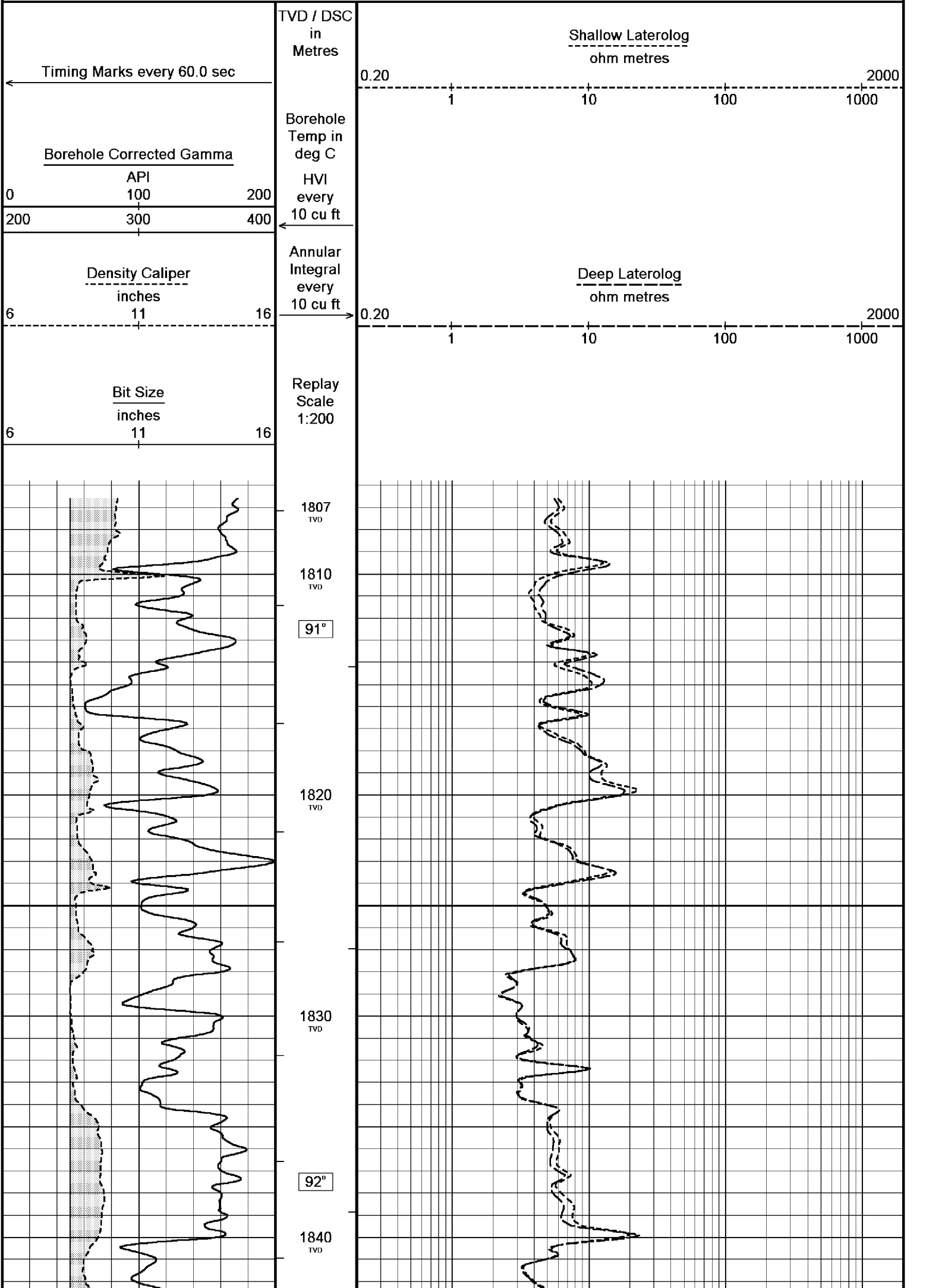


<div>Reeves</div> <div>Compact</div>			DUAL LATEROLOG GAMMA RAY 1:200 TVD		
COMPANY			Esso Australia Pty Ltd		
WELL			Marlin A10a ST		
FIELD			Turrum		
PROVINCE/COUNTY			Bass Strait		
COUNTRY/STATE			Australia		
LOCATION			38 13 49.320E , 148 13 15.712S N 5767920.060 m , E 606868.950 m		
			[FINAL PRINT]		
LSD	SEC	TWP	RGE	Other Services	
				COMPENSATED SONIC	
API Number				PHOTO DENSITY	
Permit Number VIC L3/L4				COMPENSATED NEUTRON	
Permanent Datum M.S.L. , Elevation 0.00 metres				Elevations:	
Log Measured From R.T. @ 27.91m above Permanent Datum				KB 27.91 metres	
Drilling Measured From R.T.				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.



Bit Size

Density Caliper

Borehole Corrected Gamma

Deep Laterolog  
Shallow Laterolog

700

1700  
1850  
TVD

1860  
TVD

92°

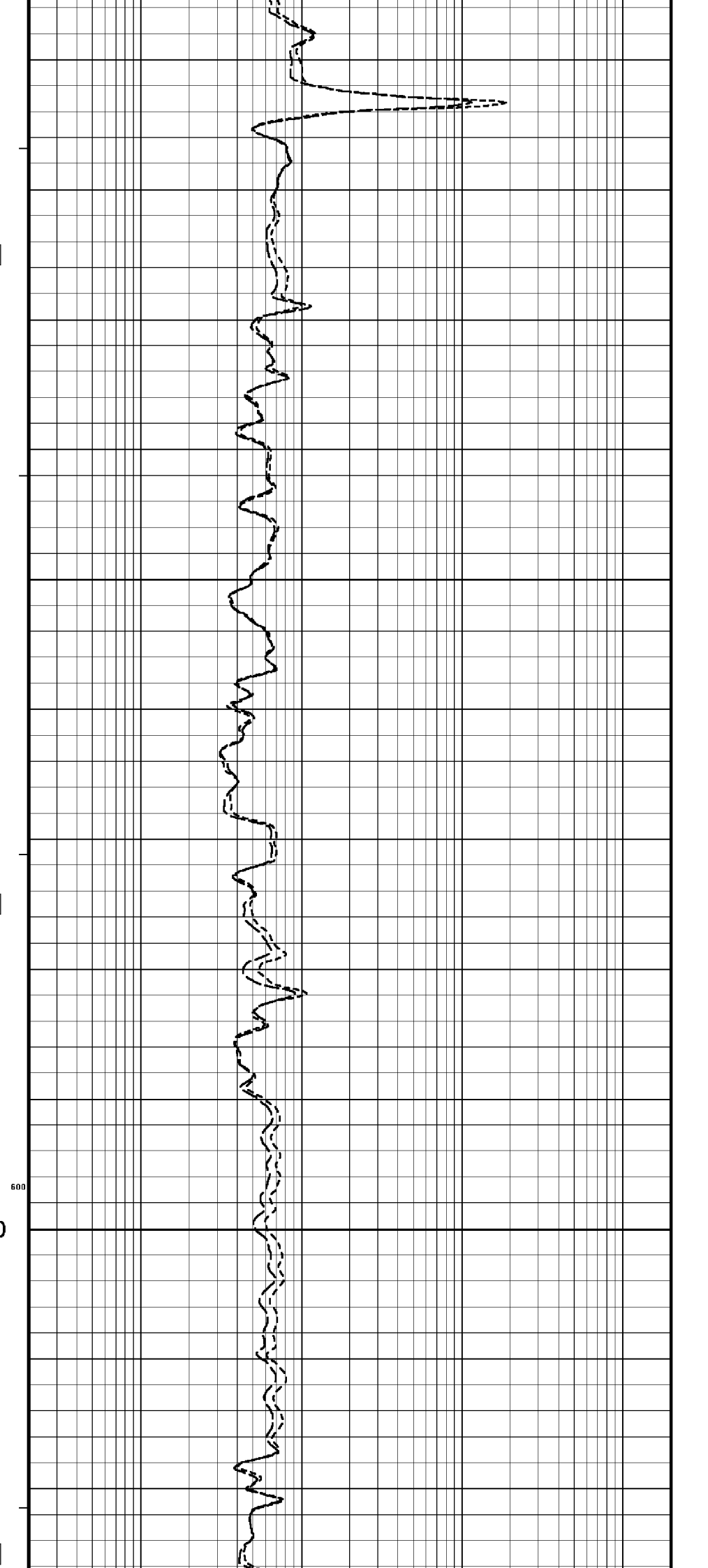
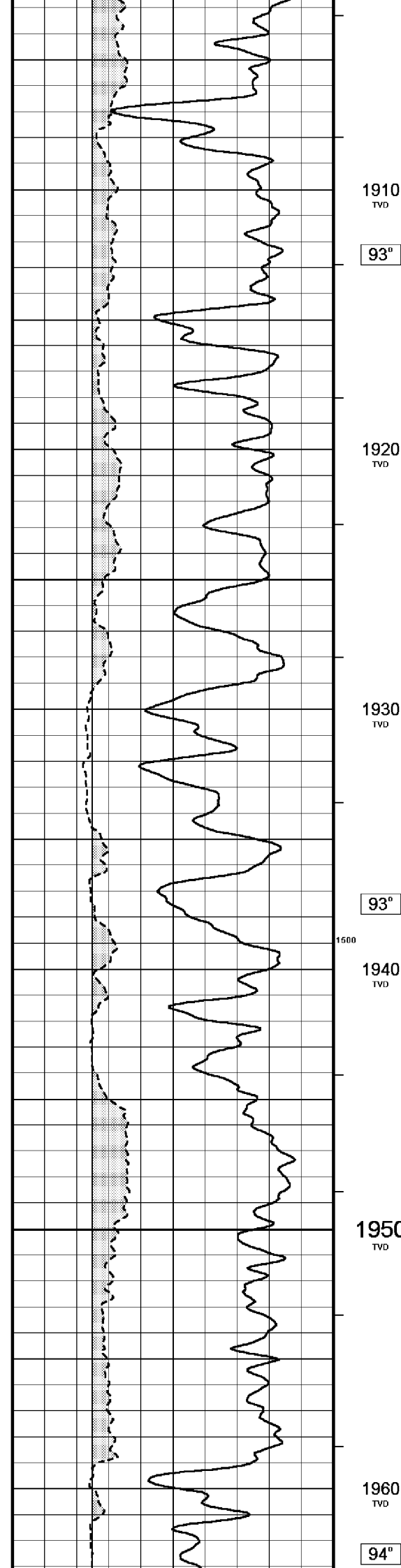
1870  
TVD

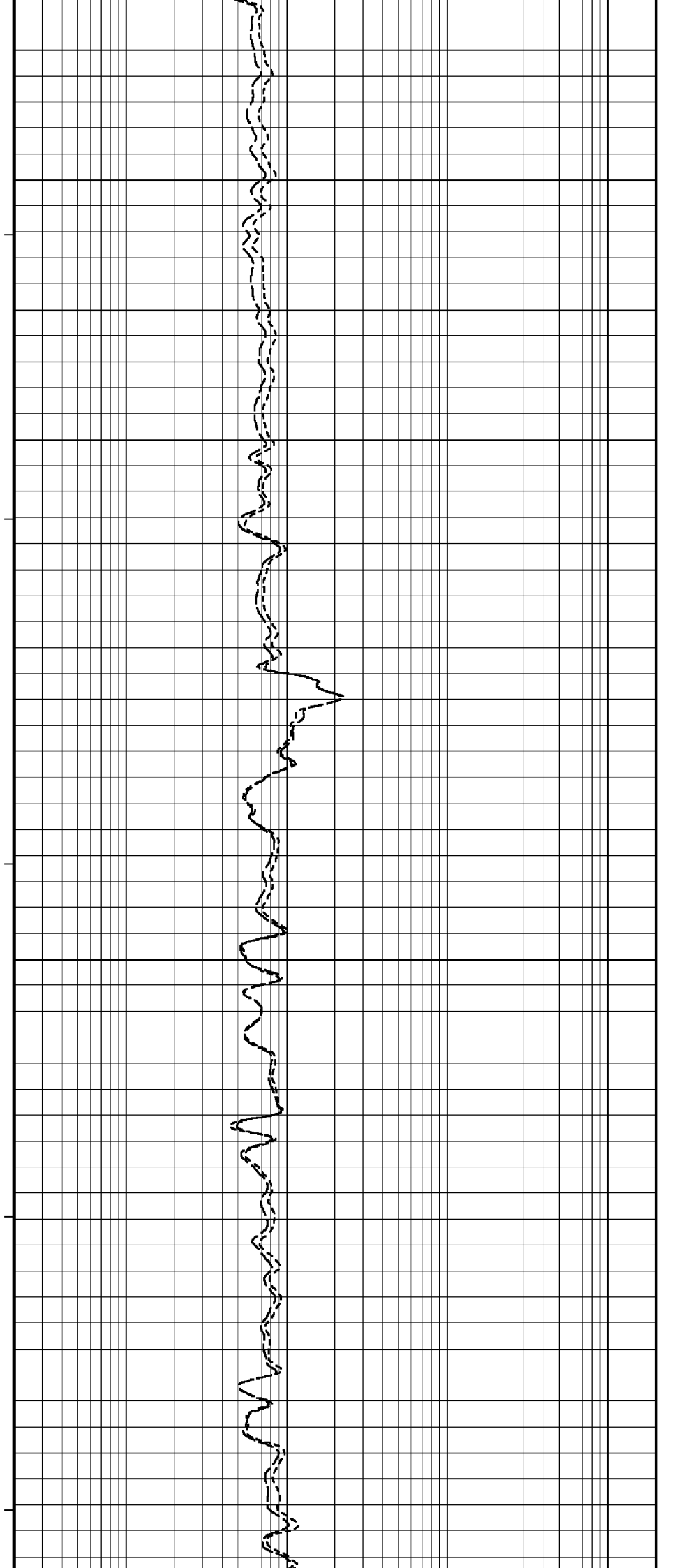
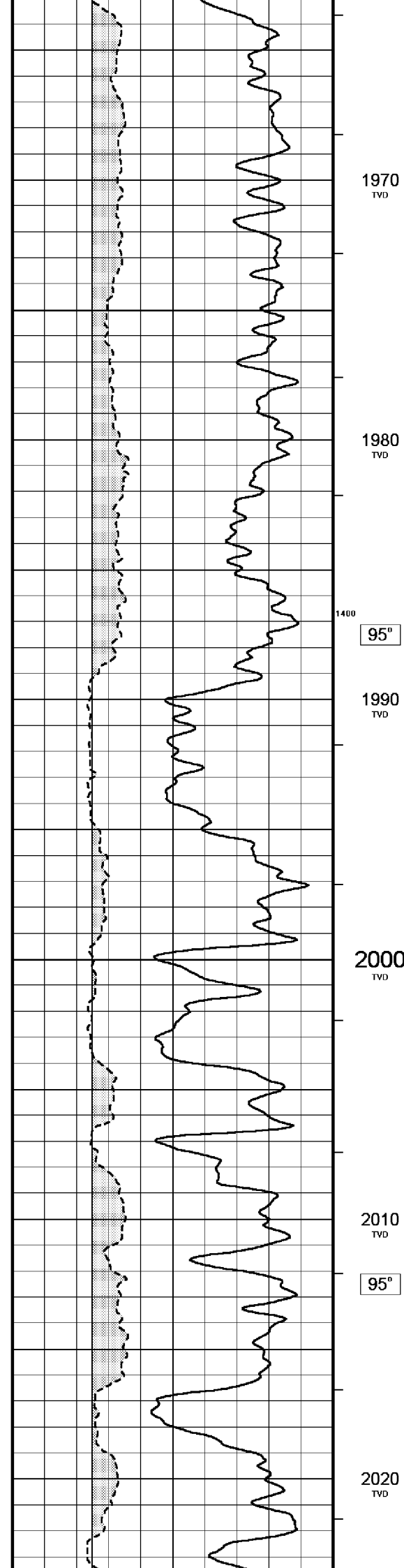
1880  
TVD

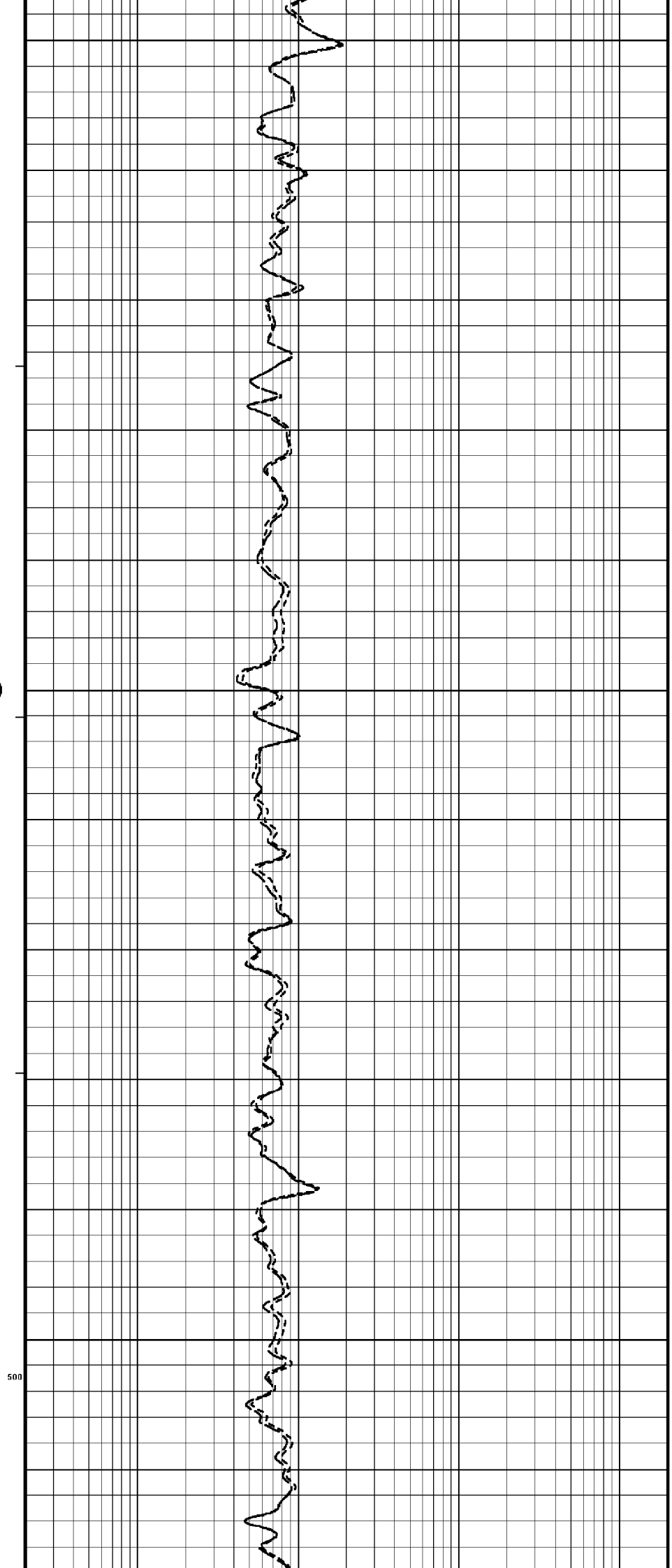
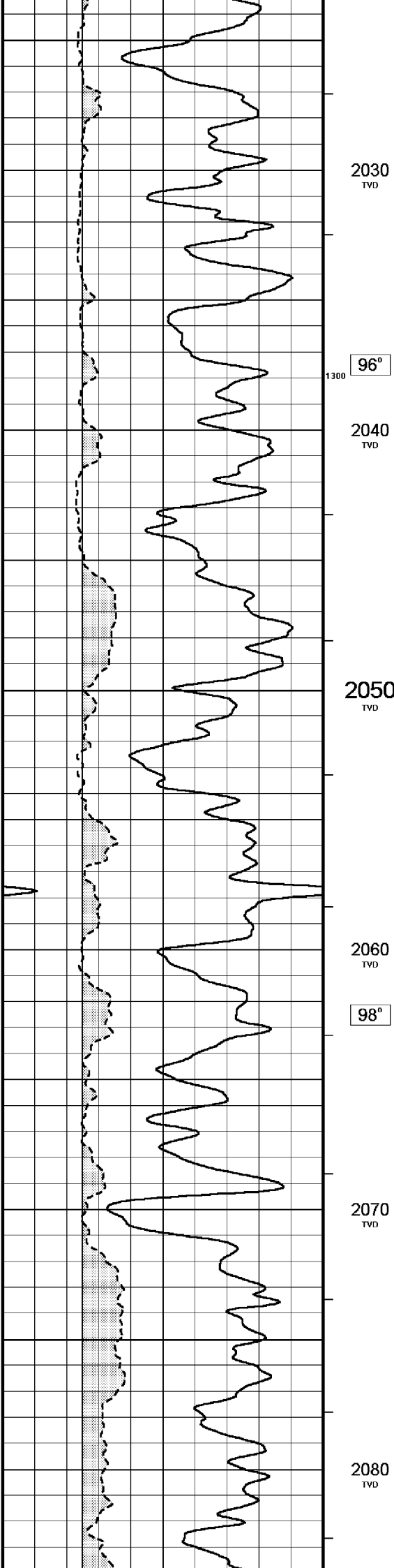
92°

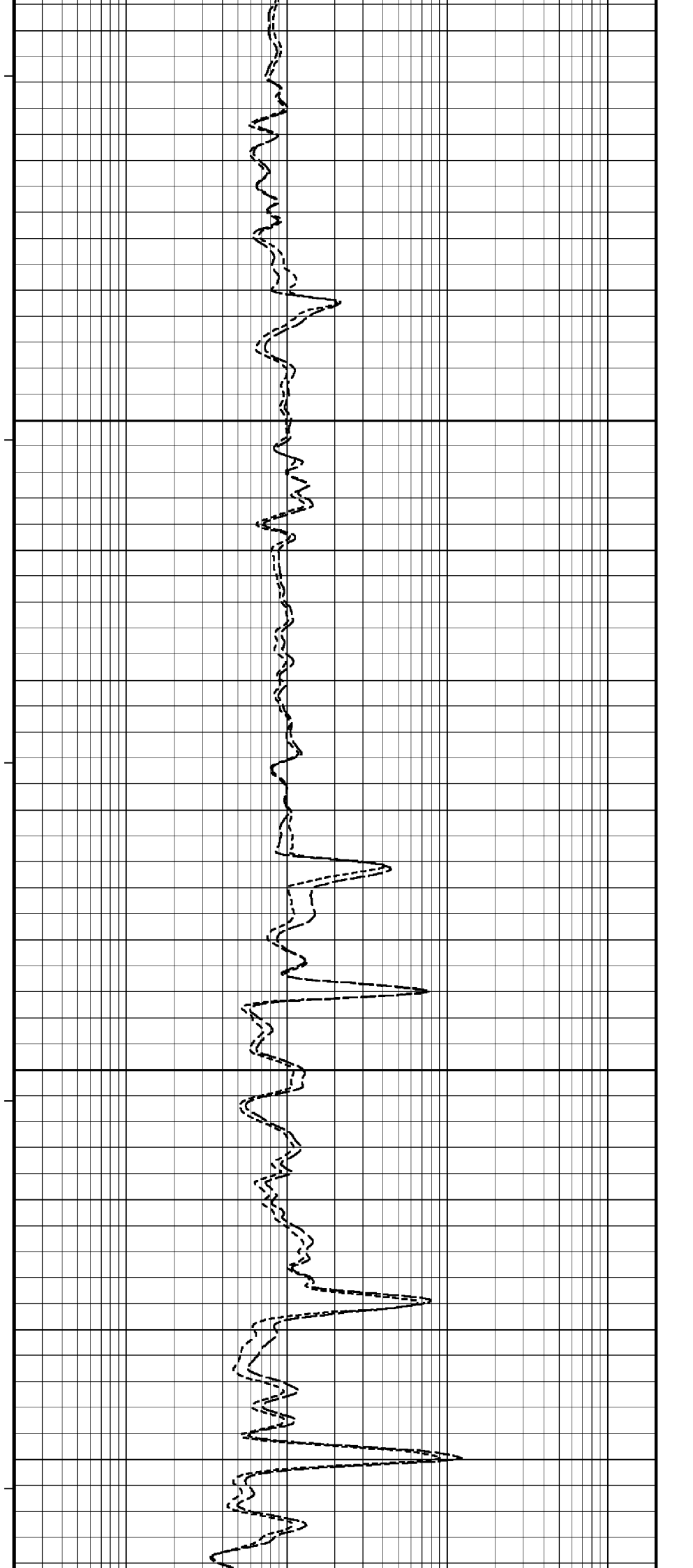
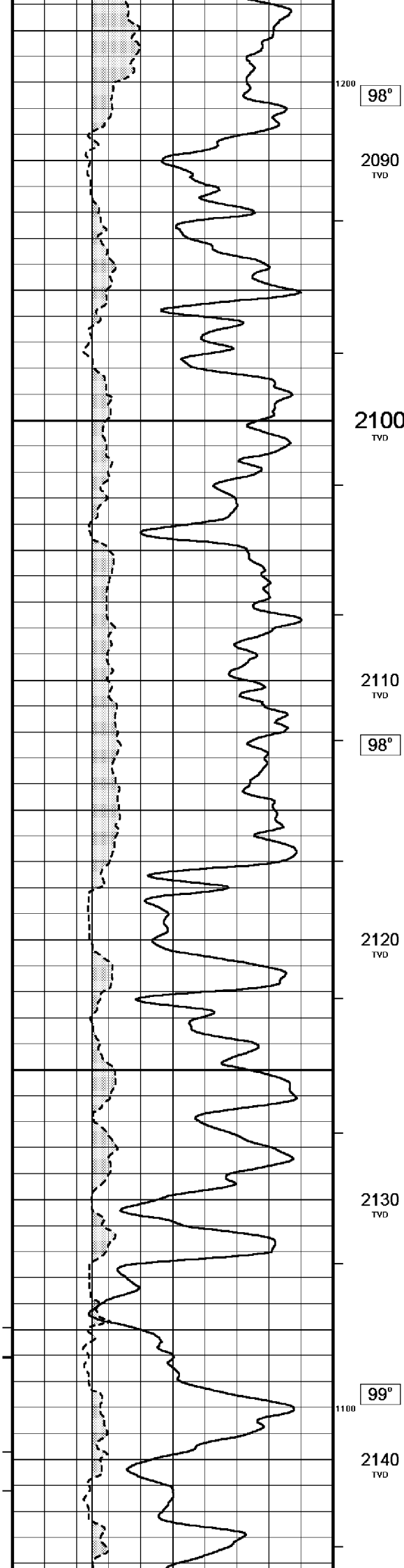
1600  
1890  
TVD

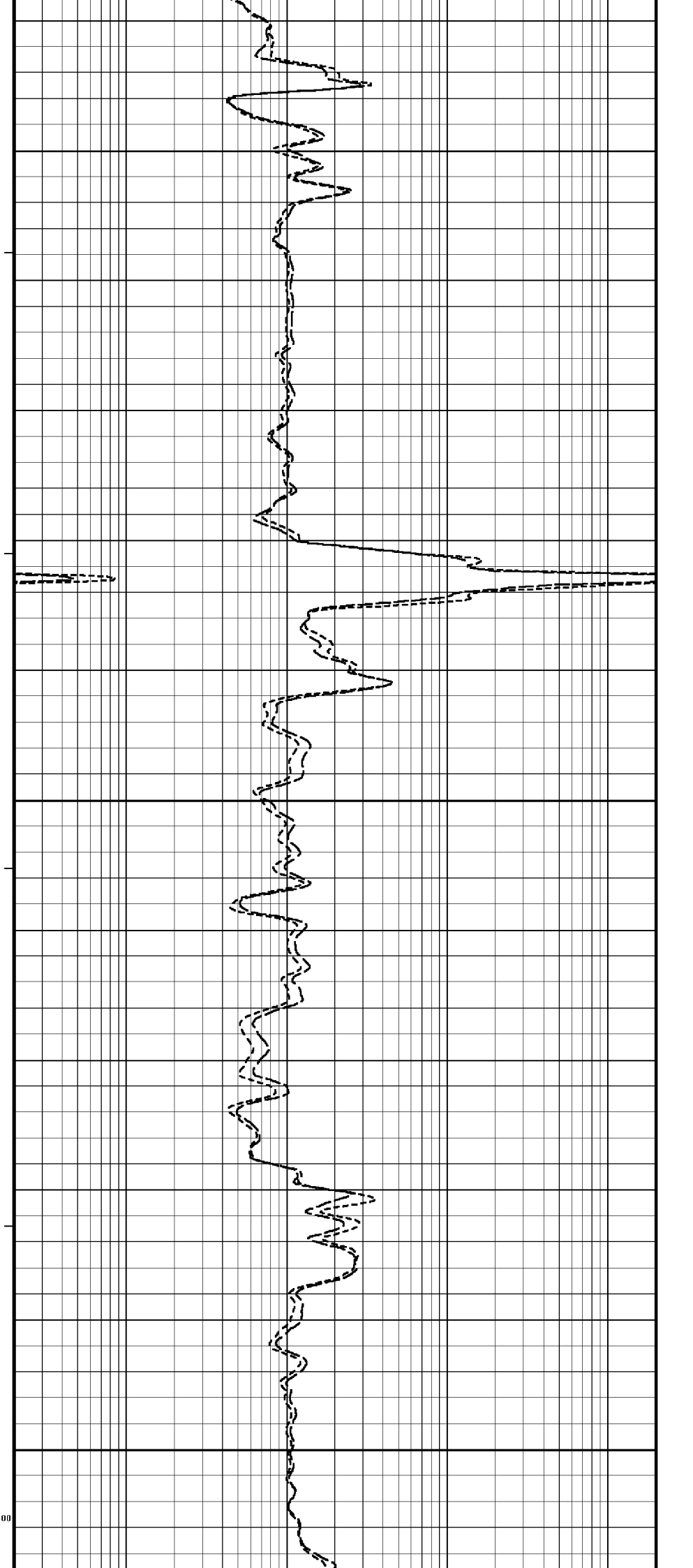
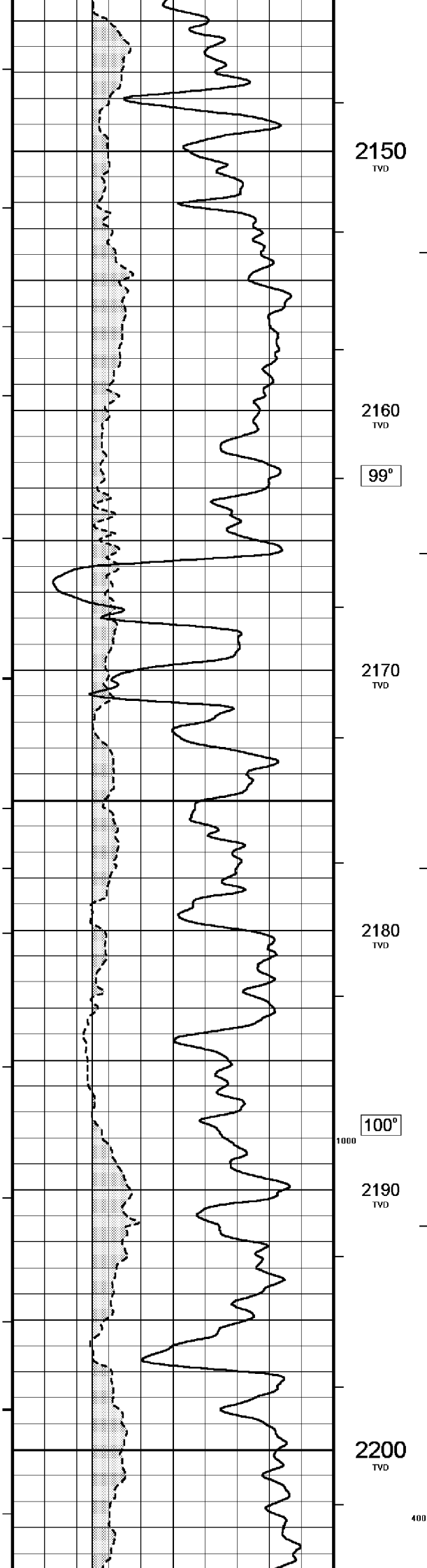
1900  
TVD



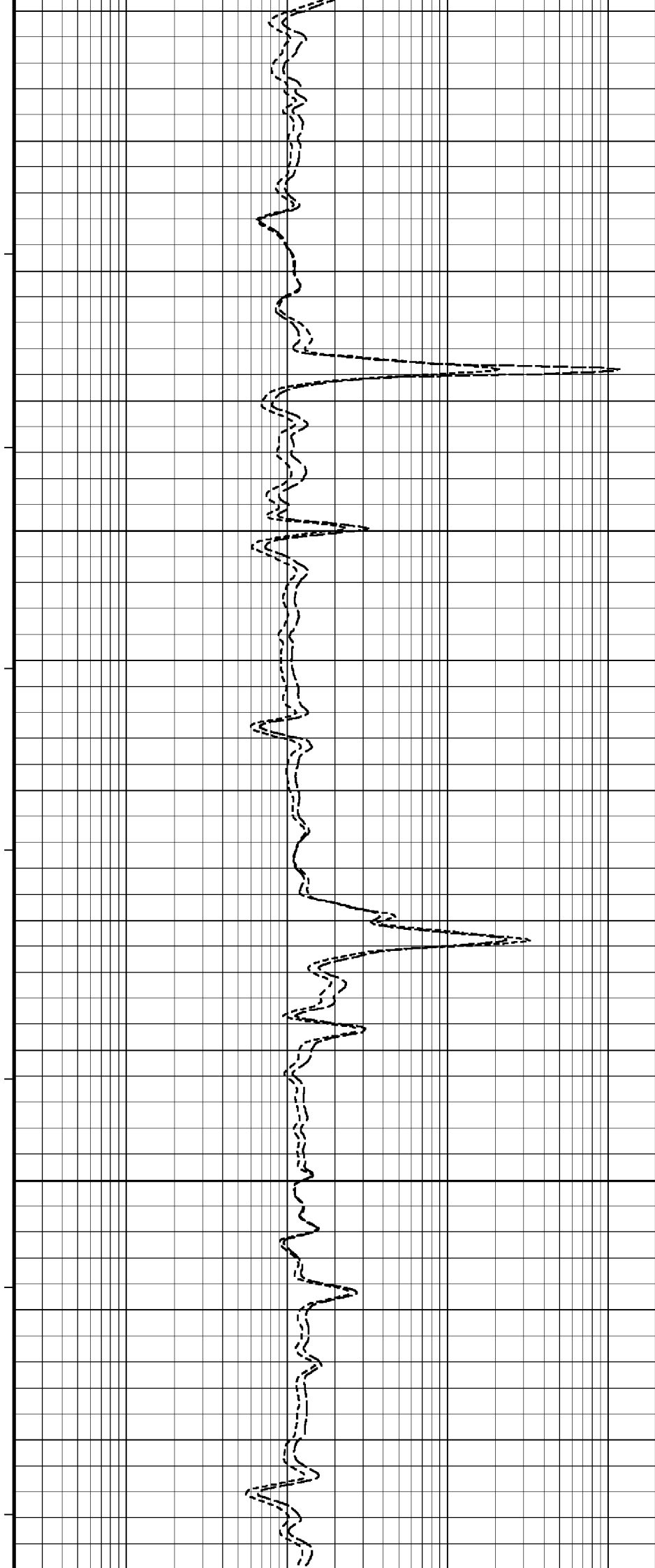
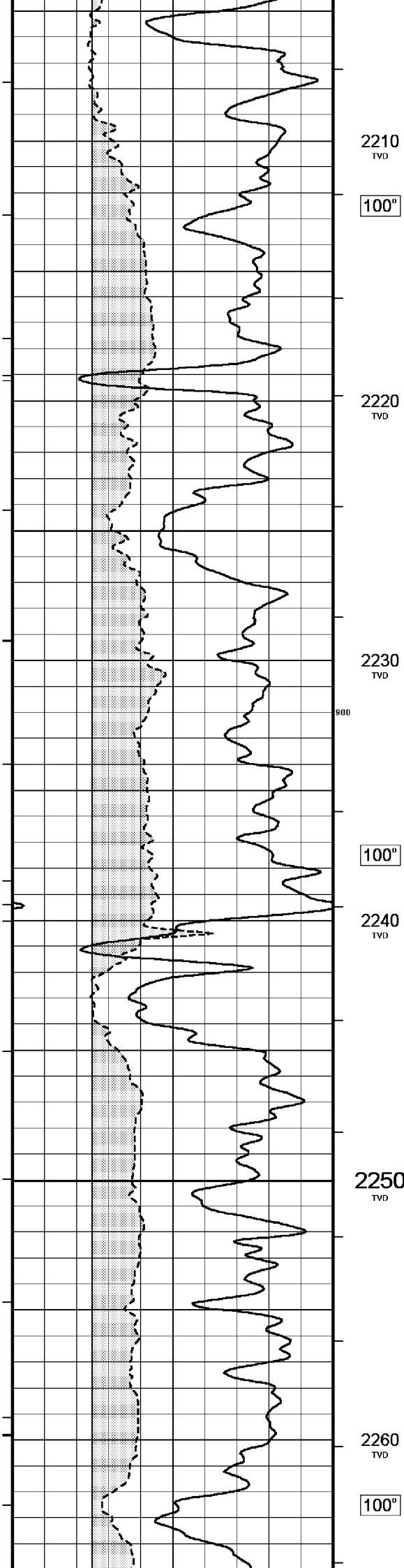


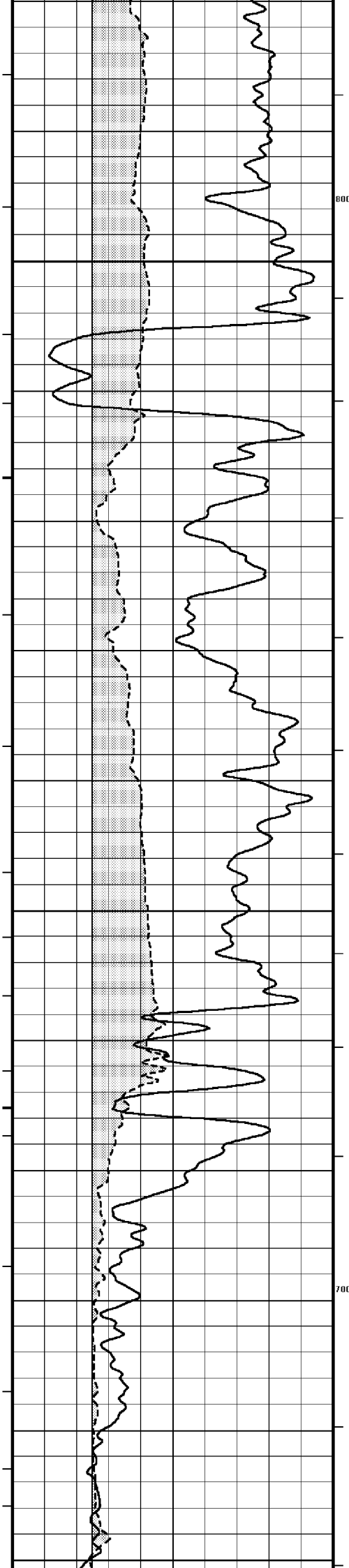












2270  
TVD

2280  
TVD

101°

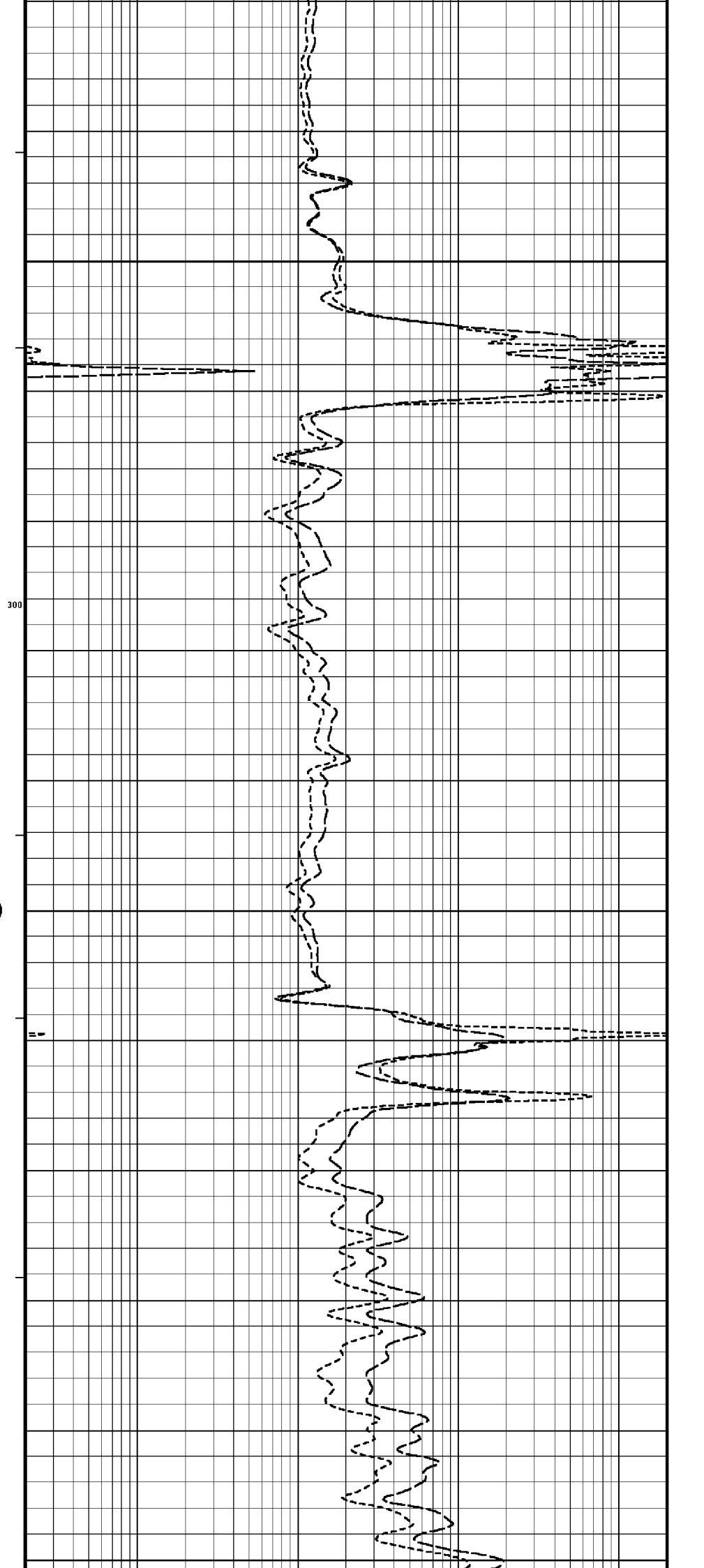
2290  
TVD

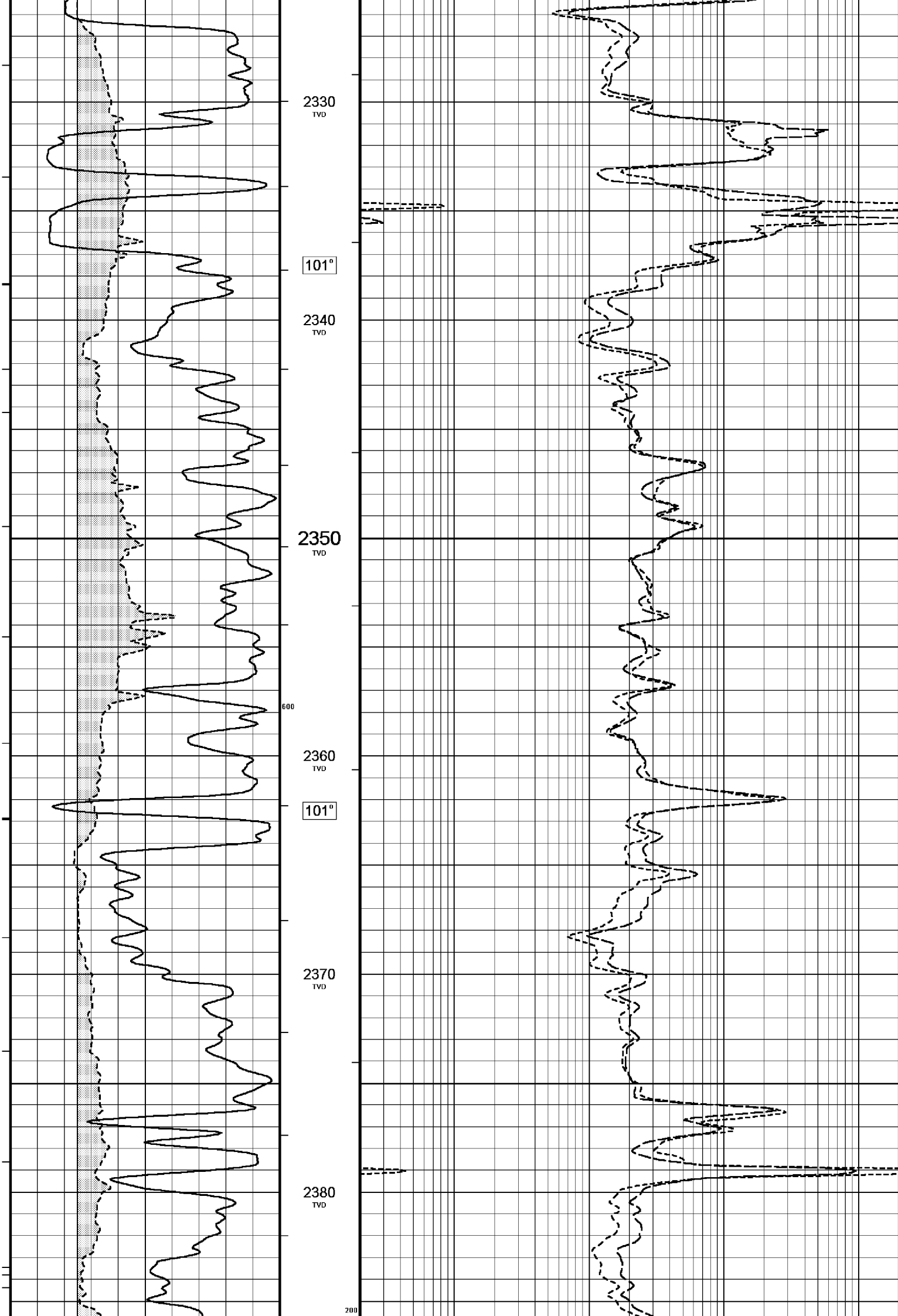
2300  
TVD

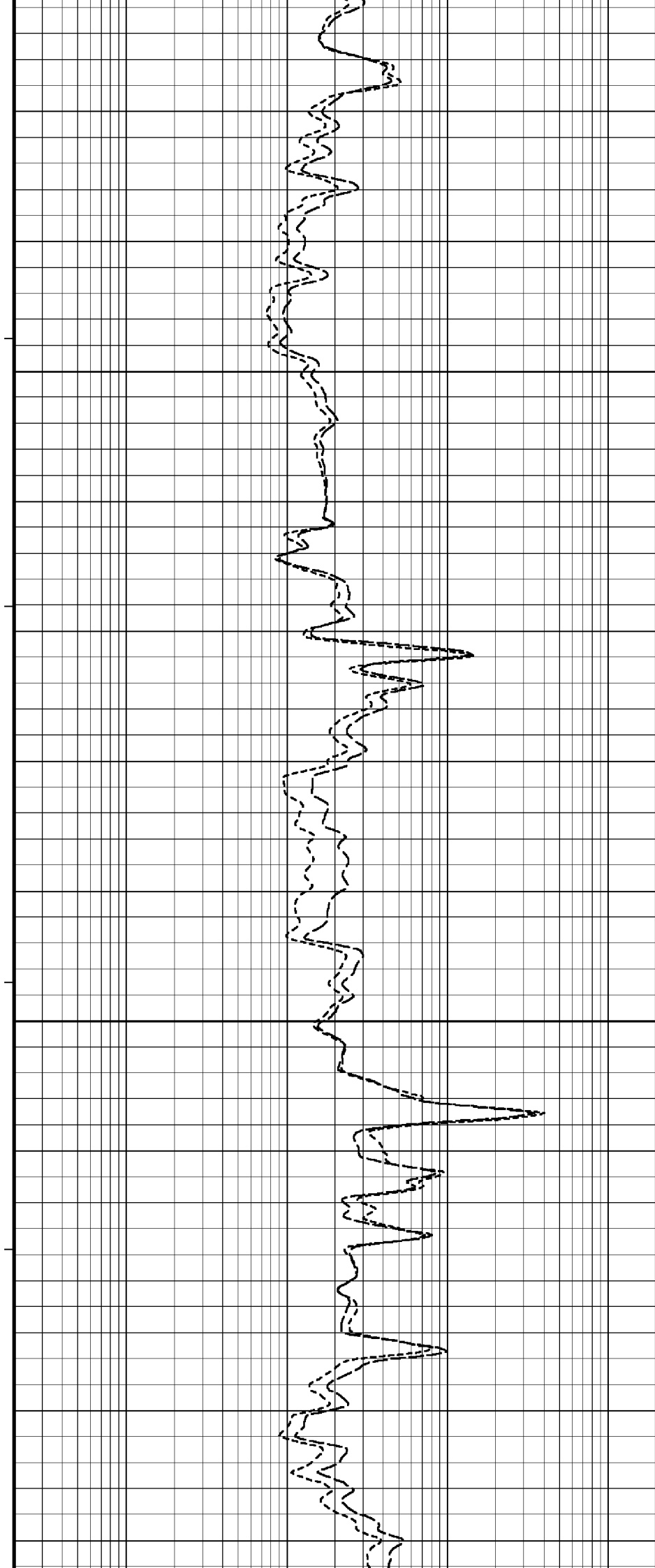
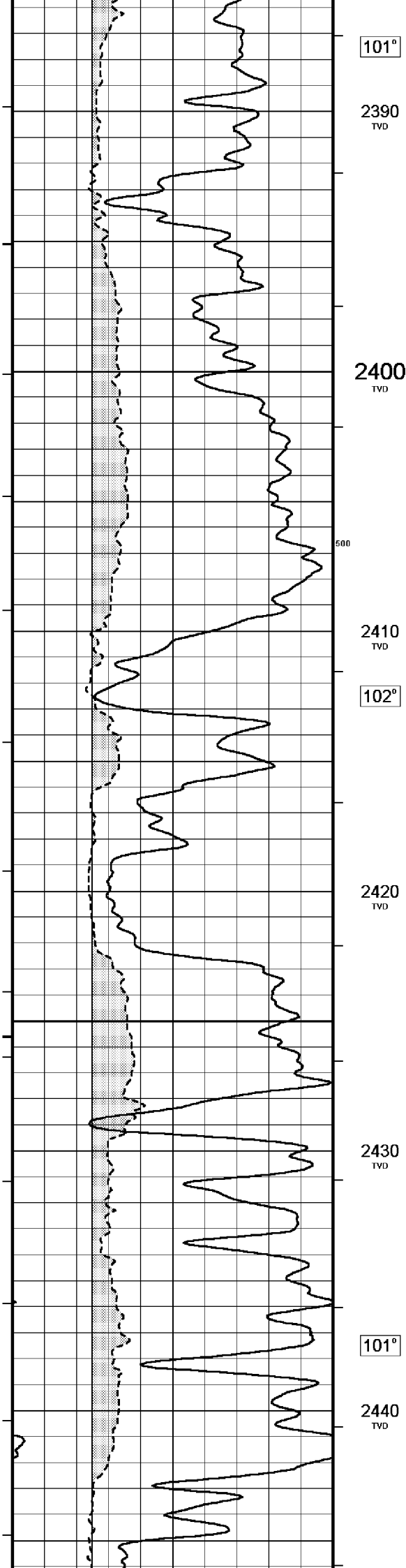
2310  
TVD

100°

2320  
TVD









2450  
TVD

400

2460  
TVD

101°

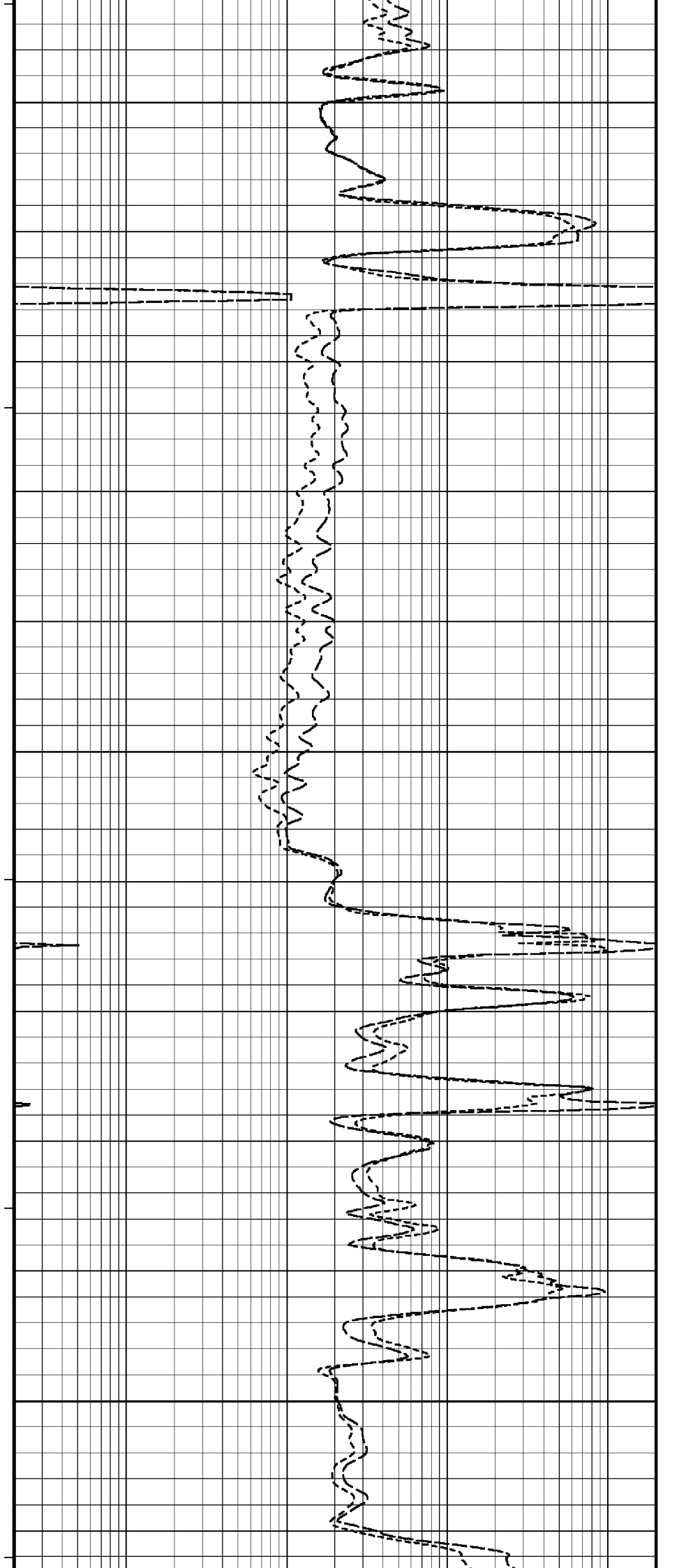
2470  
TVD

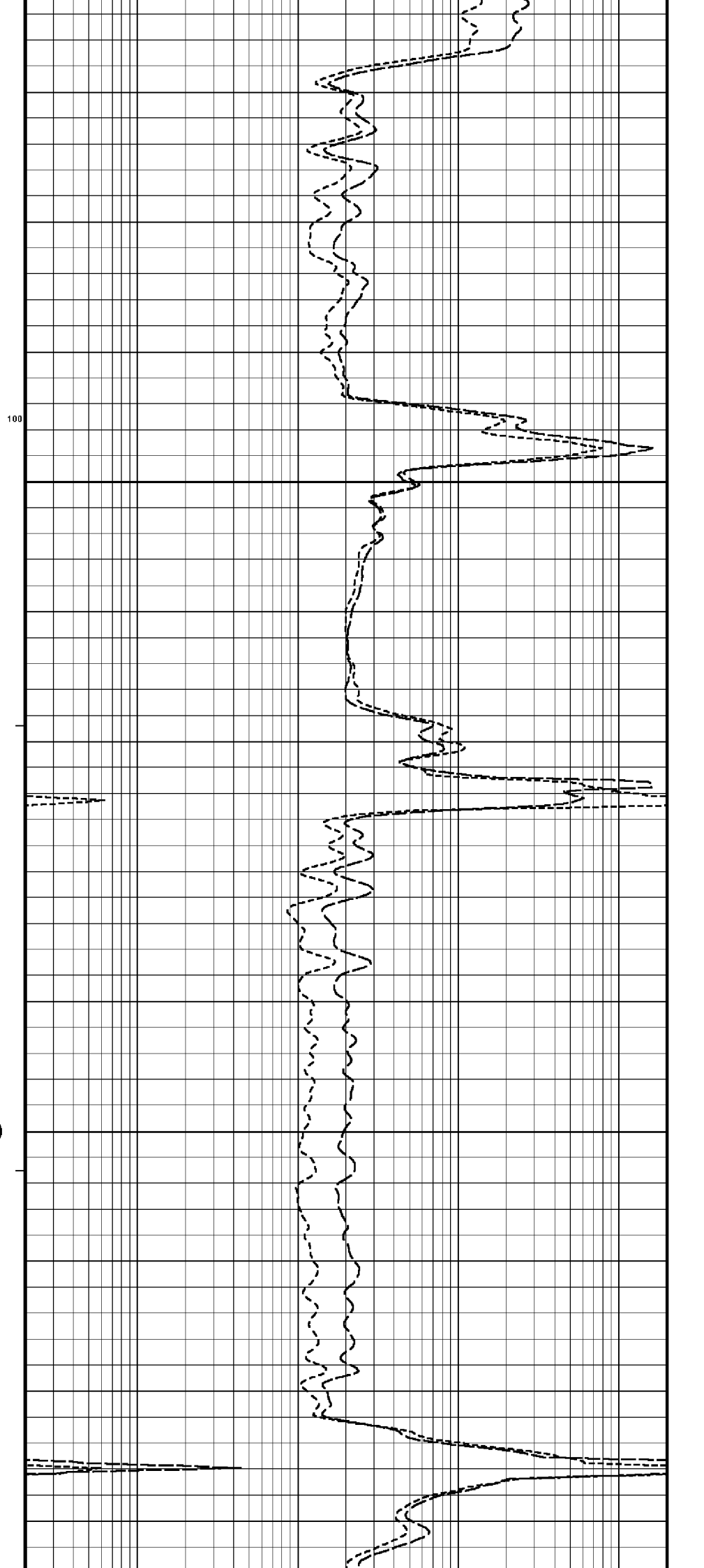
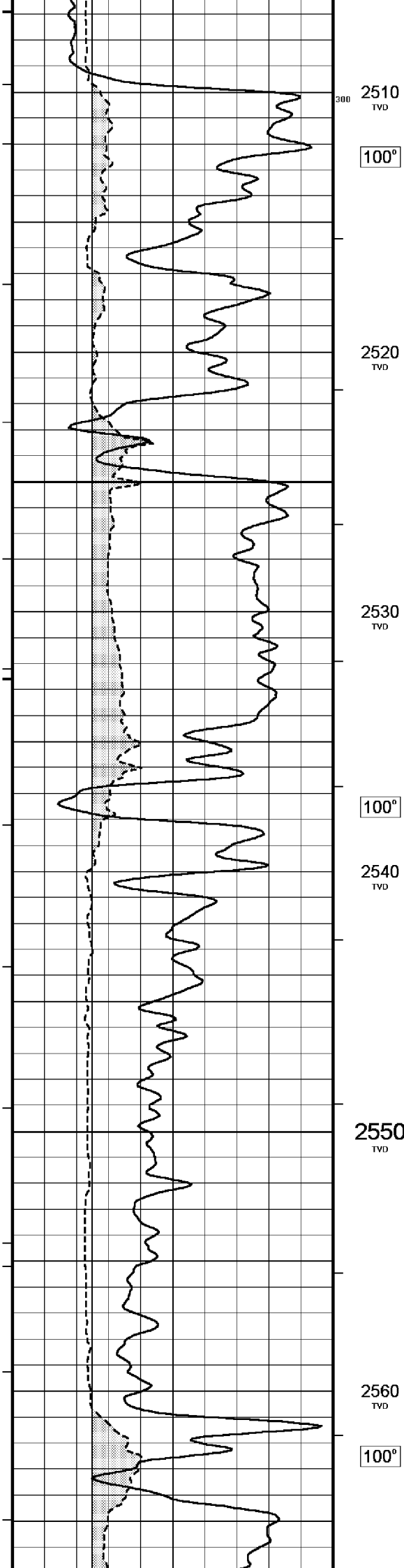
2480  
TVD

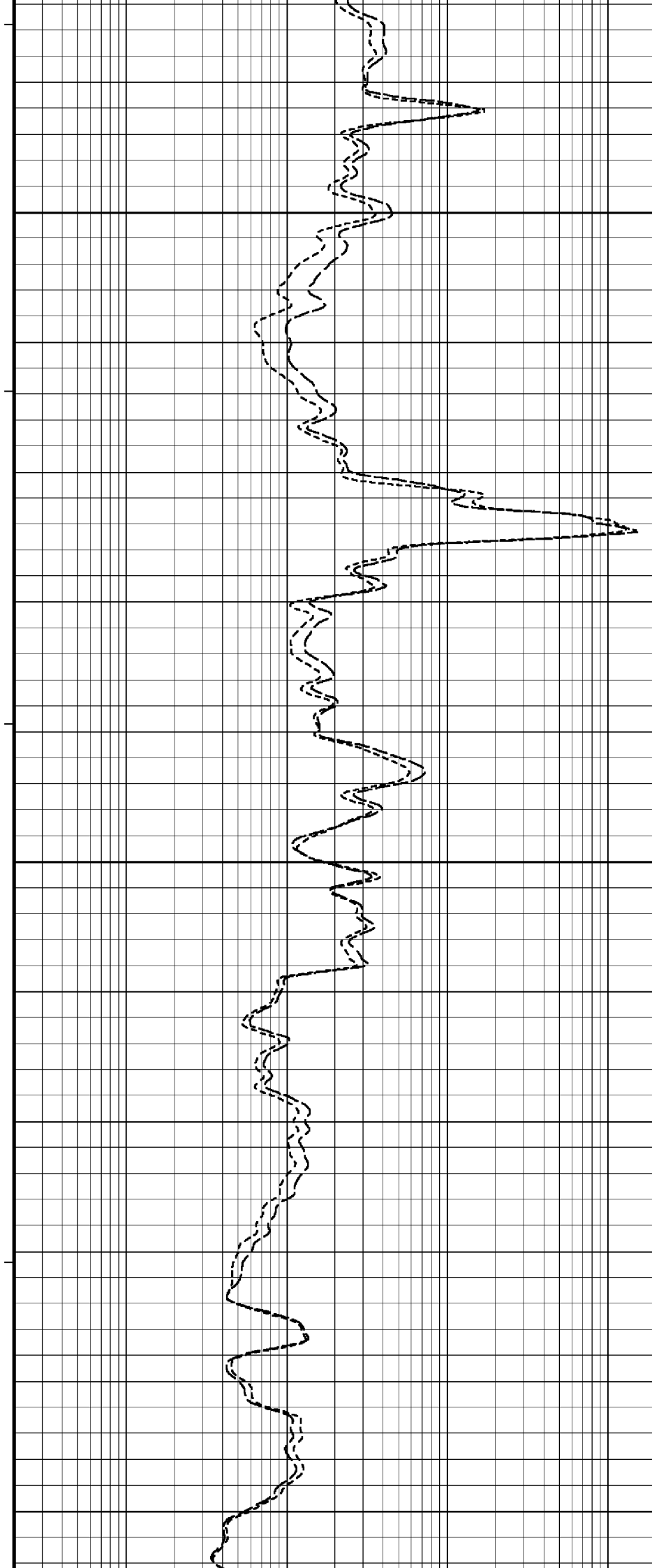
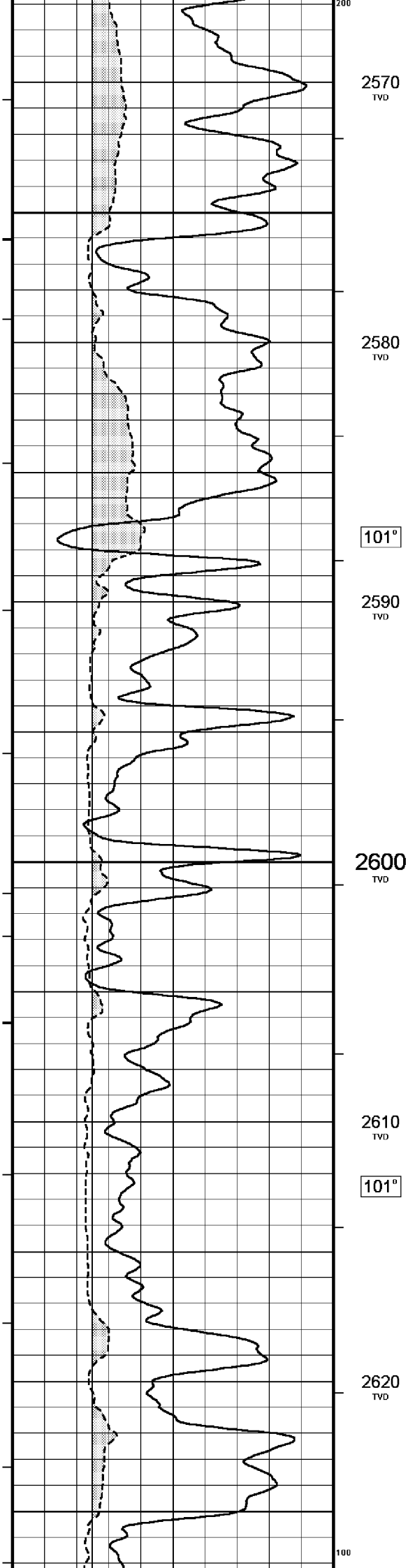
100°

2490  
TVD

2500  
TVD







2630  
TVD

104°

2640  
TVD

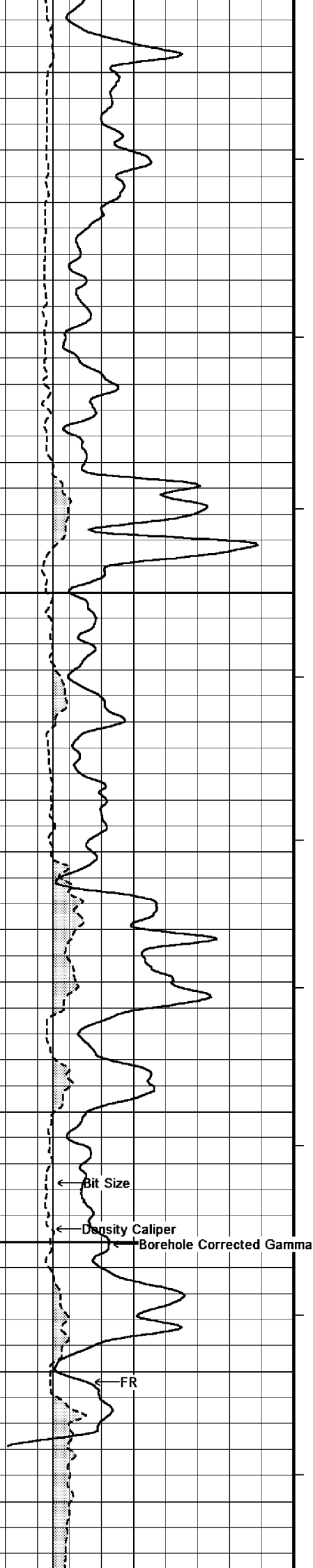
2650  
TVD

2660  
TVD

115°

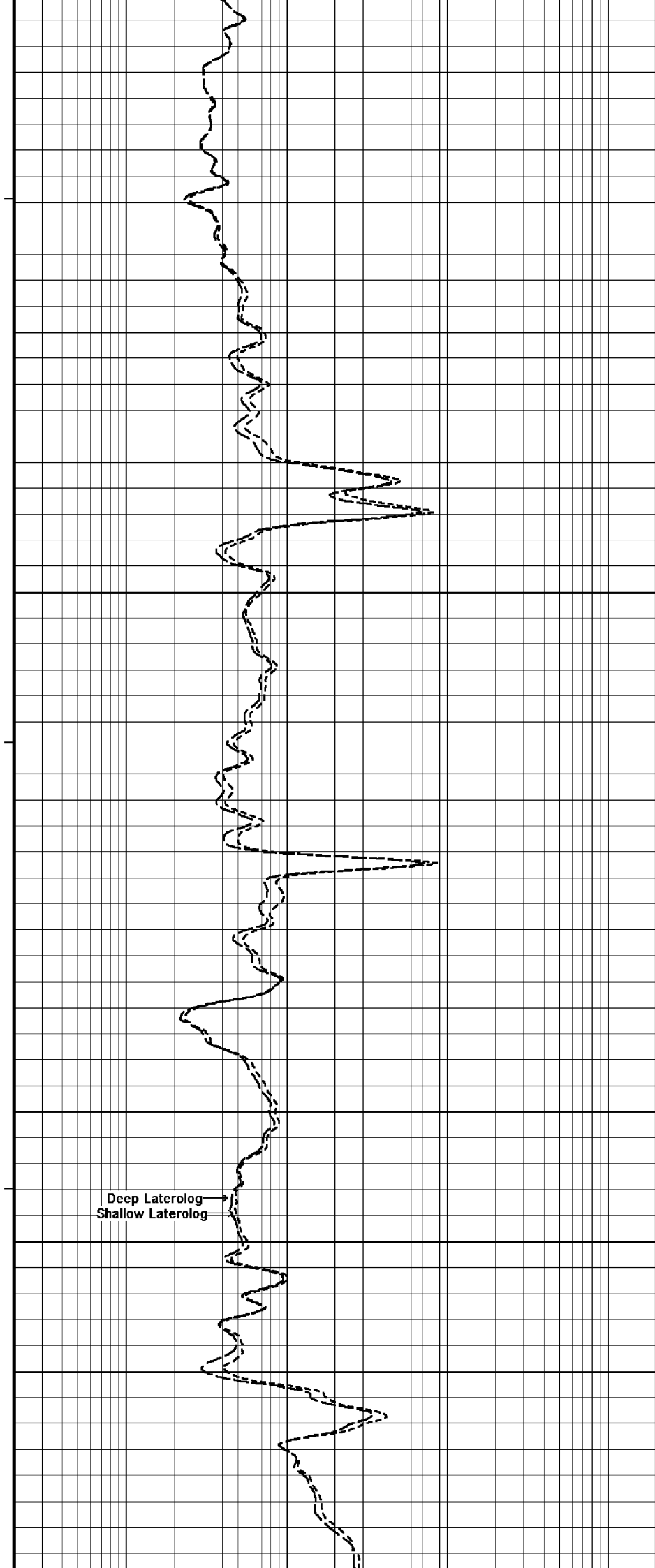
2670  
TVD

2680  
TVD

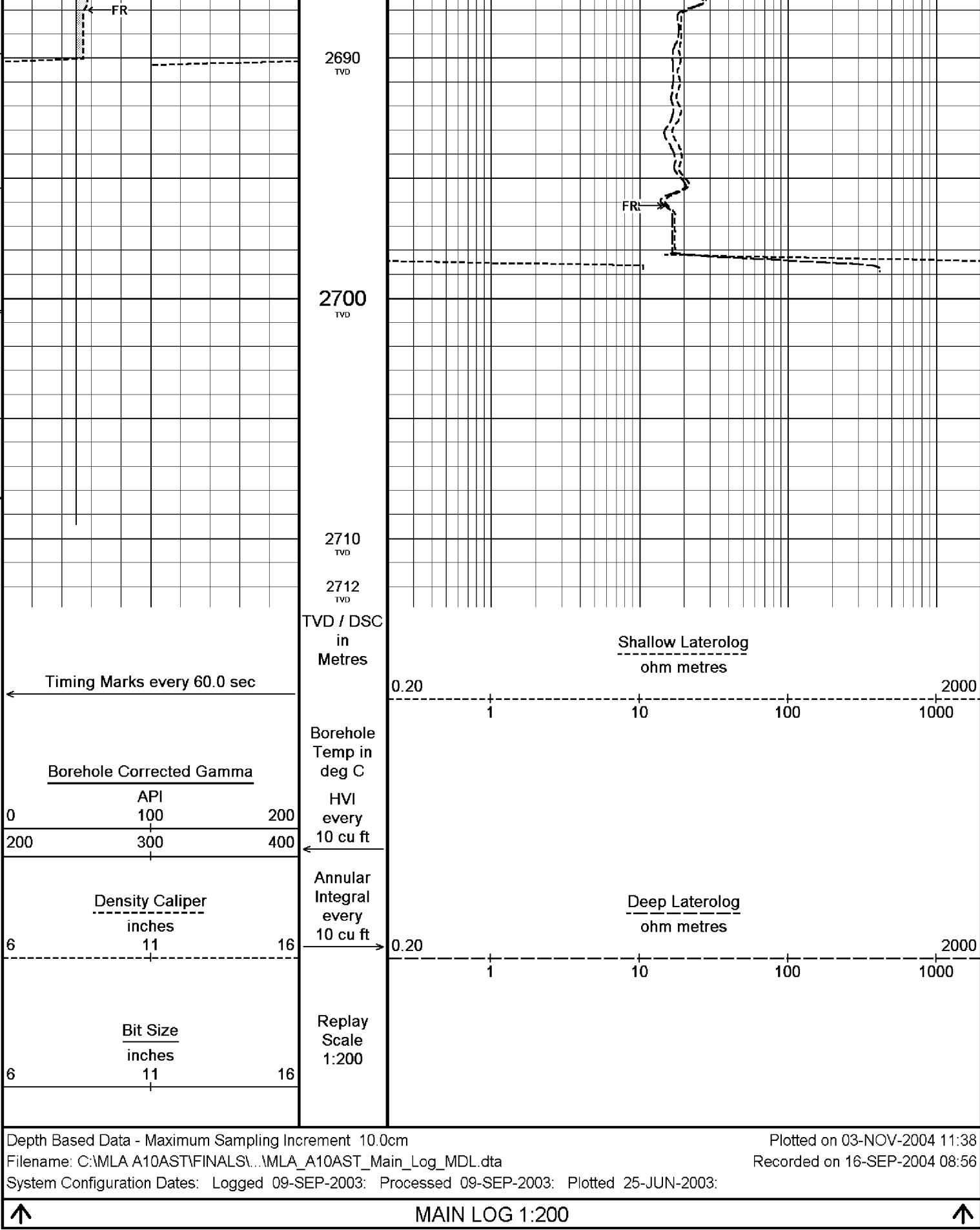


← Bit Size  
← Density Caliper  
← Borehole Corrected Gamma  
← FR

Deep Laterolog  
Shallow Laterolog







BEFORE SURVEY CALIBRATION		
C:\MLA A10AST\FINALS\BLACK AND WHITE PRESENTATIONS\MLA_A10AST_Main_Log_MDL.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
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#### 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

#### 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	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

#### Laterolog Calibration MLE 017

Base Calibration on 2-SEP-2004,17:05  
Field Check on 13-SEP-2004,17:07

Base Calibration				
	Measured		Calibrated (ohm-m)	
Channel	Resistor 1	Resistor 2	Resistor 1	Resistor 2
Shallow	9.7	969.2	13.2	1321.0
Deep	9.7	933.4	7.5	755.0
Groningen	9.7	933.7	8.5	854.0
Channel	Base Check (ohm-m)		Field Check (ohm-m)	
Shallow	49.0		49.0	
Deep	28.8		28.8	
Groningen	262.9		262.9	

#### Laterolog Constants MLE 017

Squasher Start	40000	ohm-m
Shallow Laterolog K Factor	1.3210	
Deep Laterolog K Factor	0.7550	
Groningen Laterolog K Factor	0.8540	
Interference Rejection	50 Hz	
SP Connection	SP Bridle Electrode	
Groningen Connection	Groningen Electrode	

# DOWNHOLE EQUIPMENT

C:\MLA A10AST\FINALS\BLACK AND WHITE PRESENTATIONS\MLA\_A10AST\_Main\_Log\_MDL.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 01 Length: 0.65 m Weight: 15.4 lb



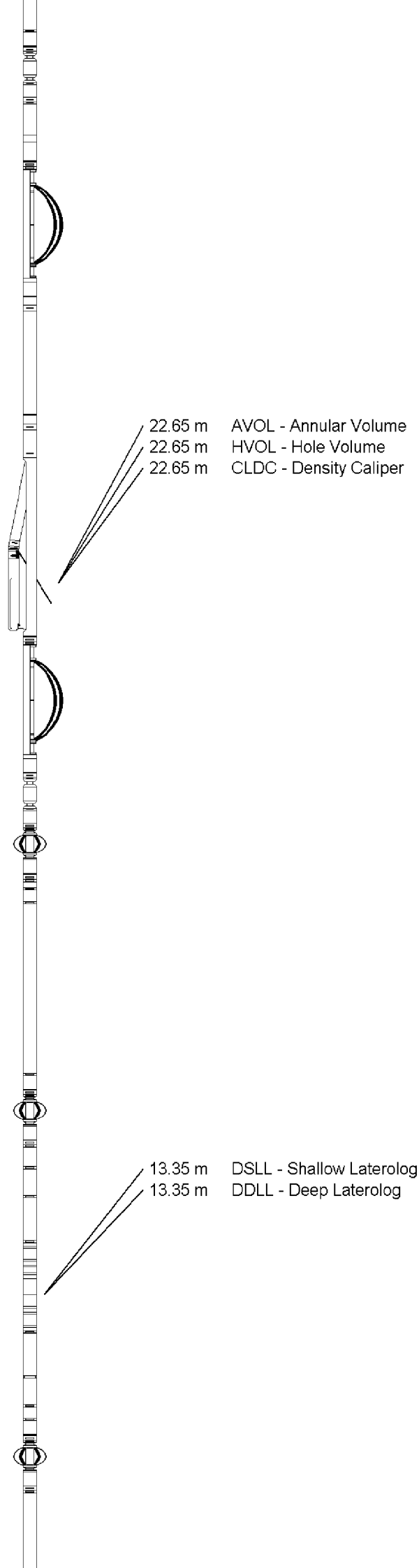
31.38 m

GGCE - Borehole Corrected Gamma

30.50 m

CGXT - MCG External Temperature

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
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**

DUAL LATEROLOG  
GAMMA RAY  
1:200 TVD