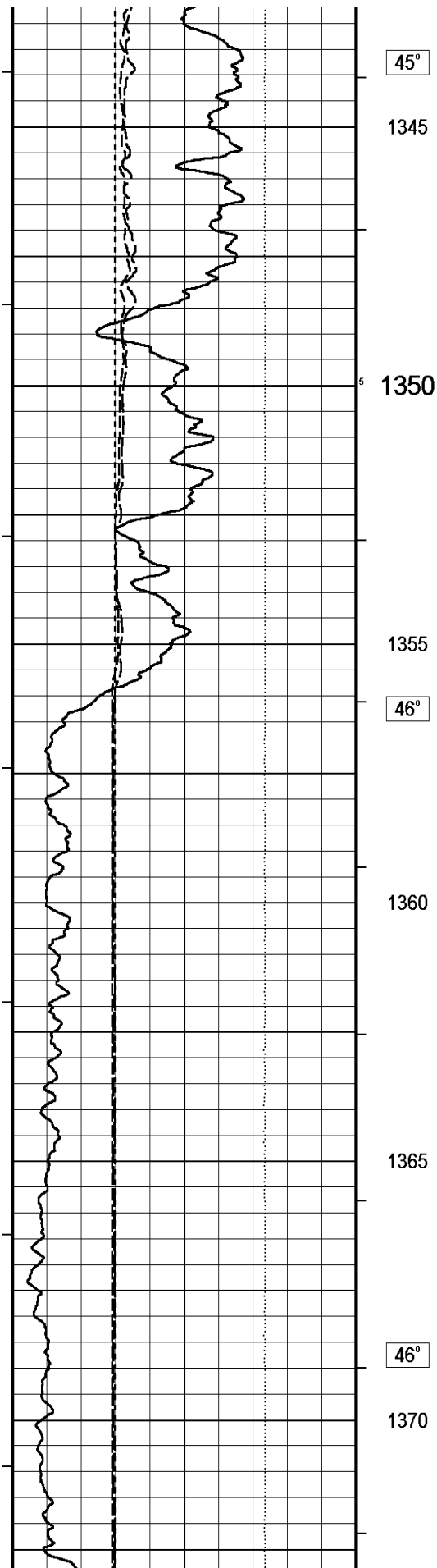


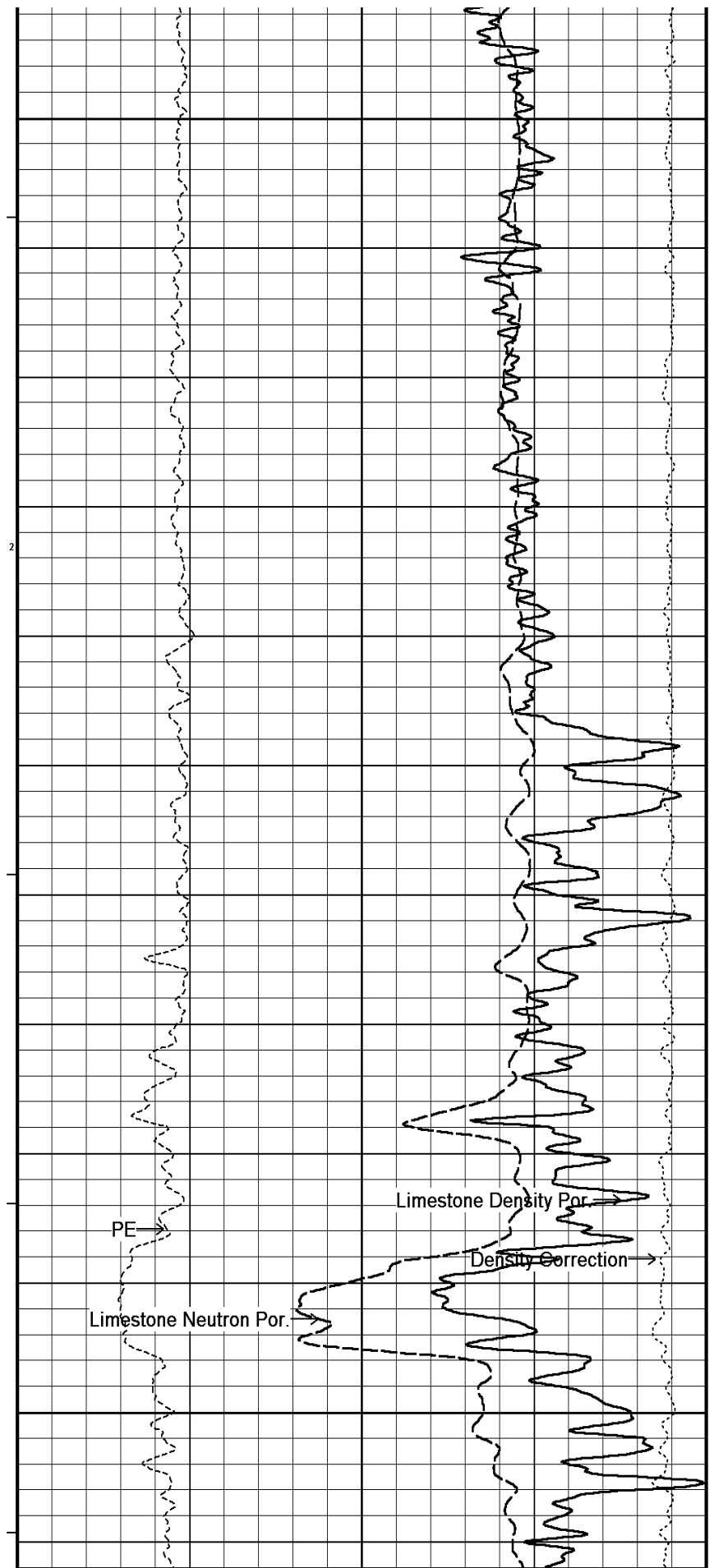
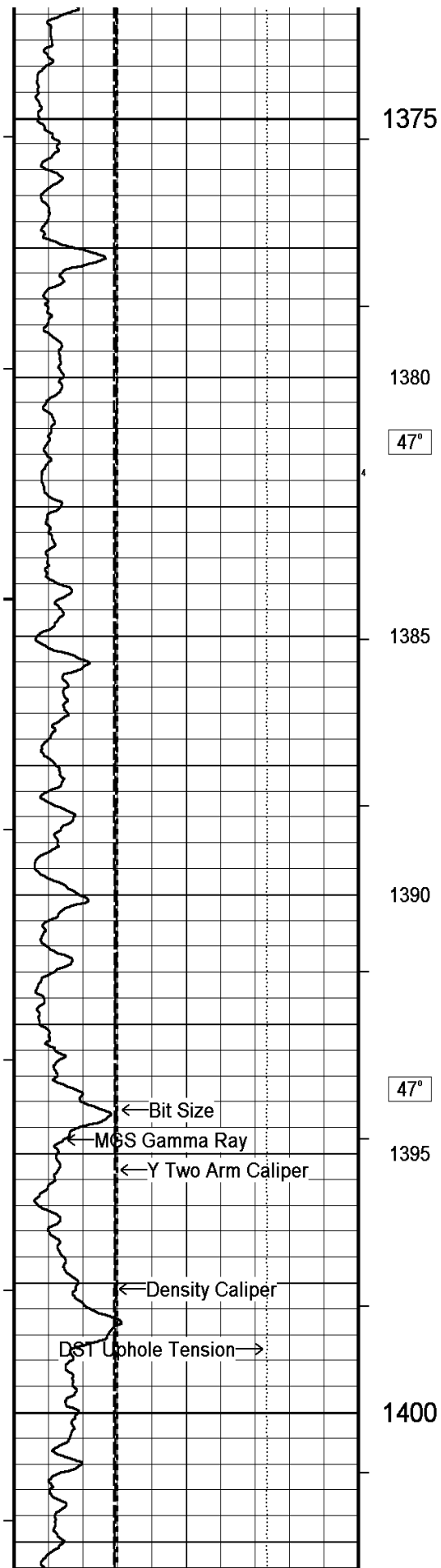


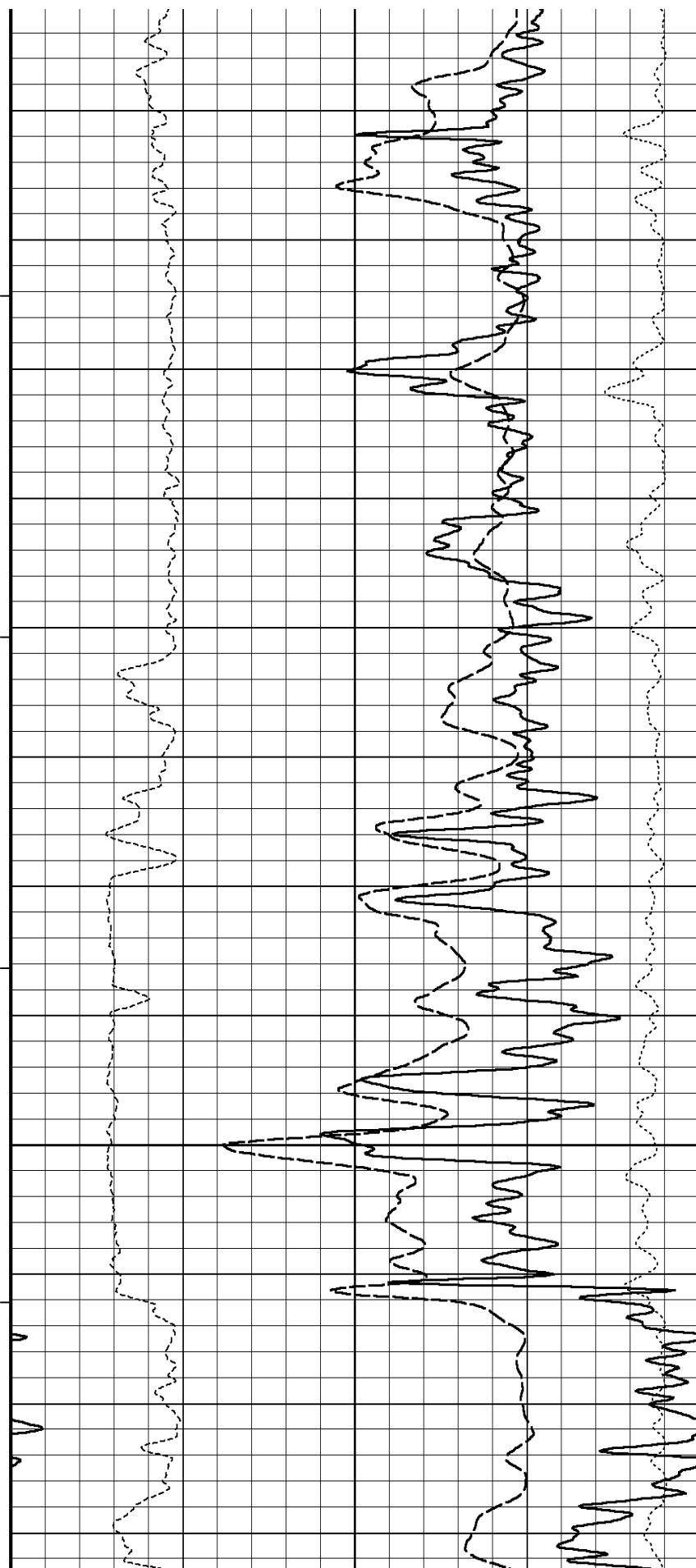
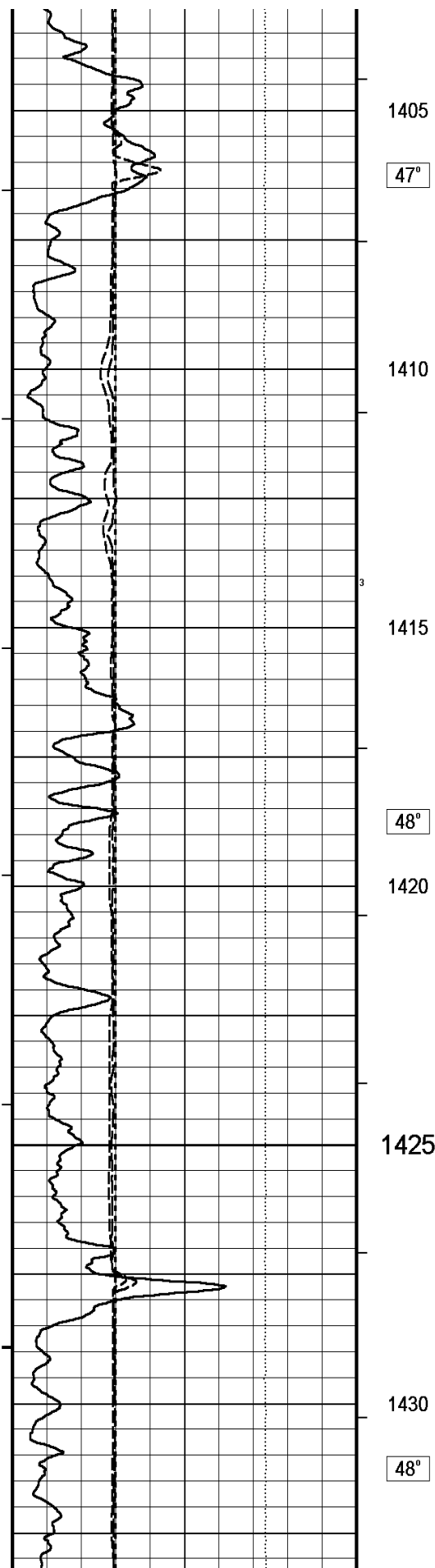


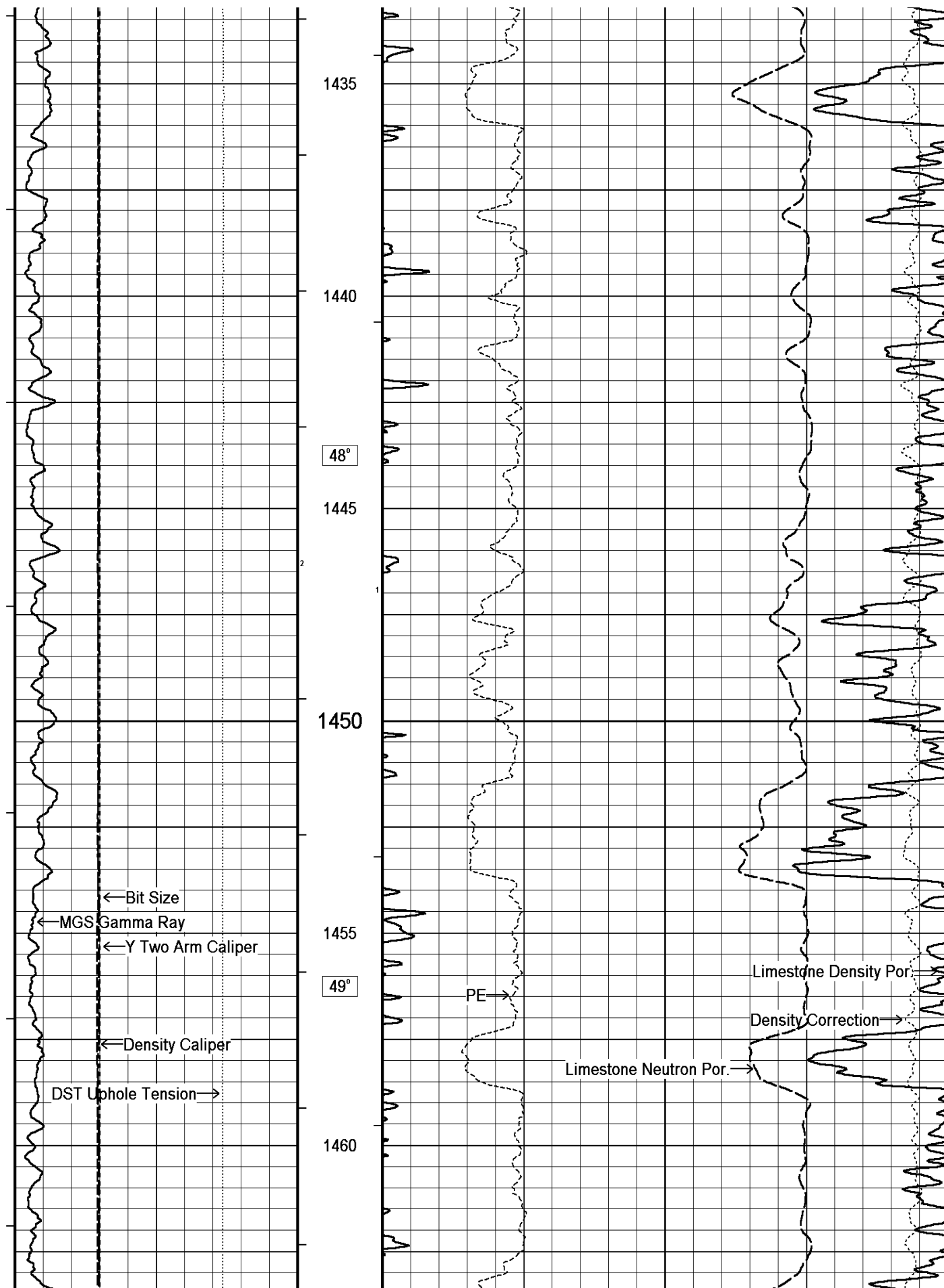


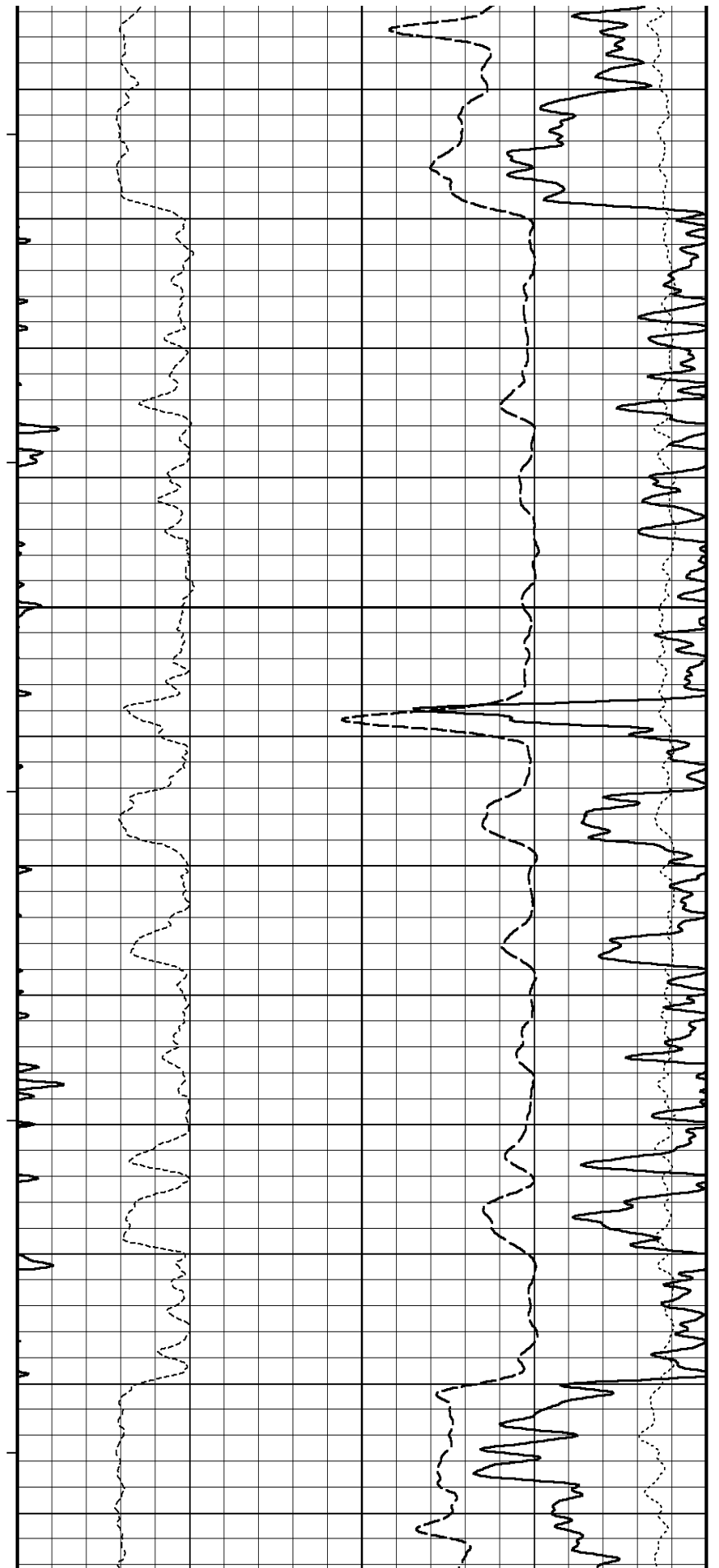
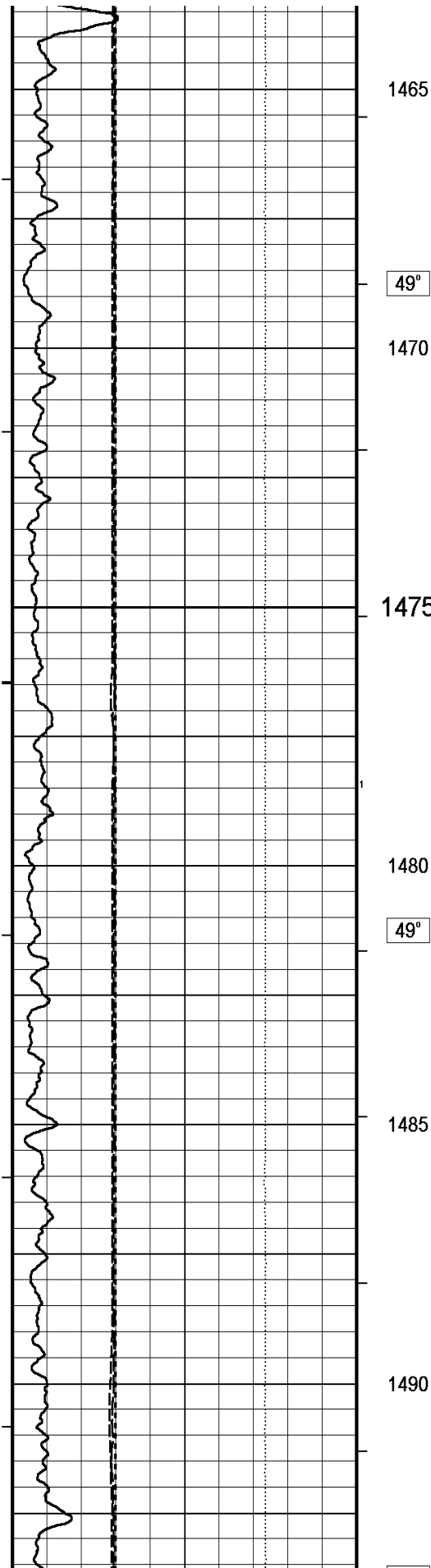


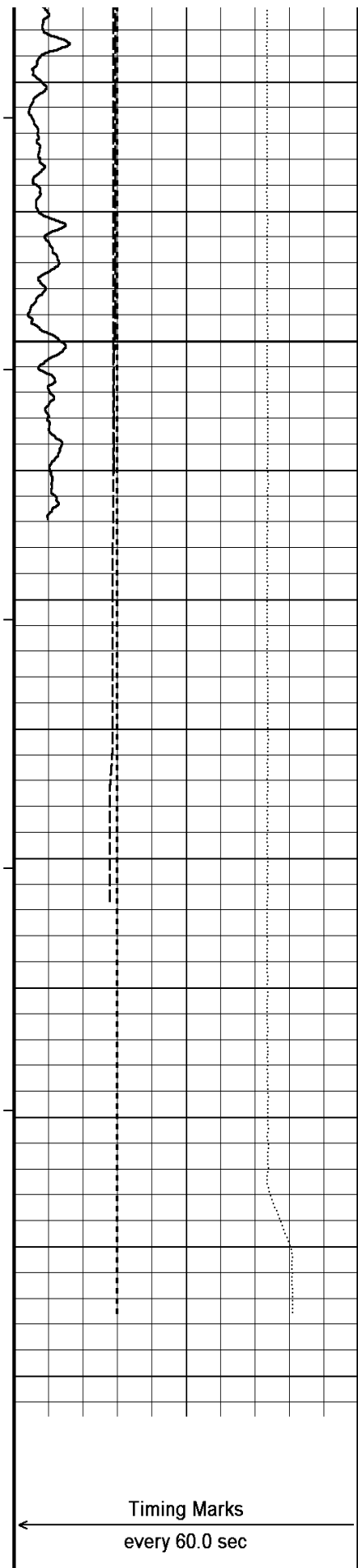












48°

1495

1500

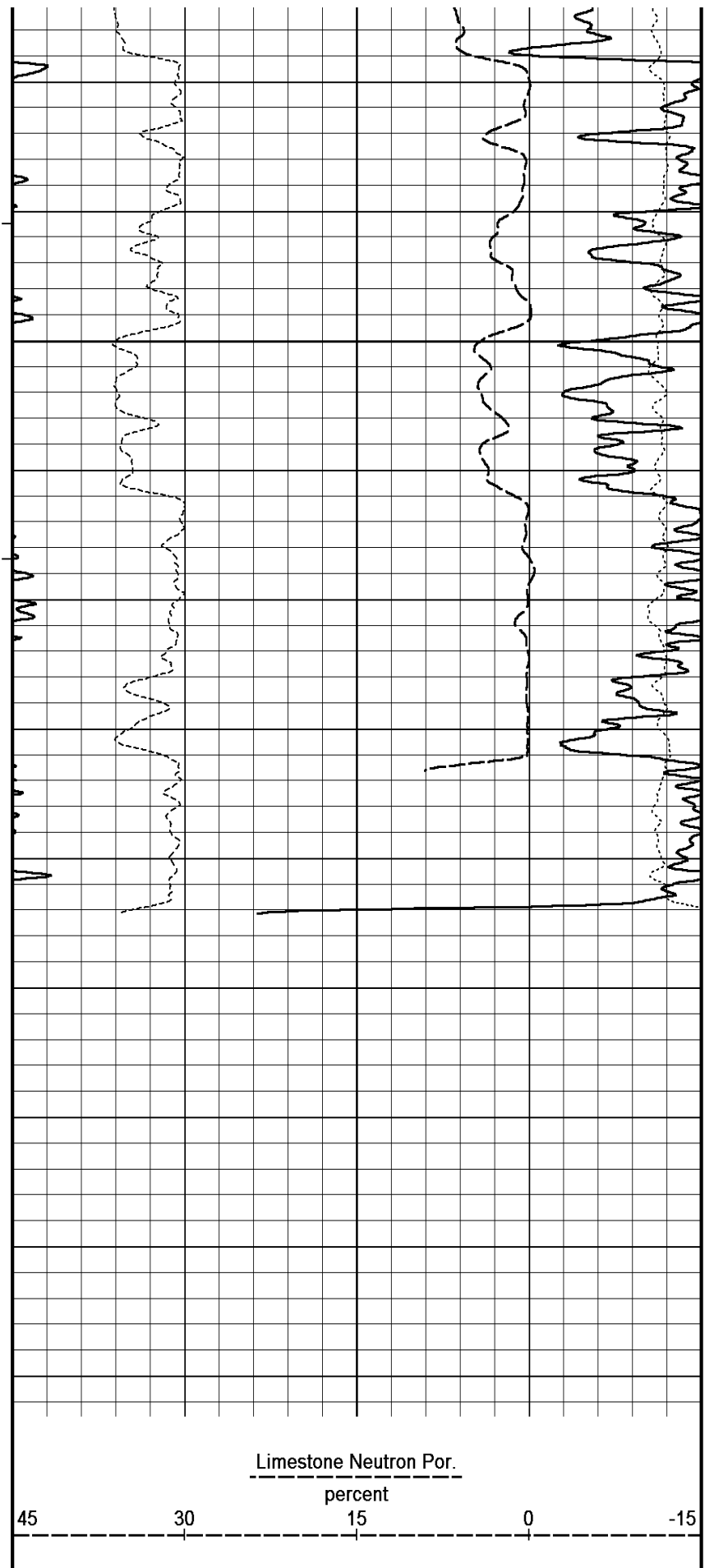
1505

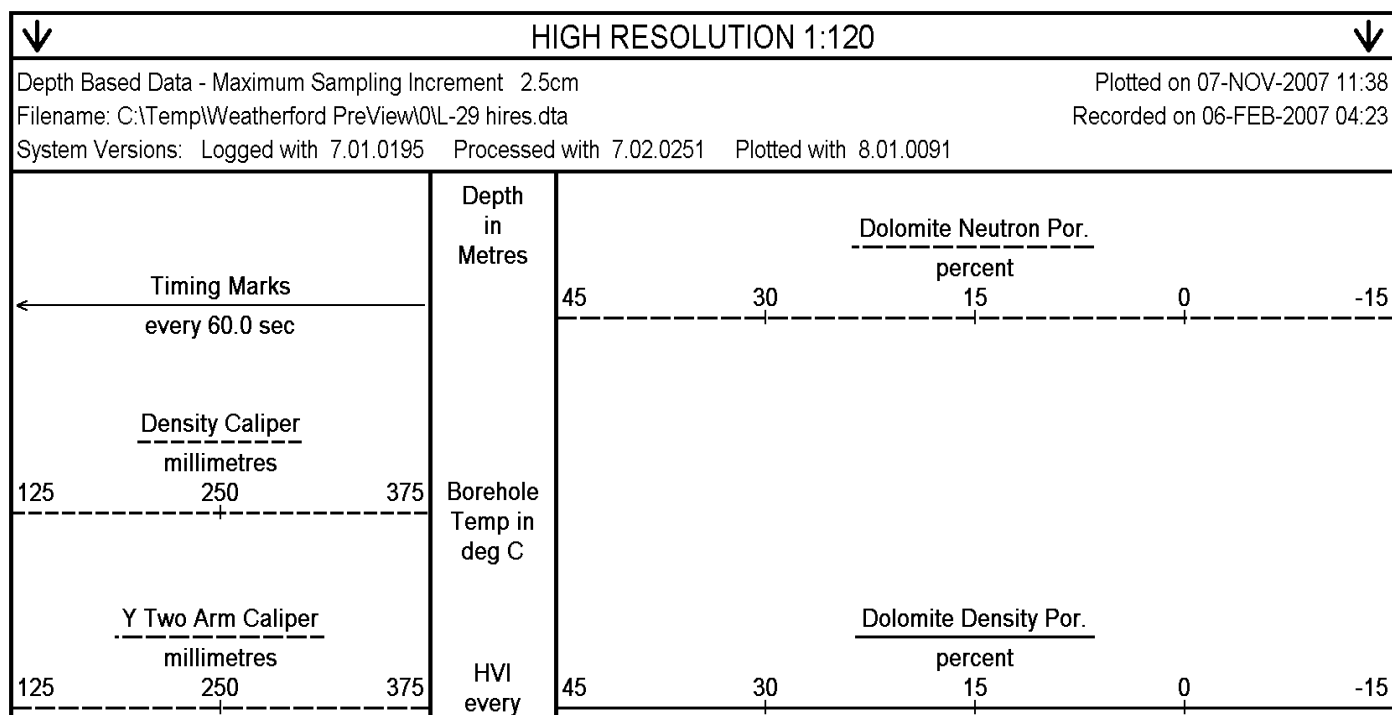
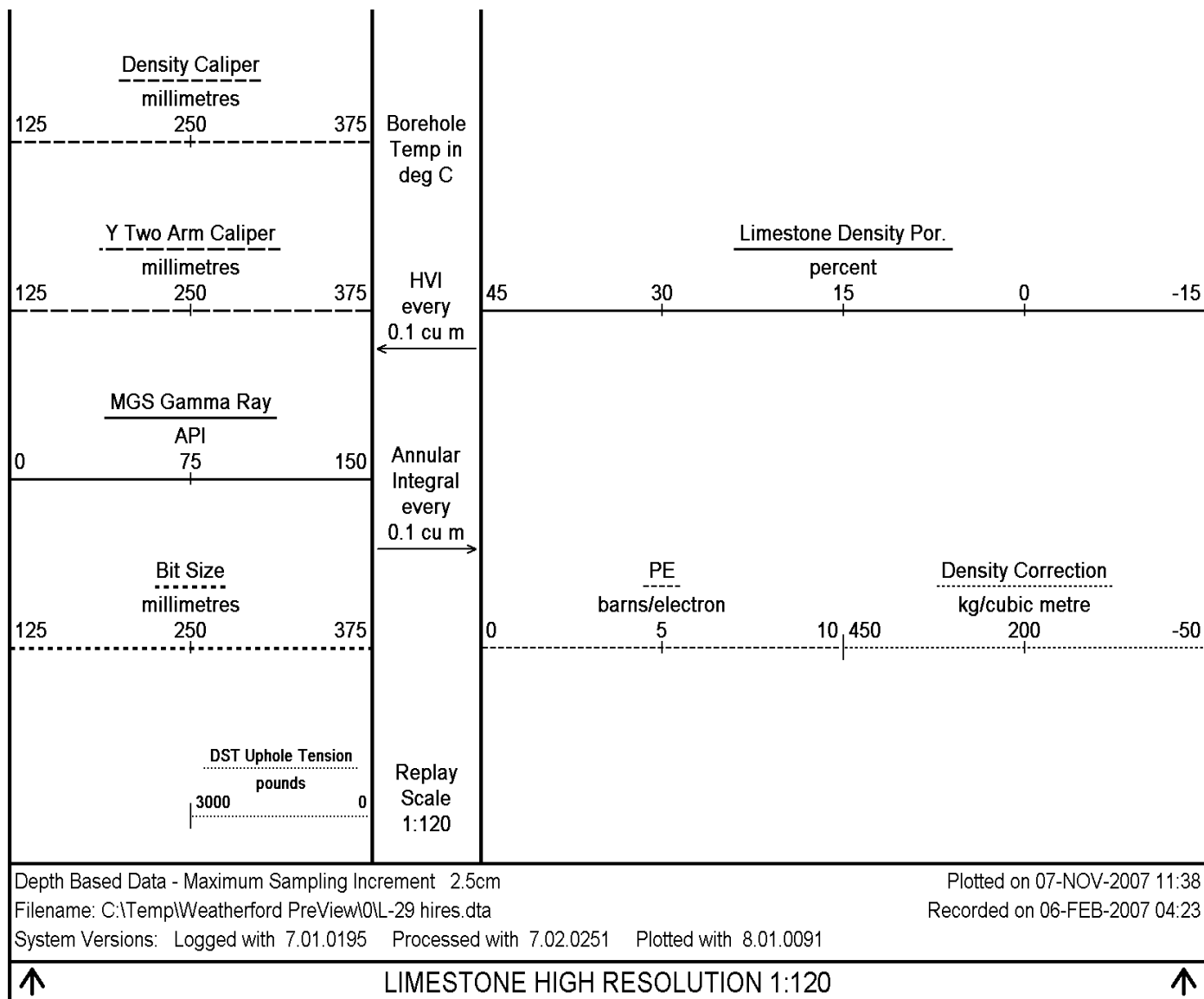
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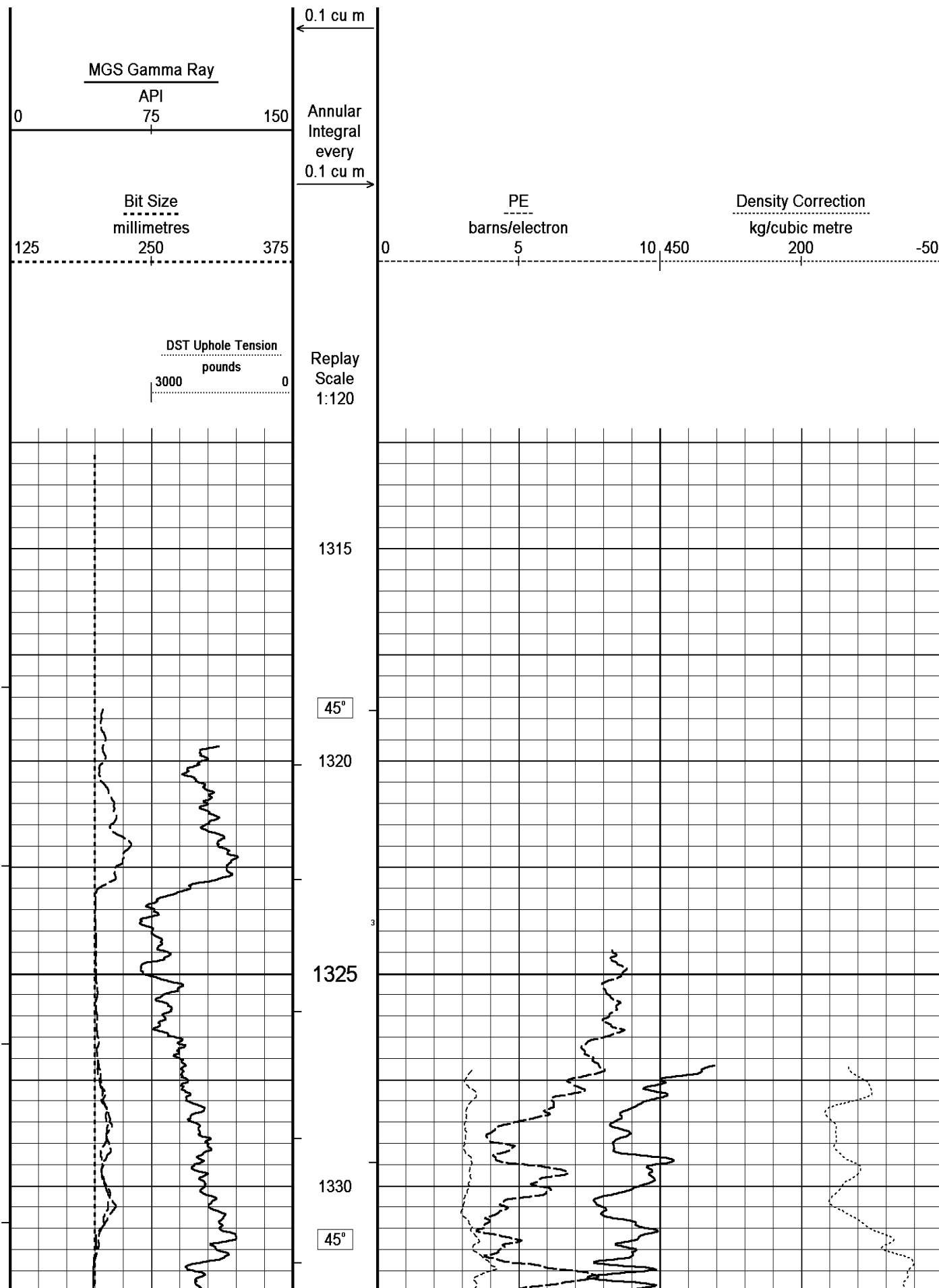
1515

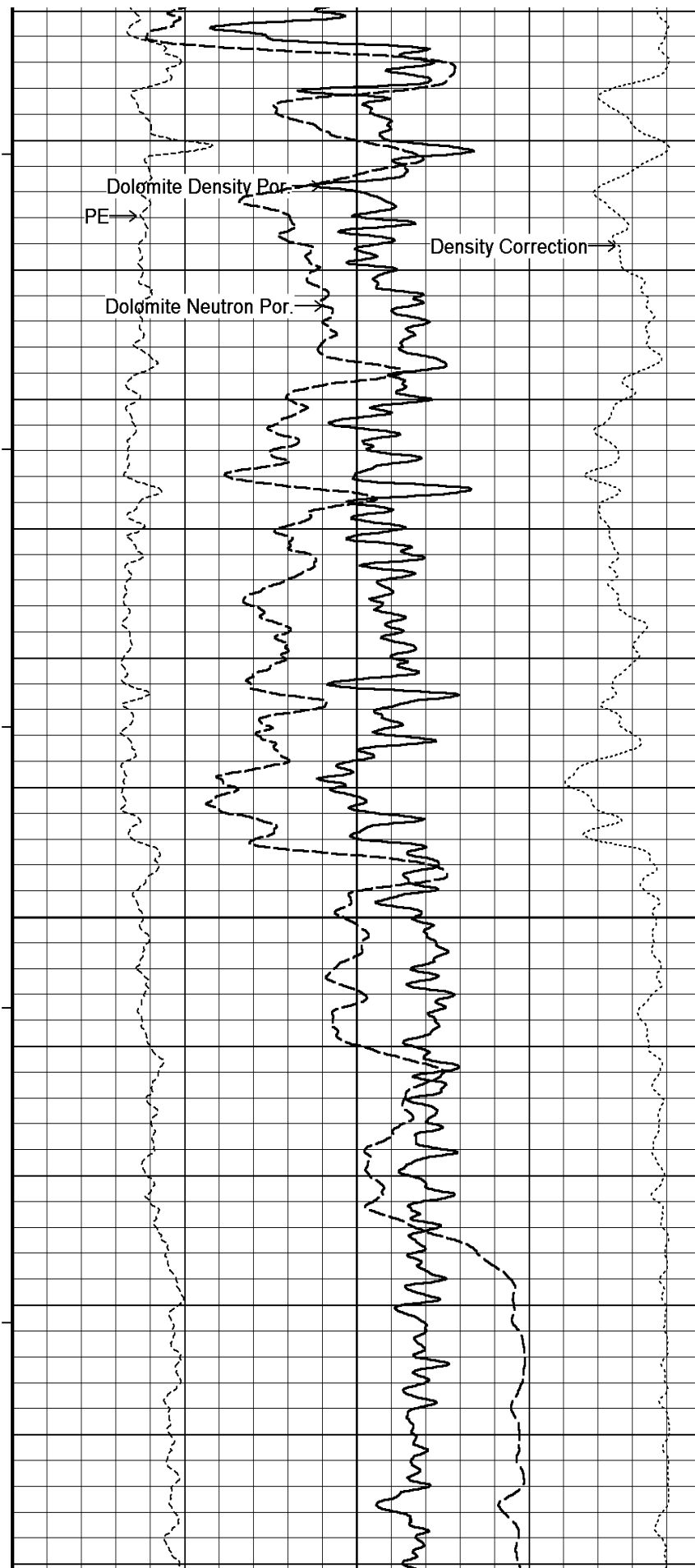
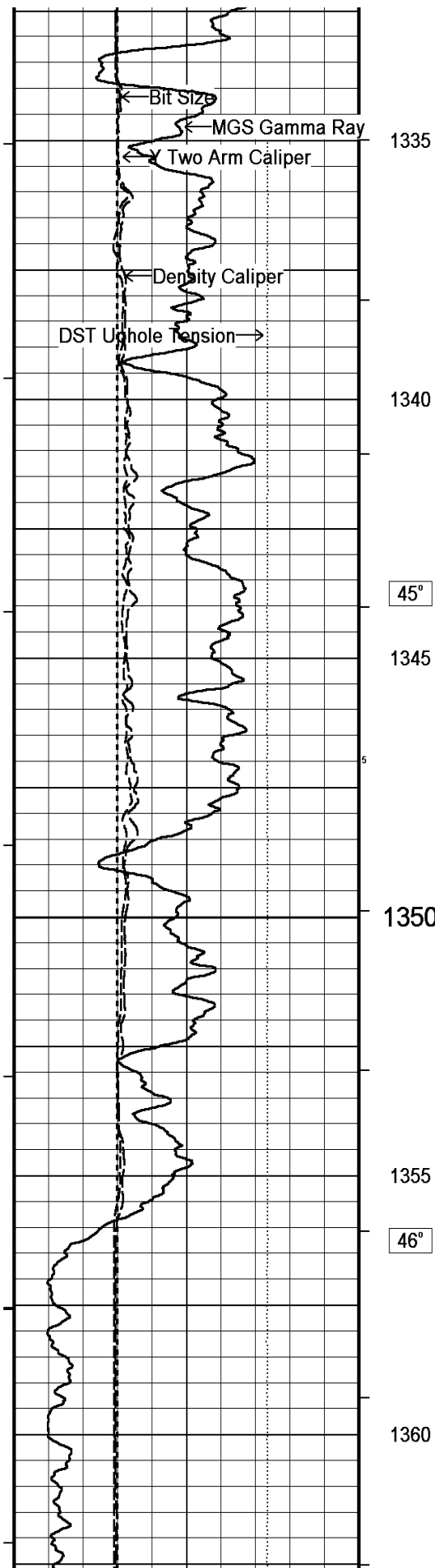
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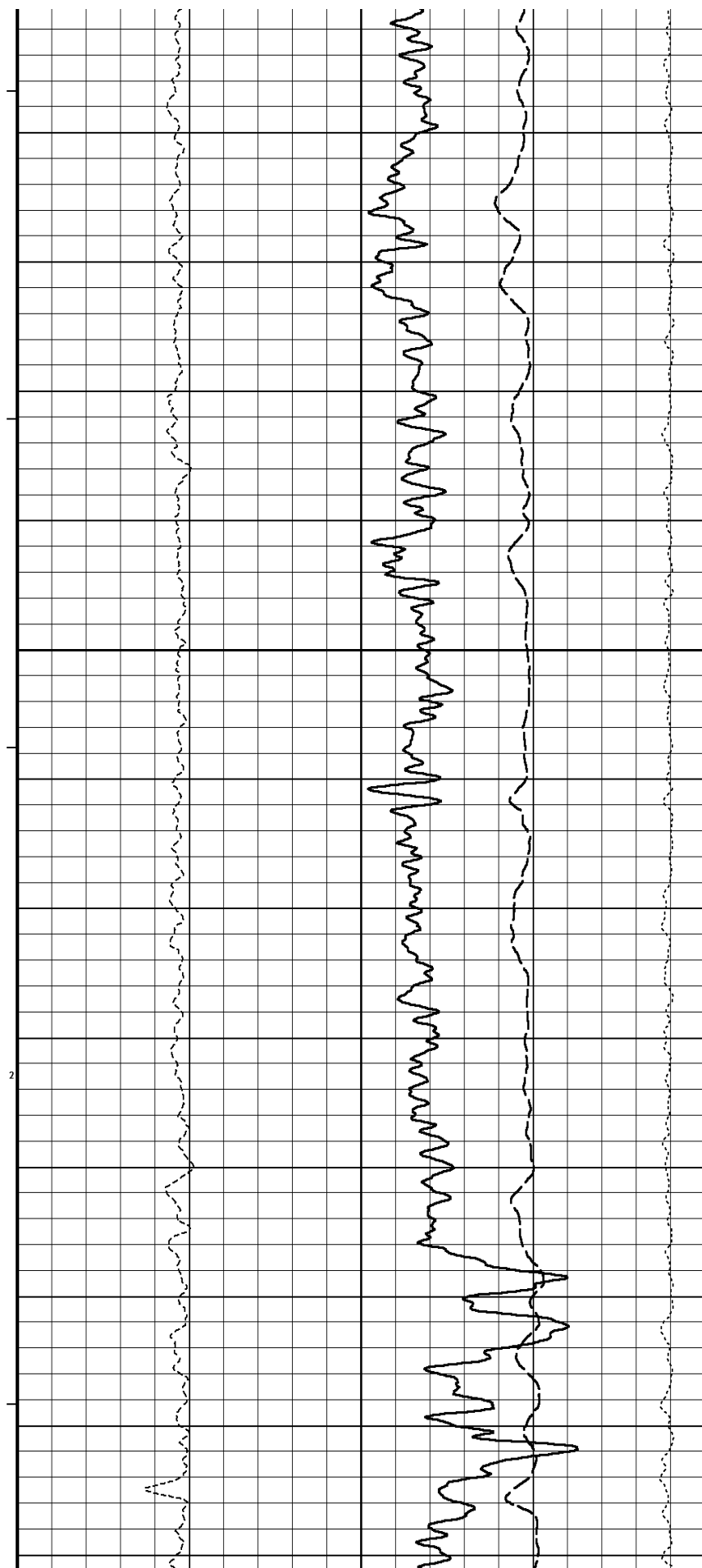
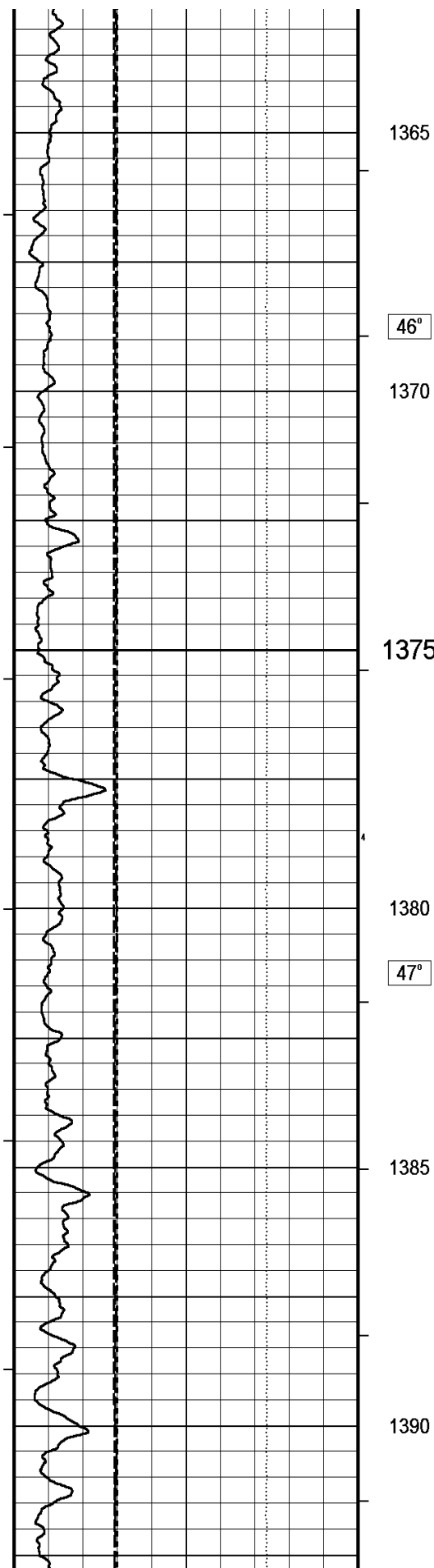
Depth
in
Metres

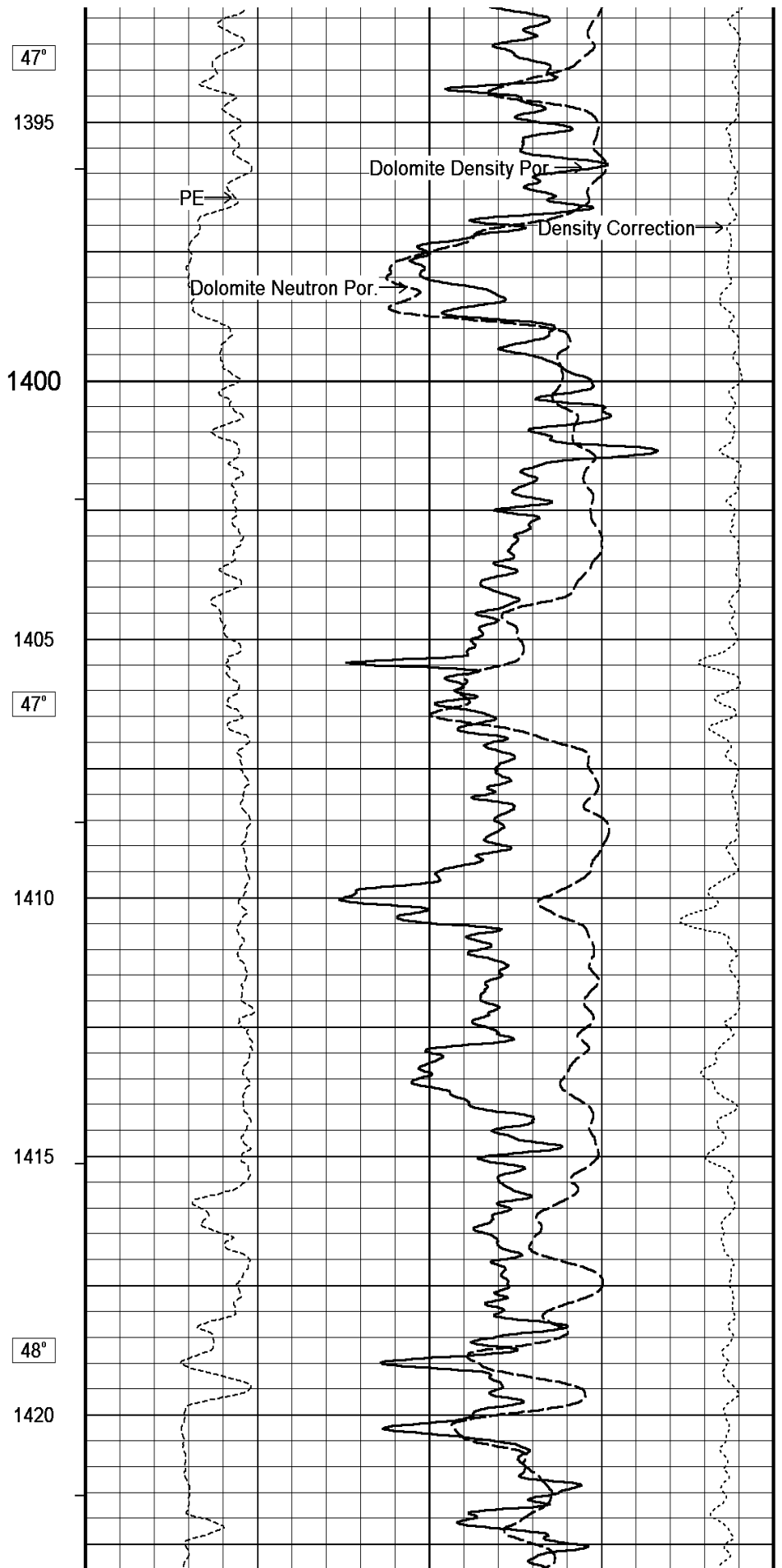
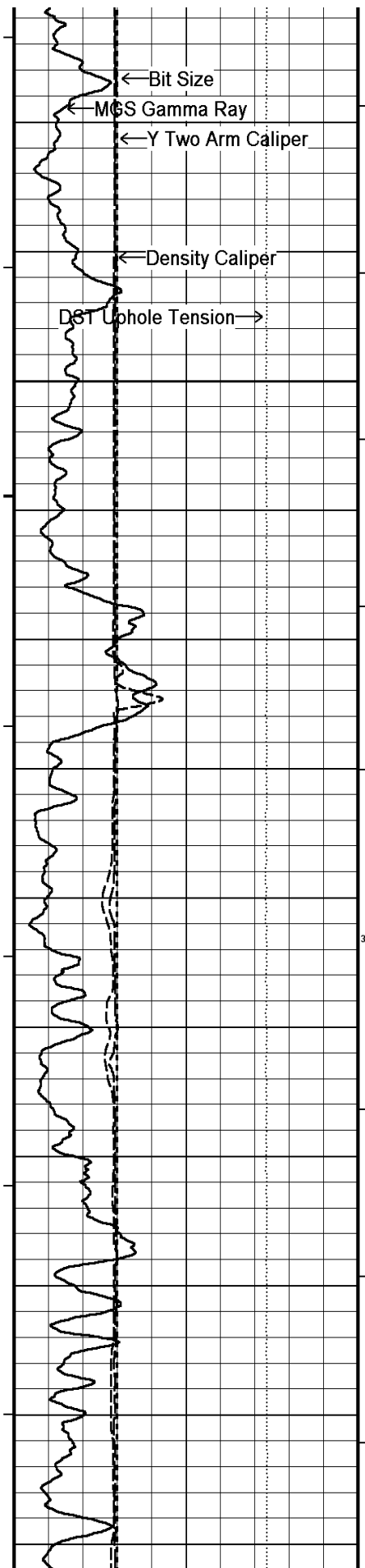


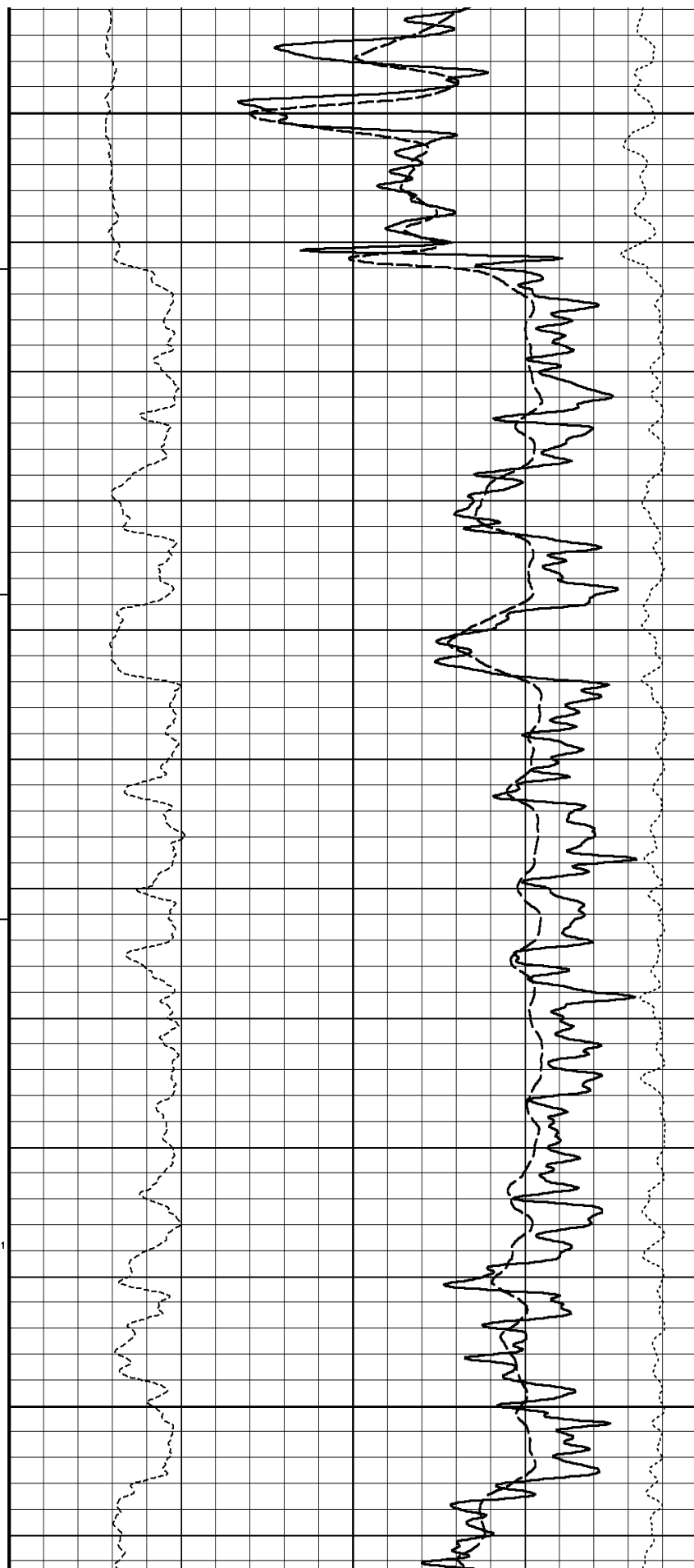
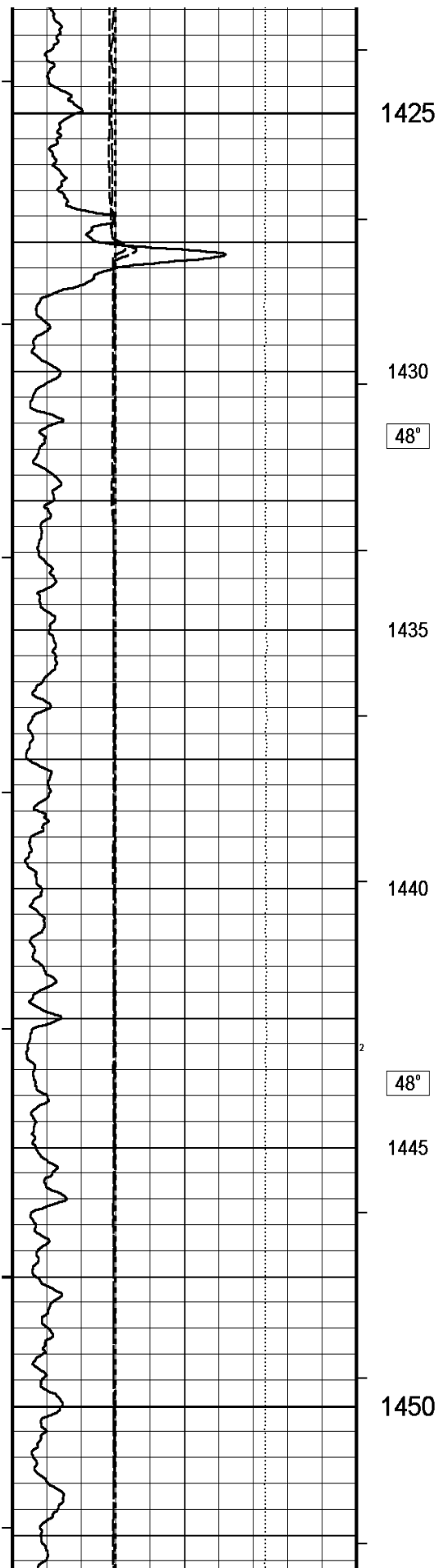


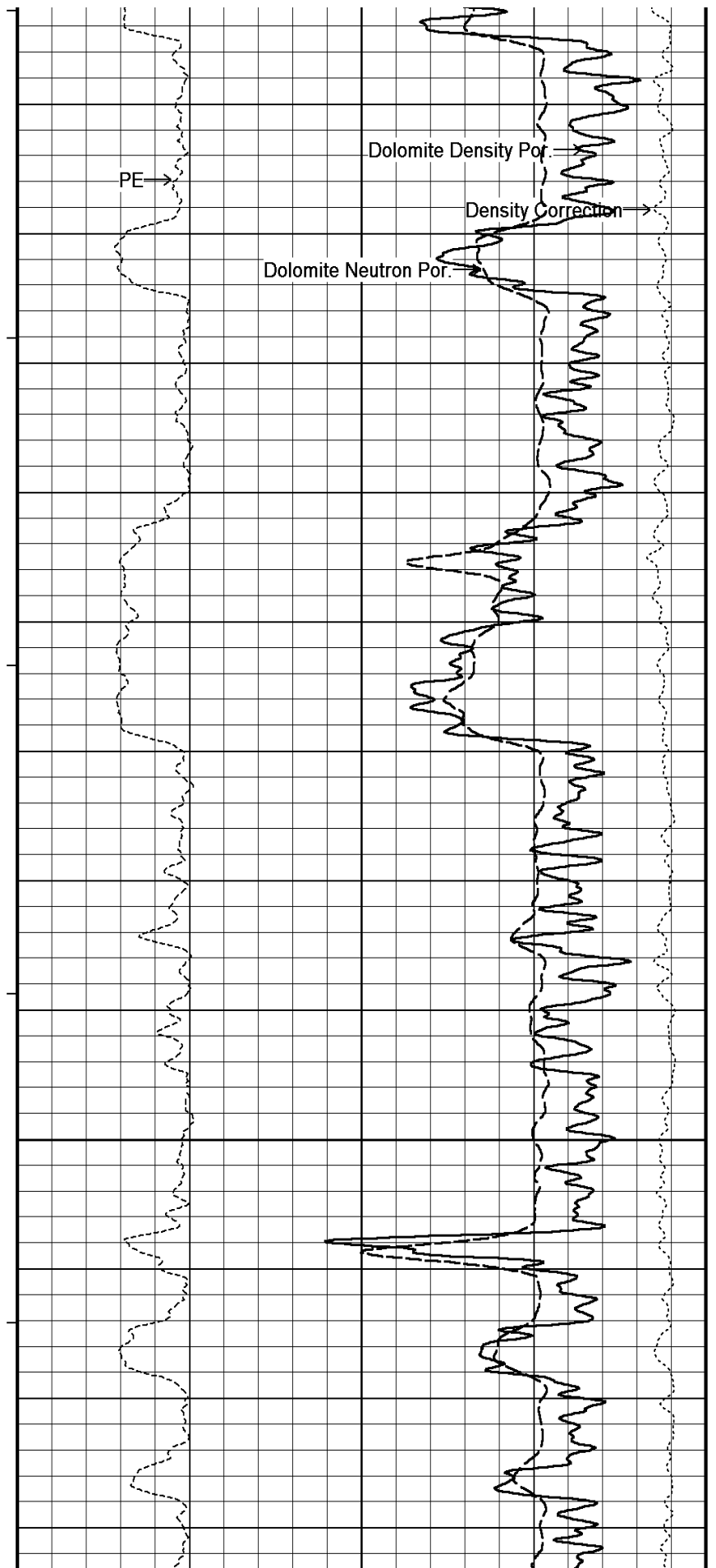
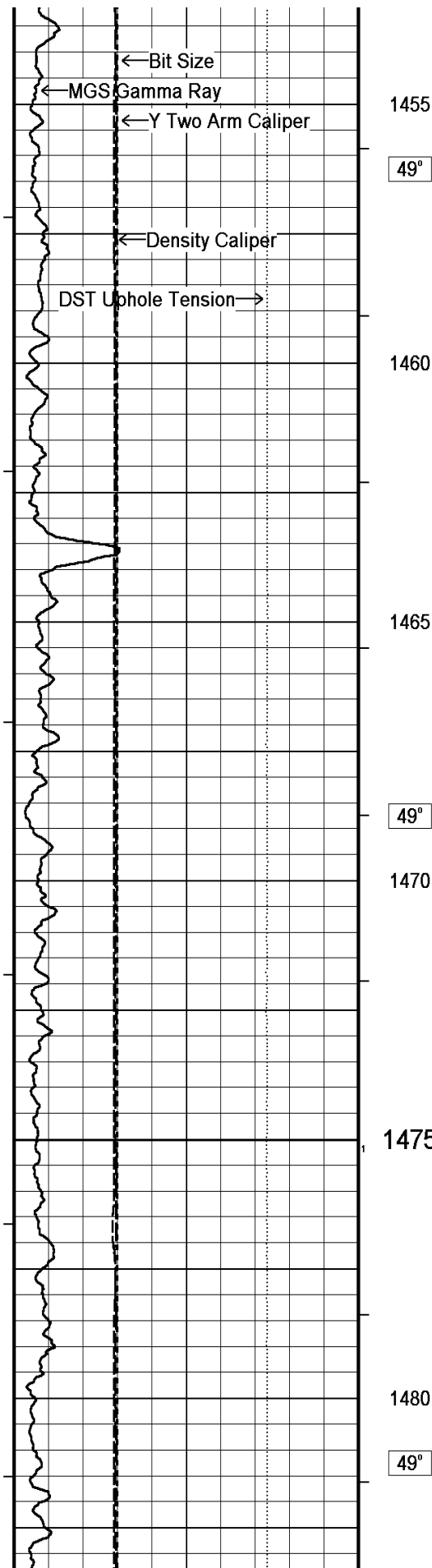


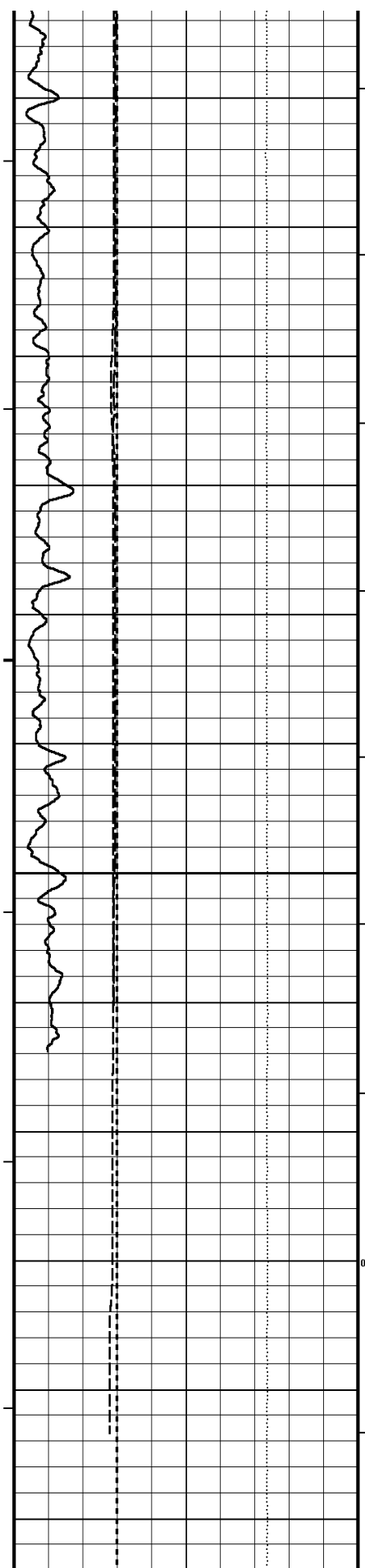












1485

1490

48°

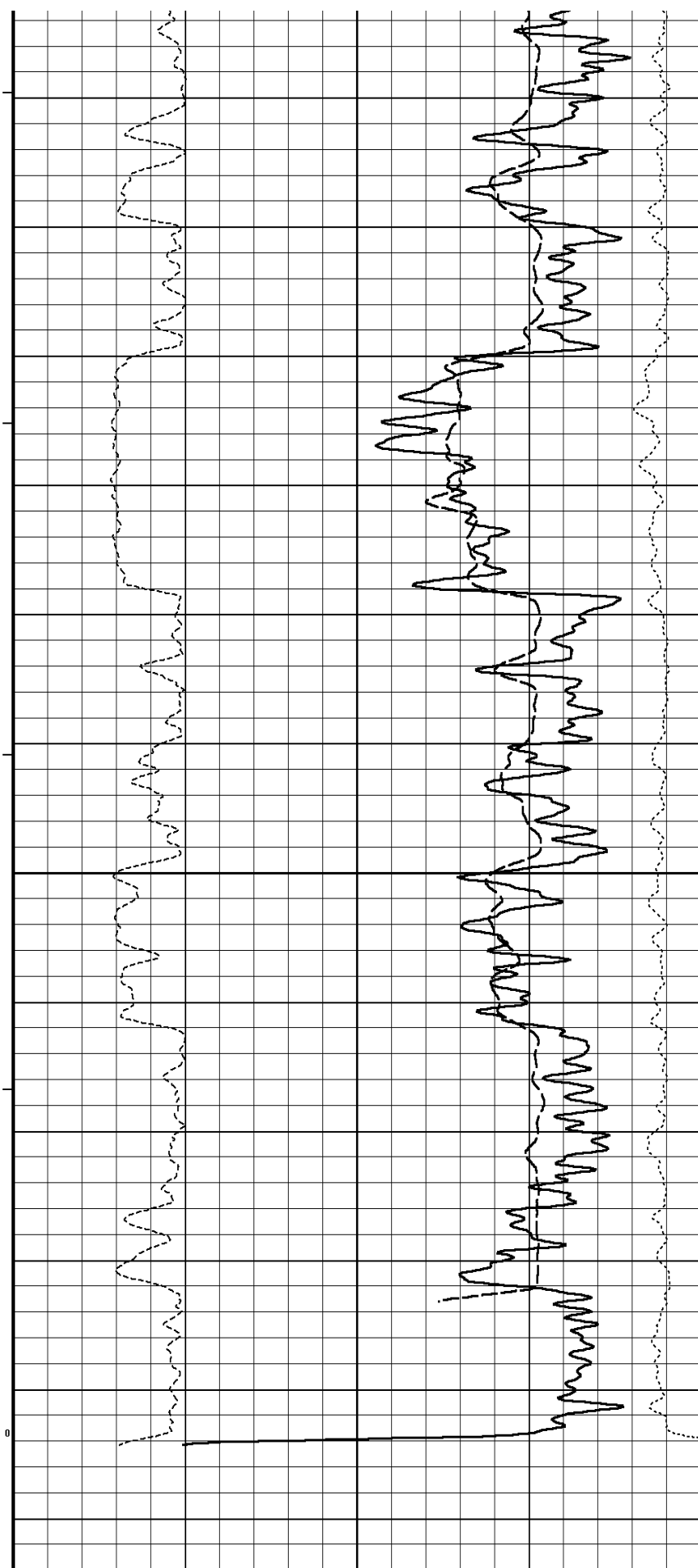
1495

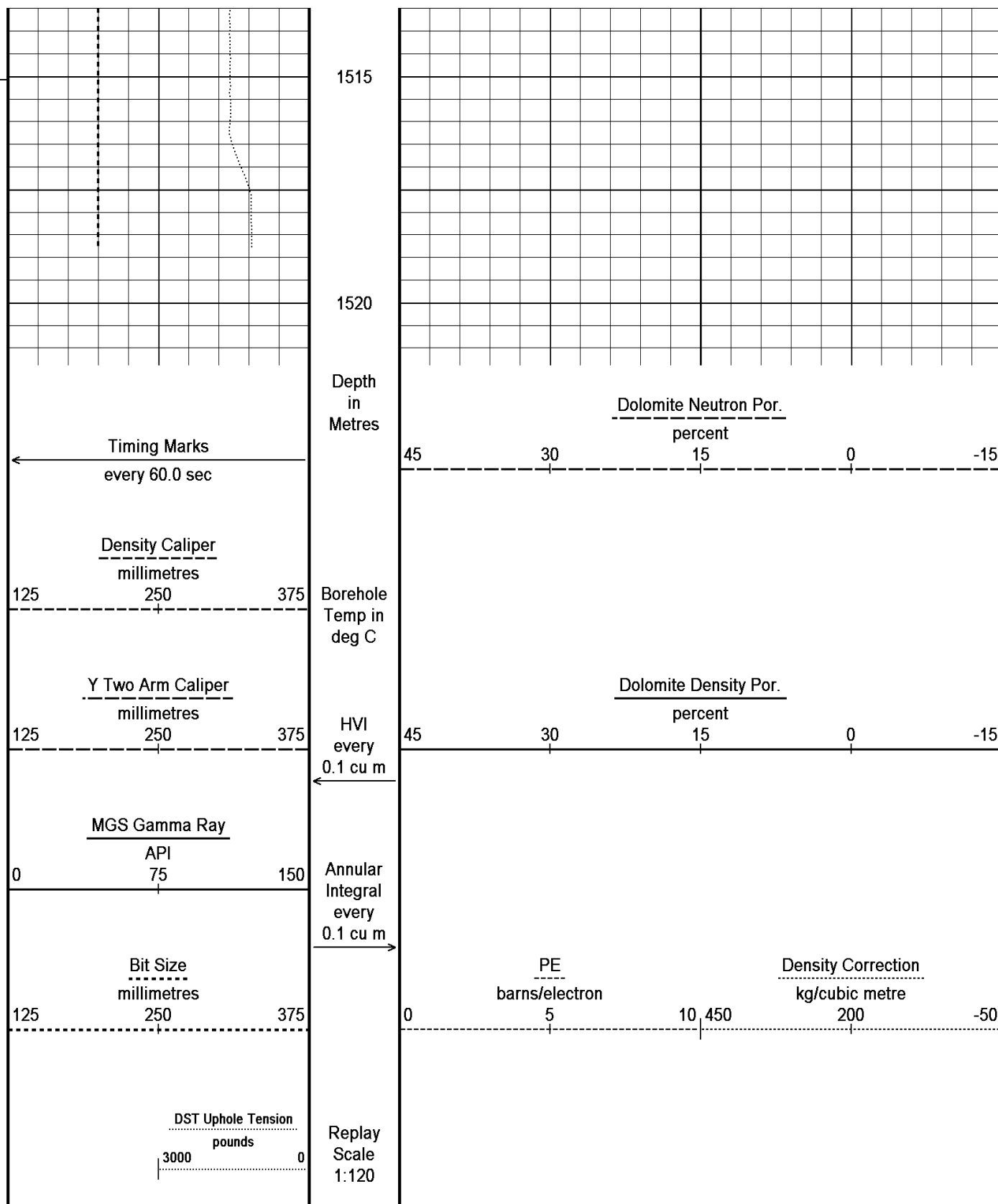
1500

1505

0

1510





Depth Based Data - Maximum Sampling Increment 2.5cm

Filename: C:\Temp\Weatherford PreView\0\L-29 hires.dta

System Versions: Logged with 7.01.0195 Processed with 7.02.0251 Plotted with 8.01.0091

Plotted on 07-NOV-2007 11:38

Recorded on 06-FEB-2007 04:23



HIGH RESOLUTION 1:120



BEFORE SURVEY CALIBRATION

C:\Temp\Weatherford PreView\0\L-29 rpt.dta

General Constants All 000

Last Edited on 6-FEB-2007,03:32

General Parameters

Mud Resistivity	0.690	ohm-metres
Mud Resistivity Temperature	25.000	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	Y Two Arm Caliper	
Annular Volume Diameter	139.700	mm
Caliper for Differential Caliper	Density Caliper	

Rwa Parameters

Porosity used	Base Density Porosity
Resistivity used	Deep Induction
RWA Constant A	0.610
RWA Constant M	2.150

Gamma Calibration MCG 159

Field Calibration on 5-FEB-2007,23:16

	Measured	Calibrated (API)
Background	50	34
Calibrator (Gross)	1224	828
Calibrator (Net)	1174	794

Gamma Constants MCG 159

Last Edited on 6-FEB-2007,02:31

Gamma Calibrator Number	GRCC075	
Mud Density	1135.00	kg/m3
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

SP Calibration MCG 159

Field Calibration on 25-JAN-2007 17:35

	Measured	Calibrated (mV)
Reference 1	99.9	99.5
Reference 2	-99.3	-99.5

High Resolution Temperature Calibration MCG 159

Field Calibration on 28-NOV-2006,15:40

	Measured	Calibrated(Deg C)
Lower	10.00	10.00
Upper	50.00	50.00

High Resolution Temperature Constants MCG 159

Last Edited on 28-NOV-2006,15:40

Pre-filter Length	11
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FE Calibration MFE 017

Base Calibration on 25-JAN-2007 17:46

Field Check on 1-FEB-2007 08:10

Base Calibration

	Measured	Calibrated (ohm-m)
Reference 1	0.0	0.0
Reference 2	971.0	126.8
Base Check		279.5
Field Check		280.6

FF Constants MFF 017

Last Edited on 29-JAN-2007 21:47

Caliper Source for FE correction	Density Caliper			
Rm Source for FE correction	Temperature Corr			
Temp. for Rm Corr.	MCG External Temperature			
Stand-off	Centred	millimetres		
Caliper Calibration MTC 006		Base Calibration on 25-JAN-2007,18:14 Field Calibration on 6-FEB-2007,03:31		
Base Calibration				
Reading No	Measured	Calibrator Size (mm)		
1	14734	110.00		
2	17539	162.00		
3	20248	212.00		
4	22990	262.00		
5	25897	311.00		
6	N/A	N/A		
Field Calibration				
	Measured Caliper (mm)	Actual Caliper (mm)		
	208.40	205.70		
Gamma Calibration MGS 010		Field Calibration on 5-FEB-2007,23:15		
	Measured	Calibrated (API)		
Background	48	31		
Calibrator (Gross)	1256	825		
Calibrator (Net)	1208	794		
Gamma Constants MGS 010		Last Edited on 6-FEB-2007,02:31		
Gamma Calibrator Number	grcc075			
Mud Density	1135.00	kg/m3		
Caliper Source for Processing	Density Caliper			
Tool Position	Centred			
Concentration of KCl	0.00	kppm		
SP Calibration MGS 010		Field Calibration on 8-NOV-2006,19:47		
	Measured	Calibrated (mV)		
Reference 1	0.0	0.0		
Reference 2	10.0	10.0		
High Resolution Temperature Calibration MGS 010		Field Calibration on 28-NOV-2006,15:40		
	Measured	Calibrated(Deg C)		
Lower	10.00	10.00		
Upper	50.00	50.00		
High Resolution Temperature Constants MGS 010				
Pre-filter Length	11			
Micro Normal and Micro Inverse Calibration MML 015		Base Calibration on 25-JAN-2007,17:08 Field Check on 31-JAN-2007 18:48		
Base Calibration				
Channel	Resistor 1	Resistor 2	Resistor 1	Resistor 2
Micro Normal	9.9	48.5	5.1	25.6
Micro Inverse	9.9	48.7	3.4	16.9
Channel	Base Check (ohm-m)		Field Check (ohm-m)	
Micro Normal	79.8		0.0	
Micro Inverse	52.6		0.0	
Micro Normal and Micro Inverse Constants MML 015		Last Edited on 5-FEB-2007,23:14		
Micro Normal K Factor	0.5110			

Micro Inverse K Factor	0.3380		
Standoff Offset	N/A	millimetres	
Caliper Calibration MML 015			Base Calibration on 25-JAN-2007,18:15 Field Calibration on 6-FEB-2007,03:32
Base Calibration			
Reading No	Measured	Calibrator Size (mm)	
1	13860	162.00	
2	17089	212.00	
3	20617	262.00	
4	24375	311.00	
5	27976	355.00	
6	N/A	N/A	
Field Calibration			
	Measured Caliper (mm)	Actual Caliper (mm)	
	211.00	205.70	
Neutron Calibration MDN 144			Base Calibration on 25-JAN-2007 18:05 Field Check on 5-FEB-2007 23:56
Base Calibration			
	Measured		Calibrated (cps)
	Near	Far	Near Far
	2967	93	3714 110
Ratio	31.886		33.764
Field Calibrator at Base			
			Calibrated (cps)
			2065 2999
Ratio			0.689
Field Check			
			Calibrated (cps)
			2075 3068
Ratio			0.676
Neutron Constants MDN 144			Last Edited on 18-JAN-2007,02:18
Neutron Source Id	16145b		
Neutron Jig Number			
Epithermal Neutron	No		
Caliper Source for Processing	Density Caliper		
Stand-off	0.00	mm	
Mud Density	1000.00	kg/m3	
Limestone Sigma	7.10	cu	
Sandstone Sigma	4.26	cu	
Dolomite Sigma	4.70	cu	
Formation Pressure Source	Constant Value		
Formation Pressure	0.00	kPa	
Temperature Source	MCG External Temperature		
Temperature	20.00	degrees C	
Mud Salinity	0.00	kppm	
Formation Fluid Salinity Source	Constant Value		
Formation Fluid Salinity	0.00	kppm	
Barite Mud Correction	Not Applied		
Photo Density Calibration MPD 036			Base Calibration on 23-JAN-2007 04:10 Field Check on 5-FEB-2007 23:46
Density Calibration			
Base Calibration	Measured		Calibrated (sdu)
	Near	Far	Near Far
Reference 1	52802	28585	60352 31615
Reference 2	21780	2767	25043 2540
Field Check at Base			
	1184.8	1494.9	

Field Check

1184.7 1500.0

PE Calibration

Base Calibration	WS	Measured WH	Ratio	Calibrated Ratio
Background	213	1052		
Reference 1	22151	52610	0.425	0.400
Reference 2	5909	21638	0.277	0.272

Field Check at Base

213.1 1051.7

Field Check

211.7 1051.4

Density Constants MPD 036

Last Edited on 6-FEB-2007,02:32

Density Source Id	2834GW	
Nylon Calibrator Number	608	
Aluminium/Fe Calibrator Number	608	
Density Shoe Profile	4 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1135.00	kg/m3
Mud Density Z/A Correction	1.11	
Mud Filtrate Density	1000.00	kg/m3
Dry Hole Mud Filtrate Density	1000.00	kg/m3
DNCT	0.00	kg/m3
CRCT	0.00	kg/m3
Density Z/A Correction	0	
Matrix Density (kg/m3)	Depth (m)	
2710.00	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	

Caliper Calibration MPD 036

Base Calibration on 23-JAN-2007 04:20

Field Calibration on 6-FEB-2007,03:32

Base Calibration		
Reading No	Measured	Calibrator Size (mm)
1	18576	110.00
2	28032	162.00
3	37841	212.00
4	48080	262.00
5	57920	311.00
6	N/A	N/A
Field Calibration		
	Measured Caliper (mm)	Actual Caliper (mm)
	206.00	205.70

Sonic Constants MSS 060

Last Edited on 6-FEB-2007,03:32

Maximum Boundary Contrast	328.08	micro-sec/m
Fluid Transit Time	620.08	micro-sec/m
Limestone Transit Time	155.84	micro-sec/m
Sandstone Transit Time	182.09	micro-sec/m
Dolomite Transit Time	142.72	micro-sec/m

Sonic used for Porosities	3-5' Compensated Sonic			
Correction for Sonde Skew	Applied			
Cycle Stretch Algorithm	Applied			
MN3FT	N/A	micro-sec		
MX3FT	N/A	micro-sec		
Hunt-Raymer Constant	0.00	0		
Fixed Gate Parameters				
Start Time (micro-sec)	End Time (micro-sec)	Discriminator (mV)	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
Down Hole Fixed Gate Parameters				
Gate Start		N/A	micro-sec	
Gate Width		N/A	micro-sec	
Initial Discriminator Level		0.0000	mVolts	
Full Waveform Parameters				
Use 3' Waveform to derive TR		N/A		
Use 4' Waveform to derive TR		N/A		
Use 5' Waveform to derive TR		N/A		
Use 6' Waveform to derive TR		N/A		
3' Waveform Discriminator Level		N/A	mV	
4' Waveform Discriminator Level		N/A	mV	
5' Waveform Discriminator Level		N/A	mV	
6' Waveform Discriminator Level		N/A	mV	
3' Waveform Filter		N/A		
4' Waveform Filter		N/A		
5' Waveform Filter		N/A		
6' Waveform Filter		N/A		
Semblance Level		N/A		
Semblance Window Width		N/A	micro-sec	
Sonic 1 Despiker		N/A	N/A	
Sonic 2 Despiker		N/A	N/A	

Induction Calibration MAI 072			Base Calibration on 25-JAN-2007,18:16	
			Field Check on 6-FEB-2007 03:36	
Base Calibration				
Test Loop Calibration		Measured	Calibrated (mmho/m)	
Channel	Low	High	Low	High
1	13.9	459.6	9.3	966.2
2	5.3	373.2	7.6	821.4
3	2.9	254.1	5.2	566.0
4	1.3	130.4	2.6	279.2
Array Temperature		18.5	Deg C	
Channel		Base Check (mmho/m)		Field Check (mmho/m)
	Low	High	Low	High
1	18.0	3925.2	21.4	3925.8
2	31.0	3598.6	33.0	3598.2
3	29.0	3101.3	30.5	3101.0
4	20.3	2105.9	21.3	2105.5
Deep	18.4	2019.9	19.5	2019.8
Medium	40.9	4089.6	42.7	4089.1
Shallow	45.6	5324.4	48.5	5323.6
Array Temperature		18.5	32.0	Deg C

Induction Constants MAI 072		Last Edited on 6-FEB-2007,03:33	
Induction Model		VECTAB	

Induction Model		VECTRA	
Caliper for Borehole Corr.		Density Caliper	
Hole Size for Borehole Correction		N/A	millimetres
Stand-off		25.40	millimetres
Number of Fins on Stand-off		5.0000	
Stand-off Fin Width		25.4000	millimetres
Borehole Corr. Rm Source		Temperature Corr	
Temp. for Rm Corr.	MCG External Temperature		
Squasher Start		0.0020	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
High Resolution Temperature Calibration MAI 072			
	Measured	Calibrated(Deg C)	Field Calibration on 11-NOV-2006,04:00
Lower	1.00	1.00	
Upper	10.00	10.00	
High Resolution Temperature Constants MAI 072			
Pre-filter Length		11	

DOWNHOLE EQUIPMENT			
C:\Temp\Weatherford PreView\0\L-29 rpt.dta			
Compact Gamma MCG 159 Length: 2.65 m	Weight: 63.9 lb		
		20.78 m	GRGC - Gamma Ray
		19.90 m	CGXT - MCG External Temperature
Compact Focussed Electric MFE 17 Length: 1.84 m	Weight: 48.5 lb		
		18.79 m	FEFE - Shallow FE
Compact Two Arm Caliper		16.22 m	CLYC - X Two Arm Caliper

Compact Two Arm Caliper
MTC 6 Length: 2.17 m

Weight: 61.7 lb

Compact Short Gamma
MGS 10 Length: 1.04 m

Weight: 24.3 lb

Compact InterSonde Crank
ISC 159 Length: 0.70 m

Weight: 24.3 lb

Compact Micro-log
MML 15 Length: 2.43 m

Weight: 81.6 lb

Compact Neutron
MDN 144 Length: 1.53 m

Weight: 50.7 lb

Compact Density/Caliper
MPD 36 Length: 2.92 m

Weight: 90.4 lb

Compact Sonic
MSS 60 Length: 3.82 m

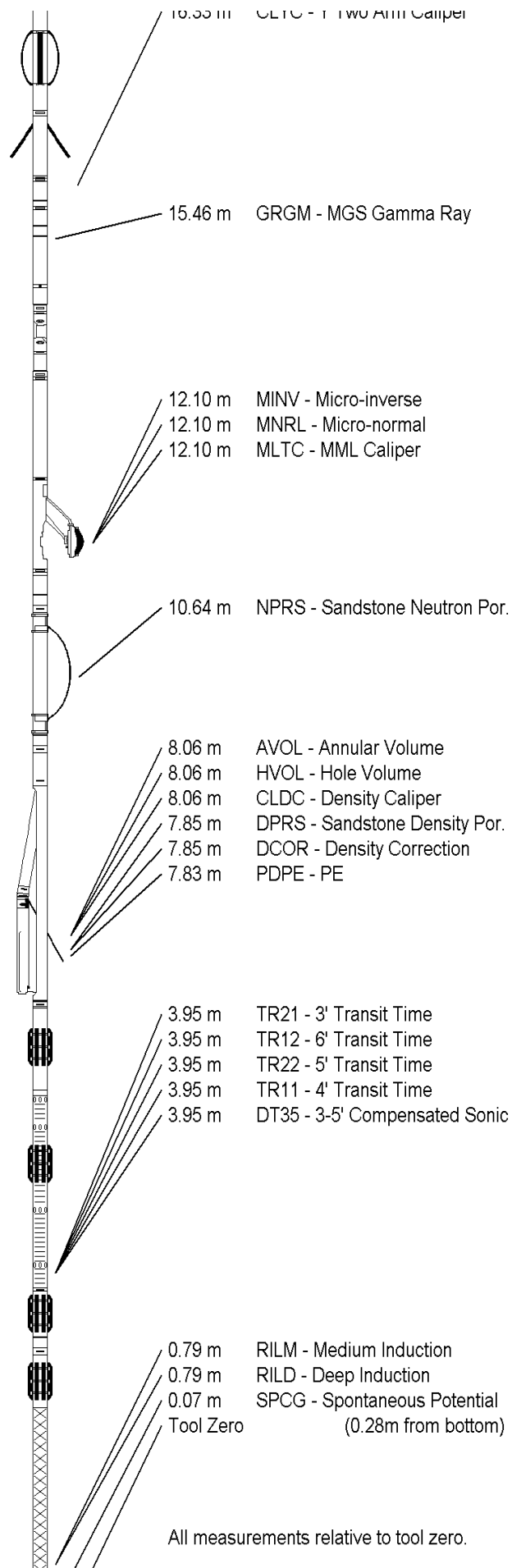
Weight: 72.8 lb

Compact Induction
MAI 72 Length: 3.29 m

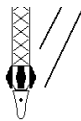
Weight: 48.5 lb

Compact Hole Finder
HFS 1 Length: 0.24 m

Weight: 2.2 lb



Total Length: 22.63 m Weight: 568.8 lb



COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARA ET AL CAMERON L-29
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTHWEST TERRITORIES
COUNTRY/STATE	CANADA

Elevation Kelly Bushing	759.50	metres	First Reading	1508.40	metre
Elevation Drill Floor		metres	Depth Driller	1515.50	metres
Elevation Ground Level	754.10	metres	Depth Logger	1516.70	metres



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