



# RADIAL ANALYSIS BOND LOG

Baker Atlas

|                            |               |                             |
|----------------------------|---------------|-----------------------------|
| File No:                   | Company       | MARATHON OIL COMPANY        |
| 1751                       | Well          | 696-50-13                   |
| API No:                    | Field         | GRAND VALLEY                |
| 0504018930000              | County        | GARFIELD                    |
|                            | State         | COLORADO                    |
| Location                   |               | Other Services              |
| SHE: 3479' FIL & 1313' FIL |               | 3.761" GAUGE<br>NEUTRON LOG |
| SEC 5 TWP 8S RGE 68E       |               |                             |
| Permanent Datum            | G.L.          | Elevation                   |
| Log Measured From          | K.B.          | 24 ft                       |
| Drill Measured From        | KELLY BUSHING | Above P. D.                 |
|                            |               | Elevations                  |
|                            |               | KB 8153 ft                  |
|                            |               | DF 8152 ft                  |
|                            |               | GL 8128 ft                  |

|                              |                   |
|------------------------------|-------------------|
| Date                         | 13-APR-2010       |
| Run                          | ONE               |
| Service Order                | 578797            |
| Depth Driller                | 10138 ft          |
| Depth Logger                 | 10104 ft          |
| Bottom Logged Interval       | 10104 ft          |
| Top Logged Interval          | 2204 ft           |
| Time Started                 | 12:30             |
| Time Finished                | 17:30             |
| Operator Rig Time            | 5 hrs             |
| Type of Fluid in Hole        | WATER             |
| Fluid Density                | N/A               |
| Salinity                     | N/A               |
| Fluid Level                  | PULL              |
| Logged Cement Top            | N/A               |
| Wellhead Pressure            | 1000 psi          |
| Maximum Hole Deviation       | N/A               |
| Nominal Logging Speed        | 30 fpm            |
| Maximum Recorded Temperature | 252 degF          |
| Reference Log                | NONE              |
| Reference Log Date           | N/A               |
| Equipment No.                | 4271              |
| Location                     | U. OSTLER         |
| Recorded By                  | MR. DOUG EPPERSON |
| Witnessed By                 |                   |

- FOLD HERE

In making interpretations of logs, our employees will give the customer the benefit of their best judgement. But since all interpretations are opinions based on inferences from electrical or other measurements, we cannot, and we do not guarantee the accuracy or correctness of any interpretation. We shall not be liable or responsible for any loss, cost, damages, or expenses whatsoever incurred or sustained by the customer resulting from any interpretation made by any of our employees.

| Borehole Record |         |          |
|-----------------|---------|----------|
| Bit Size        | From    | To       |
| 8.75 in         | SURFACE | 7895 ft  |
| 7.875 in        | SURFACE | 10208 ft |

| Casing Record |             |       |         |          |
|---------------|-------------|-------|---------|----------|
| Size          | Weight      | Grade | From    | To       |
| 9.825 in      | 38 lbm/ft   | J-55  | SURFACE | 2331 ft  |
| 4.5 in        | 11.8 lbm/ft | P-110 | SURFACE | 10208 ft |

| Remarks   |
|---|
| THIS IS THE FIRST LOG OF THE WELL                 |
| WELL WAS LOGGED WITH 1000 PSI AT THE WELL HEAD    |
| BHT = 252°F                                       |
| SHORT JOINTS AT 6814' TO 6834' AND 8498' TO 8518' |

## Equipment Data

| Run | Trip | Tool       | Series Number | Serial Number | Position    |
|-----|------|------------|---------------|---------------|-------------|
| 1   | 1    | VDL        | 1426XA        | 10154857      | CENTRALIZED |
| 1   | 1    | GR/OCL/NEU | 2459XA        | 10417457      | CENTRALIZED |

*MAIN SECTION*  
*PRIMARY PRESENTATION*  
*1000 PSI*

| MEASUREMENT TYPE | PARAMETER             | VALUE   | UNITS   | TOP    | BOTTOM    |
|------------------|-----------------------|---------|---------|--------|-----------|
| RAL              | Amp Gate Start Far    | 316.900 | usec    | 16.749 | 10127.000 |
| RAL              | Amp Gate Start Near   | 200.391 | usec    | 16.749 | 10127.000 |
| RAL              | Amp Gate Start Radial | 200.391 | usec    | 16.749 | 10127.000 |
| RAL              | Amp Gate Width Far    | 25.000  | usec    | 16.749 | 10127.000 |
| RAL              | Amp Gate Width Near   | 25.000  | usec    | 16.749 | 10127.000 |
| RAL              | Amp Gate Width Radial | 25.000  | usec    | 16.749 | 10127.000 |
| RAL              | casing od             | 4.500   | inches  | 16.749 | 10127.000 |
| RAL              | casing wt             | 11.600  | lbm/ft  | 16.749 | 10127.000 |
| RAL              | FB Start Far          | 291.900 | usec    | 16.749 | 10127.000 |
| RAL              | FB Start Near         | 175.391 | usec    | 16.749 | 10127.000 |
| RAL              | FB Start Radial       | 175.391 | usec    | 16.749 | 10127.000 |
| RAL              | FB Thresh Far         | 15.000  | mv      | 16.749 | 10127.000 |
| RAL              | FB Thresh Near        | 10.000  | mv      | 16.749 | 10127.000 |
| RAL              | FB Thresh Radial      | 10.000  | mv      | 16.749 | 10127.000 |
| RAL              | Fluid Travel Time     | 200.000 | usec/ft | 16.749 | 10127.000 |

DEPTH OFFSETS  
(for Acquired Curves)

| SERIES | DEPTH OFFSET | ACQUIRED CURVES |      |      |      |      |      |
|--------|--------------|-----------------|------|------|------|------|------|
| 1426XA | -15.360      | ACAL            | ANR  | AR1  | AR2  | AR3  | AR4  |
|        |              | AR5             | AR6  | AR7  | AR8  | CHV  | FPR2 |
|        |              | FPR3            | FPRS | TT3  | TTR1 | TTR2 | TTR3 |
|        |              | TTR4            | TTR5 | TTR6 | TTR7 | TTR8 | XAMP |

|        |         |      |     |     |
|--------|---------|------|-----|-----|
| 1426XA | -14.360 | AFAR | SIG | TT5 |
| 1426XA | -7.250  | CCL  |     |     |
| 1426XA | -5.390  | GR   |     |     |
| 1426XA | 0.000   | NEU  |     |     |

Created by : MIXED

Plotted by : PlotMgr. v5.4.504

Company : MARATHON OIL COMPANY

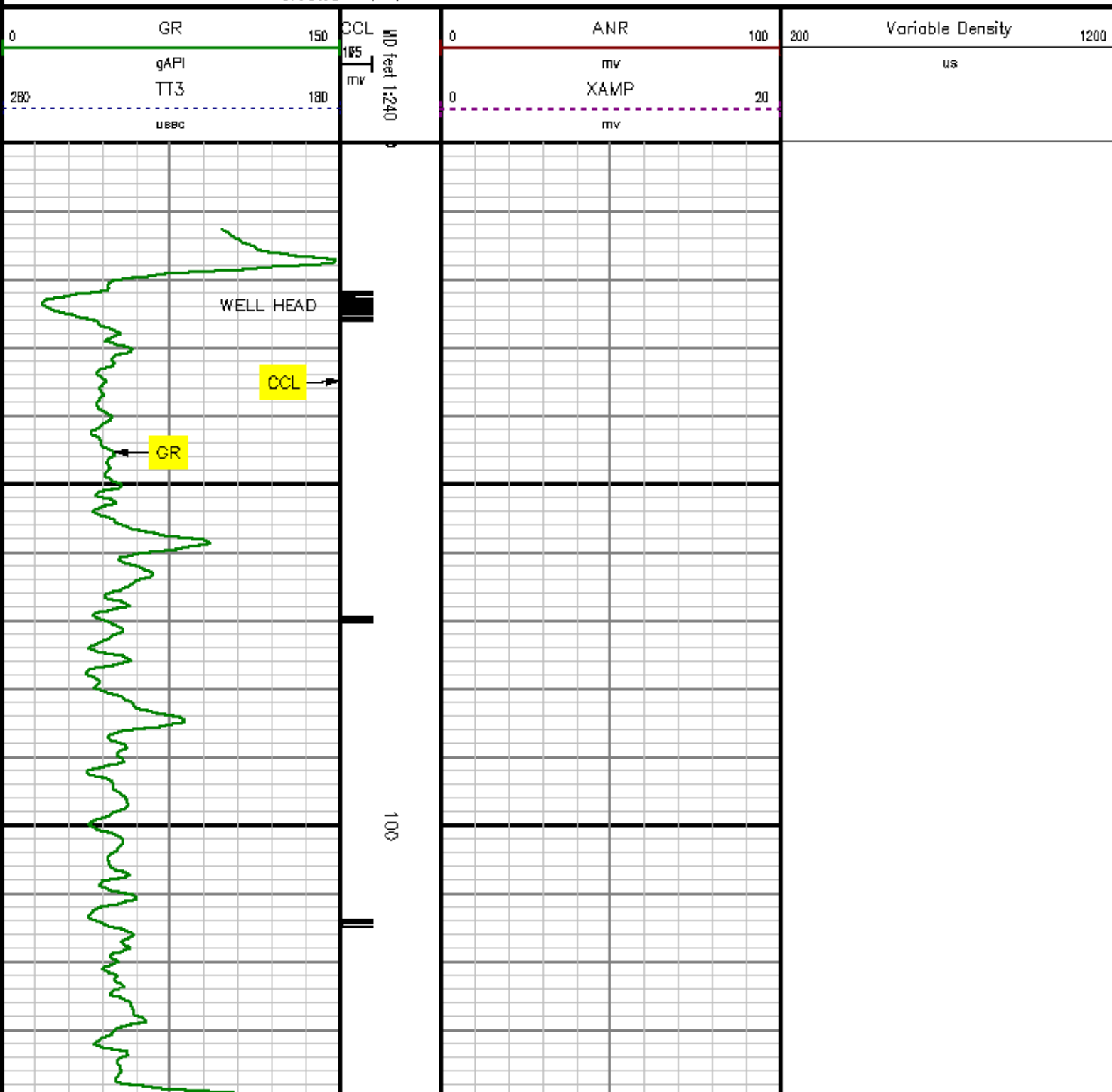
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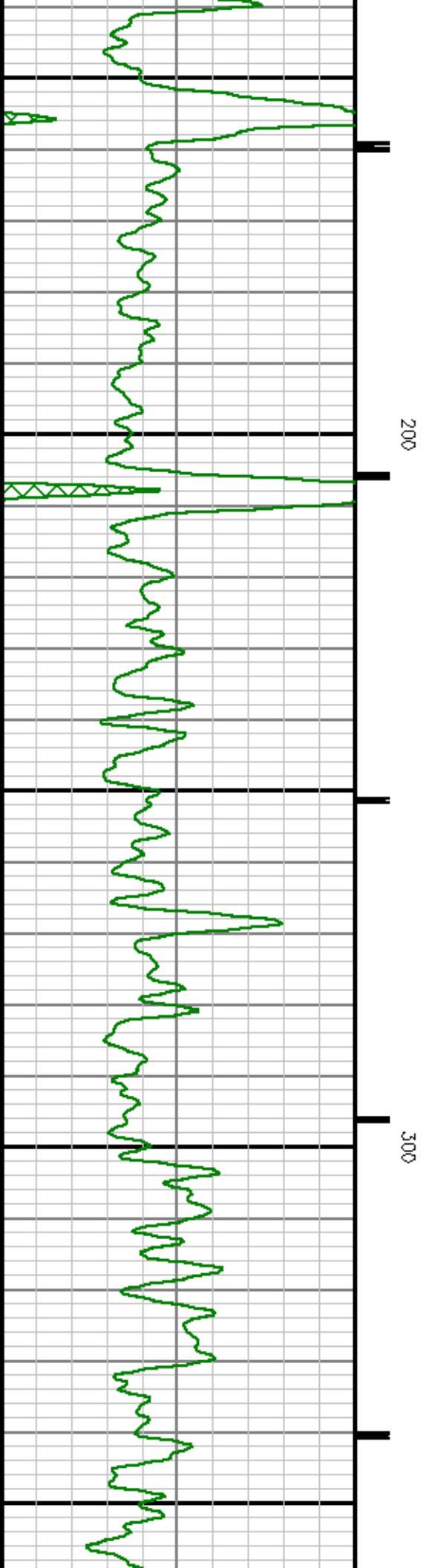
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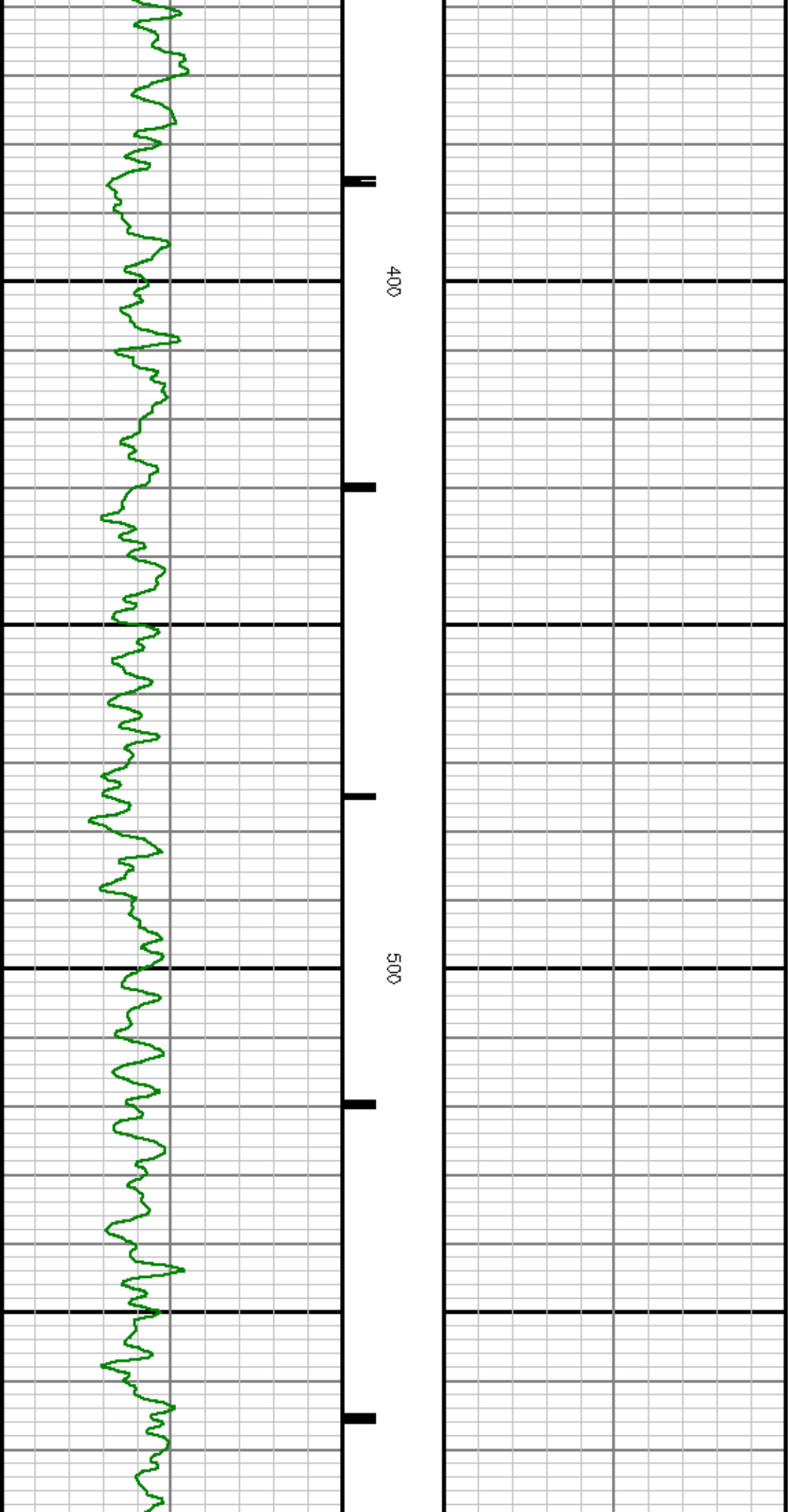
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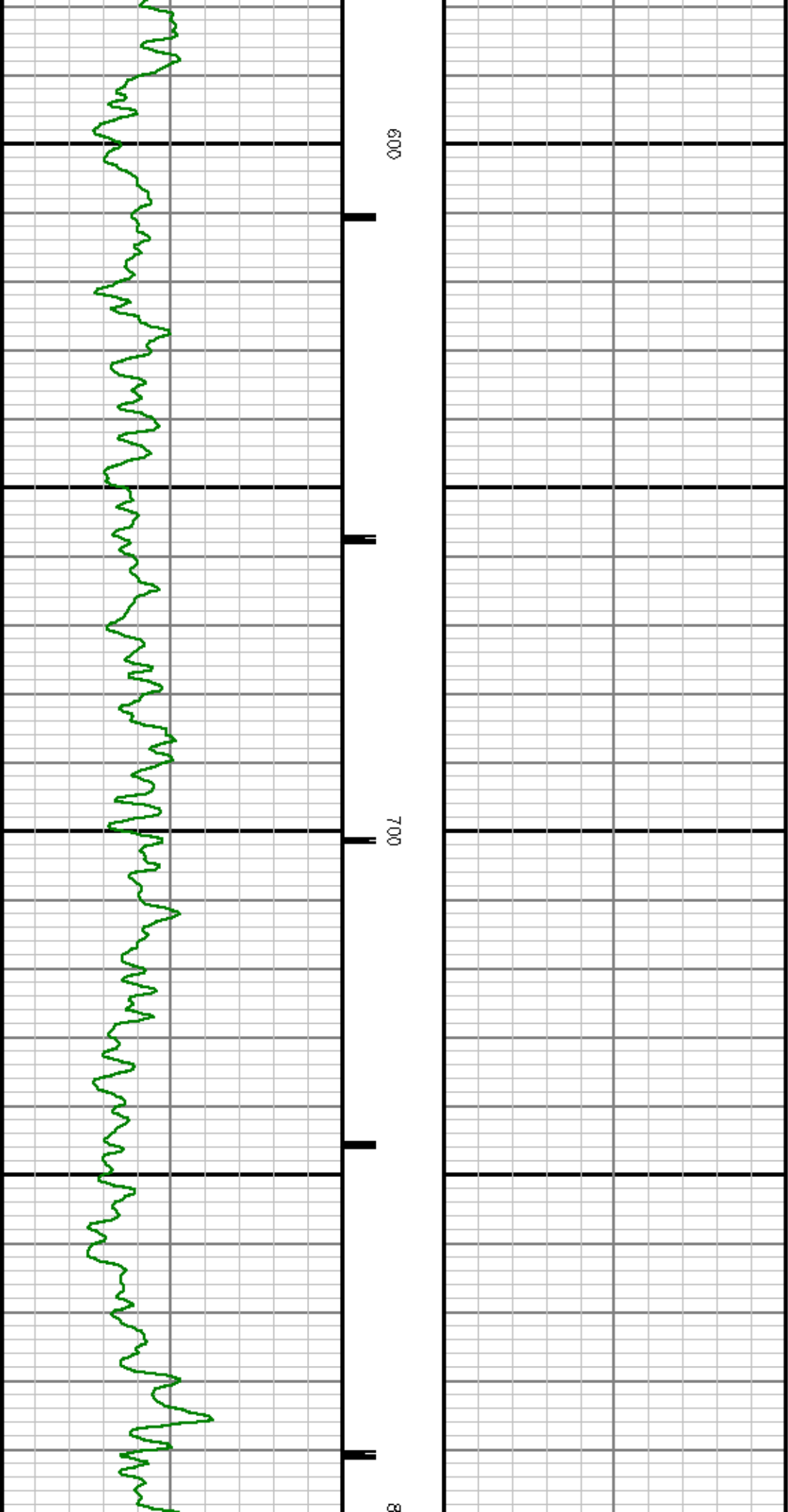
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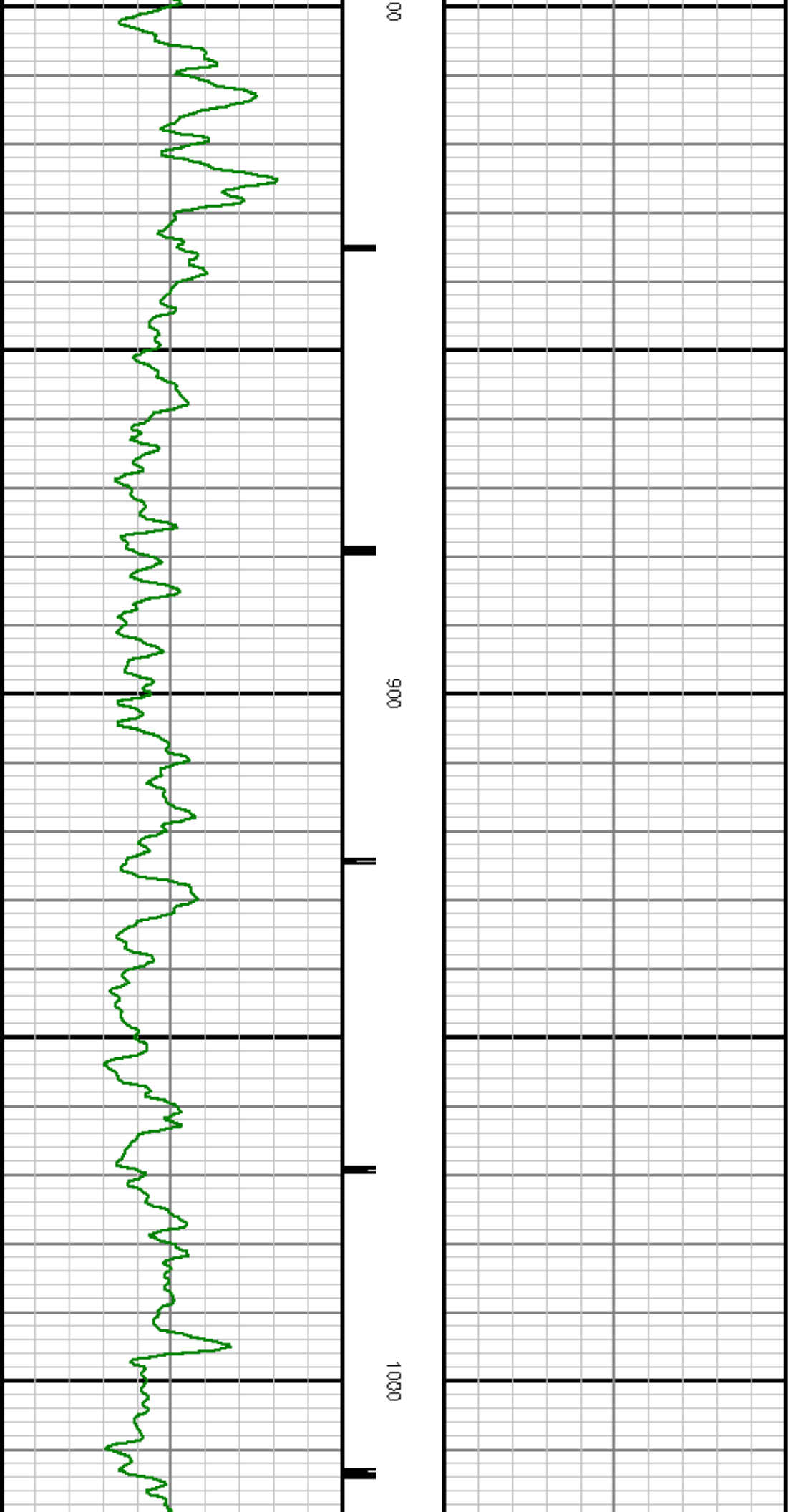
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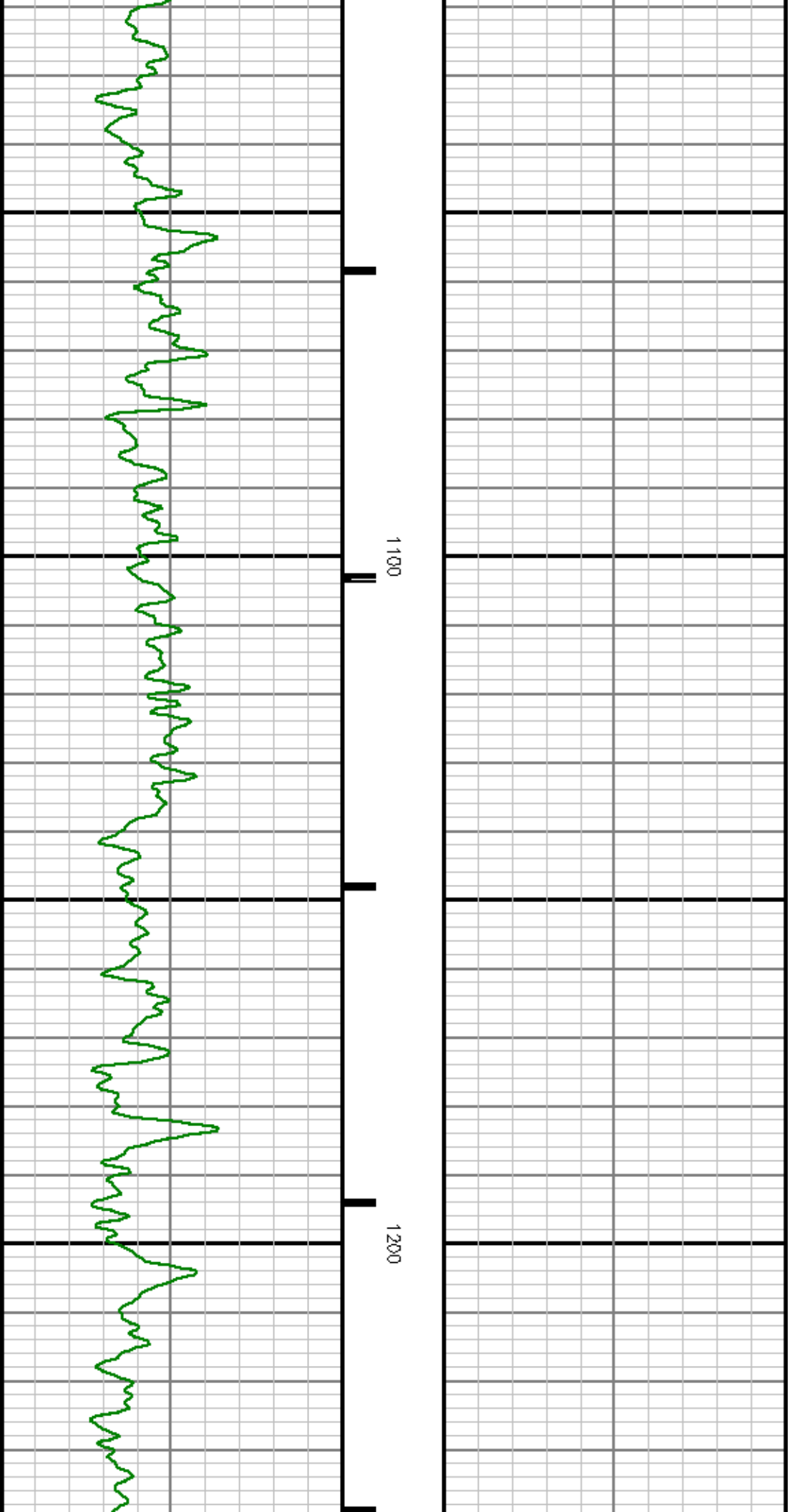




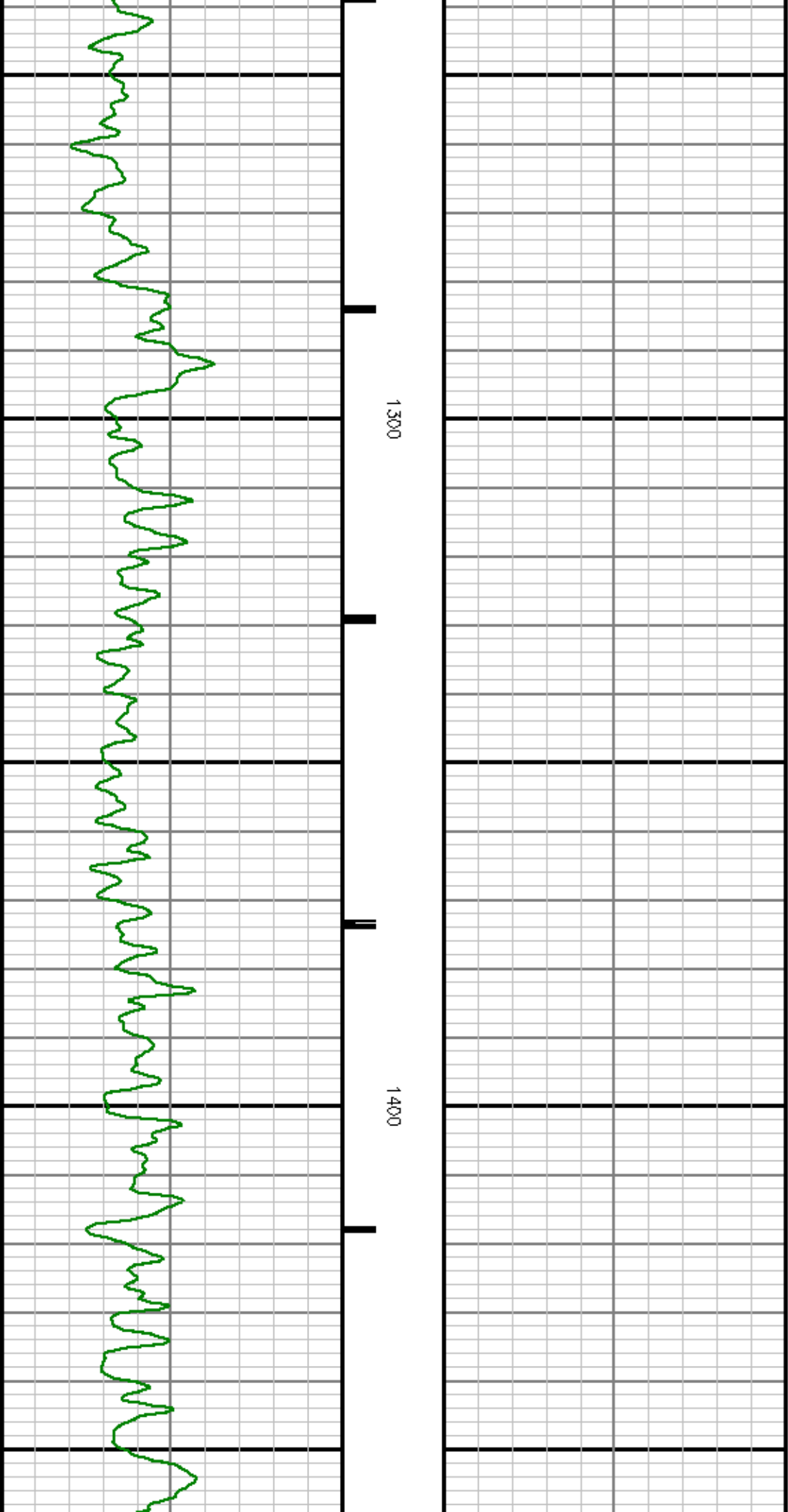


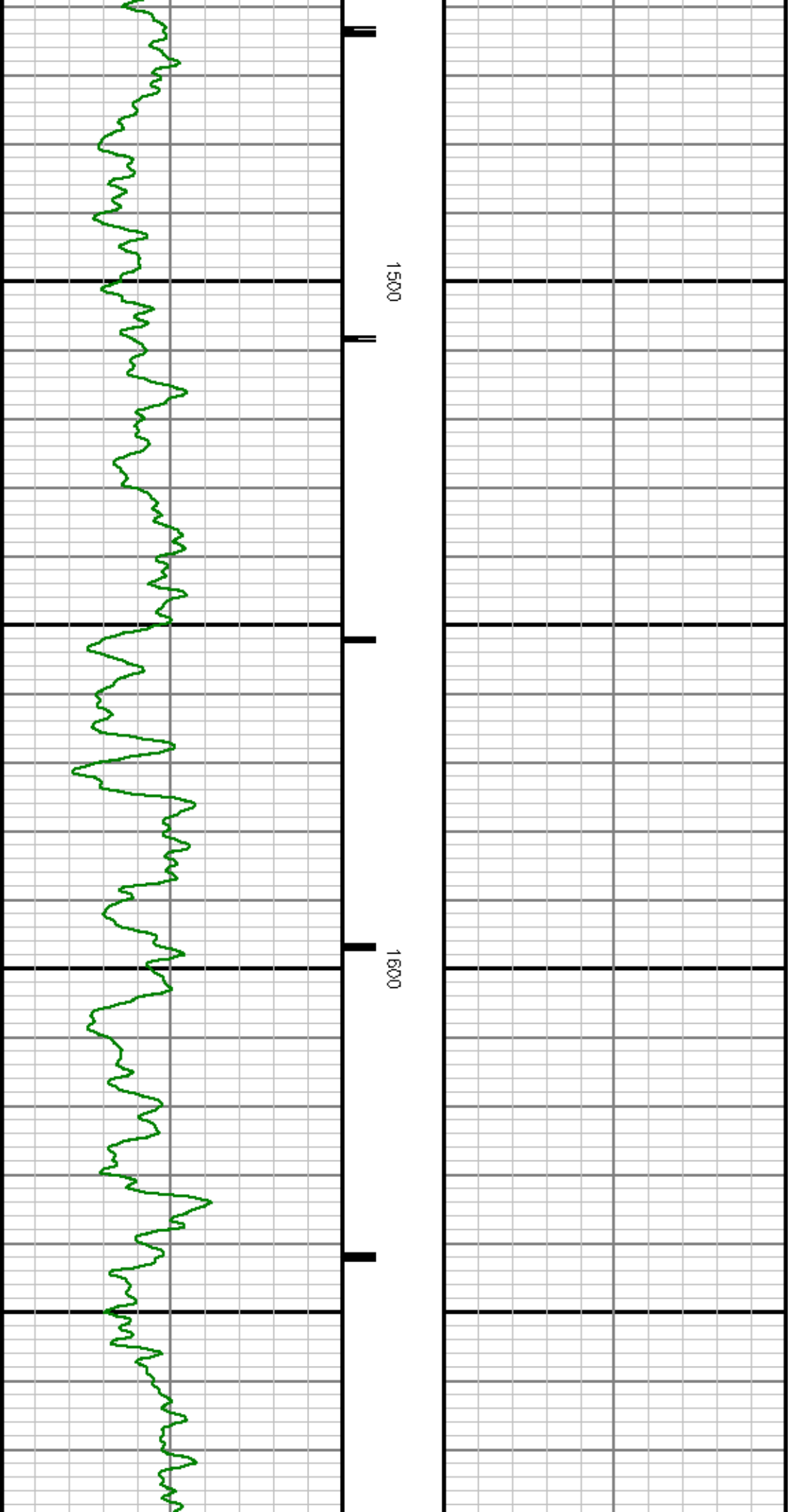


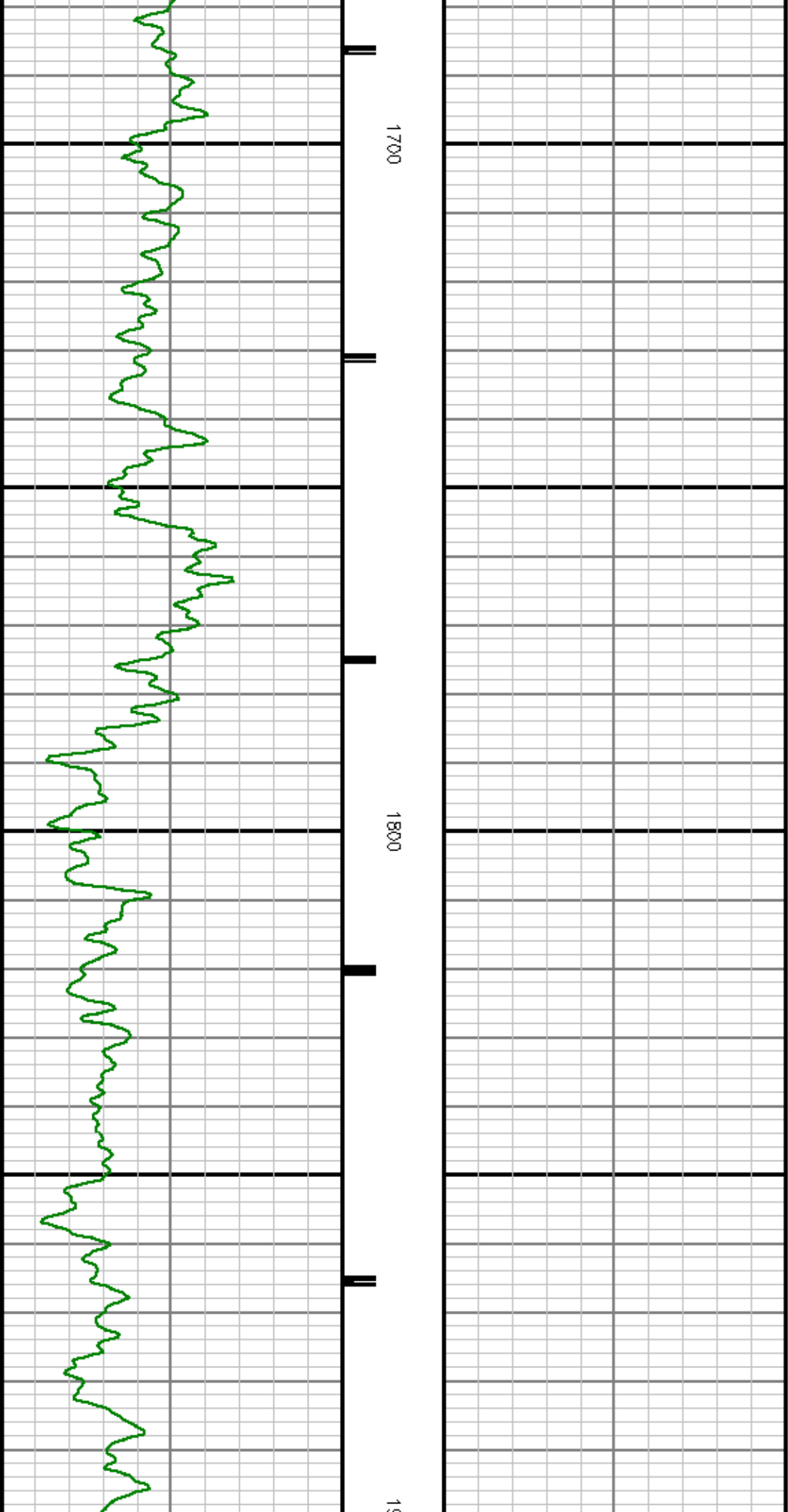


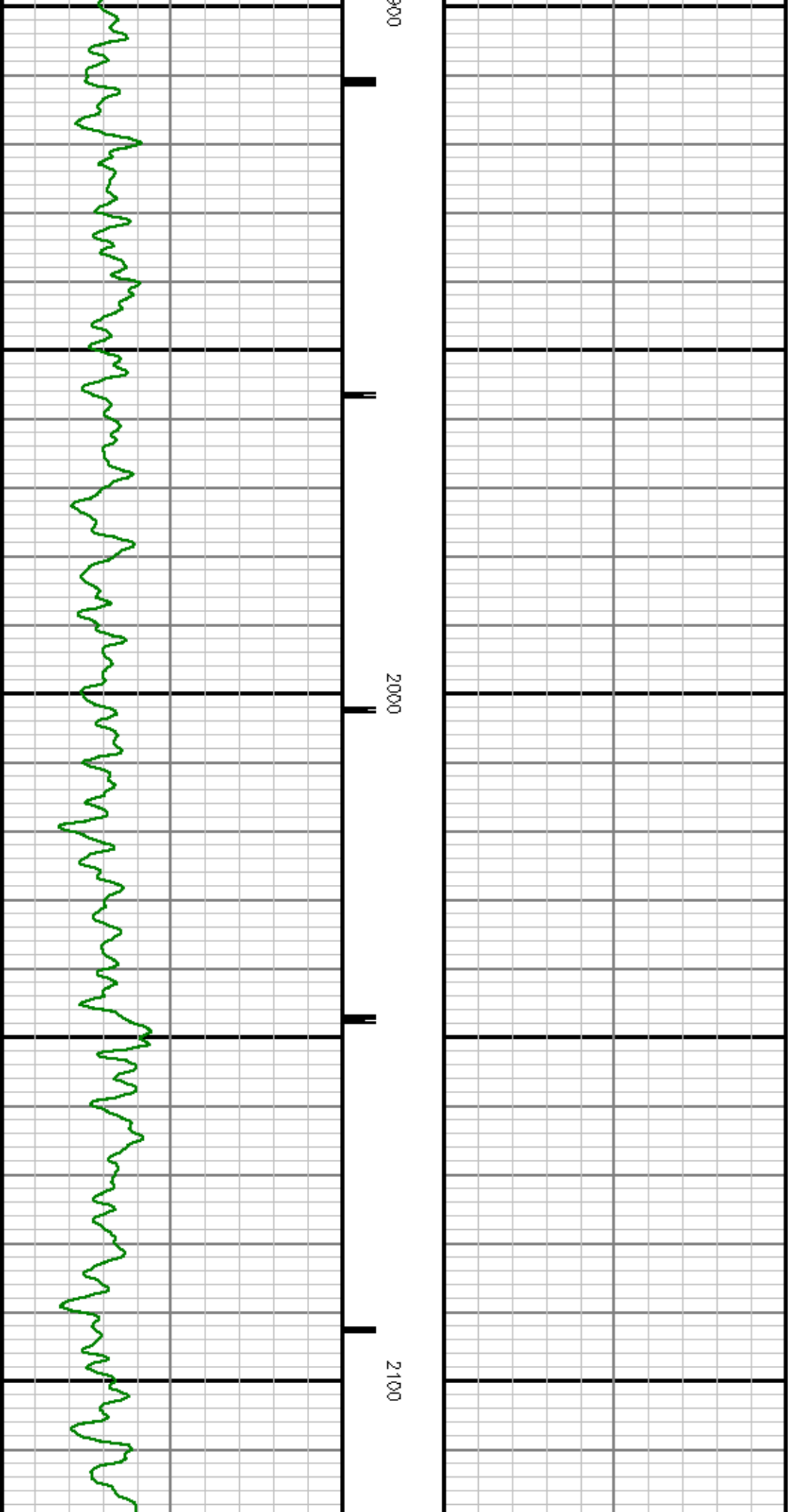


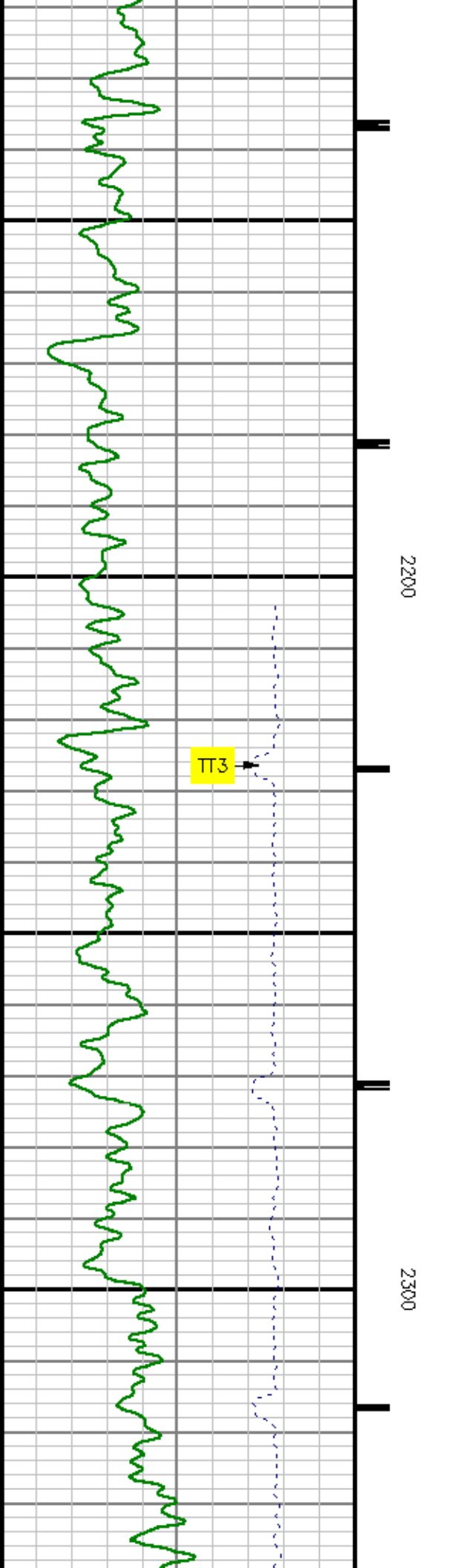
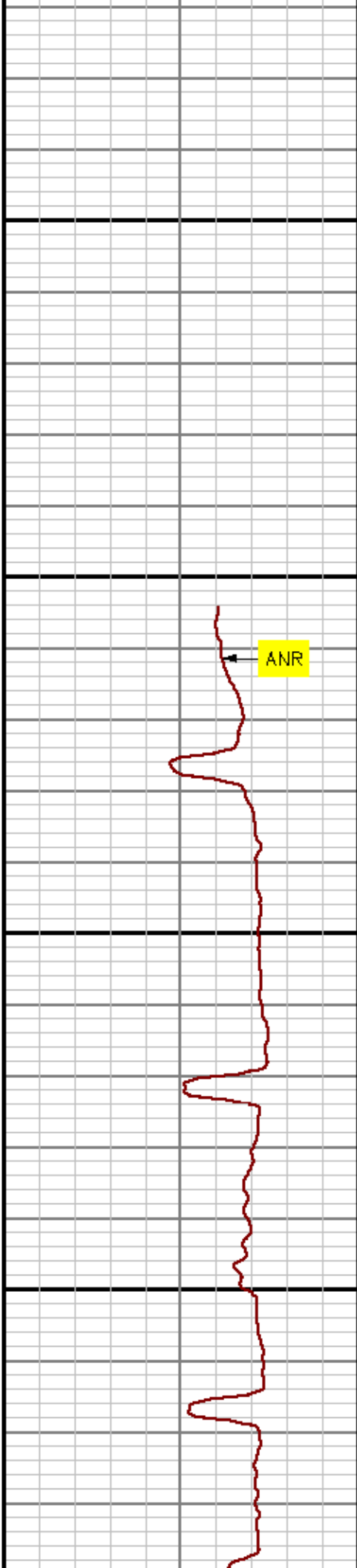
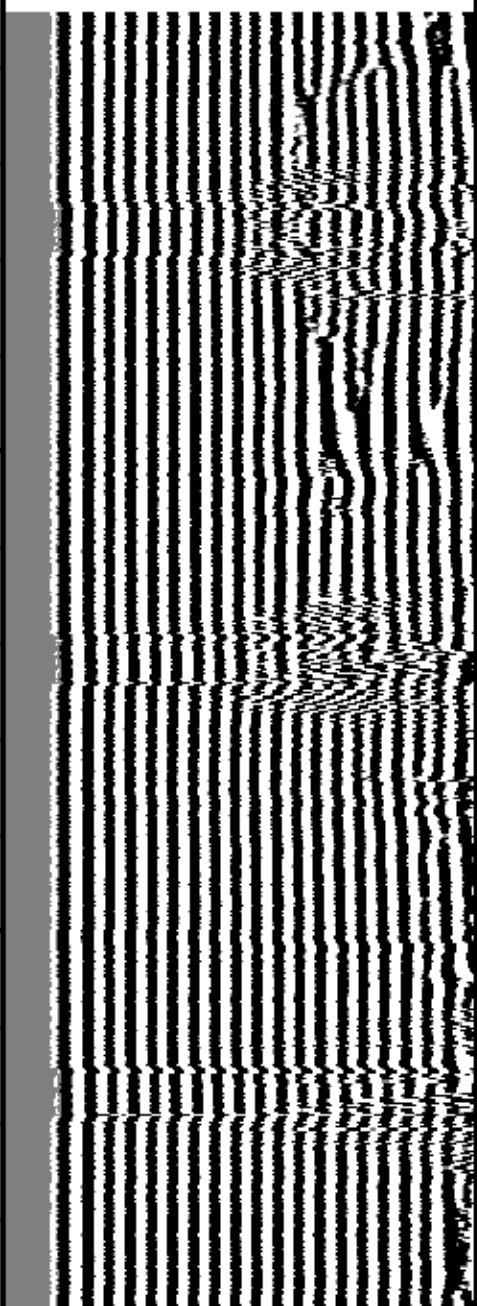


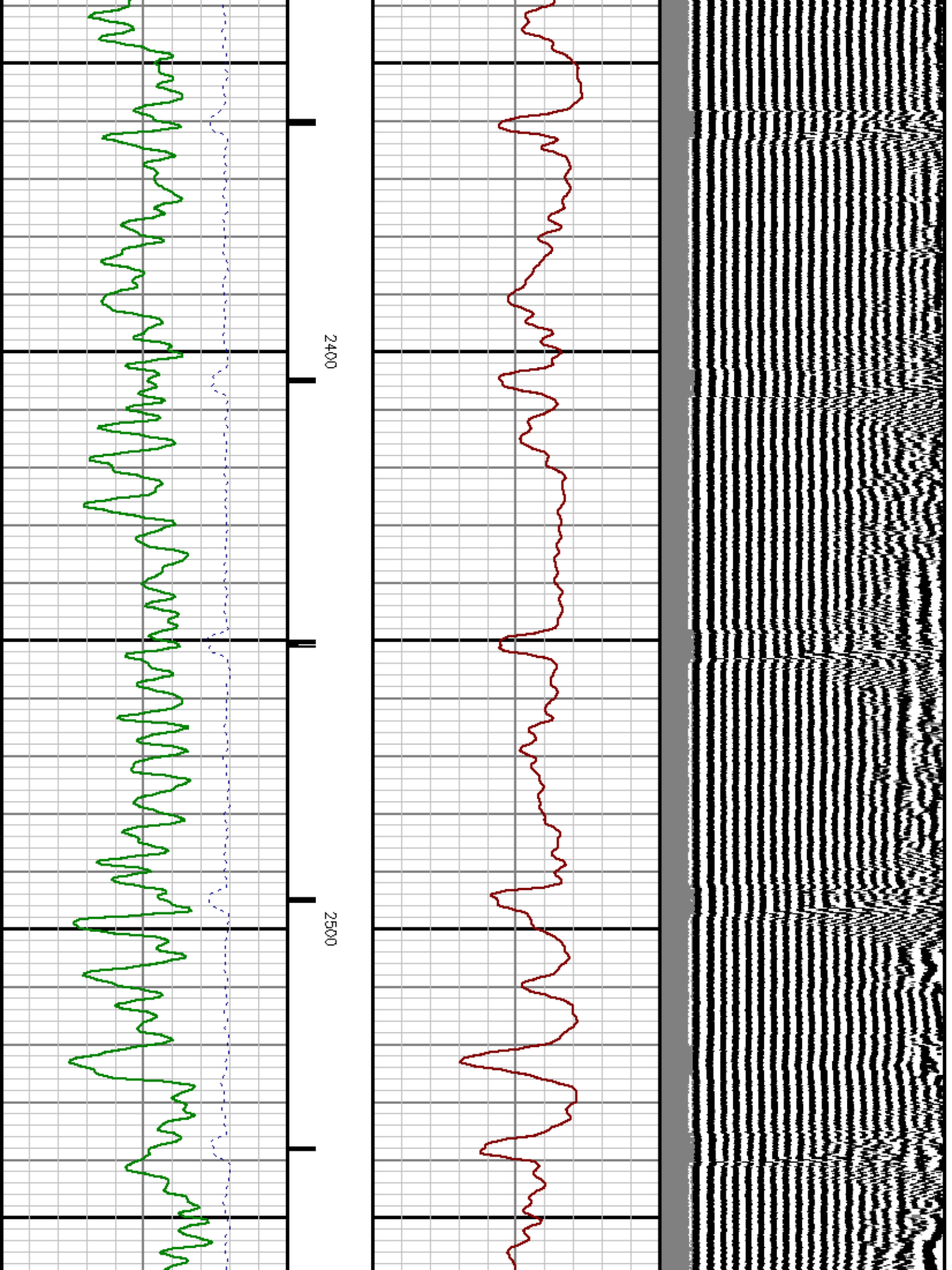


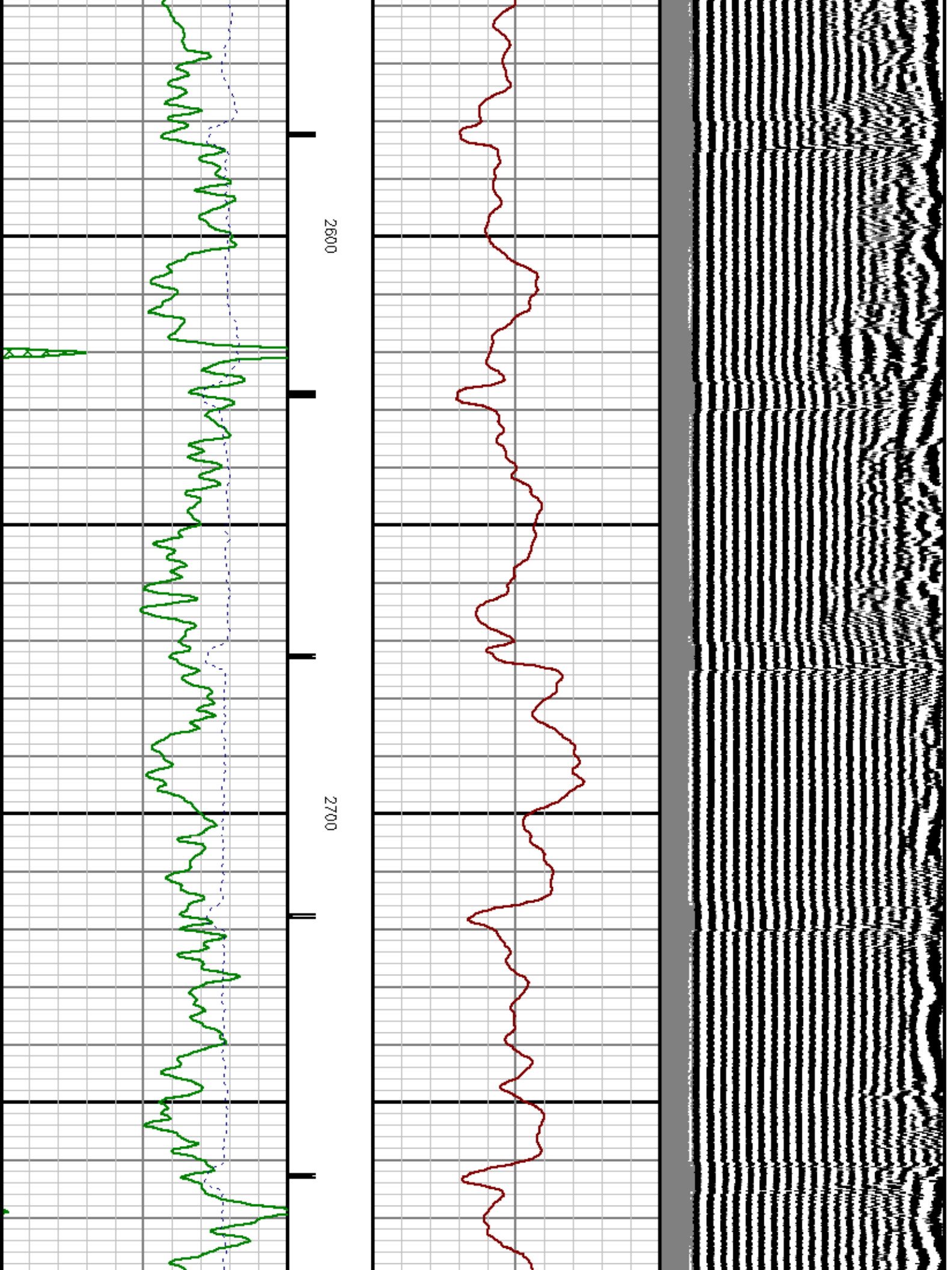




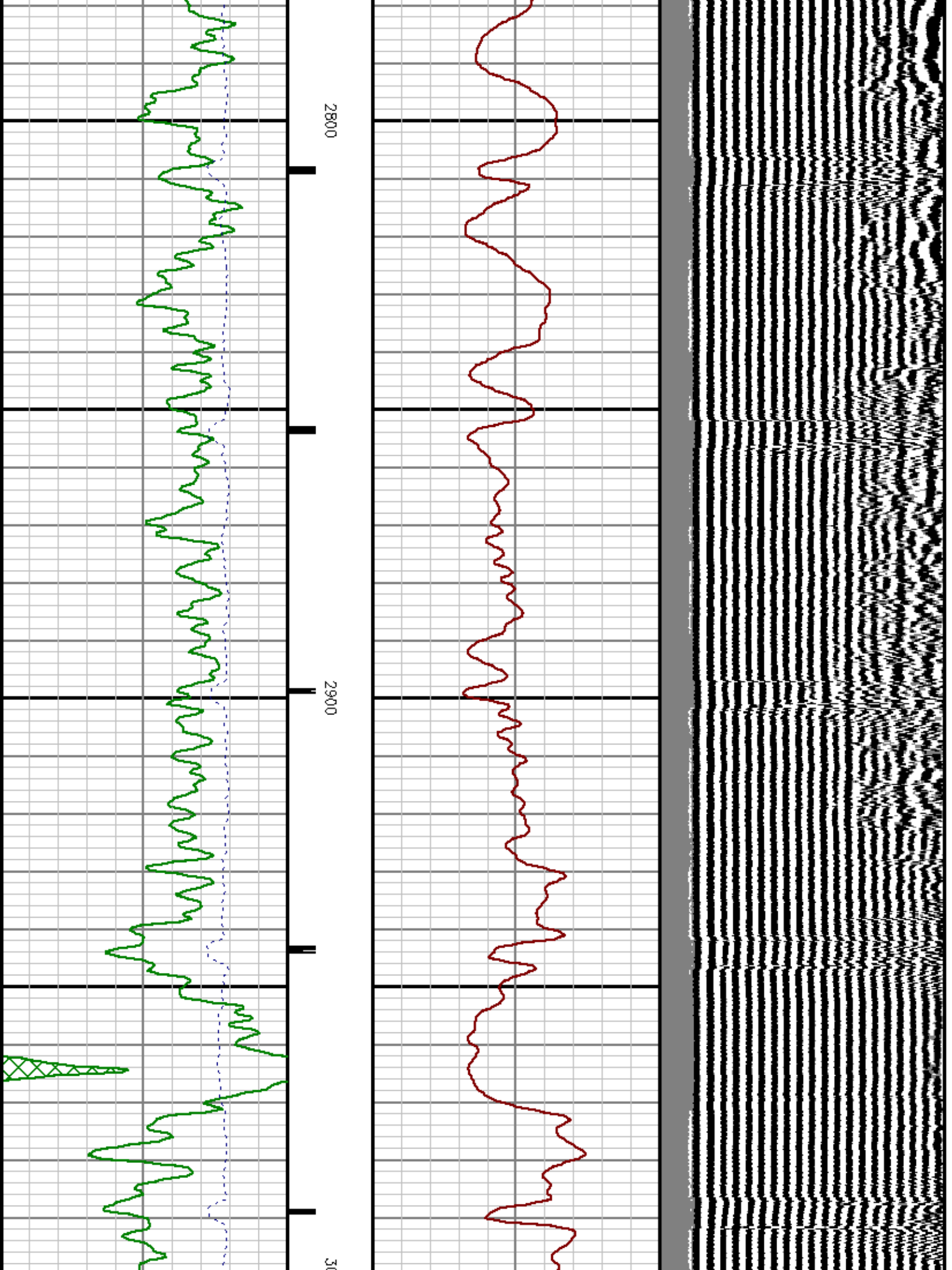




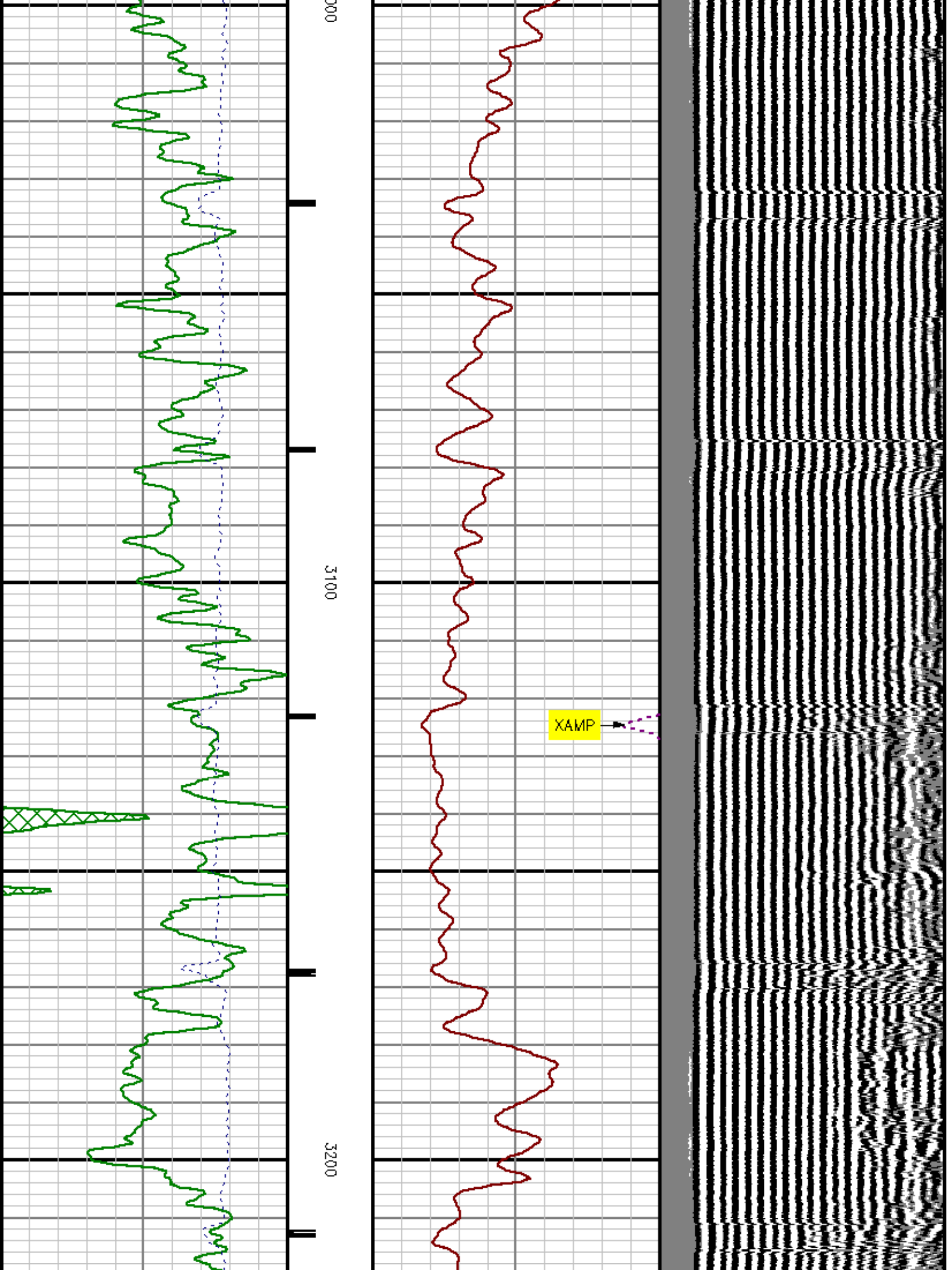


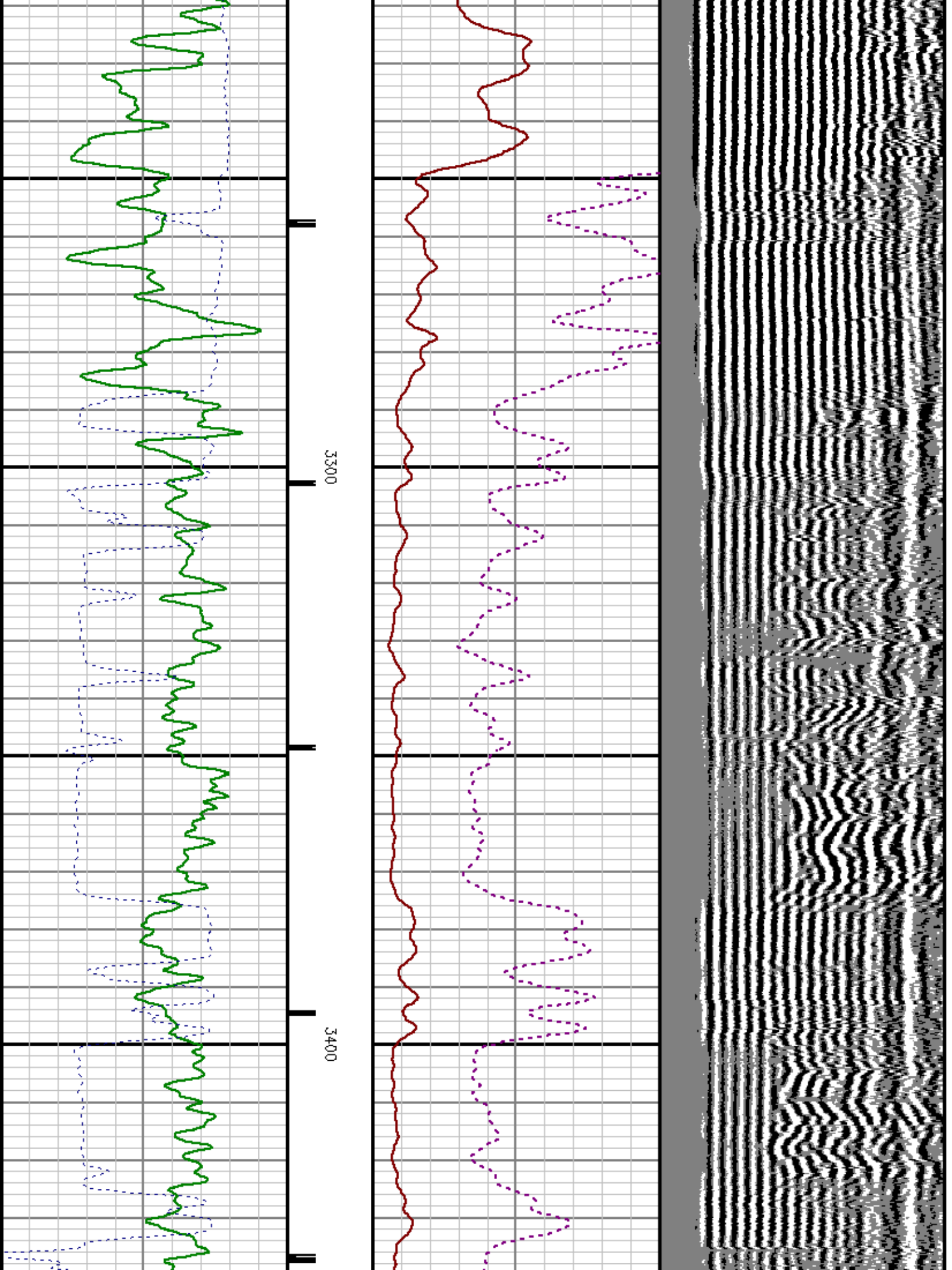


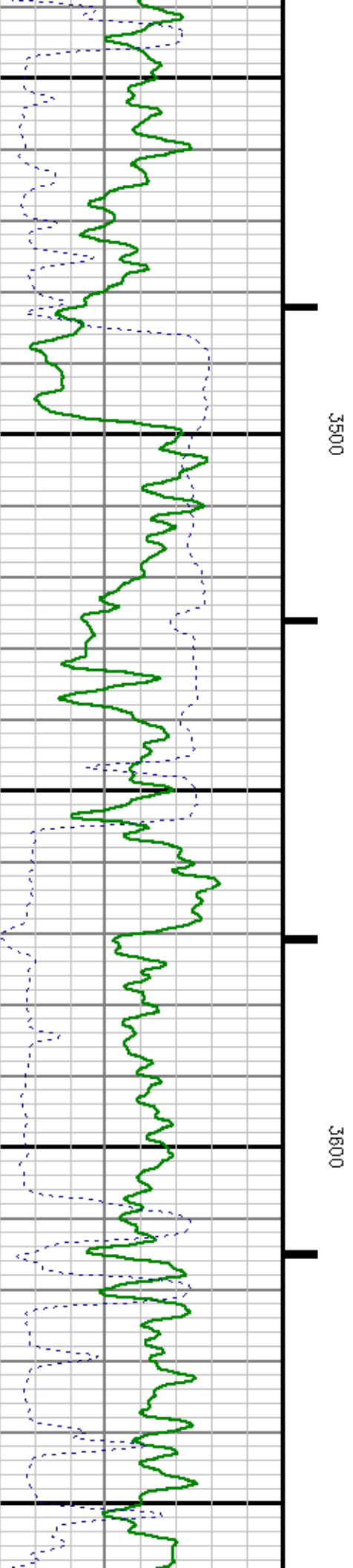
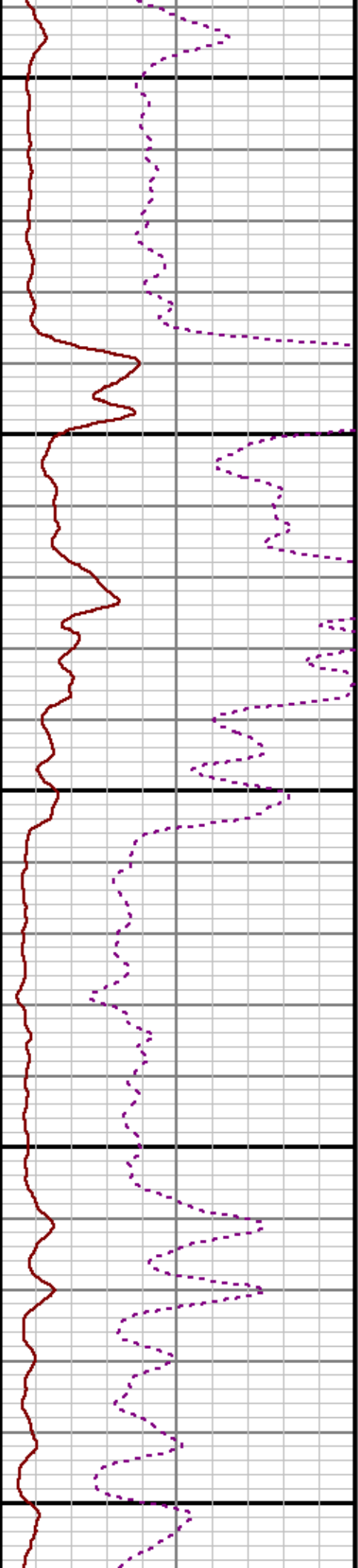
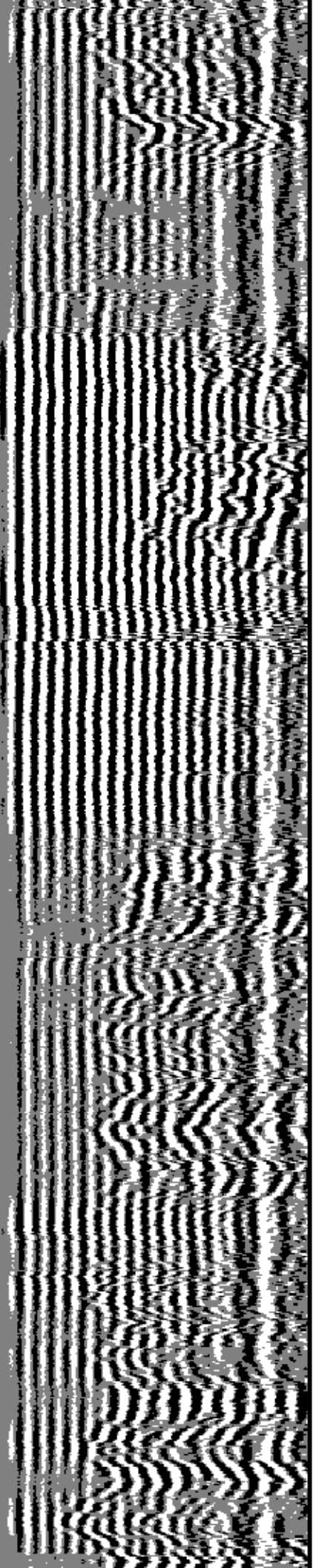




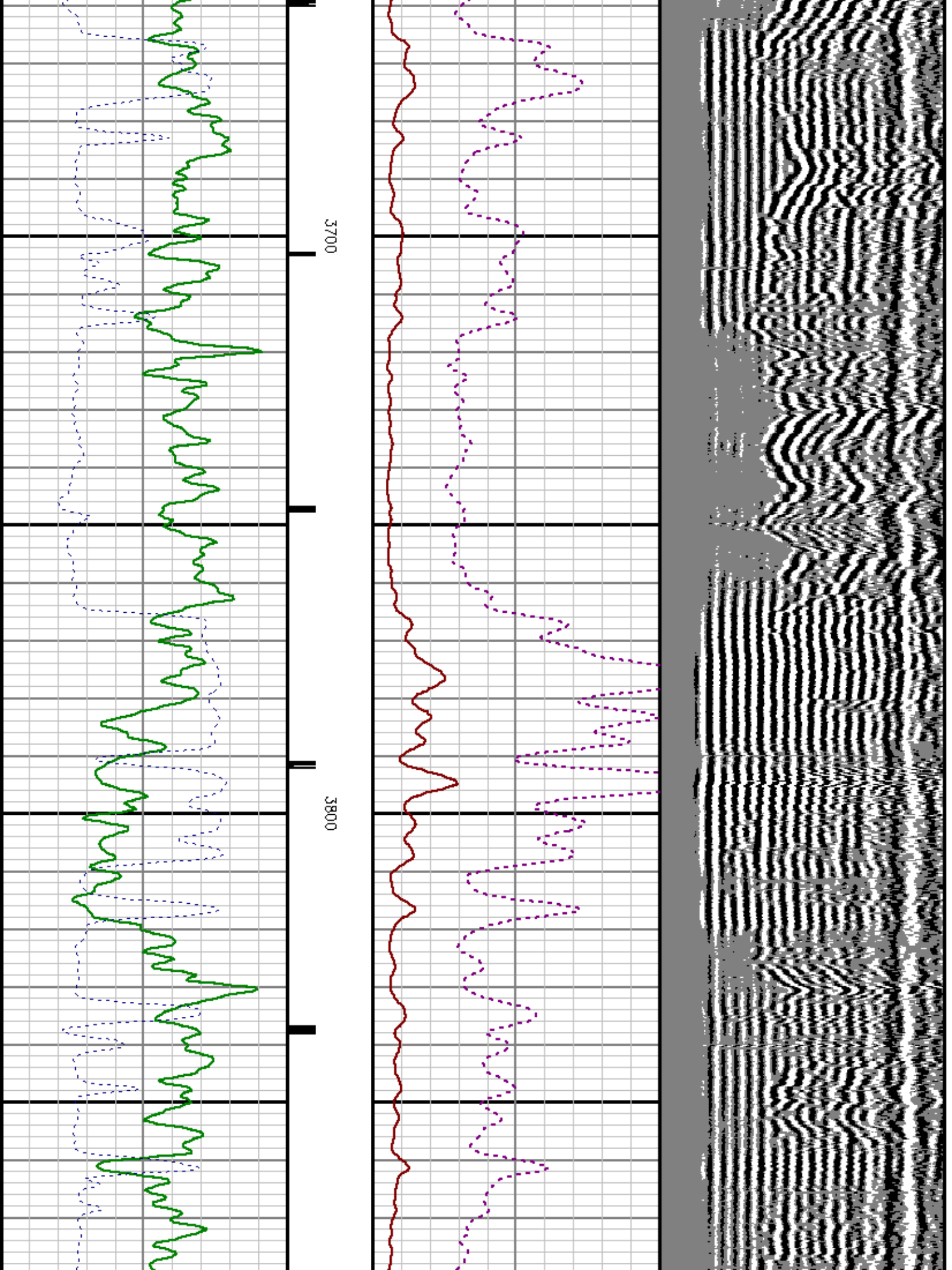


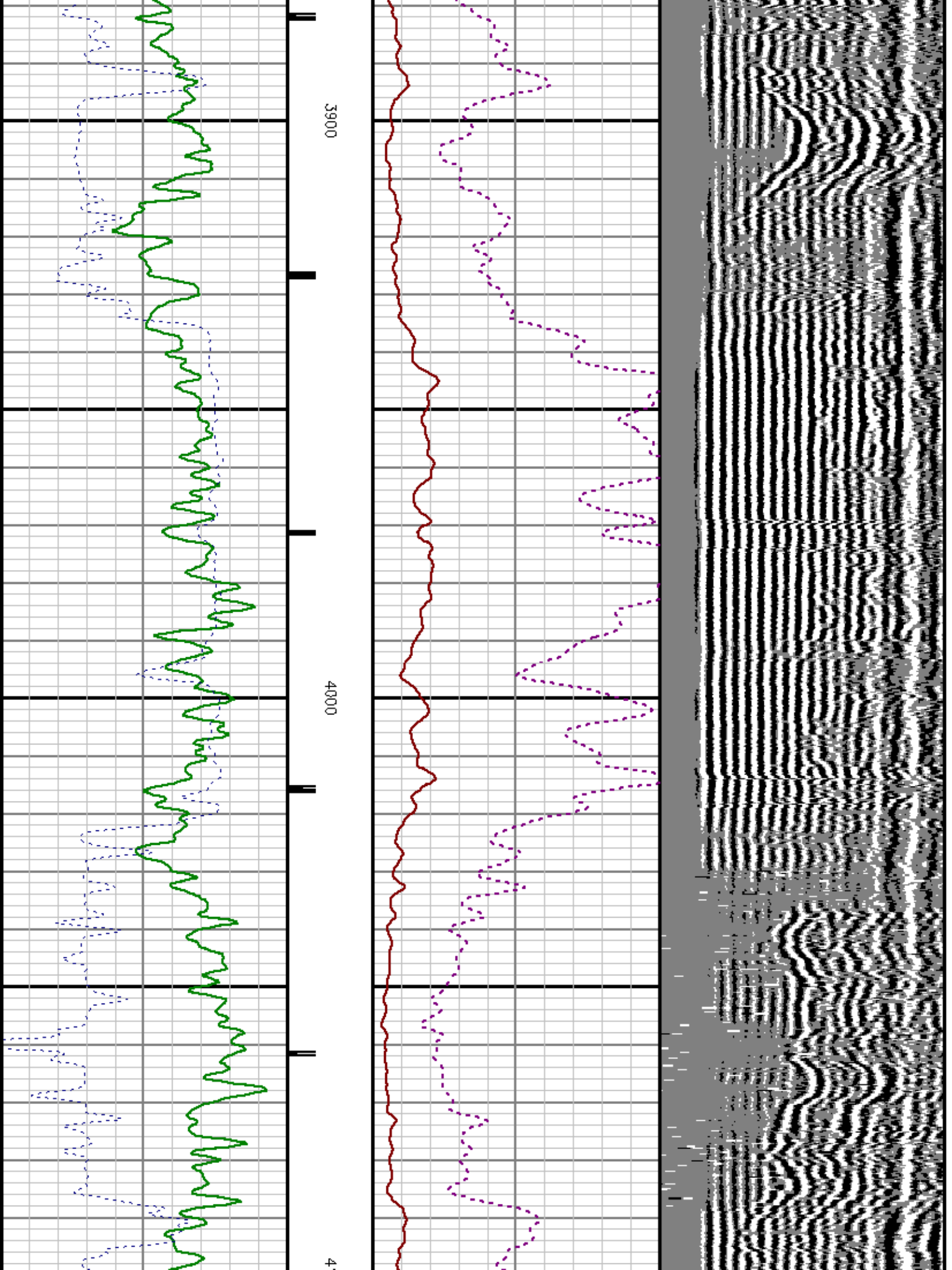


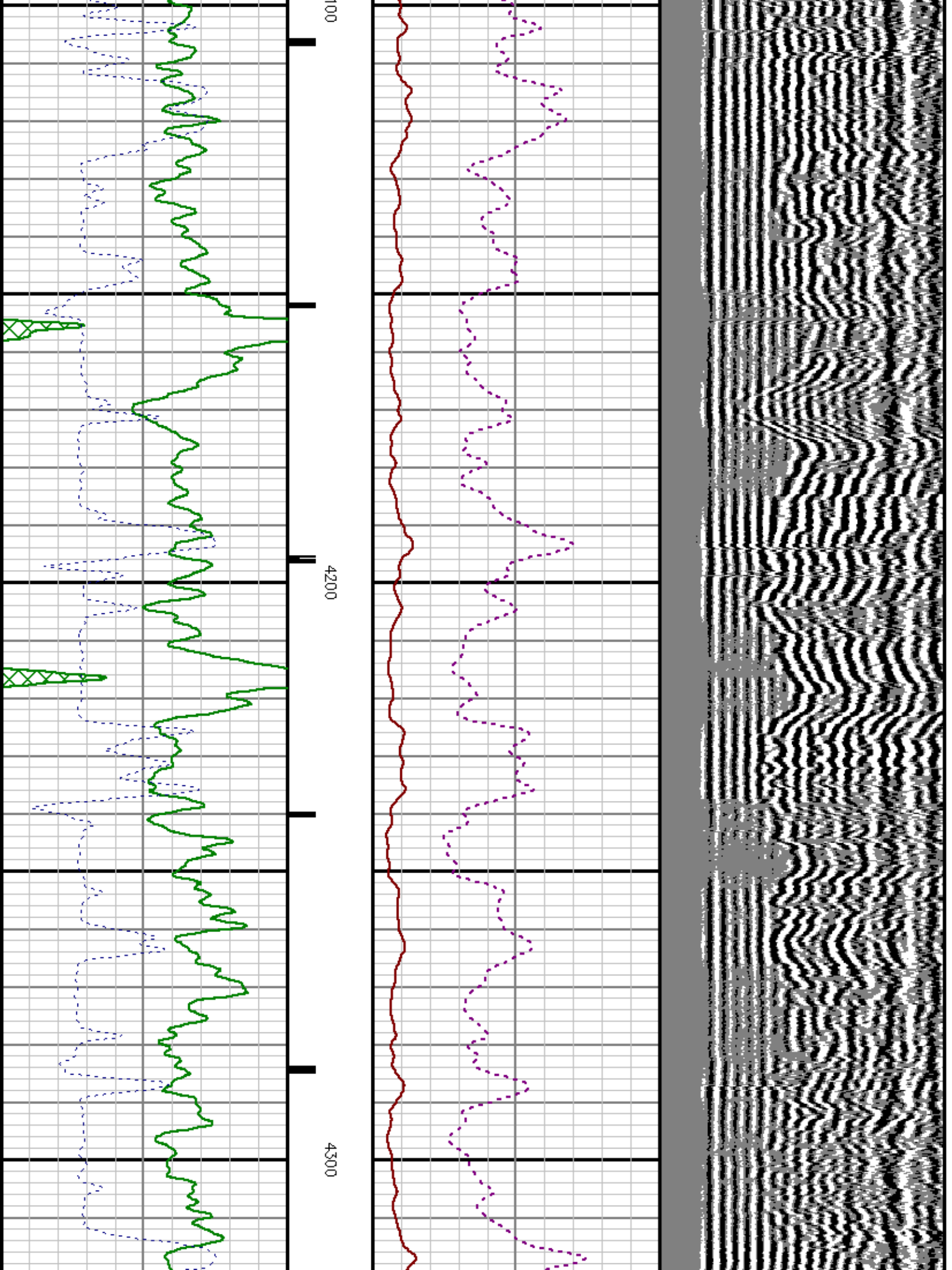




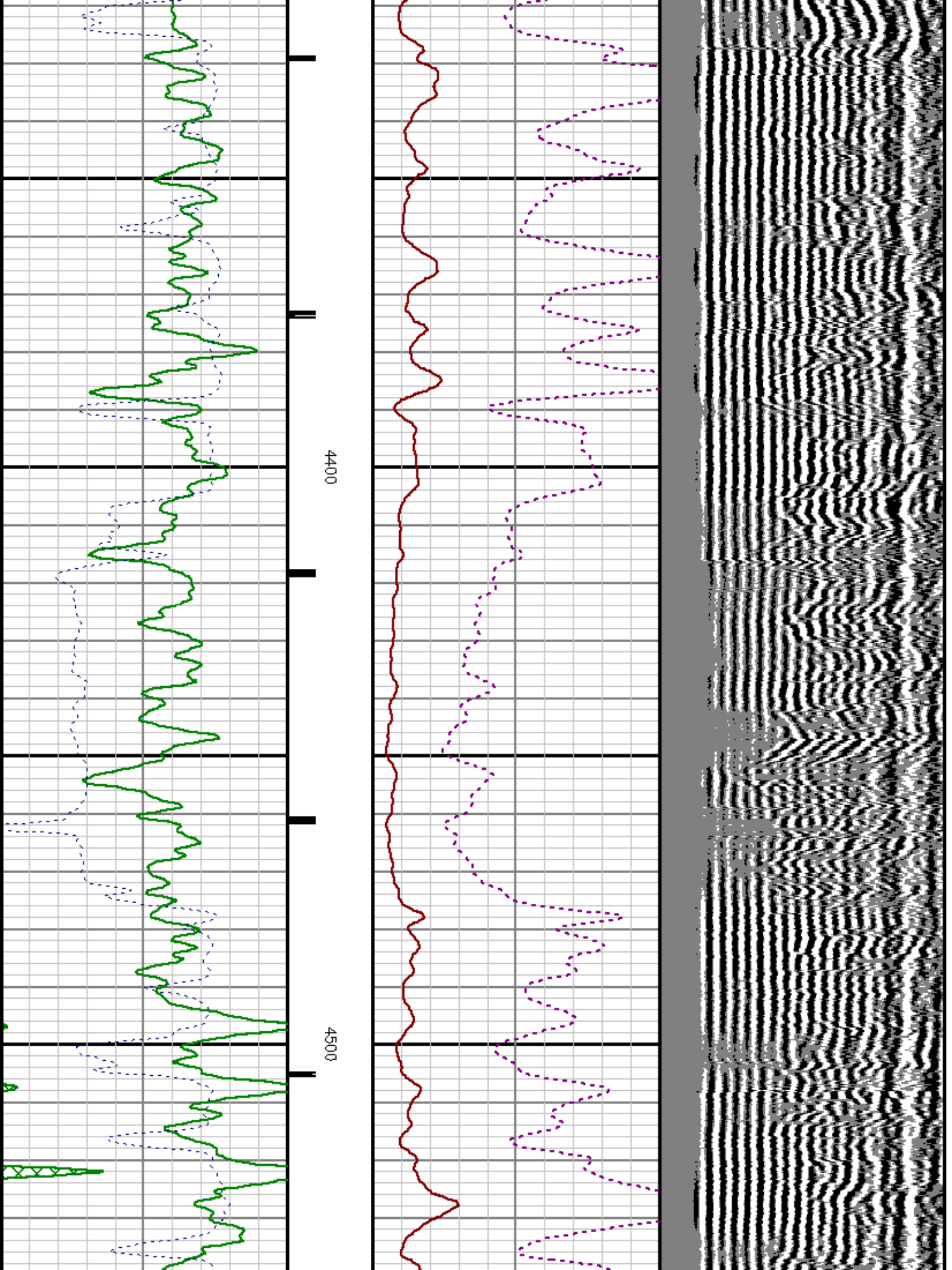


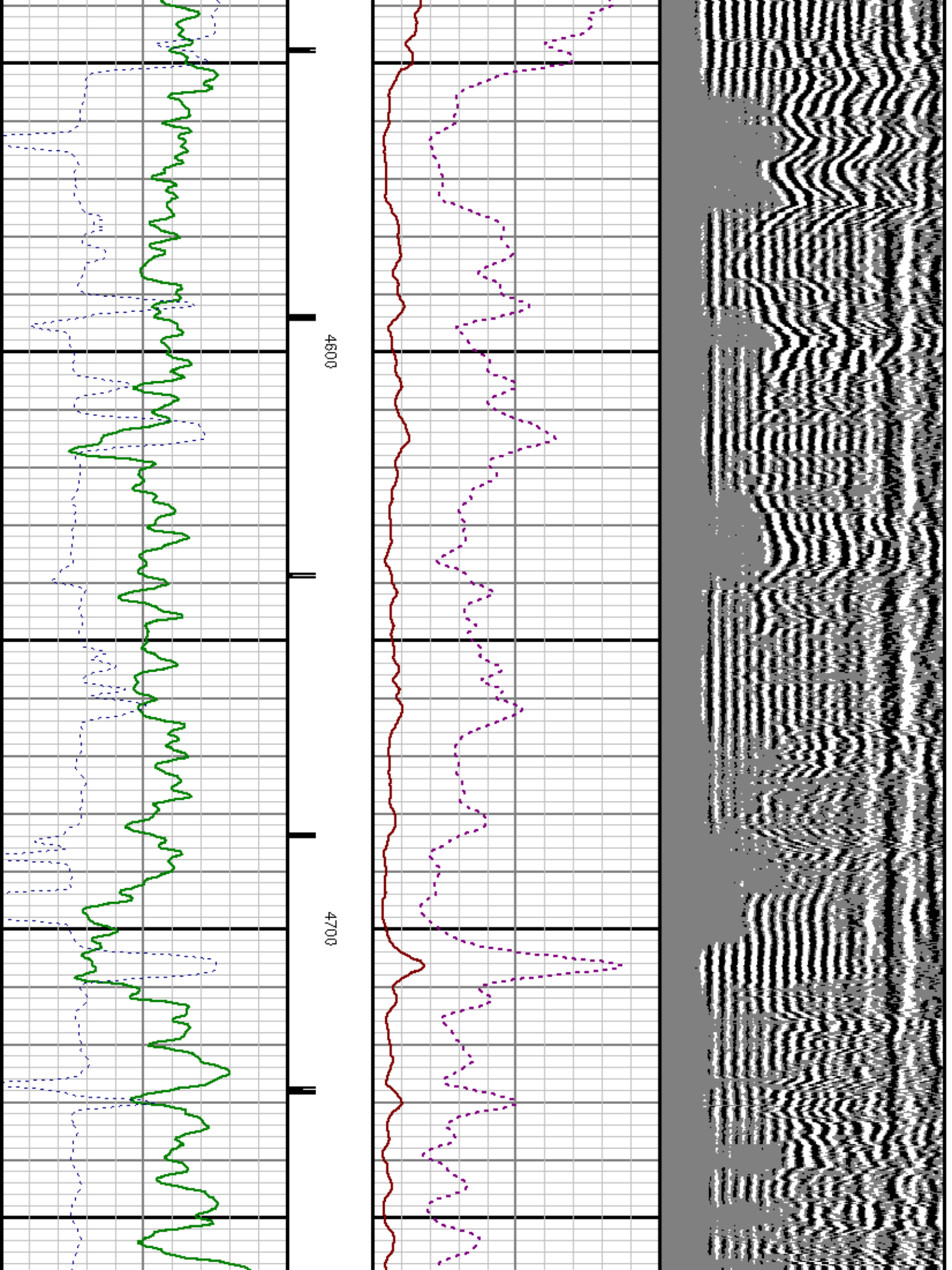




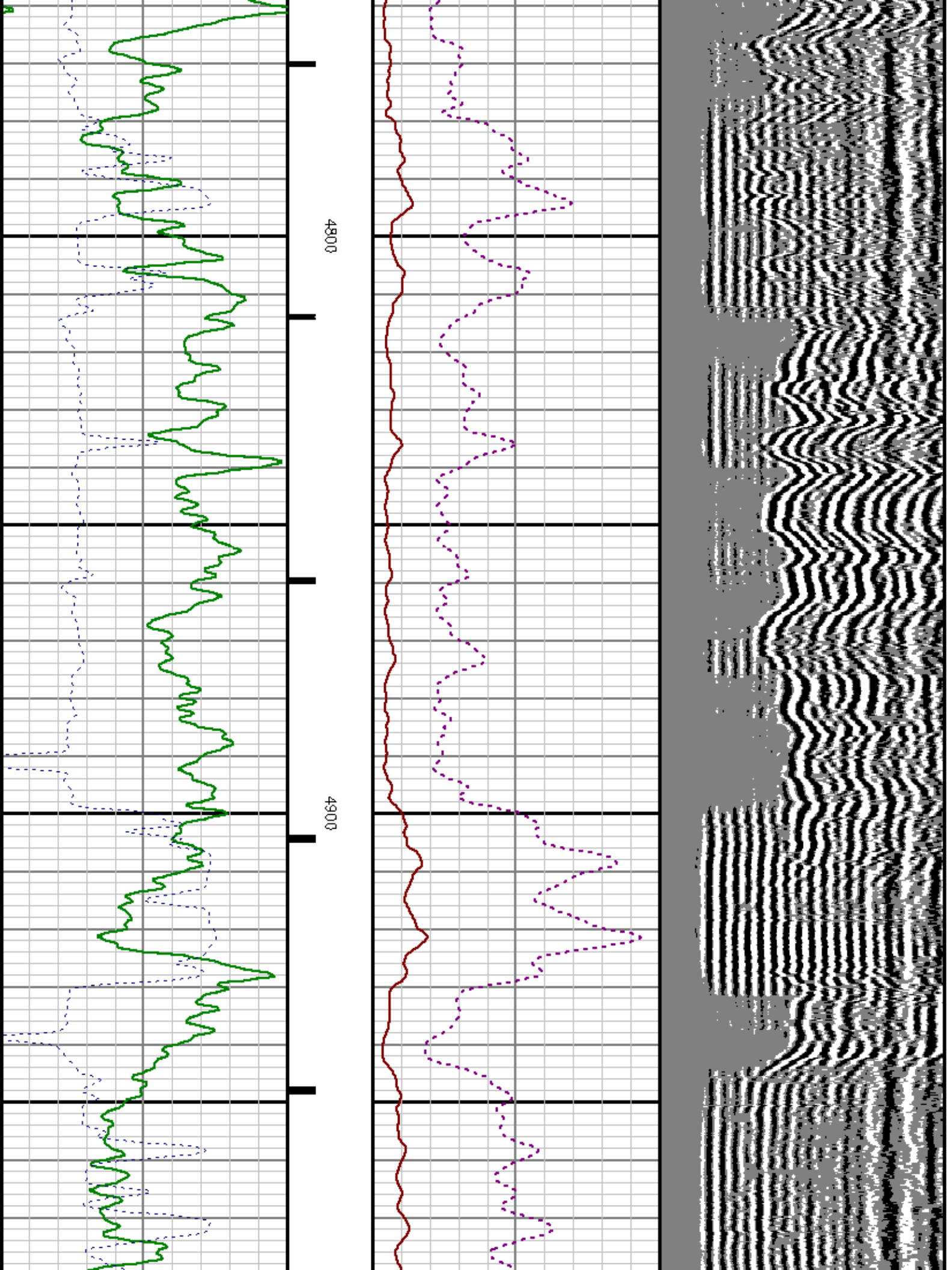


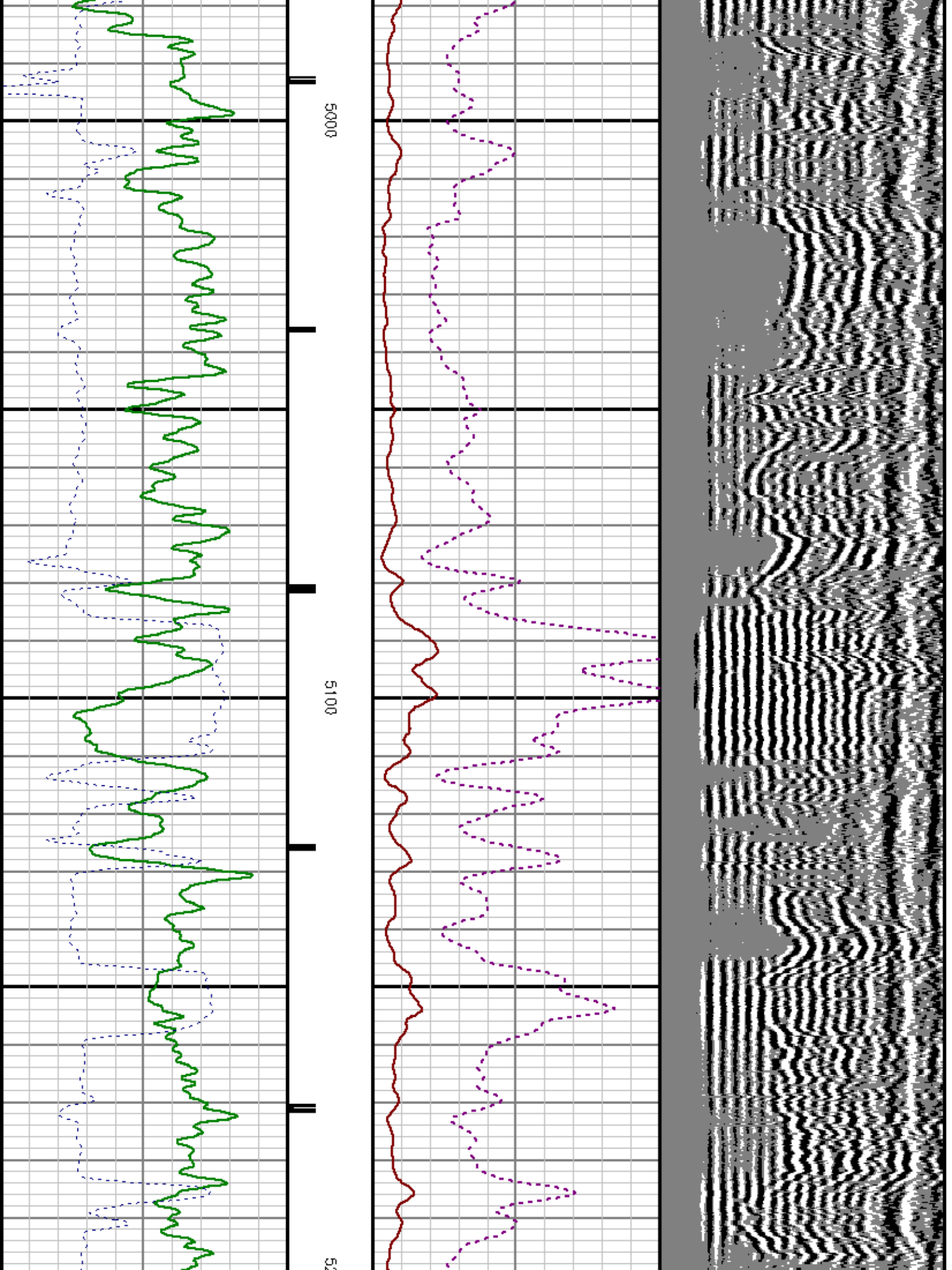


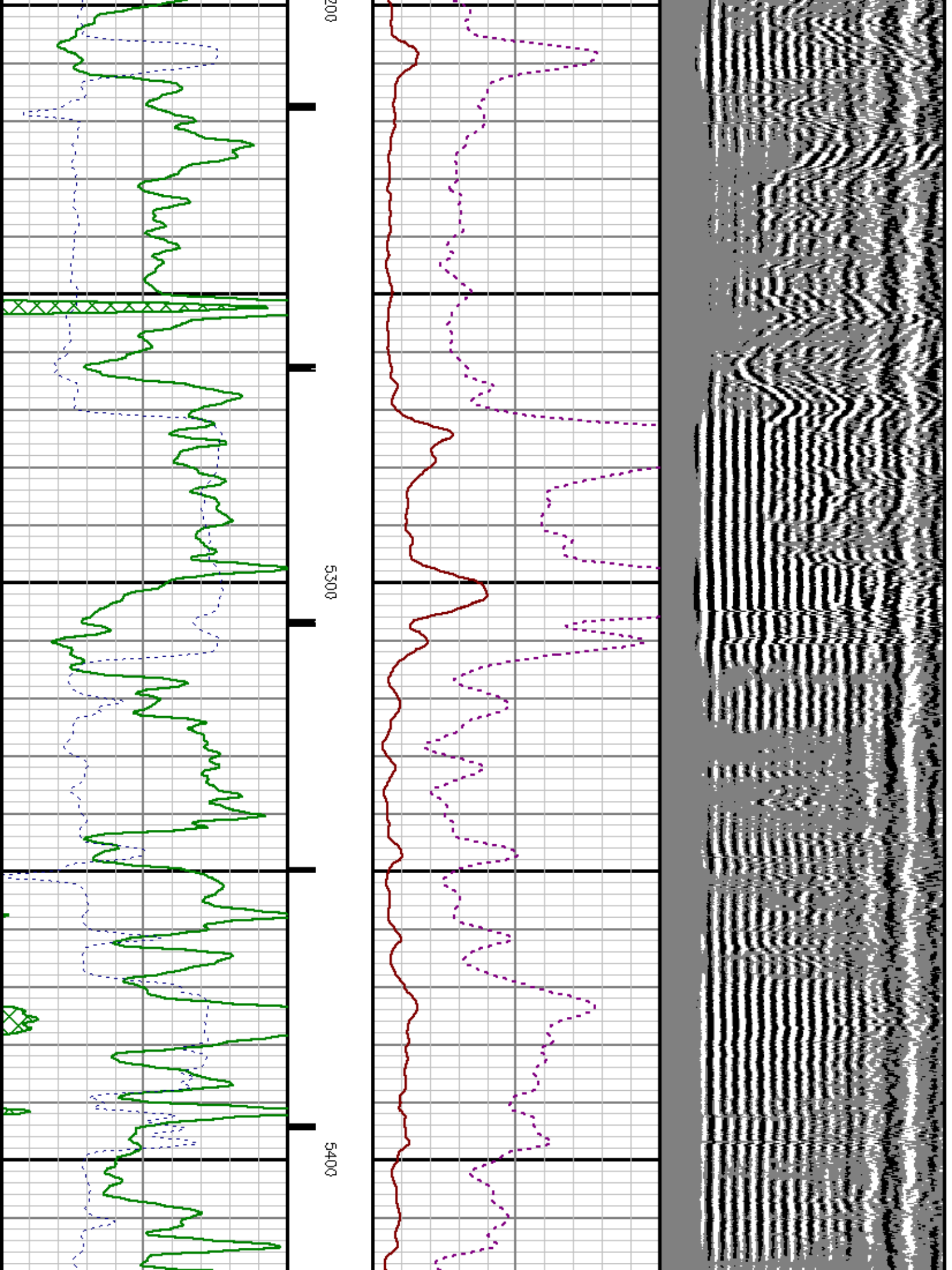




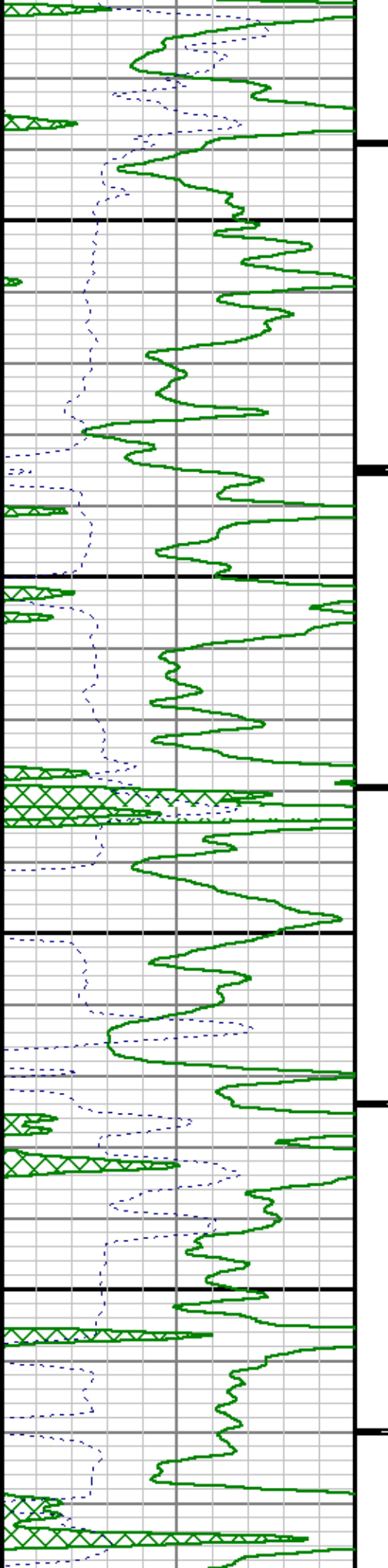






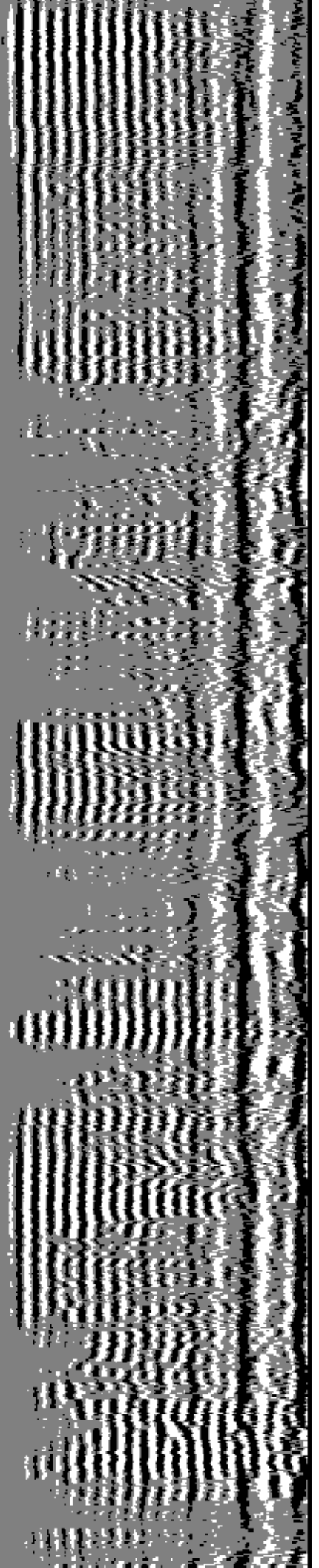
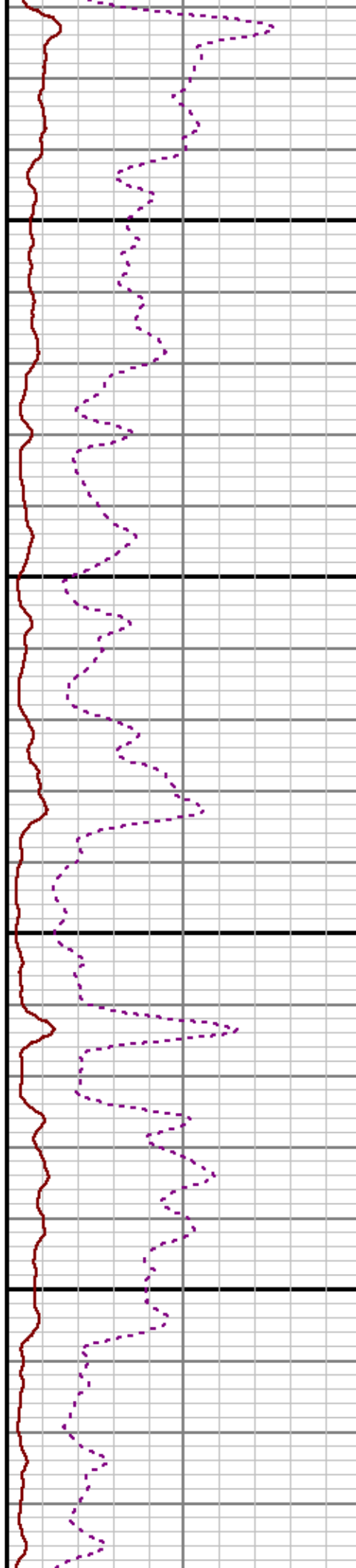


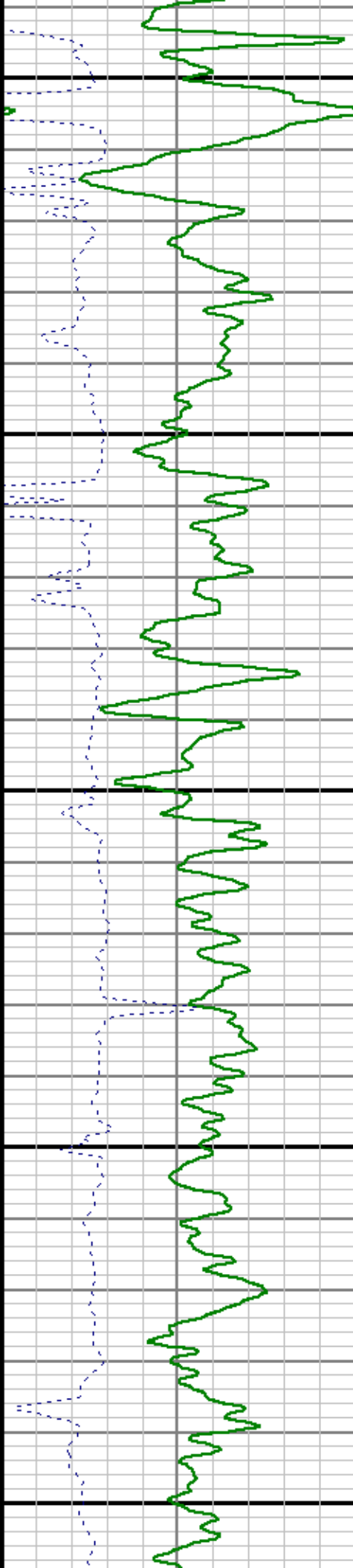




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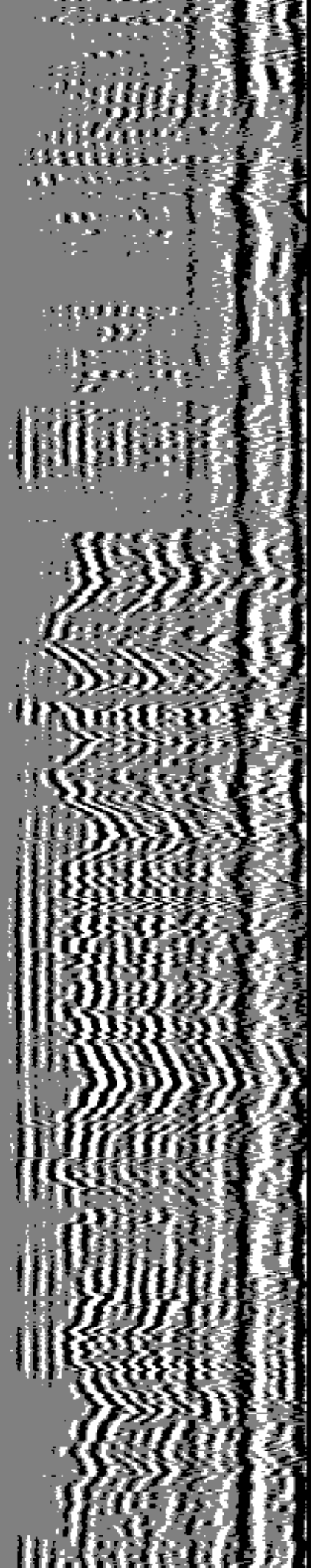
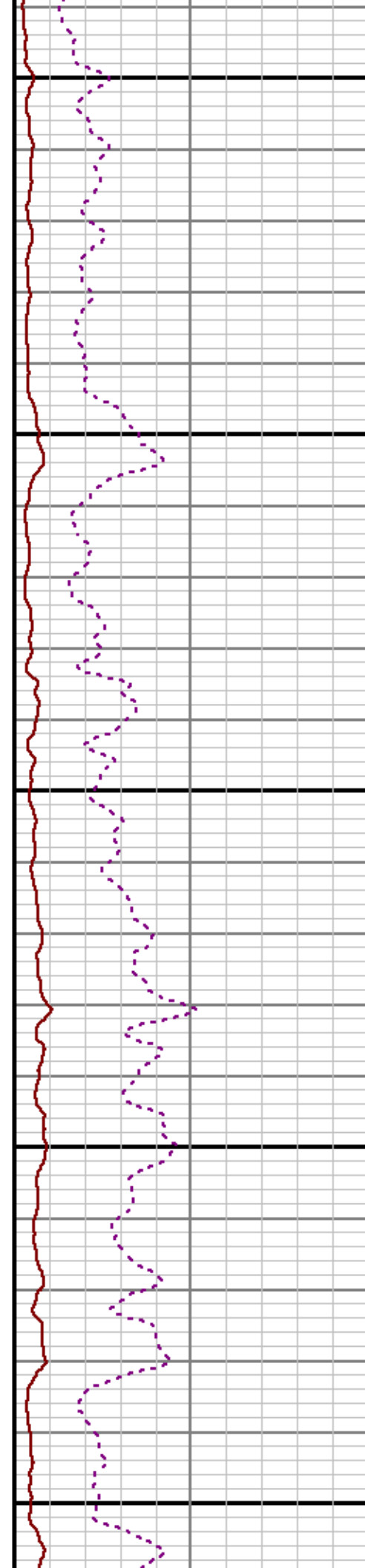
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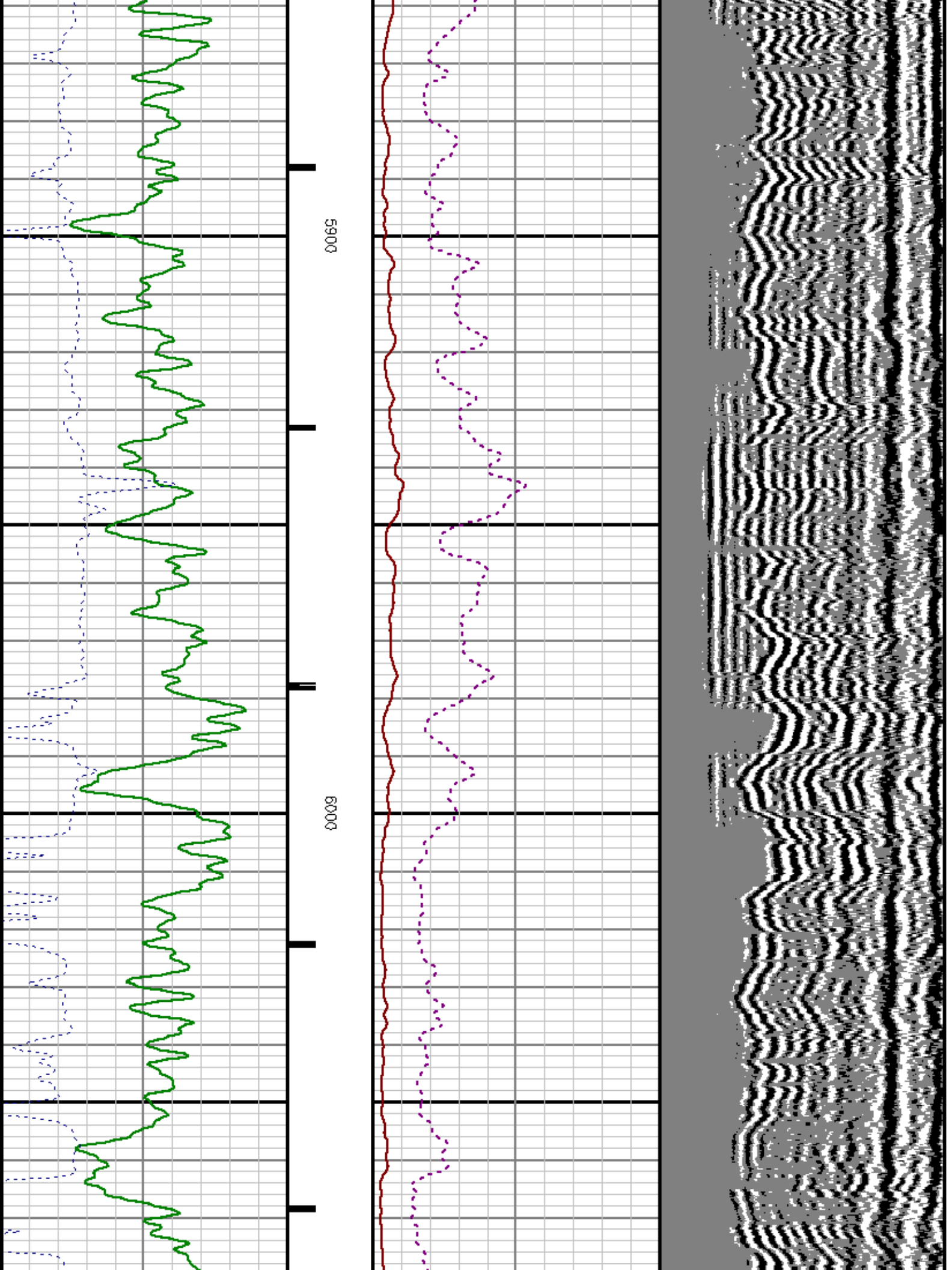


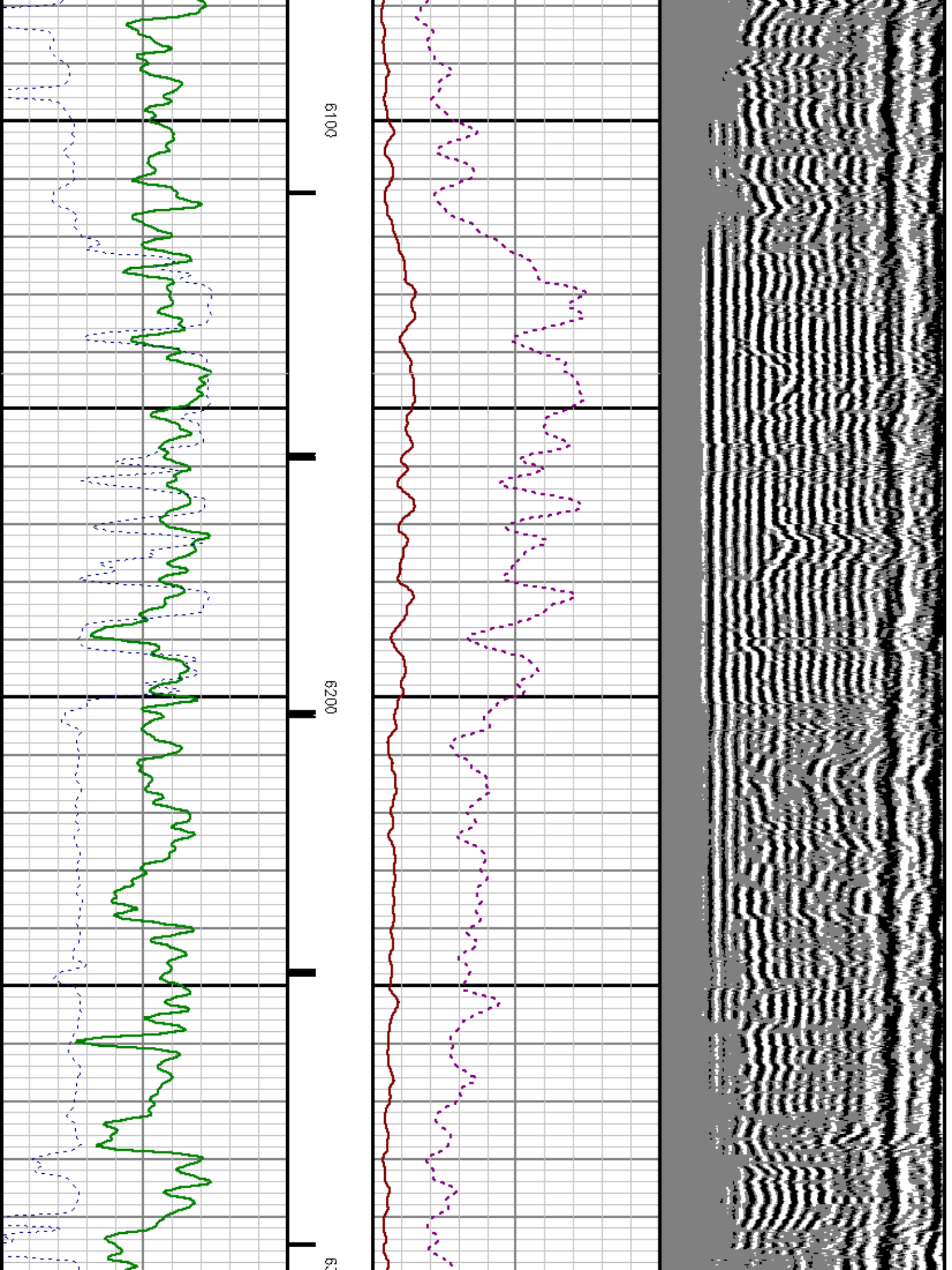


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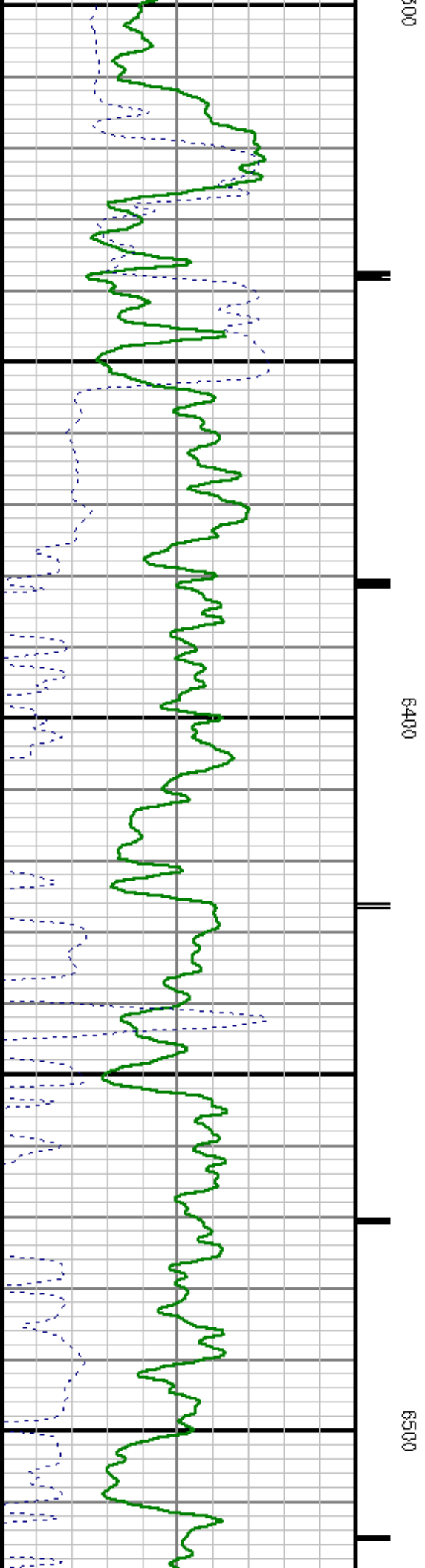
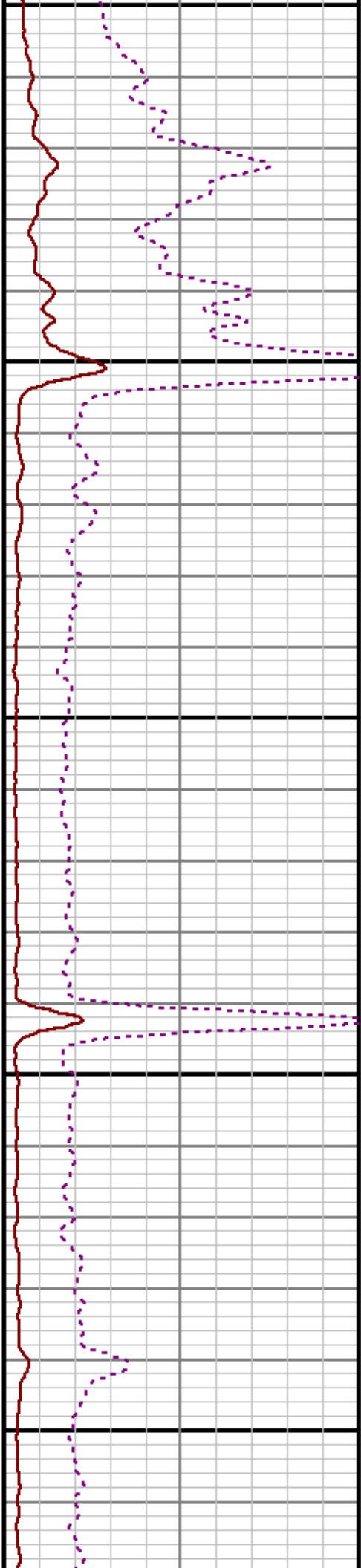
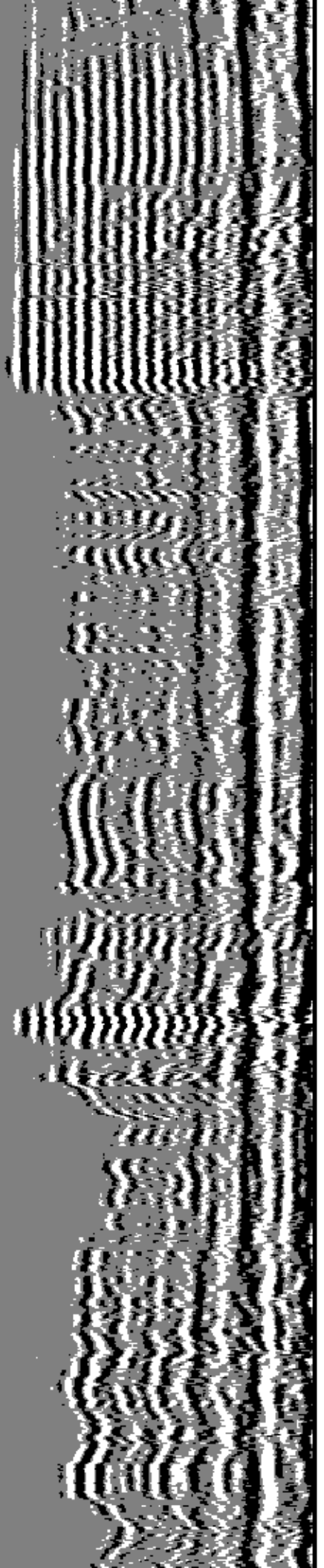
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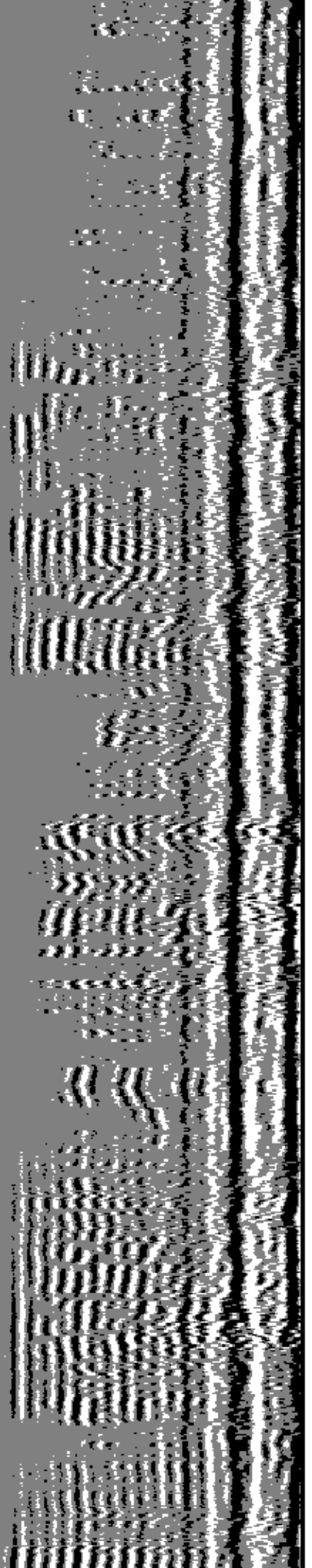
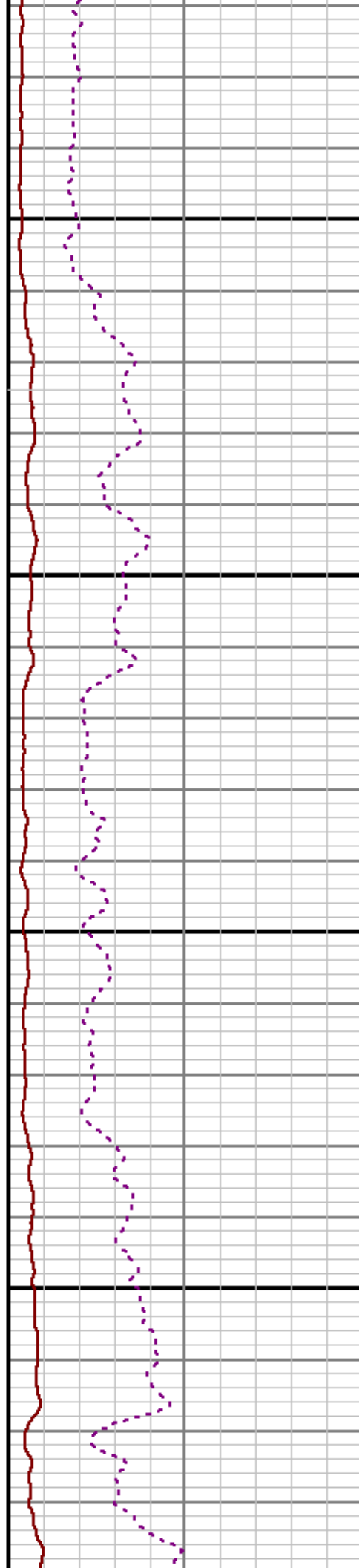
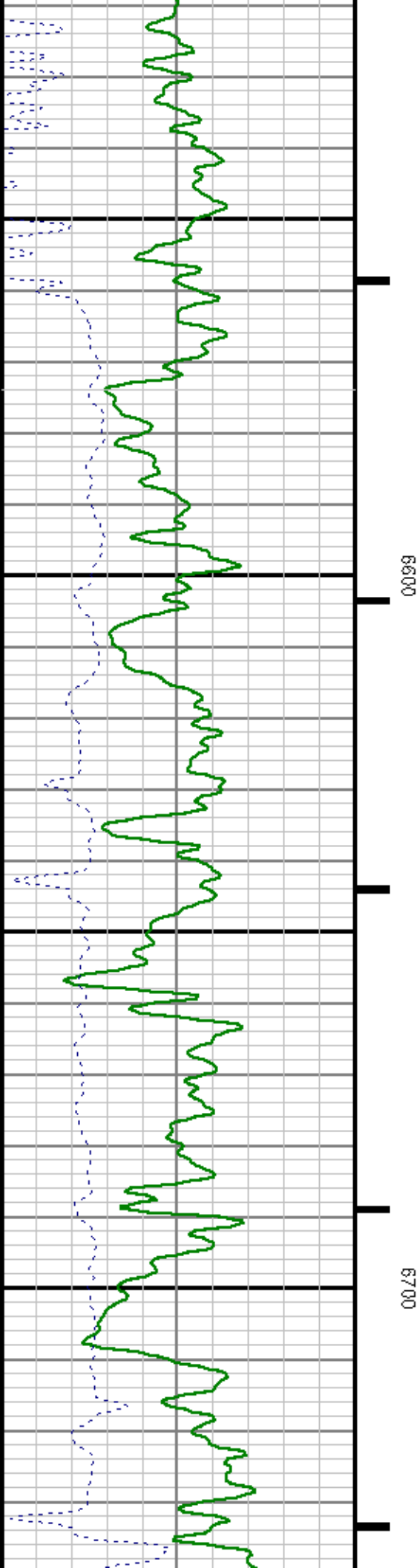


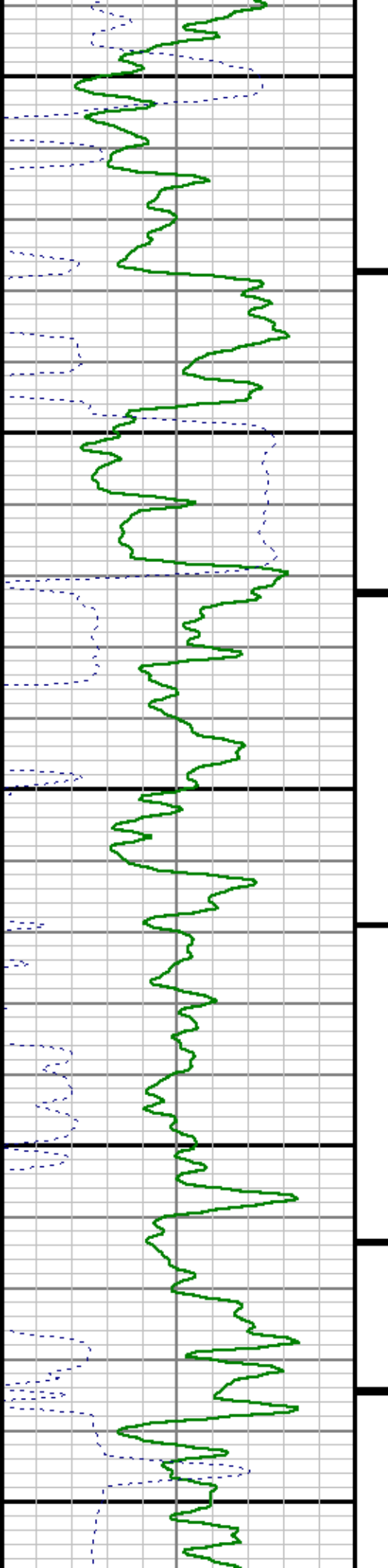






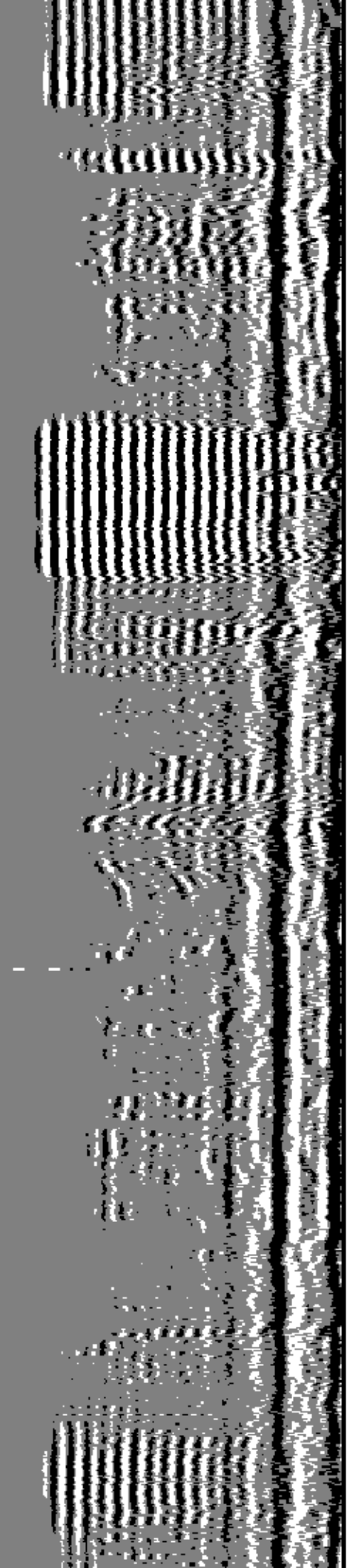
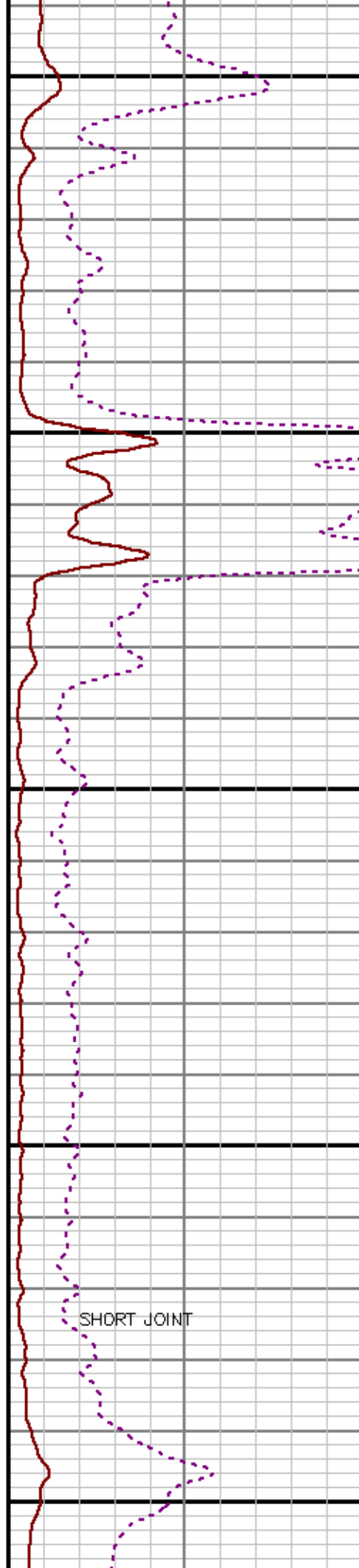


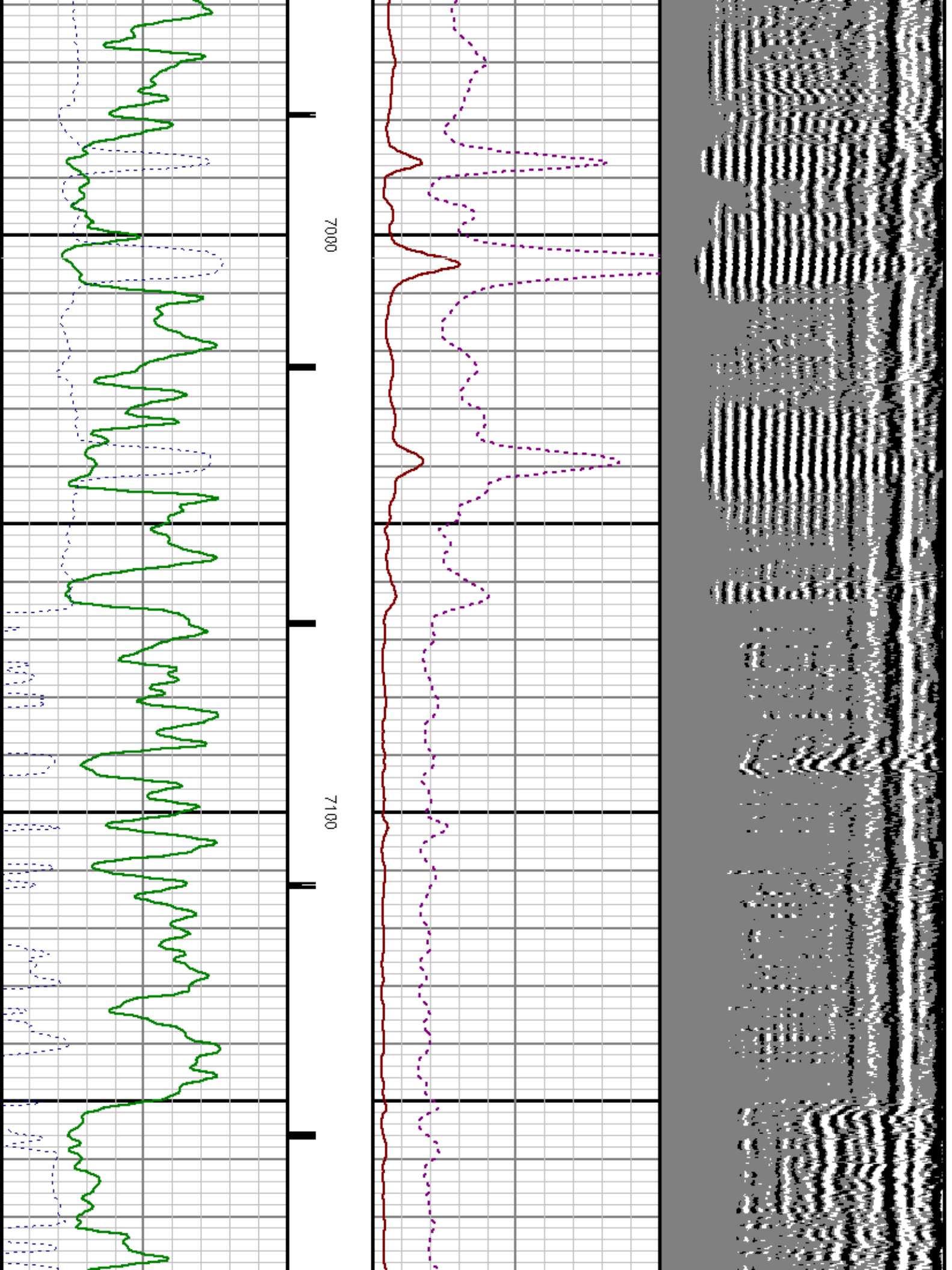


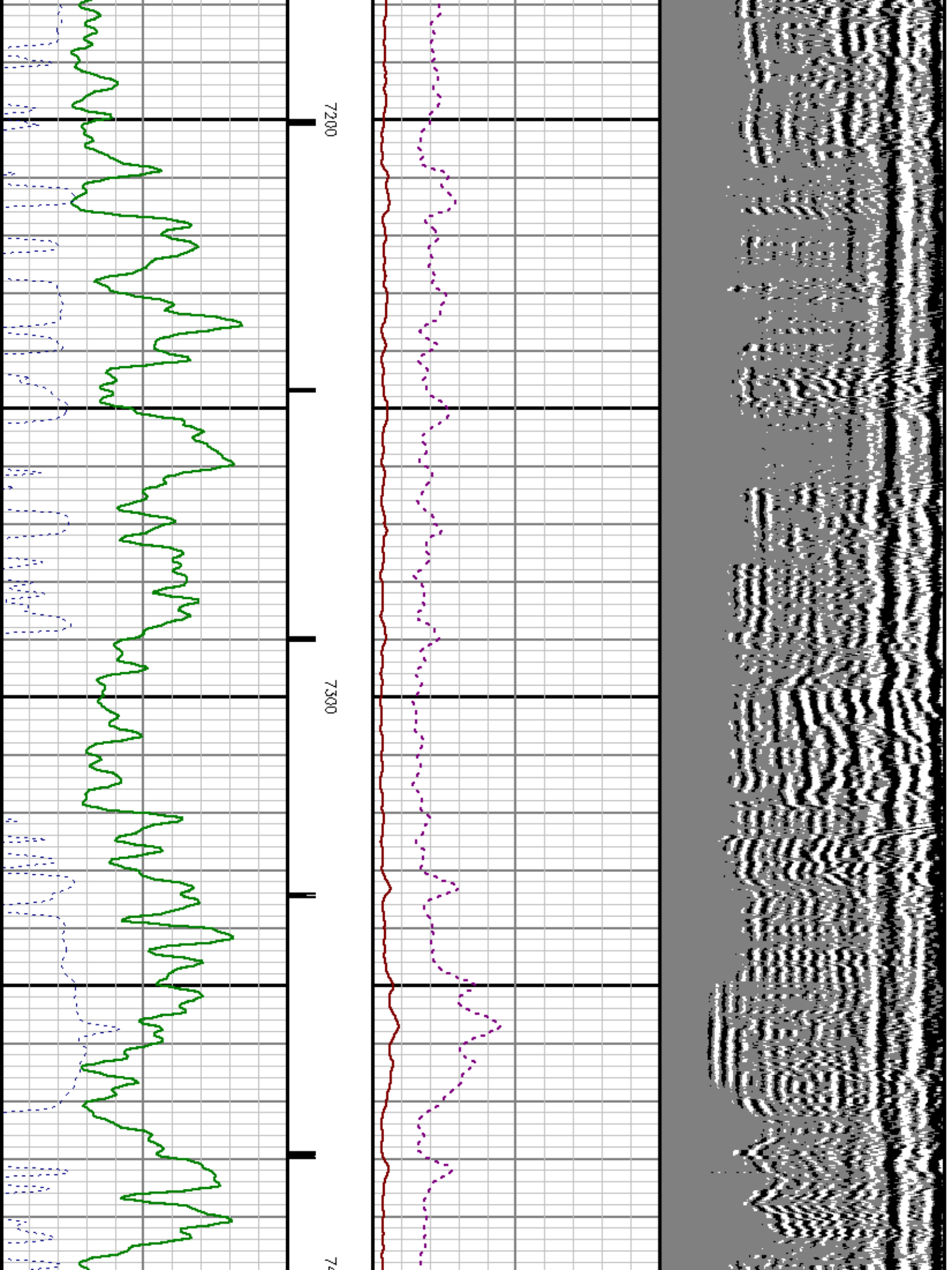


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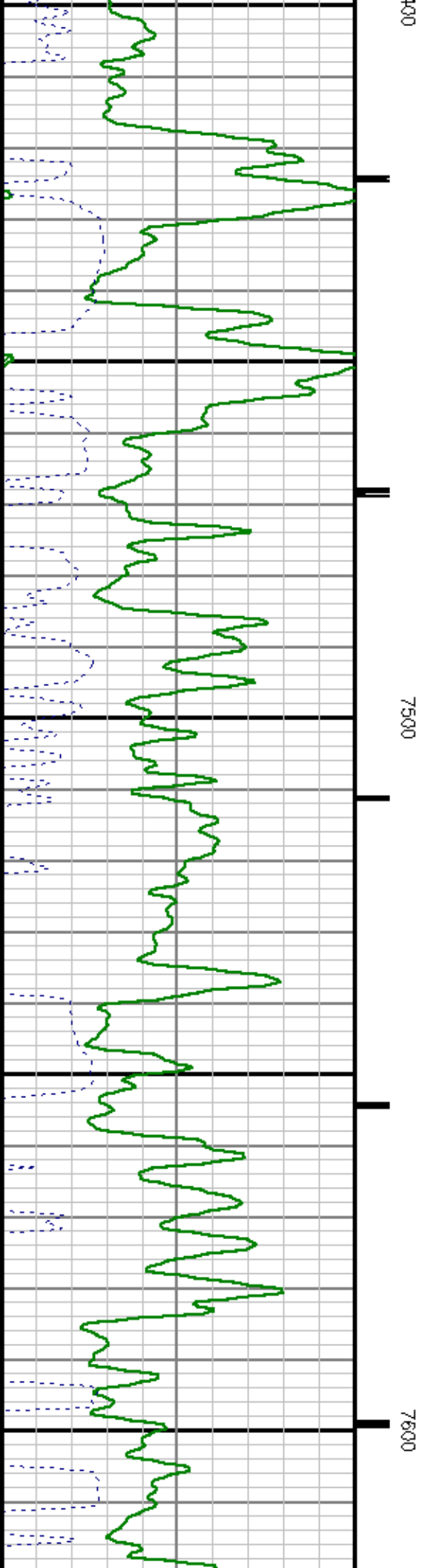
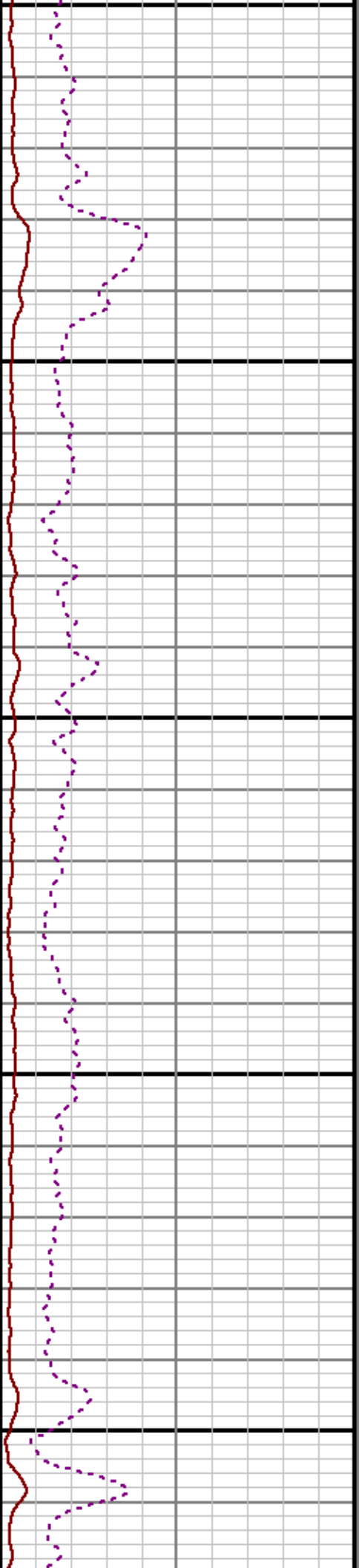
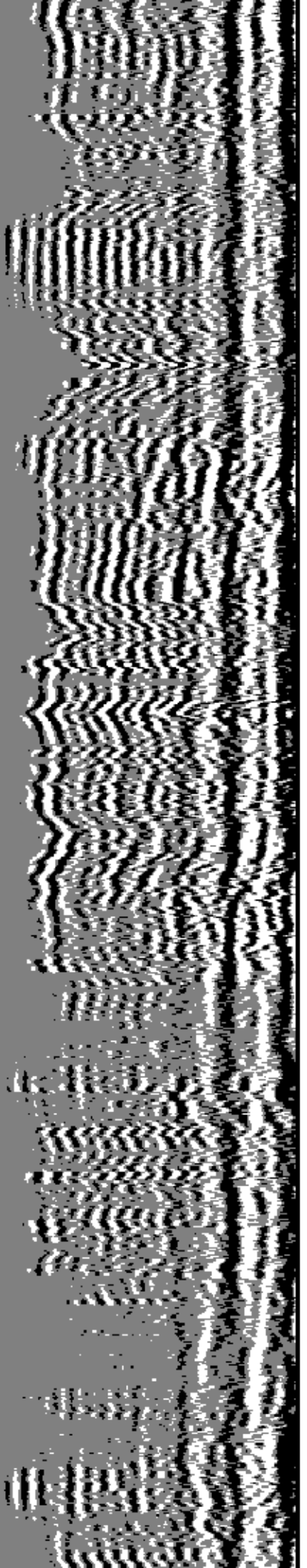
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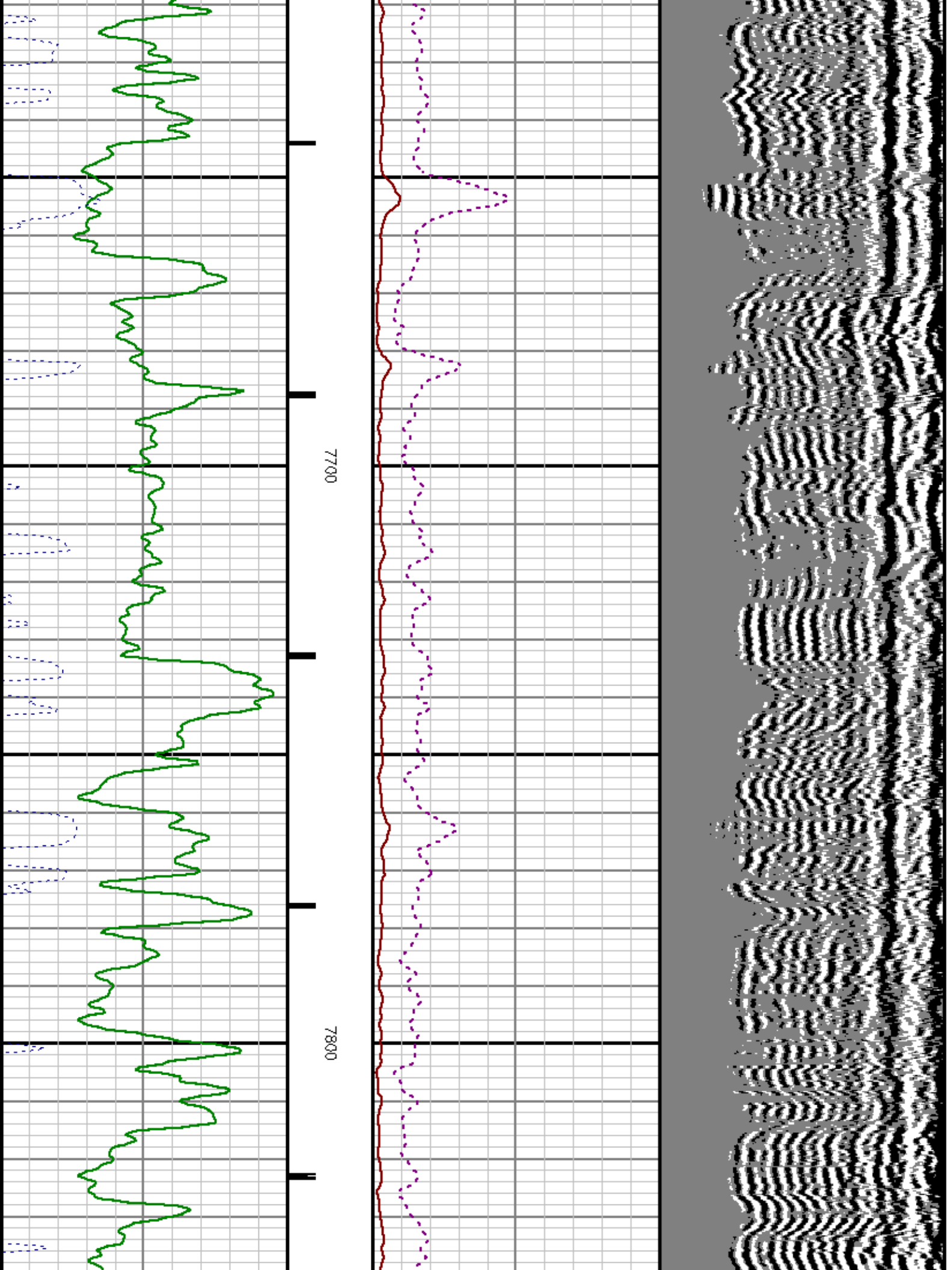


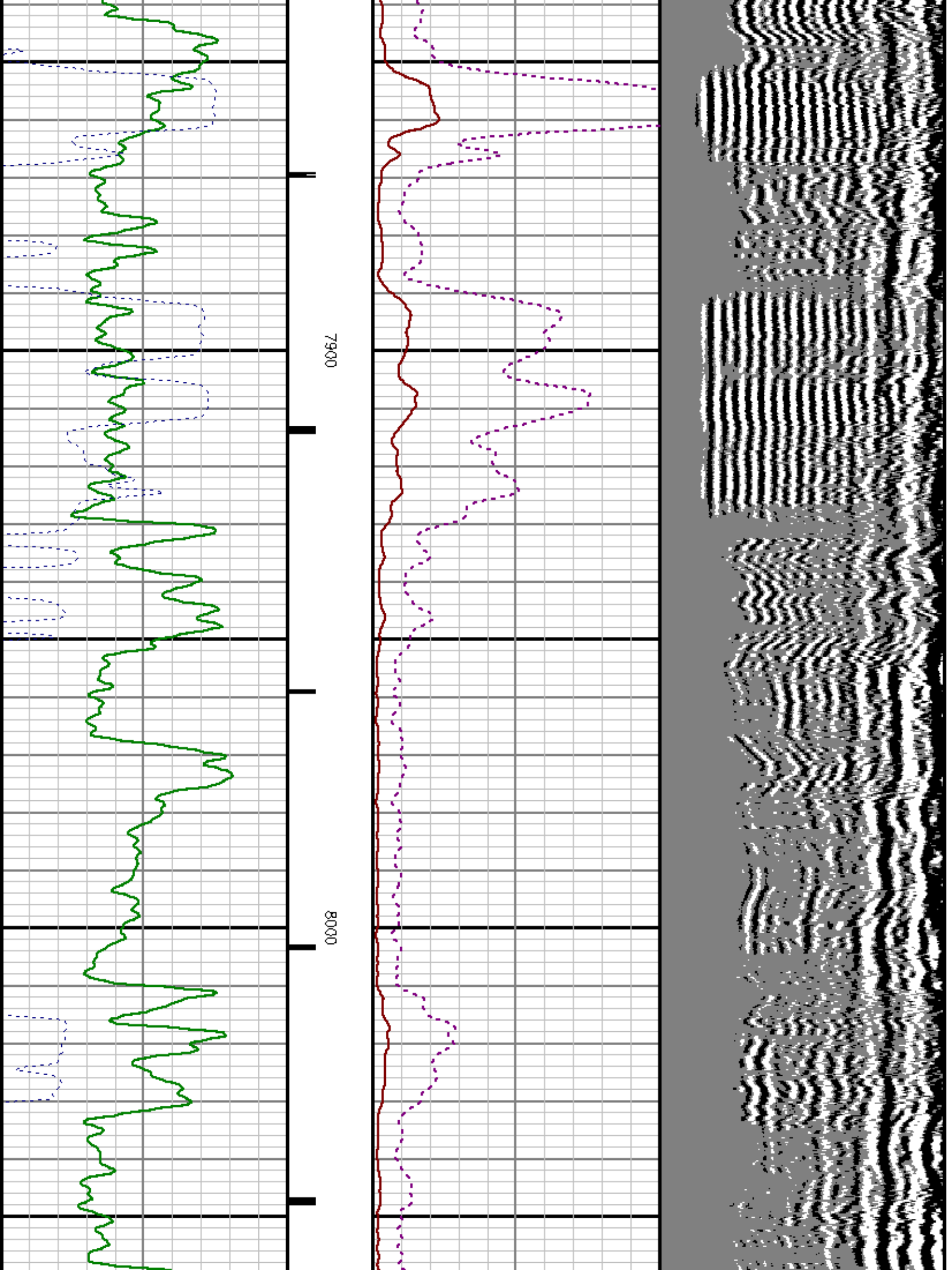


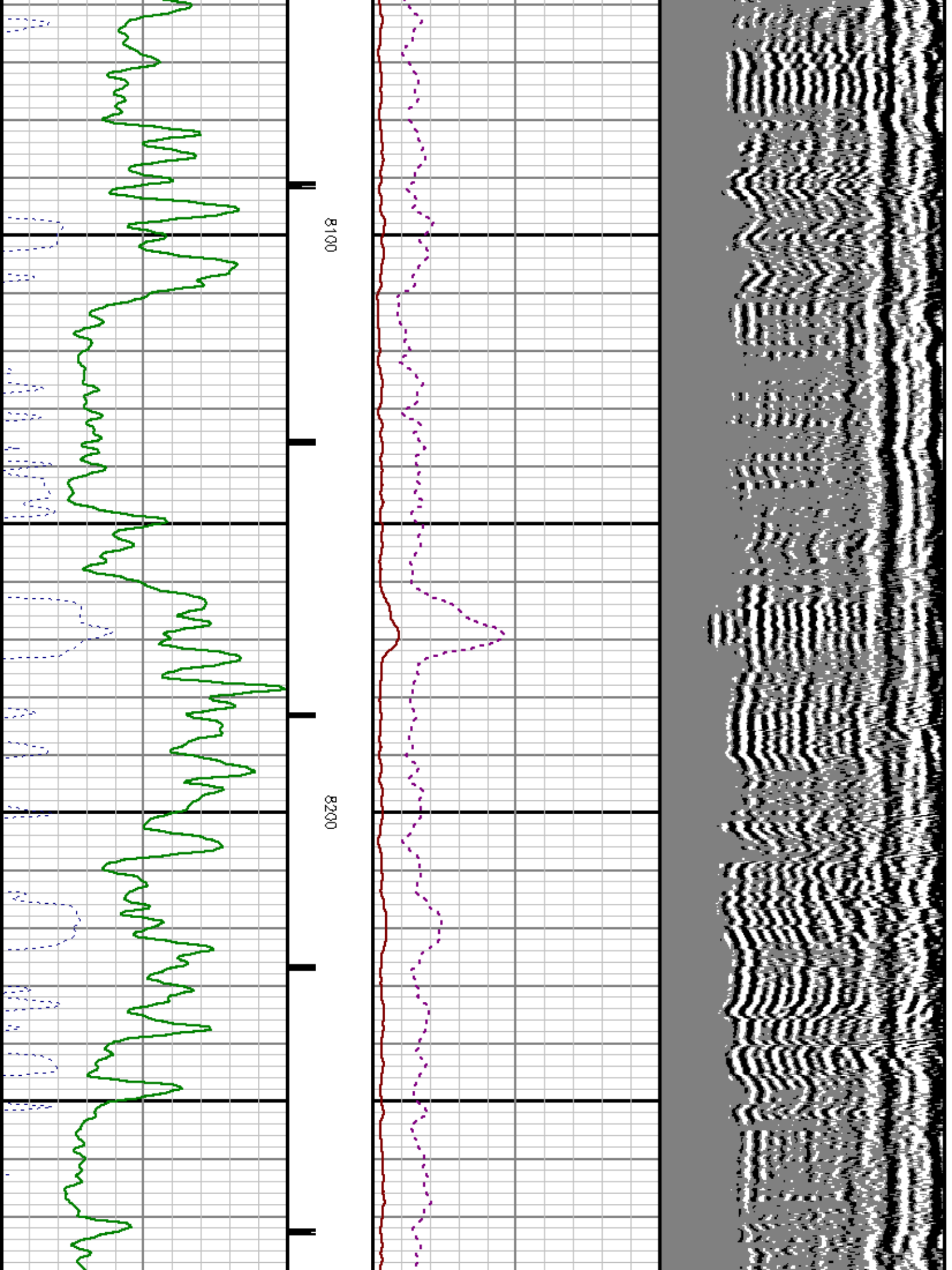




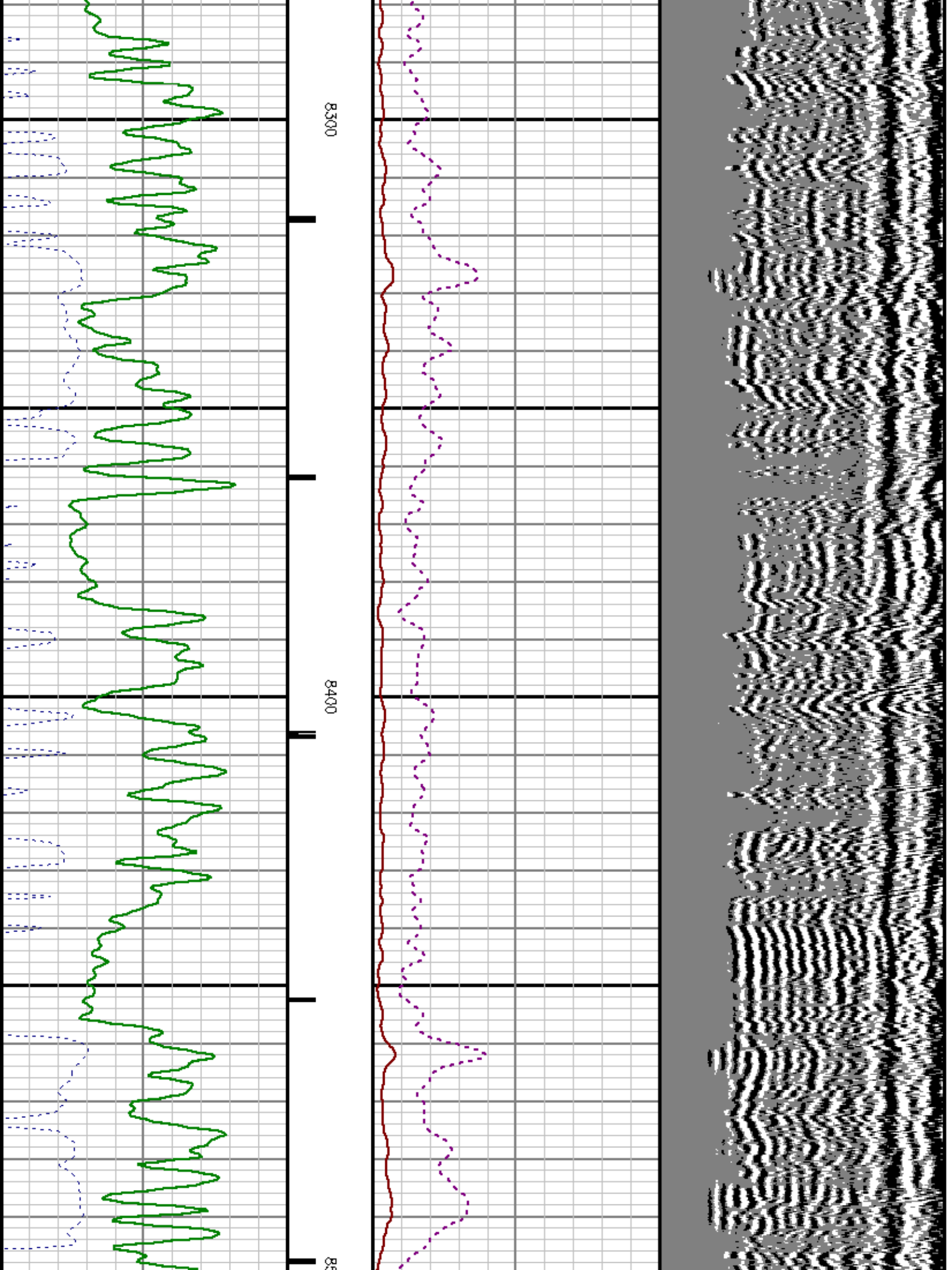


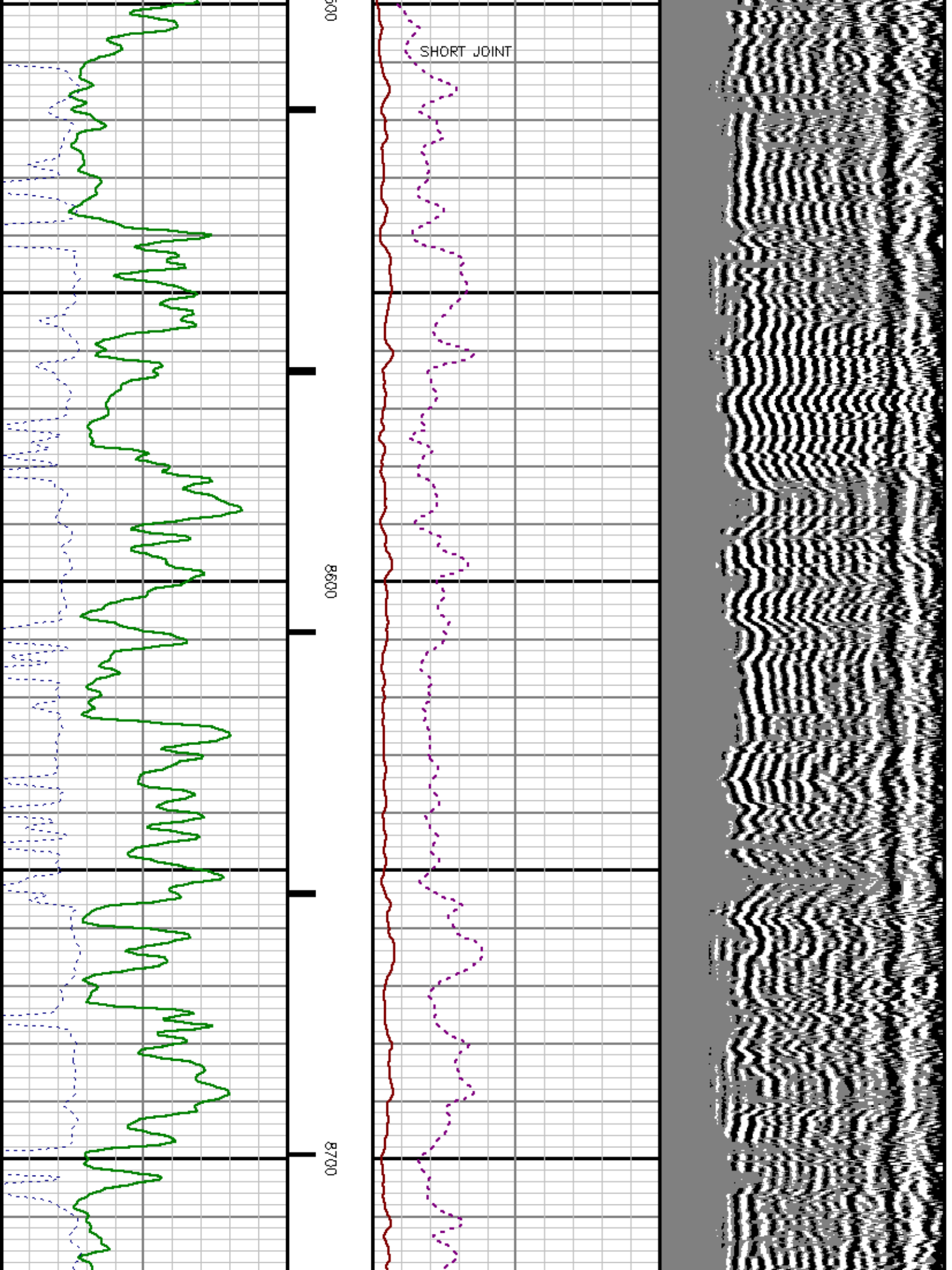


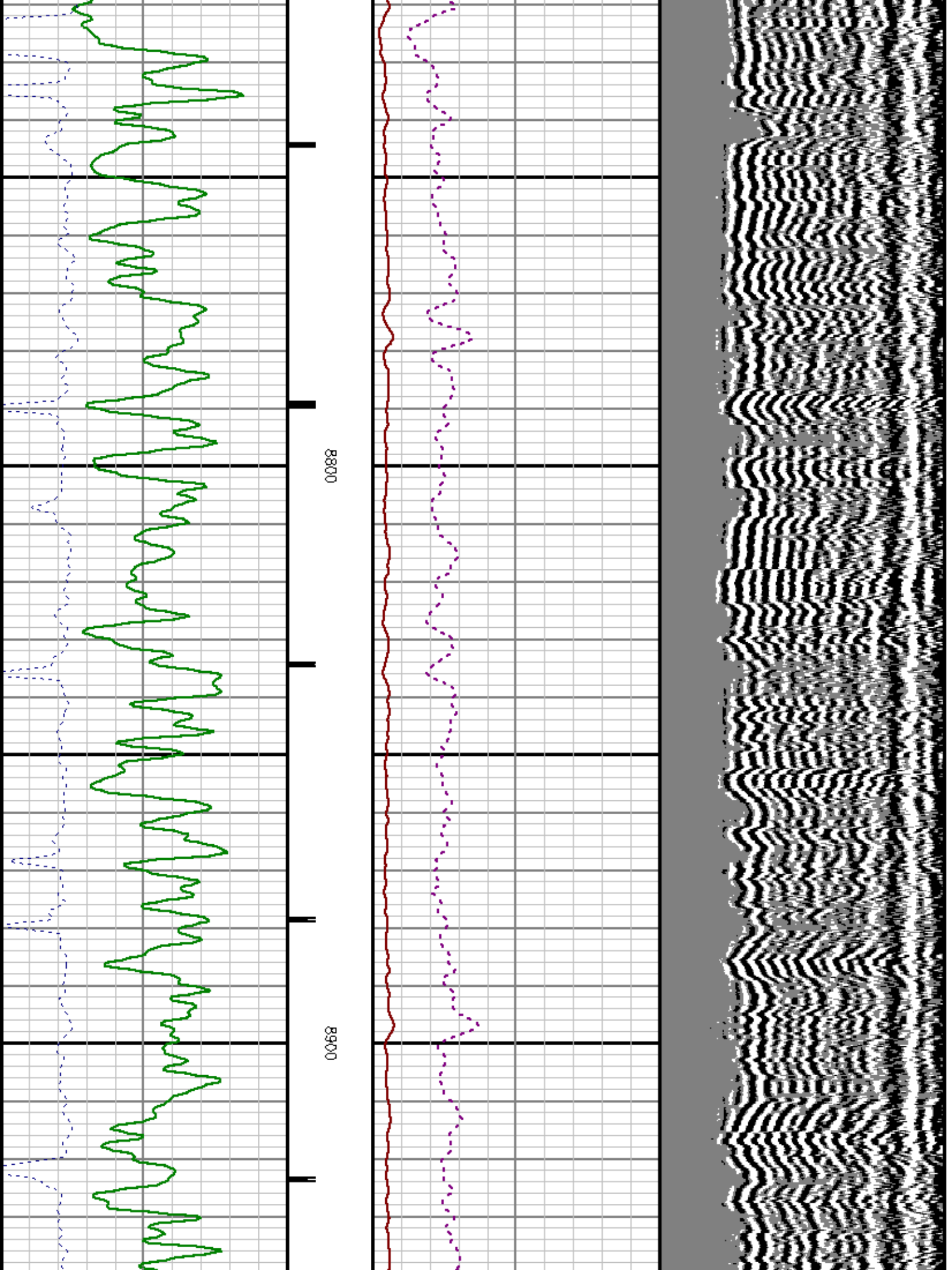




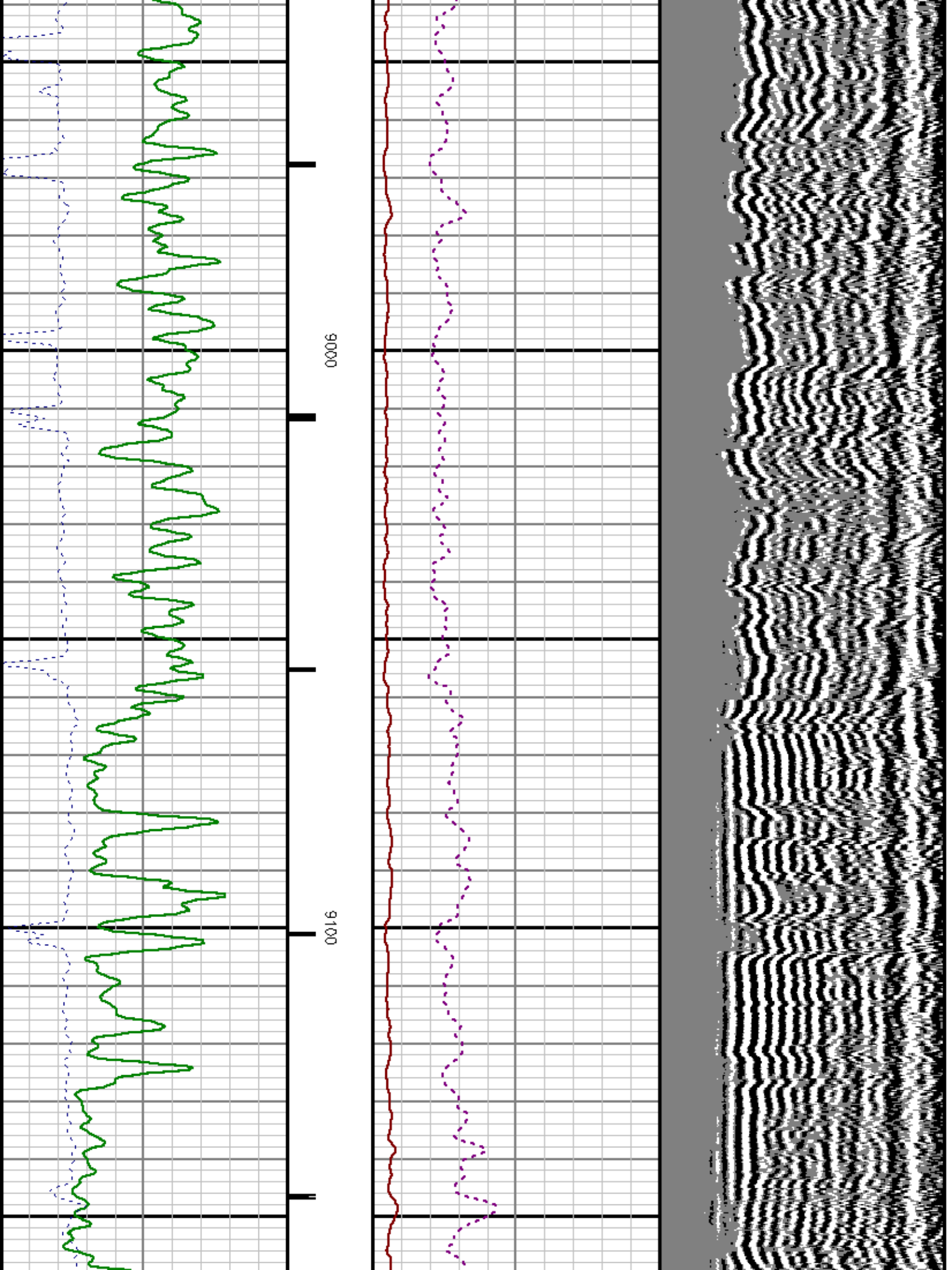


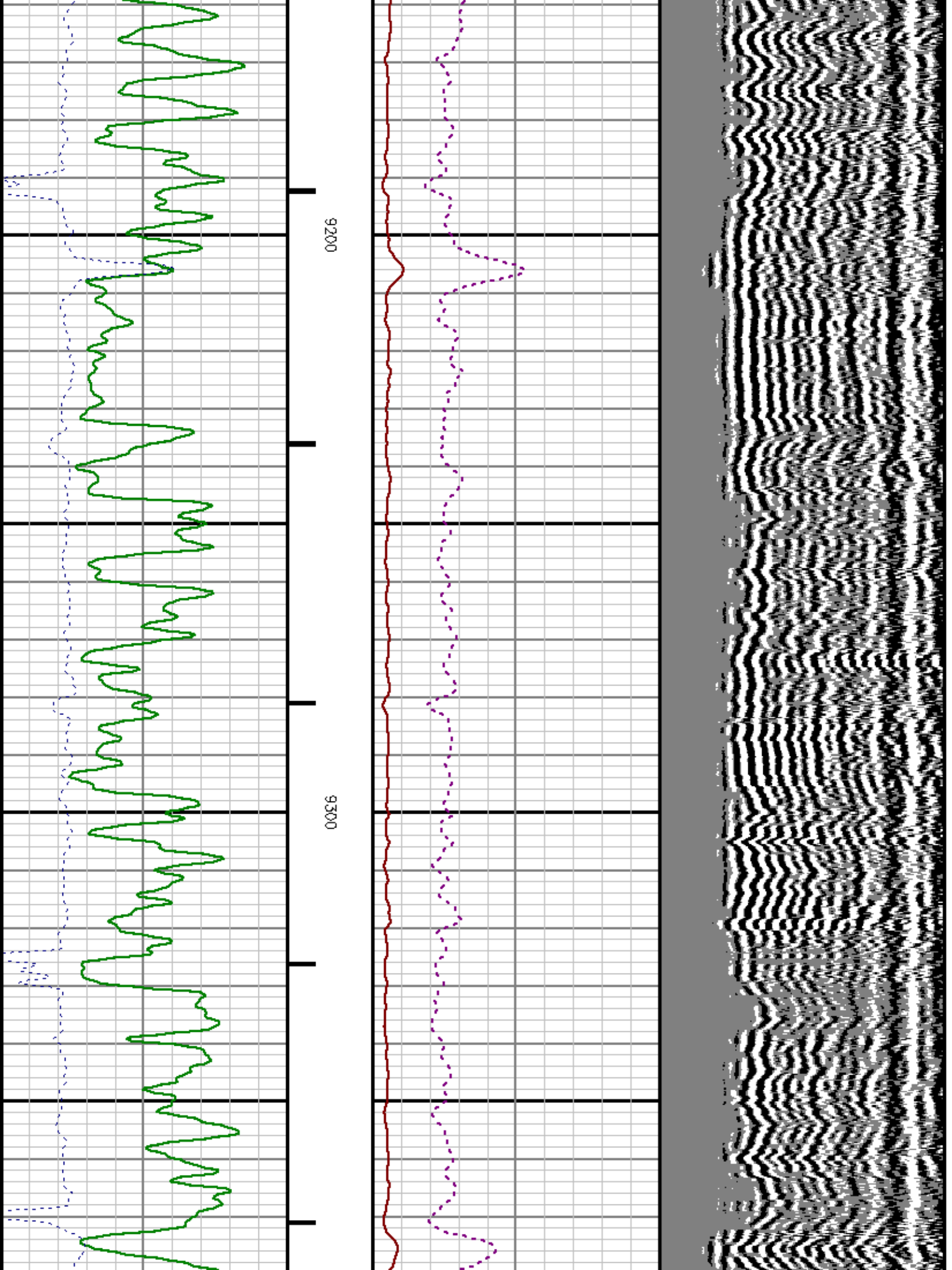




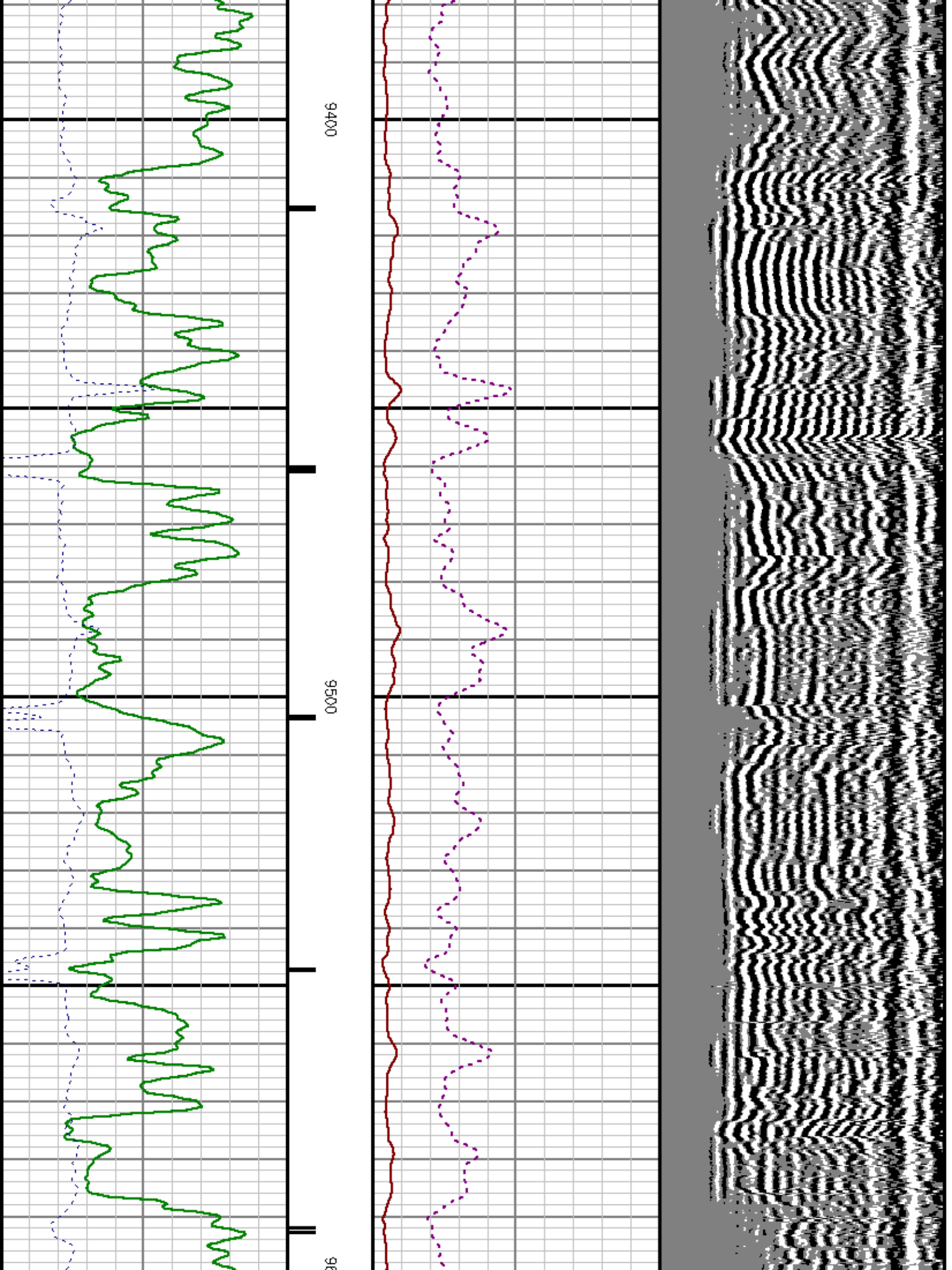


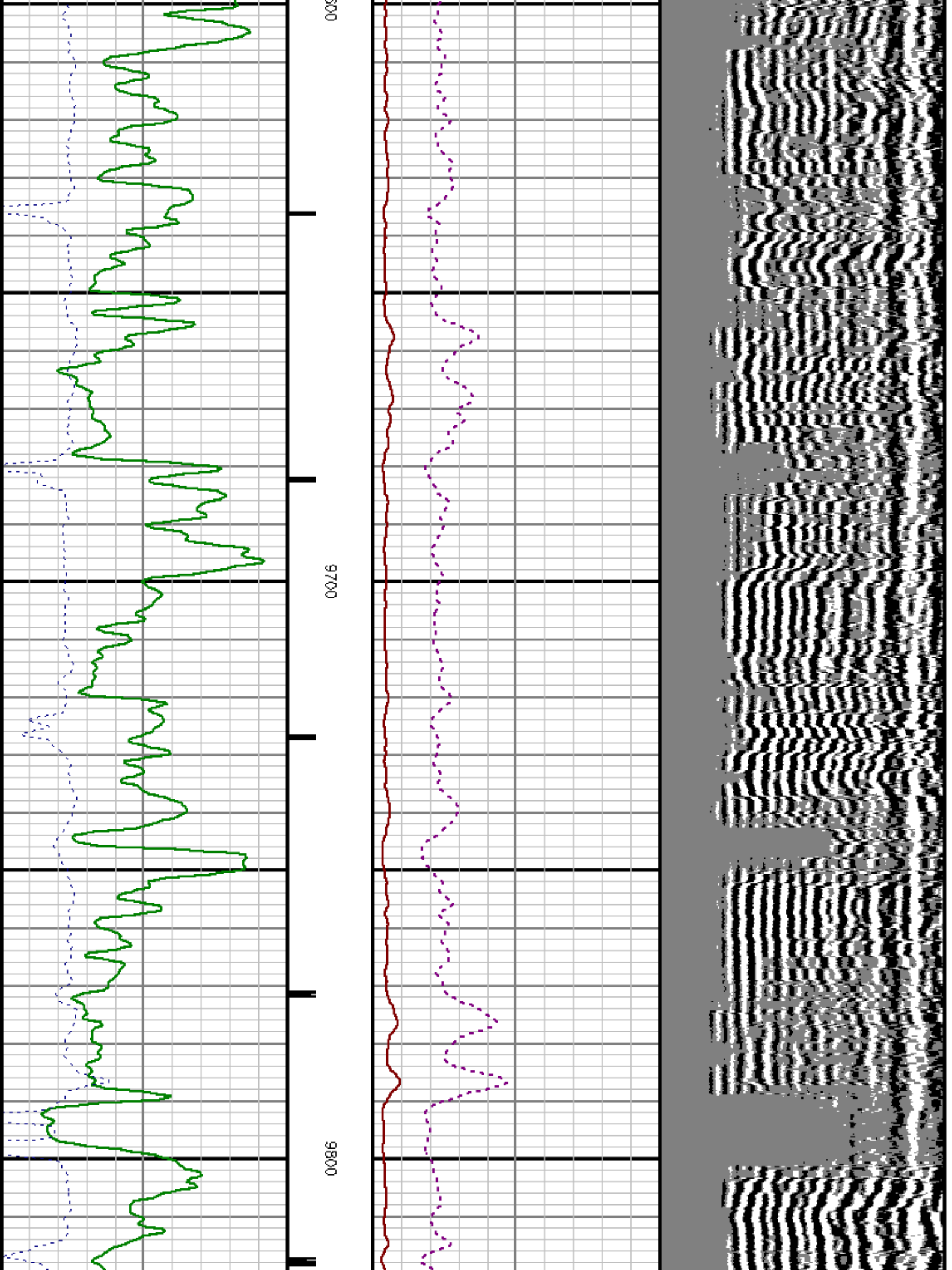


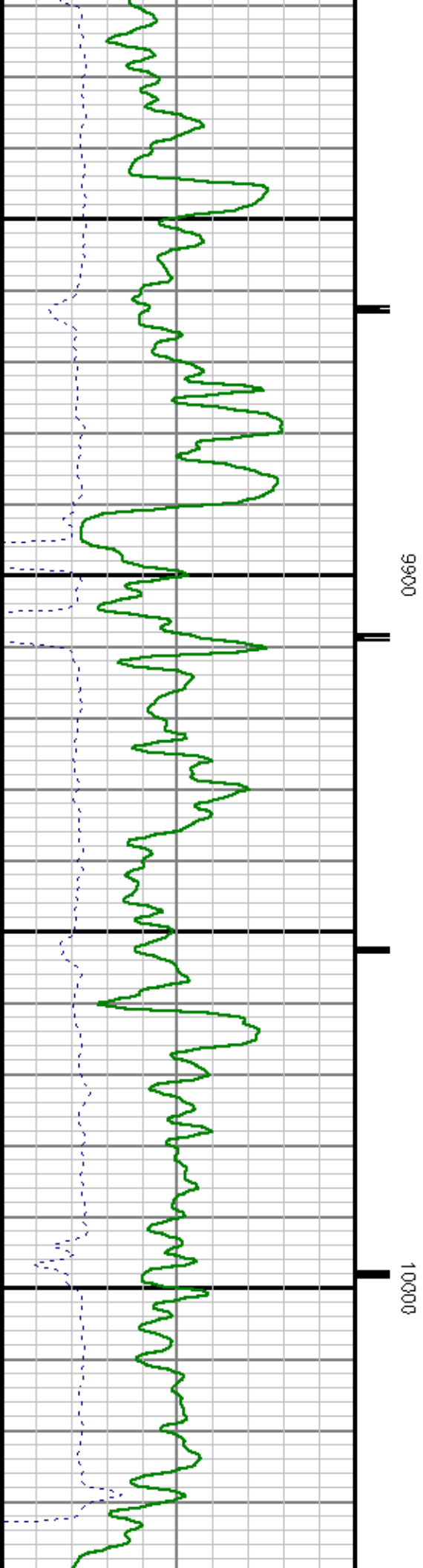
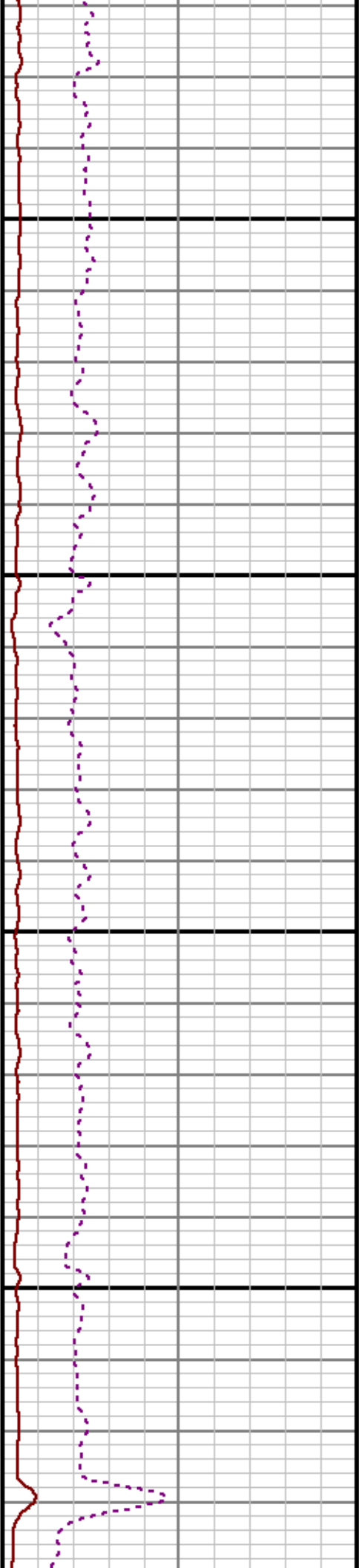
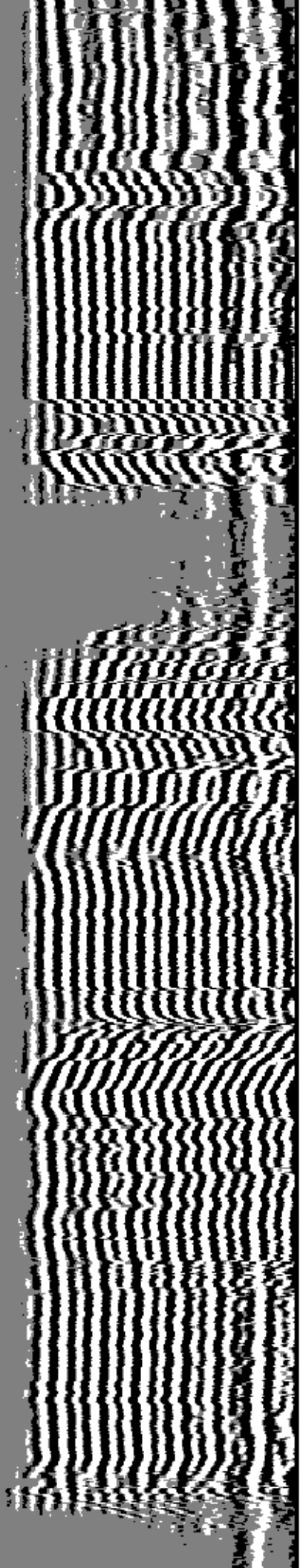


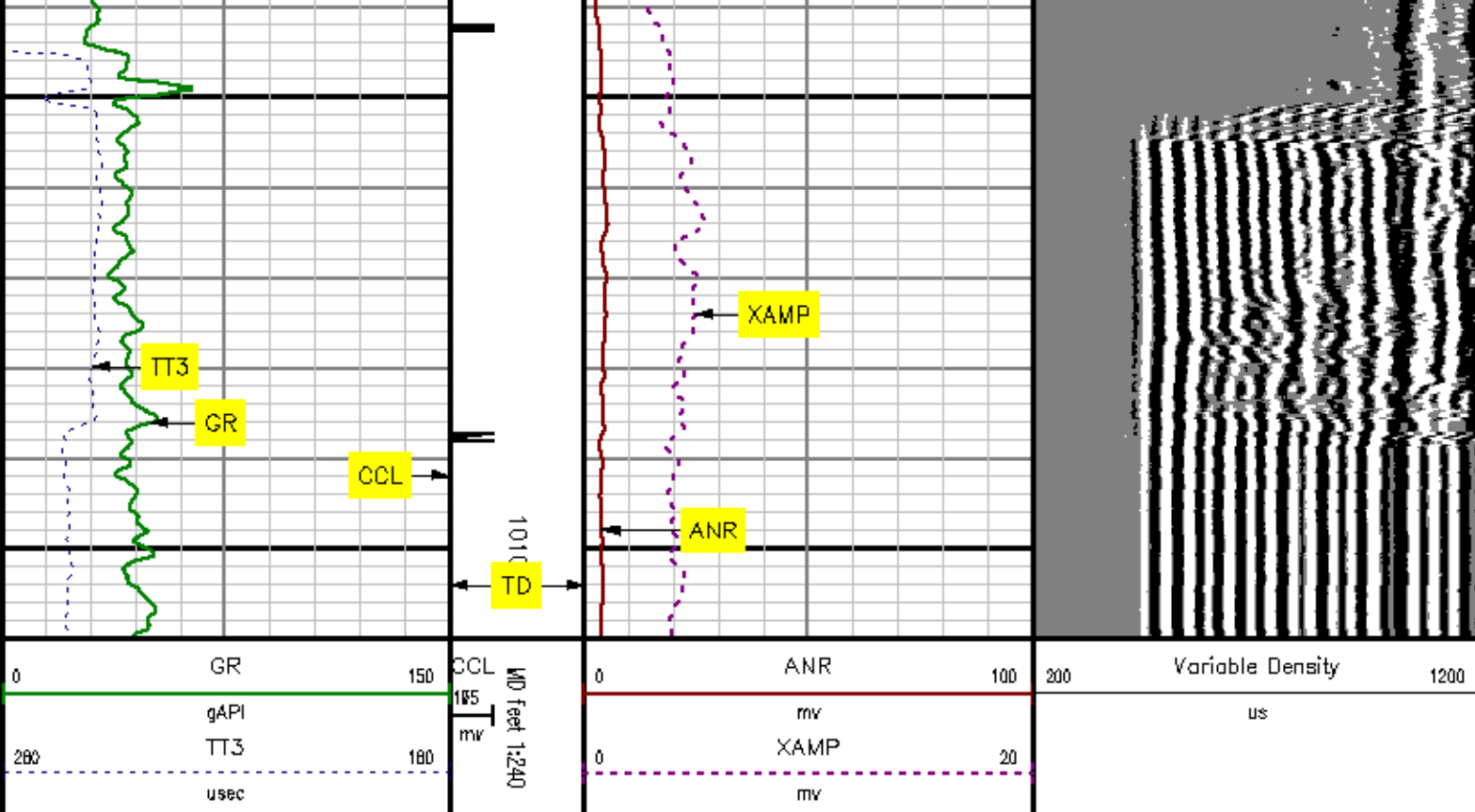












# *MAIN SECTION* *SECONDARY PRESENTATION* *1000 PSI*

| MEASUREMENT TYPE | PARAMETER             | VALUE   | UNITS  | TOP    | BOTTOM    |
|------------------|-----------------------|---------|--------|--------|-----------|
| RAL              | Amp Gate Start Far    | 316.900 | u sec  | 16.749 | 10127.000 |
| RAL              | Amp Gate Start Near   | 200.391 | u sec  | 16.749 | 10127.000 |
| RAL              | Amp Gate Start Radial | 200.391 | u sec  | 16.749 | 10127.000 |
| RAL              | Amp Gate Width Far    | 25.000  | u sec  | 16.749 | 10127.000 |
| RAL              | Amp Gate Width Near   | 25.000  | u sec  | 16.749 | 10127.000 |
| RAL              | Amp Gate Width Radial | 25.000  | u sec  | 16.749 | 10127.000 |
| RAL              | casing od             | 4.500   | inches | 16.749 | 10127.000 |
| RAL              | casing wt             | 11.600  | lbm/ft | 16.749 | 10127.000 |
| RAL              | FB Start Far          | 291.900 | u sec  | 16.749 | 10127.000 |
| RAL              | FB Start Near         | 175.391 | u sec  | 16.749 | 10127.000 |
| RAL              | FB Start Radial       | 175.391 | u sec  | 16.749 | 10127.000 |

|     |                   |         |         |        |           |
|-----|-------------------|---------|---------|--------|-----------|
| RAL | FB Thresh Far     | 15.000  | mv      | 16.749 | 10127.000 |
| RAL | FB Thresh Near    | 10.000  | mv      | 16.749 | 10127.000 |
| RAL | FB Thresh Radial  | 10.000  | mv      | 16.749 | 10127.000 |
| RAL | Fluid Travel Time | 200.000 | usec/ft | 16.749 | 10127.000 |

## DEPTH OFFSETS

(for Acquired Curves)

| SERIES | DEPTH OFFSET | ACQUIRED CURVES |      |      |      |      |      |
|--------|--------------|-----------------|------|------|------|------|------|
|        |              | ACAL            | ANR  | AR1  | AR2  | AR3  | AR4  |
| 1426XA | -15.360      | AR5             | AR6  | AR7  | AR8  | CHV  | FPR2 |
|        |              | FPR3            | FPR5 | TT3  | TTR1 | TTR2 | TTR3 |
|        |              | TTR4            | TTR5 | TTR6 | TTR7 | TTR8 | XAMP |
| 1426XA | -14.360      | AFAR            | SIG  | TT5  |      |      |      |
| 1426XA | -7.250       | CCL             |      |      |      |      |      |
| 1426XA | -5.390       | GR              |      |      |      |      |      |
| 1426XA | 0.000        | NEU             |      |      |      |      |      |

Created by : MIXED

Plotted by : PlotMgr, v5.4.5D4

Company : MARATHON OIL COMPANY

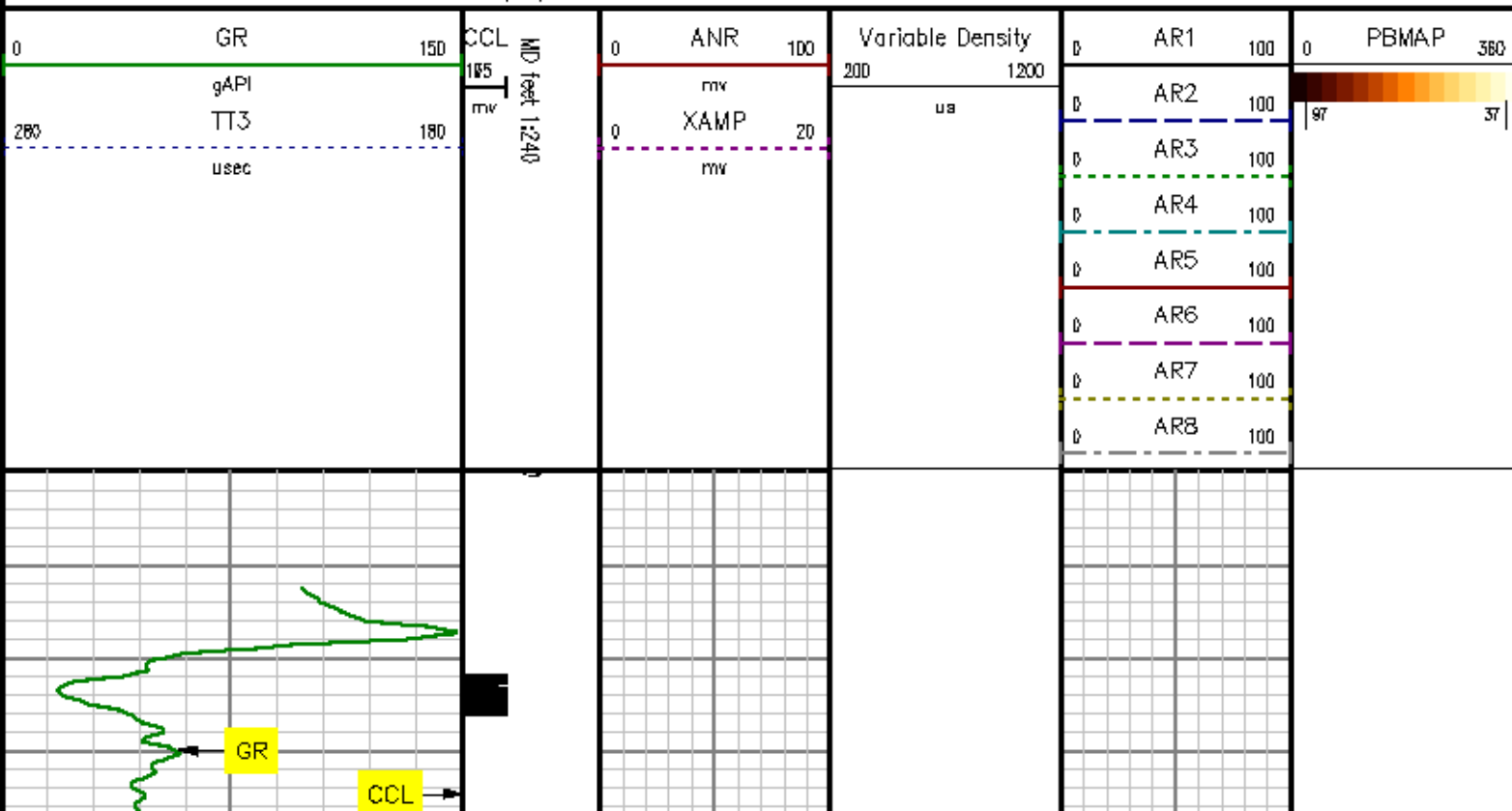
Well : 696-5C-13

File Name : D:\Welldata\13RAD\MAIN.XTF

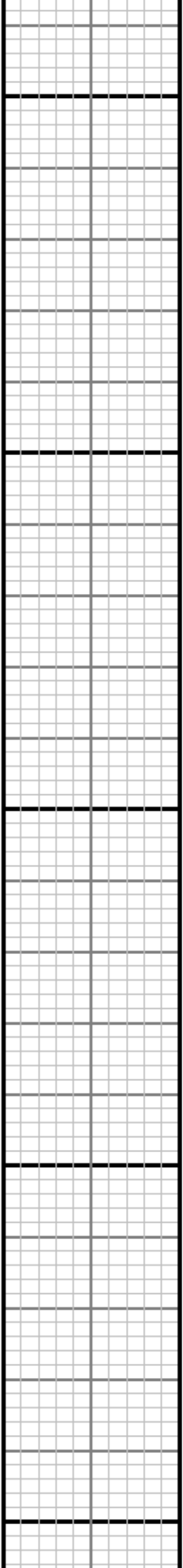
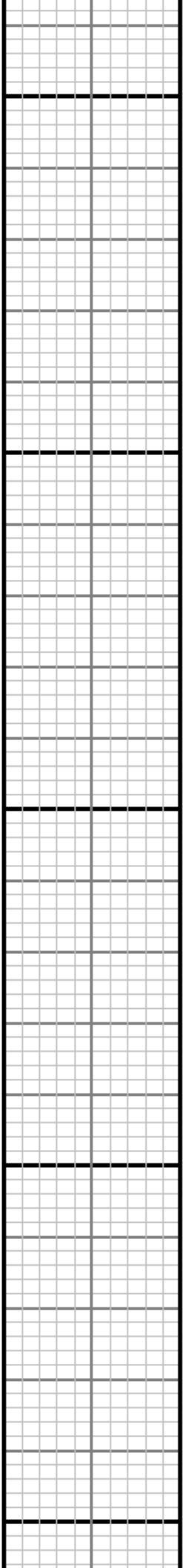
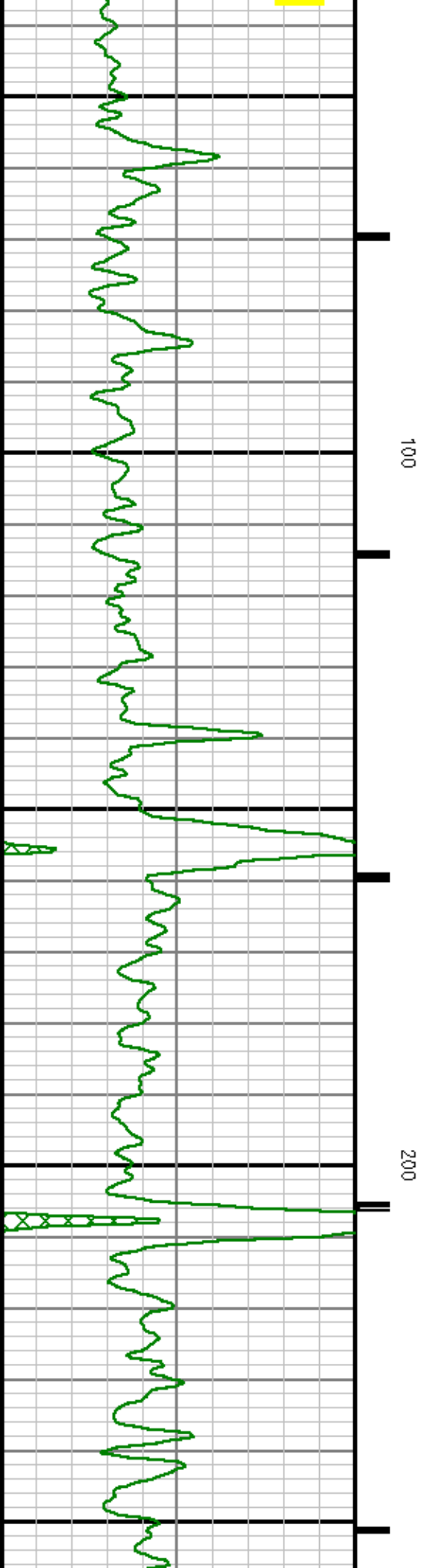
Mode : PlotMgr 5.4.5D4

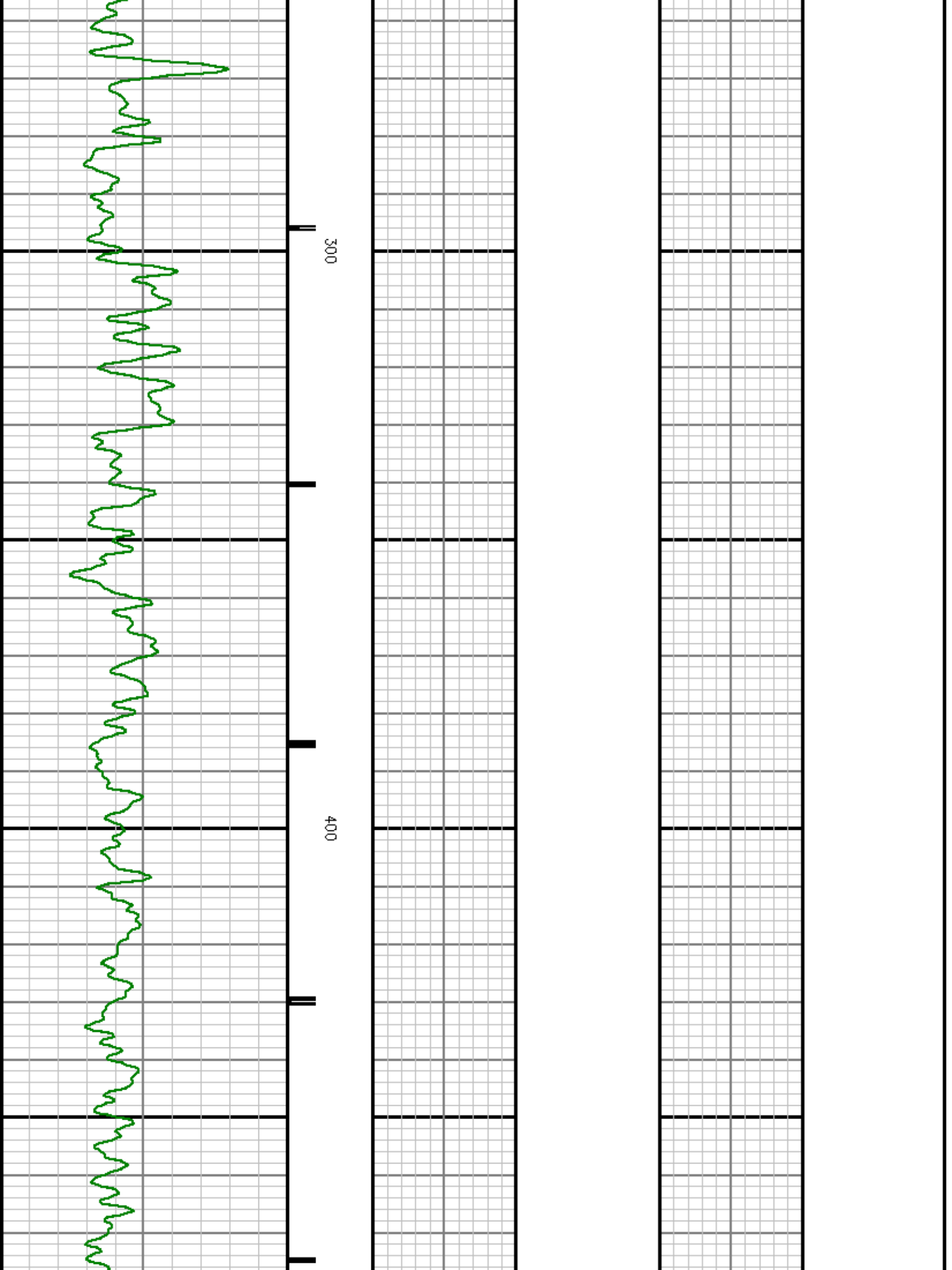
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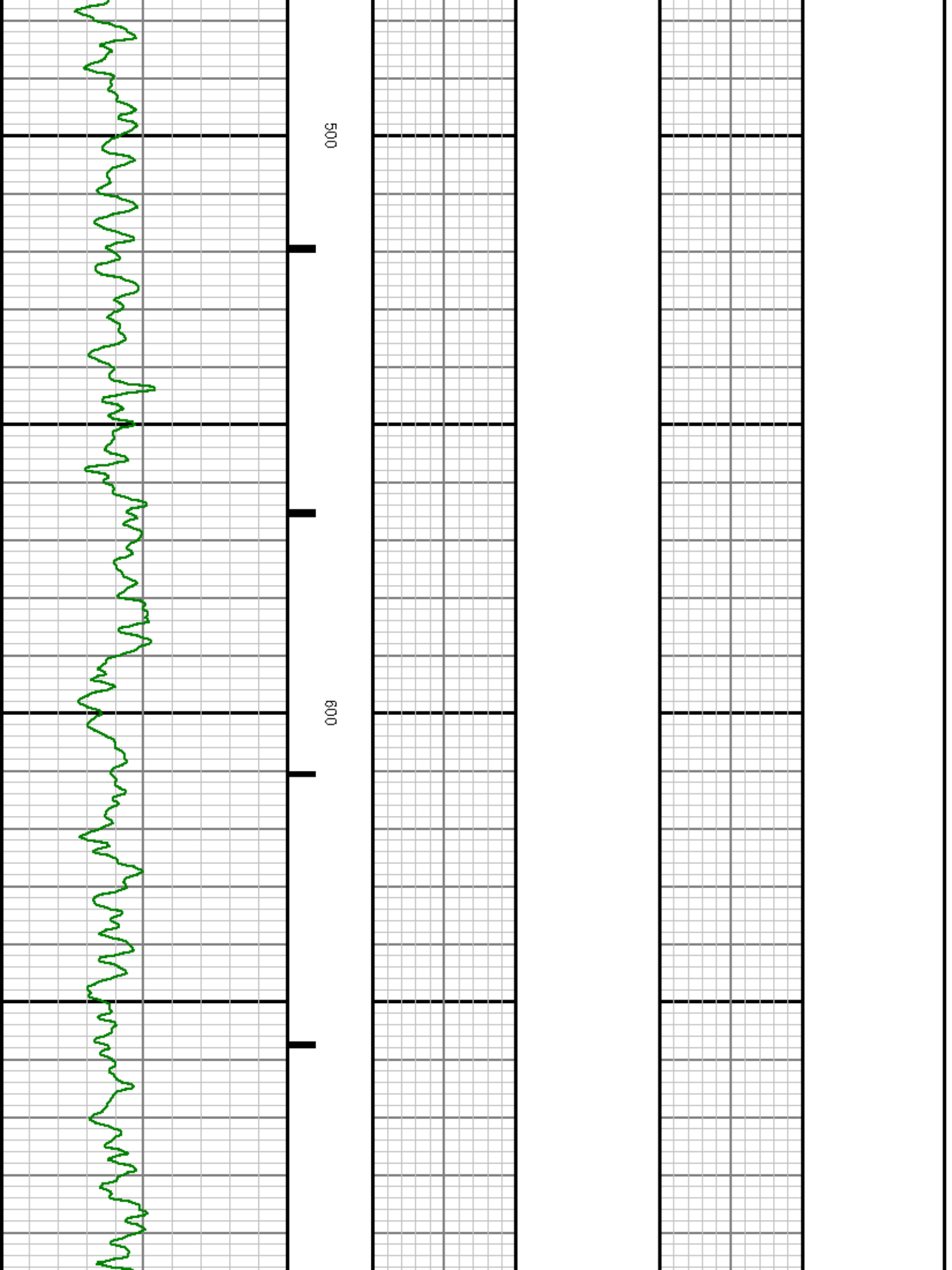
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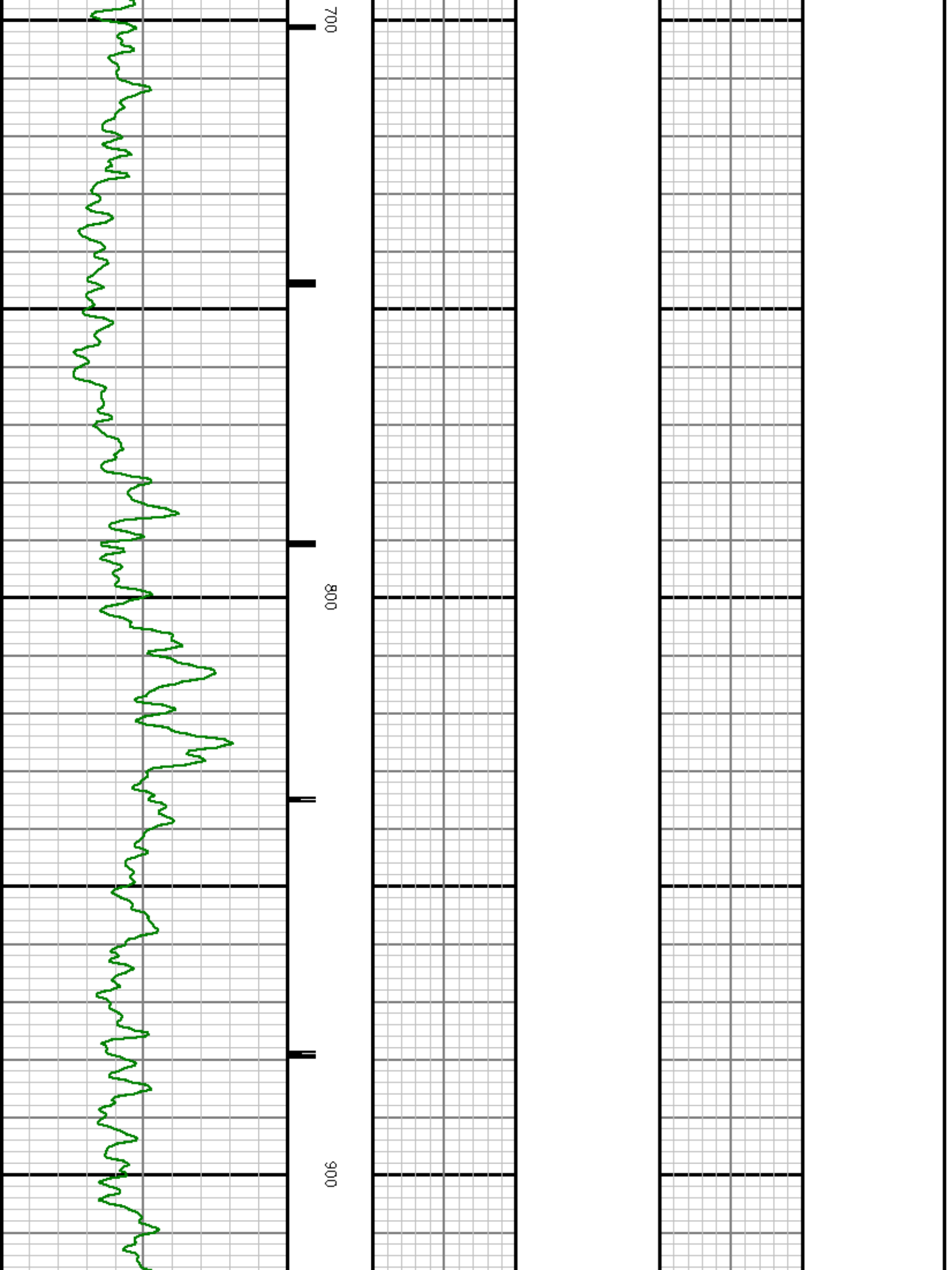


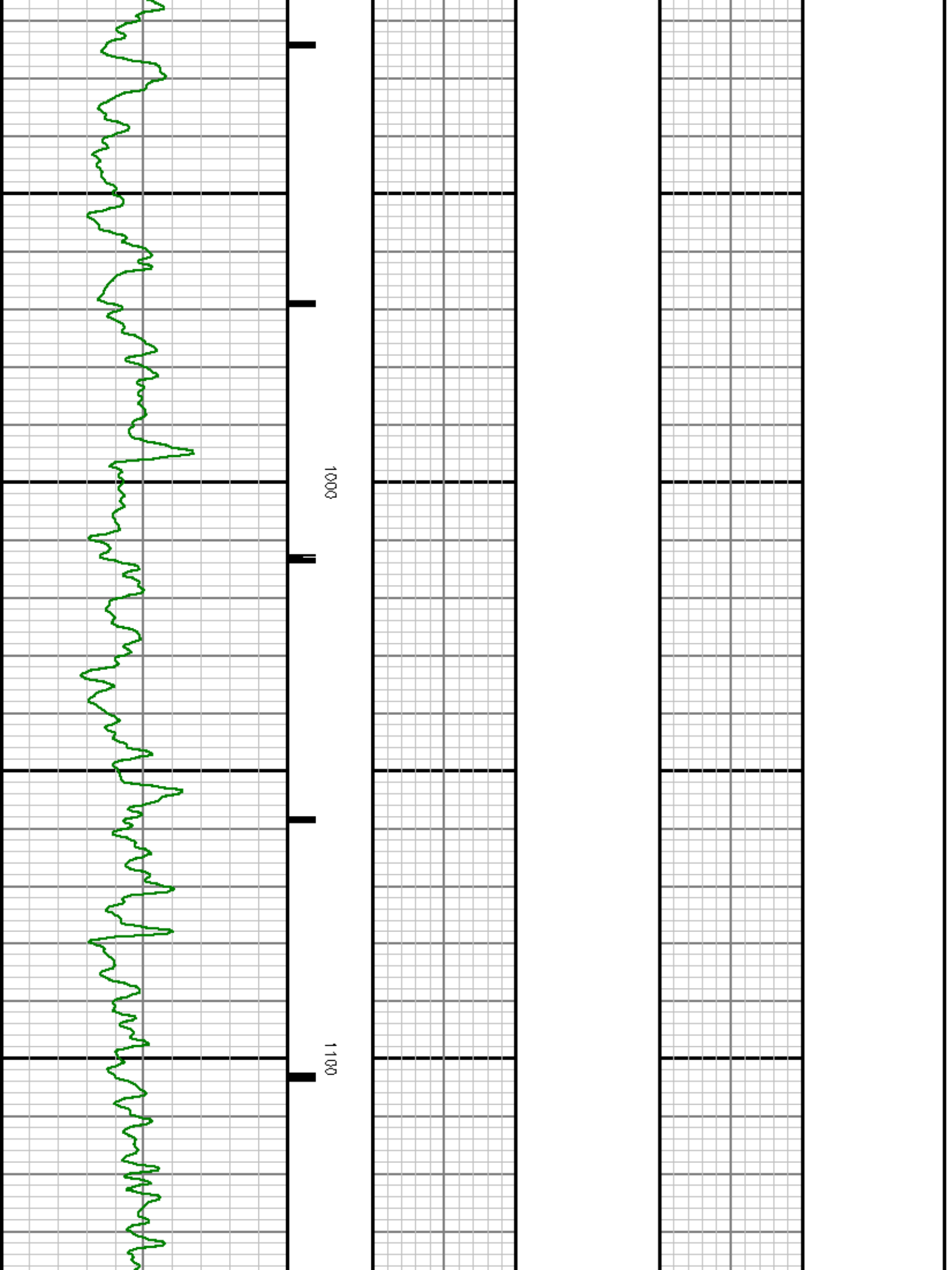




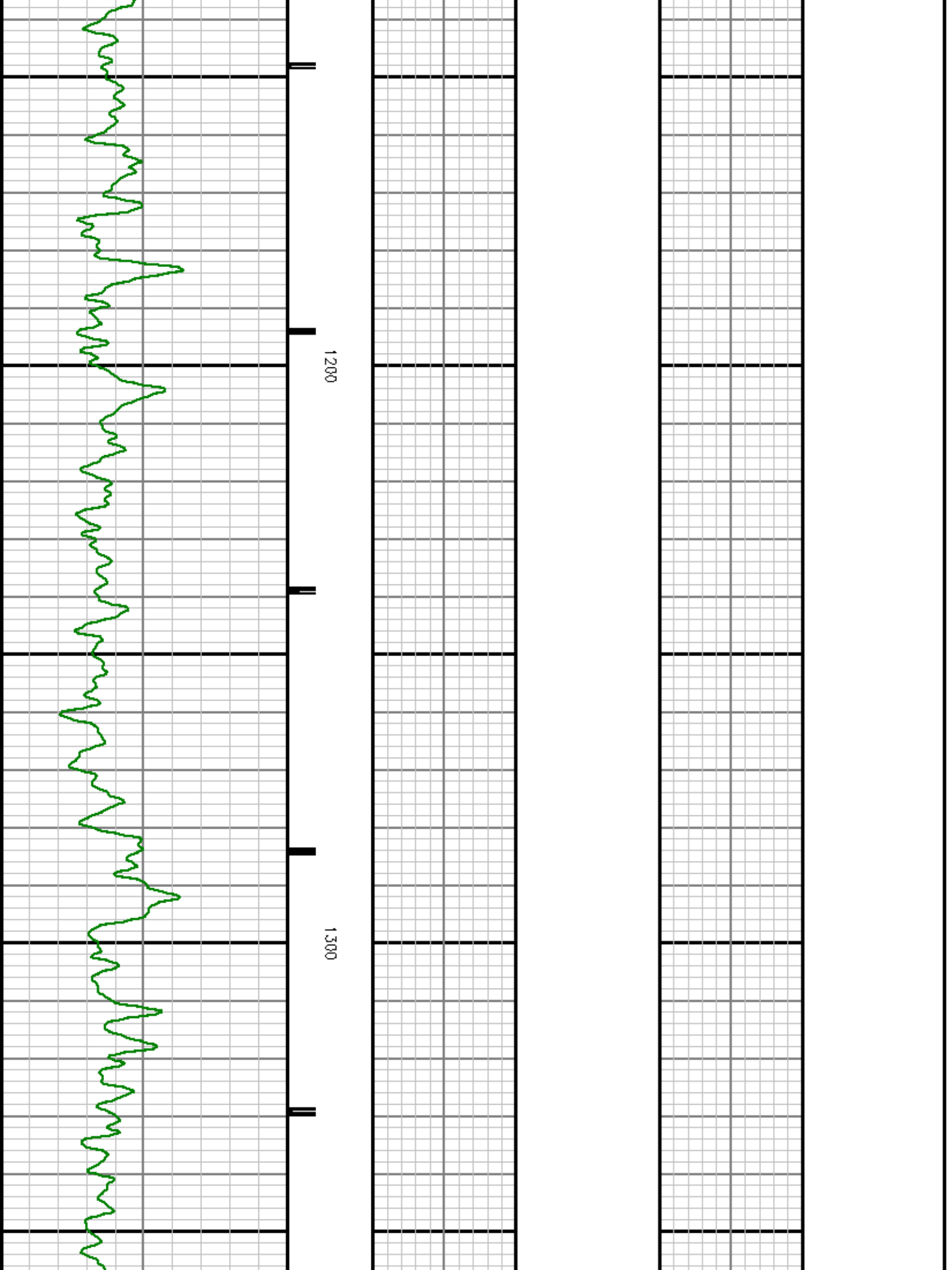


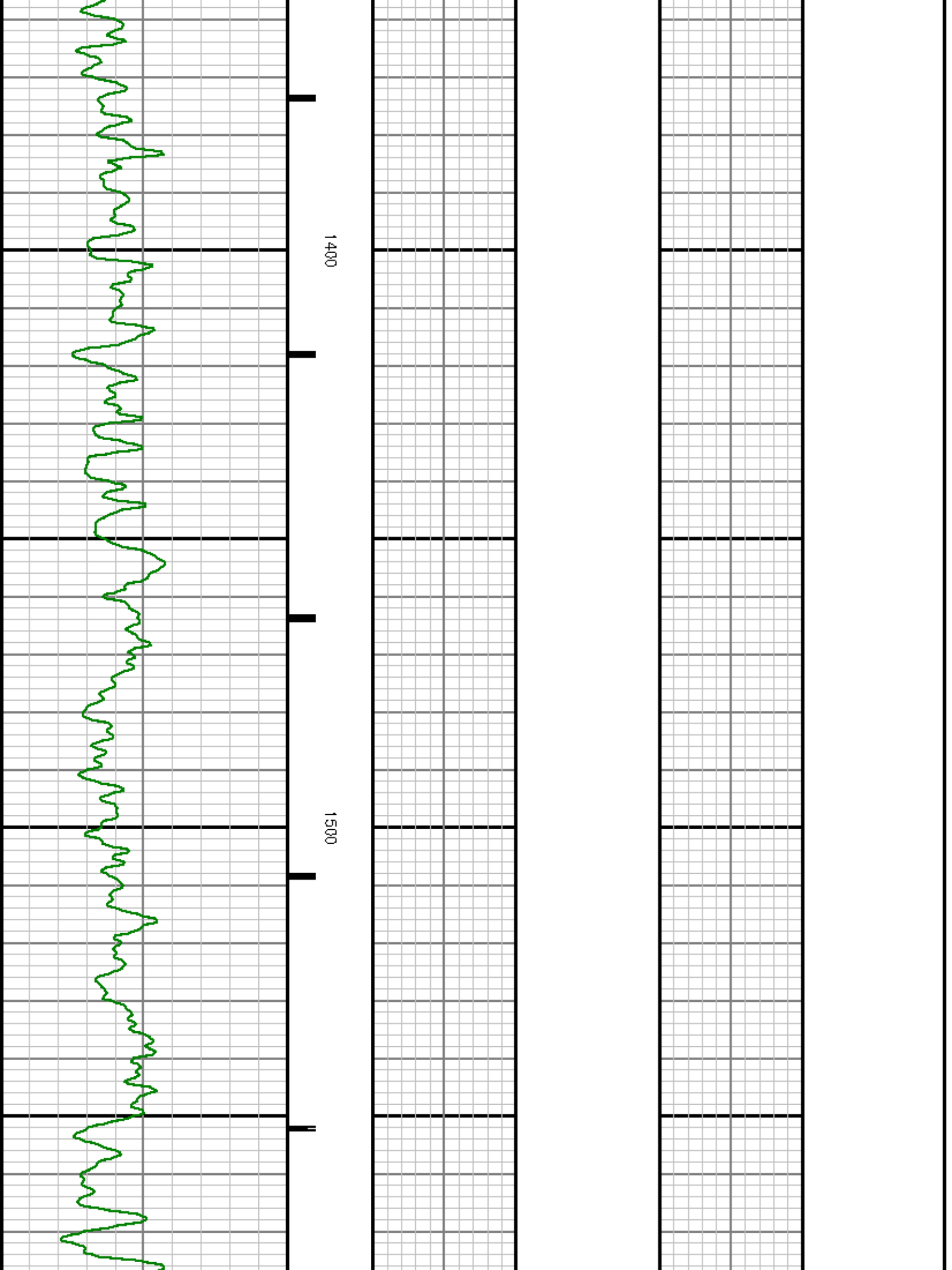


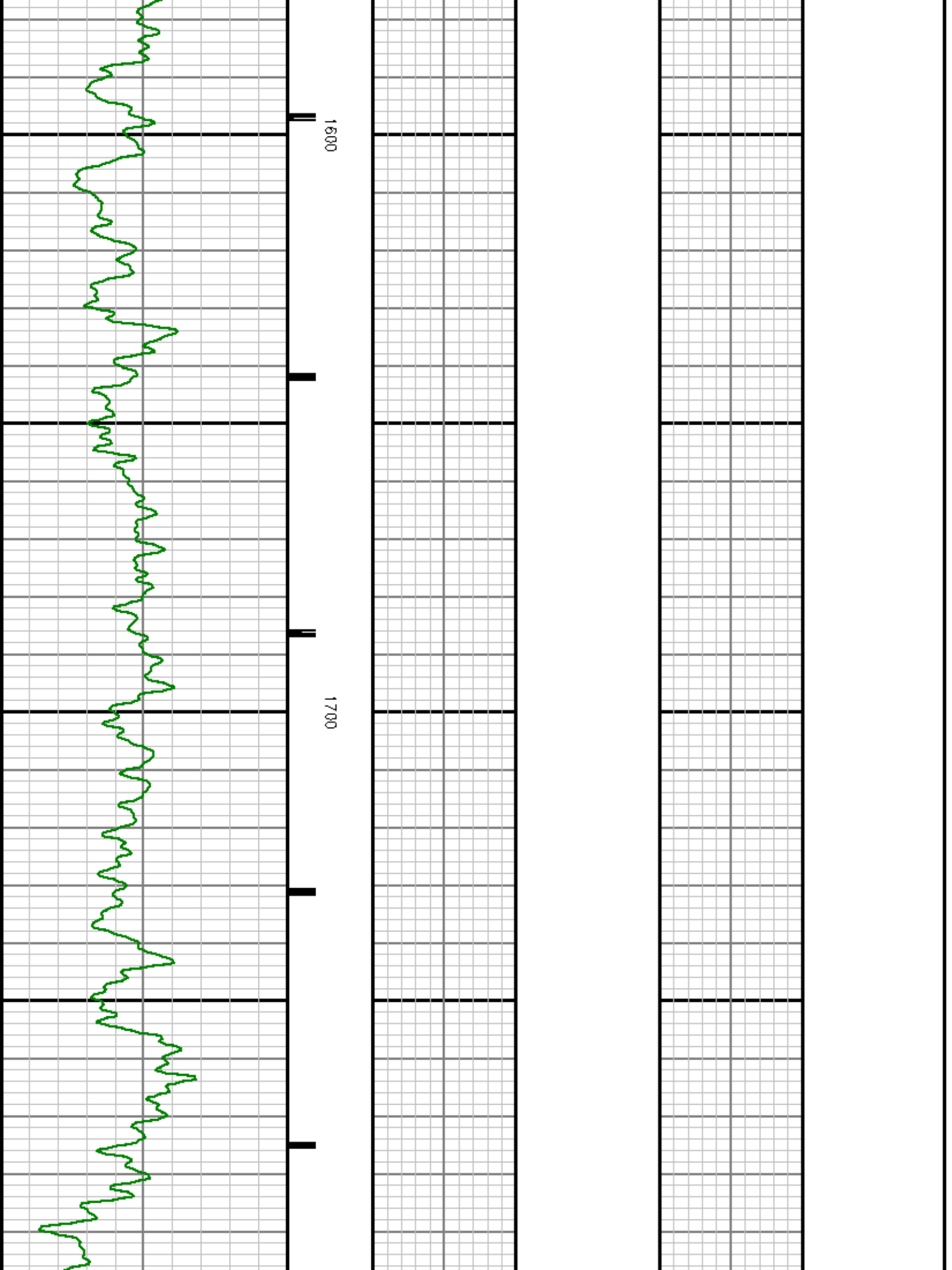


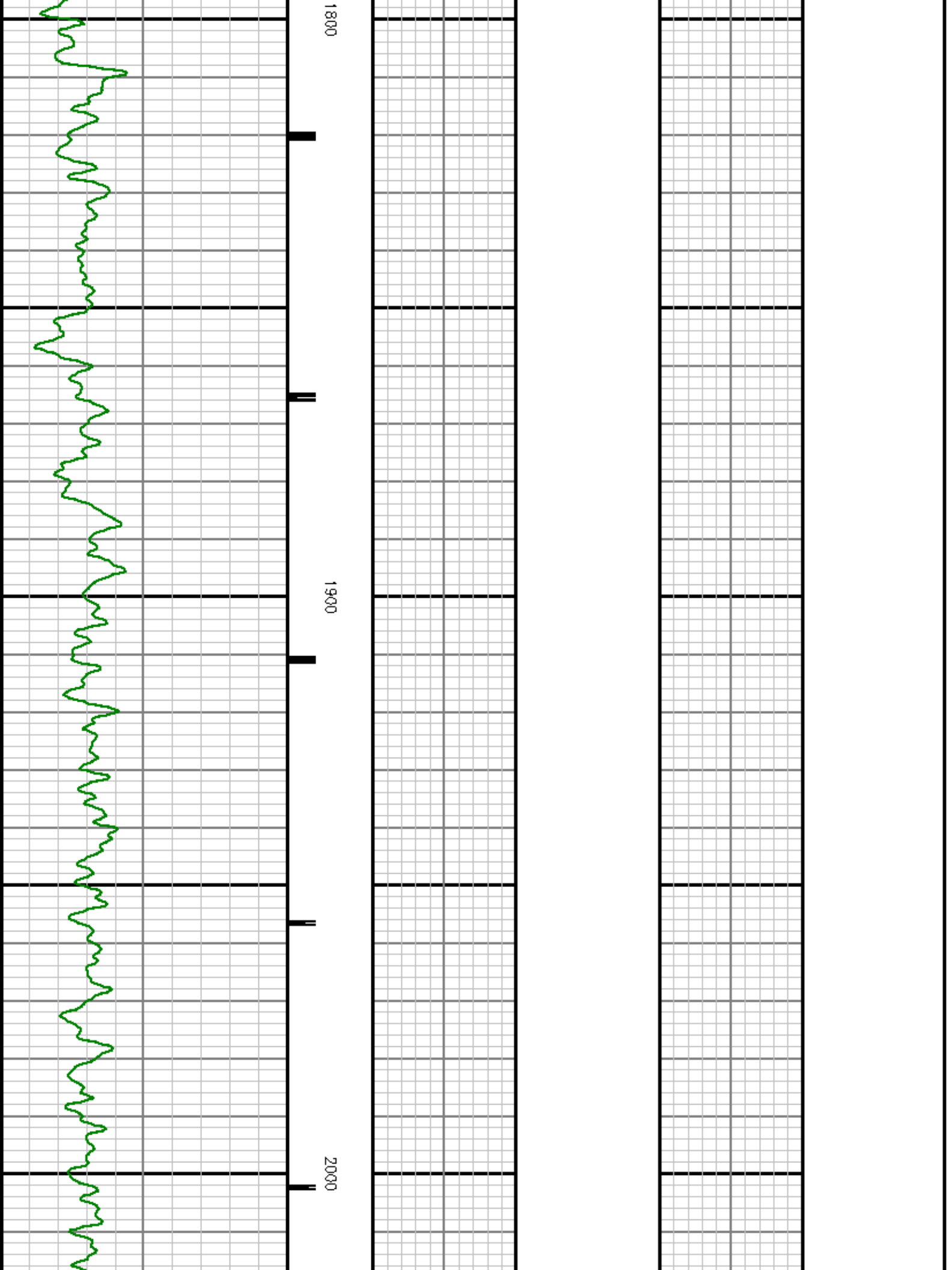


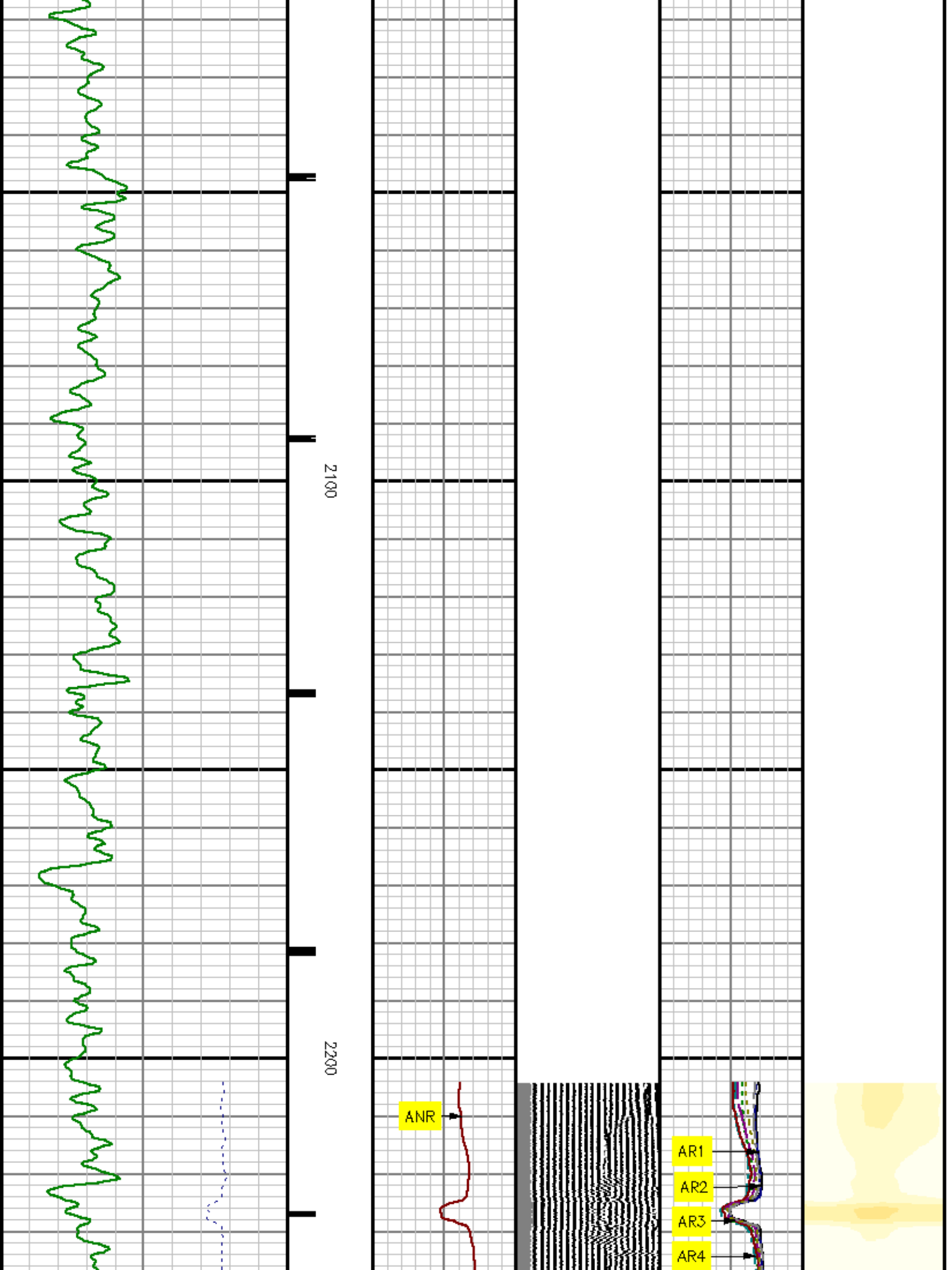




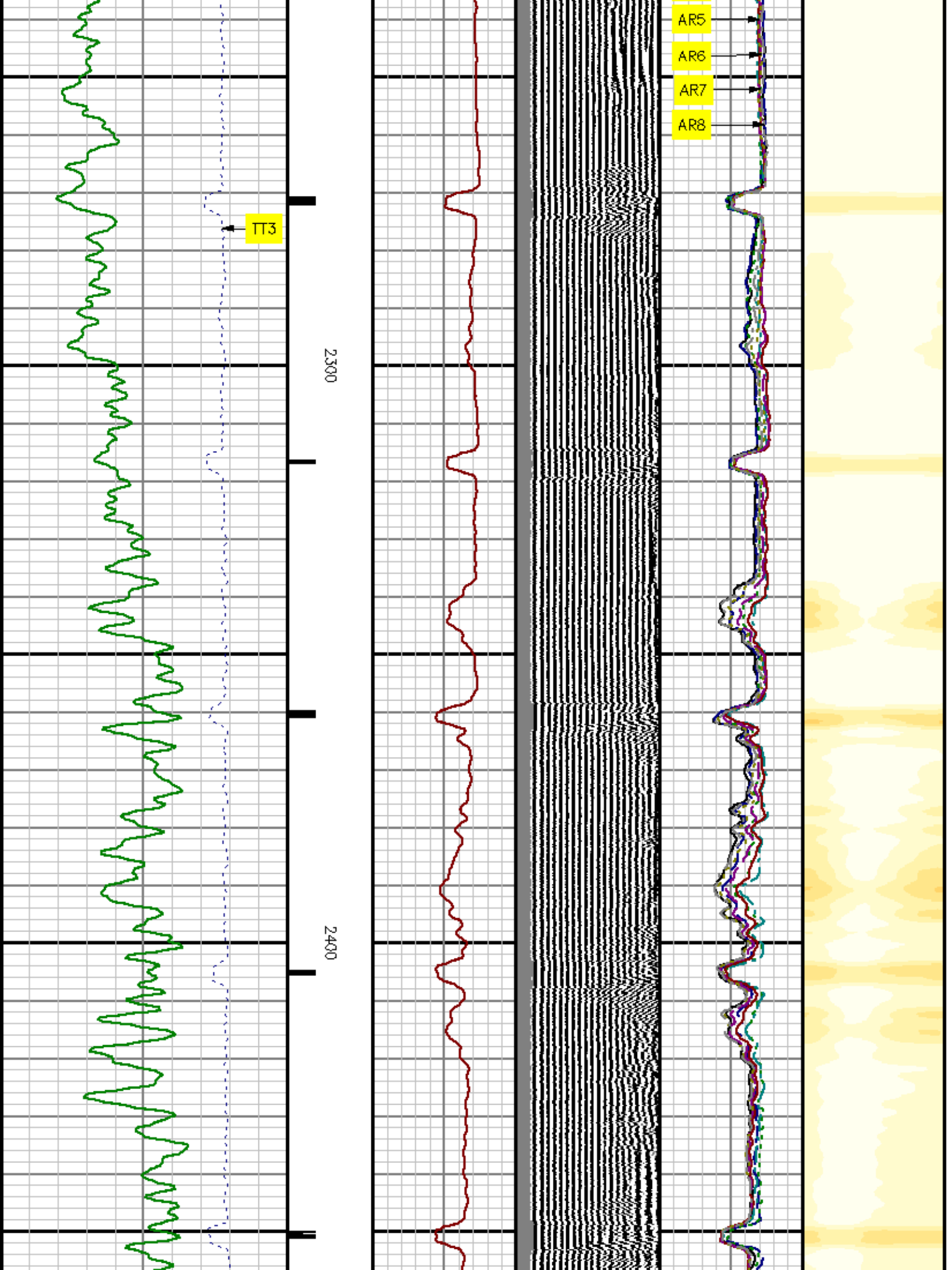


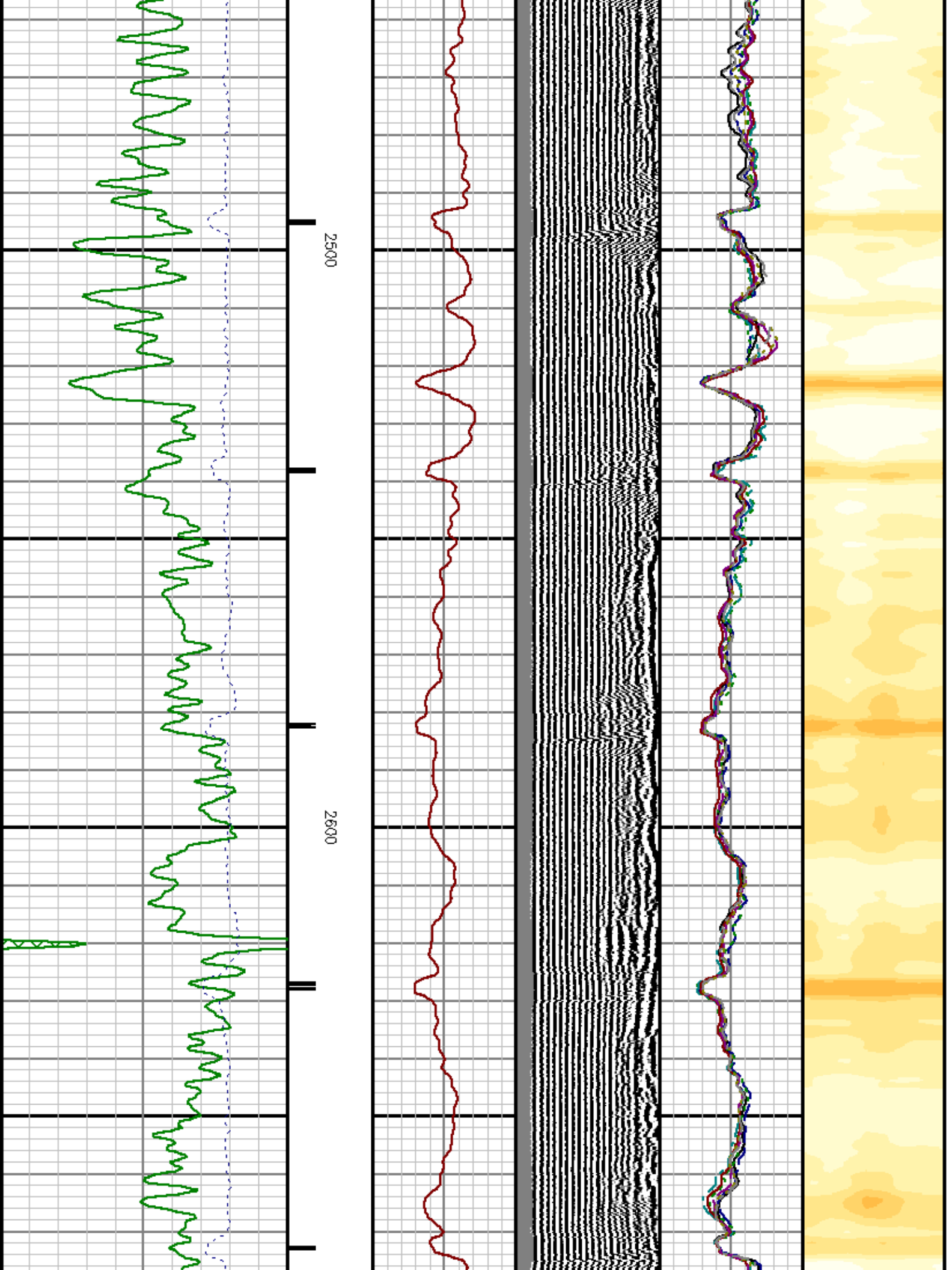


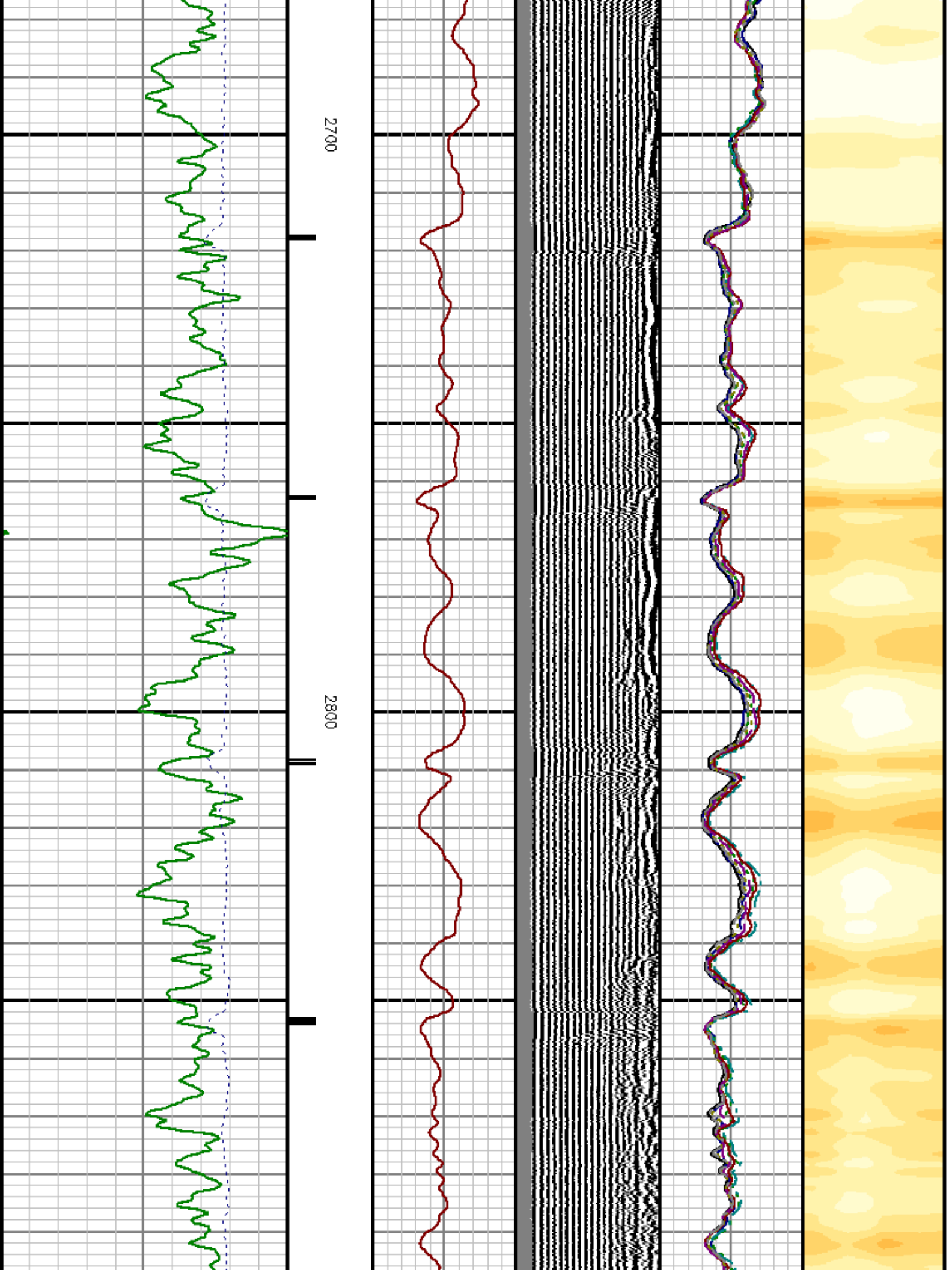


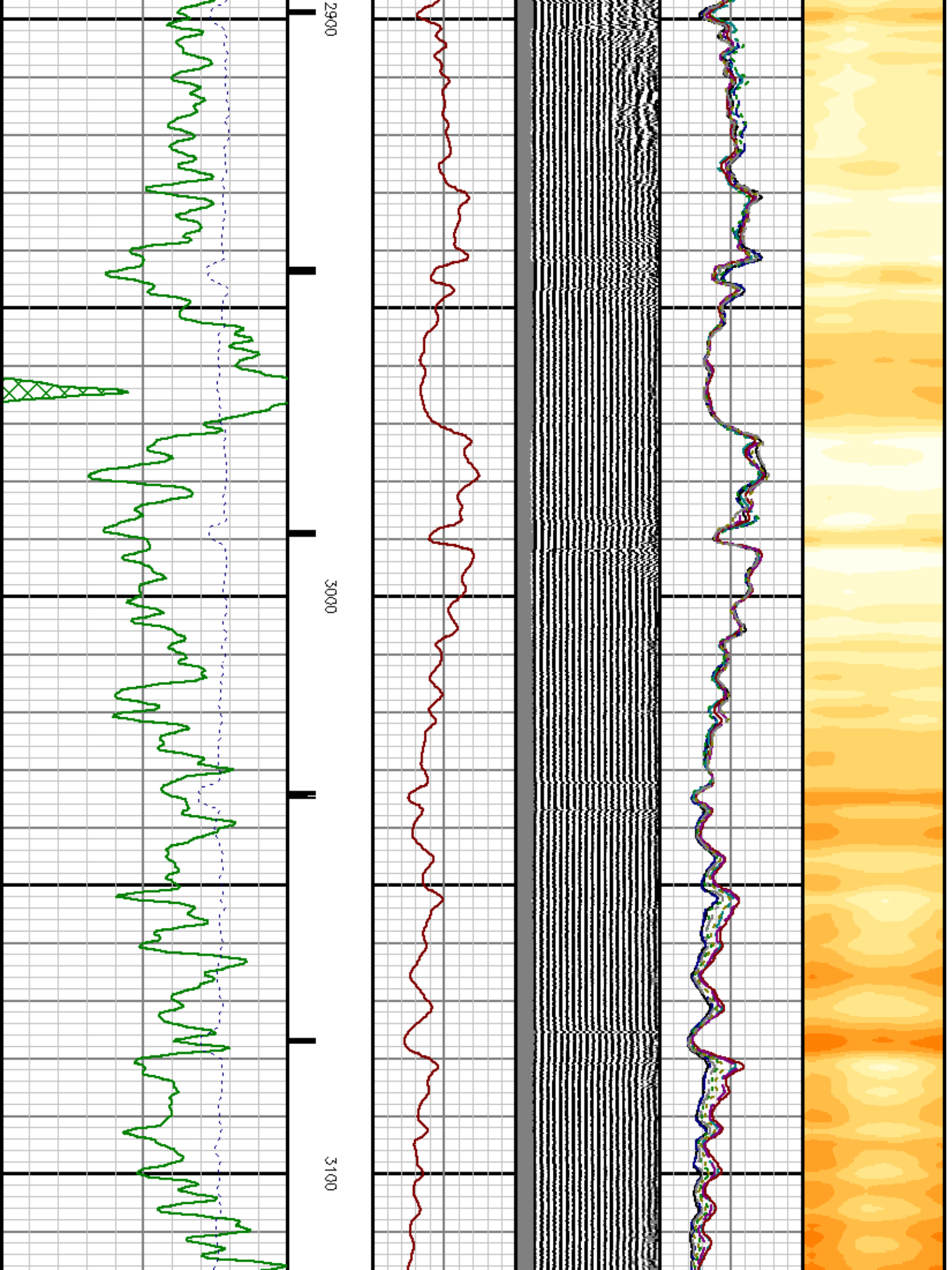




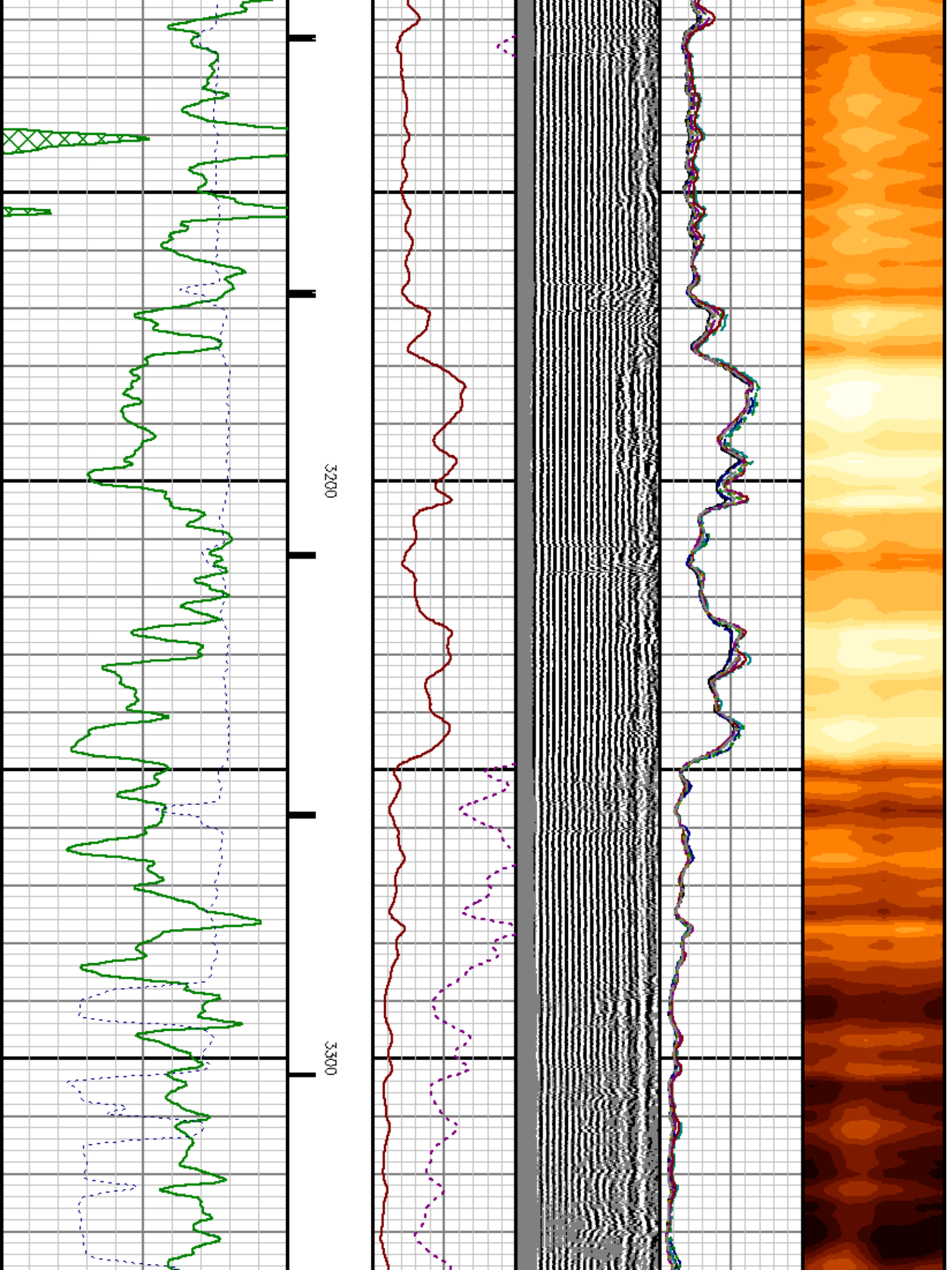




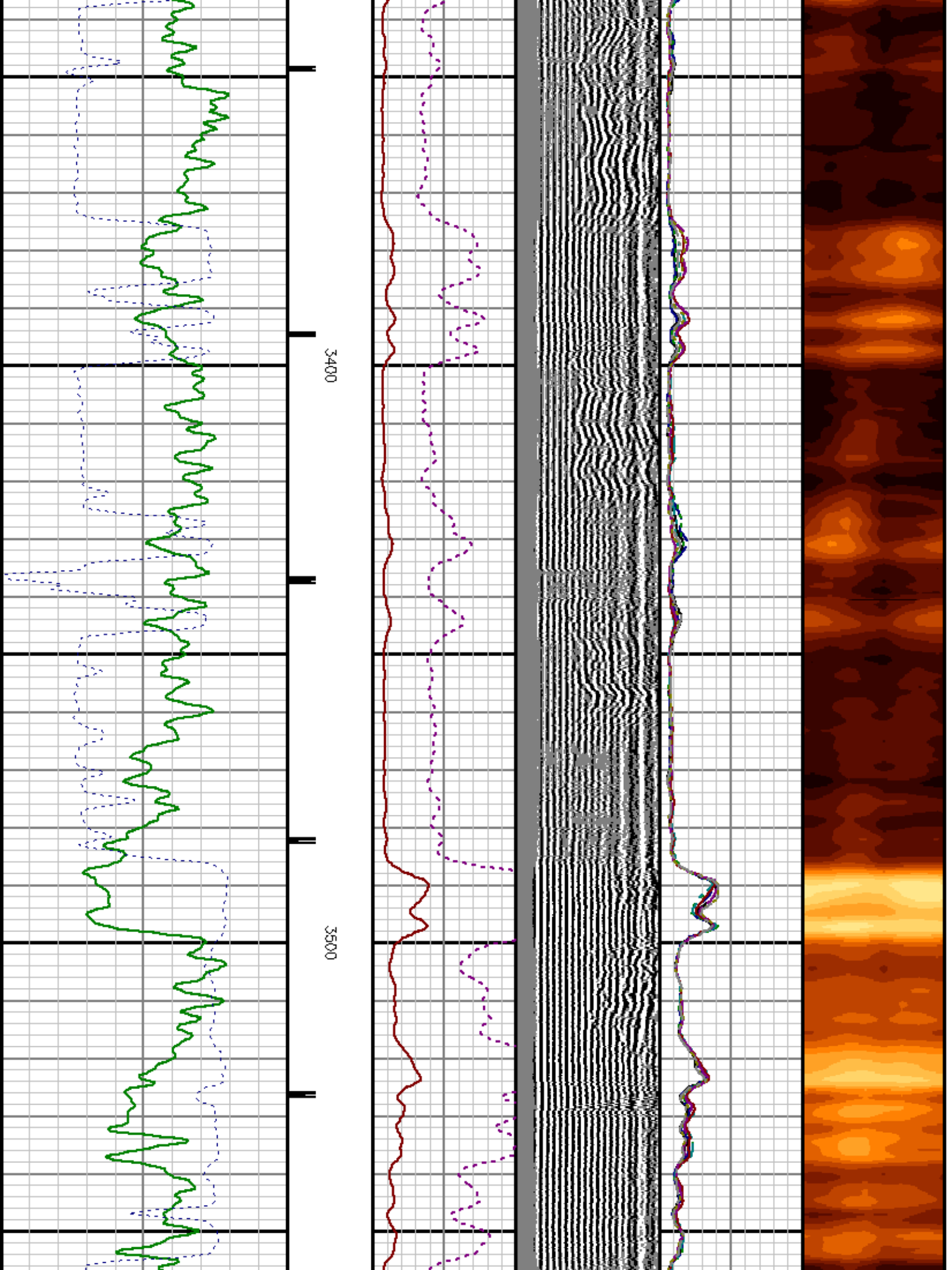


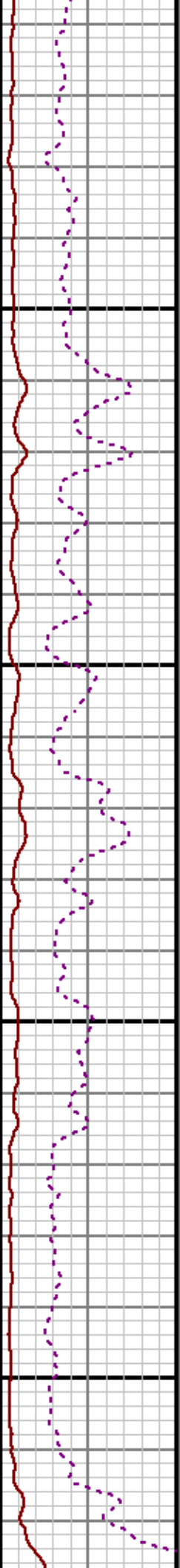
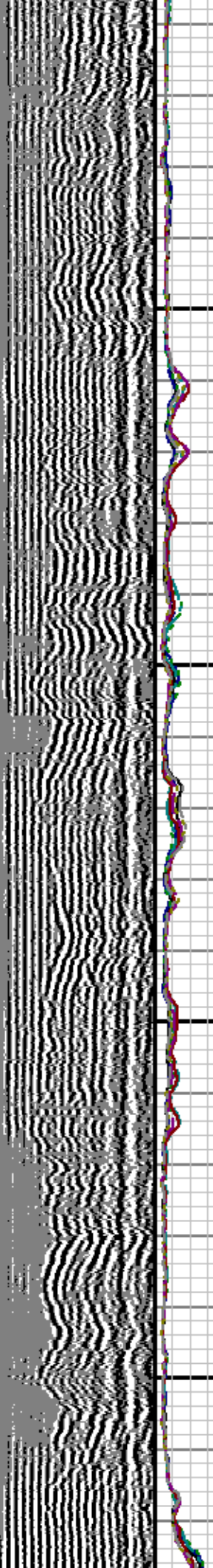
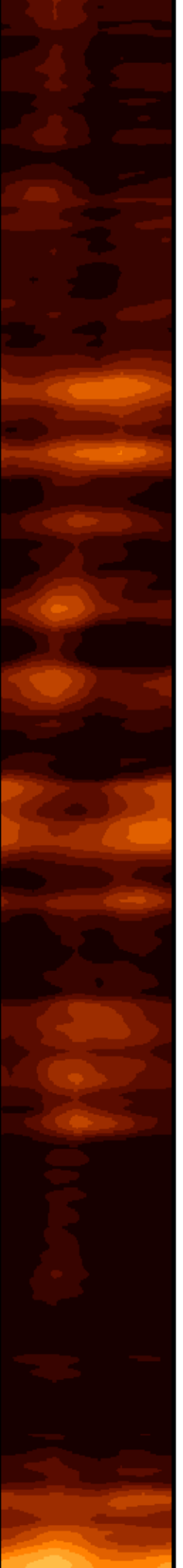






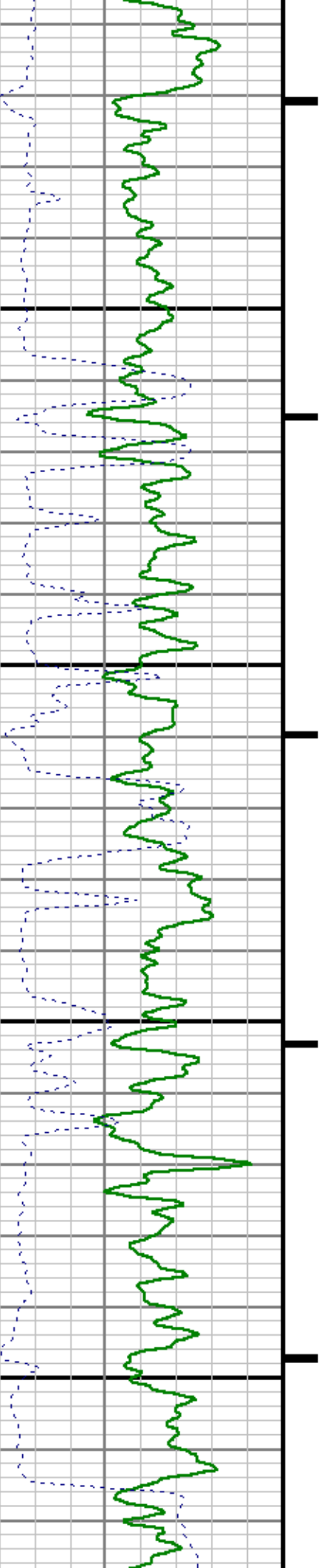


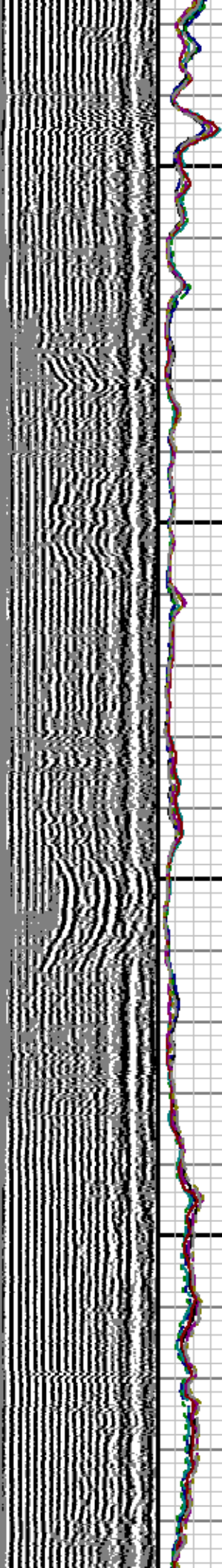
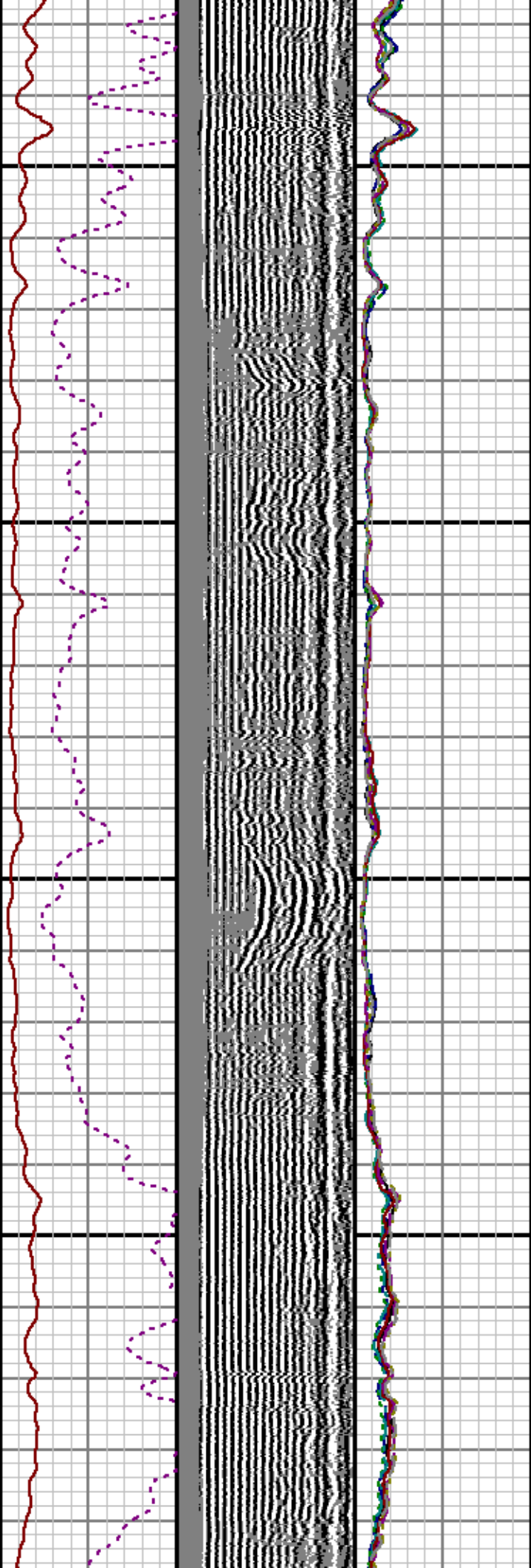
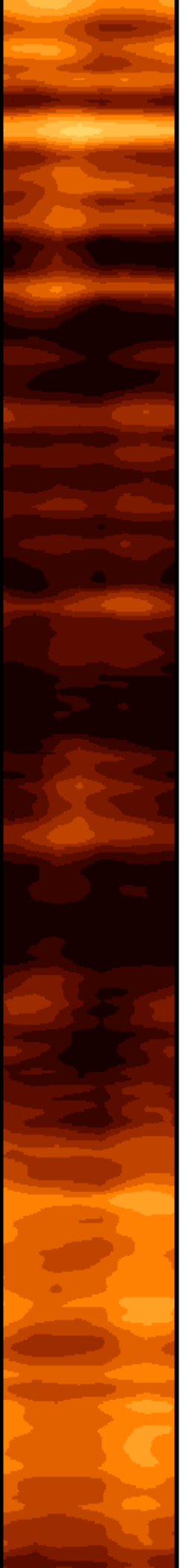




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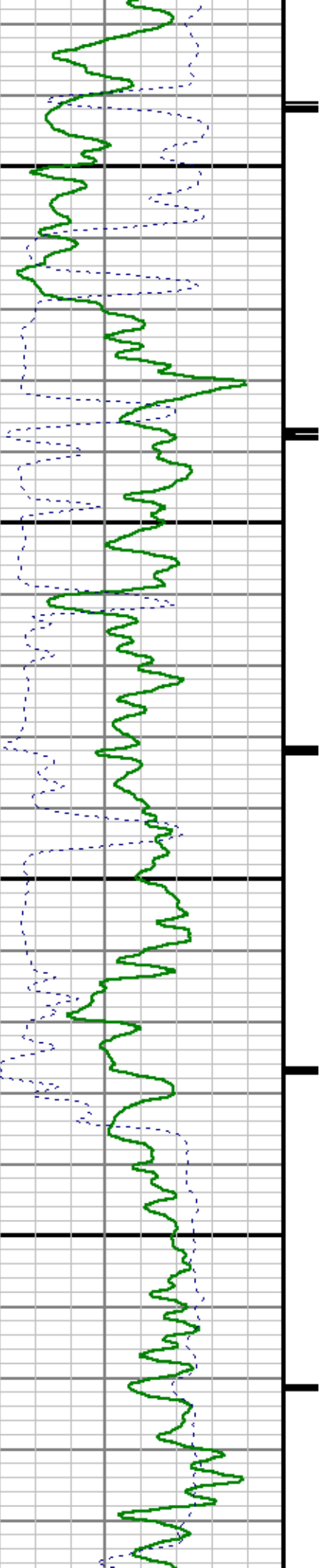
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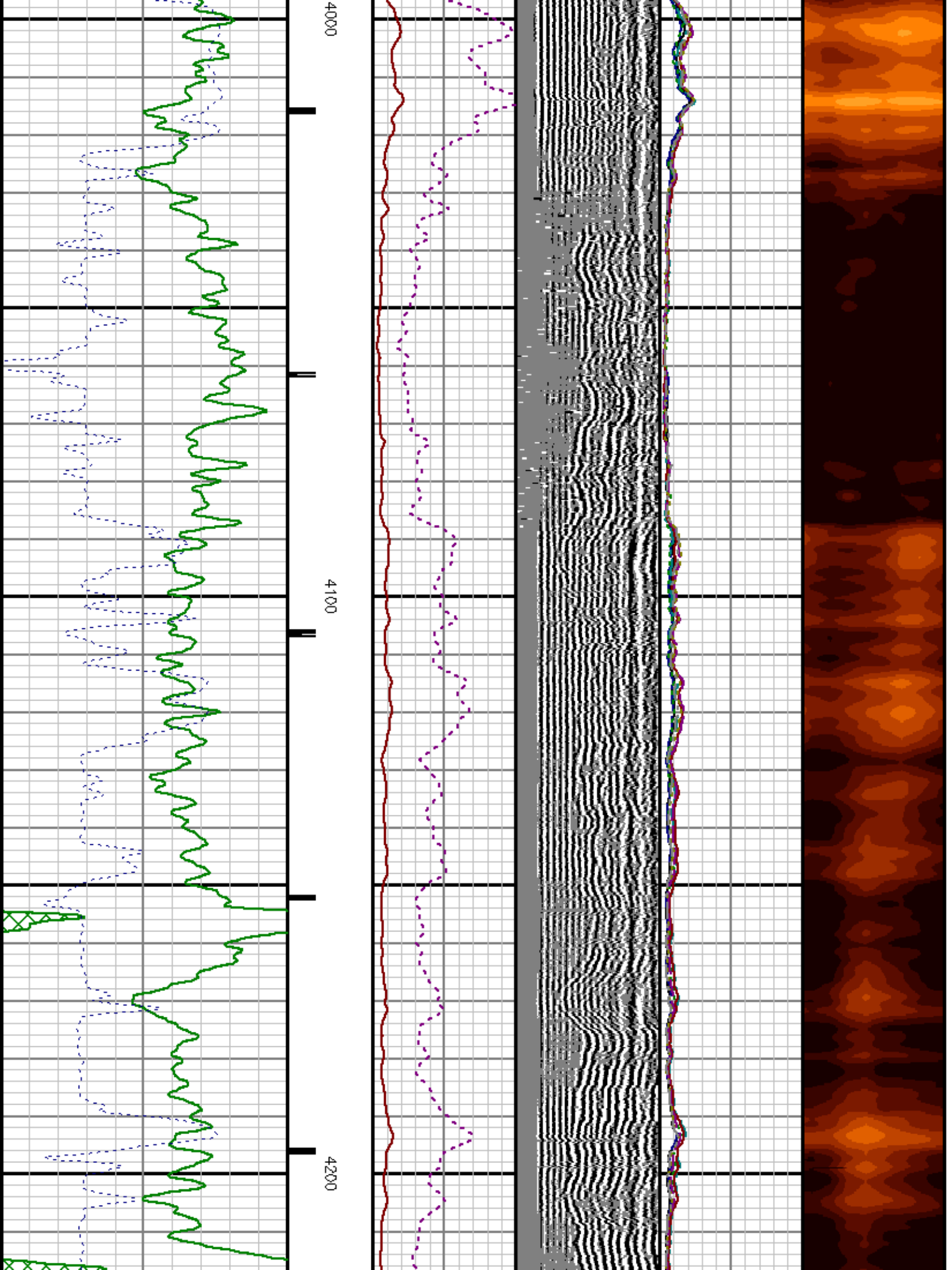




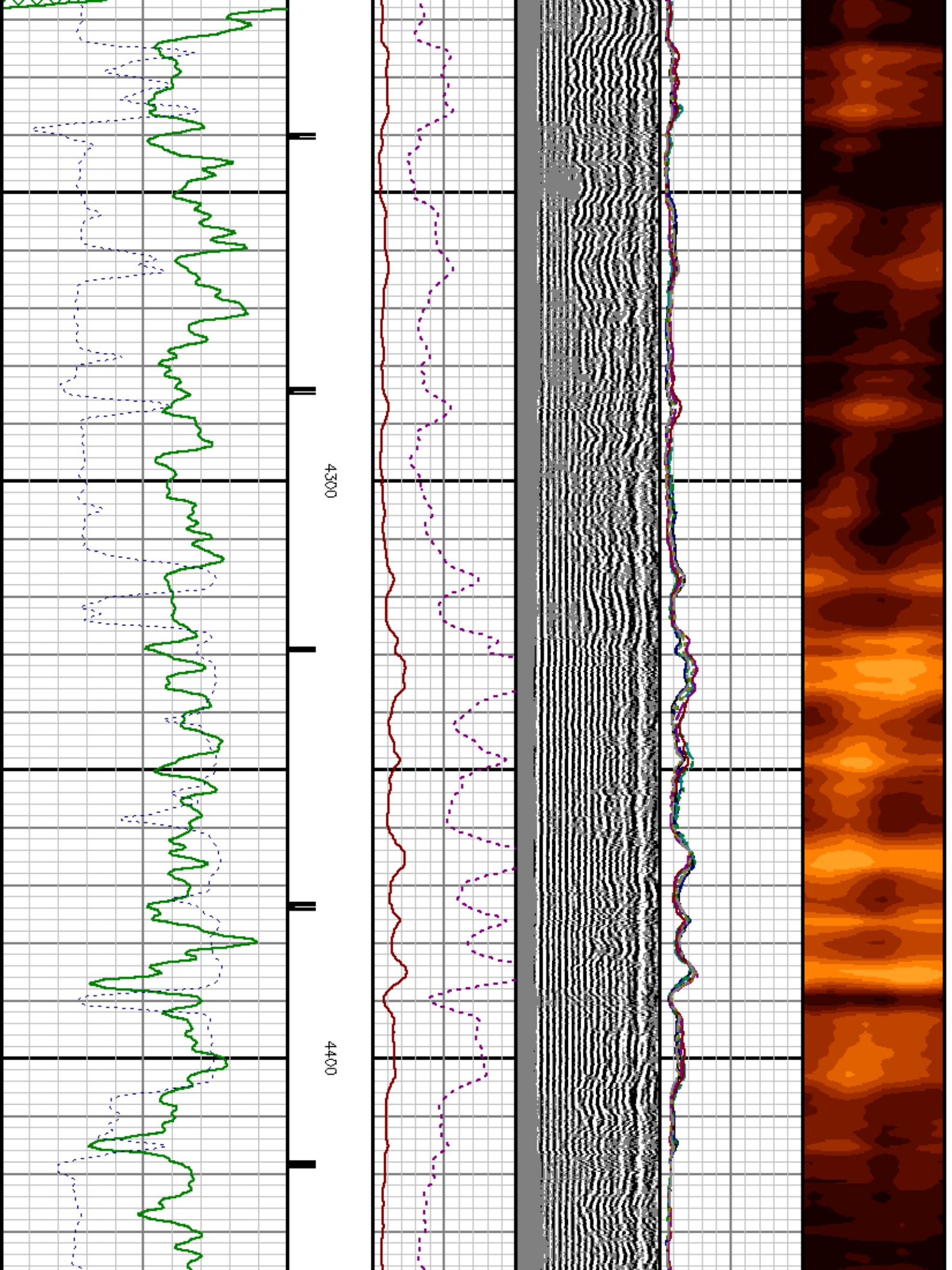
3800

3900

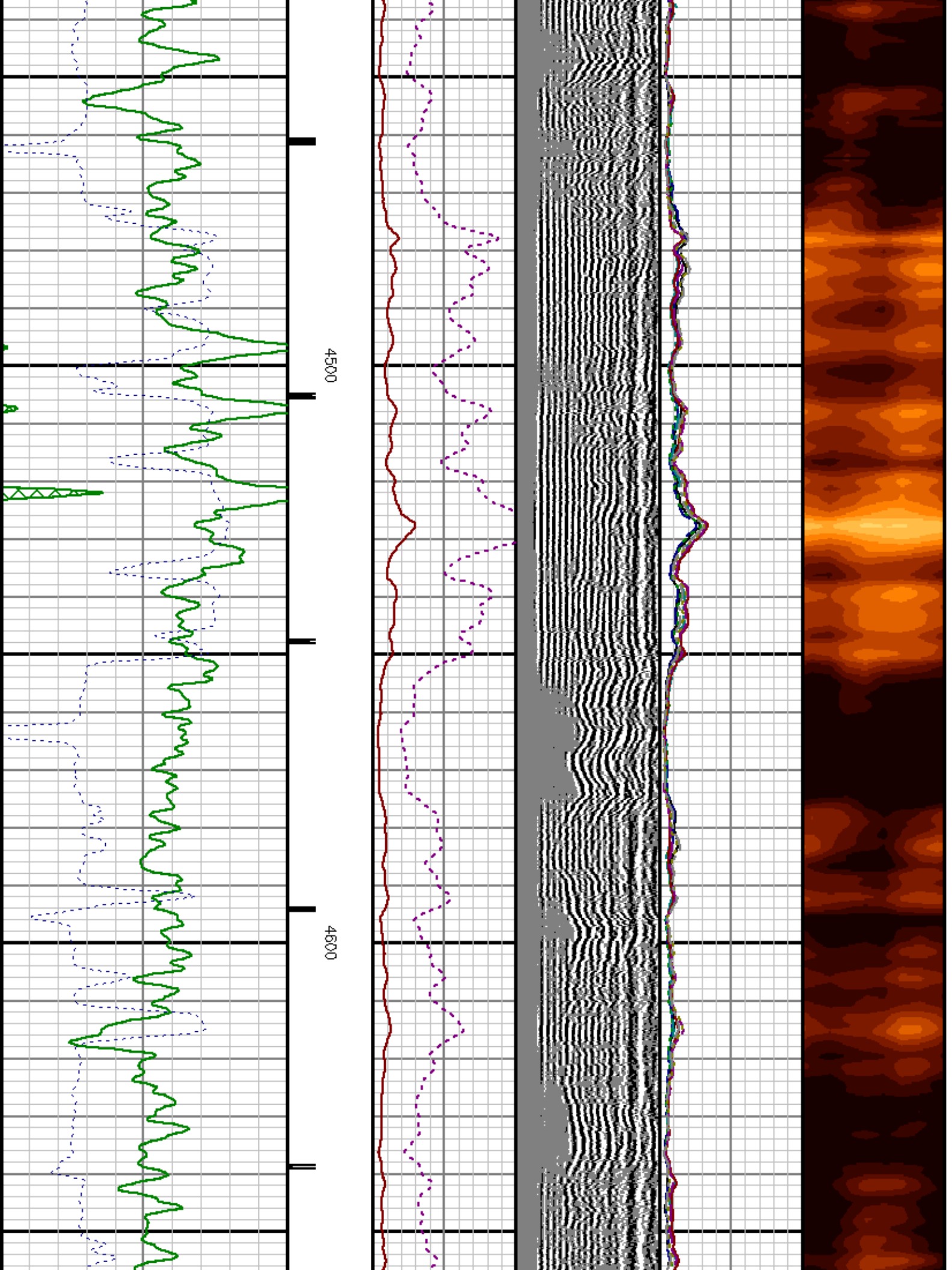


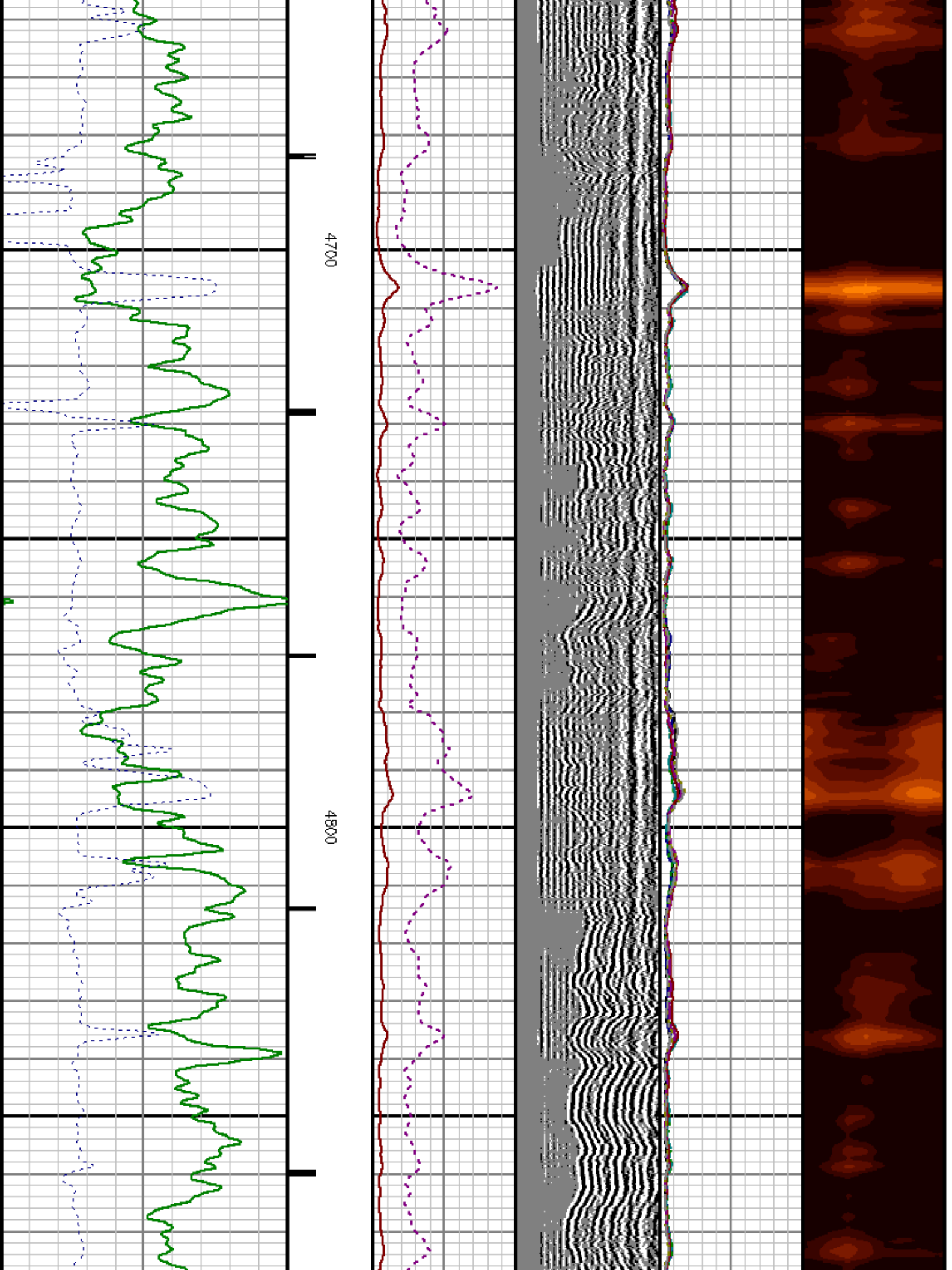


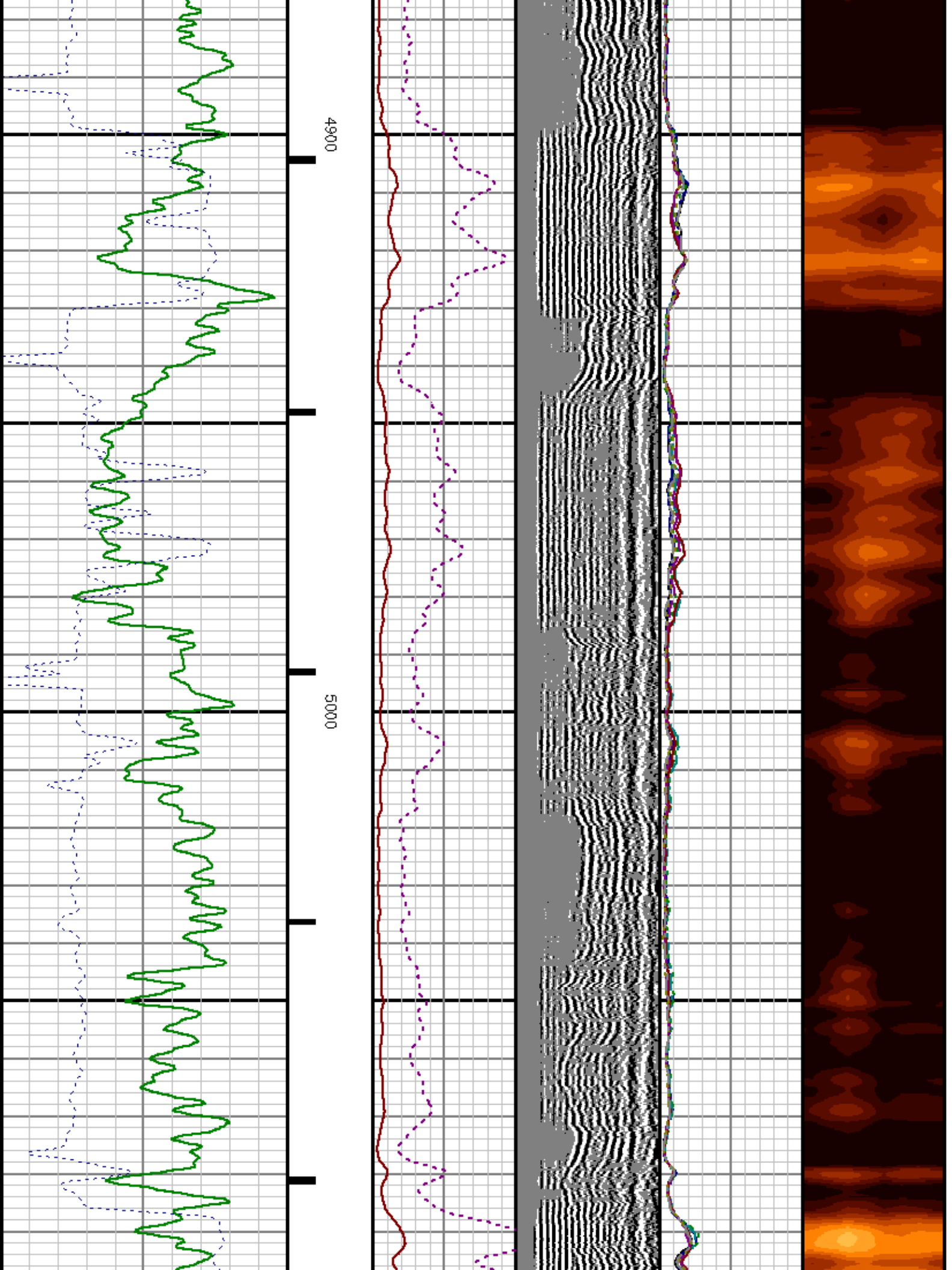


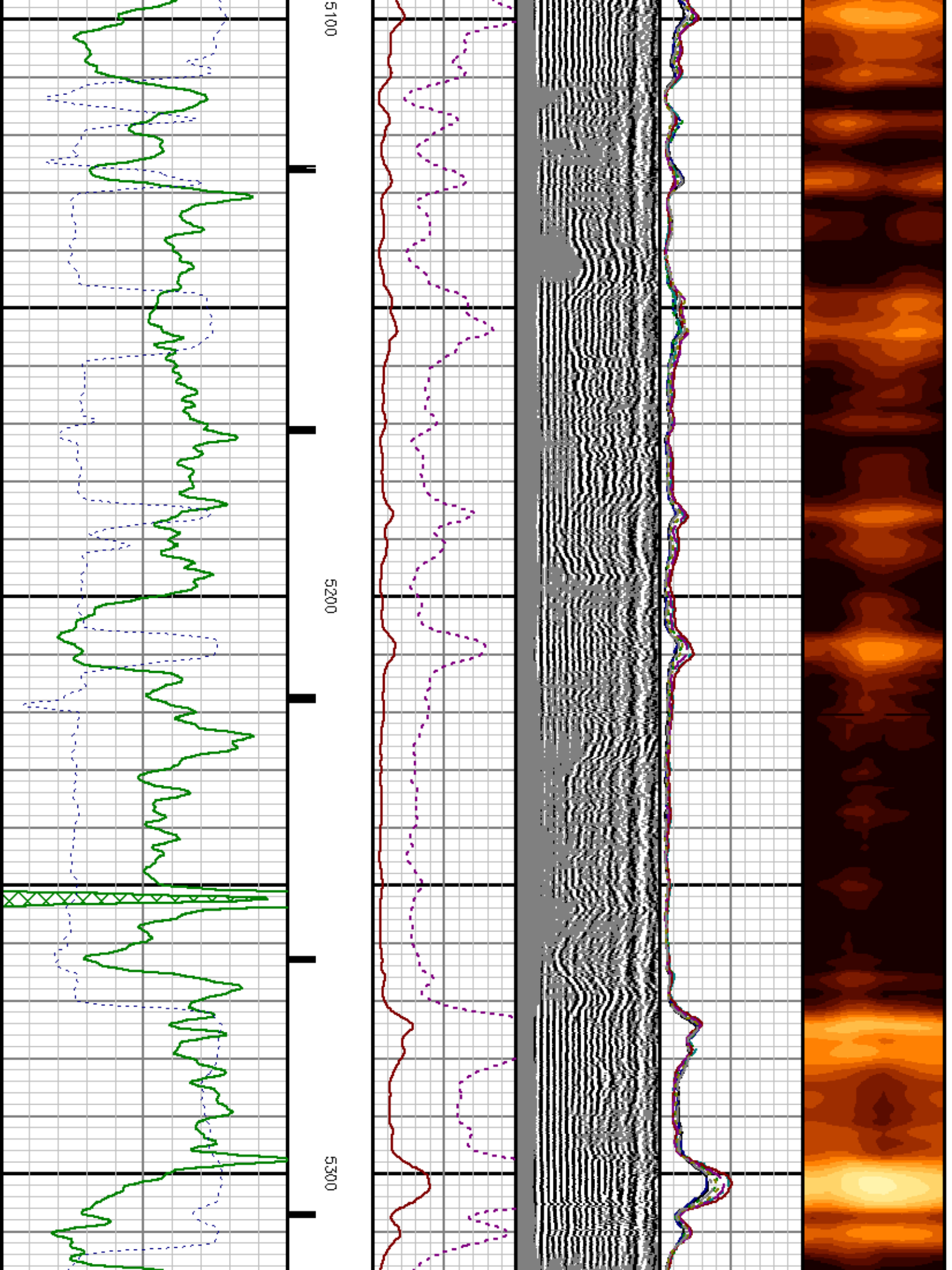




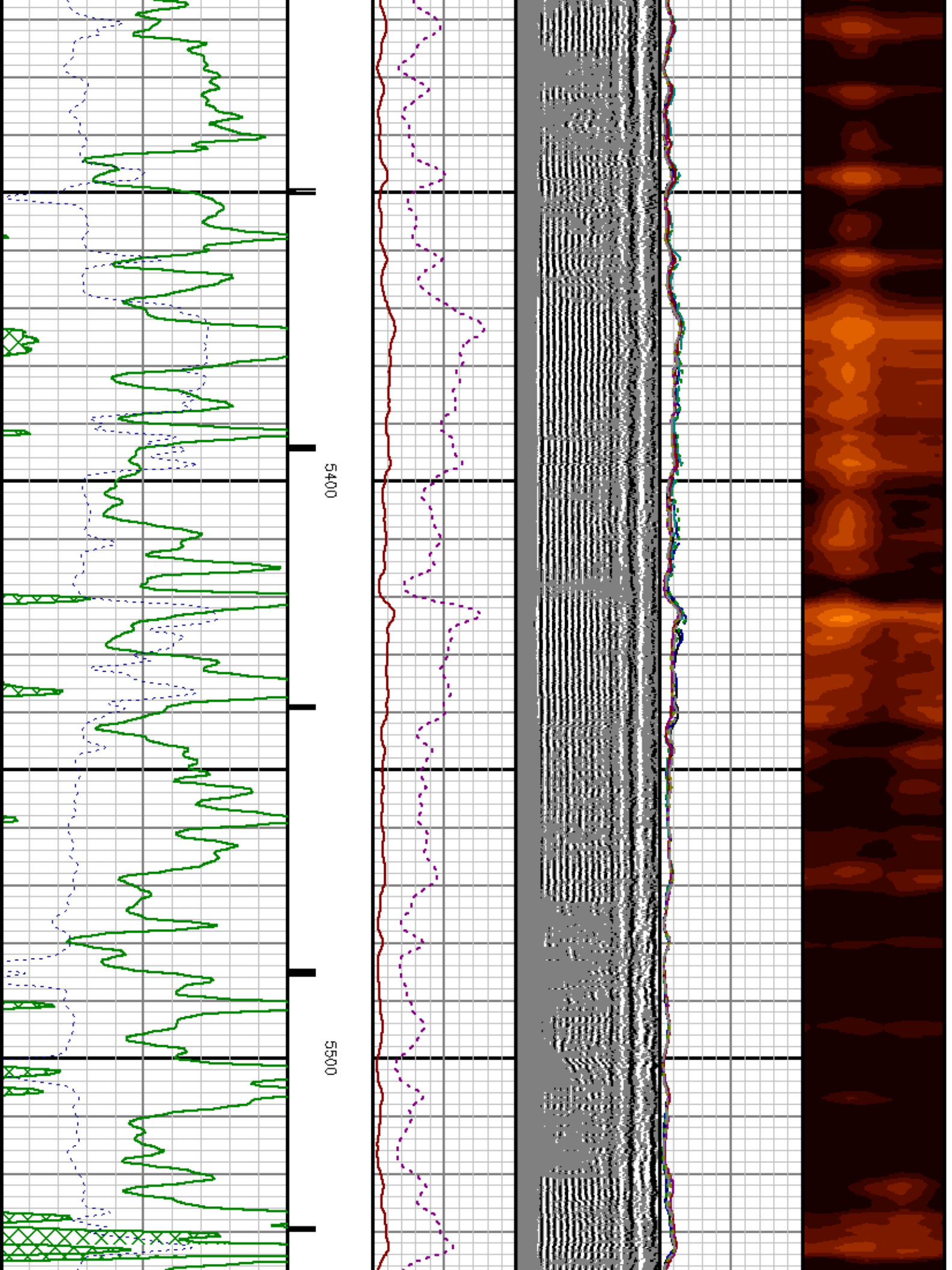




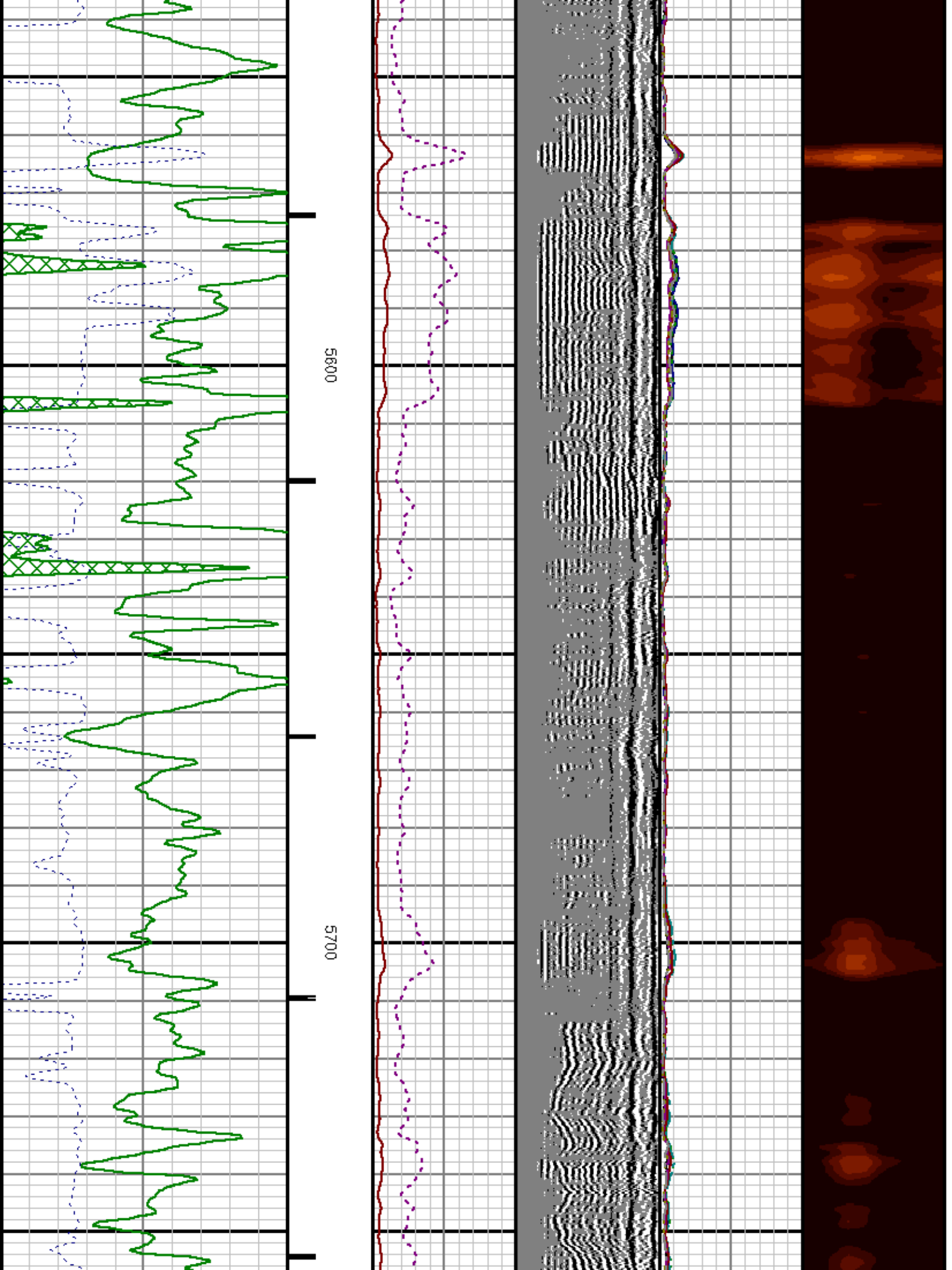


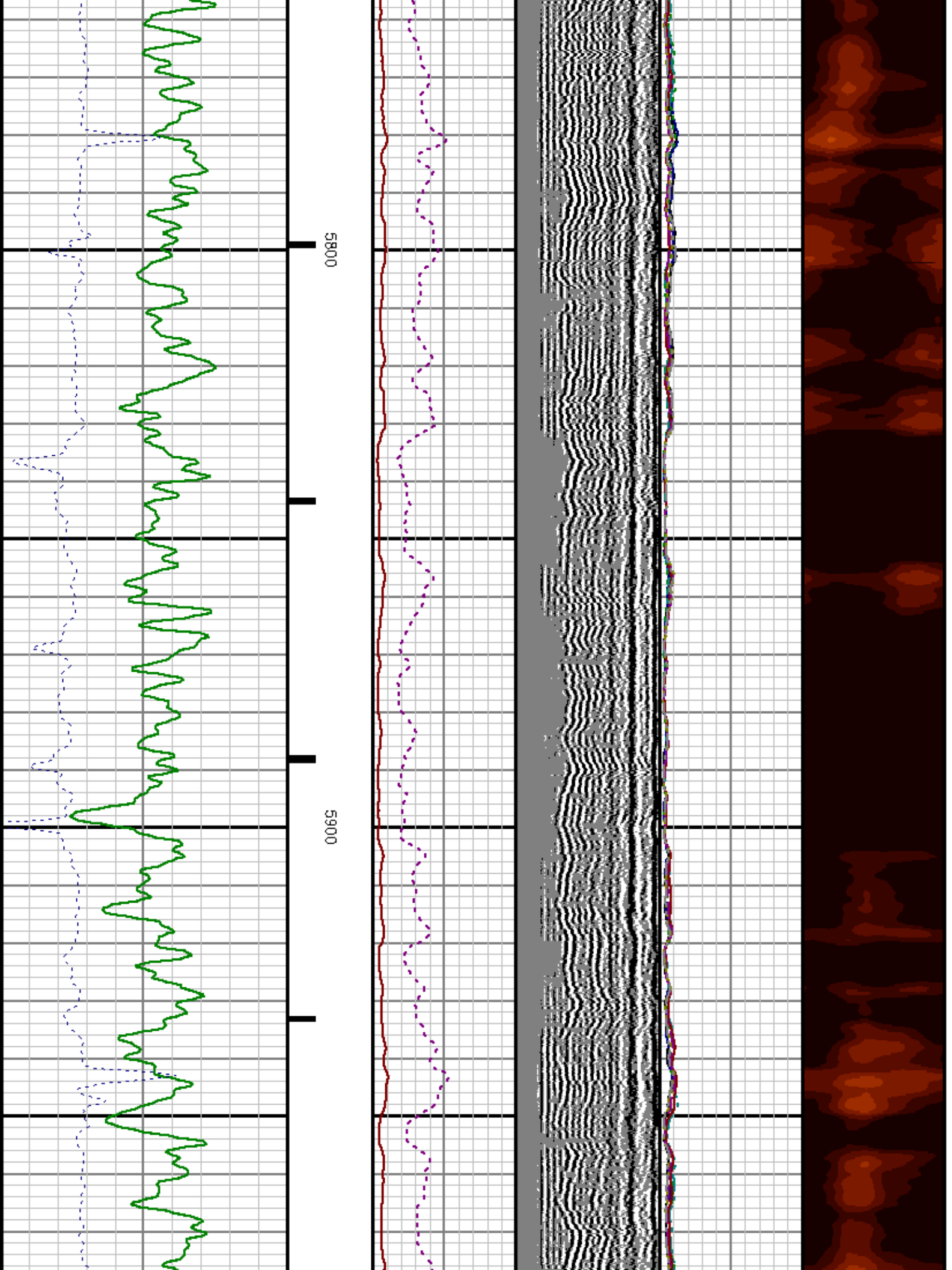


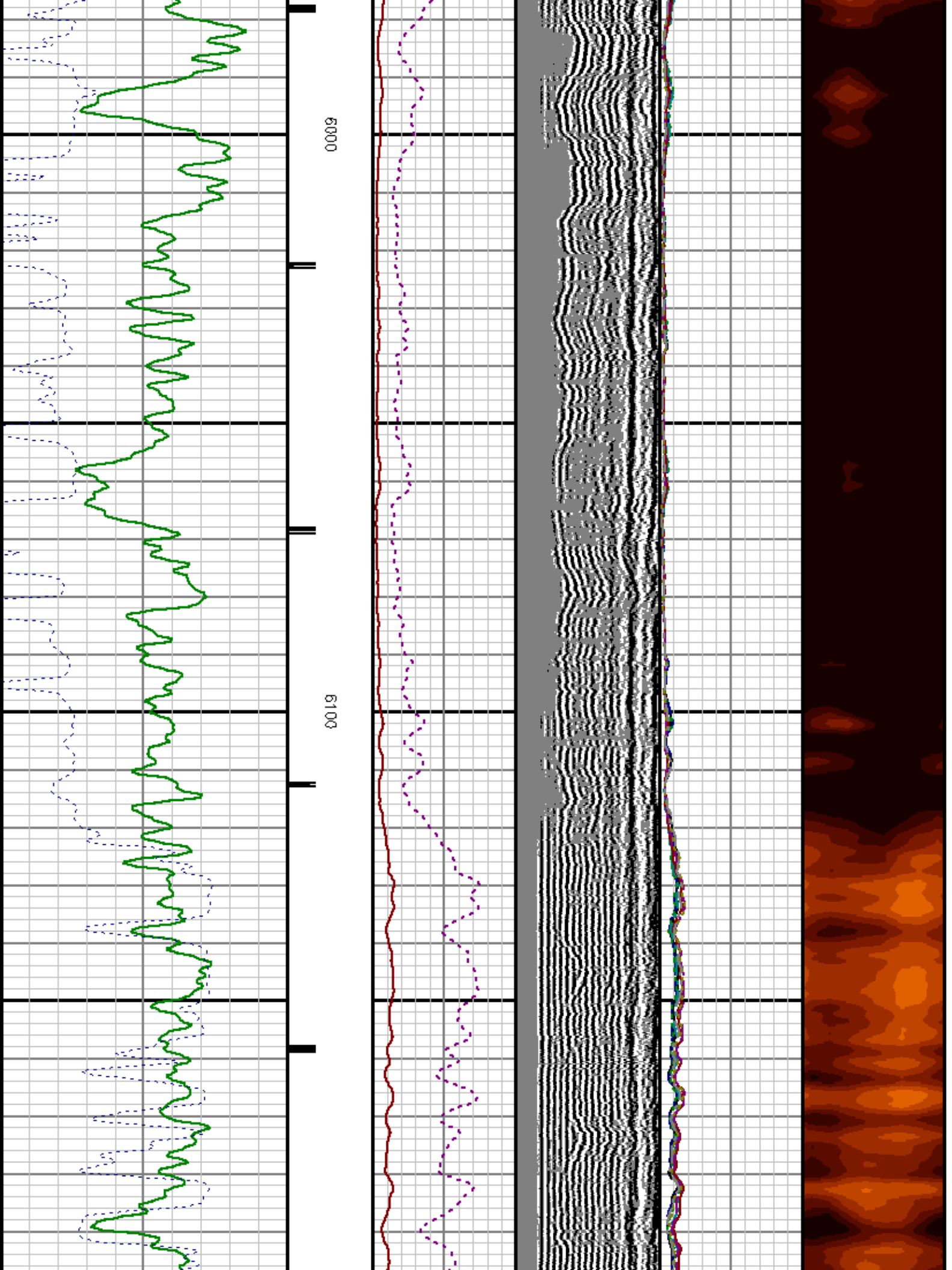


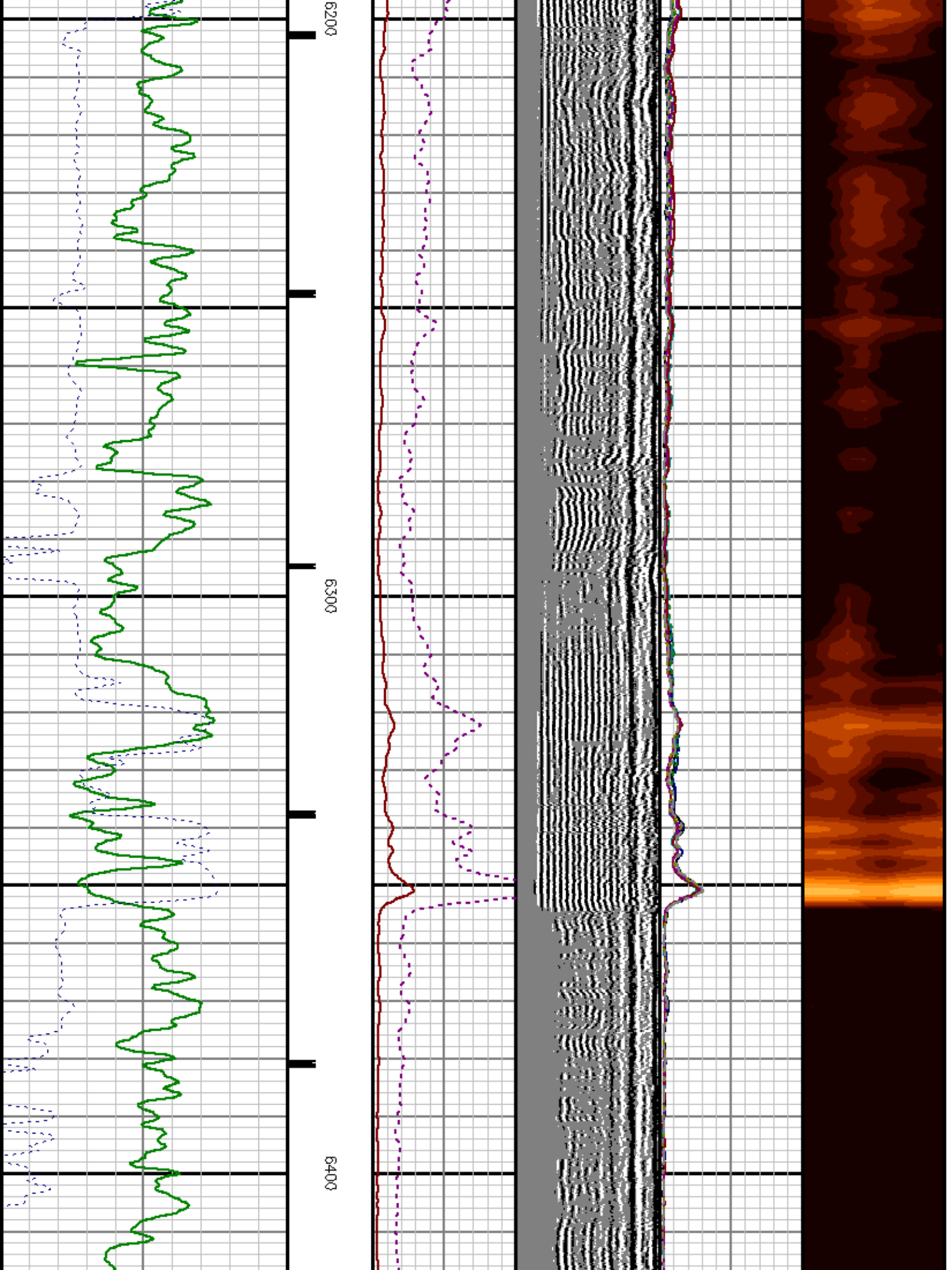




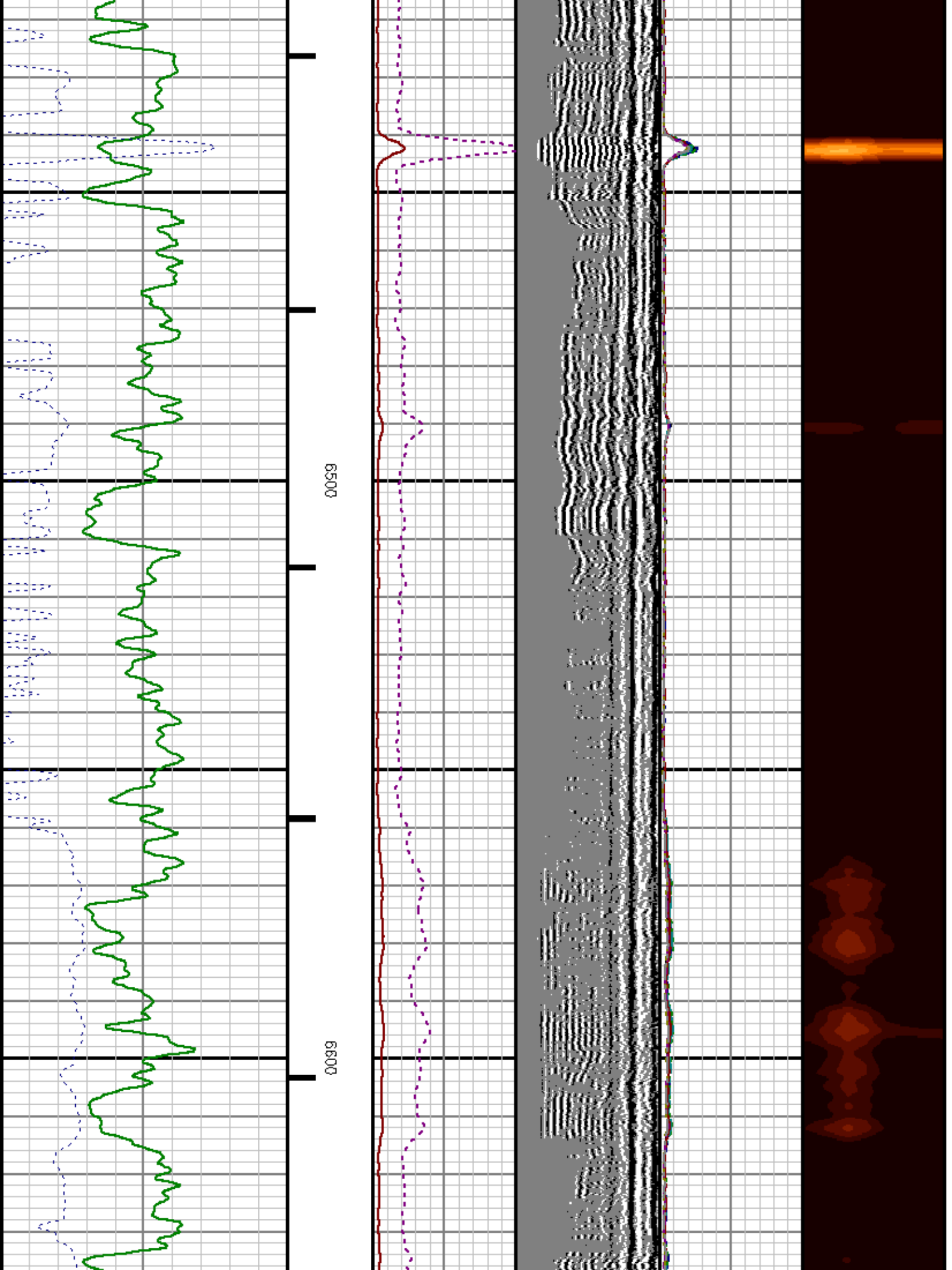




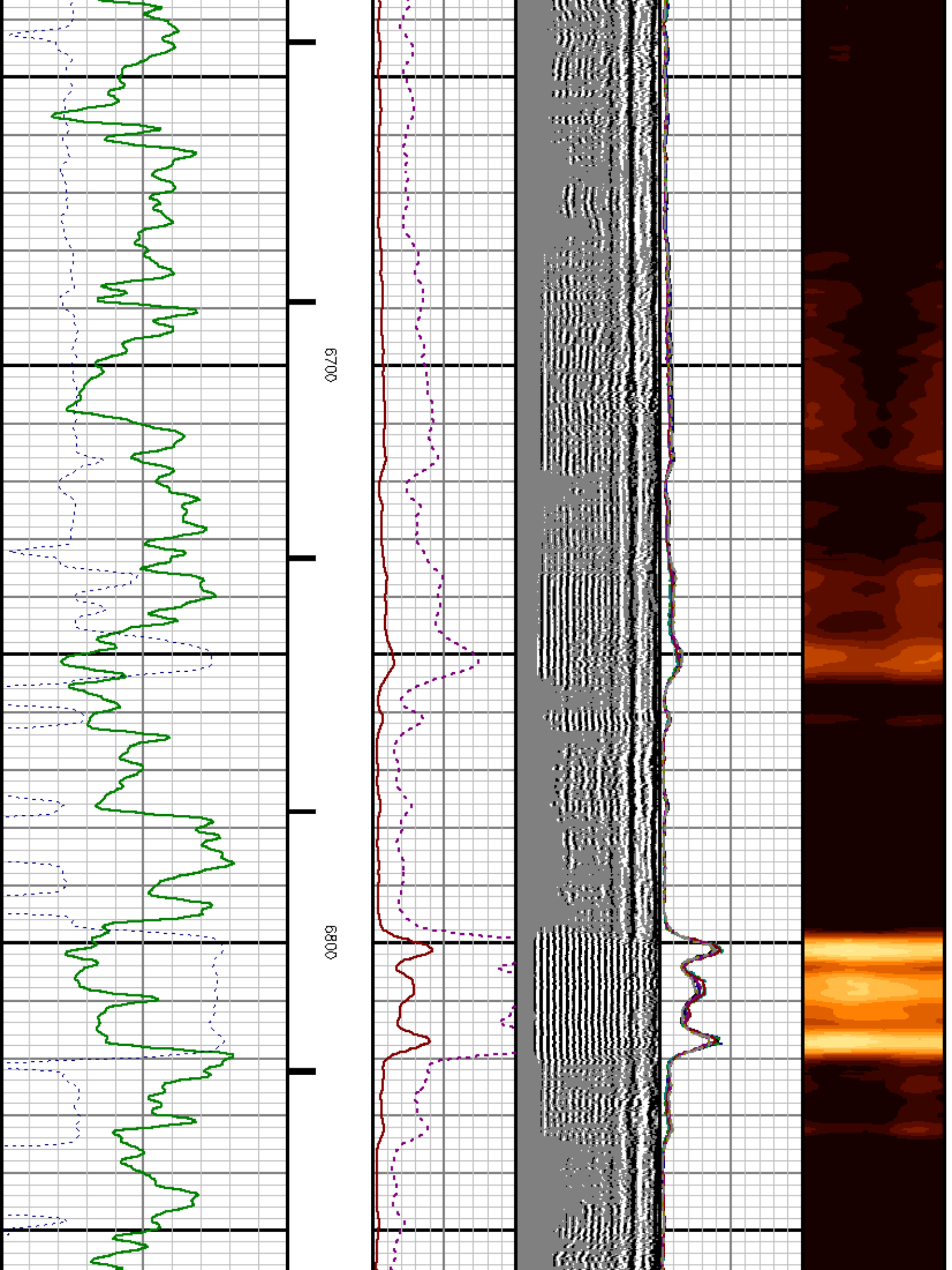


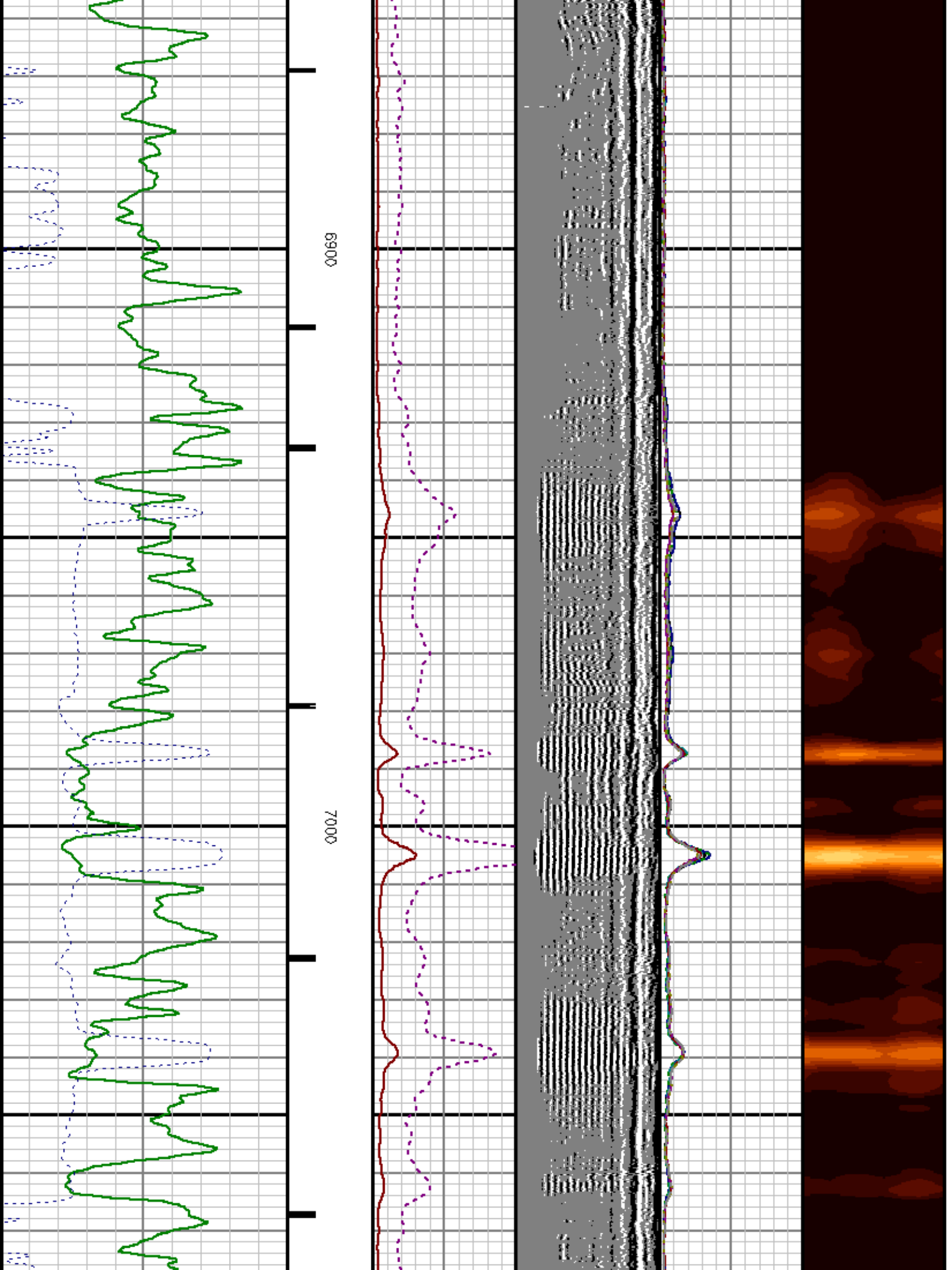


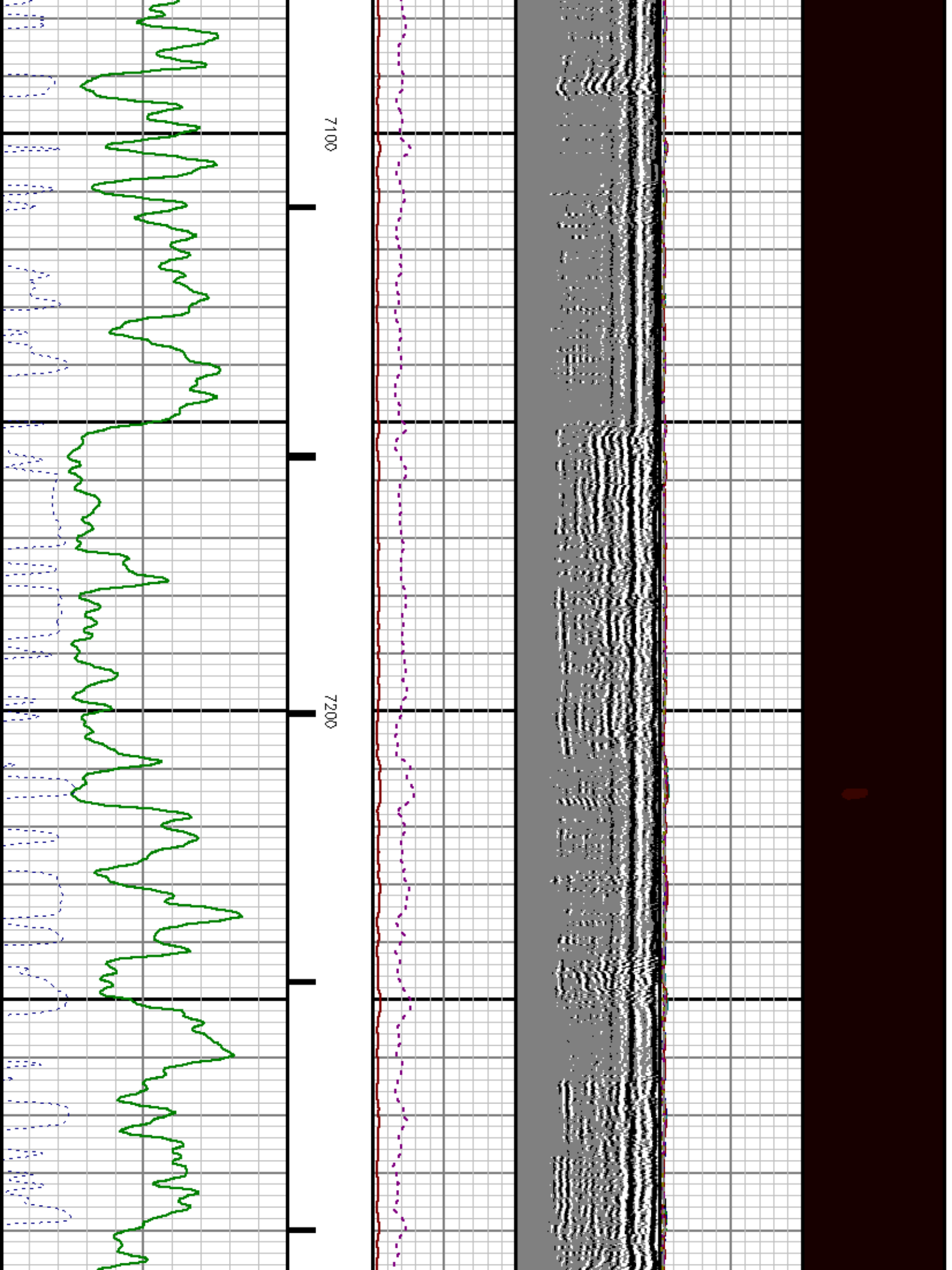


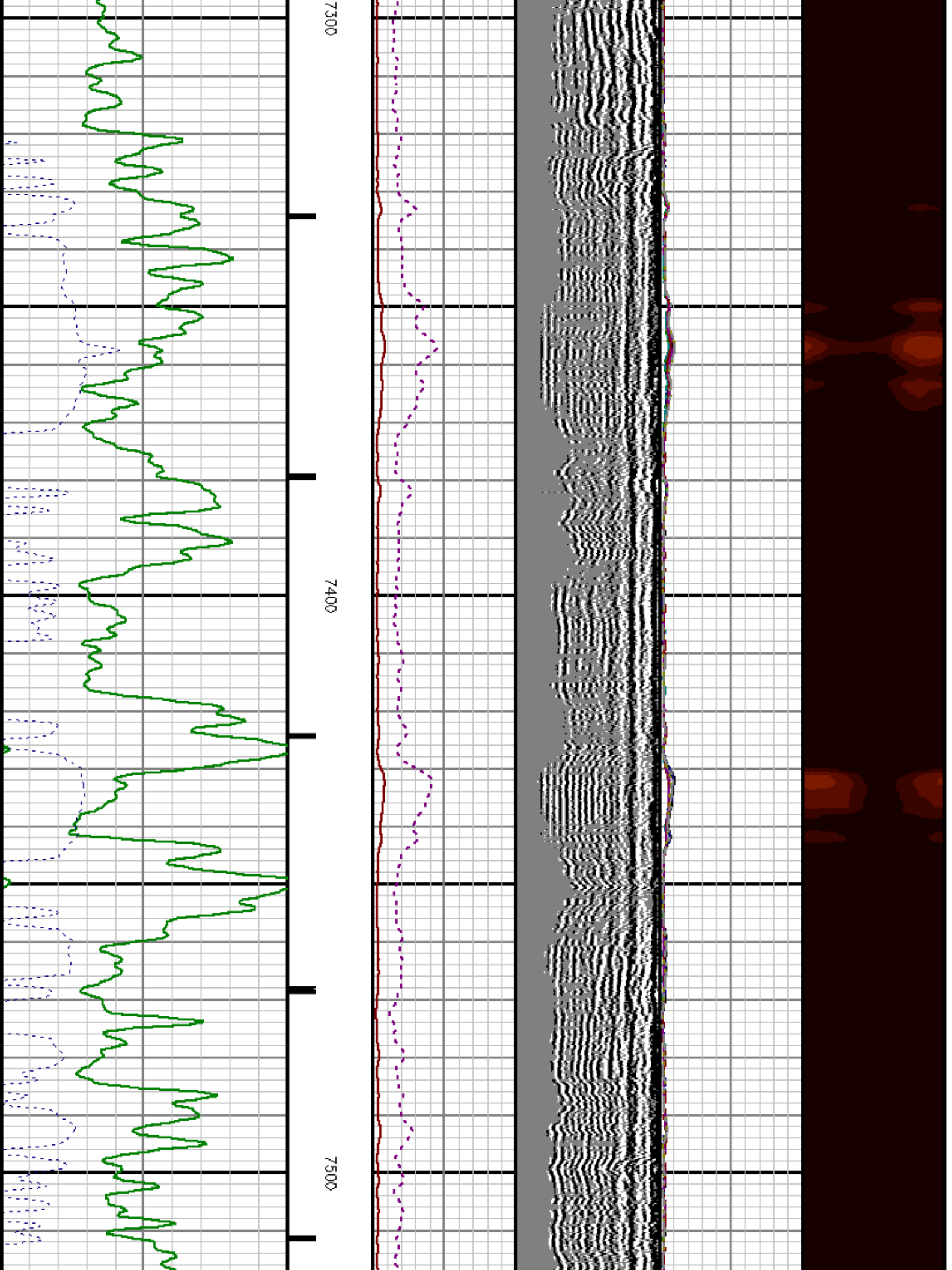


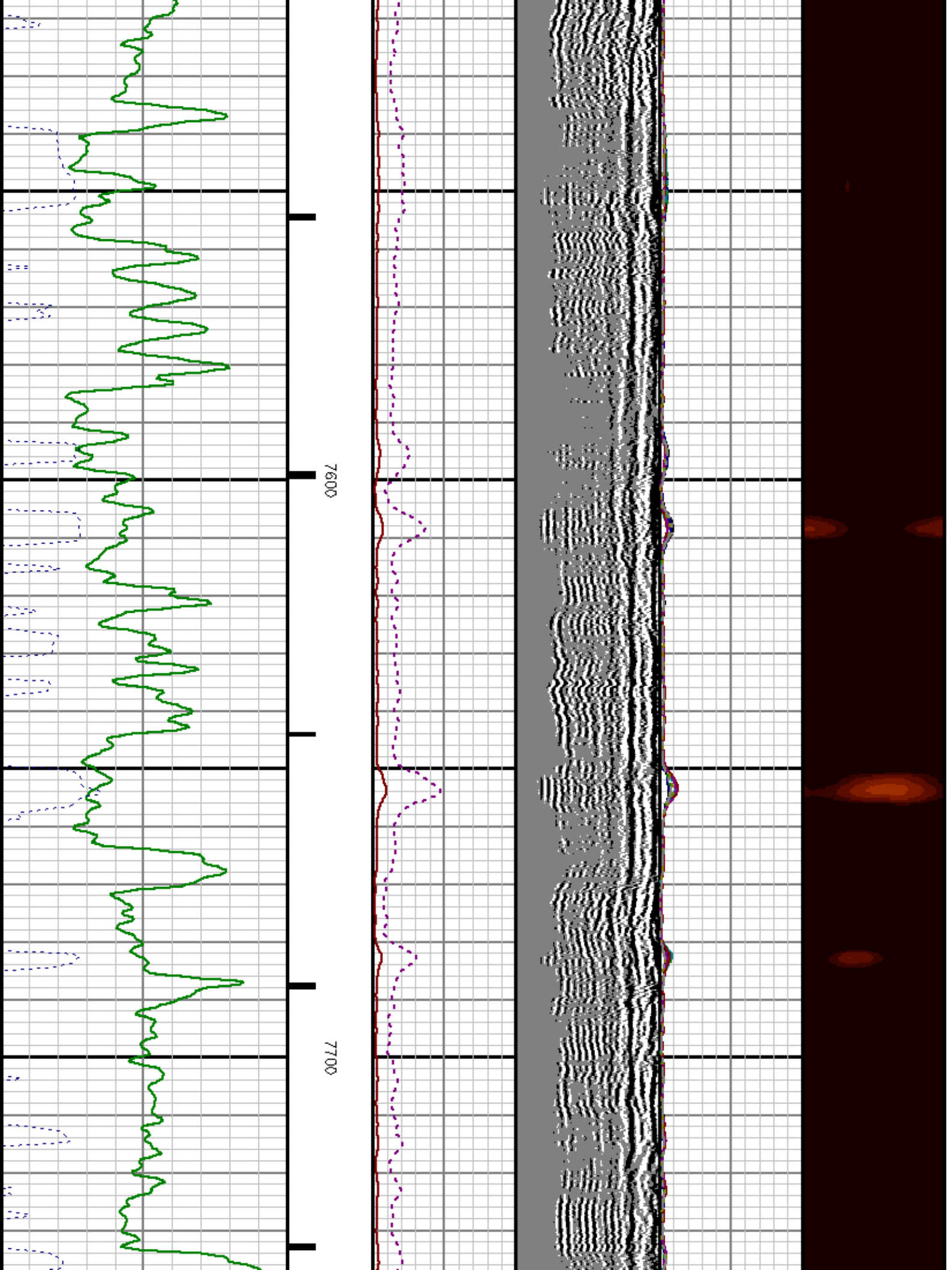




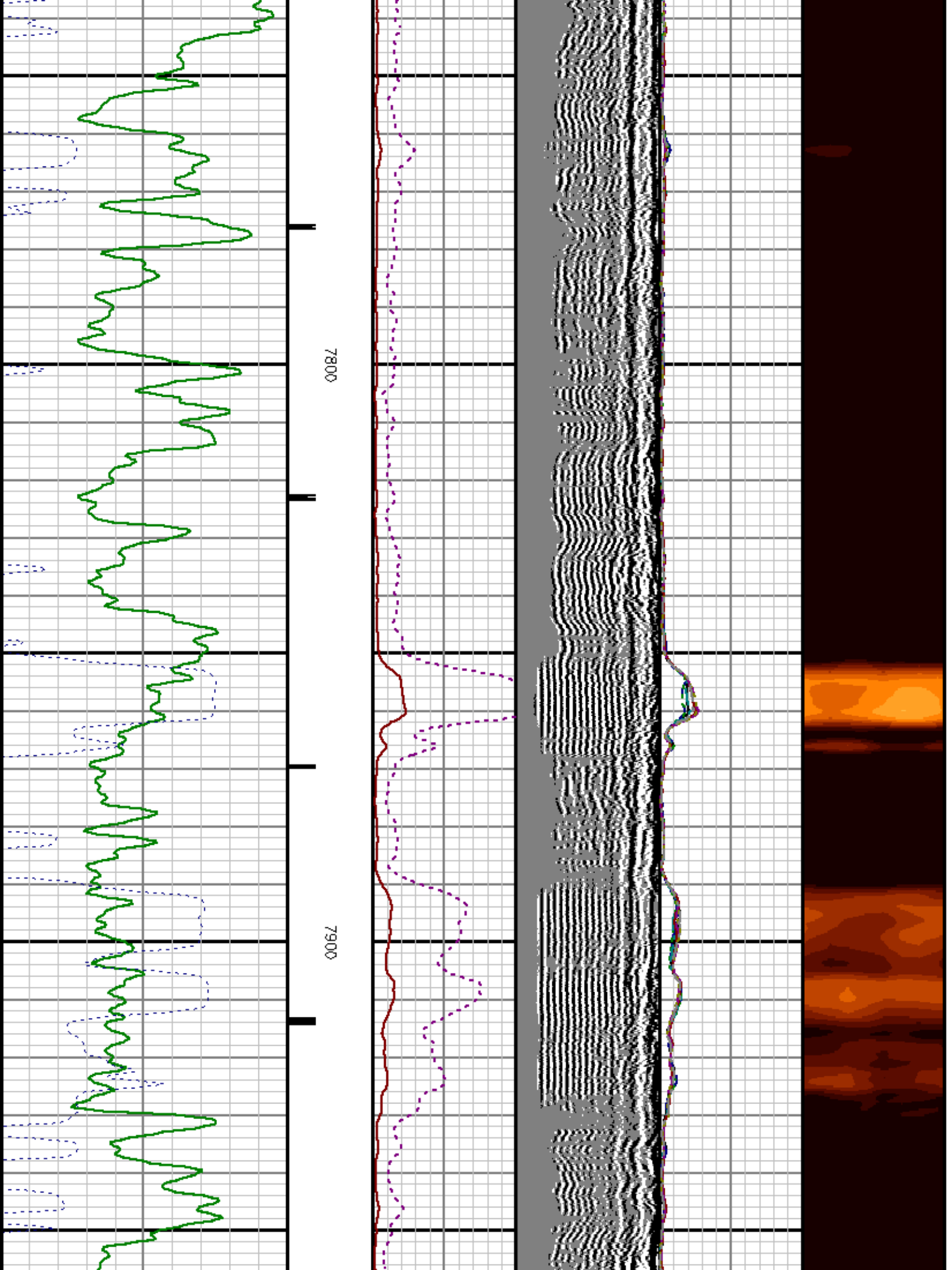


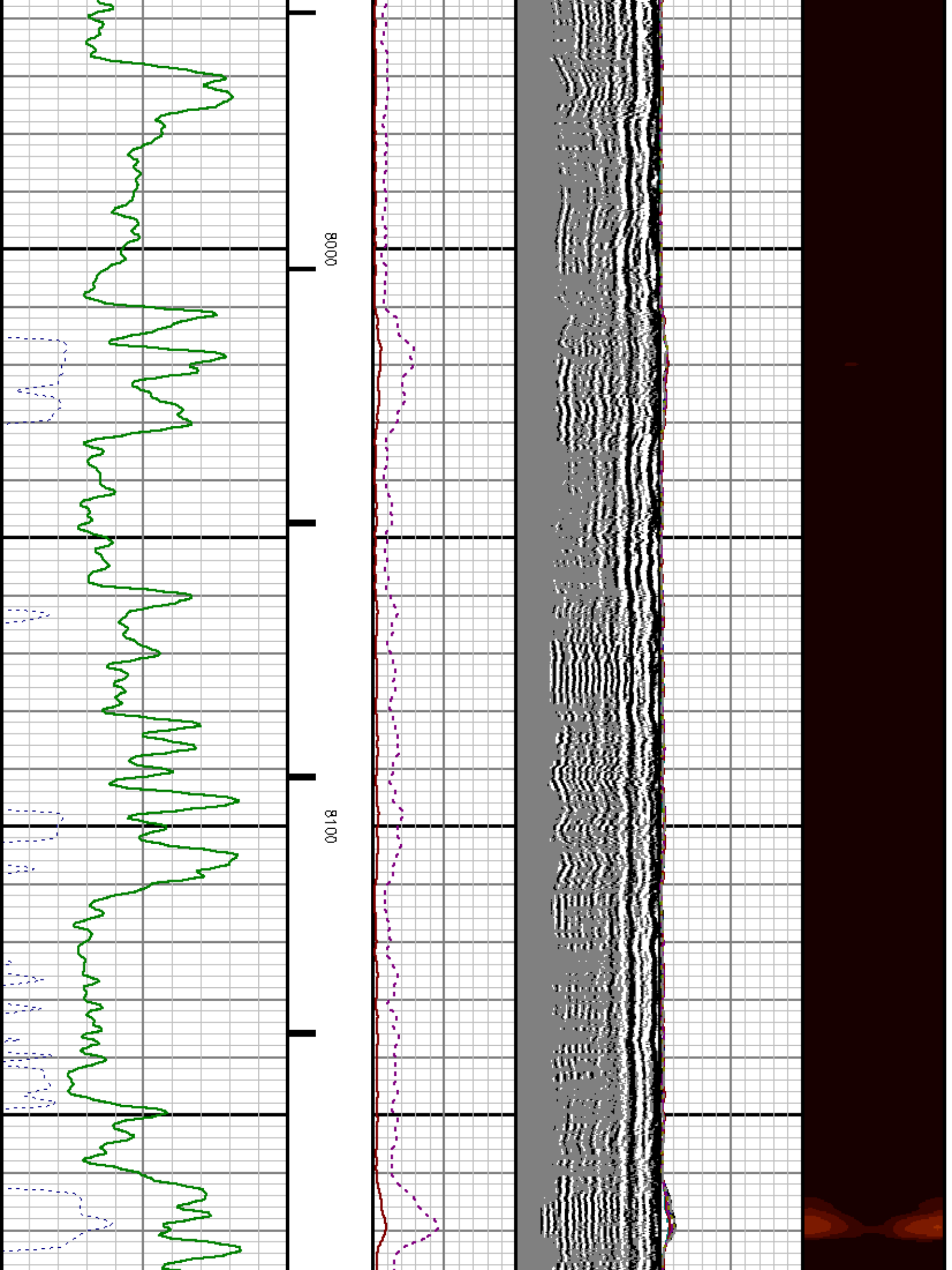


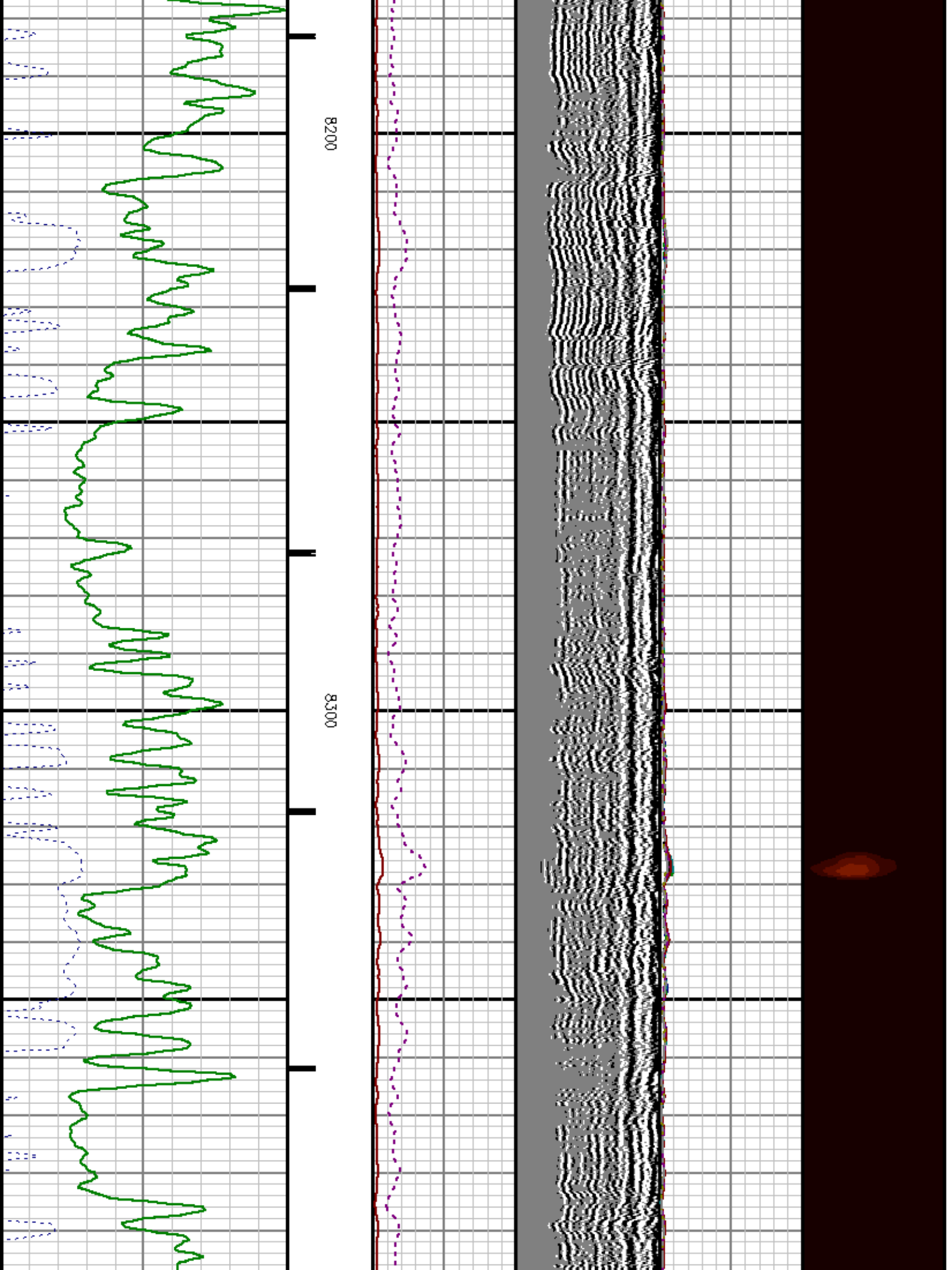


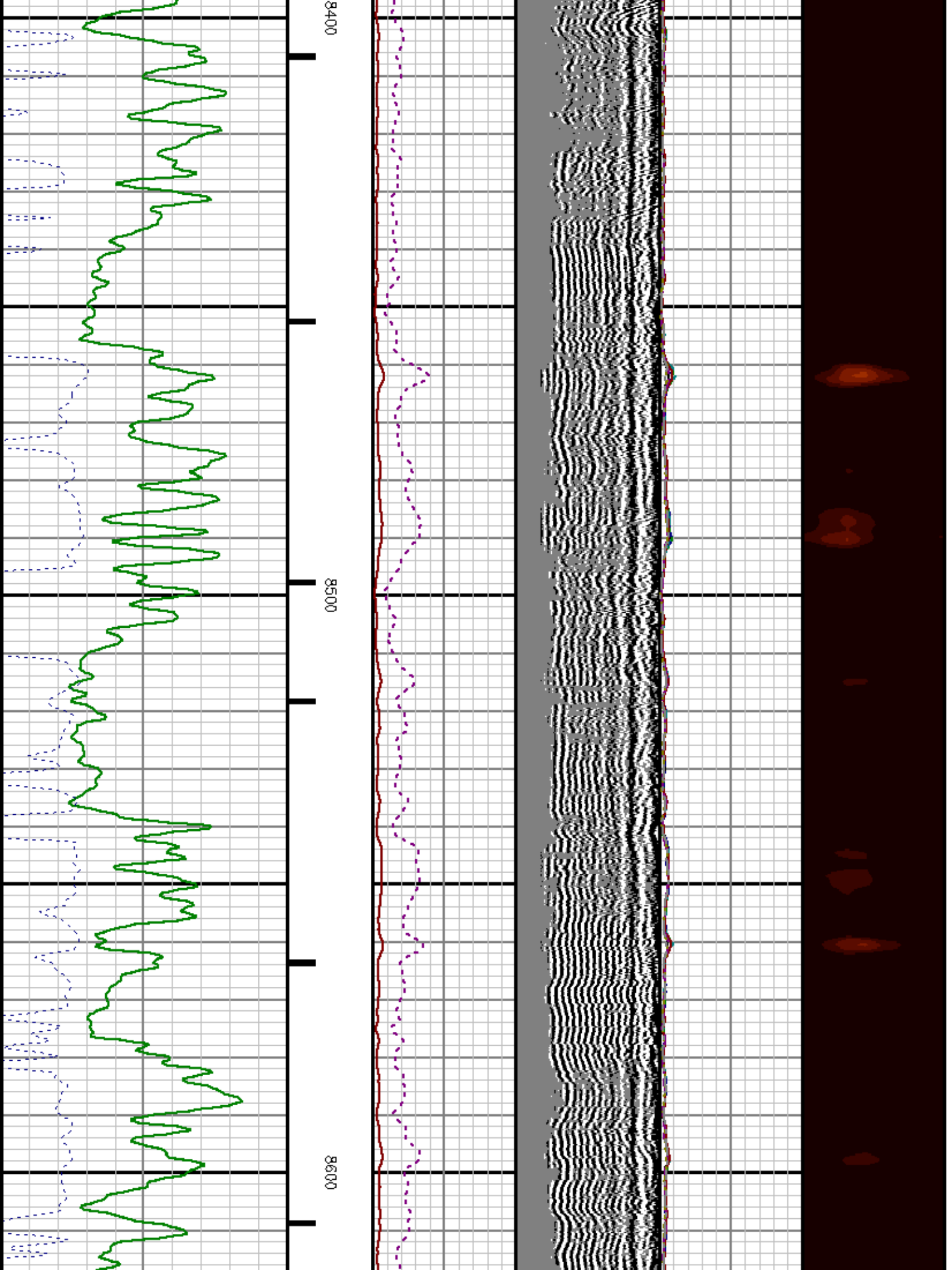




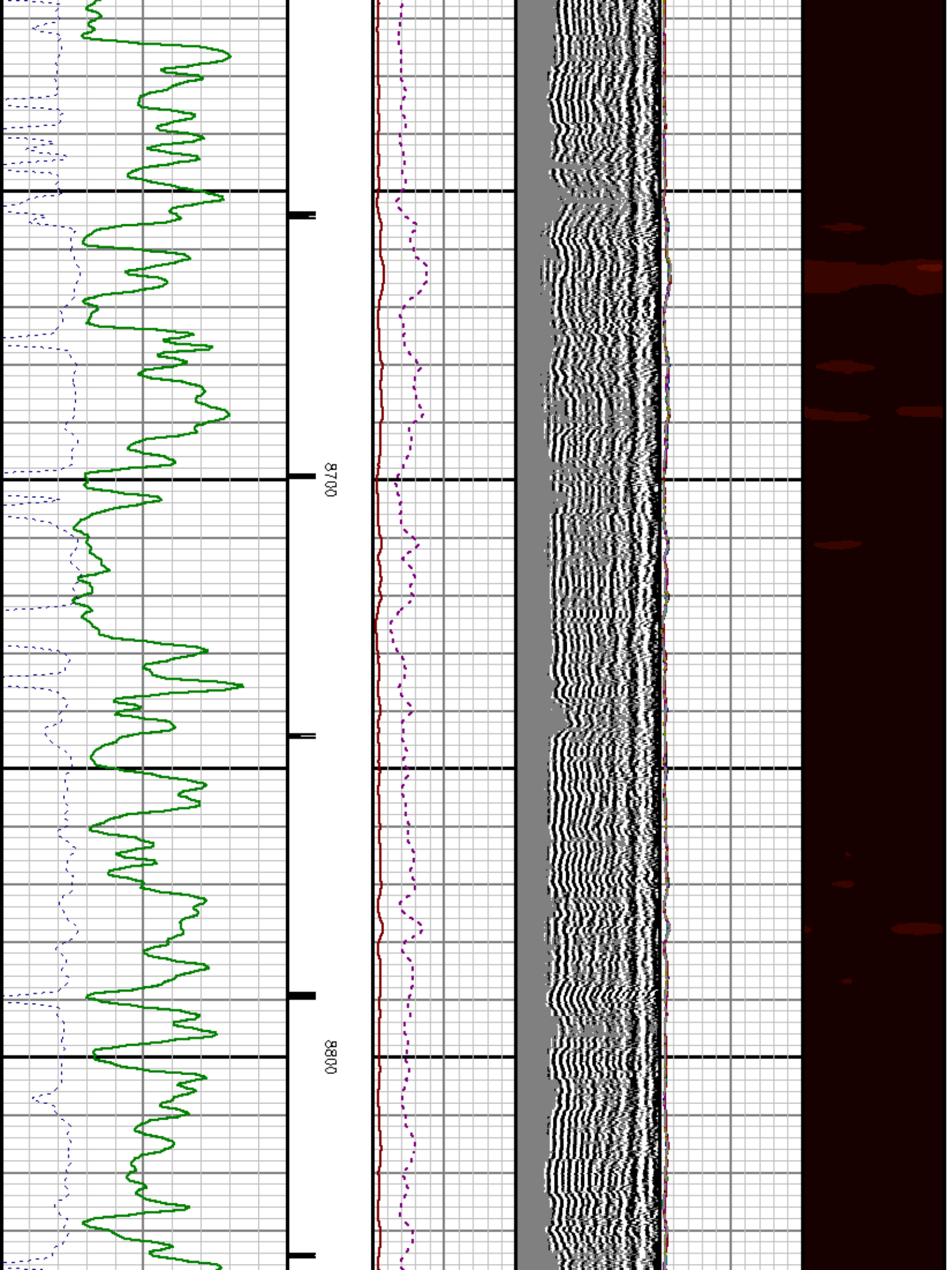




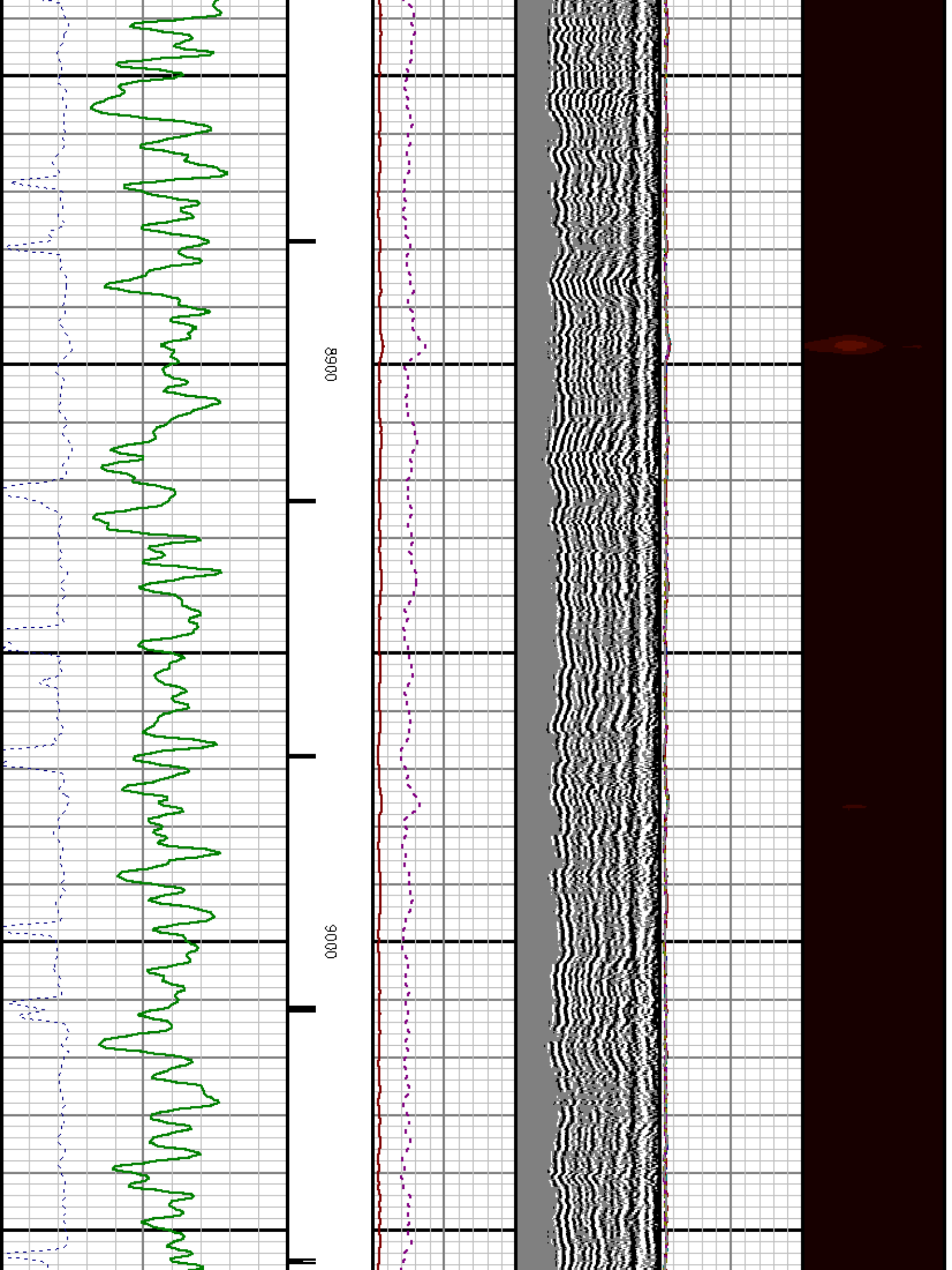


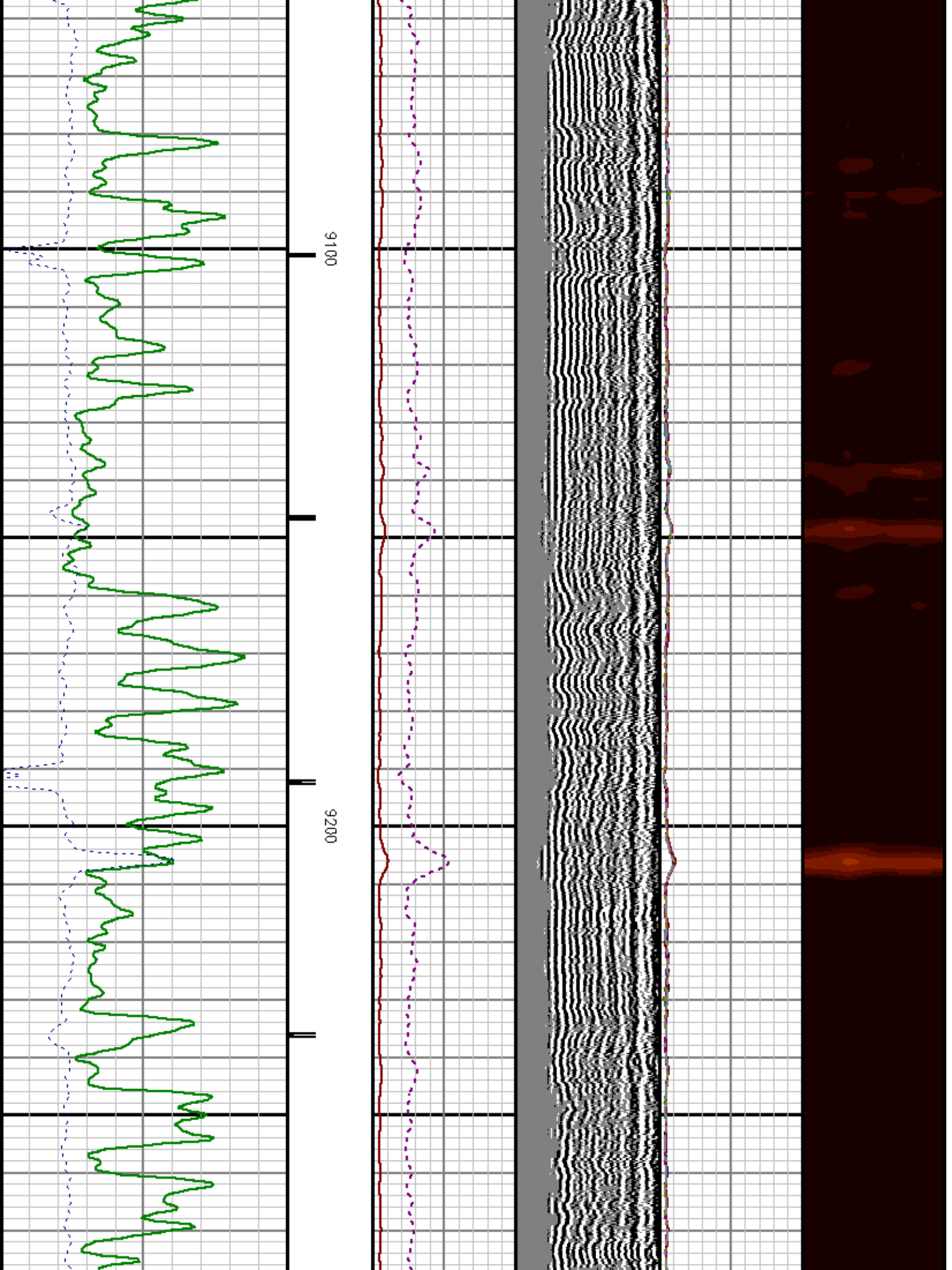


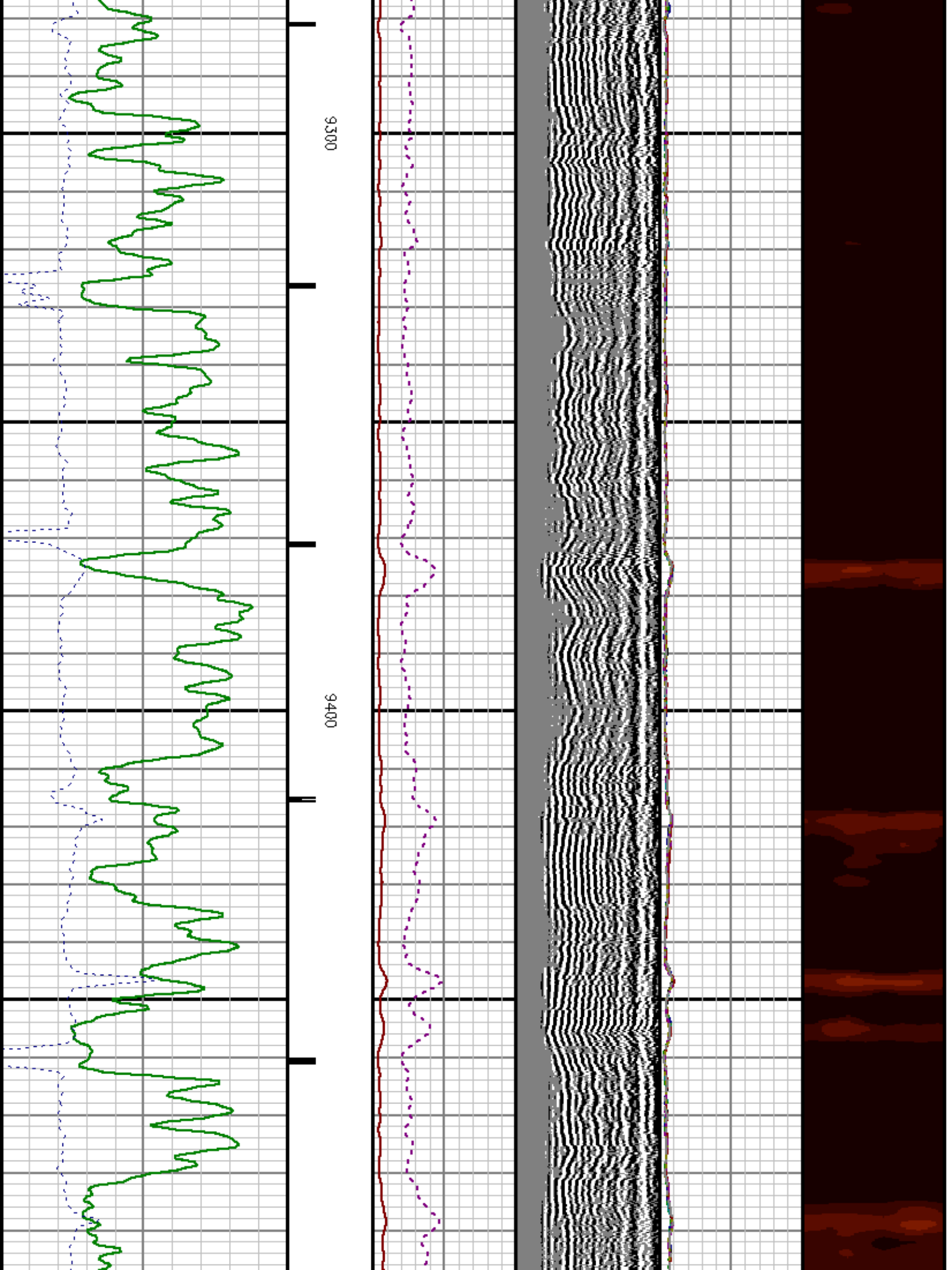


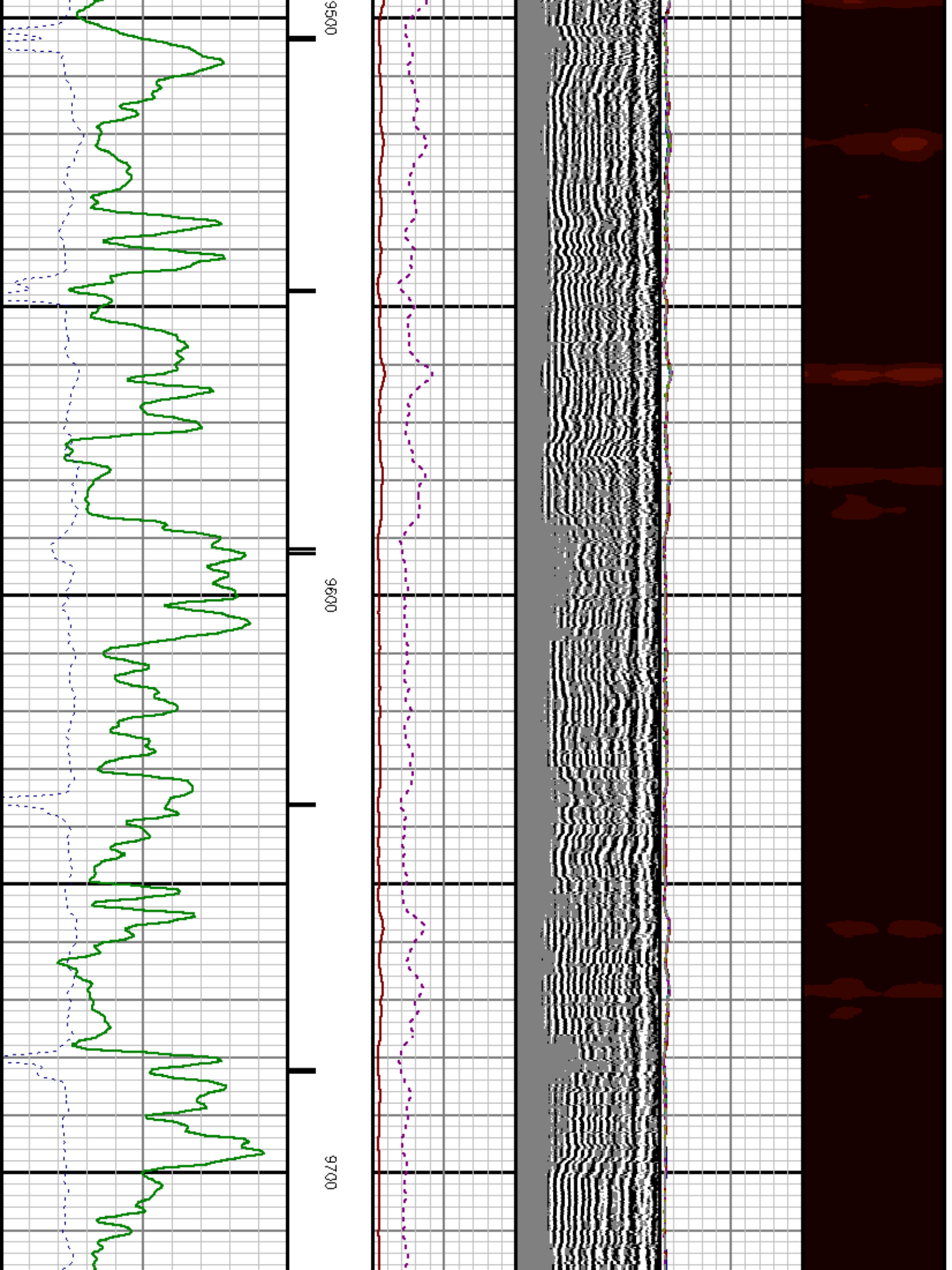




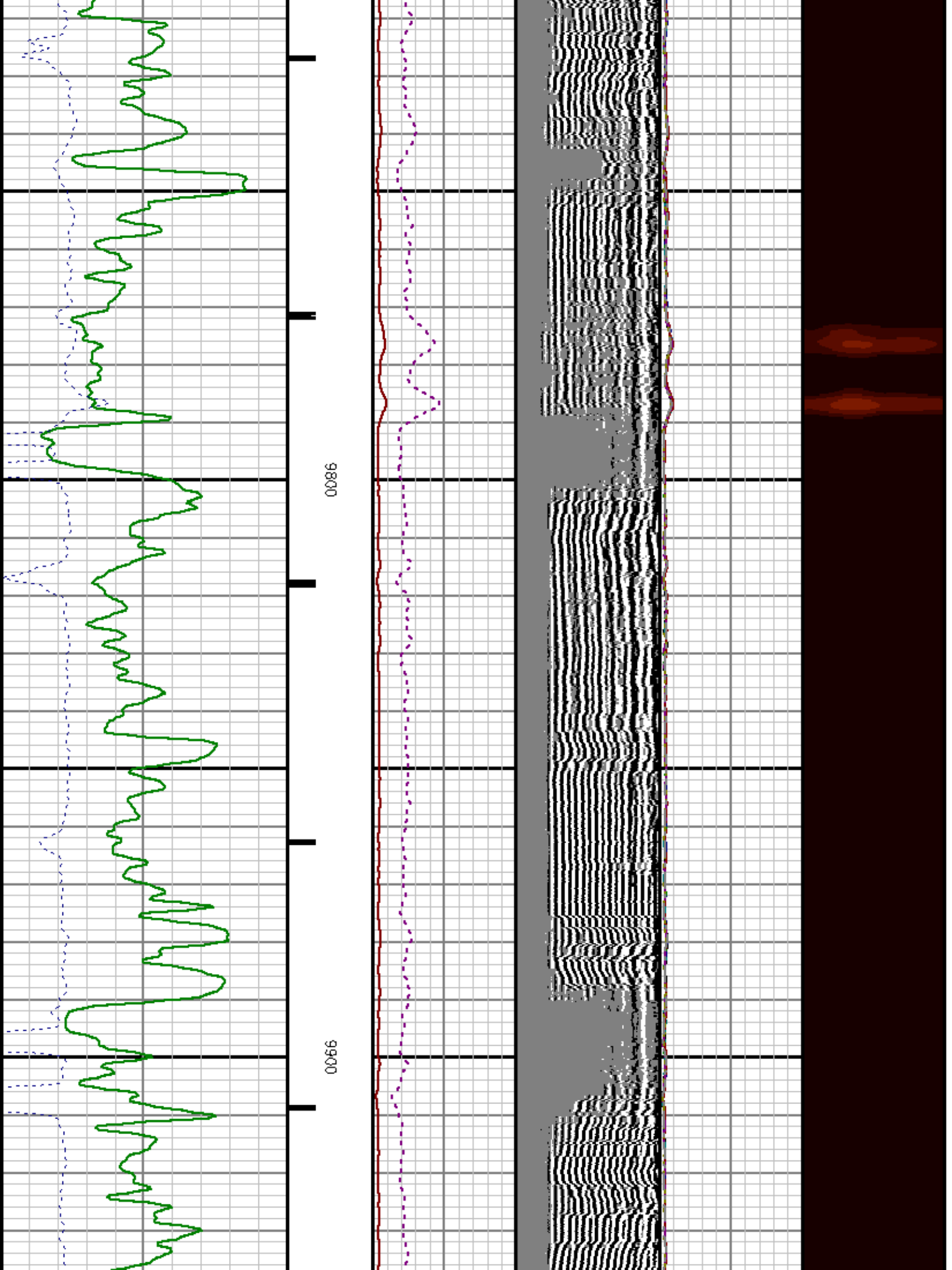




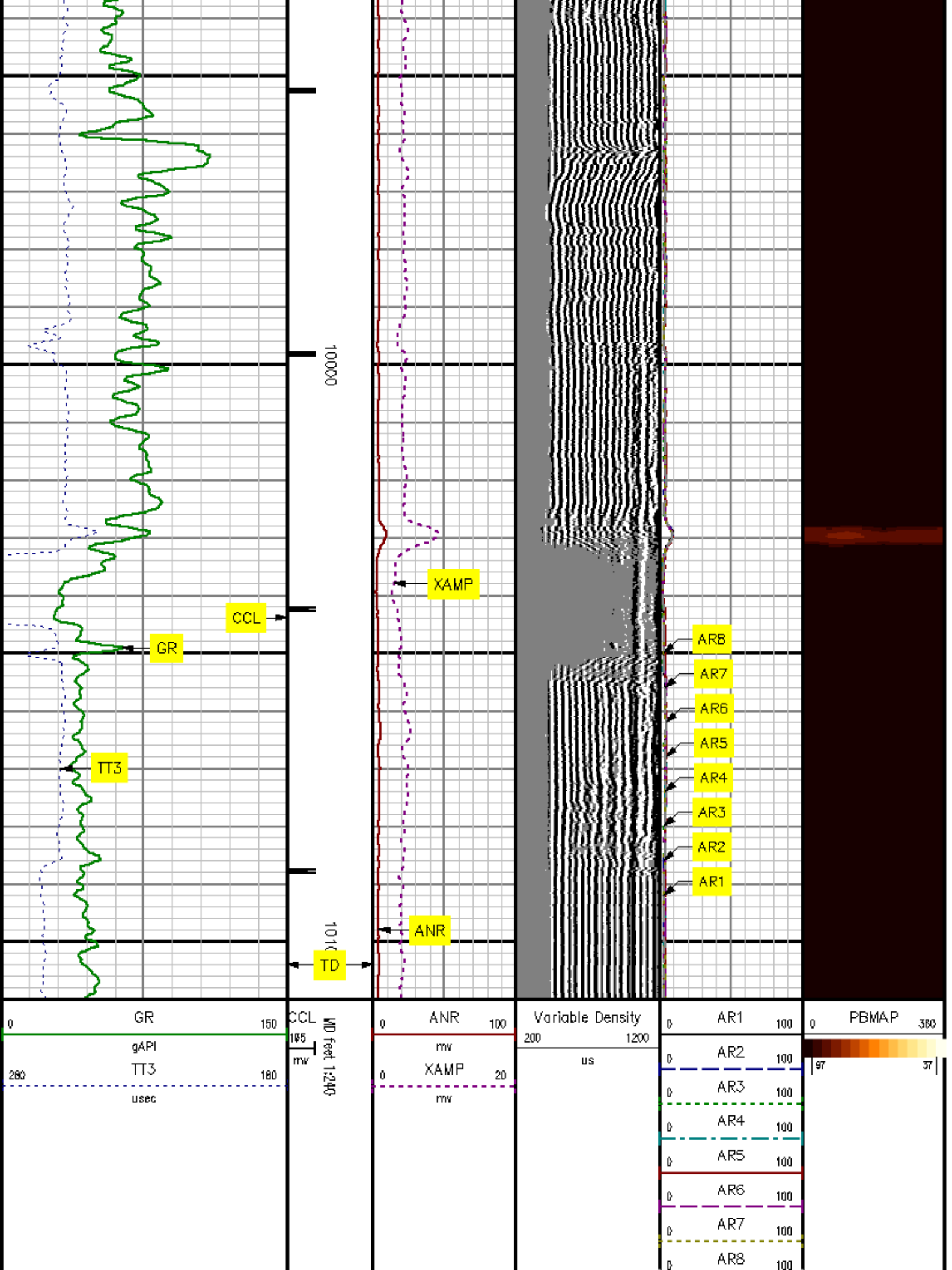












# REPEAT SECTION

0 PSI

| MEASUREMENT TYPE | PARAMETER             | VALUE   | UNITS   | TOP      | BOTTOM    |
|------------------|-----------------------|---------|---------|----------|-----------|
| RAL              | Amp Gate Start Far    | 316.900 | usec    | 9914.500 | 10121.000 |
| RAL              | Amp Gate Start Near   | 200.391 | usec    | 9914.500 | 10121.000 |
| RAL              | Amp Gate Start Radial | 200.391 | usec    | 9914.500 | 10121.000 |
| RAL              | Amp Gate Width Far    | 25.000  | usec    | 9914.500 | 10121.000 |
| RAL              | Amp Gate Width Near   | 25.000  | usec    | 9914.500 | 10121.000 |
| RAL              | Amp Gate Width Radial | 25.000  | usec    | 9914.500 | 10121.000 |
| RAL              | casing od             | 4.500   | inches  | 9914.500 | 10121.000 |
| RAL              | casing wt             | 11.600  | lbm/ft  | 9914.500 | 10121.000 |
| RAL              | FB Start Far          | 291.900 | usec    | 9914.500 | 10121.000 |
| RAL              | FB Start Near         | 175.391 | usec    | 9914.500 | 10121.000 |
| RAL              | FB Start Radial       | 175.391 | usec    | 9914.500 | 10121.000 |
| RAL              | FB Thresh Far         | 15.000  | mv      | 9914.500 | 10121.000 |
| RAL              | FB Thresh Near        | 10.000  | mv      | 9914.500 | 10121.000 |
| RAL              | FB Thresh Radial      | 10.000  | mv      | 9914.500 | 10121.000 |
| RAL              | Fluid Travel Time     | 200.000 | usec/ft | 9914.500 | 10121.000 |

## DEPTH OFFSETS

(for Acquired Curves)

| SERIES | DEPTH OFFSET | ACQUIRED CURVES |      |      |      |      |      |
|--------|--------------|-----------------|------|------|------|------|------|
| 1426XA | -15.360      | ACAL            | ANR  | AR1  | AR2  | AR3  | AR4  |
|        |              | AR5             | AR6  | AR7  | ARB  | CHV  | FPR2 |
|        |              | FPR3            | FPR5 | TT3  | TTR1 | TTR2 | TTR3 |
|        |              | TTR4            | TTR5 | TTR6 | TTR7 | TTR8 | XAMP |
| 1426XA | -14.360      | AFAR            | SIG  | TT5  |      |      |      |
| 1426XA | -7.250       | CCL             |      |      |      |      |      |
| 1426XA | -5.390       | GR              |      |      |      |      |      |
| 1426XA | 0.000        | NEU             |      |      |      |      |      |

Created by : RAL, v4.B.007

Plotted by : PlotMgr, v5.4.504

Company : MARATHON OIL COMPANY

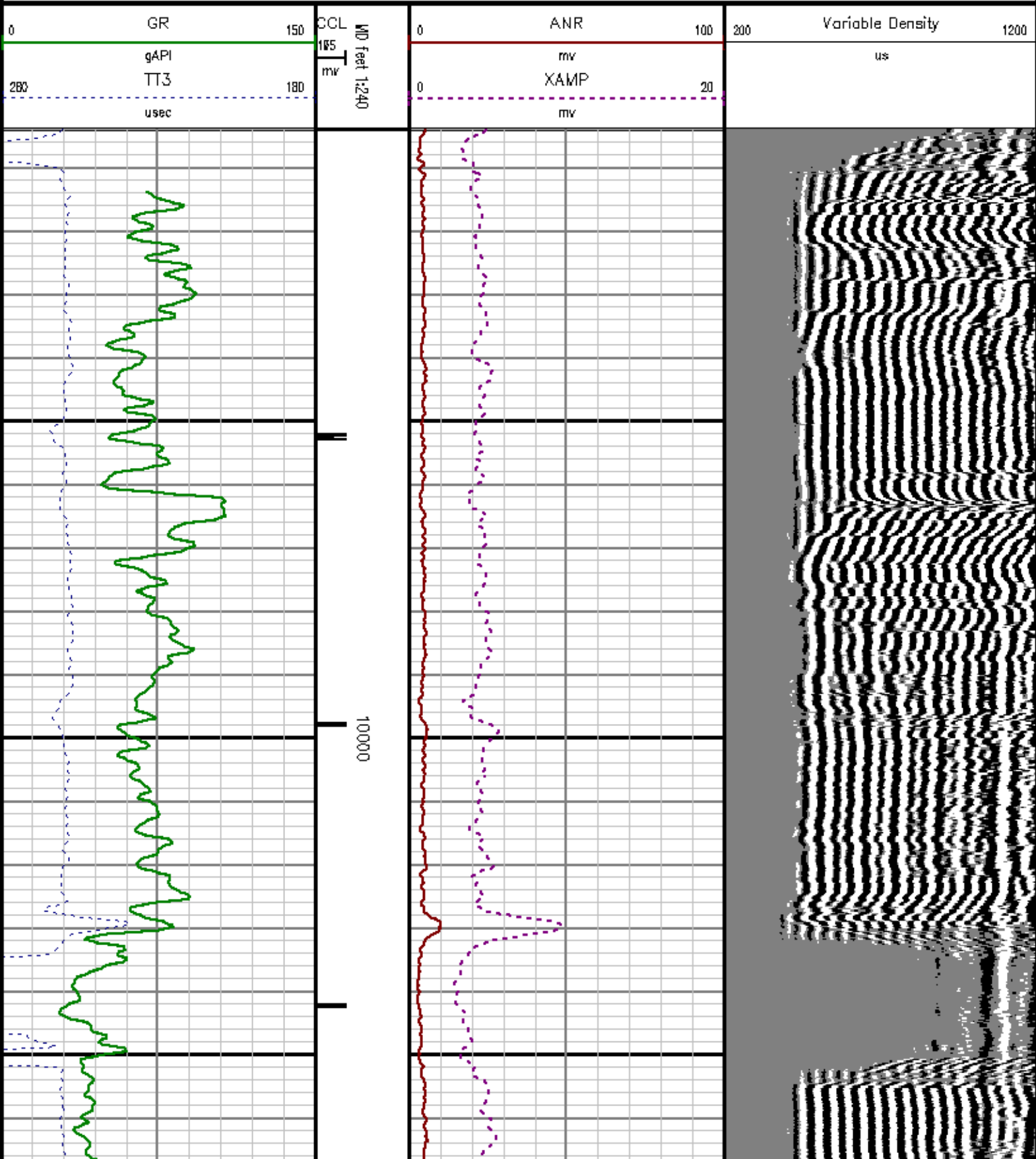
Well : 696-50-13

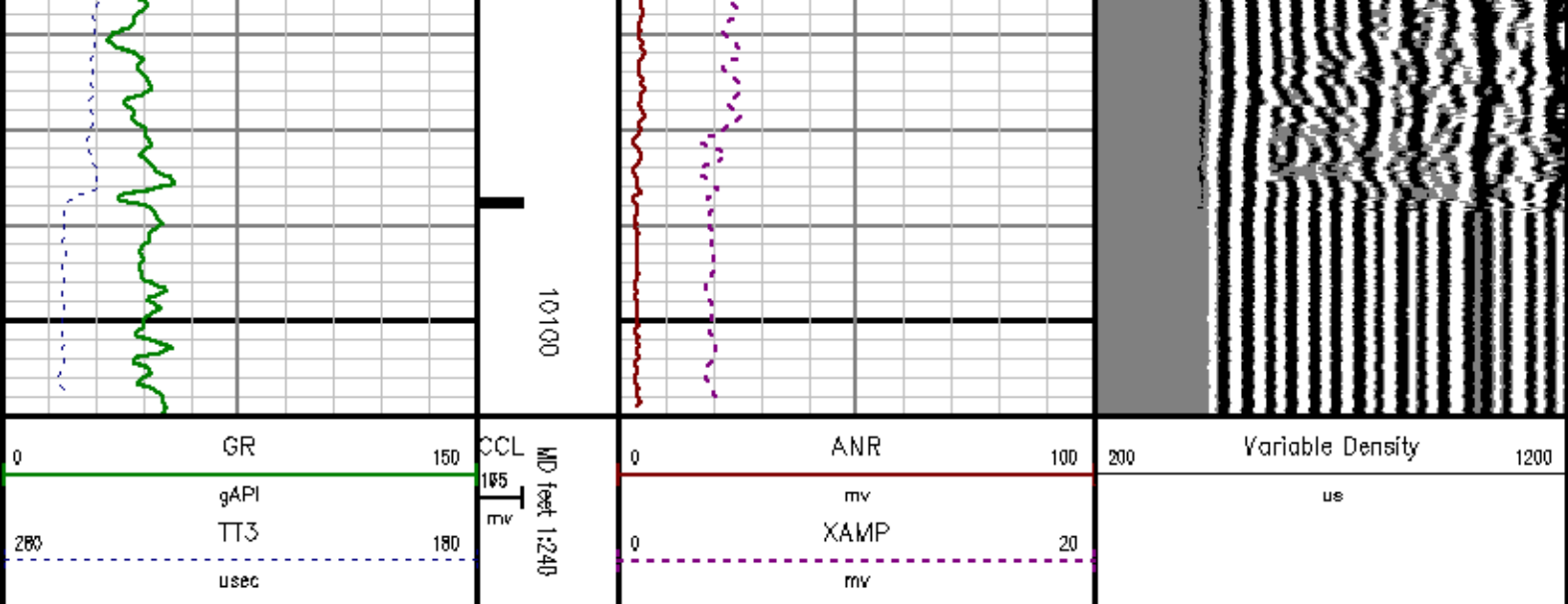
File Name : d:\welldata\13rad\repeat.xtf

Mode : PlotMgr 5.4.504

Interval : 9904.00 - 10110.00 feet UP

Created : 4/19/2010 1:35:54 PM





## *SURFACE CASING PASS*

*0 PSI*

| MEASUREMENT TYPE | PARAMETER             | VALUE   | UNITS    | TOP      | BOTTOM   |
|------------------|-----------------------|---------|----------|----------|----------|
| RAL              | Amp Gate Start Far    | 316.900 | u sec    | 2208.156 | 2422.000 |
| RAL              | Amp Gate Start Near   | 200.391 | u sec    | 2208.156 | 2422.000 |
| RAL              | Amp Gate Start Radial | 200.391 | u sec    | 2208.156 | 2422.000 |
| RAL              | Amp Gate Width Far    | 25.000  | u sec    | 2208.156 | 2422.000 |
| RAL              | Amp Gate Width Near   | 25.000  | u sec    | 2208.156 | 2422.000 |
| RAL              | Amp Gate Width Radial | 25.000  | u sec    | 2208.156 | 2422.000 |
| RAL              | casing od             | 4.500   | inches   | 2208.156 | 2422.000 |
| RAL              | casing wt             | 11.600  | lbm/ft   | 2208.156 | 2422.000 |
| RAL              | FB Start Far          | 291.900 | u sec    | 2208.156 | 2422.000 |
| RAL              | FB Start Near         | 175.391 | u sec    | 2208.156 | 2422.000 |
| RAL              | FB Start Radial       | 175.391 | u sec    | 2208.156 | 2422.000 |
| RAL              | FB Thresh Far         | 15.000  | mv       | 2208.156 | 2422.000 |
| RAL              | FB Thresh Near        | 10.000  | mv       | 2208.156 | 2422.000 |
| RAL              | FB Thresh Radial      | 10.000  | mv       | 2208.156 | 2422.000 |
| RAL              | Fluid Travel Time     | 200.000 | u sec/ft | 2208.156 | 2421.906 |

# DEPTH OFFSETS

(for Acquired Curves)

| SERIES | DEPTH OFFSET | ACQUIRED CURVES |      |      |      |      |      |
|--------|--------------|-----------------|------|------|------|------|------|
| 1426XA | -15.360      | ACAL            | ANR  | AR1  | AR2  | AR3  | AR4  |
|        |              | AR5             | AR6  | AR7  | AR8  | CHV  | FPR2 |
|        |              | FPR3            | FPR5 | TT3  | TTR1 | TTR2 | TTR3 |
|        |              | TTR4            | TTR5 | TTR6 | TTR7 | TTR8 | XAMP |
| 1426XA | -14.360      | AFAR            | SIG  | TT5  |      |      |      |
| 1426XA | -7.250       | CCL             |      |      |      |      |      |
| 1426XA | -5.380       | GR              |      |      |      |      |      |
| 1426XA | 0.000        | NEU             |      |      |      |      |      |

Created by : RAL, v4.6.D07

Plotted by : PlotMgr, v5.4.5D4

Company : MARATHON OIL COMPANY

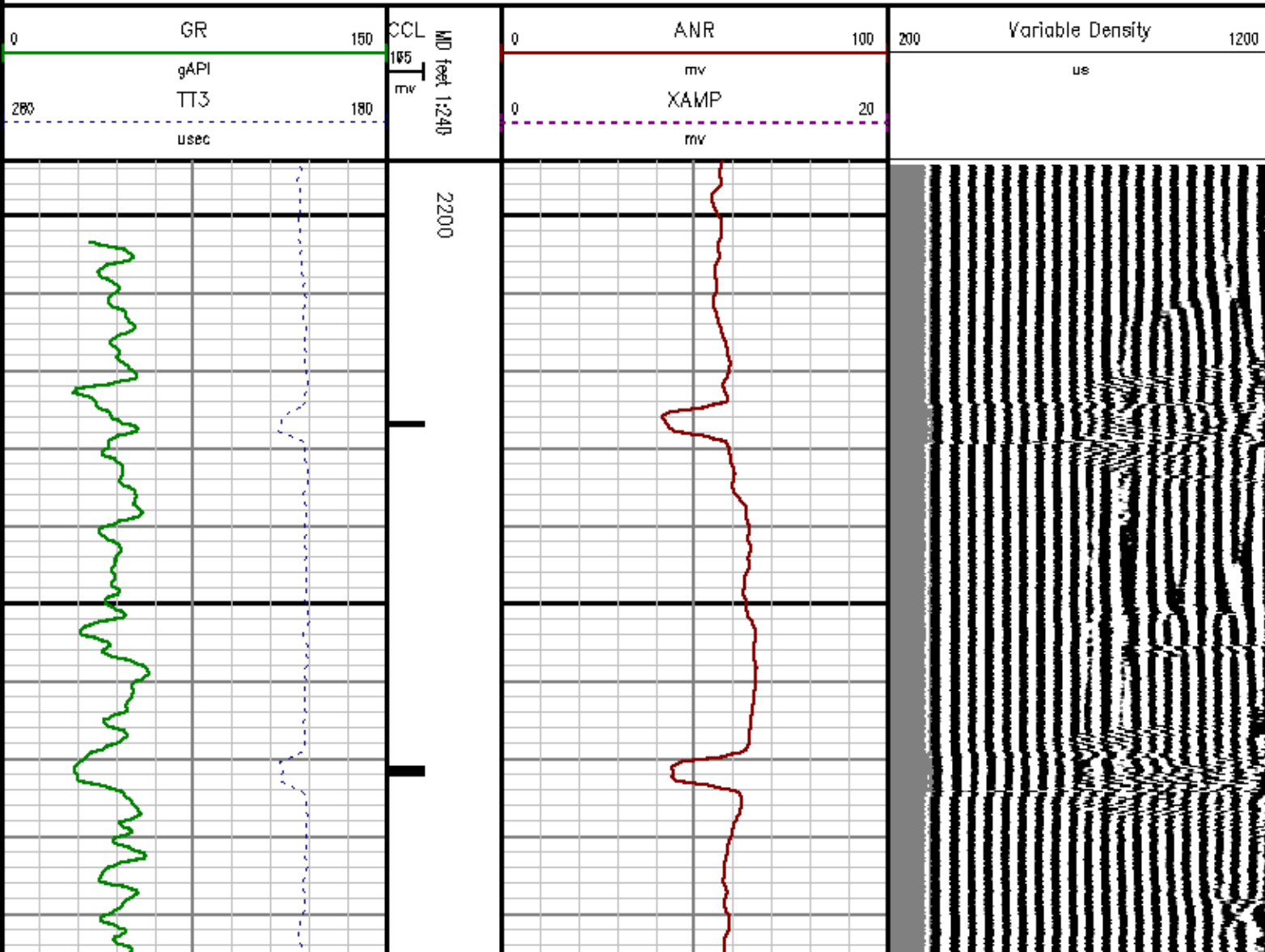
Well : 696-5C-13

File Name : D:\Welldata\13RAD\TOP.XTF

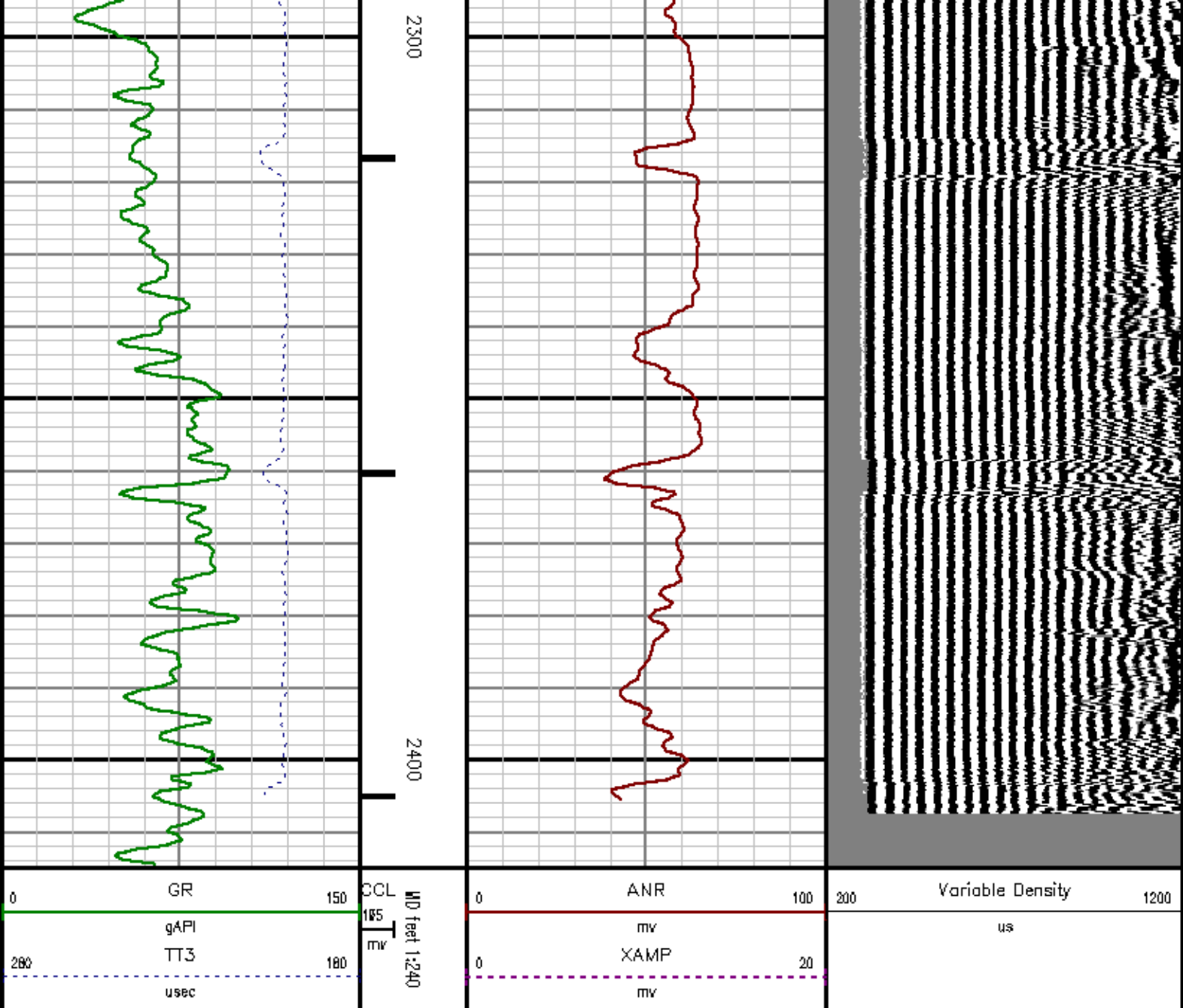
Mode : PlotMgr 5.4.5D4

Interval : 2193.00 - 2415.00 feet UP

Created : 4/18/2010 12:57:54 PM







## CALIBRATION SUMMARY

### GAMMA RAY

Calibration File: C:\case\calver\GR\457A1.cal

#### CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Apr 08 03:25:20 2010 TOOL SERIES: 2459XA ASSET: 457 SEQ: A1

Calibrator M Background Calibrator On Multiplicative Background Calibrator On Differential

|              |            |               |                |            |               |              |
|--------------|------------|---------------|----------------|------------|---------------|--------------|
| Calibrator # | Background | Calibrator On | Multiplicative | Background | Calibrator On | Differential |
|              | [cps]      | [cps]         |                | [api]      | [api]         | [api]        |
| S2K          | DA905      | 66.67         | 0.676          | 45.03      | 230.03        | 185.00       |

Verification File: C:\case\calver\GR\457A1.VP

#### PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Thu Apr 08 03:27:39 2010 TOOL SERIES: 2459XA ASSET: 457 SEQ: A1

|              |            |               |                |            |               |              |
|--------------|------------|---------------|----------------|------------|---------------|--------------|
| Calibrator # | Background | Calibrator On | Multiplicative | Background | Calibrator On | Differential |
|              | [cps]      | [cps]         |                | [api]      | [api]         | [api]        |
| S2K          | DA905      | 58.98         | 0.676          | 39.84      | 224.75        | 184.91       |

***RALSHP***

Shop Calibration: C:\case\calver\RALSHP\947A2\_shp.cal

#### SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sun Apr 18 08:25:07 2010 TOOL SERIES: 1426XA ASSET: 947 SEQ: A2

|                      |        |               |      |                   |       |               |      |
|----------------------|--------|---------------|------|-------------------|-------|---------------|------|
| Tool Delay<br>[usec] | -50.00 | Tank OD<br>in | 5.50 | Tank Wt<br>lbm/ft | 15.50 | Tank ID<br>in | 4.95 |
|----------------------|--------|---------------|------|-------------------|-------|---------------|------|

| RECEIVER       | Travel Time<br>[usec] | Amp. Gate<br>Start<br>[usec] | Amp. Gate<br>Width<br>[usec] | Zero Gate<br>Start<br>[usec] | Zero Gate<br>Width<br>[usec] | Zero Amp.<br>[mV] | Amp Ref.<br>[mV] | Shop Factor |
|----------------|-----------------------|------------------------------|------------------------------|------------------------------|------------------------------|-------------------|------------------|-------------|
| CAL Pulse      | 222                   | 216                          | 30                           | 166                          | 25                           | 0.223             | 100.00           | 0.23        |
| 3 Ft. Receiver | 222                   | 216                          | 33                           | 166                          | 25                           | 0.563             | 100.00           | 0.23        |
| 5 Ft. Receiver | 330                   | 332                          | 23                           | 239                          | 25                           | -0.115            | 150.00           | 0.25        |
| Radial #1      | 223                   | 216                          | 27                           | 131                          | 34                           | -0.354            | 100.00           | 0.23        |
| Radial #2      | 223                   | 216                          | 27                           | 131                          | 34                           | -0.110            | 100.00           | 0.23        |
| Radial #3      | 222                   | 216                          | 27                           | 131                          | 34                           | -0.257            | 100.00           | 0.23        |
| Radial #4      | 222                   | 216                          | 27                           | 131                          | 34                           | 0.038             | 100.00           | 0.23        |
| Radial #5      | 220                   | 216                          | 27                           | 131                          | 34                           | -0.013            | 100.00           | 0.23        |
| Radial #6      | 220                   | 216                          | 27                           | 131                          | 34                           | -0.085            | 100.00           | 0.23        |
| Radial #7      | 220                   | 216                          | 27                           | 131                          | 34                           | -0.285            | 100.00           | 0.23        |
| Radial #8      | 223                   | 216                          | 27                           | 131                          | 34                           | -0.357            | 100.00           | 0.23        |

***RALFLD***

Wellsite Calibration: C:\case\calver\RALFLD\947A2 fld.cal

#### WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sun Apr 18 08:27:16 2010 TOOL SERIES: 1426XA ASSET: 947 SEQ: A2

|                      |        |                 |      |                     |       |                 |      |
|----------------------|--------|-----------------|------|---------------------|-------|-----------------|------|
| Tool Delay<br>[usec] | -50.00 | Casing OD<br>in | 4.50 | Casing Wt<br>lbm/ft | 11.60 | Casing ID<br>in | 4.00 |
|----------------------|--------|-----------------|------|---------------------|-------|-----------------|------|

| RECEIVER  | Zero Gate<br>Start<br>[usec] | Zero Gate<br>Width<br>[usec] | Zero Amp.<br>[mV] | Full Amp.<br>[mV] | Wellsite Factor | Amp. Ref<br>[mV] |
|-----------|------------------------------|------------------------------|-------------------|-------------------|-----------------|------------------|
| CAL Pulse | 166                          | 25                           | 0.088             | 0.000             | 1.00            | 100.000          |

|                |     |    |       |
|----------------|-----|----|-------|
| 3 Ft. Receiver | 164 | 25 | 0.048 |
| 5 Ft. Receiver | 270 | 25 | 0.172 |
| Radial #1      | 173 | 25 | 0.240 |
| Radial #2      | 173 | 25 | 0.281 |
| Radial #3      | 173 | 25 | 0.387 |
| Radial #4      | 173 | 25 | 0.342 |
| Radial #5      | 173 | 25 | 0.157 |
| Radial #6      | 173 | 25 | 0.168 |
| Radial #7      | 173 | 25 | 0.178 |
| Radial #8      | 173 | 25 | 0.059 |

## TOOL DIAGRAM

### OTA SHORT CABLE HEAD

#### CENTRALIZER

|          |          |
|----------|----------|
| Series   | RALCENT  |
| Mnemonic | CENT     |
| Diameter | 3.12"    |
| Weight   | 20.00 lb |

### PROBE 2 3/4 DUAL RECEIVER RADII

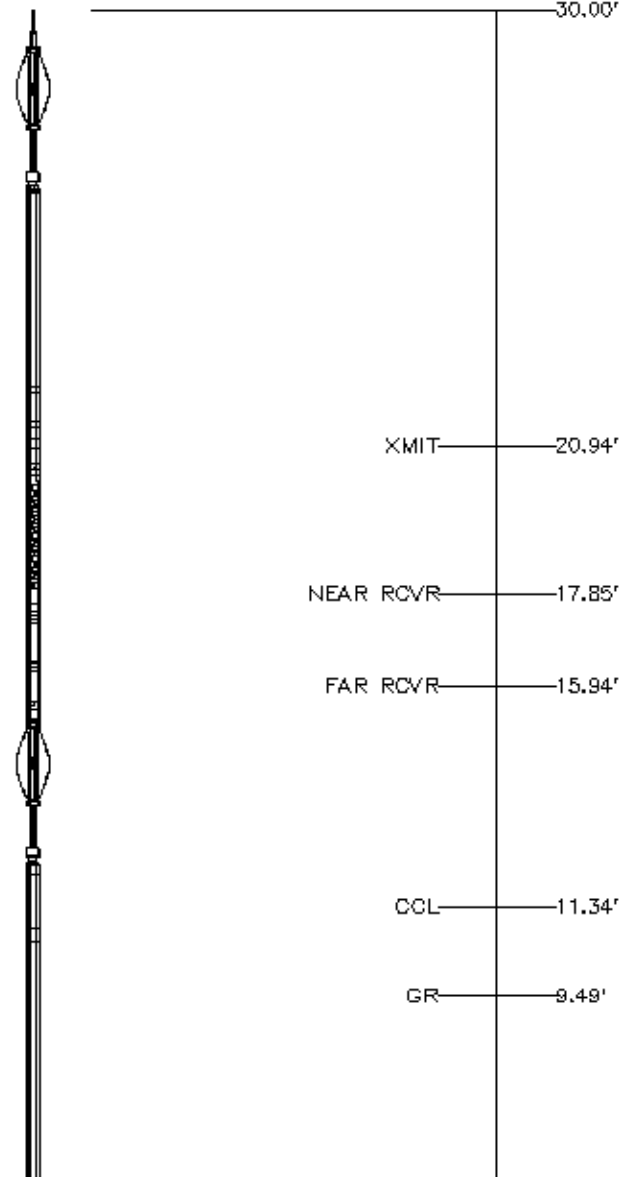
|               |                 |
|---------------|-----------------|
| Series        | 1426XA          |
| Mnemonic      | PROB            |
| Diameter      | 2.75"           |
| Length        | 11.17'          |
| Measure Point | 0.75' FAR RCVR  |
| Measure Point | 2.67' NEAR RCVR |
| Measure Point | 5.75' XMIT      |
| Temp Rating   | 350.00 °F       |
| Press Rating  | 18000.00 PSI    |

### CENTRALIZER

|          |          |
|----------|----------|
| Series   | RALCENT  |
| Mnemonic | CENT     |
| Diameter | 3.12"    |
| Weight   | 20.00 lb |

### Probe GR/CCL/NEU

|               |           |
|---------------|-----------|
| Series        | 2459XA    |
| Mnemonic      | PROB      |
| Diameter      | 2.75"     |
| Length        | 9.42'     |
| Measure Point | 1.21' NEU |
| Measure Point | 6.60' GR  |
| Measure Point | 8.46' CCL |



NEU 4.09'

0.00'

# CENTRALIZER

Series RALCENT  
Mnemonic CENT  
Diameter 3.12"  
Weight 20.00 lb

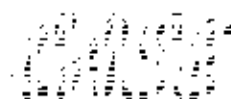
Total Length: 30.00'

Total Weight: Not Available

Max Diameter: 0' 3.12"



Baker Atlas



Company

MARATHON OIL COMPANY

Well

696-5C-13

Field

GRAND VALLEY

County

GARFIELD

State

COLORADO

File No:

1751

API No:

06045183830000

Location

SHL: 3479' FWL & 1313' FWL

Elevations

KB 8153 ft

DF 8152 ft

GL 8129 ft

SEC

5

TWP

6S

RGE

96W