



**RADIAL CEMENT BOND W/
VARIABLE DENSITY,
GAMMA RAY, CCL, TEMP LOG**

| | | |
|------------------------|-------------------------|---------------------------------|
| Company | GREAT WESTERN OIL & GAS | |
| Well | SELTZER LD 09-378HN | |
| Field | WATTENBERG | |
| County | ADAMS | |
| State | COLORADO | |
| Location: | API #: 05-001-10196 | Other Services NONE |
| Permanent Datum | SEC 4 TWP 1S RGE 67W | NWNE 39.999361, -104.892670 |
| Log Measured From | KB | Elevation 5140' |
| Drilling Measured From | KB | KB: 5160' D.F. G.L. 5140' |

| | | |
|------------------------|-------------|--|
| Date | 29-JUL-2021 | |
| Run Number | TWO | |
| Depth Driller | 18404' | |
| Depth Logger | 8377' | |
| Bottom Logged Interval | 8376' | |
| Top Log Interval | SURFACE | |
| Open Hole Size | 8-1/2" | |
| Type Fluid | WATER | |
| Density / Viscosity | - | |
| Max. Recorded Temp. | 229 DegF | |
| Estimated Cement Top | - | |
| Time Well Ready | 0700 | |
| Time Logger on Bottom | 0730 | |
| Equipment Number | 65 | |
| Location | PLATTEVILLE | |
| Recorded By | H.HILL | |
| Witnessed By | G.TRAUGHBER | |

| Run Number | Borehole Record | | Tubing Record | | | | |
|-------------------|-----------------|-------------|---------------|------------|-------------|------|--------------|
| | Bit | From | To | Size | Weight | From | To |
| Casing Record | | | | | | | |
| Surface String | | Size 9-5/8" | | Wgt/Ft 36# | Top SURFACE | | Bottom 2039' |
| Prot. String | | 5-1/2" | | 20# | SURFACE | | 18404' |
| Production String | | | | | | | |
| Liner | | | | | | | |

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

TOOL CENTRALIZED VIA 3 X GEMCO CENTRALIZERS
 TOOL ZEROED TO KELLY BUSHING
 LOG CORRELATED TO MARKER JOINT AT 7561' - 7572'

THANK YOU FOR USING KLX ENERGY SERVICES

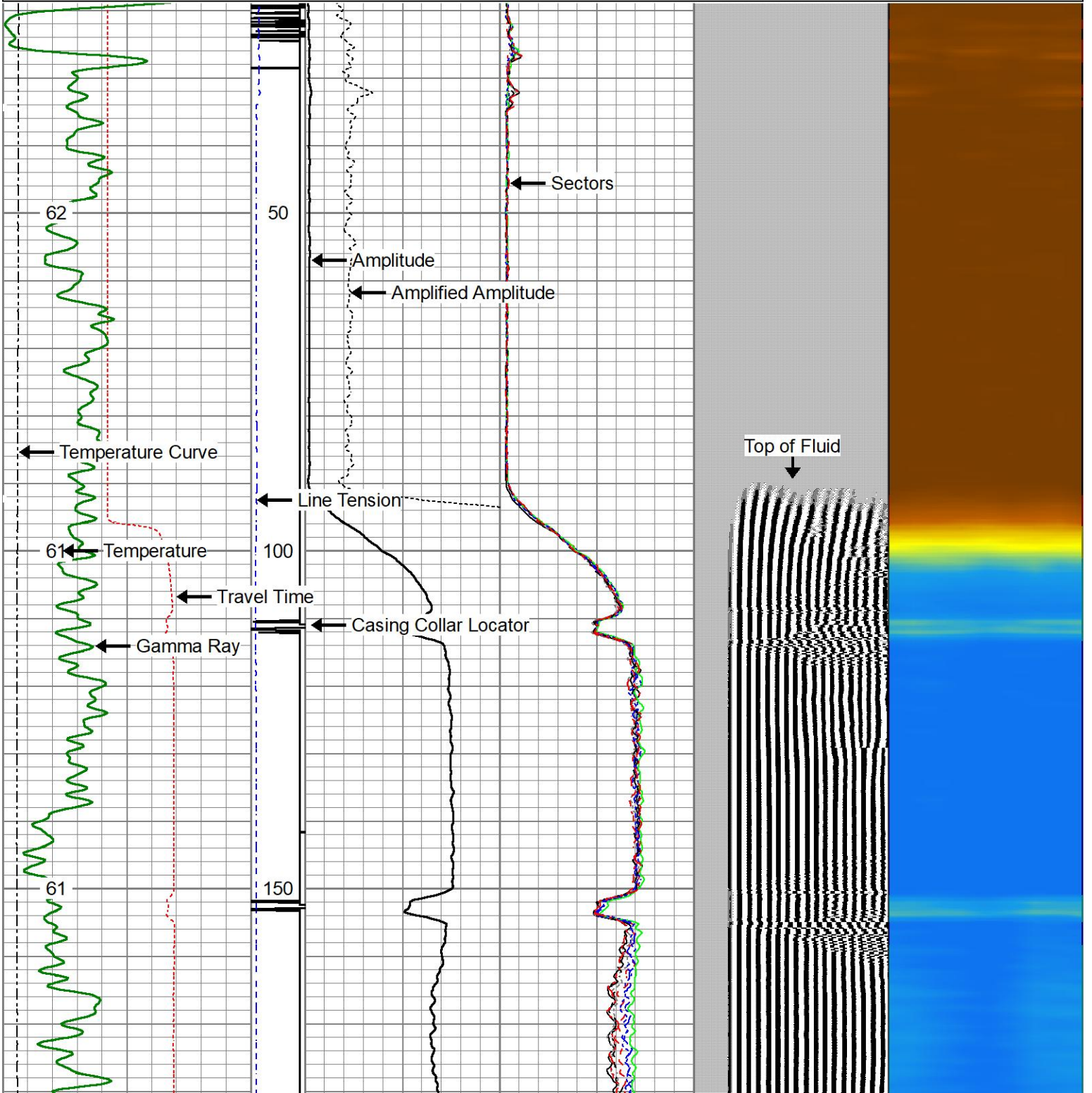


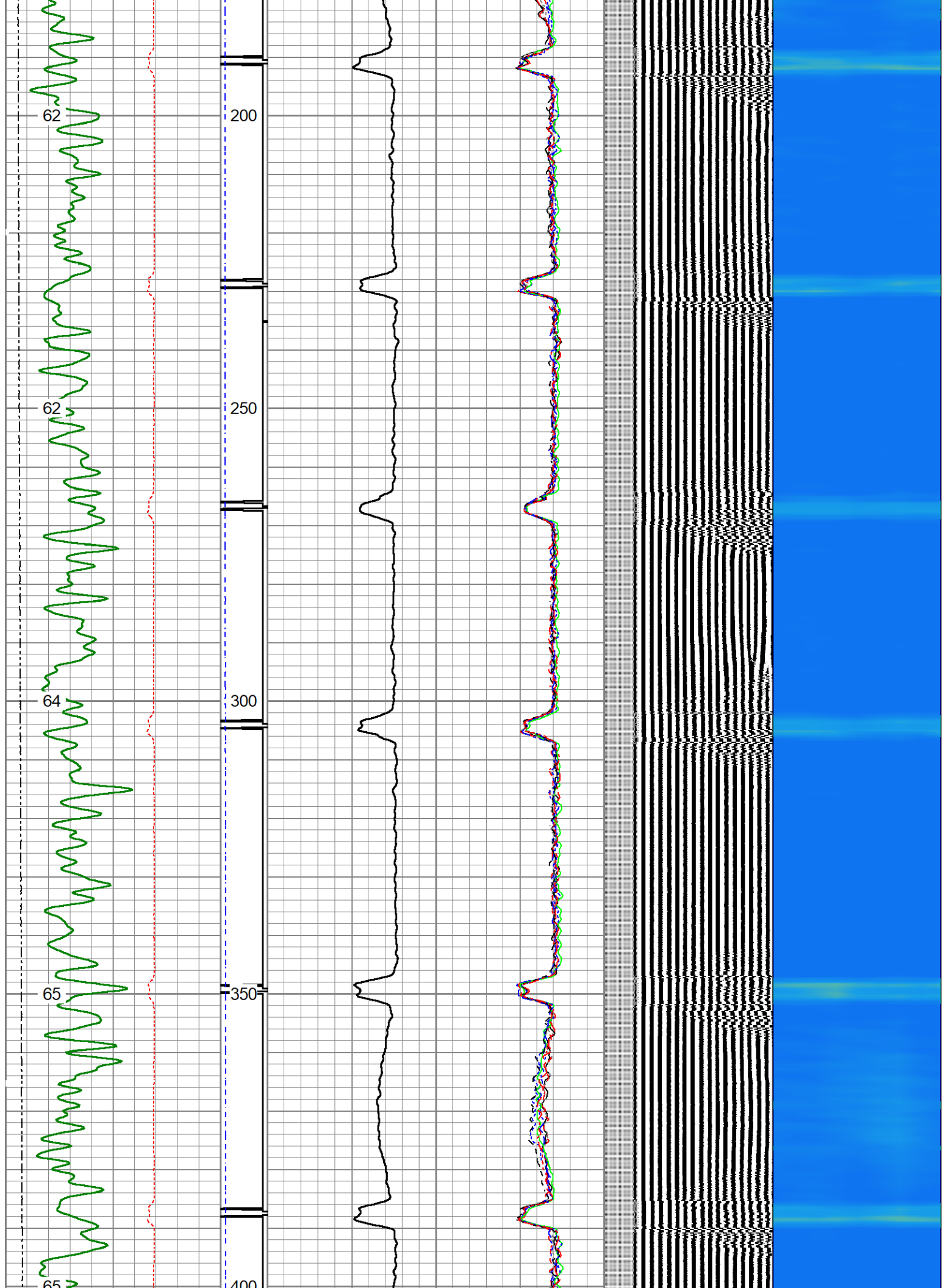
MAIN PASS

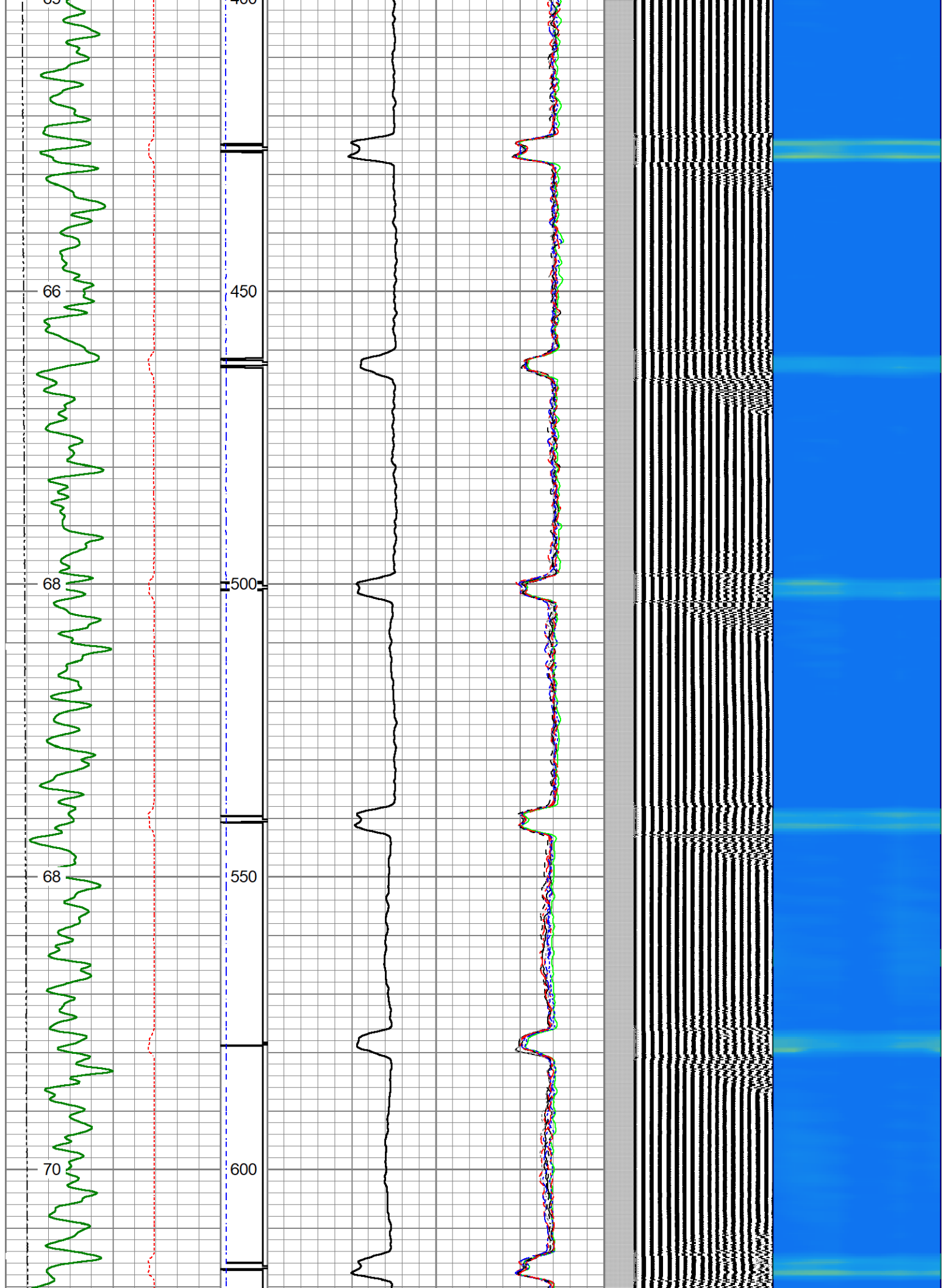
0 PSI

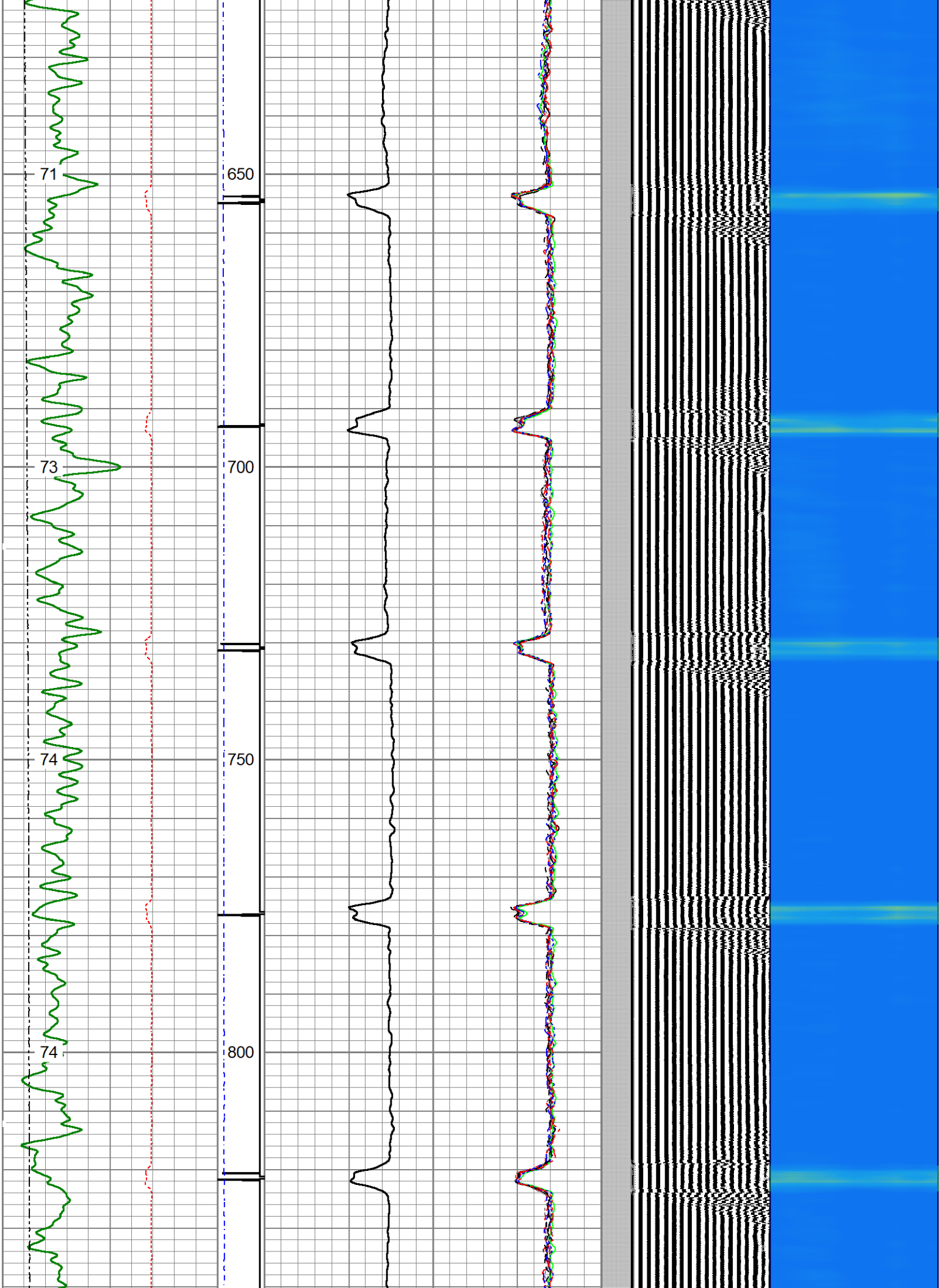
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 Dataset Pathname pass6
 Presentation Format rcbl_hh
 Dataset Creation Thu Jul 29 07:29:33 2021
 Charted by Depth in Feet scaled 1:240

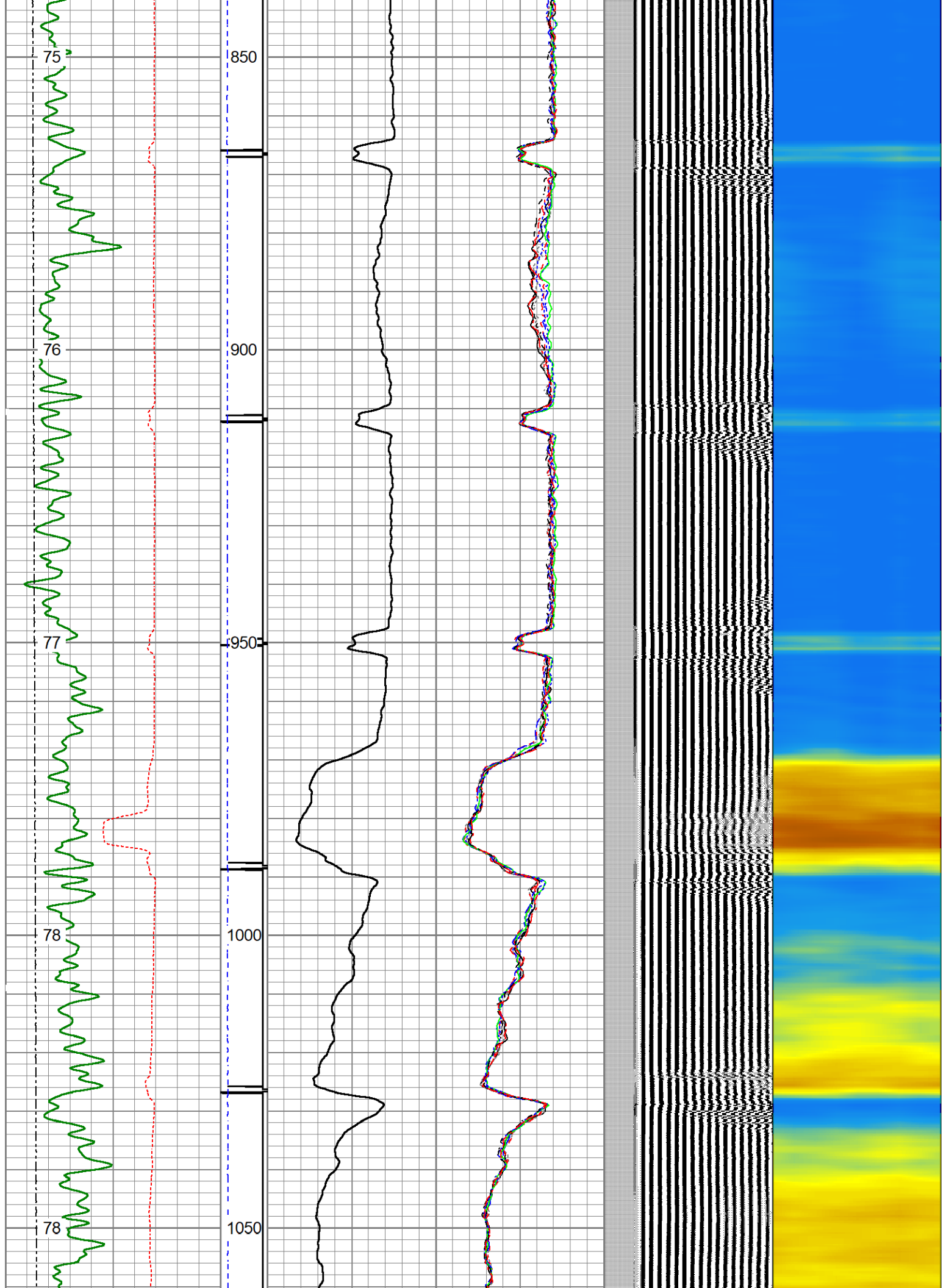
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|-----|--------------------|-----|--------|---|---------------------|-----|----|----------|-----|------------------|--------|------------|------|
| 400 | Travel Time (usec) | 200 | ing Co | 0 | Amplitude (mV) | 100 | -5 | Sector 1 | 150 | Variable Density | 1 | Cement Map | 8 |
| 0 | Gamma Ray (GAPI) | 150 | 9 -1 | | Amplified Amplitude | | -5 | Sector 2 | 150 | | (usec) | | 1200 |
| 50 | TEMP (degF) | 250 | e Tens | 0 | (mV) | 10 | -5 | Sector 3 | 150 | | | | |
| | TEMP (degF) | | (lb) | | | | -5 | Sector 4 | 150 | | | | |
| | | | (2000) | | | | -5 | Sector 5 | 150 | | | | |
| | | | | | | | -5 | Sector 6 | 150 | | | | |
| | | | | | | | -5 | Sector 7 | 150 | | | | |
| | | | | | | | -5 | Sector 8 | 150 | | | | |

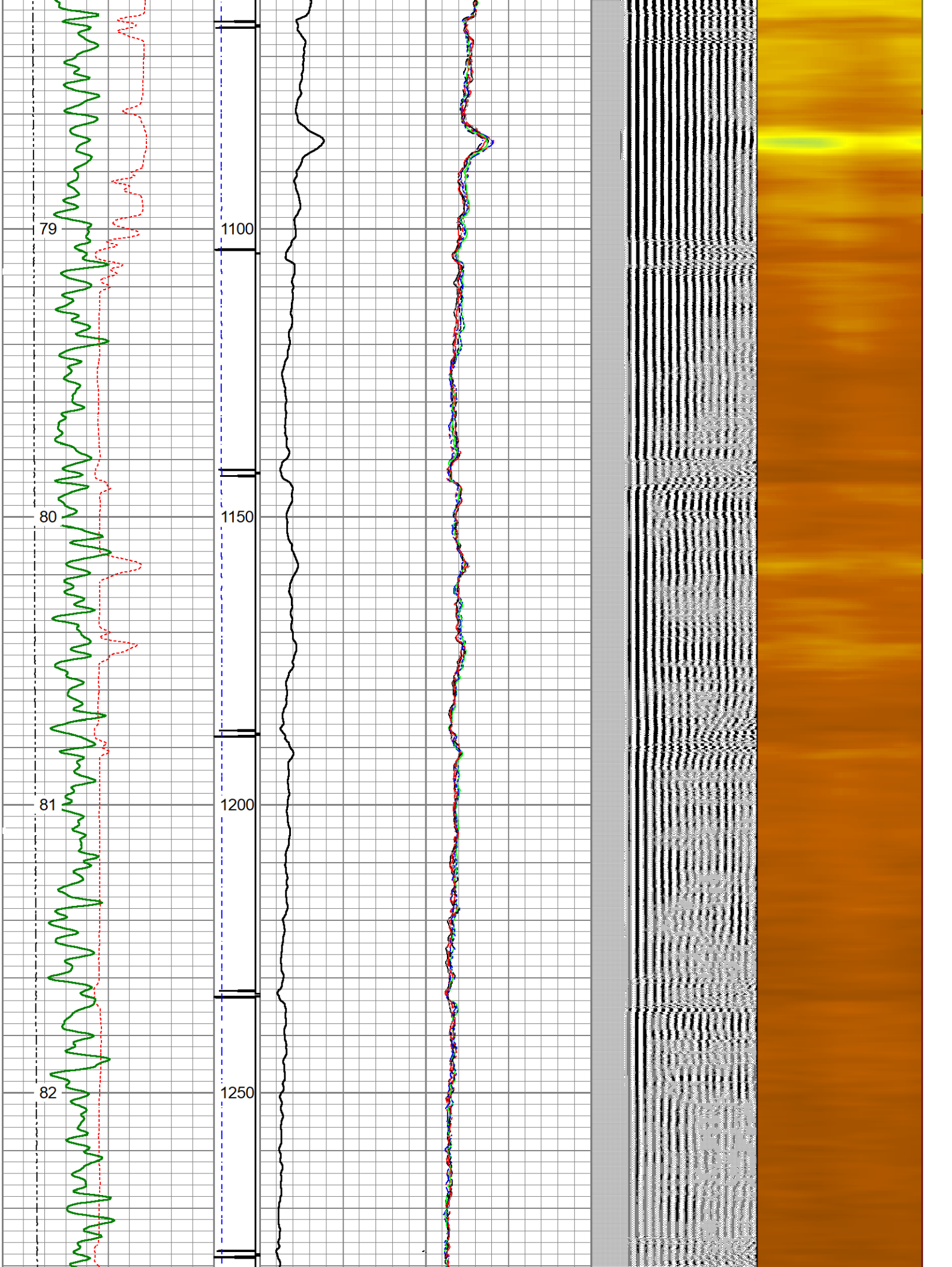


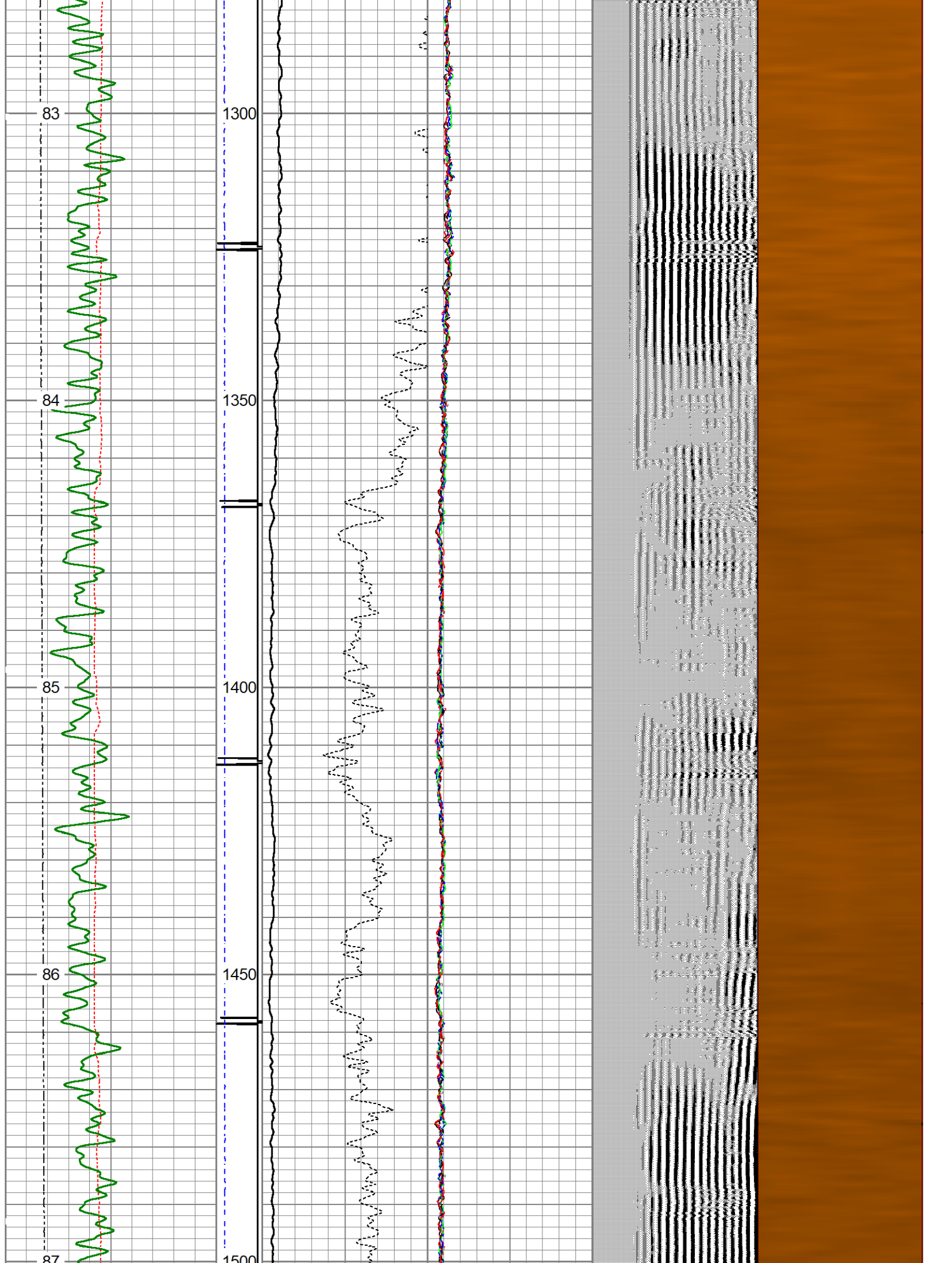


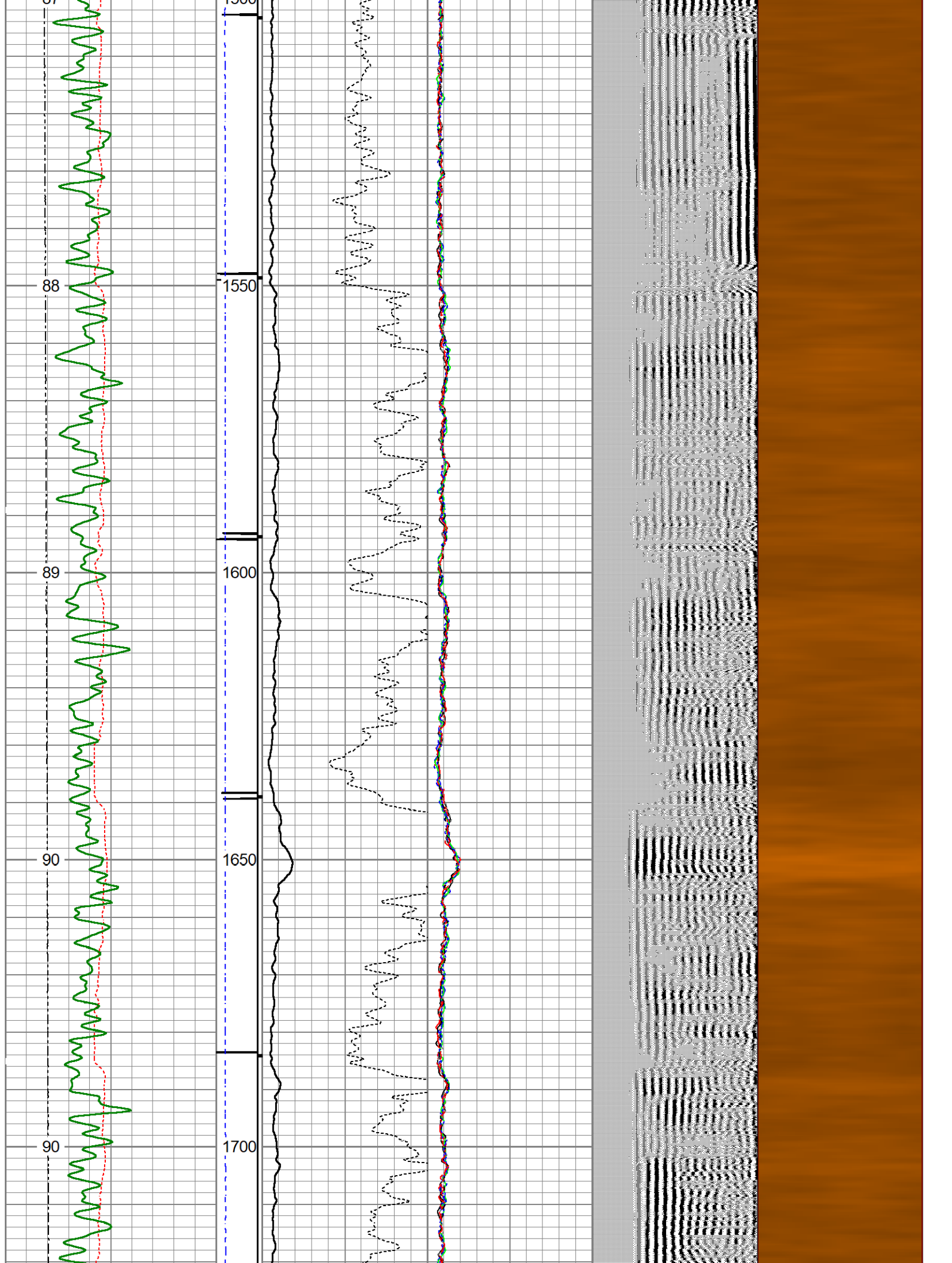


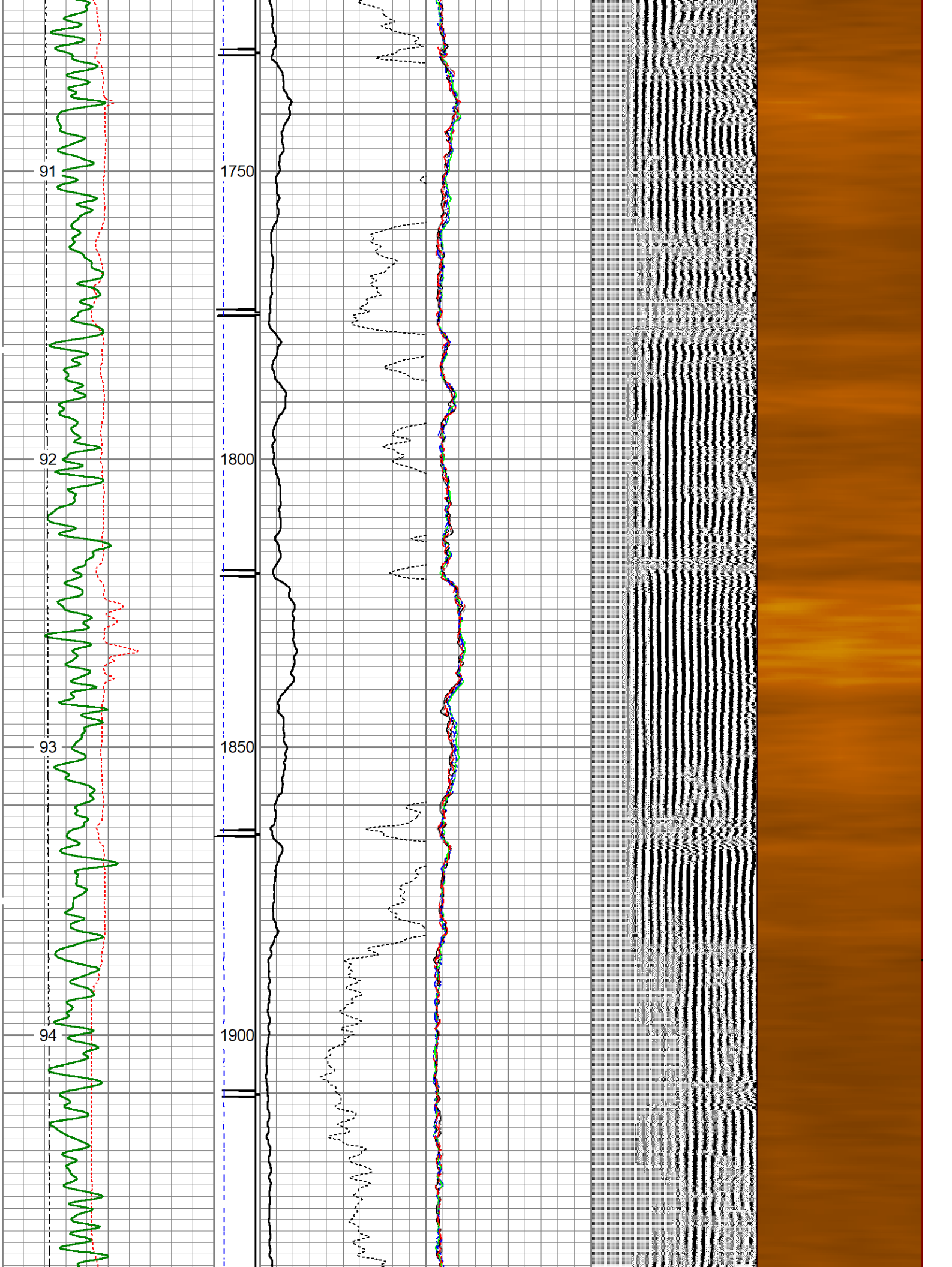


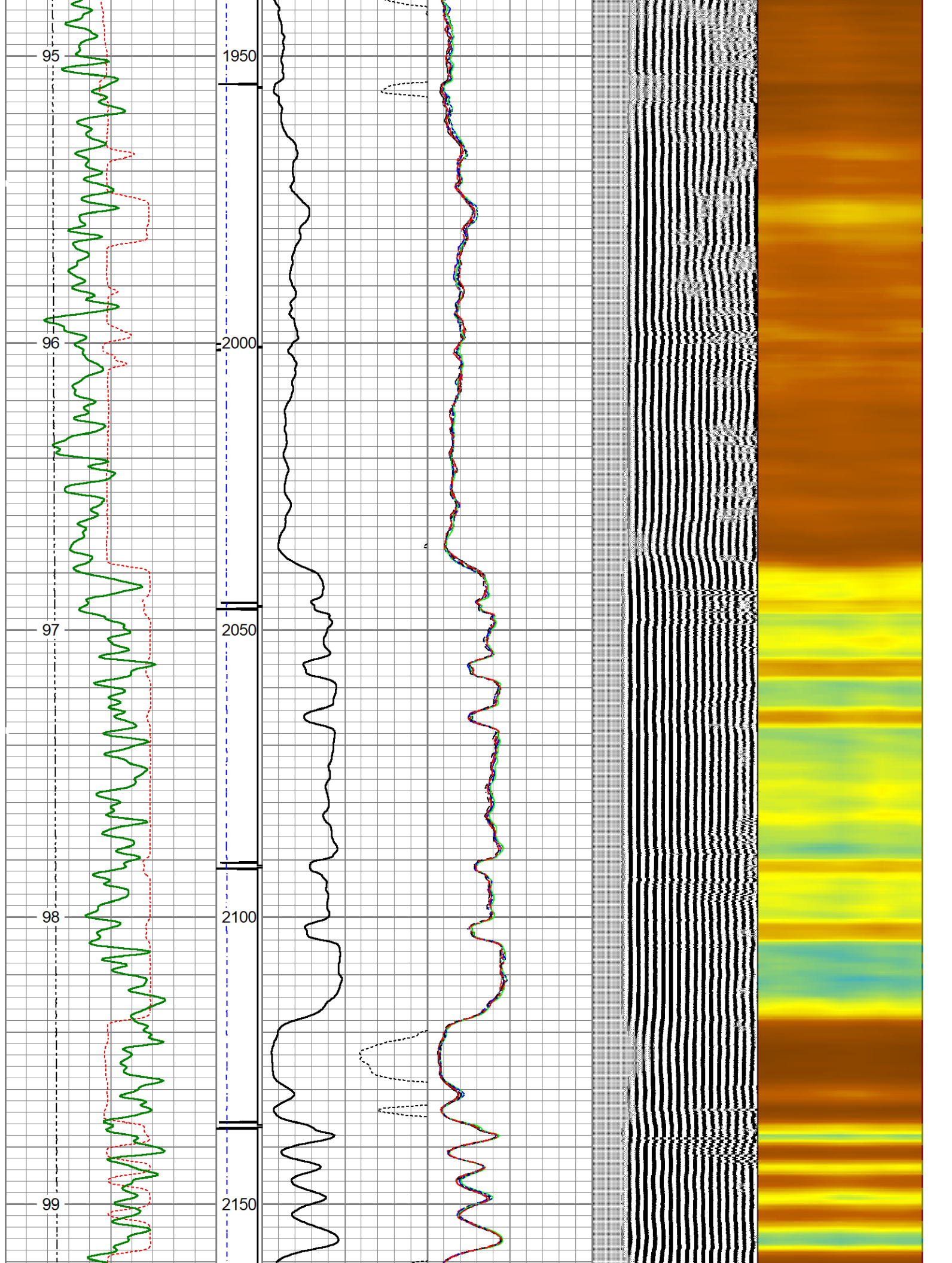


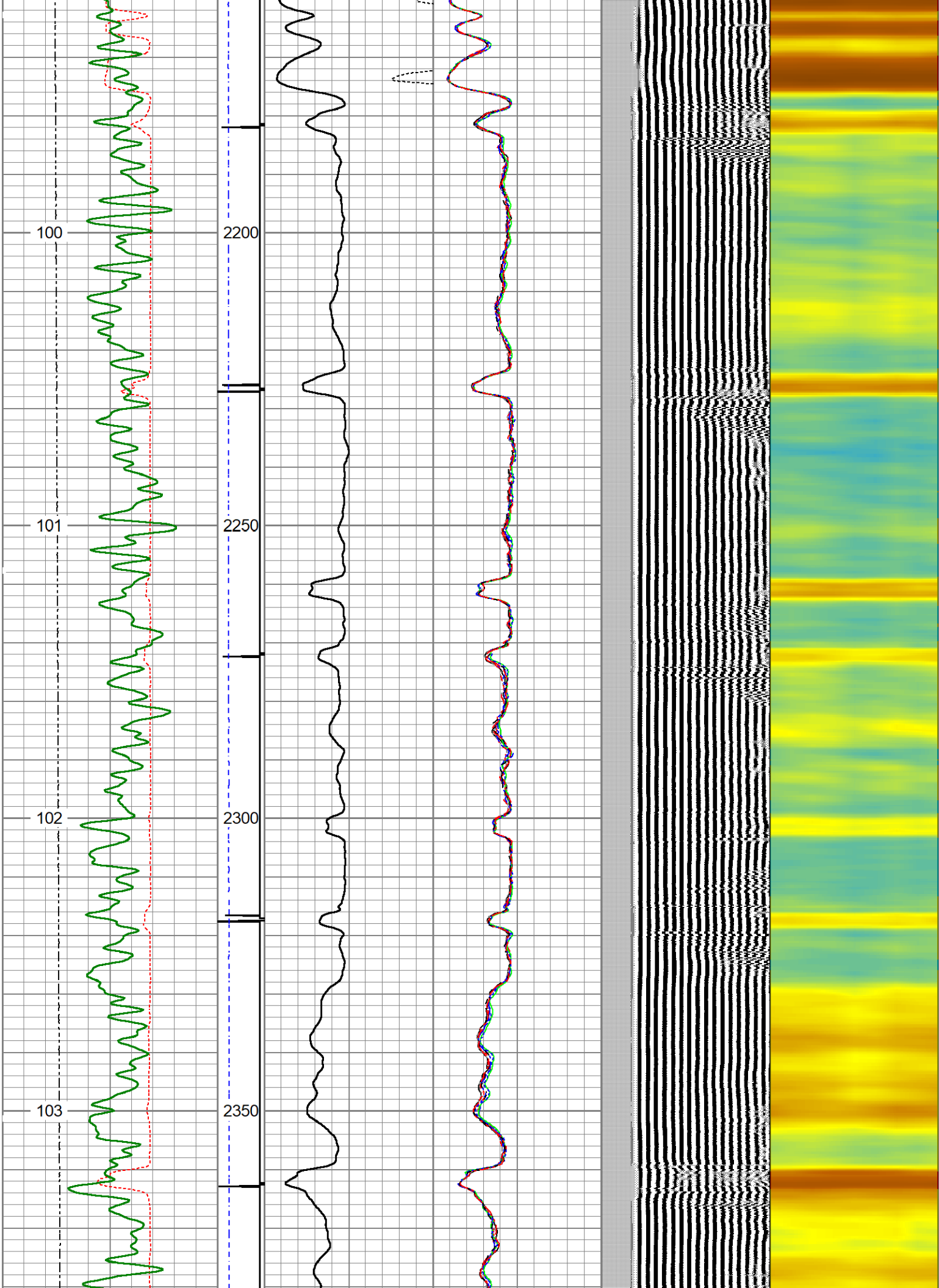


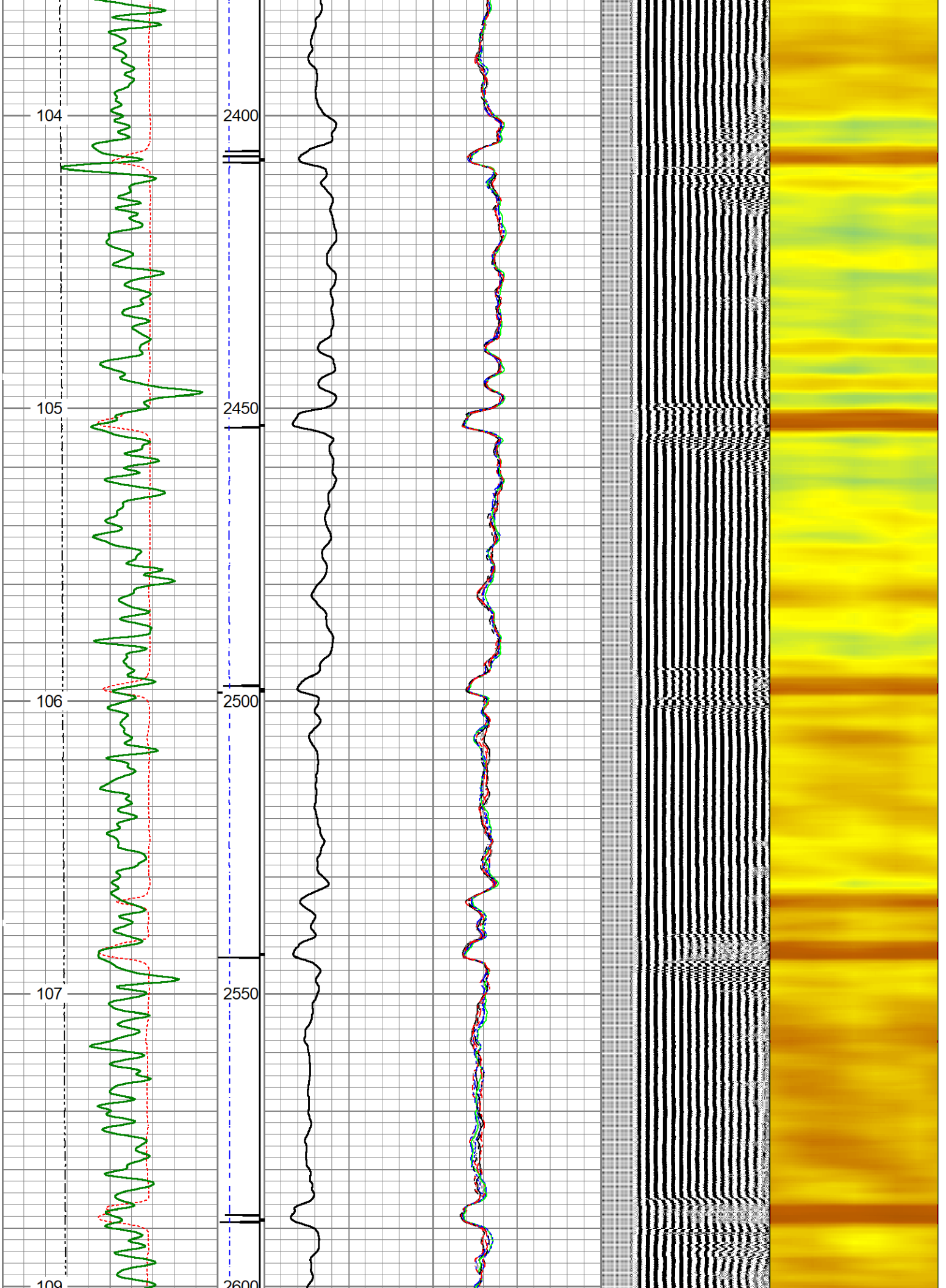


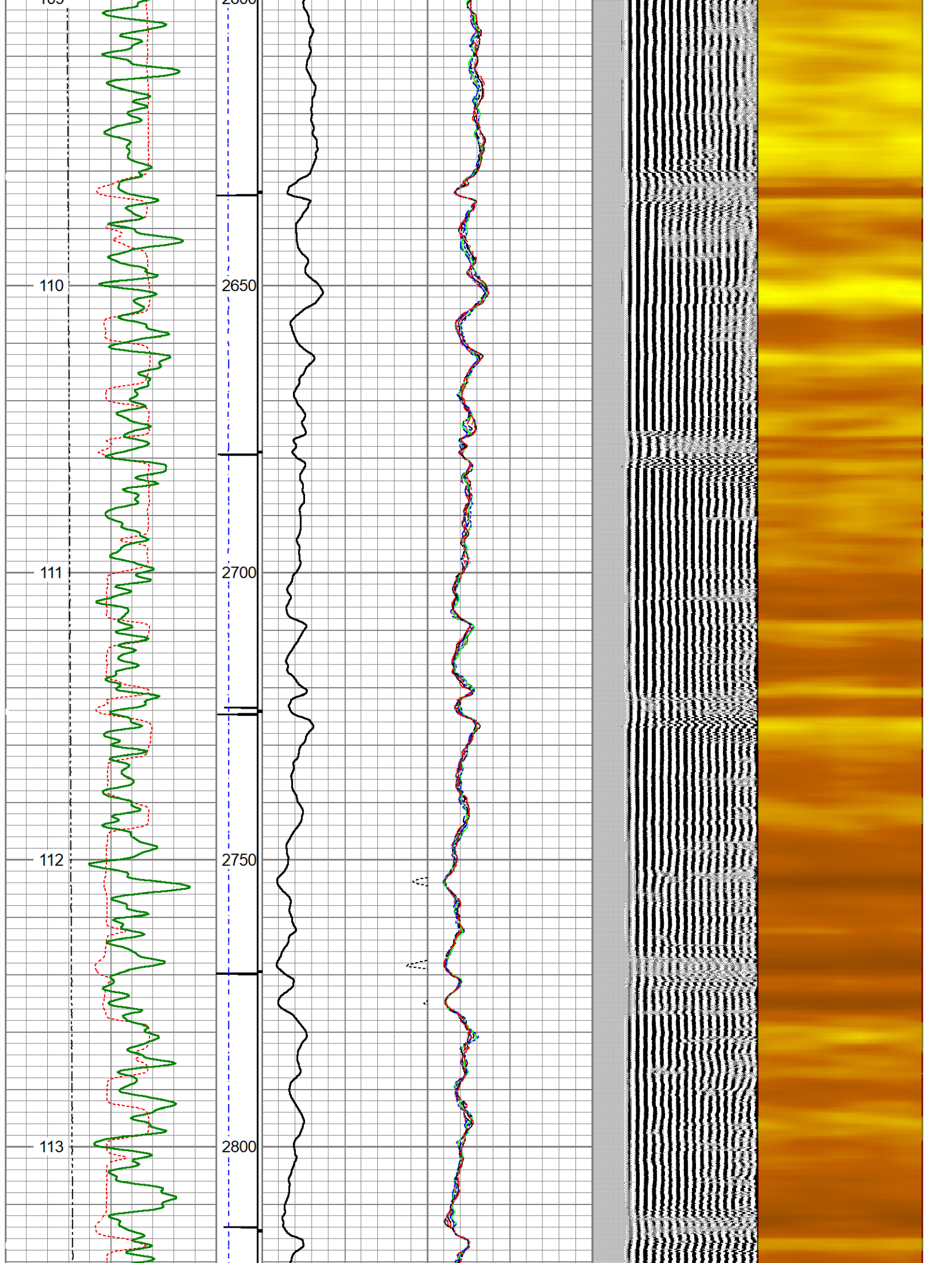


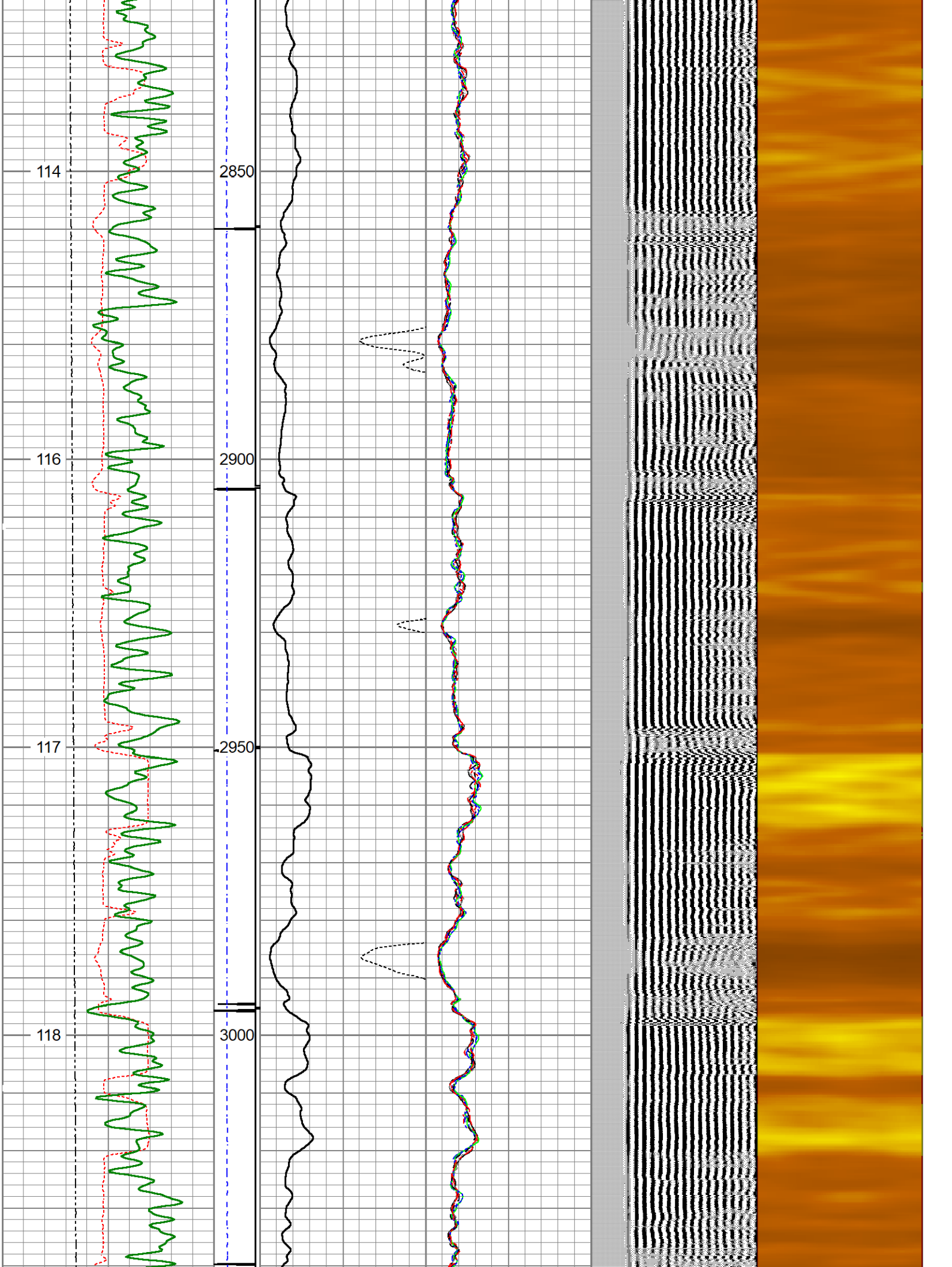


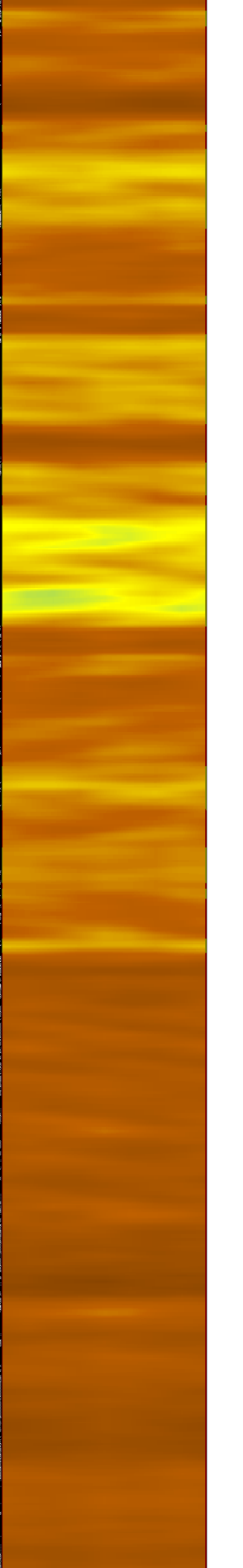
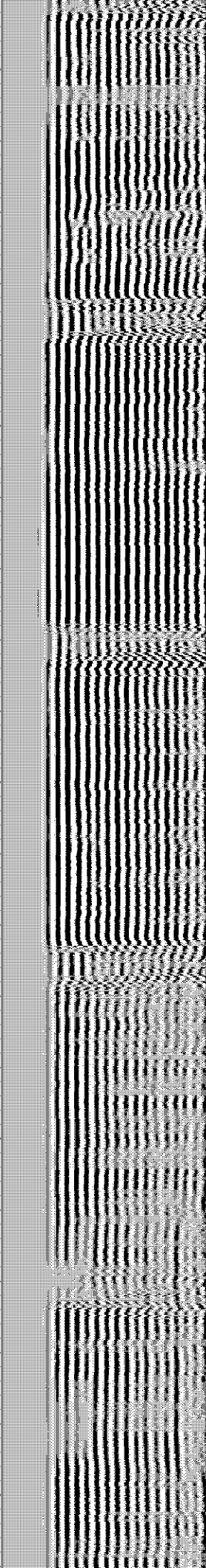
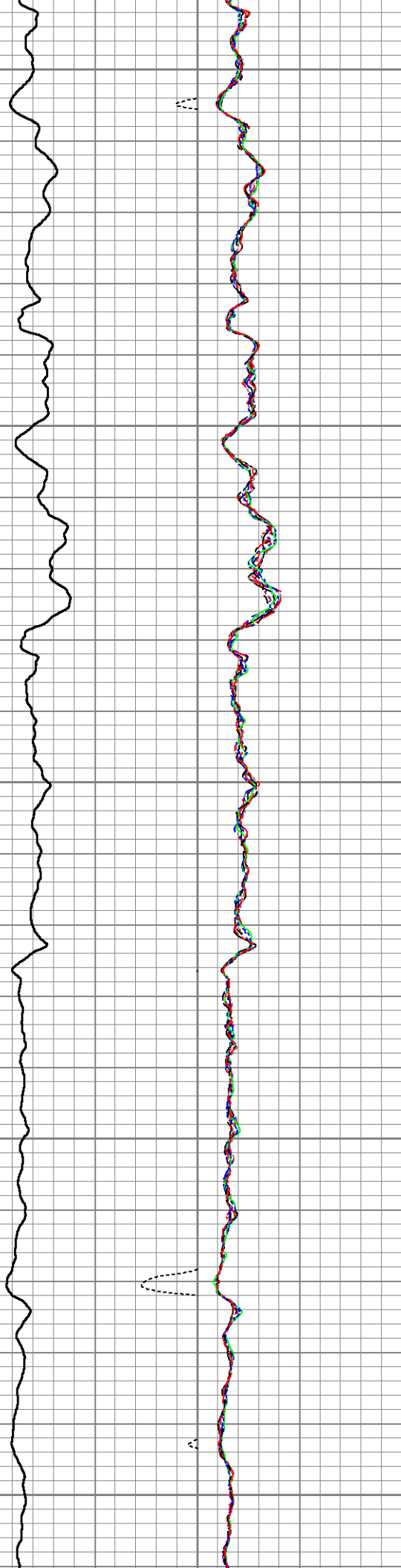
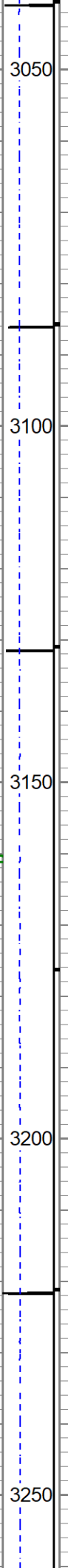
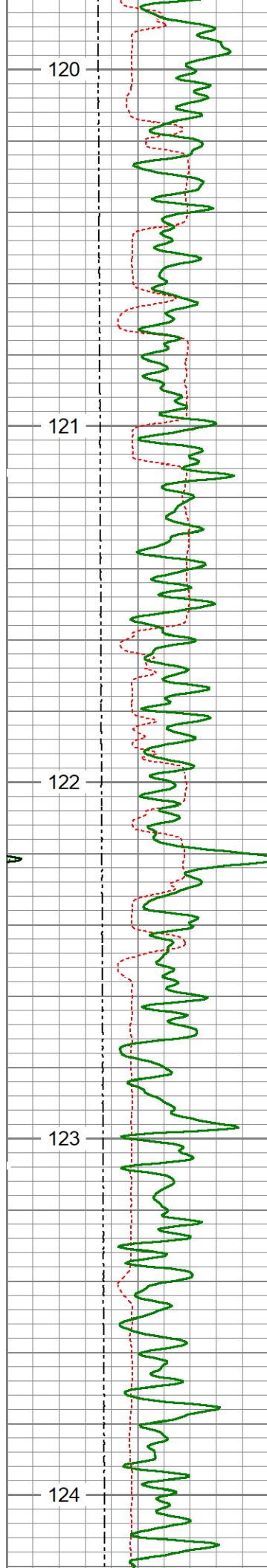


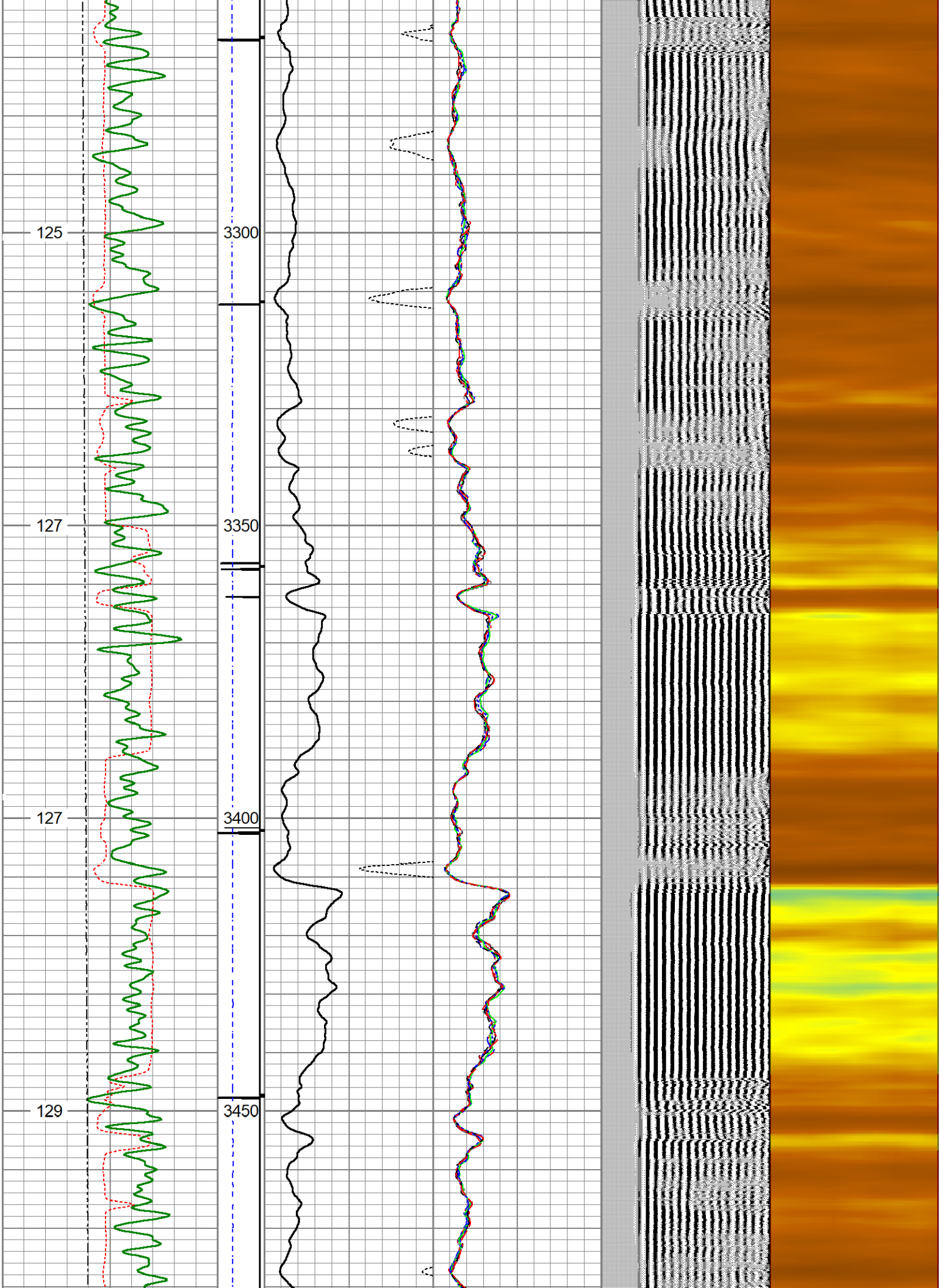


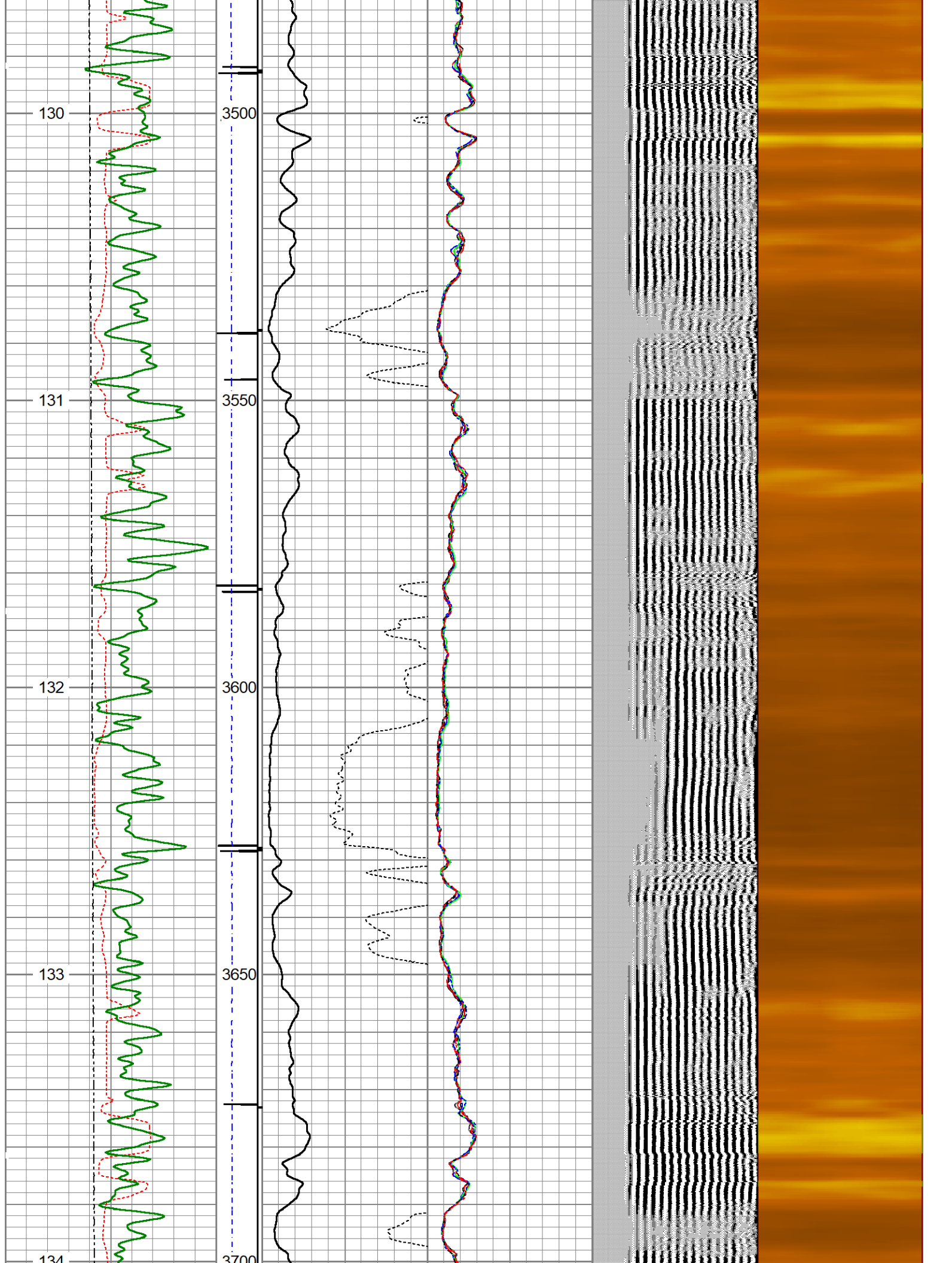


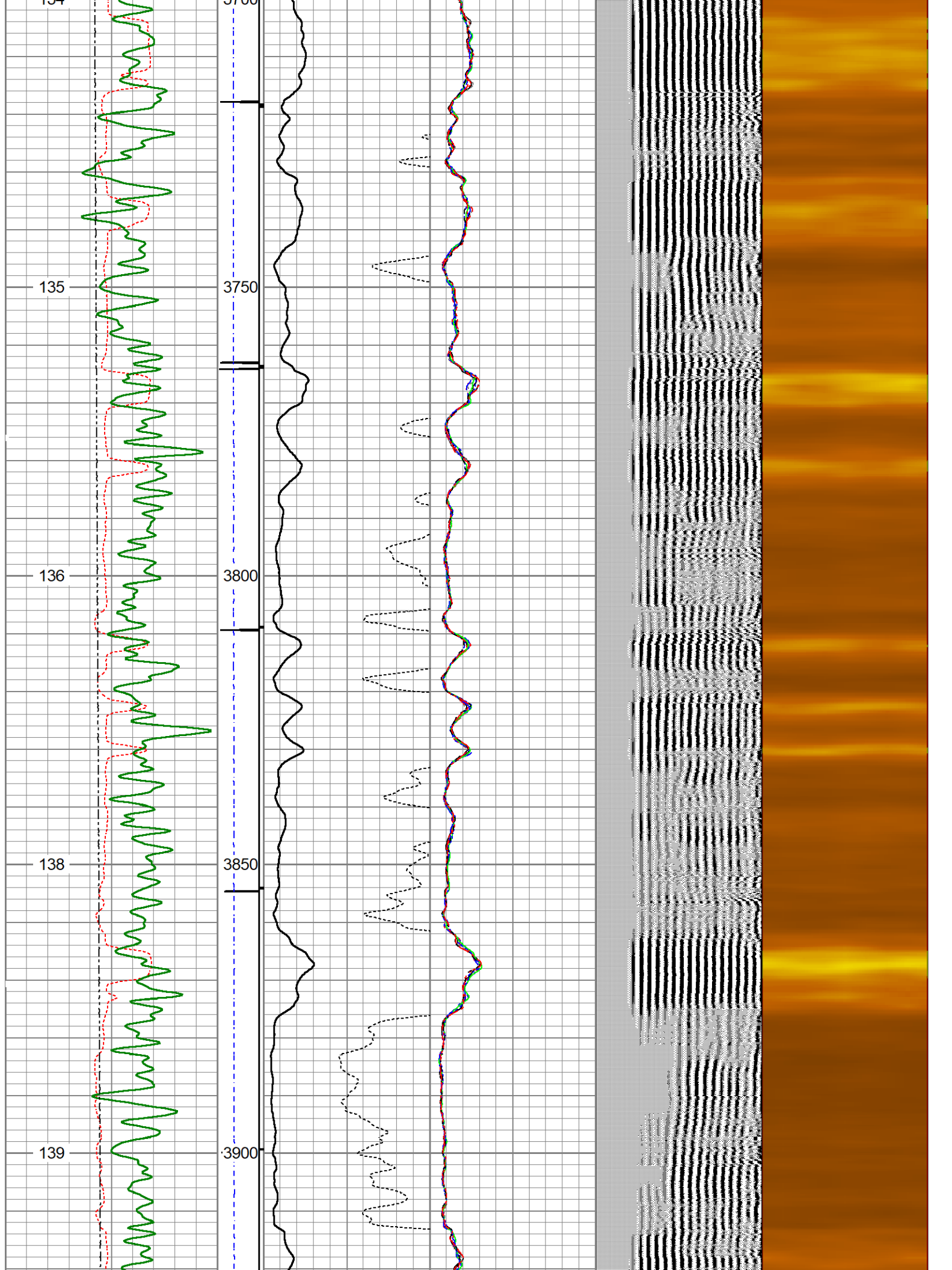


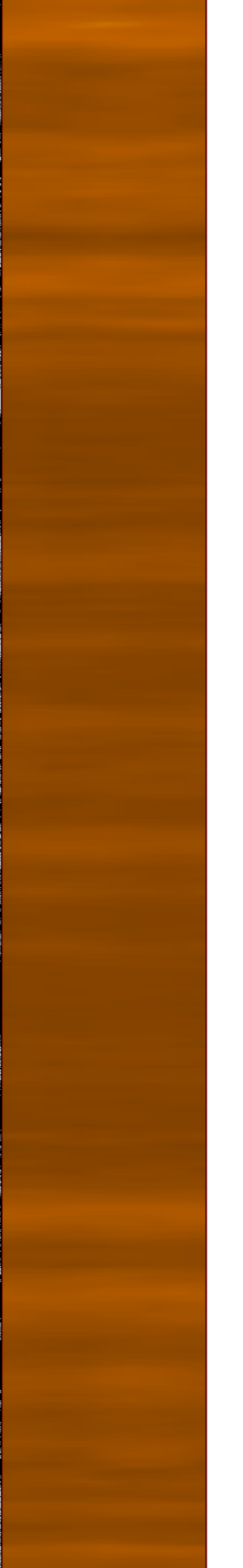
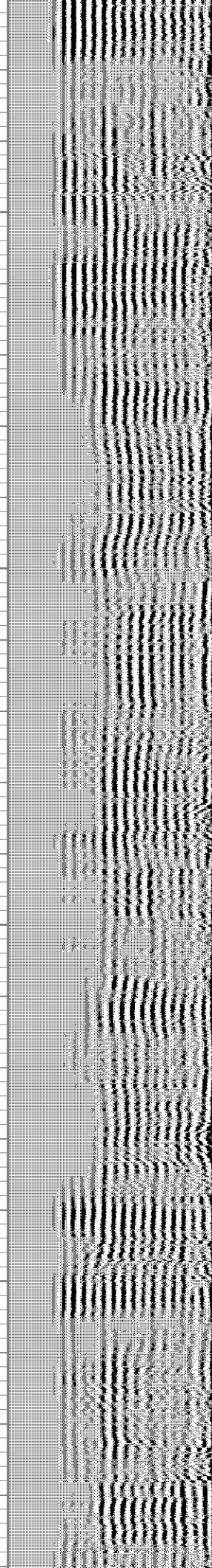
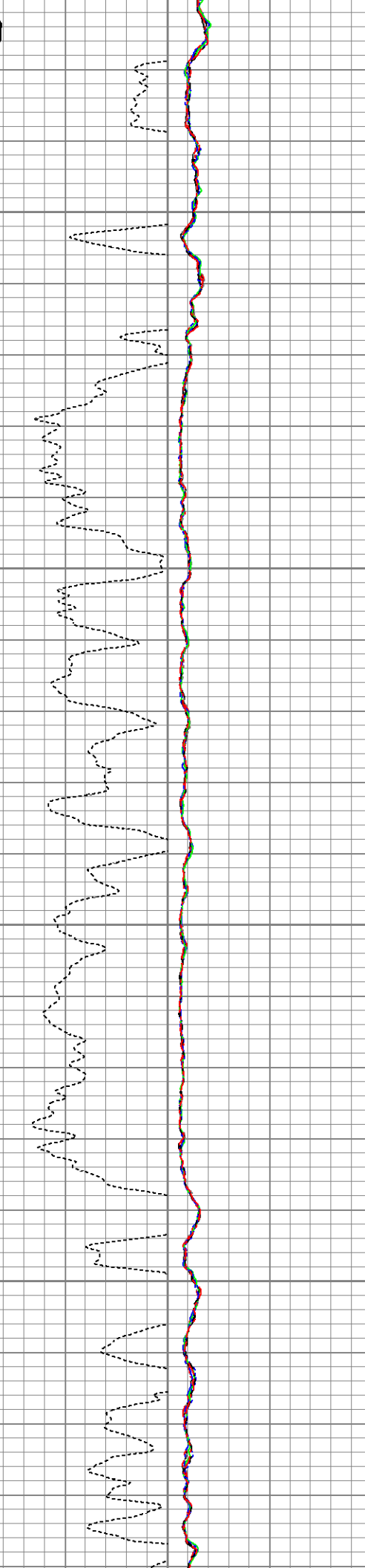
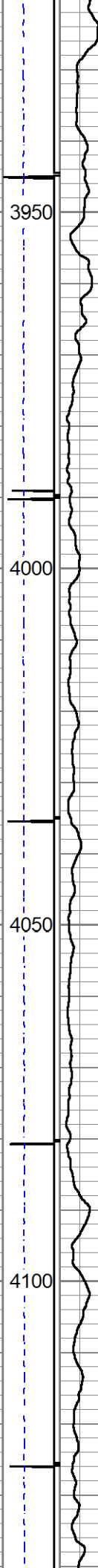
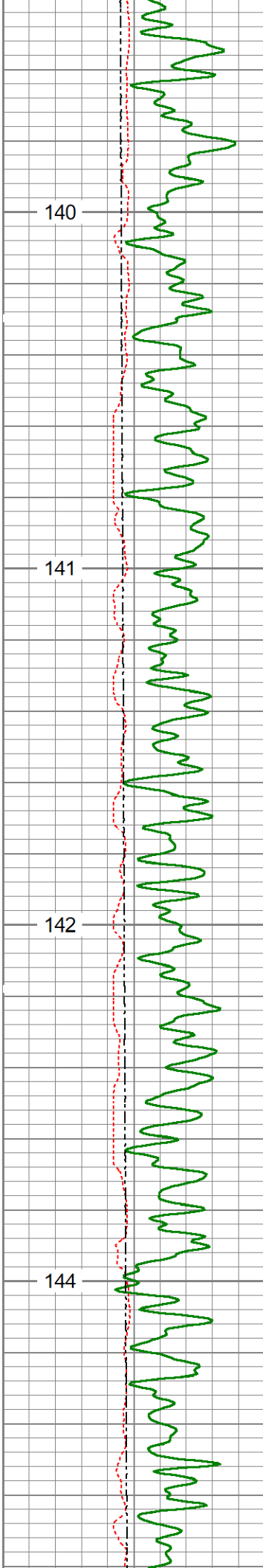


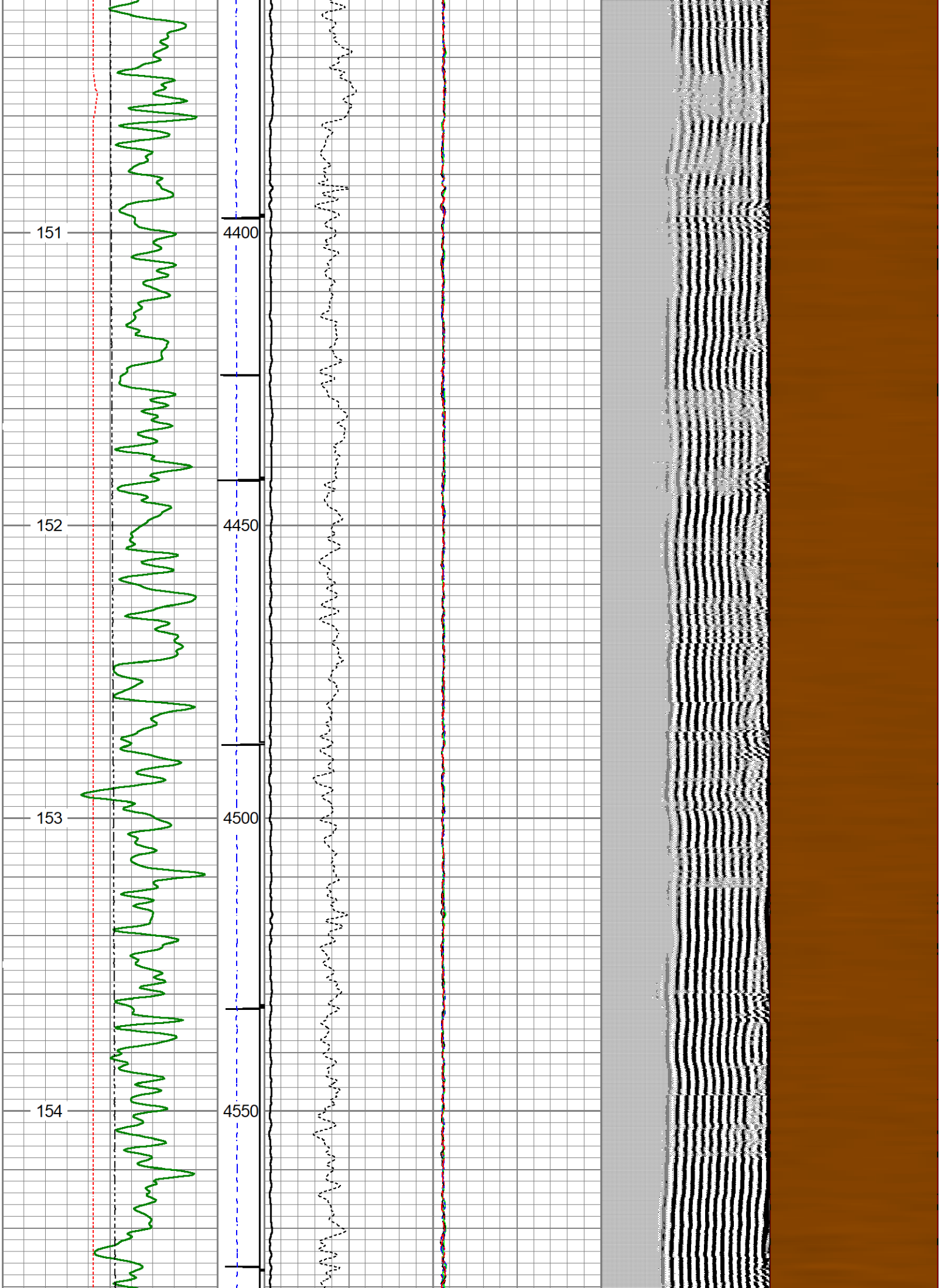


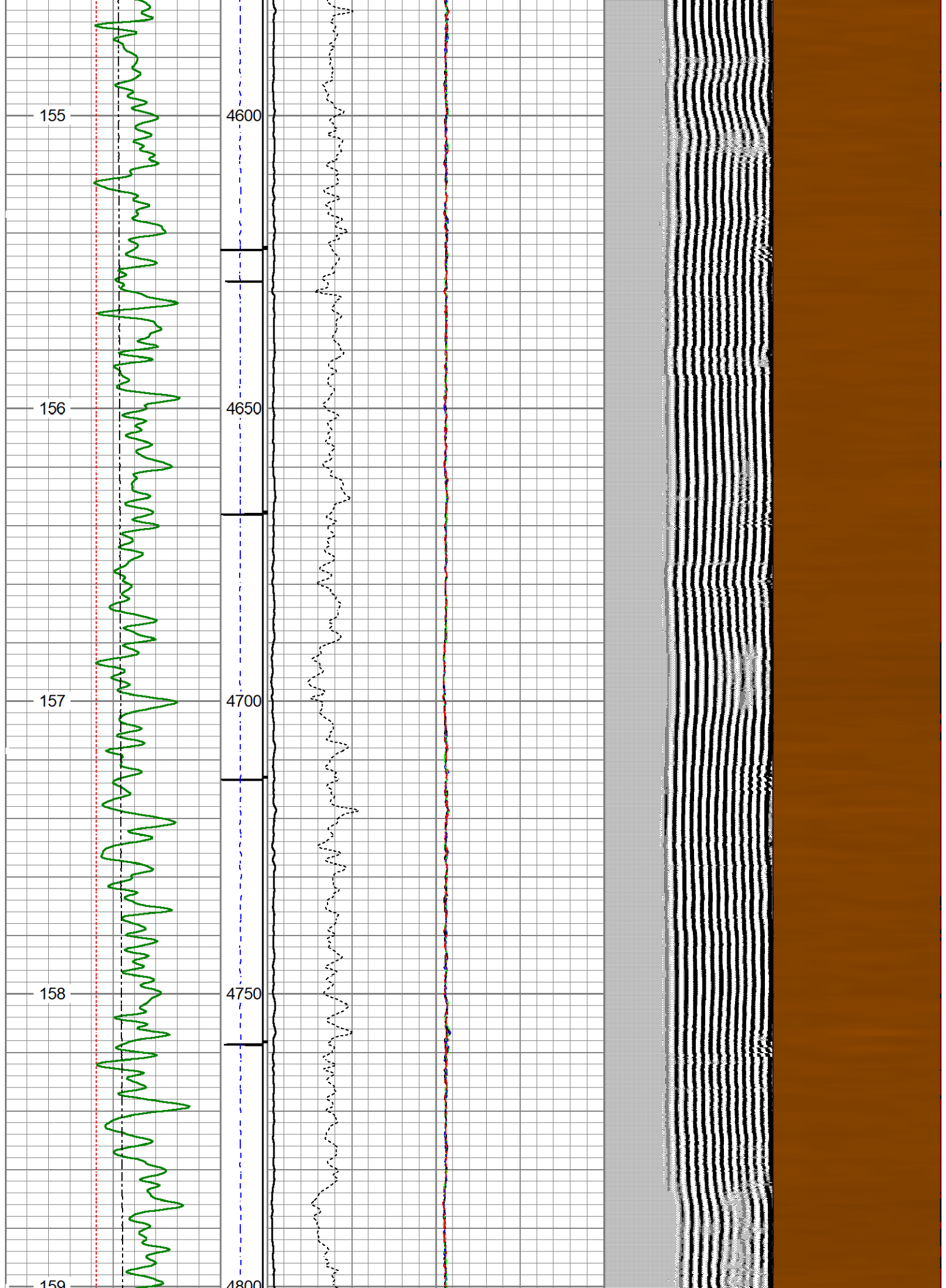


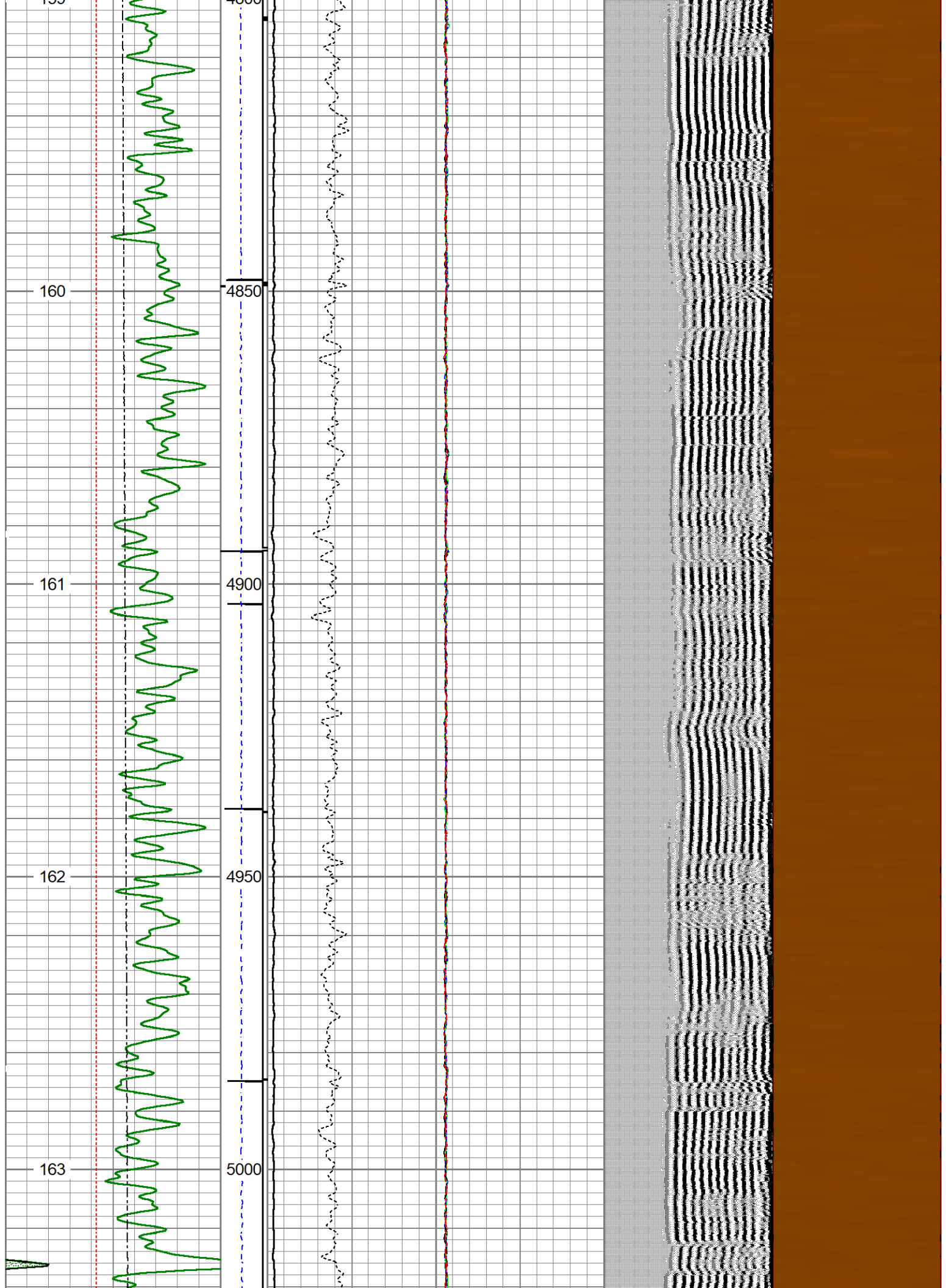




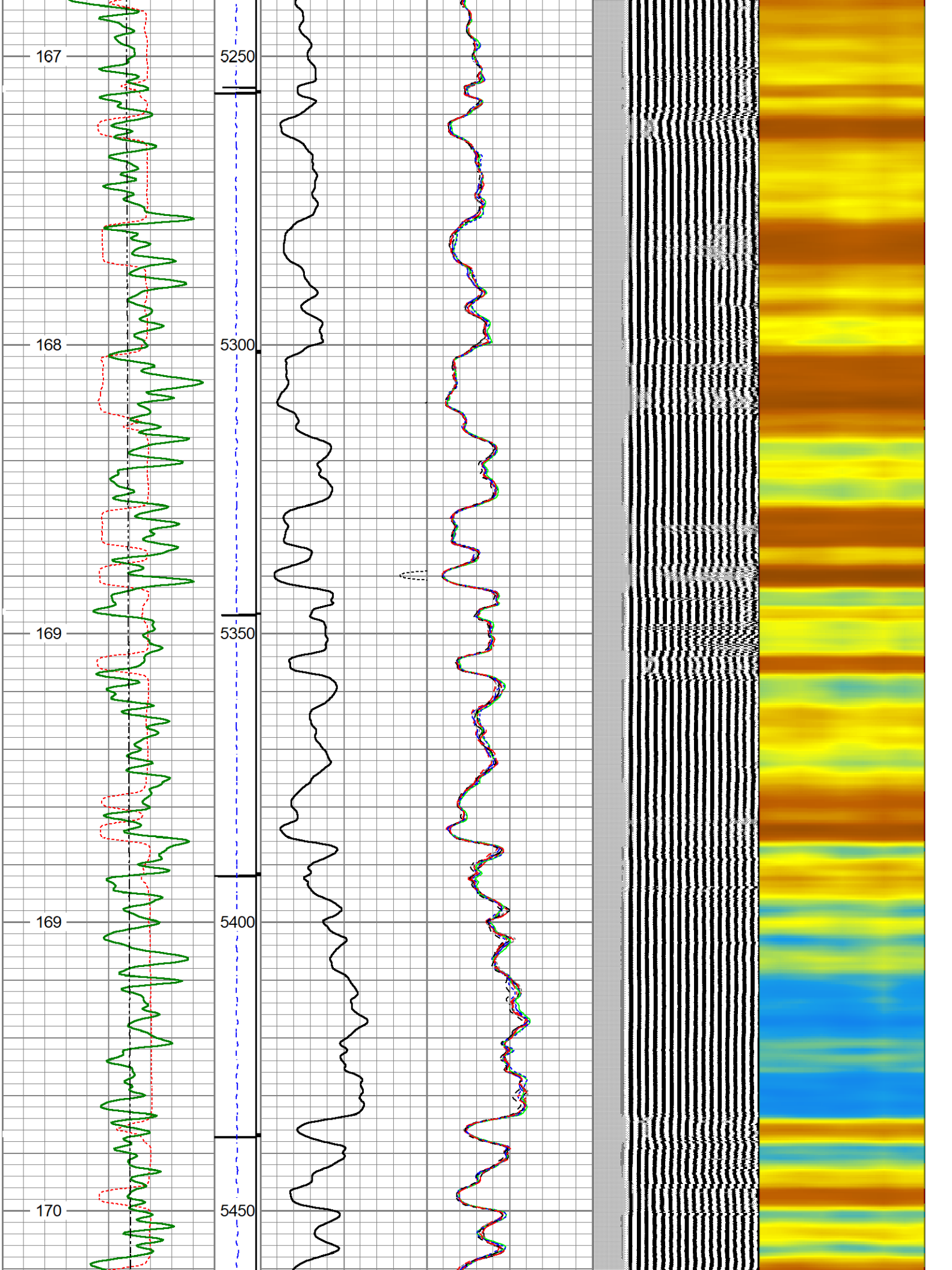


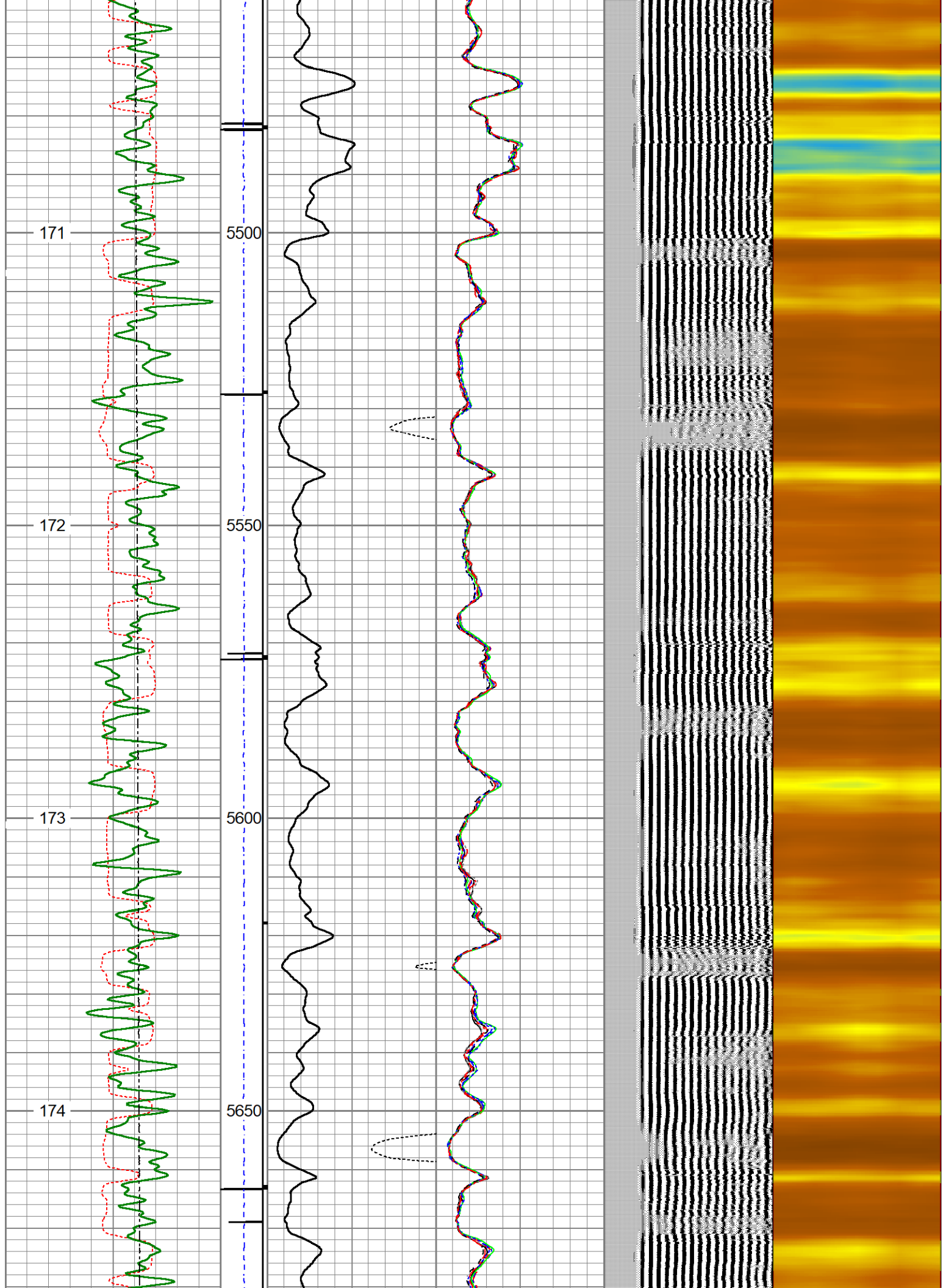


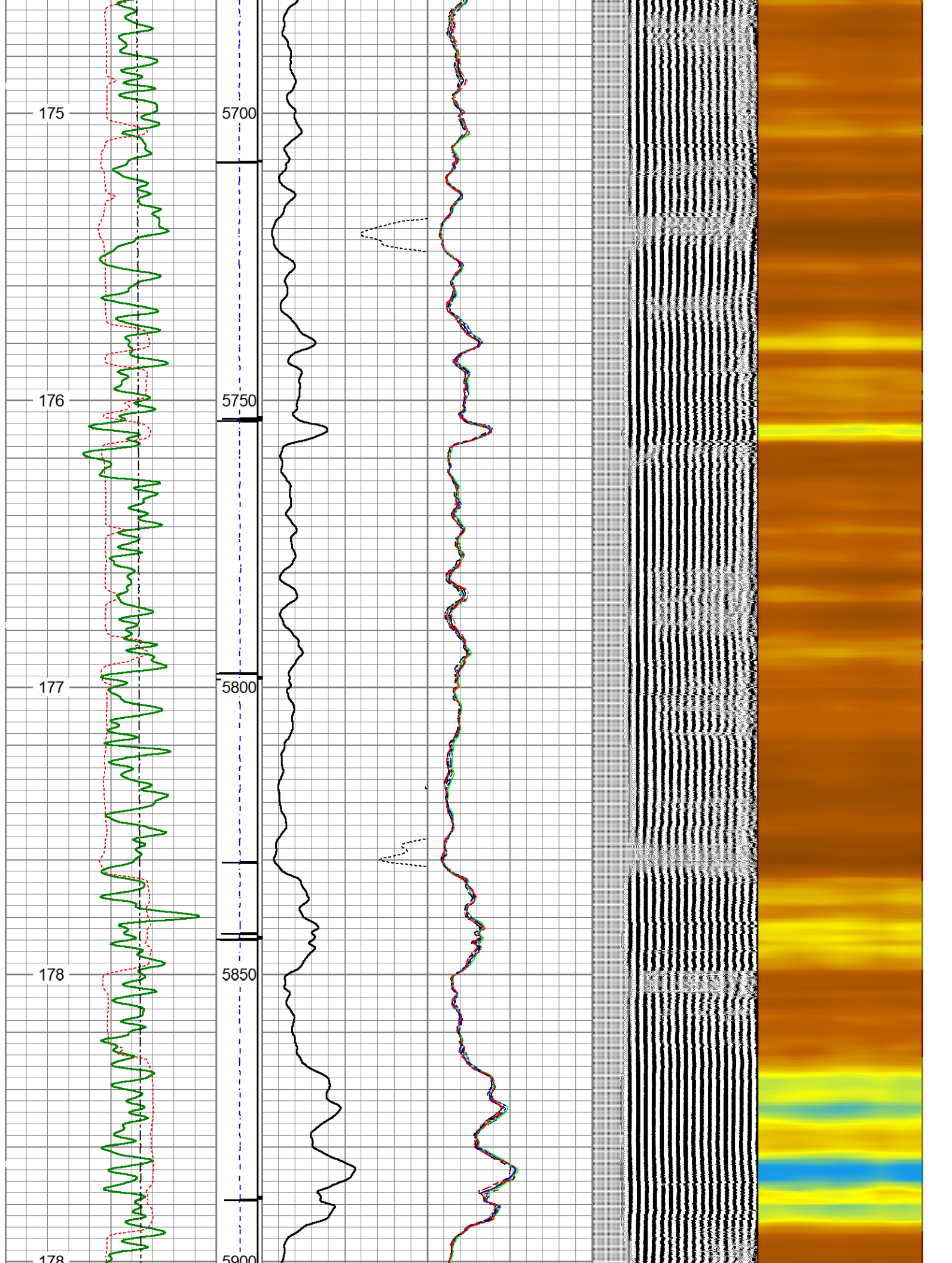


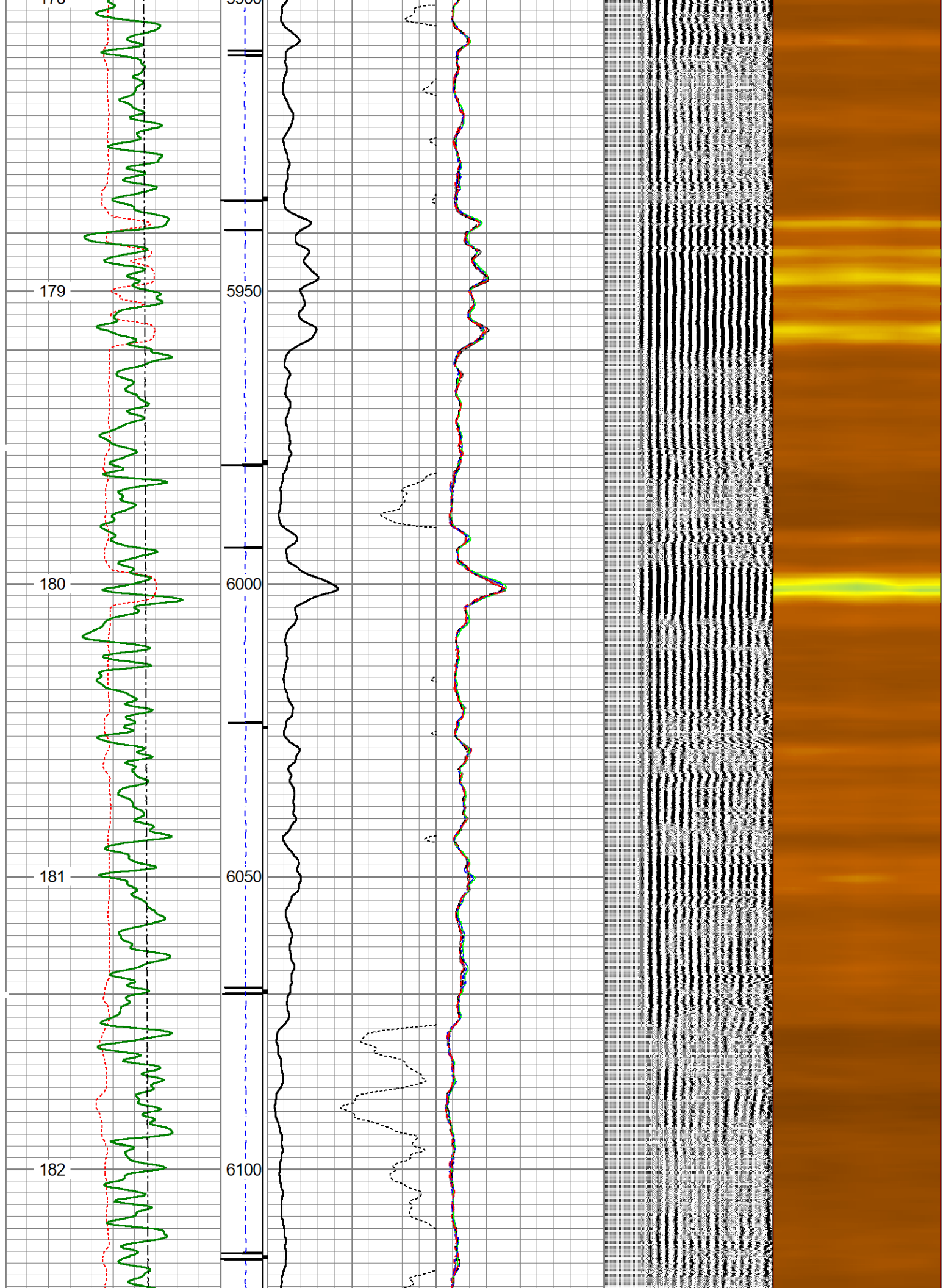


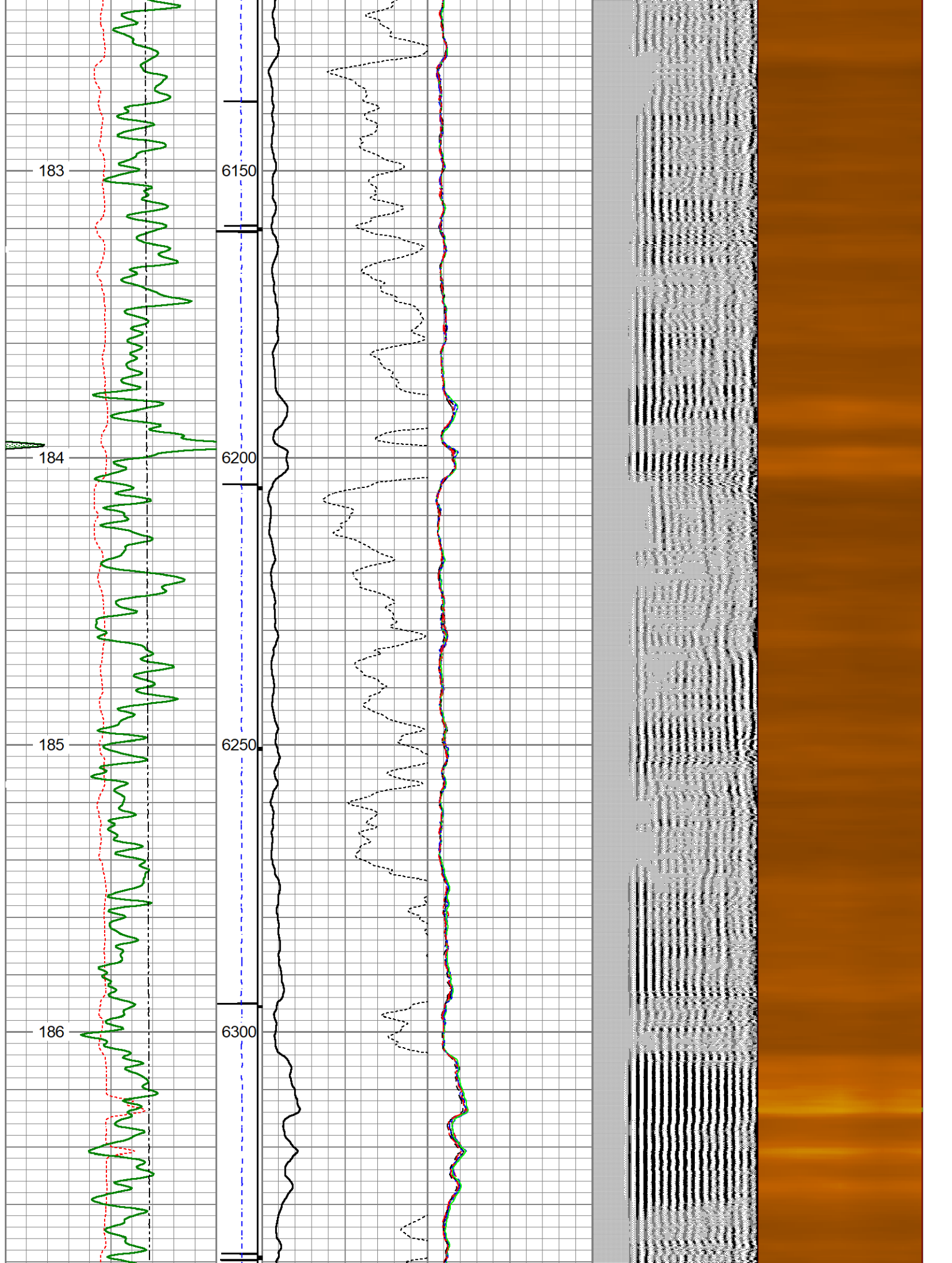


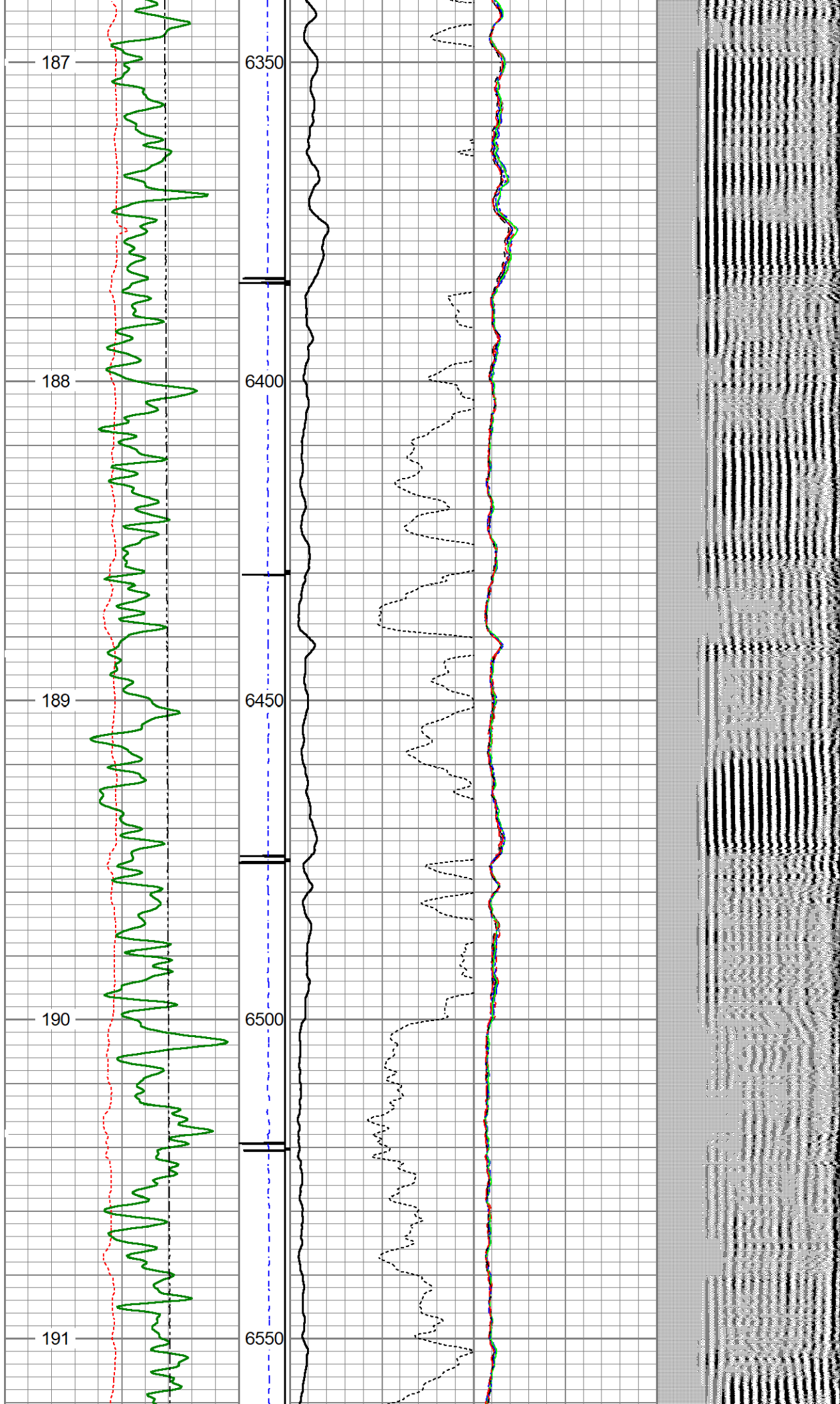


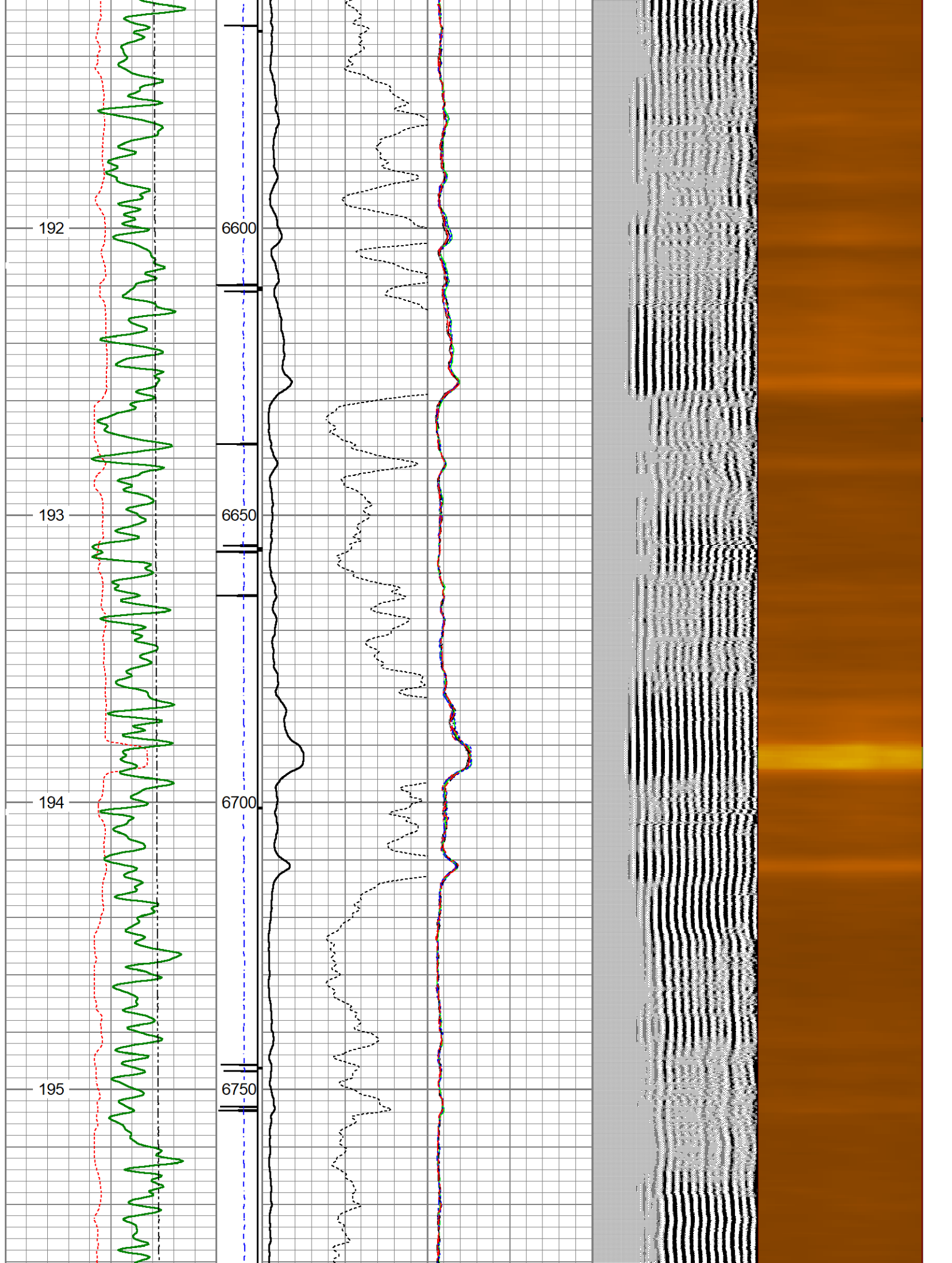




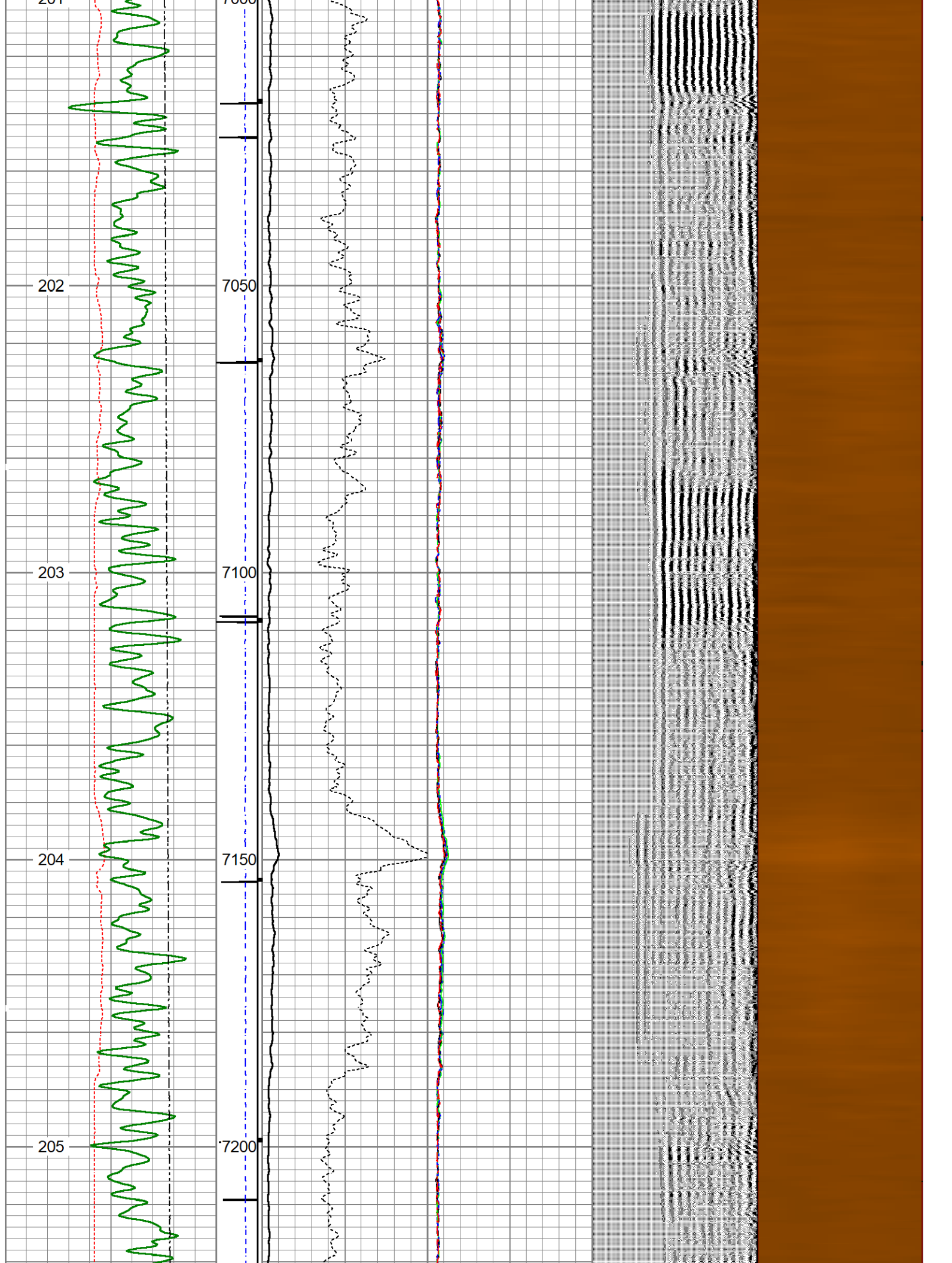


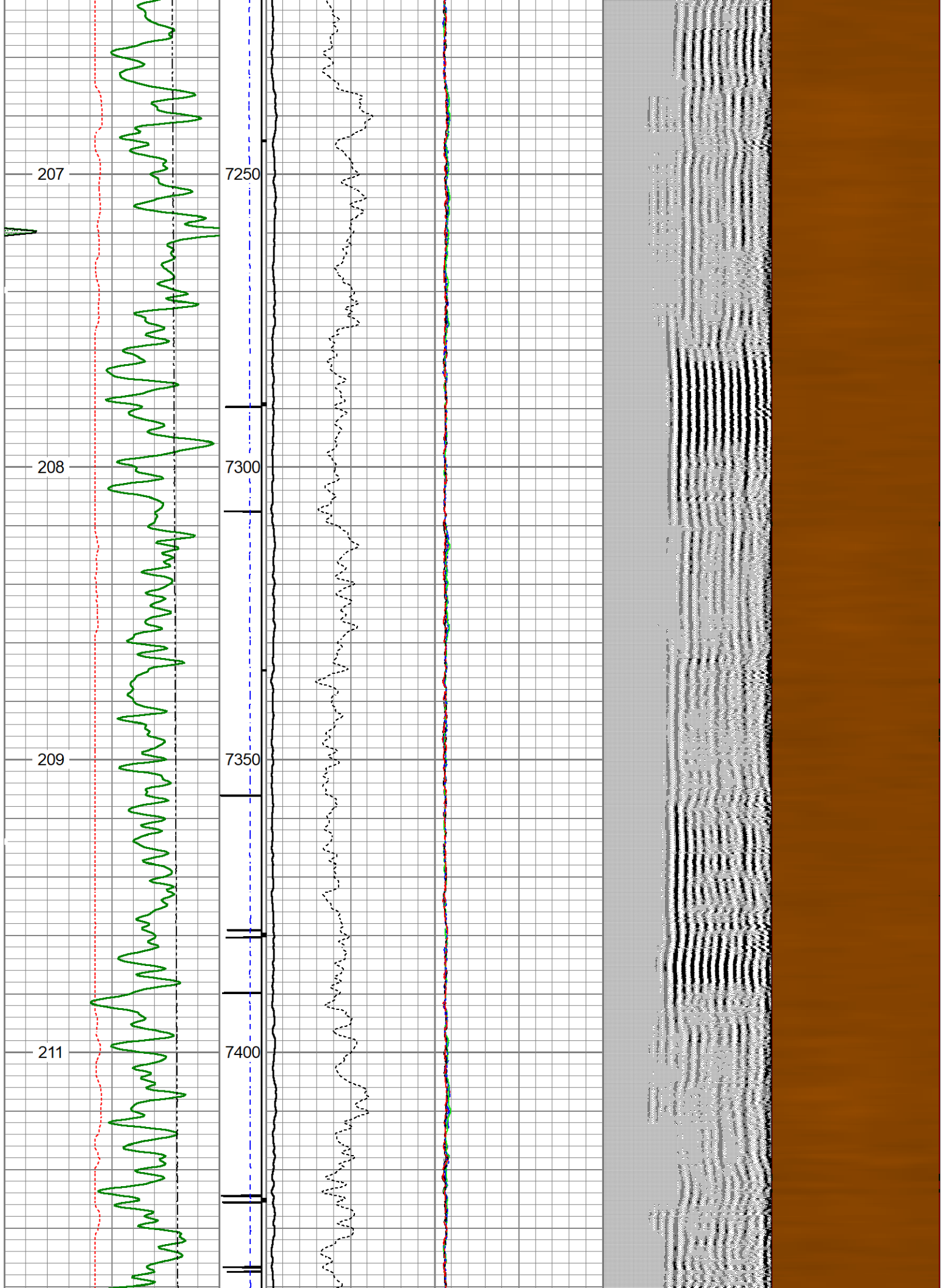


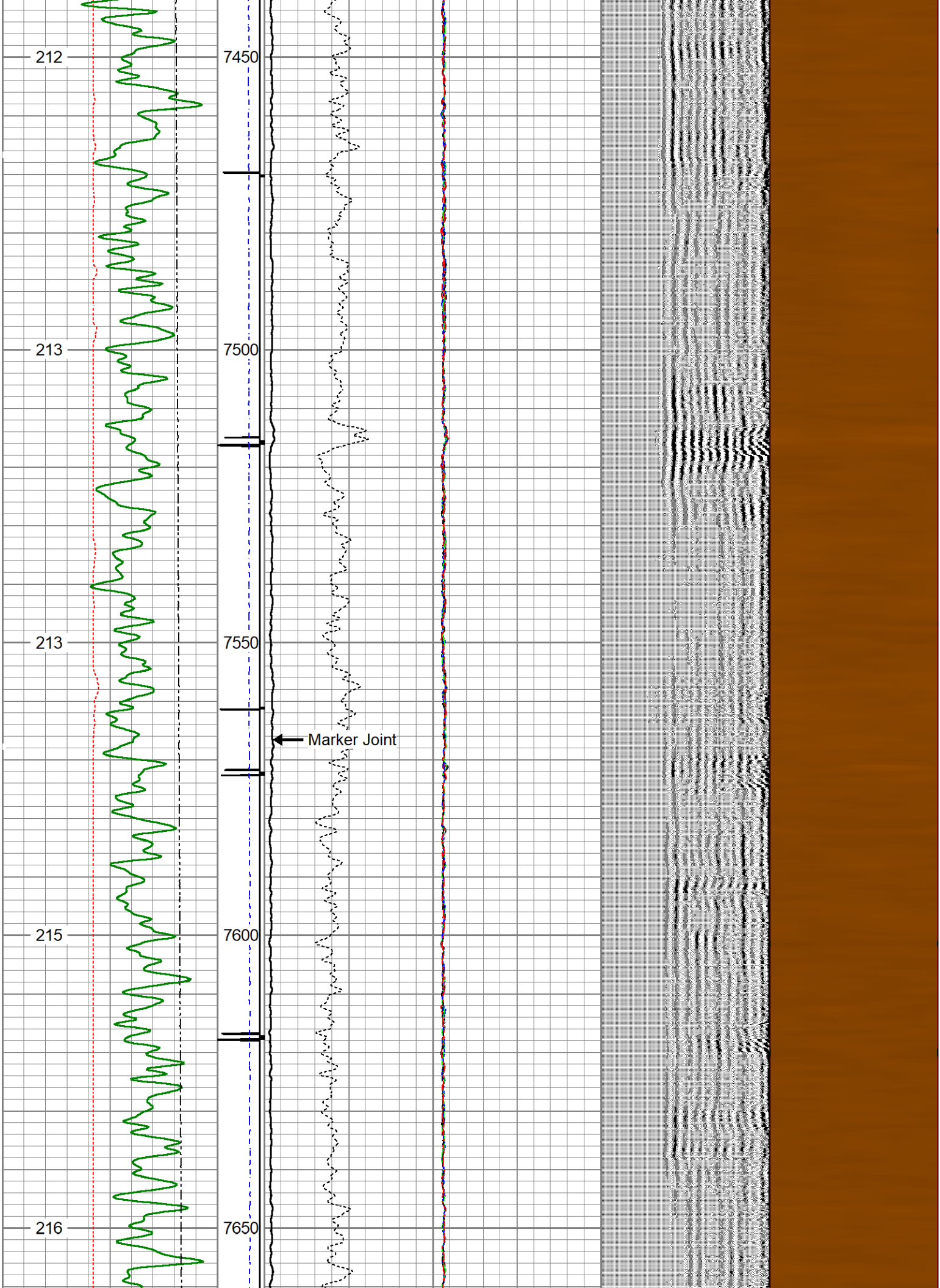


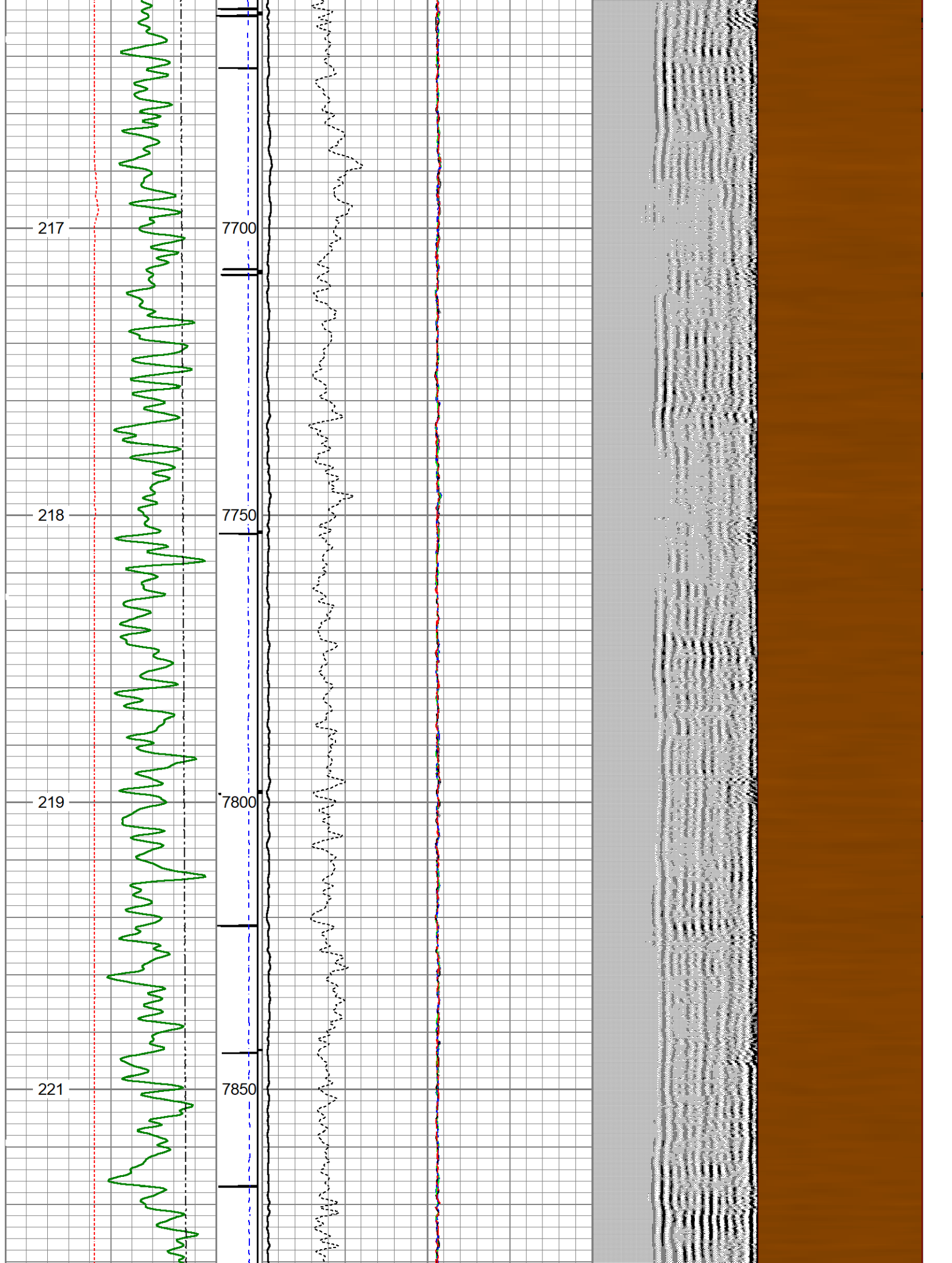












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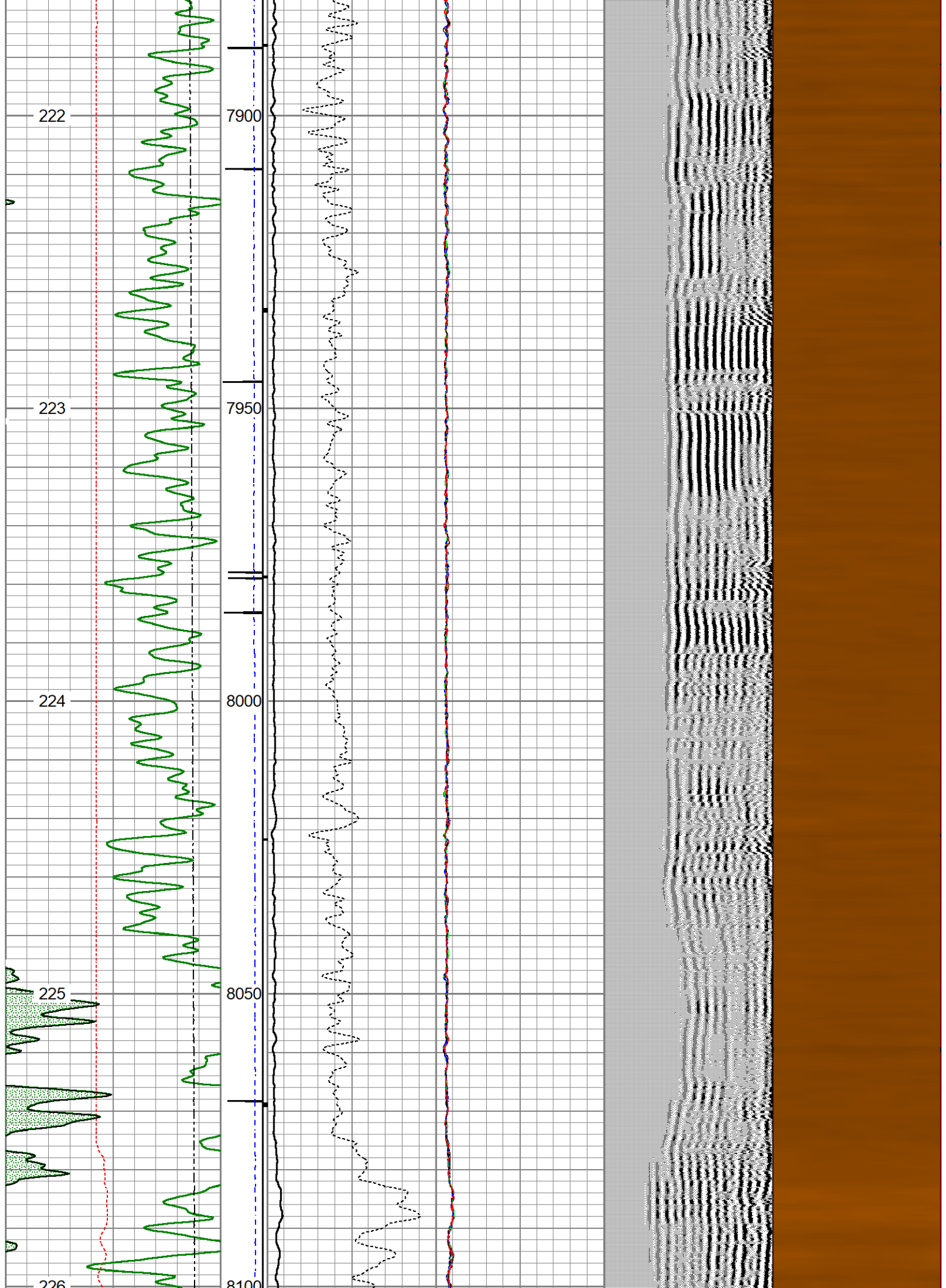
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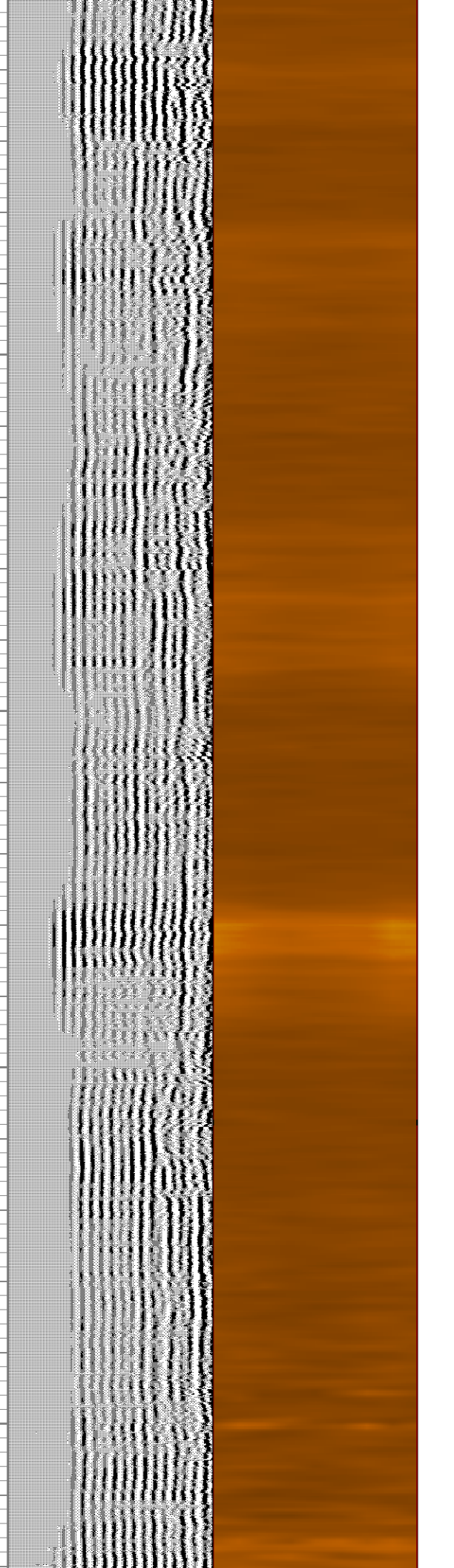
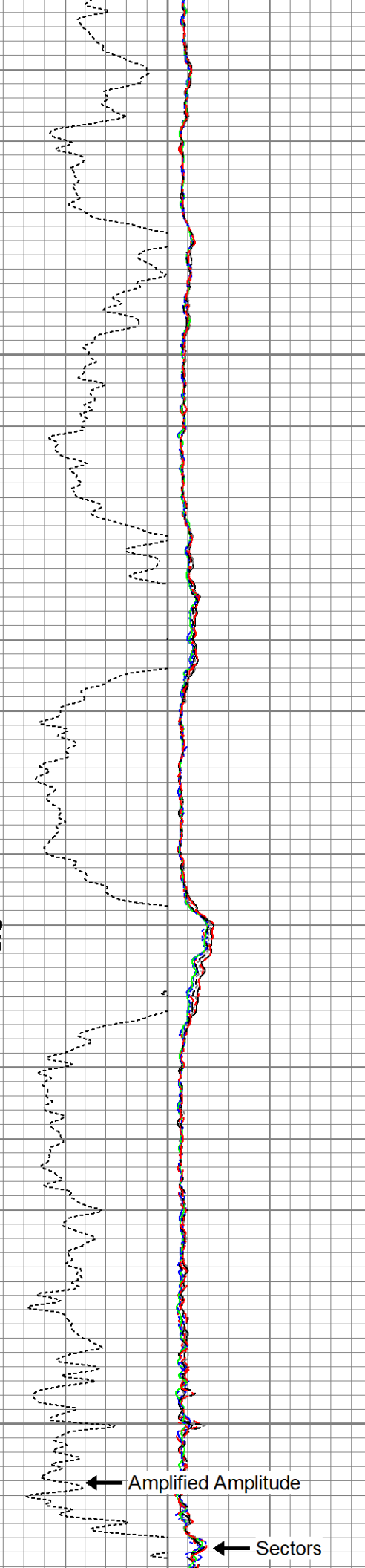
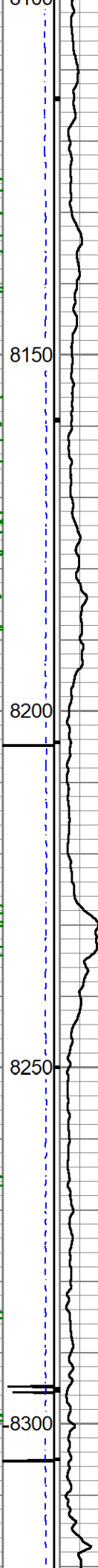
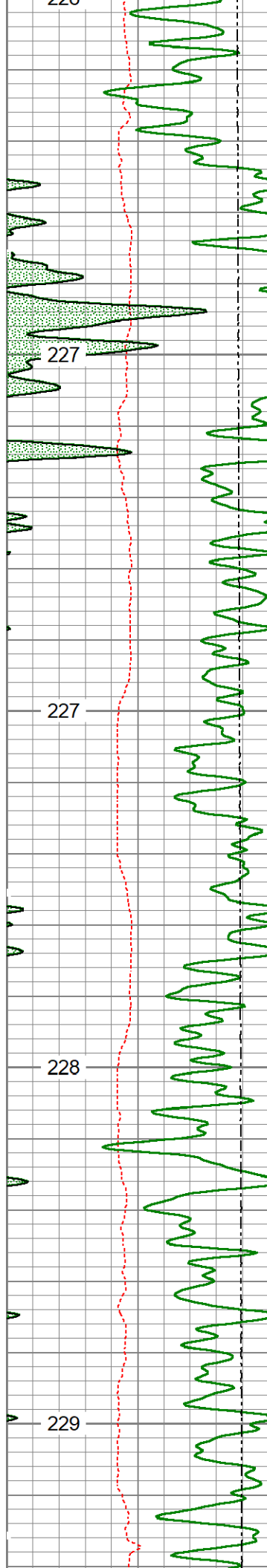
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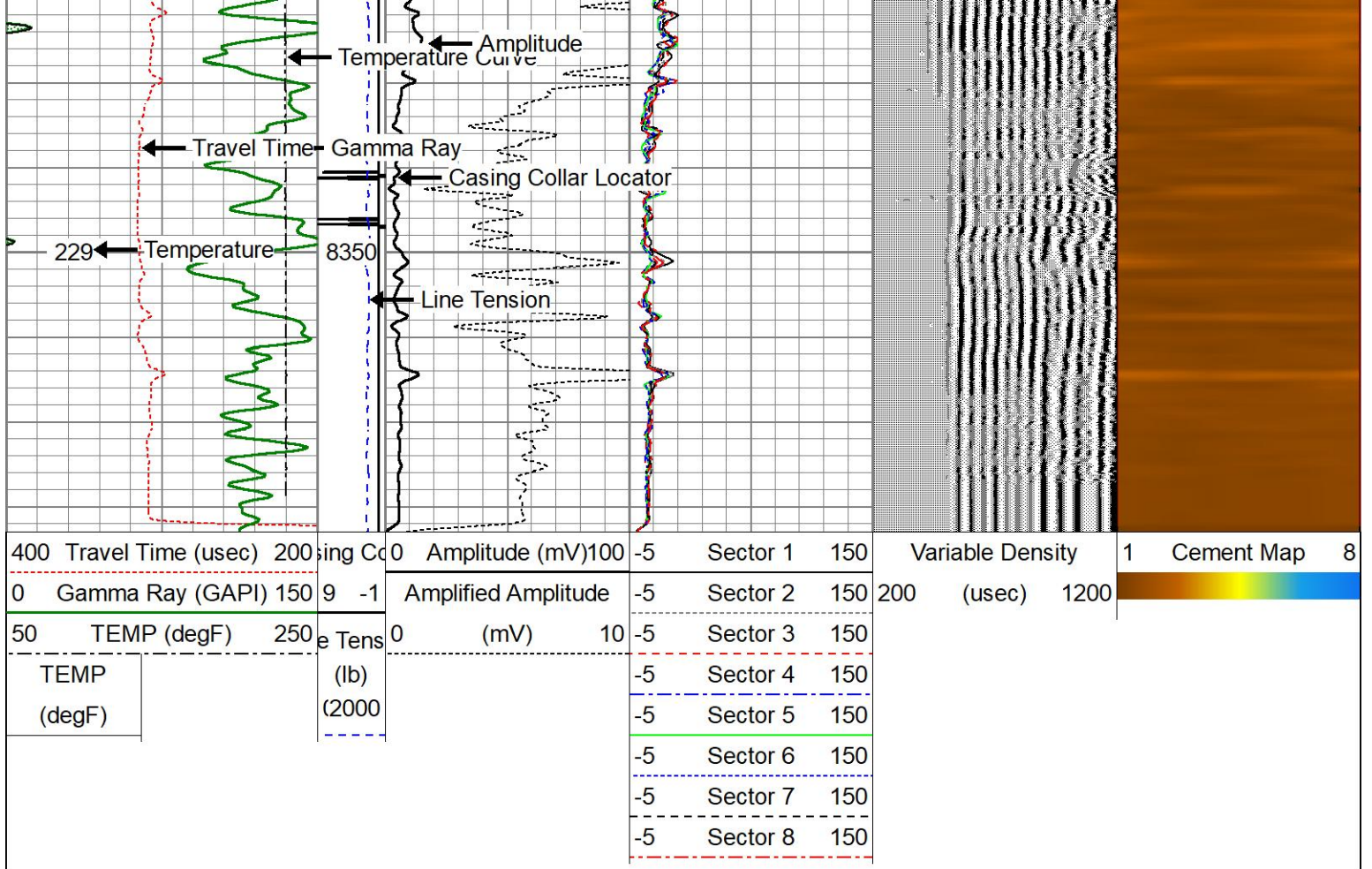
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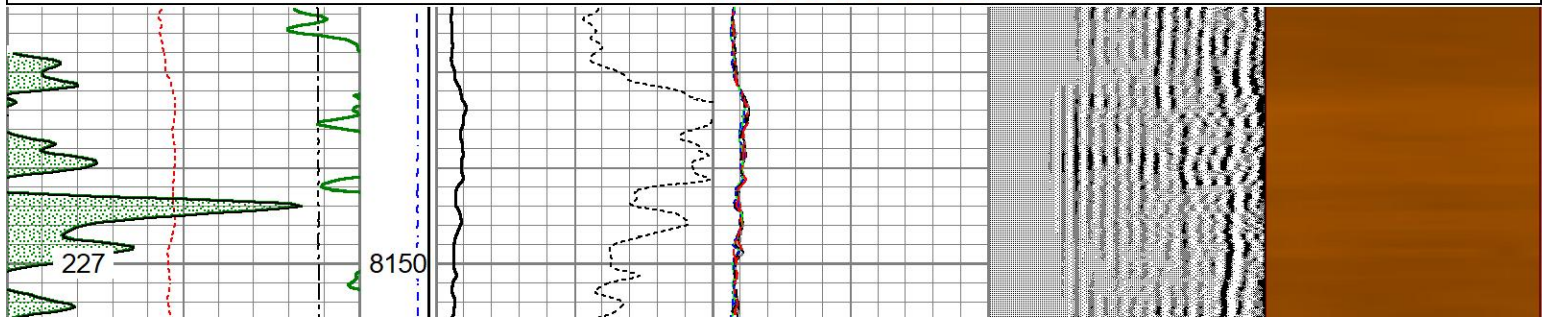
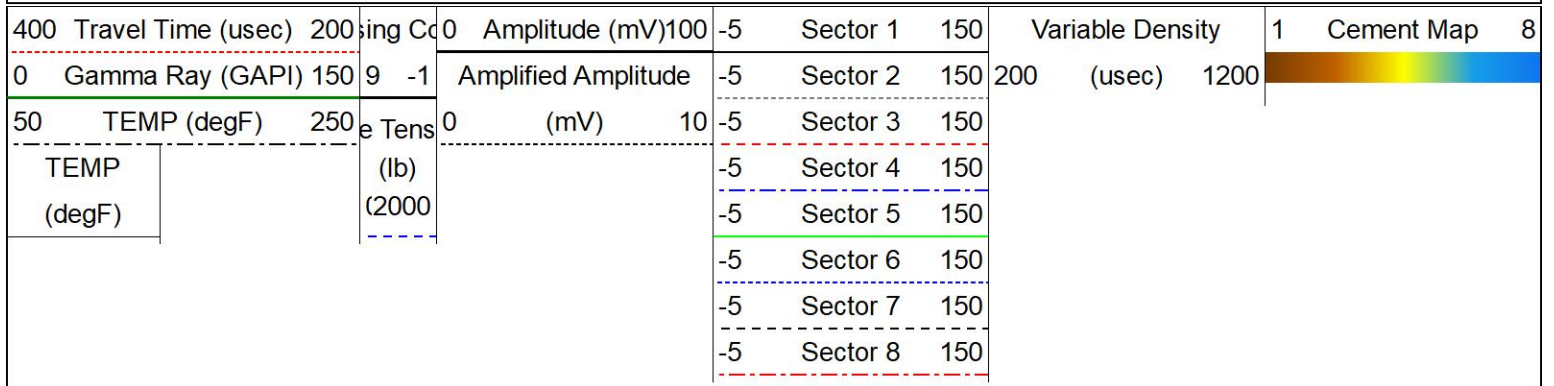


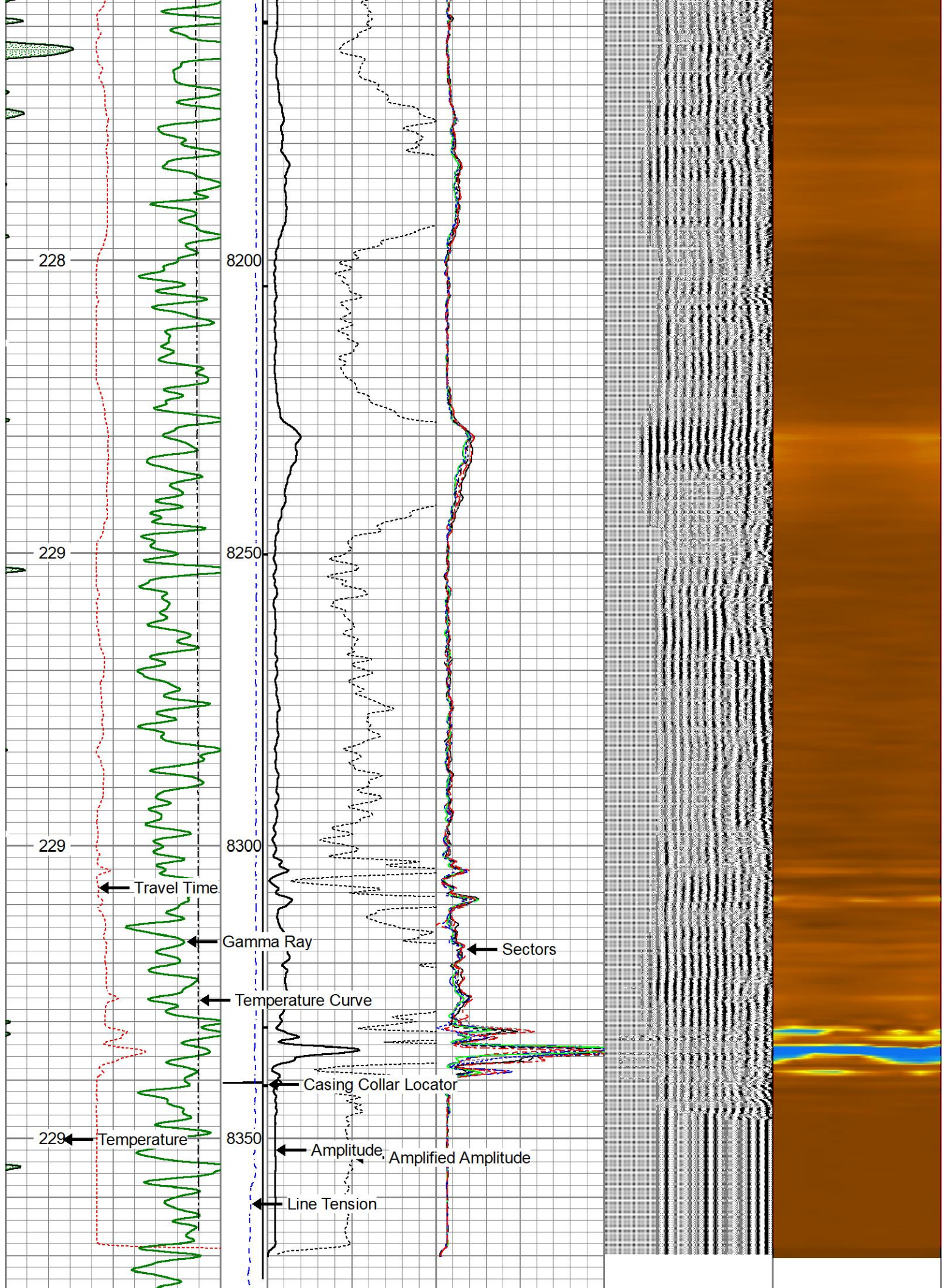



REPEAT PASS

0 PSI

Database File: gw_seltzer_378hn_rcbl_072921.db
 Dataset Pathname: pass4
 Presentation Format: rcbl_hh
 Dataset Creation: Thu Jul 29 07:23:56 2021
 Charted by: Depth in Feet scaled 1:240





| | | | | | | | | | | | | | |
|-----|--------------------|-----|--------|---|---------------------|-----|----|----------|-----|------------------|------|--|---|
| 400 | Travel Time (usec) | 200 | ing Co | 0 | Amplitude (mV) | 100 | -5 | Sector 1 | 150 | Variable Density | 1 | Cement Map | 8 |
| 0 | Gamma Ray (GAPI) | 150 | 9 -1 | 0 | Amplified Amplitude | 10 | -5 | Sector 2 | 150 | (usec) | 1200 |  | |
| 50 | TEMP (degF) | 250 | e Tens | 0 | (mV) | 10 | -5 | Sector 3 | 150 | | | | |
| | TEMP | | (lb) | | | | -5 | Sector 4 | 150 | | | | |
| | (degF) | | (2000 | | | | -5 | Sector 5 | 150 | | | | |
| | | | | | | | -5 | Sector 6 | 150 | | | | |
| | | | | | | | -5 | Sector 7 | 150 | | | | |
| | | | | | | | -5 | Sector 8 | 150 | | | | |

Calibration Report

Database File gw_seltzer_378hn_rcbl_072921.db
 Dataset Pathname pass6
 Dataset Creation Thu Jul 29 07:29:33 2021

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 080829

SHOP CALIBRATION

Wed Sep 23 10:09:42 2020

| | Counts/Sec. | Gain | Offset | Jig | Units |
|------------|-------------|--------|--------|-----|-----------------|
| Background | 0.0 | | | | cps |
| Calibrator | 1.0 | 0.8000 | | | cps GAPI/cps |

PRIMARY VERIFICATION

| | | | | | |
|------------|-----|--|--|-----|------|
| Background | 0.0 | | | | cps |
| Calibrator | 0.0 | | | | cps |
| Difference | | | | 0.0 | GAPI |

BEFORE SURVEY VERIFICATION

| | | | | | |
|------------|-----|--|--|-----|------|
| Background | 0.0 | | | | cps |
| Calibrator | 0.0 | | | | cps |
| Difference | | | | 0.0 | GAPI |

AFTER SURVEY VERIFICATION

| | | | | | |
|------------|-----|--|--|-----|------|
| Background | 0.0 | | | | cps |
| Calibrator | 0.0 | | | | cps |
| Difference | | | | 0.0 | GAPI |

Segmented Cement Bond Log Calibration Report

Serial Number: FW1409-41
 Tool Model: Probe 2.75 Radii W/Temp

Calibration Casing Diameter: 5.500 in
 Calibration Depth: 924.292 ft

Master Calibration, performed Thu Jul 29 06:59:19 2021:

| | Raw (v) | | Calibrated (mv) | | Results | |
|------|---------|-------|-----------------|--------|---------|--------|
| | Zero | Cal | Zero | Cal | Gain | Offset |
| 3' | 0.003 | 0.403 | 1.000 | 71.921 | 177.011 | 0.555 |
| CAL | 0.002 | 0.554 | | | | |
| 5' | 0.003 | 0.349 | 1.000 | 71.921 | 205.215 | 0.381 |
| SLIM | | | | | | |

| | | | | | | | |
|-----|-------|-------|-------|---------|---------|--------|--|
| SUM | | | | | | | |
| S1 | 0.006 | 0.415 | 0.000 | 100.000 | 244.399 | -1.348 | |
| S2 | 0.001 | 0.419 | 0.000 | 100.000 | 239.721 | -0.357 | |
| S3 | 0.003 | 0.420 | 0.000 | 100.000 | 239.946 | -0.776 | |
| S4 | 0.002 | 0.418 | 0.000 | 100.000 | 240.383 | -0.420 | |
| S5 | 0.001 | 0.404 | 0.000 | 100.000 | 248.145 | -0.212 | |
| S6 | 0.001 | 0.409 | 0.000 | 100.000 | 245.108 | -0.311 | |
| S7 | 0.001 | 0.416 | 0.000 | 100.000 | 241.161 | -0.288 | |
| S8 | 0.002 | 0.407 | 0.000 | 100.000 | 246.821 | -0.374 | |

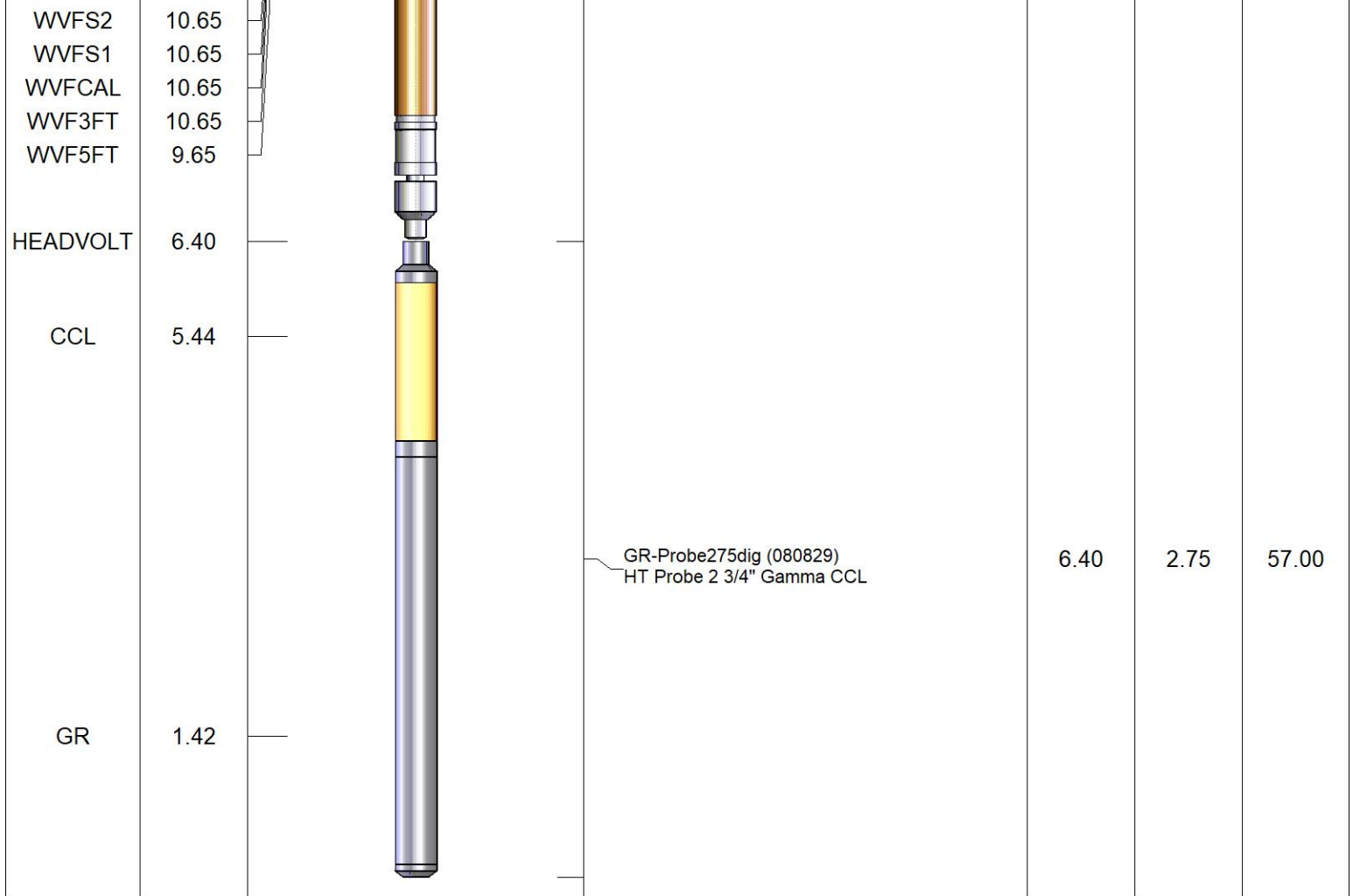
Internal Reference Calibration, performed (Not Performed):

| | Raw (v) | | Calibrated (v) | | Results | |
|-----|---------|-------|----------------|-------|---------|--------|
| | Zero | Cal | Zero | Cal | Gain | Offset |
| CAL | 0.000 | 0.000 | 0.002 | 0.554 | 1.000 | 0.000 |

Air Zero Calibration, performed Mon Aug 31 16:50:37 2020:

| | 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 | |

| Sensor | Offset (ft) | Schematic | Description | Length (ft) | O.D. (in) | Weight (lb) |
|----------|-------------|-----------|---|-------------|-----------|-------------|
| HeadVolt | 15.73 | | CHD-Titan Titan 1 7/16" GO Cablehead | 1.00 | 1.44 | 5.00 |
| Temp | 12.88 | | RBT-Probe 2.75 Radii W/Temp (FW1409-41) Probe 2.75" Radial with Integral Temperature Sub | 9.21 | 2.75 | 90.00 |
| WVFS8 | 10.65 | | | | | |
| WVFS7 | 10.65 | | | | | |
| WVFS6 | 10.65 | | | | | |
| WVFS5 | 10.65 | | | | | |
| WVFS4 | 10.65 | | | | | |
| WVFS3 | 10.65 | | | | | |



Dataset: gw_seltzer_378hn_rcbl_072921.db: field/well/run1/pass6
 Total length: 16.60 ft
 Total weight: 152.00 lb
 O.D.: 2.75 in

| | | | |
|--|---------|-------------------------|---------|
| | Company | GREAT WESTERN OIL & GAS | |
| | Well | SELTZER LD 09-378HN | |
| | Field | WATTENBERG | |
| | County | ADAMS | |
| | State | COLORADO | Country |