# 6 3/4 in. & 4 3/4 in. WeatherfordM/LWD™
# Gamma Ray & Resistivity
# 1 in. & 5 in. MEASURED DEPTH
# RECORDED DATA
# FINAL PRINT

Company: Anadarko
Well: Cannon 14C-10HZ
Field: Wattenburg
Rig: Xtreme 23
County: Weld

| | |
|---|---|
| COMPANY | **Anadarko** |
| WELL | **Cannon 14C-10HZ** |
| FIELD | **Wattenburg** |
| RIG | **Xtreme 23** |
| COUNTY | **Weld** STATE **Colorado** |
| API # | **05-123-36696-00** |

Location

| | | | |
|---|---|---|---|
| Latitude: | 40.158633° N | x = 3,204,555 ft | Mag Decl: 8.60° |
| Longitude: | 104.768138° W | y = 1,301,477 ft | Mag Dip: 66.78° |

Other Services: Spectral Azimuthal Gamma Ray, Directional, and Temperature

Permanent Datum: Mean Sea Level
Log Measured From: Drill Floor Elev: 4965 ft above perm. datum
Depth Reference: Drillers Tally Total Depth: 12035 ft

Depth Logged: 6760 ft to 12035 ft
Date Logged: 24-Jun-13 to 28-Jun-13
Runs: 2
Spud Date: 22-Jun-13

Elevation

| | |
|---|---|
| K.B. | Top Drive |
| G.L. | 4949 ft |
| D.F. | 4965 ft |
| W.D. | Onshore |

Borehole Record

| Hole Size | From | To |
|---|---|---|
| 8.750 in. | 895 ft | 7885 ft |
| 6.125 in. | 7885 ft | 12035 ft |
| | | |
| | | |
| | | |

Casing Record

| Size | Weight | From | To |
|---|---|---|---|
| 9.625 in. | | Surface | 967 ft |
| 7.000 in. | 26.0 lb/ft | Surface | 7875 ft |
| | | | |
| | | | |
| | | | |

Borehole Deviation Record

| Hole Size | Min. Inc. | Max. Inc. |
|---|---|---|
| 8.750 in. | 0.30° | 82.07° |
| 6.125 in. | 88.58° | 92.47° |
| | | |
| | | |
| | | |
| | | |

Mud Record

| Type | Weight | From | To |
|---|---|---|---|
| WBM | 8.50 - 10.25 ppg | 895 ft | 12035 ft |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**All interpretations of log data are opinions based on inferences from electrical or other measurements. Weatherford International does not guarantee the accuracy or correctness of any interpretation or recommendation and we shall not be liable or responsible for any loss, cost, damages or expenses incurred or sustained by anyone resulting from any interpretation or recommendation made by any of our employees or agents.**

# RUN SUMMARY

| M/LWD Run Number | | 1 | 2 | | | | | |
|---|---|---|---|---|---|---|---|---|
| Bit Size | in. | 8.750 | 6.125 | | | | | |
| Bit Type | | PDC | PDC | | | | | |
| Bit TFA | sq.in. | 1.610 | 1.856 | | | | | |
| Bit Start Depth | ft | 895 | 7885 | | | | | |
| Bit End Depth | ft | 7885 | 12035 | | | | | |
| Top Log Interval | ft | 6760 | 7840 | | | | | |
| Bottom Log Interval | ft | 7885 | 12035 | | | | | |
| Begin Log Time | hrs | 02:29 | 17:18 | | | | | |
| Begin Log Date | DD-MMM-YY | 24-Jun-13 | 26-Jun-13 | | | | | |
| End Log Time | hrs | 23:14 | 15:15 | | | | | |
| End Log Date | DD-MMM-YY | 24-Jun-13 | 28-Jun-13 | | | | | |
| Drill or Wipe | | Drill | Drill | | | | | |
| Flow Rate | gal/min | 562 | 297 | | | | | |
| Max AV / CV @ MWD | ft/min | 444 / 339 | 487 / 343 | | | | | |
| Min Inc @ Depth | deg @ ft | 0.30 @ 5999 | 88.58 @ 9317 | | | | | |
| Max Inc @ Depth | deg @ ft | 82.07 @ 7825 | 92.47 @ 8206 | | | | | |
| **MUD DATA** | | | | | | | | |
| Depth | ft | 7885 | 12035 | | | | | |
| Fluid Type | | WBM | WBM | | | | | |
| Mud Weight | ppg | 10.25 | 10.10 | | | | | |
| Plastic Viscosity | cP | 10 | 11 | | | | | |
| Solids / Sand | % | 8.70 / 0.50 | 8.70 / 0.75 | | | | | |
| NaCl Equiv. Chlorides | ppm | 1700 | 1700 | | | | | |
| pH | | 8.8 | 9.4 | | | | | |
| Oil:Water Ratio | % Vol | 1.1 : 98.9 | 3.3 : 96.7 | | | | | |
| Rm @ Temperature | ohm-m @ deg F | na | 1.930 @ 64 | | | | | |
| Rmc @ Temperature | ohm-m @ deg F | na | 1.623 @ 64 | | | | | |
| Rmf @ Temperature | ohm-m @ deg F | na | 1.712 @ 64 | | | | | |
| KCl | % Vol | 0 | 0 | | | | | |
| Client Representative | | J. Tettleton | J. Tettleton | | | | | |
| WeatherfordLWD Engineer | | J. Jackson | J. Evers | | | | | |

# EQUIPMENT SUMMARY

| **M/LWD Run Number** | **1** | **2** | | | |
|---|---|---|---|---|---|
| BTR / CDS Serial Number | 44702 / 44736 | na | | | |
| Battery Serial Number | 403716787 | na | | | |
| Gamma Ray Serial Number | 2978 | na | | | |
| CMS Serial Number | 1592 | na | | | |
| Pulser Serial Number | 18705 | na | | | |
| SAGR Serial Number | na | NW131111JB4.75-M2 | | | |
| HEL Serial Number | na | NW131377PDBBI4.75-M1 | | | |
| MFR Serial Number | na | NW131378RBBK4.75-M1 | | | |
| **Sensor to Bit Offsets / Acquisition Rates** | | | | | |
| Directional ft / sec | 56.64 / RT | 56.06 / RT | | | |
| Gamma Ray ft / sec | 42.43 / 16 | 41.38 / 5 | | | |
| Resistivity ft / sec | na | 84.29 / 5 | | | |
| **Other Information** | | | | | |
| Total BHA Length ft | 3335.03 | 6801.00 | | | |
| BHA Assembly Type | Steerable | Steerable | | | |
| Stabilizer Location ft | na | 33.48 | | | |
| Stabilizer Location ft | na | 102.09 | | | |
| Run Circulating Time hr | 57.96 | 40.57 | | | |
| Run Drilling Time hr | 37.98 | 18.26 | | | |

## MUD SUMMARY

| Date and Time | Run | Bit Depth | Mud Weight | % K | Rm @ Temp | Rmf @ Temp | Rmc @ Temp | BHCT |
|---|---|---|---|---|---|---|---|---|
| 24 June 13 @ 23:14 | 01 | 7885 ft | 10.25 ppg | 0 | na | na | na | 178 F |
| 28 June 13 @ 15:15 | 02 | 12035 ft | 10.1 ppg | 0 | 1.930 @ 64 | 1.712 @ 64 | 1.623 @ 64 | 223 F |

# M/LWD RUN REMARKS

**Run Number:** **1 :: REAL-TIME DATA LOG**

**WFT Services Provided:**

Recorded and Real Time Logging: Gamma Ray and Temperature.

Directional Services: On demand Inclination and Azimuth.

**Borehole and Environmental Correction:**

| | | | |
|---|---|---|---|
| Hole Size: | 8.750 in. | **Gamma Ray: Hole size, mudweight, Collar O.D., Collar I.D. and K1 factor.** | |
| Mud Weight: | 8.50 ppg | **Collar O.D.:** | 6.750 in. |
| K1 Factor: | 3.179 | **Collar I.D.:** | 3.250 in. |

**Run Number:** **2 :: RECORDED DATA LOG**

**WFT Services Provided:**

Recorded and Real Time Logging: Spectral Gamma Ray, Resistivity, and Temperature.

Directional Services: On demand Inclination and Azimuth.

**Borehole and Environmental Correction:**

| | | |
|---|---|---|
| Hole Size: | 6.125 in. | **Gamma Ray:** Corrected for mud weight, hole size and KCl concentration. |
| Mud Weight: | 9.80 ppg | **Resistivities:** Corrected for borehole temperature, hole size, drilling fluid resistivity |
| Borehole Temperature: | 214° F | and dielectric correction. |
| Drilling Fluid Resistivity: | 0.619 ohm-m @ 214° F | |
| KCl Concentration: | 0% | |

# M/LWD LOG COMMENTS

**Comment No. 1-1**

RECORDED DATA LOG

Start of MWD Drilling Run 01

Weatherford International provided 6 3/4 in. Directional, Gamma Ray, and Temperature for Run 01.

Run 01 started formation logging June 24, 2013 at 02:29 at 6760 MD / 6625 TVD. Weatherford International logged the 8.750 in. borehole.

The WBM at the start of drilling was 8.50 ppg.

**Comment No. 1-2**

End of MWD Drilling Run 01

Run 01 ended drilling formation June 24, 2013 at 23:14 at 7885 MD / 7415 TVD.

The WBM at the end of drilling was 10.25 ppg.

**Comment No. 2-1**

RECORDED DATA LOG

Start of LWD Drilling Run 02

Weatherford International provided 4 3/4 in. Directional, Resistivity, Spectral Azimuthal Gamma Ray, and Temperature for Run 02.

Run 02 started formation drilling June 26, 2013 at 17:18 at 7885 MD / 7415 TVD. Weatherford International logged the 6.125 in. borehole.

The WBM at the start of drilling was 9.70 ppg.

**Comment No. 2-2**

End of LWD Drilling Run 02

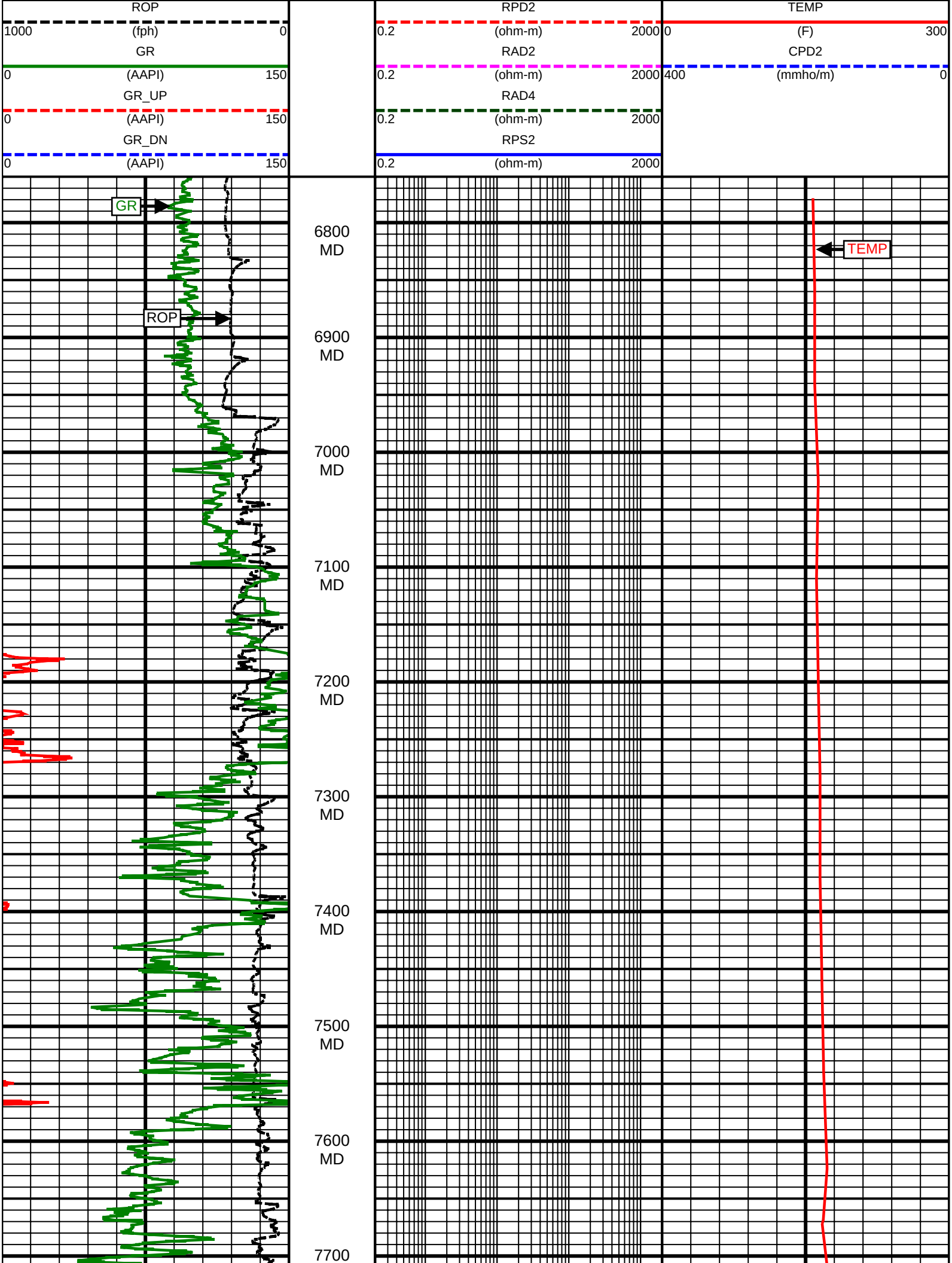
Run 02 ended drilling formation June 28, 2013 at 15:15 at 12035 MD / 7412 TVD.

The WBM at the end of drilling was 10.10 ppg.

## CURVE SPECIFICATIONS

| CURVE TYPE | MNEMONIC | UNITS | COMMENTS | CORRECTIONS |
|---|---|---|---|---|
| Rate of Penetration | ROP | fph | Rate of Penetration<br>3.0 ft window 0.5 ft Exponential Smoothing | None |
| Gamma Ray | GR | AAPI | Gamma Ray<br>3.0 ft window 0.5 ft Exponential Smoothing | See LWD Run Remarks |
| Gamma Ray Up | GR UP | AAPI | Azimuthal Gamma Ray<br>3.0 ft window 0.5 ft Exponential Smoothing | |
| Gamma Ray Down | GR DN | AAPI | Azimuthal Gamma Ray<br>3.0 ft window 0.5 ft Exponential Smoothing | |
| Deep Phase Resistivity | RPD2 | ohm-m | 2 MHz Deep Phase Resistivity<br>3.0 ft window 0.5 ft Exponential Smoothing | |
| Deep Attenuation Resistivity | RAD2 | ohm-m | 2 MHz Deep Attenuation Resistivity<br>3.0 ft window 0.5 ft Exponential Smoothing | |
| Deep Attenuation Resistivity | RAD4 | ohm-m | 400 kHz Deep Attenuation Resistivity<br>3.0 ft window 0.5 ft Exponential Smoothing | |
| Shallow Phase Resistivity | RPS2 | ohm-m | 2 MHz Shallow Phase Resistivity<br>3.0 ft window 0.5 ft Exponential Smoothing | |
| Deep Phase Conductivity | CPD2 | mmho/m | 2MHz Deep Phase Conductivity<br>3.0 ft window 0.5 ft Exponential Smoothing | |
| Temperature | TEMP | deg Fahrenheit | Borehole Temperature<br>3.0 ft window 0.5 ft Exponential Smoothing | None |

# 1 Inch - Measured Depth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(ohm-m)
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RAD2
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(ohm-m)
2000
RAD4
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(ohm-m)
2000
RPS2
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(ohm-m)
2000
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(F)
300
CPD2
400
(mmho/m)
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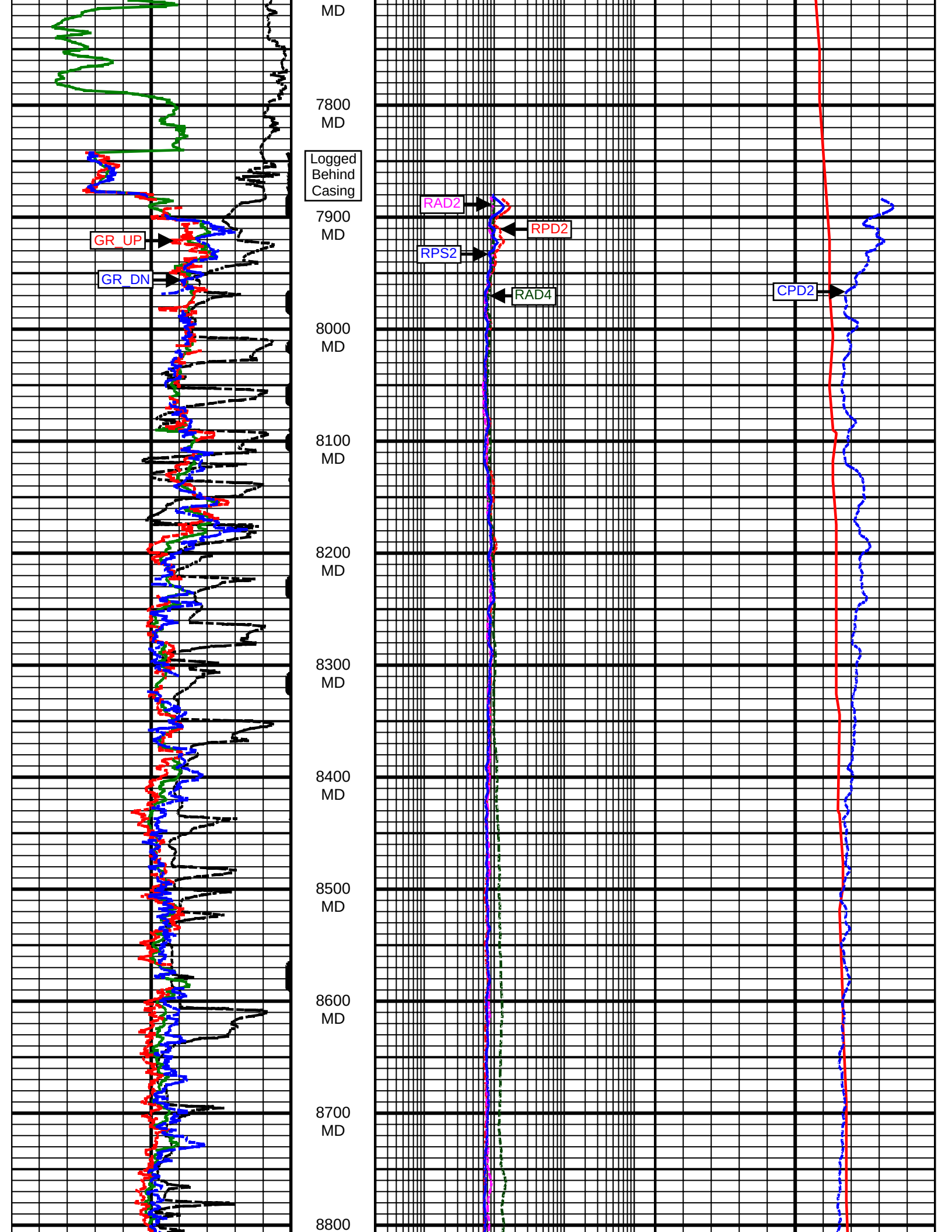
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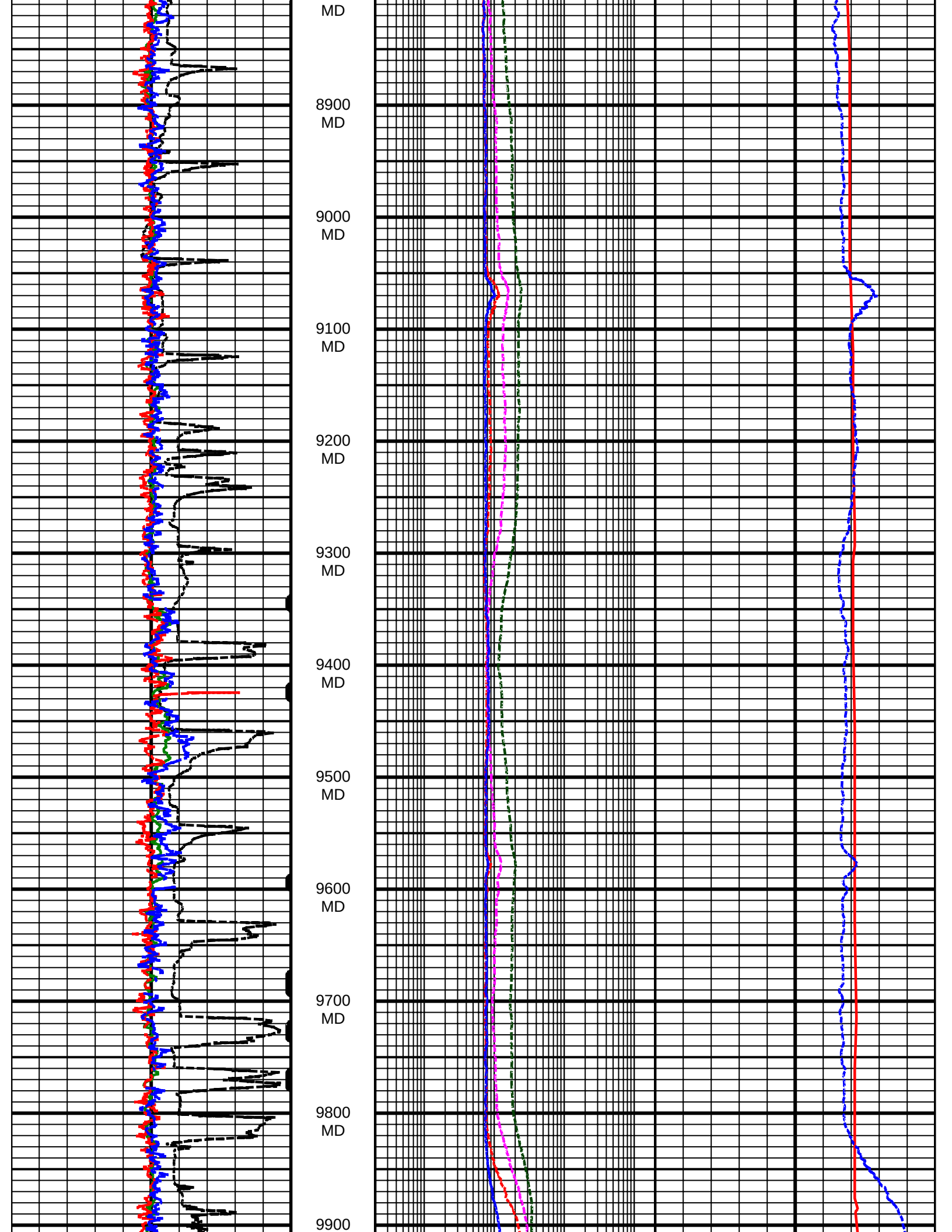
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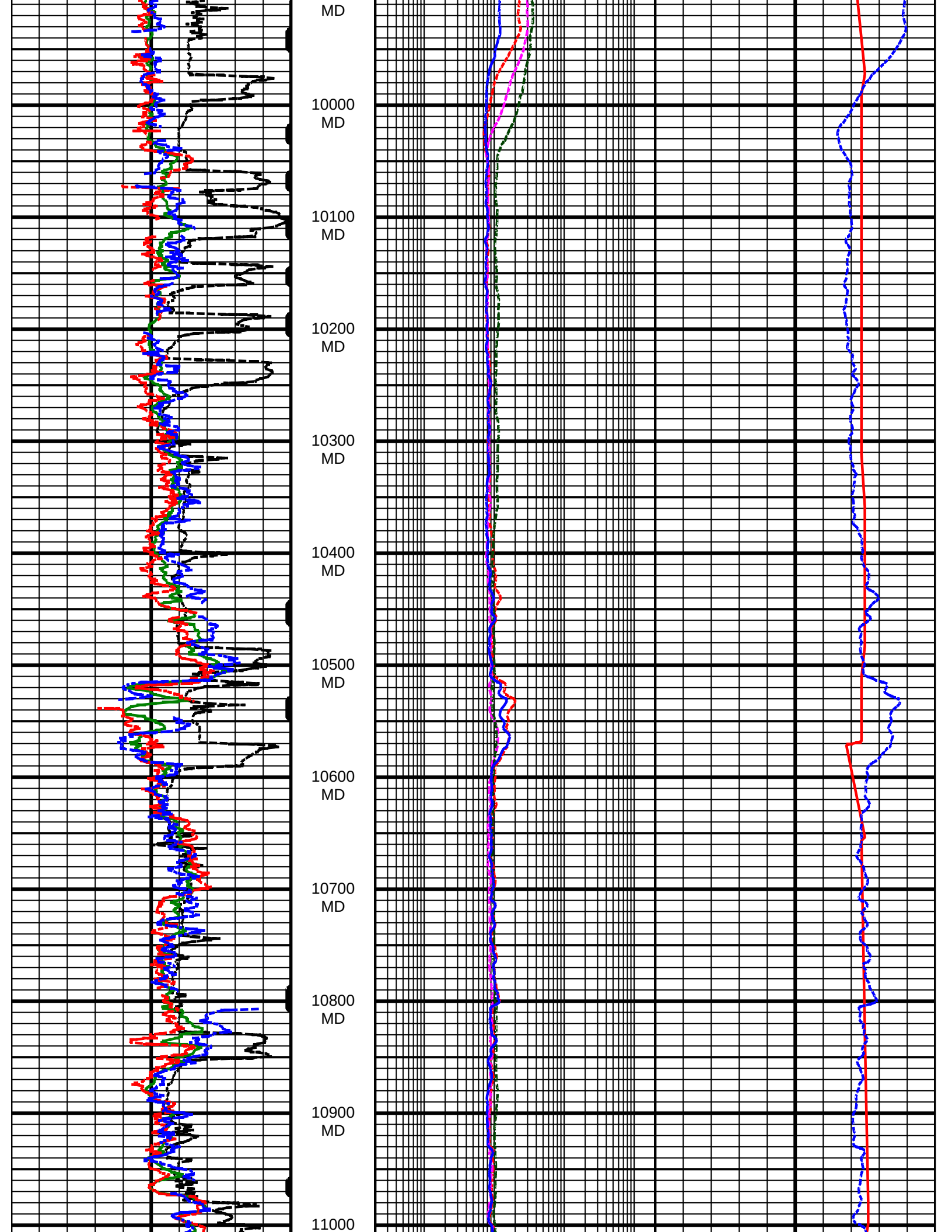
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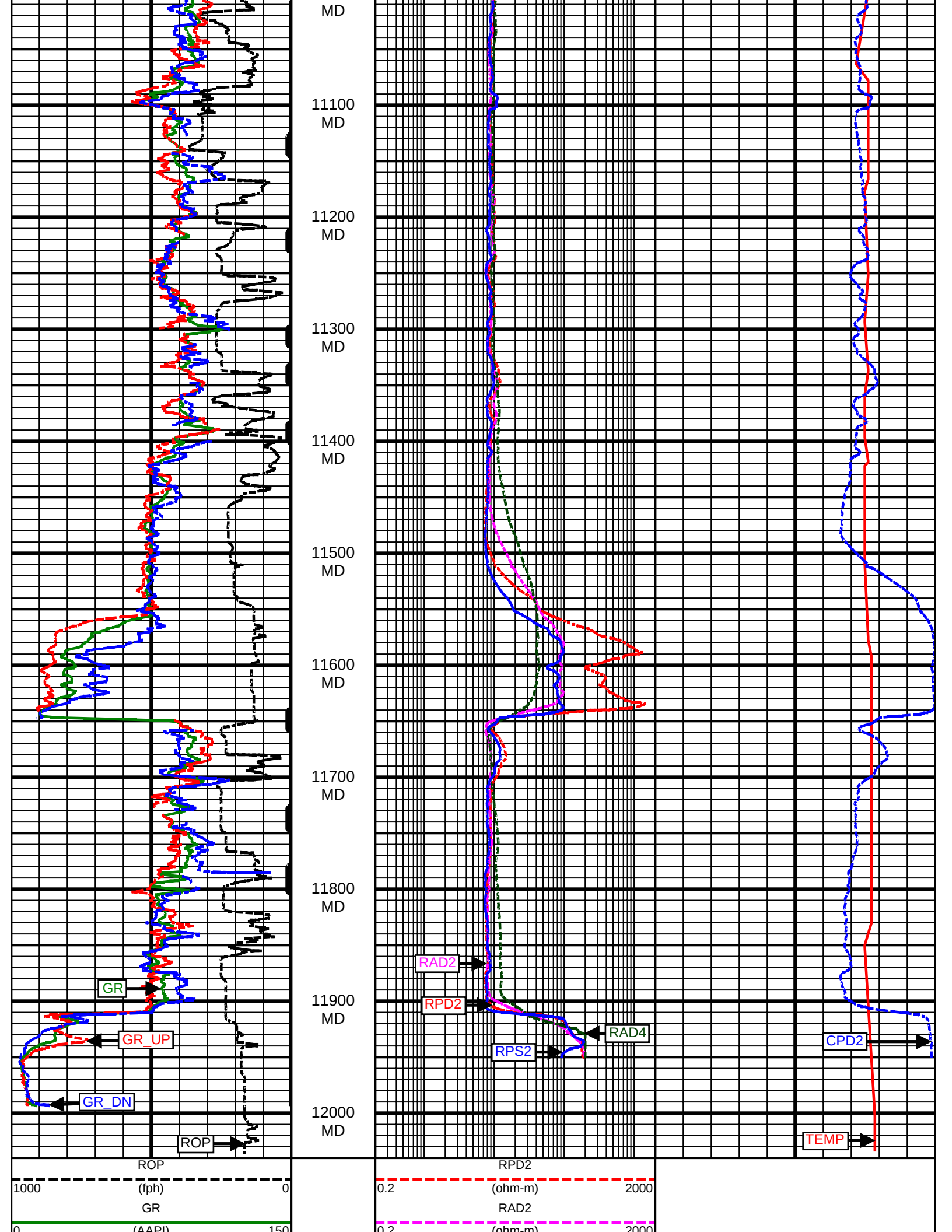
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ROP
RAD2
RPD2
RAD4
RPS2
CPD2
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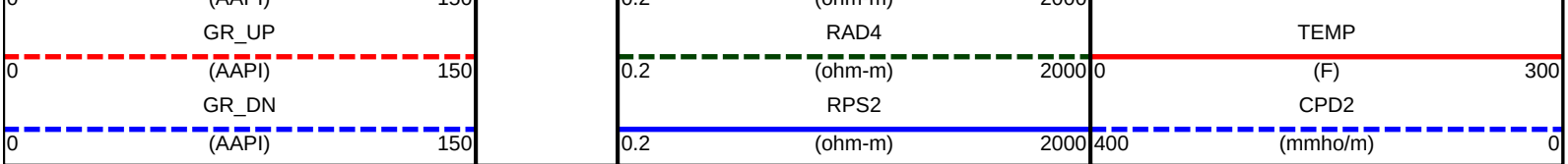
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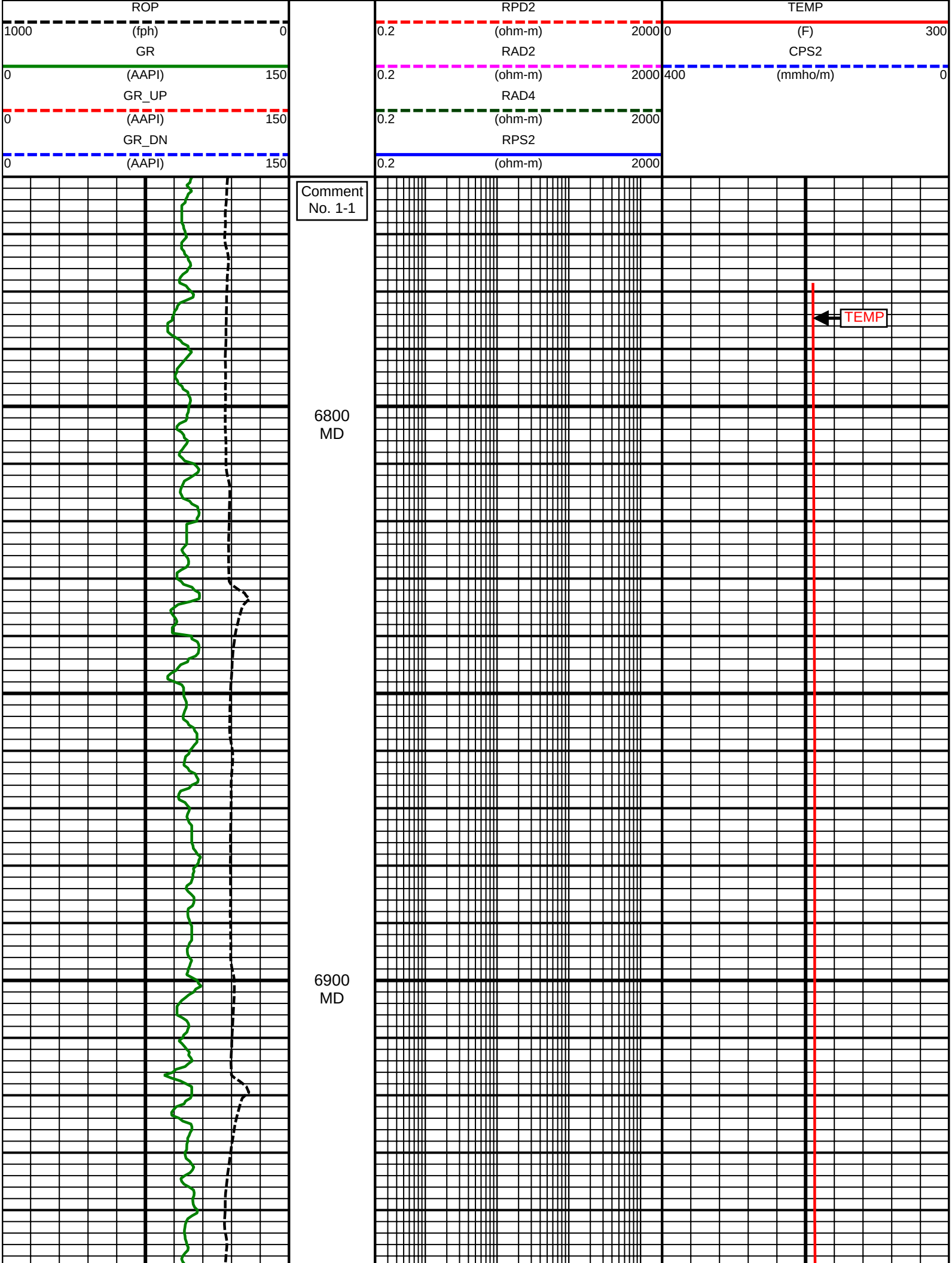
CPD2

# 5 Inch - Measured Depth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(ohm-m)
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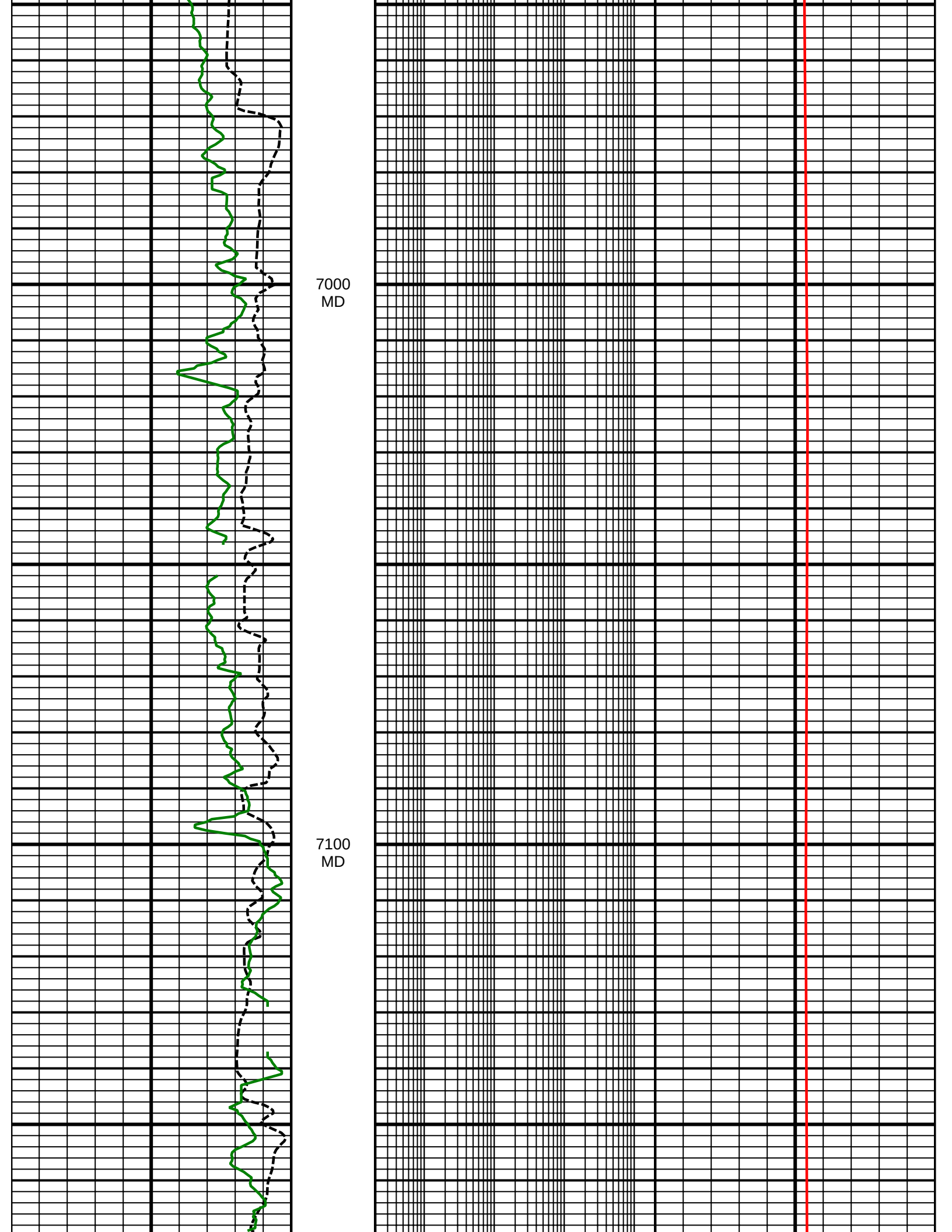
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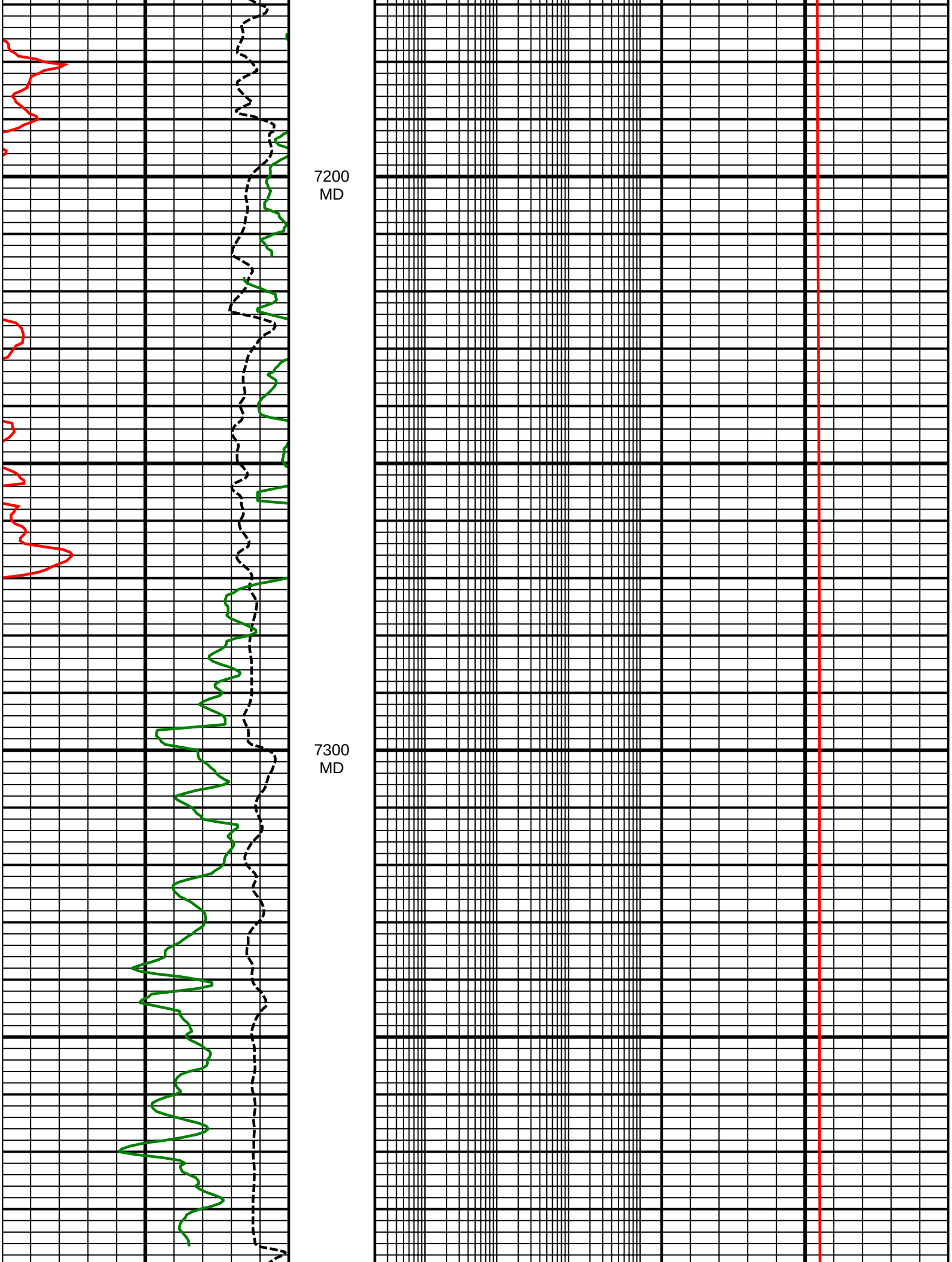
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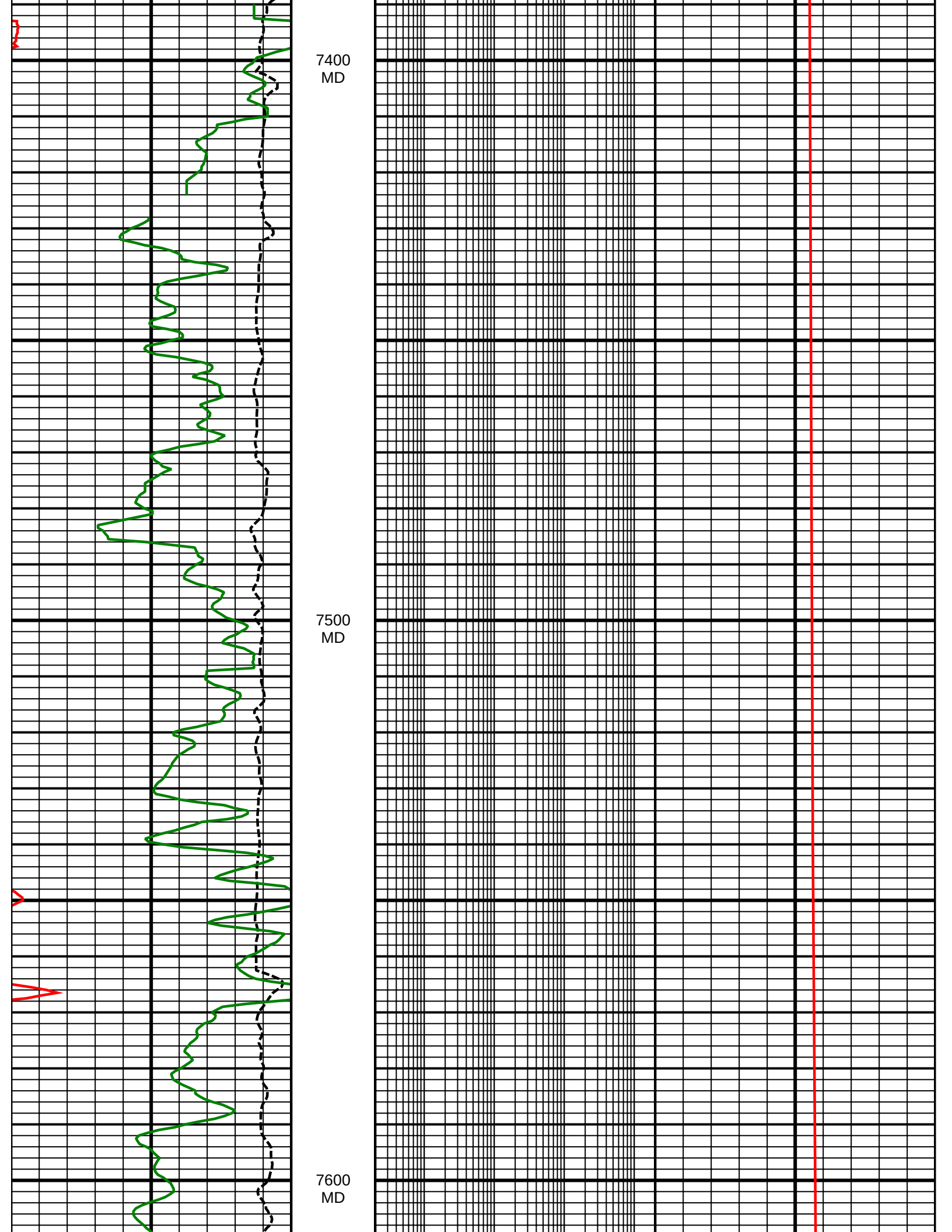
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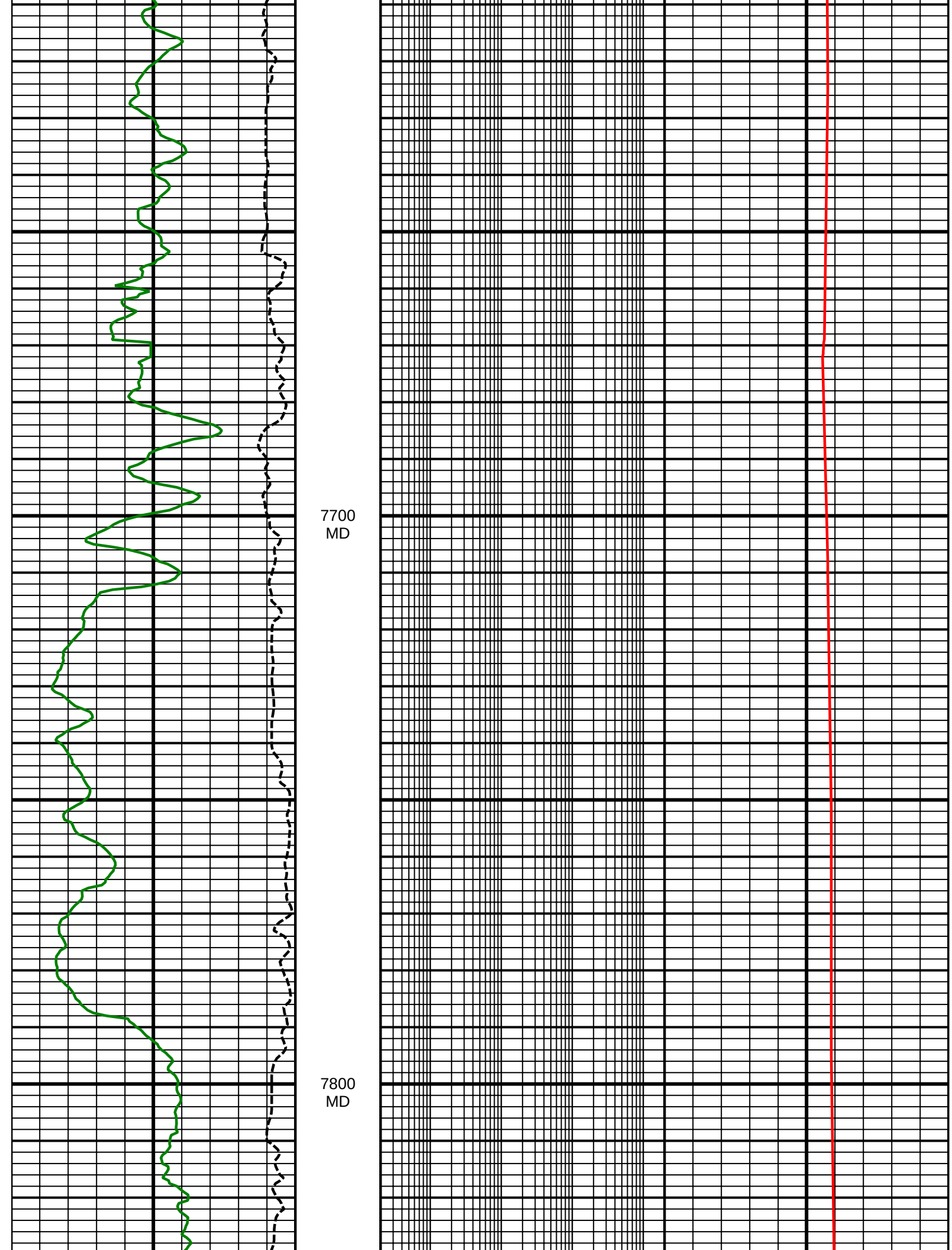
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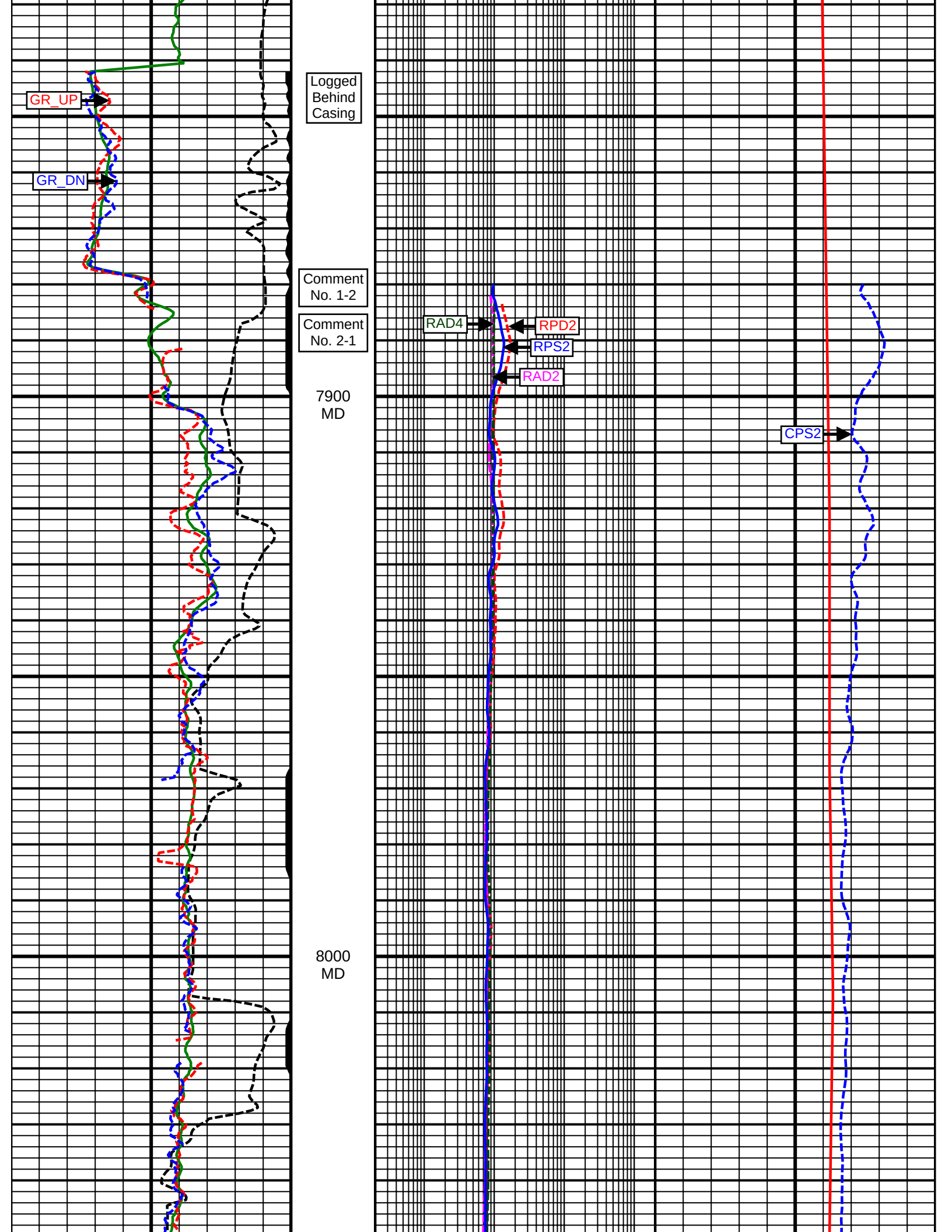
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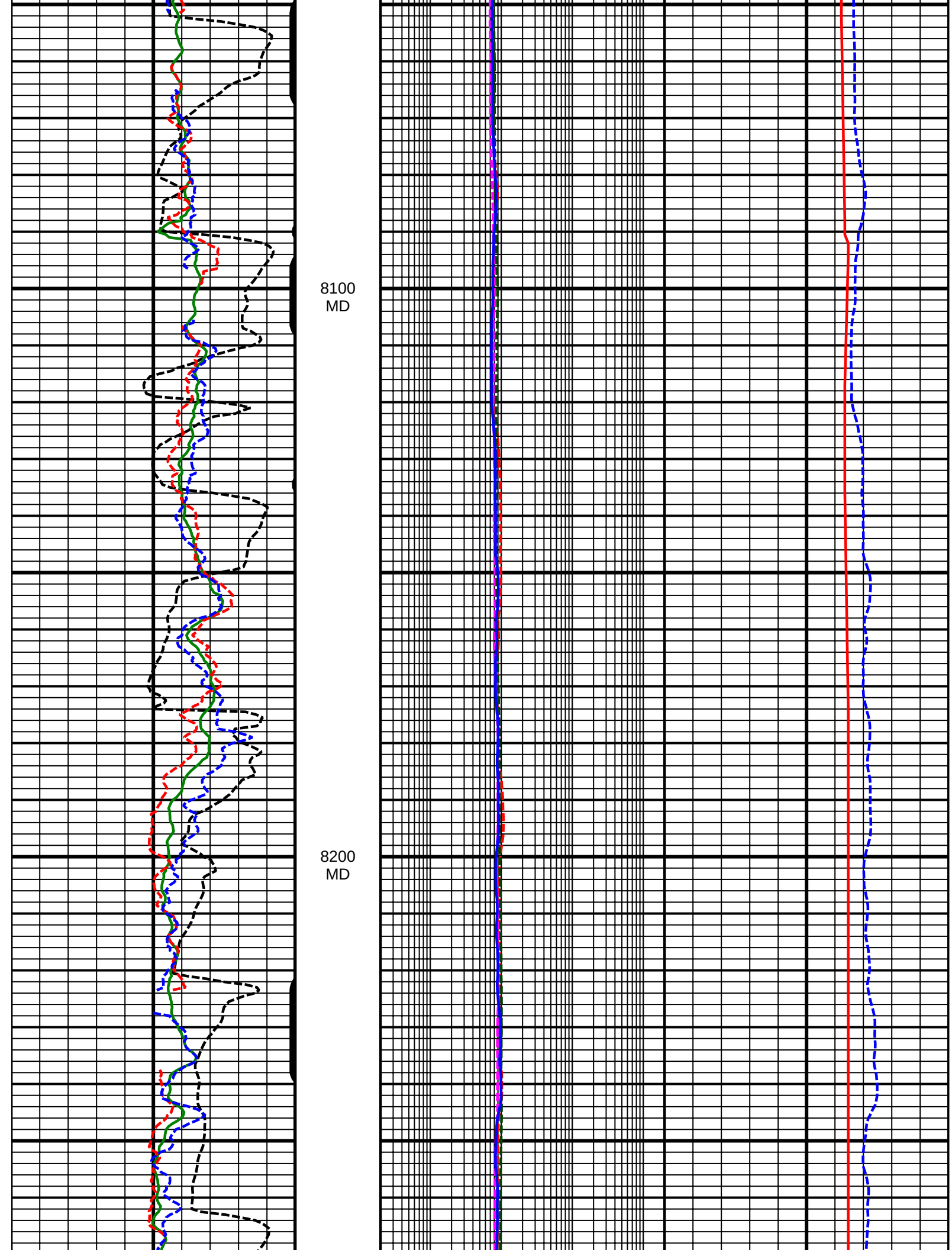
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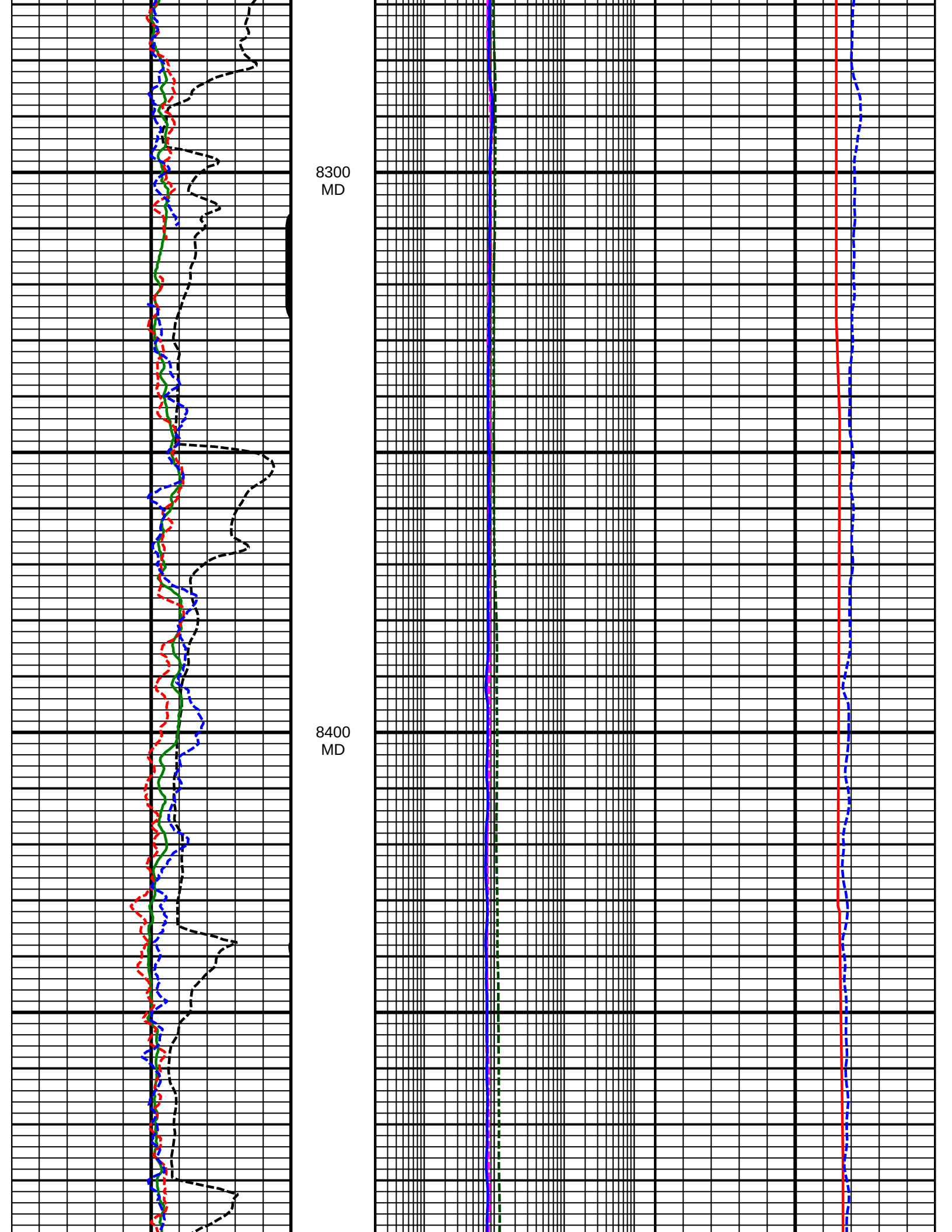
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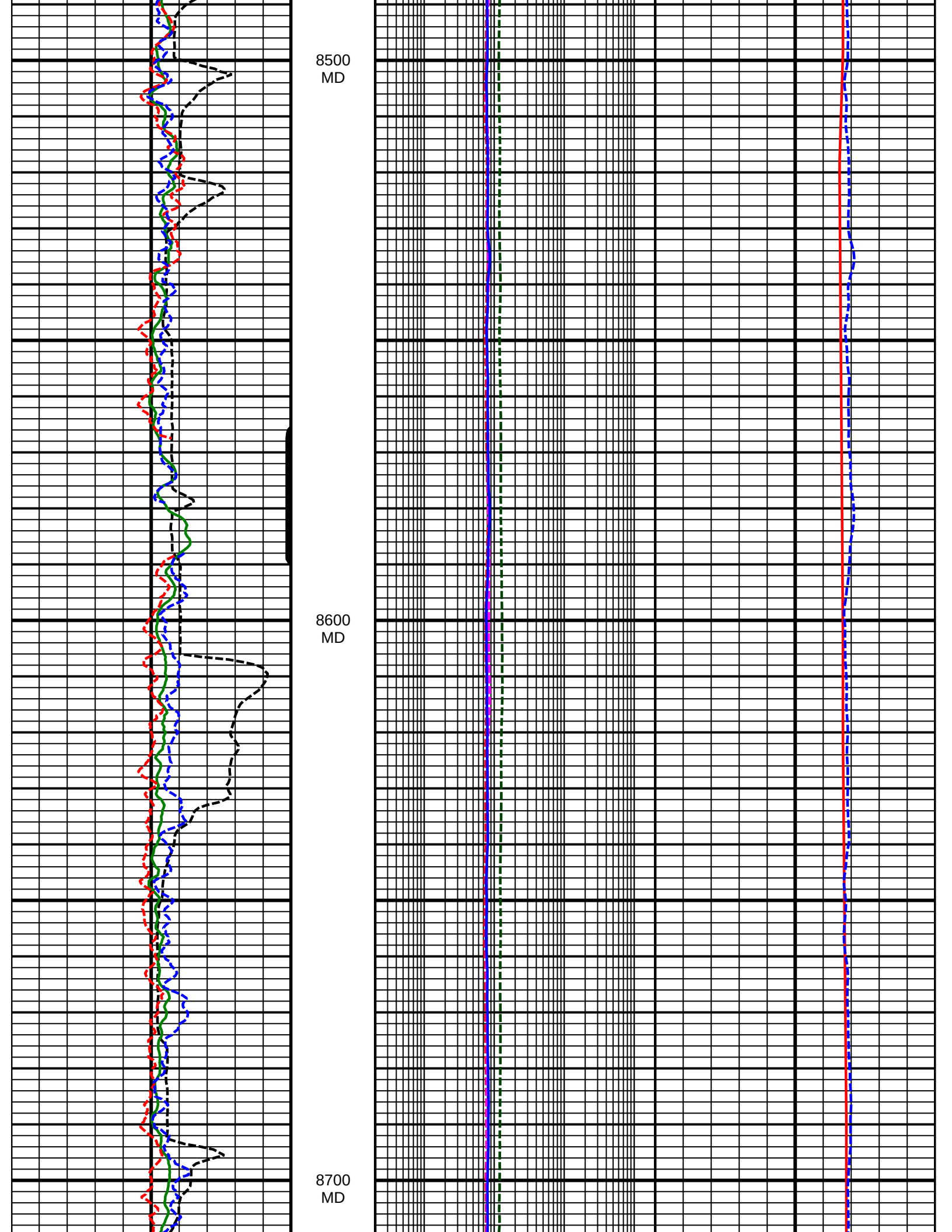
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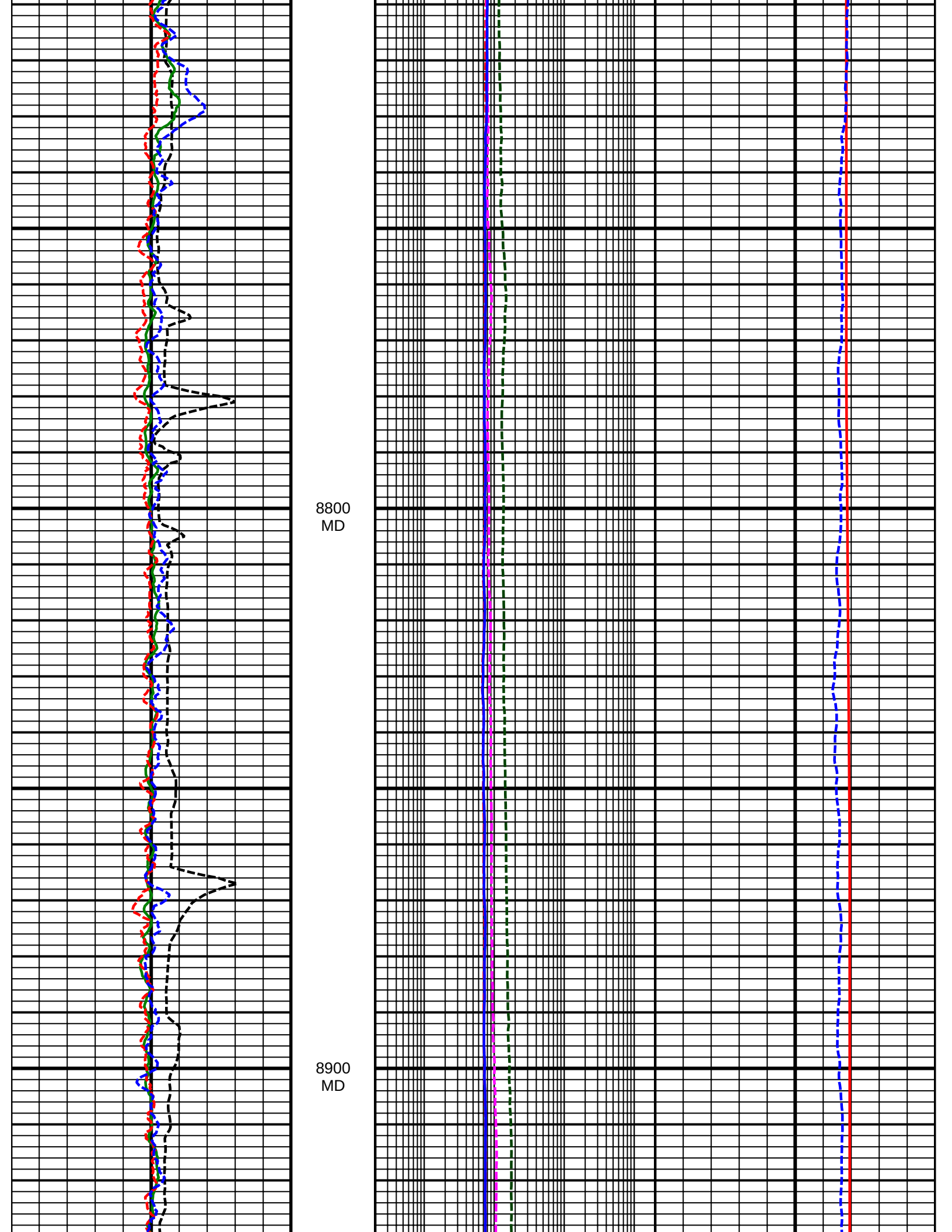
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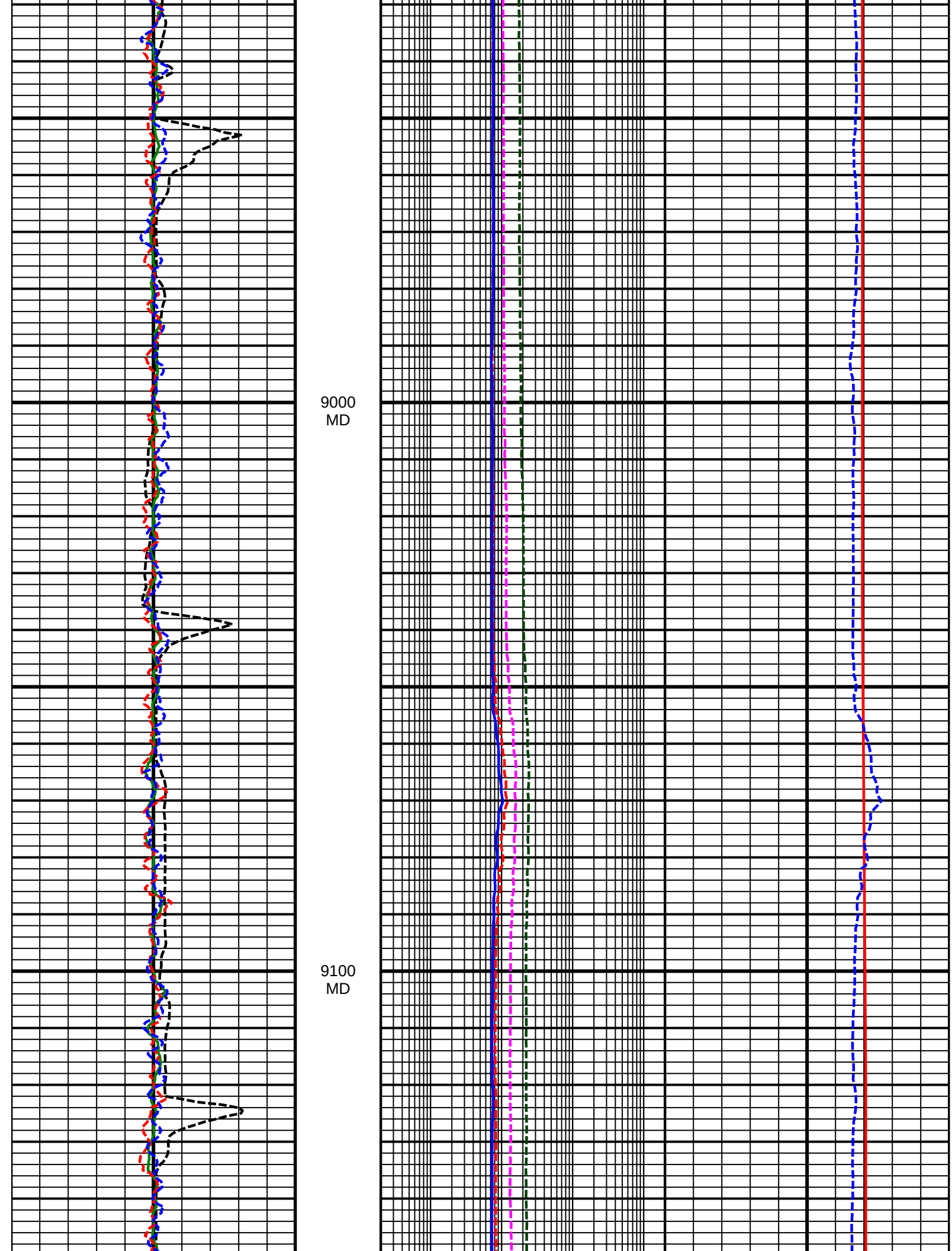
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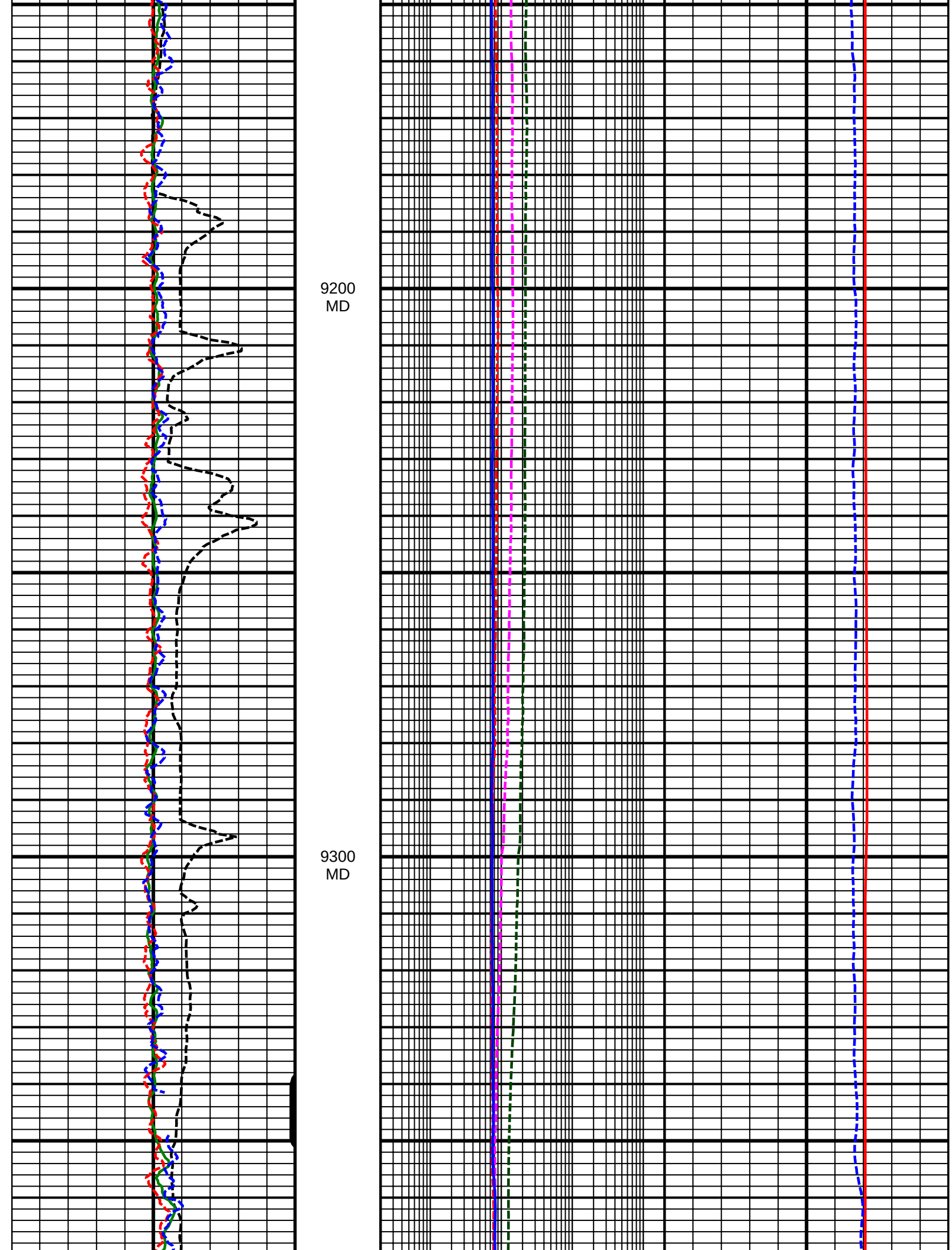
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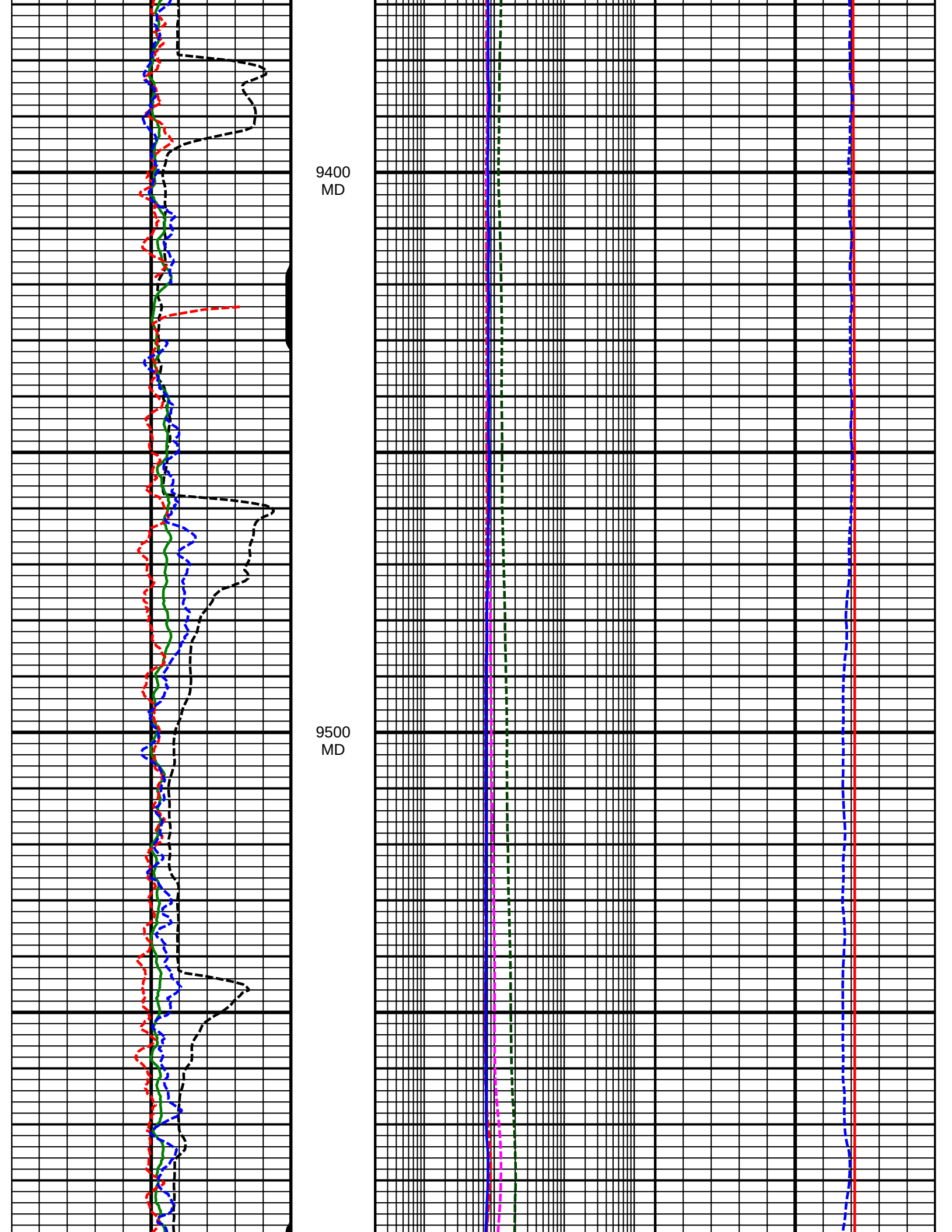
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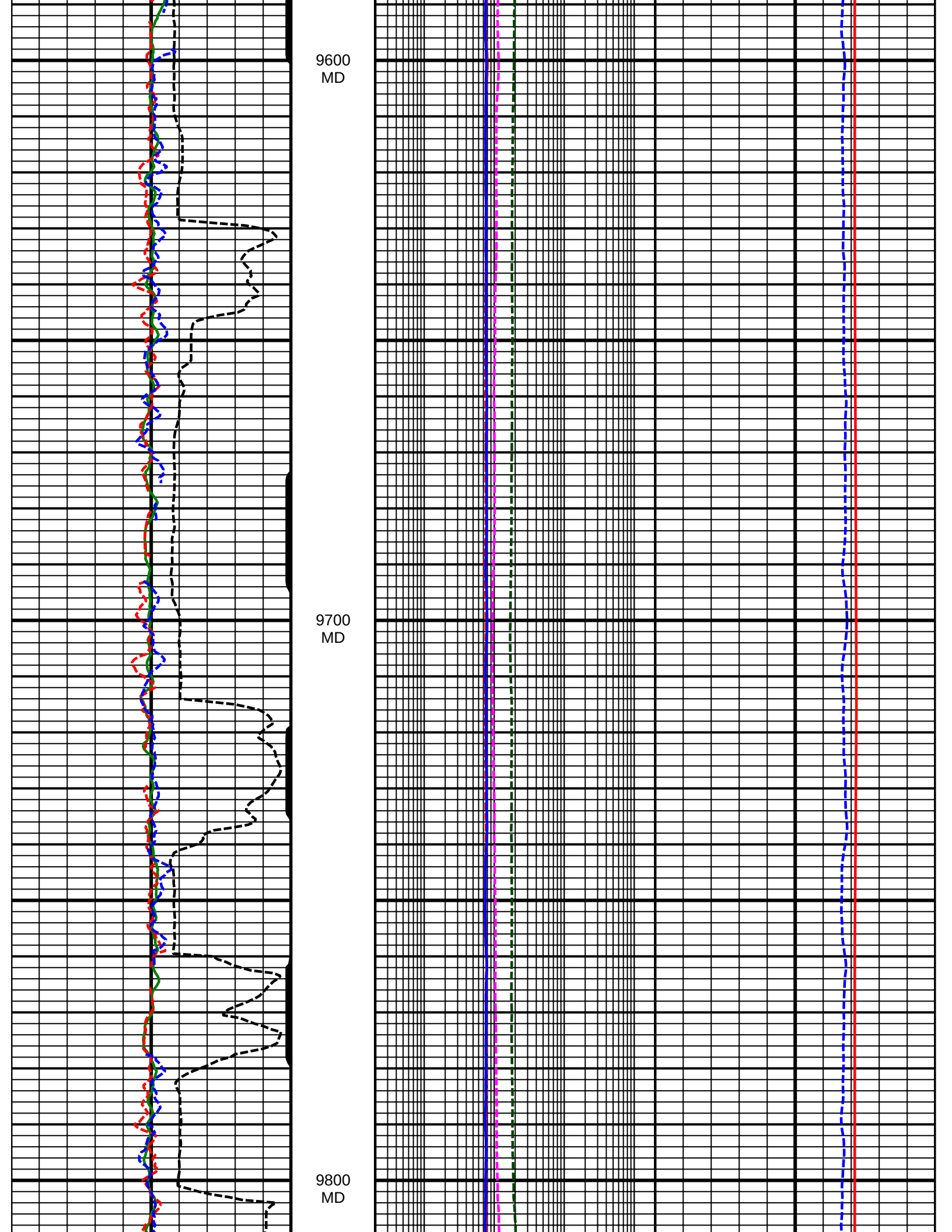
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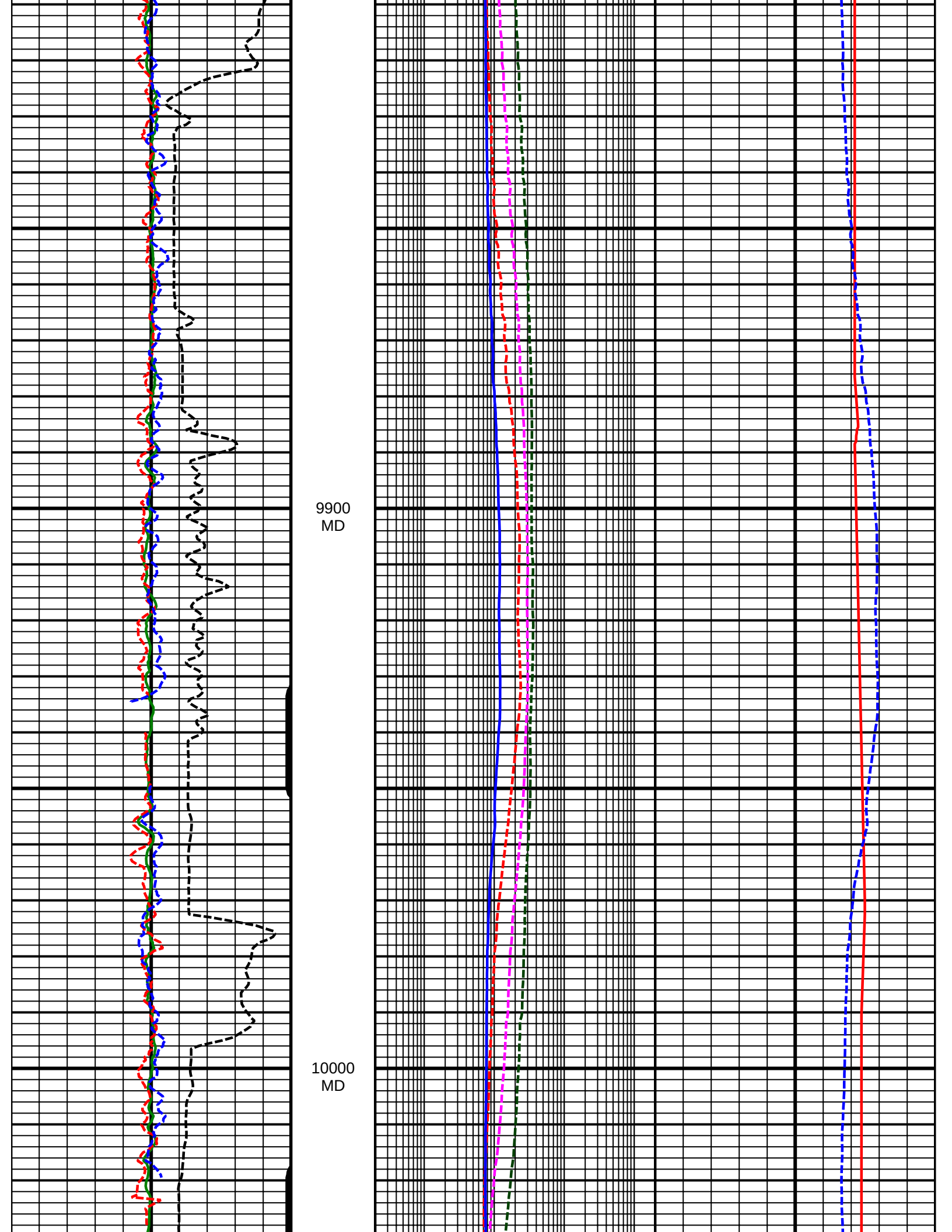
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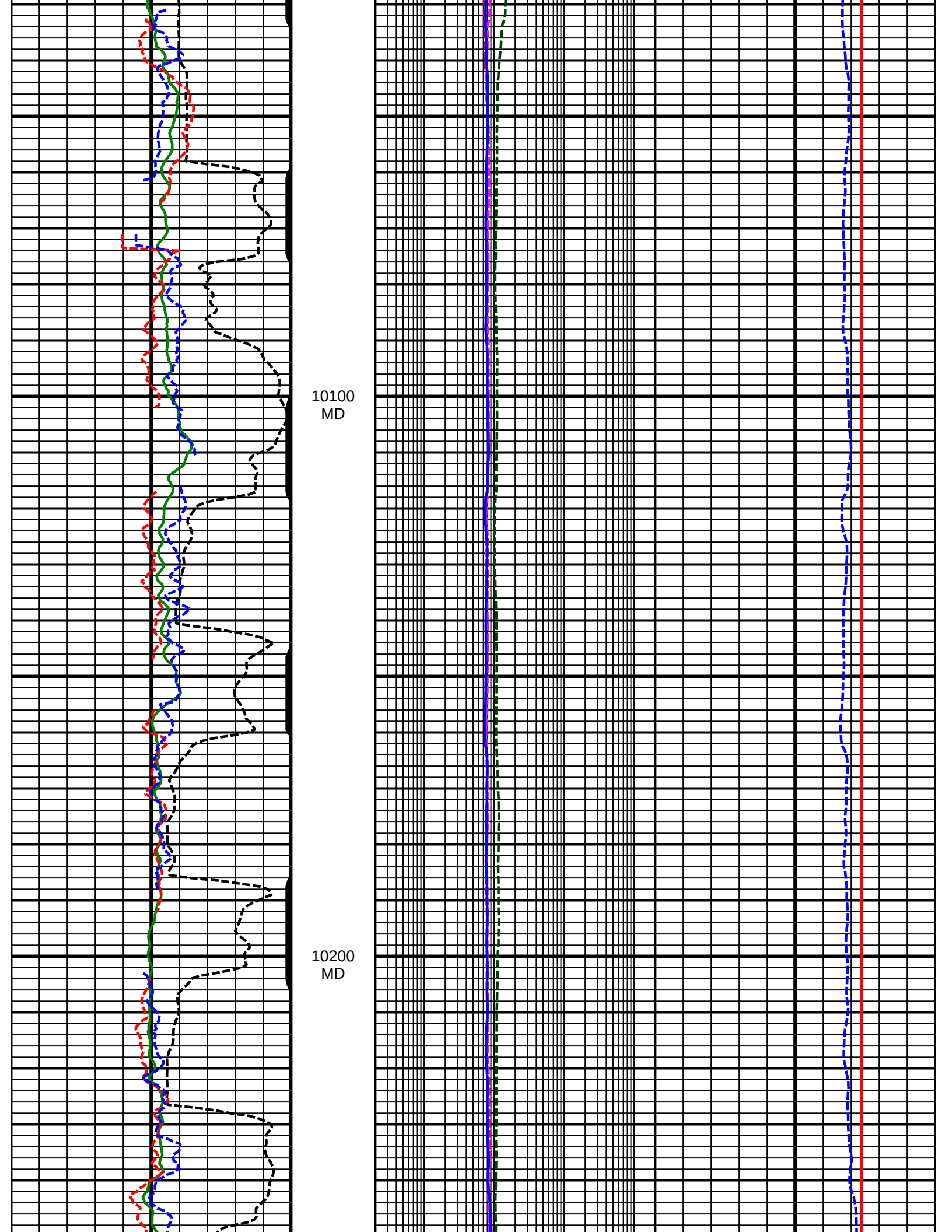
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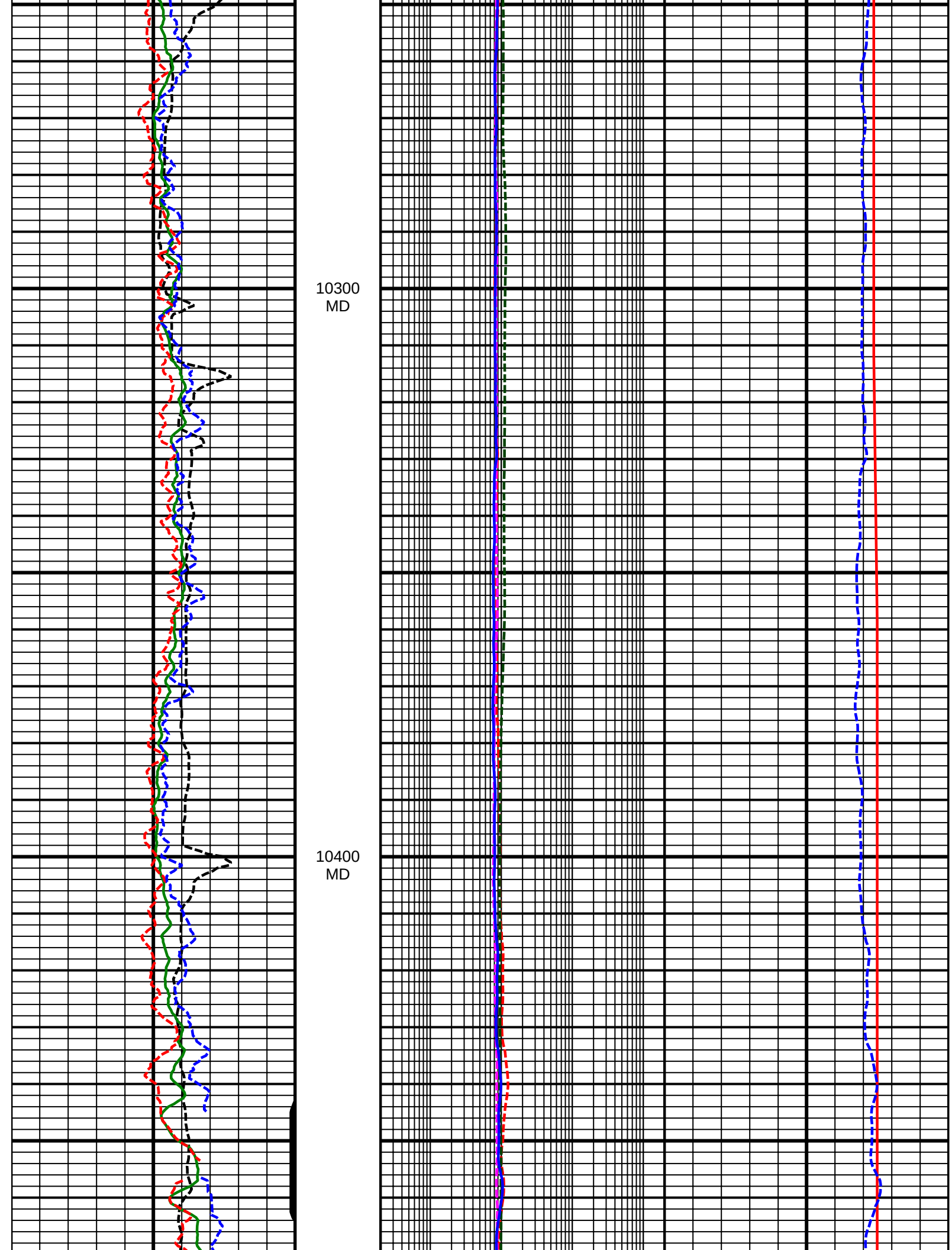
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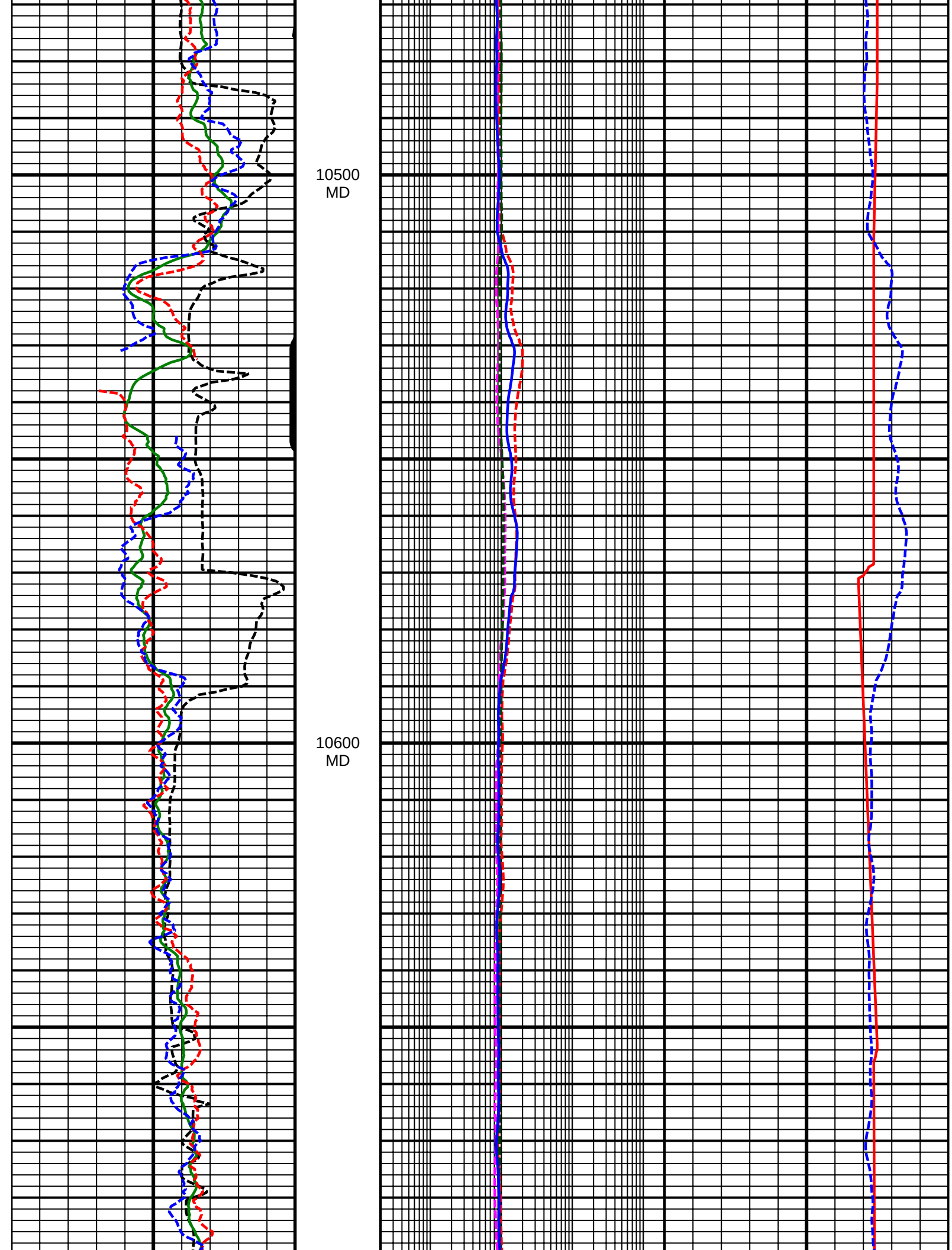
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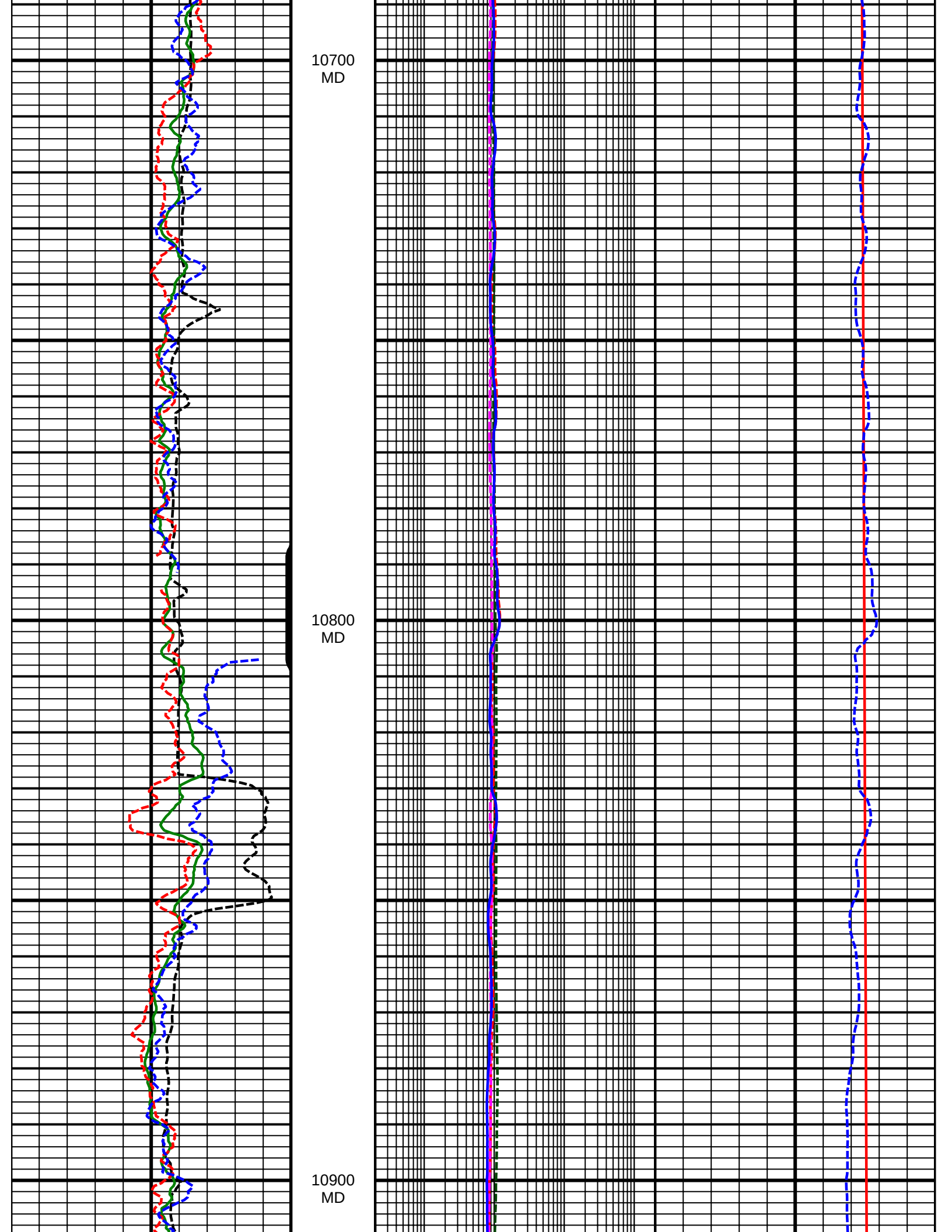
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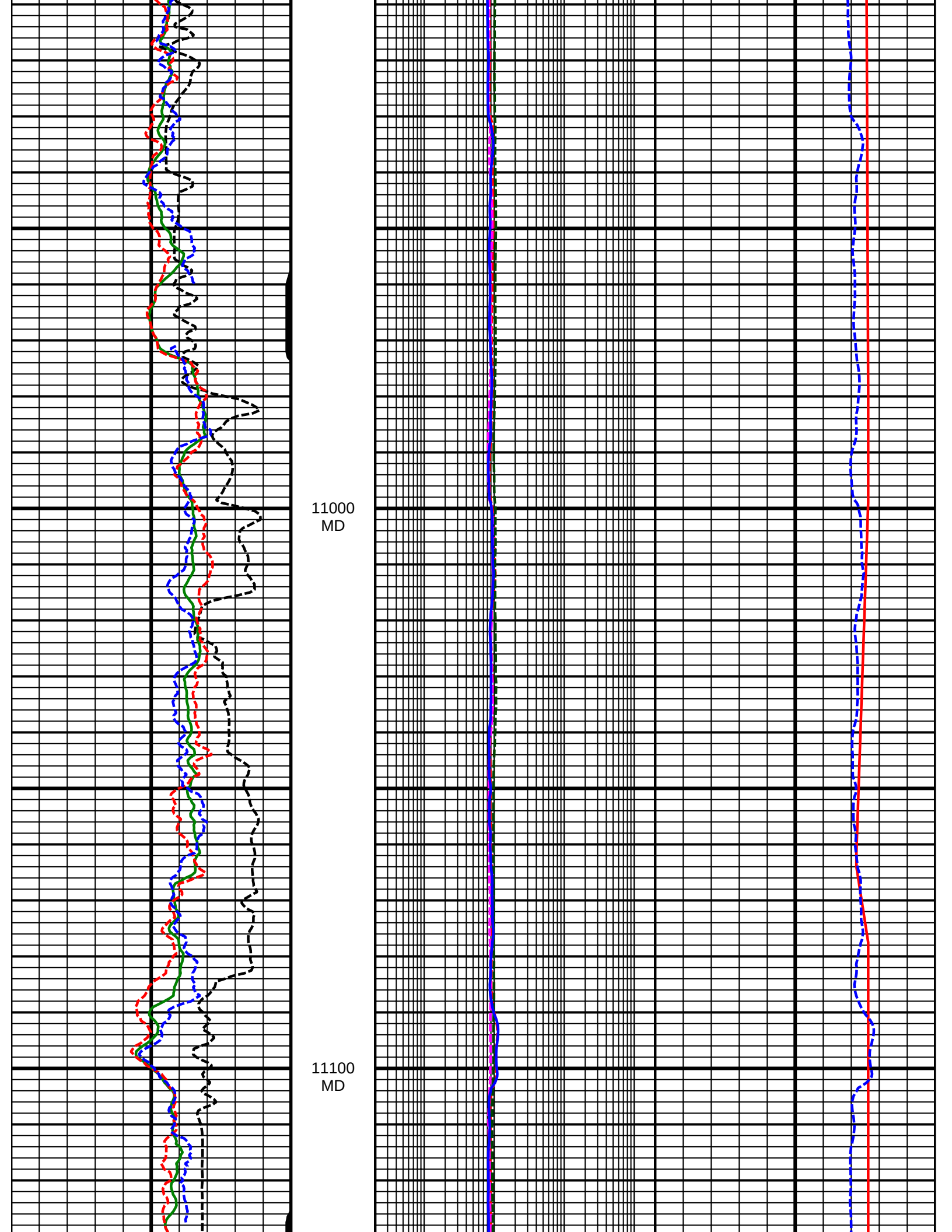
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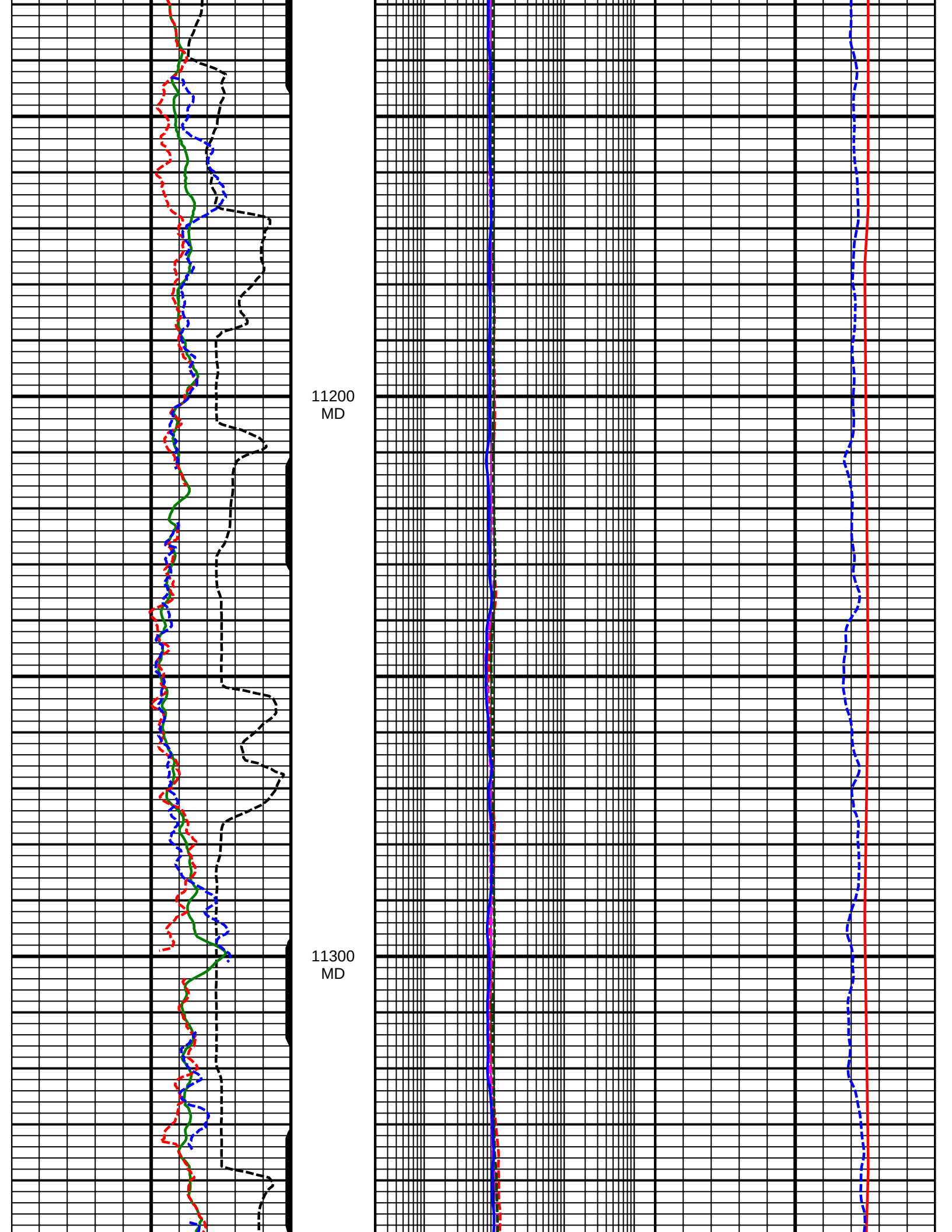
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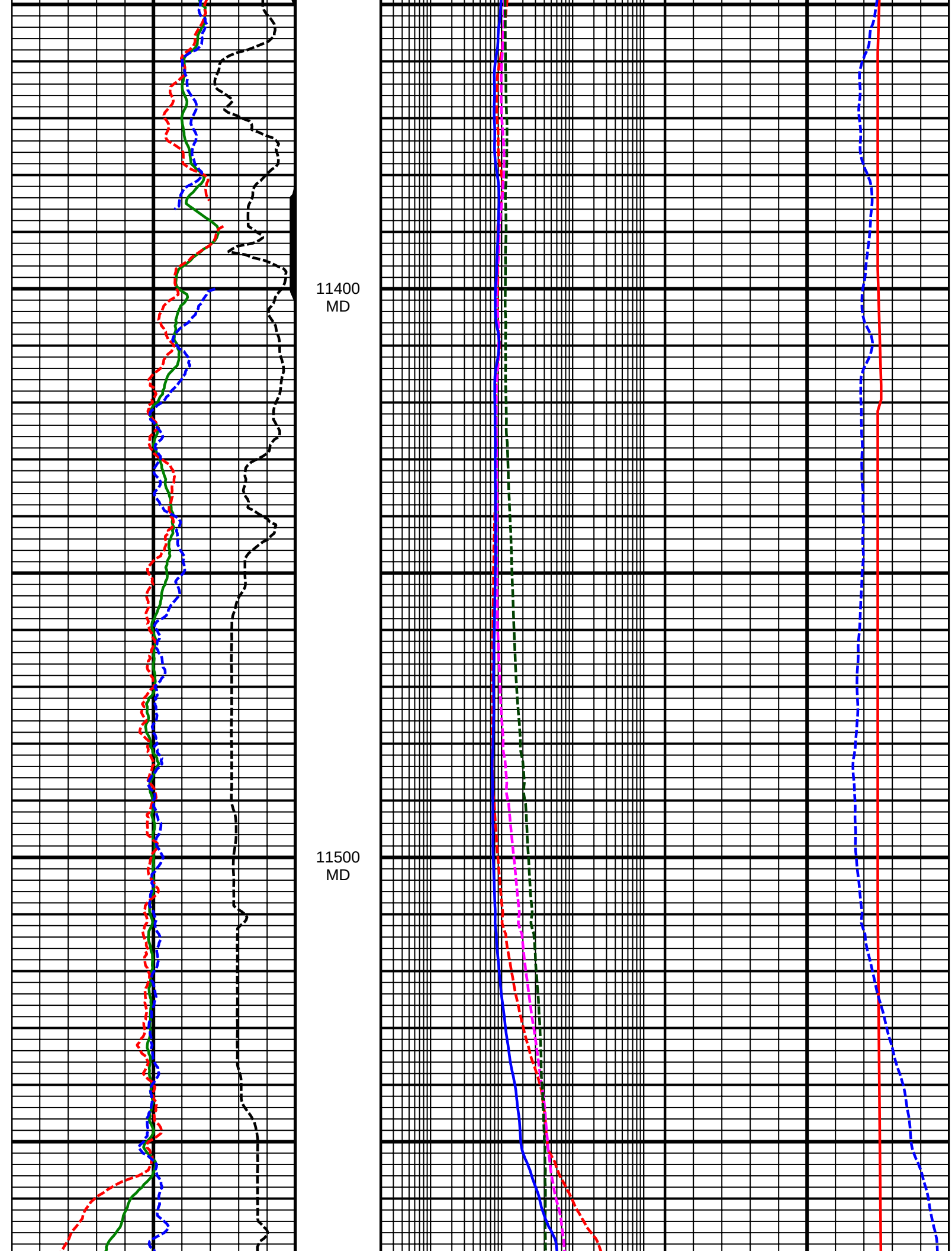
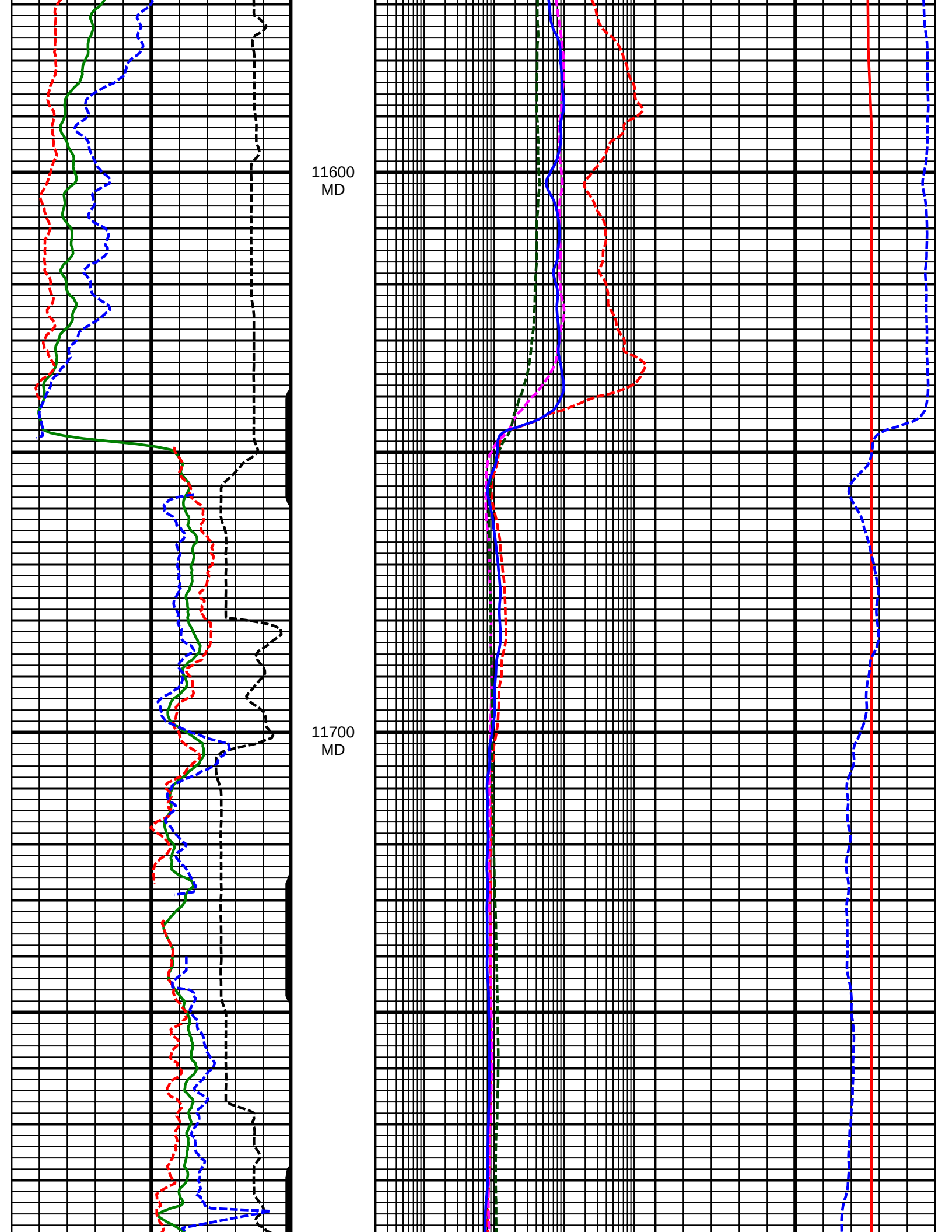
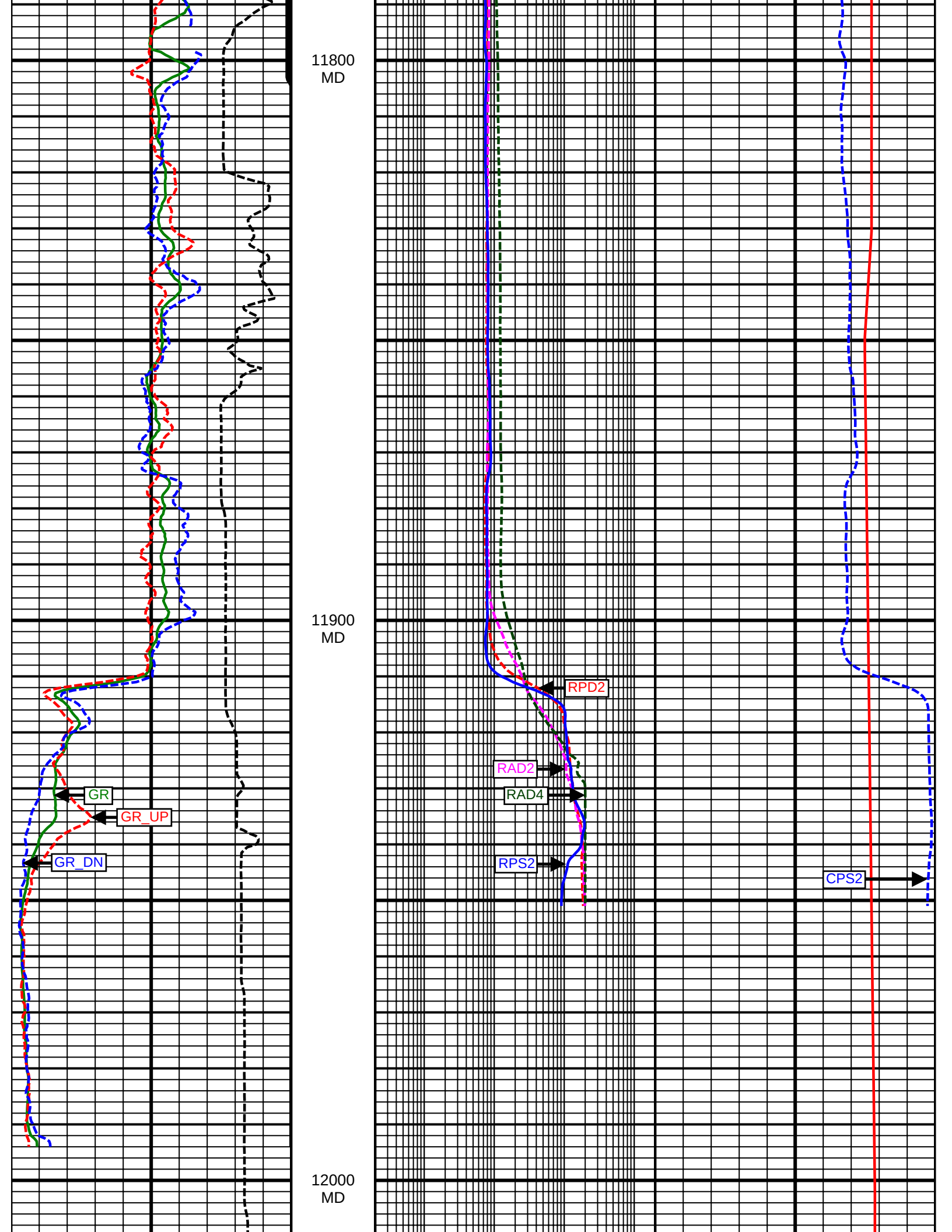
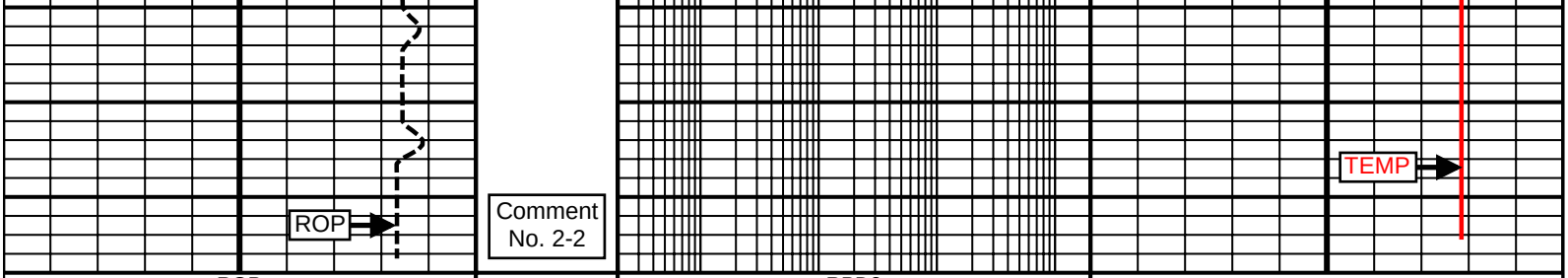

11400
MD
11500
MD


11600
MD
11700
MD


11800
MD
11900
MD
12000
MD
GR
GR_UP
GR_DN
RPD2
RAD2
RAD4
RPS2
CPS2




| ROP | | RPD2 | | |
|---|---|---|---|---|
| 1000 (fph) 0 | | 0.2 (ohm-m) 2000 | | |
| GR | | RAD2 | | |
| 0 (AAPI) 150 | | 0.2 (ohm-m) 2000 | | |
| GR_UP | | RAD4 | | TEMP |
| 0 (AAPI) 150 | | 0.2 (ohm-m) 2000 | | 0 (F) 300 |
| GR_DN | | RPS2 | | CPS2 |
| 0 (AAPI) 150 | | 0.2 (ohm-m) 2000 | | 400 (mmho/m) 0 |

# SURVEY

Survey Calculation Method: **Minimum Curvature**

| Magnetic Reference | Target Direction | Total Magnetic Field | Magnetic Dip Angle | Magnetic Declination | Grid Convergence | Total Correction |
|---|---|---|---|---|---|---|
| **True North** | **179.66 deg** | **52724 nT** | **66.78 deg** | **8.60 deg** | **0.00 deg** | **8.60 deg** |

| | Depth | INC | AZ | TVD | NS | EW |
|---|---|---|---|---|---|---|
| **Survey Tie-On** | **895.00 ft** | **0.27 deg** | **324.33 deg** | **895.00 ft** | **0.89 ft** | **-1.43 ft** |

| Depth (ft) | Inc (deg) | Azm (deg) | TVD (ft) | Well Head NS (ft) | Well Head EW (ft) | VSect (ft) | Dogleg (deg/100ft) |
|---|---|---|---|---|---|---|---|
| 1070.00 | 0.31 | 329.50 | 1070.00 | 1.63 | -1.91 | -1.64 | 0.03 |
| 1163.00 | 2.60 | 70.00 | 1162.97 | 2.57 | -0.06 | -2.57 | 2.88 |
| 1255.00 | 3.68 | 66.28 | 1254.83 | 4.47 | 4.61 | -4.45 | 1.19 |
| 1349.00 | 5.95 | 64.54 | 1348.49 | 7.78 | 11.77 | -7.71 | 2.42 |
| 1441.00 | 7.22 | 70.22 | 1439.88 | 11.79 | 21.52 | -11.66 | 1.55 |
| 1534.00 | 8.66 | 76.27 | 1531.99 | 15.43 | 33.82 | -15.23 | 1.79 |
| 1627.00 | 10.30 | 82.61 | 1623.72 | 18.16 | 48.87 | -17.87 | 2.09 |
| 1719.00 | 10.82 | 71.62 | 1714.17 | 21.94 | 65.22 | -21.55 | 2.26 |
| 1812.00 | 11.56 | 67.19 | 1805.40 | 28.31 | 82.09 | -27.82 | 1.22 |
| 1904.00 | 12.87 | 59.38 | 1895.32 | 37.10 | 99.41 | -36.51 | 2.29 |
| 1999.00 | 14.15 | 58.04 | 1987.69 | 48.63 | 118.37 | -47.93 | 1.39 |
| 2089.00 | 14.46 | 58.06 | 2074.90 | 60.40 | 137.24 | -59.59 | 0.34 |
| 2180.00 | 14.94 | 58.52 | 2162.92 | 72.54 | 156.88 | -71.61 | 0.54 |
| 2271.00 | 15.76 | 58.99 | 2250.68 | 85.03 | 177.48 | -83.98 | 0.91 |
| 2362.00 | 16.76 | 58.94 | 2338.04 | 98.17 | 199.31 | -96.98 | 1.10 |
| 2452.00 | 16.30 | 56.00 | 2424.32 | 111.93 | 220.90 | -110.61 | 1.06 |
| 2543.00 | 16.54 | 60.29 | 2511.61 | 125.49 | 242.73 | -124.04 | 1.36 |
| 2634.00 | 17.00 | 63.97 | 2598.74 | 137.74 | 265.94 | -136.16 | 1.27 |
| 2725.00 | 17.49 | 68.16 | 2685.65 | 148.67 | 290.59 | -146.94 | 1.47 |
| 2816.00 | 16.87 | 65.96 | 2772.59 | 159.14 | 315.34 | -157.26 | 0.99 |
| 2906.00 | 17.29 | 70.49 | 2858.63 | 168.92 | 339.87 | -166.90 | 1.55 |
| 2997.00 | 19.25 | 74.43 | 2945.04 | 177.47 | 367.07 | -175.29 | 2.54 |
| 3058.00 | 19.81 | 73.64 | 3002.53 | 183.08 | 386.68 | -180.78 | 1.01 |
| 3149.00 | 22.54 | 70.54 | 3087.38 | 193.23 | 417.93 | -190.75 | 3.24 |
| 3268.00 | 21.98 | 69.67 | 3197.51 | 208.57 | 460.31 | -205.83 | 0.55 |
| 3354.00 | 20.77 | 70.38 | 3277.59 | 219.28 | 489.77 | -216.37 | 1.44 |
| 3439.00 | 22.59 | 69.05 | 3356.58 | 230.18 | 519.22 | -227.10 | 2.22 |
| 3525.00 | 22.39 | 63.90 | 3436.05 | 243.29 | 549.35 | -240.03 | 2.30 |
| 3610.00 | 20.48 | 60.55 | 3515.17 | 257.73 | 576.84 | -254.30 | 2.67 |
| 3695.00 | 20.08 | 60.65 | 3594.90 | 272.19 | 602.51 | -268.61 | 0.47 |
| 3781.00 | 20.25 | 58.64 | 3675.63 | 287.17 | 628.09 | -283.44 | 0.83 |
| 3866.00 | 18.88 | 56.38 | 3755.72 | 302.44 | 652.10 | -298.57 | 1.84 |
| 3952.00 | 17.30 | 54.73 | 3837.47 | 317.53 | 674.13 | -313.53 | 1.93 |
| 4037.00 | 16.89 | 57.86 | 3918.71 | 331.40 | 694.91 | -327.27 | 1.18 |
| 4122.00 | 15.73 | 59.31 | 4000.29 | 343.85 | 715.27 | -339.60 | 1.45 |
| 4208.00 | 14.81 | 57.94 | 4083.25 | 355.63 | 734.61 | -351.27 | 1.15 |
| 4293.00 | 14.36 | 58.36 | 4165.51 | 366.93 | 752.79 | -362.46 | 0.54 |
| 4379.00 | 13.23 | 60.64 | 4249.03 | 377.35 | 770.45 | -372.77 | 1.46 |
| 4464.00 | 10.07 | 59.75 | 4332.27 | 385.87 | 785.35 | -381.20 | 3.72 |
| 4550.00 | 7.58 | 54.91 | 4417.25 | 392.91 | 796.49 | -388.18 | 3.02 |
| 4635.00 | 6.53 | 51.97 | 4501.60 | 399.12 | 804.88 | -394.33 | 1.31 |
| 4720.00 | 5.79 | 57.77 | 4586.11 | 404.38 | 812.32 | -399.55 | 1.14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4806.00 | 5.50 | 58.47 | 4671.69 | 408.85 | 819.50 | -403.98 | 0.35 |
| 4891.00 | 4.35 | 62.44 | 4756.38 | 412.47 | 825.83 | -407.56 | 1.41 |
| 4977.00 | 2.26 | 69.62 | 4842.23 | 414.57 | 830.31 | -409.64 | 2.47 |
| 5062.00 | 1.55 | 99.98 | 4927.19 | 414.95 | 833.01 | -410.00 | 1.42 |
| 5148.00 | 1.01 | 183.04 | 5013.17 | 414.00 | 834.12 | -409.04 | 2.03 |
| 5233.00 | 0.66 | 178.64 | 5098.16 | 412.76 | 834.09 | -407.80 | 0.42 |
| 5318.00 | 0.84 | 167.34 | 5183.15 | 411.66 | 834.24 | -406.70 | 0.27 |
| 5403.00 | 0.70 | 153.76 | 5268.15 | 410.59 | 834.60 | -405.63 | 0.27 |
| 5489.00 | 0.49 | 166.35 | 5354.14 | 409.76 | 834.92 | -404.80 | 0.29 |
| 5574.00 | 0.49 | 217.89 | 5439.14 | 409.12 | 834.79 | -404.16 | 0.50 |
| 5659.00 | 1.05 | 244.77 | 5524.13 | 408.50 | 833.86 | -403.54 | 0.77 |
| 5829.00 | 1.41 | 238.53 | 5694.09 | 406.74 | 830.67 | -401.81 | 0.23 |
| 5999.00 | 0.30 | 266.87 | 5864.07 | 405.63 | 828.44 | -400.70 | 0.68 |
| 6170.00 | 0.99 | 278.63 | 6035.06 | 405.83 | 826.53 | -400.91 | 0.41 |
| 6341.00 | 0.97 | 281.33 | 6206.03 | 406.33 | 823.65 | -401.44 | 0.03 |
| 6512.00 | 0.98 | 304.14 | 6377.01 | 407.44 | 821.02 | -402.56 | 0.23 |
| 6683.00 | 1.19 | 307.92 | 6547.98 | 409.35 | 818.41 | -404.48 | 0.13 |
| 6853.00 | 1.16 | 326.86 | 6717.94 | 411.87 | 816.08 | -407.02 | 0.23 |
| 6939.00 | 1.14 | 324.55 | 6803.93 | 413.30 | 815.10 | -408.46 | 0.06 |
| 7024.00 | 8.14 | 208.25 | 6888.65 | 408.68 | 811.76 | -403.85 | 10.24 |
| 7110.00 | 16.32 | 189.96 | 6972.66 | 391.38 | 806.78 | -386.59 | 10.41 |
| 7195.00 | 26.49 | 185.57 | 7051.70 | 360.67 | 802.86 | -355.90 | 12.10 |
| 7281.00 | 34.19 | 183.91 | 7125.86 | 317.40 | 799.35 | -312.66 | 9.01 |
| 7366.00 | 40.61 | 179.05 | 7193.37 | 265.85 | 798.17 | -261.11 | 8.31 |
| 7452.00 | 48.49 | 177.94 | 7254.61 | 205.59 | 799.80 | -200.84 | 9.21 |
| 7537.00 | 57.22 | 179.00 | 7305.89 | 137.93 | 801.57 | -133.17 | 10.32 |
| 7623.00 | 65.02 | 178.42 | 7347.39 | 62.70 | 803.28 | -57.93 | 9.09 |
| 7708.00 | 70.32 | 178.74 | 7379.67 | -15.87 | 805.22 | 20.65 | 6.25 |
| 7794.00 | 78.01 | 178.23 | 7403.12 | -98.52 | 807.41 | 103.31 | 8.96 |
| 7825.00 | 82.07 | 178.44 | 7408.48 | -129.03 | 808.30 | 133.82 | 13.11 |
| 7949.00 | 88.70 | 178.88 | 7418.45 | -252.53 | 811.19 | 257.33 | 5.36 |
| 8035.00 | 89.26 | 178.09 | 7419.99 | -338.48 | 813.46 | 343.30 | 1.13 |
| 8120.00 | 91.29 | 178.67 | 7419.58 | -423.44 | 815.86 | 428.27 | 2.48 |
| 8206.00 | 92.47 | 179.31 | 7416.76 | -509.38 | 817.38 | 514.22 | 1.56 |
| 8291.00 | 89.69 | 178.59 | 7415.15 | -594.34 | 818.94 | 599.19 | 3.38 |
| 8377.00 | 90.55 | 177.50 | 7414.97 | -680.29 | 821.87 | 685.15 | 1.61 |
| 8462.00 | 90.49 | 177.45 | 7414.20 | -765.20 | 825.61 | 770.09 | 0.09 |
| 8548.00 | 90.12 | 176.72 | 7413.74 | -851.09 | 829.99 | 856.00 | 0.95 |
| 8633.00 | 89.94 | 179.38 | 7413.70 | -936.03 | 832.88 | 940.96 | 3.14 |
| 8719.00 | 90.25 | 180.15 | 7413.56 | -1022.03 | 833.23 | 1026.96 | 0.97 |
| 8804.00 | 90.12 | 179.85 | 7413.28 | -1107.03 | 833.23 | 1111.96 | 0.38 |
| 8889.00 | 90.06 | 179.94 | 7413.15 | -1192.03 | 833.39 | 1196.95 | 0.13 |
| 8975.00 | 90.18 | 180.07 | 7412.97 | -1278.03 | 833.38 | 1282.95 | 0.21 |
| 9060.00 | 89.94 | 179.56 | 7412.88 | -1363.03 | 833.66 | 1367.95 | 0.66 |
| 9146.00 | 89.82 | 179.25 | 7413.06 | -1449.02 | 834.55 | 1453.95 | 0.39 |
| 9231.00 | 89.51 | 179.68 | 7413.56 | -1534.02 | 835.34 | 1538.95 | 0.62 |
| 9317.00 | 88.58 | 179.41 | 7414.99 | -1620.00 | 836.02 | 1624.94 | 1.13 |
| 9402.00 | 89.75 | 179.49 | 7416.23 | -1704.99 | 836.84 | 1709.92 | 1.38 |
| 9488.00 | 90.49 | 181.20 | 7416.05 | -1790.98 | 836.32 | 1795.91 | 2.17 |
| 9573.00 | 89.82 | 181.06 | 7415.82 | -1875.97 | 834.65 | 1880.89 | 0.81 |
| 9658.00 | 89.38 | 181.90 | 7416.41 | -1960.93 | 832.45 | 1965.84 | 1.12 |
| 9744.00 | 89.82 | 180.74 | 7417.01 | -2046.91 | 830.47 | 2051.80 | 1.44 |
| 9829.00 | 91.11 | 180.19 | 7416.32 | -2131.90 | 829.78 | 2136.79 | 1.65 |
| 9915.00 | 89.32 | 178.85 | 7416.00 | -2217.89 | 830.50 | 2222.78 | 2.60 |
| 10000.00 | 89.45 | 177.78 | 7416.91 | -2302.85 | 833.00 | 2307.75 | 1.27 |
| 10086.00 | 90.49 | 177.41 | 7416.96 | -2388.77 | 836.61 | 2393.69 | 1.28 |
| 10171.00 | 89.57 | 179.45 | 7416.91 | -2473.73 | 838.94 | 2478.67 | 2.63 |
| 10257.00 | 89.63 | 181.02 | 7417.51 | -2559.73 | 838.58 | 2564.66 | 1.83 |
| 10342.00 | 89.20 | 180.72 | 7418.38 | -2644.71 | 837.29 | 2649.64 | 0.62 |
| 10427.00 | 88.83 | 181.43 | 7419.84 | -2729.68 | 835.70 | 2734.60 | 0.94 |
| 10513.00 | 89.38 | 180.31 | 7421.19 | -2815.66 | 834.39 | 2820.56 | 1.45 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 10598.00 | 91.11 | 180.59 | 7420.82 | -2900.66 | 833.73 | 2905.55 | 2.06 |
| 10684.00 | 90.62 | 180.64 | 7419.52 | -2986.64 | 832.80 | 2991.53 | 0.57 |
| 10769.00 | 90.55 | 182.40 | 7418.66 | -3071.60 | 830.55 | 3076.48 | 2.07 |
| 10854.00 | 90.18 | 181.02 | 7418.12 | -3156.56 | 828.01 | 3161.42 | 1.68 |
| 10940.00 | 89.44 | 180.94 | 7418.40 | -3242.55 | 826.54 | 3247.40 | 0.87 |
| 11025.00 | 90.31 | 179.50 | 7418.59 | -3327.54 | 826.22 | 3332.39 | 1.98 |
| 11111.00 | 89.45 | 180.26 | 7418.77 | -3413.54 | 826.40 | 3418.39 | 1.33 |
| 11196.00 | 89.88 | 178.29 | 7419.26 | -3498.53 | 827.47 | 3503.38 | 2.37 |
| 11281.00 | 89.32 | 177.71 | 7419.86 | -3583.48 | 830.44 | 3588.34 | 0.95 |
| 11367.00 | 89.63 | 178.66 | 7420.64 | -3669.43 | 833.16 | 3674.31 | 1.16 |
| 11452.00 | 91.97 | 178.21 | 7419.46 | -3754.38 | 835.48 | 3759.27 | 2.80 |
| 11538.00 | 90.99 | 177.97 | 7417.24 | -3840.30 | 838.35 | 3845.21 | 1.17 |
| 11623.00 | 89.57 | 177.56 | 7416.82 | -3925.24 | 841.66 | 3930.16 | 1.74 |
| 11708.00 | 89.57 | 178.58 | 7417.46 | -4010.18 | 844.53 | 4015.12 | 1.20 |
| 11794.00 | 90.86 | 179.06 | 7417.14 | -4096.16 | 846.30 | 4101.11 | 1.60 |
| 11879.00 | 91.59 | 178.20 | 7415.32 | -4181.12 | 848.33 | 4186.08 | 1.33 |
| 11977.00 | 90.88 | 178.20 | 7413.21 | -4279.05 | 851.41 | 4284.02 | 0.72 |
| Projected to Total Depth: | | | | | | | |
| 12035.00 | 90.88 | 178.20 | 7412.32 | -4337.01 | 853.23 | 4342.00 | 0.00 |

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*Weatherford surveys from 1070 ft MD to 11977 ft MD.*
*TD at 12035 ft MD.*
The total correction is 8.60 deg relative to True North.

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Weatherford®

Field Print

| | |
|---|---|
| COMPANY | **Anadarko** |
| WELL | **Cannon 14C-10HZ** |
| FIELD | **Wattenburg** |
| RIG | **Xtreme 23** |
| LOC. | **Colorado** |
| COUNTY | **Weld** |