



Compact

COMPENSATED SONIC

1:200 MD

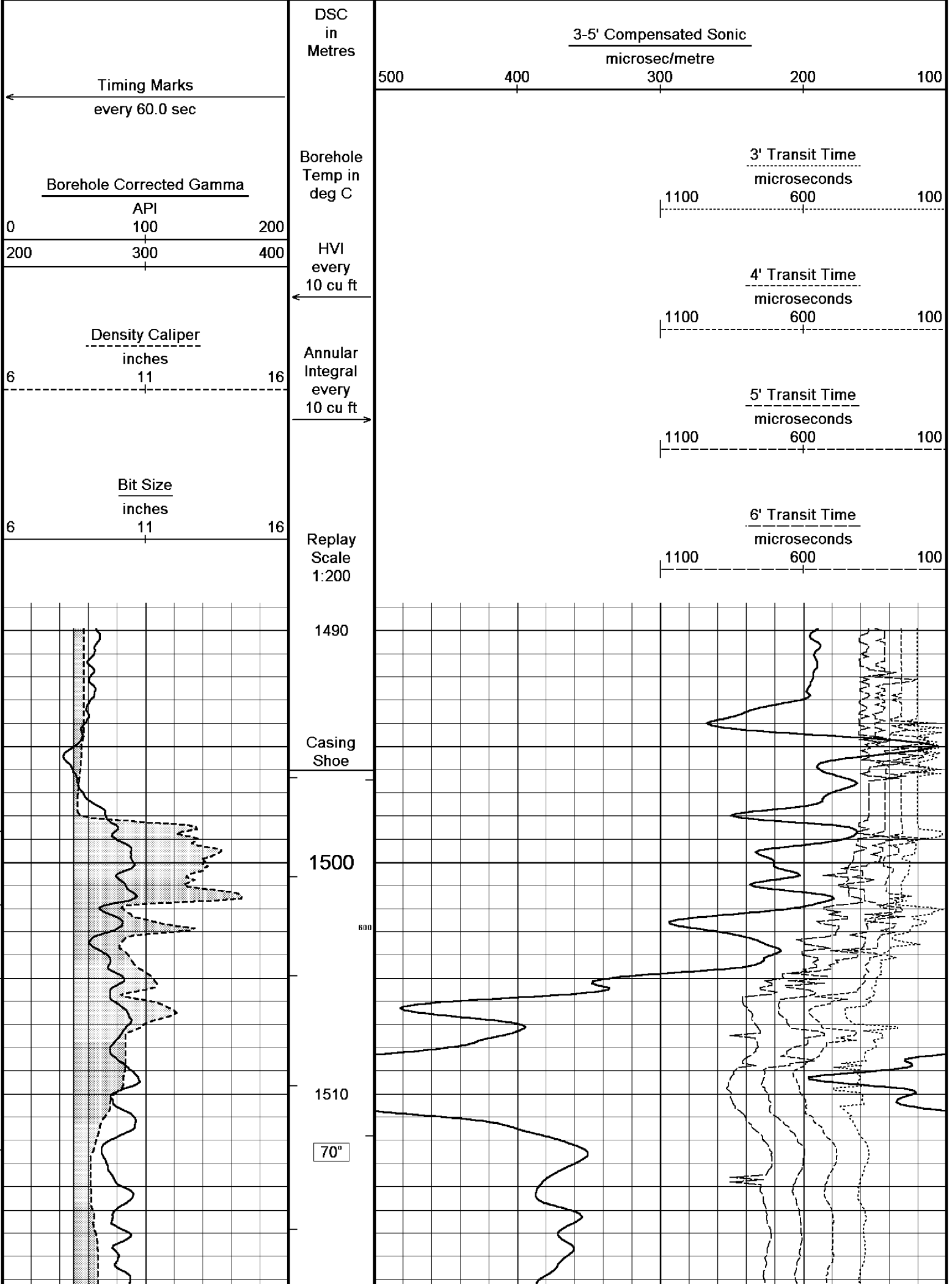
COMPANY	ESSO AUSTRALIA PTY LTD			
WELL	BREAM A1A			
FIELD	BREAM			
PROVINCE/COUNTY	BASS STRAIT			
COUNTRY/STATE	AUSTRALIA			
LOCATION	S 38 29 58.755, E 147 46 19.983			
	N 5738462.460 m, E 567336.500 m			
	FIELD PRINT			
LSD	SEC	TWP	RGE	Other Services
				DUAL LATEROLOG
API Number	PHOTO DENSITY			
Permit Number	COMPENSATED NEUTRON			
Permanent Datum MSL	, Elevation 0.0 metres			
Log Measured From RT @ 32.82 M	above Permanent Datum			
Drilling Measured From RT				
Date	08-Nov-2005			
Run Number	ONE			
Depth Driller	2294.00 metres			
Depth Logger	2291.00 metres			
First Reading	2285.60 metres			
Last Reading	1490.00 metres			
Casing Driller	1496.00 metres			
Casing Logger	1496.00 metres			
Bit Size	8.50 inches			
Hole Fluid Type	KCL/GYL/POLY			
Density / Viscosity	10.10 lb/USg 69.00 CP			
PH / Fluid Loss	9.00 3.00			
Sample Source	FLOWLINE			
Rm @ Measured Temp	0.113 @ 25.0 ohm-m			
Rmf @ Measured Temp	0.088 @ 25.0 ohm-m			
Rmc @ Measured Temp	0.168 @ 25.0 ohm-m			
Source Rmf / Rmc	PRESS PRESS			
Rm @ BHT	0.053 @ 79.0 ohm-m			
Time Since Circulation	22 Hours			
Max Recorded Temp	82.00 deg C			
Equipment Name	5" CWS/CML			
Equipment / Base	1 SALE			
Recorded By	R. TENCH, B. MOSS			
Witnessed By	TREVOR LOBO			
CIRC STOPPED	15:30 7-NOV			

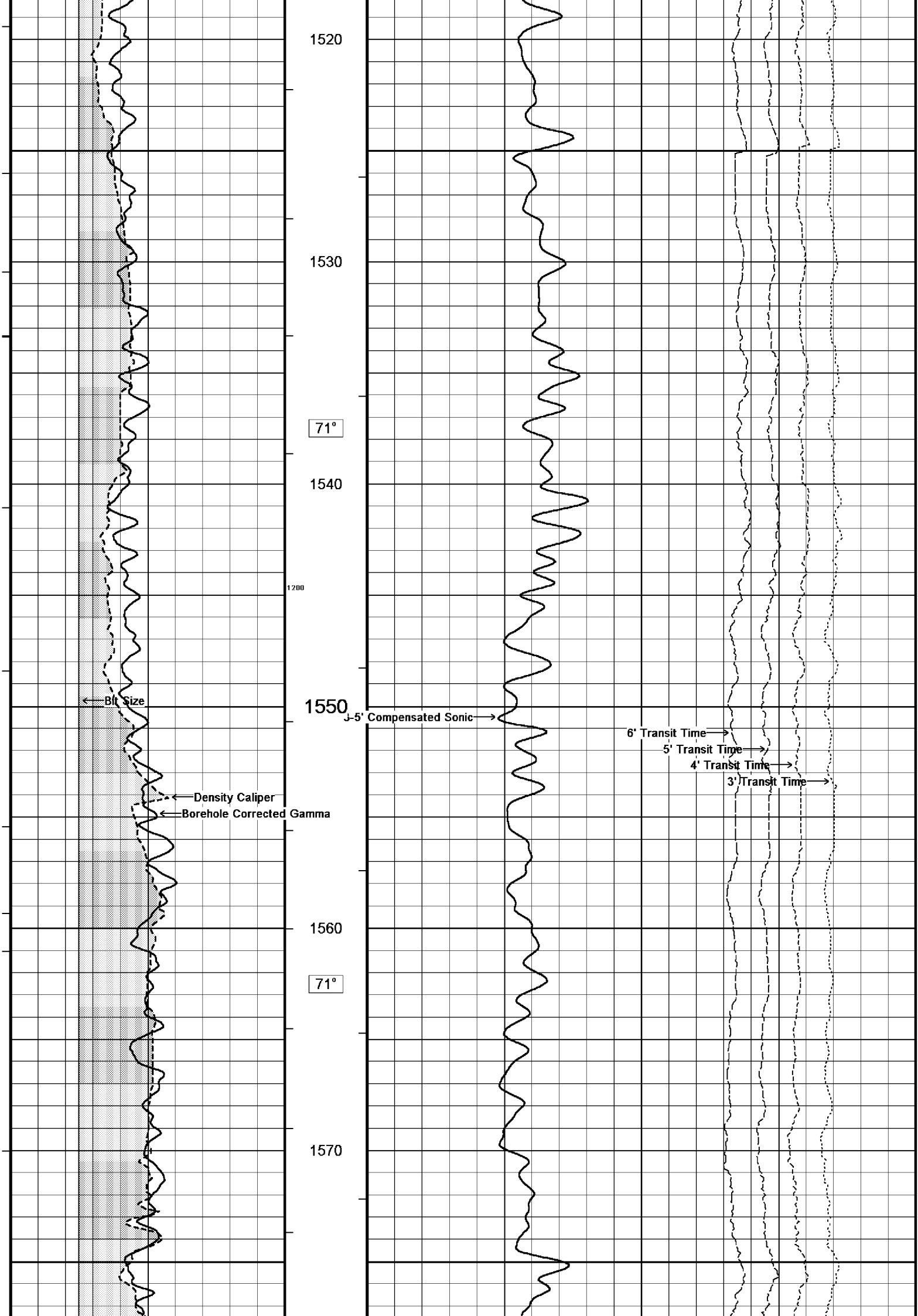
BOREHOLE RECORD		
Bit Size inches	Depth From metres	Depth To metres
8.500	1496.00	2294.00

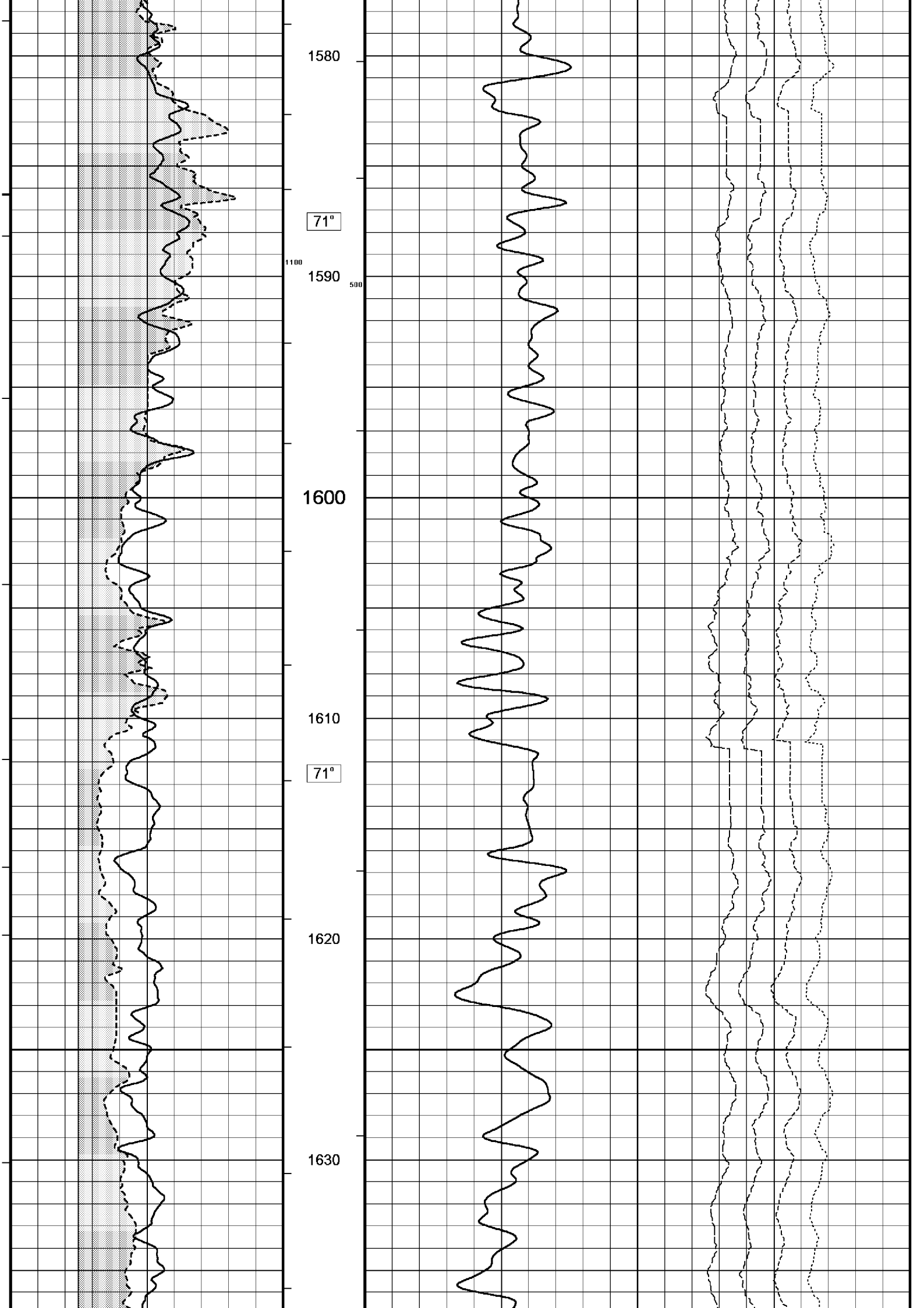
CASING RECORD				
Type	Size inches	Depth From metres	Shoe Depth metres	Weight pounds/ft
K-55	13.375	0.00	853.00	54.50
L-80	9.625	0.00	1496.00	47.00

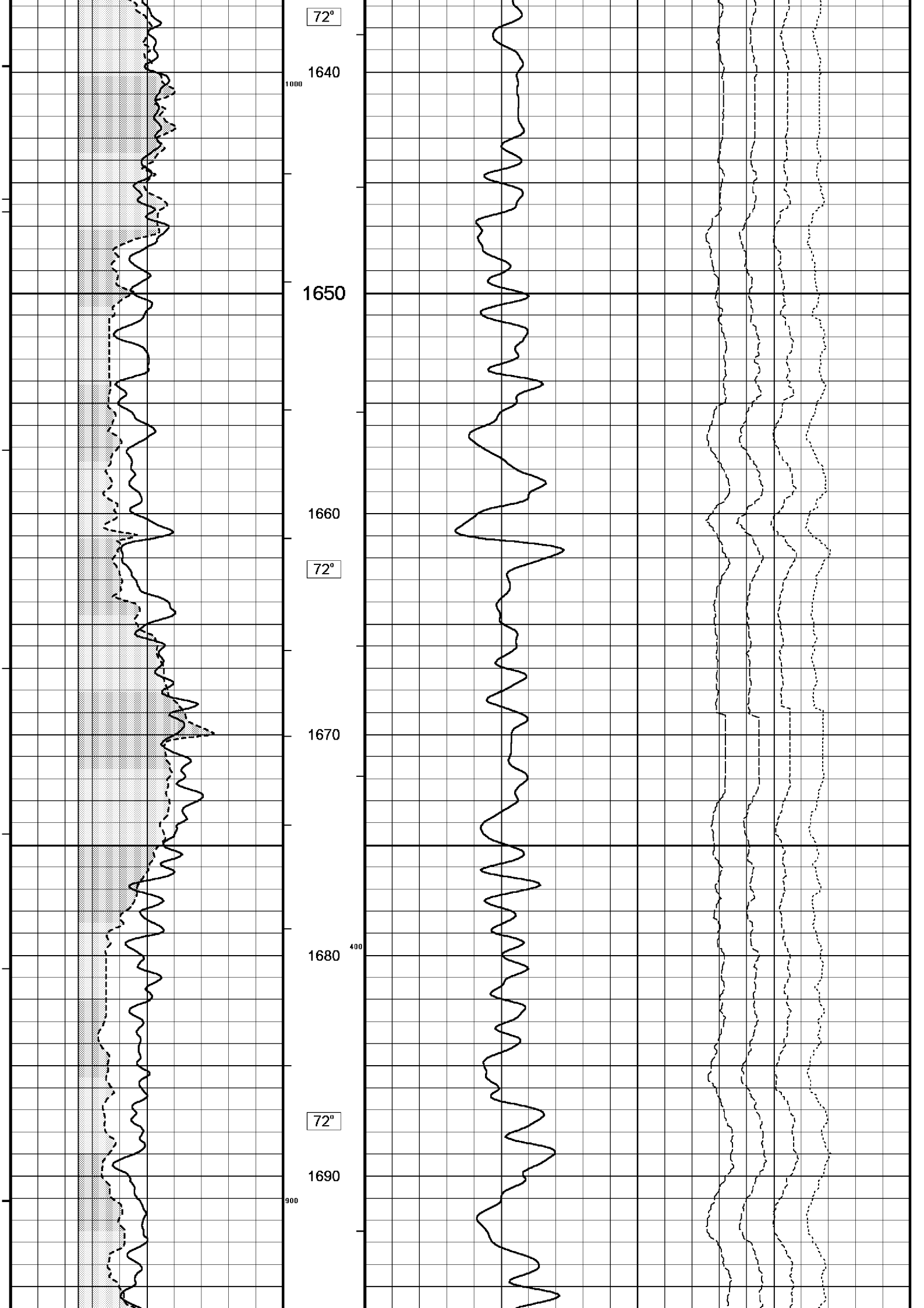
REMARKS
RIG: NABORS 453
5" SHUTTLE/MEMORY COMPACT OPERATION. CREW: R TENCH , B MOSS , B GOODWIN, M KOLCZE.
FIELD FINAL LOGS TO BE CORRELATED TO ANADRILL GAMMA LOG.
MAX. TEMPERATURE: 82DEG C AT 2249 m MD MAX. INCLINATION: 43.98 DEG AT 1500m MD MAX. DOGLEG SERVERITY: 7.58DEG/30m AT 1561.54 m MD DEPLOYMENT ANGLE: 14.45 DEG
HVOL: 1290 FT^3 AVOL: 610 FT^3

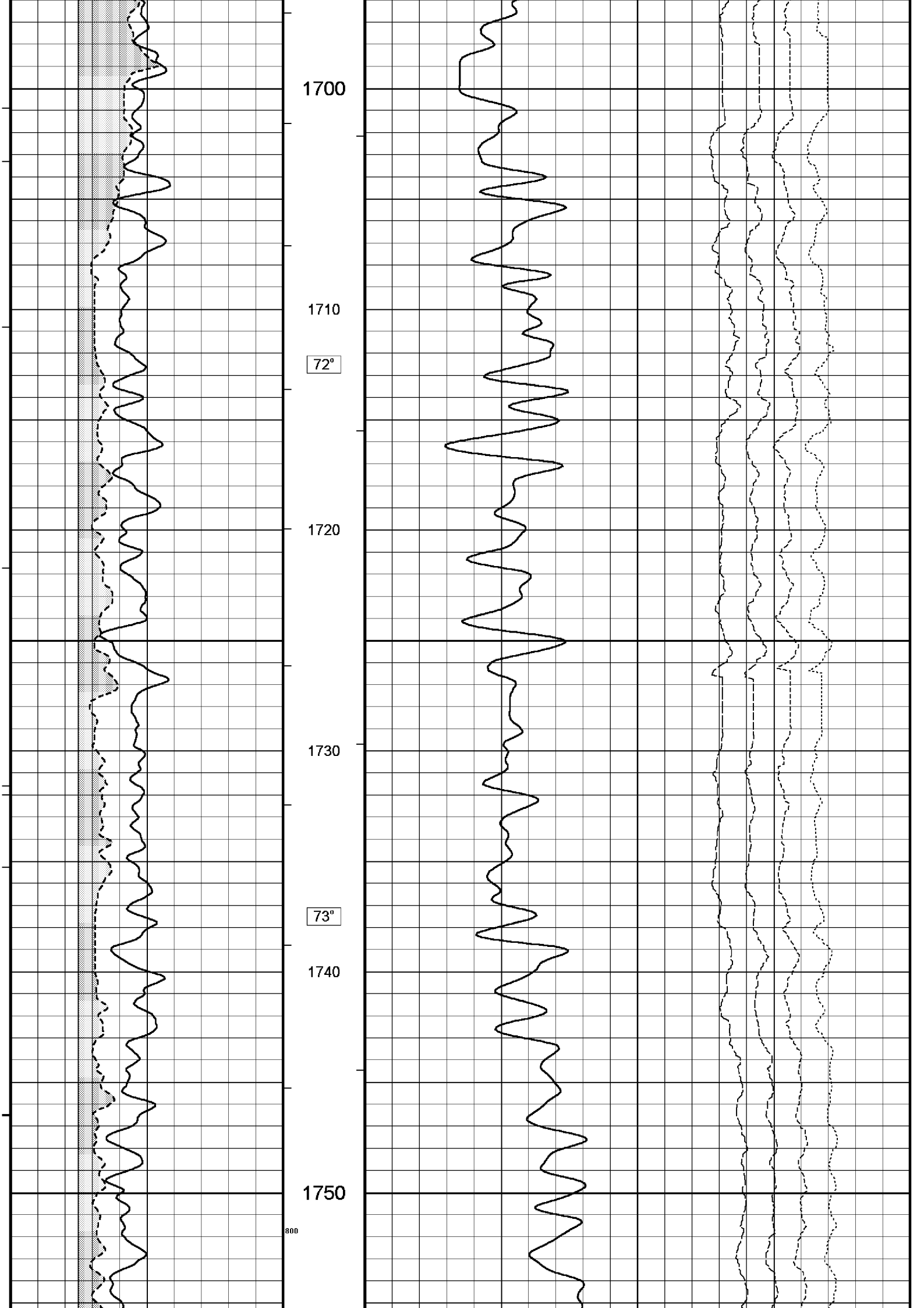
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

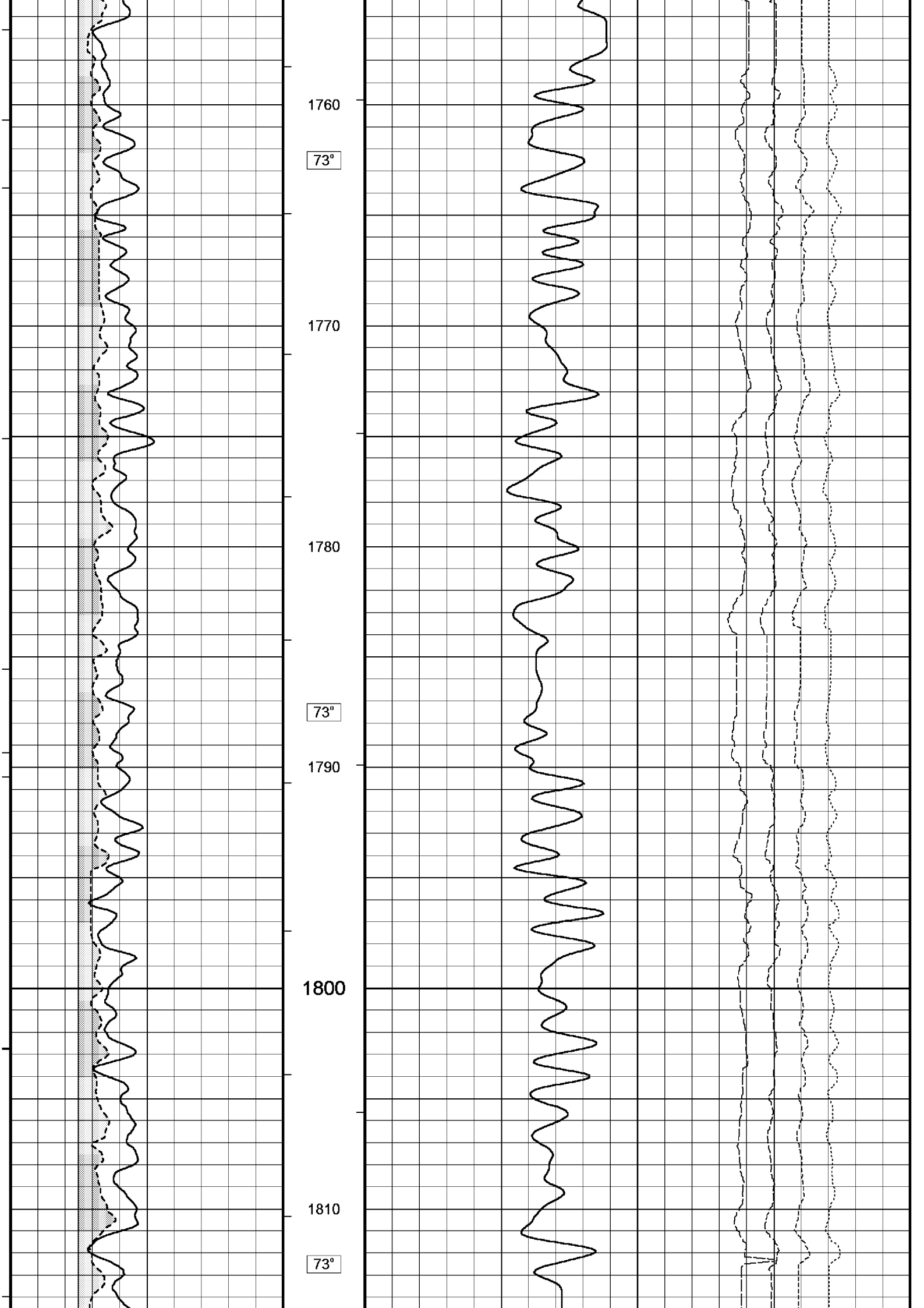


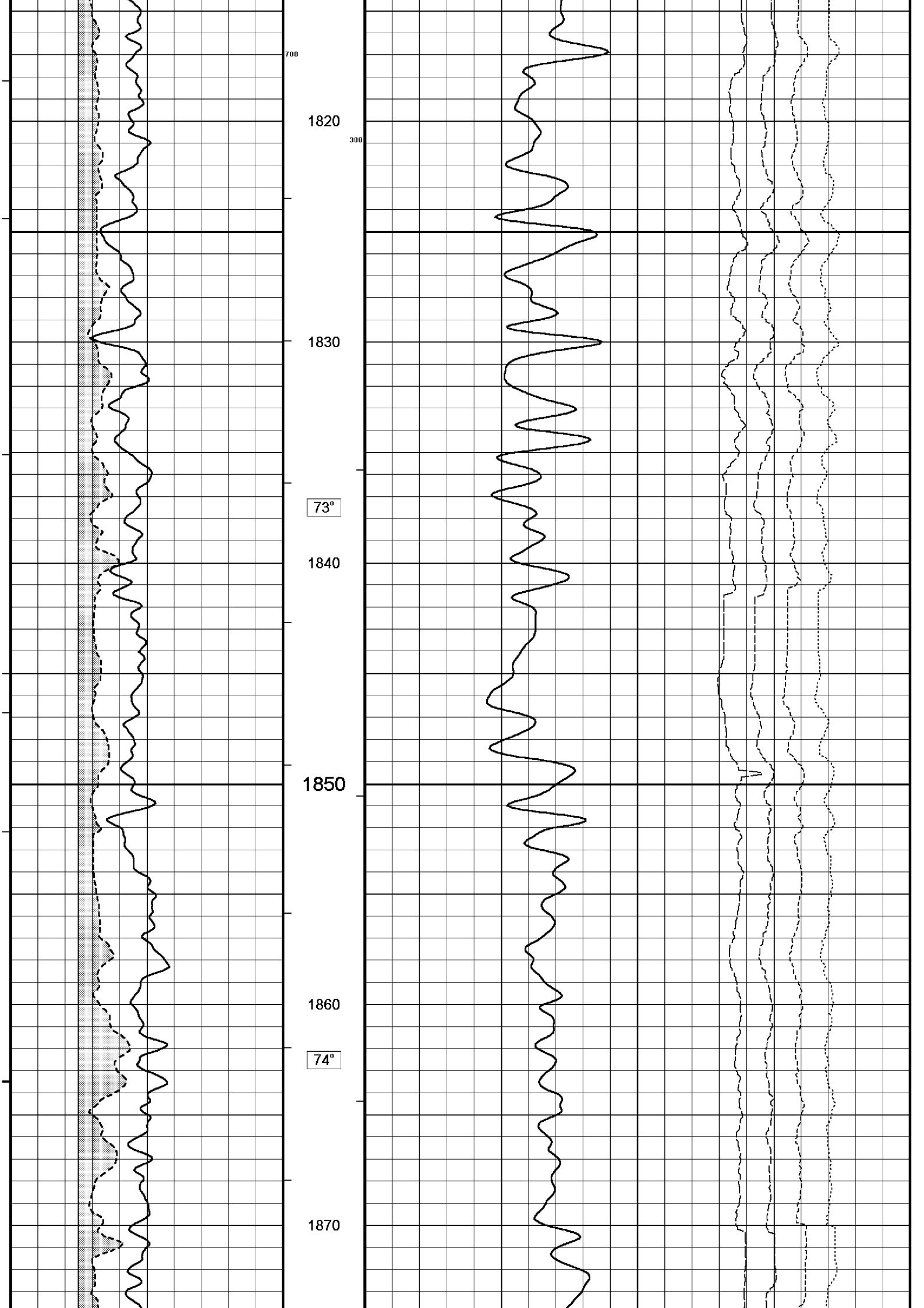




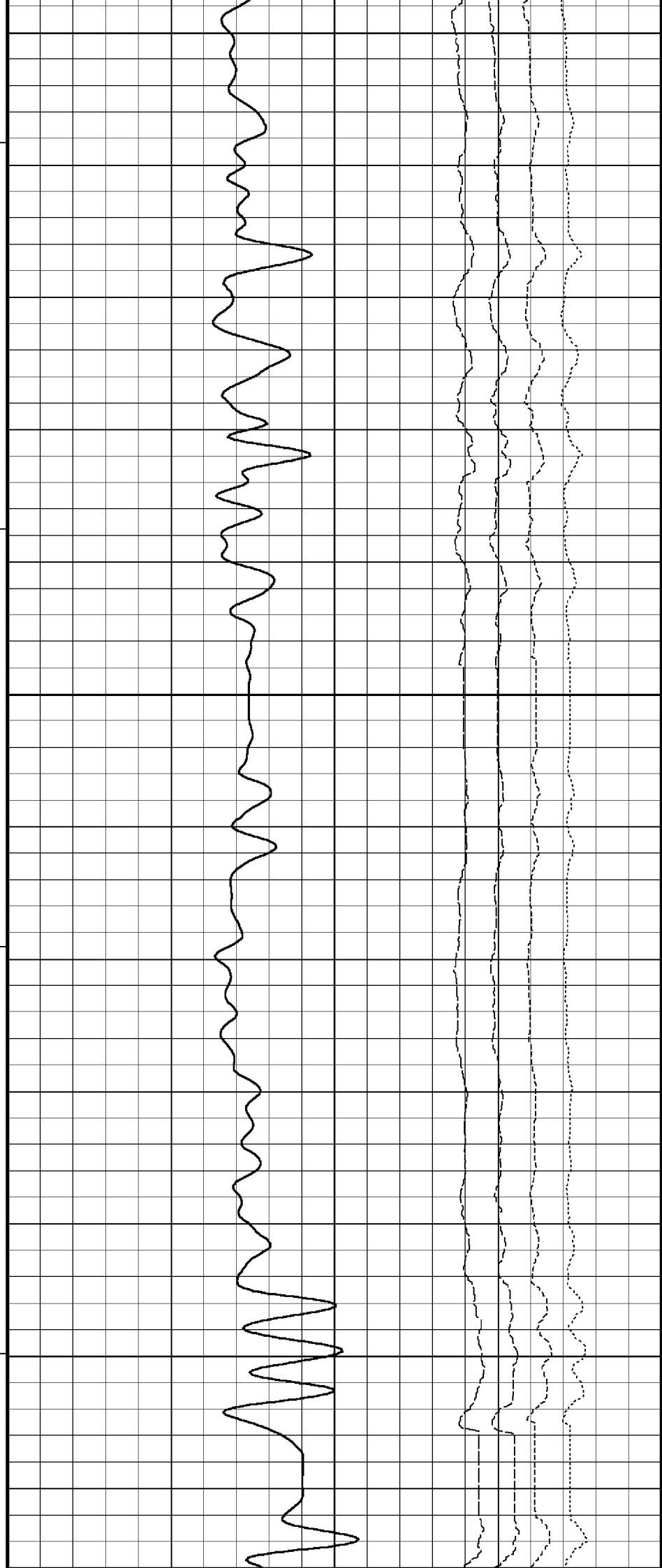
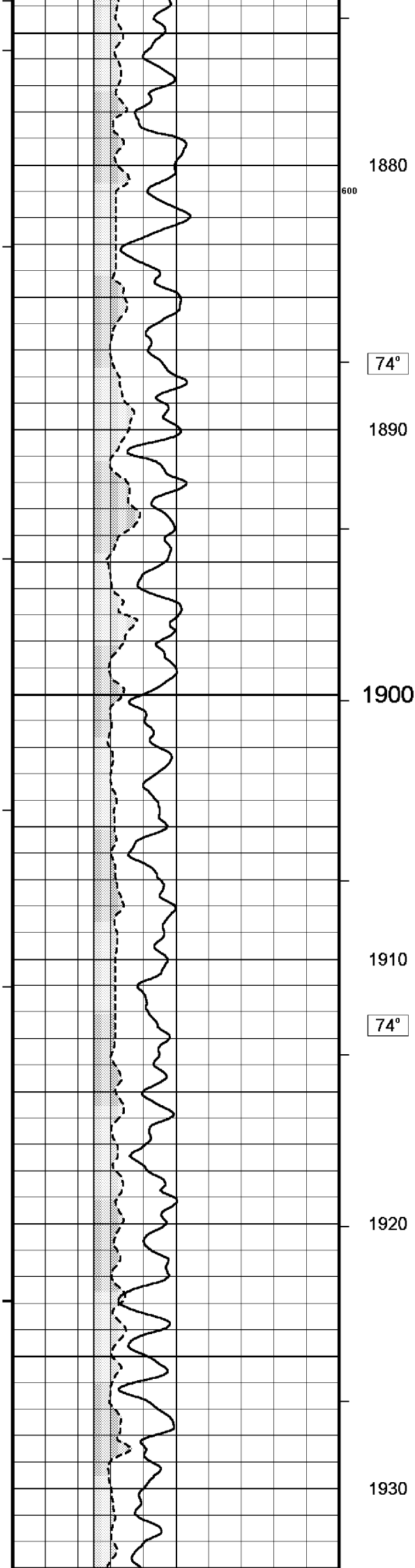


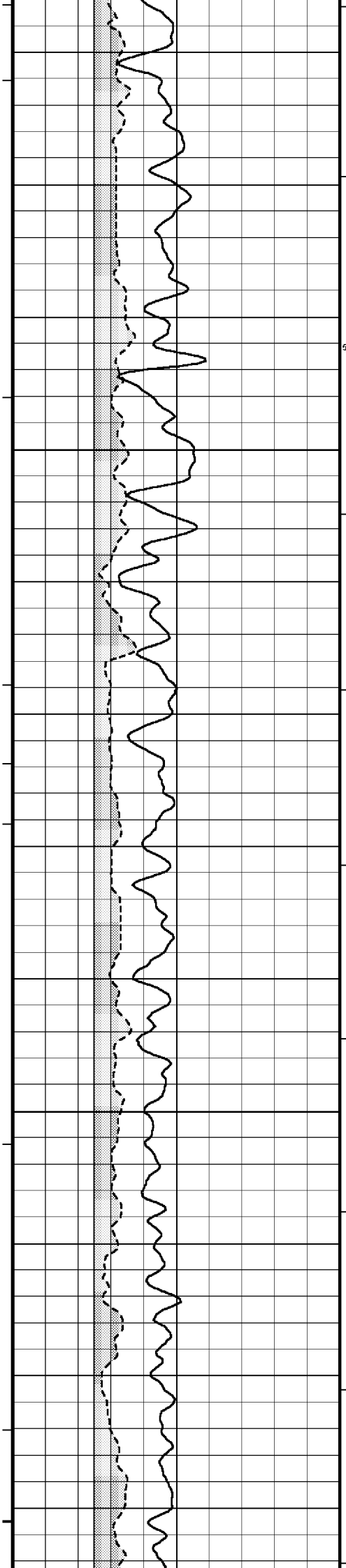












74°

1940

500

1950

1960

74°

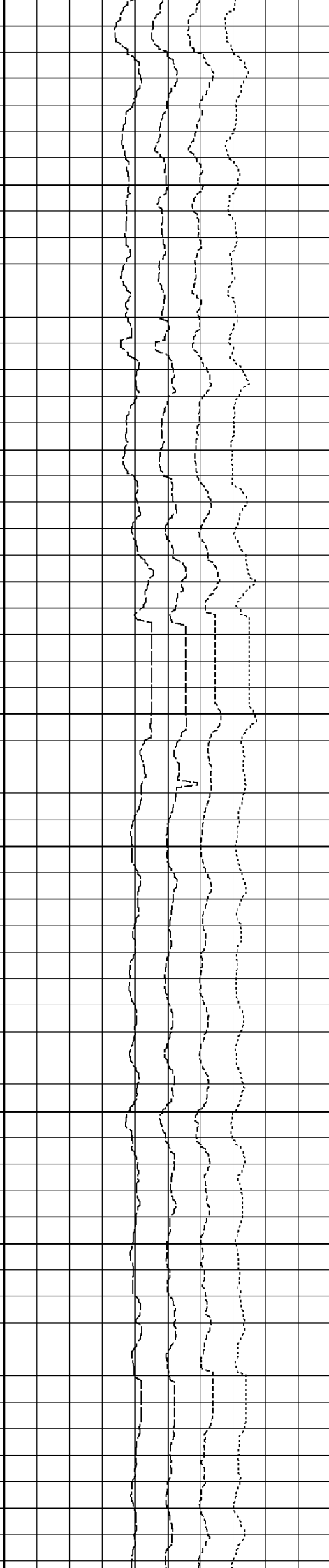
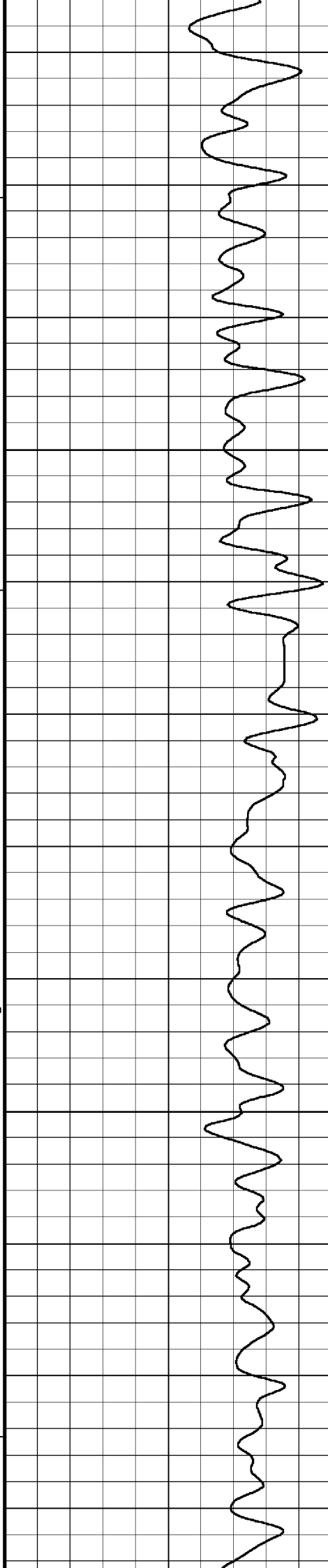
1970

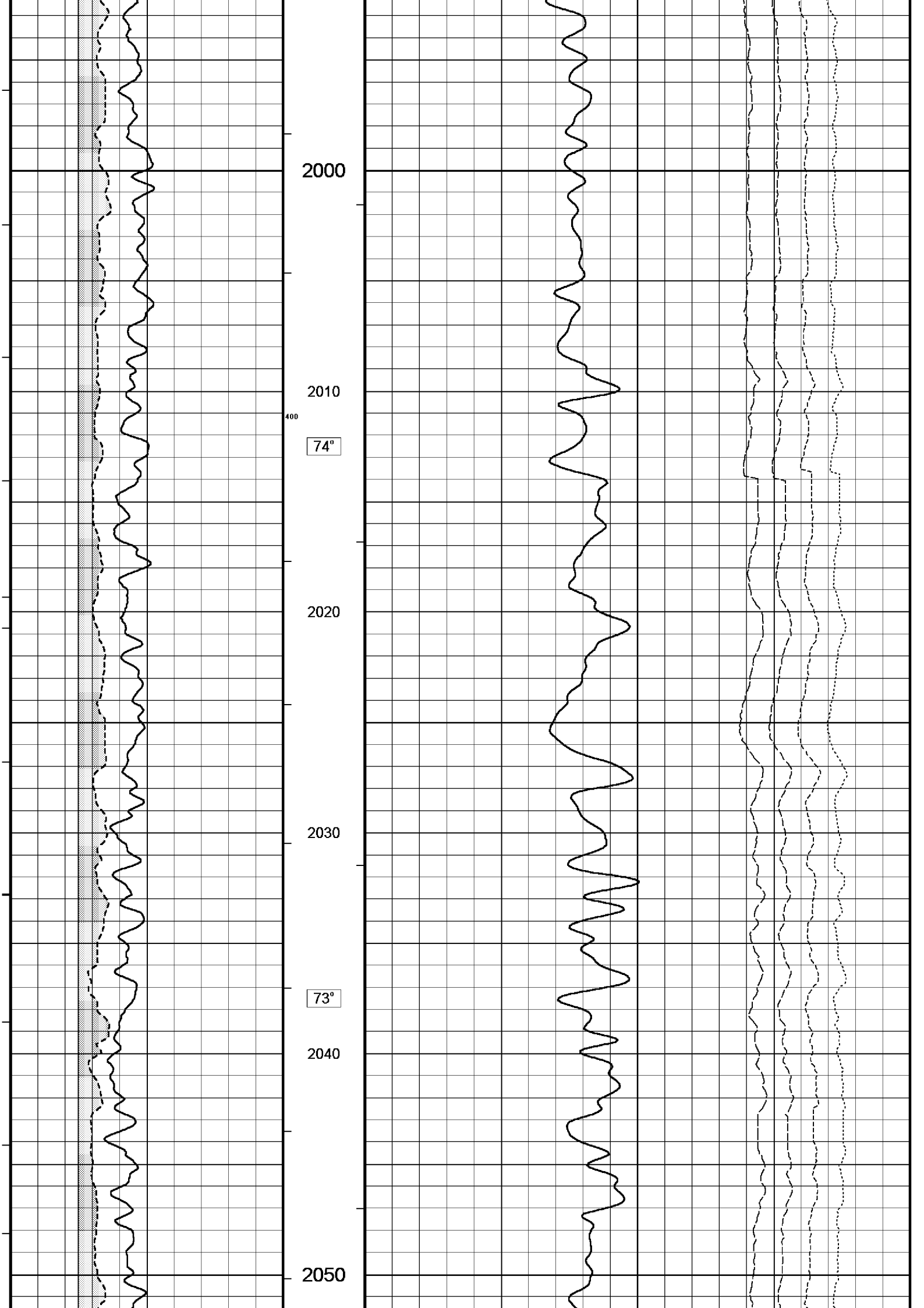
200

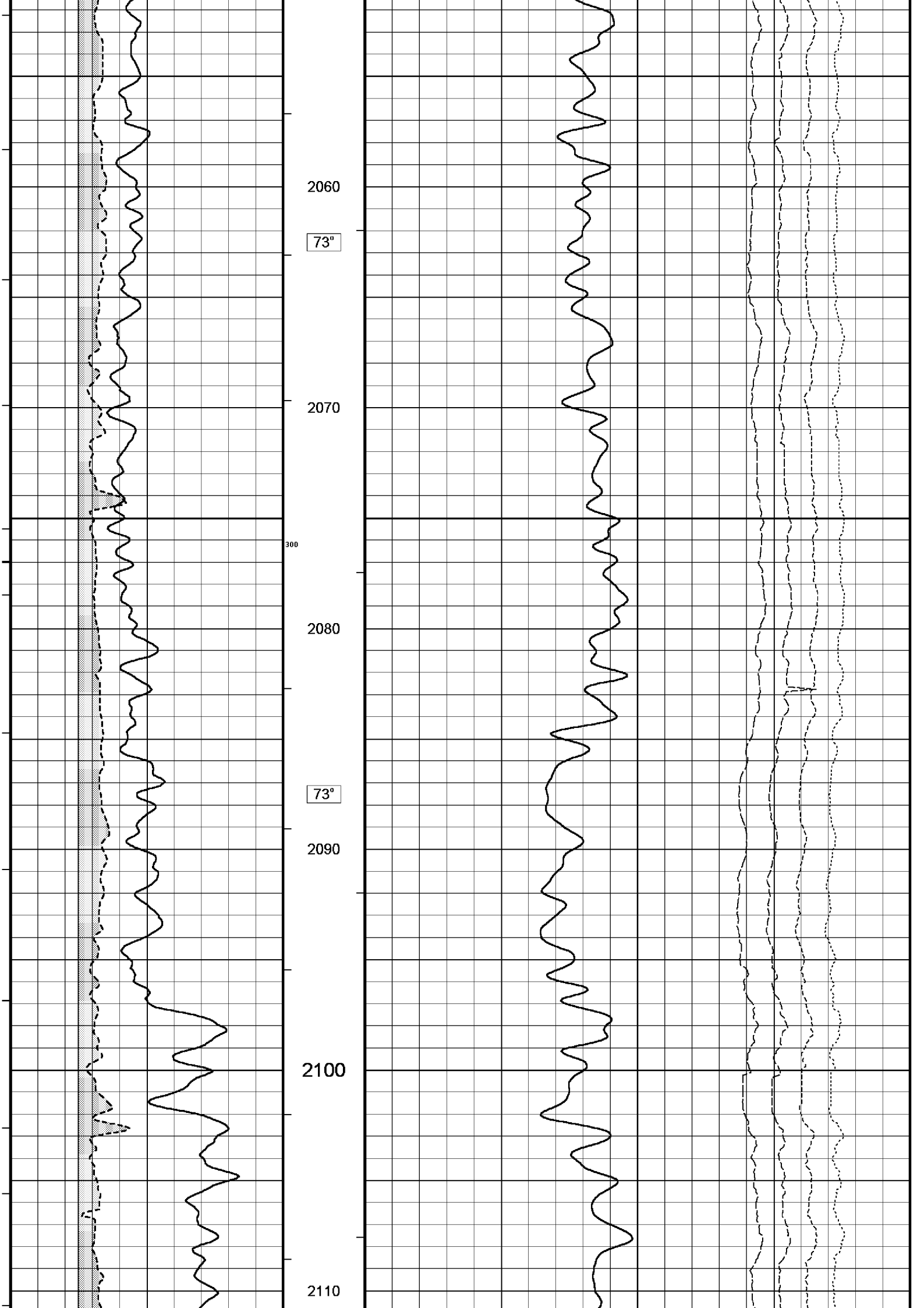
1980

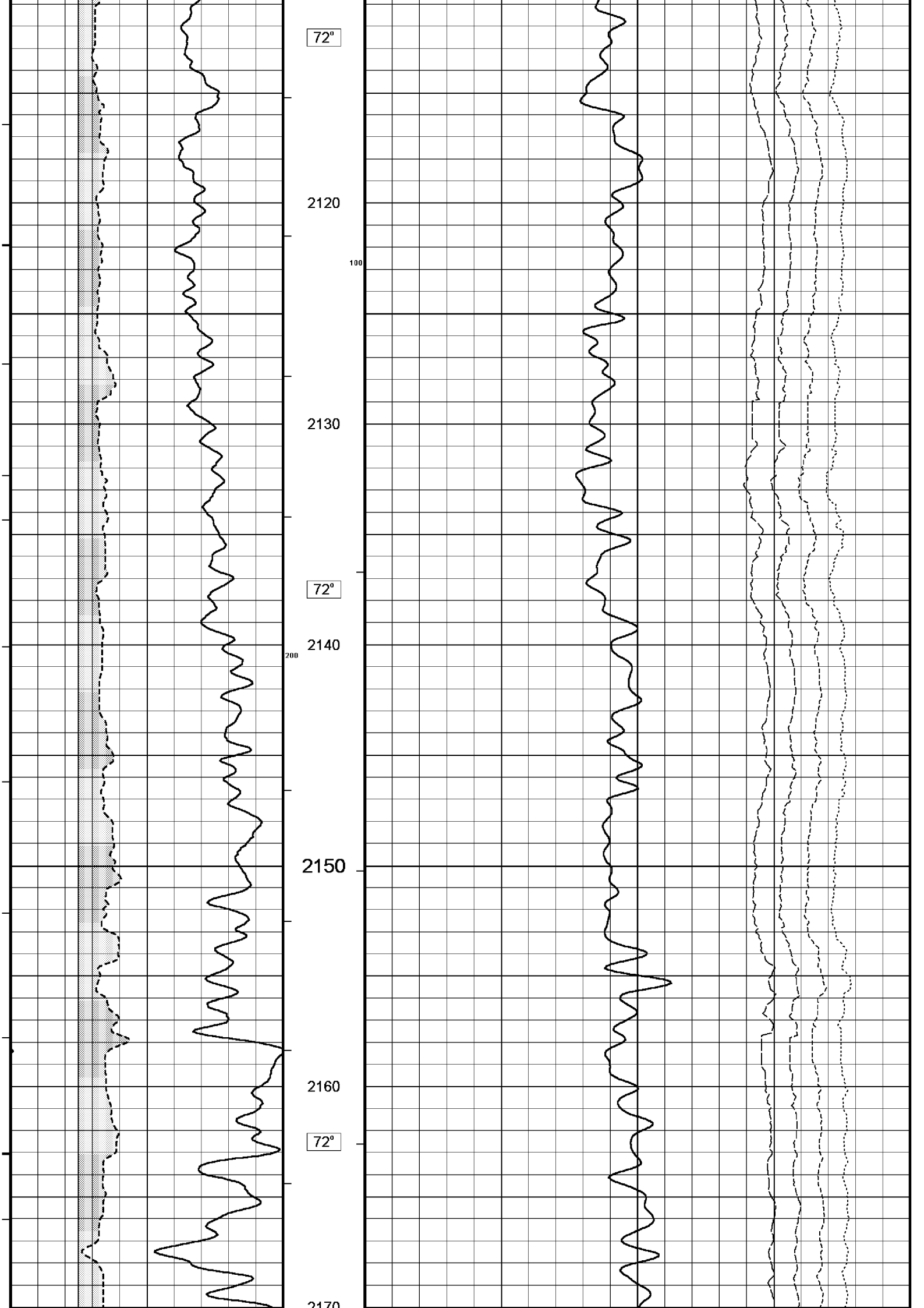
74°

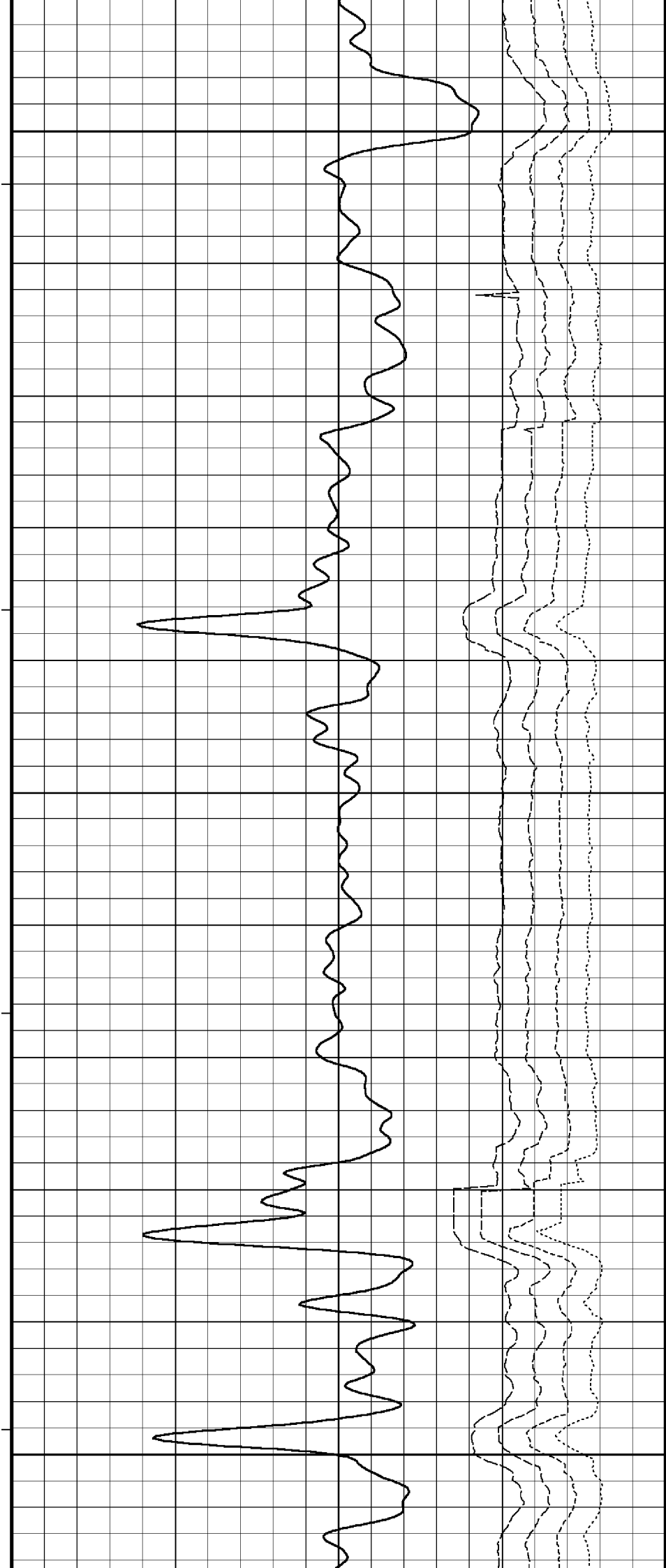
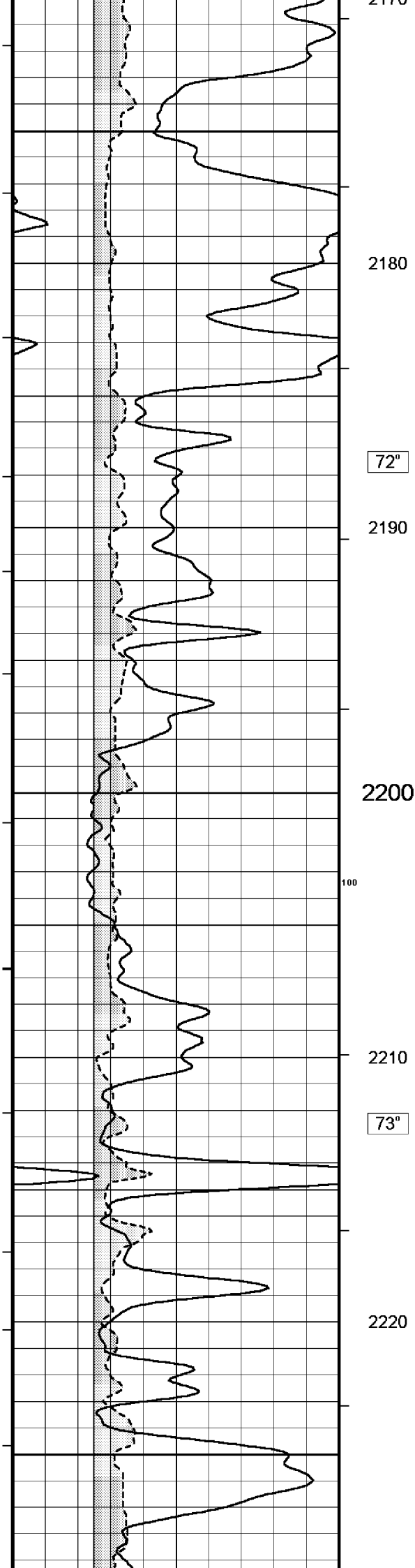
1990

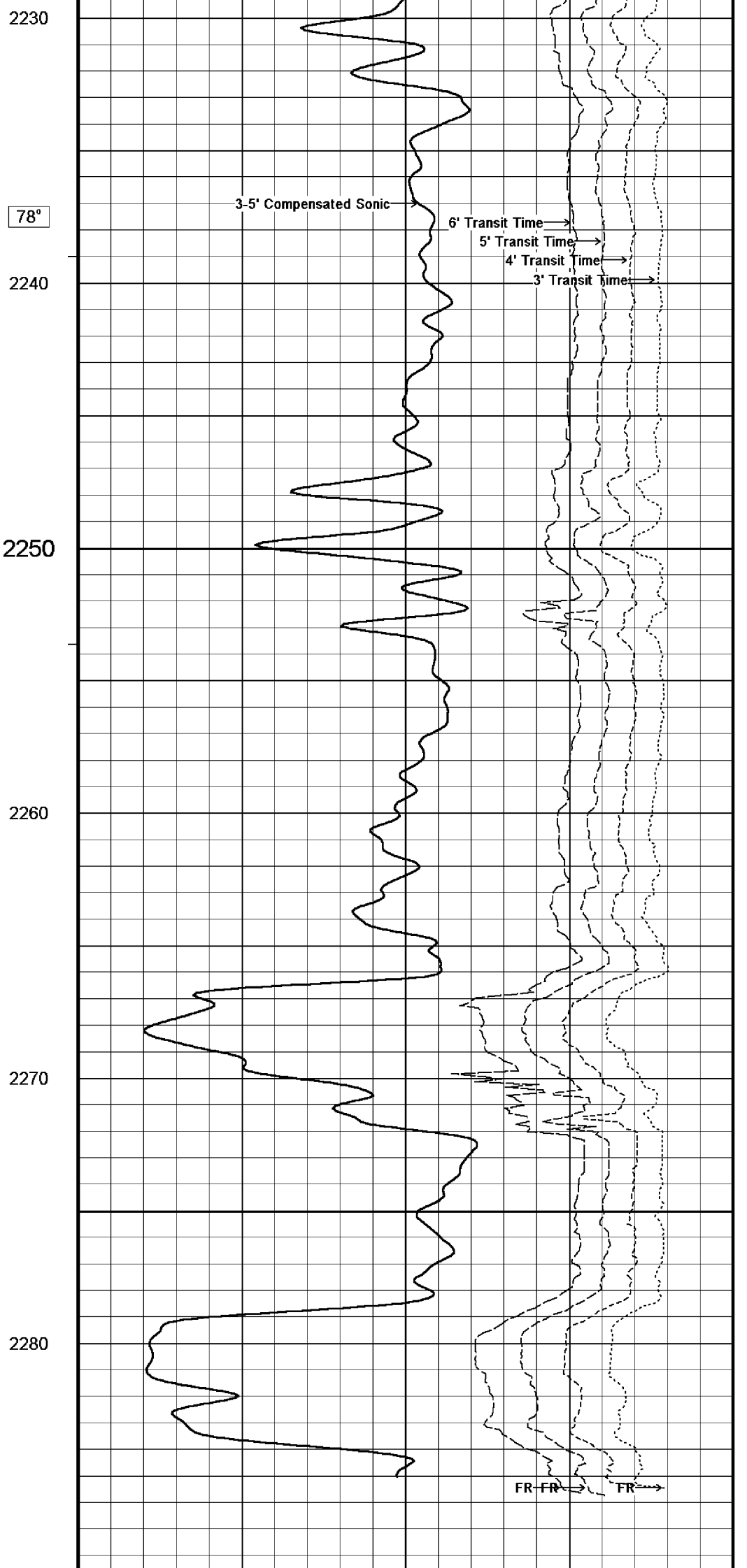
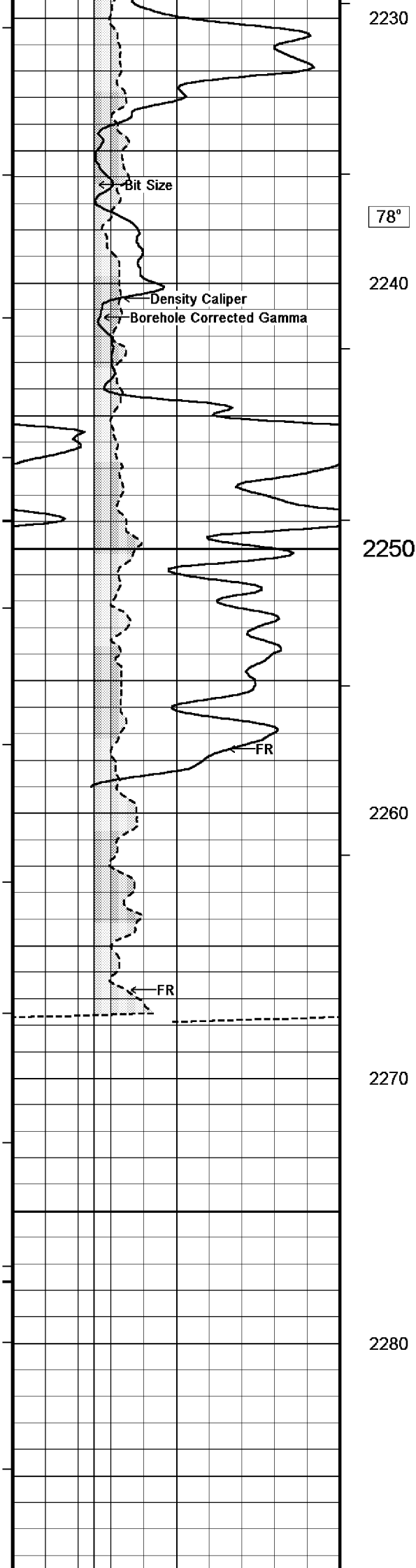


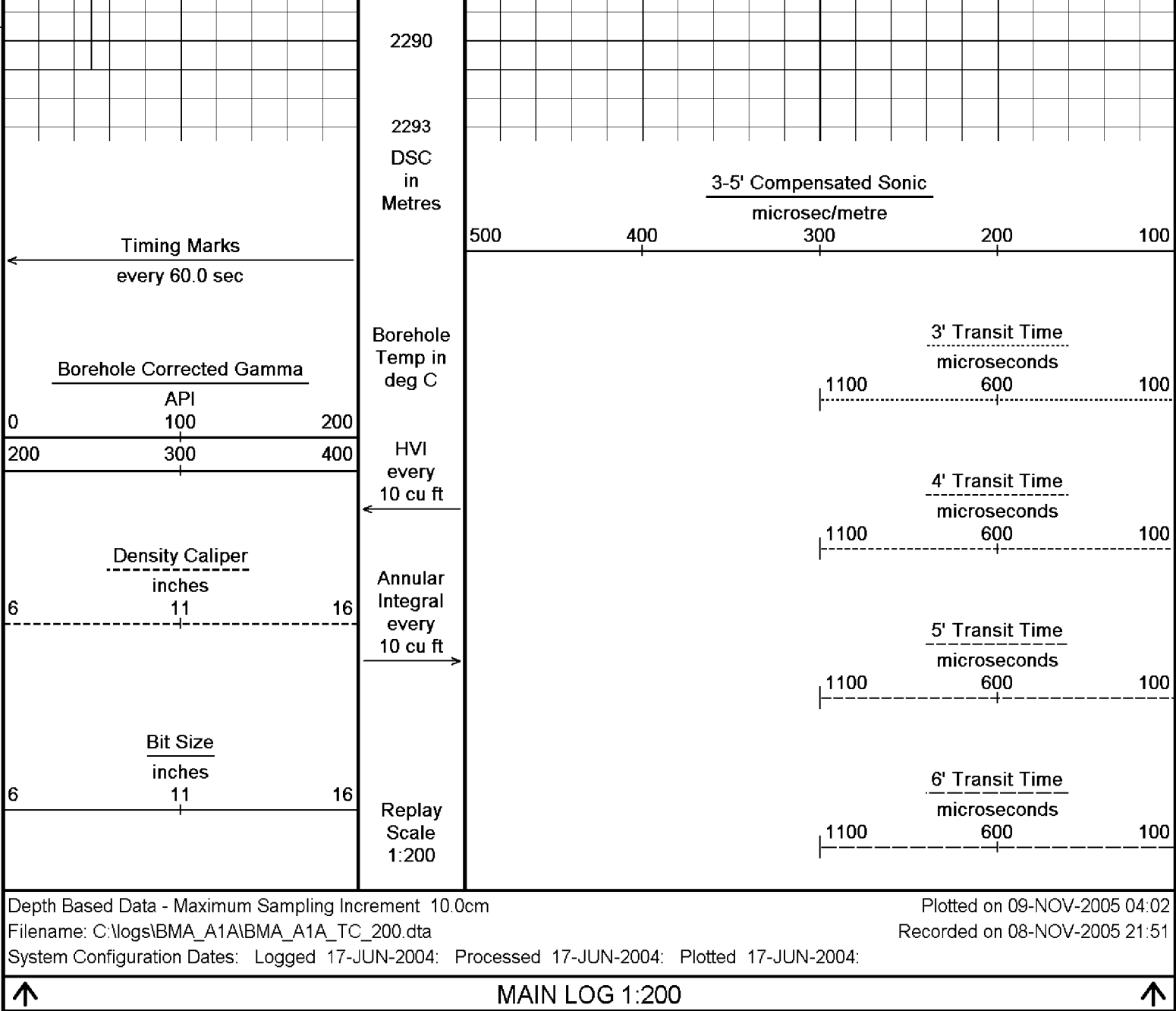












BEFORE SURVEY CALIBRATION			C:\logs\BMA_A1A\BMA_A1A_TC_200.dta
General Constants All 000			
General Parameters			
Mud Resistivity	0.113	ohm-metres	
Mud Resistivity Temperature	25.000	degrees C	
Water Level	0.000	metres	
Density/Neutron Processing	Wet Hole		
Hole/Annular Volume and Differential Caliper Parameters			
HVOL Caliper 1	Density Caliper		
HVOL Caliper 2	Density Caliper		
Annular Volume Diameter	7.000	inches	
Caliper for Differential Caliper	None		
Rwa Parameters			
Porosity used	Limestone Sonic Porosity		
Resistivity used	Deep Induction		
RWA Constant A	0.610		
RWA Constant M	2.150		
High Resolution Temperature Calibration MCG 142			Field Calibration on 7-NOV-2005,03:12
	Measured	Calibrated(Deg C)	
Lower	0.00	0.00	
Upper	100.00	100.00	



High Resolution Temperature Constants MCG 142				
Pre-filter Length		11		
Gamma Calibration MCG 142				
		Measured	Calibrated (API)	Field Calibration on 7-NOV-2005 03:17
Background		21	14	
Calibrator (Gross)		1367	923	
Calibrator (Net)		1346	909	
Gamma Constants MCG 142				
Gamma Calibrator Number		060		
Mud Density		1.21	gm/cc	
Caliper Source for Processing		Density Caliper		
Tool Position		Centred		
Concentration of KCl		0.00	kppm	
Caliper Calibration MPD 083				
			Base Calibration on 28-OCT-2005 18:13	
			Field Calibration on 7-NOV-2005 03:20	
Base Calibration				
Reading No		Measured	Calibrator Size (in)	
1		13616	4.01	
2		21847	5.99	
3		30336	7.98	
4		38762	9.94	
5		47872	12.01	
6		N/A	N/A	
Field Calibration				
		Measured Caliper (in)	Actual Caliper (in)	
		7.94	7.98	
Sonic Constants MSS 066				
Maximum Boundary Contrast		100.00	micro-sec/ft	
Fluid Transit Time		189.00	micro-sec/ft	
Limestone Transit Time		47.50	micro-sec/ft	
Sandstone Transit Time		55.50	micro-sec/ft	
Dolomite Transit Time		43.50	micro-sec/ft	
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	
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	
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		No		
Use 4' Waveform to derive TR		No		
Use 5' Waveform to derive TR		No		
Use 6' Waveform to derive TR		No		
3' Waveform Discriminator Level		0.45	mV	
4' Waveform Discriminator Level		0.45	mV	
5' Waveform Discriminator Level		0.35	mV	
6' Waveform Discriminator Level		0.35	mV	
3' Waveform Filter		None		
4' Waveform Filter		None		
5' Waveform Filter		None		
6' Waveform Filter		None		
Semblance Level		0.50		
Semblance Window Width		120.00	micro-sec	
Gain 4' Depth		120.00	micro-sec	

Sonic 1 Despiker  
Sonic 2 Despiker

100.00  
100.00

micro-sec/ft  
micro-sec/ft

## DOWNHOLE EQUIPMENT

C:\logs\BMA\_A1A\BMA\_A1A\_TC\_200.dta

Compact Swivel Head Adaptor F

SHA 71 Length: 0.83 m Weight: 26.5 lb

Compact Knuckle Joint

SKJ 100 Length: 0.66 m Weight: 24.3 lb

Compact Battery Sub.

MBS 99 Length: 4.41 m Weight: 44.1 lb

Compact Inline Standoff B

MIS 73 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 138 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 136 Length: 0.65 m Weight: 15.4 lb

MBE21 - THIRD BRIDLE

MLK 111 Length: 3.76 m Weight: 30.9 lb

Compact Inline Standoff B

MIS 133 Length: 0.65 m Weight: 15.4 lb

Compact Gamma

MCG 142 Length: 2.65 m Weight: 63.9 lb



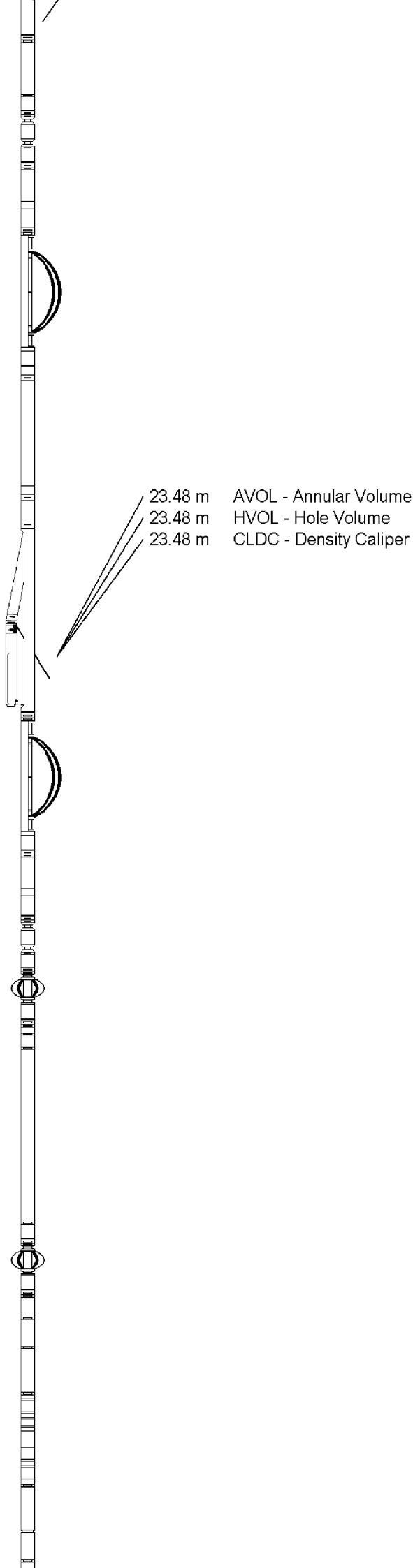
32.63 m

31.75 m

GGCE - Borehole Corrected Gamma

CGXT - MCG External Temperature

Compact Memory Sub A.C		
MMS 38	Length: 1.37 m	Weight: 30.9 lb
Compact Knuckle Joint		
SKJ 45	Length: 0.66 m	Weight: 24.3 lb
Compact Swivel Head Adaptor F		
SHA 64	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 Swivel Head Adaptor		
SHA 28	Length: 0.83 m	Weight: 26.5 lb
Compact Knuckle Joint		
SKJ 110	Length: 0.66 m	Weight: 24.3 lb
Compact Inline Standoff B		
MIS 72	Length: 0.65 m	Weight: 15.4 lb
Compact Upper Guard Sub.		
MUG 30	Length: 2.74 m	Weight: 68.3 lb
Compact Inline Standoff B		
MIS 141	Length: 0.65 m	Weight: 15.4 lb
Compact Laterolog Electrode Sub.		
MLE 31	Length: 3.76 m	Weight: 92.6 lb



Compact Inline Standoff B  
MIS 127 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 129 Length: 0.65 m Weight: 15.4 lb

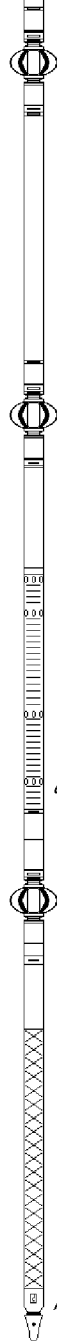
Compact Sonic  
MSS 66 Length: 3.82 m Weight: 72.8 lb

Compact Inline Standoff B  
MIS 126 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 4 Length: 0.40 m Weight: 6.6 lb

Total Length: 54.43 m Weight: 1201.5 lb



4.60 m TR21 - 3' Transit Time  
4.60 m TR12 - 6' Transit Time  
4.60 m TR22 - 5' Transit Time  
4.60 m TR11 - 4' Transit Time

4.60 m DT35 - 3-5' Compensated Sonic

Tool Zero (0.44m from bottom)

All measurements relative to tool zero.

COMPANY	ESSO AUSTRALIA PTY LTD
WELL	BREAM A1A
FIELD	BREAM
PROVINCE/COUNTY	BASS STRAIT
COUNTRY/STATE	AUSTRALIA

Elevation Kelly Bushing	metres	First Reading	2285.60	metres
Elevation Drill Floor	32.82 metres	Depth Driller	2294.00	metres
Elevation Ground Level	-59.40 metres	Depth Logger	2291.00	metres



**Compact**

COMPENSATED SONIC  
1:200 MD