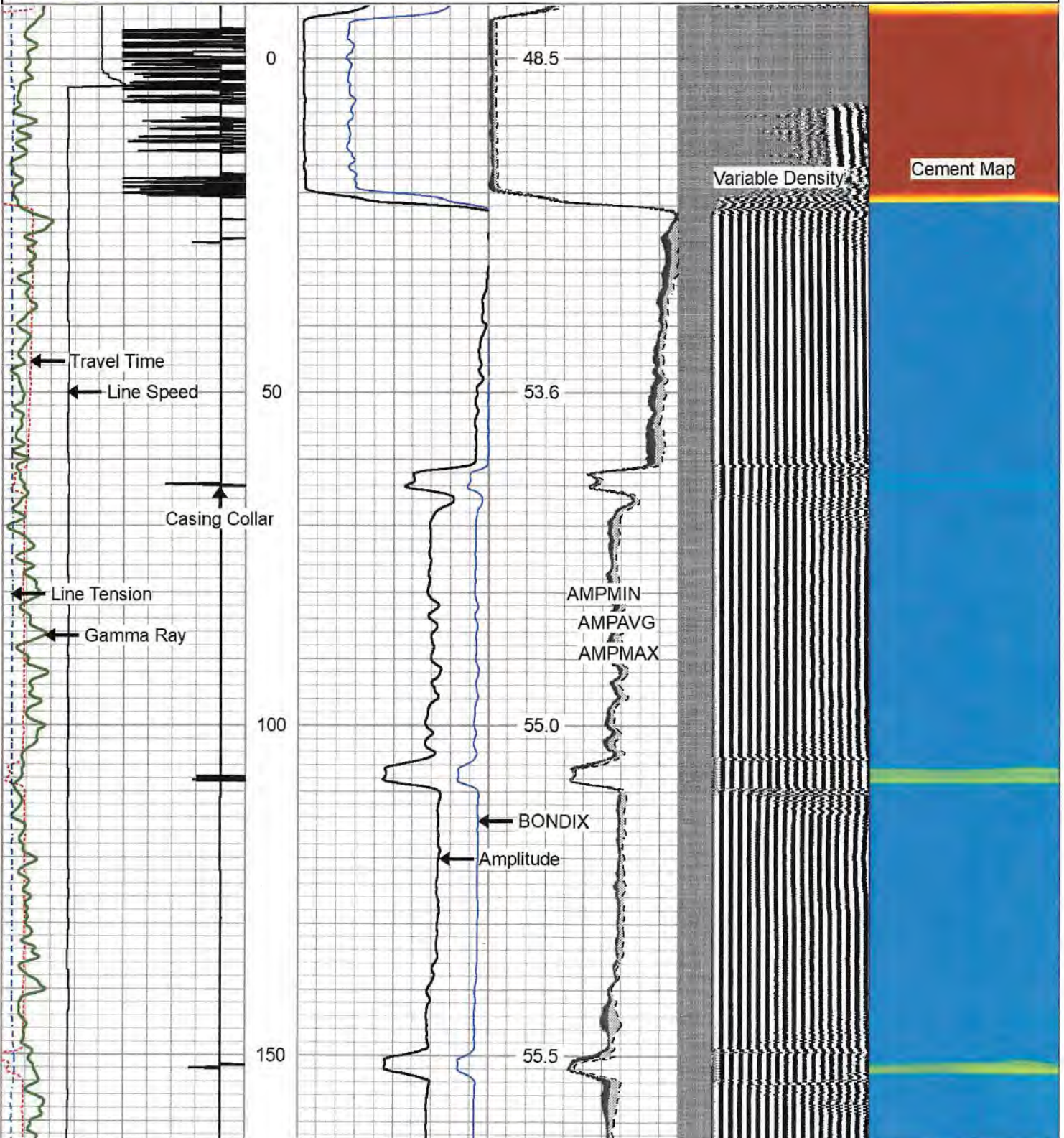


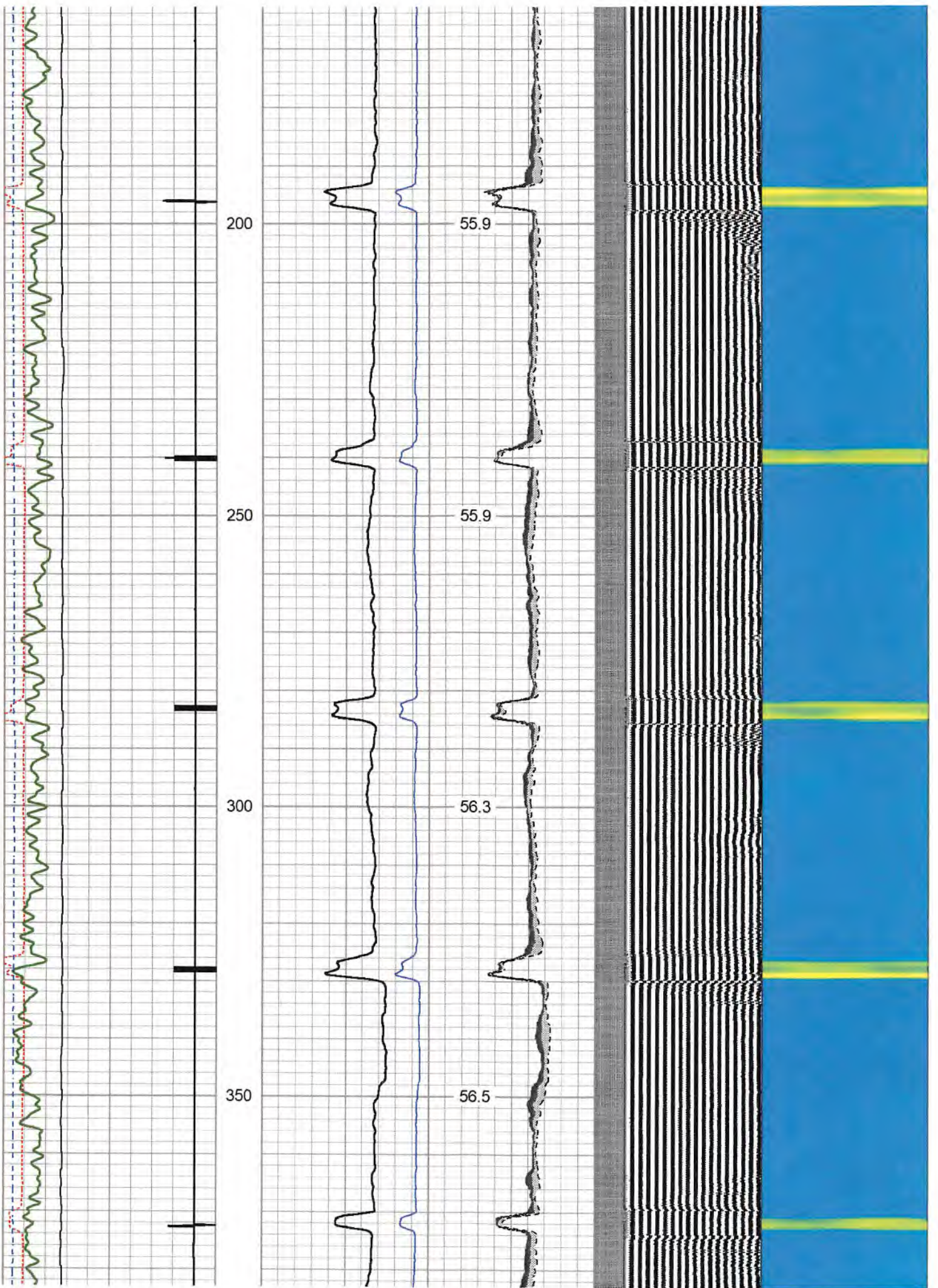
Database File antero_mamba_2h_rcbl_18_feb_2023.db
 Dataset Pathname pass6
 Presentation Format rcbl 2
 Dataset Creation Sat Feb 18 11:35:05 2023
 Charted by Depth in Feet scaled 1:240

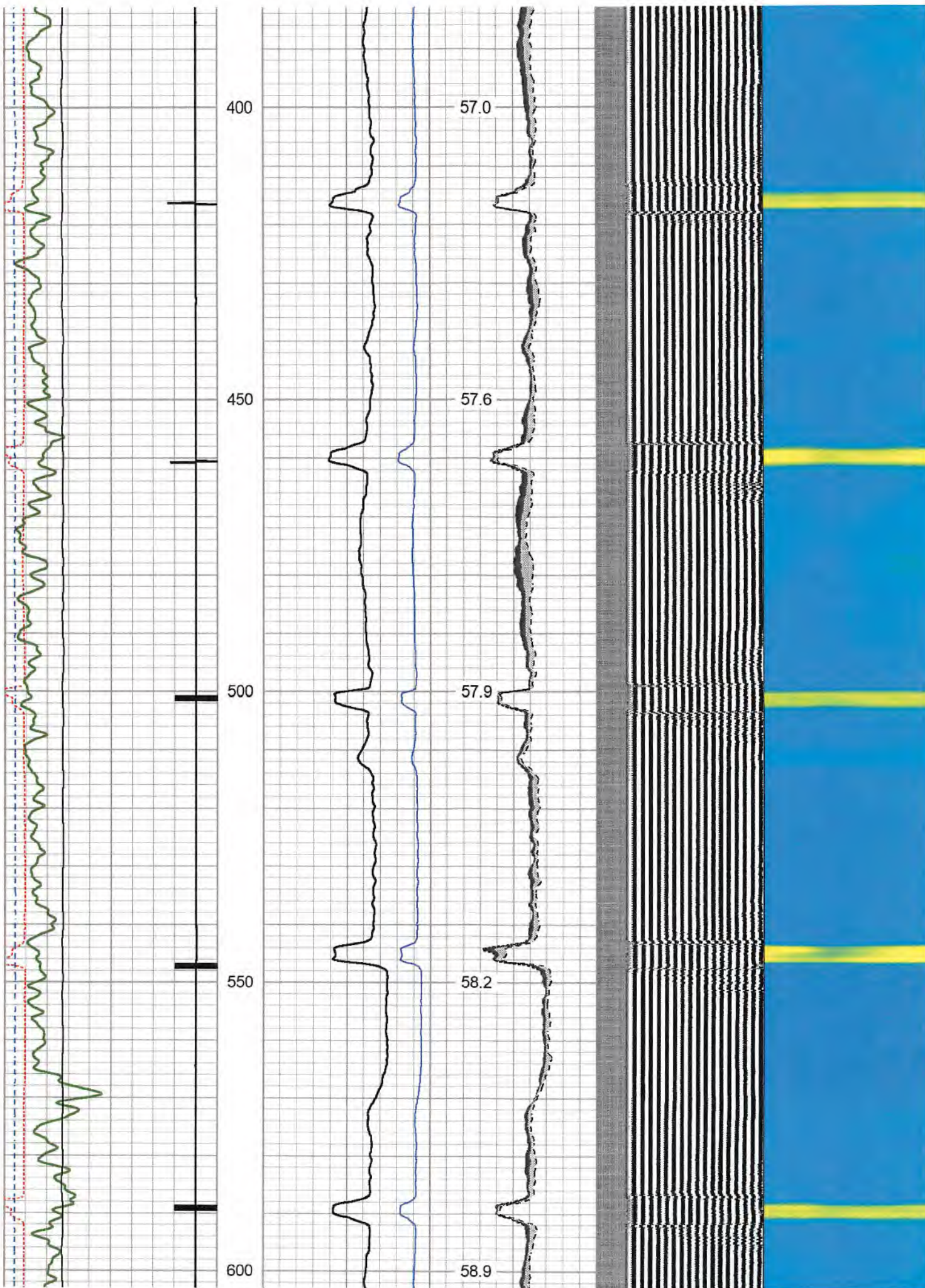
| | | |
|------------|--------------------|------|
| 266 | Travel Time (usec) | 166 |
| 9 | Casing Collar | -1 |
| 0 | Gamma Ray (GAPI) | 150 |
| Line Speed | | |
| -200 | (ft/min) | 200 |
| 0 | Line Tension (lb) | 5000 |

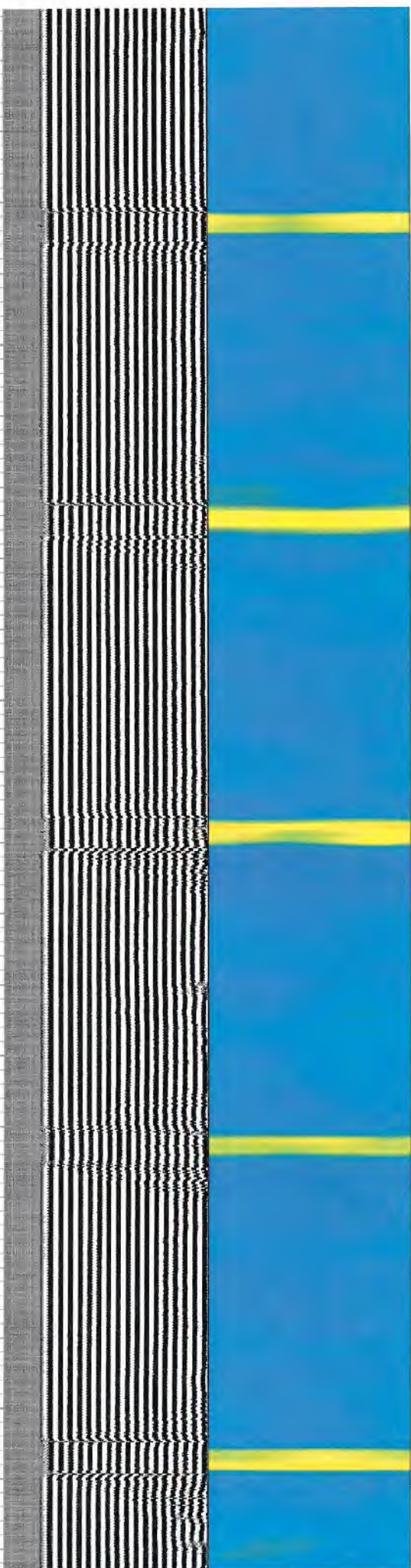
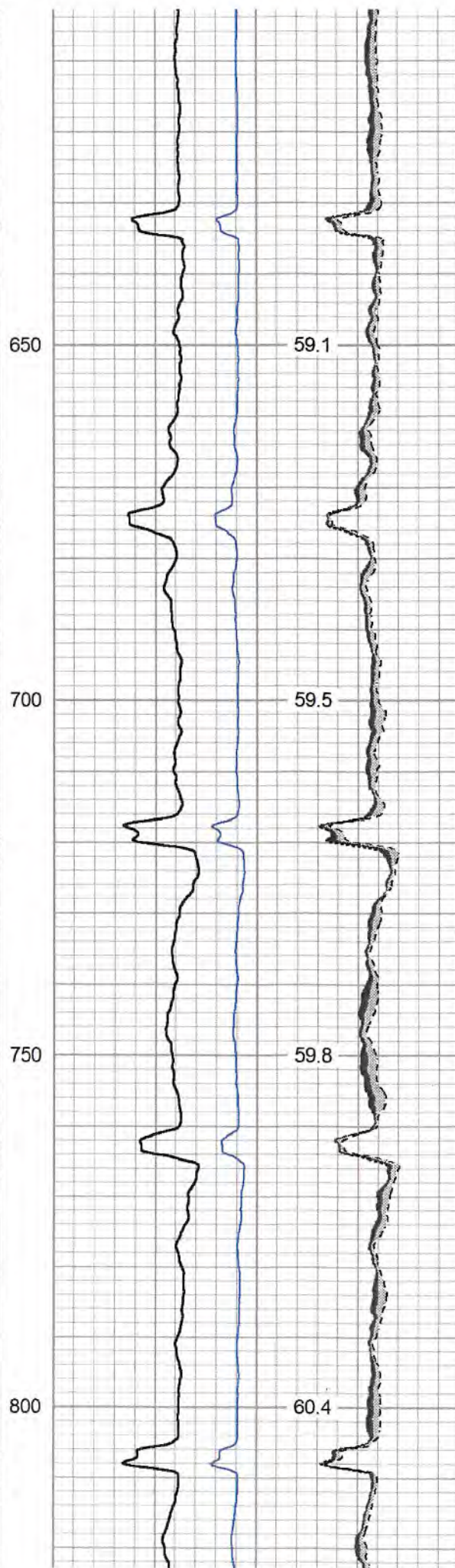
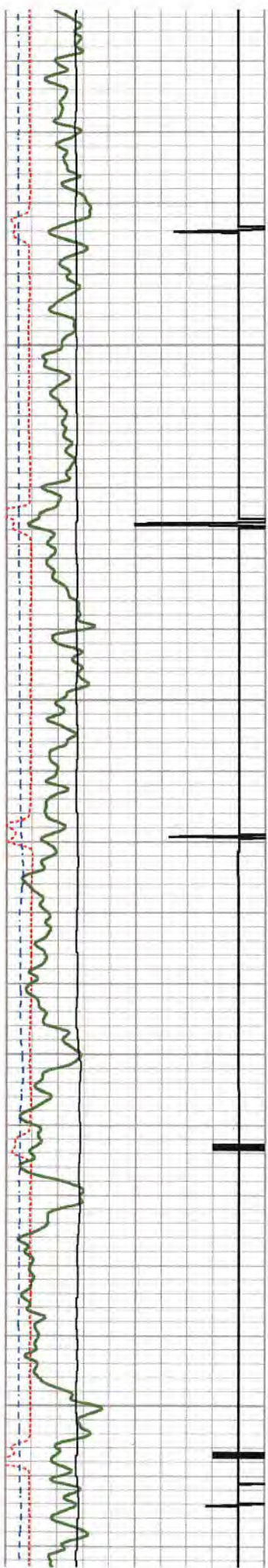
| | | | | | | |
|--------|----------------|-----|----|-----|-----|-----|
| 0 | Amplitude (mV) | 100 | -5 | AMP | MIN | 150 |
| 1 | BONDIX | 0 | -5 | AMP | MAX | 150 |
| | | | -5 | AMP | AVG | 150 |
| TEMP | | | | | | |
| (degF) | | | | | | |

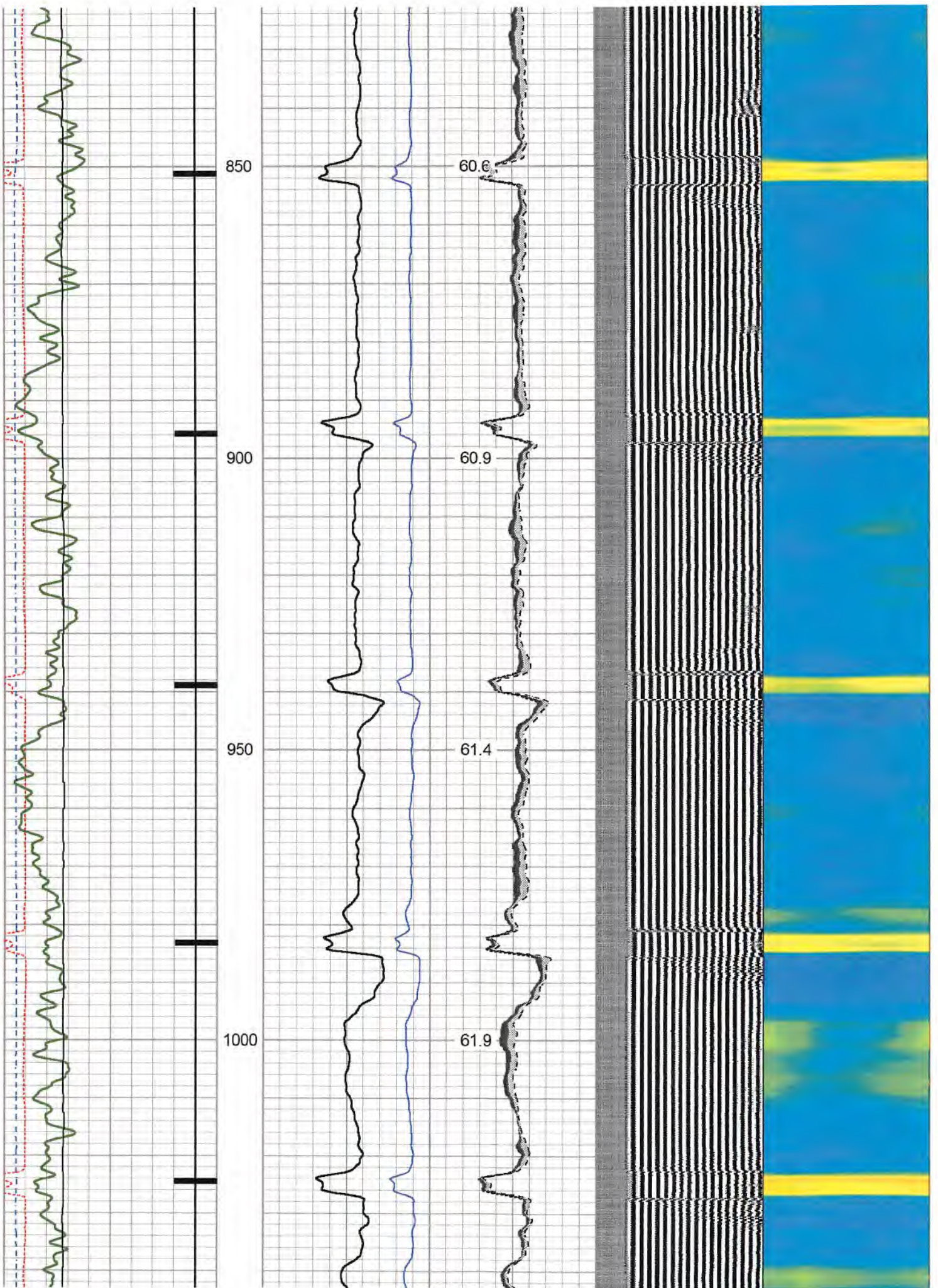
| | | | |
|------------------|--------|------------|---|
| Variable Density | 1 | Cement Map | 8 |
| 200 | (usec) | 1200 | |

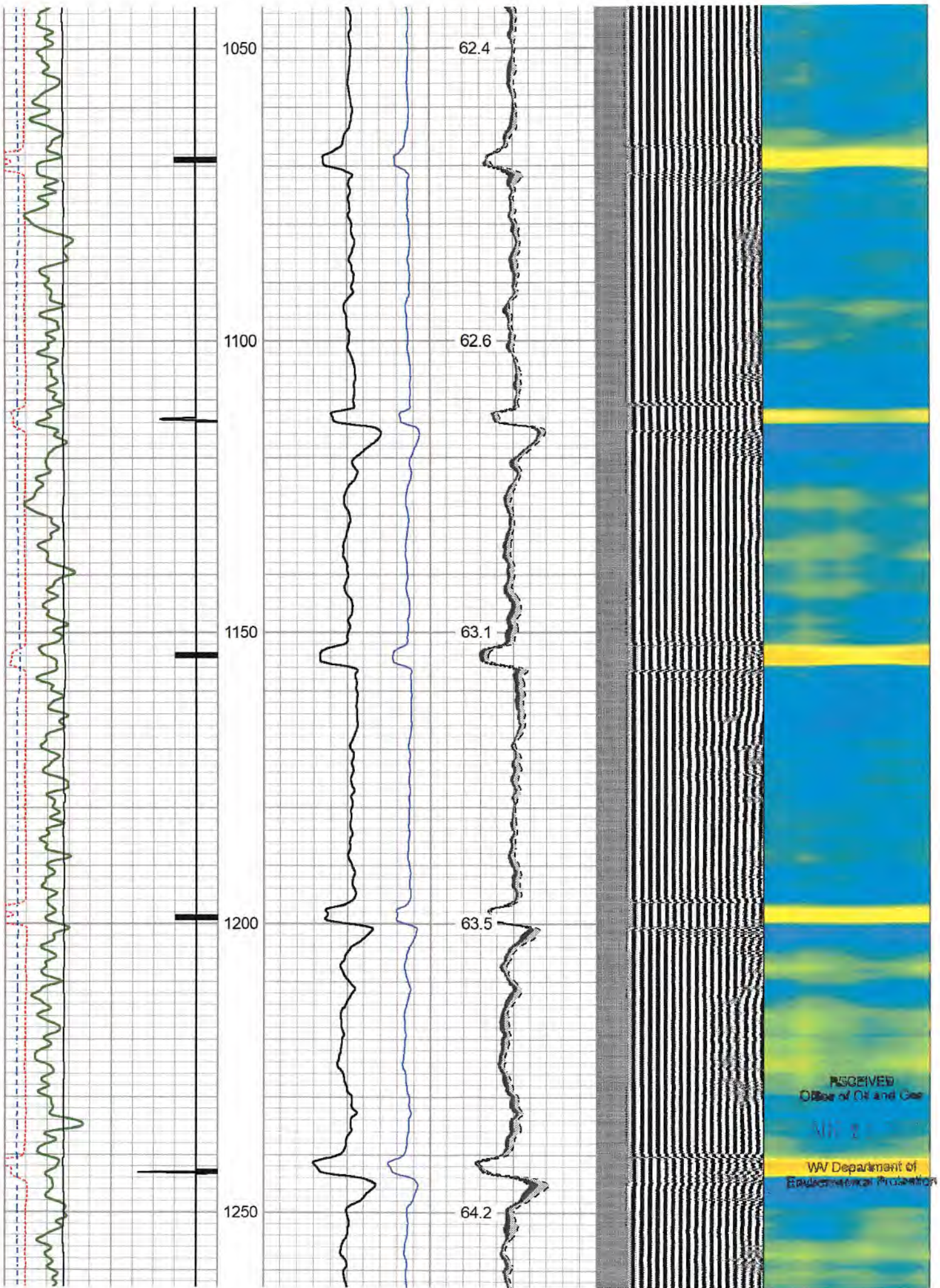




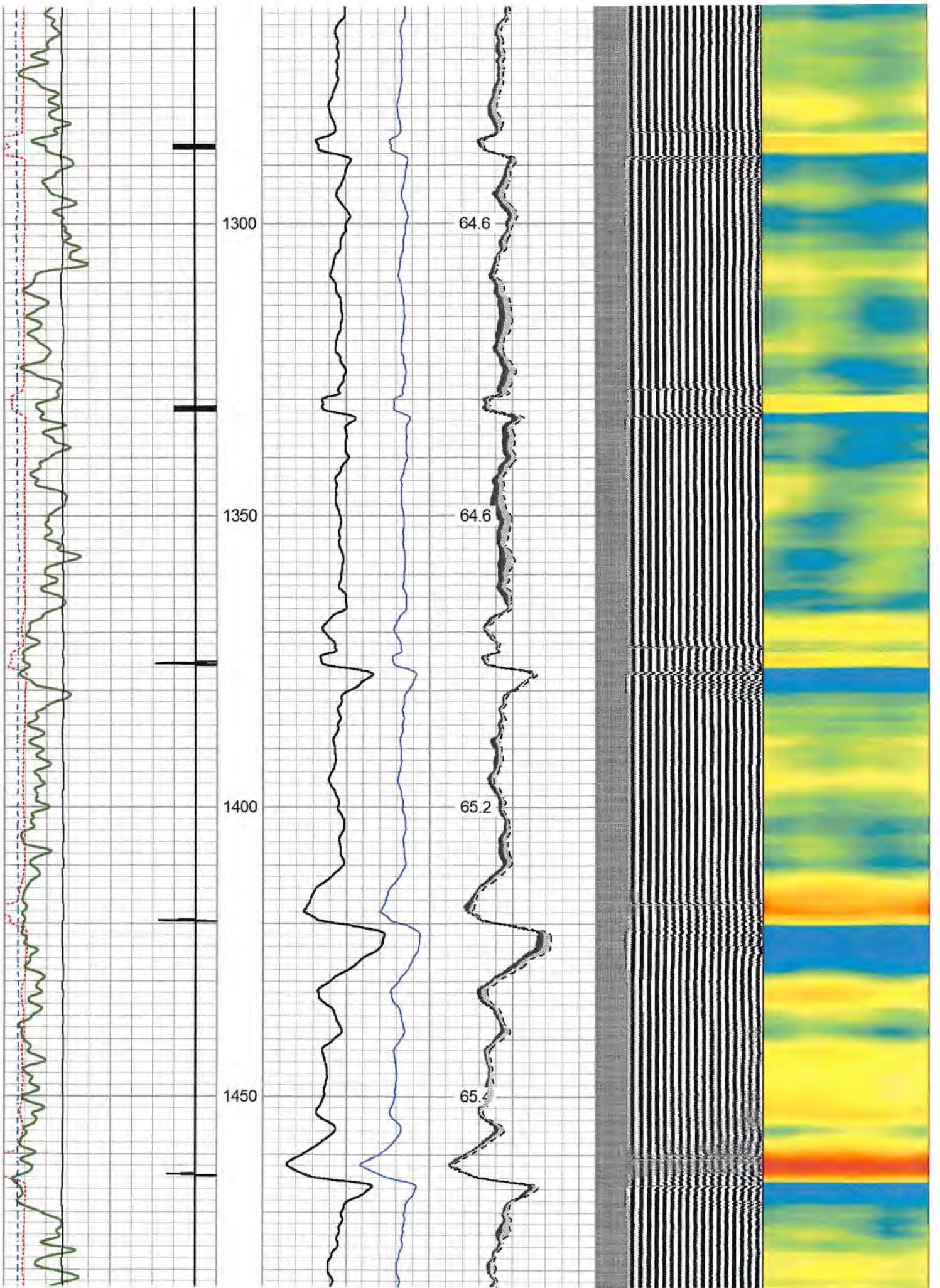


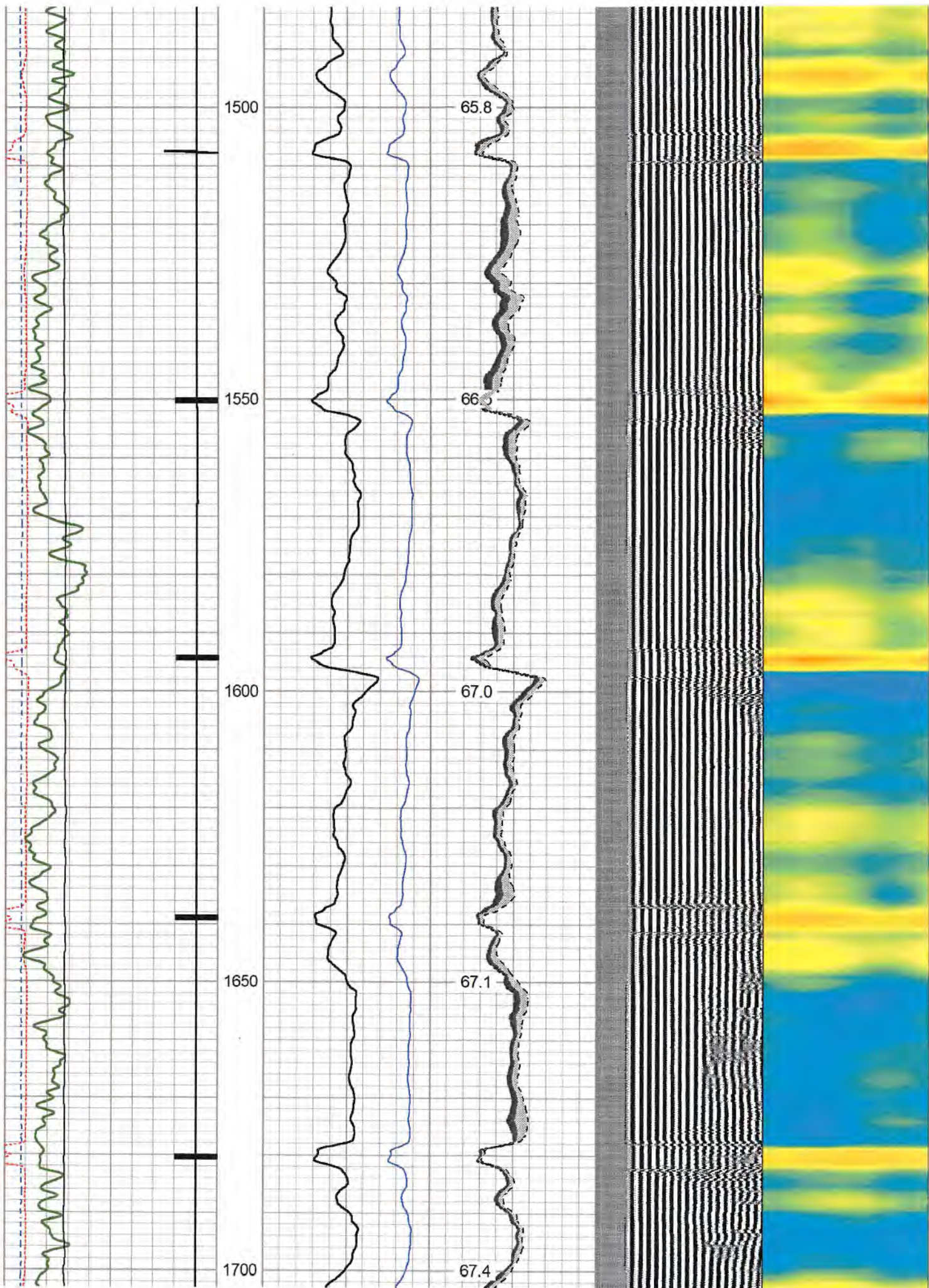


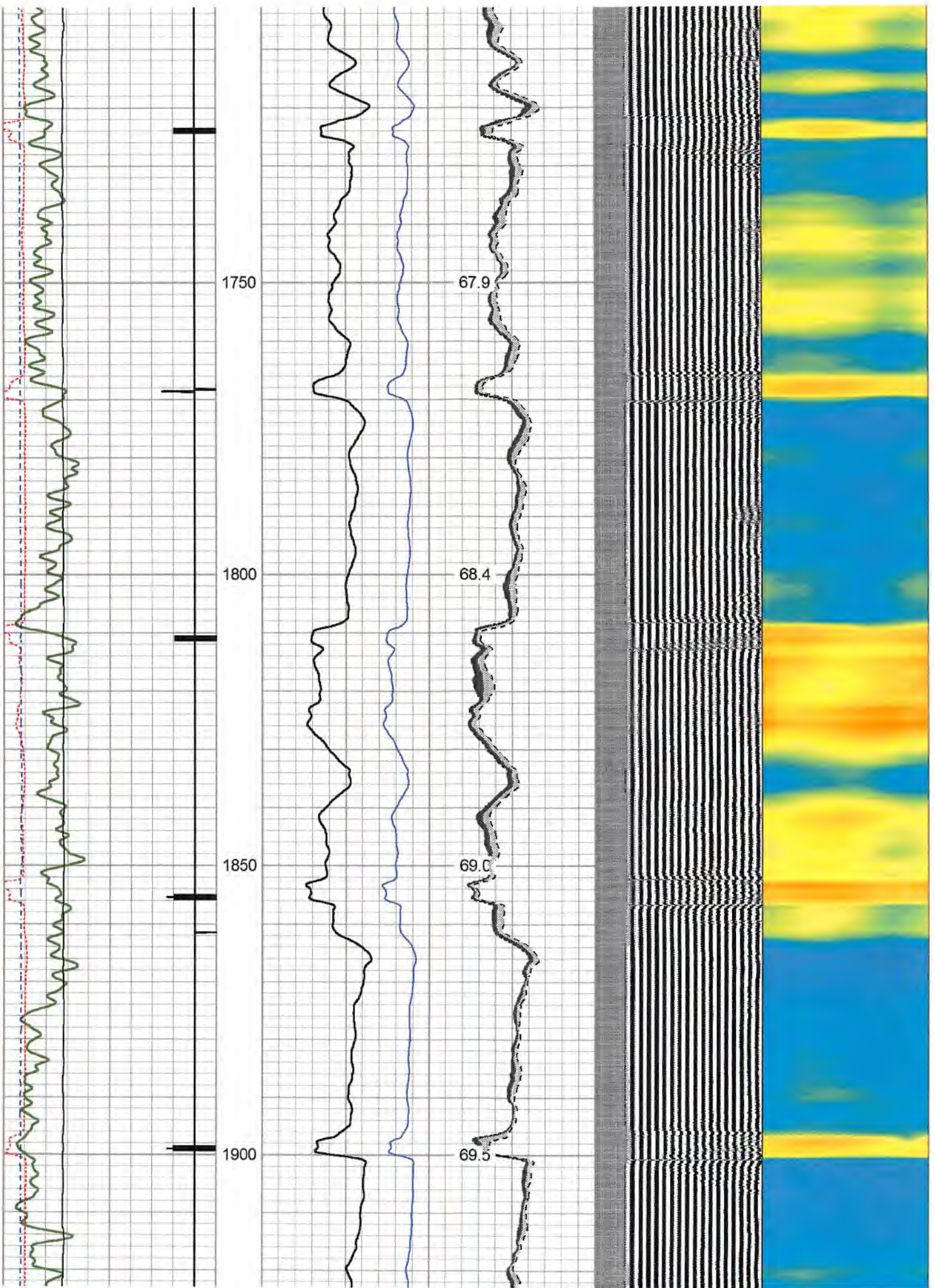


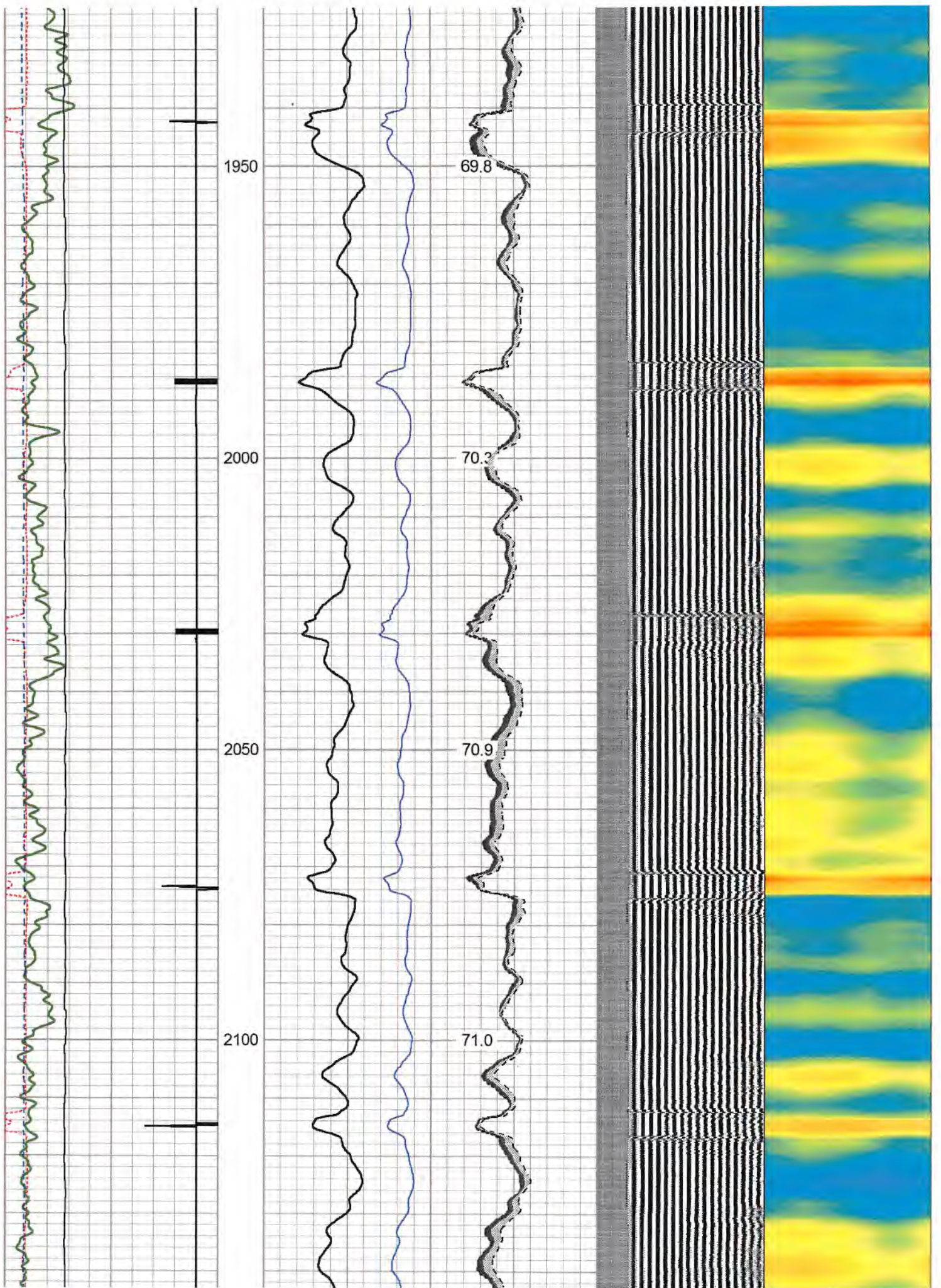


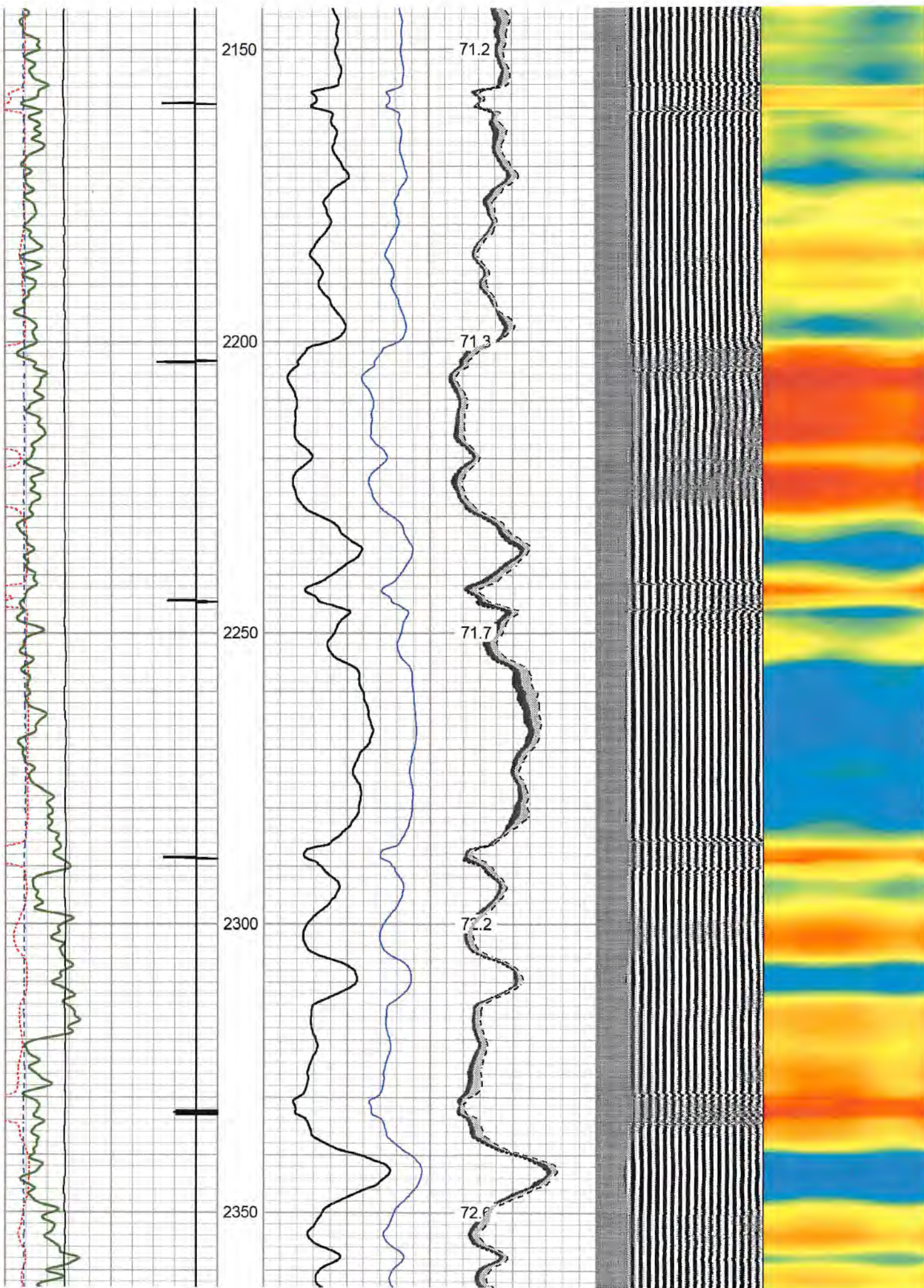
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Economic Protection

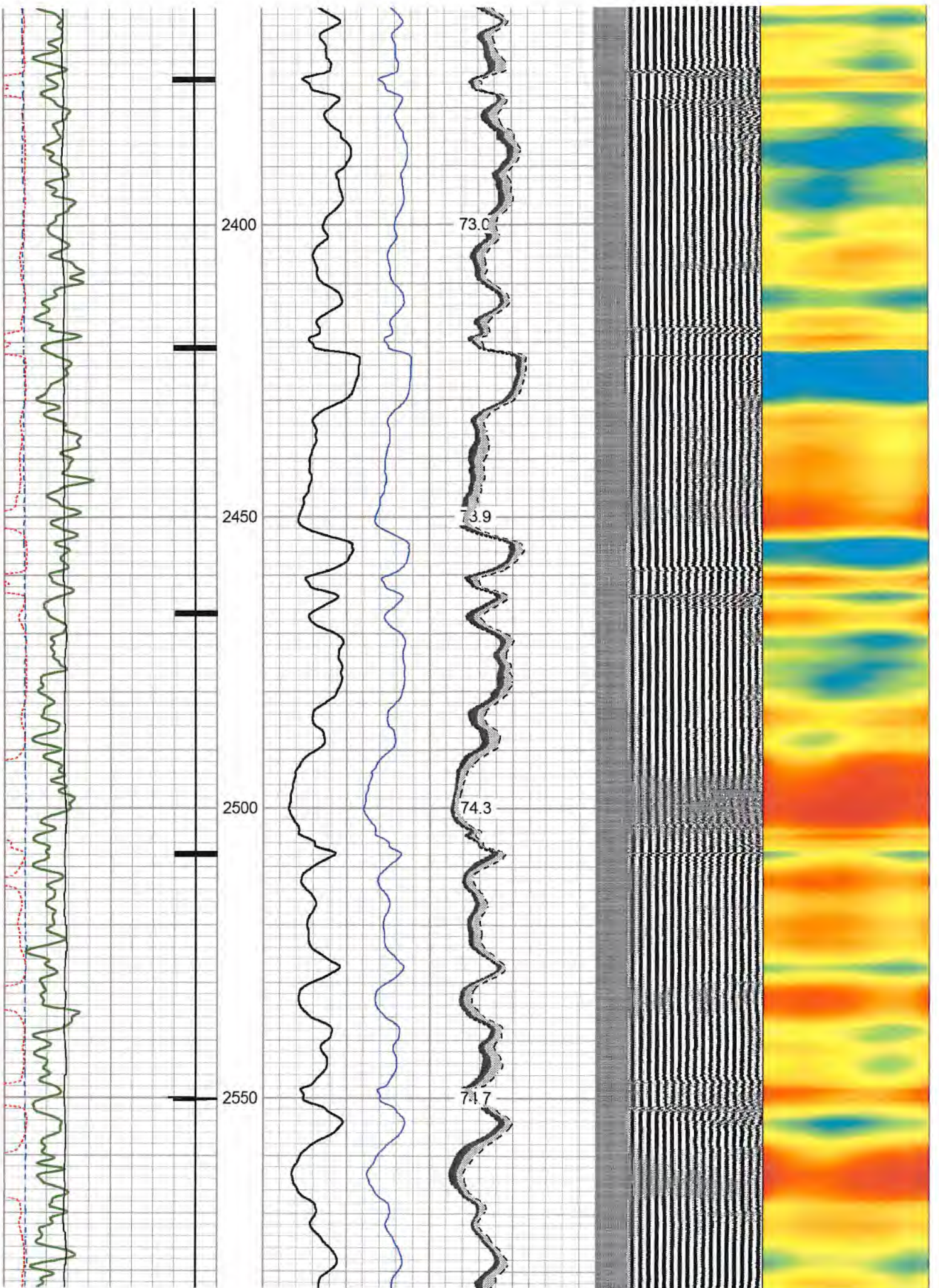


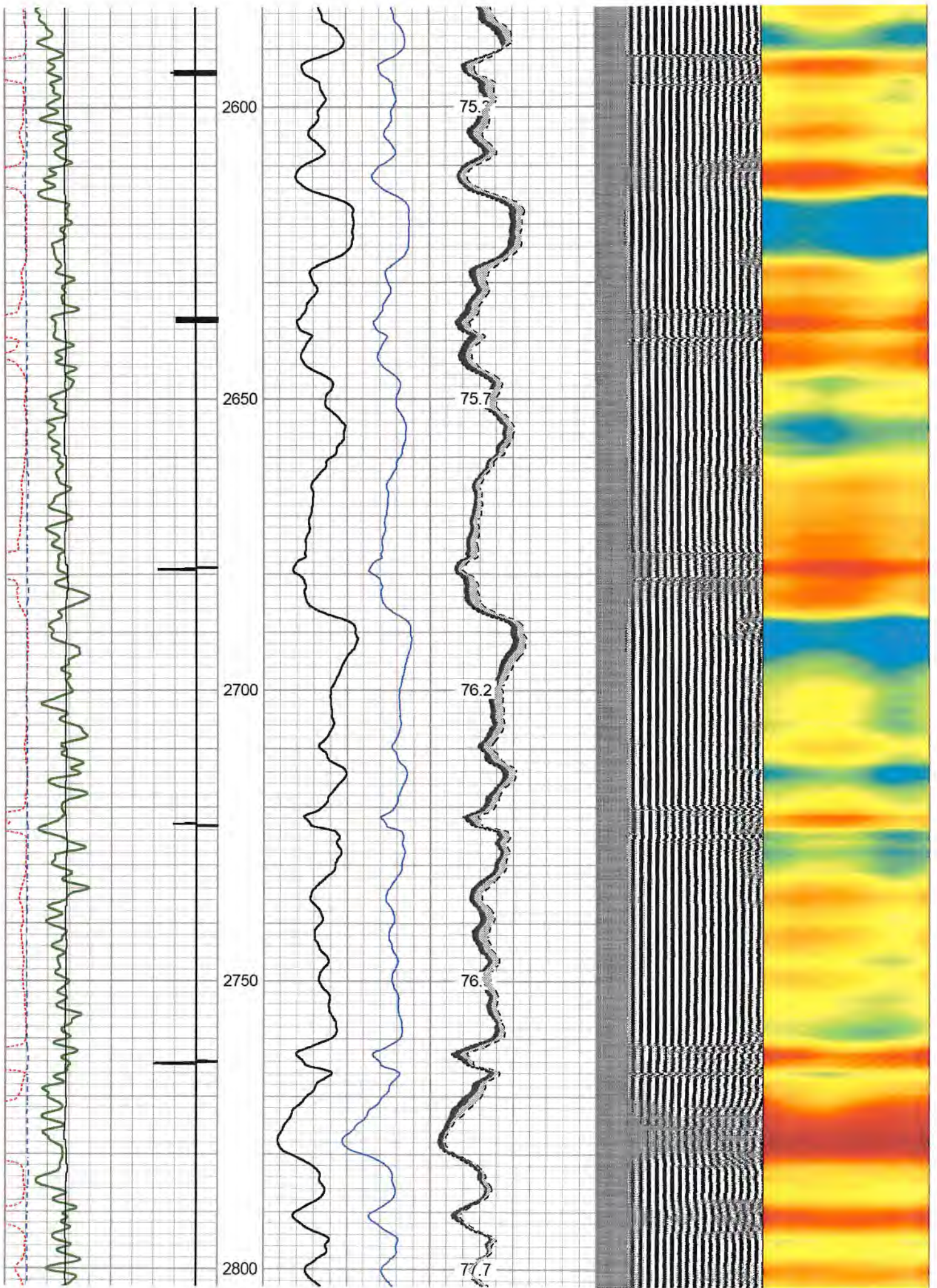


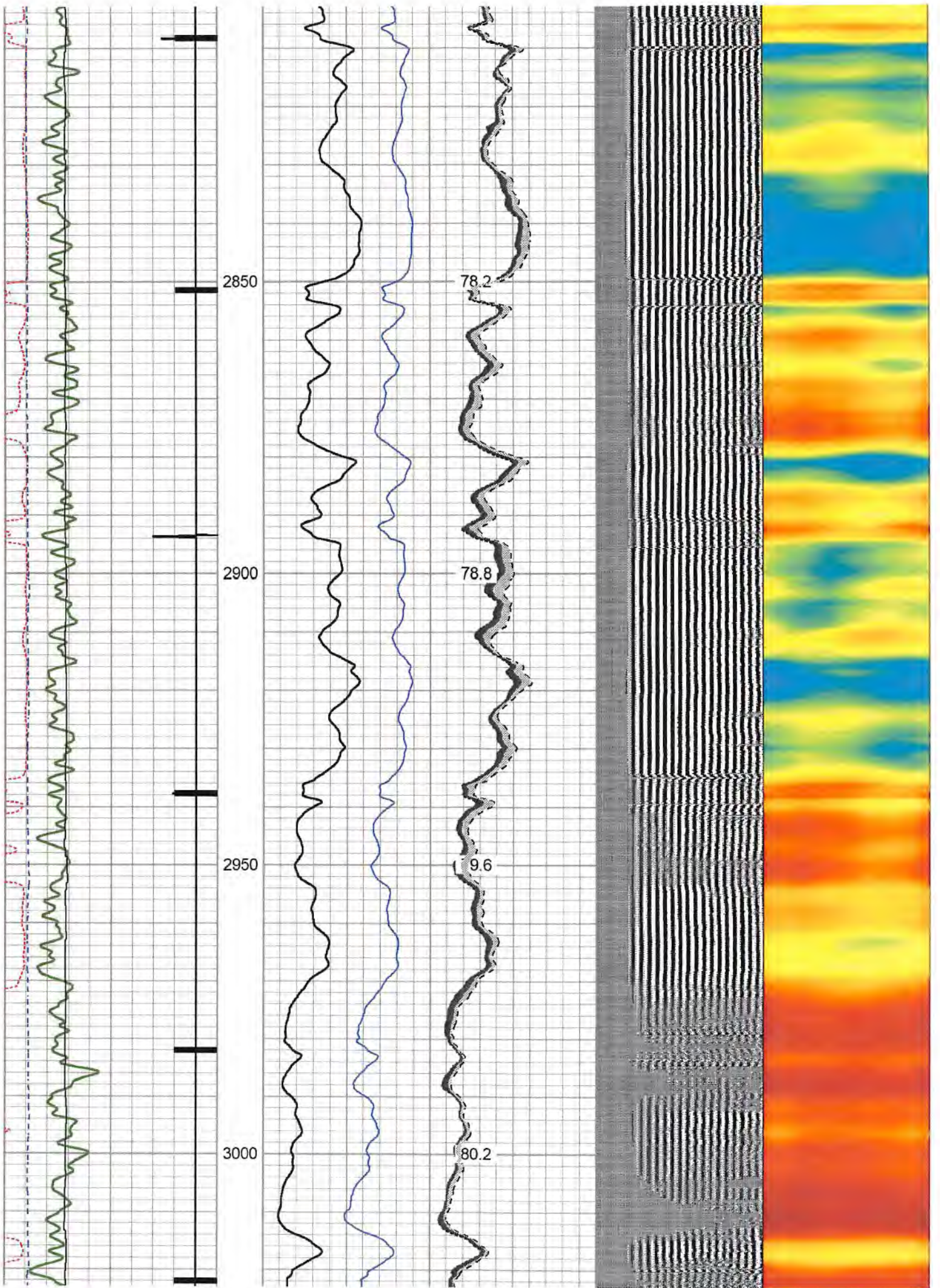


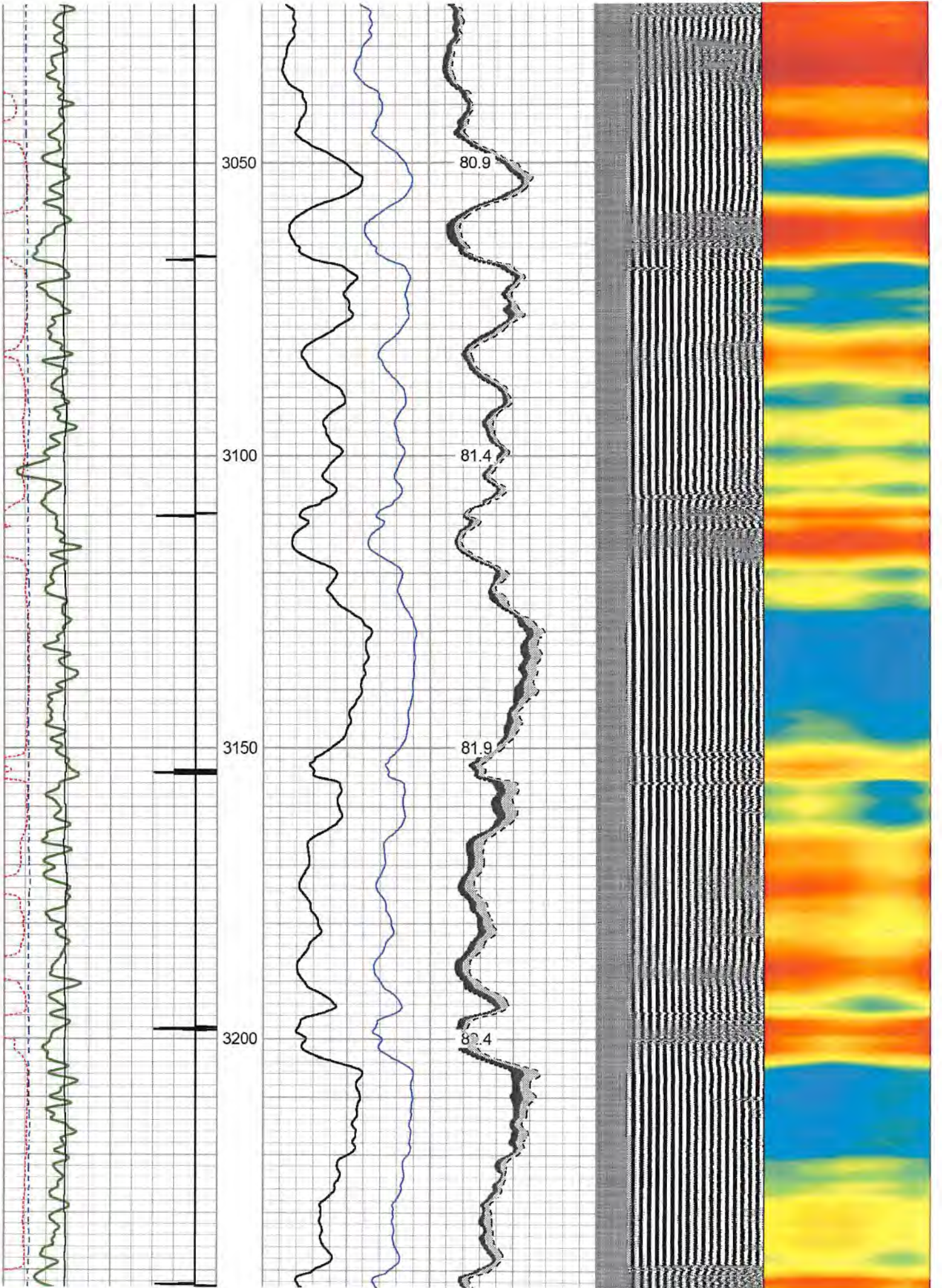


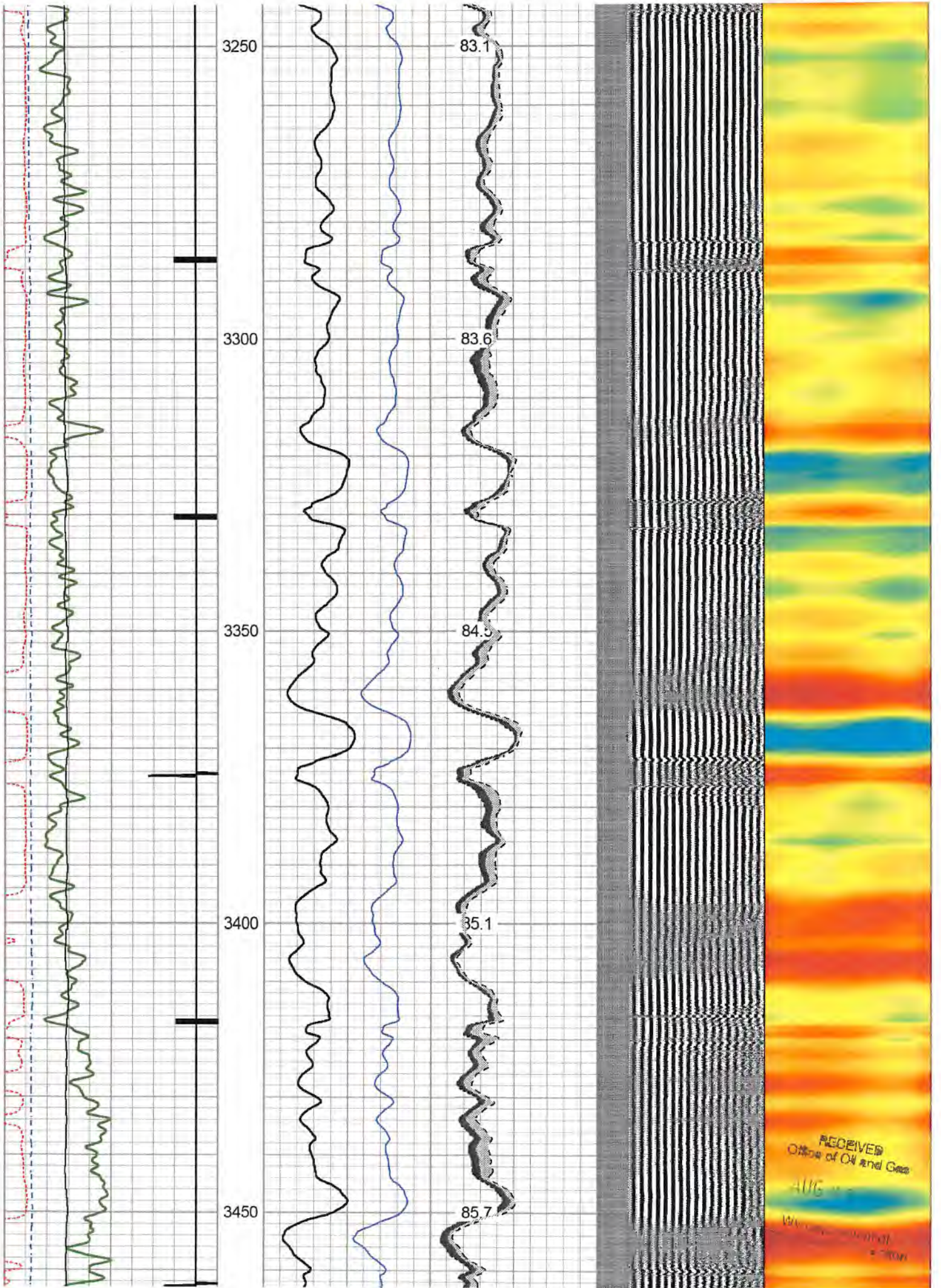


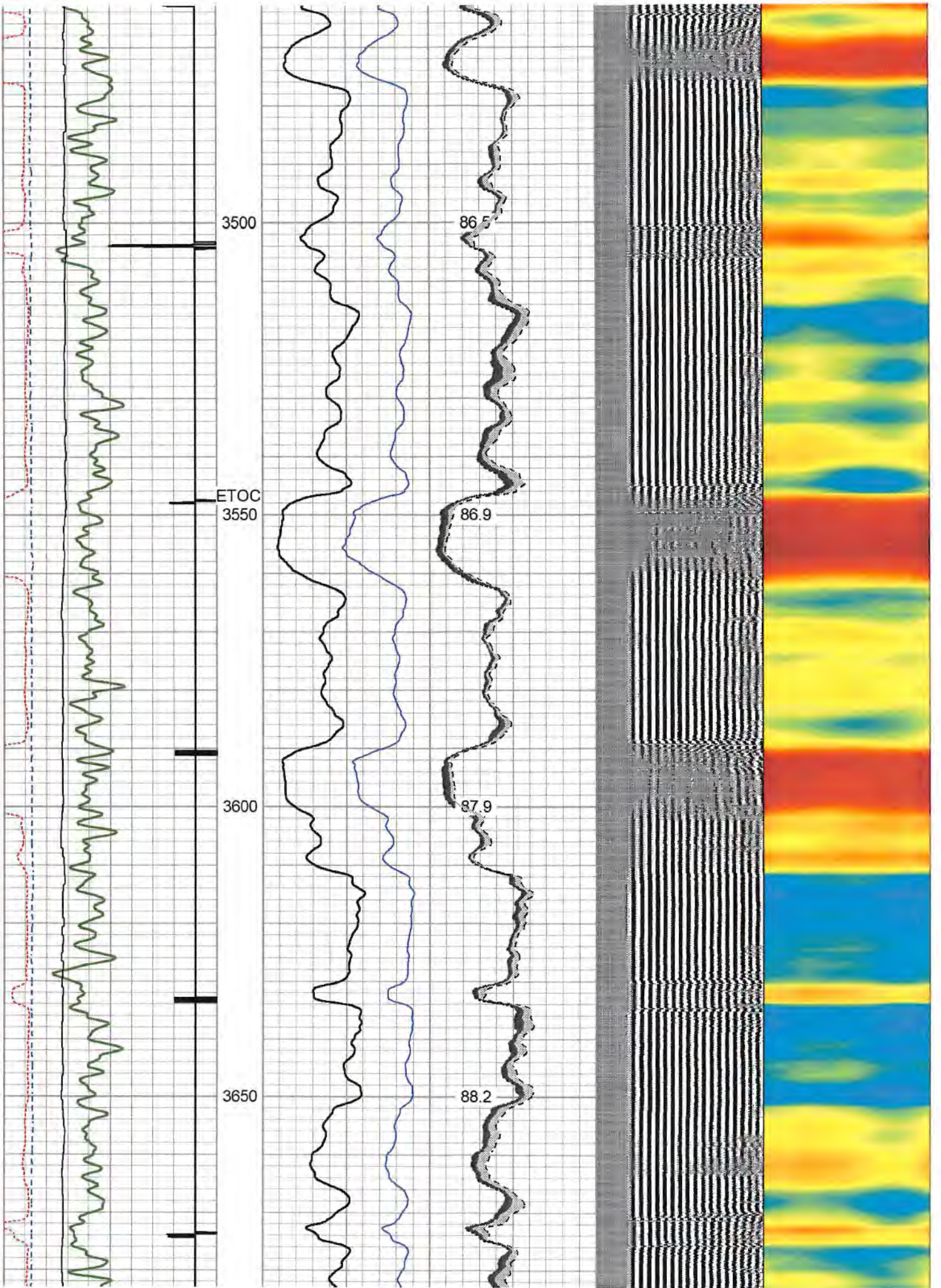


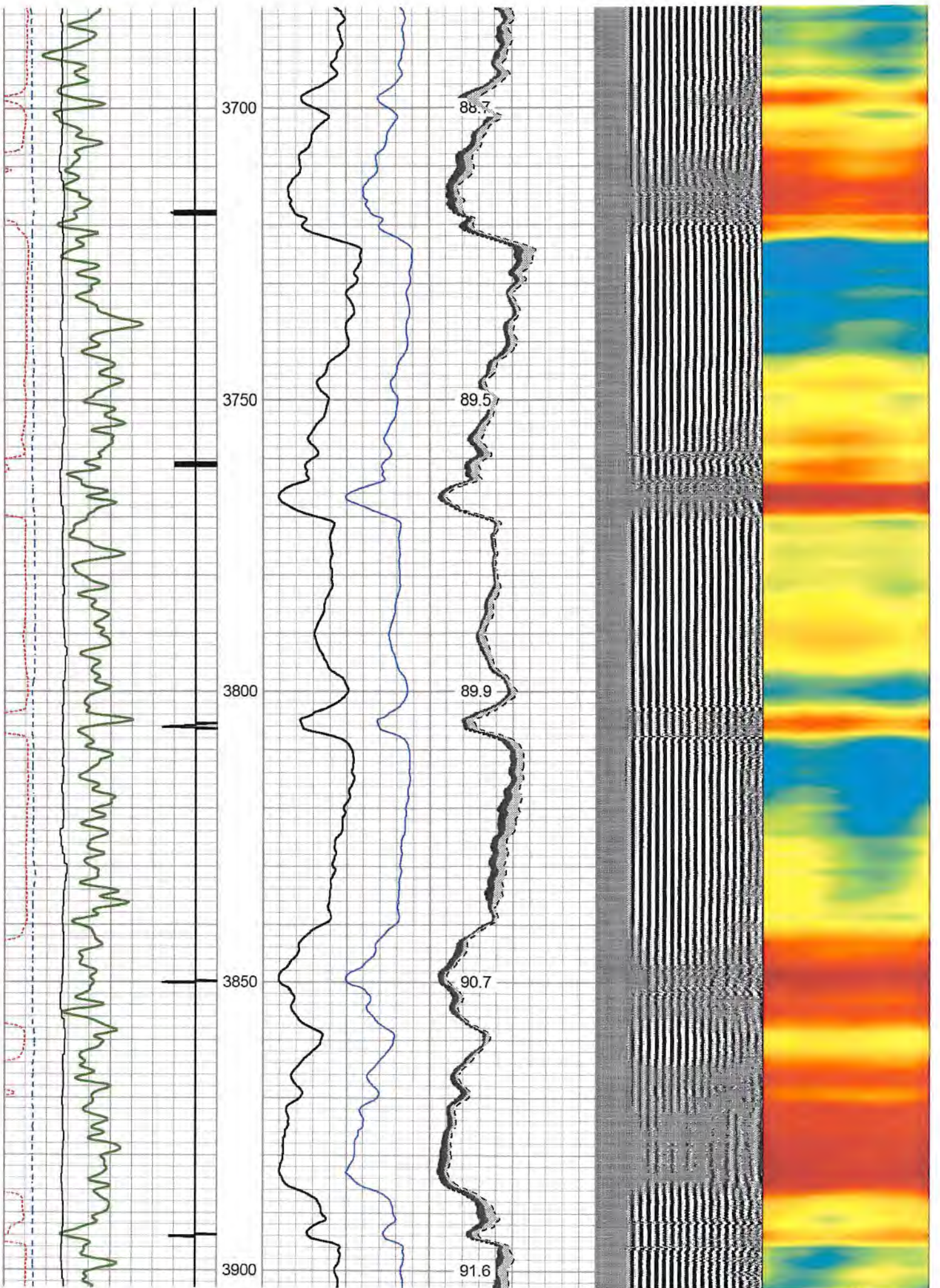


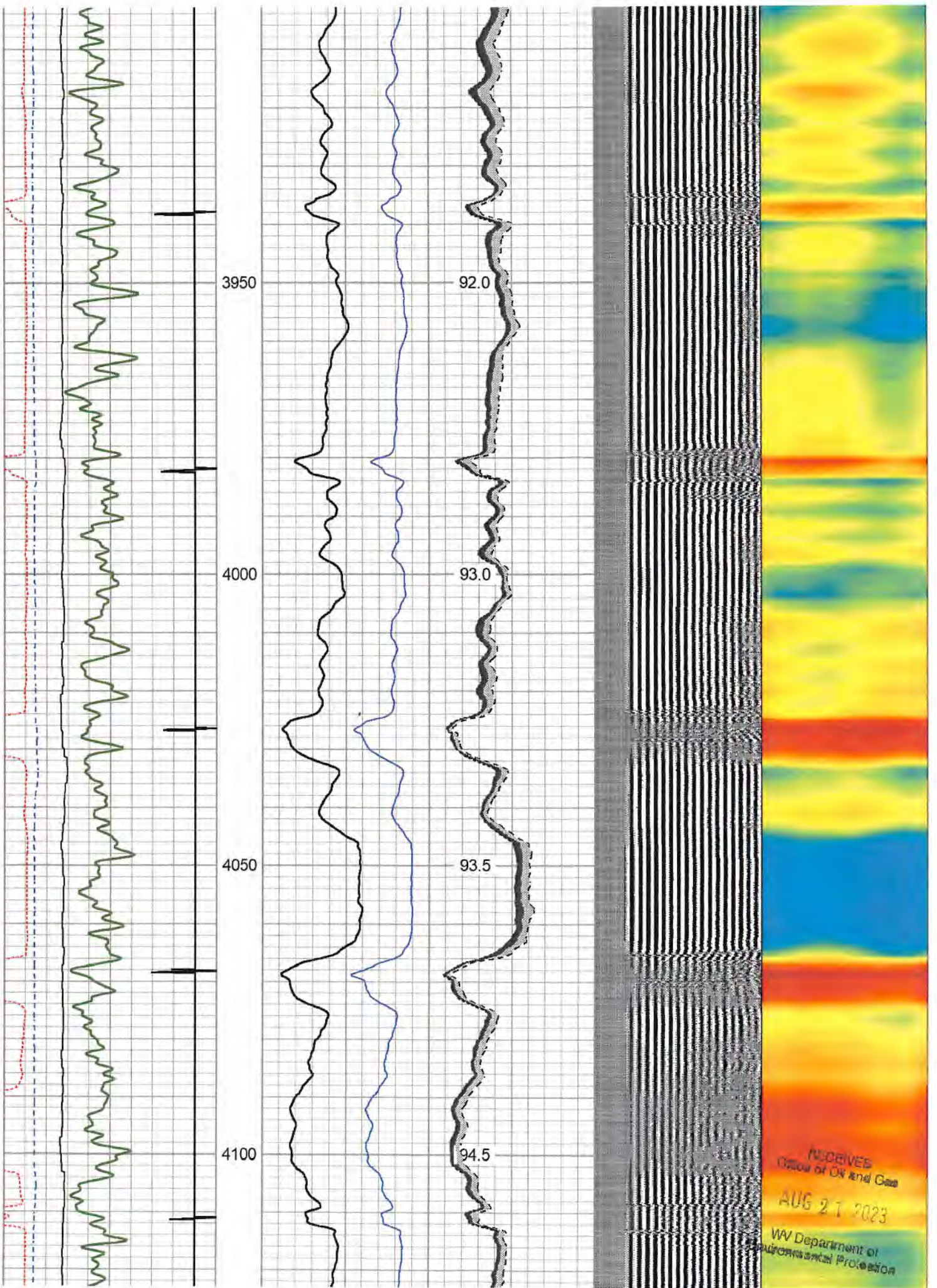




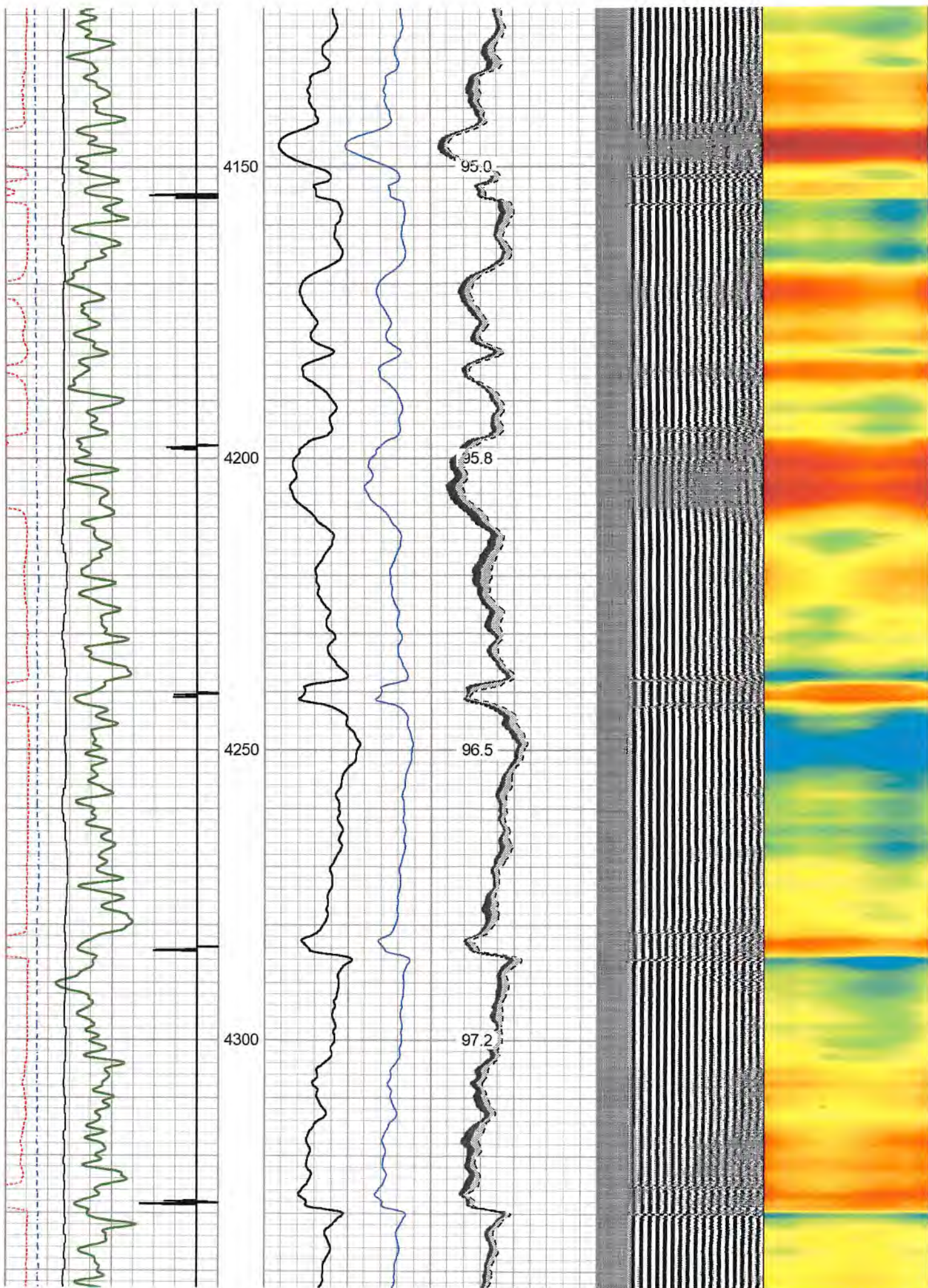


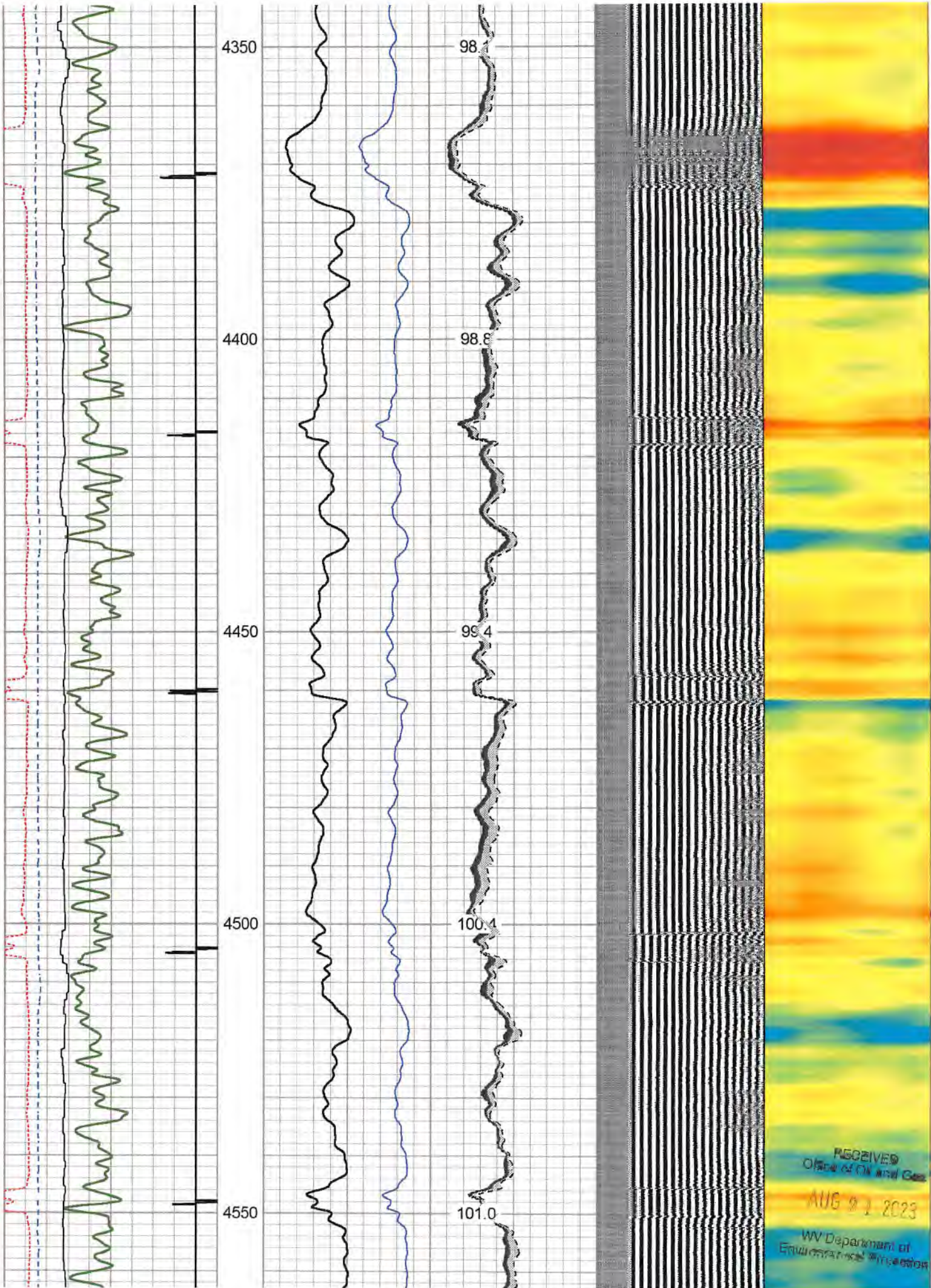






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4350

4400

4450

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98

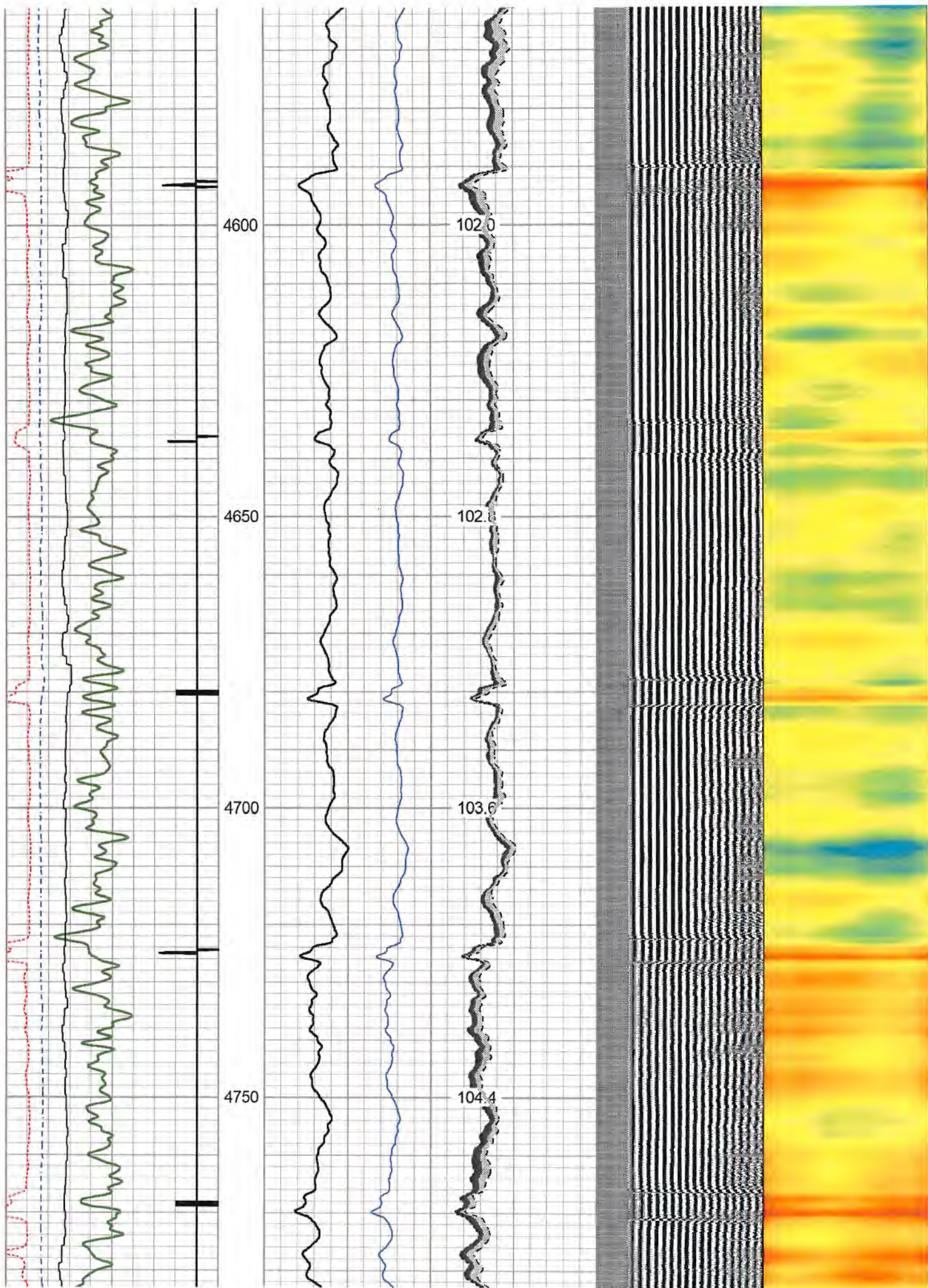
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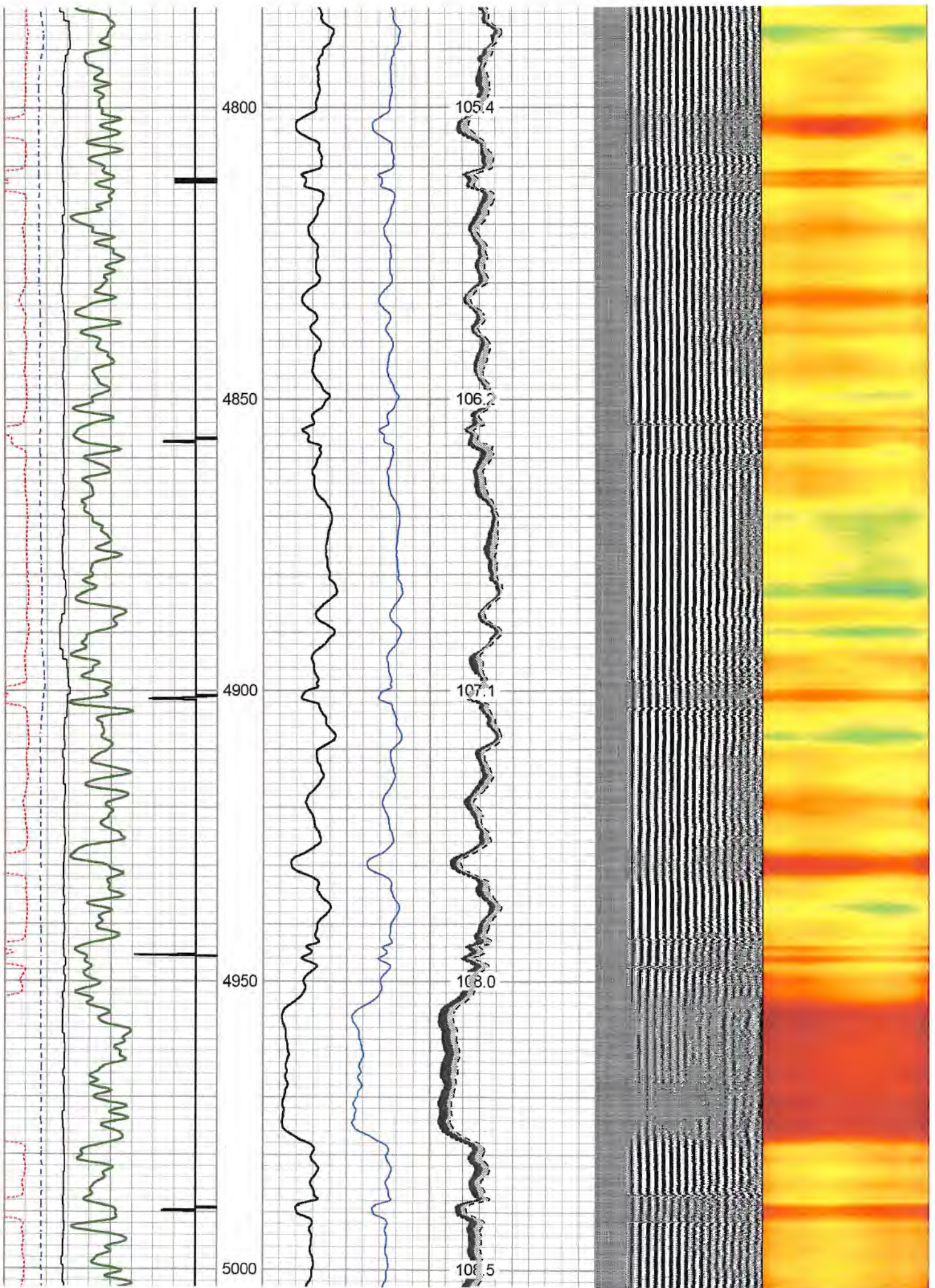
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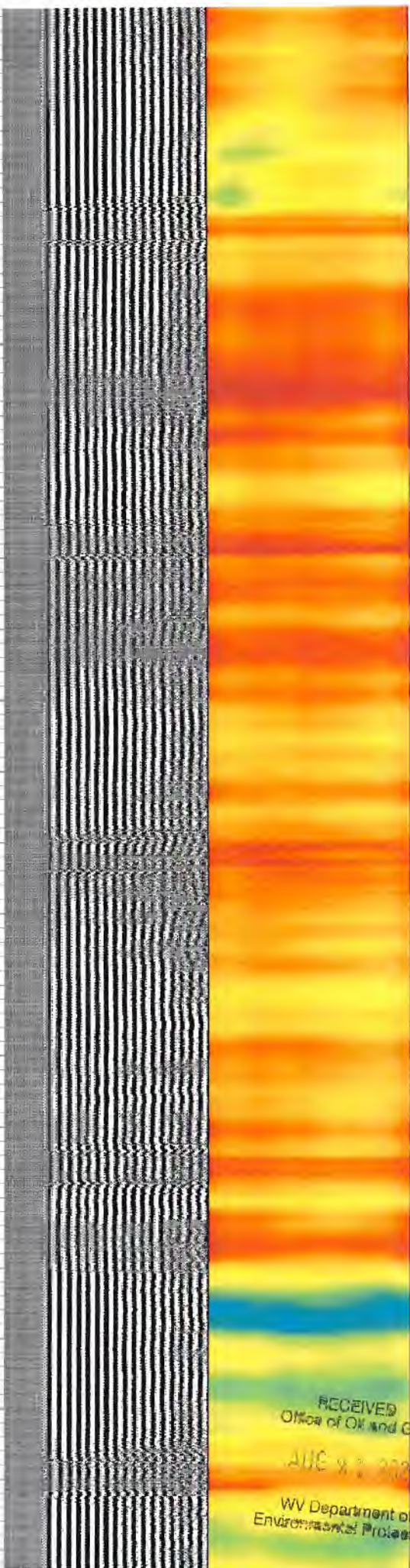
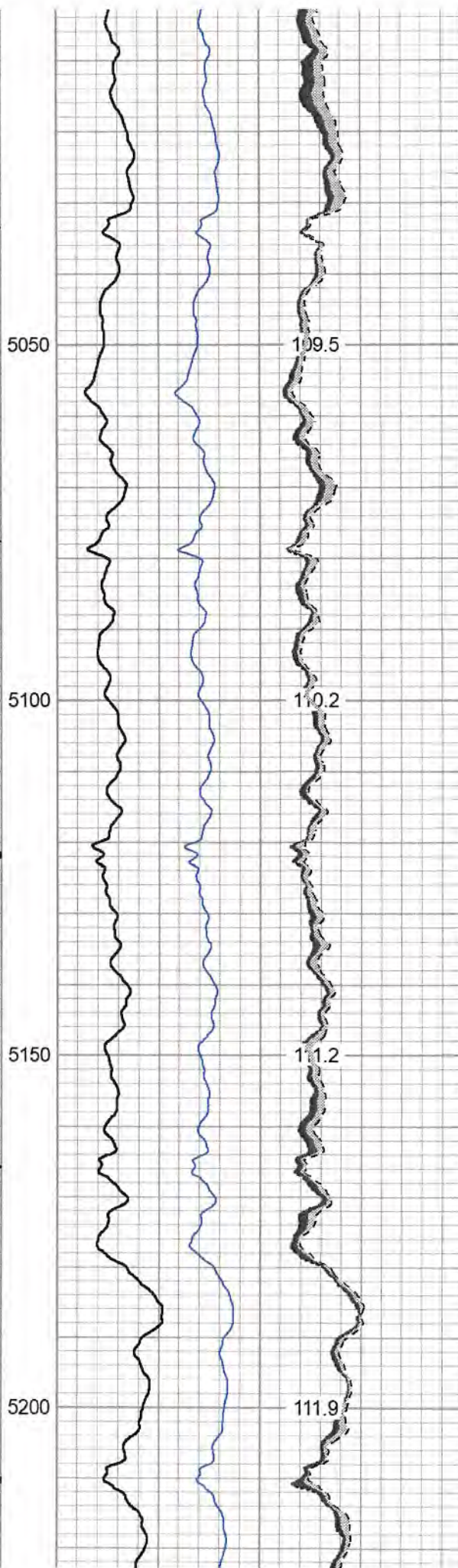
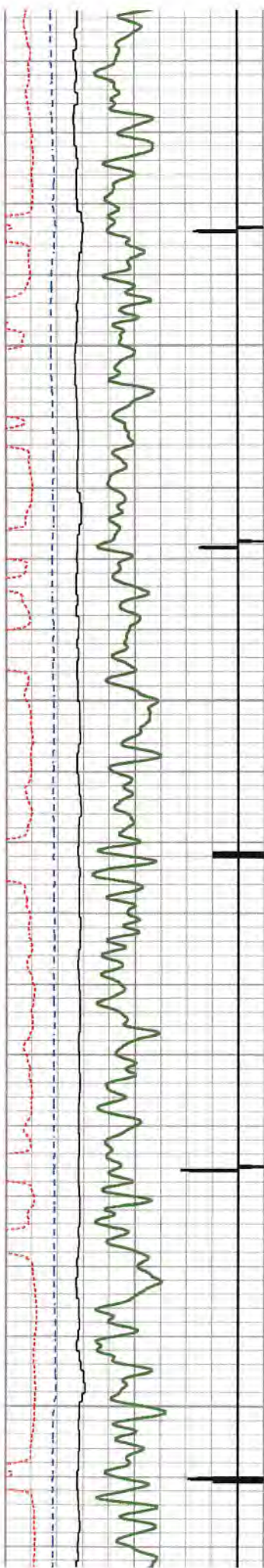
100.4

101.0

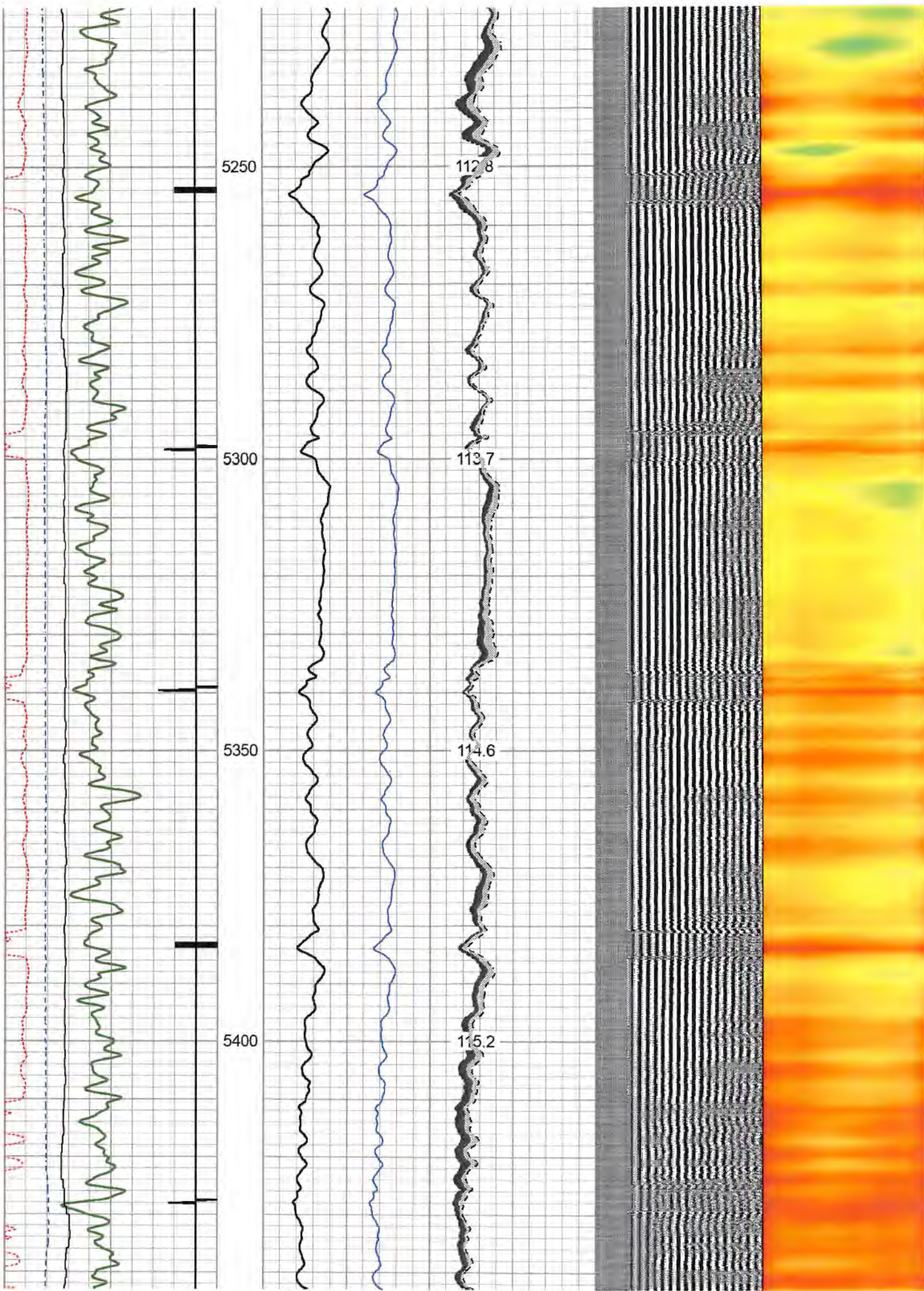
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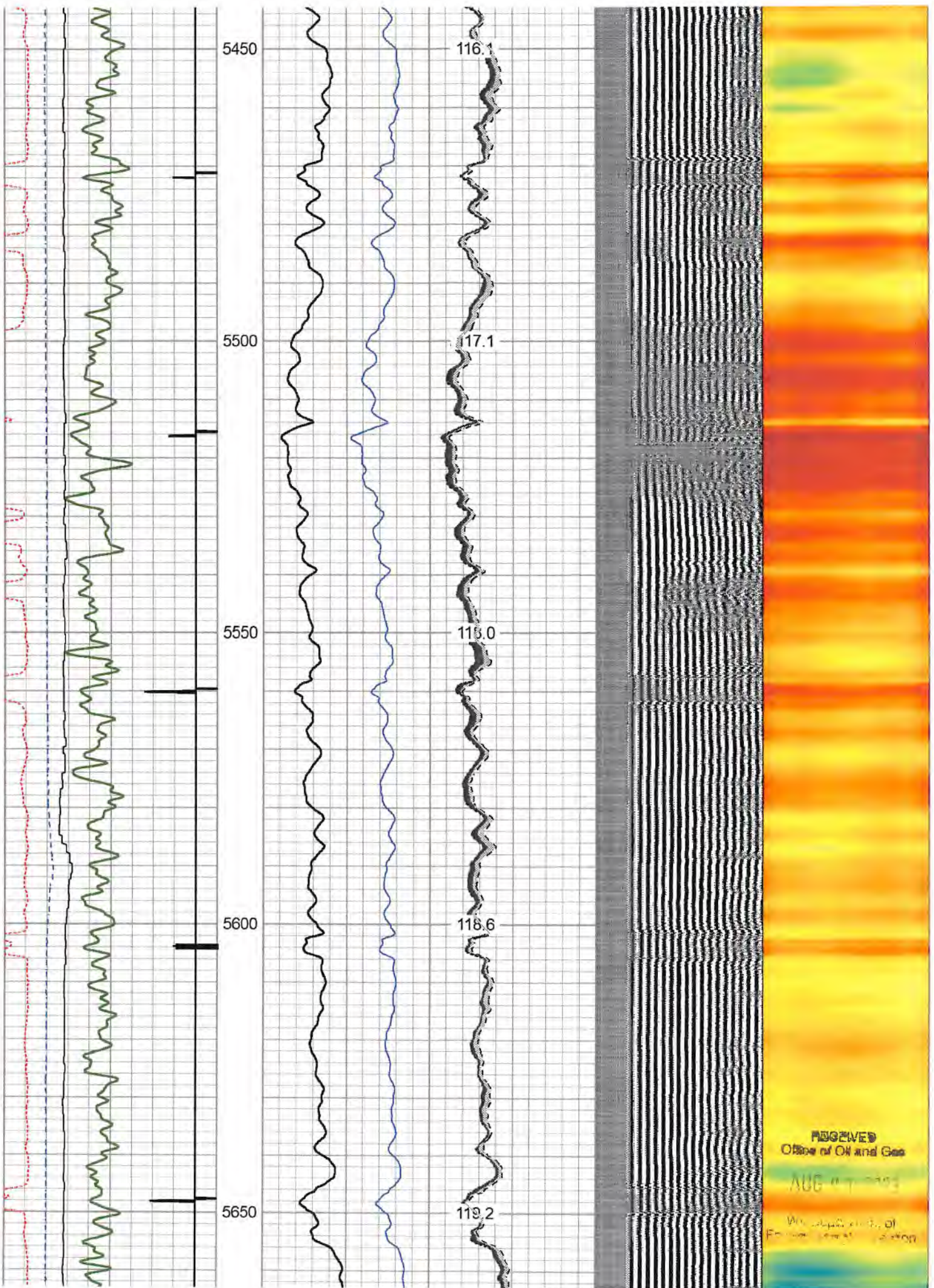




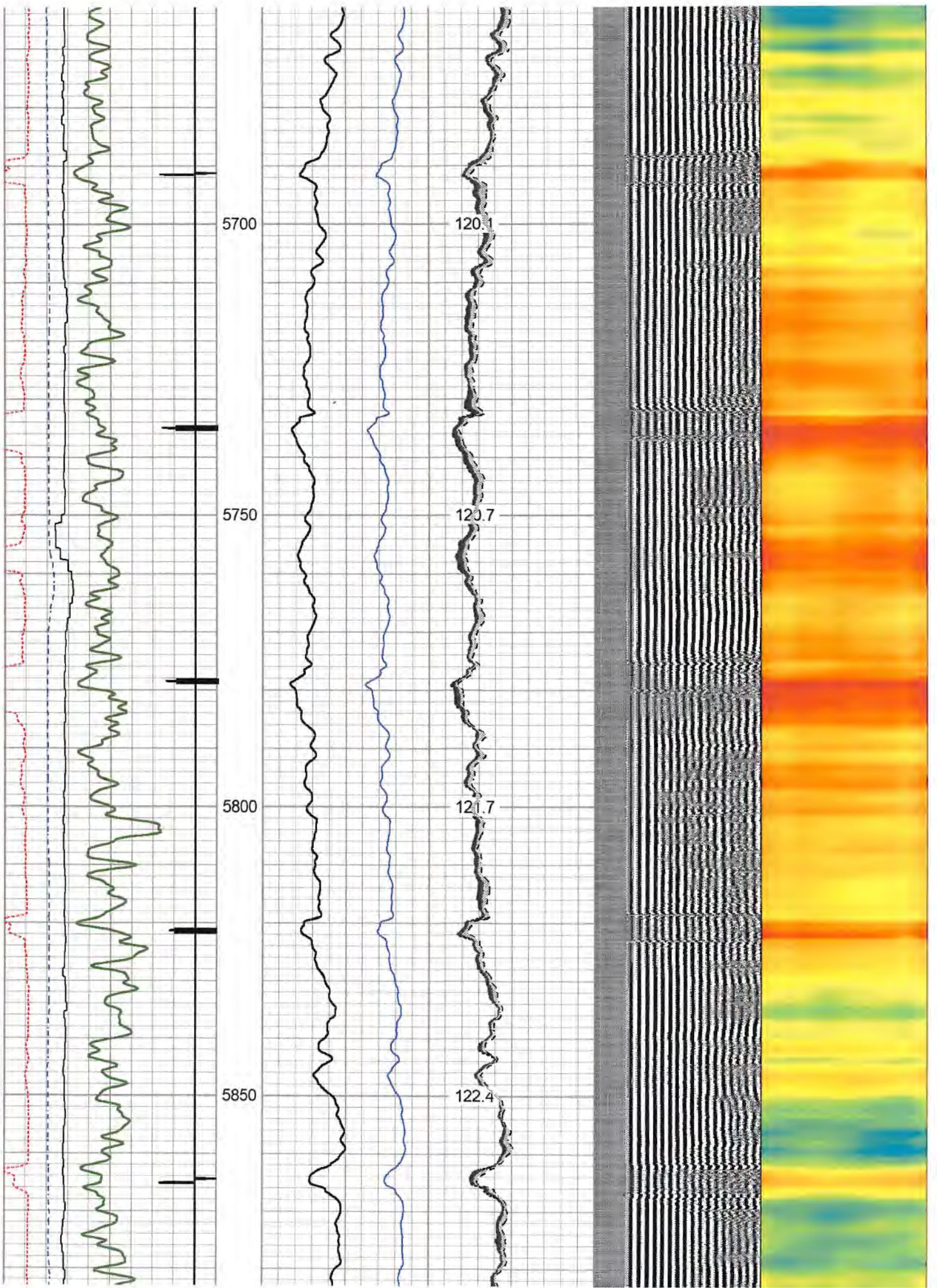


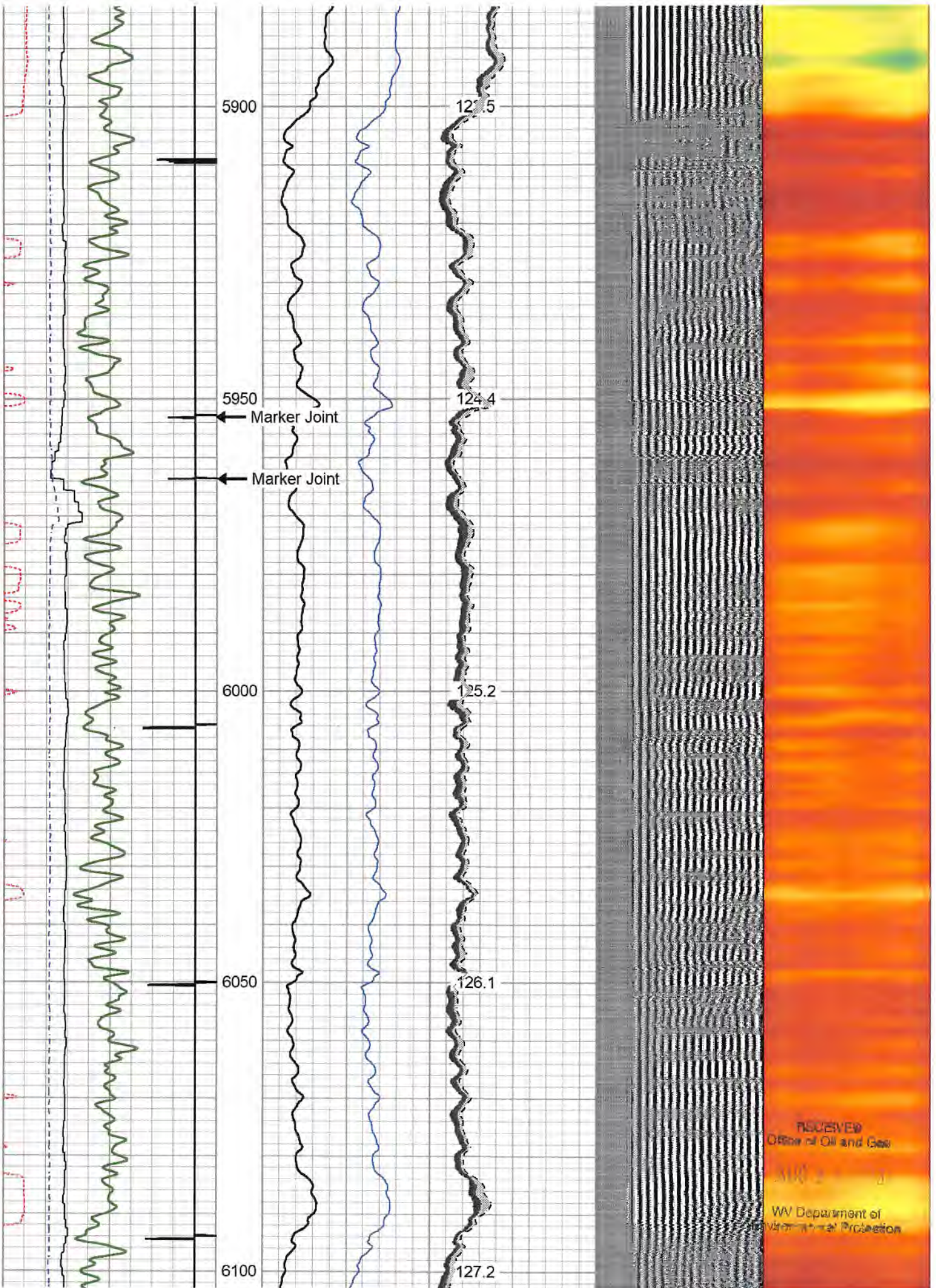
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AUG 21 2003
WV Department of
Environmental Protection

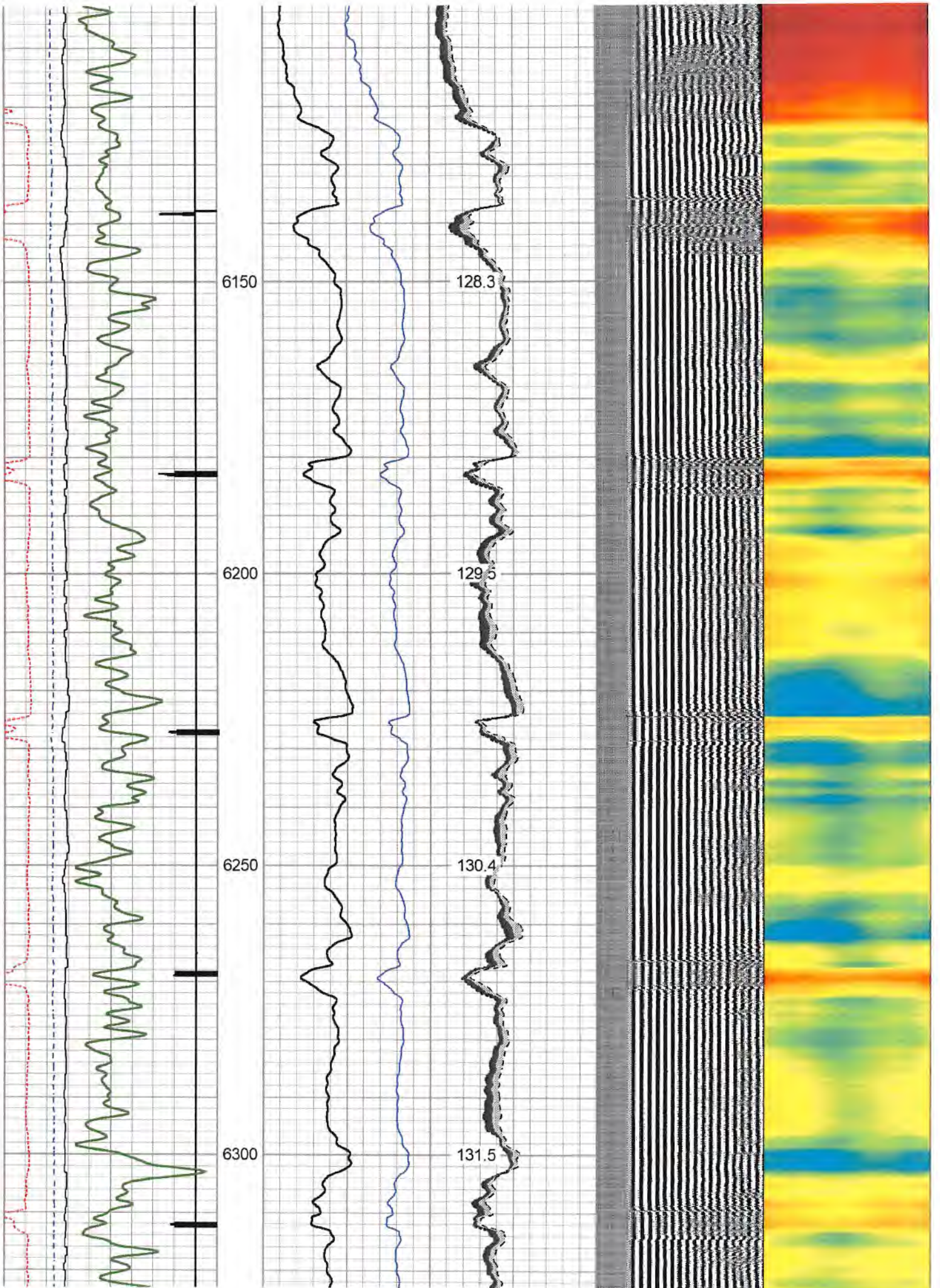


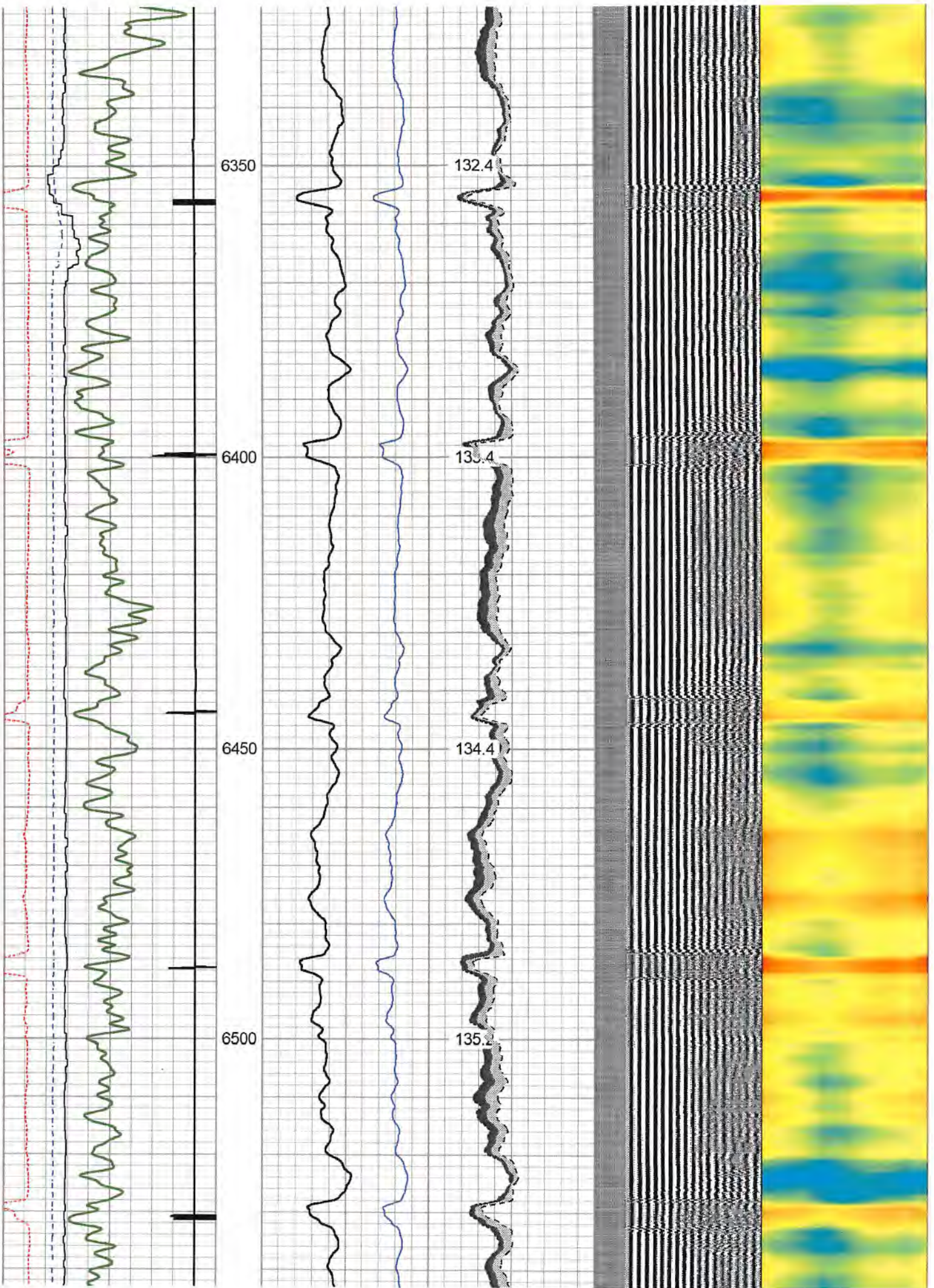


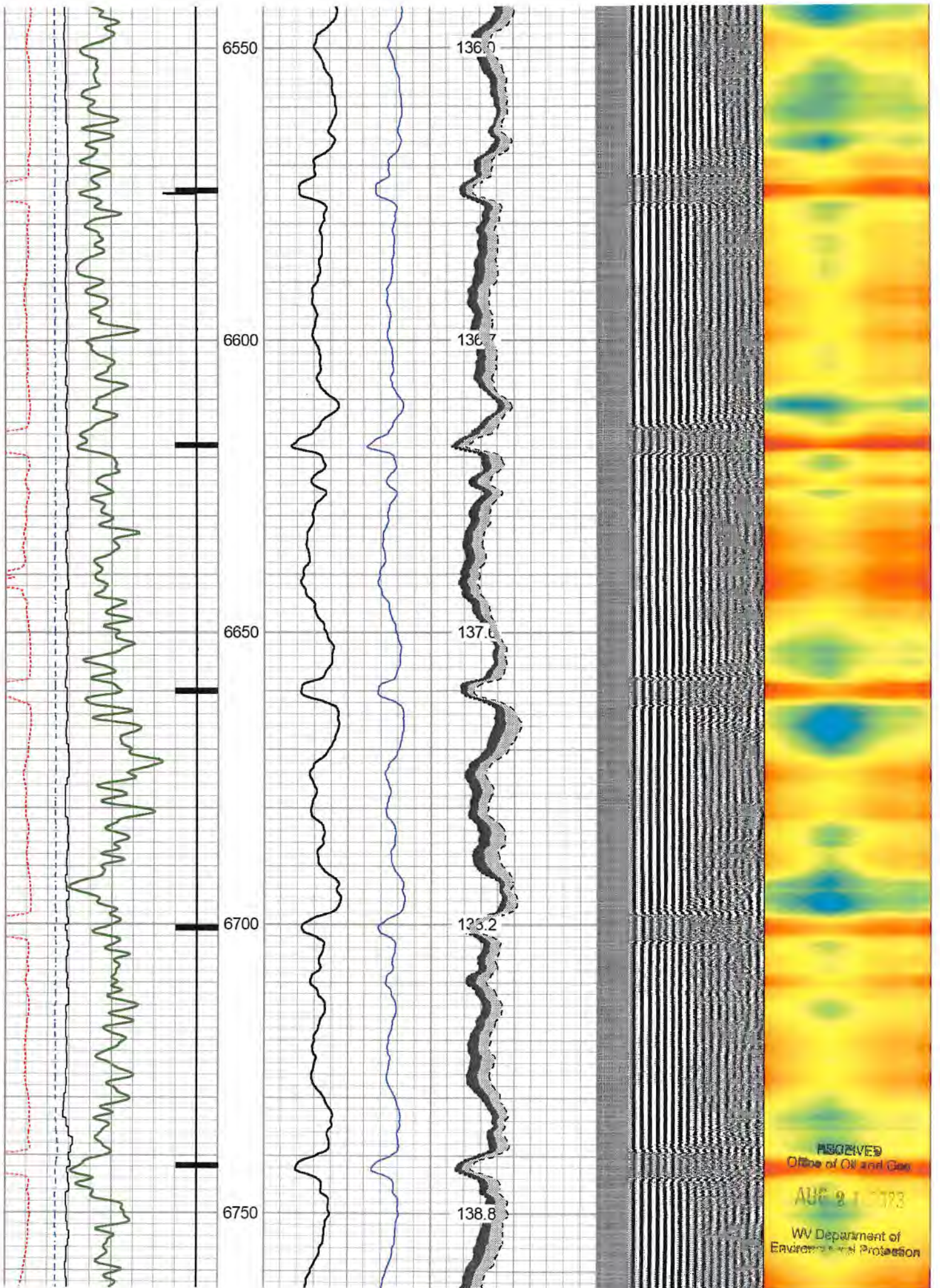
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AUG 07 2013
The Department of
Energy and Environment

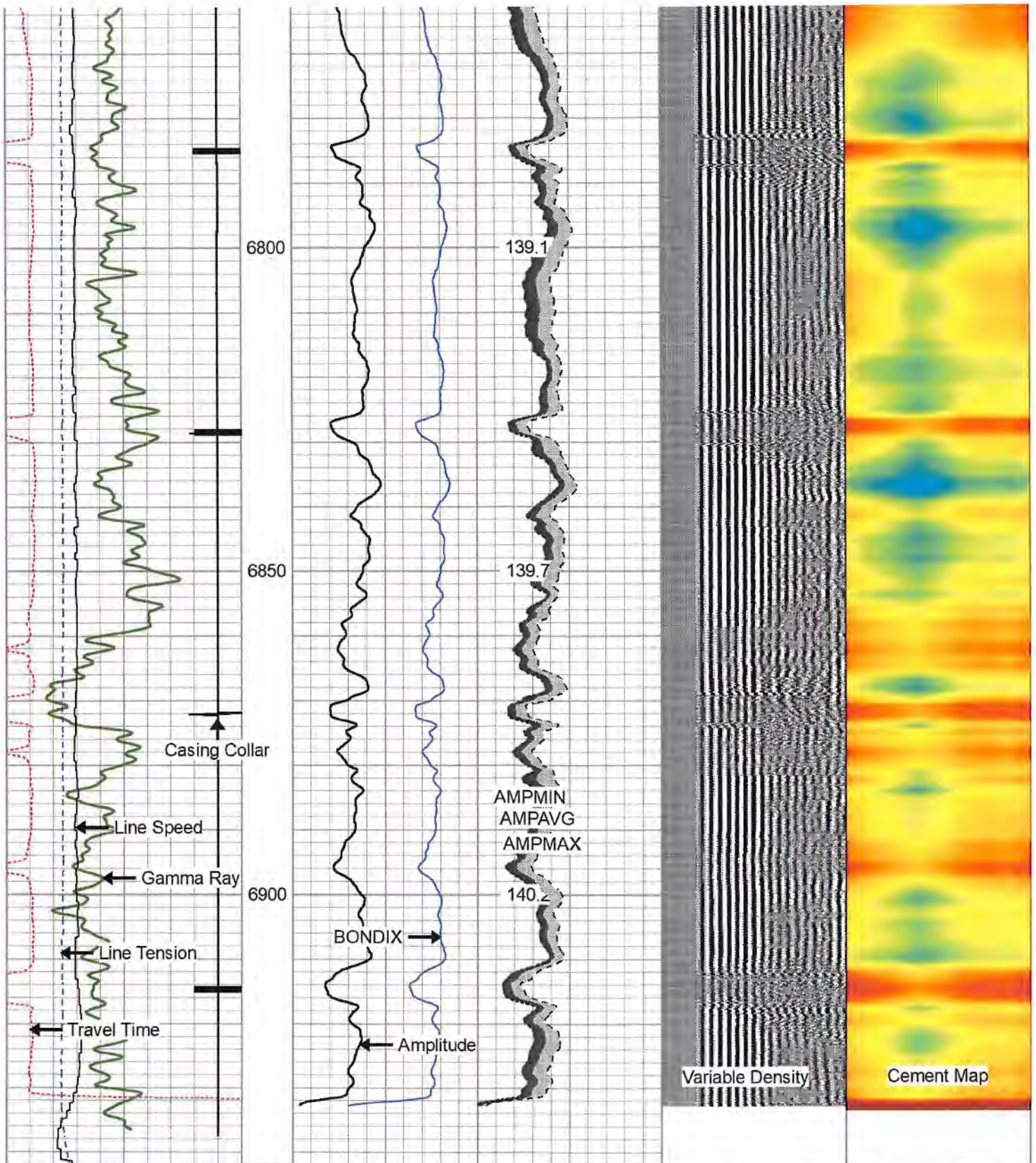












| | | |
|------------|--------------------|------|
| 266 | Travel Time (usec) | 166 |
| 9 | Casing Collar | -1 |
| 0 | Gamma Ray (GAPI) | 150 |
| Line Speed | | |
| -200 | (ft/min) | 200 |
| 0 | Line Tension (lb) | 5000 |

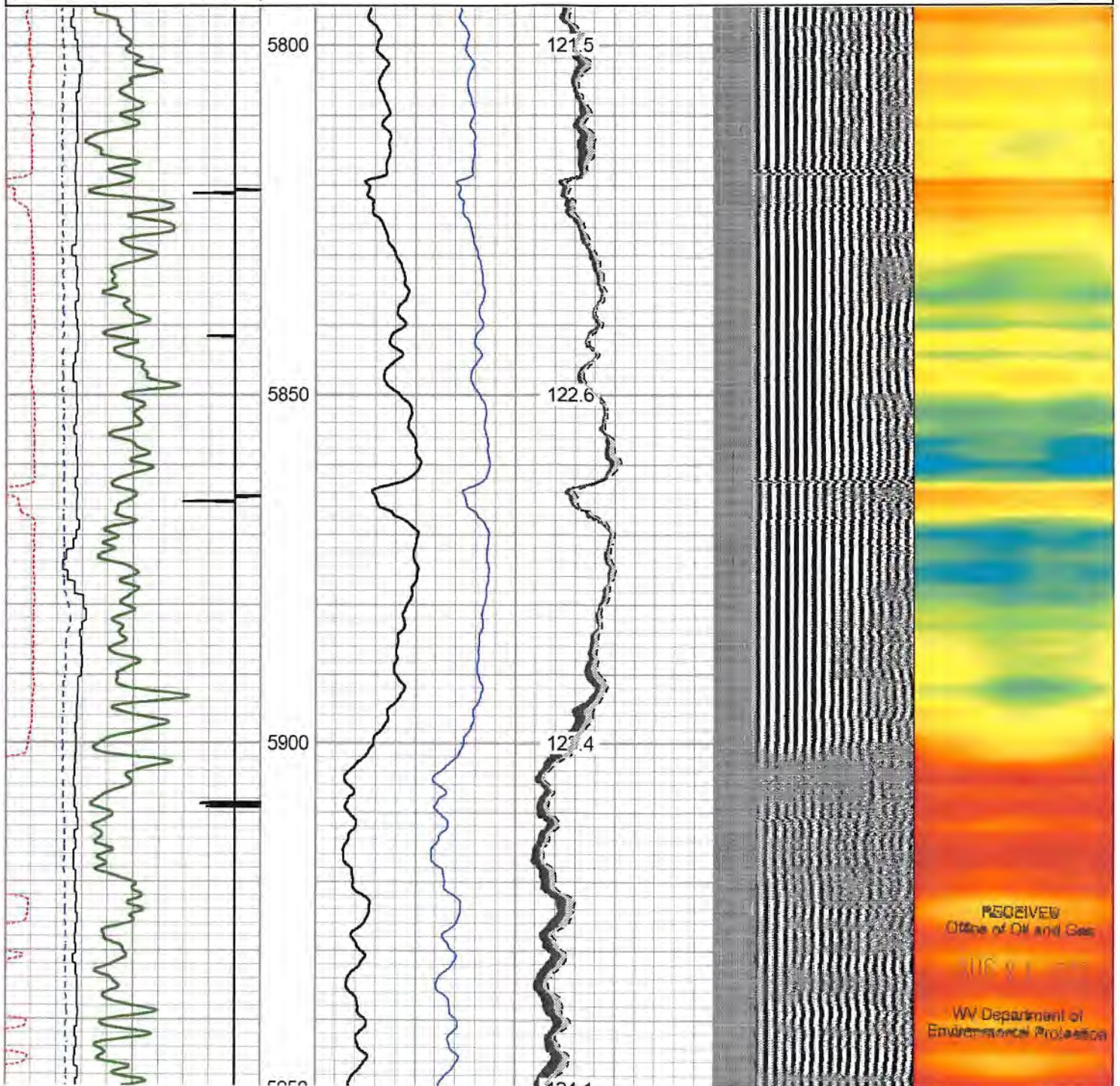
| | | | | | |
|--------|----------------|-----|----|--------|-----|
| 0 | Amplitude (mV) | 100 | -5 | AMPMIN | 150 |
| 1 | BONDIX | 0 | -5 | AMPMAX | 150 |
| | | | -5 | AMPAVG | 150 |
| TEMP | | | | | |
| (degF) | | | | | |

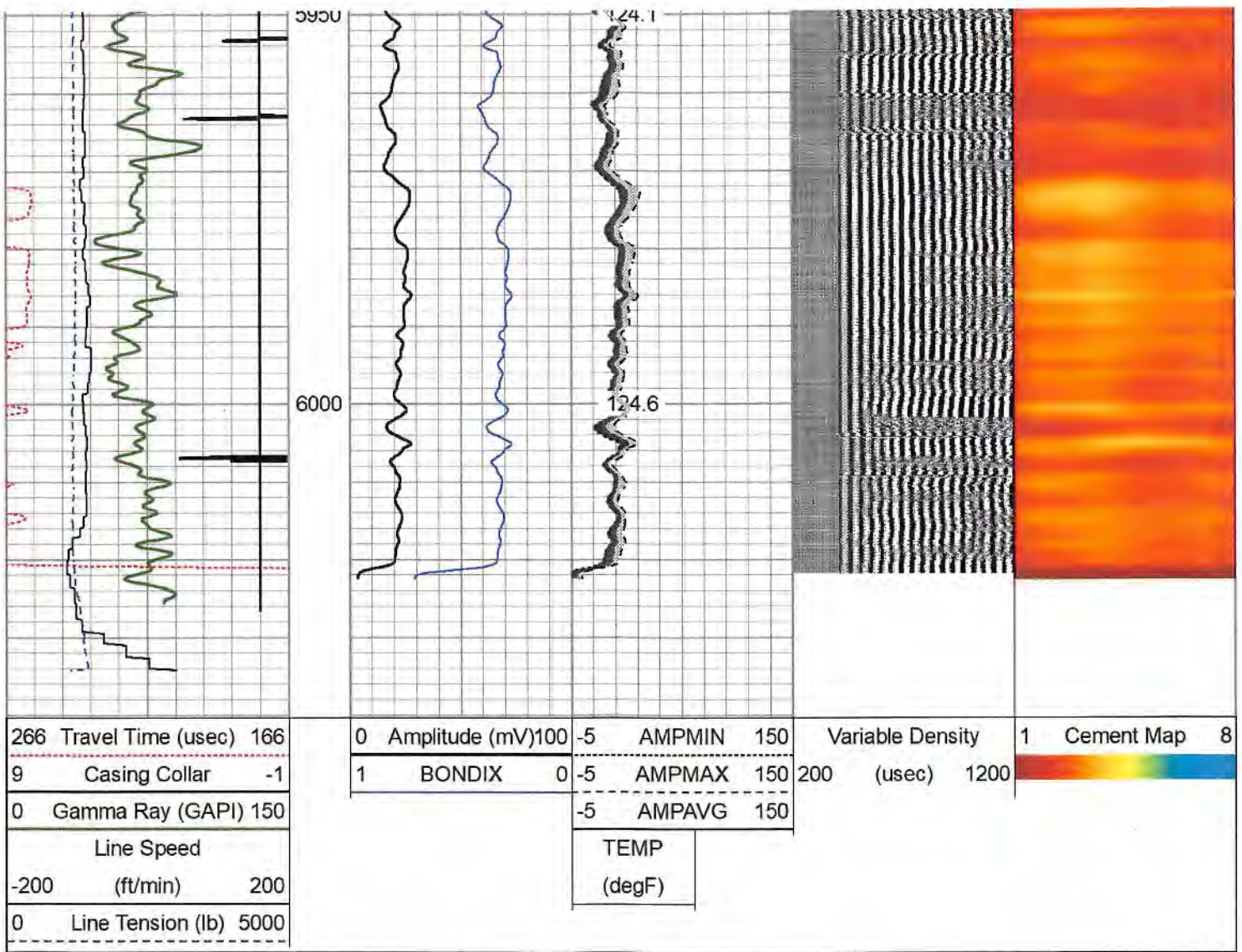
| | | | |
|------------------|--------|------------|---|
| Variable Density | 1 | Cement Map | 8 |
| 200 | (usec) | 1200 | |



Database File antero_mamba_2h_rcbl_18_feb_2023.db
 Dataset Pathname pass4
 Presentation Format rcbl 2
 Dataset Creation Sat Feb 18 11:15:15 2023
 Charted by Depth in Feet scaled 1:240

| | | | | | | | | | | | | |
|------|--------------------|------|---|----------------|-----|----|--------|-----|------------------|--------|------------|---|
| 266 | Travel Time (usec) | 166 | 0 | Amplitude (mV) | 100 | -5 | AMPMIN | 150 | Variable Density | 1 | Cement Map | 8 |
| 9 | Casing Collar | -1 | 1 | BONDIX | 0 | -5 | AMPMAX | 150 | 200 | (usec) | 1200 | |
| 0 | Gamma Ray (GAPI) | 150 | | | | -5 | AMPAVG | 150 | | | | |
| | Line Speed | | | | | | TEMP | | | | | |
| -200 | (ft/min) | 200 | | | | | (degF) | | | | | |
| 0 | Line Tension (lb) | 5000 | | | | | | | | | | |





Log Variables

DatabaseC:\ProgramData\Warrior\Data\antero_mamba_2h_rcbl_18_feb_2023.db
 Dataset field/well/run1/pass6/_vars_

Top - Bottom

| BHTEMP_Src | BOREID | BOTTEMP | CASEOD | CASETHCK | CASEWGHT | MAXAMPL | MINAMPL |
|------------|--------|---------|---------|----------|----------|---------|---------|
| | in | degF | in | in | lb/ft | mV | mV |
| TEMP | 7.875 | 100 | 5.5 | 0 | 11.5 | 0 | 1 |
| MINATTN | PERFS | PPT | SRFTEMP | TDEPTH | | | |
| db/ft | | uSec | degF | ft | | | |
| 0.8 | No | 0 | 0 | 0 | | | |

Variable Description

BHTEMP_Src : BHTEMP Input Source Selector
 BOREID : Borehole I.D.
 BOTTEMP : Bottom Hole Temperature
 CASEOD : Casing O.D.
 CASETHCK : Casing Thickness
 CASEWGHT : Casing Weight
 MAXAMPL : Maximum Amplitude

MINAMPL : Minimum Amplitude
 MINATTN : Minimum Attenuation
 PERFS : Perforation Flag
 PPT : Predicted Pipe Time
 SRFTEMP : Surface Temperature
 TDEPTH : Total Depth

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 Environmental Protection

Calibration Report

Database File antero_mamba_2h_rcbl_18_feb_2023.db
 Dataset Pathname pass6

Gamma Ray Calibration Report

Serial Number: 275
 Tool Model: Probe
 Performed: Sat Feb 18 08:07:03 2023

Calibrator Value: 100.0 GAPI

Background Reading: 35.0 cps
 Calibrator Reading: 160.0 cps

Sensitivity: 0.5000 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: 2.75"
 Tool Model: Probe275T

Calibration Casing Diameter: 5.500 in
 Calibration Depth: 356.750 ft

Master Calibration, performed Sat Feb 18 10:53:58 2023:

| | Raw (v) | | Calibrated (mv) | | Results | |
|-----|---------|-------|-----------------|---------|---------|---------|
| | Zero | Cal | Zero | Cal | Gain | Offset |
| 3' | -0.002 | 0.330 | 3.400 | 71.921 | 206.932 | 3.726 |
| CAL | 0.559 | 0.563 | | | | |
| 5' | -0.009 | 0.319 | 3.400 | 71.921 | 209.449 | 5.208 |
| SUM | | | | | | |
| S1 | 0.030 | 0.321 | 0.000 | 100.000 | 344.158 | -10.385 |
| S2 | -0.007 | 0.295 | 0.000 | 100.000 | 331.996 | 2.193 |
| S3 | -0.004 | 0.311 | 0.000 | 100.000 | 317.963 | 1.238 |
| S4 | -0.004 | 0.323 | 0.000 | 100.000 | 305.740 | 1.179 |
| S5 | -0.003 | 0.346 | 0.000 | 100.000 | 286.995 | 0.795 |
| S6 | -0.006 | 0.360 | 0.000 | 100.000 | 272.867 | 1.739 |
| S7 | -0.001 | 0.358 | 0.000 | 100.000 | 278.535 | 0.326 |
| S8 | -0.008 | 0.332 | 0.000 | 100.000 | 293.789 | 2.335 |

Internal Reference Calibration, performed Wed Nov 23 14:17:52 2011:

| | Raw (v) | | Calibrated (v) | | Results | |
|-----|---------|-------|----------------|-------|---------|--------|
| | Zero | Cal | Zero | Cal | Gain | Offset |
| CAL | 0.000 | 0.000 | 0.559 | 0.563 | 1.000 | 0.000 |

Air Zero Calibration, performed Sat Feb 18 07:28:40 2023:

| | 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 | |

| Sensor | Offset (ft) | Schematic | Description | Length (ft) | O.D. (in) | Weight (lb) |
|----------|-------------|---|---|-------------|-----------|-------------|
| HeadVolt | 18.52 | | CHD-Titan Standard 1 7/16" Cable Head | 1.02 | 1.44 | 1.00 |
| Temp | 15.67 | | Centralizer-2.75_Overbody | 1.67 | 3.12 | 5.00 |
| WVFS8 | 13.44 | | RBT-Probe275T (2.75") Probe 2.75" Radial with Integral Temperature Sub | 9.39 | 2.75 | 90.00 |
| WVFS7 | 13.44 | | | | | |
| WVFS6 | 13.44 | | | | | |
| WVFS5 | 13.44 | | | | | |
| WVFS4 | 13.44 | | | | | |
| WVFS3 | 13.44 | | | | | |
| WVFS2 | 13.44 | | | | | |
| WVFS1 | 13.44 | | | | | |
| WVF3FT | 13.44 | | | | | |
| WVF5FT | 12.44 | | | | | |
| WVFCAL | 9.19 | | | | | |
| HEADVOLT | 9.19 | | | | | |
| CCL | 7.56 | | Centralizer-2.75_Overbody | 1.67 | 3.12 | 5.00 |
| GR | 6.23 | GR-Probe (275) Probe 2 3/4" Logging Gamma Ray | 5.50 | 2.75 | 57.00 | |
| | | Centralizers-5419-312-S600 Titan 3 1/8" Adjustable Centralizer | 3.42 | 3.13 | 34.00 | |
| | | Bull_Plug-1_7/16_GO Titan 1 7/16" Female Bull Plug | 0.27 | 1.44 | 1.00 | |

Total length: 19.60 ft
Total weight: 193.00 lb
O.D.: 3.13 in



| | |
|---------|------------------|
| Company | Antero Resources |
| Well | Mamba 2H |
| Field | Rabbit Ears |
| County | Tyler |
| State | WV |

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