



PRECISION

COMPENSATED SONIC

Compact

1:200 MD

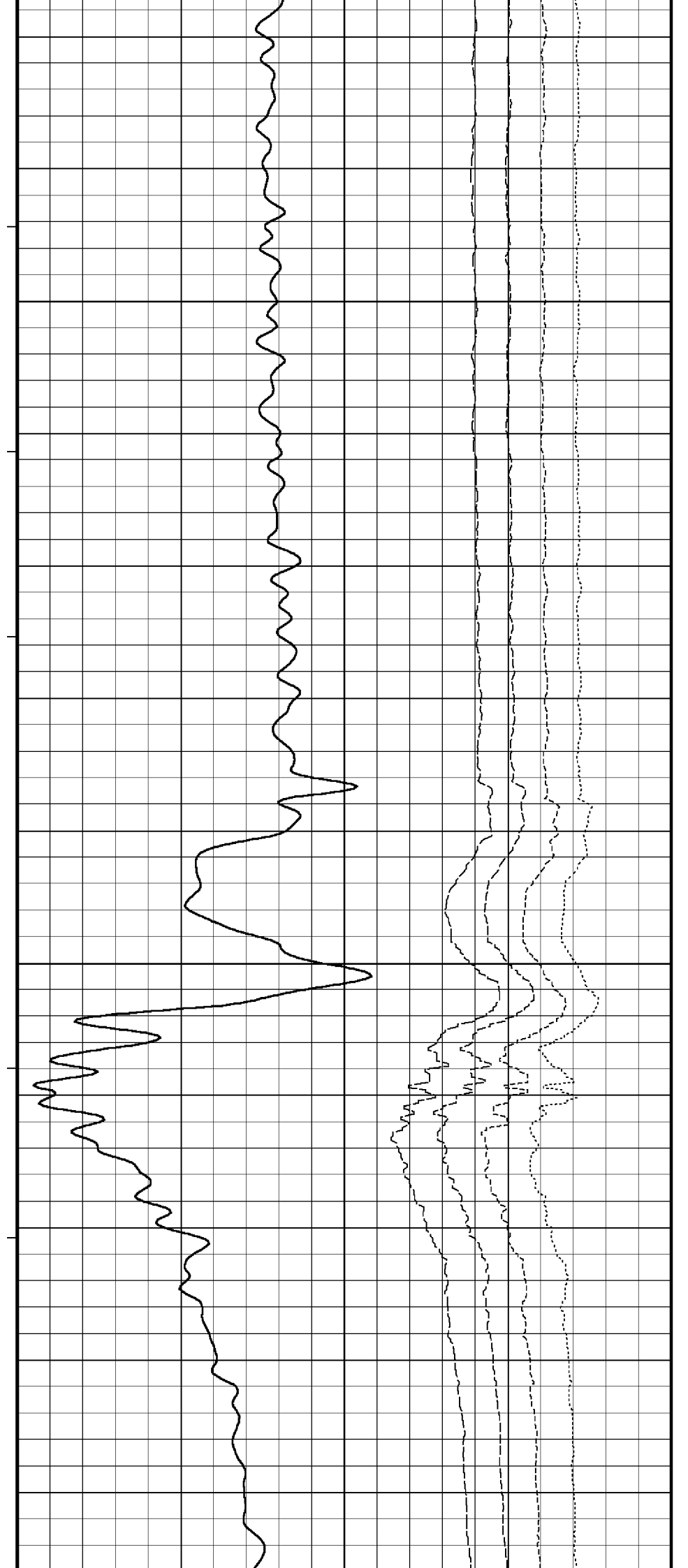
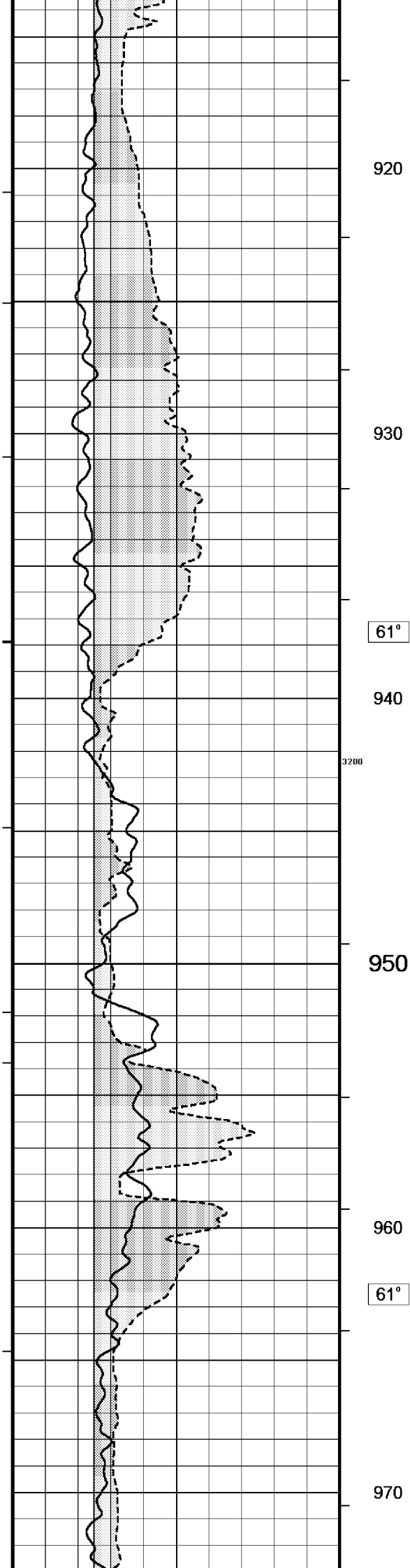
| | | | | |
|-------------------------------|---------------------------------|-----|-----|---------------------|
| COMPANY | ESSO AUSTRALIA PTY.LTD | | | |
| WELL | WKF W27A | | | |
| FIELD | KINGFISH GDA94 | | | |
| PROVINCE/COUNTRY | BASS STRAIT, VICTORIA | | | |
| COUNTRY/STATE | AUSTRALIA | | | |
| LOCATION | S 38 35 34.851, E 148 6 20.022 | | | |
| | N 5727806.021 m, E 596279.875 m | | | |
| | FIELD PRINT | | | |
| LSD | SEC | TWP | RGE | Other Services |
| | | | | COMPENSATED NEUTRON |
| API Number | PHOTO DENSITY | | | |
| Permit Number | DUAL LATEROLOG | | | |
| Permanent Datum MSL | , Elevation 0.0 metres | | | |
| Log Measured From DF @ 33.43m | above Permanent Datum | | | |
| Drilling Measured From DF | | | | |
| Date | 26-JUL-2006 | | | |
| Run Number | ONE | | | |
| Depth Driller | 3093.00 metres | | | |
| Depth Logger | 3093.00 metres | | | |
| First Reading | 3085.00 metres | | | |
| Last Reading | 895.00 metres | | | |
| Casing Driller | 895.00 metres | | | |
| Casing Logger | 895.00 metres | | | |
| Bit Size | 8.50 inches | | | |
| Hole Fluid Type | KCL/PHPA | | | |
| Density / Viscosity | 1.16 g/cc 26.00 CP | | | |
| PH / Fluid Loss | 9.50 2.80 ml/30Min | | | |
| Sample Source | FLOWLINE | | | |
| Rm @ Measured Temp | 0.105 @ 25.0 ohm-m | | | |
| Rmf @ Measured Temp | 0.08 @ 25.0 ohm-m | | | |
| Rmc @ Measured Temp | 0.081 @ 25.0 ohm-m | | | |
| Source Rmf / Rmc | MEAS MEAS | | | |
| Rm @ BHT | 0.046 @ 87.1 ohm-m | | | |
| Time Since Circulation | 28 HOURS | | | |
| Max Recorded Temp | 93.80 deg C | | | |
| Equipment Name | CML | | | |
| Equipment / Base | 1 SALE | | | |
| Recorded By | R L TENCH, B J R MOSS | | | |
| Witnessed By | T LOBO | | | |
| LAST CIRC. | 12:25 24/07 | | | |
| | Last Line | | | |

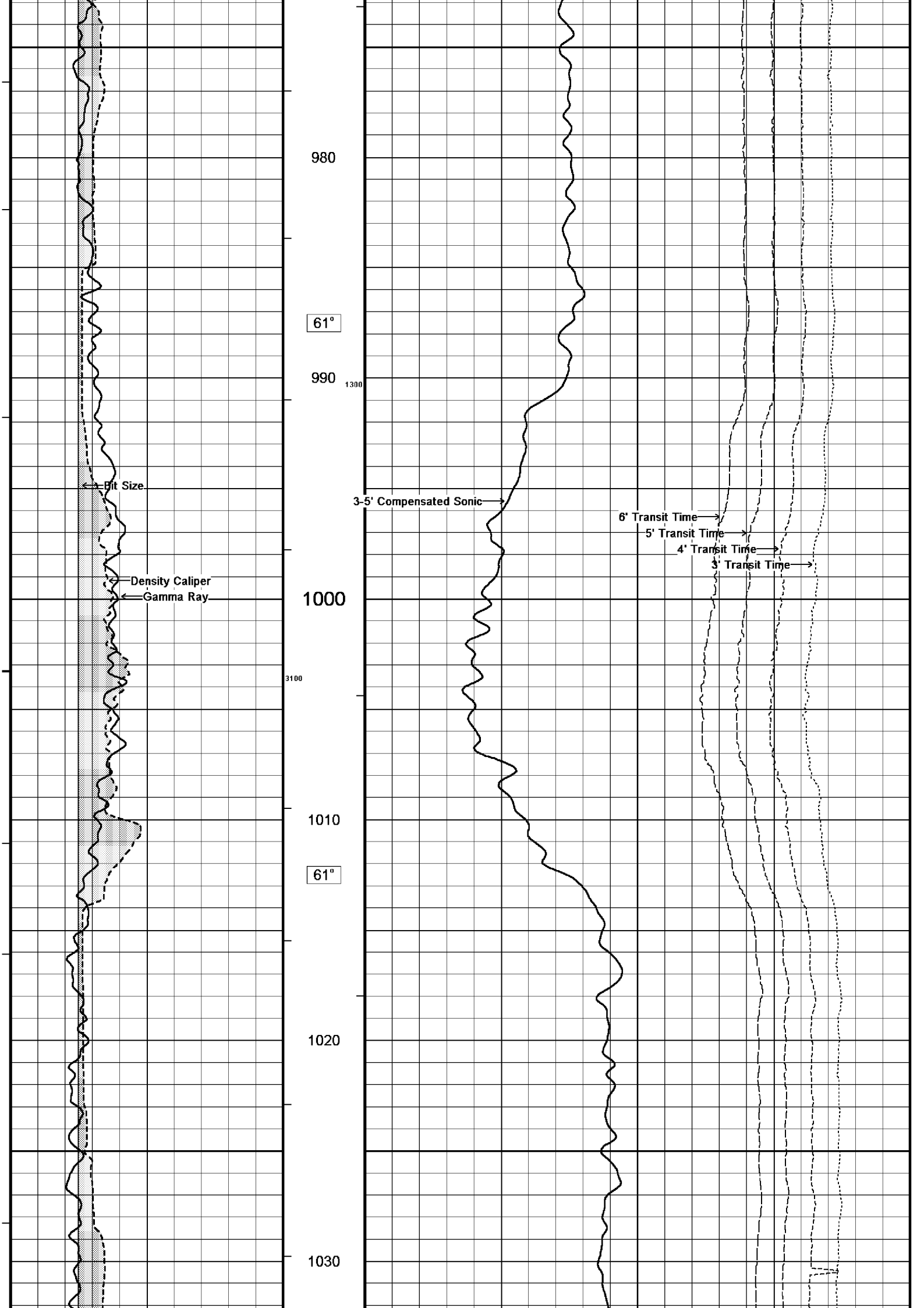
| BOREHOLE RECORD | | | | |
|--------------------|----------------|----------------------|----------------------|---------------------|
| Bit Size inches | | Depth From metres | | Depth To metres |
| 8.500 | | 895.00 | | 3095.00 |
| CASING RECORD | | | | |
| Type | Size inches | Depth From metres | Shoe Depth metres | Weight pounds/ft |
| K-55 | 10.750 | 0.00 | 895.00 | 40.50 |

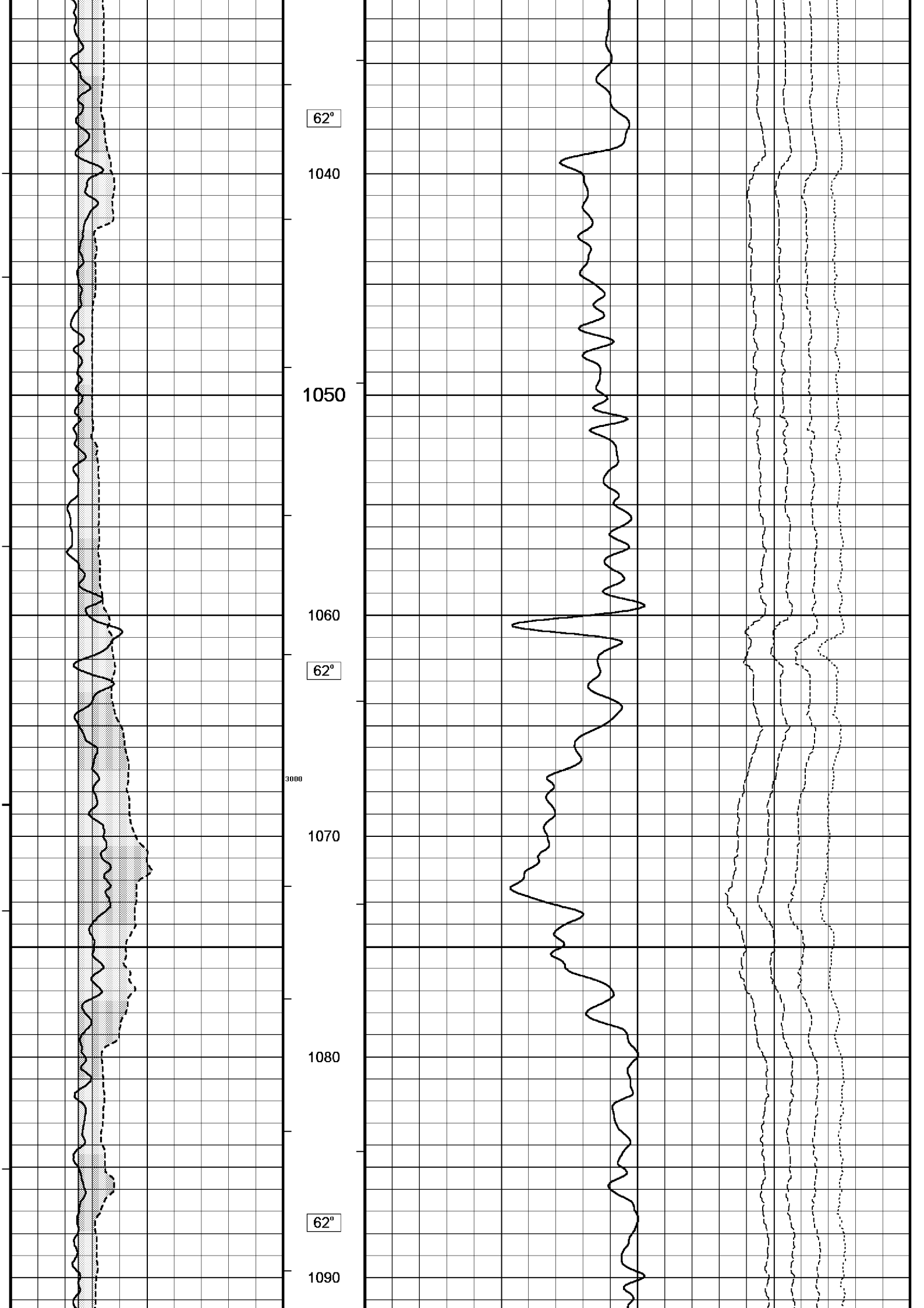
| REMARKS |
|---|
| RIG: NABORS 453 |
| 5" SHUTTLE/MEMORY COMPACT OPERATION. CREW: R TENCH , B MOSS , J.BLESSING, M KOLCZE. |
| FIELD FINAL LOGS TO BE CORRELATED TO ANADRILL GAMMA LOG. |
| MAX. TEMPERATURE: 93.8 DEG C AT 3041m MD MAX. INCLINATION: 46.10 DEG AT 3095 m MD MAX. DOGLEG SEVERITY: 5.03 DEG/30m AT 993.08 m MD DEPLOYMENT ANGLE: 46.10 DEG |
| HVOL: 3285 FT^3 AVOL: 1382 FT^3 |
| LOGGING SPEED 6M/MIN FROM TD TO 2791.52 M MD LOGGING SPEED 12 M/MIN FROM 2791.52 TO 1297.42 M MD LOGGING SPEED 6 M/MIN FROM 1297.42 TO 1125.7 M MD LOGGING SPEED 12 M/MIN FROM 1125.7 TO 866.87 M MD |
| BRIDGED OFF AT 2364M MD, REQUIRED 3BBLs FLOW TO PASS BRIDGE. |

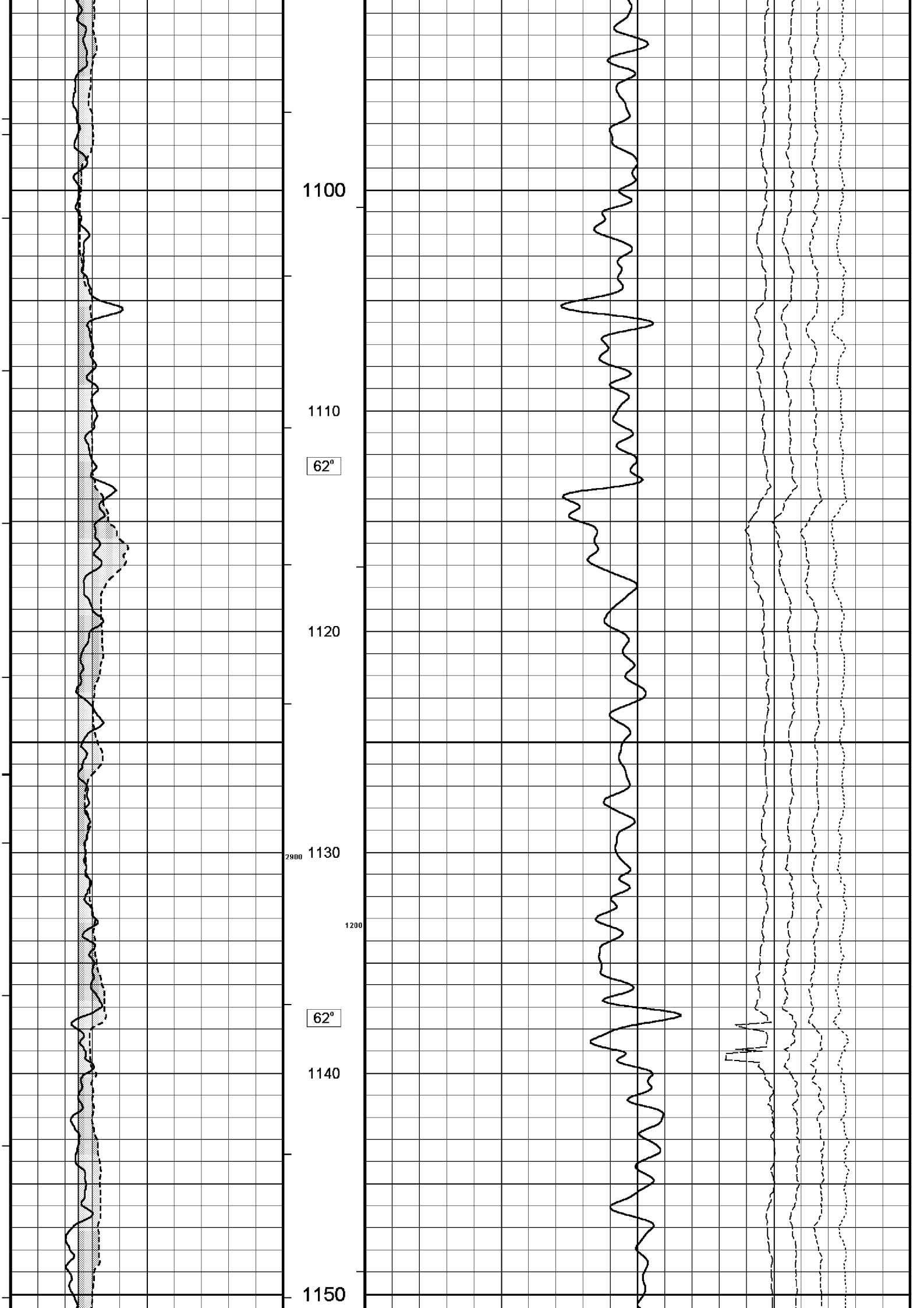
| | |
|---|-------------------------------|
| MAIN LOG 1:200 | |
| Depth Based Data - Maximum Sampling Increment 10.0cm | Plotted on 26-JUL-2006 13:57 |
| Filename: C:\logs\WKF_W27A\FIELD_DATA\WKF_W27A_MAIN_LOG_FULL.dta | Recorded on 26-JUL-2006 03:12 |
| System Configuration Dates: Logged : Plotted 17-JUN-2004: | |

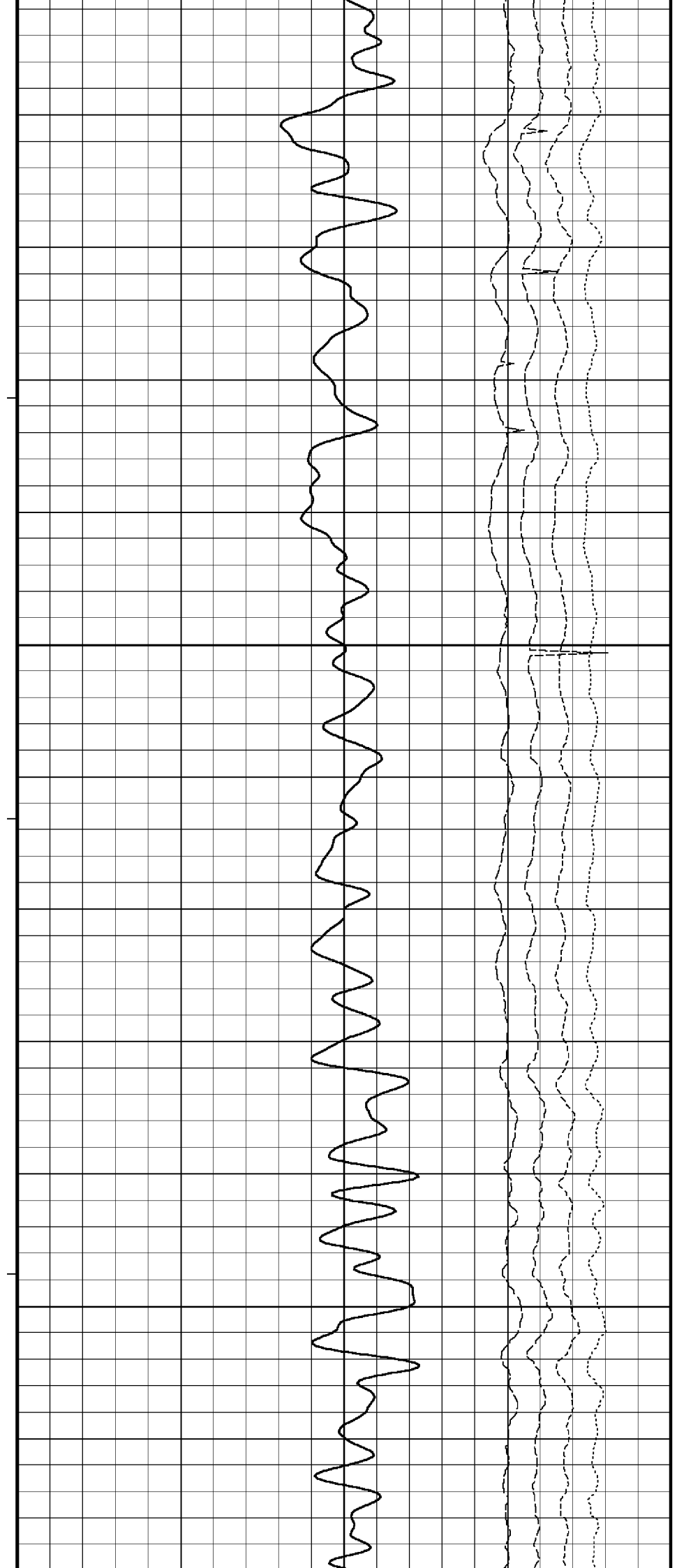
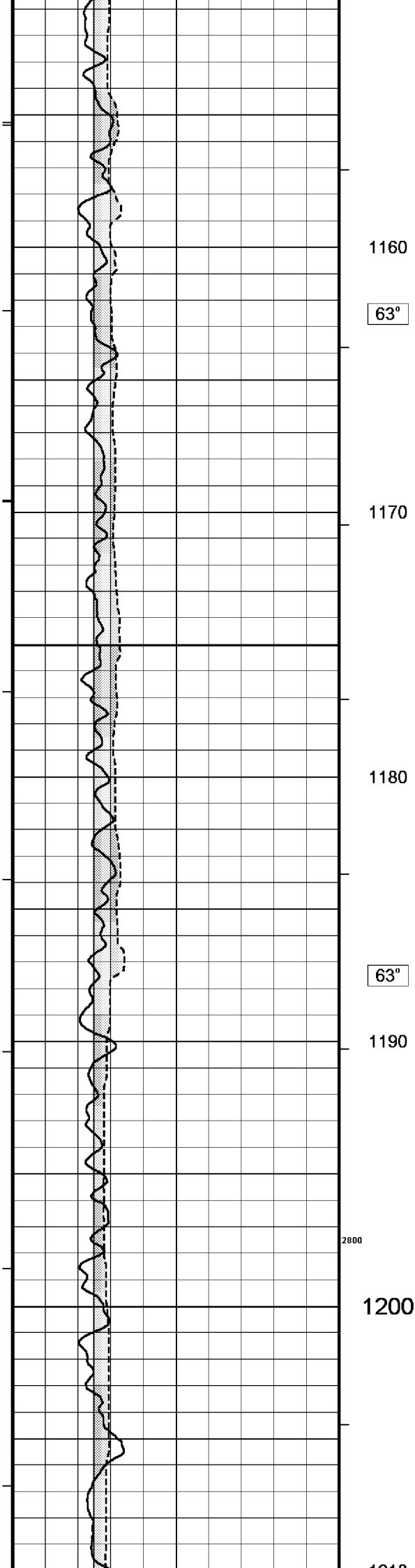


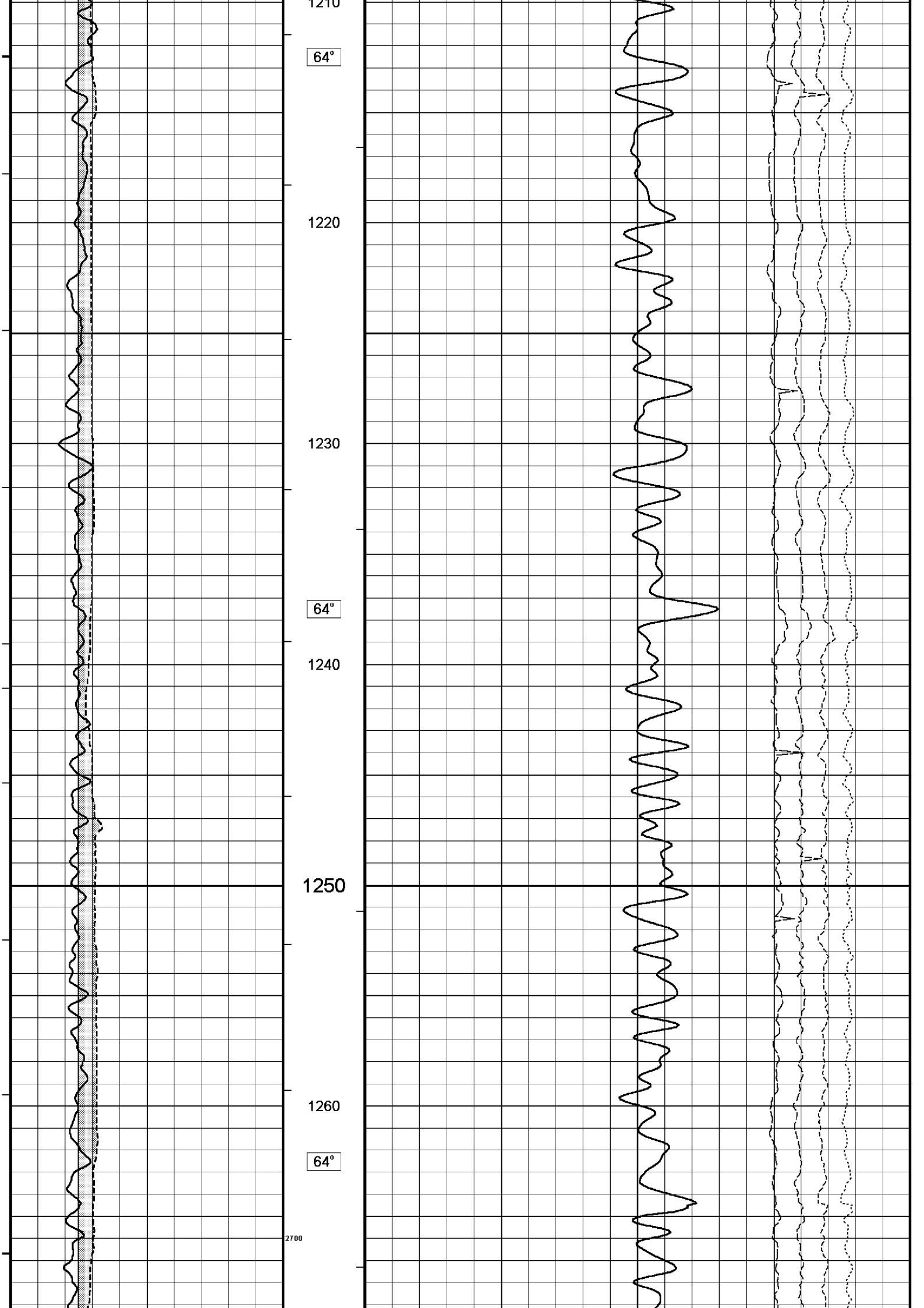


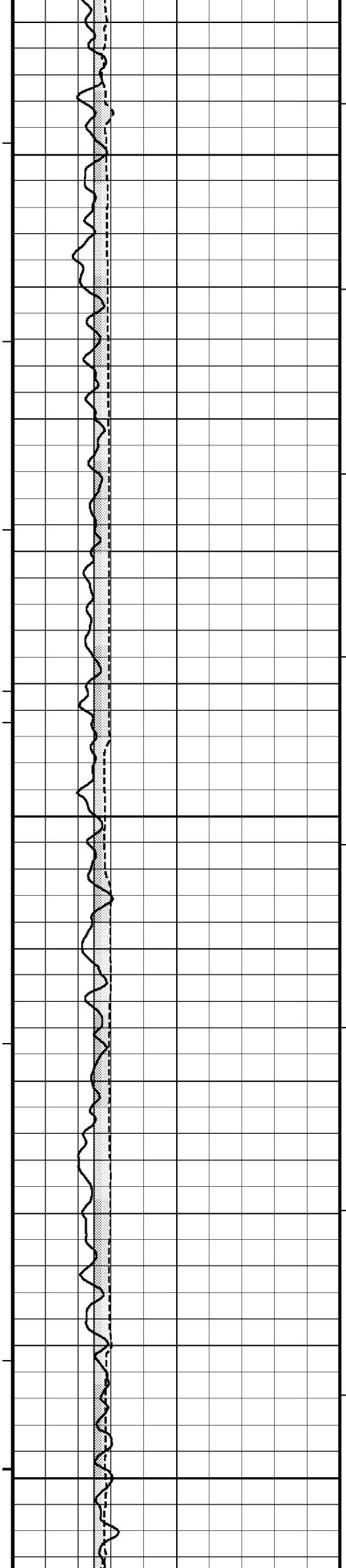












1270

1280

65°

1290

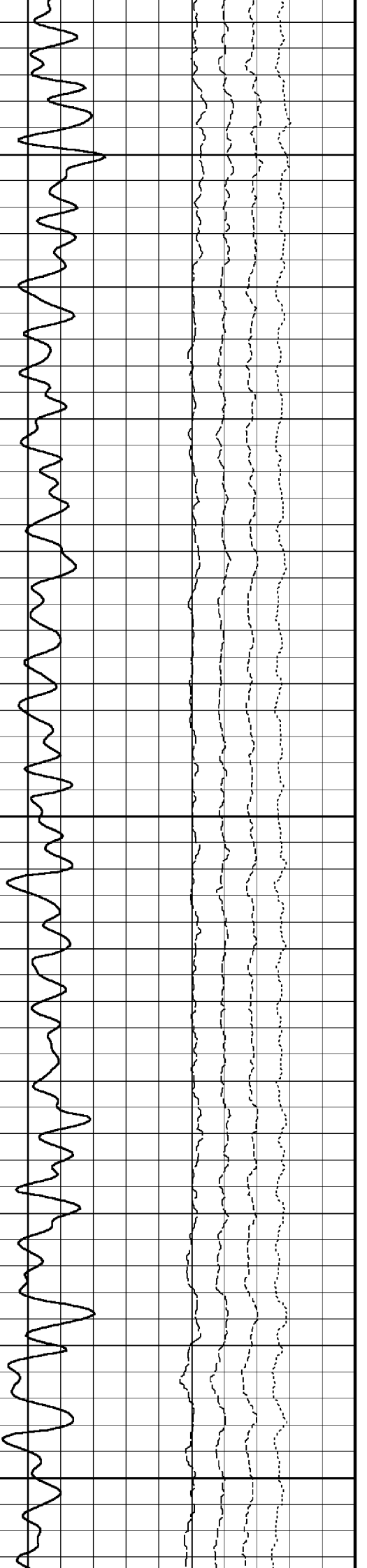
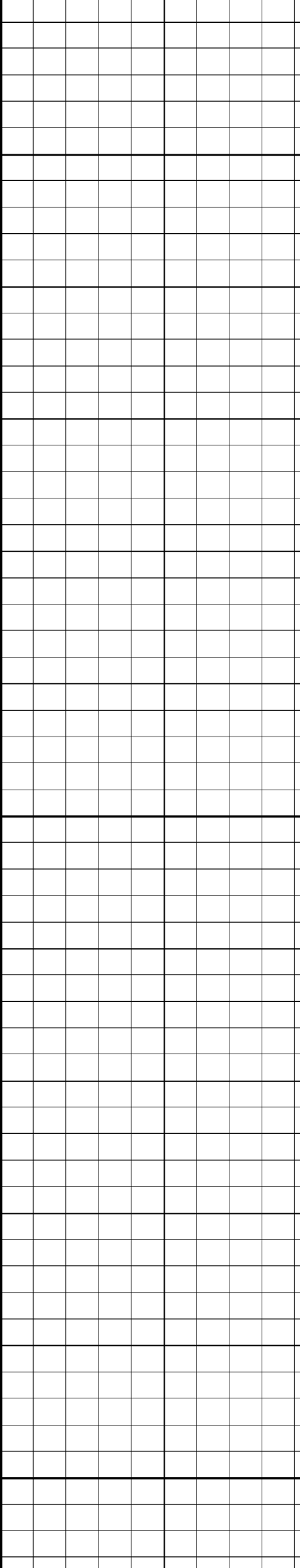
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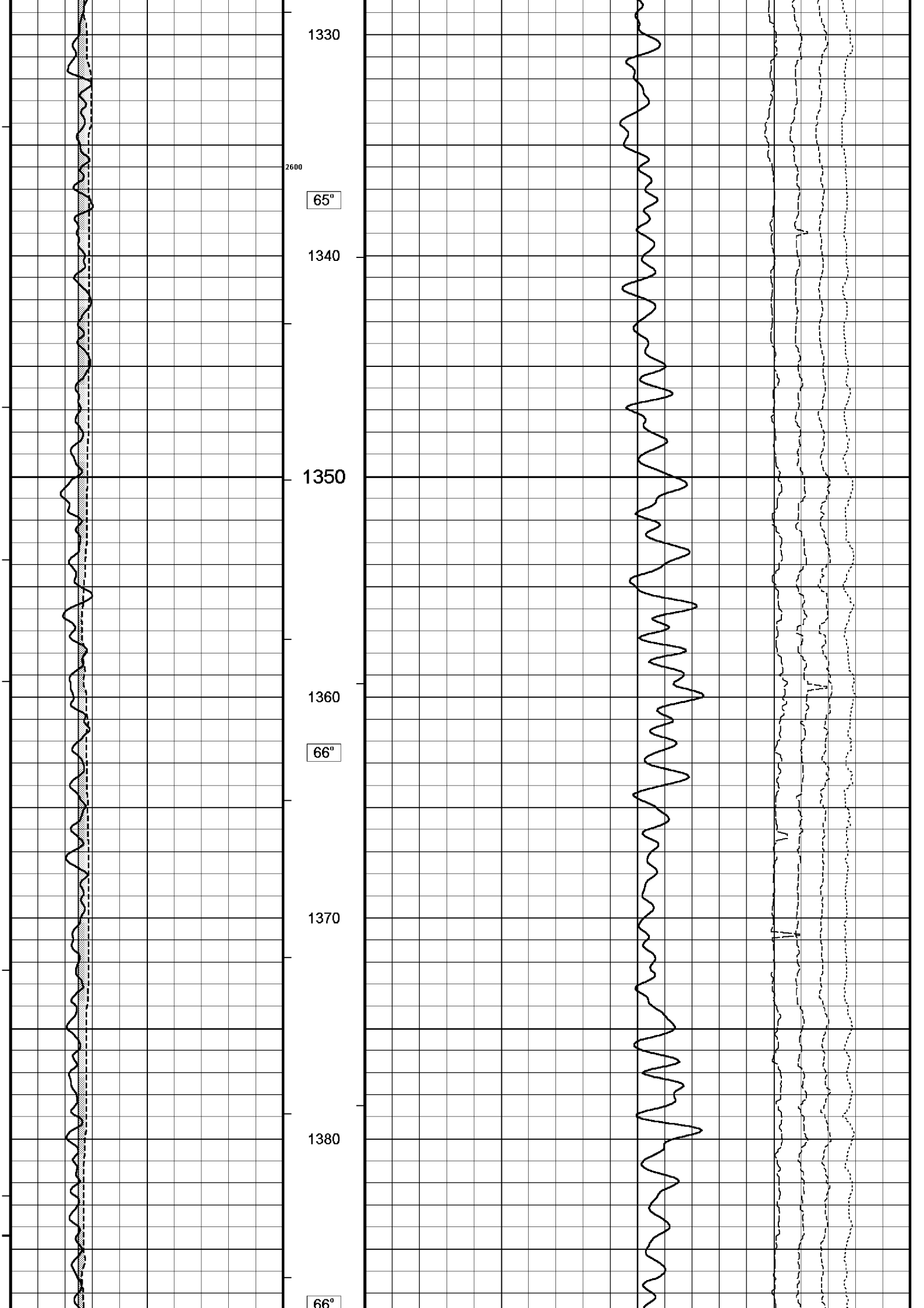
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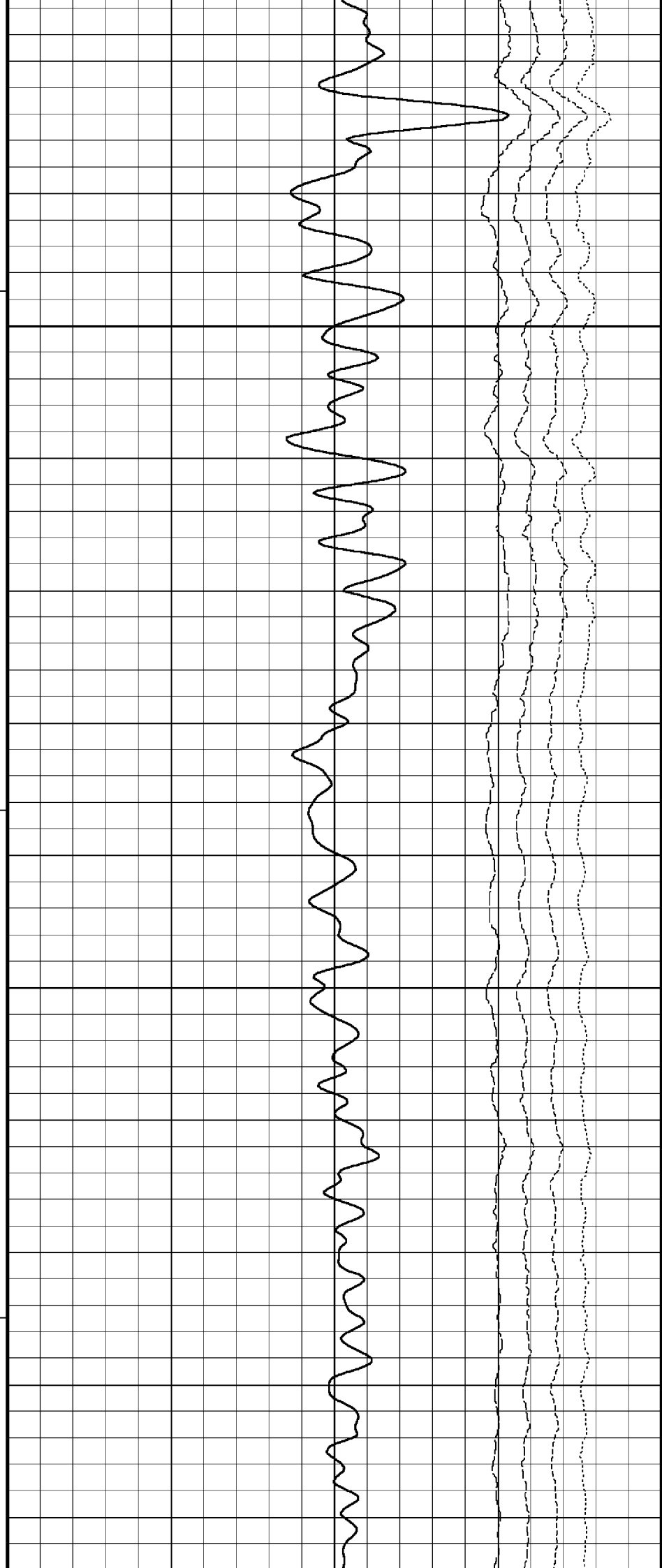
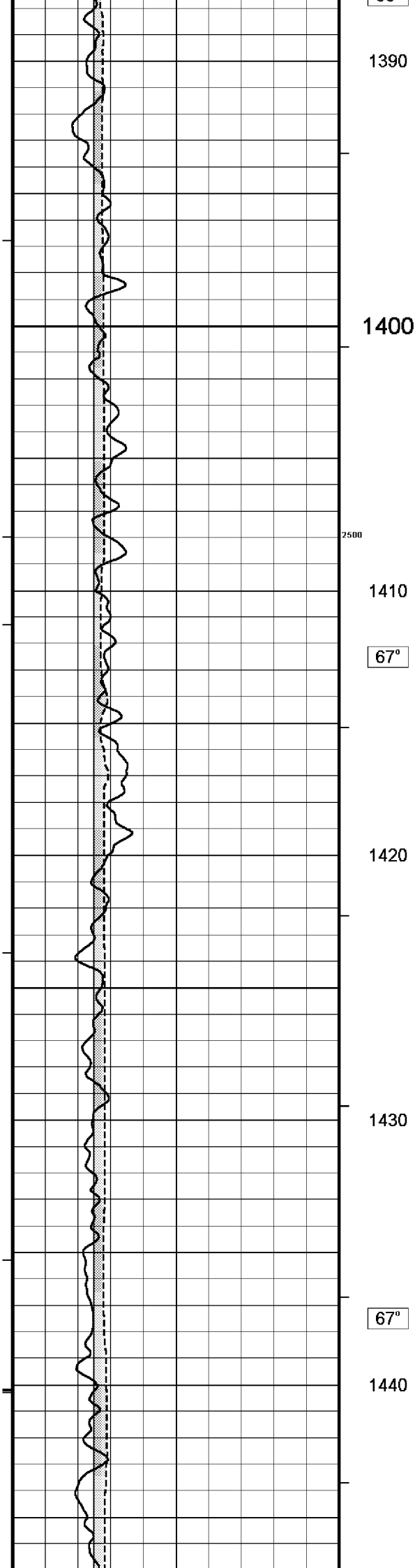
65°

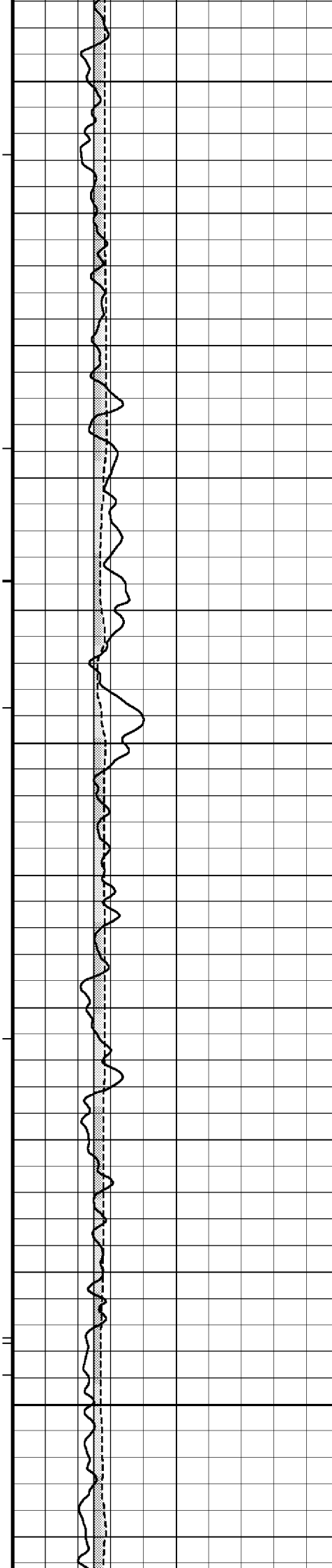
1320

1100









1450

1460

67°

1470

2400

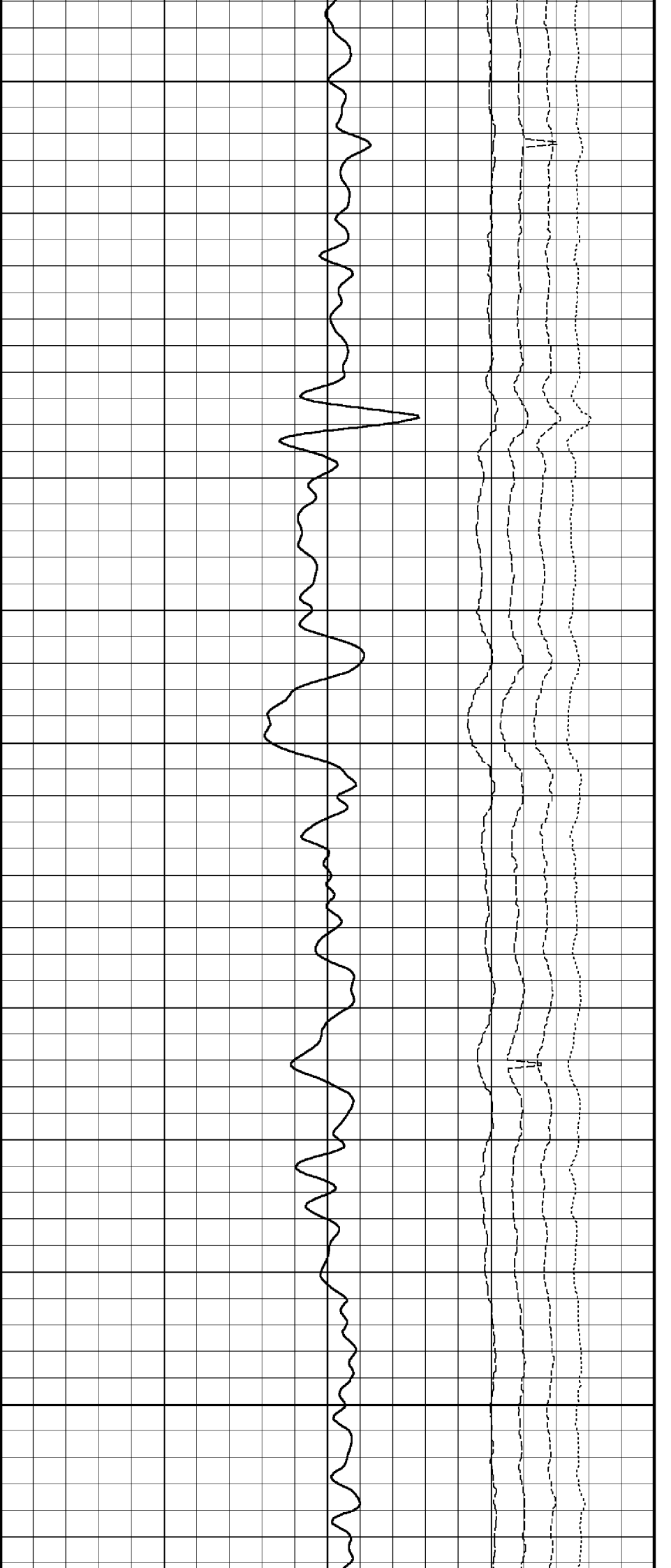
1480

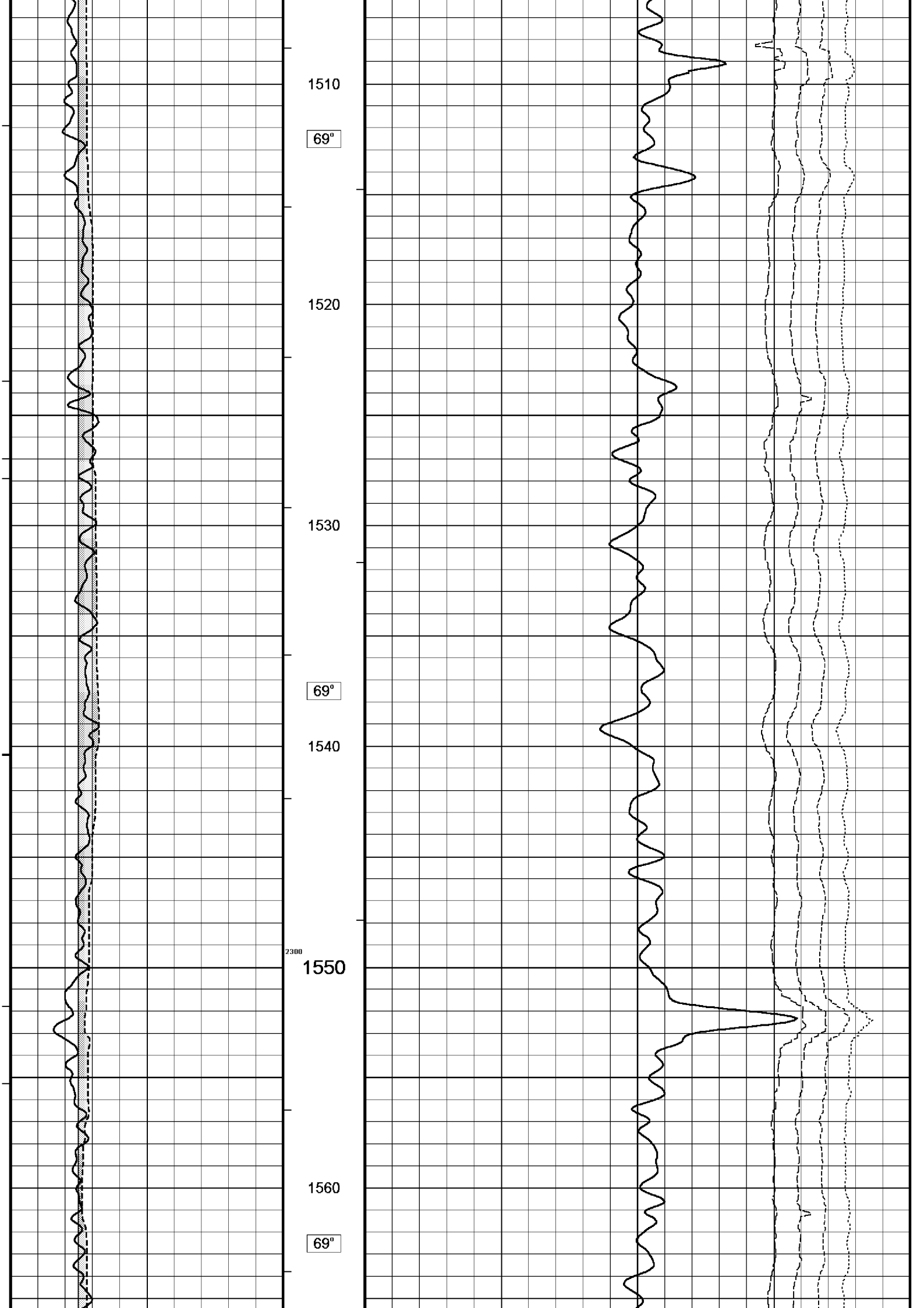
68°

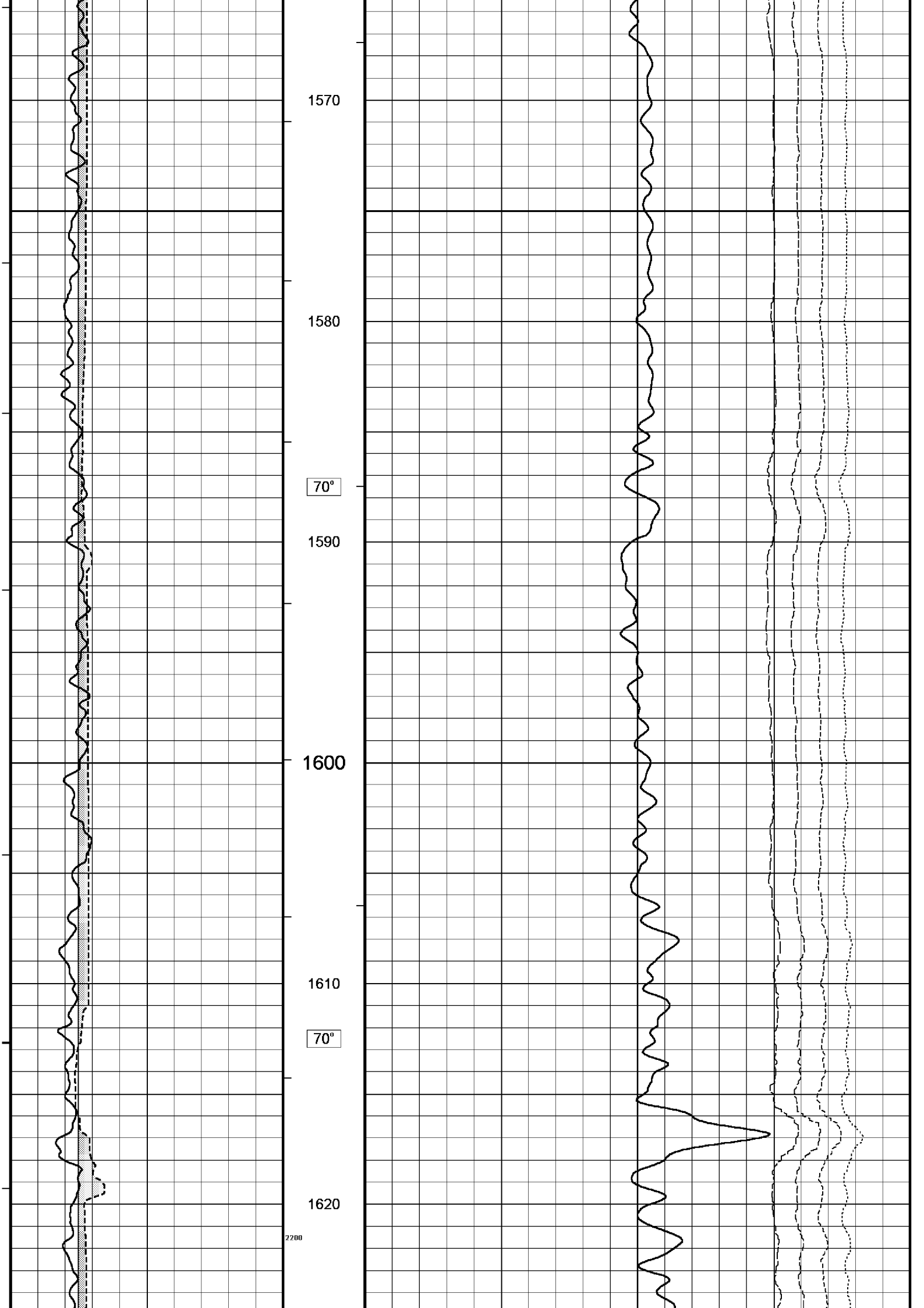
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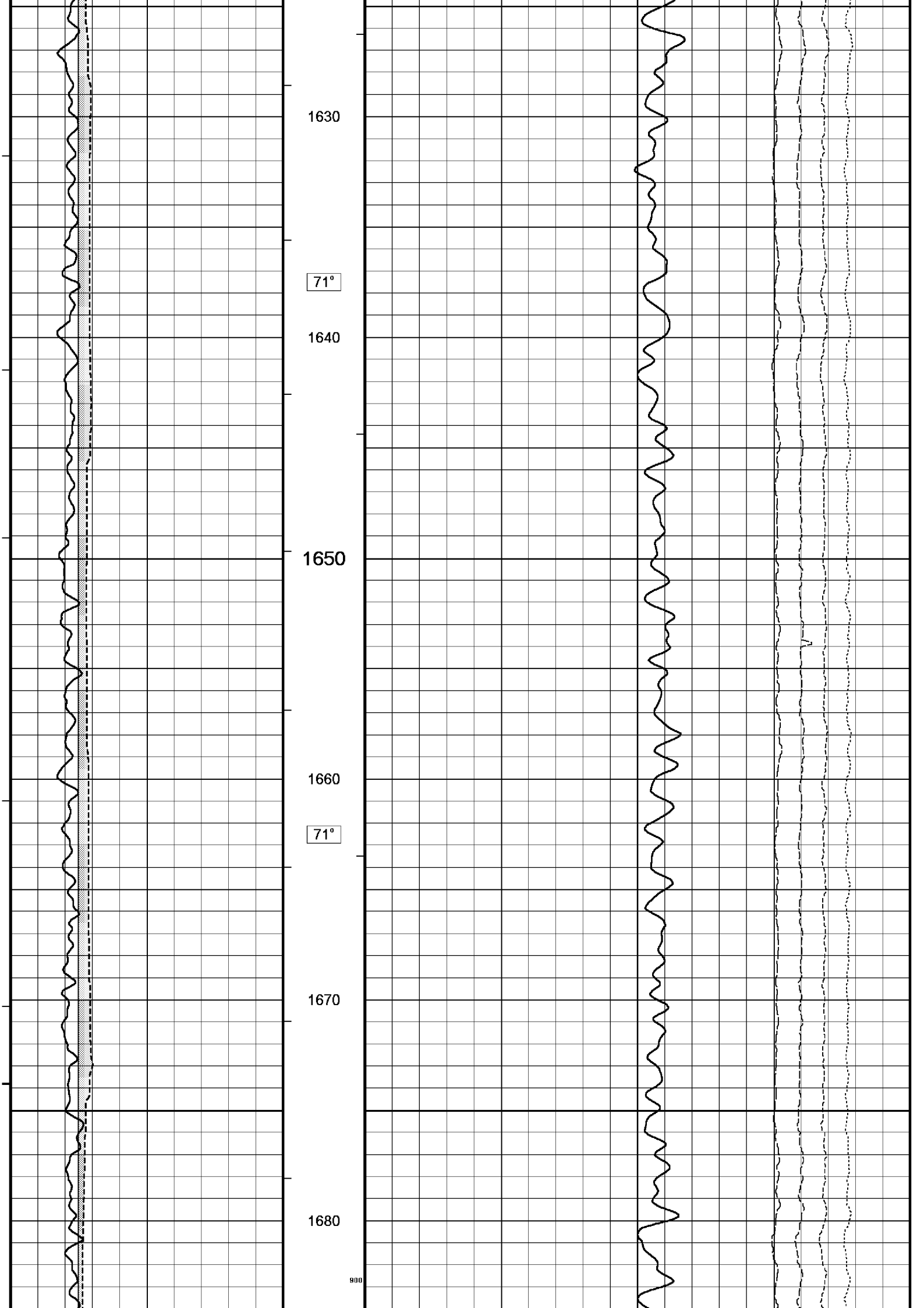
1000

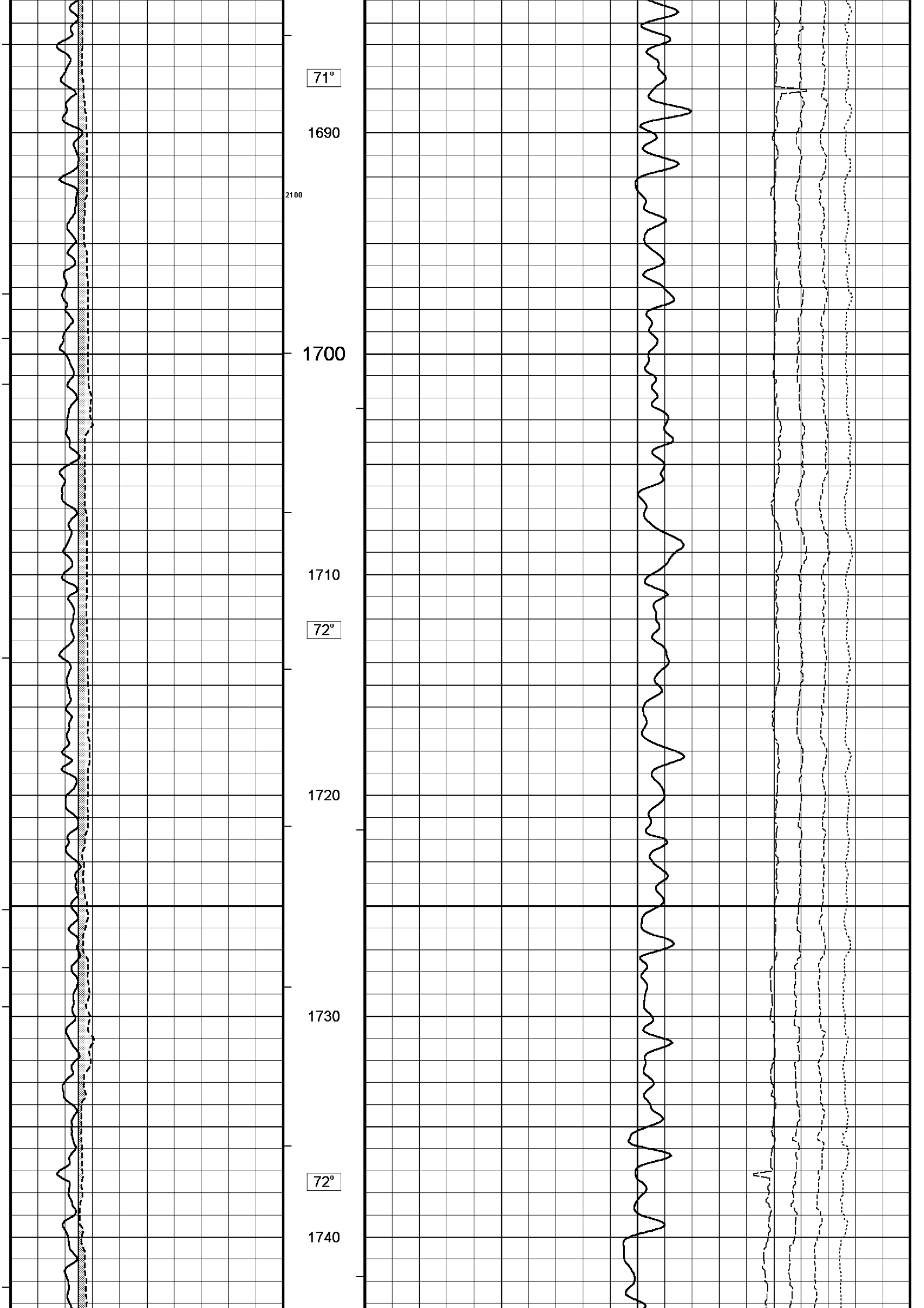
1500

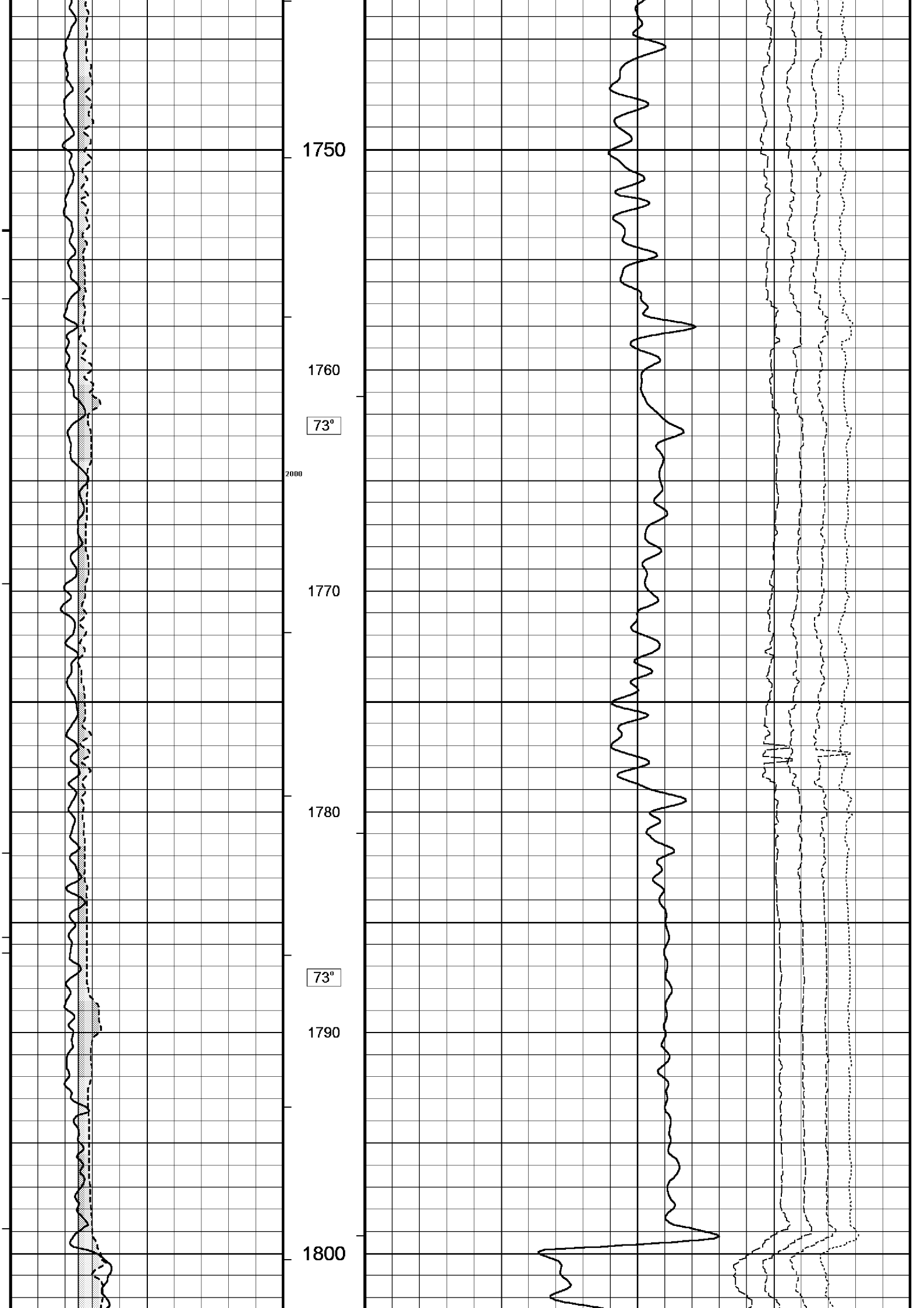


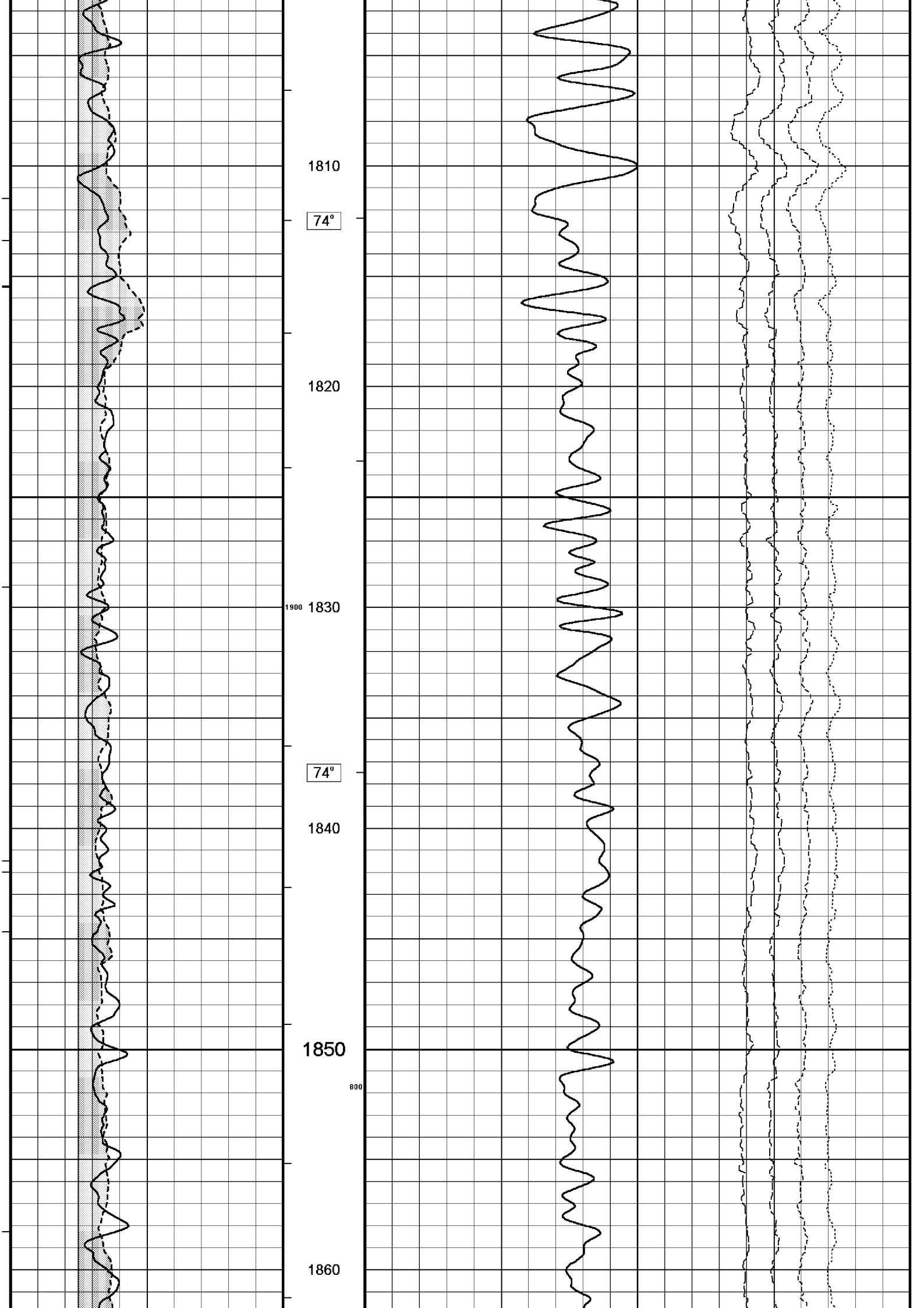


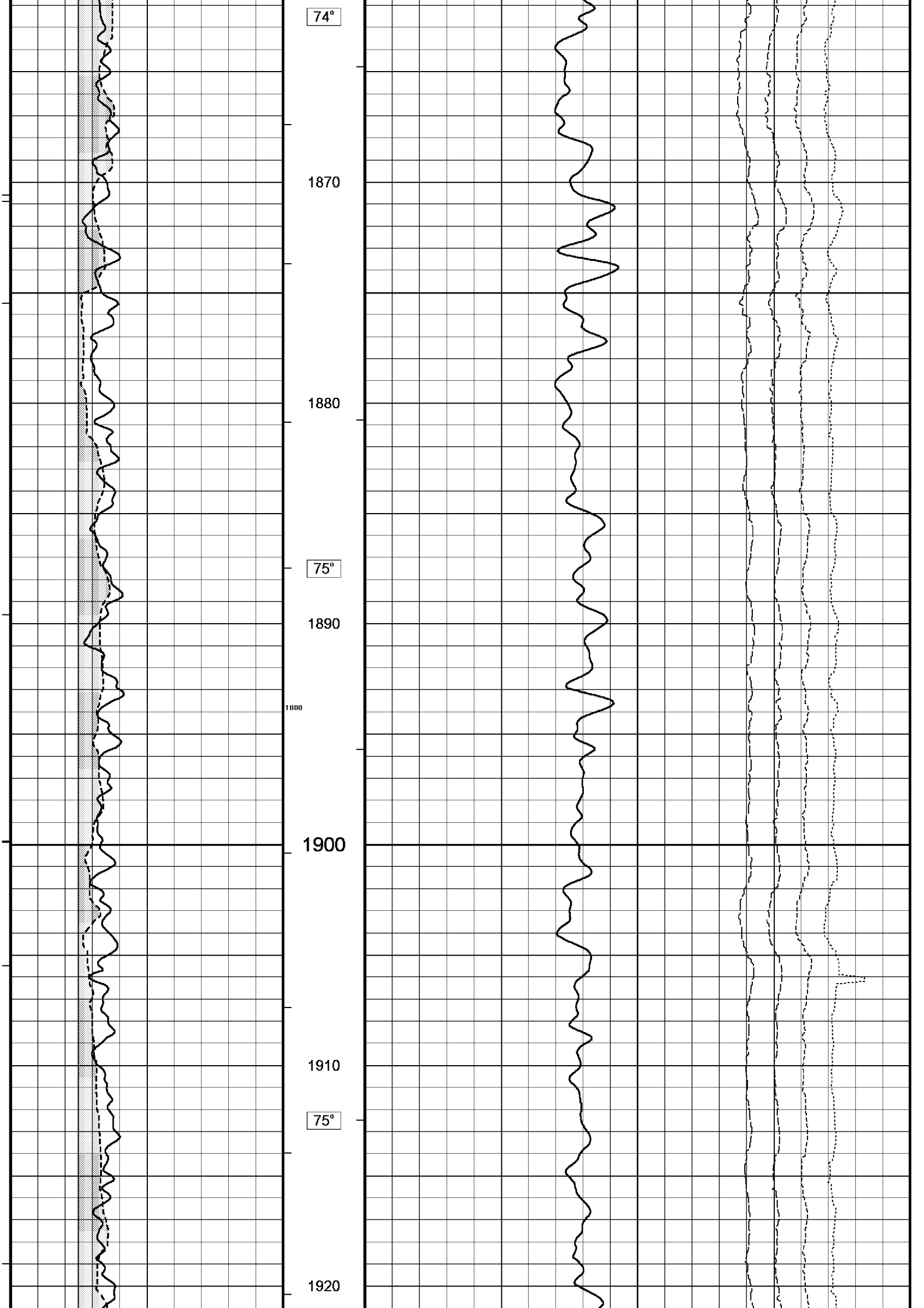


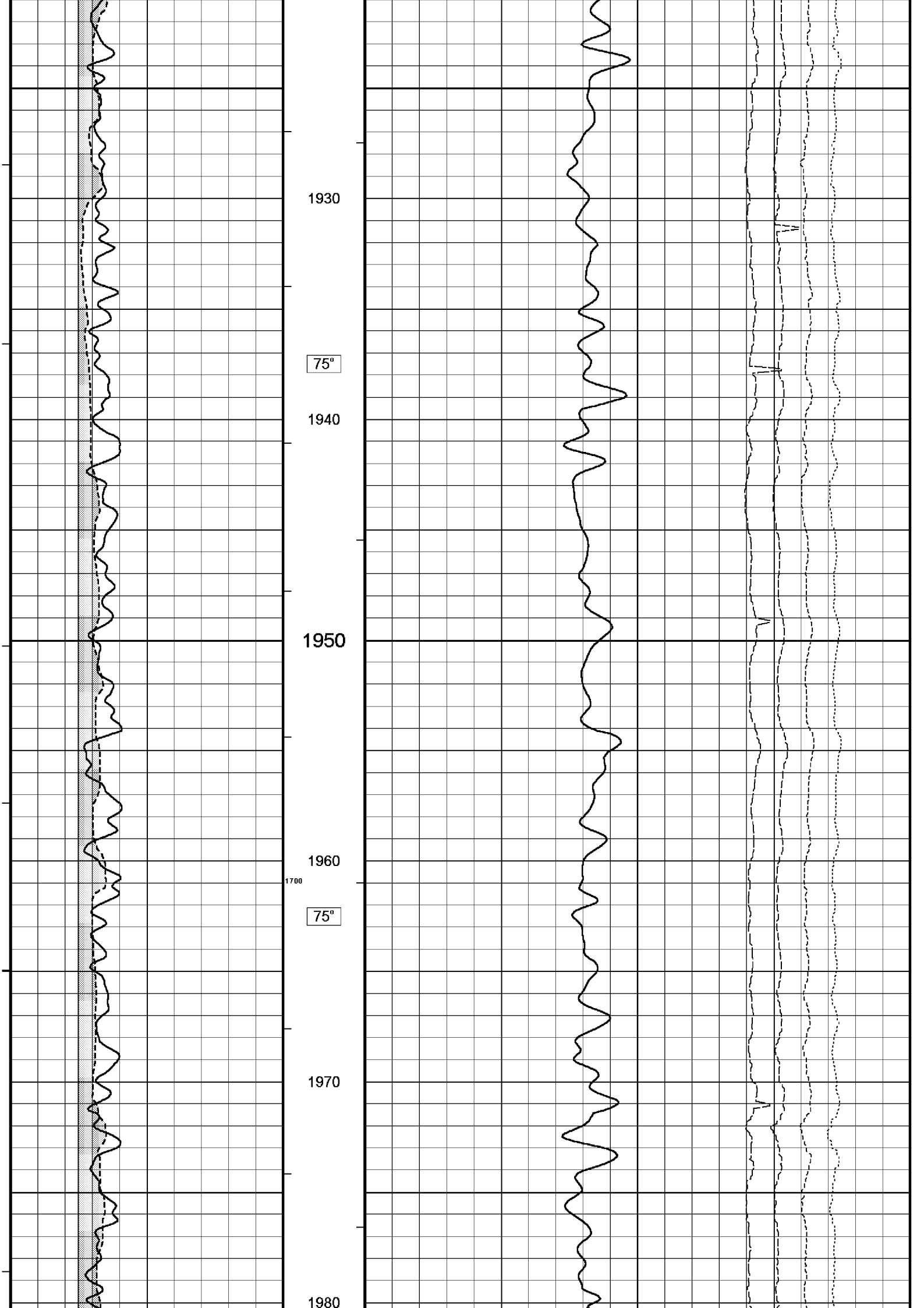


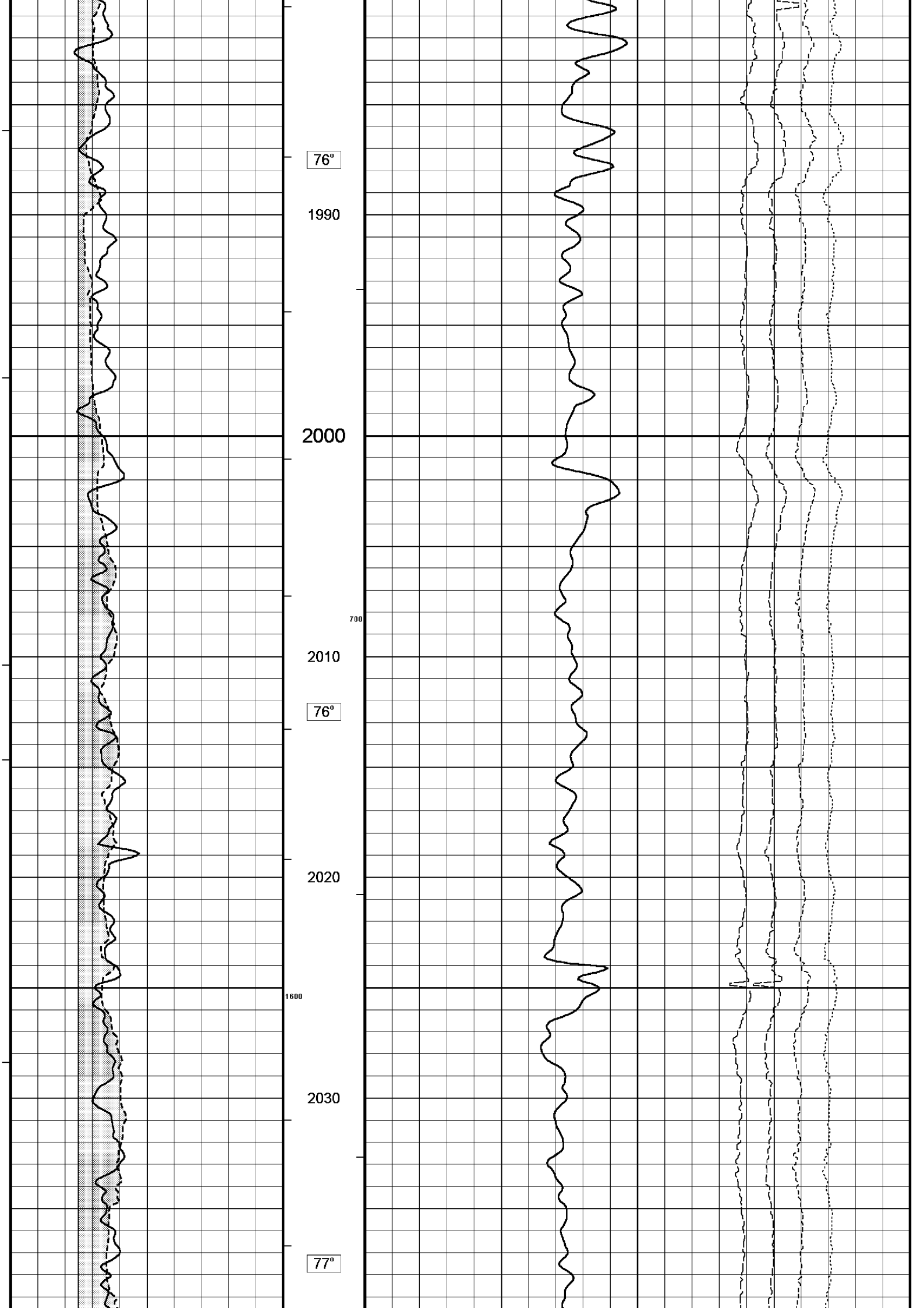


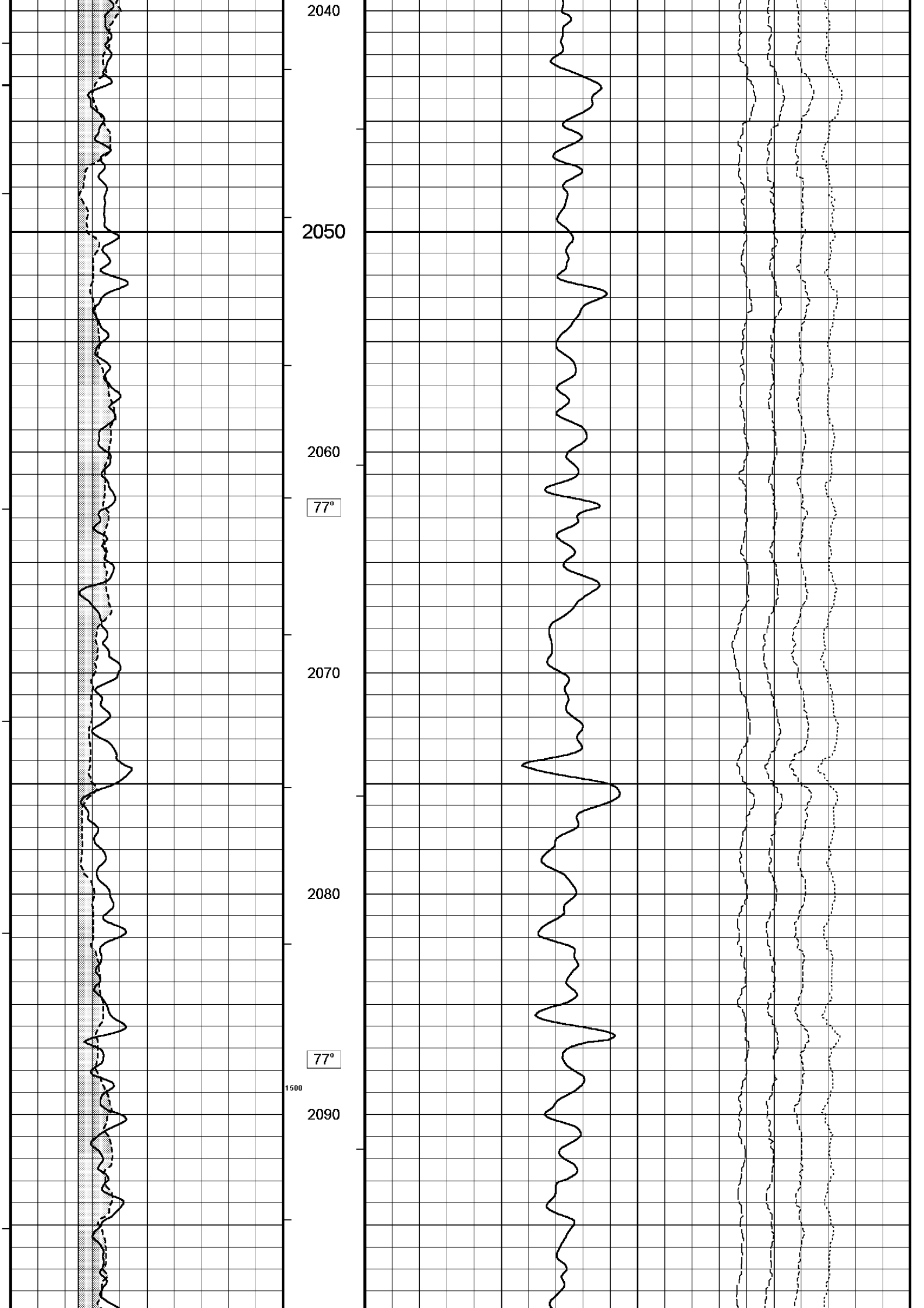


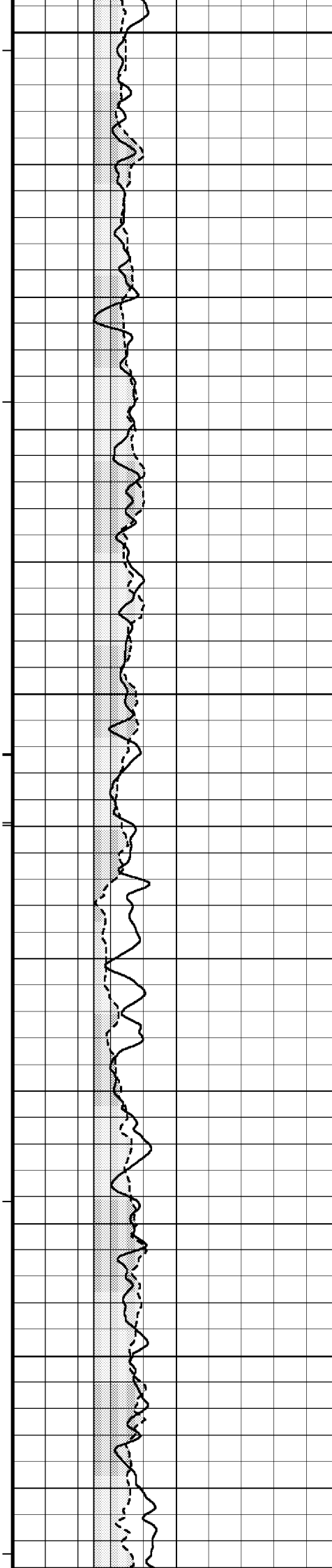












2100

2110

77°

2120

2130

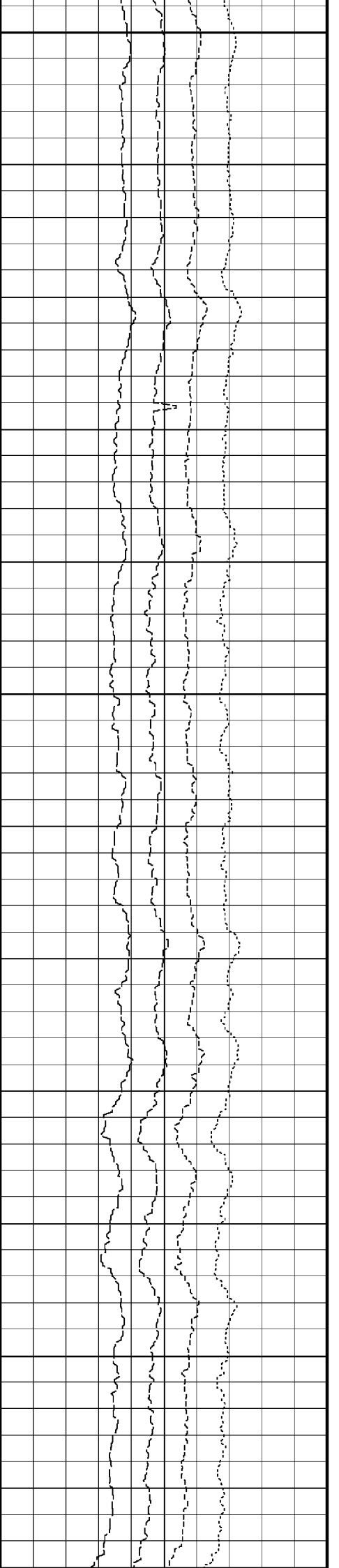
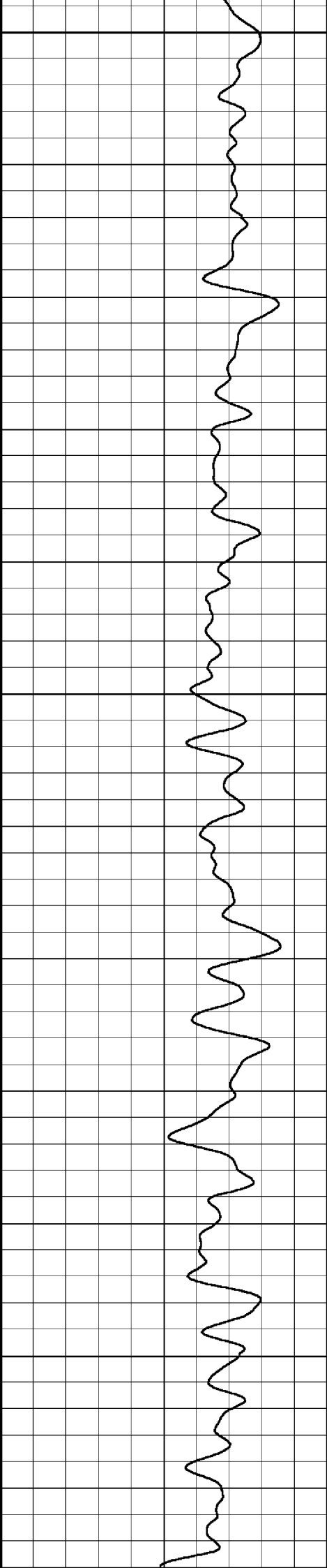
78°

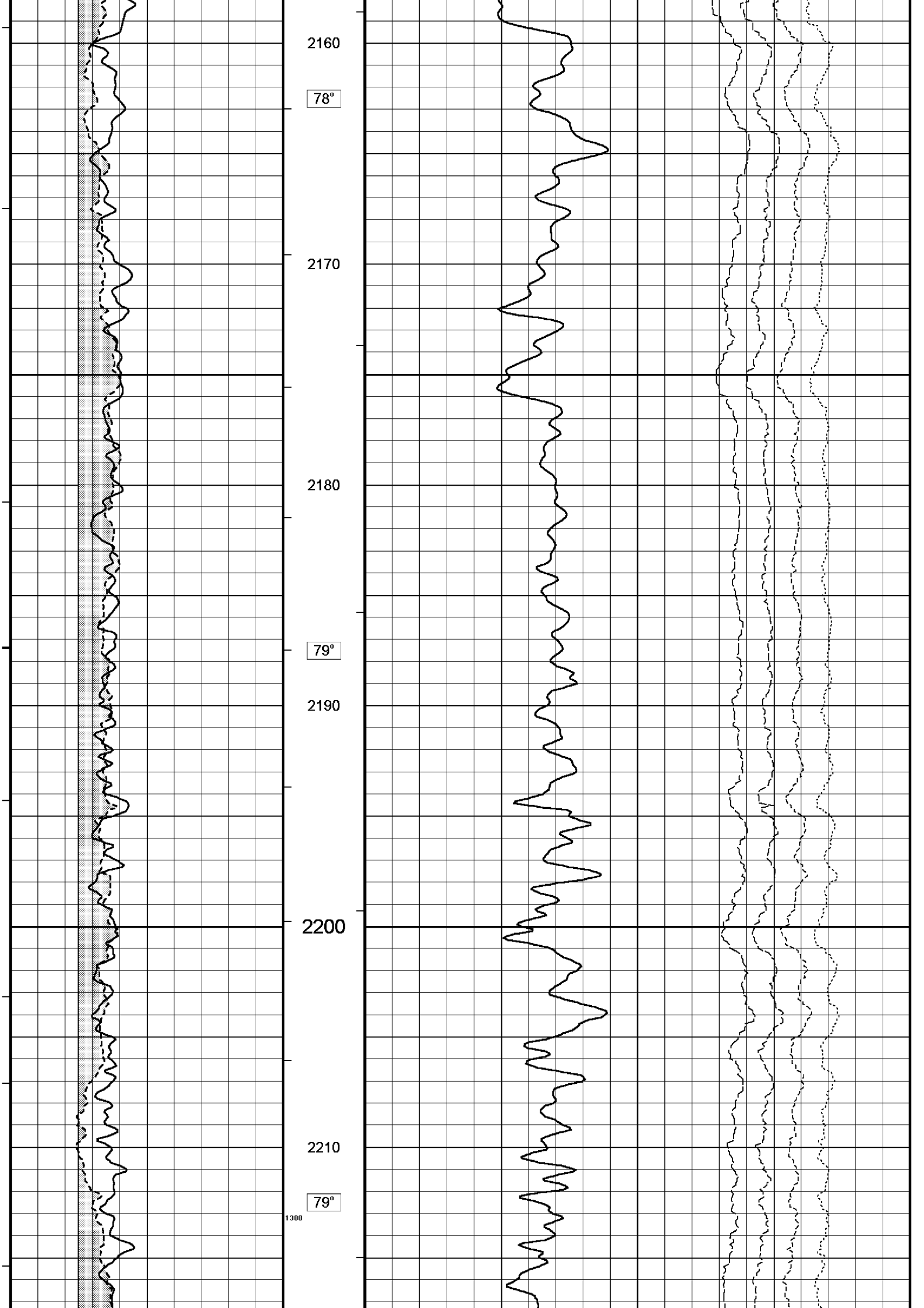
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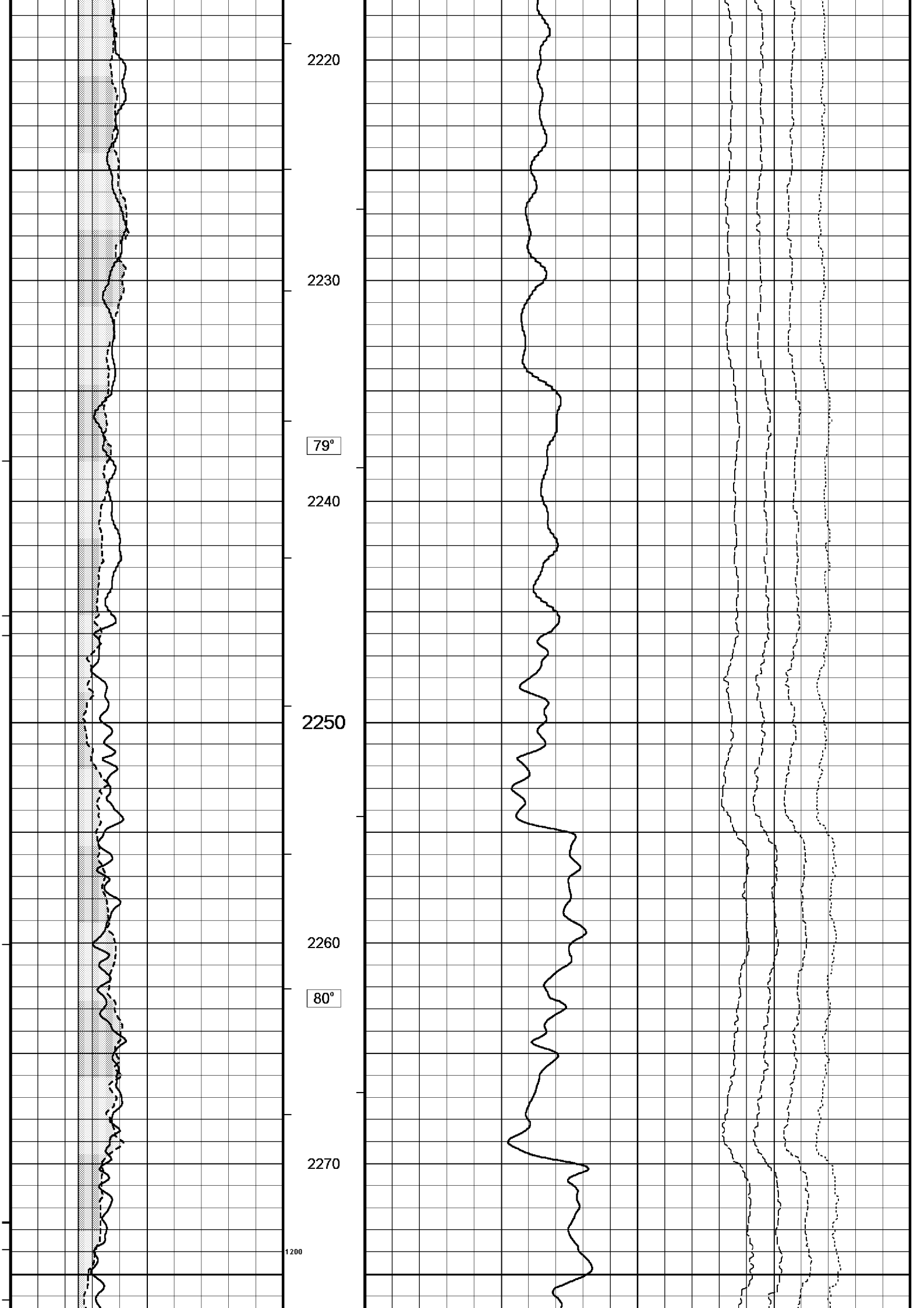
600

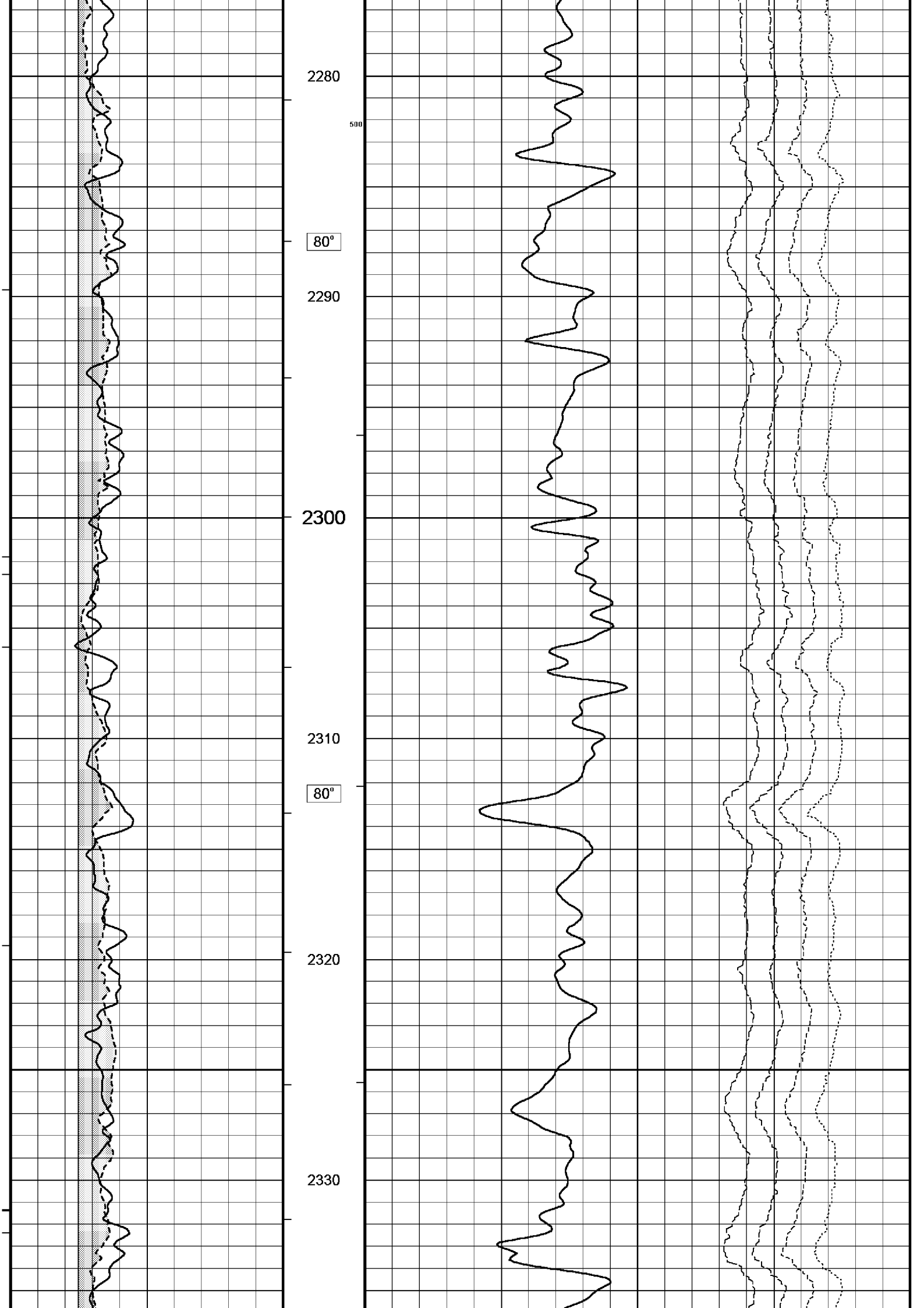
2150

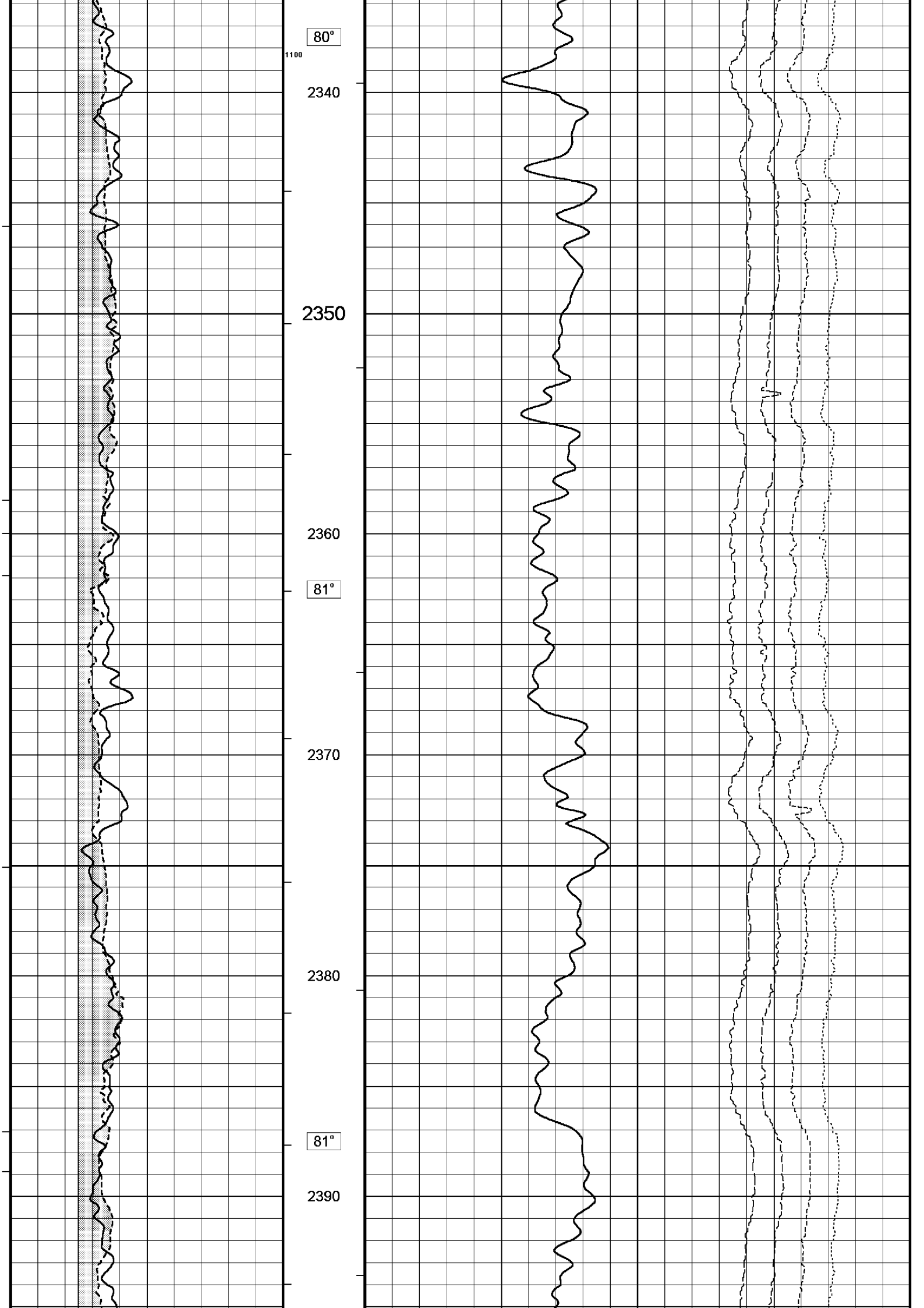
1400

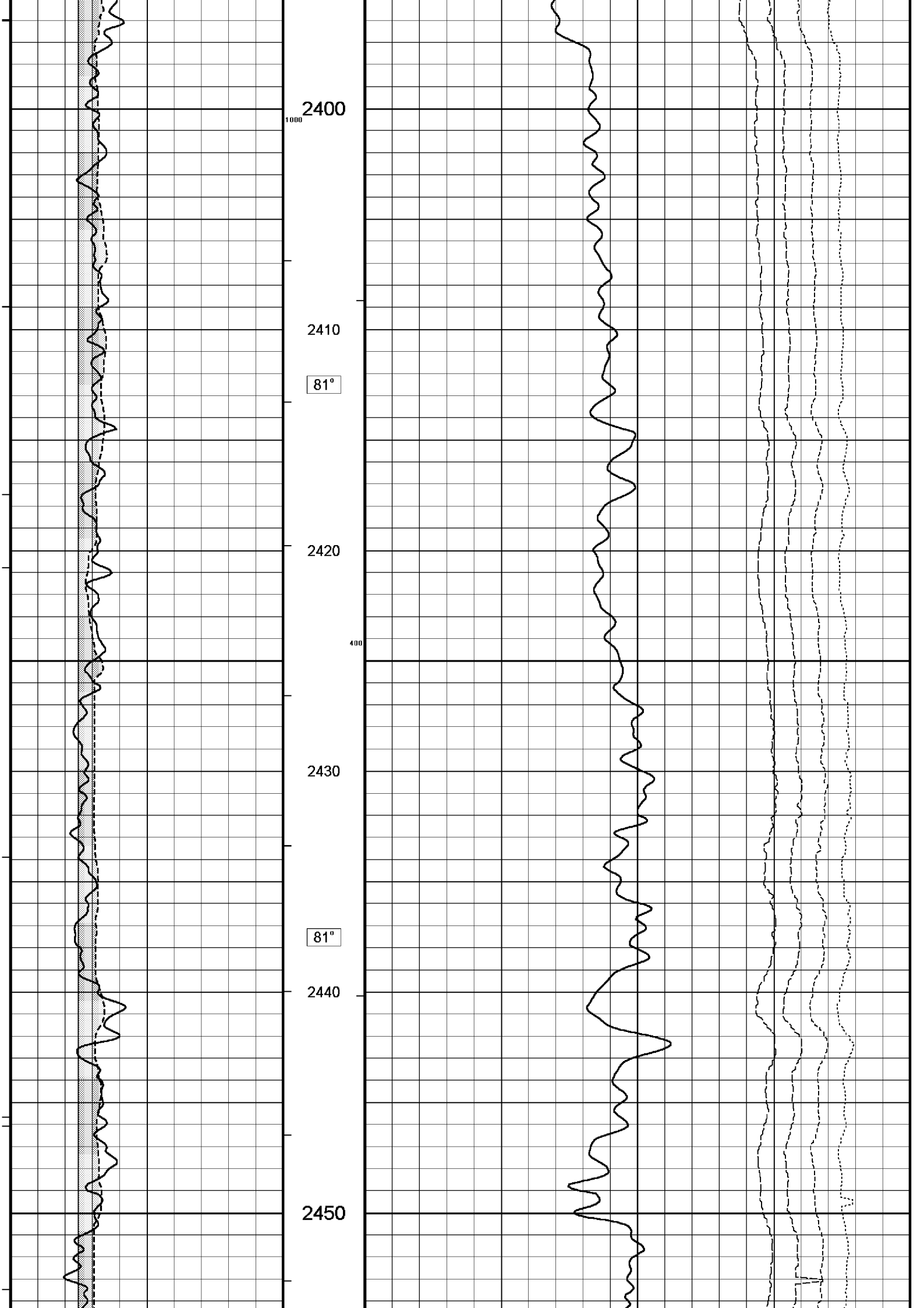


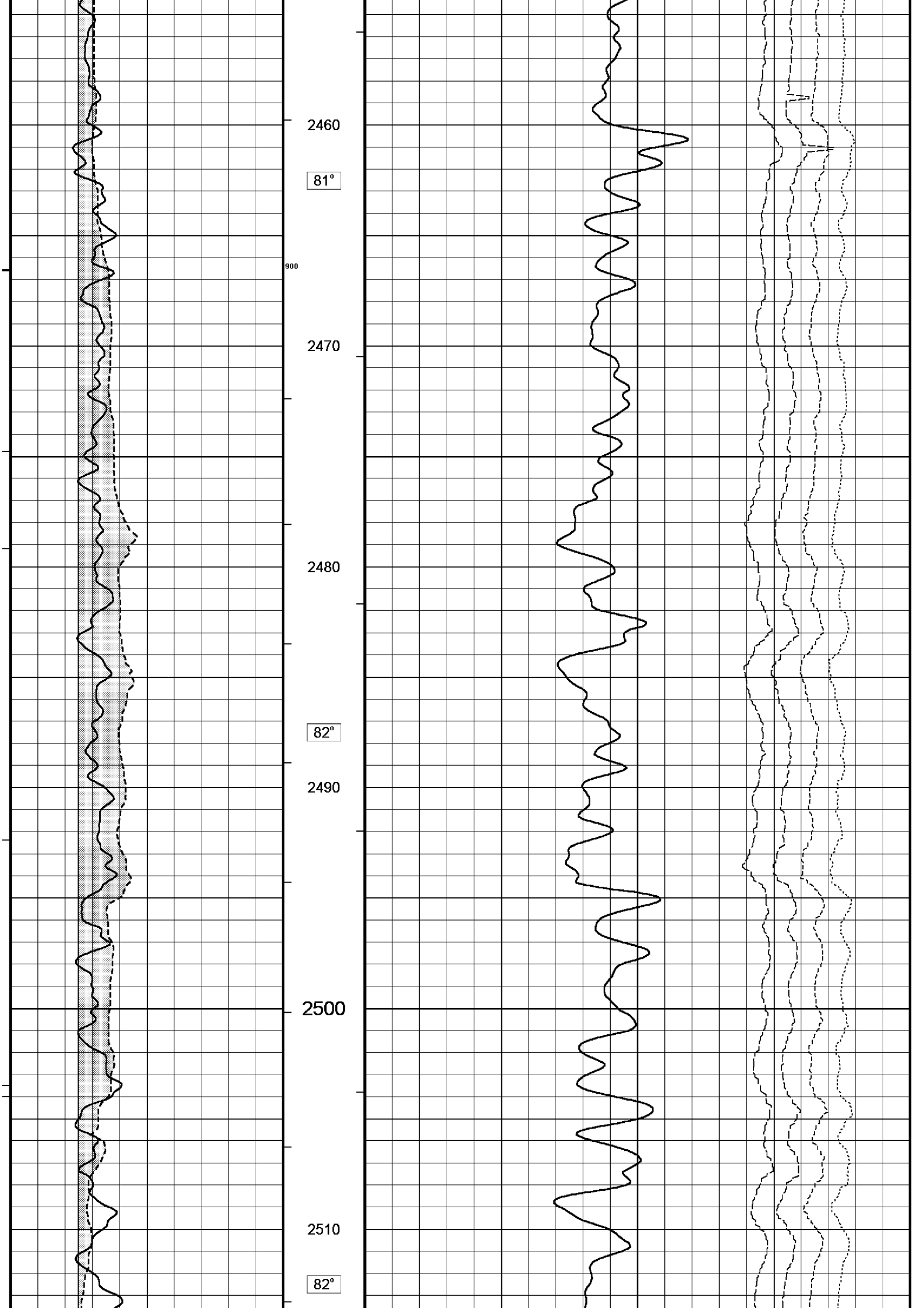


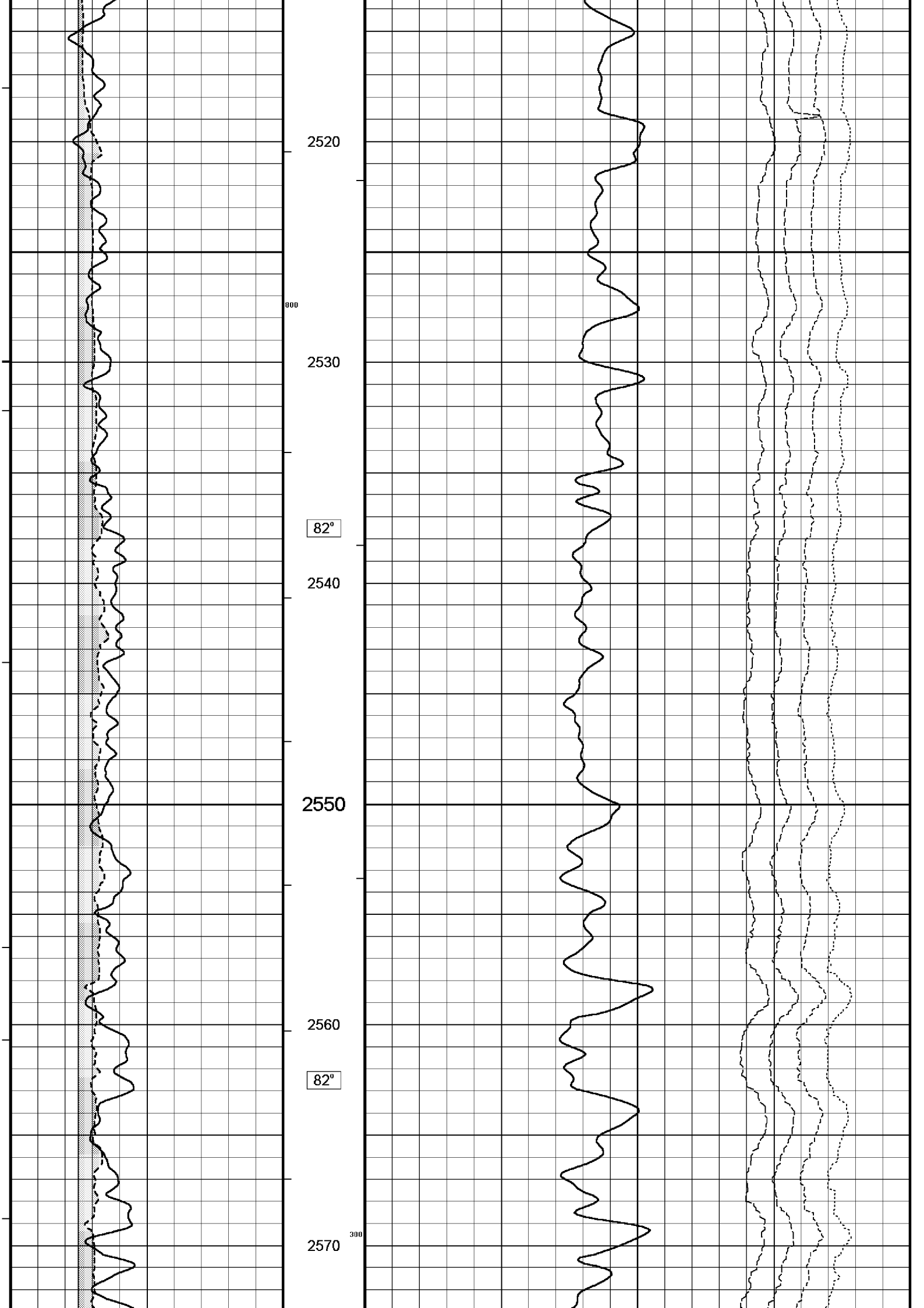


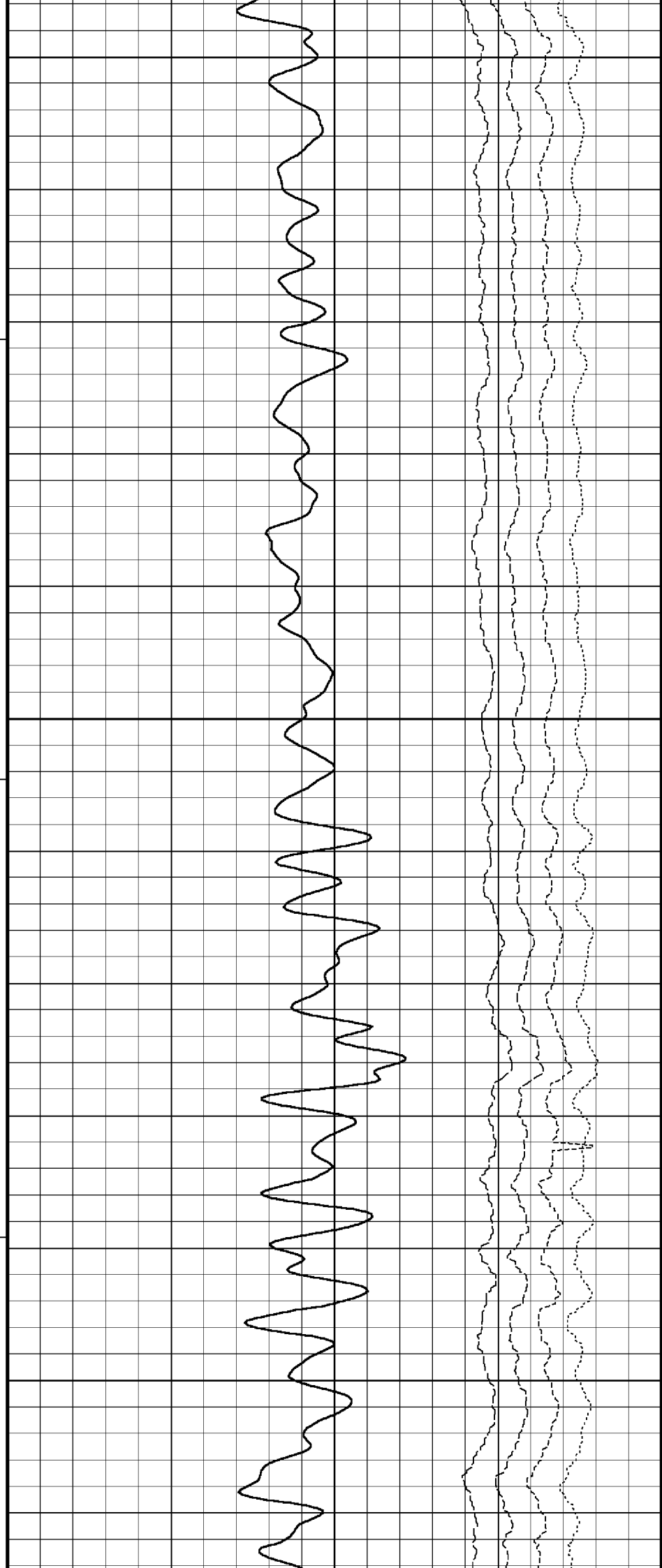
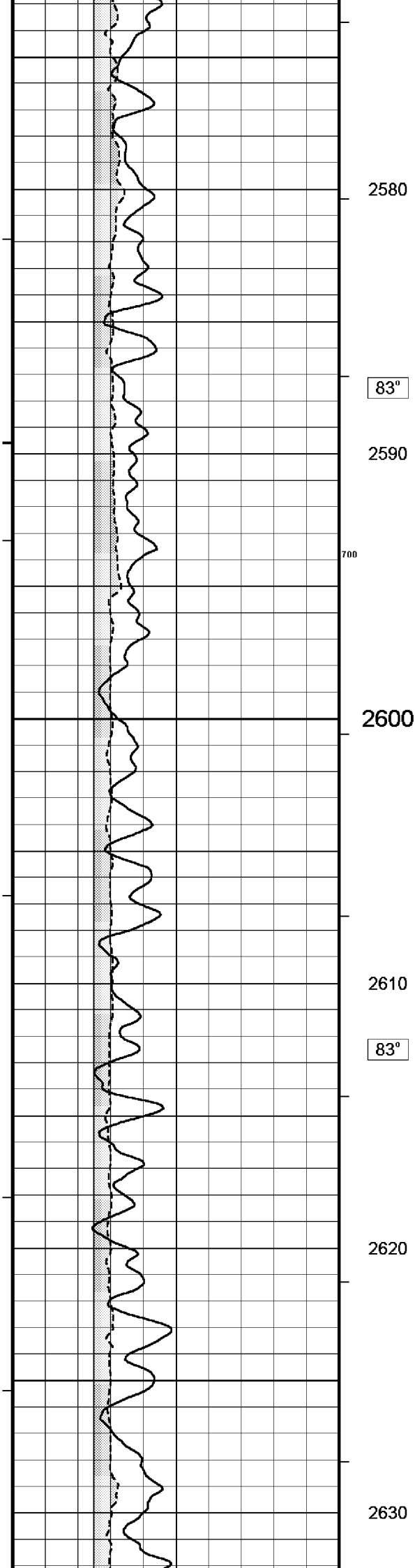


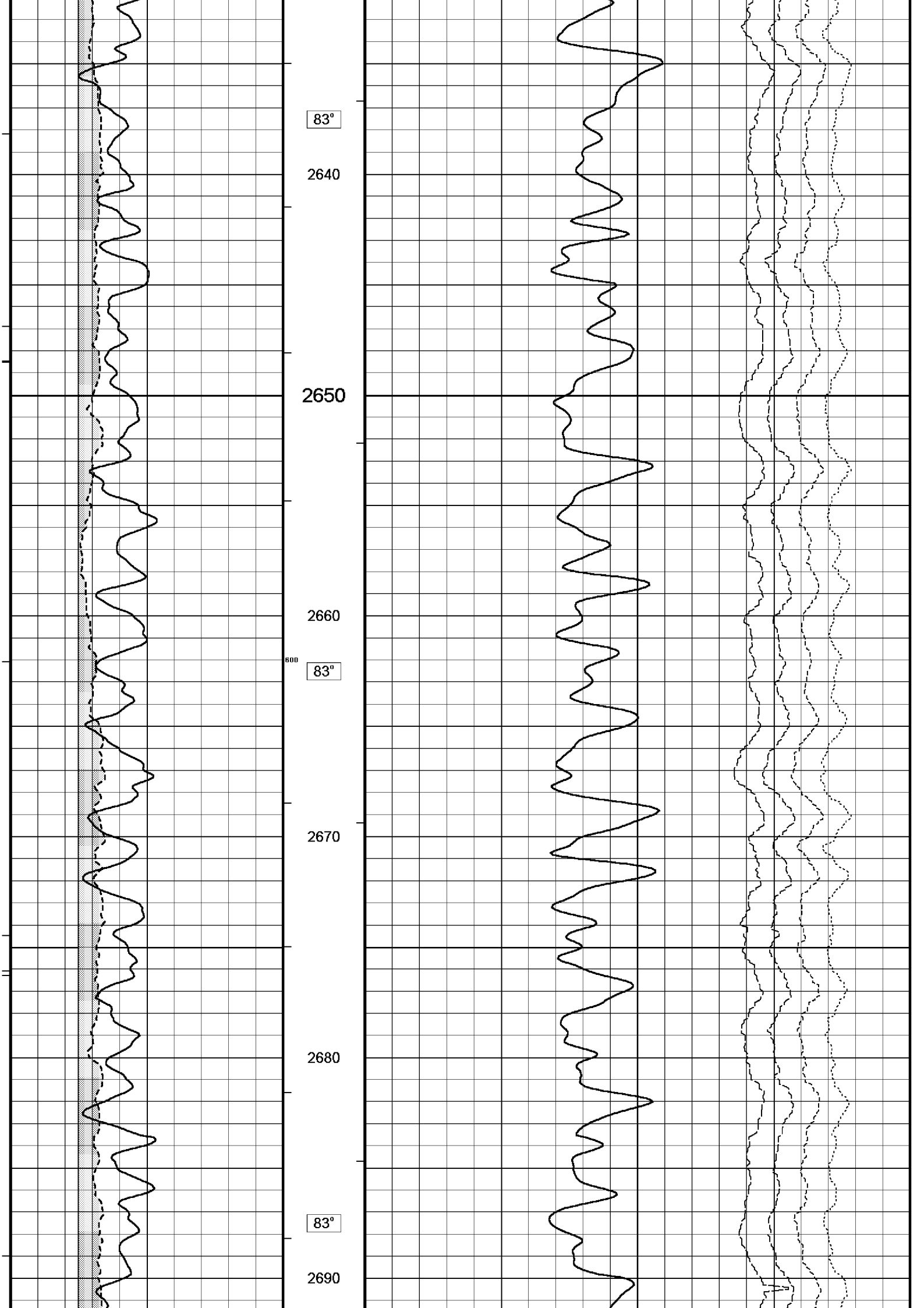


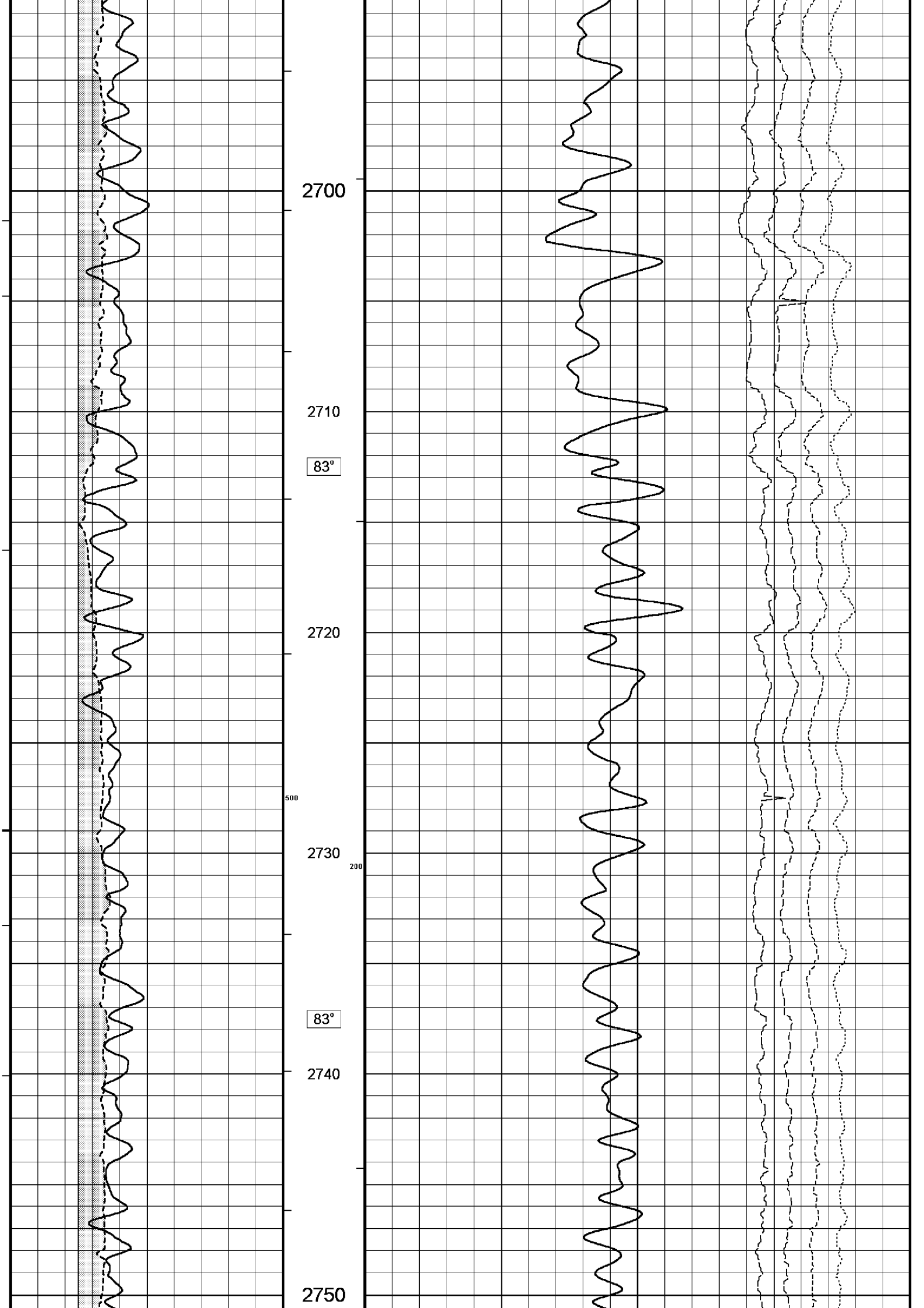


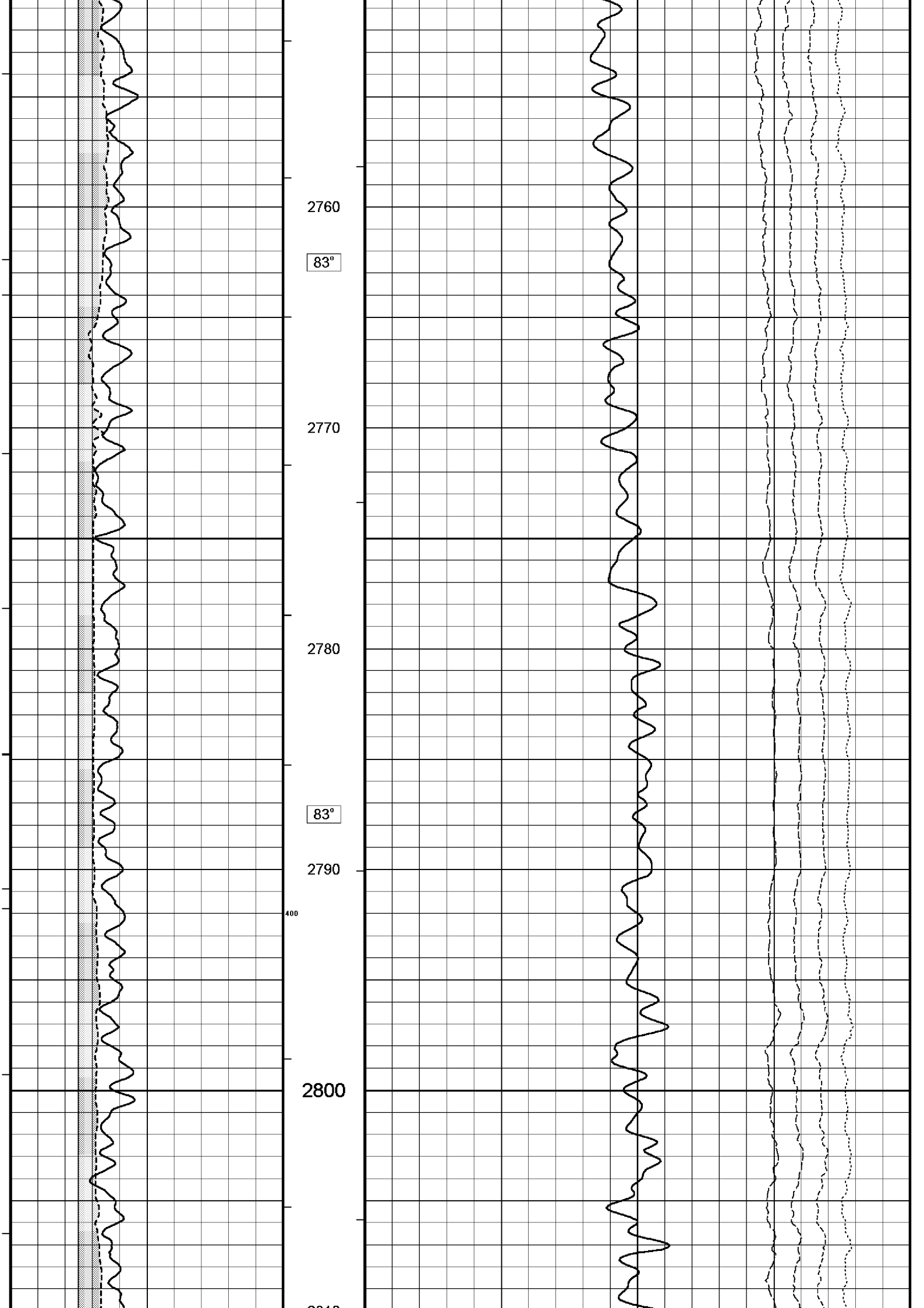


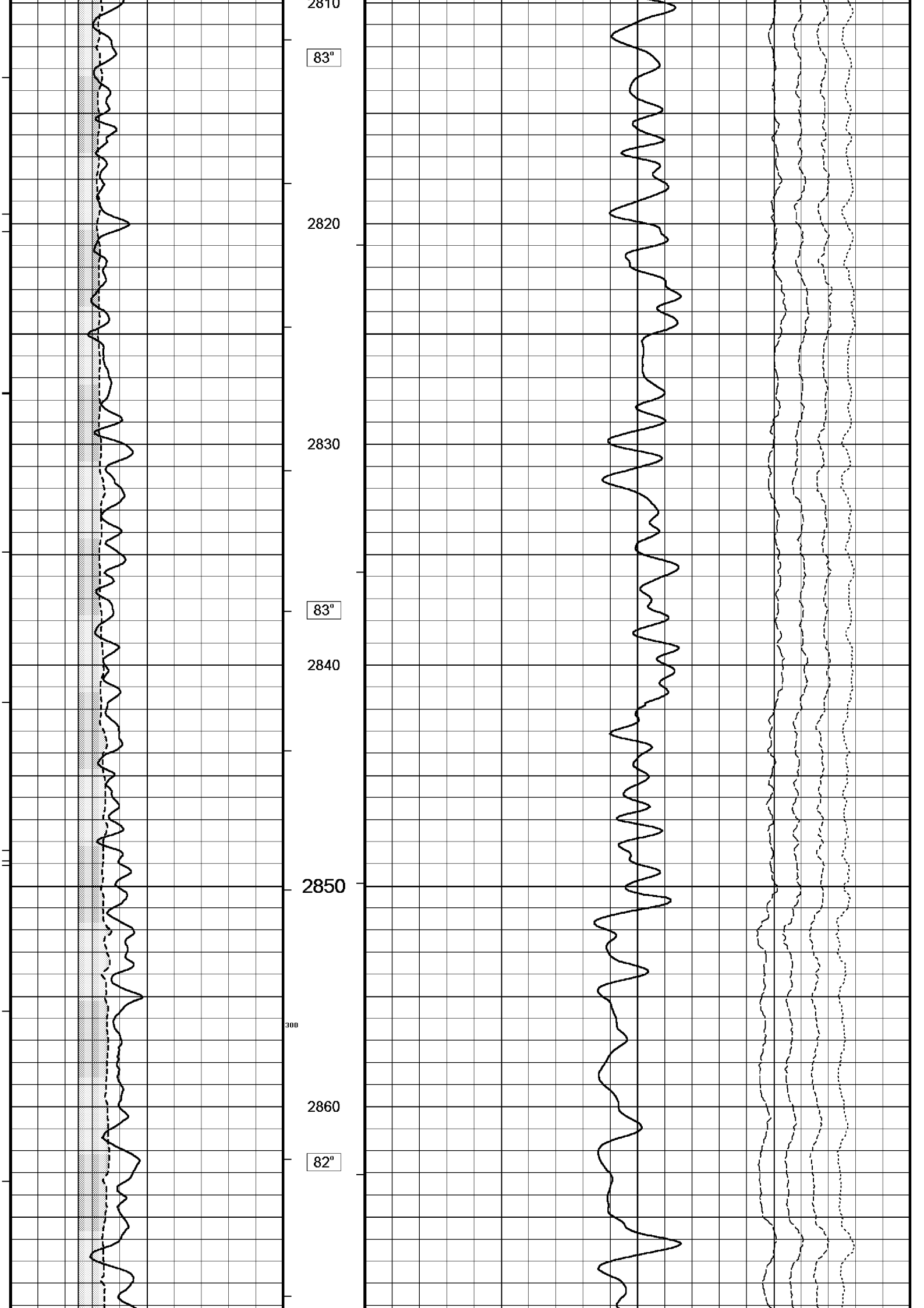


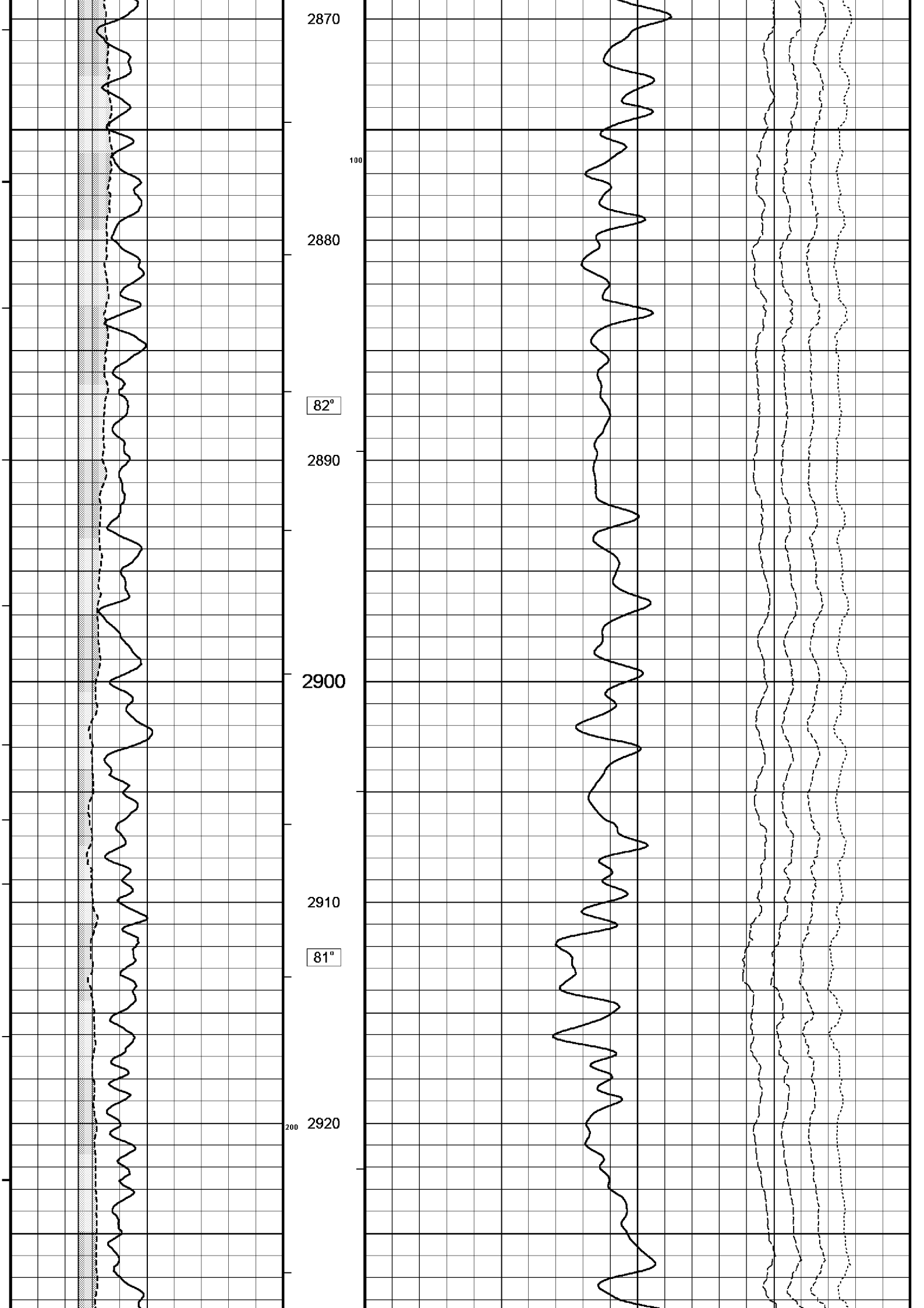


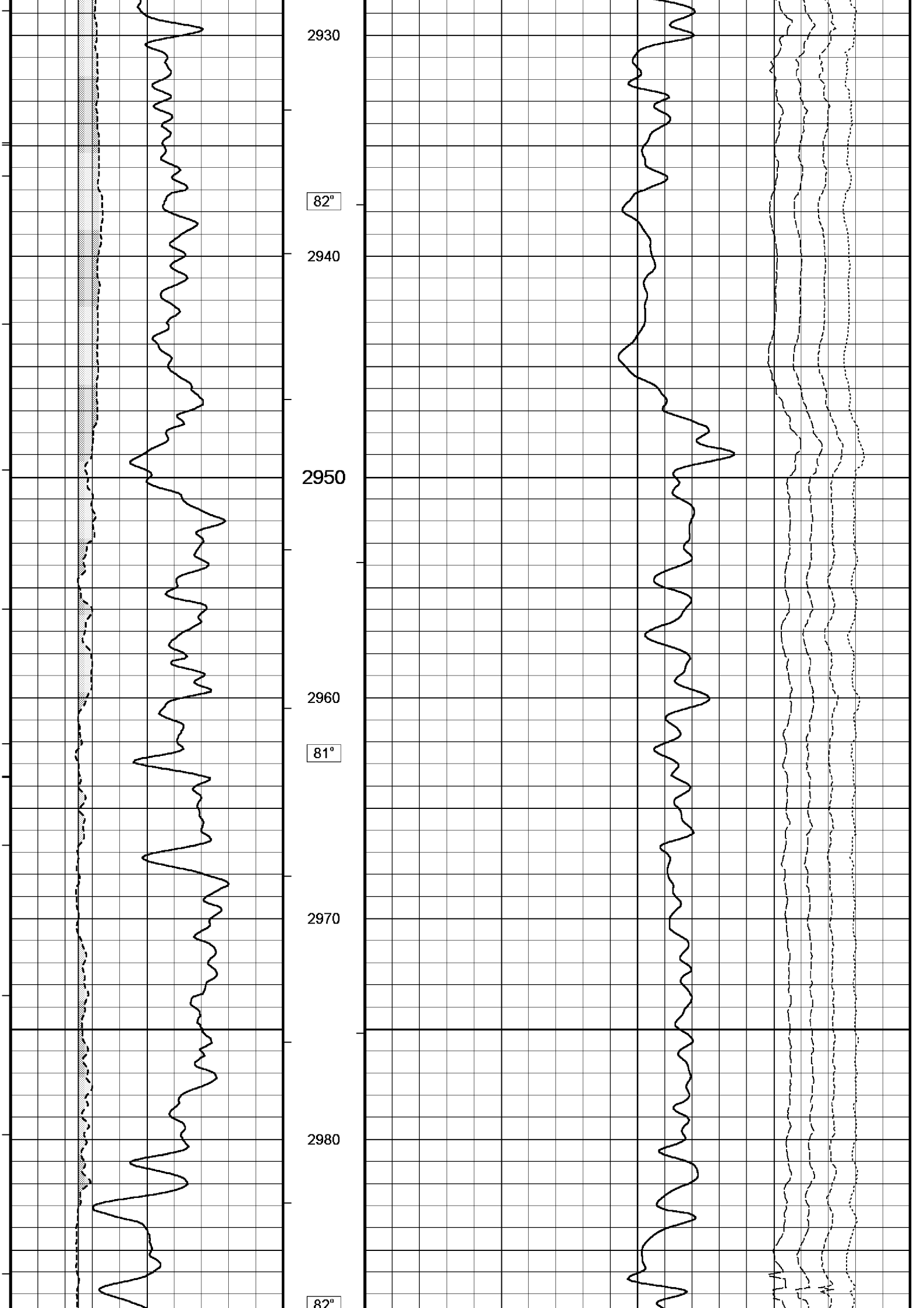


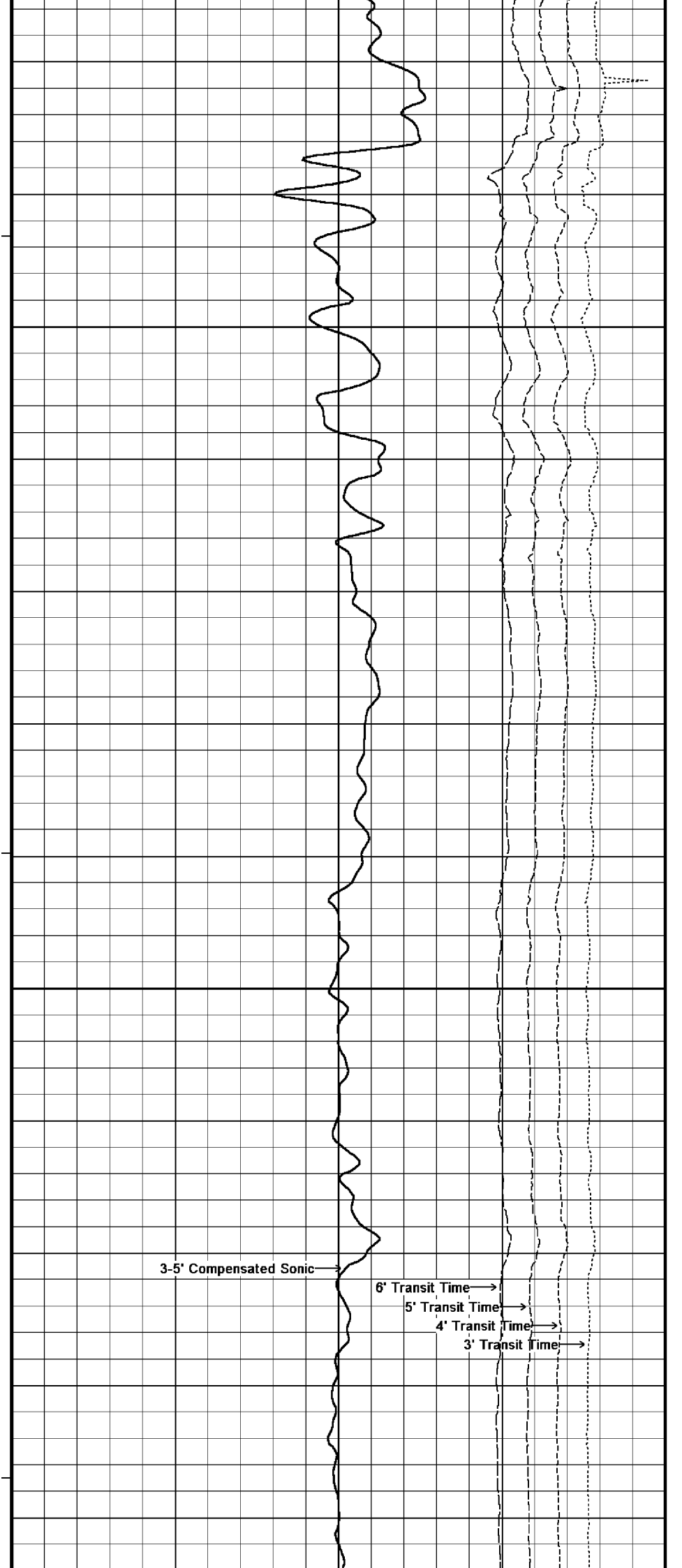
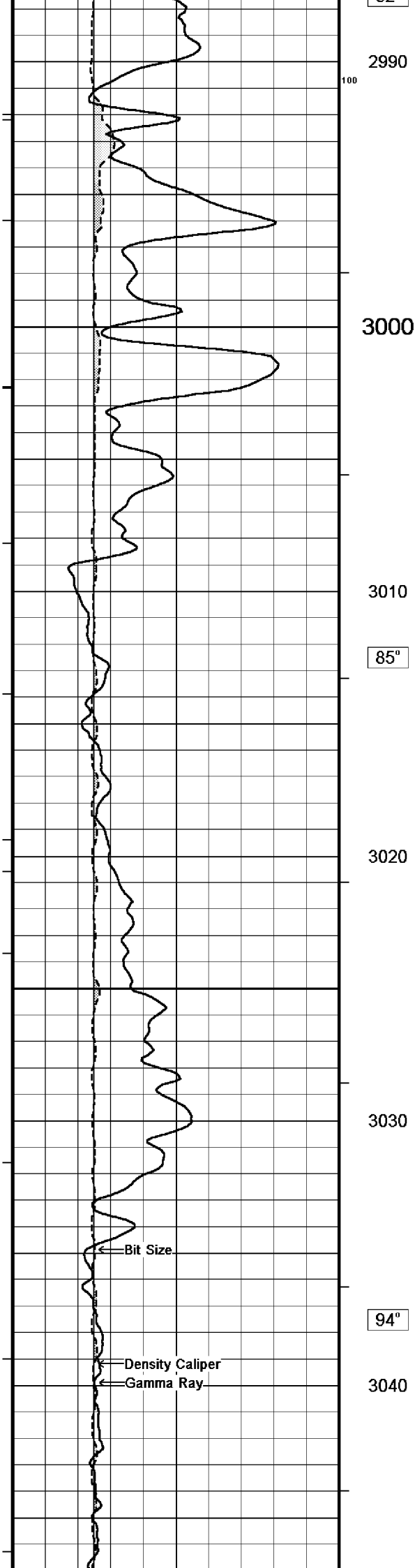


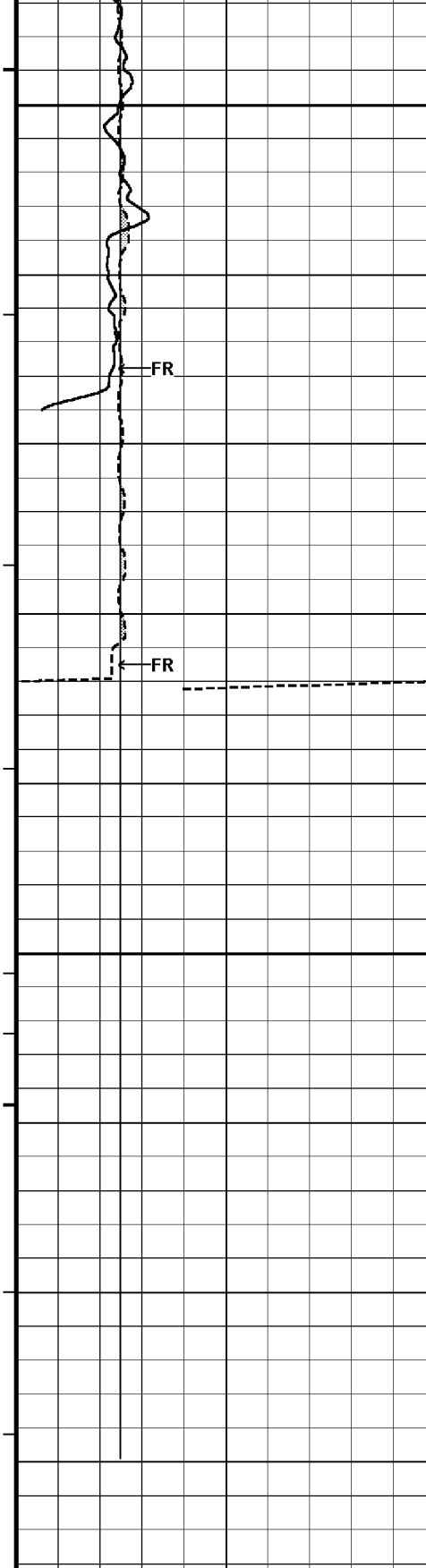












3050

3060

3070

3080

3090

3092

Depth
in
Metres

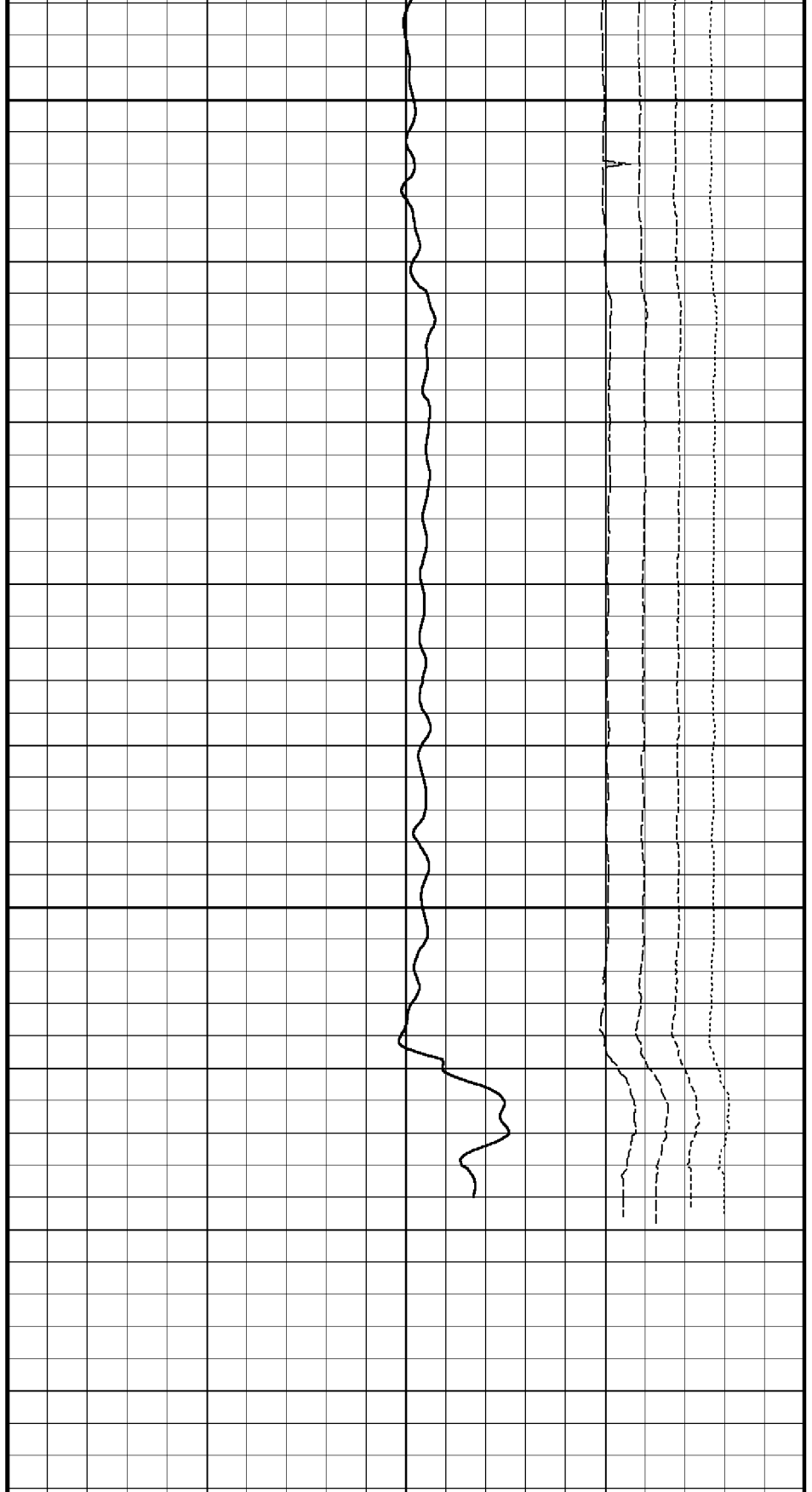
Timing Marks
every 60.0 sec

Gamma Ray

| API | | |
|-----|-----|-----|
| 0 | 100 | 200 |
| 200 | 300 | 400 |

Borehole
Temp in
deg C

HVI
every
10 cu ft



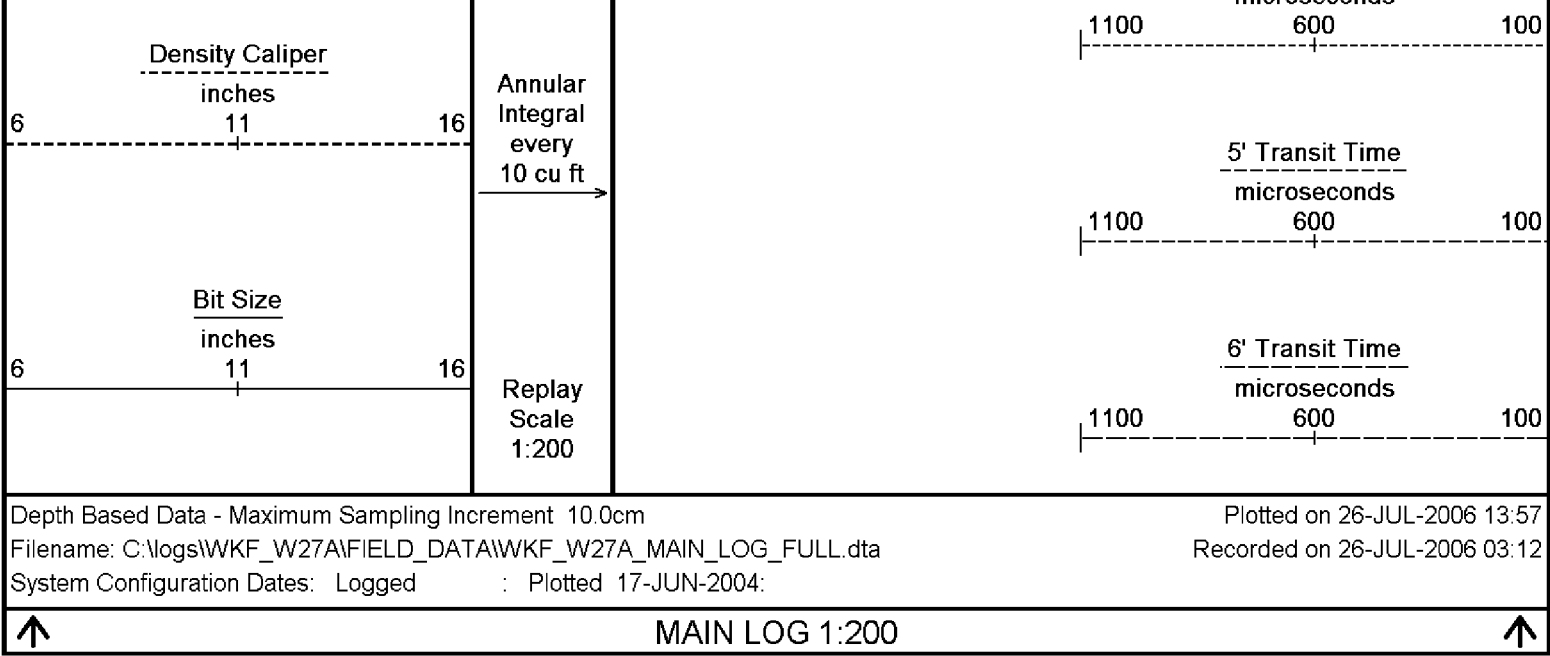
3-5' Compensated Sonic
microsec/metre

500 400 300 200 100

3' Transit Time
microseconds

1100 600 100

4' Transit Time
microseconds



| BEFORE SURVEY CALIBRATION | | | |
|---|-----------------------|----------------------|--|
| C:\logs\WKF_W27A\FIELD_DATA\WKF_W27A_MAIN_LOG.dta | | | |
| General Constants All 000 | | | |
| General Parameters | | | |
| Mud Resistivity | 0.105 | 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 | 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 21-JUN-2006,15:43 |
| | 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 24-JUL-2006 01:45 |
| | Measured | Calibrated (API) | |
| Background | 22 | 15 | |
| Calibrator (Gross) | 1363 | 924 | |
| Calibrator (Net) | 1341 | 909 | |
| Gamma Constants MCG 142 | | | |
| Gamma Calibrator Number | 60 | | |
| Mud Density | 1.16 | gm/cc | |
| Caliper Source for Processing | Density Caliper | | |
| Tool Position | Eccentred | | |
| Concentration of KCl | 0.00 | kppm | |
| Caliper Calibration MPD 083 | | | |
| | | | Base Calibration on 19-JUL-2006 12:33 |
| | | | Field Calibration on 24-JUL-2006,02:04 |
| Base Calibration | | | |
| Reading No | Measured | Calibrator Size (in) | |

| | | |
|---|-------|-------|
| 1 | 15377 | 4.01 |
| 2 | 22794 | 5.99 |
| 3 | 31114 | 7.98 |
| 4 | 39638 | 9.94 |
| 5 | 48896 | 12.01 |
| 6 | N/A | N/A |

Field Calibration

| Measured Caliper (in) | Actual Caliper (in) |
|-----------------------|---------------------|
| 7.98 | 7.98 |

Sonic Constants MSS 066

| | | |
|---------------------------|------------------------|--------------|
| Maximum Boundary Contrast | 100.00 | micro-sec/ft |
| Fluid Transit Time | 189.00 | micro-sec/ft |
| Limestone Transit Time | 47.50 | micro-sec/ft |
| Sandstone Transit Time | 55.50 | micro-sec/ft |
| Dolomite Transit Time | 43.50 | micro-sec/ft |
| Sonic used for Porosities | 3-5' Compensated Sonic | |
| Correction for Sonde Skew | Applied | |
| Cycle Stretch Algorithm | Applied | |
| MN3FT | N/A | micro-sec |
| MX3FT | N/A | micro-sec |

Fixed Gate Parameters

| Start Time (micro-sec) | End Time (micro-sec) | Discriminator (mV) | N/A |
|------------------------|----------------------|--------------------|-----|
| N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A |

Down Hole Fixed Gate Parameters

| | | |
|-----------------------------|--------|-----------|
| Gate Start | N/A | micro-sec |
| Gate Width | N/A | micro-sec |
| Initial Discriminator Level | 0.0000 | mVolts |

Full Waveform Parameters

| | | |
|---------------------------------|--------|--------------|
| Use 3' Waveform to derive TR | No | |
| Use 4' Waveform to derive TR | No | |
| Use 5' Waveform to derive TR | No | |
| Use 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_W27A\FIELD_DATA\WKF_W27A_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 Compact Stiff Bridle Electrode
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 Inline Bowspring A
MIS 95 Length: 1.74 m Weight: 33.1 lb

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

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

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



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

26.17 m NPRL - Limestone Neutron Por.

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

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

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

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

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

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

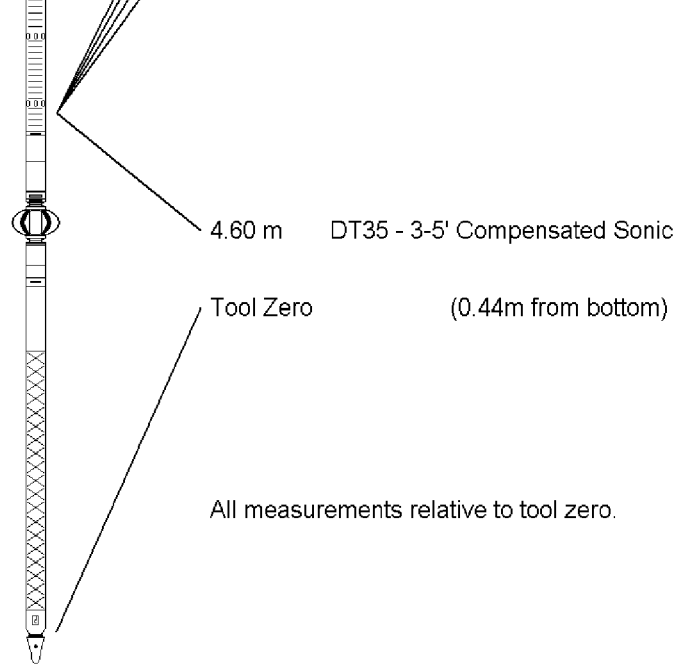


Compact Inline Standoff B
MIS 127 Length: 0.65 m Weight: 15.4 lb

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



| | |
|-----------------|------------------------|
| COMPANY | ESSO AUSTRALIA PTY.LTD |
| WELL | WKF W27A |
| FIELD | KINGFISH GDA94 |
| PROVINCE/COUNTY | BASS STRAIT, VICTORIA |
| COUNTRY/STATE | AUSTRALIA |

| | | | | |
|-------------------------------|--------|---------------|---------|--------|
| Elevation Kelly Bushing | metres | First Reading | 3085.00 | metres |
| Elevation Drill Floor 33.43 | metres | Depth Driller | 3093.00 | metres |
| Elevation Ground Level -76.13 | metres | Depth Logger | 3093.00 | metres |



COMPENSATED SONIC
1:200 MD