PRECISION
Compact

DUAL LATEROLOG - GR
DENSITY - NEUTRON
1:200 MD

COMPANY	ESSO AUSTRALIA PTY.LTD
WELL	WKF W19A
FIELD	KINGFISH GDA94
PROVINCE/COUNTY	BASS STRAIT, VICTORIA
COUNTRY/STATE	AUSTRALIA
LOCATION	S 38 35 34.833, E 148 6 19.318
	N 5727806.791 m, E 596262.840 m

FIELD PRINT

LSD	SEC	TWP	RGE	Other Services
				COMPENSATED SONIC

API Number
Permit Number

Permanent Datum L , Elevation 0.0 metres
Log Measured From DF @ 33.4m above Permanent Datum
Drilling Measured From DF

Elevations:
KB metres
DF 33.43 metres
GL -76.13 metres

Date	10-JUN-2006		
Run Number	ONE		
Depth Driller	2687.00 metres		
Depth Logger	2684.00 metres		
First Reading	2670.65 metres		
Last Reading	666.00 metres		
Casing Driller	666.00 metres		
Casing Logger	666.00 metres		
Bit Size	8.50 inches		
Hole Fluid Type	KCL/PHPA		
Density / Viscosity	1.13 g/c3	23.00 CP	
PH / Fluid Loss	8.80	3.40 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	0.106 @ 25.0 ohm-m		
Rmf @ Measured Temp	0.085 @ 25.0 ohm-m		
Rmc @ Measured Temp	0.114 @ 25.0 ohm-m		
Source Rmf / Rmc	MEAS	MEAS	
Rm @ BHT	0.05 @ 79.3 ohm-m		
Time Since Circulation	37 HRS		
Max Recorded Temp	83.20 deg C		
Equipment Name	CML		
Equipment / Base	1	SALE	
Recorded By	R L TENCH, B J R MOSS		
Witnessed By	T LOBO		
LAST CIRC	8/06 04:00		Last Line

BOREHOLE RECORD

Bit Size inches	Depth From metres	Depth To metres
8.500	666.00	2687.00

CASING RECORD

Type	Size inches	Depth From metres	Shoe Depth metres	Weight pounds/ft
K-55	10.750	0.00	666.00	40.50

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: 83.2 DEG C AT 2636 m MD
MAX. INCLINATION: 37 DEG AT 665 m MD
MAX. DOGLEG SERVERITY: 6.21 DEG/30m AT 696.25 m MD
DEPLOYMENT ANGLE: 26.98 DEG

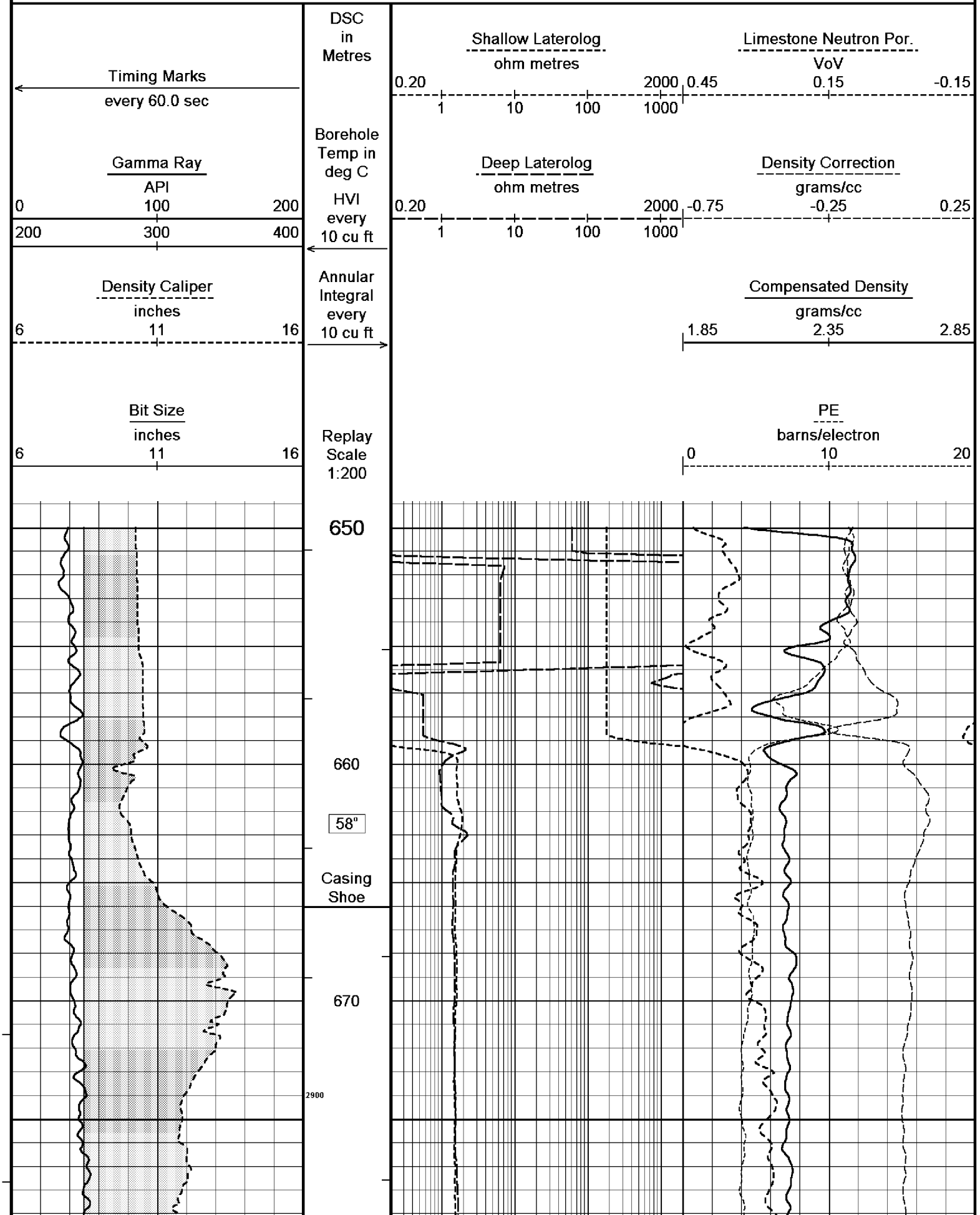
HVOL: 2890 FT^3
AVOL: 1120 FT^3

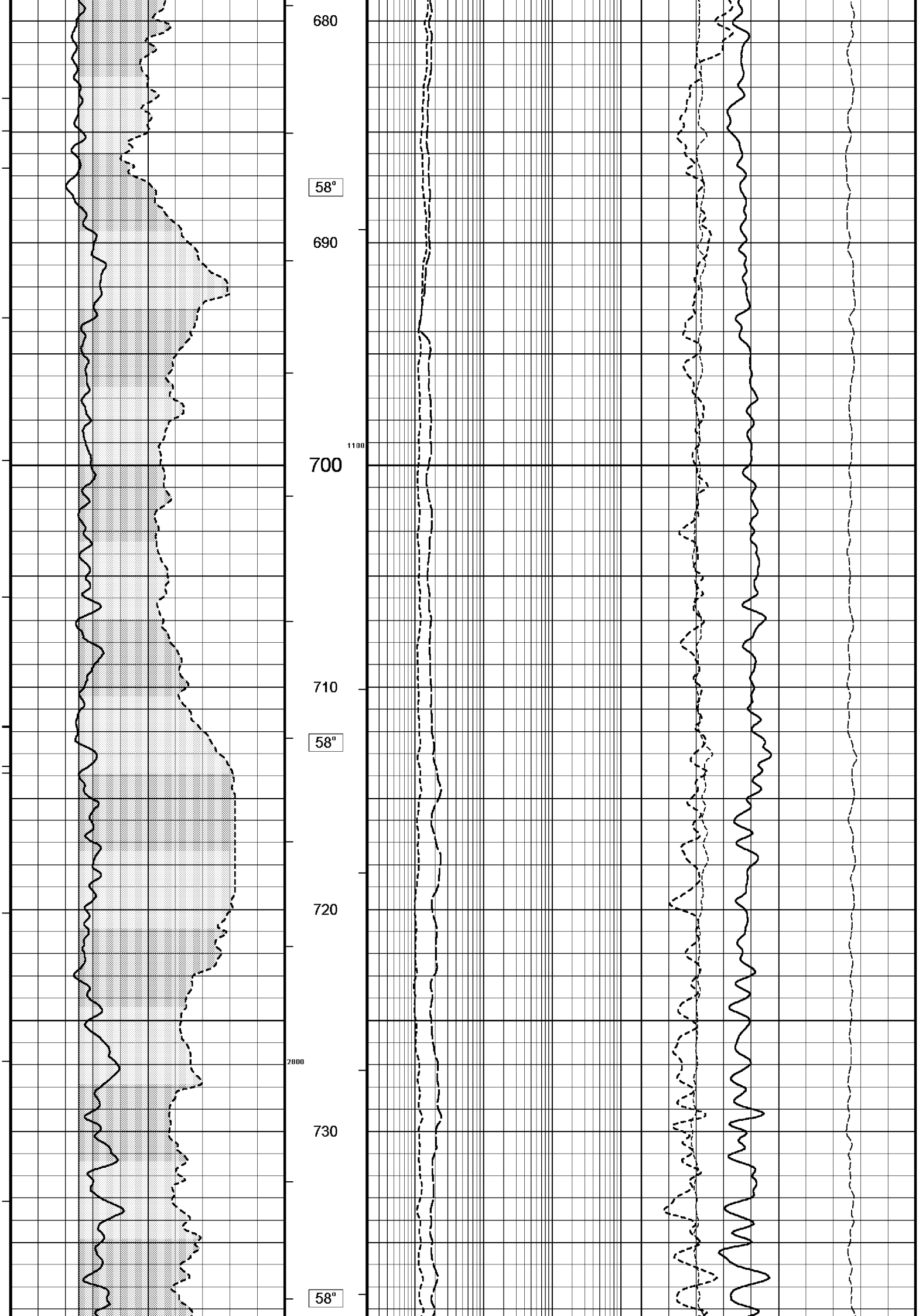
LOGGING SPEED 6M/MIN FROM TD TO 2439.2 M MD
LOGGING SPEED 12 M/MIN FROM 2439.2 TO 1749.3 M MD
LOGGING SPEED 6 M/MIN FROM 1749.3 TO 1519.3 M MD
LOGGING SPEED 12 M/MIN FROM 1519.3 TO 1289.4 M MD
LOGGING SPEED 6 M/MIN FROM 1289.4 TO 628.8 M MD

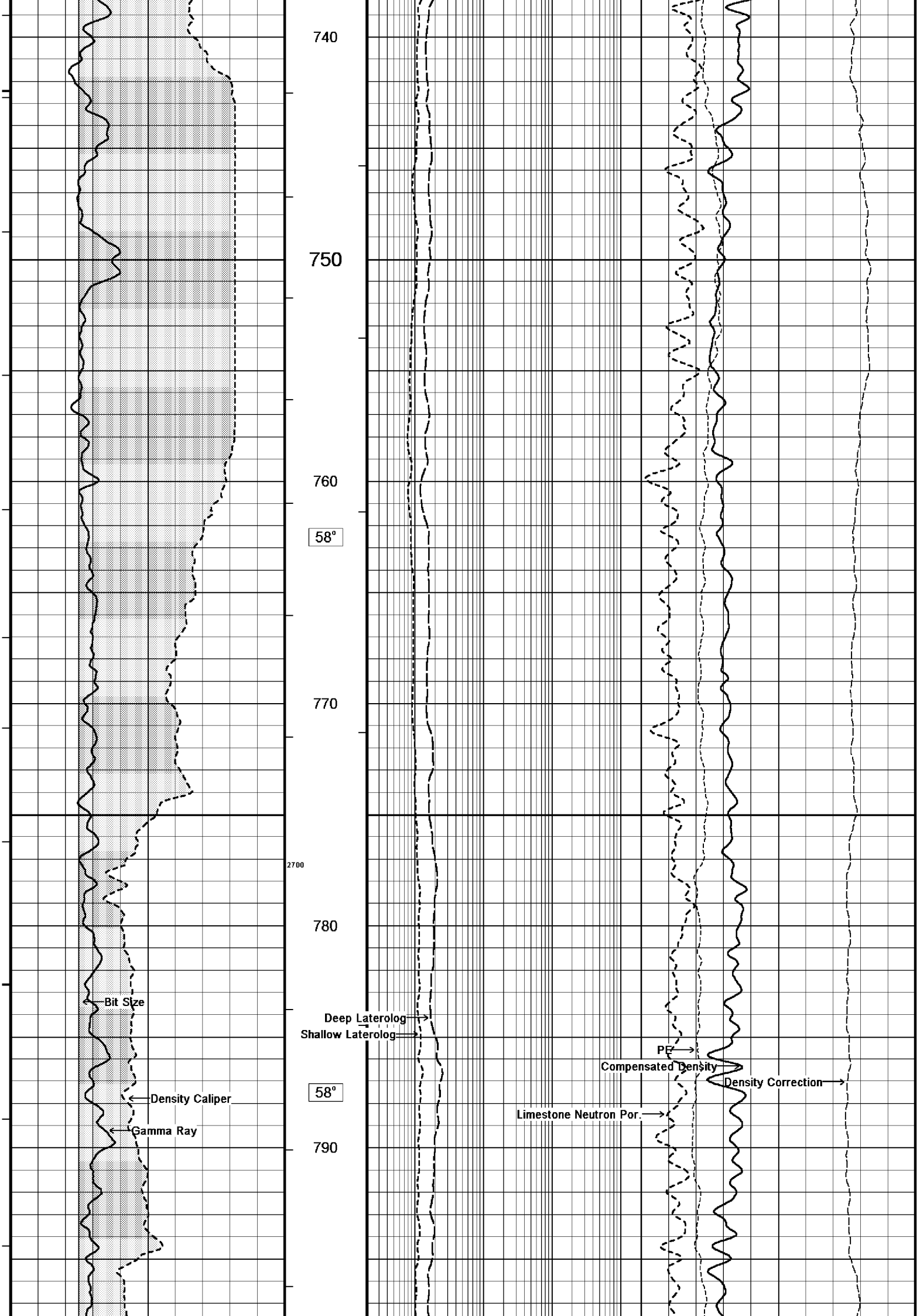
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

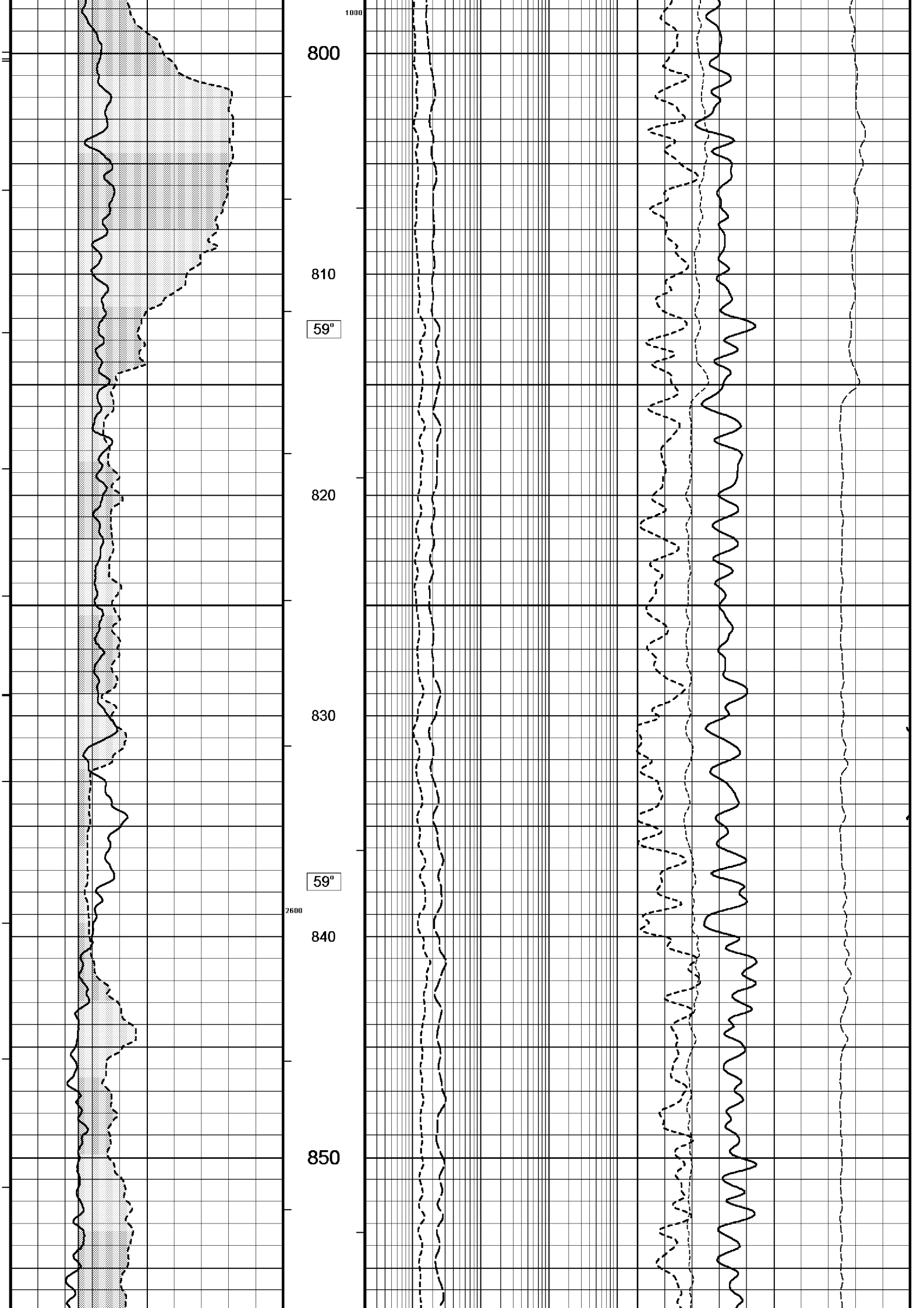
MAIN LOG 1:200

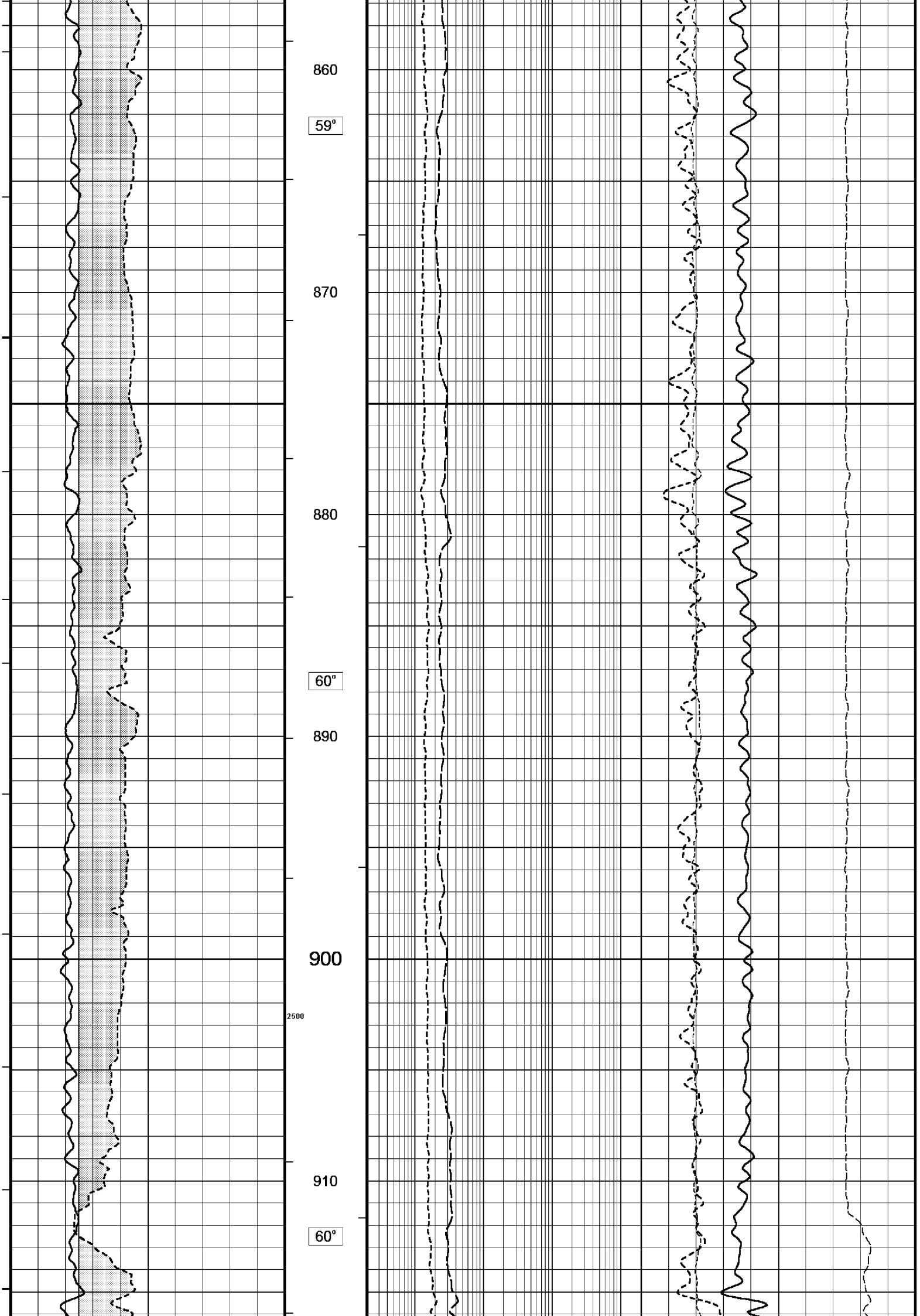
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 10-JUN-2006 11:36
Filename: C:\logs\WKF_W19A\FIELD DATA\WKF_W19A_MAIN_LOG.dta
Recorded on 10-JUN-2006 04:30
System Configuration Dates: Logged 17-JUN-2004: Processed 17-JUN-2004: Plotted 17-JUN-2004:

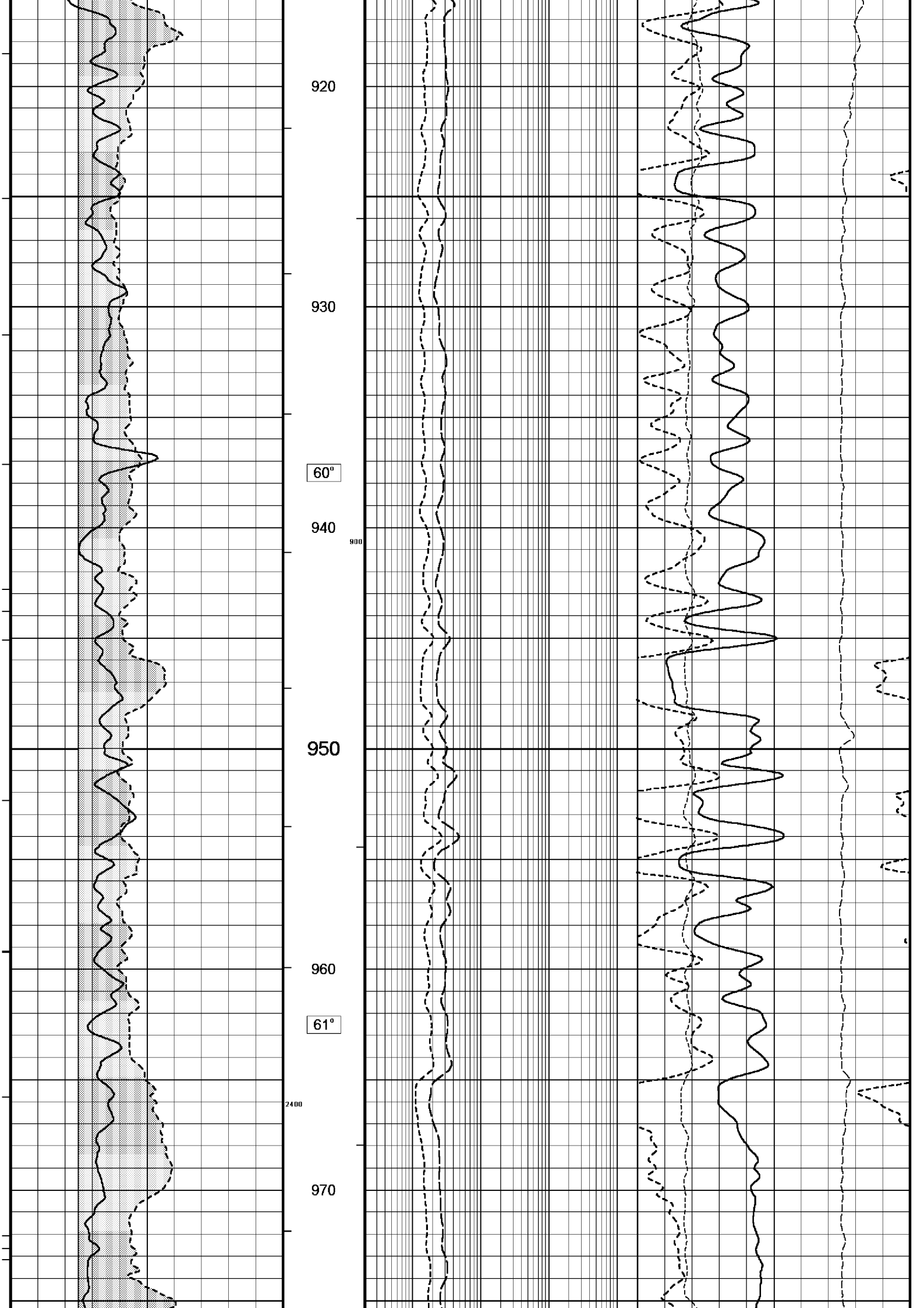


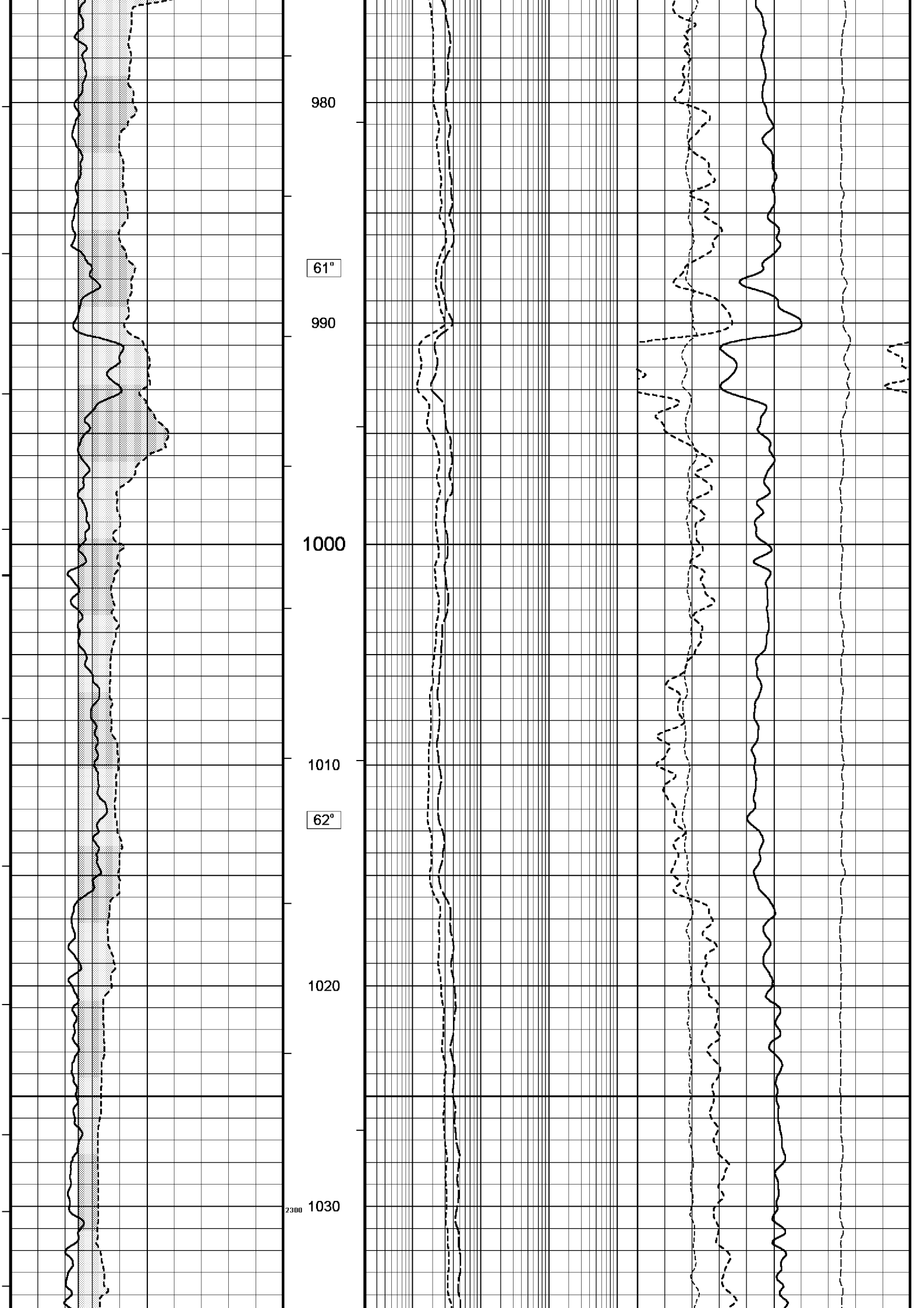

680
58°
690
1100
700
710
58°
720
2000
730
58°

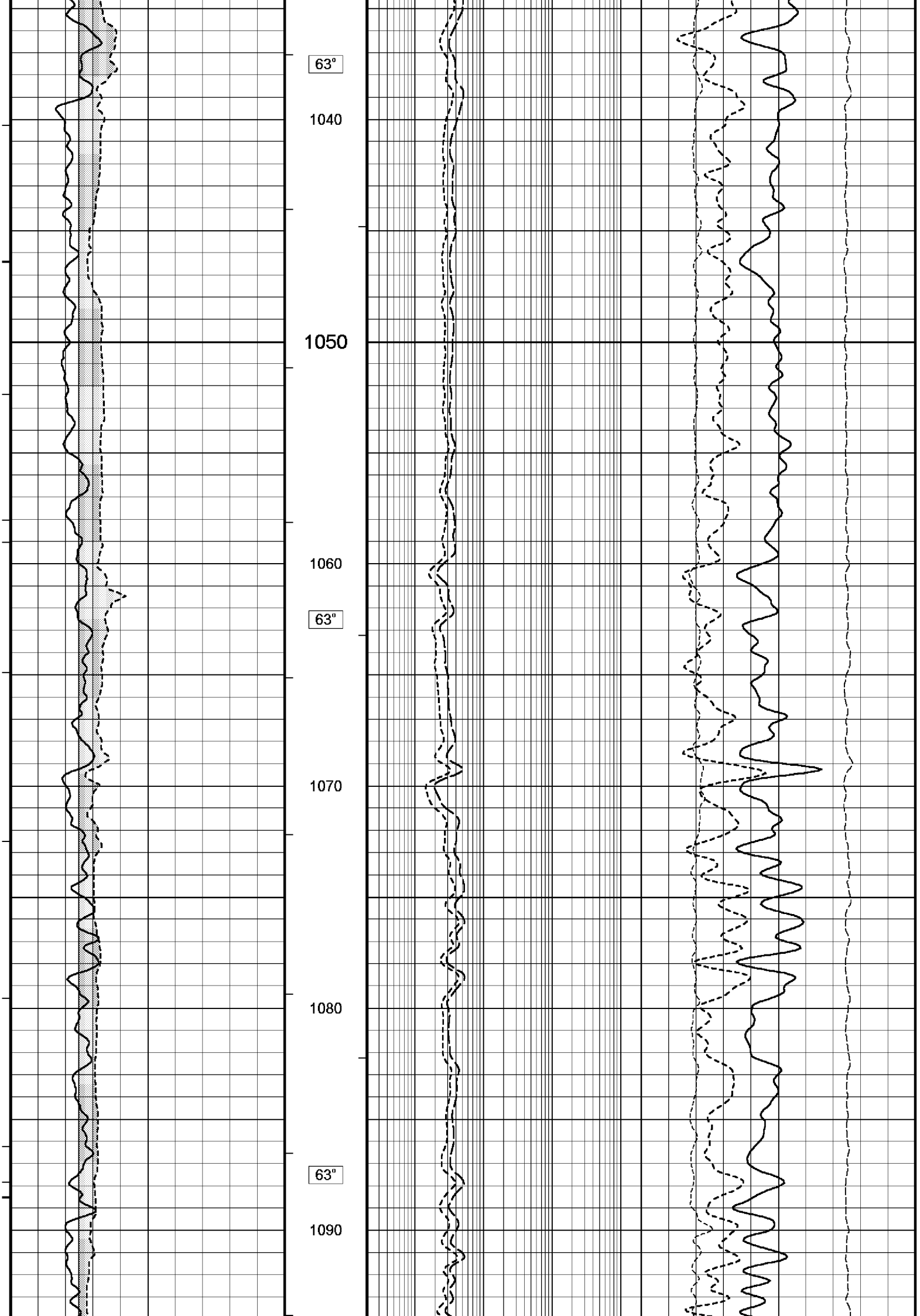

740
750
760
58°
770
2700
780
Bit Size
Deep Laterolog
Shallow Laterolog
58°
PE
Compensated Density
Density Correction
Density Caliper
Limestone Neutron Por.
Gamma Ray
790

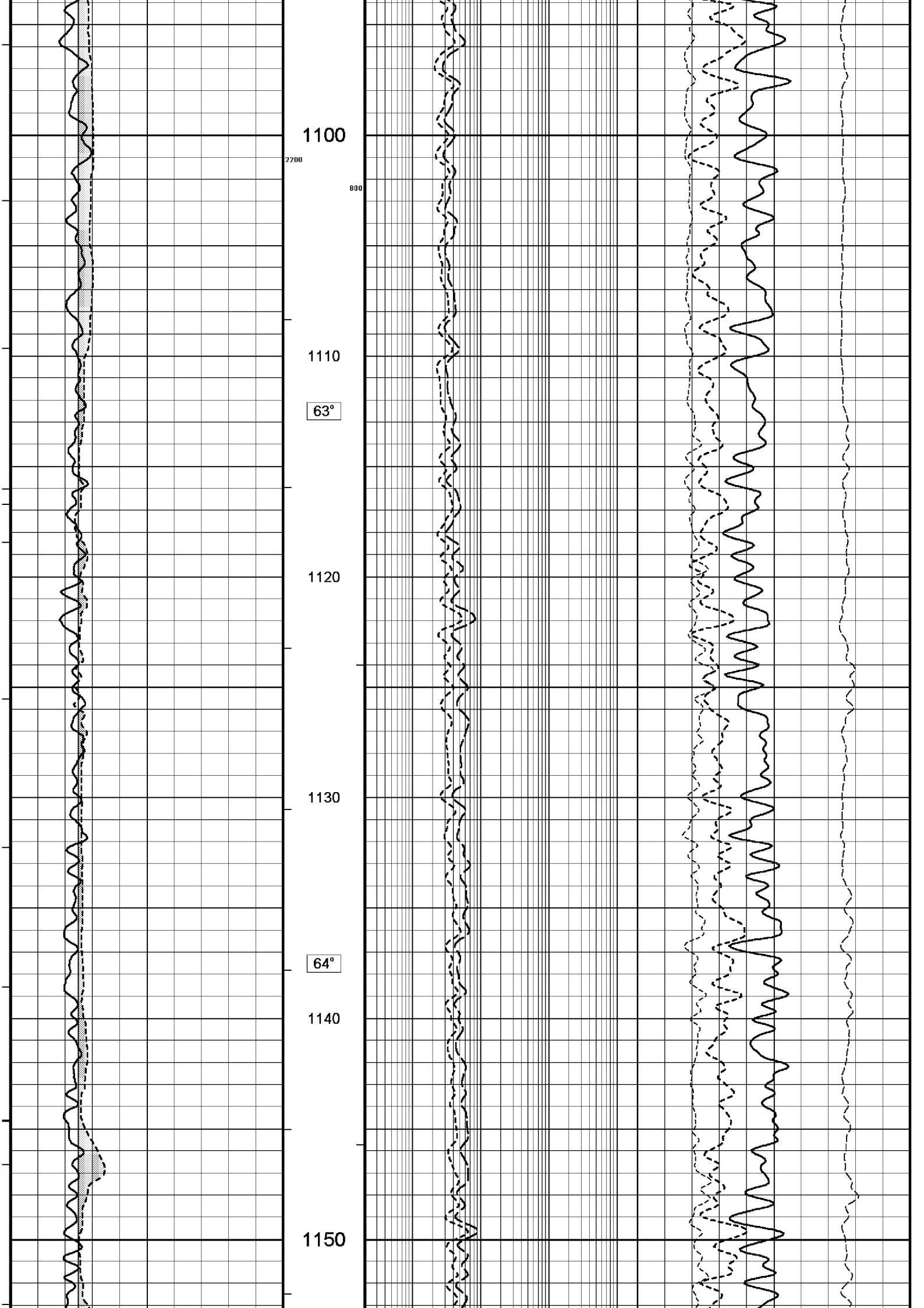

1000
800
810
59°
820
830
59°
2600
840
850

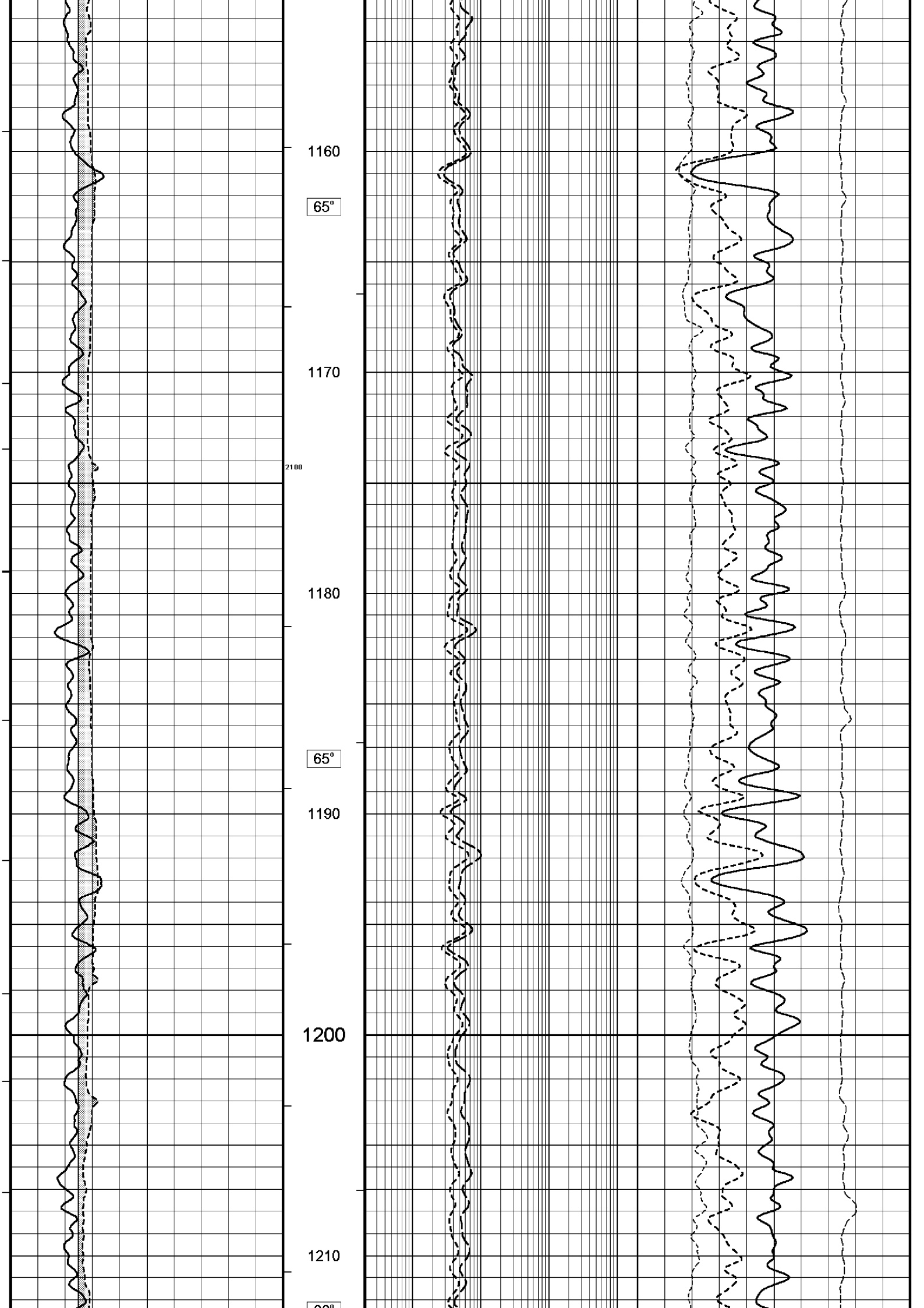

860
59°
870
880
60°
890
900
2500
910
60°

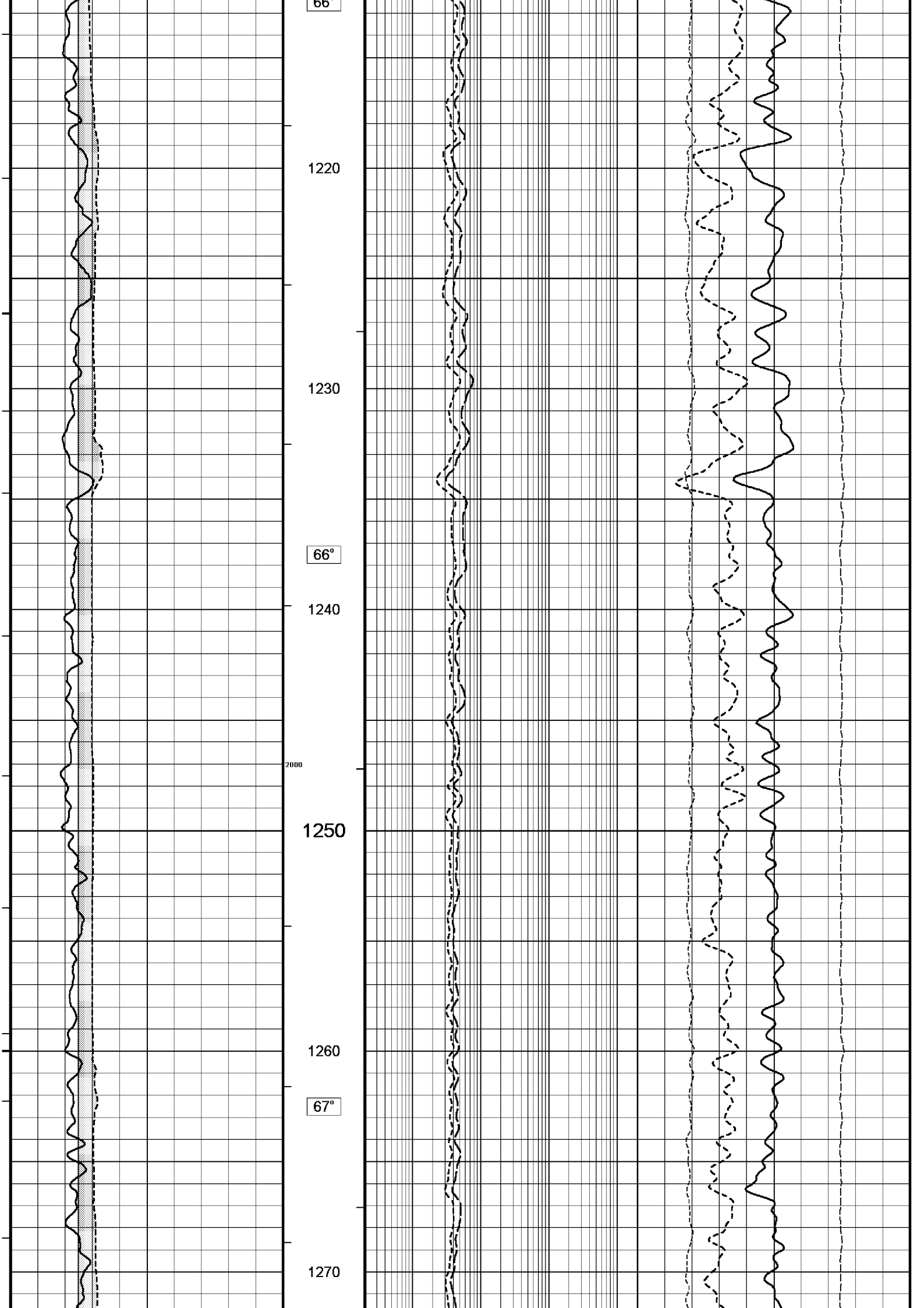

920
930
60°
940
900
950
960
61°
2400
970

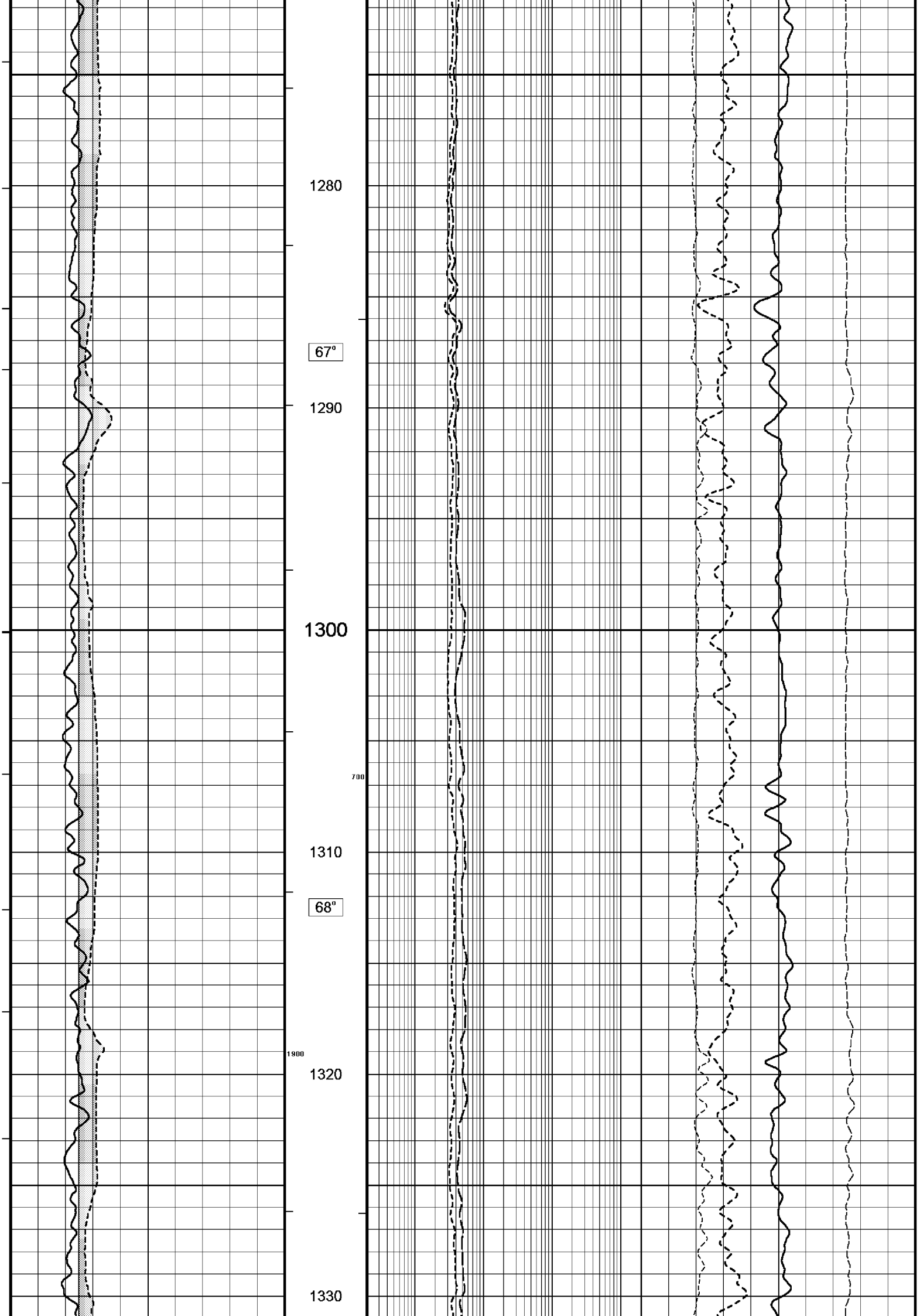

980
61"
990
1000
1010
62°
1020
2300
1030

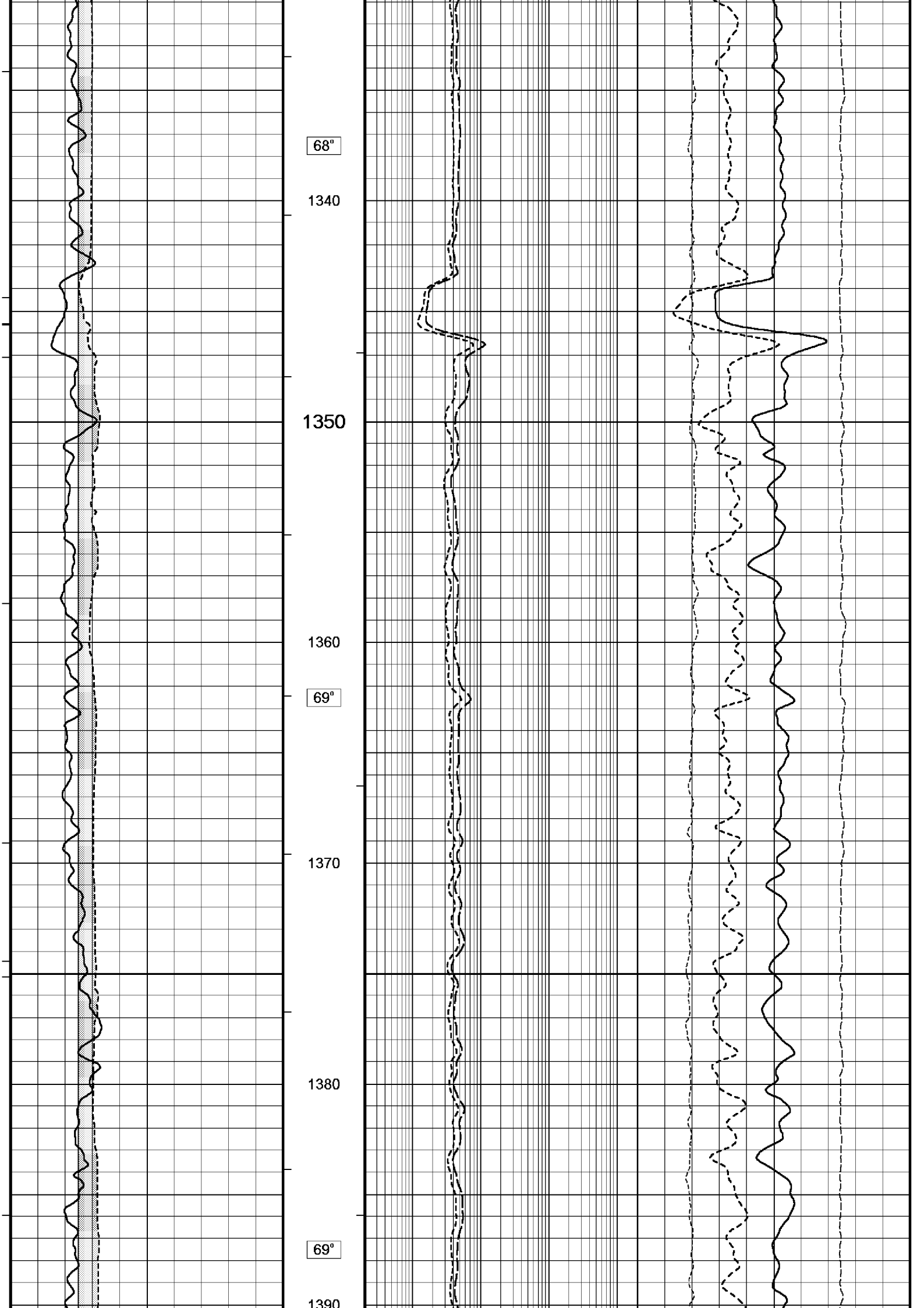

63°
1040
1050
1060
63°
1070
1080
63°
1090

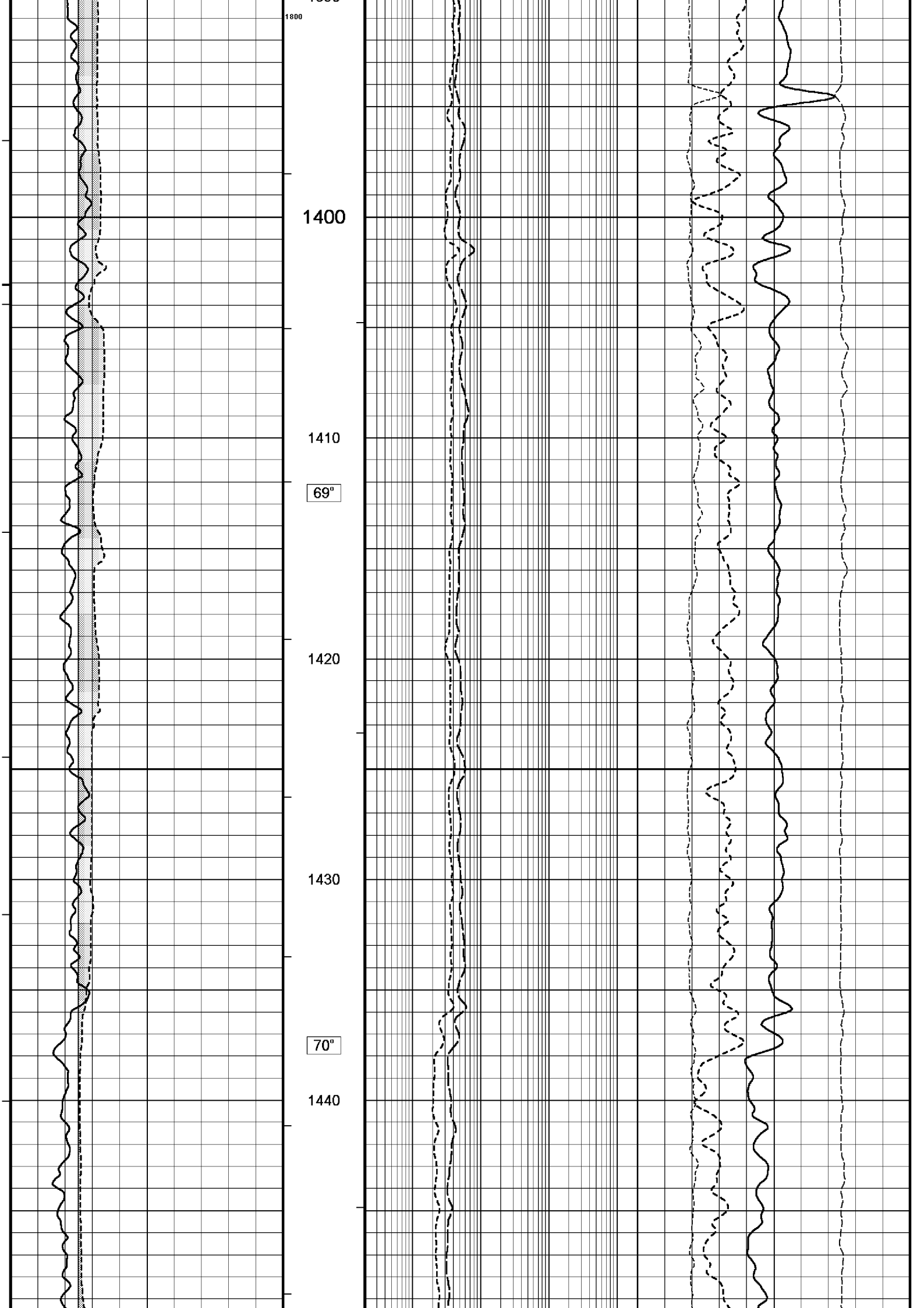

1100
2200
800
1110
63°
1120
1130
64°
1140
1150

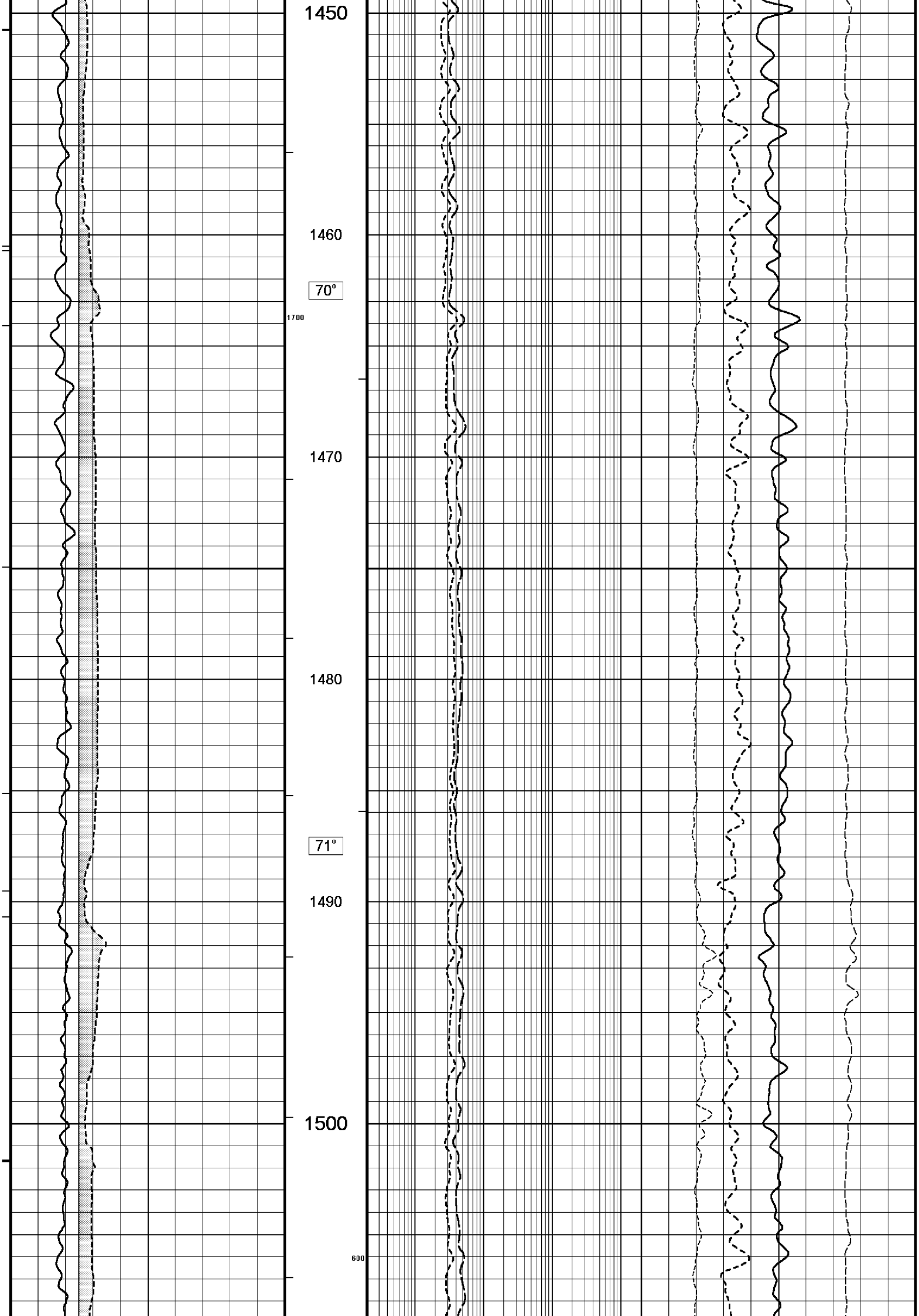

1160
65°
1170
2100
1180
65°
1190
1200
1210

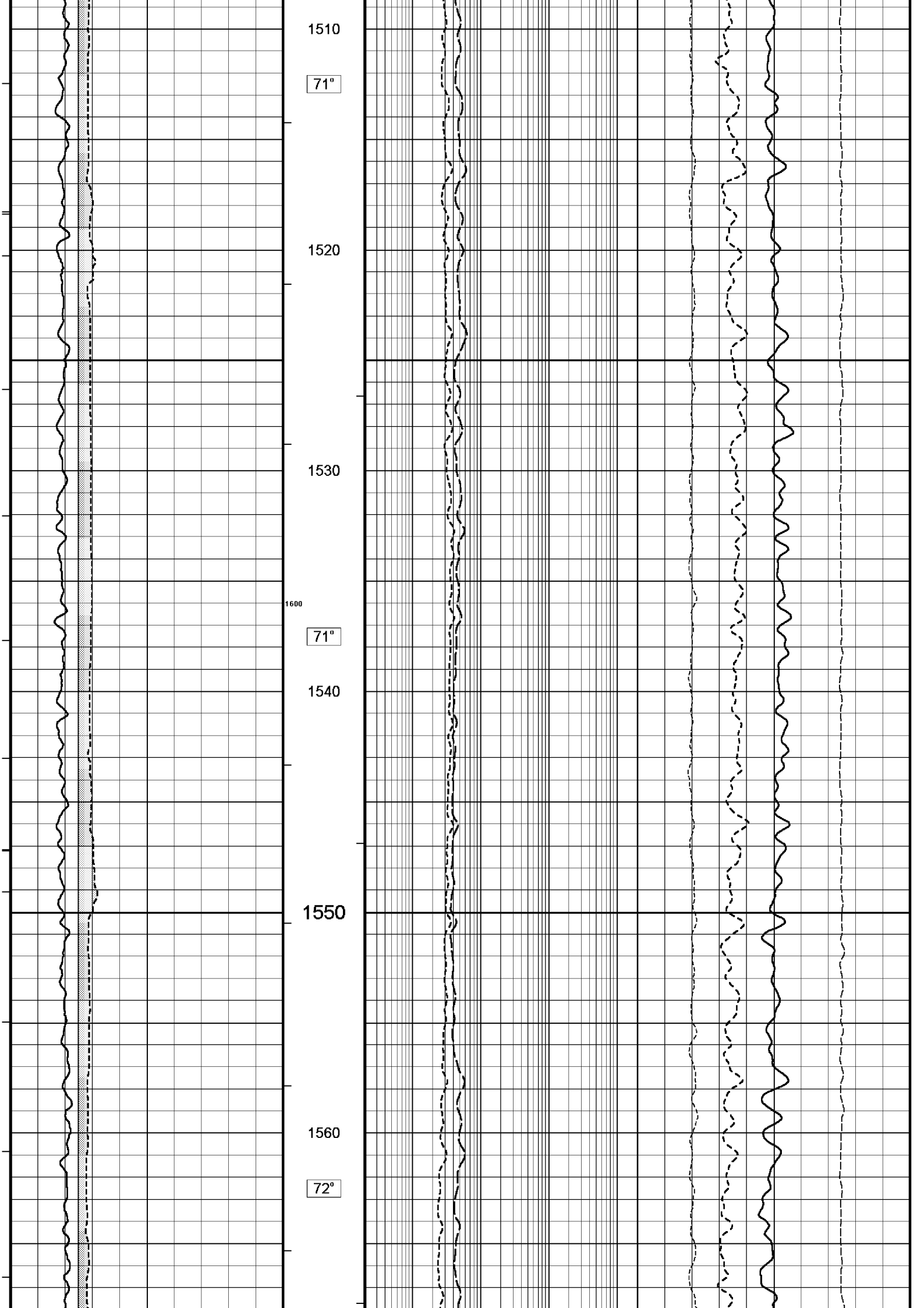

66
1220
1230
66°
1240
2000
1250
1260
67°
1270

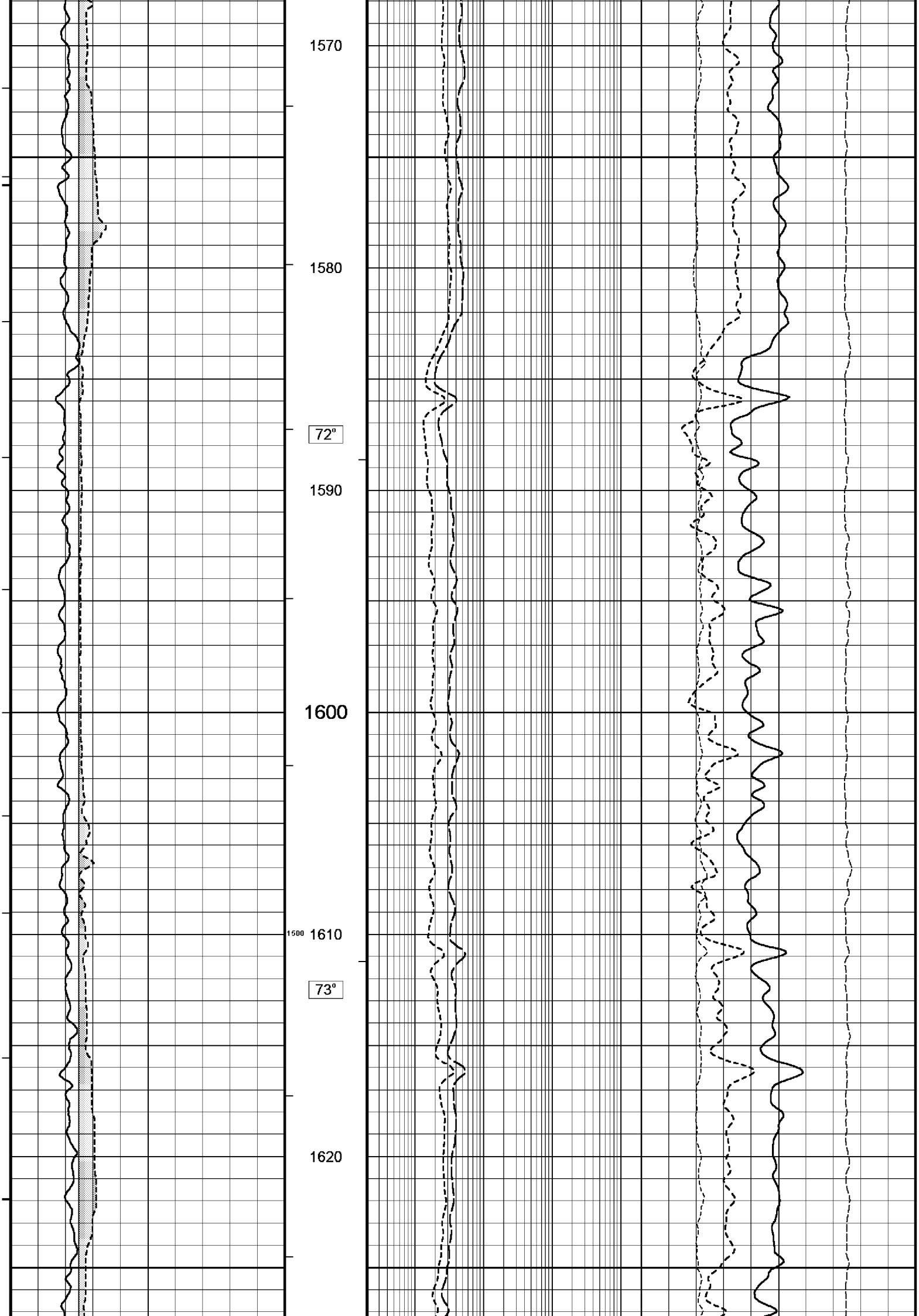

1280
67°
1290
1300
700
1310
68°
1900
1320
1330

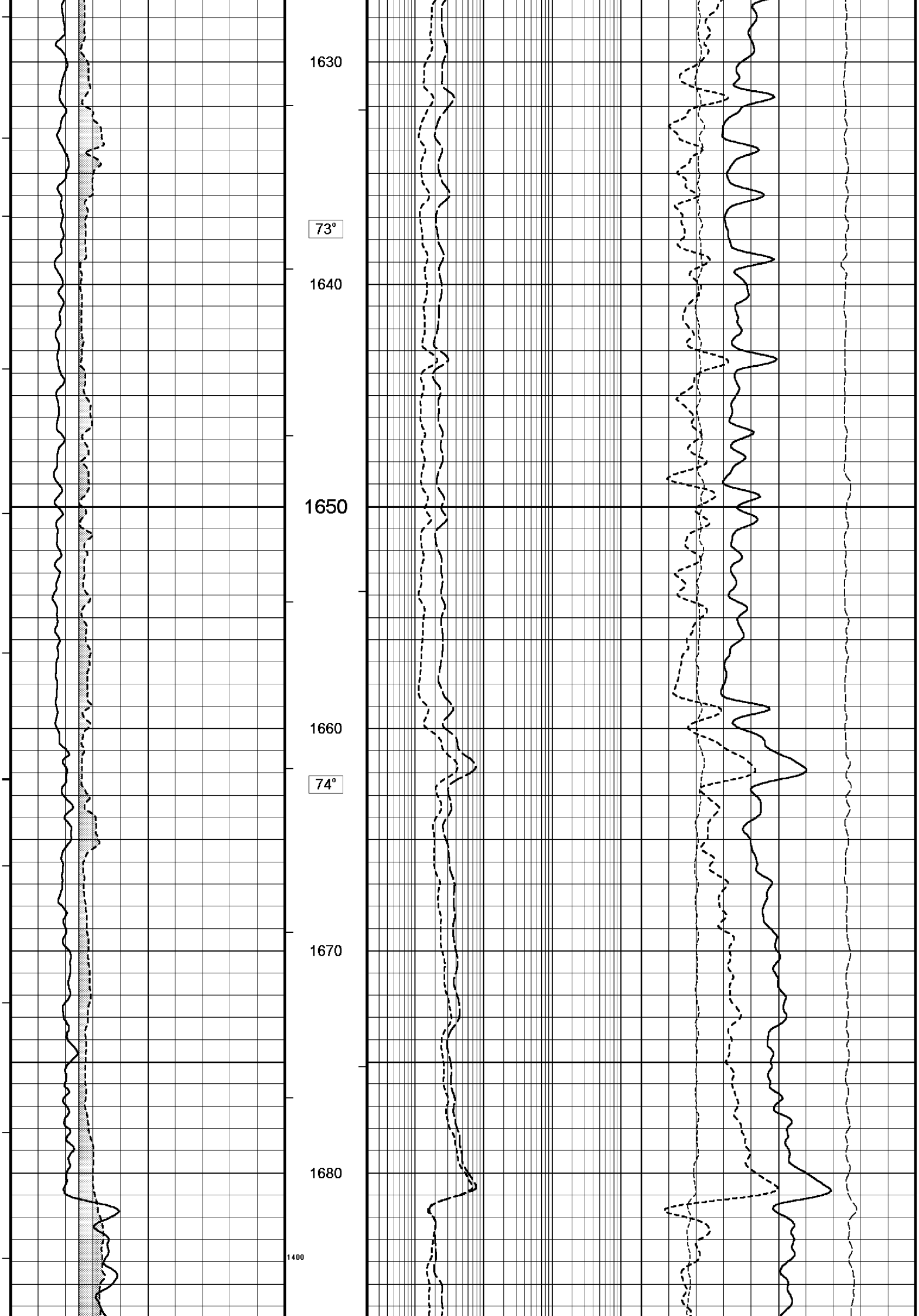

68"
1340
1350
1360
69°
1370
1380
69°
1390

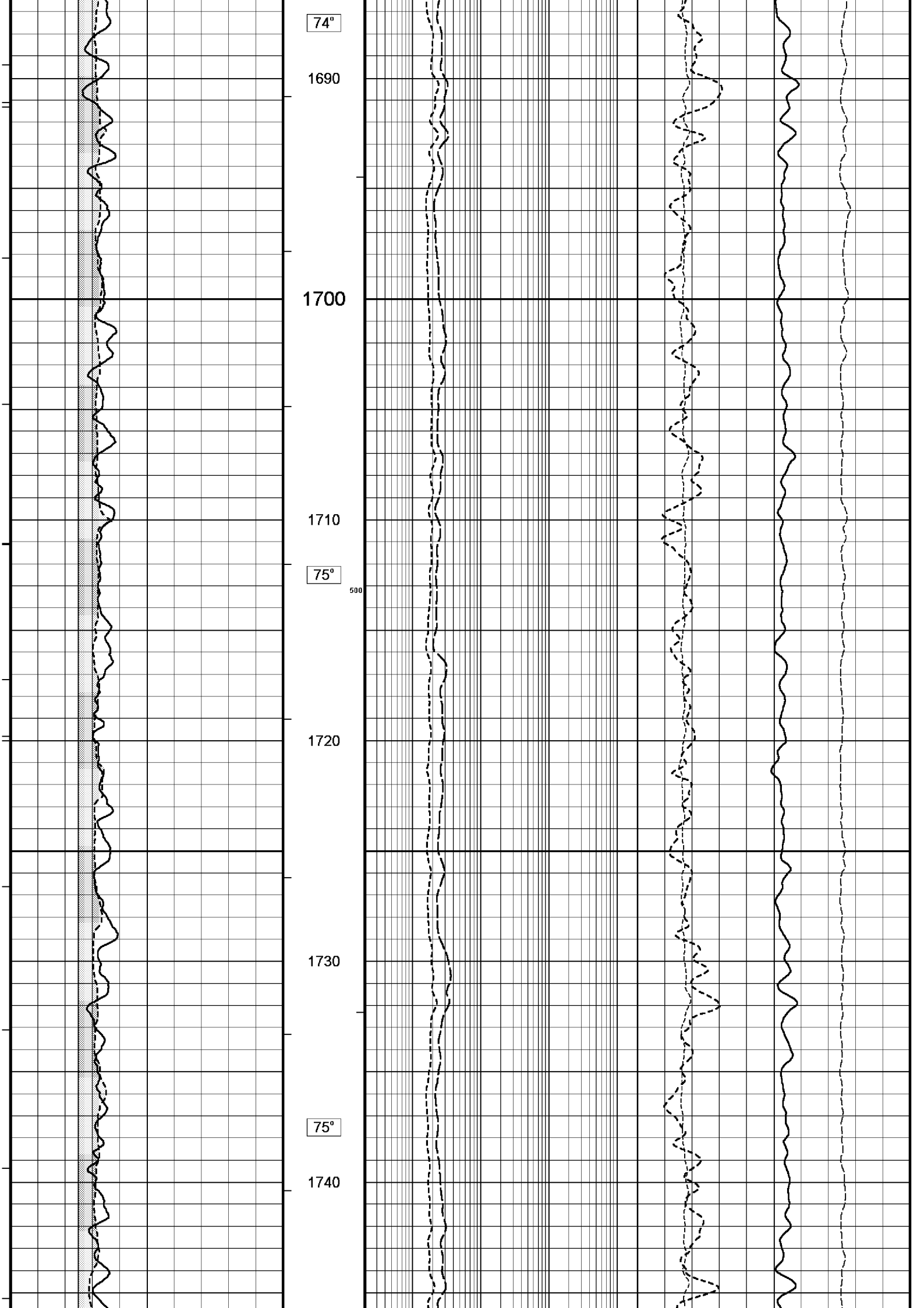

1800
1400
1410
69°
1420
1430
70°
1440

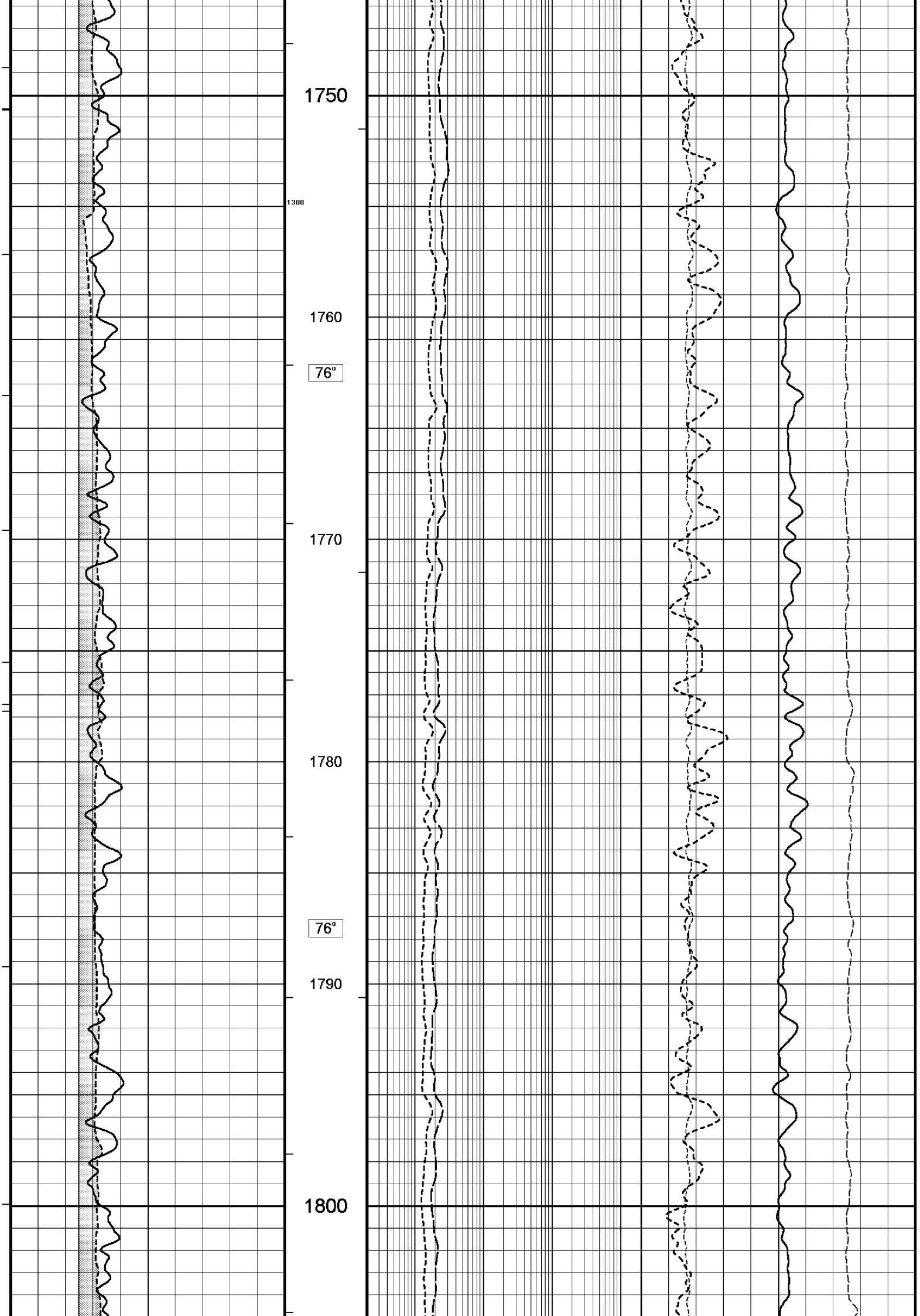

1450
1460
70°
1700
1470
1480
71°
1490
1500
600

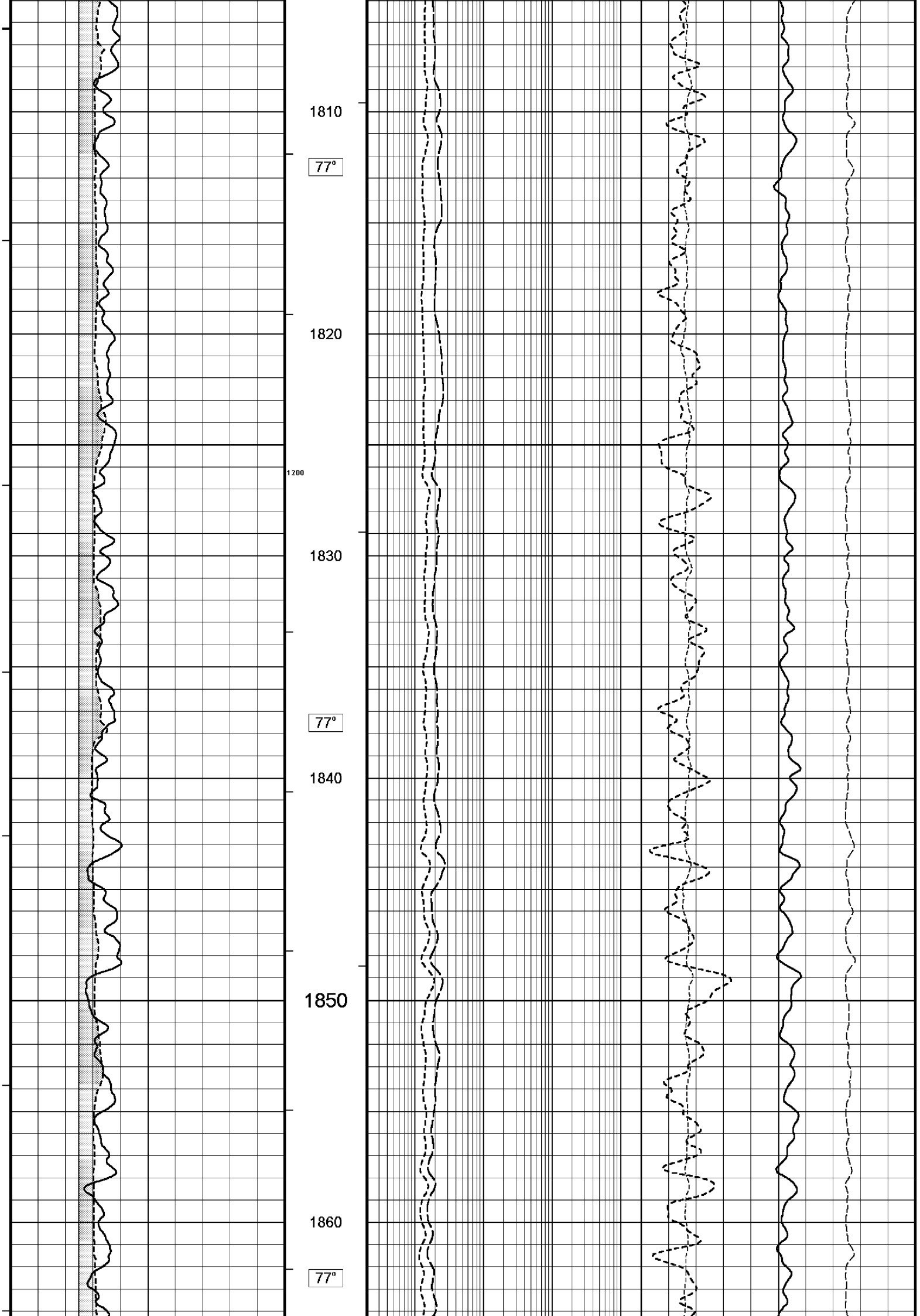

1510
71°
1520
1530
1600
71°
1540
1550
1560
72°

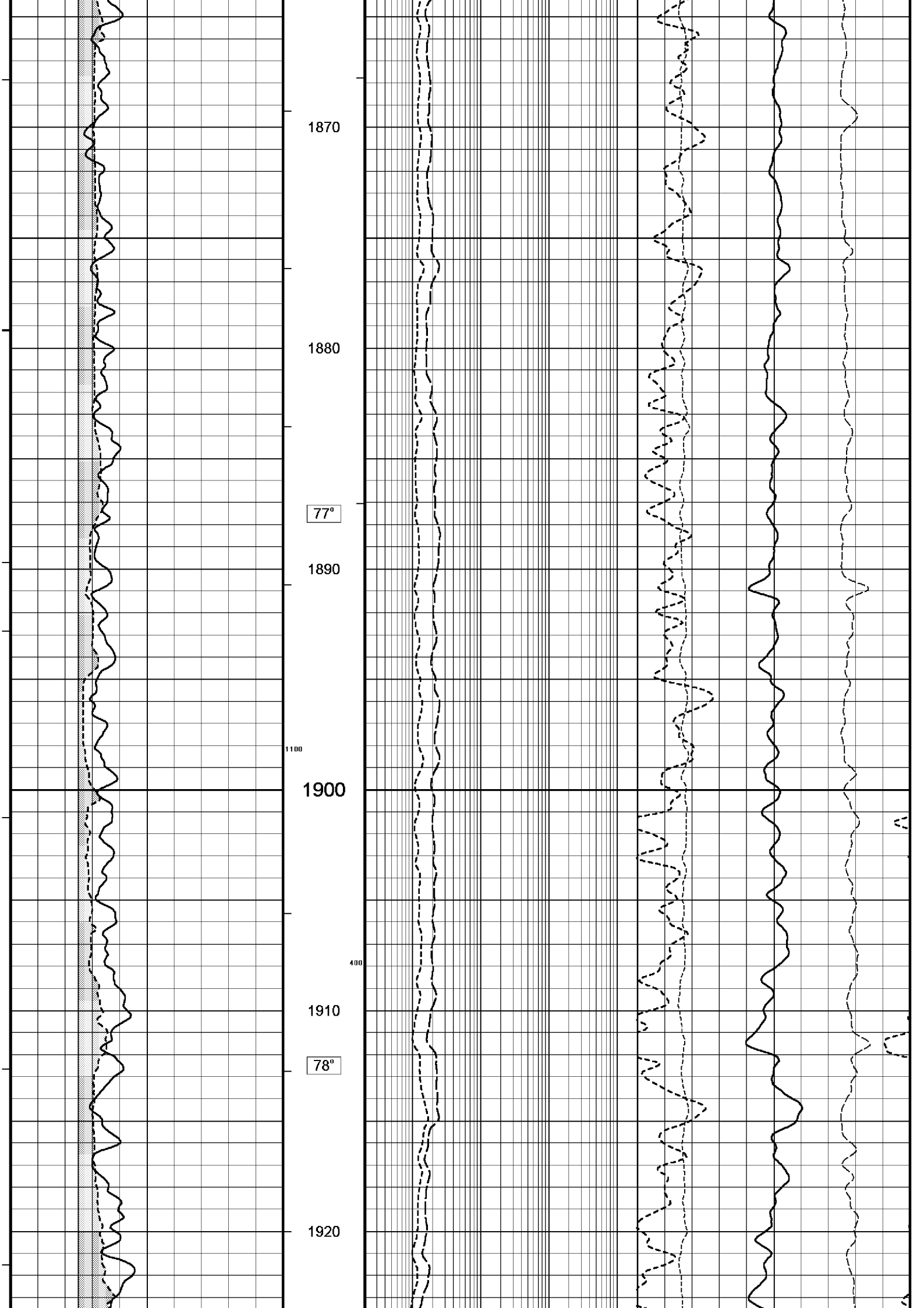

1570
1580
72°
1590
1600
1500
1610
73°
1620

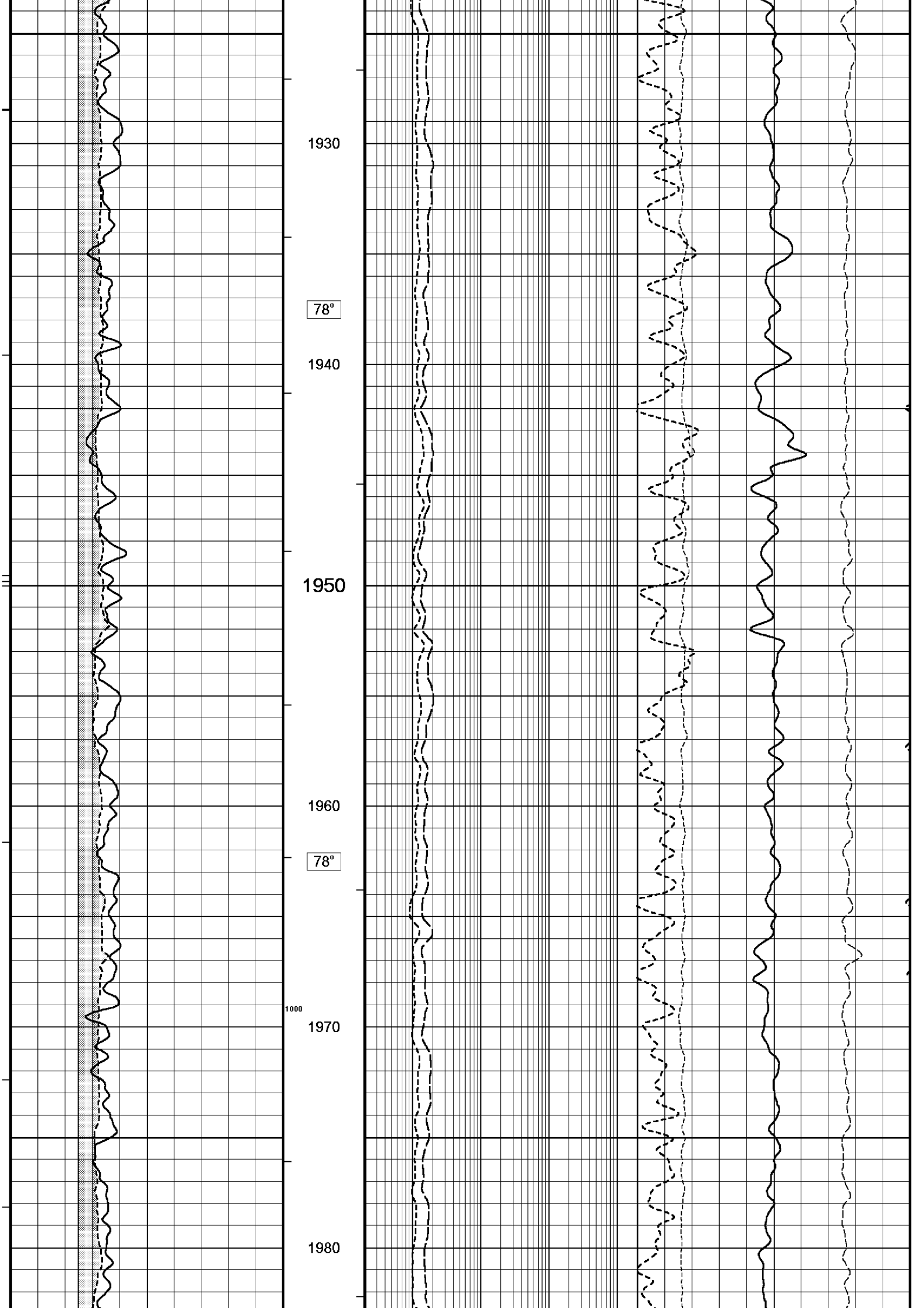

1630
73°
1640
1650
1660
74°
1670
1680
1400

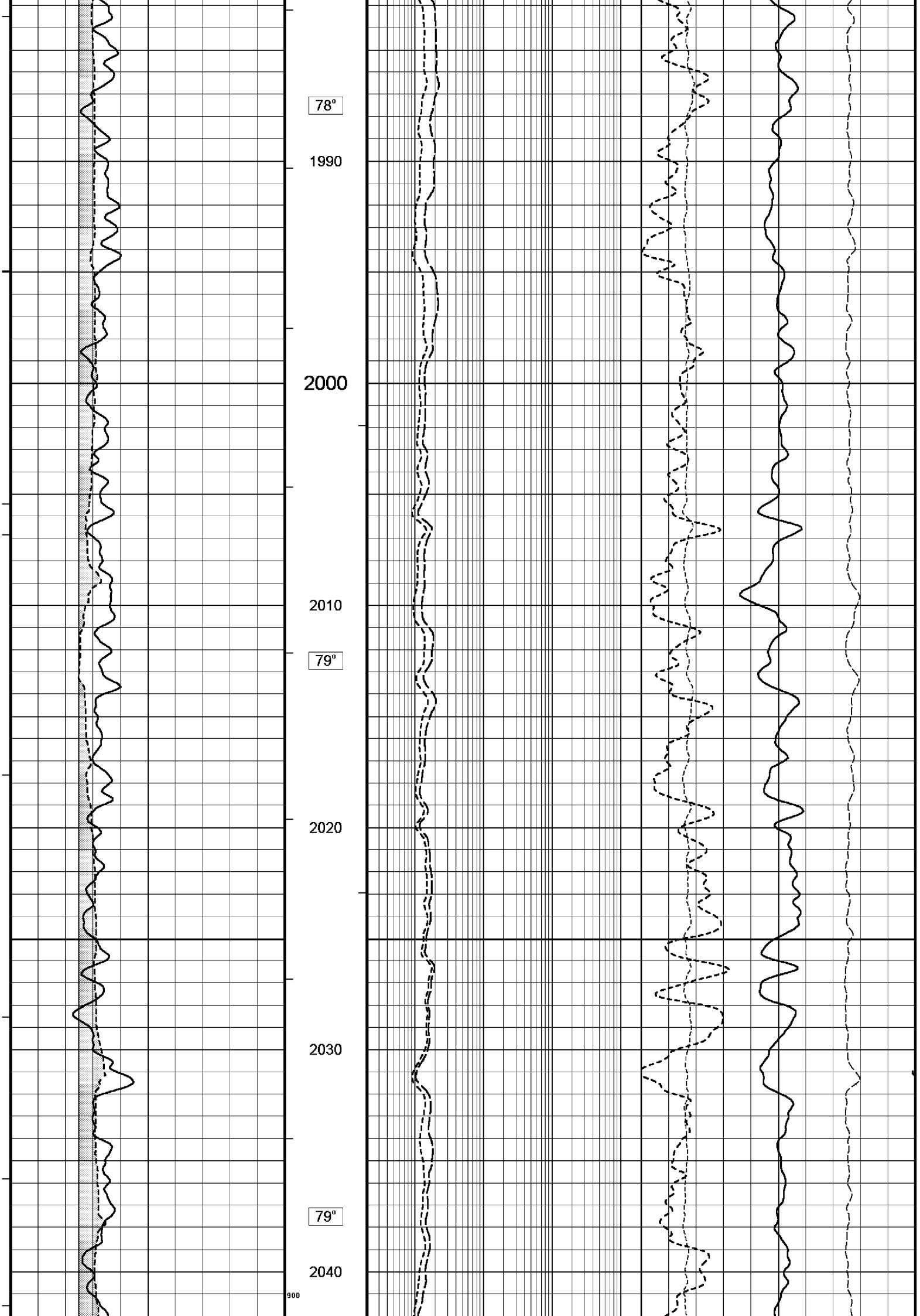

74°
1690
1700
1710
75°
500
1720
1730
75°
1740

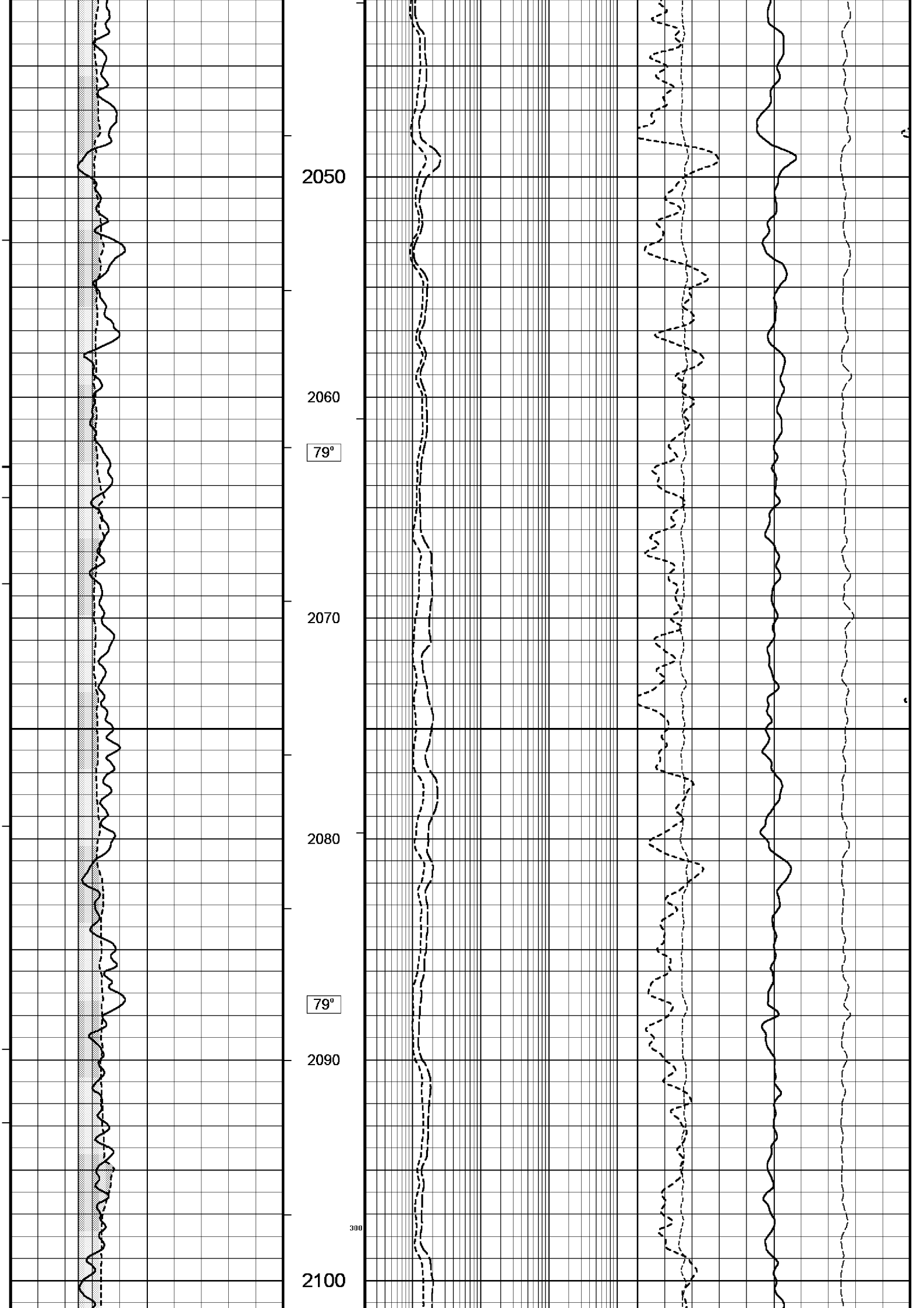

1750
1300
1760
76°
1770
1780
76°
1790
1800

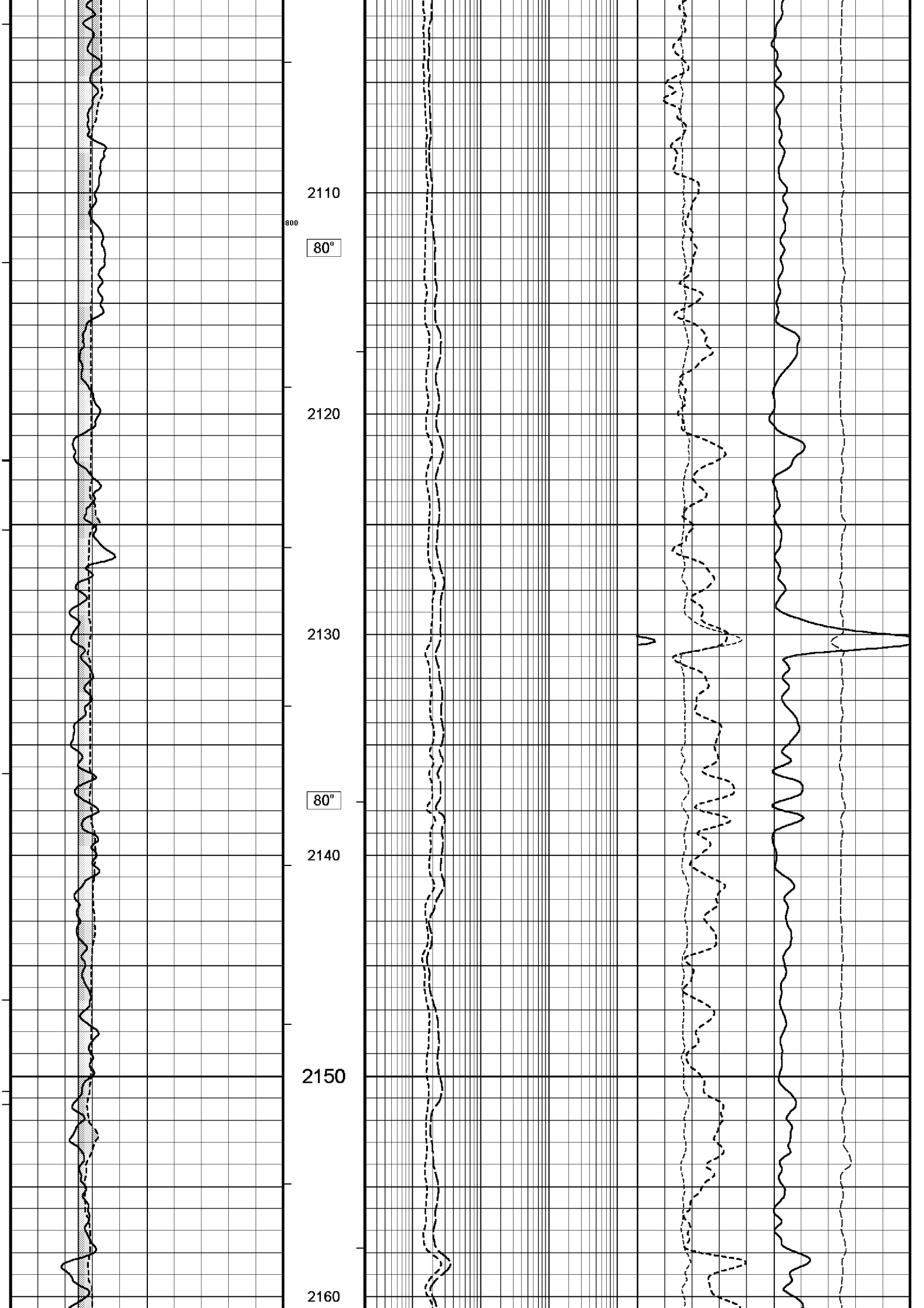

1810
77°
1820
1200
1830
77°
1840
1850
1860
77°

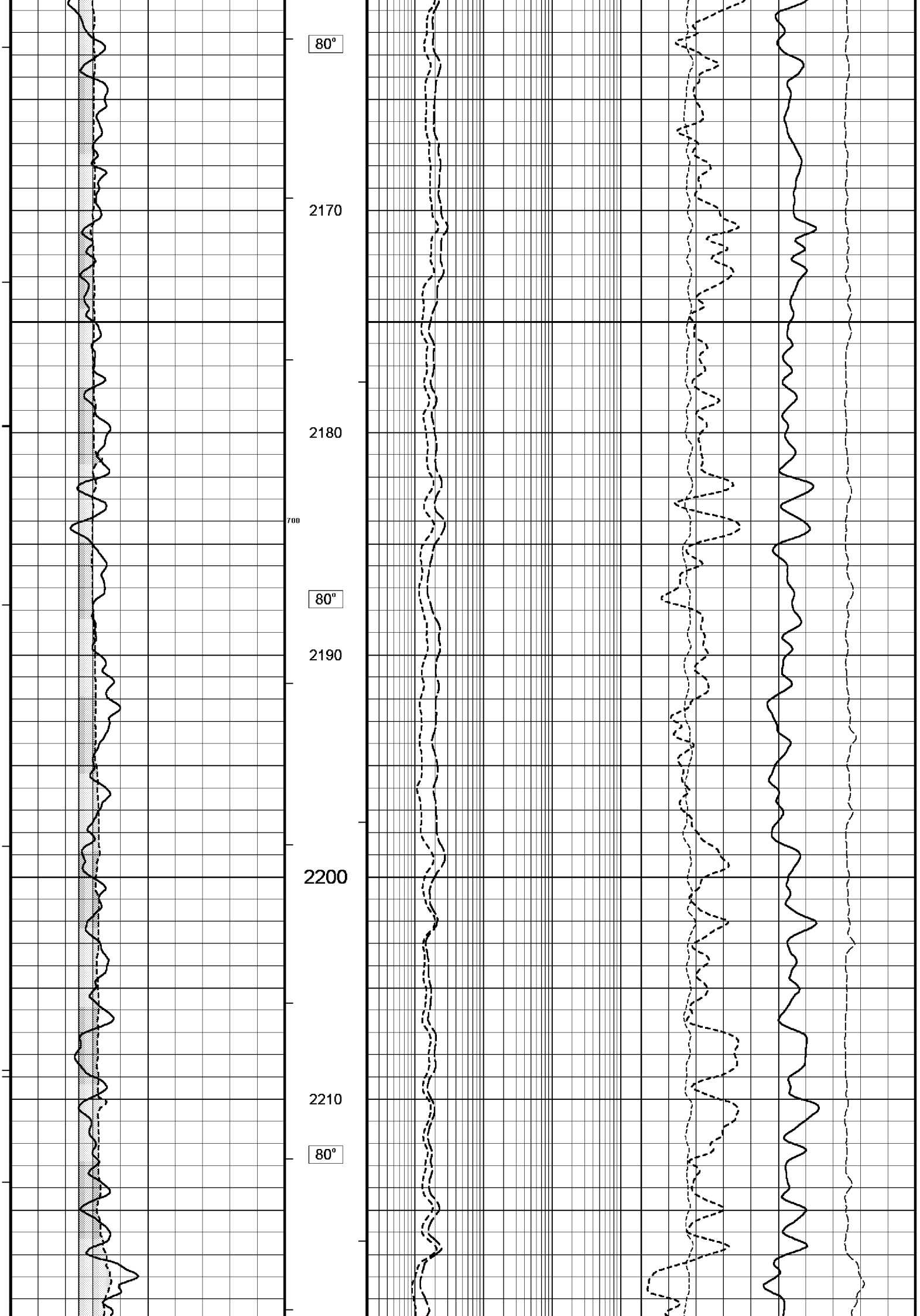

1870
1880
77°
1890
1100
1900
400
1910
78°
1920

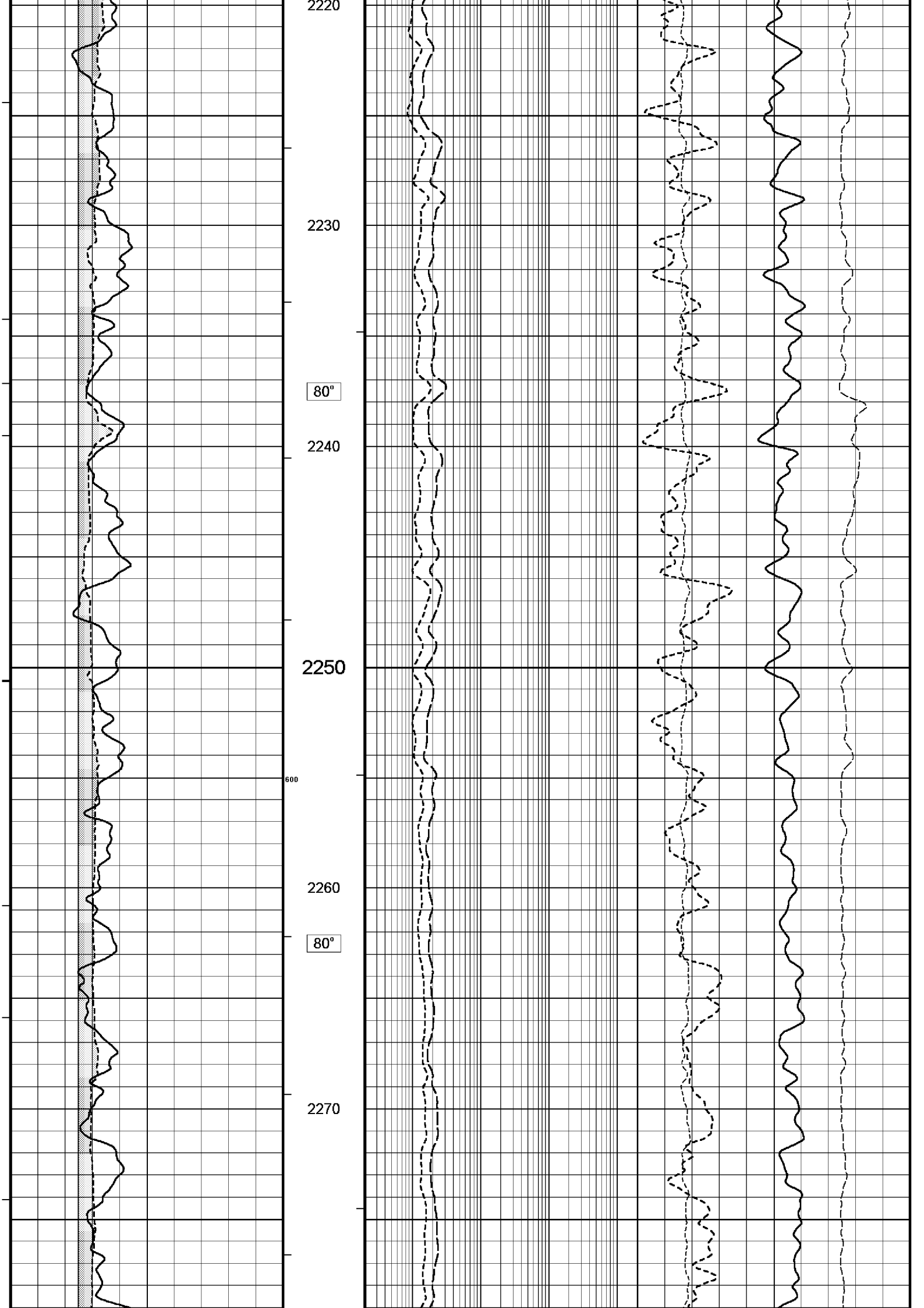

1930
78°
1940
1950
1960
78°
1000
1970
1980

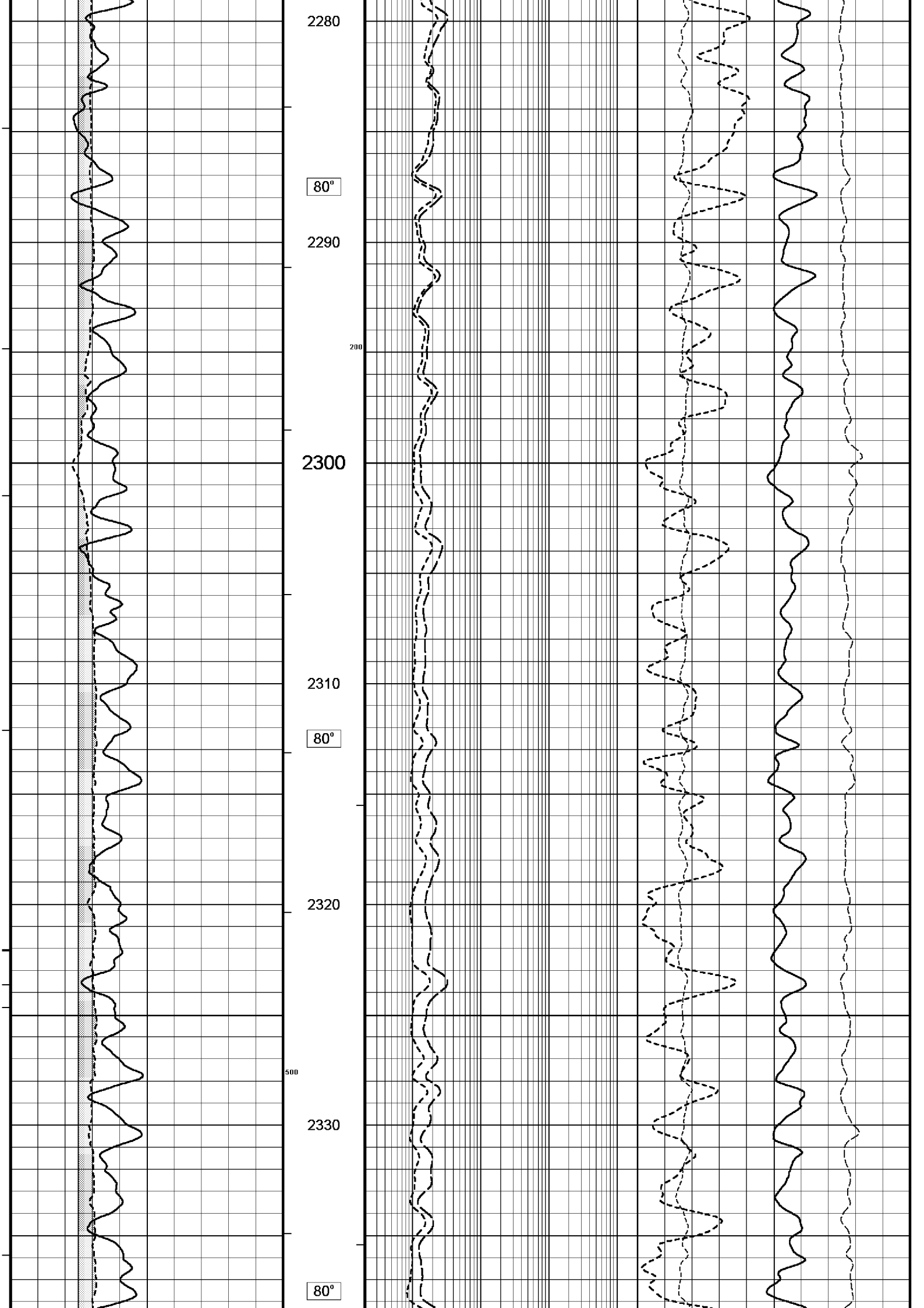

78°
1990
2000
2010
79°
2020
2030
79°
2040
900

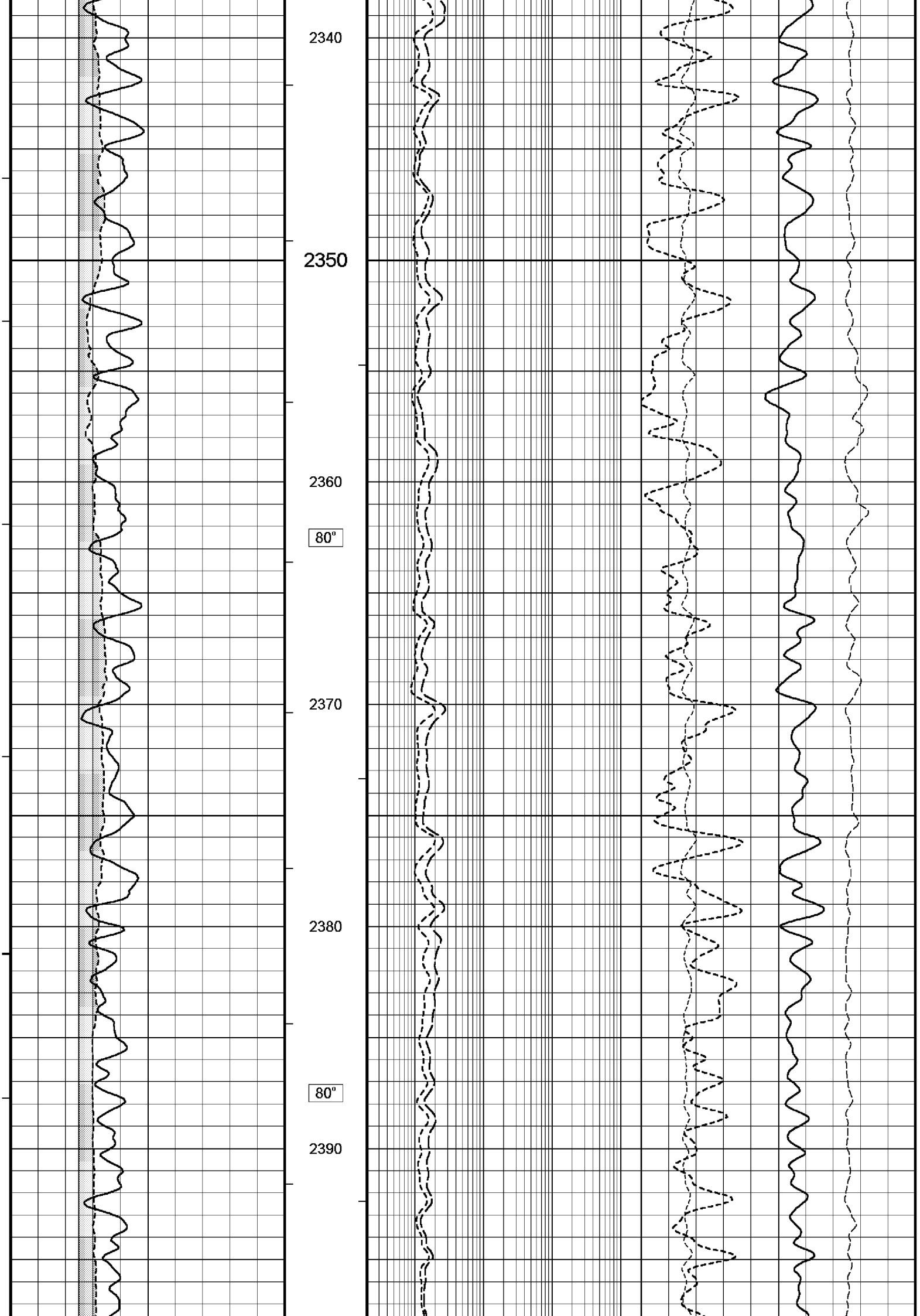

2050
2060
79°
2070
2080
79°
2090
300
2100

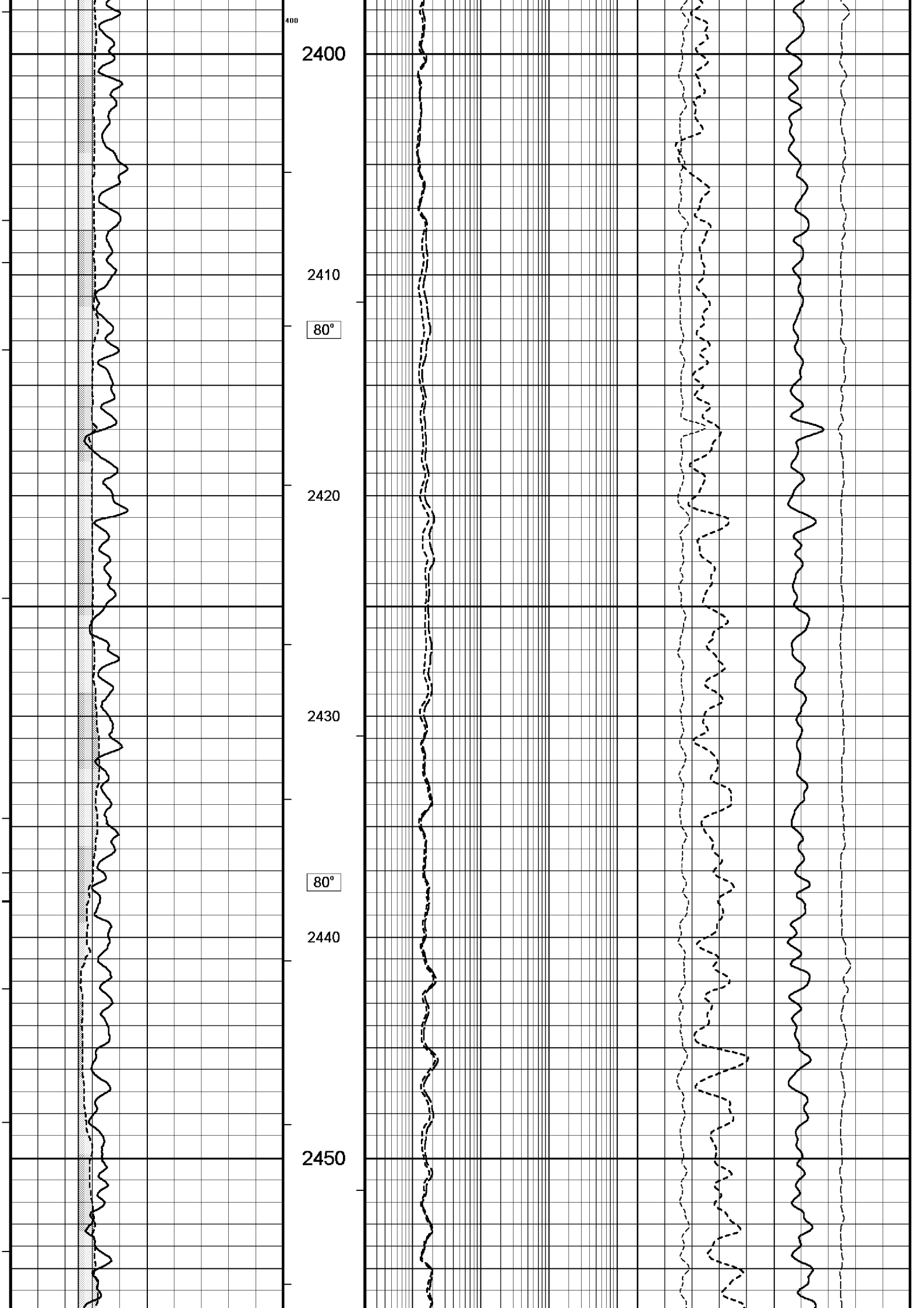

2110
800
80°
2120
2130
80°
2140
2150
2160

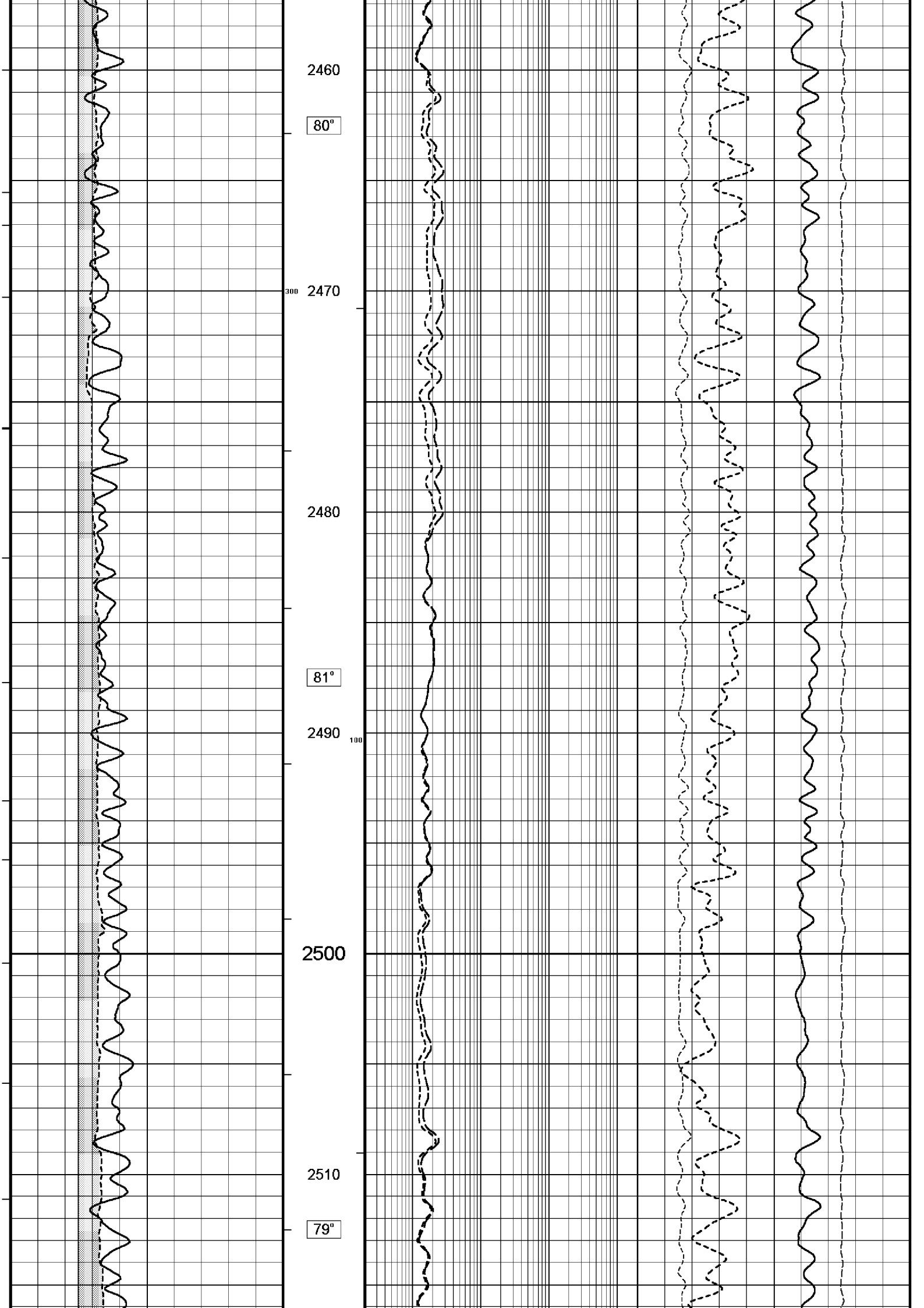

80°
2170
2180
700
80°
2190
2200
2210
80°

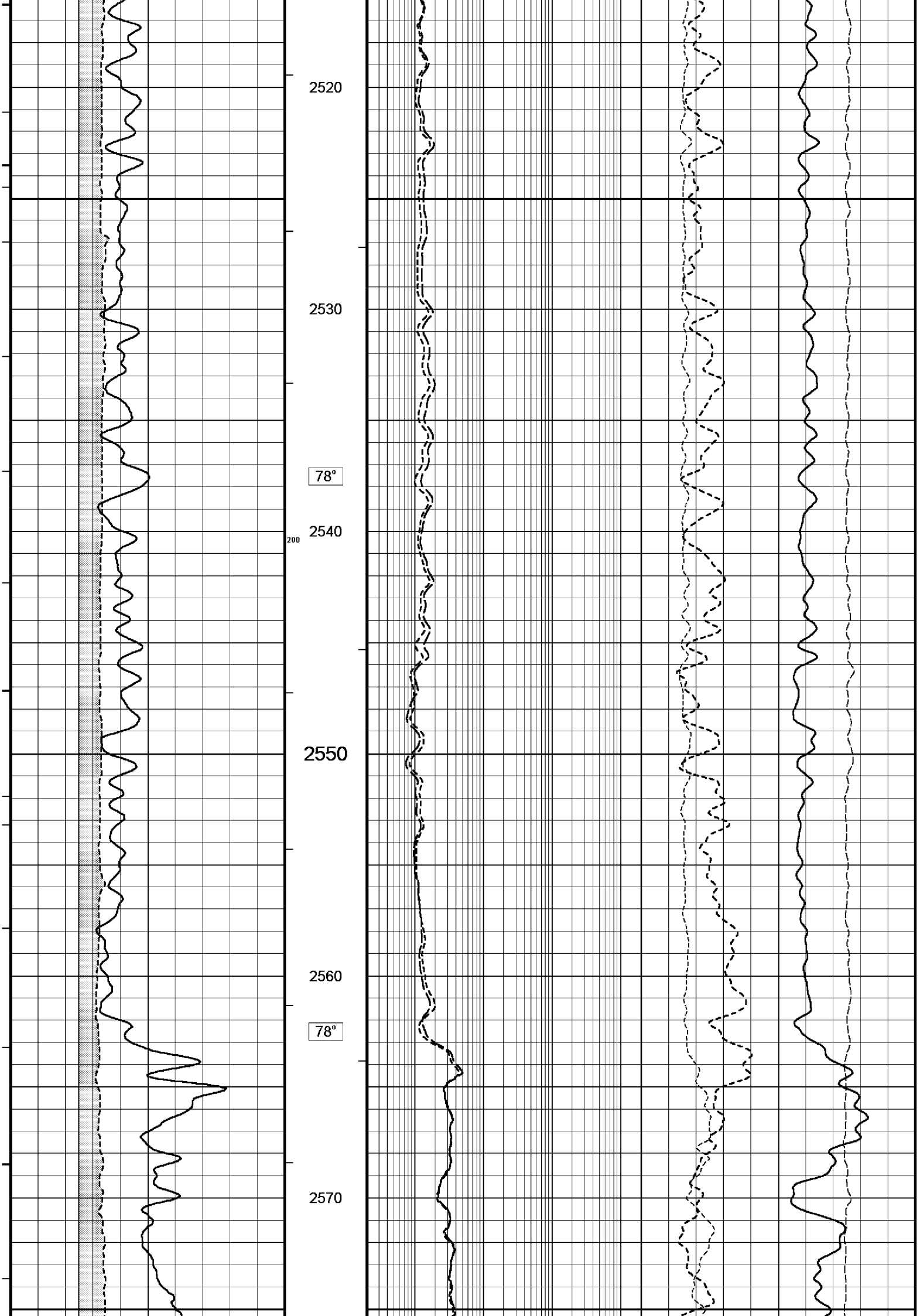

2220
2230
80°
2240
2250
600
2260
80°
2270

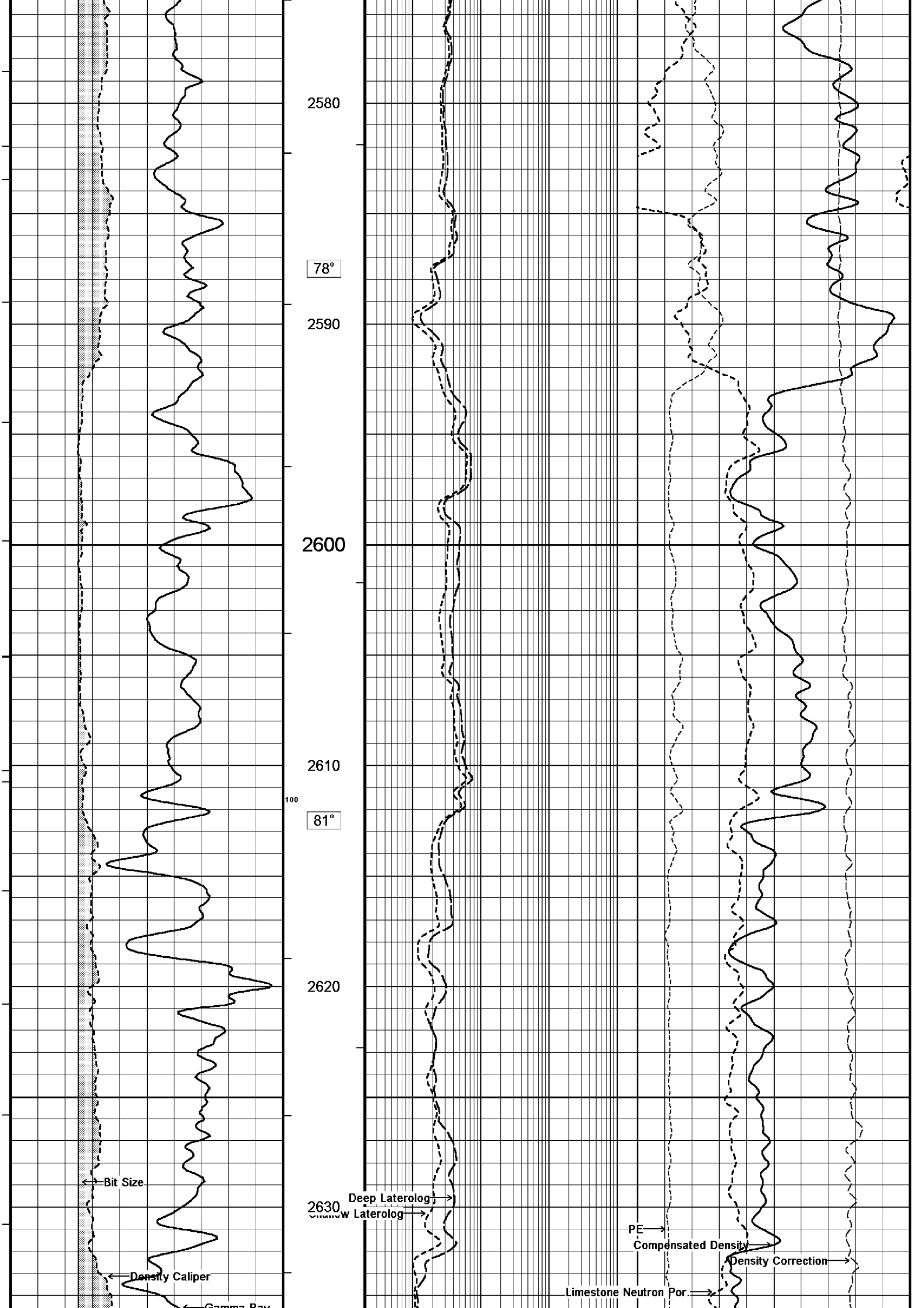

2280
80°
2290
200
2300
2310
80°
2320
500
2330
80°

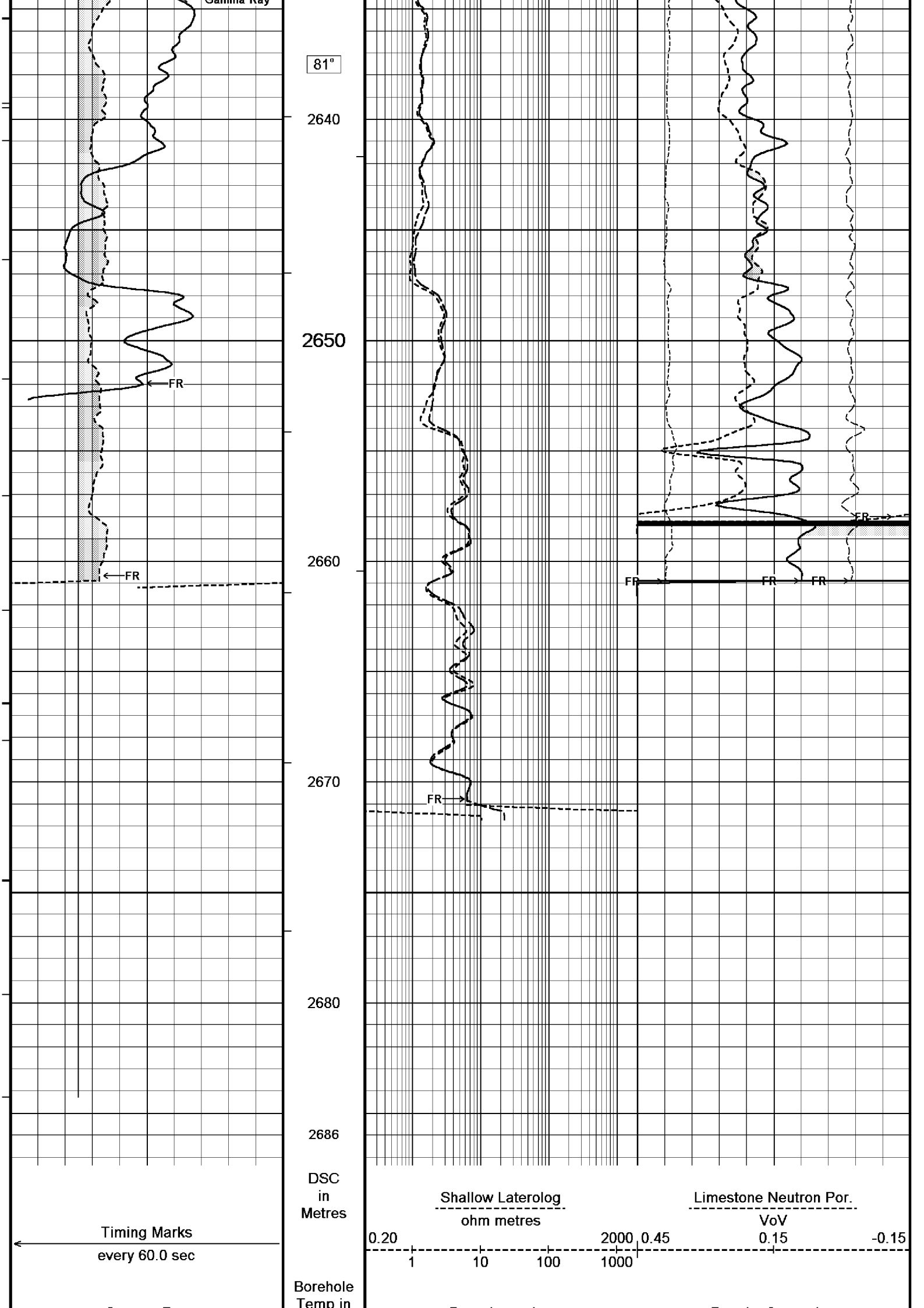

2340
2350
2360
80°
2370
2380
80°
2390

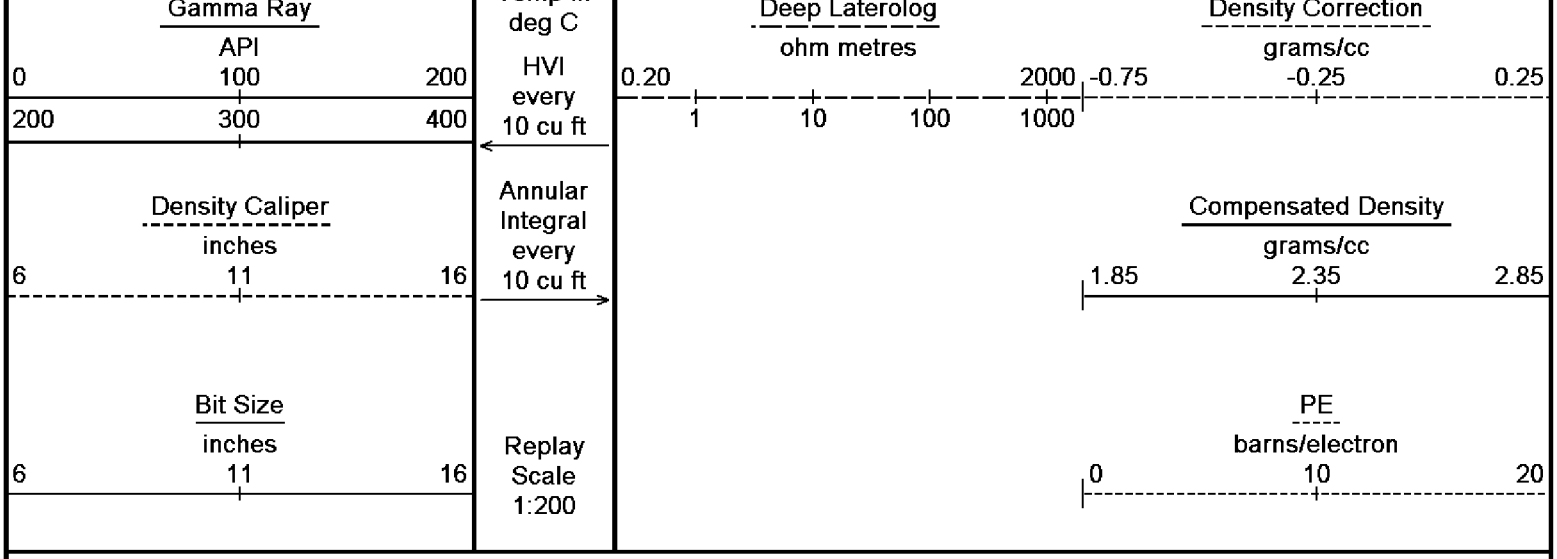

400
2400
2410
80°
2420
2430
80°
2440
2450


2460
80°
300
2470
2480
81°
2490
100
2500
2510
79°


2520
2530
78°
200
2540
2550
2560
78°
2570


2580
78°
2590
2600
2610
100
81°
2620
2630
Bit Size
Density Caliper
Gamma Ray
Deep Laterolog
Shallow Laterolog
PE
Compensated Density
Density Correction
Limestone Neutron Por.


Gamma Ray
81"
2640
2650
2660
2670
2680
2686
FR
FR
FR
FR
FR
FR
FR
DSC
in
Metres
Timing Marks
every 60.0 sec
Shallow Laterolog
ohm metres
0.20
2000
1
10
100
1000
Limestone Neutron Por.
VoV
0.45
0.15
-0.15
Borehole
Temp in



Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 10-JUN-2006 11:36
Filename: C:\logs\WKF_W19A\FIELD DATA\WKF_W19A_MAIN_LOG.dta — Recorded on 10-JUN-2006 04:30
System Configuration Dates: Logged 17-JUN-2004: Processed 17-JUN-2004: Plotted 17-JUN-2004:

MAIN LOG 1:200

BEFORE SURVEY CALIBRATION

C:\logs\WKF_W19A\FIELD DATA\WKF_W19A_MAIN_LOG.dta

General Constants All 000

General Parameters		
Mud Resistivity	0.122	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	Bit Size	
Annular Volume Diameter	7.000	inches
Caliper for Differential Caliper	None	
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 142

Field Calibration on 22-MAY-2006,23:42

	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

Field Calibration on 7-JUN-2006 23:40

	Measured	Calibrated (API)
Background	12	8
Calibrator (Gross)	1393	917
Calibrator (Net)	1381	909

Gamma Constants MCG 142

Gamma Calibrator Number	60	
Mud Density	1.13	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-JUN-2006 14:00
Field Check on 8-JUN-2006 01:26

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
	3121	97	3714	110
Ratio	32.033		33.764	

Field Calibrator at Base

	Calibrated (cps)	
	1457	2120
Ratio	0.687	

Field Check

	Calibrated (cps)	
	1449	2113
Ratio	0.686	

Neutron Constants MDN 085

Neutron Source Id	NSN-E-739	
Neutron Jig Number	NEC-E-052	
Epithermal Neutron	No	
Caliper Source for Processing	Bit Size	
Stand-off	0.00	inches
Mud Density	1.13	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	N/A	degrees C
Mud Salinity	0.00	kppm
Formation Fluid Salinity Source	None	
Formation Fluid Salinity	N/A	kppm
Barite Mud Correction	Not Applied	

Caliper Calibration MPD 083

Base Calibration on 31-MAY-2006 16:59
Field Calibration on 8-JUN-2006 01:20

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	14224	4.01
2	22476	5.99
3	30896	7.98
4	39296	9.94
5	48692	12.01
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
7.92	7.98

Photo Density Calibration MPD 083

Base Calibration on 31-MAY-2006 17:21
Field Check on 8-JUN-2006 01:18

Density Calibration

Base Calibration

	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	55199	18450	53111	19310
Reference 2	25968	2457	24951	2530

Field Check at Base

943.5	1085.5

Field Check

940.2	1083.2

PE Calibration

Base Calibration

	WS	Measured WH	Ratio	Calibrated Ratio
Background	178	808		
Reference 1	17485	55005	0.319	0.320
Reference 2	6890	25822	0.268	0.273

Field Check at Base

178.4	807.6

Field Check

176.2	805.7

Density Constants MPD 083

Density Source Id	NSDL 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	1.13	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

Laterolog Calibration MLE 031

Base Calibration on 31-MAY-2006,16:09
Field Check on 7-JUN-2006,23:41

Base Calibration

	Measured		Calibrated (ohm-m)	
Channel	Resistor 1	Resistor 2	Resistor 1	Resistor 2
Shallow	9.8	976.1	13.2	1321.0
Deep	9.8	976.4	7.5	755.0
Groningen	9.8	976.6	8.5	854.0

Channel	Base Check (ohm-m)	Field Check (ohm-m)
Shallow	48.6	48.6
Deep	27.8	27.8
Groningen	251.6	251.6

Laterolog Constants MLE 031

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	None	

DOWNHOLE EQUIPMENT

C:\logs\WKF_W19A\FIELD DATA\WKF_W19A_MAIN_LOG.dta

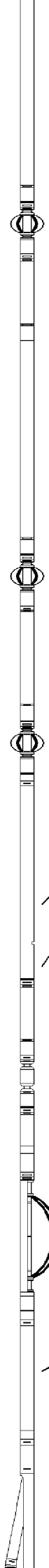
Compact Swivel Head Adaptor F
SHA 71 Length: 0.83 m Weight: 26.5 lb

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

32.22 m GGCE - Borehole Corrected Gamma
31.33 m CGXT - MCG External Temperature

Compact Memory Sub A.C
MMS 38 Length: 0.95 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

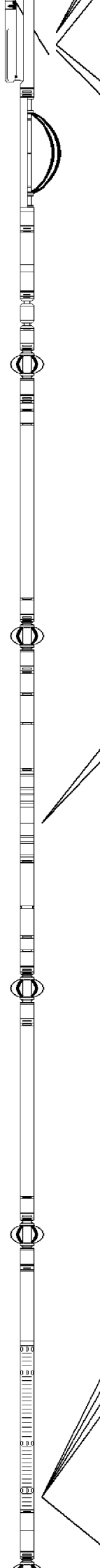
Compact Inline Bowspring A
MIS 94 Length: 1.74 m Weight: 33.1 lb

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

26.17 m NPRL - Limestone Neutron Por.

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

23.48 m AVOL - Annular Volume
23.48 m HVOL - Hole Volume
23.48 m CLDC - Density Caliper
23.27 m DEN - Compensated Density



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

23.27 m DCOR - Density Correction
23.25 m PDPE - PE

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

13.35 m DDLL - Deep Laterolog
13.35 m DSLL - Shallow Laterolog

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

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

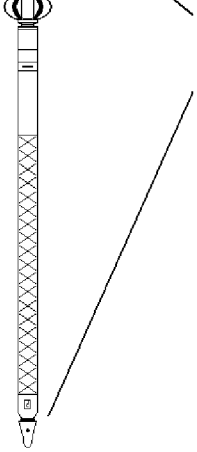
Compact Inline Standoff B

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: 54.01 m Weight: 1201.5 lb



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	WKF W19A
FIELD	KINGFISH GDA94
PROVINCE/COUNTY	BASS STRAIT, VICTORIA
COUNTRY/STATE	AUSTRALIA

Elevation Kelly Bushing		metres	First Reading	2670.65	metres
Elevation Drill Floor	33.43	metres	Depth Driller	2687.00	metres
Elevation Ground Level	-76.13	metres	Depth Logger	2684.00	metres

PRECISION Compact

DUAL LATEROLOG - GR
DENSITY - NEUTRON
1:200 MD