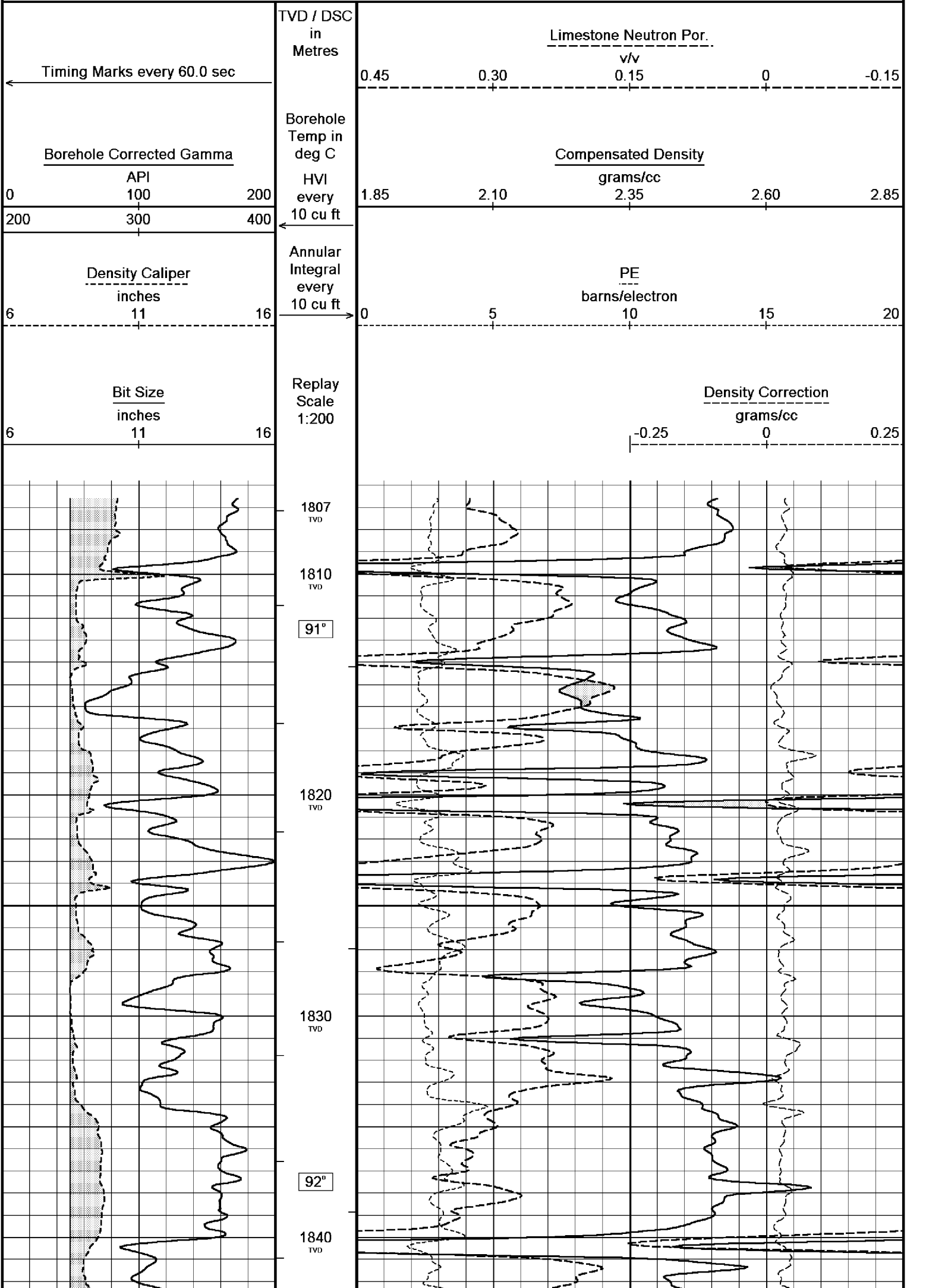
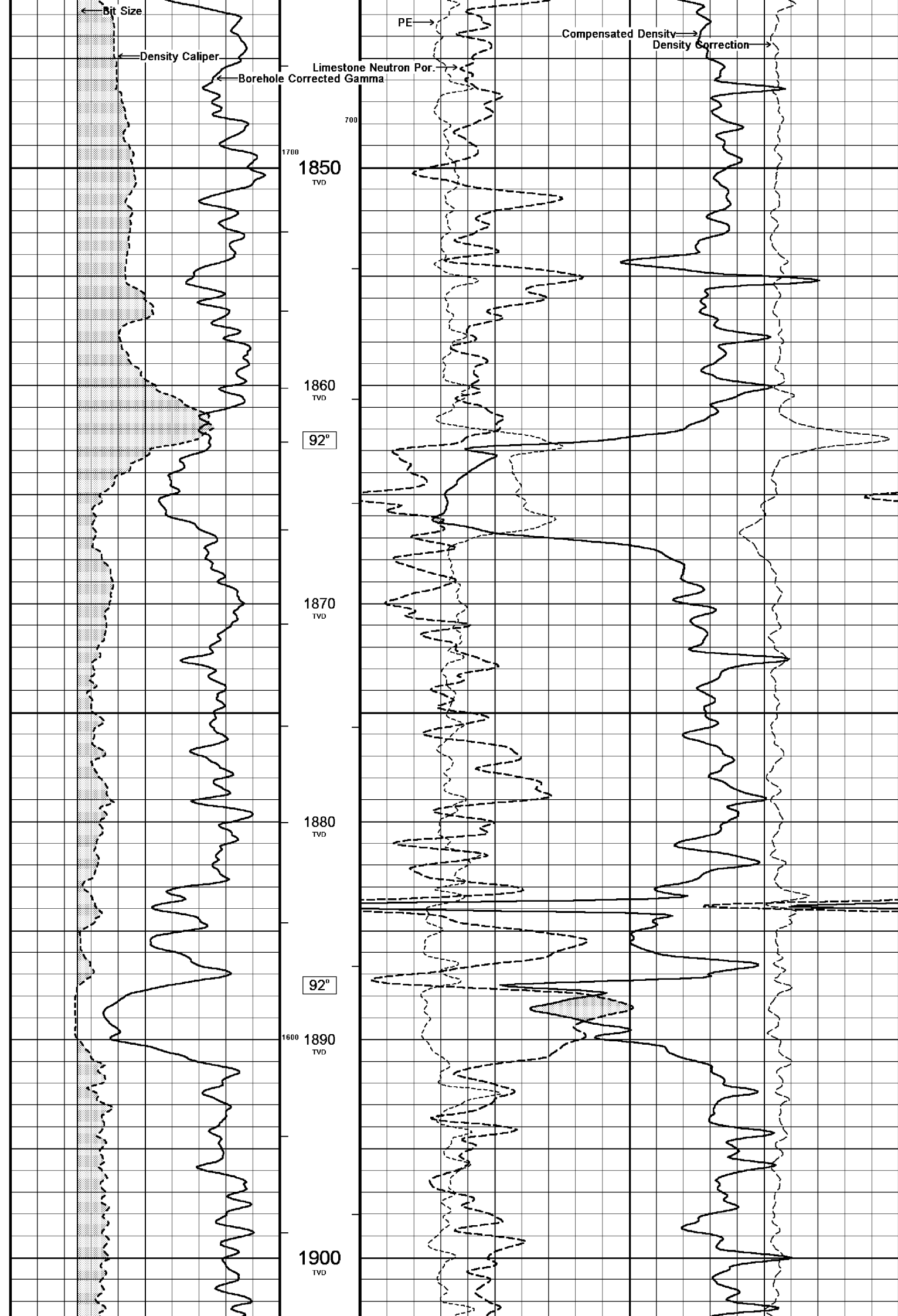


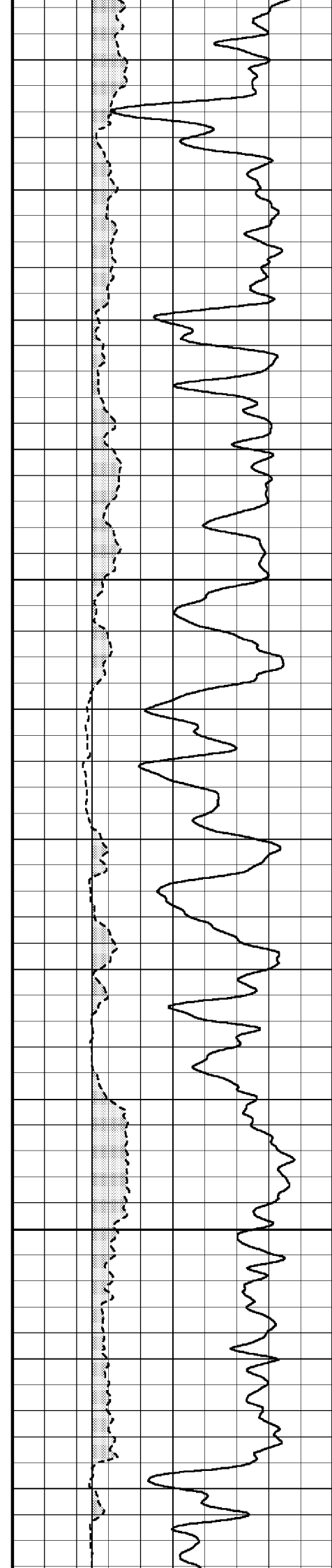
<div>Reeves</div> <div>Compact</div>			PHOTO DENSITY COMPENSATED NEUTRON 1:200 TVD		
COMPANY WELL FIELD PROVINCE/COUNTY COUNTRY/STATE LOCATION			Esso Australia Pty Ltd Marlin A10a ST Turrum Bass Strait Australia 38 13 49.320E , 148 13 15.712S N 5767920.060 m , E 606868.950 m [FINAL PRINT]		
LSD	SEC	TWP	RGE	Other Services COMPENSATED SONIC DUAL LATEROLOG	
API Number Permit Number VIC L3/L4					
Permanent Datum M.S.L. , Elevation 0.00 metres Log Measured From R.T. @ 27.91m above Permanent Datum Drilling Measured From R.T.			Elevations: KB 27.91 metres DF 27.91 metres GL -59.00 metres		
Date	15-SEP-2004				
Run Number	One				
Depth Driller	2713.46 metres				
Depth Logger	2707.83 metres				
First Reading	2703.46 metres				
Last Reading	1806.66 metres				
Casing Driller	616.41 metres				
Casing Logger					
Bit Size	8.50 inches				
Hole Fluid Type	KC/PPH/PA/GLY				
Density / Viscosity	9.90 lb/USg 77.00 CP				
PH / Fluid Loss	9.10 2.80 ml/30Min				
Sample Source	Flow Line				
Rm @ Measured Temp	0.135 @ 25.0 ohm-m				
Rmf @ Measured Temp	0.098 @ 25.0 ohm-m				
Rmc @ Measured Temp	0.168 @ 25.0 ohm-m				
Source Rmf / Rmc	Press Press				
Rm @ BHT	0.047 @114.0 ohm-m				
Time Since Circulation	23.5 Hrs				
Max Recorded Temp	114.00 deg C				
Equipment Name	CWS/CML				
Equipment / Base	1 Sale				
Recorded By	G. McManus, R. Tench				
Witnessed By	C. MENHENITT				
Circ. Stopped	2200 14-Sep				

BOREHOLE RECORD				
Bit Size inches		Depth From metres		Depth To metres
8.500		642.000		3491.000
CASING RECORD				
Type	Size inches	Depth From metres	Shoe Depth metres	Weight pounds/ft
J-55	13.375	0.000	642.000	54.40
REMARKS				
Drilling Rig: Nabors 453				
Crew: G McManus; R Tench; B Goodwin; M Susa				
Open hole well logged using Reeves COMPACT logging tools and 5" Shuttle conveyed Memory logging techniques. Logs depth corrected and quality controlled with Anadrill gamma log. Caliper reading inside casing: 12.688 In. Inside diameter of casing: 12.615 In.				
Max Inclination: 45.1 deg at 2884.87mMDRT Max Dogleg Severity: 4.32 deg at 3229.06mMDRT Max Temperature: 114.0 deg C at 3429.90mMDRT				
Hole Volume to Last Read: 1790 ft^3 Annular Volume to Last Read: 735 ft^3				

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.







1910  
TVD

93°

1920  
TVD

1930  
TVD

93°

1500

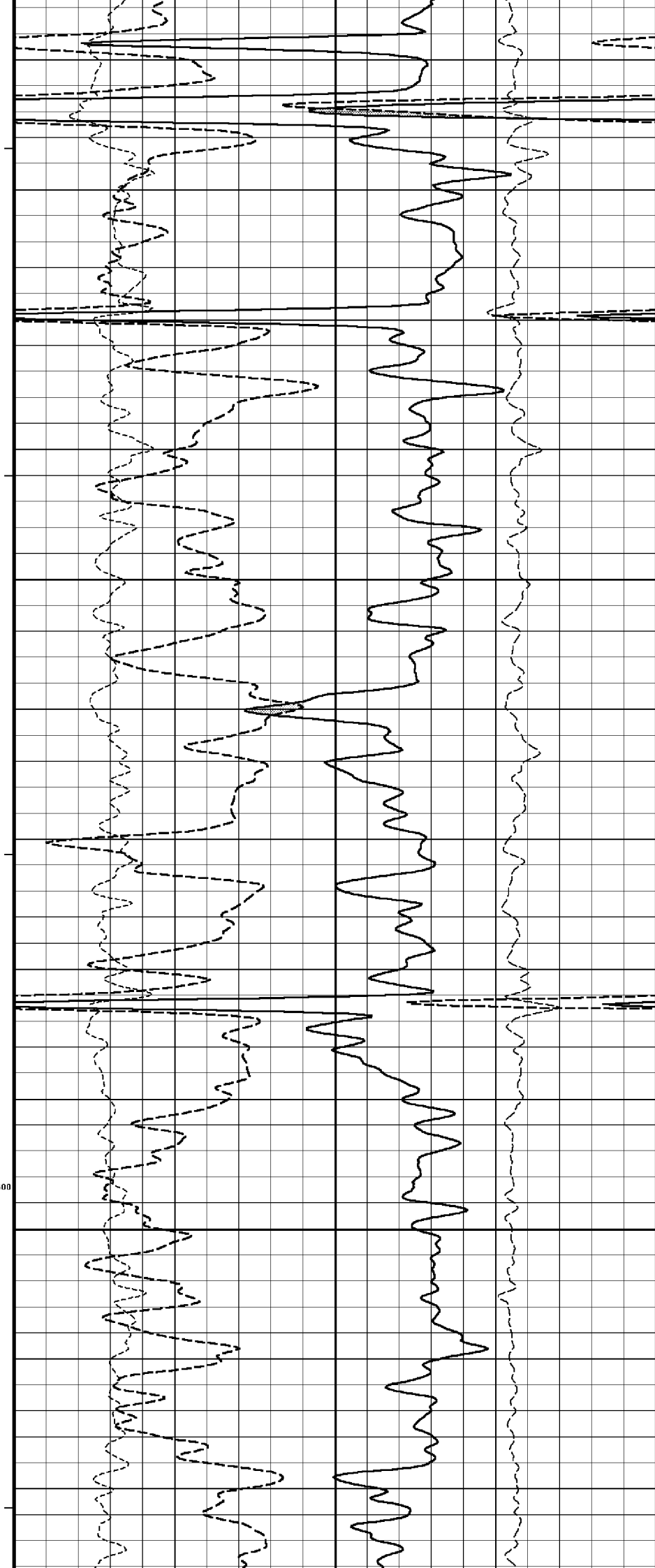
1940  
TVD

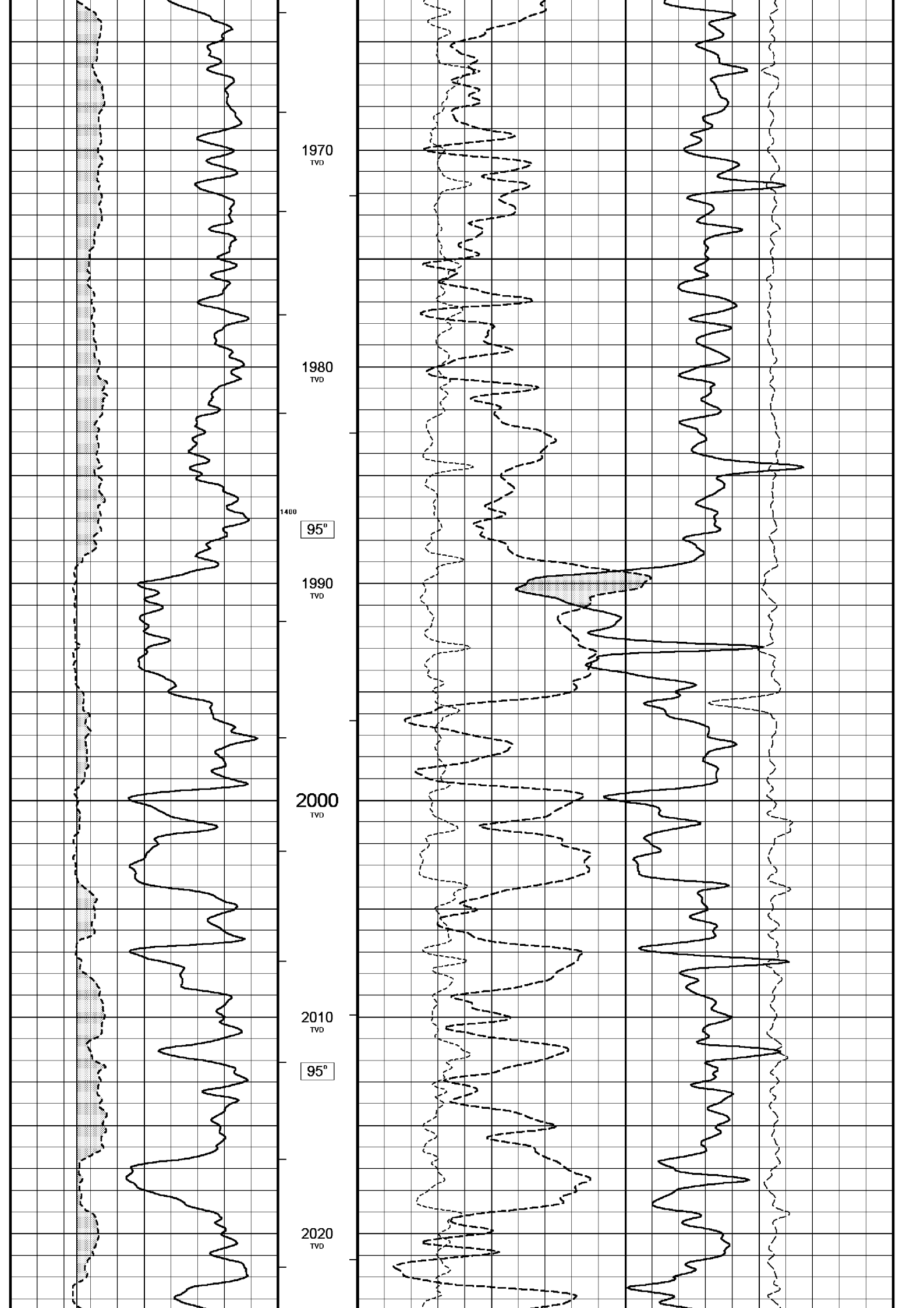
600

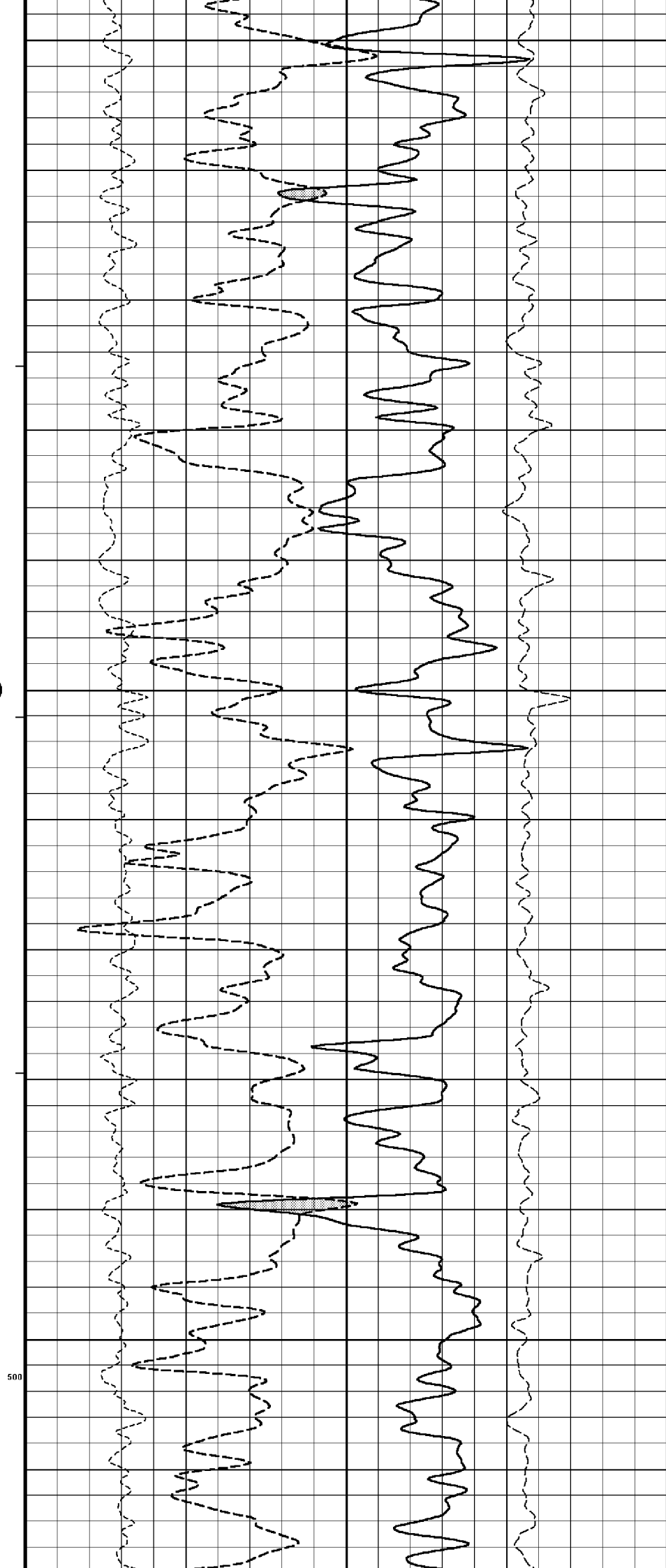
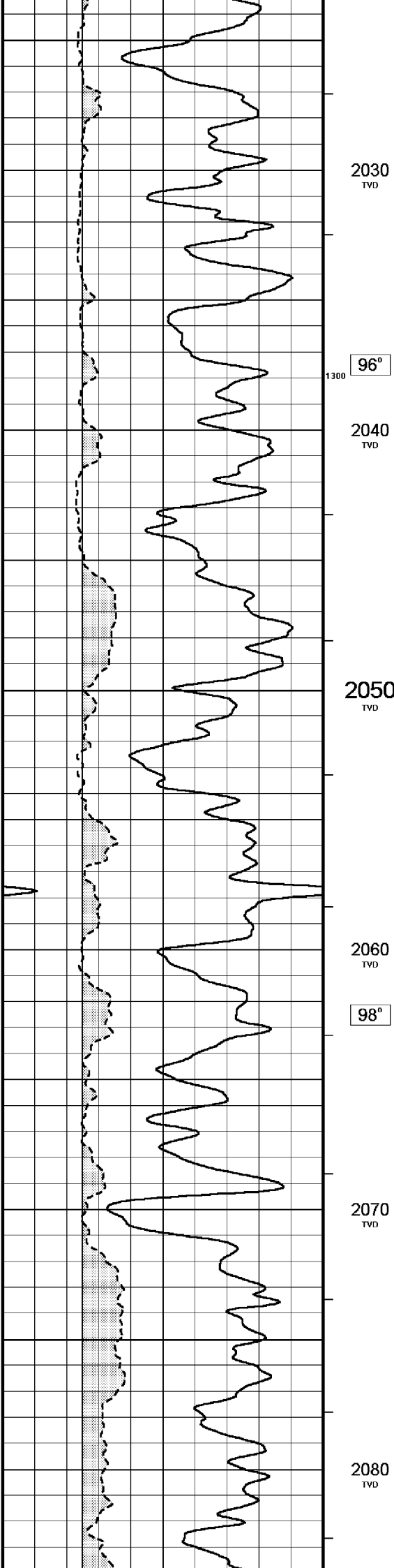
1950  
TVD

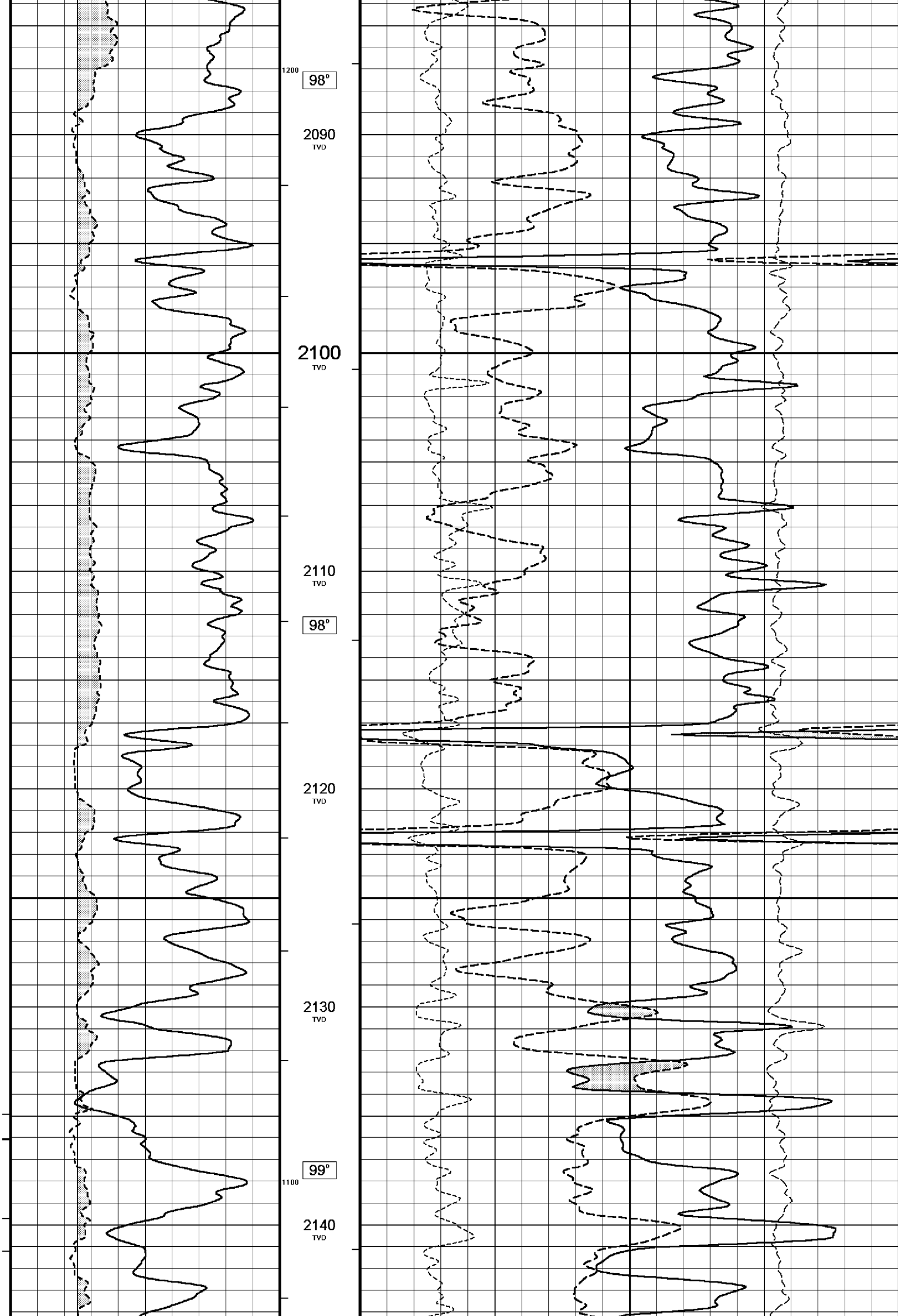
1960  
TVD

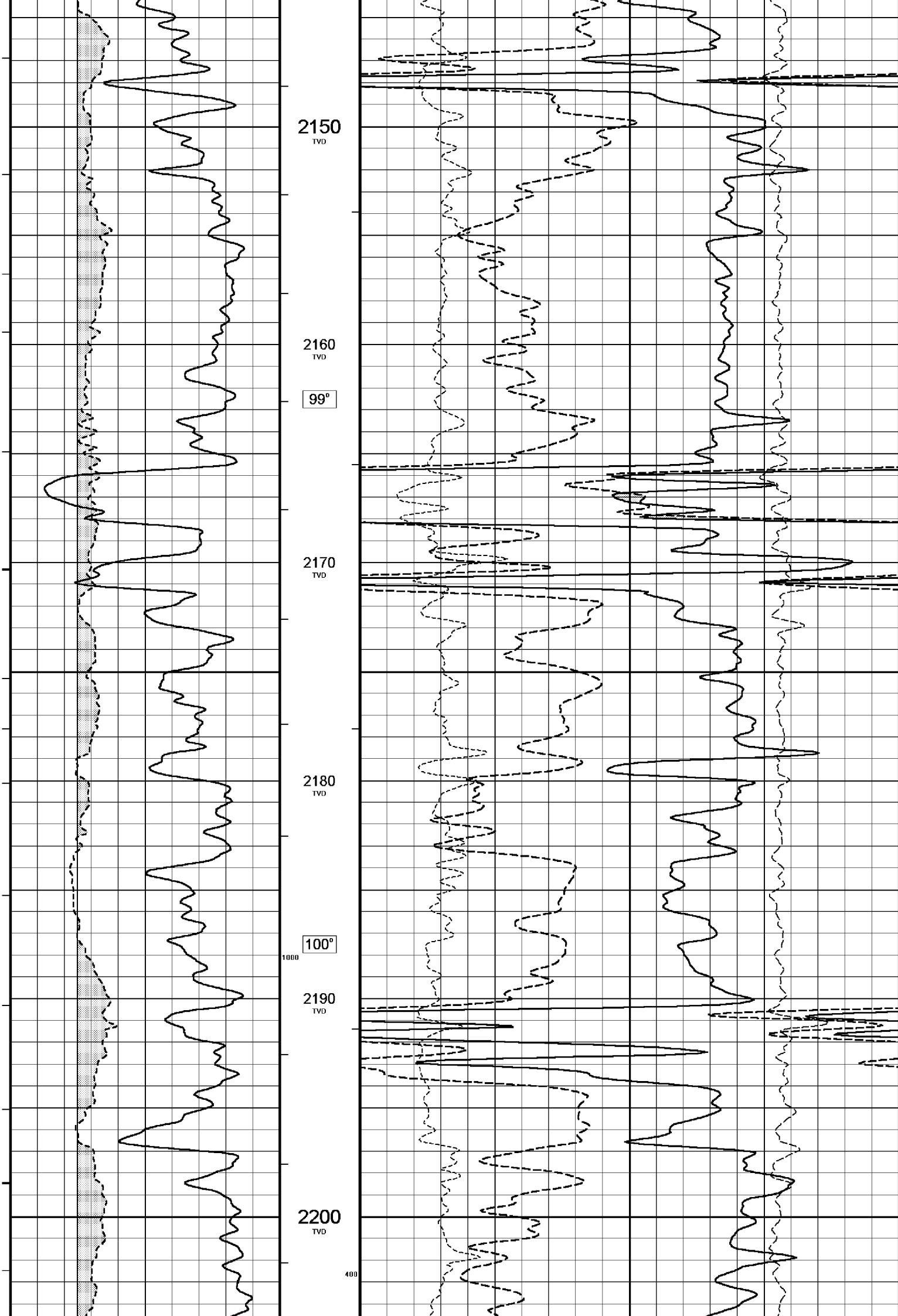
94°



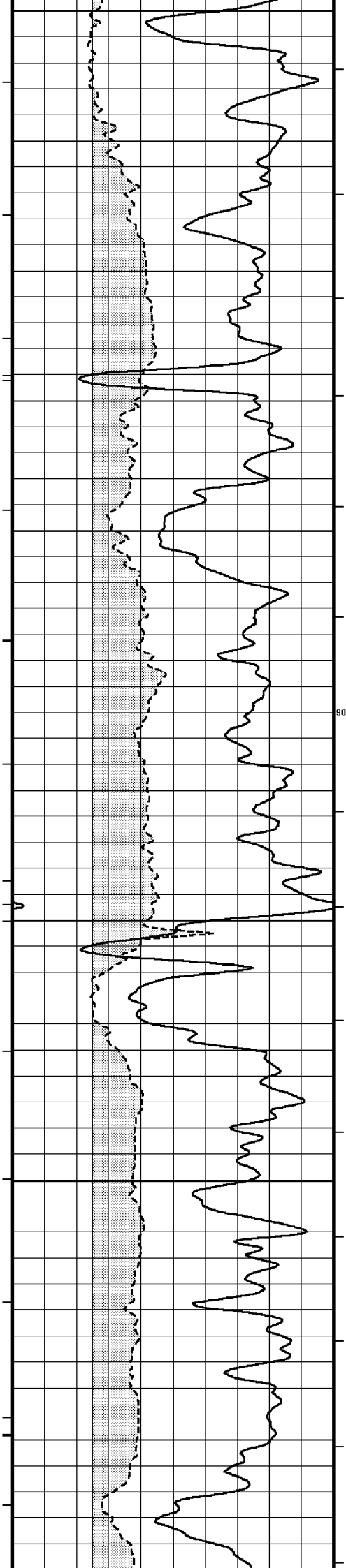












2210  
TVD

100°

2220  
TVD

2230  
TVD

800

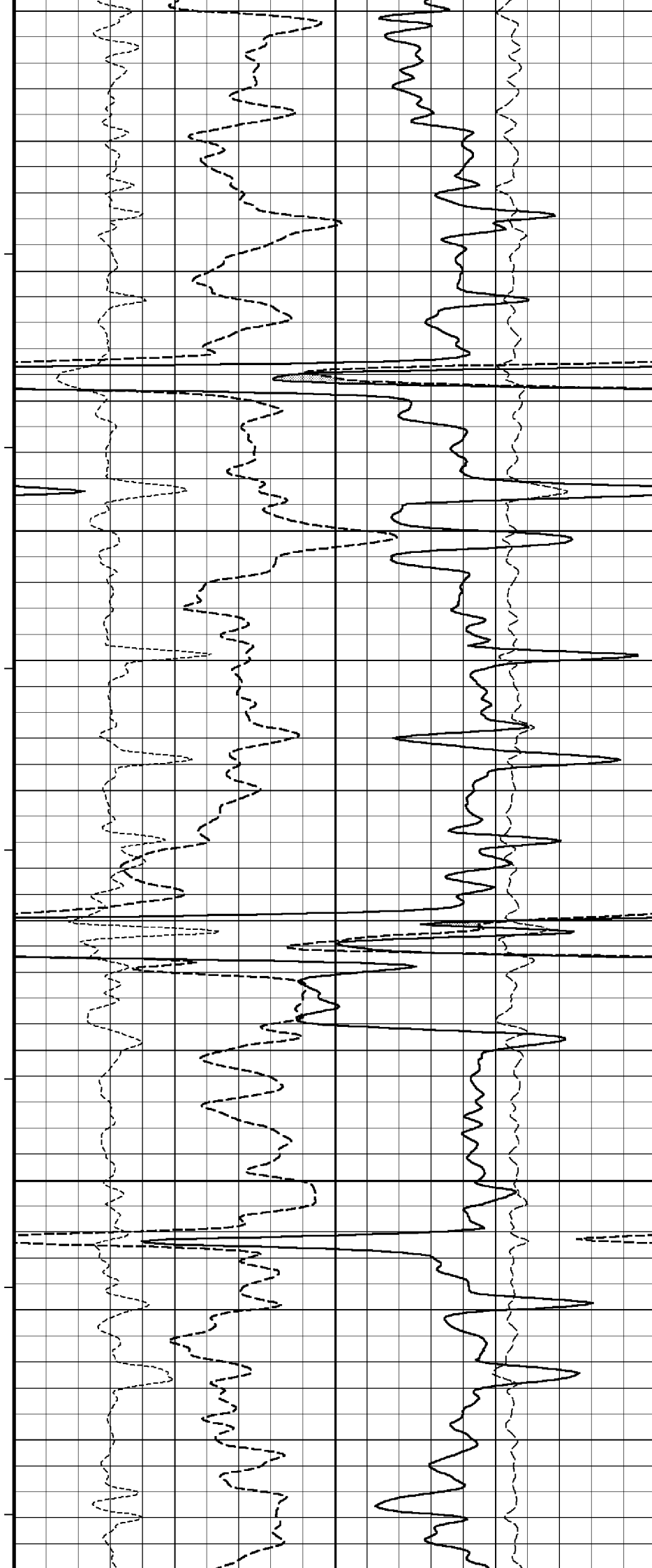
100°

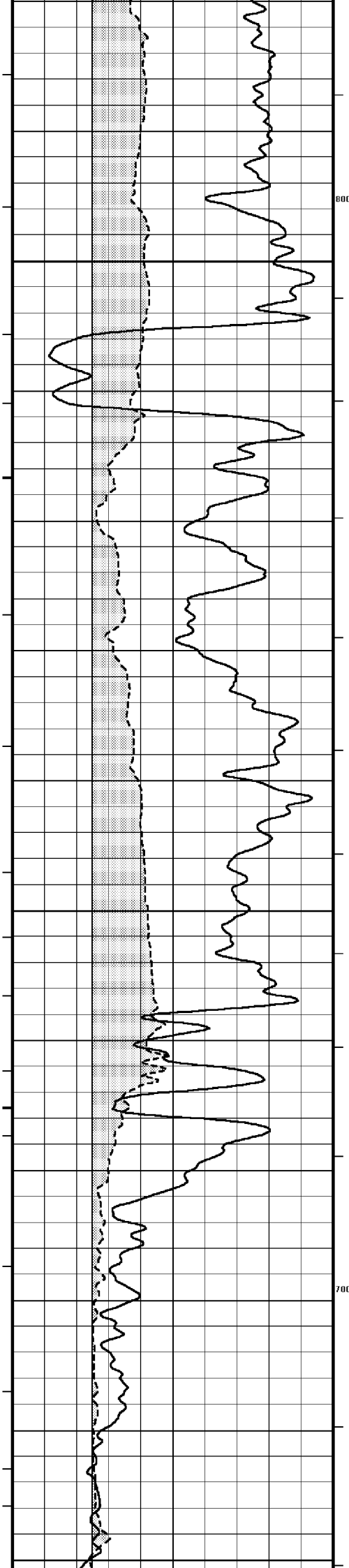
2240  
TVD

2250  
TVD

2260  
TVD

100°





2270  
TVD

800

2280  
TVD

101°

300

2290  
TVD

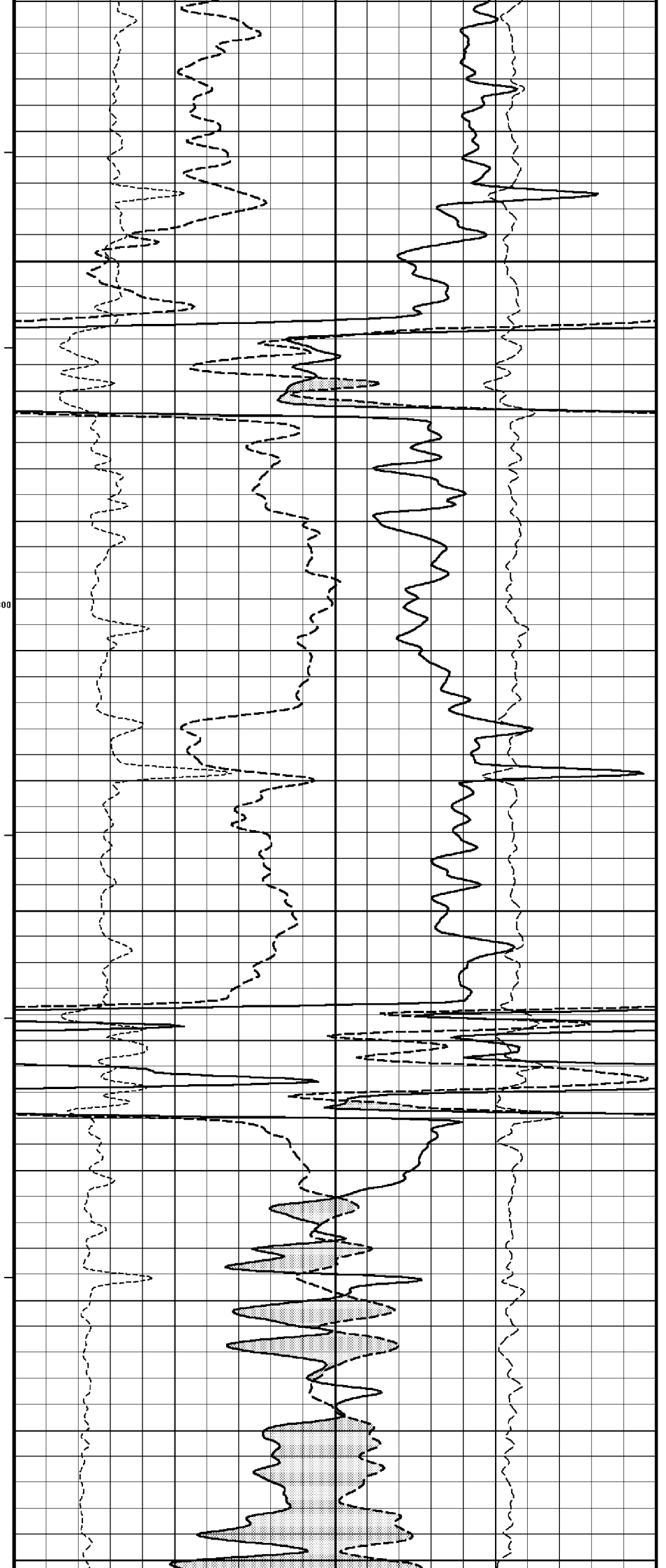
2300  
TVD

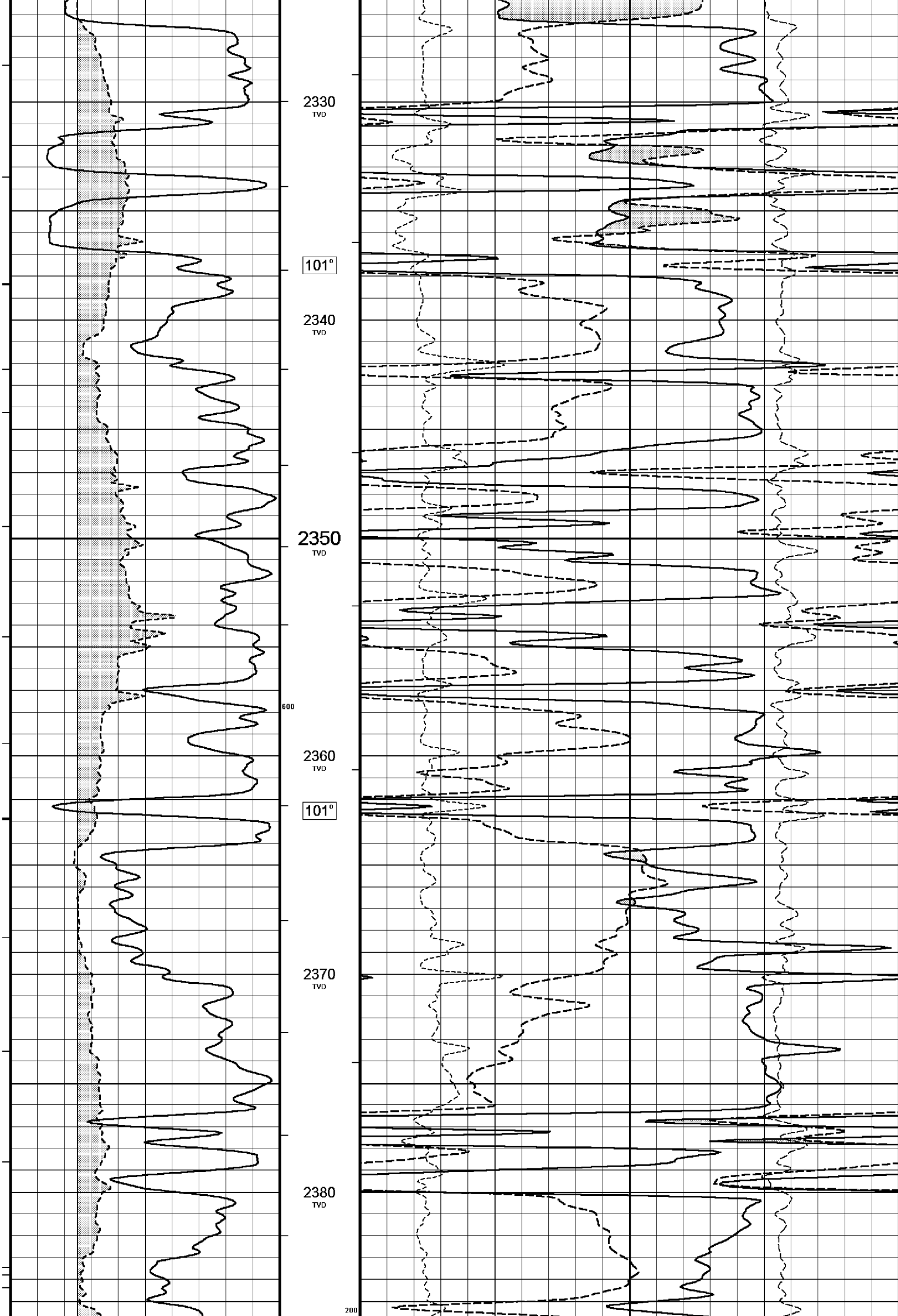
2310  
TVD

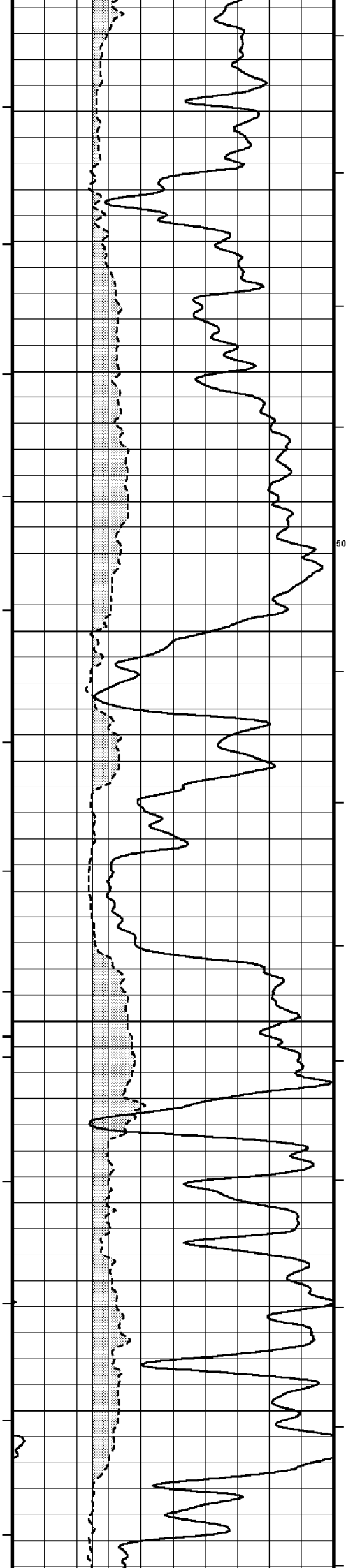
100°

700

2320  
TVD







101°

2390  
TVD

2400  
TVD

500

2410  
TVD

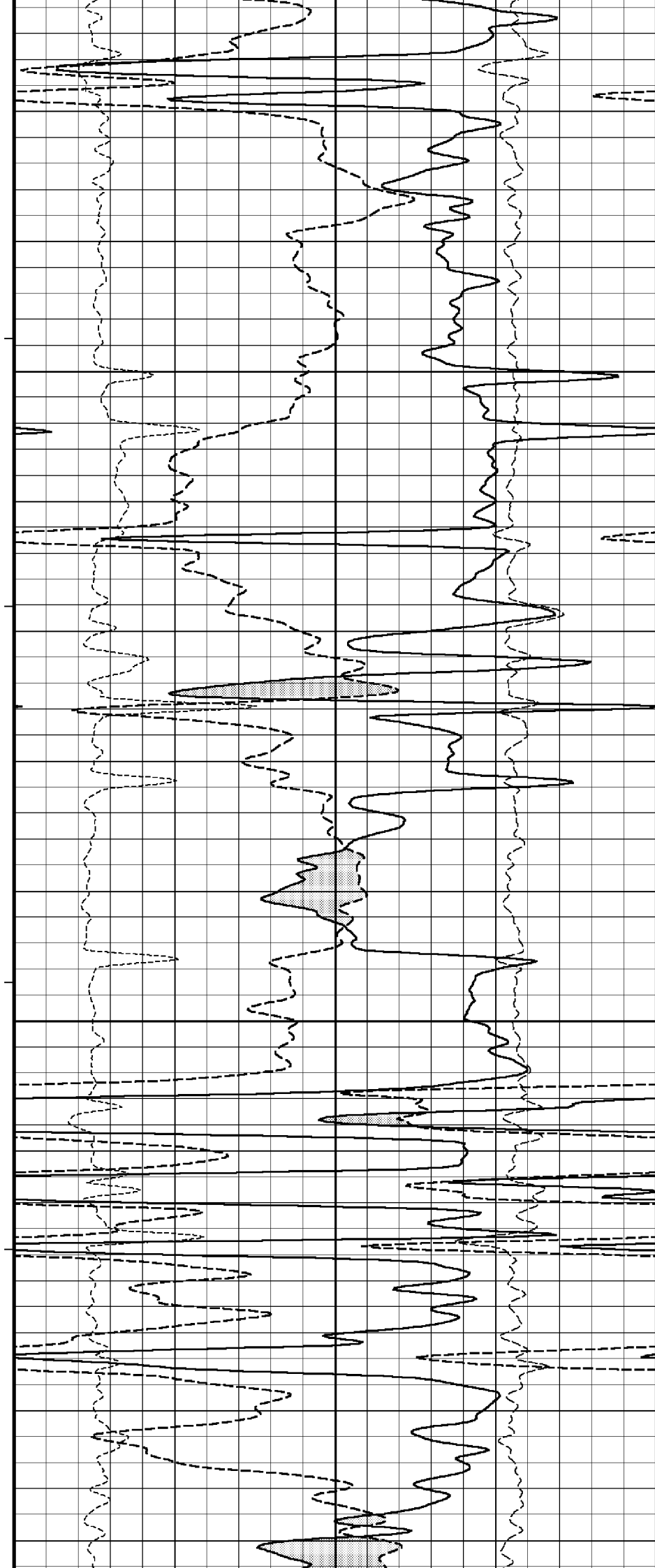
102°

2420  
TVD

2430  
TVD

101°

2440  
TVD





2450  
TVD

400

2460  
TVD

101°

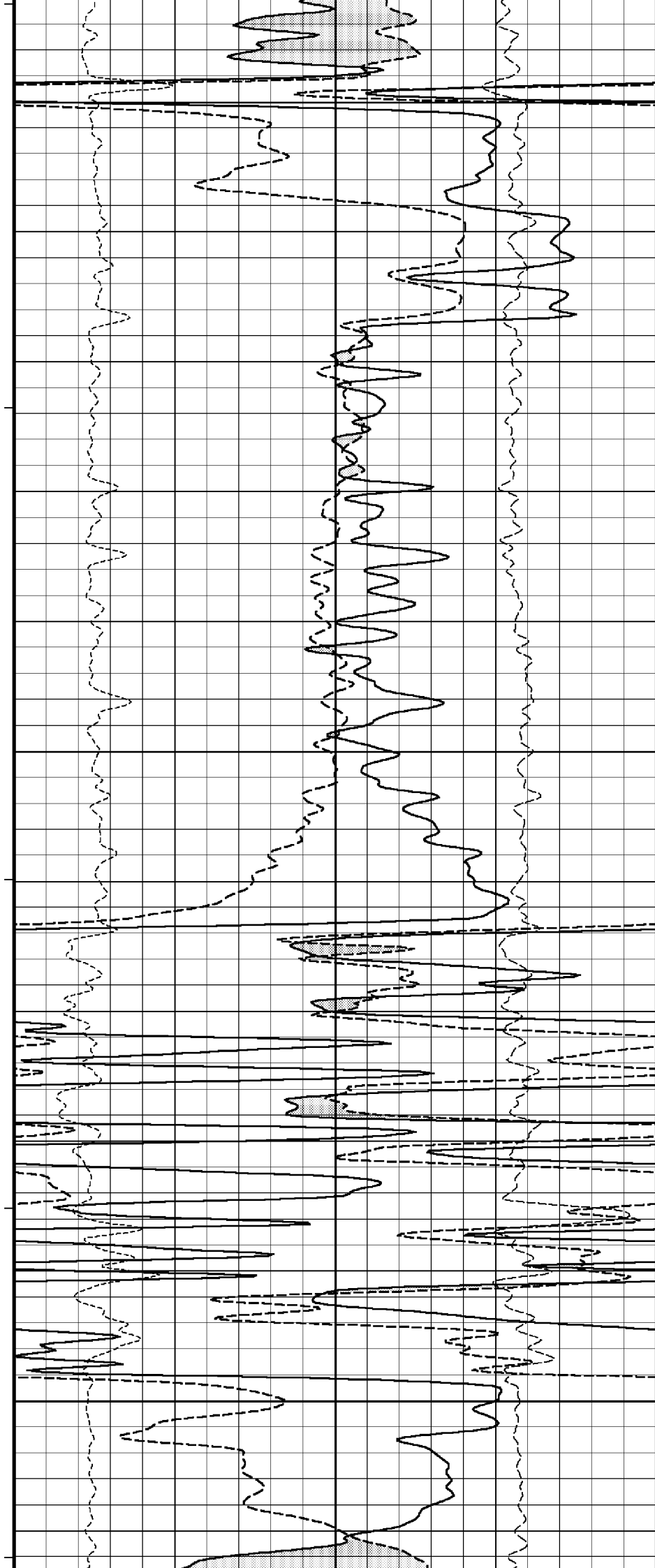
2470  
TVD

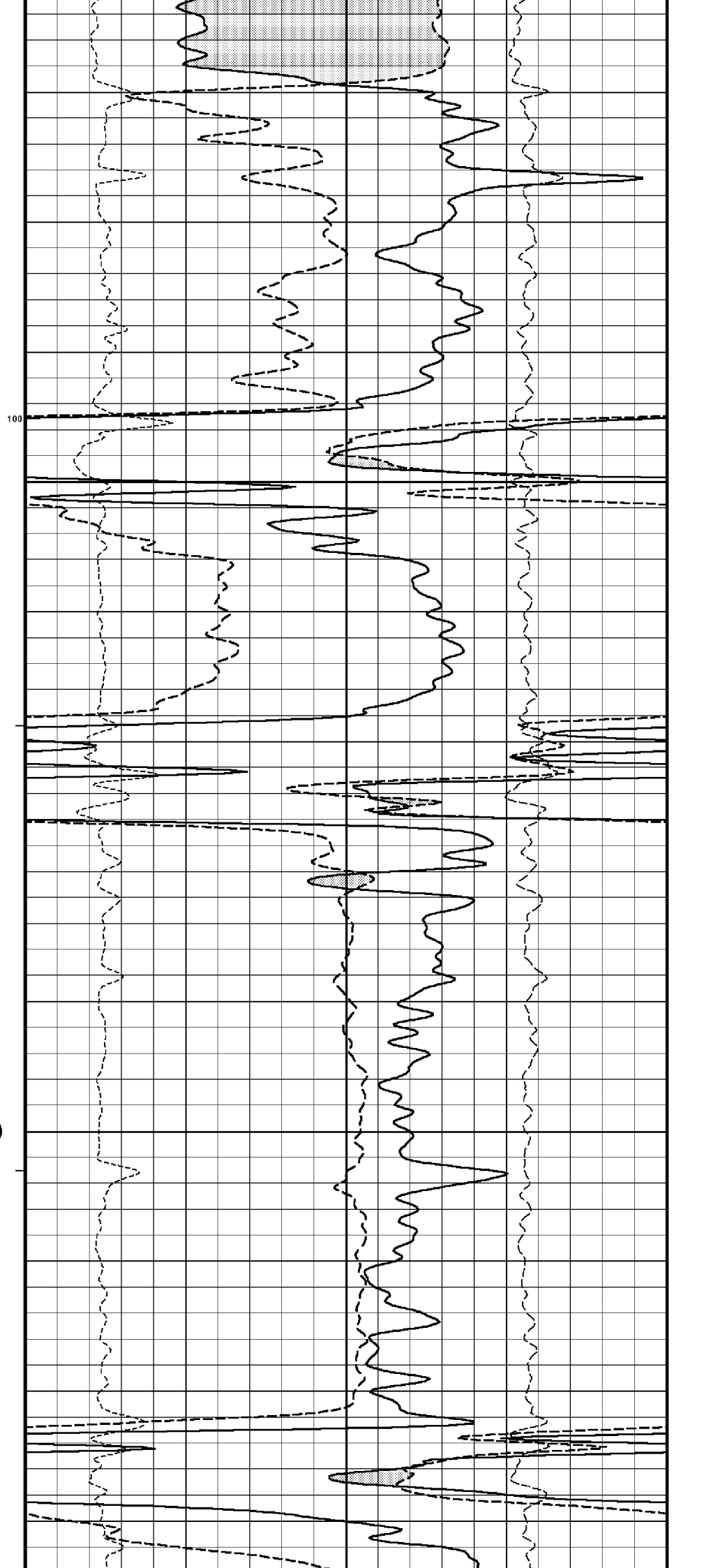
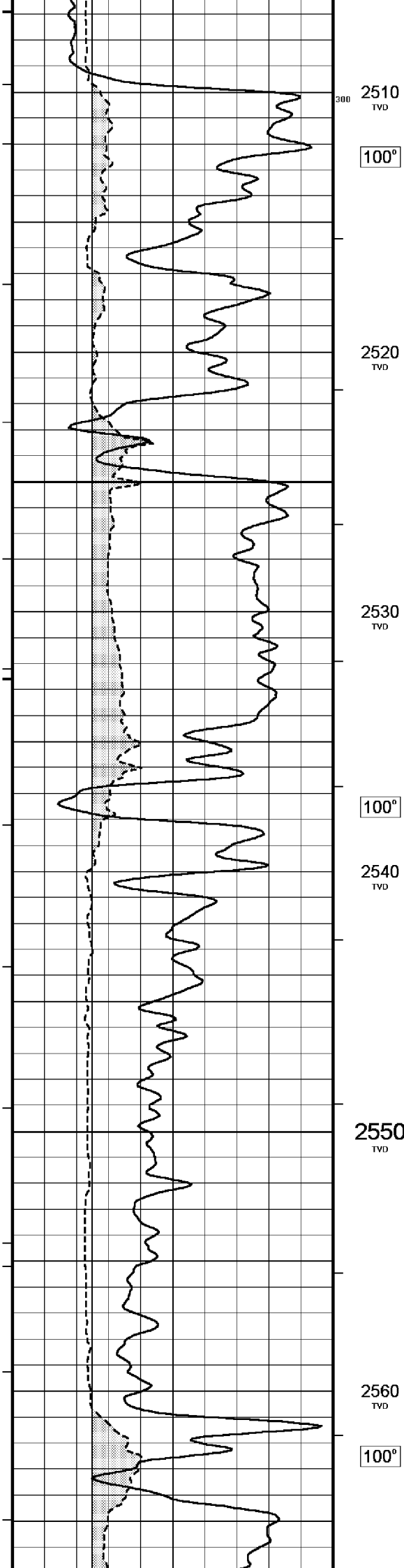
2480  
TVD

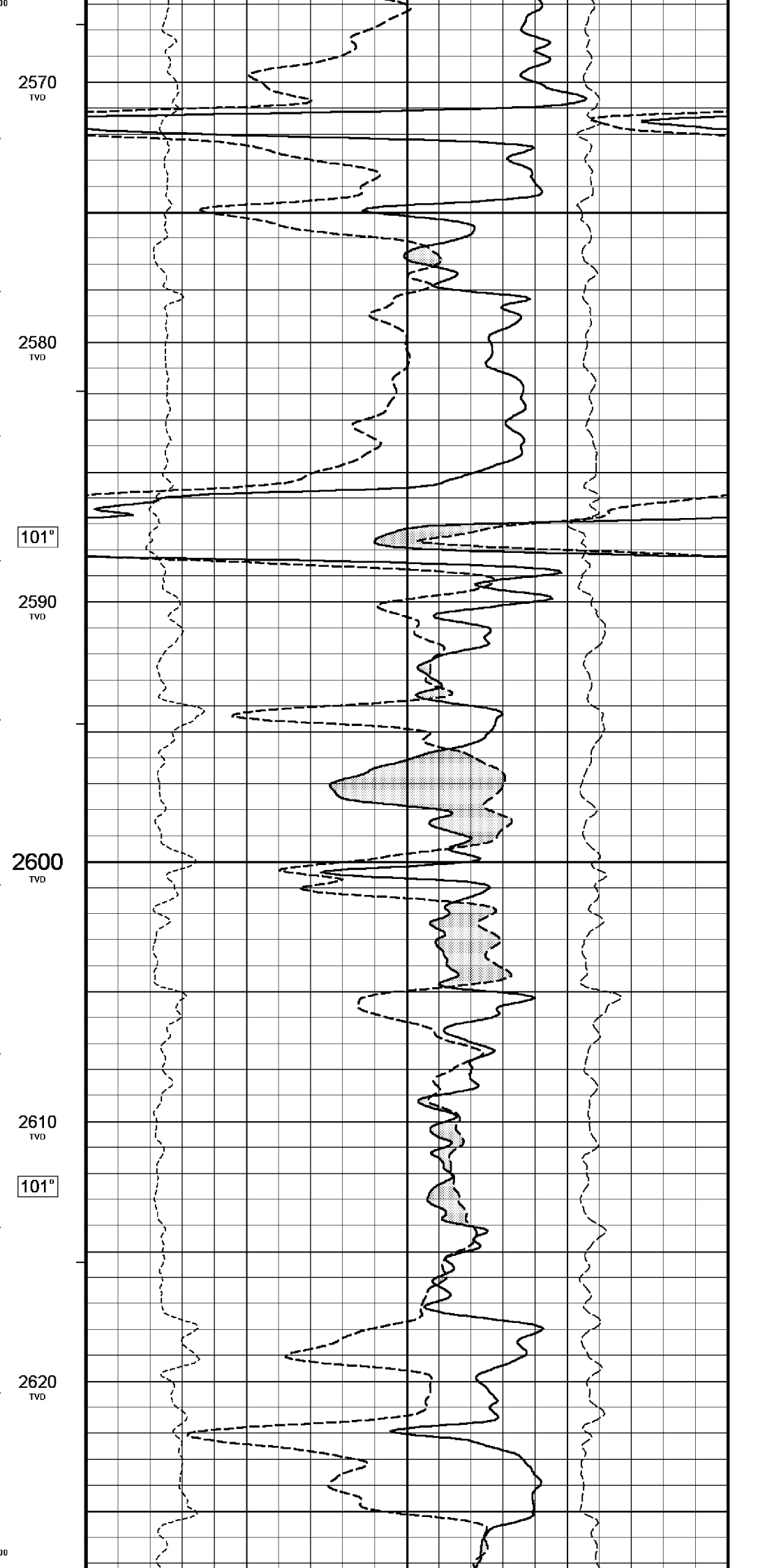
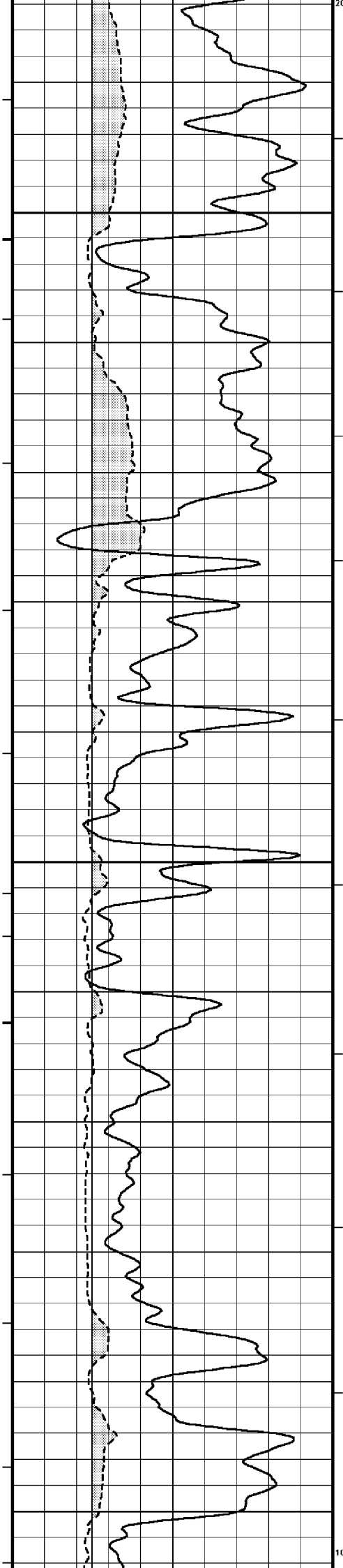
100°

2490  
TVD

2500  
TVD







2630  
TVD

104°

2640  
TVD

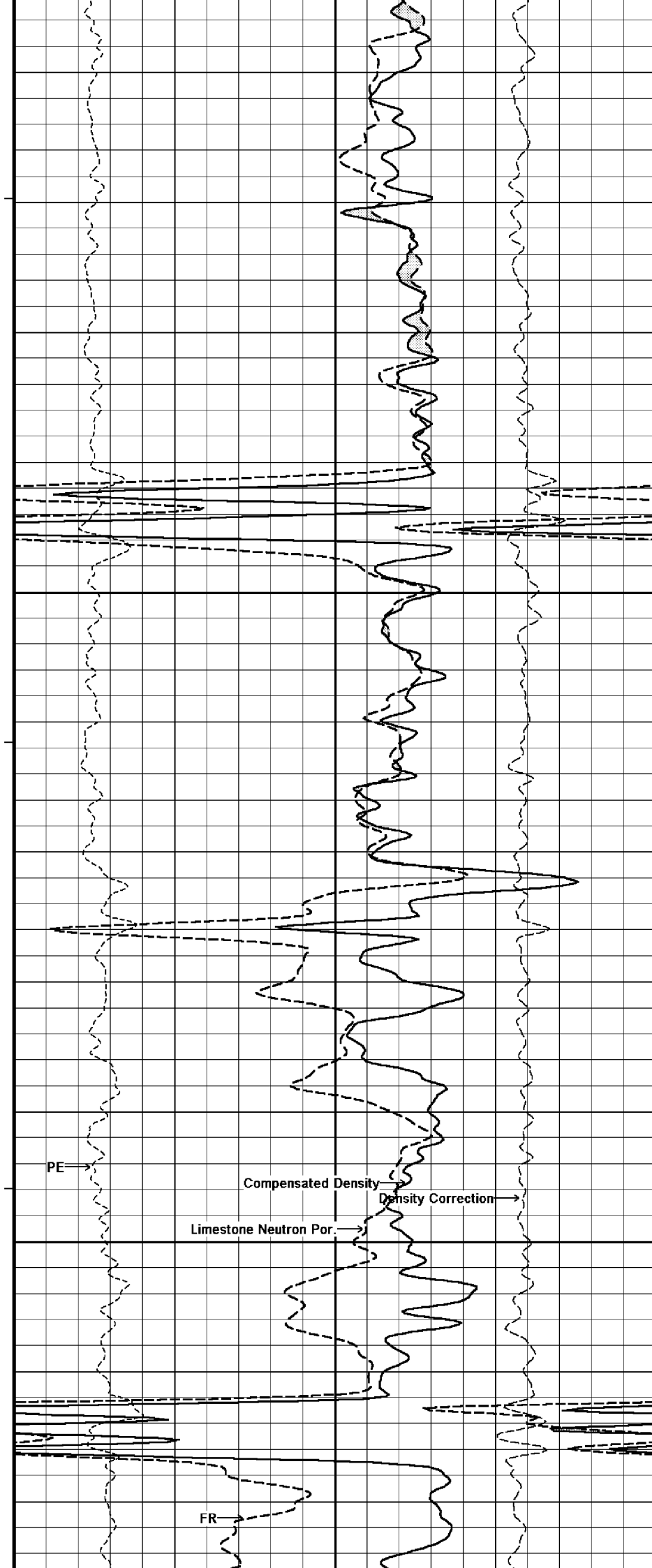
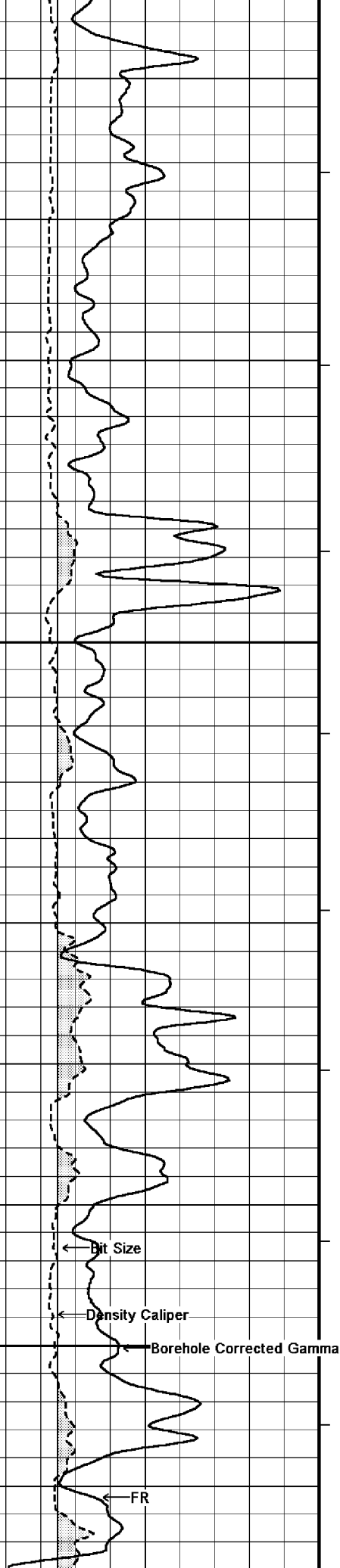
2650  
TVD

2660  
TVD

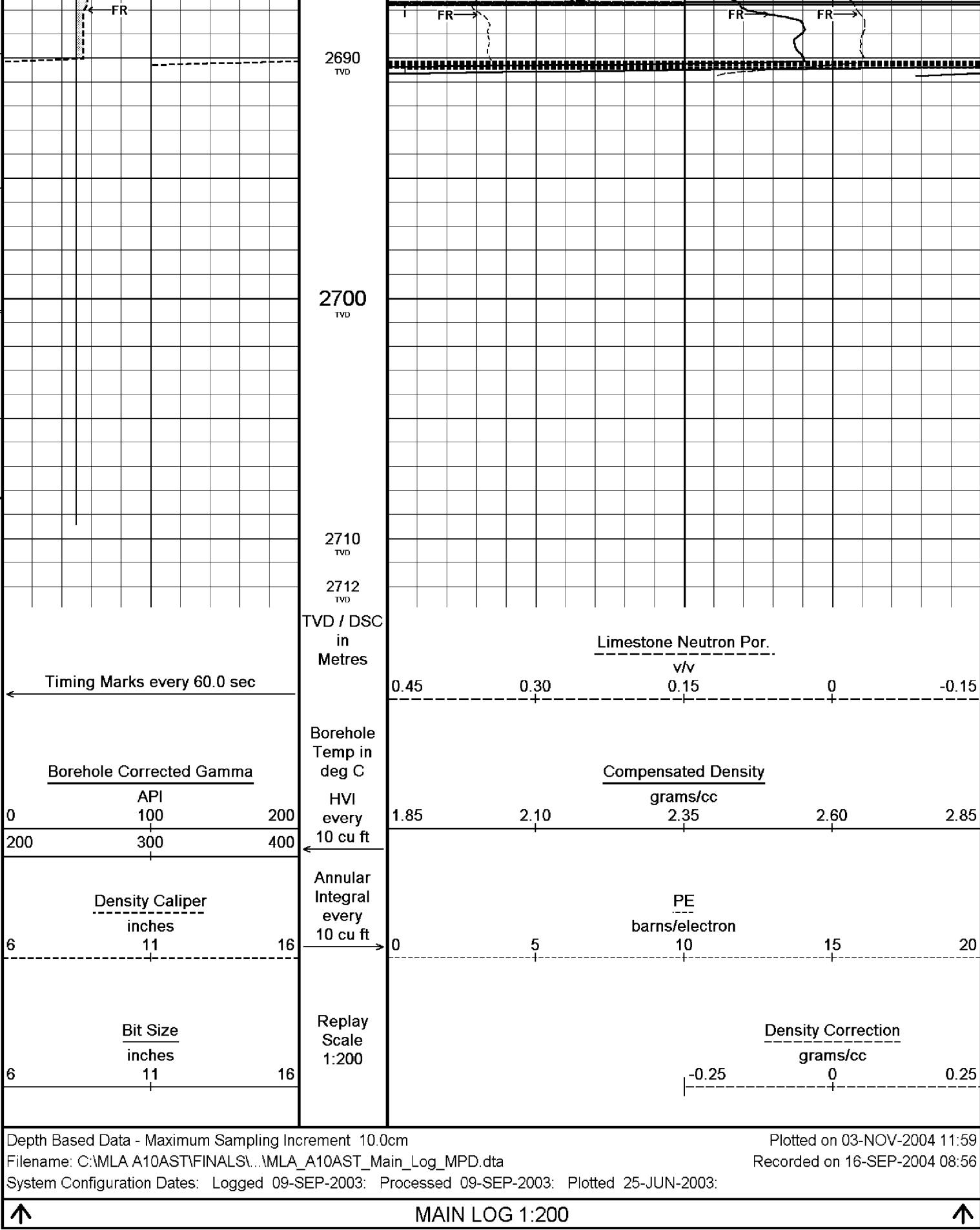
115°

2670  
TVD

2680  
TVD







BEFORE SURVEY CALIBRATION		
C:\MLA A10AST\FINALS\BLACK AND WHITE PRESENTATIONS\MLA_A10AST_Main_Log_MPD.dta		
General Constants All 000		
General Parameters		
Mud Resistivity	0.135	ohm-metres
Mud Resistivity Temperature	25.000	degrees C
Water Level	0.000	metres
Density/Neutron Processing	Wet Hole	

Density/Neutron Processing      Wet Hole			
Hole/Annular Volume and Differential Caliper Parameters			
HVOL Caliper 1	Density Caliper		
HVOL Caliper 2	Density Caliper		
Annular Volume Diameter	7.000	inches	
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		
High Resolution Temperature Calibration MCG 043			Field Calibration on 10-FEB-2004,09:37
	Measured	Calibrated(Deg C)	
Lower	0.00	0.00	
Upper	100.00	100.00	
High Resolution Temperature Constants MCG 043			
Pre-filter Length	11		
Gamma Calibration MCG 043			Field Calibration on 13-SEP-2004 17:13
	Measured	Calibrated (API)	
Background	7	4	
Calibrator (Gross)	1404	913	
Calibrator (Net)	1397	909	
Gamma Constants MCG 043			
Gamma Calibrator Number	60		
Mud Density	1.18	gm/cc	
Caliper Source for Processing	Density Caliper		
Tool Position	Eccentred		
Concentration of KCl	0.00	kppm	
Neutron Calibration MDN 085			Base Calibration on 1-SEP-2004 13:09 Field Check on 13-SEP-2004 18:47
Base Calibration			
	Measured		Calibrated (cps)
	Near	Far	Near      Far
	3144	98	3714      110
Ratio	32.224		33.764
Field Calibrator at Base			
			Calibrated (cps)
			1597      2306
Ratio			0.692
Field Check			
			Calibrated (cps)
			1571      2298
Ratio			0.684
Neutron Constants MDN 085			
Neutron Source Id	NSN-E-739		
Neutron Jig Number	NEC-C-052		
Epithermal Neutron	No		
Caliper Source for Processing	Density Caliper		
Stand-off	0.00	inches	
Mud Density	1.18	gm/cc	
Limestone Sigma	7.10	cu	
Sandstone Sigma	4.26	cu	
Dolomite Sigma	4.70	cu	
Formation Pressure Source	None		
Formation Pressure	N/A	kpsi	
Temperature Source	MCG External Temperature		
Temperature	20.00	degrees C	
Mud Salinity	48.30	kppm	
Formation Fluid Salinity Source	None		
Formation Fluid Salinity	N/A	kppm	
Barite Mud Correction	Not Applied		
Caliper Calibration MPD 083			Base Calibration on 1-SEP-2004 10:37 Field Calibration on 13-SEP-2004 18:41
Base Calibration			
Reading No	Measured	Calibrator Size (in)	
1	10070	1.04	

1	13072	4.01
2	21358	5.99
3	29792	7.98
4	38288	9.94
5	47695	12.01
6	N/A	N/A

#### Field Calibration

Measured Caliper (in)	Actual Caliper (in)
7.95	7.98

#### Photo Density Calibration MPD 083

Base Calibration on 1-SEP-2004 10:28  
Field Check on 13-SEP-2004 18:40

#### Density Calibration

Base Calibration	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	54422	18790	53111	19310
Reference 2	25713	2533	24951	2530

#### Field Check at Base

981.2 1133.8

#### Field Check

980.1 1130.8

#### PE Calibration

Base Calibration	WS	Measured		Calibrated Ratio
		WH	Ratio	
Background	186	847		
Reference 1	16823	54230	0.312	0.320
Reference 2	6734	25569	0.265	0.273

#### Field Check at Base

185.5 846.9

#### Field Check

186.9 844.2

#### Density Constants MPD 083

Density Source Id	242	
Nylon Calibrator Number	DNC-D-536	
Aluminium/Fe Calibrator Number	DAC-D-536	
Density Shoe Profile	4 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1.18	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

#### DOWNHOLE EQUIPMENT

C:\MLA A10AST\FINALS\BLACK AND WHITE PRESENTATIONS\MLA\_A10AST\_Main\_Log\_MPD.dta

#### Compact Swivel Head Adaptor

SHA 64 Length: 0.83 m Weight: 26.5 lb

#### Compact Knuckle Joint

SKJ 111 Length: 0.66 m Weight: 24.3 lb

#### Compact Battery Sub.

MBS 99 Length: 4.34 m Weight: 88.2 lb



Compact Inline Standoff B  
MIS 144 Length: 0.65 m Weight: 15.4 lb

Compact Stiff Bridle Electrode Sub.  
MBE 18 Length: 3.76 m Weight: 94.8 lb

Compact Inline Standoff B  
MIS 142 Length: 0.65 m Weight: 15.4 lb

Compact Stiff Bridle Electrode Sub.  
MBE 19 Length: 3.76 m Weight: 94.8 lb

Compact Inline Standoff B  
MIS 141 Length: 0.65 m Weight: 15.4 lb

Thrid Bridle MBE 20  
MLK 111 Length: 3.76 m Weight: 94.8 lb

Compact Inline Standoff B  
MIS 140 Length: 0.65 m Weight: 15.4 lb

Compact Knuckle Joint  
SKJ 110 Length: 0.66 m Weight: 24.3 lb

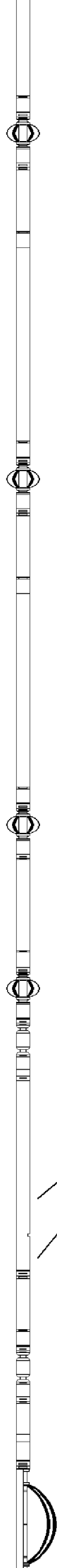
Compact Gamma  
MCG 43 Length: 2.65 m Weight: 63.9 lb

Compact Memory Sub.  
MMS 24 Length: 0.95 m Weight: 22.0 lb

Compact Knuckle Joint  
SKJ 100 Length: 0.66 m Weight: 24.3 lb

Compact Swivel Head Adaptor  
SHA 71 Length: 0.83 m Weight: 26.5 lb

Compact Inline Bowspring A  
MIS 94 Length: 1.74 m Weight: 33.1 lb



31.38 m GGCE - Borehole Corrected Gamma  
30.50 m CGXT - MCG External Temperature

Compact Neutron  
MDN 85 Length: 1.53 m Weight: 50.7 lb

Compact Density/Caliper  
MPD 83 Length: 2.92 m Weight: 90.4 lb

Compact Inline Bowspring A  
MIS 24 Length: 1.74 m Weight: 33.1 lb

Compact Knuckle Joint  
SKJ 102 Length: 0.66 m Weight: 24.3 lb

Compact Inline Standoff B  
MIS 139 Length: 0.65 m Weight: 15.4 lb

Compact Upper Guard Sub.  
MUG 5 Length: 2.74 m Weight: 68.3 lb

Compact Inline Standoff B  
MIS 136 Length: 0.65 m Weight: 15.4 lb

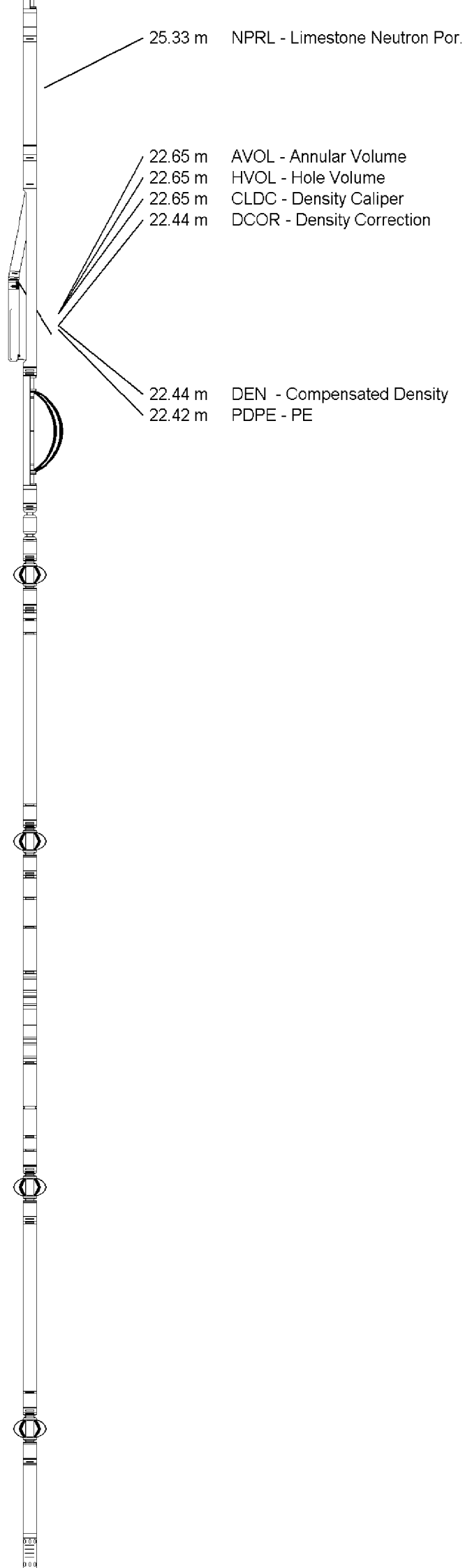
Compact Laterolog Electrode Sub.  
MLE 17 Length: 3.76 m Weight: 92.6 lb

Compact Inline Standoff B  
MIS 133 Length: 0.65 m Weight: 15.4 lb

Compact Lower Guard Sub.  
MLG 7 Length: 2.44 m Weight: 55.1 lb

Compact Inline Standoff B  
MIS 130 Length: 0.65 m Weight: 15.4 lb

Compact Sonic  
MSS 47 Length: 3.82 m Weight: 72.8 lb



Compact Inline Standoff B  
MIS 132    Length: 0.65 m    Weight: 15.4 lb

Compact Induction  
MAI 39    Length: 3.29 m    Weight: 48.5 lb

Pressure Bung + Hole Finder  
HFS 3    Length: 0.40 m    Weight: 6.6 lb

Total    Length: 53.77 m    Weight: 1298.5 lb



Tool Zero (0.44m from bottom)

All measurements relative to tool zero.

COMPANY	Esso Australia Pty Ltd
WELL	Marlin A10a ST
FIELD	Turrum
PROVINCE/COUNTY	Bass Strait
COUNTRY/STATE	Australia

Elevation Kelly Bushing	metres	First Reading	2703.46	metres
Elevation Drill Floor    27.91	metres	Depth Driller	2713.46	metres
Elevation Ground Level    -59.00	metres	Depth Logger	2707.83	metres

**Reeves**  
**Compact**

PHOTO DENSITY  
COMPENSATED NEUTRON  
1:200 TVD