



PRECISION

COMPENSATED SONIC

Compact

1-200 TVD

COMPANY

ESSO AUSTRALIA PTY.LTD

WELL

WKF W23A

FIELD

KINGFISH GDA94

PROVINCE/COUNTRY

BASS STRAIT, VICTORIA

COUNTRY/STATE

AUSTRALIA

LOCATION

S 38 35 34.842, E 148 6 19.670

N 5727806.411 m, E 596271.358 m

FIELD PRINT

LSD SEC TWP RGE

Other Services
COMPENSATED NEUTRON
PHOTO DENSITY
DUAL LATEROLOG

API Number

Permit Number

Permanent Datum MSL

Elevation 0.0 metres

Log Measured From DF @ 33.43m

above Permanent Datum

Drilling Measured From DF

Elevations:
KB 33.43 metres
DF 33.43 metres
GL -76.13 metres

Date 24-OCT-2006

Run Number ONE

Depth Driller 2382.04 metres

Depth Logger 2382.04 metres

First Reading 2376.80 metres

Last Reading 618.90 metres

Casing Driller 618.90 metres

Casing Logger 618.90 metres

Bit Size 8.50 inches

Hole Fluid Type KCL/PHPA

Density / Viscosity 1.17 g/cc 27.00 CP

PH / Fluid Loss 9.00 2.40 ml/30Min

Sample Source FLOWLINE

Rm @ Measured Temp 0.145 @ 25.0 ohm-m

Rmf @ Measured Temp 0.088 @ 25.0 ohm-m

Rmc @ Measured Temp 0.195 @ 25.0 ohm-m

Source Rmf / Rmc MEAS MEAS

Rm @ BHT 0.065 @ 83.1 ohm-m

Time Since Circulation 29 HOURS

Max Recorded Temp 87.70 deg C

Equipment Name CML

Equipment / Base 1 SALE

Recorded By B J R MOSS, R L TENCH

Witnessed By D VAN DER AA

LAST CIRC. 17:05 22/10

Last Line

BOREHOLE RECORD

Bit Size inches	Depth From metres	Depth To metres
8.500	651.00	3338.00

CASING RECORD

Type	Size inches	Depth From metres	Shoe Depth metres	Weight pounds/ft
K-55	10.750	0.00	651.00	40.50

REMARKS

RIG: NABORS 453

5" SHUTTLE/MEMORY COMPACT OPERATION.
CREW: B MOSS ,R TENCH, M KOLCZE, B GOODWIN.

FIELD FINAL LOGS TO BE CORRELATED TO ANADRILL GAMMA LOG.

MAX. TEMPERATURE: 87.7 DEG C AT 3281.0 m MD
MAX. INCLINATION: 60.76 DEG AT 1340.34 m MD
MAX. DOGLEG SEVERITY: 6.96 DEG/30m AT 679.90 m MD
DEPLOYMENT ANGLE: 47.36 DEG

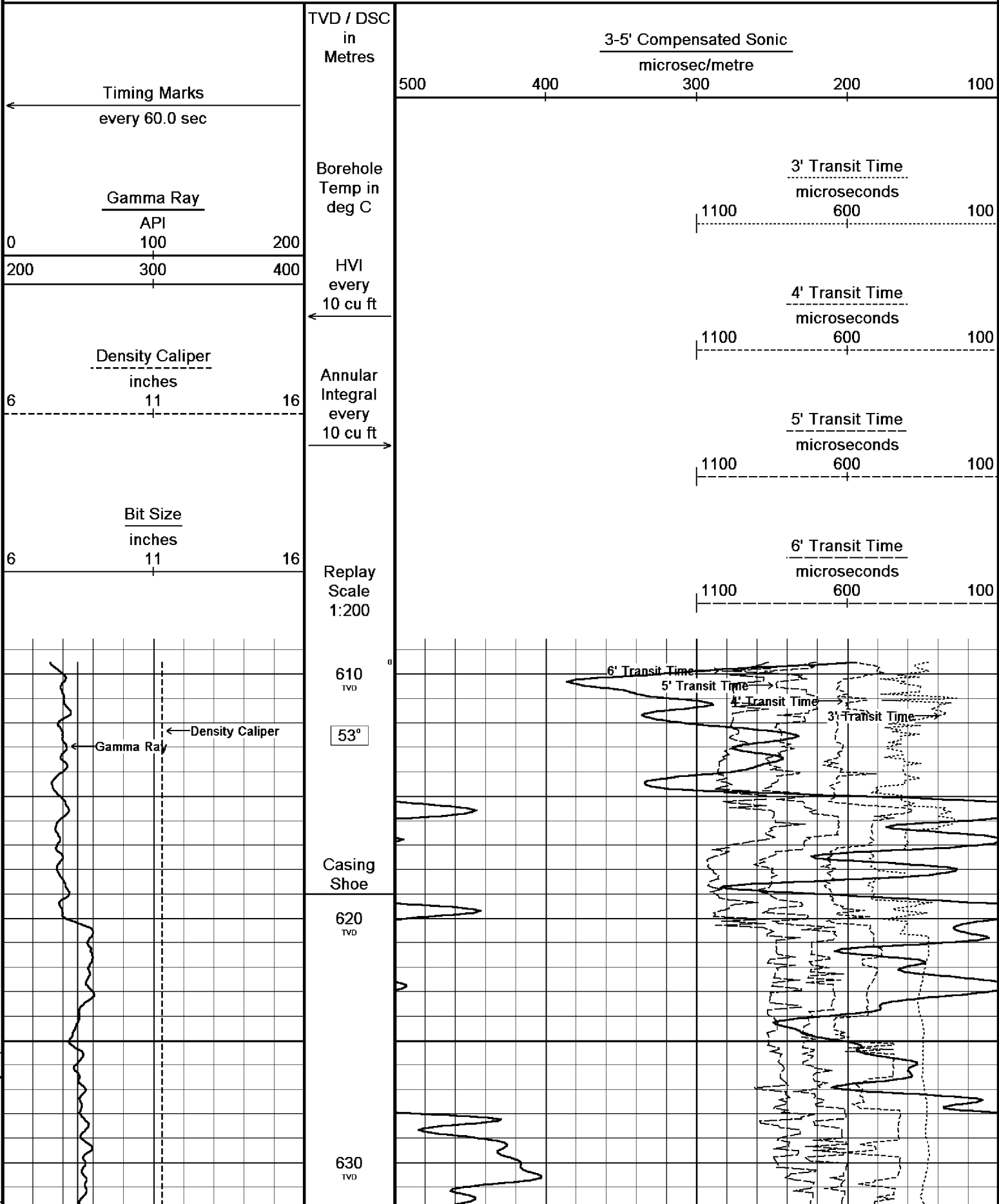
HVOL: FT^3
AVOL: FT^3
NO HOLE VOLUMES OR DENSITY READINGS GIVEN DUE TO FAILURE OF CALIPER AND DENSITY TOOL DURING RUNNING IN THE HOLE.

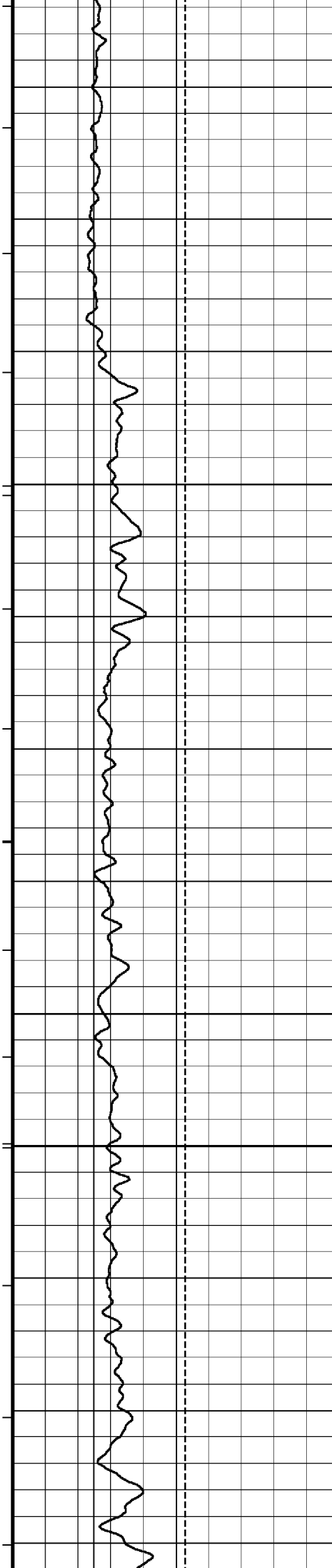
LOGGING SPEED 6 M/MIN FROM TD TO 2995 M MD
LOGGING SPEED 12 M/MIN FROM 2995 TO 1444 M MD
LOGGING SPEED 6 M/MIN FROM 1444 TO 1272 M MD
LOGGING SPEED 12 M/MIN FROM 1272 TO 1071 M MD
LOGGING SPEED 6 M/MIN FROM 1071 TO 928 M MD

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 25-OCT-2006 08:04
 Filename: C:\logs\WKF_W23A\FIELD_DATA\WKF_W23A_MAIN_LOG.dta Recorded on 24-OCT-2006 11:22
 System Configuration Dates: Logged 17-JUN-2004: Processed 17-JUN-2004: Plotted 17-JUN-2004:





54°

640
TVD

650
TVD

660
TVD

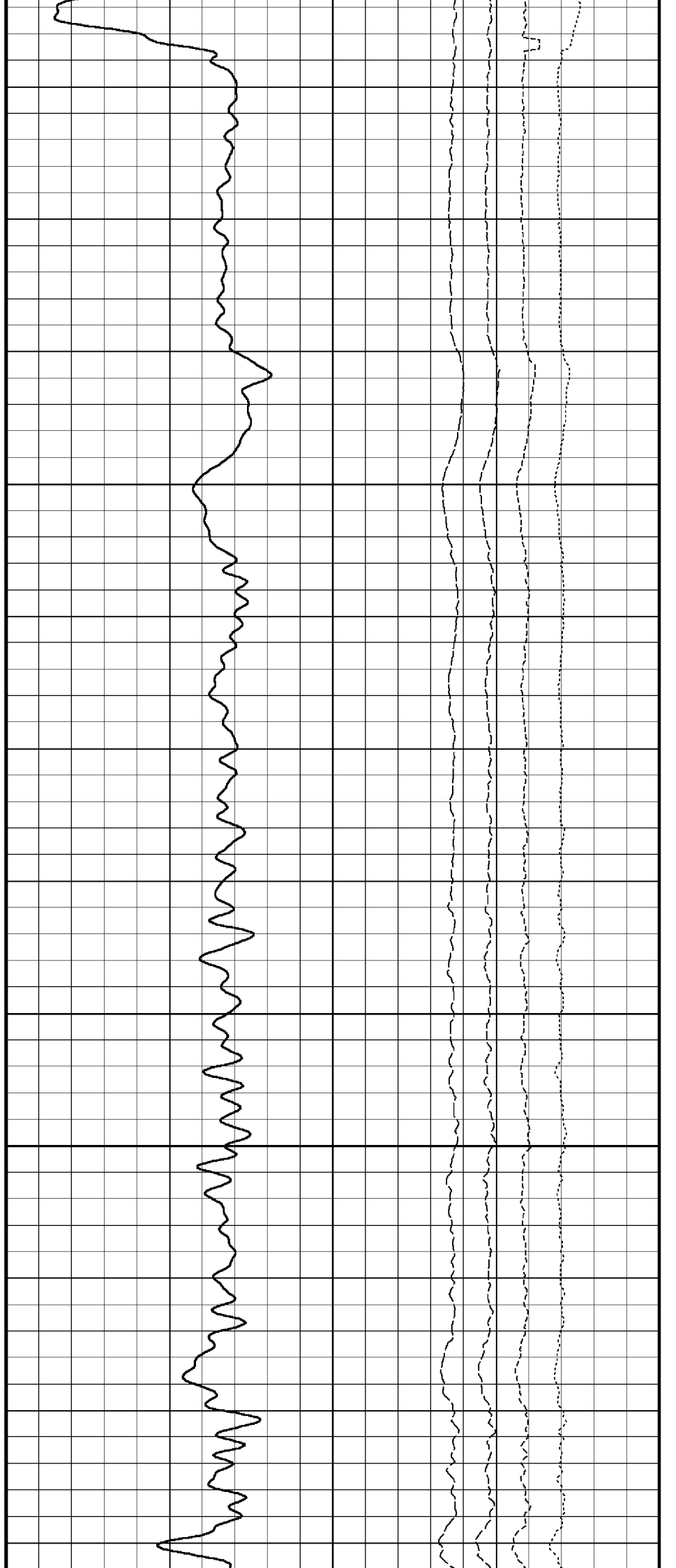
54°

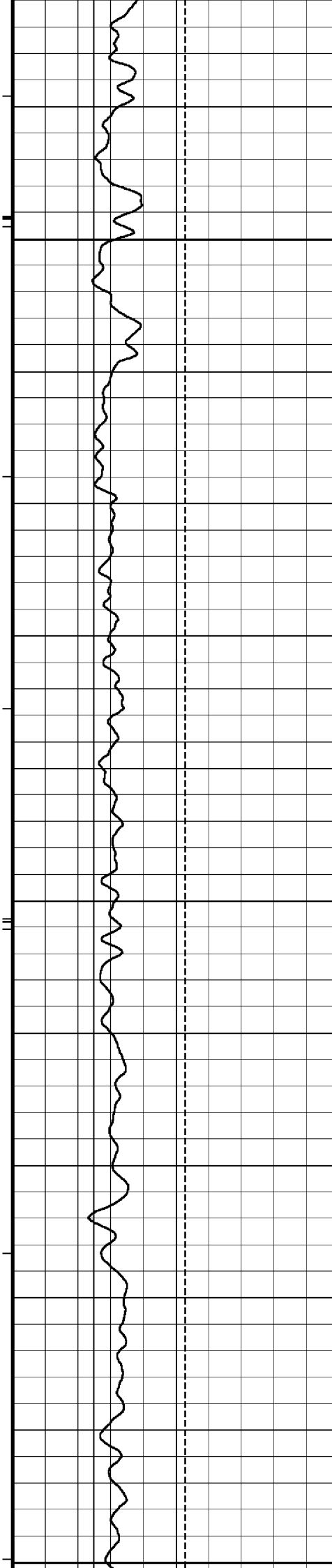
670
TVD

680
TVD

55°

690
TVD





700
TVD

710
TVD

55°

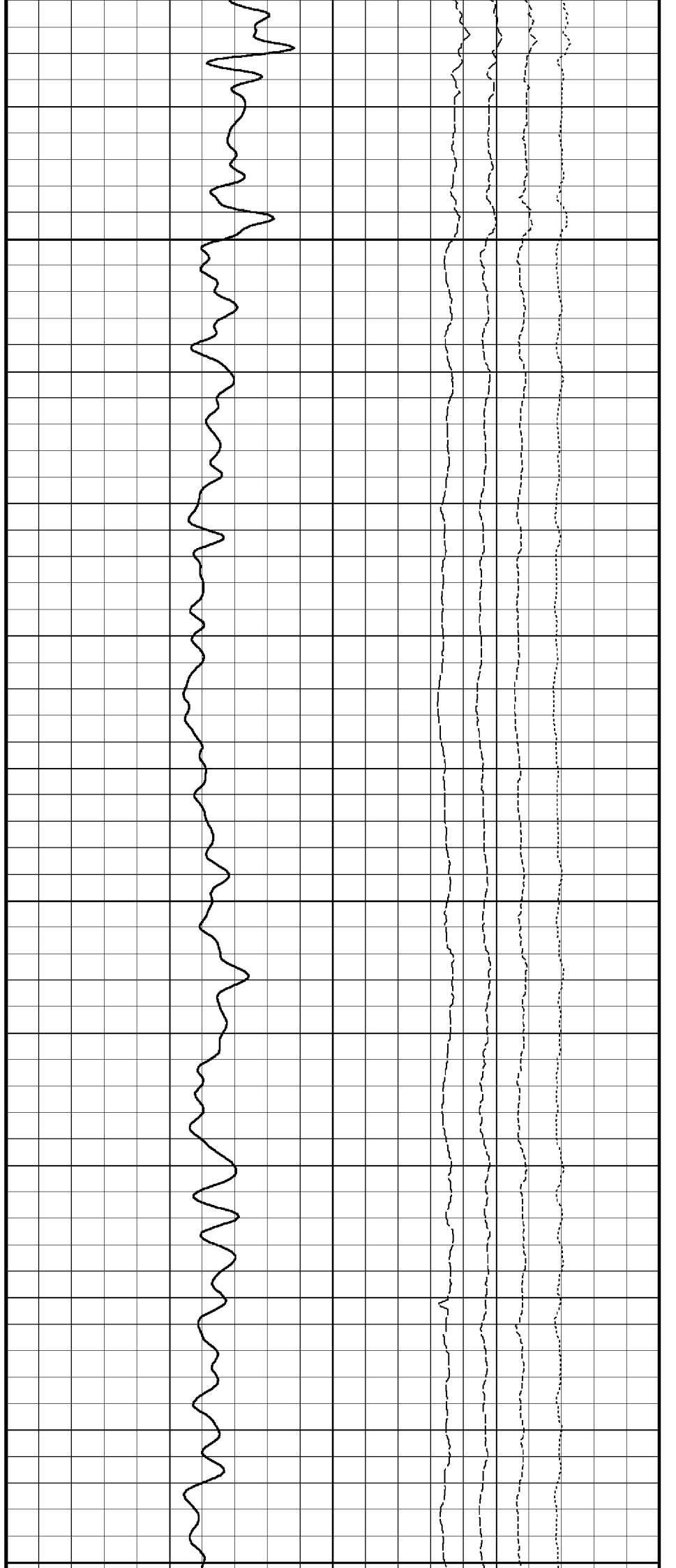
720
TVD

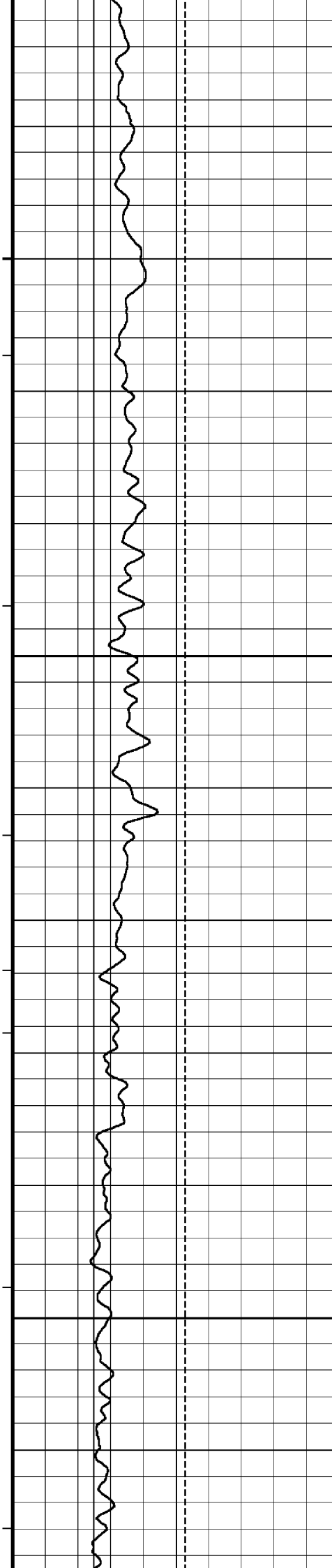
730
TVD

55°

740
TVD

750





760
TVD

760
TVD

56°

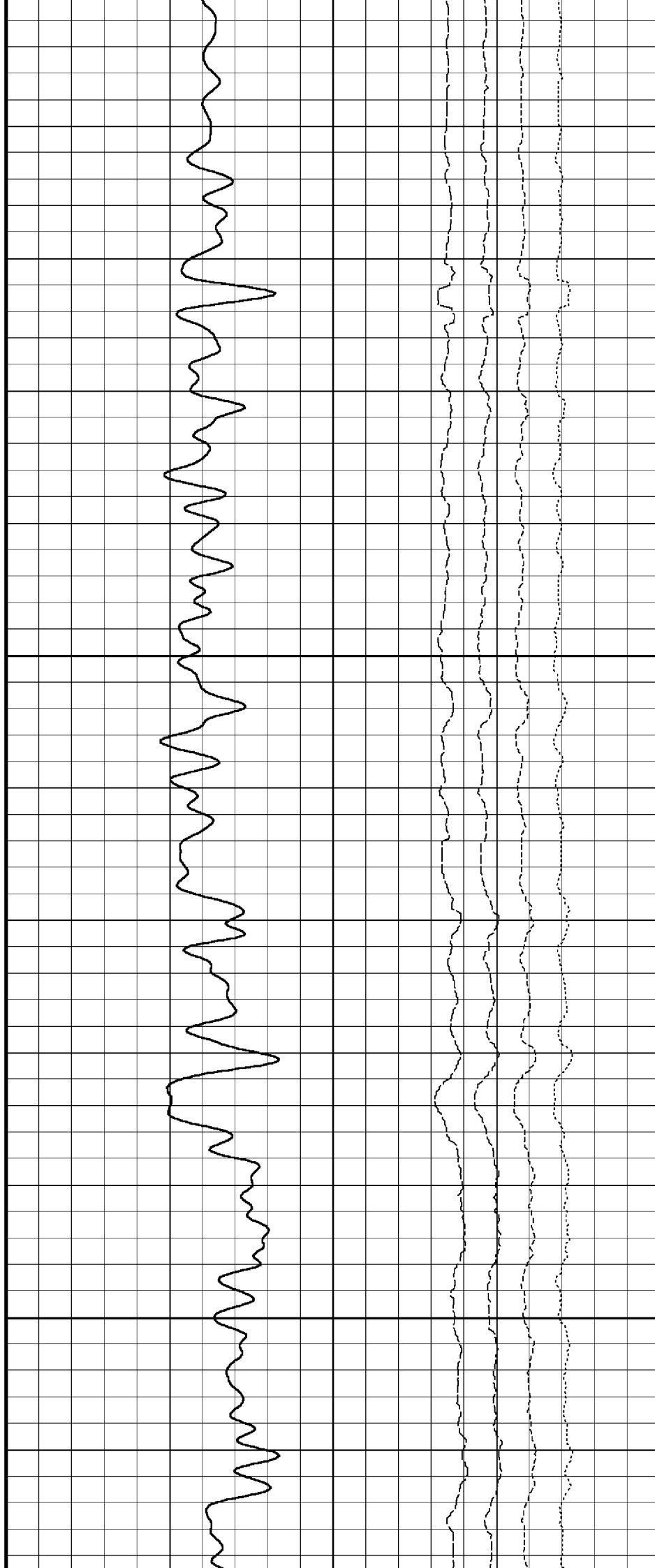
770
TVD

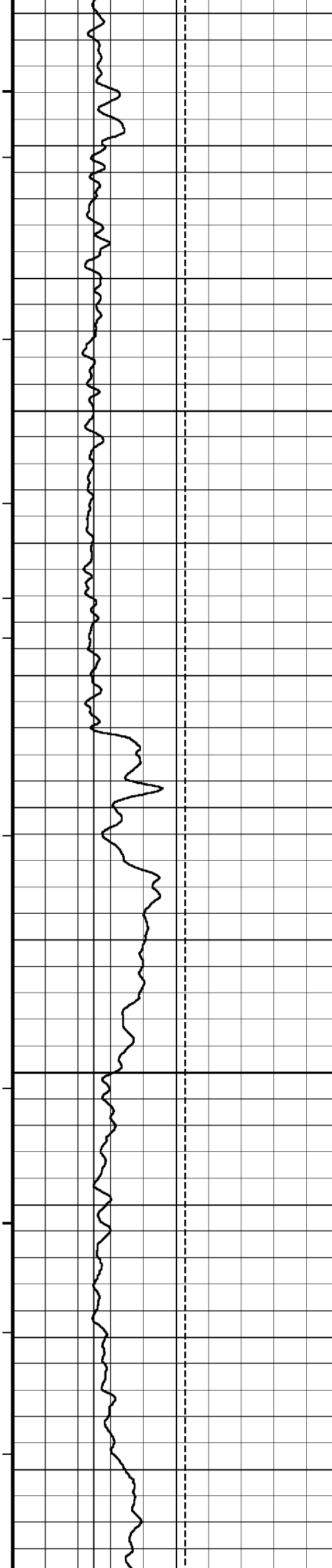
780
TVD

56°

790
TVD

800
TVD





810
TVD

57°

820
TVD

830
TVD

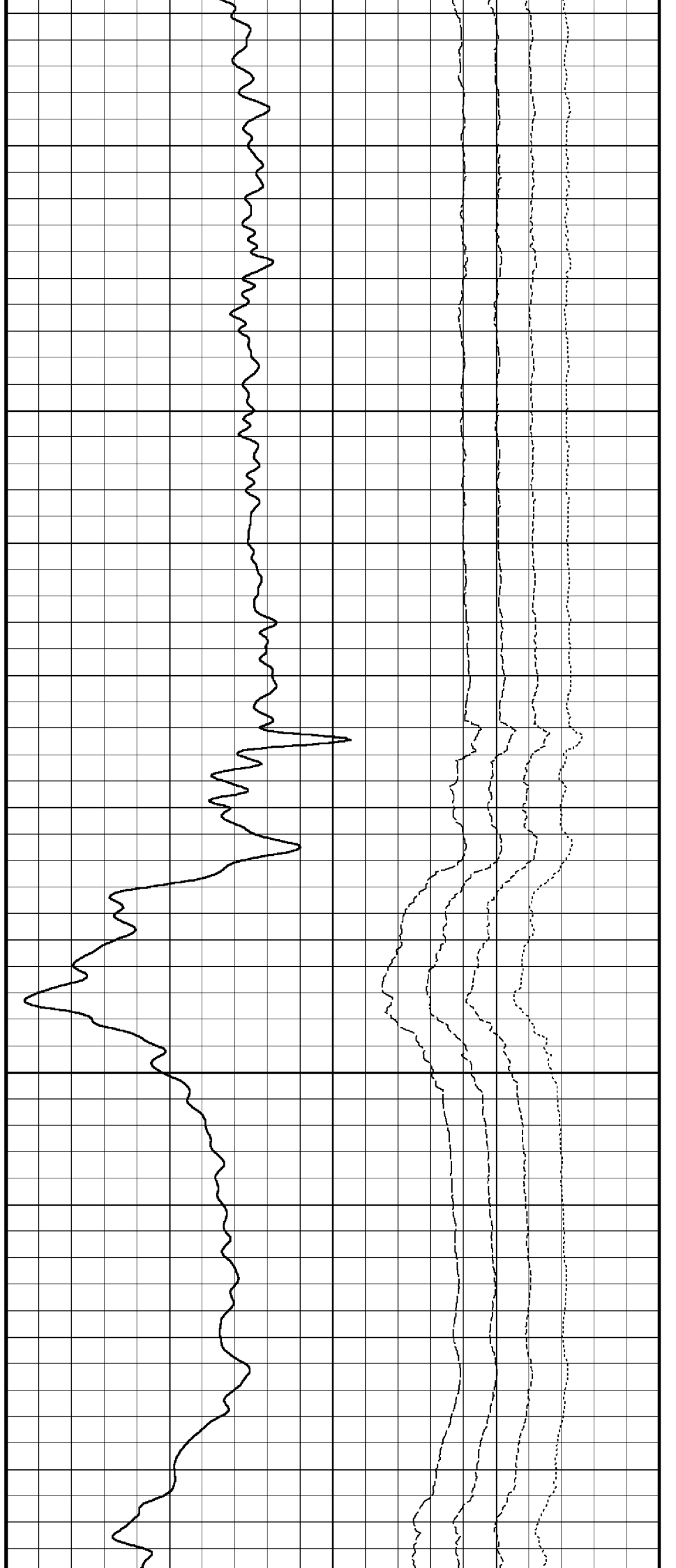
57°

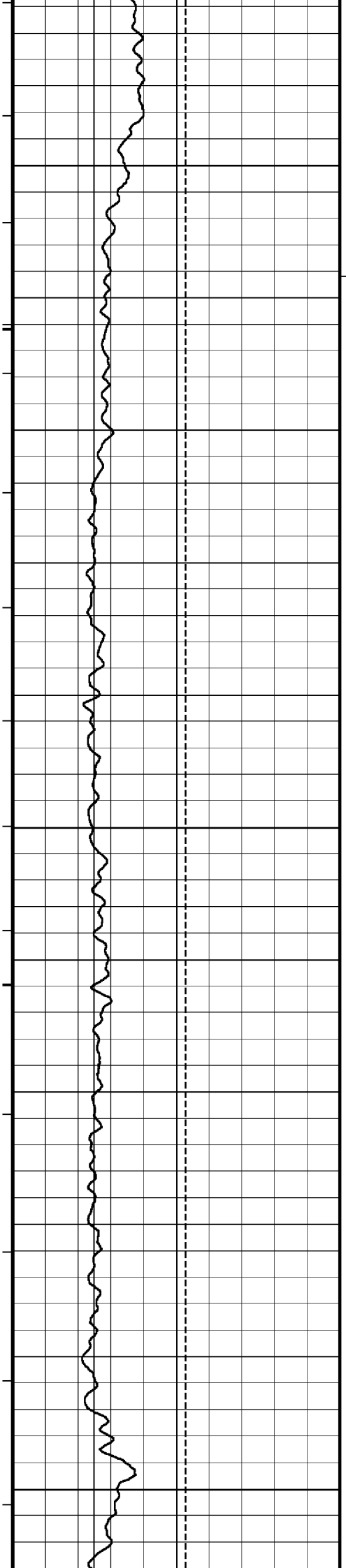
840
TVD

850
TVD

860
TVD

57°





870
TVD

880
TVD

58°

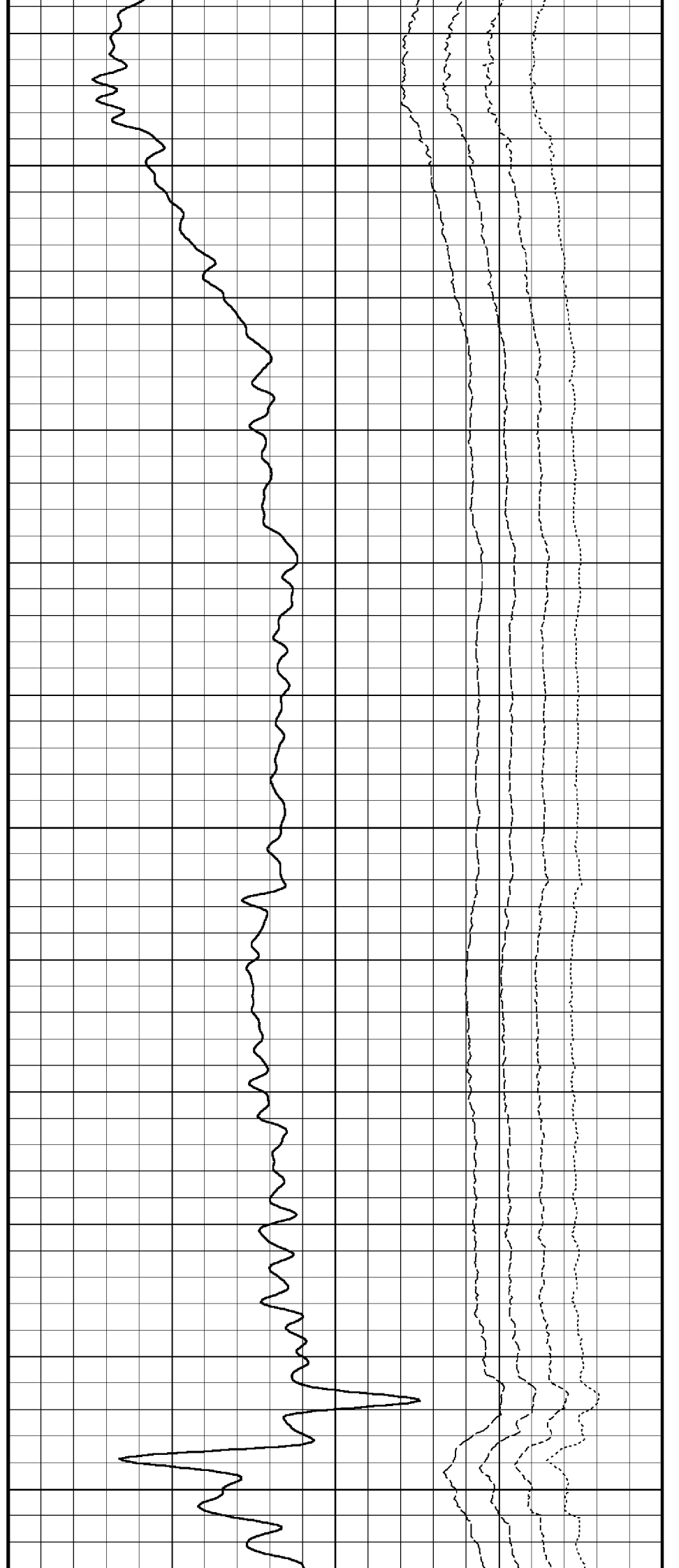
890
TVD

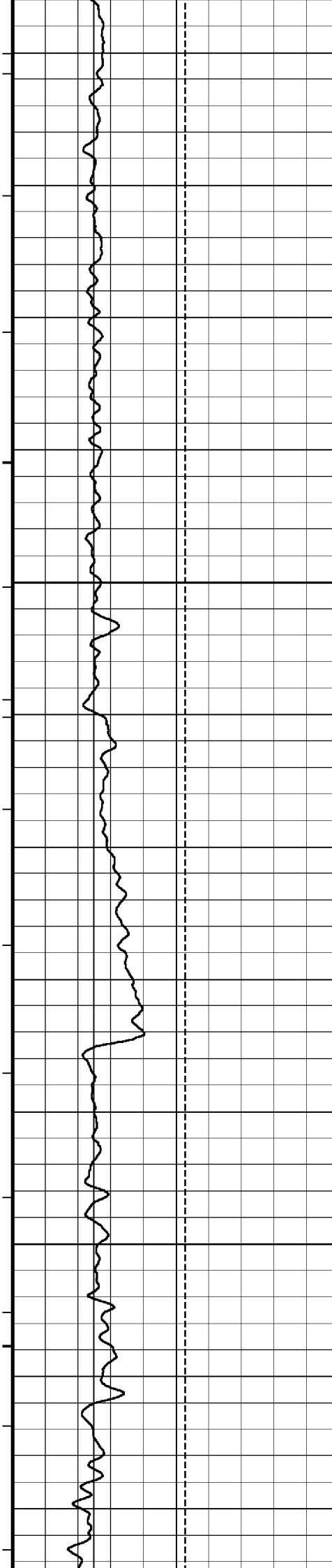
900
TVD

910
TVD

58°

920
TVD





930
TVD

58°

940
TVD

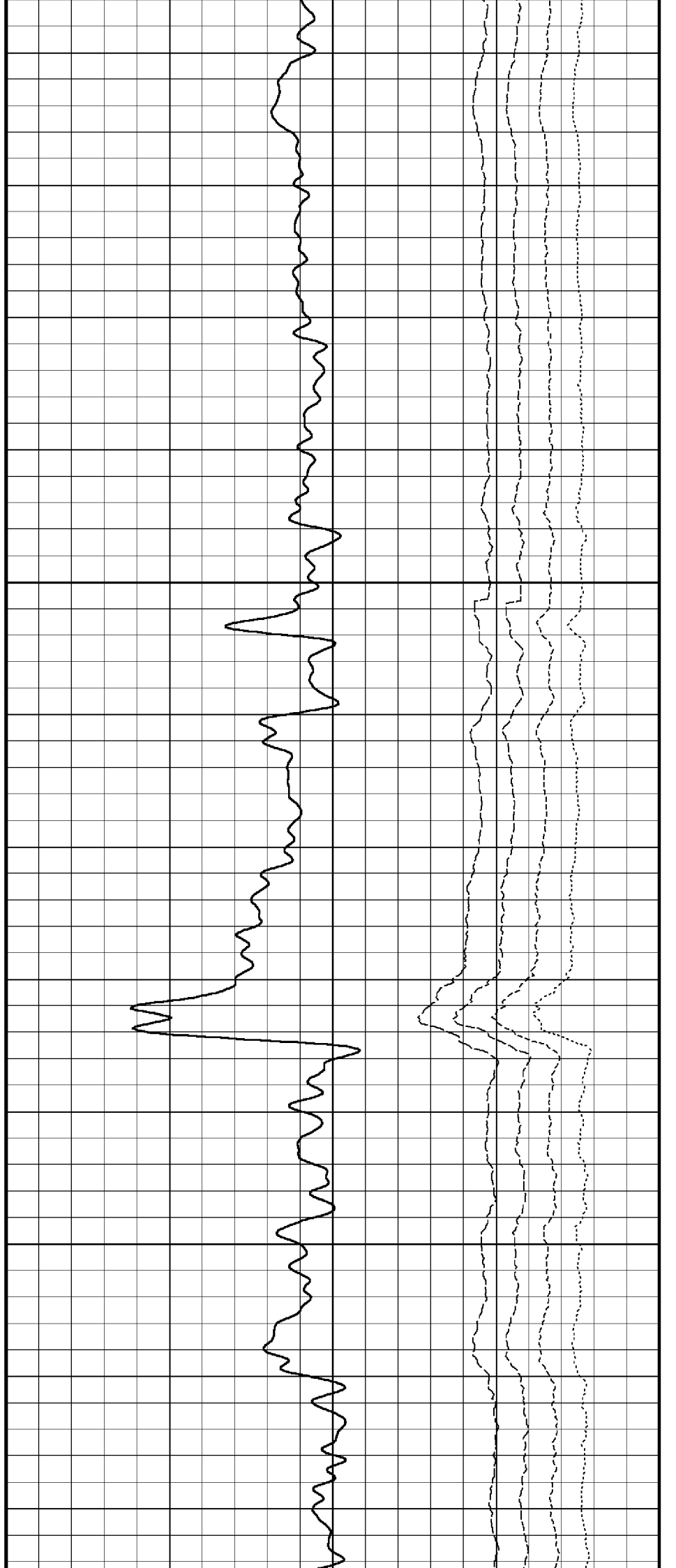
950
TVD

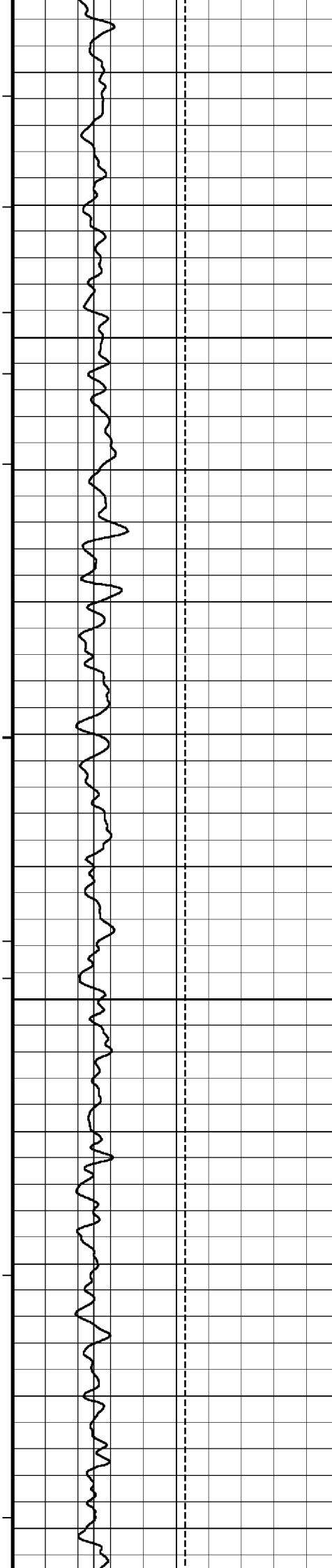
960
TVD

59°

970
TVD

980
TVD





59°

990
TVD

1000
TVD

1010
TVD

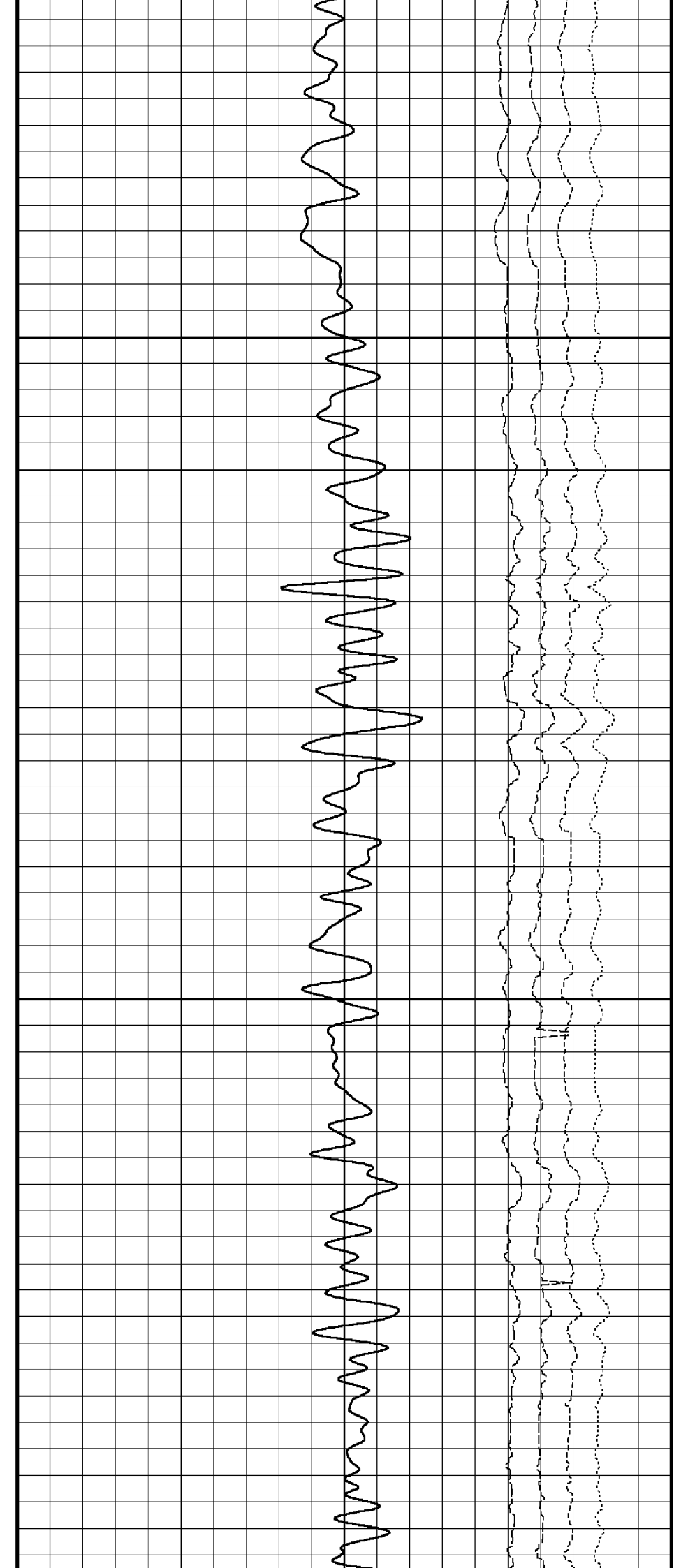
60°

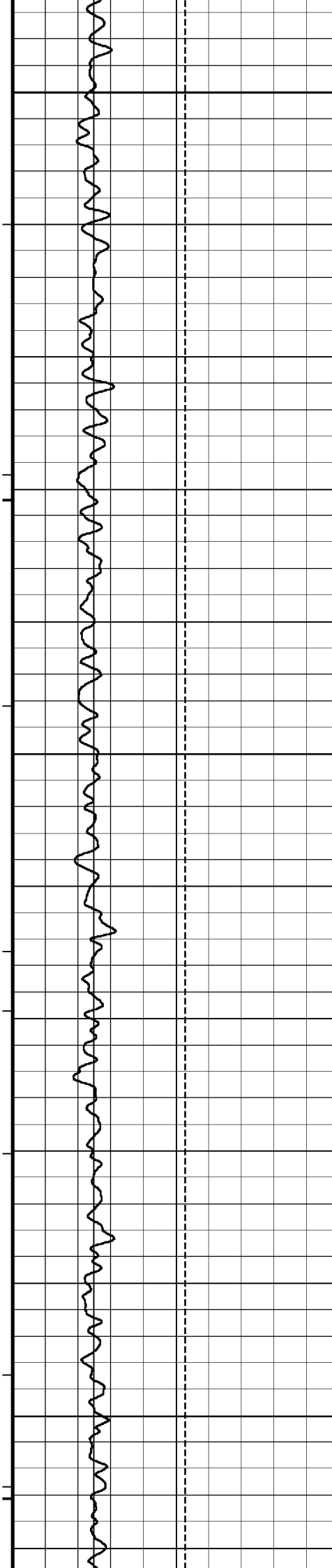
1020
TVD

1030
TVD

60°

1040
TVD





1050
TVD

1060
TVD

61°

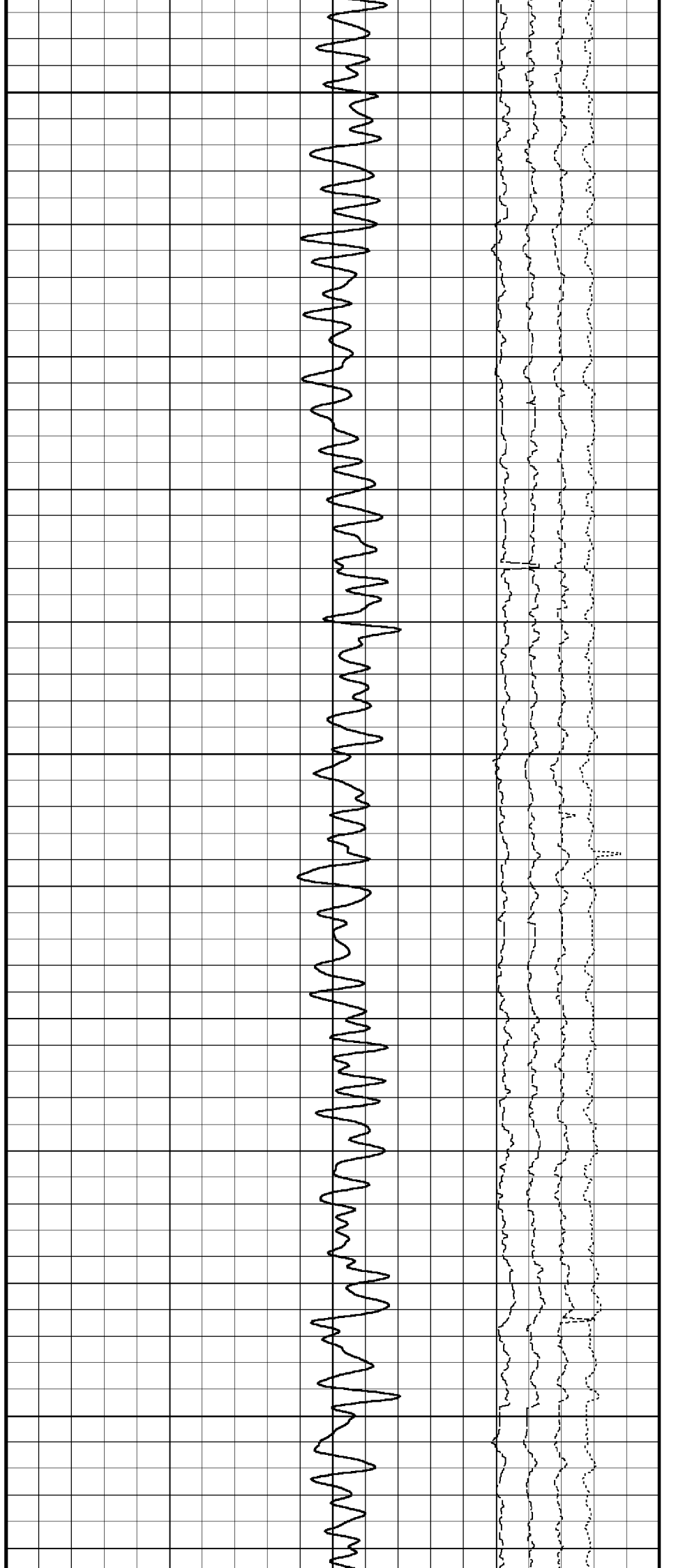
1070
TVD

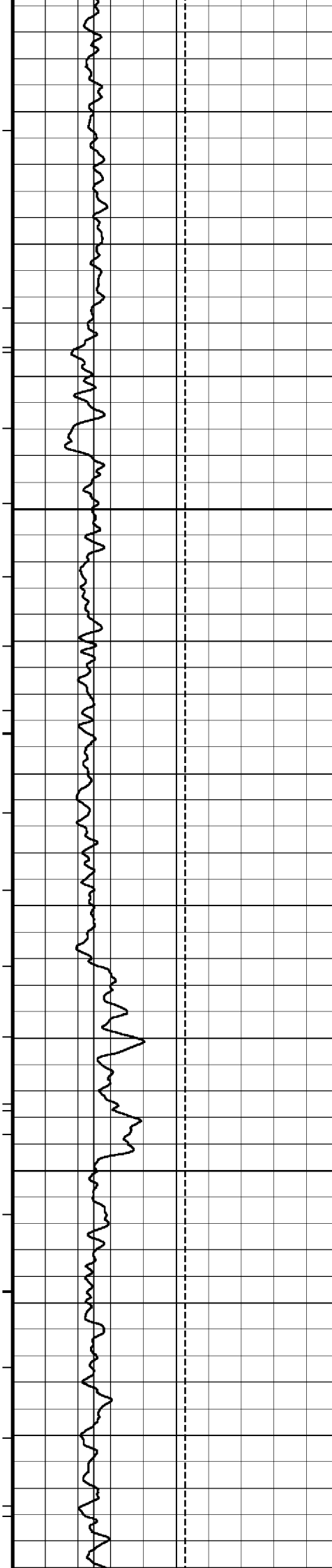
1080
TVD

62°

1090
TVD

1100
TVD





1110
TVD

62°

1120
TVD

1130
TVD

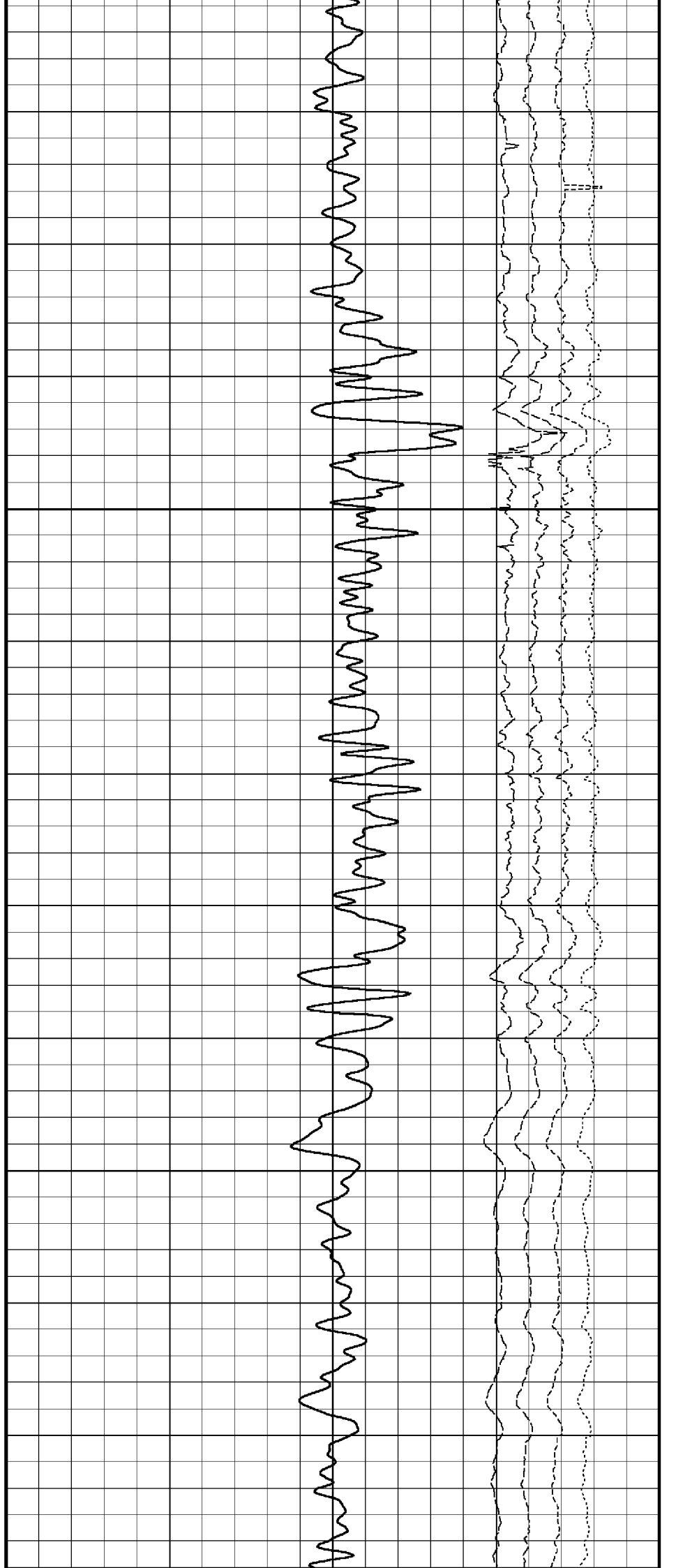
63°

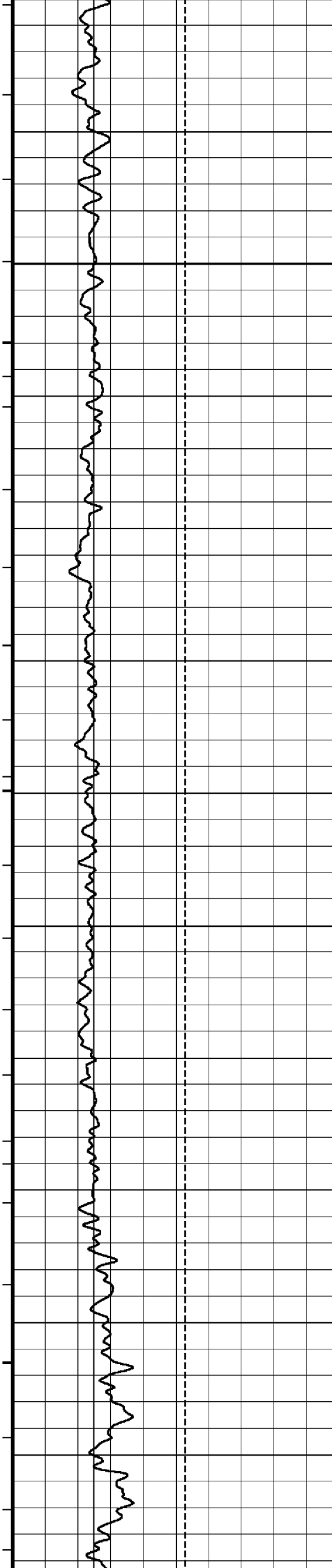
1140
TVD

1150
TVD

1160
TVD

64°





1170
TVD

1180
TVD

64°

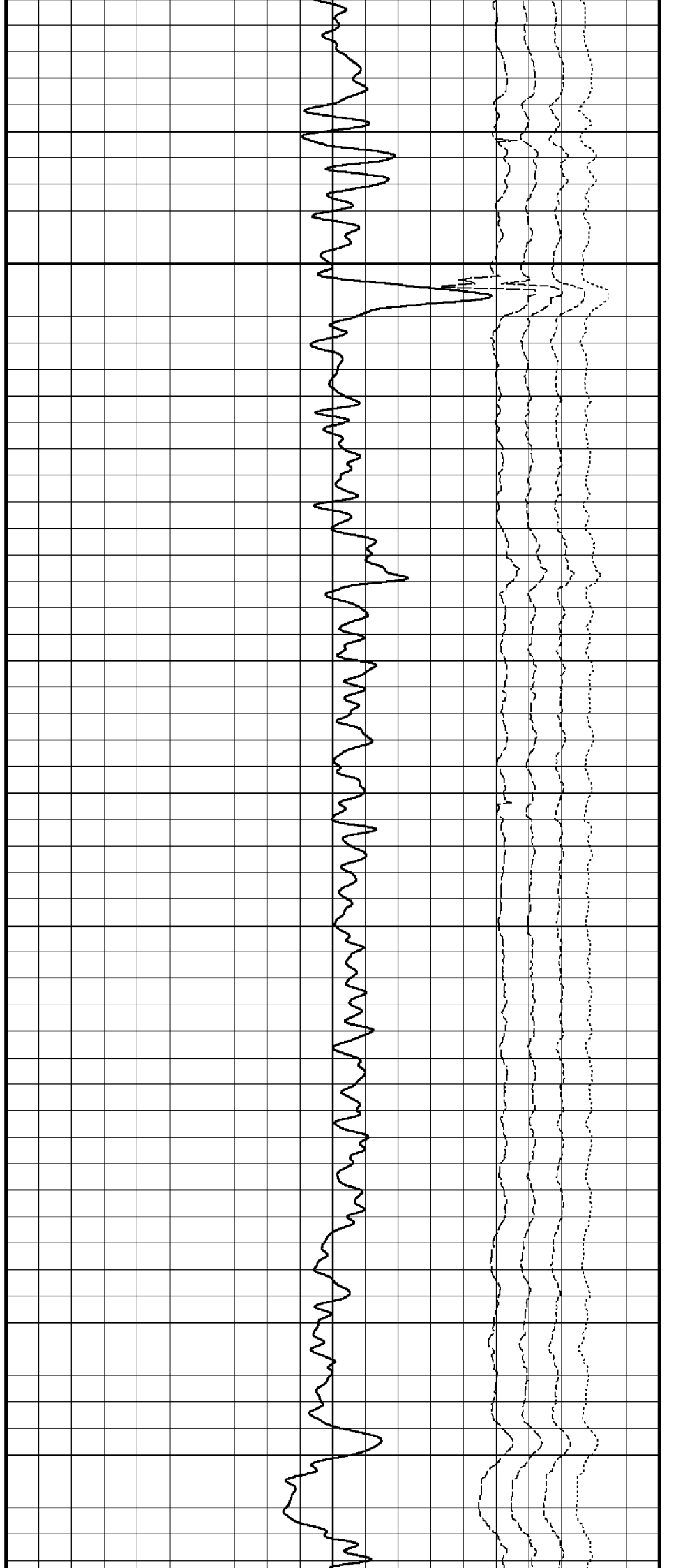
1190
TVD

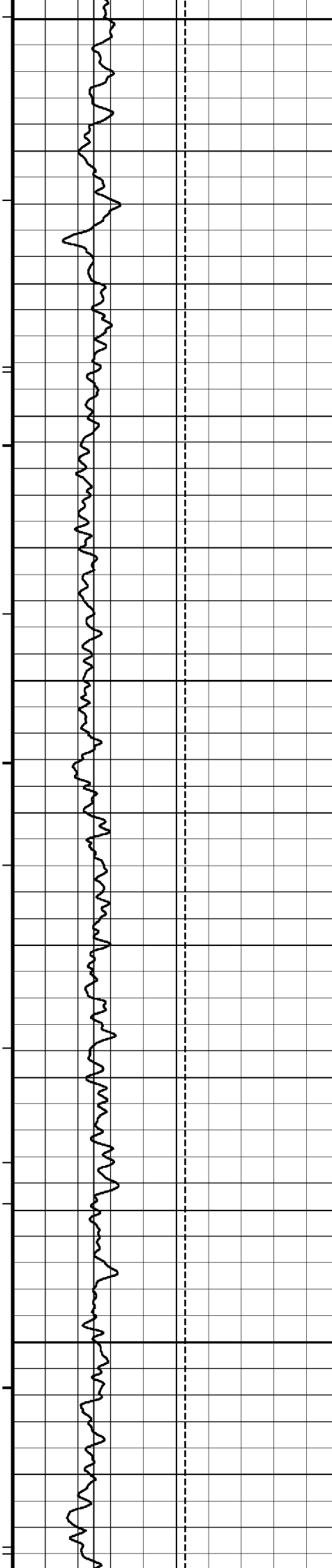
1200
TVD

1210
TVD

65°

1220
TVD





1230
TVD

66°

1240
TVD

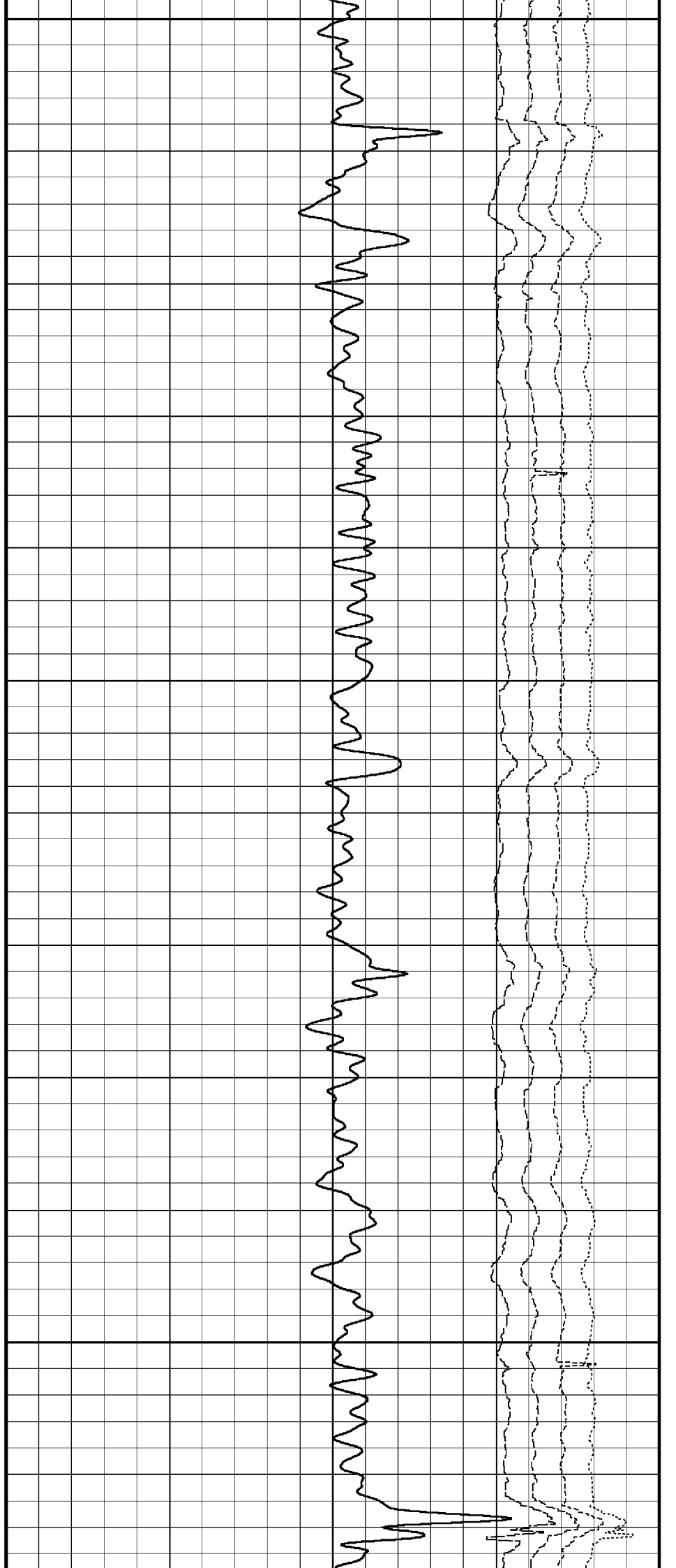
1250
TVD

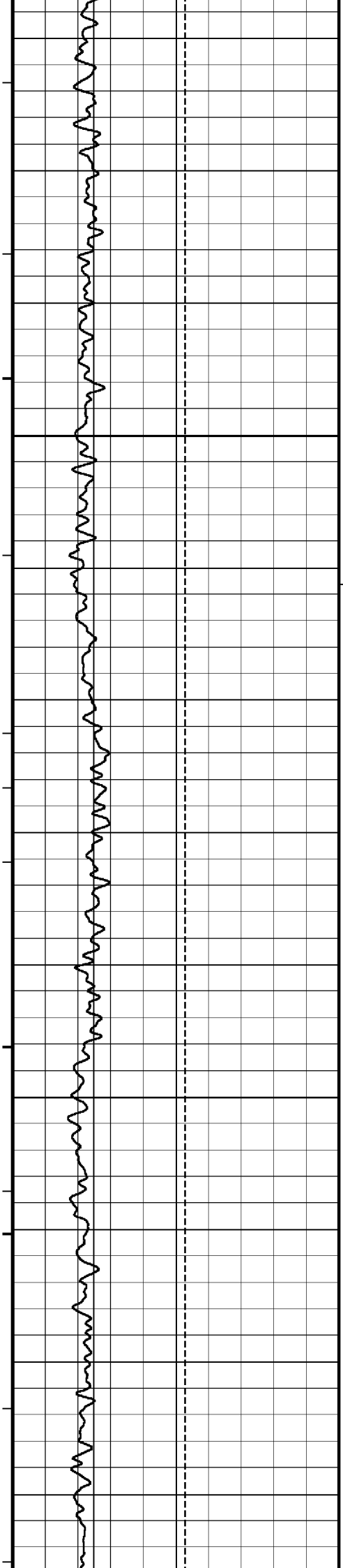
1260
TVD

67°

1270
TVD

1280
TVD





67°

1290
TVD

1300
TVD

1310
TVD

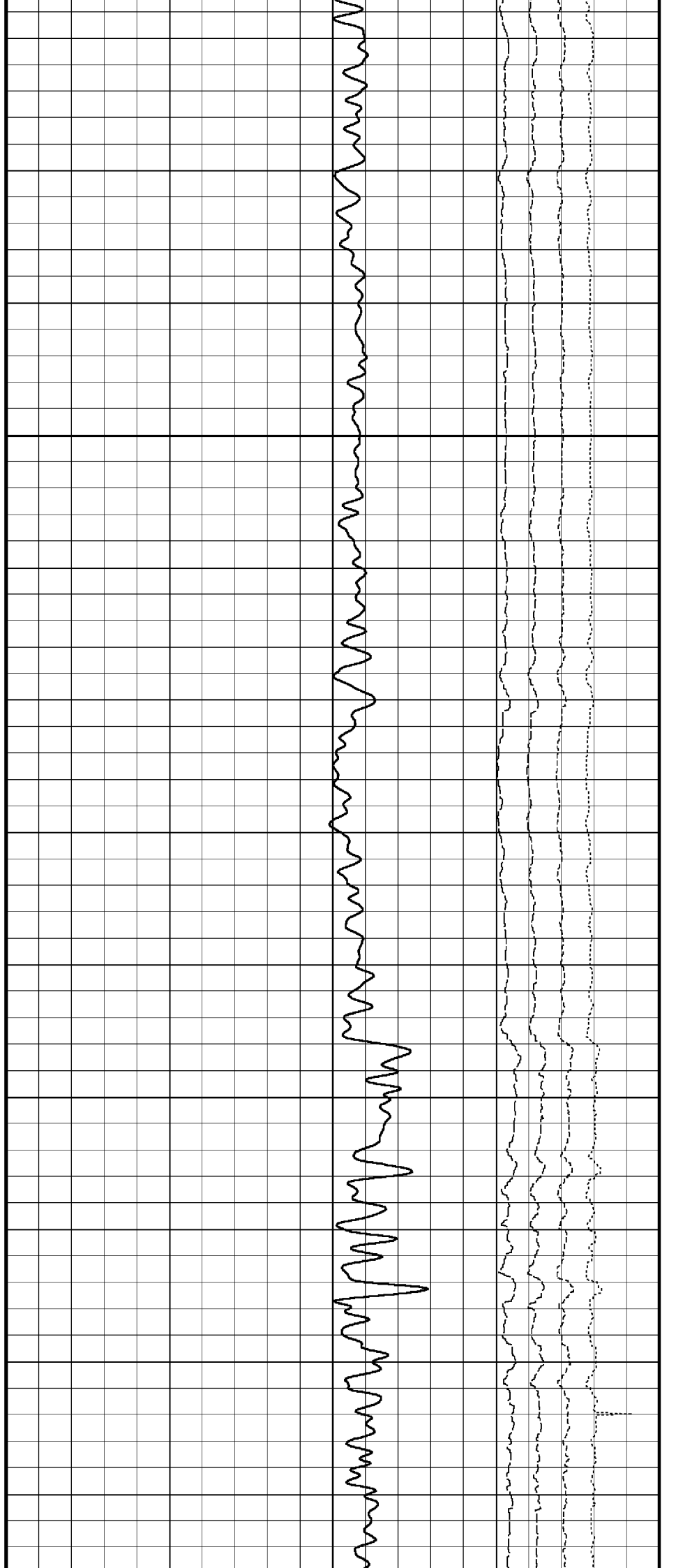
68°

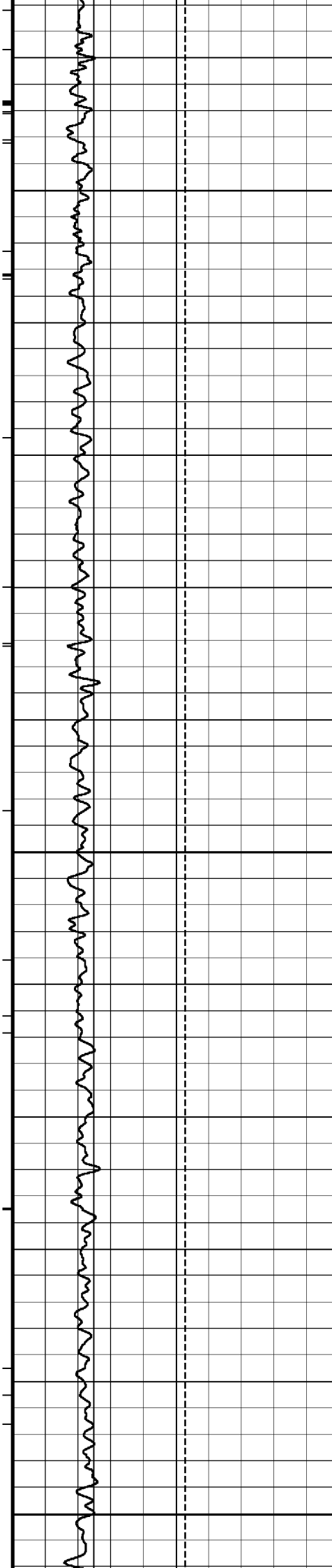
1320
TVD

1330
TVD

69°

1340
TVD





1350
TVD

1360
TVD

70°

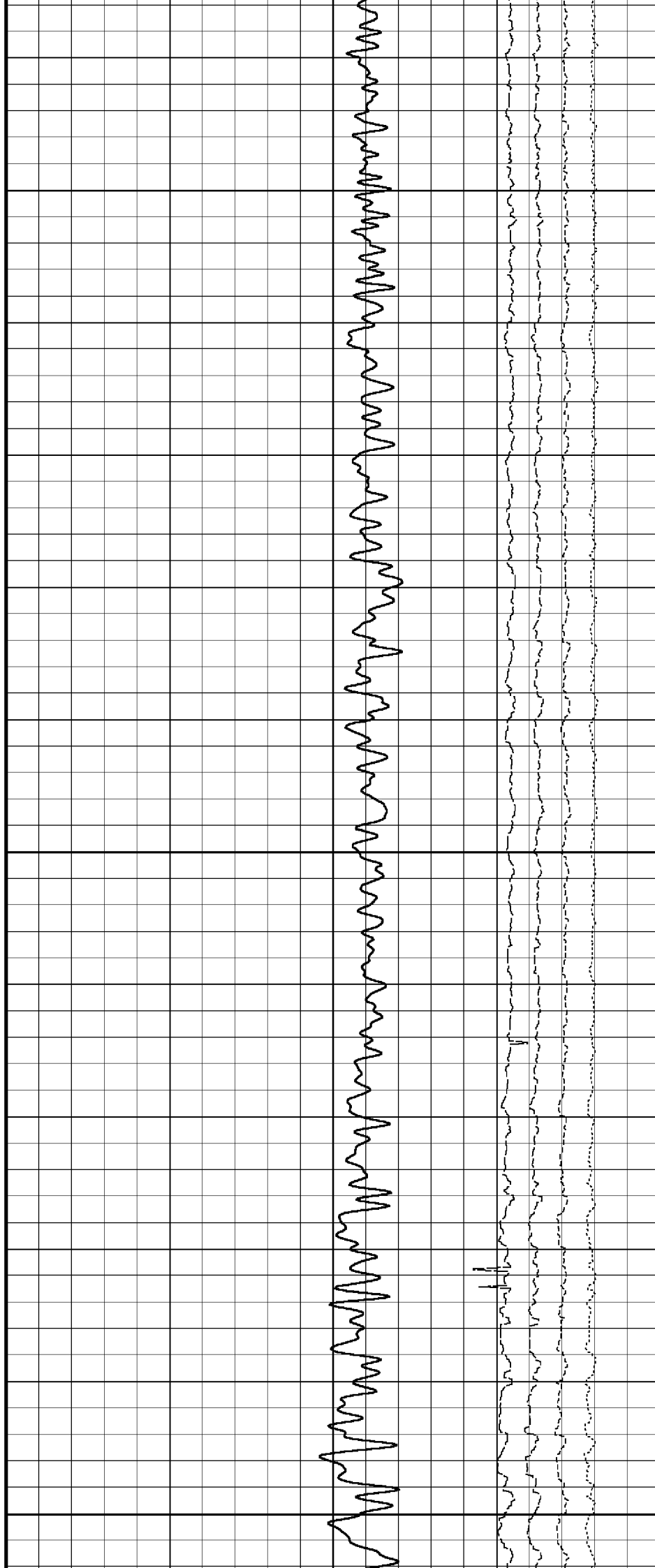
1370
TVD

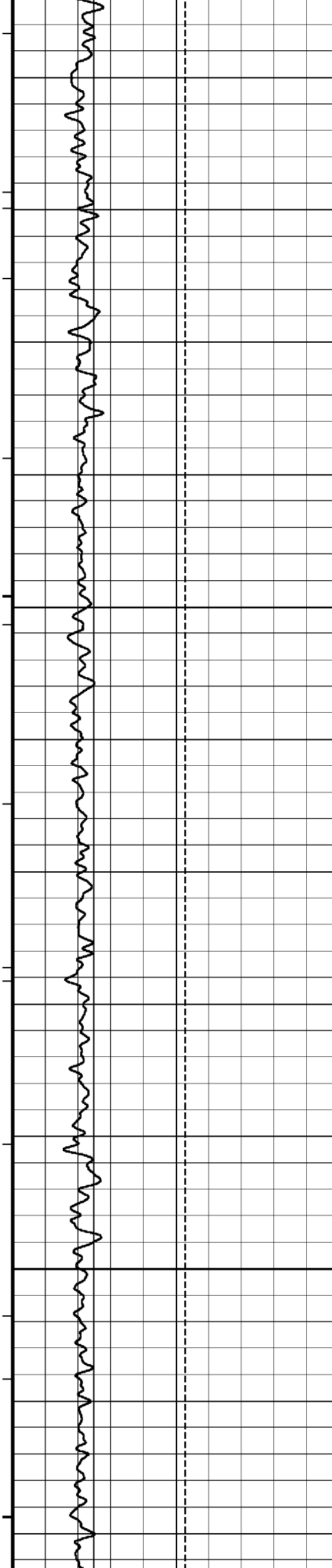
1380
TVD

70°

1390
TVD

1400
TVD





1410
TVD

71°

1420
TVD

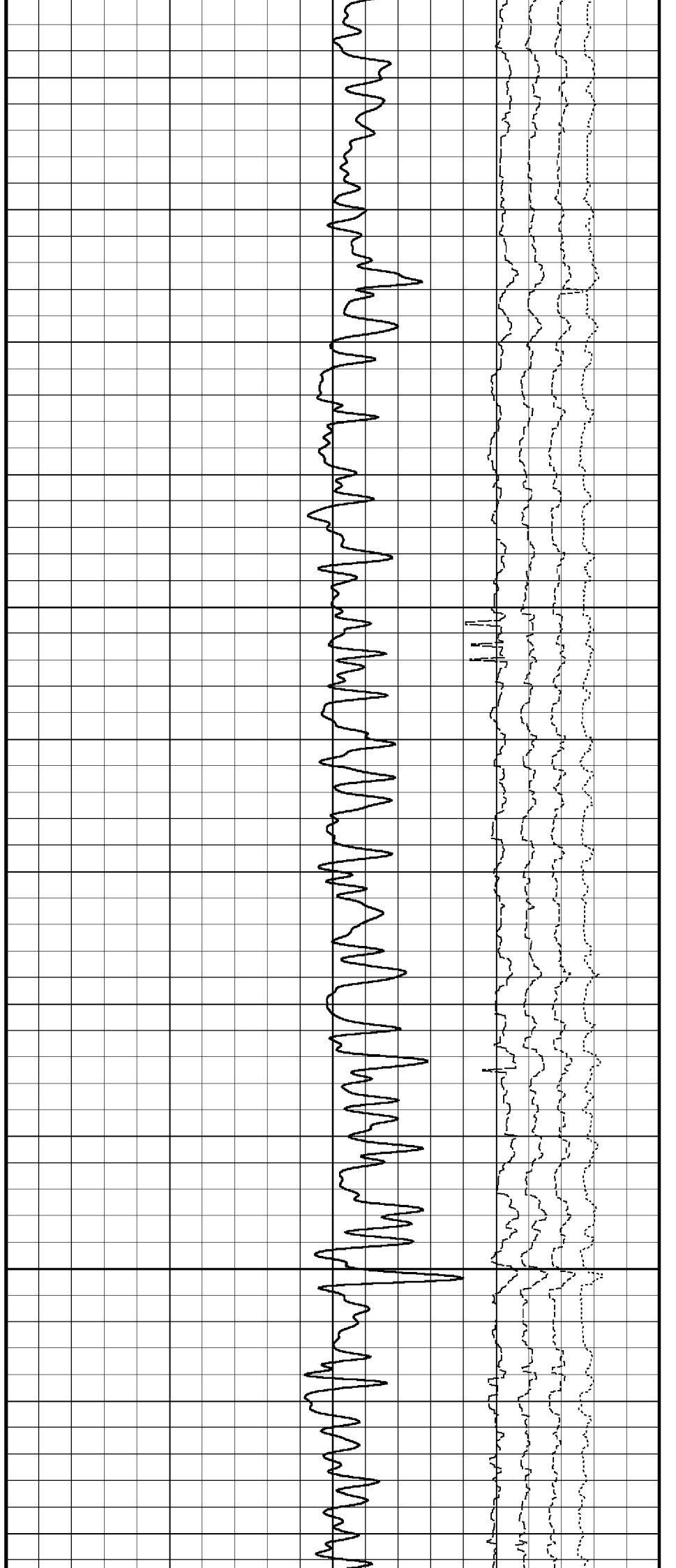
1430
TVD

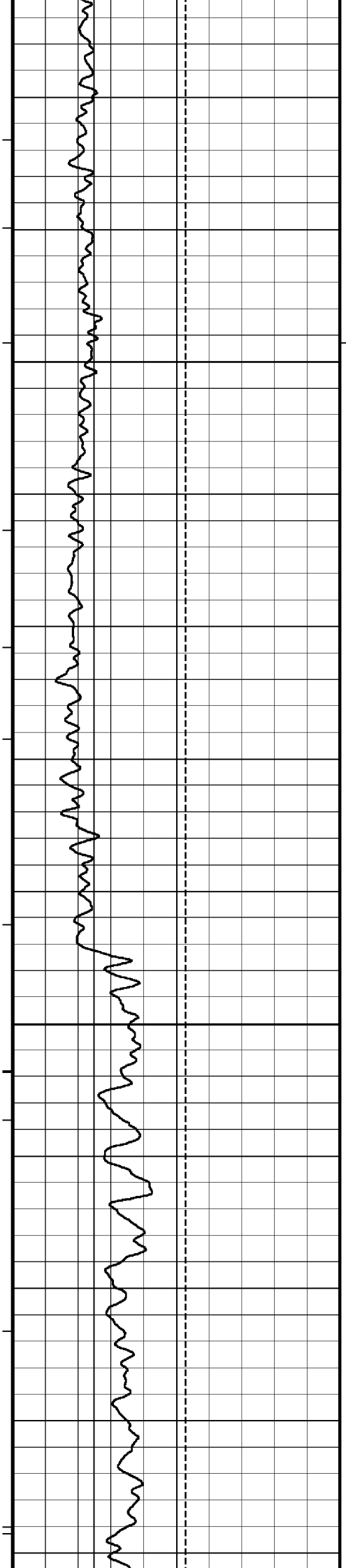
72°

1440
TVD

1450
TVD

1460
TVD





73°

1470
TVD

1480
TVD

74°

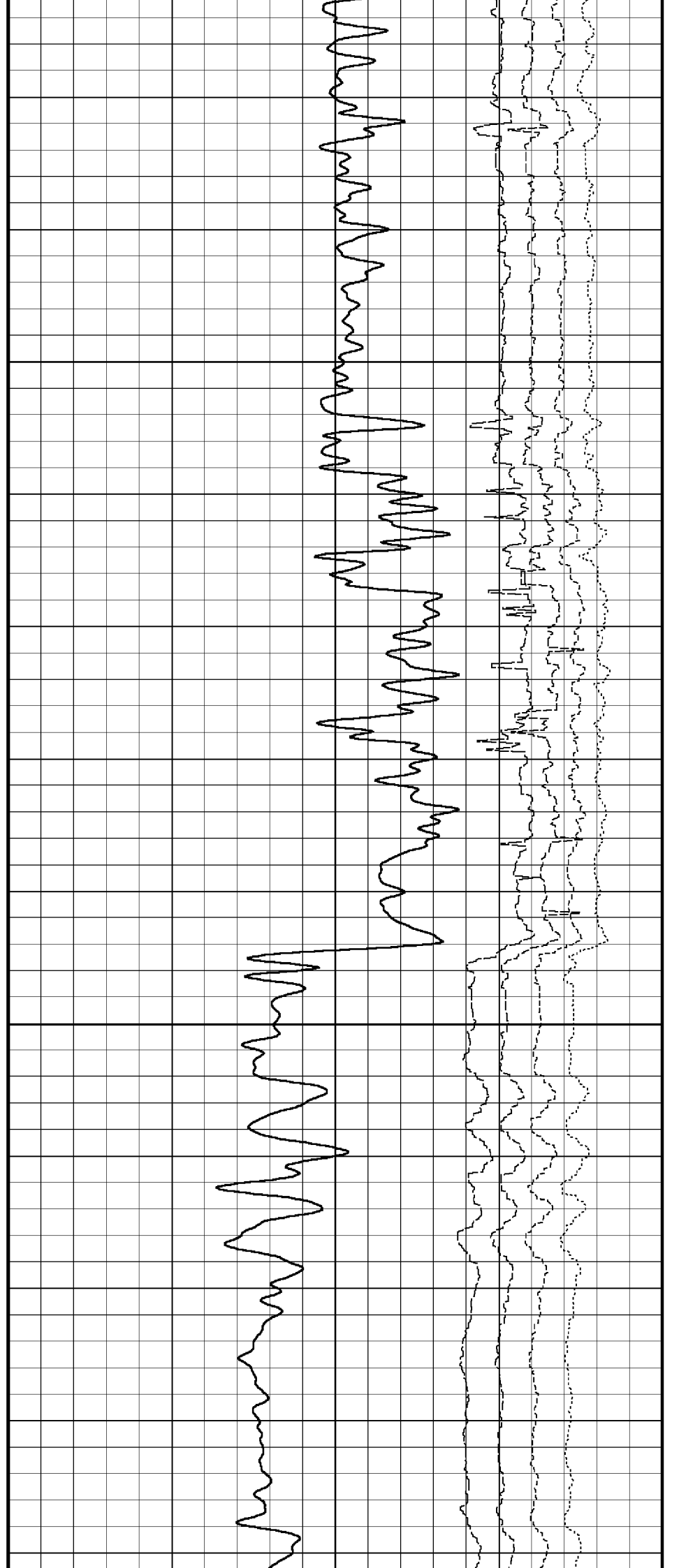
1490
TVD

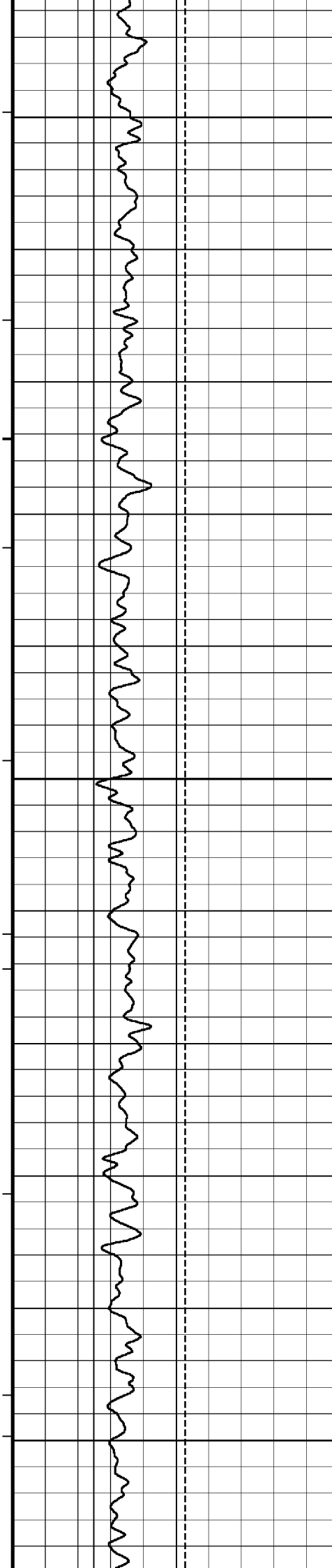
1500
TVD

1510
TVD

75°

1520
TVD





1530
TVD

76°

1540
TVD

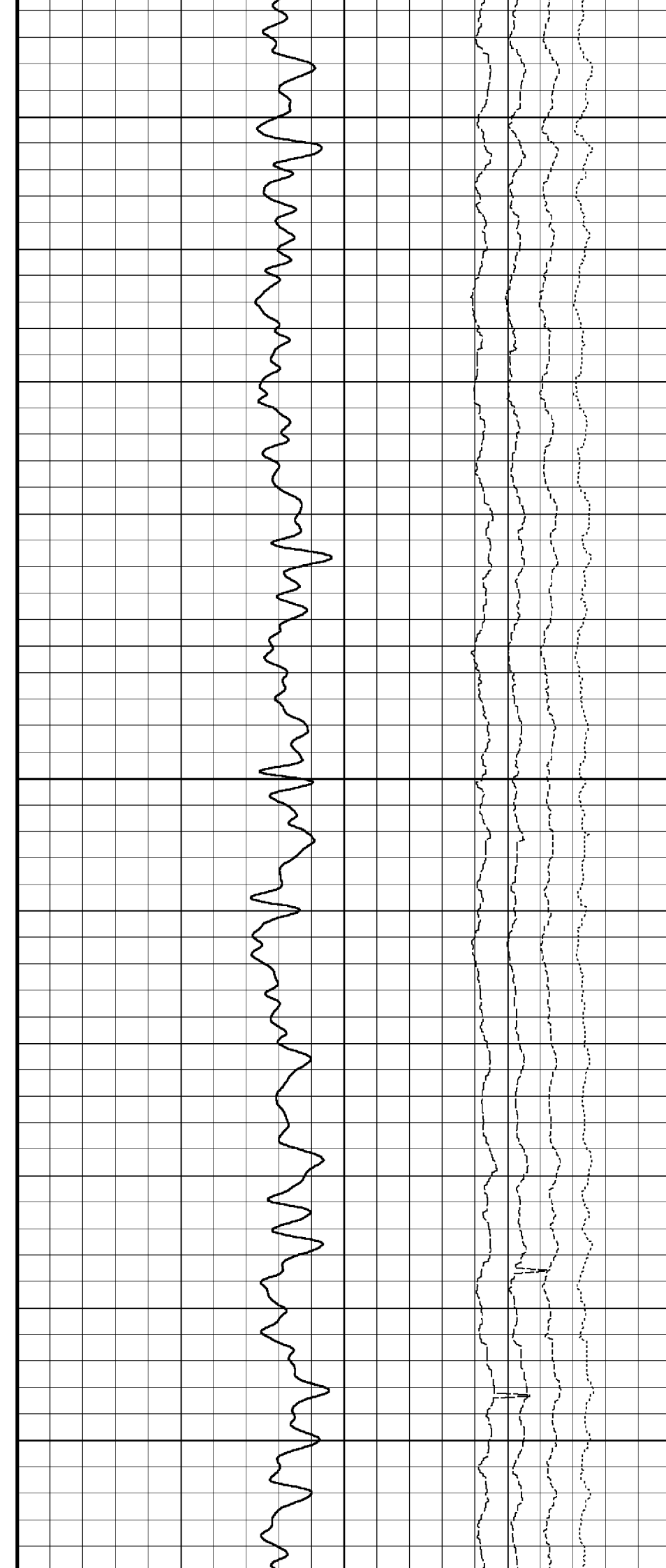
1550
TVD

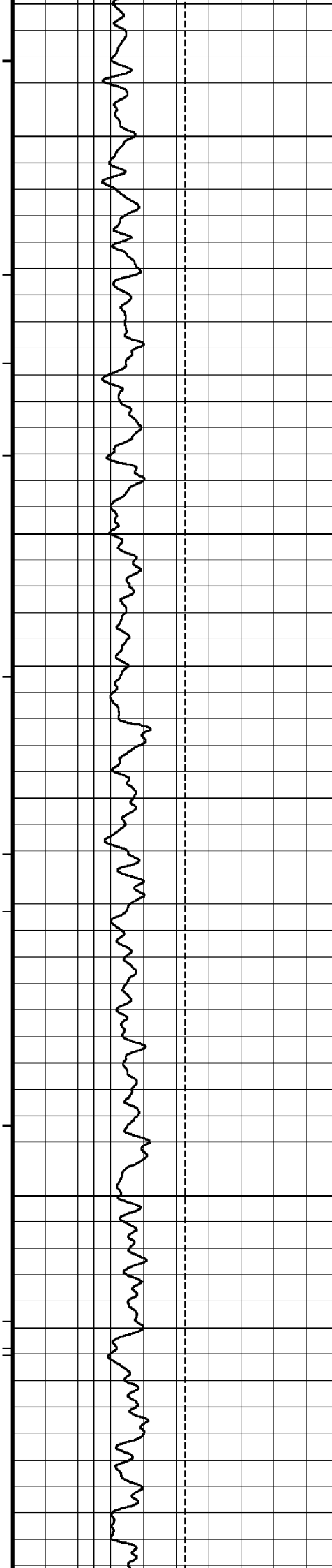
1560
TVD

76°

1570
TVD

1580
TVD





1580
TVD

76°

1590
TVD

1600
TVD

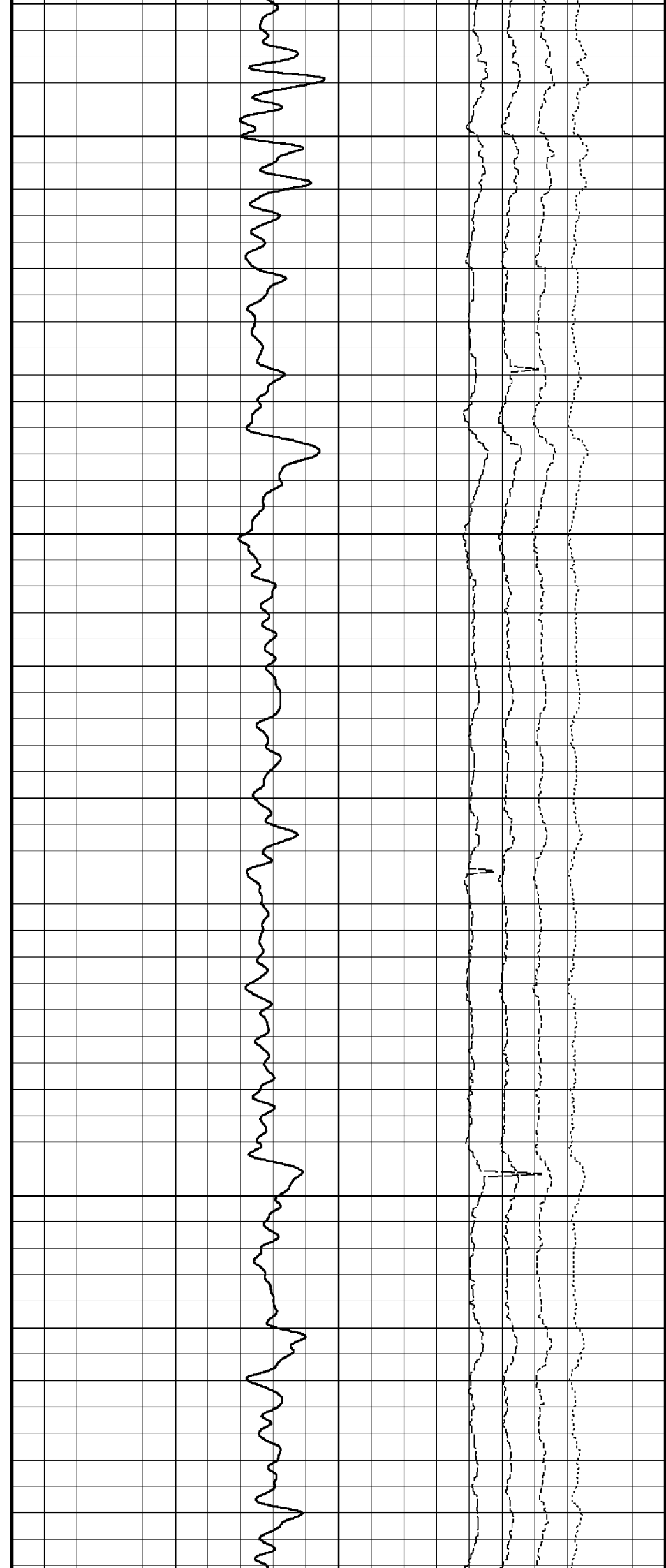
1610
TVD

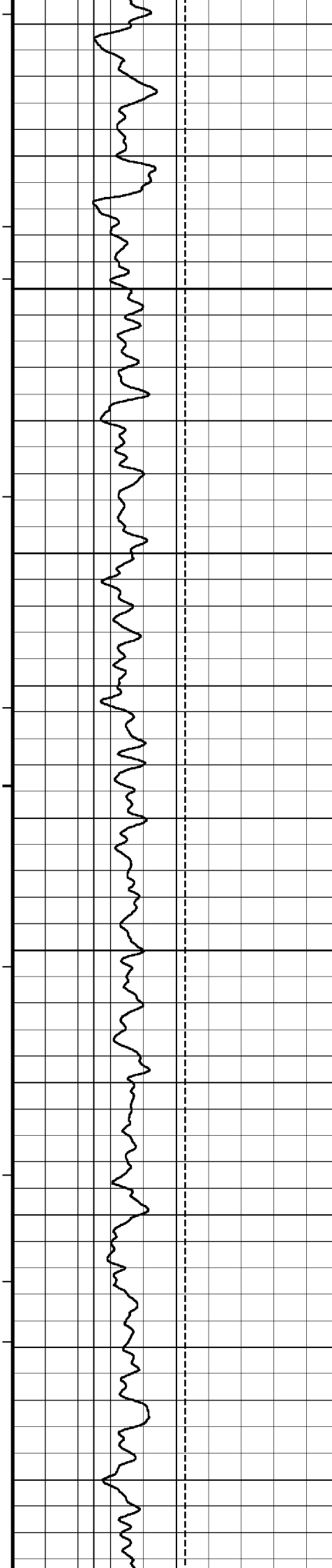
77°

1620
TVD

1630
TVD

77°





1640
TVD

1650
TVD

1660
TVD

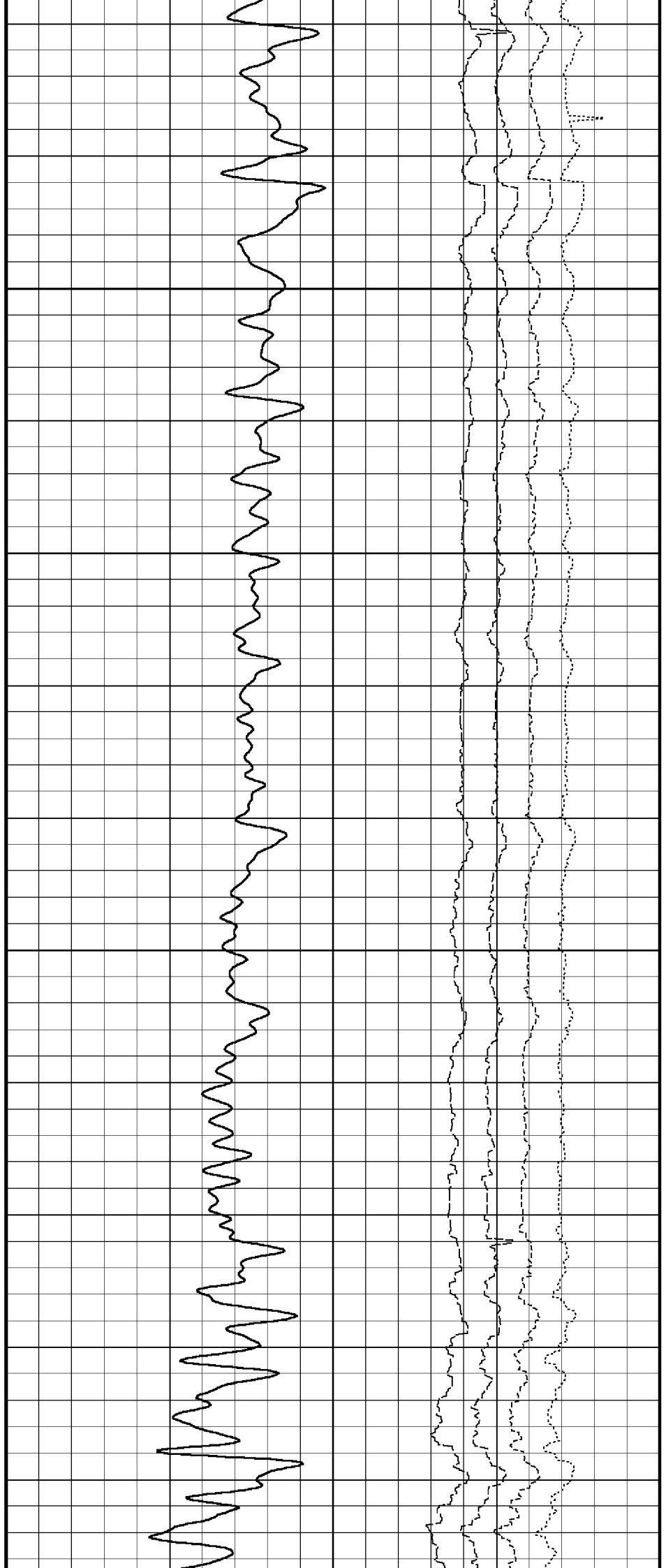
78°

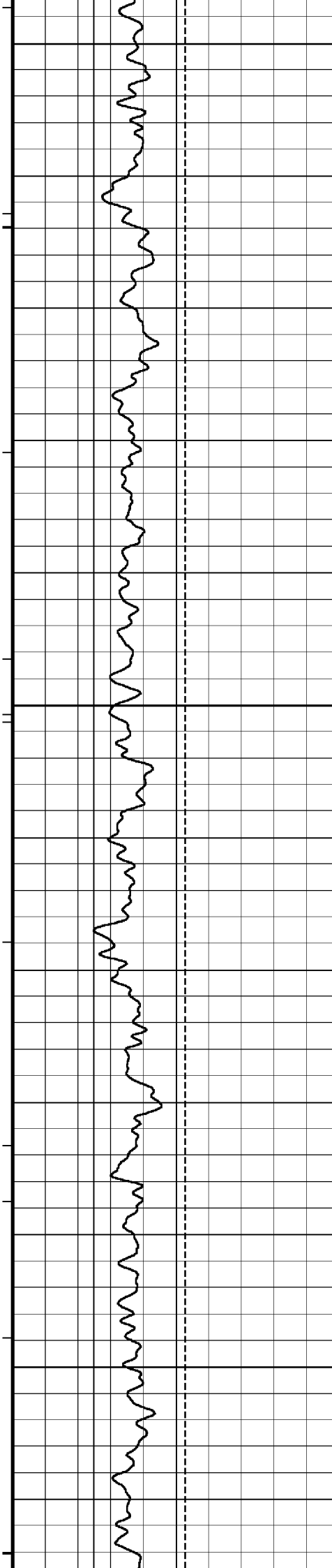
1670
TVD

1680
TVD

79°

1690
TVD





1700
TVD

1710
TVD

79°

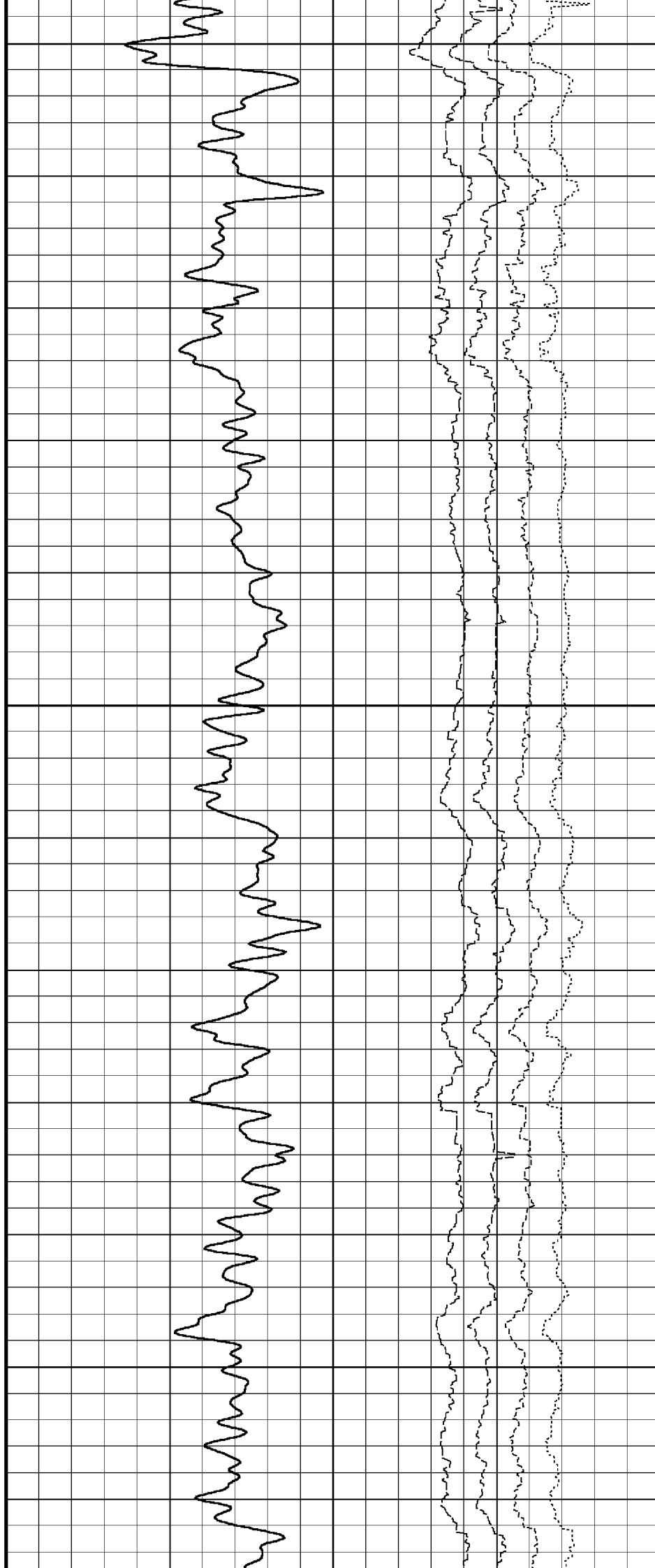
1720
TVD

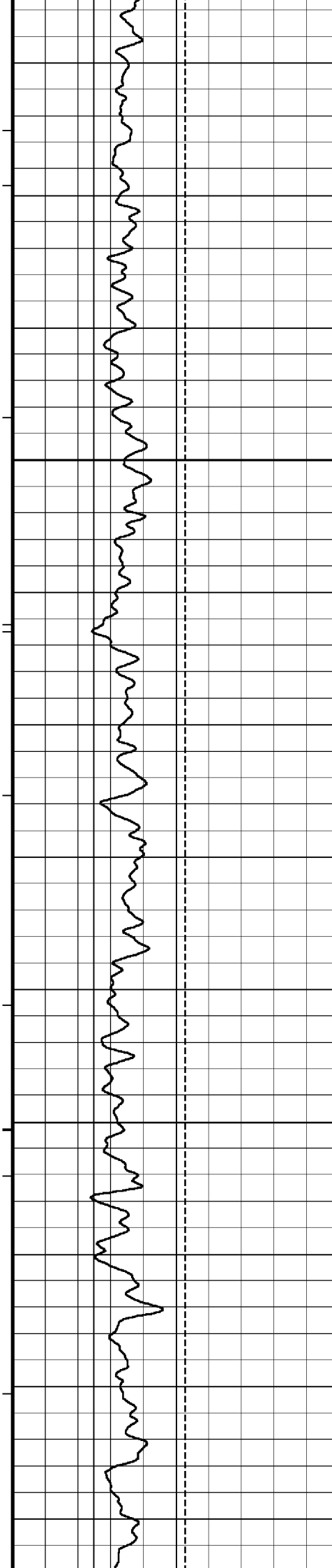
1730
TVD

79°

1740
TVD

1750
TVD





1760
TVD

80°

1770
TVD

1780
TVD

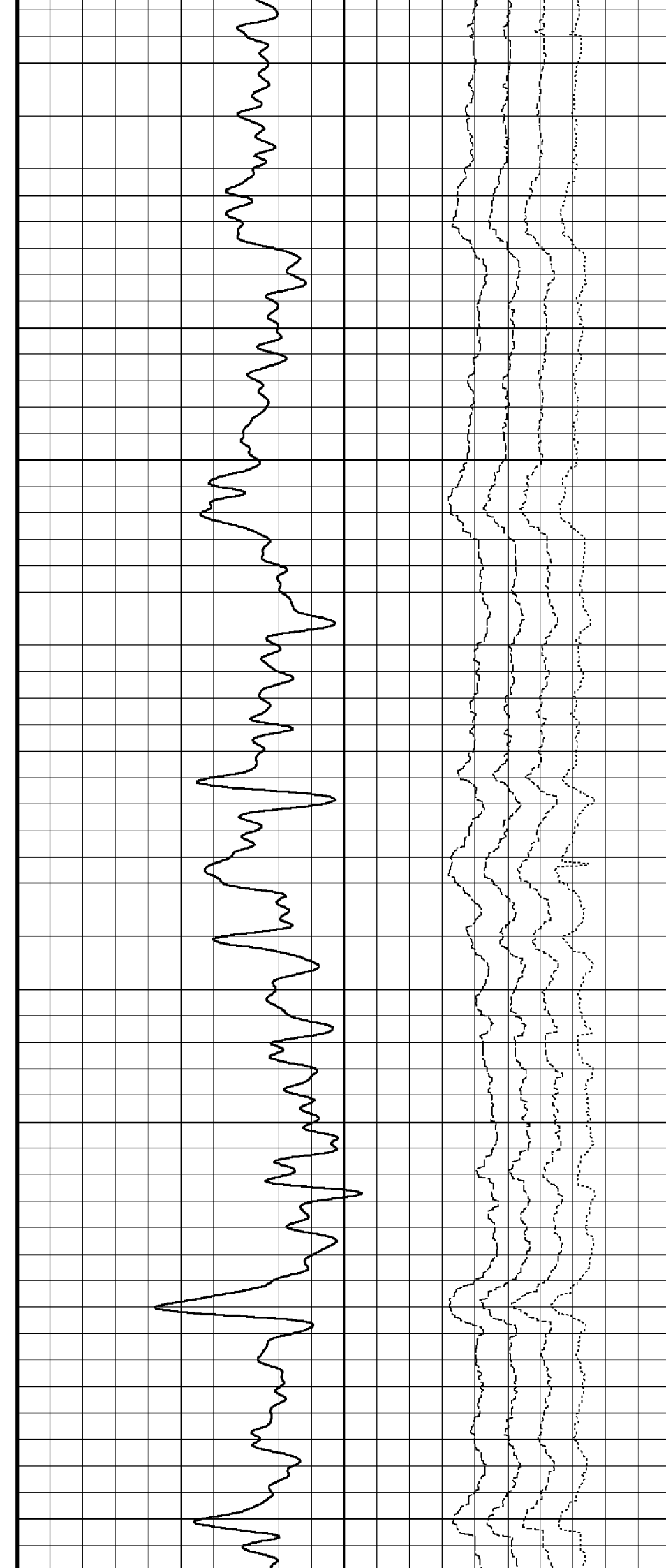
80°

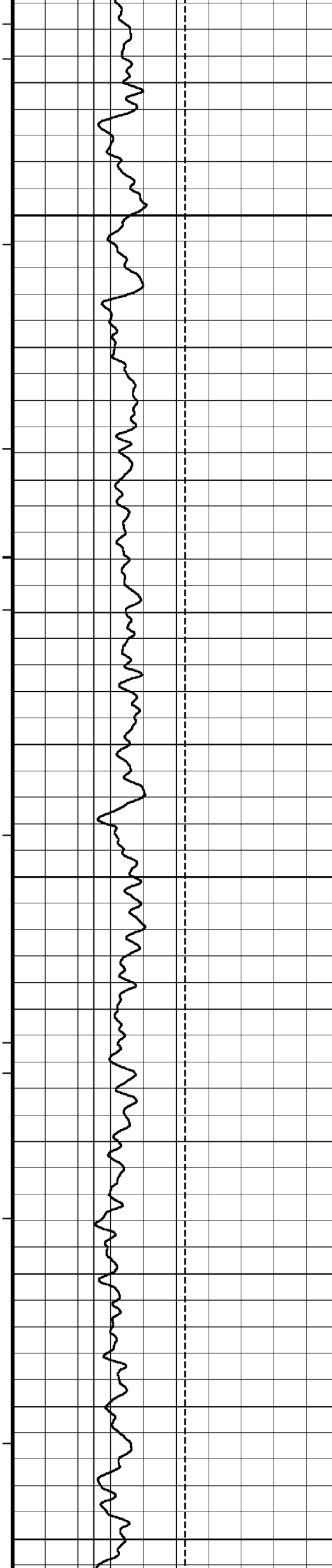
1790
TVD

1800
TVD

1810
TVD

81°





1820
TVD

1830
TVD

81°

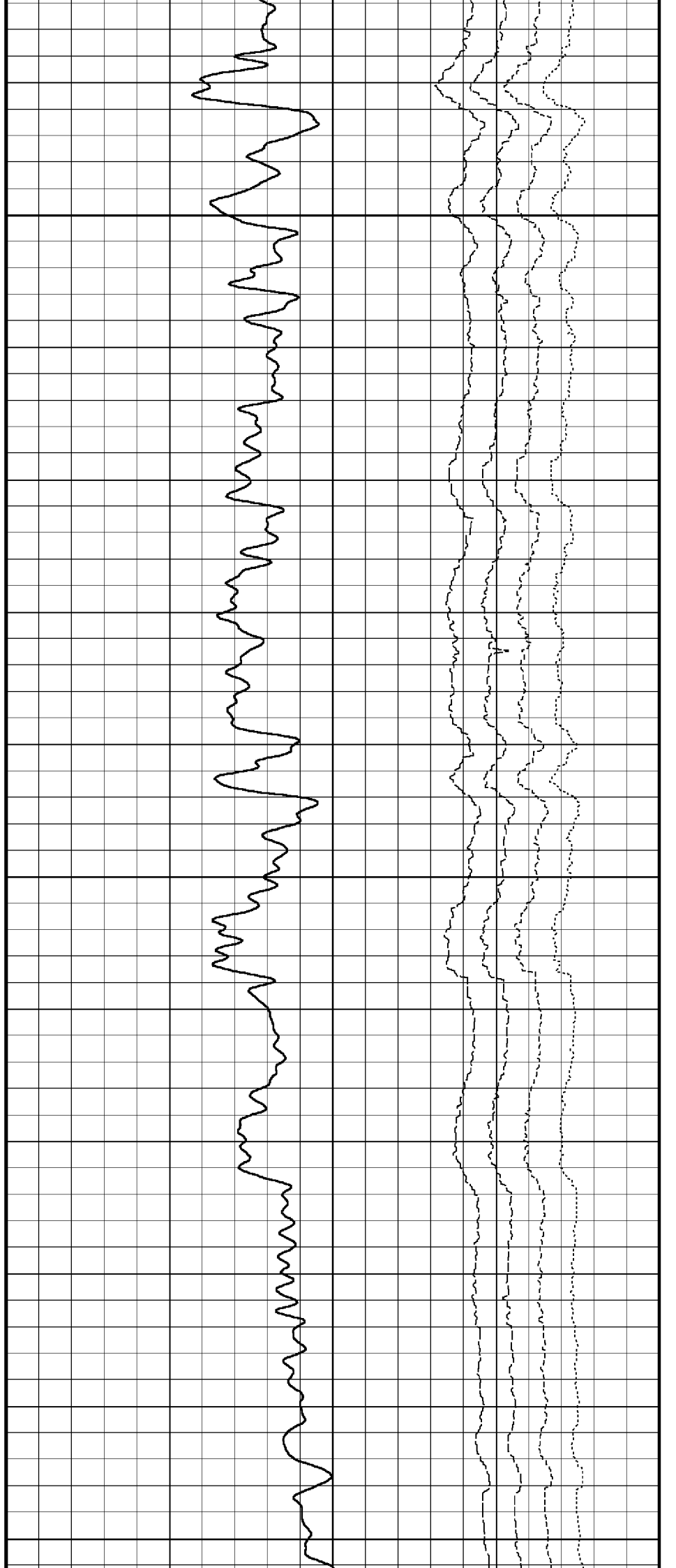
1840
TVD

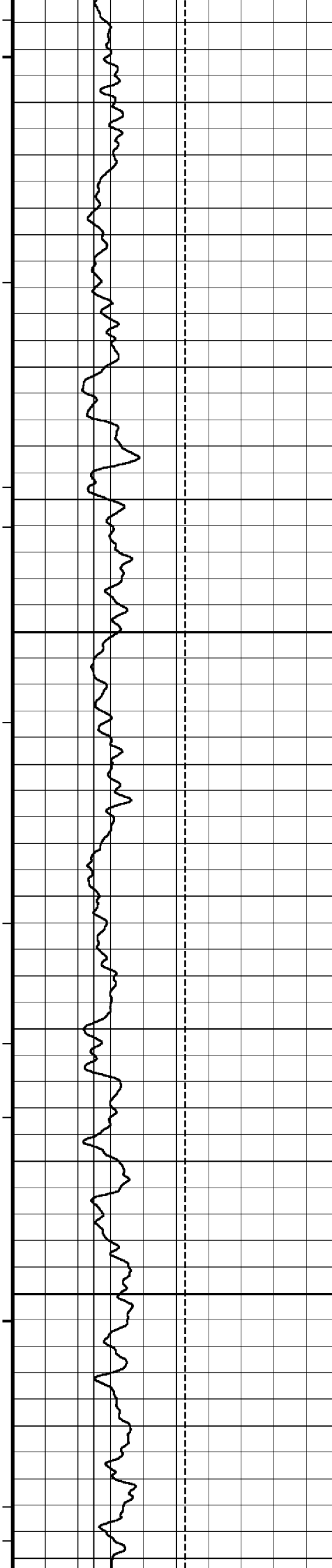
1850
TVD

1860
TVD

81°

1870
TVD





1880
TVD

82°

1890
TVD

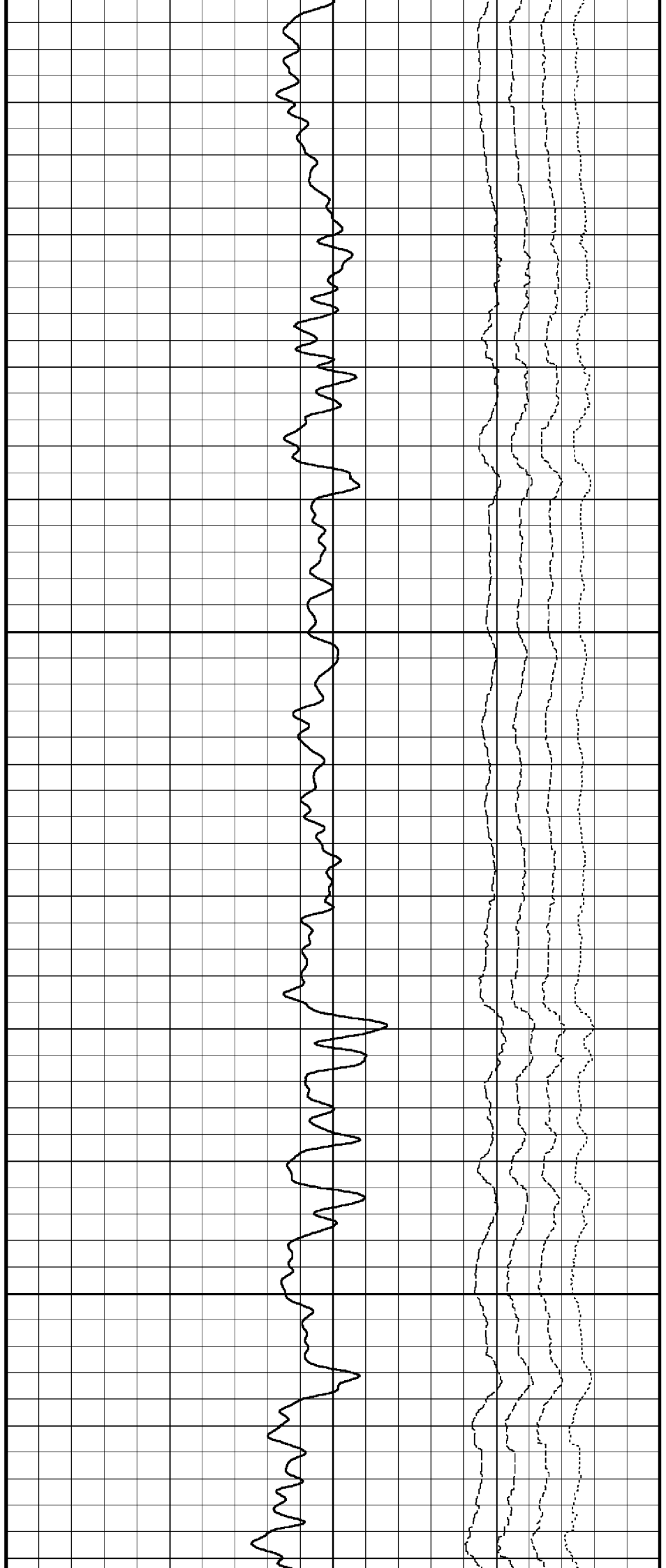
1900
TVD

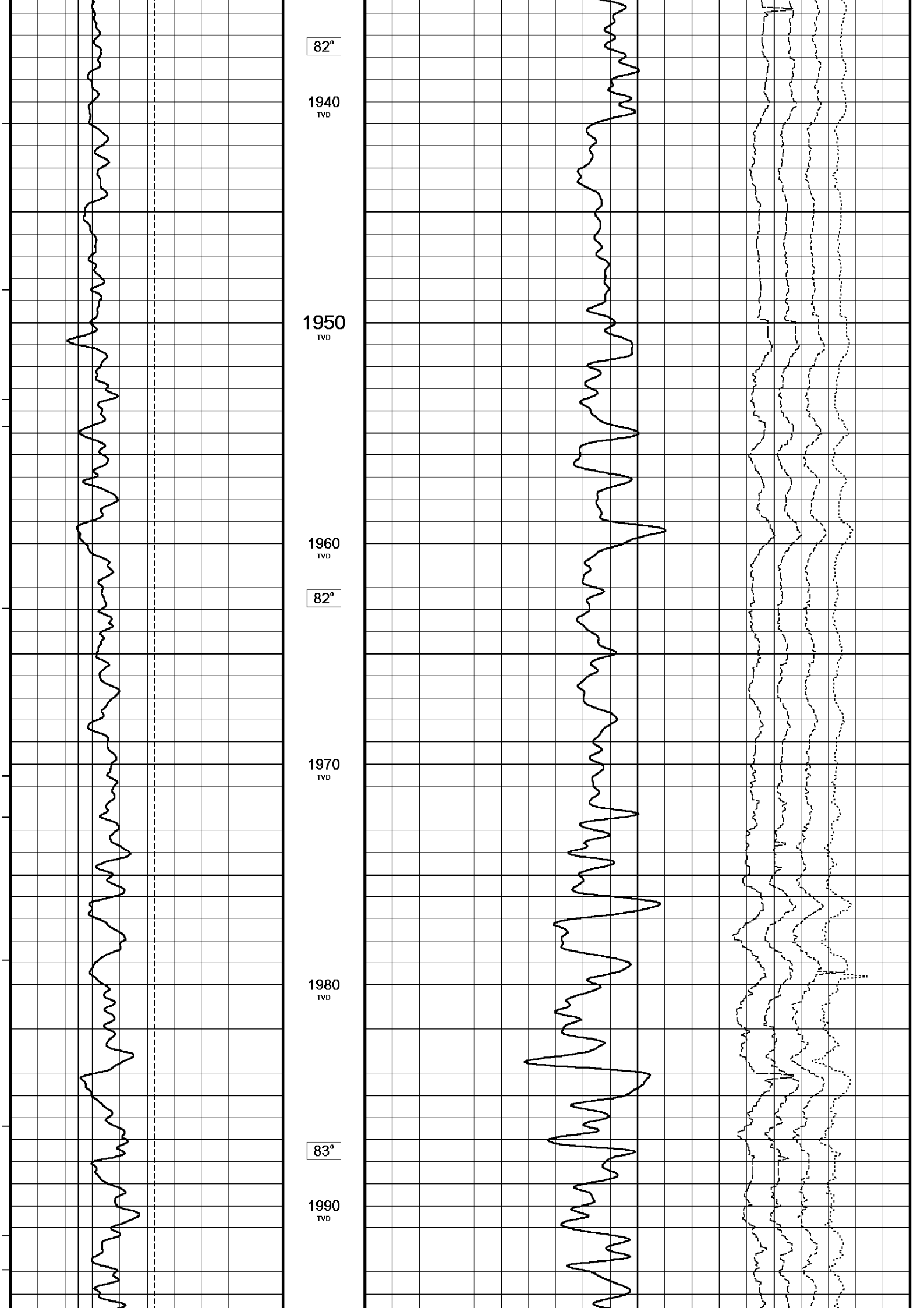
1910
TVD

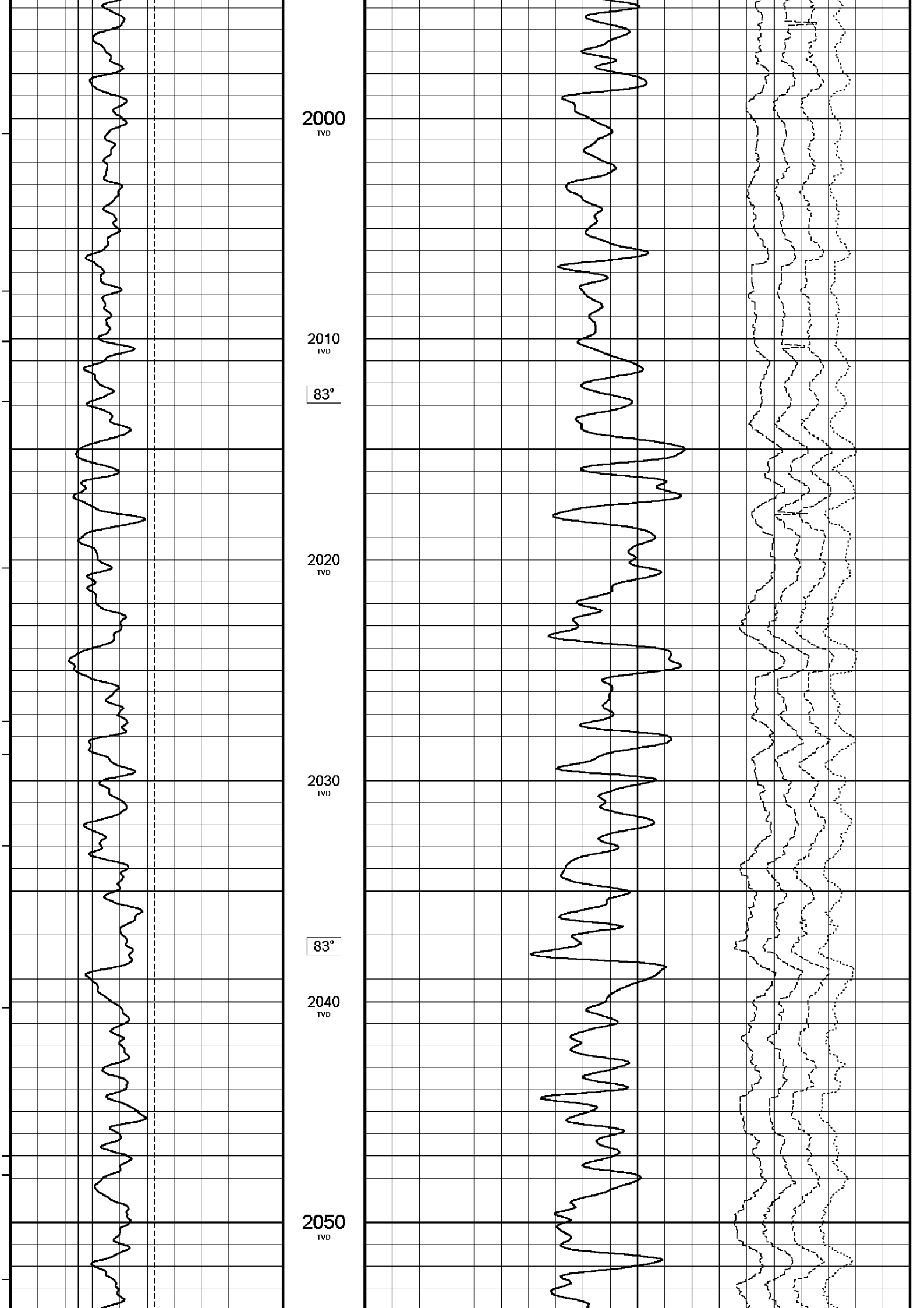
82°

1920
TVD

1930
TVD







2000
TVD

2010
TVD

83°

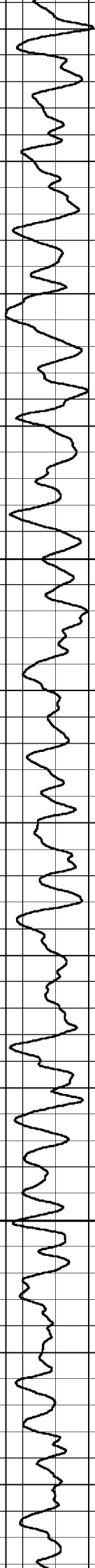
2020
TVD

2030
TVD

83°

2040
TVD

2050
TVD



2060
TVD

83°

2070
TVD

2080
TVD

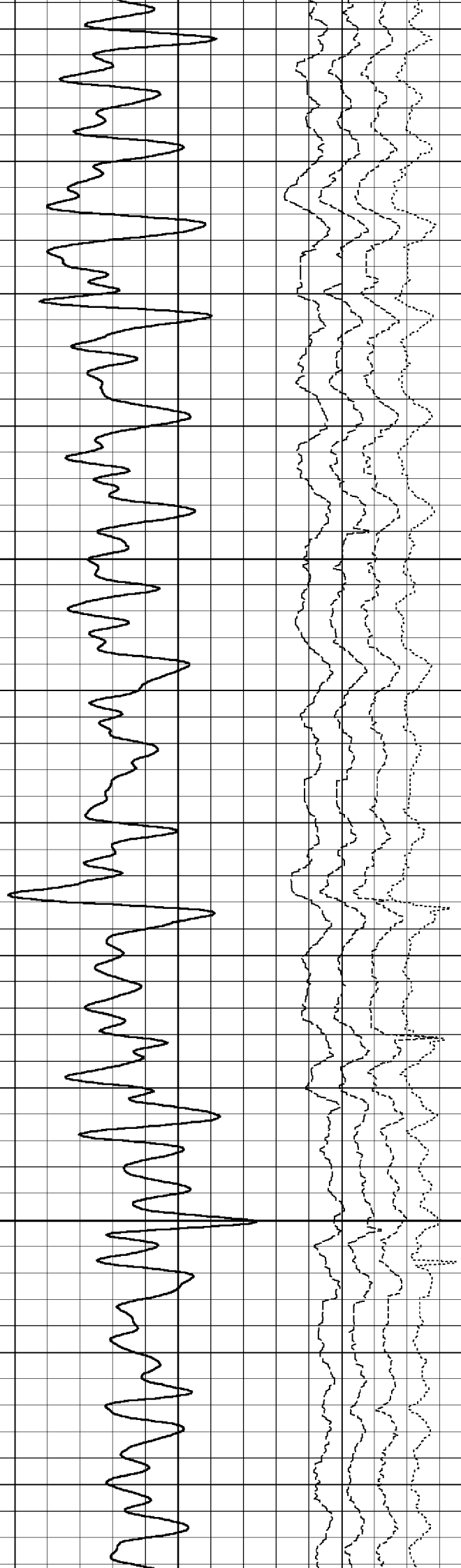
83°

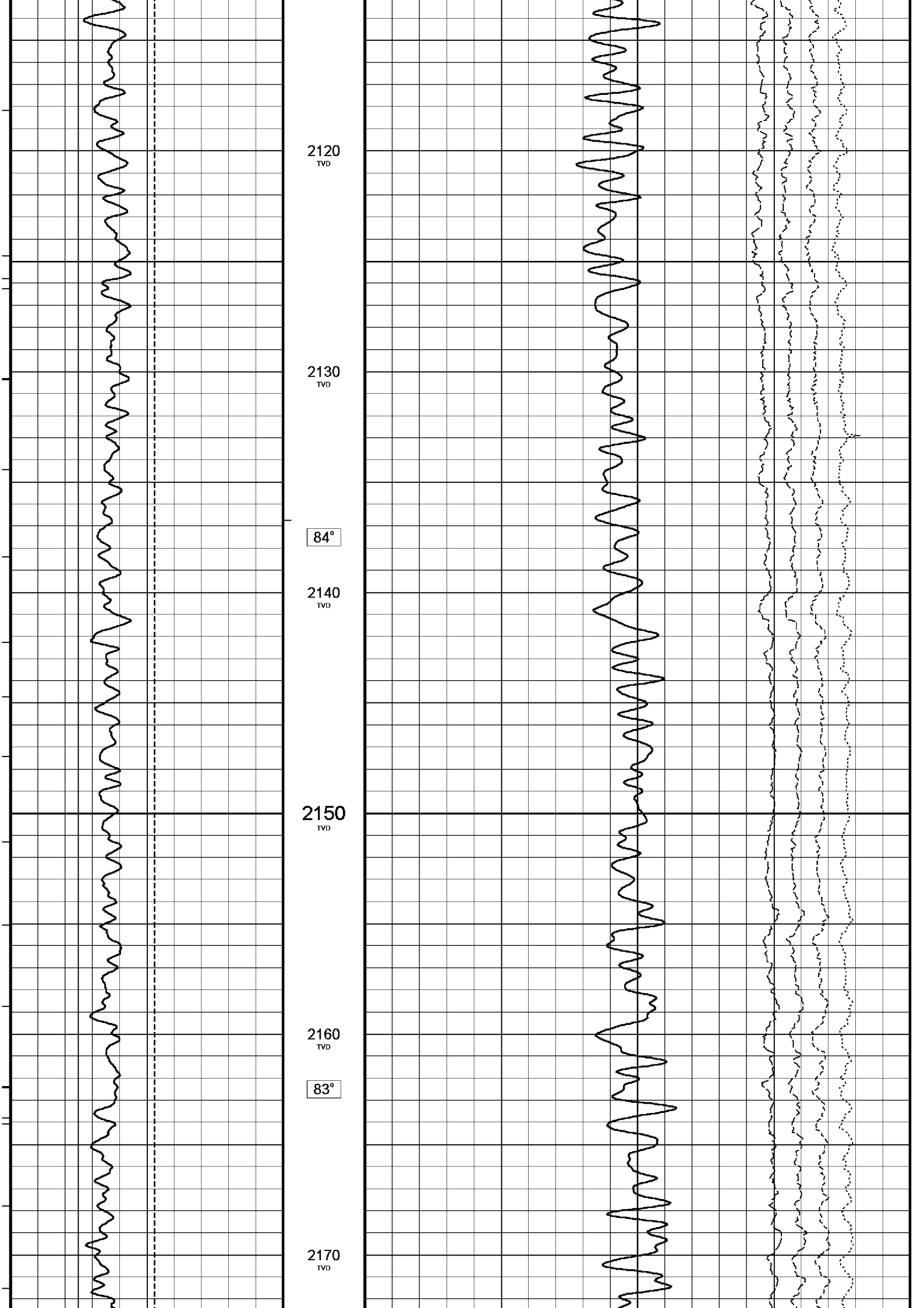
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TVD

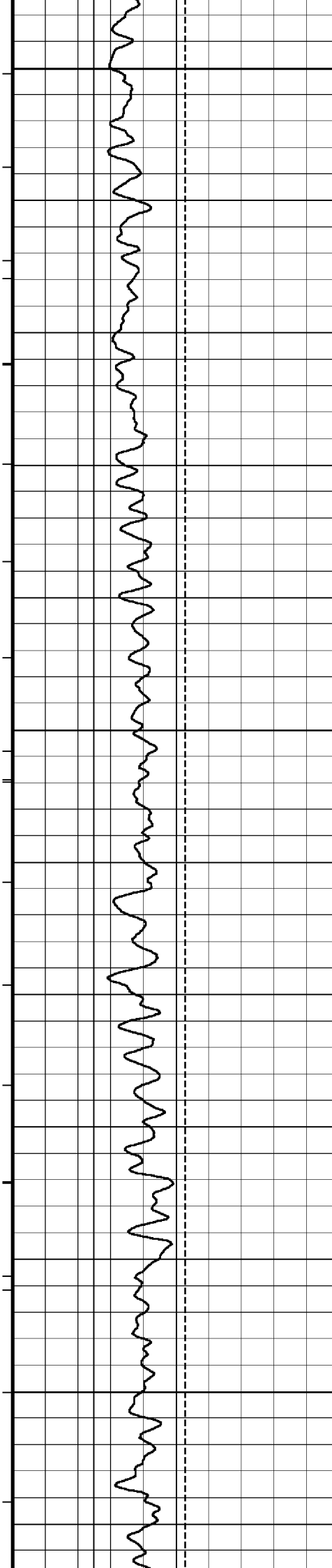
2100
TVD

2110
TVD

83°







2180
TVD

83°

2190
TVD

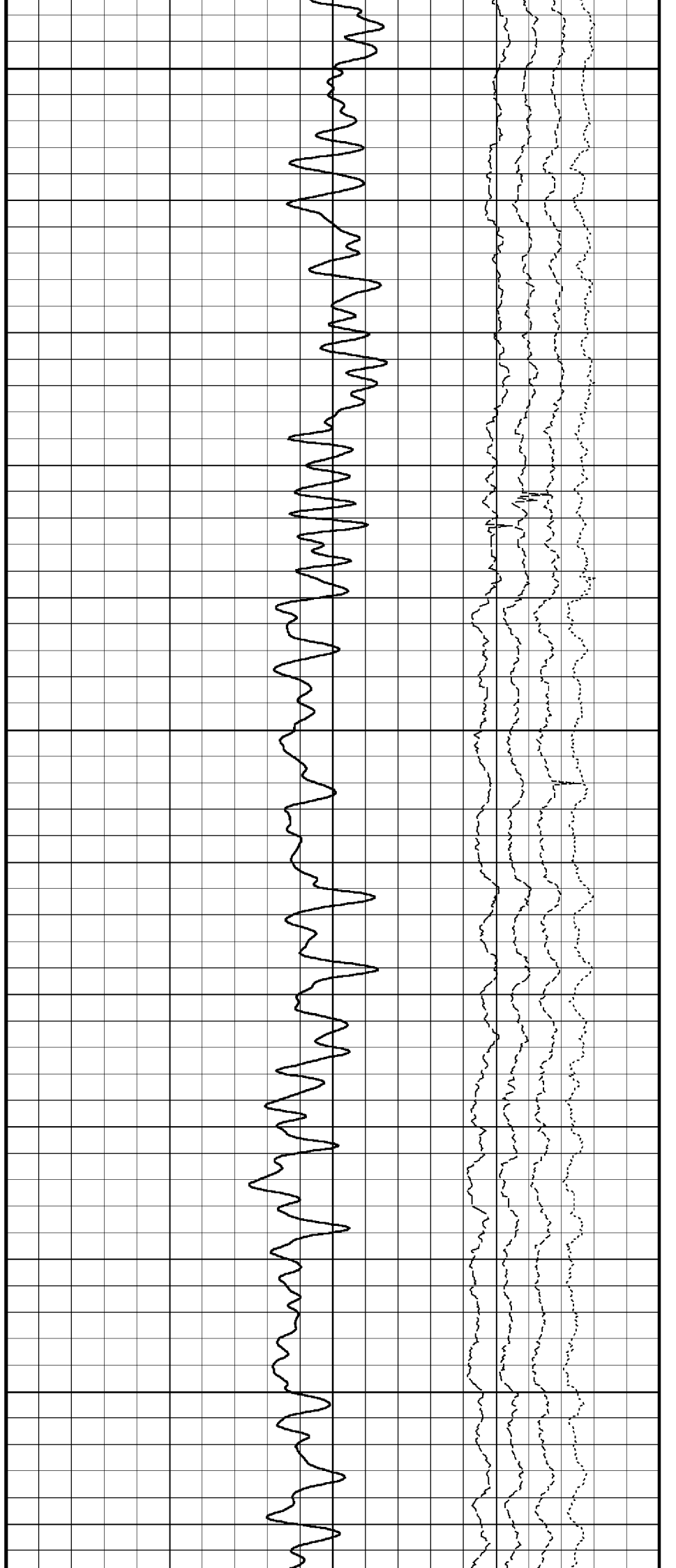
2200
TVD

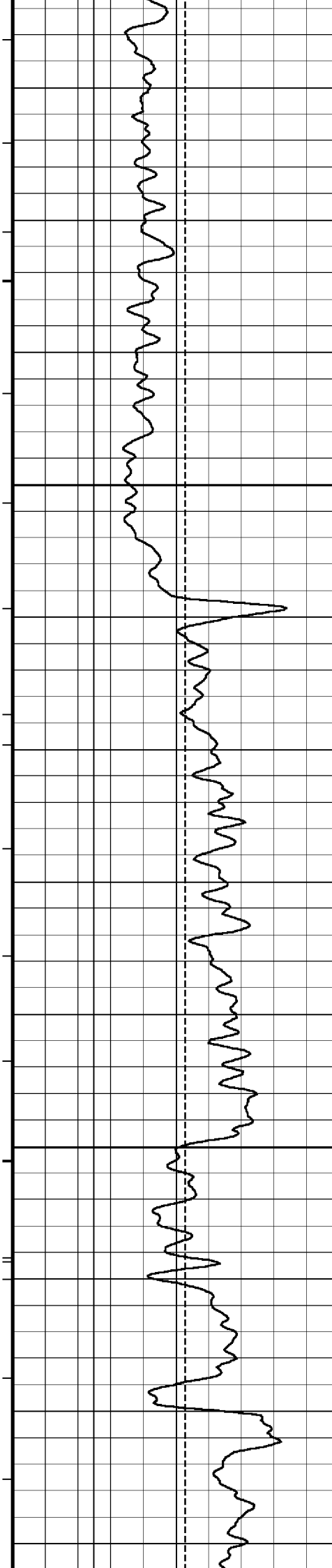
2210
TVD

83°

2220
TVD

2230
TVD





82°

2240
TVD

2250
TVD

2260
TVD

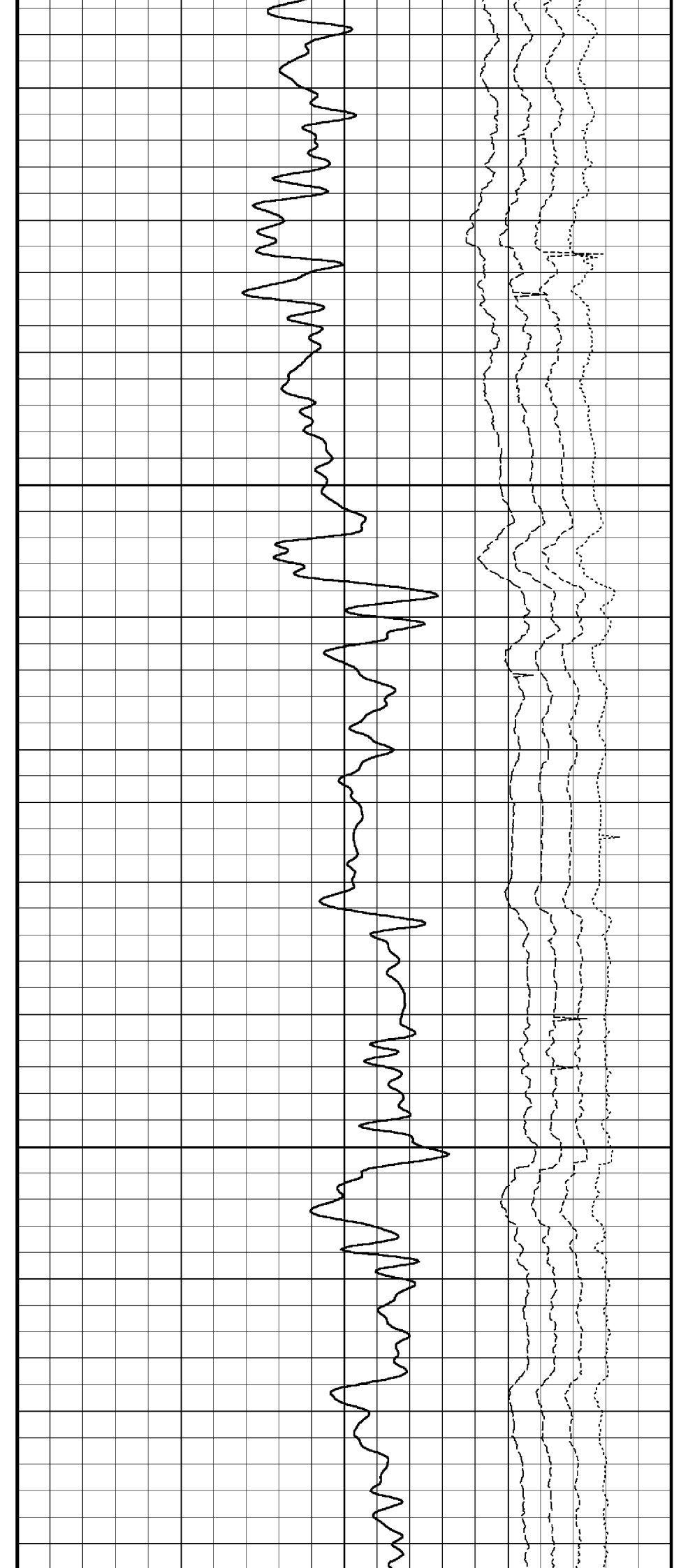
83°

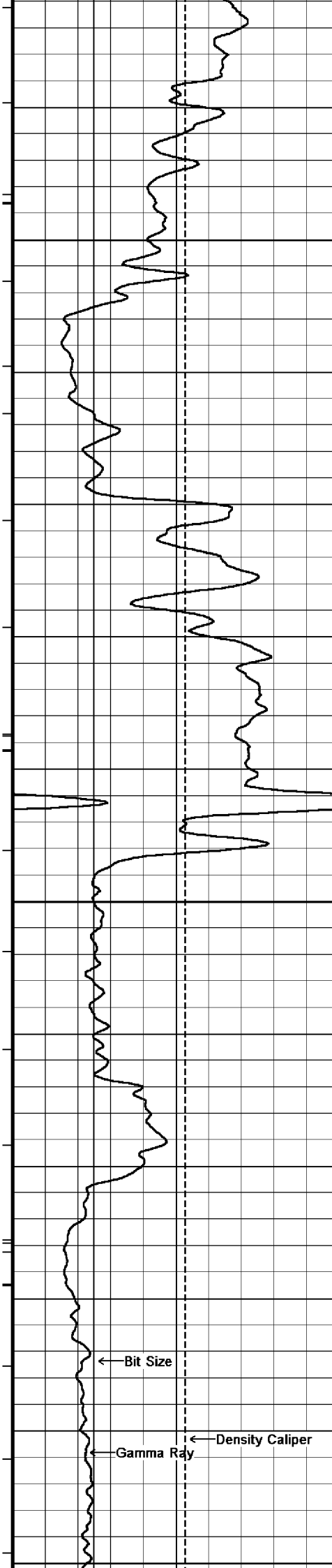
2270
TVD

2280
TVD

82°

2290
TVD





2300
TVD

2310
TVD

2320
TVD

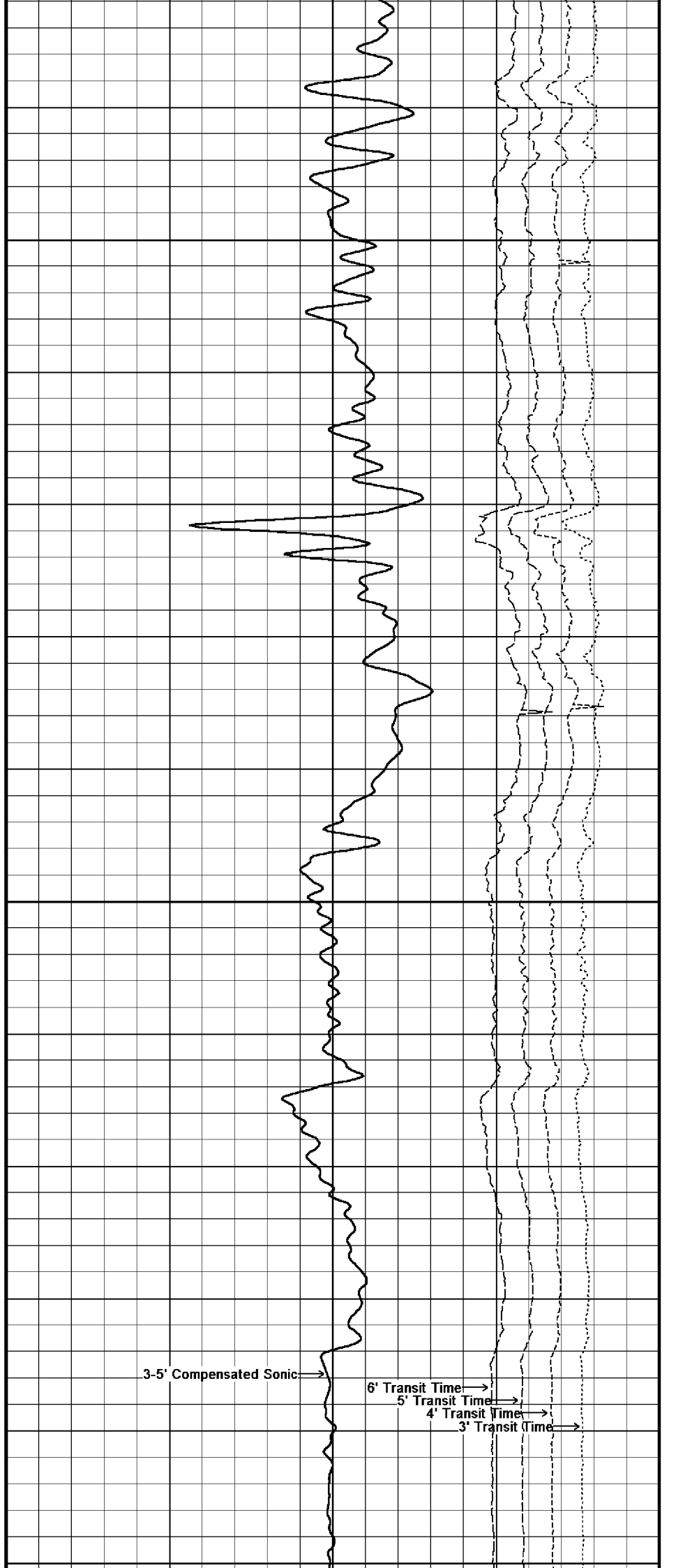
2330
TVD

2340
TVD

2350
TVD

81°

86°



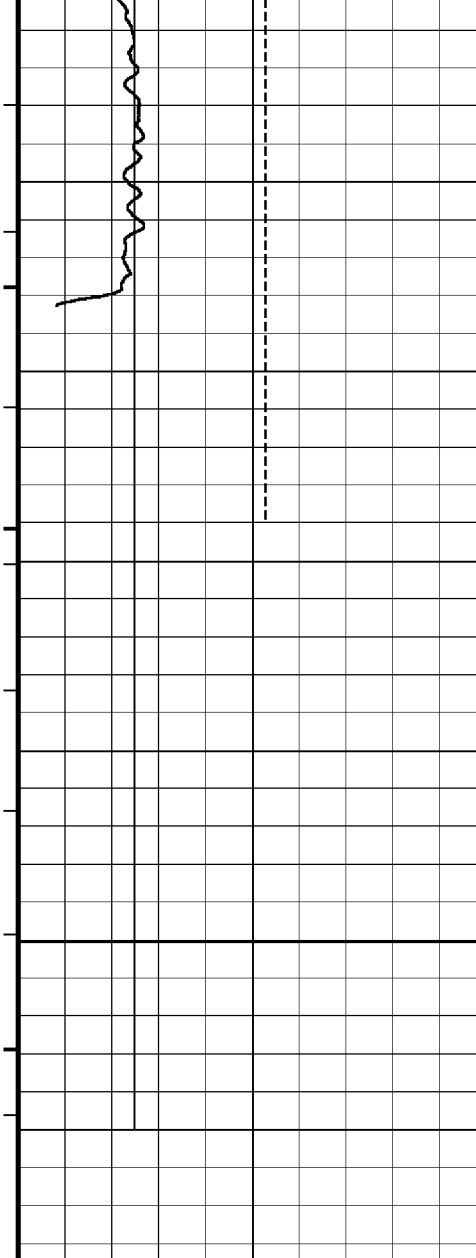
3-5' Compensated Sonic

6' Transit Time

5' Transit Time

4' Transit Time

3' Transit Time

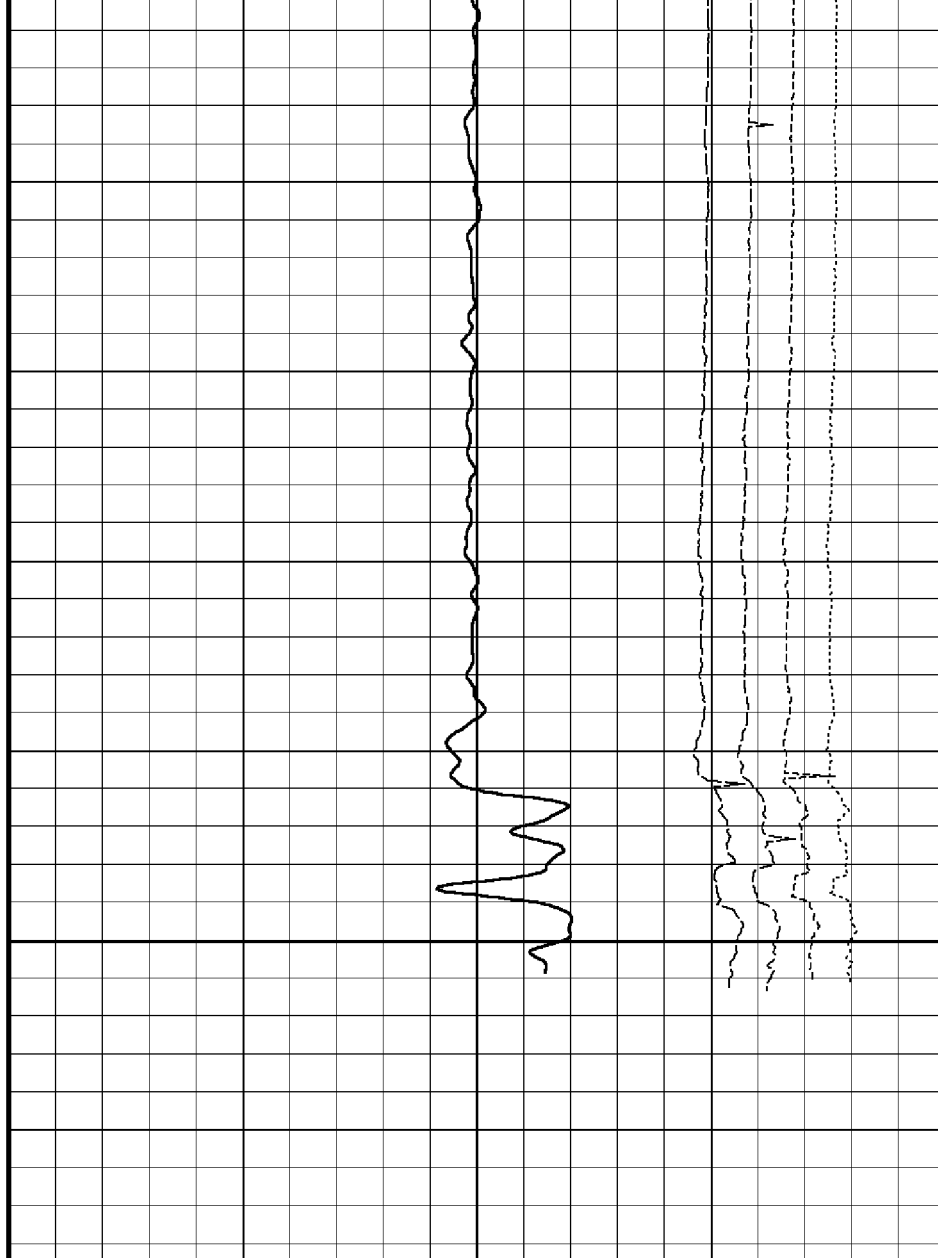


2360
TVD

2370
TVD

2380
TVD

2383
TVD



TVD / DSC
in
Metres

3-5' Compensated Sonic
microsec/metre

500 400 300 200 100

Timing Marks
every 60.0 sec

Gamma Ray

0 API 100 200

200 300 400

Borehole
Temp in
deg C

HVI
every
10 cu ft

Density Caliper

6 inches 11 16

Annular
Integral
every
10 cu ft

Bit Size

6 inches 11 16

Replay
Scale
1:200

3' Transit Time
microseconds
1100 600 100

4' Transit Time
microseconds
1100 600 100

5' Transit Time
microseconds
1100 600 100

6' Transit Time
microseconds
1100 600 100



MAIN LOG 1:200



BEFORE SURVEY CALIBRATION

C:\logs\WKF_W23A\FIELD_DATA\WKF_W23A_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 Laterolog
RWA Constant A	0.610
RWA Constant M	2.150

High Resolution Temperature Calibration MCG 142

Field Calibration on 20-OCT-2006,23:34

	Measured	Calibrated(Deg C)
Lower	0.00	0.00
Upper	100.00	100.00

High Resolution Temperature Constants MCG 142

Pre-filter Length	11
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Gamma Calibration MCG 142

Field Calibration on 20-OCT-2006 23:54

	Measured	Calibrated (API)
Background	14	9
Calibrator (Gross)	1368	918
Calibrator (Net)	1354	909

Gamma Constants MCG 142

Gamma Calibrator Number	060	
Mud Density	1.00	gm/cc
Caliper Source for Processing	Bit Size	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

Caliper Calibration MPD 116

Base Calibration on 2-OCT-2006 11:51
Field Calibration on 21-OCT-2006 01:05

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	13024	4.01
2	22384	5.99
3	32405	7.98
4	42176	9.94
5	53631	12.01
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
7.95	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

Soundstone Transit Time		43.50	micro-sec/ft
Dolomite Transit Time	3-5' Compensated Sonic		
Sonic used for Porosities		Applied	
Correction for Sonde Skew		Applied	
Cycle Stretch Algorithm			
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 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
Sonic 1 Despiker	100.00	micro-sec/ft
Sonic 2 Despiker	100.00	micro-sec/ft

DOWNHOLE EQUIPMENT

C:\logs\WKF_W23A\FIELD_DATA\WKF_W23A_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 31 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 141 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 129 Length: 0.65 m Weight: 15.4 lb

MBE 21 3rd bridle
MLK 111 Length: 3.76 m Weight: 94.8 lb

Compact Inline Standoff B
MIS 135 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: 0.95 m Weight: 30.9 lb

Compact Knuckle Joint
SKJ 101 Length: 0.66 m Weight: 24.3 lb

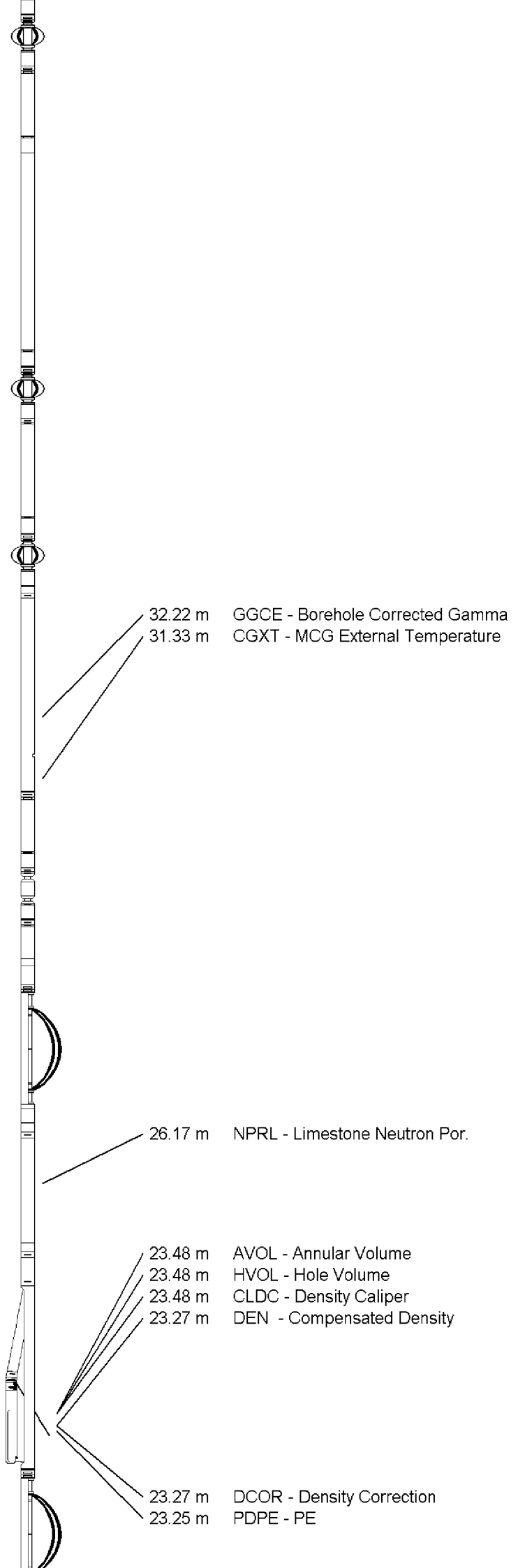
Compact Swivel Head Adaptor F
SHA 64 Length: 0.83 m Weight: 26.5 lb

Compact Inline Bowspring A
MIS 95 Length: 1.74 m Weight: 33.1 lb

Compact Neutron
MDN 119 Length: 1.53 m Weight: 50.7 lb

Compact Density/Caliper
MPD 116 Length: 2.92 m Weight: 90.4 lb

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



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

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

Compact Swivel Head Adaptor F
SHA 73 Length: 0.83 m Weight: 26.5 lb

Compact Knuckle Joint
SKJ 46 Length: 0.66 m Weight: 24.3 lb

Compact Inline Standoff B
MIS 132 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 139 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 138 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 73 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 127 Length: 0.65 m Weight: 15.4 lb

Compact Induction
MAI 39 Length: 3.29 m Weight: 48.5 lb



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

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

4.60 m DT35 - 3-5' Compensated Sonic

Tool Zero (0.44m from bottom)

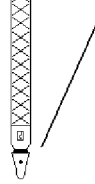
Pressure Bung + Hole Finder

HFS 4 Length: 0.40 m

Weight: 6.6 lb

Total Length: 54.01 m

Weight: 1265.5 lb



All measurements relative to tool zero.

COMPANY	ESSO AUSTRALIA PTY.LTD
WELL	WKF W23A
FIELD	KINGFISH GDA94
PROVINCE/COUNTY	BASS STRAIT, VICTORIA
COUNTRY/STATE	AUSTRALIA

Elevation Kelly Bushing		metres	First Reading	2376.80	metres
Elevation Drill Floor	33.43	metres	Depth Driller	2382.04	metres
Elevation Ground Level	-76.13	metres	Depth Logger	2382.04	metres



COMPENSATED SONIC
1:200 TVD