



**Cement Bond
Variable Density Log
W/ Gamma Ray/CCL**

| | | | |
|------------------------|--|---|--|
| Company | | Bonanza Creek Energy | |
| Well | | State Seventy Holes F11-J14-3HNC | |
| Field | | Wattenberg | |
| County | | Weld | |
| State | | Colorado | |
| Location: | | API # : 05-123-38881 | |
| Permanent Datum | | SEC 3 TWP 4N RGE 62W | |
| Log Measured From | | Ground Level Elevation 4534' | |
| Drilling Measured From | | Kelly Bushing 16' APD | |
| | | Elevation K.B. 4550' D.F. 4549' G.L. 4534' | |
| Date | | 4/19/2014 | |
| Run Number | | 1 | |
| Depth Driller | | - | |
| Depth Logger | | 6348' | |
| Bottom Logged Interval | | 6335' | |
| Top Log Interval | | Surface | |
| Open Hole Size | | 8.75 | |
| Type Fluid | | Fresh Water | |
| Density / Viscosity | | 8.33 | |
| Max. Recorded Temp. | | - | |
| Estimated Cement Top | | Surface | |
| Time Well Ready | | 9:56 | |
| Time Logger on Bottom | | 10:35 | |
| Equipment Number | | 13033 | |
| Location | | Brighton | |
| Recorded By | | N.Menchaca | |
| Witnessed By | | K.Bunker | |
| C.Rail | | | |
| Run Number | | | |
| Bit | | From To | |
| Size | | Weight From To | |
| Casing Record | | Top Bottom | |
| Surface String | | 9 5/8" 36# 0 427' | |
| Prot. String | | | |
| Production String | | 7" 26# 0 6248' | |
| 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

Primary Log on this Well

Main Pass and Repeat Pass logged with 0 PSI

Logged from 16' Kelly Bushing

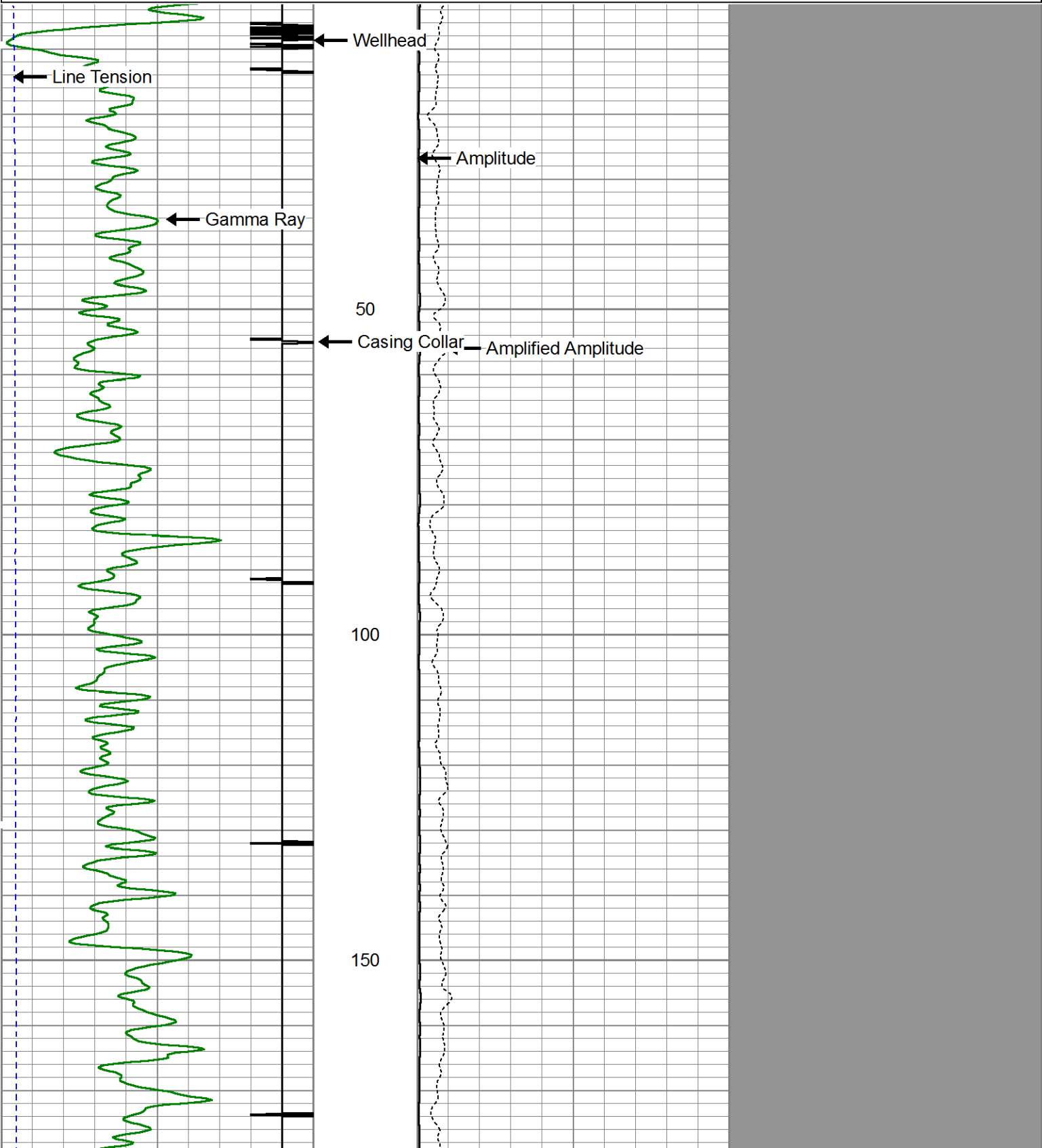
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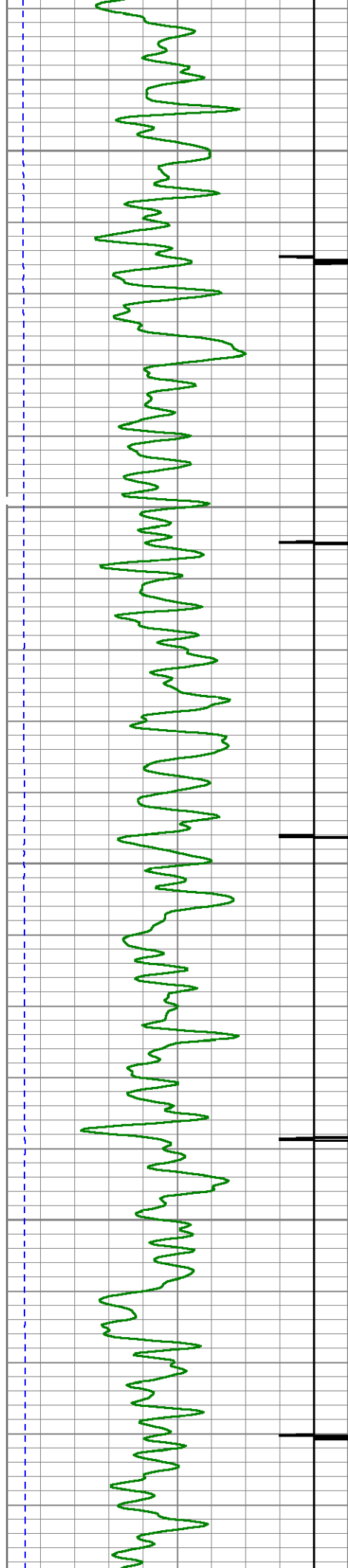
Thank You For using Allied Wireline Services
(303) 659-4609



Main Pass (0 P.S.I.)

| | | | | | | | | |
|-----|--------------------|------|---|--------------------------|-----|-----|------------------|------|
| 400 | Travel Time (usec) | 200 | 0 | Amplitude (mV) | 100 | 200 | Variable Density | 1200 |
| 9 | Casing Collar | -1 | 0 | Amplified Amplitude (mV) | 10 | | | |
| 0 | Gamma Ray (GAPI) | 150 | | | | | | |
| 0 | Line Tension (lb) | 5000 | | | | | | |



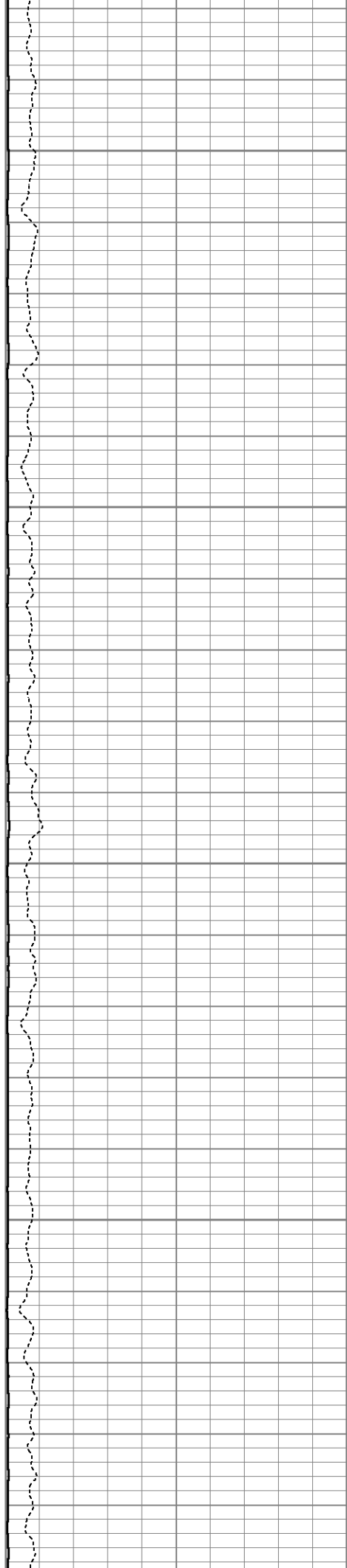


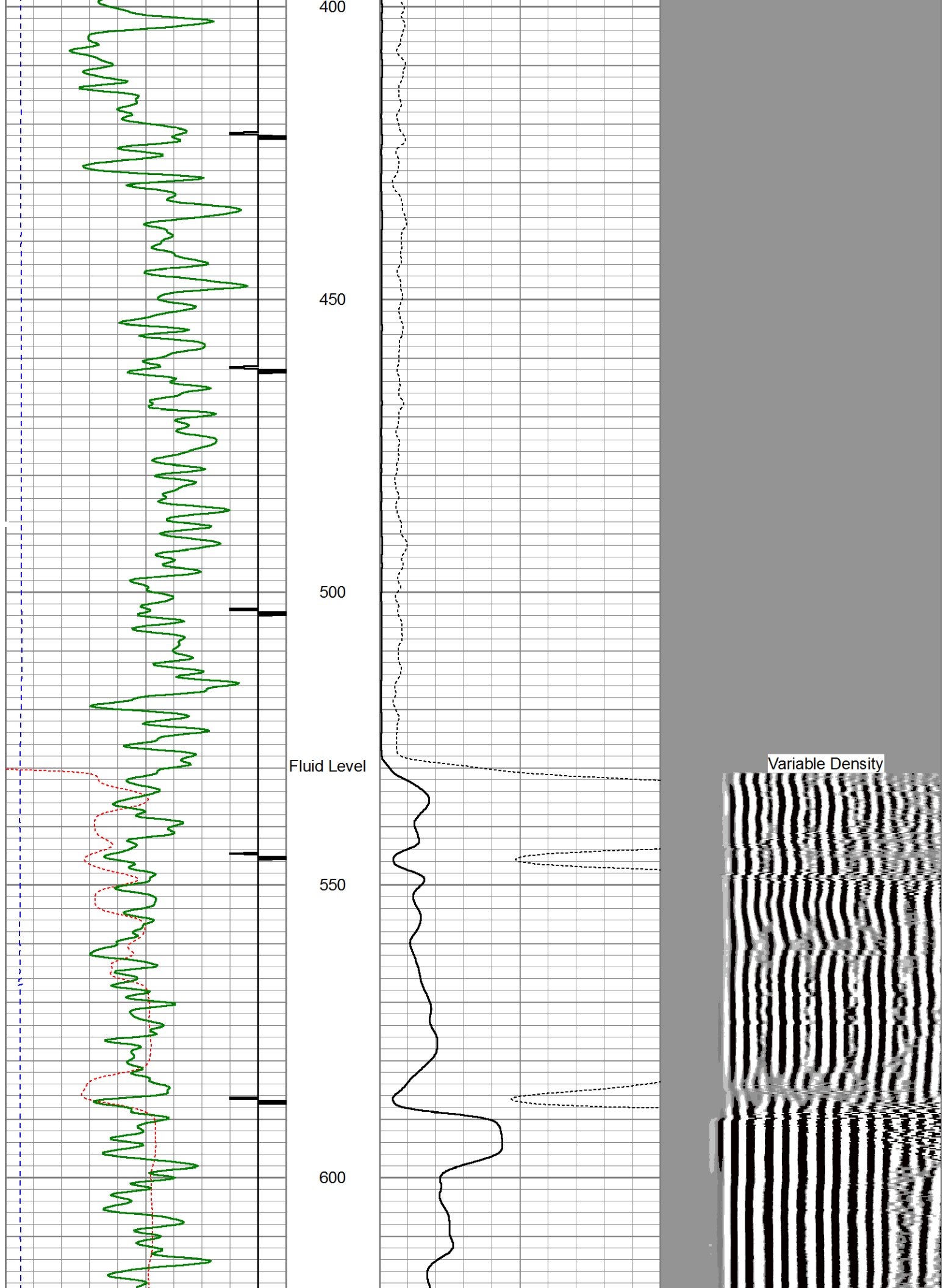
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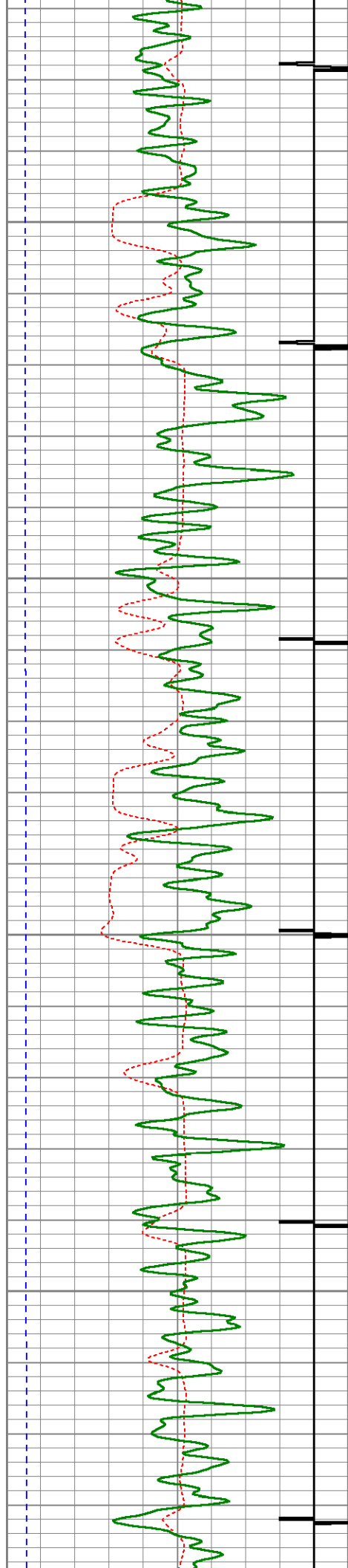
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300

350





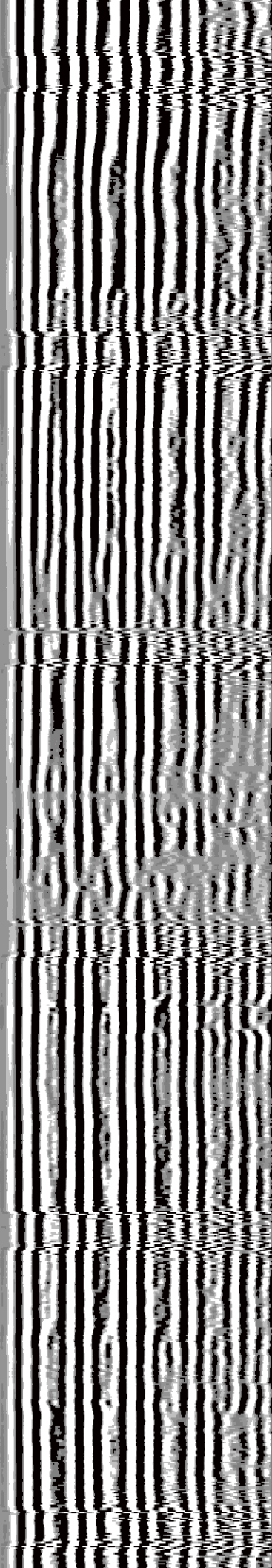
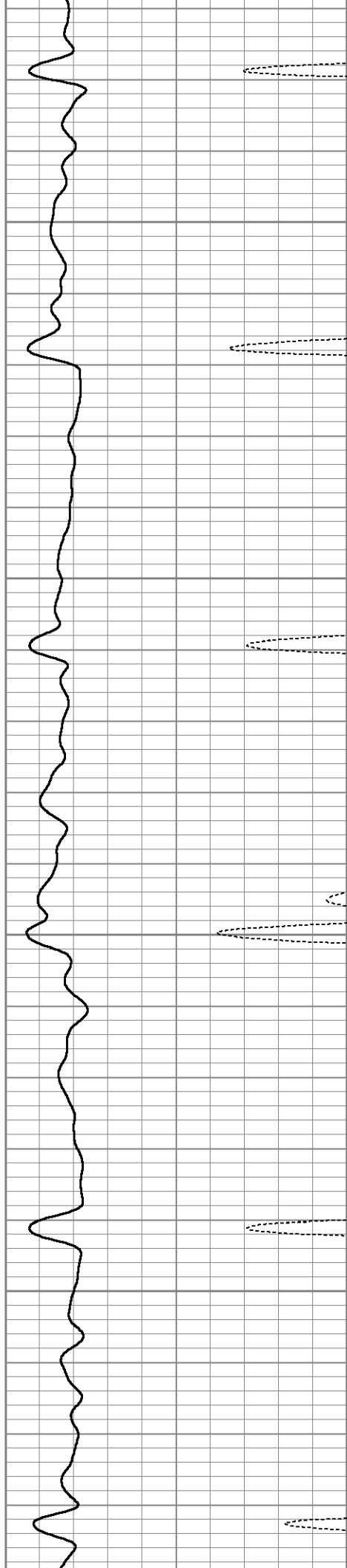


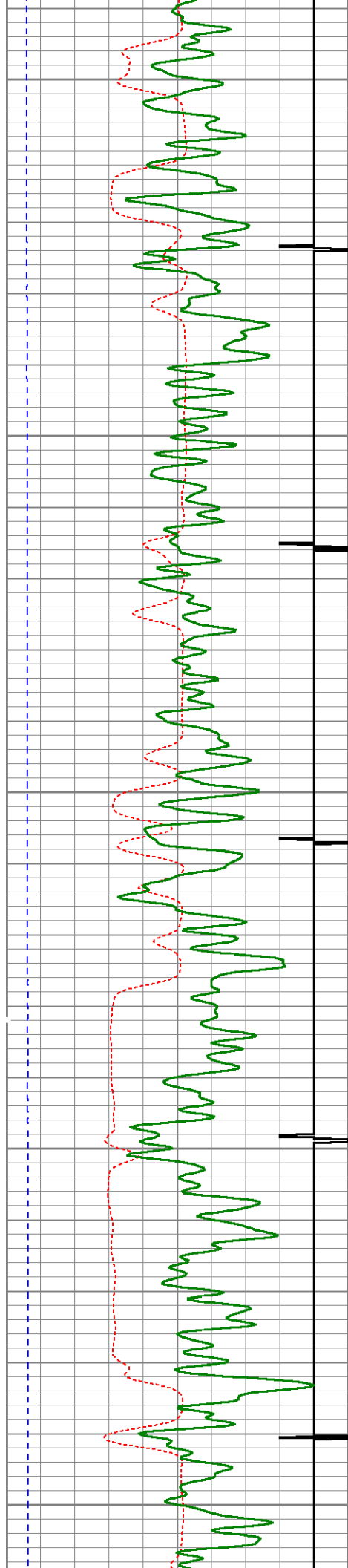
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700

750

800





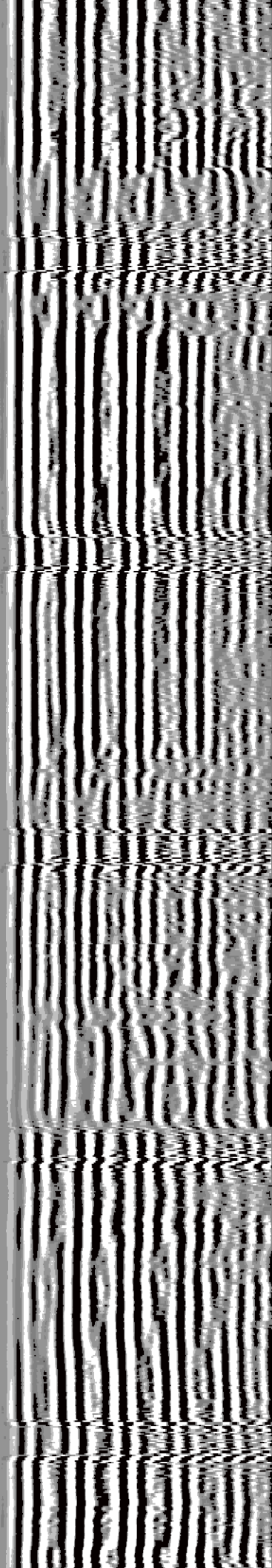
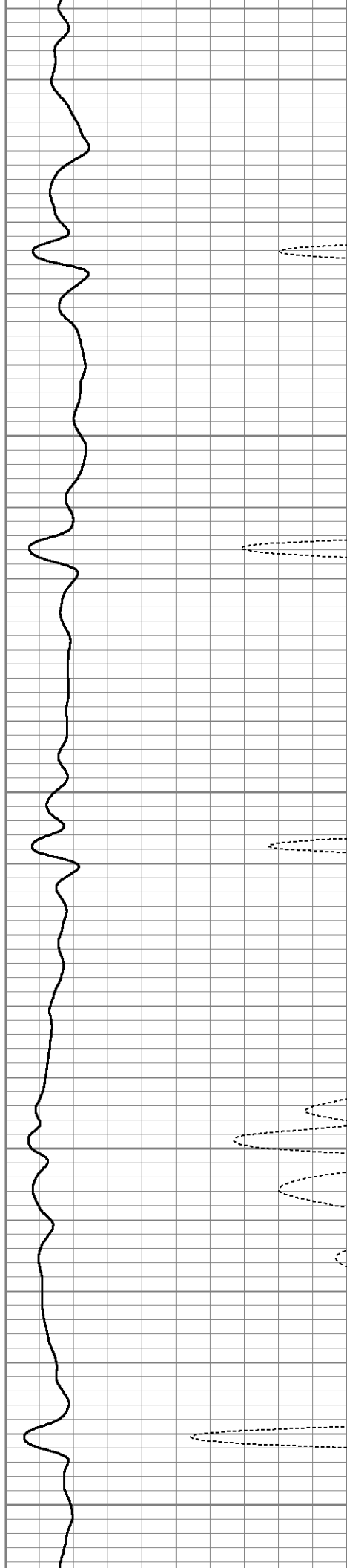
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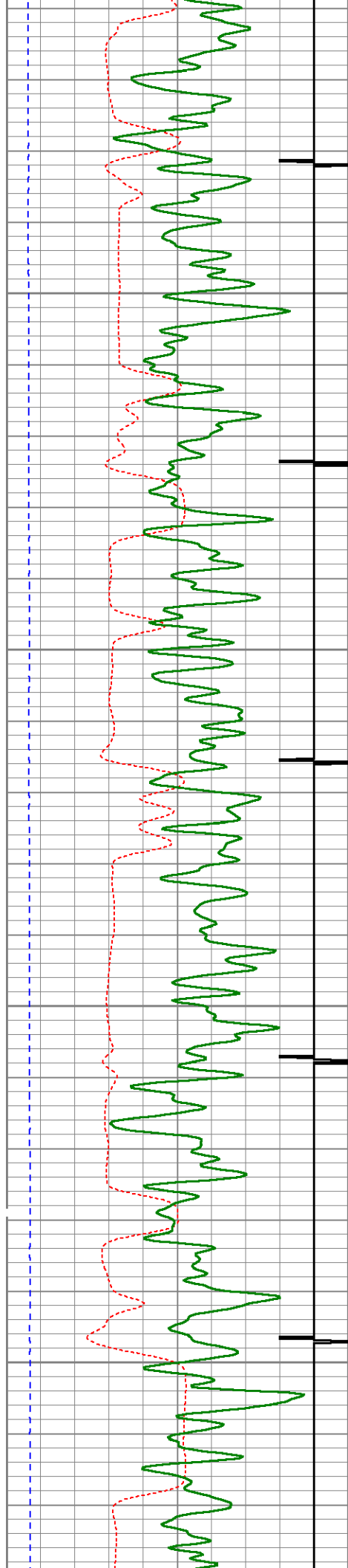
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950

1000

1050



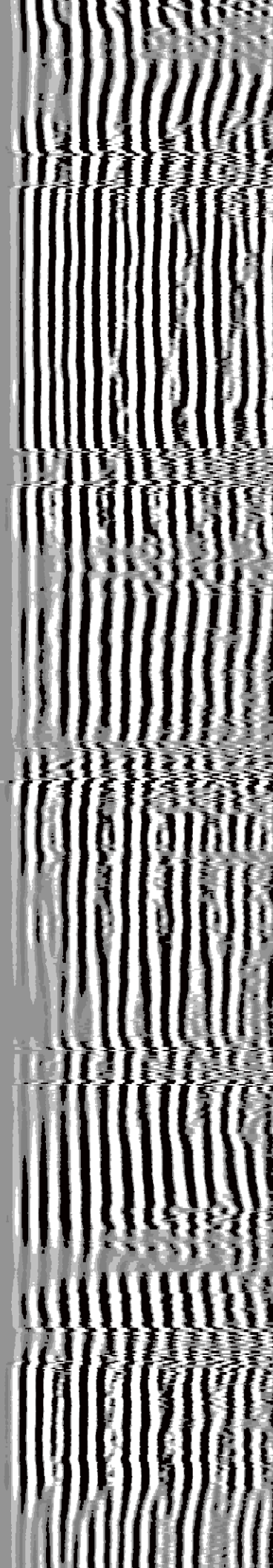
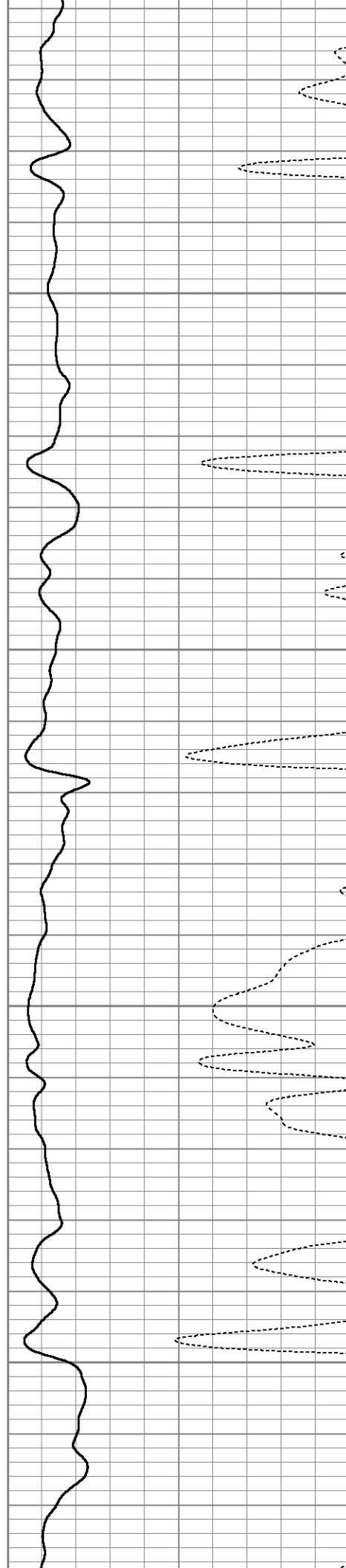


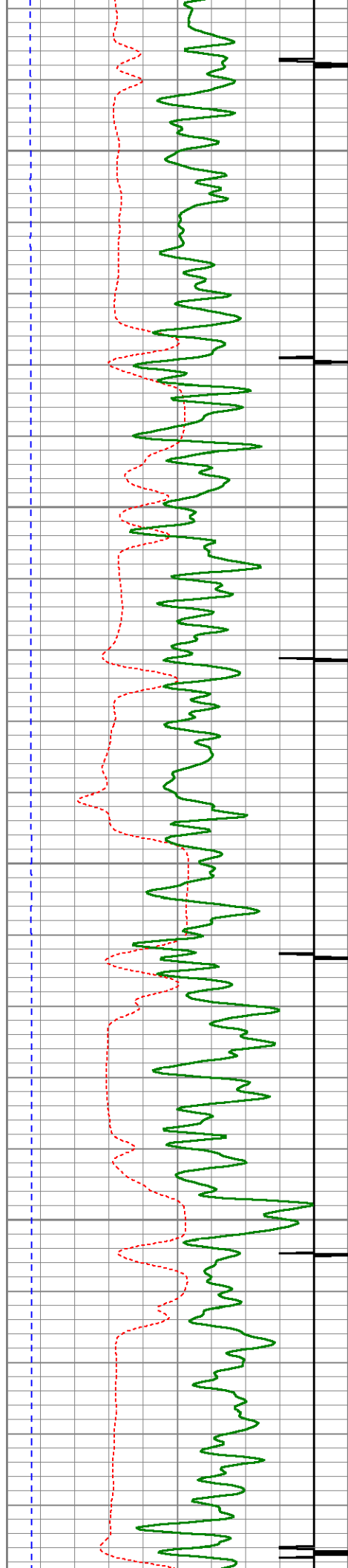
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1150

1200

1250



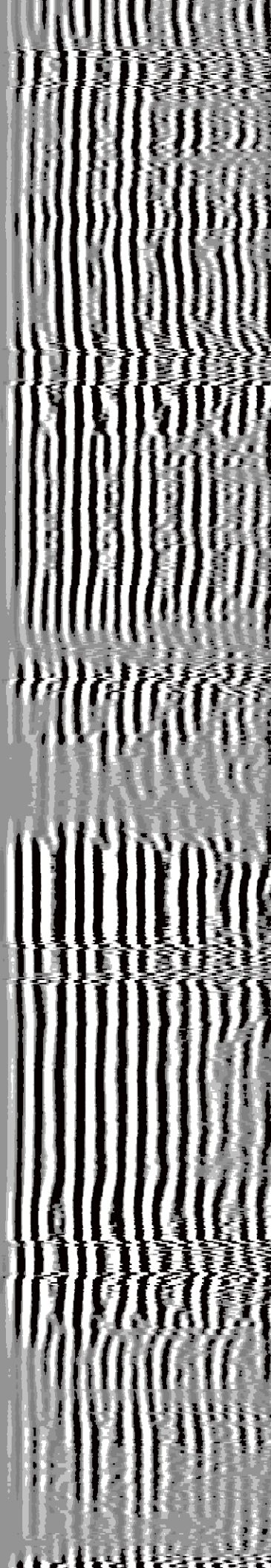
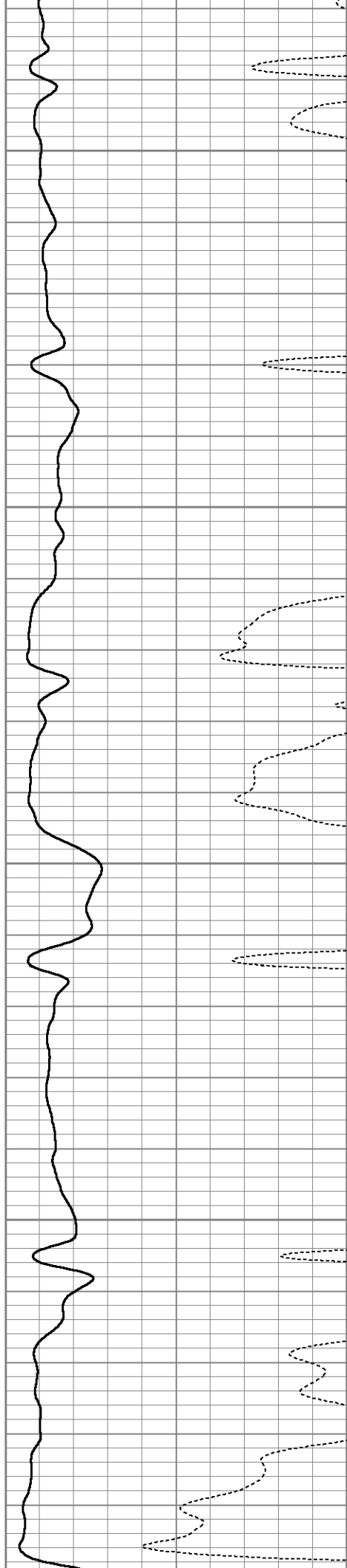


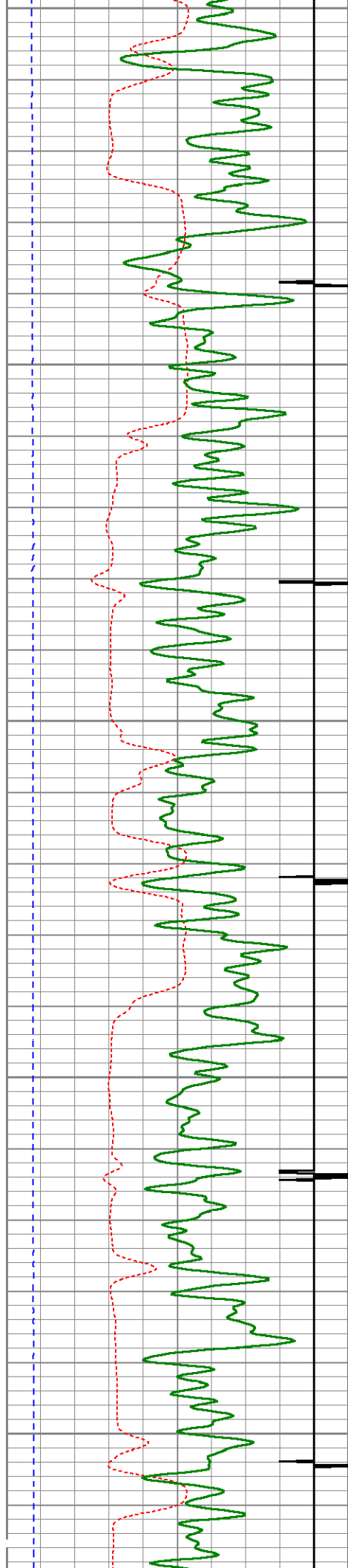
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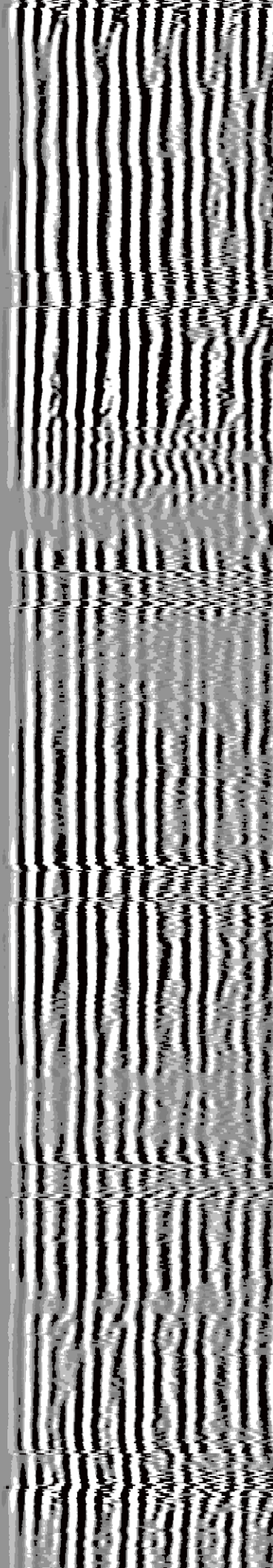
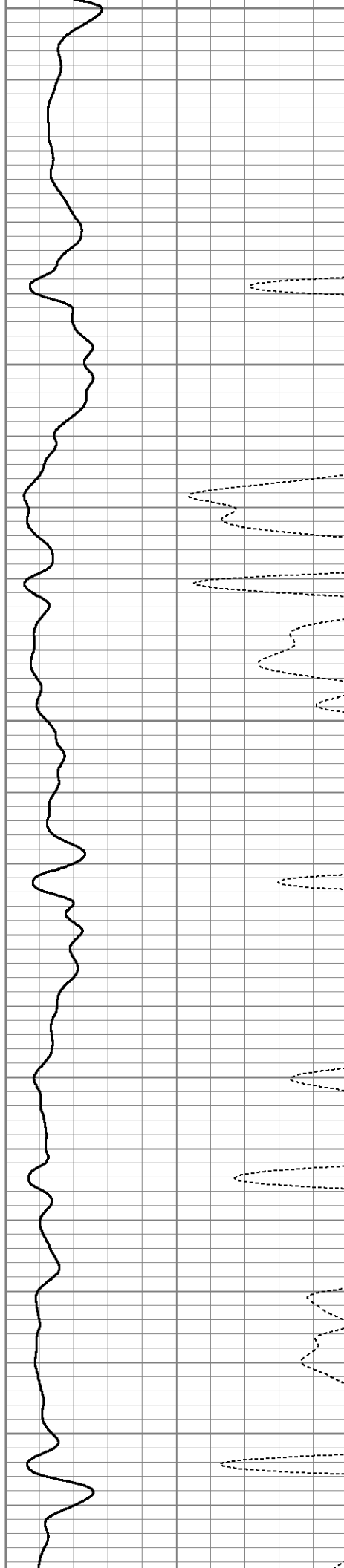
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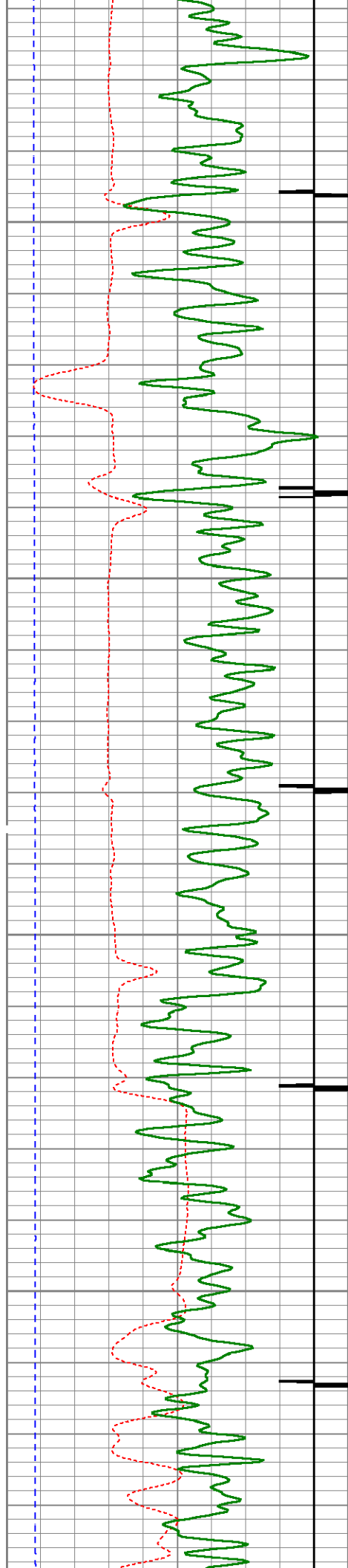
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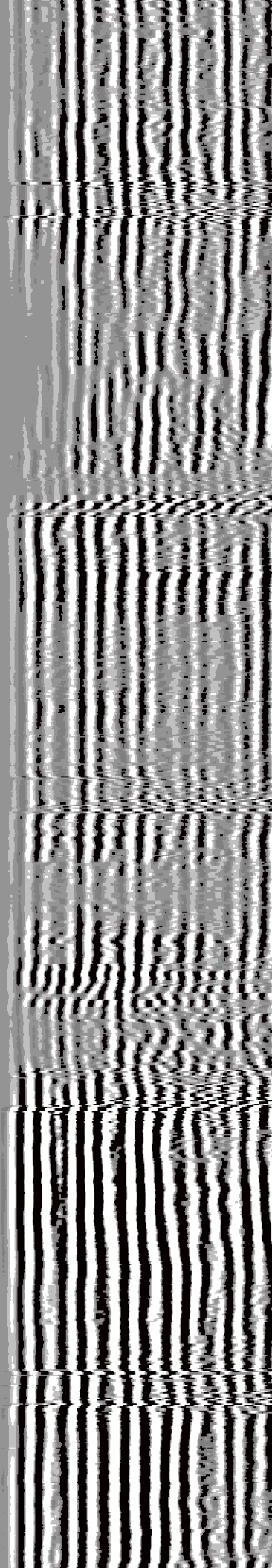
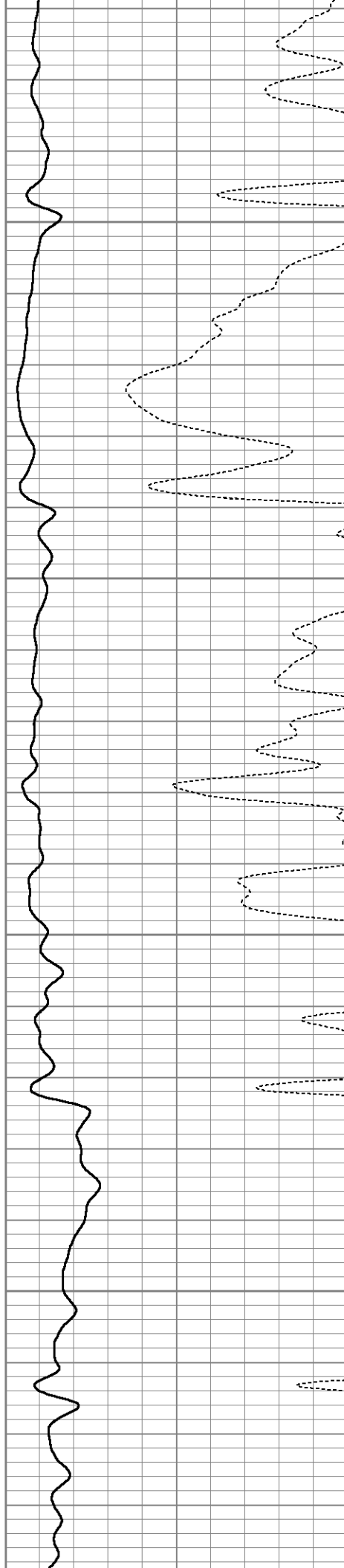


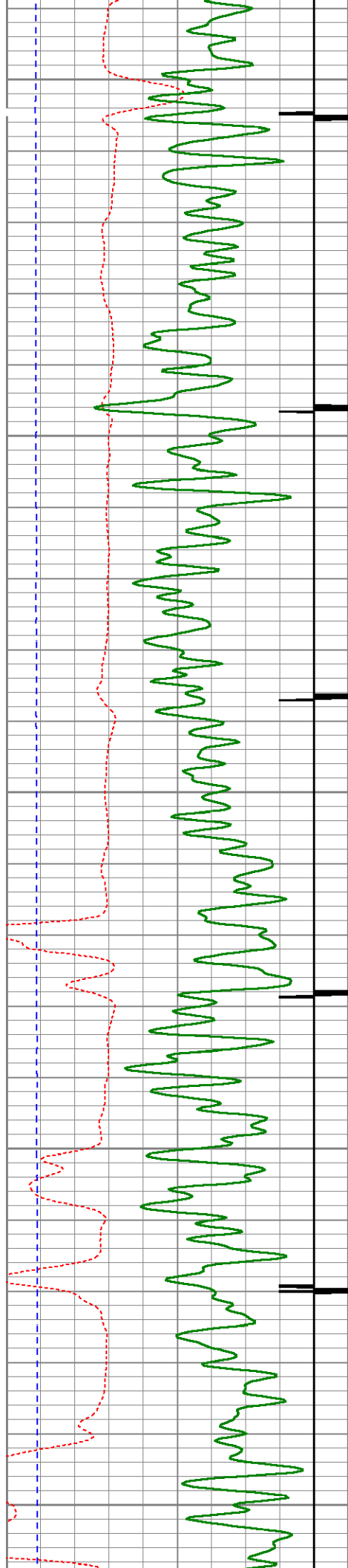
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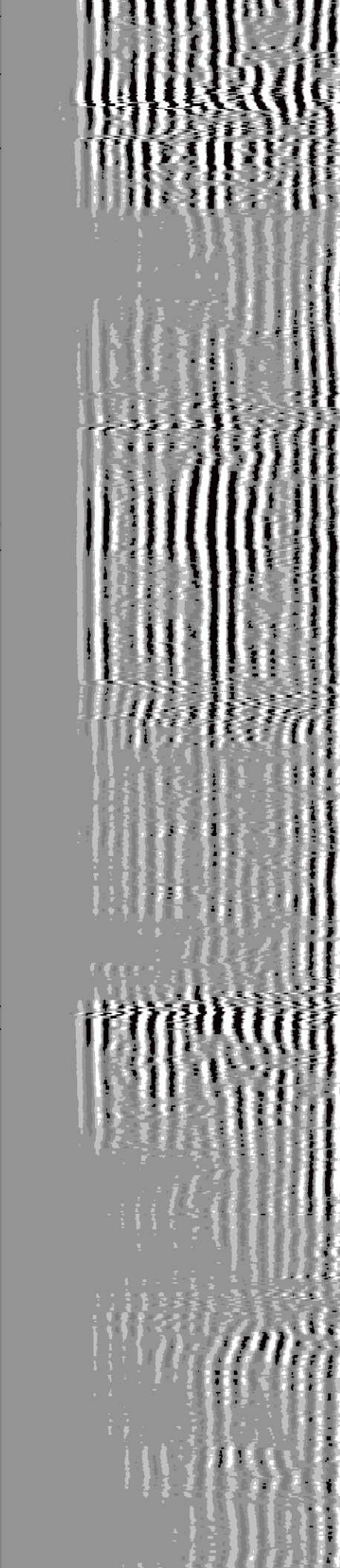
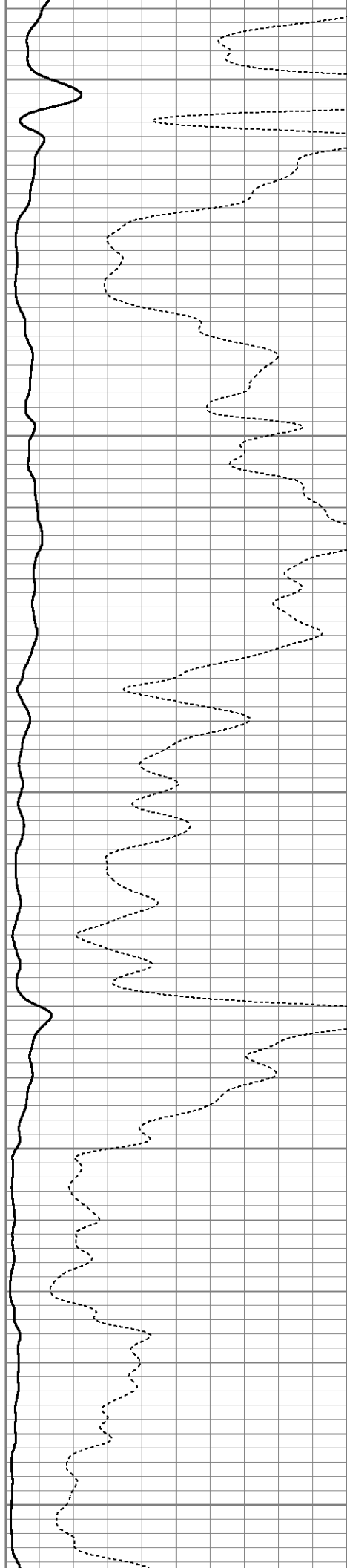
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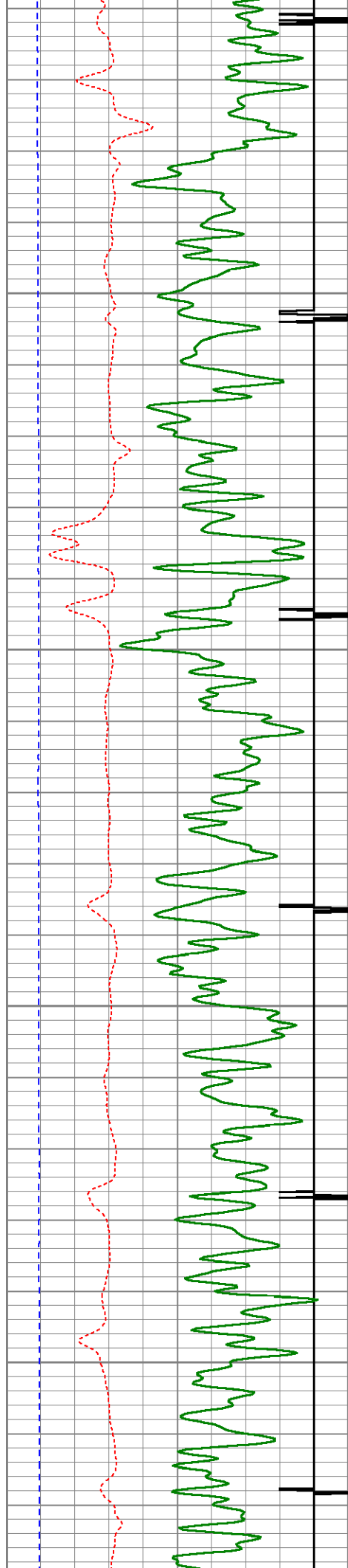
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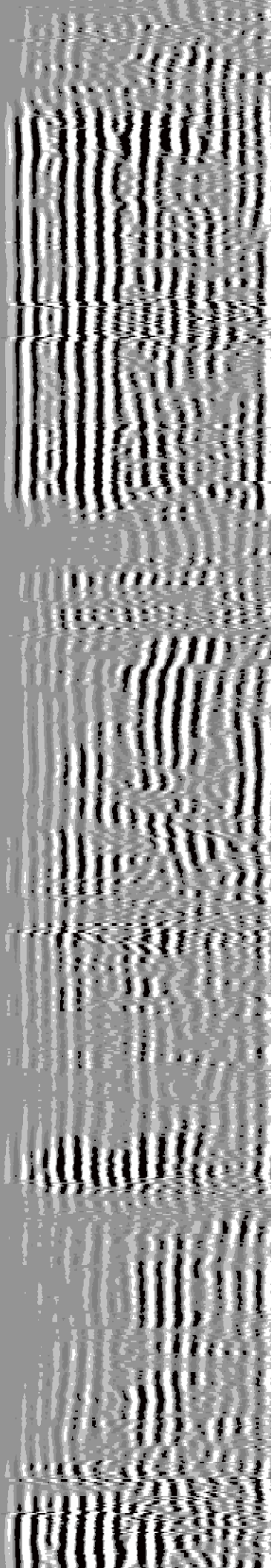
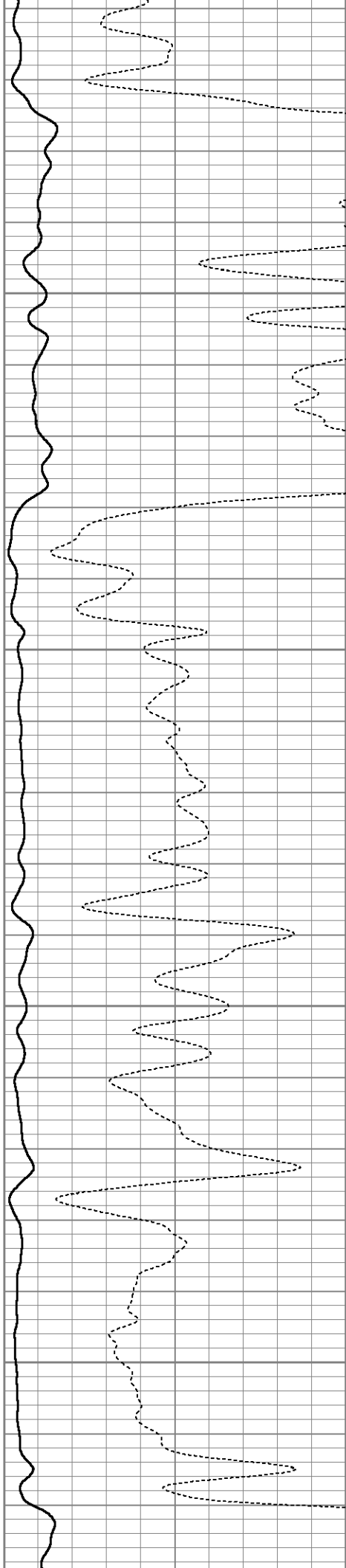


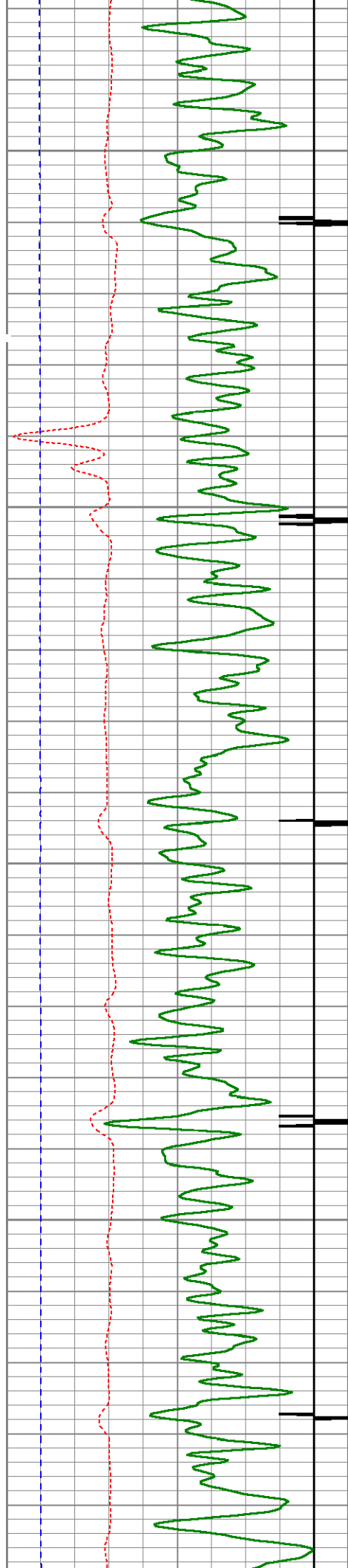
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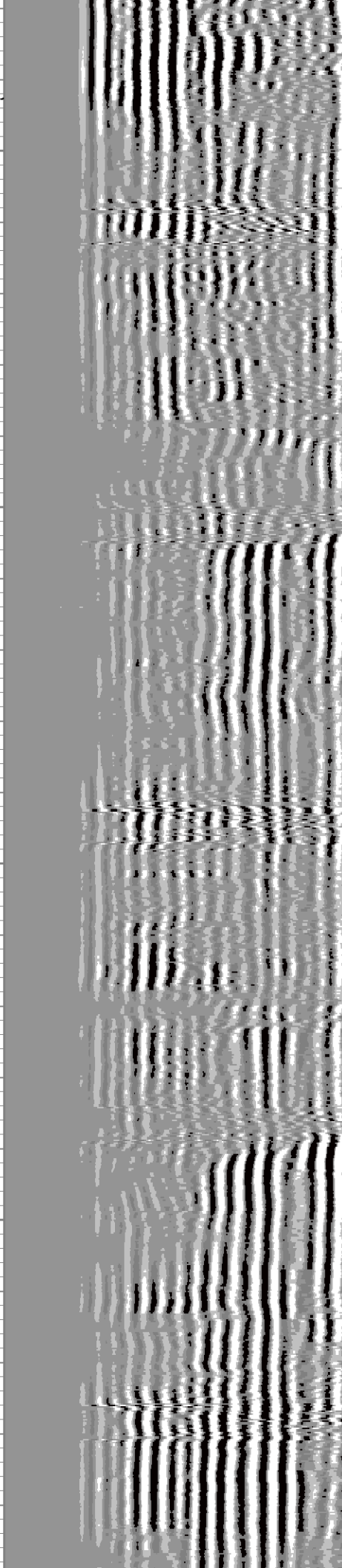
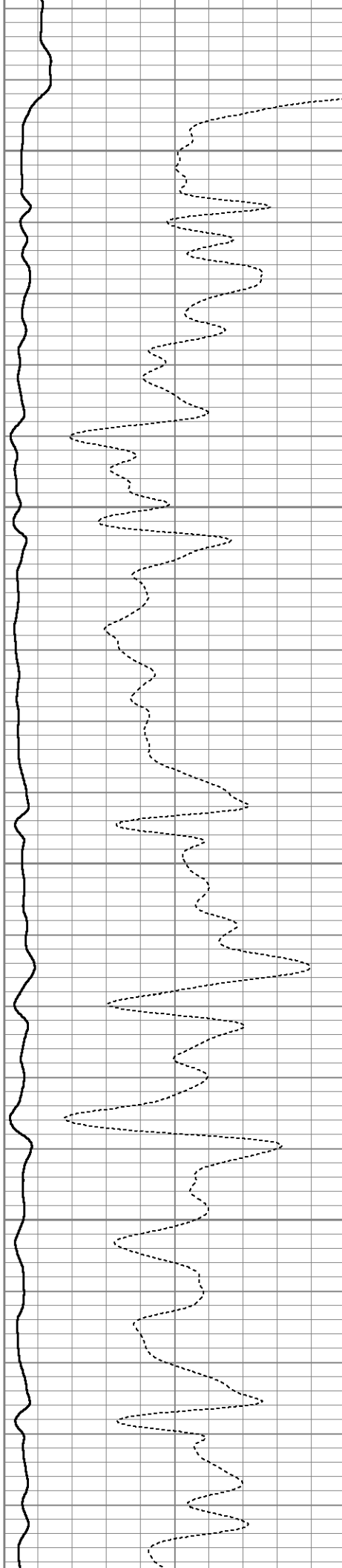


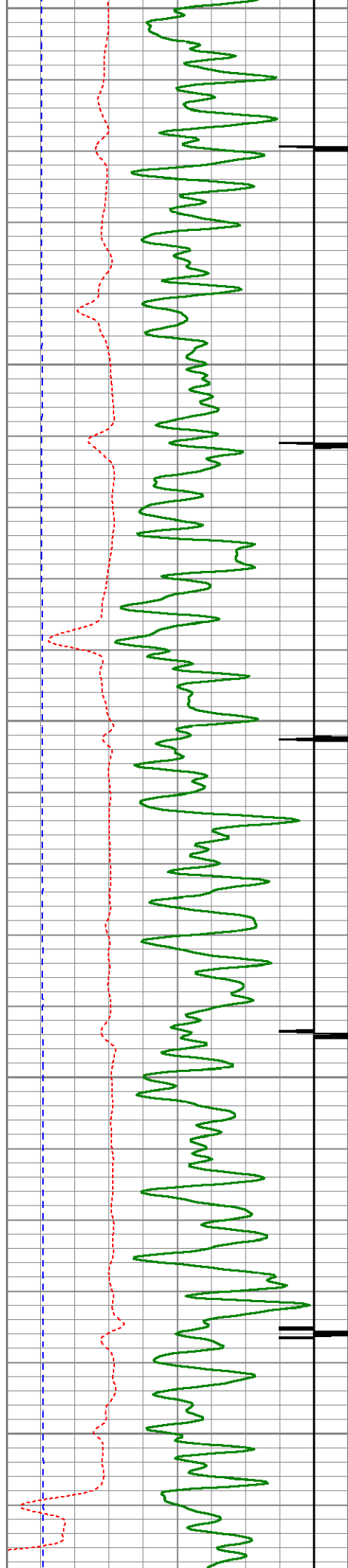
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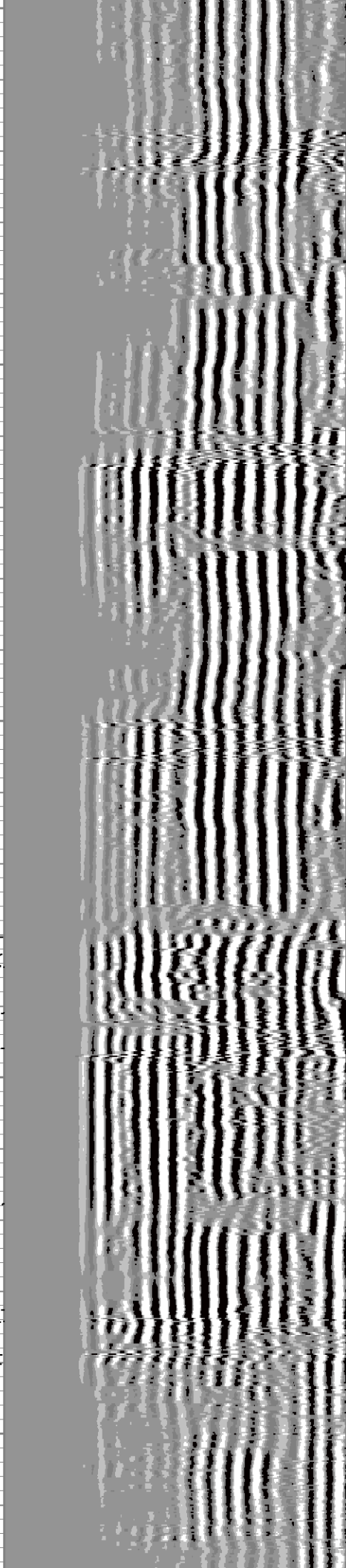
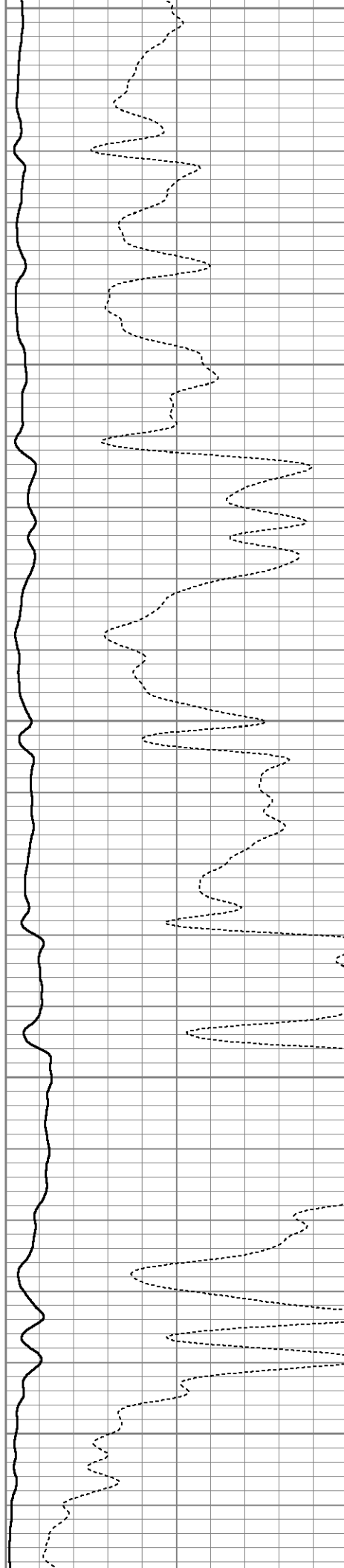
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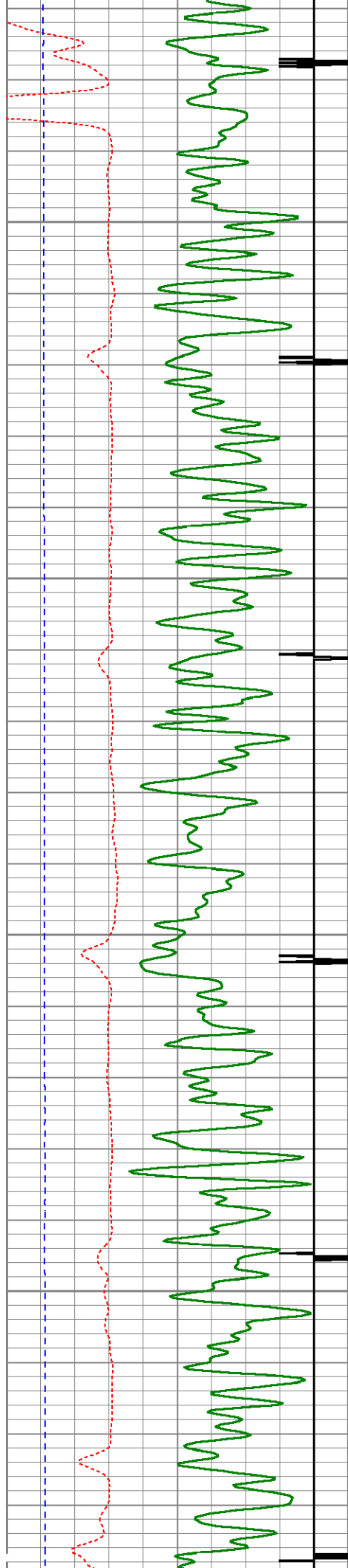
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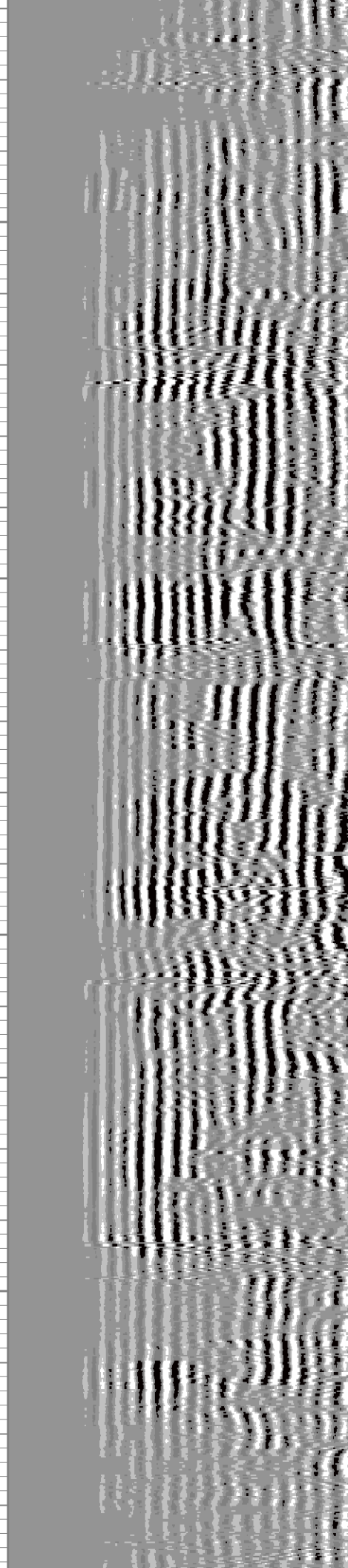
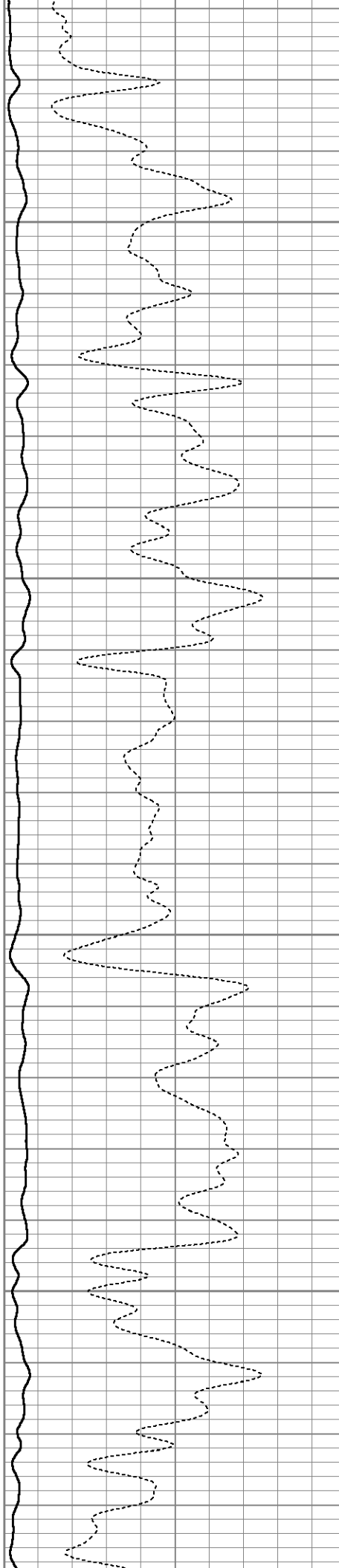


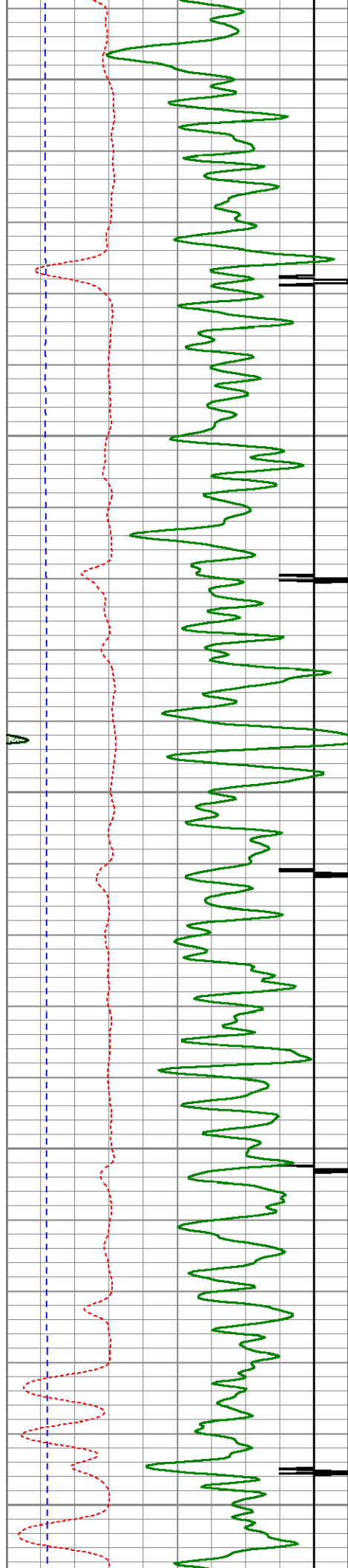
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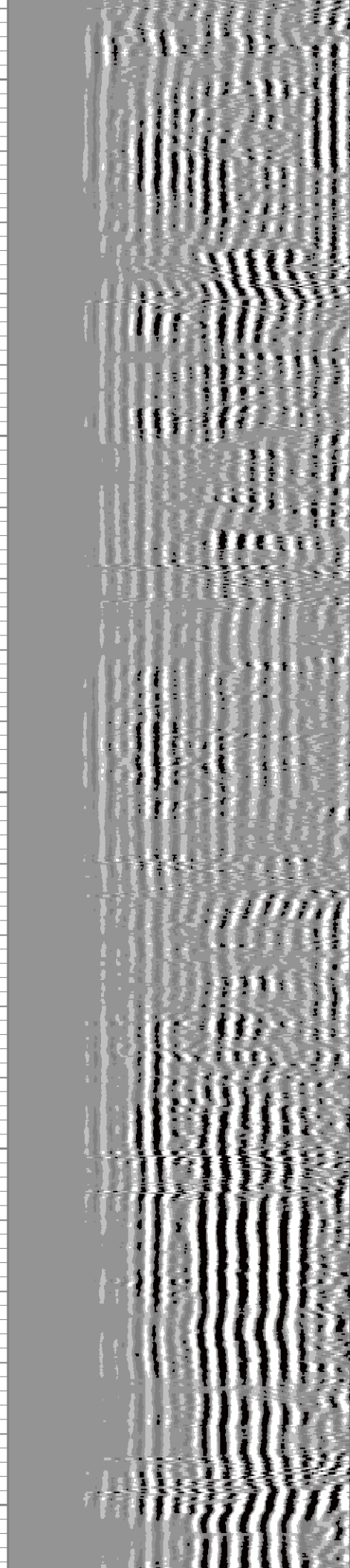
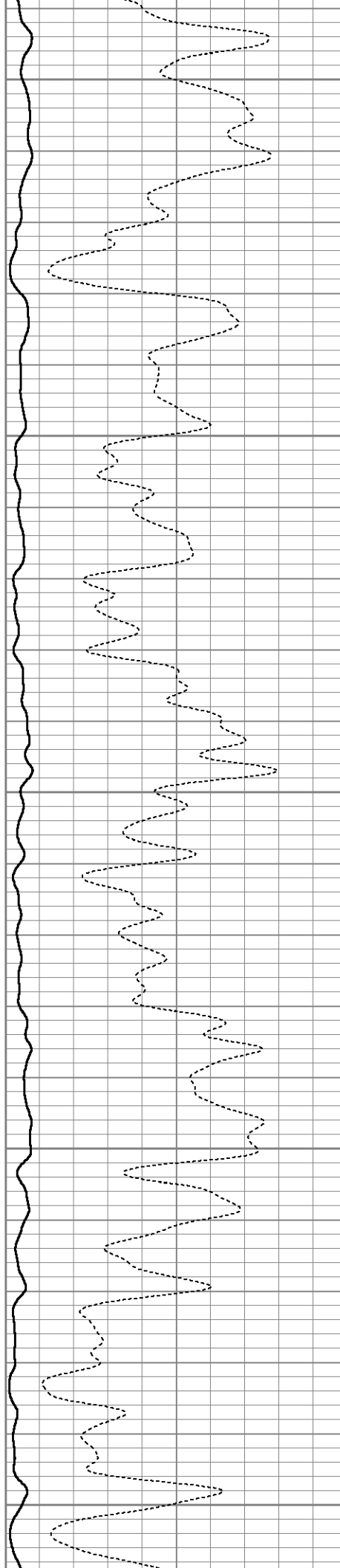
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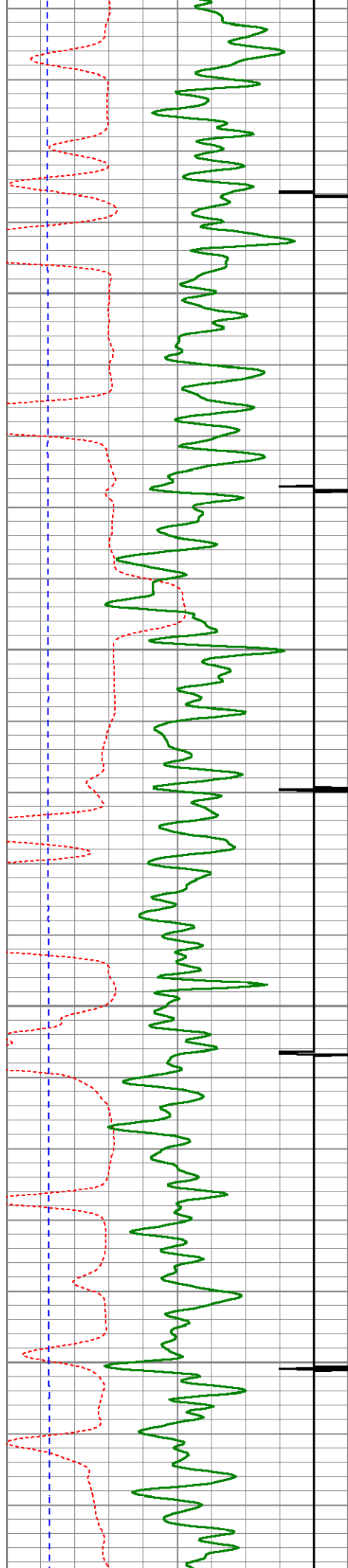
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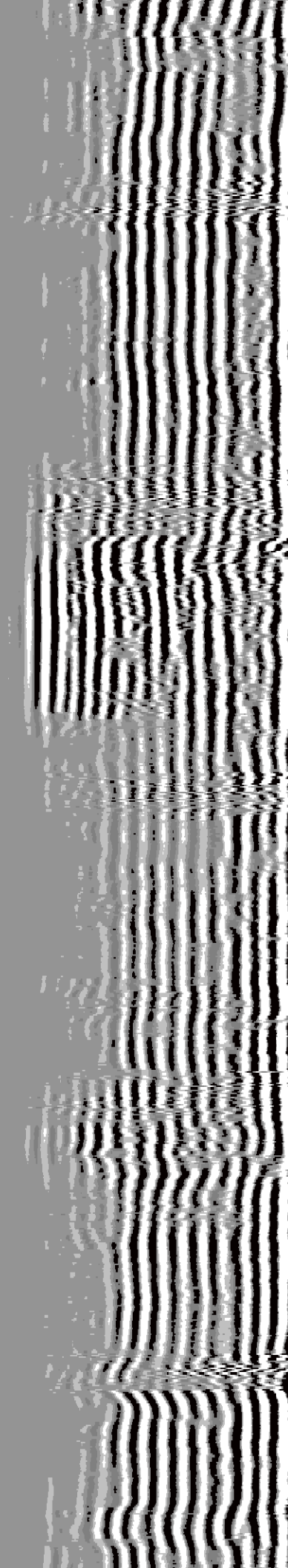
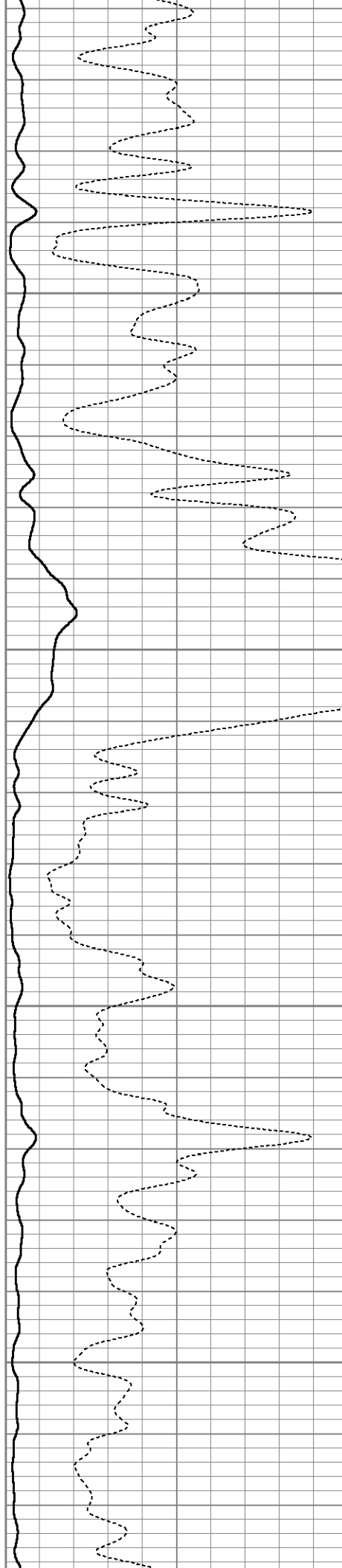


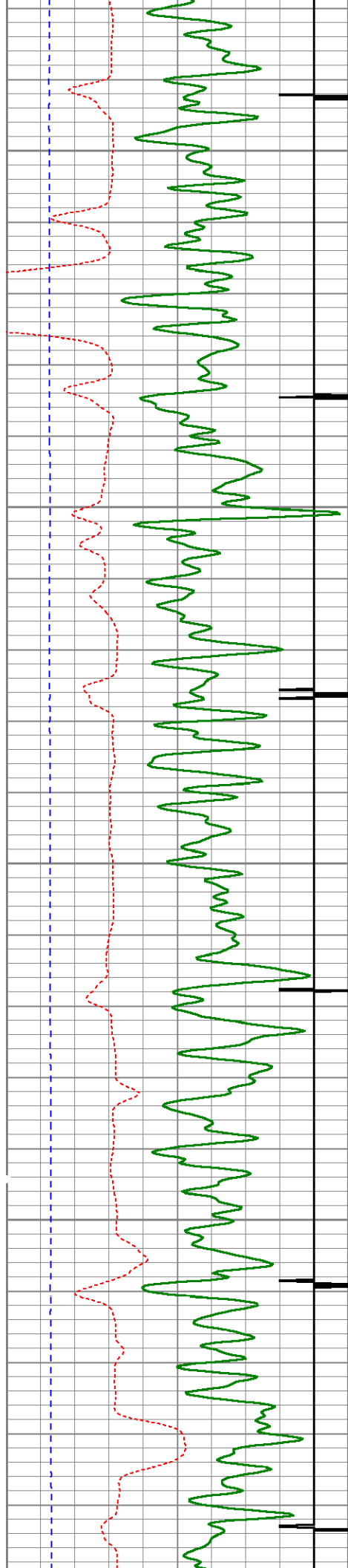
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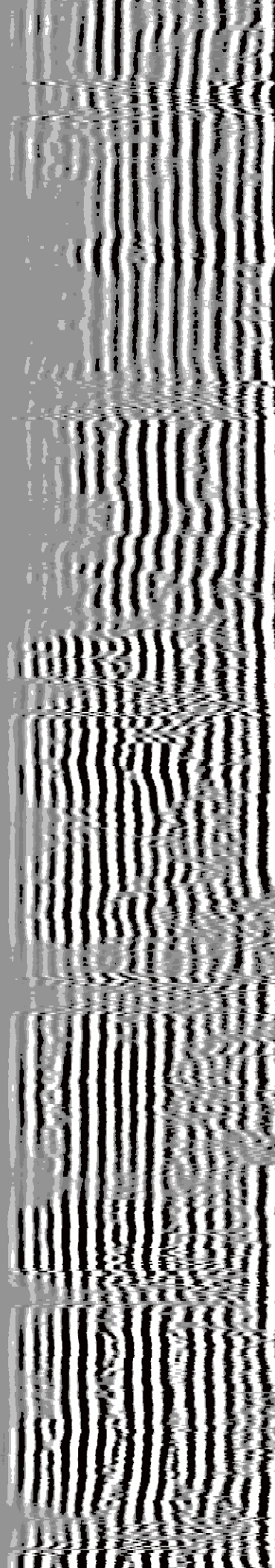
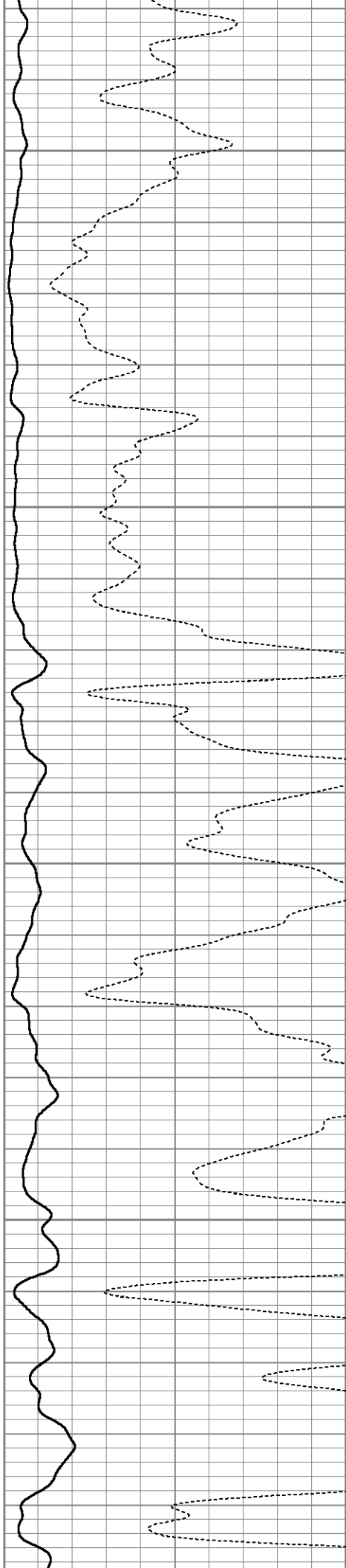


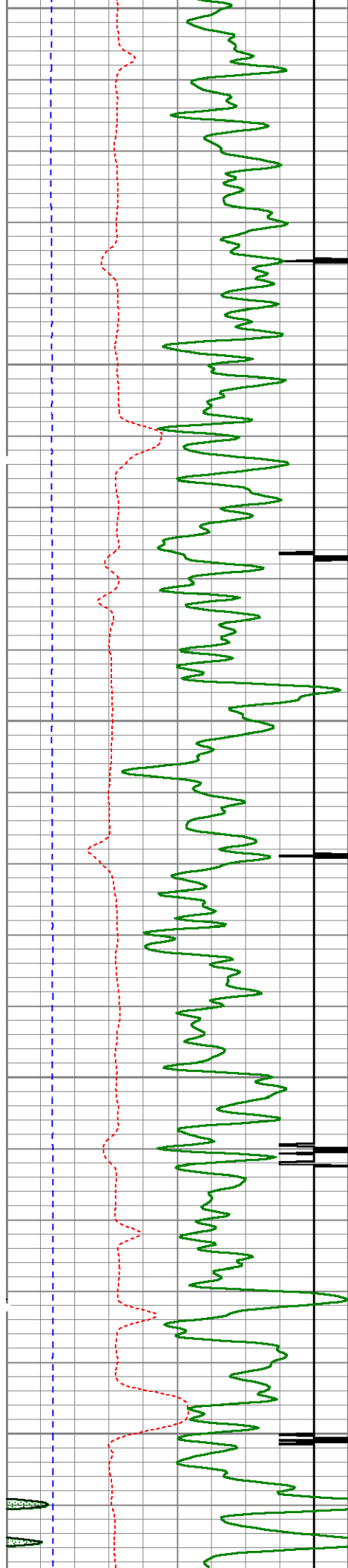
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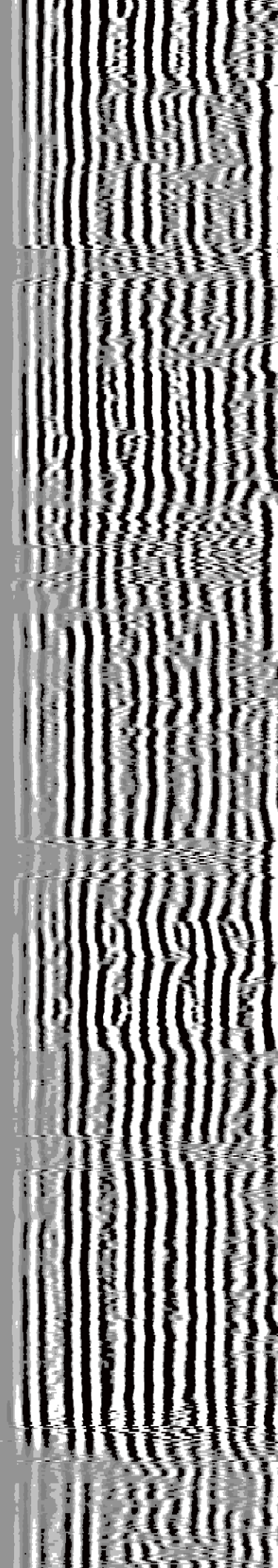
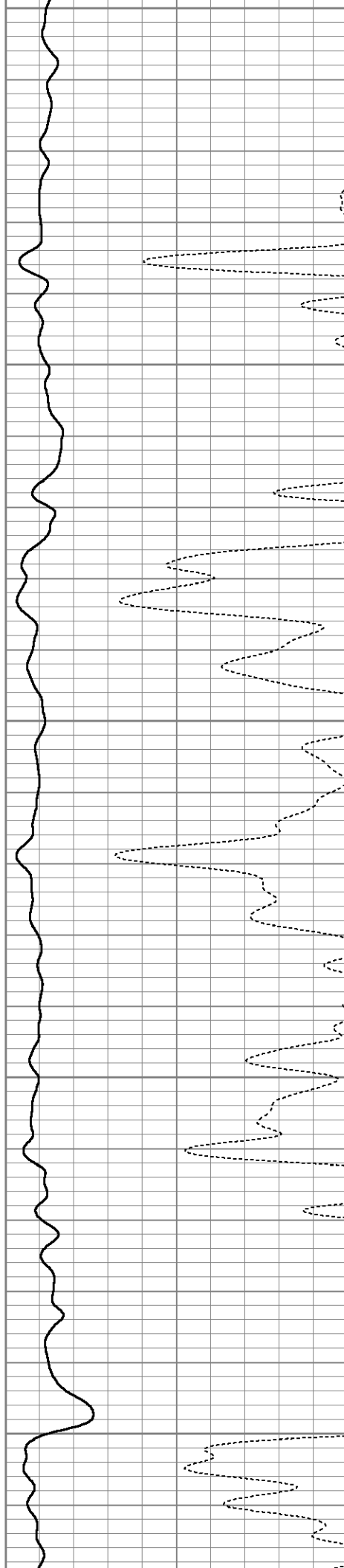
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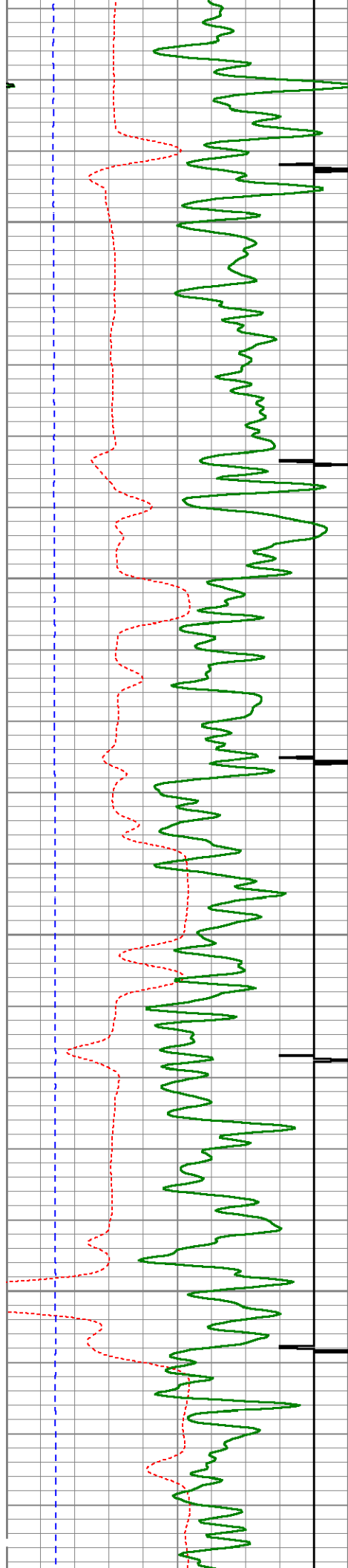
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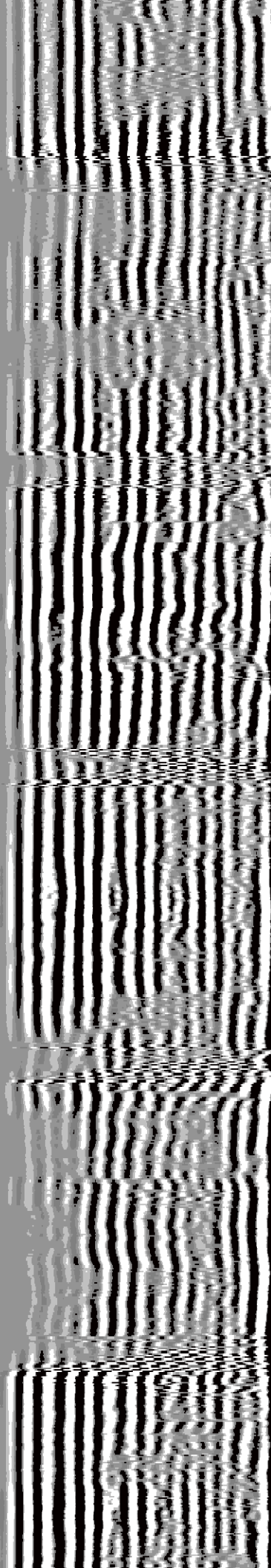
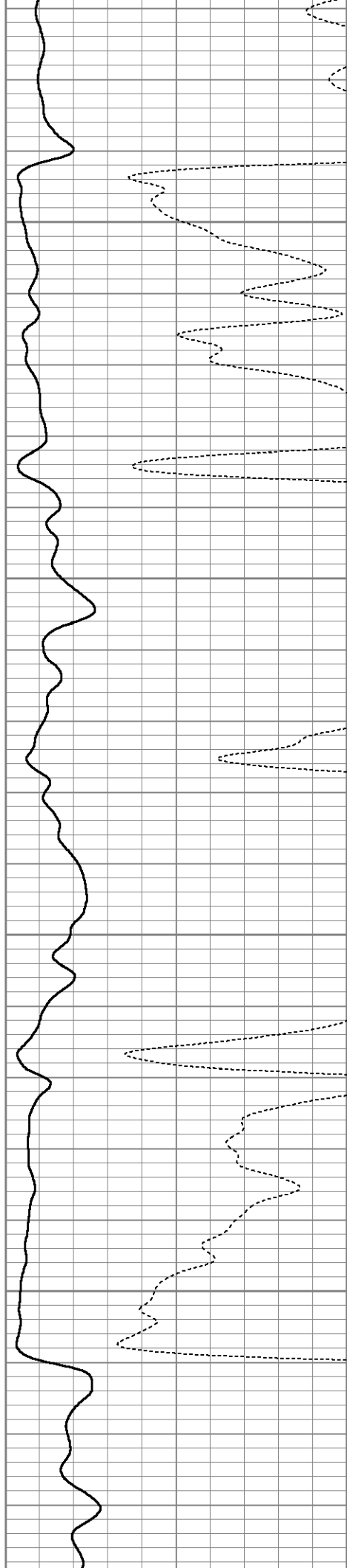


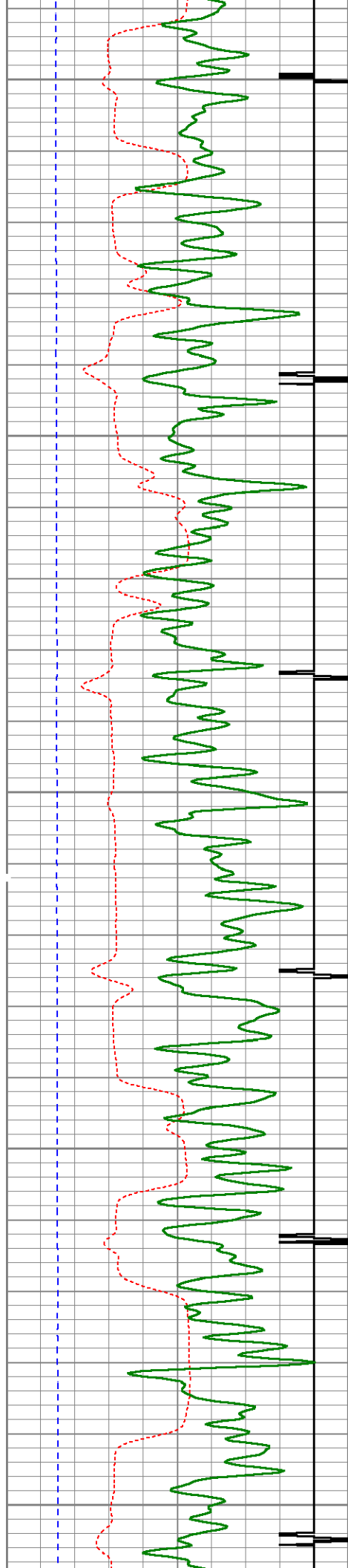
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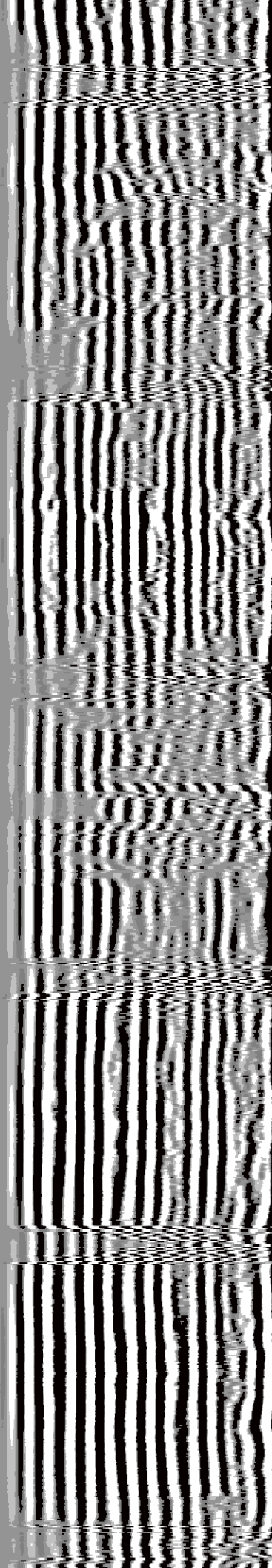
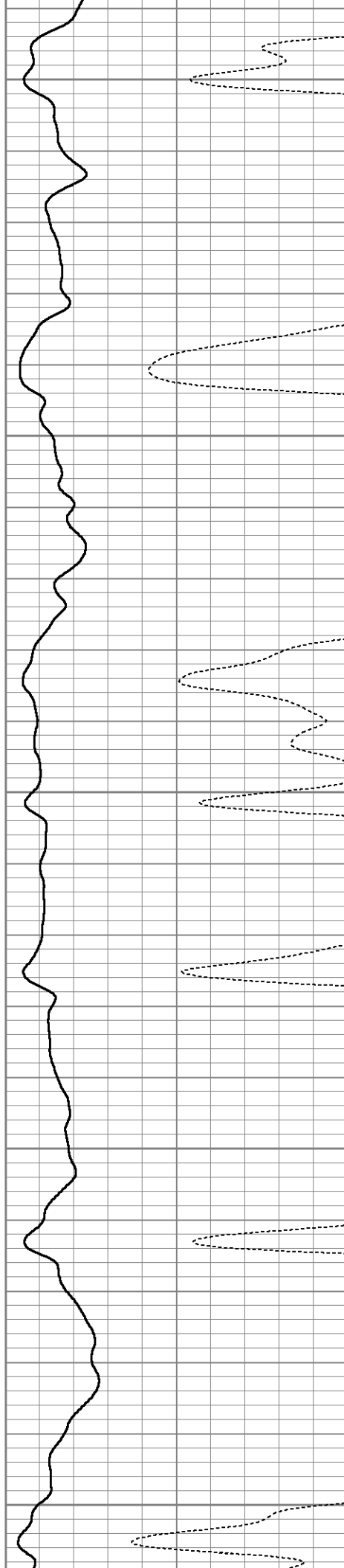
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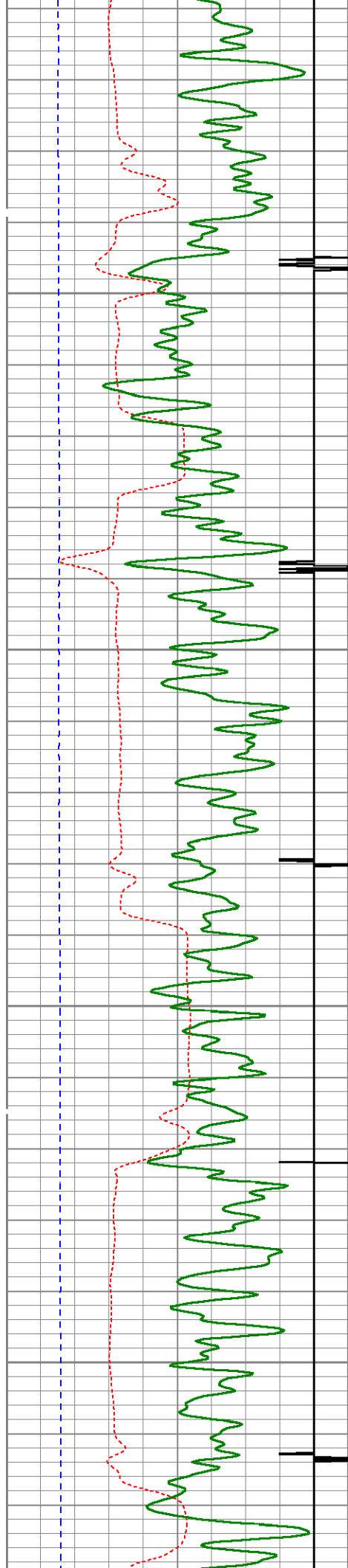
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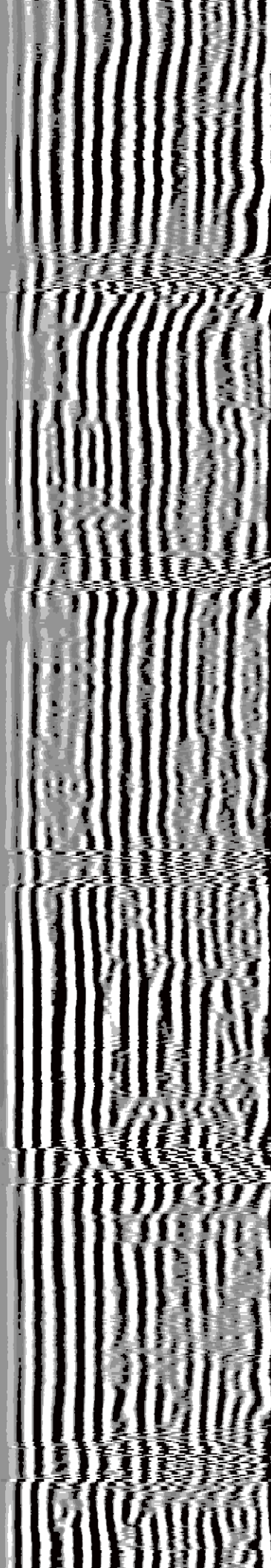
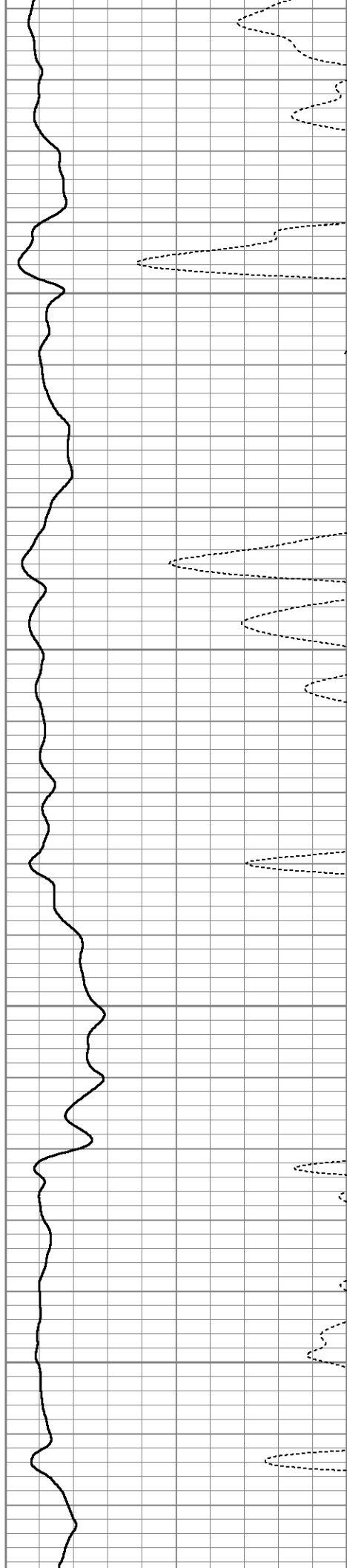


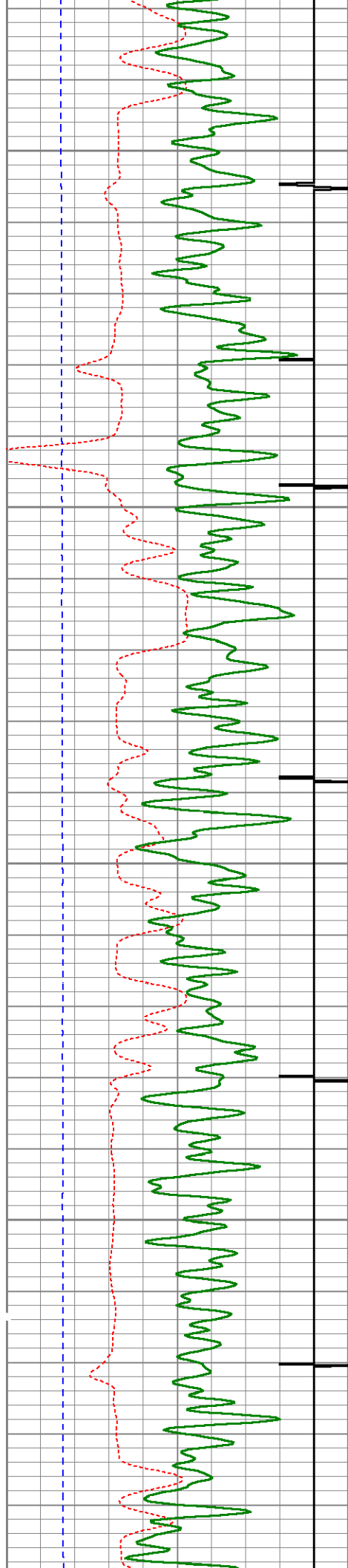
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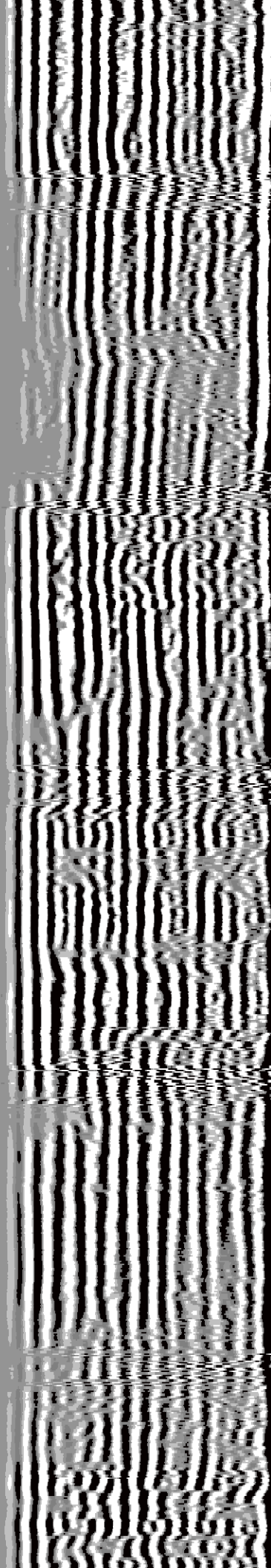
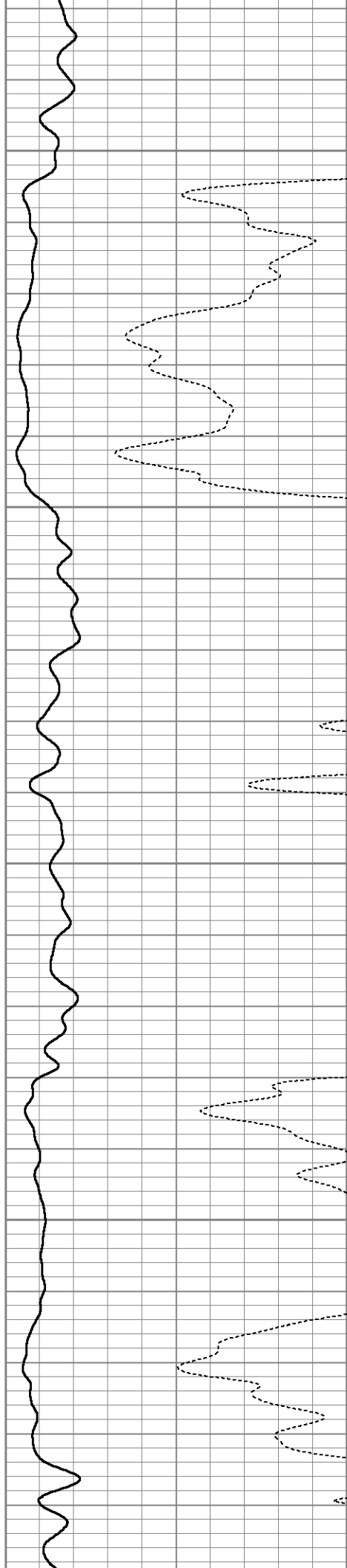


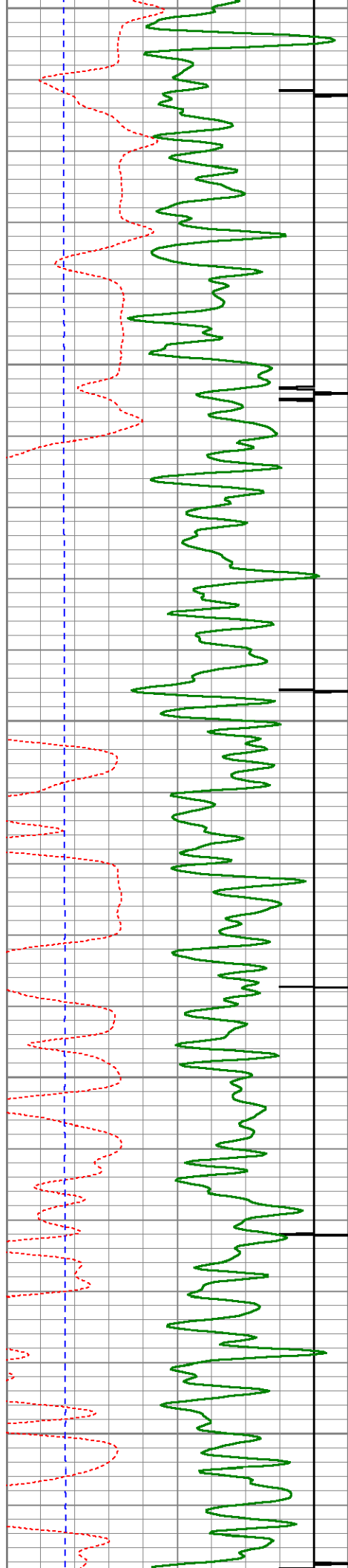
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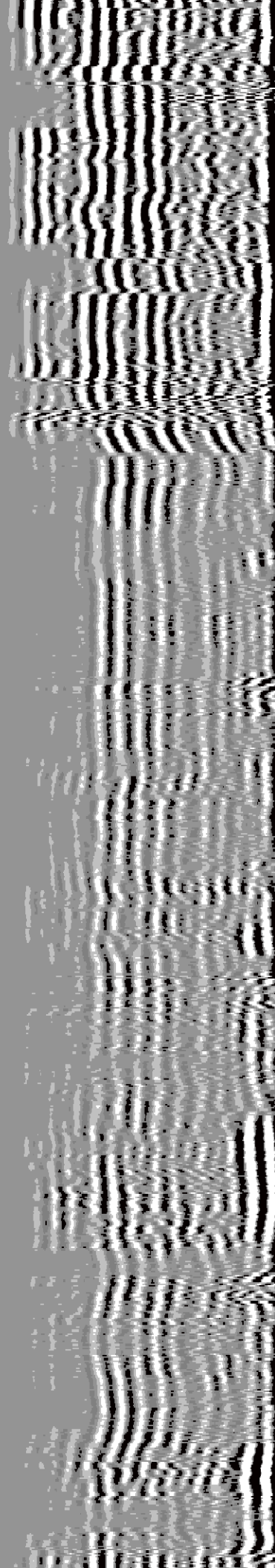
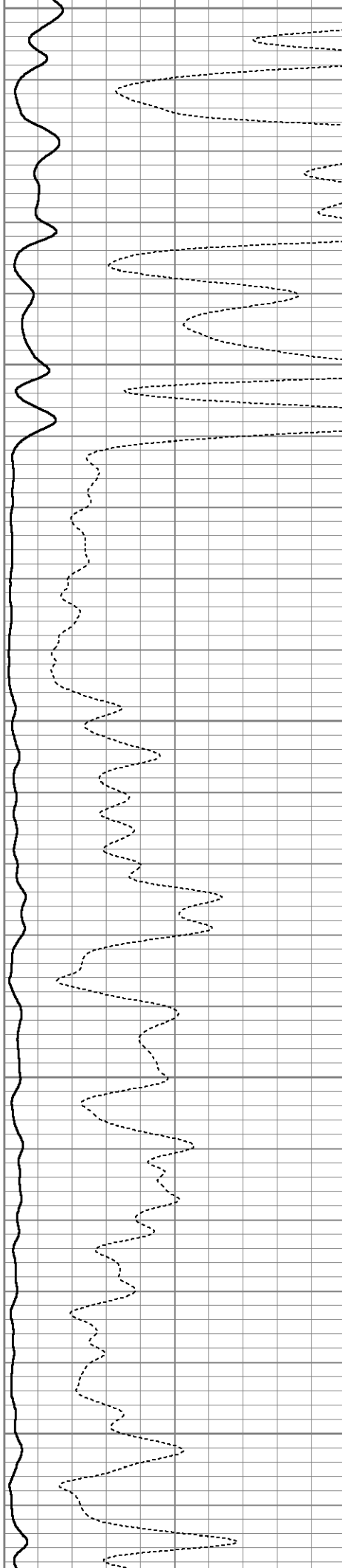
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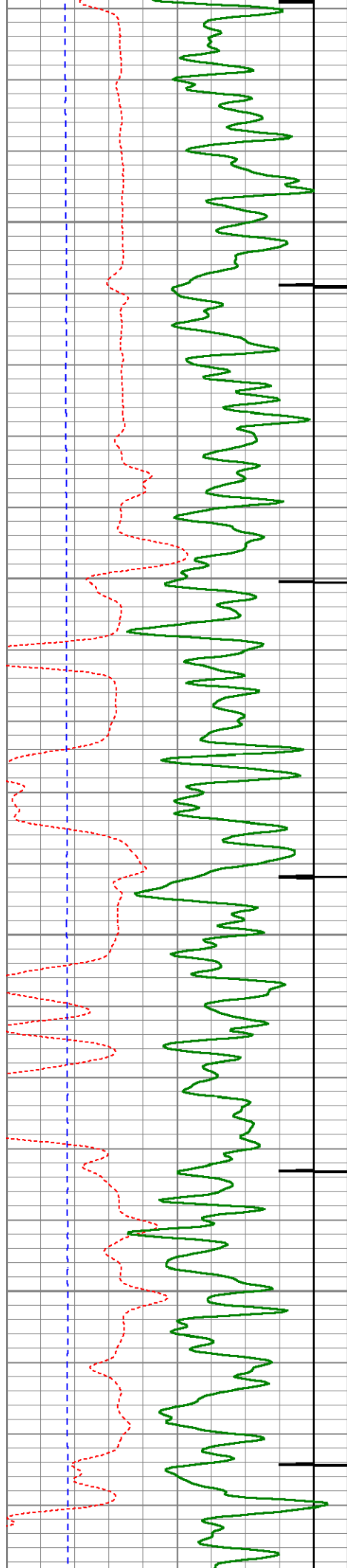
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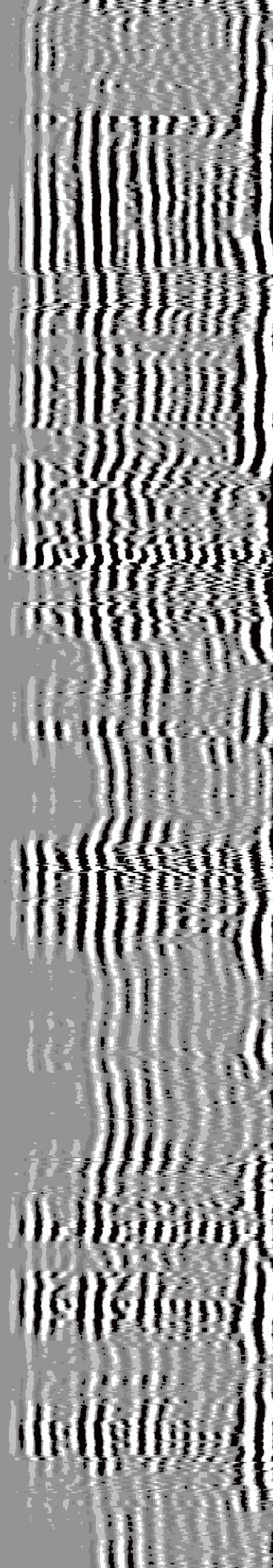
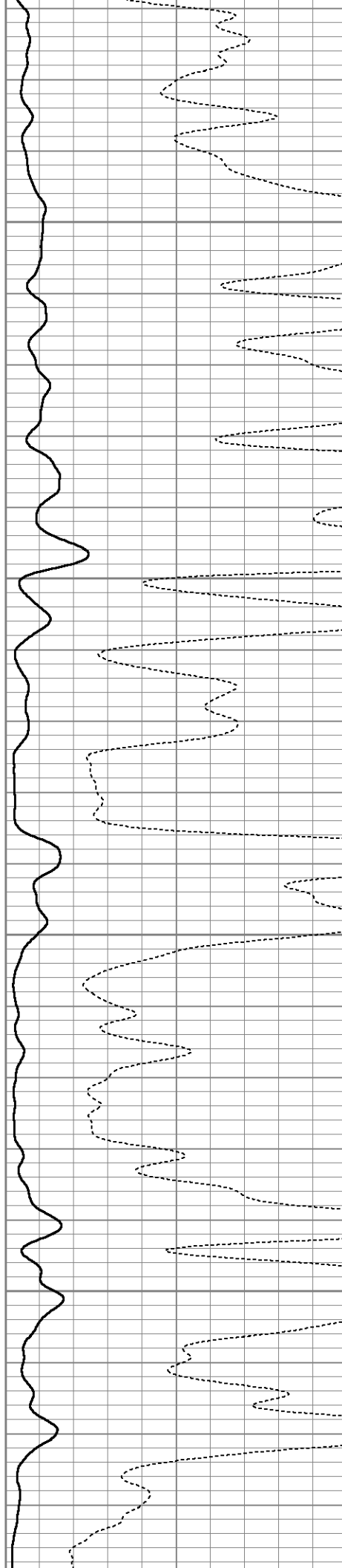


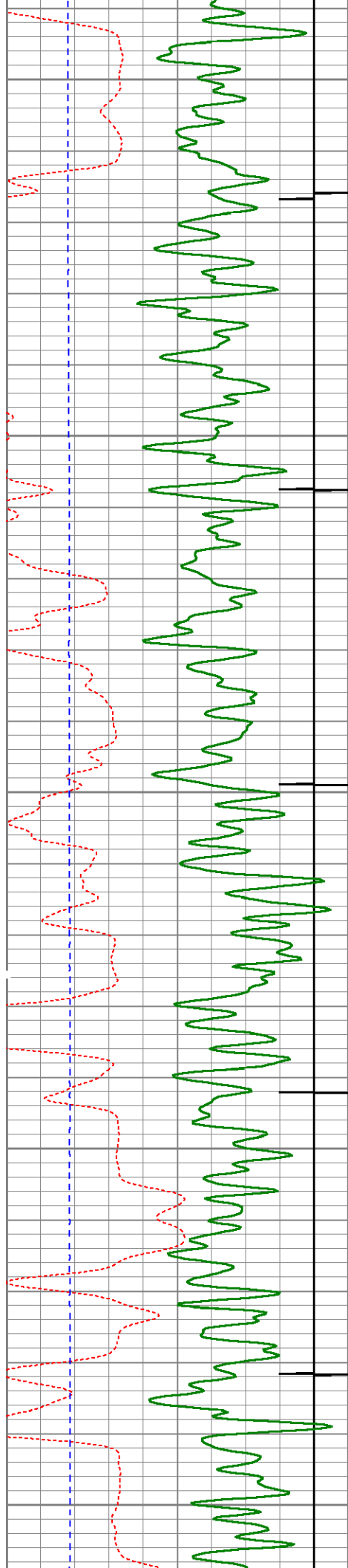
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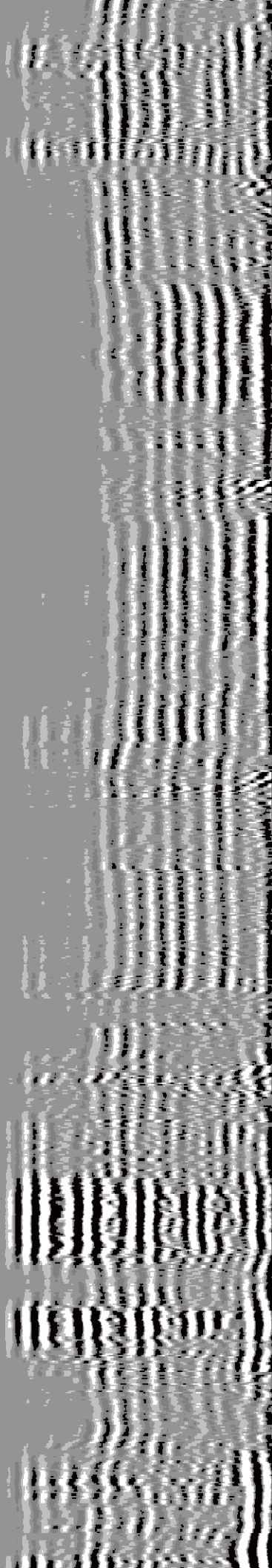
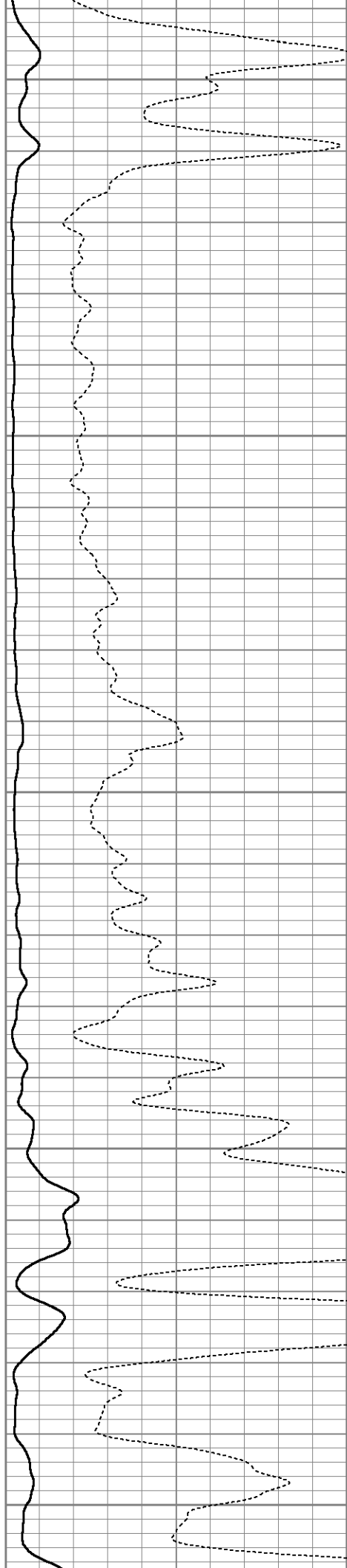
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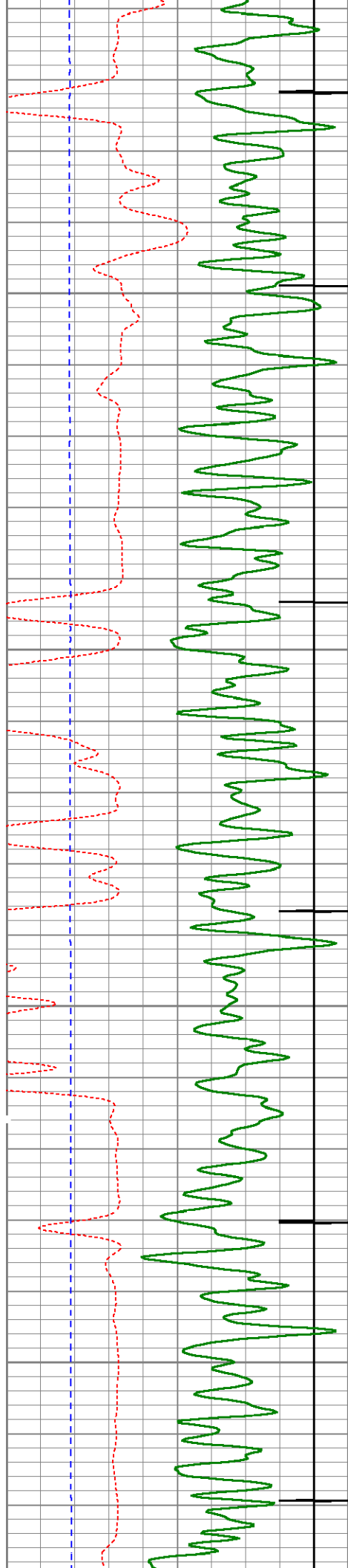
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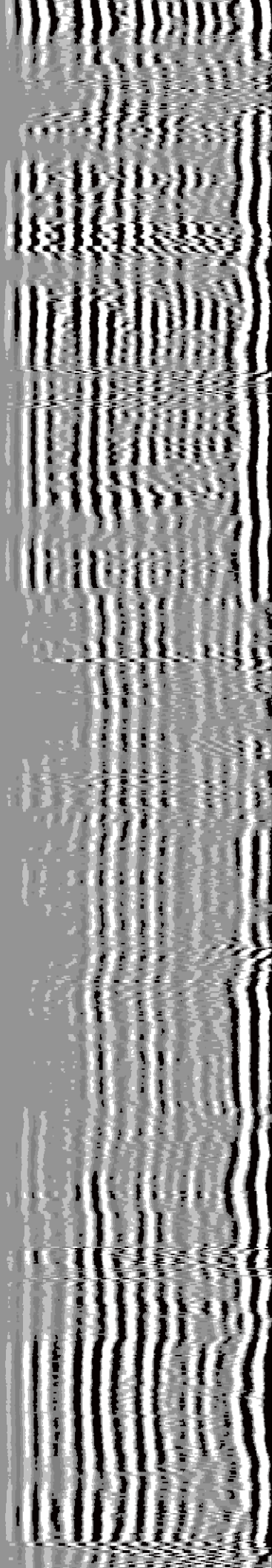
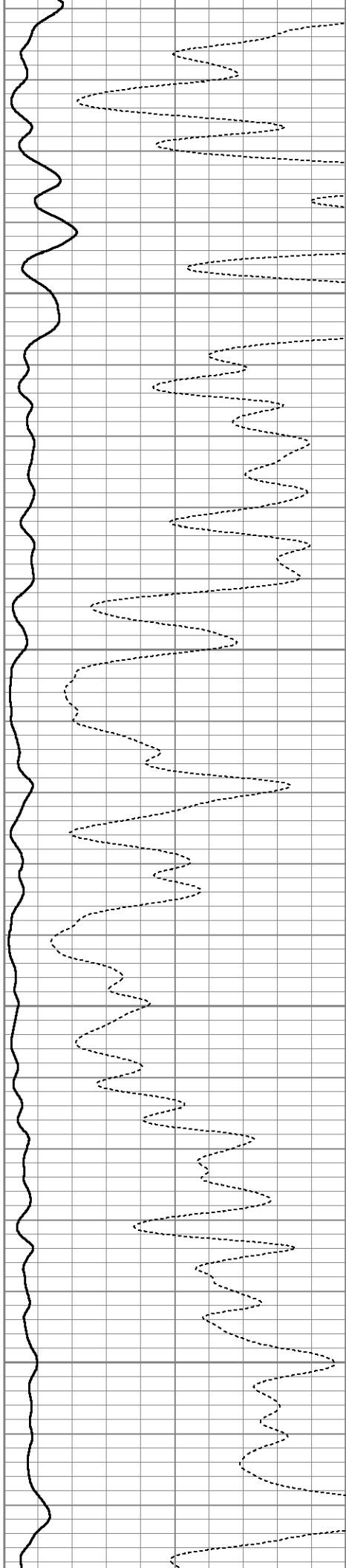


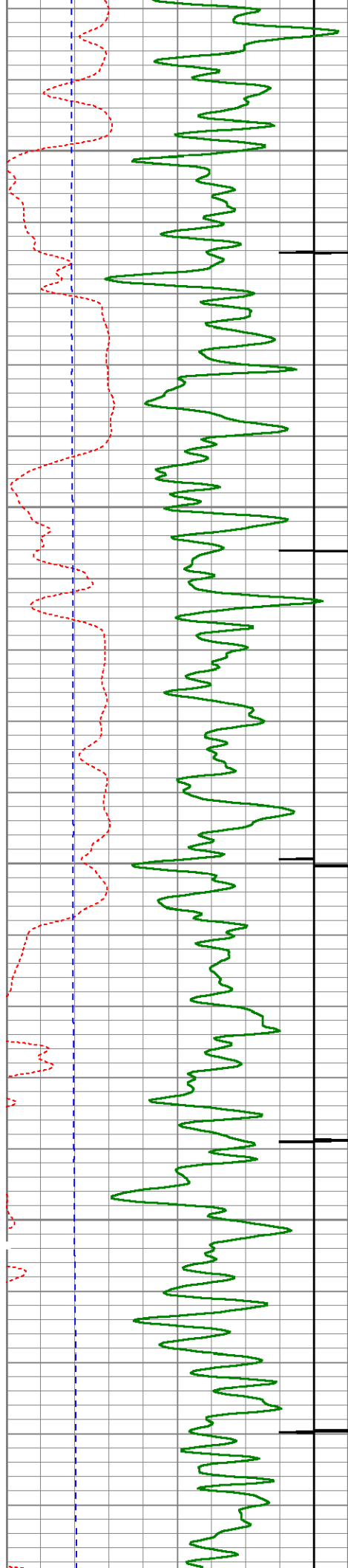
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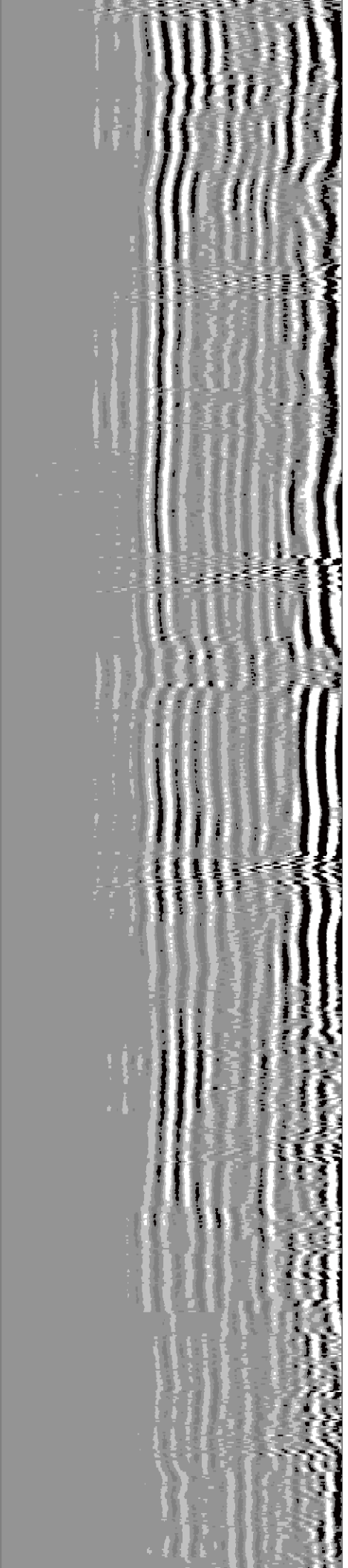
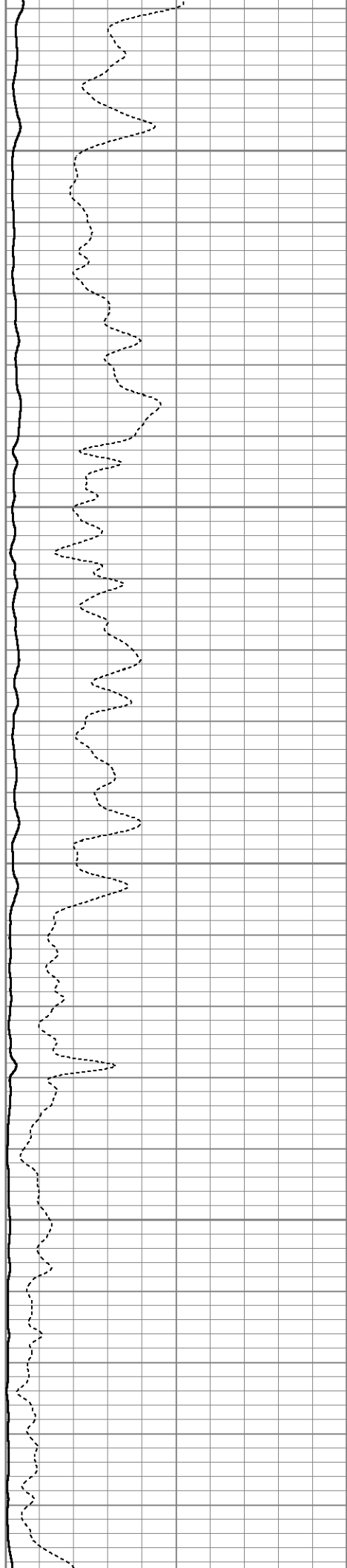


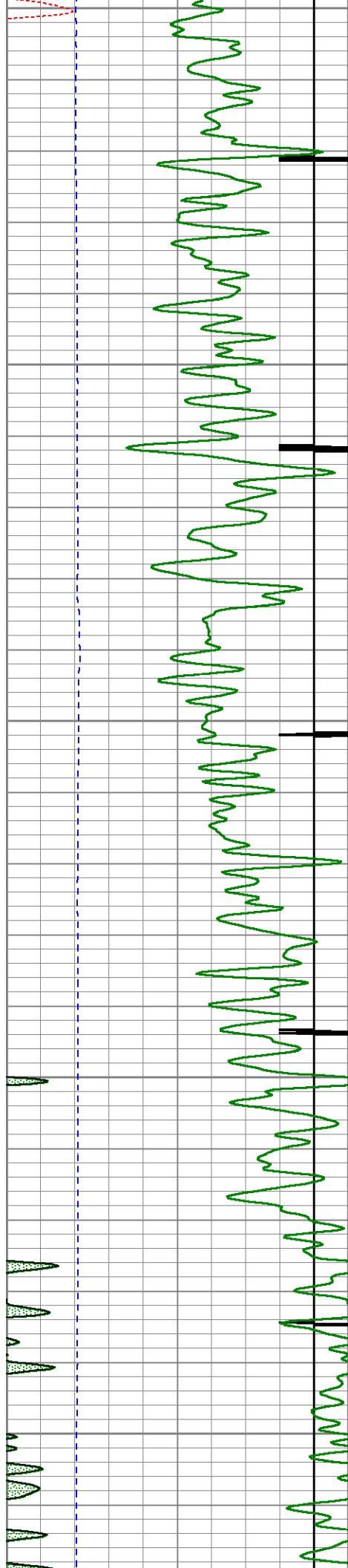
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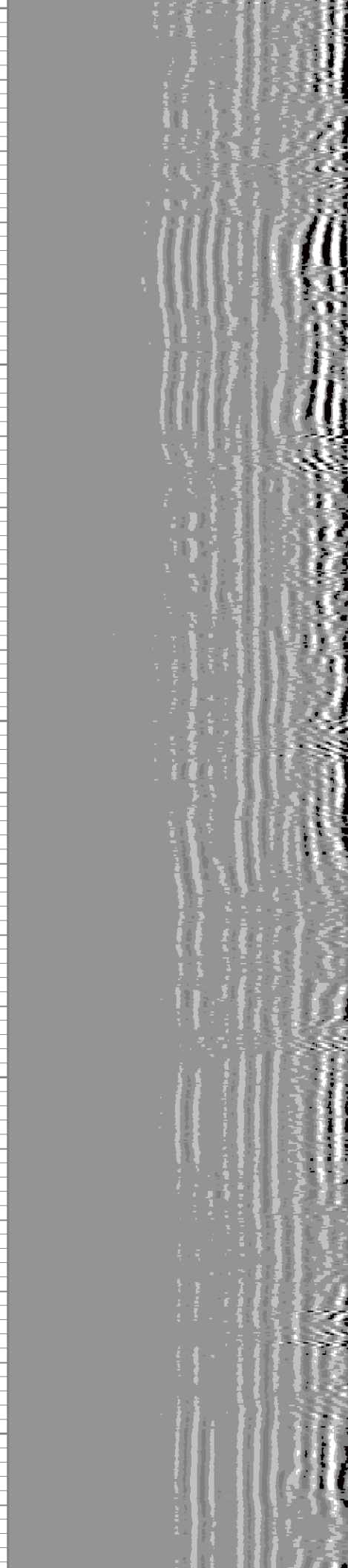
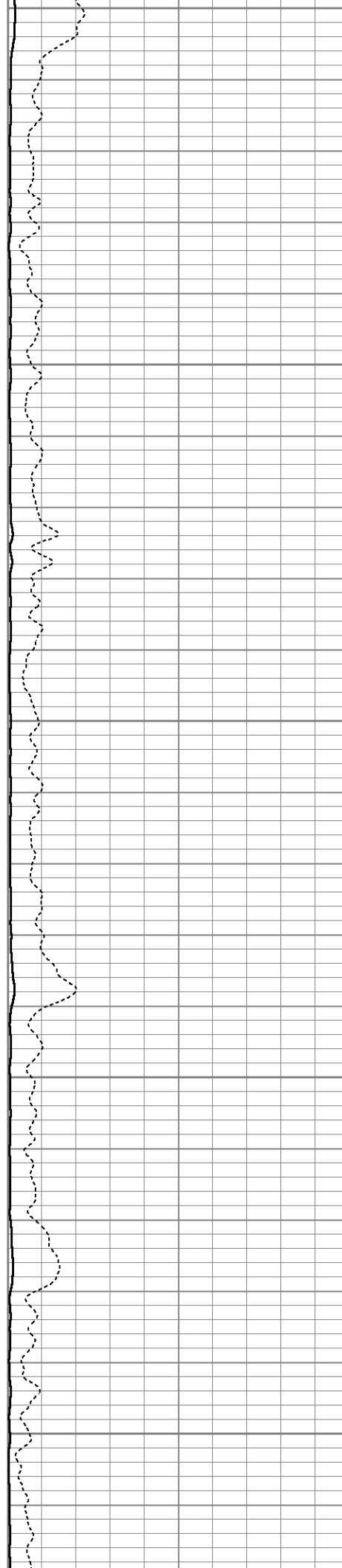
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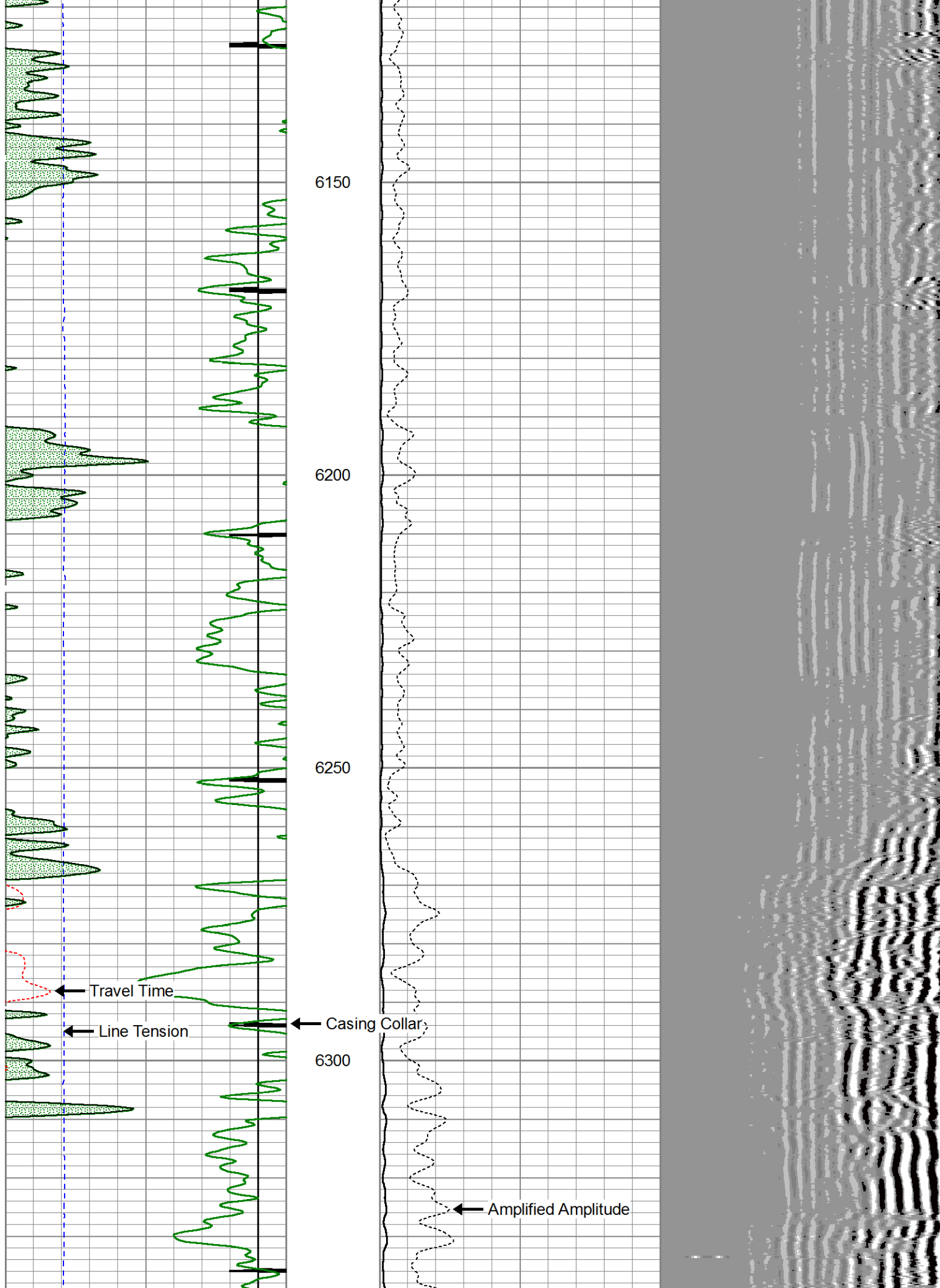
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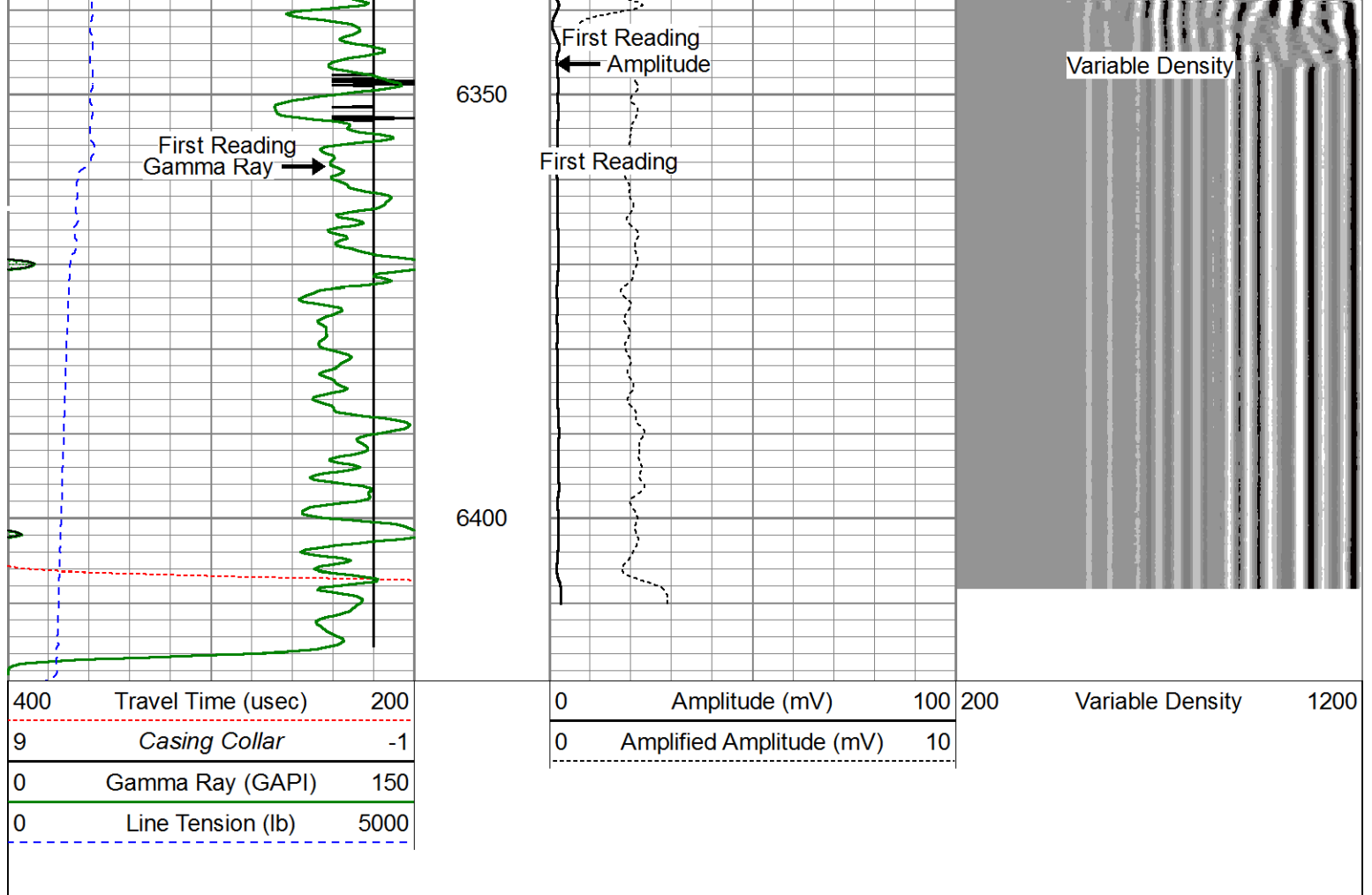
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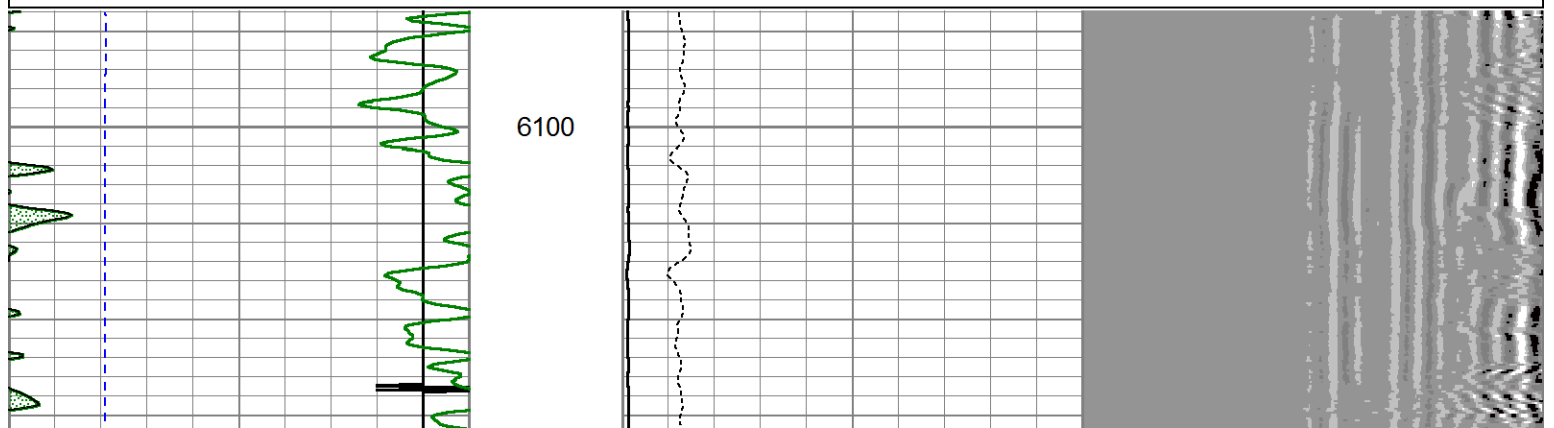
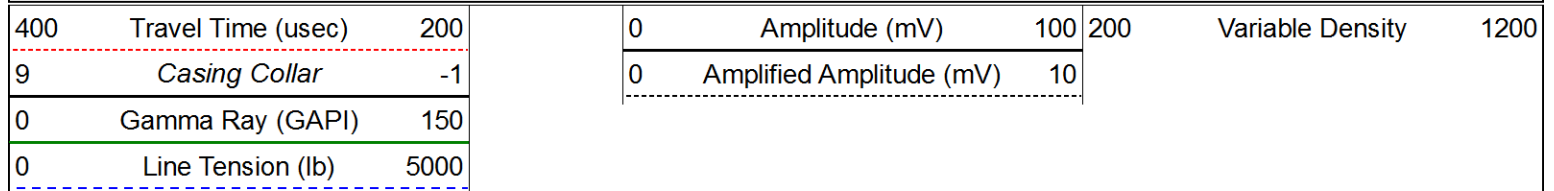


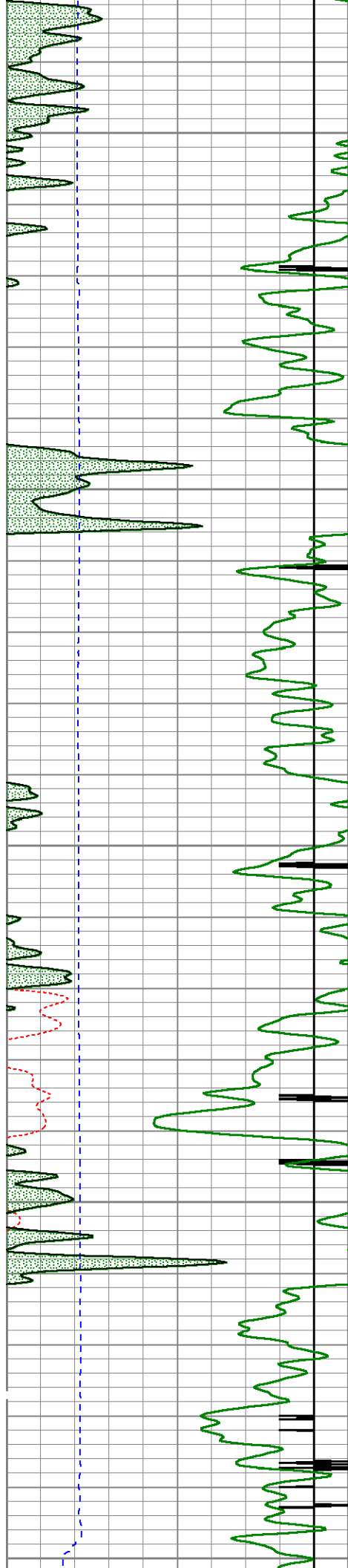




Repeat Pass (0 P.S.I.)

Database File: c:\users\engineers\desktop\bc sates 70 holes\stateseventyholesf-j-3hnb_cbl.db
Dataset Pathname: pass2
Presentation Format: cblprobe
Dataset Creation: Sat Apr 19 10:32:04 2014 by Log 0
Charted by: Depth in Feet scaled 1:240





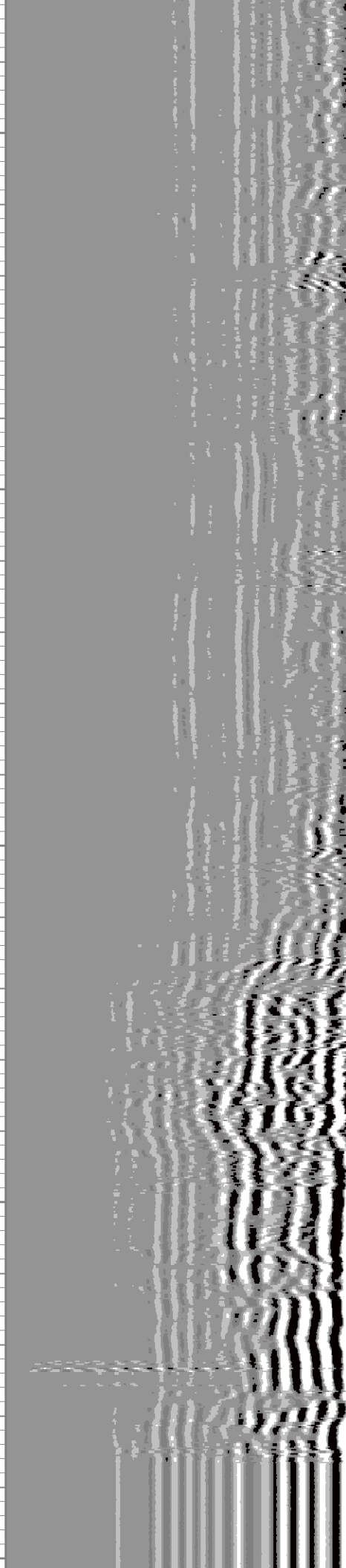
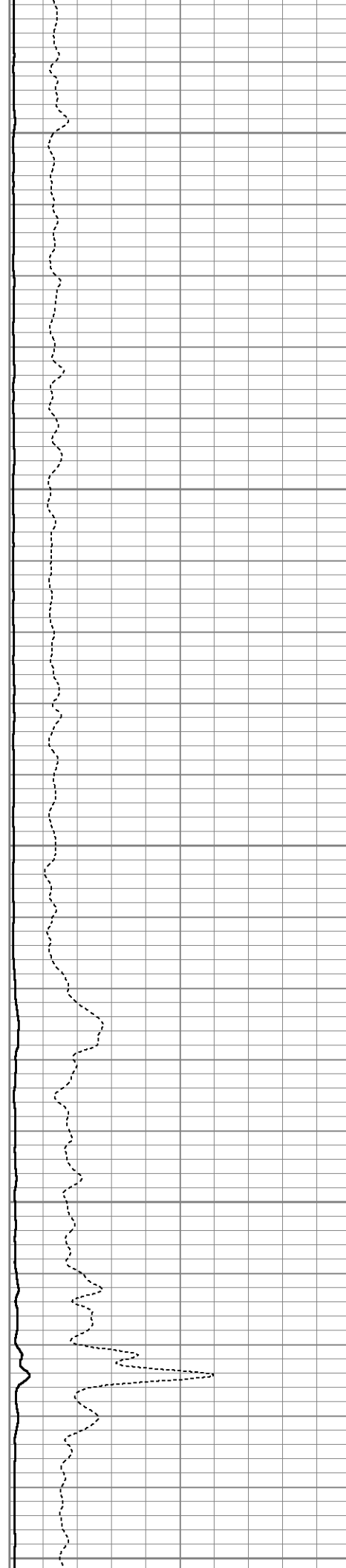
6150

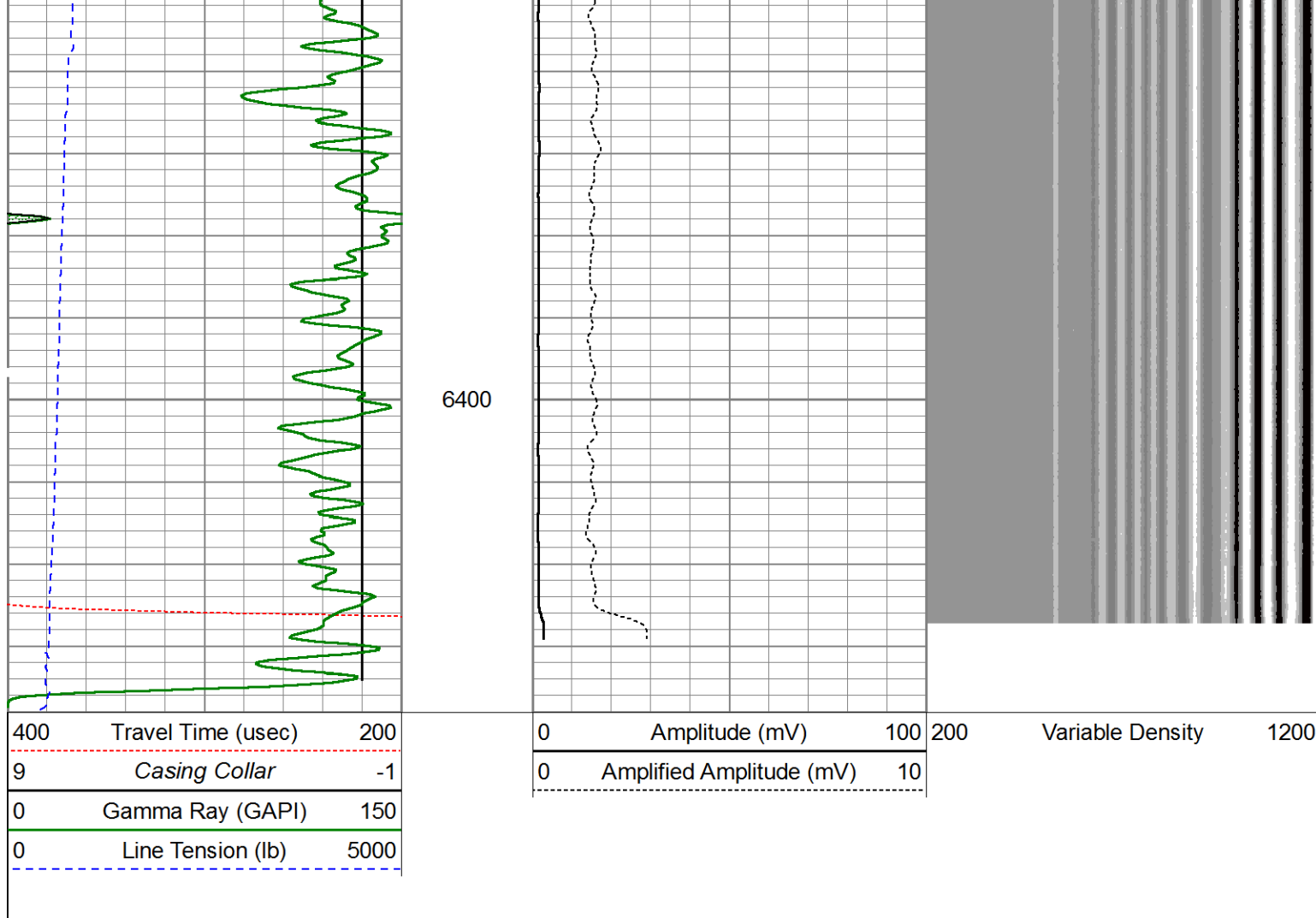
6200

6250

6300

6350





| Calibration Report | | | | | |
|--------------------------------|---|----------|---------|-----|--|
| Database File: | C:\Users\Engineers\Desktop\BC sates 70 holes\stateseventyholesf-j-3hnb_cbl.db | | | | |
| Dataset Pathname: | pass4.1 | | | | |
| Dataset Creation: | Sat Apr 19 13:23:18 2014 by Calc 0 | | | | |
| Gamma Ray Calibration Report | | | | | |
| Serial Number: | 110108-Dig | | | | |
| Tool Model: | Probe275 | | | | |
| Performed: | Fri Nov 29 14:39:10 2013 | | | | |
| Calibrator Value: | 1.0 | GAPI | | | |
| Background Reading: | 0.0 | cps | | | |
| Calibrator Reading: | 1.0 | cps | | | |
| Sensitivity: | 0.8500 | GAPI/cps | | | |
| Temperature Calibration Report | | | | | |
| Serial Number: | 110108-Dig | | | | |
| Tool Model: | Probe275 | | | | |
| Performed: | Sun Jun 13 13:33:21 1993 | | | | |
| | Reference | | Reading | | |
| Low Reference: | 0.00 | degF | 0.00 | cps | |
| High Reference: | 1.00 | degF | 1.00 | cps | |
| Gain: | 1.00 | | | | |
| Offset: | 0.00 | | | | |
| Probe Gain: | 0.00 | | | | |

Segmented Cement Bond Log Calibration Report

Serial Number: 101224
 Tool Model: Probe
 Calibration Casing Diameter: 5.500 in
 Calibration Depth: 0.110 ft

Master Calibration, performed Sat Apr 19 08:02:42 2014:

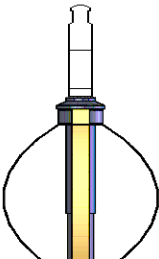
| | Raw (v) | | Calibrated (mv) | | Results | |
|-----|---------|-------|-----------------|---------|---------|--------|
| | Zero | Cal | Zero | Cal | Gain | Offset |
| 3' | -0.020 | 0.722 | 1.000 | 71.921 | 130.508 | 2.918 |
| CAL | -0.019 | 0.754 | | | | |
| 5' | -0.017 | 0.659 | 1.000 | 71.921 | 104.939 | 2.732 |
| SUM | | | | | | |
| S1 | 0.025 | 0.743 | 0.000 | 100.000 | 139.403 | -3.541 |
| S2 | -0.022 | 0.724 | 0.000 | 100.000 | 134.135 | 2.923 |
| S3 | -0.019 | 0.737 | 0.000 | 100.000 | 132.274 | 2.553 |
| S4 | -0.020 | 0.744 | 0.000 | 100.000 | 130.856 | 2.636 |
| S5 | -0.020 | 0.737 | 0.000 | 100.000 | 132.106 | 2.651 |
| S6 | -0.020 | 0.729 | 0.000 | 100.000 | 133.435 | 2.663 |
| S7 | -0.020 | 0.724 | 0.000 | 100.000 | 134.317 | 2.717 |
| S8 | -0.020 | 0.729 | 0.000 | 100.000 | 133.503 | 2.642 |

Internal Reference Calibration, performed Mon Oct 10 09:42:03 2005:

| | Raw (v) | | Calibrated (v) | | Results | |
|-----|---------|-------|----------------|-------|---------|--------|
| | Zero | Cal | Zero | Cal | Gain | Offset |
| CAL | 0.000 | 0.000 | -0.019 | 0.754 | 1.000 | 0.000 |

Air Zero Calibration, performed Sun Oct 27 20:29:00 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 | |

| Sensor | Offset (ft) | Schematic | Description | Len (ft) | OD (in) | Wt (lb) |
|--------|-------------|---|-------------------------------|----------|---------|---------|
| | |  | Titan Cable_head | 1.00 | 1.44 | 10.00 |
| | | | Probe275 2.75" Centralizer | 2.88 | 2.75 | 20.00 |

