



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH088807 WPX ENERGY

Well STATE OF COLORADO KP 431-9

API No: Field KOKOPELLI

County GARFIELD State CO

05045222180000

Location

SHL: 2313' FNL & 2158' FEL

BHL: 826' FNL & 1564' FEL

SEC 9 TWP 6S RGE 91W

Other Services

RPM

Permanent Datum GL Elevation 5762

Log Measured From KB 21 Above P. D.

Drill Measured From KB Elevations KB 5783 DF GL 5762

| | | |
|------------------------------|---------------|----------------|
| Date | 02/AUG/14 | |
| Run | ONE | |
| Service Order | US088807 | |
| Depth Driller | 6137 | |
| Depth Logger | 6067 | |
| Bottom Logged Interval | 6057 | |
| Top Logged Interval | 21 | |
| Time Started | 15:30 | |
| Time Finished | 18:00 | |
| Operator Rig Time | 2.5 HOURS | |
| Type of Fluid in Hole | WATER | |
| Fluid Density | NA | |
| Salinity | NA | |
| Fluid Level | 46 | |
| Logged Cement Top | NA | |
| Wellhead Pressure | 0 | |
| Maximum Hole Deviation | NA | |
| Nominal Logging Speed | 65 | |
| Maximum Recorded Temperature | 174 | |
| Reference Log | NA | |
| Reference Log Date | NA | |
| Equipment No. | Location | GRAND JUNCTION |
| Recorded By | NEMELL | |
| Witnessed By | COLLEAPLEGATE | |

- 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 |
| 13.5 | 0 | 1406 |
| 8.75 | 1406 | 6309 |

| Casing Record | | | | |
|---------------|--------|-------|------|------|
| Size | Weight | Grade | From | To |
| 9.625 | | | 0 | 1406 |
| 5.5 | 17 | 1-80 | 0 | 6309 |

Remarks

All data on this log is shifted using the CCL curve to put the wellhead (top CCL mark) on depth with ground level elevation at the client's request.

The amount of linear shift is 6 feet.

Logged with zero PSI at wellhead.

BHT = 174 °F

| Equipment Data | | | | | |
|----------------|------|--------|---------------|---------------|-------------|
| Run | Trip | Tool | Series Number | Serial Number | Position |
| 1 | 1 | CBL | 1426XA | 10218496 | CENTRALIZED |
| 1 | 1 | GR/CCL | 2459XA | 10124121 | CENTRALIZED |

PRIMARY PRESENTATION

0 PSI

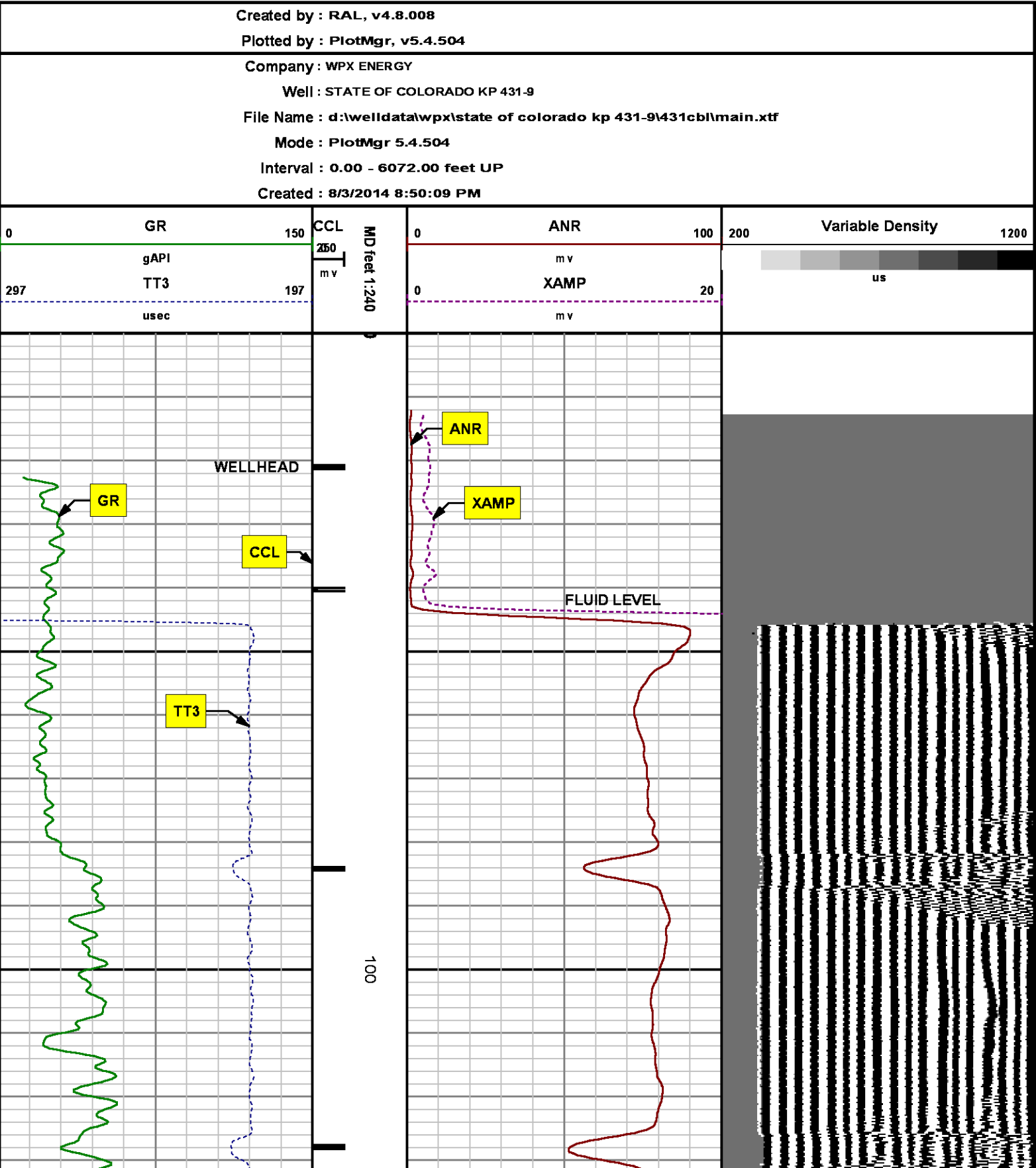
| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | TOP | BOTTOM |
|------------------|-----------------------|---------|---------|--------|----------|
| RAL | Amp Gate Start Far | 320.000 | usec | 26.844 | 6071.500 |
| RAL | Amp Gate Start Near | 212.000 | usec | 26.844 | 6071.500 |
| RAL | Amp Gate Start Radial | 212.000 | usec | 26.844 | 6071.500 |
| RAL | Amp Gate Width Far | 25.000 | usec | 26.844 | 6071.500 |
| RAL | Amp Gate Width Near | 25.000 | usec | 26.844 | 6071.500 |
| RAL | Amp Gate Width Radial | 25.000 | usec | 26.844 | 6071.500 |
| RAL | casing od | 5.500 | inches | 26.844 | 6071.500 |
| RAL | casing wt | 17.000 | lbm/ft | 26.844 | 6071.500 |
| RAL | FB Start Far | 306.289 | usec | 26.844 | 6071.500 |
| RAL | FB Start Near | 189.780 | usec | 26.844 | 6071.500 |
| RAL | FB Start Radial | 189.780 | usec | 26.844 | 6071.500 |
| RAL | FB Thresh Far | 10.000 | mv | 26.844 | 6071.500 |
| RAL | FB Thresh Near | 4.000 | mv | 26.844 | 6071.500 |
| RAL | FB Thresh Radial | 4.000 | mv | 26.844 | 6071.500 |
| RAL | Fluid Travel Time | 200.000 | usec/ft | 26.844 | 6072.344 |

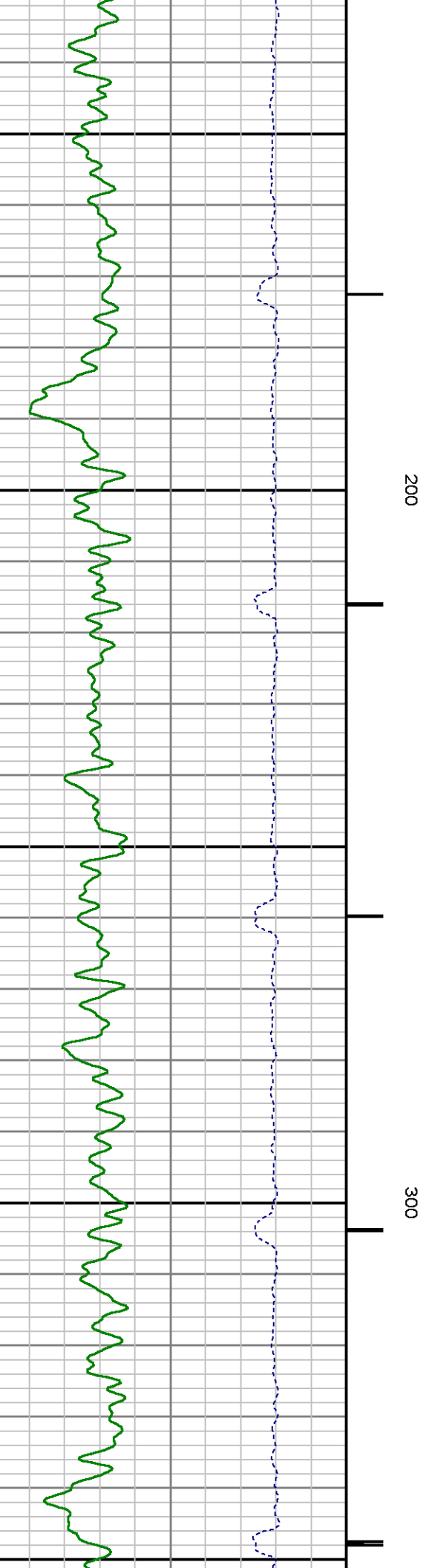
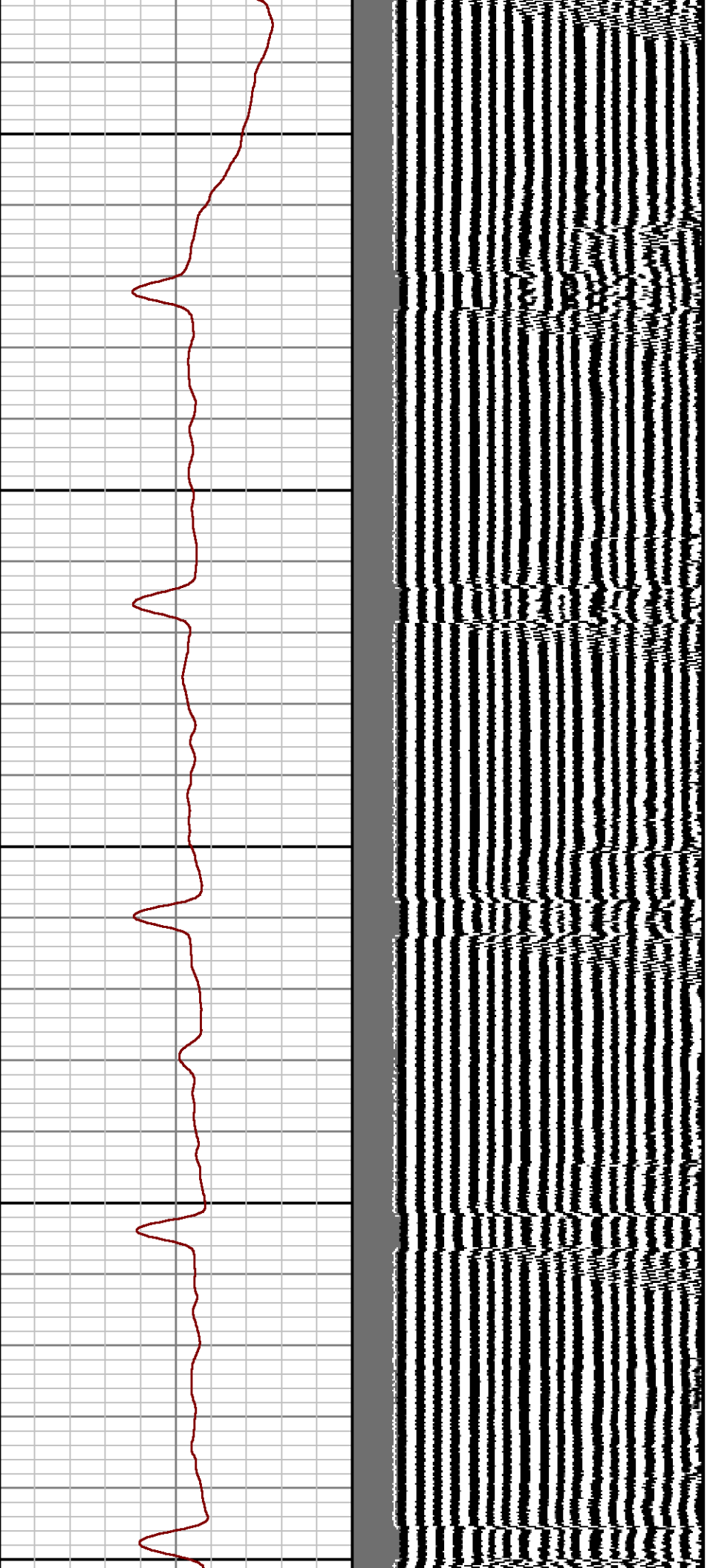
DEPTH OFFSETS

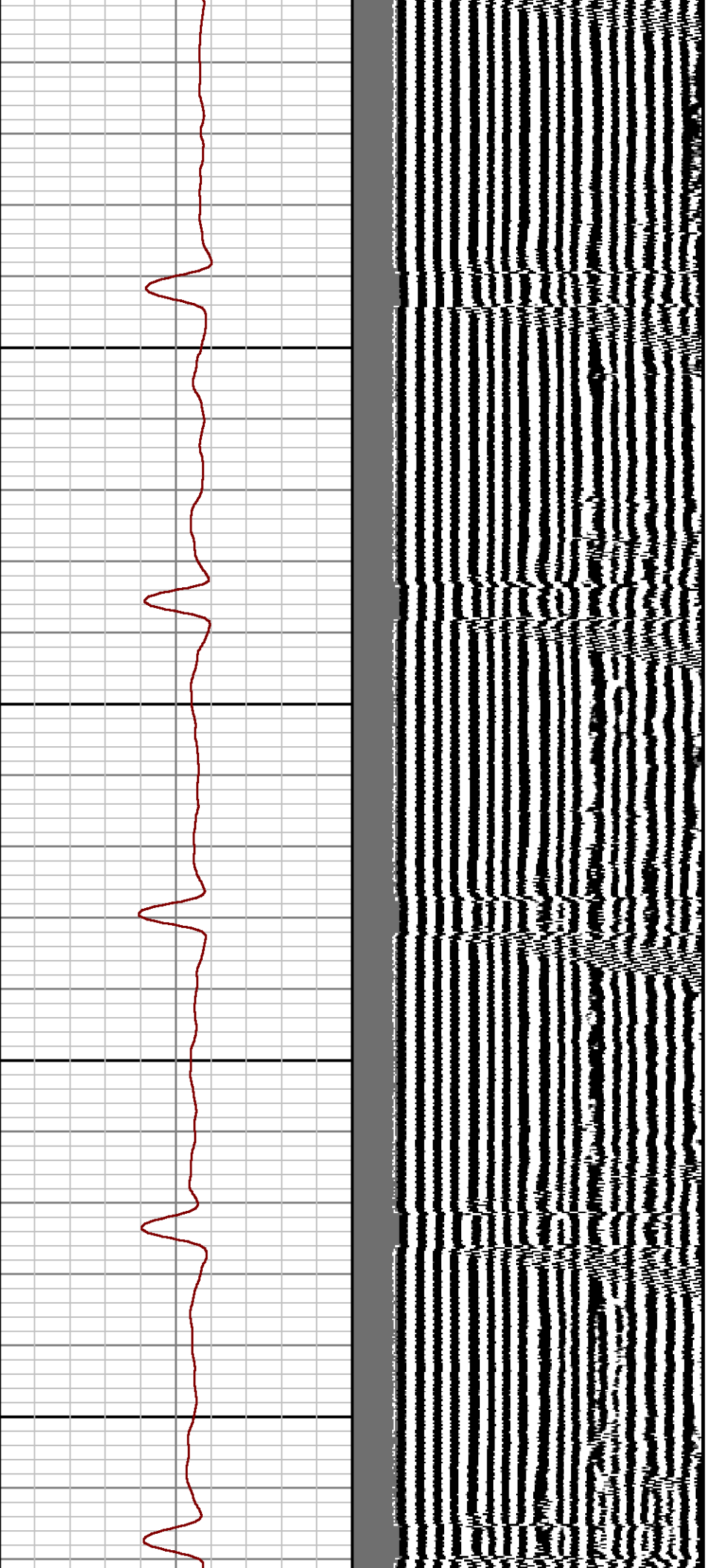
(for Acquired Curves)

| 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 | | | |
| 2459XA | -7.250 | CCL | | | | | |
| 2459XA | -5.390 | GR | | | | | |
| 2459XA | 0.000 | NEU | | | | | |

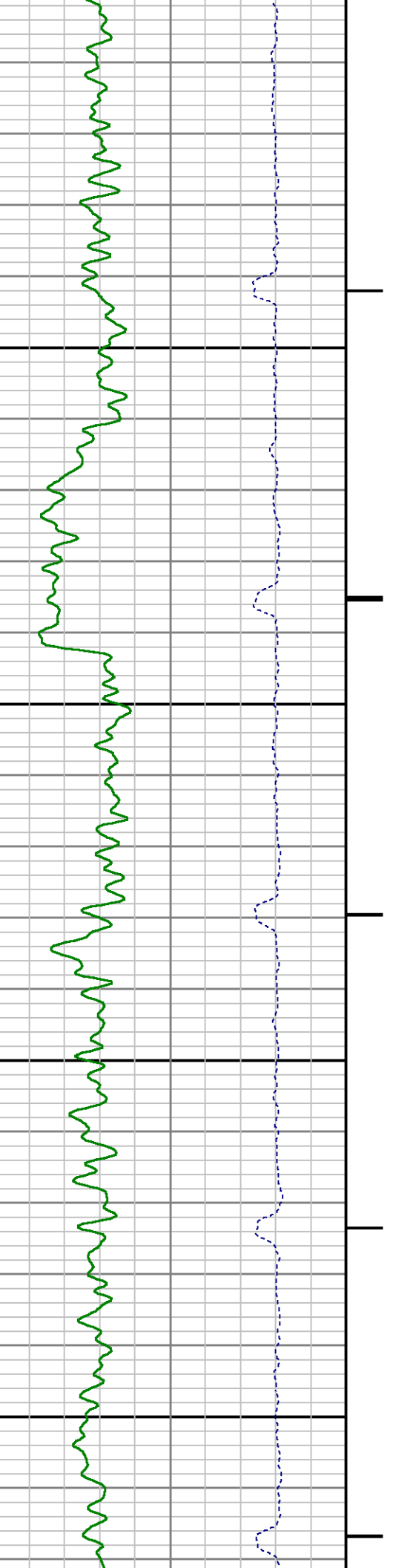


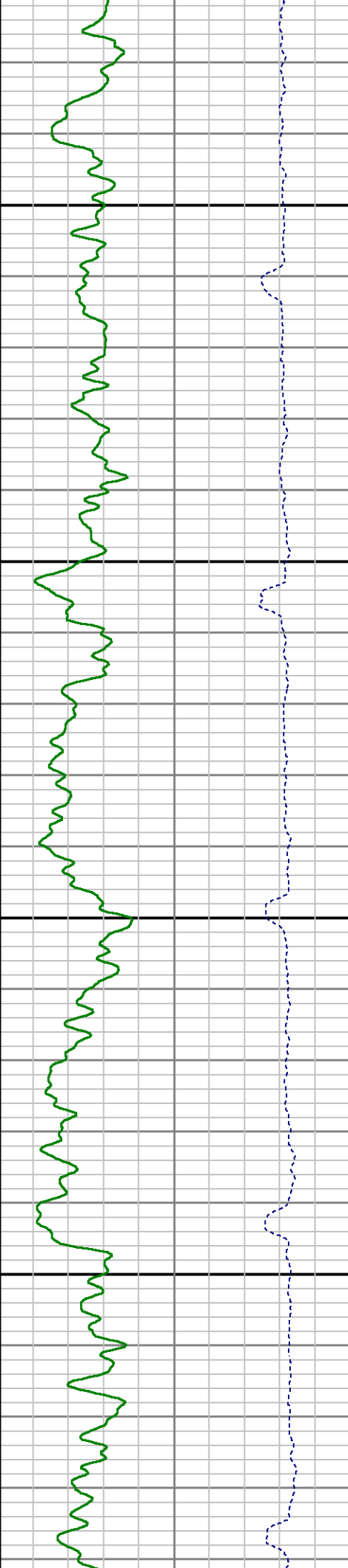
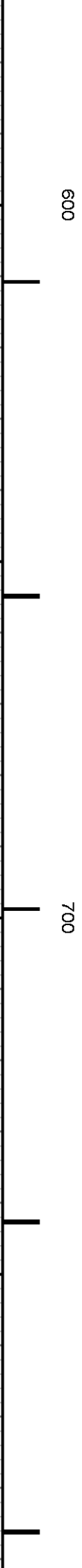
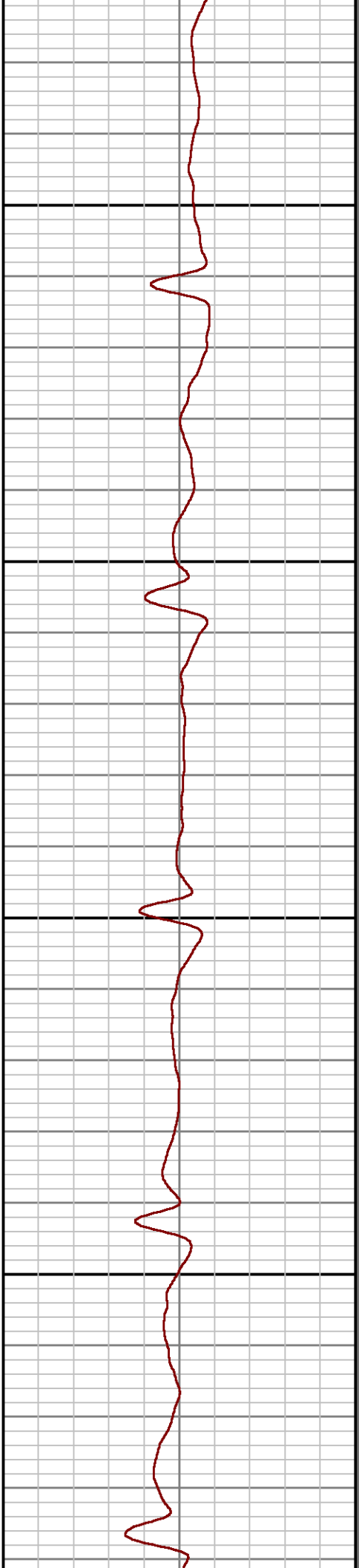
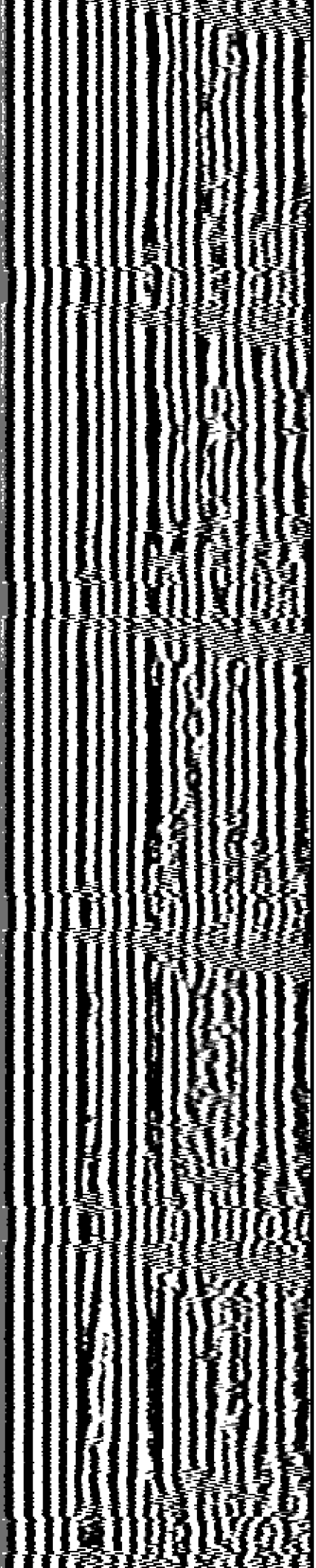


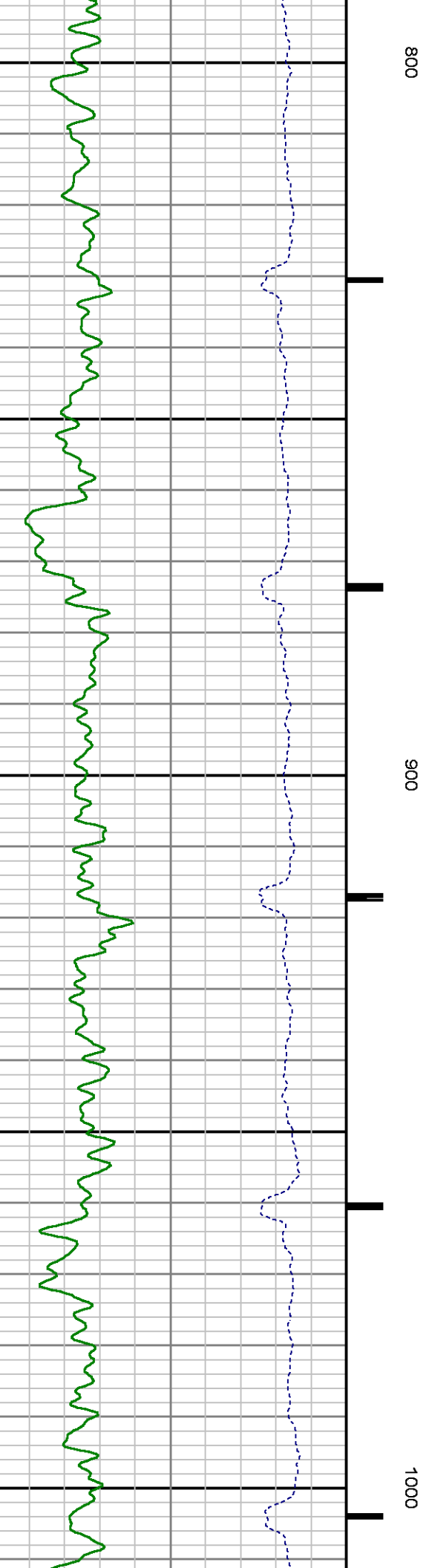
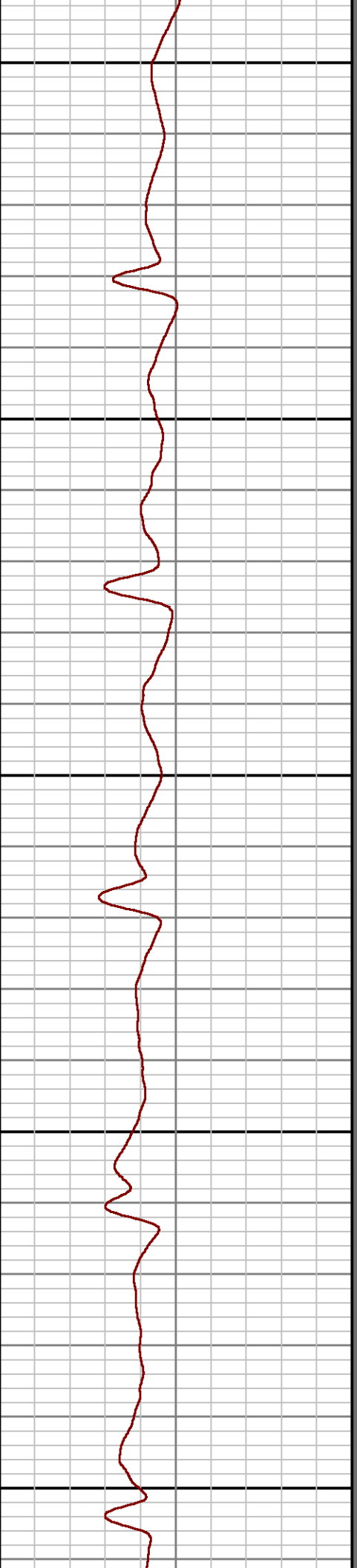
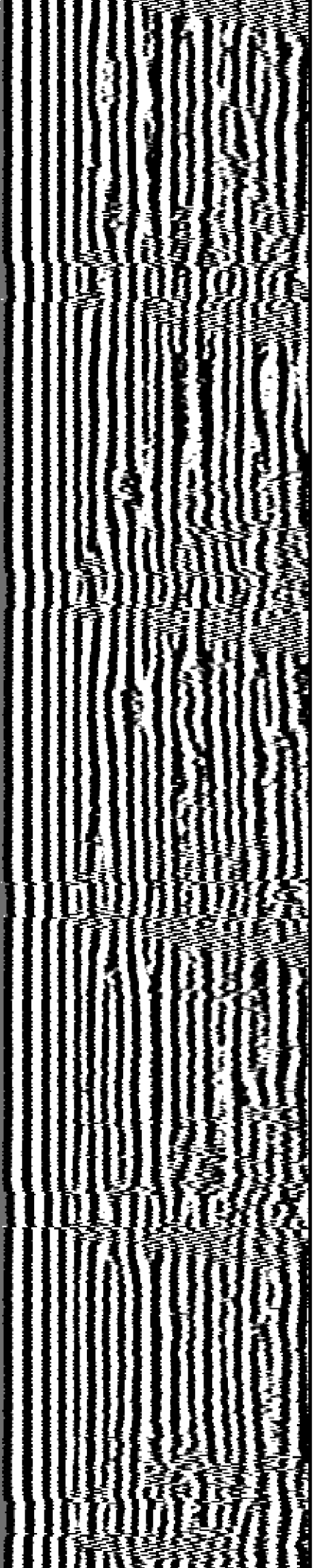


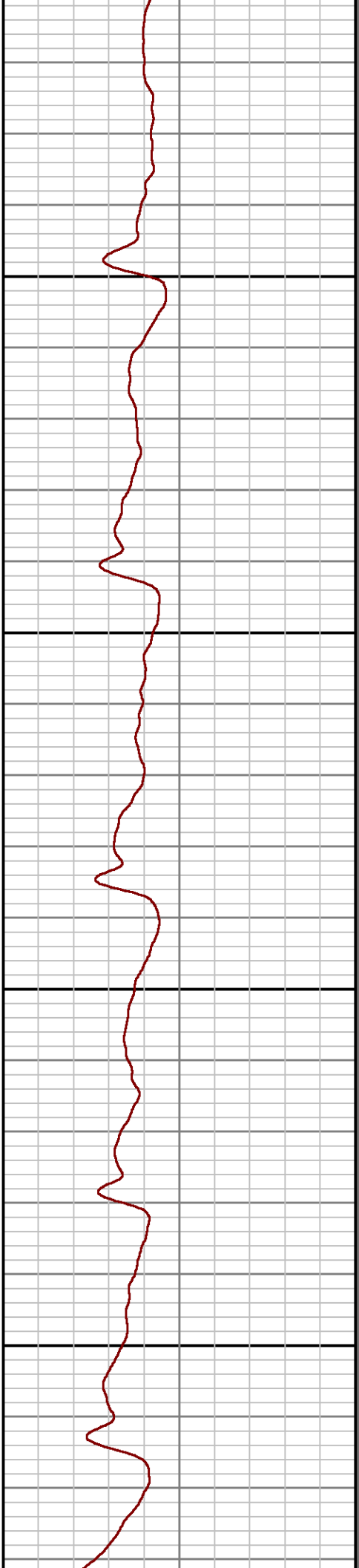
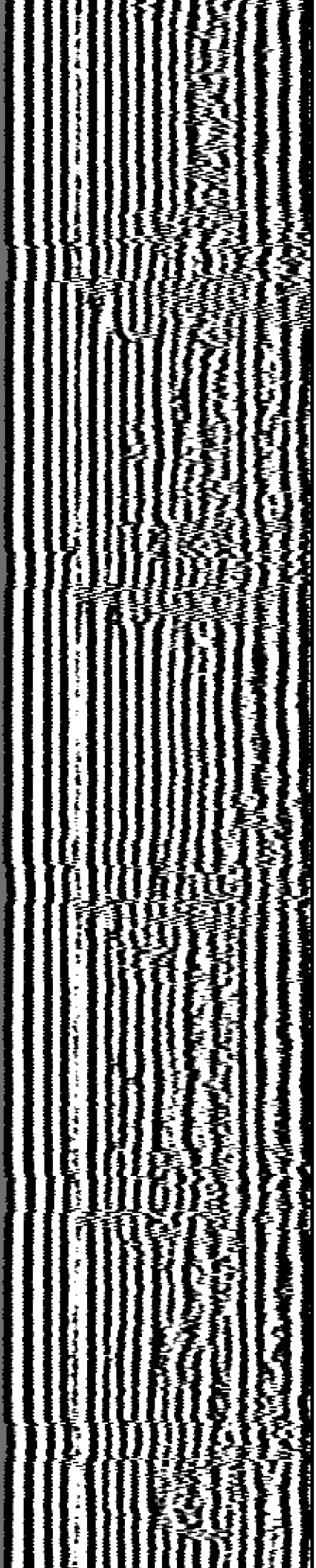
400

500



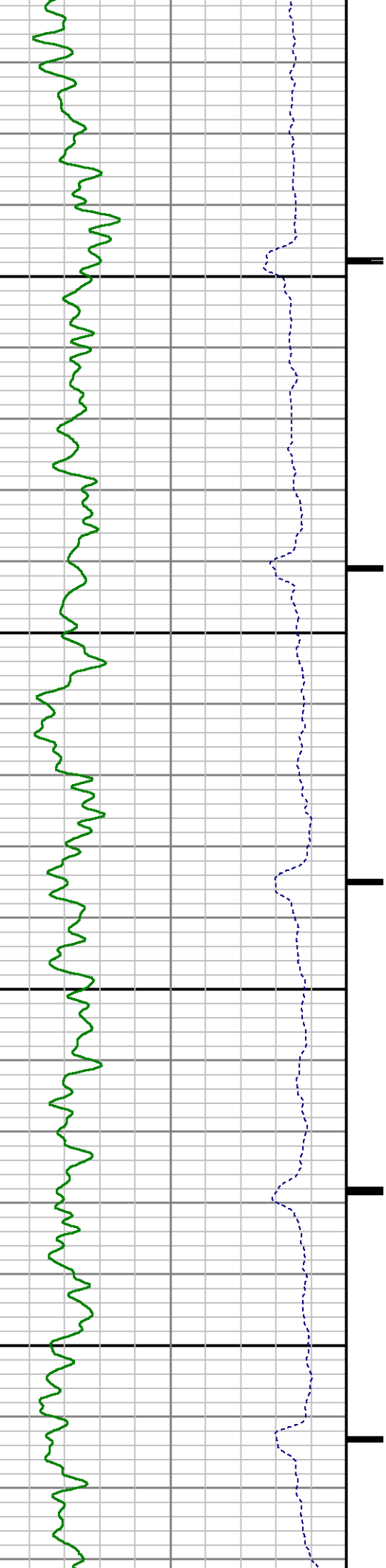


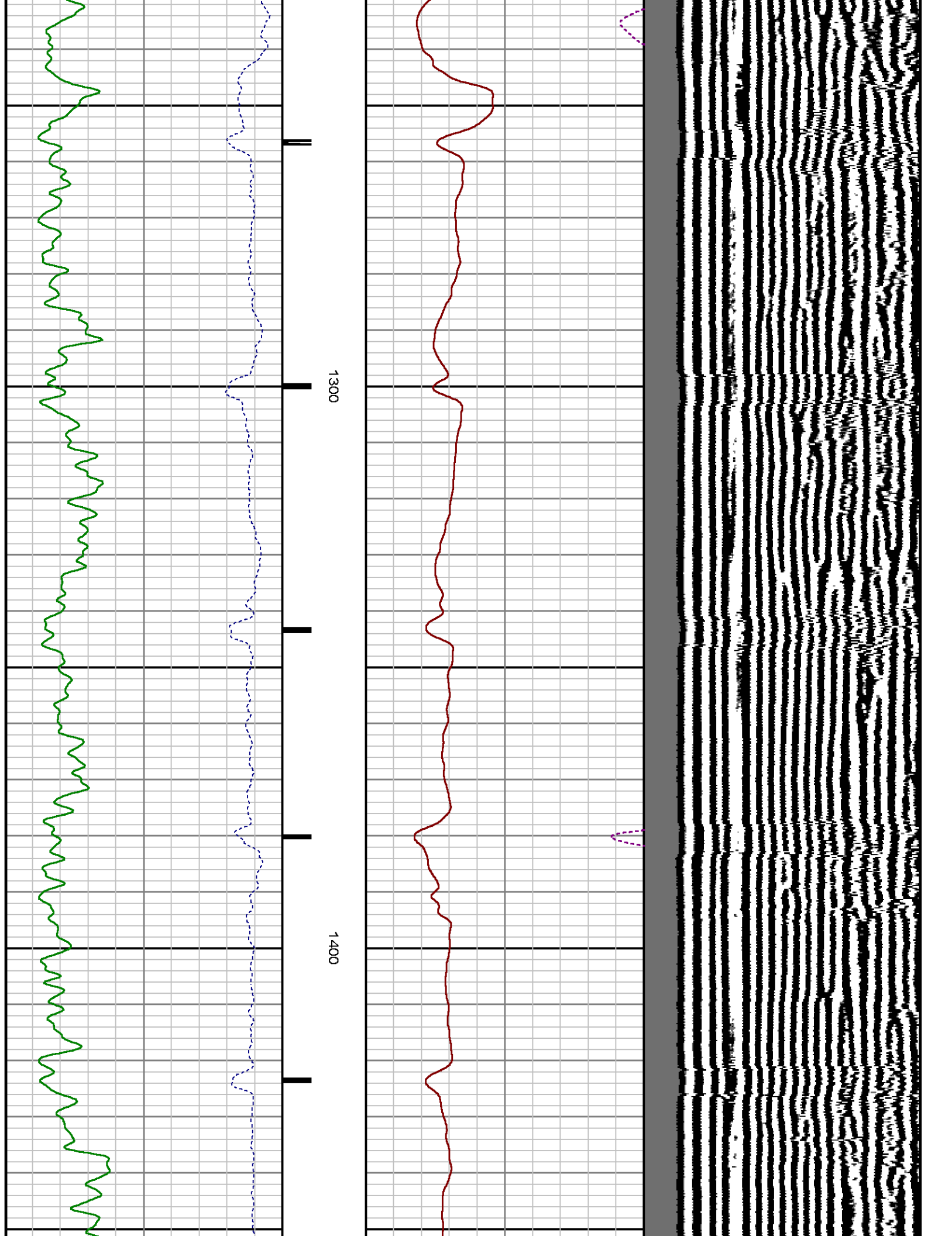


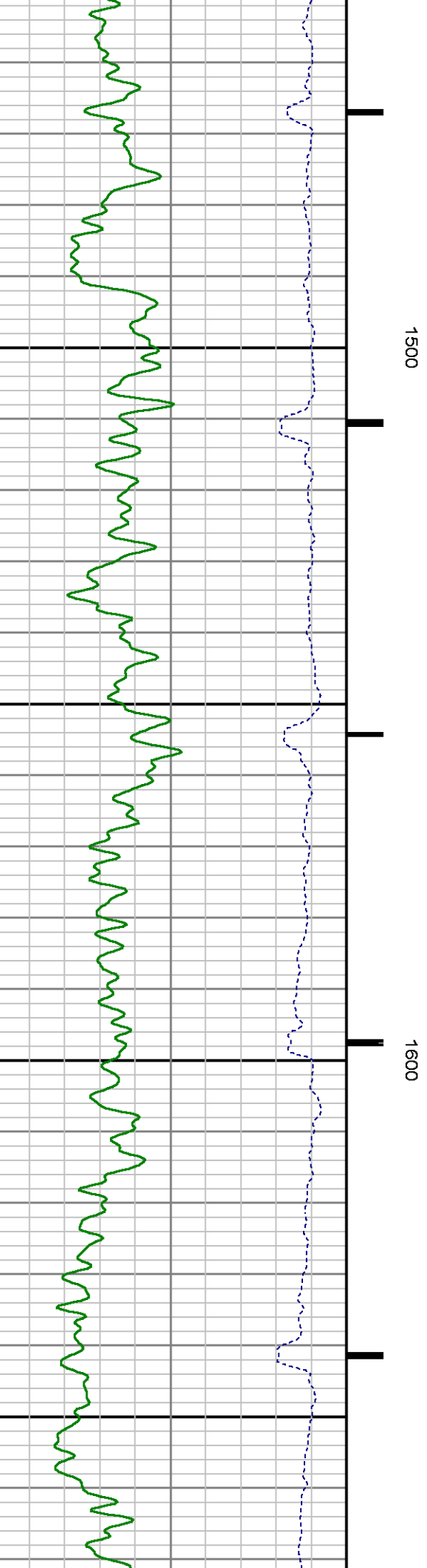
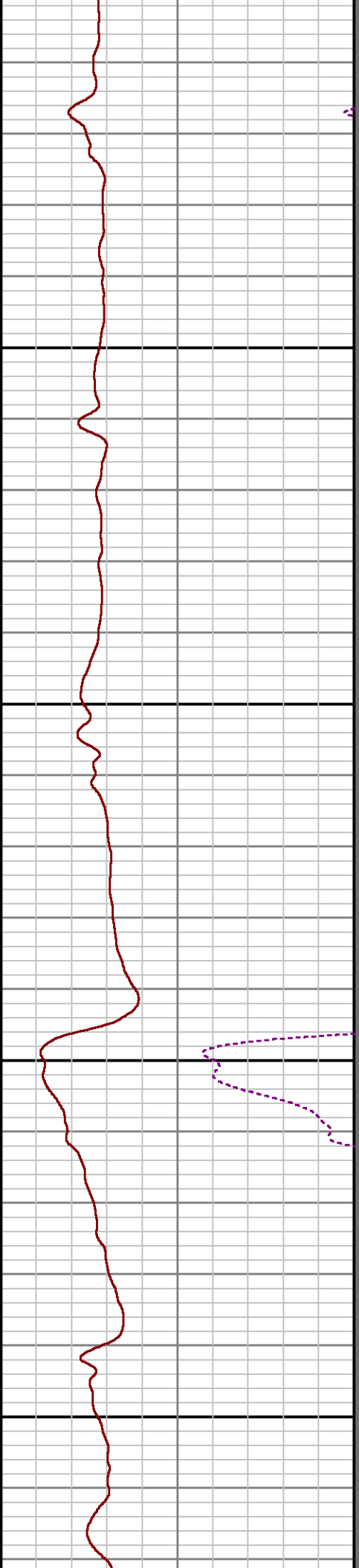
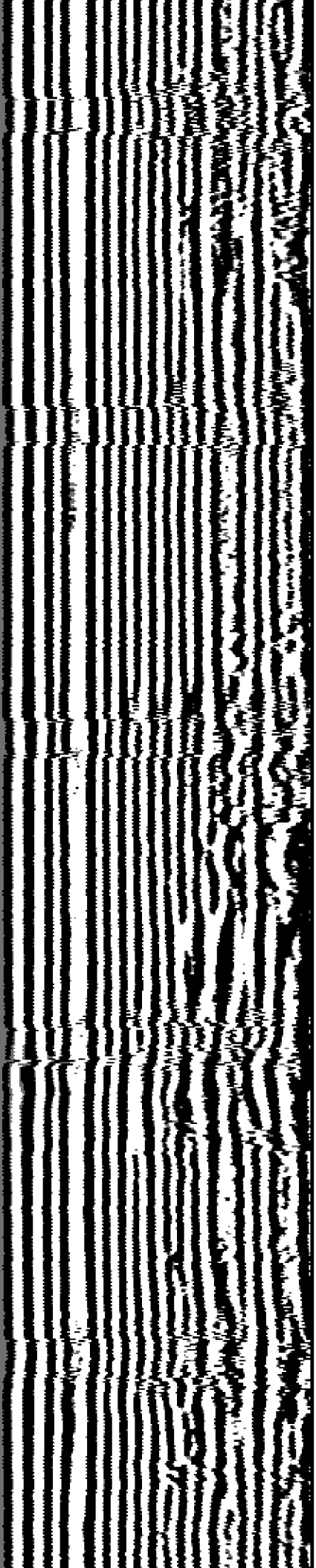


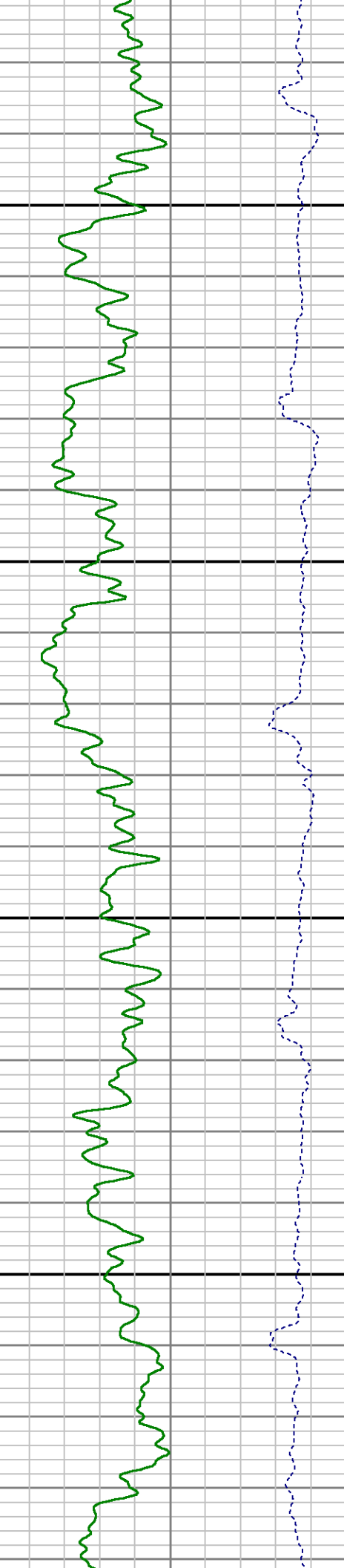
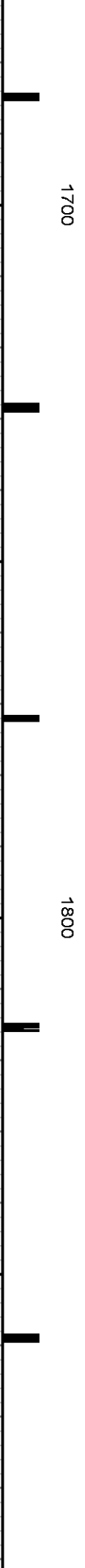
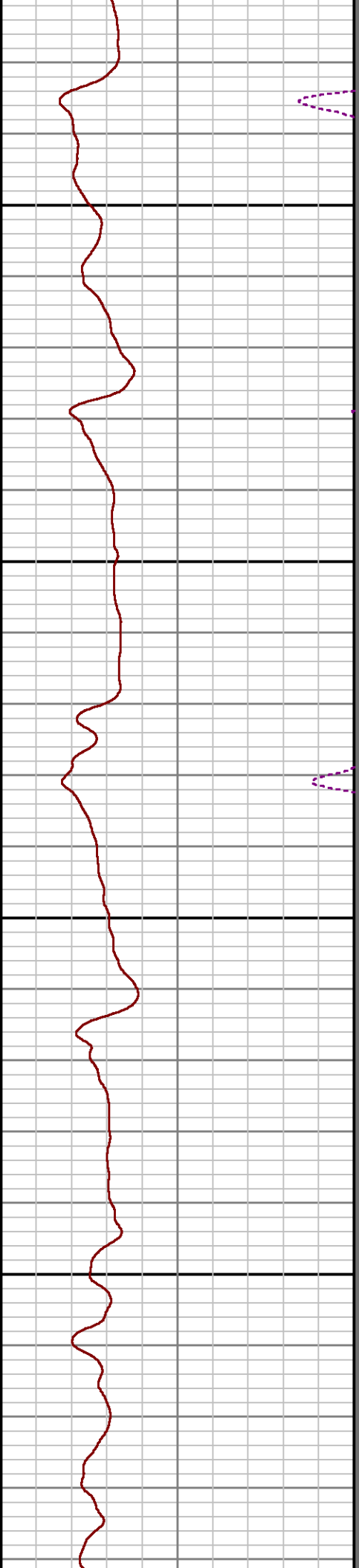
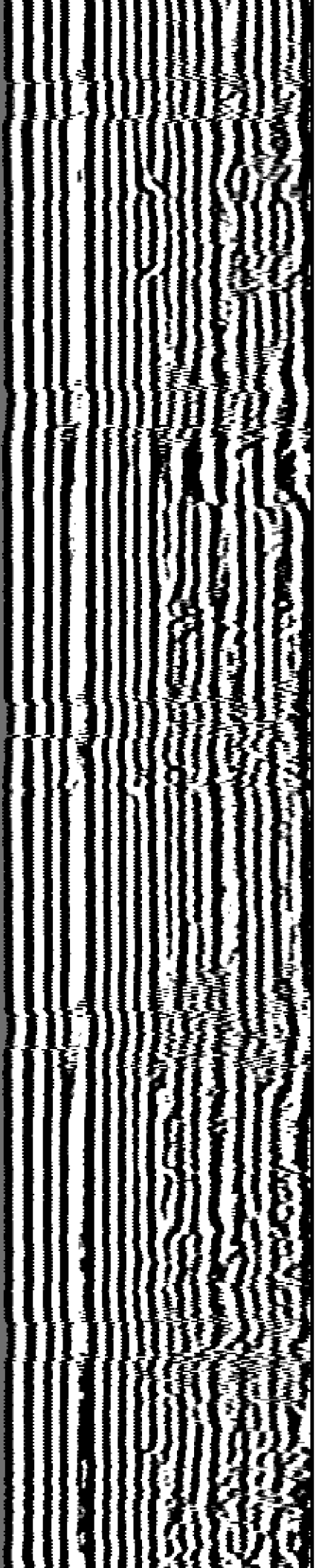
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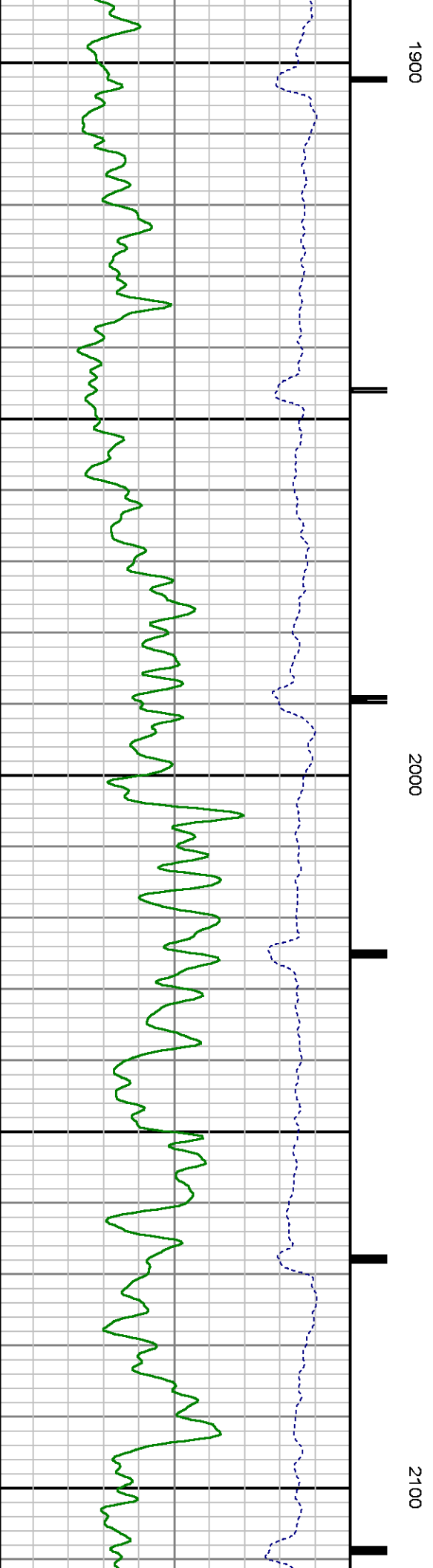
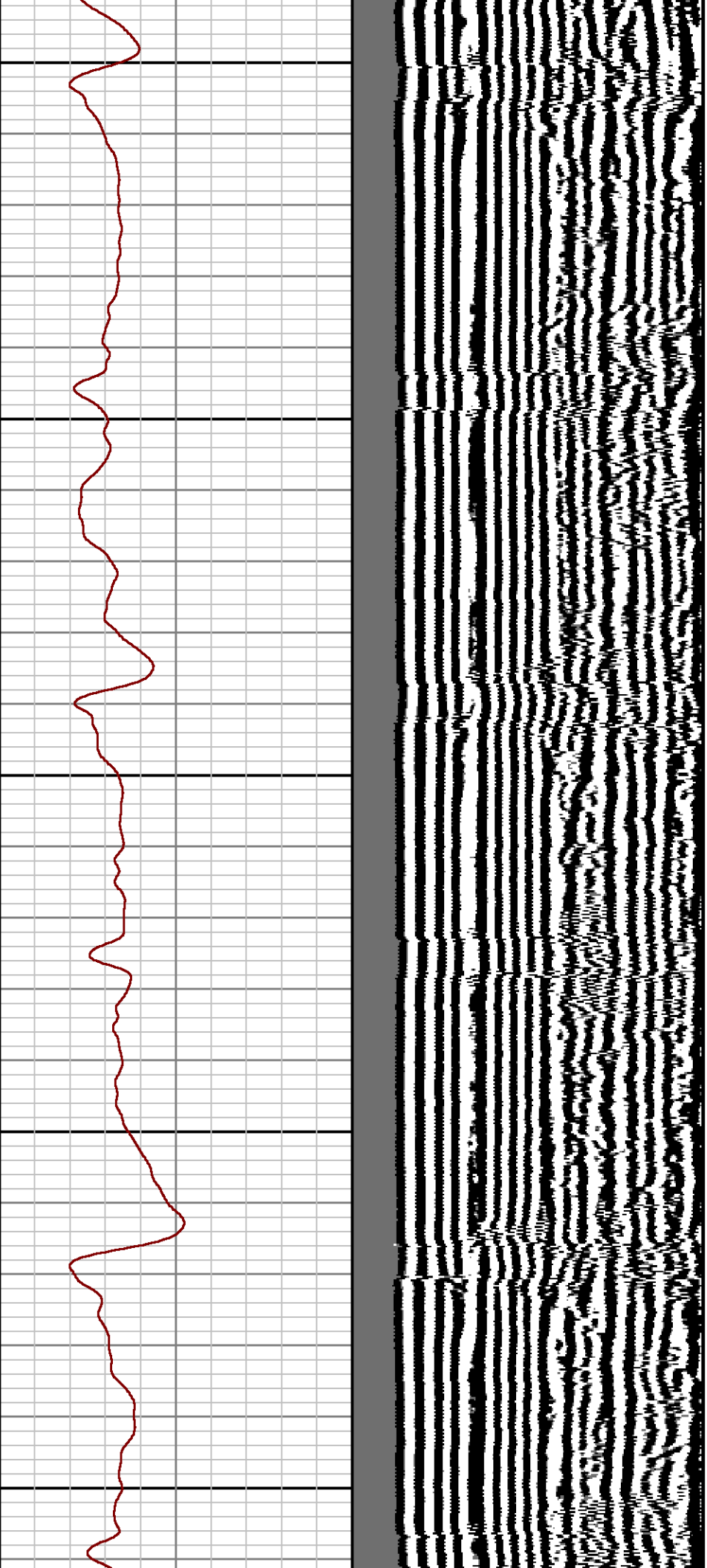
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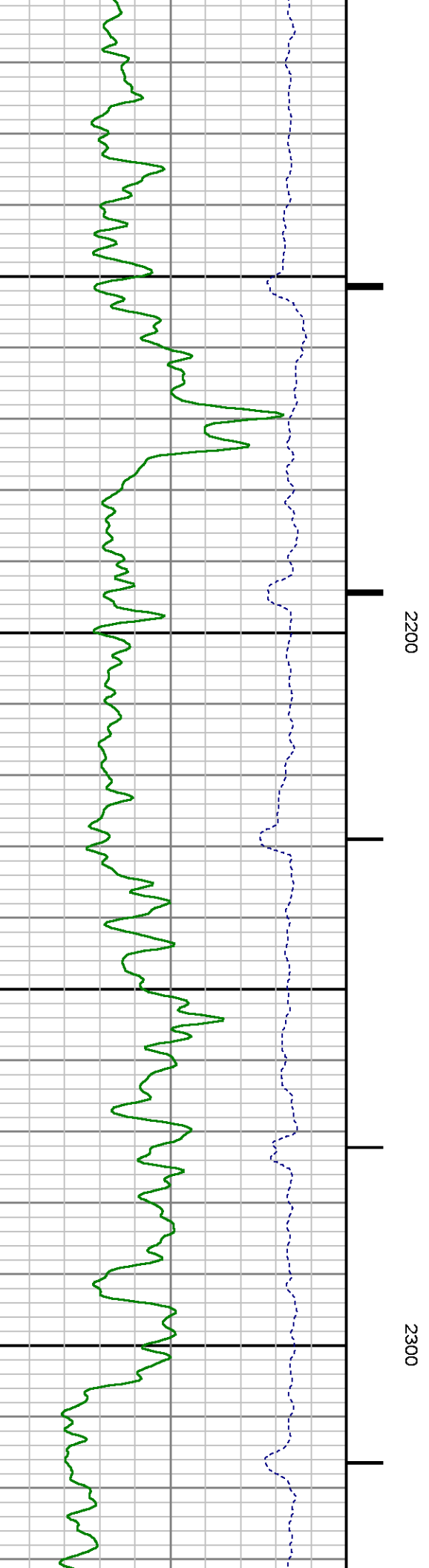
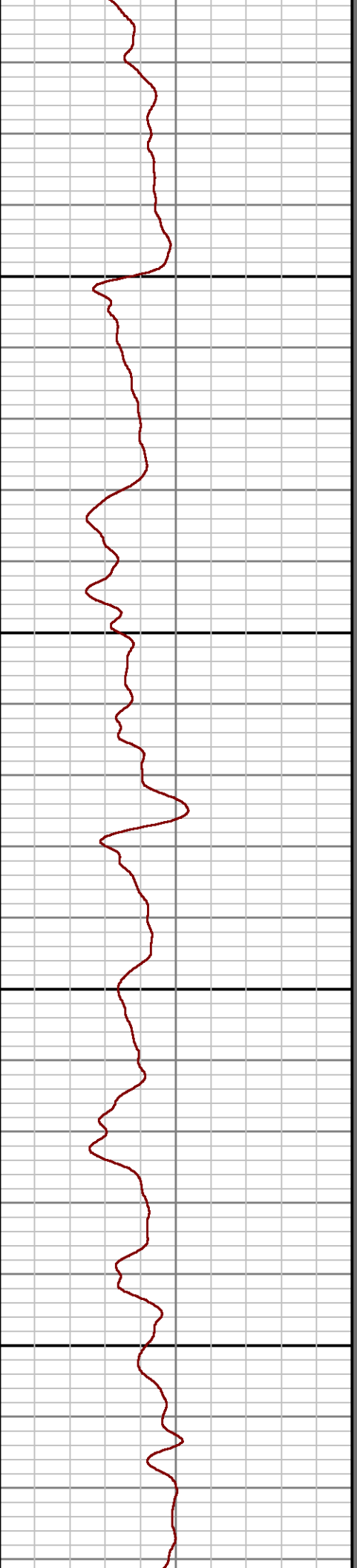
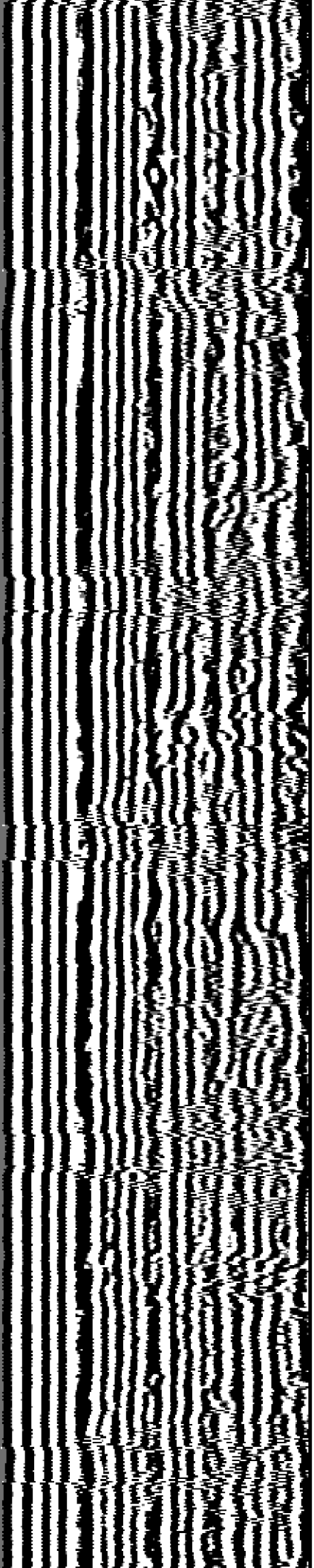


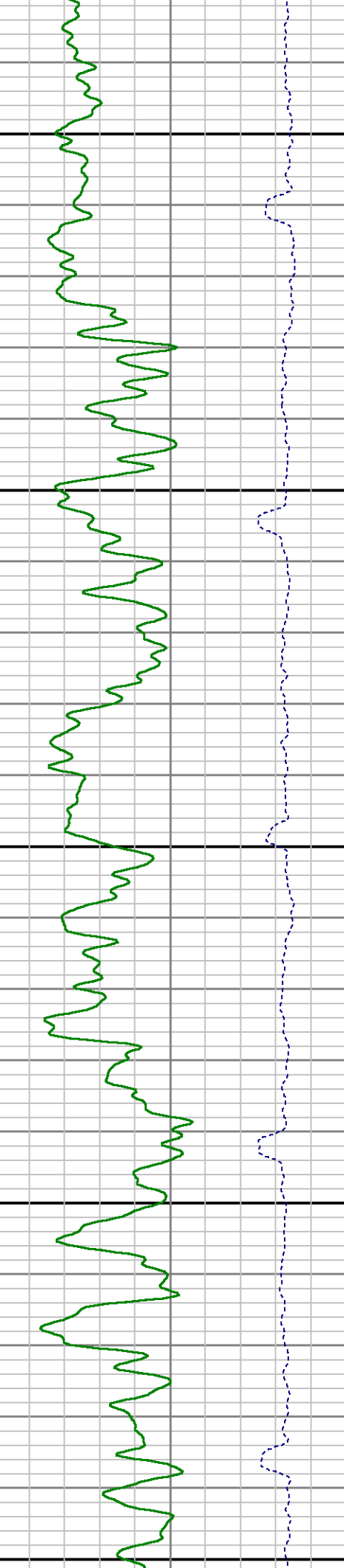
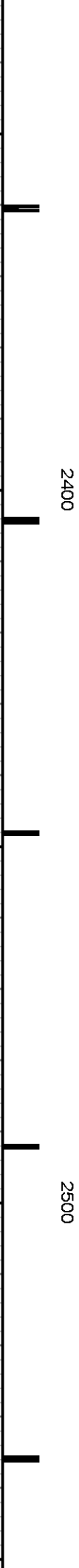
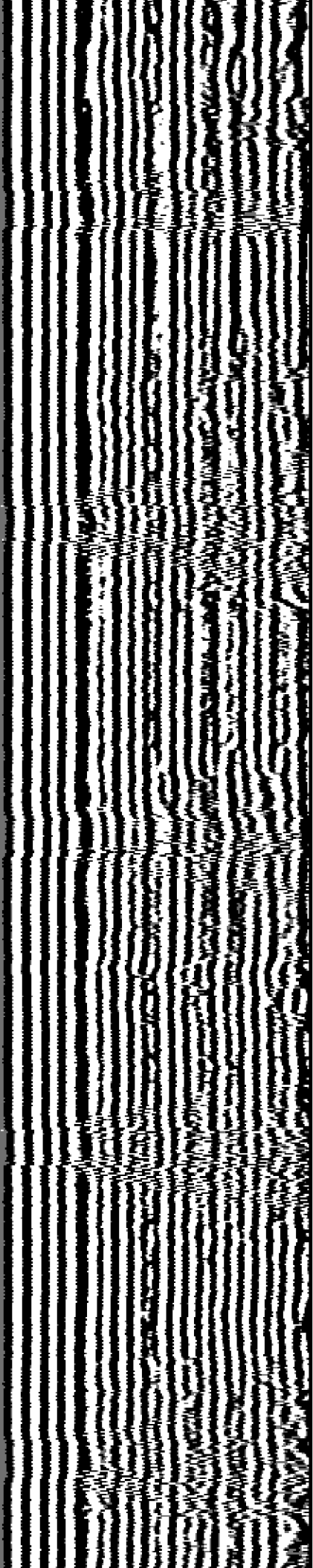


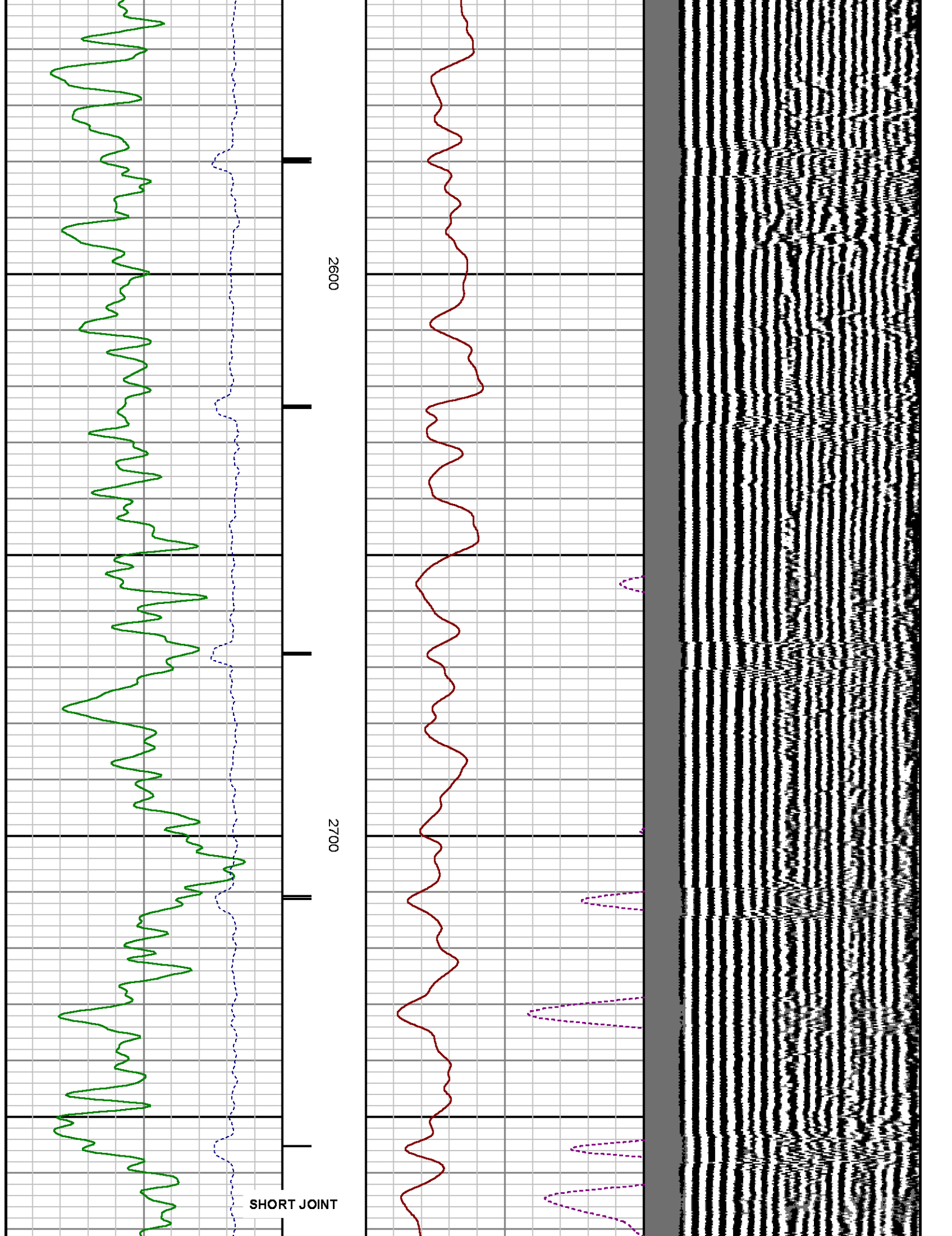


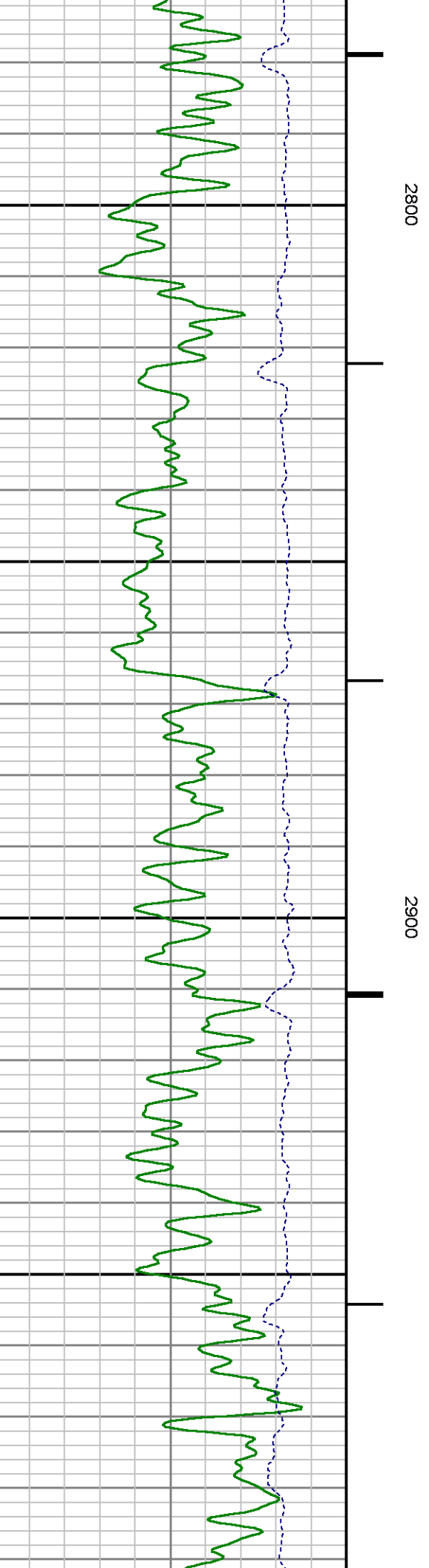
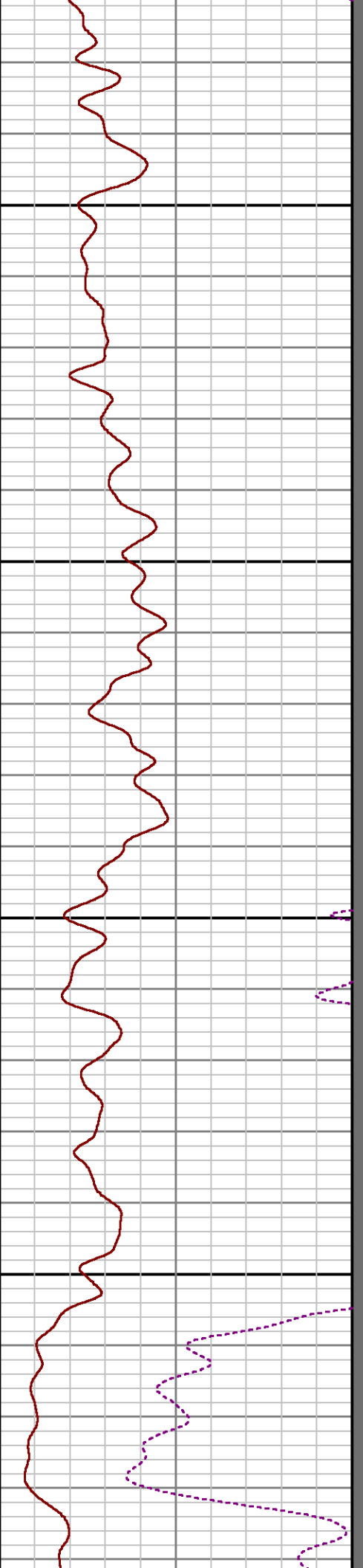
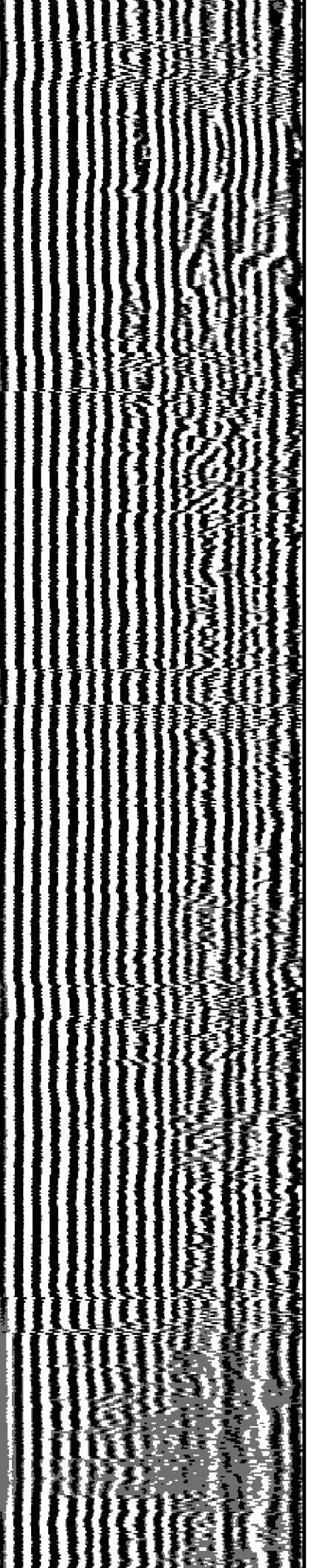


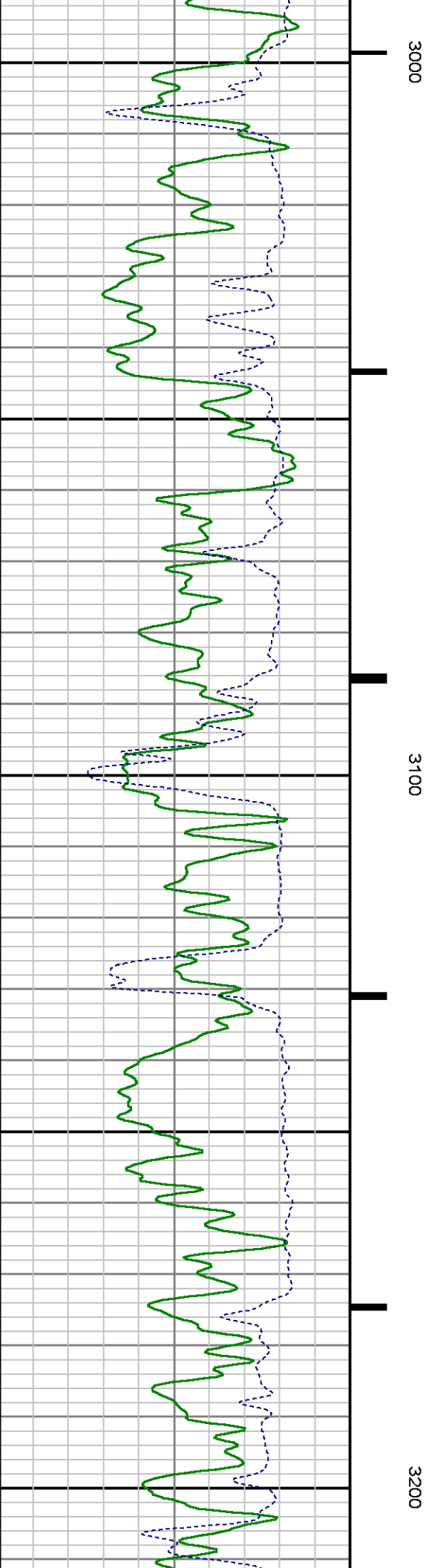
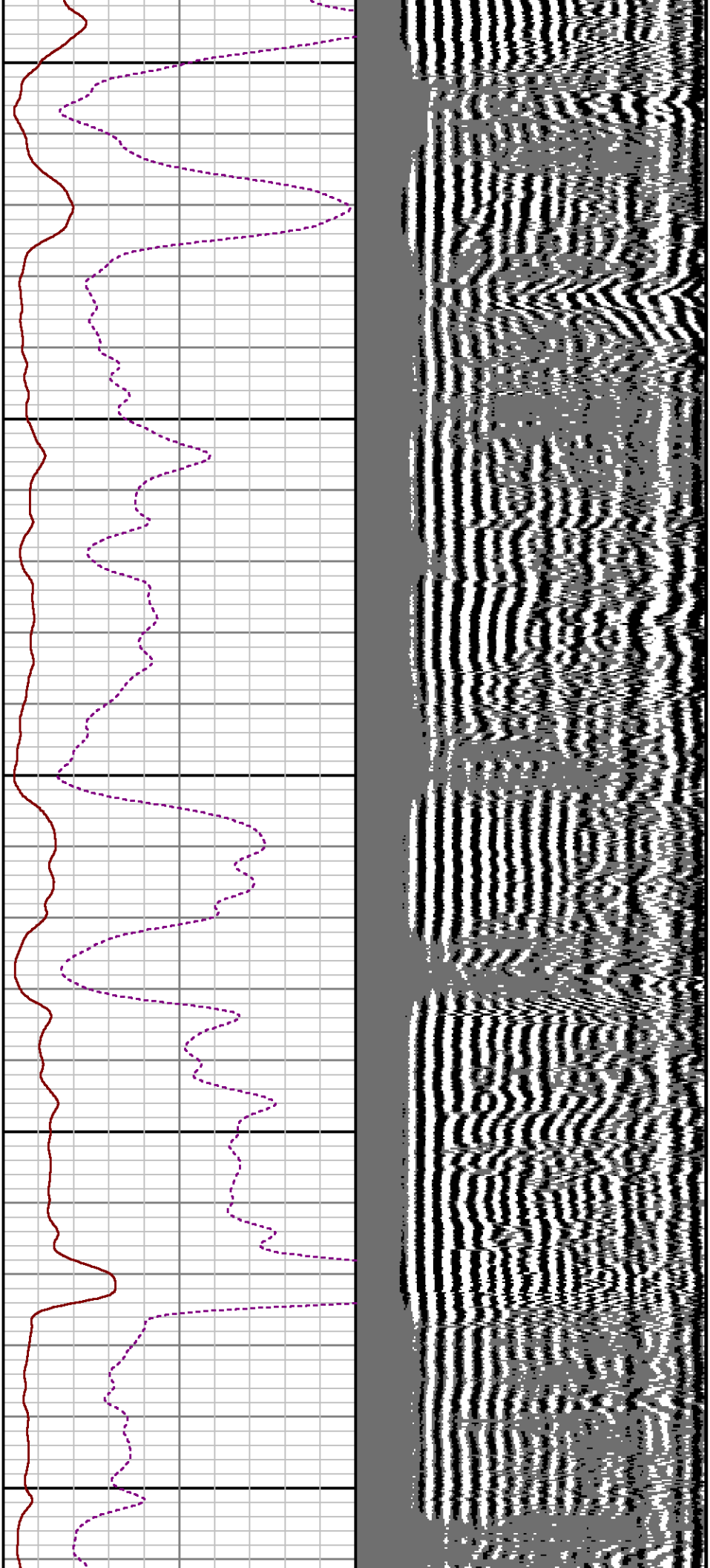


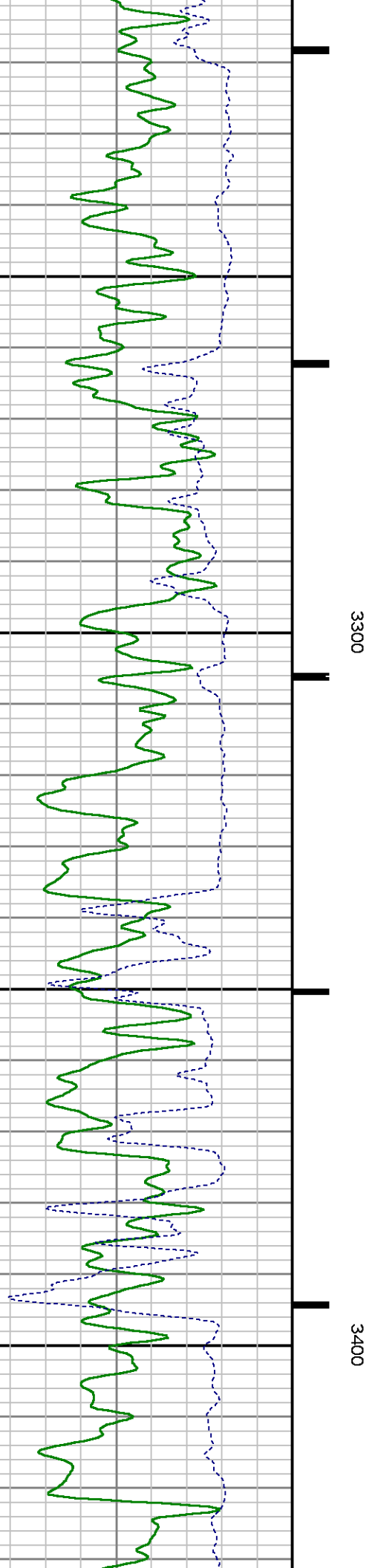
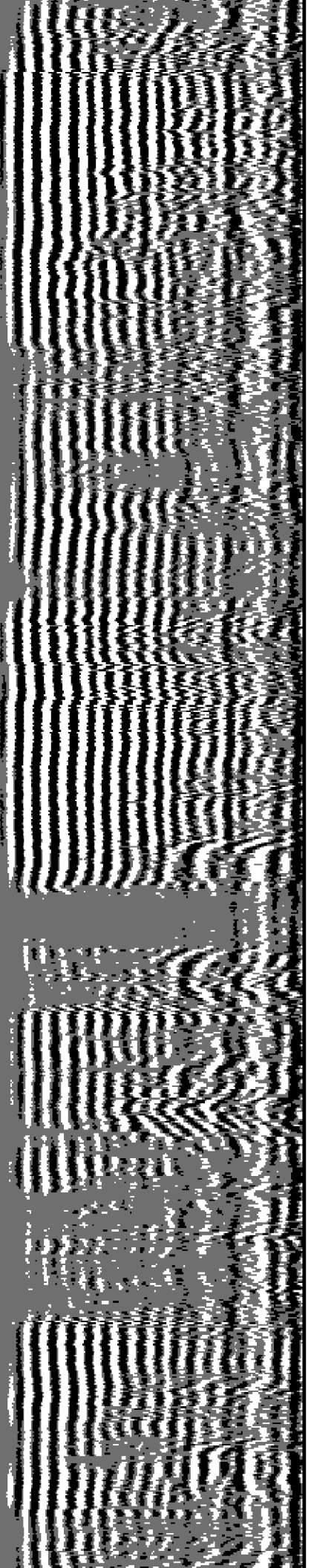


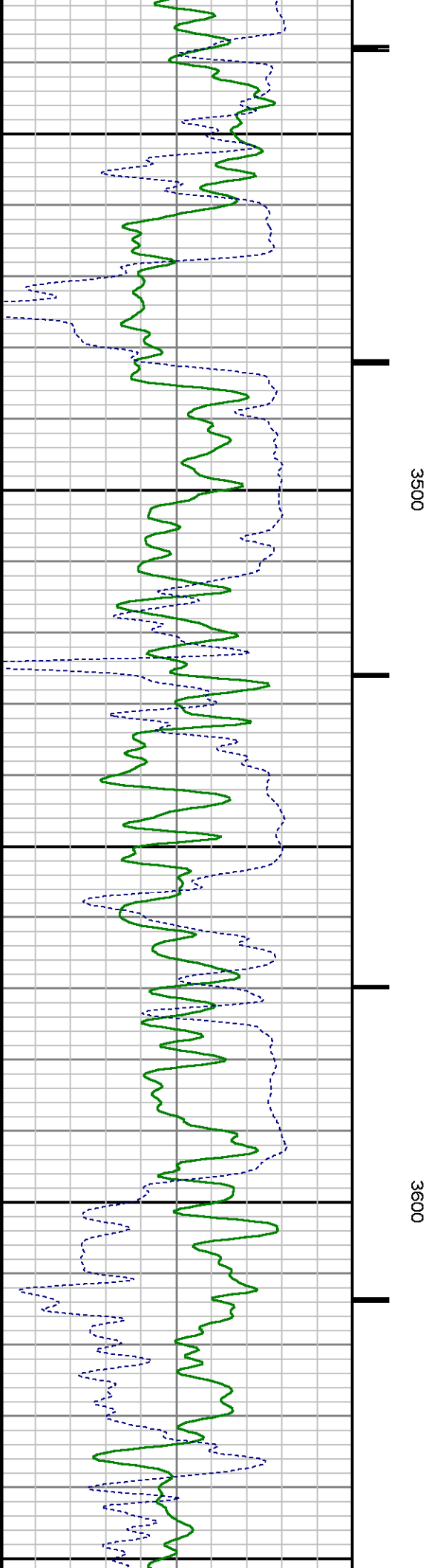
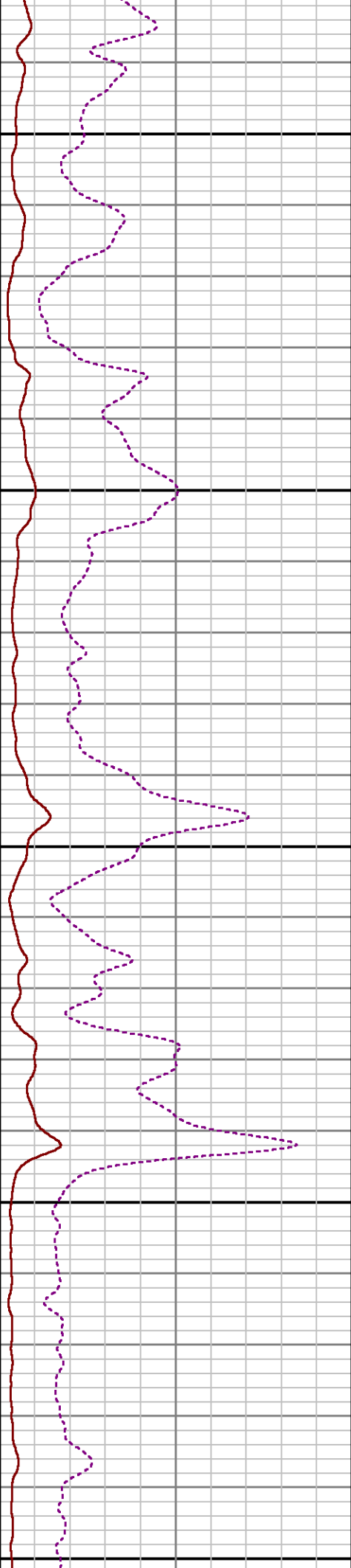
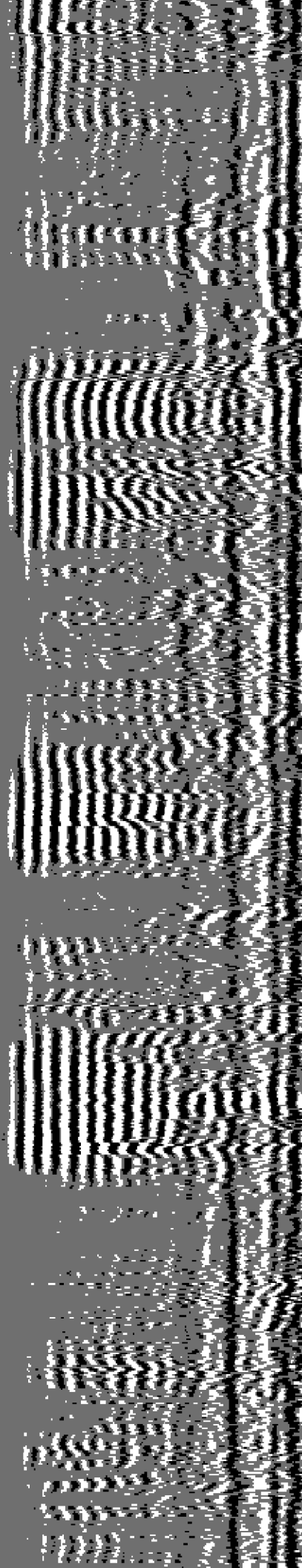


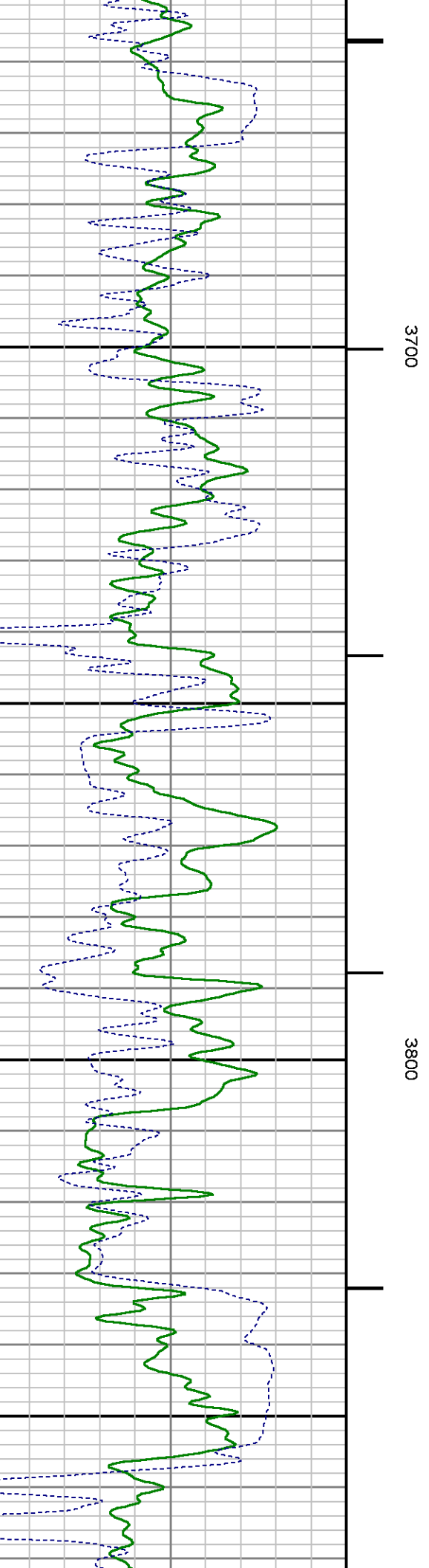
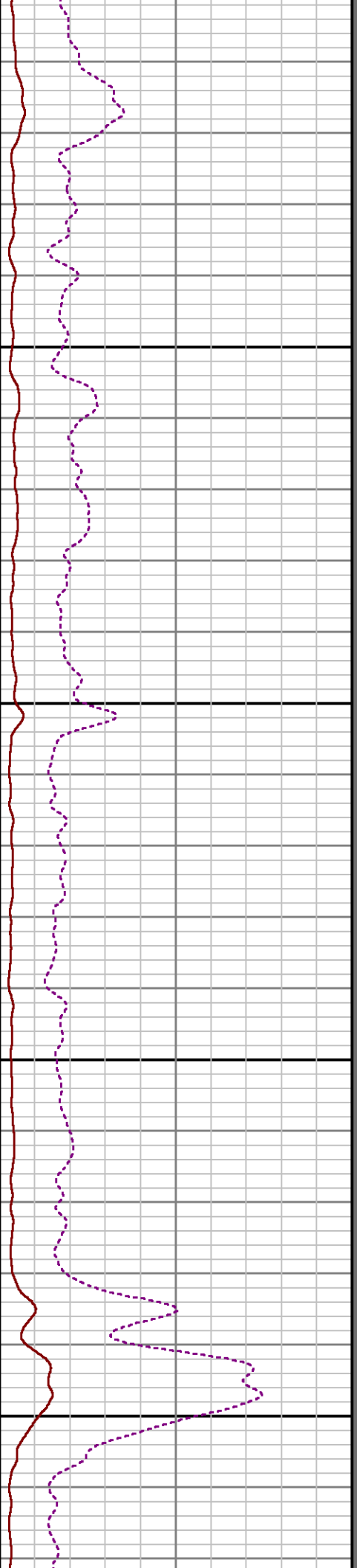
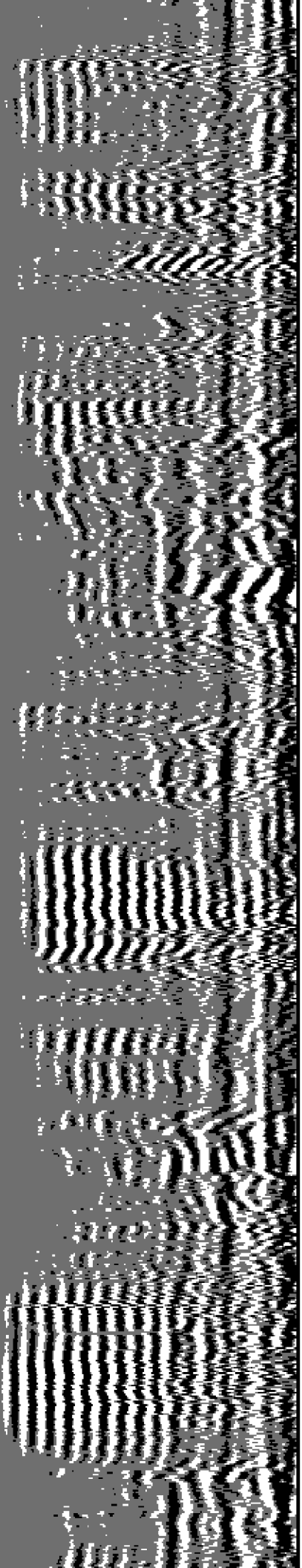


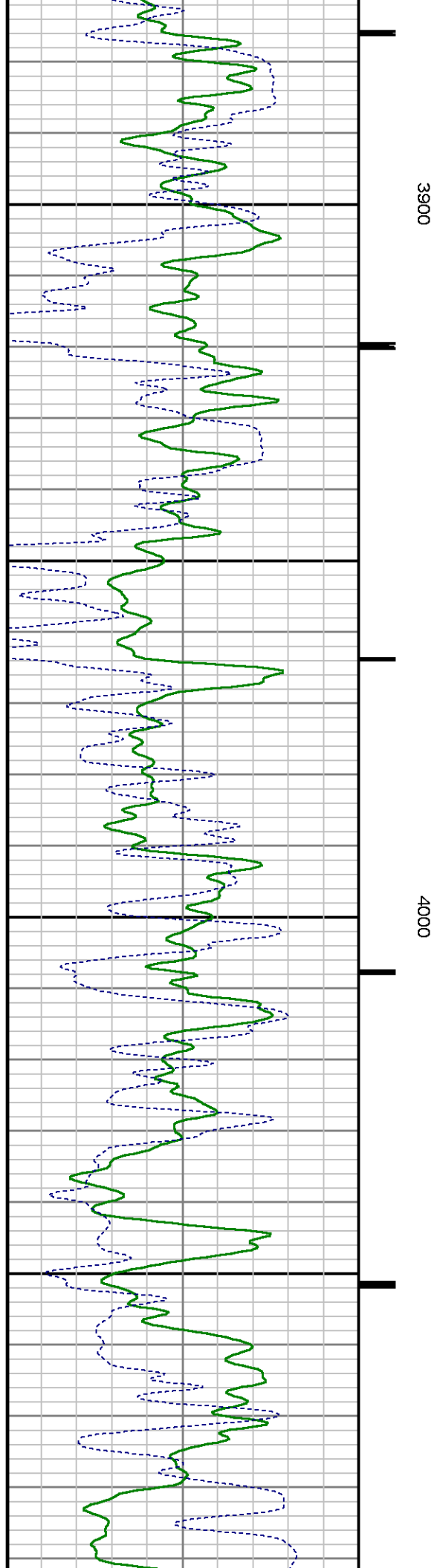
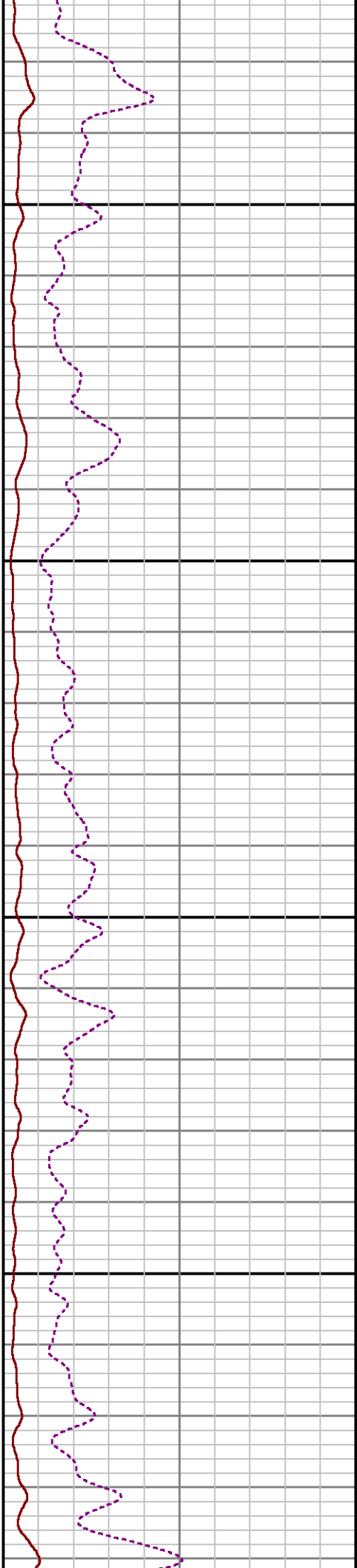
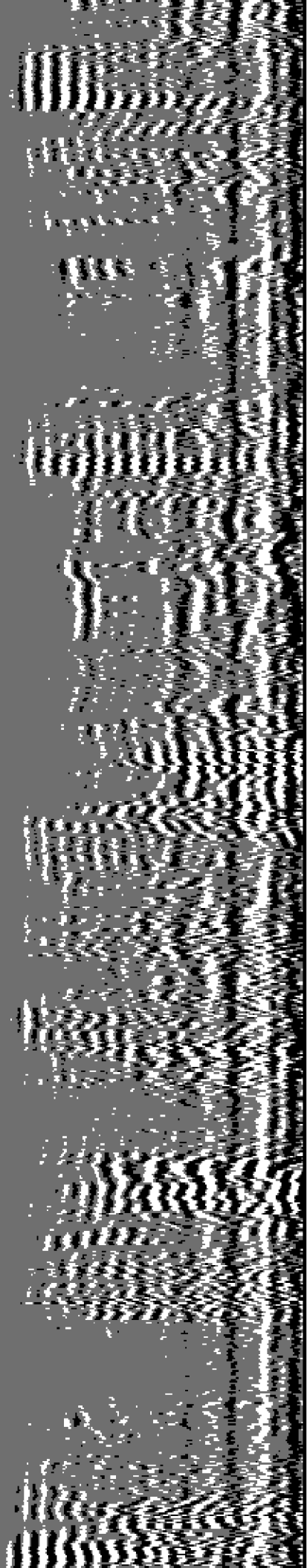


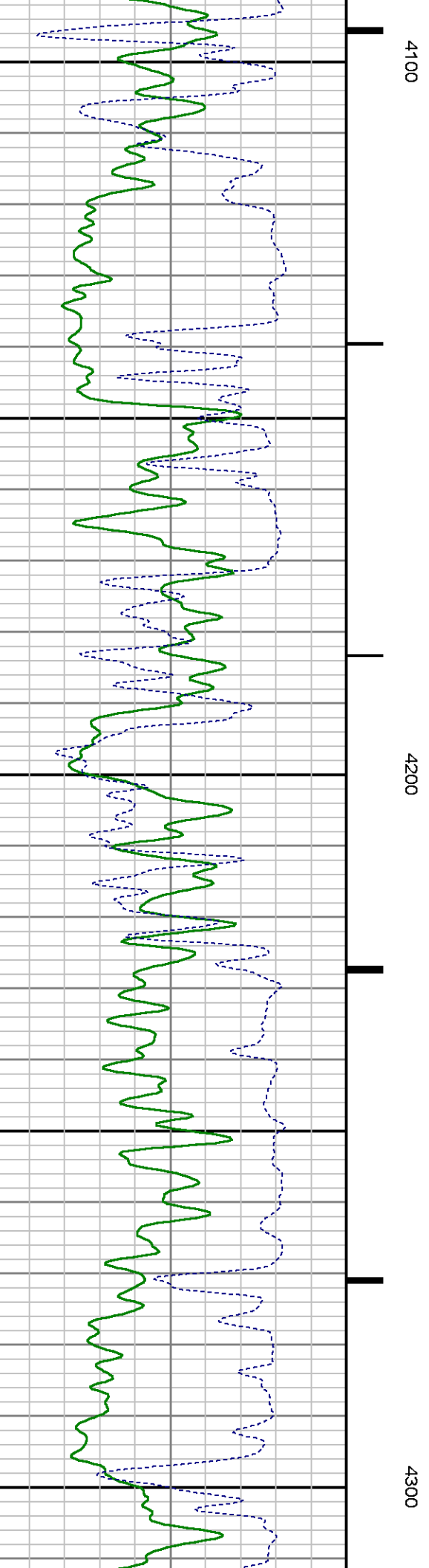
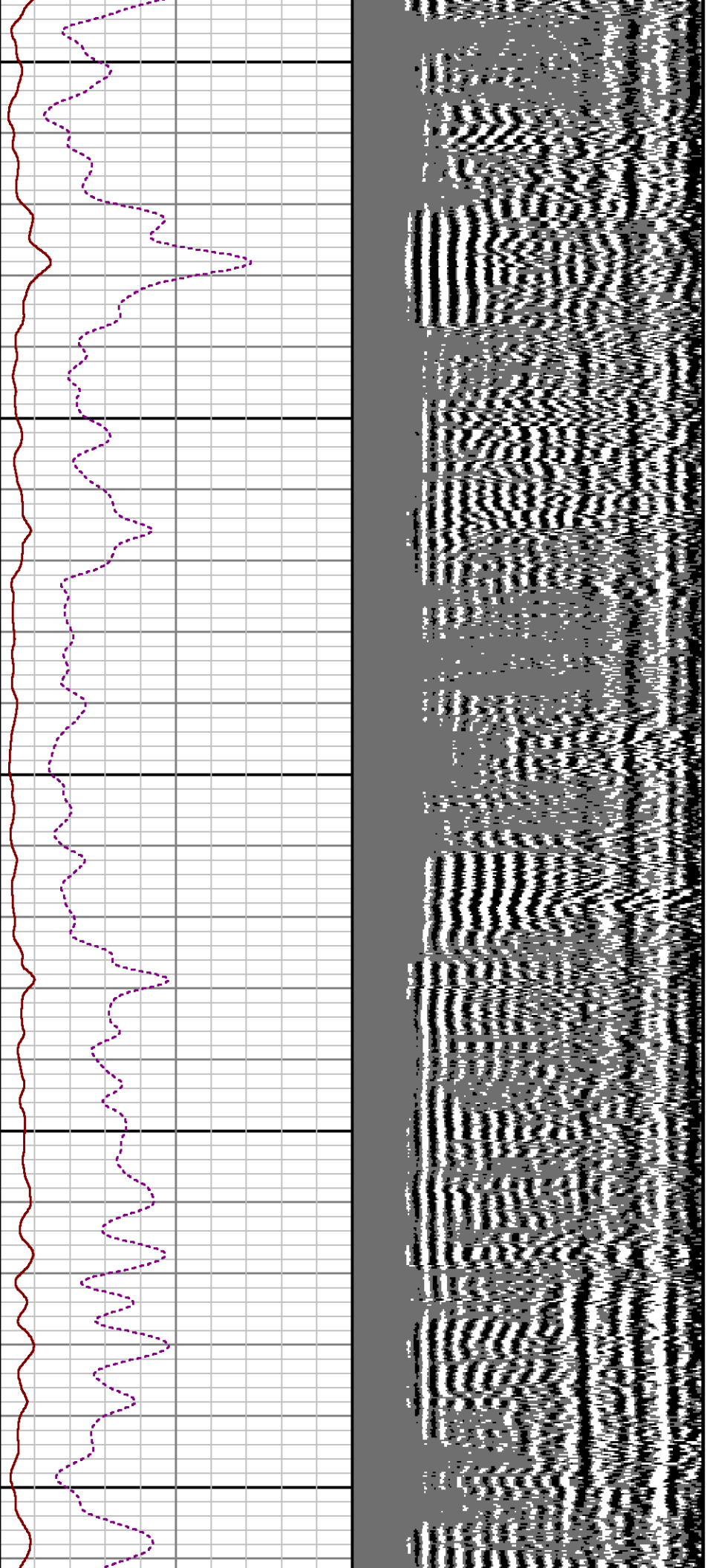


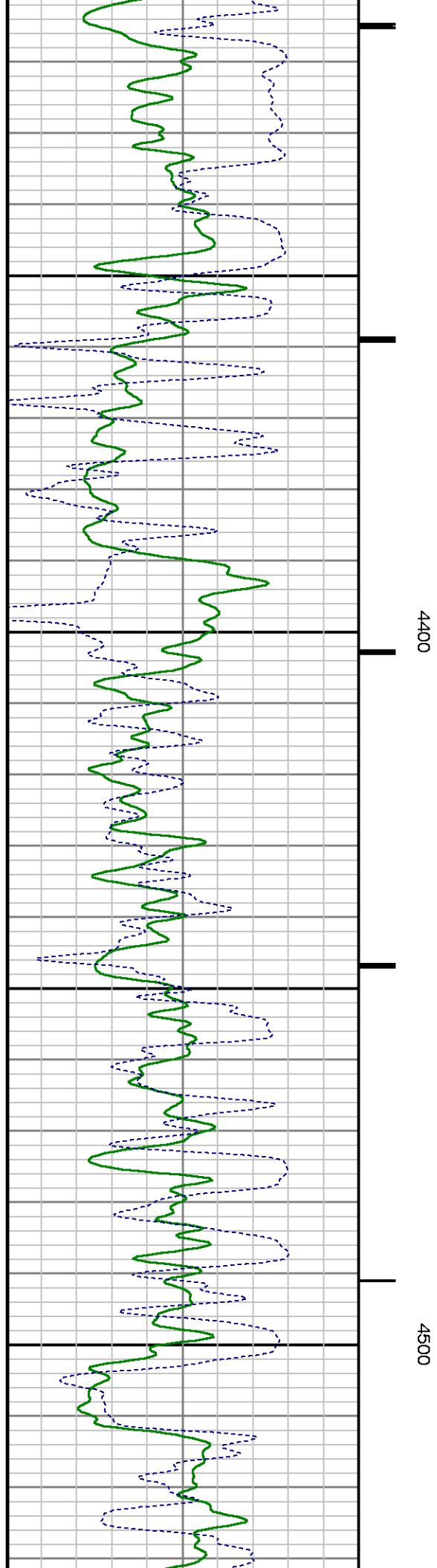
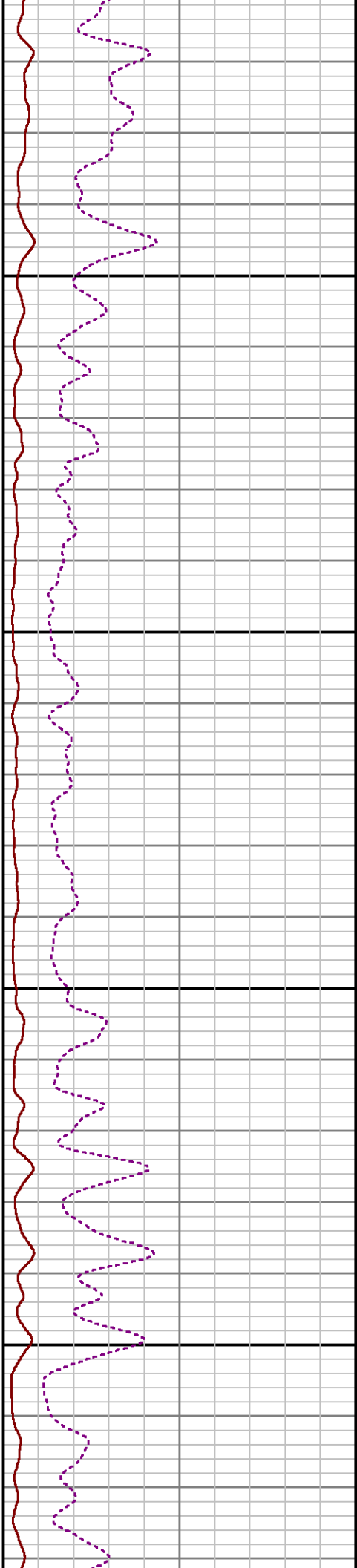
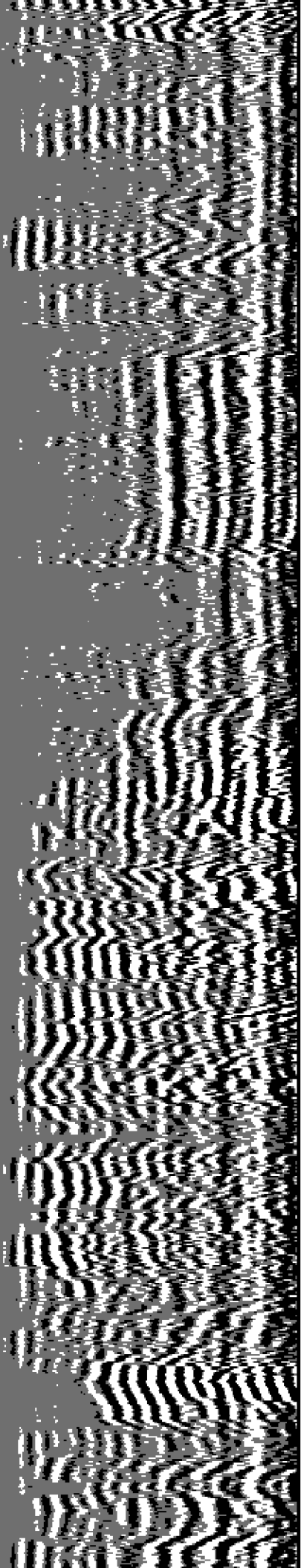


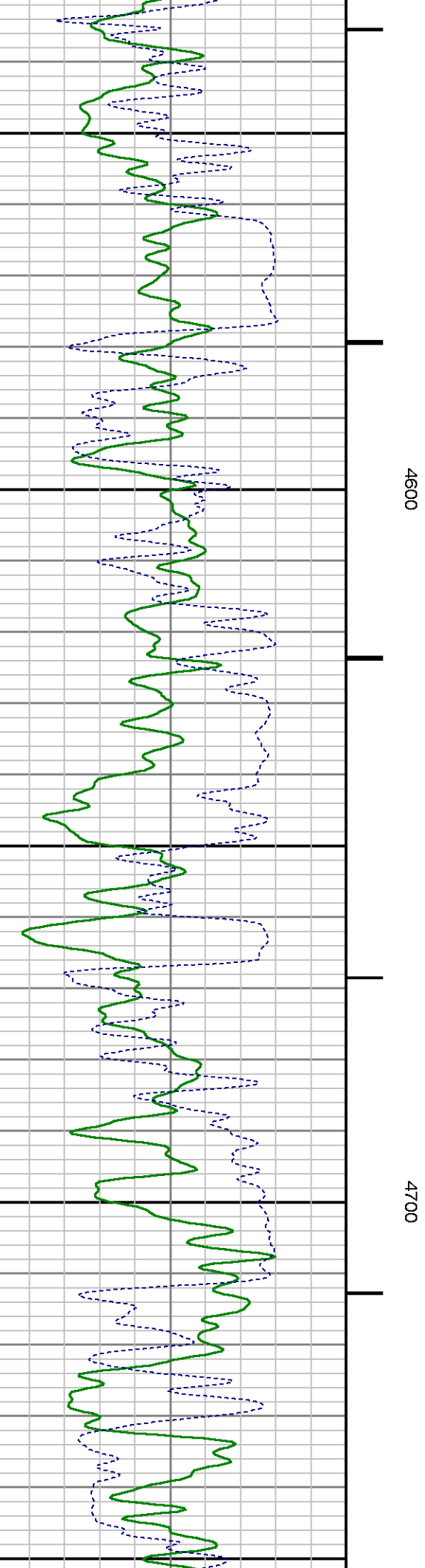
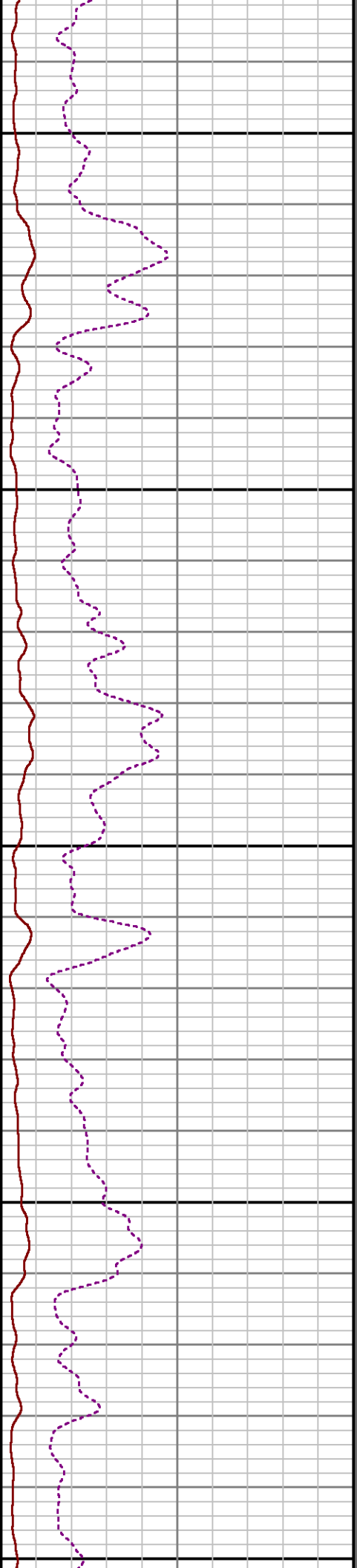
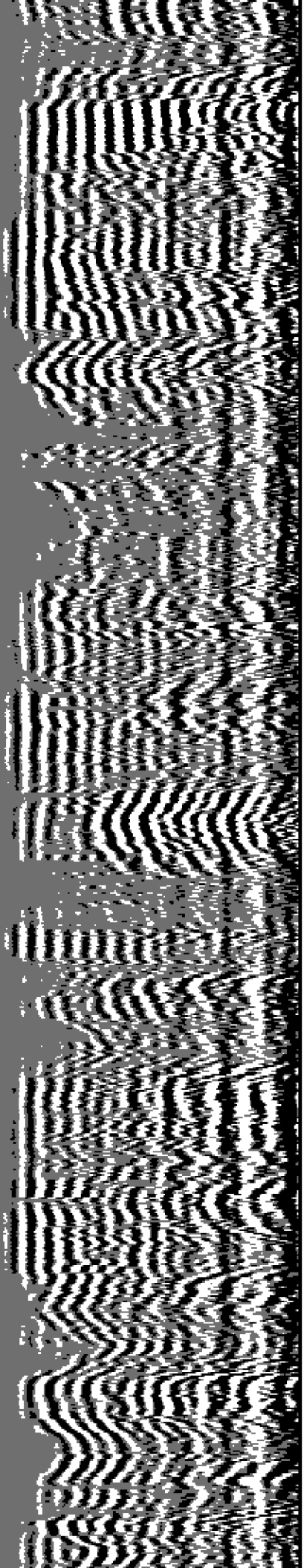


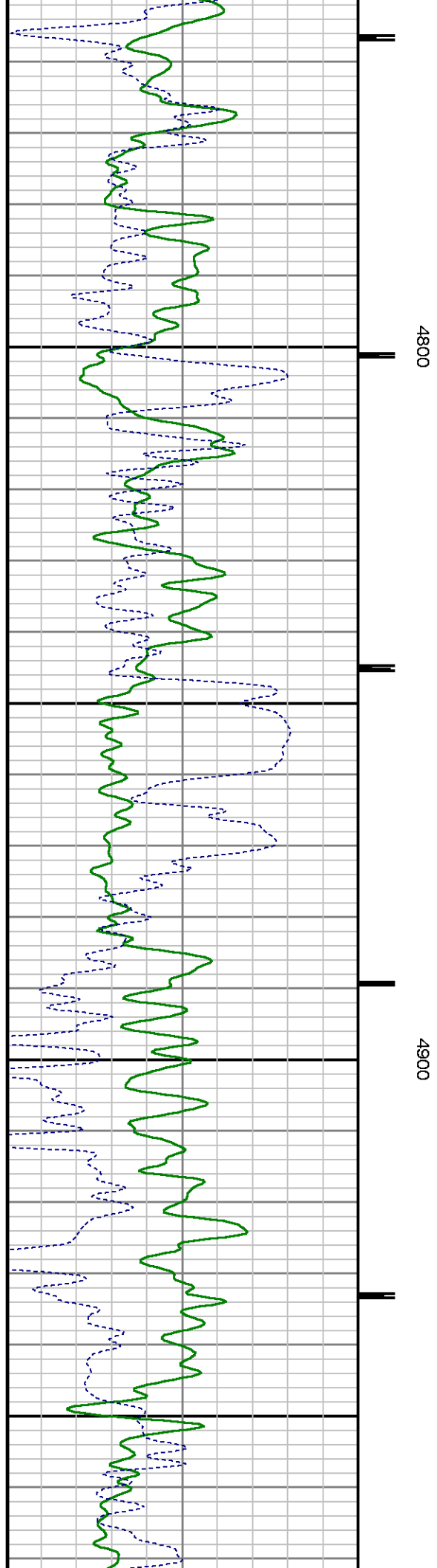
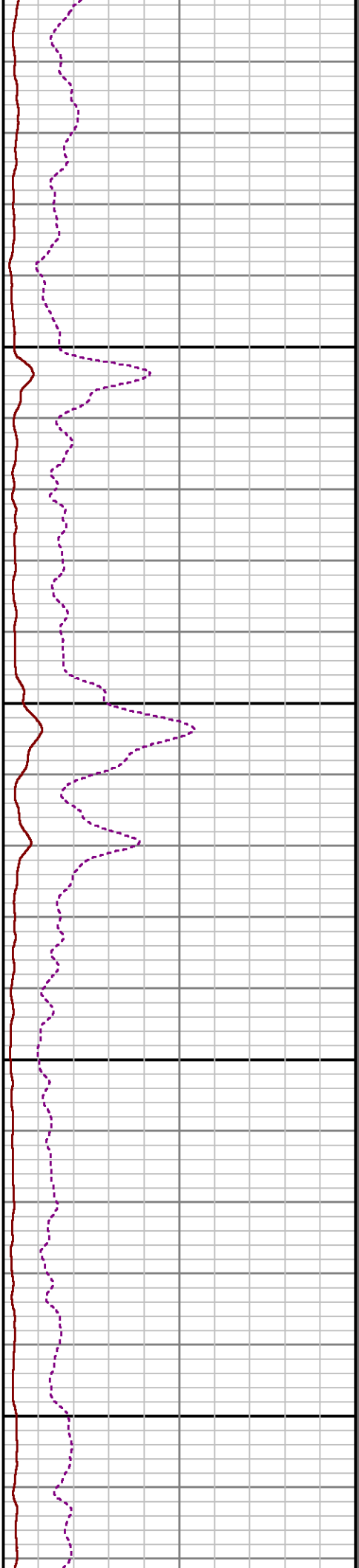
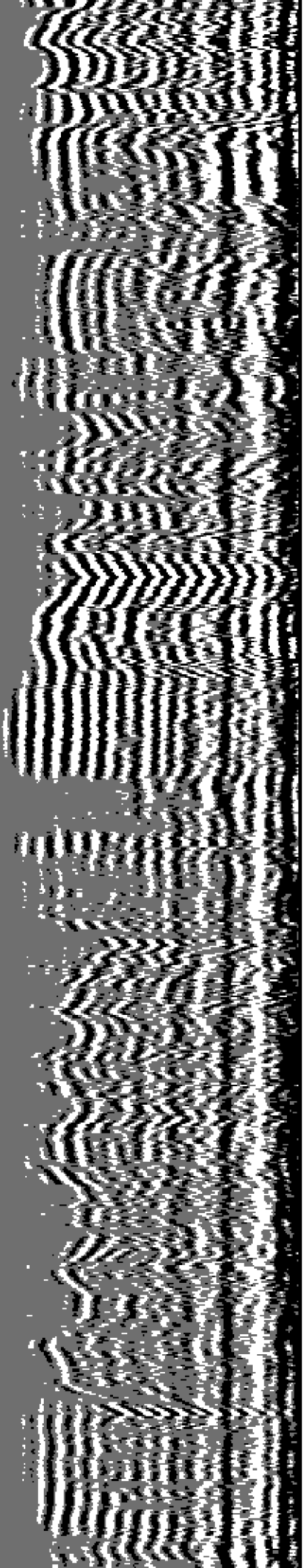


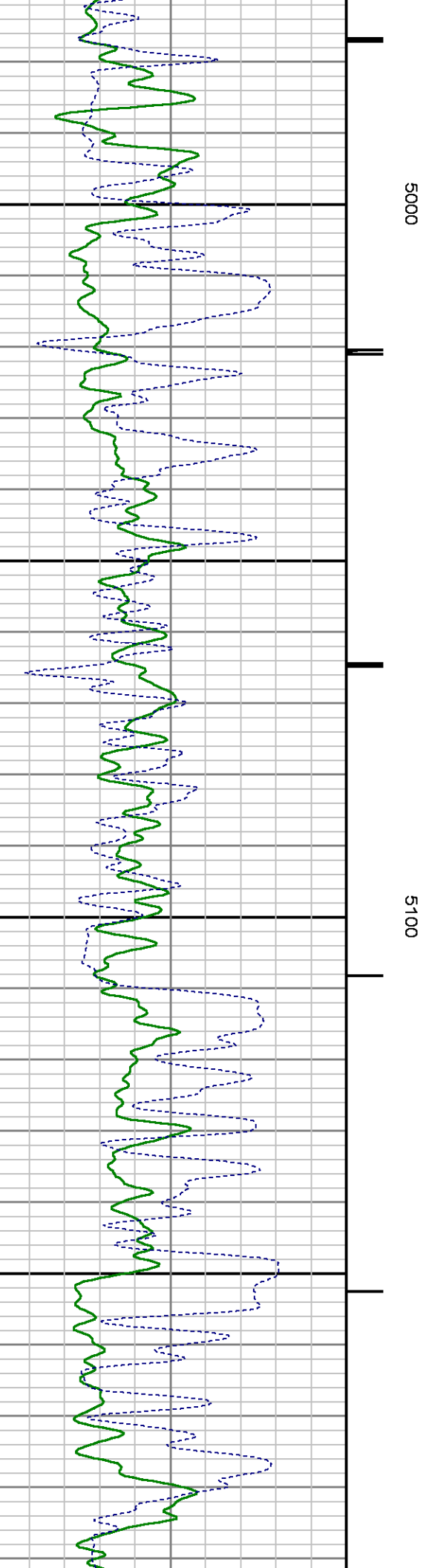
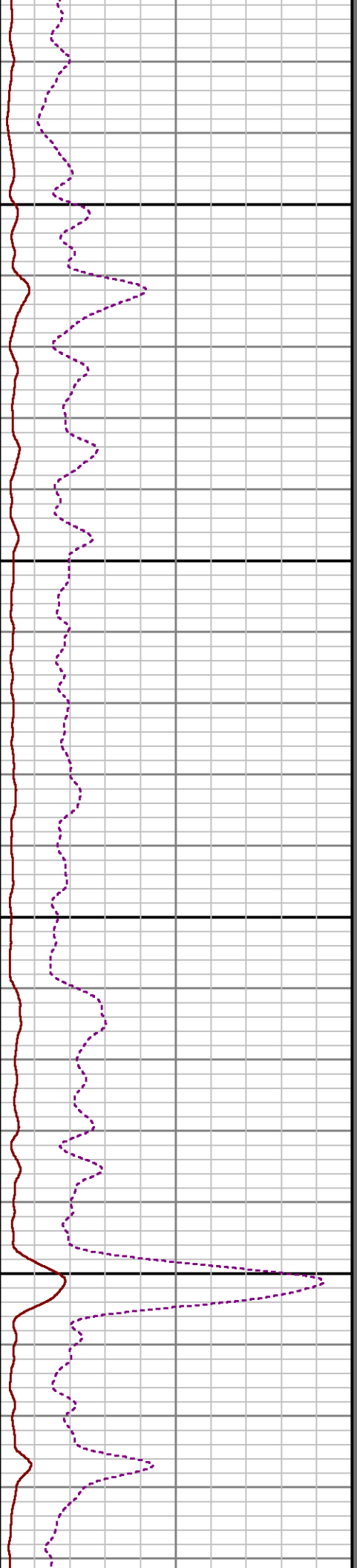
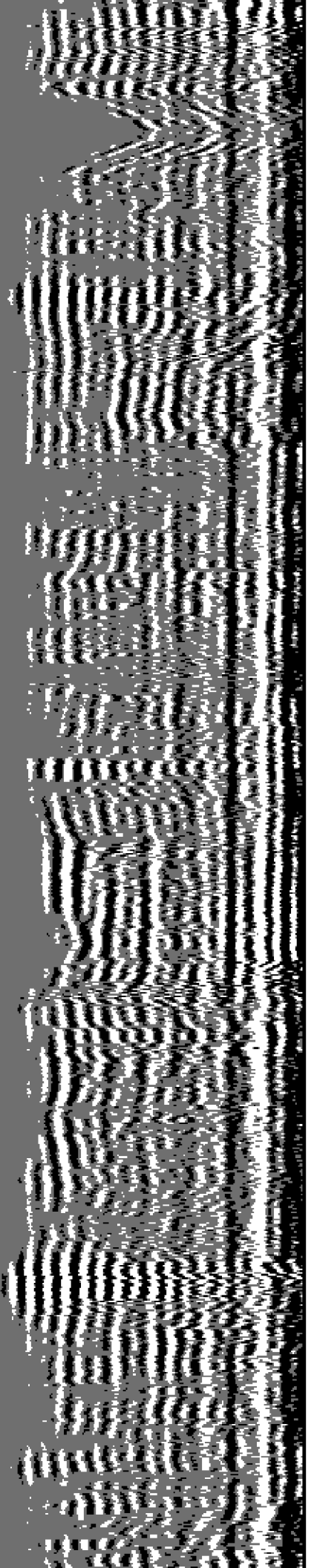


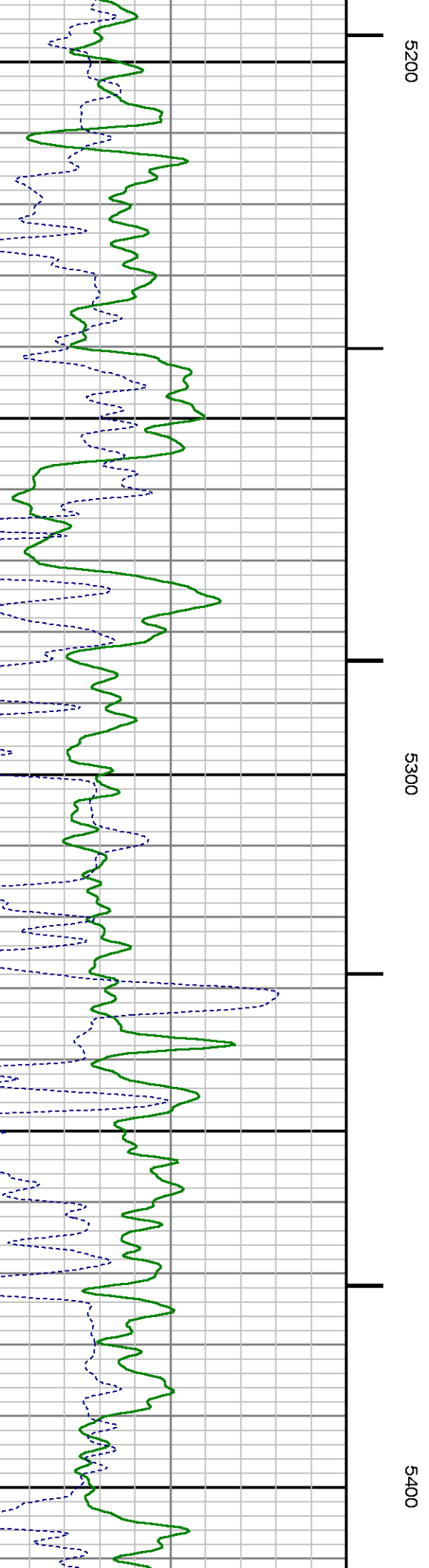
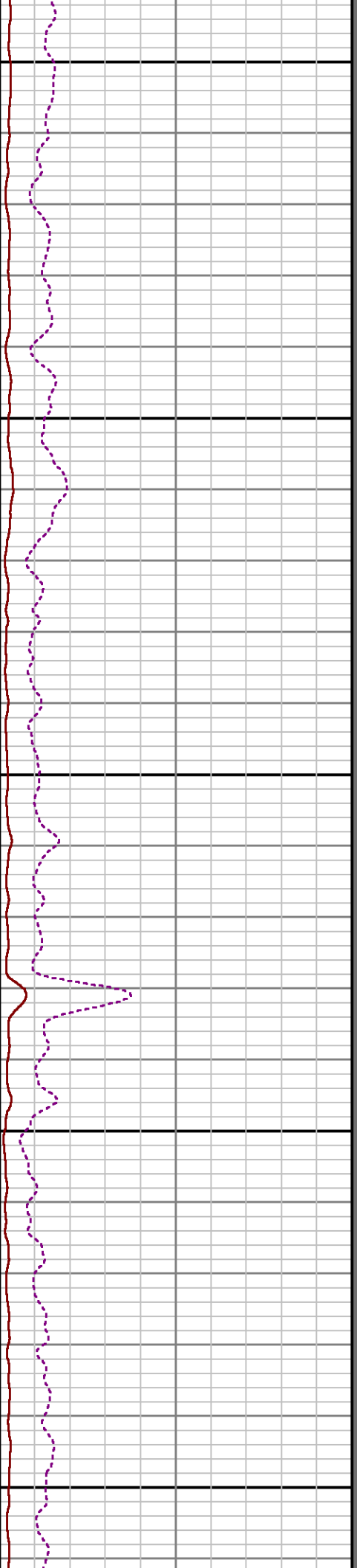
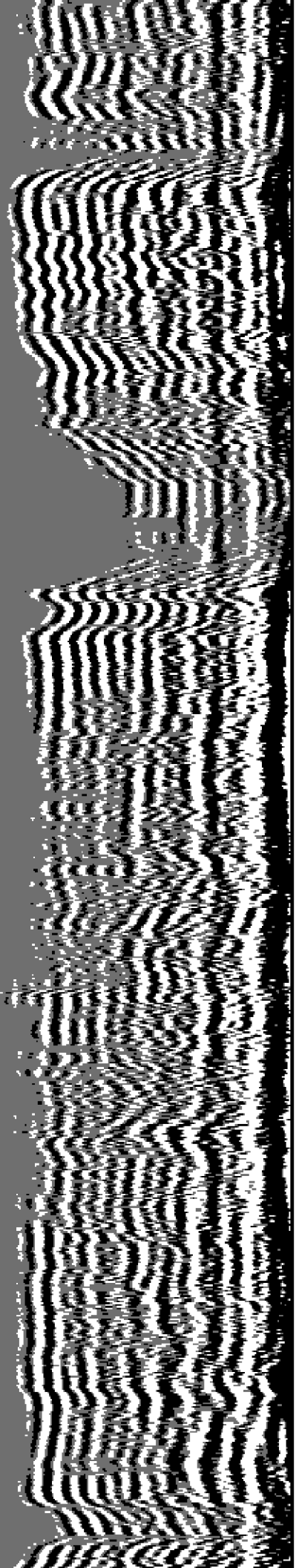


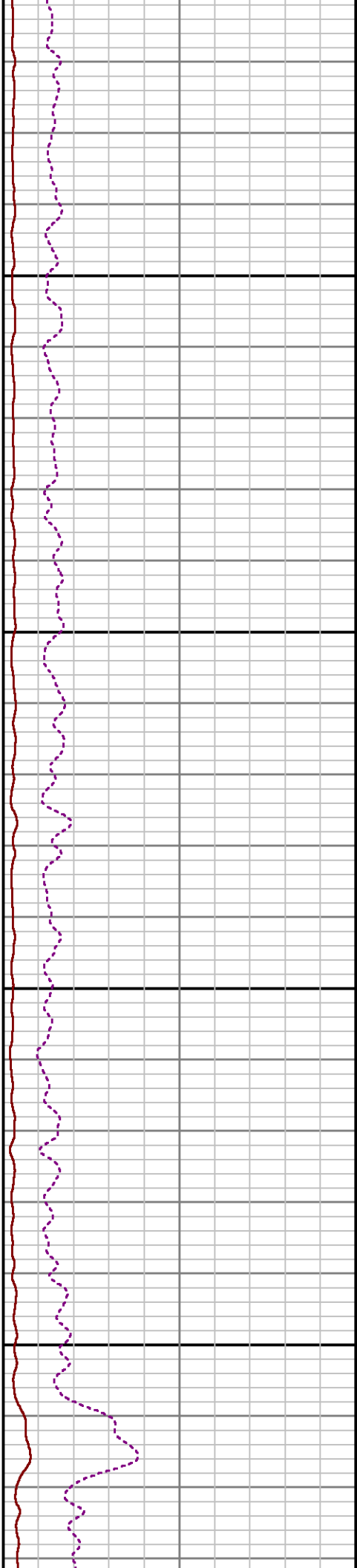
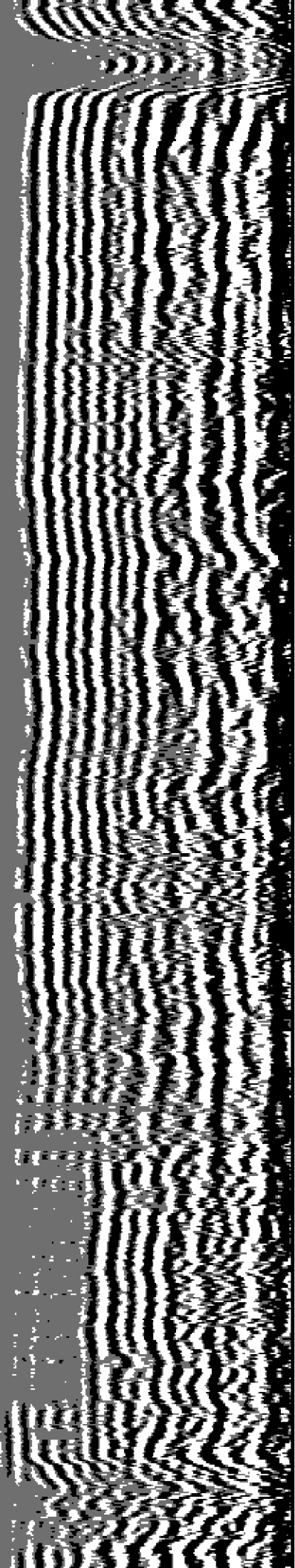






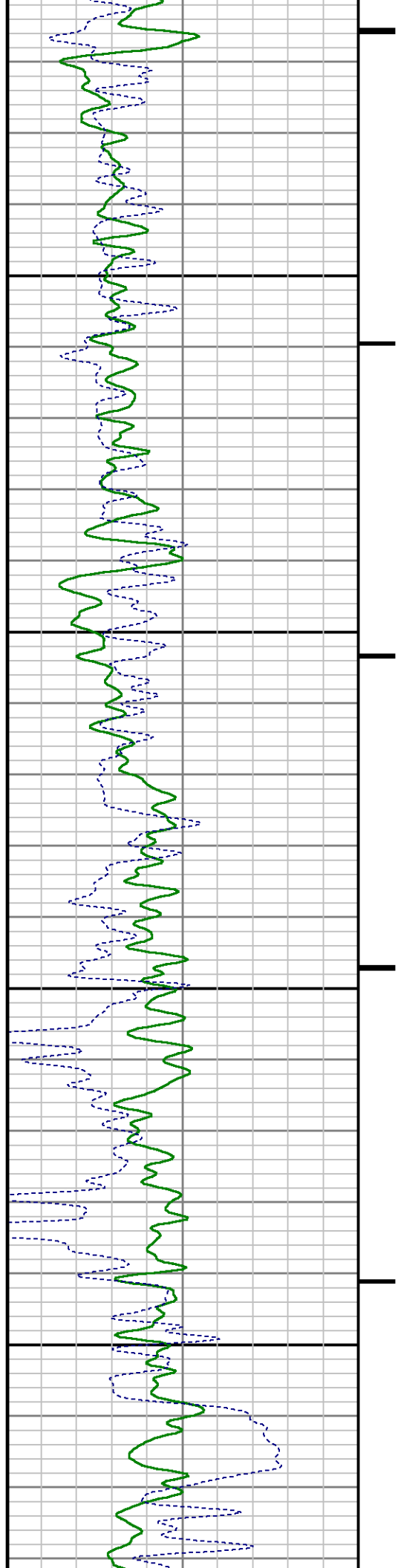


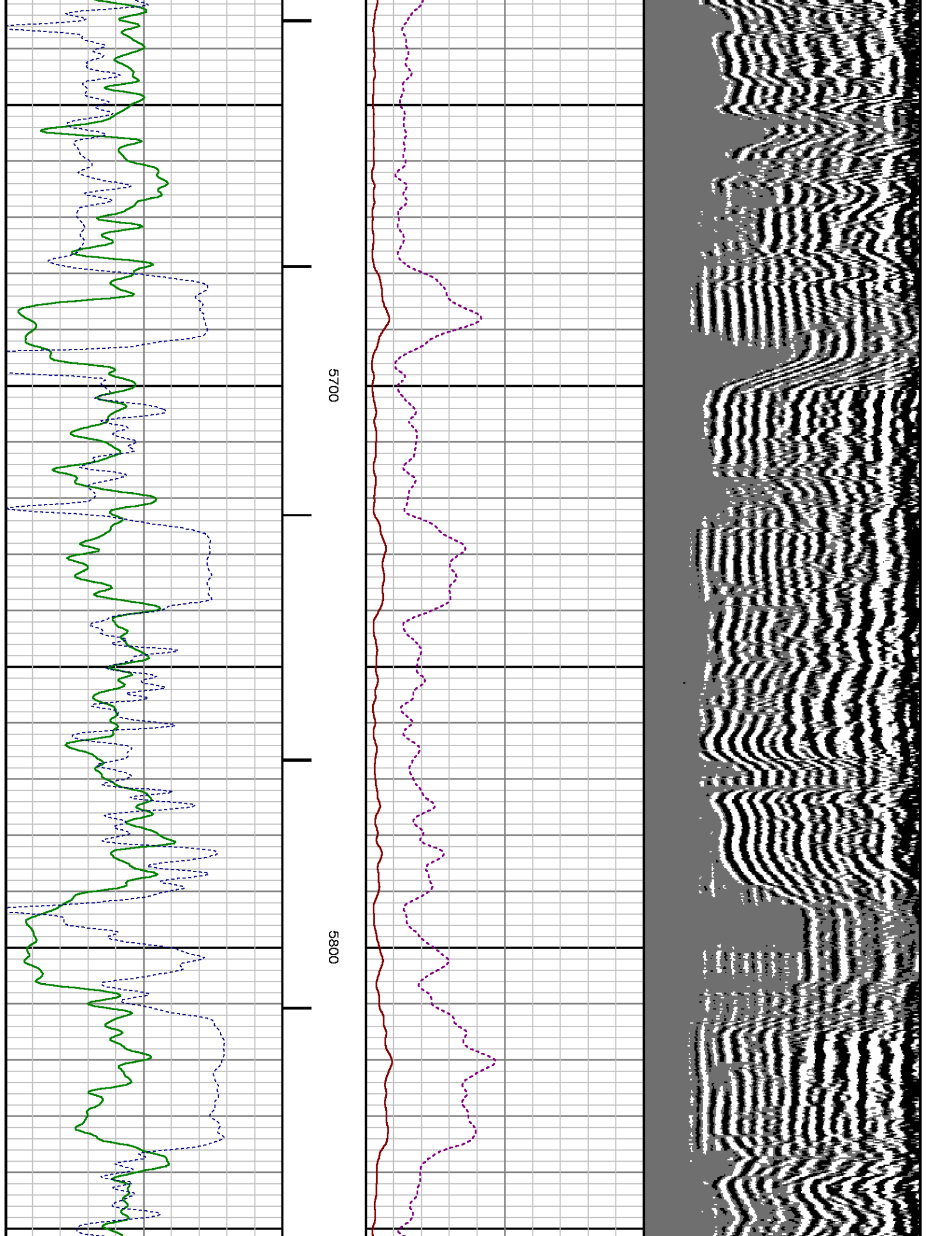


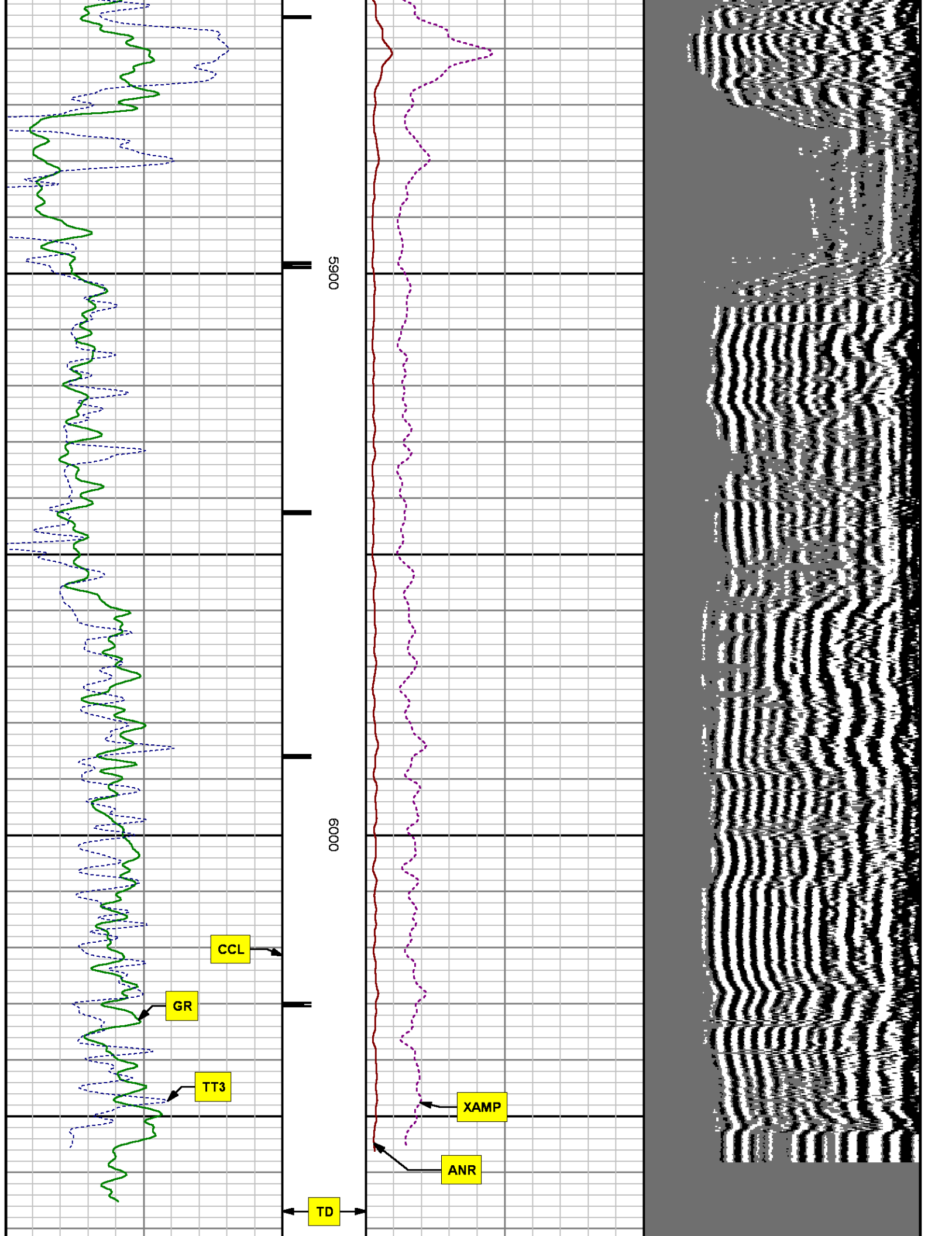


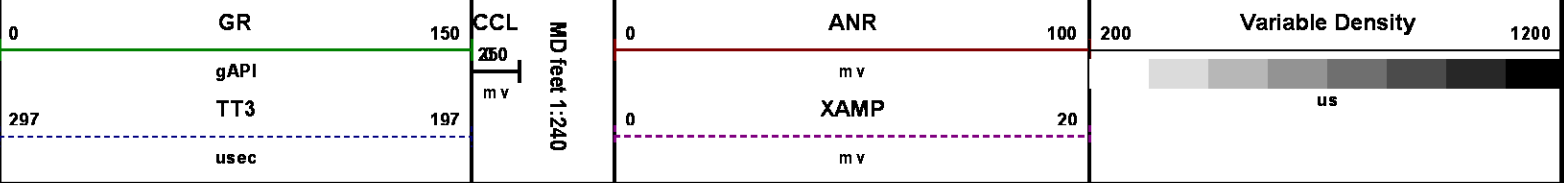
5500

5600









SECONDARY PRESENTATION

0 PSI

| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | TOP | BOTTOM |
|------------------|-----------------------|---------|----------|--------|----------|
| RAL | Amp Gate Start Far | 320.000 | u sec | 26.844 | 6071.500 |
| RAL | Amp Gate Start Near | 212.000 | u sec | 26.844 | 6071.500 |
| RAL | Amp Gate Start Radial | 212.000 | u sec | 26.844 | 6071.500 |
| RAL | Amp Gate Width Far | 25.000 | u sec | 26.844 | 6071.500 |
| RAL | Amp Gate Width Near | 25.000 | u sec | 26.844 | 6071.500 |
| RAL | Amp Gate Width Radial | 25.000 | u sec | 26.844 | 6071.500 |
| RAL | casing od | 5.500 | inches | 26.844 | 6071.500 |
| RAL | casing wt | 17.000 | lbm/ft | 26.844 | 6071.500 |
| RAL | FB Start Far | 306.289 | u sec | 26.844 | 6071.500 |
| RAL | FB Start Near | 189.780 | u sec | 26.844 | 6071.500 |
| RAL | FB Start Radial | 189.780 | u sec | 26.844 | 6071.500 |
| RAL | FB Thresh Far | 10.000 | m v | 26.844 | 6071.500 |
| RAL | FB Thresh Near | 4.000 | m v | 26.844 | 6071.500 |
| RAL | FB Thresh Radial | 4.000 | m v | 26.844 | 6071.500 |
| RAL | Fluid Travel Time | 200.000 | u sec/ft | 26.844 | 6072.344 |

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 | | | |
| 2459XA | -7.250 | CCL | | | | | |

2459XA

-5.390

GR

2459XA

0.000

NEU

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

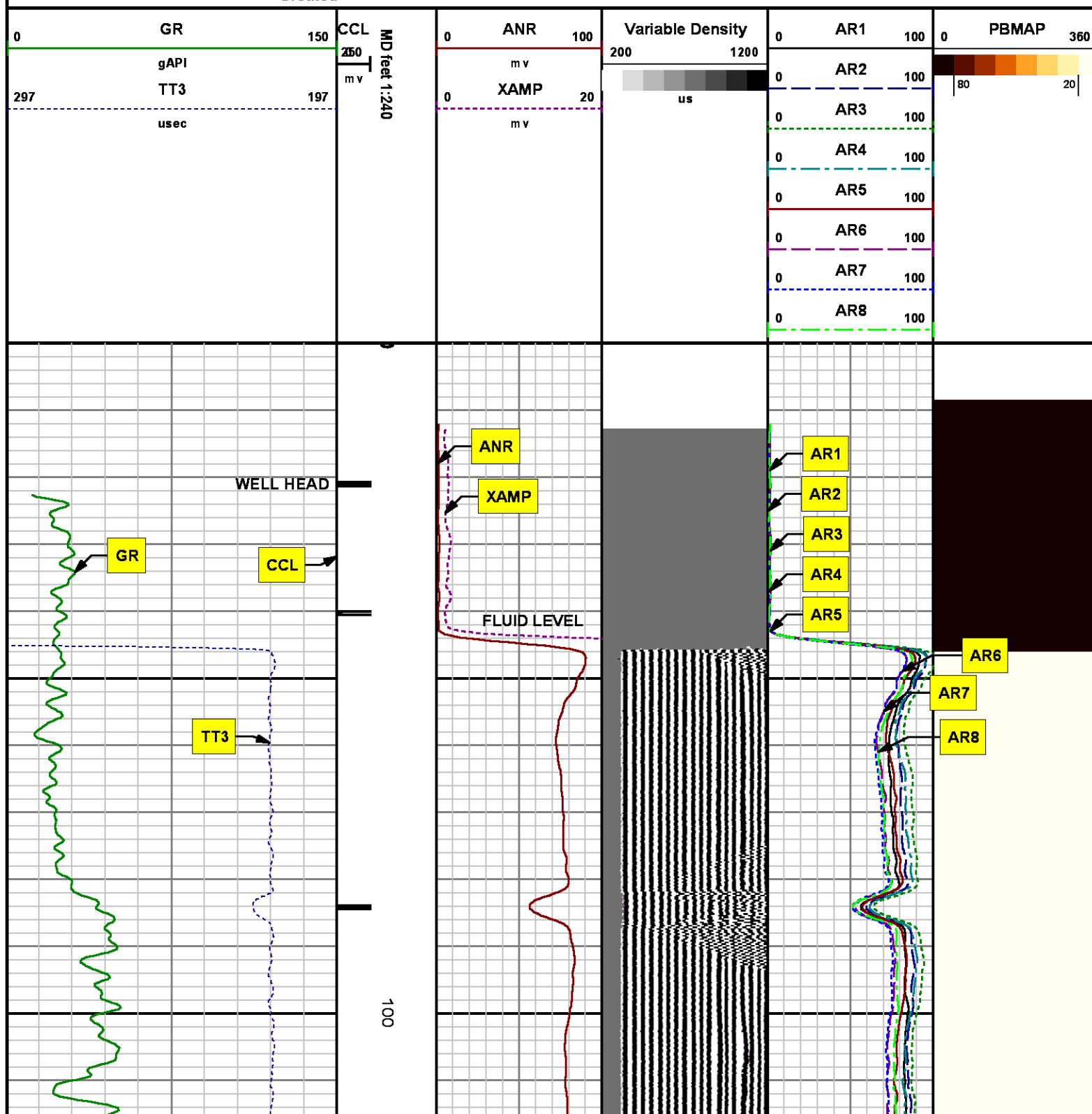
Well : STATE OF COLORADO KP 431-9

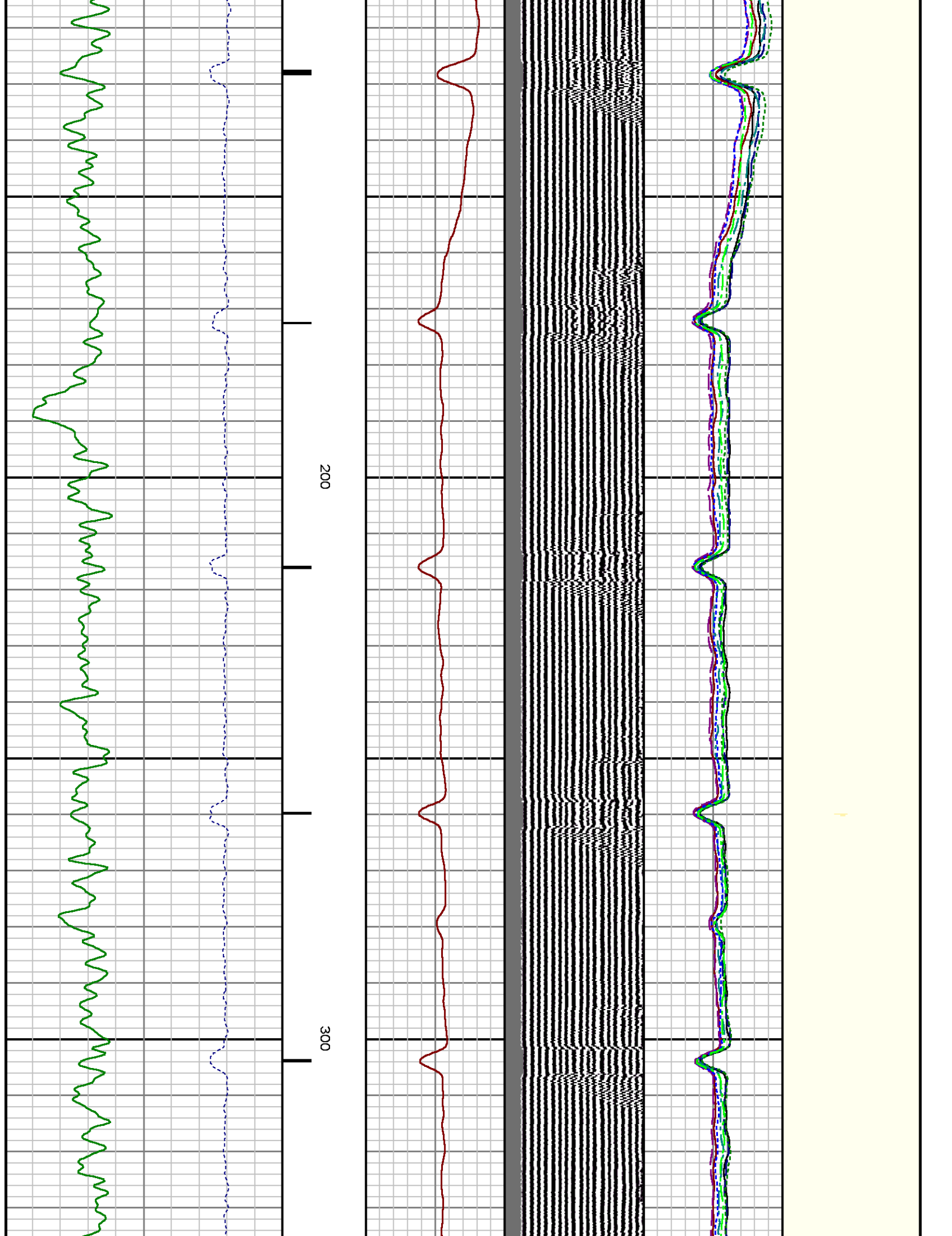
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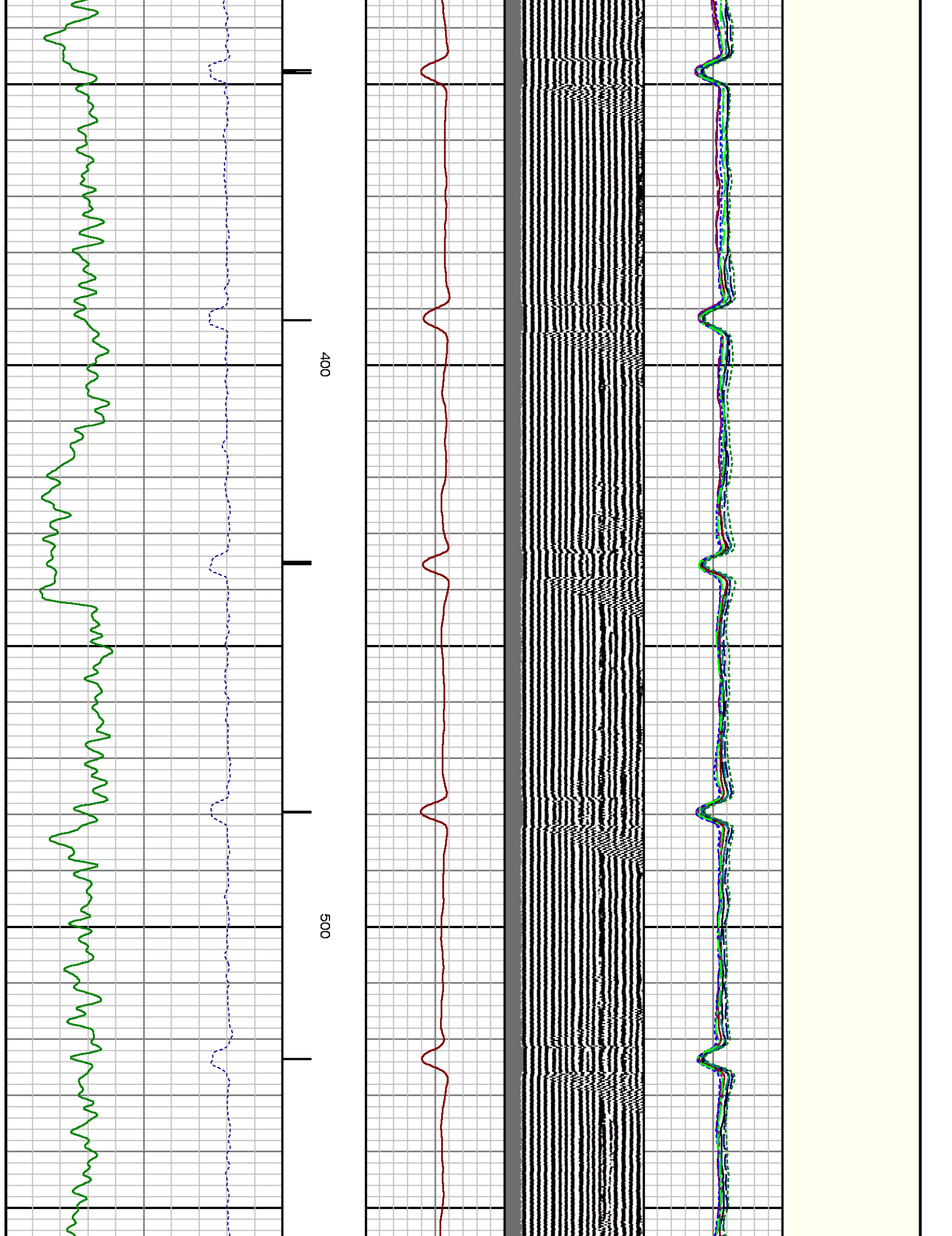
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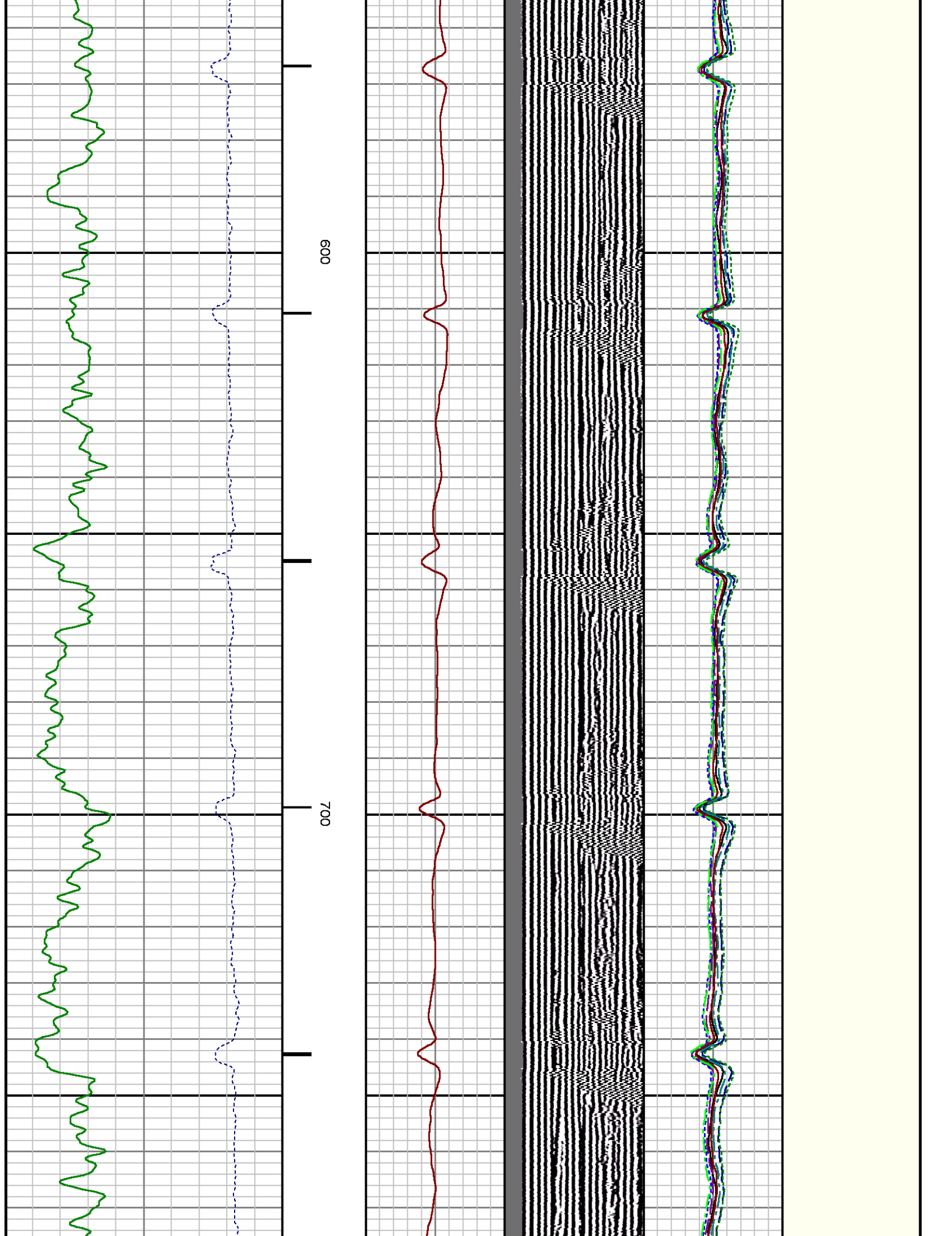
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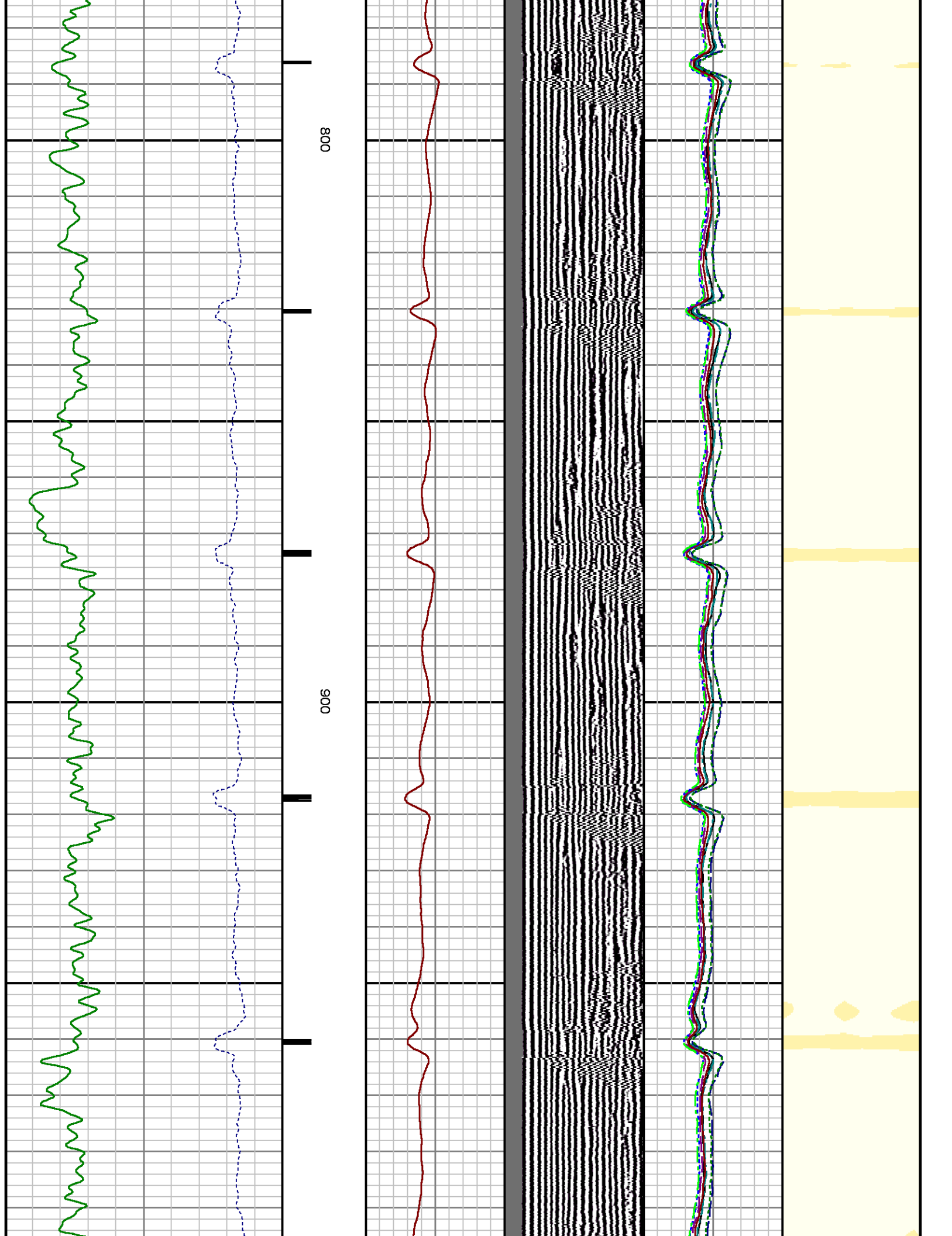
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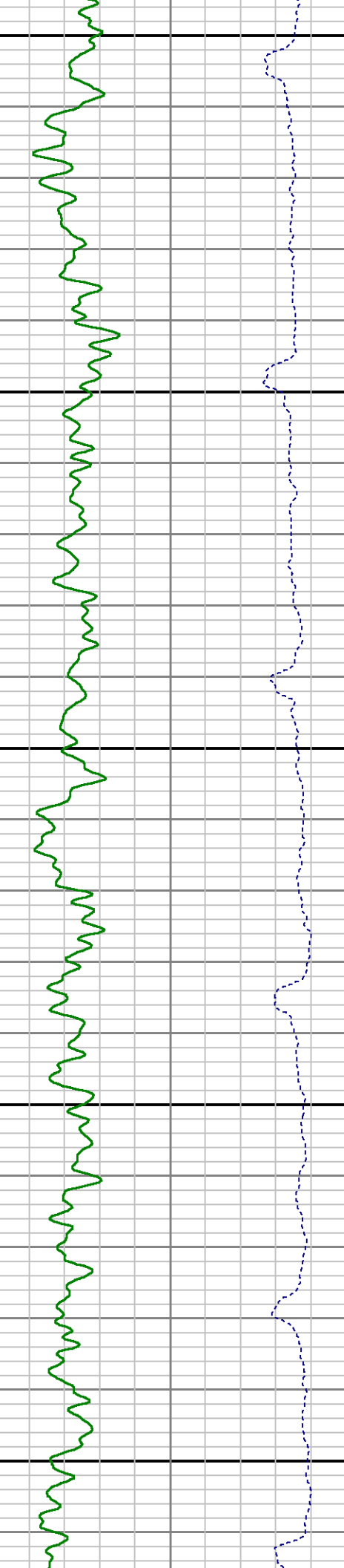
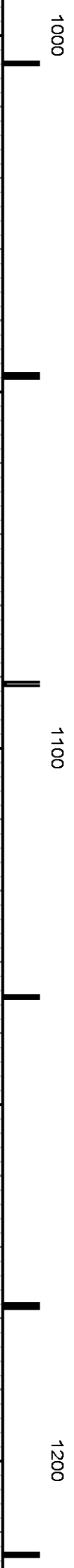
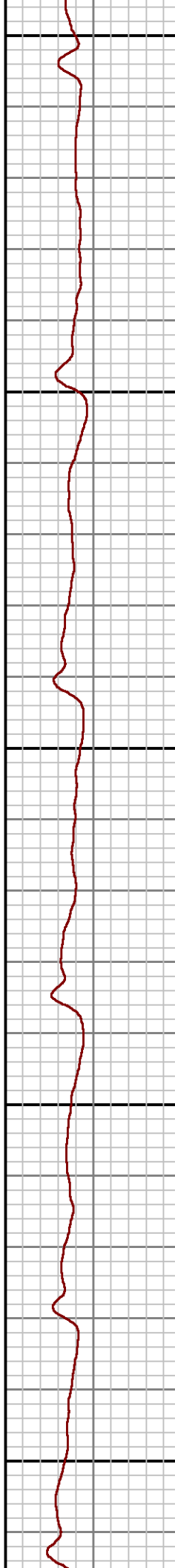
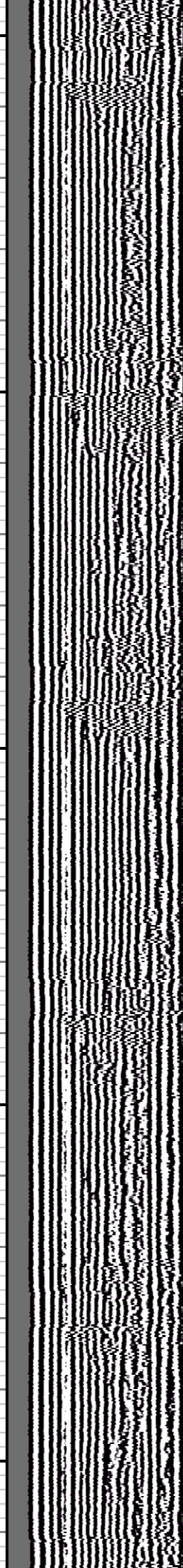
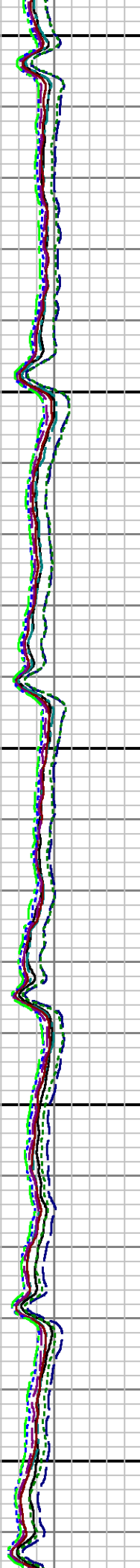
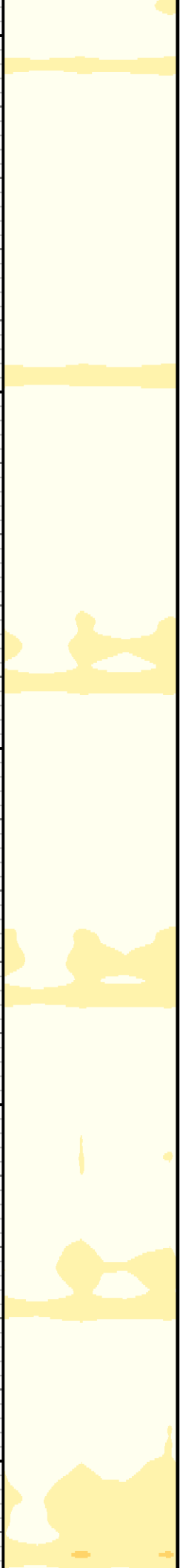


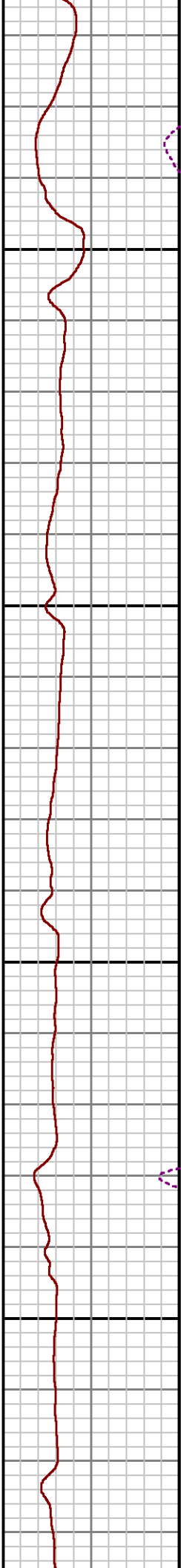
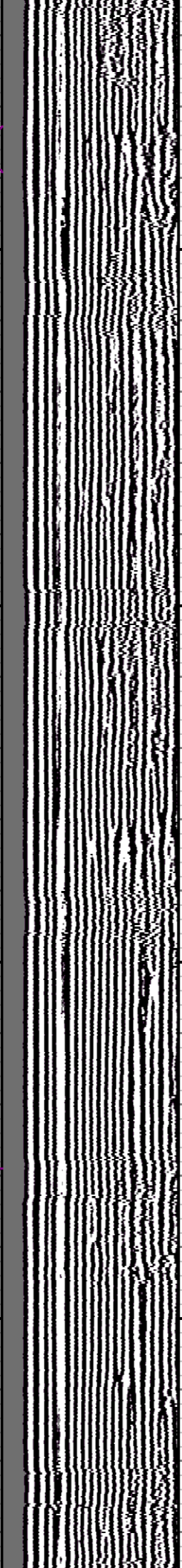
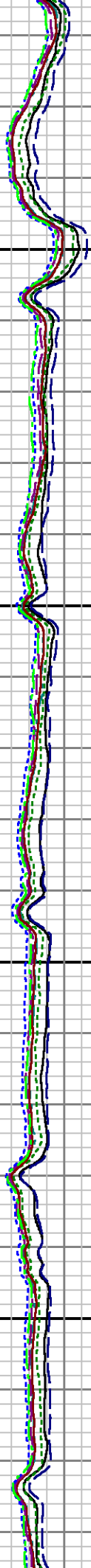








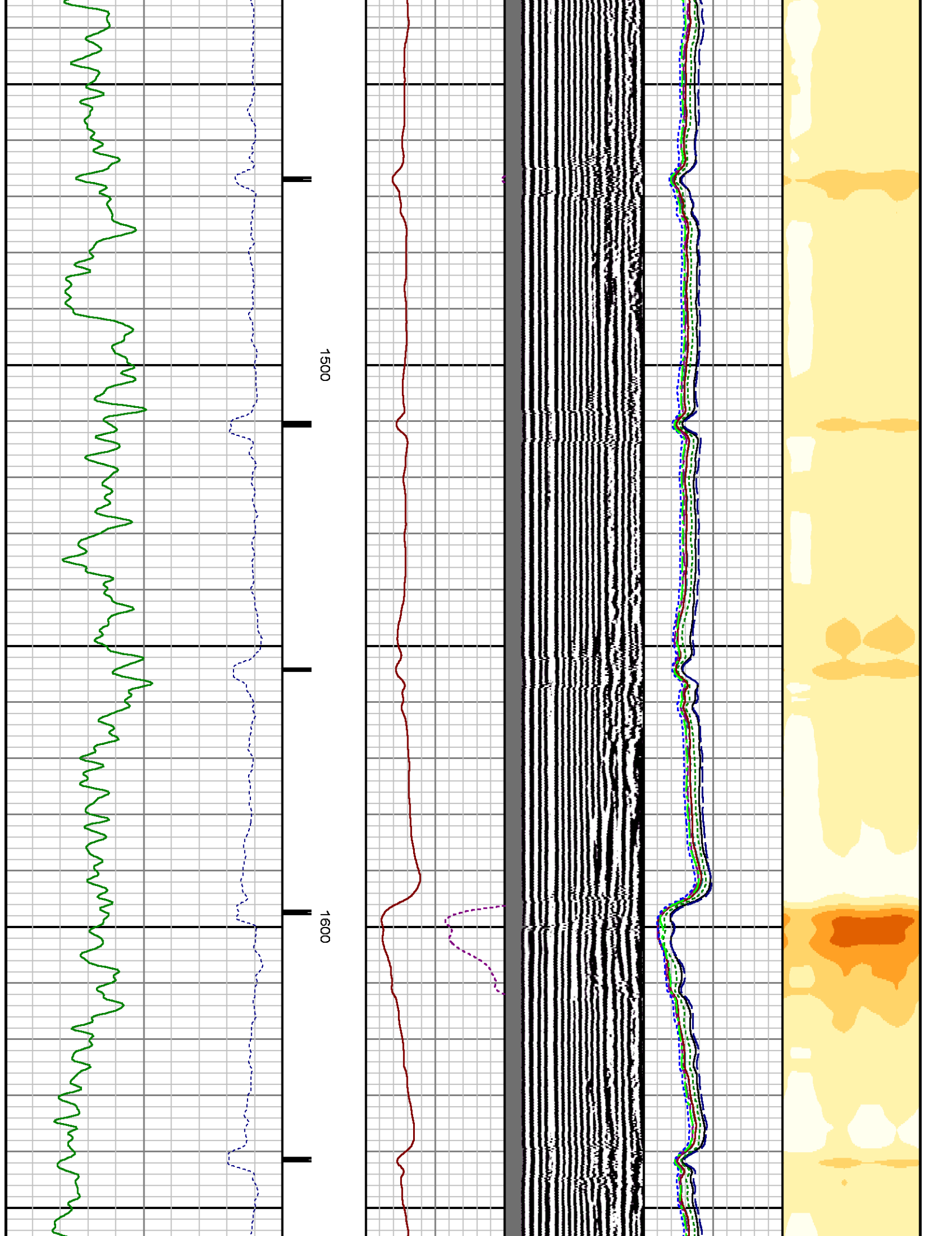


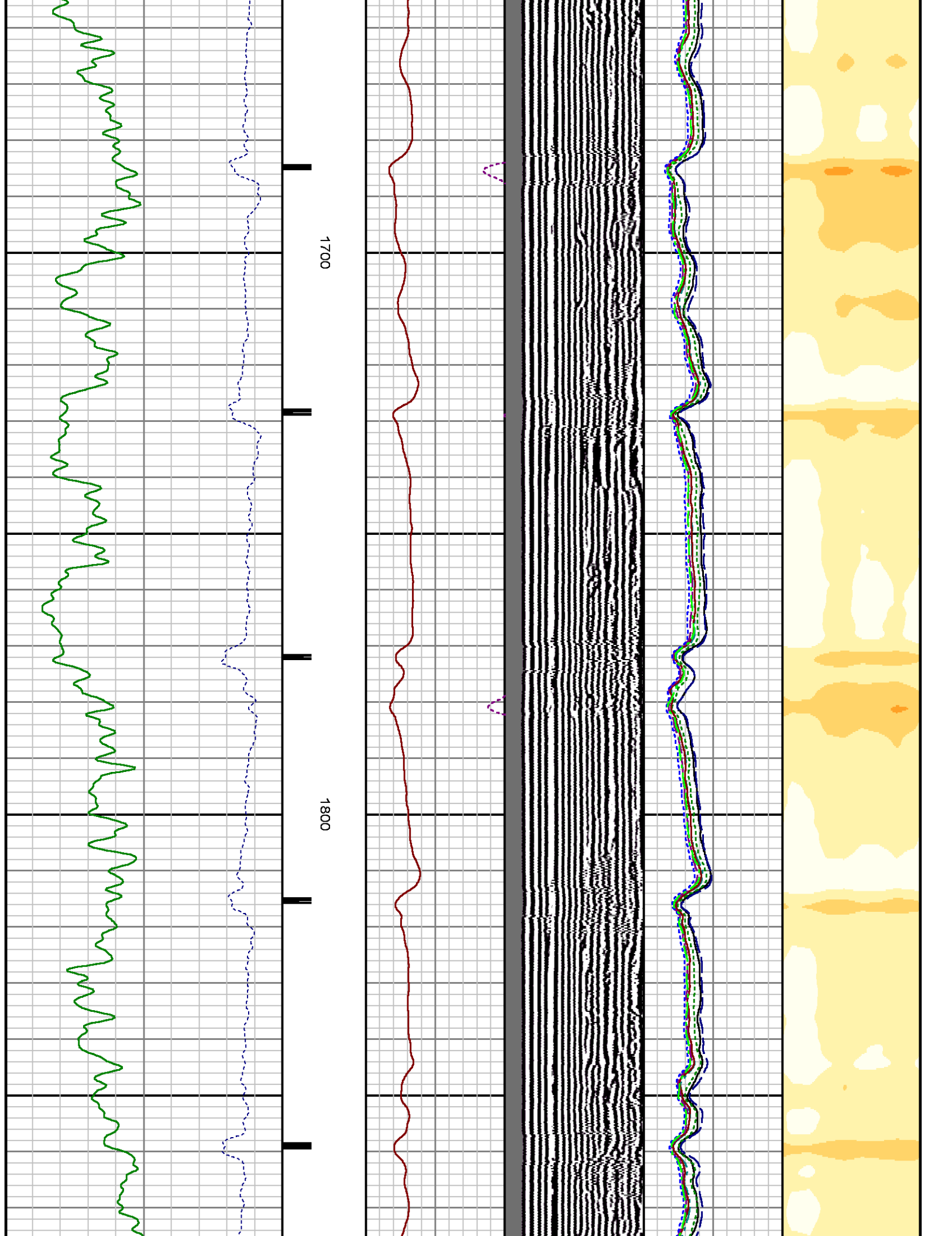


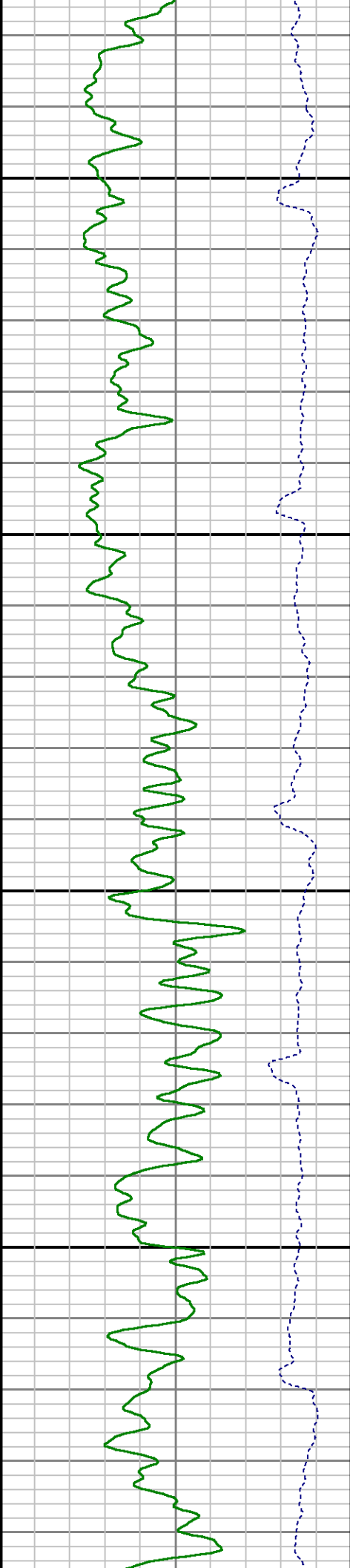
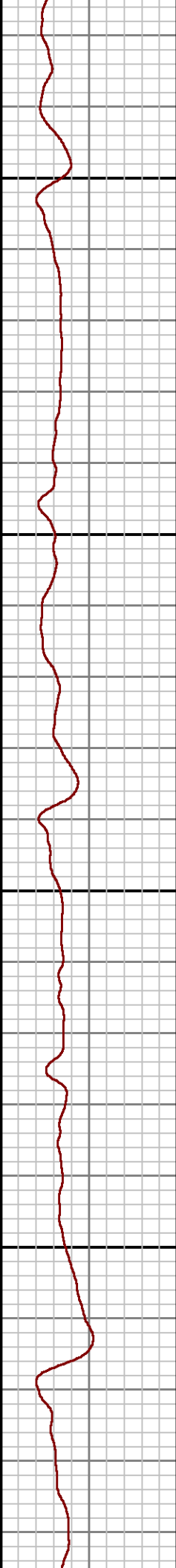
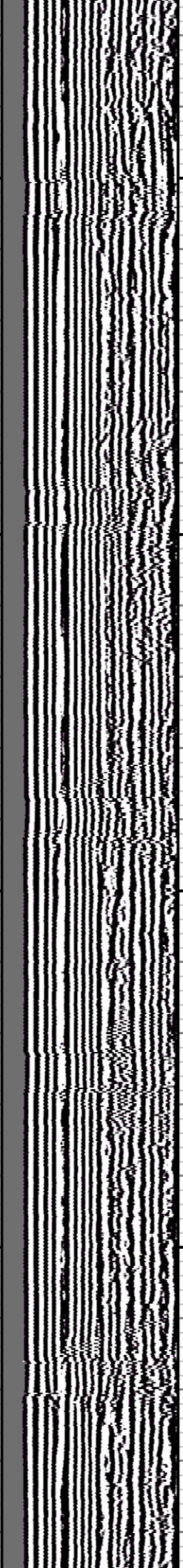
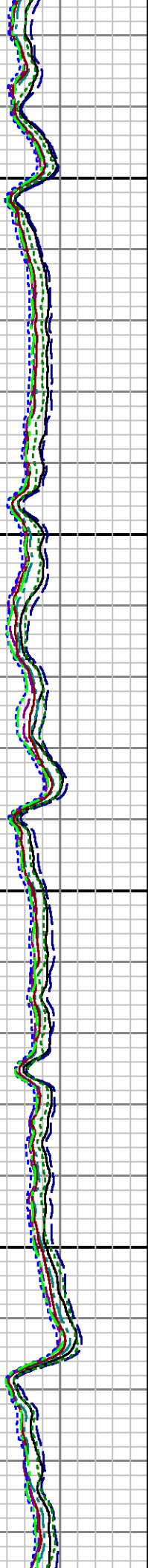
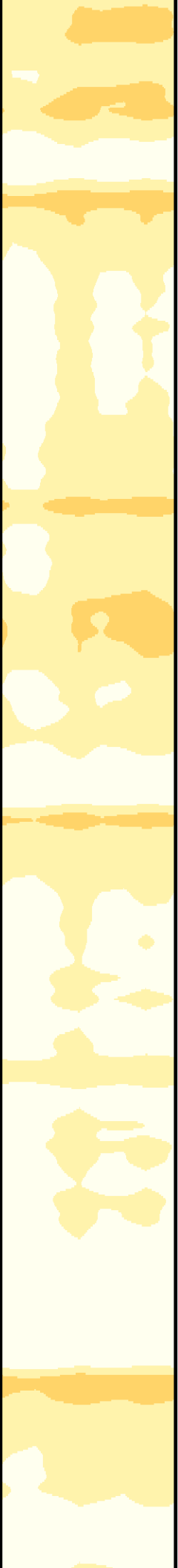
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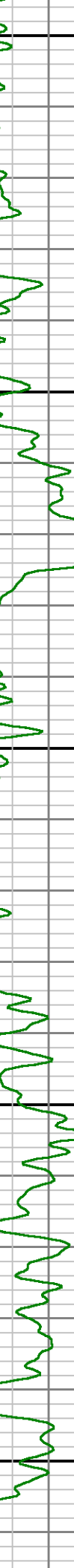
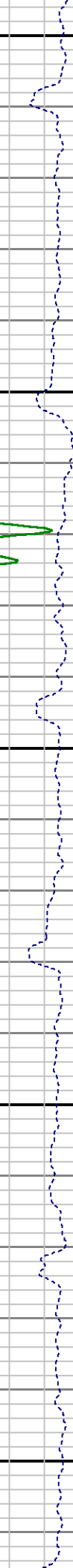
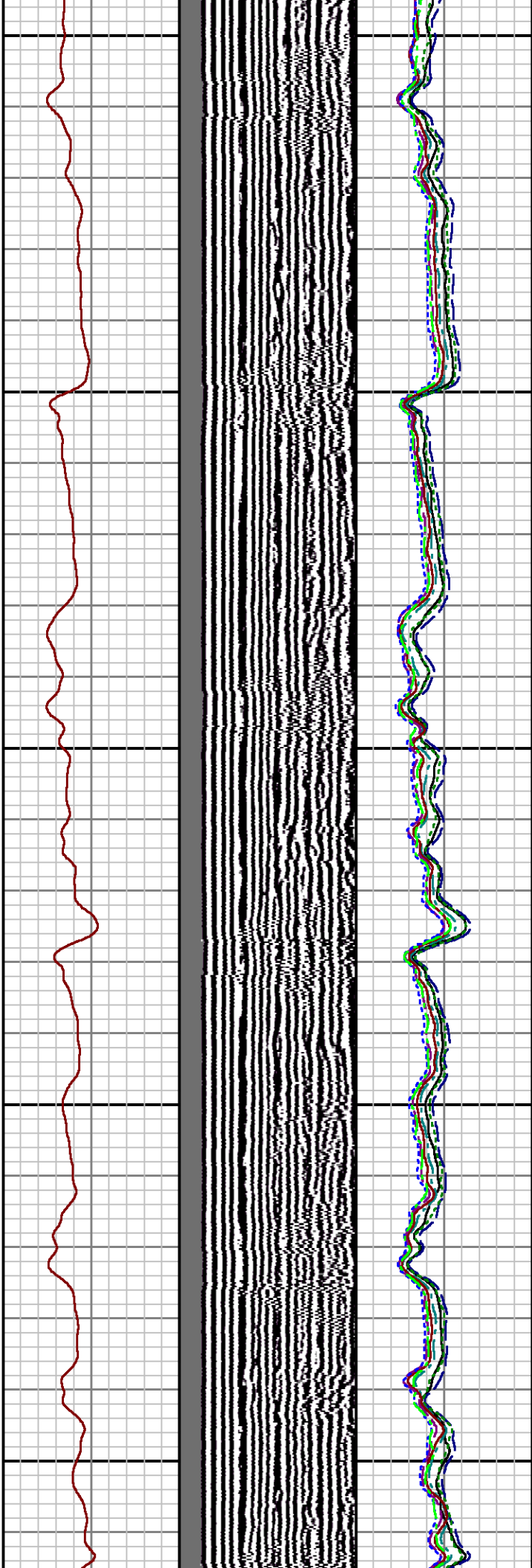
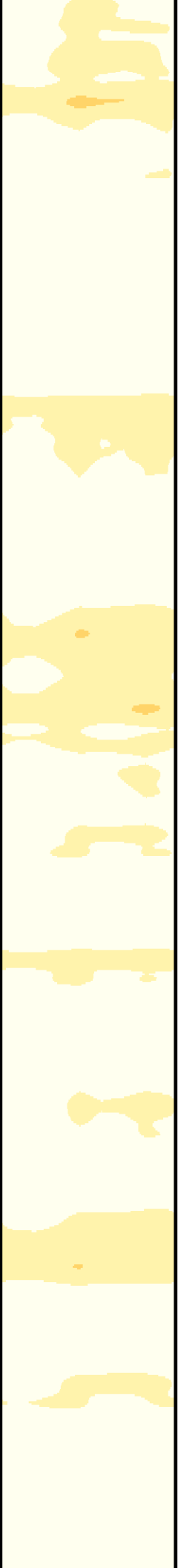
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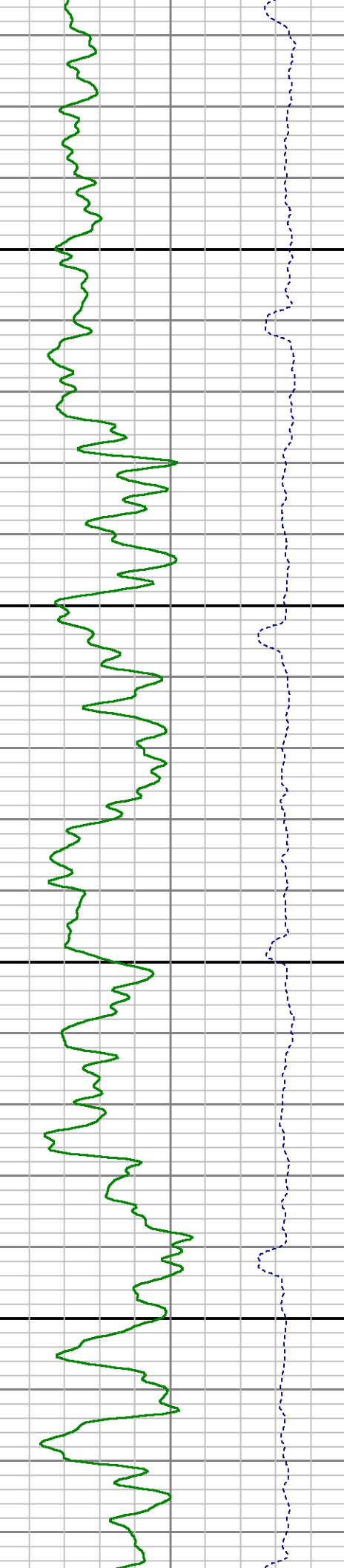
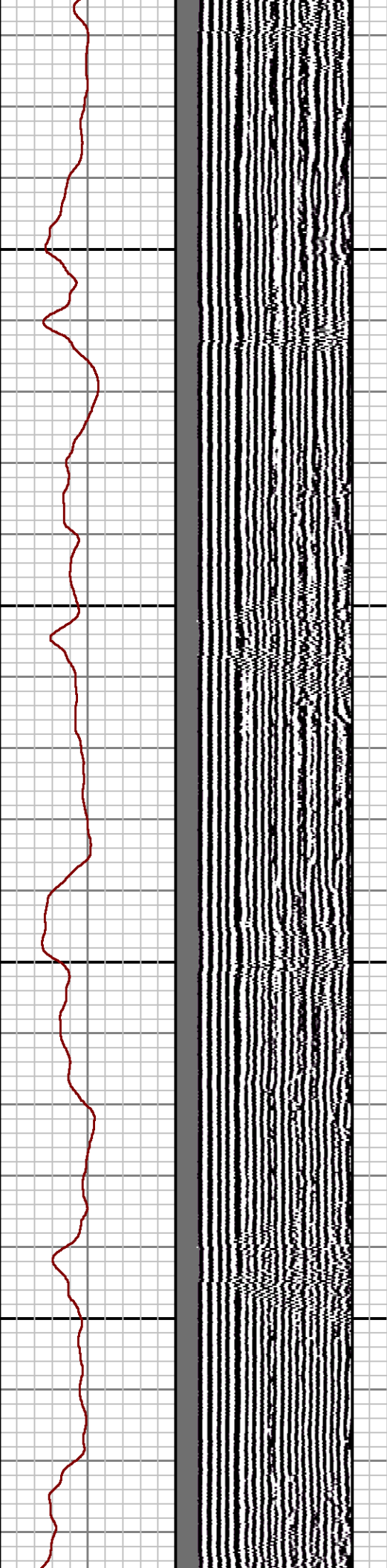
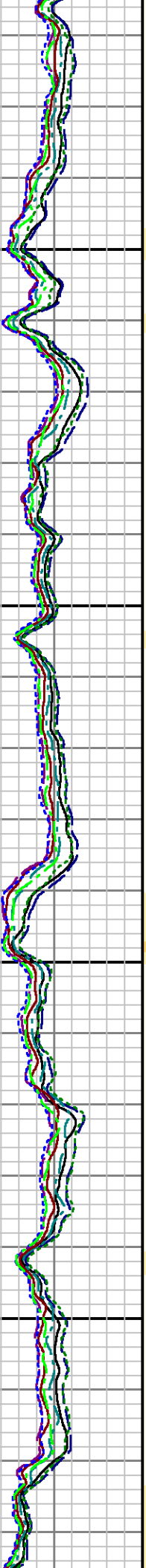


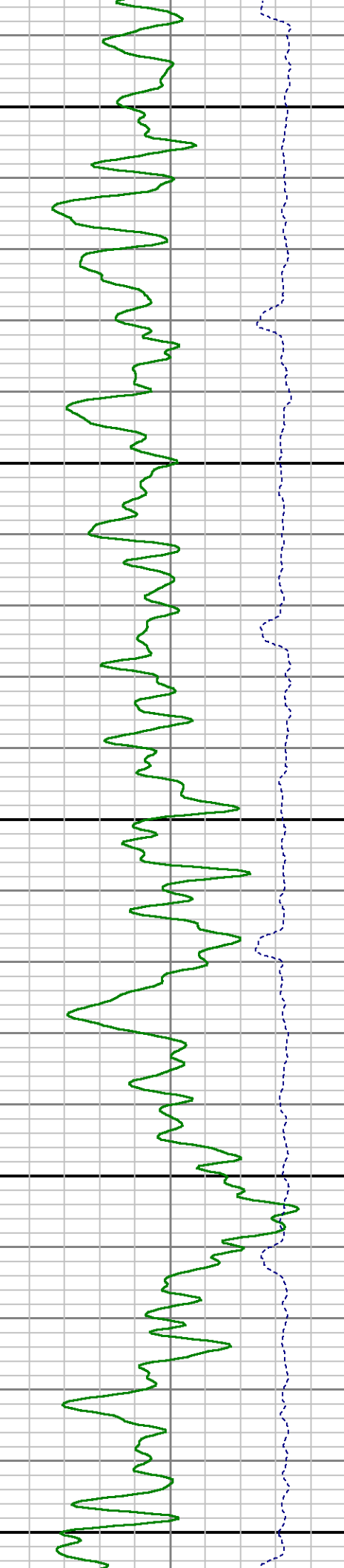
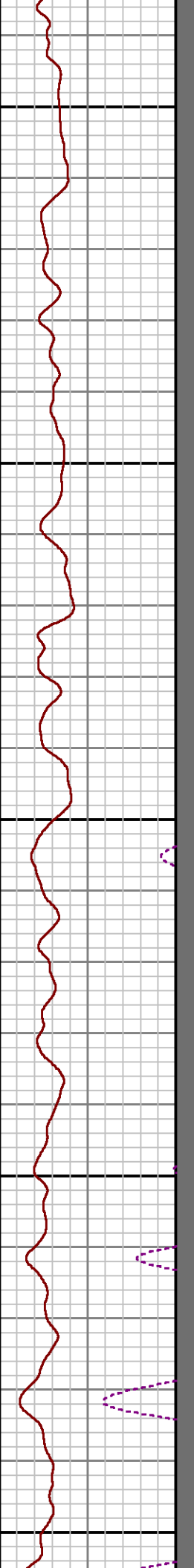
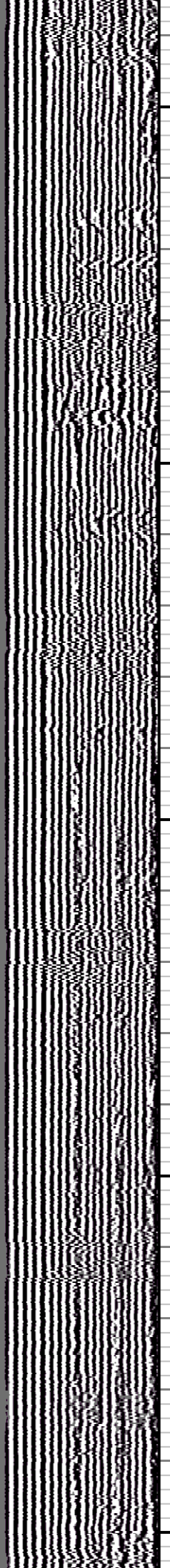
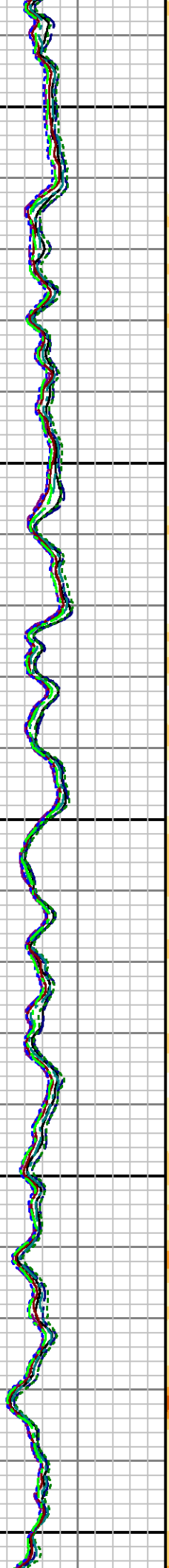
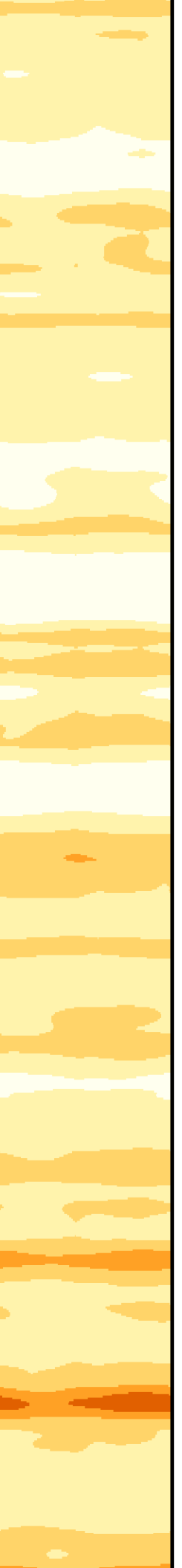


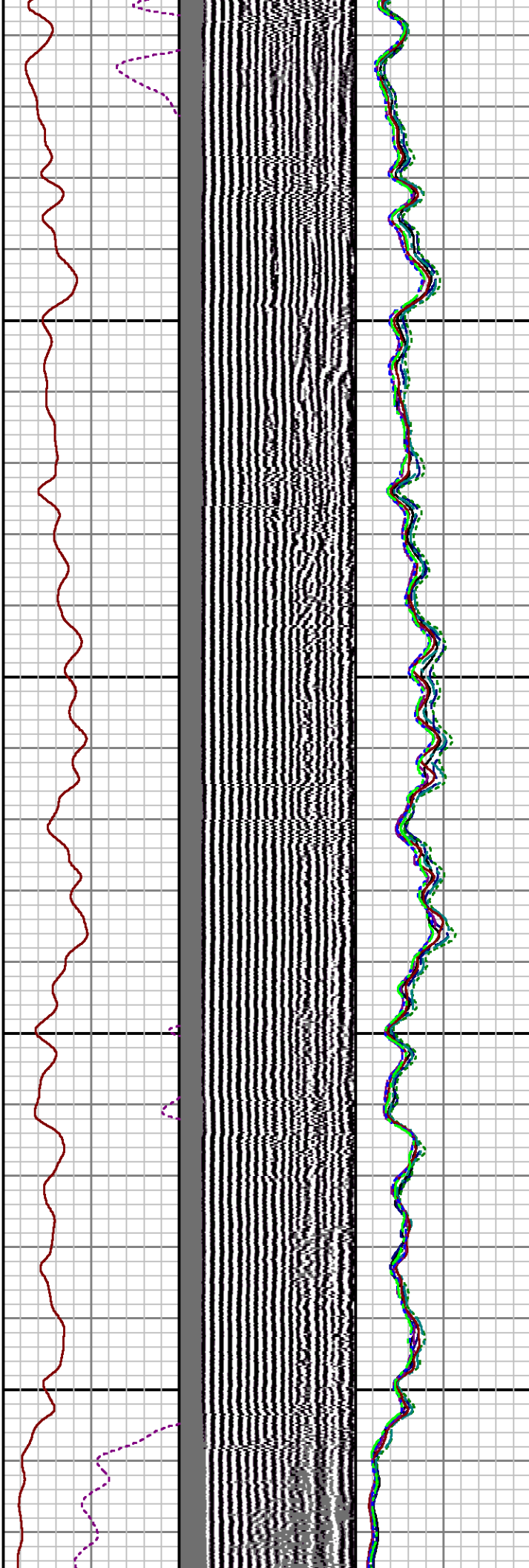
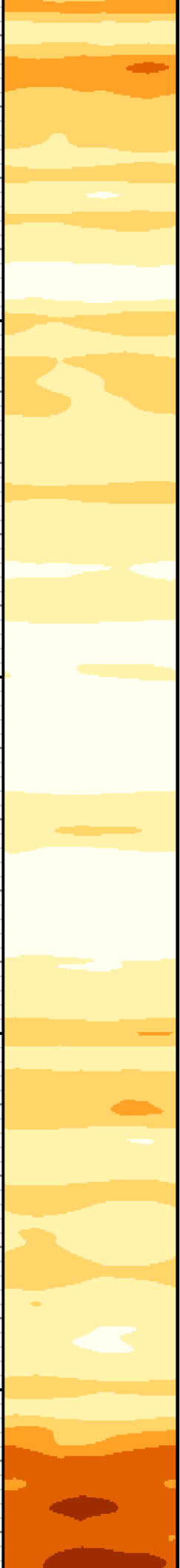
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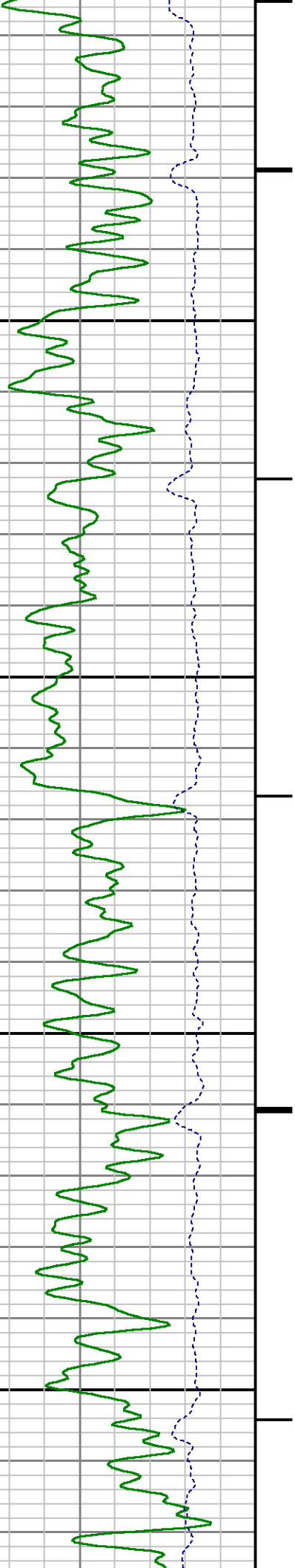


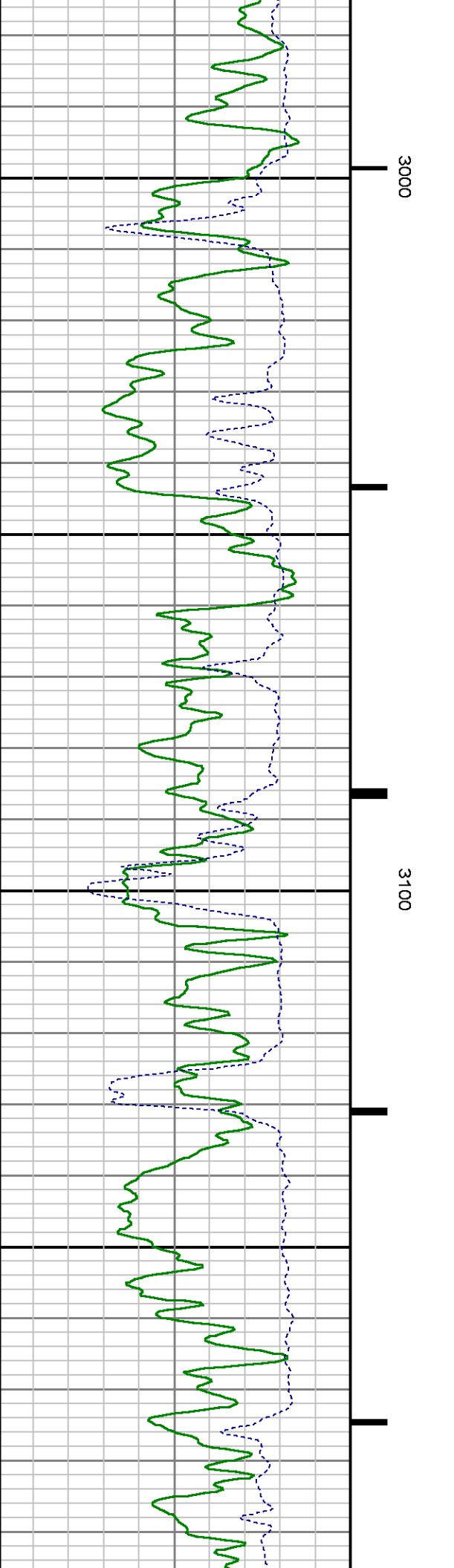
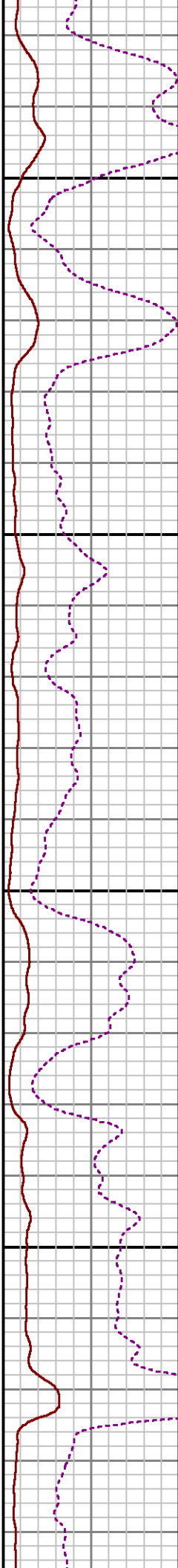
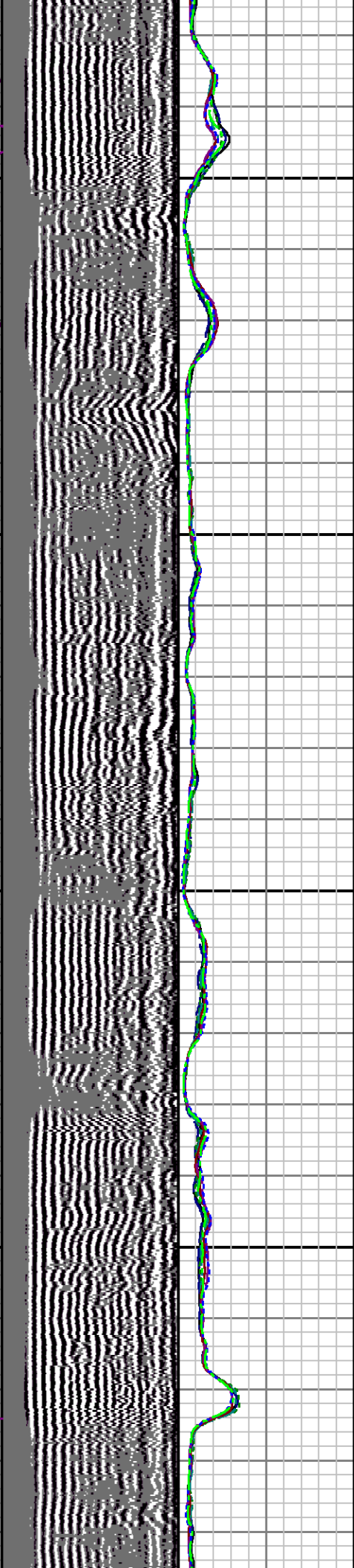
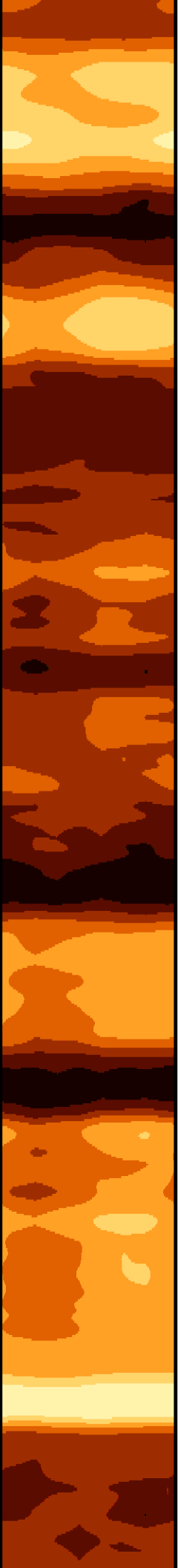


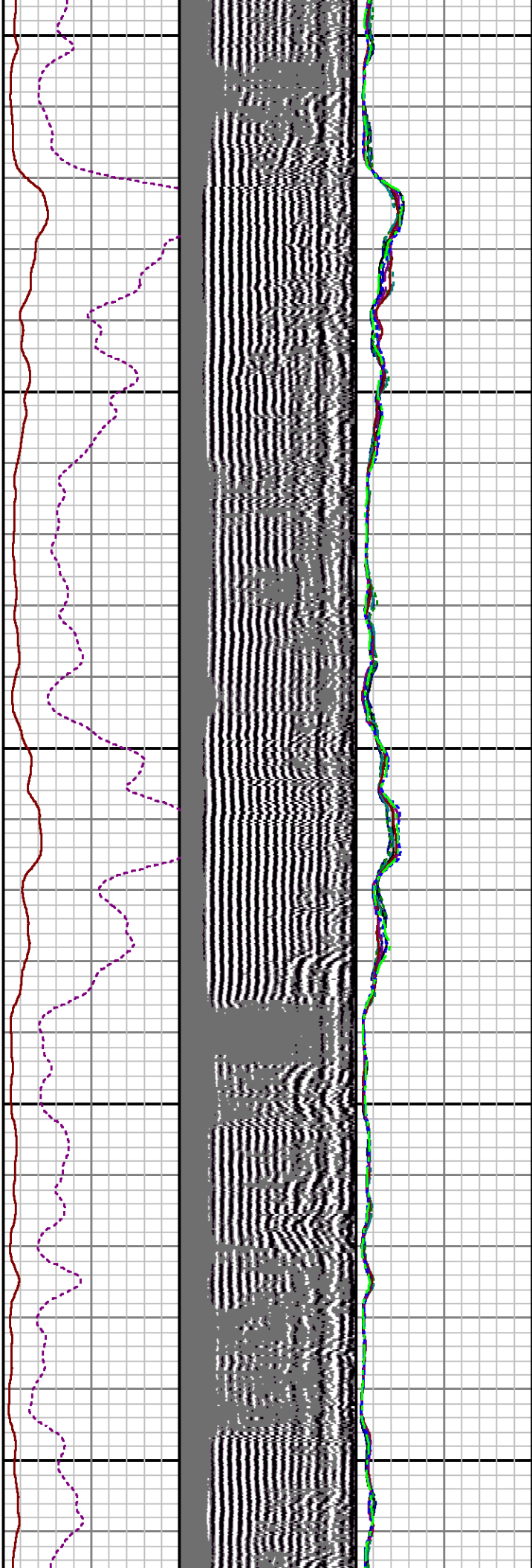


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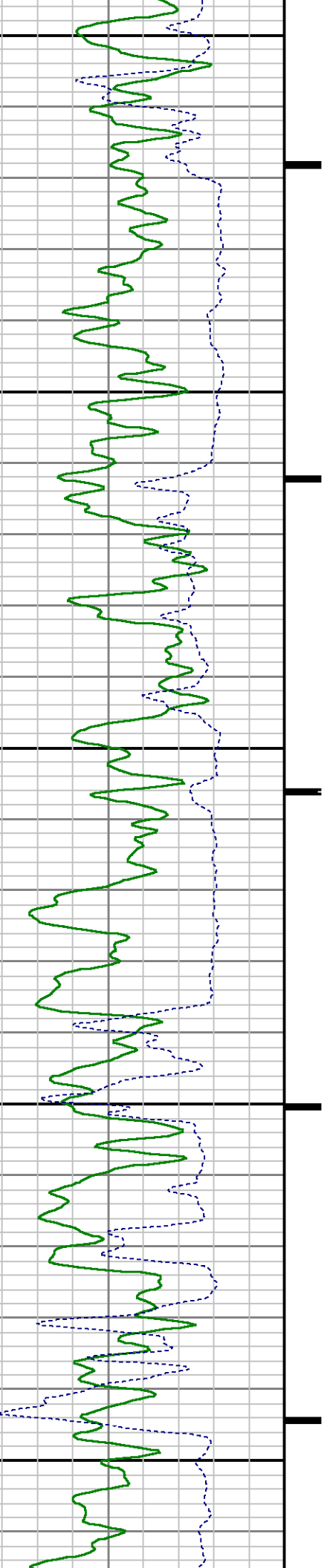


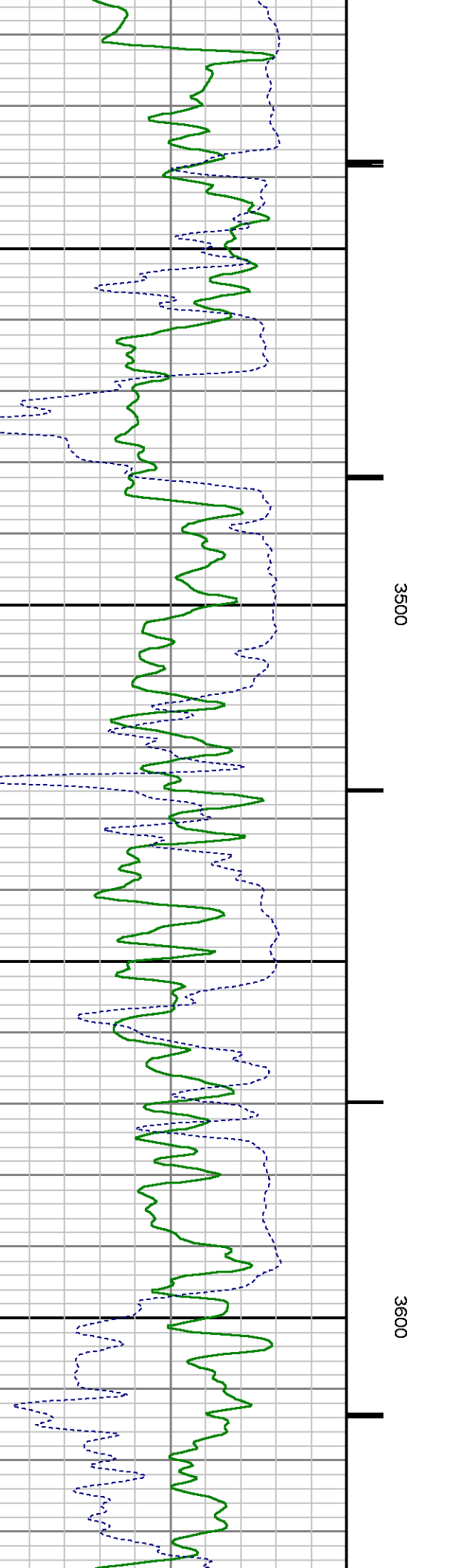
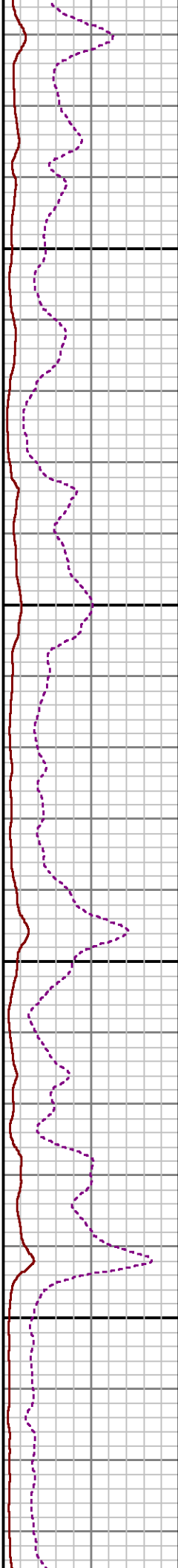
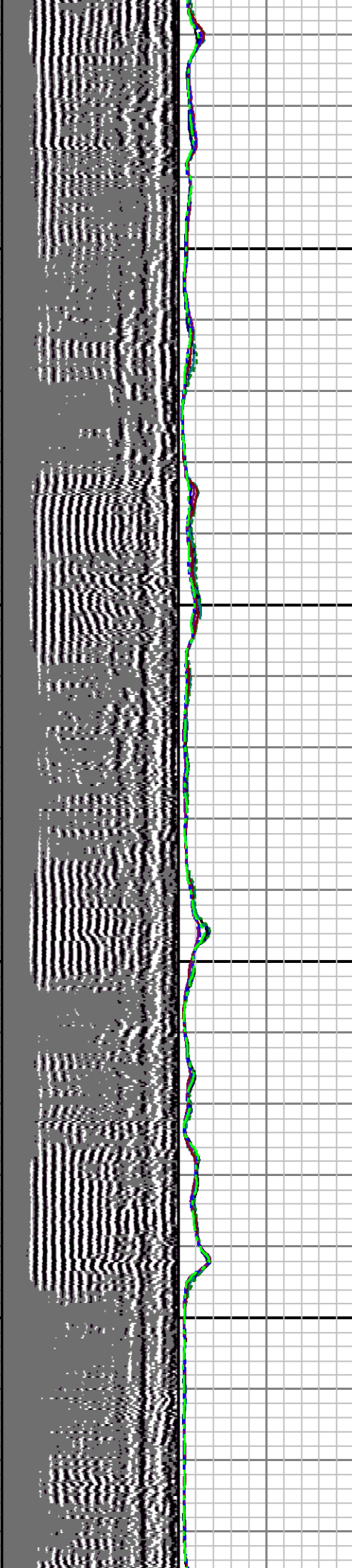
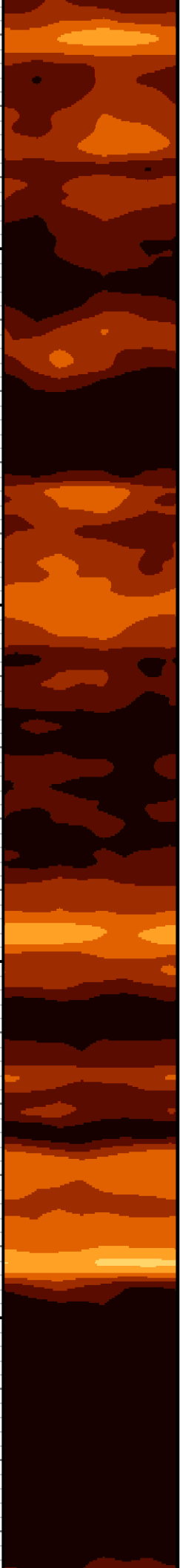


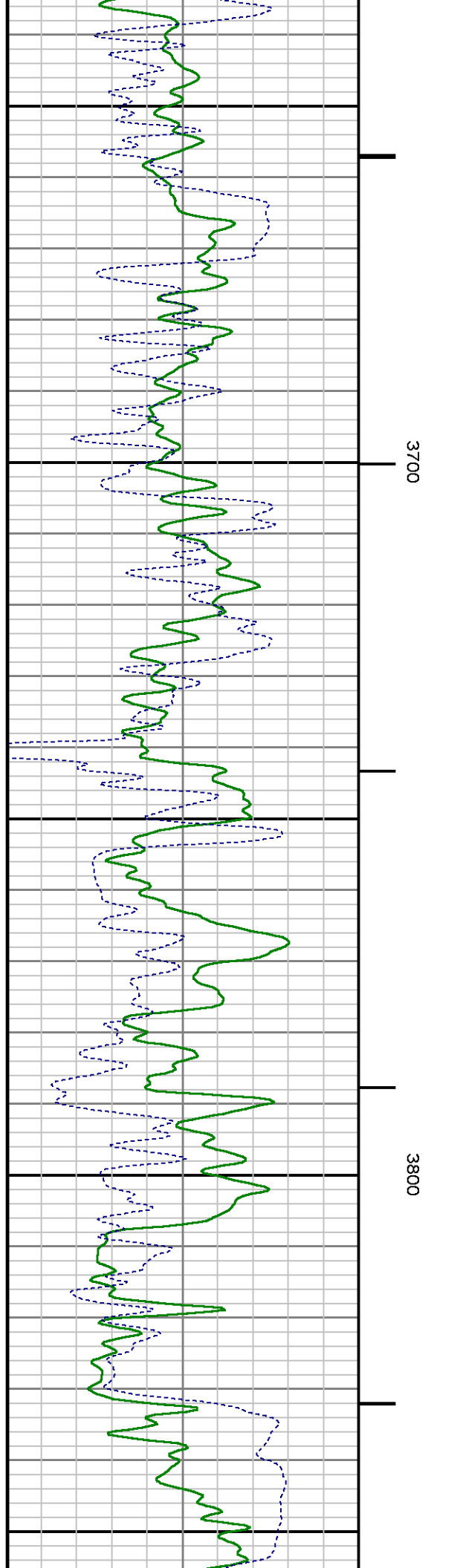
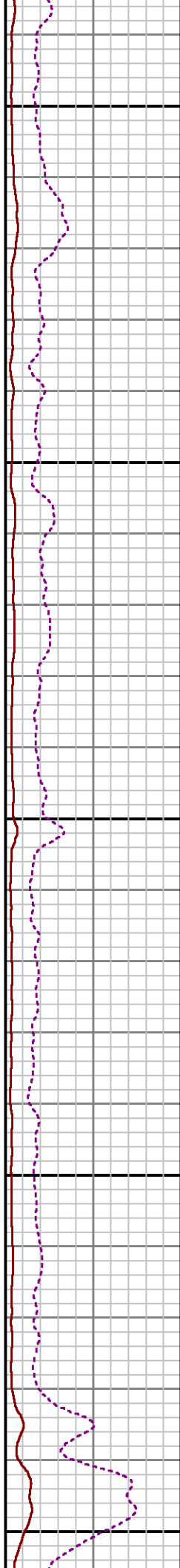
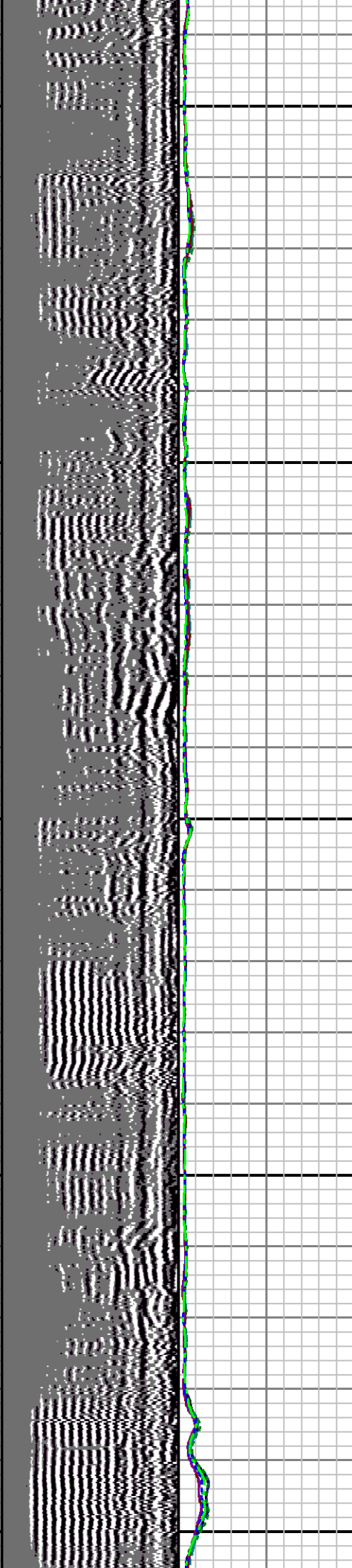
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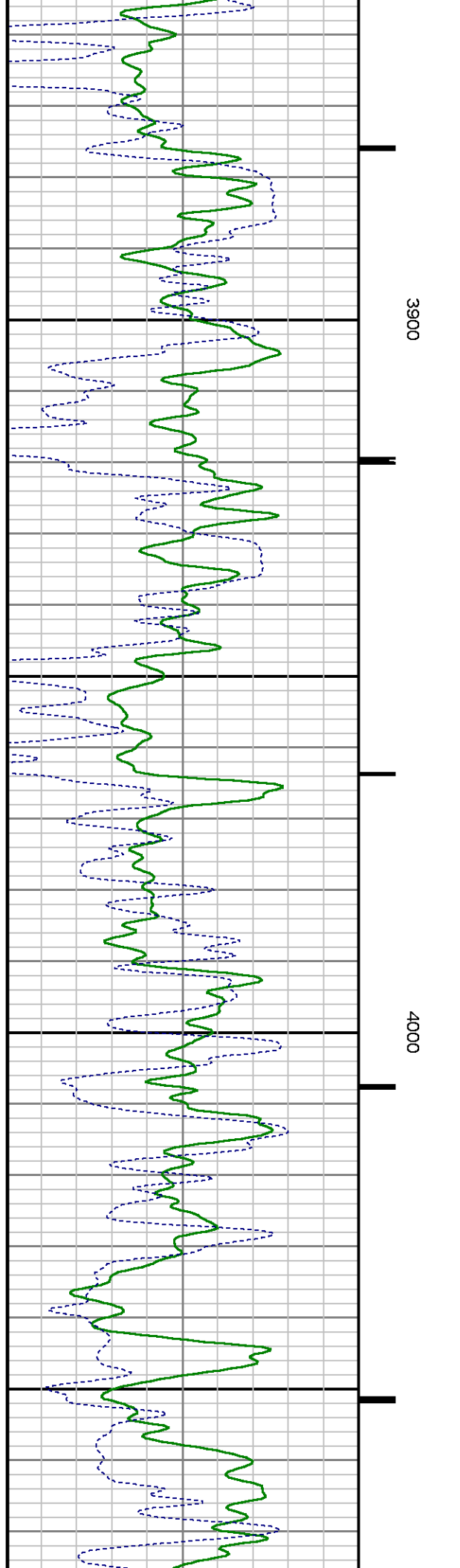
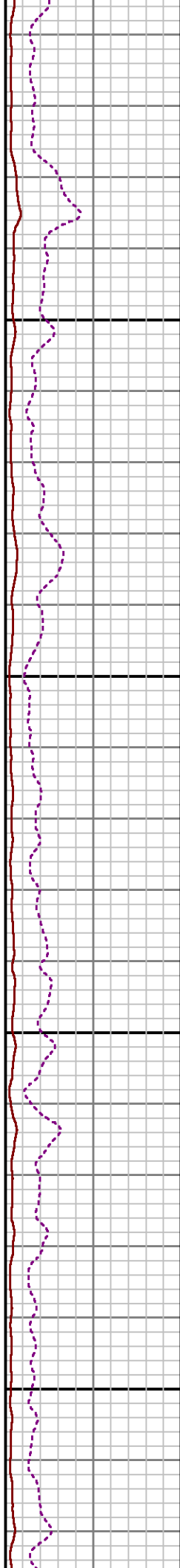
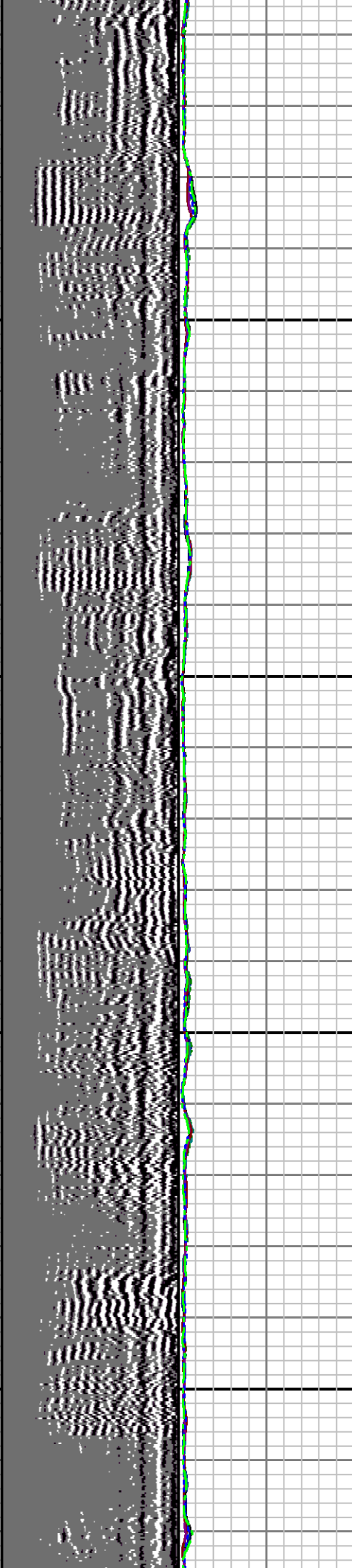
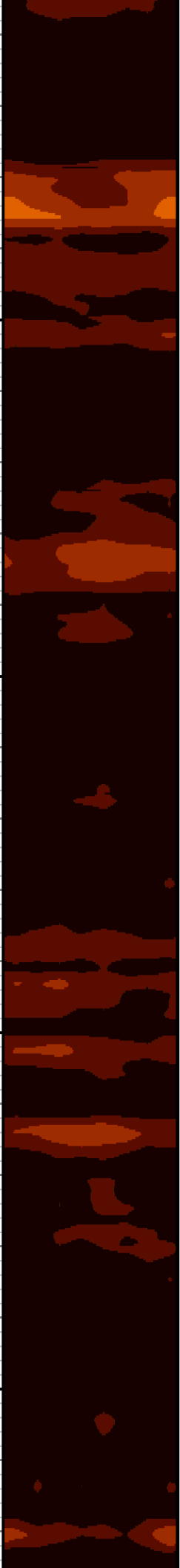
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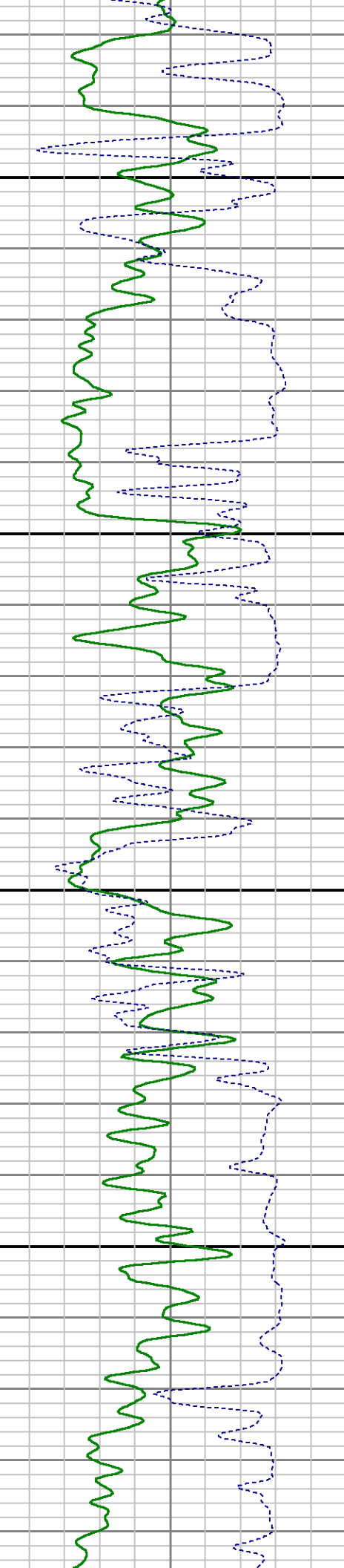
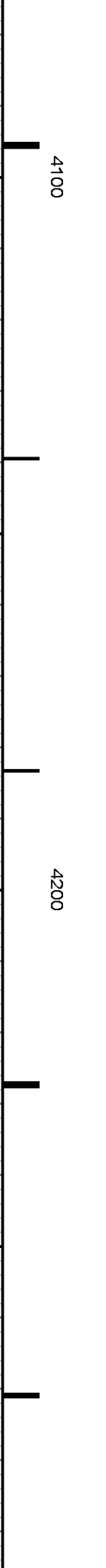
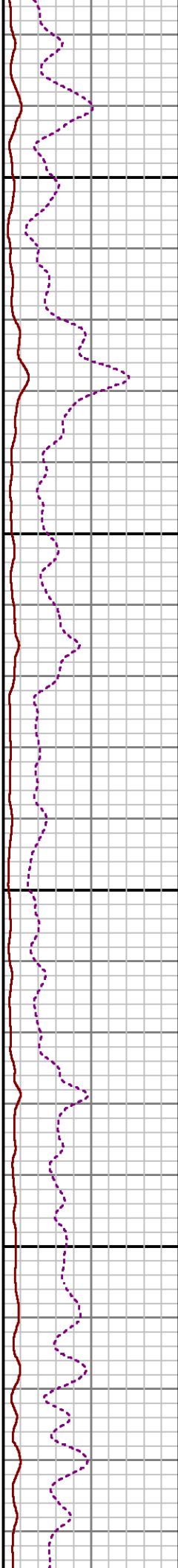
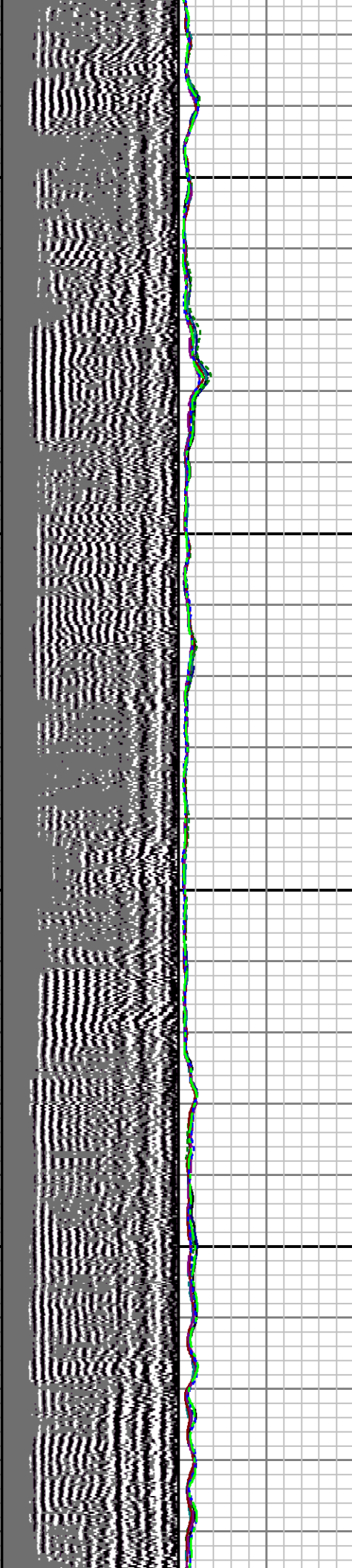
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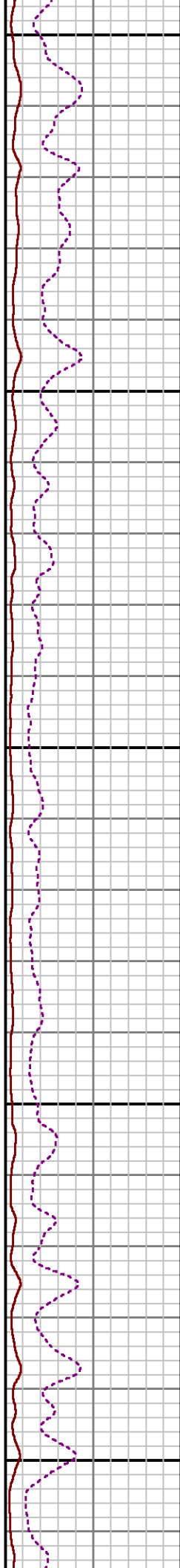
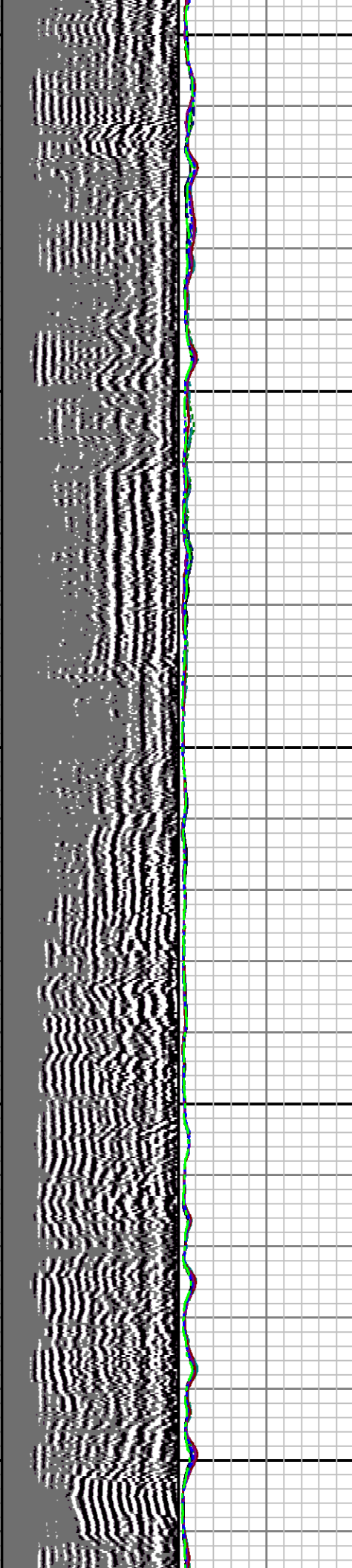








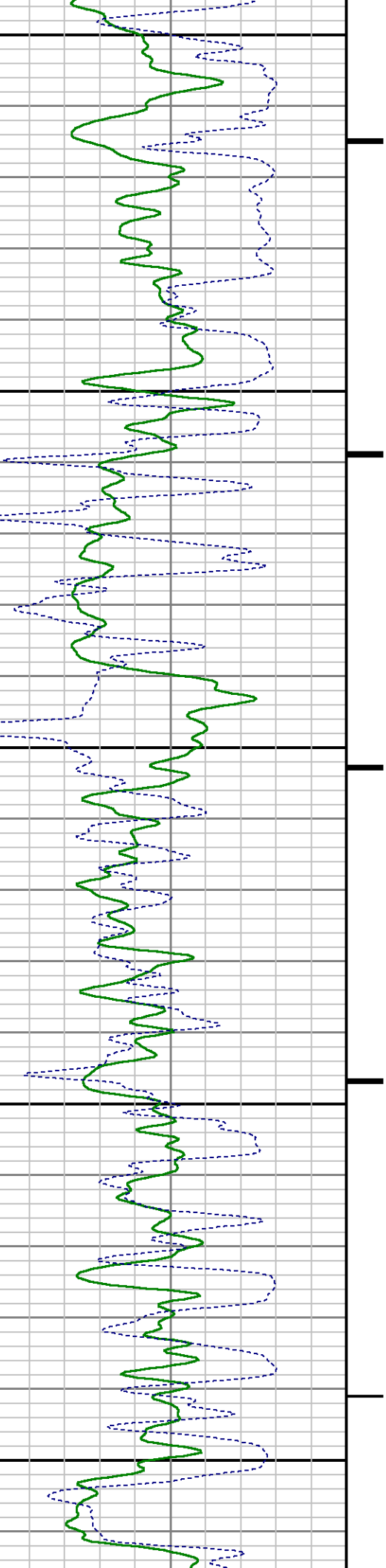


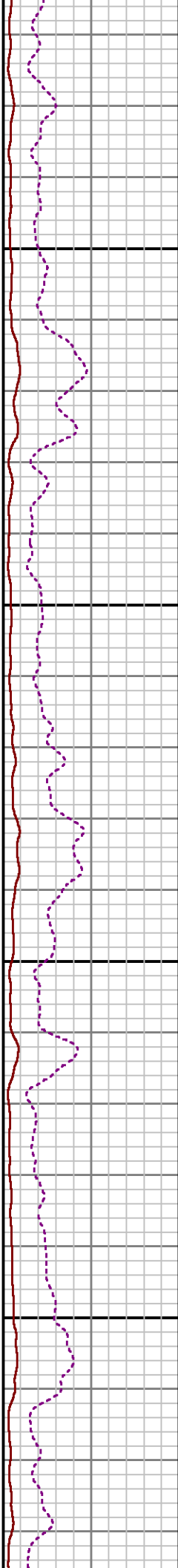
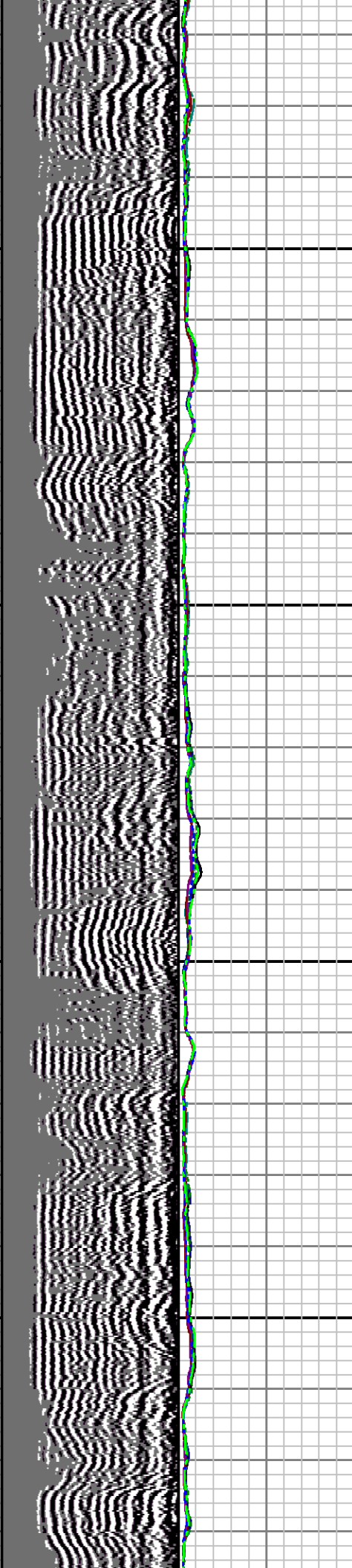


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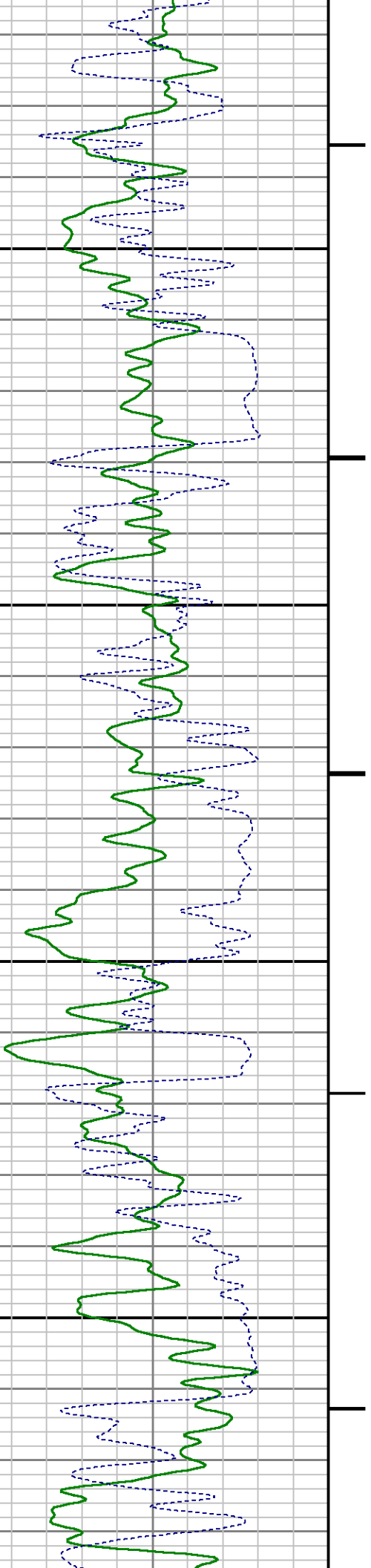
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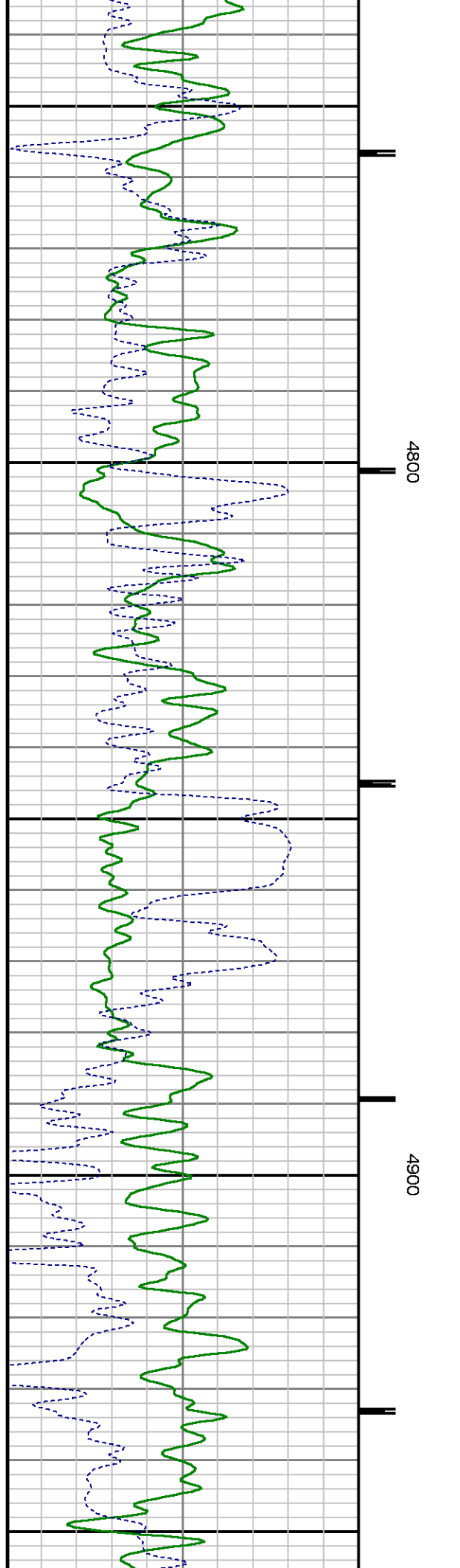
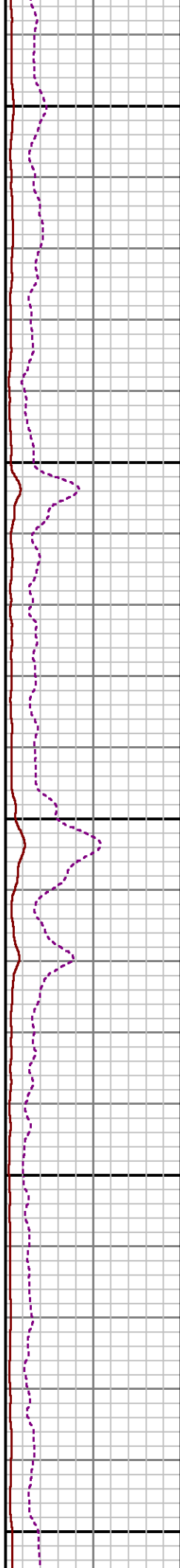
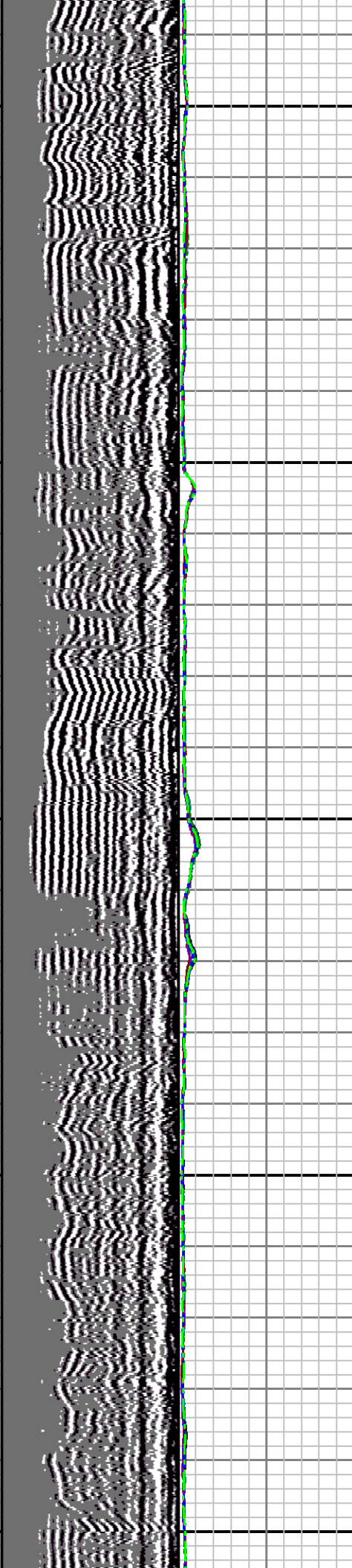


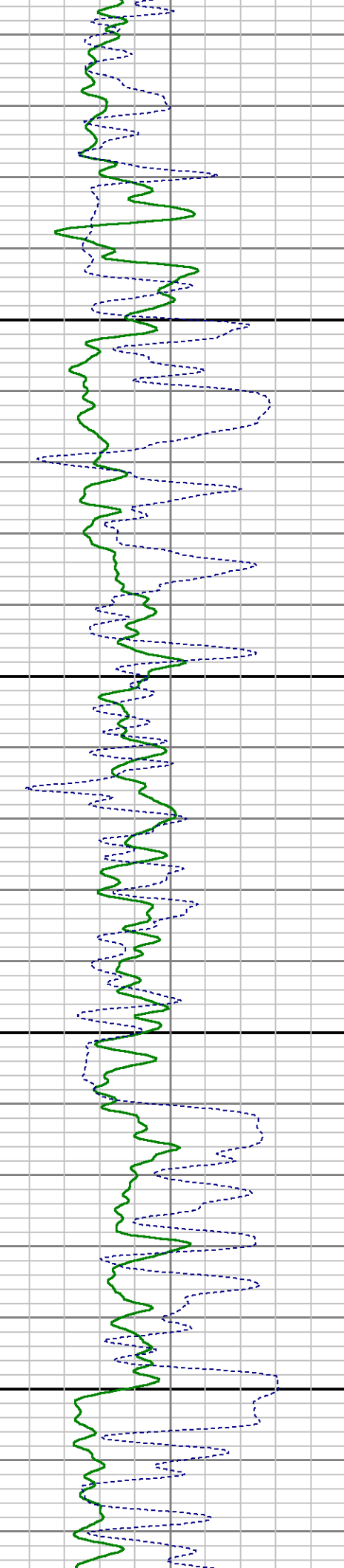
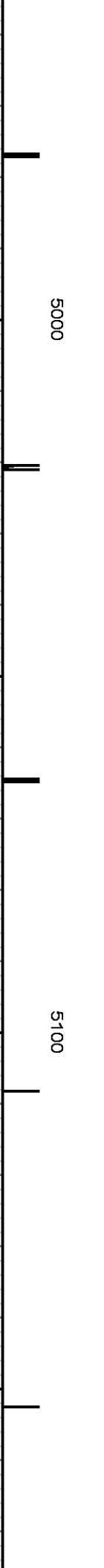
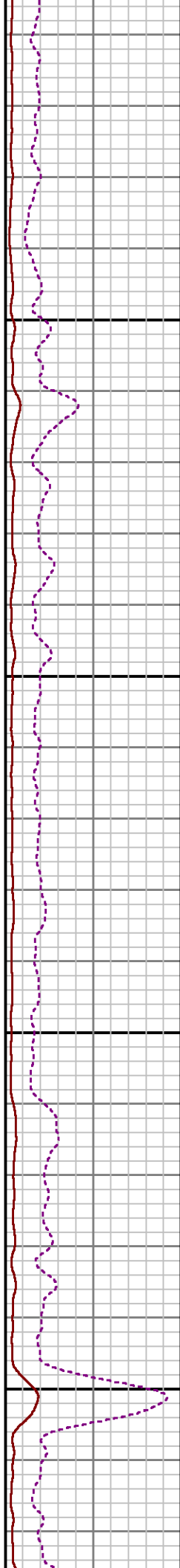
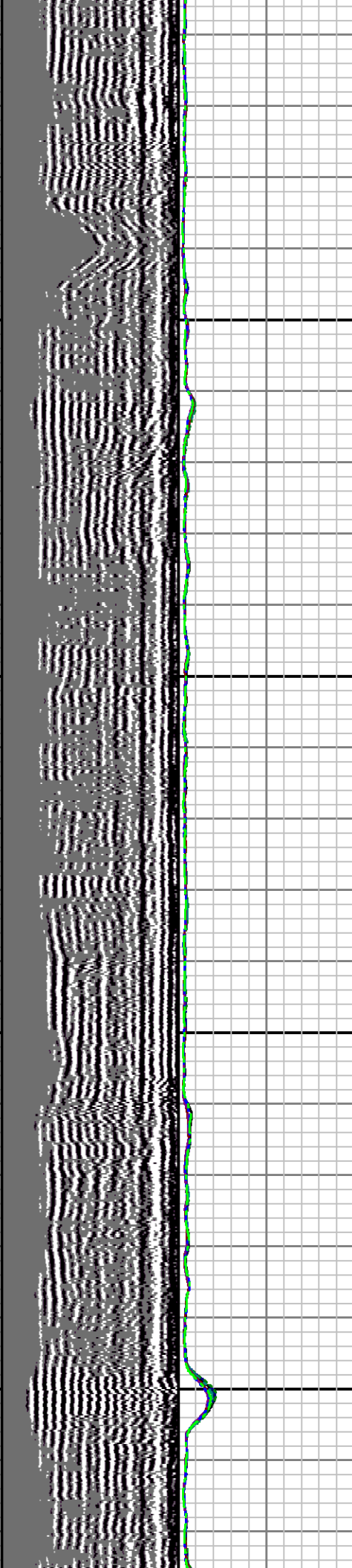
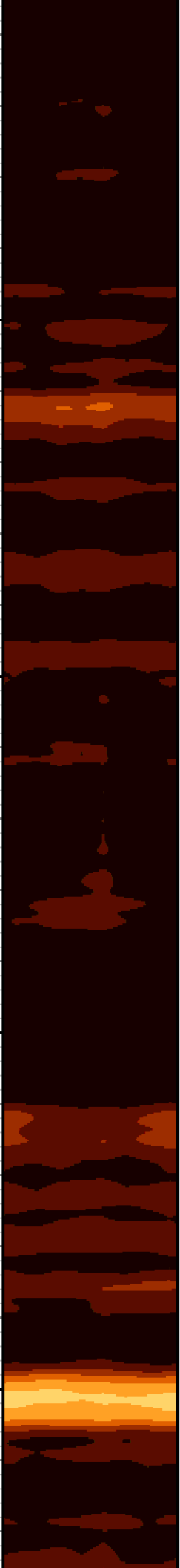


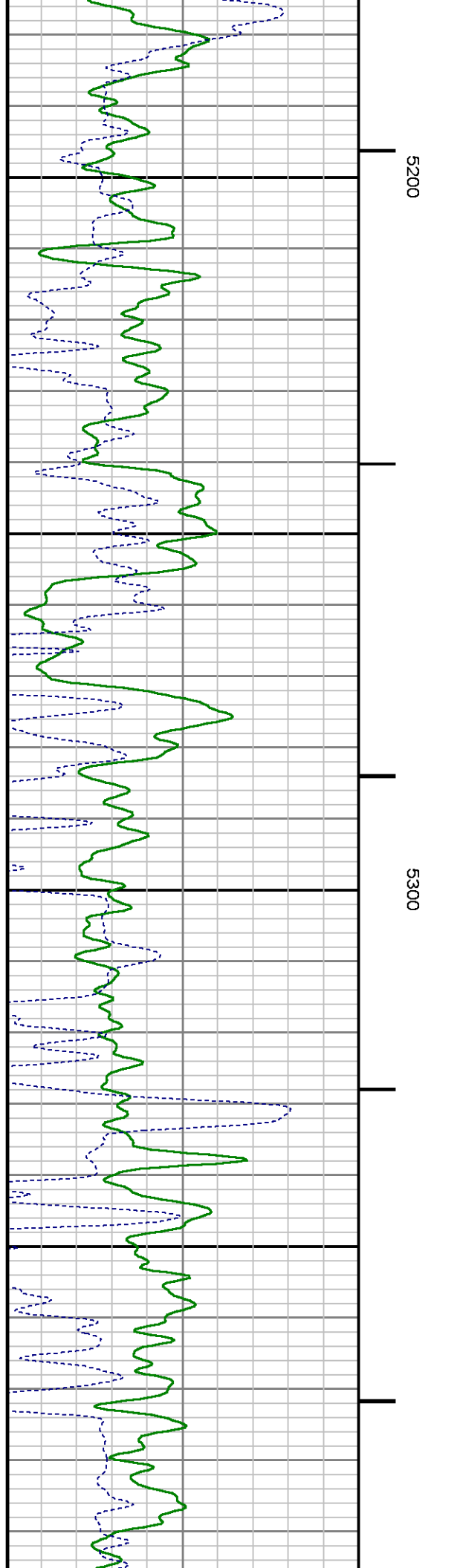
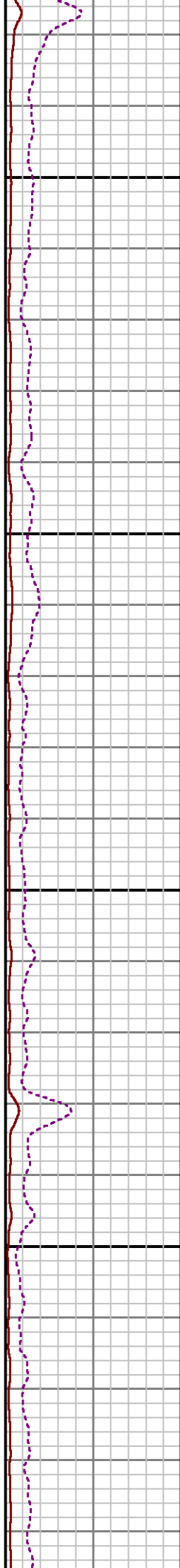
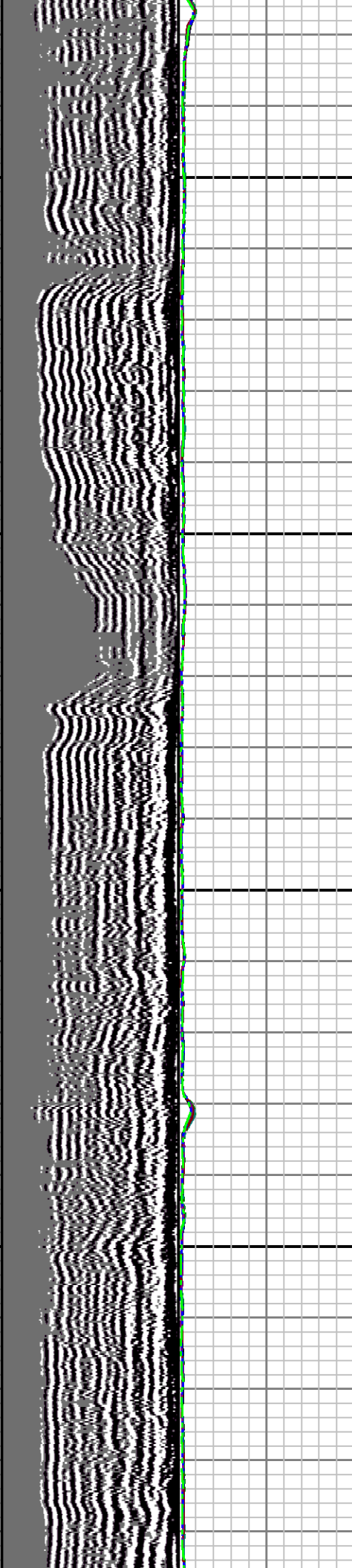
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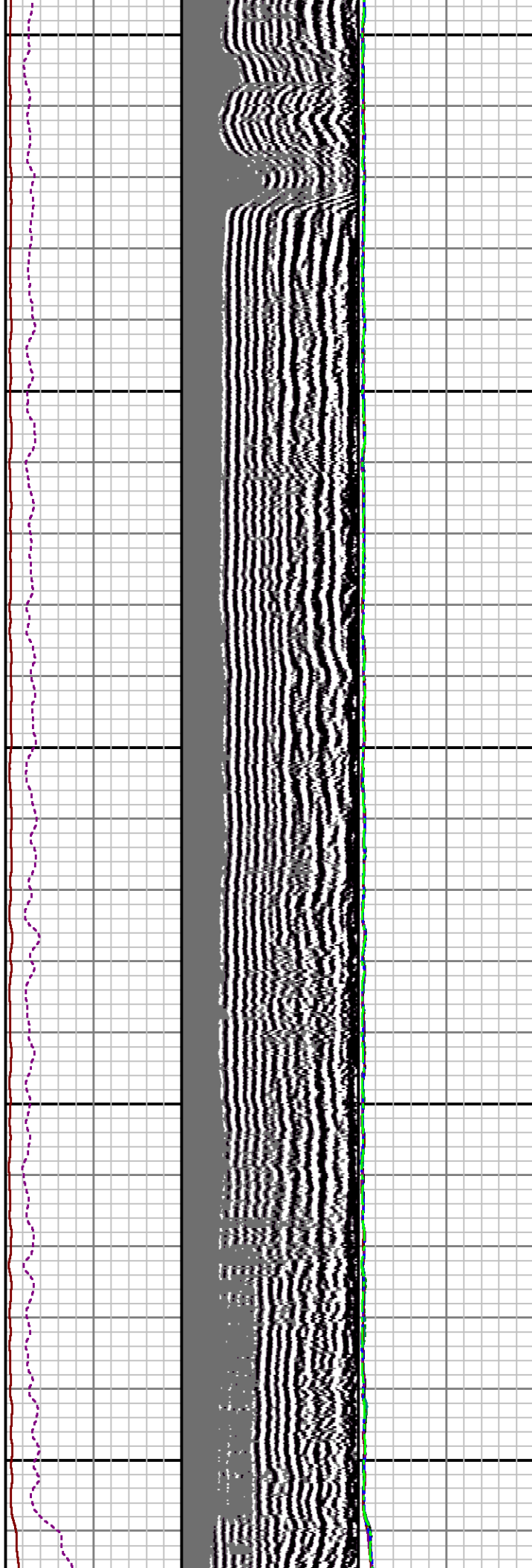
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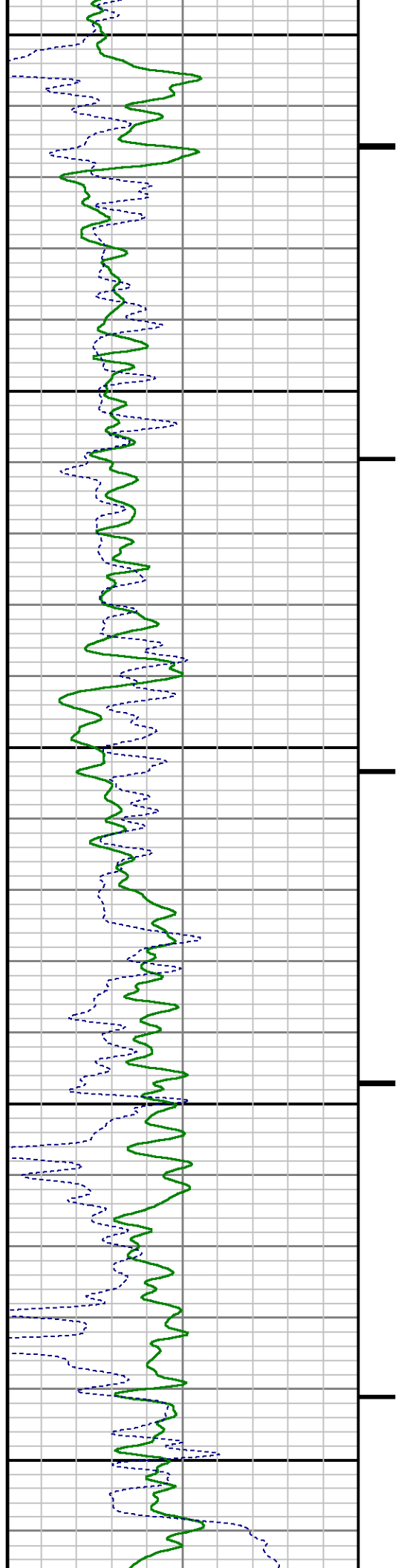


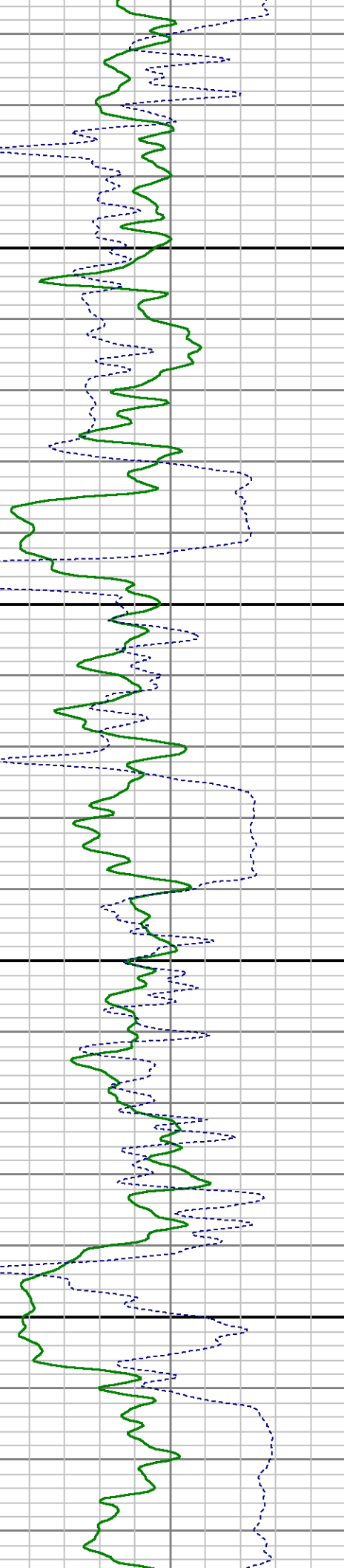
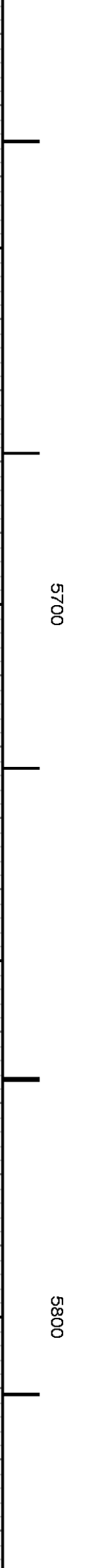
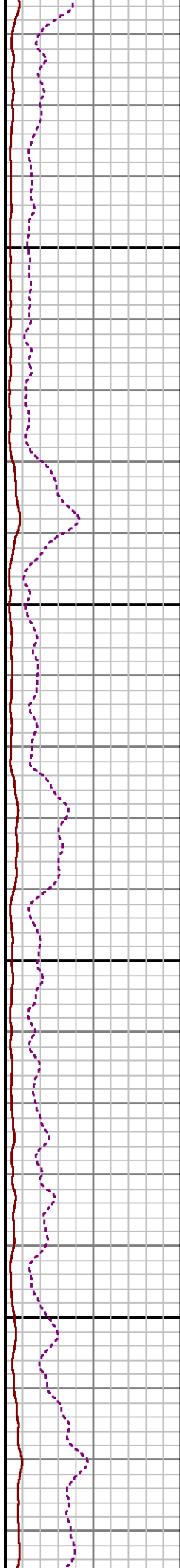
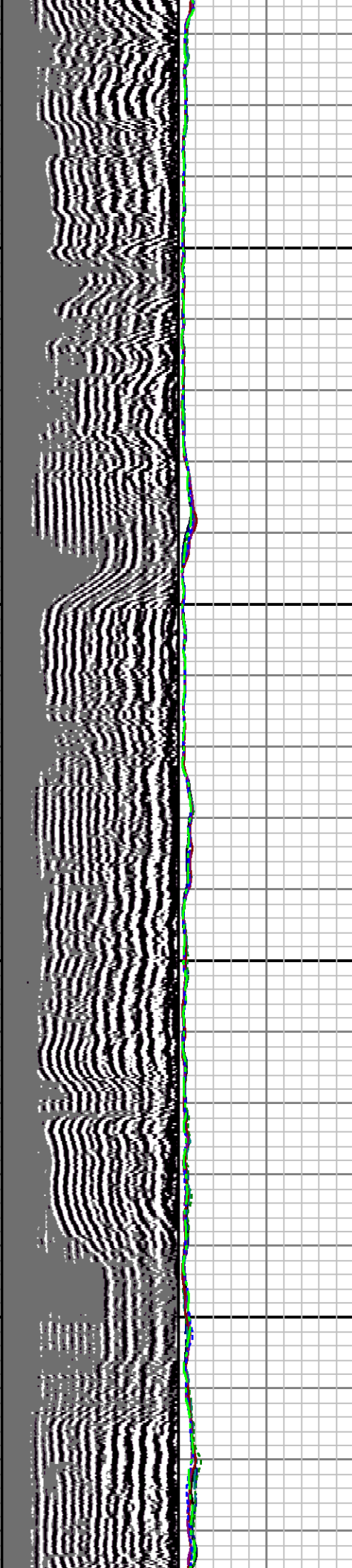


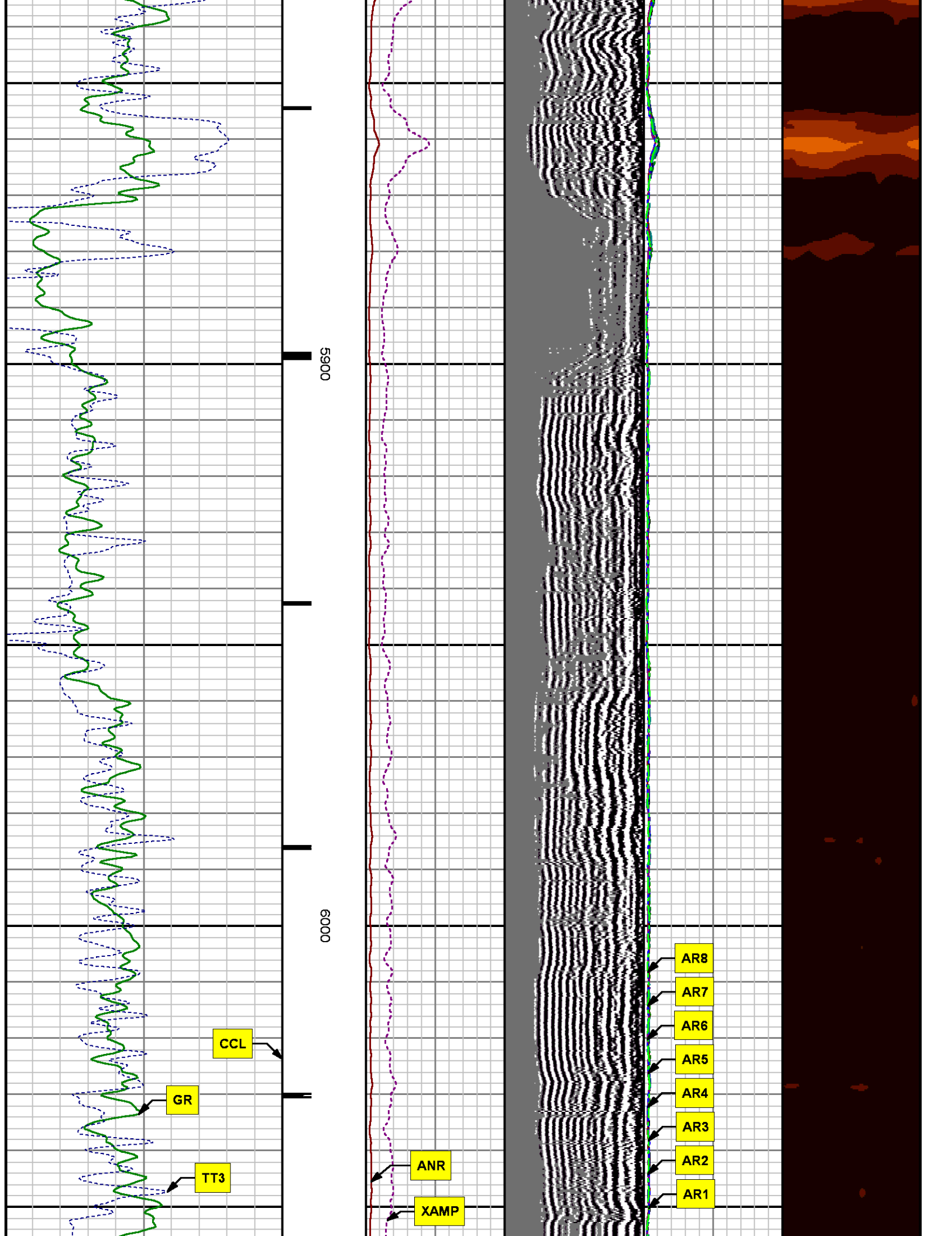


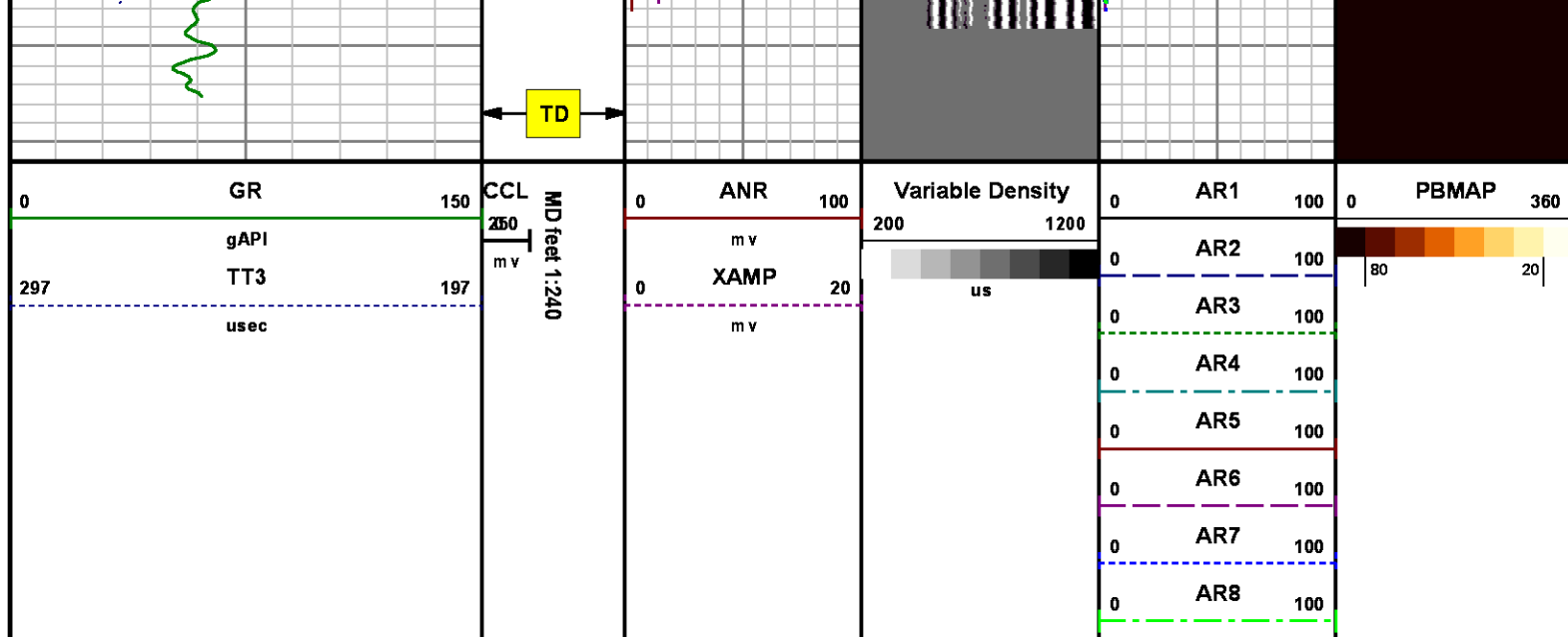


5400 5500 5600









REPEAT SECTION
0 PSI

| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | TOP | BOTTOM |
|------------------|-----------------------|---------|----------|----------|----------|
| RAL | Amp Gate Start Far | 320.000 | u sec | 5737.470 | 6070.720 |
| RAL | Amp Gate Start Near | 212.000 | u sec | 5737.470 | 6070.720 |
| RAL | Amp Gate Start Radial | 212.000 | u sec | 5737.470 | 6070.720 |
| RAL | Amp Gate Width Far | 25.000 | u sec | 5737.470 | 6070.720 |
| RAL | Amp Gate Width Near | 25.000 | u sec | 5737.470 | 6070.720 |
| RAL | Amp Gate Width Radial | 25.000 | u sec | 5737.470 | 6070.720 |
| RAL | casing od | 5.500 | inches | 5737.470 | 6070.720 |
| RAL | casing wt | 17.000 | lbm/ft | 5737.470 | 6070.720 |
| RAL | FB Start Far | 306.289 | u sec | 5737.470 | 6070.720 |
| RAL | FB Start Near | 189.780 | u sec | 5737.470 | 6070.720 |
| RAL | FB Start Radial | 189.780 | u sec | 5737.470 | 6070.720 |
| RAL | FB Thresh Far | 10.000 | m v | 5737.470 | 6070.720 |
| RAL | FB Thresh Near | 4.000 | m v | 5737.470 | 6070.720 |
| RAL | FB Thresh Radial | 4.000 | m v | 5737.470 | 6070.720 |
| RAL | Fluid Travel Time | 200.000 | u sec/ft | 5737.470 | 6070.470 |

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 | | | |
| 2459XA | -7.250 | CCL | | | | | |
| 2459XA | -5.390 | GR | | | | | |
| 2459XA | 0.000 | NEU | | | | | |

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

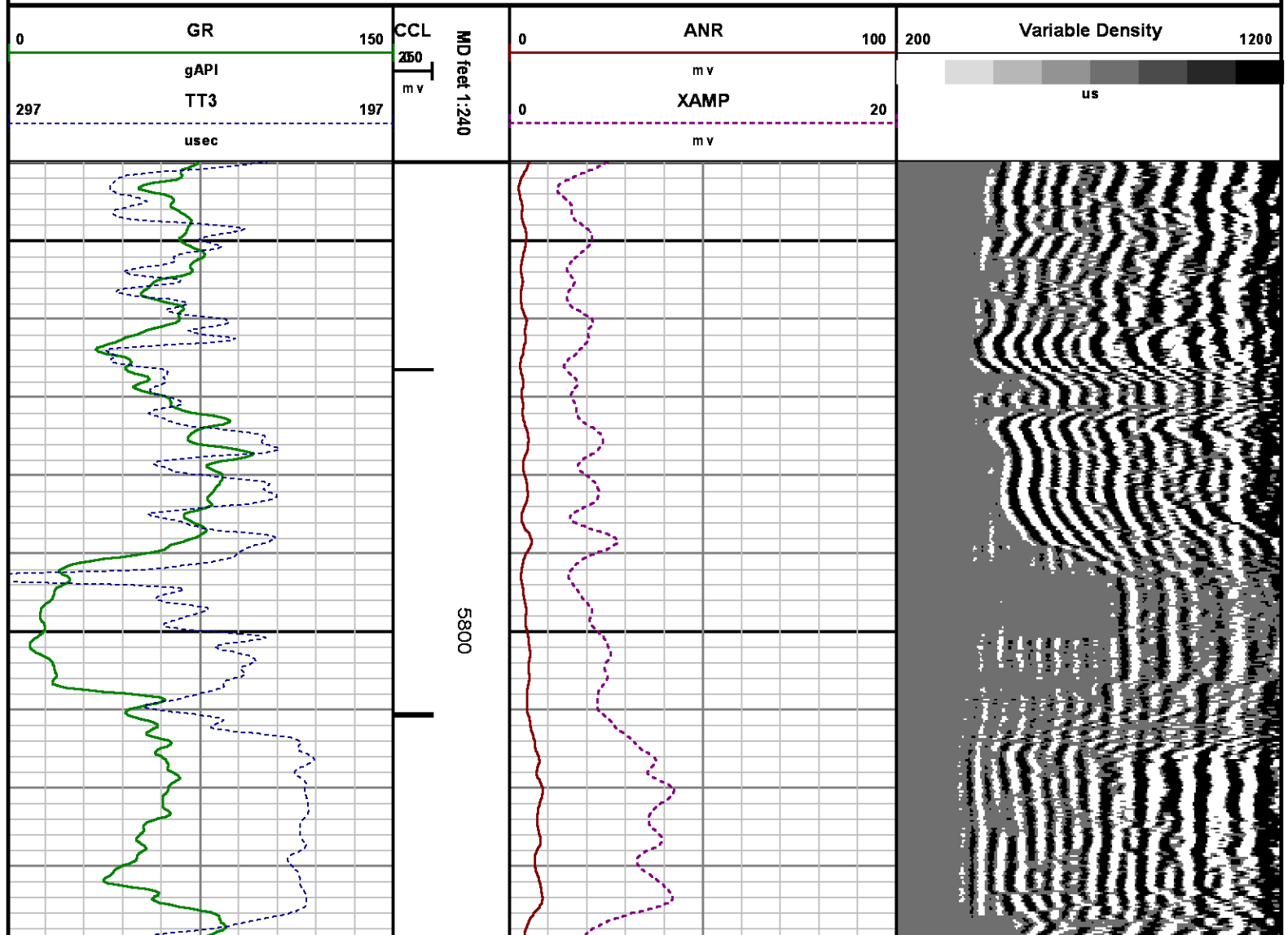
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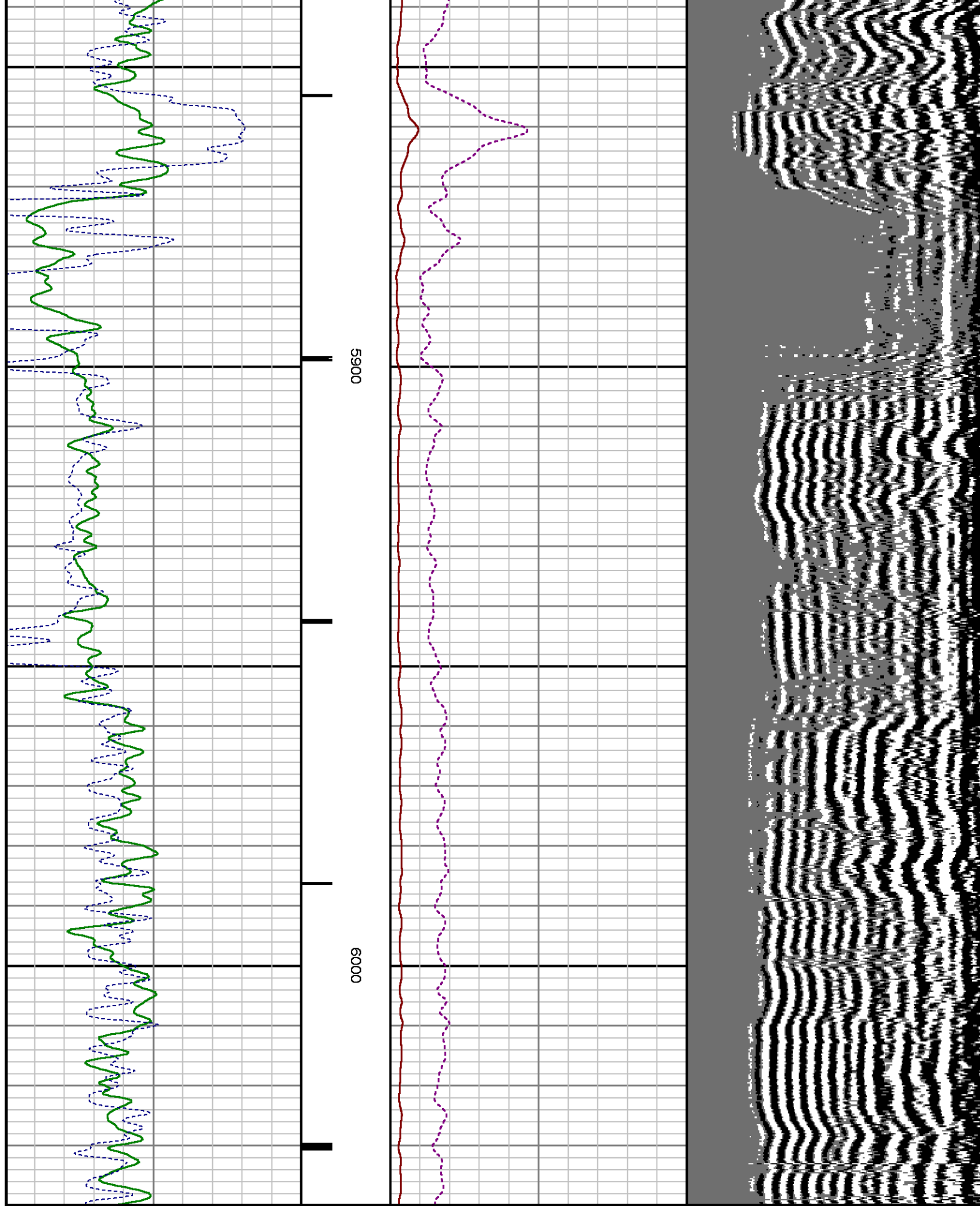
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Mode : PlotMgr 5.4.504

Interval : 5740.00 - 6040.00 feet UP

Created : 8/2/2014 4:06:13 PM





| | | | | | | | | | | |
|-----|------|-----|------------|---------------|---|------|-----|-----|------------------|------|
| 0 | GR | 150 | CCL | MD feet 1:240 | 0 | ANR | 100 | 200 | Variable Density | 1200 |
| | gAPI | | 250 m v | | | m v | | | | |
| 297 | TT3 | 197 | | | 0 | XAMP | 20 | | us | |
| | usec | | | | | m v | | | | |

CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\496A2_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Aug 02 12:53:39 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: A2

| Tool Delay [usec] | -53.00 | Tank OD in | 5.50 | Tank Wt lbm/ft | 15.50 | Tank ID in | 4.95 | |
|----------------------|-----------------------|------------------------------|------------------------------|------------------------------|------------------------------|-------------------|------------------|-------------|
| RECEIVER | Travel Time [usec] | Amp. Gate Start [usec] | Amp. Gate Width [usec] | Zero Gate Start [usec] | Zero Gate Width [usec] | Zero Amp. [mV] | Amp Ref. [mV] | Shop Factor |
| CAL Pulse | 218 | 216 | 30 | 166 | 25 | 0.253 | 100.00 | 0.32 |
| 3 Ft. Receiver | 217 | 216 | 30 | 166 | 17 | 0.444 | 100.00 | 0.32 |
| 5 Ft. Receiver | 326 | 325 | 30 | 256 | 25 | 1.094 | 150.00 | 0.36 |
| Radial #1 | 217 | 216 | 30 | 166 | 17 | 1.310 | 100.00 | 0.32 |
| Radial #2 | 216 | 216 | 30 | 166 | 17 | 1.126 | 100.00 | 0.32 |
| Radial #3 | 215 | 216 | 30 | 166 | 17 | 0.782 | 100.00 | 0.32 |
| Radial #4 | 216 | 216 | 30 | 166 | 17 | 0.710 | 100.00 | 0.32 |
| Radial #5 | 216 | 216 | 30 | 166 | 17 | 1.252 | 100.00 | 0.32 |
| Radial #6 | 217 | 216 | 30 | 166 | 17 | 1.172 | 100.00 | 0.32 |
| Radial #7 | 217 | 216 | 30 | 166 | 17 | 1.403 | 100.00 | 0.32 |
| Radial #8 | 218 | 216 | 30 | 166 | 17 | 0.190 | 100.00 | 0.33 |

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\496A02 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Aug 02 15:36:59 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: A02

| Tool Delay [usec] | -53.00 | Casing OD in | 5.50 | Casing Wt lbm/ft | 17.00 | Casing ID in | 4.90 | |
|----------------------|------------------------------|------------------------------|-------------------|---------------------|-----------------|------------------|------|--|
| RECEIVER | Zero Gate Start [usec] | Zero Gate Width [usec] | Zero Amp. [mV] | Full Amp. [mV] | Wellsite Factor | Amp. Ref [mV] | | |
| CAL Pulse | 166 | 25 | 0.078 | 0.000 | 1.00 | 100.000 | | |
| 3 Ft. Receiver | 215 | 30 | 1.467 | | | | | |
| 5 Ft. Receiver | 331 | 30 | 0.893 | | | | | |

| | | | |
|-----------|-----|----|-------|
| Radial #1 | 215 | 30 | 0.900 |
| Radial #2 | 215 | 30 | 1.096 |
| Radial #3 | 215 | 30 | 1.332 |
| Radial #4 | 215 | 30 | 1.300 |
| Radial #5 | 215 | 30 | 1.359 |
| Radial #6 | 215 | 30 | 1.312 |
| Radial #7 | 215 | 30 | 1.087 |
| Radial #8 | 215 | 30 | 1.048 |

GAMMA RAY

Calibration File: C:\case\calver\GR\121J2.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sun Jul 20 13:01:13 2014 TOOL SERIES: 2459XA ASSET: 121 SEQ: J2

| Calibrator # | Background [cps] | Calibrator On [cps] | Multiplicative | Background [api] | Calibrator On [api] | Differential [api] |
|--------------|---------------------|------------------------|----------------|---------------------|------------------------|-----------------------|
| S2K WA612 | 55.16 | 311.20 | 0.723 | 39.85 | 224.85 | 185.00 |

Verification File: C:\case\calver\GR\121J2.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Sun Jul 20 13:02:21 2014 TOOL SERIES: 2459XA ASSET: 121 SEQ: J2

| Calibrator # | Background [cps] | Calibrator On [cps] | Multiplicative | Background [api] | Calibrator On [api] | Differential [api] |
|--------------|---------------------|------------------------|----------------|---------------------|------------------------|-----------------------|
| S2K WA612 | 50.67 | 318.22 | 0.723 | 36.61 | 229.93 | 193.32 |

TOOL DIAGRAM

OTA SHORT CABLE HEAD

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



24.23'

XMIT 18.05'

Press Rating 18000.00 PSI

| | |
|-----------|--------|
| NEAR RCVR | 14.97' |
| FAR RCVR | 13.05' |
| CCL | 11.34' |
| GR | 9.49' |
| NEU | 4.09' |
| | 0.00' |

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

CENTRALIZER

Series RALCENT
Mnemonic CENT
Diameter 3.12"
Weight 20.00 lb

Total Length: 24.23'
Total Weight: Not Available
Max Diameter: 0' 3.12"



Baker Atlas

CASE

Company

WPX ENERGY

Well

STATE OF COLORADO KP 431-9

Field

KOKOPELLI

County

GARFIELD

State

CO

Location

SHL: 2313' FNL & 2168' FEL

BHL: 826' FNL & 1564' FEL

SEC 9

TWP 6S

RGE 91W

Elevations

KB 5783

DF

GL 5762

File No:

CH088807

API No:

05045222180000

9 6S 91W

KP 32-9 PAD

CYCLONE 17