

# Reeves

## PHOTO DENSITY COMPENSATED NEUTRON 1:200 TVD

COMPANY				ESSO AUSTRALIA PTY. LTD.			
WELL				FLOUNDER A12a			
FIELD				GIPPSLAND BASIN			
PROVINCE/COUNTY				BASS STRAIT			
COUNTRY/STATE				AUSTRALIA			
LOCATION				5758709.11 m N, 625849.47 m E 38°18'39.173" S, 148°26'21.833" E			
LSD	SEC	TWP	RGE	Other Services			
API Number				COMPENSATED SONIC			
Permit Number				DUAL LATEROLOG			
Permanent Datum MSL				, Elevation 0 metres			
Log Measured From RT				@33.85 metres above Permanent Datum			
Drilling Measured From RT							
Date	12-APR-2003					Elevations: KB DF GL	
Run Number	1					metres	
Depth Driller	2636.40			metres			
Depth Logger	2637.40			metres			
First Reading	2636.90			metres			
Last Reading	1084.00			metres			
Casing Driller	754.70			metres			
Casing Logger	754.50			metres			
Bit Size	8.50			inches			
Hole Fluid Type	KC/PHPA/GLY						
Density / Viscosity	9.90 lb/USg			68.00 sec/cst			
PH / Fluid Loss	9.40			2.50 ml/30Min			
Sample Source	FLOWLINE						
Rm @ Measured Temp	0.124 @ 25.0			ohm-m			
Rmf @ Measured Temp	0.113 @ 25.0			ohm-m			
Rmc @ Measured Temp	0.179 @ 25.0			ohm-m			
Source Rmf / Rmc	PRESS			PRESS			
Rm @ BHT	0.048 @100.0			ohm-m			
Time Since Circulation	17:45 HRS						
Max Recorded Temp	100.00			deg C			
Equipment Name	COMPACT						
Equipment / Base	1						
Recorded By	M.Barnes, R.Tench			G.McManus			
Witnessed By	E.Espiritu						
Circ. Stopped	08:00 11-APR						

### BOREHOLE RECORD

Bit Size inches	Depth From metres	Depth To metres
8.500	0.00	2920.00

### CASING RECORD

Type	Size inches	Depth From metres	Shoe Depth metres	Weight pounds/ft
K-55	10.750	0.00	856.25	40.50

### REMARKS

DRILLING RIG: NABORS (ISDL) 453.

TOP OF WINDOW: 856.25m

TOP OF WHIPSTOCK: 856.75m

BTTM OF WINDOW: 863.25m

REEVES COMPACT WIRELINE TOOLS RUN ON SCHLUMBERGER UNIT.

MPD CALIPER AND MMR CALIPER ARE INDEPENDENT OF EACH OTHER, DUE TO SWIVALS ABOVE AND BELOW DENSITY/NEUTRON SECTION.

SPIKES IN DEEP LATEROLOG @ 2094m MD AND 2113m MD ARE INVALID.

HTHP: 11.2 ml/30 min @ Deg 121 deg C.

MAX DEVIATION: 53.8 DEGREES AT 2137.0 m.

DOGLEG AT 892 M, WITH DLS > 6.0 DEGREES/30 m.

REEVES CREW: M.BARNES, R.TENCH, G.MCMANUS.

SCHLUMBERGER CREW: B.GLOVER, B.TAYLOR, J.LIGHT, R.DEGROOT.

# AFTER SURVEY CALIBRATION

C:\Fla a12a\MAIN LOG A DSC.dta

## Gamma Check MCG 076

Field Calibration on 7-APR-2003,14:34  
After Survey Check on 12-APR-2003,07:31

	Before (API)	After (API)
Background	10	6
Calibrator (Gross)	919	915
Calibrator (Net)	909	909

## Neutron Check MDN 069

Before Survey Check on 7-APR-2003 14:52  
After Survey Check on 12-APR-2003,07:35

Near (cps)		Far (cps)	
Before	After	Before	After
1846	1818	2708	2648
Ratio			
Before		After	
0.682		0.687	

## Photo Density Check MPD 067

Before Survey Check on 7-APR-2003 14:40  
After Survey Check on 12-APR-2003,07:40

### Density Check

Near		Far	
Before	After	Before	After
957.7	954.7	1152.3	1153.1

### PE Check

	Before	After
WS	180.1	179.6
WH	831.6	828.5

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.



## MAIN LOG B 1:200



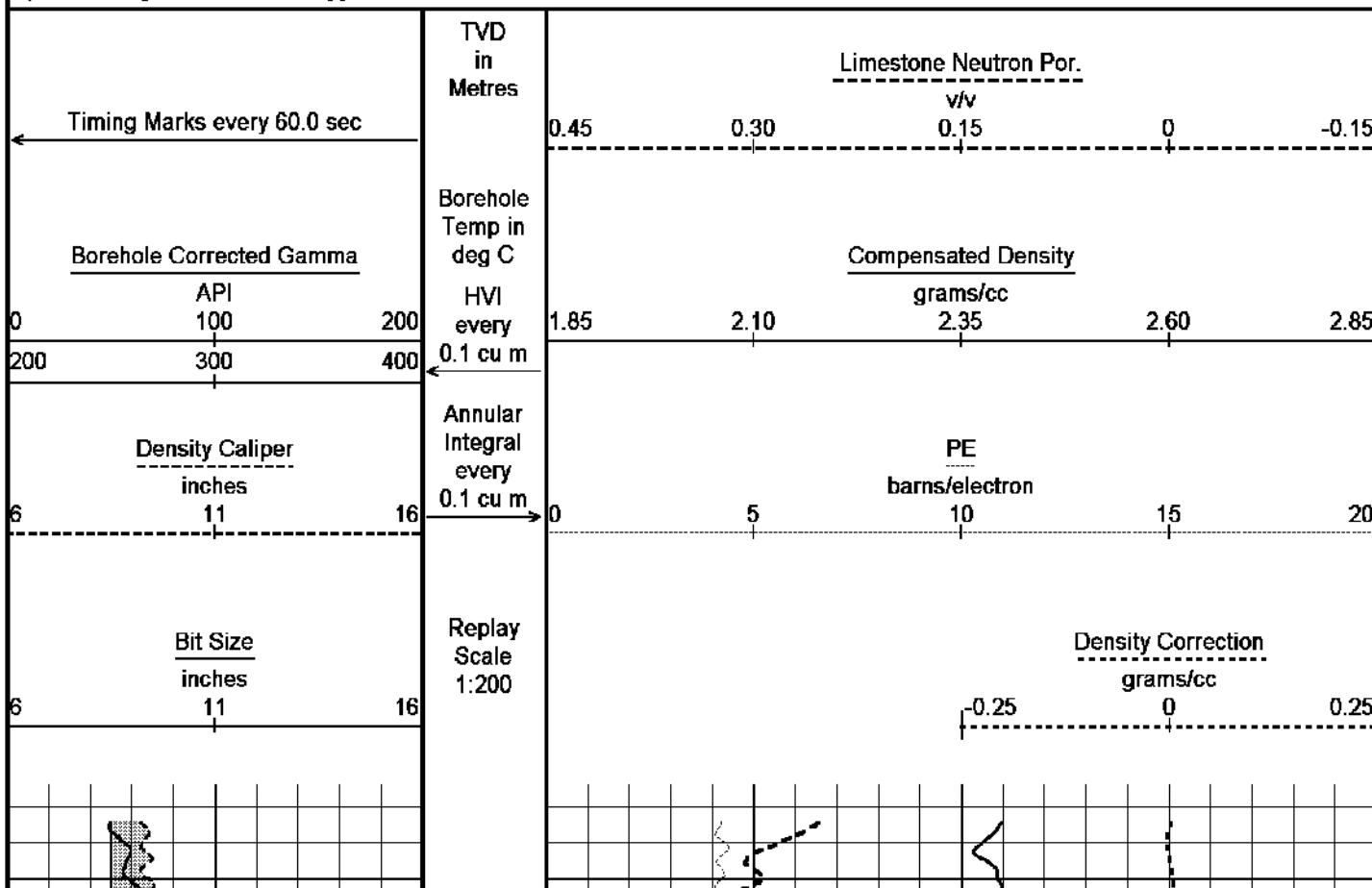
Depth Based Data - Maximum Sampling Increment 10.0cm

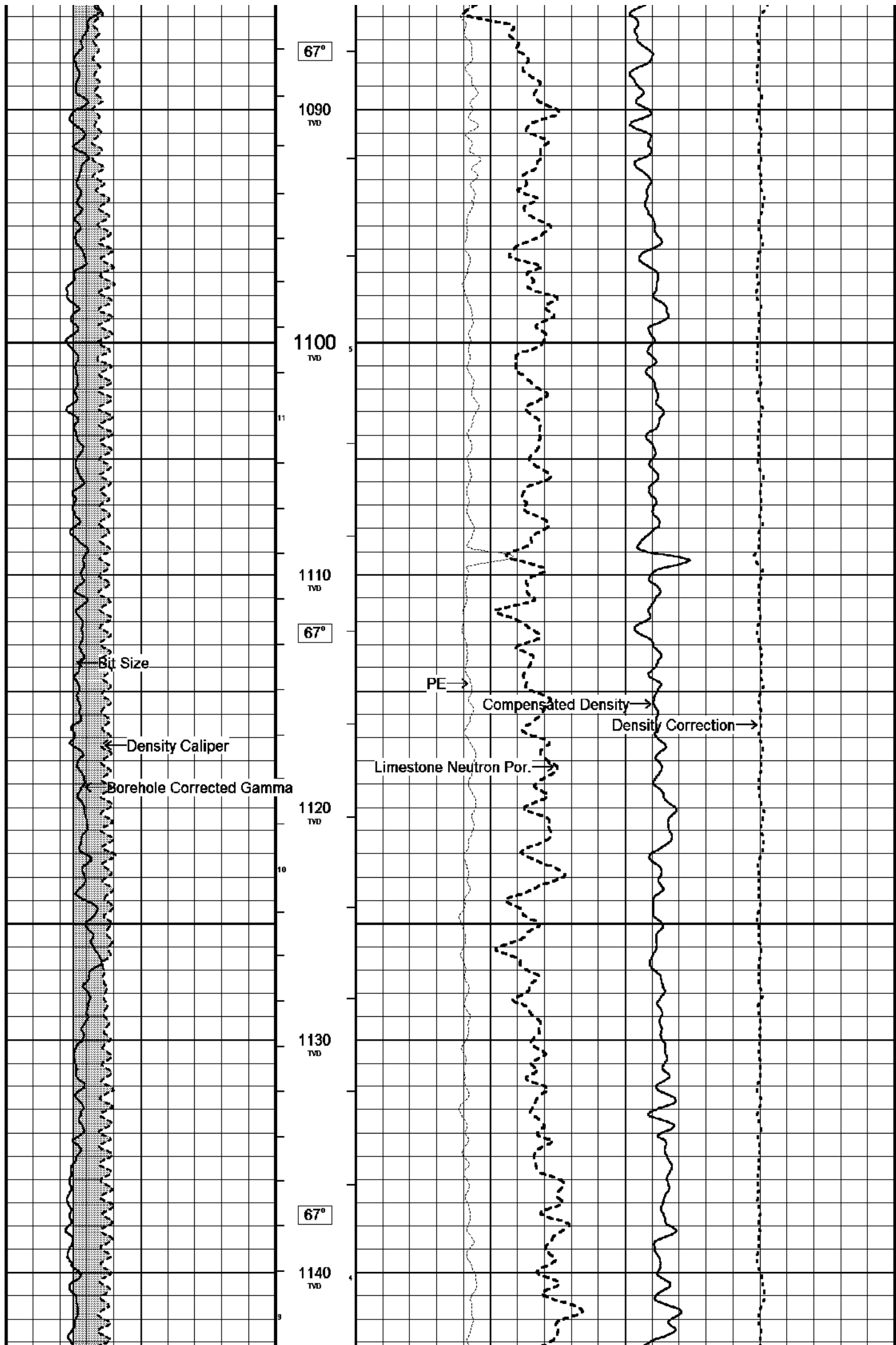
Plotted on 24-MAY-2003 15:37

Filename: C:\Fla a12a\MAIN LOG B DSC.dta

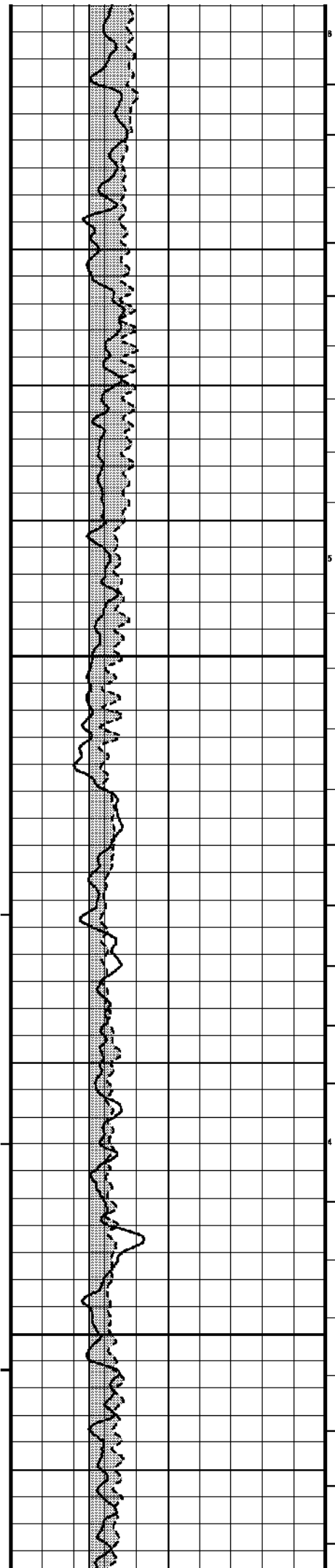
Recorded on 12-APR-2003 04:49

System Configuration Dates: Logged 23-OCT-2002: Processed 23-OCT-2002: Plotted 23-OCT-2002:









1210  
TVD

69°

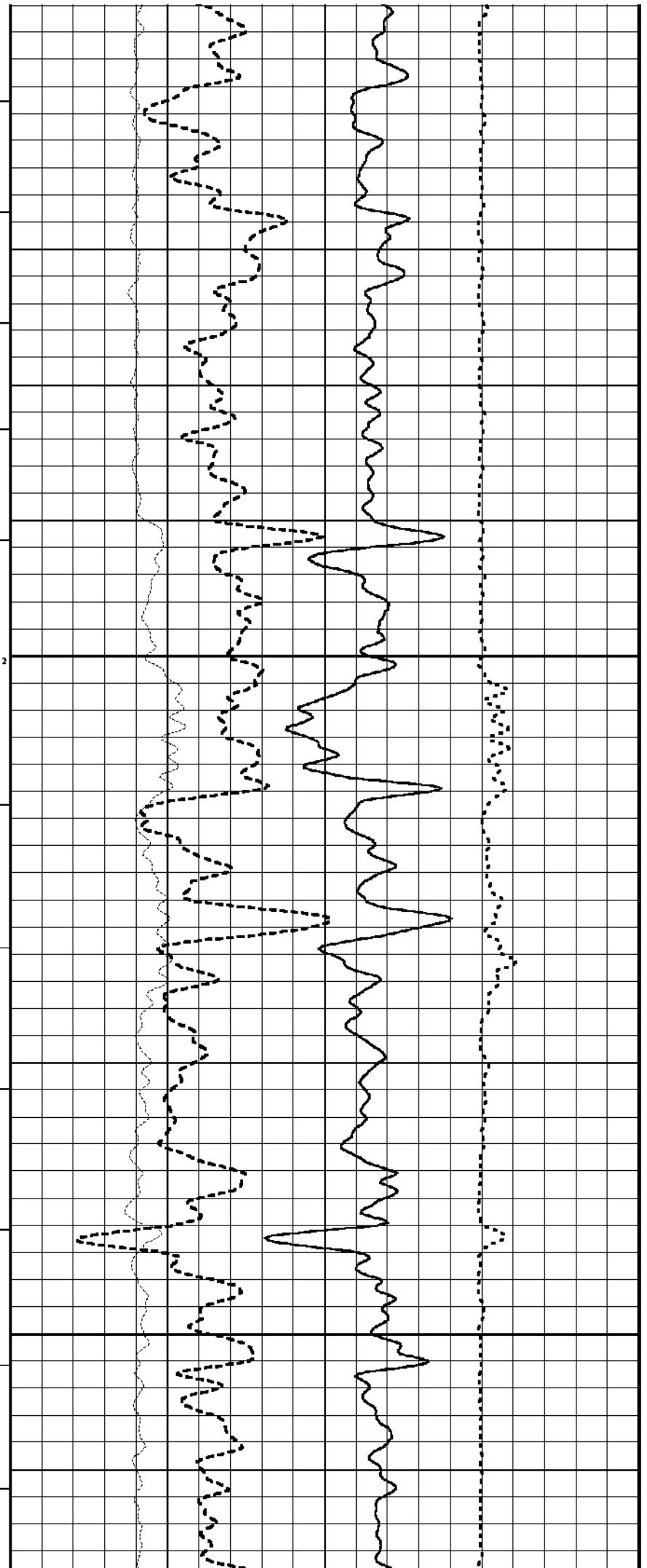
1220  
TVD

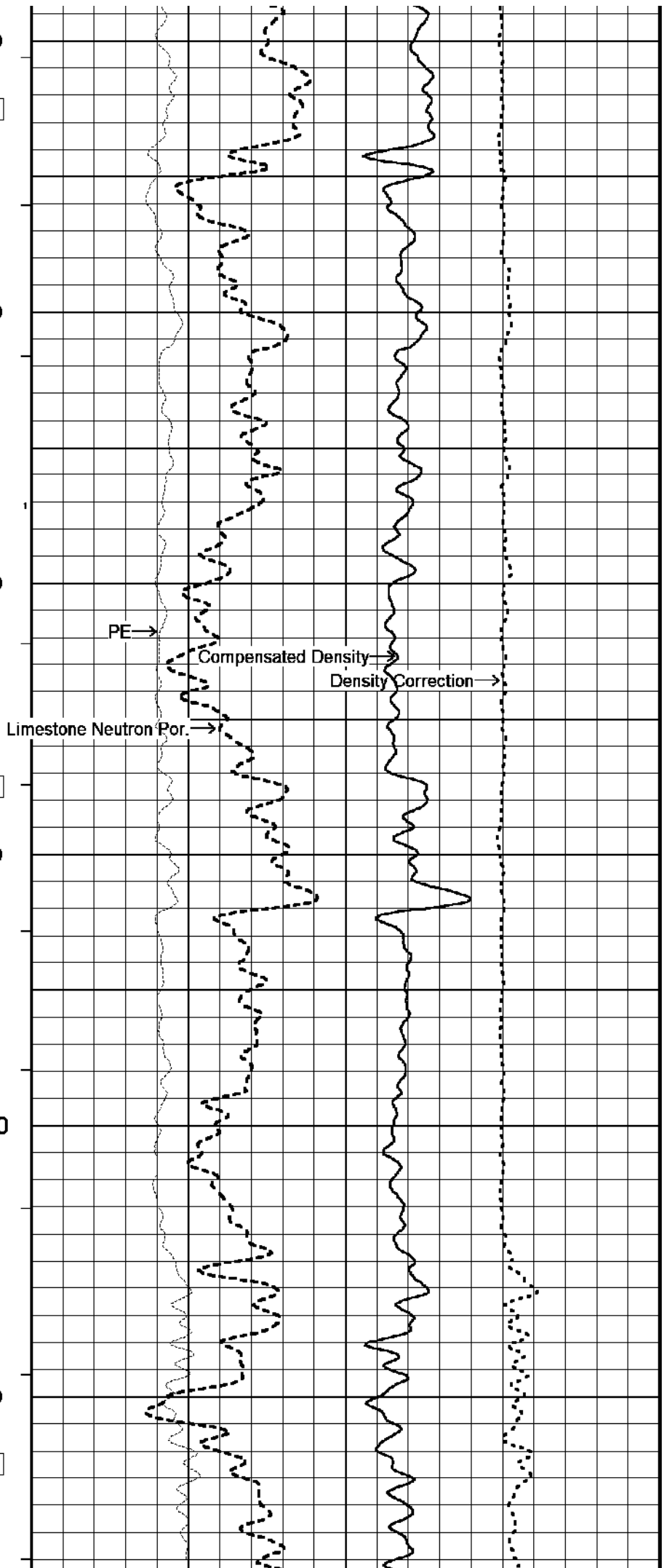
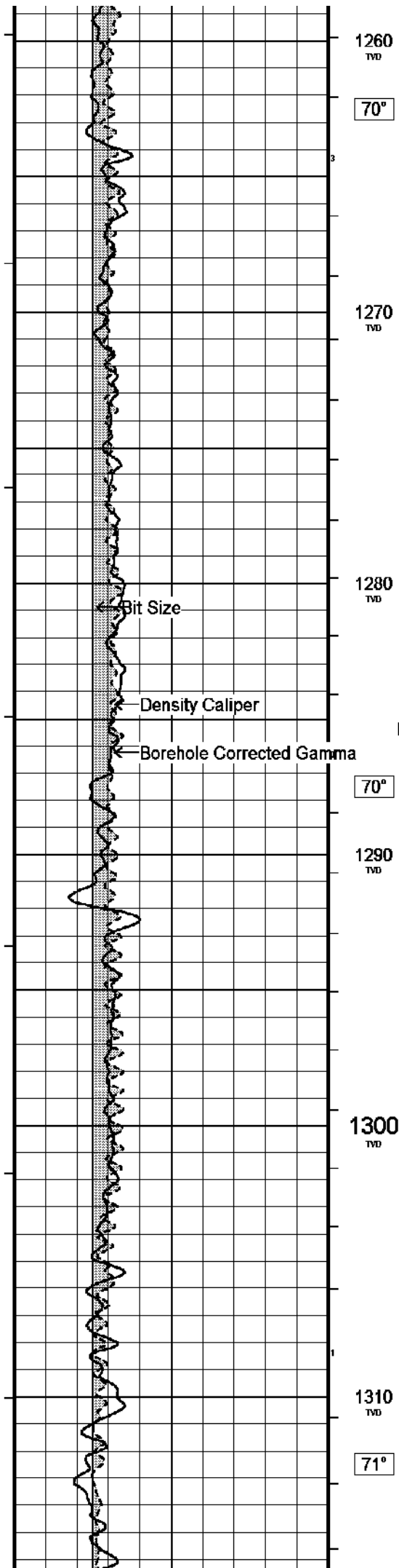
1230  
TVD

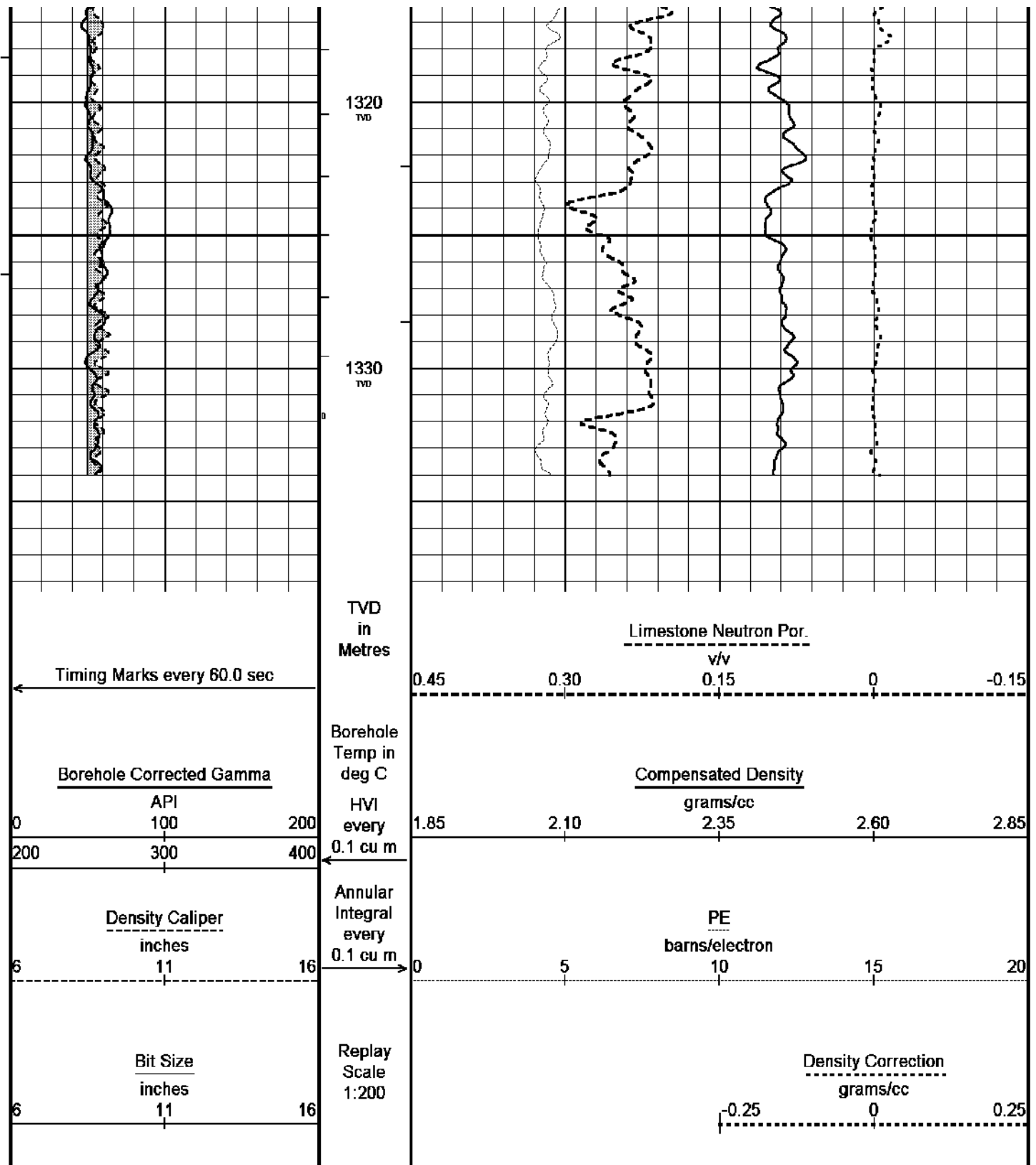
69°

1240  
TVD

1250  
TVD







Depth Based Data - Maximum Sampling Increment 10.0cm

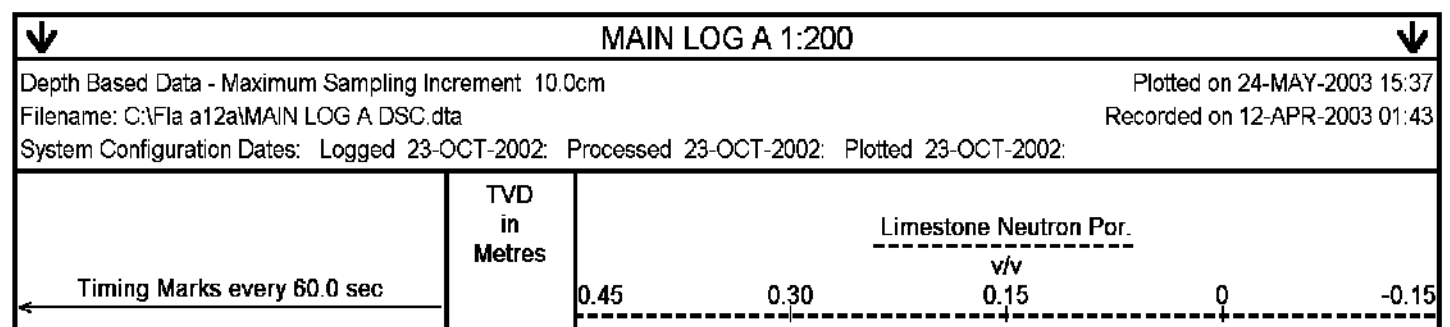
Plotted on 24-MAY-2003 15:37

Filename: C:\Fla a12a\MAIN LOG B DSC.dta

Recorded on 12-APR-2003 04:49

System Configuration Dates: Logged 23-OCT-2002: Processed 23-OCT-2002: Plotted 23-OCT-2002:

MAIN LOG B 1:200



Depth Based Data - Maximum Sampling Increment 10.0cm

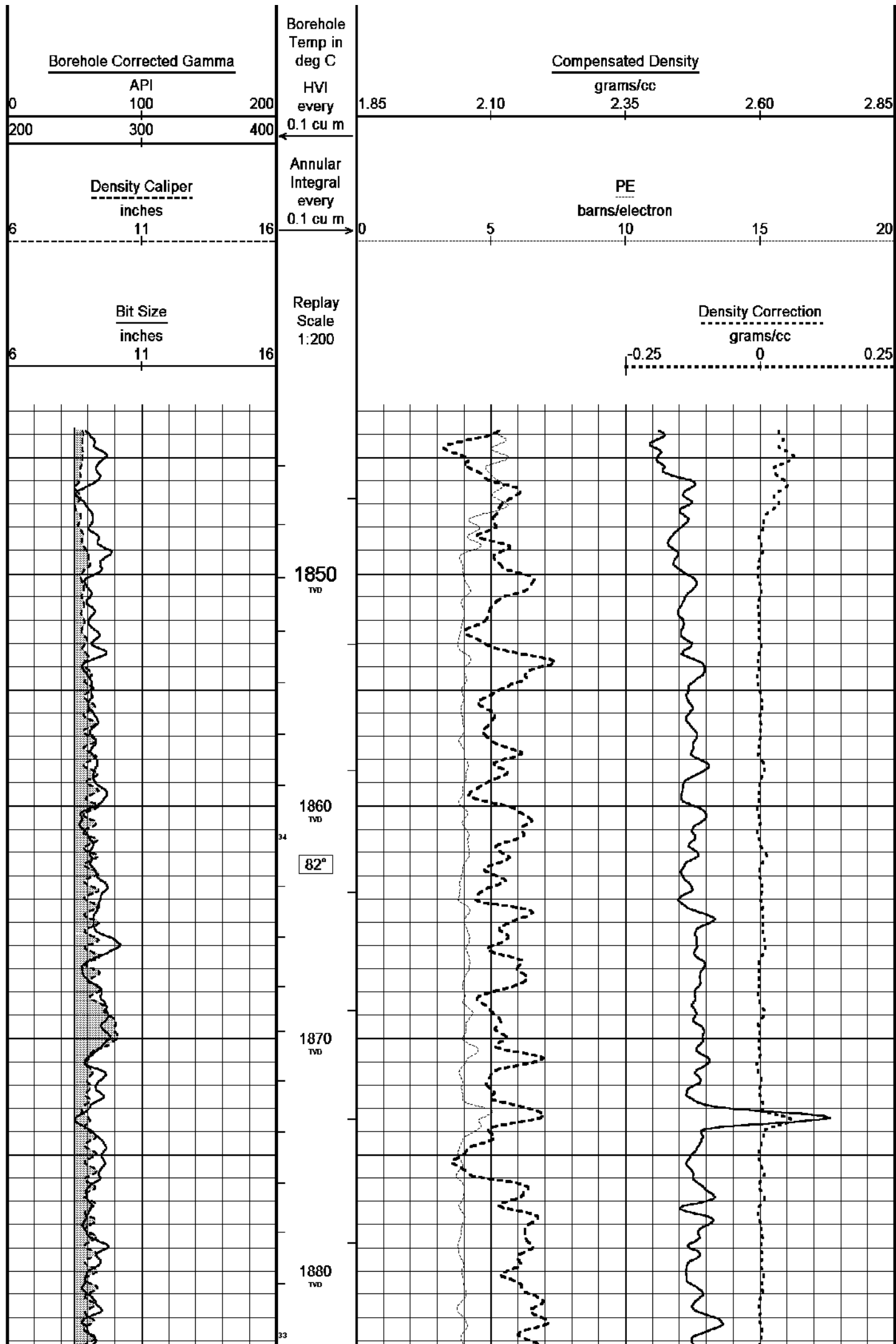
Plotted on 24-MAY-2003 15:37

Filename: C:\Fla a12a\MAIN LOG A DSC.dta

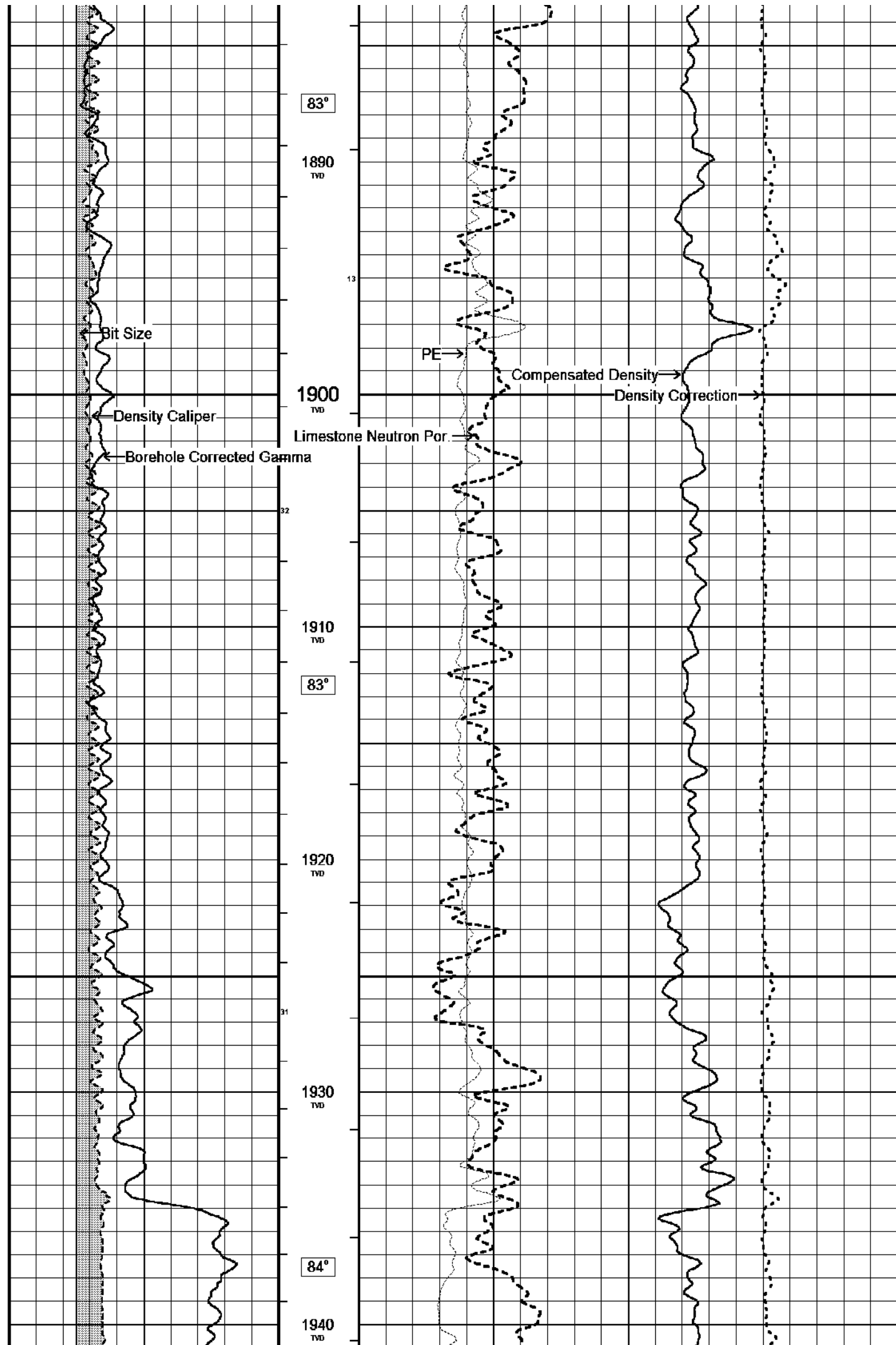
Recorded on 12-APR-2003 01:43

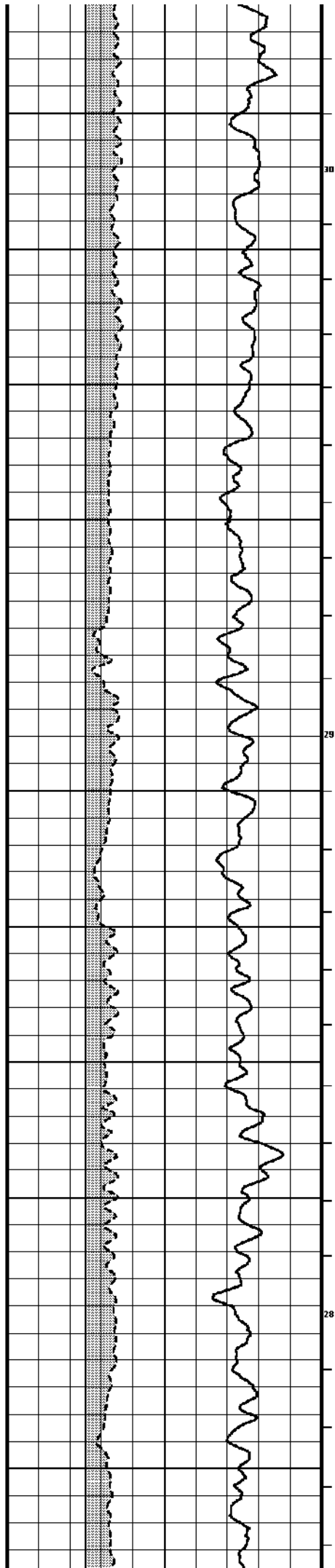
System Configuration Dates: Logged 23-OCT-2002: Processed 23-OCT-2002: Plotted 23-OCT-2002:

MAIN LOG A 1:200









1950  
TVD

1960  
TVD

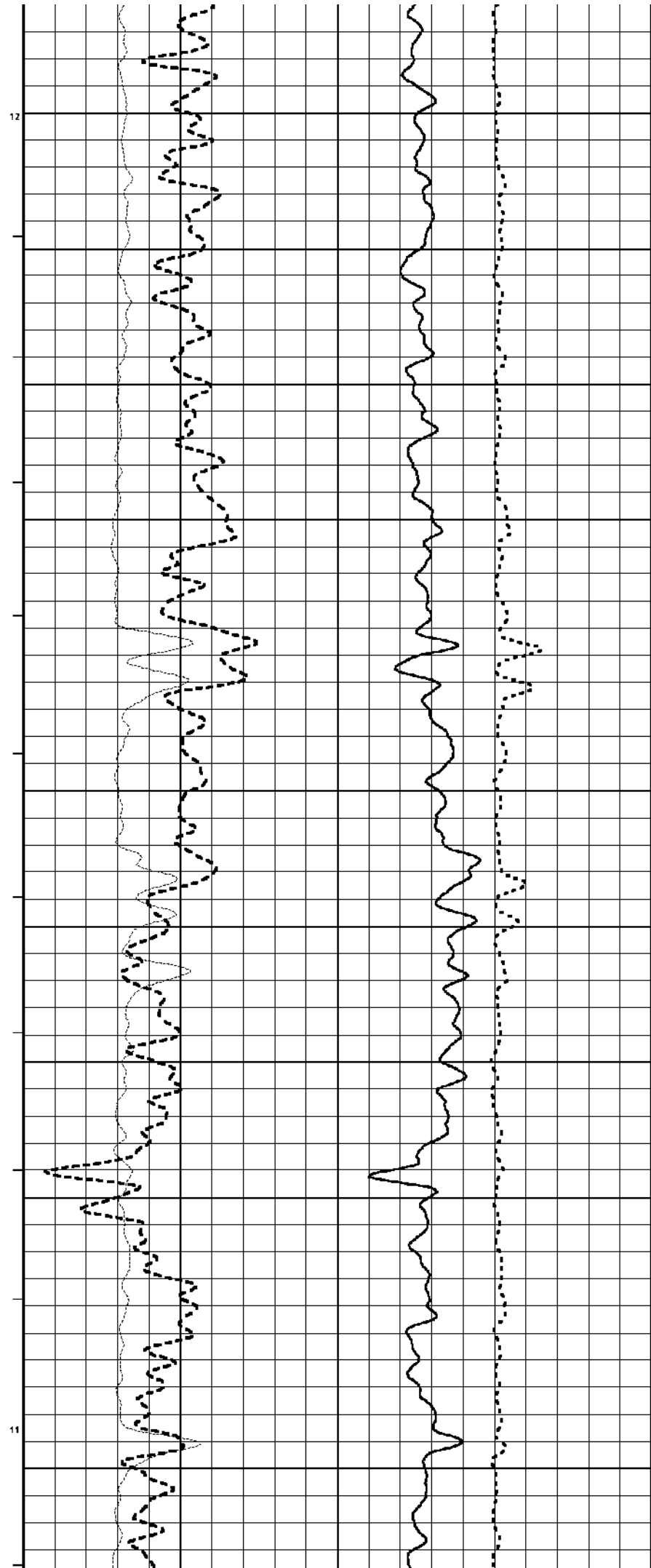
1970  
TVD

1980  
TVD

1990  
TVD

85°

85°



1950  
TVD

1960  
TVD

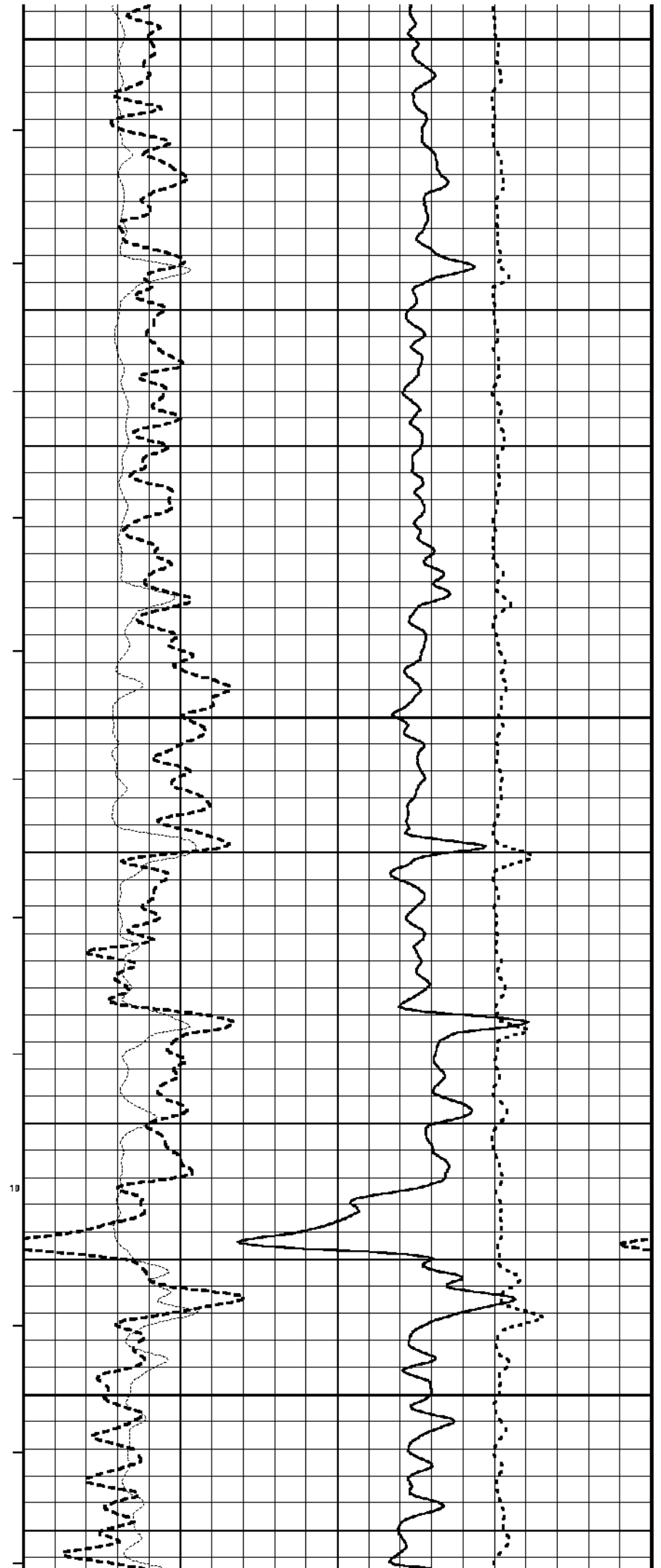
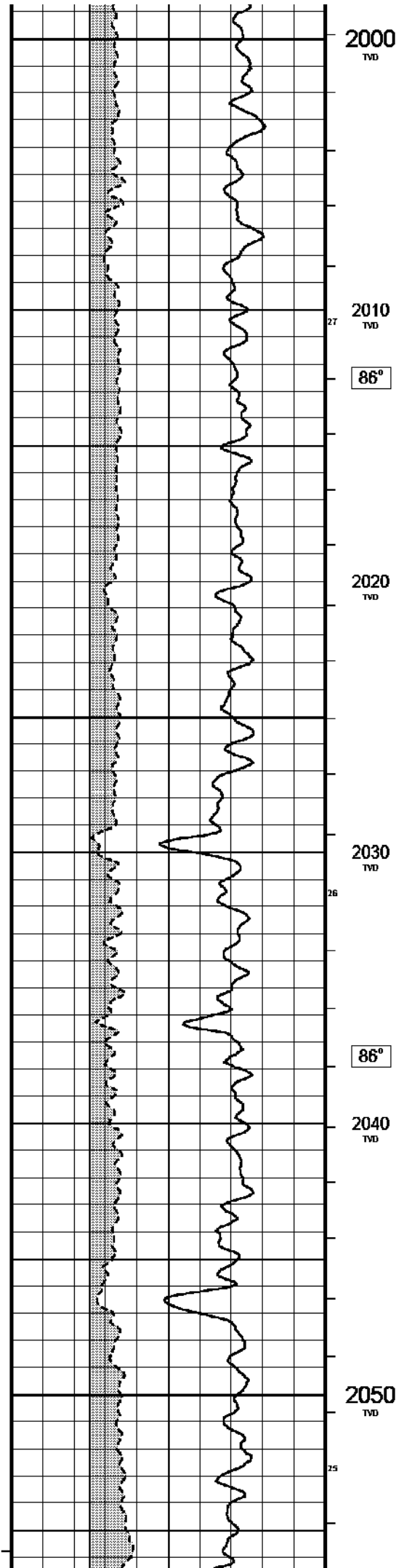
1970  
TVD

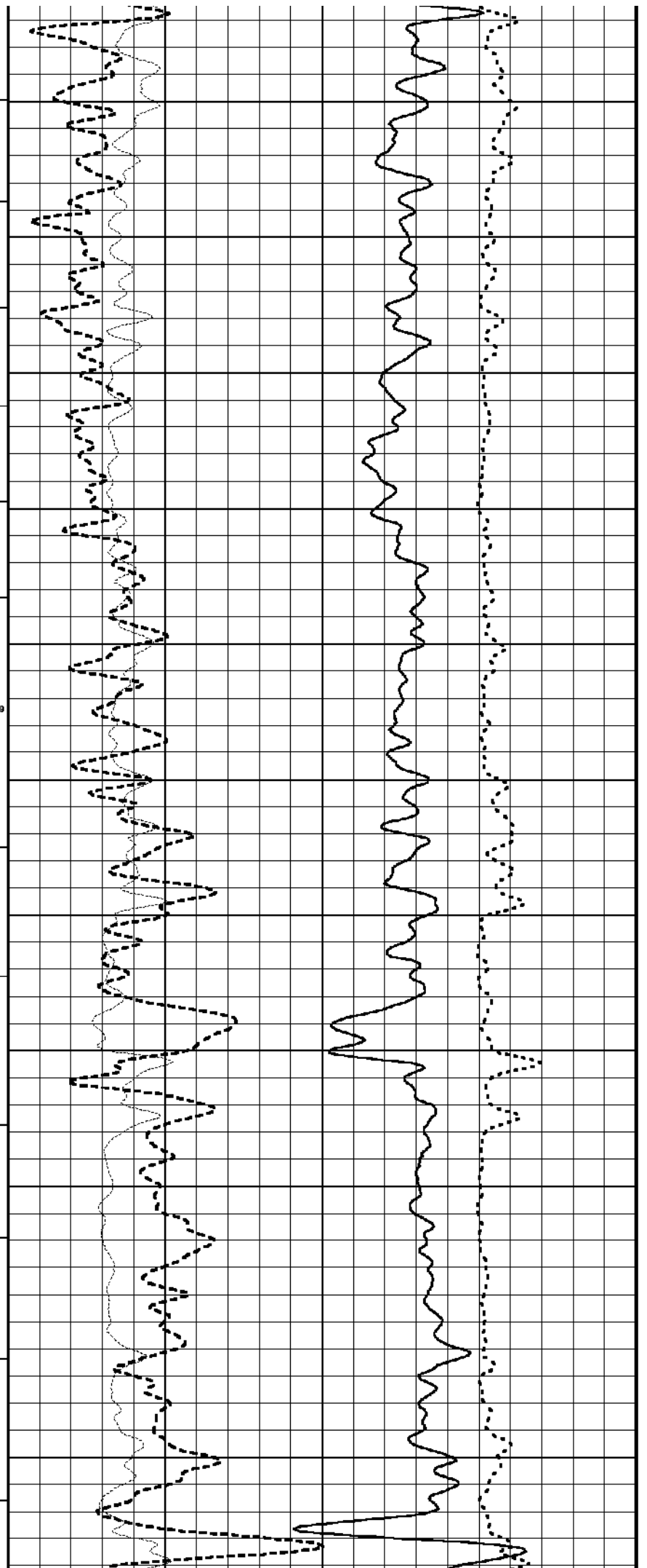
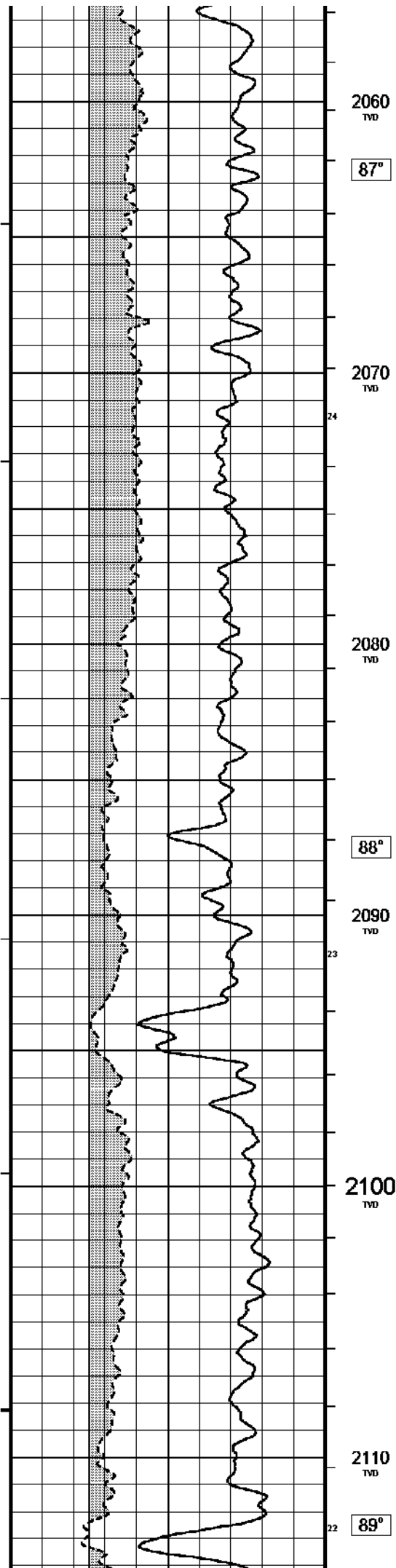
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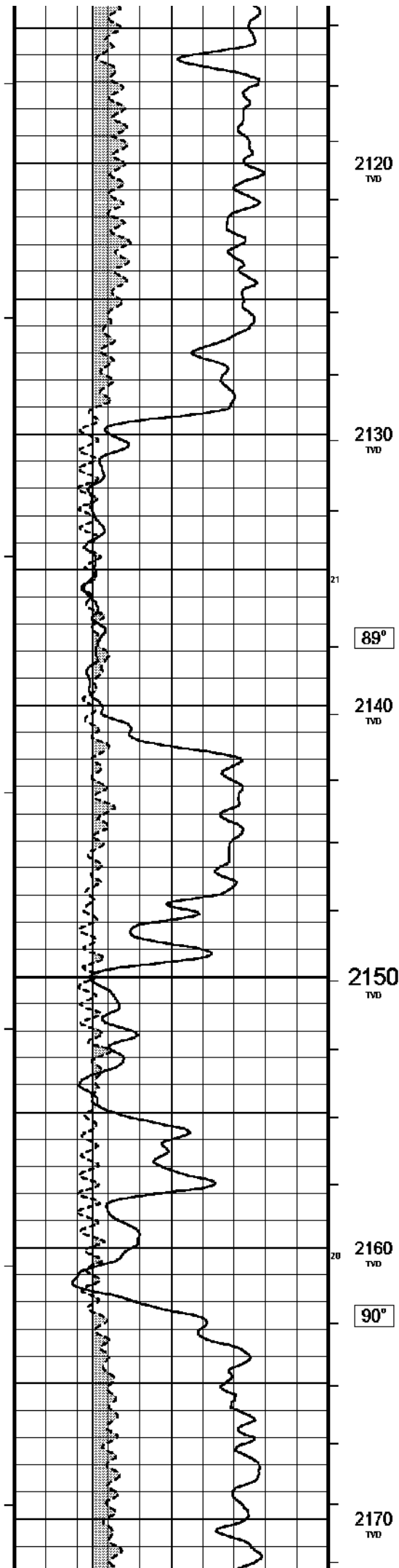
1990  
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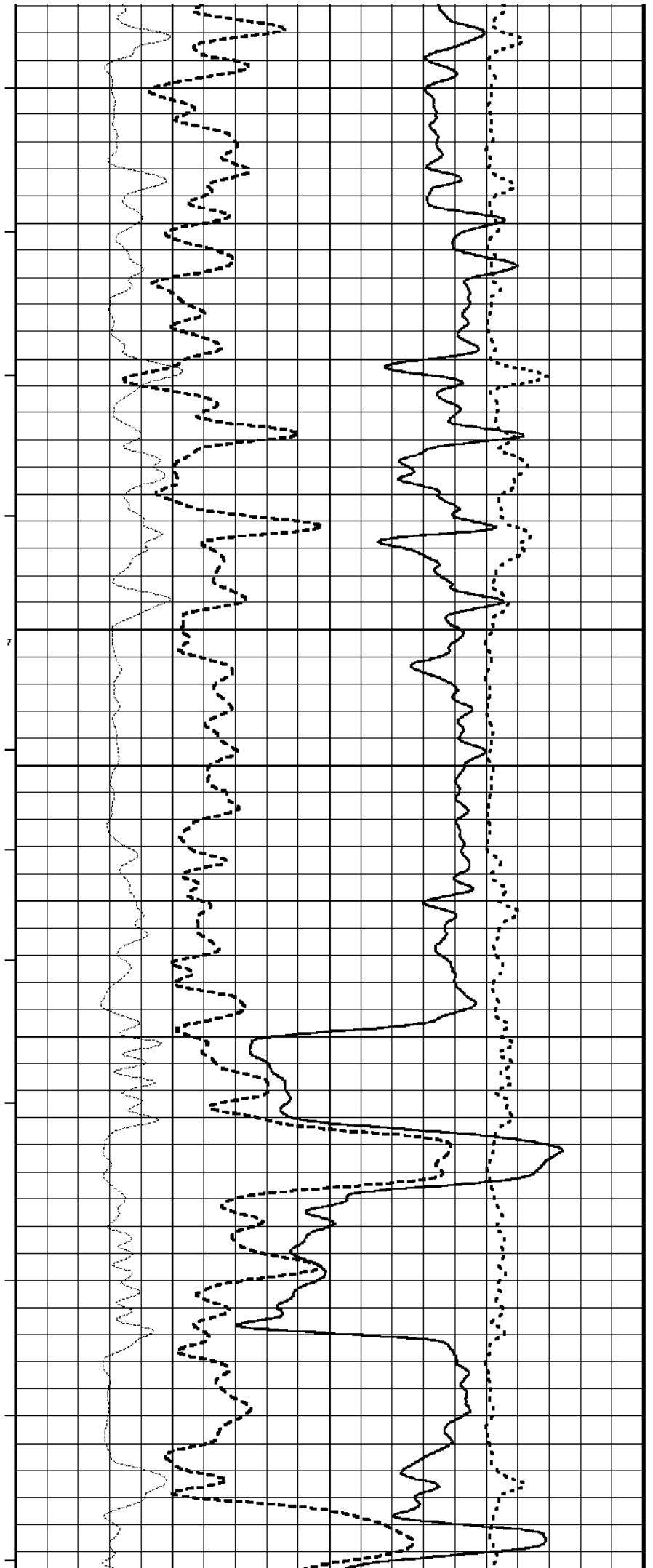
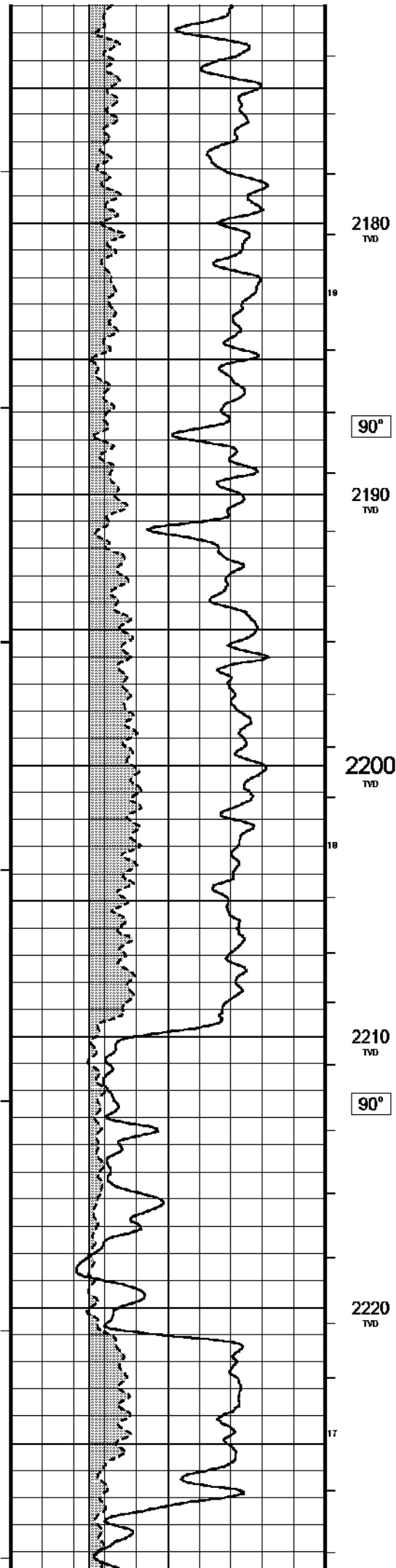
85°

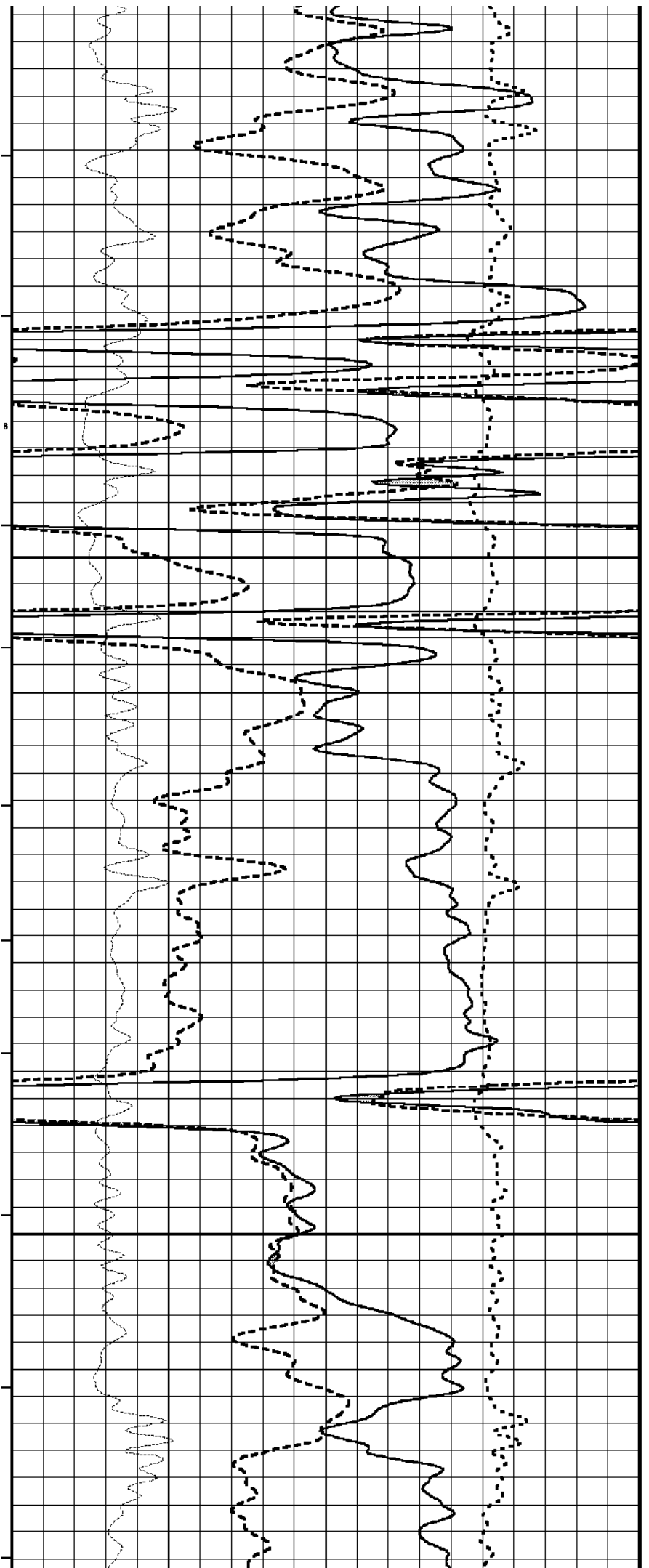
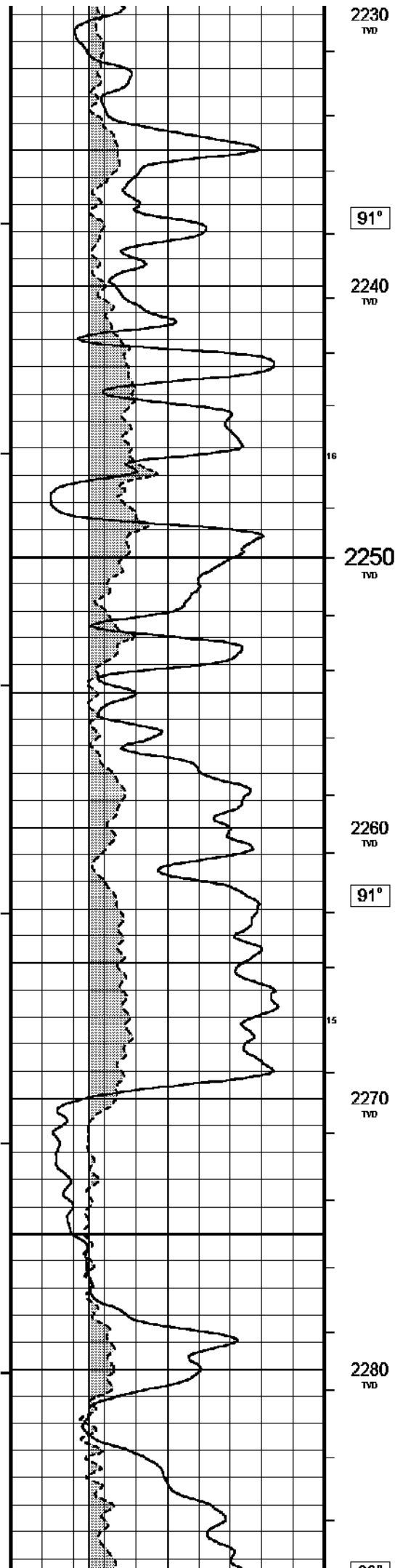
85°

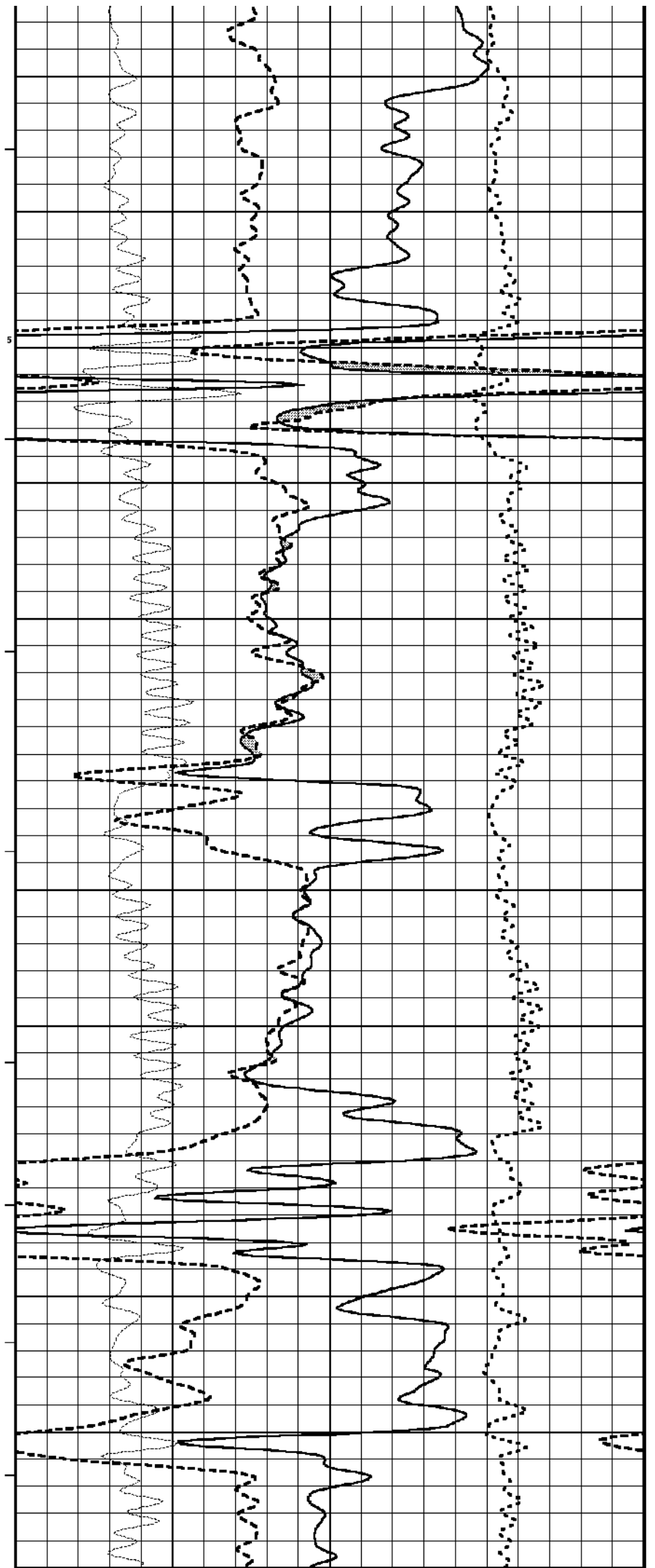
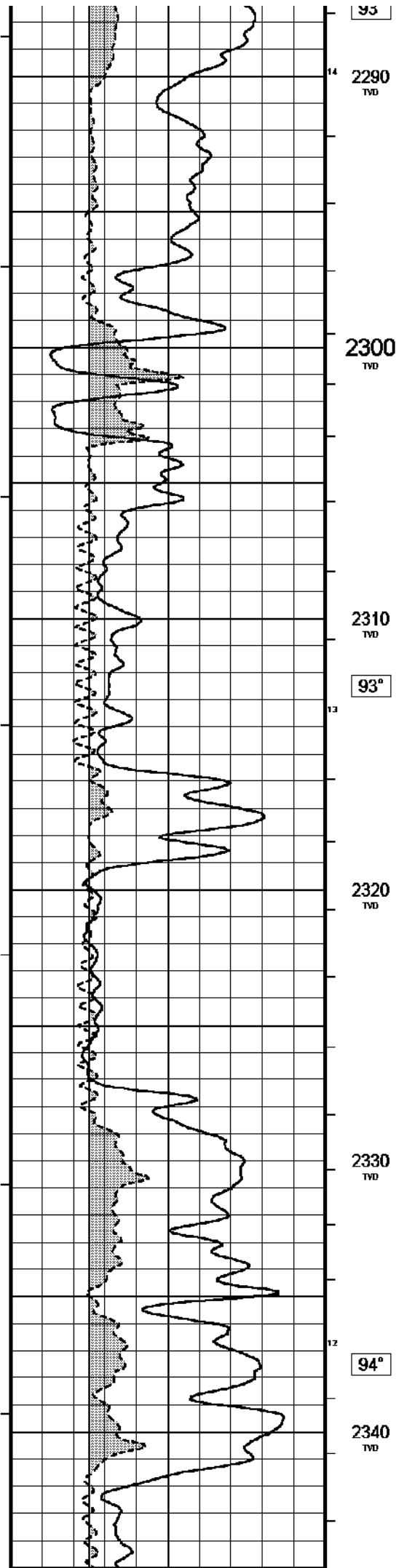




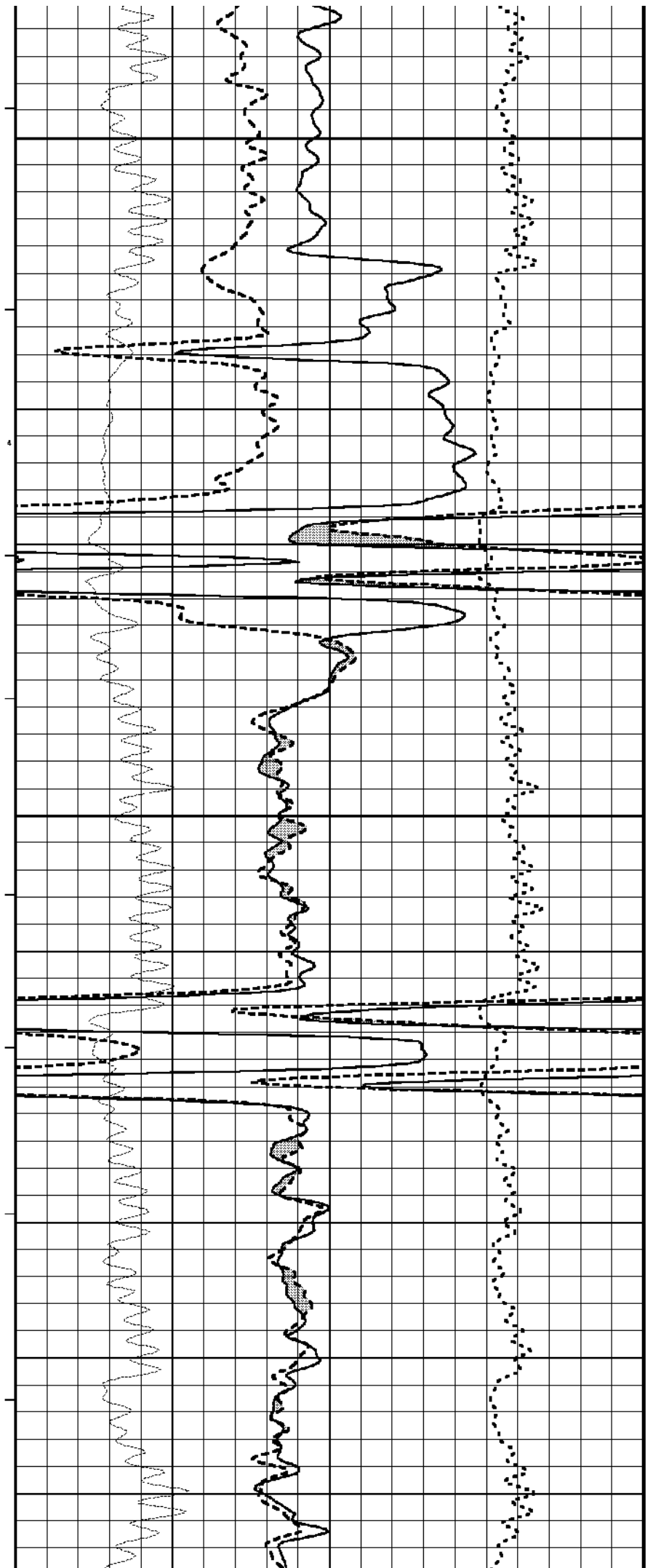
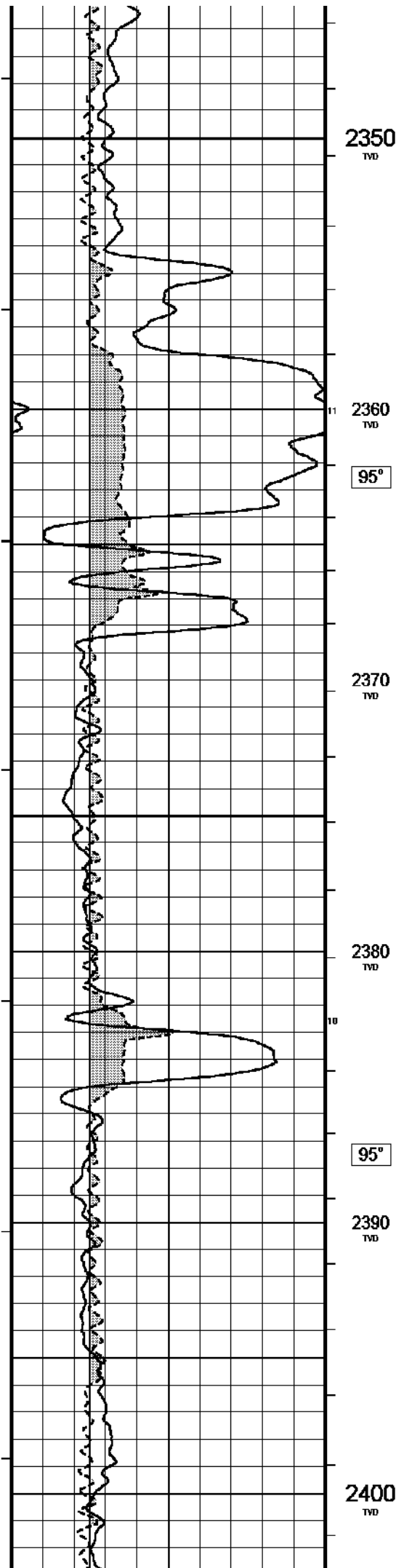


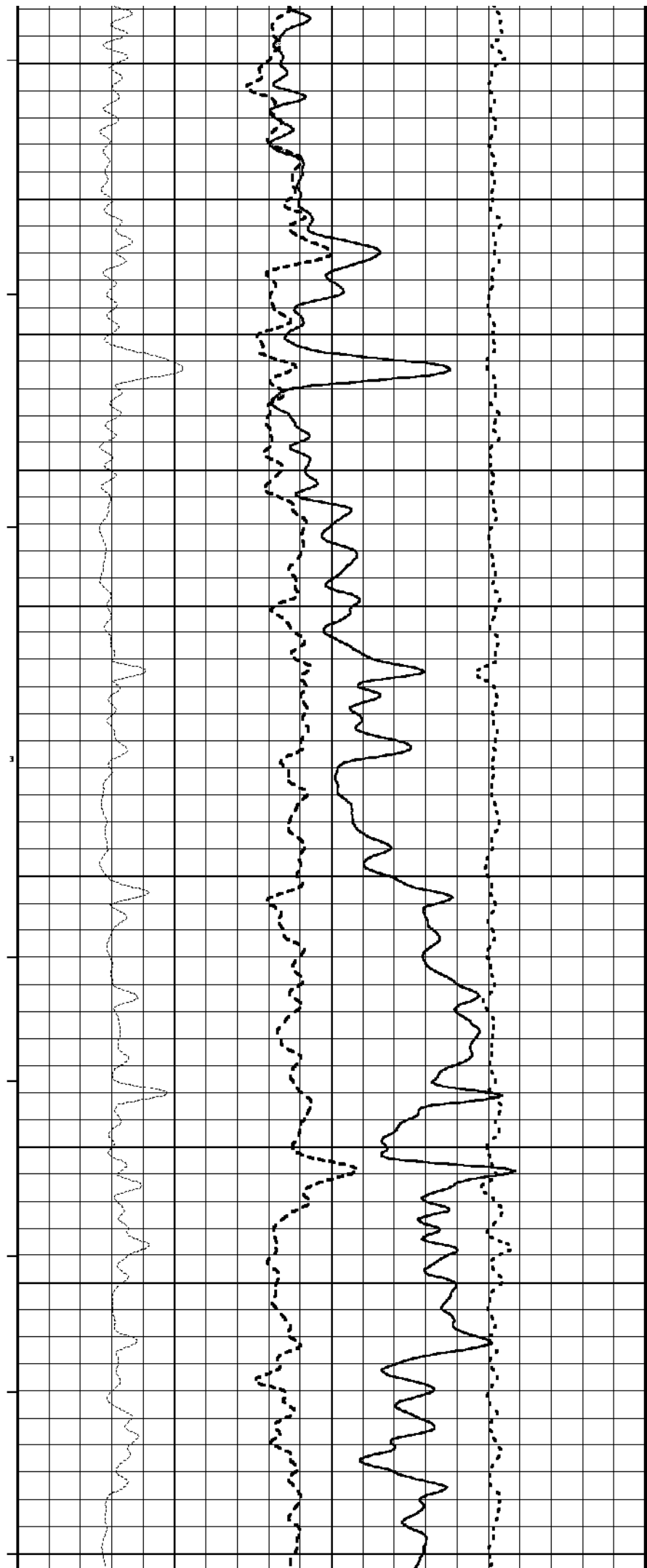
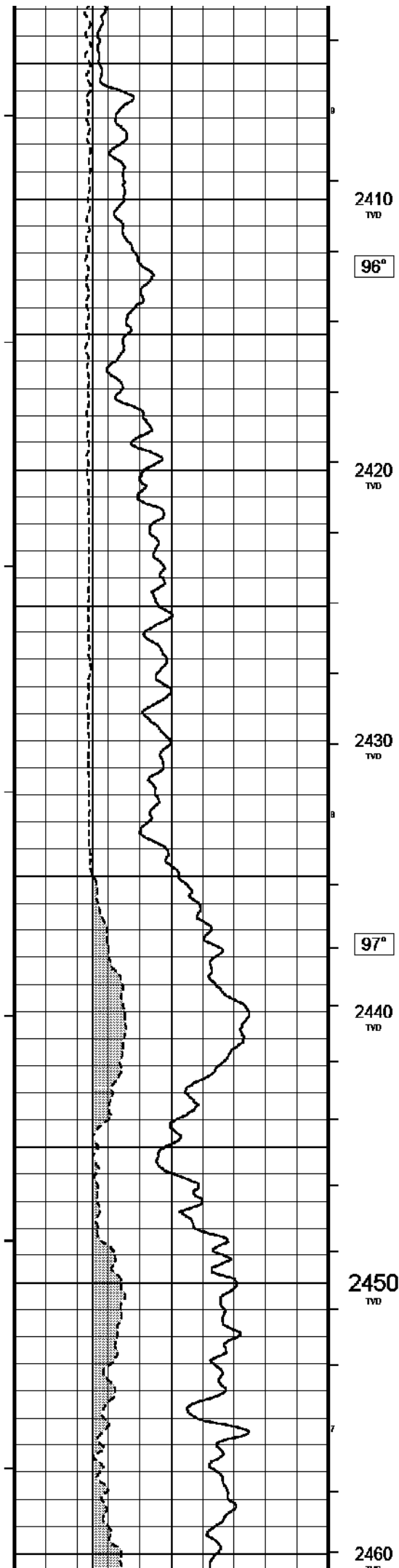


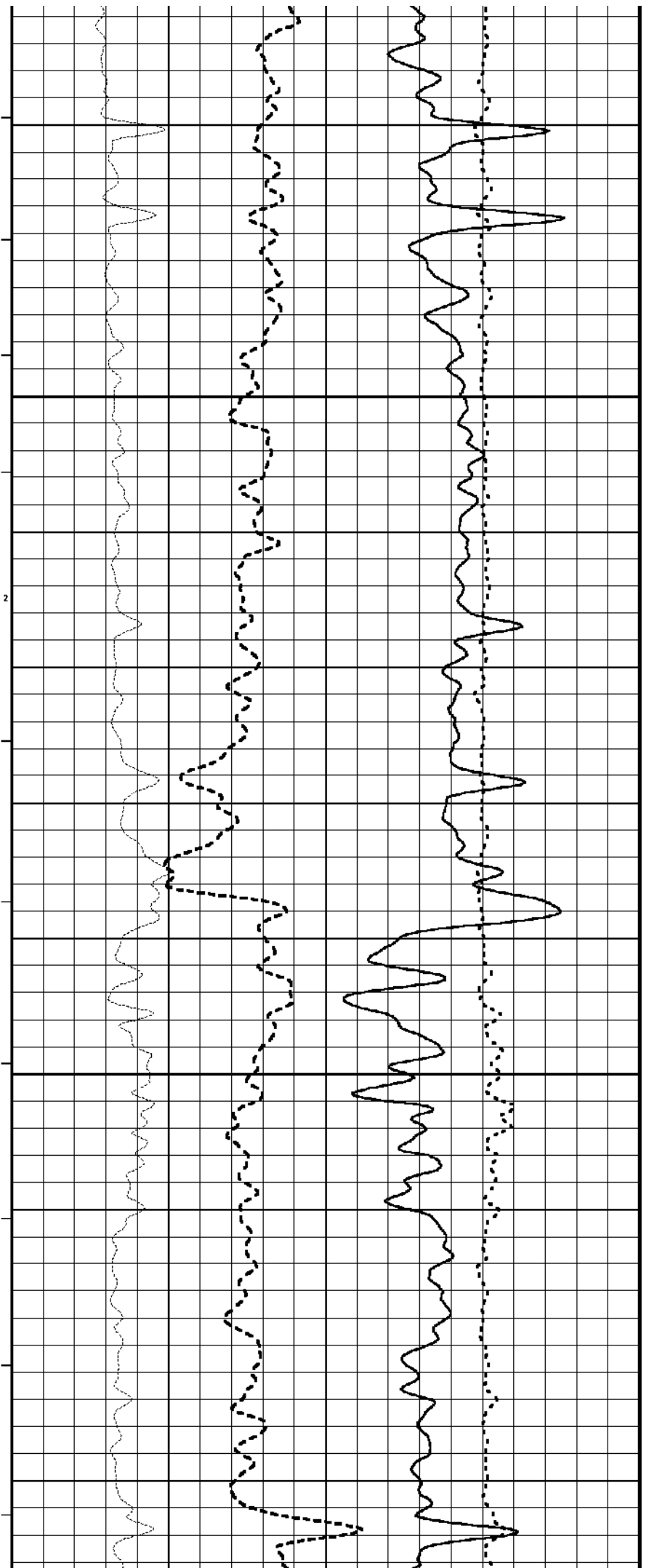
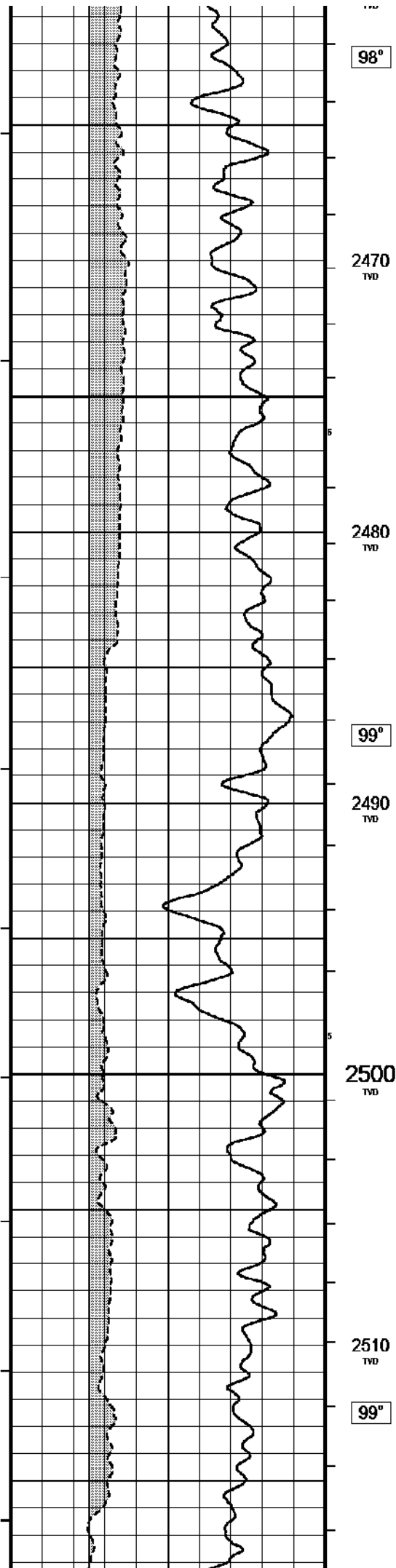


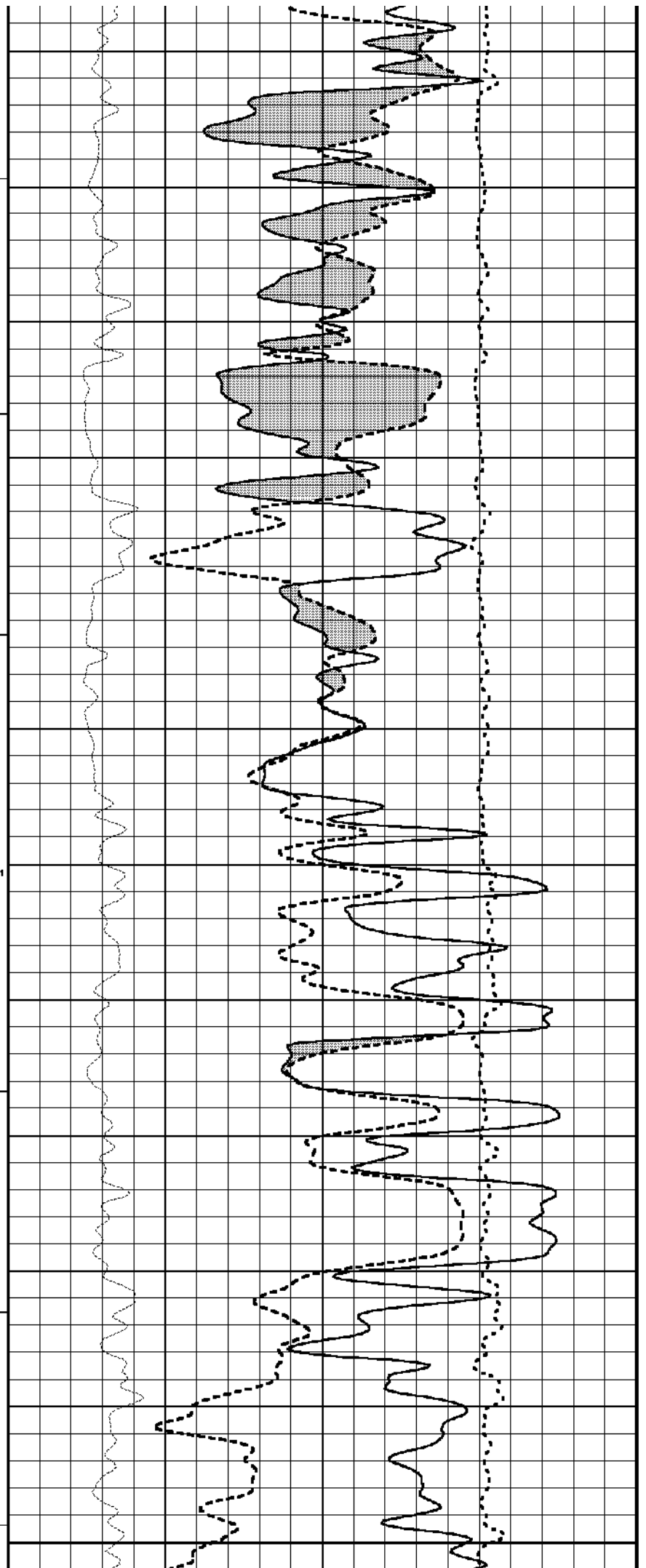
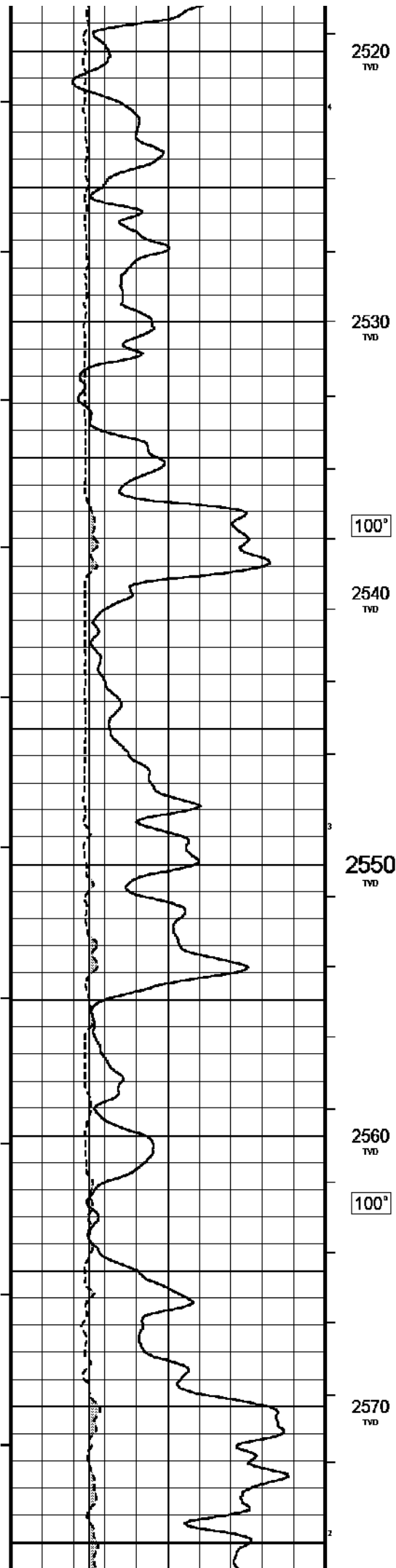


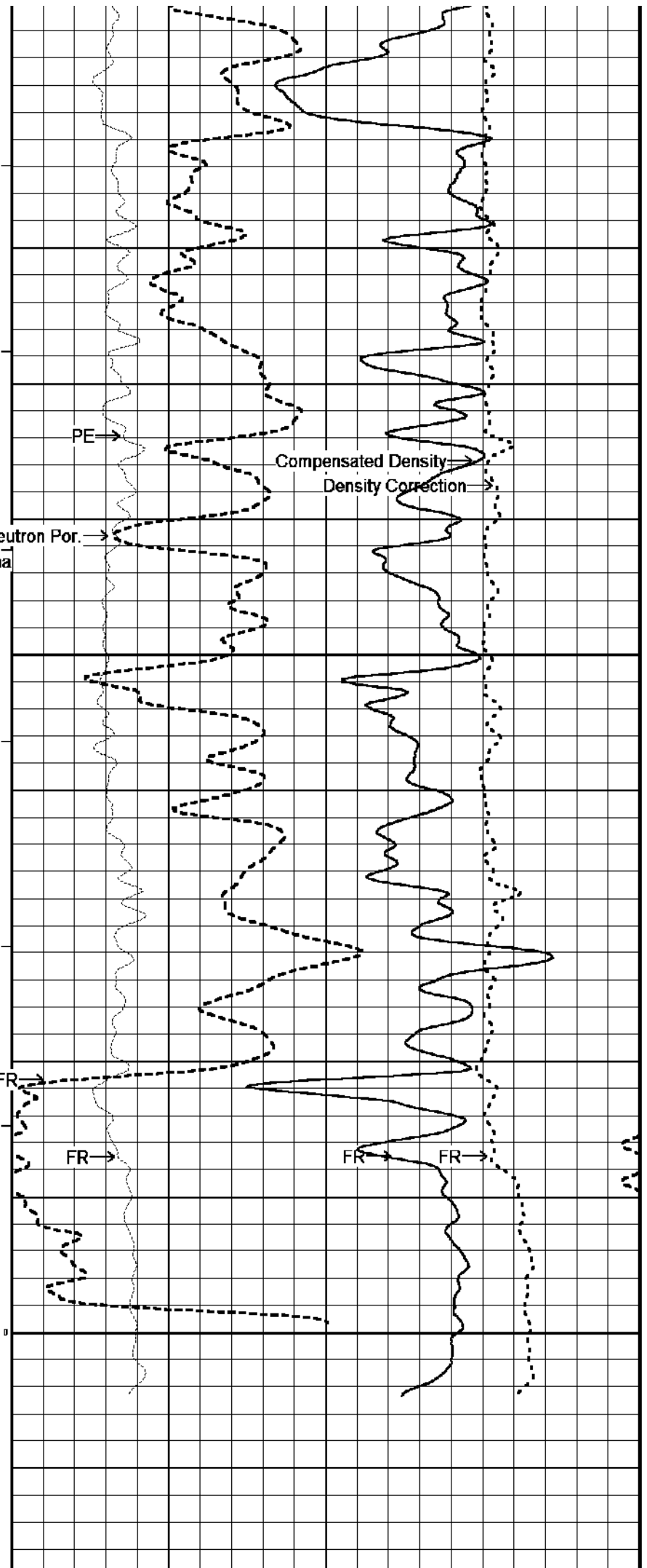
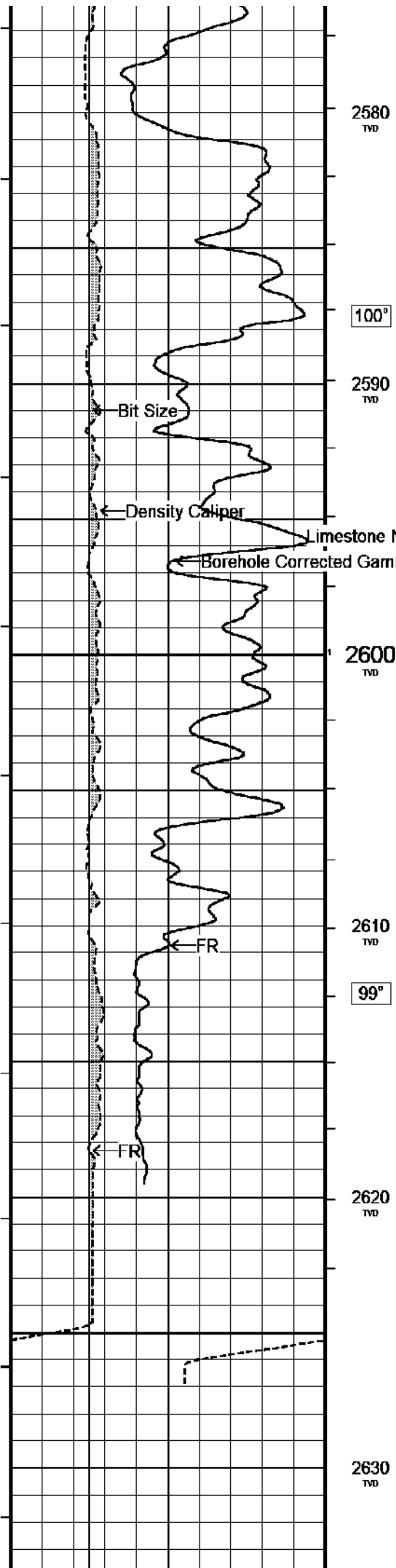


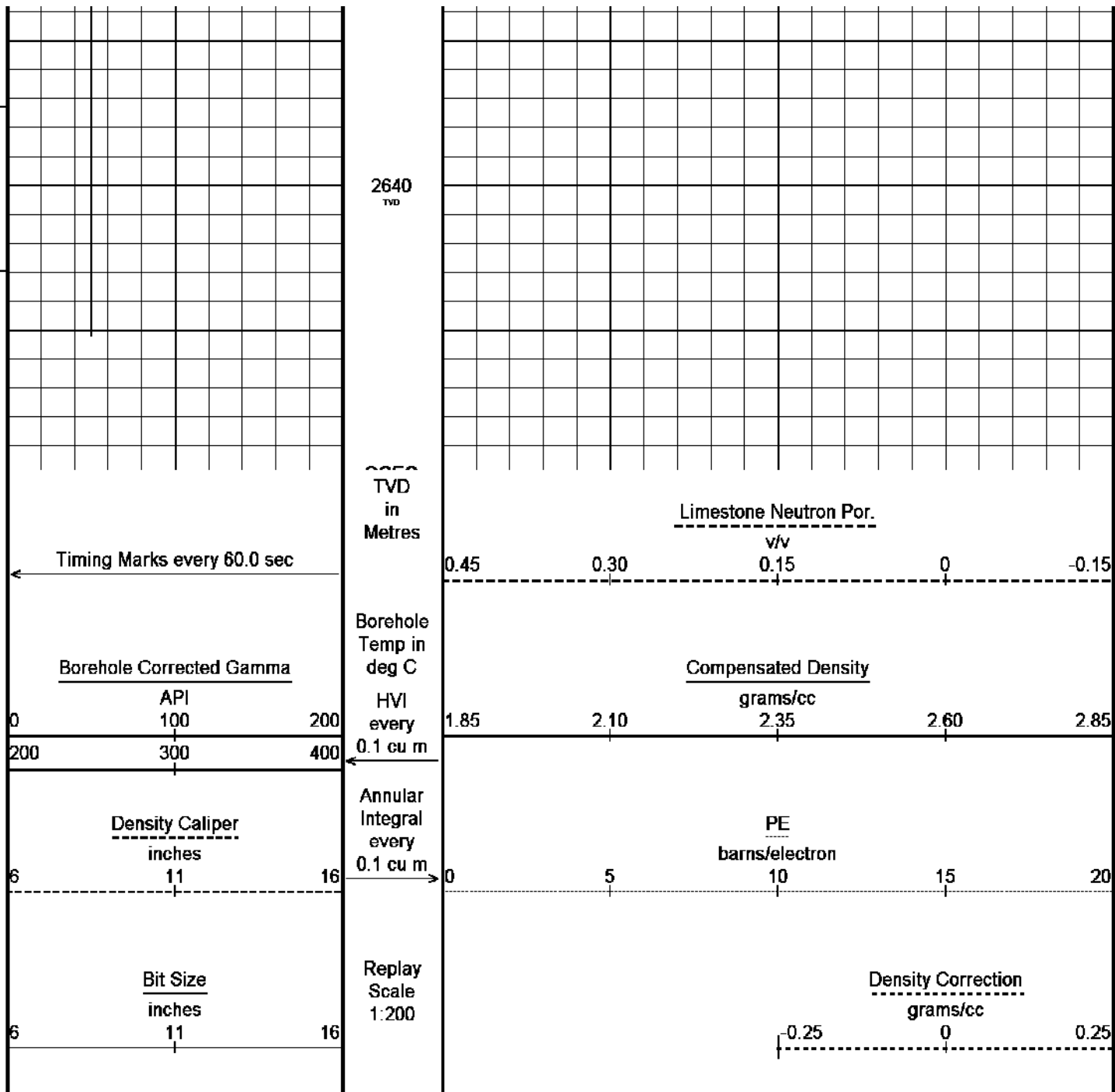












Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 24-MAY-2003 15:37

Filename: C:\Fla a12a\MAIN LOG A DSC.dta

Recorded on 12-APR-2003 01:43

System Configuration Dates: Logged 23-OCT-2002: Processed 23-OCT-2002: Plotted 23-OCT-2002:

MAIN LOG A 1:200

REPEAT SECTION 1:200

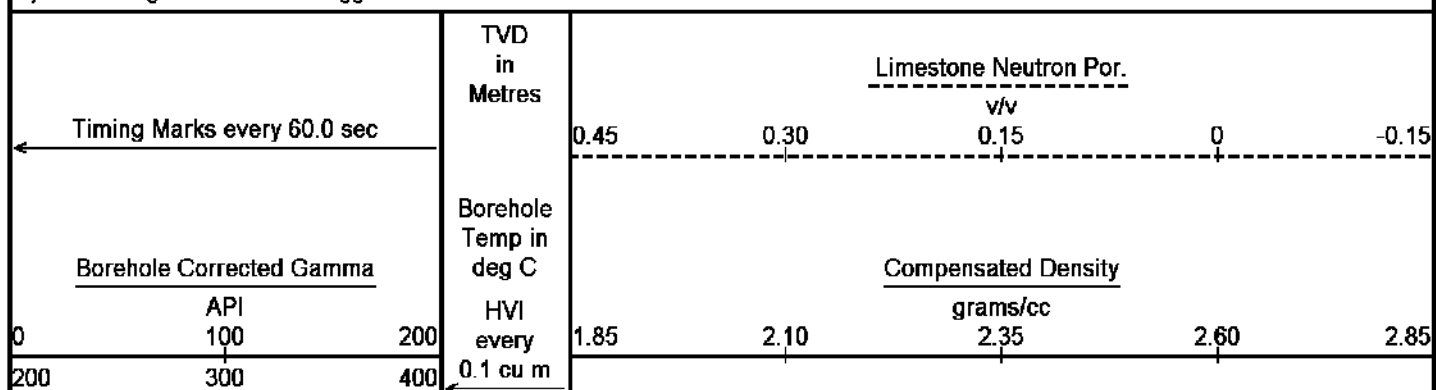
Depth Based Data - Maximum Sampling Increment 10.0cm

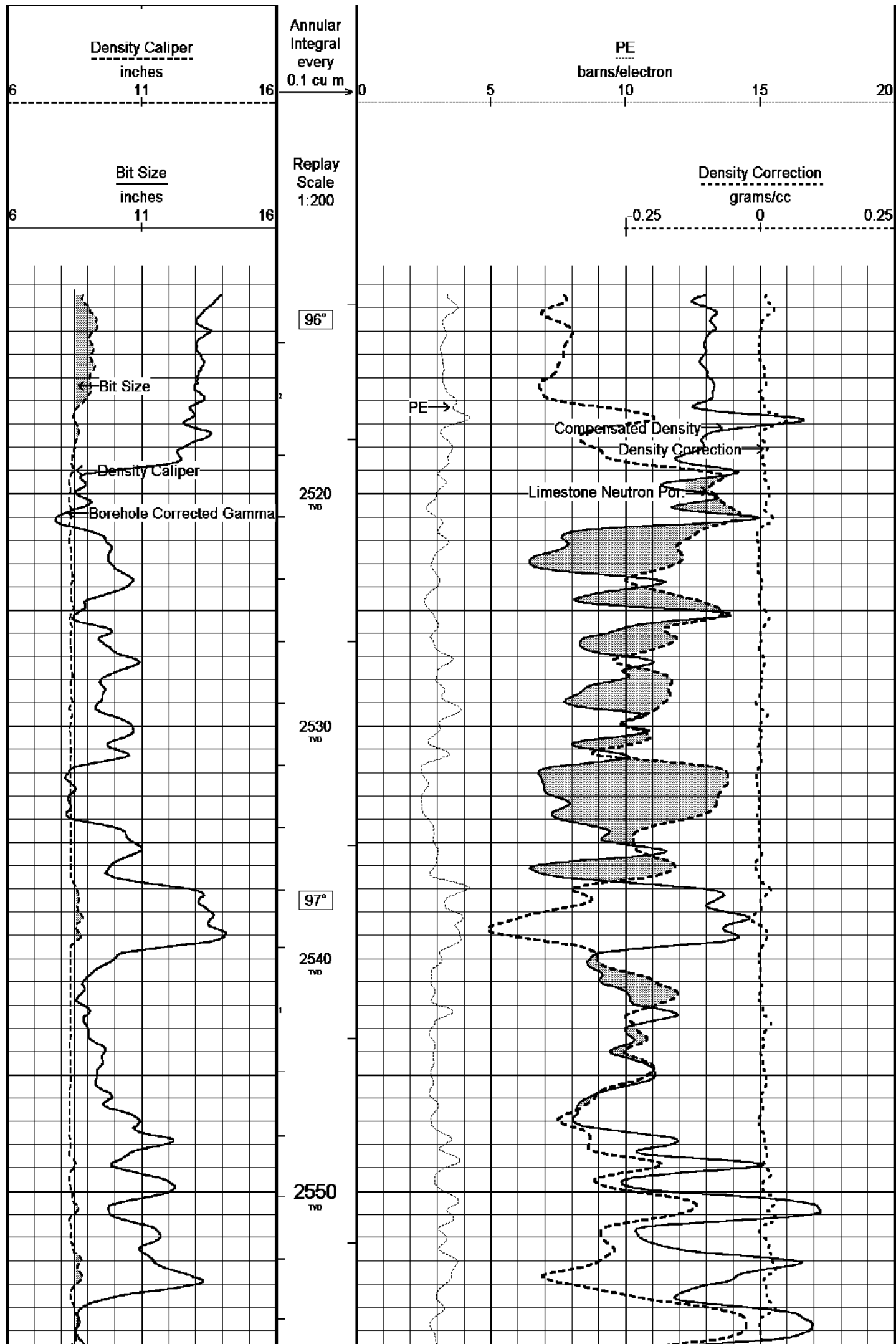
Plotted on 24-MAY-2003 15:37

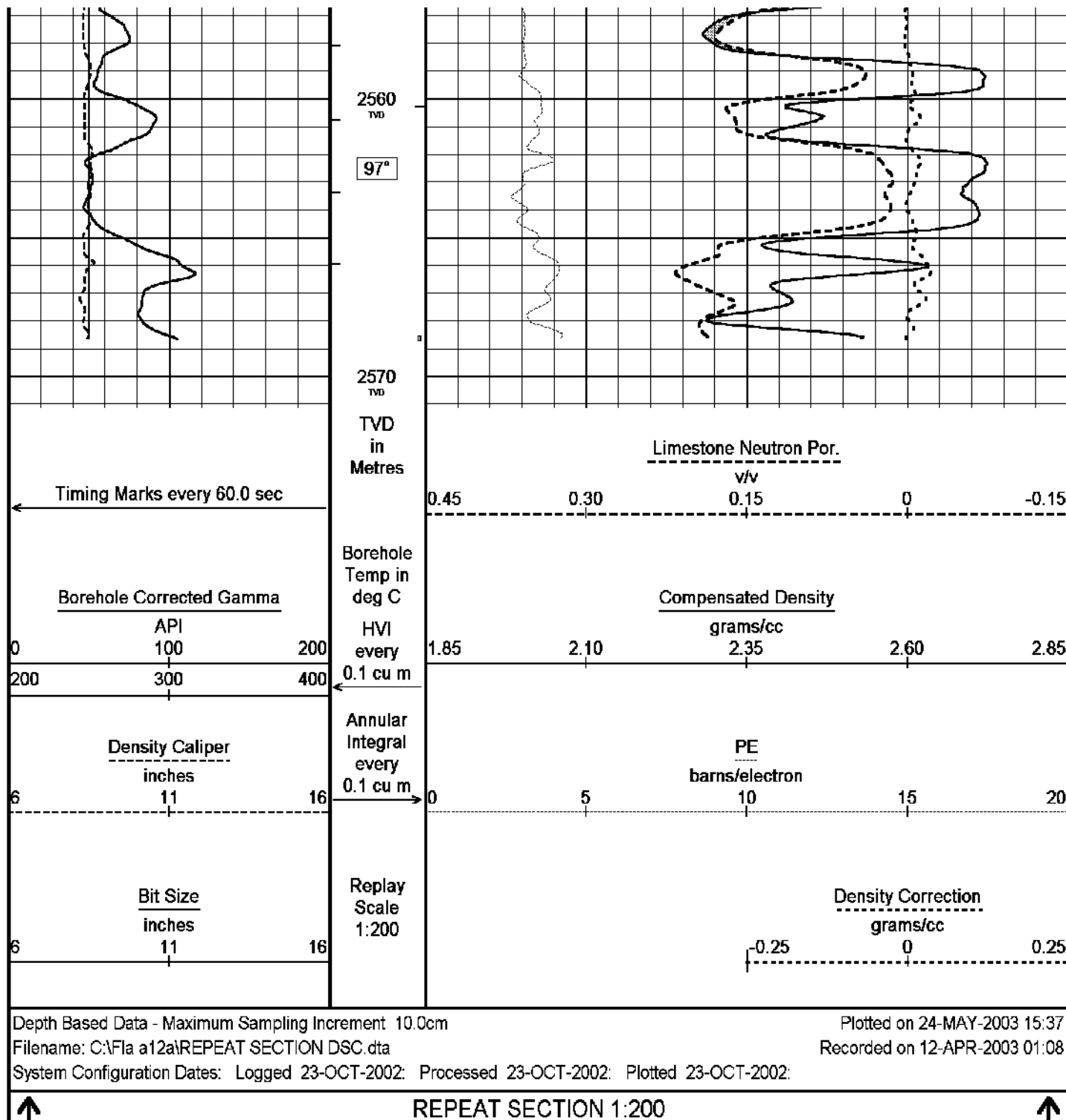
Filename: C:\Fla a12a\REPEAT SECTION DSC.dta

Recorded on 12-APR-2003 01:08

System Configuration Dates: Logged 23-OCT-2002: Processed 23-OCT-2002: Plotted 23-OCT-2002:









RWA Constant A		0.61		
RWA Constant M		2.15		
Gamma Calibration MCG 076			Field Calibration on 7-APR-2003,14:34	
	Measured		Calibrated (API)	
Background	16		10	
Calibrator (Gross)	1432		919	
Calibrator (Net)	1416		909	
Gamma Constants MCG 076				
Gamma Calibrator Number	60			
Mud Density	1.19		gm/cc	
Caliper Source for Processing	Density Caliper			
Tool Position	Eccentred			
Concentration of KCl	0.00		kppm	
High Resolution Temperature Calibration MCG 076			Field Calibration on 19-FEB-2003,09:40	
	Measured		Calibrated(Deg C)	
Lower	0.00		0.00	
Upper	100.00		100.00	
High Resolution Temperature Constants MCG 076				
Pre-filter Length	11			
Neutron Calibration MDN 069			Base Calibration on 17-JAN-2003 16:36	
			Field Check on 7-APR-2003 14:52	
Base Calibration				
	Measured		Calibrated (cps)	
	Near	Far	Near	Far
	2851	89	3714	110
Ratio	31.978		33.764	
Field Calibrator at Base				
			Calibrated (cps)	
			1871	2717
Ratio			0.689	
Field Check				
			Calibrated (cps)	
			1846	2708
Ratio			0.682	
Neutron Constants MDN 069				
Neutron Source Id	724			
Neutron Jig Number	52			
Epithermal Neutron	No			
Caliper Source for Processing	Density Caliper			
Stand-off	0.00		inches	
Mud Density	1.19		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	MCG External Temperature			
Temperature	N/A		degrees C	
Mud Salinity	53.00		kppm	
Formation Fluid Salinity Source	None			
Formation Fluid Salinity	N/A		kppm	
Barite Mud Correction	Not Applied			
Caliper Calibration MPD 067			Base Calibration on 12-APR-2003,03:34	
			Field Calibration on	
Base Calibration				
Reading No	Measured		Calibrator Size (in)	
1	14809		4.61	
2	24384		6.59	
3	34304		8.58	
4	44327		10.54	
5	55504		12.61	
6	N/A		N/A	
Field Calibration				

0  
0.00

0  
0.00

# Photo Density Calibration MPD 067

Base Calibration on 19-JAN-2003 12:40  
Field Check on 7-APR-2003 14:40

Density Calibration		Measured		Calibrated (sdu)	
Base Calibration		Near	Far	Near	Far
Reference 1		58595	20350	53282	19349
Reference 2		27401	2638	25298	2555

Field Check at Base  
960.1 1164.2

Field Check  
957.7 1152.3

PE Calibration		Measured		Calibrated
Base Calibration		WH	Ratio	Ratio
Background	WS 180	835		
Reference 1	18645	58403	0.321	0.318
Reference 2	7313	27257	0.270	0.273

Field Check at Base  
179.8 835.5

Field Check  
180.1 831.6

# Density Constants MPD 067

Density Source Id	226
Nylon Calibrator Number	517
Aluminium/Fe Calibrator Number	517
Density Shoe Profile	4 inch
Caliper Source for Processing	Density Caliper
PE Correction to Density	Not Applied
Mud Density	1.19 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

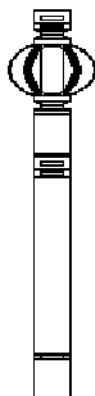
Matrix Density (gm/cc)	Depth (m)
2.71	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00

## DOWNHOLE EQUIPMENT

All measurements relative to tool zero.

Compact Inline Standoff B  
MIS 52 Length: 0.65 m Weight: 15.43 lb

Compact Stiff Bridle Electrode Sub.  
MBE 9 Length: 3.76 m Weight: 94.80 lb



Compact Inline Standoff B  
MIS 77    Length: 0.65 m    Weight: 15.43 lb

Compact Stiff Bridle Electrode Sub.  
MBE 5    Length: 3.76 m    Weight: 94.80 lb

Compact Inline Standoff B  
MIS 31    Length: 0.65 m    Weight: 15.43 lb

Compact Gamma  
MCG 76    Length: 2.65 m    Weight: 63.93 lb



31.84 m    SPDL - Spontaneous Potential

26.85 m    GGCE - Borehole Corrected Gamma

Compact Knuckle Joint  
SKJ 46    Length: 0.66 m    Weight: 24.25 lb

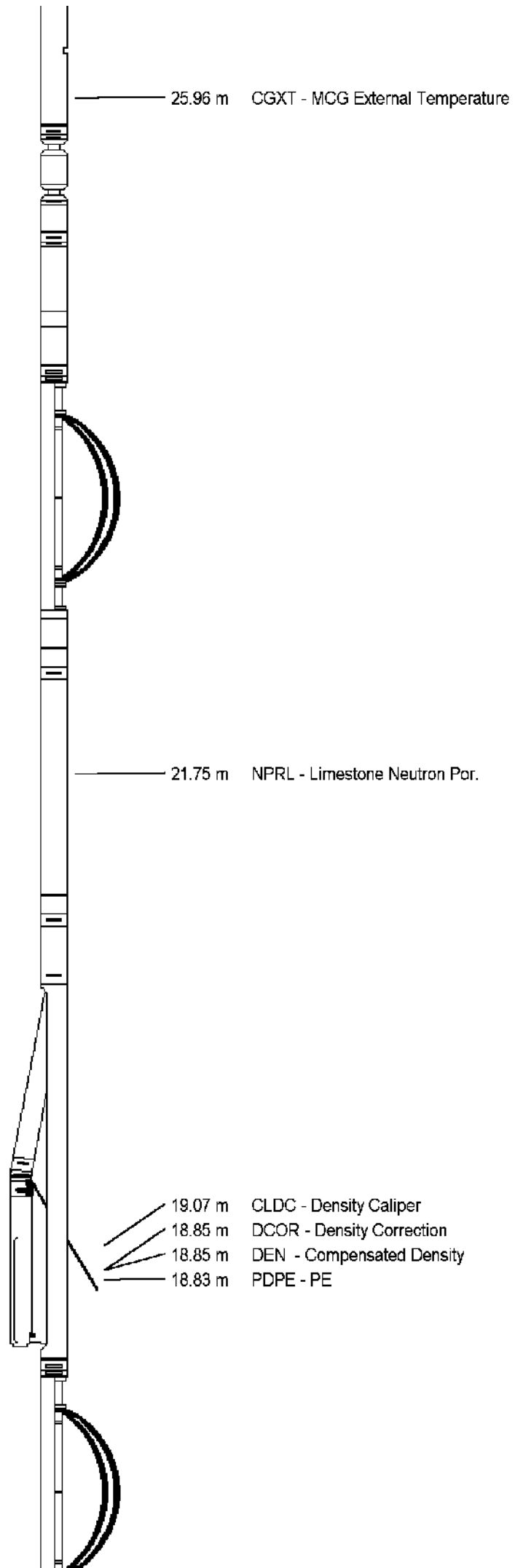
Compact Swivel Head Adaptor  
SHA 27    Length: 0.83 m    Weight: 26.46 lb

Compact Inline Bowspring A  
MIS 24    Length: 1.74 m    Weight: 33.07 lb

Compact Neutron  
MDN 69    Length: 1.53 m    Weight: 50.71 lb

Compact Density/Caliper  
MPD 67    Length: 2.92 m    Weight: 90.39 lb

Compact Inline Bowspring A  
MIS 25    Length: 1.74 m    Weight: 33.07 lb



Compact Swivel Head Adaptor  
SHA 28    Length: 0.83 m    Weight: 26.46 lb

Compact Knuckle Joint  
SKJ 45    Length: 0.66 m    Weight: 24.25 lb

Compact Inline Standoff B  
MIS 53    Length: 0.65 m    Weight: 15.43 lb

Compact Upper Guard Sub.  
MUG 17    Length: 2.74 m    Weight: 68.34 lb

Compact Inline Standoff B  
MIS 49    Length: 0.65 m    Weight: 15.43 lb

Compact Laterolog Electrode Sub.  
MLE 15    Length: 3.76 m    Weight: 92.59 lb




8.93 m

DSL - Shallow Laterolog

8.93 m

DGL - Deep Laterolog

ESSO AUSTRALIA PTY. LTD.  
FLOUNDER A12a  
GIPPSLAND BASIN

PROVINCE/COUNTY		BASS STRAIT			
COUNTRY/STATE		AUSTRALIA			
Elevation Kelly Bushing		metres	First Reading	2636.90	metres
Elevation Drill Floor	33.85	metres	Depth Driller	2636.40	metres
Elevation Ground Level	-93.00	metres	Depth Logger	2637.40	metres
<div>  <div>           PHOTO DENSITY            COMPENSATED NEUTRON            1:200 TVD         </div> </div>					