

HALLIBURTON



ALD Azimuthal Lithodensity
CTN Compensated Thermal Neutron
DGR Dual Gamma Ray
EWR-Phase 4
ACAL Acoustic Caliper

1 : 200

Sperry Drilling Services

| | | | | |
|--|-----------------------|---|-----------------------|------------|
| Country : Australia | | | | |
| Field : Thylacine | | | | |
| Location : 39° 14' 14.47" South GDA94 142° 54' 7.58" East GDA94 | | | | |
| Well : THA02 | | | | |
| Company : Woodside Energy Ltd | | | | |
| Rig : Maersk Guardian | | <div>Company : Woodside Energy Ltd</div> <div>Rig : Maersk Guardian</div> <div>Well : THA02</div> <div>Field : Thylacine</div> <div>Country : Australia</div> <div>DOE Number :</div> | | |
| LOCATION | | | | |
| Latitude : 39° 14' 14.47" South GDA94 Longitude : 142° 54' 7.58" East GDA94 | | | | |
| UTM Easting = 664,161.0 m UTM Northing = 5,655,159.6 m | | | | |
| Permanent Datum : LAT | | Elevation : 0.00 m | | |
| Log Measured From : Drill Floor | | 50.50 m Above Permanent Datum | | |
| Drilling Measured From : Drill Floor | | TVD LOG | | |
| Depth Logged : 636.64 m To 2,340.18 m | | Unit No. : SSDS-40 | | |
| Date Logged : 20-May-06 To 17-Jun-06 | | Job No. : AU-FE-0003930658 | | |
| Total Depth MD : 4,026.00 m TVD : 2,340.18 m | | Plot Type : Final | | |
| Spud Date : 20-May-06 | | Plot Date : 28-Sep-06 | | |
| Run No. | Borehole Record (TVD) | | Borehole Record (TVD) | |
| | Size | From | To | Run No. |
| 1 | 762,000 mm | 149.80 m | 219.89 m | |
| 2 | 584,000 mm | 219.89 m | 636.64 m | |
| 3 | 311,000 mm | 636.64 m | 2,107.87 m | |
| 4 | 216,000 mm | 2,107.87 m | 2,125.16 m | |
| 5 | 216,000 mm | 2,125.16 m | 2,340.18 m | |
| | | Casing Record (TVD) | | |
| | | Size | Weight | From |
| | | 660,000 mm | 397.68 kgpm | 149.80 m |
| | | 473,000 mm | 139.89 kgpm | 149.80 m |
| | | 244,000 mm | 70.00 kgpm | 149.80 m |
| | | | | 2,106.22 m |
| | | | | |
| | | | | |

WELL INFORMATION

| | | | | | |
|--------------------------------|---------------------|---------------------|---------------------|--|--|
| MWD Run Number | 300 | 400 | 500 | | |
| Date run completed | 04-Jun-06 | 12-Jun-06 | 17-Jun-06 | | |
| Rig Bit Number | 3 | 4 | 5 | | |
| Bit Size (mm) | 311 | 216 | 216 | | |
| Tool Nominal OD (mm) | 203 | 171 | 171 | | |
| Log Start Depth (TVD, m) | 636.64 | 2107.87 | 2125.16 | | |
| Log End Depth (TVD, m) | 2107.87 | 2125.16 | 2340.18 | | |
| Drill or Wipe | Drilling | Drilling | Drilling | | |
| Drill/Wipe Start Date and Time | 30-May-06 20:00 | 08-Jun-06 00:05 | 13-Jun-06 16:15 | | |
| Drill/Wipe End Date and Time | 03-Jun-06 06:57 | 12-Jun-06 07:45 | 16-Jun-06 00:15 | | |
| Min Inc (deg) @ Depth (TVD, m) | 3.73 @ 650.61 | 72.83 @ 1,508.07 | 41.91 @ 2,777.31 | | |
| Max Inc (deg) @ Depth (TVD, m) | 73.39 @ 1,481.07 | 93.22 @ 1,680.29 | 91.36 @ 2,411.54 | | |
| Bit TFA(in2) / Bit Type | 1.83 / SEC FMF3653Z | 1.11 / SEC FMF3653Z | 1.11 / SEC FMF3653Z | | |
| Flow Rate (gpm) | 1050 | 730 | 725 | | |
| Max AV (mpm) / CV (mpm) @ MWD | 117.5 / 131.0 | 207.0 / 181.8 | 201.6 / 155.4 | | |
| Fluid Type | Synteq | Synteq | Synteq | | |
| Density (sg) / Viscosity (spl) | 1.25 / 84.5 | 1.26 / 93.0 | 1.26 / 74.0 | | |
| Filtrate CL (ppm) | 25,355 | 38,842 | 36,912 | | |
| pH / Fluid Loss (mptm) | N/A / 2.0 | N/A / 3.0 | N/A / 2 | | |
| PV (cP) / YP (pa) | 38 / 13.89 | 42 / 17.28 | 35 / 11.49 | | |
| % Solids / % Sand | 13.7 / 5.0 | 14.8 / 0.3 | 13.9 / 0.3 | | |
| % Oil / Oil:Water Ratio | 60.5 / 72:28 | 62.5 / 75:25 | 65.0 / 77:23 | | |
| Rm @ Measured Temp (degC) | N/A @ N/A | N/A @ N/A | N/A @ N/A | | |
| Rmf @ Measured Temp (degC) | N/A @ N/A | N/A @ N/A | N/A @ N/A | | |
| Rmc @ Measured Temp (degC) | N/A @ N/A | N/A @ N/A | N/A @ N/A | | |
| Max Tool Temp (degC) / Source | 96 / EWR-P4 | 109 / EWR-P4 | 112 / EWR-P4 | | |
| Rm @ Max Tool Temp (degC) | N/A @ 96 | N/A @ 109 | N/A @ 112 | | |
| Lead MWD Engineer | P. King | M. Lee | M. Lee | | |
| Customer Representative | D. Rota | S. Corless | S. Corless | | |

SENSOR INFORMATION

Downhole Processor Information

| | | | | | |
|---------------------------|-----------------|-----------------|-----------------|--|--|
| Tool Type | HCIM | HCIM | HCIM | | |
| Software Version | 68.18 | 72.13 | 72.13 | | |
| Sub Serial Number | 152862 | 43987 | 43987 | | |
| Insert Serial Number | 134502 | 161828 | 161828 | | |
| Date and Time Initialized | 30-May-06 01:52 | 08-Jun-06 14:12 | 13-Jun-06 02:33 | | |
| Date and Time Read | 04-Jun-06 04:50 | 12-Jun-06 23:24 | 19-Jun-06 14:10 | | |

Directional Sensor Information

| | | | | | |
|-----------------------|-----------|----------|----------|--|--|
| Tool Type | DM | DM | DM | | |
| Distance From Bit (m) | 8.61 | 8.92 | 8.02 | | |
| Software Version | 3.15 | 3.15 | 3.15 | | |
| Sub Serial Number | CP1015763 | CP919968 | CP772990 | | |
| Sonde Serial Number | 133447 | 133447 | 185534 | | |
| Sensor ID Number | N/A | N/A | N/A | | |
| Toolface Offset (deg) | N/A | N/A | N/A | | |

Gamma Ray Sensor Information

| | | | | | |
|------------------------------|----------|--------|--------|--|--|
| Tool Type | DGR | DGR | DGR | | |
| Distance From Bit (m) | 11.04 | 11.37 | 10.49 | | |
| Recorded Sample Period (sec) | 12 | 14 | 14 | | |
| Software Version | N/A | N/A | N/A | | |
| Sub Serial Number | 10718409 | 144358 | 144358 | | |
| Insert/Sonde Serial Number | 172498 | 50437 | 50437 | | |

Resistivity Sensor Information

| | | | | | |
|----------------------------------|--------|--------|--------|--|--|
| Tool Type | EWR-P4 | EWR-P4 | EWR-P4 | | |
| Distance From Bit (m) | 13.40 | 13.68 | 12.80 | | |
| Recorded Sample Period (sec) | 14 | 14 | 14 | | |
| Software Version | 1.38 | 1.38 | 1.38 | | |
| Sub Serial Number | 37661 | 136366 | 136366 | | |
| Receiver Insert Serial Number | 205859 | 61101 | 61101 | | |
| Transmitter Insert Serial Number | 151389 | 77011 | 77011 | | |
| Receiver Orientation | Down | Down | Down | | |

Neutron Sensor Information

| | | | | | |
|------------------------------|--|----------|----------|--|--|
| Tool Type | | CTN | CTN | | |
| Distance From Bit (m) | | 25.34 | 24.46 | | |
| Recorded Sample Period (sec) | | 20 | 20 | | |
| Sub Serial Number | | 10603697 | 10603697 | | |
| Insert Serial Number | | 192981 | 192981 | | |
| Source Serial Number | | 0102NN | 0102NN | | |
| Source Factor | | N/A | N/A | | |
| Pin Orientation | | Up | Up | | |

Density Sensor Information

| | | | | | |
|------------------------------|--|----------|----------|--|--|
| Tool Type | | ALD | ALD | | |
| Distance From Bit (m) | | 21.27 | 20.39 | | |
| Recorded Sample Period (sec) | | 20 | 20 | | |
| Software Version | | 2.13 | 2.13 | | |
| Sub Serial Number | | 10718174 | 10718174 | | |
| Insert Serial Number | | 215918 | 215918 | | |
| Sensor ID Number | | 32081 | 32081 | | |
| Source Serial Number | | 2434GW | 2434GW | | |
| Pin Orientation | | Up | Up | | |

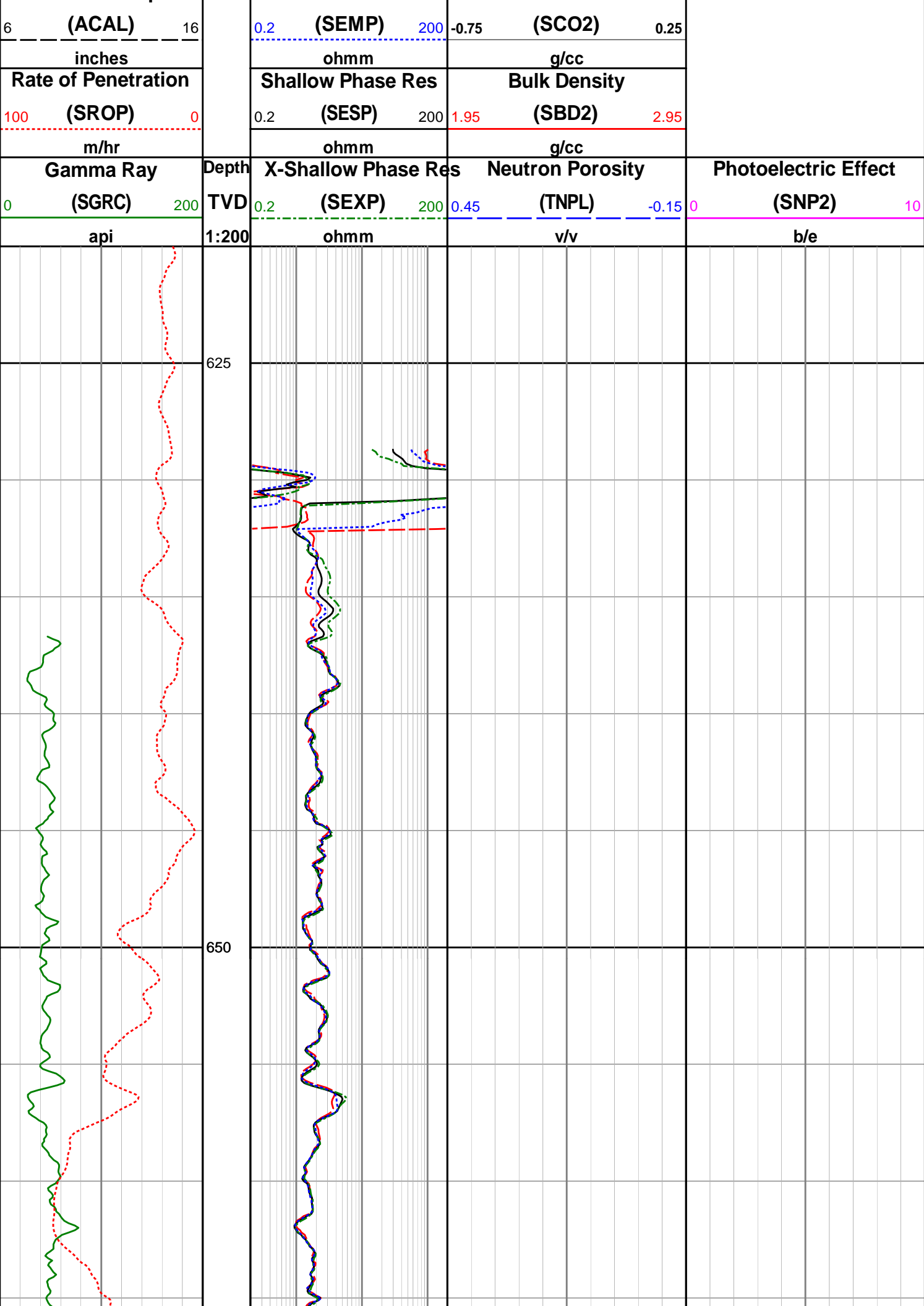
| | | | | | |
|----------------------------|--|---------|---------|--|--|
| Stabilizer Blade O.D. (mm) | | 209.550 | 209.550 | | |
| DPA Offset | | 132.00 | 211.50 | | |

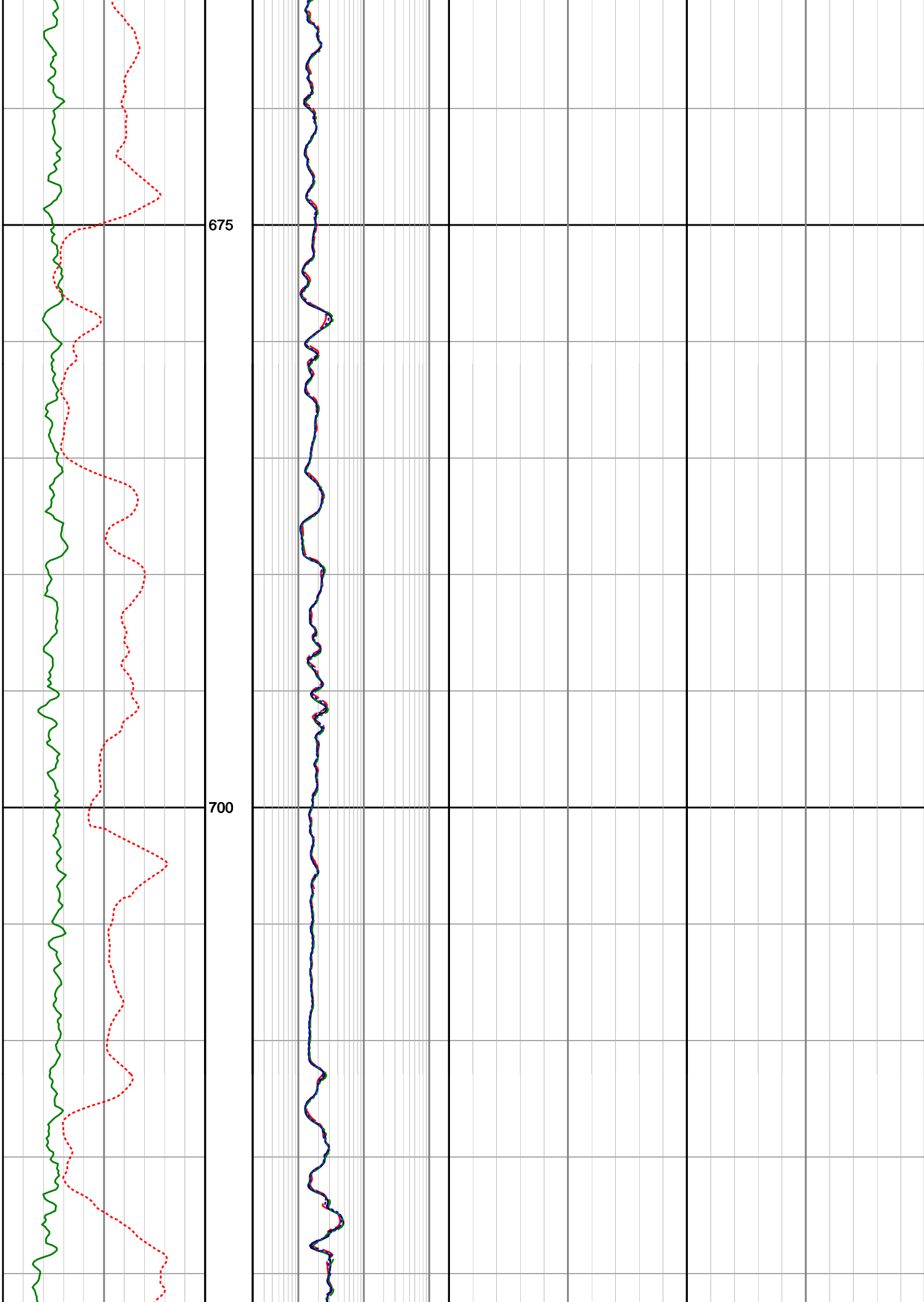
| Caliper Sensor Information | | | | | |
|----------------------------|--|----------|----------|--|--|
| Tool Type | | ACAL | ACAL | | |
| Distance From Bit (m) | | 24.28 | 23.40 | | |
| Software Version | | 2.05 | 2.05 | | |
| Sub Serial Number | | 10603697 | 10603697 | | |
| Insert Serial Number | | 192981 | 192981 | | |

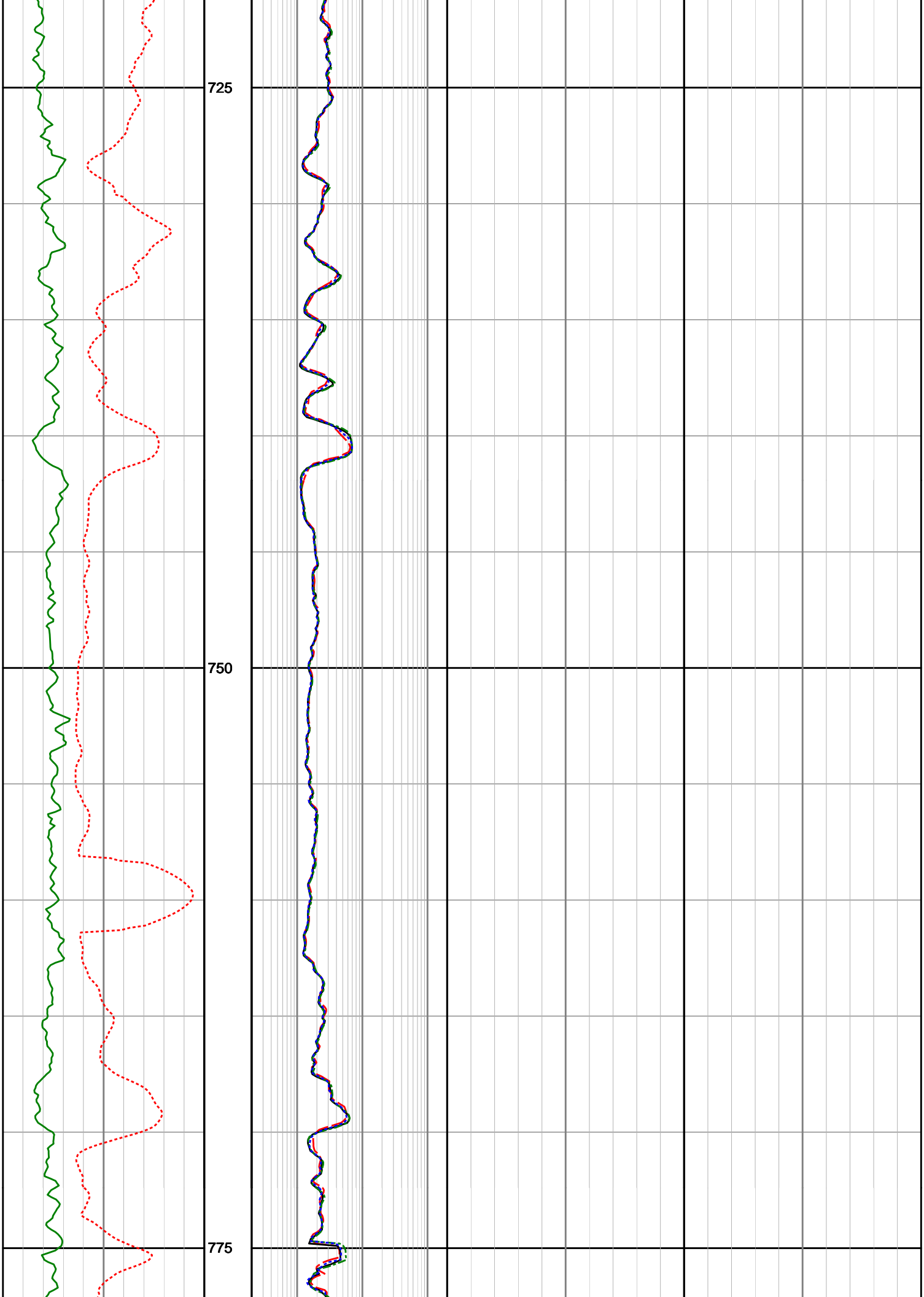
| REMARKS |
|---|
| <p>1.) All depths are bit depths and are referenced to the driller's pipe tally unless otherwise noted.</p> <p>2.) AV/CV values are calculated at the LWD collar using the Bingham Plastic Model for oil based mud, measured in m/min.</p> <p>3.) Curve Mnemonics used are:</p> <p>SGRC - Smoothed Combined Gamma Ray, api SROP - Smoothed Rate of Penetration, m/hr SEXP - Smoothed Extra-Shallow Phase Resistivity, ohm-metre SESP - Smoothed Shallow Phase Resistivity, ohm-metre SEMP - Smoothed Medium Phase Resistivity, ohm-metre SEDP - Smoothed Deep Phase Resistivity, ohm-metre ACAL - Smoothed Acoustic Caliper Hole Size, inches SC02 - Smoothed Low Count Rate Stand Off Correction, g/cc SBD2 - Smoothed Low Count Rate Bulk Density, g/cc SNP2 - Smoothed Near Detector Pe, b/e TNPL - Smoothed Compensated Thermal Neutron Porosity (LS), v/v</p> <p>4.) CTN data has been processed using the following parameters and is based on Limestone matrix:</p> <p>MW = 1.25 - 1.26 sg Formation Salinity = 15,000 ppm Cl Mud Salinity = 38,842 - 41,902 ppm Cl Matrix Density = 2.71 g/cc Fluid Density = 1.00 g/cc</p> <p>5.) CTN data has been reprocessed using hole size derived from the Acoustic Caliper tool.</p> <p>6.) Caliper data presented from 2106.11 to 2134.24 mTVDRT is Hole Size Indicator from the ALD tool.</p> |

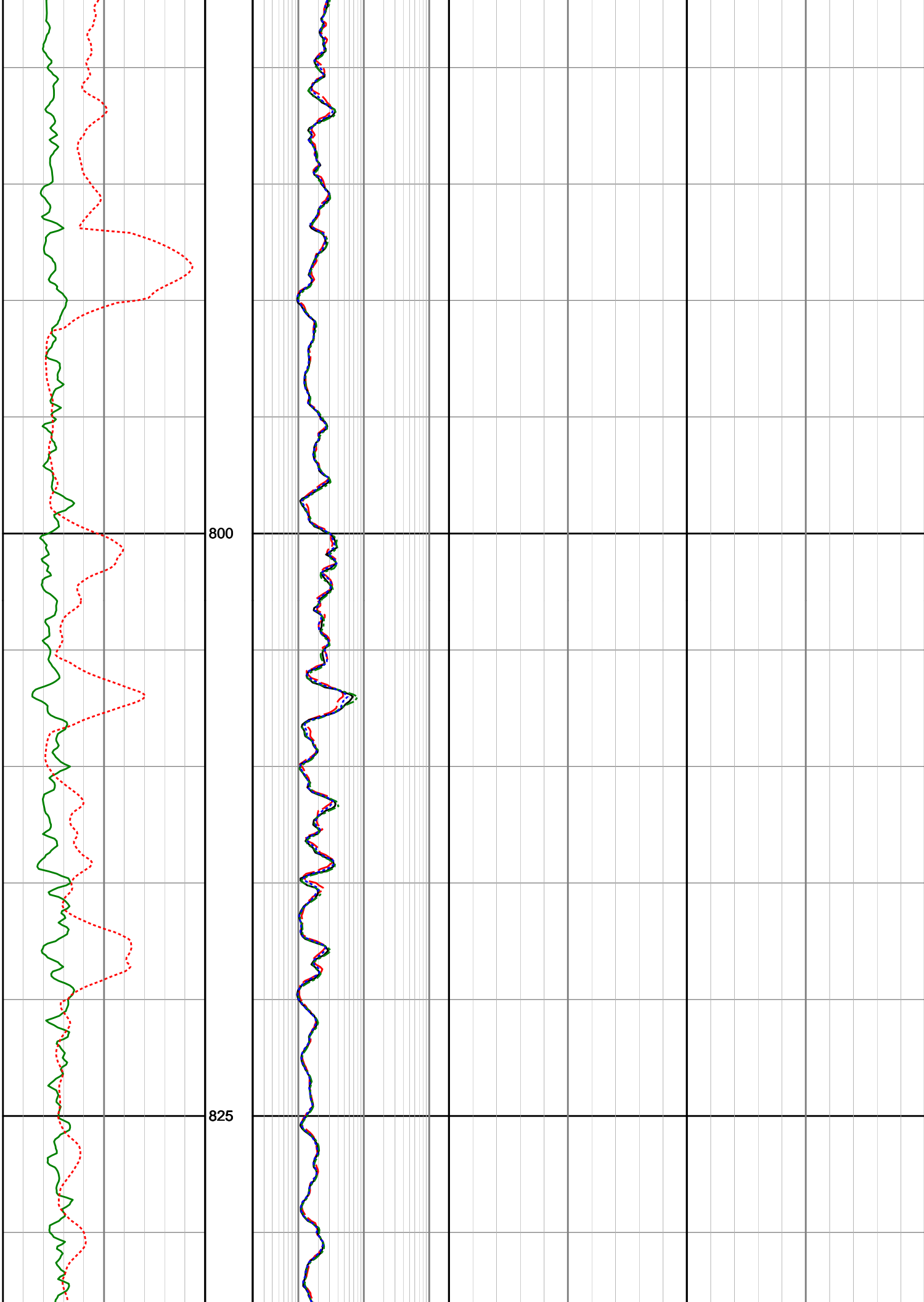
| WARRANTY |
|---|
| <p>HALLIBURTON ENERGY SERVICES (HES) WILL USE ITS BEST EFFORTS TO FURNISH CUSTOMERS WITH ACCURATE INFORMATION AND INTERPRETATIONS THAT ARE PART OF, AND INCIDENT TO, THE SERVICES PROVIDED. HOWEVER, HES CANNOT AND DOES NOT WARRANT THE ACCURACY OR CORRECTNESS OF SUCH INFORMATION AND INTERPRETATIONS. UNDER NO CIRCUMSTANCES SHOULD ANY SUCH INFORMATION OR INTERPRETATION BE RELIED UPON AS THE SOLE BASIS FOR ANY DRILLING, COMPLETION, PRODUCTION, OR FINANCIAL DECISION OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING VENTURE, DRILLING RIG OR ITS CREW OR ANY OTHER THIRD PARTY. THE CUSTOMER HAS FULL RESPONSIBILITY FOR ALL DRILLING, COMPLETION AND PRODUCTION OPERATION. HES MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE SERVICES RENDERED. IN NO EVENT WILL HES BE LIABLE FOR FAILURE TO OBTAIN ANY PARTICULAR RESULTS OR FOR ANY DAMAGES, INCLUDING, BUT NOT LIMITED TO, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, RESULTING FROM THE USE OF ANY INFORMATION OR INTERPRETATION PROVIDED BY HES.</p> |

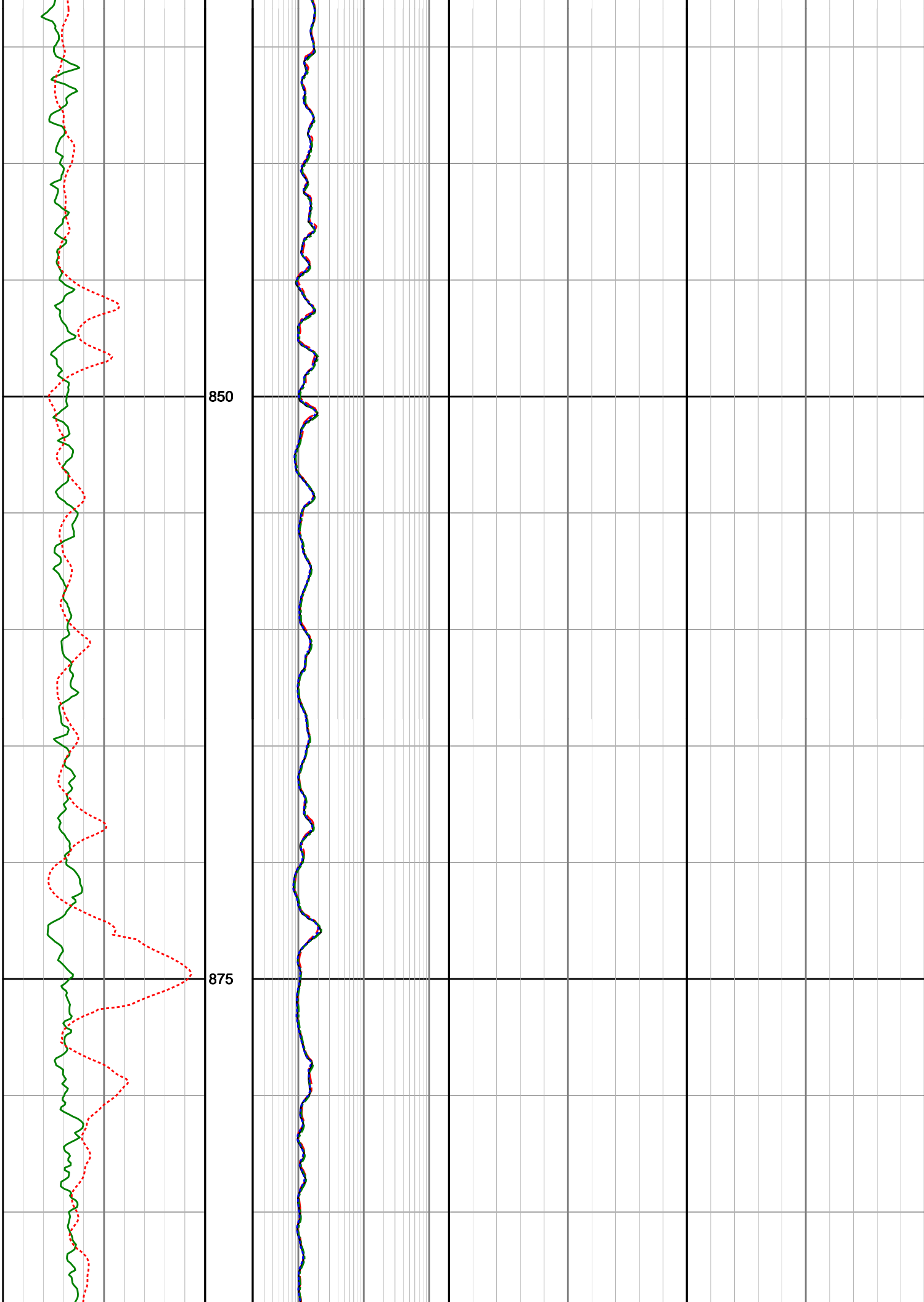
| | | |
|------------------|---|---------------------|
| | <p>Deep Phase Res</p> <p>0.2 (SEDP) 200</p> <p>ohmm</p> | |
| Acoustic Caliper | Medium Phase Res | Standoff Correction |

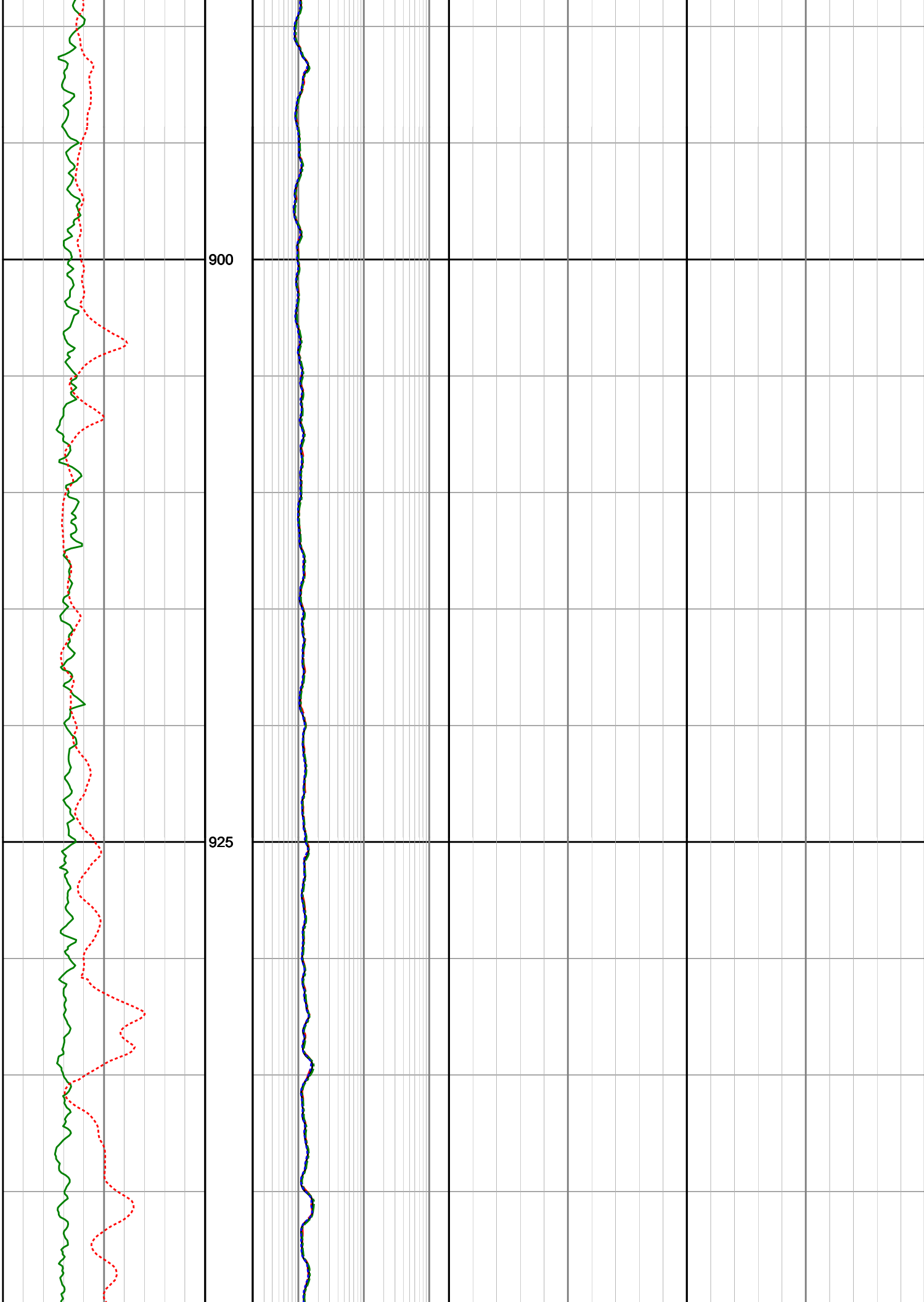


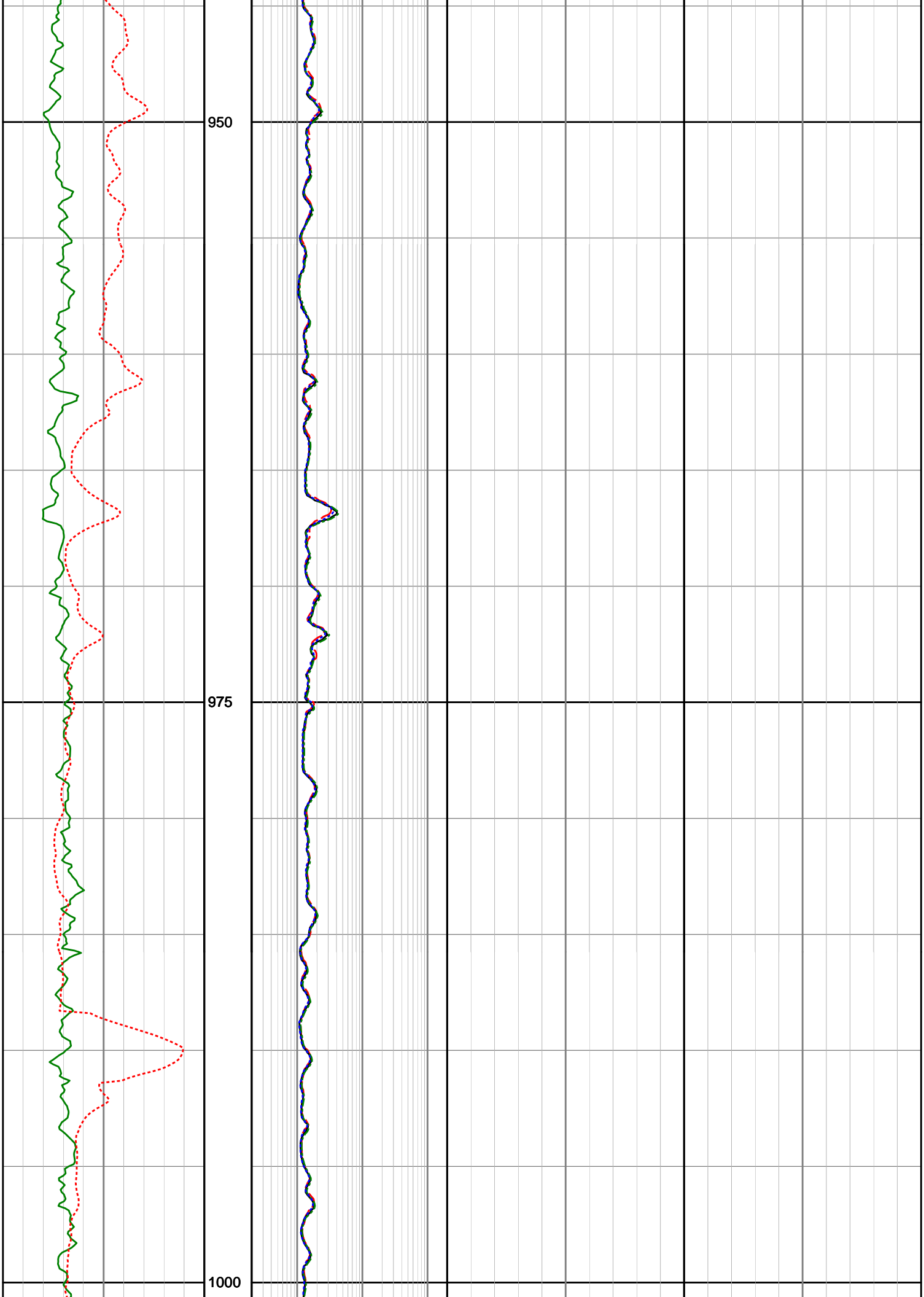


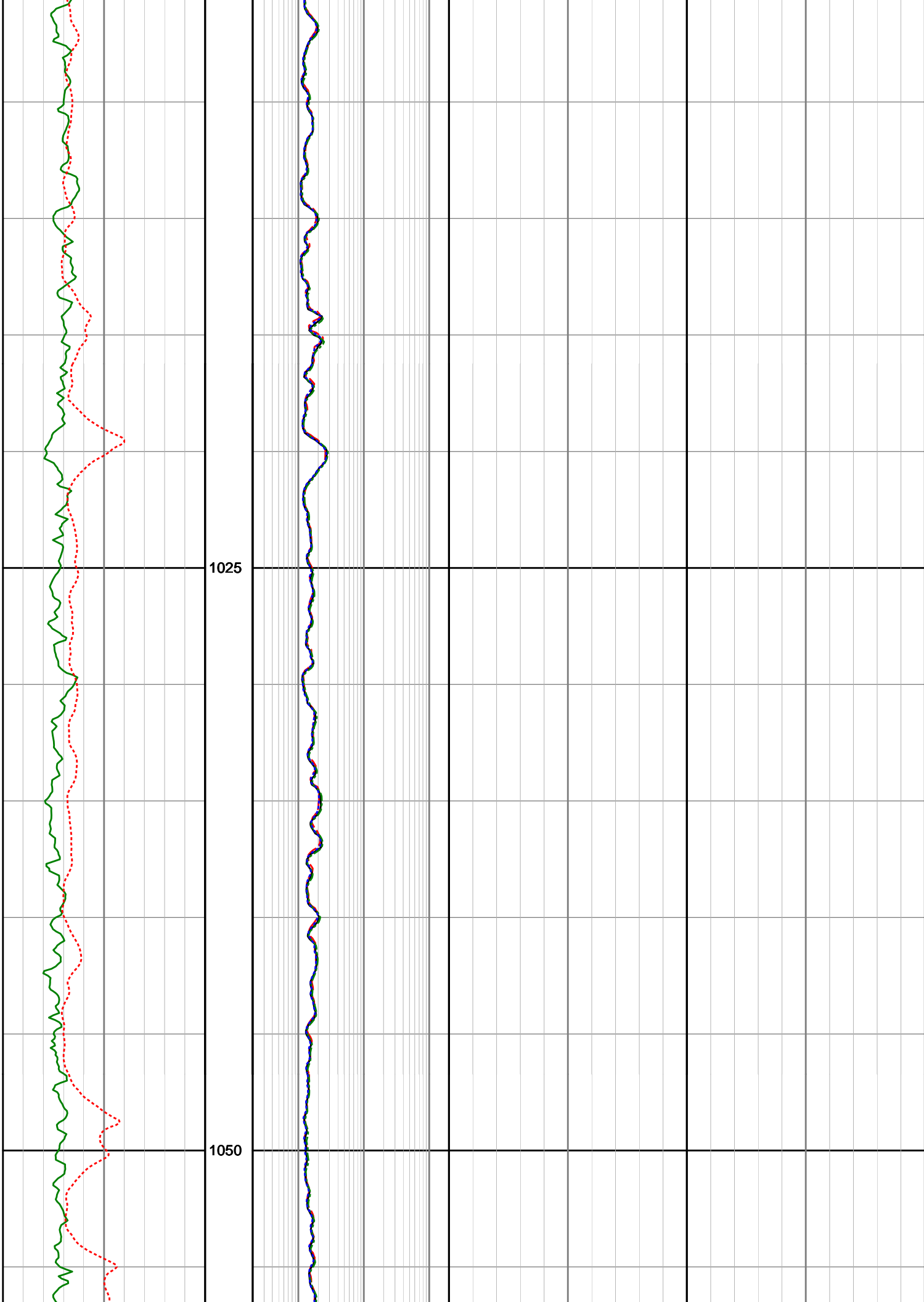


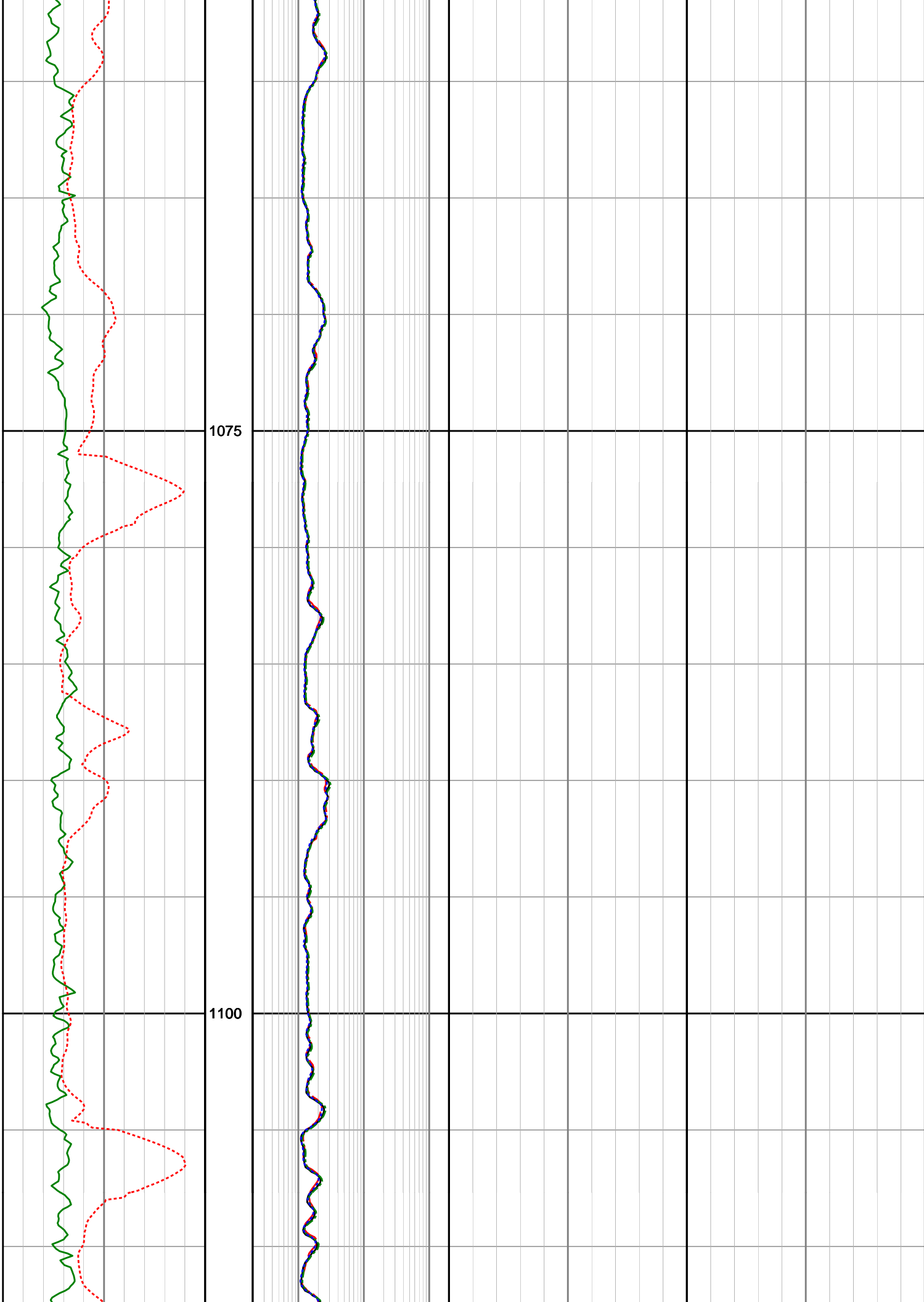


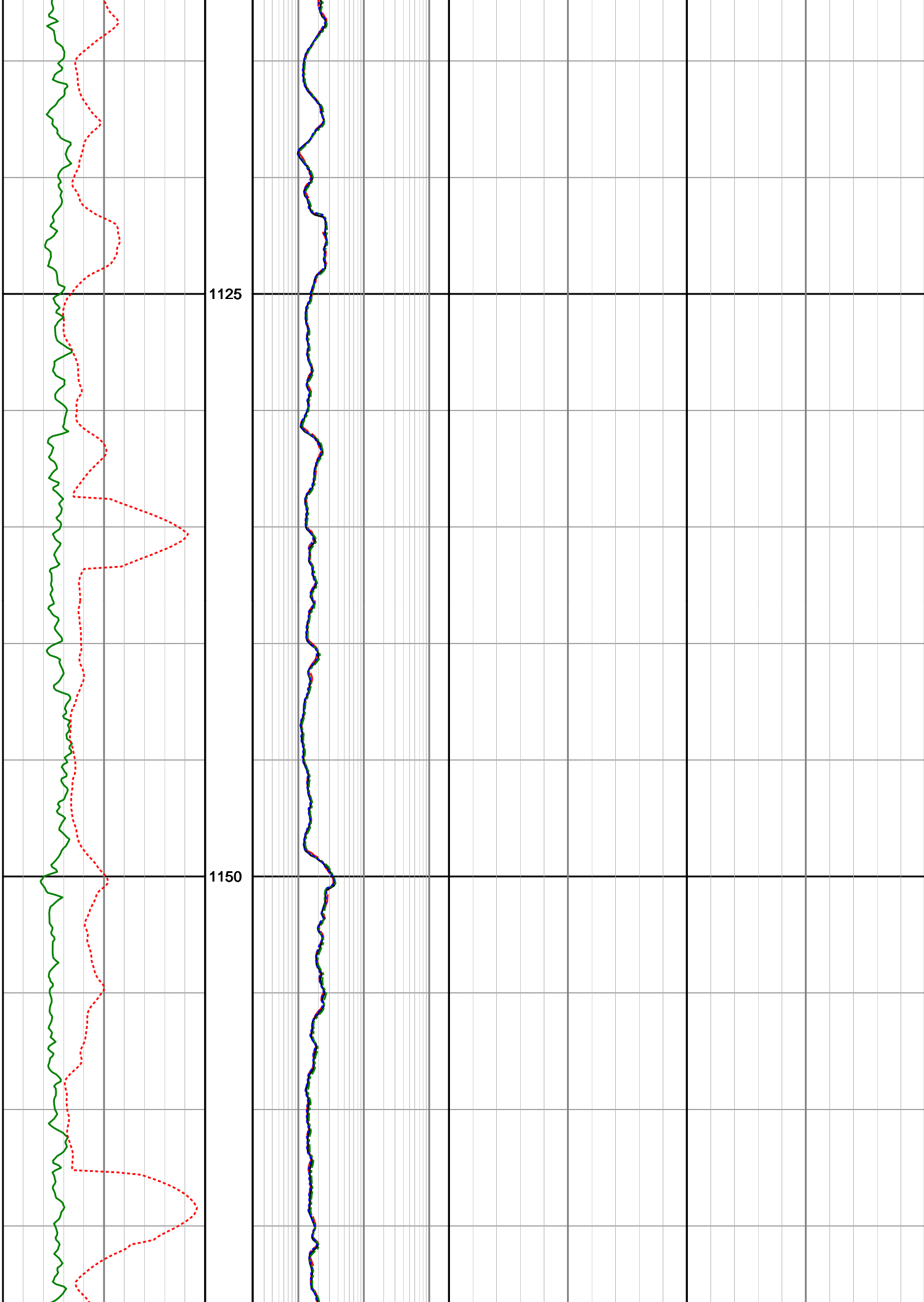


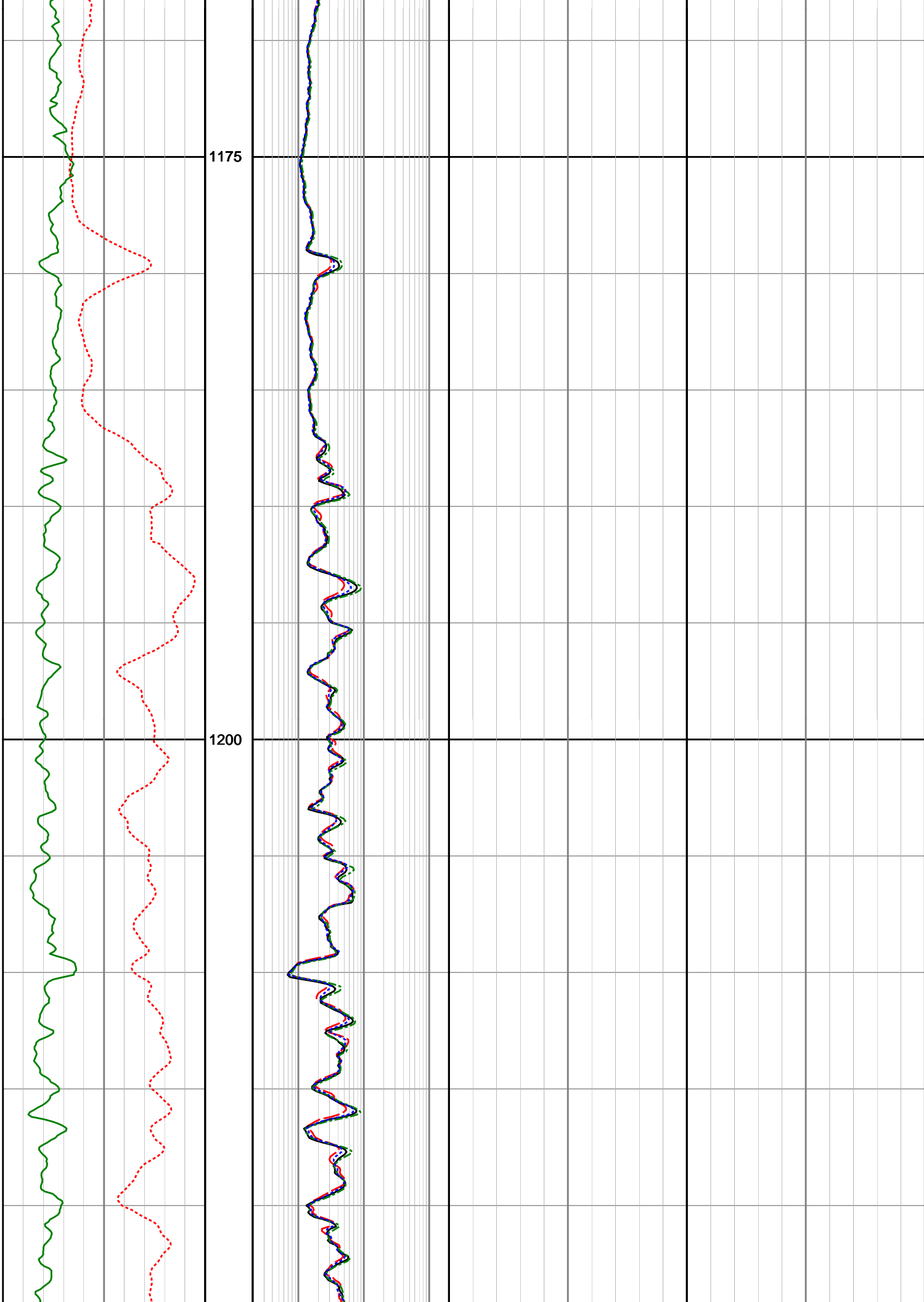


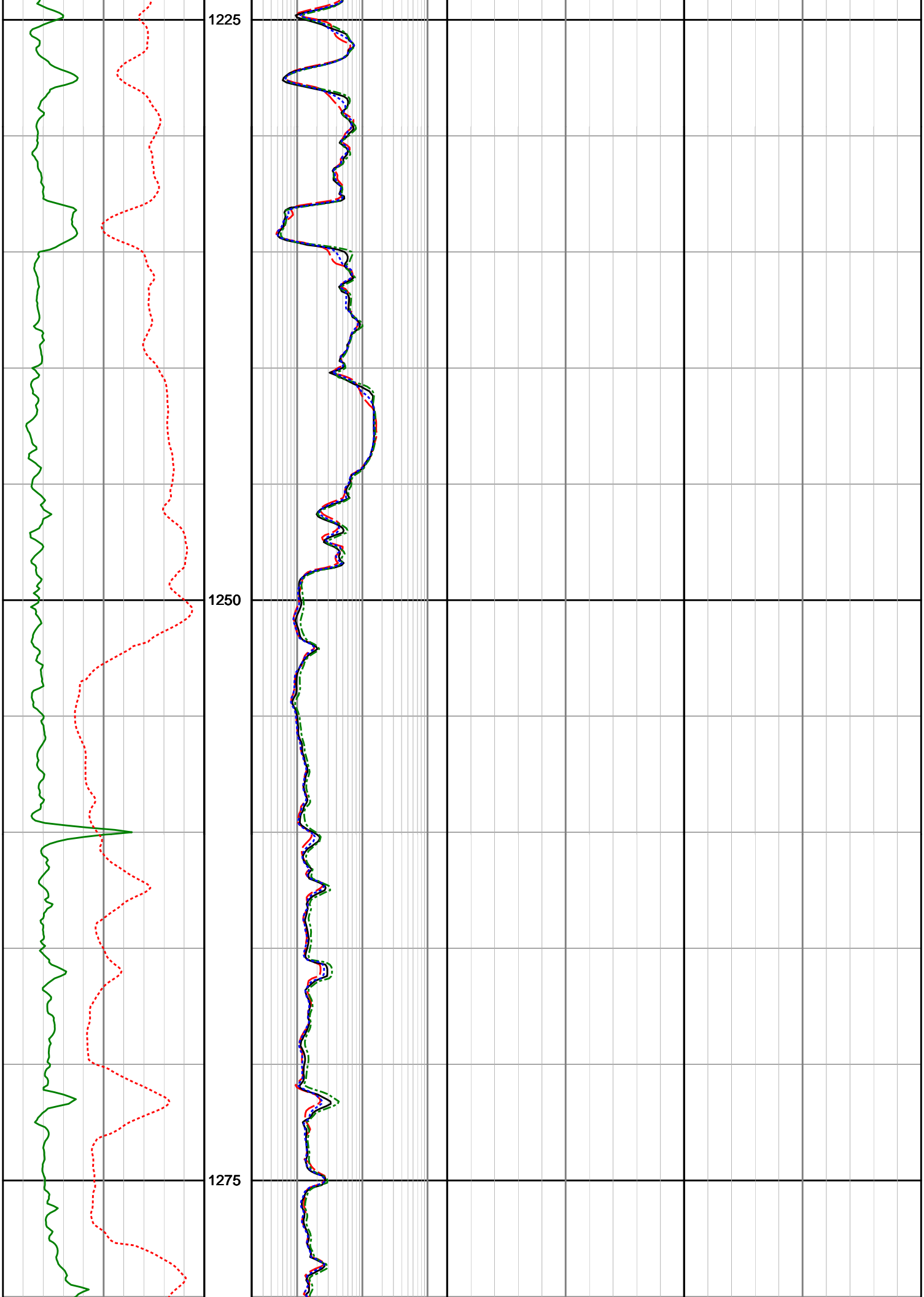


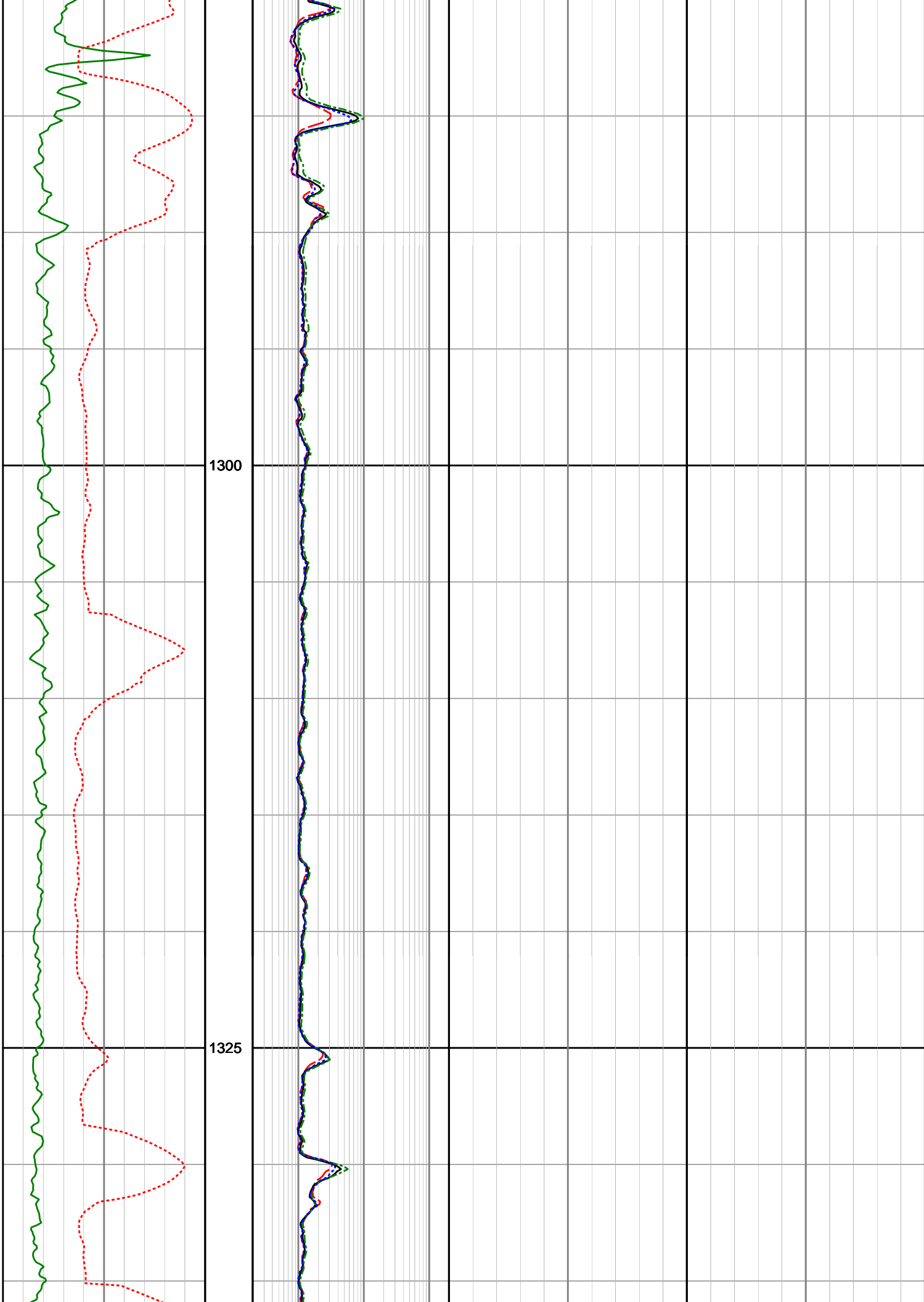


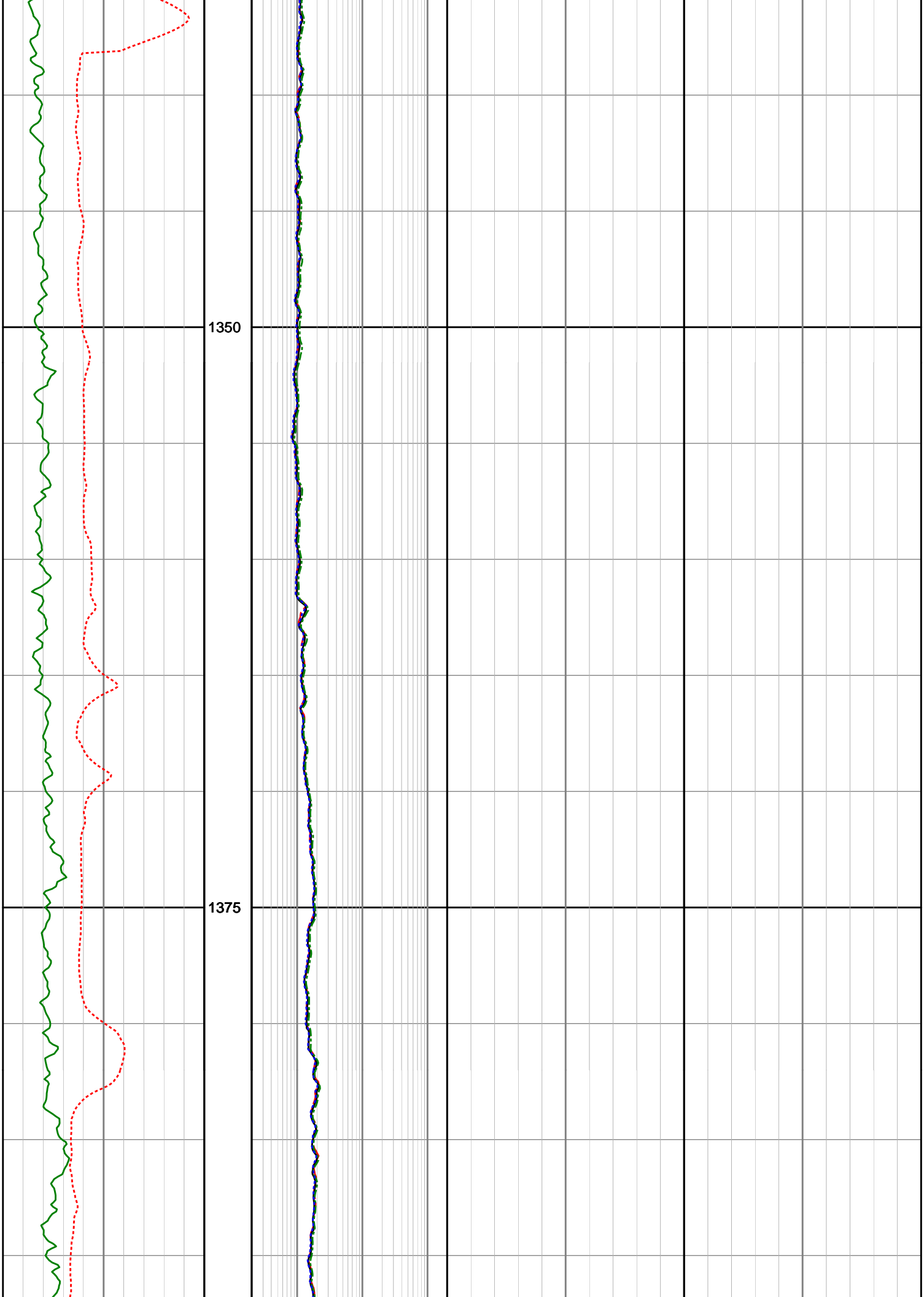


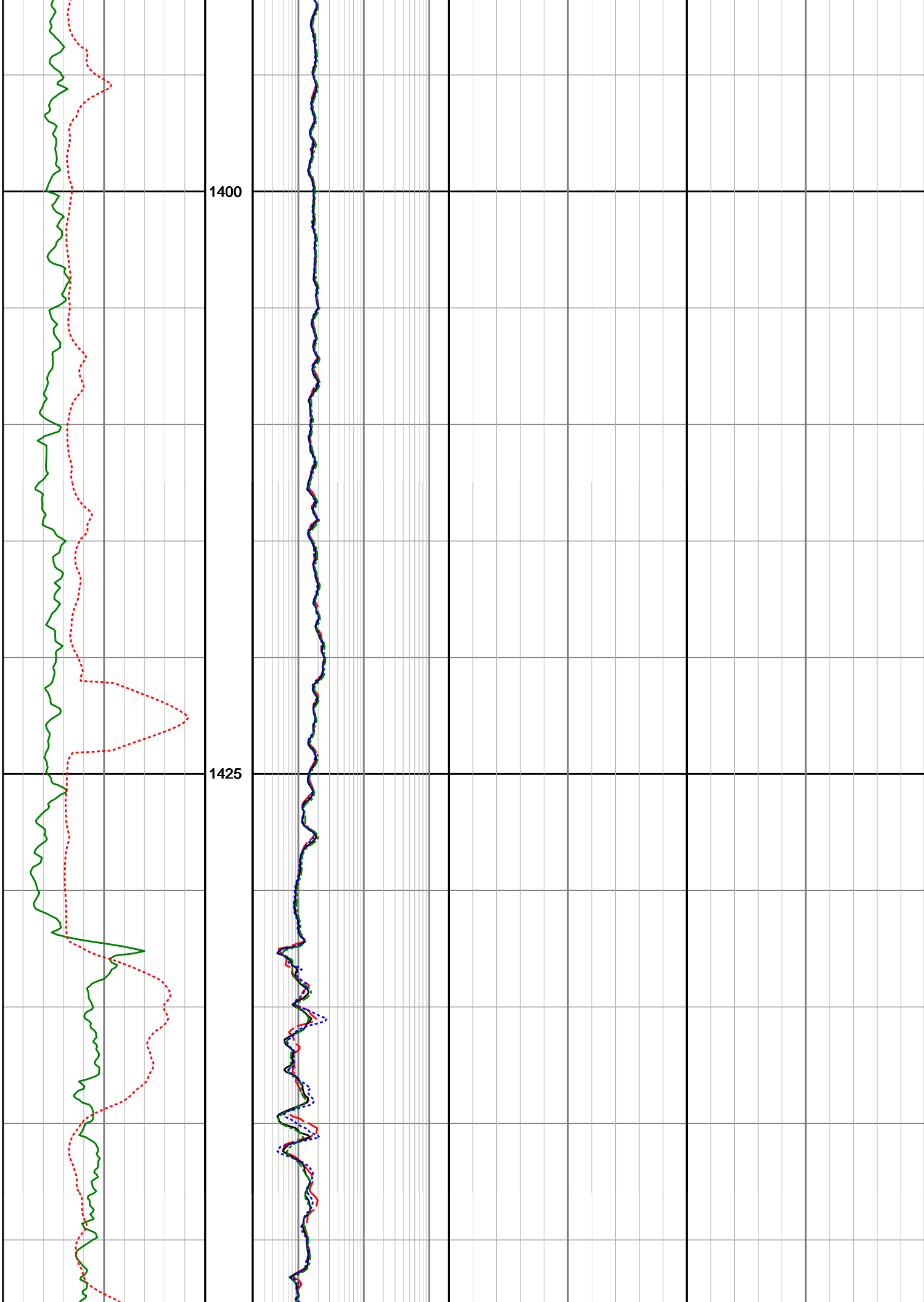


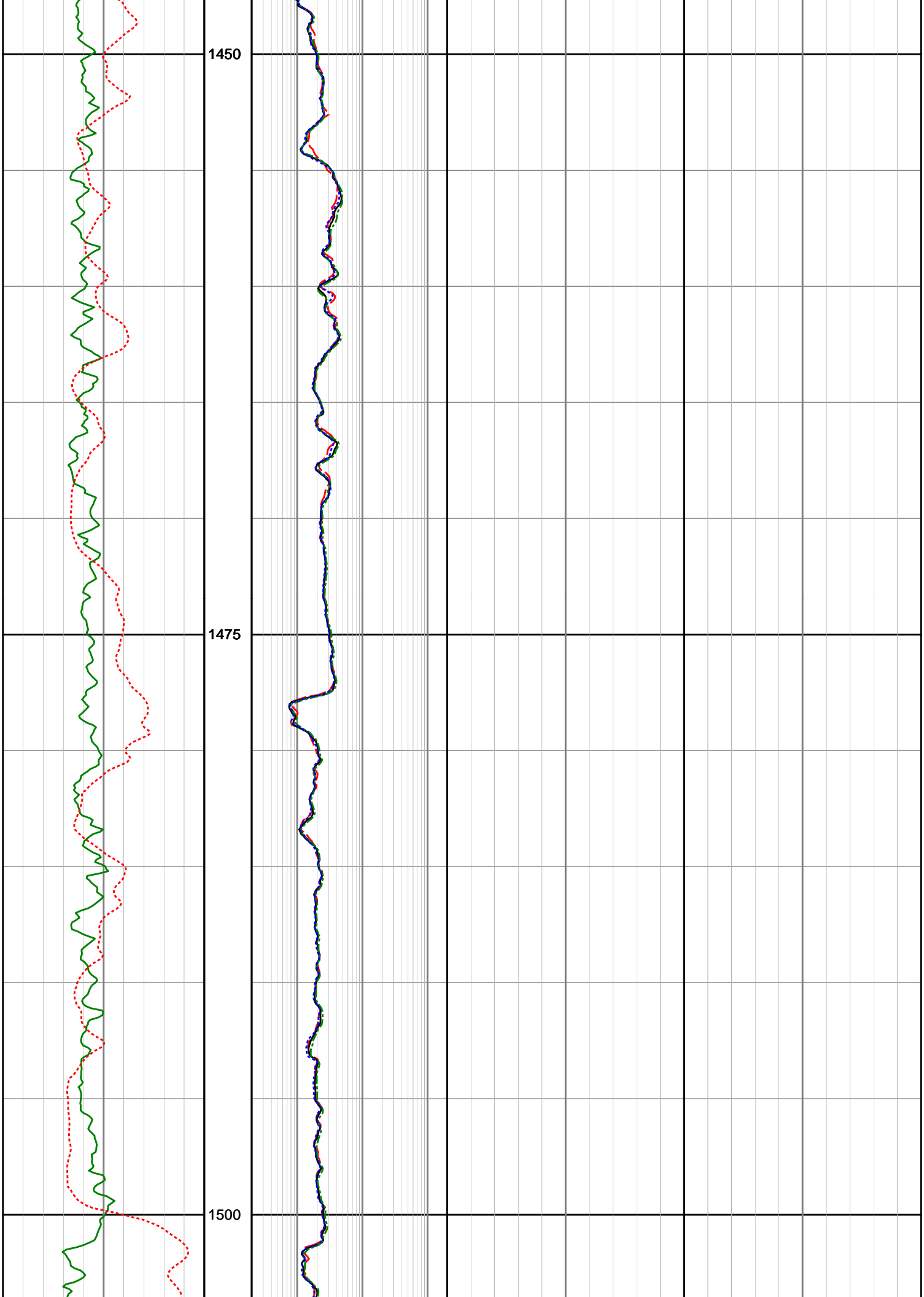


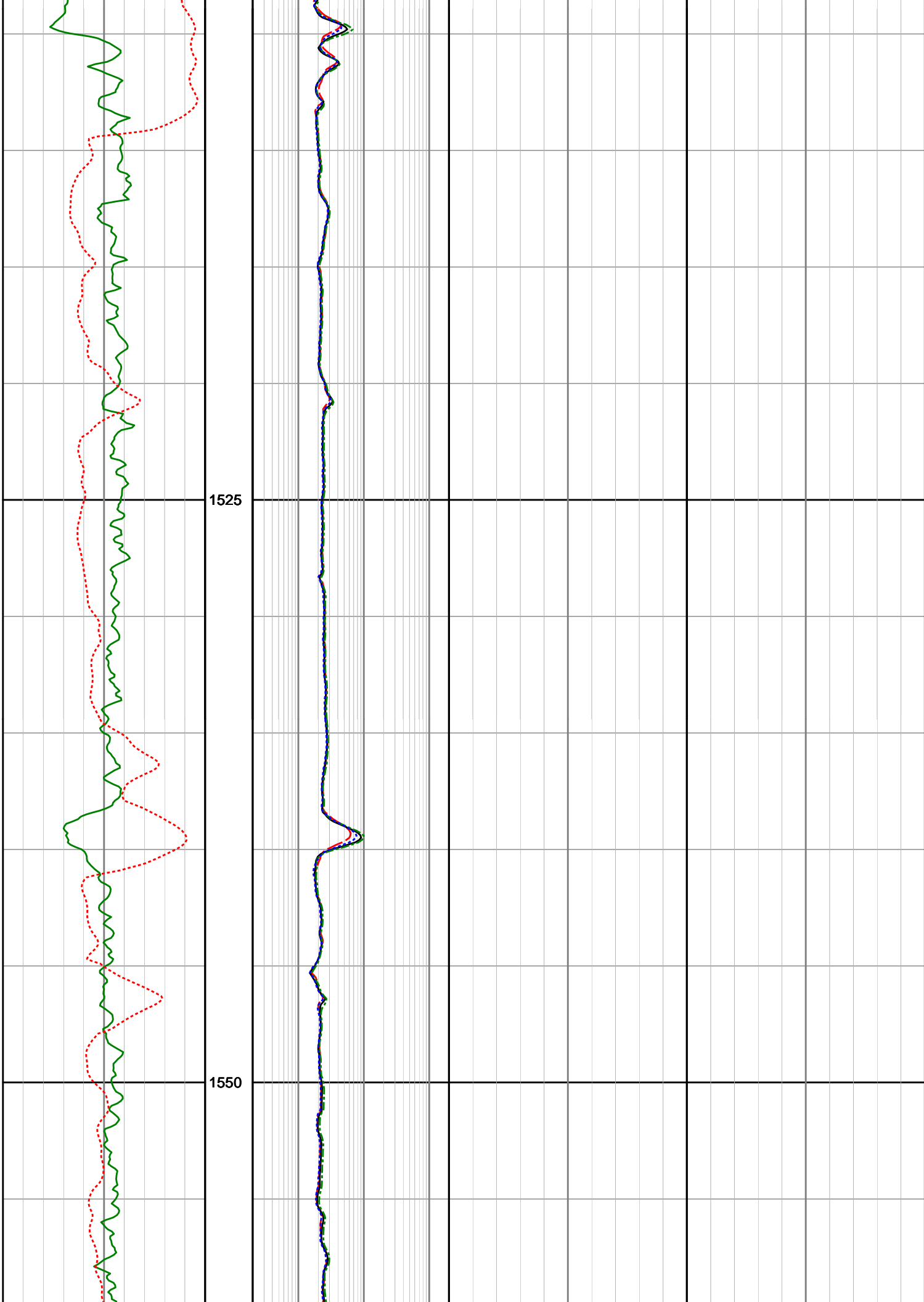


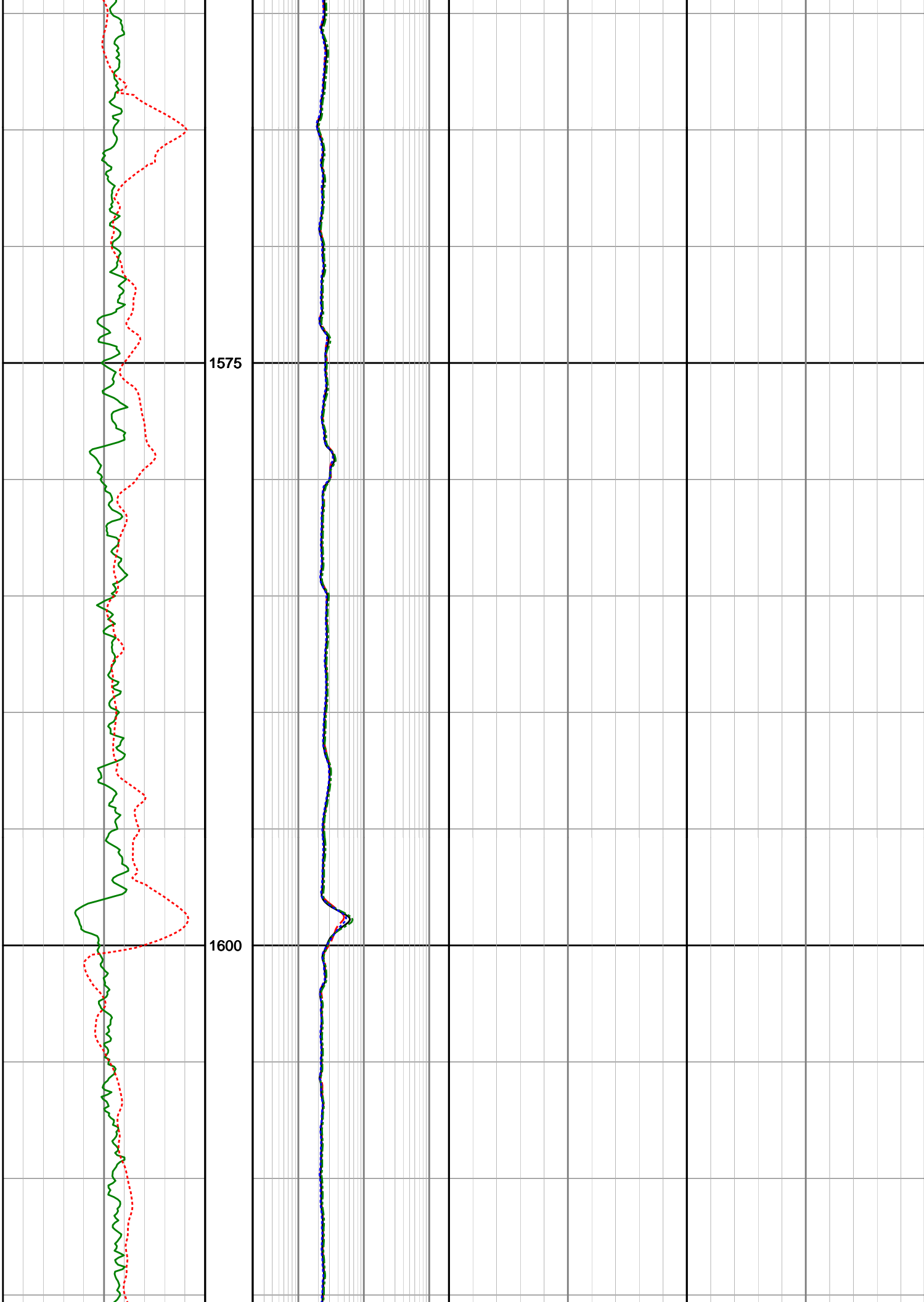


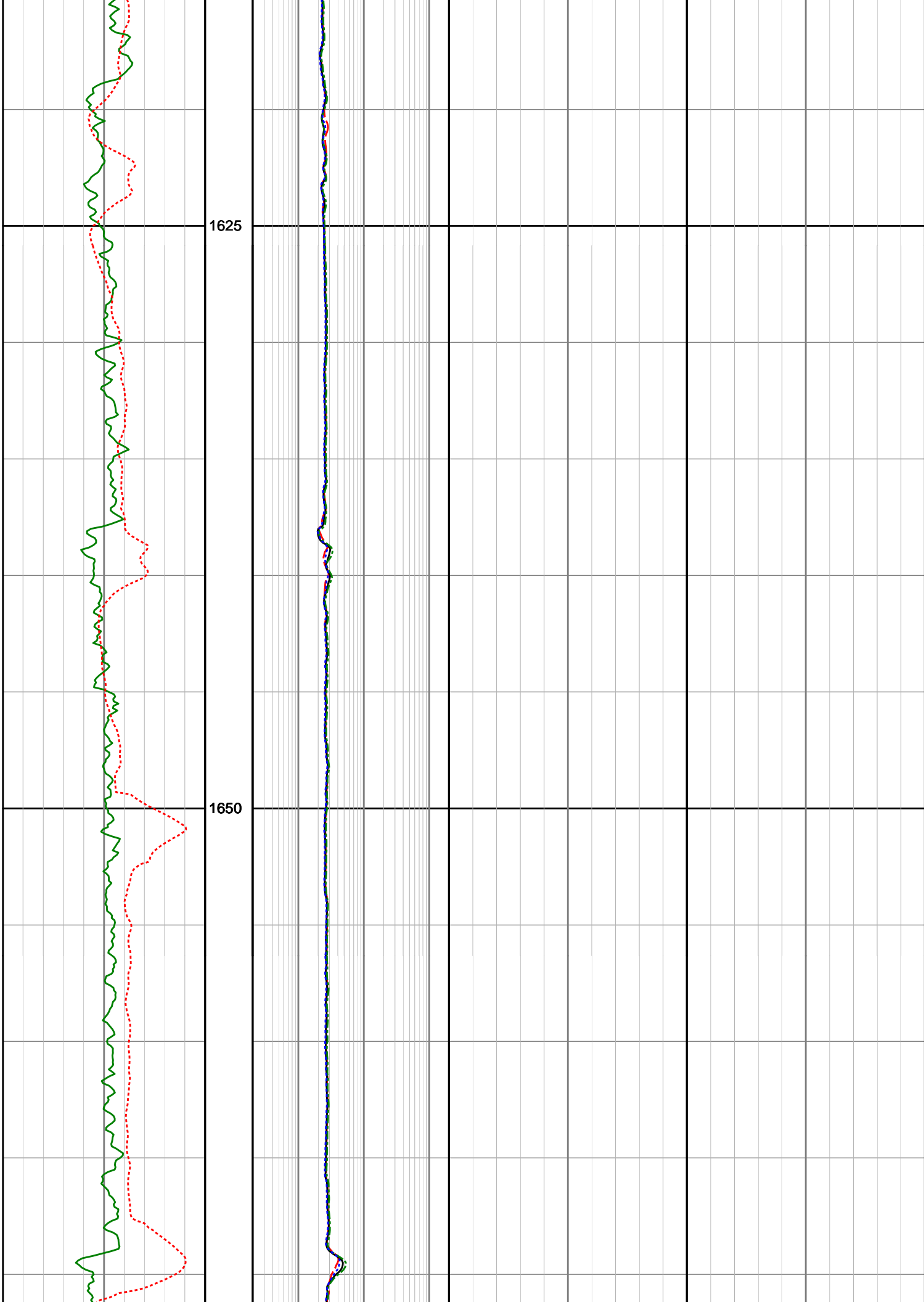


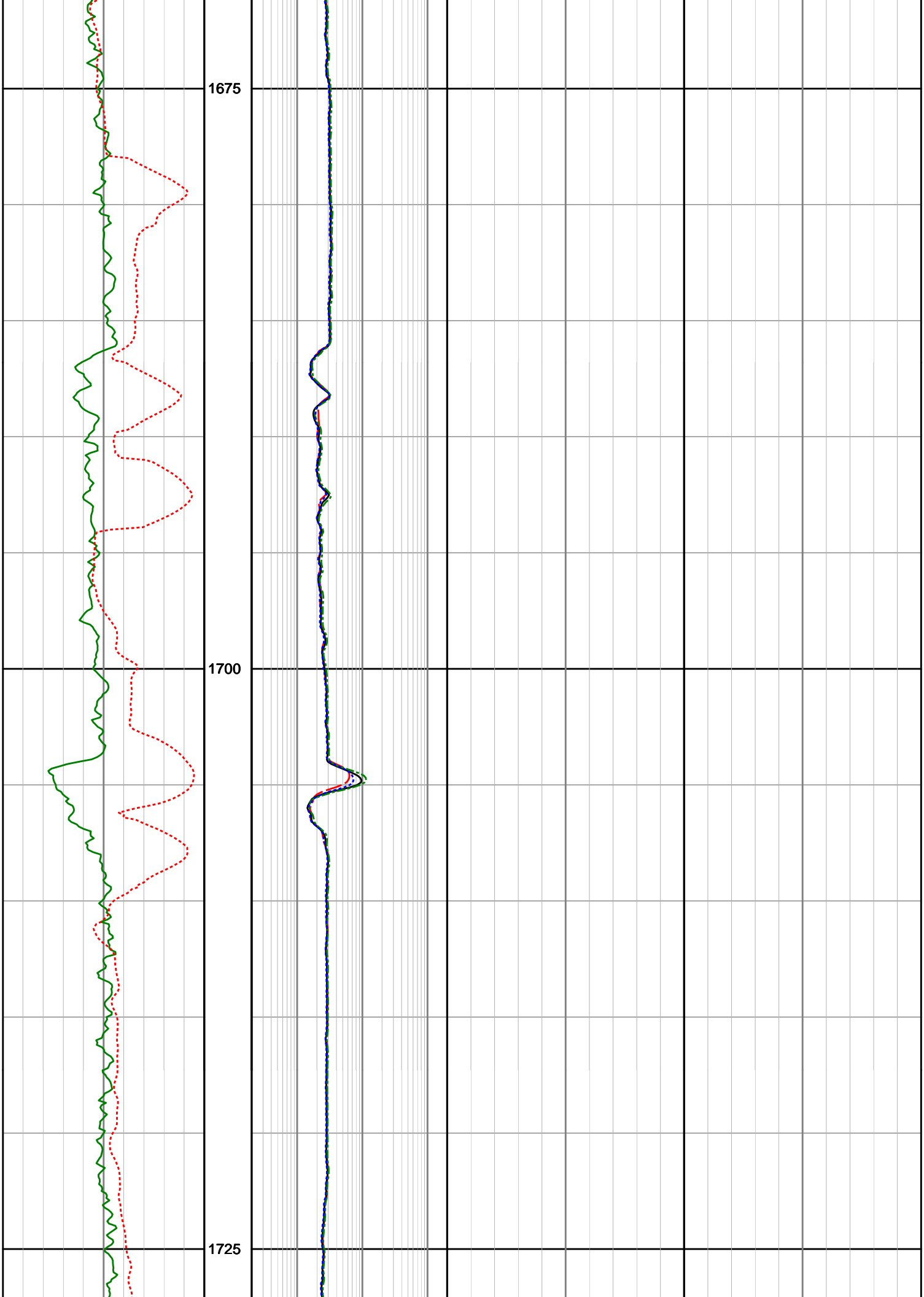


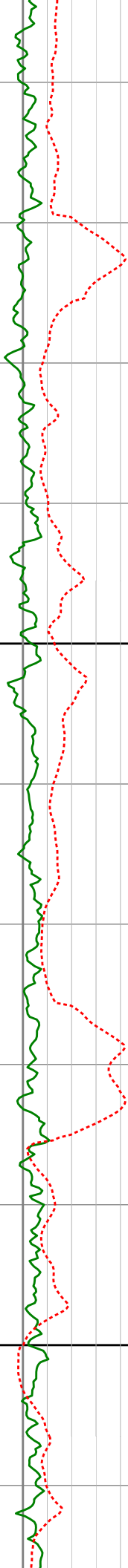






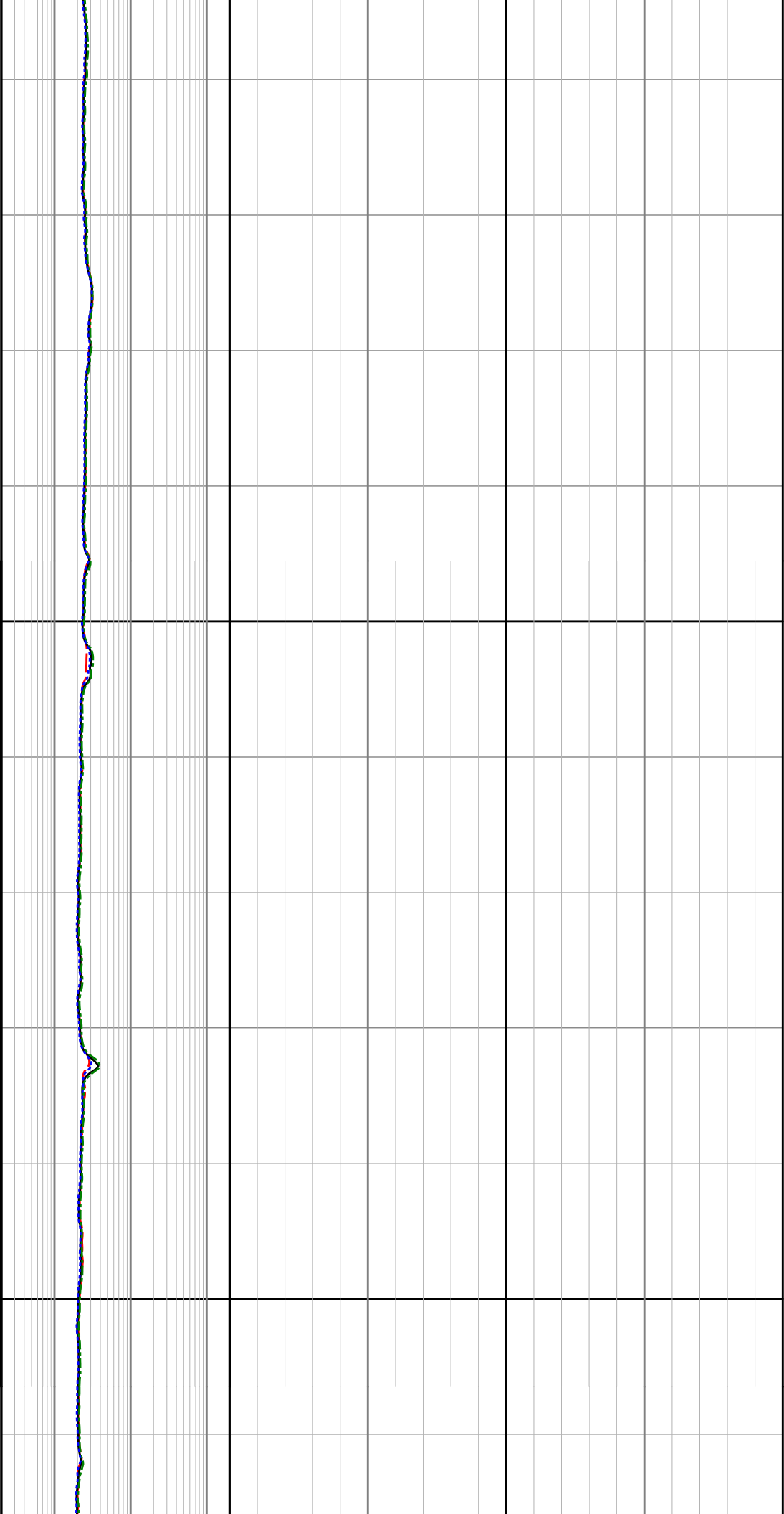


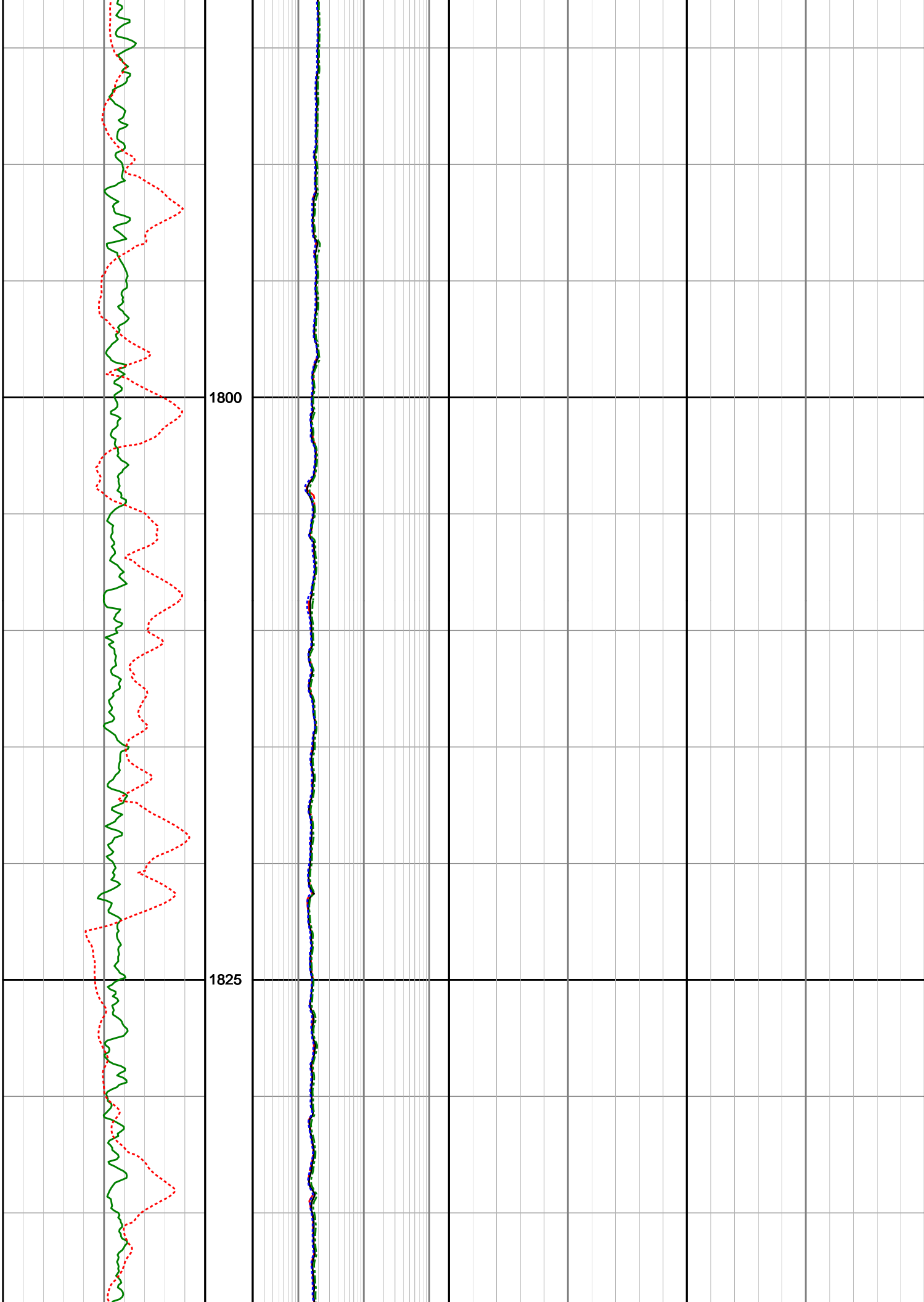


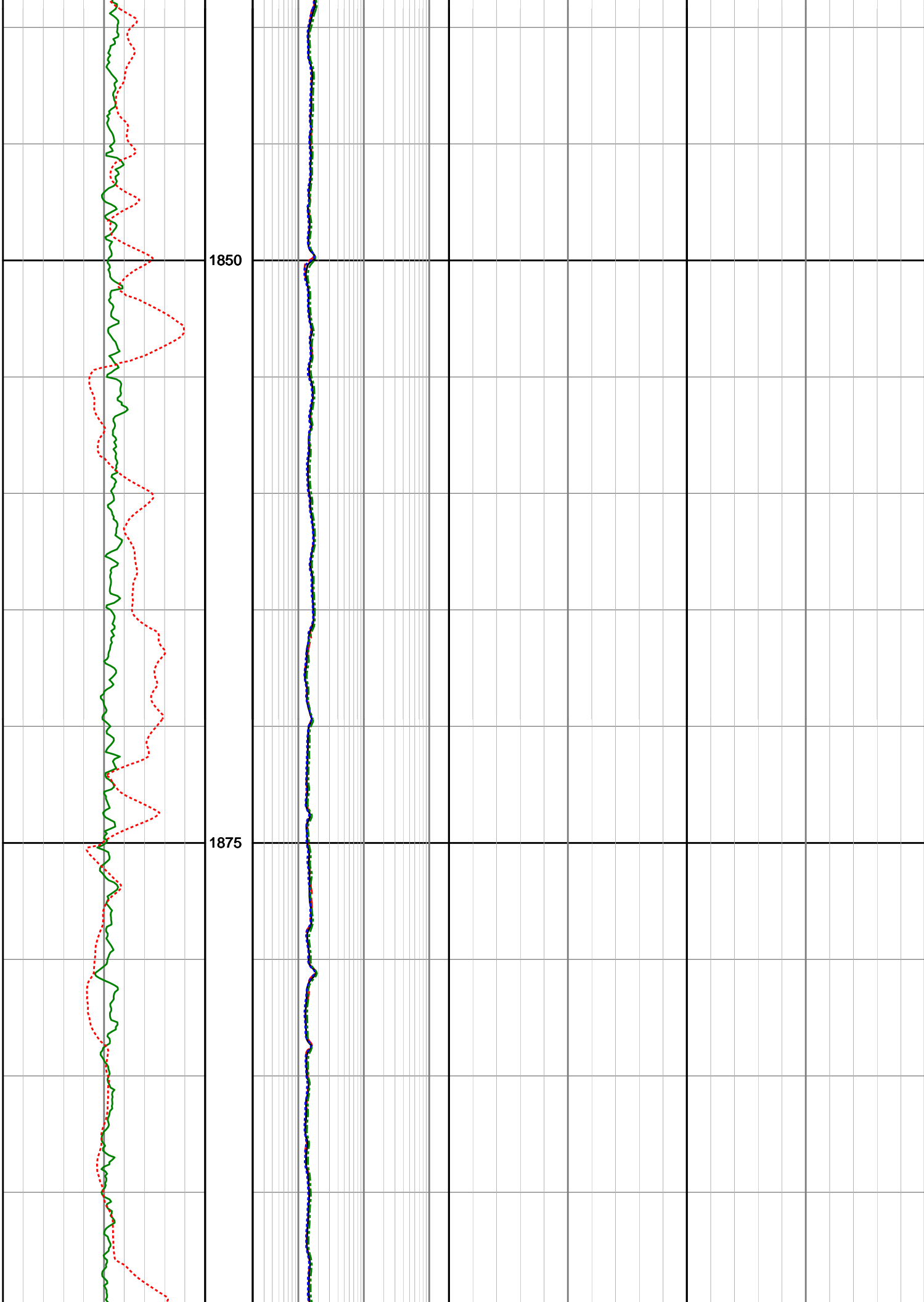


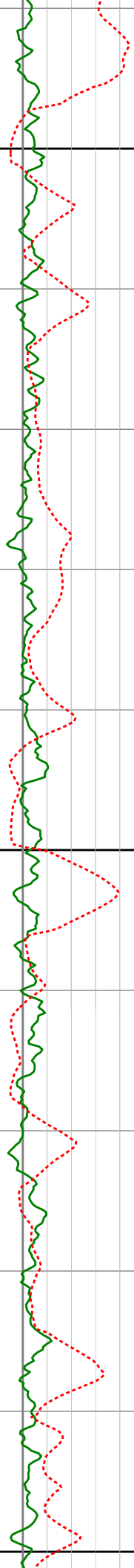
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1775





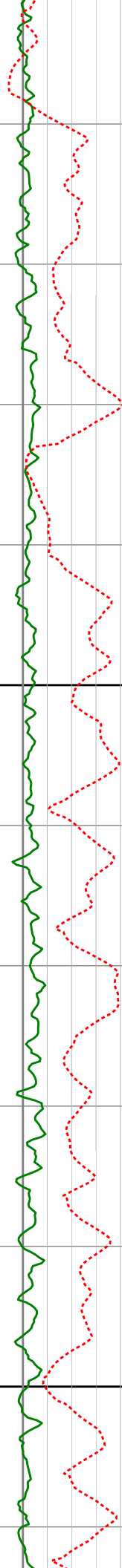




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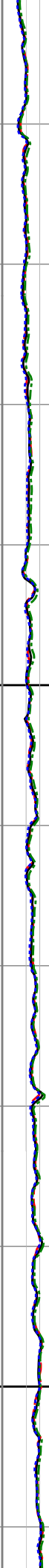
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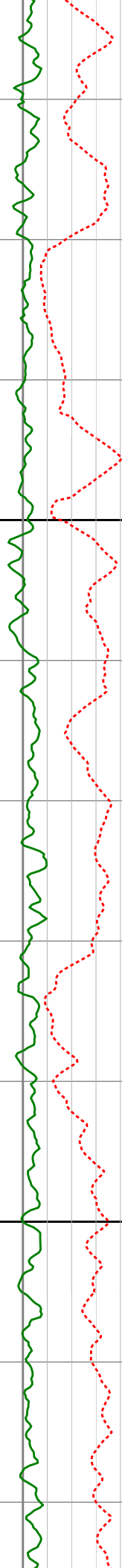
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1975

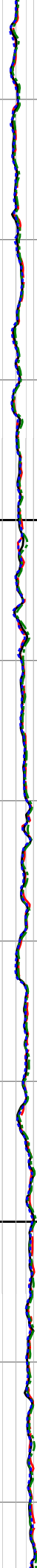
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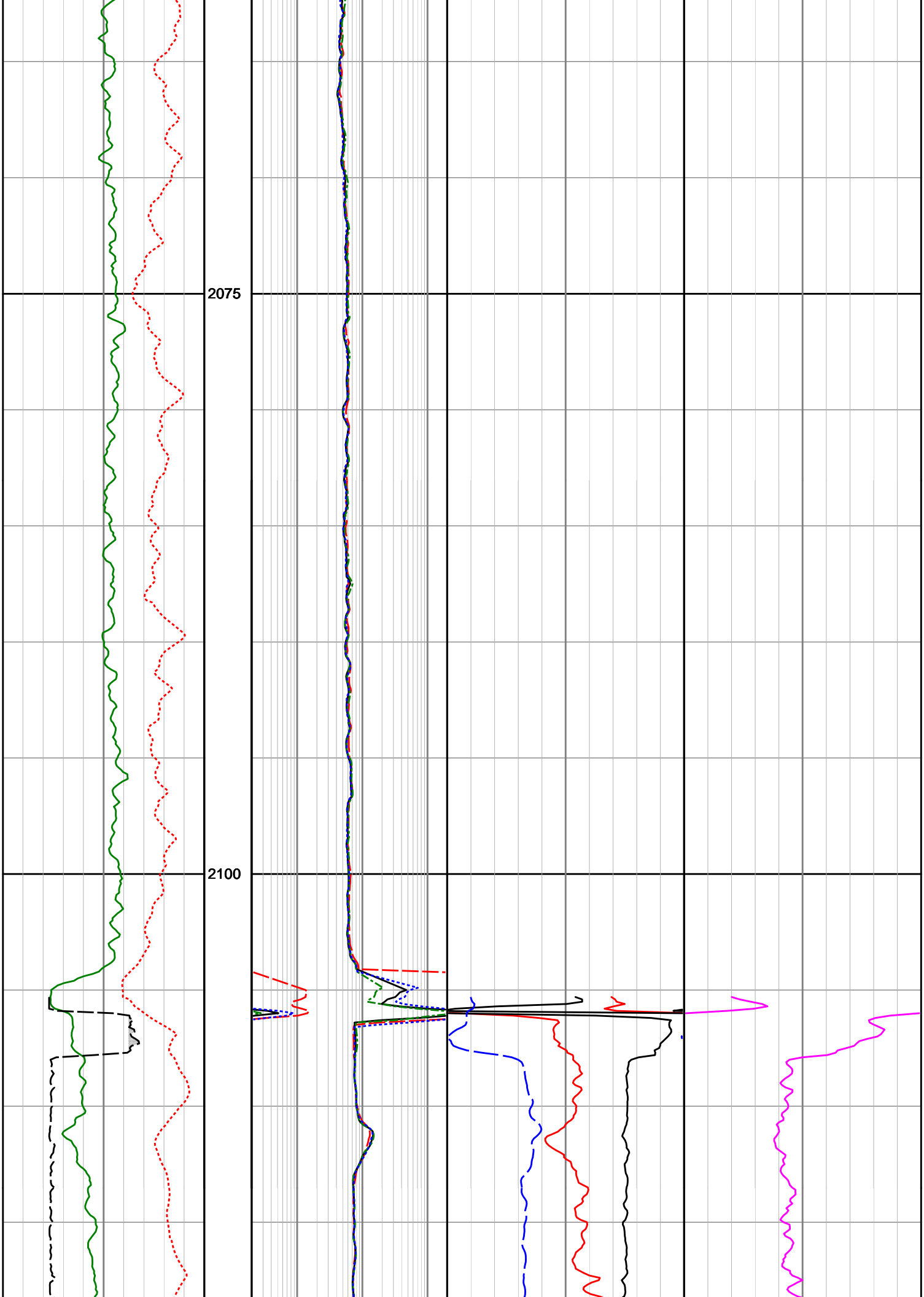


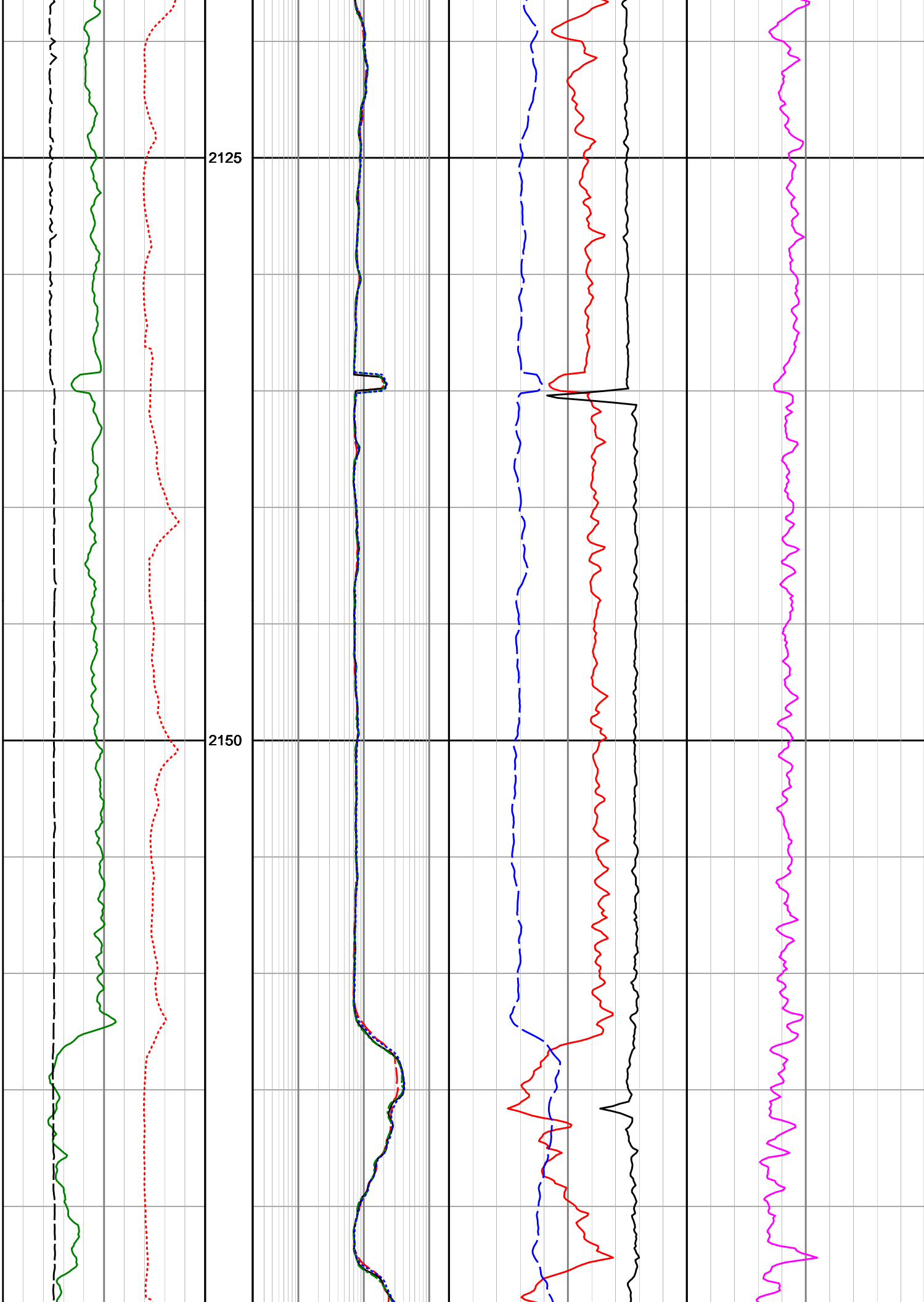


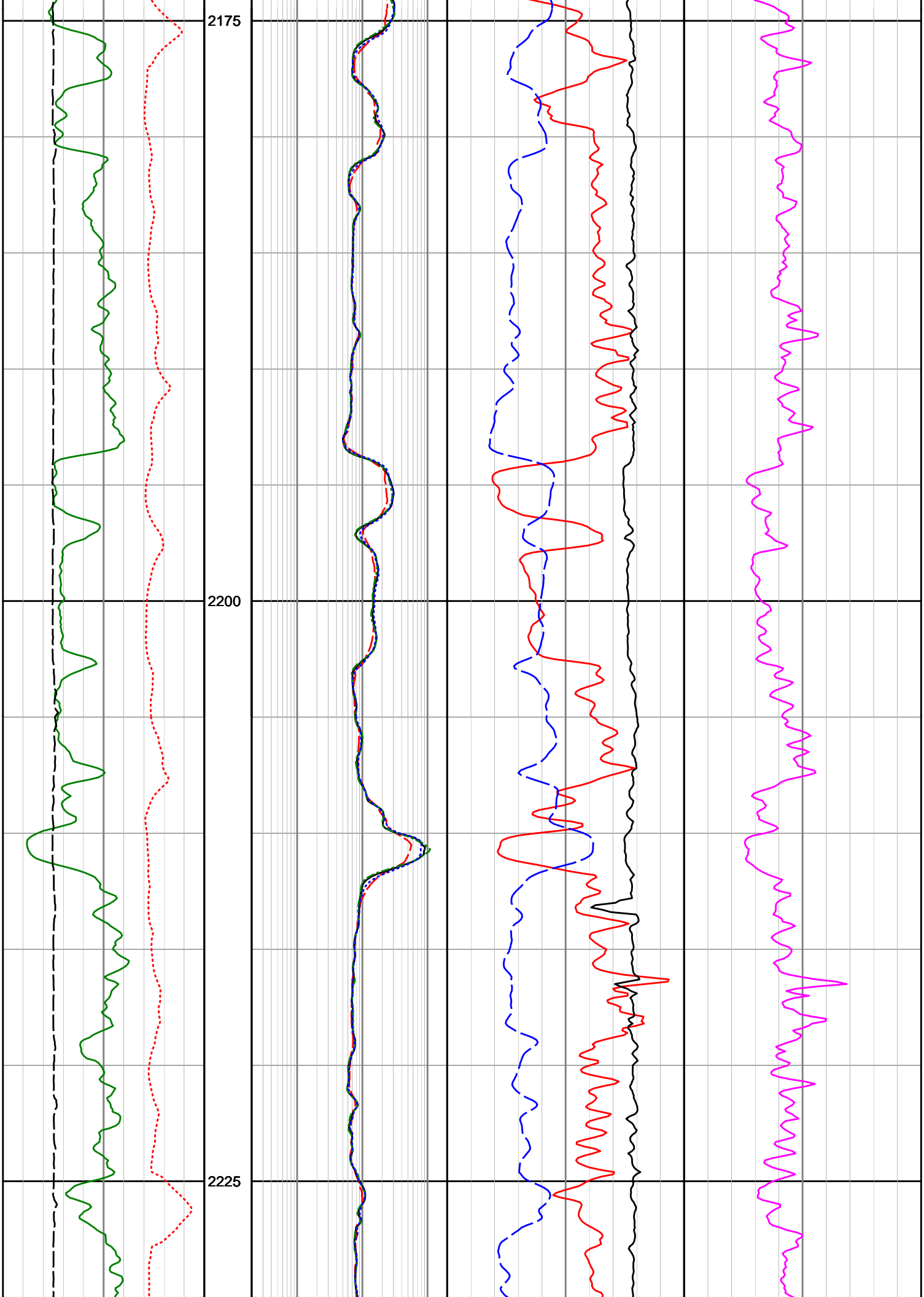
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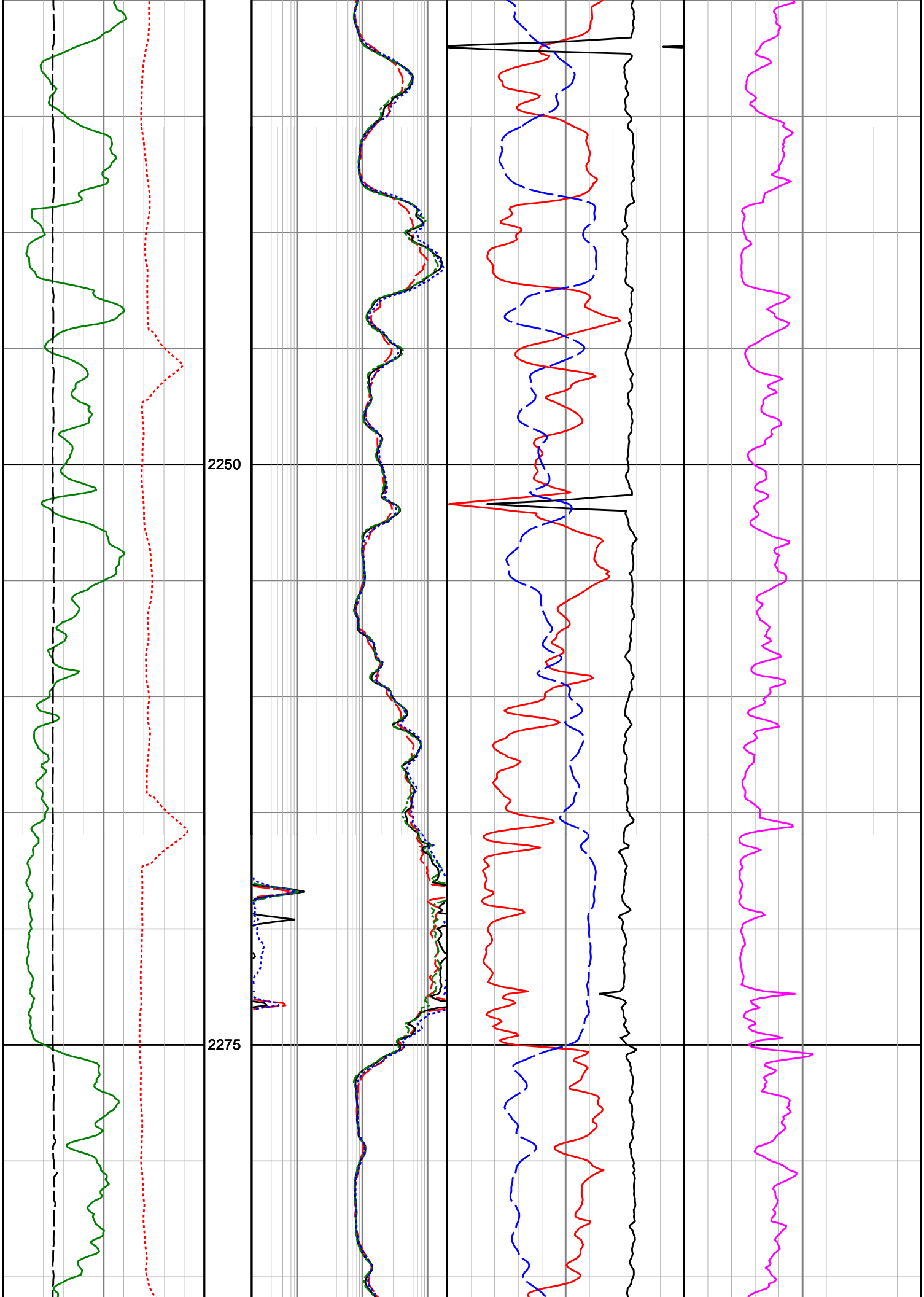
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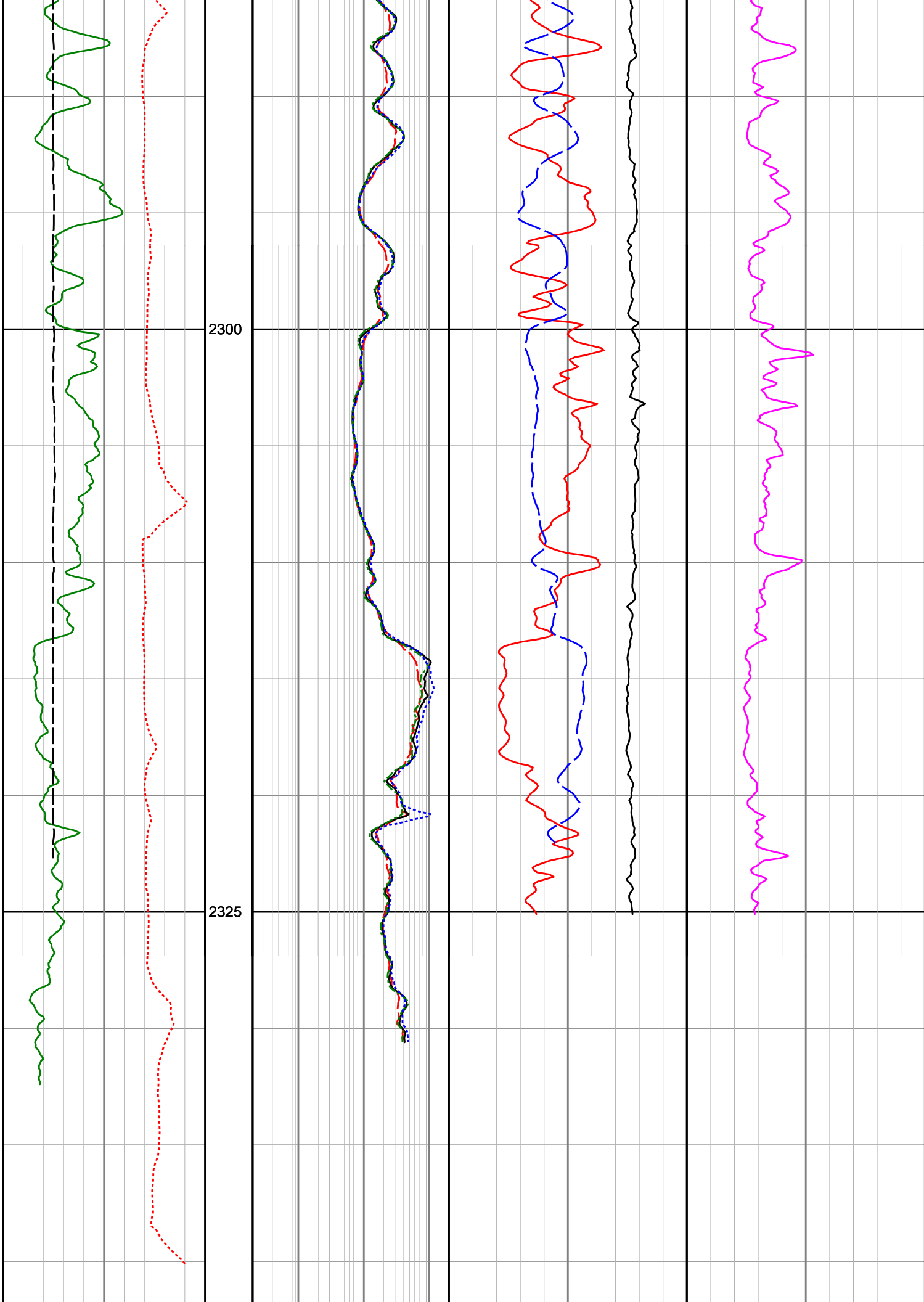












| | | | | | | | | |
|-------------------------------|-----|-------|-------------------------------|-----|-------------------------------|-------|--------------------------------|----|
| | | 2350 | | | | | | |
| Gamma Ray (SGRC) | | Depth | X-Shallow Phase Res (SEXP) | | Neutron Porosity (TNPL) | | Photoelectric Effect (SNP2) | |
| 0 | 200 | TVD | 0.2 | 200 | 0.45 | -0.15 | 0 | 10 |
| api | | 1:200 | ohmm | | v/v | | b/e | |
| Rate of Penetration (SROP) | | | Shallow Phase Res (SESP) | | Bulk Density (SBD2) | | | |
| 100 | 0 | | 0.2 | 200 | 1.95 | 2.95 | | |
| m/hr | | | ohmm | | g/cc | | | |
| Acoustic Caliper (ACAL) | | | Medium Phase Res (SEMP) | | Standoff Correction (SCO2) | | | |
| 6 | 16 | | 0.2 | 200 | -0.75 | 0.25 | | |
| inches | | | ohmm | | g/cc | | | |
| | | | Deep Phase Res (SEDP) | | | | | |
| | | | 0.2 | 200 | | | | |
| | | | ohmm | | | | | |

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| Measured Depth (metres) | Inclination (degrees) | Direction (degrees) | Vertical Depth (metres) | Latitude (metres) | Departure (metres) | Vertical Section (metres) | Dogleg (deg/30m) |
|-------------------------------|--------------------------|------------------------|-------------------------------|----------------------|-----------------------|---------------------------------|---------------------|
| 0.000 | 0.00 | 0.00 | 0.000 | 0.000 N | 0.000 E | 0.000 | TIE-IN |
| 150.000 | 0.00 | 0.00 | 150.000 | 0.000 N | 0.000 E | 0.000 | 0.00 |
| 169.130 | 0.71 | 221.05 | 169.130 | 0.089 S | 0.078 W | 0.073 | 1.11 |
| 208.000 | 0.52 | 196.77 | 207.997 | 0.440 S | 0.287 W | 0.261 | 0.25 |
| 220.400 | 0.29 | 185.42 | 220.397 | 0.525 S | 0.306 W | 0.275 | 0.59 |
| 259.700 | 0.89 | 270.66 | 259.695 | 0.621 S | 0.621 W | 0.584 | 0.70 |
| 341.490 | 2.59 | 273.52 | 341.444 | 0.500 S | 3.101 W | 3.066 | 0.62 |
| 370.420 | 3.21 | 272.48 | 370.337 | 0.425 S | 4.562 W | 4.530 | 0.65 |
| 399.400 | 3.84 | 274.34 | 399.262 | 0.316 S | 6.340 W | 6.312 | 0.66 |
| 428.360 | 4.65 | 272.33 | 428.143 | 0.195 S | 8.480 W | 8.455 | 0.85 |
| 457.280 | 5.51 | 259.78 | 456.950 | 0.394 S | 11.018 W | 10.977 | 1.45 |
| 486.270 | 5.77 | 264.15 | 485.799 | 0.789 S | 13.838 W | 13.769 | 0.52 |
| 525.140 | 5.59 | 268.32 | 524.479 | 1.044 S | 17.674 W | 17.584 | 0.35 |
| 544.150 | 6.87 | 262.02 | 543.376 | 1.229 S | 19.725 W | 19.621 | 2.29 |
| 572.990 | 5.92 | 272.75 | 572.038 | 1.397 S | 22.919 W | 22.800 | 1.58 |
| 601.890 | 6.64 | 272.65 | 600.764 | 1.248 S | 26.077 W | 25.961 | 0.75 |
| 620.250 | 6.72 | 280.11 | 619.000 | 1.010 S | 28.195 W | 28.089 | 1.42 |
| 637.830 | 6.20 | 276.25 | 636.468 | 0.726 S | 30.151 W | 30.058 | 1.16 |
| 666.700 | 5.81 | 274.13 | 665.180 | 0.451 S | 33.158 W | 33.077 | 0.47 |

| | | | | | | | |
|----------|-------|--------|----------|----------|-----------|---------|------|
| 724.560 | 4.14 | 270.99 | 722.820 | 0.204 S | 38.168 W | 38.092 | 0.88 |
| 753.490 | 4.52 | 273.28 | 751.667 | 0.121 S | 40.350 W | 40.275 | 0.43 |
| 782.470 | 4.29 | 270.74 | 780.562 | 0.042 S | 42.574 W | 42.500 | 0.31 |
| 811.430 | 4.34 | 267.95 | 809.439 | 0.067 S | 44.752 W | 44.673 | 0.22 |
| 840.350 | 4.62 | 270.66 | 838.271 | 0.093 S | 47.010 W | 46.926 | 0.36 |
| 869.340 | 4.34 | 269.72 | 867.173 | 0.085 S | 49.275 W | 49.187 | 0.30 |
| 898.280 | 3.92 | 268.79 | 896.037 | 0.111 S | 51.359 W | 51.266 | 0.44 |
| 927.230 | 4.40 | 268.45 | 924.911 | 0.162 S | 53.458 W | 53.359 | 0.50 |
| 956.070 | 3.73 | 266.06 | 953.678 | 0.256 S | 55.500 W | 55.392 | 0.72 |
| 984.970 | 4.34 | 268.49 | 982.507 | 0.350 S | 57.531 W | 57.414 | 0.66 |
| 1013.890 | 4.16 | 272.00 | 1011.347 | 0.342 S | 59.673 W | 59.553 | 0.33 |
| 1042.820 | 4.06 | 274.94 | 1040.203 | 0.217 S | 61.742 W | 61.626 | 0.24 |
| 1071.770 | 3.93 | 261.43 | 1069.083 | 0.277 S | 63.744 W | 63.621 | 0.98 |
| 1100.720 | 4.17 | 266.35 | 1097.961 | 0.491 S | 65.776 W | 65.637 | 0.44 |
| 1129.600 | 4.49 | 268.53 | 1126.758 | 0.587 S | 67.954 W | 67.806 | 0.37 |
| 1158.570 | 5.03 | 274.87 | 1155.628 | 0.509 S | 70.353 W | 70.205 | 0.78 |
| 1187.500 | 6.72 | 277.51 | 1184.405 | 0.180 S | 73.295 W | 73.161 | 1.77 |
| 1216.400 | 7.21 | 278.85 | 1213.092 | 0.320 N | 76.763 W | 76.653 | 0.54 |
| 1274.310 | 7.49 | 272.32 | 1270.527 | 1.032 N | 84.125 W | 84.044 | 0.46 |
| 1303.240 | 7.51 | 269.23 | 1299.210 | 1.083 N | 87.900 W | 87.815 | 0.42 |
| 1332.210 | 7.47 | 270.49 | 1327.933 | 1.074 N | 91.676 W | 91.584 | 0.18 |
| 1361.320 | 8.41 | 273.97 | 1356.763 | 1.237 N | 95.692 W | 95.603 | 1.09 |
| 1390.210 | 9.62 | 275.12 | 1385.296 | 1.599 N | 100.204 W | 100.128 | 1.27 |
| 1419.150 | 9.54 | 275.91 | 1413.833 | 2.062 N | 104.998 W | 104.941 | 0.16 |
| 1448.060 | 9.40 | 274.75 | 1442.349 | 2.504 N | 109.734 W | 109.694 | 0.25 |
| 1476.990 | 9.05 | 273.21 | 1470.904 | 2.827 N | 114.360 W | 114.331 | 0.44 |
| 1505.900 | 8.41 | 272.71 | 1499.479 | 3.054 N | 118.742 W | 118.719 | 0.67 |
| 1534.850 | 8.28 | 270.88 | 1528.123 | 3.187 N | 122.941 W | 122.919 | 0.31 |
| 1563.740 | 8.34 | 272.11 | 1556.710 | 3.296 N | 127.114 W | 127.092 | 0.19 |
| 1592.670 | 8.65 | 273.85 | 1585.322 | 3.519 N | 131.382 W | 131.365 | 0.42 |
| 1621.600 | 8.77 | 273.02 | 1613.919 | 3.781 N | 135.755 W | 135.746 | 0.18 |
| 1650.500 | 8.90 | 271.30 | 1642.476 | 3.948 N | 140.190 W | 140.183 | 0.31 |
| 1679.430 | 9.29 | 270.16 | 1671.042 | 4.005 N | 144.762 W | 144.751 | 0.45 |
| 1708.390 | 9.95 | 271.28 | 1699.595 | 4.068 N | 149.601 W | 149.586 | 0.71 |
| 1737.350 | 13.61 | 273.91 | 1727.940 | 4.356 N | 155.504 W | 155.495 | 3.83 |
| 1766.320 | 14.48 | 273.78 | 1756.044 | 4.827 N | 162.519 W | 162.525 | 0.90 |
| 1795.250 | 18.77 | 275.16 | 1783.758 | 5.485 N | 170.767 W | 170.798 | 4.47 |
| 1824.140 | 21.92 | 277.04 | 1810.843 | 6.564 N | 180.751 W | 180.827 | 3.34 |
| 1853.060 | 24.85 | 276.60 | 1837.384 | 7.924 N | 192.147 W | 192.283 | 3.04 |
| 1882.070 | 26.96 | 269.43 | 1863.484 | 8.560 N | 204.783 W | 204.935 | 3.90 |
| 1911.030 | 30.94 | 270.57 | 1888.821 | 8.569 N | 218.797 W | 218.926 | 4.16 |
| 1939.980 | 35.09 | 272.02 | 1913.091 | 8.936 N | 234.562 W | 234.686 | 4.38 |
| 1968.910 | 38.21 | 272.59 | 1936.299 | 9.634 N | 251.815 W | 251.950 | 3.25 |
| 1997.860 | 41.94 | 273.44 | 1958.448 | 10.619 N | 270.423 W | 270.584 | 3.91 |
| 2026.790 | 45.44 | 272.99 | 1979.363 | 11.737 N | 290.372 W | 290.564 | 3.64 |
| 2055.710 | 48.46 | 272.75 | 1999.103 | 12.794 N | 311.476 W | 311.695 | 3.14 |
| 2084.640 | 51.86 | 272.71 | 2017.634 | 13.852 N | 333.661 W | 333.904 | 3.53 |
| 2110.880 | 54.91 | 272.40 | 2033.283 | 14.790 N | 354.700 W | 354.961 | 3.50 |
| 2142.550 | 59.40 | 274.22 | 2050.456 | 16.336 N | 381.254 W | 381.560 | 4.49 |
| 2171.490 | 64.94 | 274.96 | 2063.962 | 18.388 N | 406.754 W | 407.136 | 5.78 |
| 2200.390 | 65.78 | 275.15 | 2076.010 | 20.702 N | 432.920 W | 433.392 | 0.89 |
| 2229.340 | 69.94 | 274.26 | 2086.918 | 22.899 N | 459.639 W | 460.194 | 4.39 |
| 2259.310 | 73.39 | 274.89 | 2096.345 | 25.169 N | 487.992 W | 488.631 | 3.50 |
| 2287.290 | 73.01 | 274.85 | 2104.432 | 27.443 N | 514.681 W | 515.407 | 0.41 |
| 2295.600 | 72.83 | 274.15 | 2106.873 | 28.066 N | 522.600 W | 523.348 | 2.50 |
| 2324.710 | 74.76 | 273.81 | 2114.996 | 30.006 N | 550.485 W | 551.299 | 2.02 |
| 2353.600 | 77.11 | 274.62 | 2122.017 | 32.067 N | 578.431 W | 579.317 | 2.57 |
| 2380.350 | 80.82 | 275.67 | 2127.136 | 34.422 N | 604.575 W | 605.554 | 4.32 |
| 2409.420 | 83.75 | 281.32 | 2131.041 | 38.680 N | 633.050 W | 634.228 | 6.52 |
| 2440.380 | 86.54 | 283.47 | 2133.662 | 45.302 N | 663.175 W | 664.686 | 3.41 |
| 2469.290 | 89.57 | 284.75 | 2134.643 | 52.345 N | 691.193 W | 693.064 | 3.41 |
| 2497.930 | 92.66 | 285.85 | 2134.085 | 59.900 N | 718.809 W | 721.071 | 3.44 |
| 2527.130 | 93.22 | 285.11 | 2132.588 | 67.684 N | 746.912 W | 749.578 | 0.95 |
| 2556.060 | 93.09 | 282.07 | 2130.995 | 74.470 N | 774.986 W | 777.998 | 3.15 |
| 2584.990 | 93.16 | 278.76 | 2129.417 | 79.692 N | 803.393 W | 806.660 | 3.43 |
| 2613.890 | 92.85 | 276.08 | 2127.902 | 83.418 N | 832.009 W | 835.444 | 2.80 |
| 2642.820 | 92.60 | 275.29 | 2126.527 | 86.281 N | 860.764 W | 864.316 | 0.86 |
| 2671.780 | 90.50 | 275.95 | 2125.743 | 89.116 N | 889.572 W | 893.240 | 2.28 |
| 2700.740 | 90.75 | 275.69 | 2125.428 | 92.052 N | 918.381 W | 922.171 | 0.37 |
| 2729.710 | 90.50 | 276.17 | 2125.111 | 95.045 N | 947.195 W | 951.109 | 0.56 |
| 2758.640 | 90.07 | 275.82 | 2124.968 | 98.067 N | 975.966 W | 980.007 | 0.57 |

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|----------|-------|--------|----------|-----------|------------|----------|------|
| 2786.010 | 89.20 | 277.60 | 2125.142 | 101.265 N | 1003.146 W | 1007.327 | 2.17 |
| 2816.450 | 88.53 | 274.82 | 2125.745 | 104.557 N | 1033.399 W | 1037.720 | 2.82 |
| 2843.560 | 89.08 | 272.77 | 2126.310 | 106.350 N | 1060.442 W | 1064.821 | 2.35 |
| 2872.880 | 88.15 | 274.77 | 2127.019 | 108.277 N | 1089.688 W | 1094.130 | 2.26 |
| 2901.720 | 87.41 | 276.08 | 2128.136 | 111.002 N | 1118.377 W | 1122.928 | 1.56 |

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|----------|-------|--------|----------|-----------|------------|----------|------|
| 2932.300 | 87.66 | 276.72 | 2129.452 | 114.408 N | 1148.738 W | 1153.435 | 0.67 |
| 2961.250 | 88.53 | 273.72 | 2130.414 | 117.040 N | 1177.548 W | 1182.350 | 3.24 |
| 2990.180 | 88.22 | 277.49 | 2131.235 | 119.863 N | 1206.323 W | 1211.240 | 3.92 |
| 3019.100 | 87.97 | 275.06 | 2132.196 | 123.023 N | 1235.052 W | 1240.103 | 2.53 |
| 3048.030 | 87.91 | 276.60 | 2133.236 | 125.959 N | 1263.812 W | 1268.986 | 1.60 |

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|----------|-------|--------|----------|-----------|------------|----------|------|
| 3076.970 | 88.77 | 276.21 | 2134.074 | 129.186 N | 1292.559 W | 1297.872 | 0.98 |
| 3105.940 | 89.21 | 275.52 | 2134.585 | 132.146 N | 1321.373 W | 1326.808 | 0.85 |
| 3134.880 | 90.81 | 275.69 | 2134.580 | 134.973 N | 1350.174 W | 1355.724 | 1.67 |
| 3162.220 | 91.73 | 274.81 | 2133.974 | 137.474 N | 1377.392 W | 1383.042 | 1.40 |
| 3191.150 | 91.43 | 273.46 | 2133.176 | 139.559 N | 1406.235 W | 1411.957 | 1.43 |

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|----------|-------|--------|----------|-----------|------------|----------|------|
| 3220.270 | 91.24 | 272.90 | 2132.498 | 141.174 N | 1435.302 W | 1441.069 | 0.61 |
| 3248.910 | 91.43 | 272.30 | 2131.831 | 142.473 N | 1463.905 W | 1469.699 | 0.66 |
| 3277.480 | 91.74 | 270.72 | 2131.040 | 143.225 N | 1492.453 W | 1498.243 | 1.69 |
| 3308.520 | 91.55 | 267.86 | 2130.149 | 142.841 N | 1523.474 W | 1529.190 | 2.77 |
| 3335.970 | 91.86 | 267.23 | 2129.332 | 141.666 N | 1550.887 W | 1556.488 | 0.77 |

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|----------|-------|--------|----------|-----------|------------|----------|------|
| 3366.390 | 91.67 | 267.91 | 2128.395 | 140.377 N | 1581.265 W | 1586.741 | 0.70 |
| 3395.360 | 91.42 | 268.54 | 2127.614 | 139.480 N | 1610.210 W | 1615.586 | 0.70 |
| 3424.310 | 91.73 | 269.11 | 2126.818 | 138.886 N | 1639.143 W | 1644.435 | 0.67 |
| 3452.270 | 91.18 | 270.09 | 2126.108 | 138.691 N | 1667.093 W | 1672.327 | 1.21 |
| 3481.190 | 90.62 | 271.42 | 2125.654 | 139.073 N | 1696.006 W | 1701.214 | 1.50 |

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|----------|-------|--------|----------|-----------|------------|----------|------|
| 3510.200 | 91.36 | 270.88 | 2125.153 | 139.655 N | 1725.006 W | 1730.198 | 0.95 |
| 3539.050 | 90.68 | 268.43 | 2124.639 | 139.481 N | 1753.848 W | 1758.982 | 2.64 |
| 3568.540 | 90.62 | 269.75 | 2124.305 | 139.013 N | 1783.332 W | 1788.390 | 1.34 |
| 3596.900 | 87.47 | 267.06 | 2124.777 | 138.224 N | 1811.671 W | 1816.635 | 4.38 |
| 3625.860 | 83.38 | 266.72 | 2127.087 | 136.659 N | 1840.490 W | 1845.315 | 4.25 |

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|----------|-------|--------|----------|-----------|------------|----------|------|
| 3654.780 | 79.21 | 266.22 | 2131.463 | 134.900 N | 1869.016 W | 1873.692 | 4.36 |
| 3683.720 | 74.37 | 265.83 | 2138.074 | 132.948 N | 1897.114 W | 1901.630 | 5.03 |
| 3712.660 | 69.09 | 265.58 | 2147.144 | 130.892 N | 1924.509 W | 1928.859 | 5.48 |
| 3741.630 | 66.06 | 268.24 | 2158.195 | 129.442 N | 1951.242 W | 1955.464 | 4.04 |
| 3770.600 | 61.26 | 267.44 | 2171.046 | 128.467 N | 1977.178 W | 1981.300 | 5.03 |

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|----------|-------|--------|----------|-----------|------------|----------|------|
| 3799.550 | 57.17 | 268.95 | 2185.860 | 127.677 N | 2002.030 W | 2006.064 | 4.45 |
| 3824.400 | 54.02 | 268.15 | 2199.900 | 127.161 N | 2022.524 W | 2026.493 | 3.89 |
| 3857.310 | 49.28 | 270.04 | 2220.315 | 126.740 N | 2048.320 W | 2052.222 | 4.53 |
| 3886.190 | 47.08 | 270.46 | 2239.570 | 126.832 N | 2069.841 W | 2073.712 | 2.31 |
| 3915.140 | 45.75 | 270.18 | 2259.529 | 126.950 N | 2090.810 W | 2094.653 | 1.39 |

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|----------|-------|--------|----------|-----------|------------|----------|------|
| 3944.070 | 44.63 | 271.10 | 2279.918 | 127.178 N | 2111.332 W | 2115.154 | 1.34 |
| 3973.050 | 42.59 | 270.42 | 2300.899 | 127.445 N | 2131.318 W | 2135.122 | 2.17 |
| 4001.930 | 41.91 | 270.87 | 2322.277 | 127.663 N | 2150.735 W | 2154.519 | 0.77 |
| 4017.670 | 41.94 | 269.81 | 2333.988 | 127.726 N | 2161.251 W | 2165.021 | 1.35 |
| 4026.000 | 41.94 | 269.81 | 2340.184 | 127.707 N | 2166.818 W | 2170.578 | 0.00 |

CALCULATION BASED ON MINIMUM CURVATURE METHOD

SURVEY COORDINATES RELATIVE TO WELL SYSTEM REFERENCE POINT
TVD VALUES GIVEN RELATIVE TO DRILLING MEASUREMENT POINT

VERTICAL SECTION RELATIVE TO WELL HEAD
VERTICAL SECTION IS COMPUTED ALONG A DIRECTION OF 273.32 DEGREES (GRID)
A TOTAL CORRECTION OF 12.31 DEG FROM MAGNETIC NORTH TO GRID NORTH HAS BEEN APPLIED

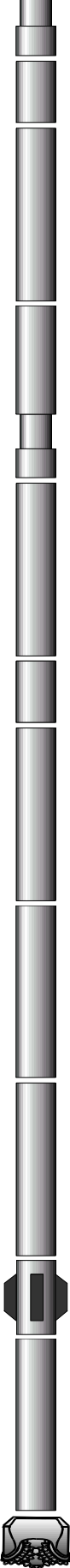
HORIZONTAL DISPLACEMENT IS RELATIVE TO THE WELL HEAD.
HORIZONTAL DISPLACEMENT(CLOSURE) AT 4026.000 METRES
IS 2170.579 METRES ALONG 273.37 DEGREES (GRID)

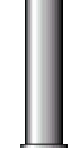



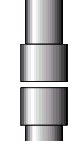

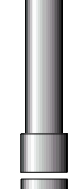

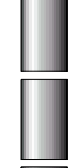










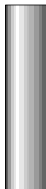


Date Printed:28 September 2006

MWD RUN 300 - BHA

MWD RUN 300 - MWD
























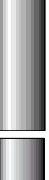
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|---|
| <div>  <div> <div>X-Over Sub</div> <div>1.380</div> </div> <div> <div>Spiral Drill Collar</div> <div>17.310</div> </div> <div> <div>Jar</div> <div>9.630</div> </div> <div> <div>Spiral Drill Collar</div> <div>35.850</div> </div> <div> <div>Float Sub</div> <div>.770</div> </div> <div> <div>Non-Magnetic</div> <div>8.580</div> </div> <div> <div>MWD</div> <div>14.36</div> </div> <div> <div>Flex</div> <div>2.810</div> </div> <div> <div>Stabilizer</div> <div>.780</div> </div> <div> <div>MWD</div> <div>5.830</div> </div> <div> <div>PDC</div> <div>.530</div> </div> </div> |
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|--------------|---|--------|-----------------|---|------------|
| Heavy Weight |  | 58.120 | Positive Pulsar |  | 10.220 (m) |
| Jar |  | 9.860 | TM |  | |
| Heavy Weight |  | 19.380 | FTWD Insert |  | 28.520 |
| X-Over Sub |  | 1.380 | PWD-FTWD Insert |  | 28.660 |
| Float Sub |  | .790 | CTN Insert |  | 25.340 |
| Non-Magnetic |  | 9.450 | ALD Insert |  | 21.270 |
| MWD |  | 27.21 | HCIM Insert |  | |
| Stabilizer |  | .590 | EWR-P4 Insert |  | 13.680 |
| Flex |  | 2.770 | DDS Insert |  | 11.470 |
| Geo-Pilot |  | 7.060 | DGR Insert |  | 11.370 |
| PDC |  | .420 | DM Sonde |  | 8.920 |

MWD RUN 500 - BHA

MWD RUN 500 - MWD

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|------------------|--------|
| Component Length | Sensor |
|------------------|--------|

| | | Length (m) | | | Measure Point Distance To Bit (m) |
|--------------|---|---------------|-----------------|---|--|
| Heavy Weight |  | 58.120 | Positive Pulser |  | |
| Jar |  | 9.860 | TM |  | |
| Heavy Weight |  | 19.380 | FTWD Insert |  | 27.640 |
| X-Over Sub |  | 1.380 | PWD-FTWD Insert |  | 27.780 |
| Float Sub |  | .790 | CTN Insert |  | 24.460 |
| Non-Magnetic |  | 9.450 | ALD Insert |  | 20.390 |
| MWD |  | 27.21 | HCIM Insert |  | |
| Stabilizer |  | .590 | EWR-P4 Insert |  | 12.800 |
| Flex |  | 2.800 | DDS Insert |  | 10.590 |
| Geo-Pilot |  | 6.130 | DGR Insert |  | 10.490 |
| PDC |  | .430 | DM Sonde |  | 8.020 |