



CEMENT BOND LOG

Mesa Wireline

Company ENCANA OIL & GAS (USA) INC
Well CRANDELL 4-6-26
Field WATTENBERG
County BROOMFIELD
State COLORADO

Company ENCANA OIL & GAS (USA) INC
Well CRANDELL 4-6-26
Field WATTENBERG
County BROOMFIELD State COLORADO

Location: API #: 05-014-42700-0000
SHL: 1745' FSL & 1008' FWL
BHL: 1350' FSL & 2575' FWL
SEC: 26 TWP: 1N RGE: 68W
Permanent Datum GROUND LEVEL Elevation 5217'
Log Measured From KELLY BUSHING = 13'
Drilling Measured From KELLY BUSHING
Other Services
NONE
Elevation
K.B. 5230'
D.F. 5229'
G.L. 5217'

Date 9 NOVEMBER 2011

| | |
|------------------------|-------------|
| Run Number | ONE |
| Depth Driller | 8831' |
| Depth Logger | 8842' |
| Bottom Logged Interval | 8842' |
| Top Log Interval | 3300' |
| Open Hole Size | 7.875" |
| Type Fluid | WATER |
| Density / Viscosity | ~8.3# |
| Max. Recorded Temp. | 262 DEG F |
| Estimated Cement Top | 3638' |
| Time Well Ready | N/A |
| Time Logger on Bottom | N/A |
| Equipment Number | 10901 PRD01 |
| Location | AULT, CO |
| Recorded By | Z. EMICK |
| Witnessed By | T. MAJORS |

| Borehole Record | | | | Tubing Record | | | |
|-----------------|--------|-------|-------|---------------|--------|------|----|
| Run Number | Bit | From | To | Size | Weight | From | To |
| ONE | 12.25" | 0' | 1100' | | | | |
| TWO | 7.875" | 1100' | 8845' | | | | |

| | | | | |
|-------------------|--------|--------|-----|--------|
| Casing Record | Size | Wgt/Ft | Top | Bottom |
| Surface String | 8.625" | 24# | 0' | 1084' |
| Prot. String | | | | |
| Production String | 4.5" | 11.6# | 0' | 8831' |
| 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

LOG NOT CORRELATED TO ANY OTHER LOG
SHORT JOINT 7758' - 7781'

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



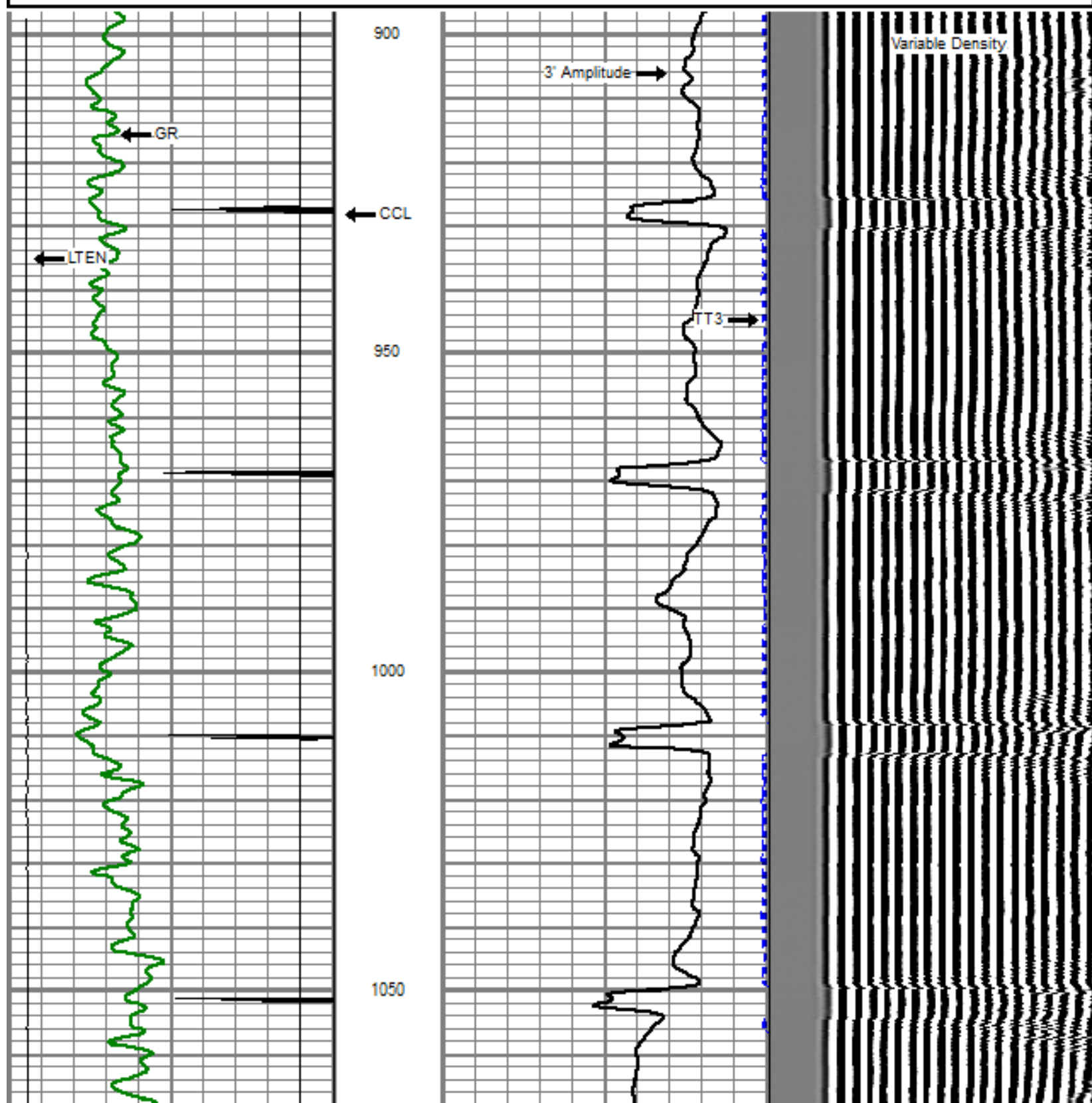
TOP PASS

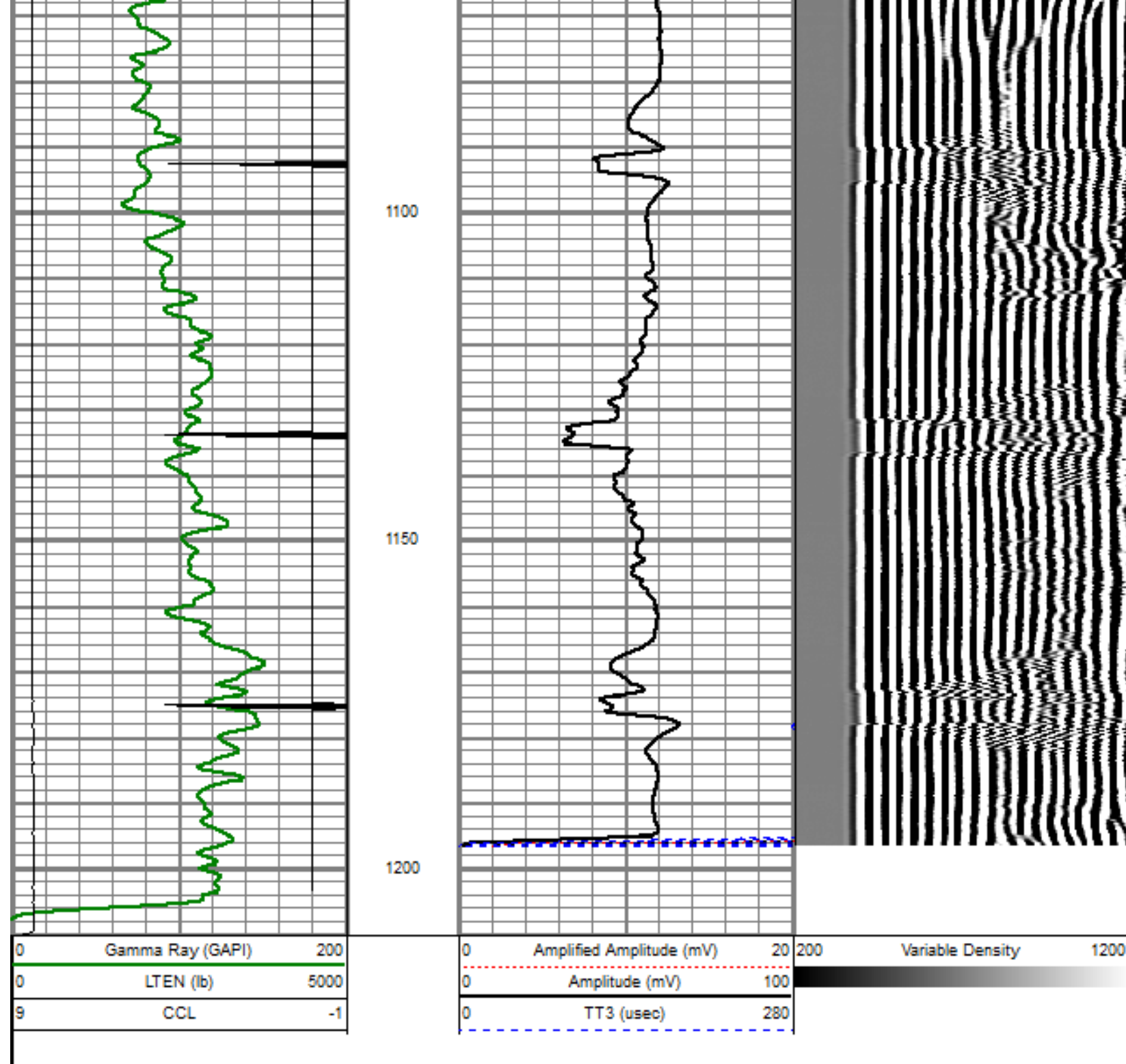
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Dataset Pathname: pass4.1
Presentation Format: dobl_prb
Dataset Creation: Wed Nov 09 17:43:53 2011 by Calc SCH 110722
Charted by: Depth in Feet scaled 1:240

| | | |
|---|------------------|------|
| 0 | Gamma Ray (GAPI) | 200 |
| 0 | LTEN (lb) | 5000 |
| 9 | CCL | -1 |

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

200 Variable Density 1200

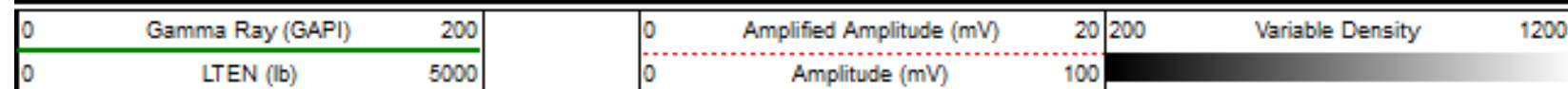


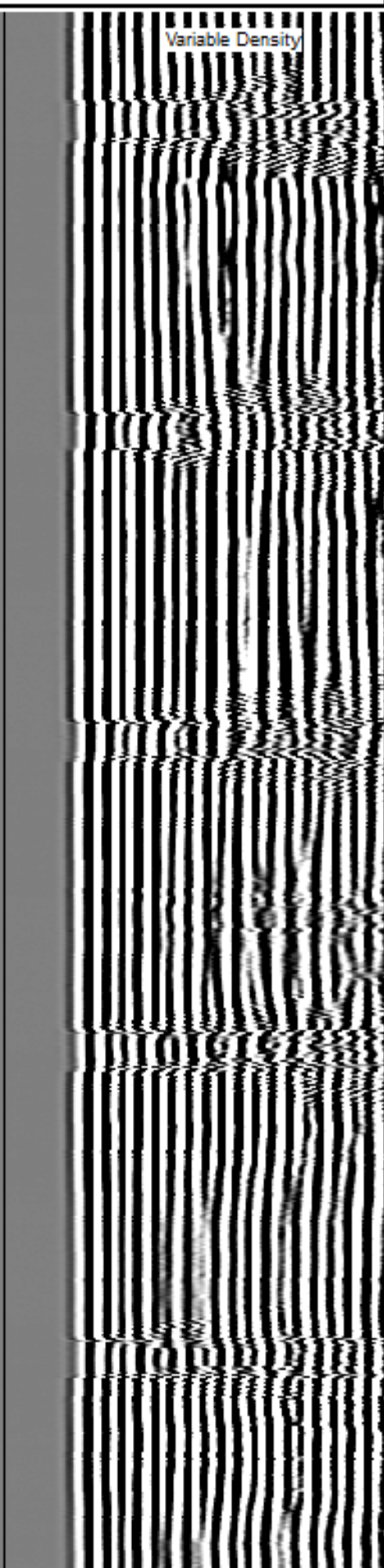
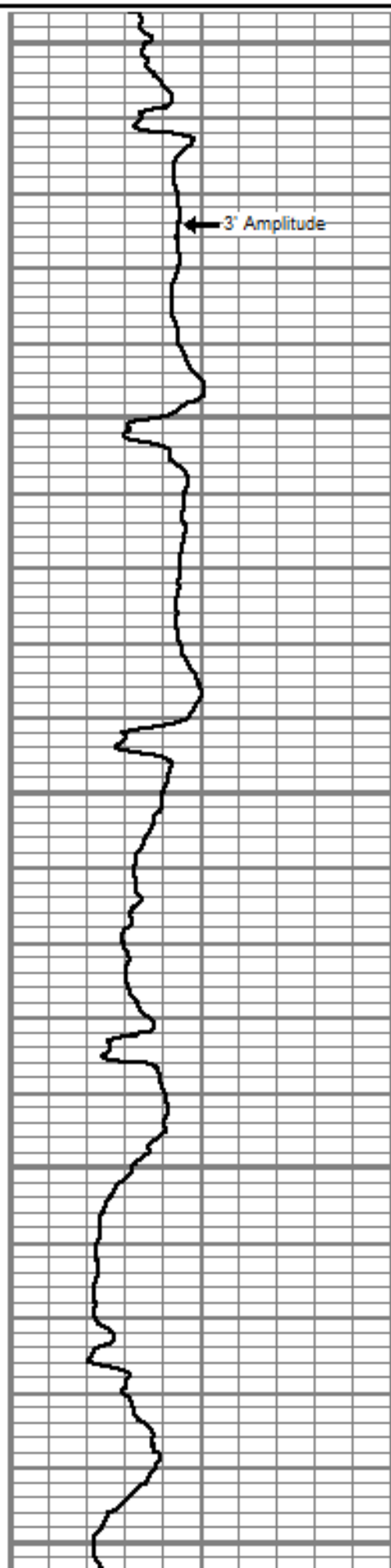
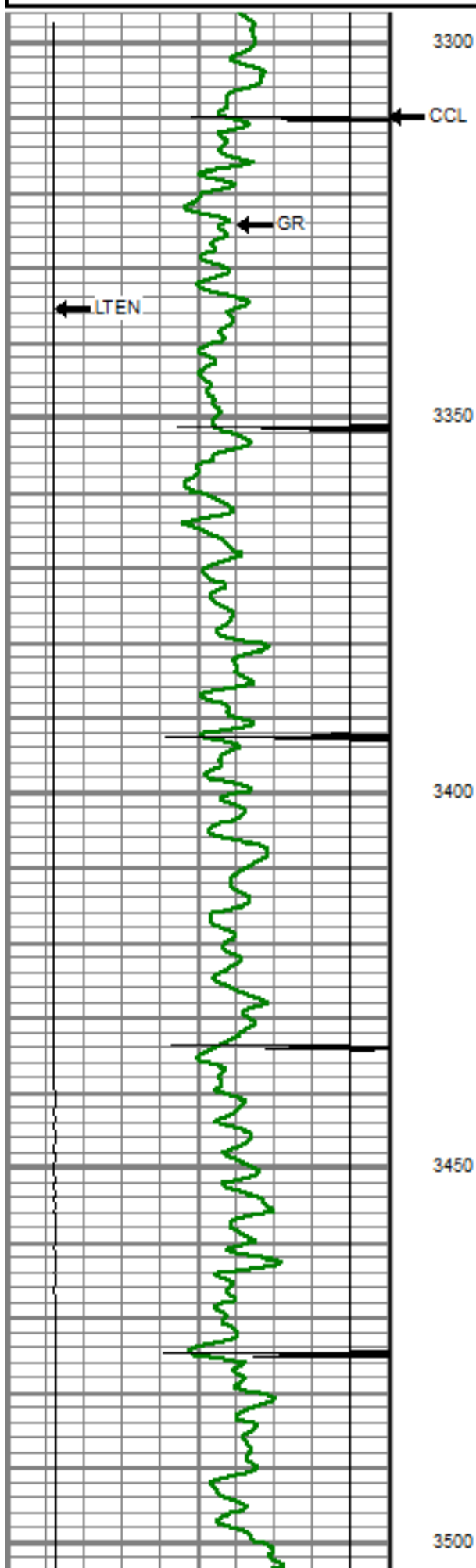


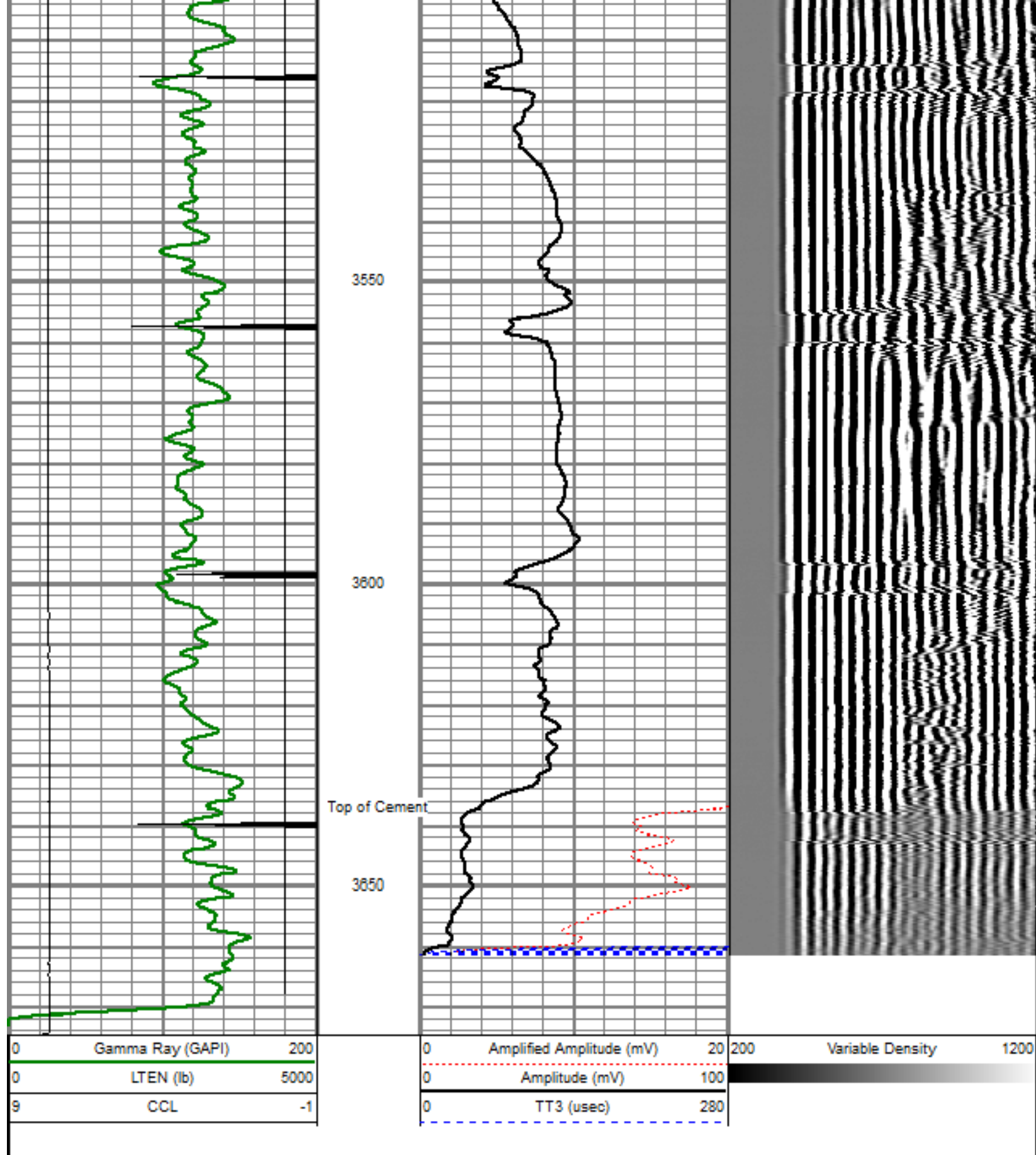
REPEAT PASS

5" = 100'

Database File: crandell 4-6-26.db
 Dataset Pathname: pass3
 Presentation Format: dobl_prb
 Dataset Creation: Wed Nov 09 17:21:58 2011 by Log SCH 110722
 Charted by: Depth in Feet scaled 1:240





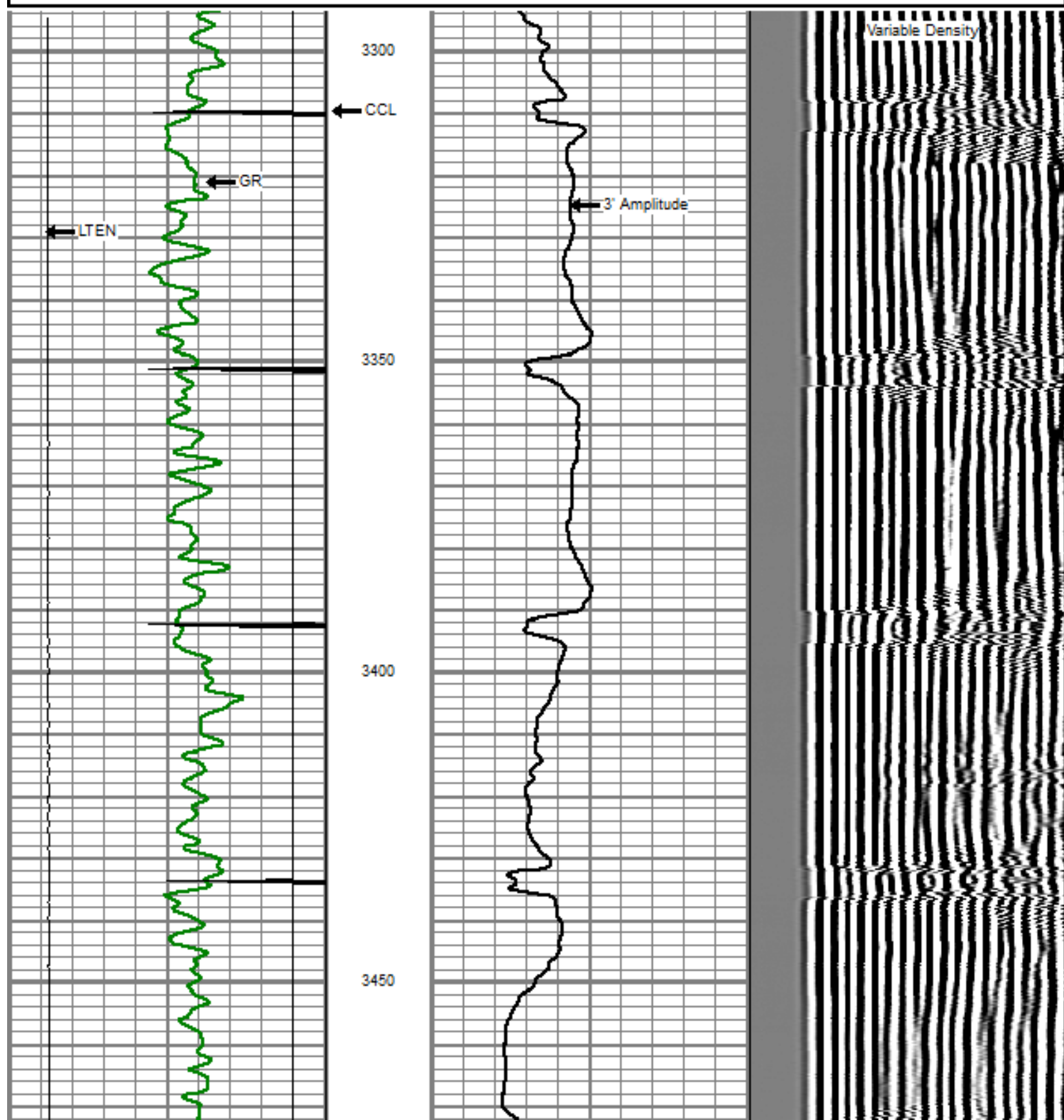


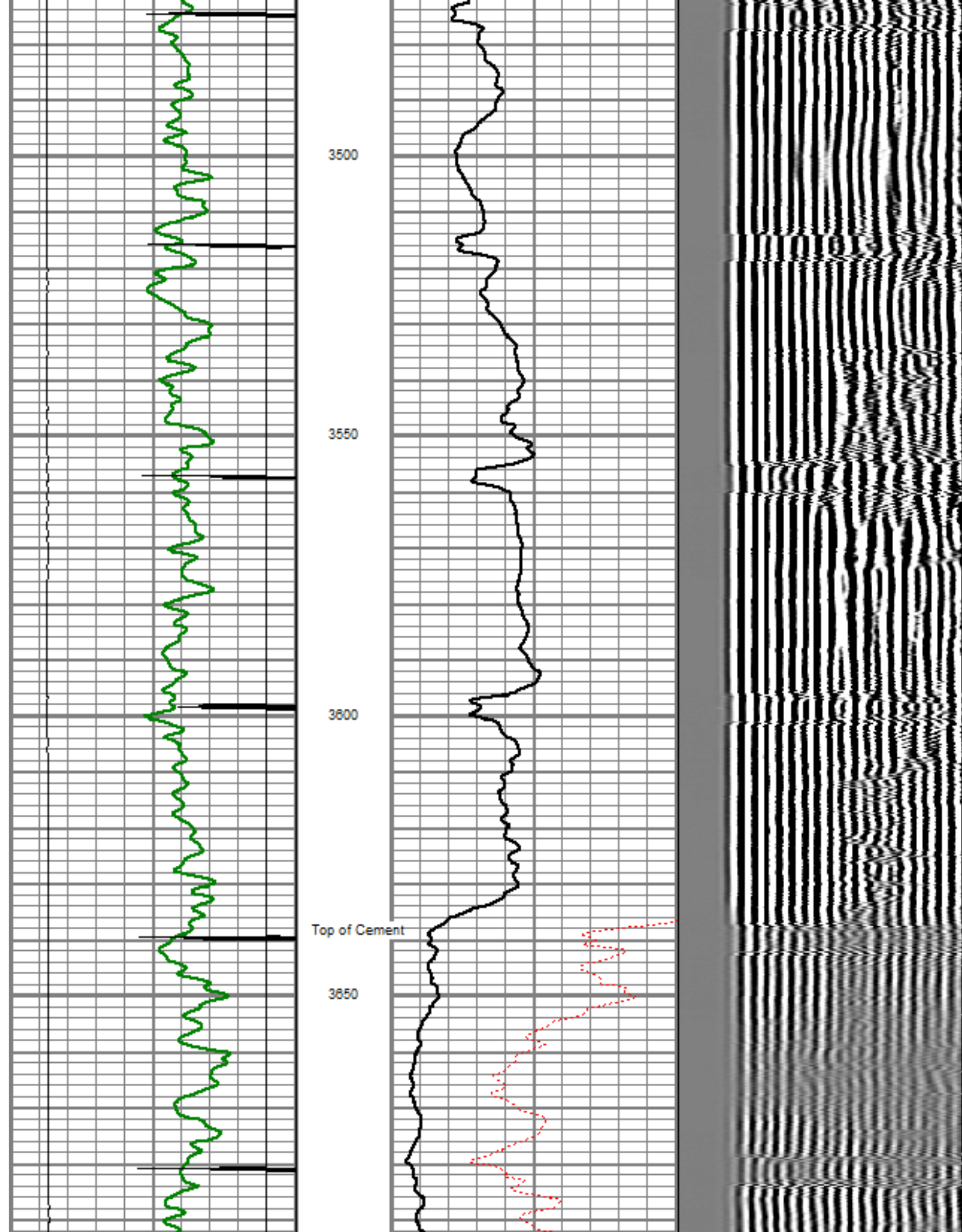
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 Dataset Pathname: pass2
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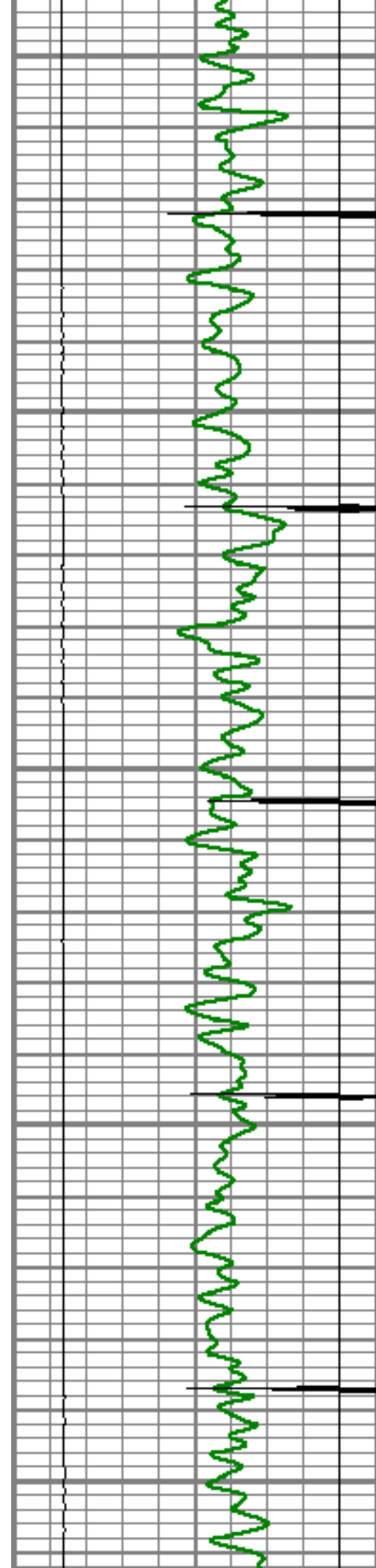
| | | |
|---|------------------|------|
| 0 | Gamma Ray (GAPI) | 200 |
| 0 | LTEN (lb) | 5000 |
| 9 | CCL | -1 |

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

| | | |
|-----|------------------|------|
| 200 | Variable Density | 1200 |
|-----|------------------|------|







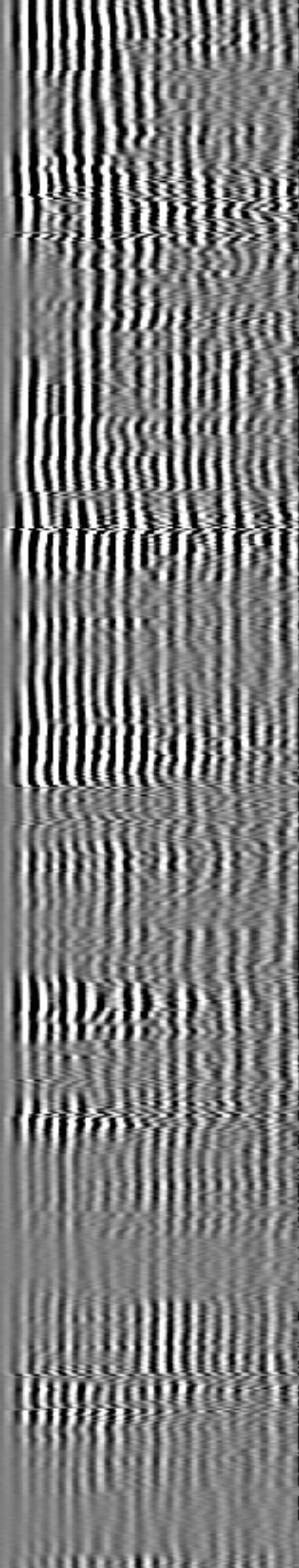
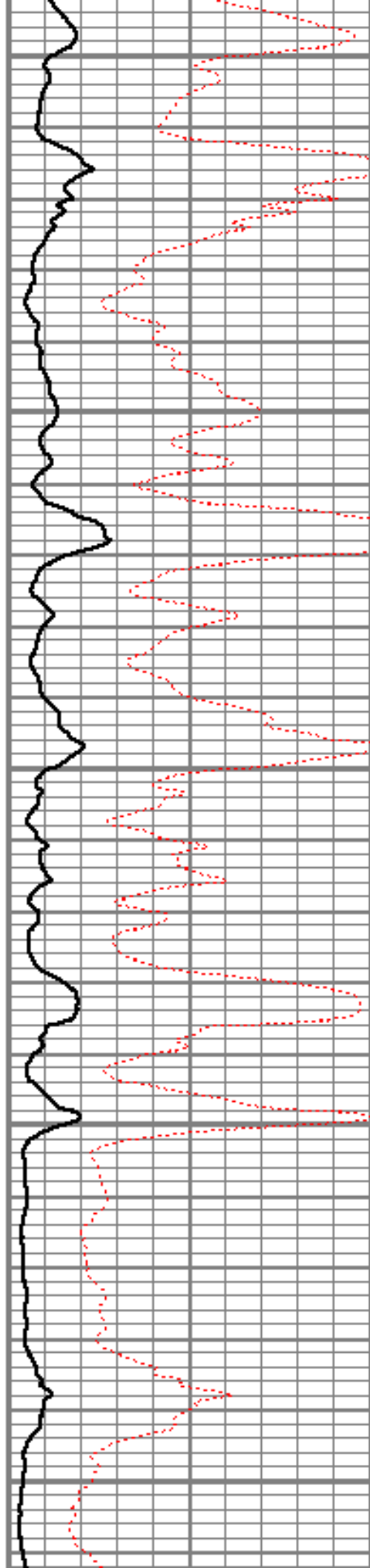
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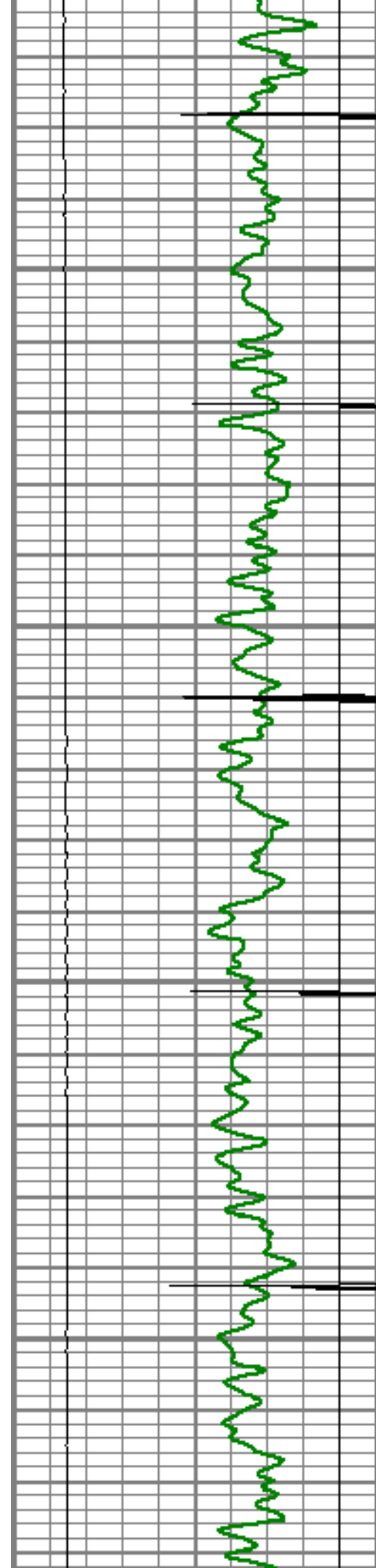
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3850

3900



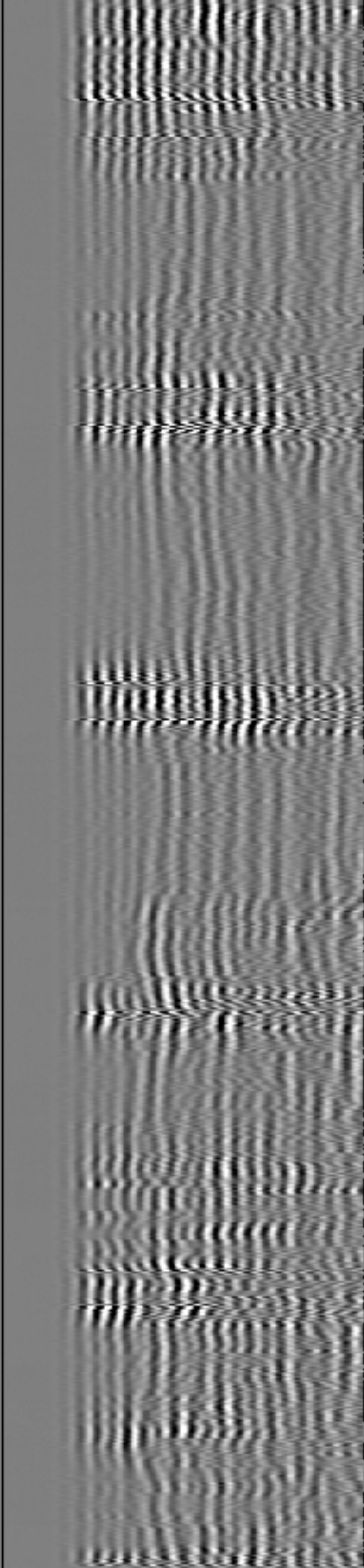
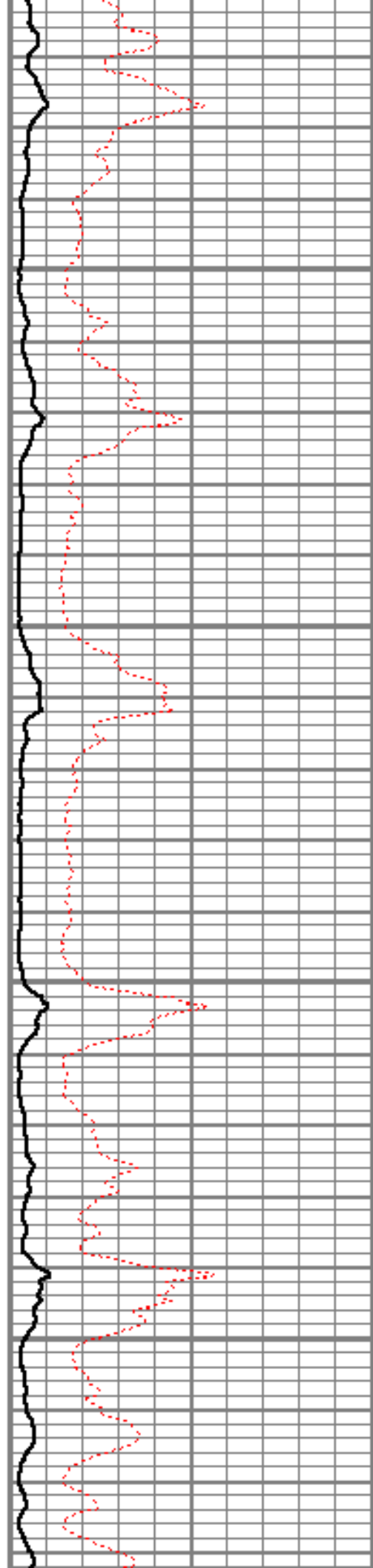


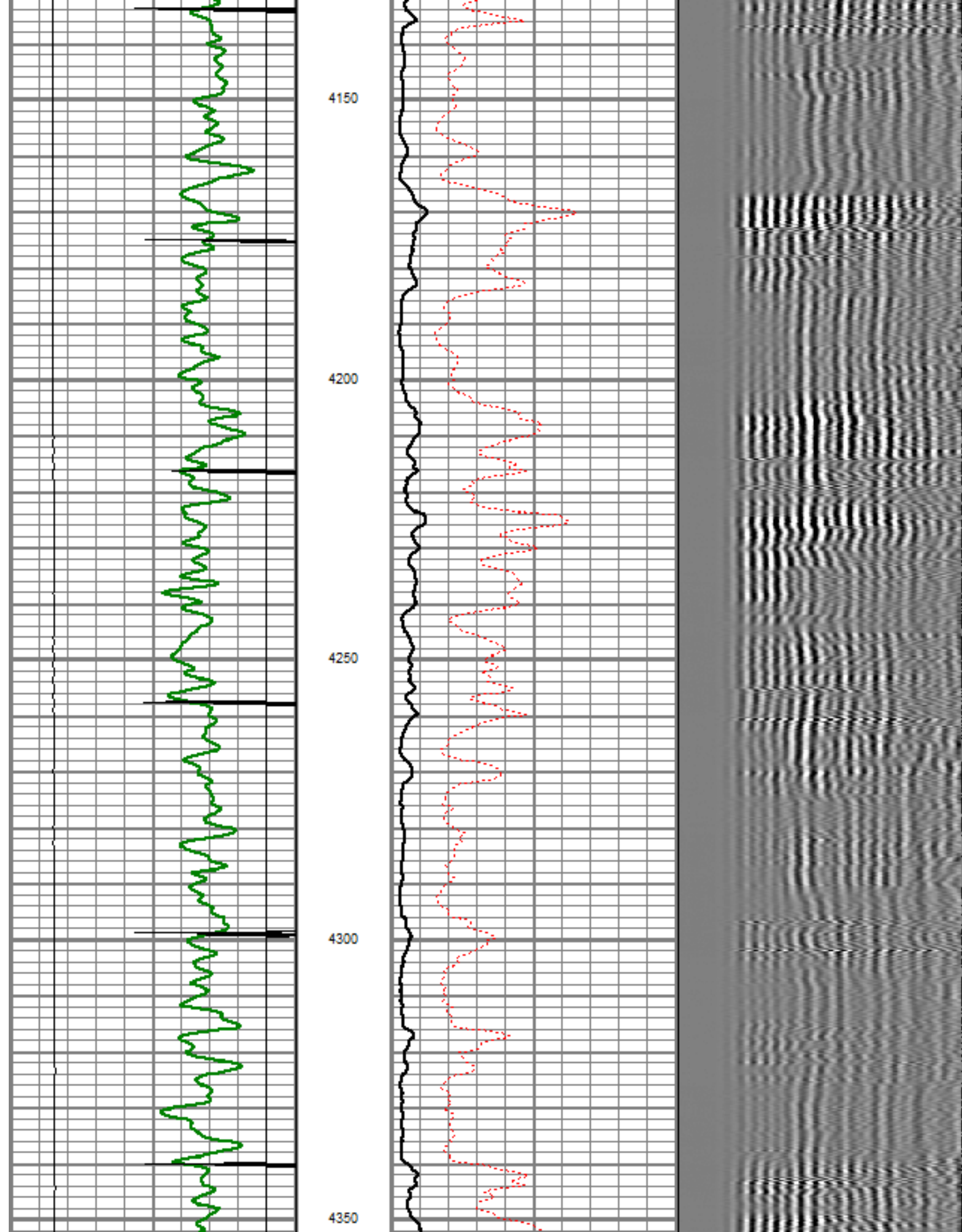
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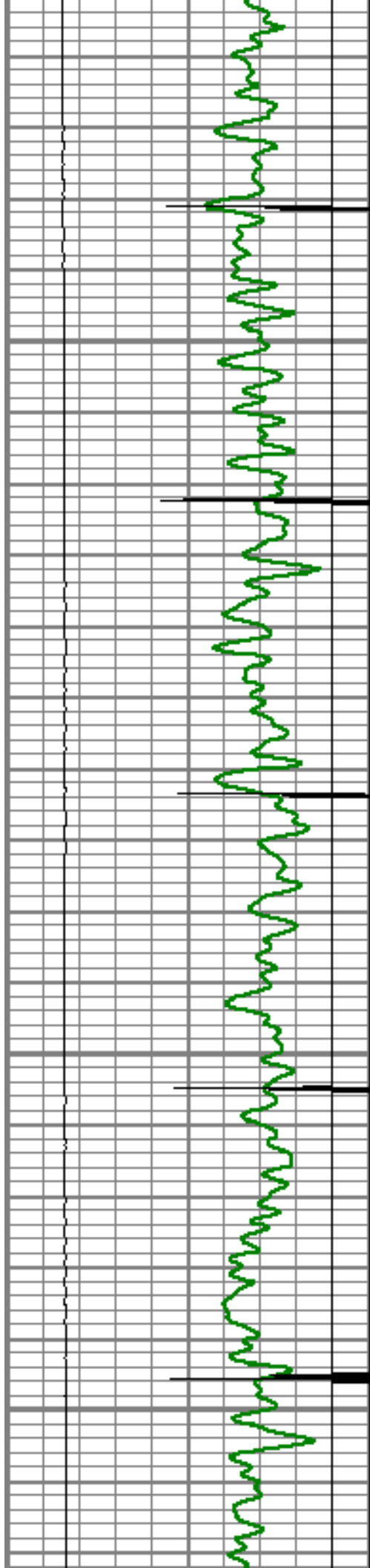
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4050

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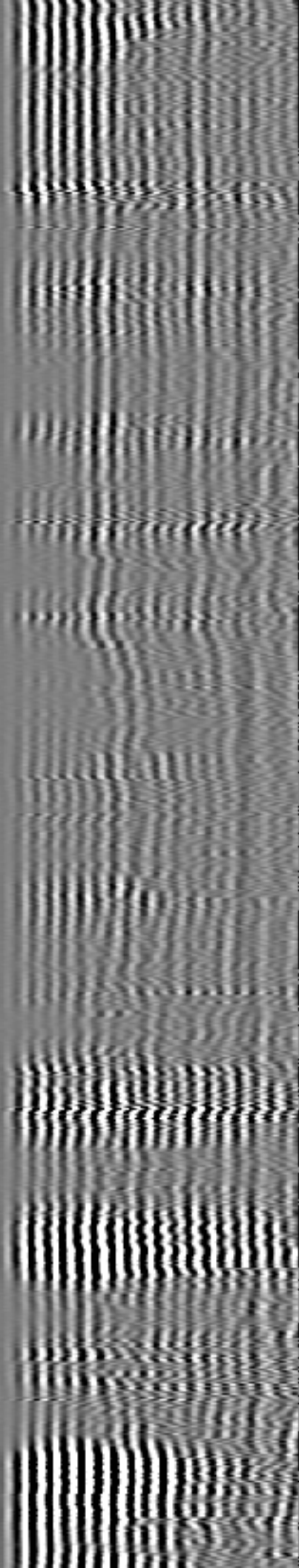
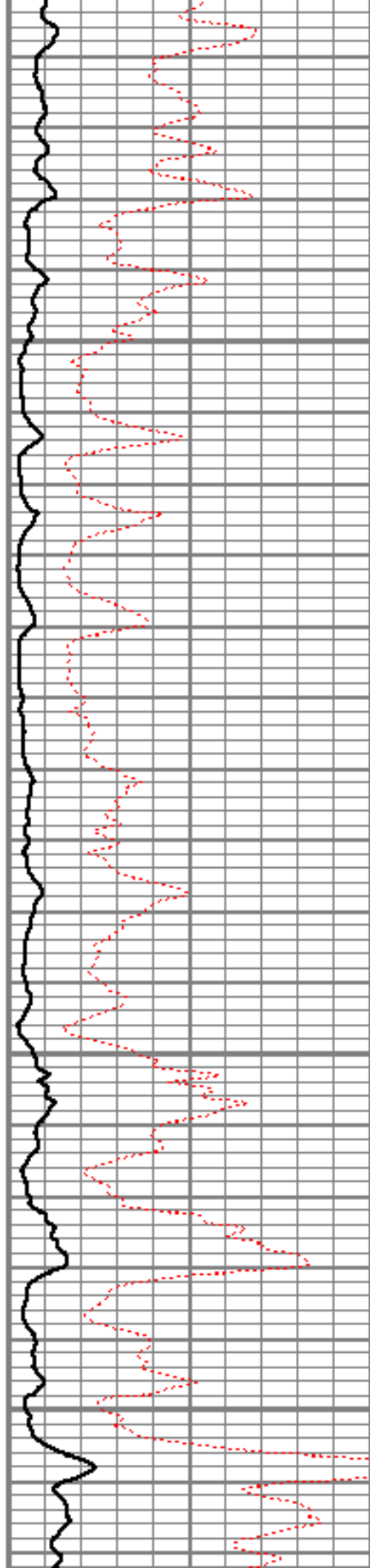


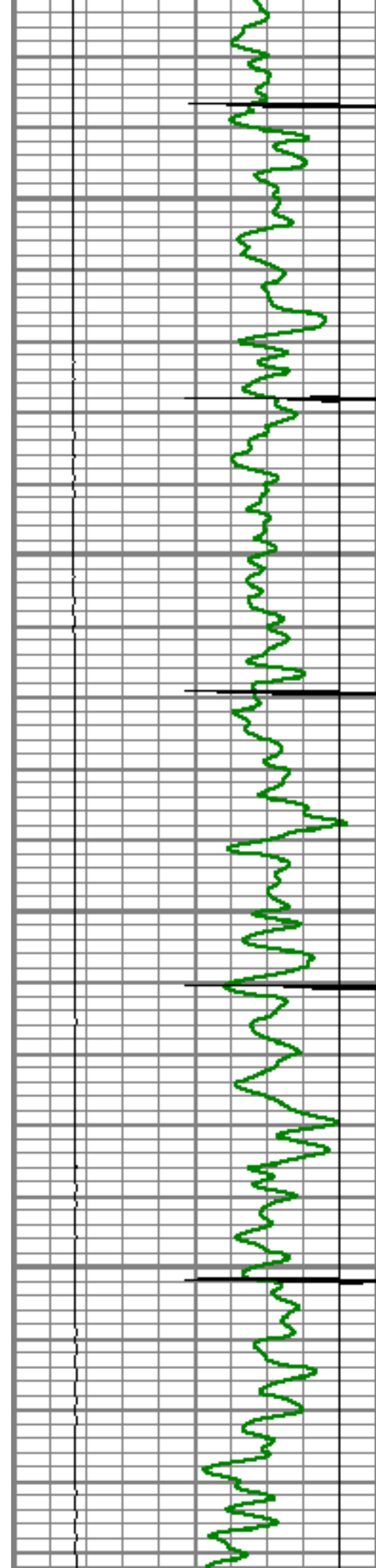
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4500

4550



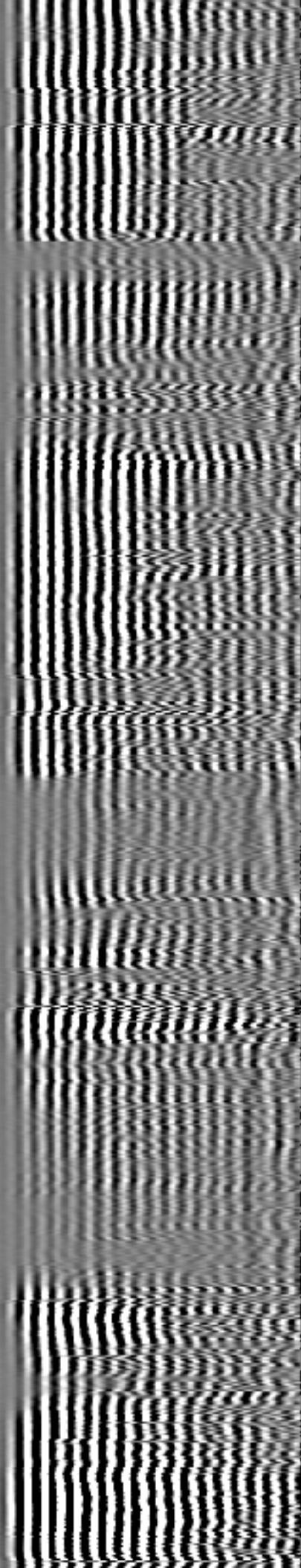
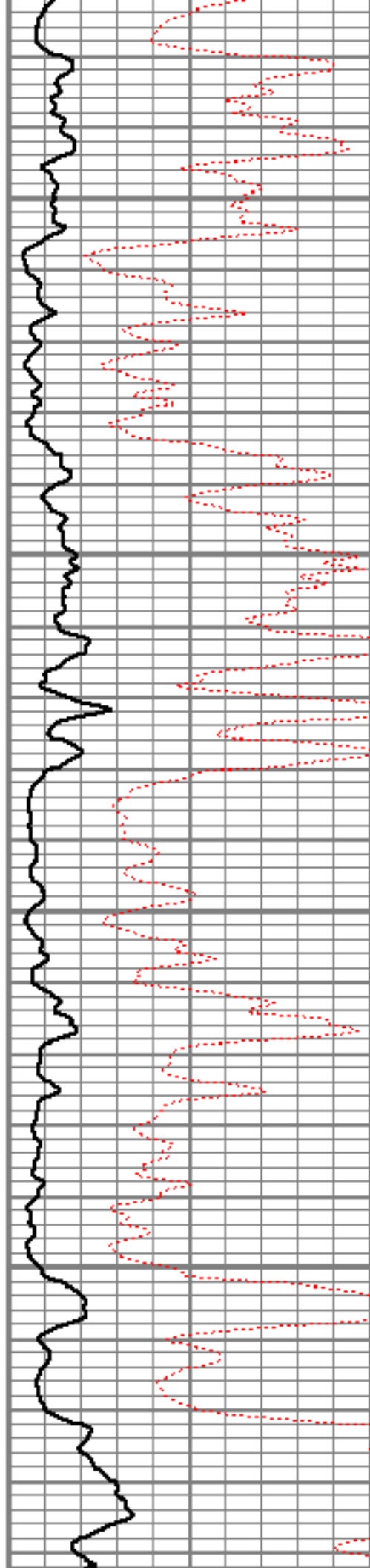


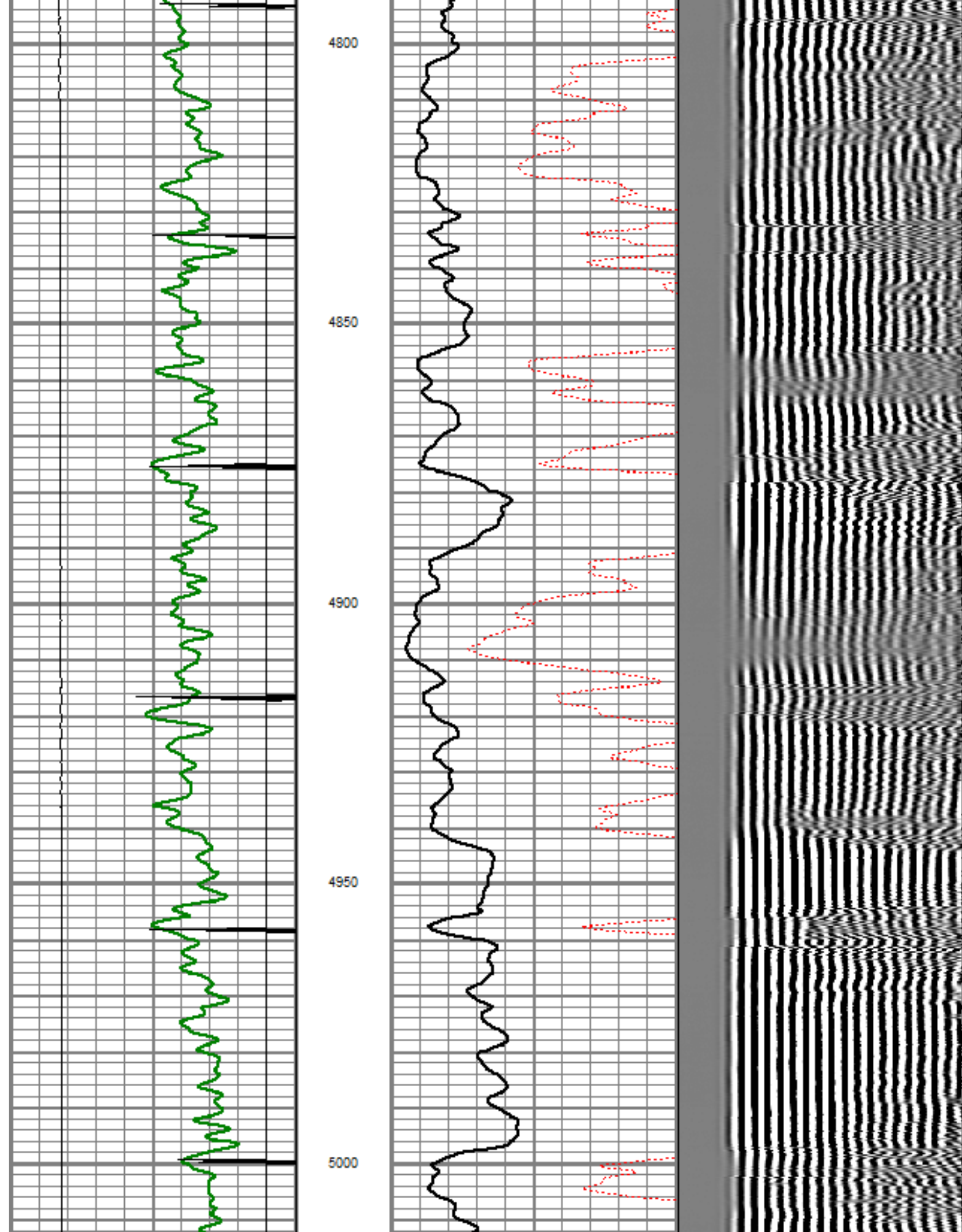
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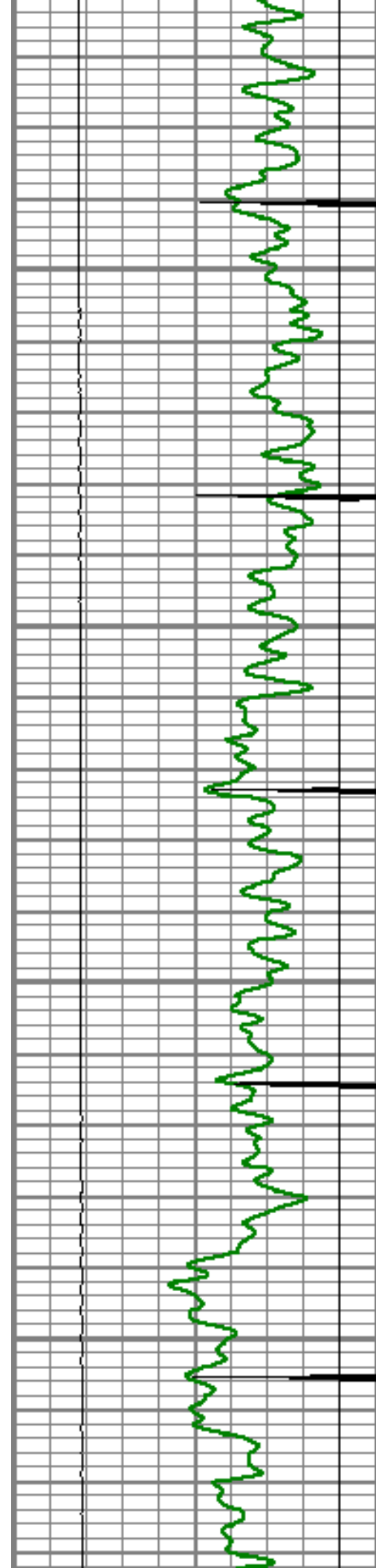
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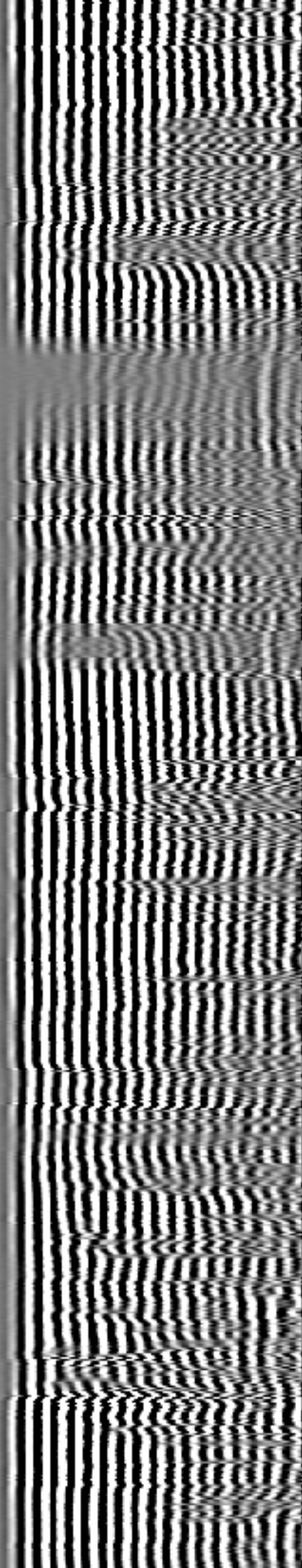
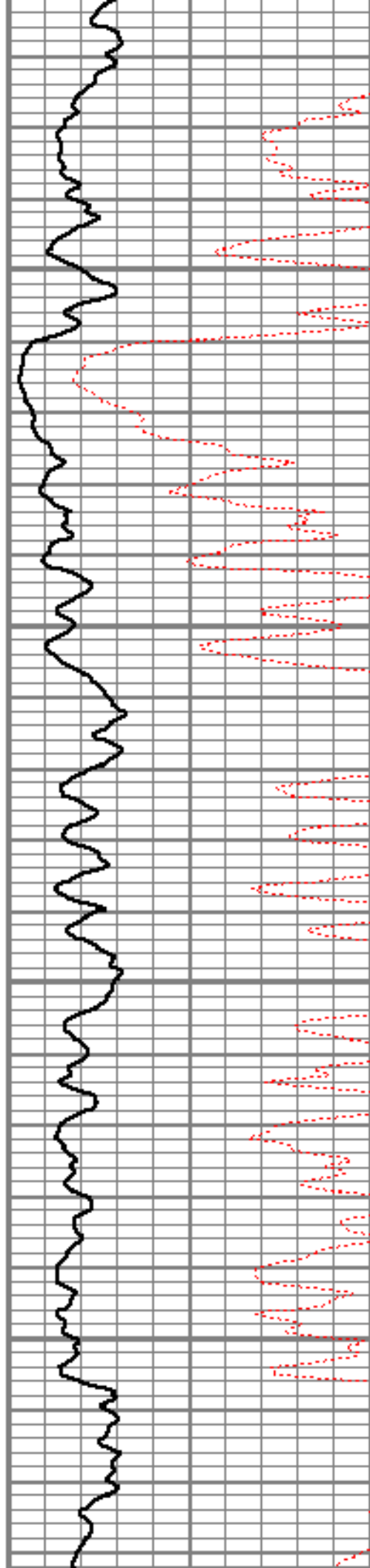


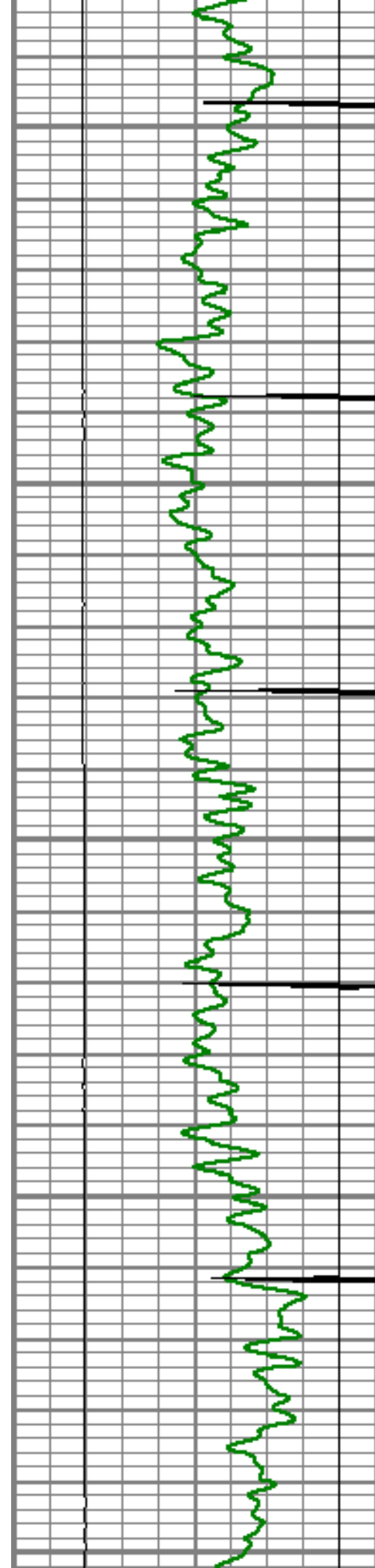
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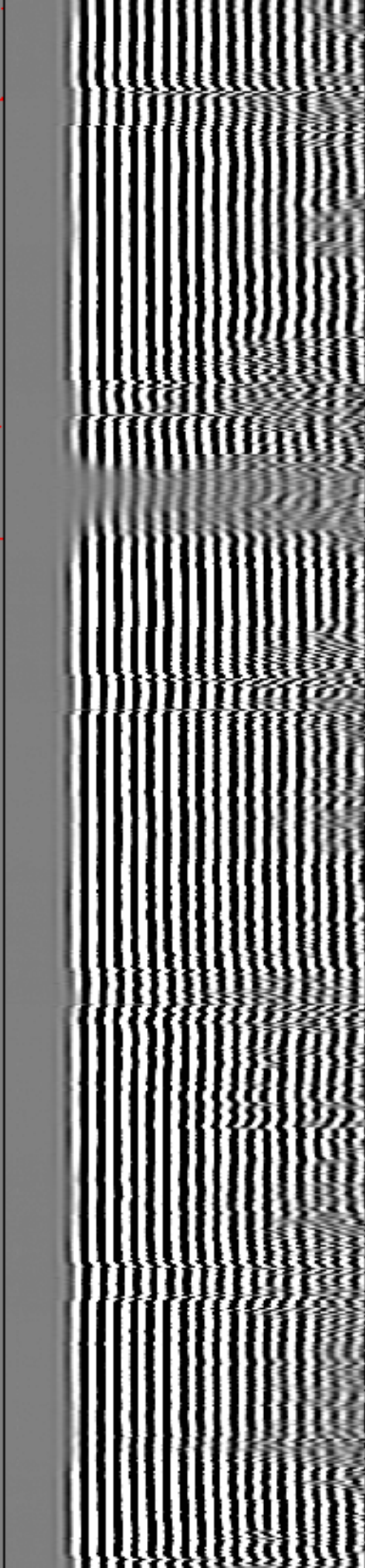
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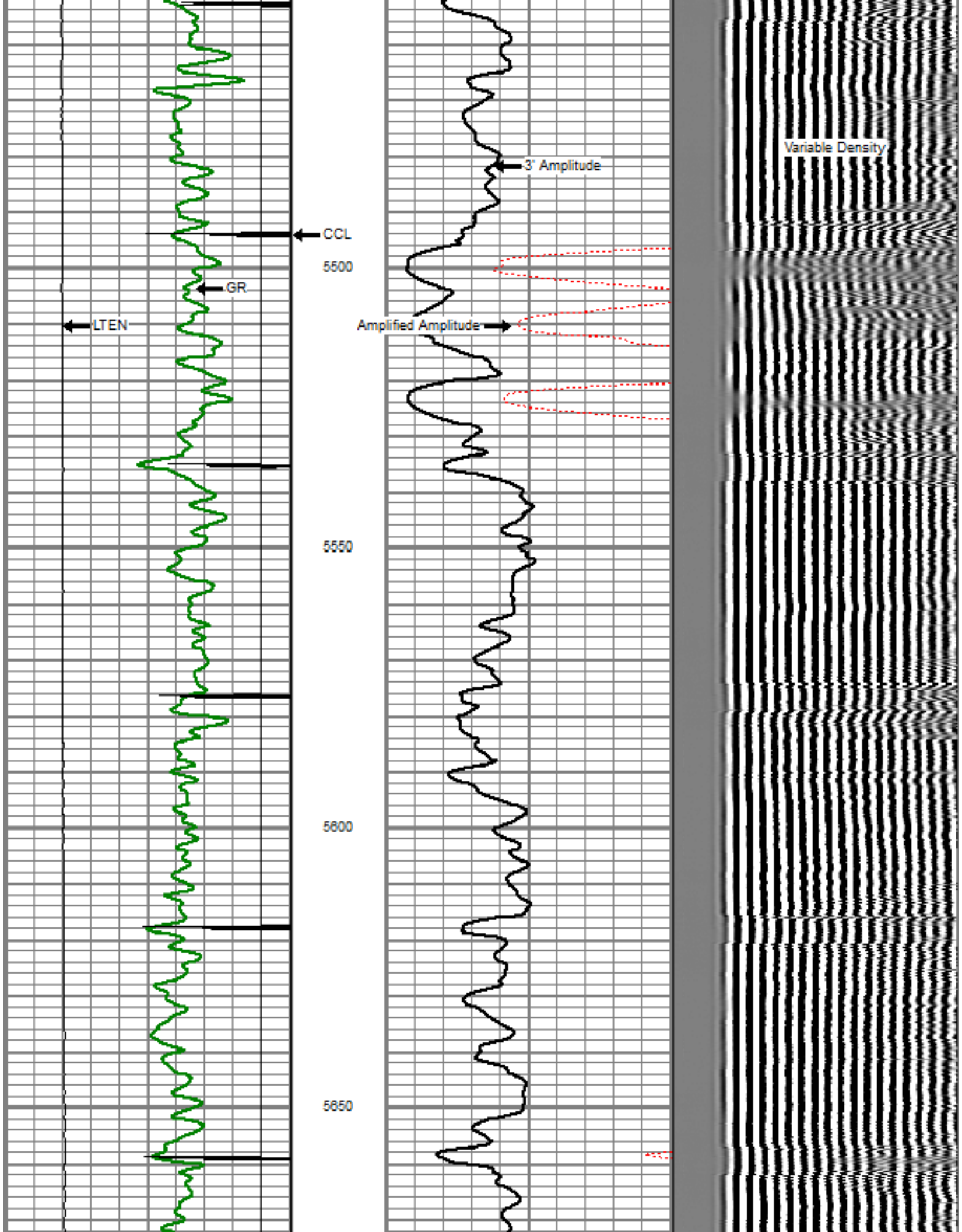
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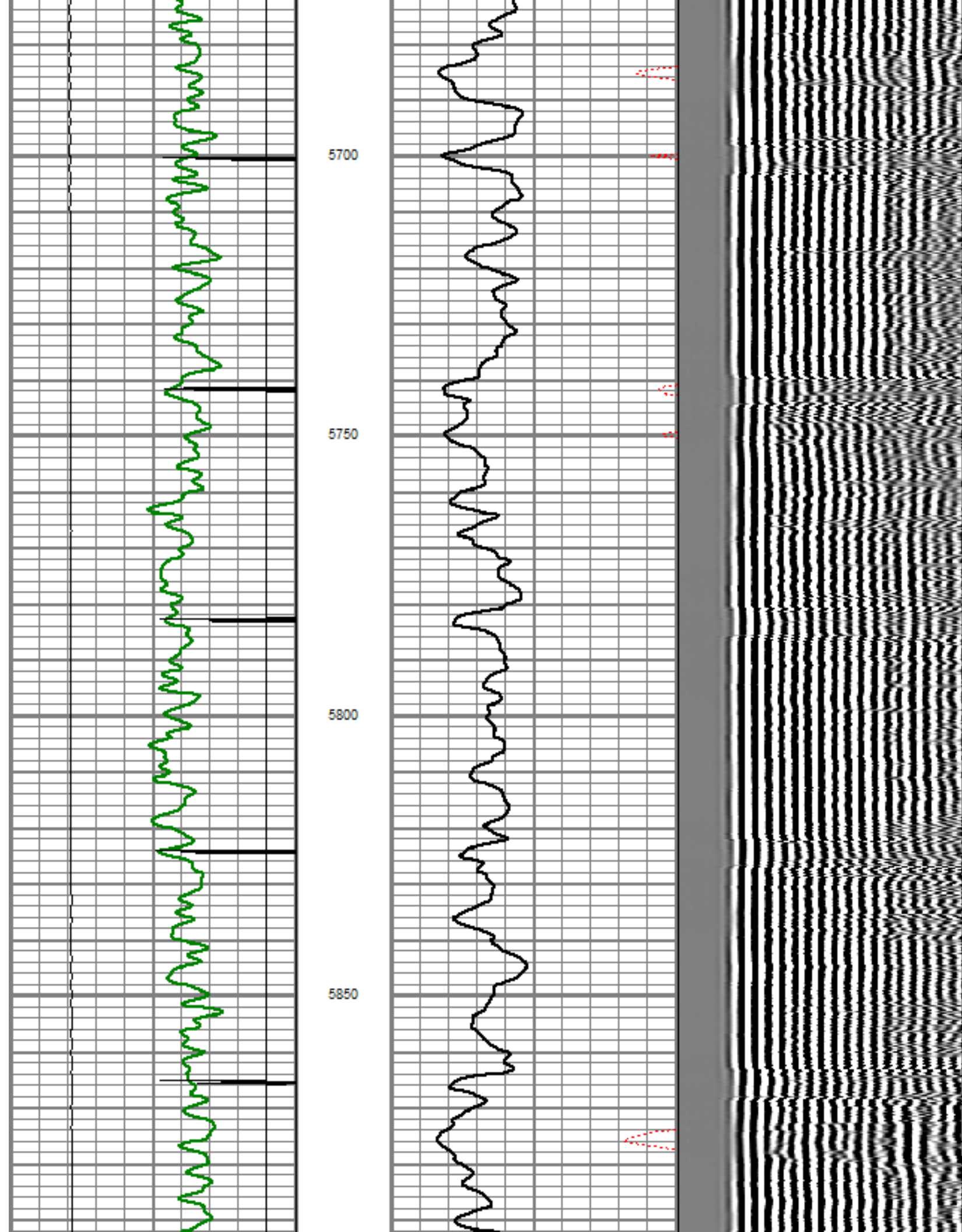
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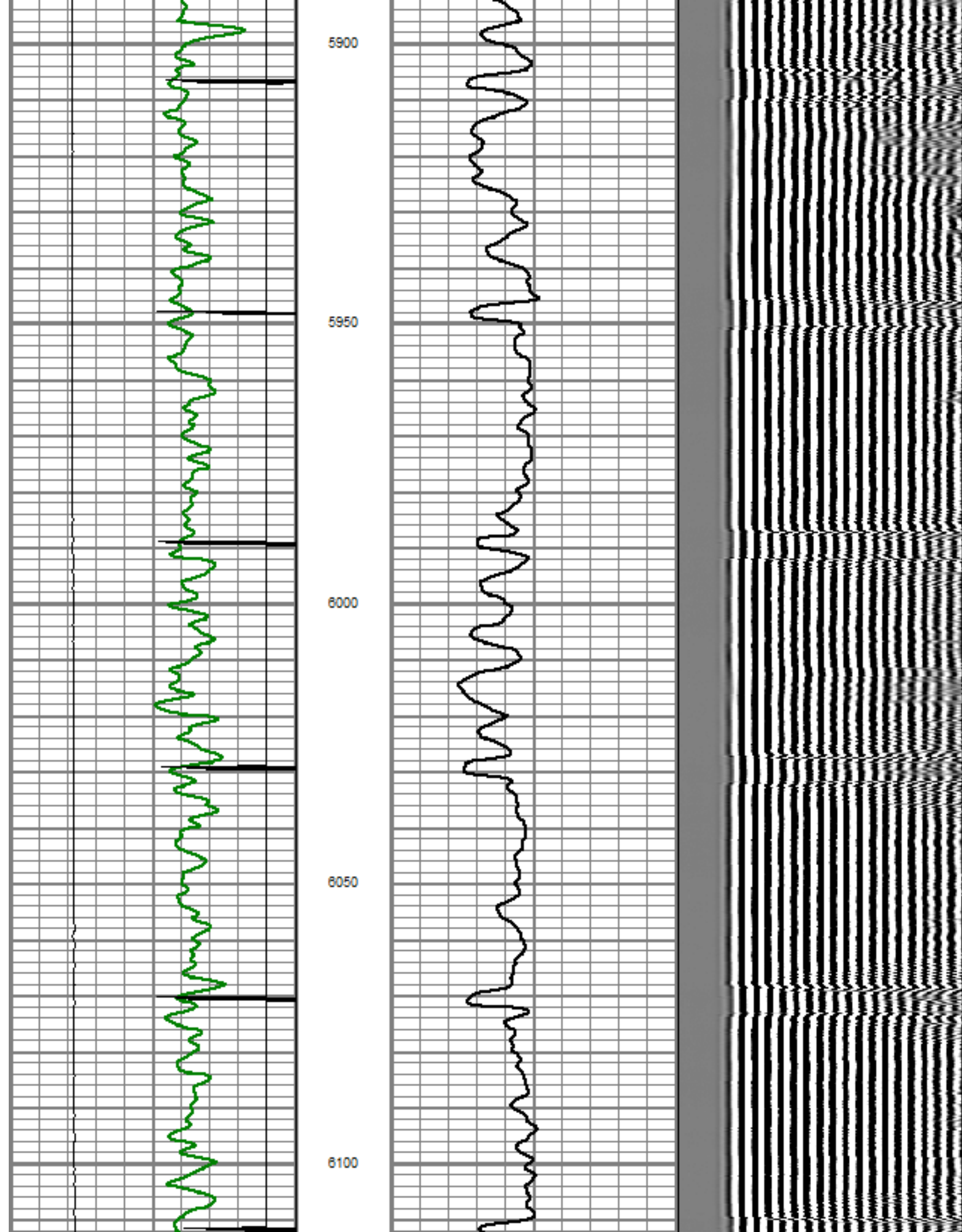
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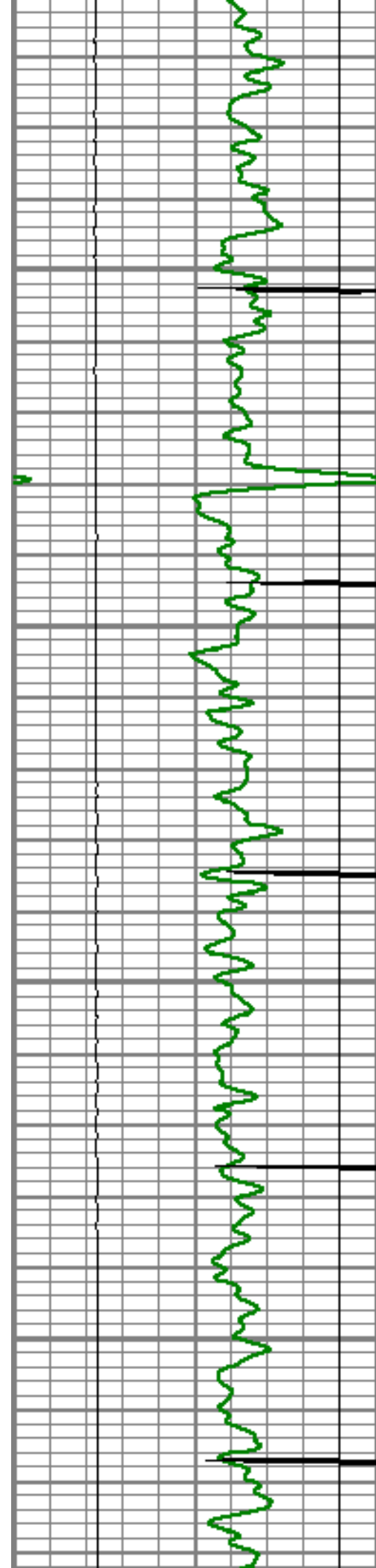
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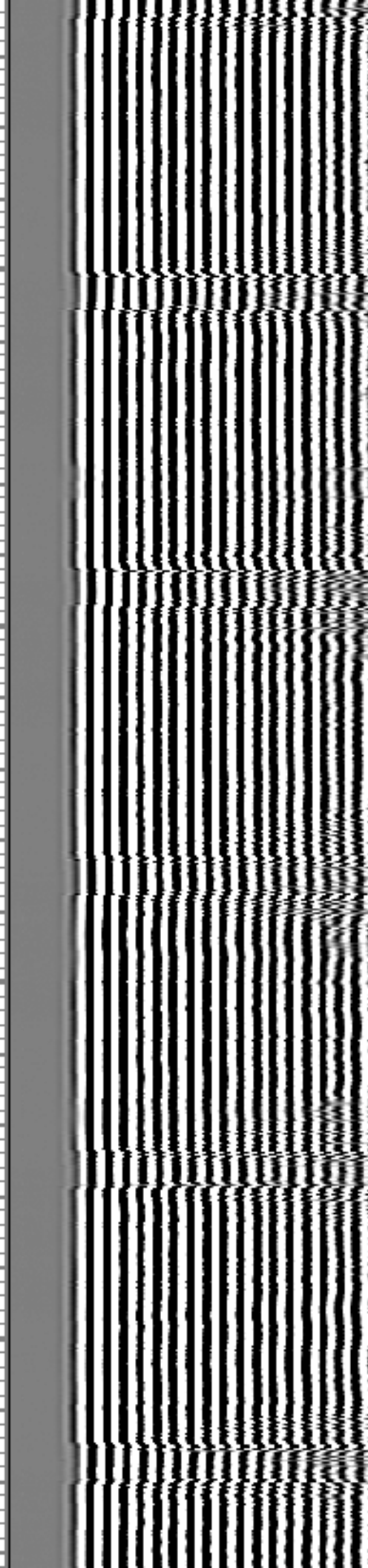
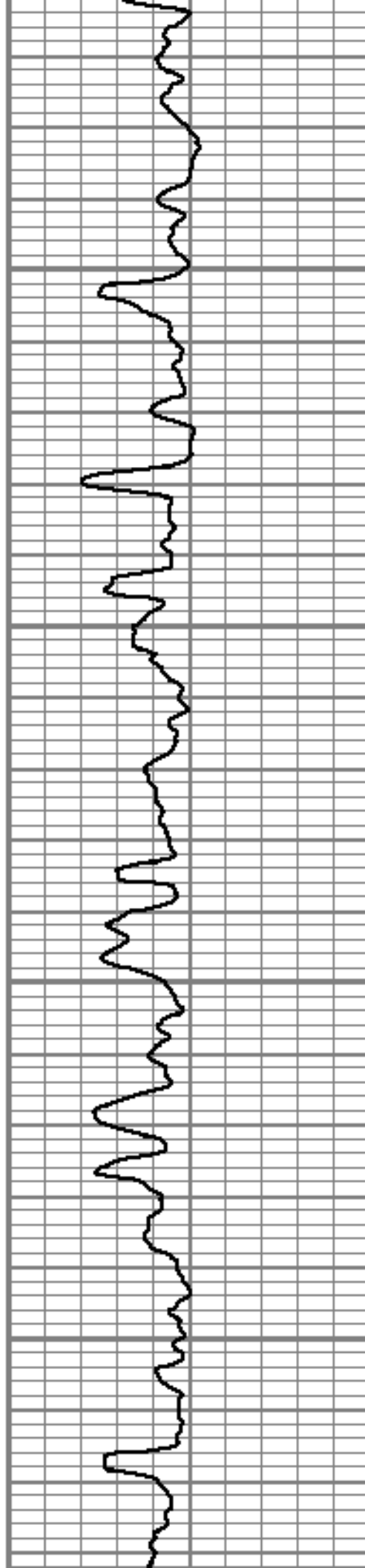


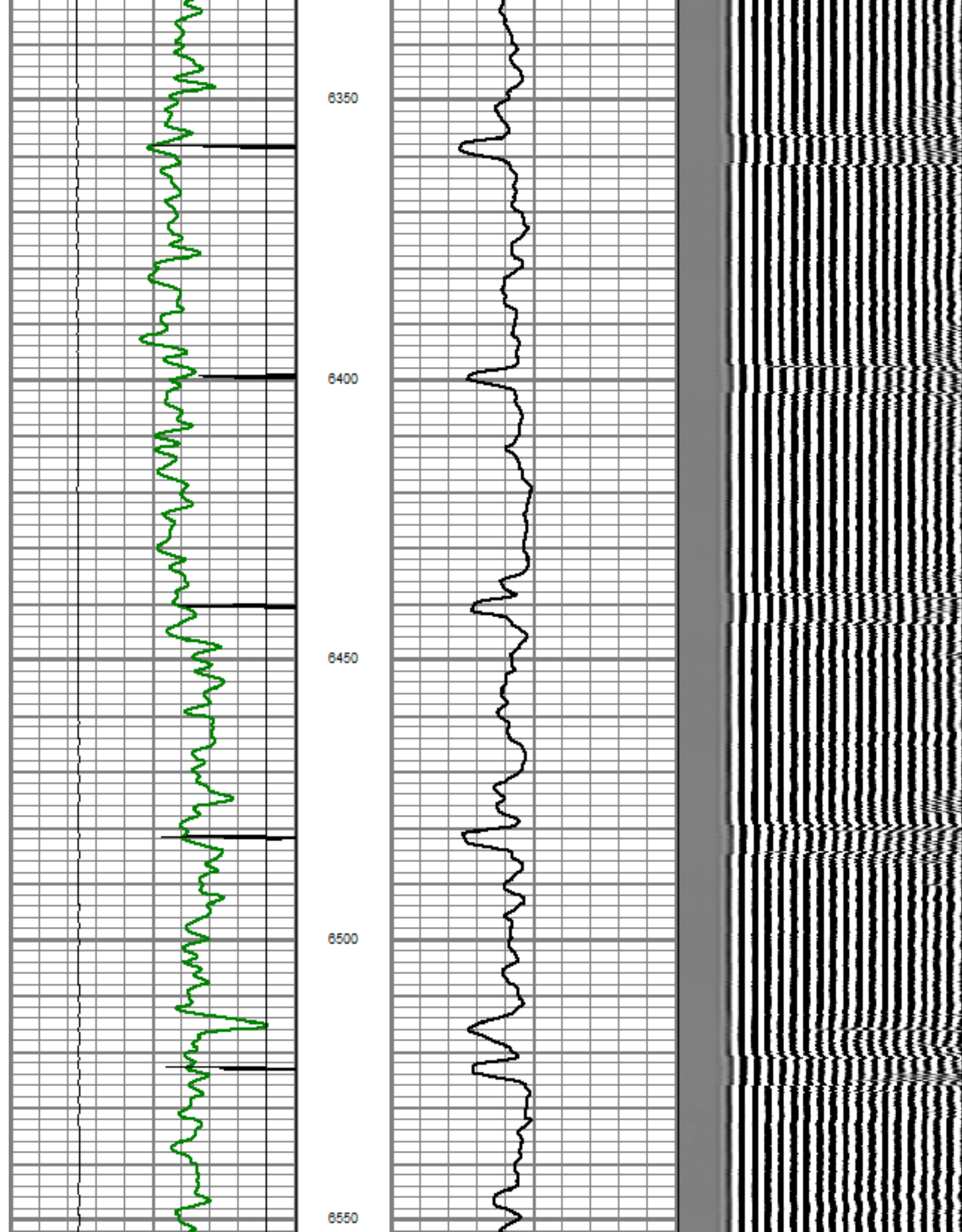
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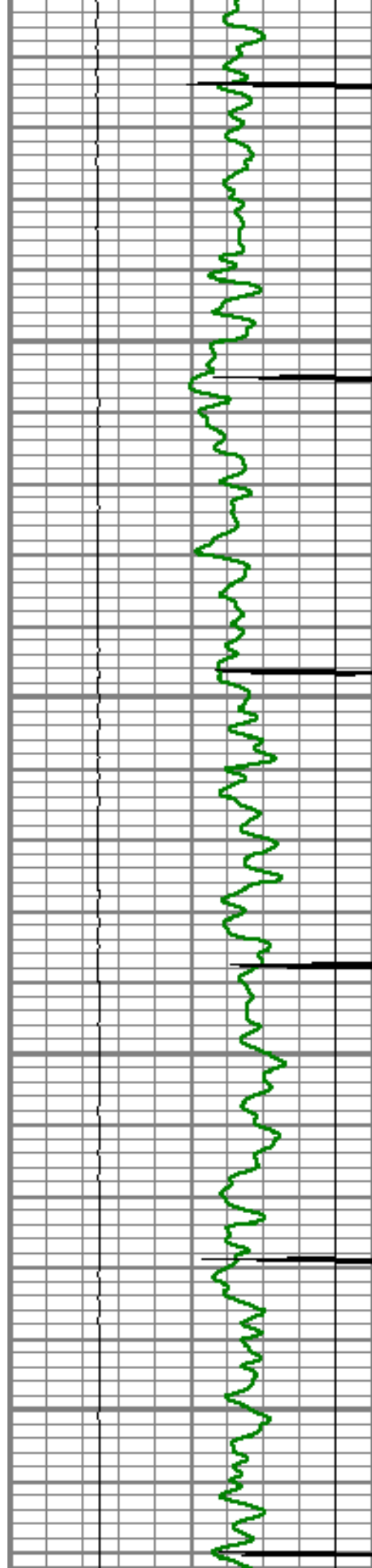
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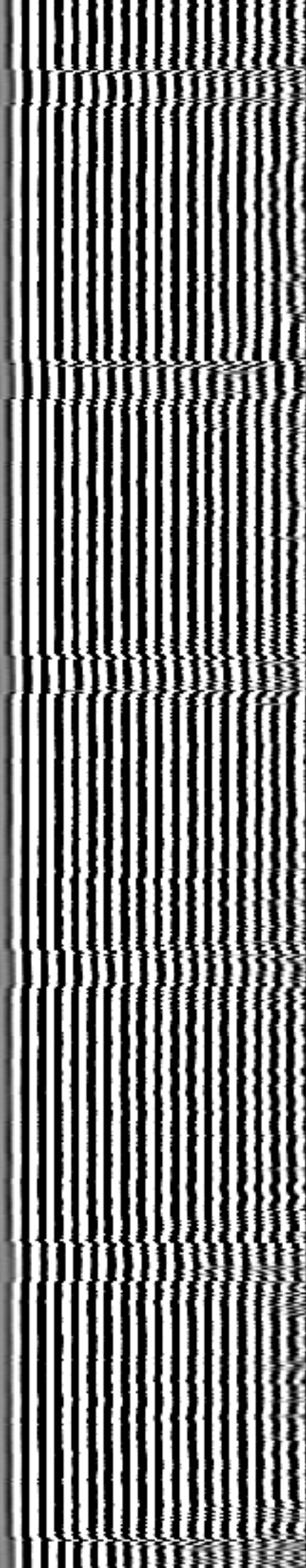
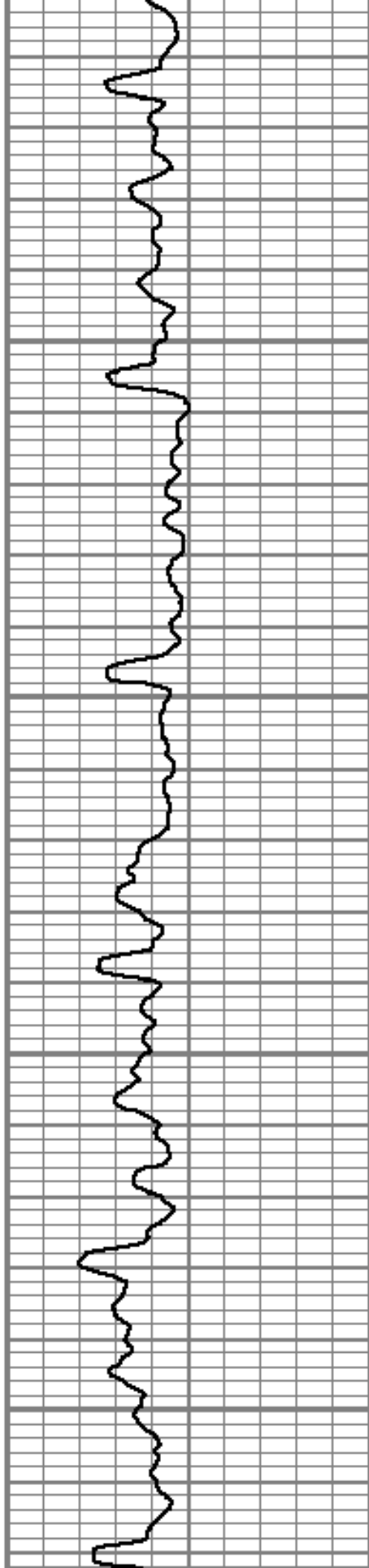


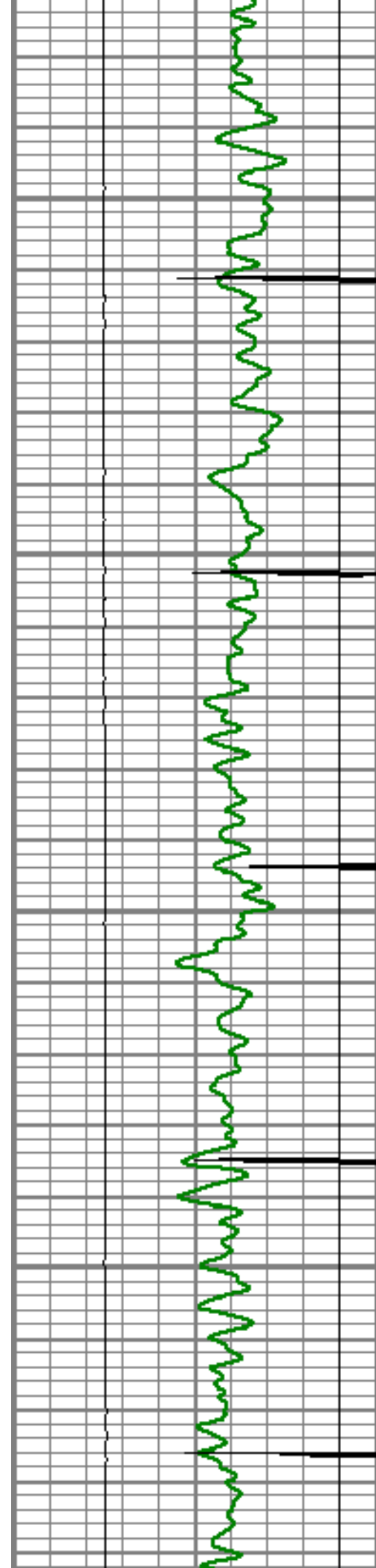
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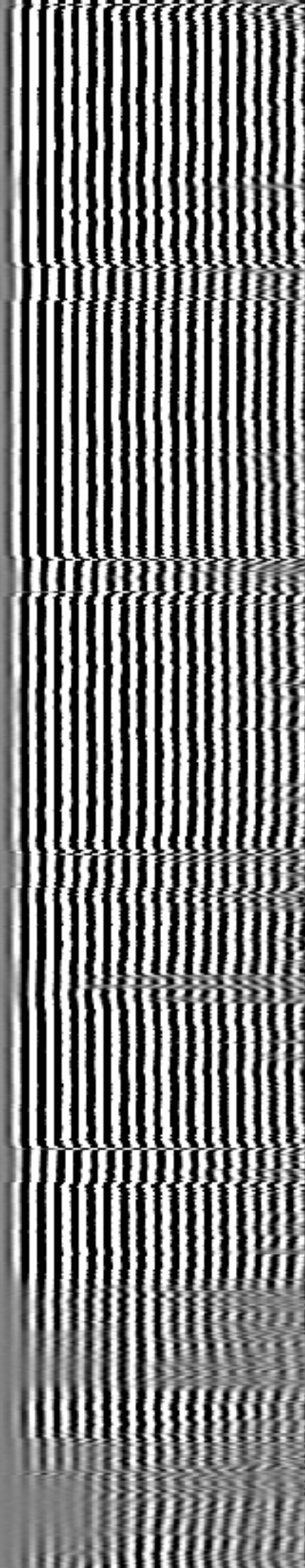
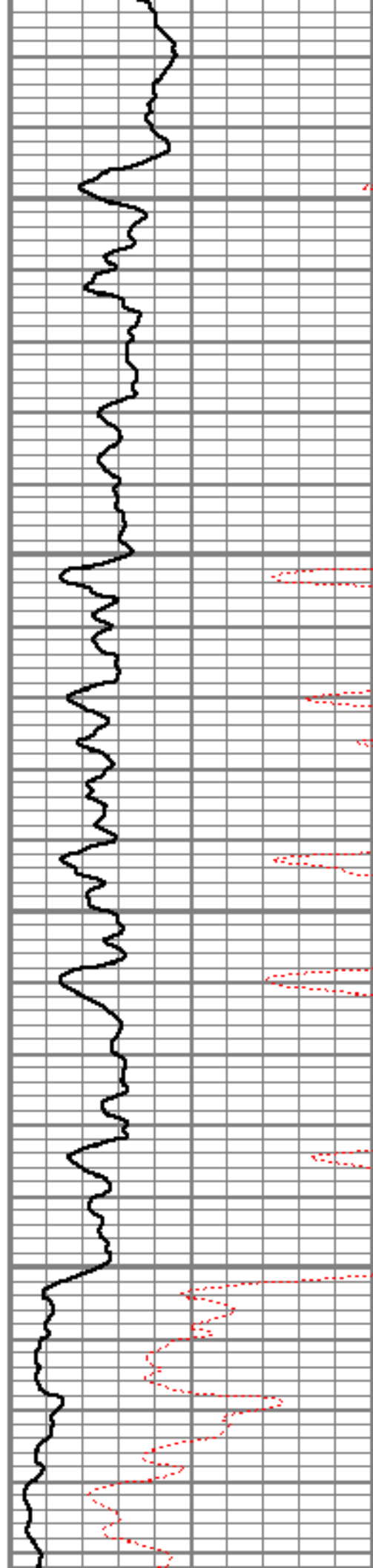


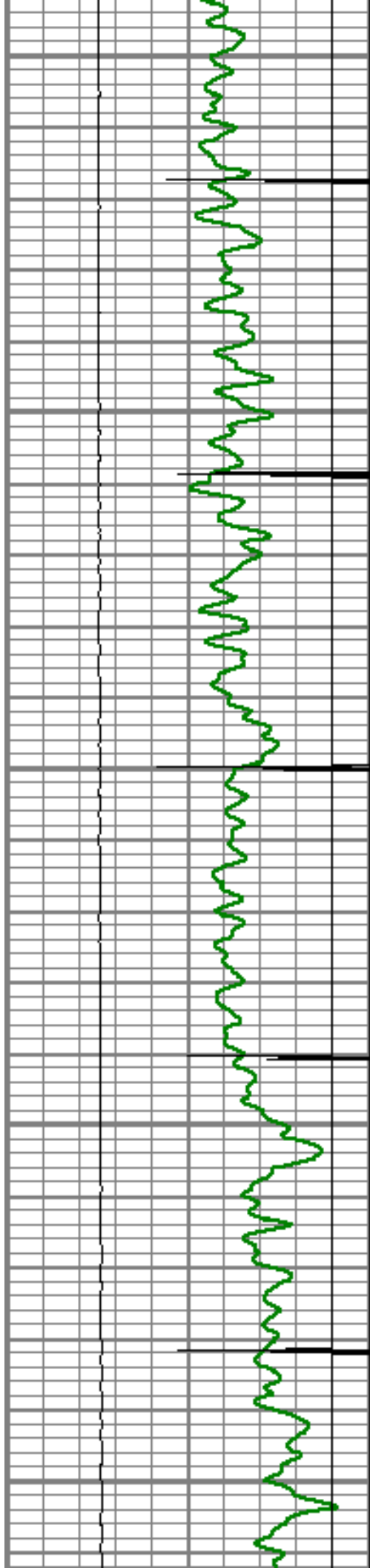
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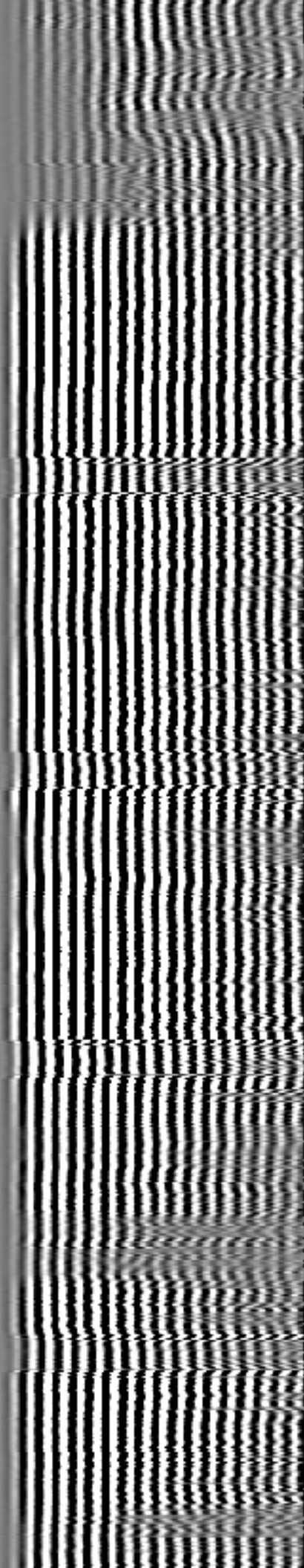
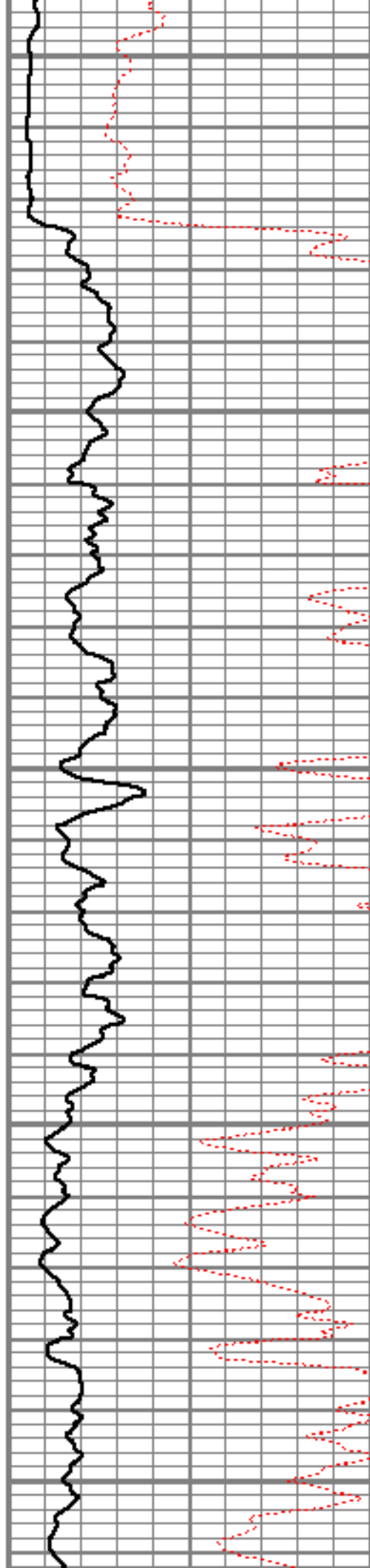
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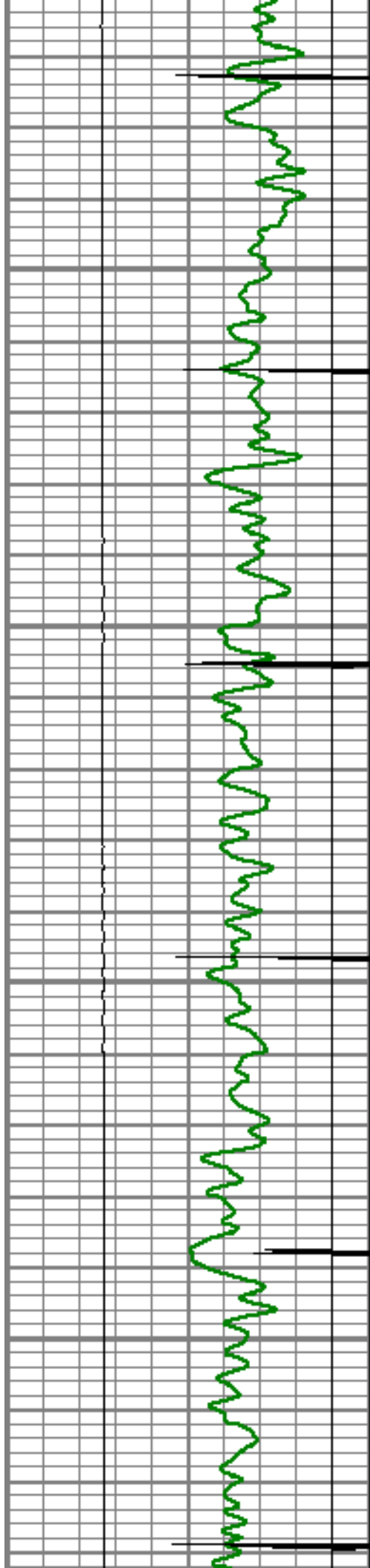
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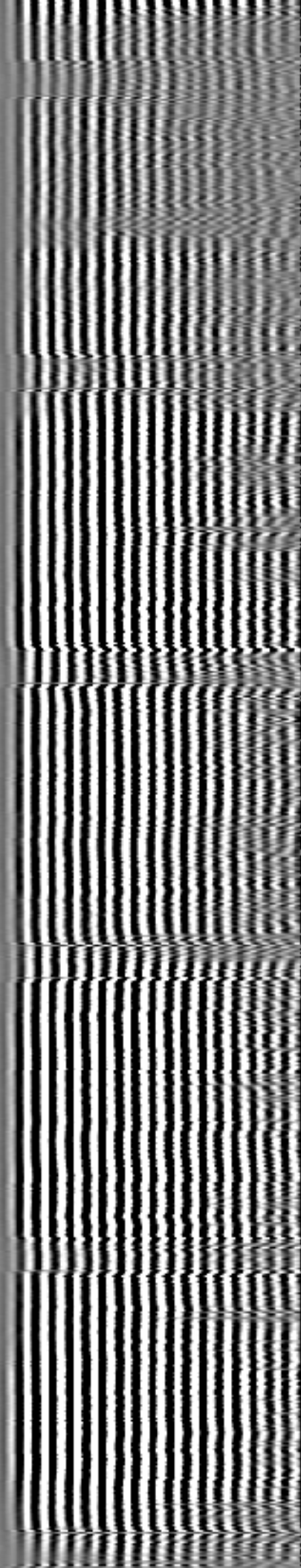
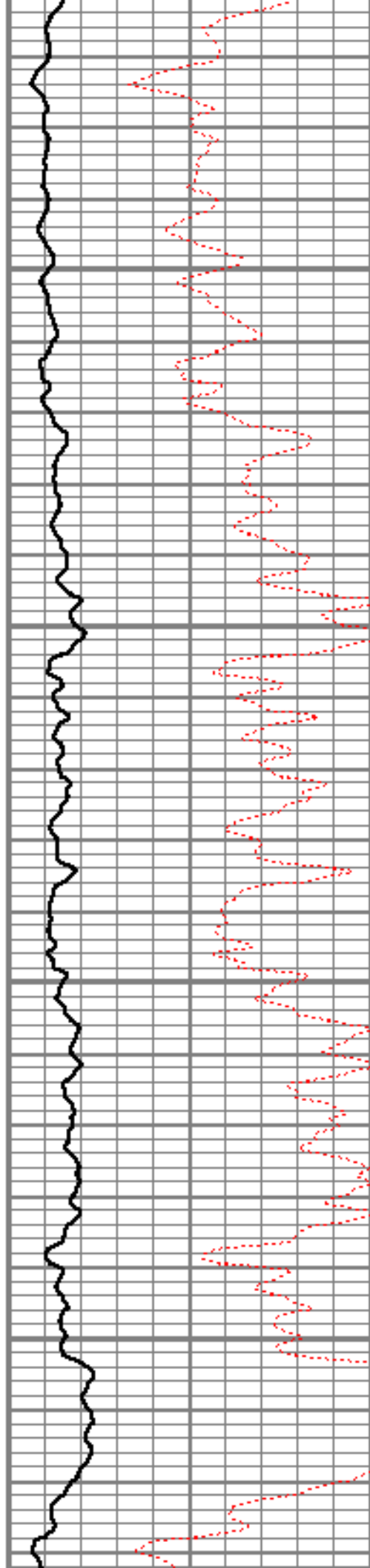


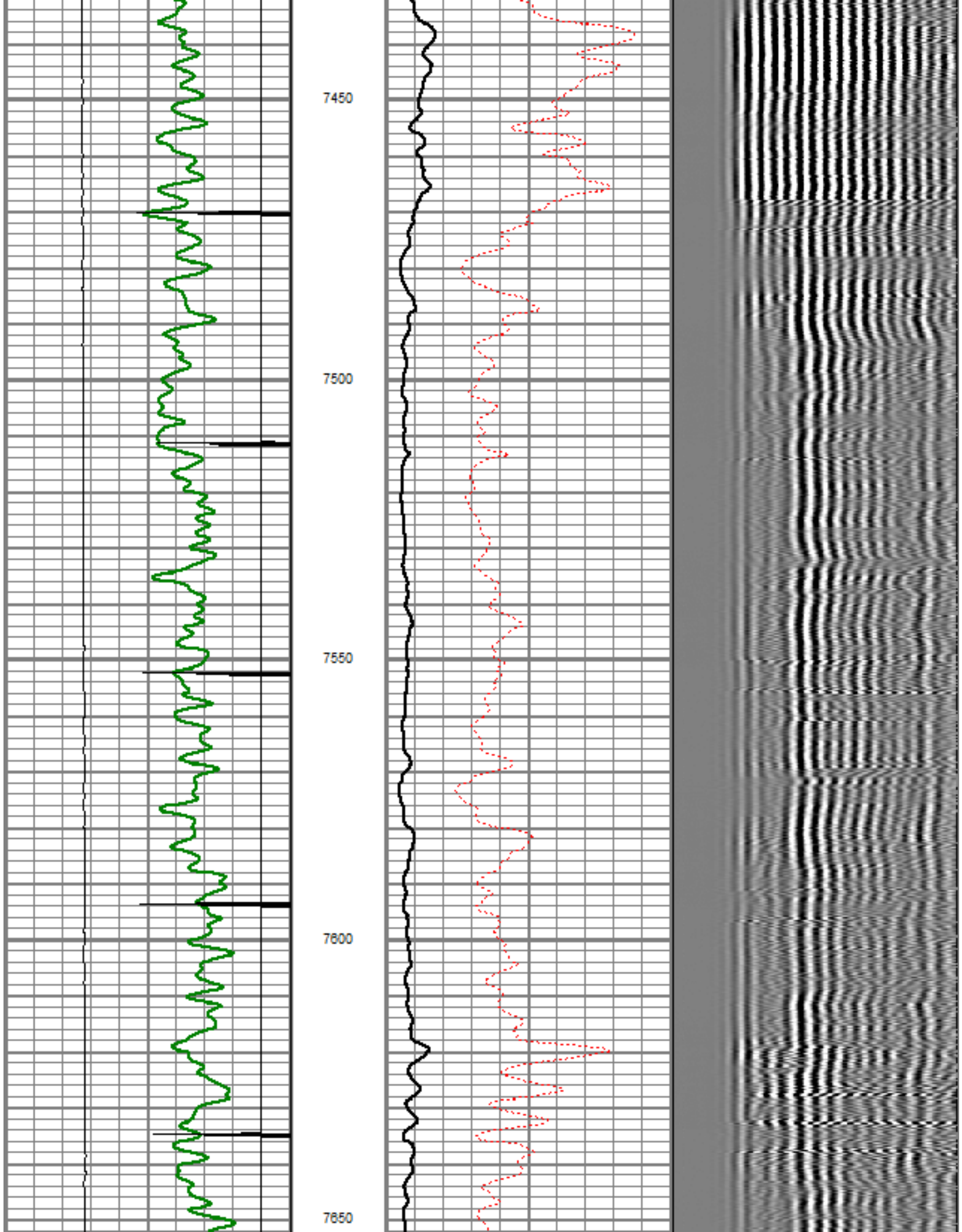
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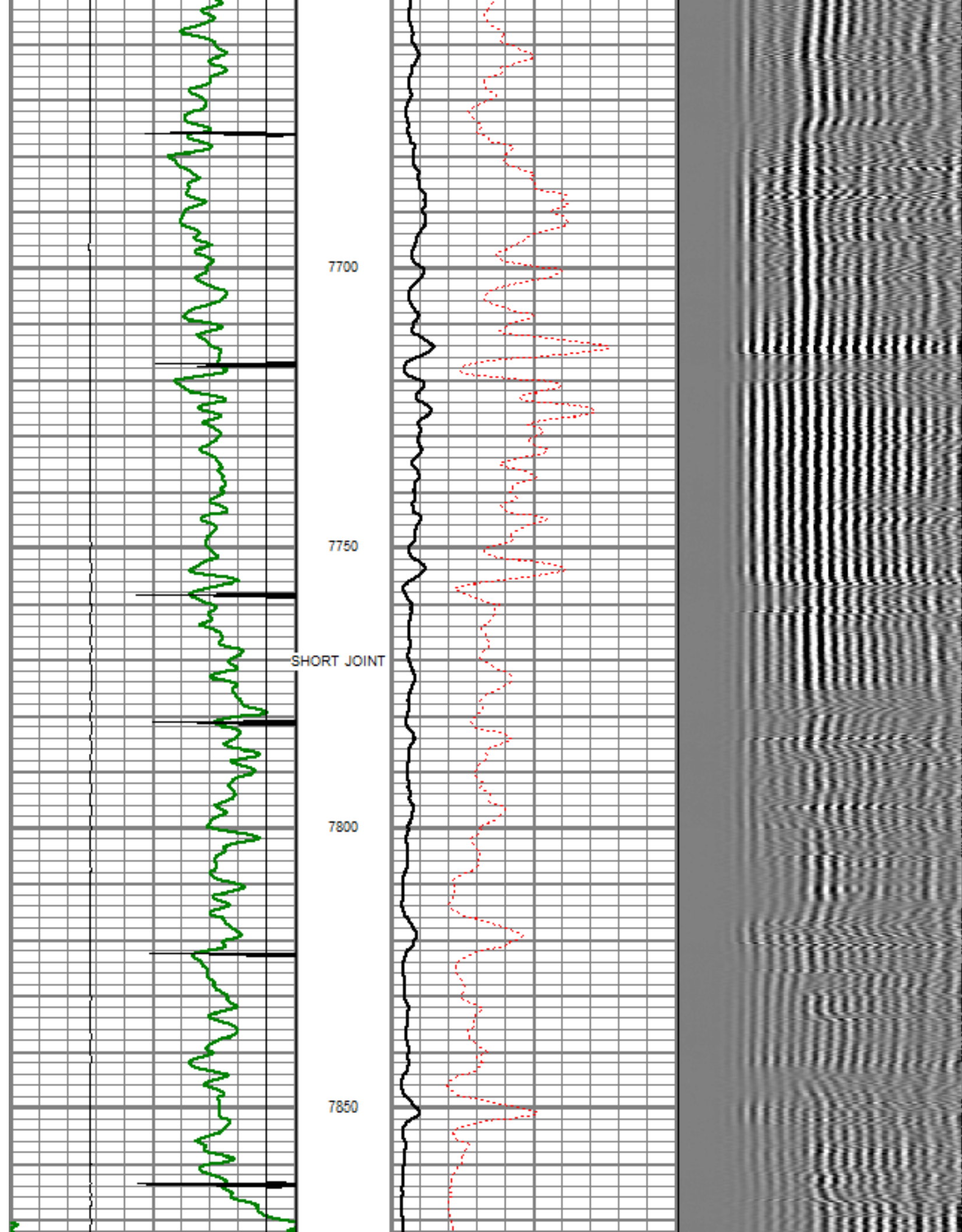
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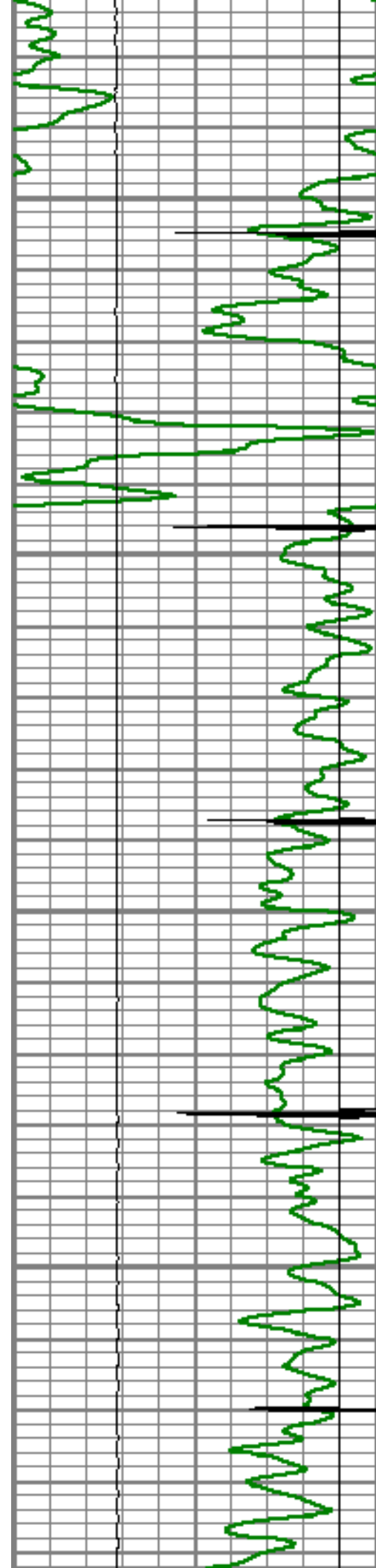
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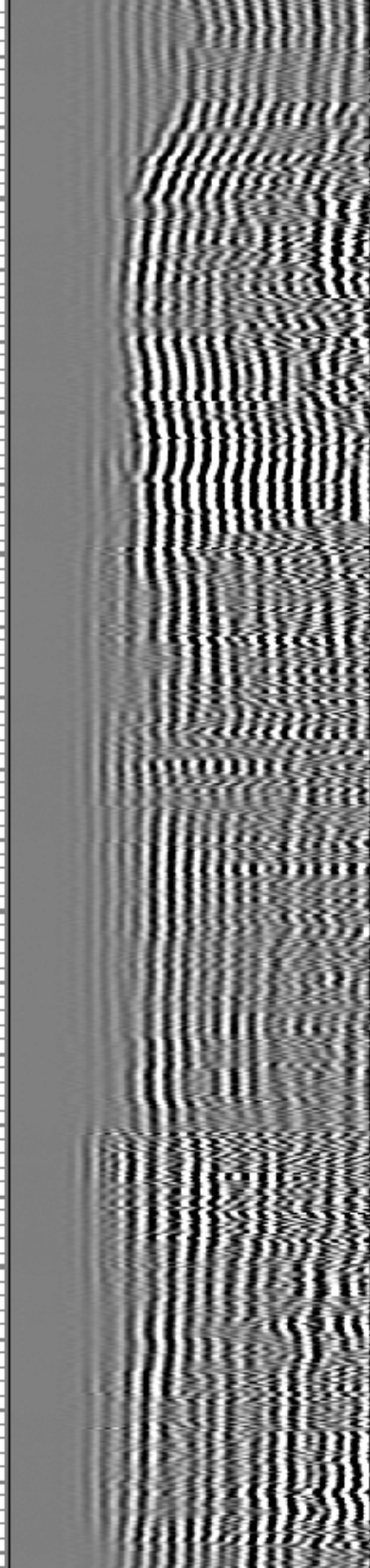
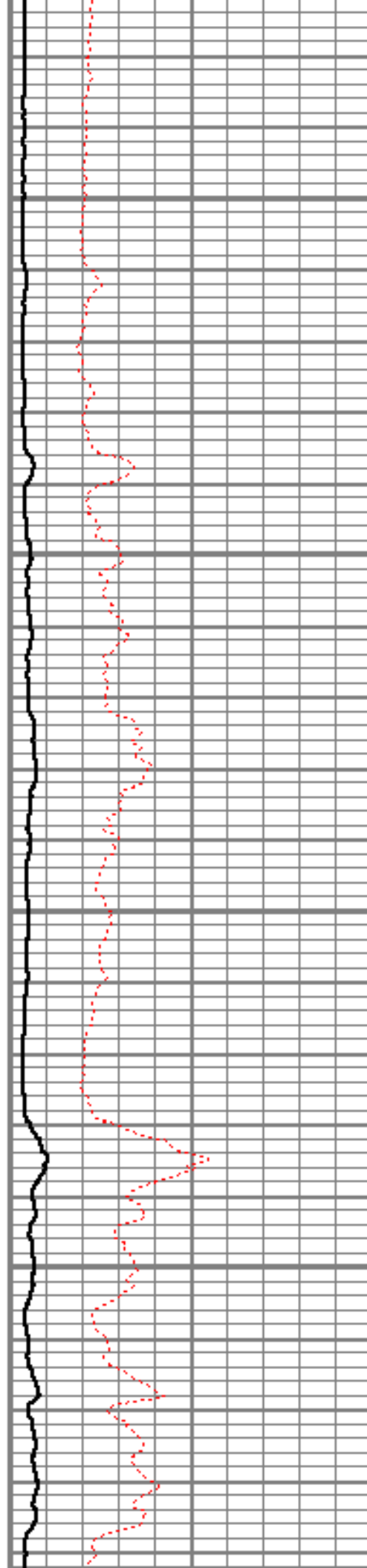


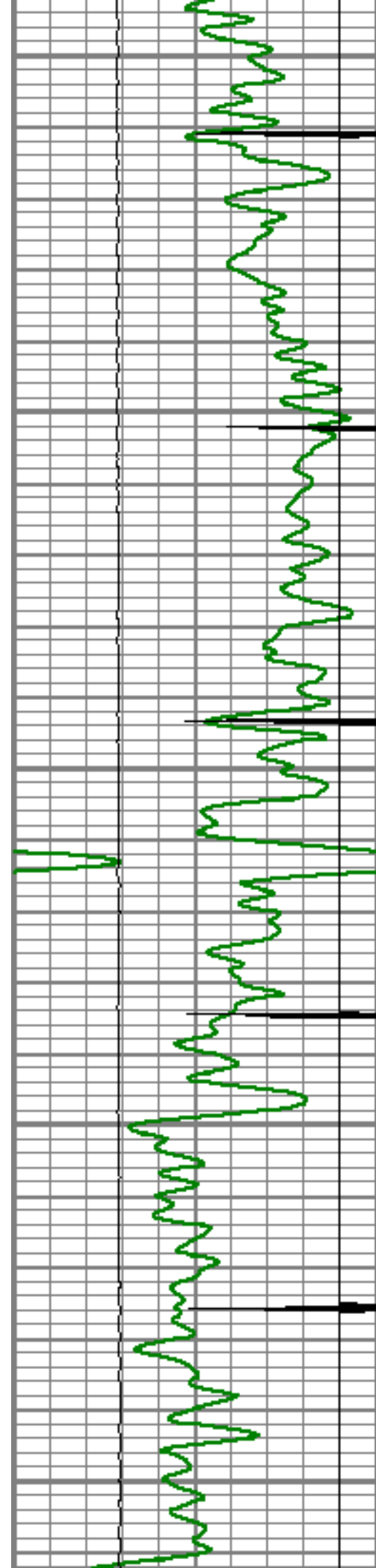
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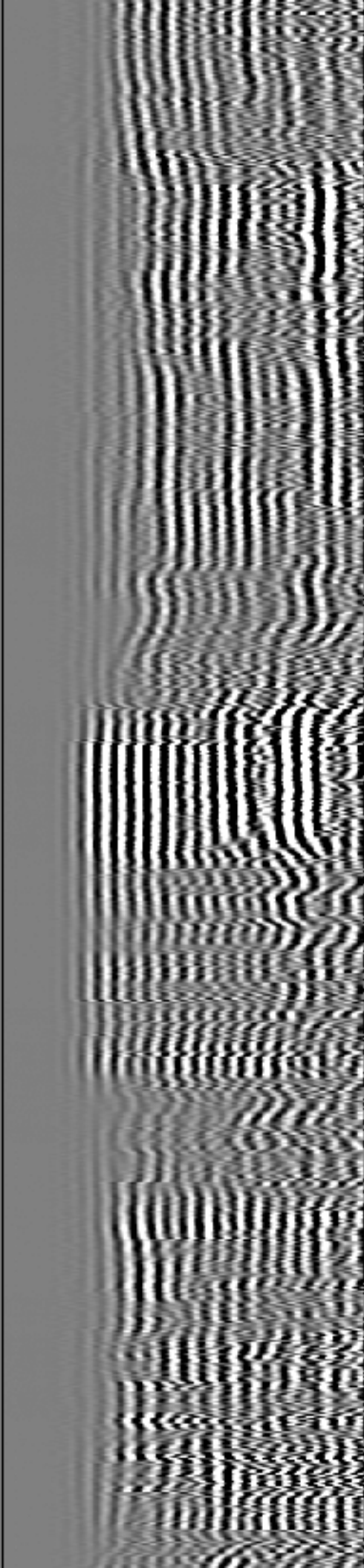
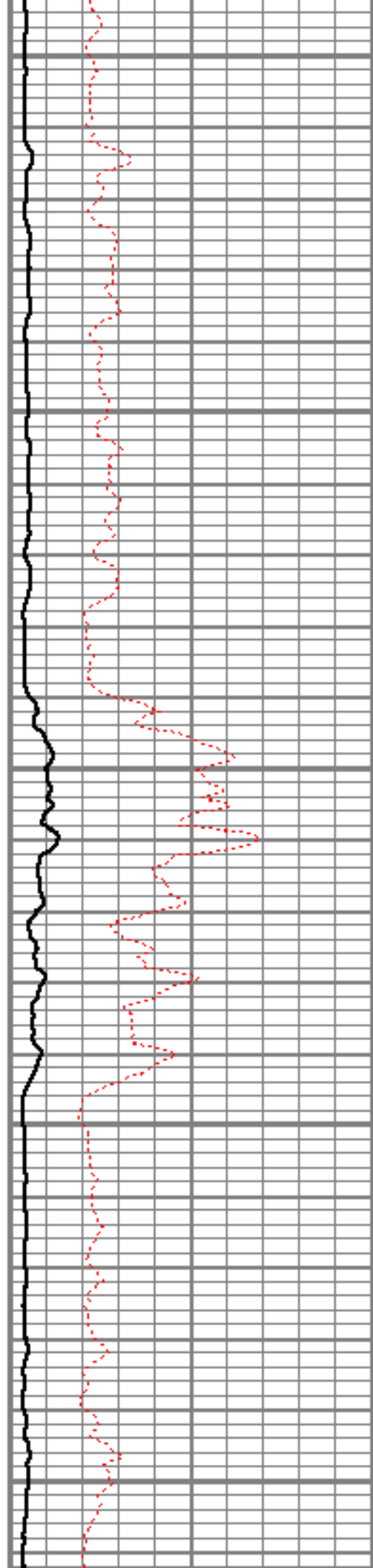
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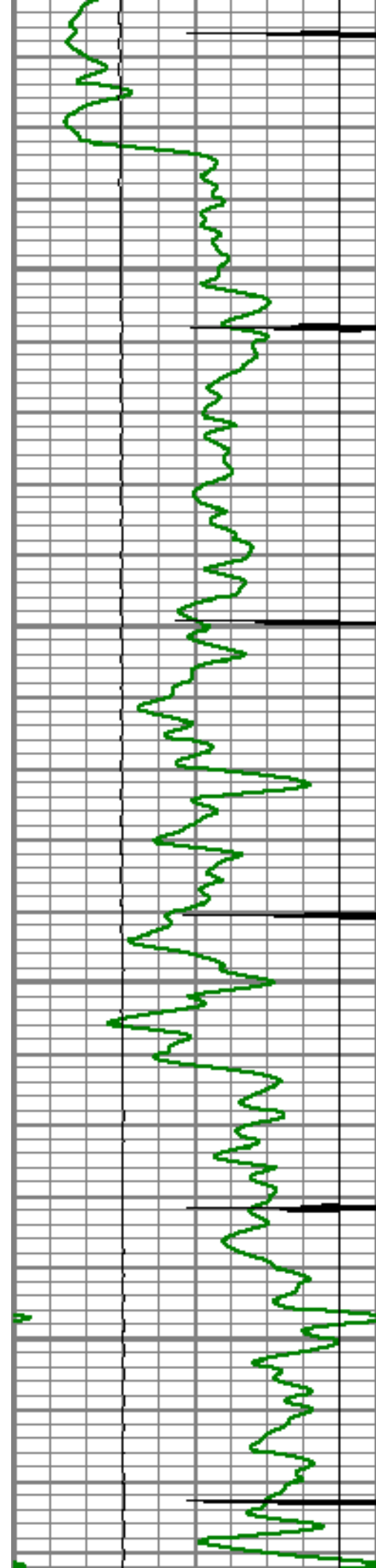
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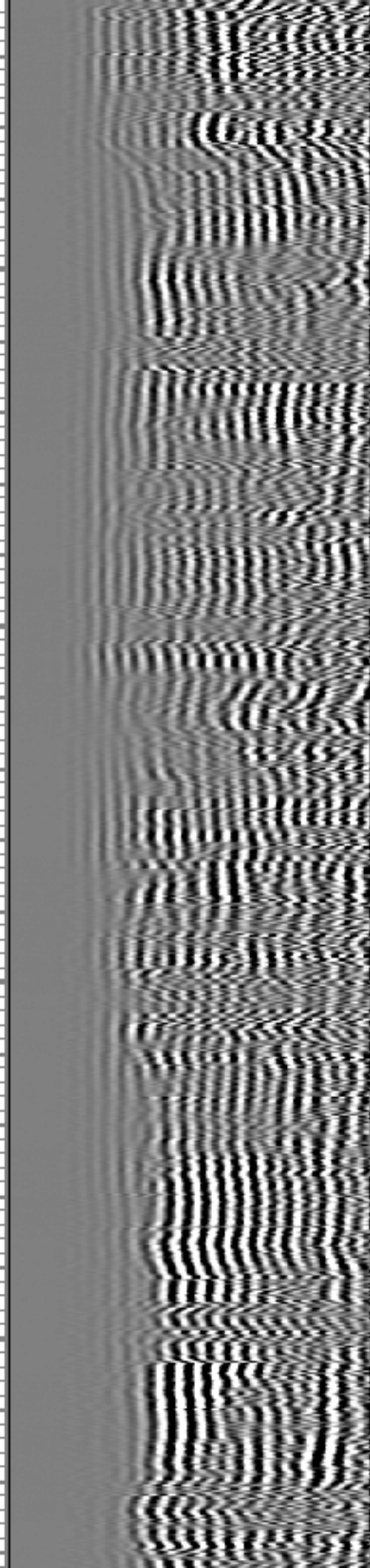
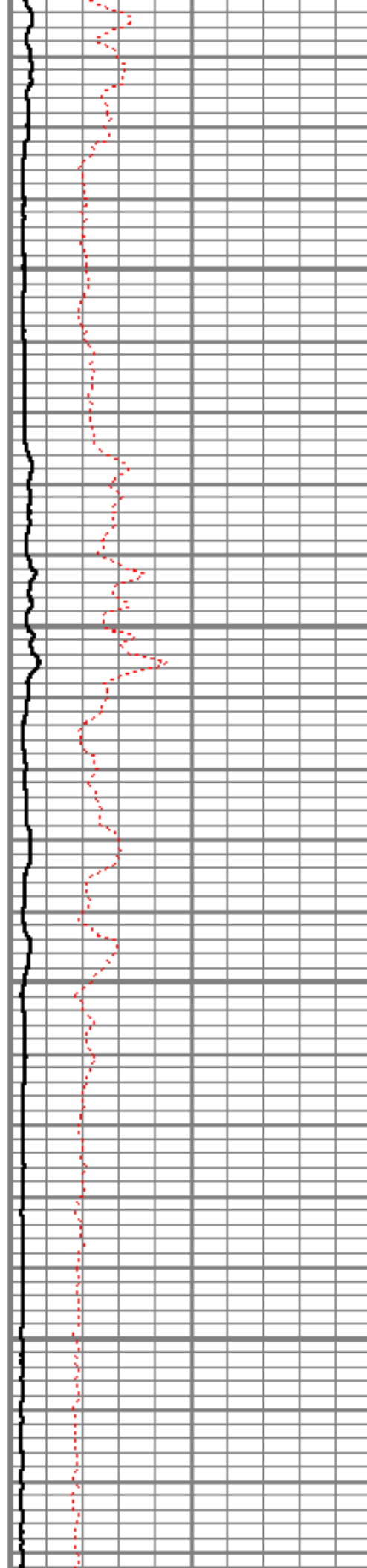


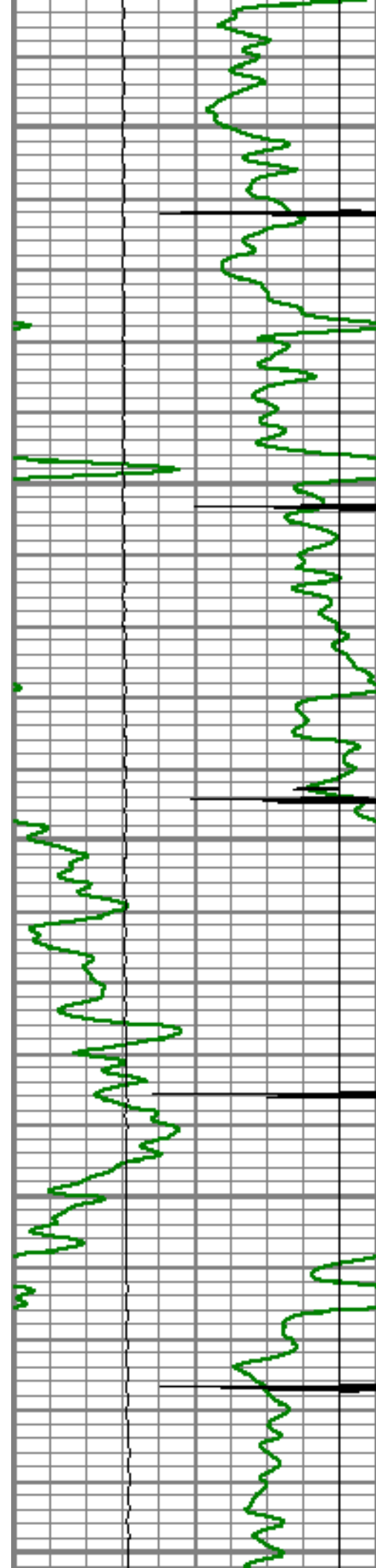
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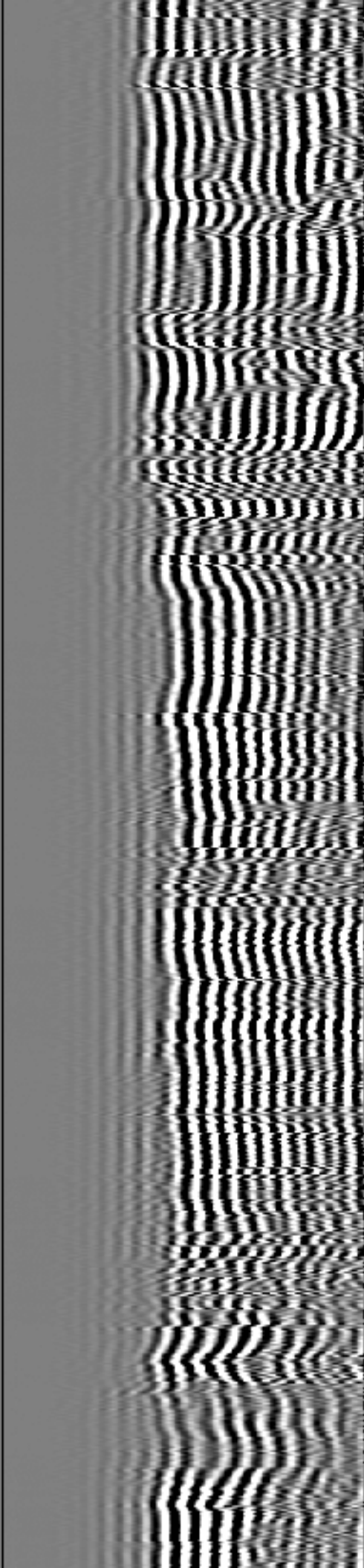
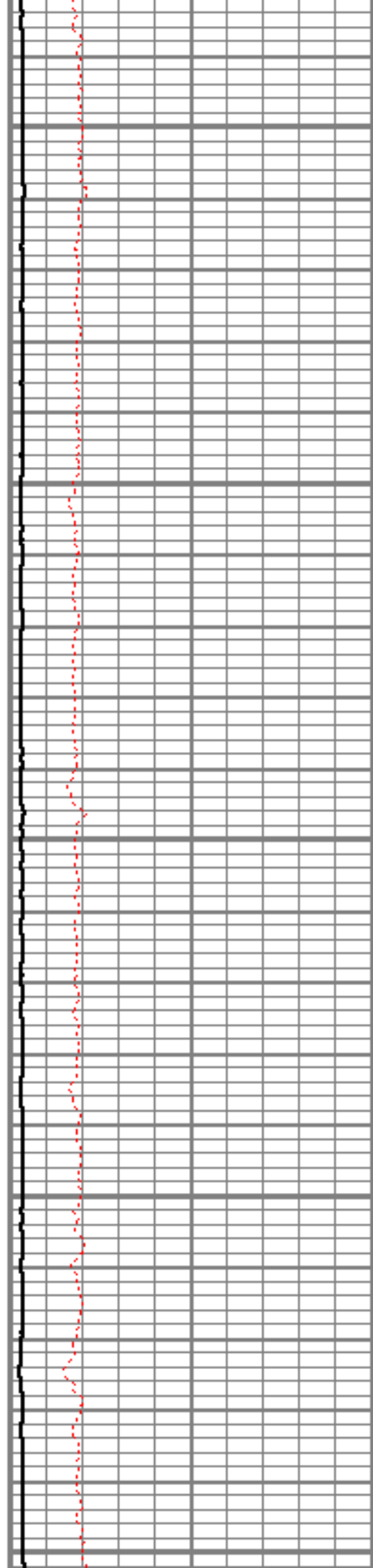
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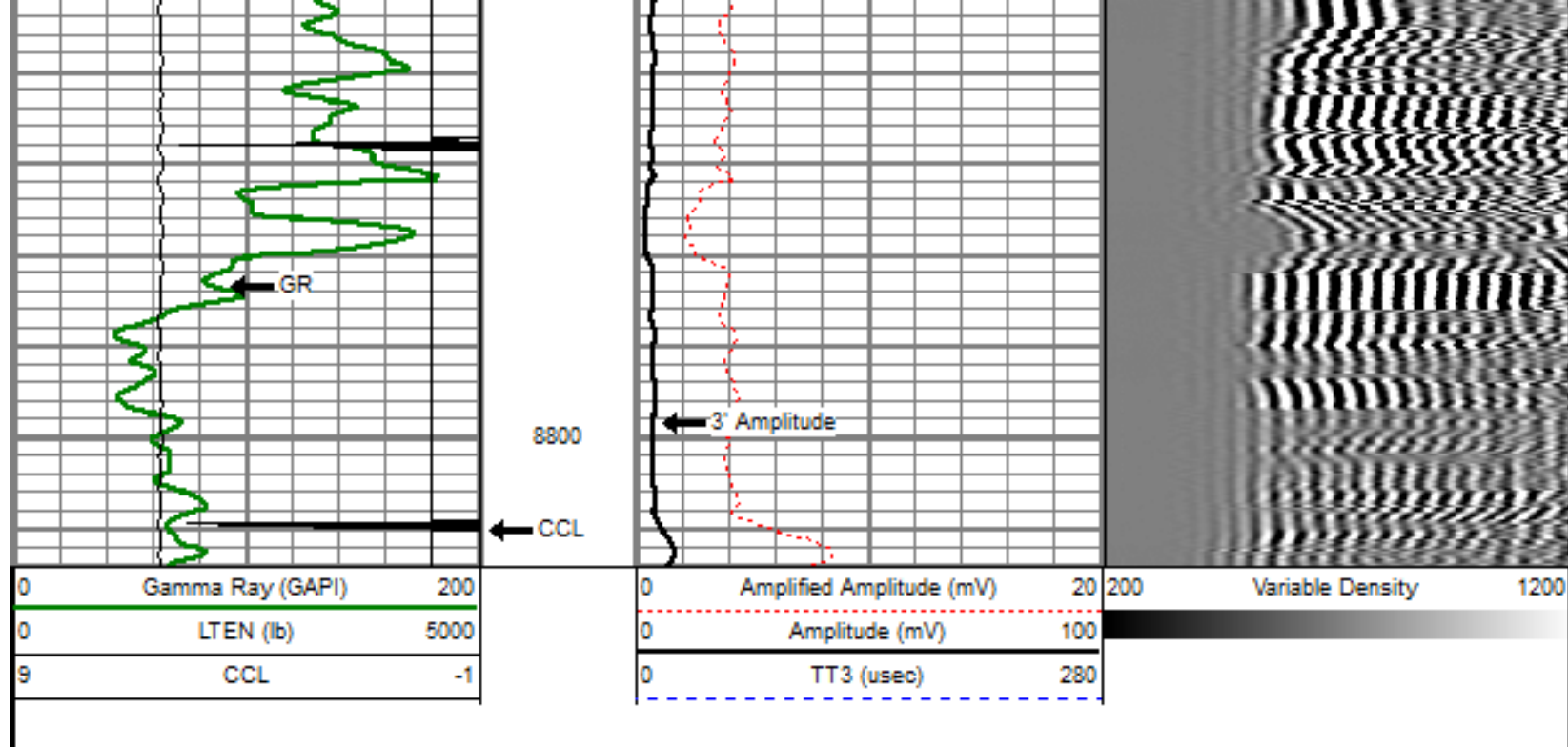
8600


8650


8700

8750





| Sensor | Offset (ft) | Schematic | Description | Len (ft) | OD (in) | Wt (lb) |
|--------|-------------|--|---|----------|---------|---------|
| | |  | titan Titan Cable Head Go Pin. | 1.02 | 1.44 | 1.50 |
| | | | Centralizer-Probe (CENT-PROBE-1) Probe Bowspring Centralizer | 2.88 | 2.75 | 10.00 |
| WVF3 | 14.54 | | CBL-PRB_CBL_DIGITAL (PRB_CBL_DIG_28.77 1) Probe 2.75" Dual Receiver Bond | 2.75 | 2.75 | 60.00 |
| WVF5 | 13.54 | | | | | |
| | | | Centralizer-Probe (CENT-PROBE-2) Probe Bowspring Centralizer | 2.88 | 2.75 | 10.00 |

| | | | | | | |
|---|------|---|--|------|------|-------|
| CCL | 6.50 |  | GR-PROBE_GRCCCL (PRB_GRCCCL_275_01) Probe 2.75" 4 Channel Pulse | 4.54 | 2.75 | 30.00 |
| GR | 3.77 | | TEMP-Comprobe (TEMP_CMPRB_1375_01) Positive pulse Temp tool | 2.88 | 1.38 | 15.00 |
| TEMP | 0.17 | | | | | |
| Dataset: crandell 4-6-26.db: field/well/run1/pass2 Total Length: 22.96 ft Total Weight: 126.50 lb O.D. 2.75 in | | | | | | |



Company ENCANA OIL & GAS (USA) INC
 Well CRANDELL 4-6-26
 Field WATTENBERG
 County BROOMFIELD
 State COLORADO