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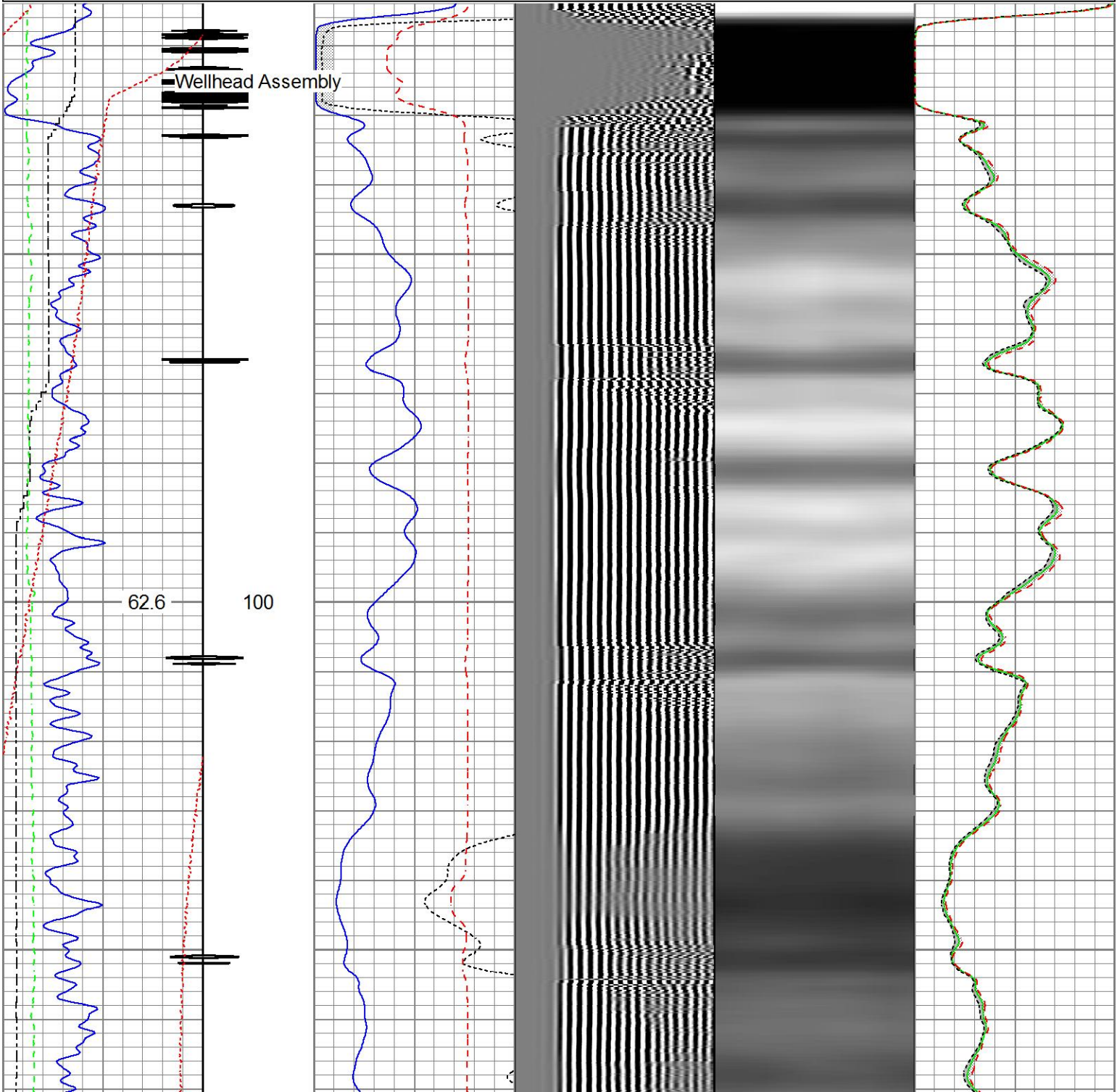
Comments



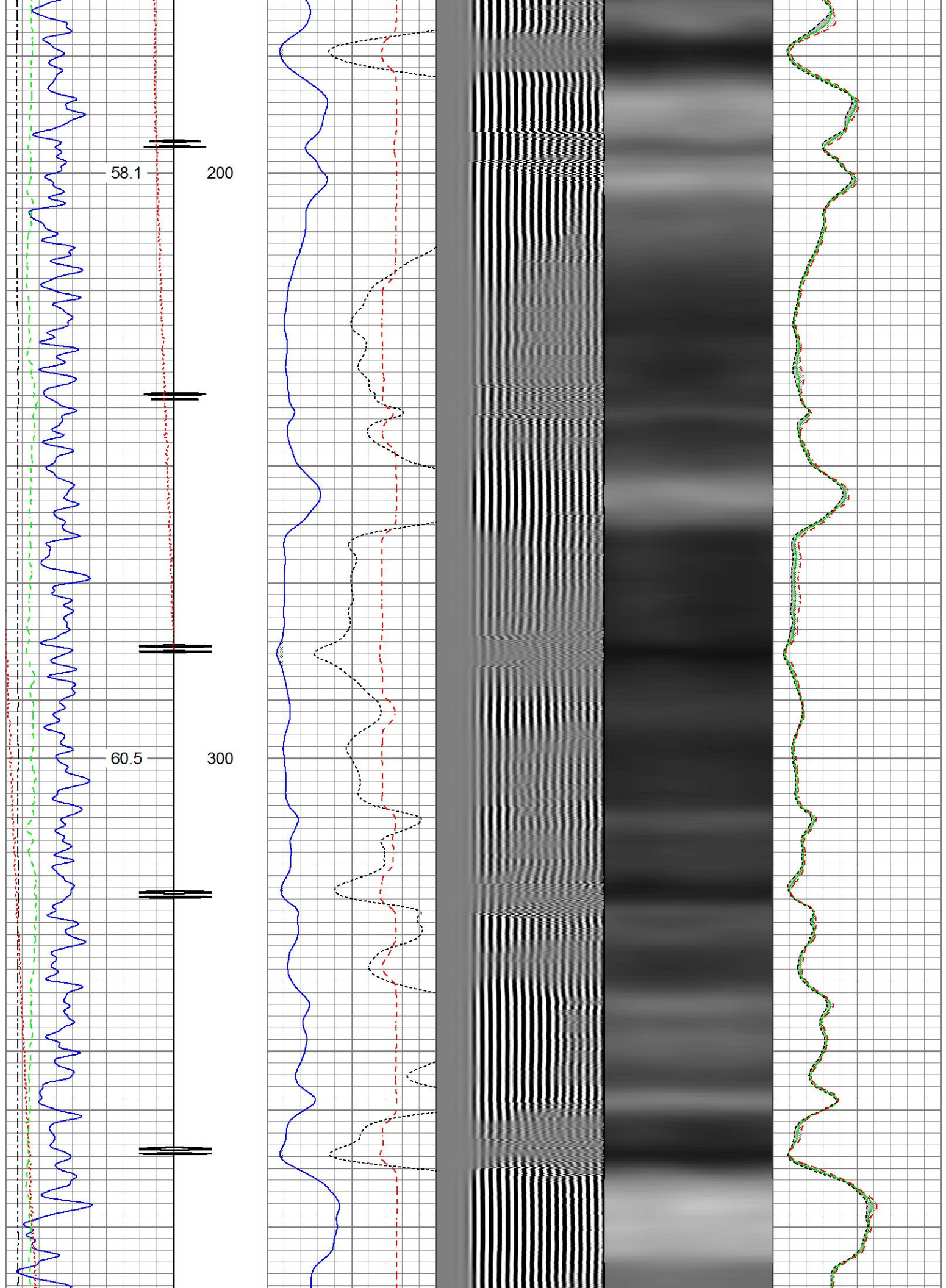
**RELIANCE**  
OILFIELD SERVICES

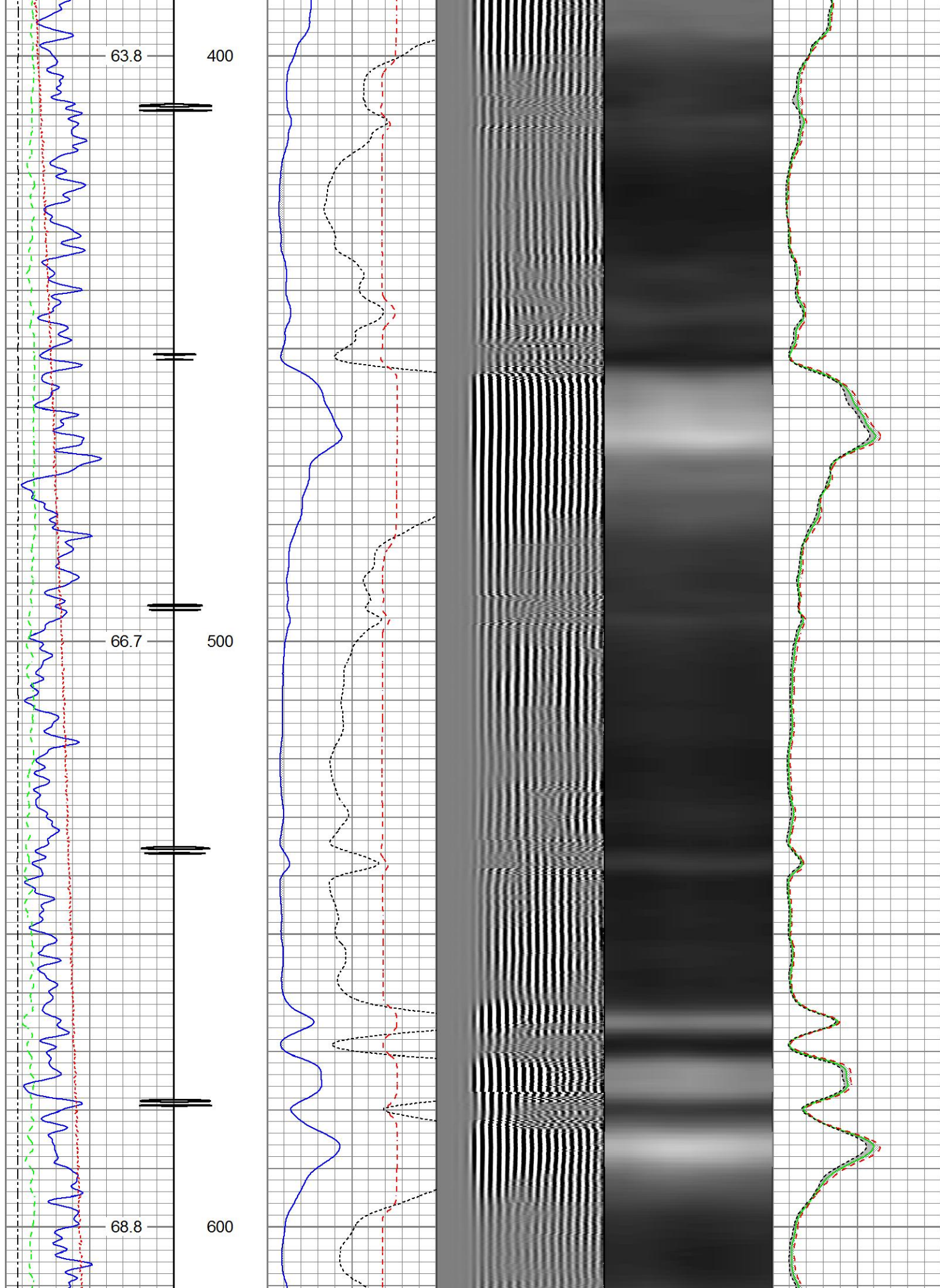
Recorded With 2800 PSI Surface Induced Pressure

|                       |                  |                         |            |                   |
|-----------------------|------------------|-------------------------|------------|-------------------|
| Gamma Ray             | 3' Amplitude     | 5' Variable Density Log | Sector Map | Average Amplitude |
| 0 (GAPI) 120          | 0 (mV) 100       | 200 1200                |            | 0 100             |
| Casing Collar Locator | 3' Amplitude x 5 |                         |            | Mimimum Amplitude |
| Temperature           | 0 (mV) 20        |                         |            | 0 100             |
| 0 (degF) 20           | 3' Travel Time   |                         |            | Maximum Amplitude |
| Line Speed            | 650 (usec) 150   |                         |            | 0 100             |
| -150 (ft/min) 150     |                  |                         |            |                   |
| Line Tension          |                  |                         |            |                   |
| 0 (lb) 2000           |                  |                         |            |                   |

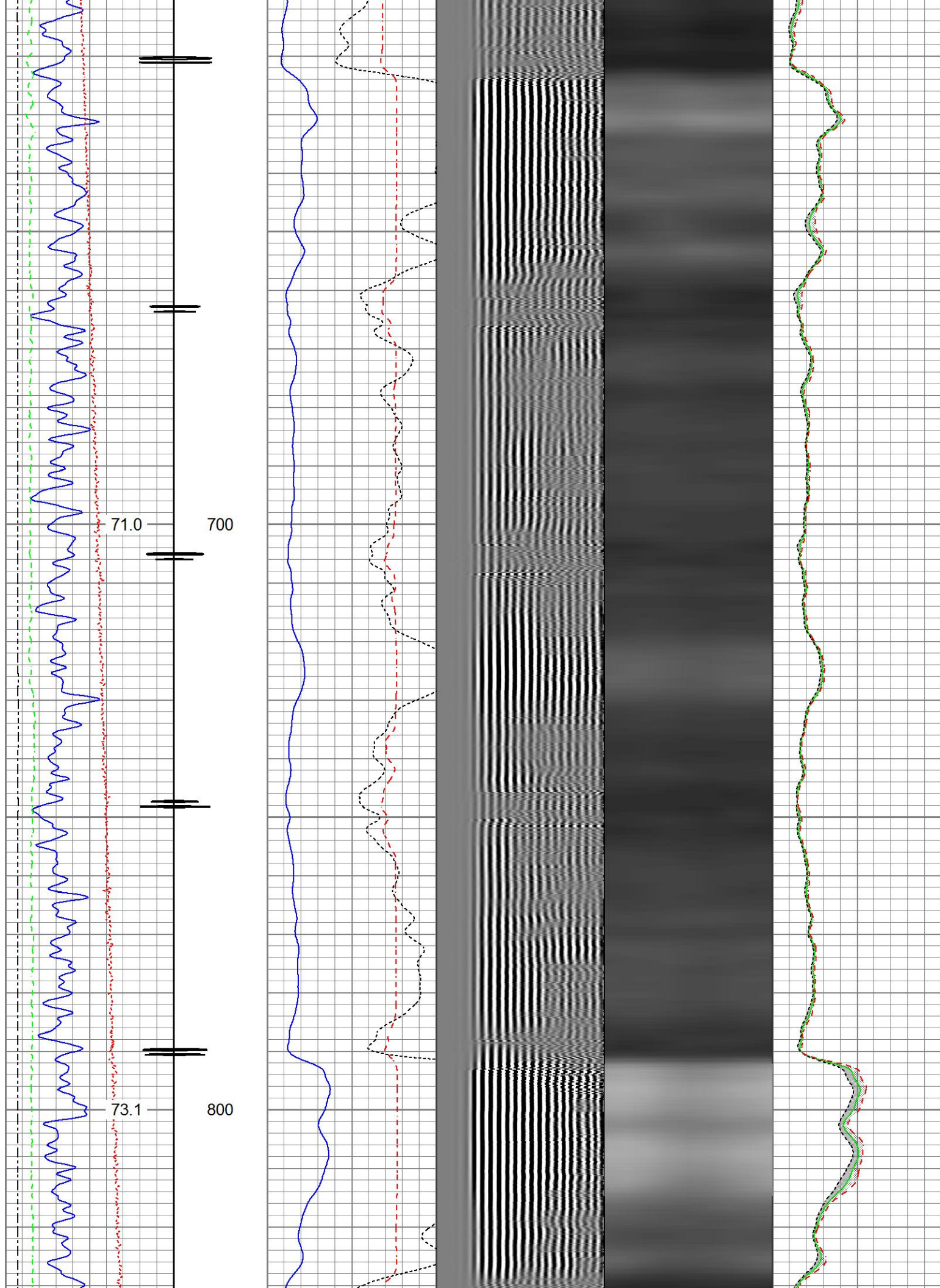


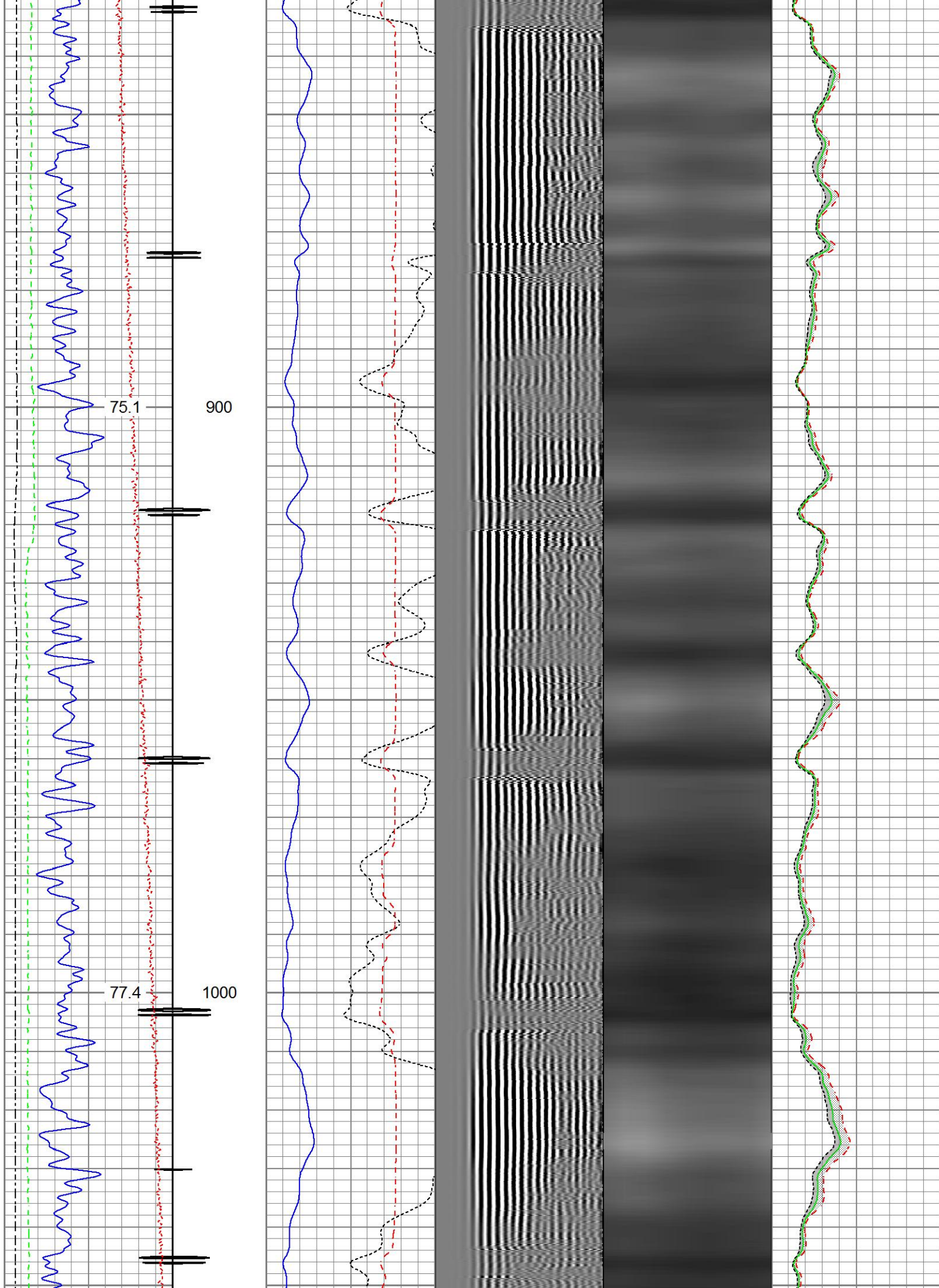




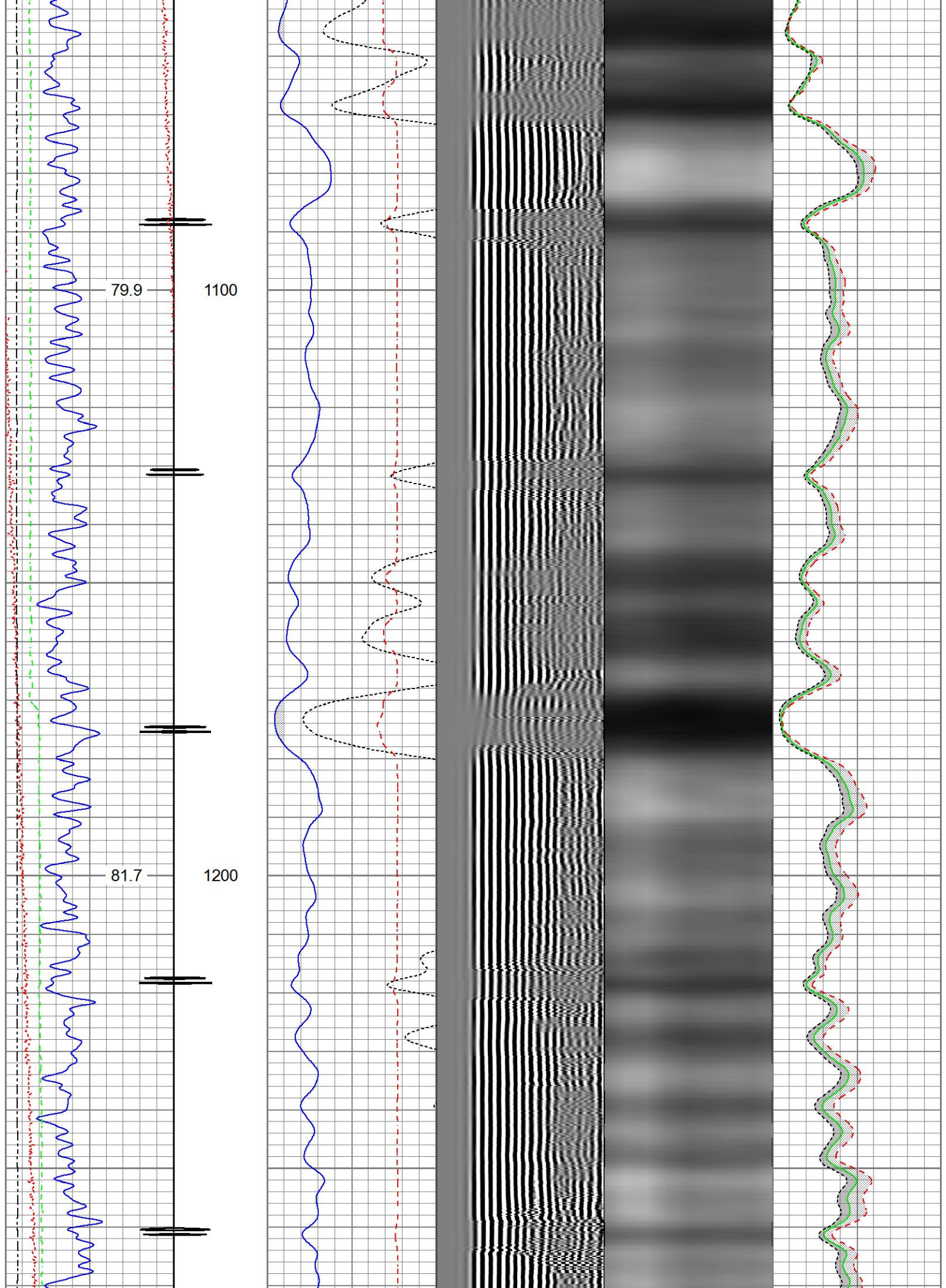




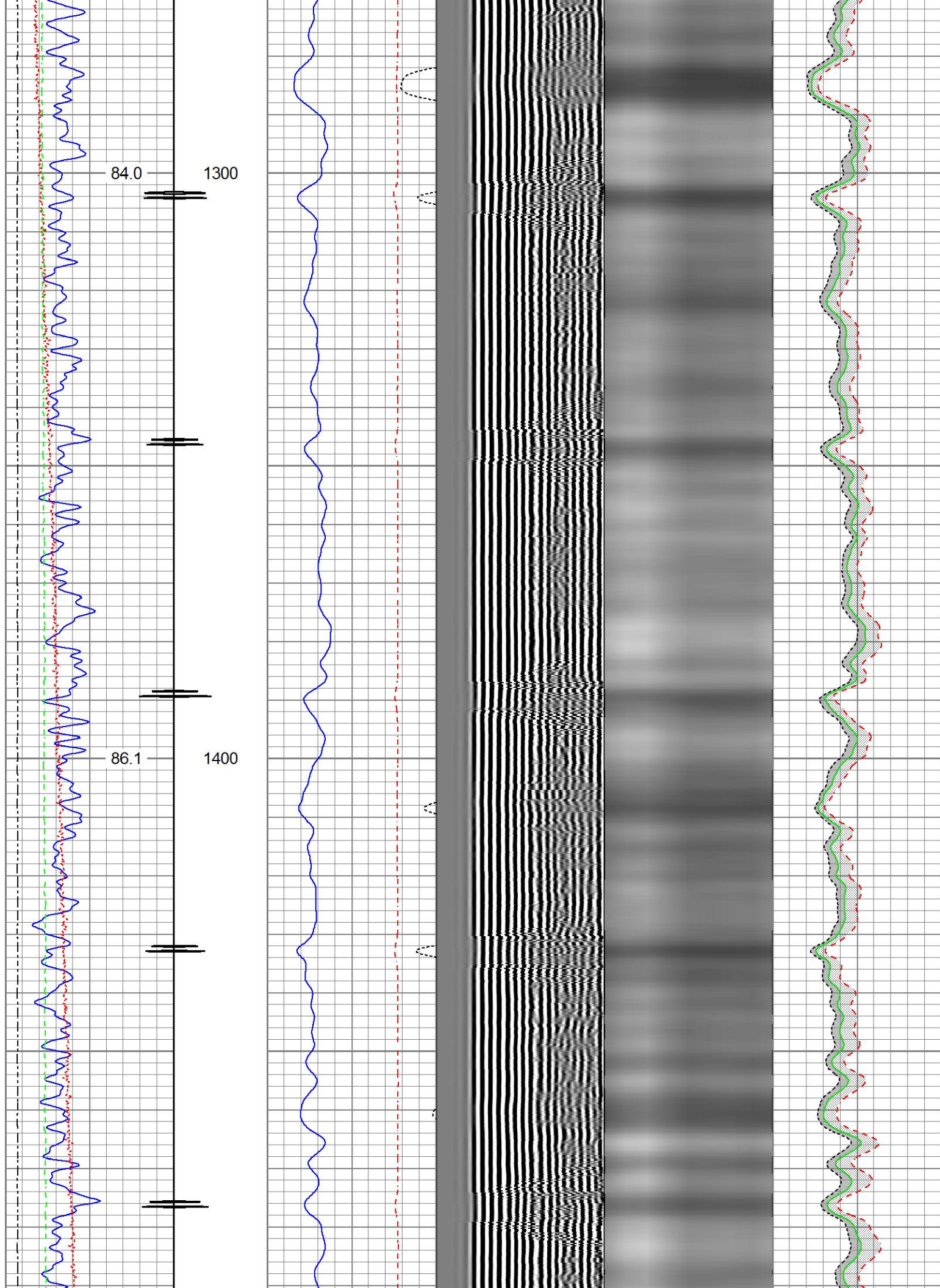




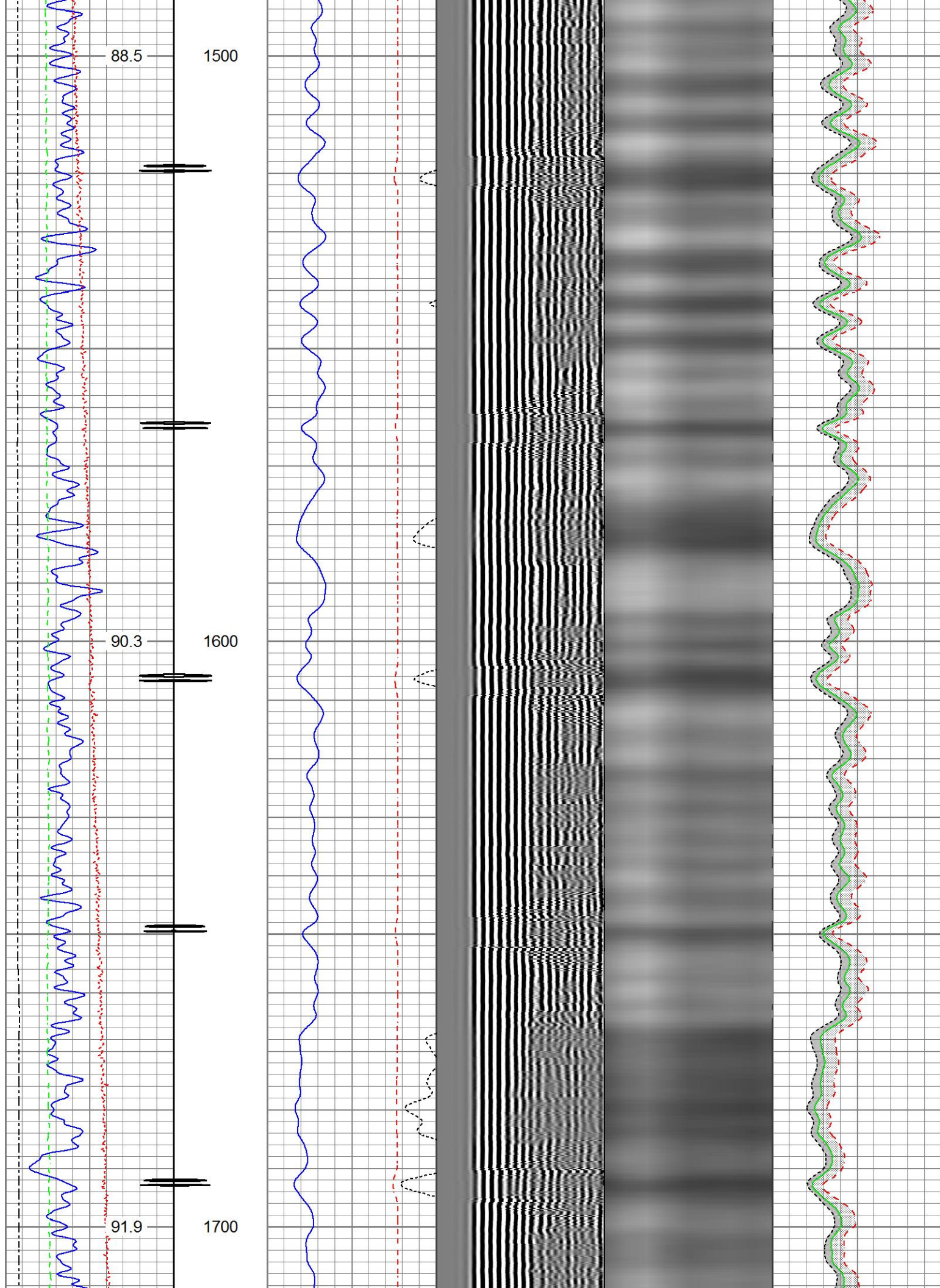




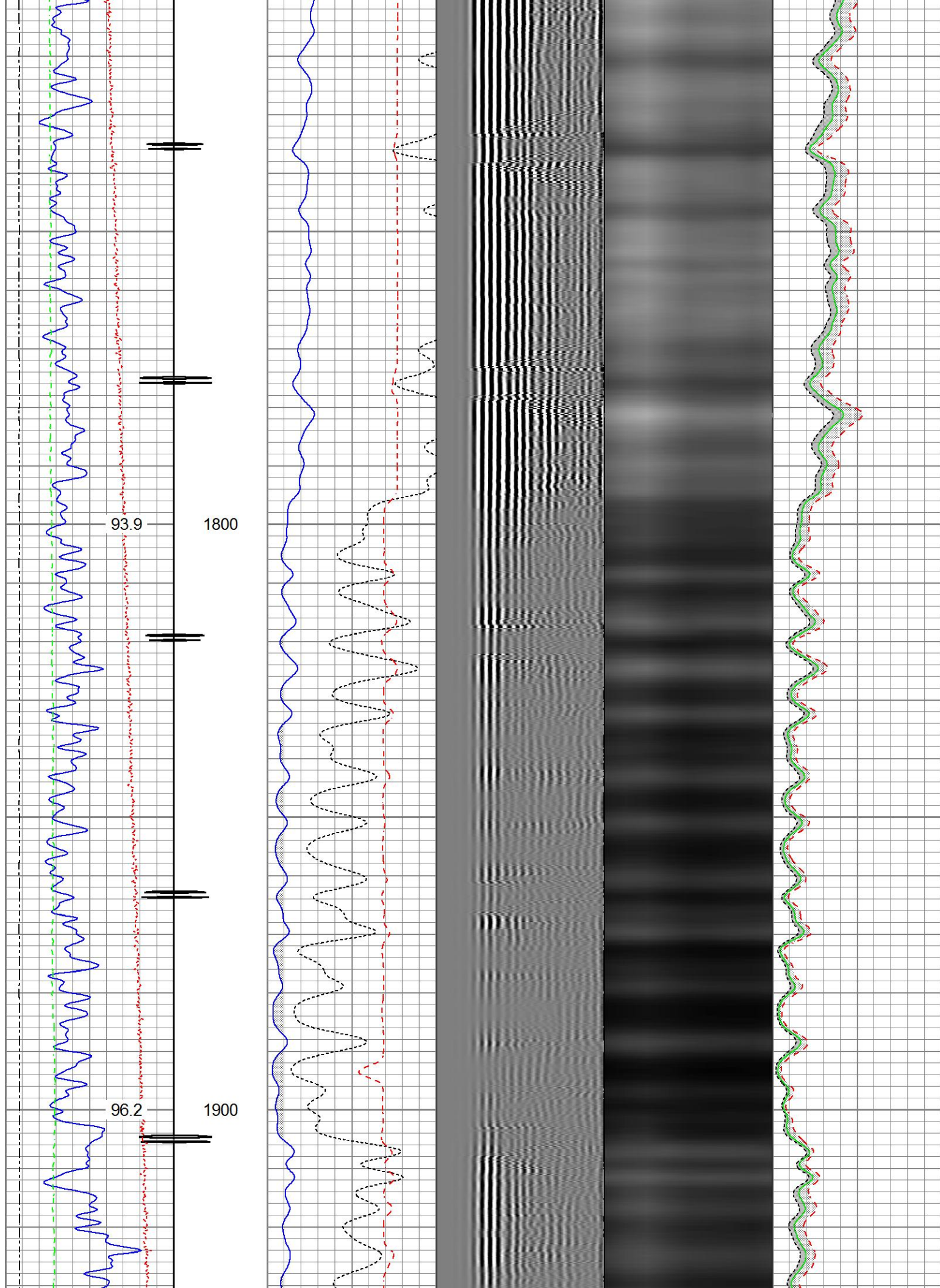




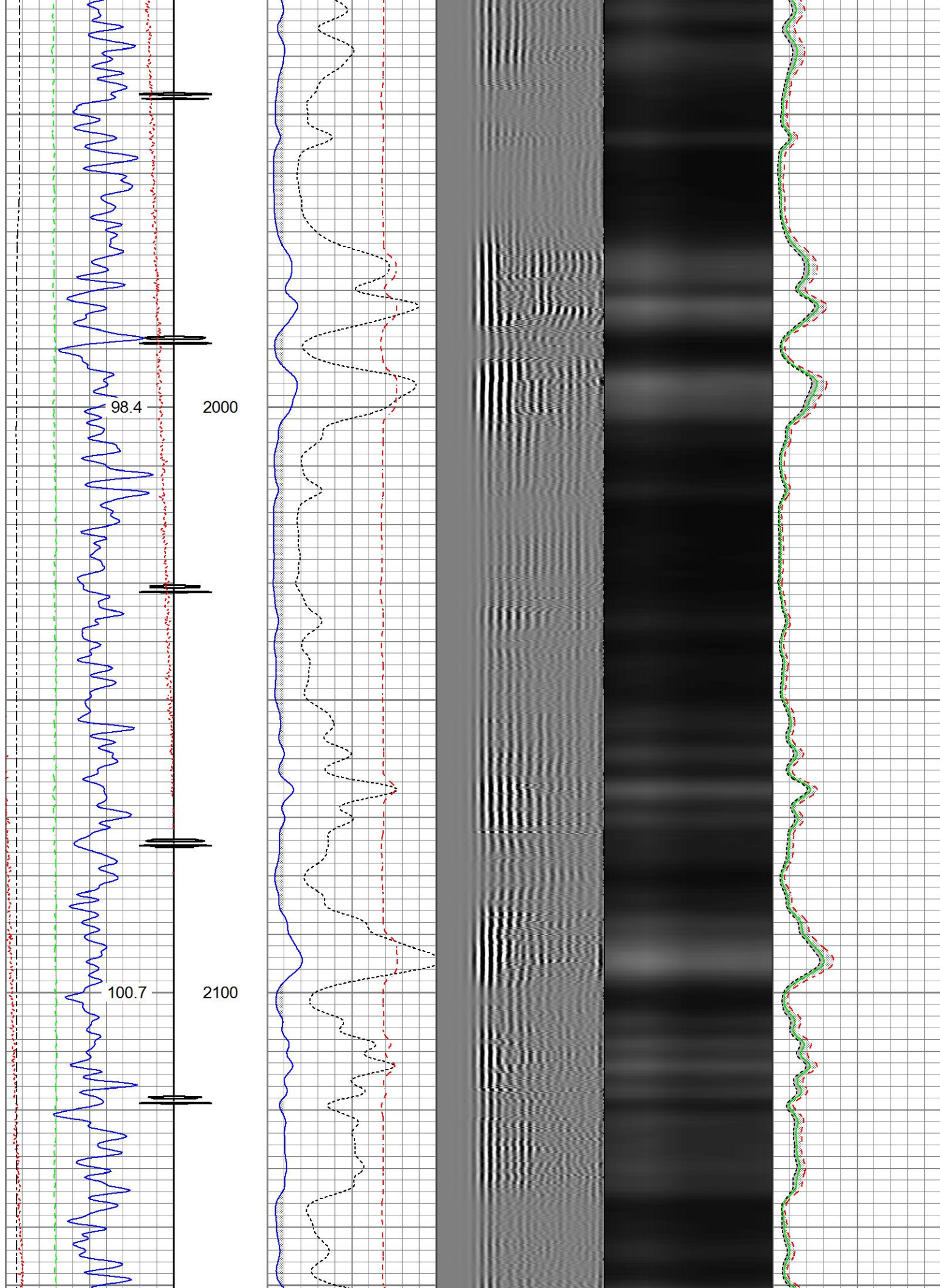


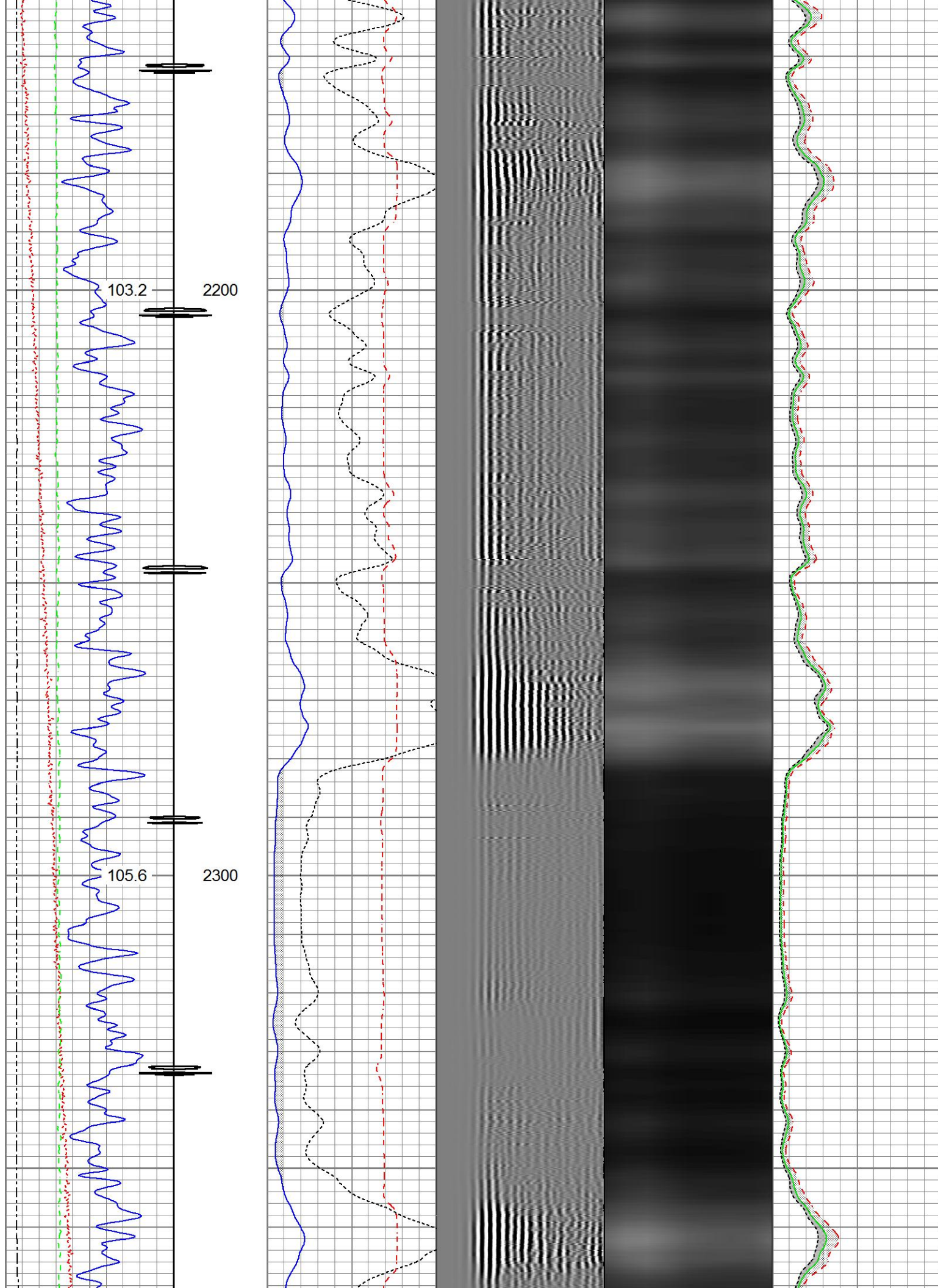




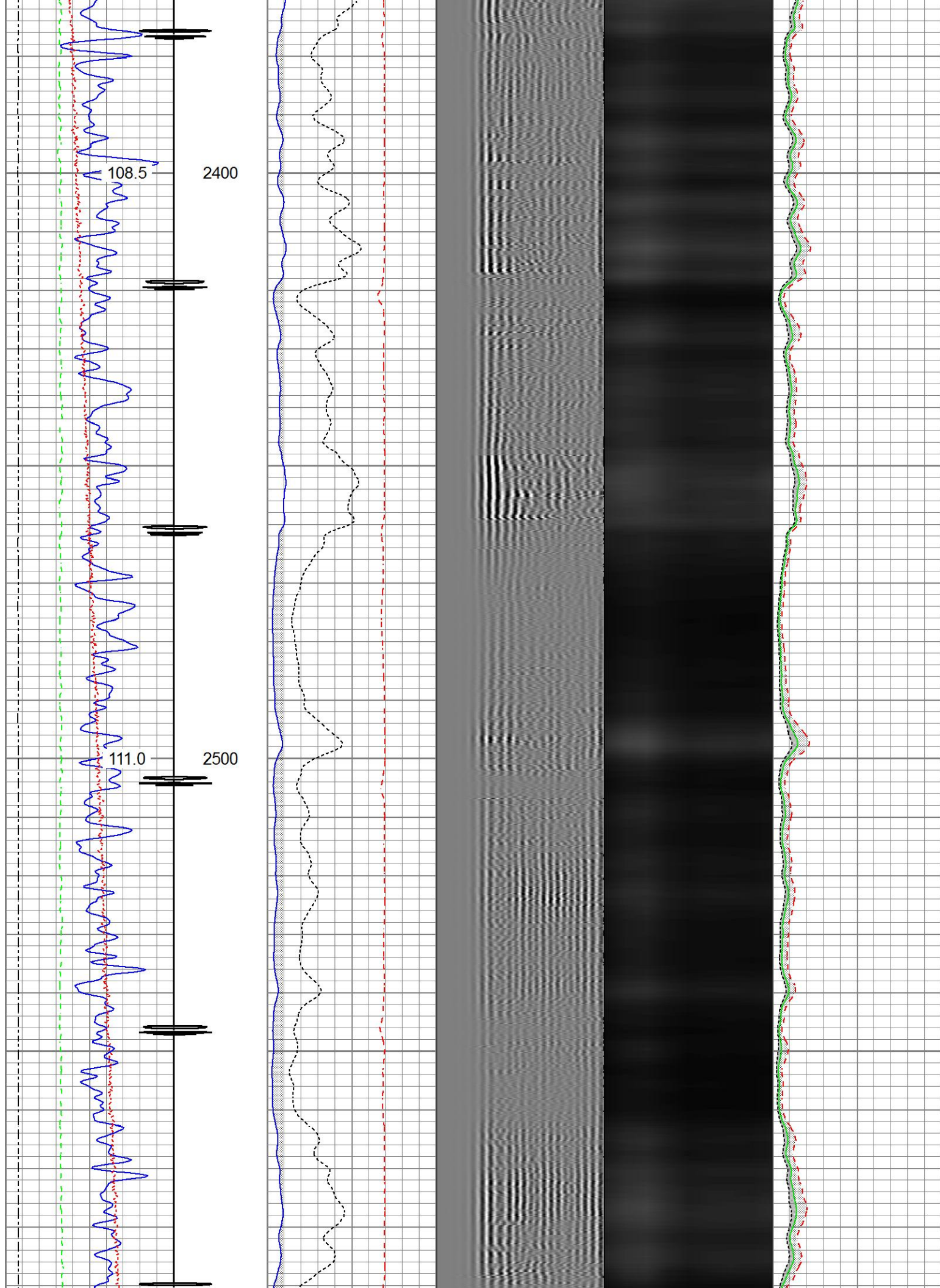


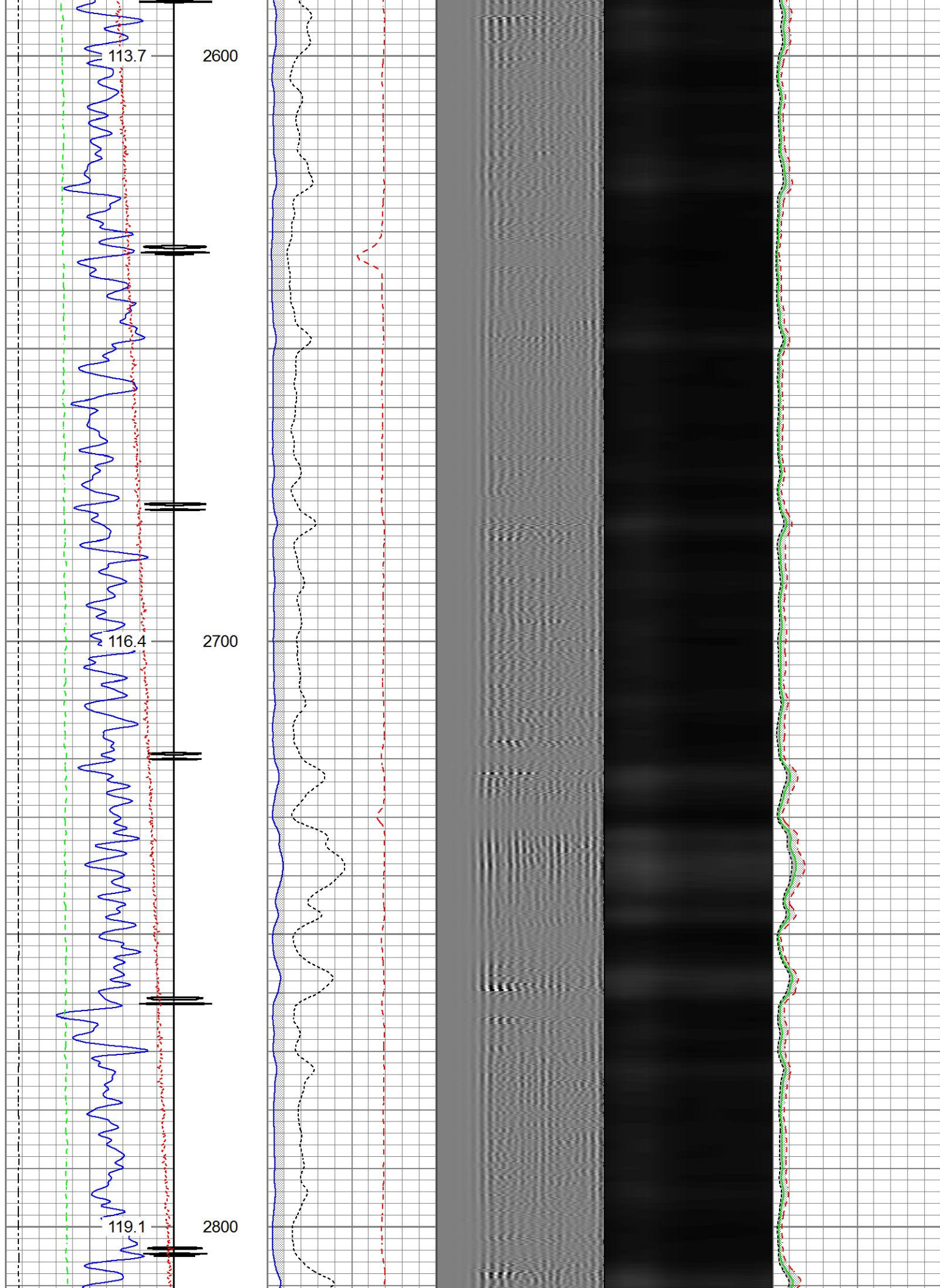




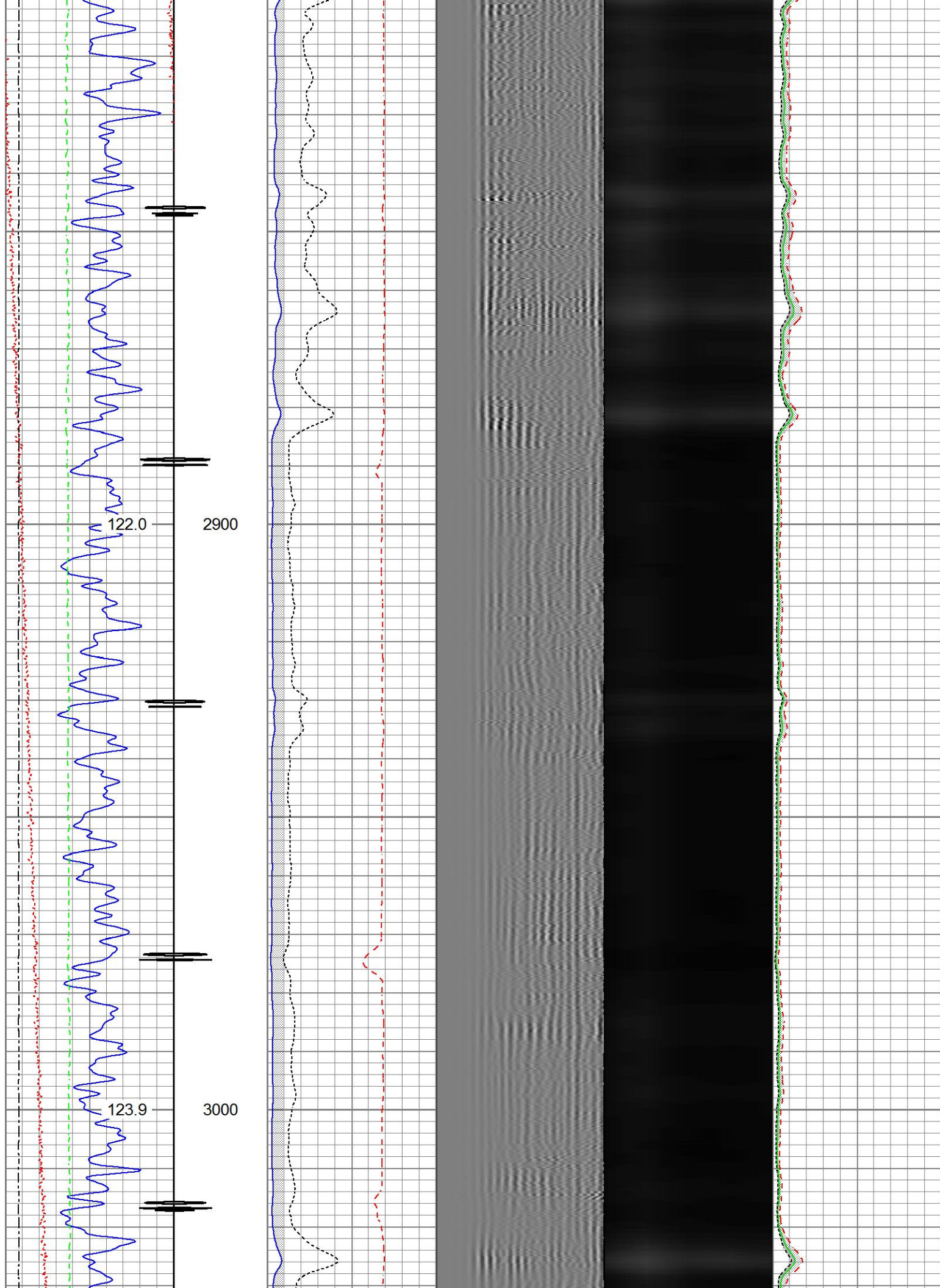


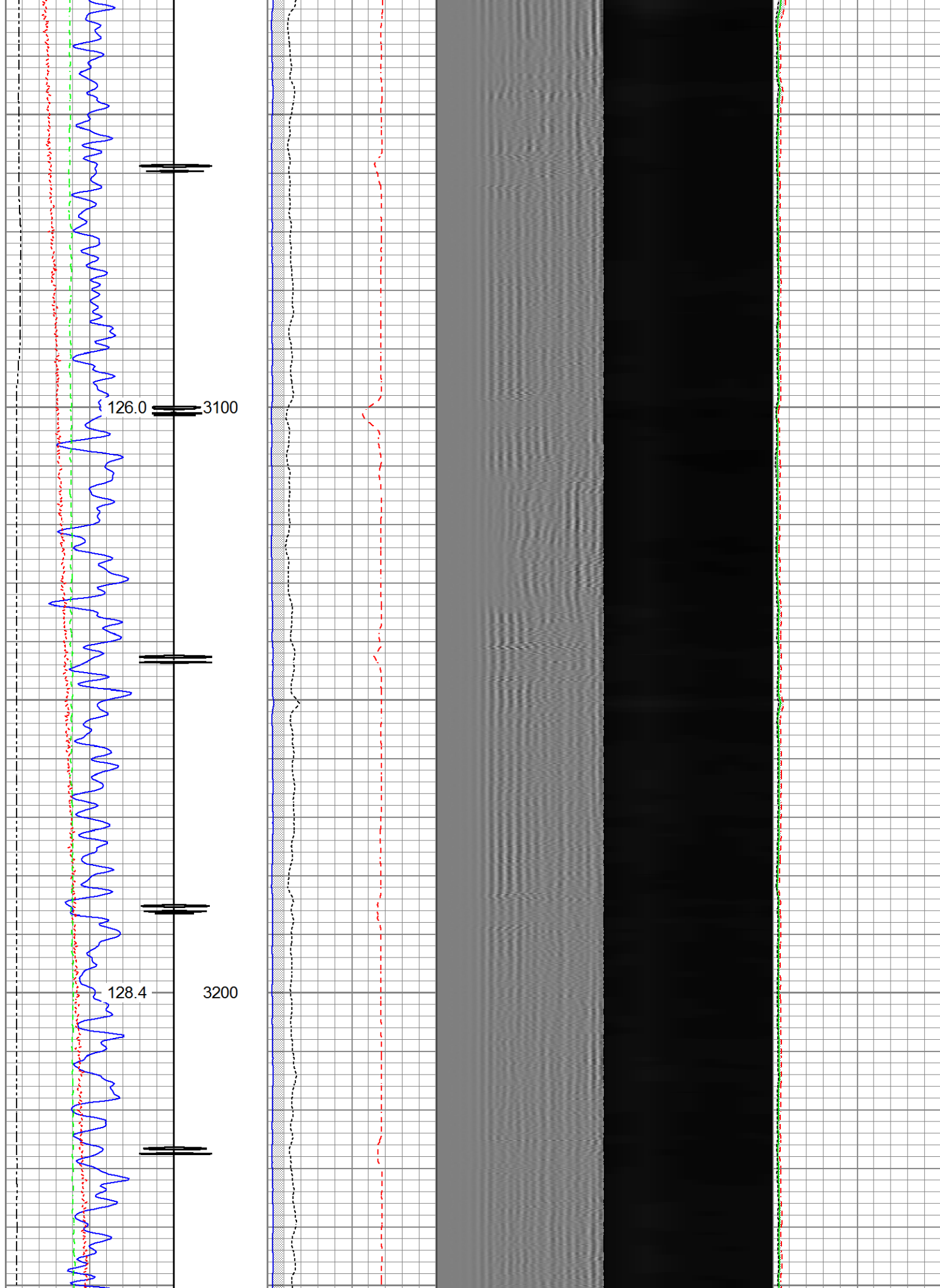




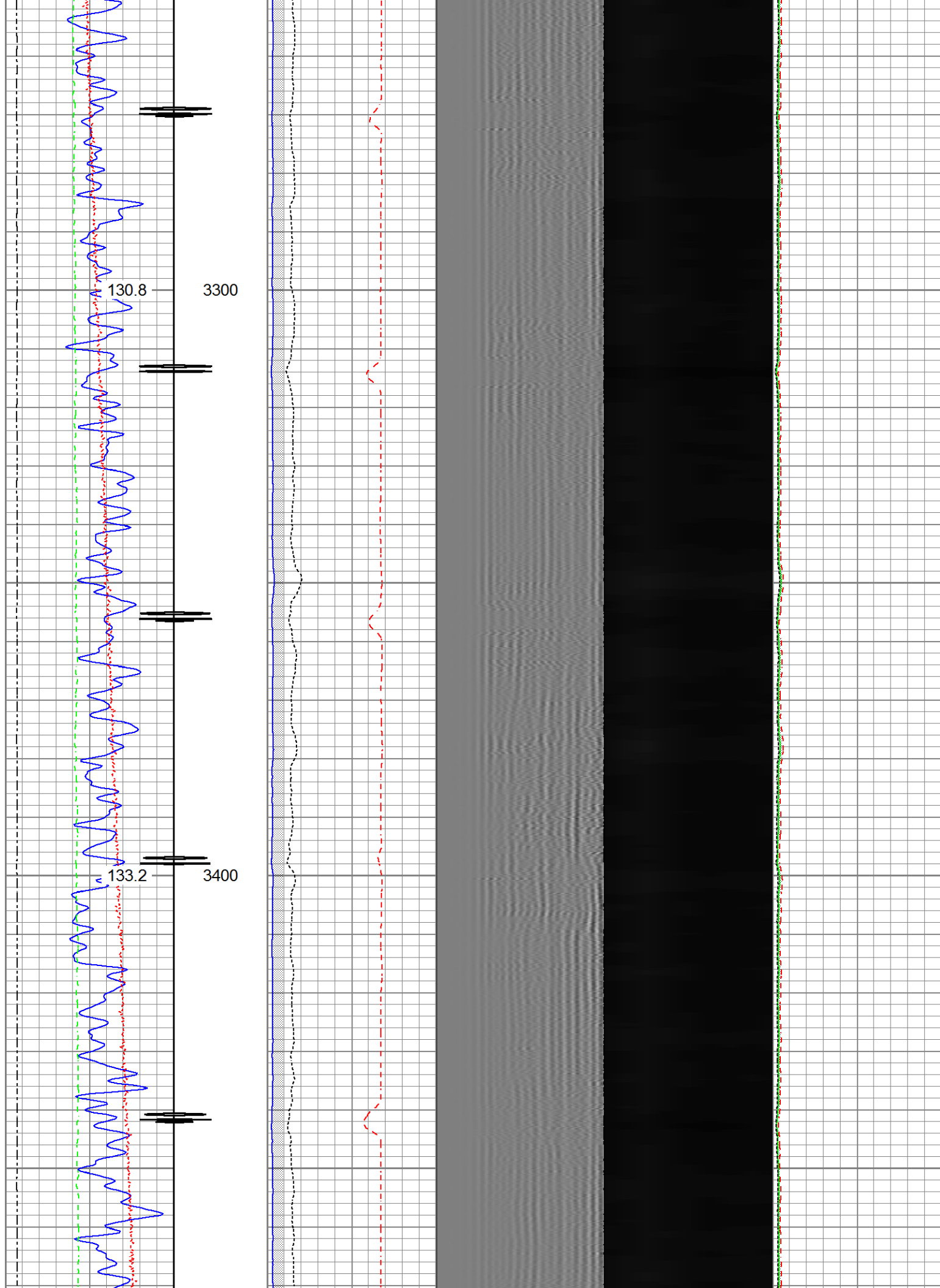


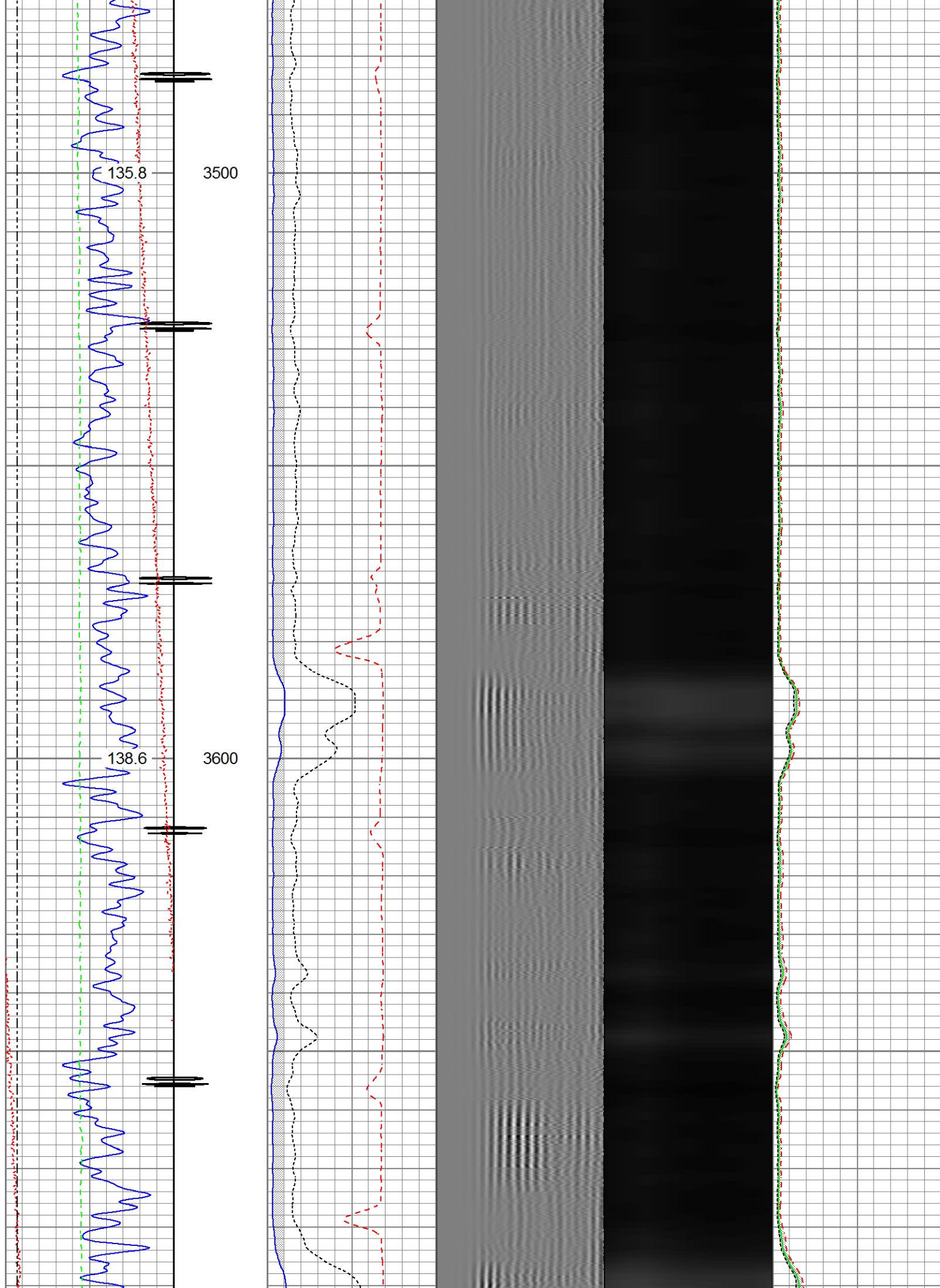




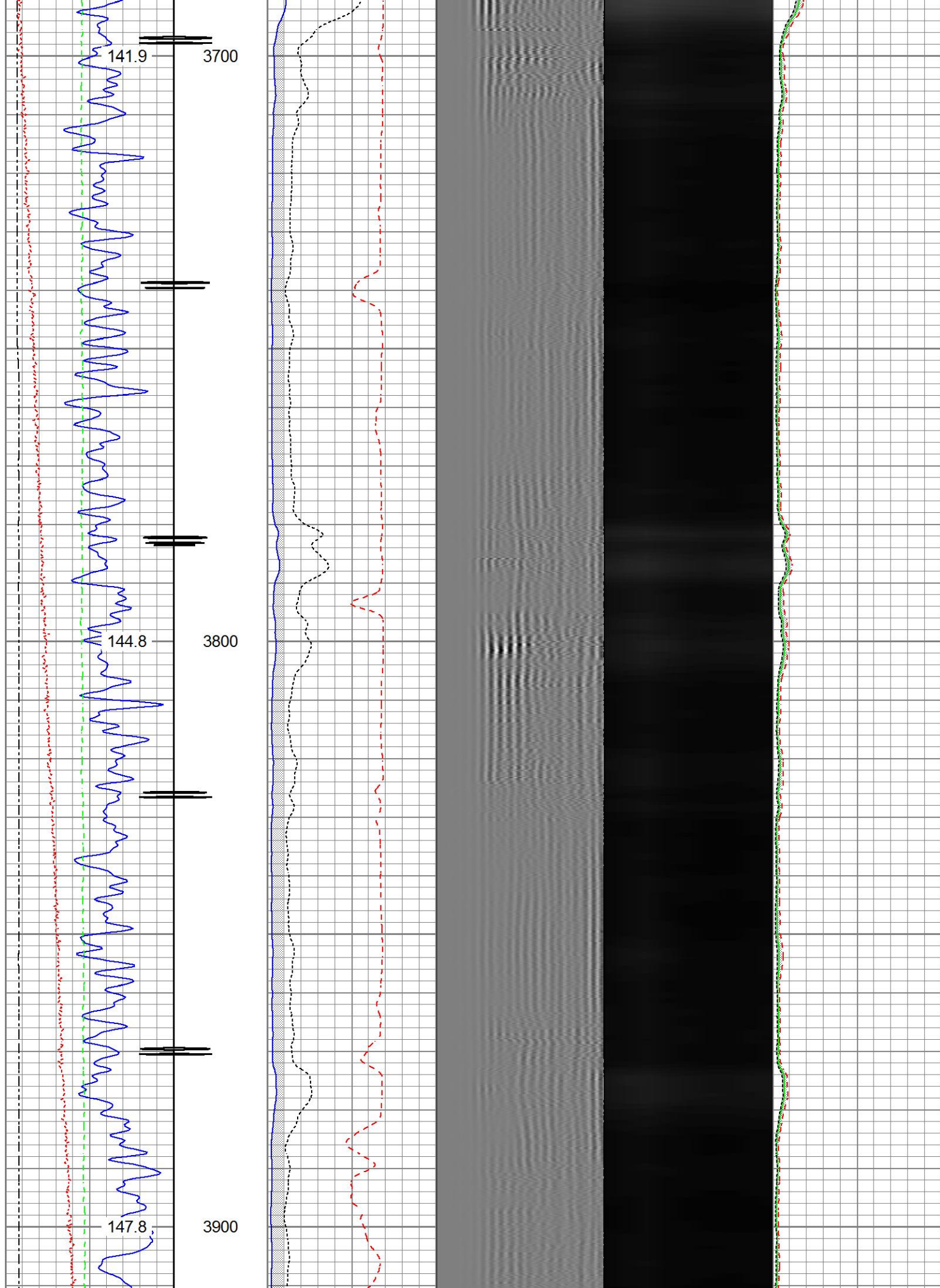


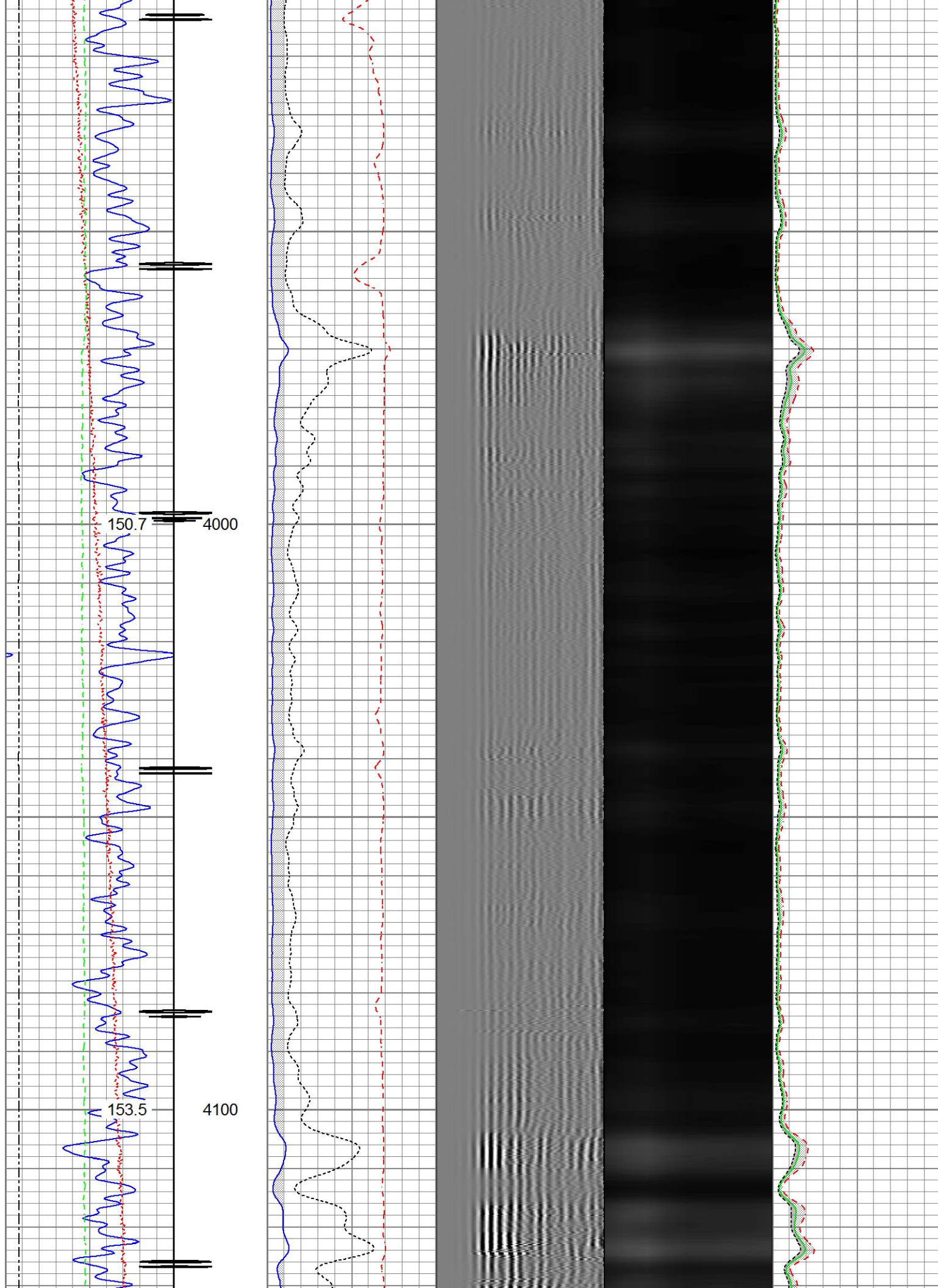




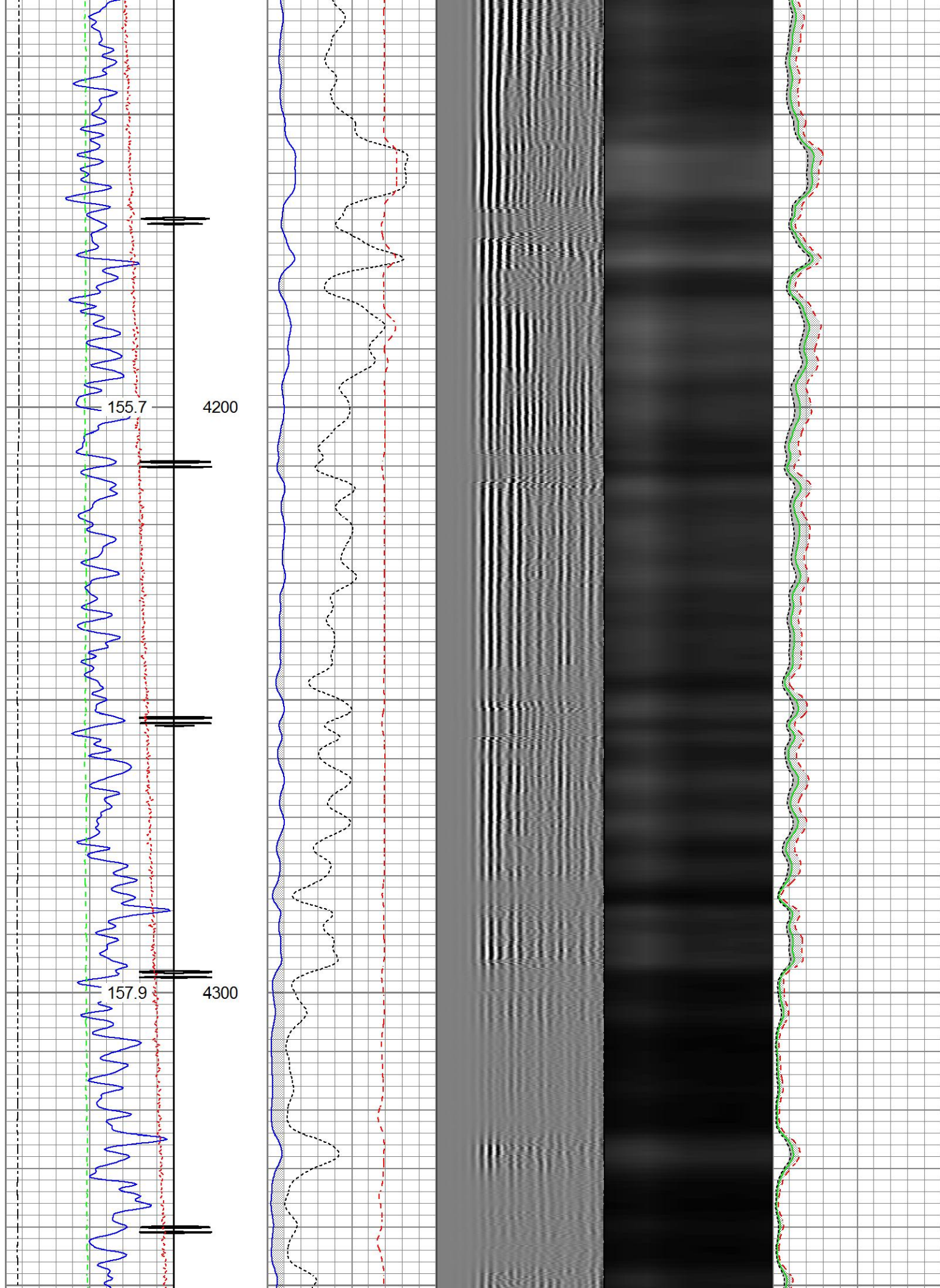


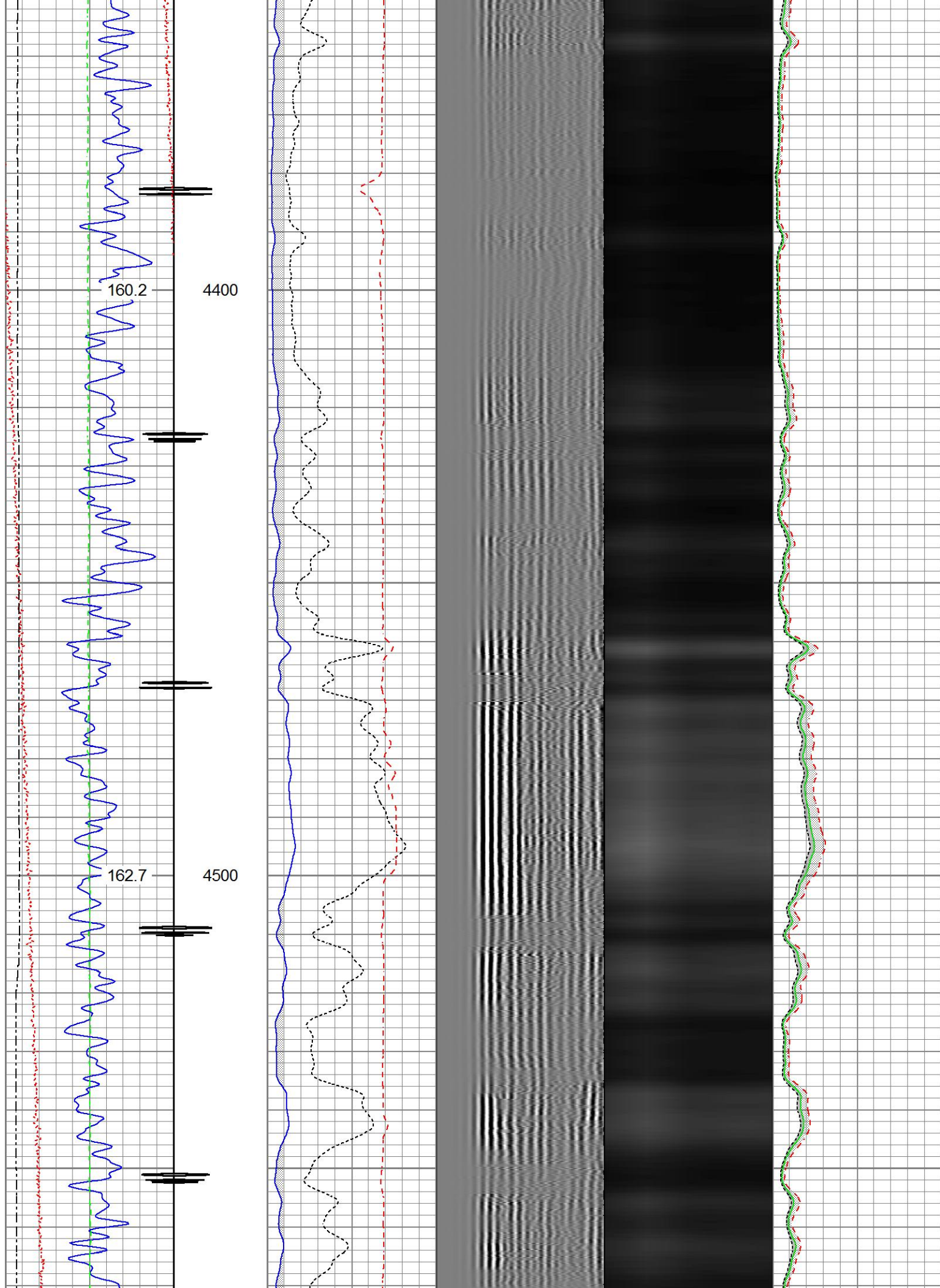




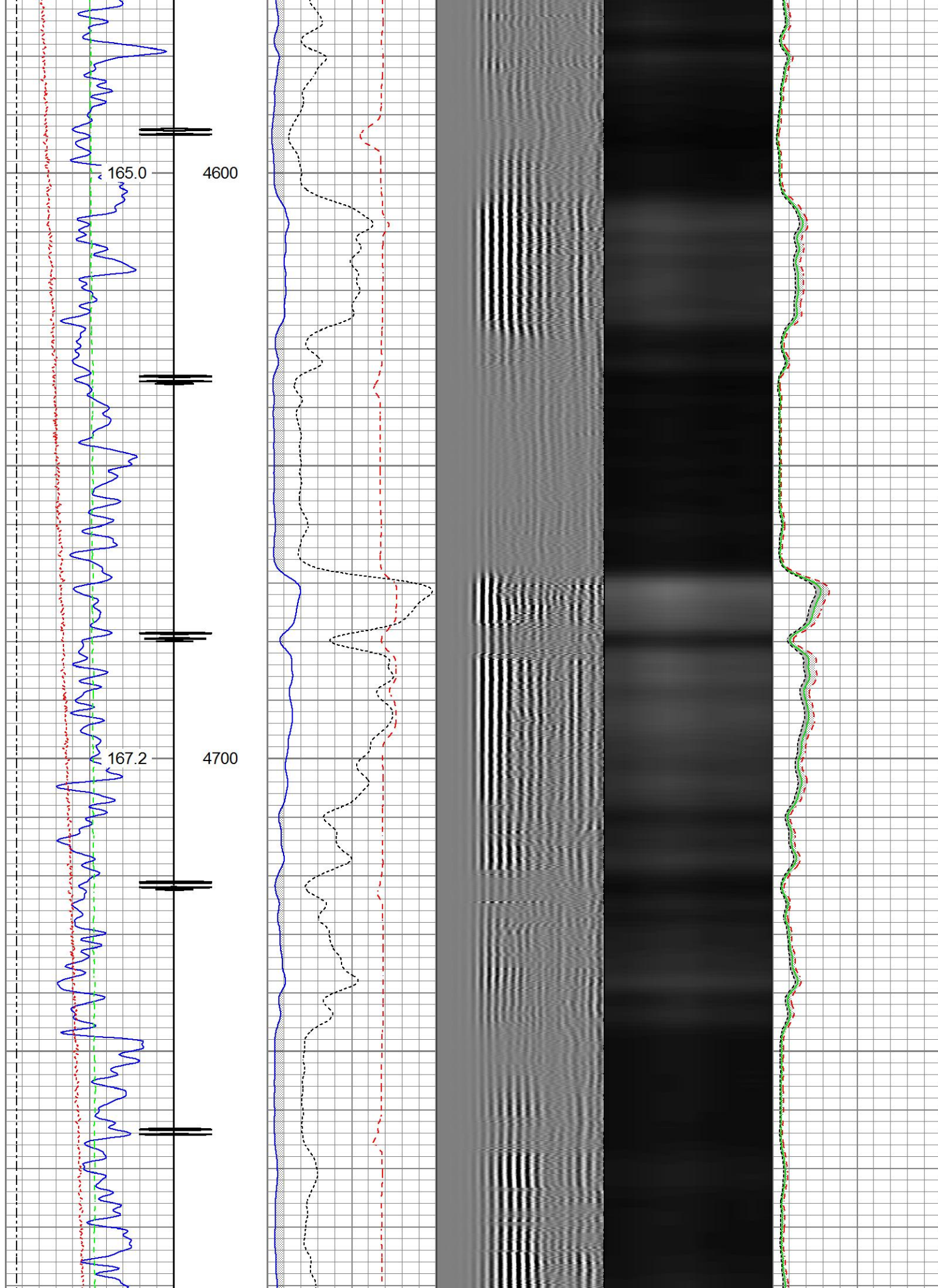


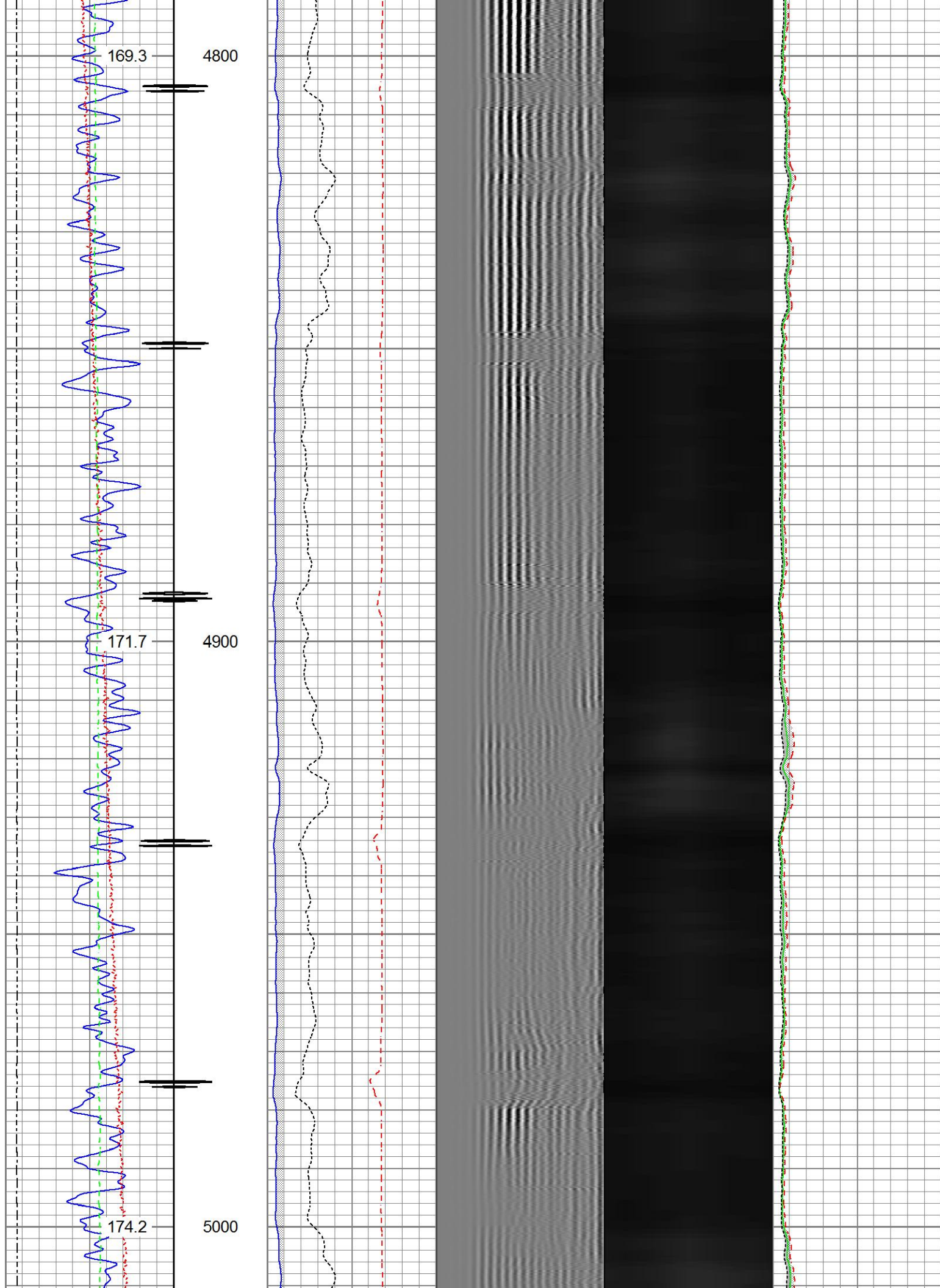




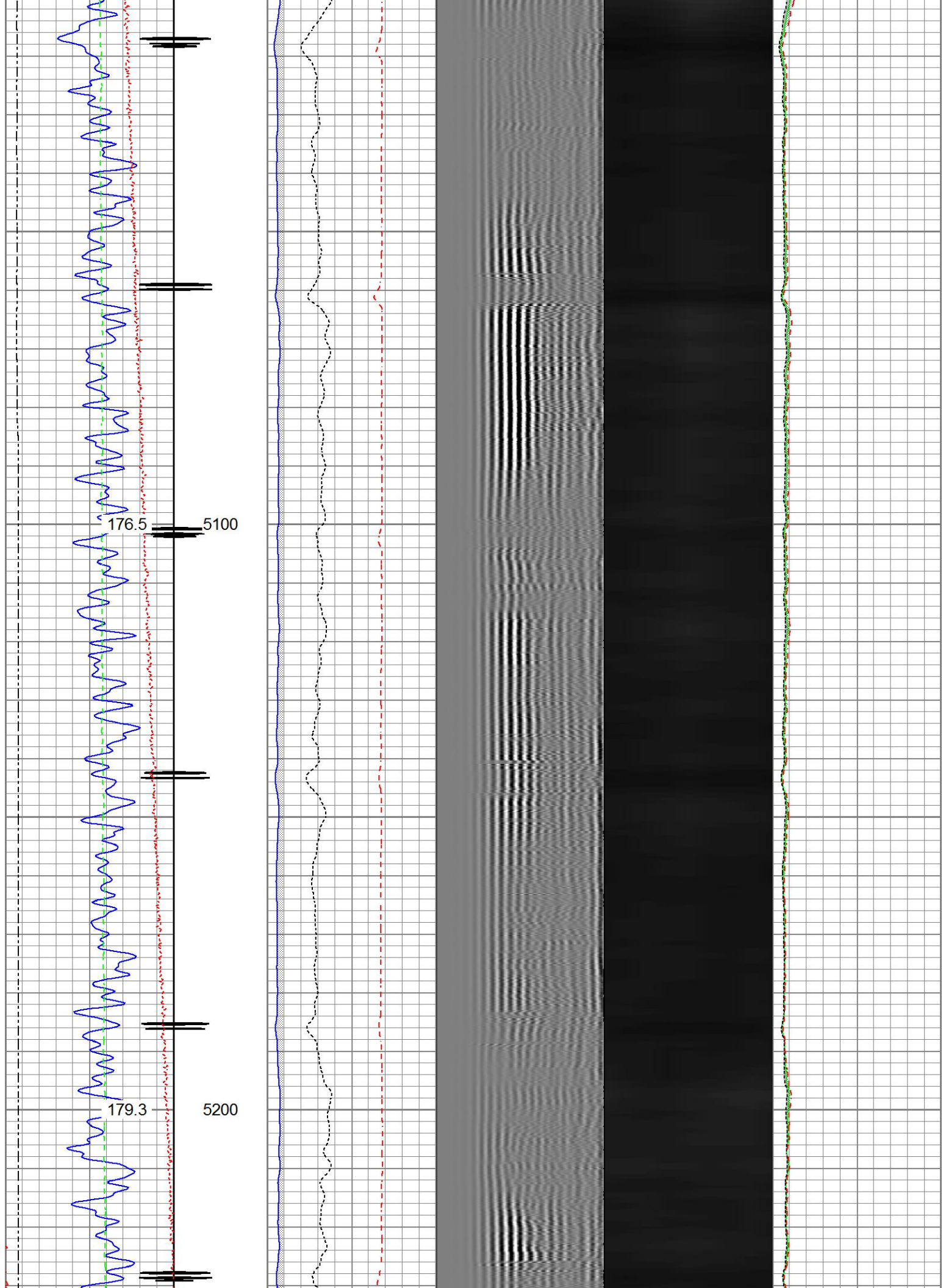


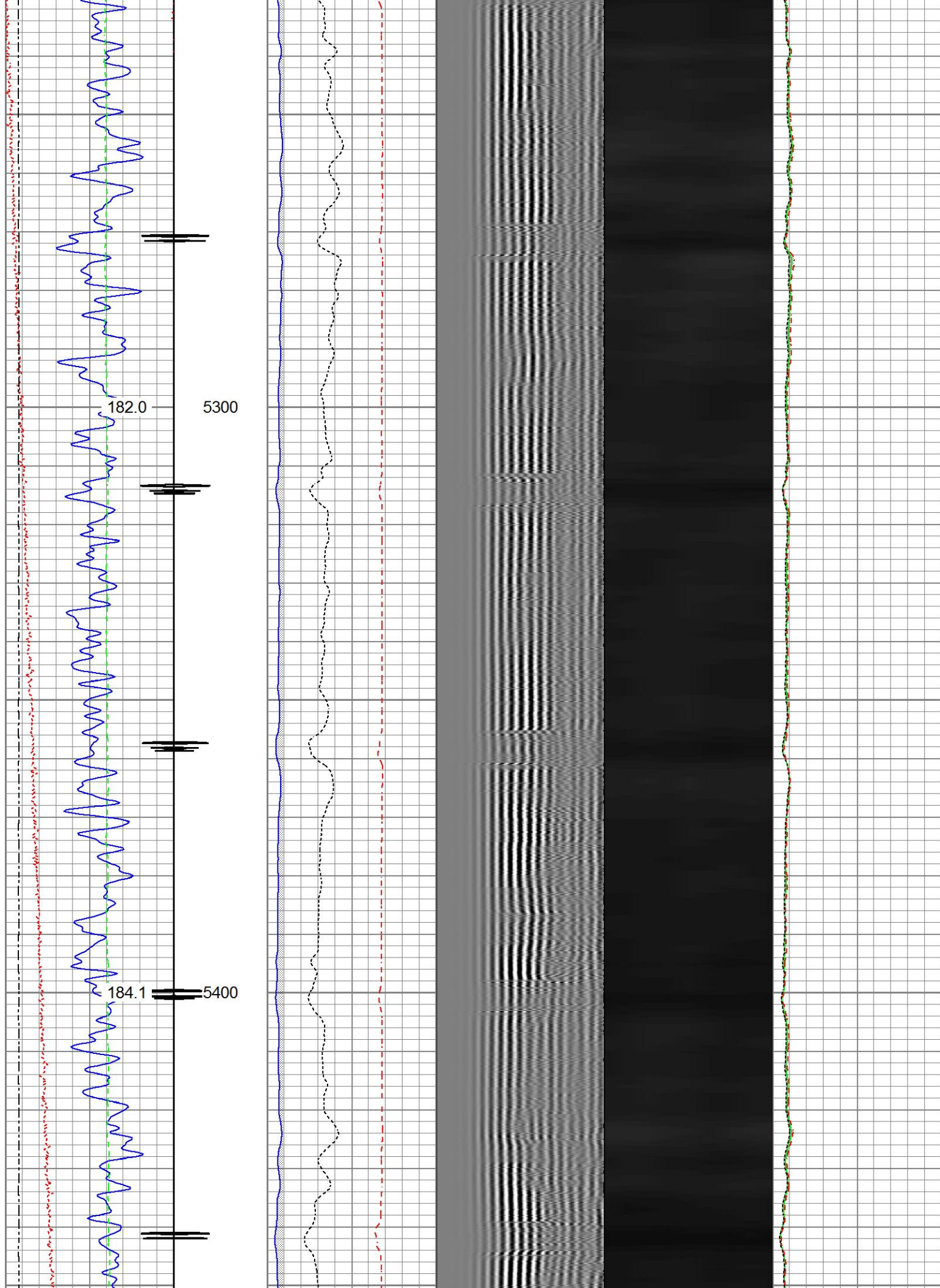




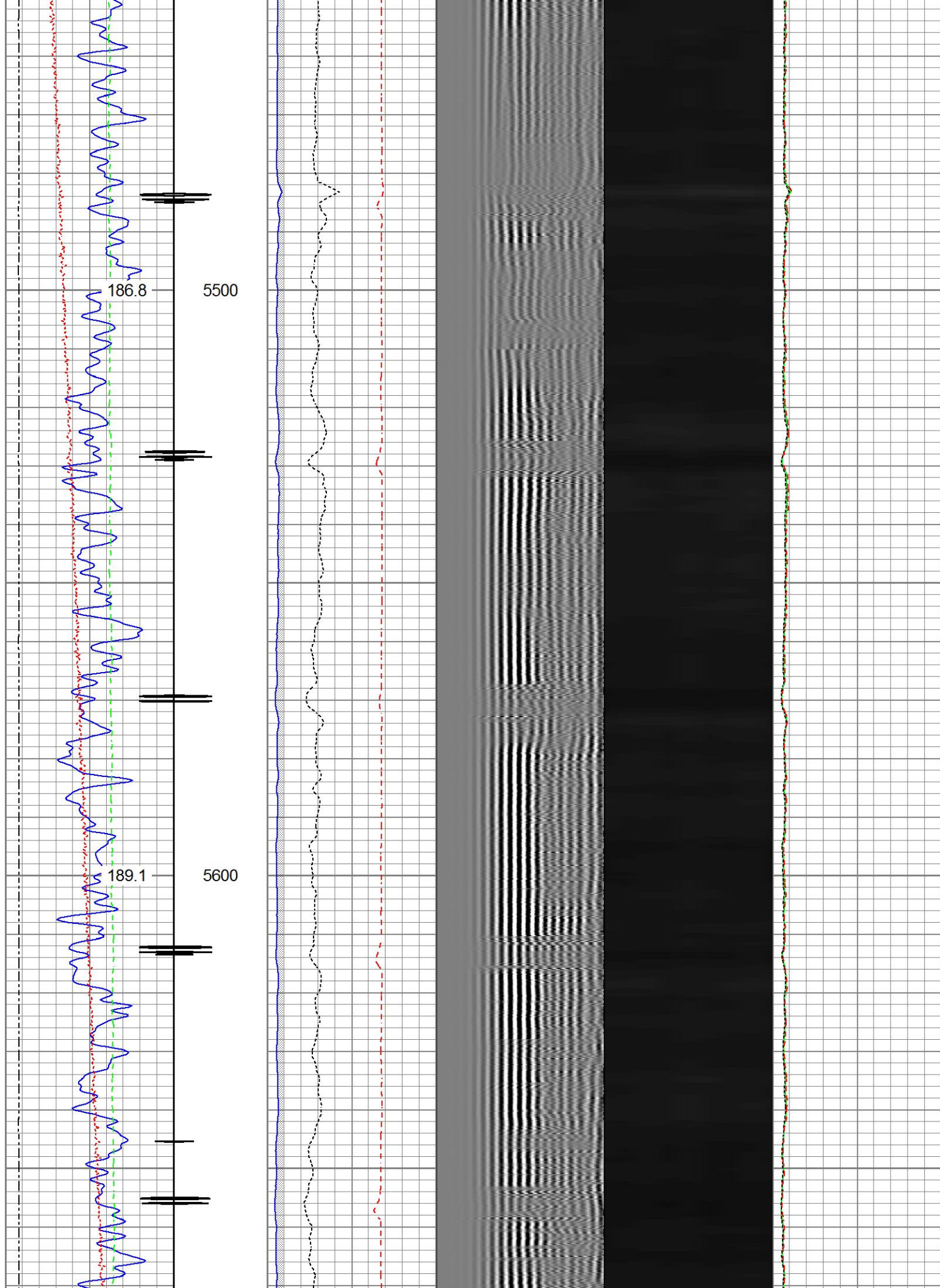


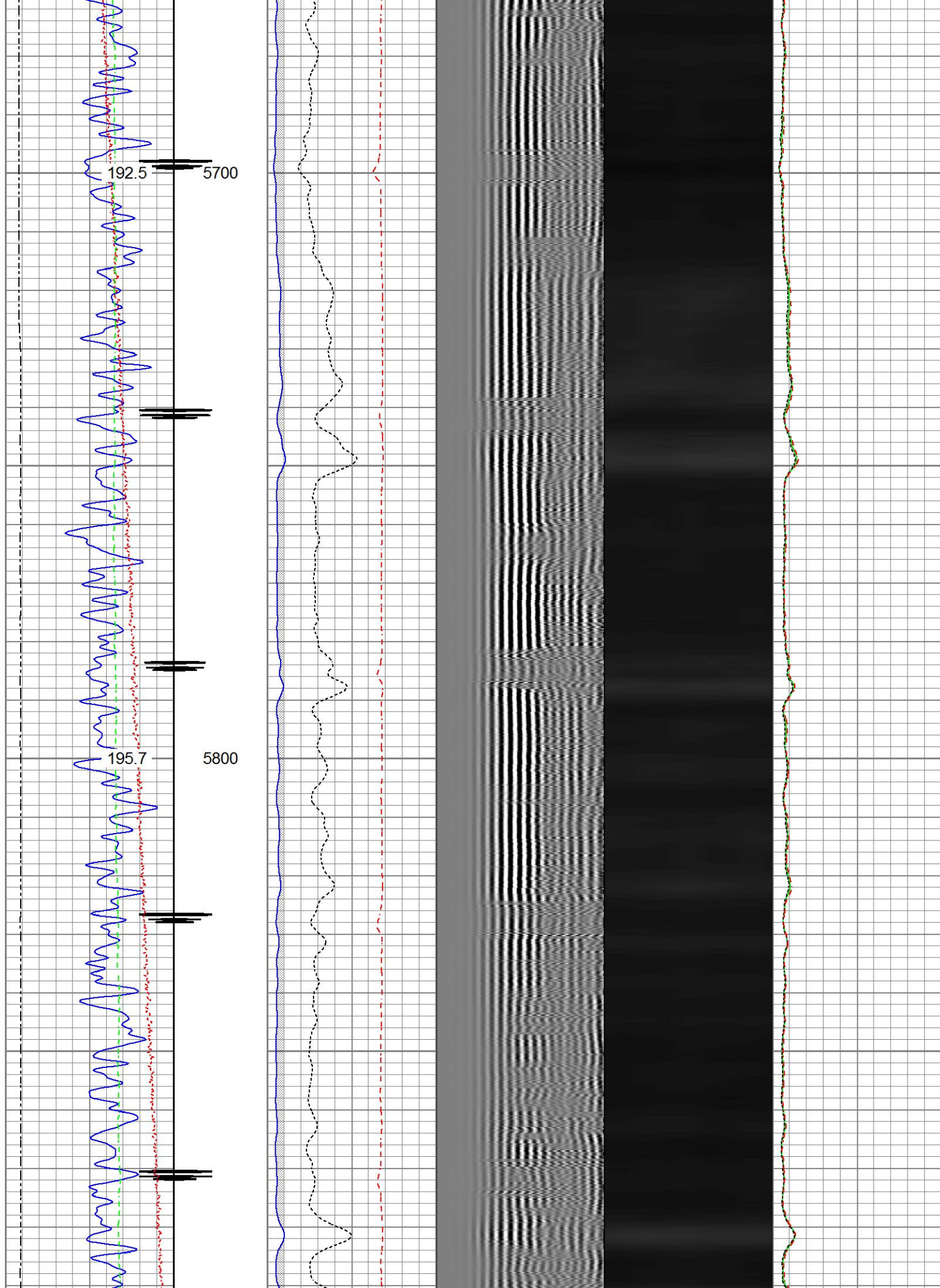




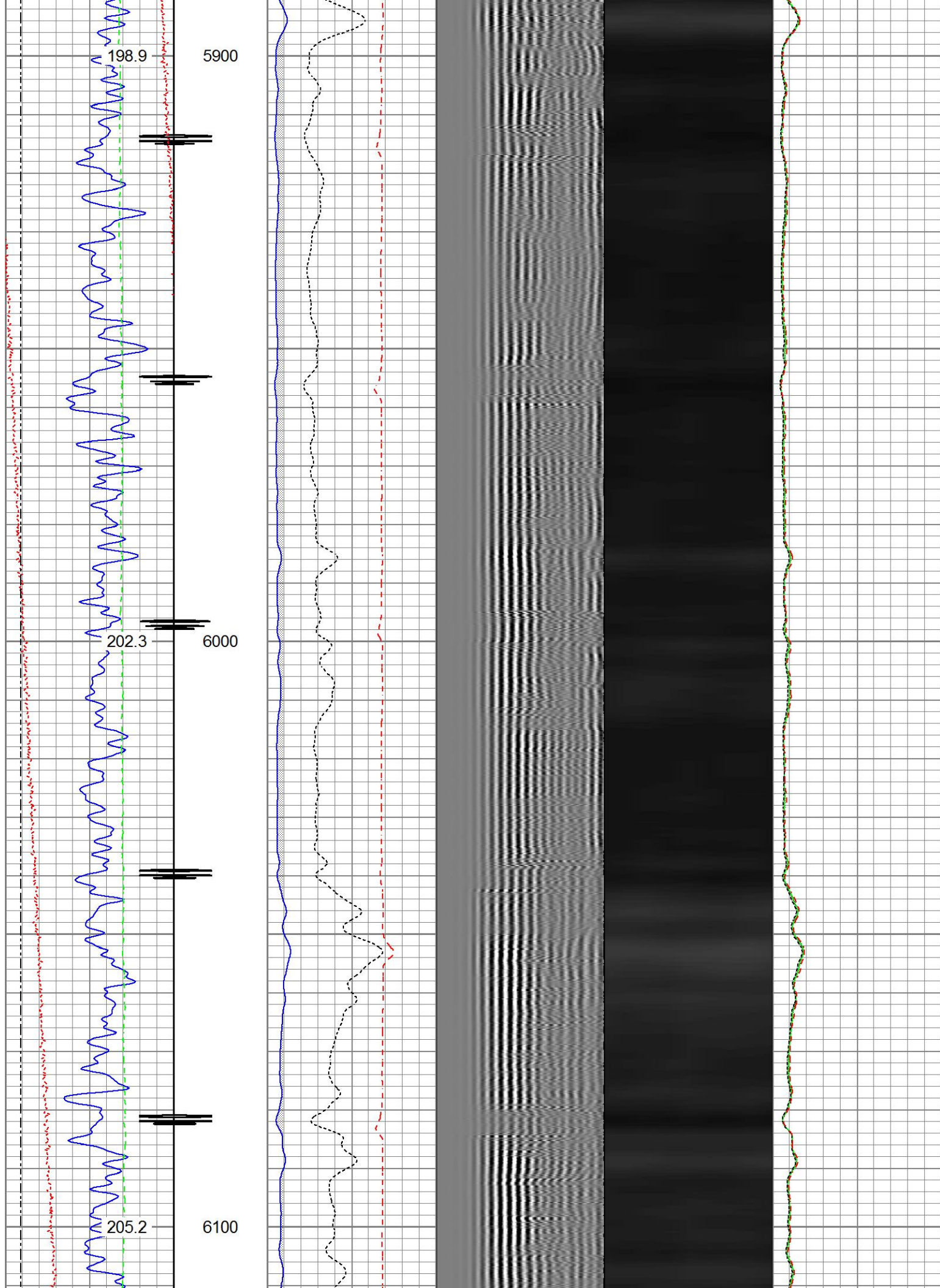


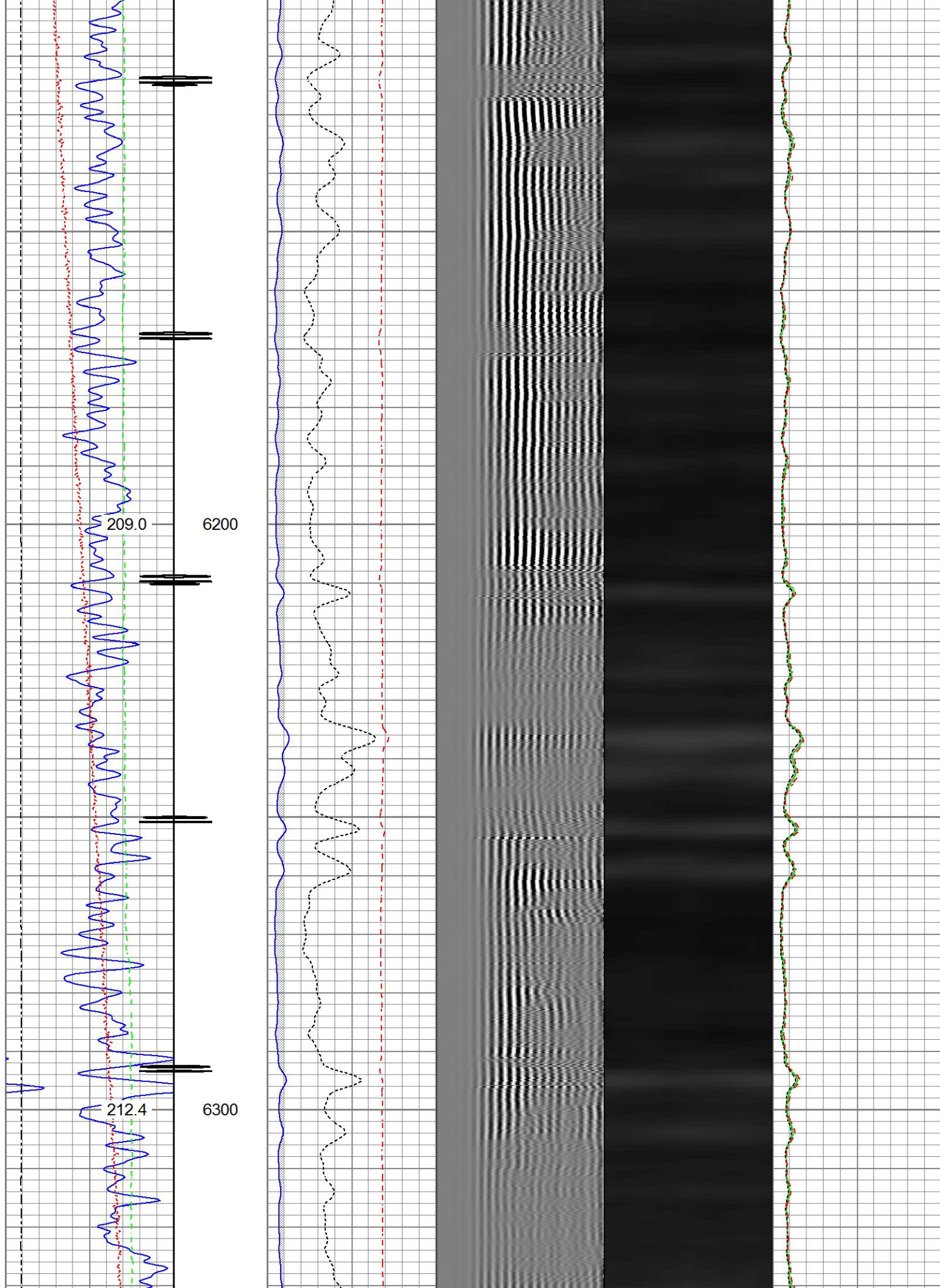




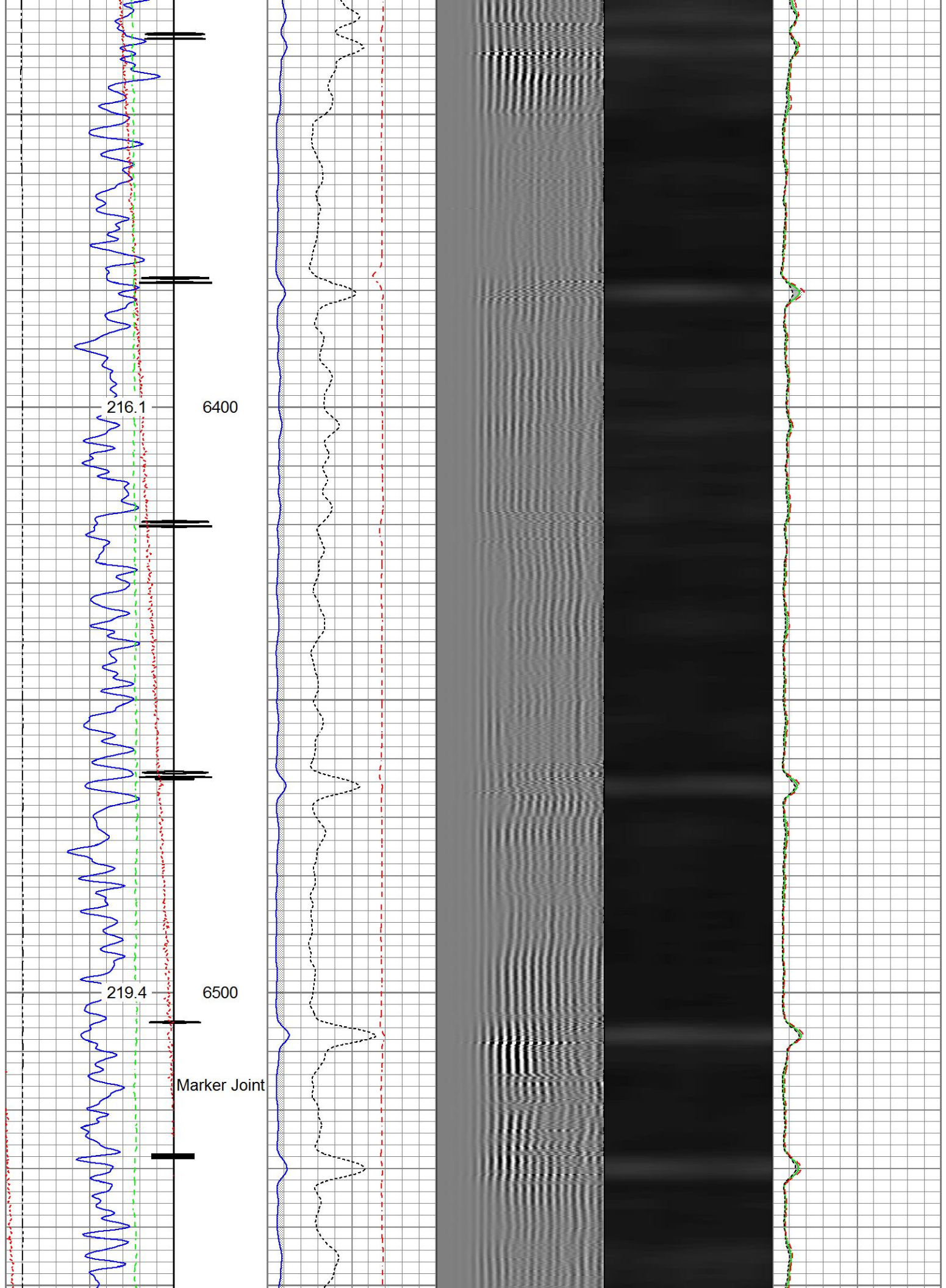


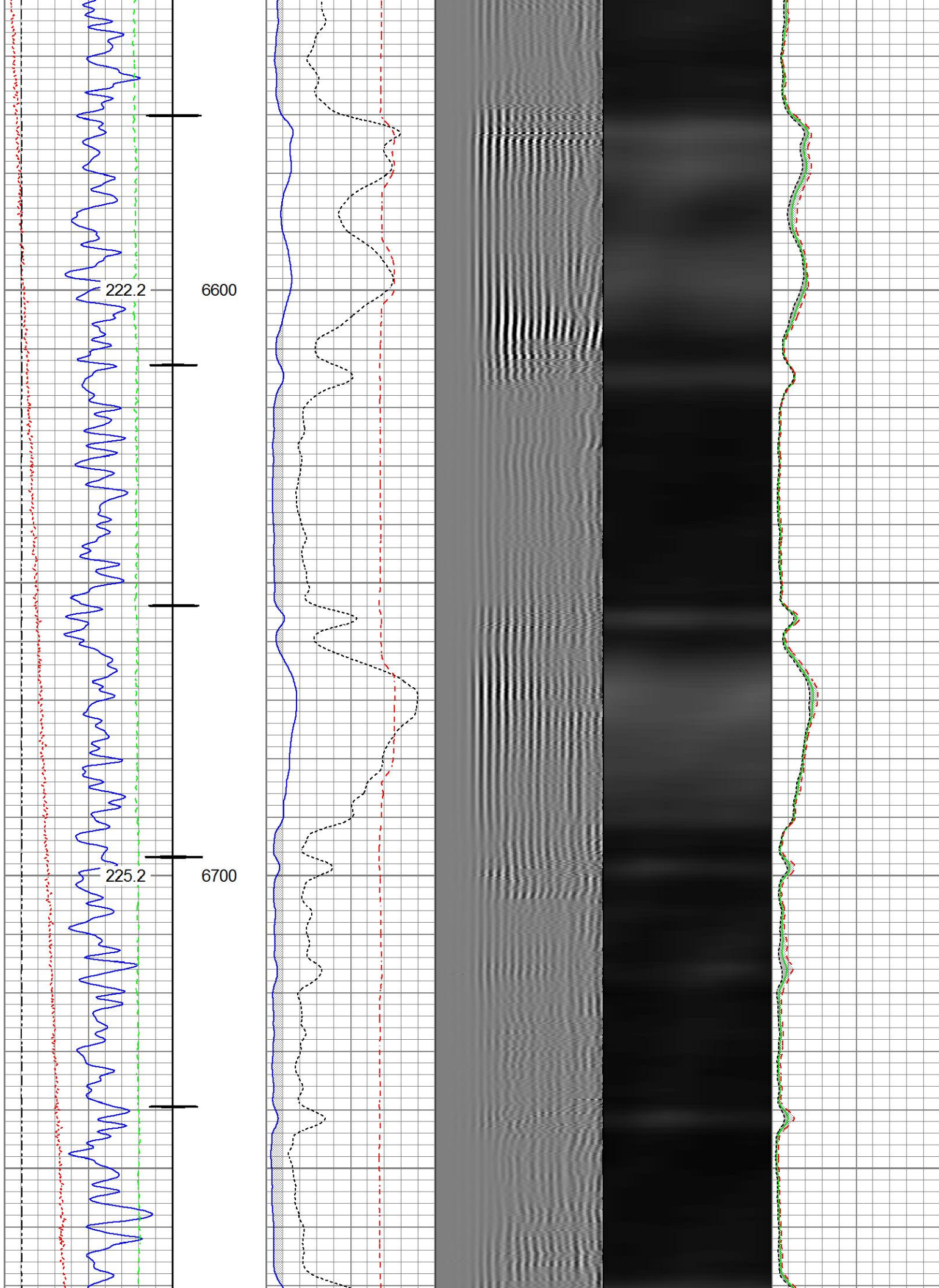




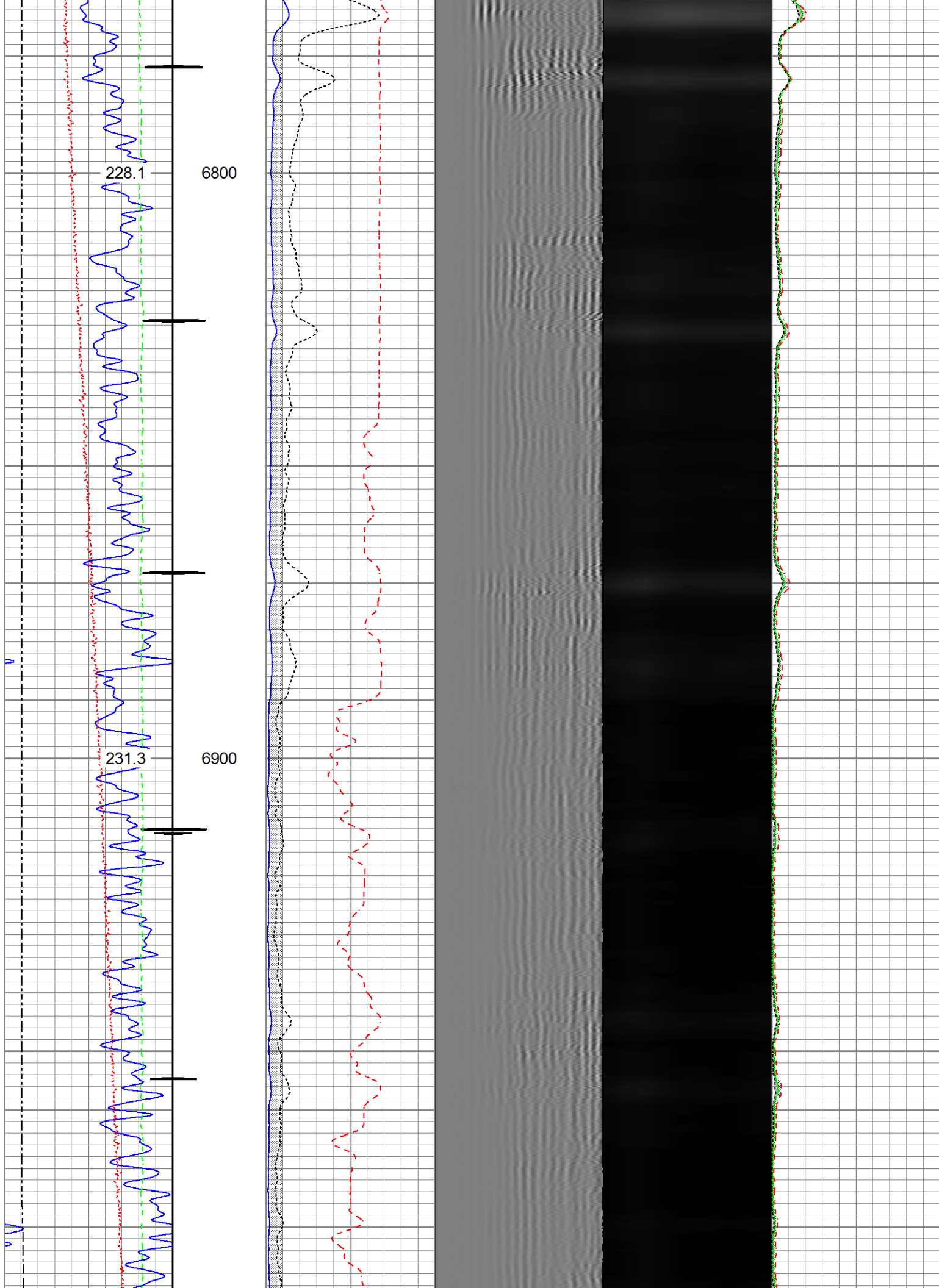


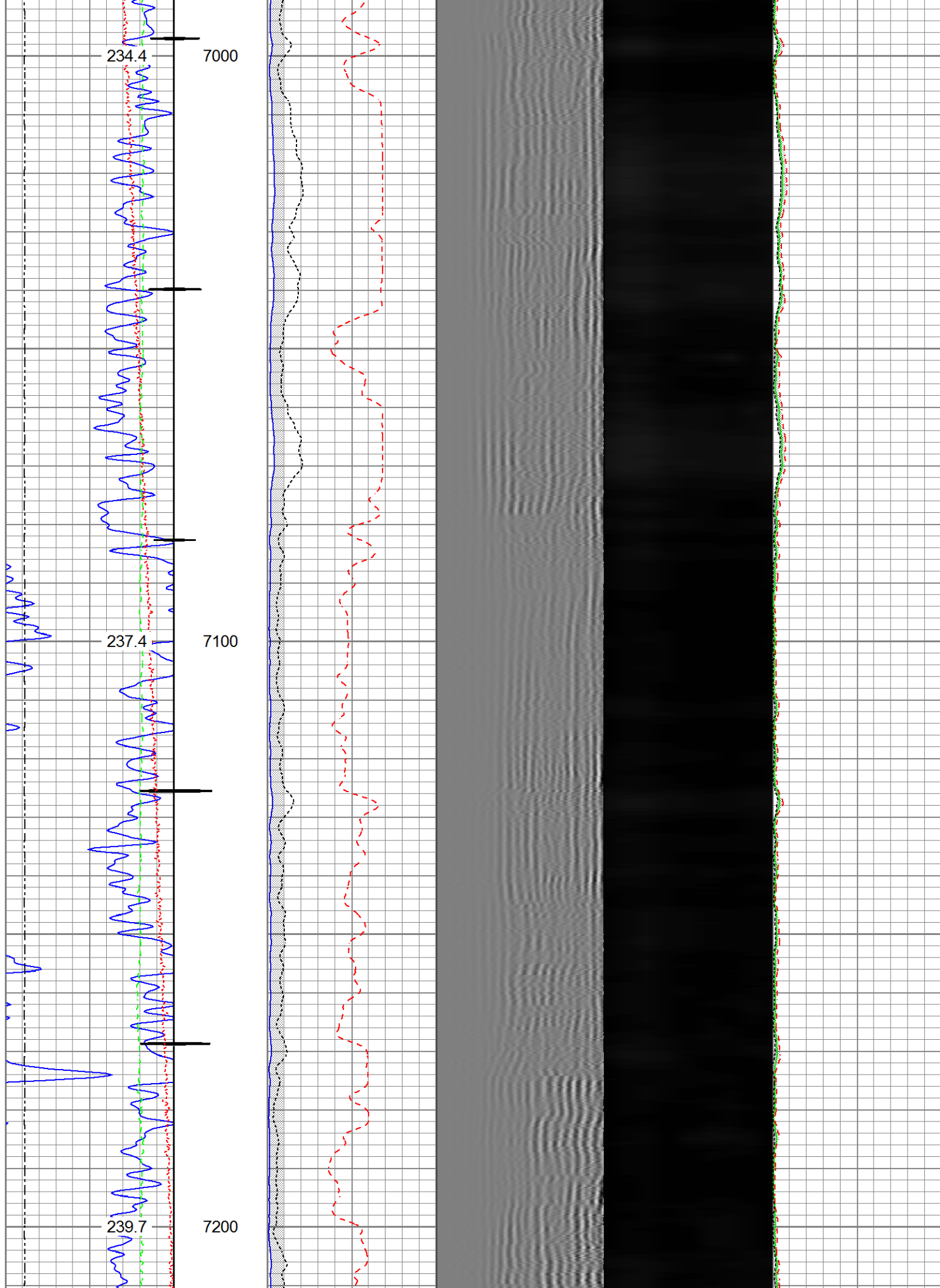




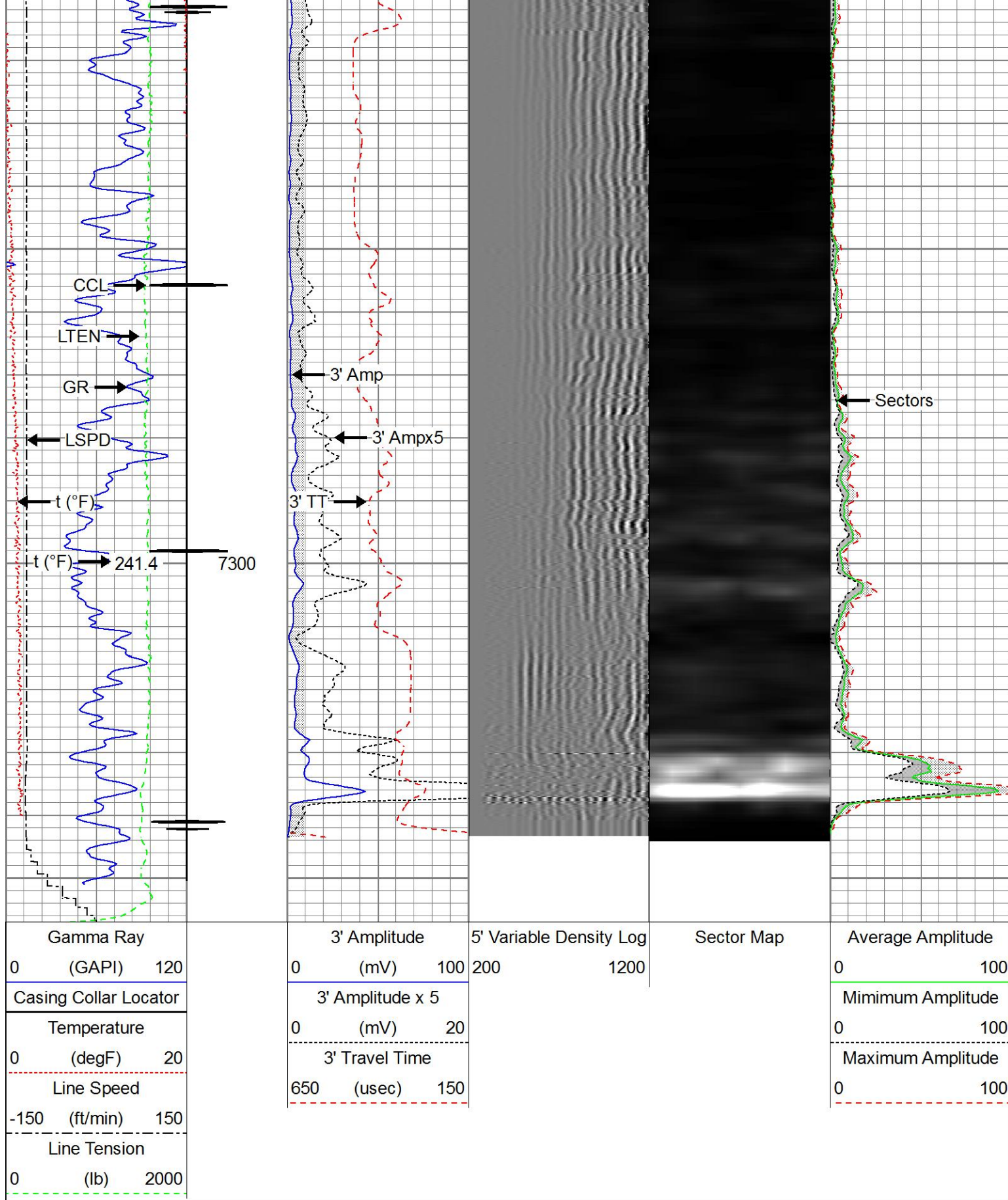










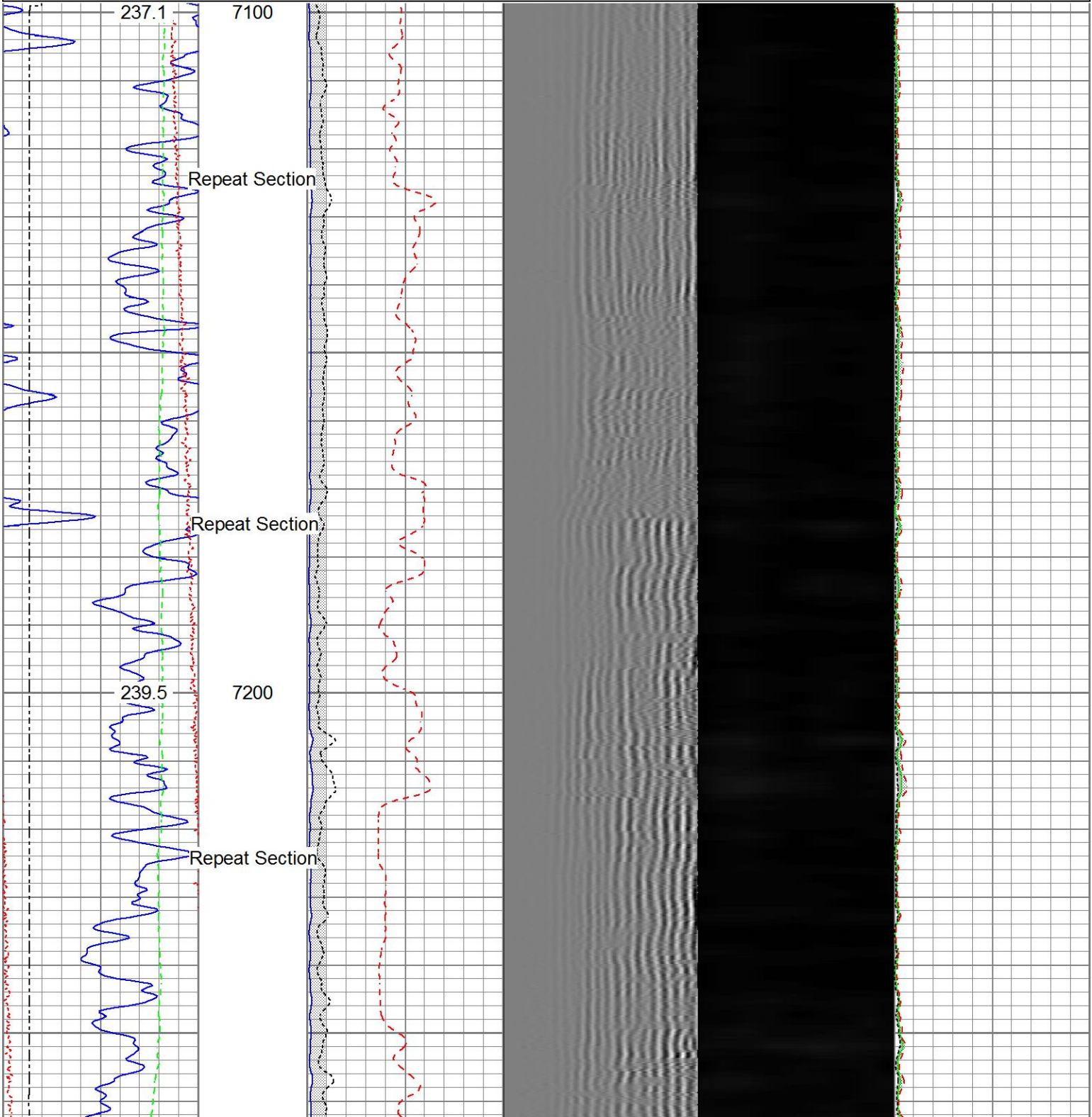


Repeat Pass

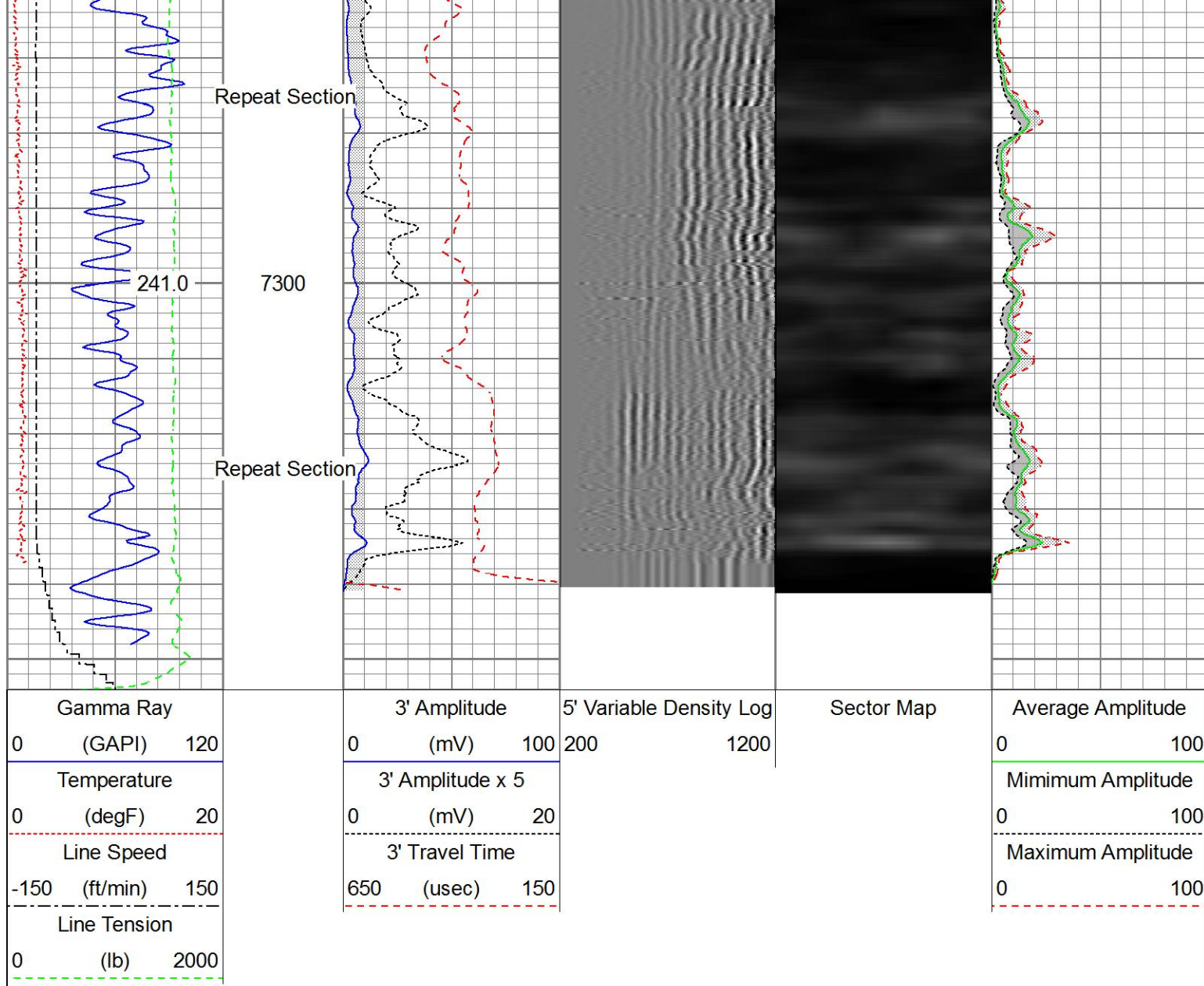
Recorded With 2800 PSI Surface Induced Pressure

|                     |   |
|---------------------|---|
| Database File       | 0012012110_andadarko_000K_2017_1012_0012_10_10_10_00.us |
| Dataset Pathname    | Repeat.1  |
| Presentation Format | ros_radII   |
| Dataset Creation    | Mon Aug 15 10:18:47 2016                                |
| Charted by          | Depth in Feet scaled 1:240                              |

|                   |  |                  |                         |            |                   |
|-------------------|--|------------------|-------------------------|------------|-------------------|
| Gamma Ray         |  | 3' Amplitude     | 5' Variable Density Log | Sector Map | Average Amplitude |
| 0 (GAPI) 120      |  | 0 (mV) 100       | 200 1200                |            | 0 100             |
| Temperature       |  | 3' Amplitude x 5 |                         |            | Minimum Amplitude |
| 0 (degF) 20       |  | 0 (mV) 20        |                         |            | 0 100             |
| Line Speed        |  | 3' Travel Time   |                         |            | Maximum Amplitude |
| -150 (ft/min) 150 |  | 650 (usec) 150   |                         |            | 0 100             |
| Line Tension      |  |                  |                         |            |                   |
| 0 (lb) 2000       |  |                  |                         |            |                   |

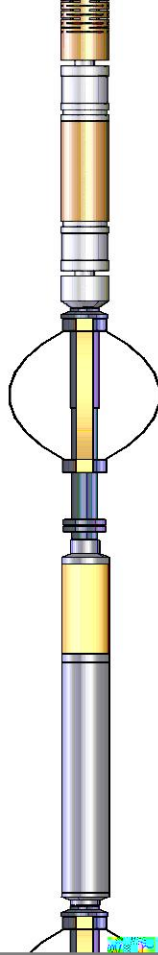






| Sensor | Offset (ft) | Schematic | Description  | Length (ft) | O.D. (in) | Weight (lb) |
|--------|-------------|-----------|--|-------------|-----------|-------------|
|        |             |           | Titan_Electric_Cable_Heads-Titan_1-11/161.03<br>Electric Cable Head with 1" Fishing Neck               | 1.69        | 1.69      | 5.40        |
|        |             |           | Probe_ELine_BowSpring_Centralizer-P-EE2.88.275<br>Probe 2-3/4" Electric Inline Bowspring Centralizer   | 2.75        | 2.75      | 20.00       |
| Temp   | 16.72       |           |  |             |           |             |
| WVFS8  | 14.55       |           | Probe_RADII-C-P_RBT_2750 (FW1302-009.19<br>Probe 2-3/4" Sector Cement Bond Tool with Temperature Probe | 2.75        | 2.75      | 105.00      |

WVFS7 14.55  
 WVFS6 14.55  
 WVFS5 14.55  
 WVFS4 14.55  
 WVFS3 14.55  
 WVFS2 14.55  
 WVFS1 14.55  
 WVFCAL 14.55  
 WVF3FT 14.55  
 WVF5FT 13.55  
 HeadVolt 10.30



|   |            |      |       |
|---|------------|------|-------|
| Probe_ELine_BowSpring_Centralizer-P<br>Probe 2-3/4" Electric Inline Bowspring Centralizer | EE2.88.275 | 2.75 | 20.00 |
|---|------------|------|-------|

DCCL 6.51  
 CCL 6.51

|   |  |      |       |
|---|--|------|-------|
| Probe_GR_CCL-P_CGR_2750_S (FW121:4.543)<br>Probe 2-3/4" Digital CCL / Gamma Ray<br>Combined |  | 2.75 | 55.00 |
|---|--|------|-------|

GR 3.77



Calibration Casing Diameter: 0.000 in.  
Calibration Depth: 25.002 ft

Master Calibration, performed (Derived):

|     | Raw (v) |       | Calibrated (mv) |         | Results |        |
|-----|---------|-------|-----------------|---------|---------|--------|
|     | Zero    | Cal   | Zero            | Cal     | Gain    | Offset |
| 3'  | 0.009   | 0.717 | 0.800           | 71.921  | 100.463 | -0.061 |
| CAL | 0.779   | 0.769 |                 |         |         |        |
| 5'  | 0.010   | 0.544 | 0.800           | 71.921  | 133.143 | -0.497 |
| SUM |         |       |                 |         |         |        |
| S1  | 0.008   | 0.698 | 0.000           | 100.000 | 145.054 | -1.207 |
| S2  | 0.008   | 0.711 | 0.000           | 100.000 | 142.343 | -1.206 |
| S3  | 0.009   | 0.731 | 0.000           | 100.000 | 138.660 | -1.302 |
| S4  | 0.009   | 0.737 | 0.000           | 100.000 | 137.234 | -1.203 |
| S5  | 0.010   | 0.737 | 0.000           | 100.000 | 137.605 | -1.392 |
| S6  | 0.010   | 0.721 | 0.000           | 100.000 | 140.707 | -1.427 |
| S7  | 0.011   | 0.699 | 0.000           | 100.000 | 145.317 | -1.633 |
| S8  | 0.009   | 0.702 | 0.000           | 100.000 | 144.226 | -1.311 |

Internal Reference Calibration, performed Fri Aug 05 07:29:17 2016:

|     | Raw (v) |       | Calibrated (v) |       | Results |        |
|-----|---------|-------|----------------|-------|---------|--------|
|     | Zero    | Cal   | Zero           | Cal   | Gain    | Offset |
| CAL | 0.000   | 0.000 | 0.779          | 0.769 | 1.000   | 0.000  |

Air Zero Calibration, performed Fri Aug 12 09:02:47 2016:

|     | Raw (v) |  | Calibrated (v) |  | Results |  |
|-----|---------|--|----------------|--|---------|--|
|     | Zero    |  | Zero           |  | Offset  |  |
| 3'  | 0.000   |  | 0.000          |  | 0.000   |  |
| 5'  | 0.000   |  | 0.000          |  | 0.000   |  |
| SUM |         |  |                |  |         |  |
| S1  | 0.000   |  | 0.000          |  | 0.000   |  |
| S2  | 0.000   |  | 0.000          |  | 0.000   |  |
| S3  | 0.000   |  | 0.000          |  | 0.000   |  |
| S4  | 0.000   |  | 0.000          |  | 0.000   |  |
| S5  | 0.000   |  | 0.000          |  | 0.000   |  |
| S6  | 0.000   |  | 0.000          |  | 0.000   |  |
| S7  | 0.000   |  | 0.000          |  | 0.000   |  |
| S8  | 0.000   |  | 0.000          |  | 0.000   |  |



Company Kerr-McGee Oil & Gas Onshore, L.P.  
Well Cook 28N-16HZ  
Field Wattenberg  
County Weld  
State Colorado