



CEMENT BOND LOG

Mesa Wireline

| | | | |
|------------------------|--------------------------|----------------|------------------------|
| Company | ENCANA OIL & GAS (USA) | Company | ENCANA OIL & GAS (USA) |
| Well | COSTIGAN 8-8-20 | Well | COSTIGAN 8-8-20 |
| Field | WATTENBERG | Field | WATTENBERG |
| County | WELD | County | WELD |
| State | COLORADO | State | COLORADO |
| Location: | API #: 05-123-31717-0000 | Other Services | NONE |
| Permanent Datum | GROUND LEVEL | Elevation | |
| Log Measured From | KELLY BUSHING = 13' | | |
| Drilling Measured From | KELLY BUSHING | | |

| | | | |
|------------------------|---------------|---------|---------|
| Date | 6 JULY 2011 | | |
| Run Number | ONE | | |
| Depth Driller | 8800' | | |
| Depth Logger | 8767' | | |
| Bottom Logged Interval | 8767' | | |
| Top Log Interval | 3150' | | |
| Open Hole Size | 7.875" | | |
| Type Fluid | WATER | | |
| Density / Viscosity | ~8.34 LBS/GAL | | |
| Max. Recorded Temp. | 275 DegF | | |
| Estimated Cement Top | 3520' | | |
| Time Well Ready | N/A | | |
| Time Logger on Bottom | N/A | | |
| Equipment Number | 10801W / PB2 | | |
| Location | AULT, CO | | |
| Recorded By | B. MAYNARICH | | |
| Witnessed By | TOM MAJORS | | |
| Borehole Record | | | |
| Run Number | Bit | From | To |
| ONE | 12.25" | 0 | 1070' |
| TWO | 7.875" | 0 | 8800' |
| Tubing Record | | | |
| Casing Record | Size | Wt/Lbft | Top |
| Surface String | 8.625" | 24# | 0 |
| Prot. String | | | |
| Production String | 4.5" | 11.6# | SURFACE |
| Liner | | | TD |

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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

NO LOGS AVAILABLE TO CORRELATE TO.
SHORT JOINT @ 7682' - 7705'

WE APPRECIATE YOUR BUSINESS, MESA WIRELINE LLC, GRAND JUNCTION CO. (970) 257-0458



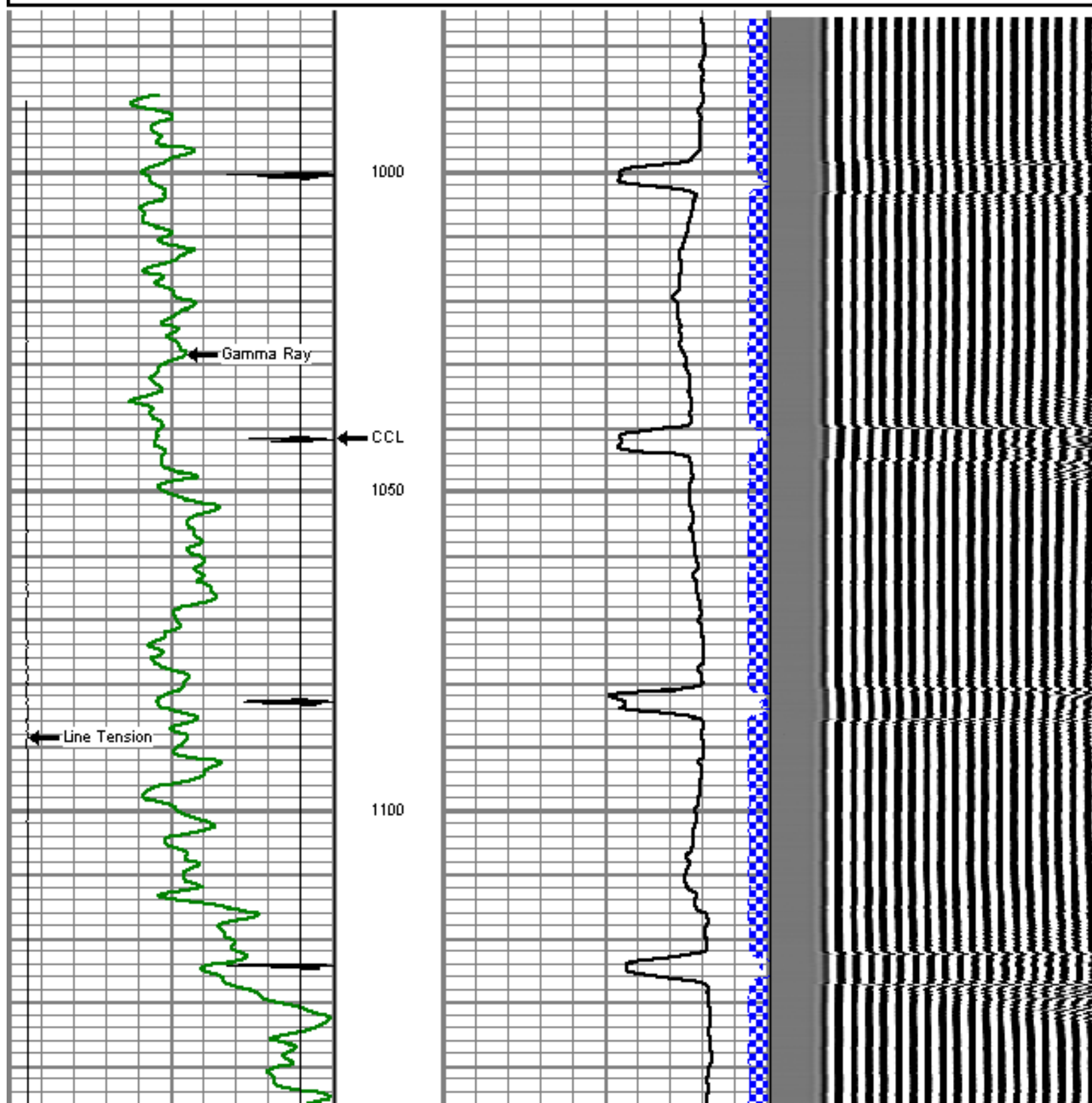
SURFACE PASS

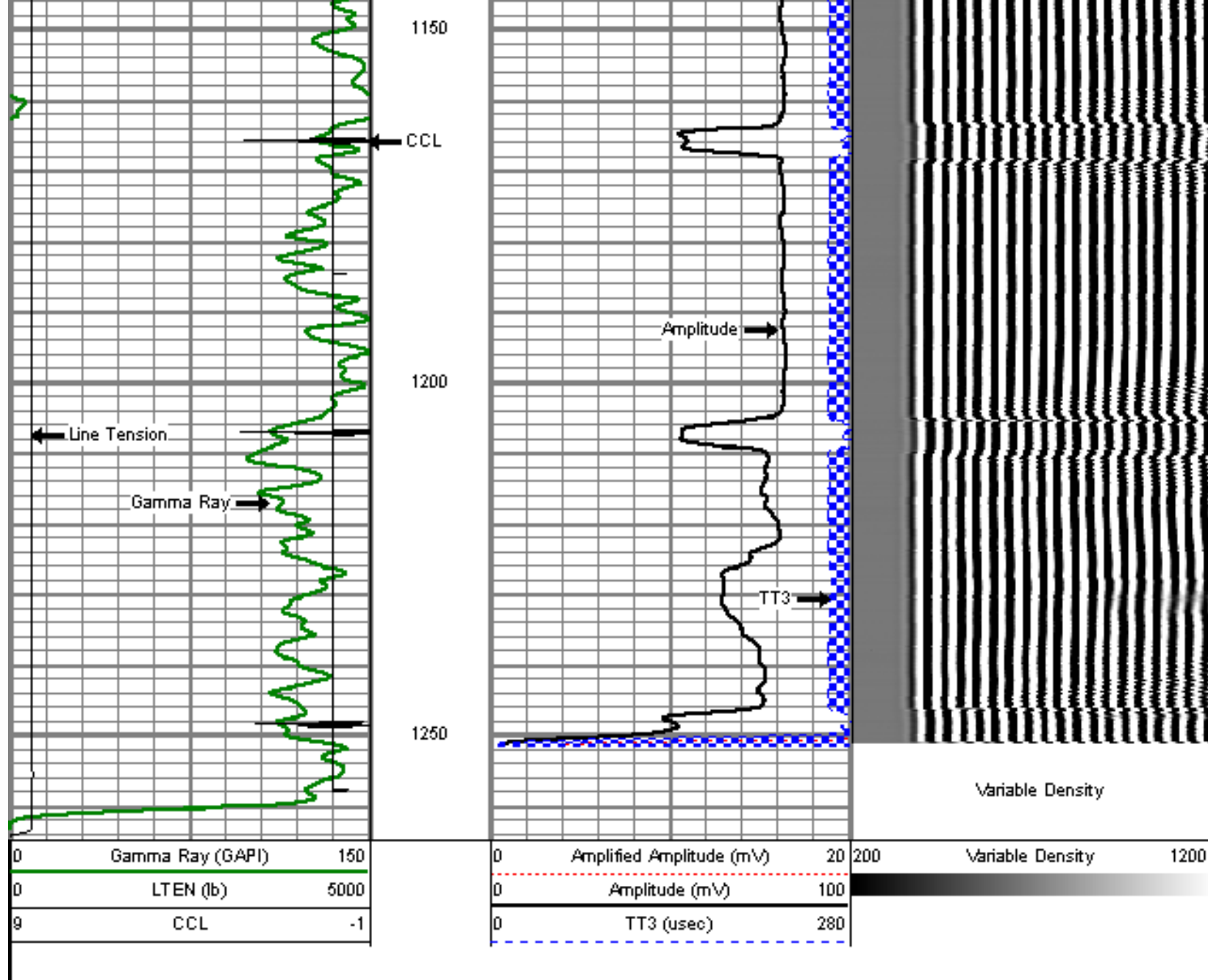
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Dataset Pathname: pass7
Presentation Format: dcbl_prb
Dataset Creation: Wed Jul 06 11:09:50 2011 by Log Std Casedhole 09061
Charted by: Depth in Feet scaled 1:240

| | | |
|---|------------------|------|
| 0 | Gamma Ray (GAPI) | 150 |
| 0 | LTEN (lb) | 5000 |
| 9 | CCL | -1 |

| | | |
|---|--------------------------|-----|
| 0 | Amplified Amplitude (mV) | 20 |
| 0 | Amplitude (mV) | 100 |
| 0 | TT3 (usec) | 280 |

200 Variable Density 1200

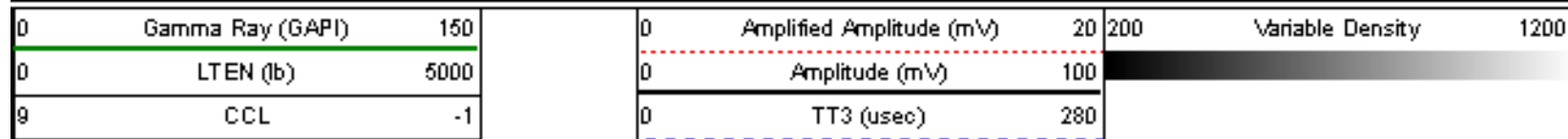


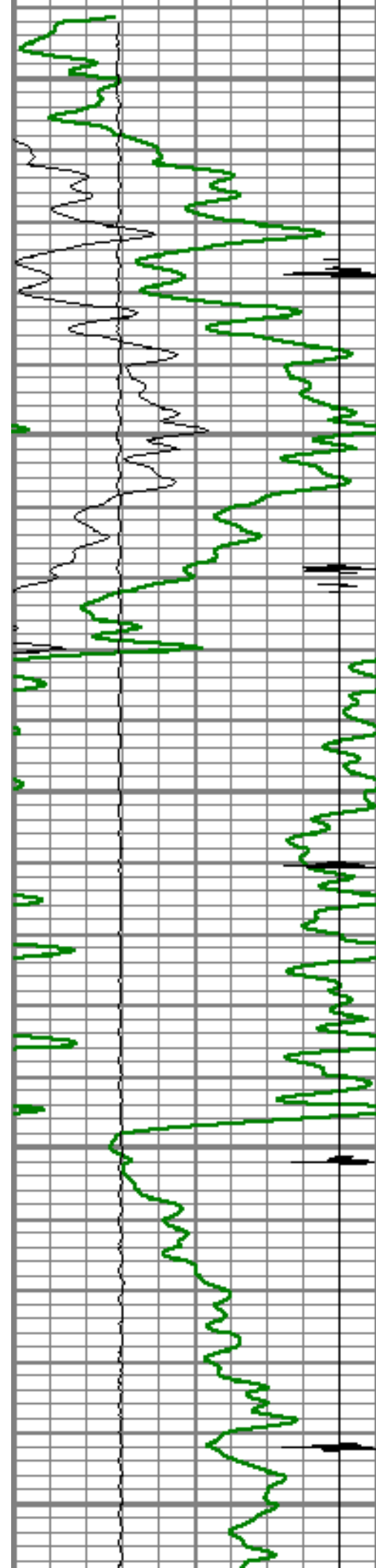


REPEAT PASS

5" = 100'

Database File: costigan 8-8.db
 Dataset Pathname: pass4
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 Charted by: Depth in Feet scaled 1:240





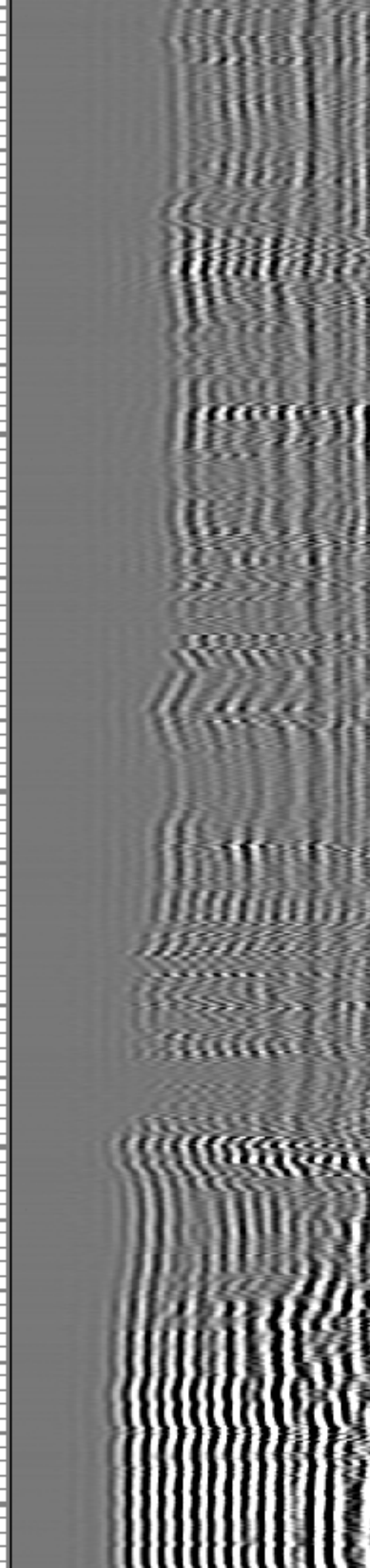
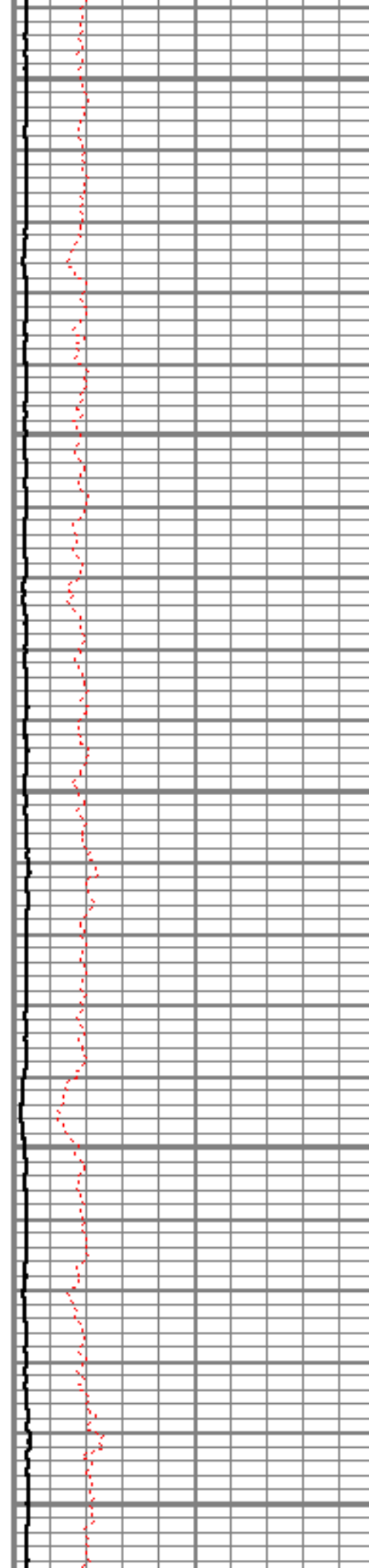
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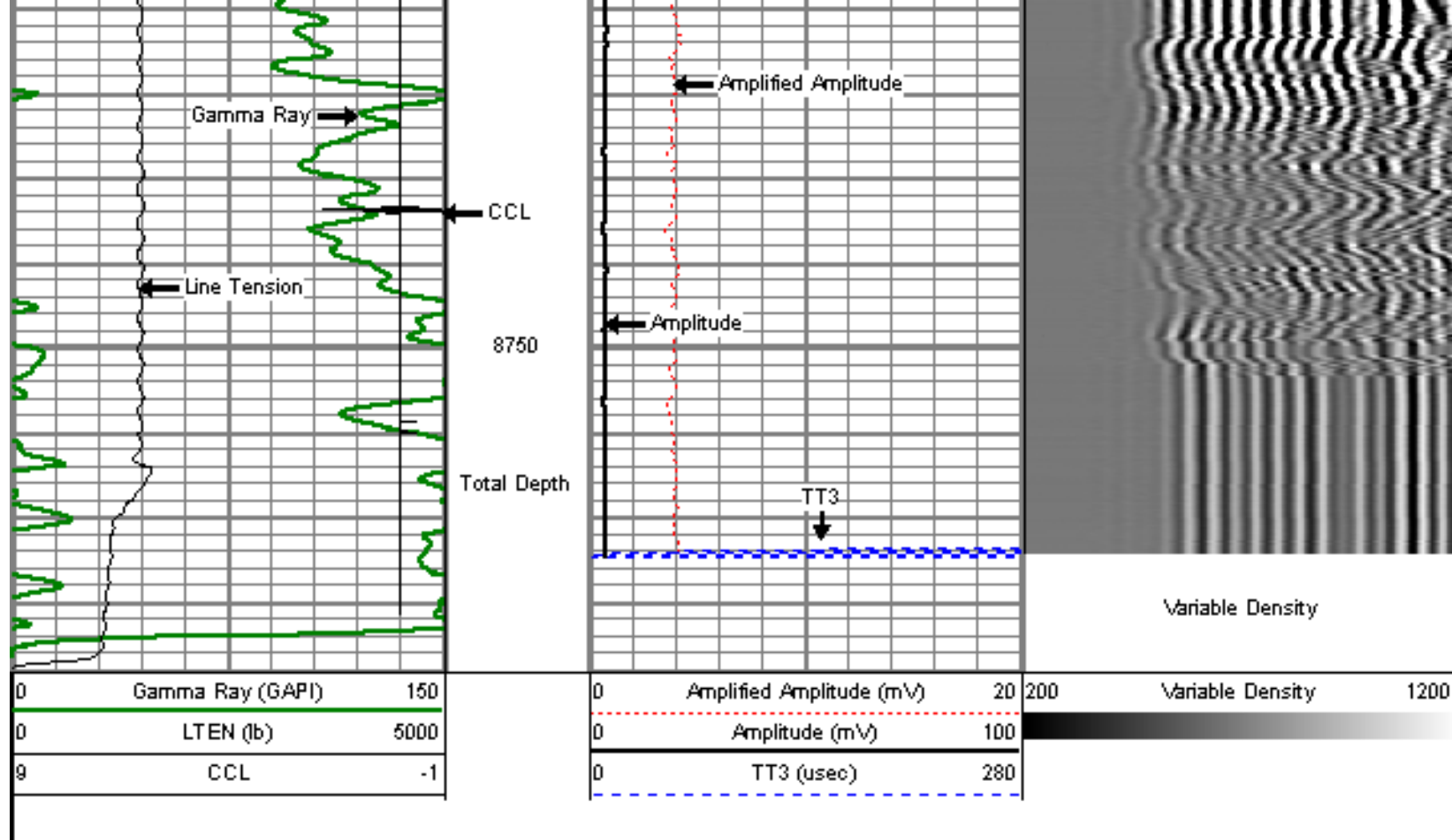
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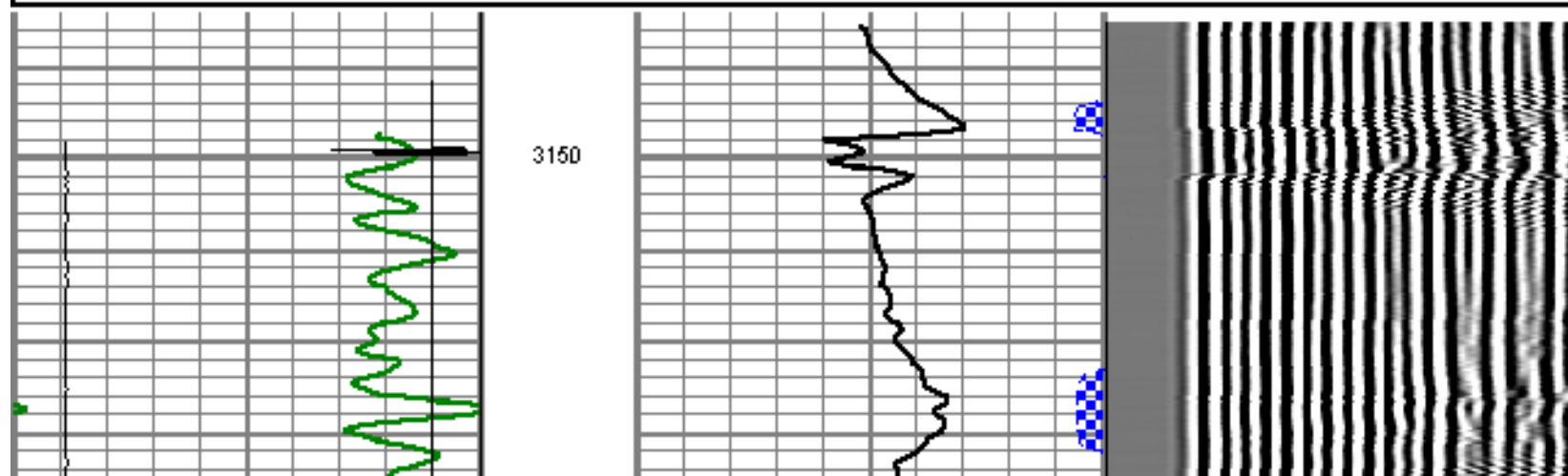
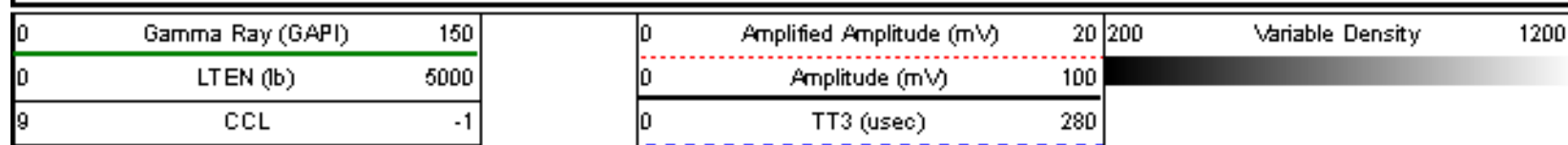


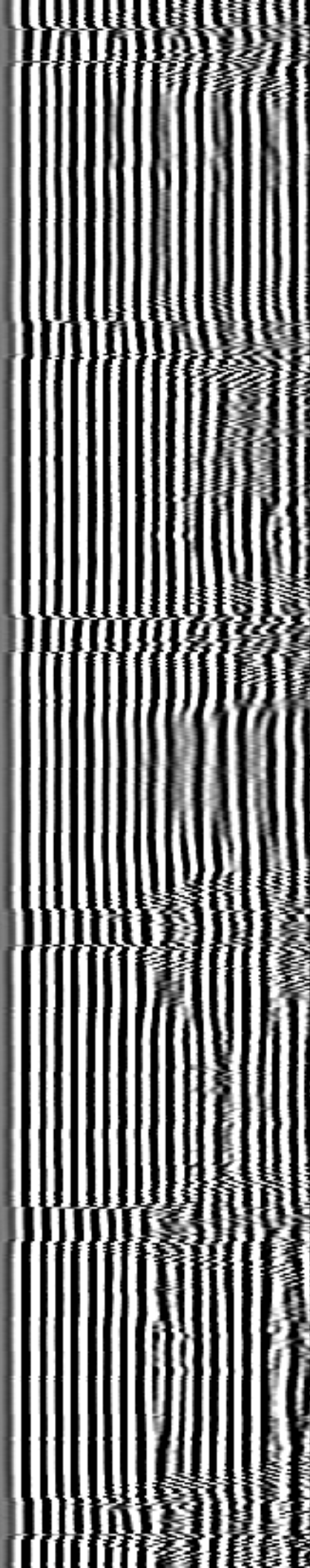
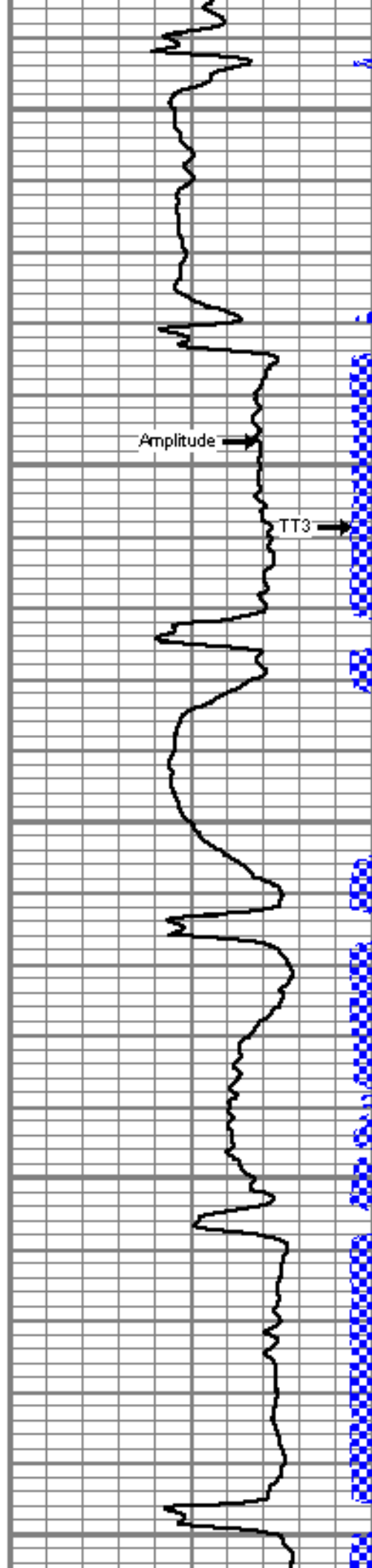
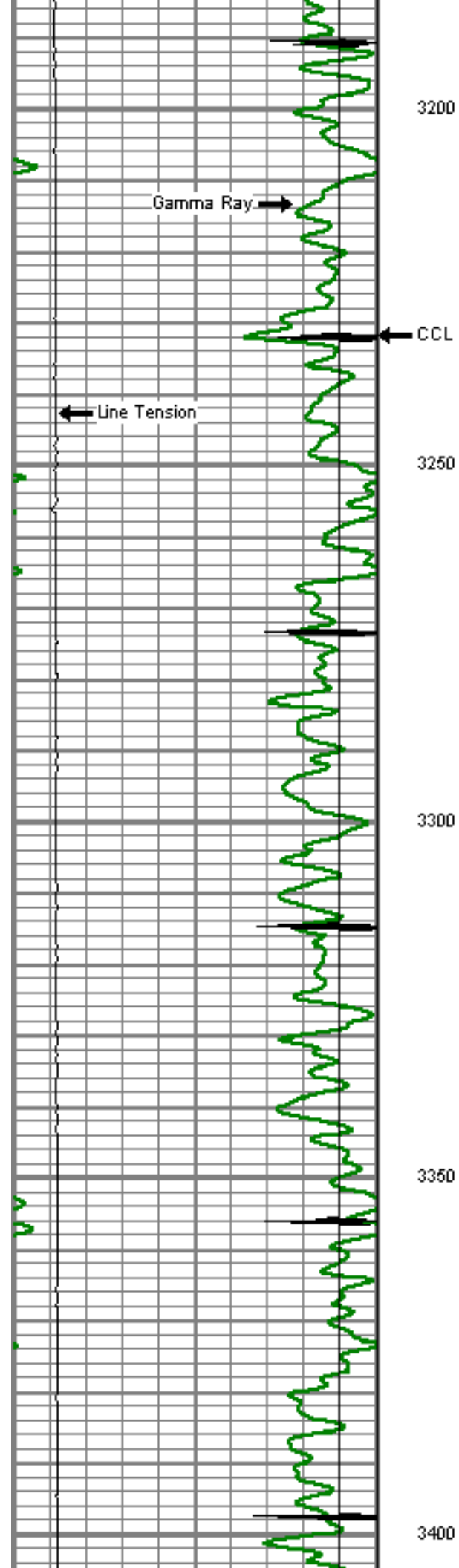


MAIN PASS

5" = 100'

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 Charted by: Depth in Feet scaled 1:240





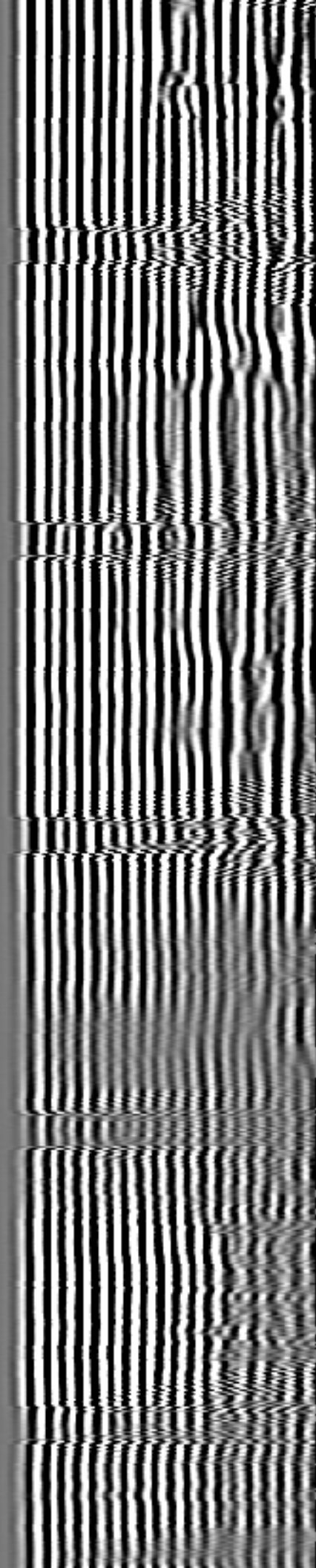
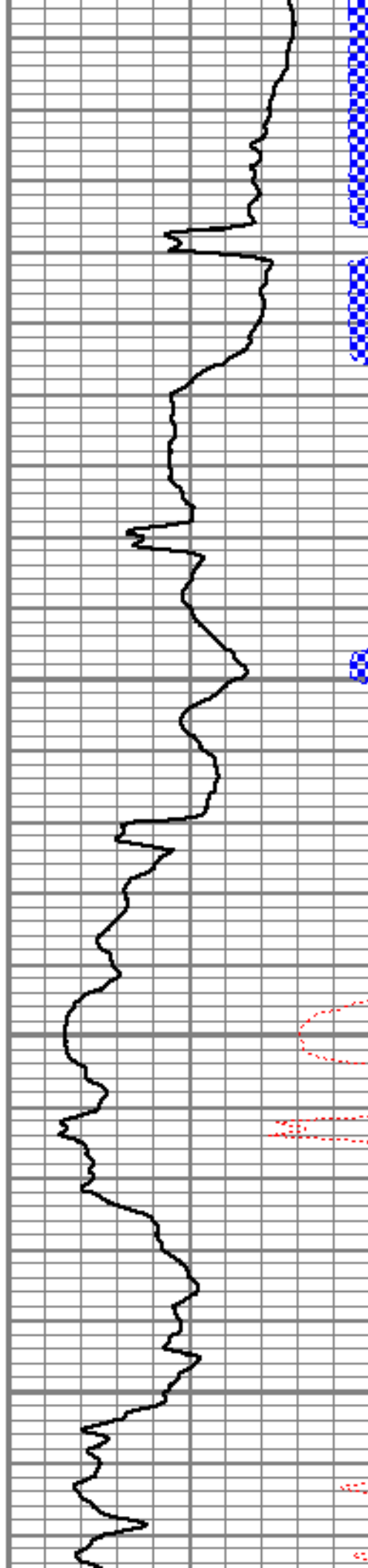


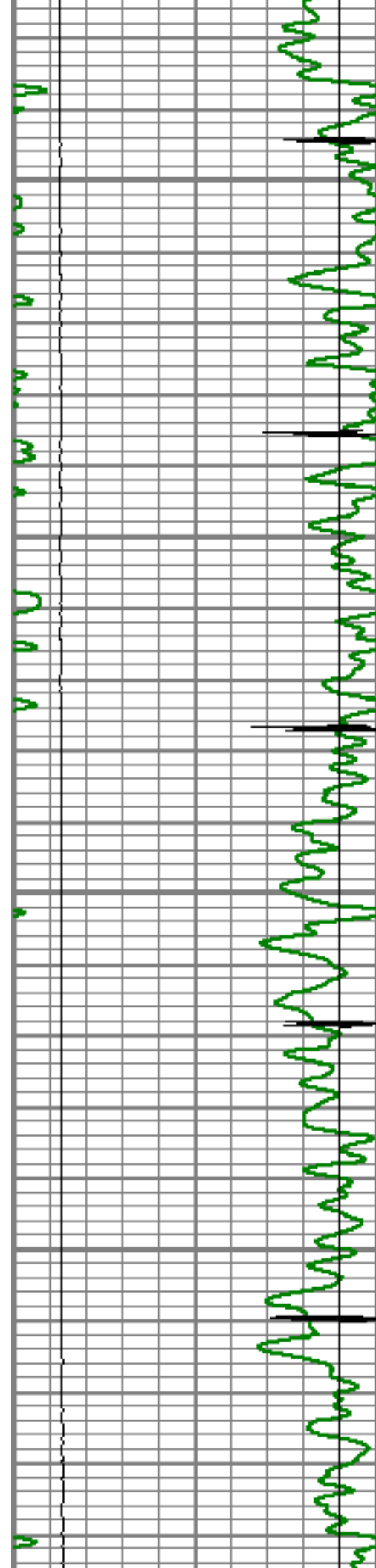
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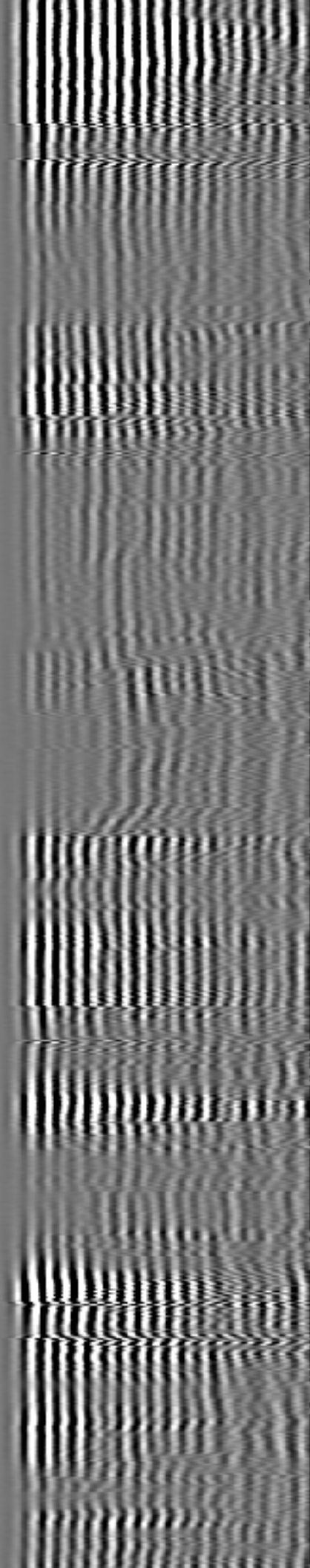
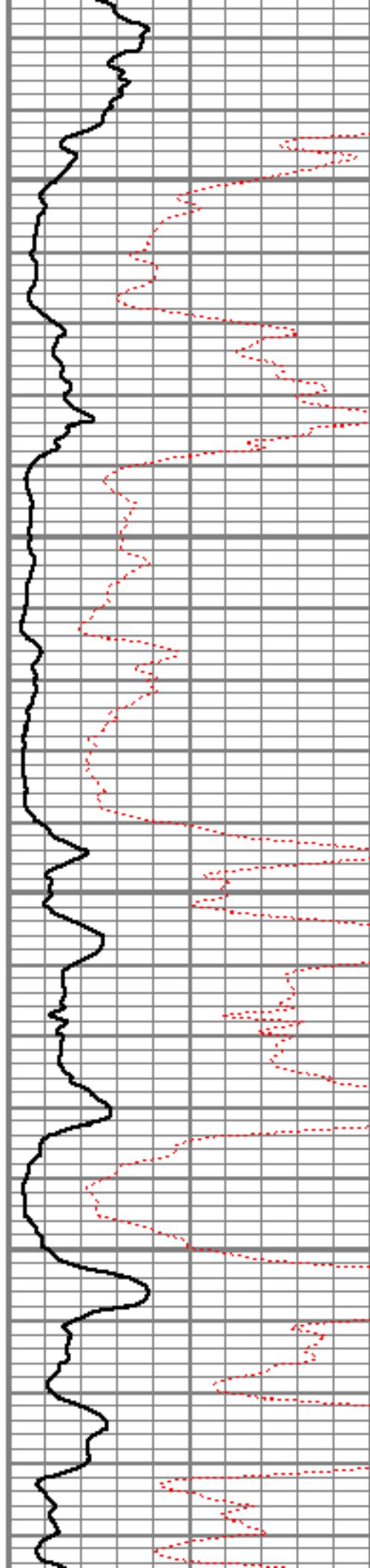


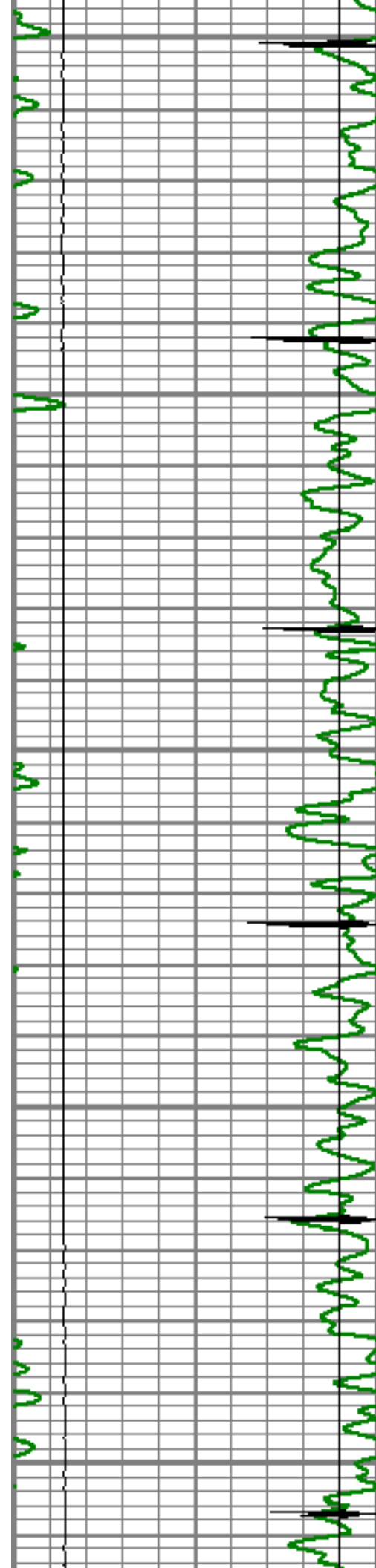
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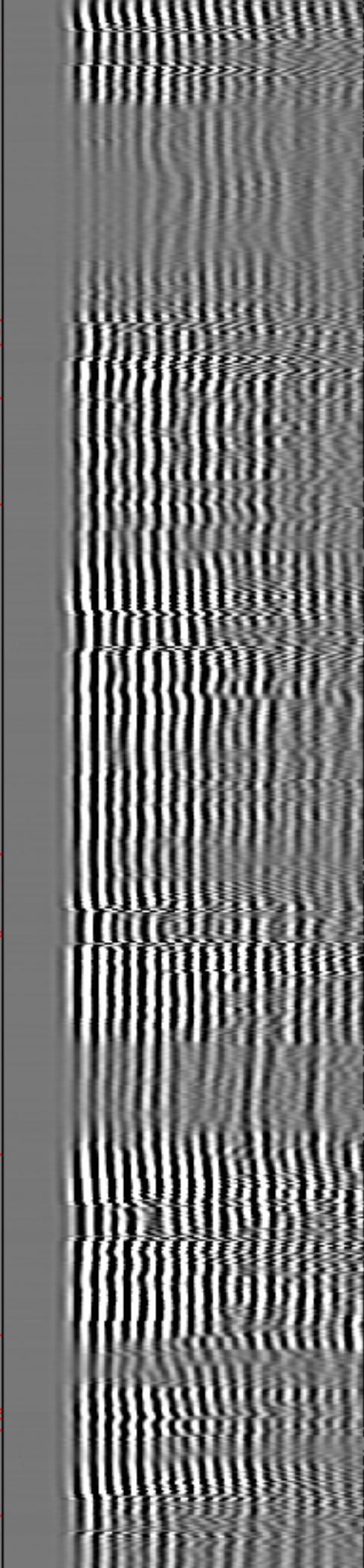
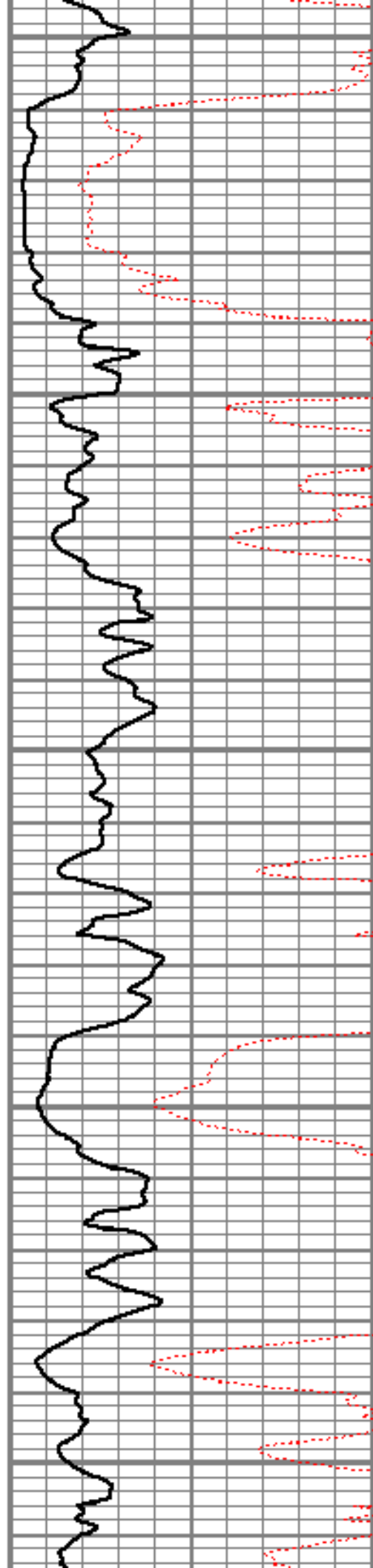
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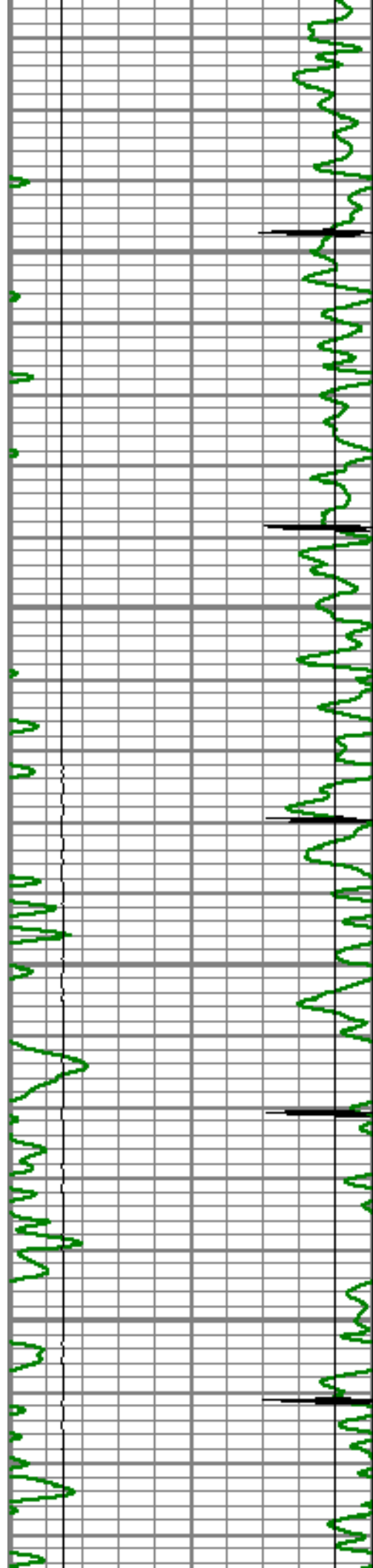
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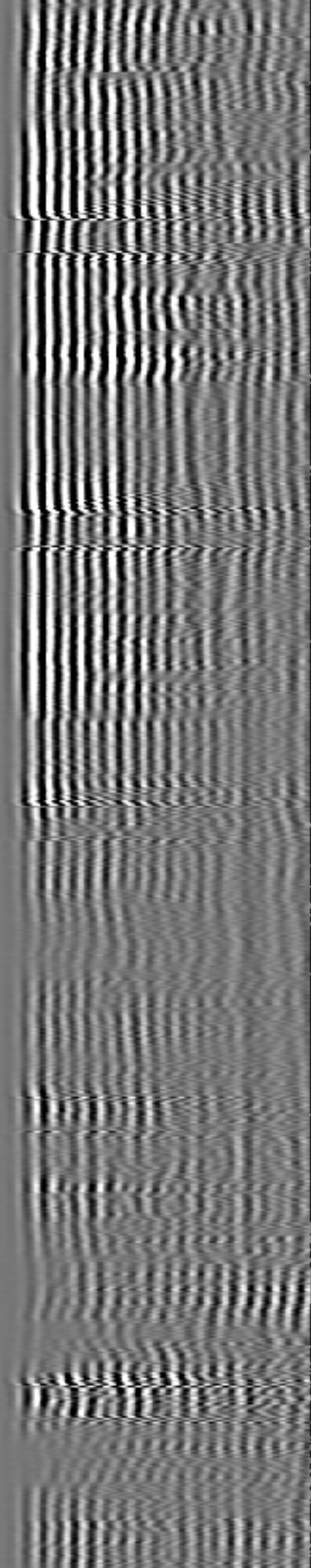
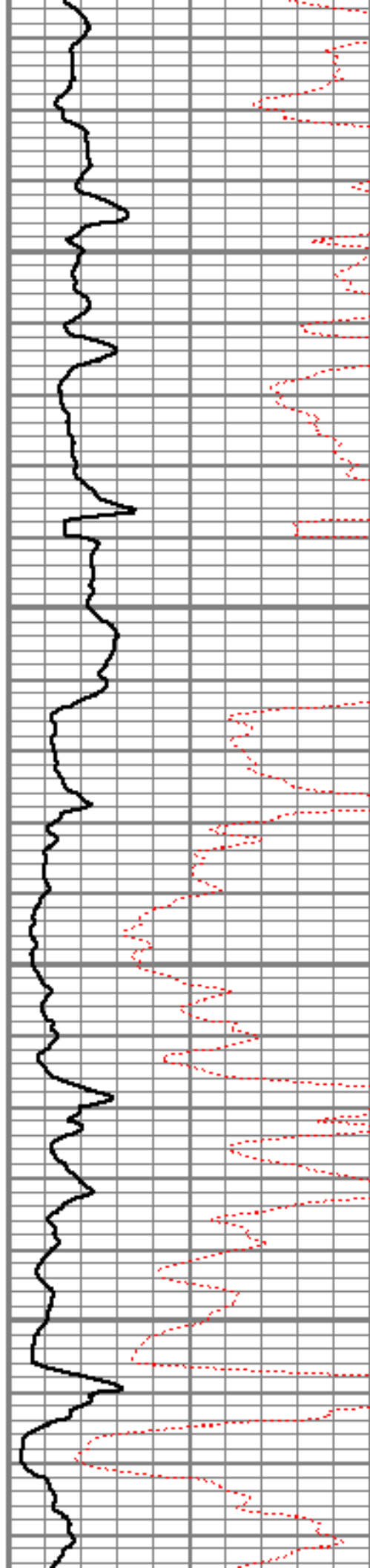


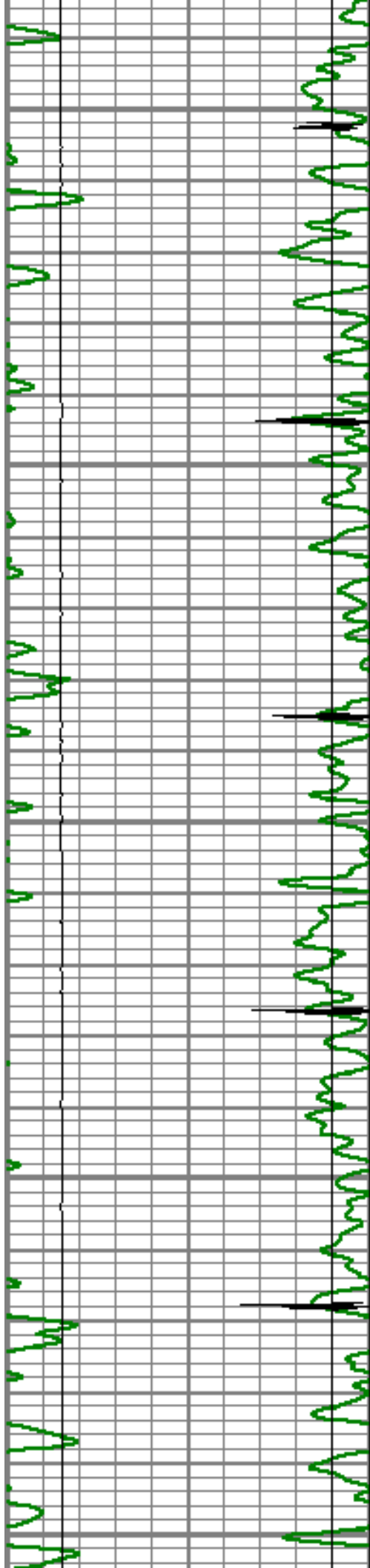
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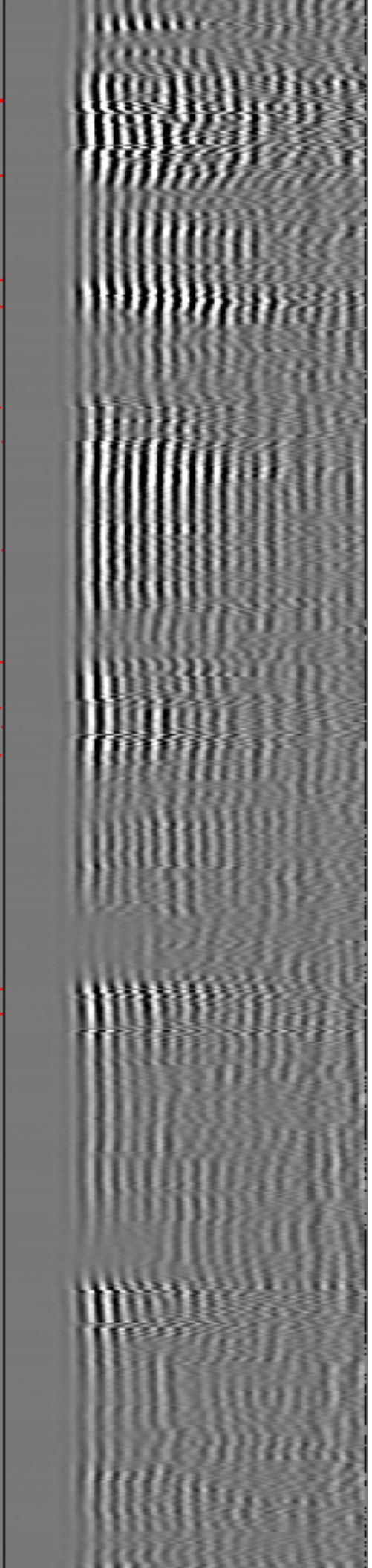
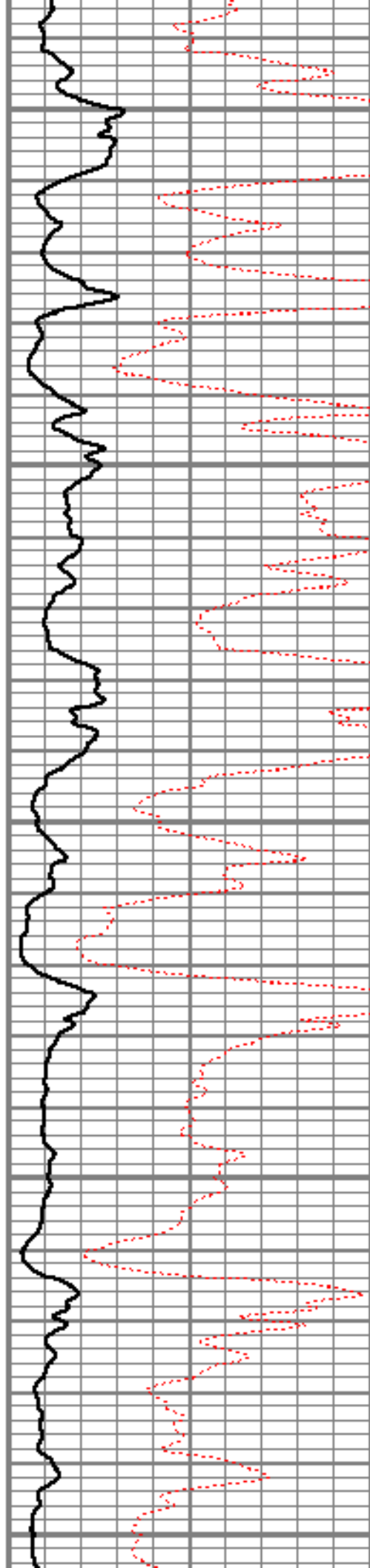
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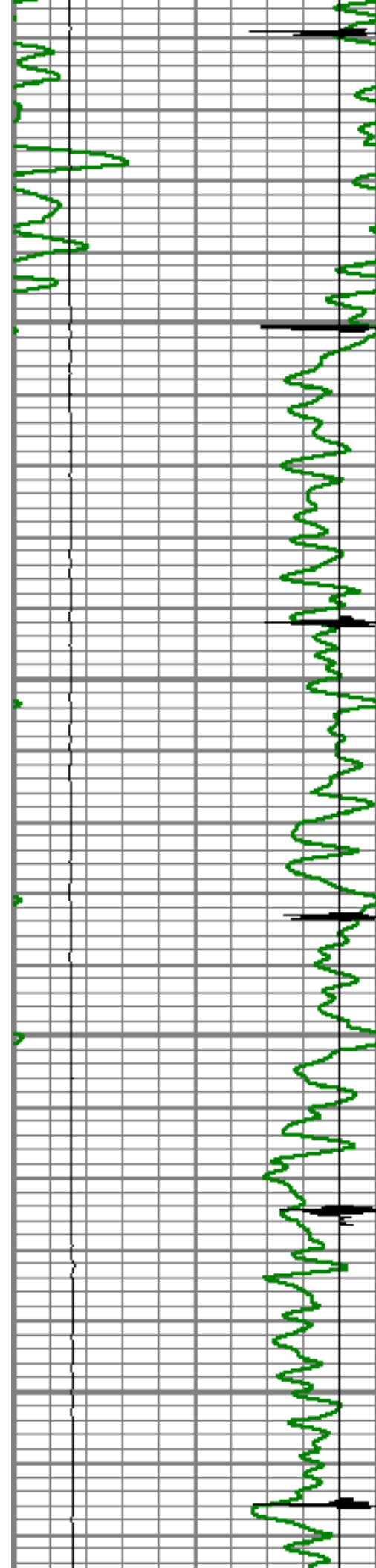
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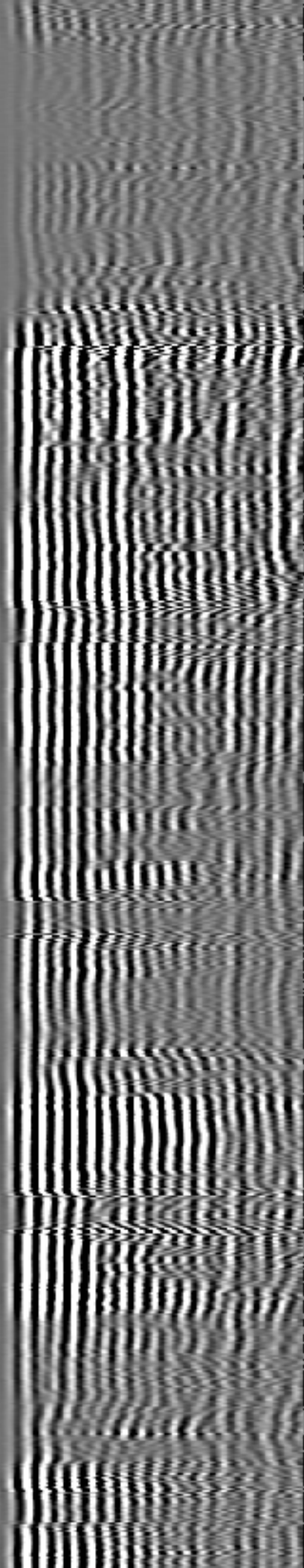
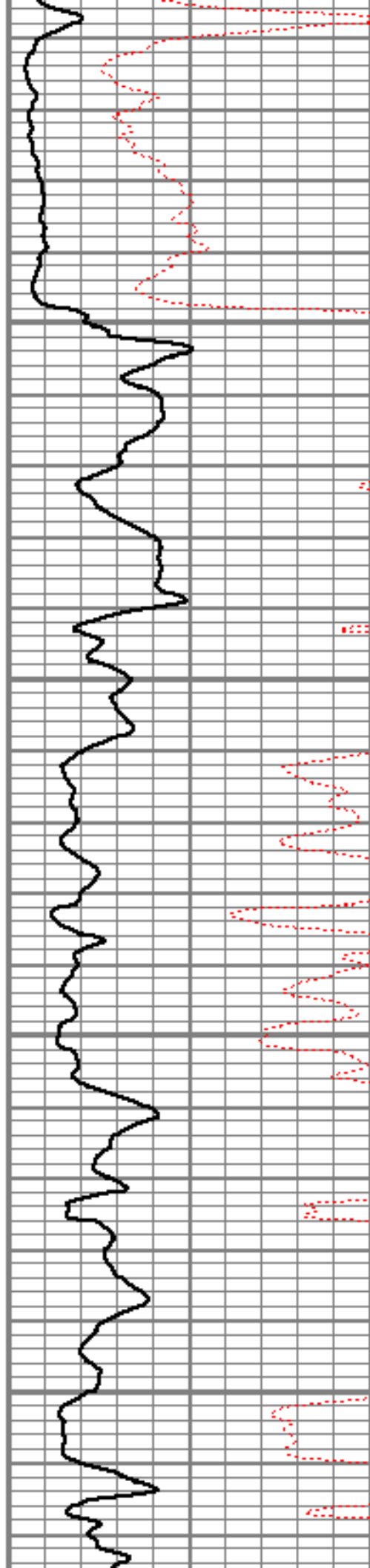


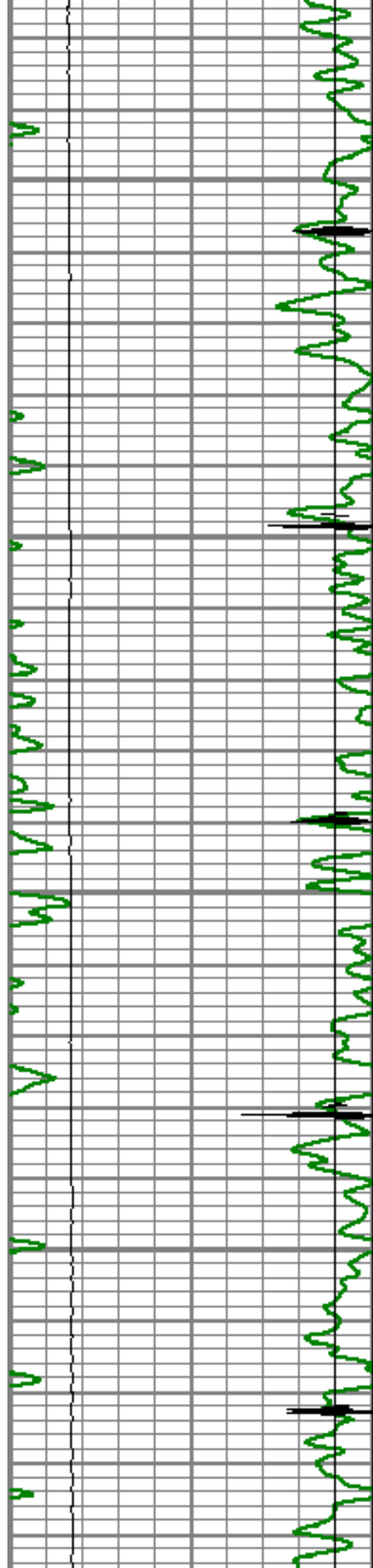
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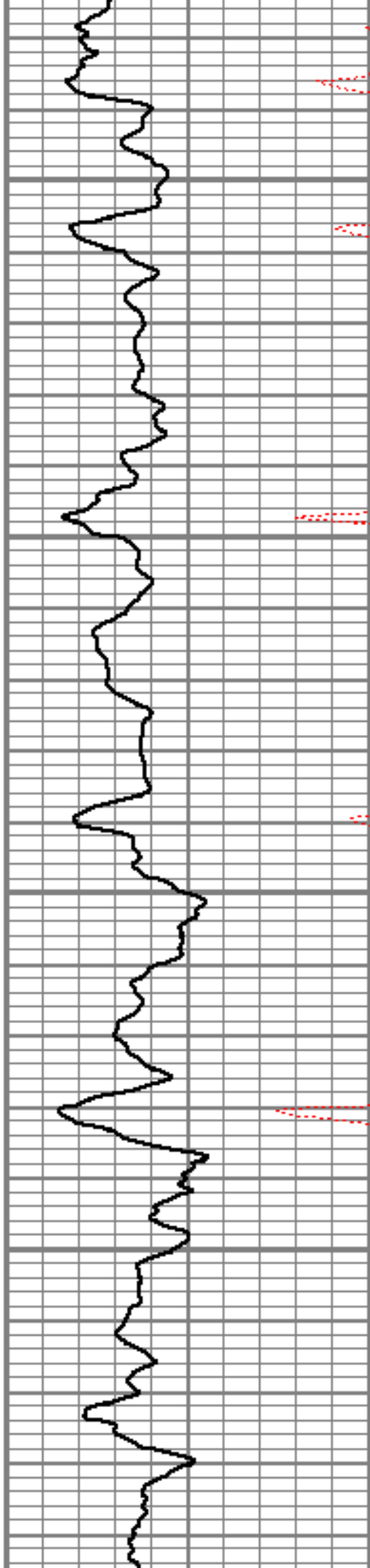


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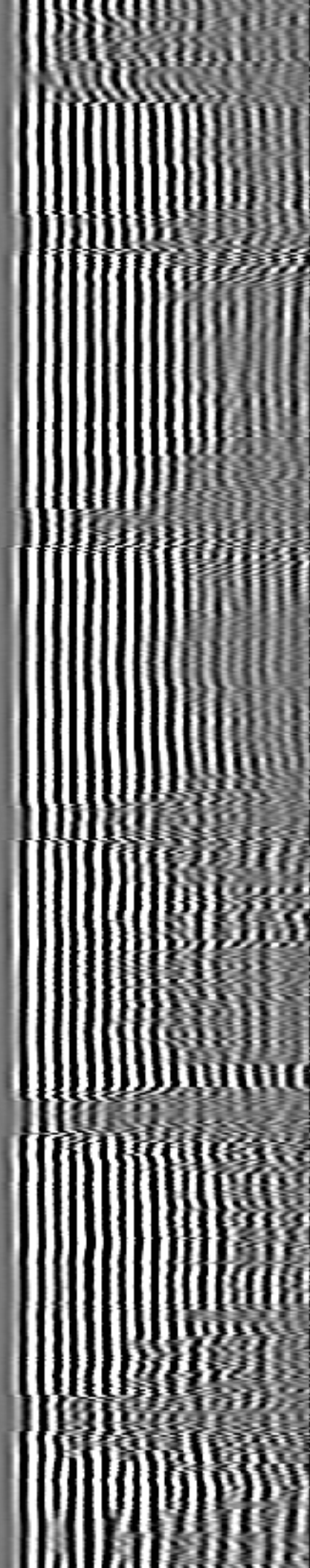


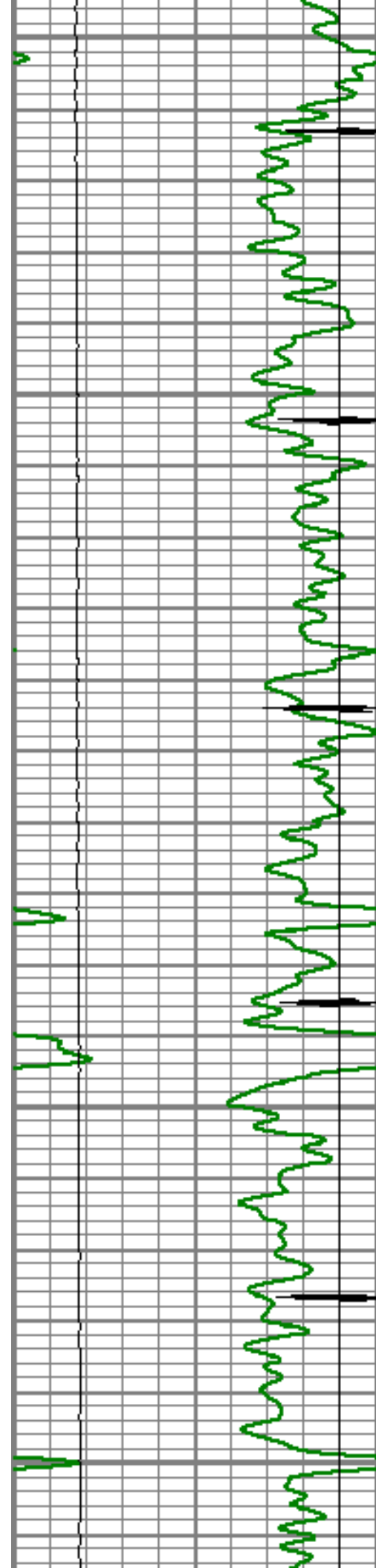
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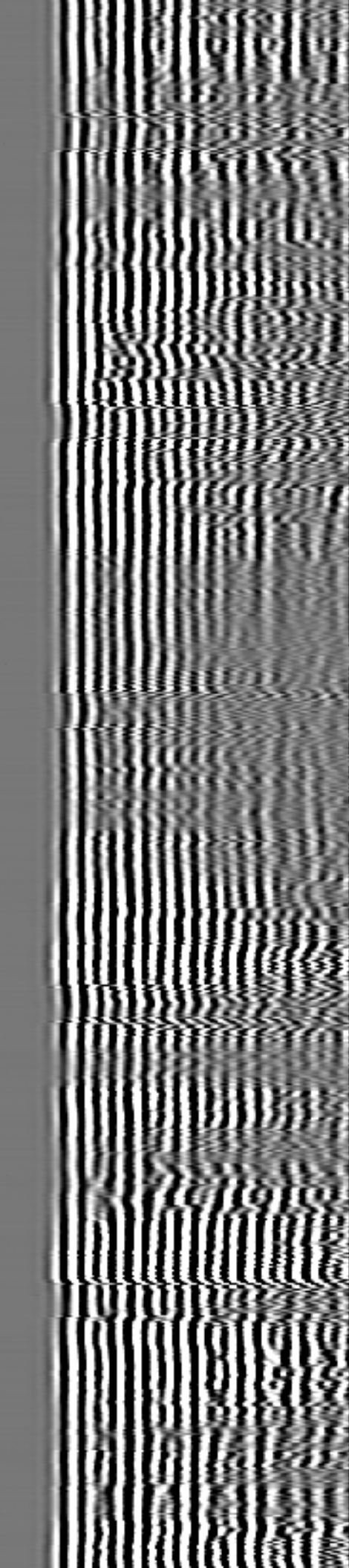
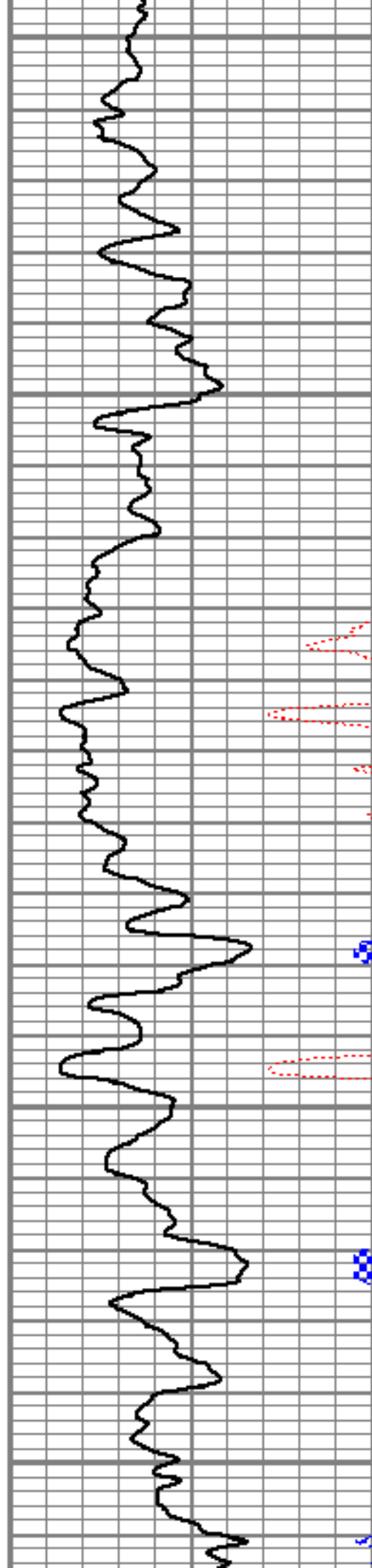
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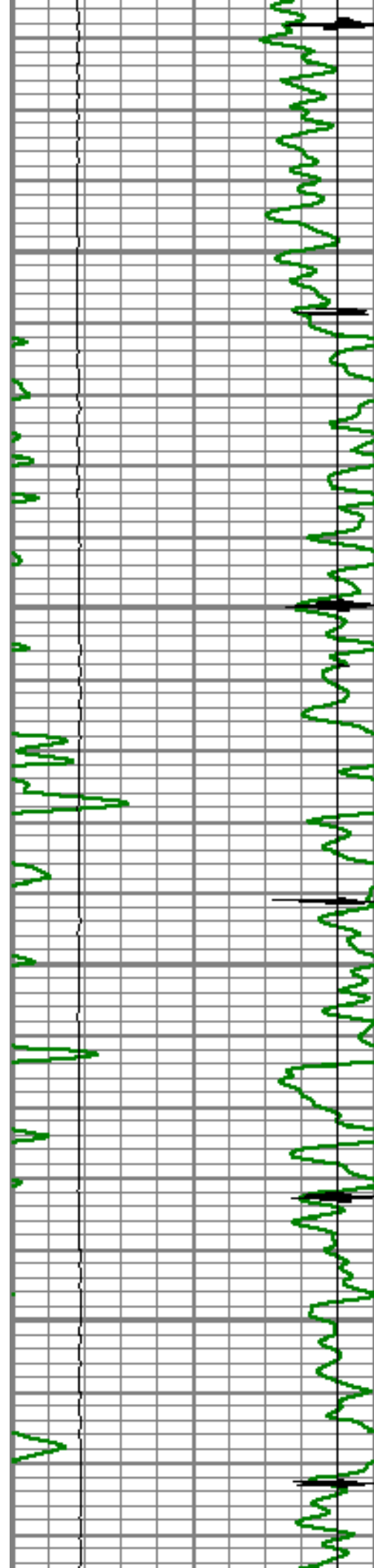
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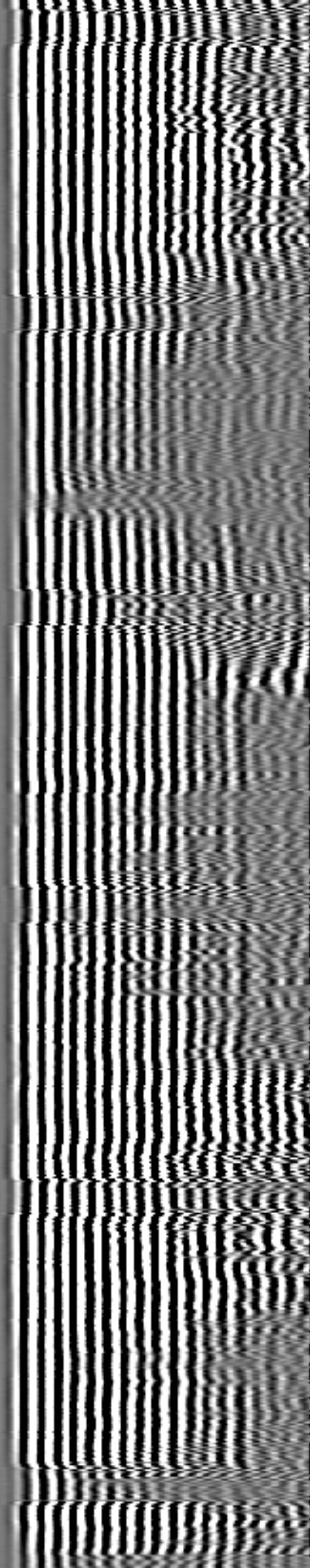
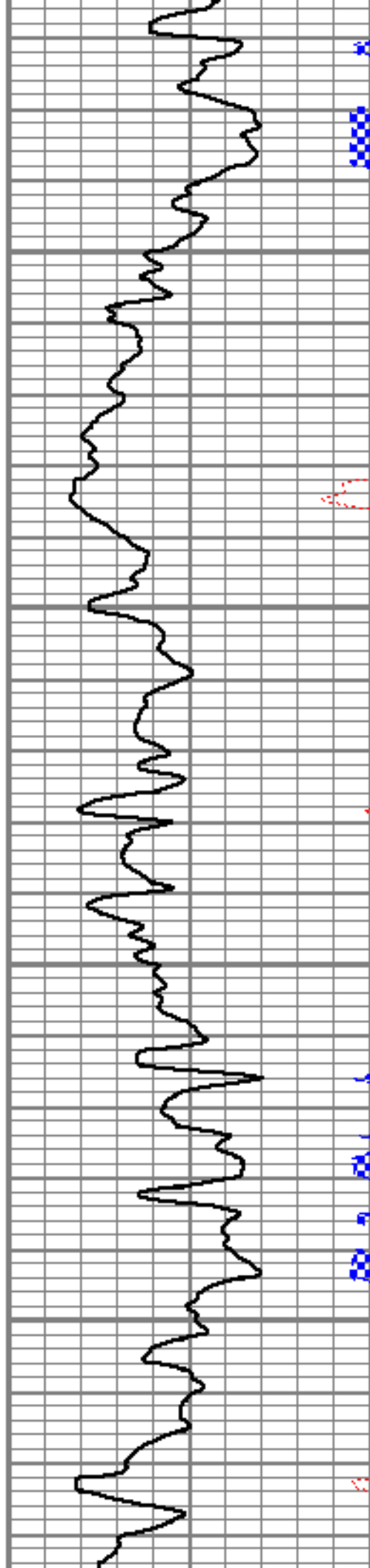


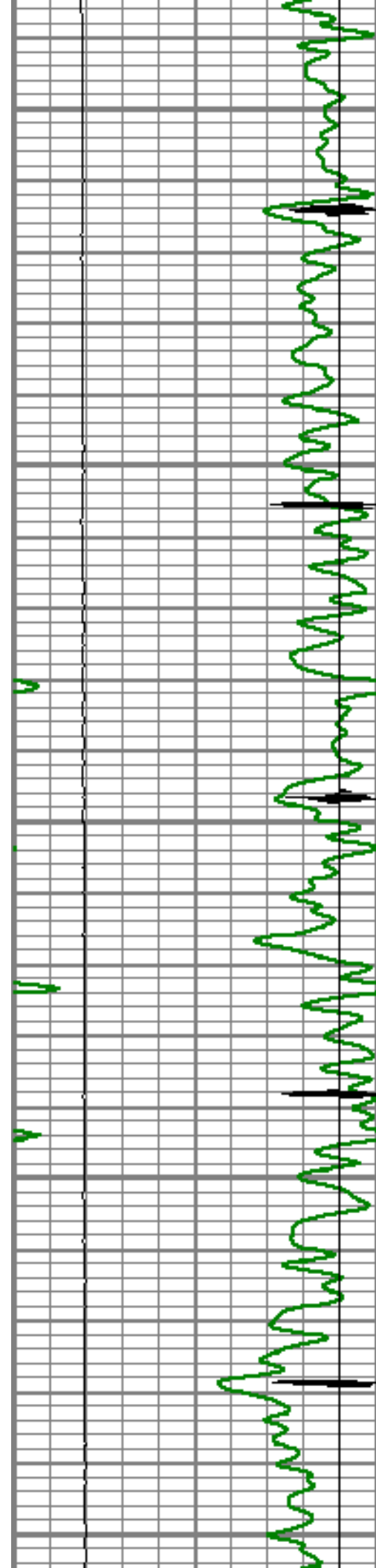
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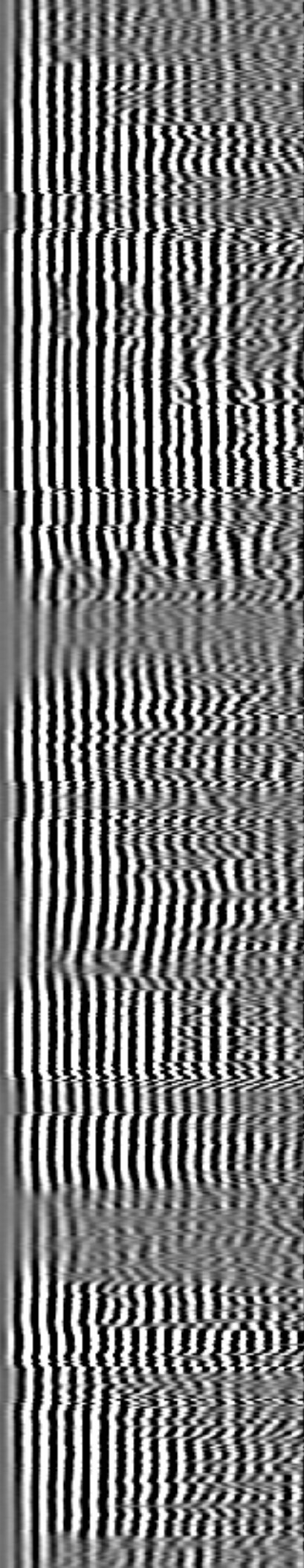
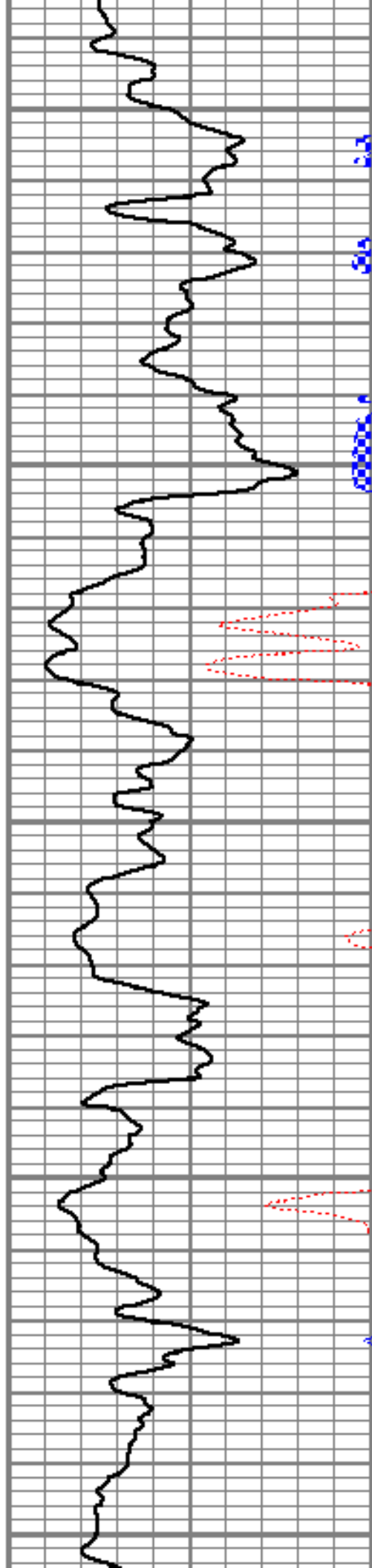
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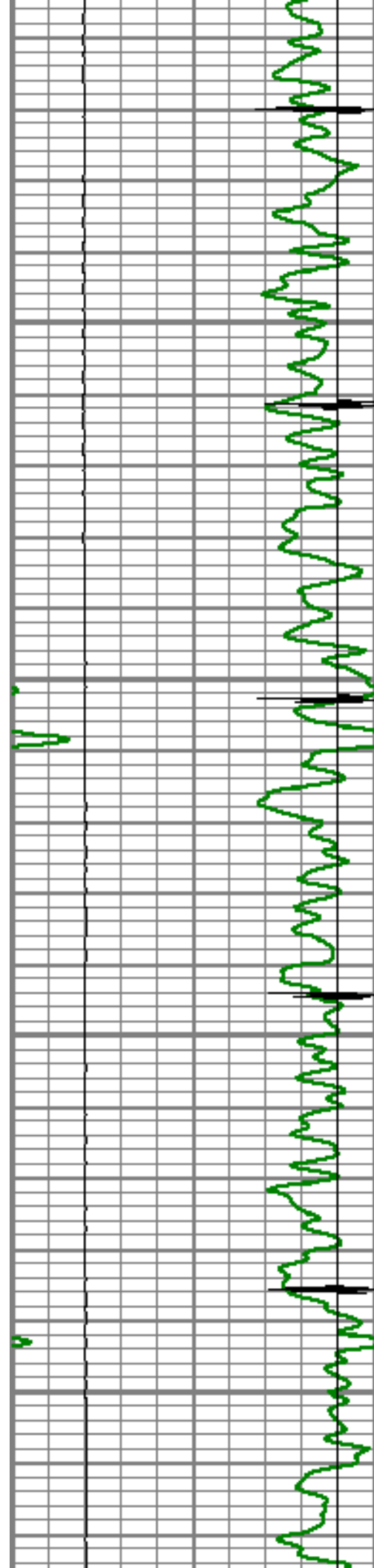
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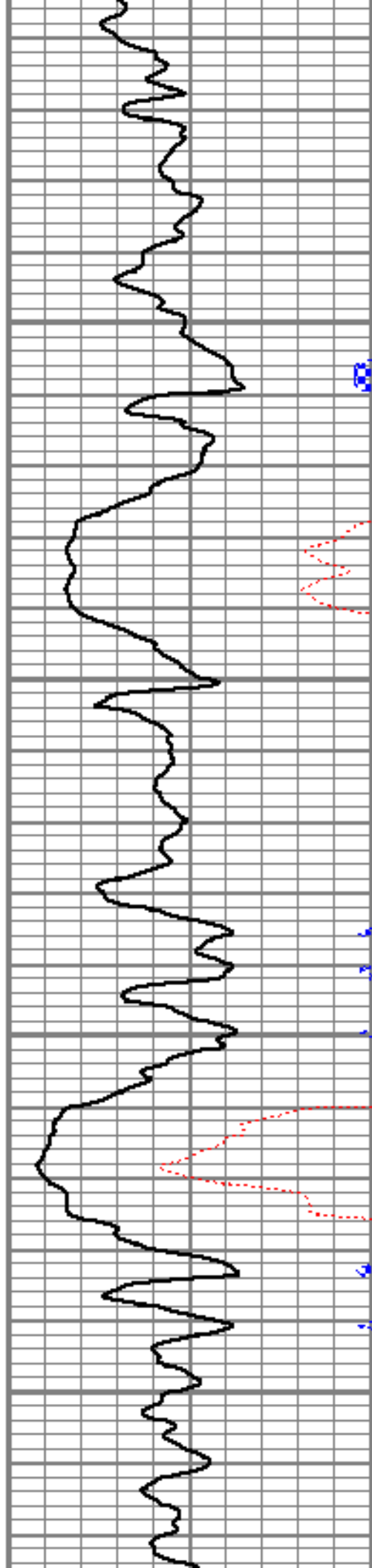


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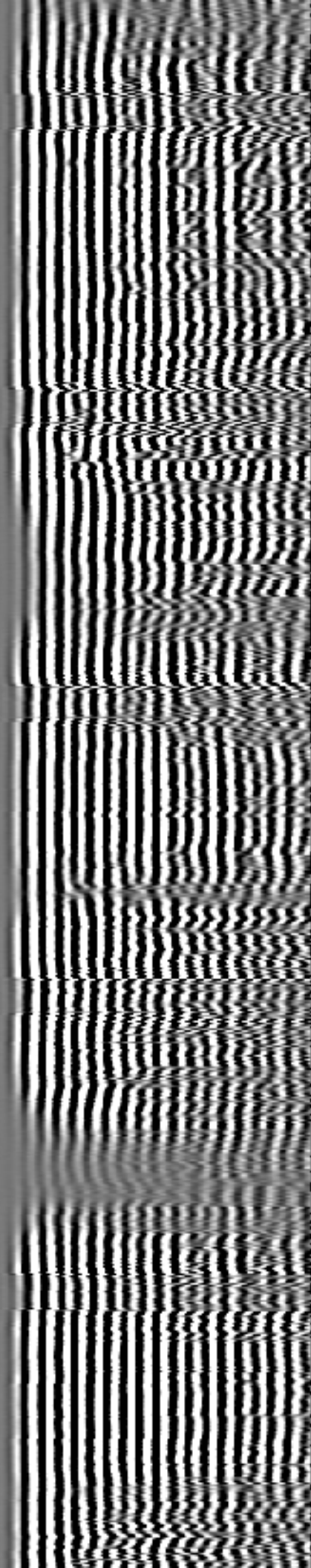


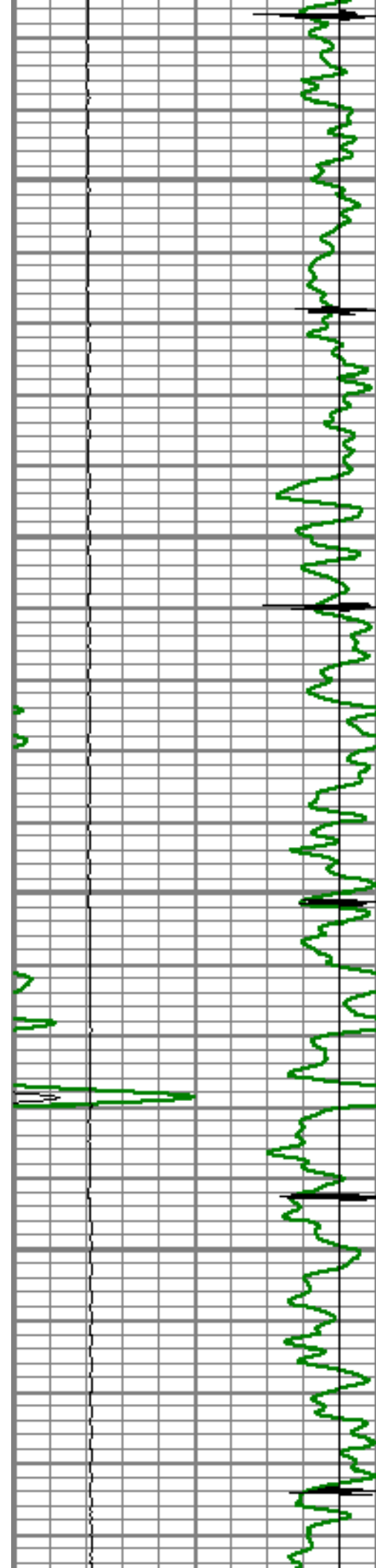
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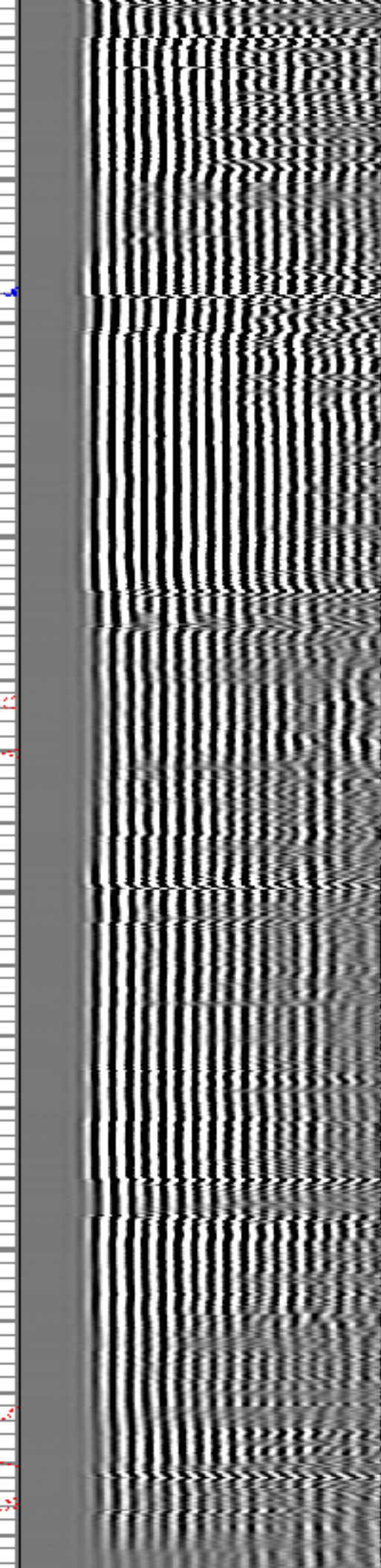
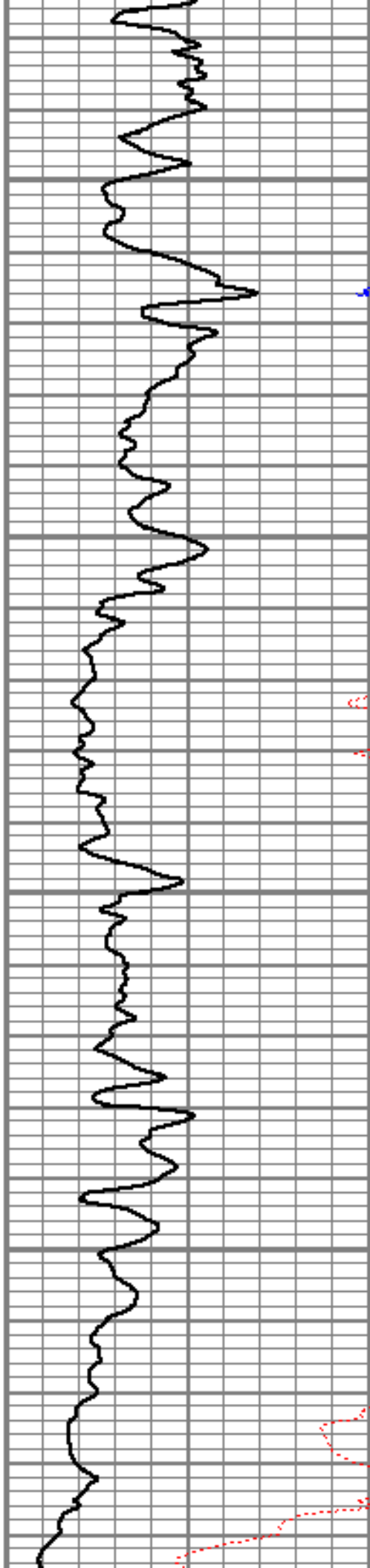


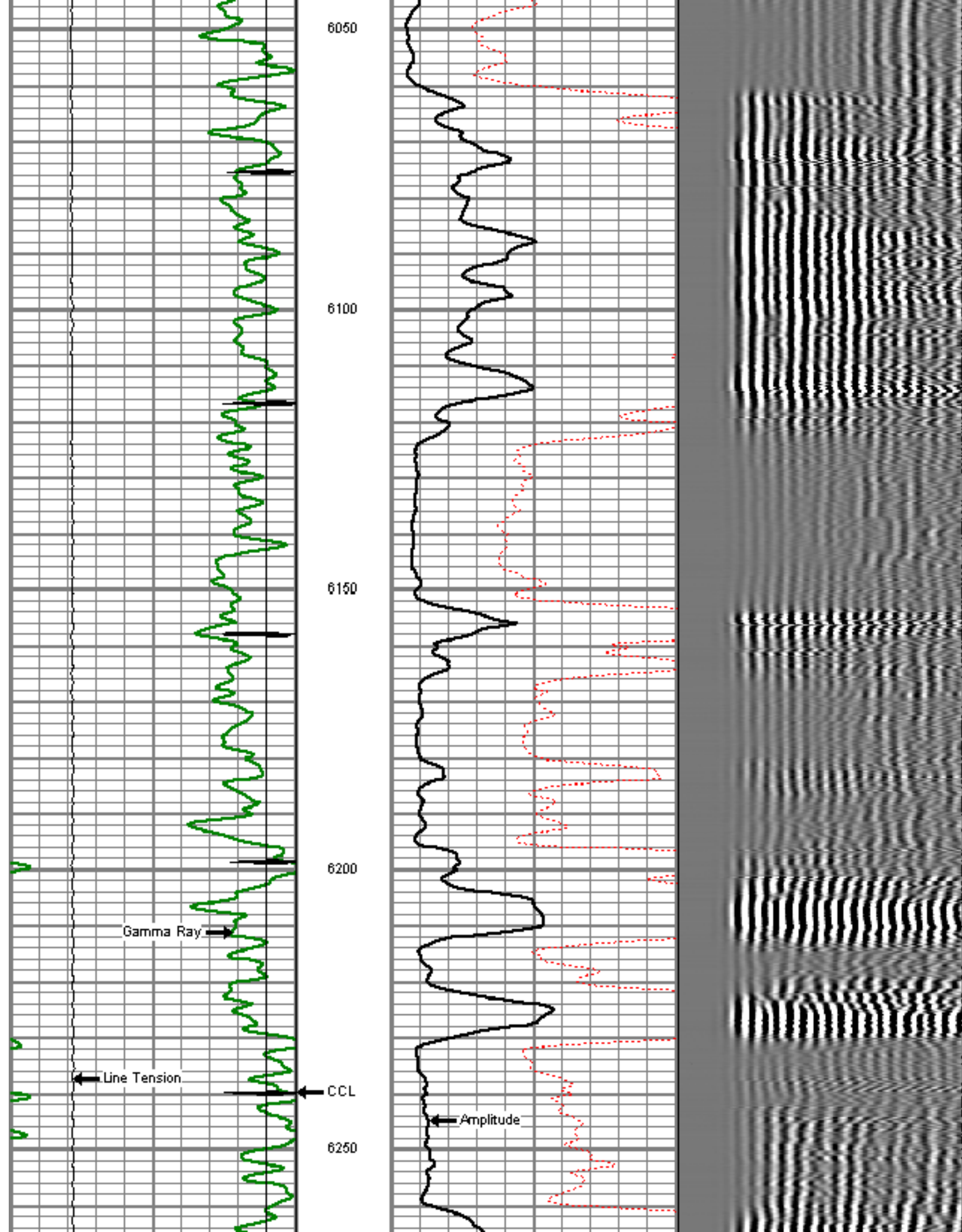
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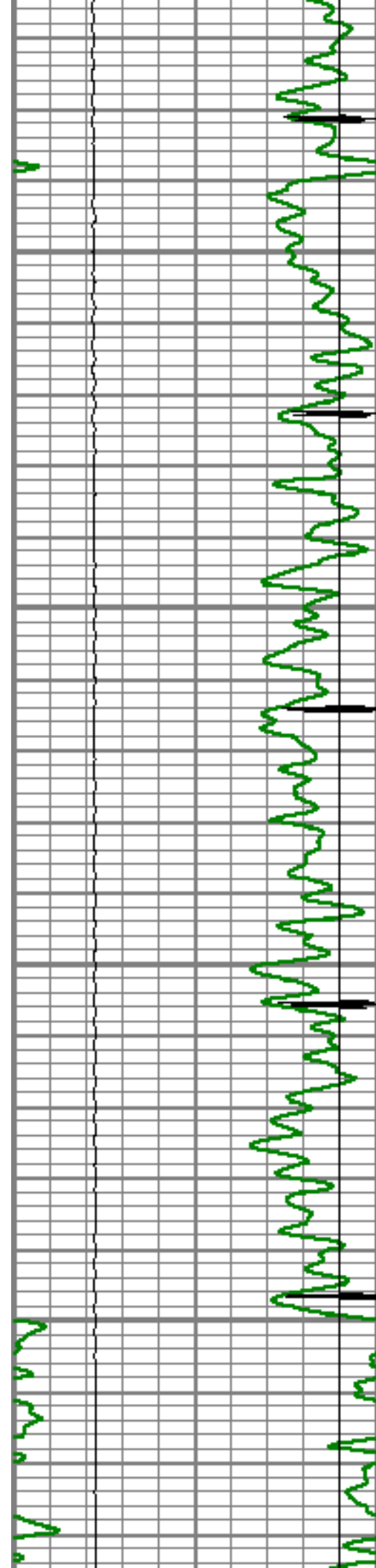
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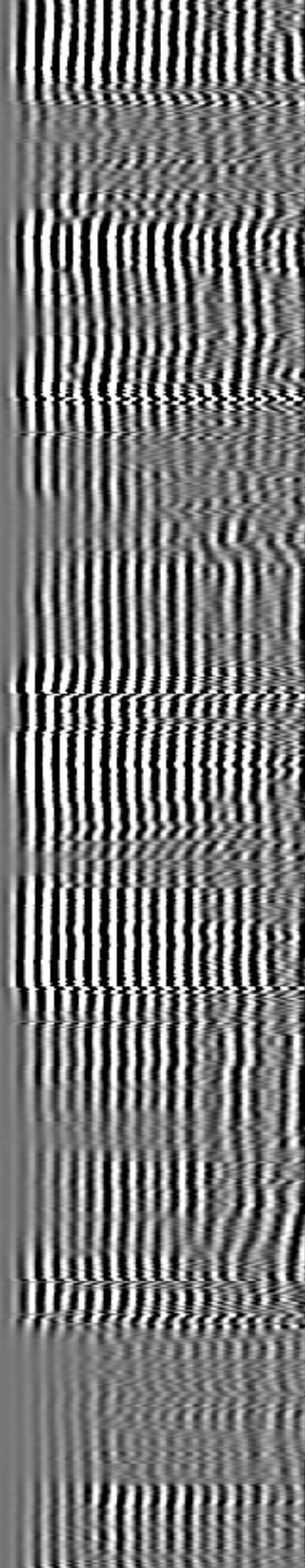
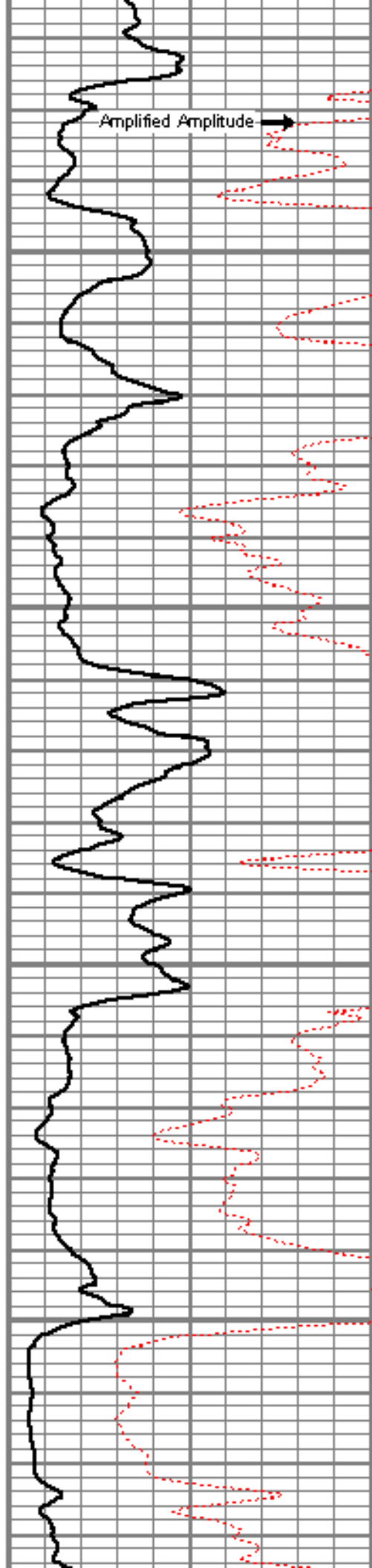
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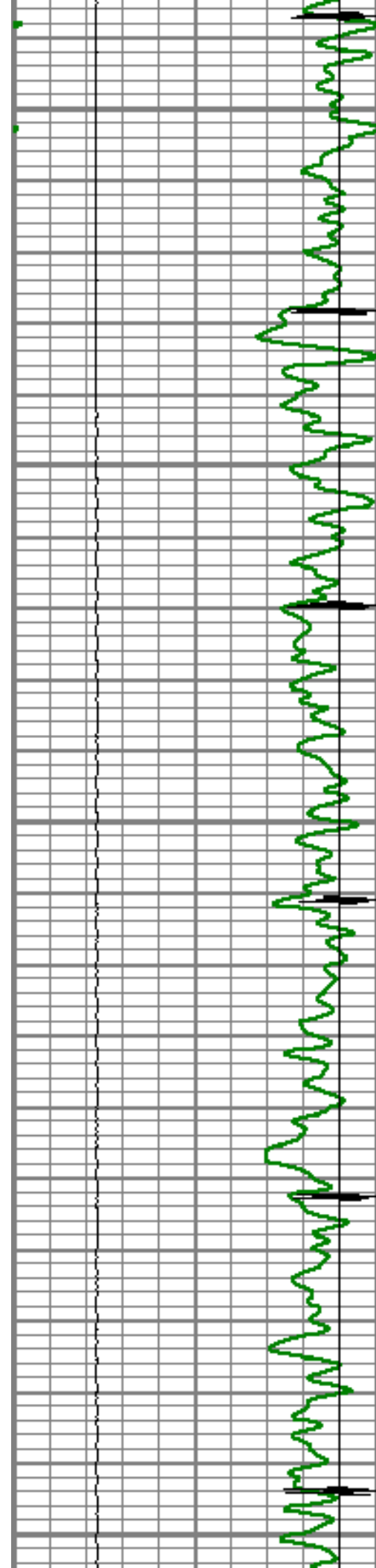
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Amplified Amplitude





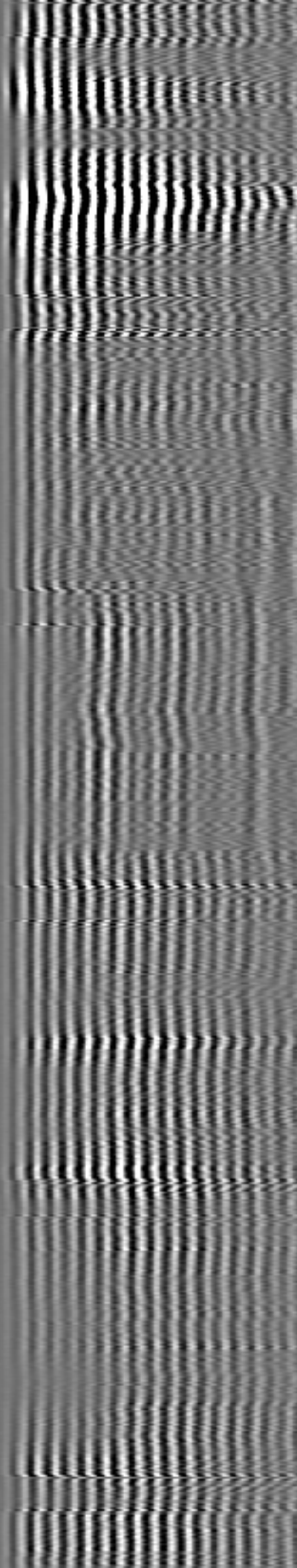
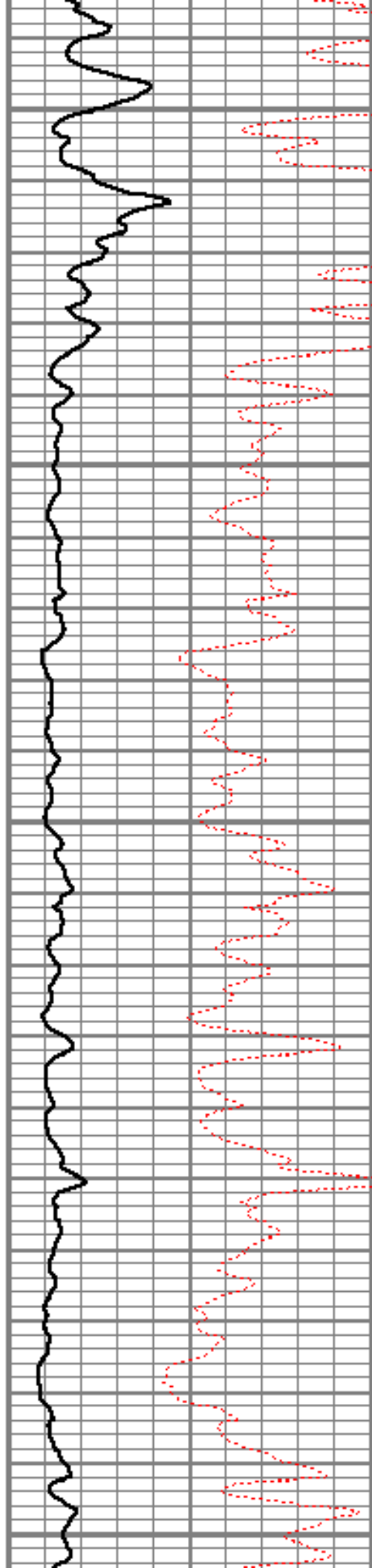
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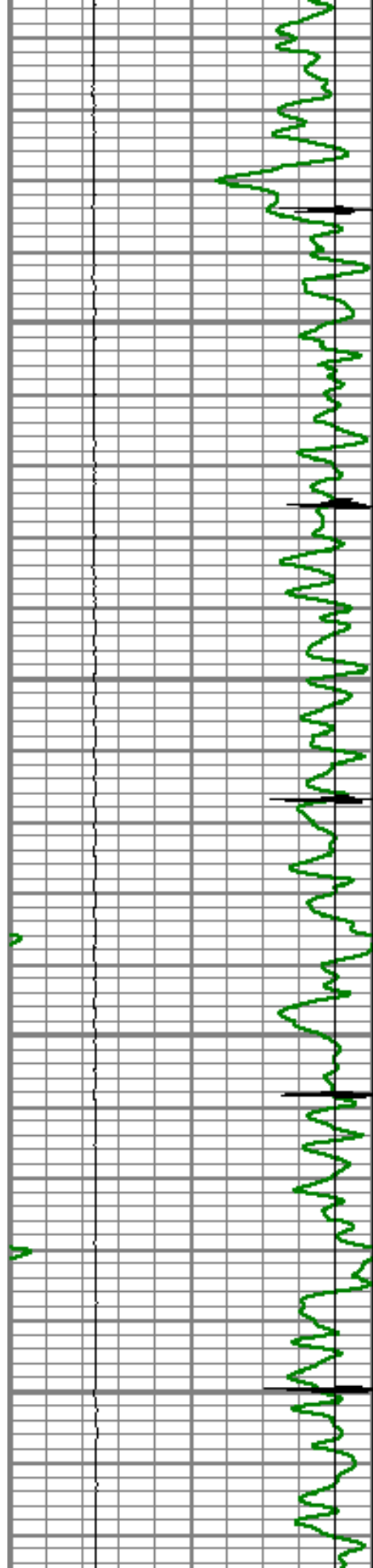
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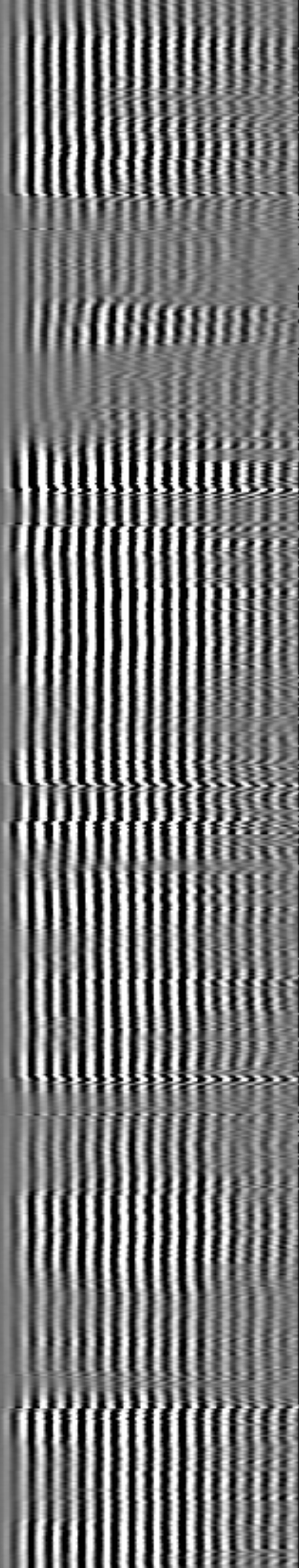
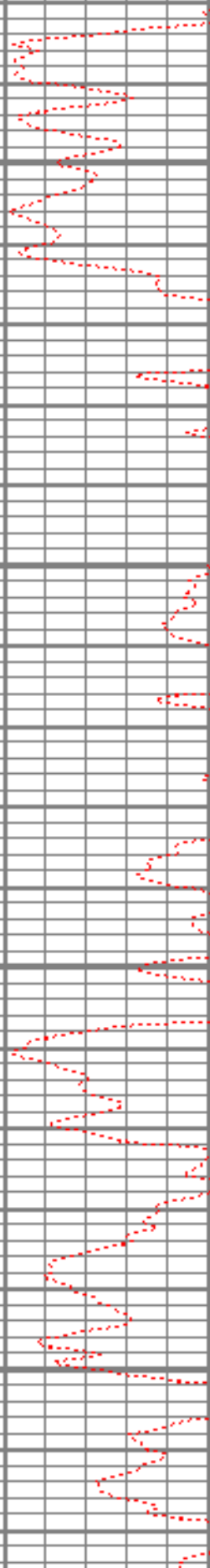
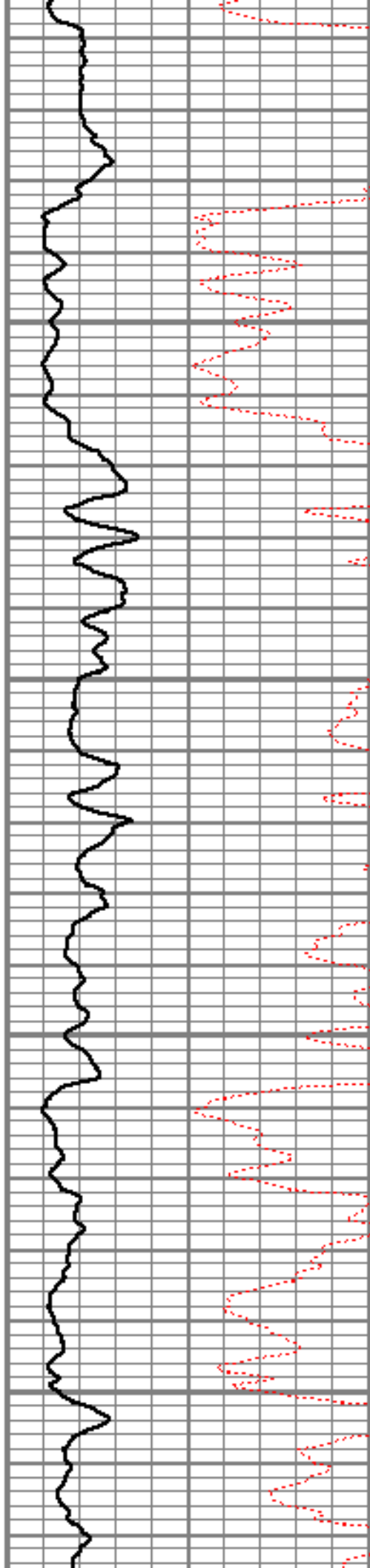


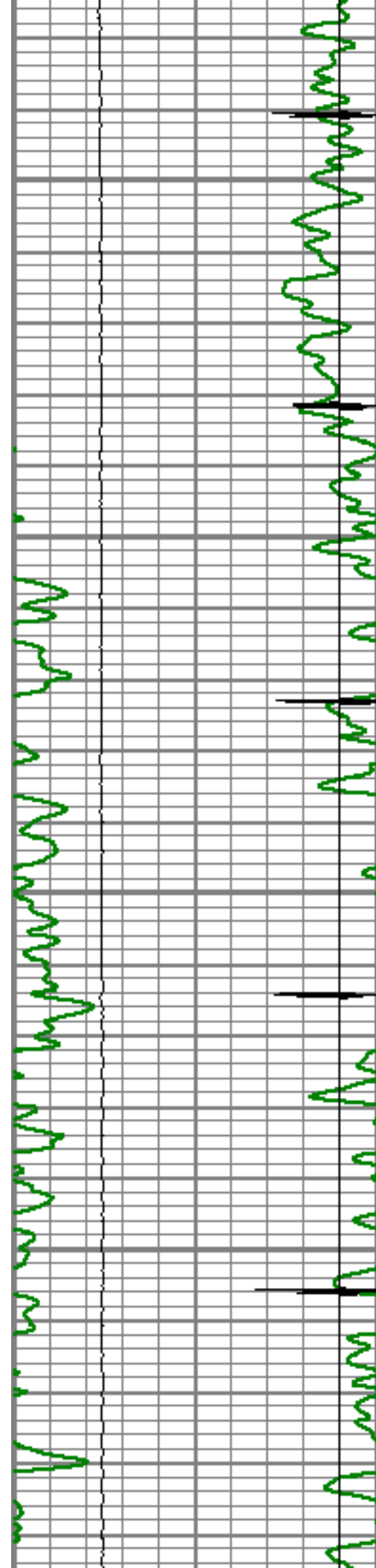
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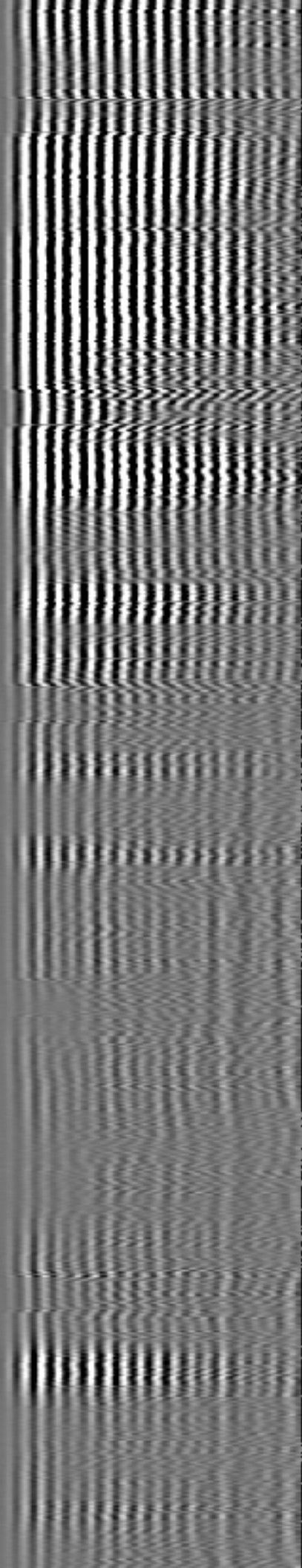
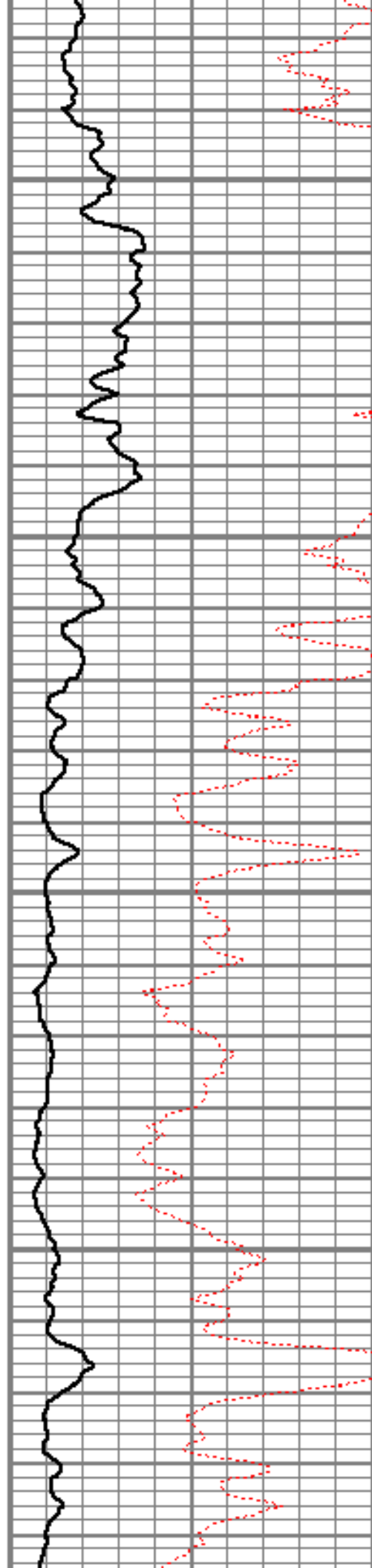


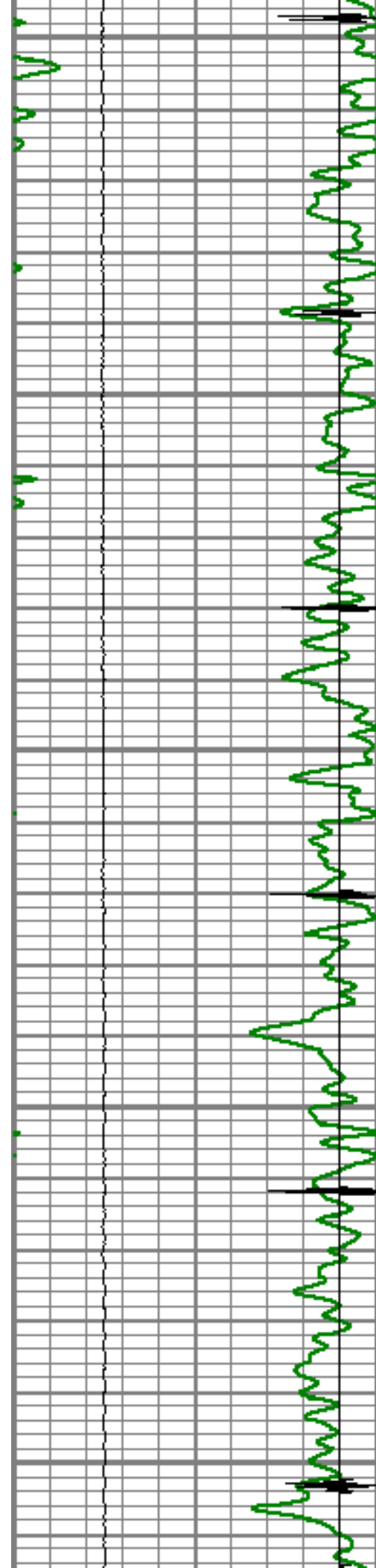
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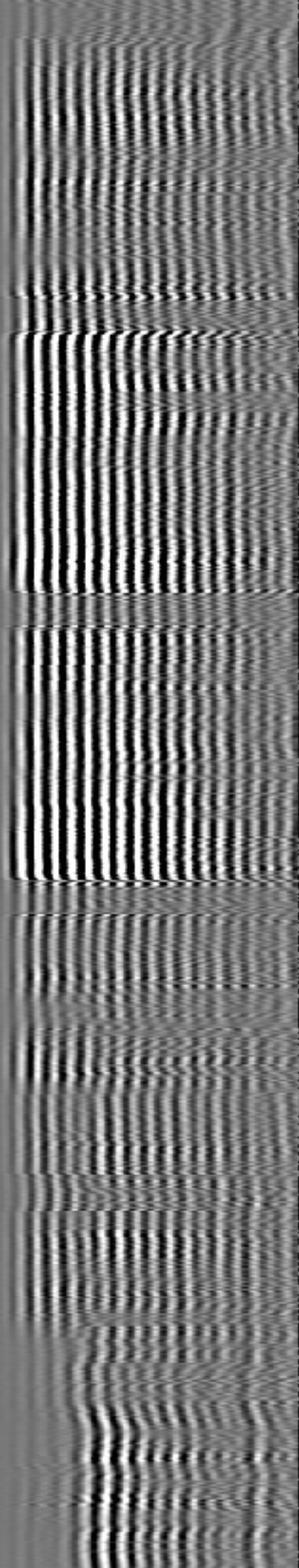
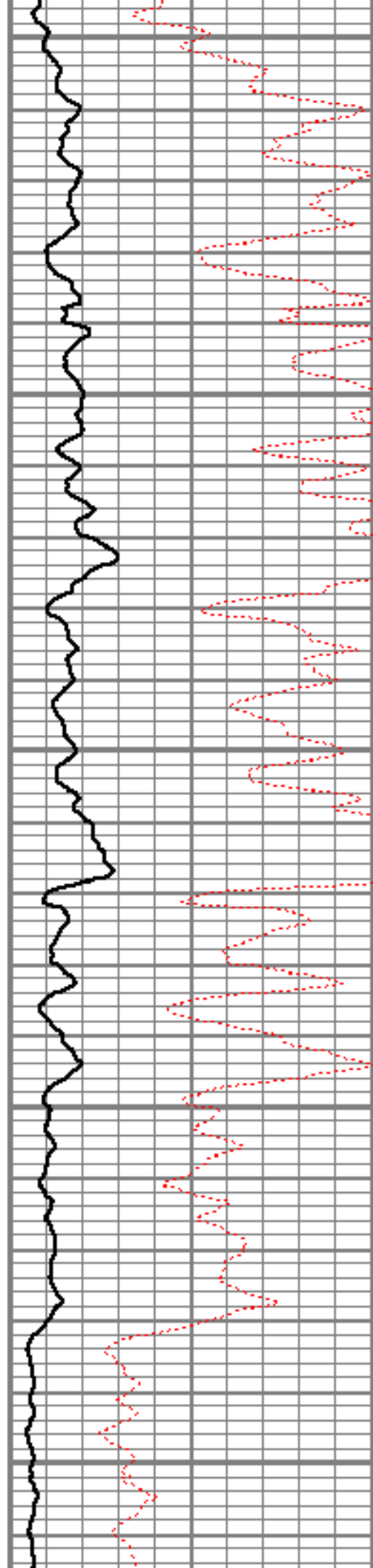
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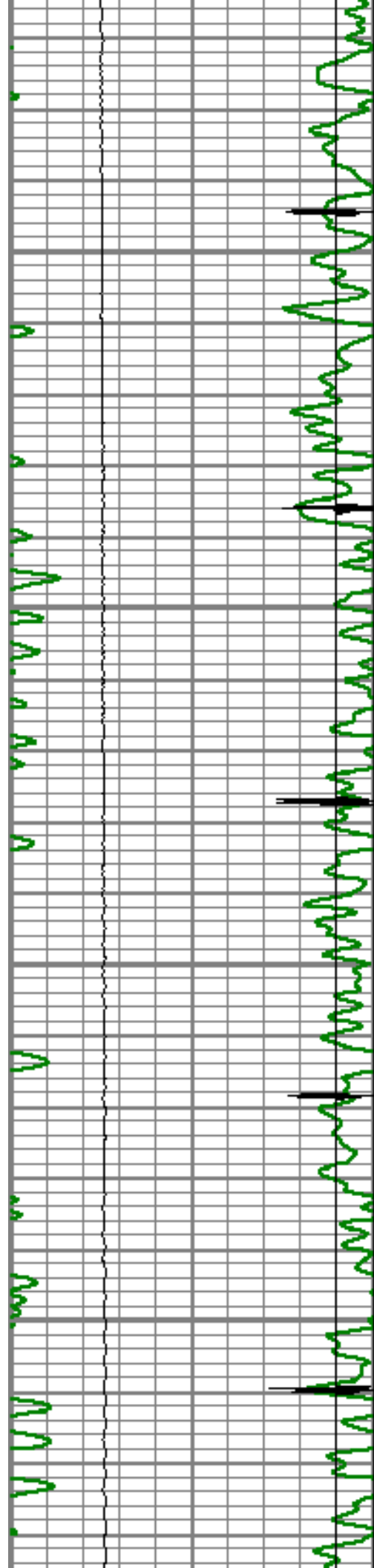
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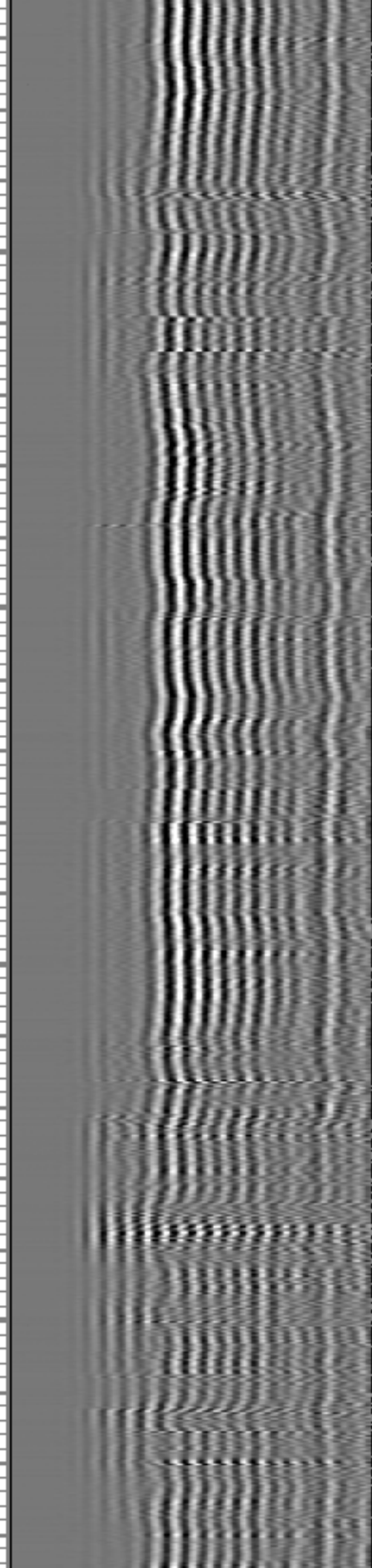
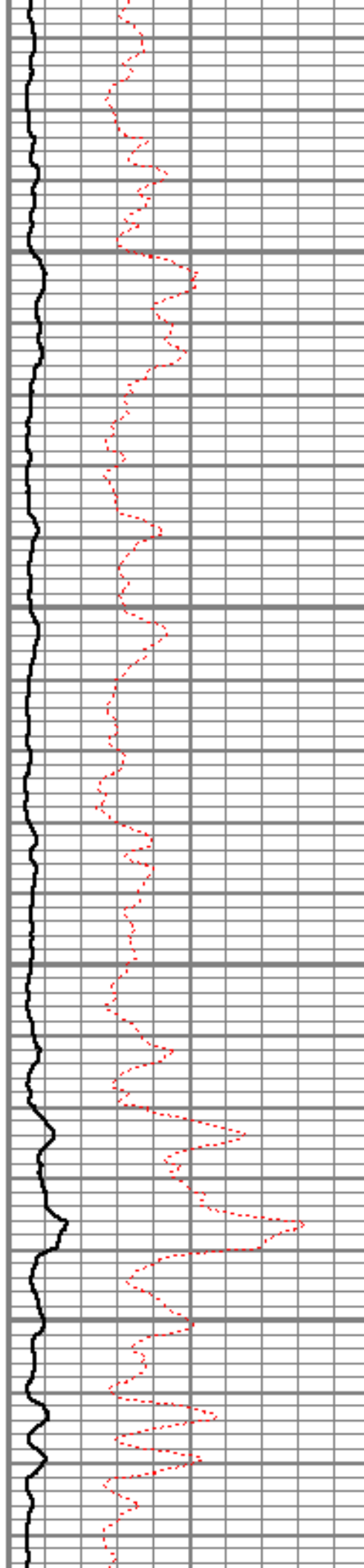


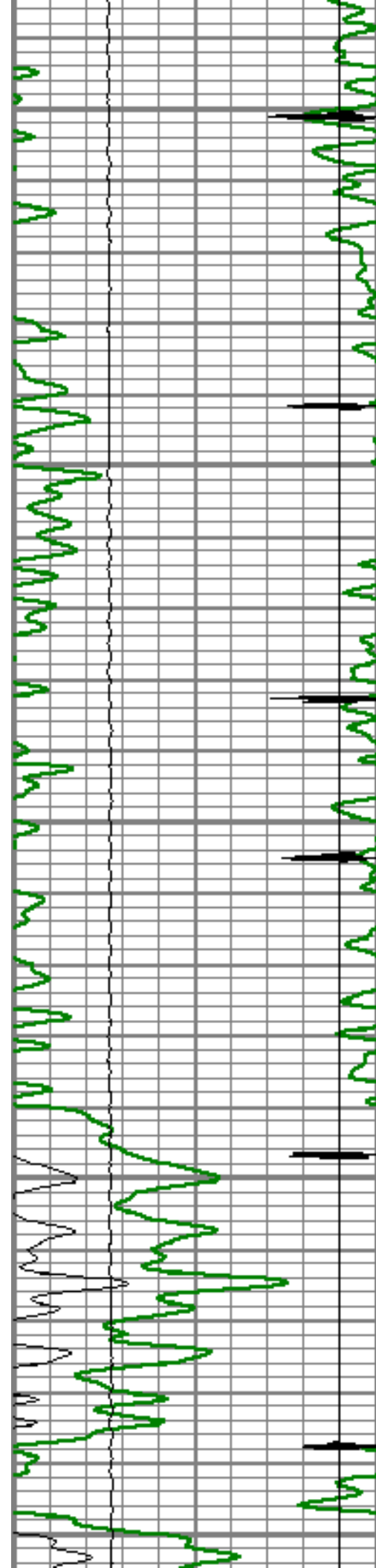
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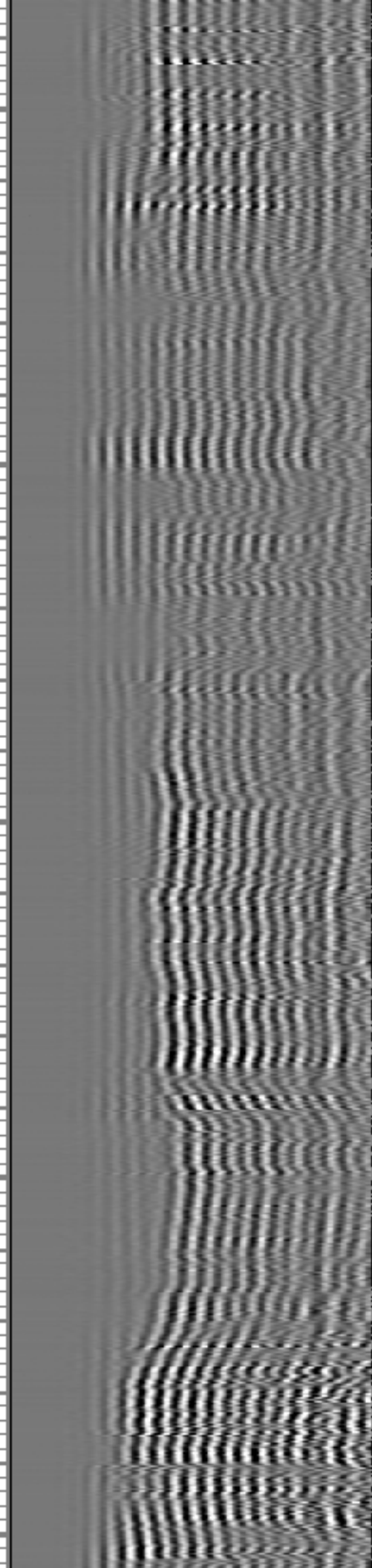
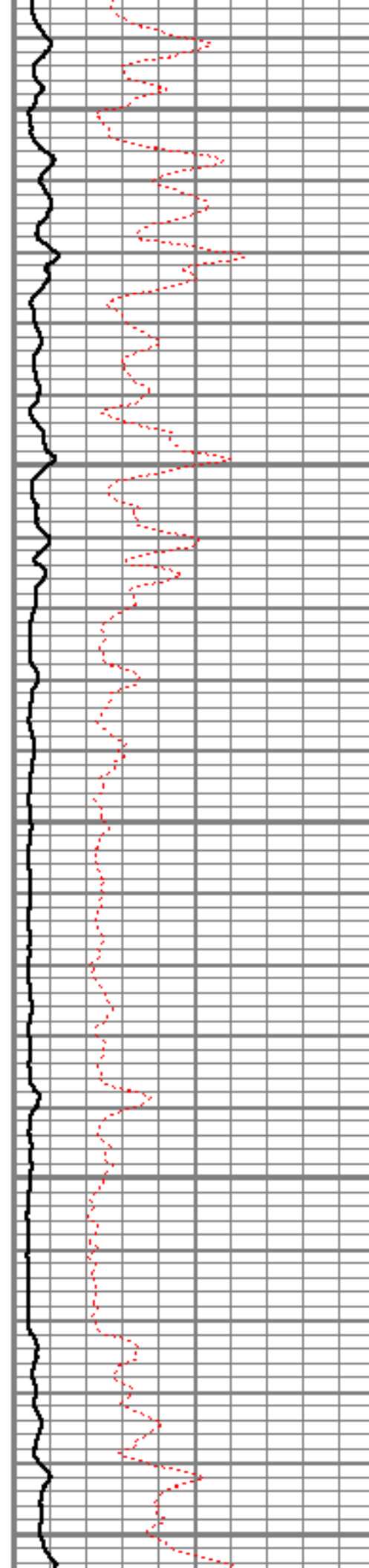
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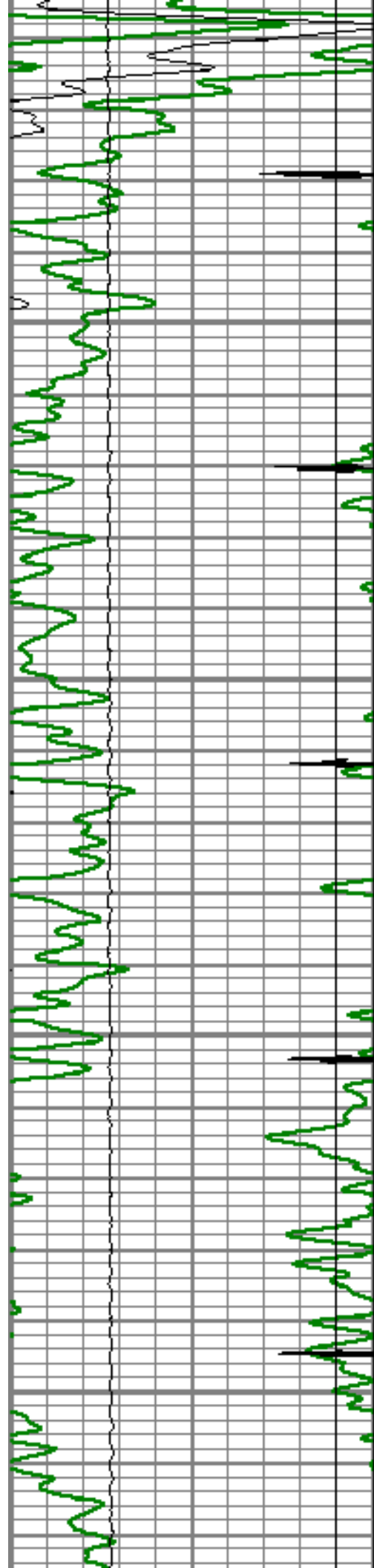
Short Joint

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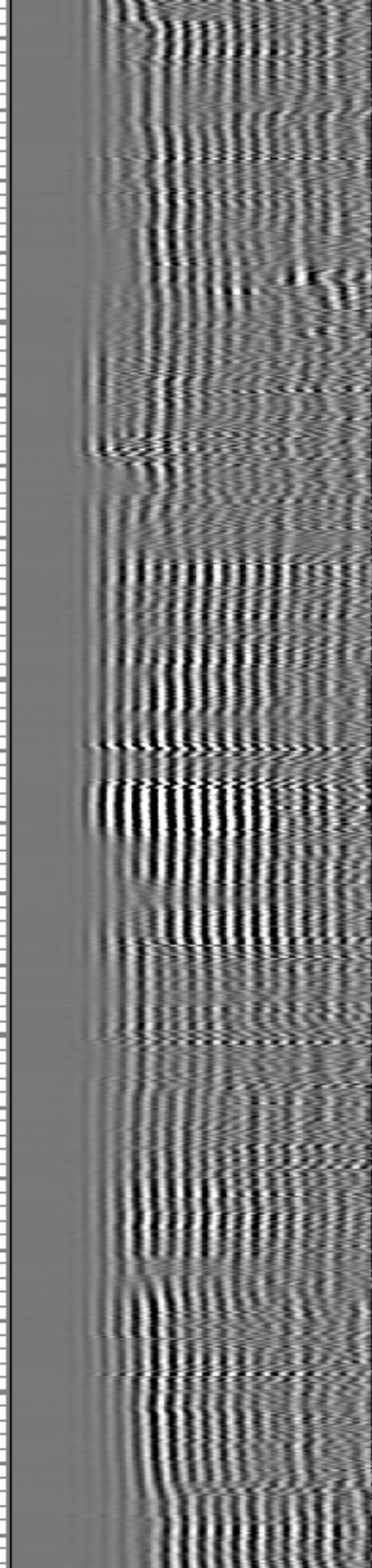
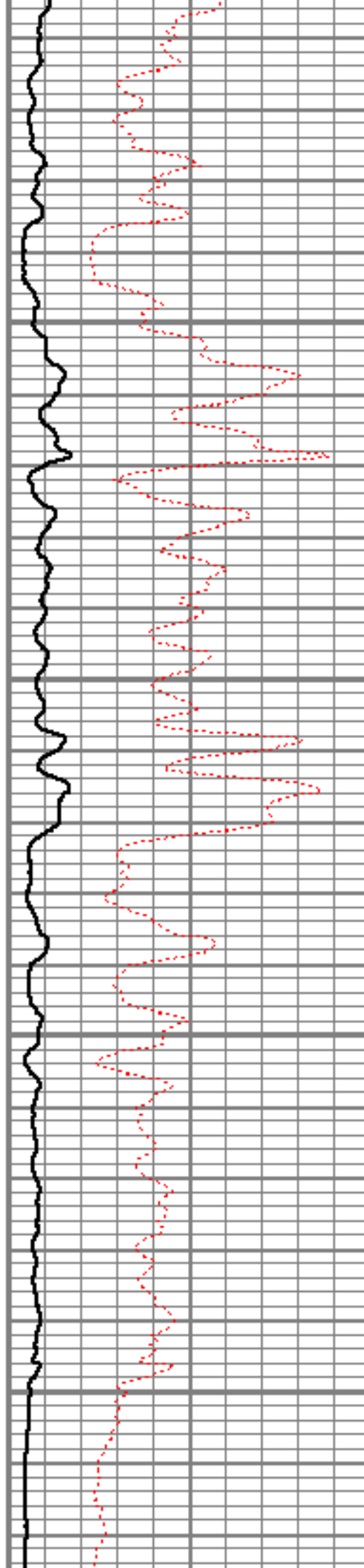


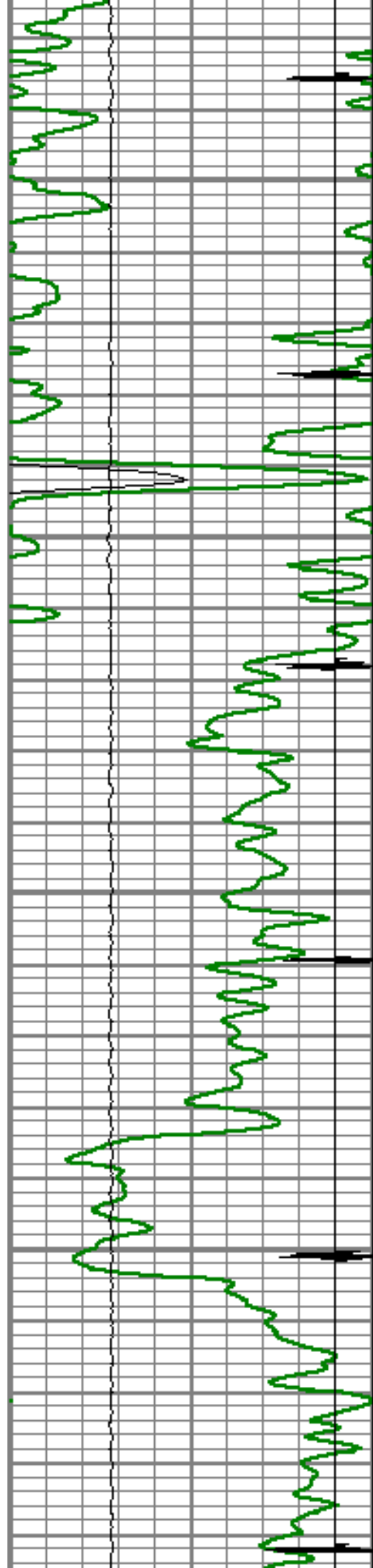
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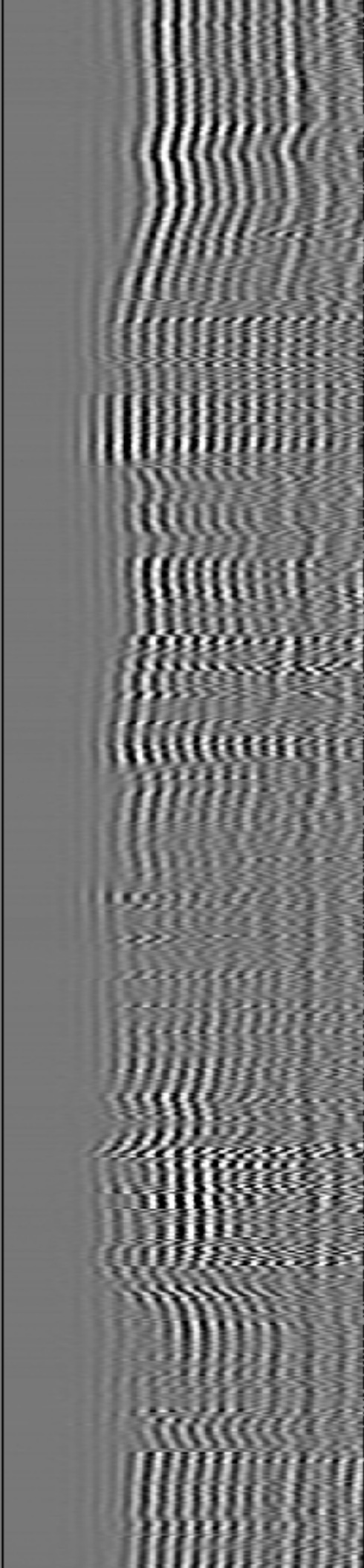
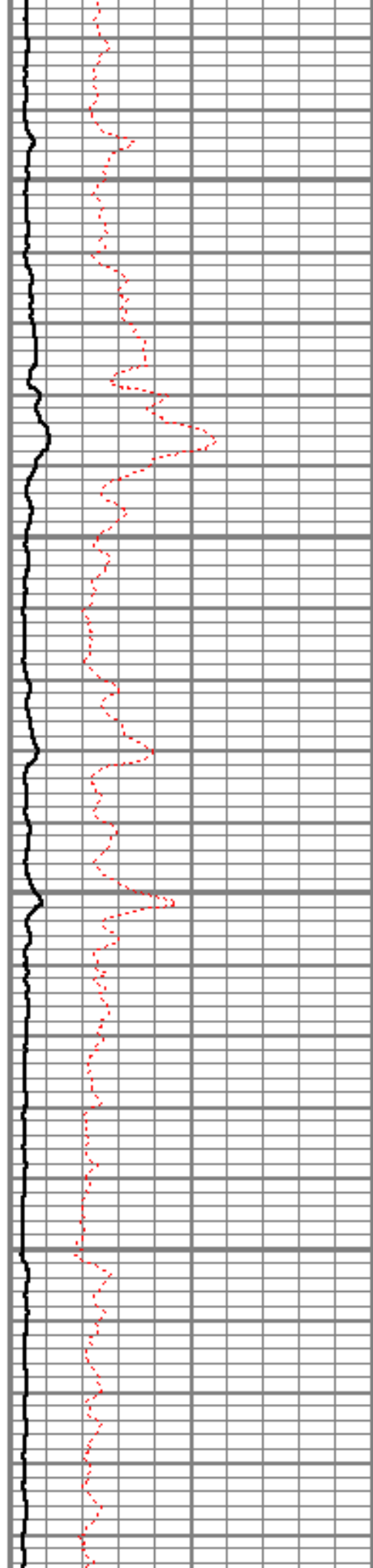


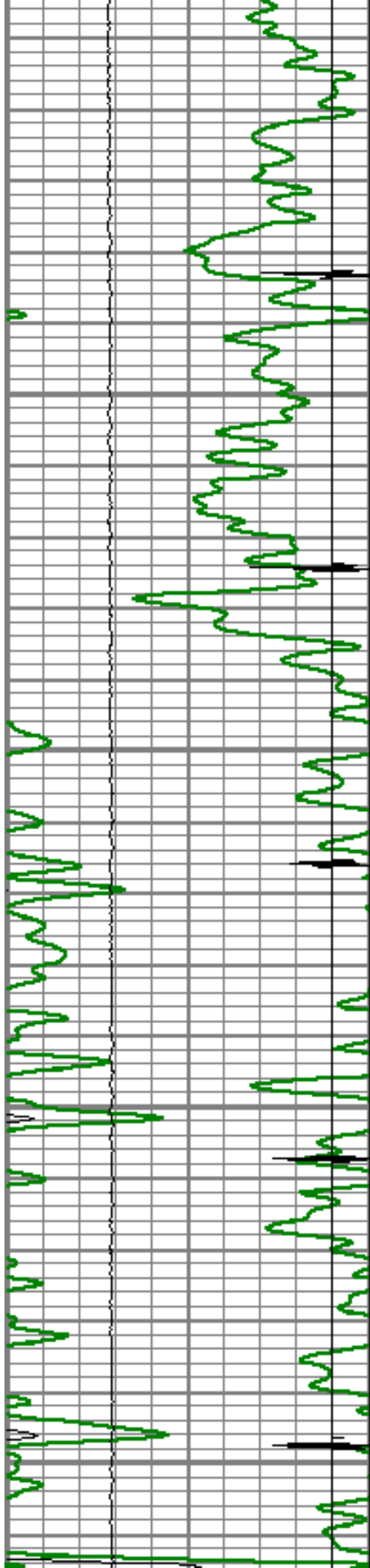
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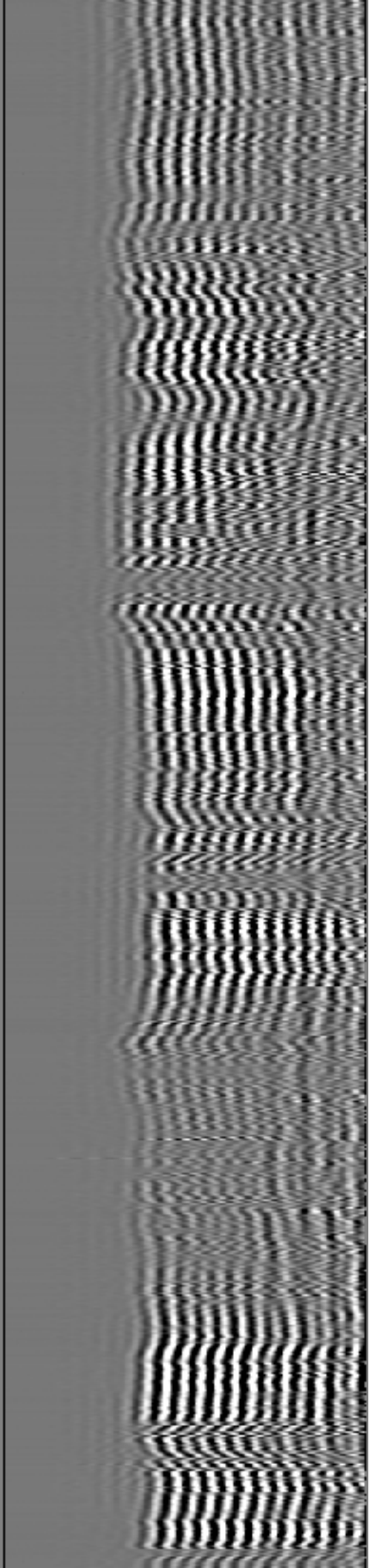
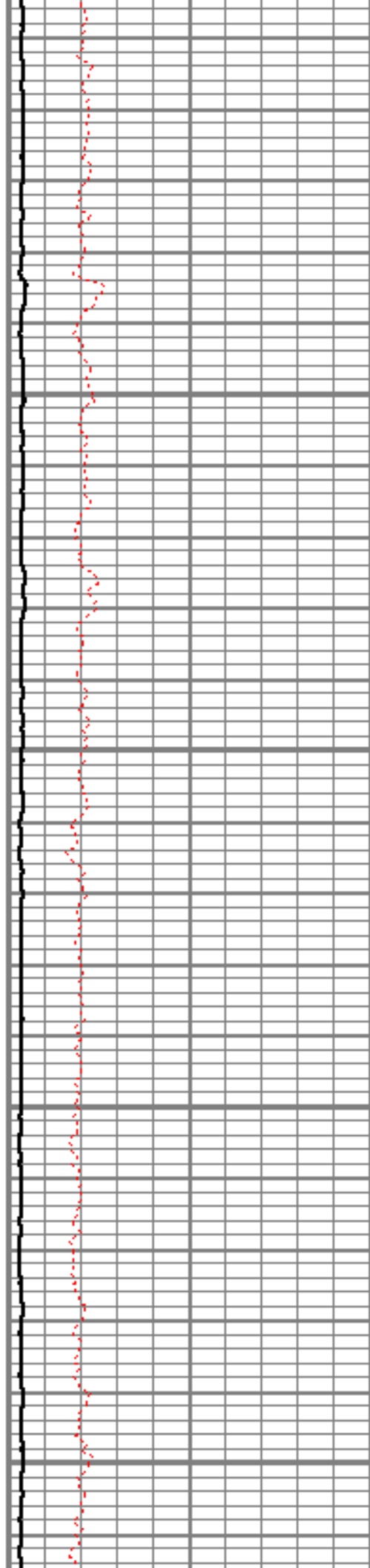
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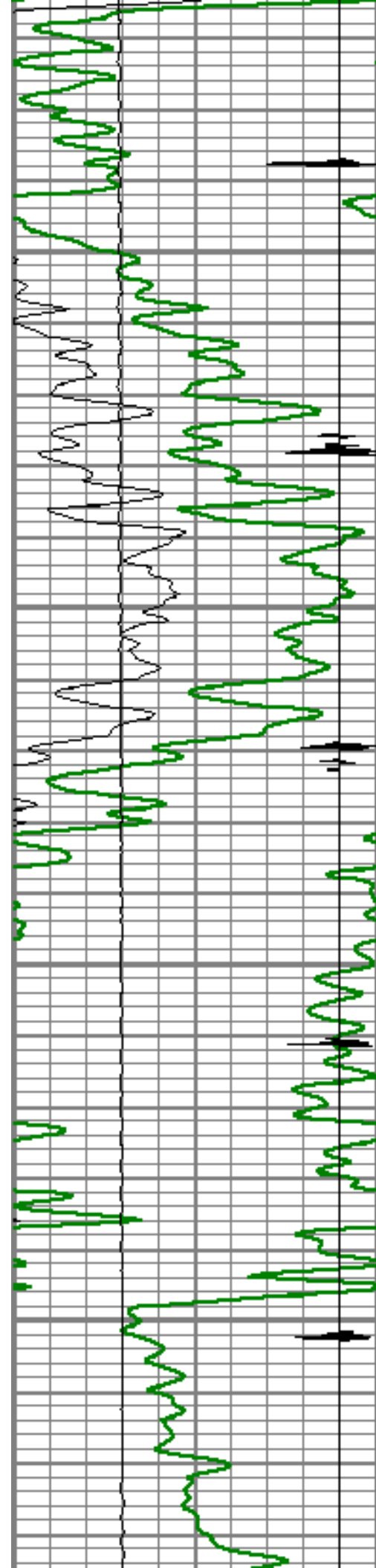
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8400

8450



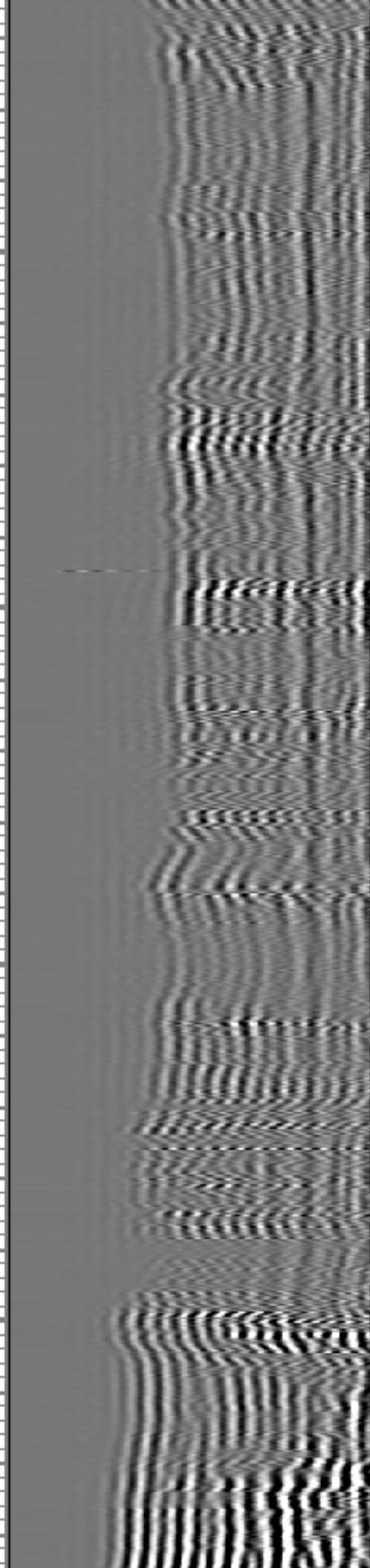
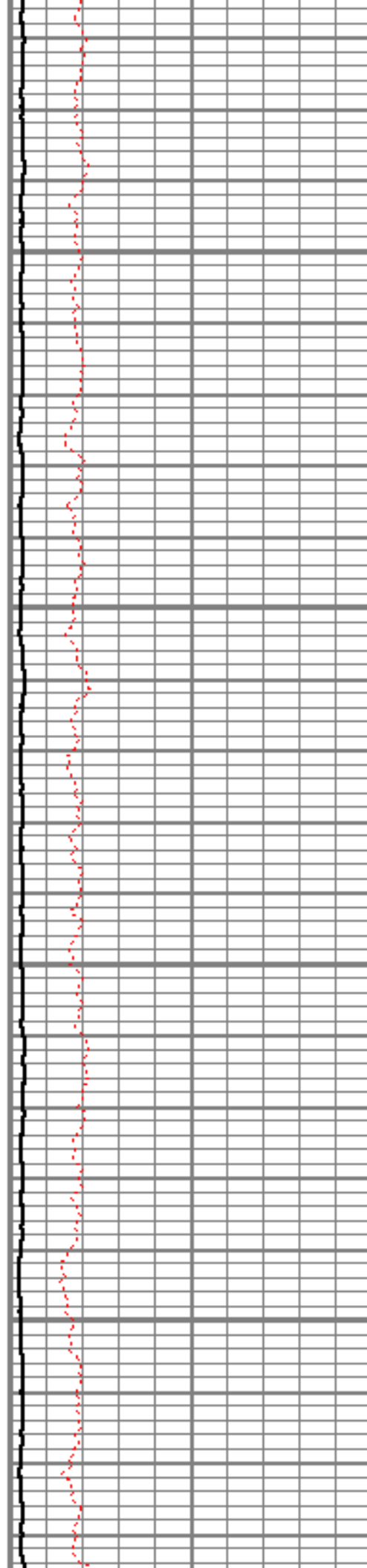


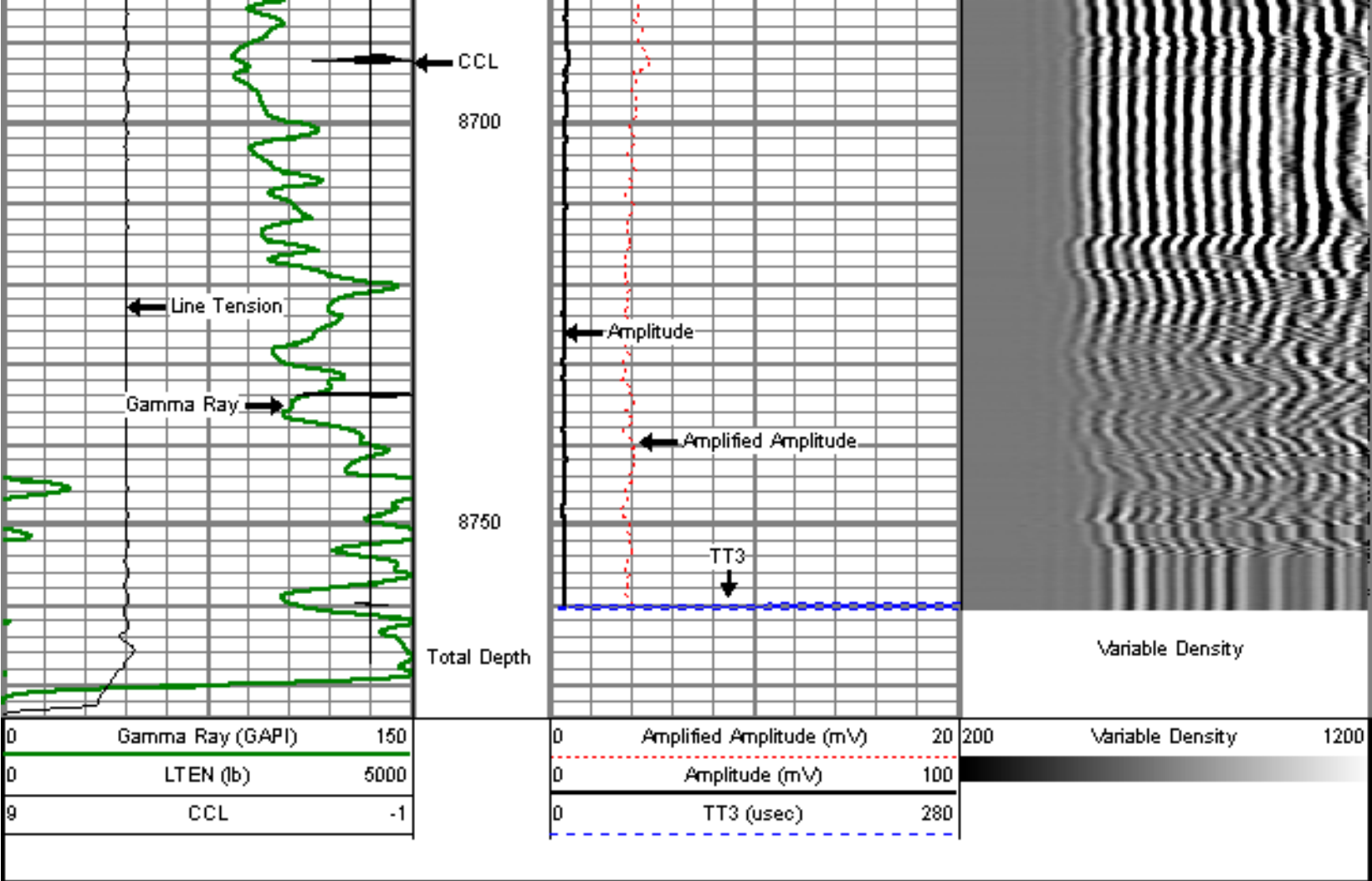
8500


8550

8600

8650





| Sensor | Offset (ft) | Schematic | Description | Len (ft) | OD (in) | Wt (lb) |
|--------|-------------|---|---|----------|---------|---------|
| | |  | titan | 1.02 | 1.44 | 1.50 |
| | | | Centralizer-Probe (CENT-PROBE-1) Probe Bowspring Centralizer | 2.88 | 2.75 | 10.00 |
| WVF3 | 13.54 | | CBL-Probe (DCBL_PRB_275_01) Probe 275" Dial Receiver Bond | 8.77 | 2.75 | 60.00 |
| WVF5 | 12.54 | | | | | |

