PRECISION

Compact

DUAL LATEROLOG - GR
DENSITY - NEUTRON
1:200 TVD

COMPANY	ESSO AUSTRALIA PTY.LTD
WELL	WKF W20A
FIELD	KINGFISH GDA94
PROVINCE/COUNTY	BASS STRAIT, VICTORIA
COUNTRY/STATE	AUSTRALIA
LOCATION	S 38 35 34.835, E 148 6 19.406
	N 5727806.701 m, E 596264.969 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	24-MAY-2006		
Run Number	ONE		
Depth Driller	2320.75 metres		
Depth Logger	2320.00 metres		
First Reading	2318.40 metres		
Last Reading	629.70 metres		
Casing Driller	629.70 metres		
Casing Logger	629.70 metres		
Bit Size	8.50 inches		
Hole Fluid Type	KCL/PHPA		
Density / Viscosity	1.17 g/c3	28.00 CP	
PH / Fluid Loss	9.00	2.90 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	0.108 @ 25.0 ohm-m		
Rmf @ Measured Temp	0.087 @ 25.0 ohm-m		
Rmc @ Measured Temp	0.152 @ 25.0 ohm-m		
Source Rmf / Rmc	MEAS	MEAS	
Rm @ BHT	0.047 @ 87.0 ohm-m		
Time Since Circulation	25 HOURS		
Max Recorded Temp	91.00 deg C		
Equipment Name	CML		
Equipment / Base	1	SALE	
Recorded By	R L TENCH, B J R MOSS		
Witnessed By	T LOBO		
LAST CIRC	04:30 23/05		Last Line

BOREHOLE RECORD

Bit Size inches	Depth From metres	Depth To metres
8.500	675.00	2946.00

CASING RECORD

Type	Size inches	Depth From metres	Shoe Depth metres	Weight pounds/ft
K-55	10.750	0.00	675.00	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: 91.2 DEG C AT 2906.3 m MD
MAX. INCLINATION: 75.9 DEG AT 2946 m MD
MAX. DOGLEG SERVERITY: 9.0 DEG/30m AT 706.79 m MD
DEPLOYMENT ANGLE: 75.90 DEG

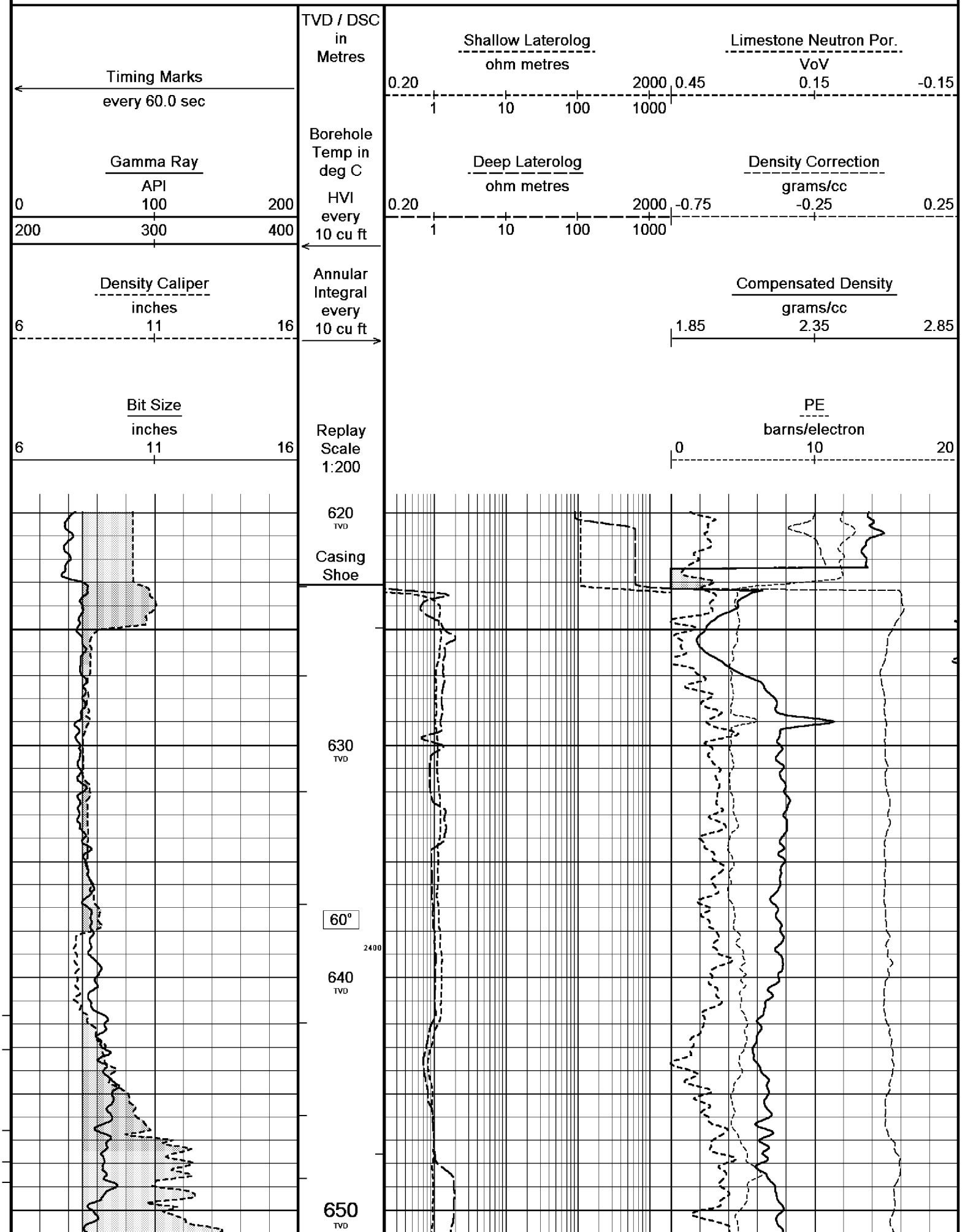
HVOL: 4390 FT^3
AVOL: 2415 FT^3

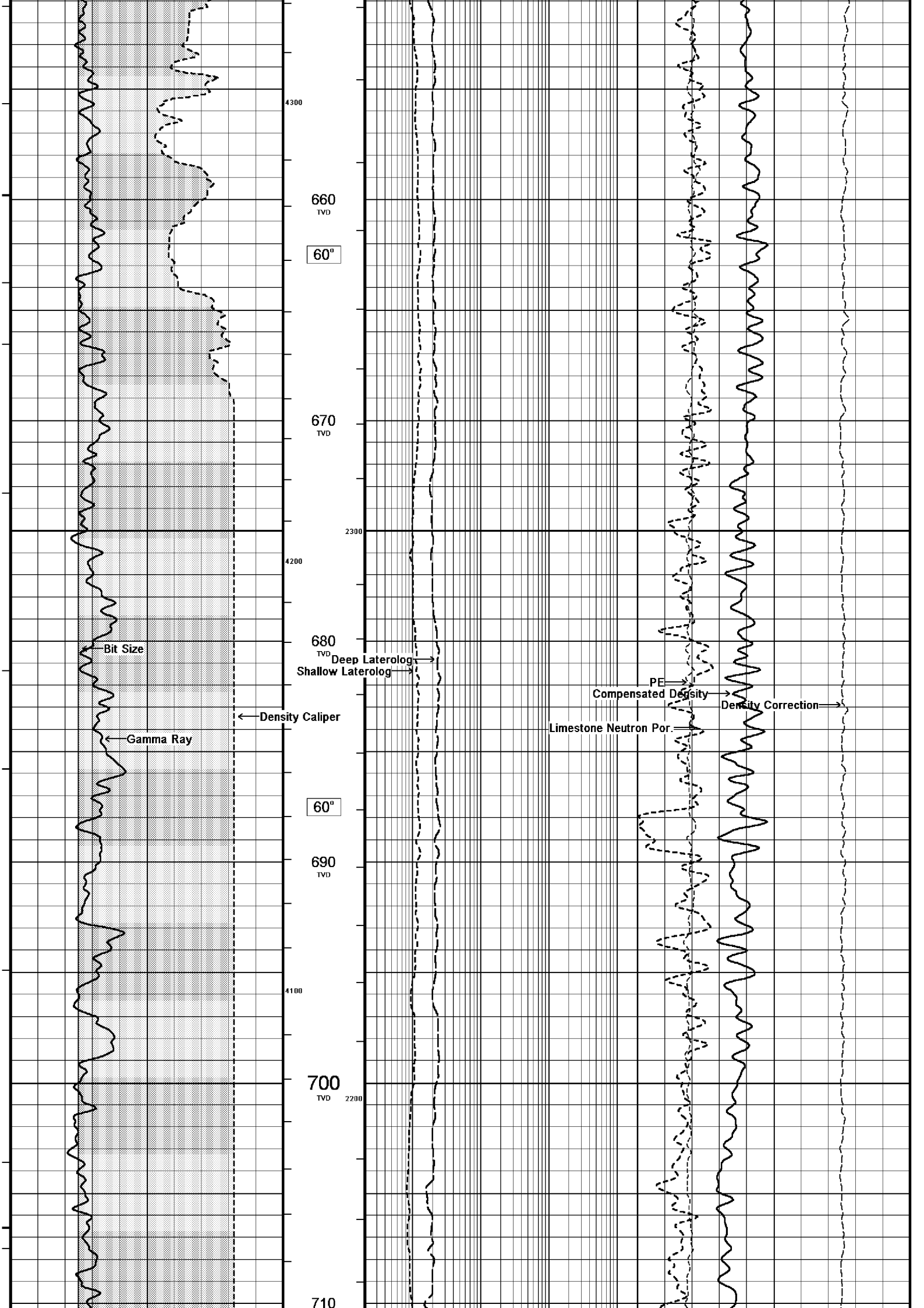
LOGGING SPEED 6M/MIN FROM TD TO 2478.78 M MD
LOGGING SPEED 12 M/MIN FROM 2478.78 TO 696.26 M MD
LOGGING SPEED 6 M/MIN FROM 696.26 TO 638.71 M MD

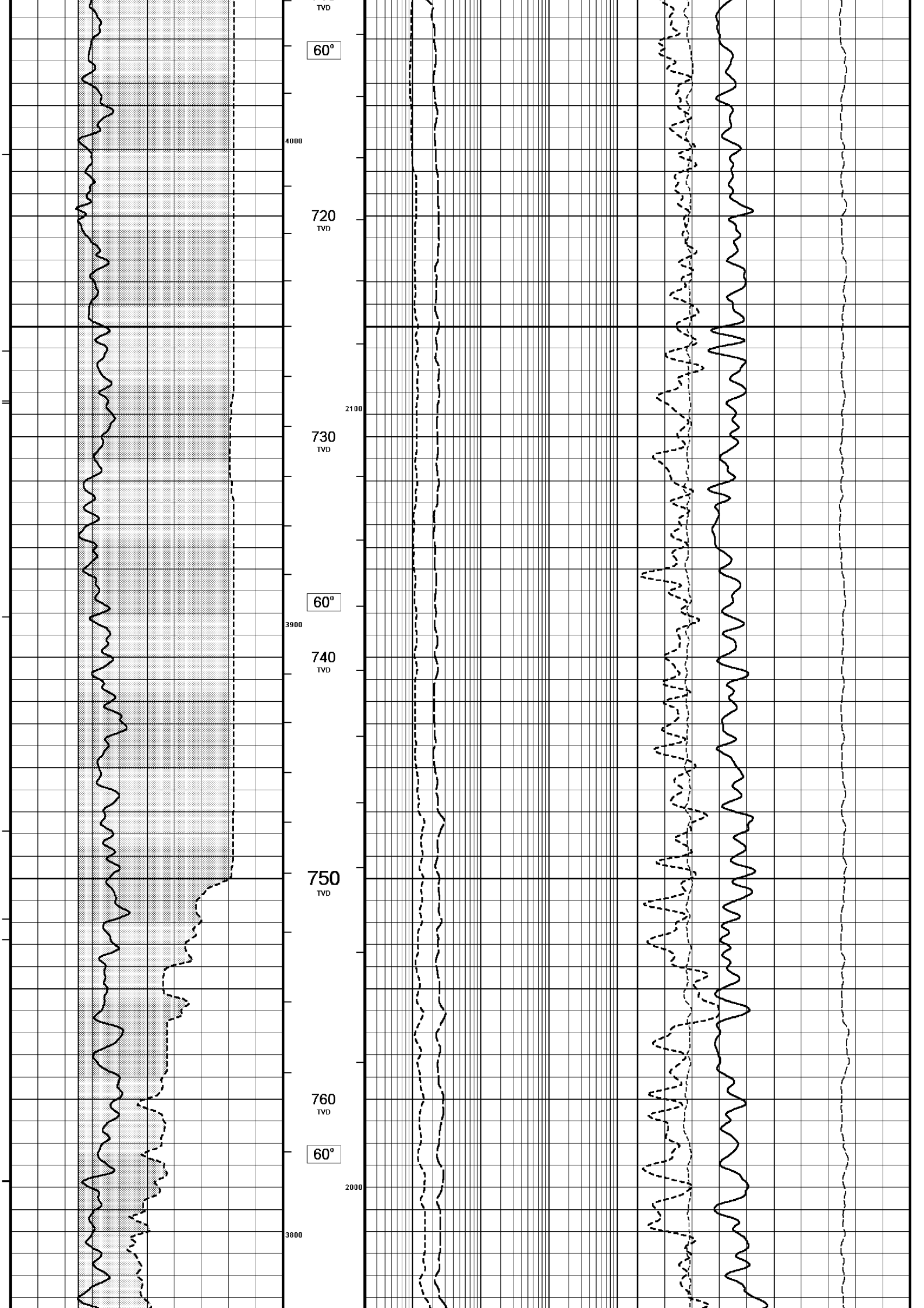
any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions in our price schedule.

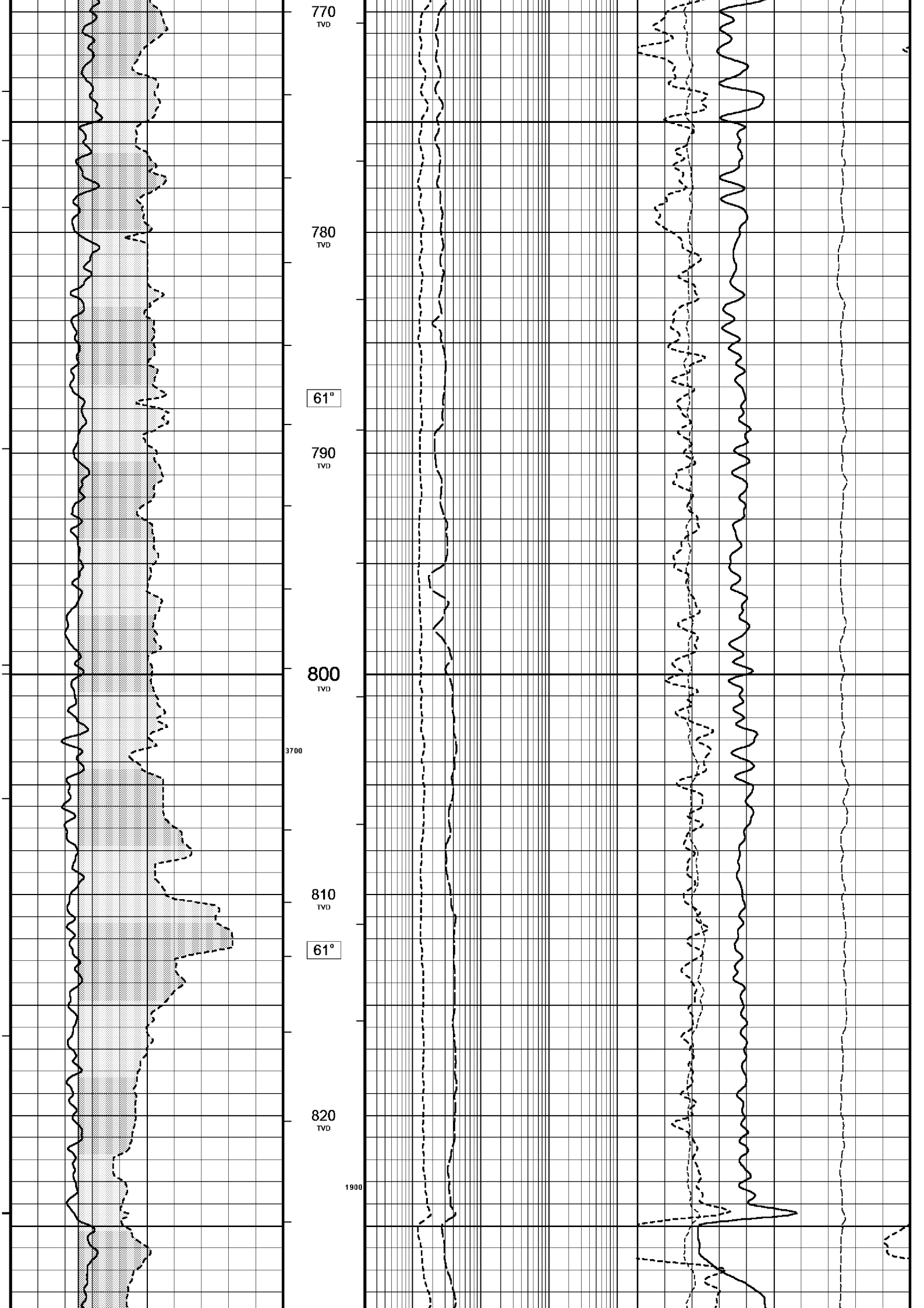
MAIN LOG 1:200

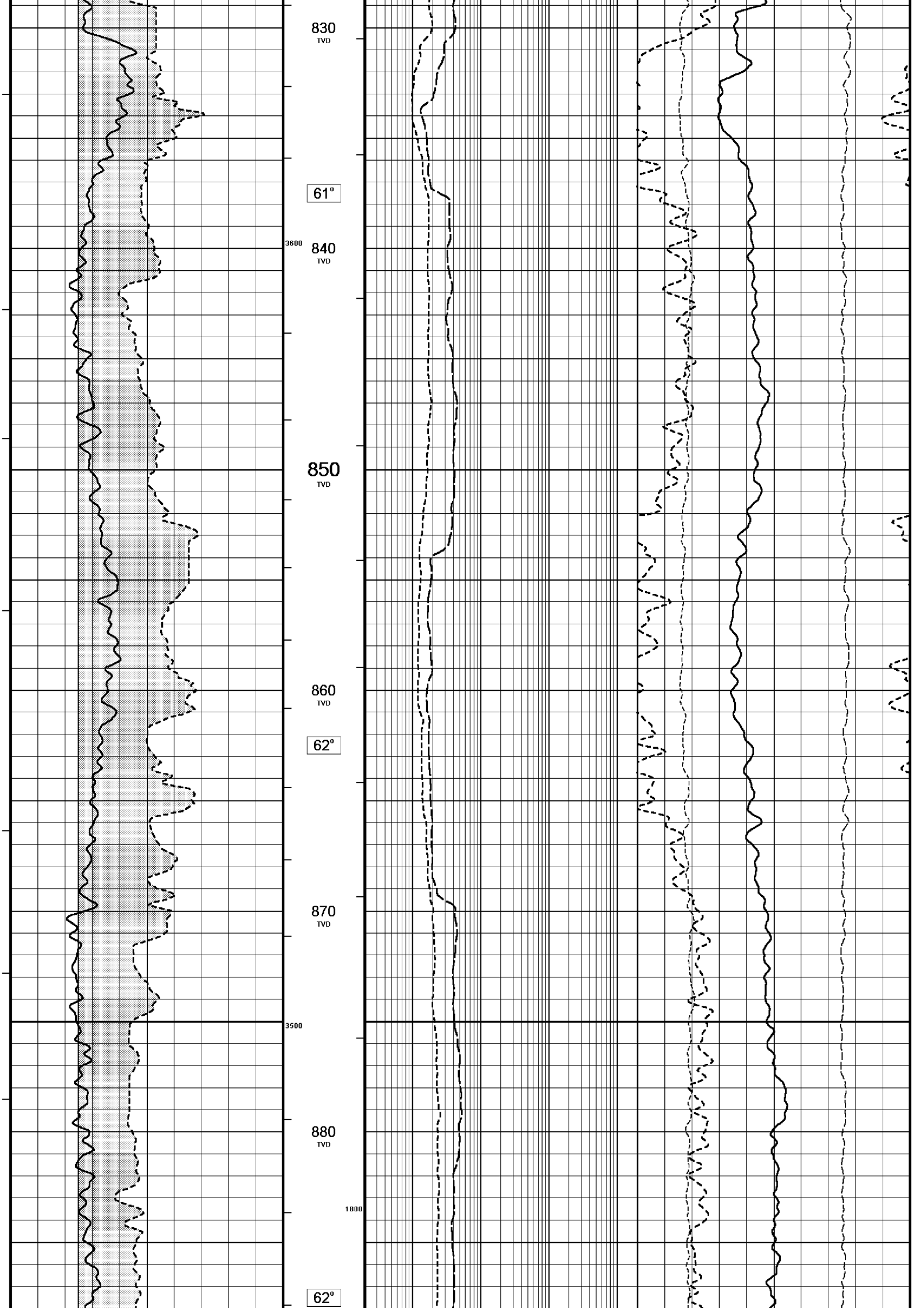
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 25-MAY-2006 01:30
Filename: C:\logs\WKF_W20A\FIELD_DATA\WKF_W20A_MAIN_LOG.dta
Recorded on 24-MAY-2006 17:21
System Configuration Dates: Logged 17-JUN-2004: Processed 17-JUN-2004: Plotted 17-JUN-2004:

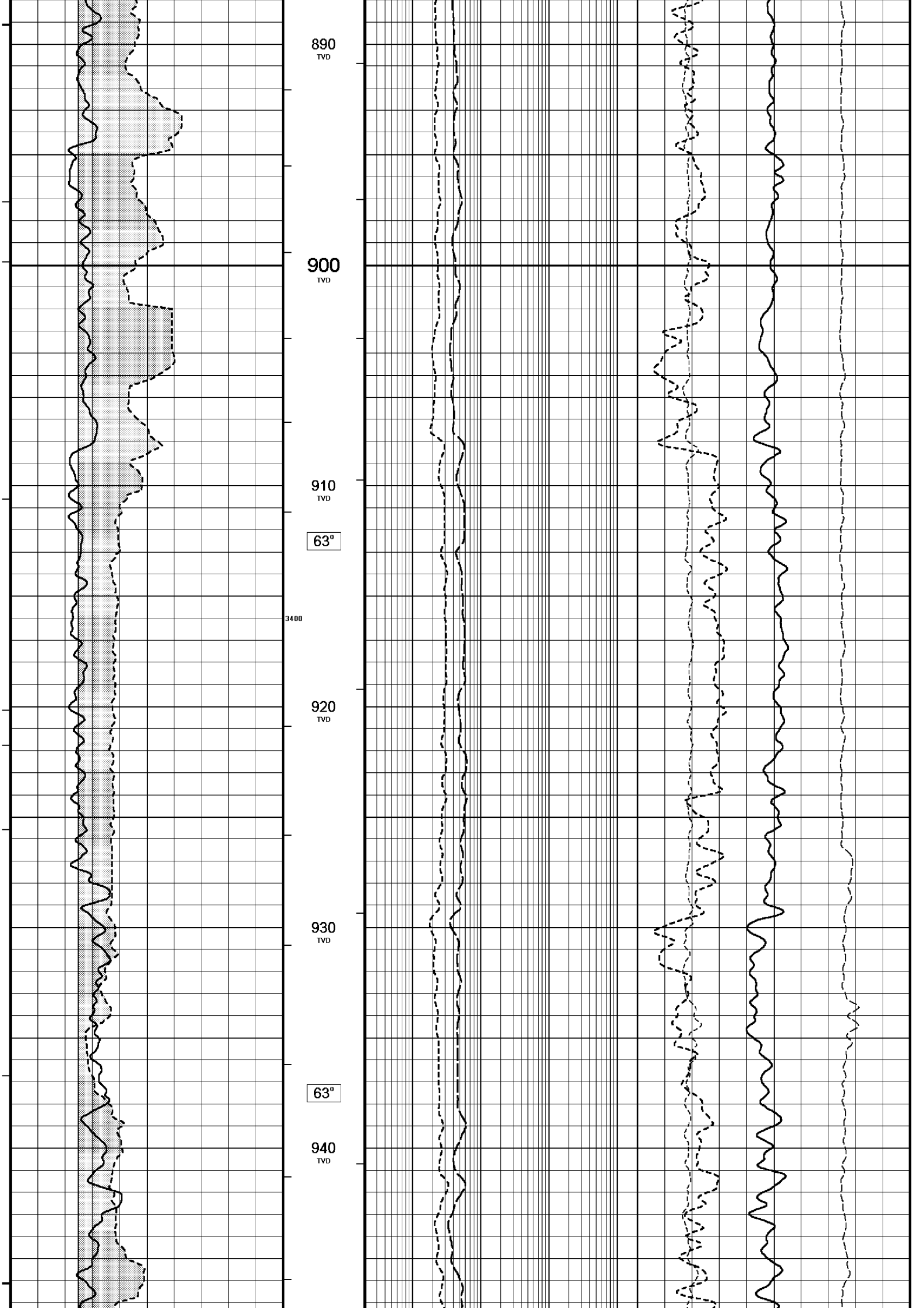


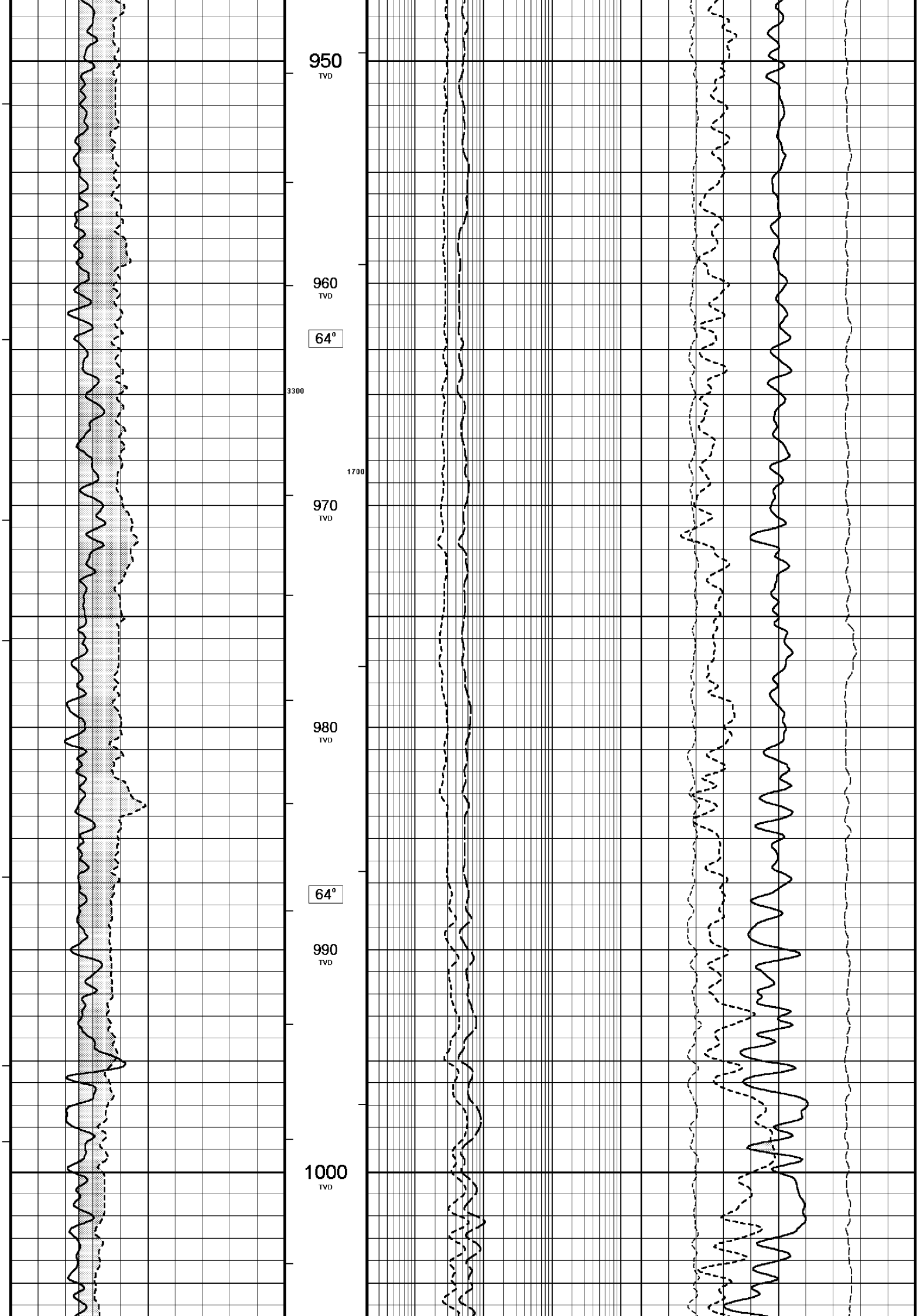

4300
660
TVD
60°
670
TVD
2300
4200
680
TVD
Bit Size
Deep Laterolog
Shallow Laterolog
PE
Compensated Density
Density Correction
Density Caliper
Limestone Neutron Por.
Gamma Ray
60°
690
TVD
4100
700
TVD
2200
710

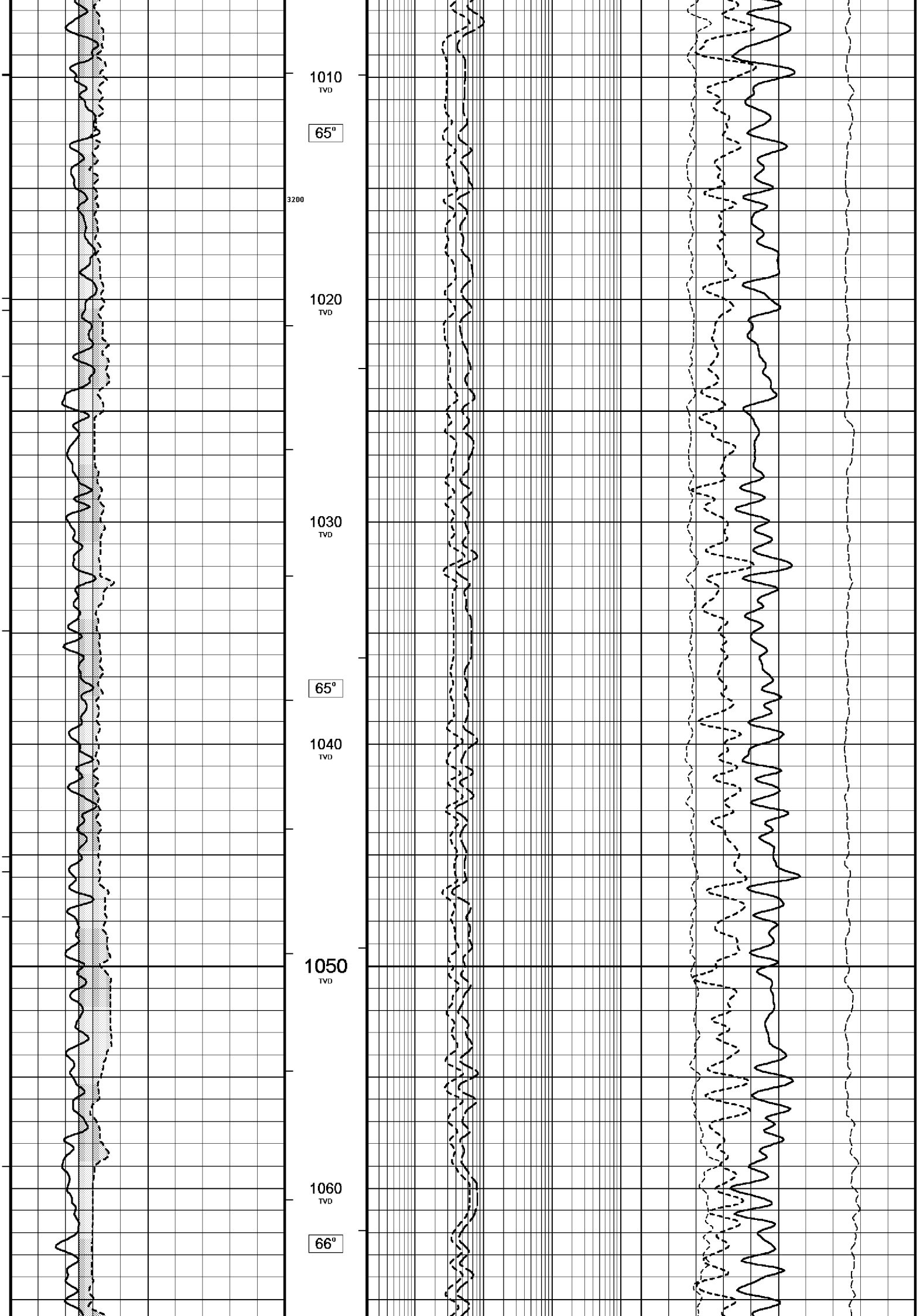

TVD
60°
4000
720
TVD
2100
730
TVD
60°
3900
740
TVD
750
TVD
760
TVD
60°
2000
3800

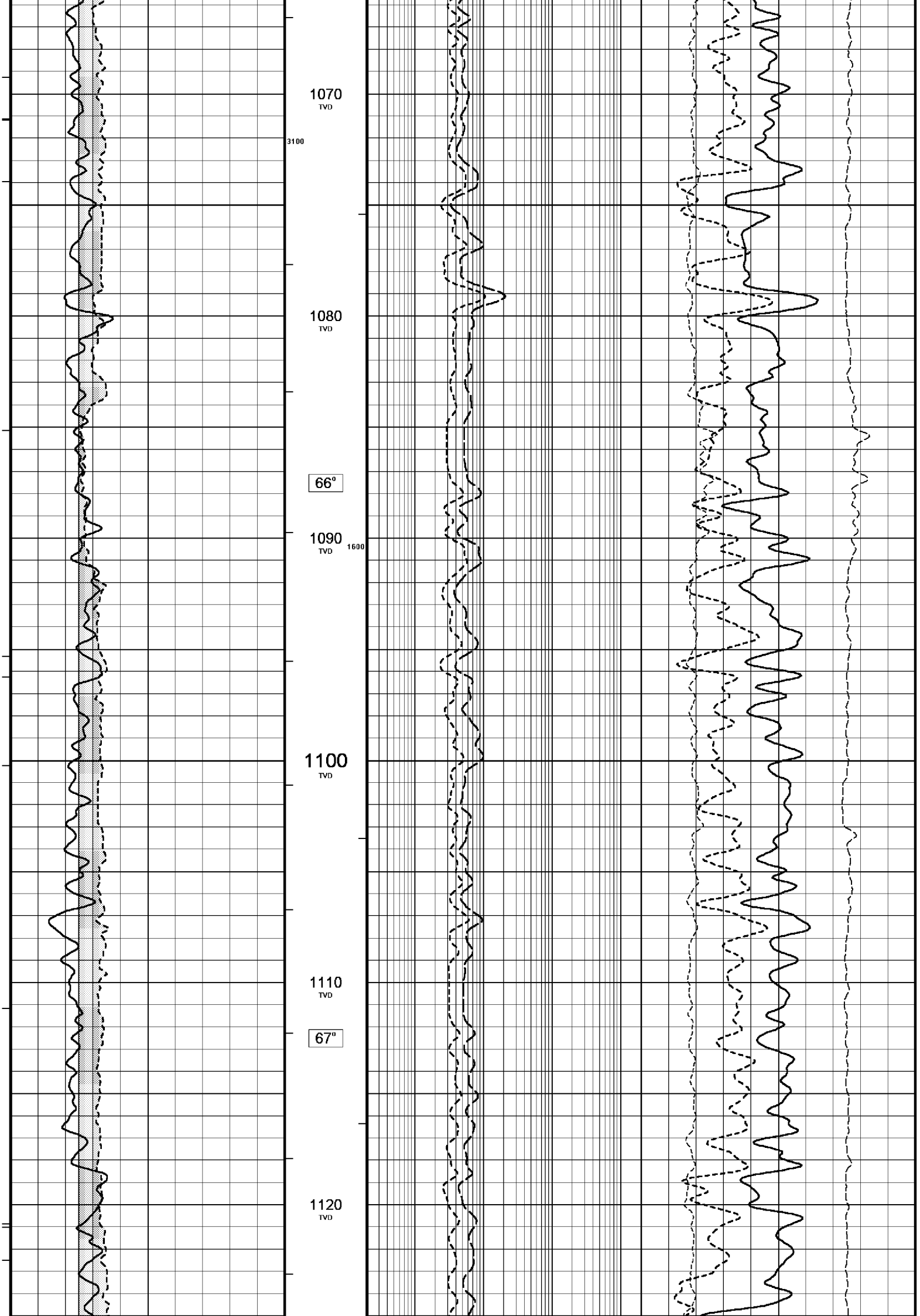

770
TVD
780
TVD
61°
790
TVD
800
TVD
3700
810
TVD
61°
820
TVD
1900

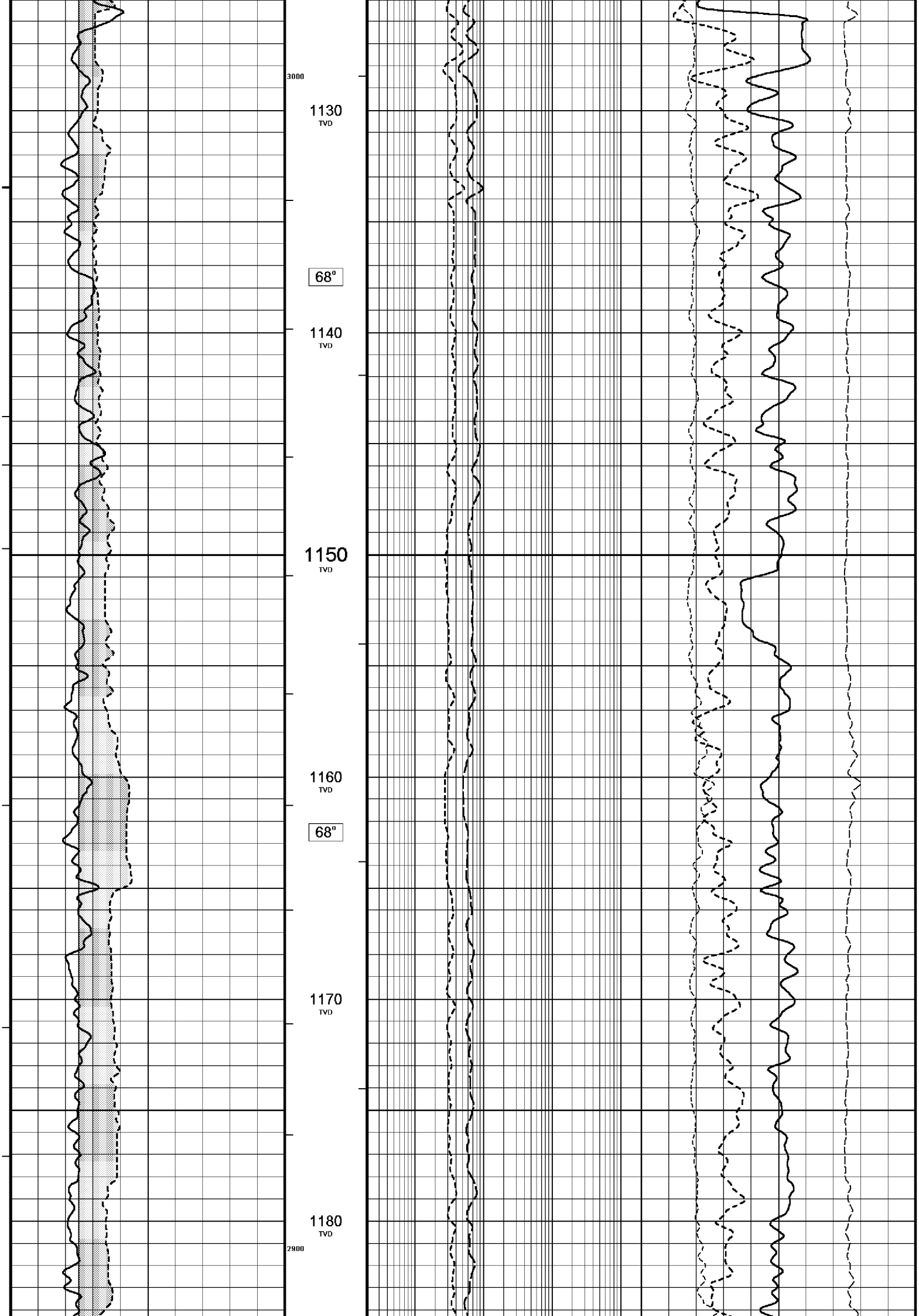

830
TVD
61°
3600
840
TVD
850
TVD
860
TVD
62°
870
TVD
3500
880
TVD
1800
62°

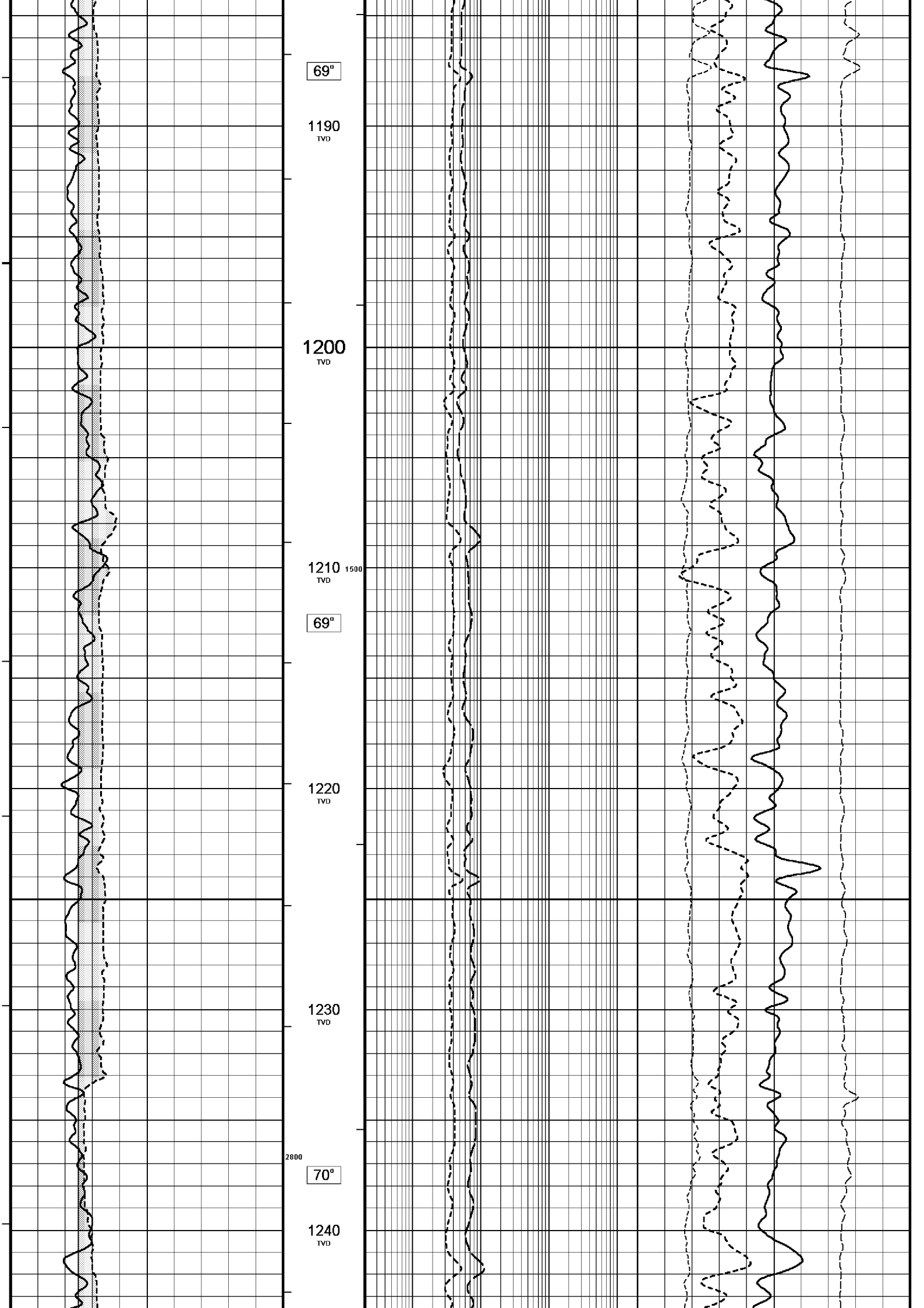

890
TVD
900
TVD
910
TVD
63°
3400
920
TVD
930
TVD
63°
940
TVD

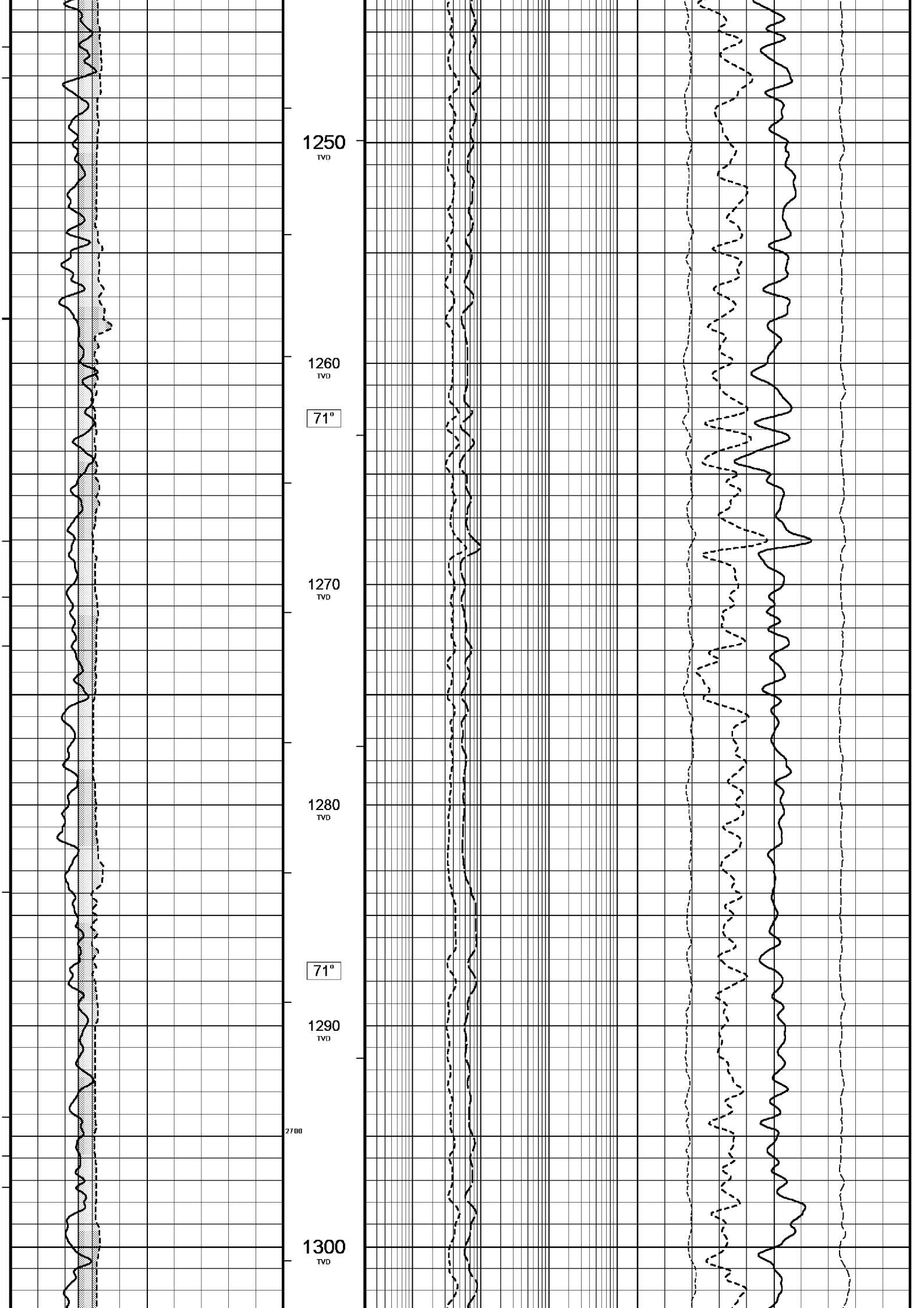

950
TVD
960
TVD
64°
3300
1700
970
TVD
980
TVD
64°
990
TVD
1000
TVD

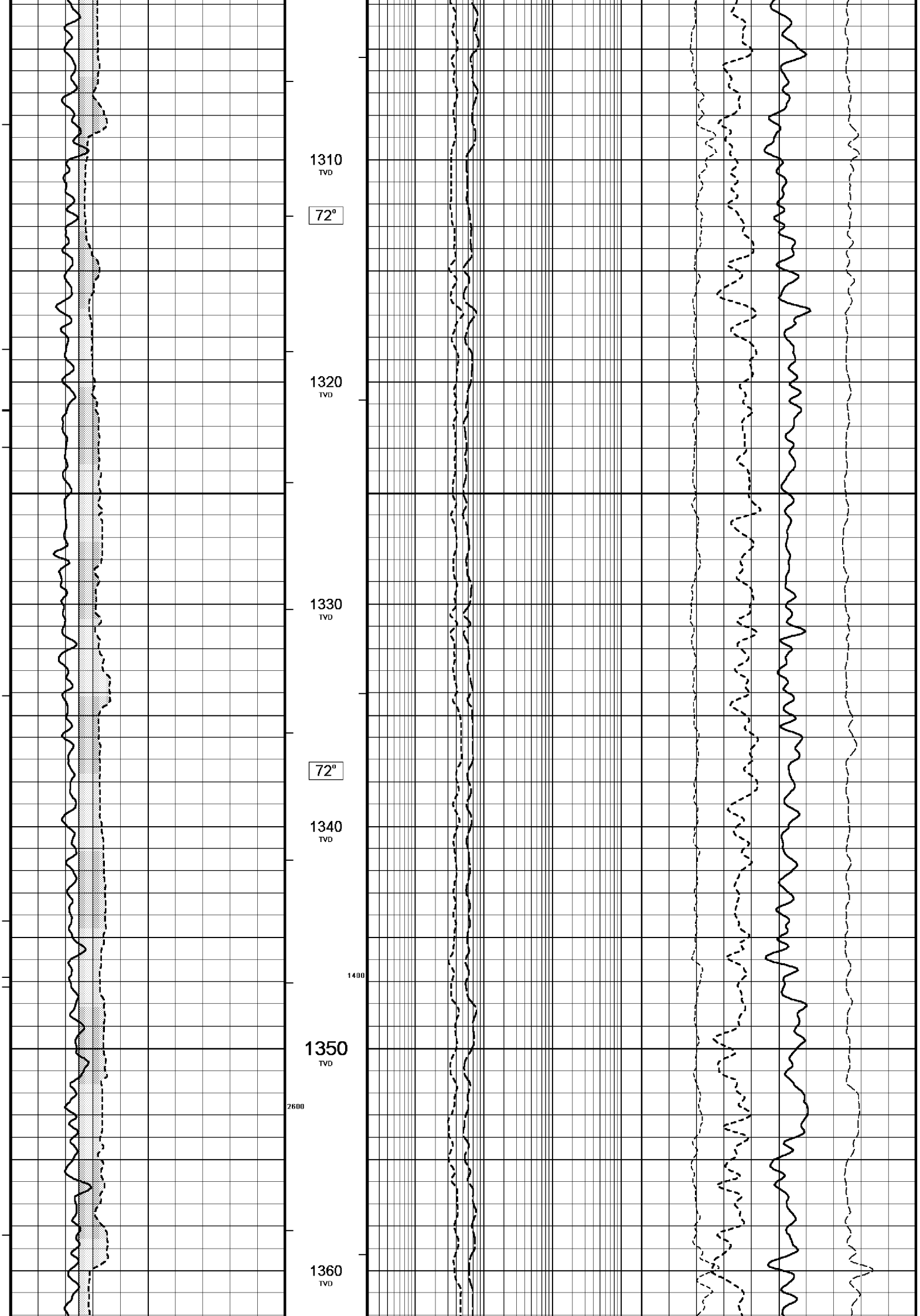

1010
TVD
65°
3200
1020
TVD
1030
TVD
65°
1040
TVD
1050
TVD
1060
TVD
66°

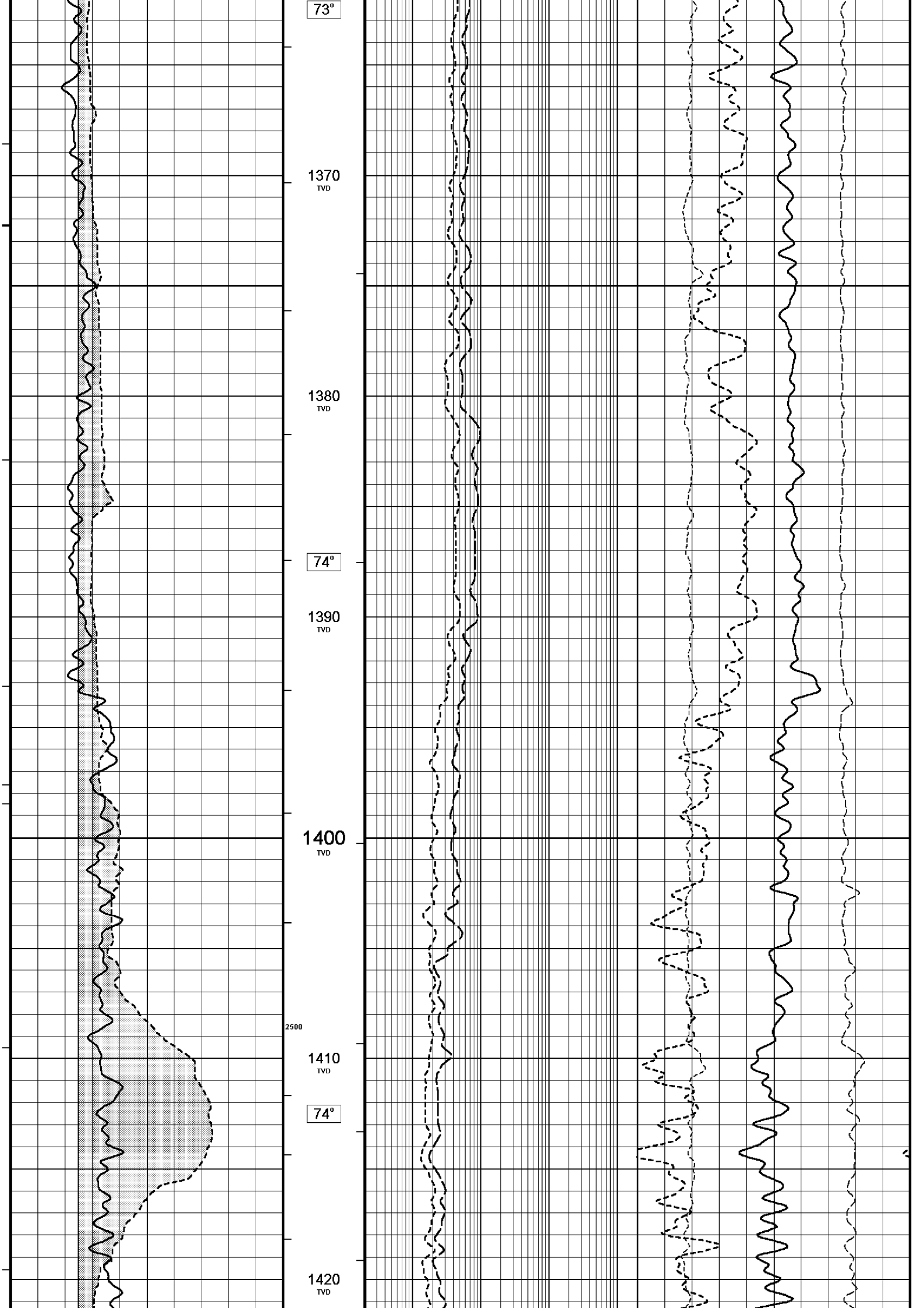

1070
TVD
3100
1080
TVD
66°
1090
TVD
1600
1100
TVD
1110
TVD
67°
1120
TVD

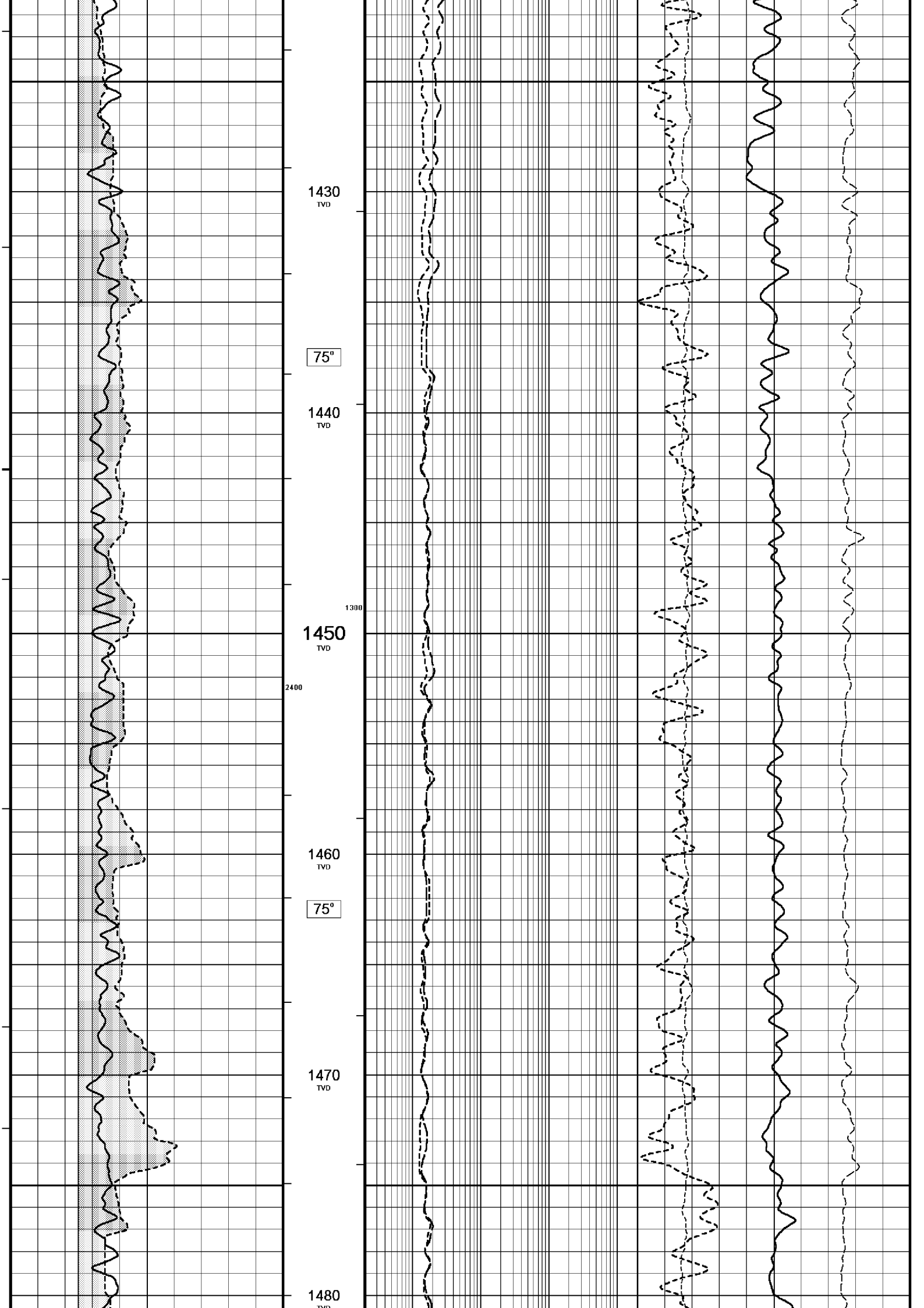

3000
1130
TVD
68°
1140
TVD
1150
TVD
1160
TVD
68°
1170
TVD
1180
TVD
2900

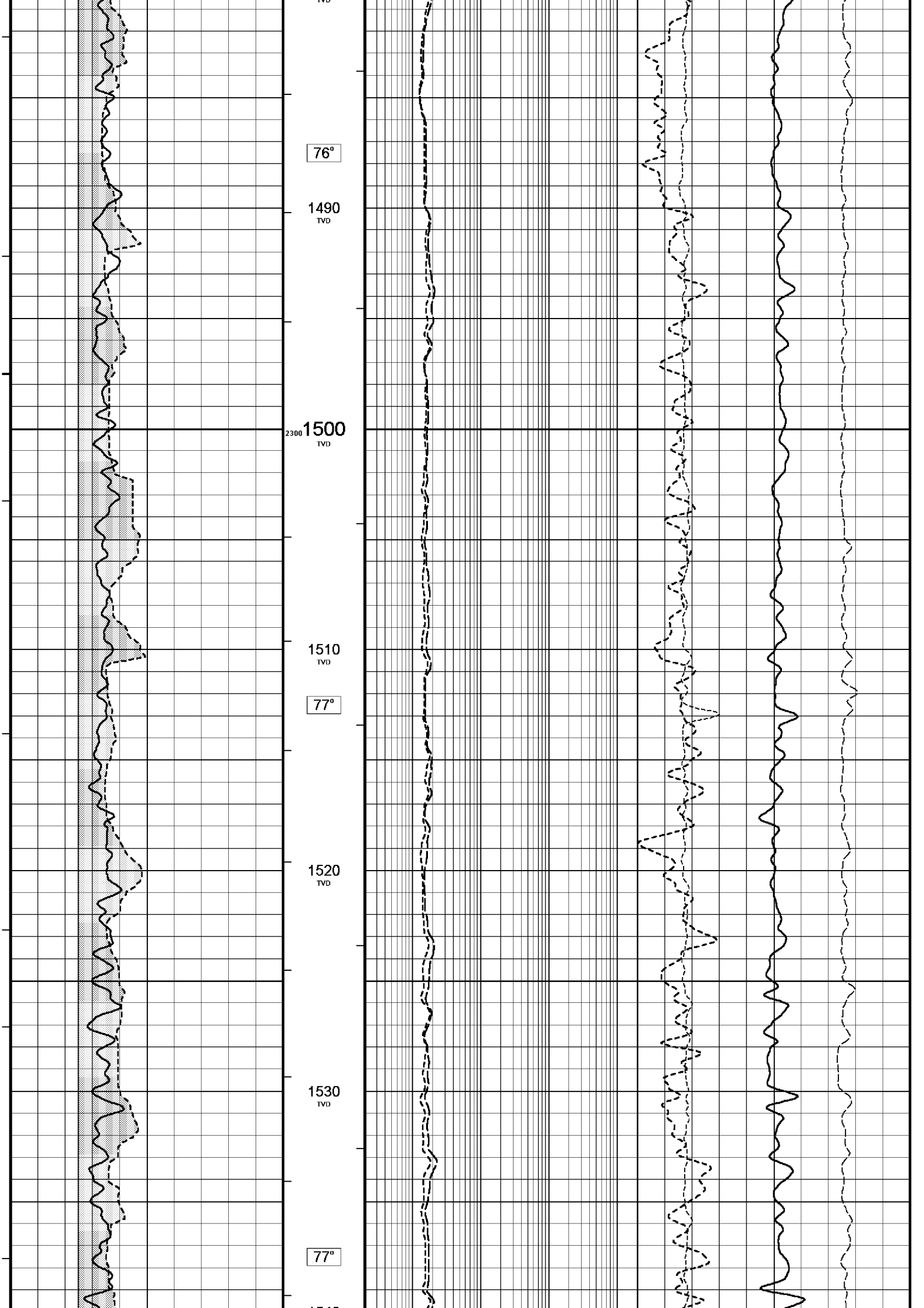

69°
1190
TVD
1200
TVD
1210
TVD
1500
69°
1220
TVD
1230
TVD
2800
70°
1240
TVD

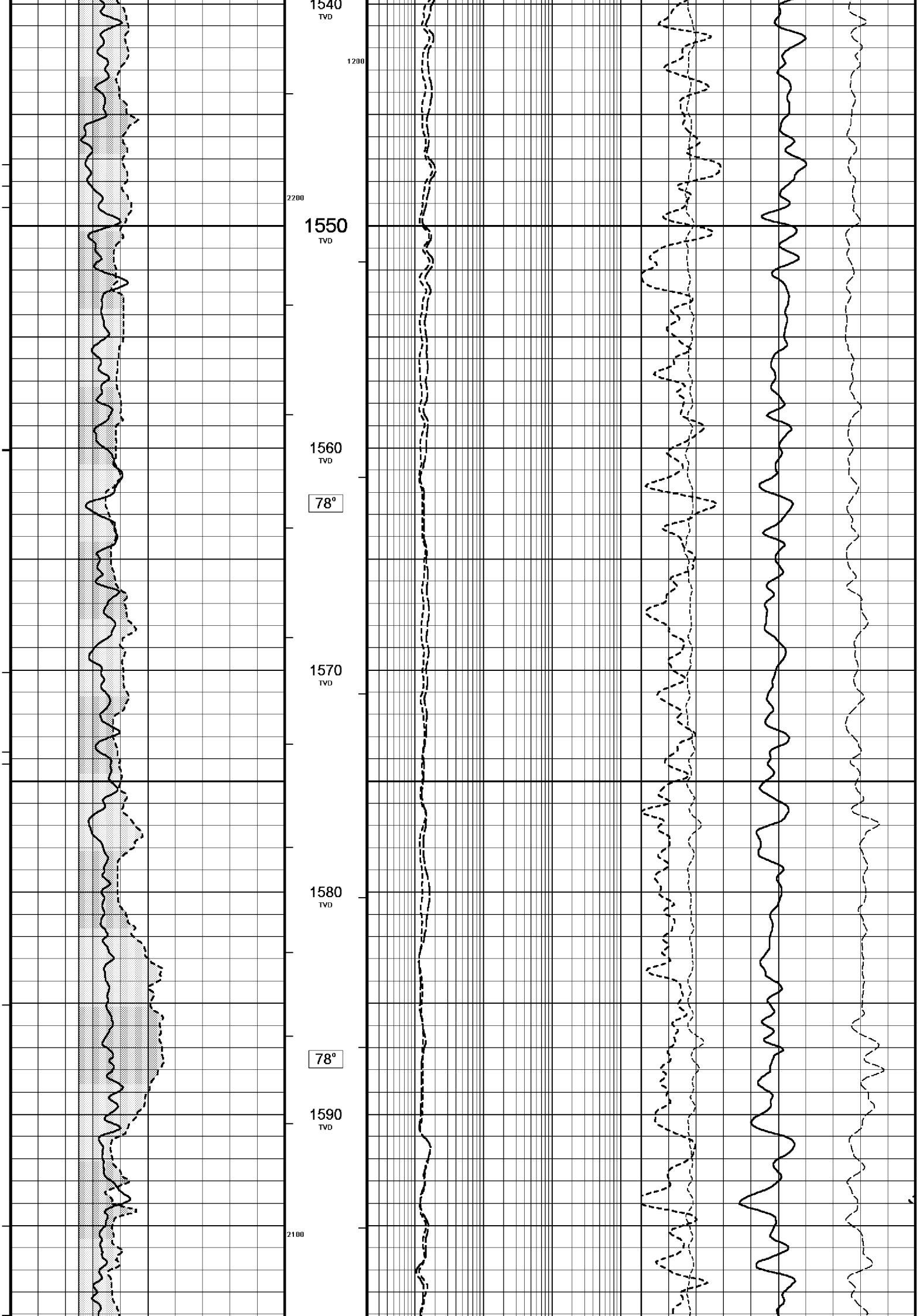

1250
TVD
1260
TVD
71°
1270
TVD
1280
TVD
71°
1290
TVD
2700
1300
TVD

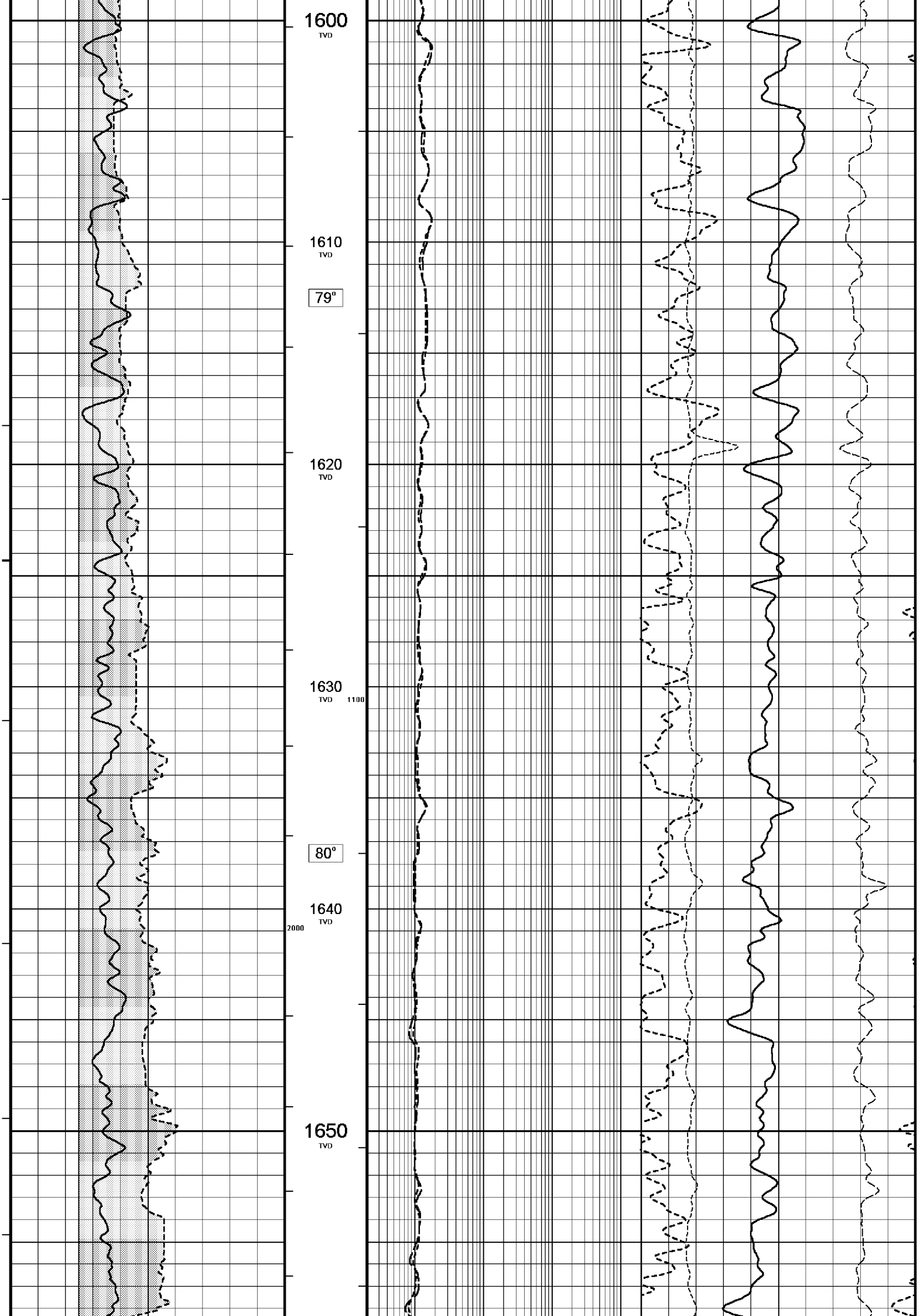

1310
TVD
72°
1320
TVD
1330
TVD
72°
1340
TVD
1400
1350
TVD
2600
1360
TVD

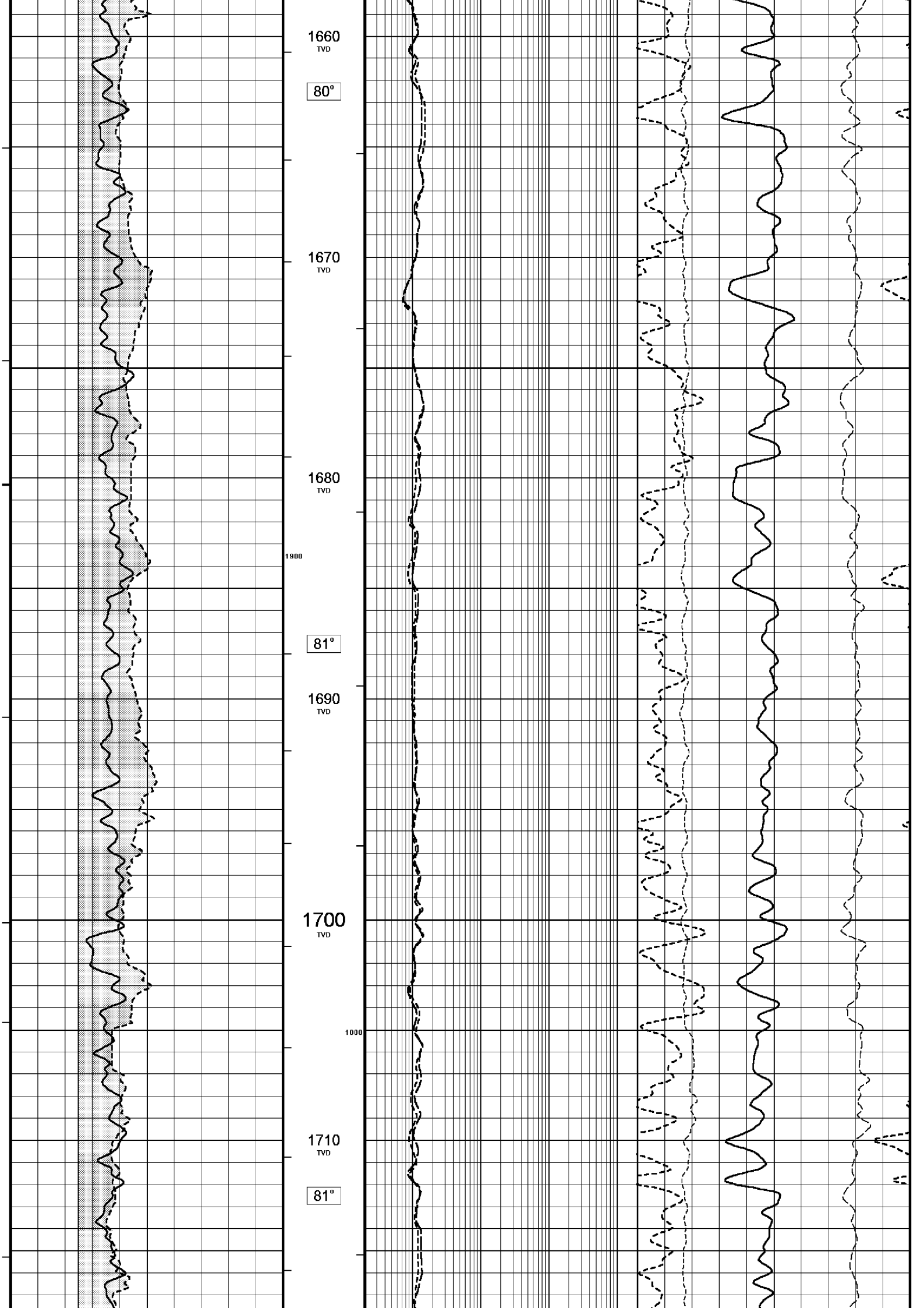

73°
1370
TVD
1380
TVD
74°
1390
TVD
1400
TVD
2500
1410
TVD
74°
1420
TVD

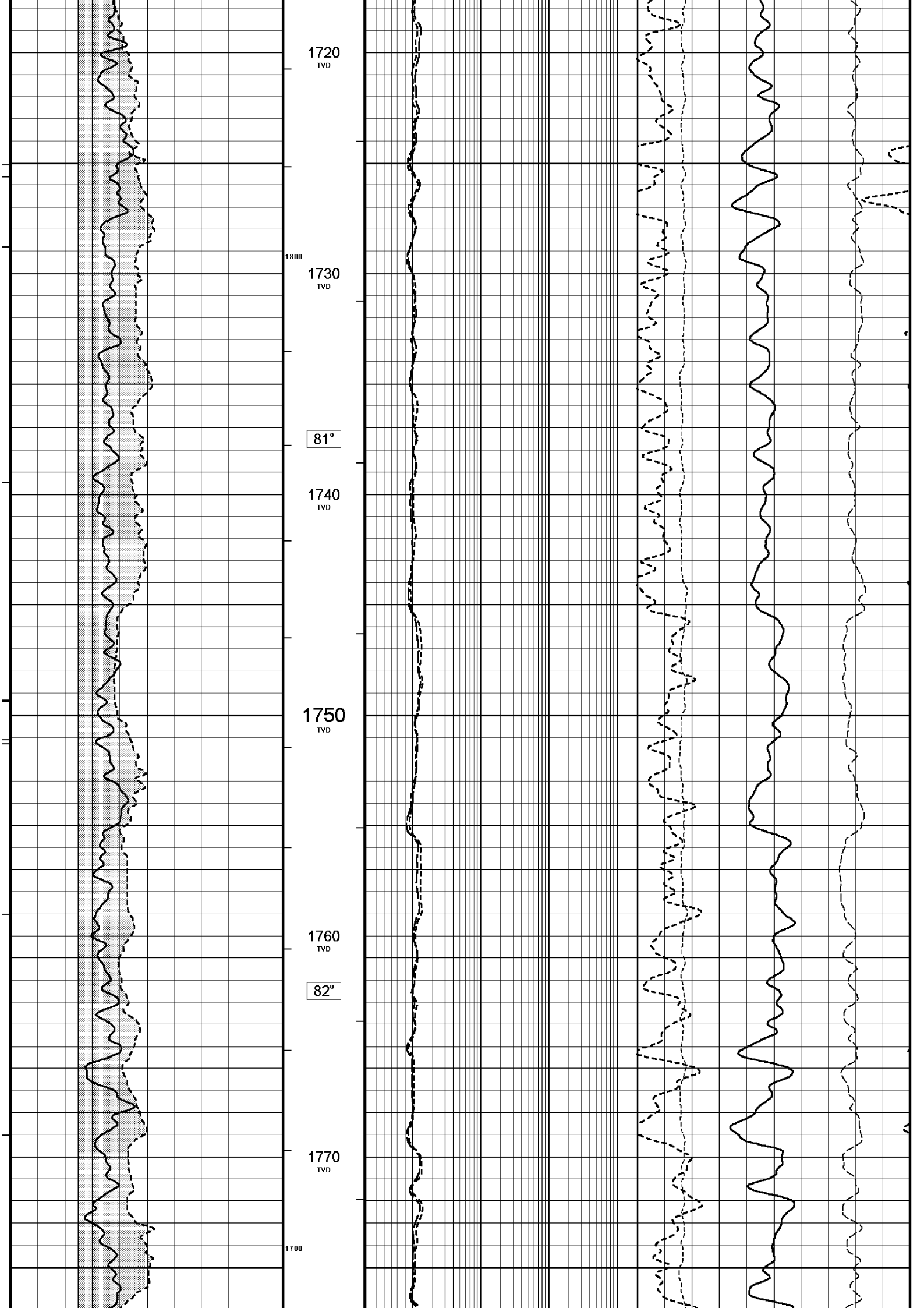

1430
TVD
75°
1440
TVD
1300
1450
TVD
2400
1460
TVD
75°
1470
TVD
1480
TVD

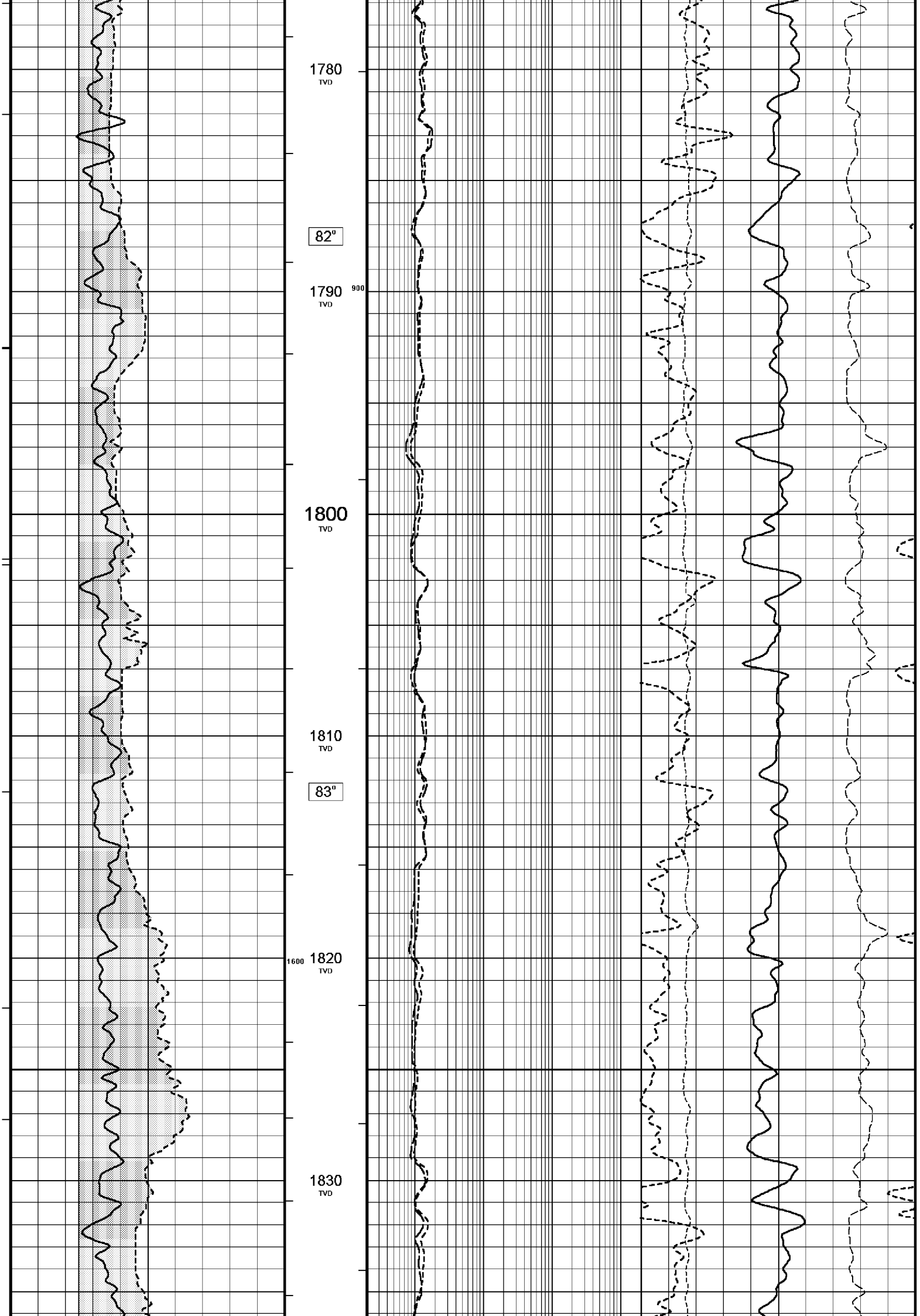

76°
1490
TVD
2300
1500
TVD
1510
TVD
77°
1520
TVD
1530
TVD
77°

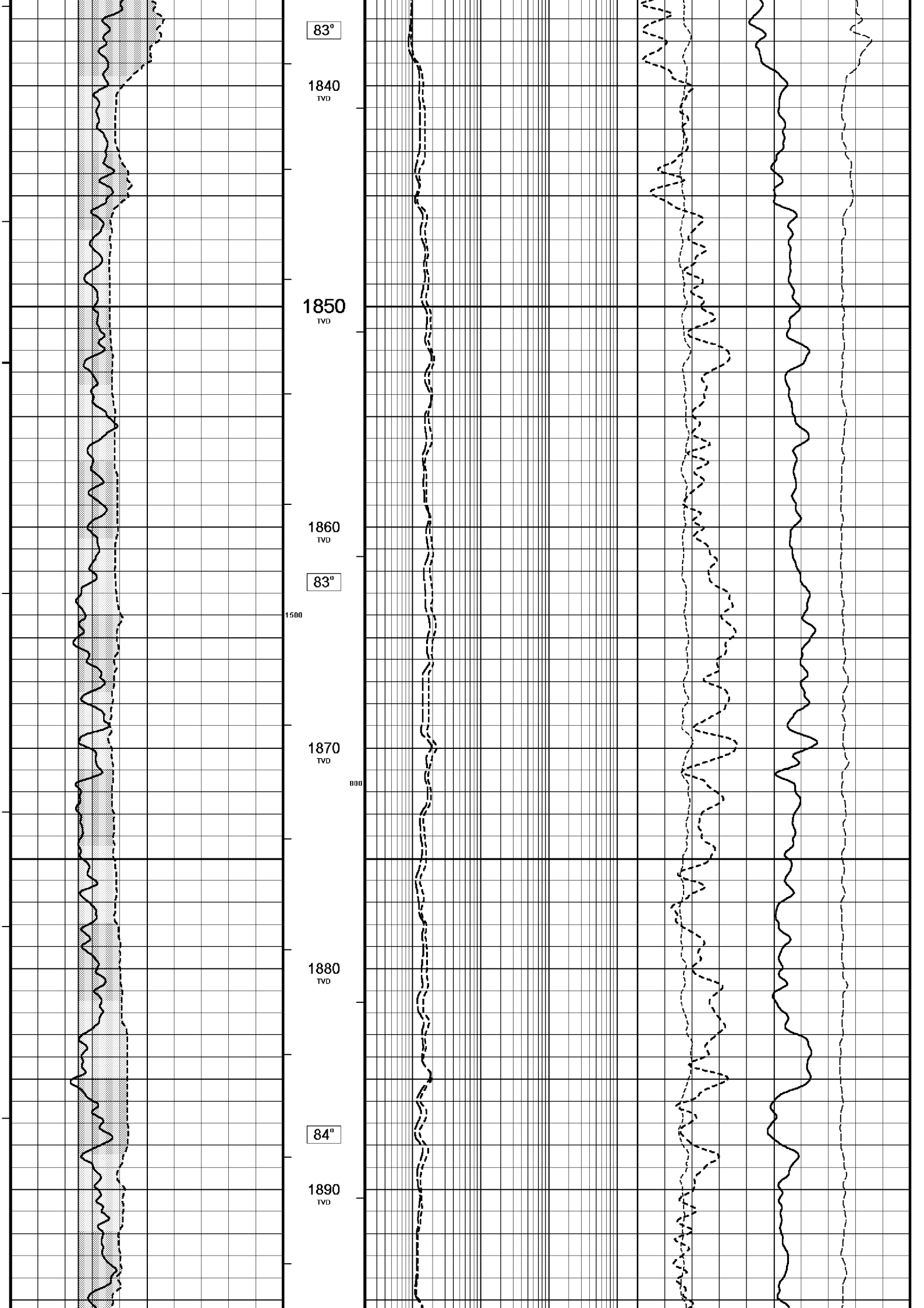

1540
TVD
1200
2200
1550
TVD
1560
TVD
78°
1570
TVD
1580
TVD
78°
1590
TVD
2100

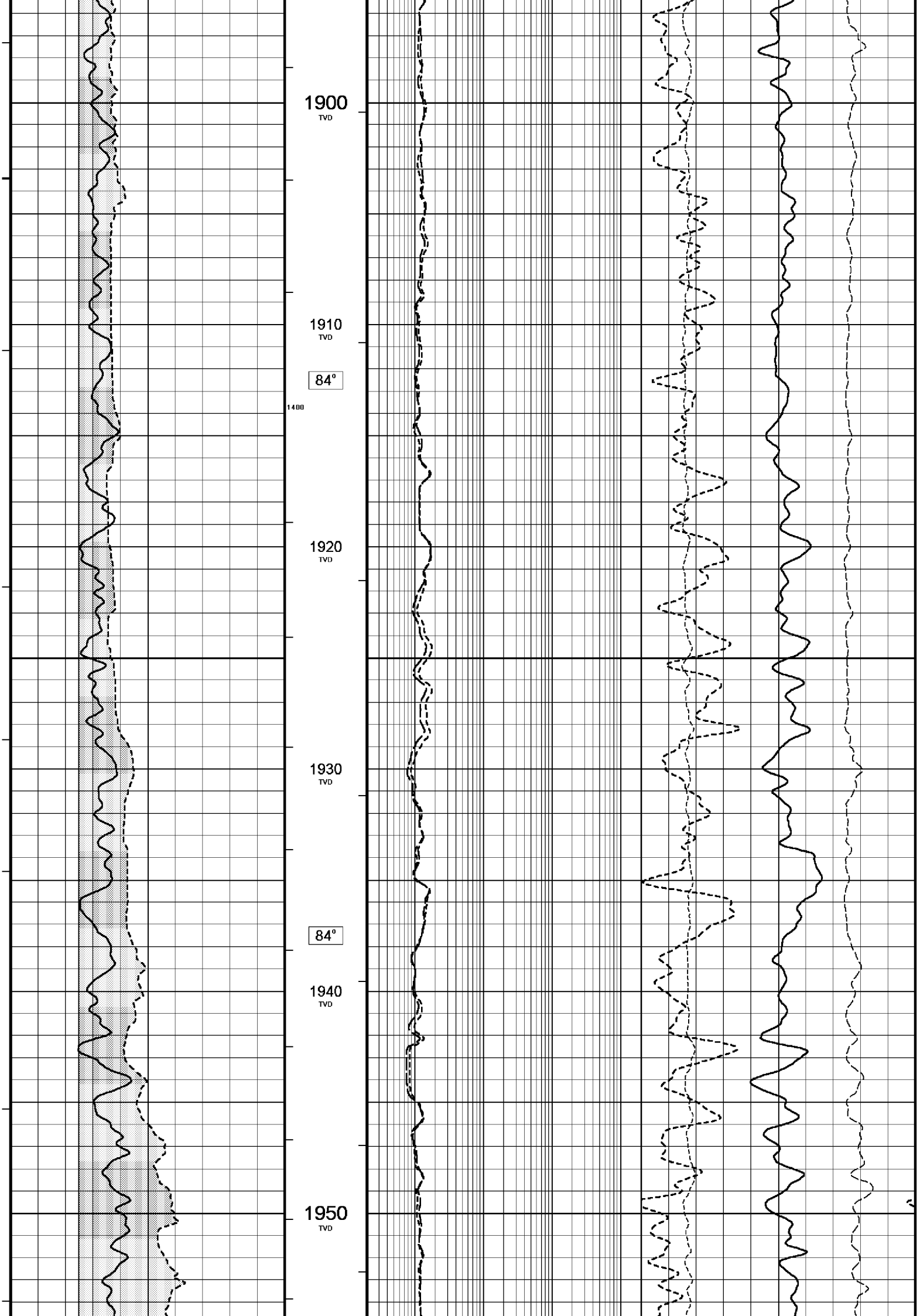

1600
TVD
1610
TVD
79°
1620
TVD
1630
TVD
1100
80°
1640
TVD
2000
1650
TVD

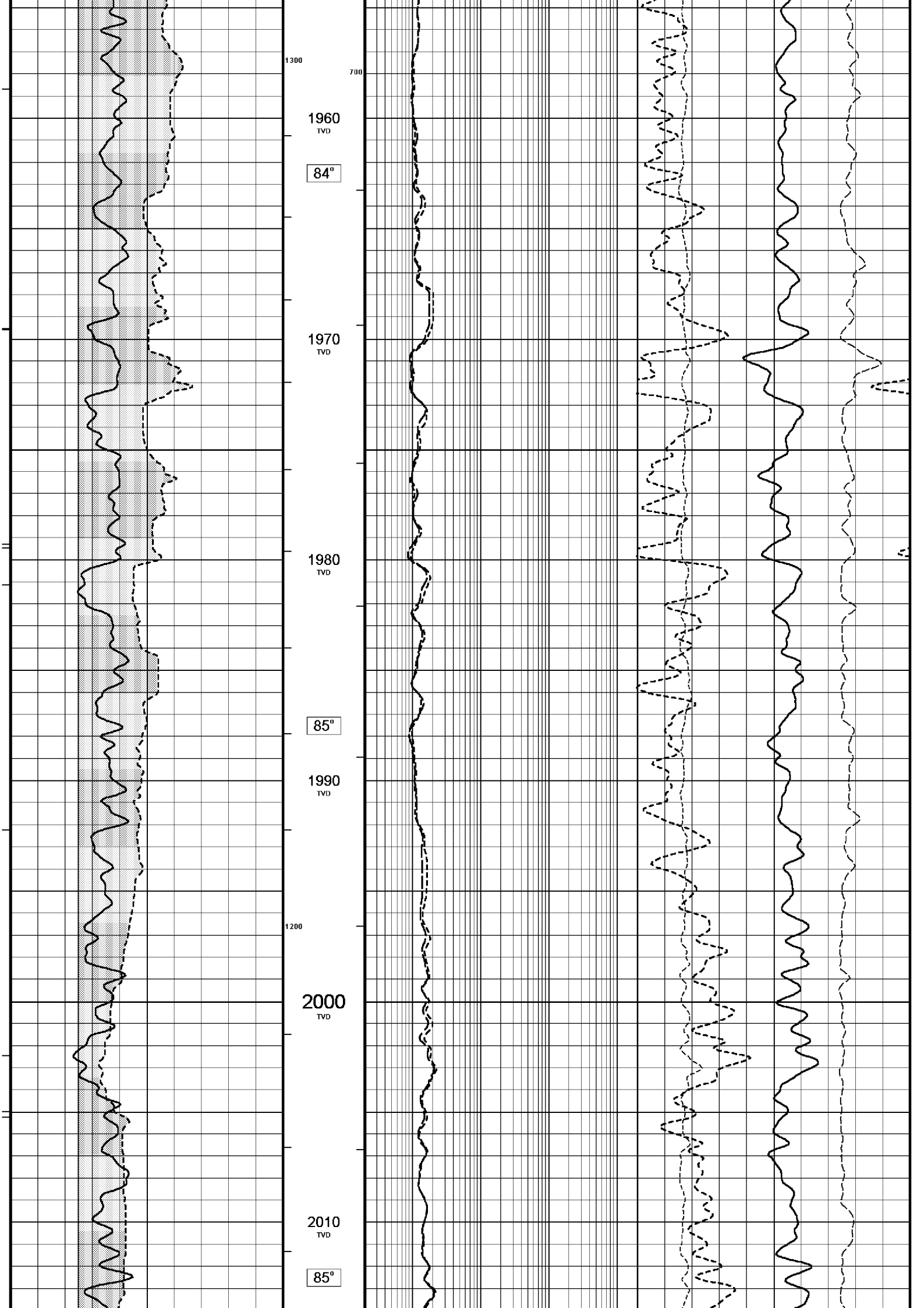

1660
TVD
80°
1670
TVD
1680
TVD
1900
81°
1690
TVD
1700
TVD
1000
1710
TVD
81°

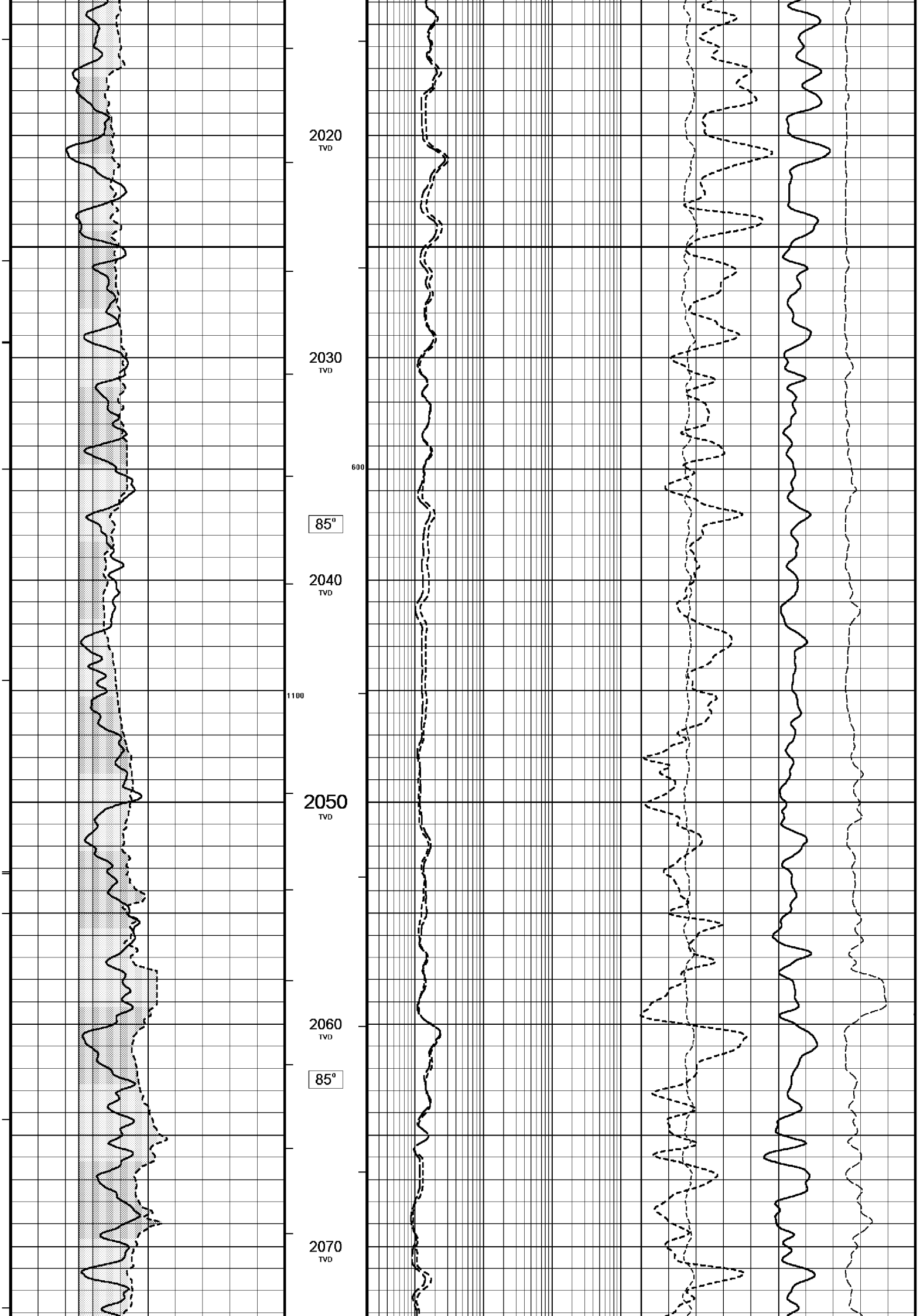

1720
TVD
1800
1730
TVD
81°
1740
TVD
1750
TVD
1760
TVD
82°
1770
TVD
1700

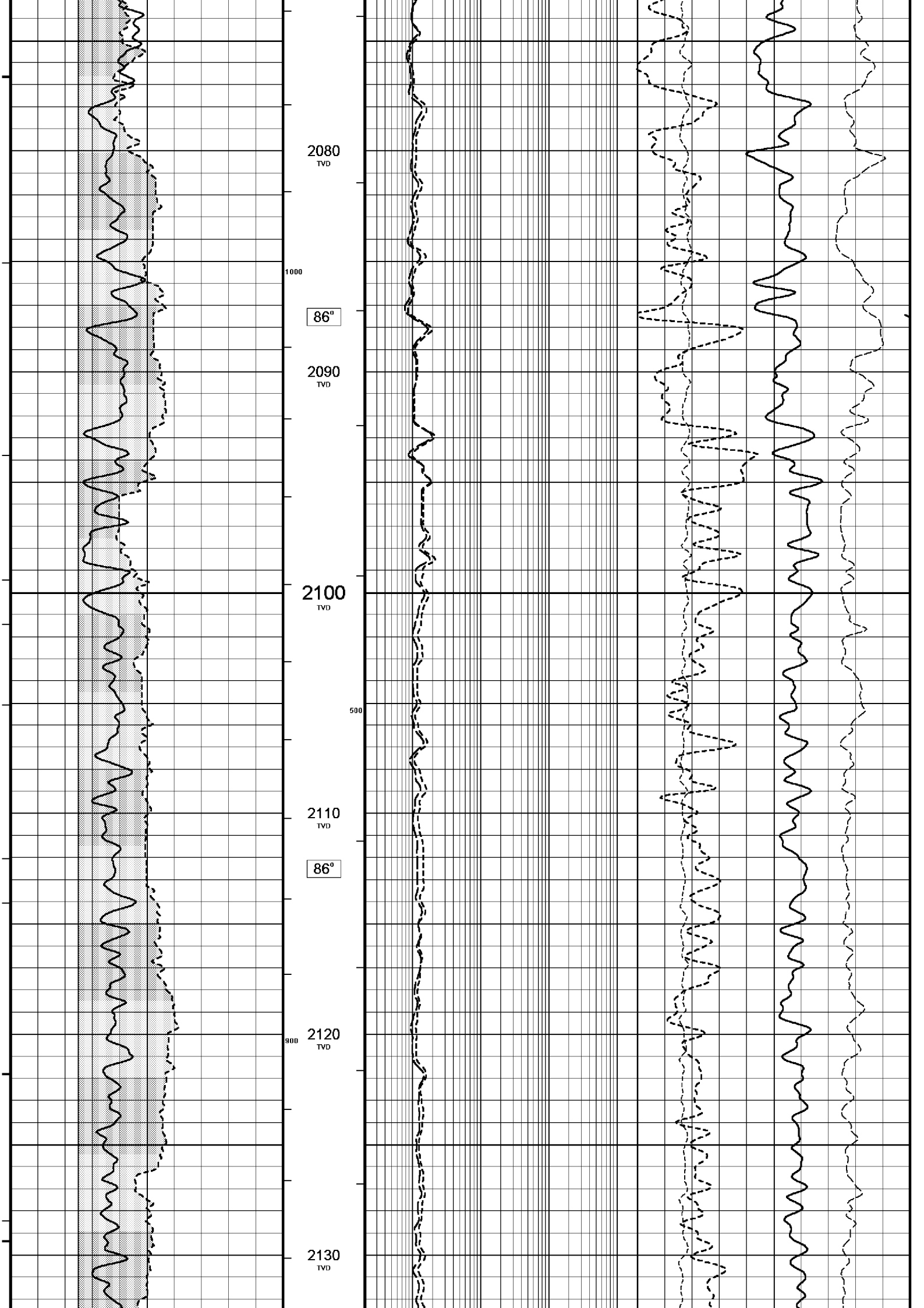

1780
TVD
82°
1790
TVD
900
1800
TVD
1810
TVD
83°
1600
1820
TVD
1830
TVD

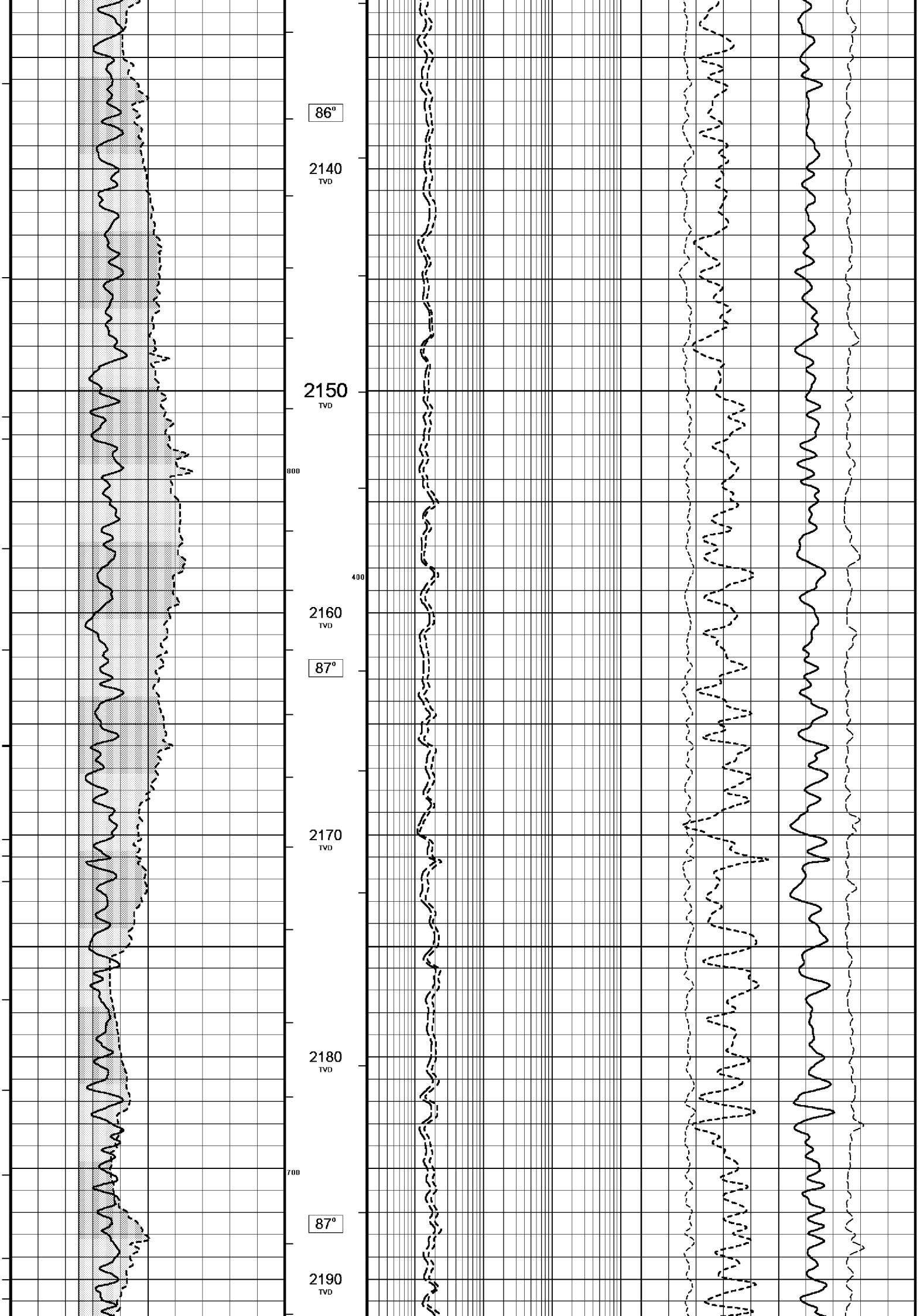

83°
1840
TVD
1850
TVD
1860
TVD
83°
1500
1870
TVD
800
1880
TVD
84°
1890
TVD

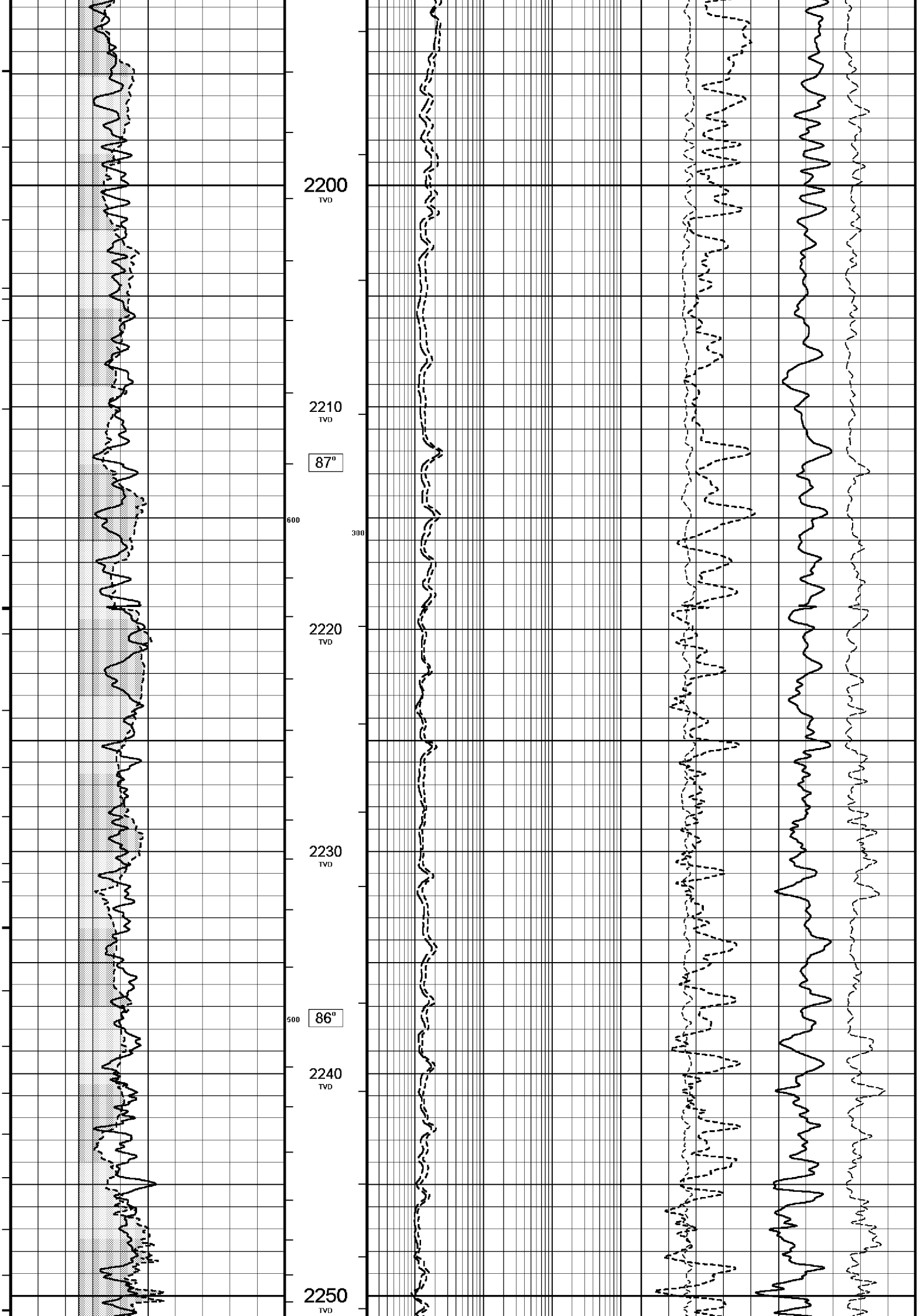

1900
TVD
1910
TVD
84°
1400
1920
TVD
1930
TVD
84°
1940
TVD
1950
TVD

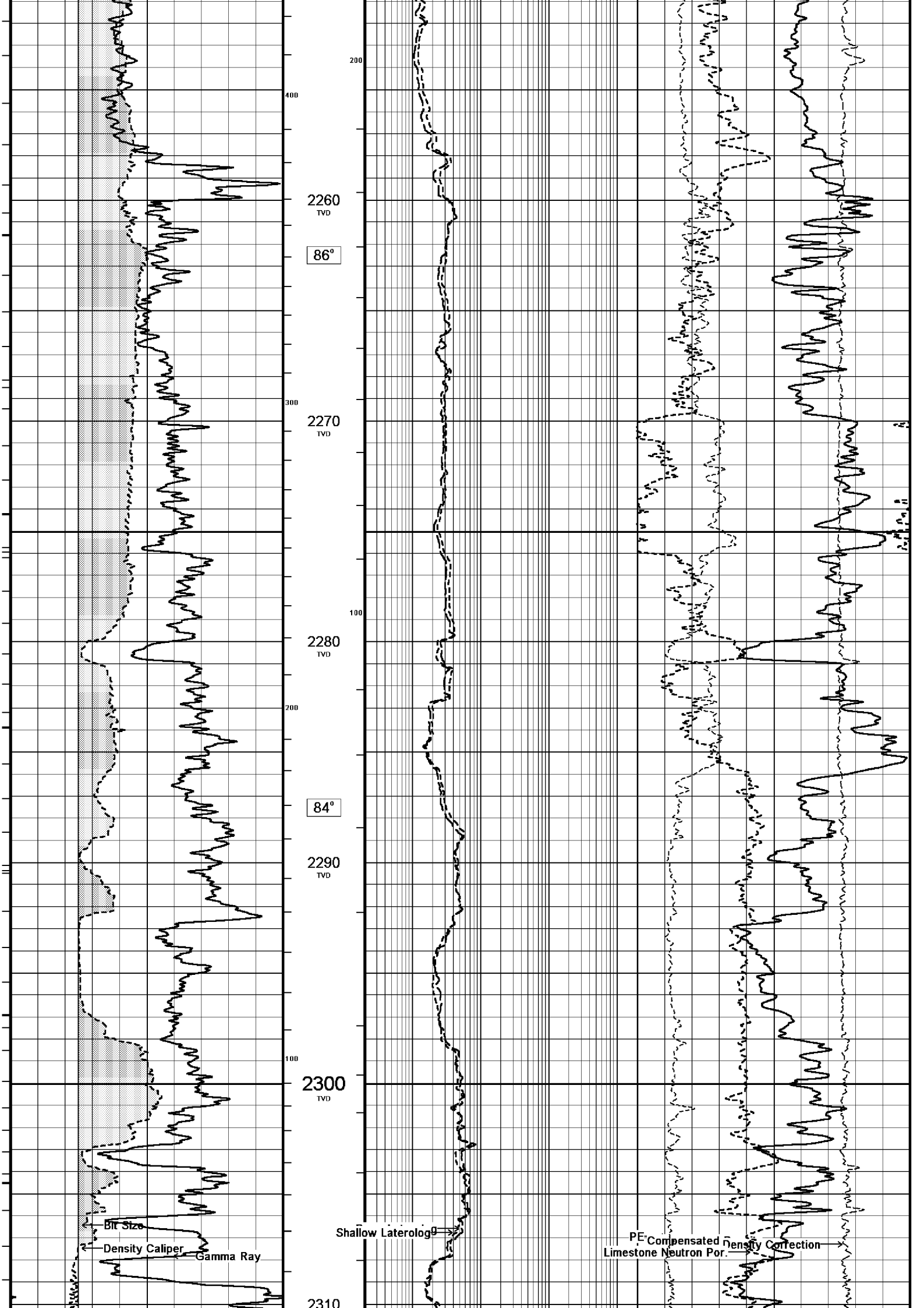

1300
700
1960
TVD
84°
1970
TVD
1980
TVD
85°
1990
TVD
1200
2000
TVD
2010
TVD
85°

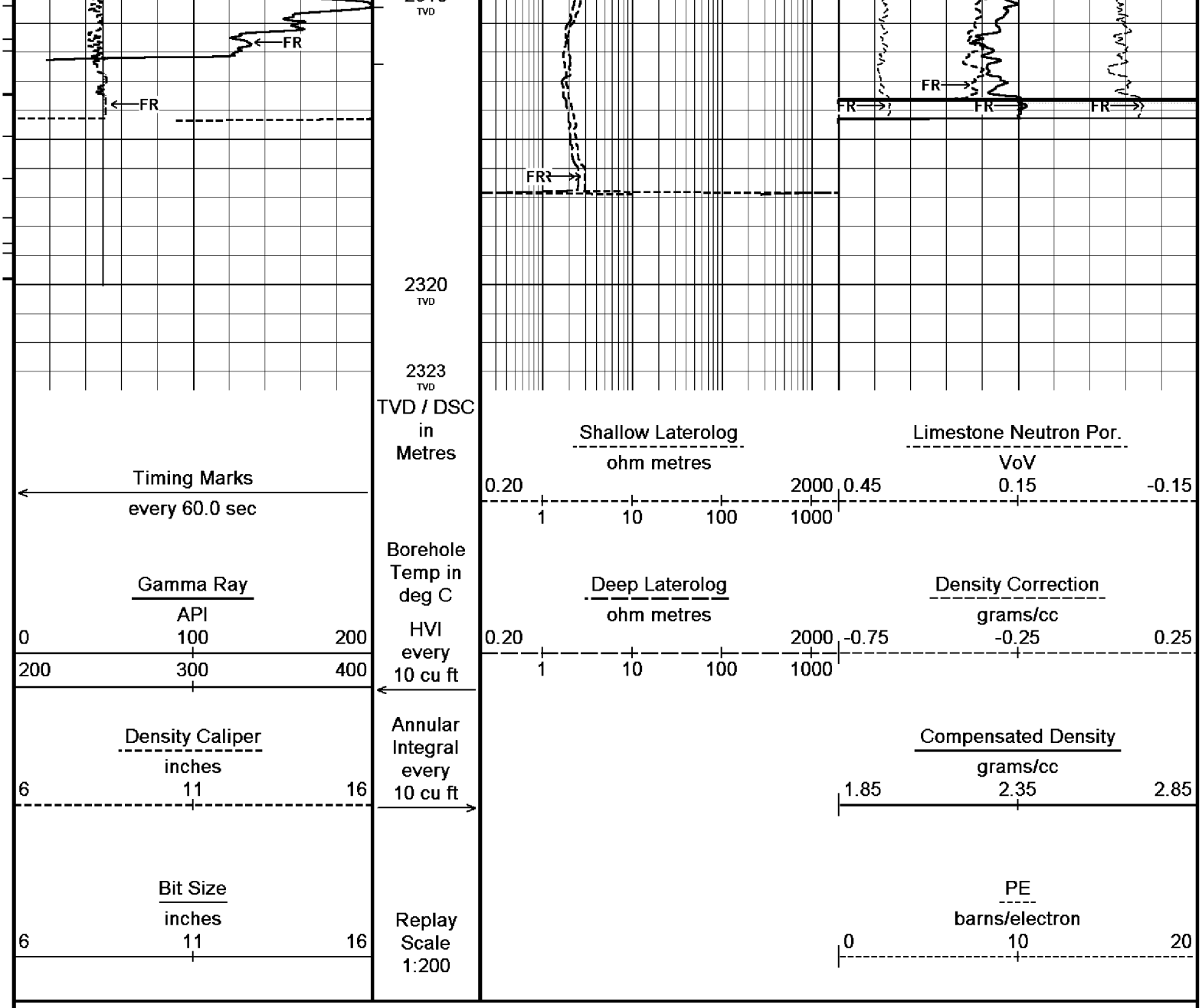

2020
TVD
2030
TVD
600
85°
2040
TVD
1100
2050
TVD
2060
TVD
85°
2070
TVD


2080
TVD
1000
86°
2090
TVD
2100
TVD
500
2110
TVD
86°
900
2120
TVD
2130
TVD


86°
2140
TVD
2150
TVD
800
400
2160
TVD
87°
2170
TVD
2180
TVD
700
87°
2190
TVD


2200
TVD
2210
TVD
87°
600
300
2220
TVD
2230
TVD
500
86°
2240
TVD
2250
TVD


400
300
200
100
2260
TVD
86°
2270
TVD
2280
TVD
84°
2290
TVD
2300
TVD
2310
Bit Size
Density Caliper
Gamma Ray
Shallow Laterolog
PE
Compensated Density Correction
Limestone Neutron Por.



Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 25-MAY-2006 01:31
Filename: C:\logs\WKF_W20A\FIELD_DATA\WKF_W20A_MAIN_LOG.dta
Recorded on 24-MAY-2006 17:21
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_W20A\FIELD_DATA\WKF_W20A_TIME_LOG.dta

General Constants All 000

General Parameters		
Mud Resistivity	0.108	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 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 22-MAY-2006 23:42

	Measured	Calibrated (API)
Background	8	5
Calibrator (Gross)	1367	914
Calibrator (Net)	1360	909

Gamma Constants MCG 142

Gamma Calibrator Number	060	
Mud Density	1.17	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

Neutron Calibration MDN 085

Base Calibration on 11-MAY-2006 10:39
Field Check on 22-MAY-2006 23:58

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
	3152	97	3714	110
Ratio	32.513		33.764	

Field Calibrator at Base

	Calibrated (cps)	
	1642	2388
Ratio	0.687	

Field Check

	Calibrated (cps)	
	1614	2397
Ratio	0.673	

Neutron Constants MDN 085

Neutron Source Id	NSN-E-739	
Neutron Jig Number	NEC52	
Epithermal Neutron	No	
Caliper Source for Processing	Bit Size	
Stand-off	0.00	inches
Mud Density	1.17	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	39.00	kppm
Formation Fluid Salinity Source	None	
Formation Fluid Salinity	N/A	kppm
Barite Mud Correction	Not Applied	

Caliper Calibration MPD 083

Base Calibration on 10-MAY-2006 21:00
Field Calibration on 22-MAY-2006 23:48

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	14332	4.01
2	22399	5.99
3	30880	7.98
4	39280	9.94
5	48576	12.01
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
7.96	7.98

Photo Density Calibration MPD 083

Base Calibration on 11-MAY-2006 12:58
Field Check on 22-MAY-2006 23:46

Density Calibration

Base Calibration

	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	55324	18685	53111	19310
Reference 2	25920	2474	24951	2530

Field Check at Base

943.6	1092.6

Field Check

937.3	1084.6

PE Calibration

Base Calibration

	Measured			Calibrated
	WS	WH	Ratio	Ratio
Background	178	808		
Reference 1	17386	55127	0.317	0.320
Reference 2	6869	25774	0.268	0.273

Field Check at Base

177.6	807.7

Field Check

177.1	801.8

Density Constants MPD 083

Density Source Id	NSD-L-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	1.17	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	0.00

Laterolog Calibration MLE 031

Base Calibration on 11-MAY-2006 14:01
Field Check on 23-MAY-2006,00:48

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

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

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

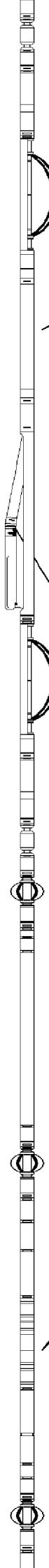
Compact Inline Standoff B
MIS 72 Length: 0.65 m Weight: 15.4 lb

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



26.17 m NPRL - Limestone Neutron Por.

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

23.27 m DCOR - Density Correction
23.25 m PDPE - PE

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

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

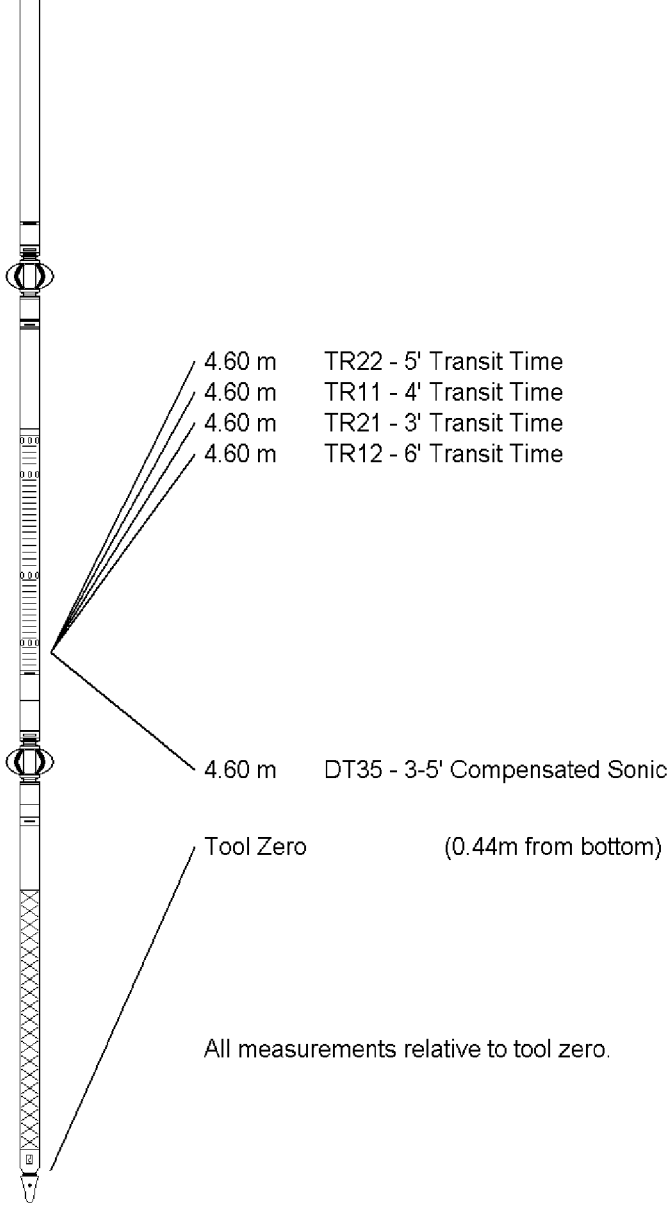
Compact Sonic
MSS 66 Length: 3.82 m Weight: 72.8 lb

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: 54.01 m Weight: 1201.5 lb



COMPANY	ESSO AUSTRALIA PTY.LTD
WELL	WKF W20A
FIELD	KINGFISH GDA94
PROVINCE/COUNTY	BASS STRAIT, VICTORIA
COUNTRY/STATE	AUSTRALIA

Elevation Kelly Bushing		metres	First Reading	2318.40	metres
Elevation Drill Floor	33.43	metres	Depth Driller	2320.75	metres
Elevation Ground Level	-76.13	metres	Depth Logger	2320.00	metres

PRECISION Compact

DUAL LATEROLOG - GR
DENSITY - NEUTRON
1:200 TVD