



PRECISION

Compact

**DUAL LATEROLOG - GR
DENSITY - NEUTRON
1:200 MD**

COMPANY **ESSO AUSTRALIA PTY.LTD**

WELL **WKF W23A**
FIELD **KINGFISH GDA94**

PROVINCE/COUNTY **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 SONIC

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	3338.00	metres
Depth Logger	3338.00	metres
First Reading	3321.65	metres
Last Reading	651.00	metres
Casing Driller	651.00	metres
Casing Logger	651.00	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

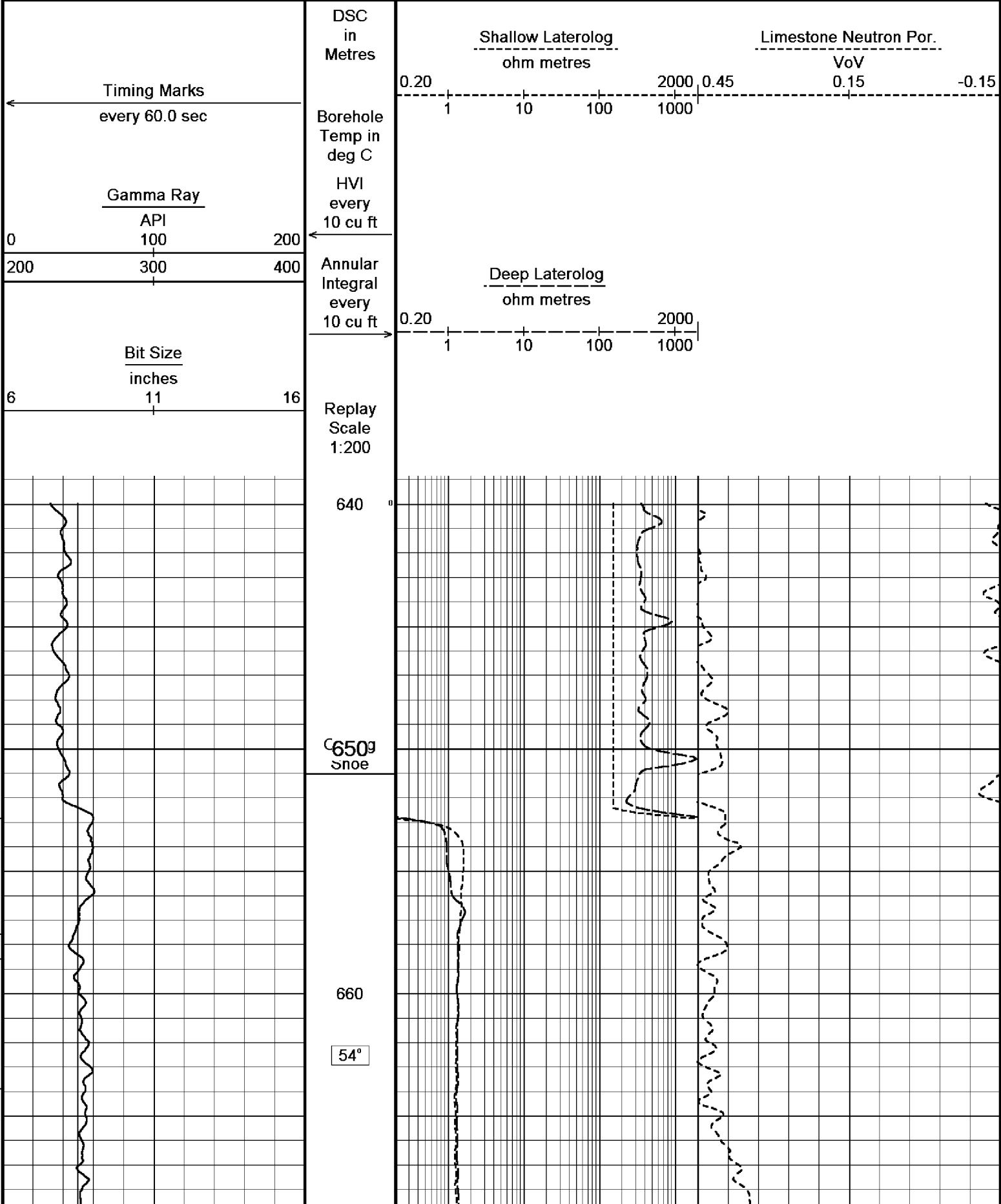
HVOL: FT^3
AVOL: FT^3
NO HOLE VOLUMES OR DENSITY READINGS GIVEN DUE TO FAILURE OF CALIPER AND DENSITY TOOL DURING RUNNING IN THE HOLE.

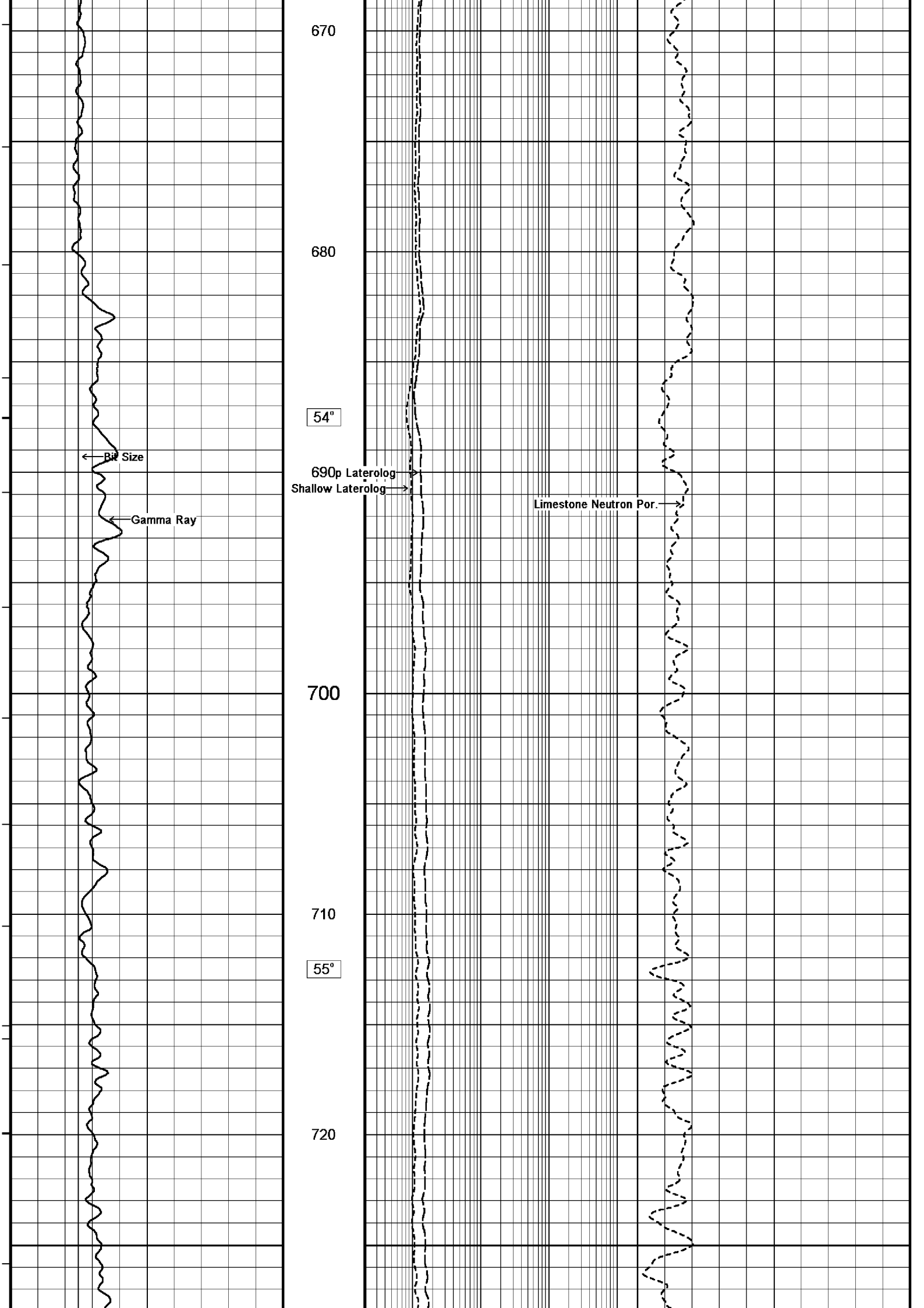
LOGGING SPEED 6 M/MIN FROM TD TO 2995 M MD
LOGGING SPEED 12 M/MIN FROM 2995 TO 1444 M MD
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LOGGING SPEED 6 M/MIN FROM 1071 TO 928 M MD

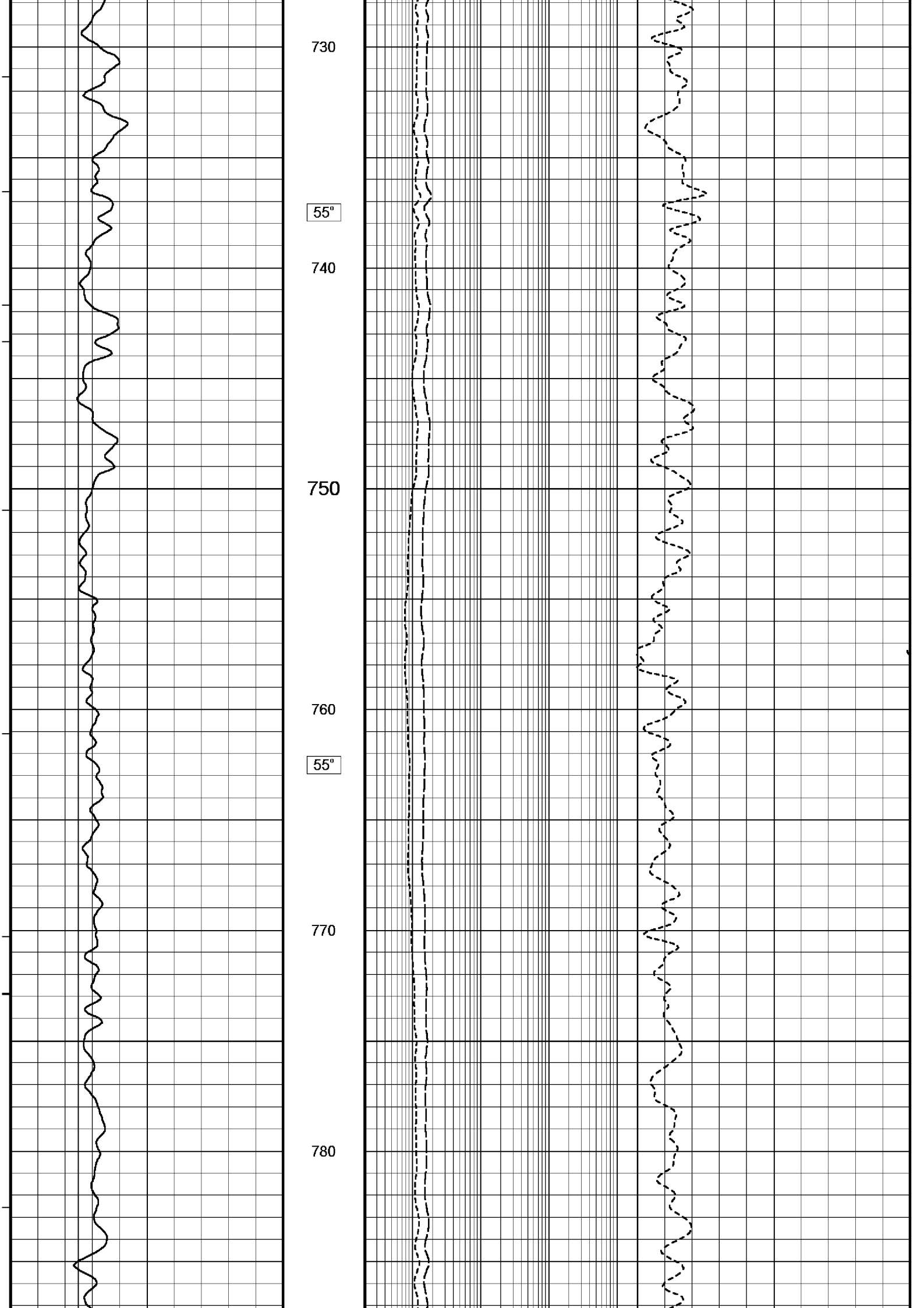
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

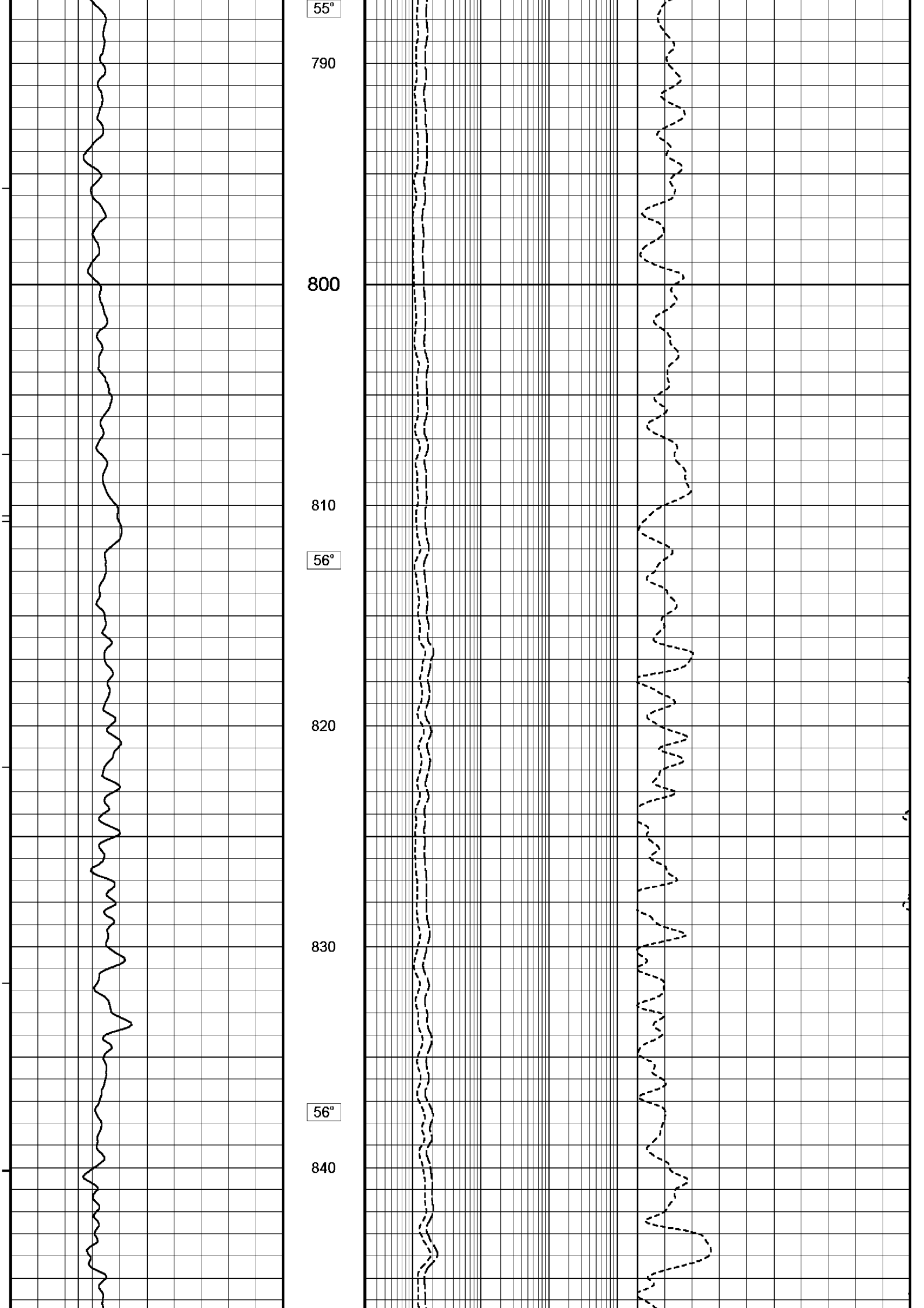
MAIN LOG 1:200

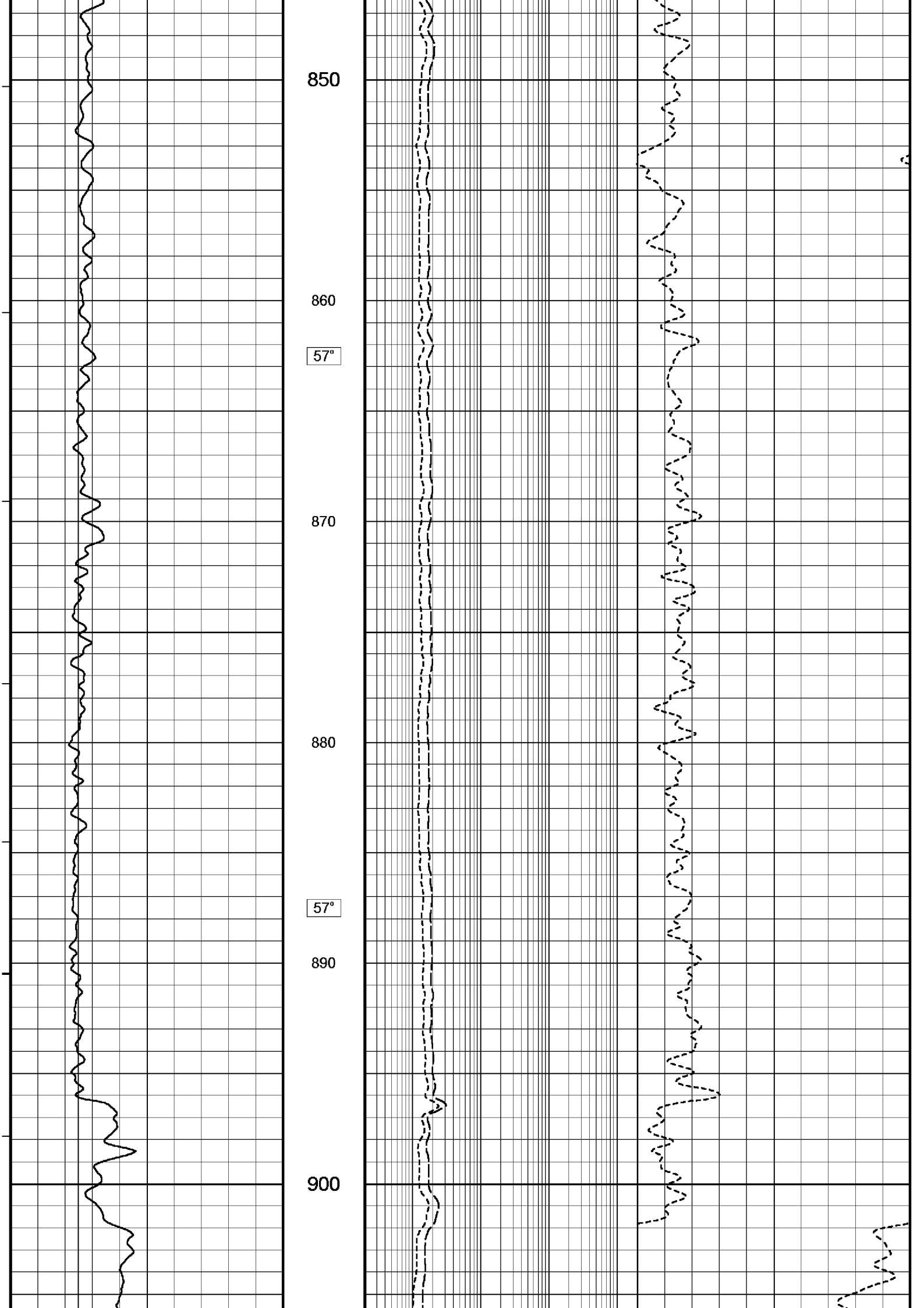
Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 25-OCT-2006 07:58
 Filename: C:\logs\WKF_W23A\FIELD_DATA\WKF_W23A_MAIN_LOG.dta
 Recorded on 24-OCT-2006 11:22
 System Configuration Dates: Logged 17-JUN-2004: Processed 17-JUN-2004: Plotted 17-JUN-2004:

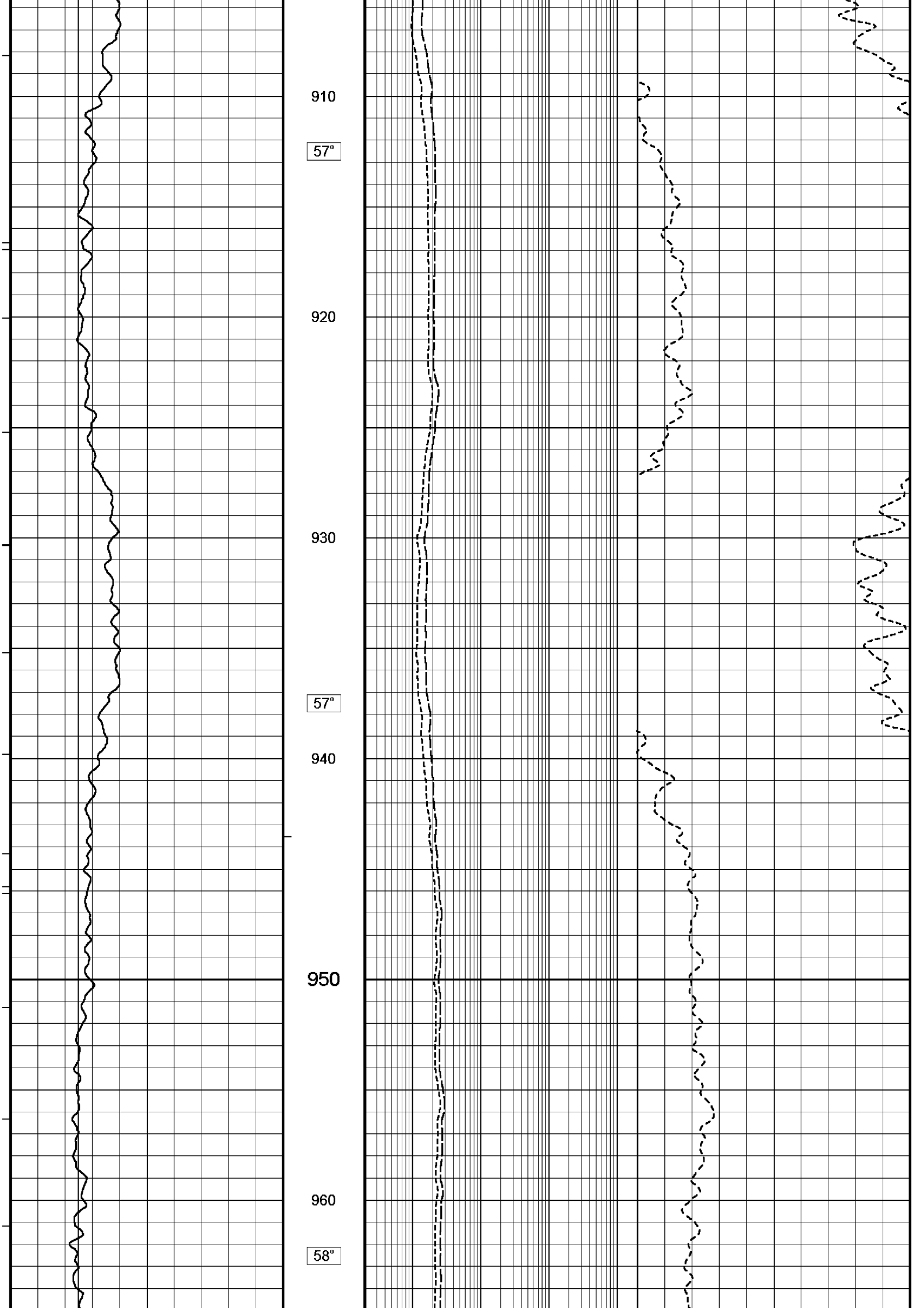


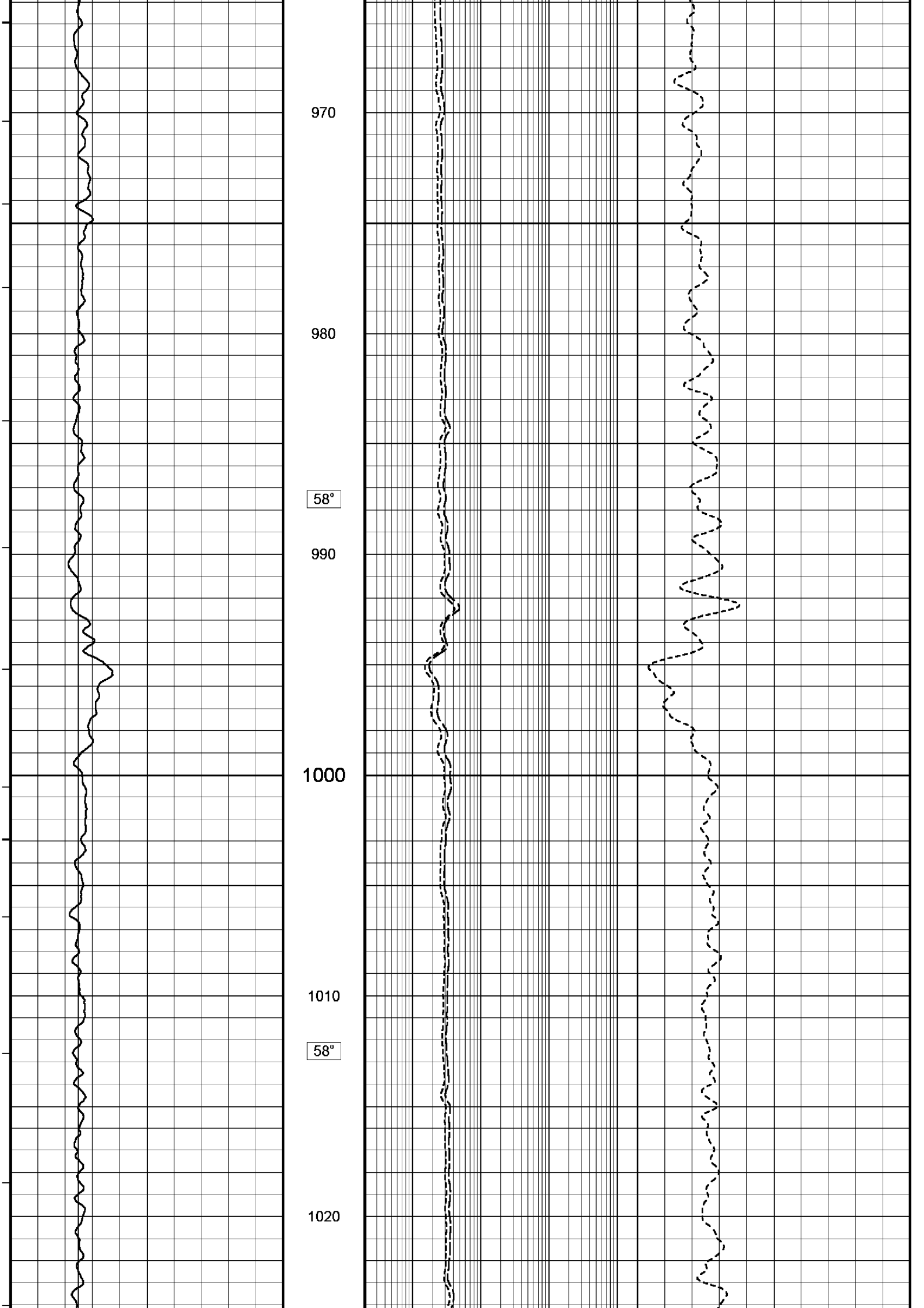


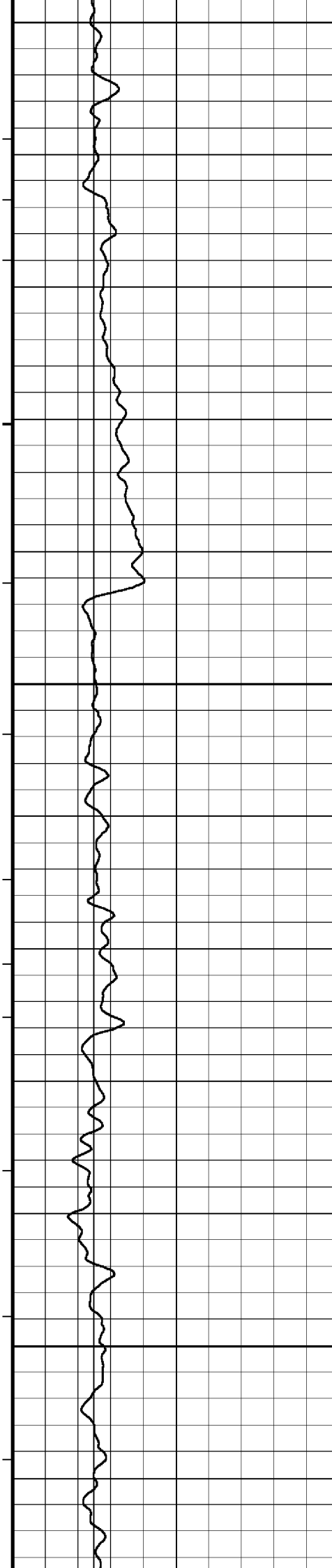












1030

59°

1040

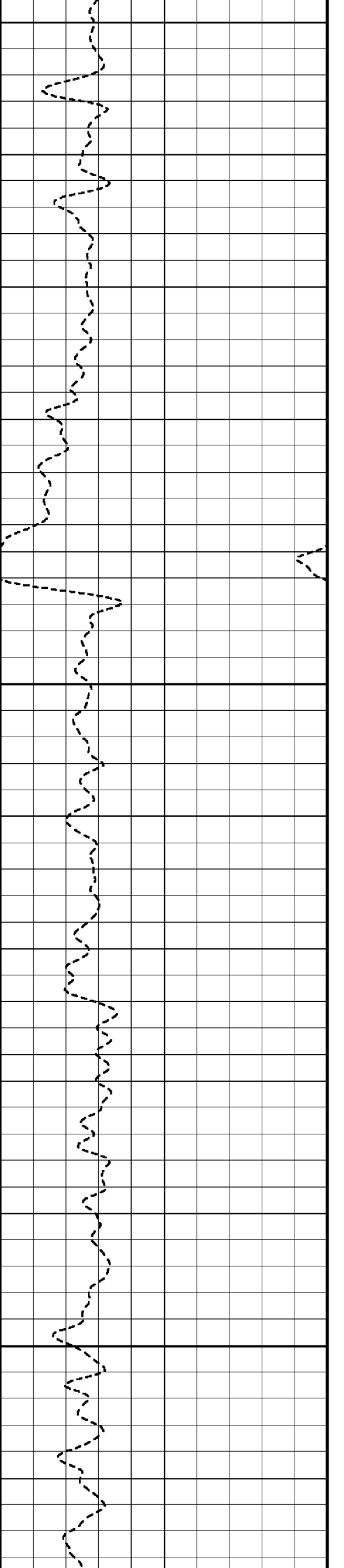
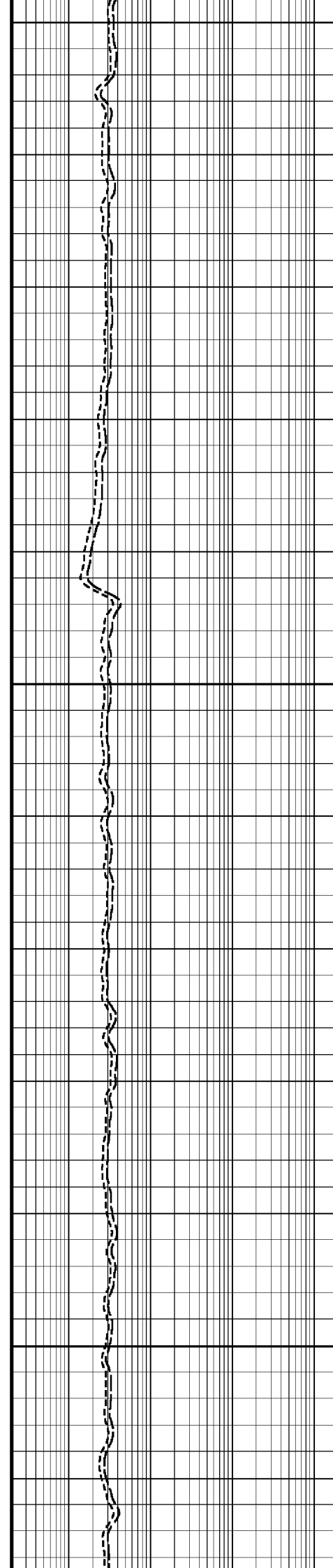
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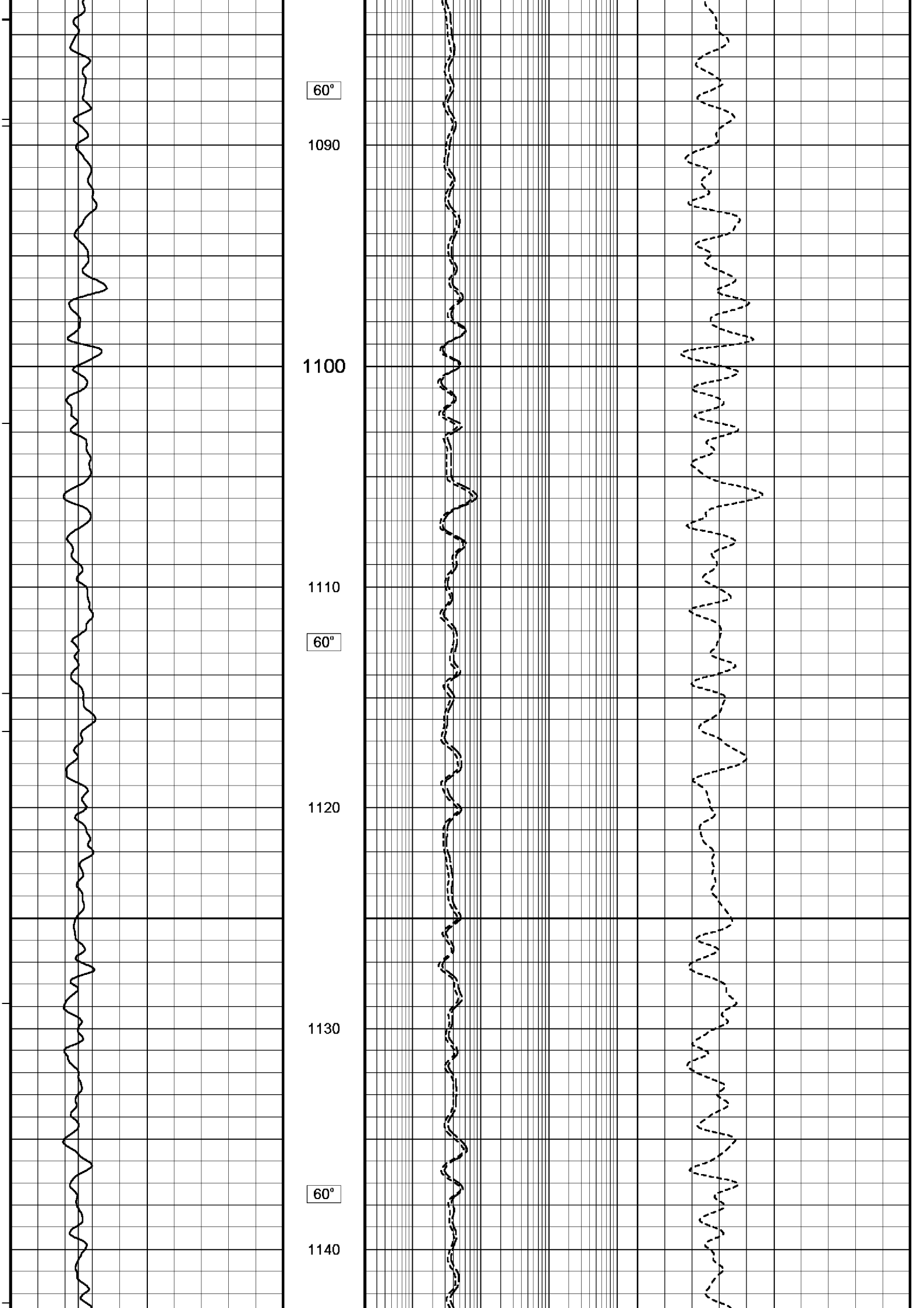
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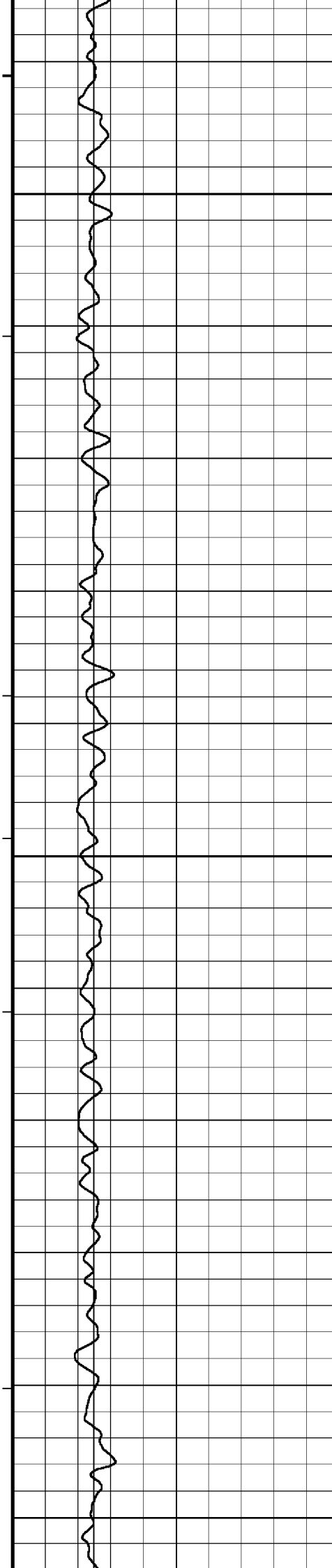
59°

1070

1080







1150

1160

61°

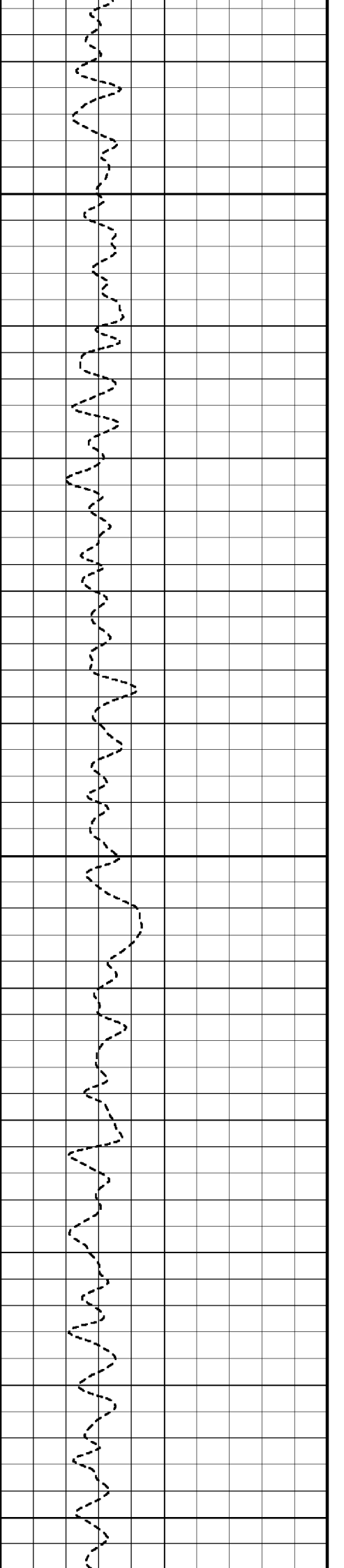
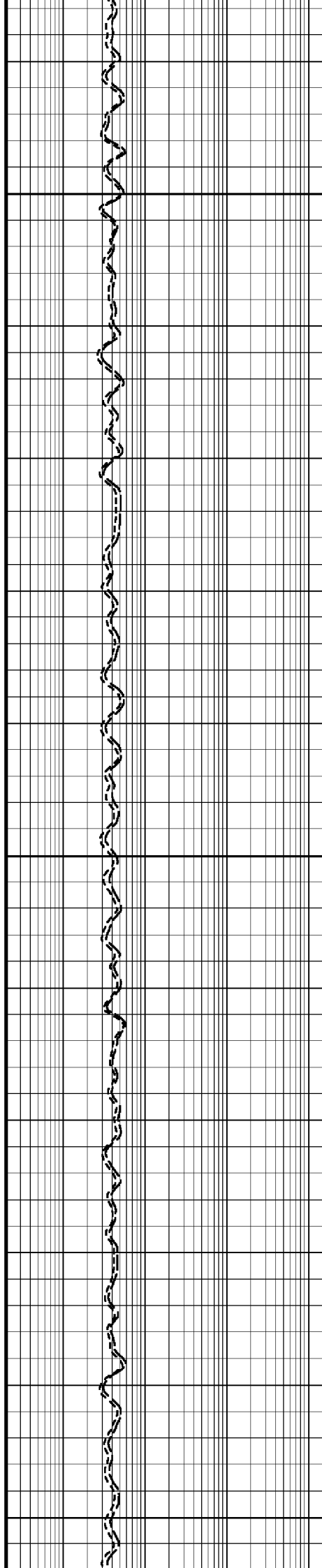
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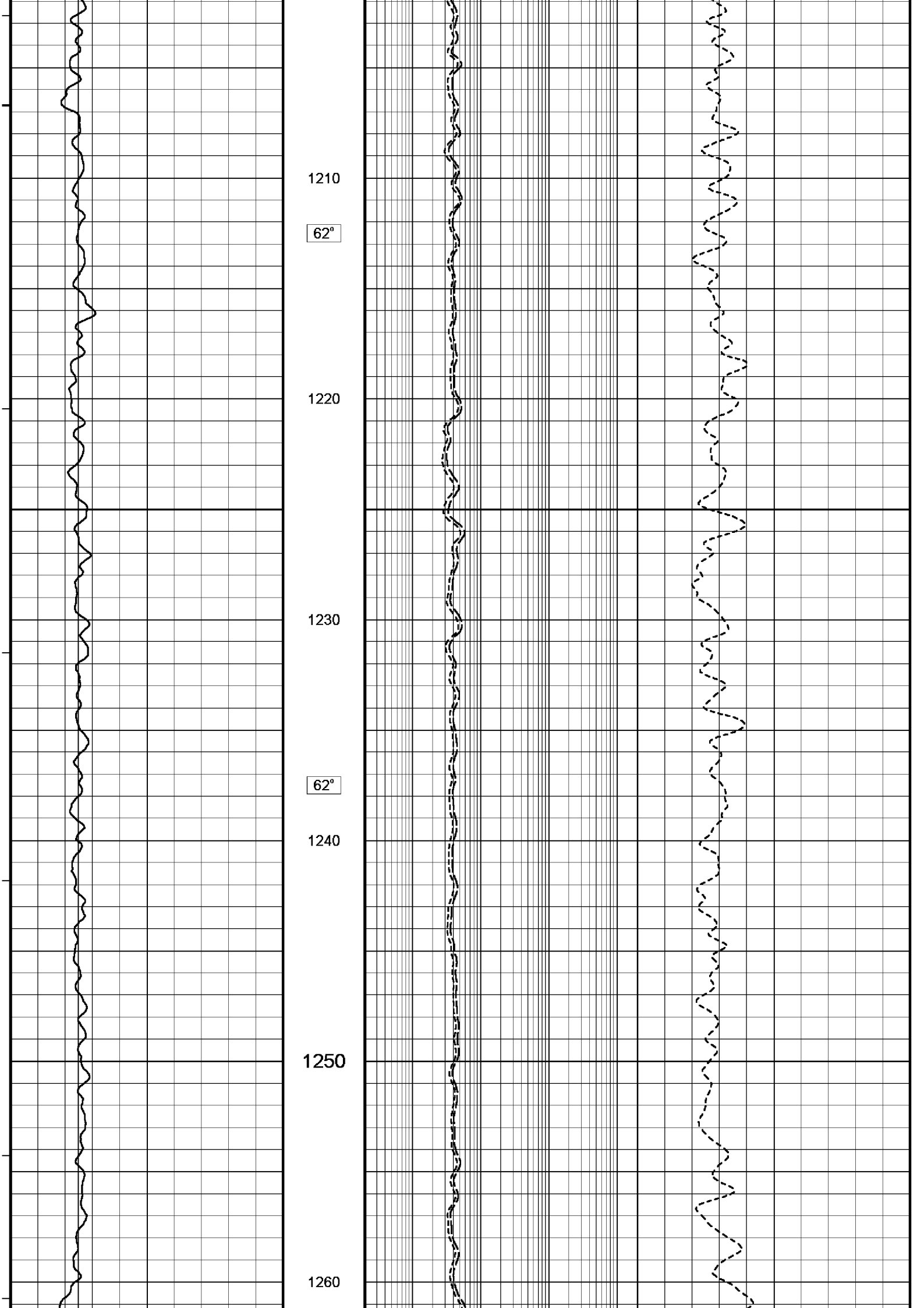
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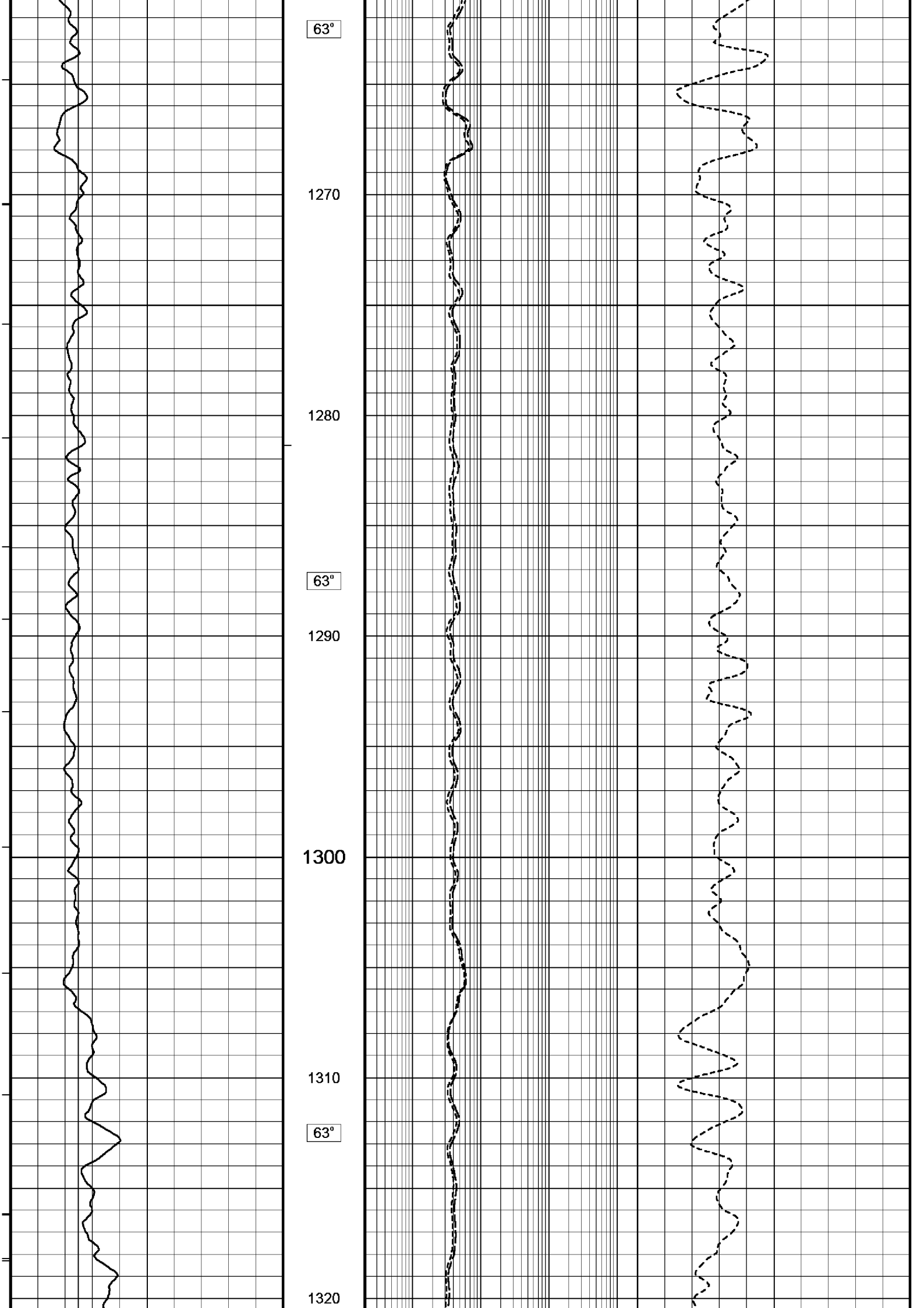
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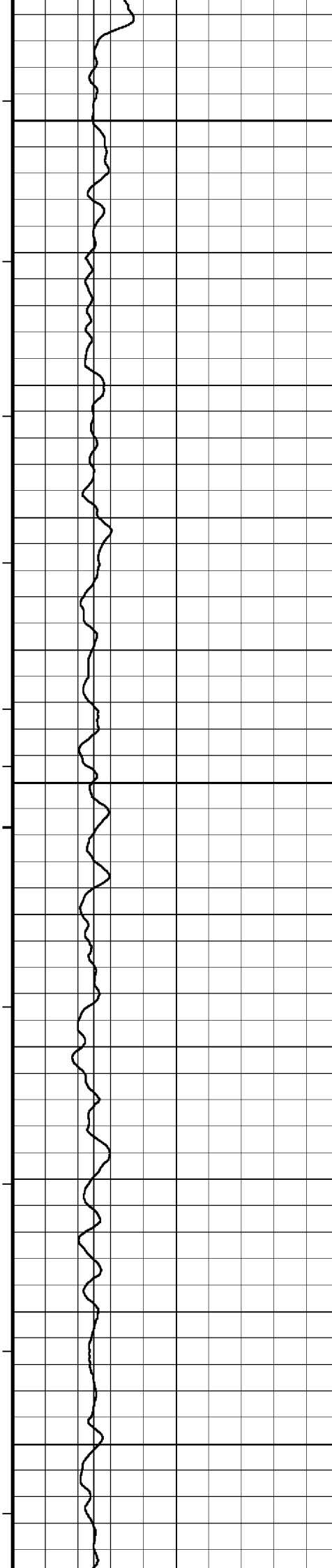
1190

1200









1330

64°

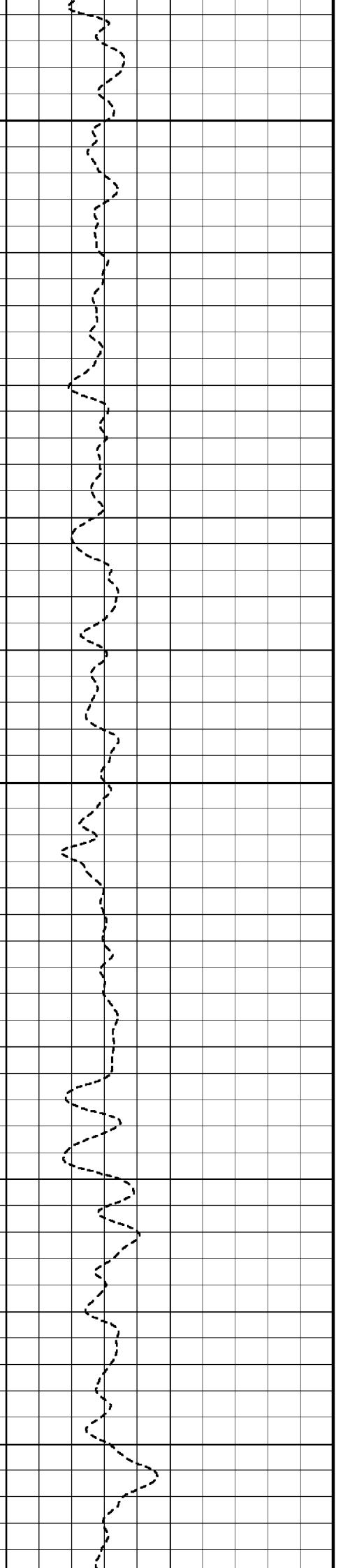
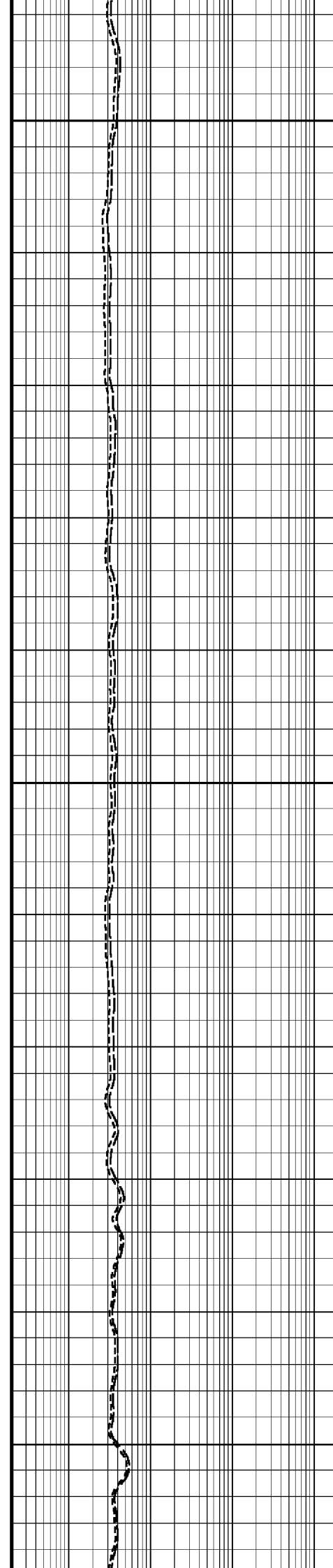
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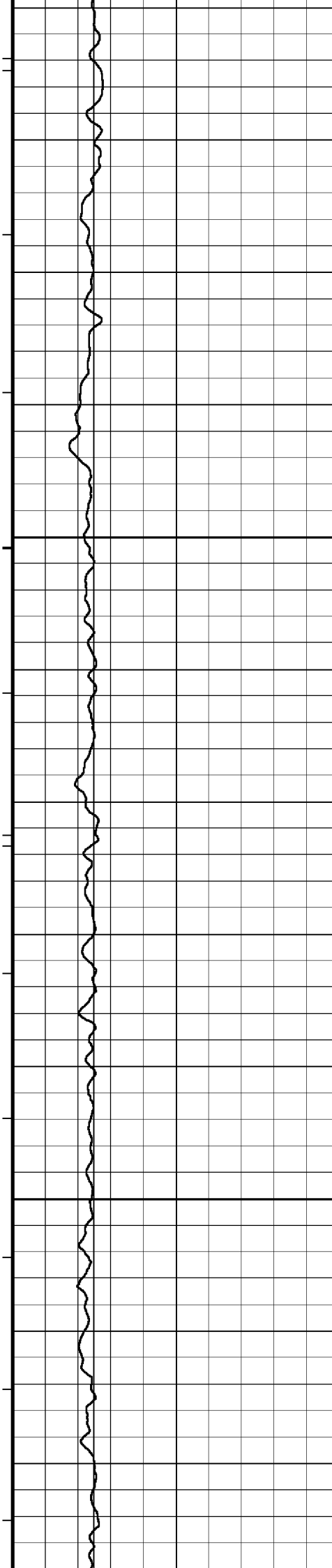
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1360

64°

1370





1380

64°

1390

1400

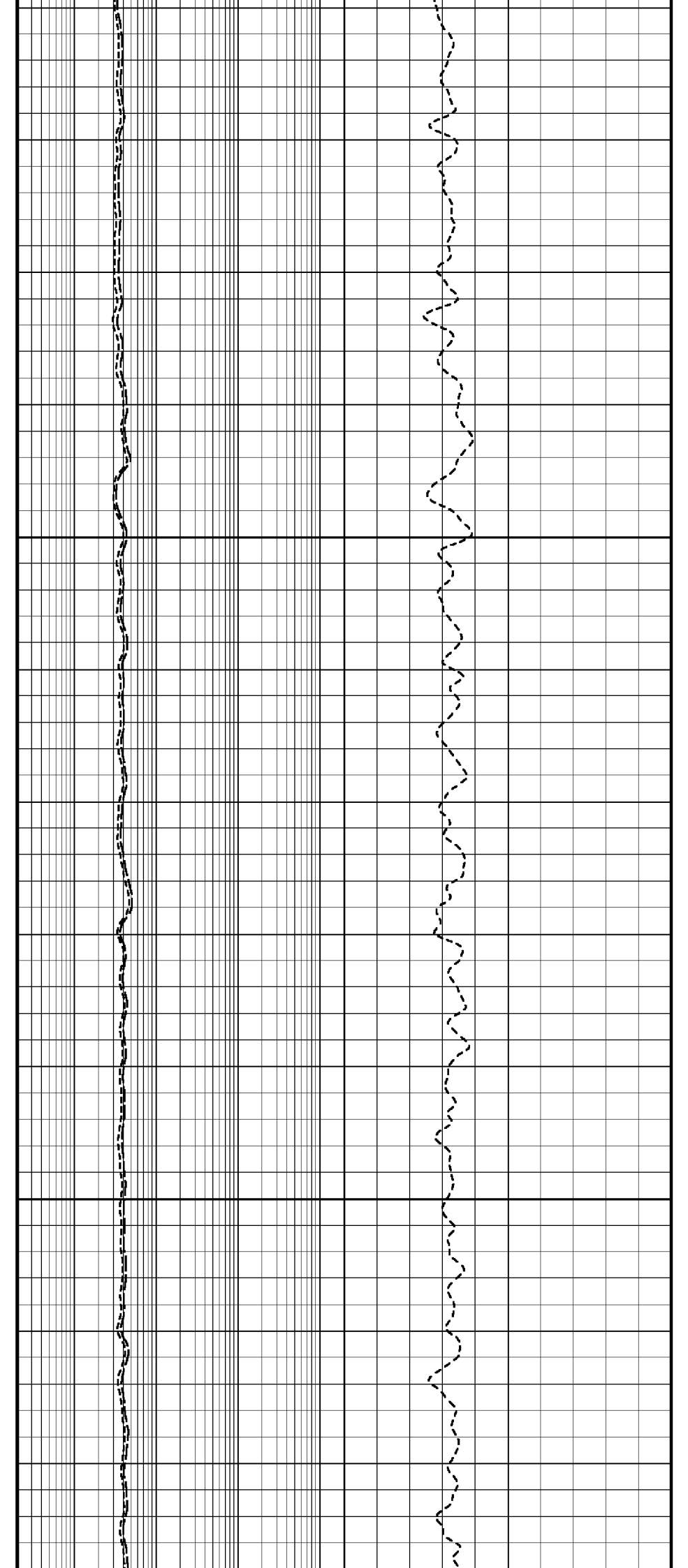
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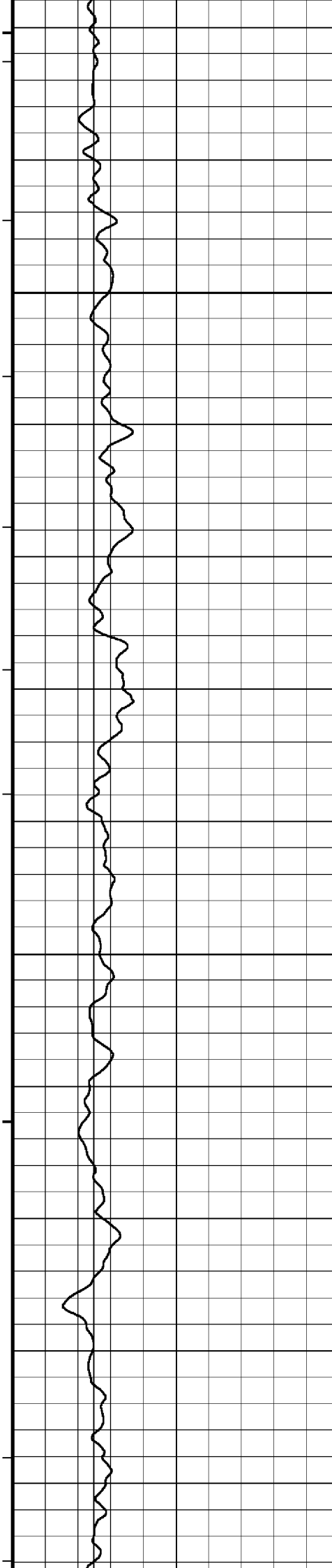
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1420

1430

65°





1440

1450

1460

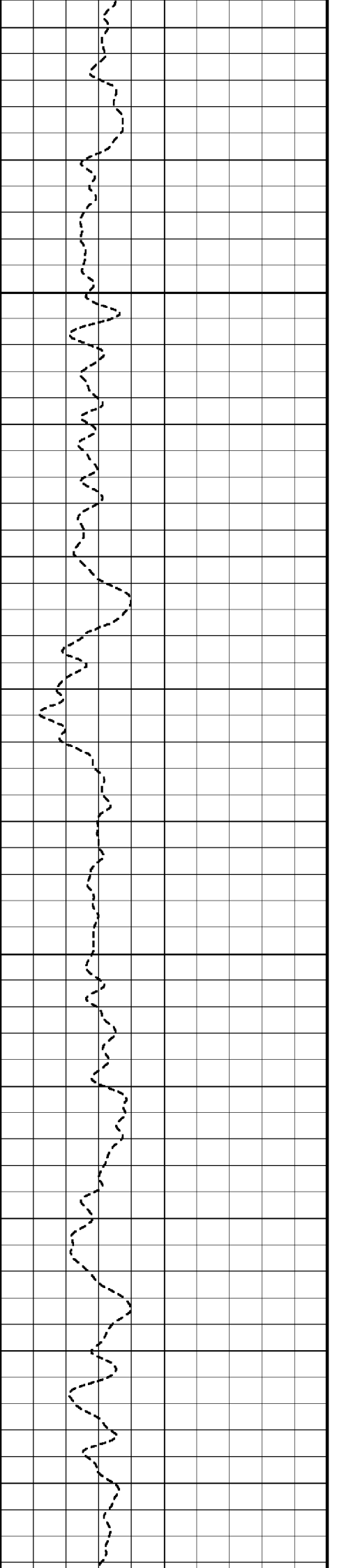
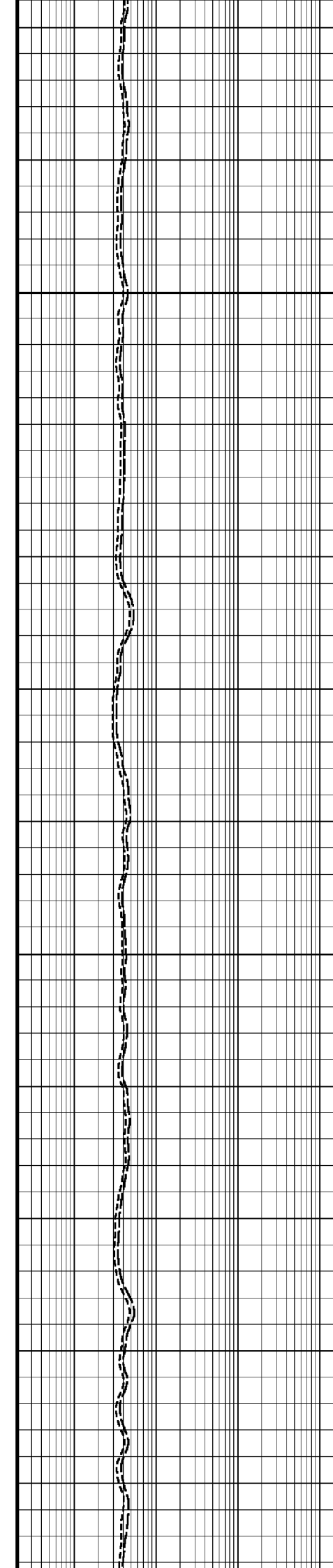
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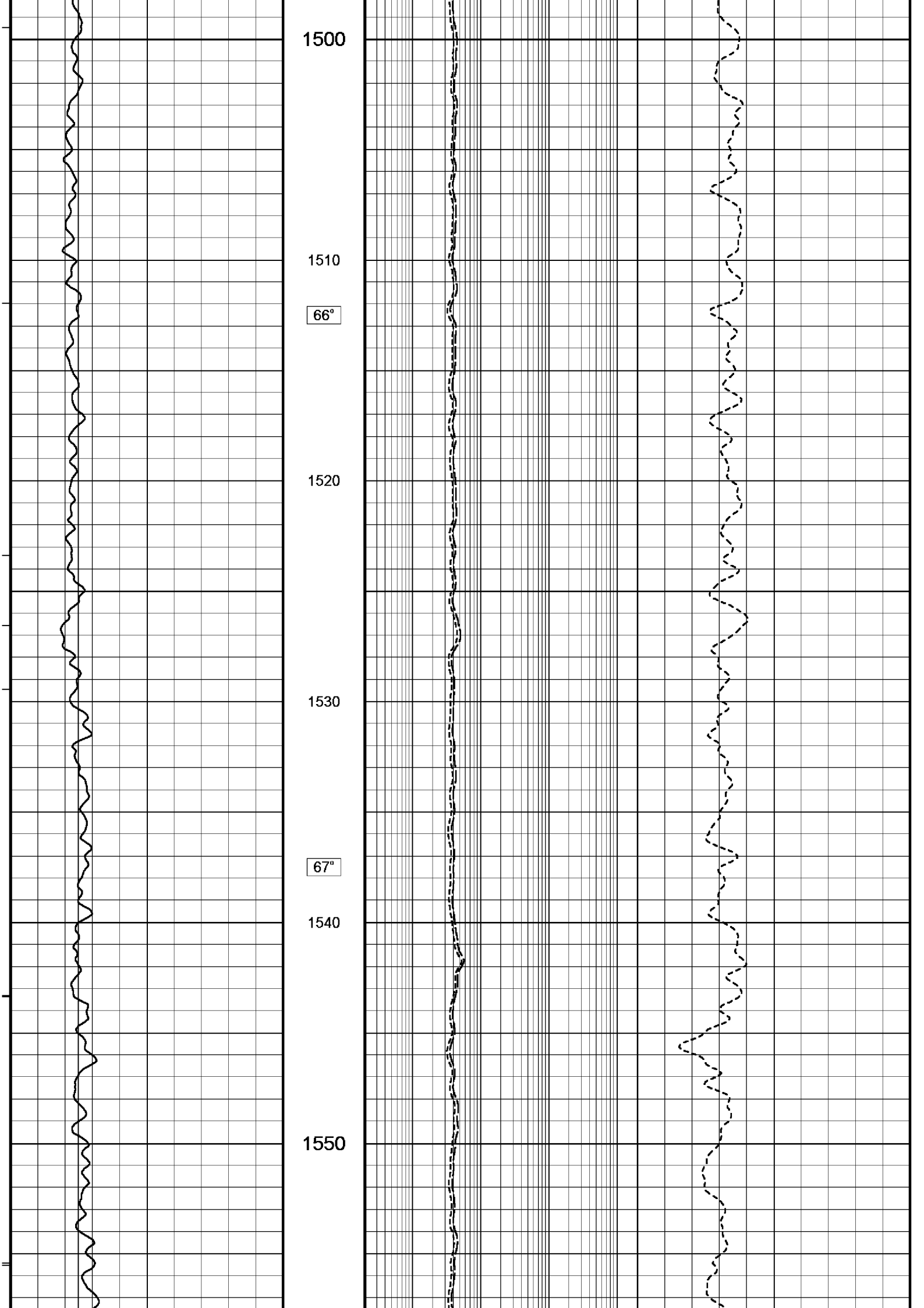
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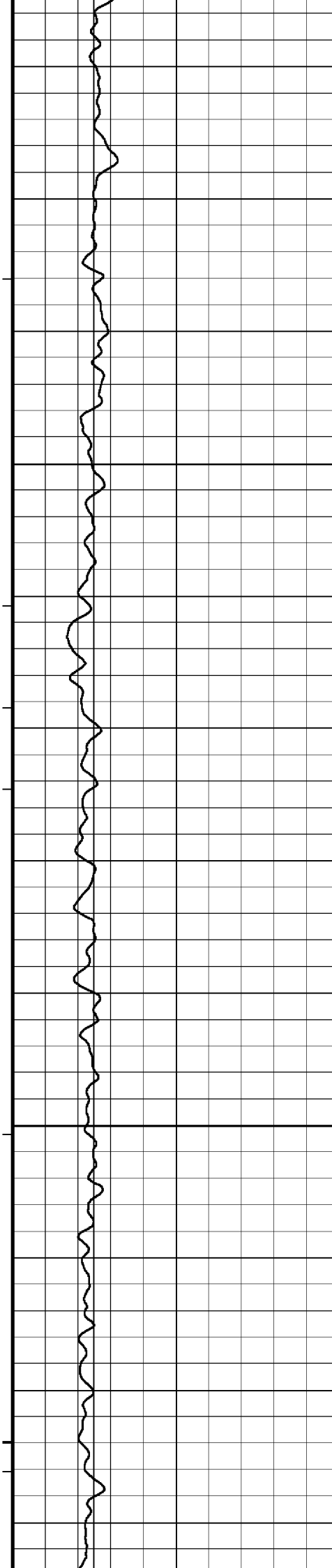
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66°

1490







1560

67°

1570

1580

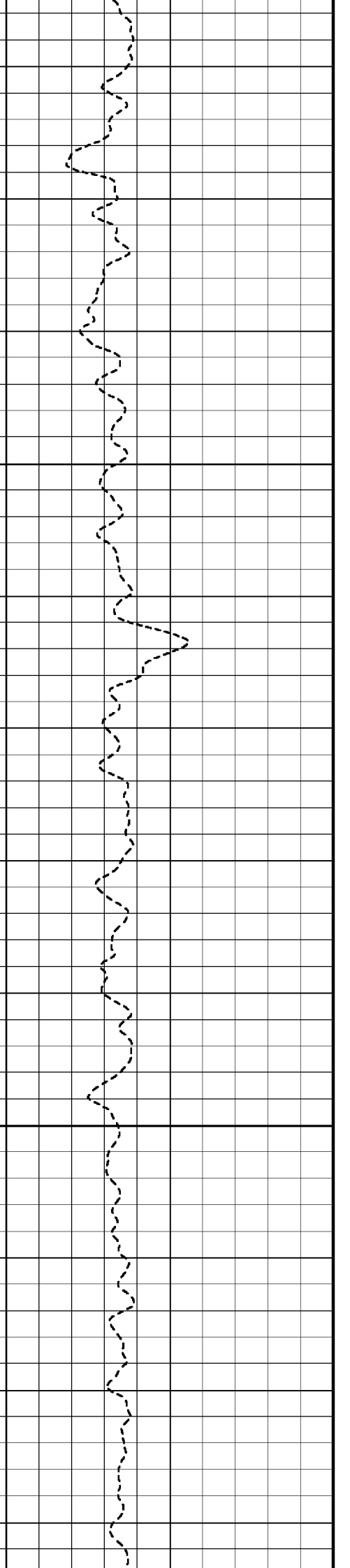
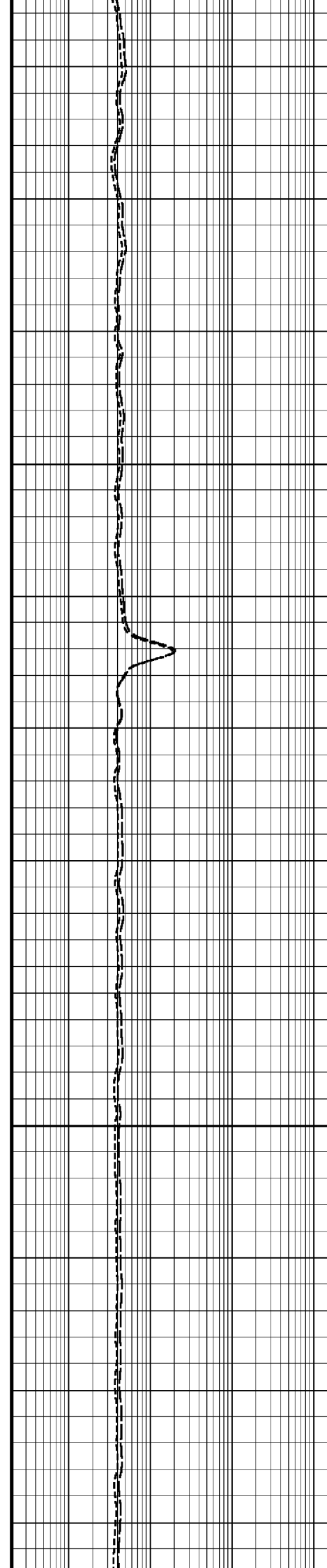
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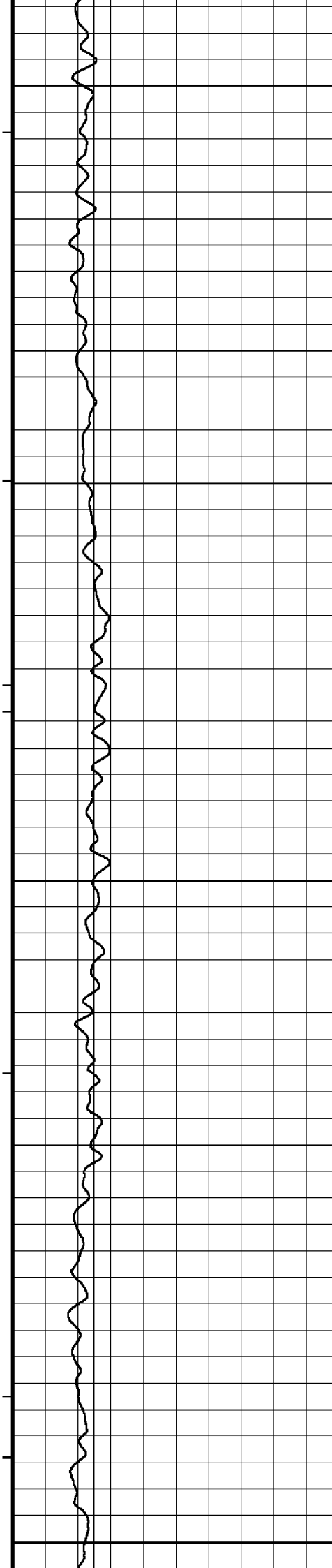
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1600

1610

68°





1620

1630

68°

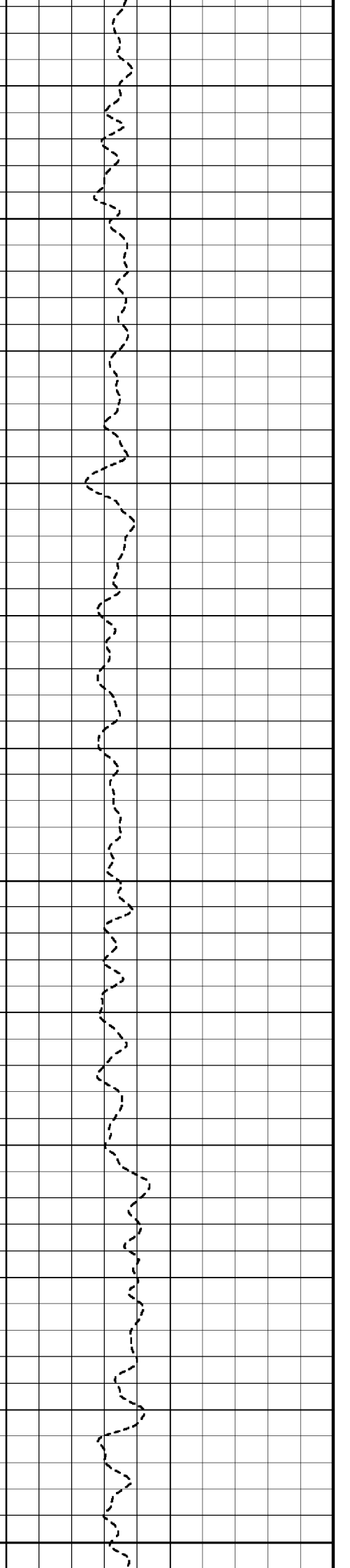
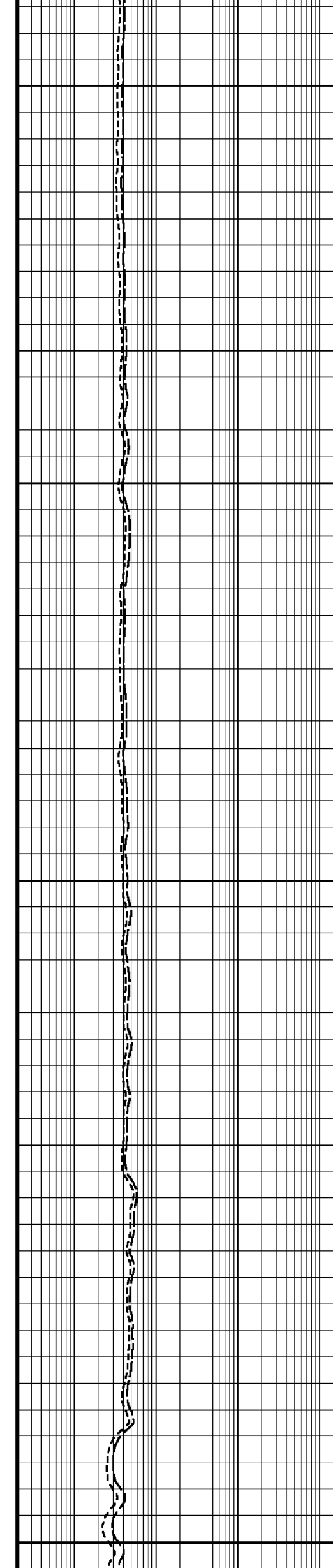
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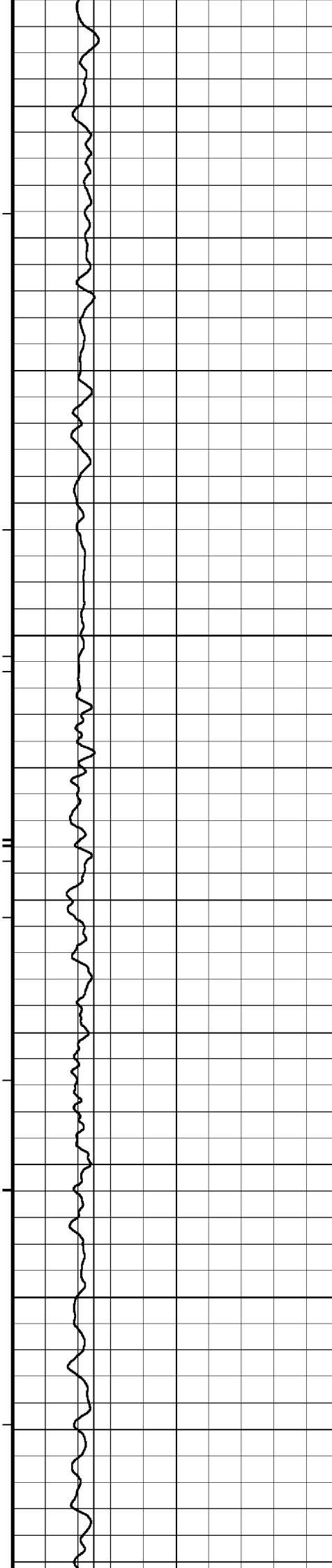
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1660

69°

1670





1680

69°

1690

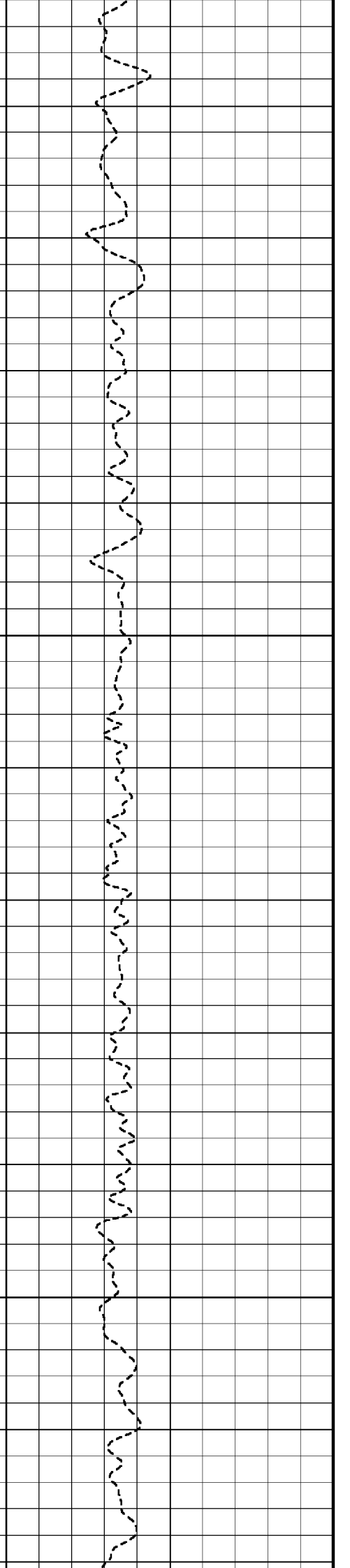
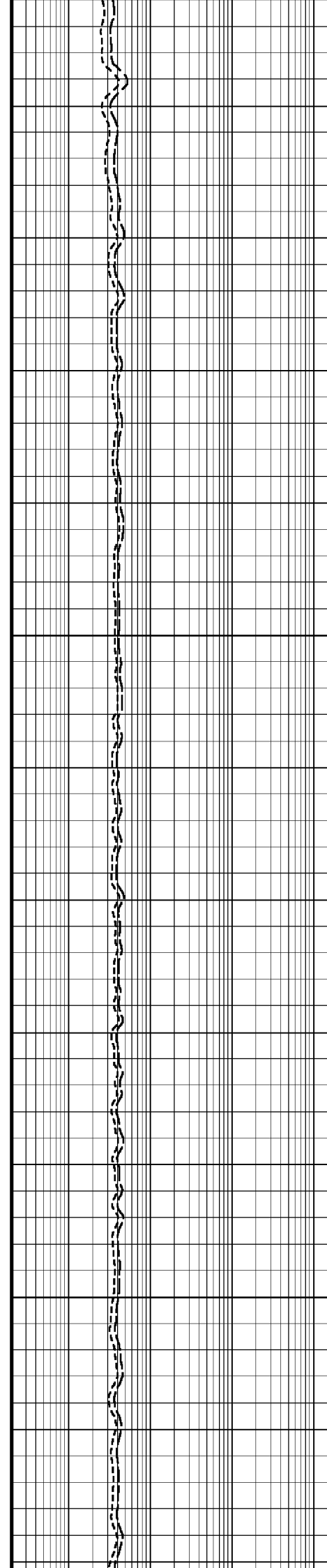
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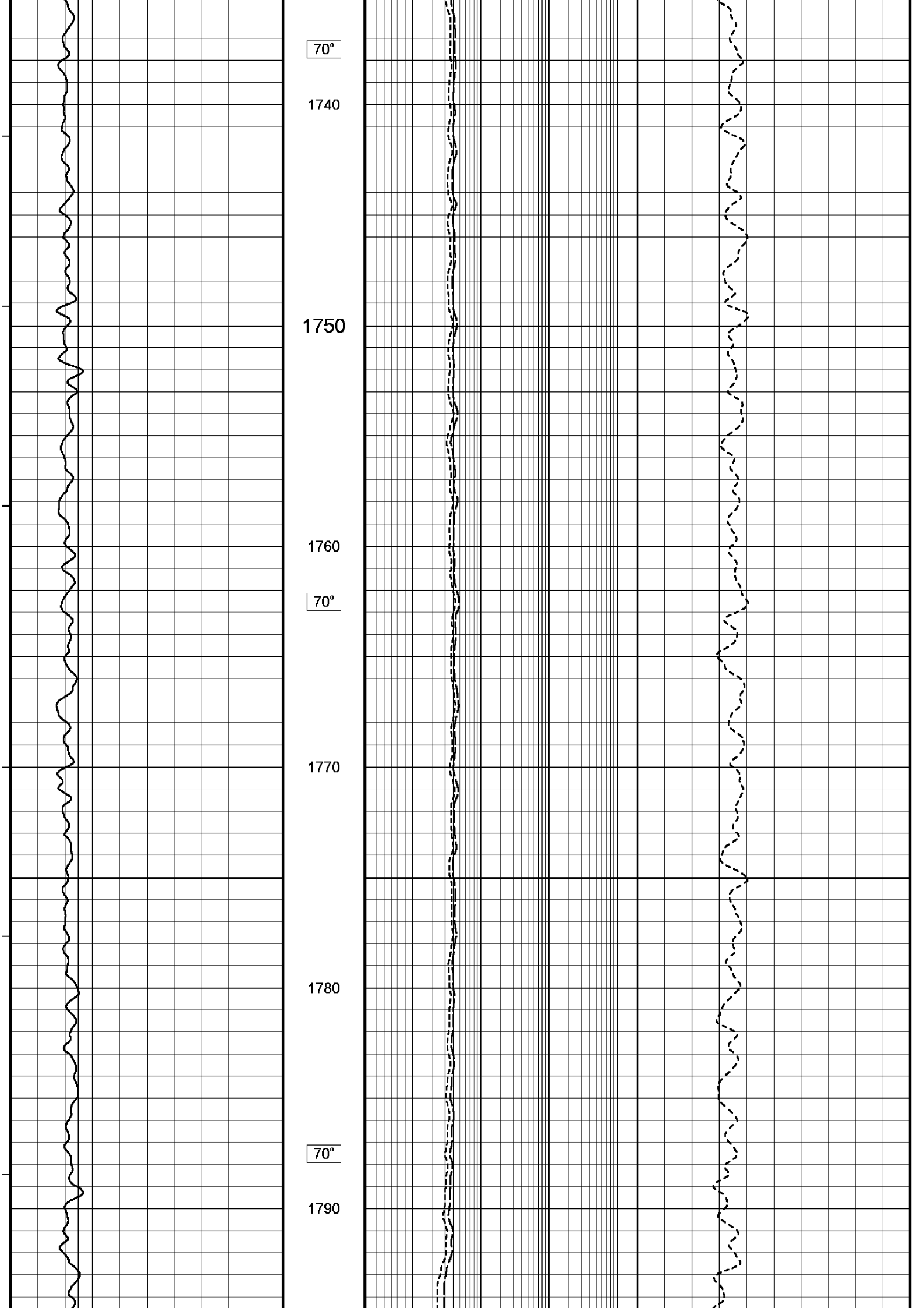
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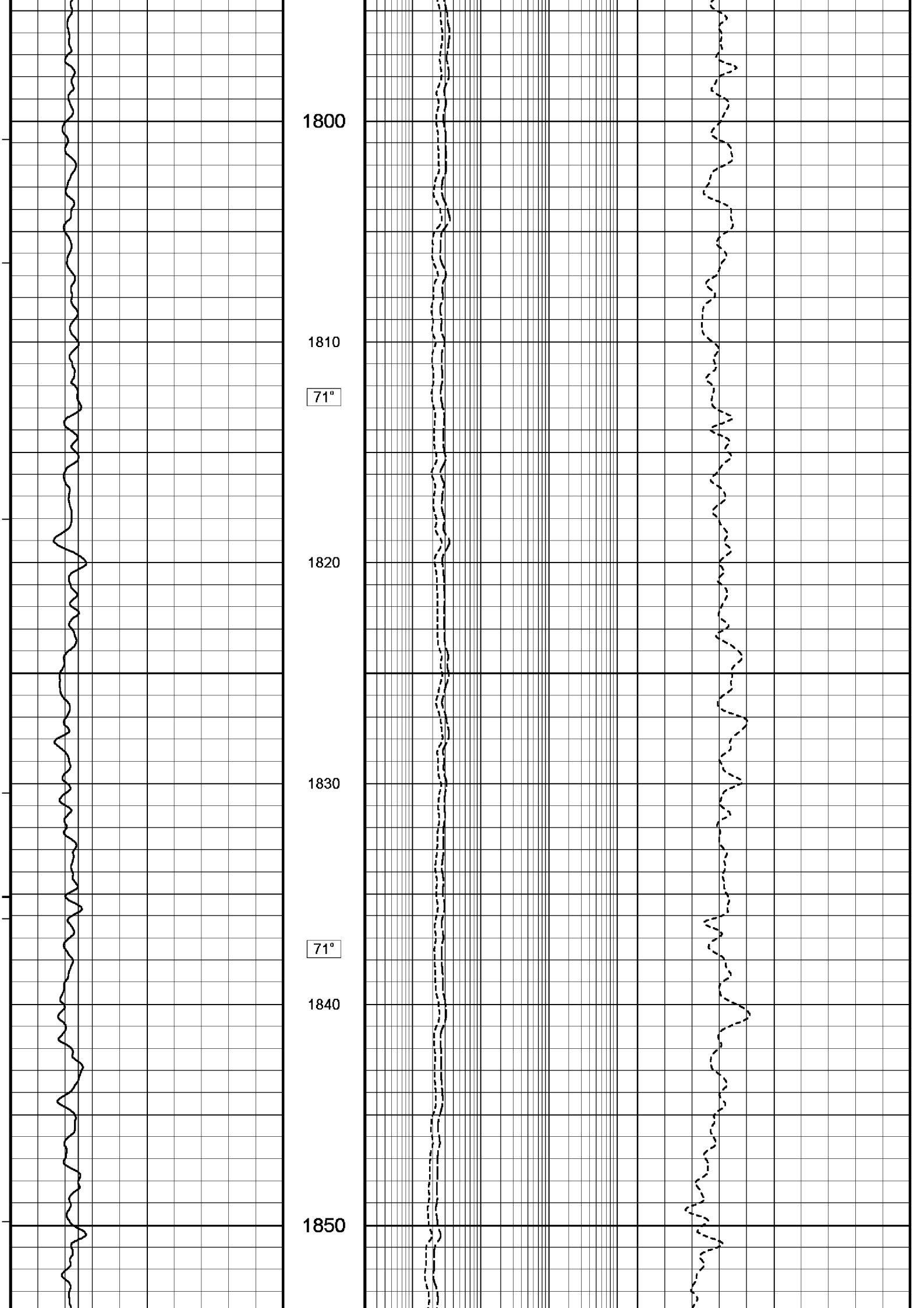
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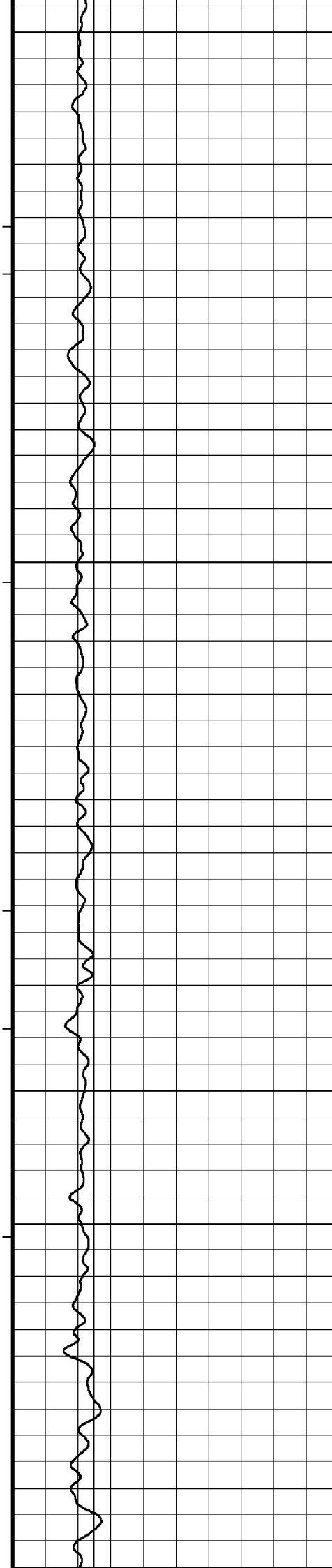
1720

1730









1860

72°

1870

1880

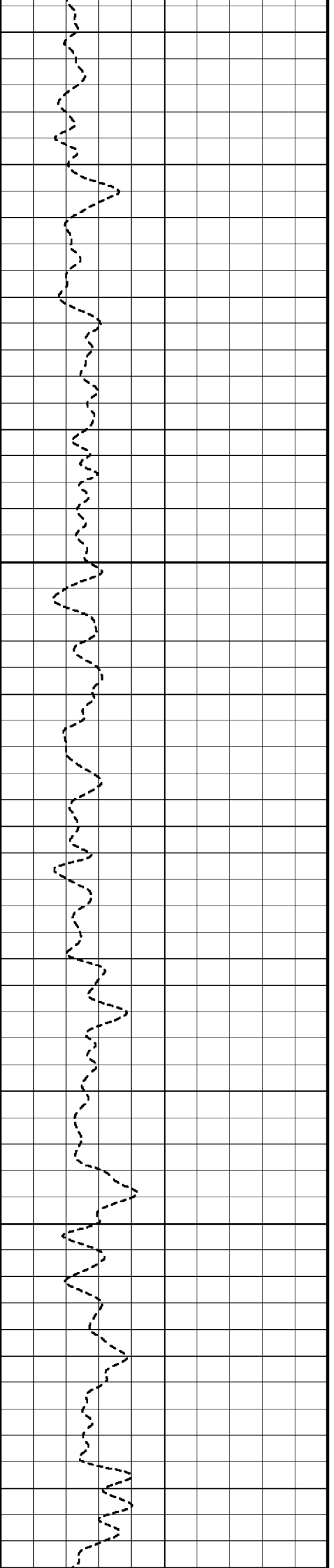
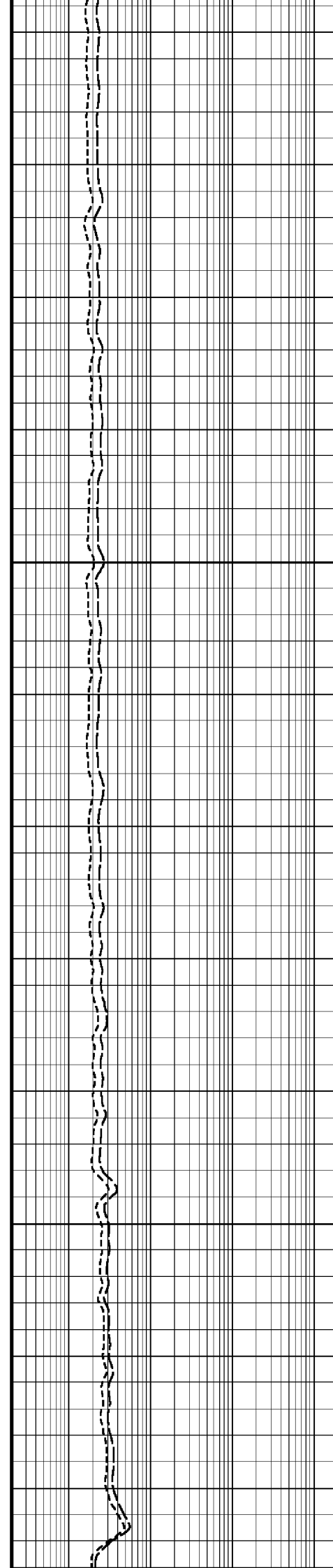
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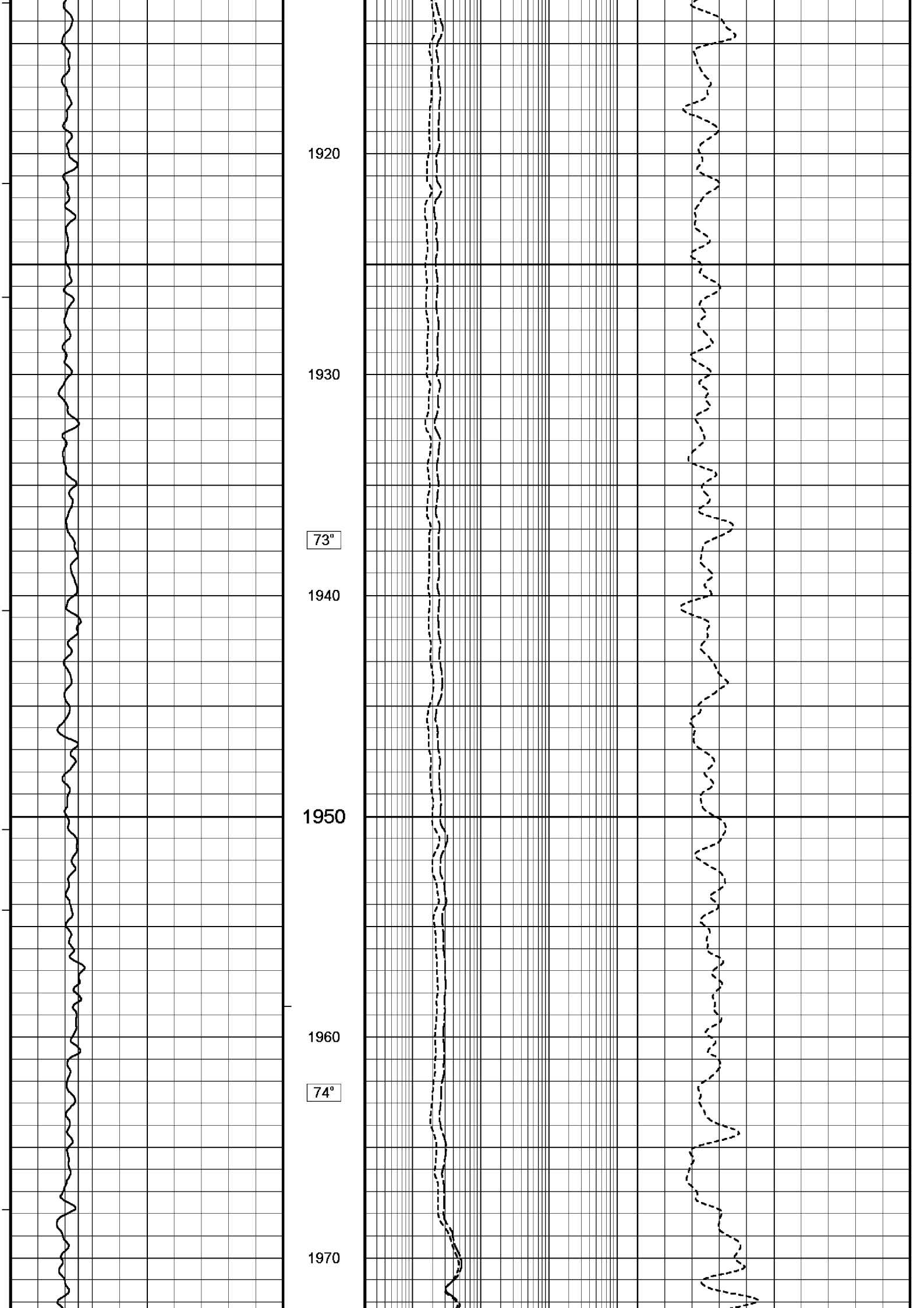
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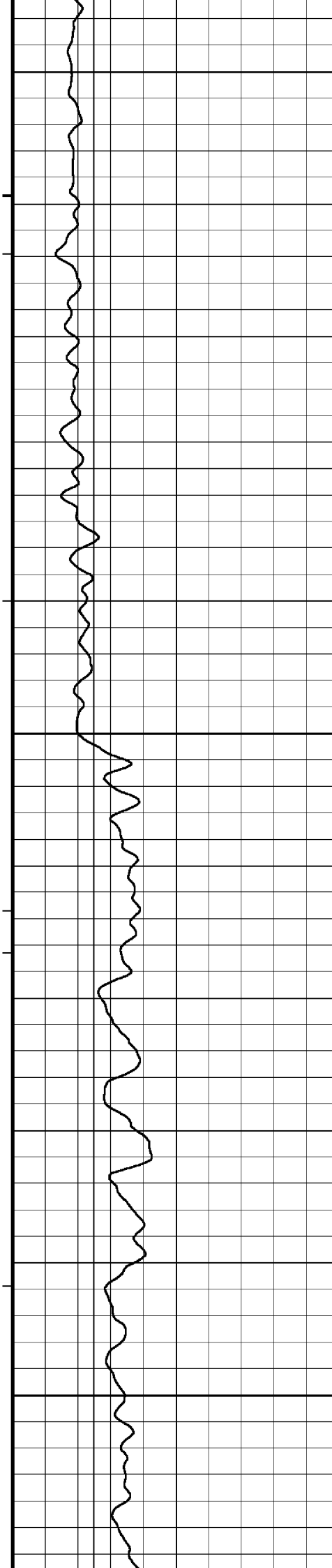
1900

1910

72°







1980

74°

1990

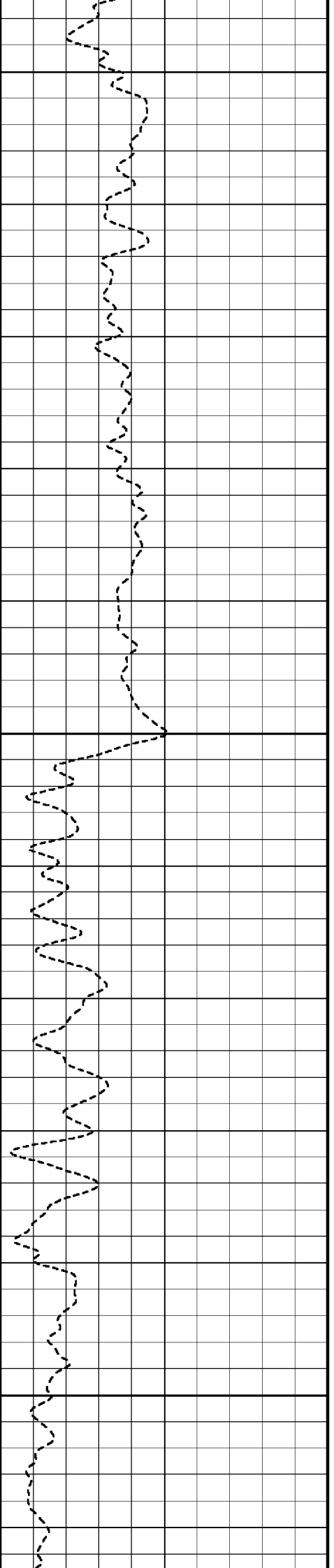
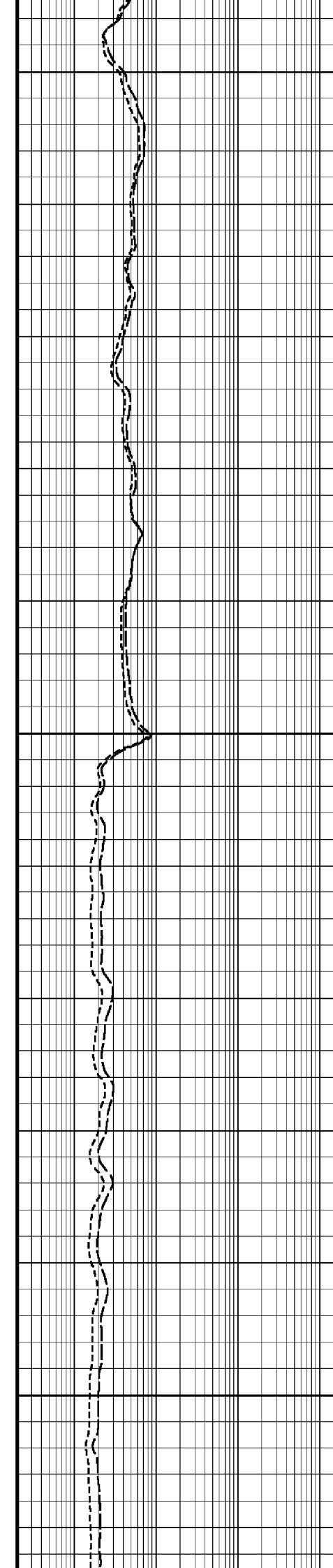
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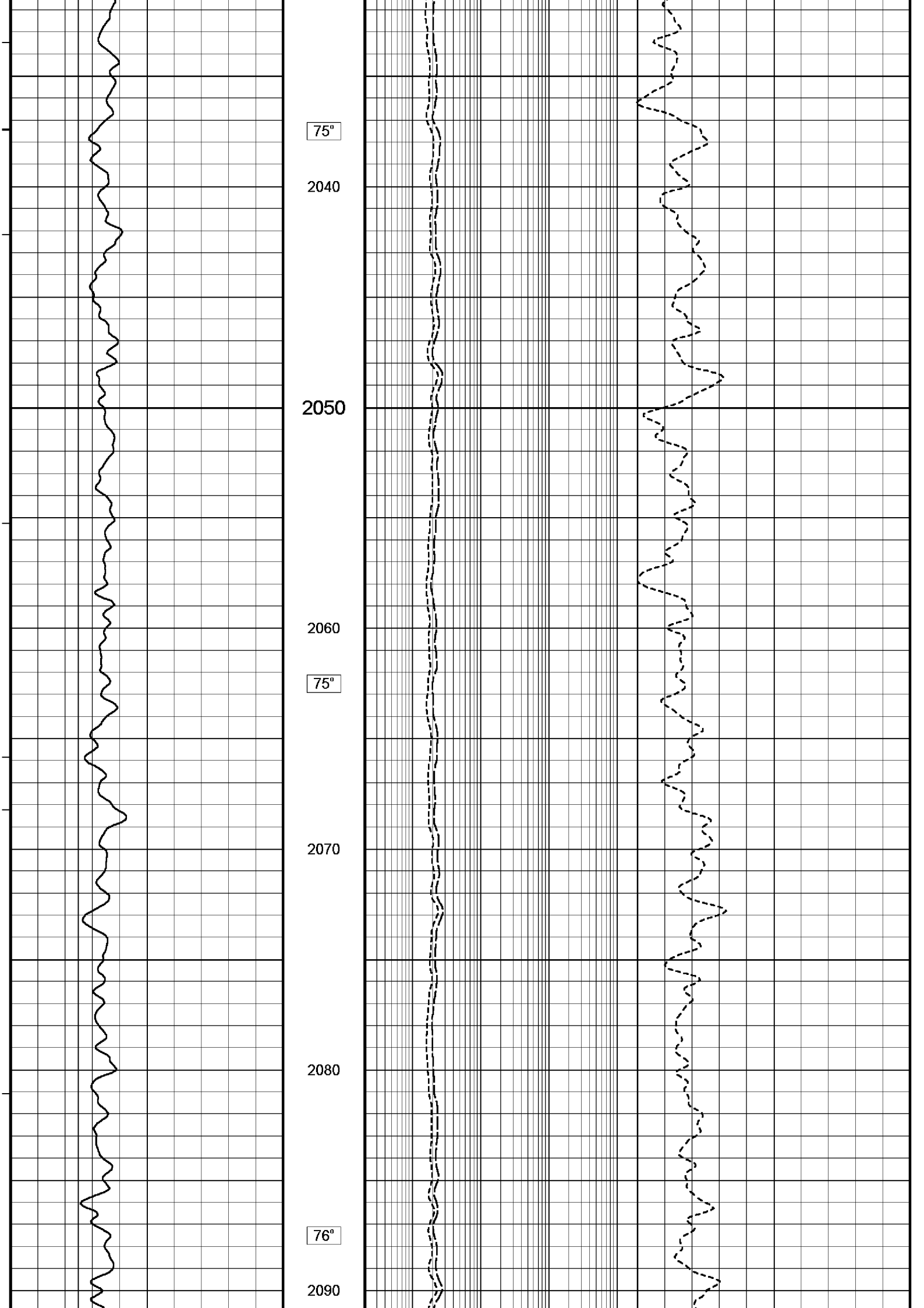
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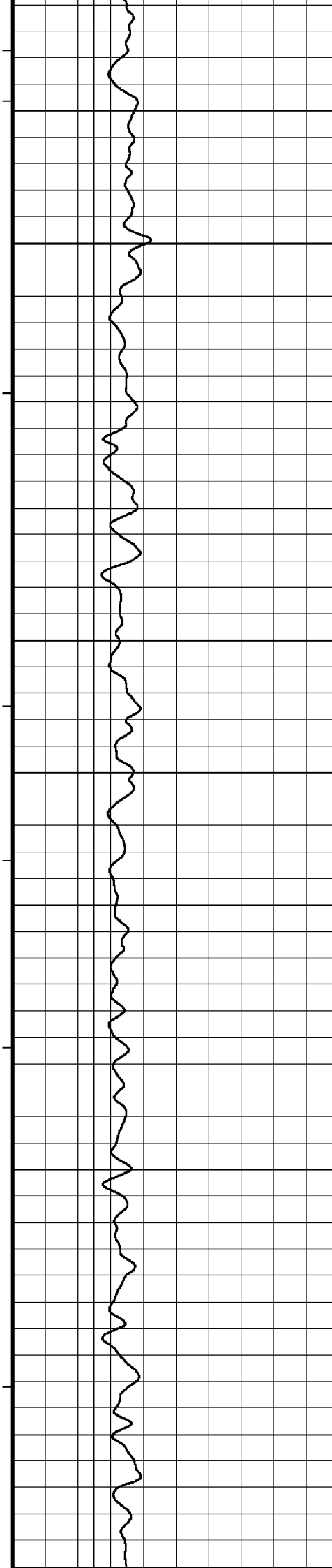
75°

2020

2030







2100

2110

76°

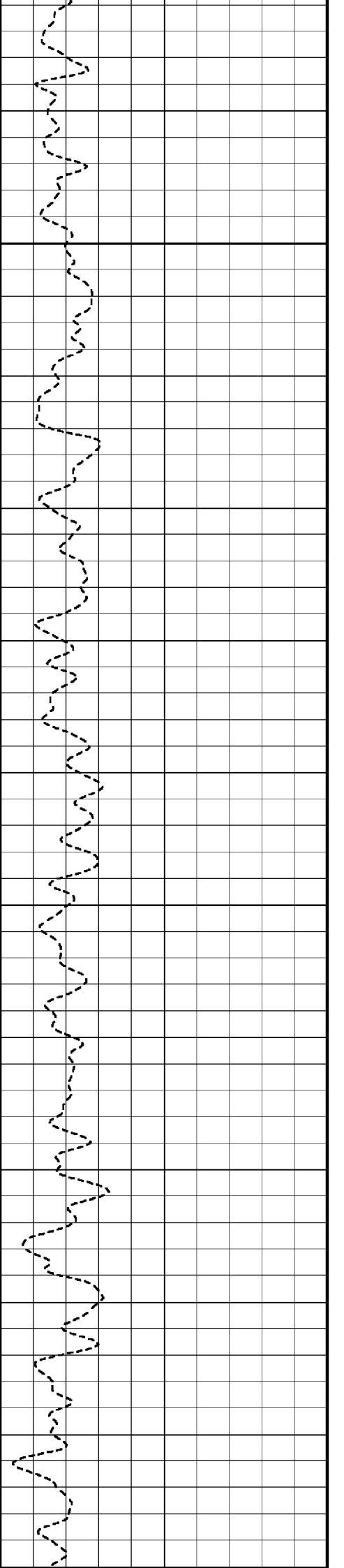
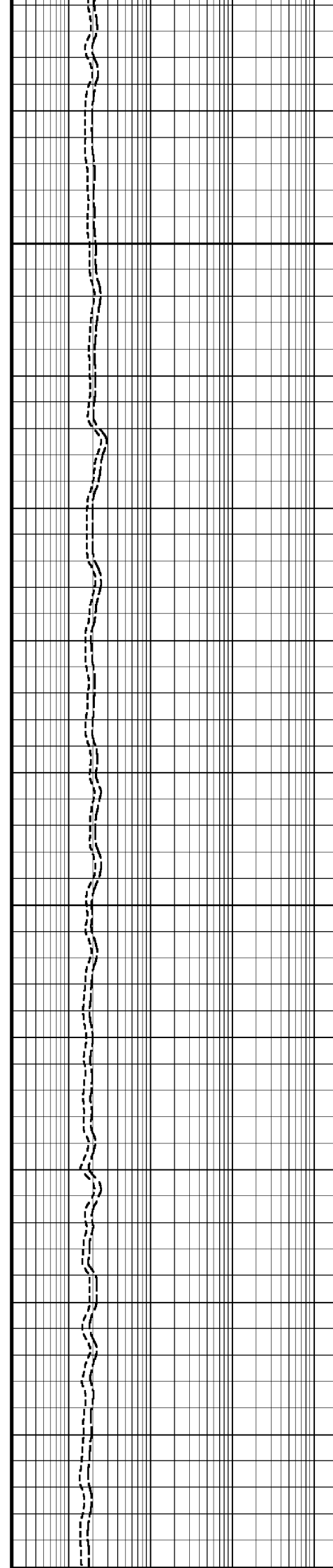
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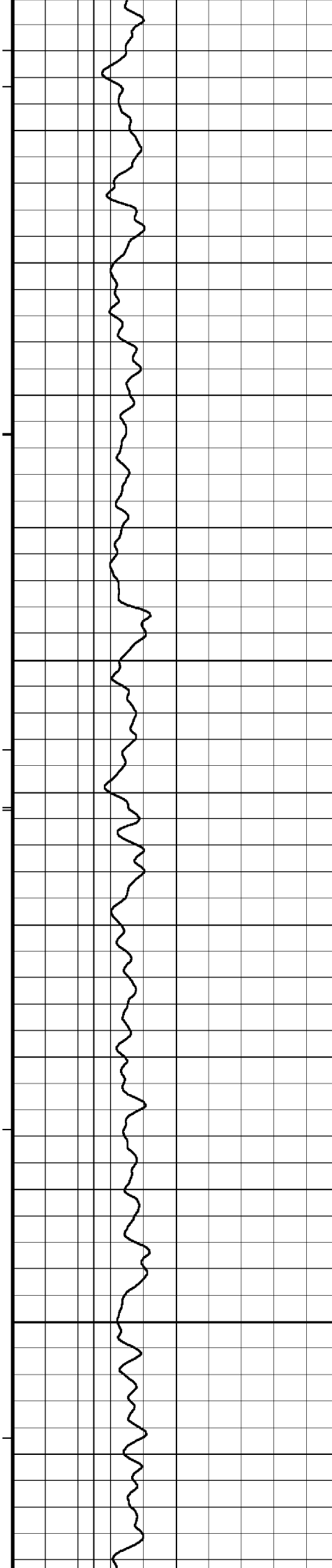
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76°

2140

2150





2150

2160

77°

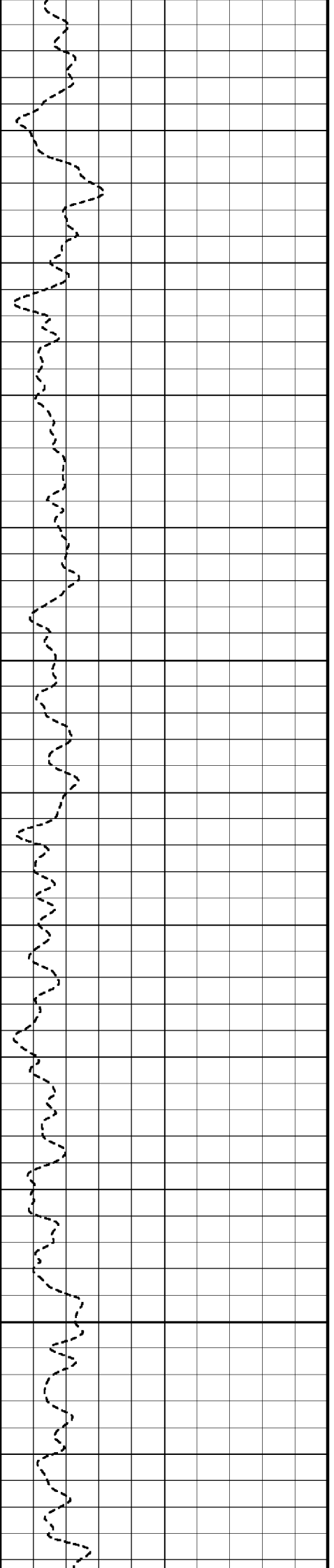
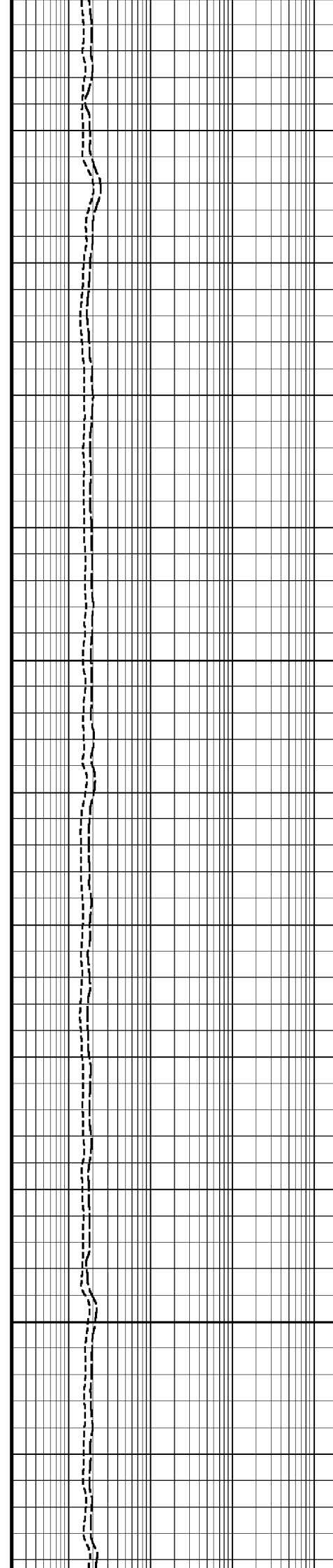
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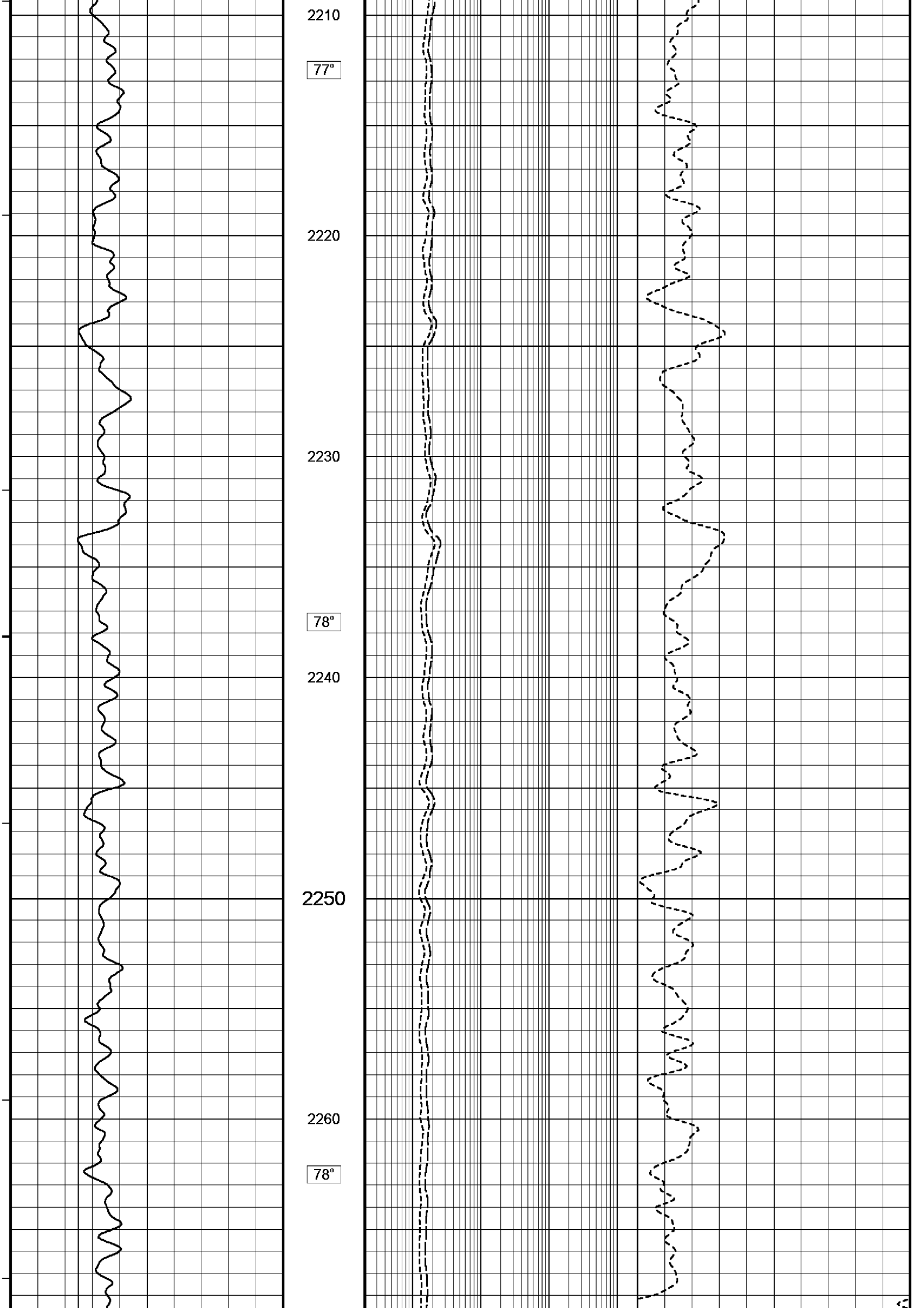
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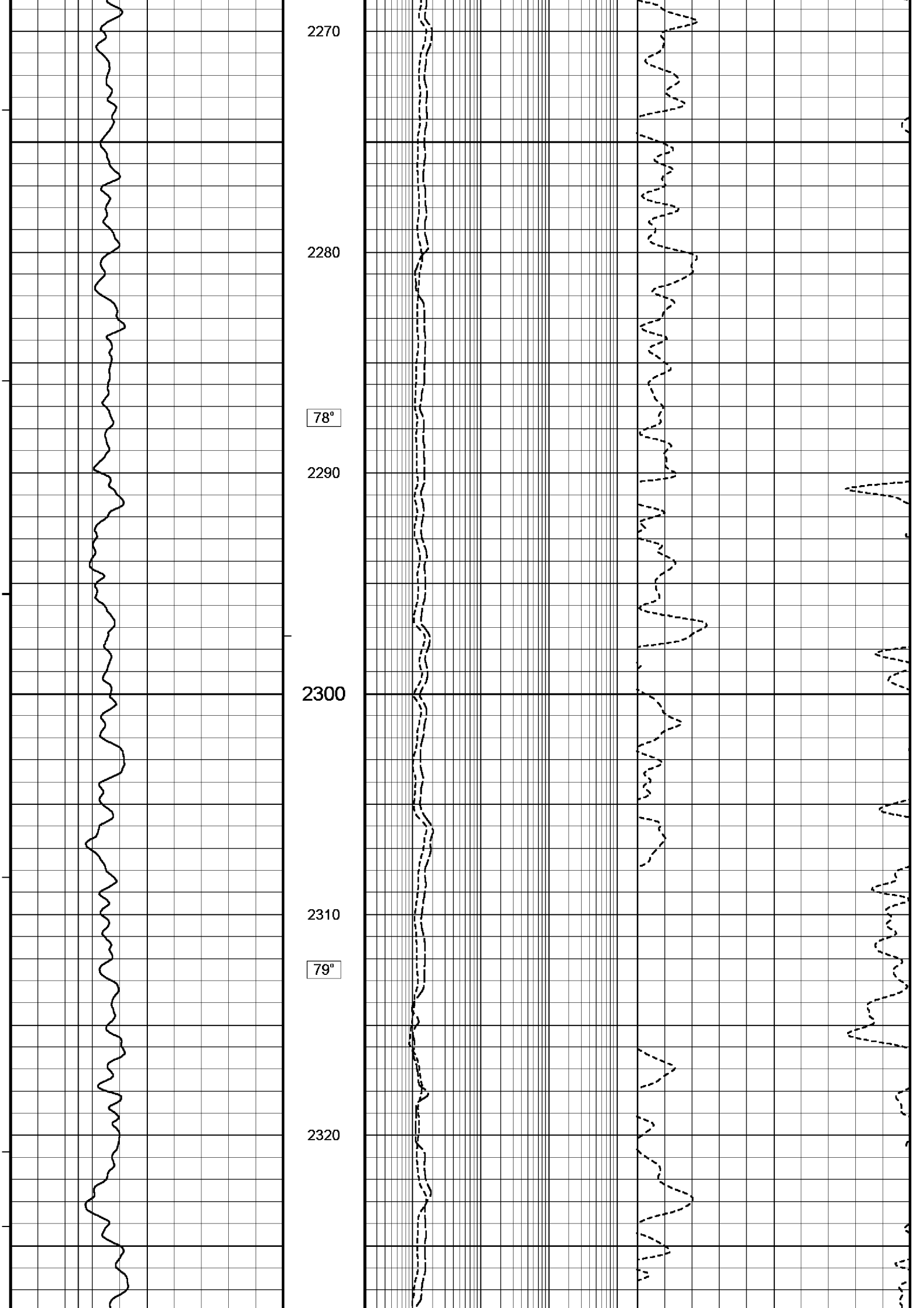
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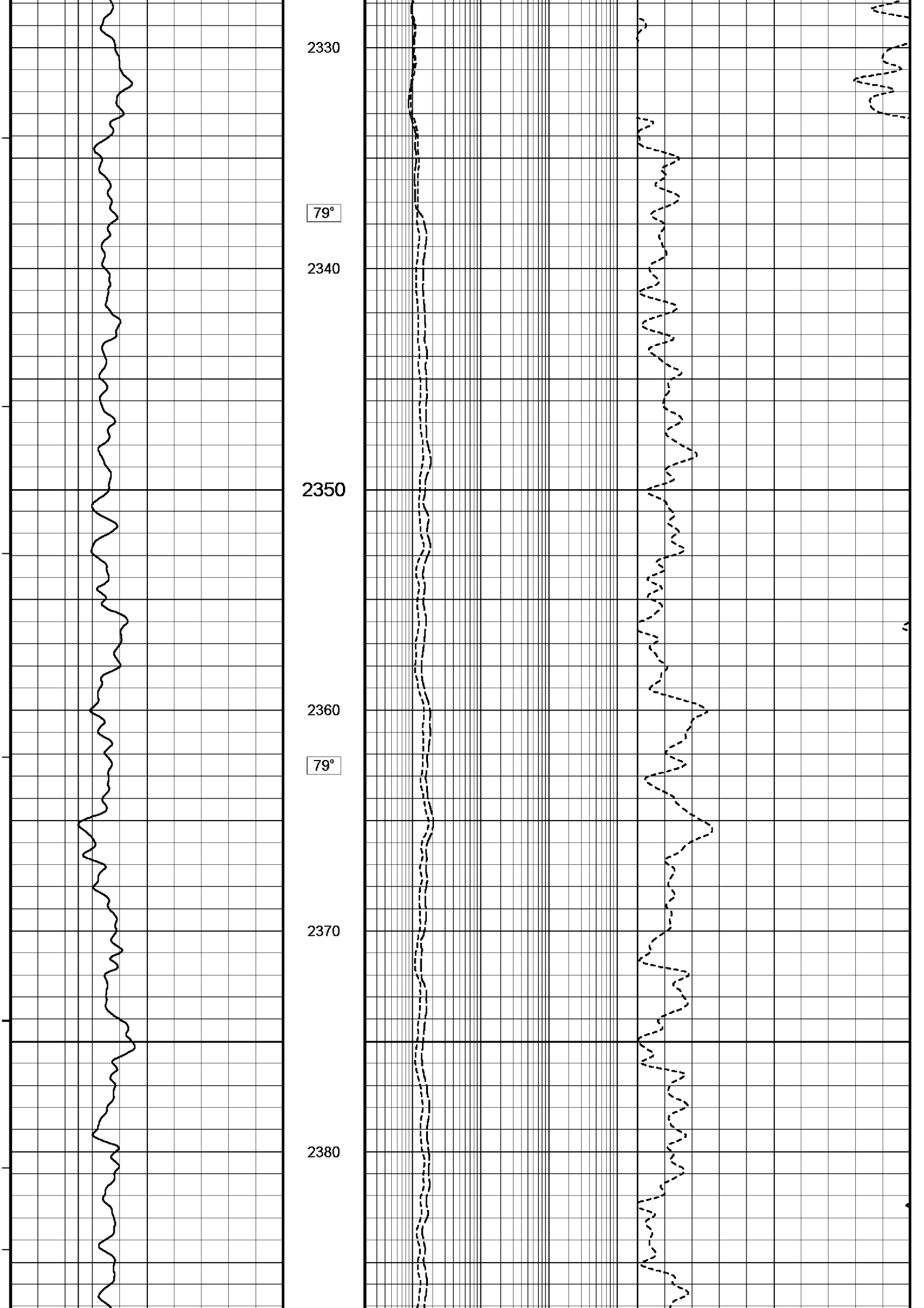
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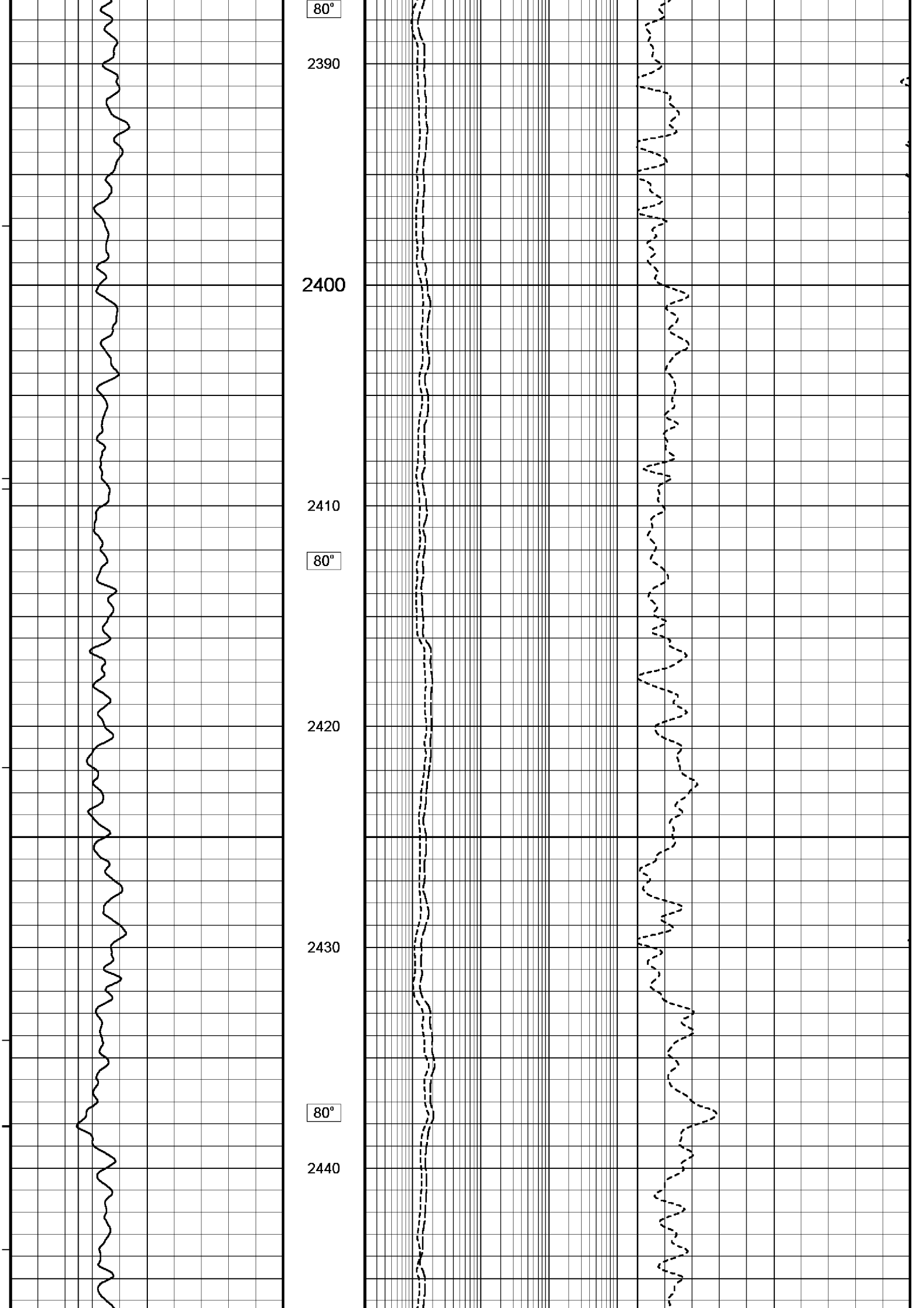
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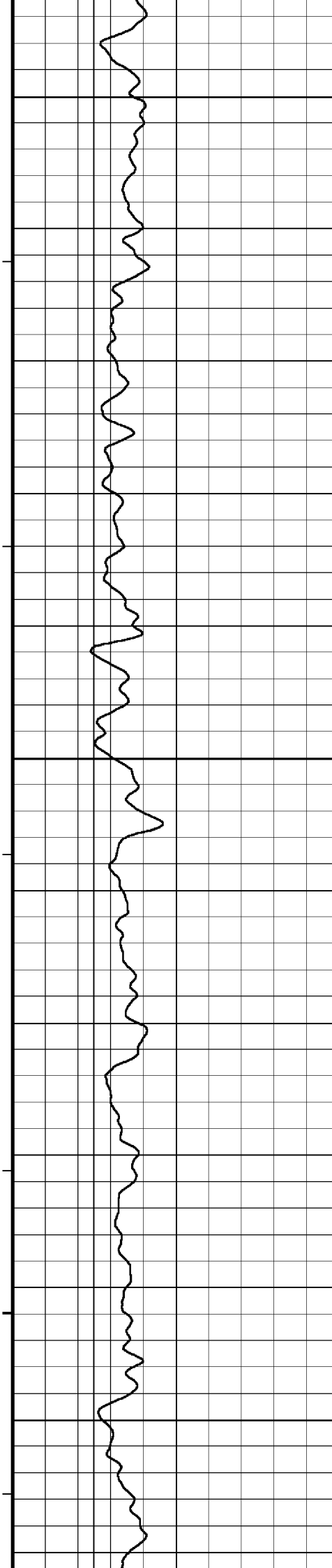












2450

2460

80°

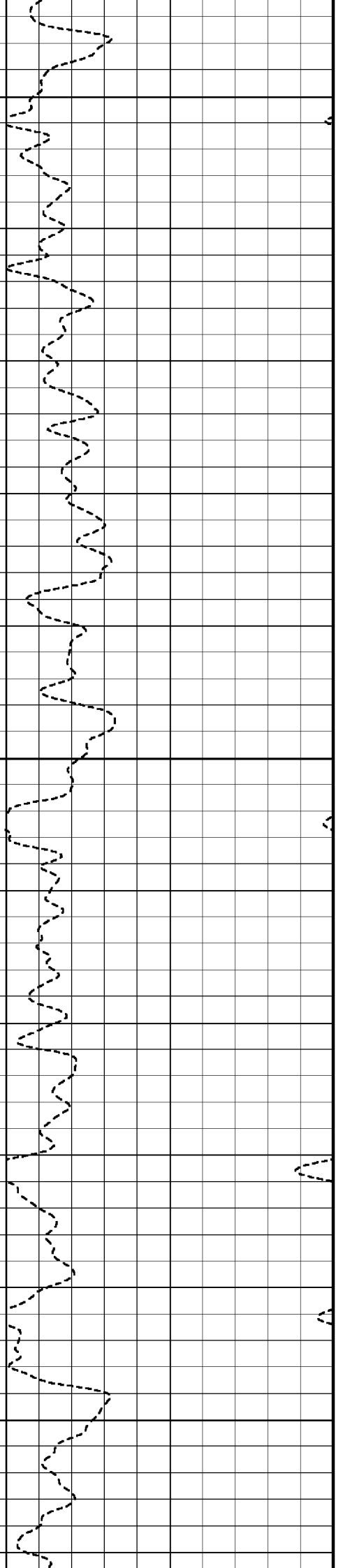
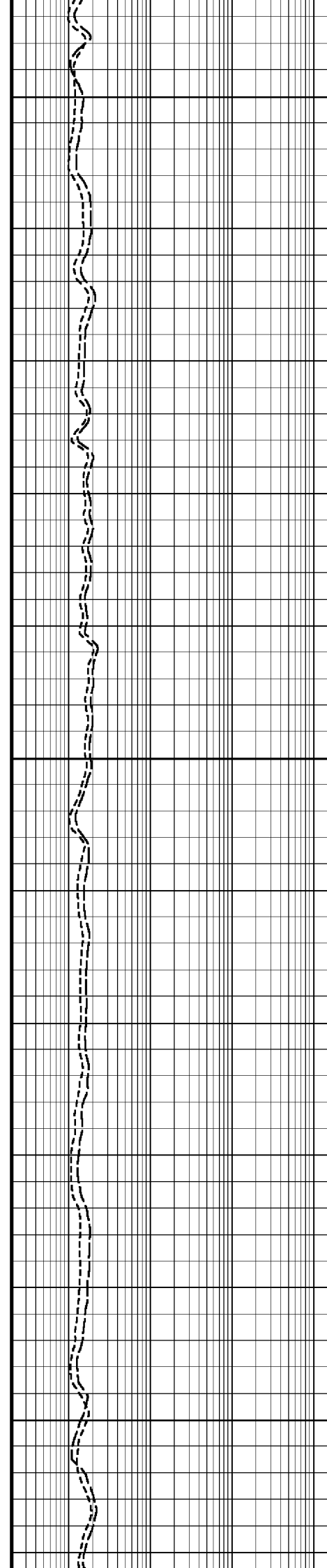
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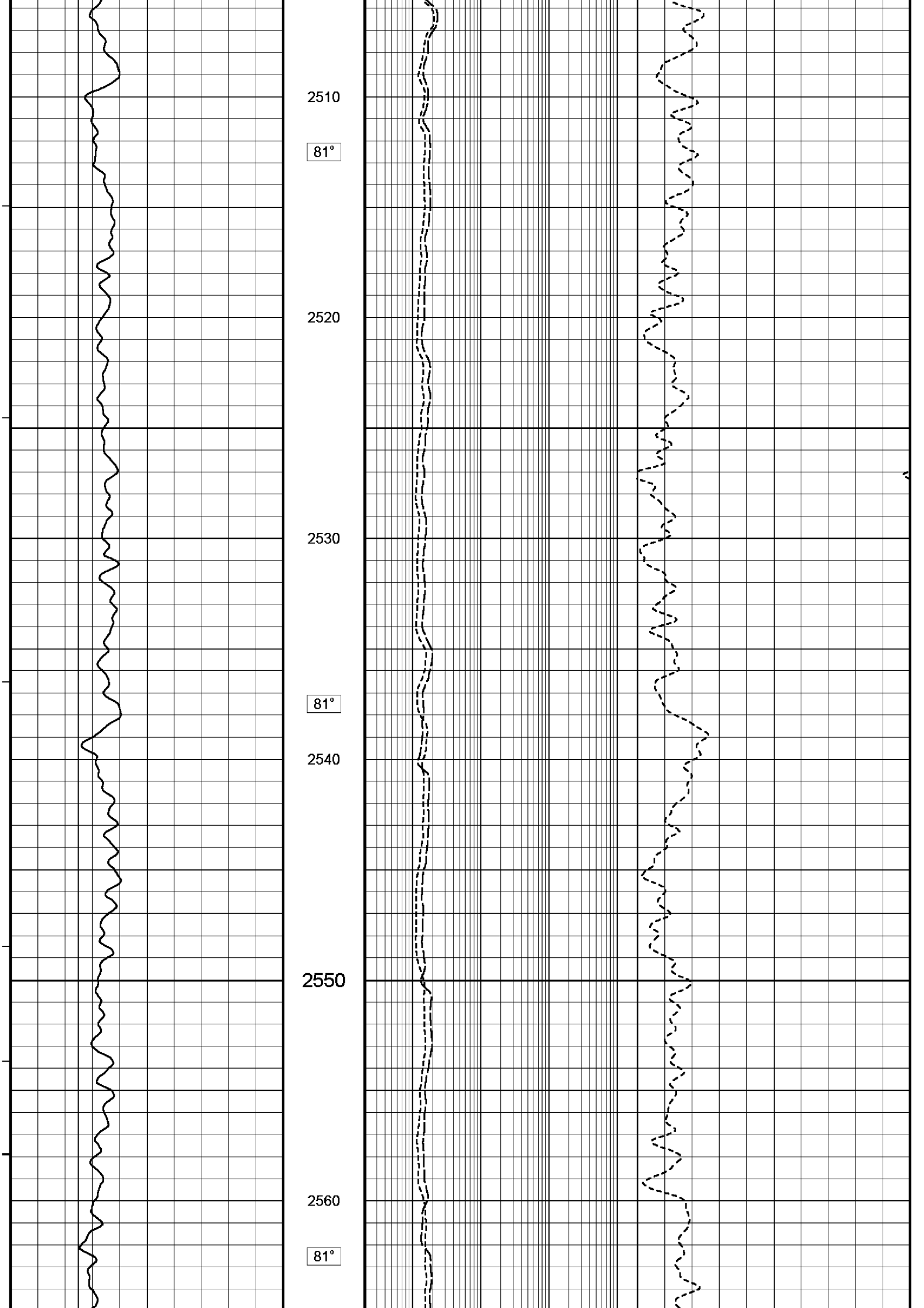
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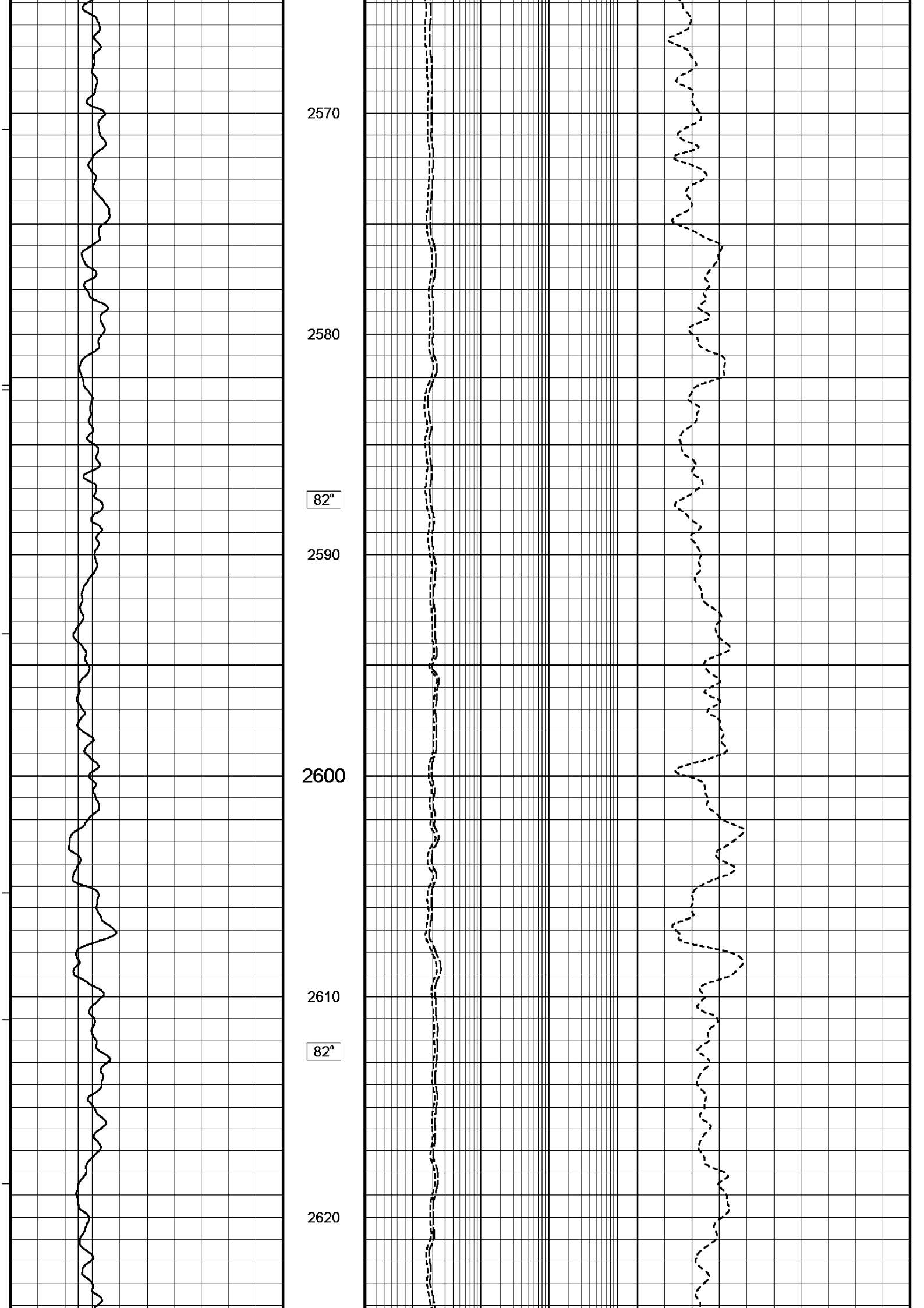
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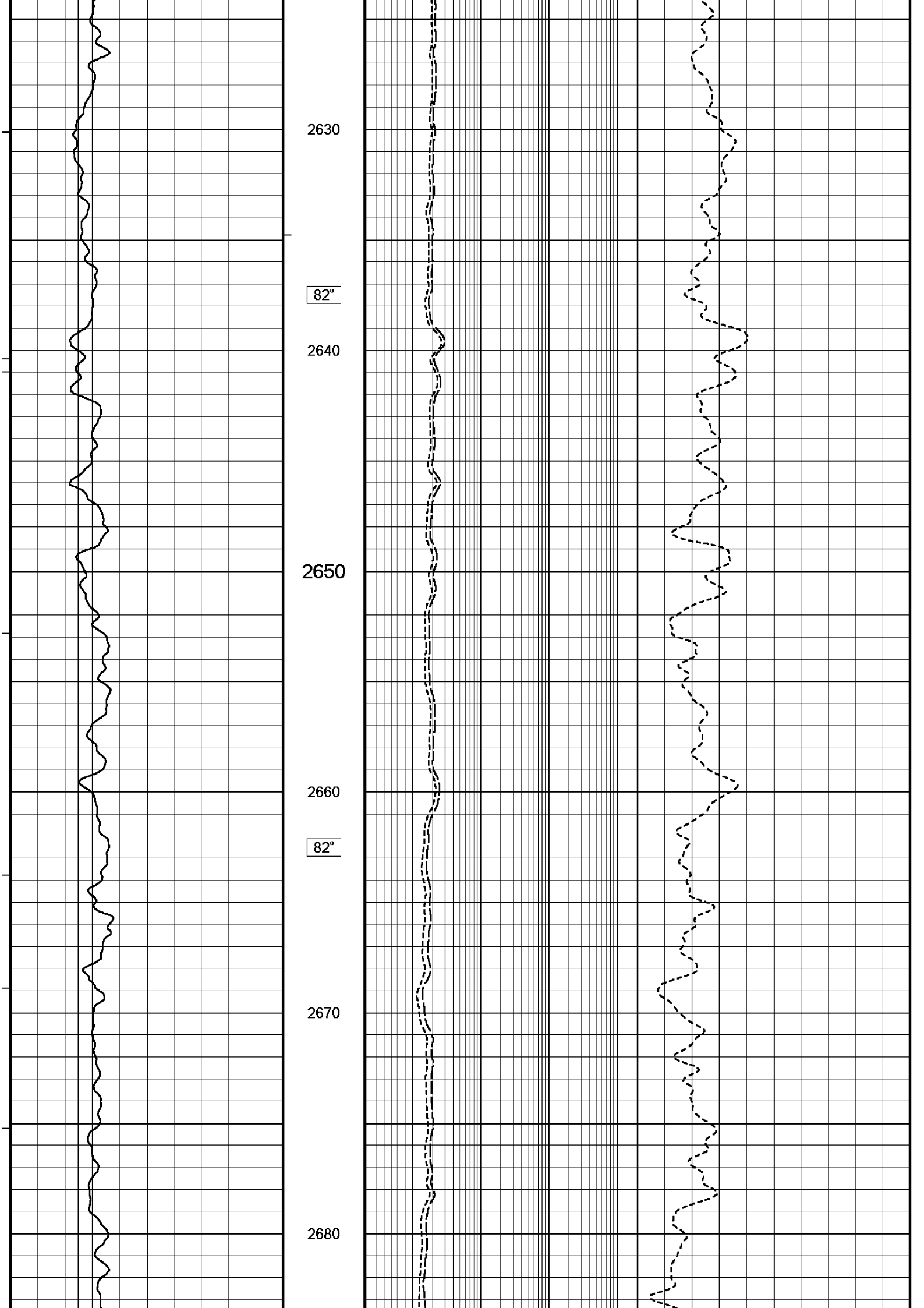
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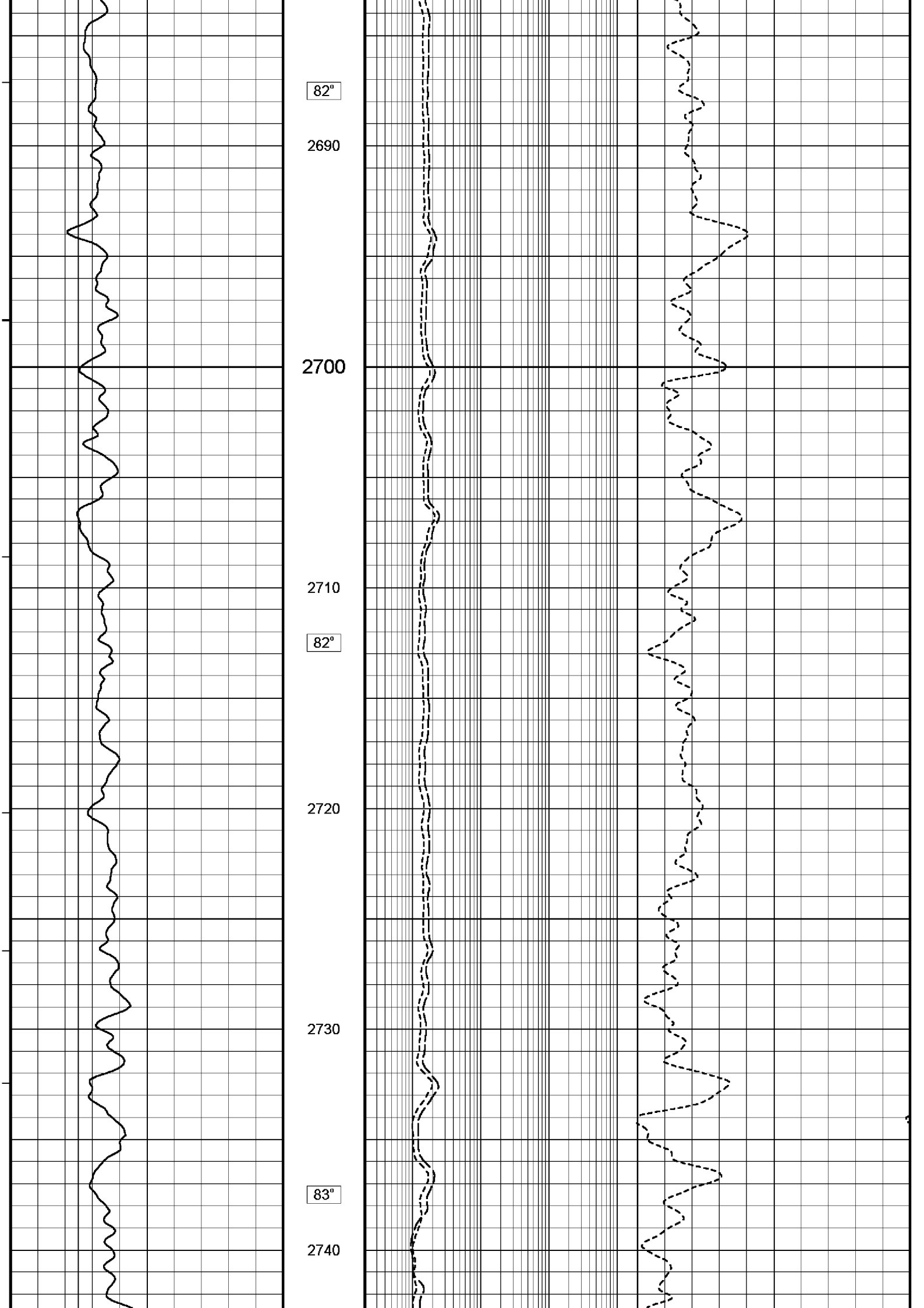
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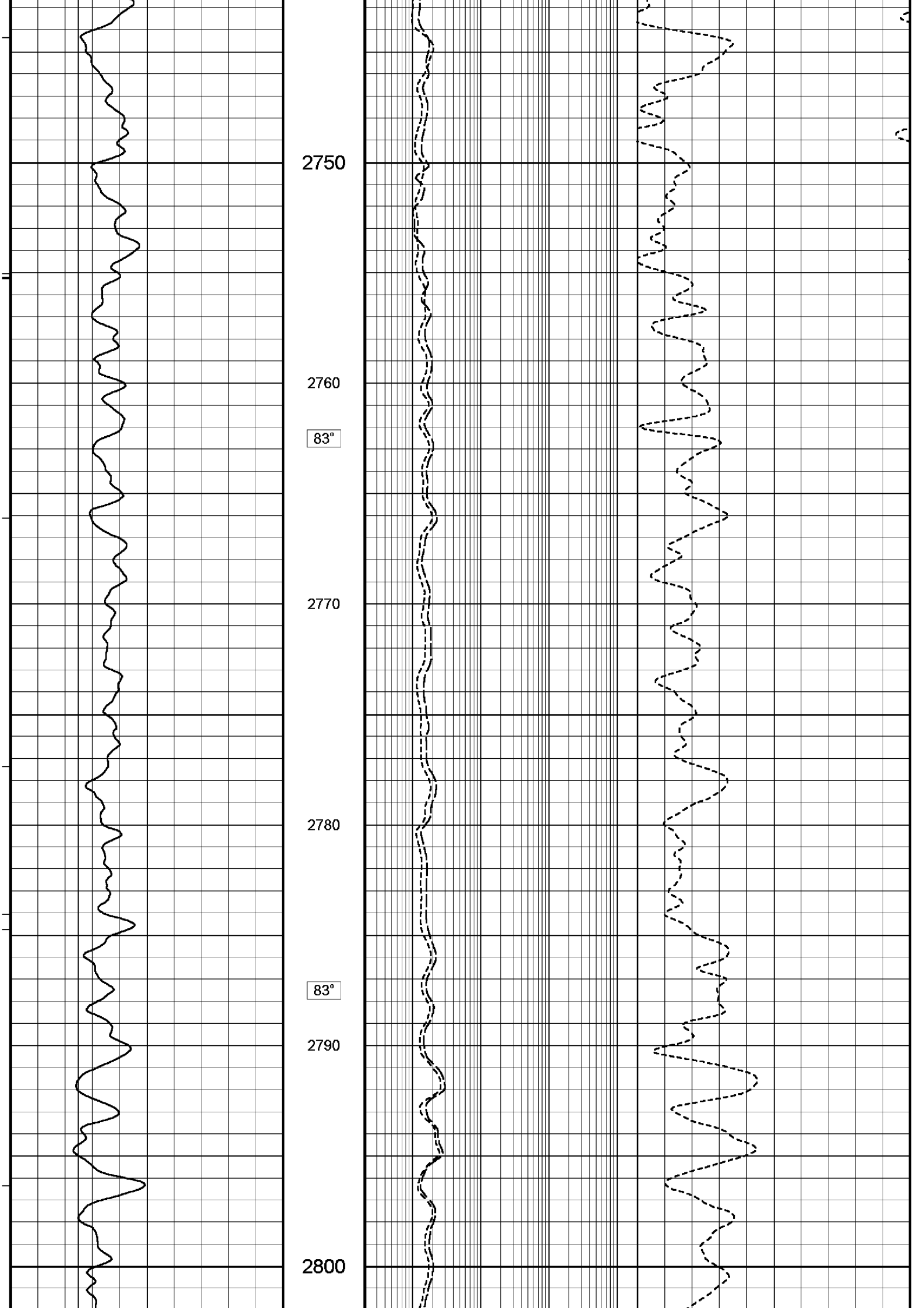


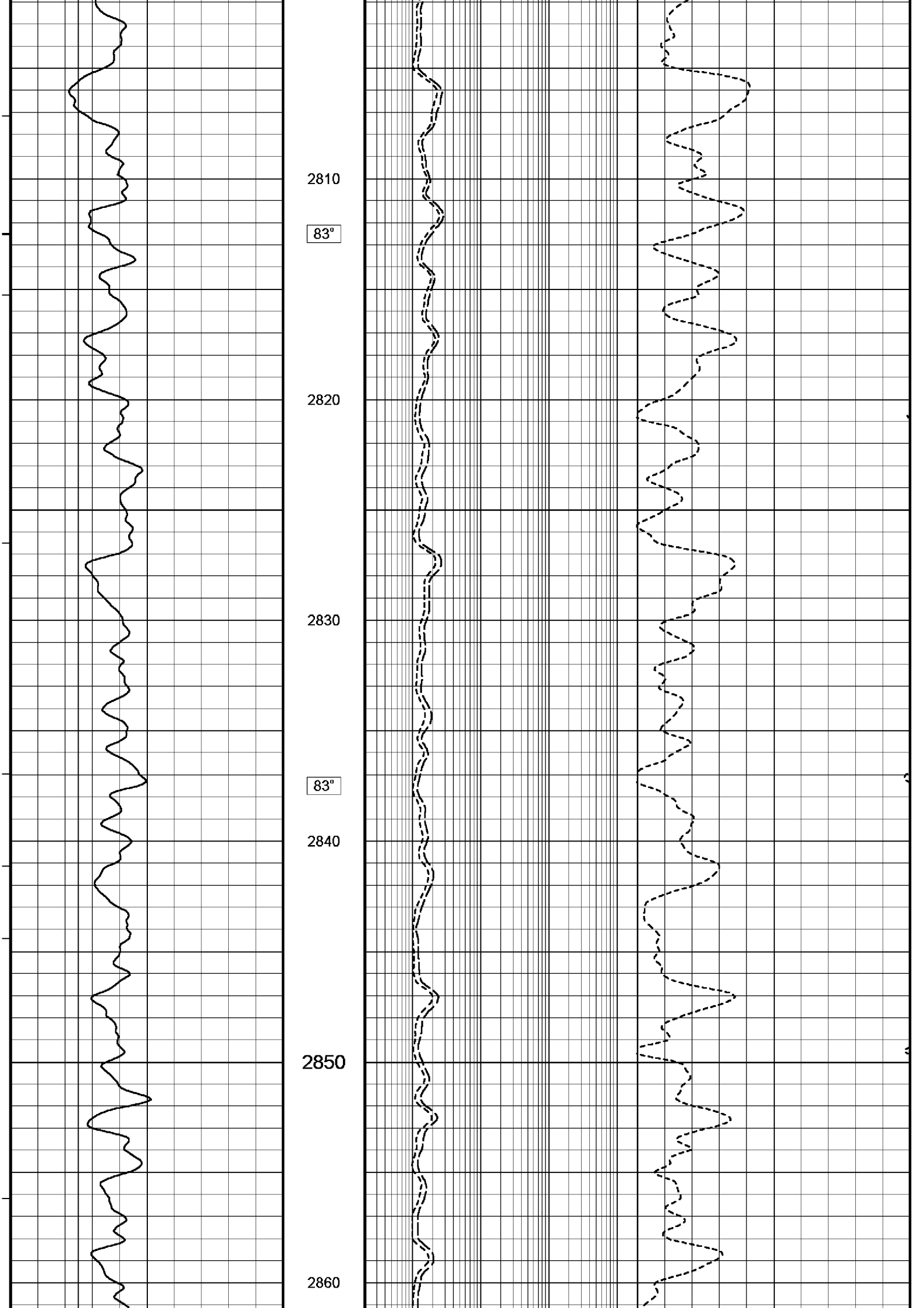


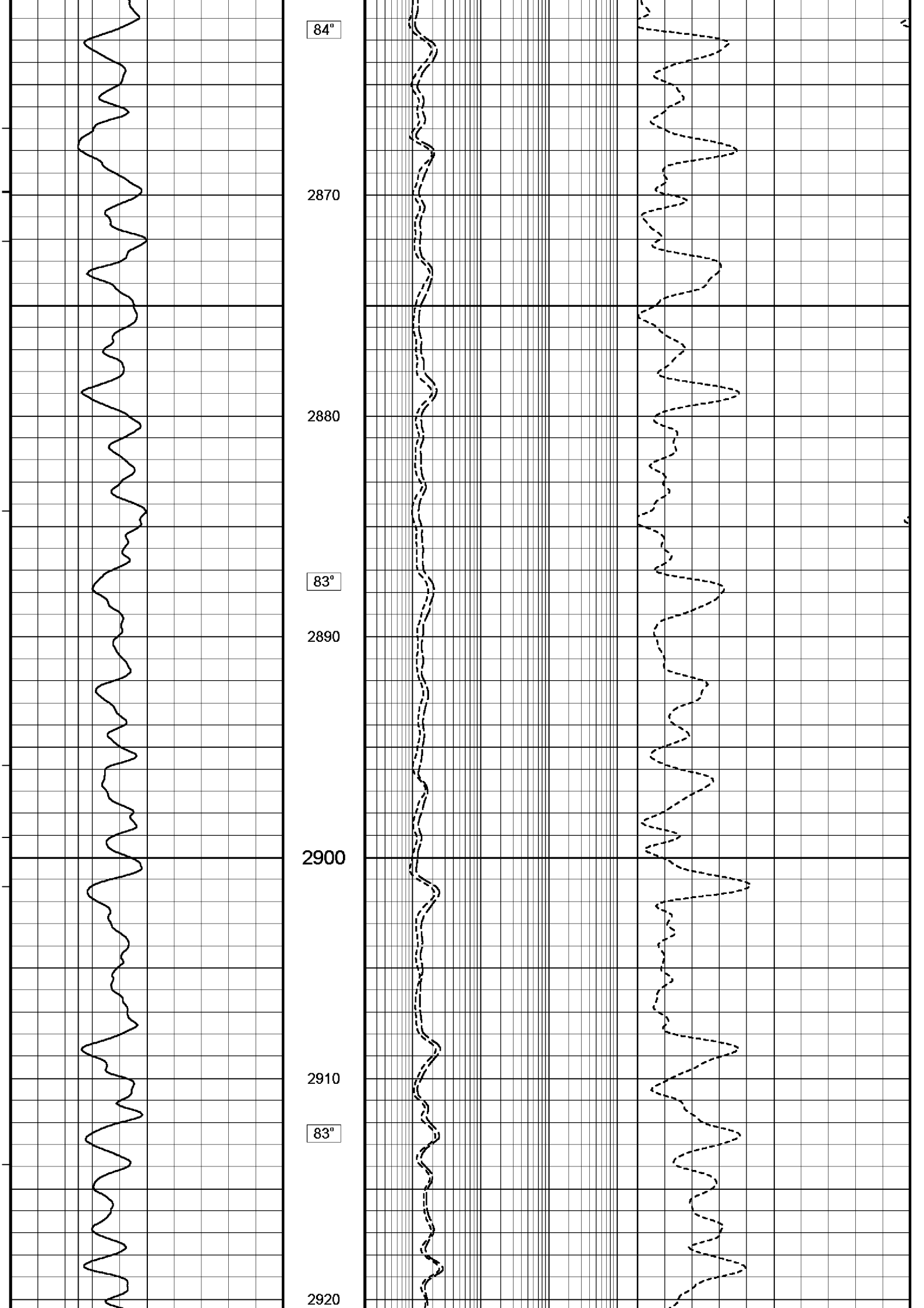


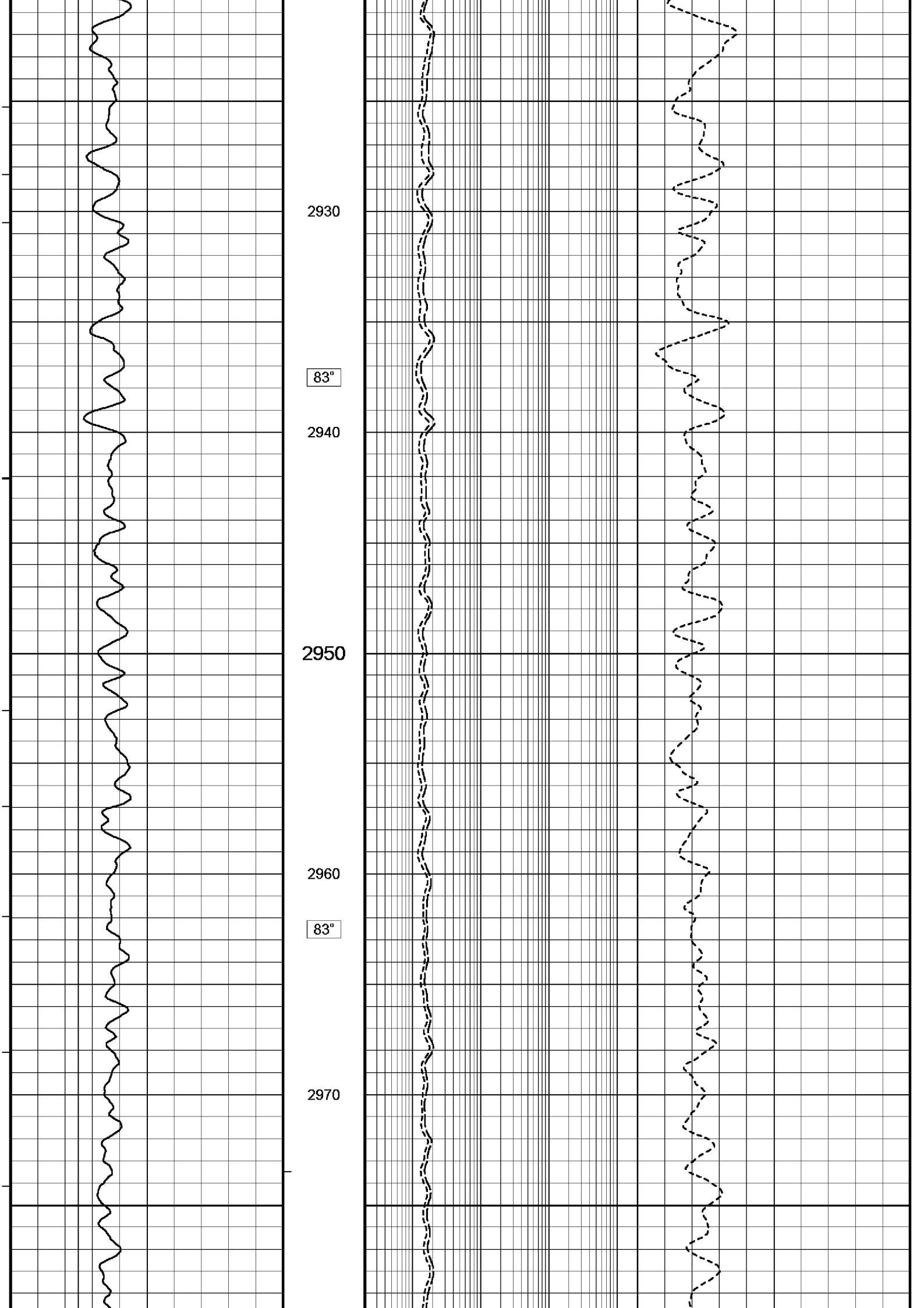


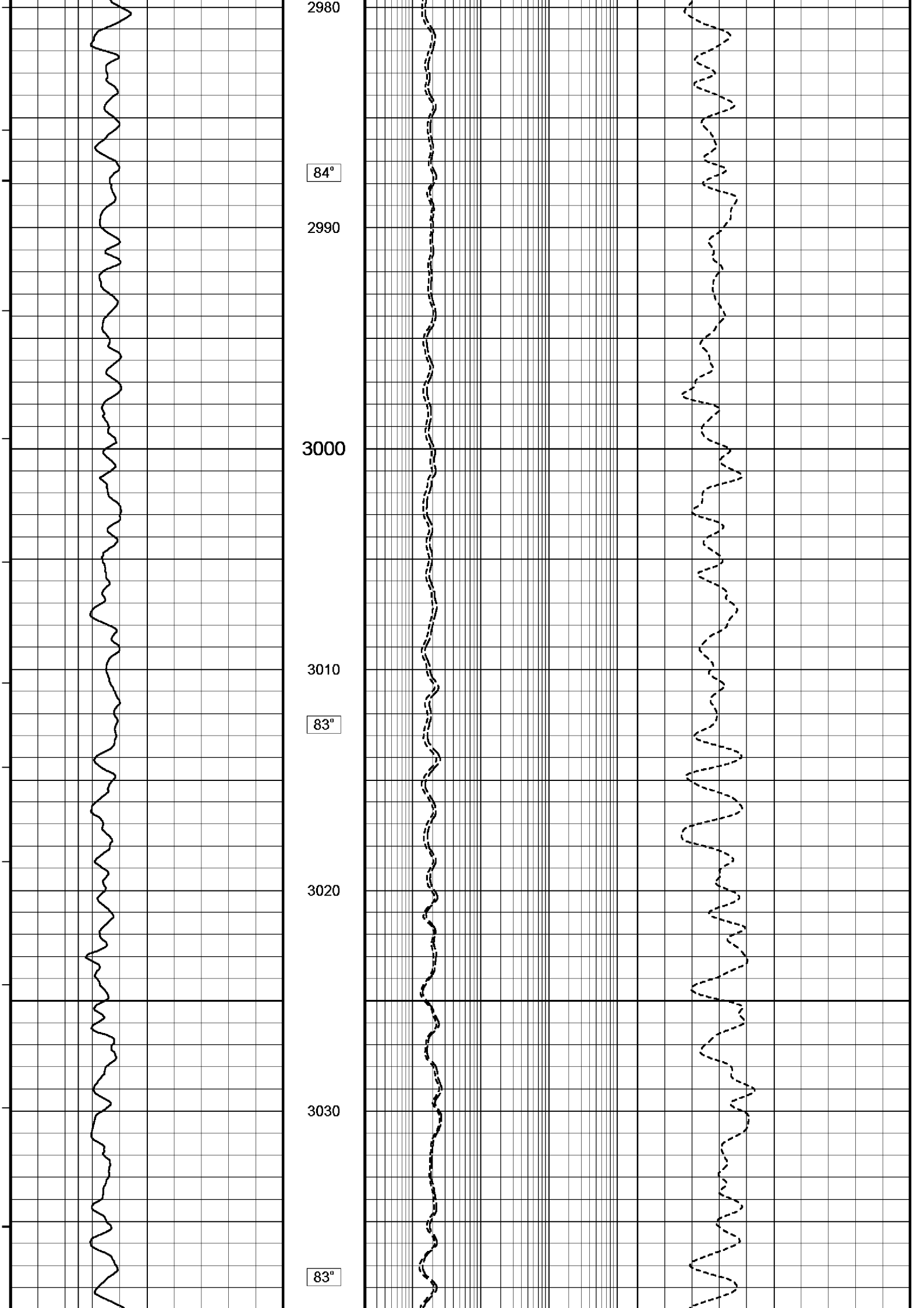


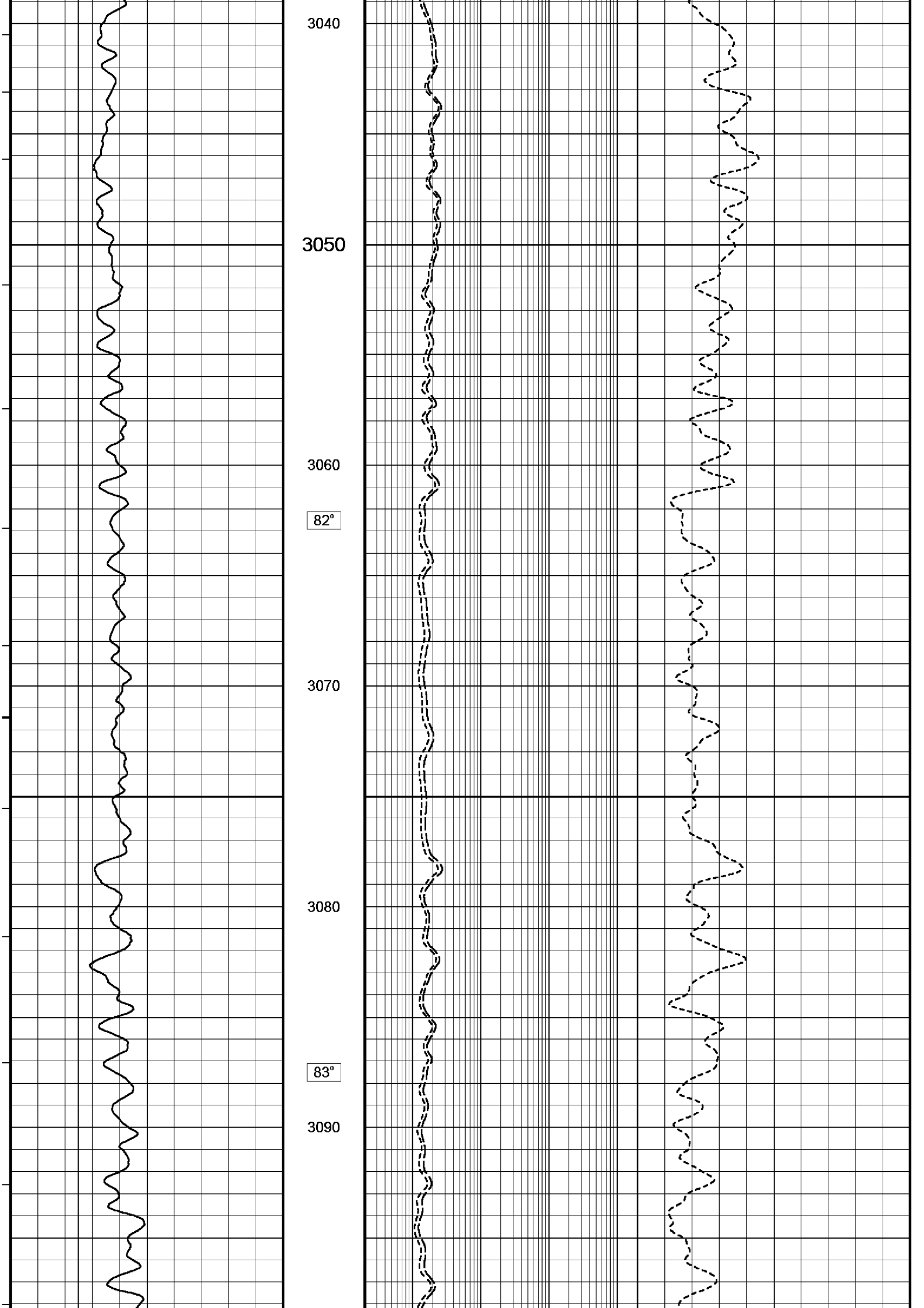


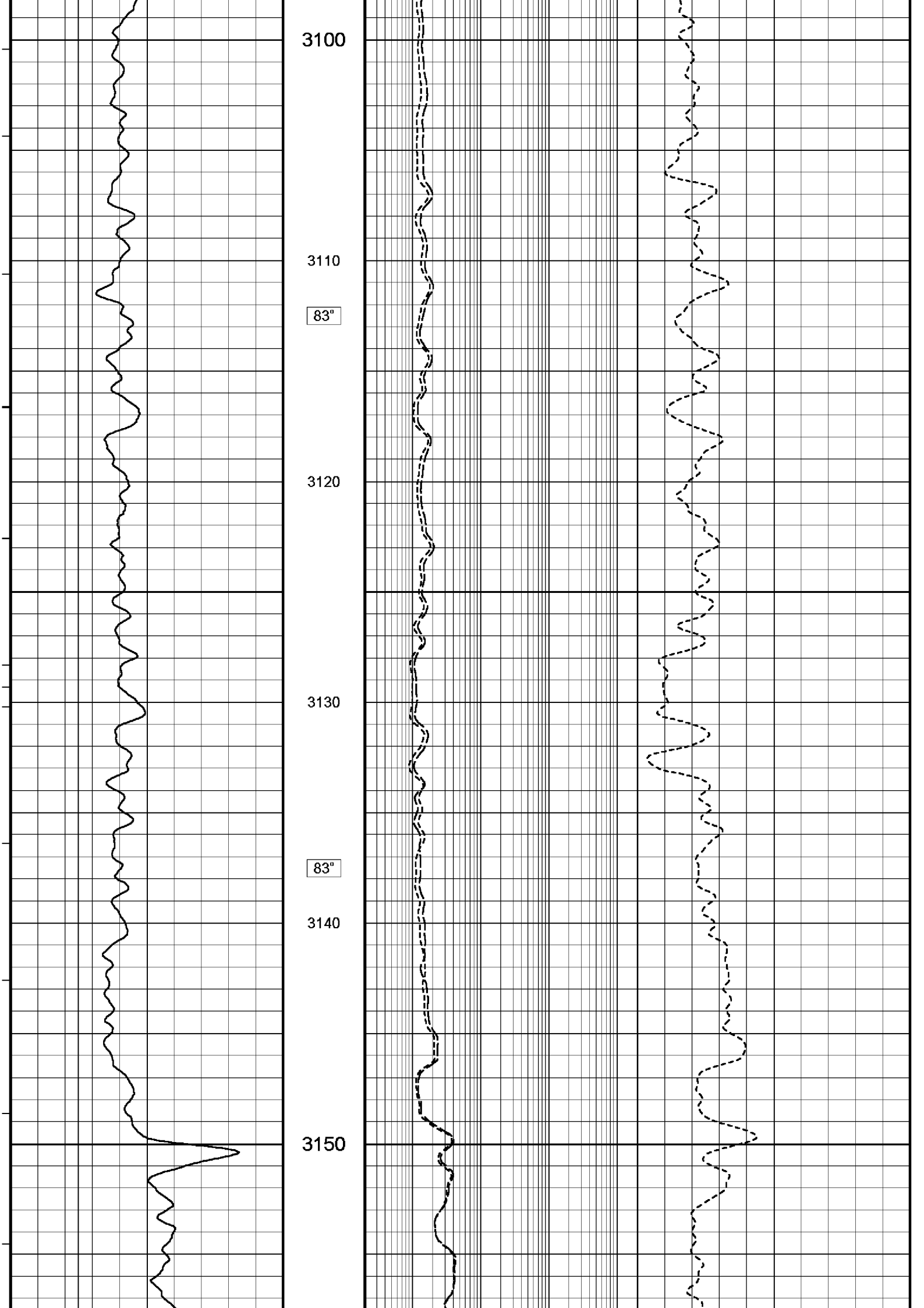


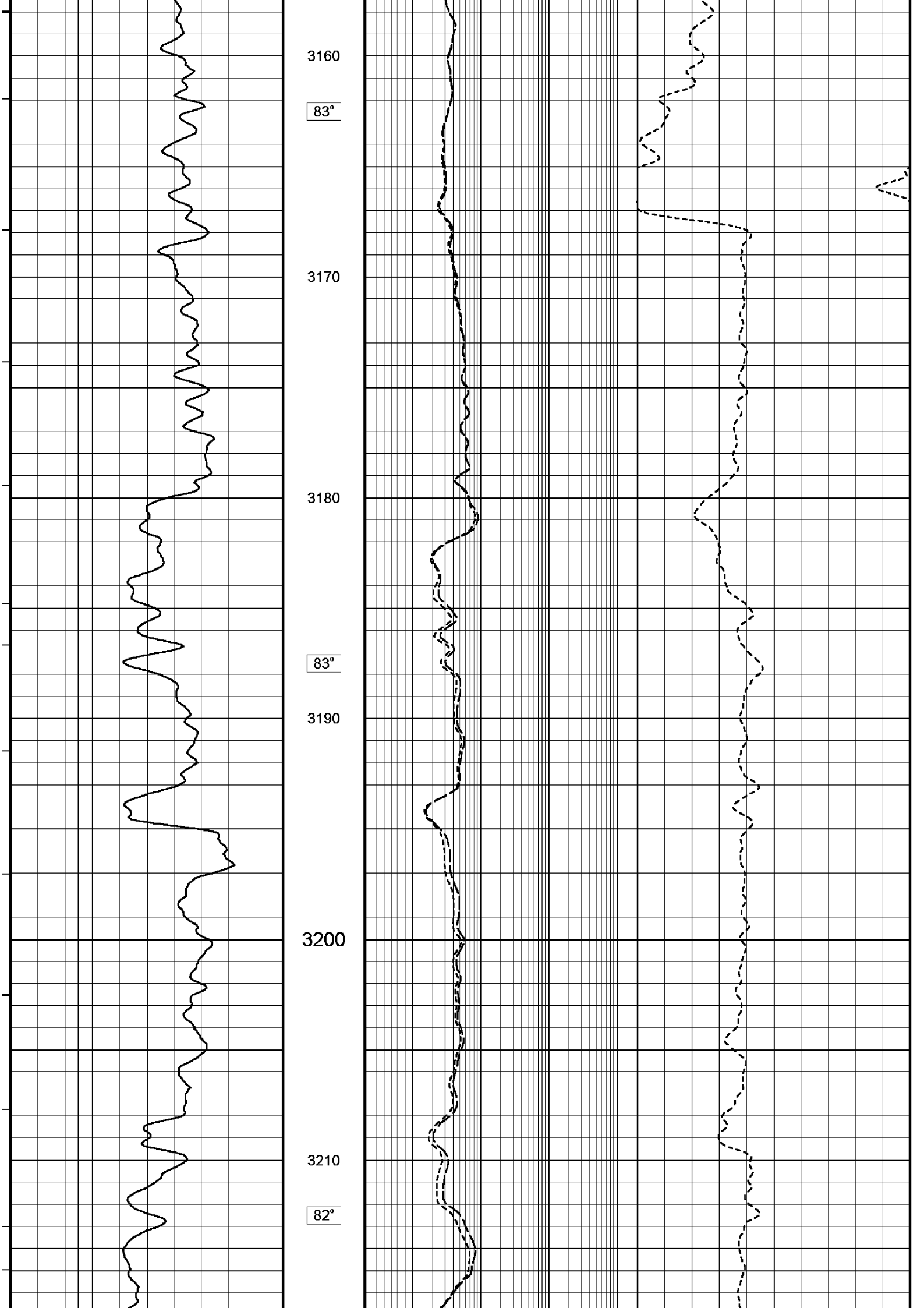


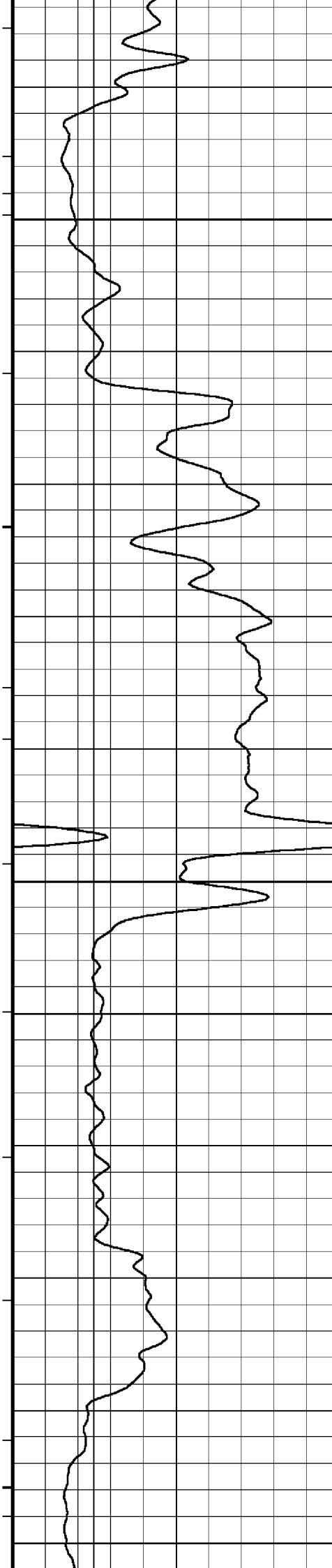












3220

3230

81°

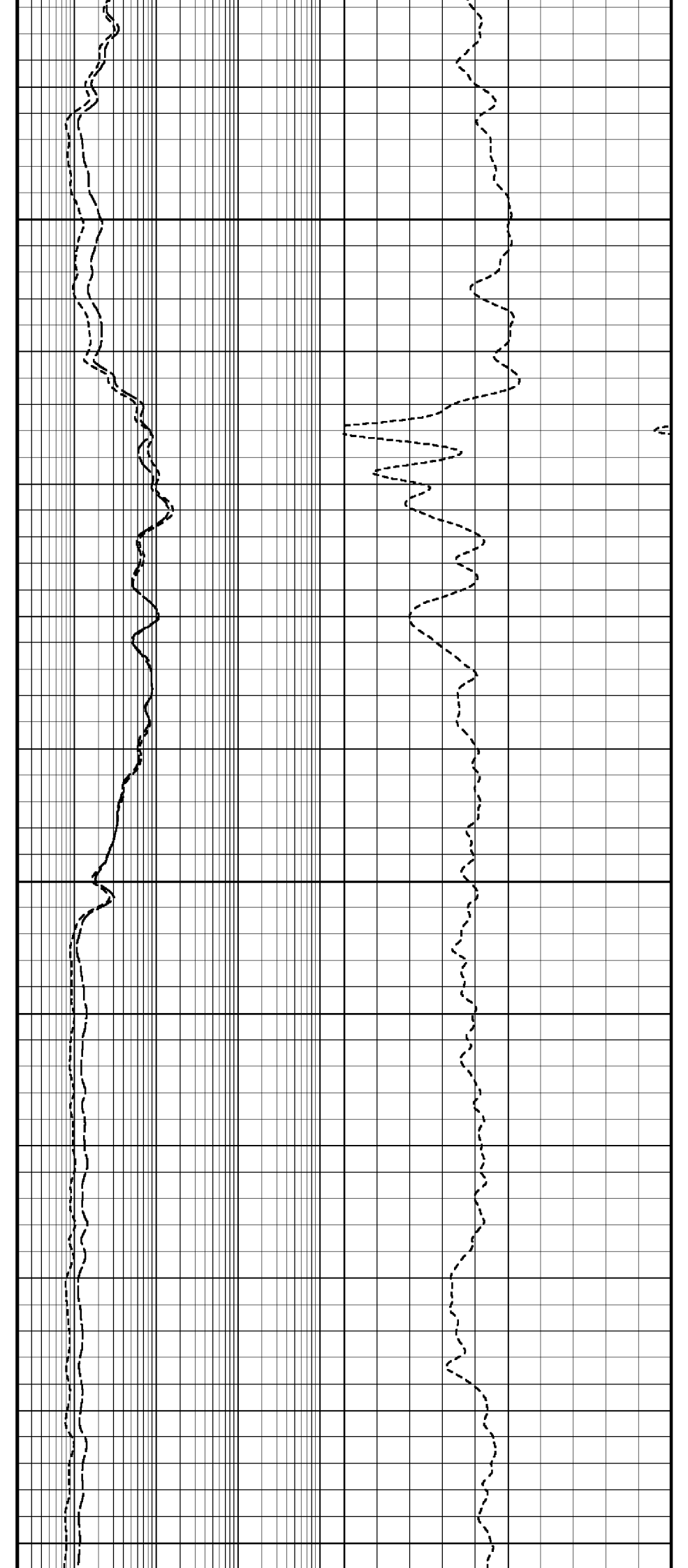
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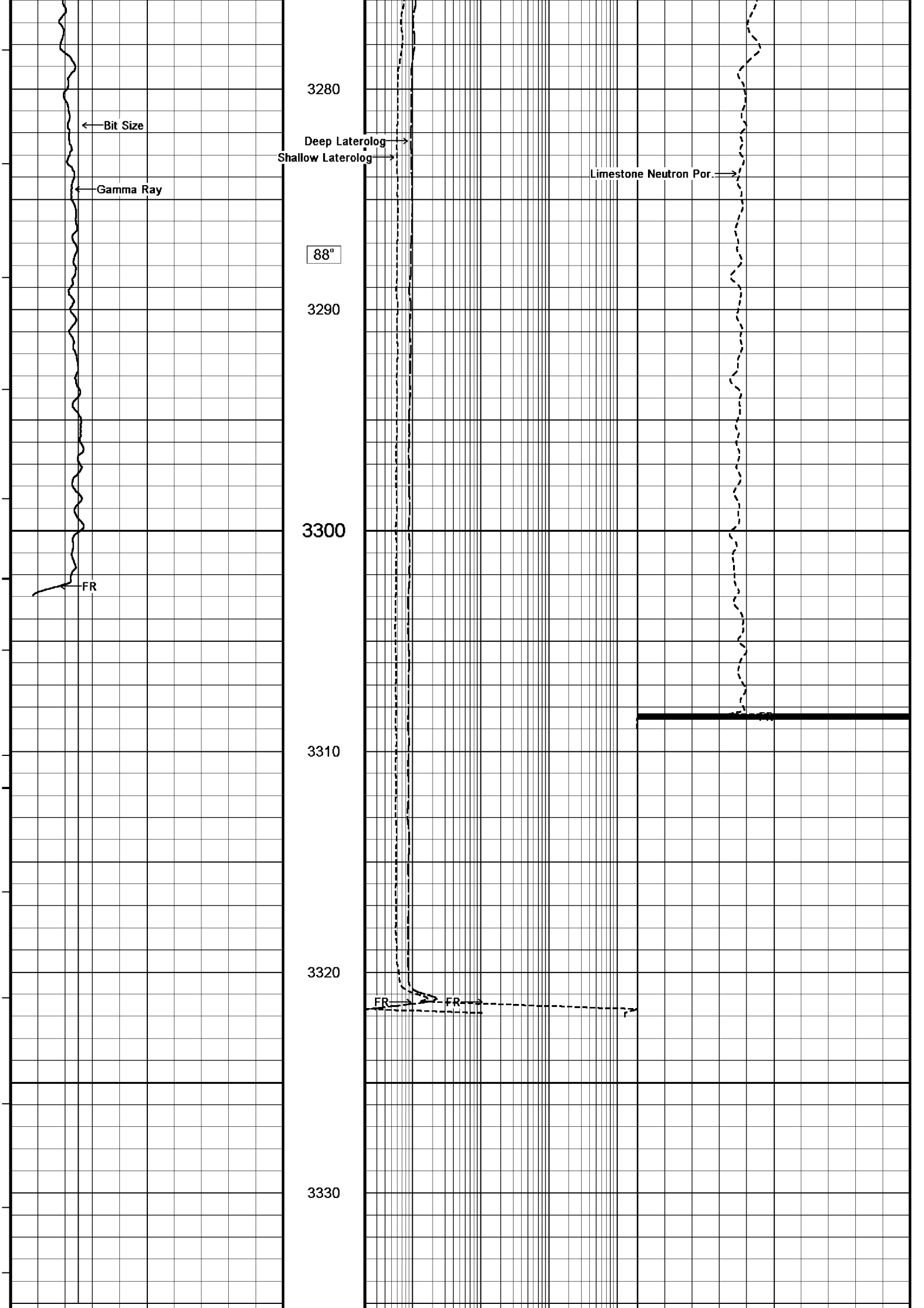
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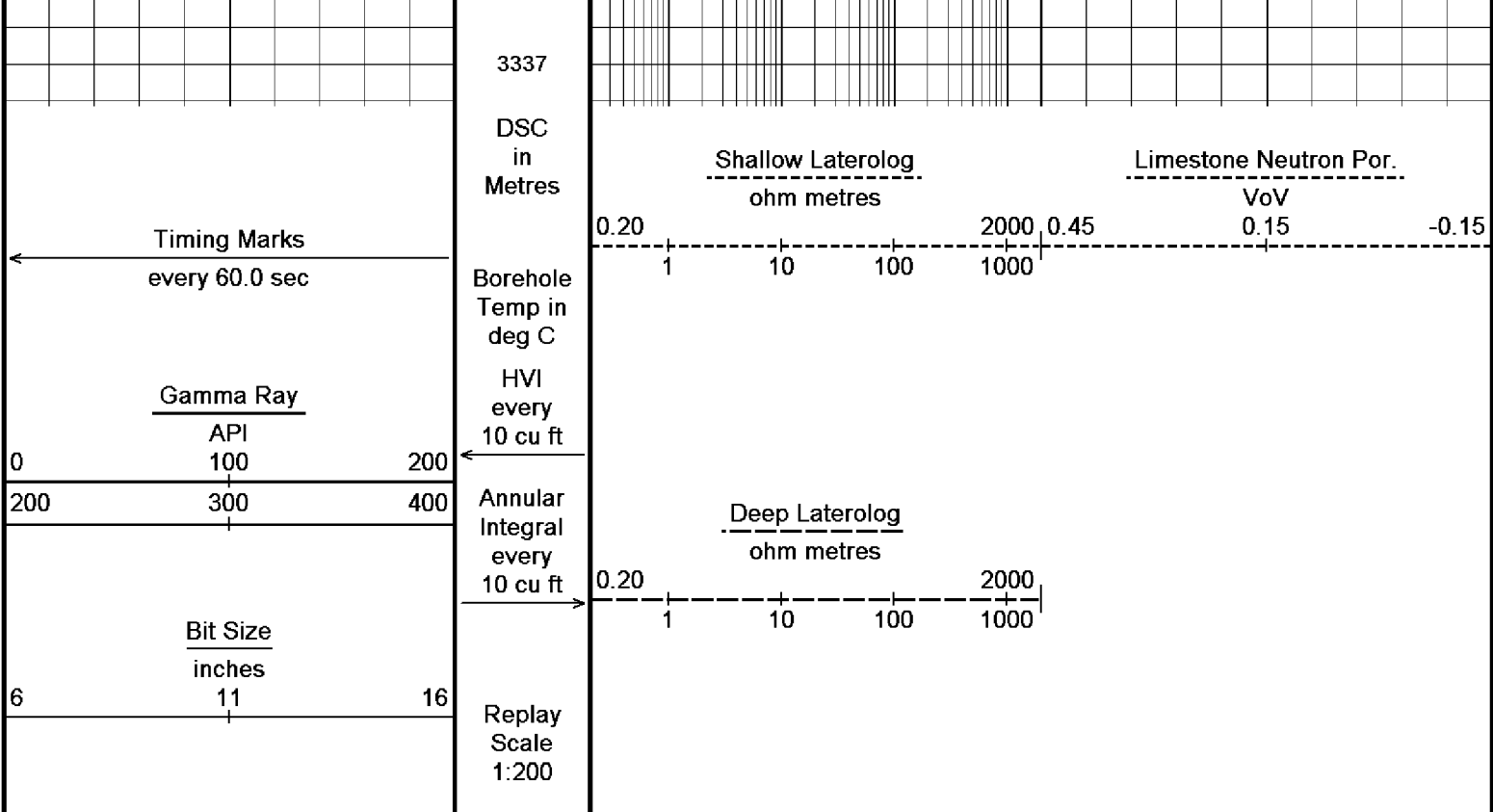
3260

85°

3270







Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 25-OCT-2006 07:59
 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:

↑ 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

Neutron Calibration MDN 119

Base Calibration on 3-OCT-2006 10:16
Field Check on 21-OCT-2006 01:18

Base Calibration					
		Measured		Calibrated (cps)	
	Near	Far	Near	Far	
	3038	93	3714	110	
Ratio	32.780		33.764		
Field Calibrator at Base					
			Calibrated (cps)		
			1625	2401	
Ratio			0.677		
Field Check					
			Calibrated (cps)		
			1704	2463	
Ratio			0.692		

Neutron Constants MDN 119

Neutron Source Id	NSN-E-739		
Neutron Jig Number	NEC-E-E052		
Epithermal Neutron	No		
Caliper Source for Processing	Bit Size		
Stand-off	0.00	inches	
Mud Density	1.00	gm/cc	
Limestone Sigma	7.10	cu	
Sandstone Sigma	4.26	cu	
Dolomite Sigma	4.70	cu	
Formation Pressure Source	None		
Formation Pressure	0.00	kpsi	
Temperature Source	MCG External Temperature		
Temperature	20.00	degrees C	
Mud Salinity	0.00	kppm	
Formation Fluid Salinity Source	None		
Formation Fluid Salinity	0.00	kppm	
Barite Mud Correction	Not Applied		

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

Laterolog Calibration MLE 031

Base Calibration on 1-OCT-2006 14:11
Field Check on 1-OCT-2006,14:21

Base Calibration					
		Measured		Calibrated (ohm-m)	
Channel	Resistor 1	Resistor 2	Resistor 1	Resistor 2	
Shallow	9.8	976.4	13.2	1321.0	
Deep	9.7	976.0	7.5	755.0	
Groningen	9.8	977.3	8.5	854.0	
Channel	Base Check (ohm-m)		Field Check (ohm-m)		
Shallow	48.6		48.6		
Deep	27.8		27.8		
Groningen	251.4		251.4		

Laterolog Constants MLE 031

Squasher Start	40000	ohm-m
Shallow Laterolog K Factor	1.3210	

Shallow Laterolog K Factor	1.5210
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_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



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 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

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

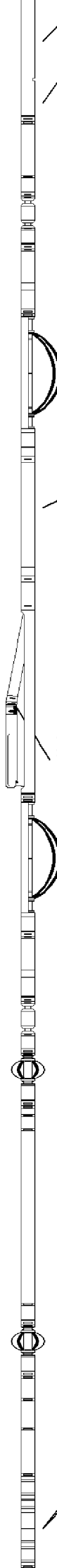
Compact Knuckle Joint
SKJ 46 Length: 0.66 m Weight: 24.3 lb

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



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 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

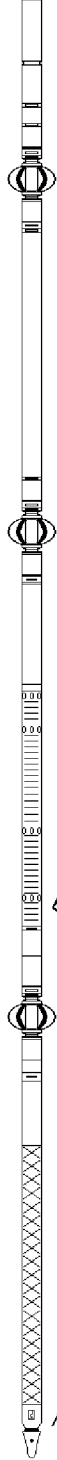
Compact Sonic
MSS 66 Length: 3.82 m Weight: 72.8 lb

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

Pressure Bung + Hole Finder
HFS 4 Length: 0.40 m Weight: 6.6 lb

Total Length: 54.01 m Weight: 1265.5 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

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 W23A
FIELD KINGFISH GDA94
PROVINCE/COUNTY BASS STRAIT, VICTORIA
COUNTRY/STATE AUSTRALIA

Elevation Kelly Bushing		metres	First Reading	3321.65	metres
Elevation Drill Floor	33.43	metres	Depth Driller	3338.00	metres
Elevation Ground Level	-76.13	metres	Depth Logger	3338.00	metres



DUAL LATEROLOG - GR
DENSITY - NEUTRON
1:200 MD

