

**RADIAL CEMENT BONG
GAMMA RAY C.C.L.V.D.L.
LOG**

Company OCCIDENTAL PETROLEUM INC.
Well BUUM 11-7A
Field WATTENBERG
County WELD State COLORADO

Company OCCIDENTAL PETROLEUM INC.
Well BUUM 11-7A
Field WATTENBERG
County WELD State COLORADO

| | | |
|------------------------|------------------|-------------------|
| Date | 29 JANUARY, 2024 | |
| Run Number | ONE | |
| Depth Driller | 8005' | |
| Depth Logger | 6550' | |
| Bottom Logged Interval | 6547' | |
| Top Log Interval | SURFACE | |
| Casing Size | 4.5" | |
| Type Fluid | WATER | |
| Density / Viscosity | N/A | |
| Max. Recorded Temp. | N/A | |
| Estimated Cement Top | EST CEM T.B.D. | |
| Time Well Ready | R.O.A. | |
| Time Logger on Bottom | 8:15AM | |
| Equipment Number | 200128 | |
| Location | STERLING, CO | |
| Recorded By | ADAM GARDNER | |
| Witnessed By | NATE WINDHOLZ | |
| Borehole Record | | |
| Run Number | Bit | From To |
| Tubing Record | | |
| Run Number | Size | Weight From To |
| Casing Record | Size | Wgt/Ft Top Bottom |
| Surface String | 8.625" | 24# 0' 898' |
| Prot. String | | |
| Production String | 4.5" | 11.6# 0' 8005' |
| Liner | | |

<<< Fold Here >>>

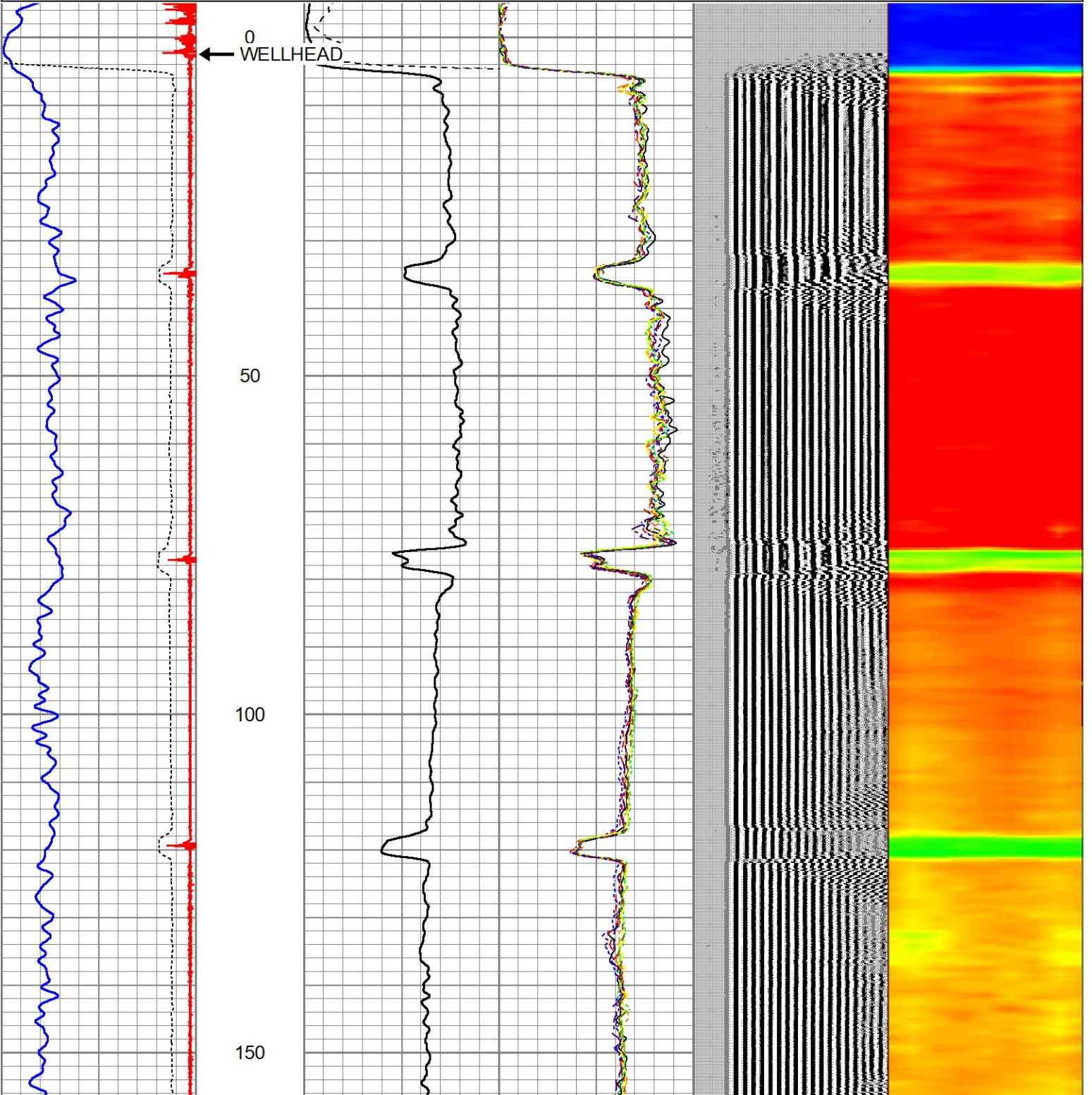
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

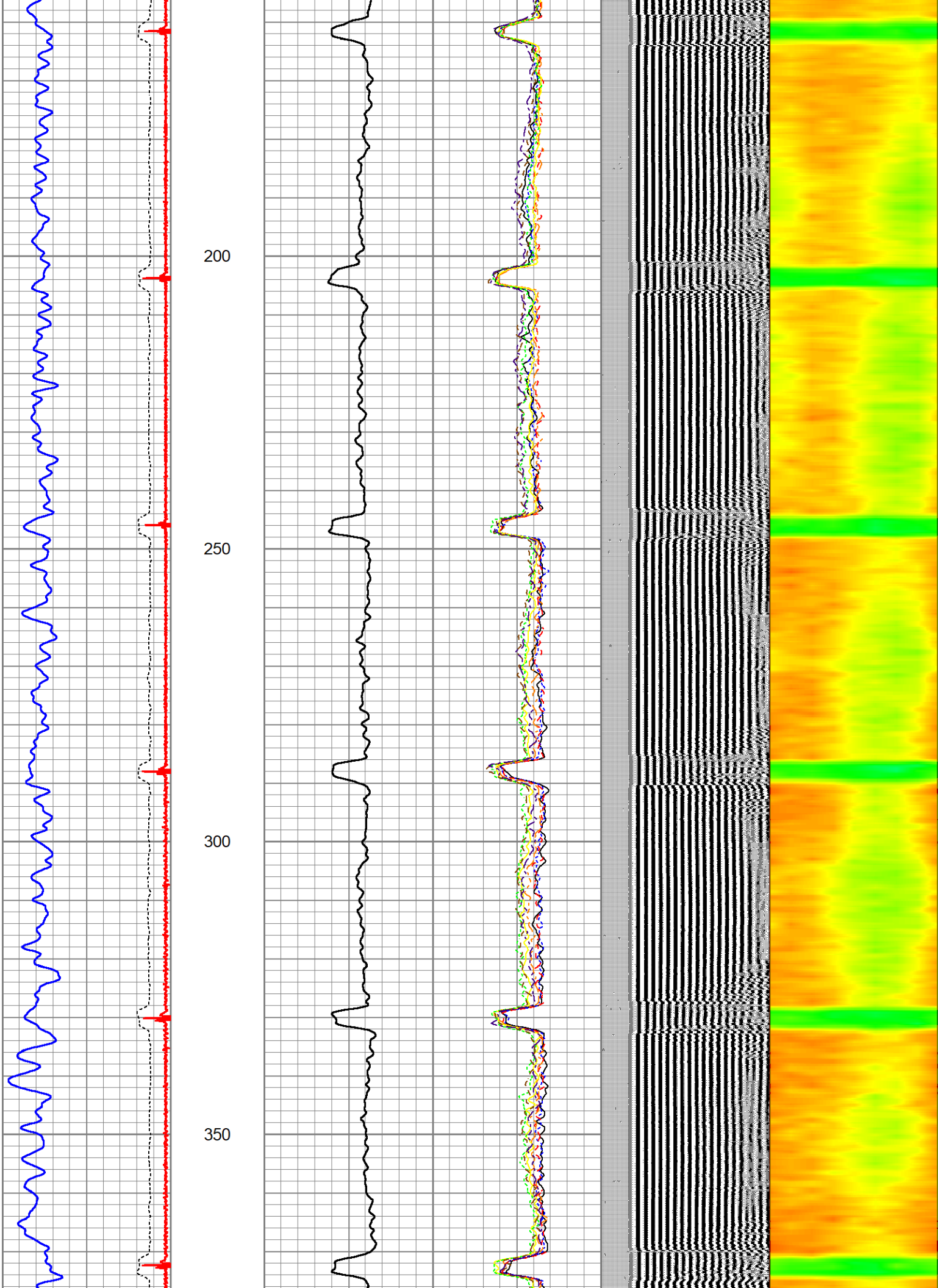
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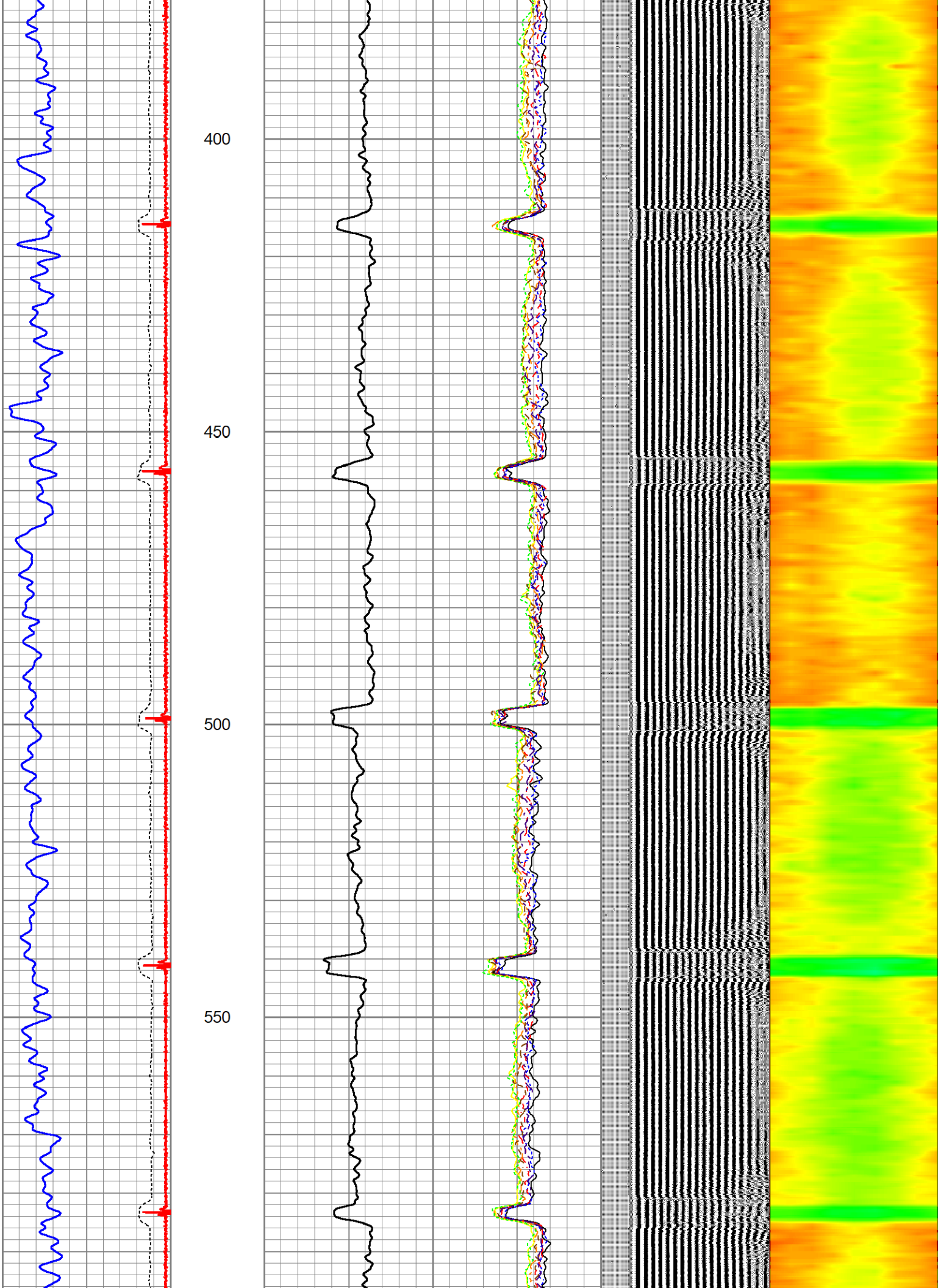
LOG CORRELATED TO SCHLUMBERGER DATED 7 FEB 2004
SHORT JOINT @ 5229'-5261'
EST CEMENT TOP T.B.D.

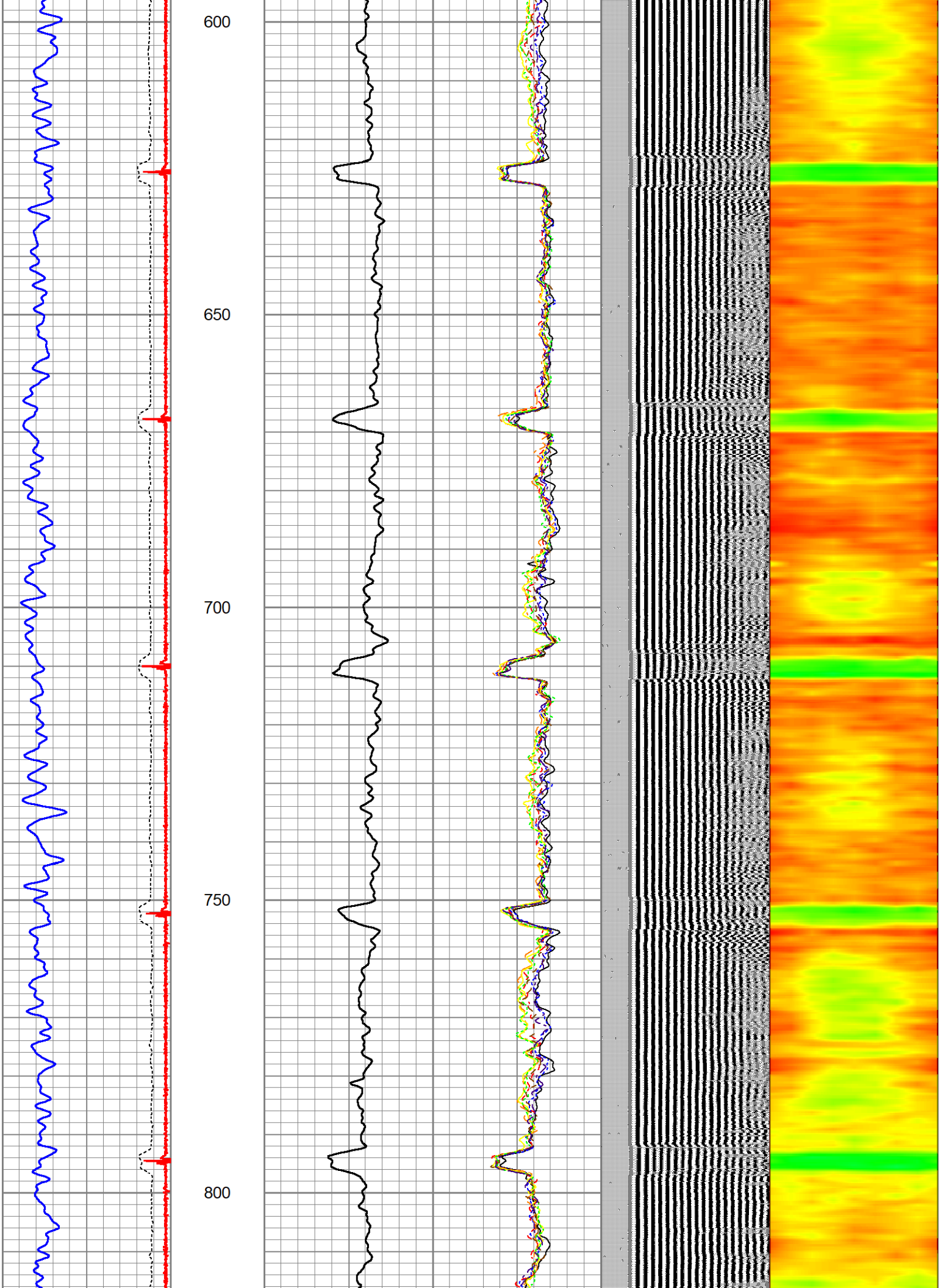
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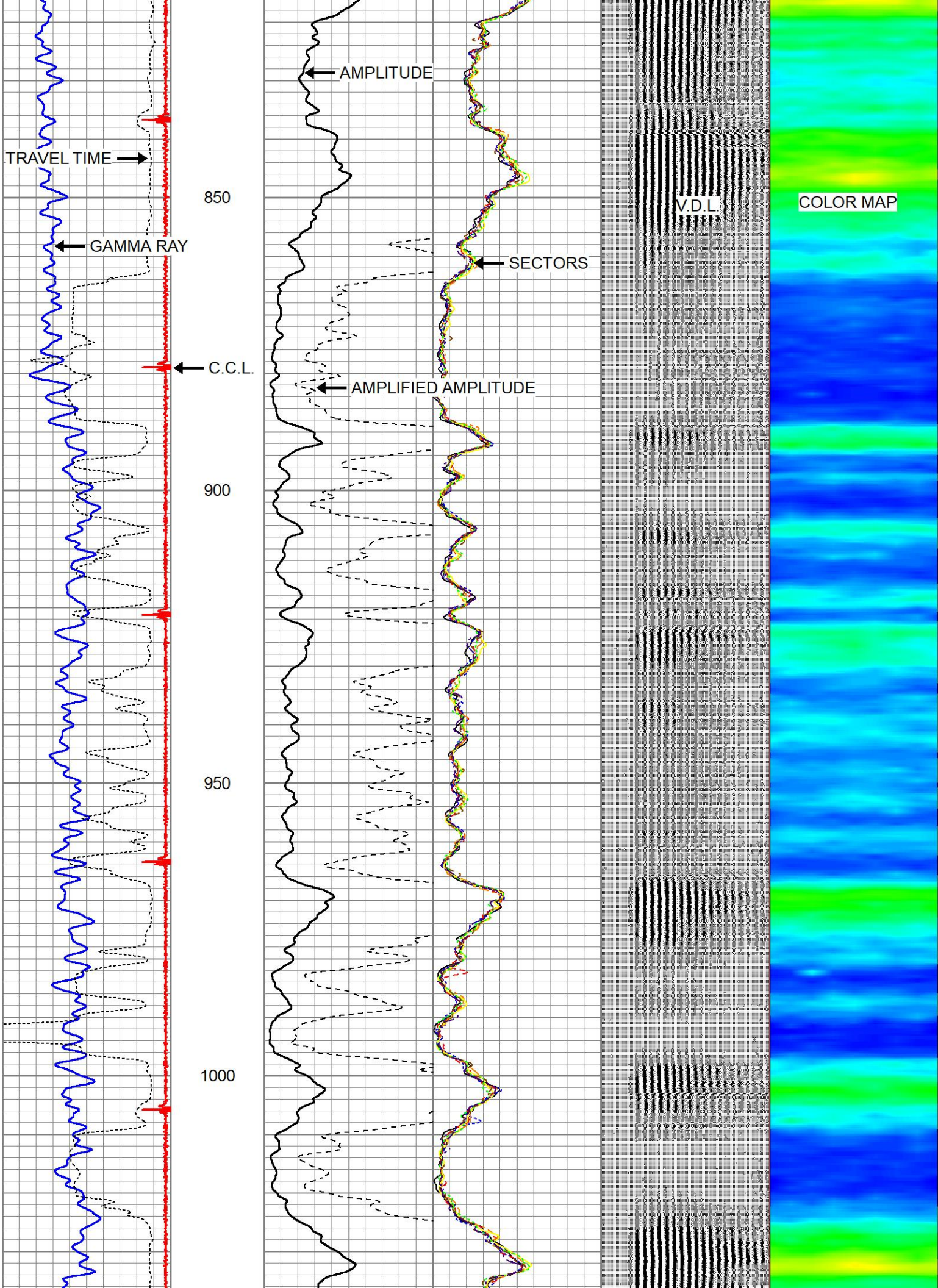
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| 50 | CCL | -1.5 | 0 | AMP (mV) | 100 | 0 | AMPS1 | 100 | 200 | VDL (usec) | 1200 | 1 | RADIAL MAP | 8 |
| 0 | GR (GAPI) | 150 | AMPLIFIED AMP3 | | | 0 | AMPS2 | 100 | | | | | | |
| 340 | TT3 (usec) | 244 | 0 | (mV) | 20 | 0 | AMPS3 | 100 | | | | | | |
| | | | | | | 0 | AMPS4 | 100 | | | | | | |
| | | | | | | 0 | AMPS5 | 100 | | | | | | |
| | | | | | | 0 | AMPS6 | 100 | | | | | | |
| | | | | | | 0 | AMPS7 | 100 | | | | | | |
| | | | | | | 0 | AMPS8 | 100 | | | | | | |

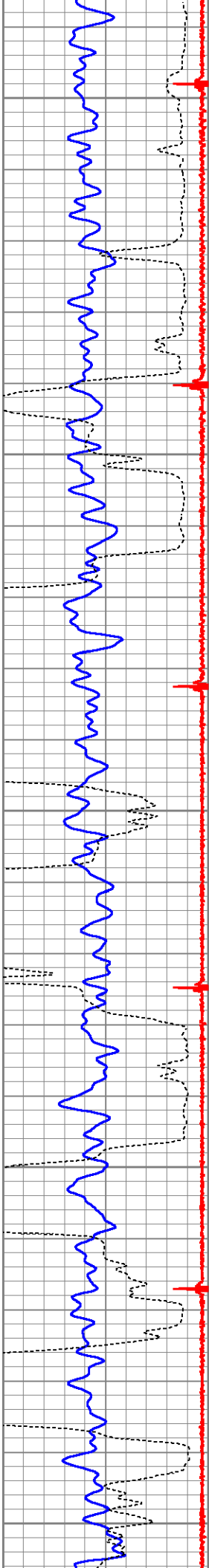




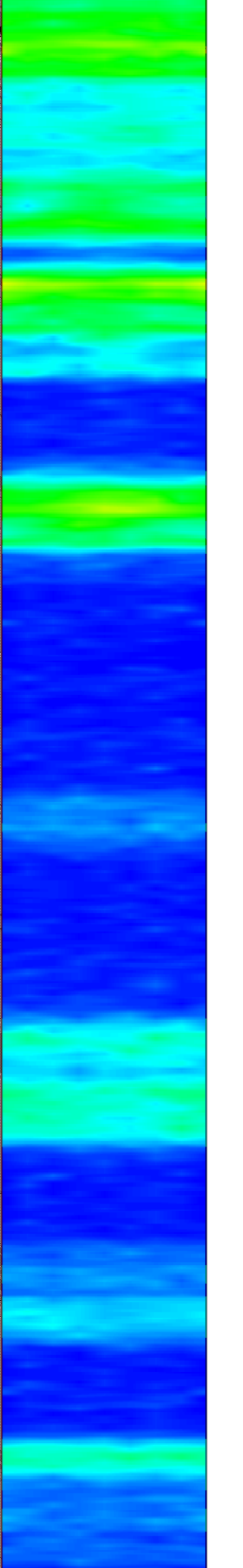
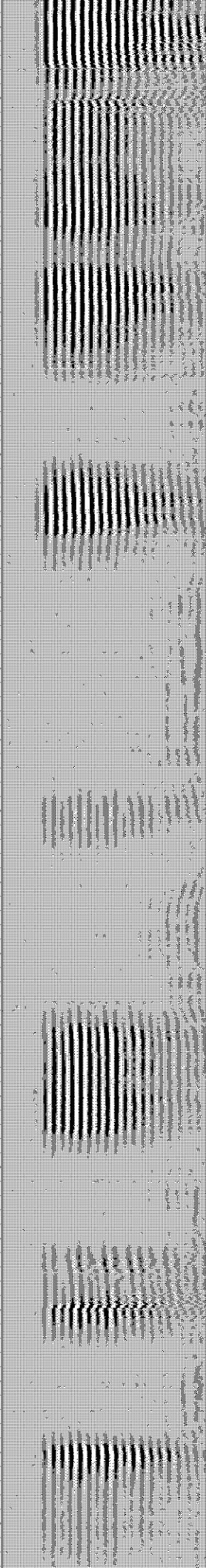
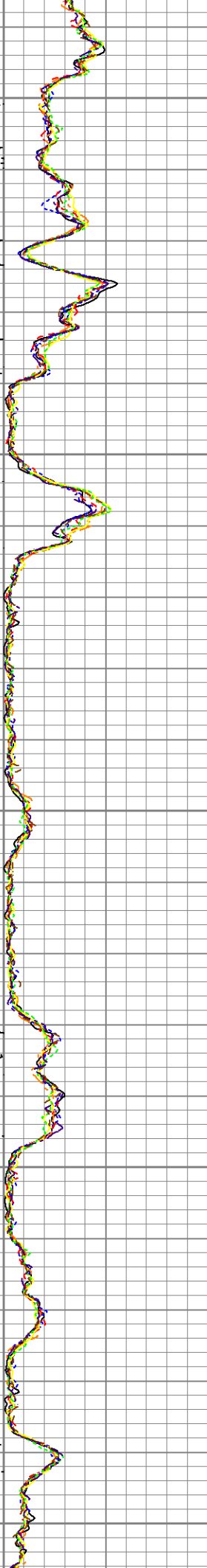
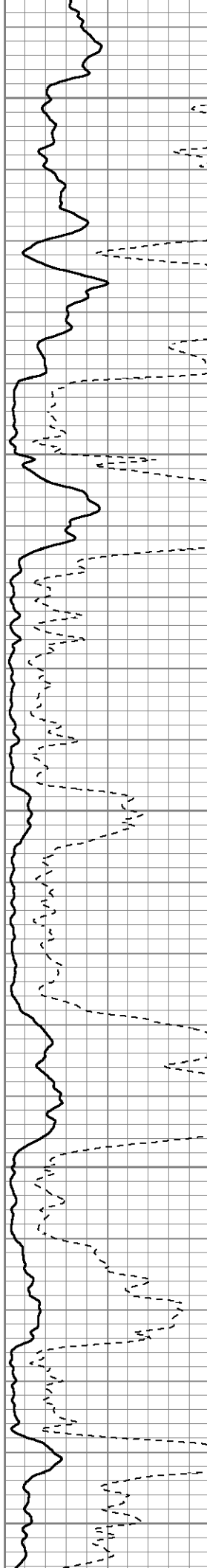


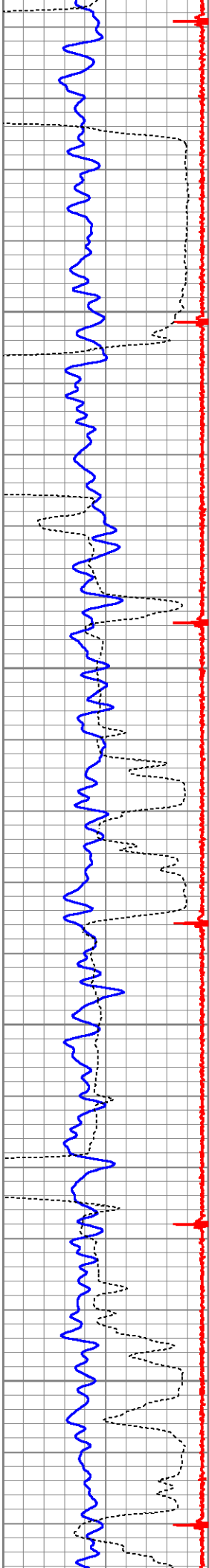






1050
1100
1150
1200
1250



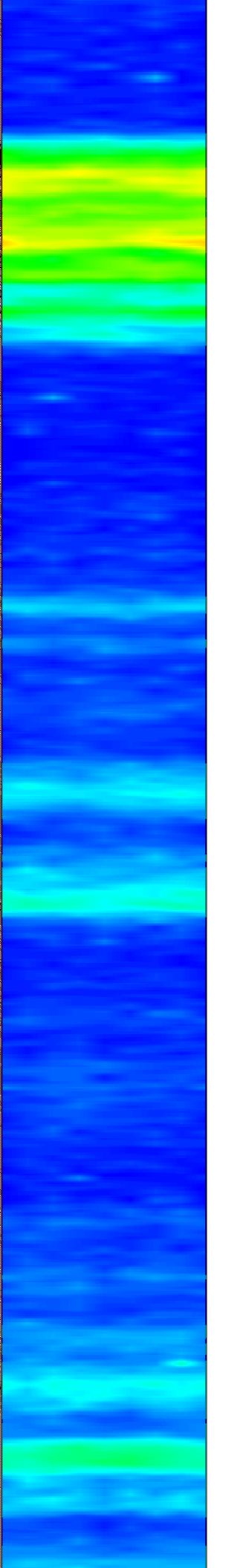
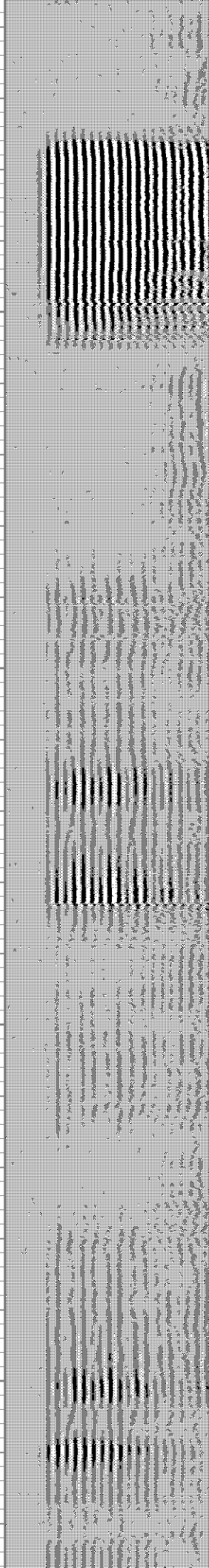
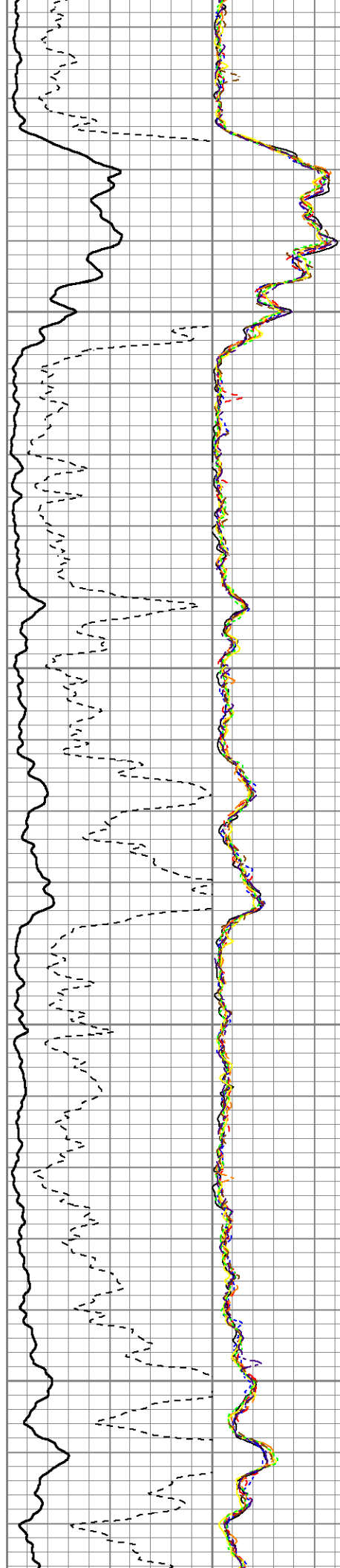


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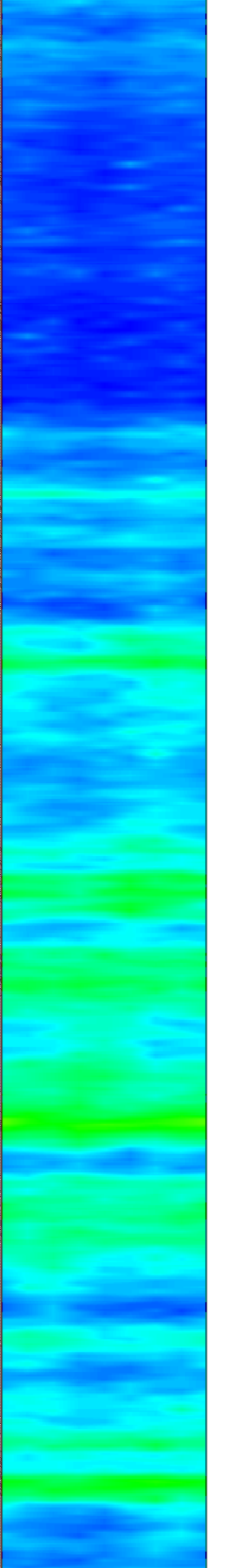
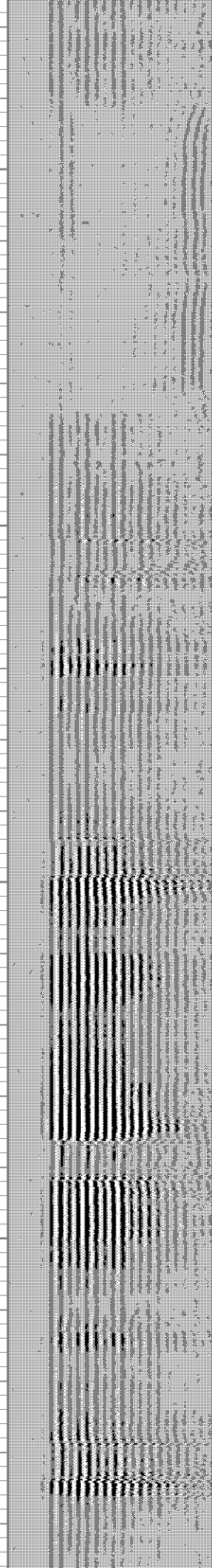
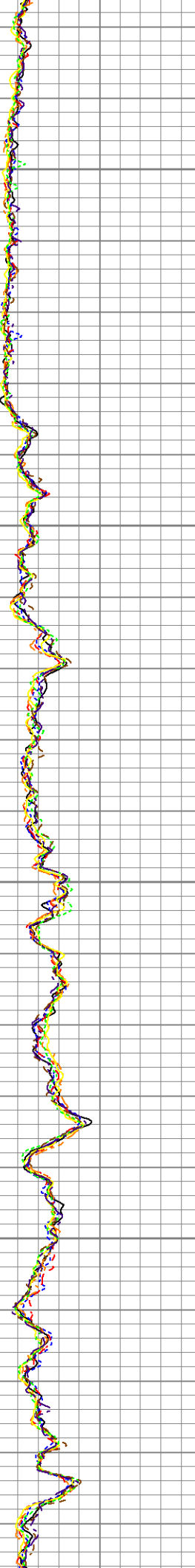
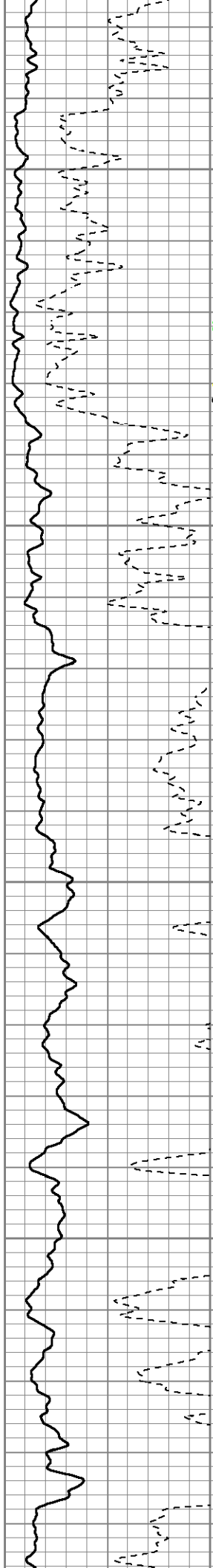


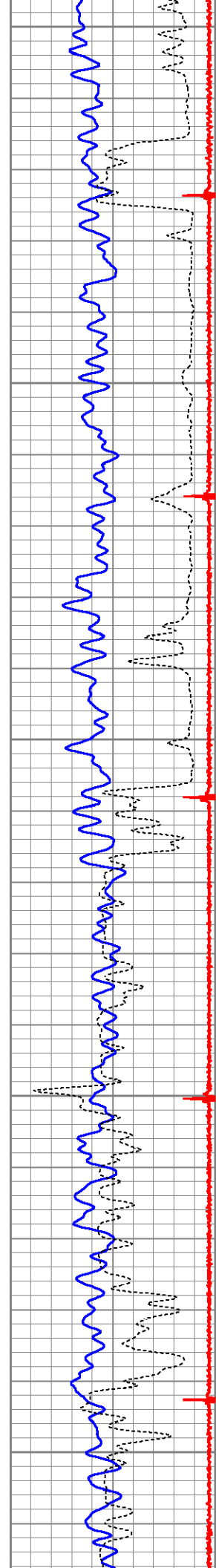
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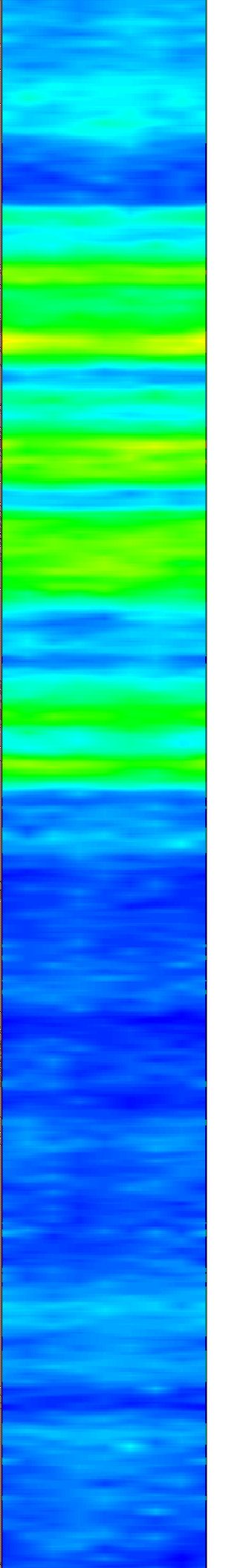
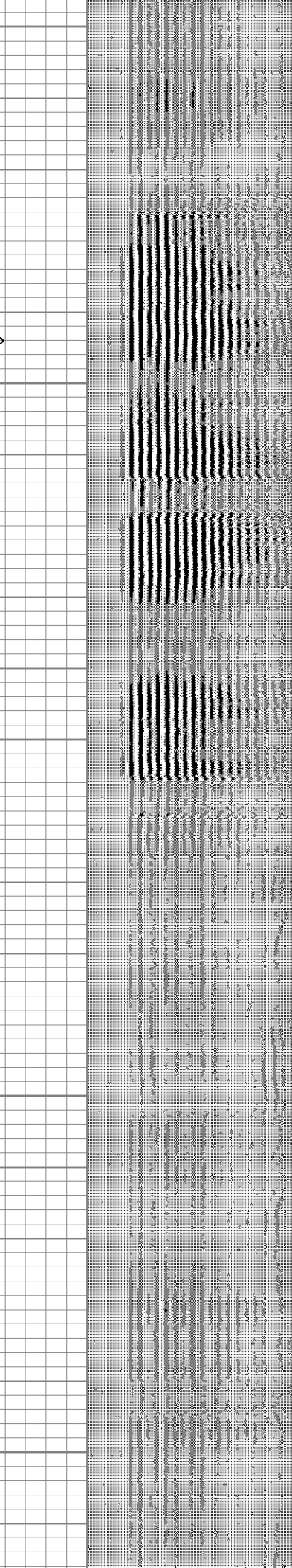
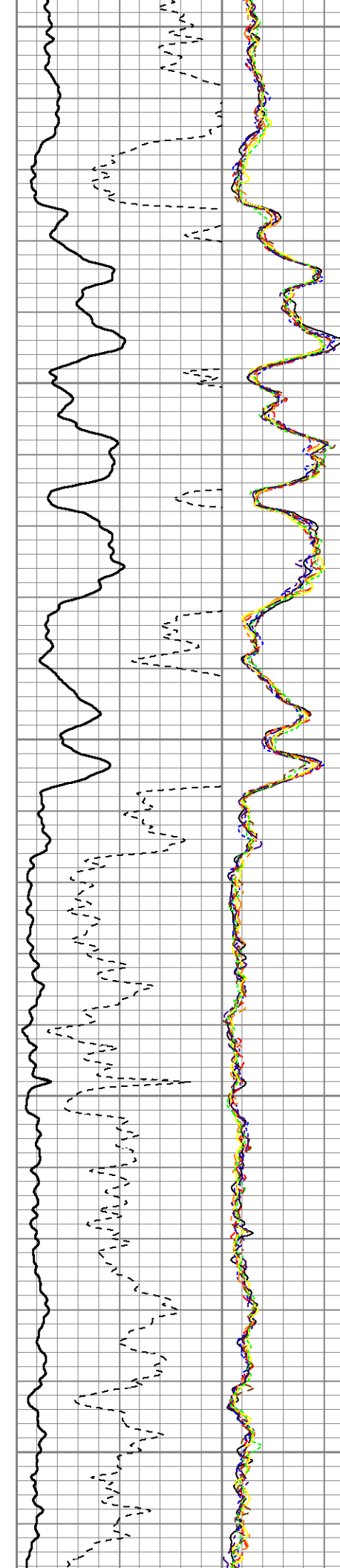
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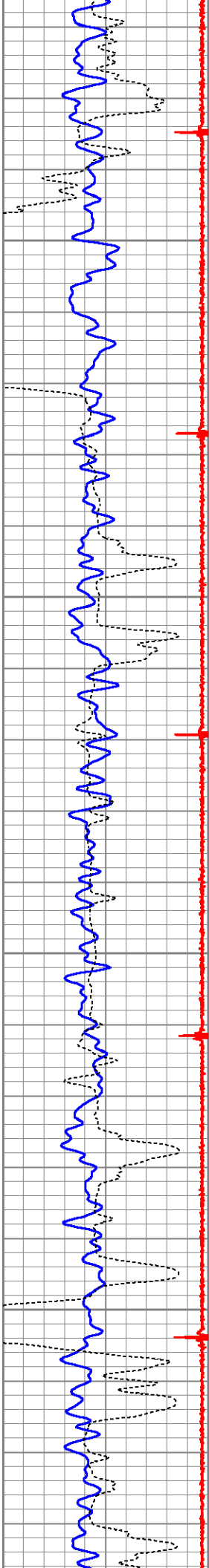
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1700
1750
1800
1850
1900



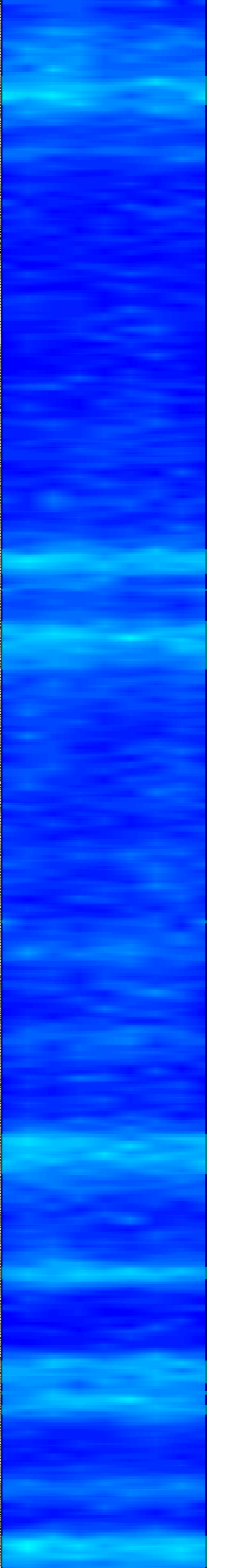
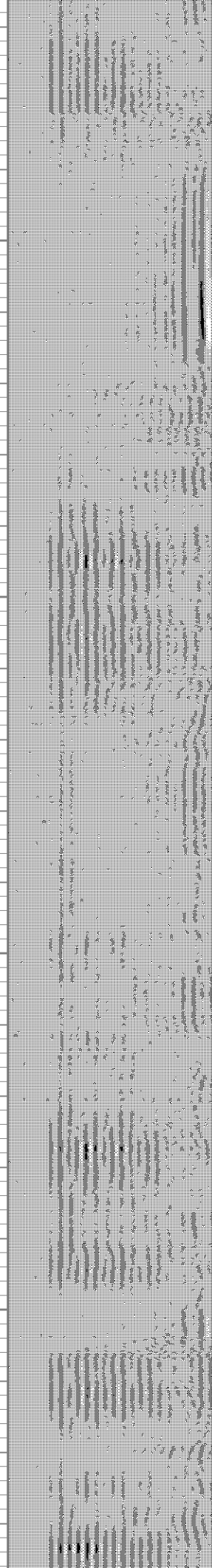
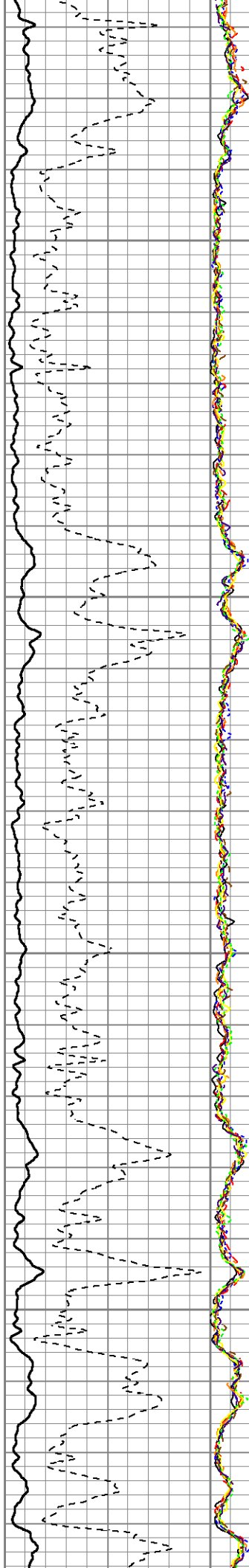


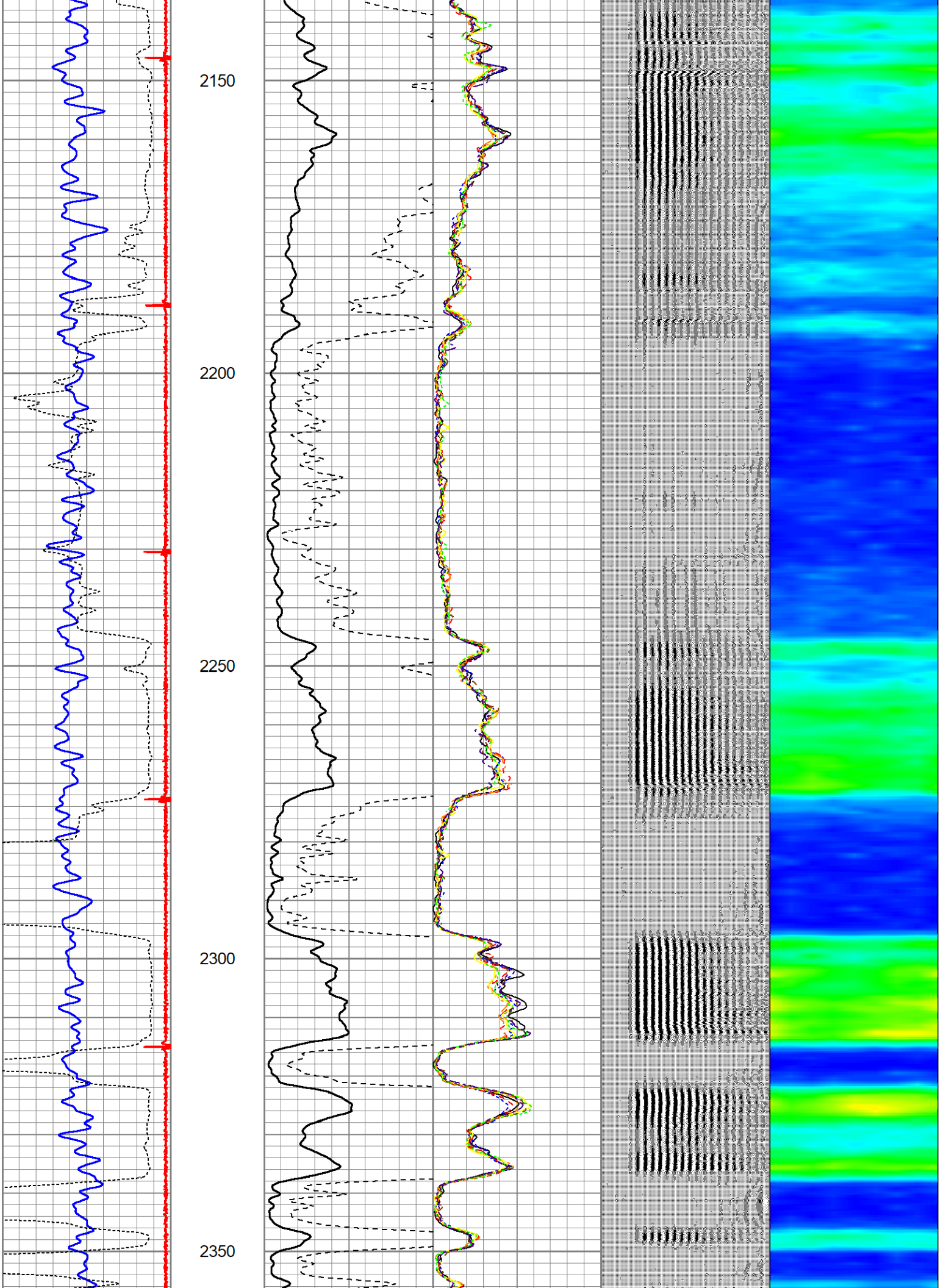
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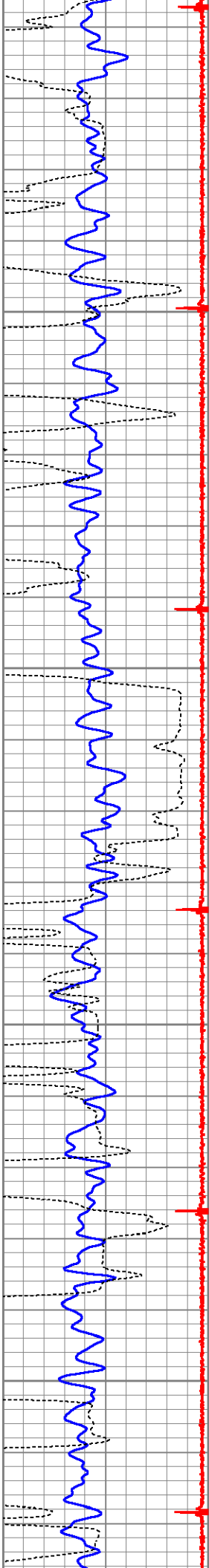
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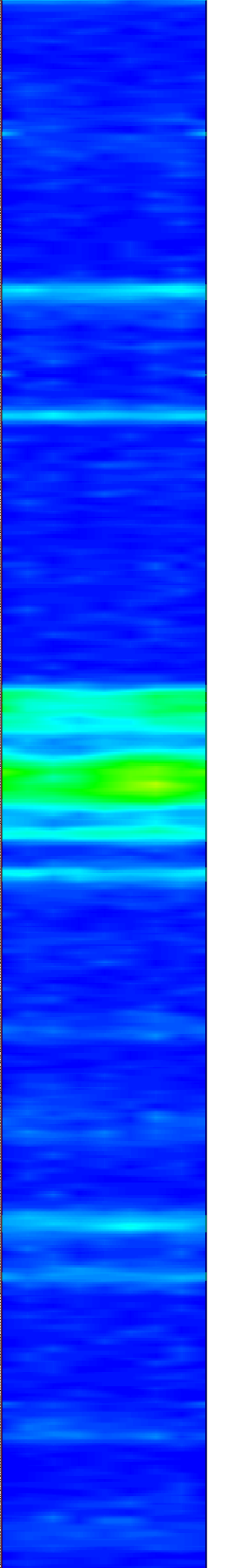
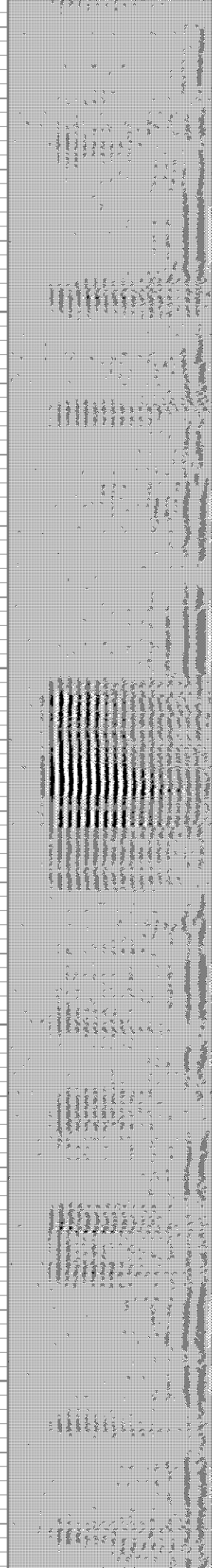
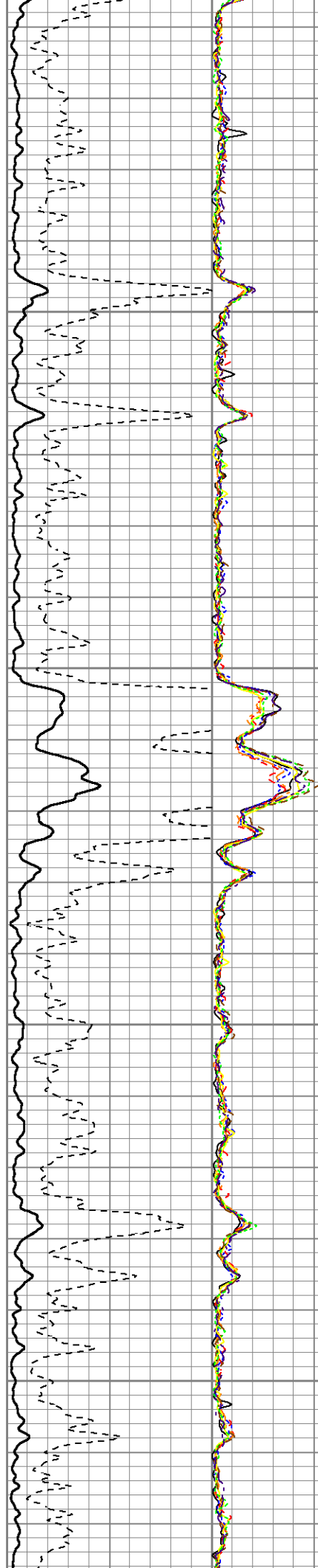


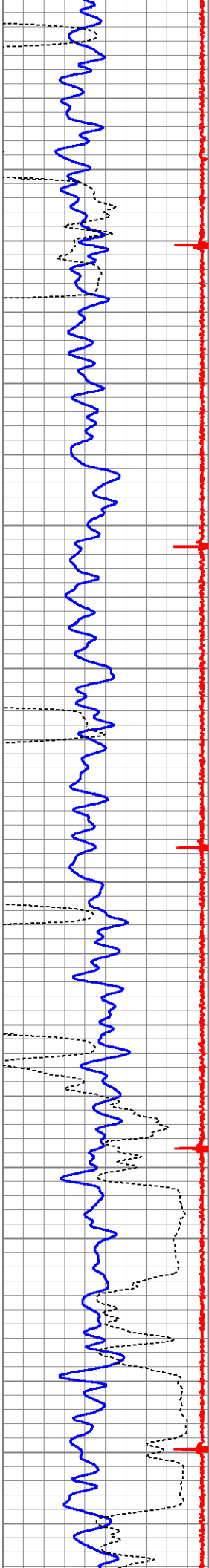
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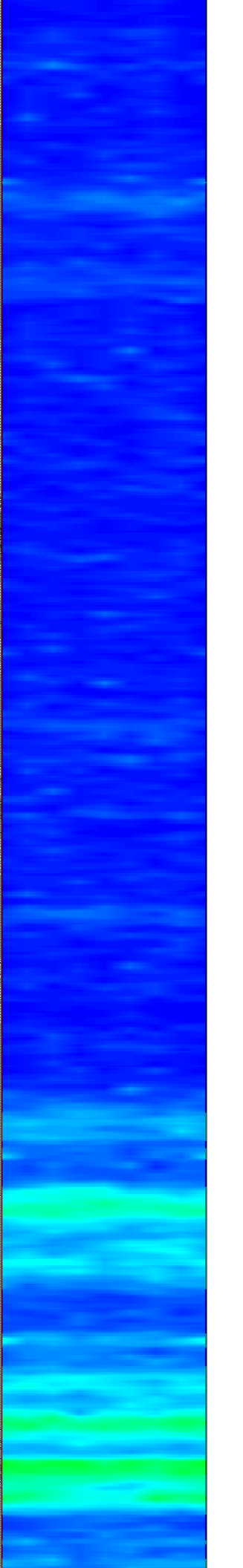
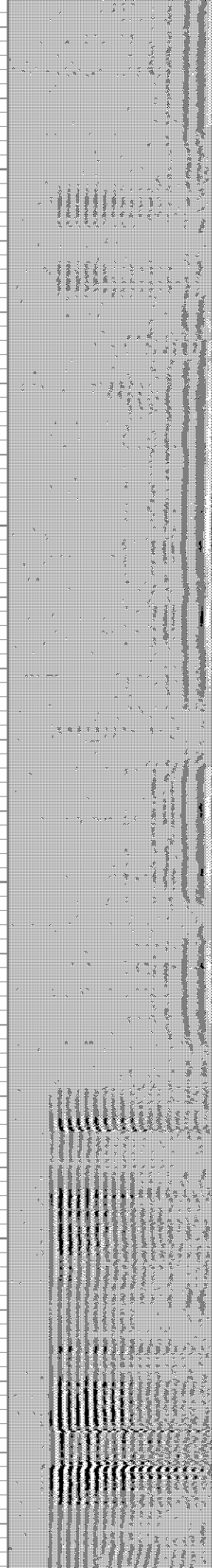
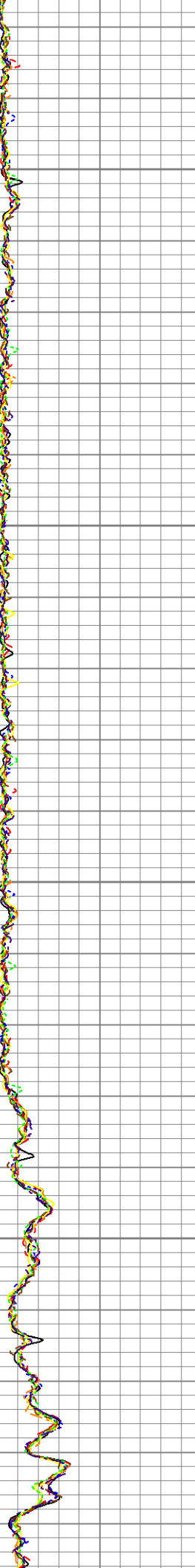
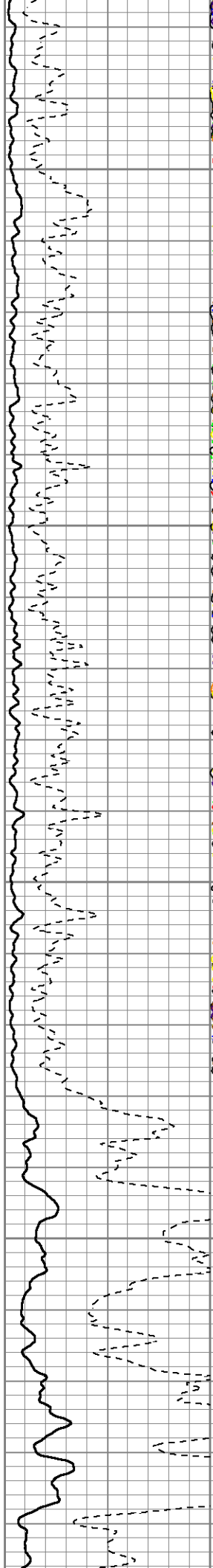


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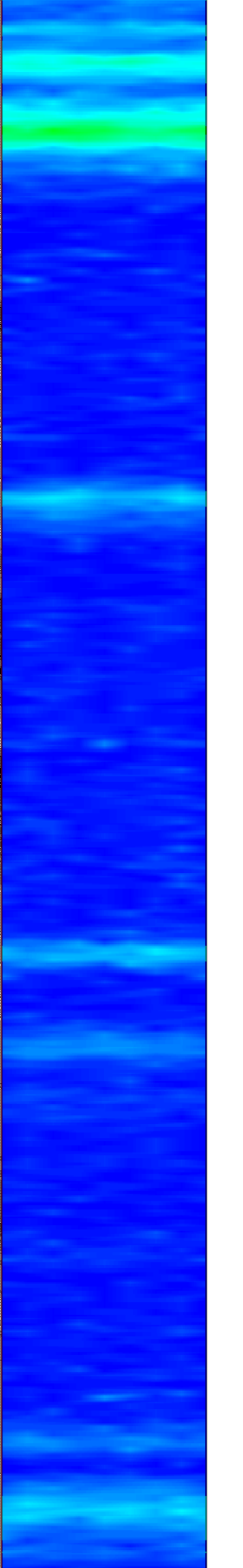
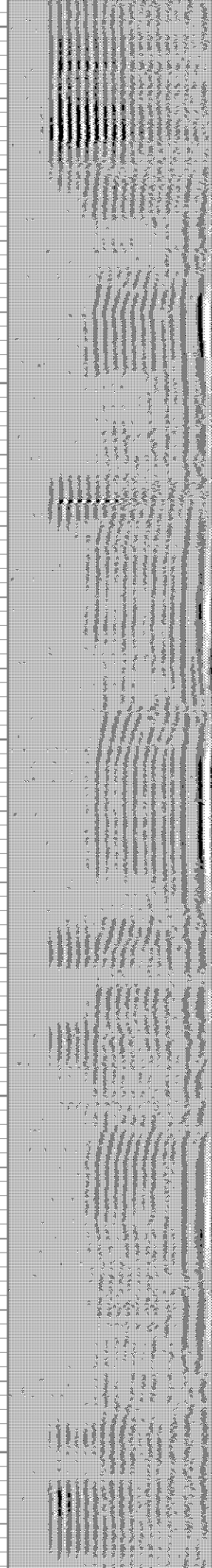
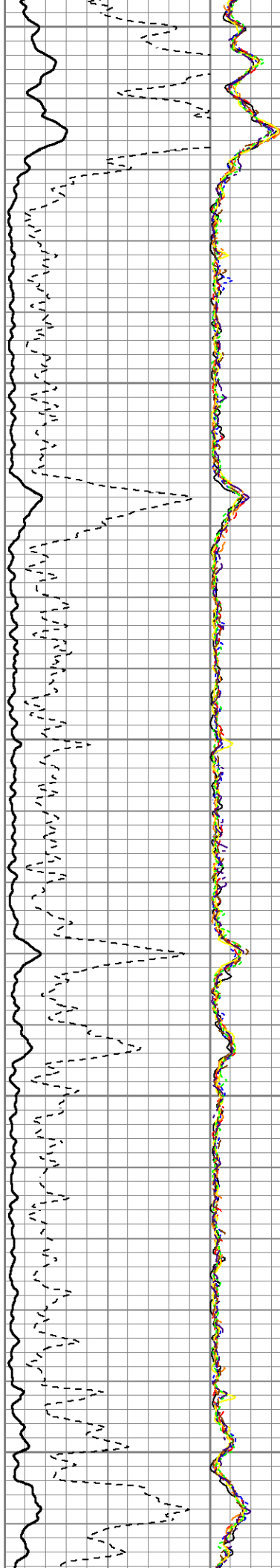
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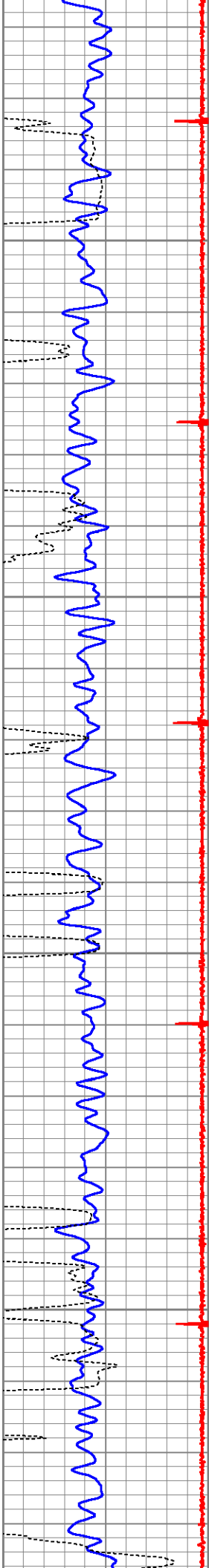
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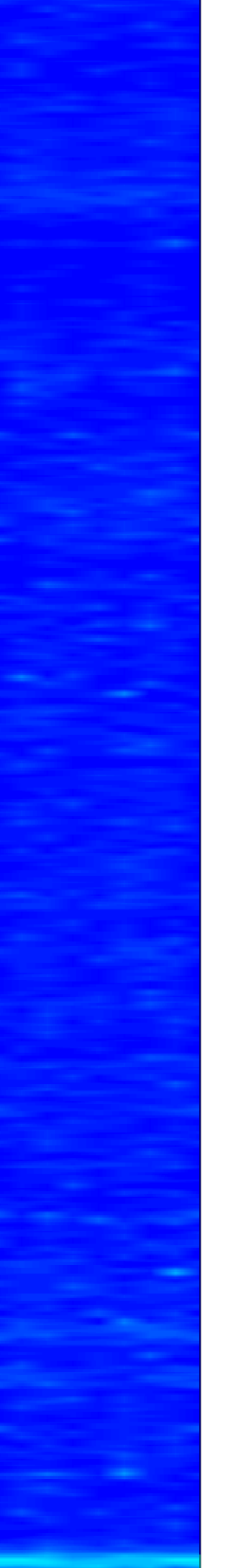
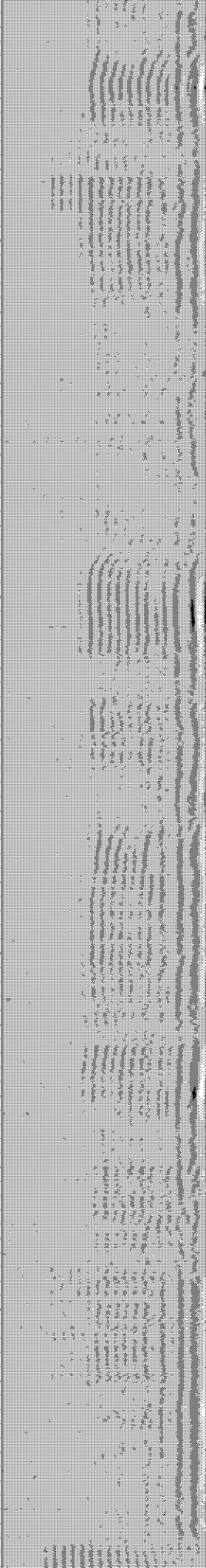
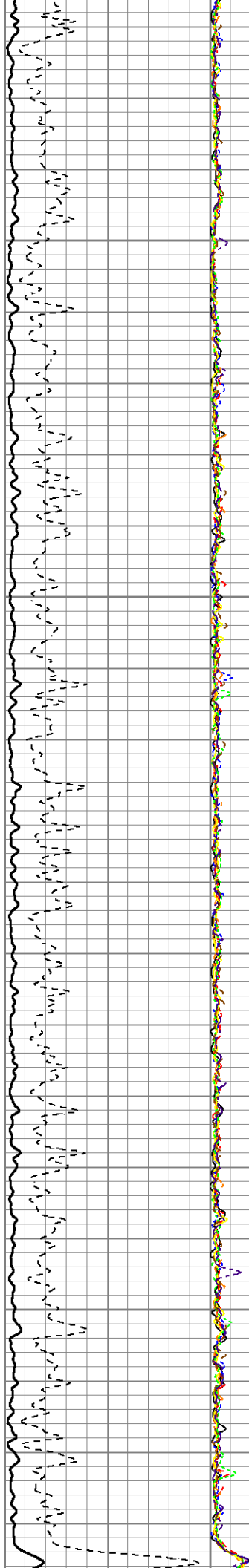


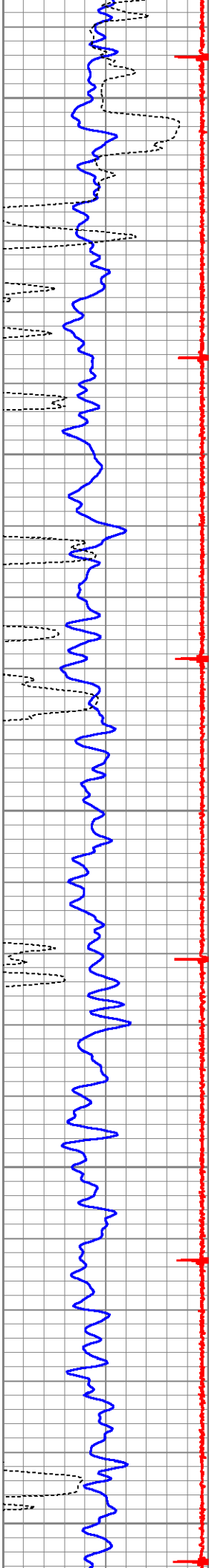
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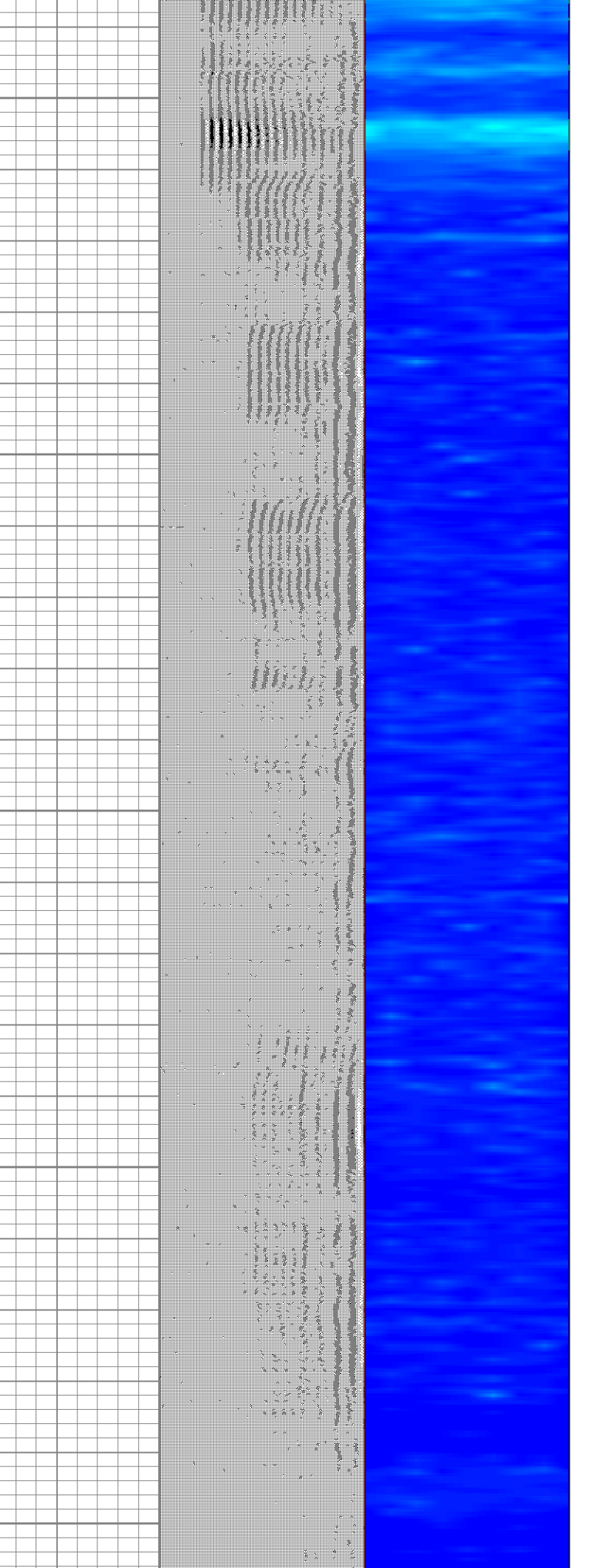
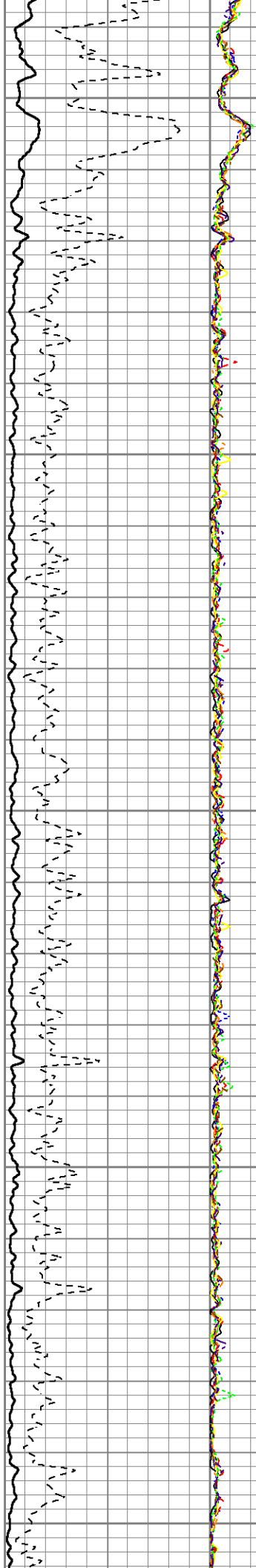
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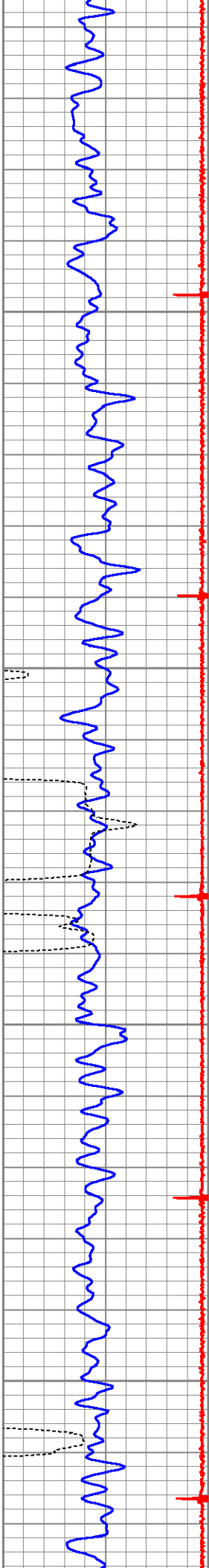
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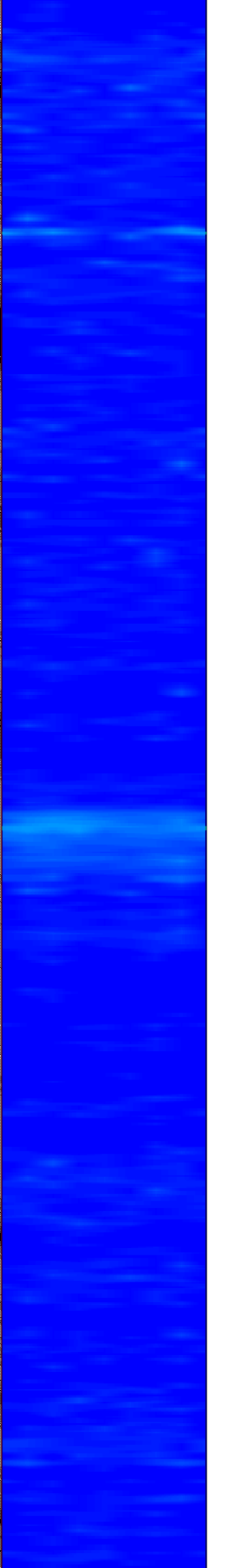
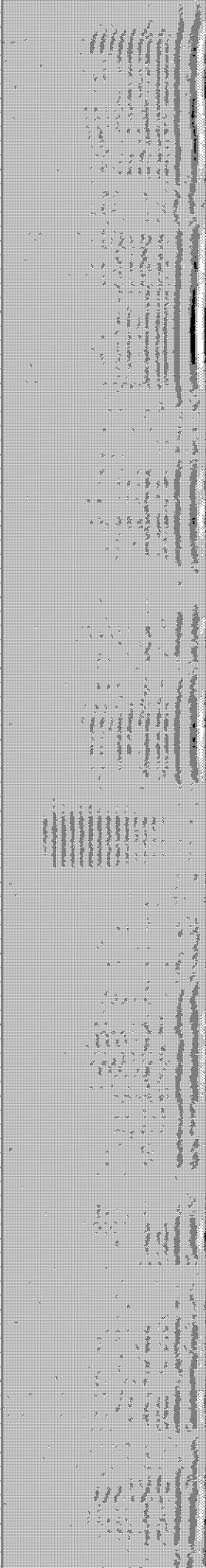
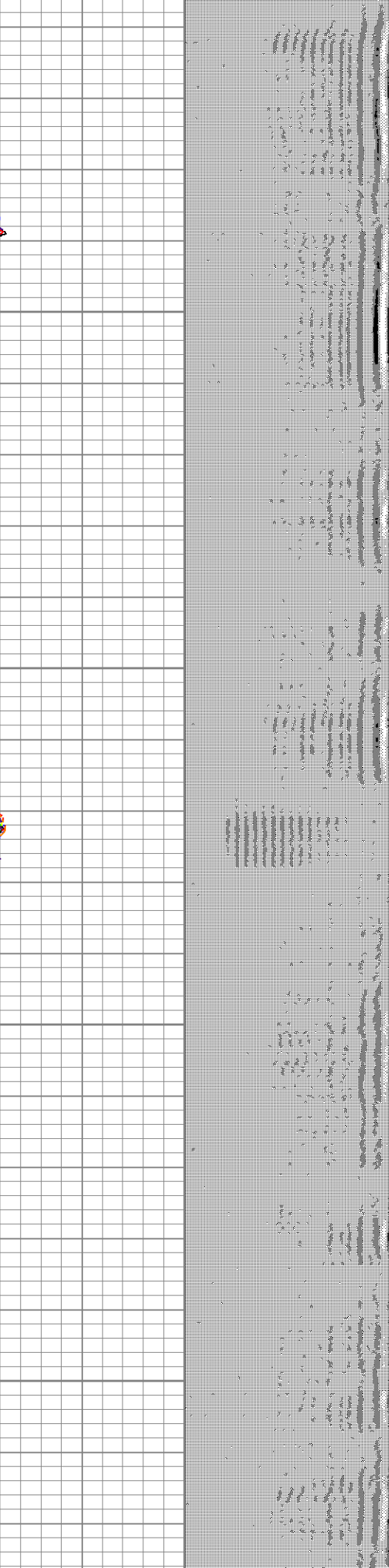
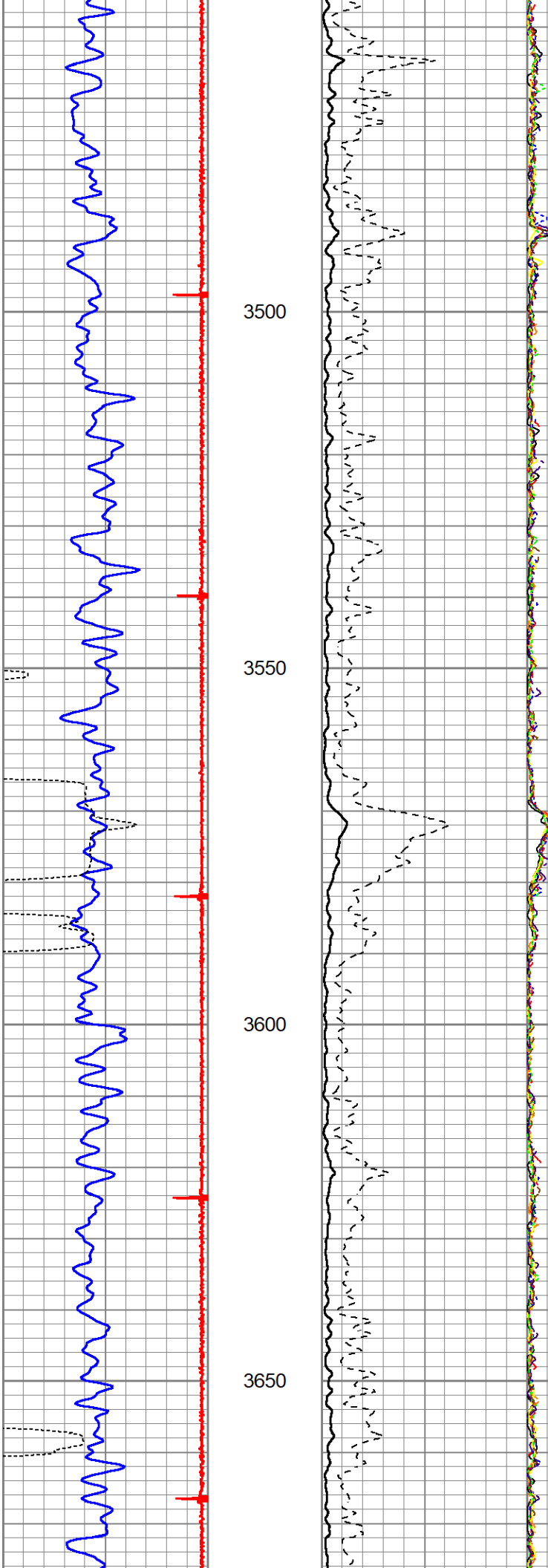


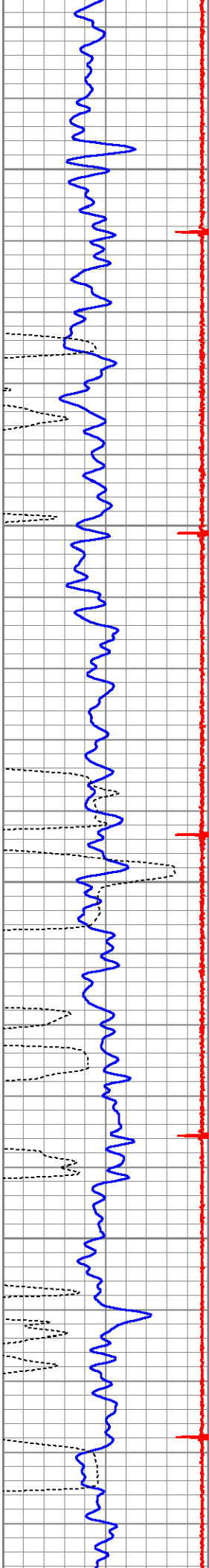
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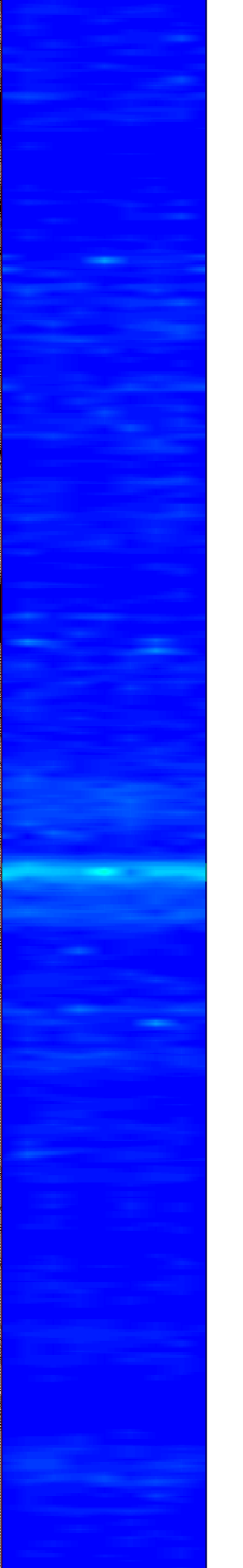
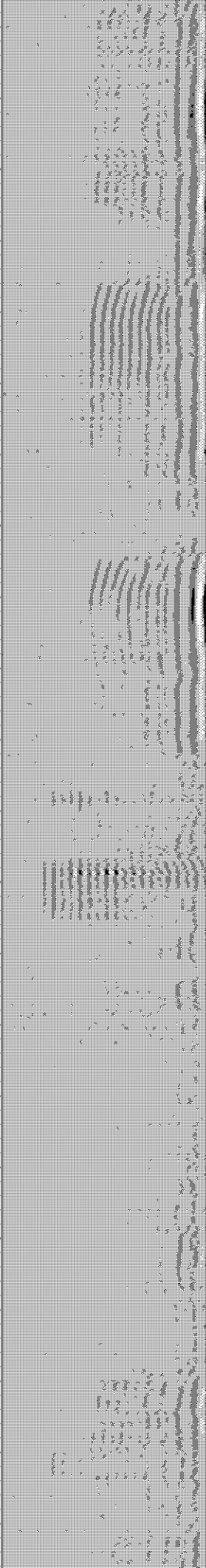
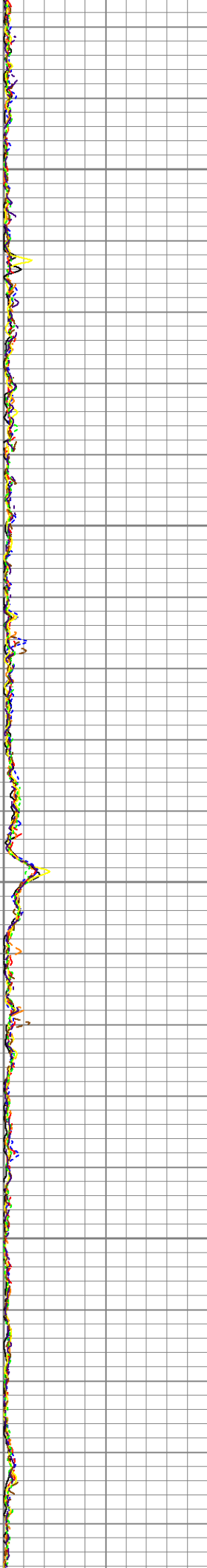
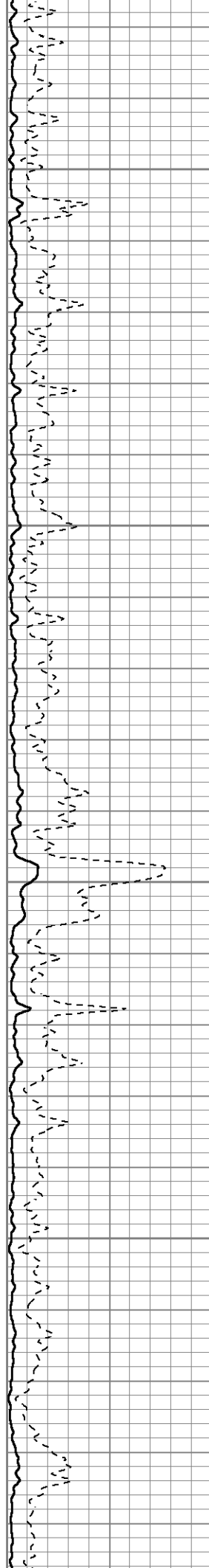


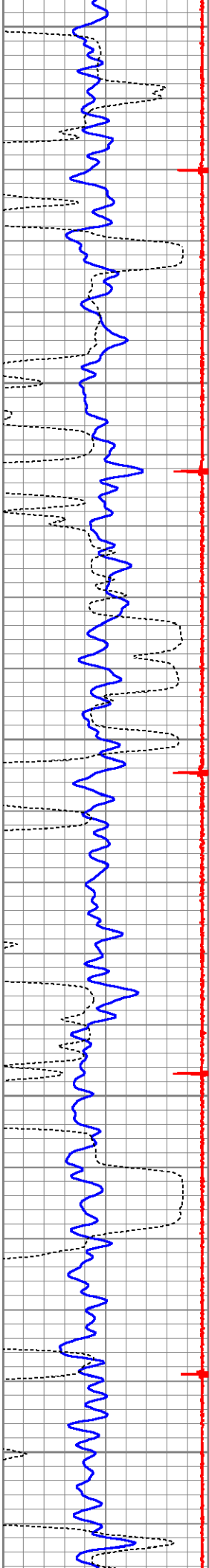
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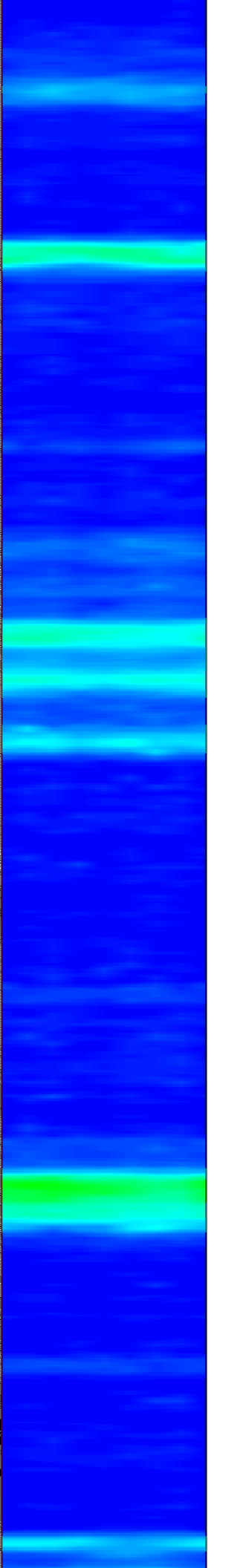
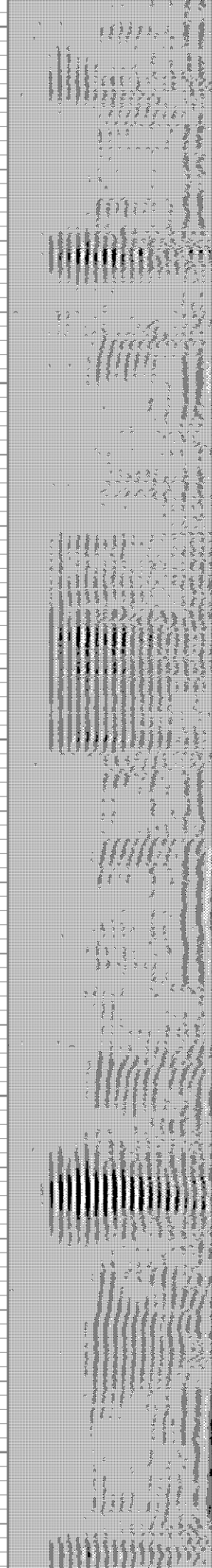
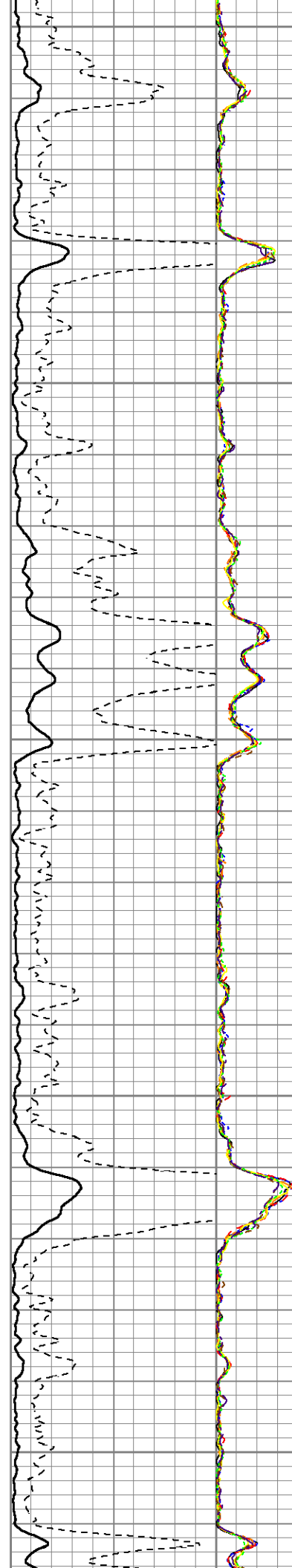
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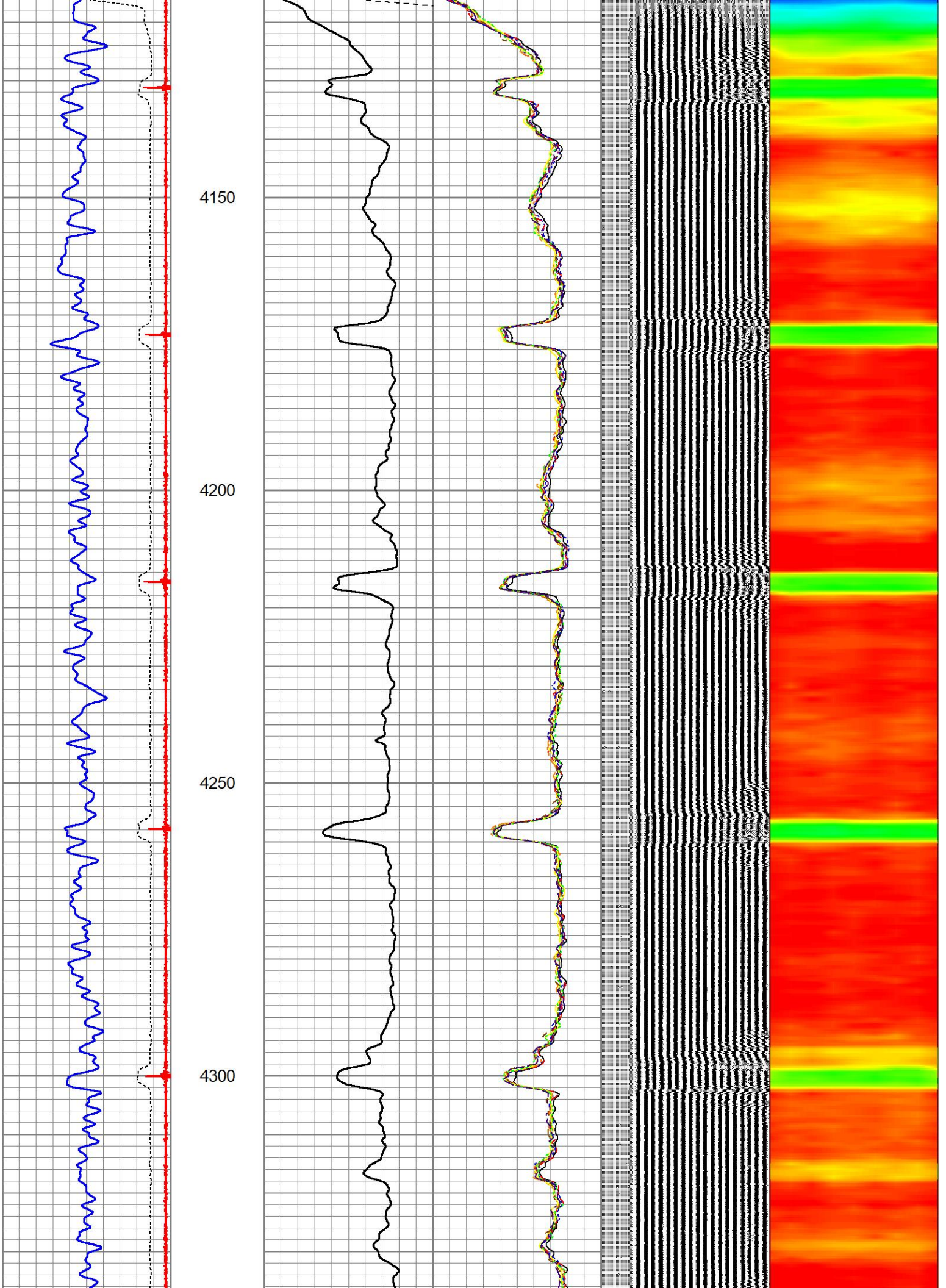
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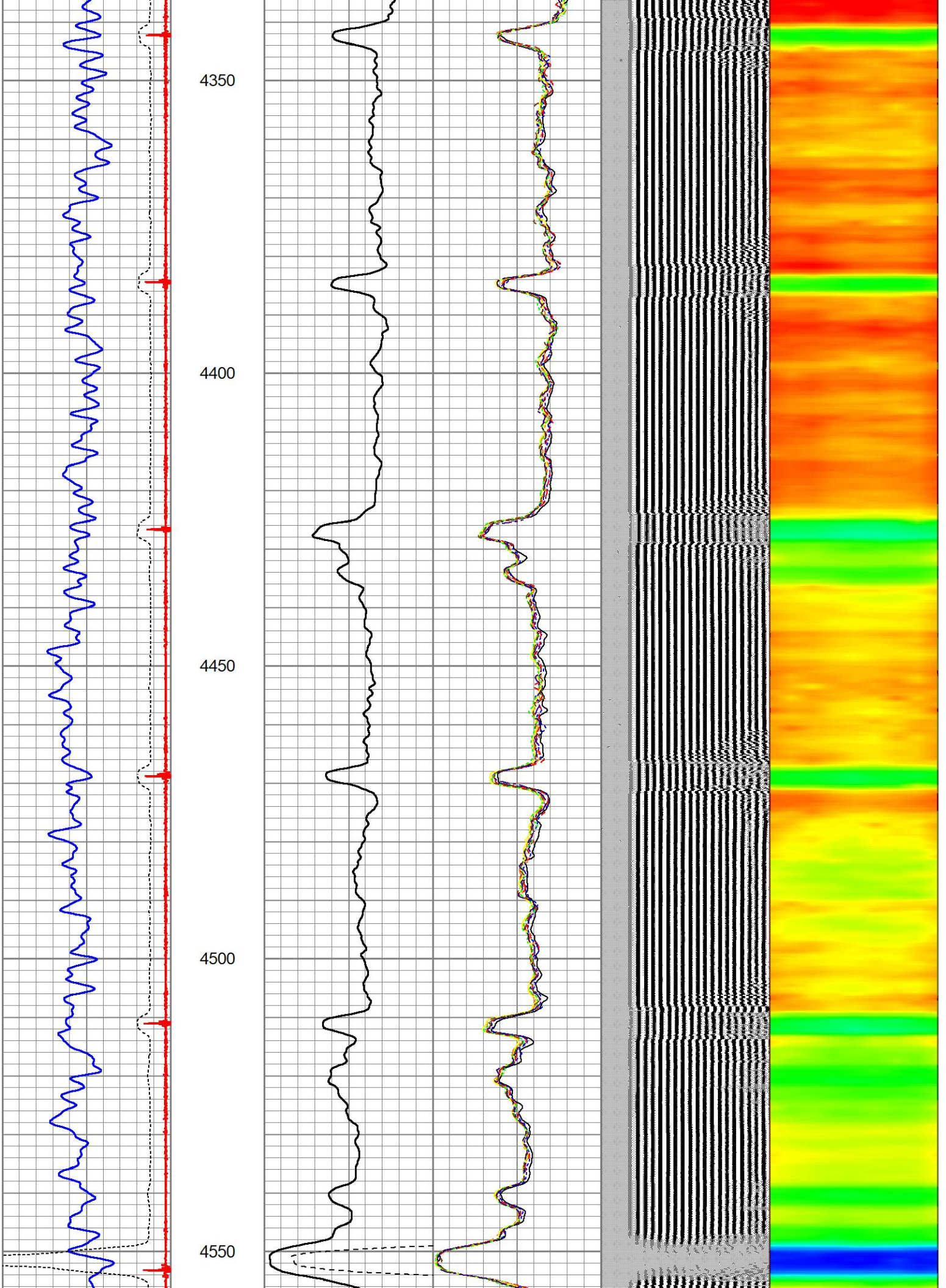
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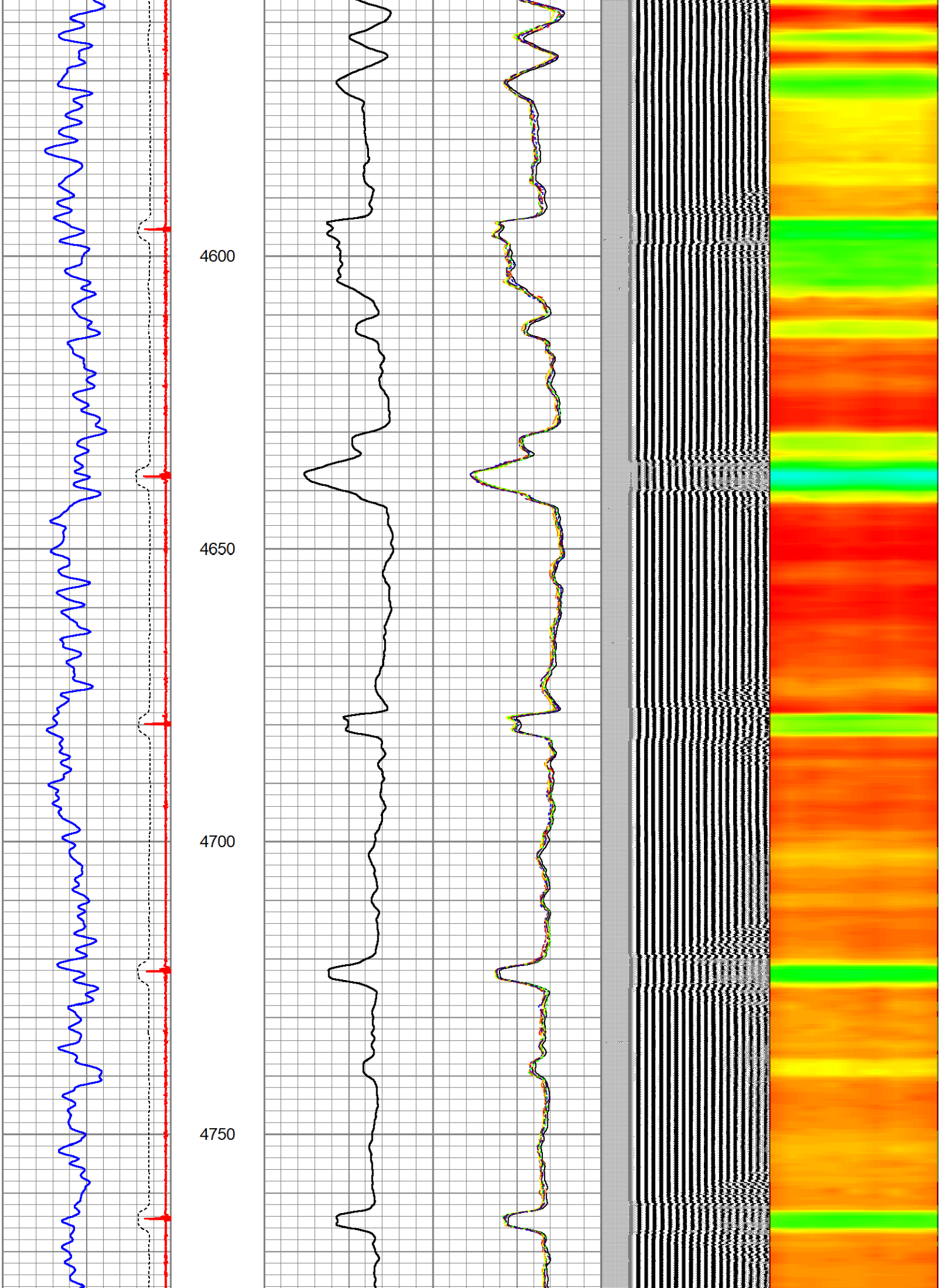
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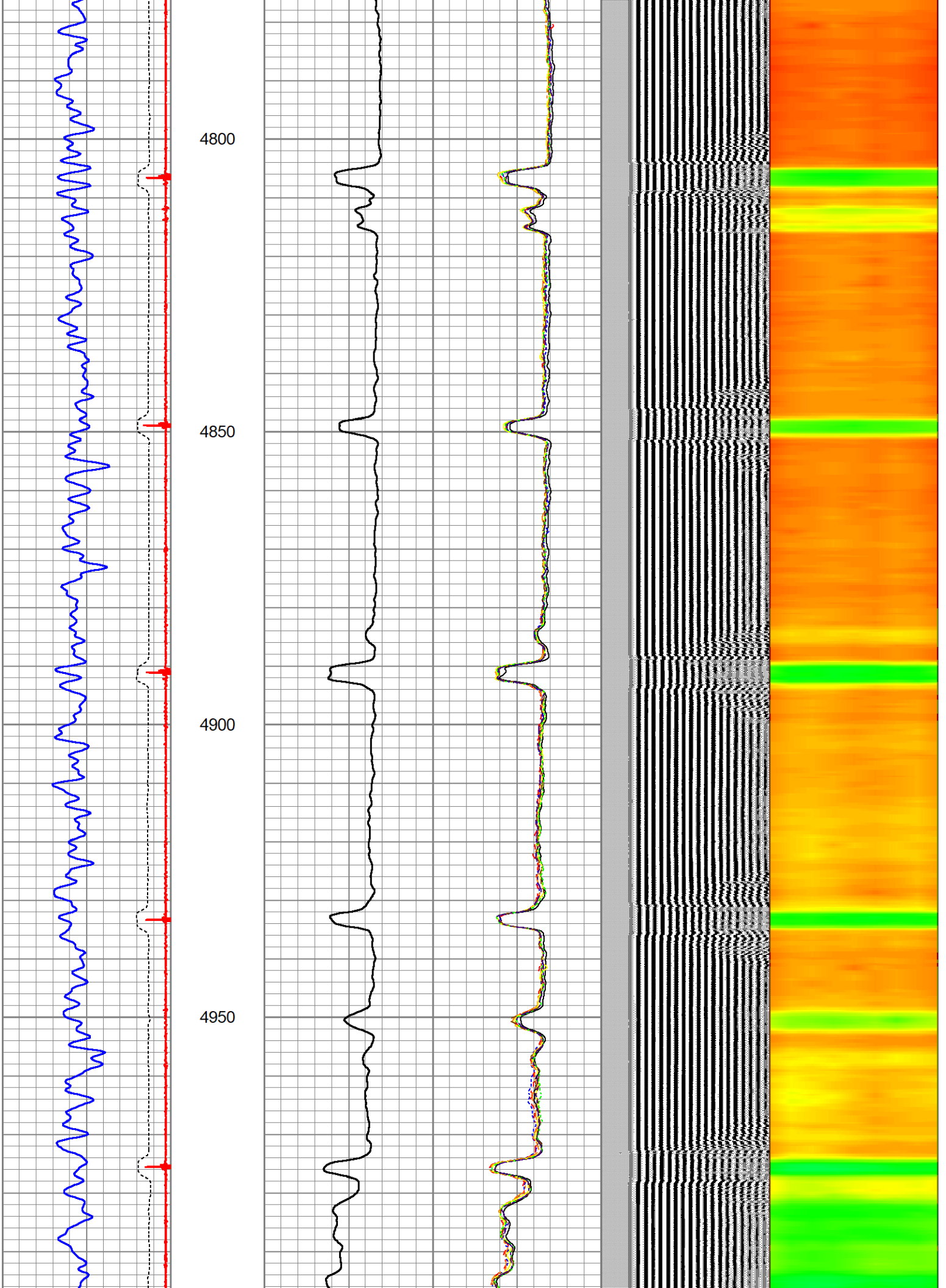
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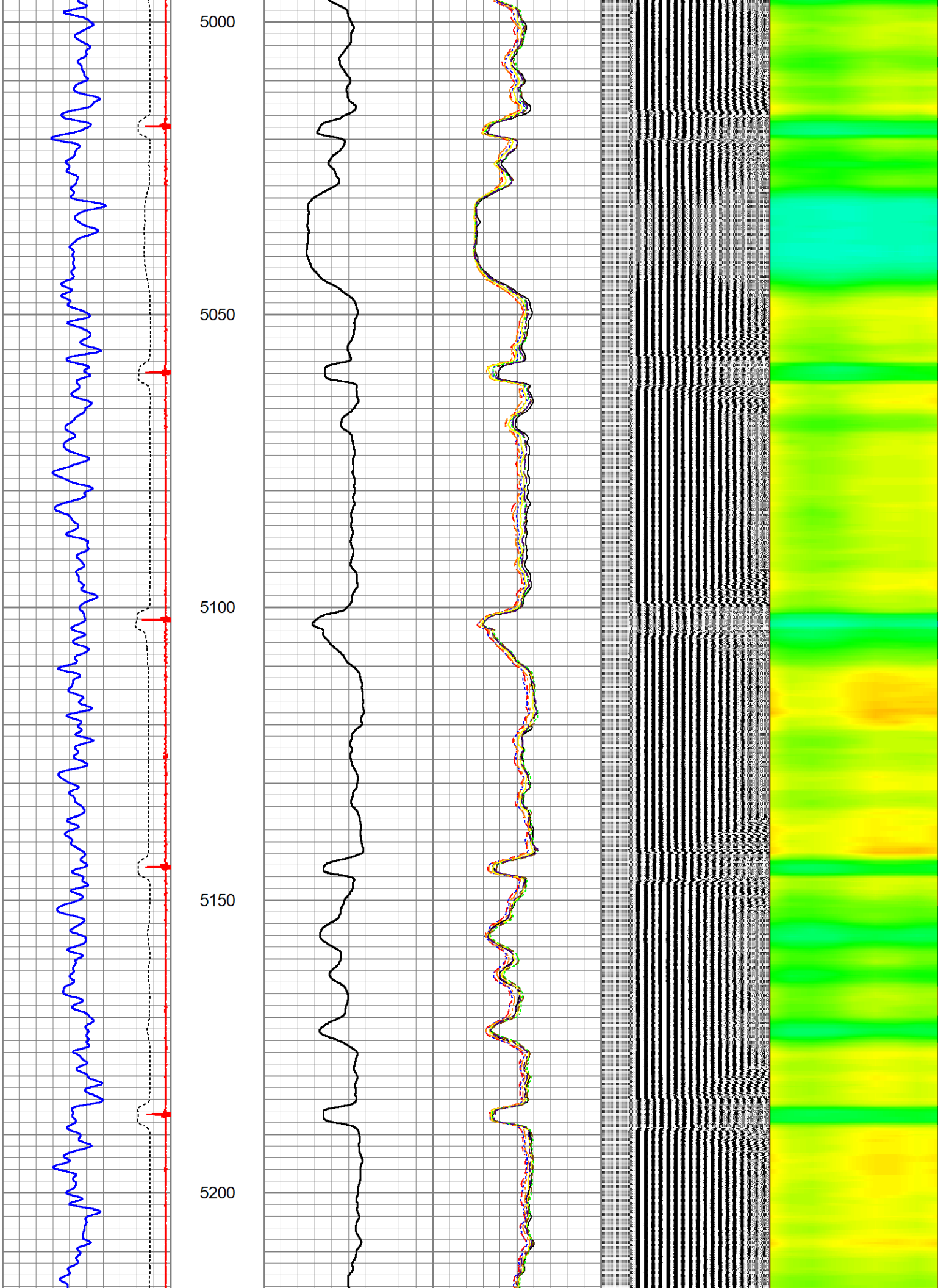


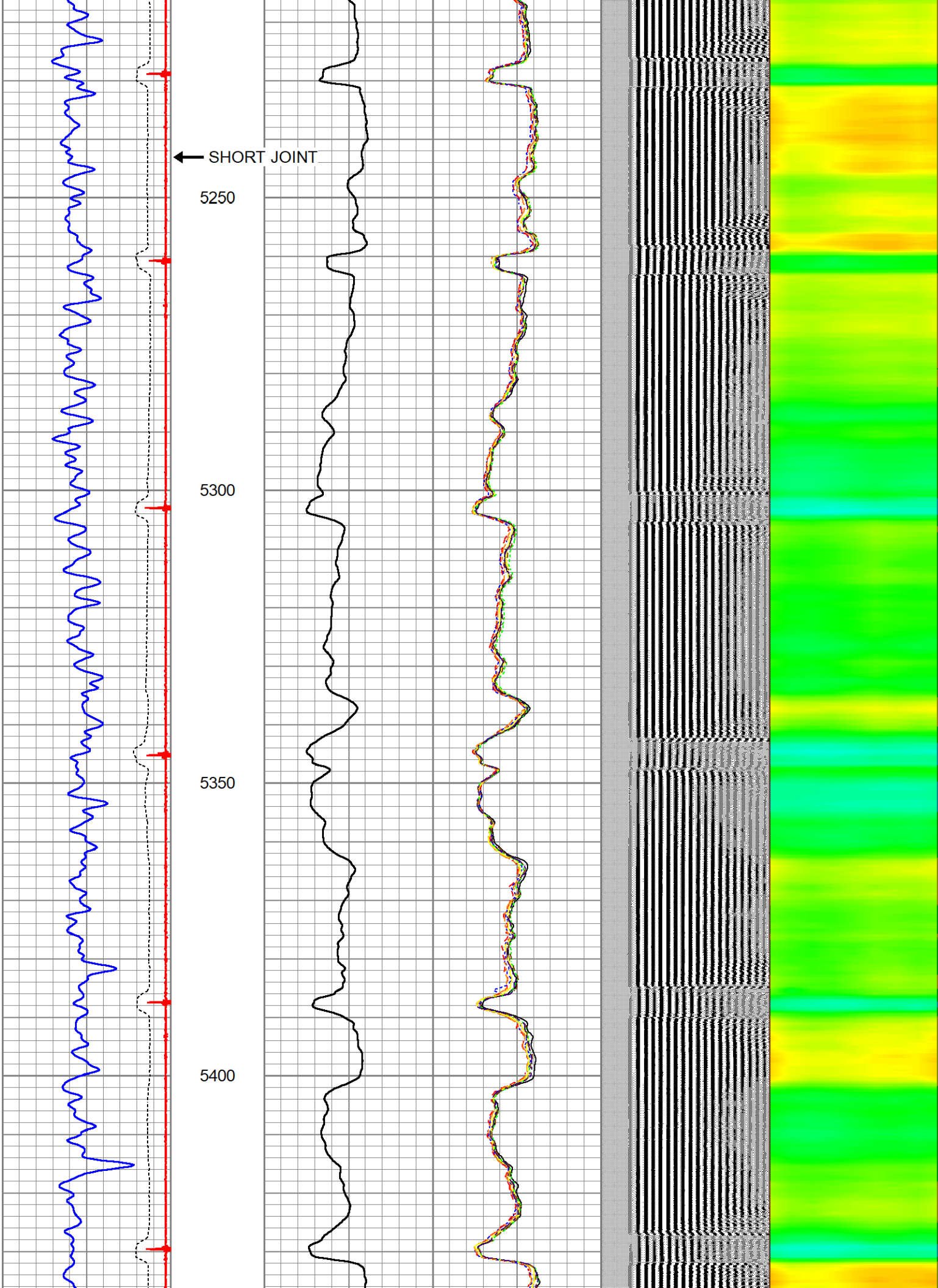


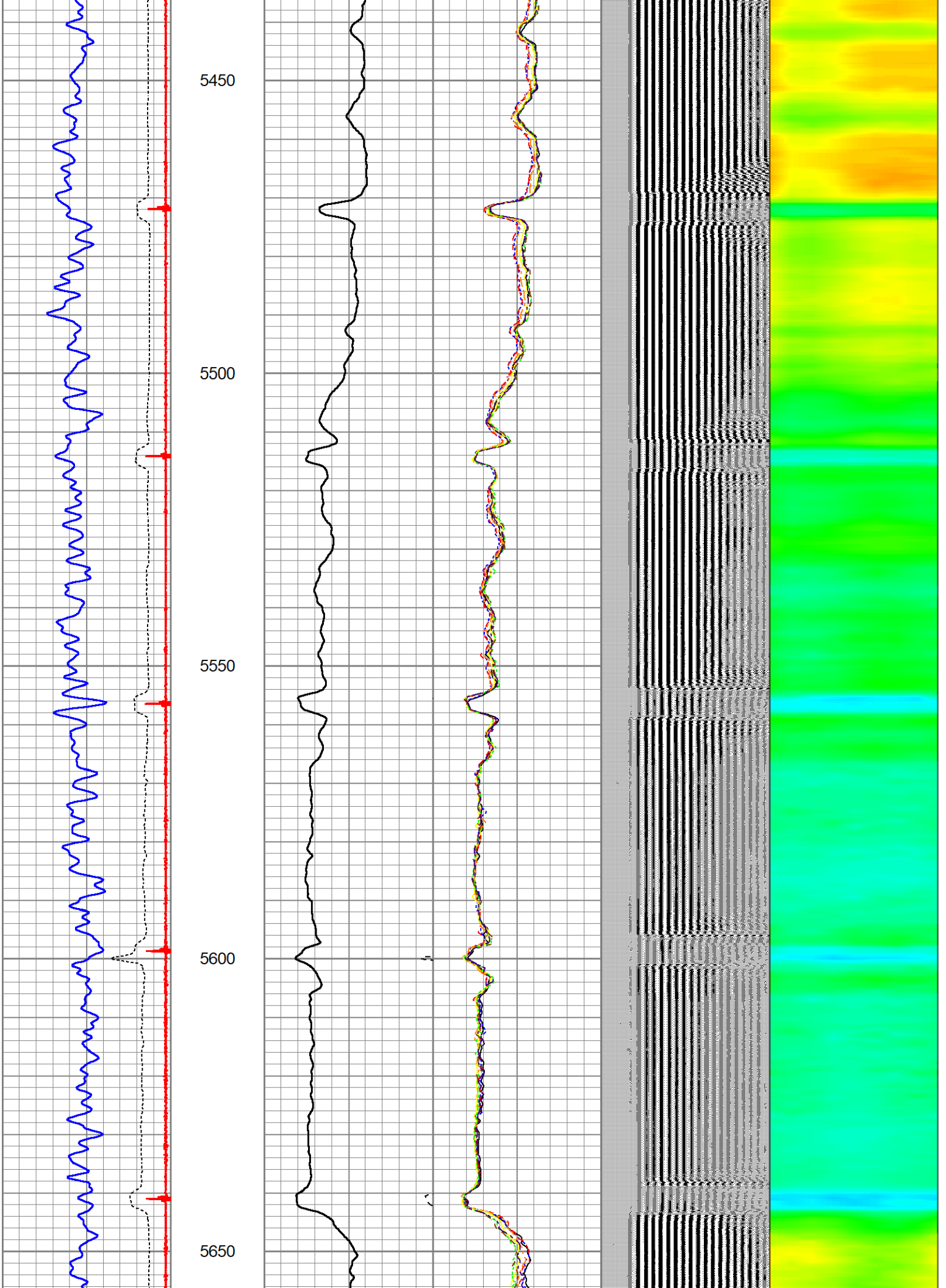


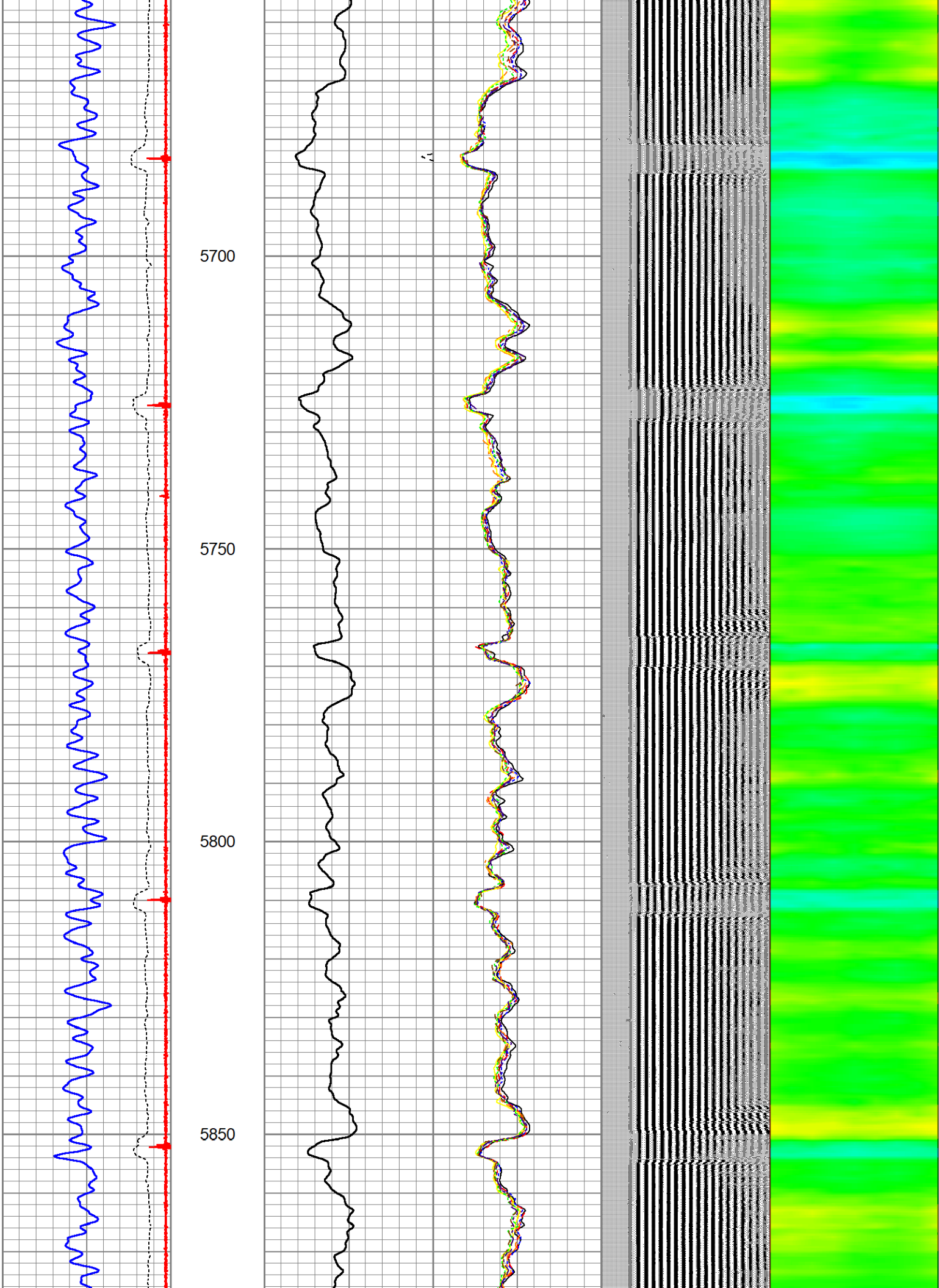


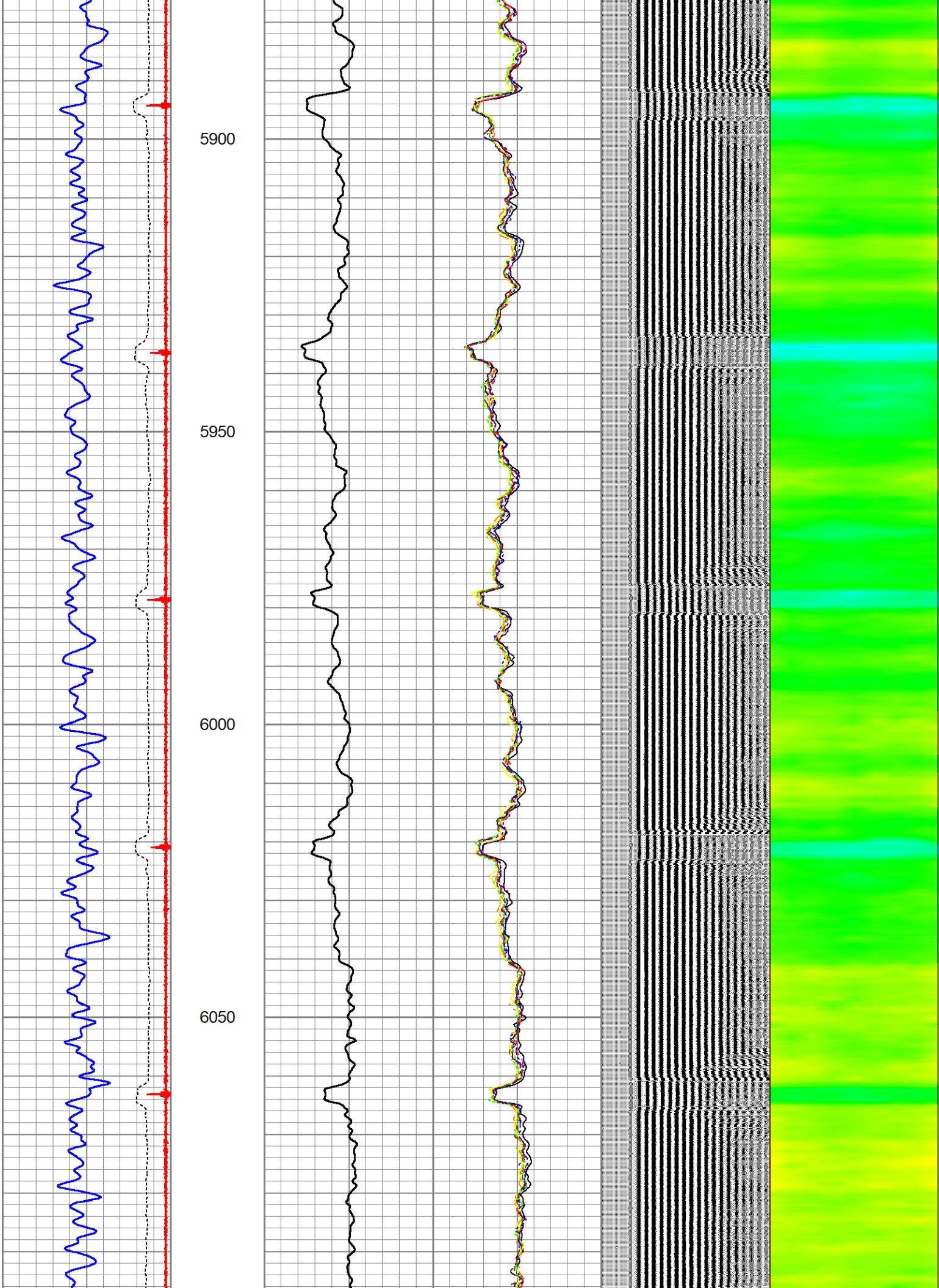


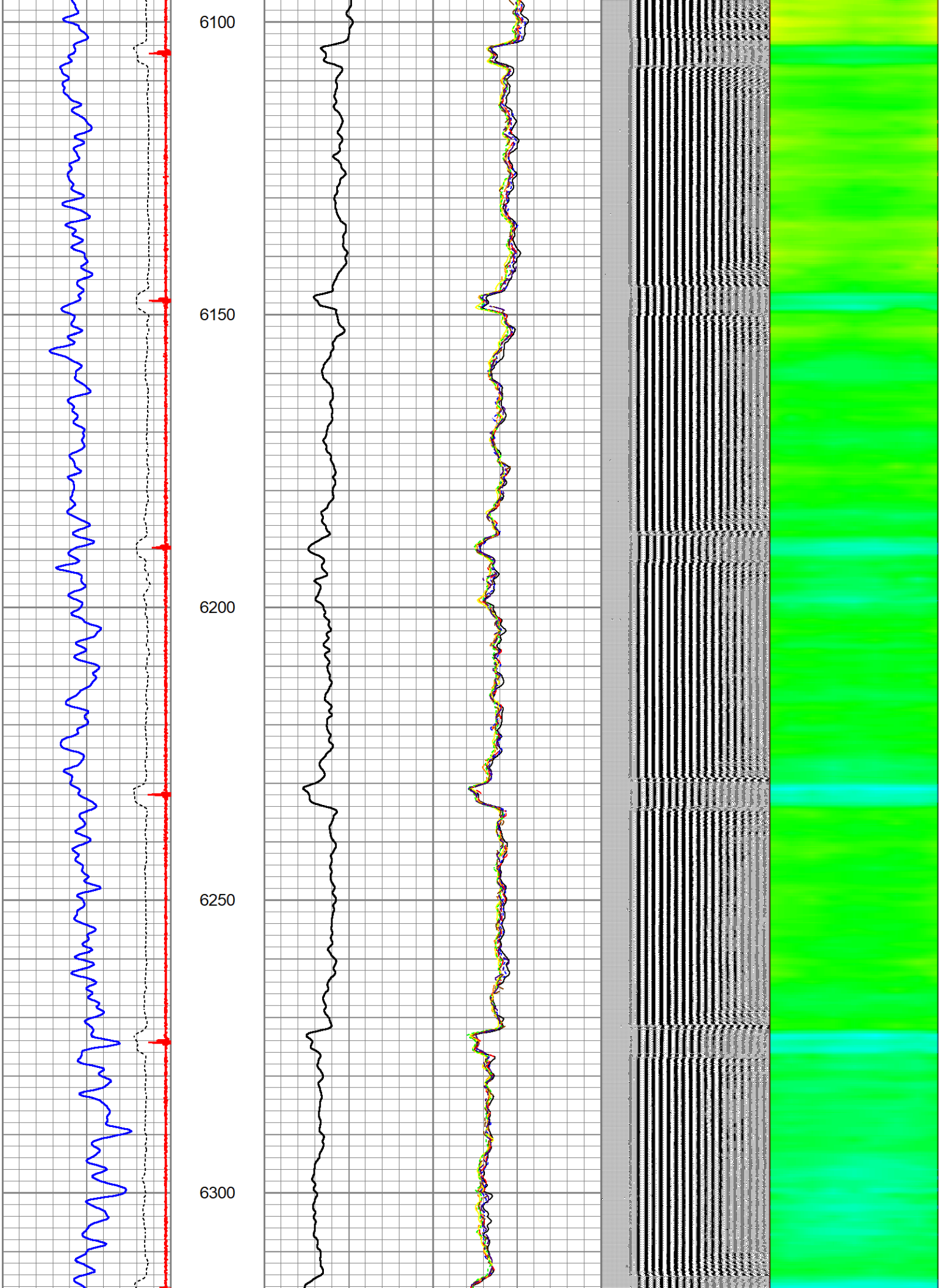


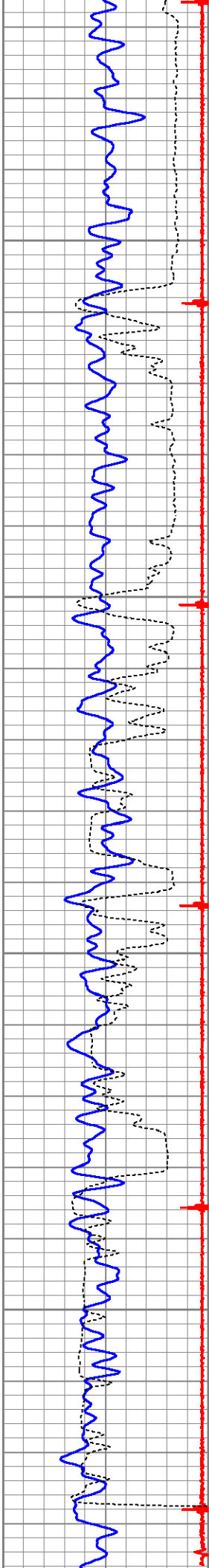










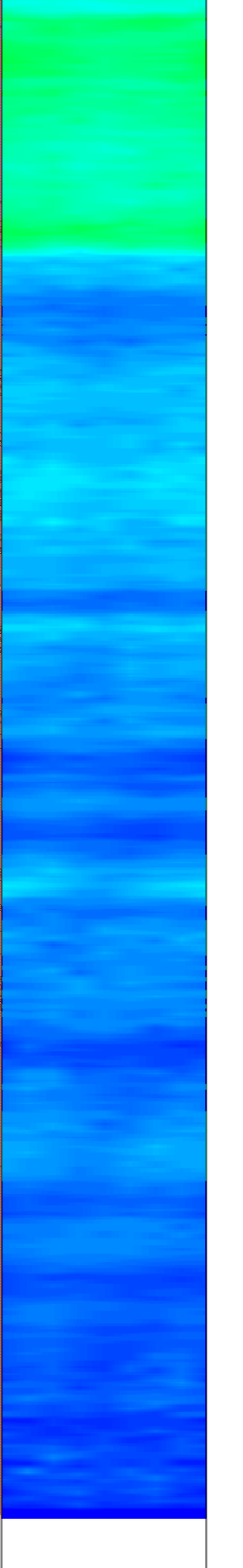
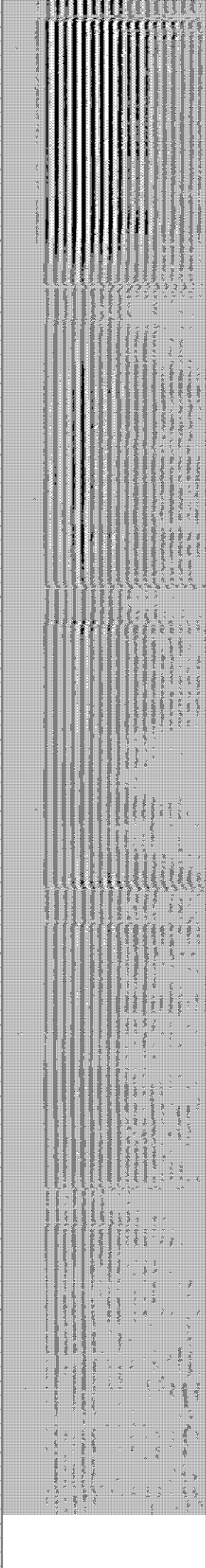
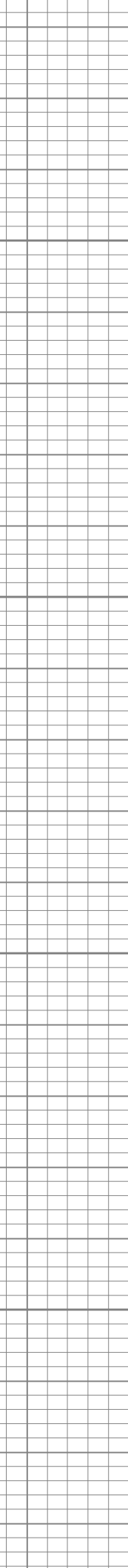
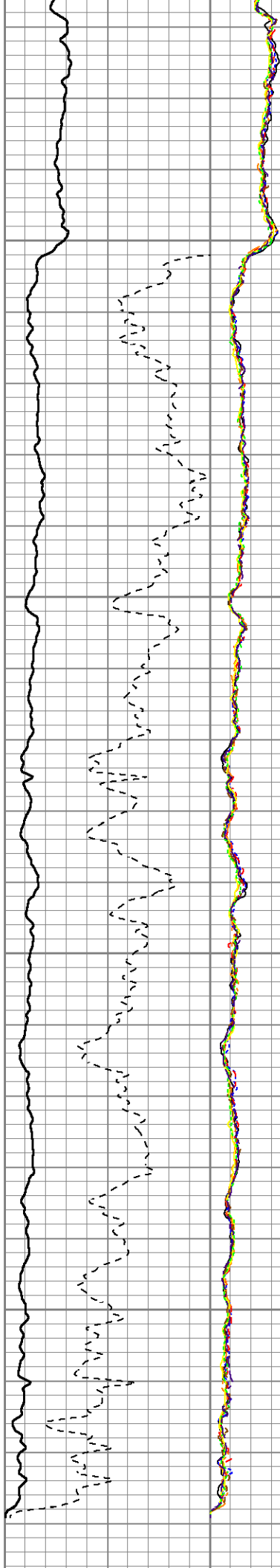


6350

6400

6450

6500



| | | | | | | | | | | | | | | |
|-----|------------|------|----------------|----------|-----|-------|-------|-----|-----|------------|------|---|------------|---|
| 50 | CCL | -1.5 | 0 | AMP (mV) | 100 | 0 | AMPS1 | 100 | 200 | VDL (usec) | 1200 | 1 | RADIAL MAP | 8 |
| 0 | GR (GAPI) | 150 | AMPLIFIED AMP3 | | 0 | AMPS2 | 100 | | | | | | | |
| 340 | TT3 (usec) | 244 | 0 | (mV) | 20 | 0 | AMPS3 | 100 | | | | | | |
| | | | | | 0 | AMPS4 | 100 | | | | | | | |
| | | | | | 0 | AMPS5 | 100 | | | | | | | |
| | | | | | 0 | AMPS6 | 100 | | | | | | | |
| | | | | | 0 | AMPS7 | 100 | | | | | | | |
| | | | | | 0 | AMPS8 | 100 | | | | | | | |

Calibration Report

Database File buum 11-7a rcbl.db
Dataset Pathname pass1.4
Dataset Creation Tue Jan 30 08:18:16 2024

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 101010

| | | | | | |
|-----------------------------------|-------------|--------------------------|--------|-----|----------|
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| | Counts/Sec. | Gain | Offset | Jig | Units |
| Background | 0.0 | | | | cps |
| Calibrator | 1.0 | 0.5000 | | | 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: 101020
Tool Model: Probe

Calibration Casing Diameter: 4.500 in
Calibration Depth: 4212.342 ft

Master Calibration, performed Tue Jan 30 08:00:19 2024:

| | Raw (v) | | Calibrated (mv) | | Results | |
|----|---------|-------|-----------------|--------|---------|--------|
| | Zero | Cal | Zero | Cal | Gain | Offset |
| 3' | 0.002 | 0.675 | 0.700 | 81.196 | 119.502 | 0.509 |

| | | | | | | |
|-----|-------|-------|-------|--------|---------|--------|
| 5' | 0.002 | 0.679 | 0.700 | 81.196 | 119.362 | 0.303 |
| CAL | 0.002 | 0.856 | | | | |
| 5' | 0.001 | 0.491 | 0.700 | 81.196 | 164.367 | 0.457 |
| SUM | | | | | | |
| S1 | 0.002 | 0.603 | 0.000 | 81.000 | 134.690 | -0.204 |
| S2 | 0.002 | 0.677 | 0.000 | 81.000 | 119.861 | -0.190 |
| S3 | 0.002 | 0.716 | 0.000 | 81.000 | 113.333 | -0.185 |
| S4 | 0.002 | 0.755 | 0.000 | 81.000 | 107.514 | -0.172 |
| S5 | 0.002 | 0.751 | 0.000 | 81.000 | 108.097 | -0.178 |
| S6 | 0.002 | 0.703 | 0.000 | 81.000 | 115.477 | -0.179 |
| S7 | 0.002 | 0.665 | 0.000 | 81.000 | 122.131 | -0.200 |
| S8 | 0.002 | 0.649 | 0.000 | 81.000 | 125.182 | -0.206 |

Internal Reference Calibration, performed Tue Feb 12 12:45:01 2013:

| | Raw (v) | | Calibrated (v) | | Results | |
|-----|---------|-------|----------------|-------|---------|--------|
| | Zero | Cal | Zero | Cal | Gain | Offset |
| CAL | 0.000 | 0.000 | 0.002 | 0.856 | 1.000 | 0.000 |

Air Zero Calibration, performed Thu Feb 21 13:40:31 2013:

| | 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 | |

Log Variables

DatabaseC:\ProgramData\Warrior\Data\buum 11-7a rcbl.db
Dataset field/well/run1/pass1.4/_vars_

Top - Bottom


| | | | | | | | |
|-----------------------|------------------------|-----------------------|---------------------|---------------------------|---------------------|----------------------|-------------------------|
| BOREID in 8.625 | BOTTEMP degF 100 | CASEOD in 4.5 | CASETHCK in 0 | CASEWGHT lb/ft 11.6 | MAXAMPL mV 81 | MINAMPL mV 0.7 | MINATTN db/ft 0.8 |
| PERFS No | PPT usec 357 | SRFTEMP degF 22 | TDEPTH ft 0 | | | | |

Variable Description

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

| Sensor | Offset (ft) | Schematic | Description | Length (ft) | O.D. (in) | Weight (lb) |
|--------|-------------|---|-----------------------------------|-------------|-----------|-------------|
| | |  | CHD-STNDRD Standard Cable Head | 1.00 | 1.69 | 10.00 |

