



PRECISION
ENERGY SERVICES

COMPENSATED SONIC

Compact

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.

Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 09-NOV-2005 04:41

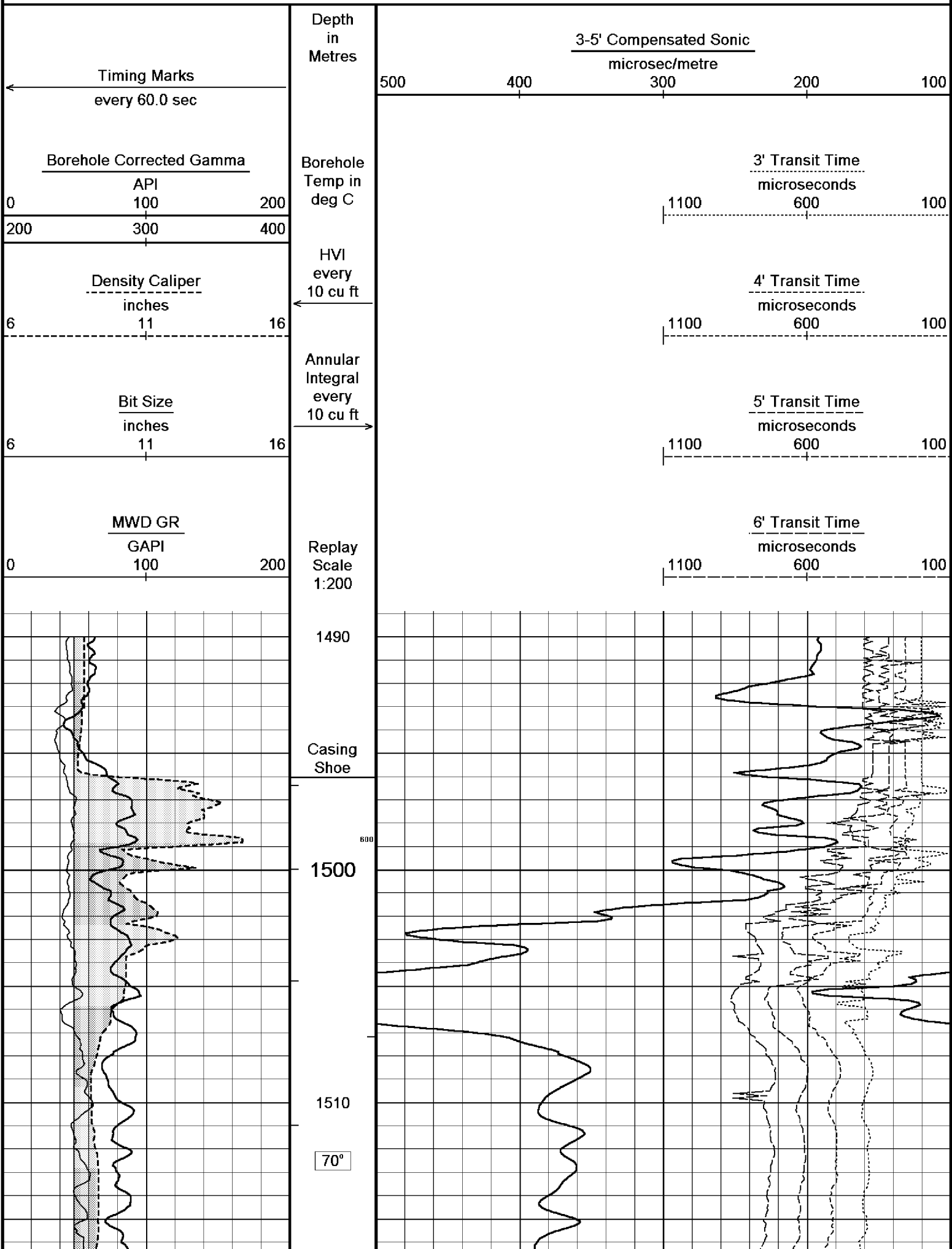
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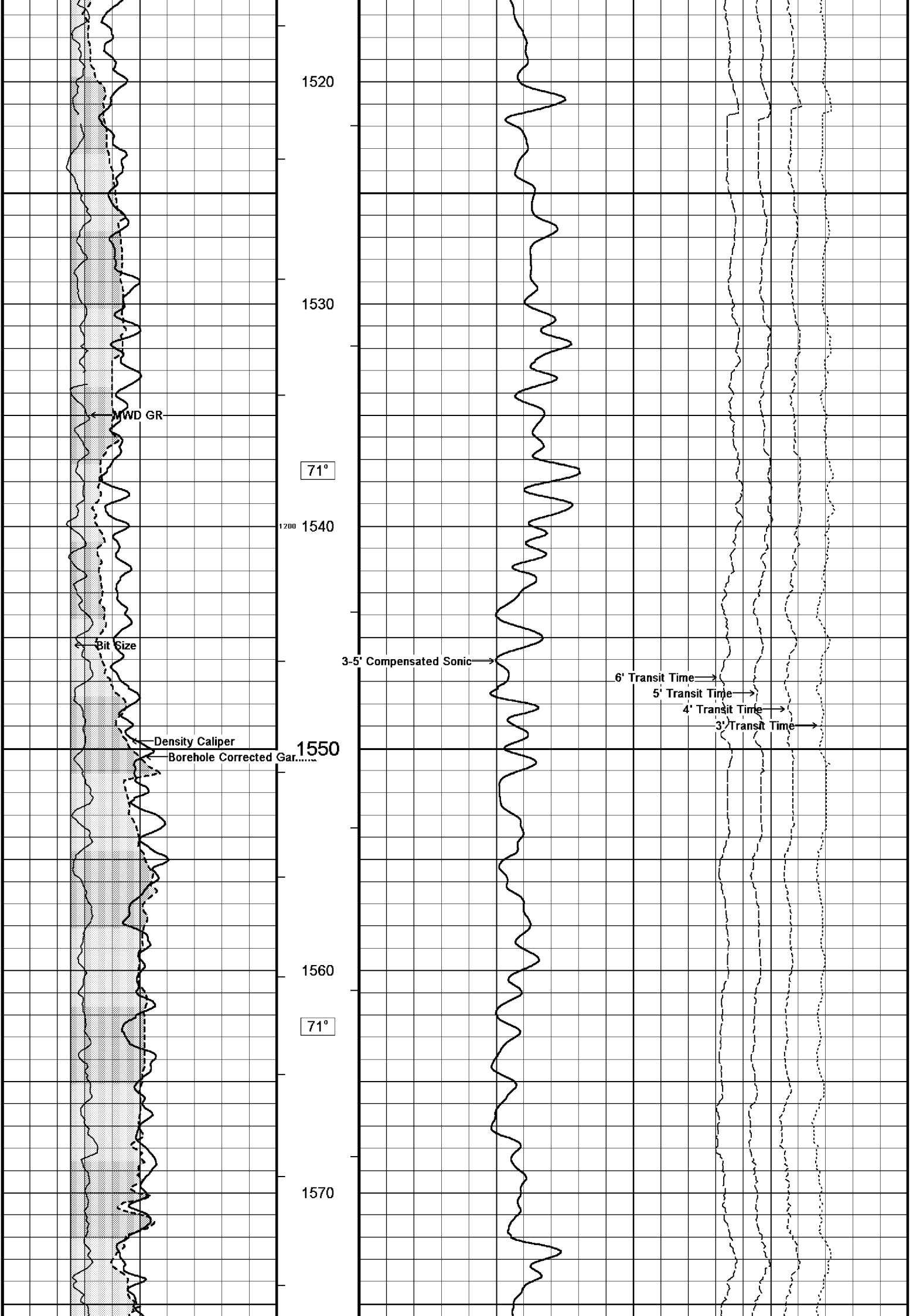
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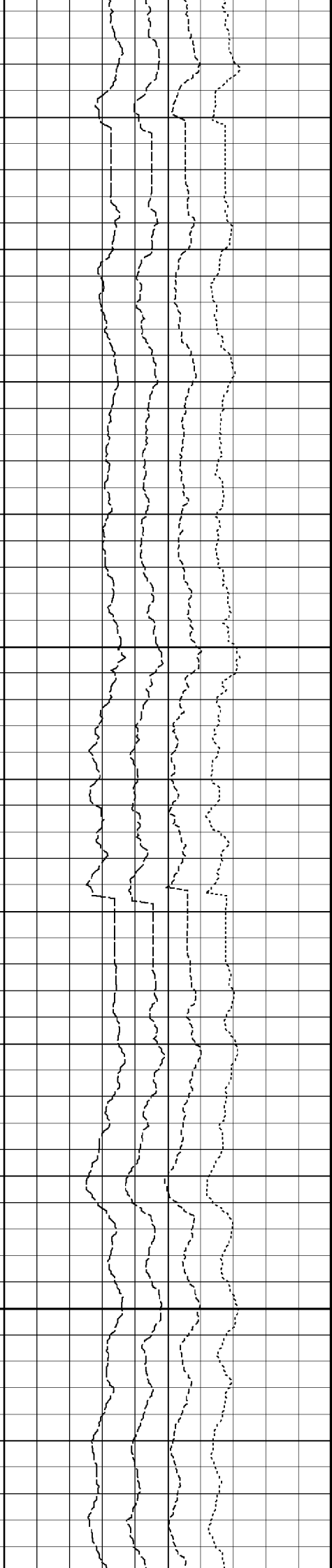
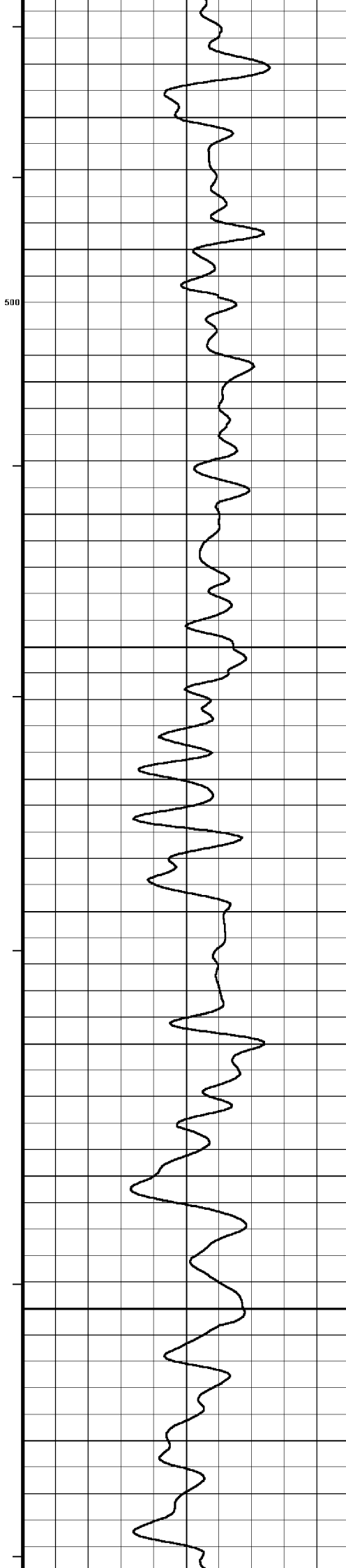
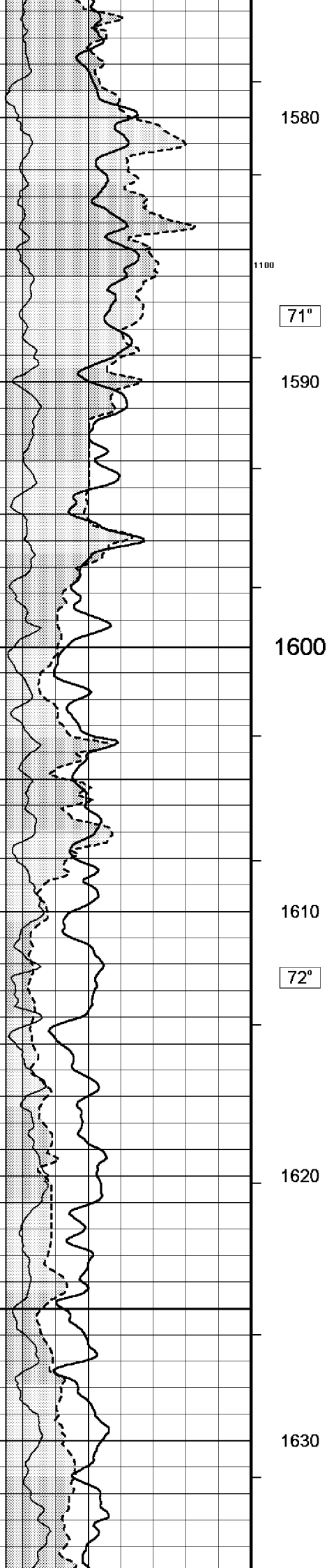
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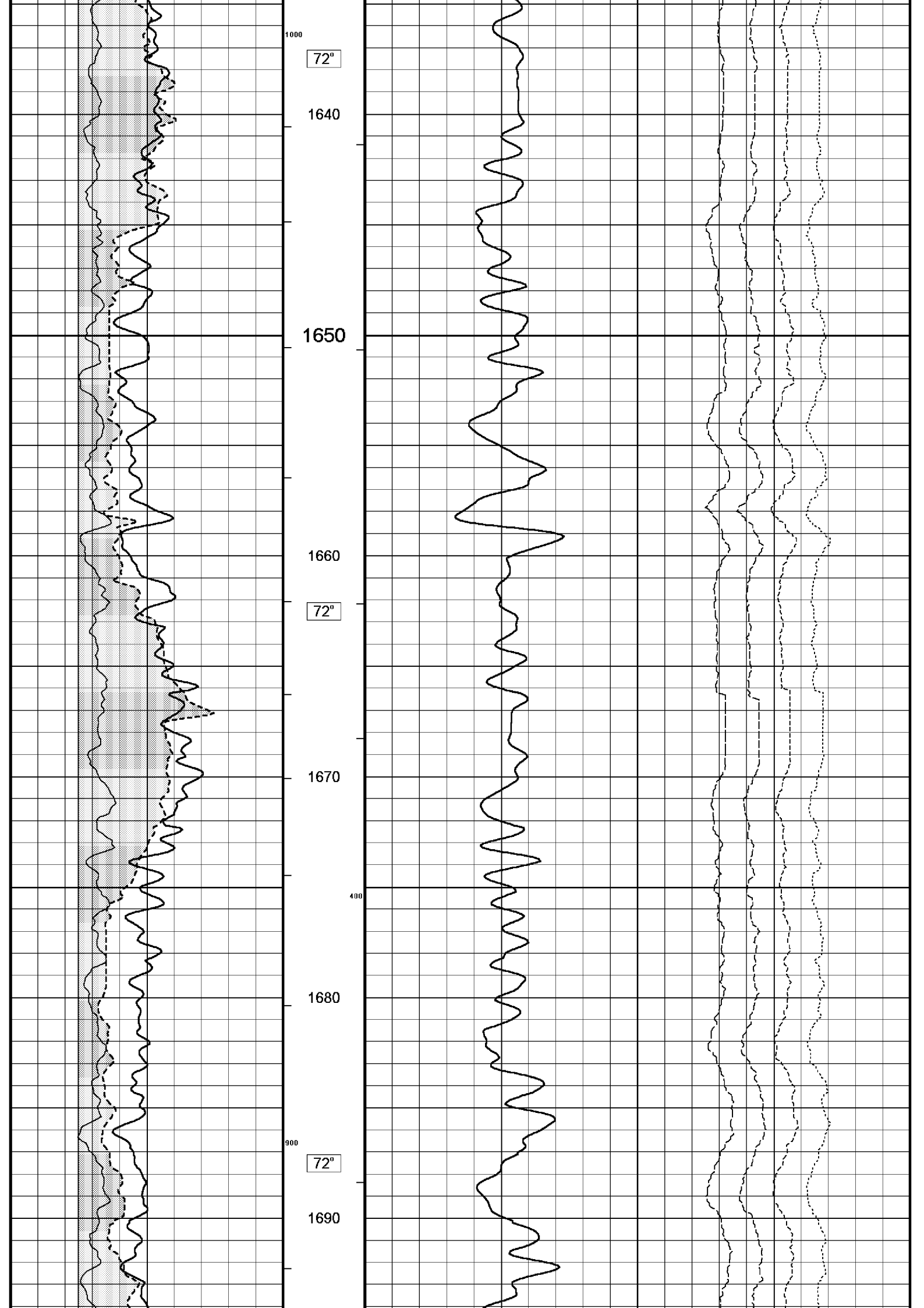
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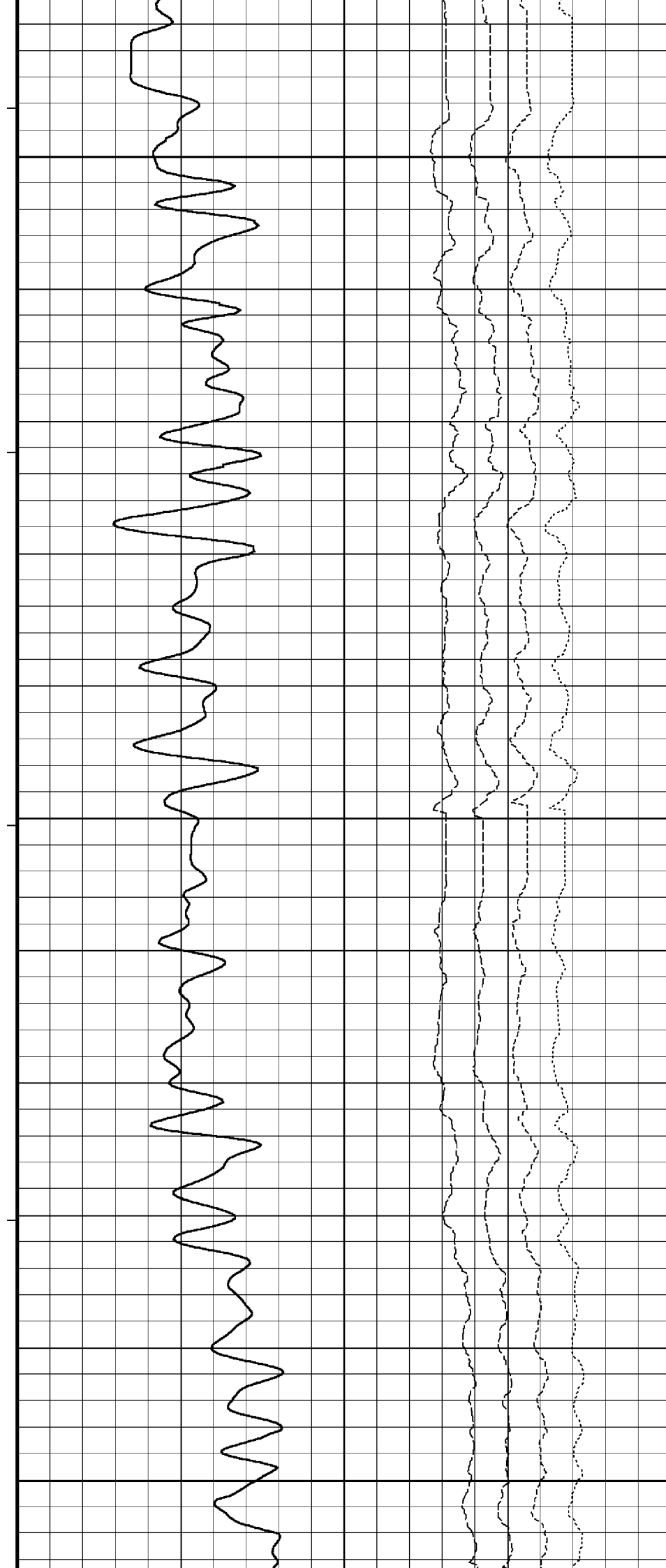
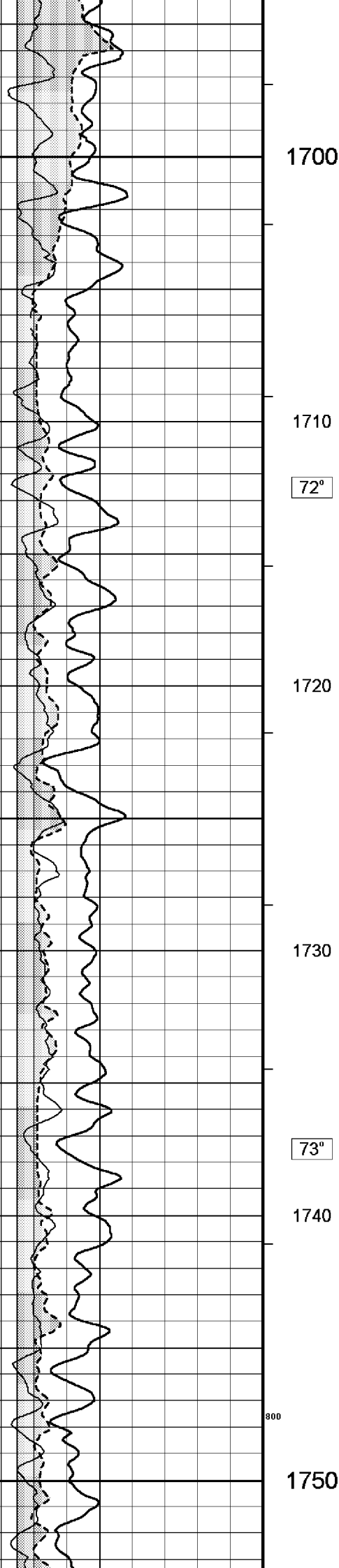
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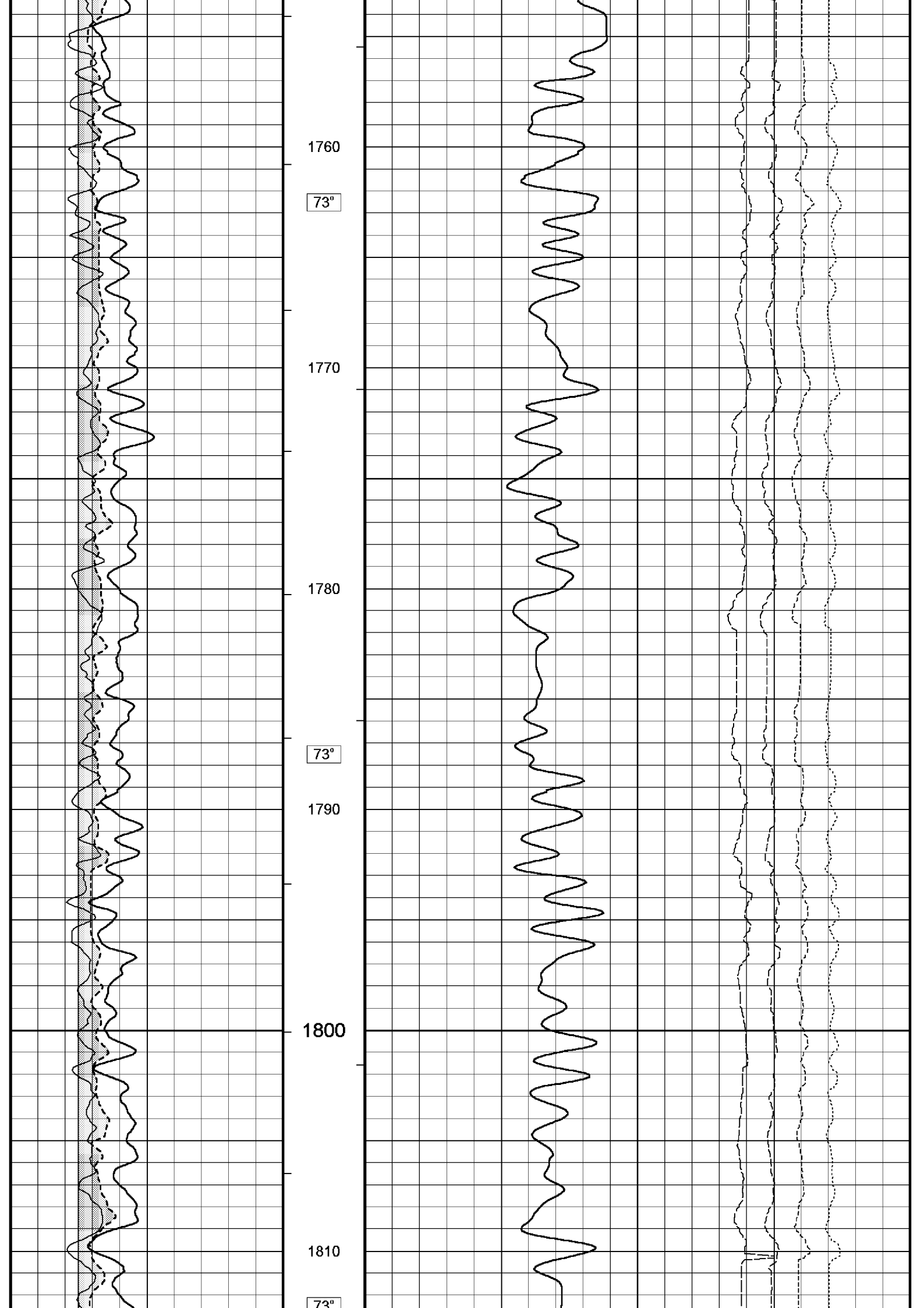


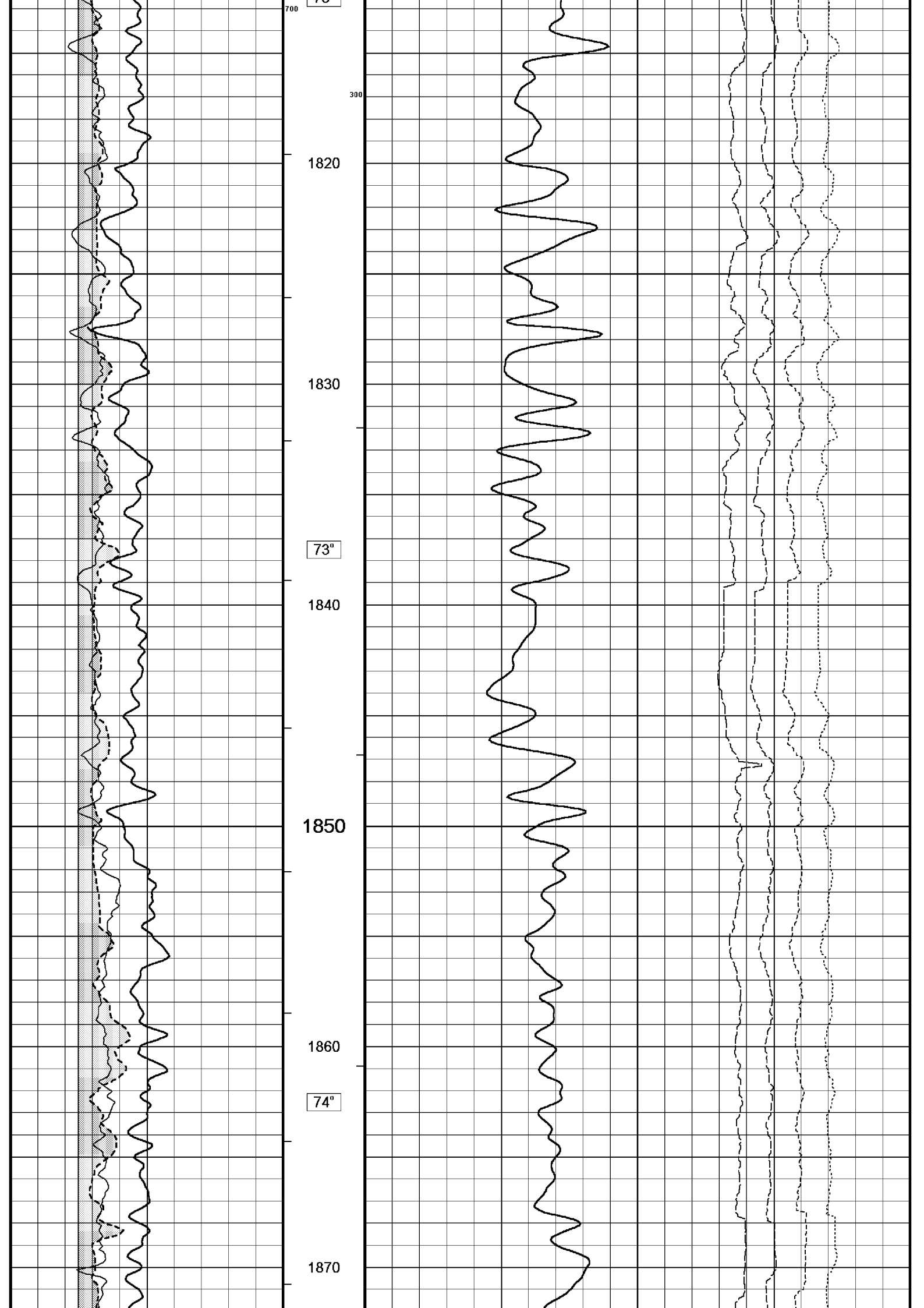


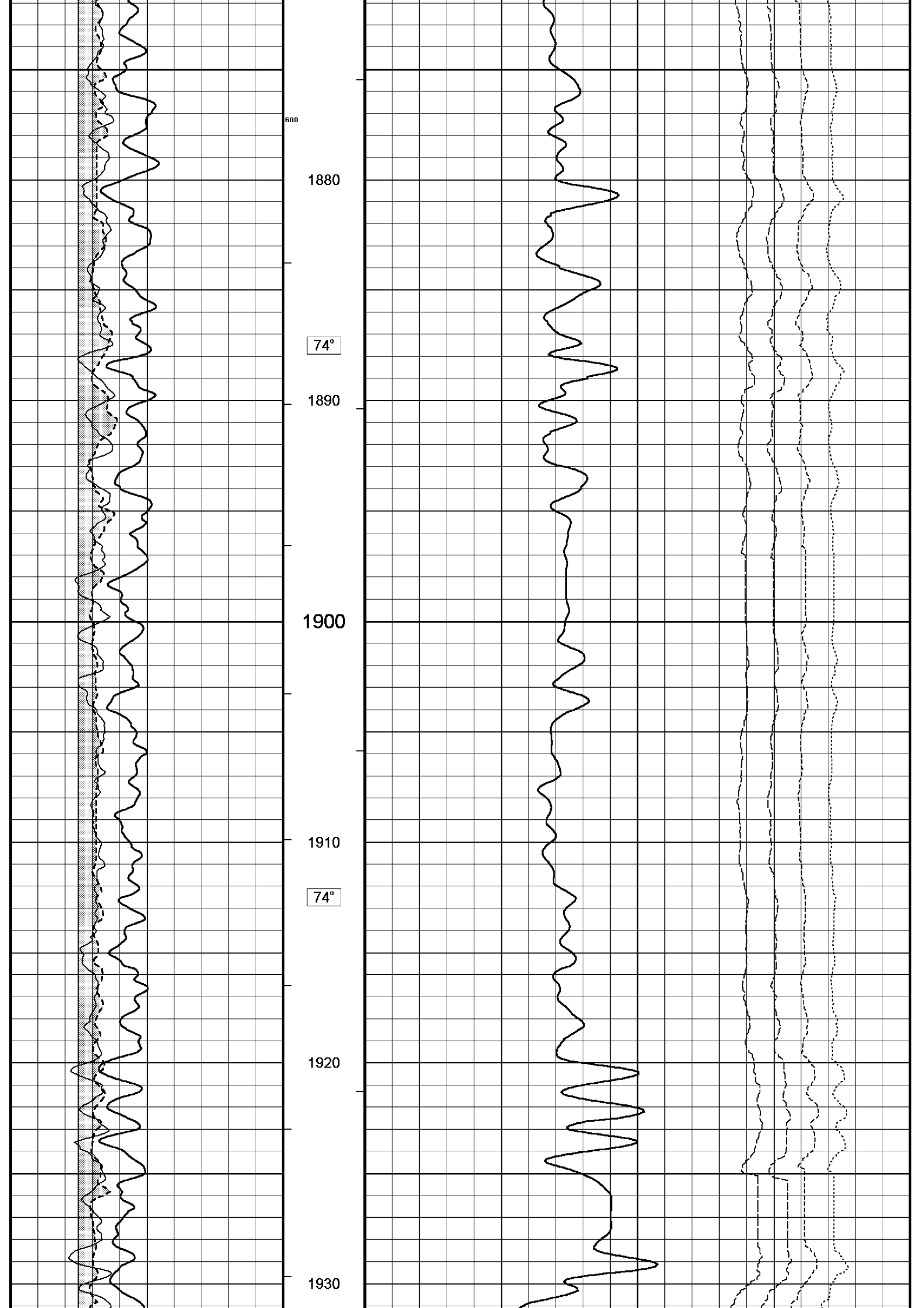


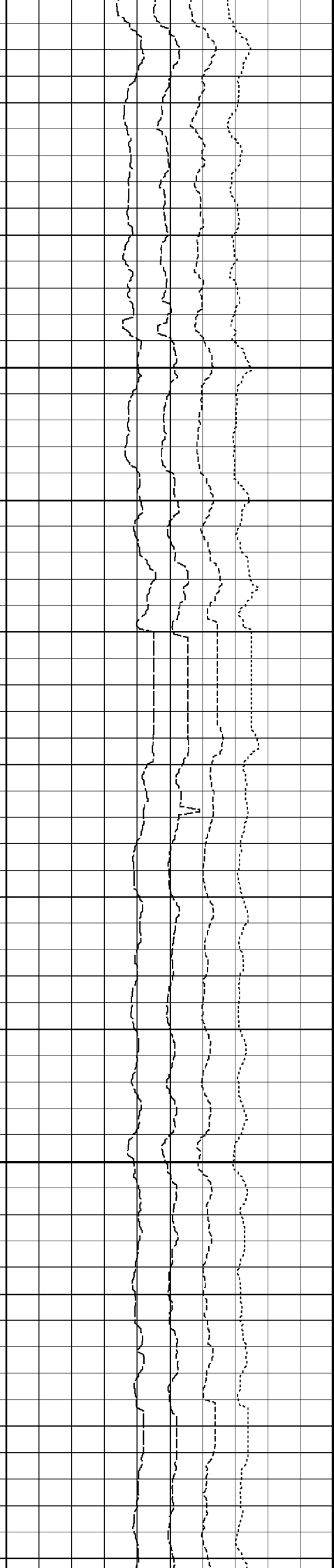
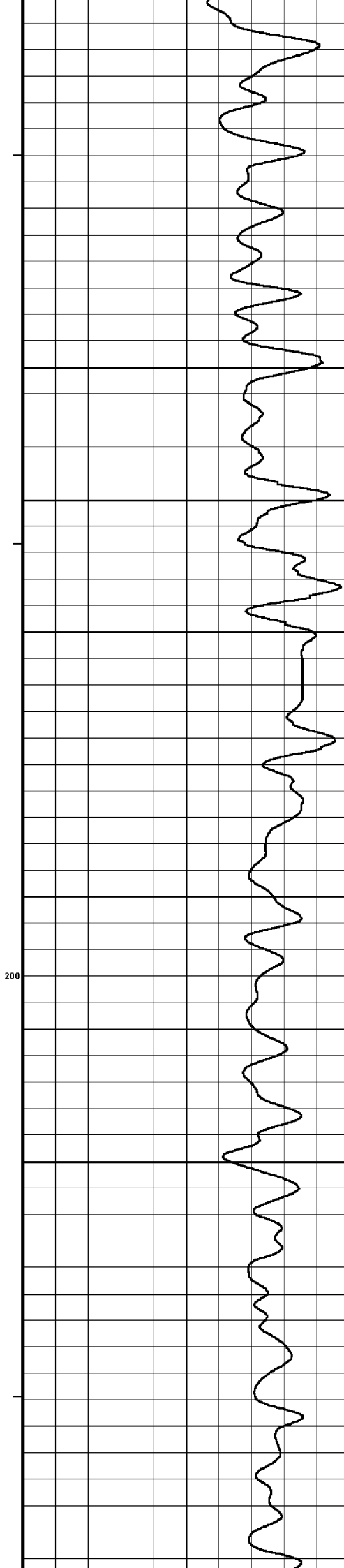
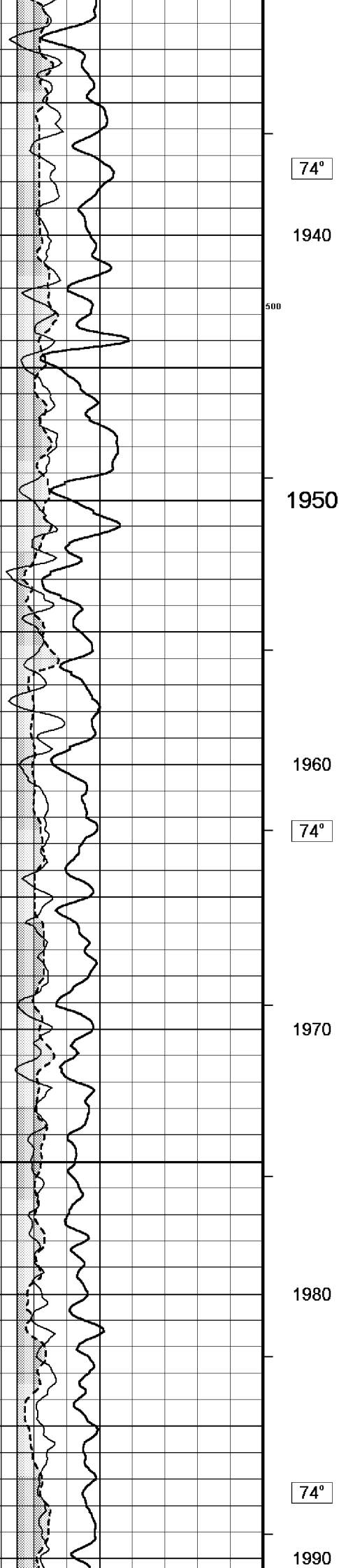


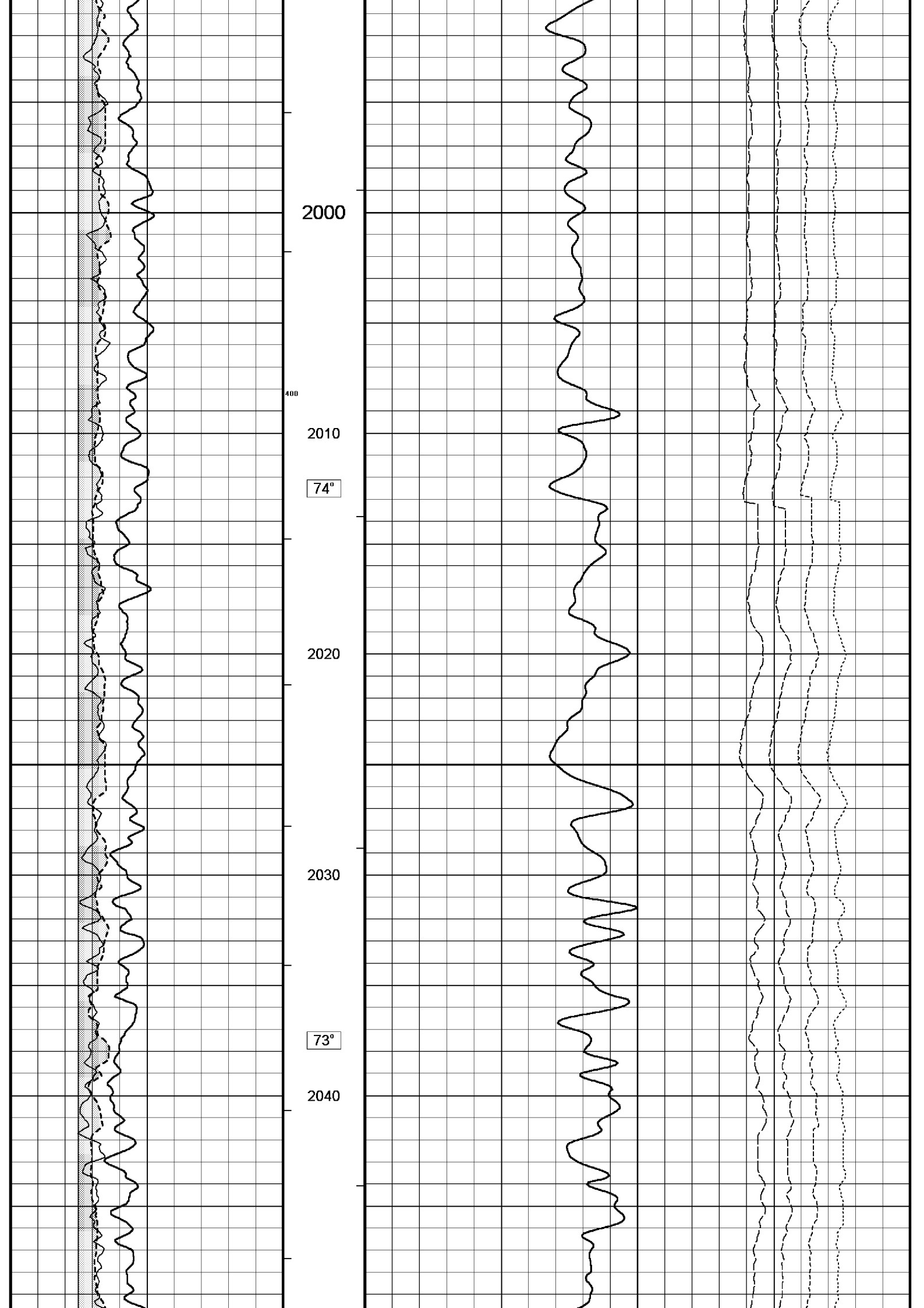


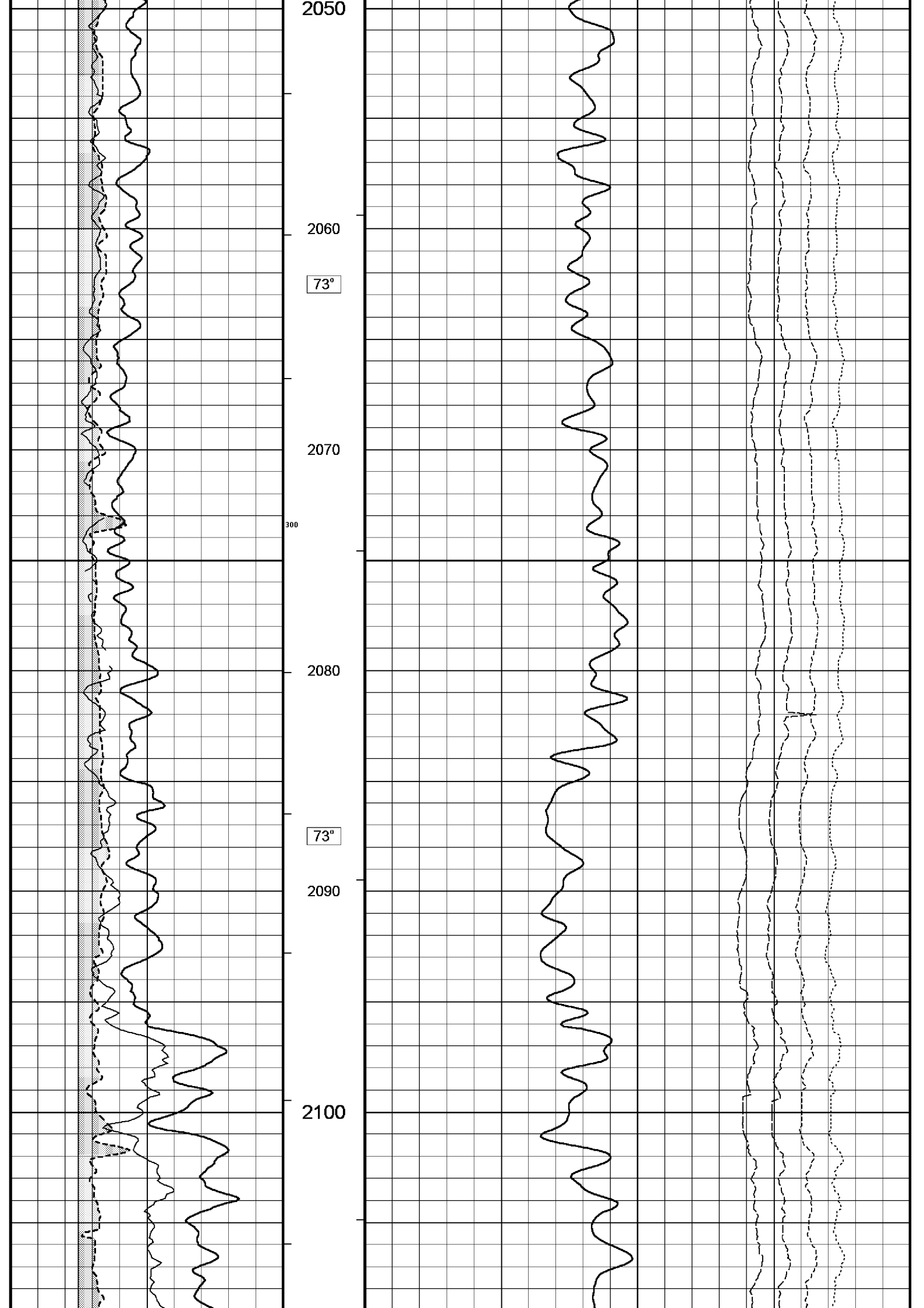


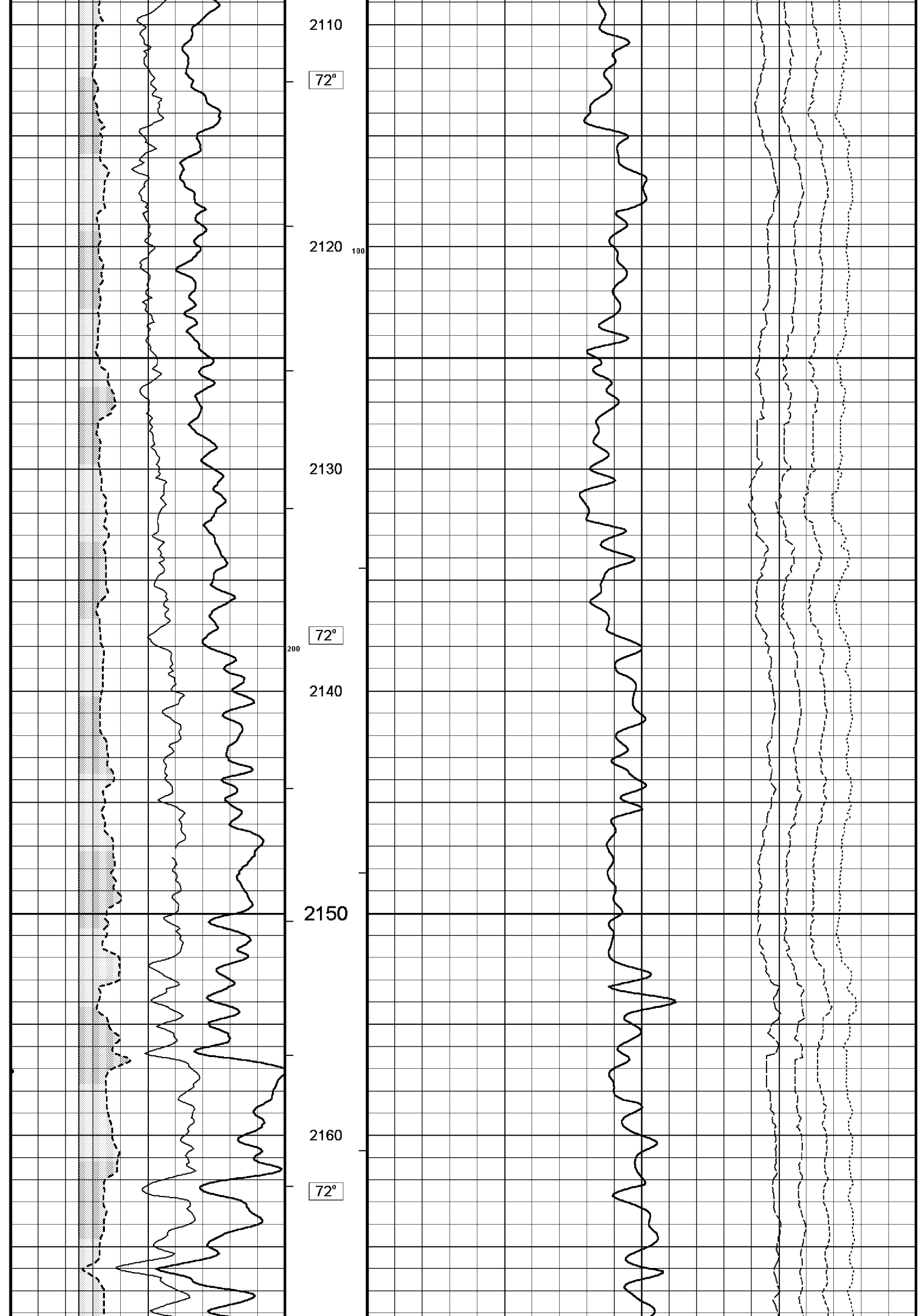


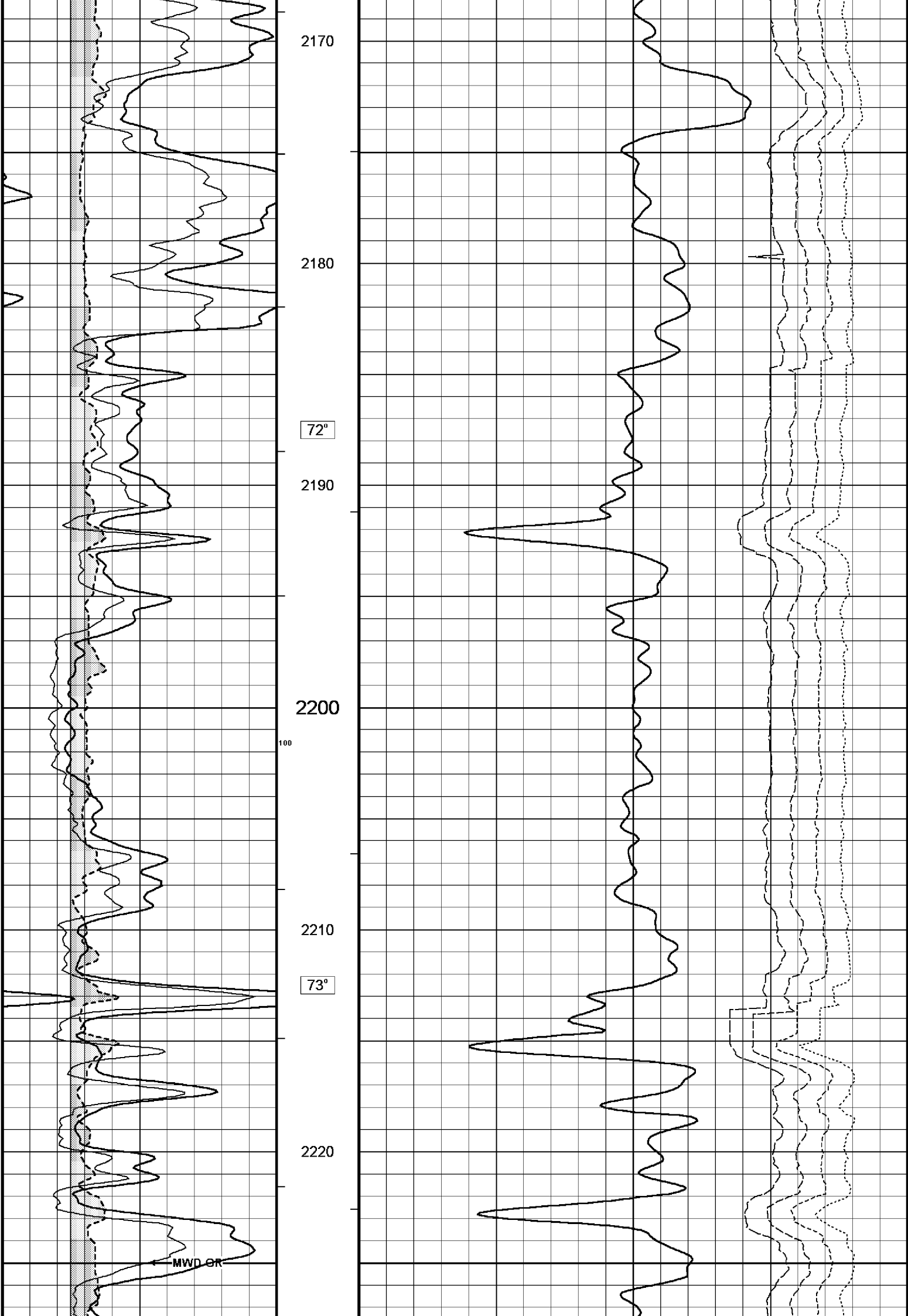


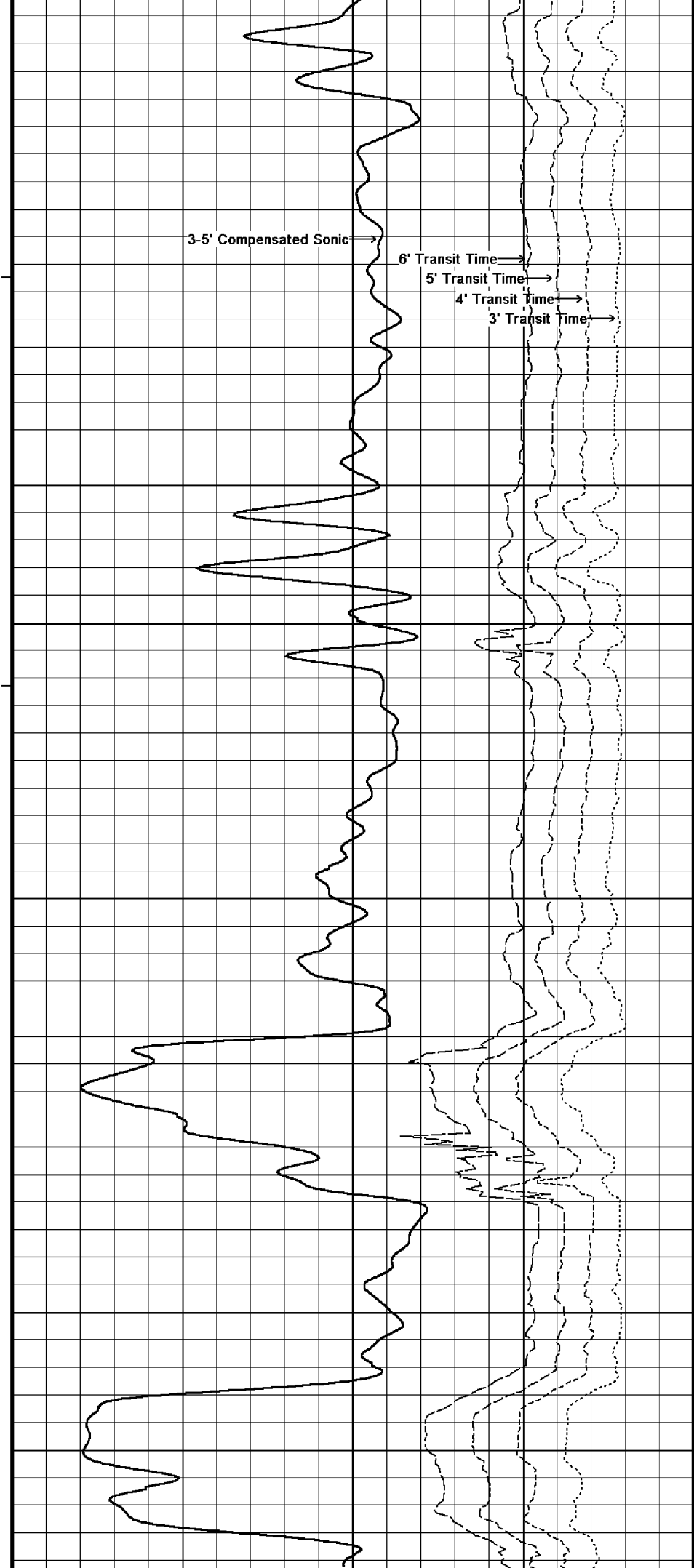
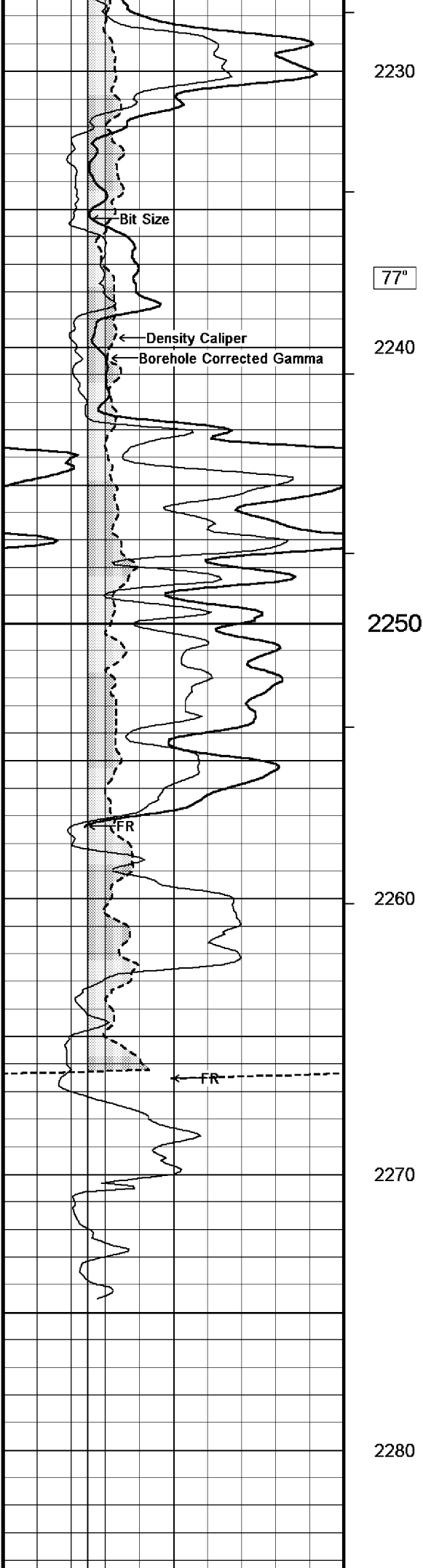


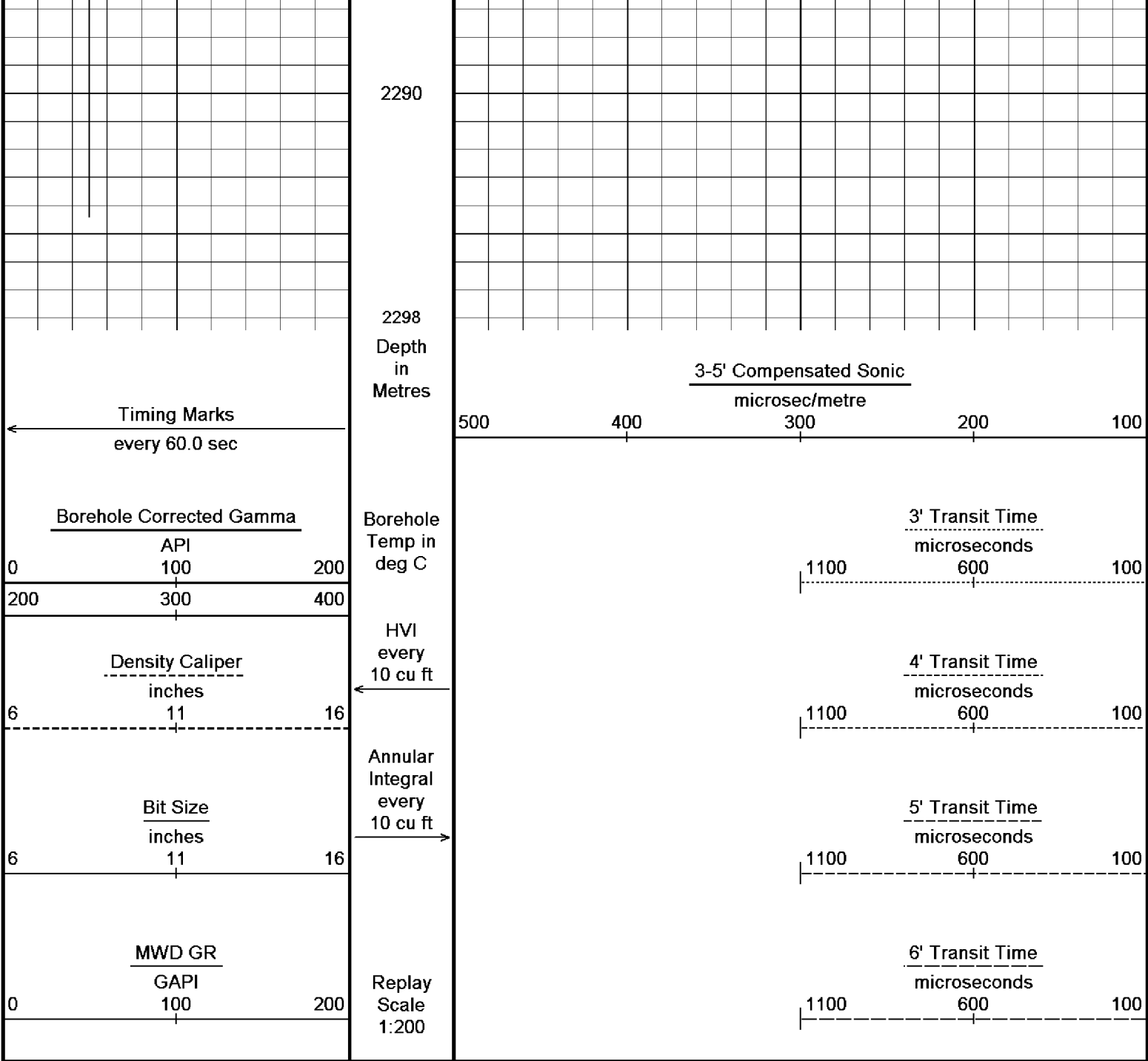












BEFORE SURVEY CALIBRATION		
C:\logs\BMA_A1A\BMA_A1A_TC_200.dta		
General Constants All 000		
General Parameters		
Mud Resistivity	0.113	ohm-metres
Mud Resistivity Temperature	25.000	degrees C
Water Level	0.000	metres
Density/Neutron Processing	Wet Hole	
Hole/Annular Volume and Differential Caliper Parameters		
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			
	Measured	Calibrated(Deg C)	Field Calibration on 7-NOV-2005,03:12
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	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 2' Waveform to derive TR	No		

Use 6' Waverform to derive 1R	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
Sonic 1 Despiker	100.00	micro-sec/ft
Sonic 2 Despiker	100.00	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

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

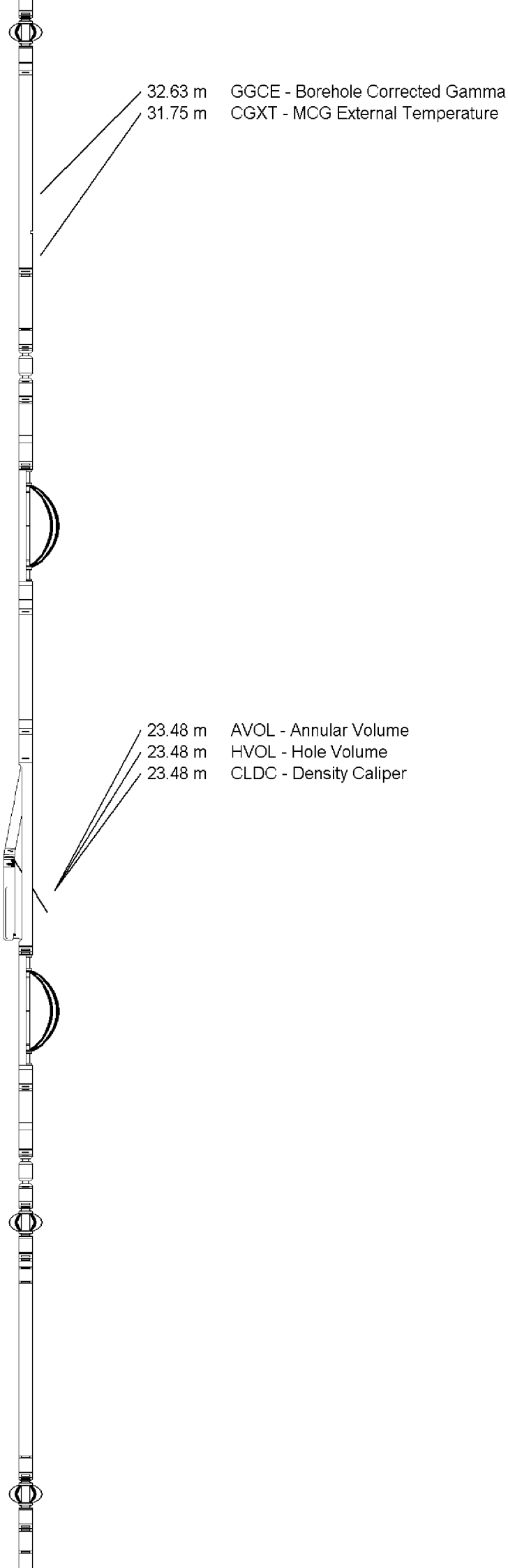
Compact Knuckle Joint
SKJ 110 Length: 0.66 m Weight: 24.3 lb

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

T.200 MD