



| | | | |
|---------------------------|------------------------------------|--|-------------------|
| FILE NO: CH092541 | COMPANY WELL FIELD COUNTY | WPX ENERGY GM 43-12 GRAND VALLEY GARFIELD | STATE COLORADO |
| API NO: 05045224640000 | | | |

| | | |
|--|--|-----------------------|
| Ver. 3.87 12 7S 96W GM 21-12 PAD NABORS 573 | LOCATION: SHL: 1205' FNL & 1941' FWL BHL: 2396' FSL & 1191' FEL SEC 12 TWP 7S RGE 96W | OTHER SERVICES RPM |
|--|--|-----------------------|

| | | | |
|---|----------------------|---|---|
| PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM | GL KB KB KB | ELEVATION 26 FT 5125 FT ABOVE P.D. | ELEVATIONS: KB 5151 FT DF GL 5125 FT |
|---|----------------------|---|---|

| | |
|------------------------|------------------|
| DATE | 19-Nov-2014 |
| RUN | 1 |
| SERVICE ORDER | US092541 |
| DEPTH DRILLER | 7229 FT |
| DEPTH LOGGER | 7213 FT |
| BOTTOM LOGGED INTERVAL | 7203 FT |
| TOP LOGGED INTERVAL | 26 FT |
| TIME STARTED | 9:00 |
| TIME FINISHED | 13:00 |
| OPERATOR RIG TIME | 4 HOURS |
| TYPE OF FLUID IN HOLE | WATER |
| FLUID DENSITY | NA |
| FLUID SALINITY | NA |
| FLUID LEVEL | 74 FT |
| LOGGED CEMENT TOP | NA |
| WELLHEAD PRESSURE | 0 PSI |
| MAXIMUM HOLE DEVIATION | NA |
| NOMINAL LOGGING SPEED | 65 FMIN |
| MAX. RECORDED TEMP. | SEE RPM LOG |
| REFERENCE LOG | NA |
| REFERENCE LOG DATE | NA |
| EQUIP. NO. | HL-6670 |
| LOCATION | NEWELL / EDWARDS |
| RECORDED BY | GRAND JCT. |
| WITNESSED BY | ORAN JACOBS |

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 IN | 26 FT | 1530 FT |
| 8.75 IN | 1530 FT | 7252 FT |

| CASING RECORD | | | | |
|---------------|-----------|-------|-------|---------|
| SIZE | WEIGHT | GRADE | FROM | TO |
| 9.625 IN | | | 26 FT | 1530 FT |
| 4.5 IN | 11.6 LB/F | I-80 | 26 FT | 7252 FT |

| REMARKS |
|--|
| RUN 1 TRIP 1: 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 -3 feet. |
| Logged with zero PSI at wellhead. |
| SJ = 3976' - 3998' |

| EQUIPMENT DATA | | | |
|----------------|------|------|----------|
| RUN | TRIP | TOOL | POSITION |

| RUN | TRIP | TOOL | SERIES NO. | SERIAL NO. | POSITION |
|-----|------|-----------|------------|------------|-------------|
| 1 | 1 | BOND TOOL | 1426XA | 10417452 | CENTRALIZED |
| 1 | 1 | GR/CCL | 2459XA | 10218503 | CENTRALIZED |

PRIMARY PRESENTATION 0 PSI

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013

Updates: 1 Patches: 4

Plotted: Wed Nov 19 13:42:08 2014

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH092541/n012e02.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 28.750 ft BOTTOM DEPTH: 7223.715 ft

SYMMETRIC FILTER

| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | INTERVAL (ft) | |
|------------------|-----------|------------|-------|---------------|--------|
| GR | FILTER () | medium (1) | | TOP | BOTTOM |
| AMPLITUDE | FILTER () | medium (1) | | " | " |
| TRAVEL TIME | FILTER () | medium (1) | | " | " |

RAL CCL PROCESSING

| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | INTERVAL (ft) | |
|------------------|-----------|-------|-------|---------------|--------|
| CCL FLOOR | CCL FLOOR | 0 | | TOP | BOTTOM |

ANALOG RAL PROCESSING

| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | INTERVAL (ft) | |
|---------------------------|----------------------------|---------|-------|---------------|--------|
| AMPLITUDE WINDOW (NEAR) | AMP WINDOW START (fgpn*) | 187 | us | TOP | BOTTOM |
| | AMP WINDOW LENGTH | 25 | us | " | " |
| TRAVEL TIME WINDOW (NEAR) | TT WINDOW START (ttn*) | 160 | us | " | " |
| | TT WINDOW LENGTH | 500 | us | " | " |
| | FIRST BRK THRESHOLD (ttn*) | 4 | mV | " | " |
| RAL CASING PARAMETERS | PPT NEAR | 200.391 | us | " | " |
| RAL TOOL DELAY | TOOL DELAY (strn*) | -70 | us | " | " |
| BASELINE NOISE (NEAR) | NOISE WINDOW START | 125 | us | " | " |
| | NOISE WINDOW LENGTH | 25 | us | " | " |

CURVE DESCRIPTION REPORT

| CURVE NAME | CREATION DATE | CURVE DESCRIPTION |
|------------|----------------------|---|
| F1:CCL | Nov 19 10:54:12 2014 | CASING COLLAR LOCATOR |
| F1:FAMPN | Nov 19 10:54:12 2014 | FIXED GATE AMPLITUDE NEAR RECEIVER |
| F1:FWAVE | Nov 19 10:54:12 2014 | FAR WAVE FORM |
| F1:GR | Nov 19 10:54:12 2014 | GAMMA RAY |
| F1:TTN | Nov 19 10:54:12 2014 | TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER |
| F1:XAMPN | Nov 19 10:54:12 2014 | FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE |

CURVE MEASURE POINT OFFSET

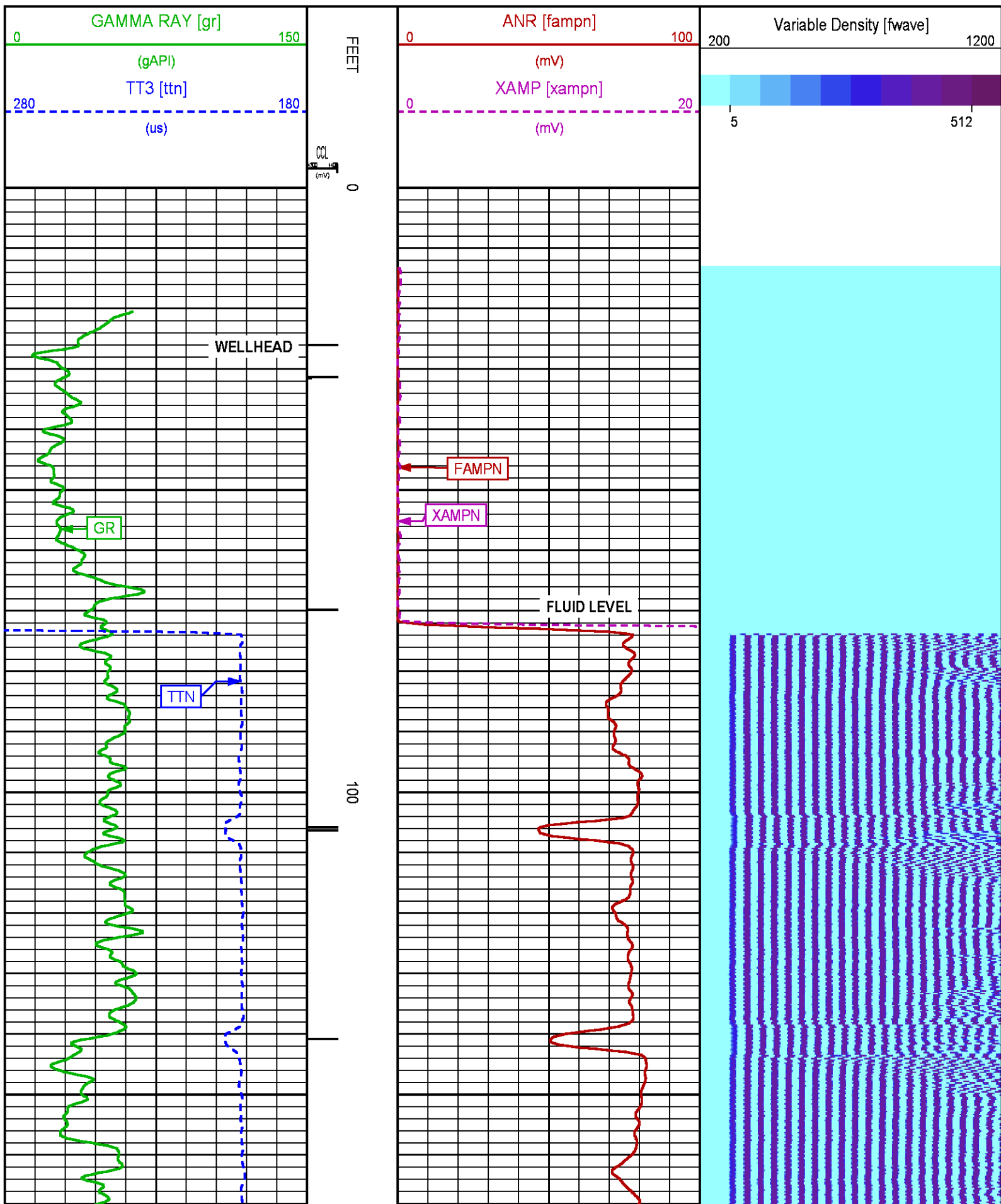
| CURVE | OFFSET (ft) | CURVE | OFFSET (ft) | CURVE | OFFSET (ft) | CURVE | OFFSET (ft) |
|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| CCL | 8.50 | GR | 6.50 | XAMPN | 13.75 | | |
| FAMPN | 13.75 | TTN | 13.75 | | | | |

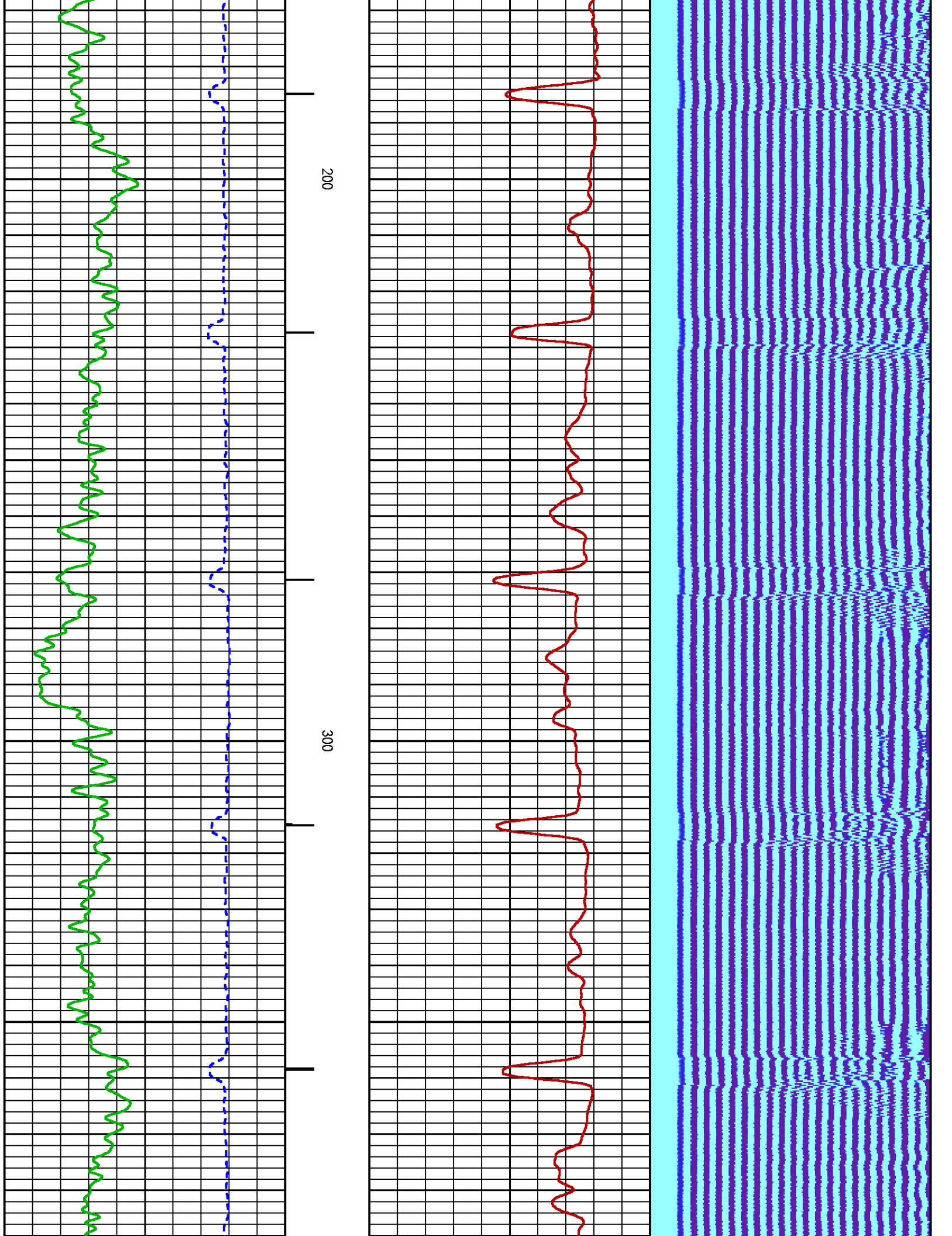
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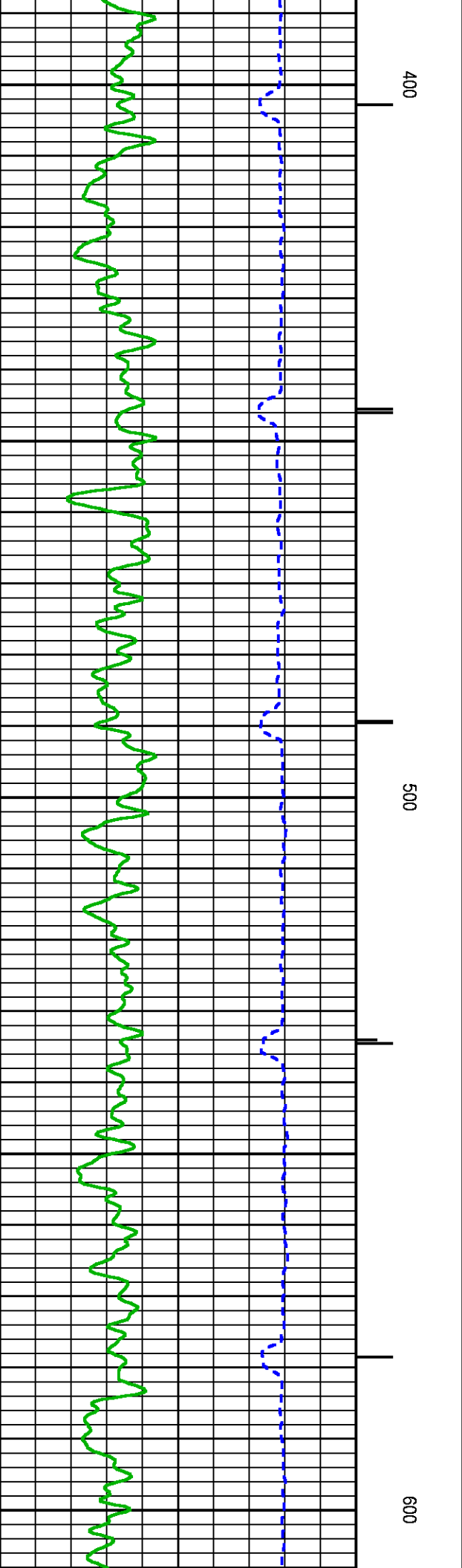
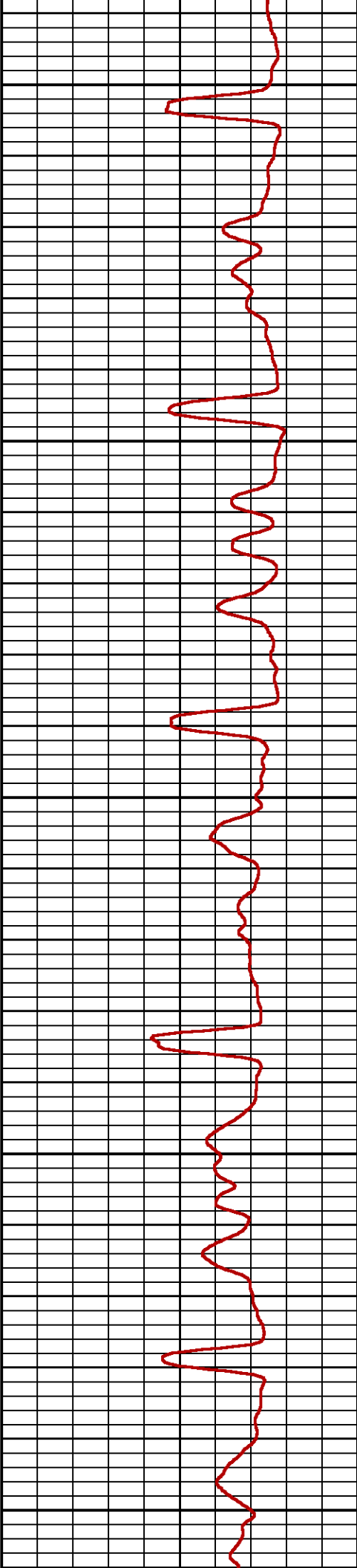
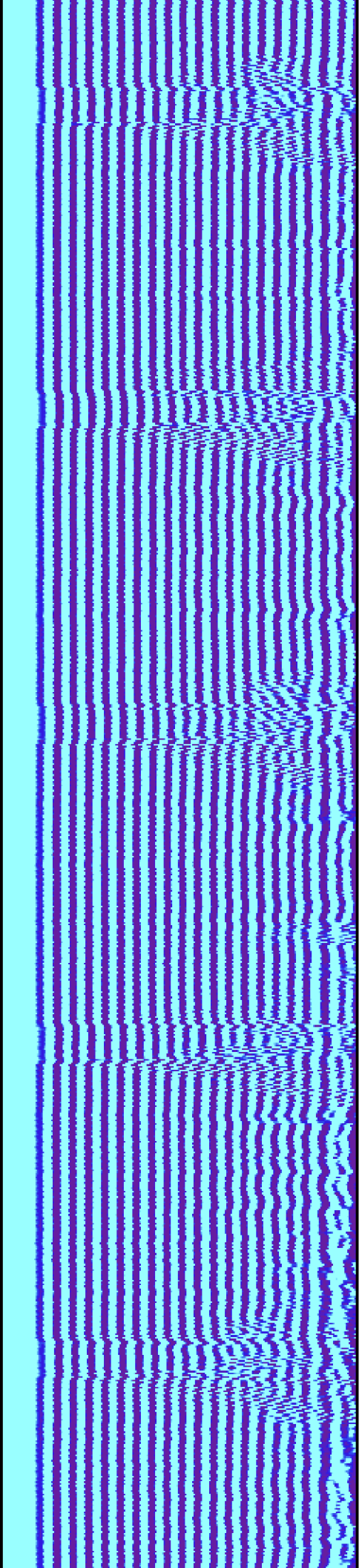
Plot Interval : 0 - 7218 Feet

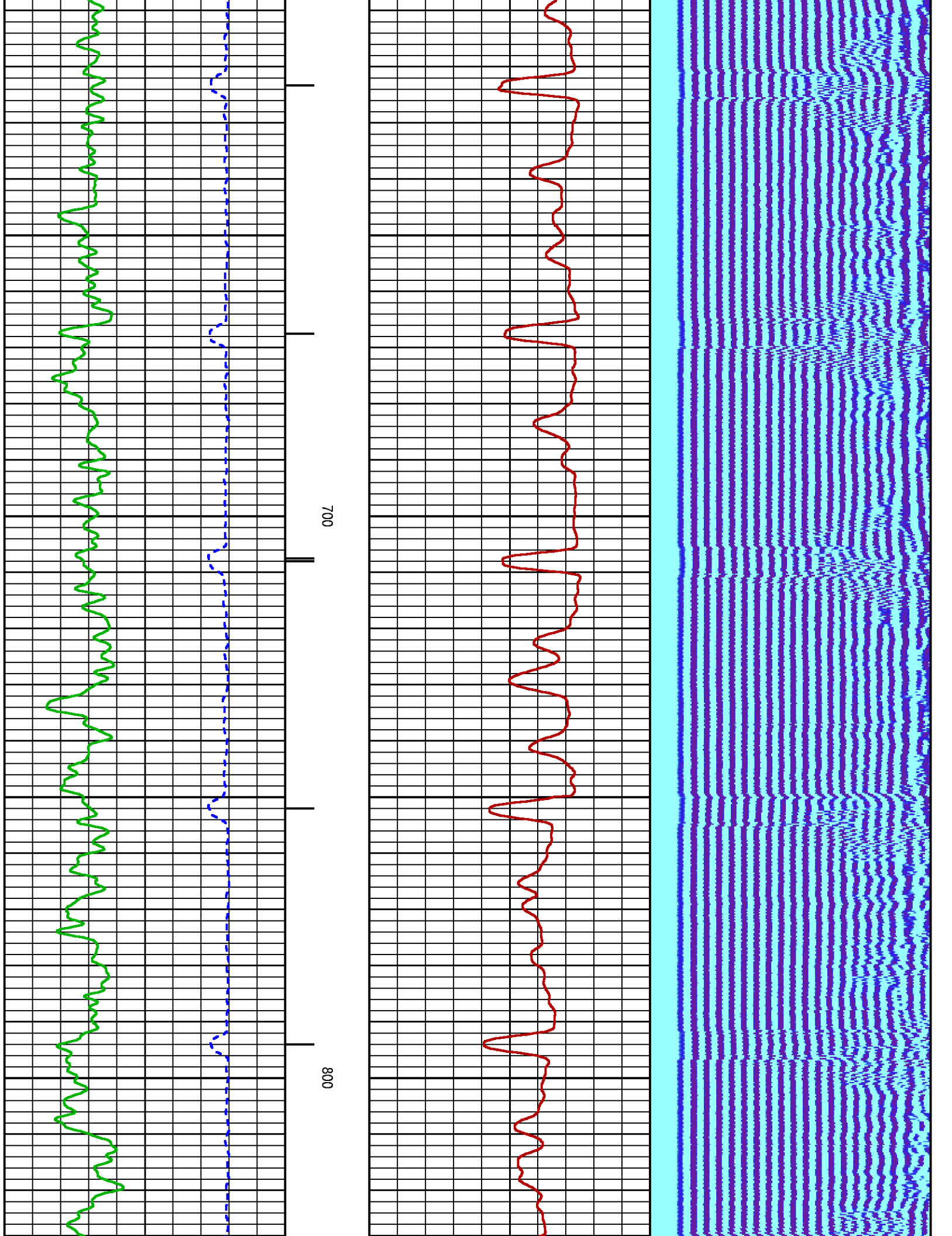
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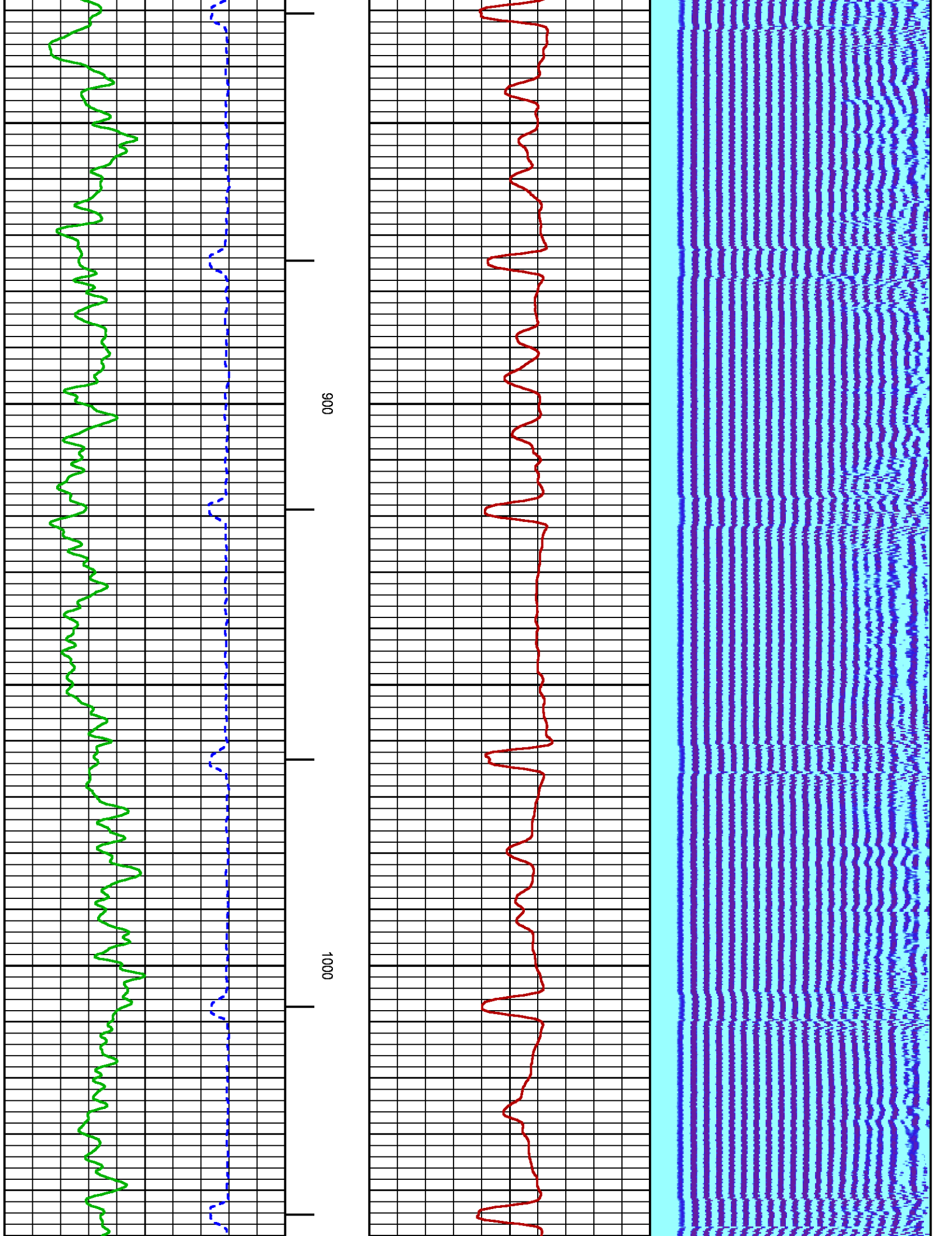
Data File : FT : HL00707.dat
Created On : Nov 19 10:54:12 2014
Company : WPX ENERGY
Well : GM 43-12
Field : GRAND VALLEY
File Interval : 12 - 7218.25 Feet
OCT : n012e

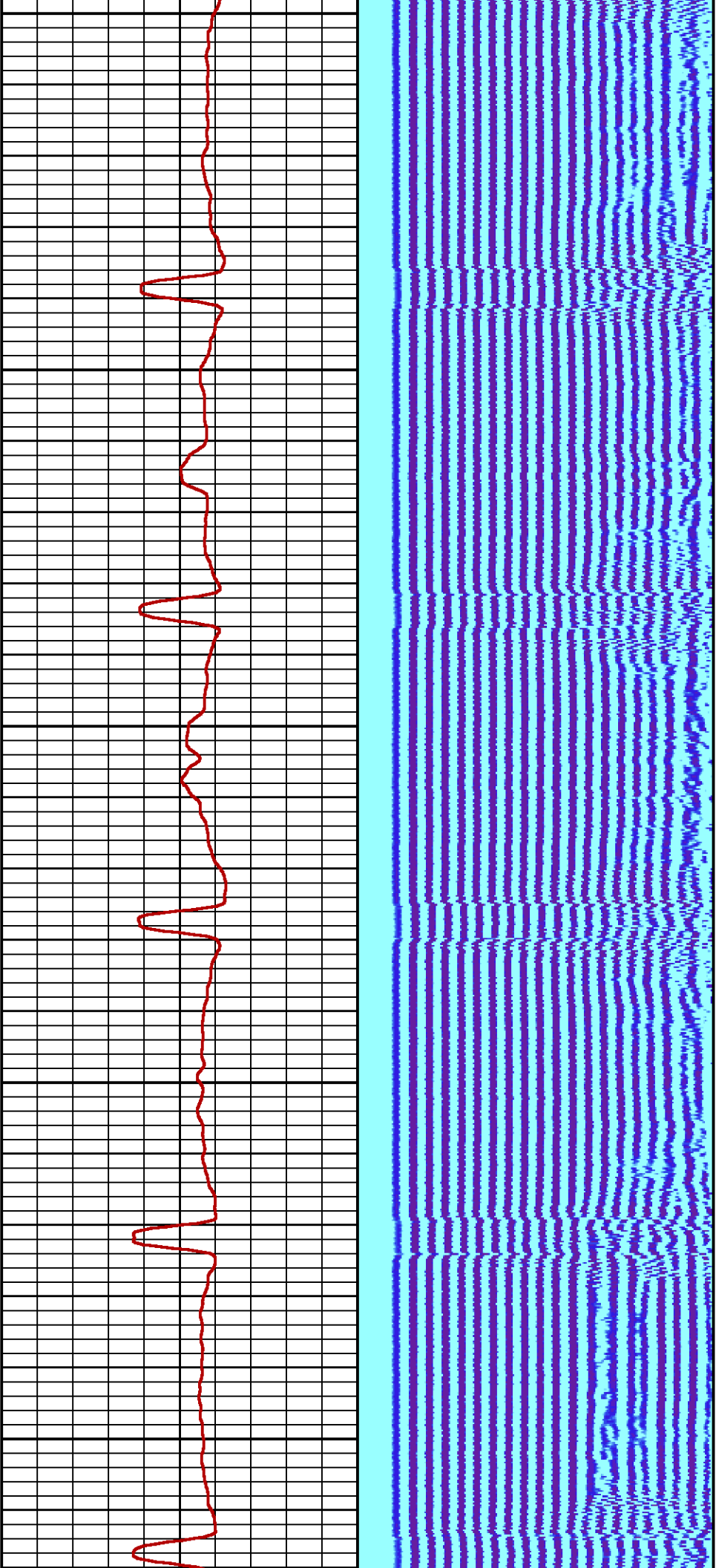






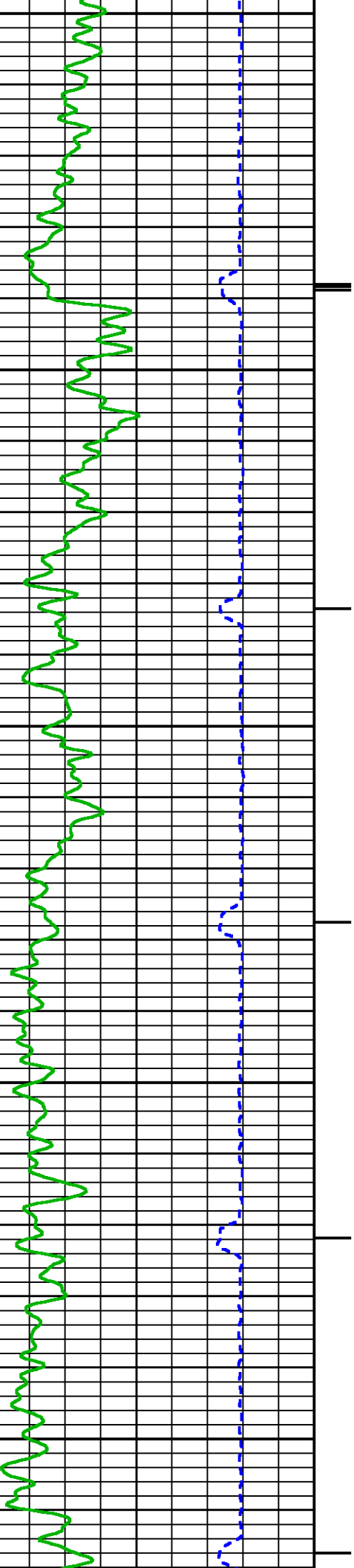


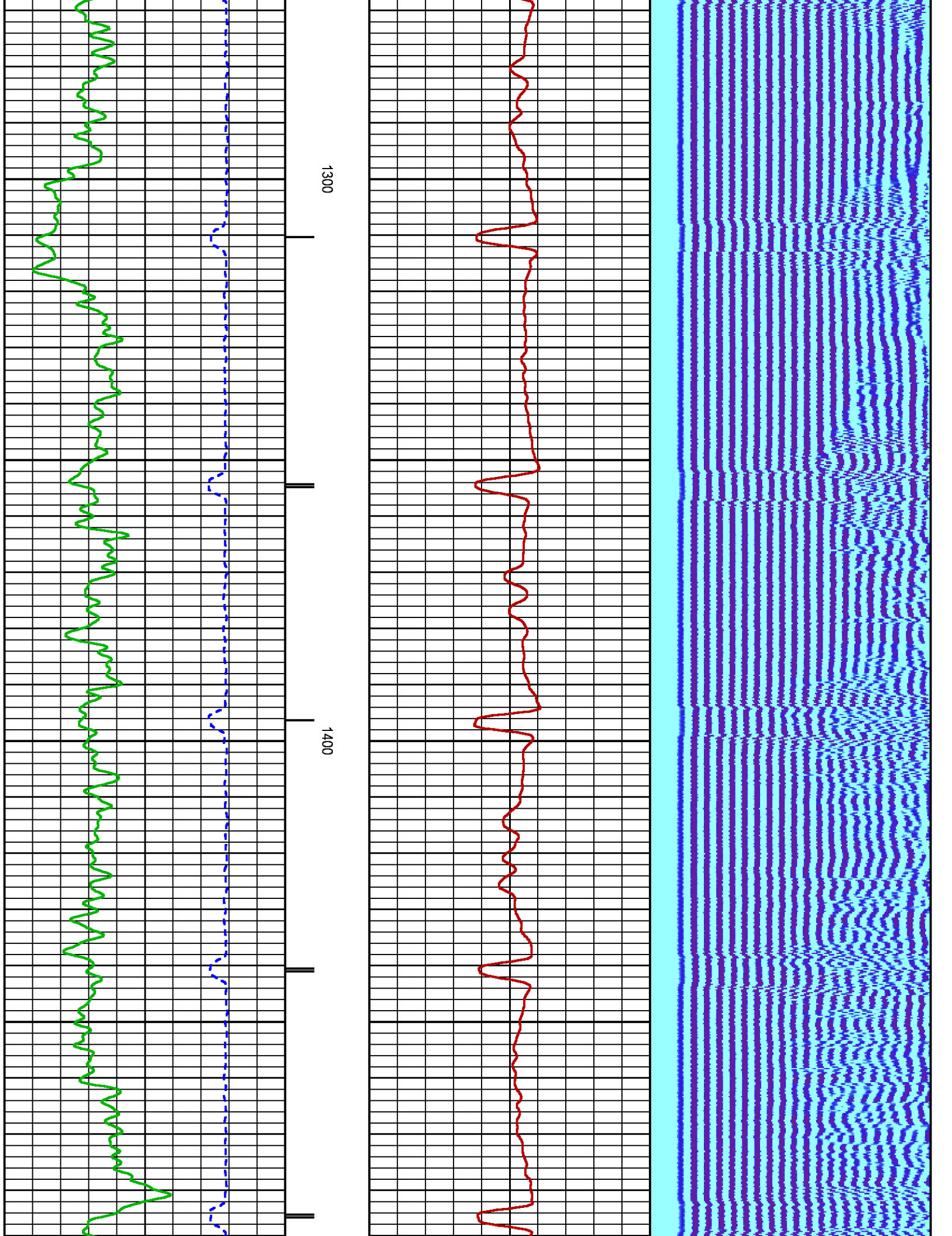


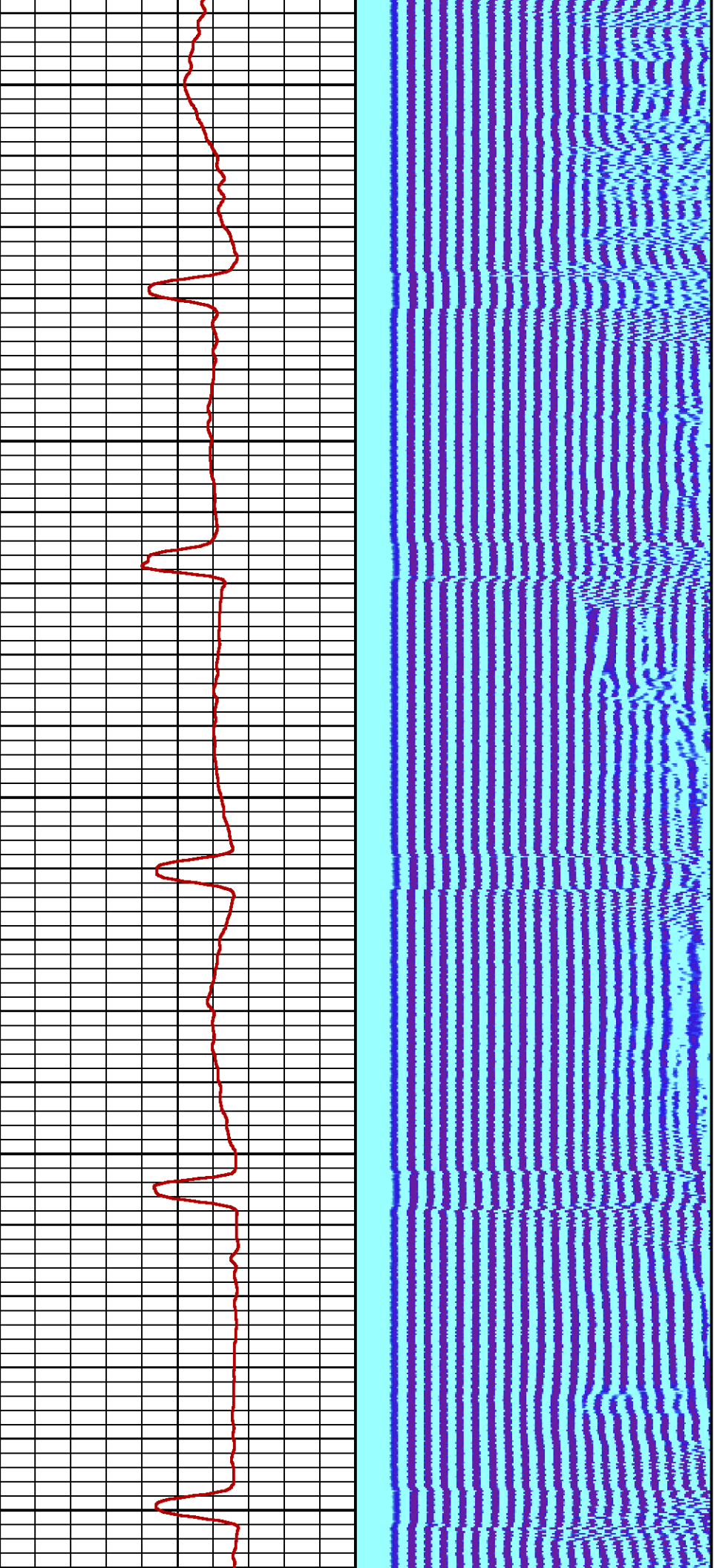


1100

1200



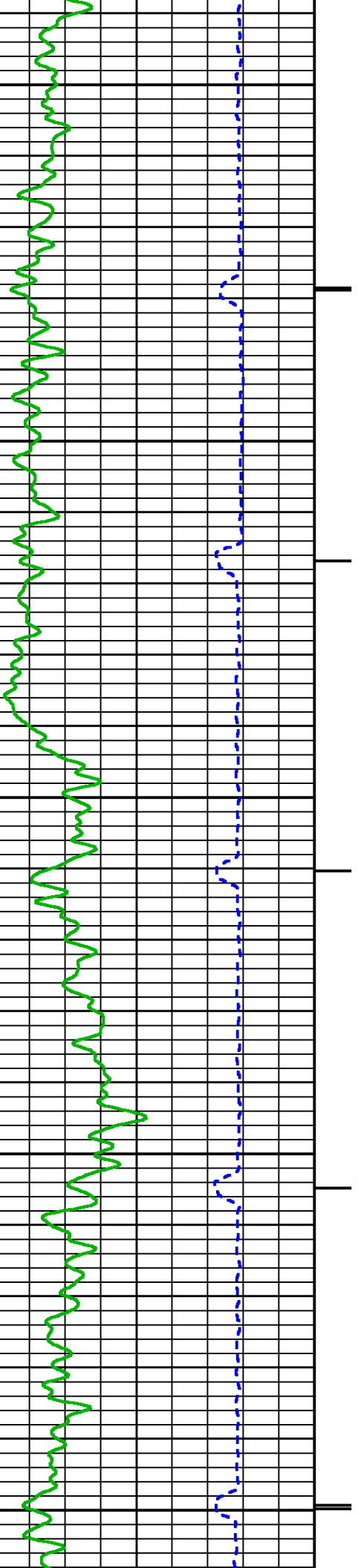


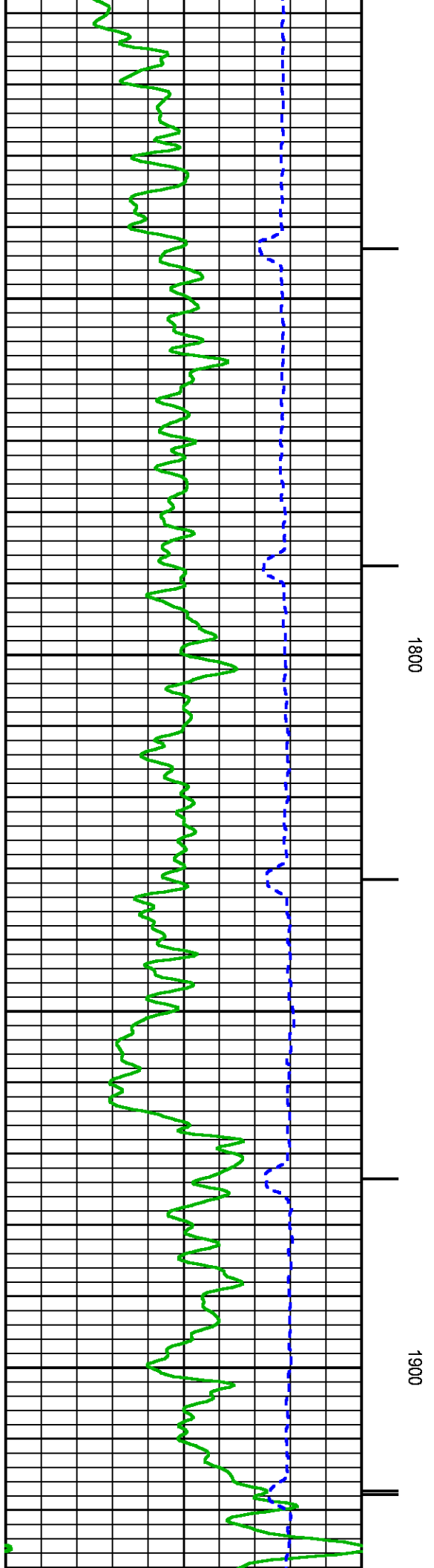
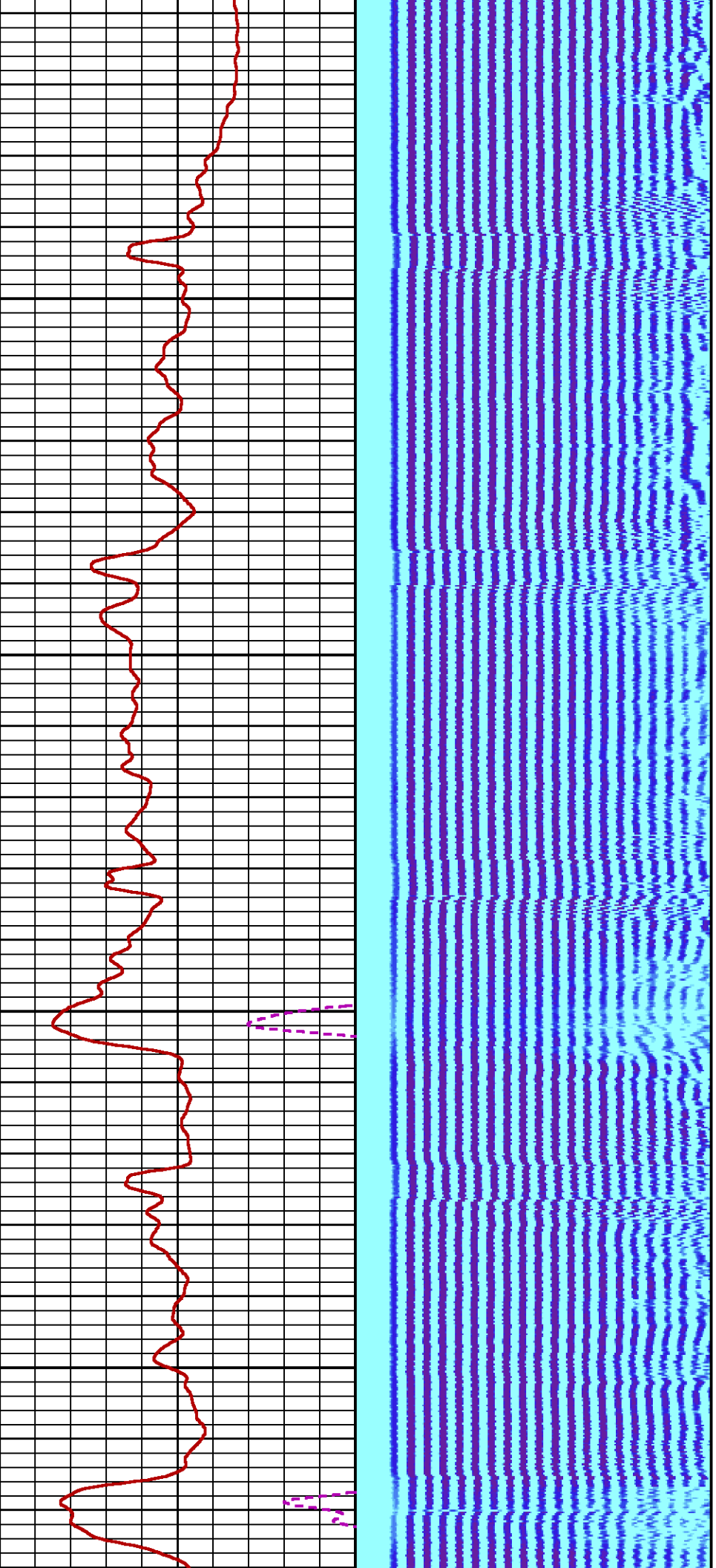


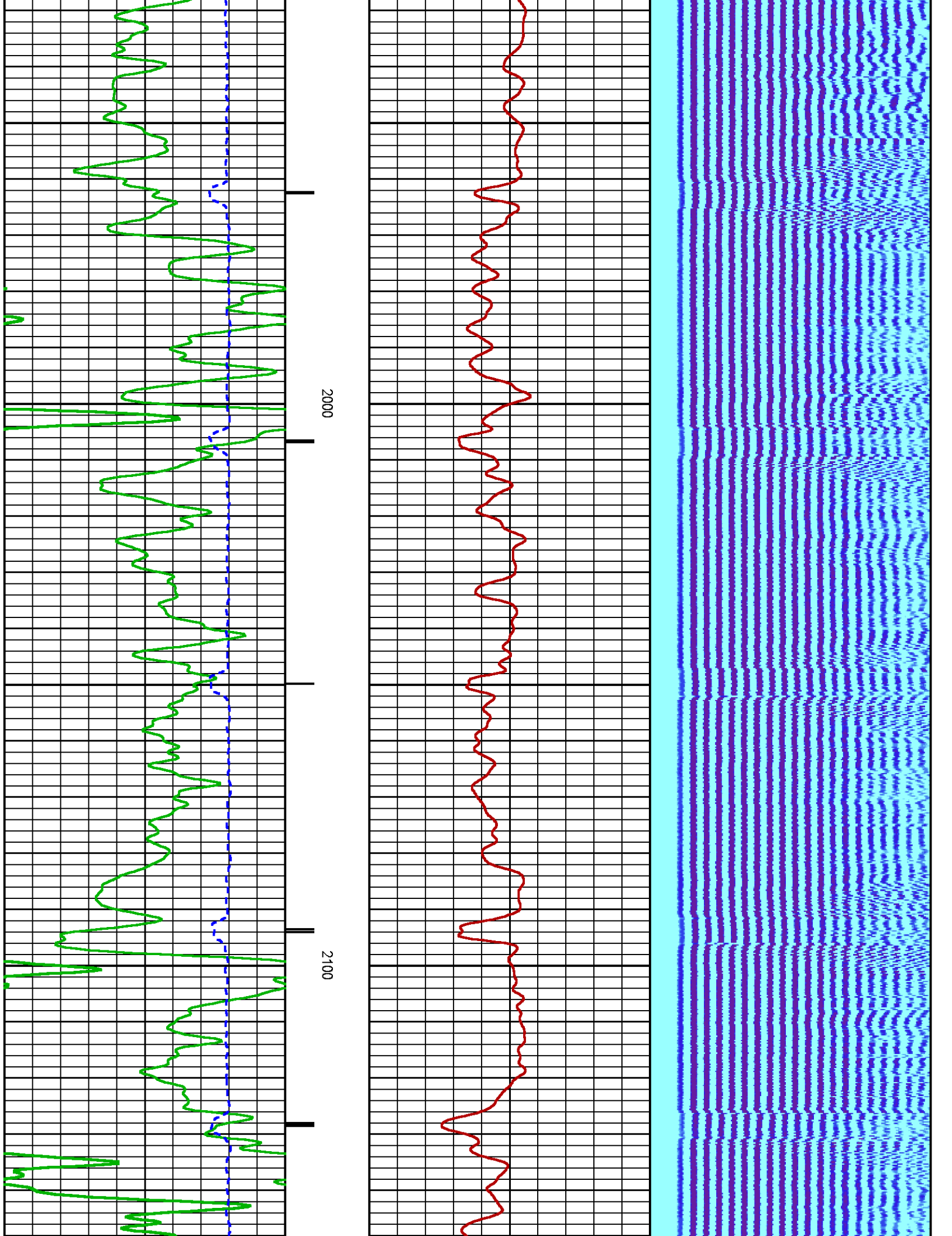
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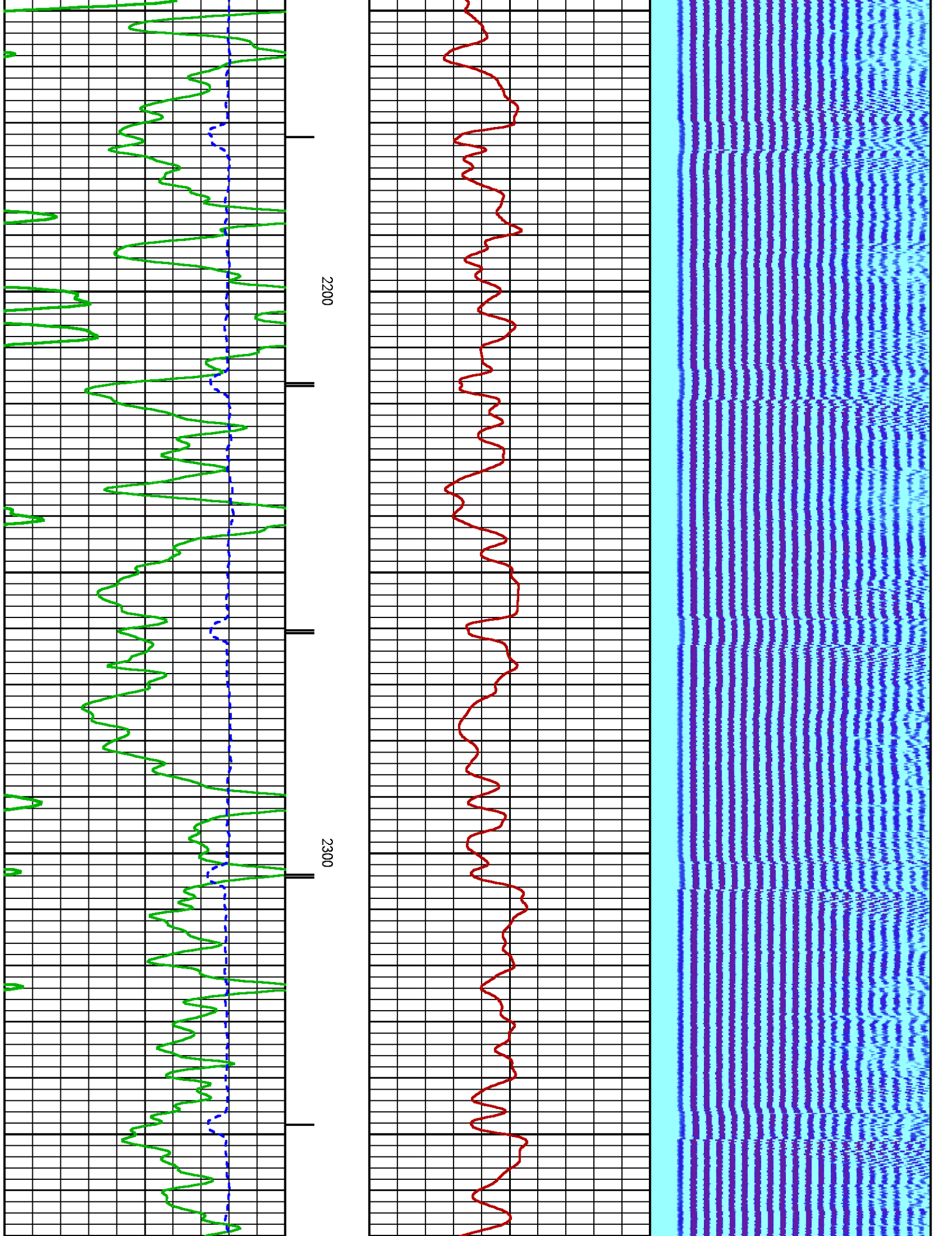
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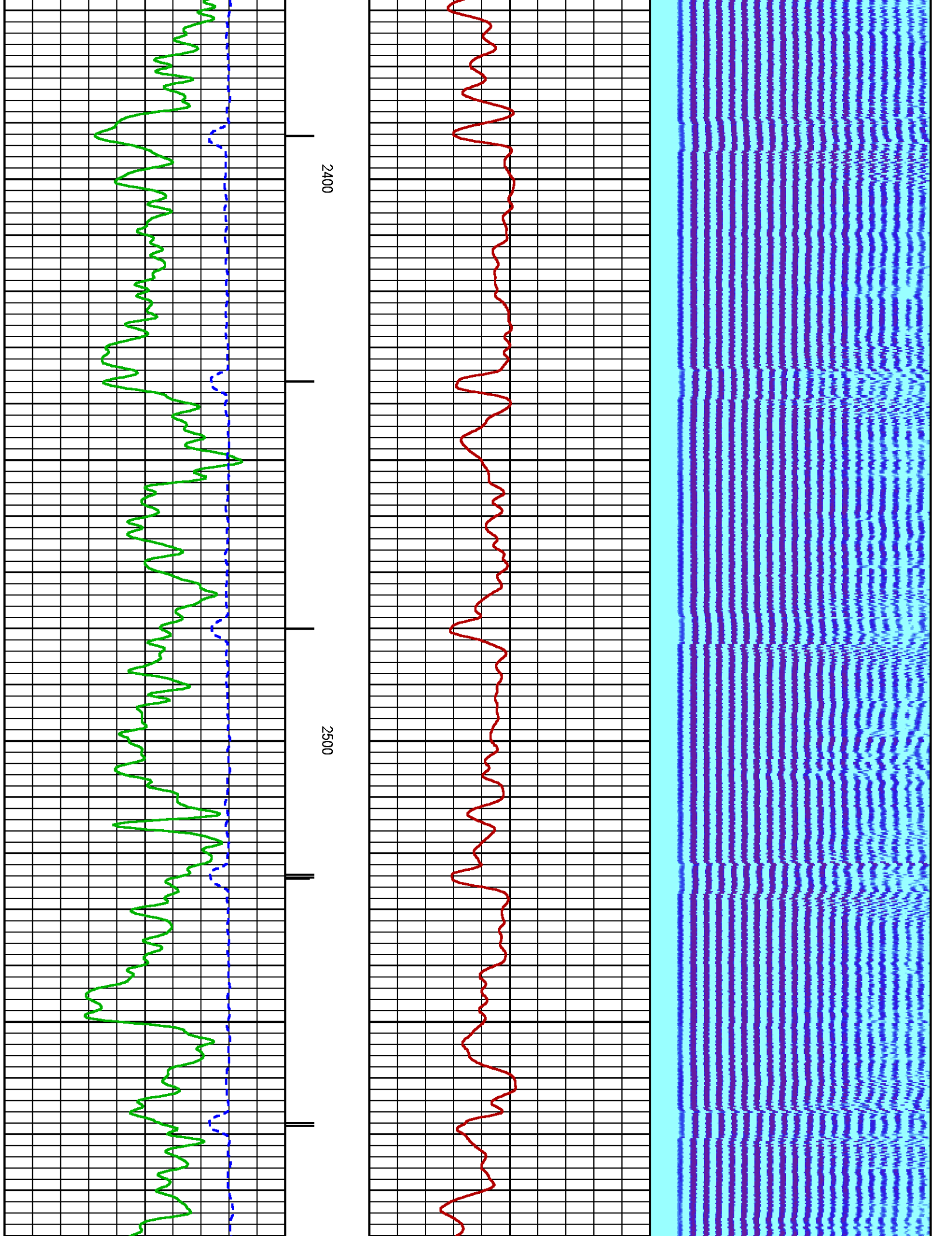
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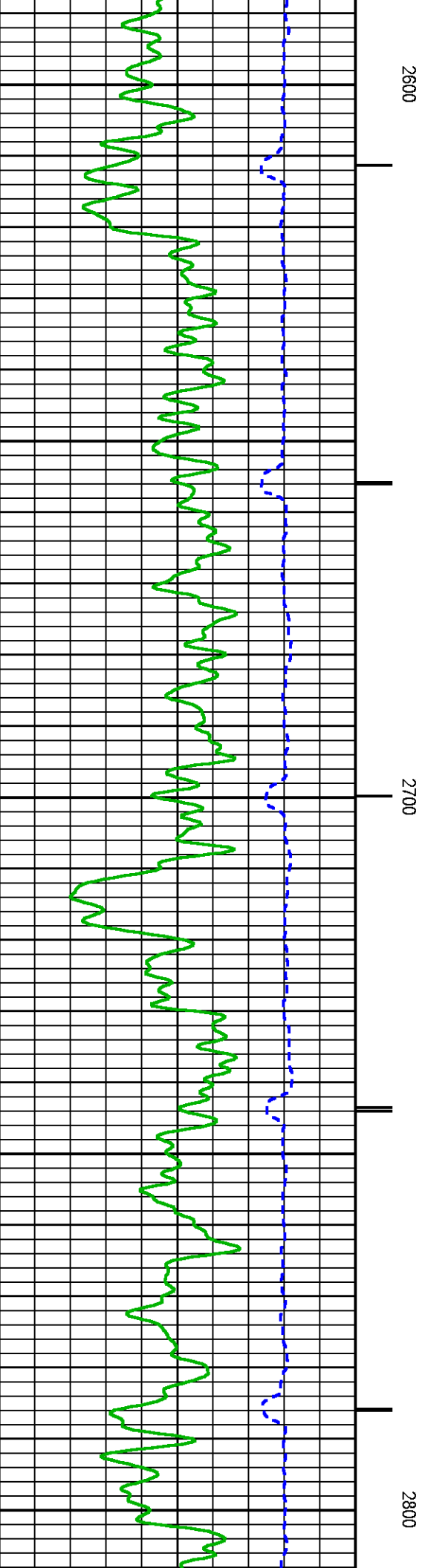
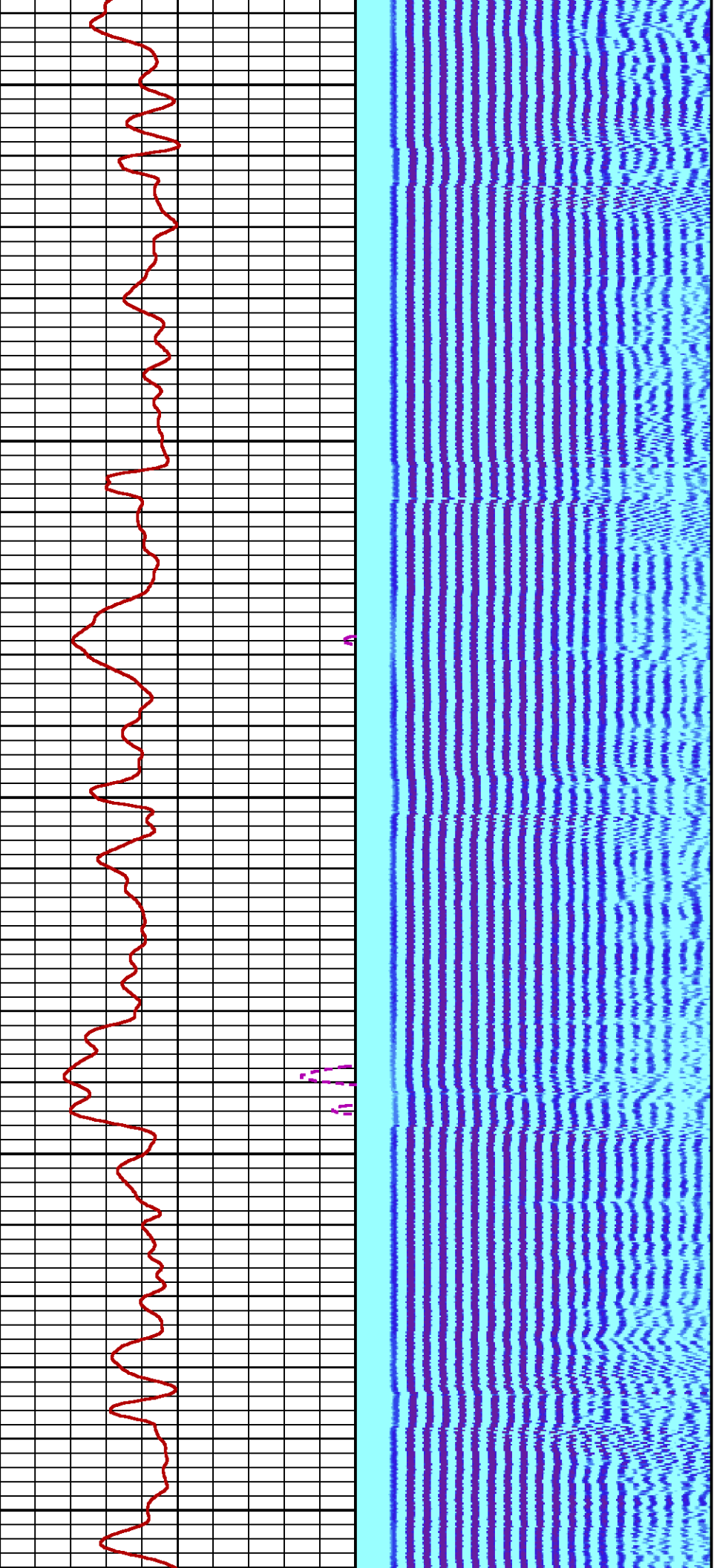


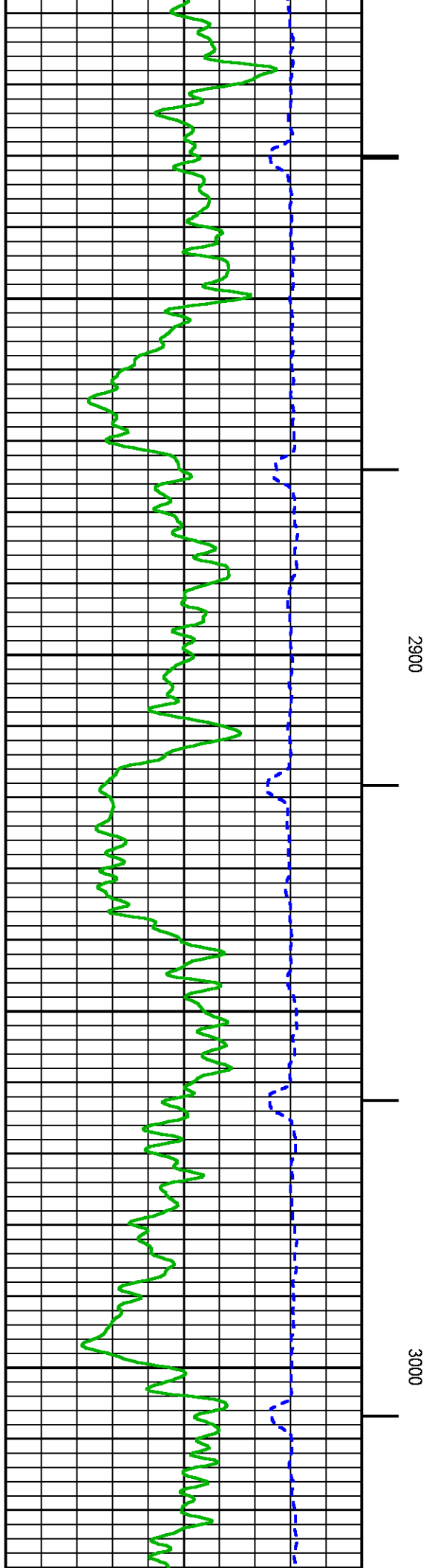
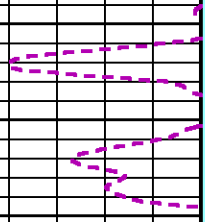
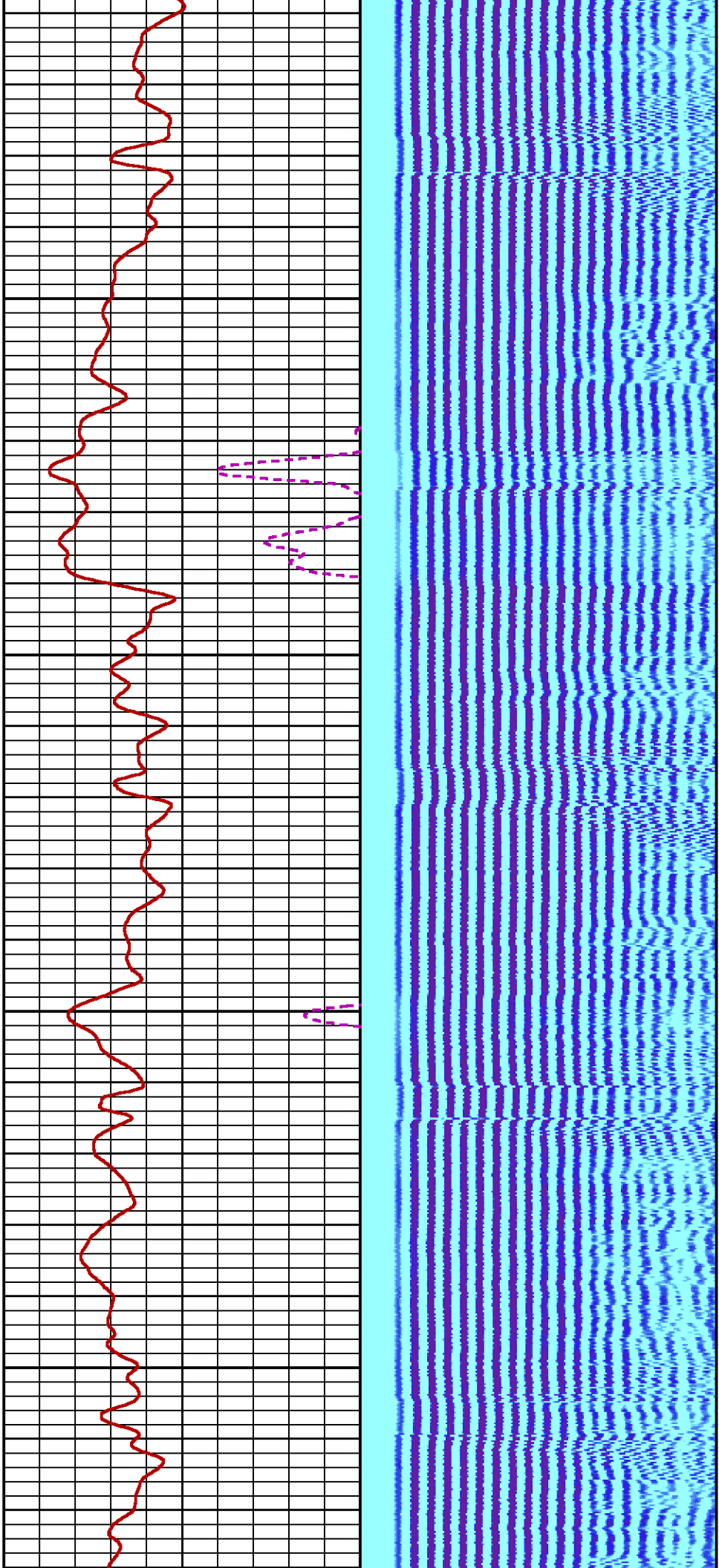


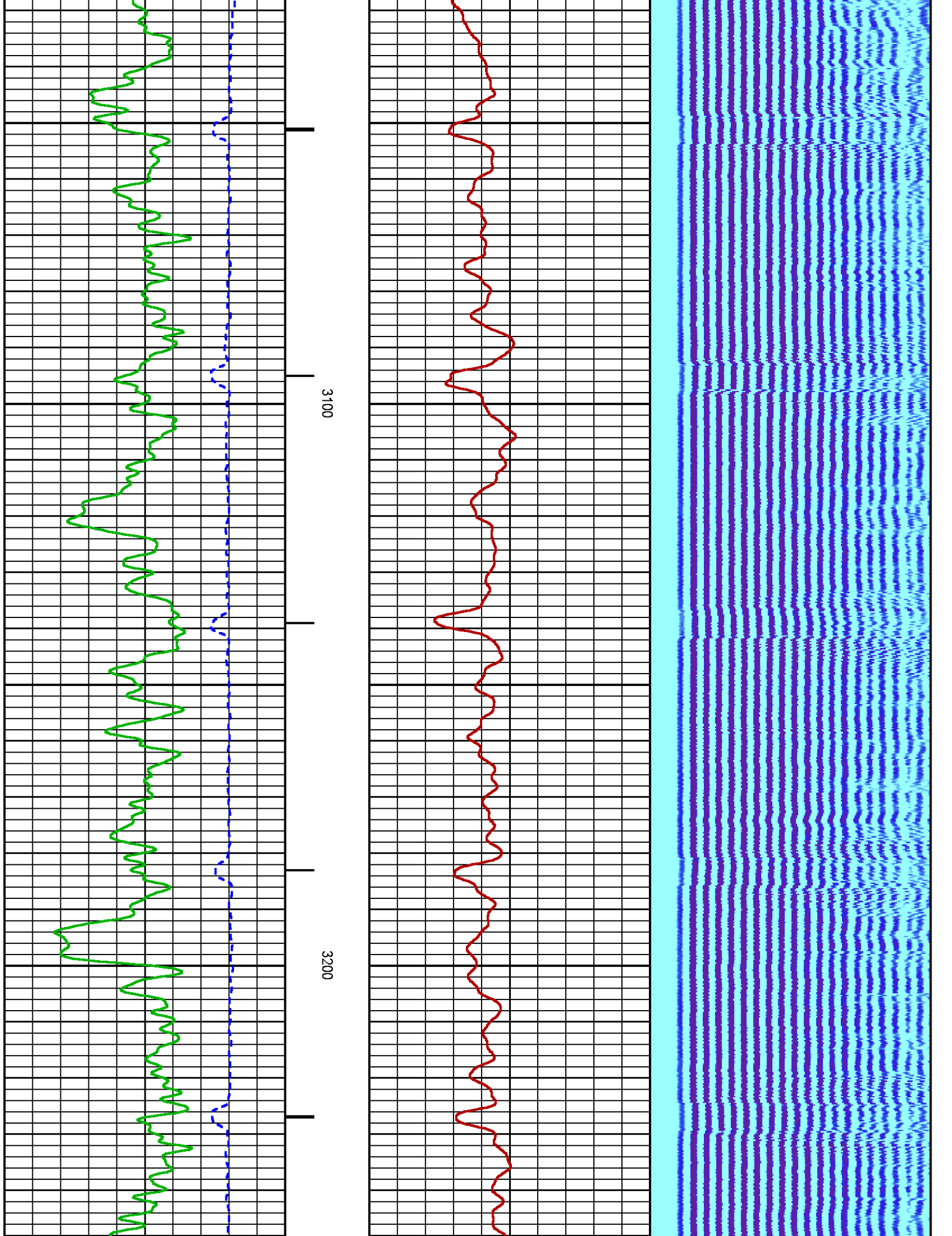


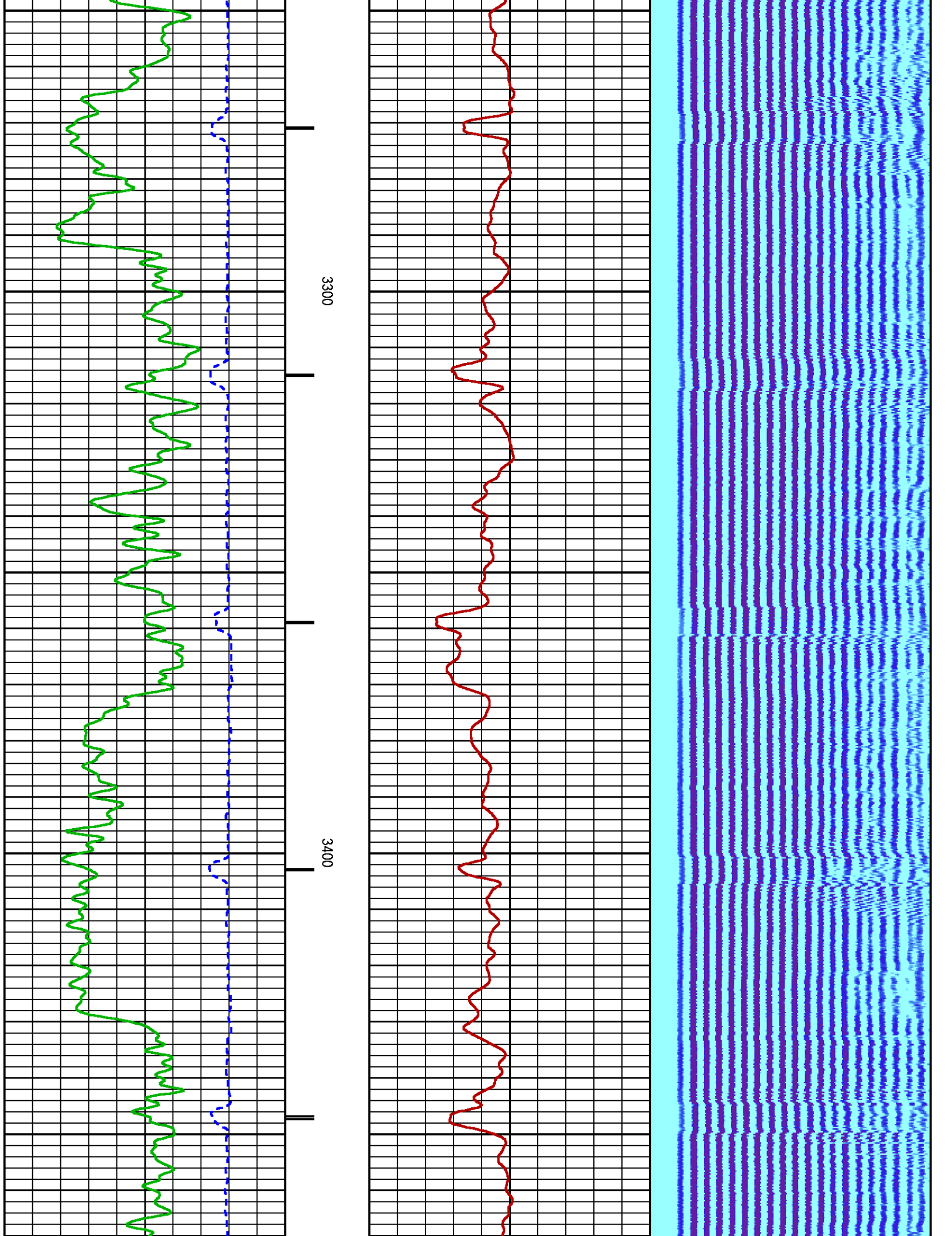


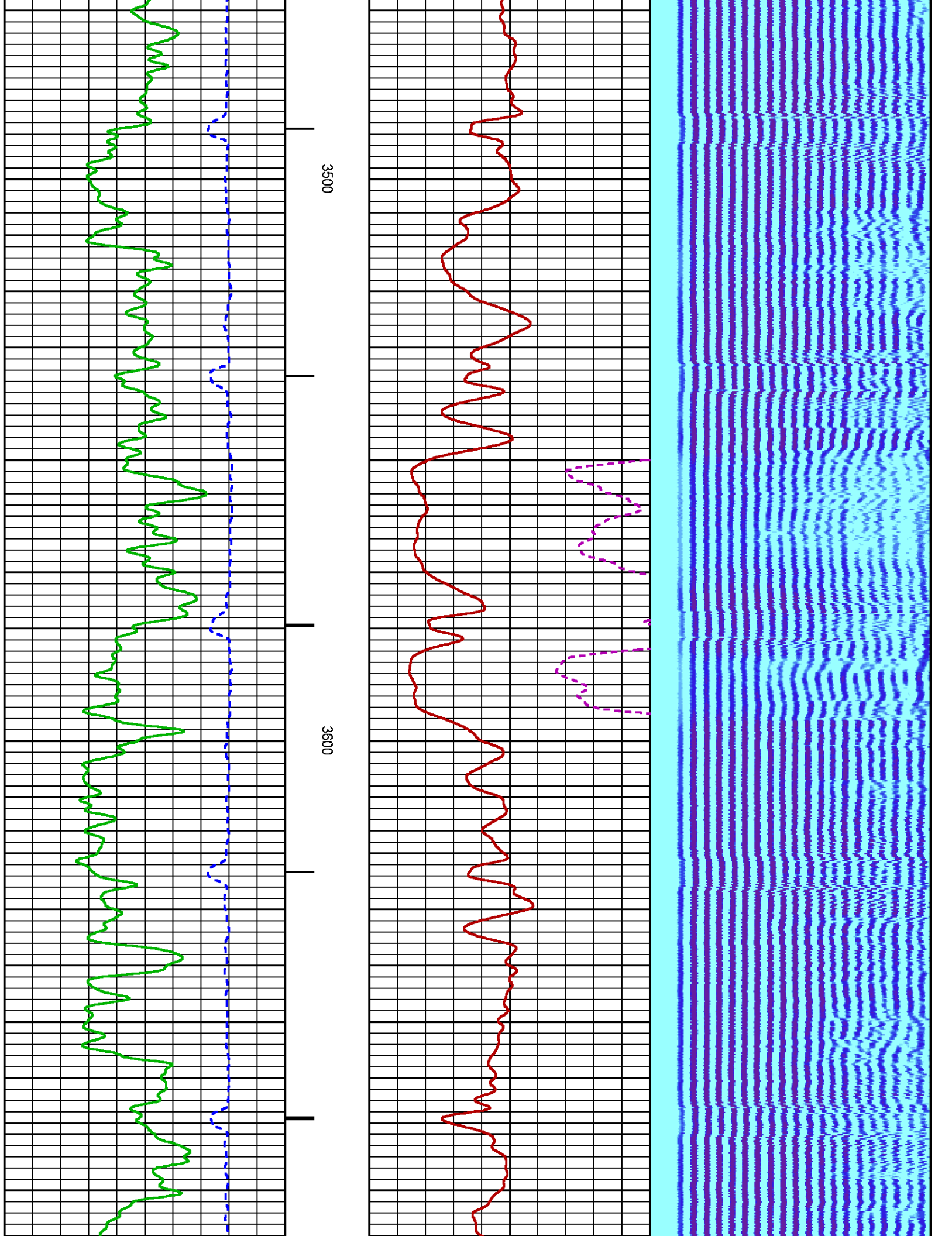


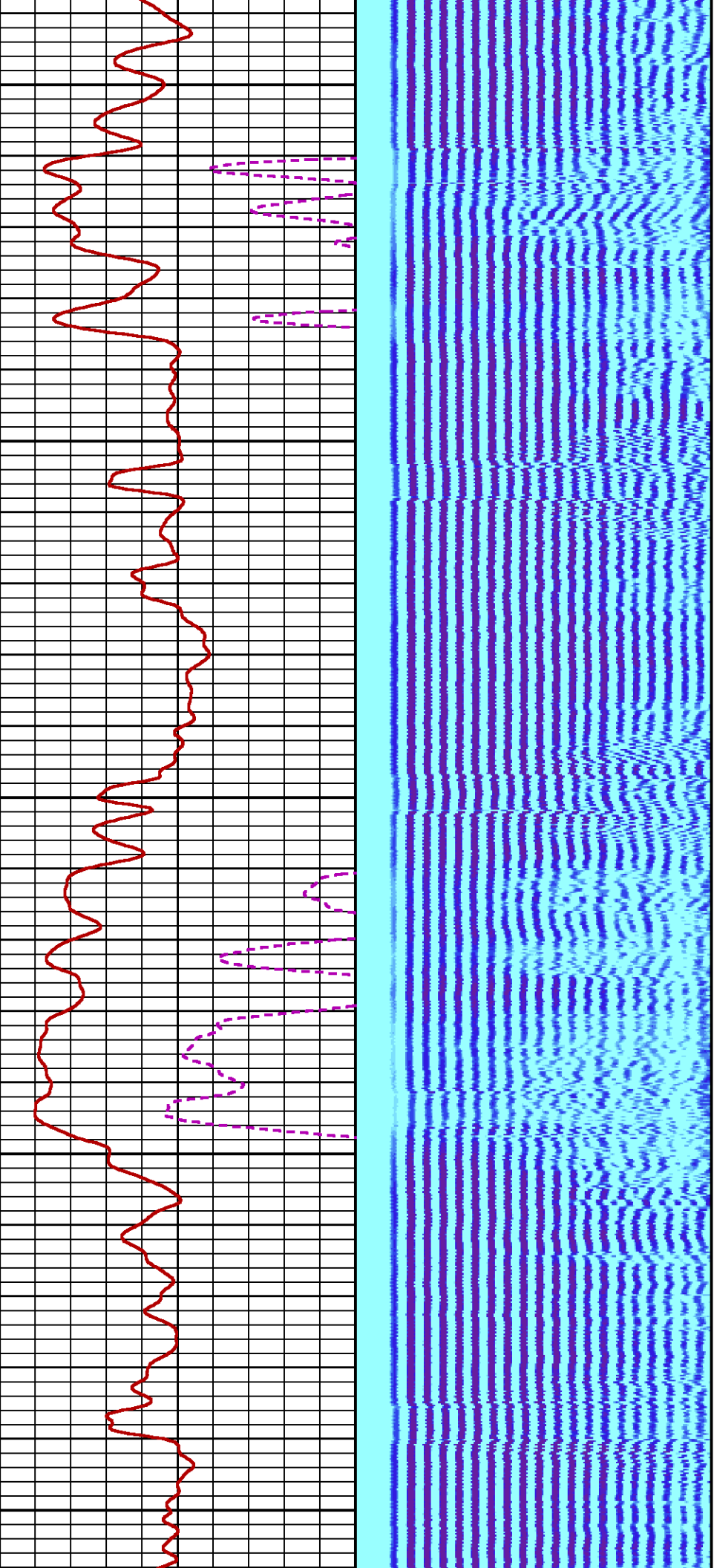








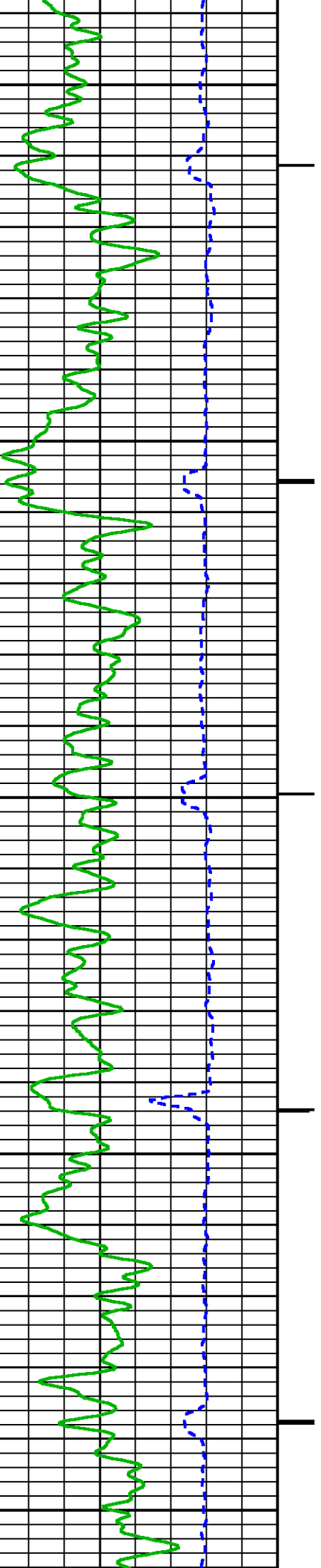


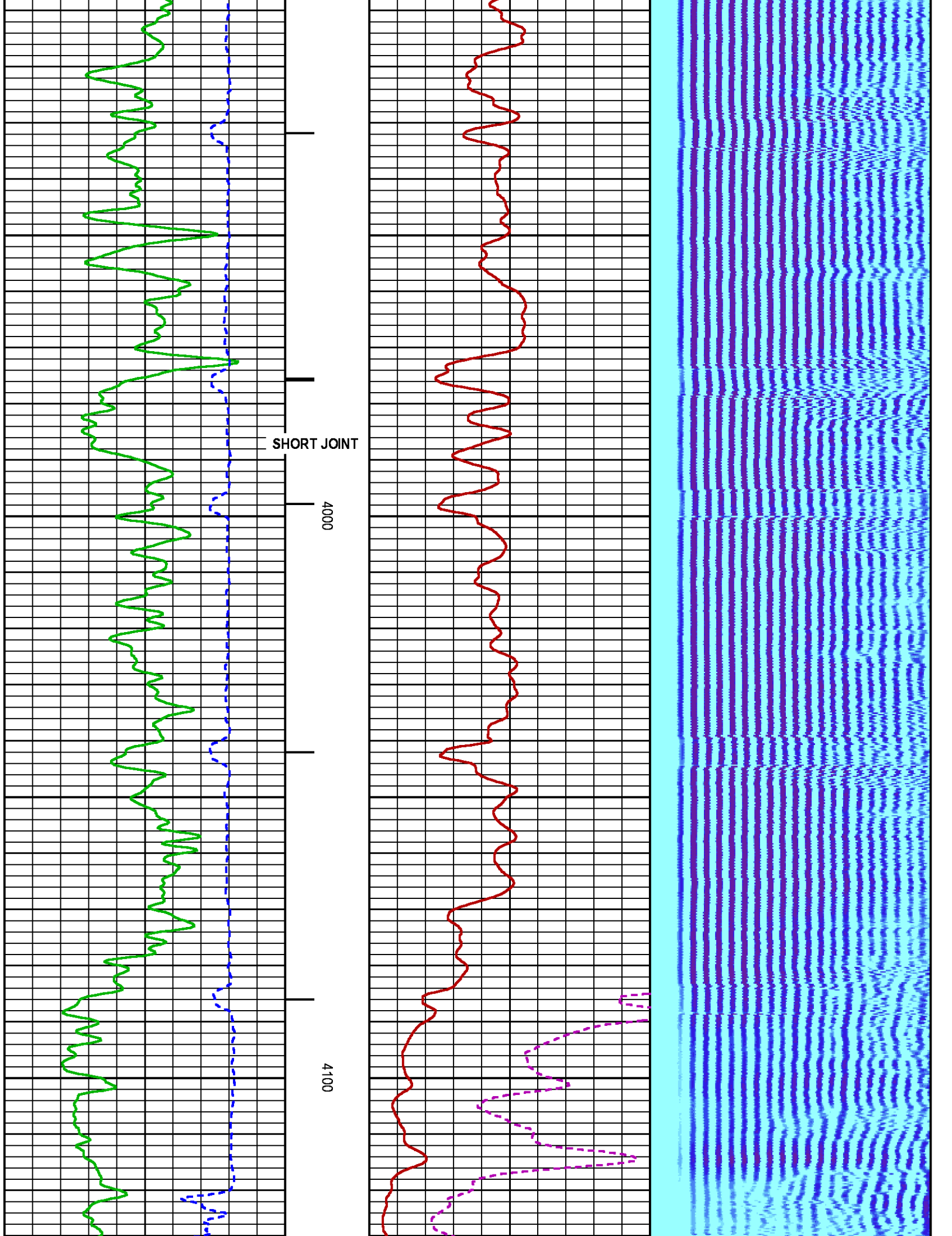


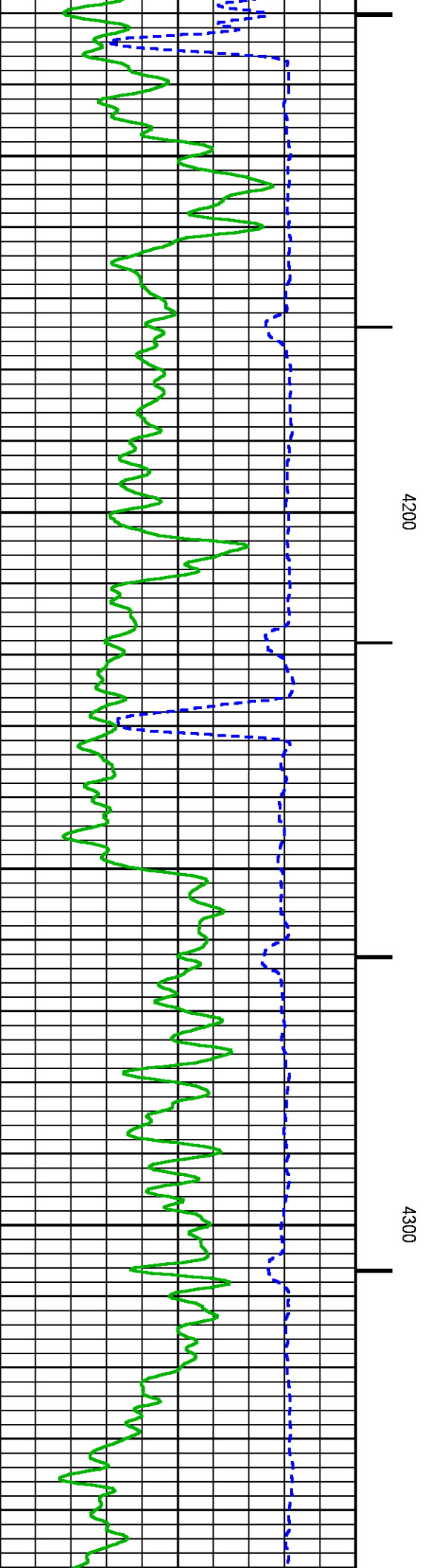
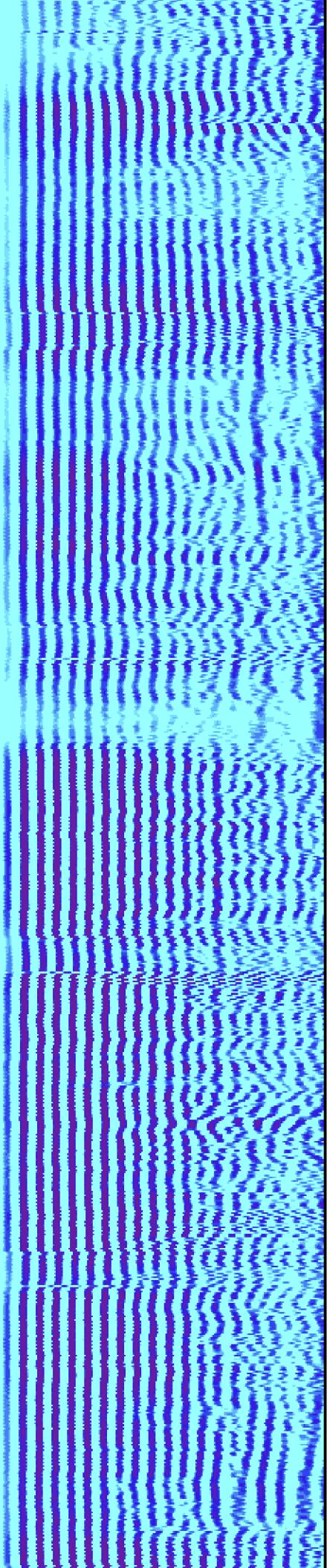
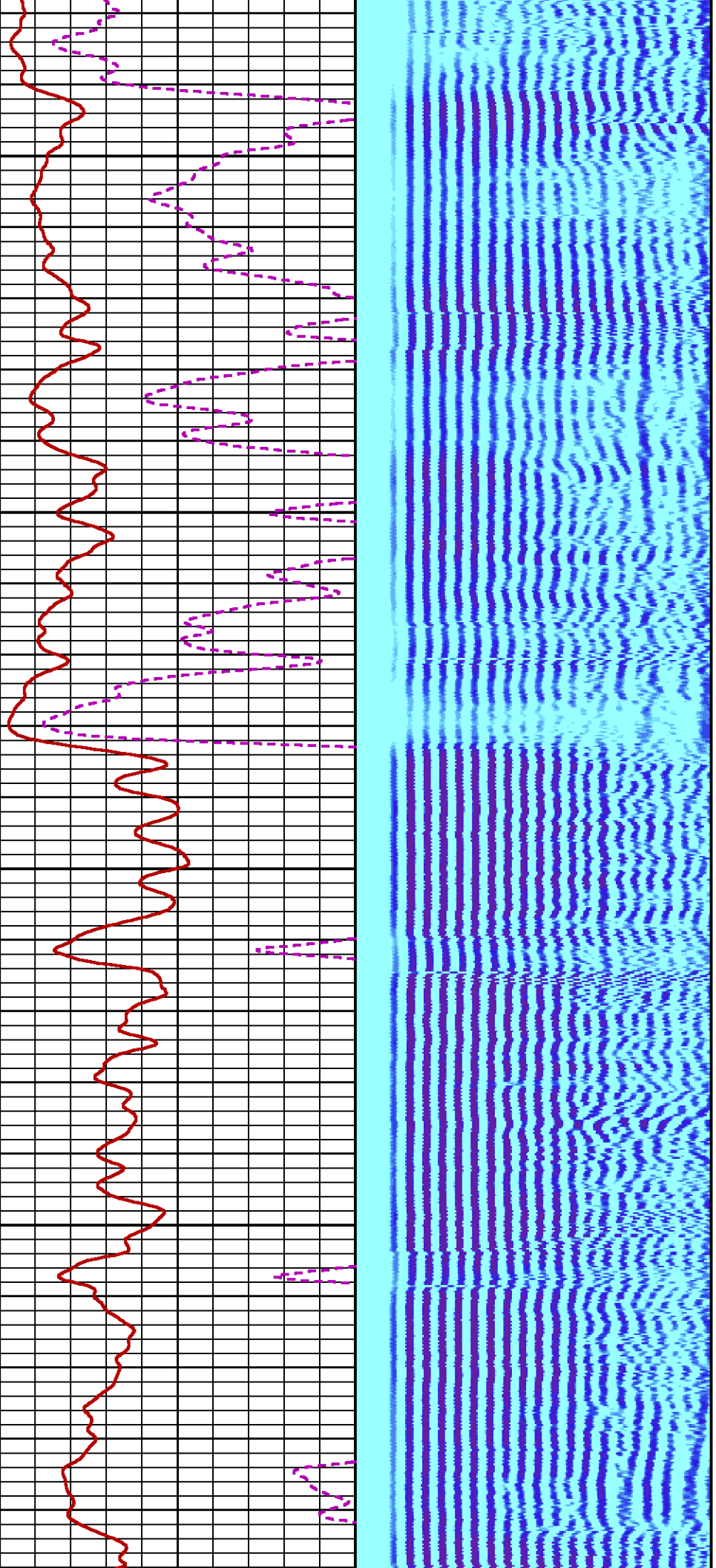
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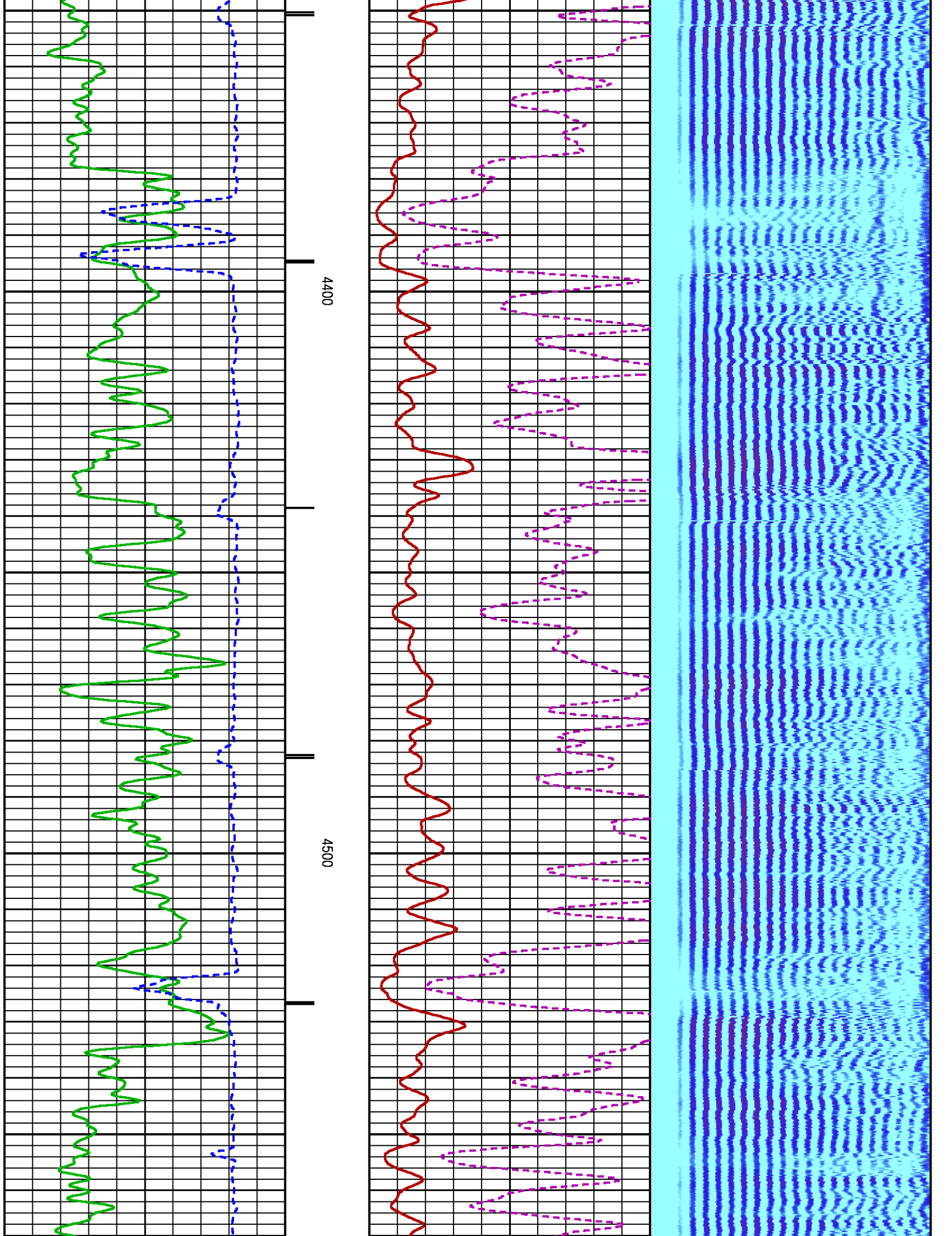
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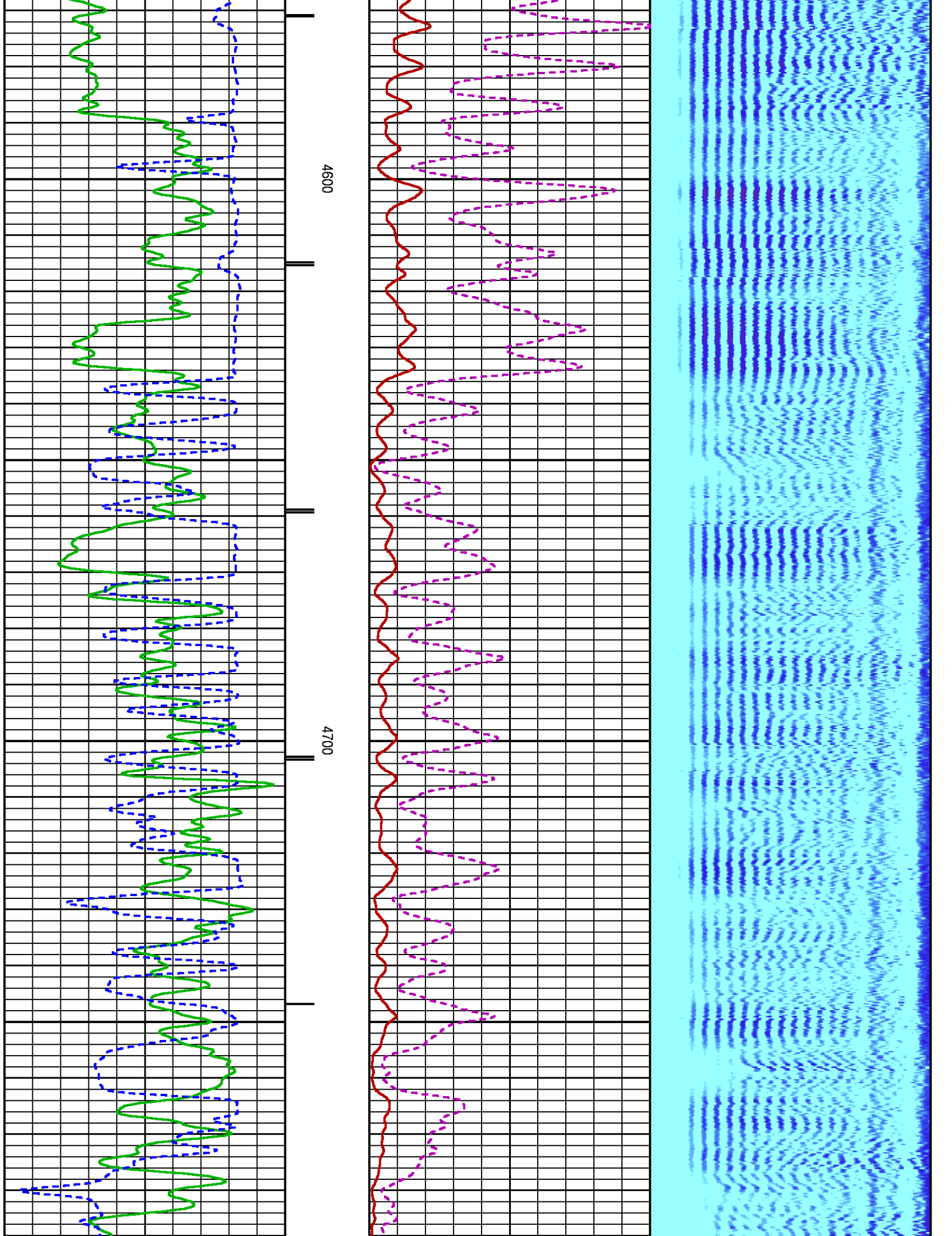
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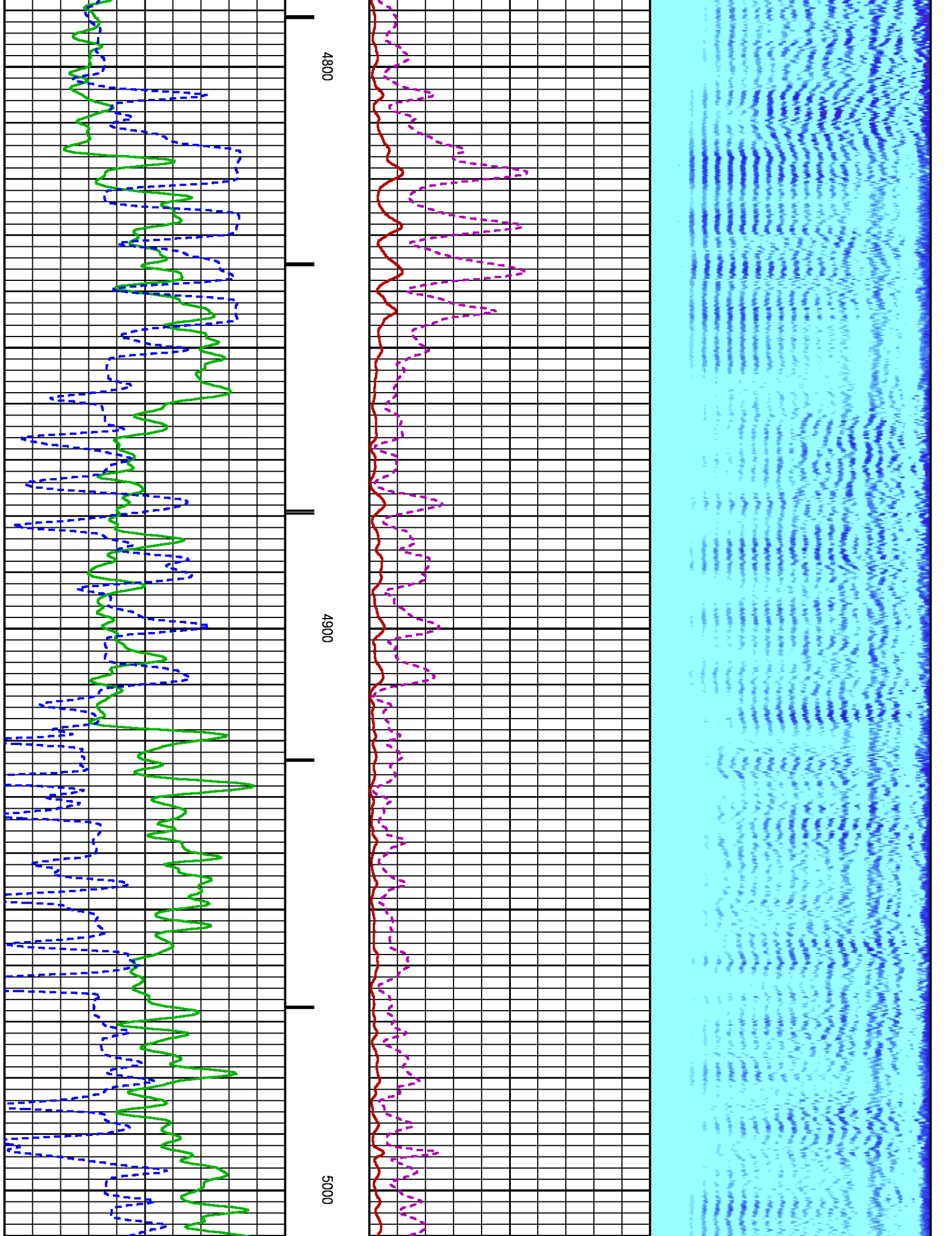


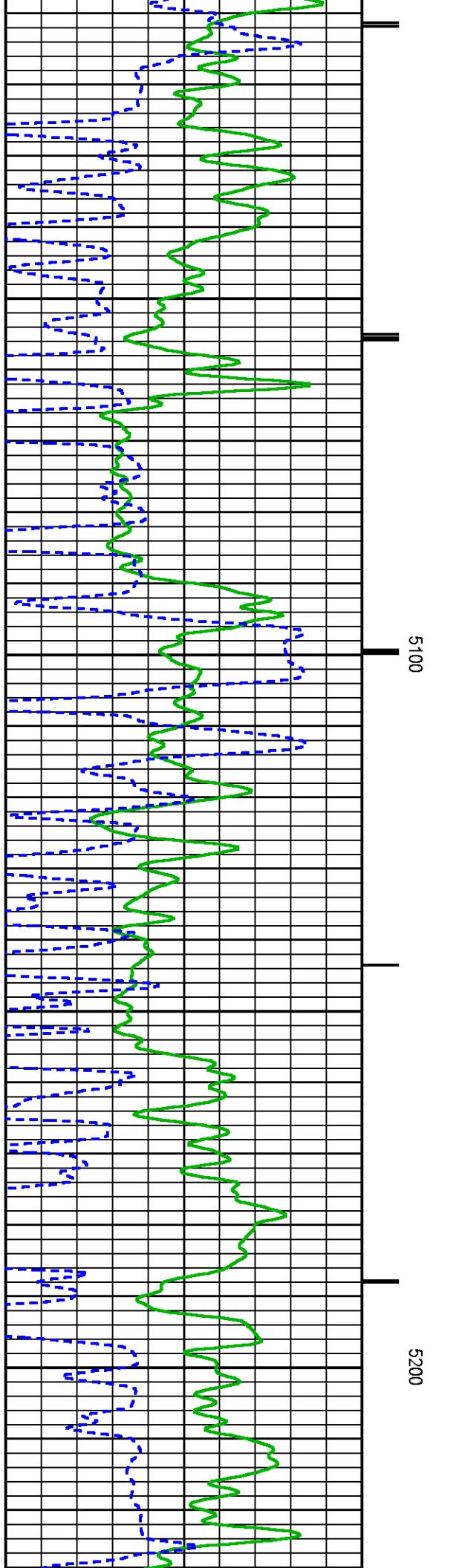
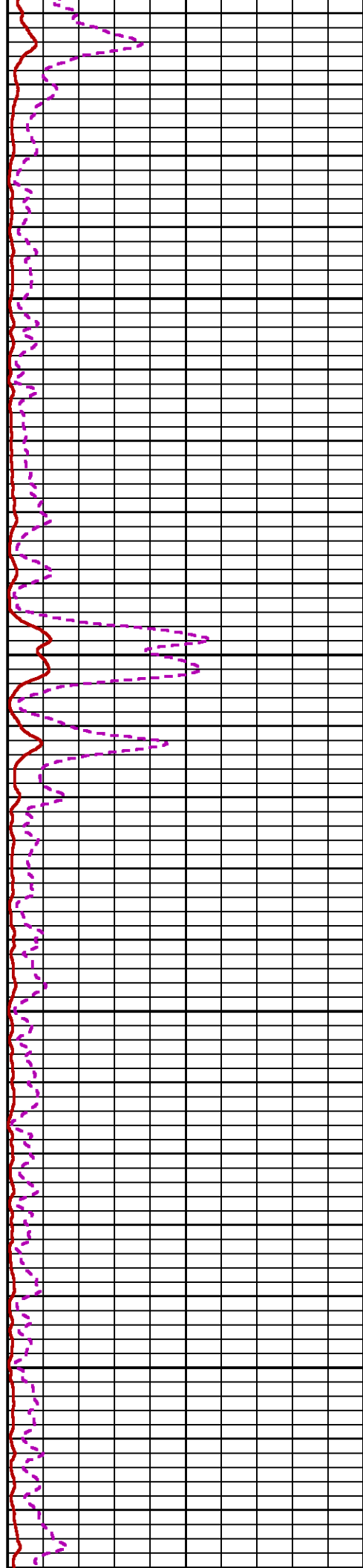
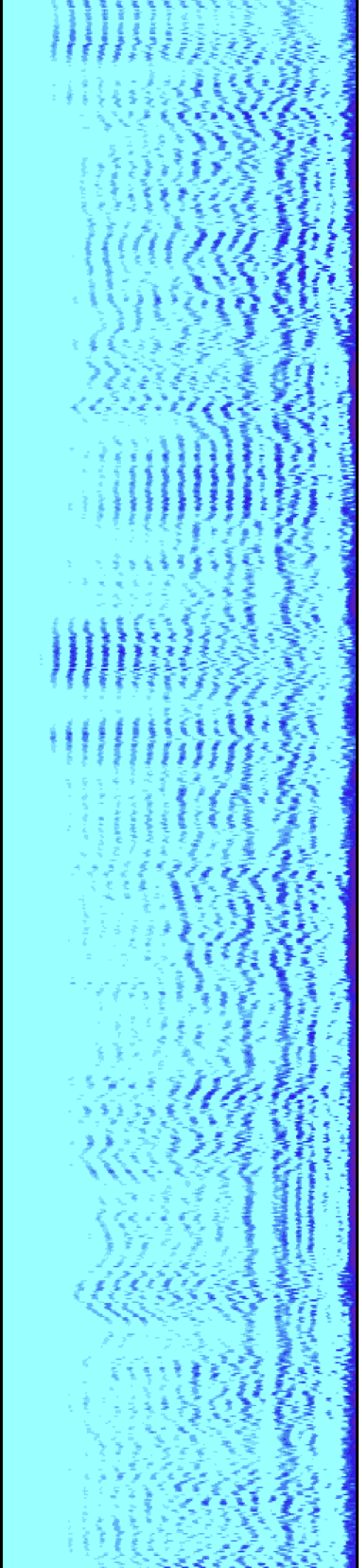


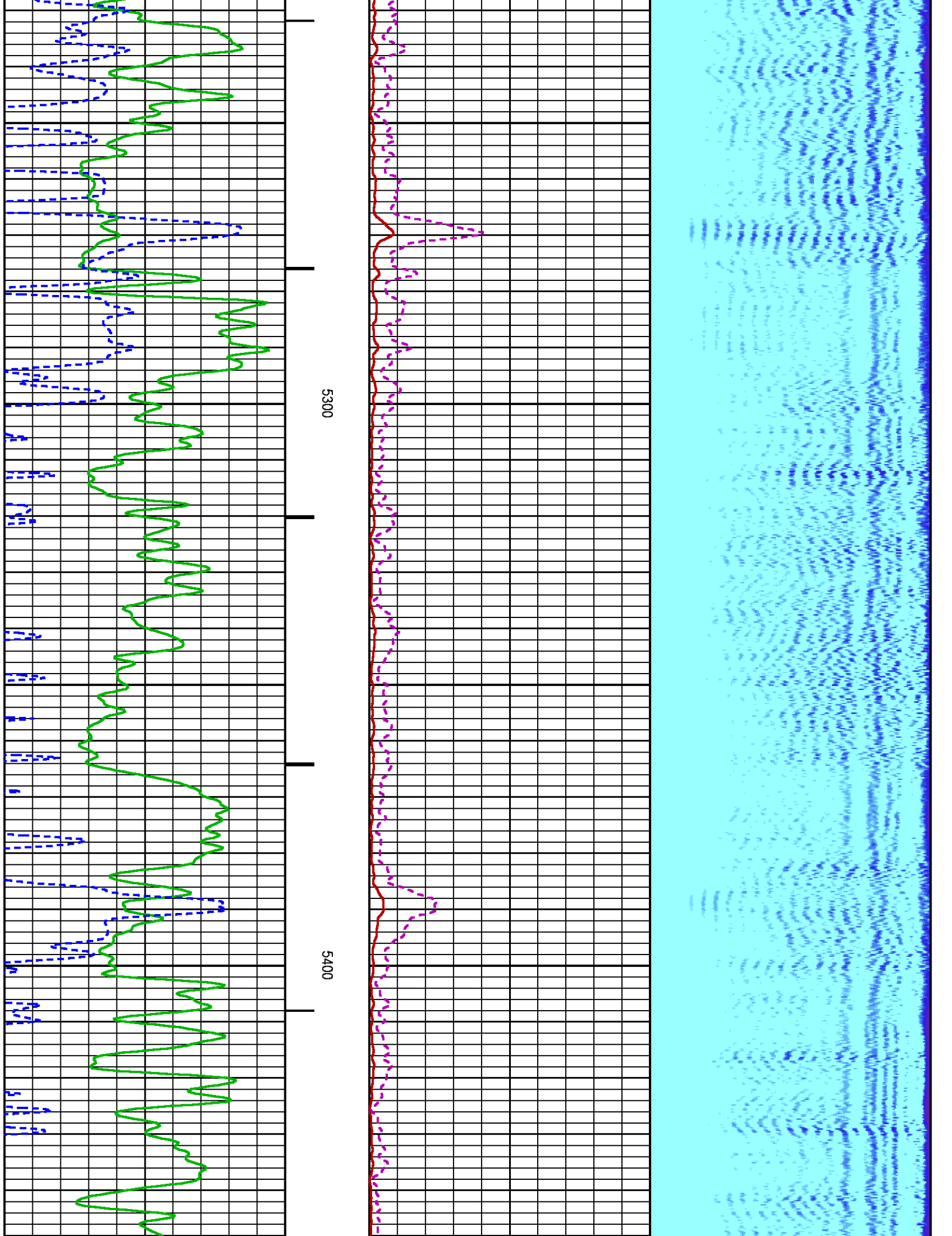


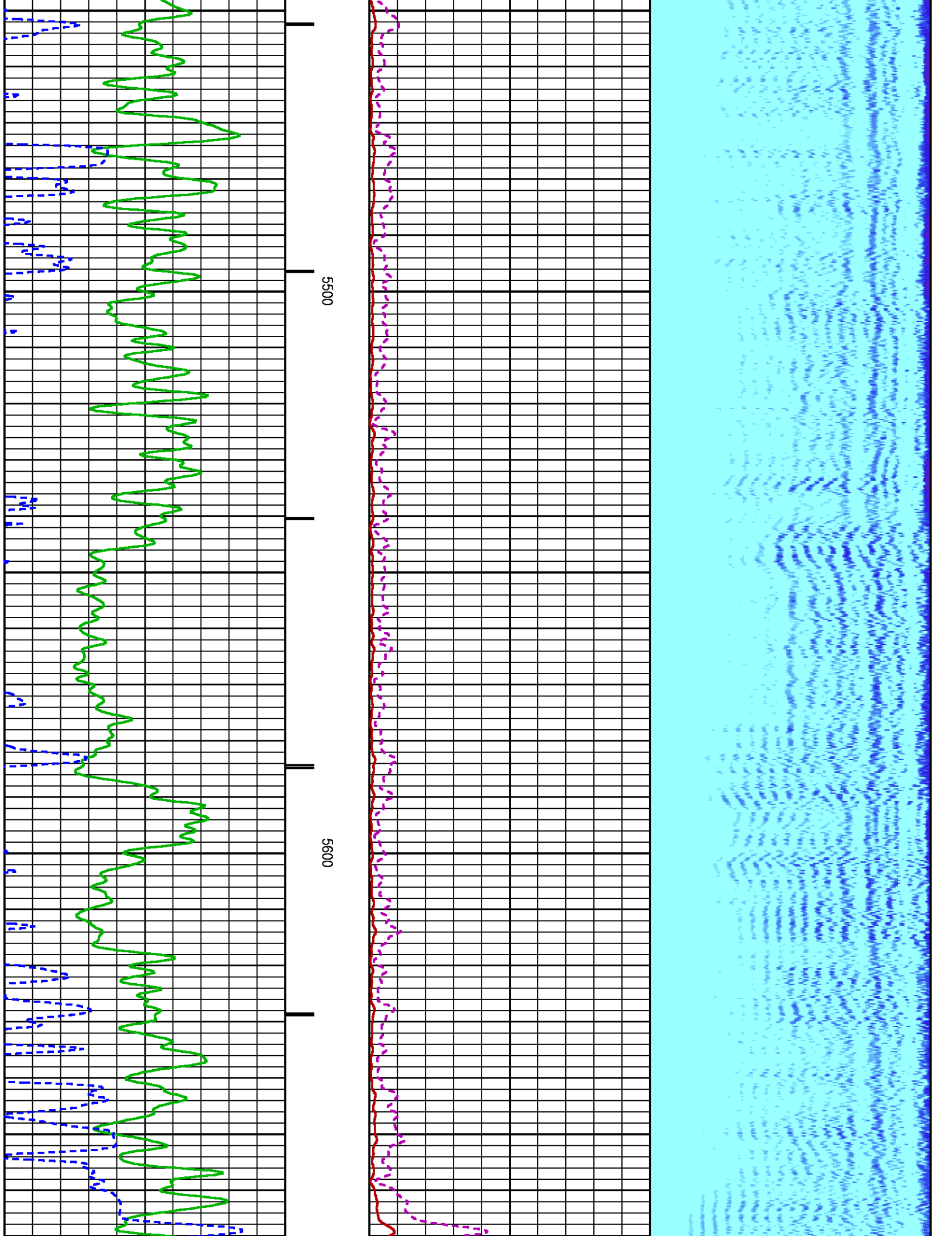


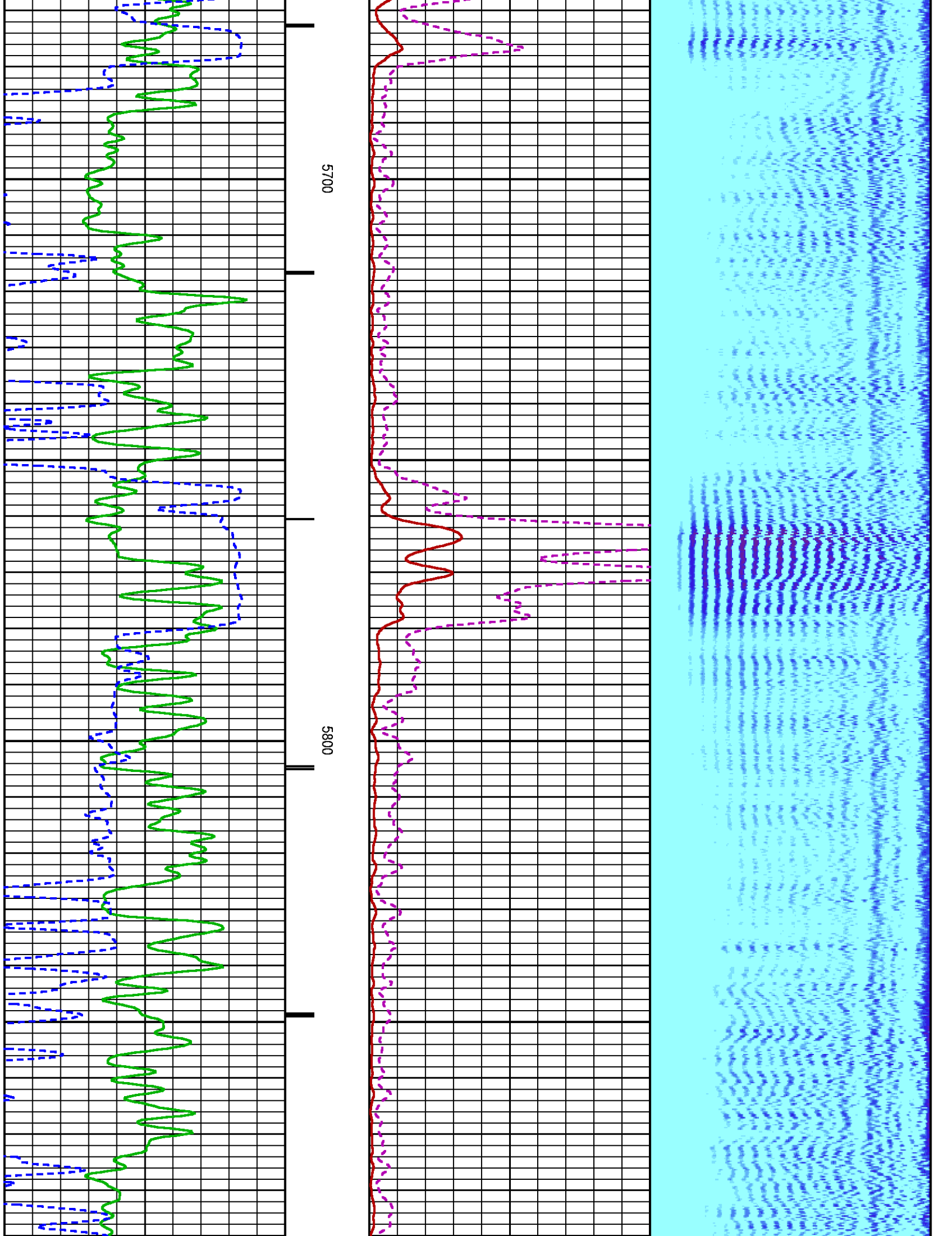


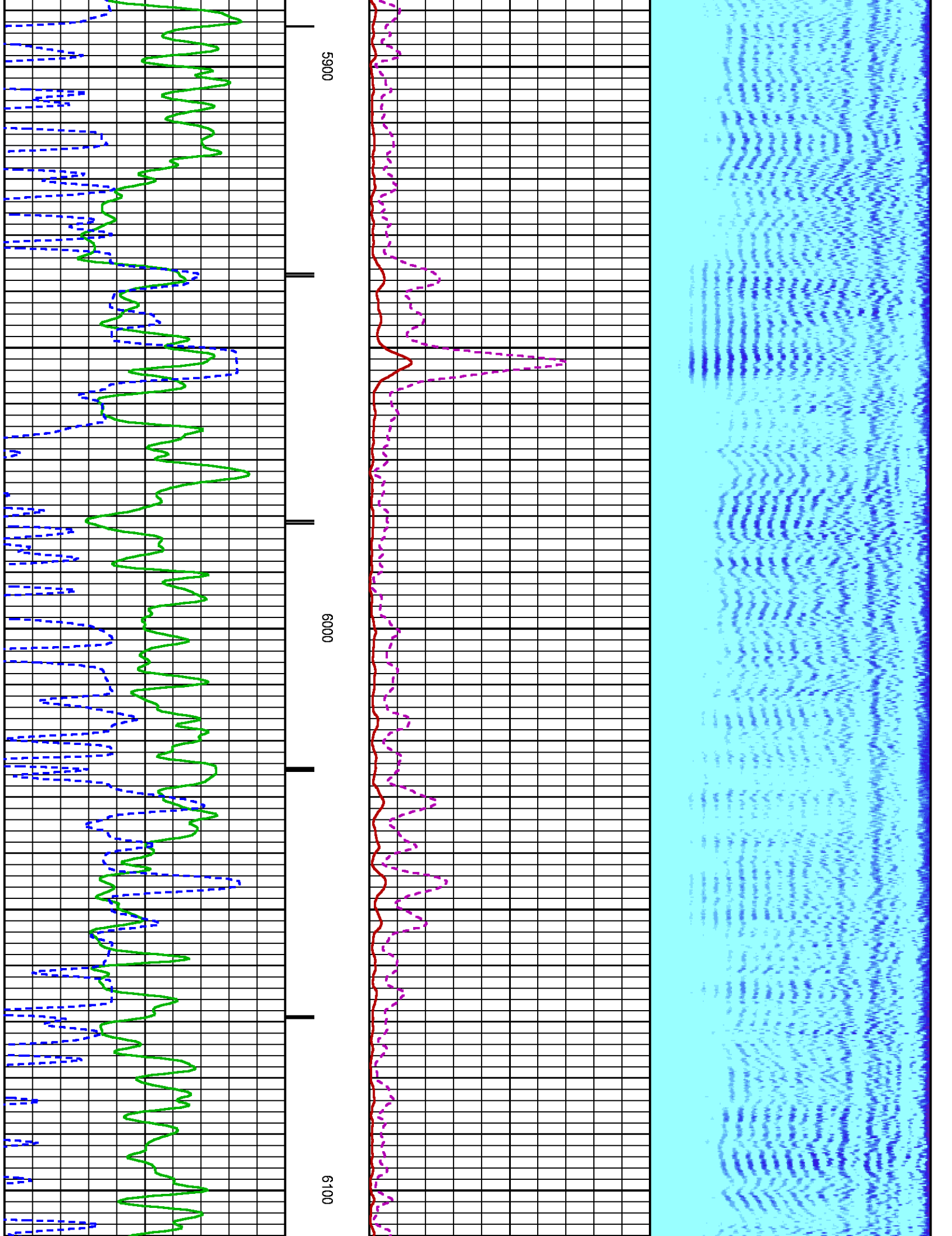


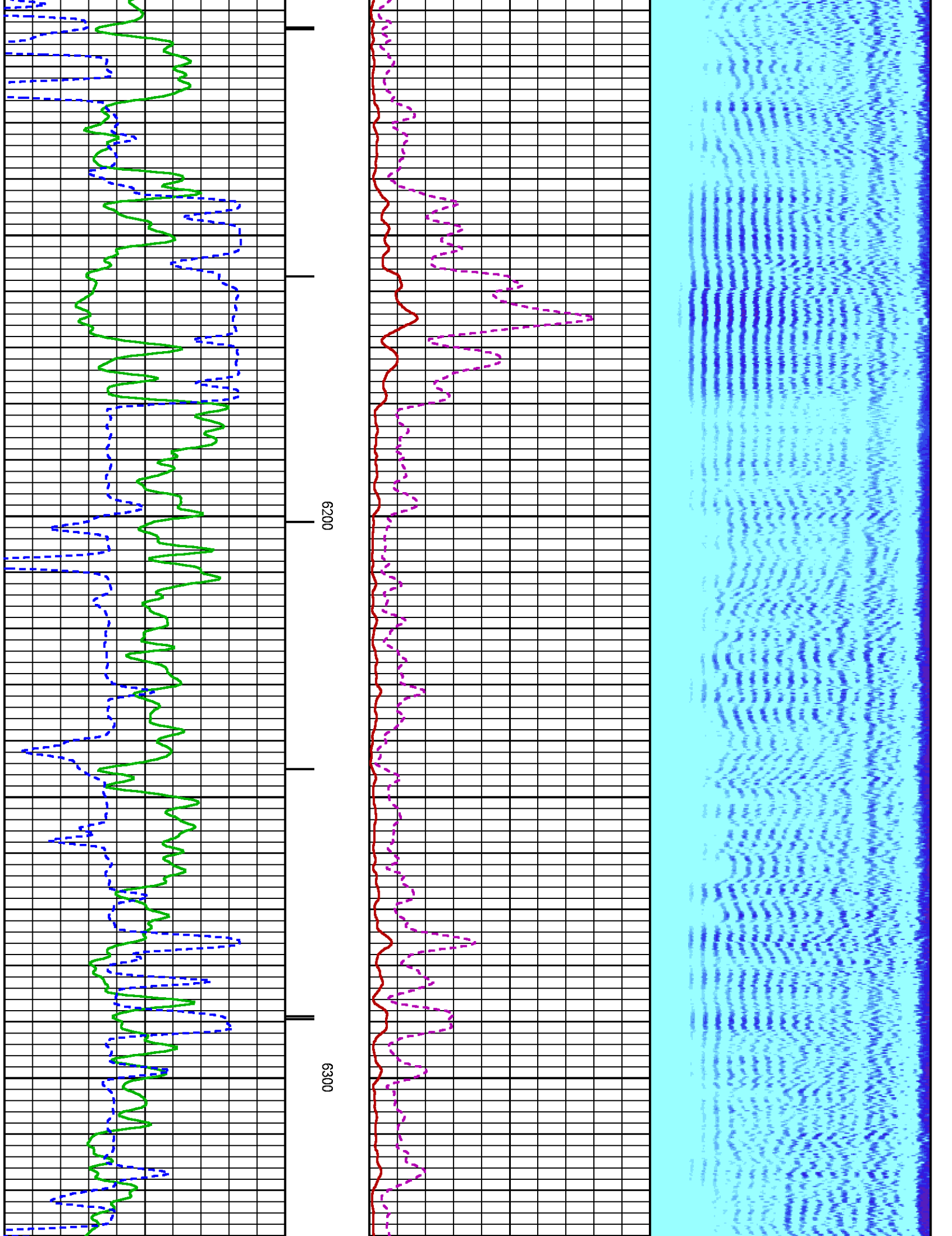


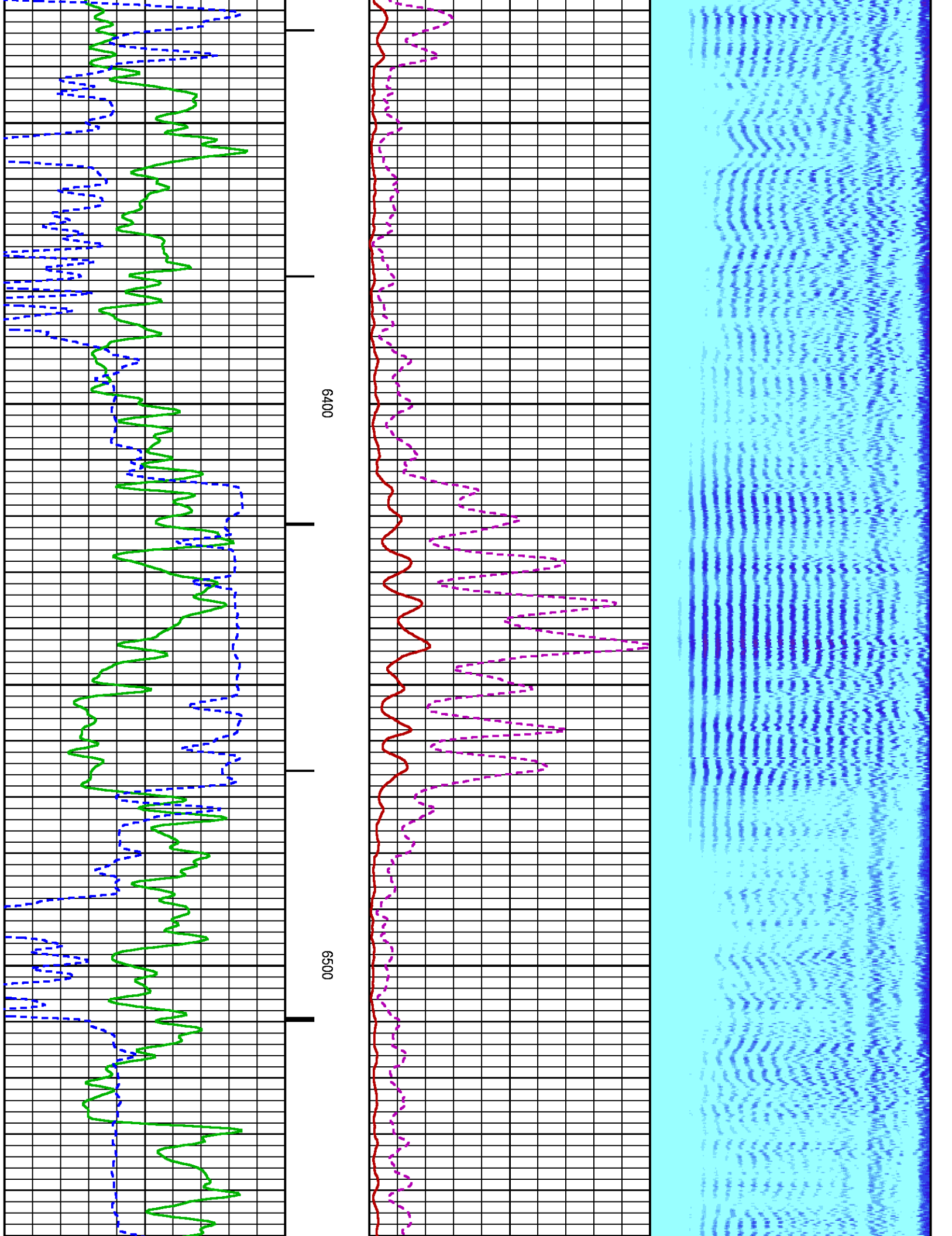


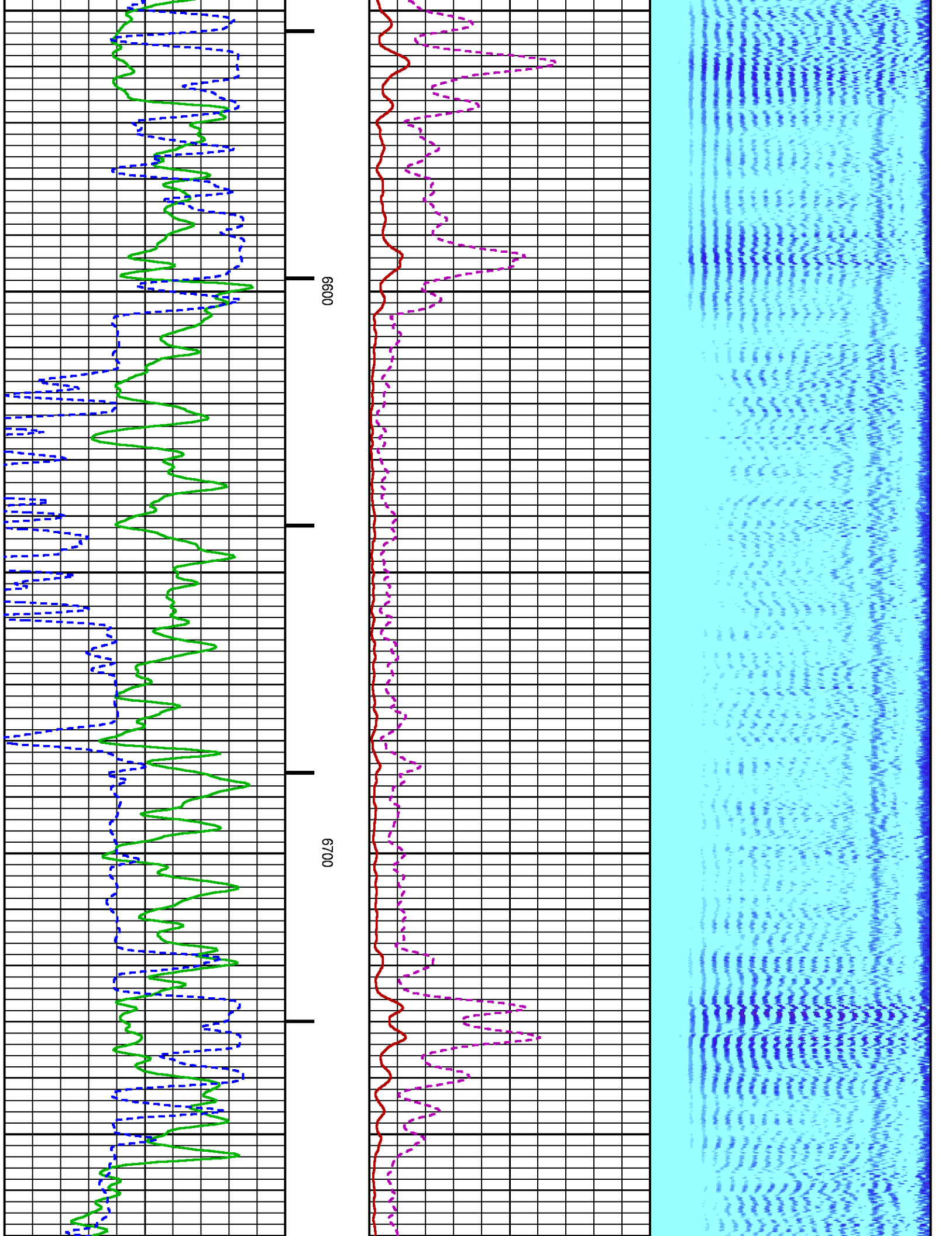


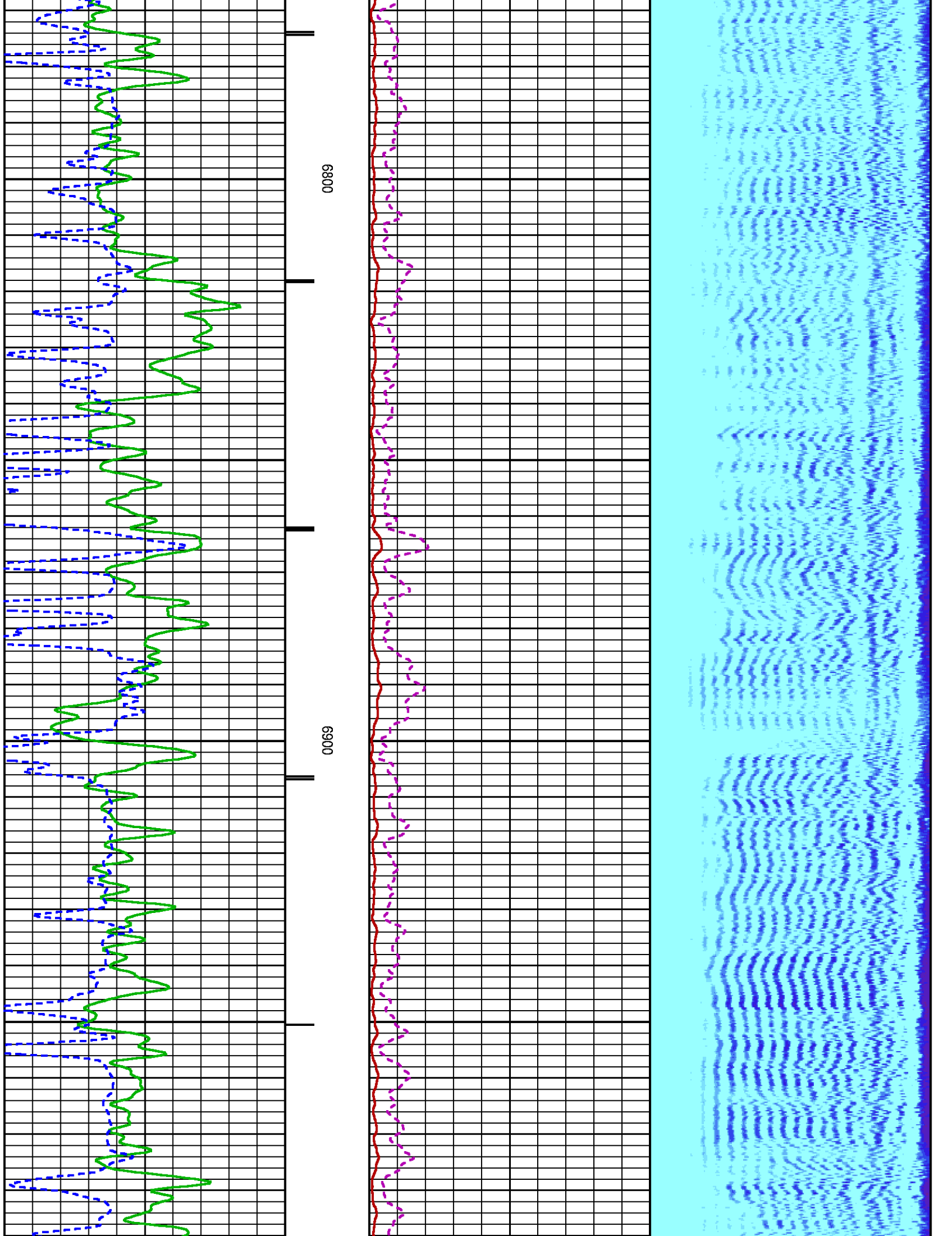


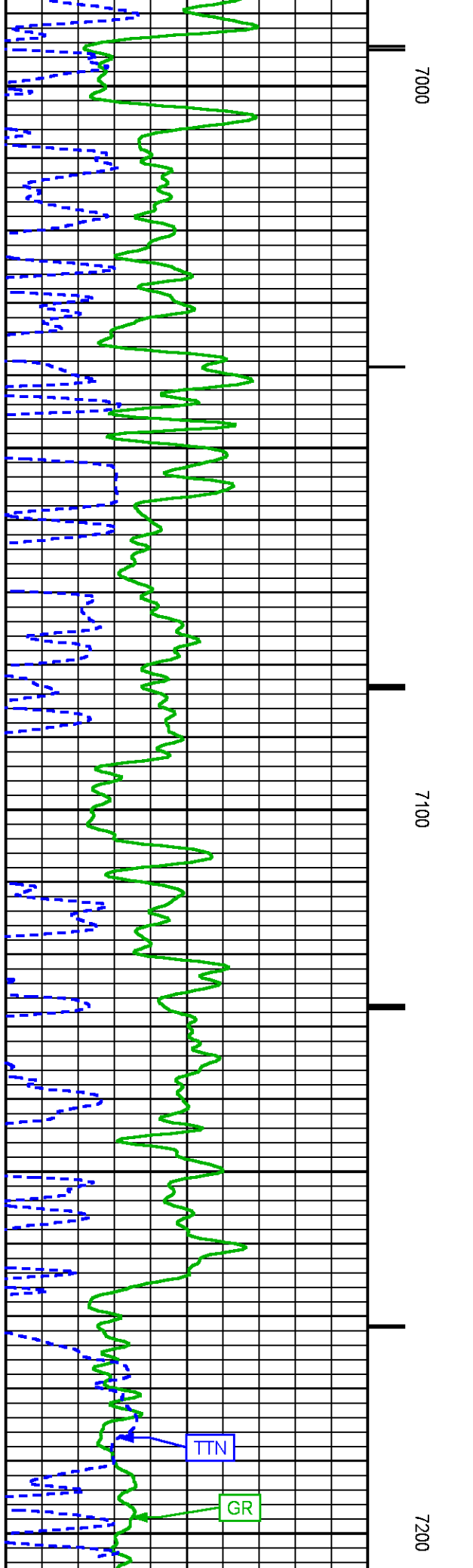
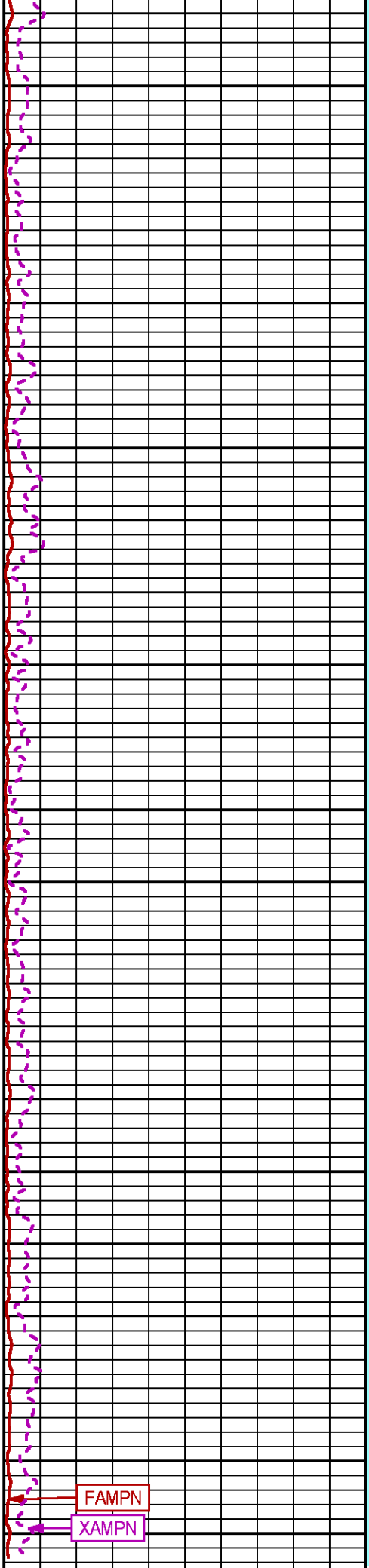
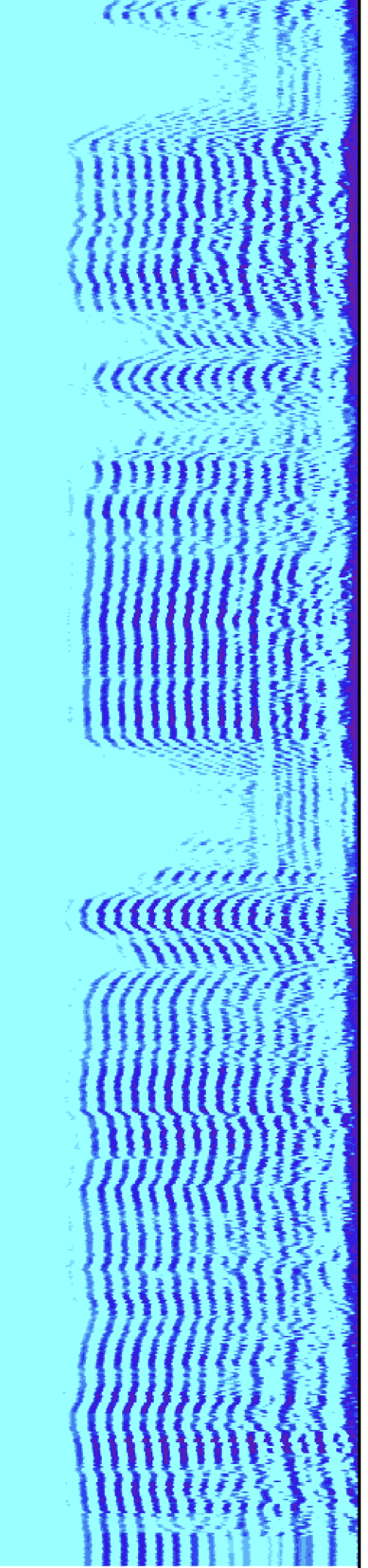


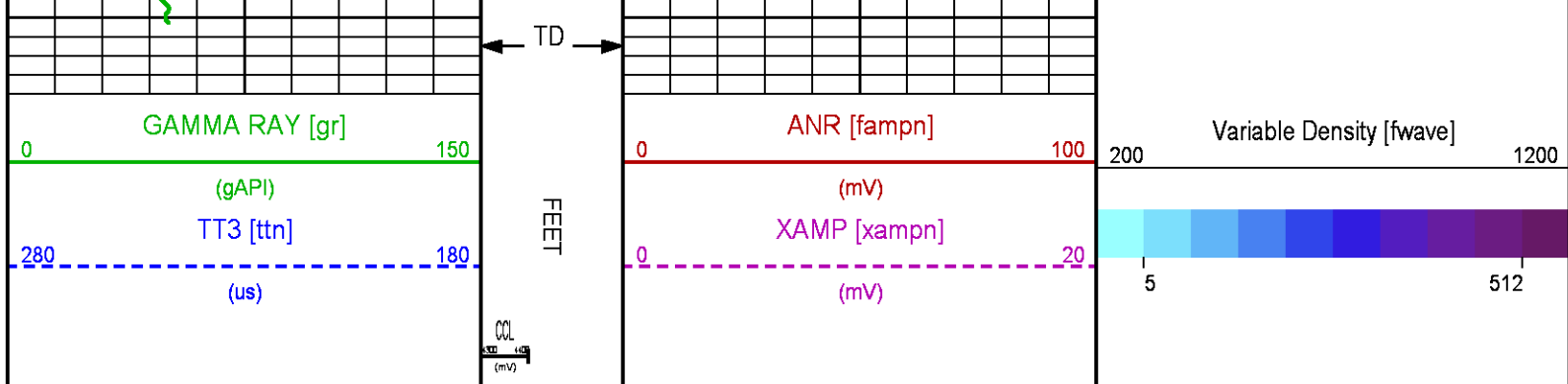












SECONDARY PRESENTATION 0 PSI

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013

Updates: 1 Patches: 4

Plotted: Wed Nov 19 13:36:09 2014

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH092541/n012e02.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 28.750 ft BOTTOM DEPTH: 7223.715 ft

SYMMETRIC FILTER

| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | INTERVAL (ft) | |
|------------------|-----------|------------|-------|---------------|--------|
| GR | FILTER () | medium (1) | | TOP | BOTTOM |
| AMPLITUDE | FILTER () | medium (1) | | " | " |
| TRAVEL TIME | FILTER () | medium (1) | | " | " |

RAL CCL PROCESSING

| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | INTERVAL (ft) | |
|------------------|-----------|-------|-------|---------------|--------|
| CCL FLOOR | CCL FLOOR | 0 | | TOP | BOTTOM |

ANALOG RAL PROCESSING

| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | INTERVAL (ft) | |
|---------------------------|----------------------------|---------|-------|---------------|--------|
| AMPLITUDE WINDOW (NEAR) | AMP WINDOW START (fgp1*) | 187 | us | TOP | BOTTOM |
| | AMP WINDOW START (fgp2*) | 187 | us | " | " |
| | AMP WINDOW START (fgp3*) | 187 | us | " | " |
| | AMP WINDOW START (fgp4*) | 187 | us | " | " |
| | AMP WINDOW START (fgp5*) | 187 | us | " | " |
| | AMP WINDOW START (fgp6*) | 187 | us | " | " |
| | AMP WINDOW START (fgp7*) | 187 | us | " | " |
| | AMP WINDOW START (fgp8*) | 187 | us | " | " |
| | AMP WINDOW START (fgpn*) | 187 | us | " | " |
| | AMP WINDOW LENGTH | 25 | us | " | " |
| TRAVEL TIME WINDOW (NEAR) | TT WINDOW START (ttn*) | 160 | us | " | " |
| | TT WINDOW LENGTH | 500 | us | " | " |
| | FIRST BRK THRESHOLD (ttn*) | 4 | mV | " | " |
| RAL CASING PARAMETERS | PPT NEAR | 200.391 | us | " | " |
| RAL TOOL DELAY | TOOL DELAY (str1*) | -70 | us | " | " |
| | TOOL DELAY (str2*) | -70 | us | " | " |
| | TOOL DELAY (str3*) | -70 | us | " | " |
| | TOOL DELAY (str4*) | -70 | us | " | " |
| | TOOL DELAY (str5*) | -70 | us | " | " |
| | TOOL DELAY (str6*) | -70 | us | " | " |
| | TOOL DELAY (str7*) | -70 | us | " | " |
| | TOOL DELAY (str8*) | -70 | us | " | " |

| | | | | | |
|-----------------------|---------------------|-----|----|---|---|
| | TOOL DELAY (strn*) | -70 | us | " | " |
| BASELINE NOISE (NEAR) | NOISE WINDOW START | 125 | us | " | " |
| | NOISE WINDOW LENGTH | 25 | us | " | " |

PERCENT BOND CEMENT MAP

| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | INTERVAL (ft) | |
|-------------------------|---------------------|-------|-------|---------------|--------|
| RAL FREE PIPE AMPLITUDE | FREE AMP REC 1 | 81 | mV | TOP | BOTTOM |
| | FREE AMP REC 2 | 81 | mV | " | " |
| | FREE AMP REC 3 | 81 | mV | " | " |
| | FREE AMP REC 4 | 81 | mV | " | " |
| | FREE AMP REC 5 | 81 | mV | " | " |
| | FREE AMP REC 6 | 81 | mV | " | " |
| | FREE AMP REC 7 | 81 | mV | " | " |
| | FREE AMP REC 8 | 81 | mV | " | " |
| RAL FULL BOND AMPLITUDE | FULL BOND AMP REC 1 | 2 | mV | " | " |
| | FULL BOND AMP REC 2 | 2 | mV | " | " |
| | FULL BOND AMP REC 3 | 2 | mV | " | " |
| | FULL BOND AMP REC 4 | 2 | mV | " | " |
| | FULL BOND AMP REC 5 | 2 | mV | " | " |
| | FULL BOND AMP REC 6 | 2 | mV | " | " |
| | FULL BOND AMP REC 7 | 2 | mV | " | " |
| | FULL BOND AMP REC 8 | 2 | mV | " | " |

CURVE DESCRIPTION REPORT

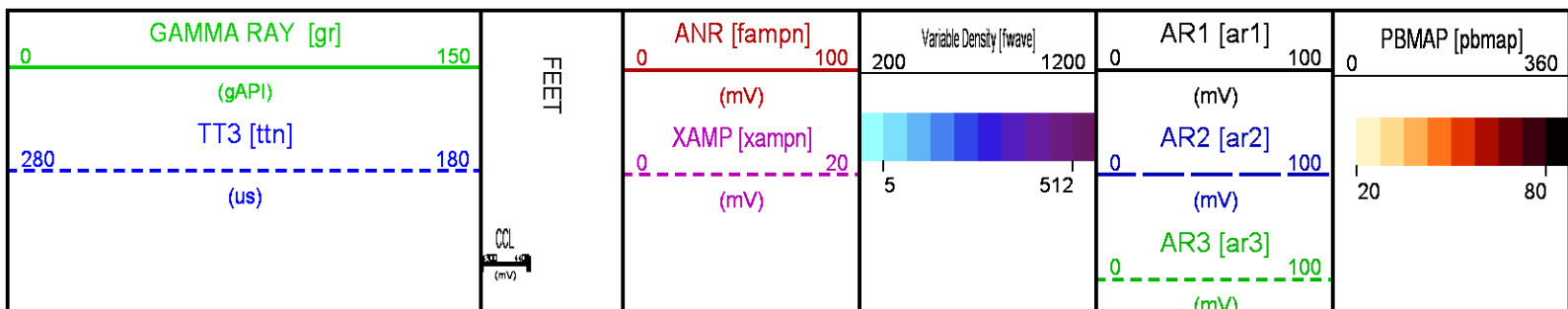
| CURVE NAME | CREATION DATE | CURVE DESCRIPTION |
|------------|----------------------|---|
| F1:AR1 | Nov 19 10:54:12 2014 | FIXED GATE AMPLITUDE T-R1 |
| F1:AR2 | Nov 19 10:54:12 2014 | FIXED GATE AMPLITUDE T-R2 |
| F1:AR3 | Nov 19 10:54:12 2014 | FIXED GATE AMPLITUDE T-R3 |
| F1:AR4 | Nov 19 10:54:12 2014 | FIXED GATE AMPLITUDE T-R4 |
| F1:AR5 | Nov 19 10:54:12 2014 | FIXED GATE AMPLITUDE T-R5 |
| F1:AR6 | Nov 19 10:54:12 2014 | FIXED GATE AMPLITUDE T-R6 |
| F1:AR7 | Nov 19 10:54:12 2014 | FIXED GATE AMPLITUDE T-R7 |
| F1:AR8 | Nov 19 10:54:12 2014 | FIXED GATE AMPLITUDE T-R8 |
| F1:CCL | Nov 19 10:54:12 2014 | CASING COLLAR LOCATOR |
| F1:FAMPN | Nov 19 10:54:12 2014 | FIXED GATE AMPLITUDE NEAR RECEIVER |
| F1:FWAVE | Nov 19 10:54:12 2014 | FAR WAVE FORM |
| F1:GR | Nov 19 10:54:12 2014 | GAMMA RAY |
| F1:PBMAP | Nov 19 10:54:12 2014 | PERCENT BOND CEMENT MAP |
| F1:TTN | Nov 19 10:54:12 2014 | TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER |
| F1:XAMPN | Nov 19 10:54:12 2014 | FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE |

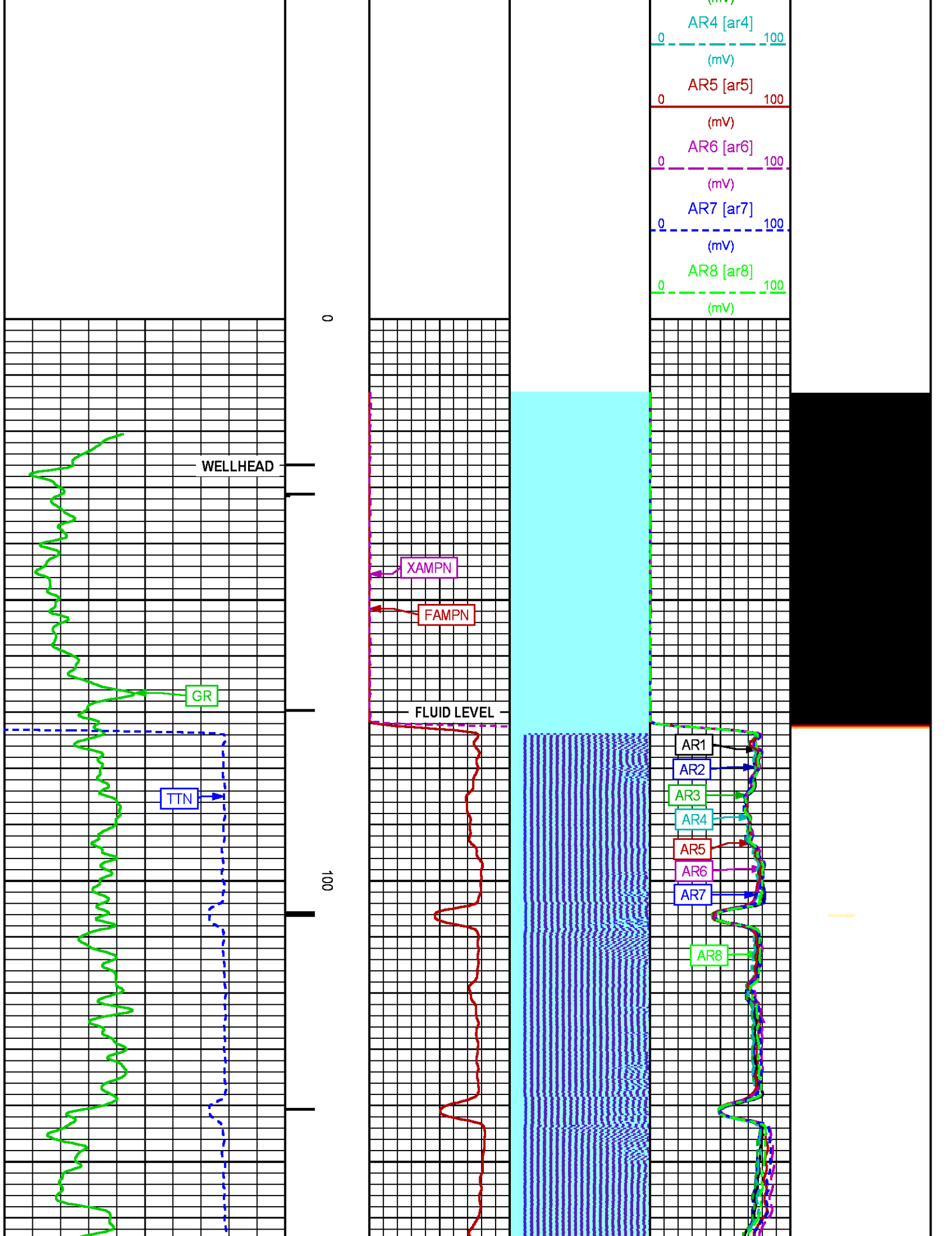
CURVE MEASURE POINT OFFSET

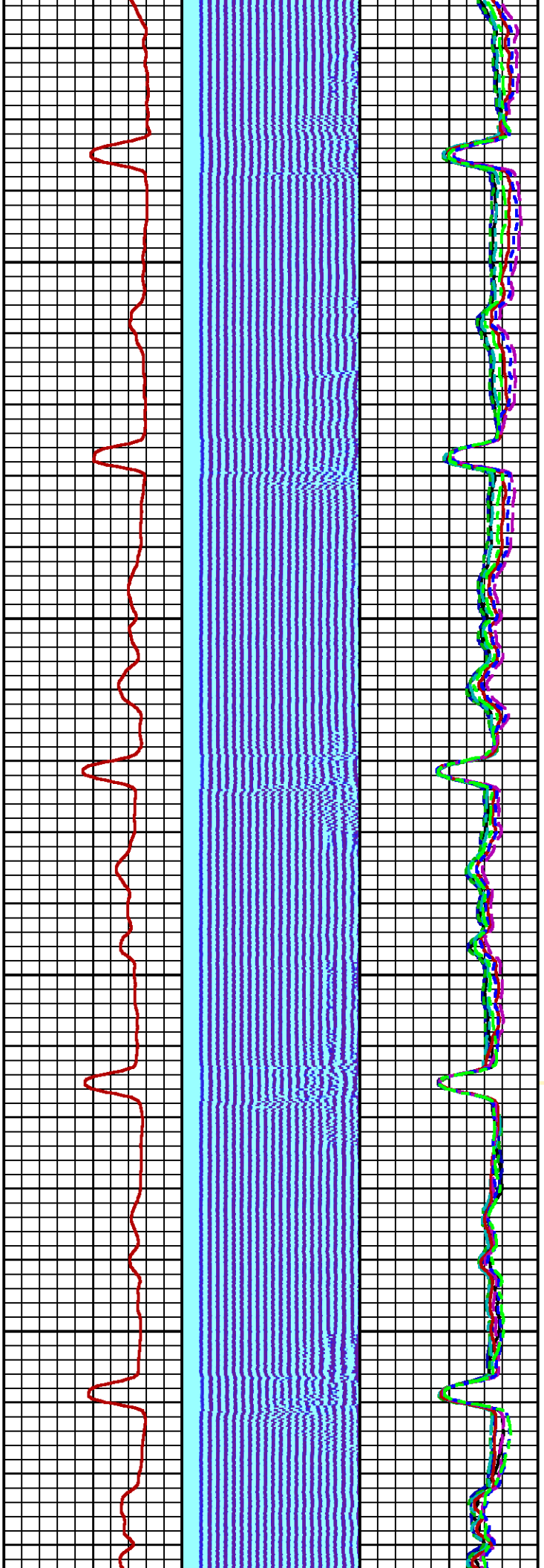
| CURVE | OFFSET (ft) | CURVE | OFFSET (ft) | CURVE | OFFSET (ft) | CURVE | OFFSET (ft) |
|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| AR1 | 13.75 | AR5 | 13.75 | CCL | 8.50 | XAMPN | 13.75 |
| AR2 | 13.75 | AR6 | 13.75 | FAMPN | 13.75 | | |
| AR3 | 13.75 | AR7 | 13.75 | GR | 6.50 | | |
| AR4 | 13.75 | AR8 | 13.75 | TTN | 13.75 | | |

Presentation : HL6670:/dat1a/CH092541/43CBL_MAIN_SECONDARY.fvpdf [5"/100' Scale]
Plot Interval : 0 - 7218 Feet

Data File 1 : F1 : HL6670:/dat1a/CH092541/43CBL_MAIN.txt
Created On : Nov 19 10:54:12 2014
Company : WPX ENERGY
Well : GM 43-12
Field : GRAND VALLEY
File Interval : 12 - 7218.25 Feet
OCT : n012e

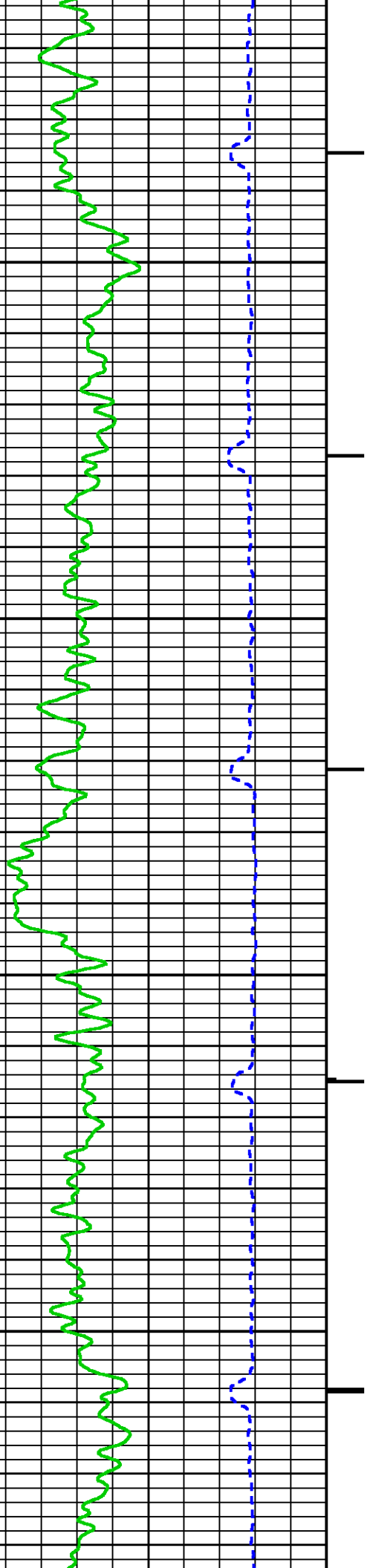


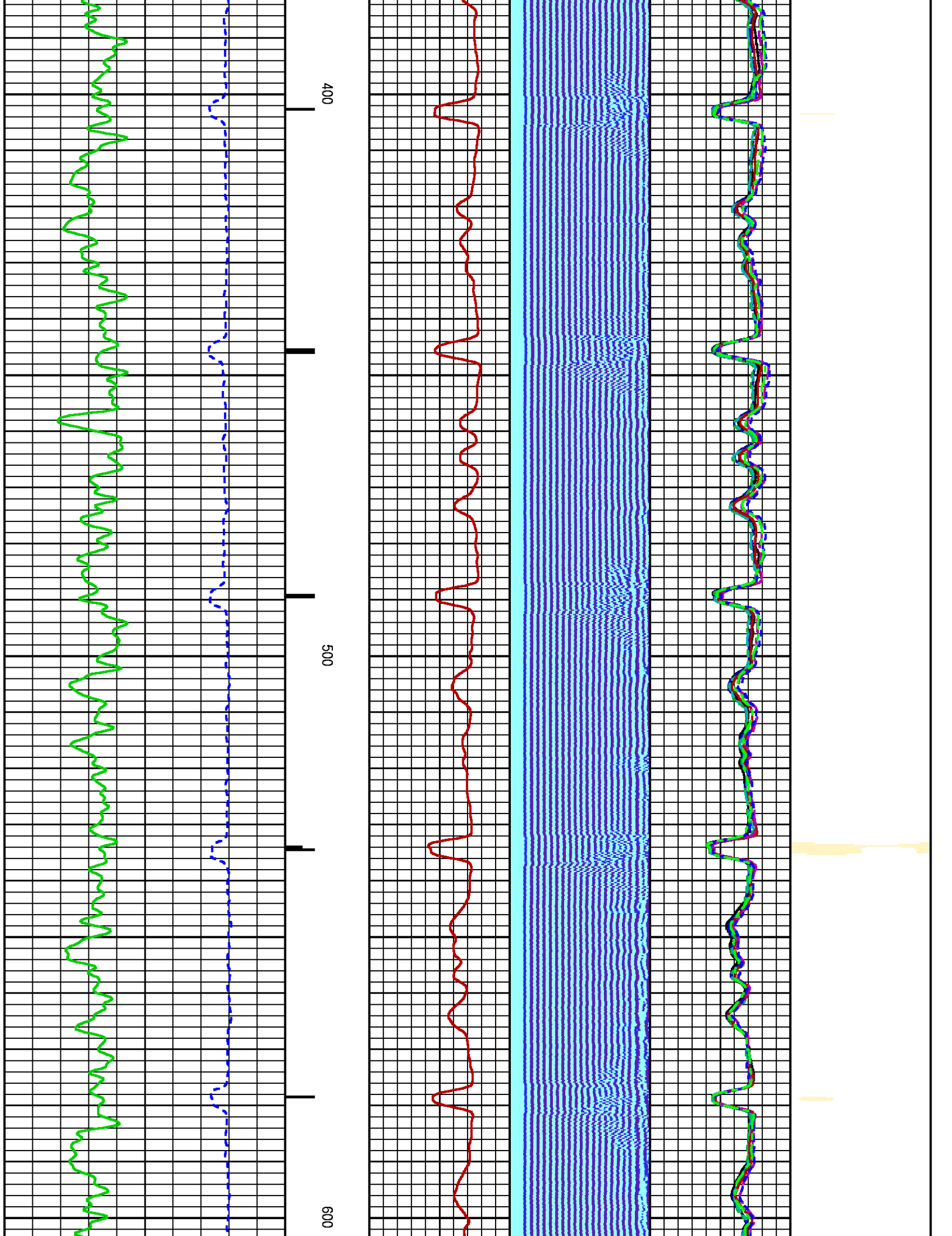


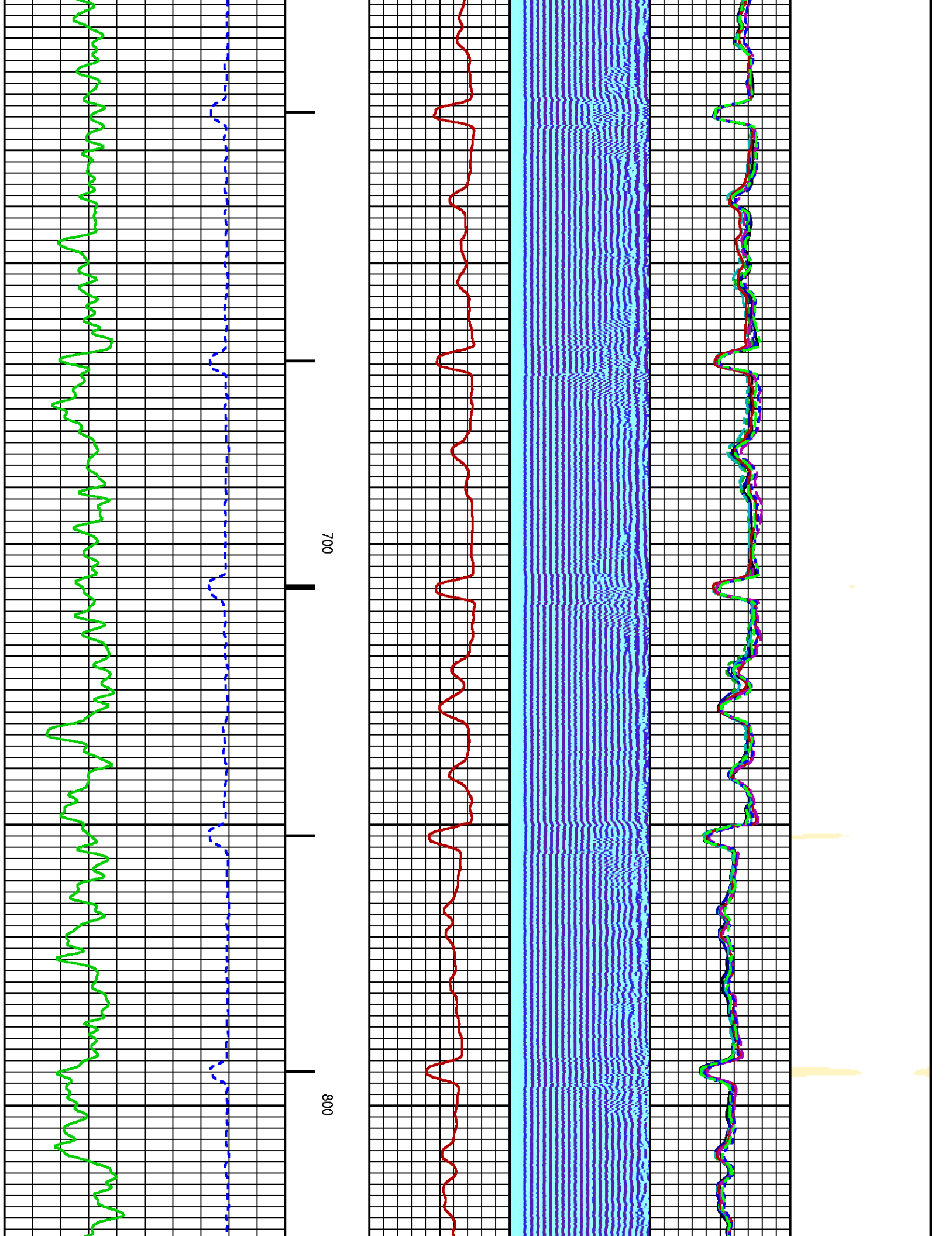


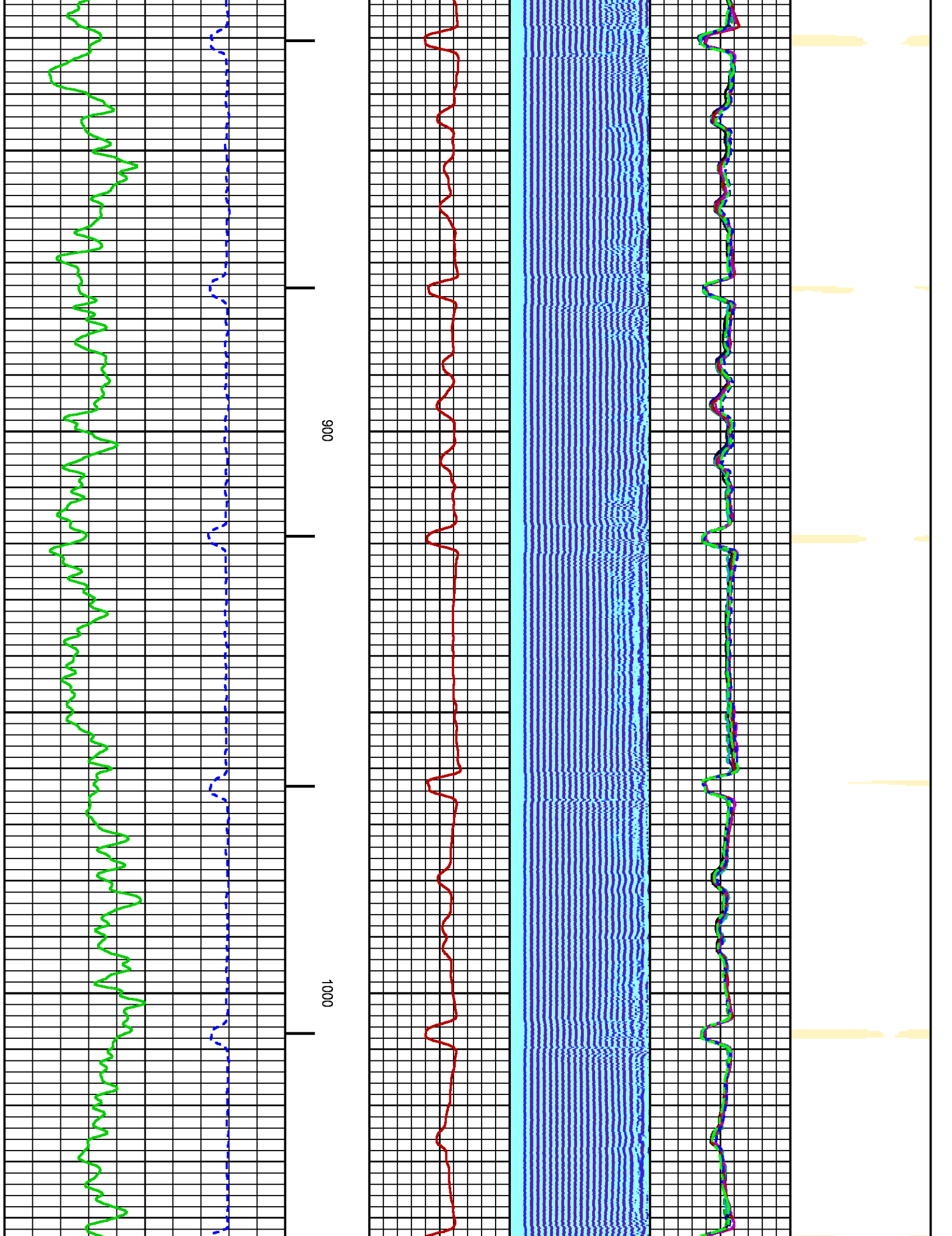
200

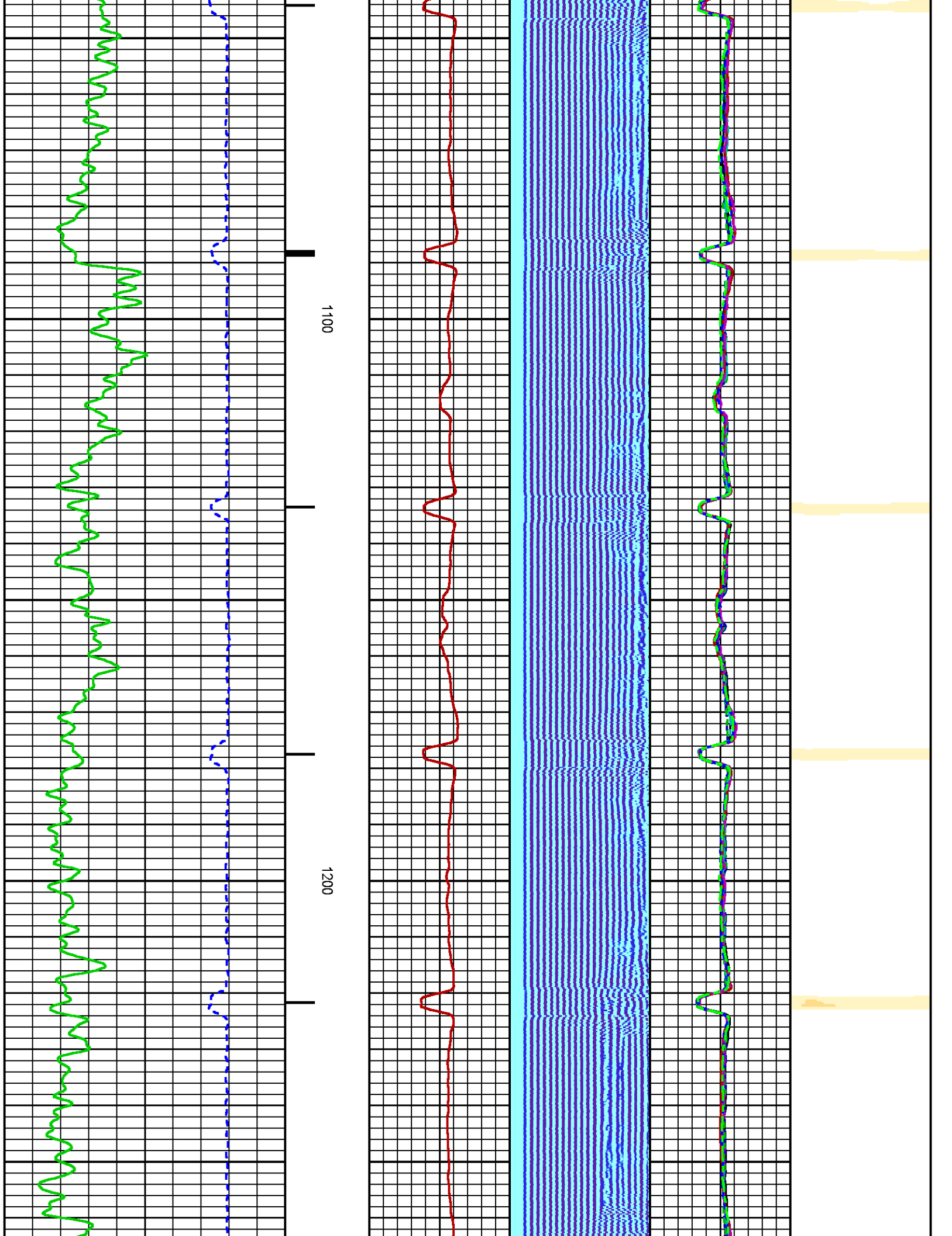
300

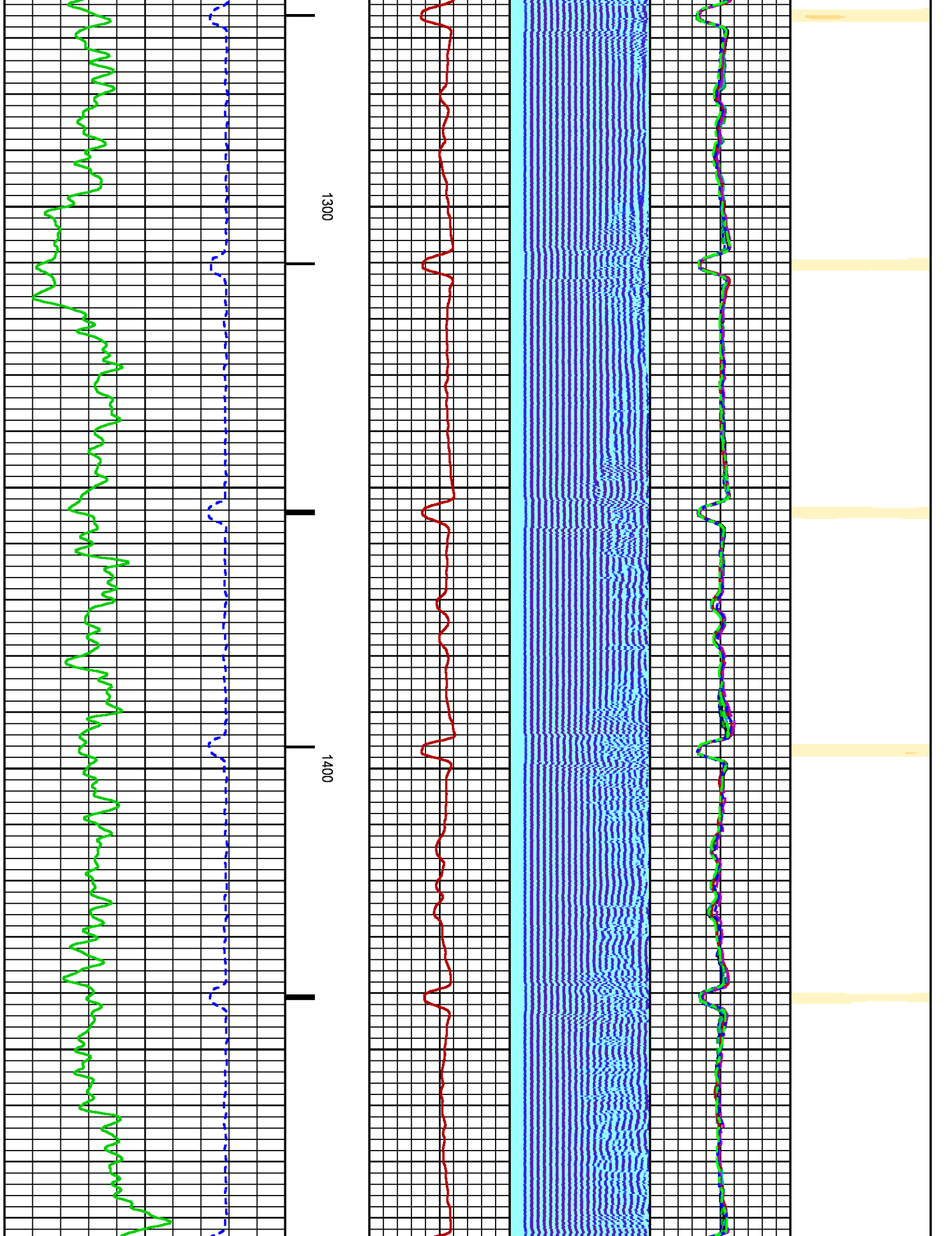


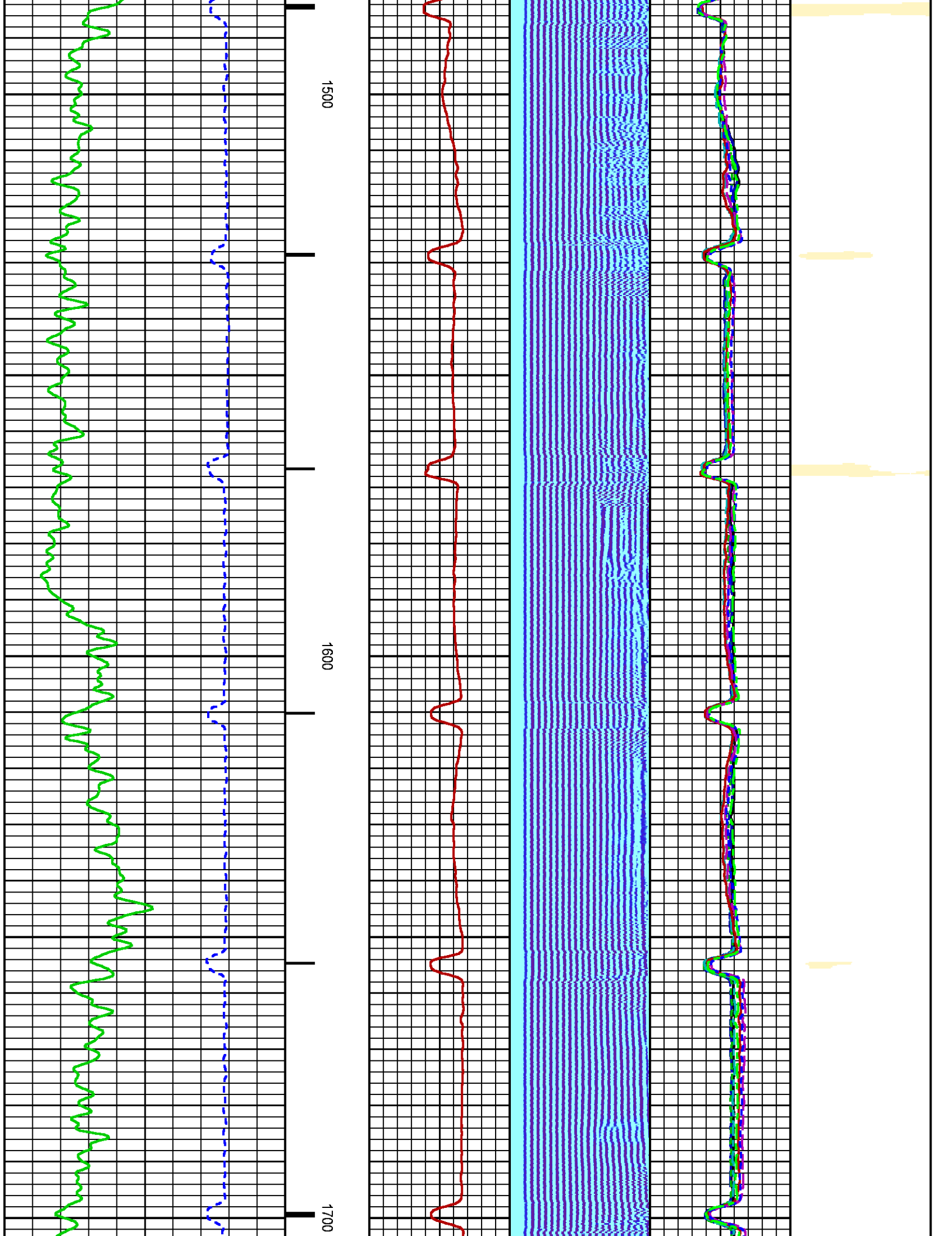


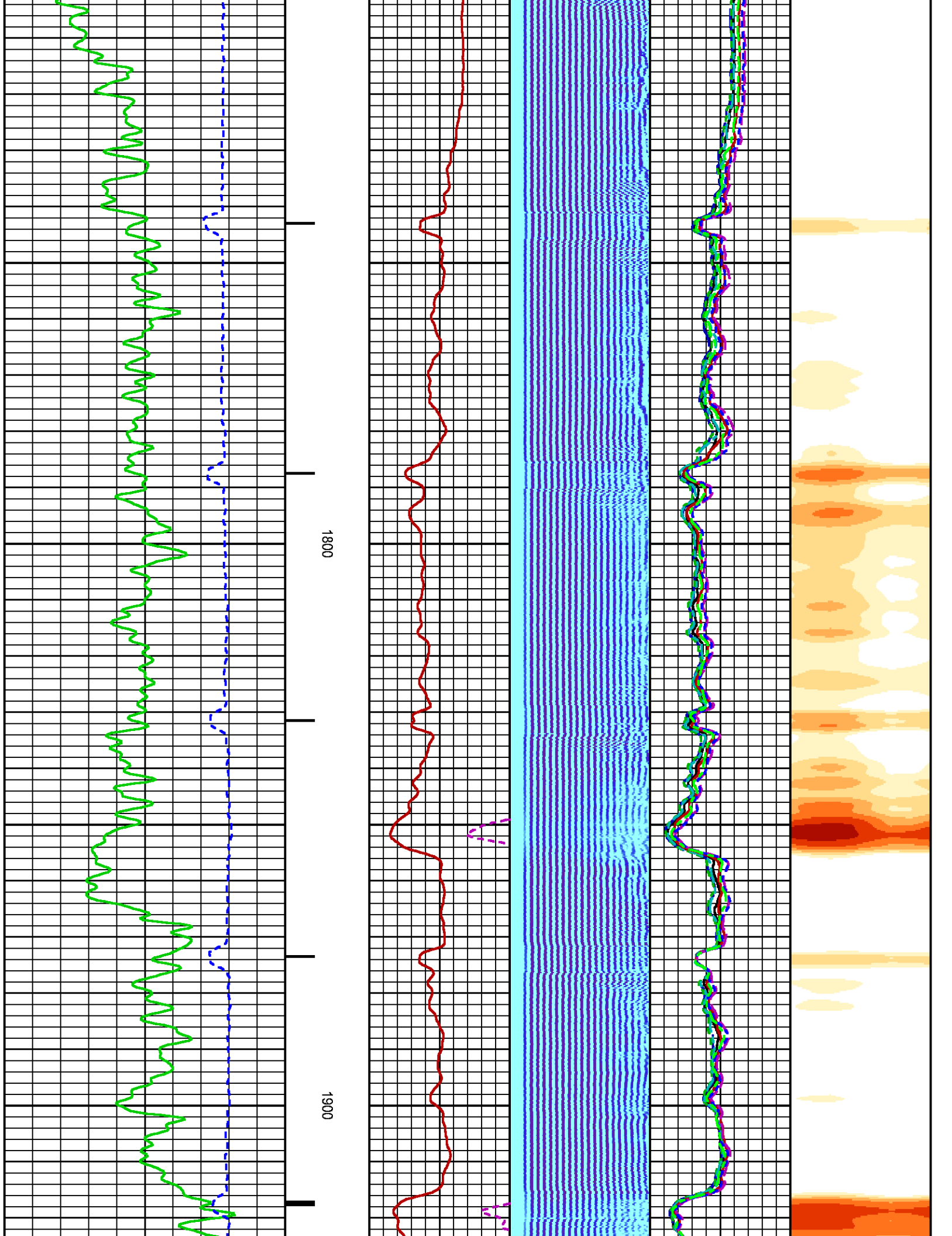


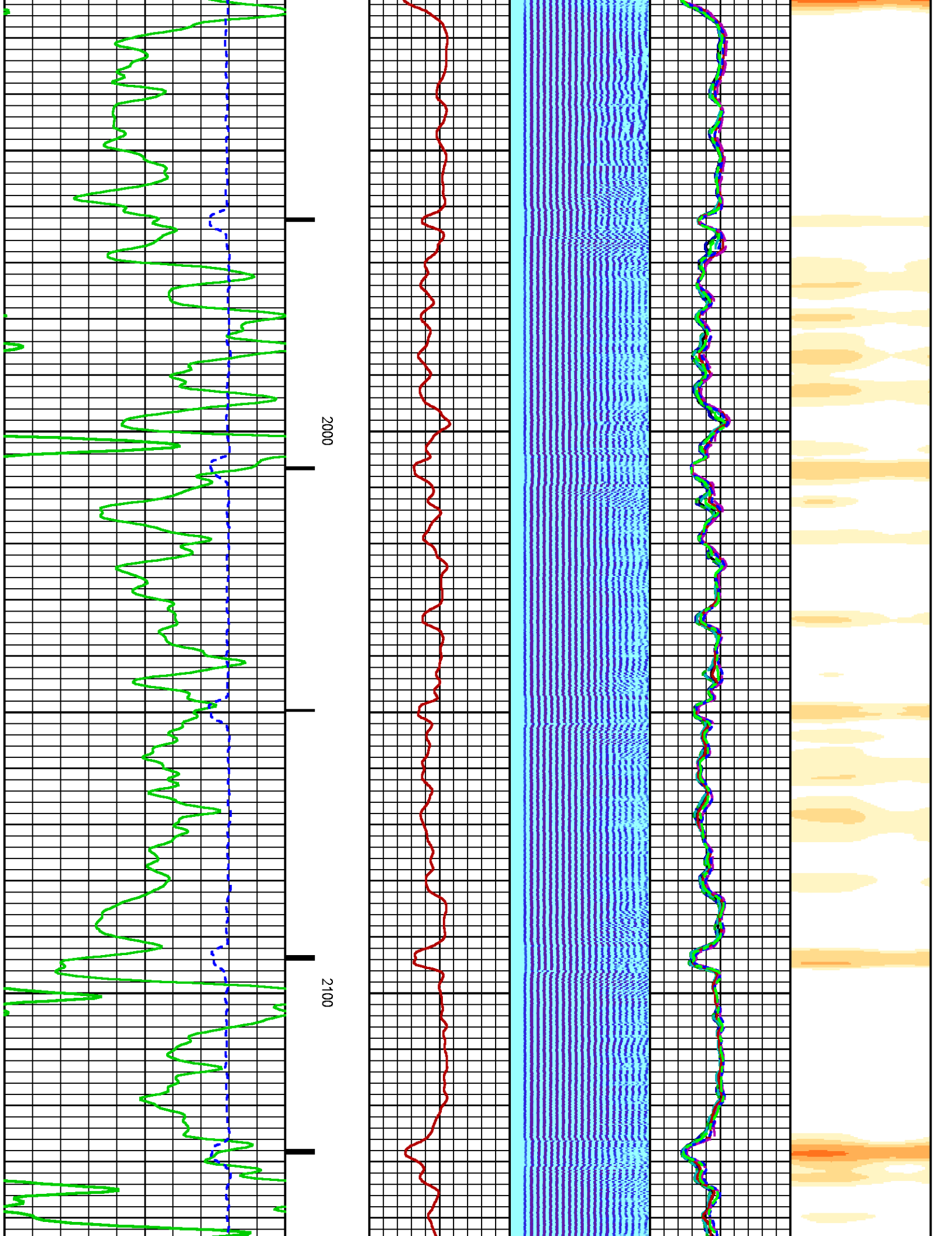


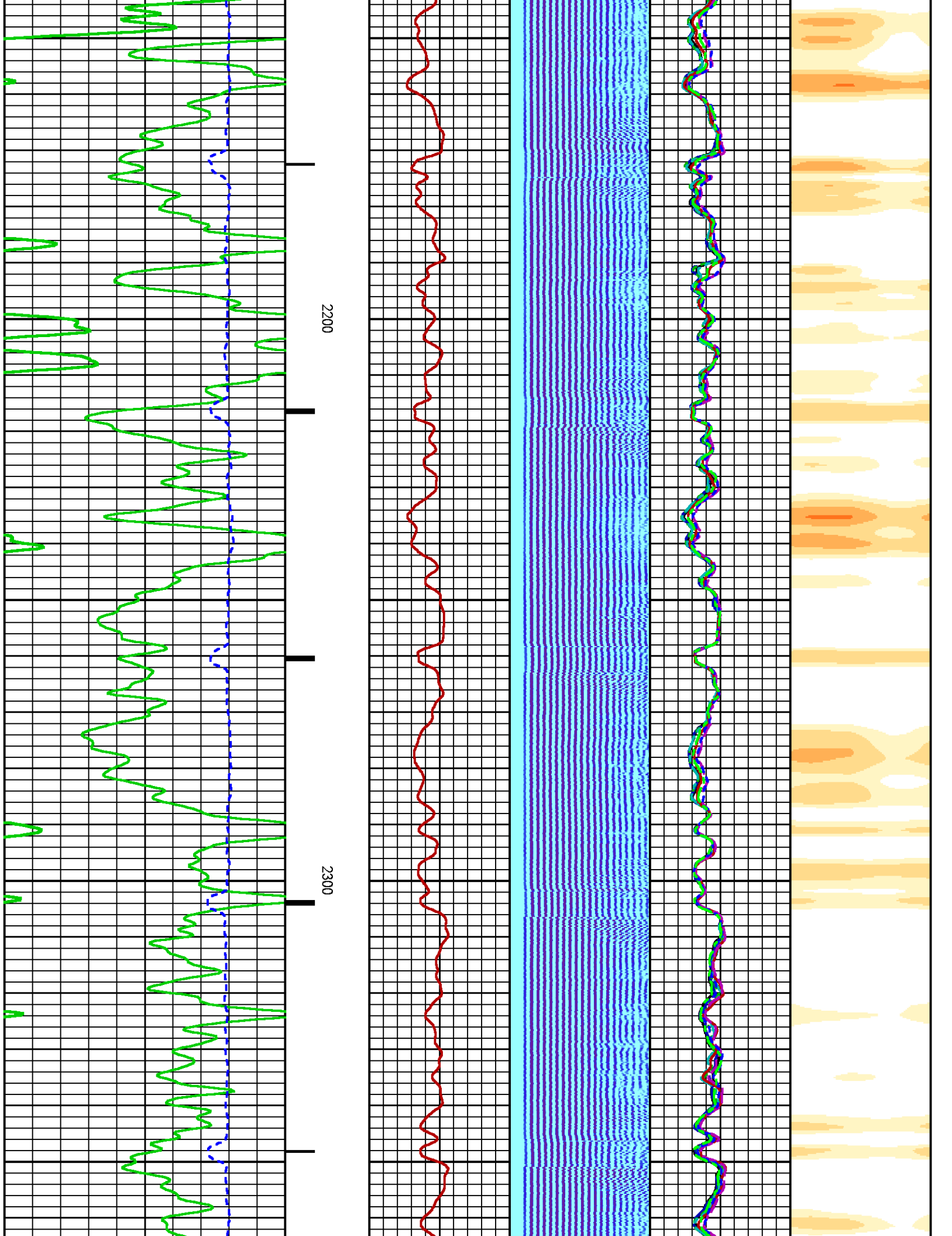


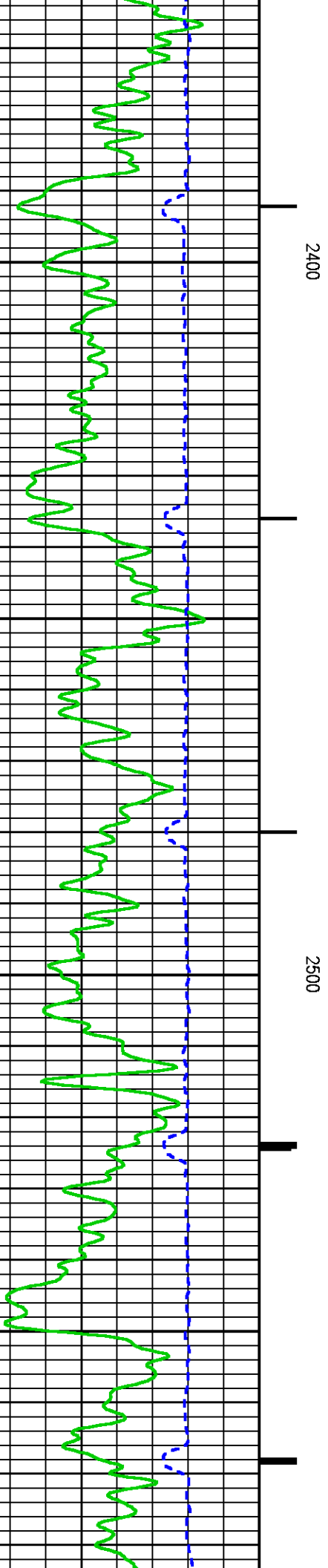
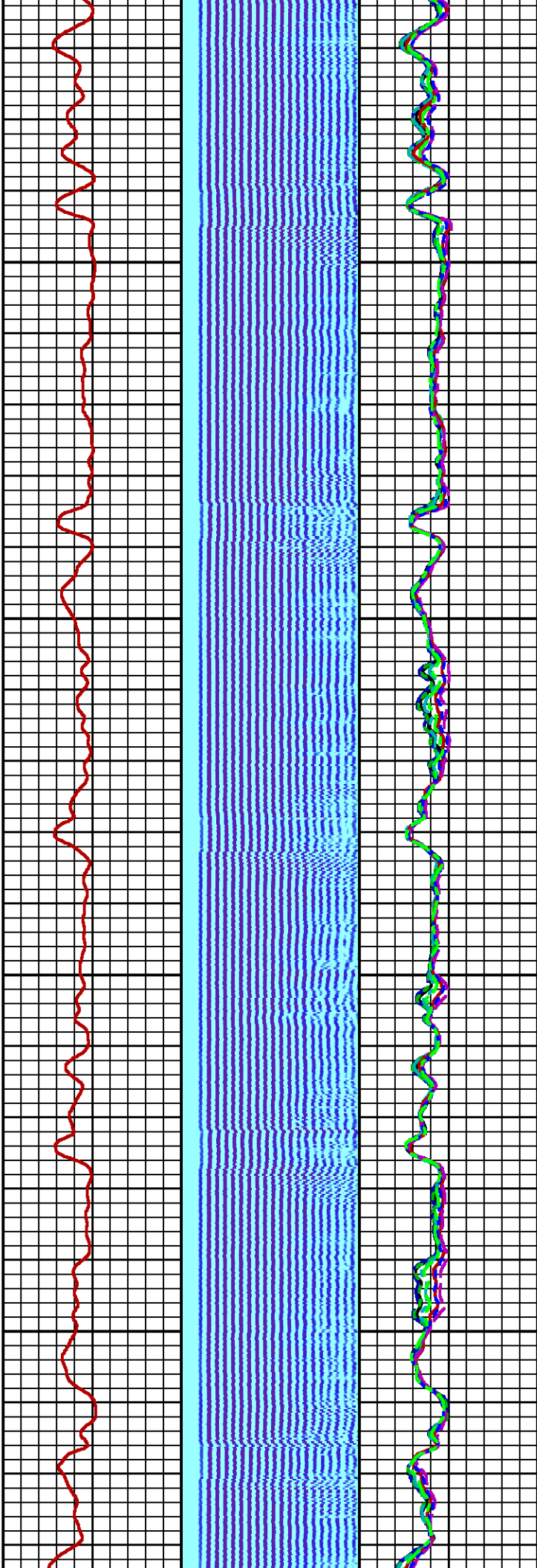


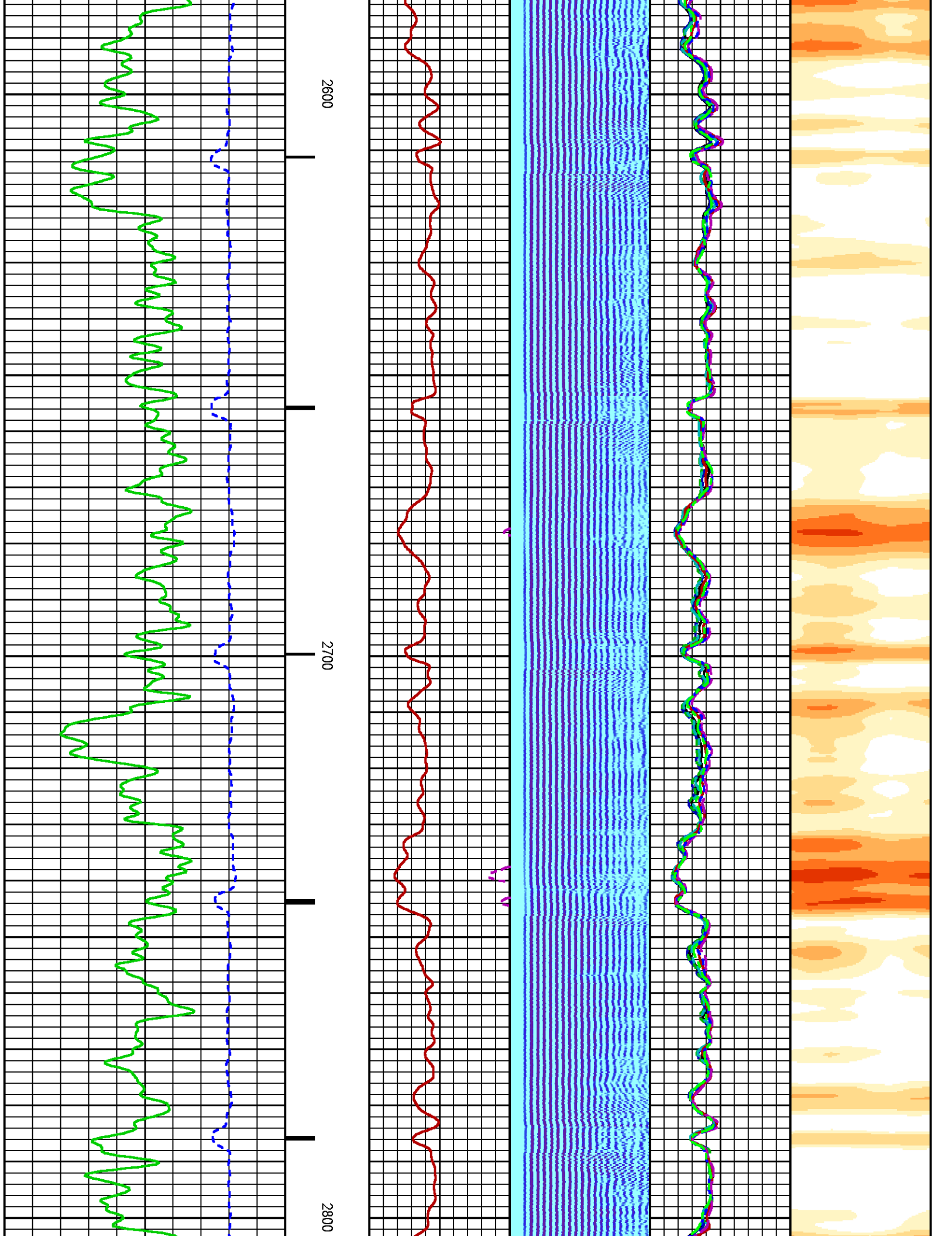


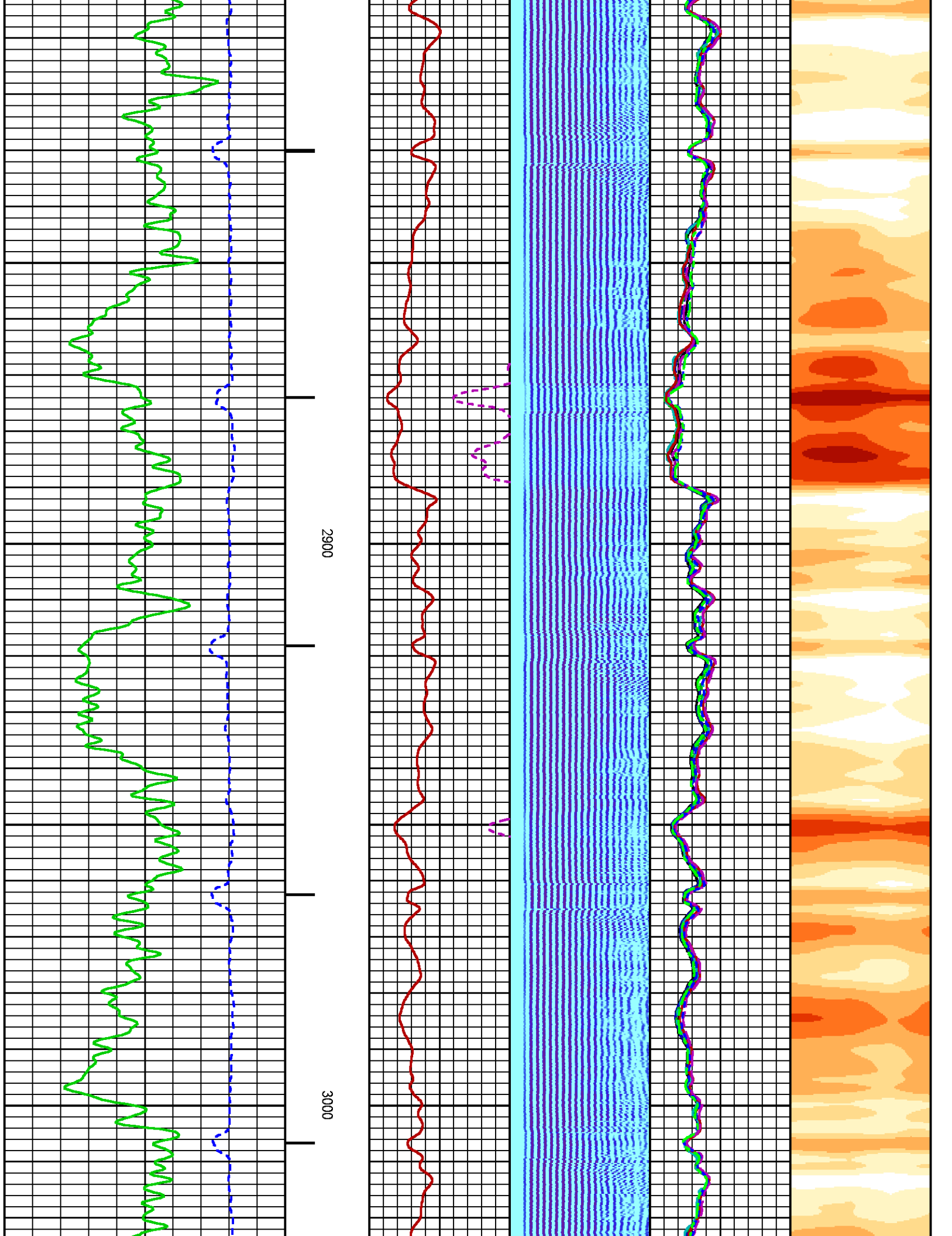


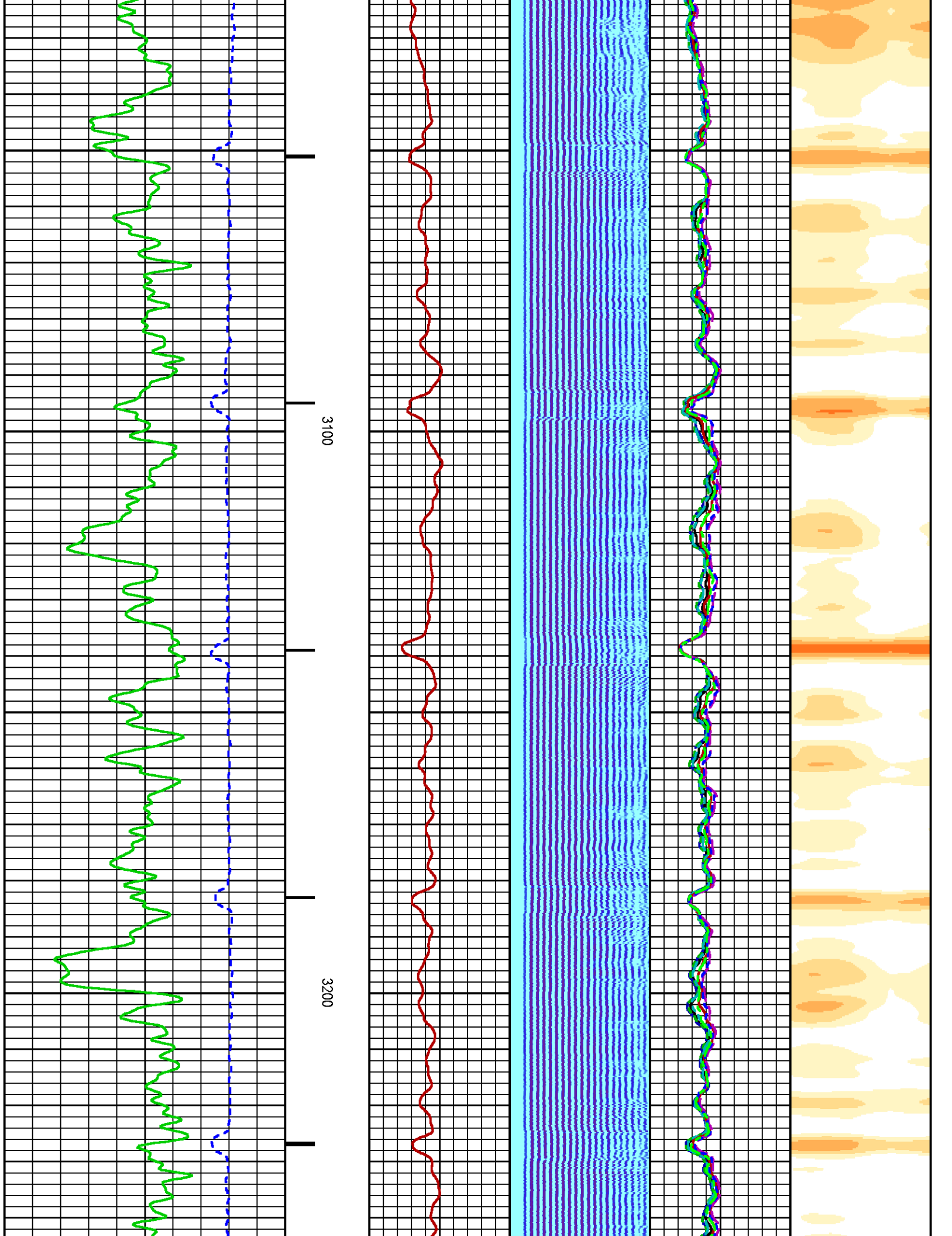


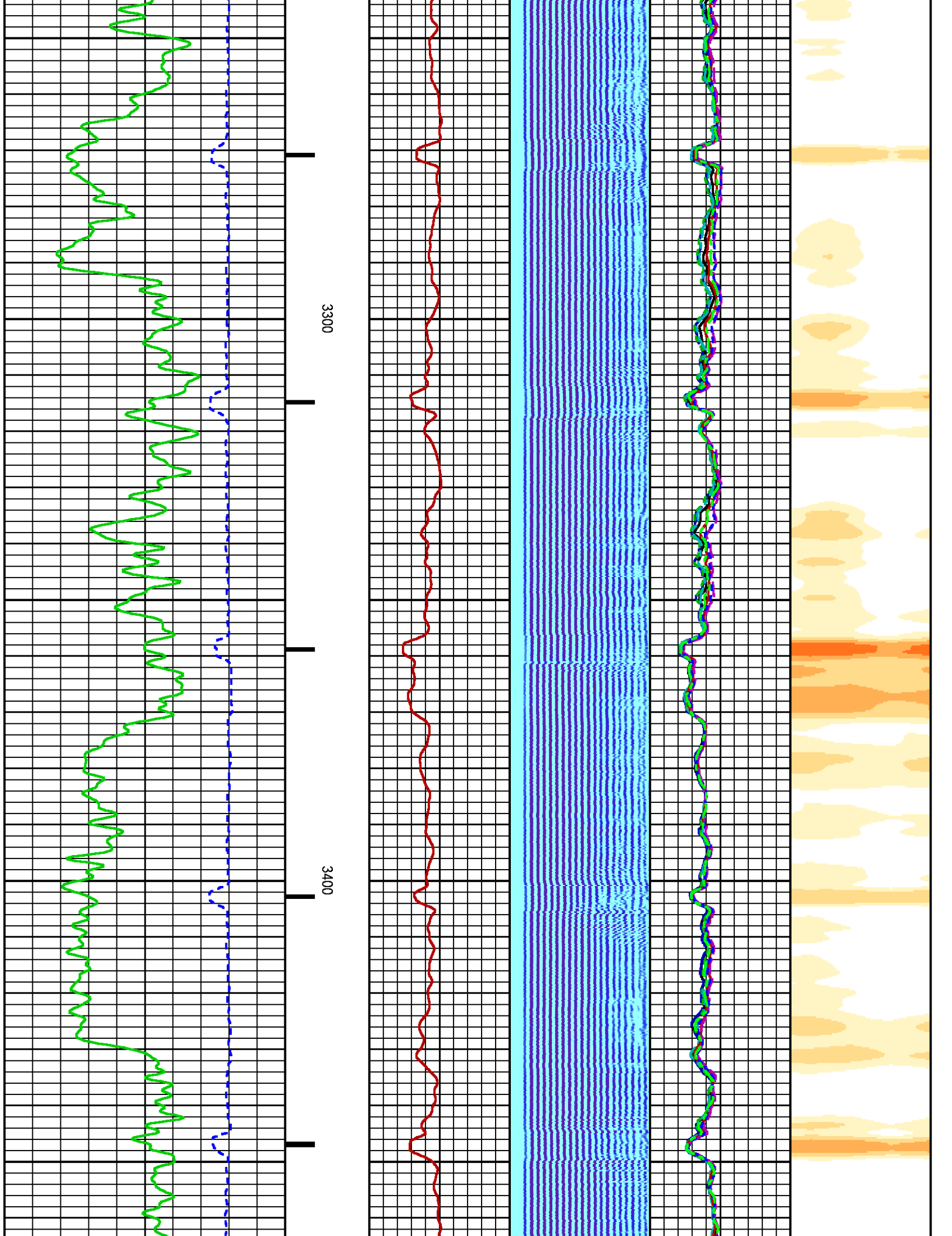


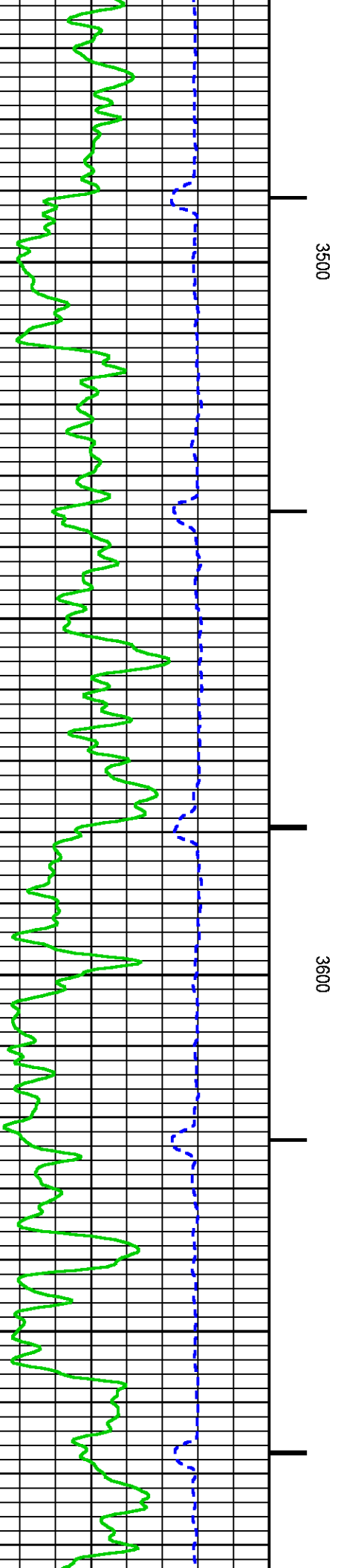
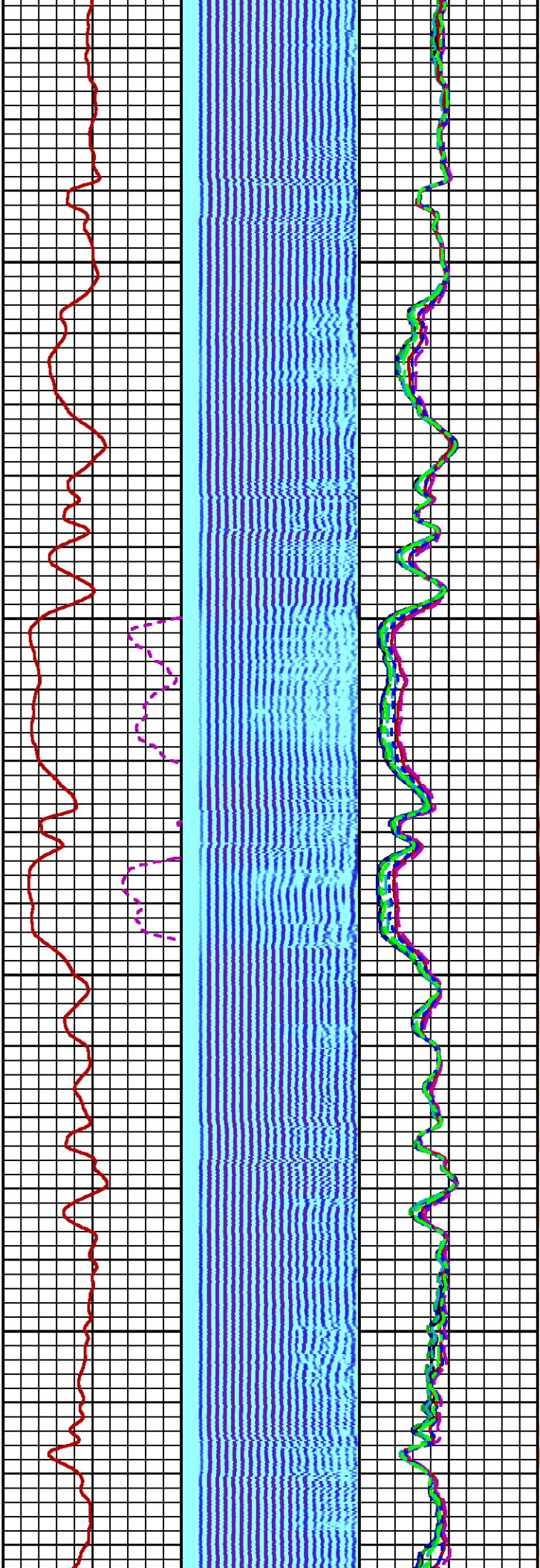
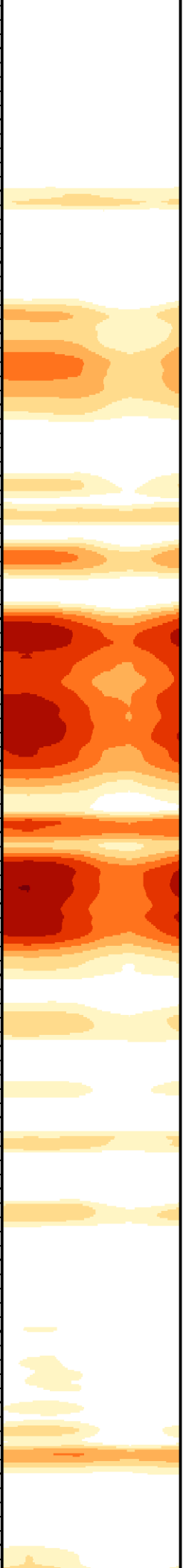


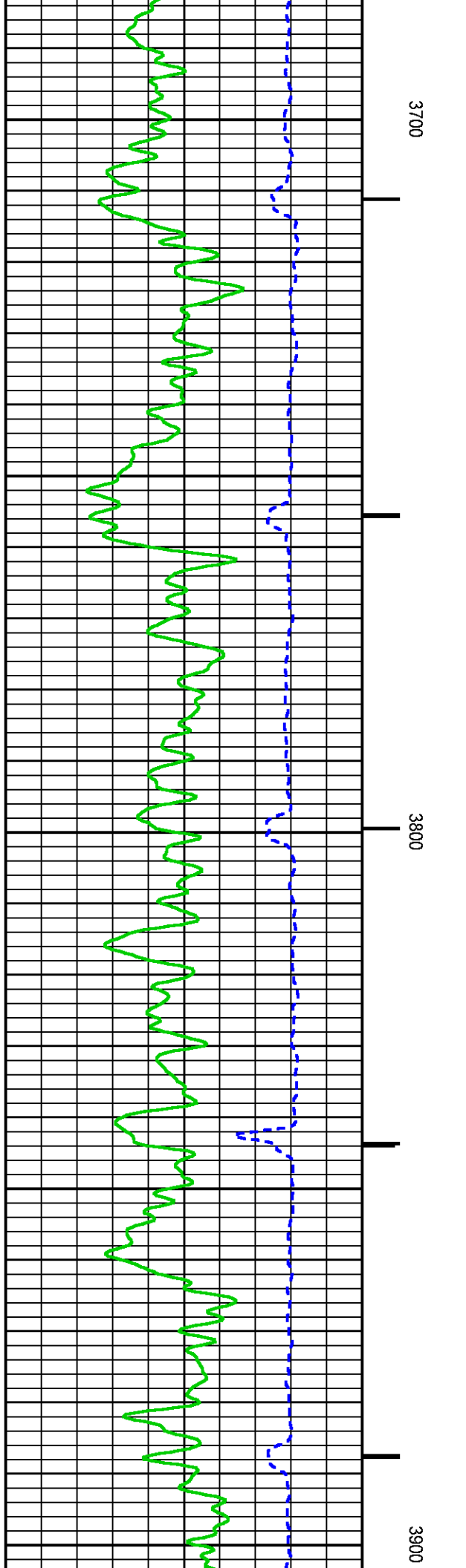
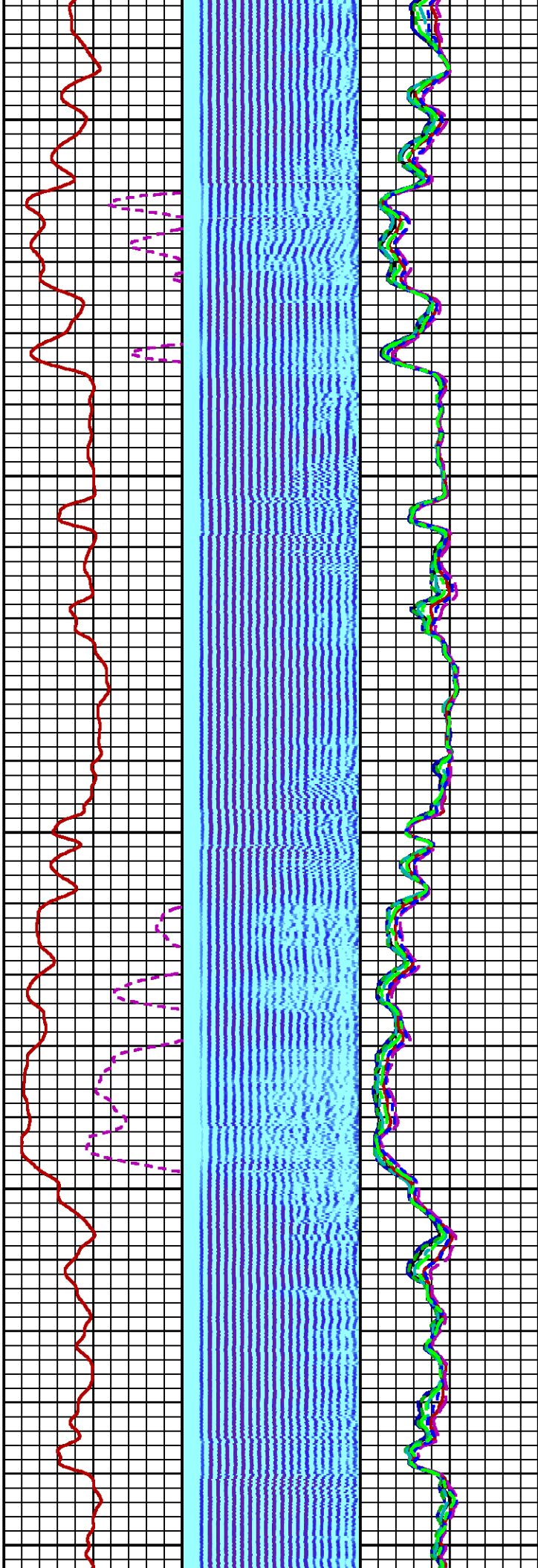
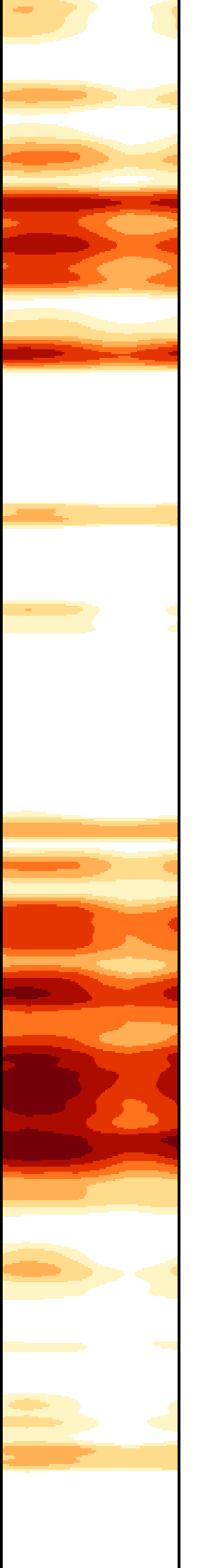


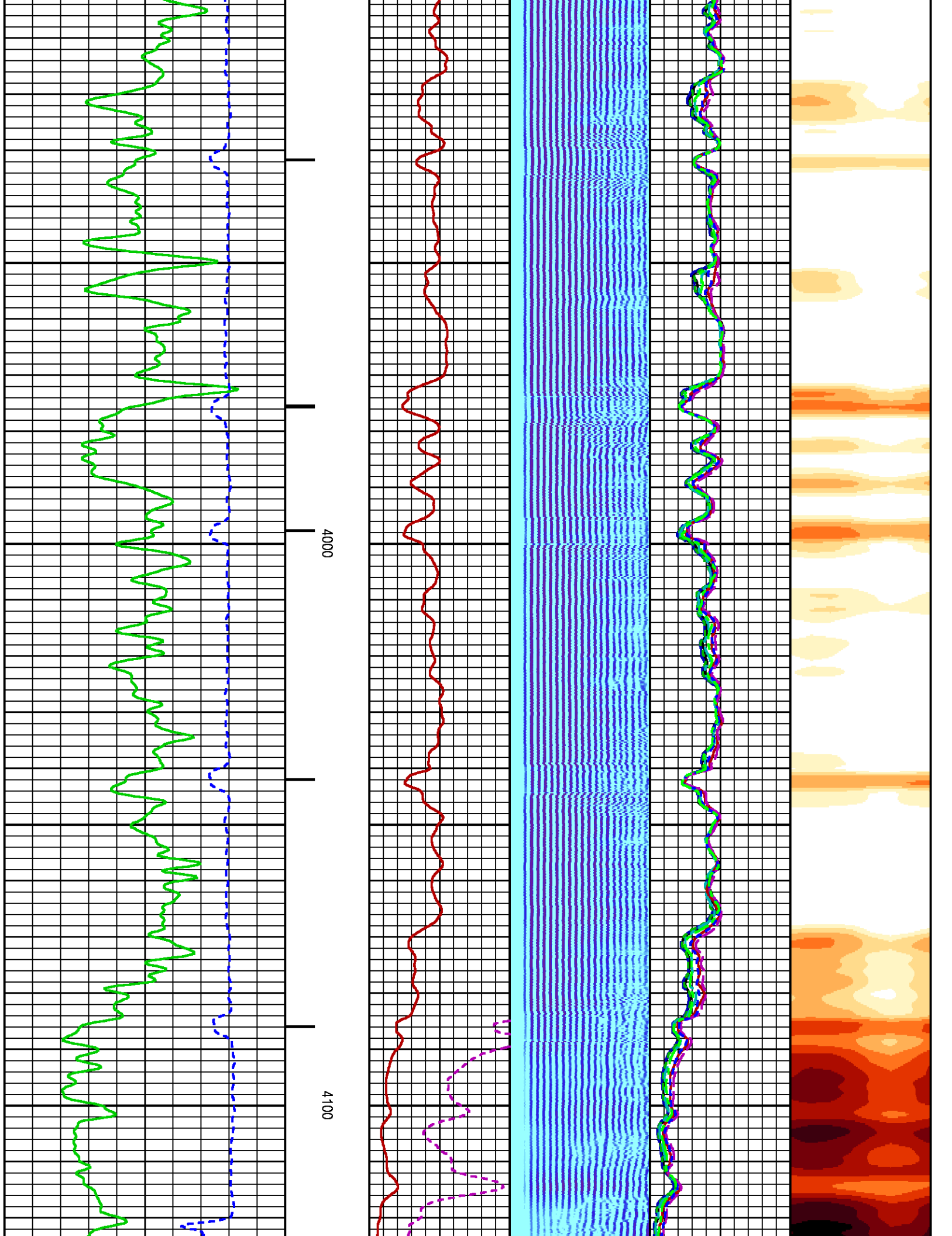


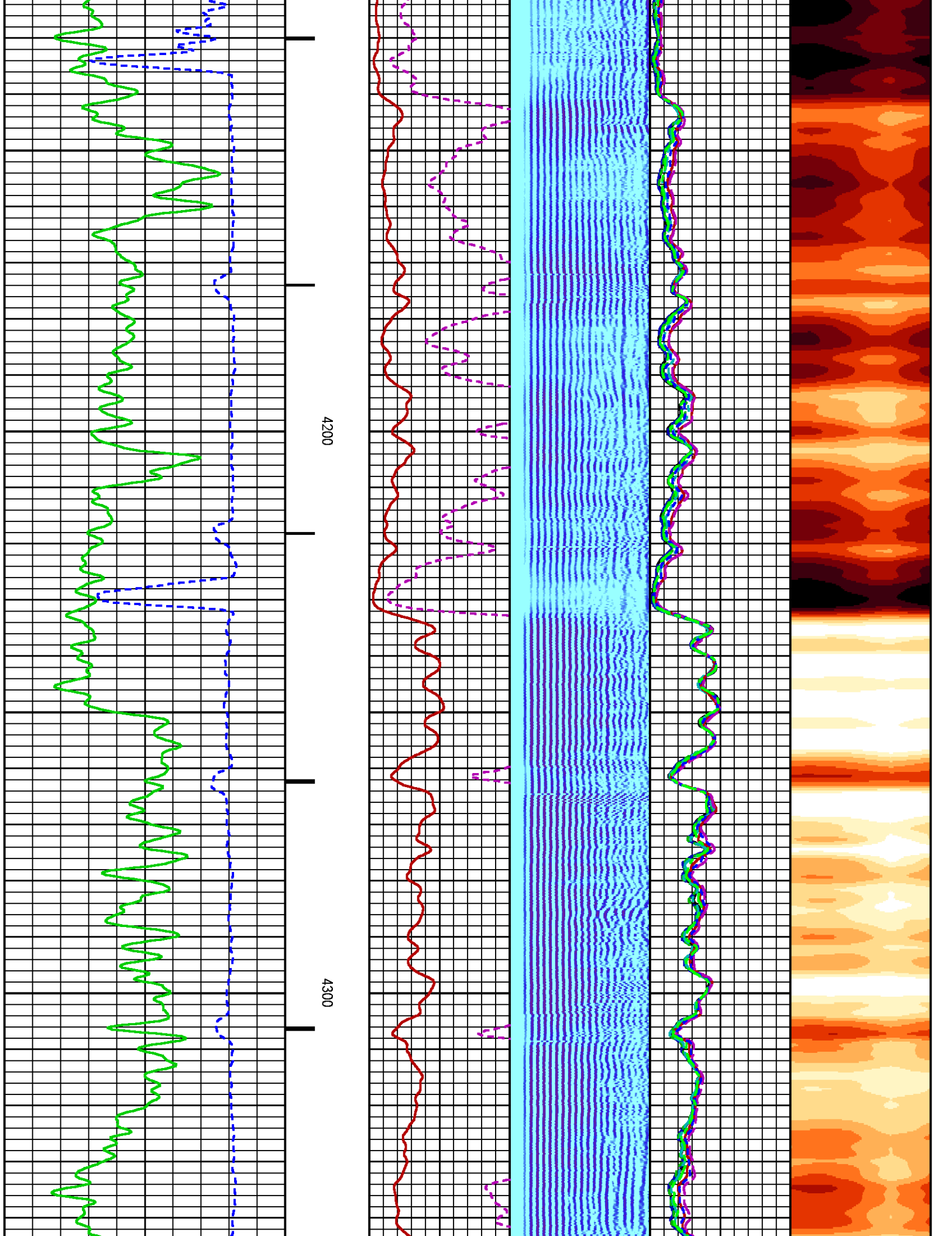


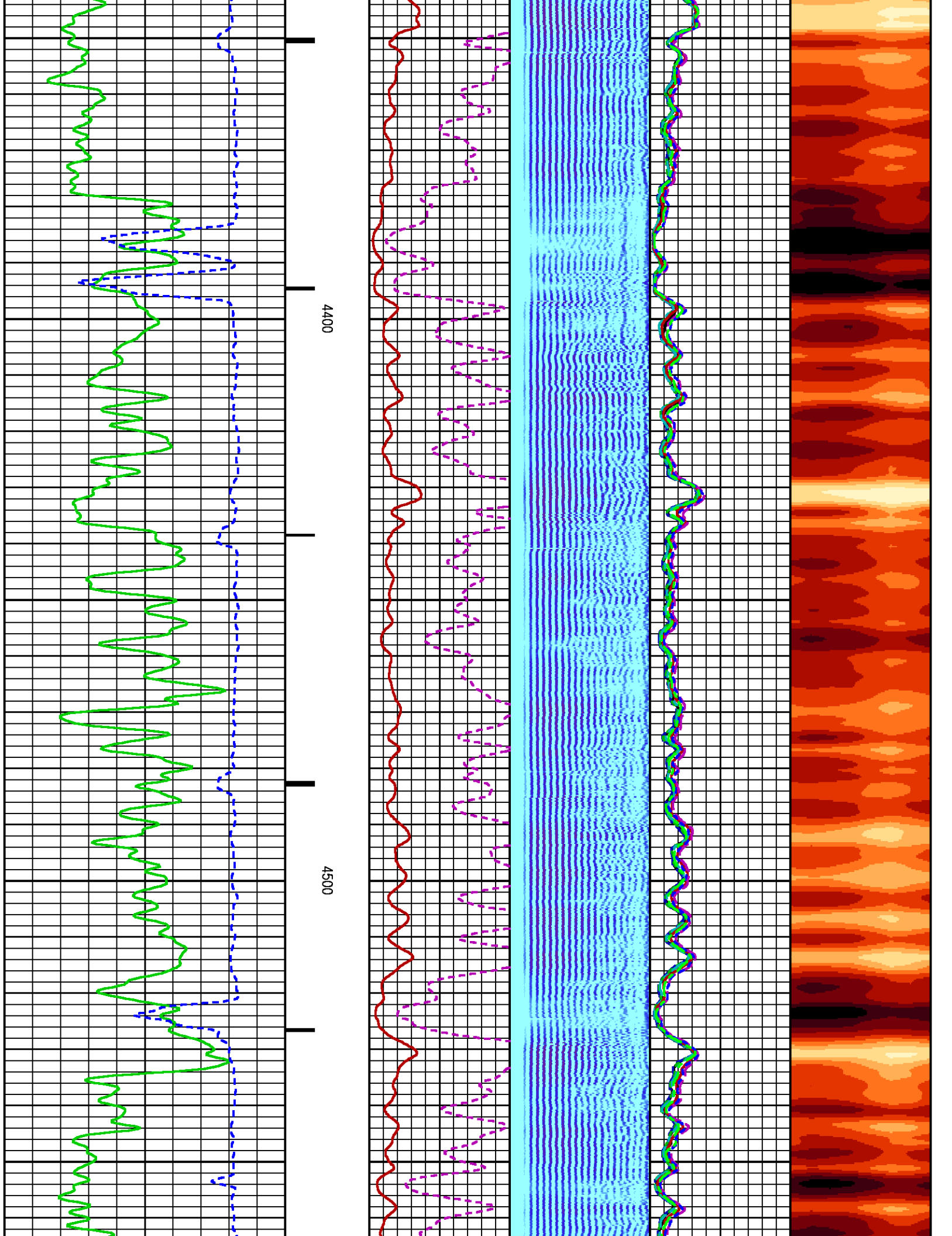


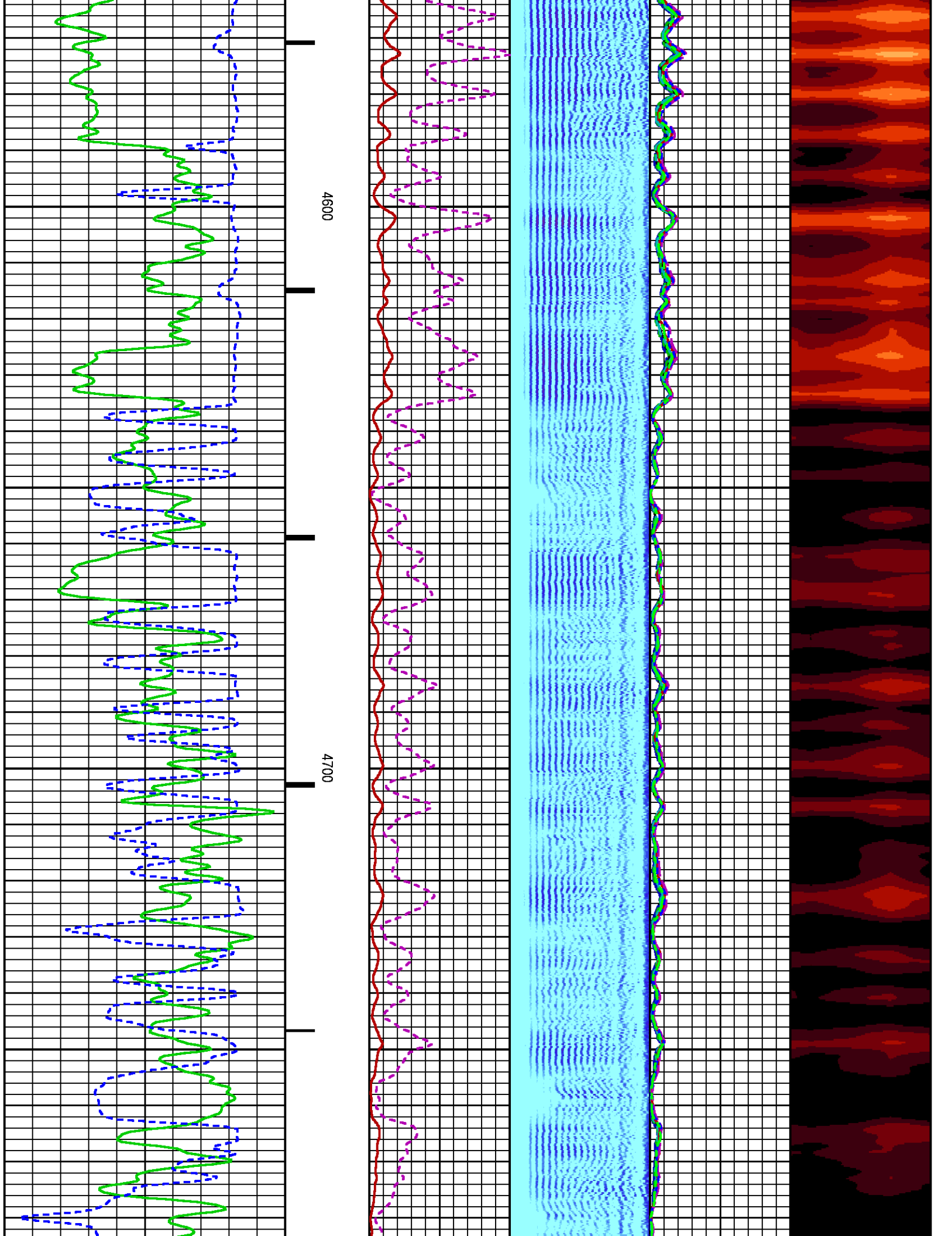


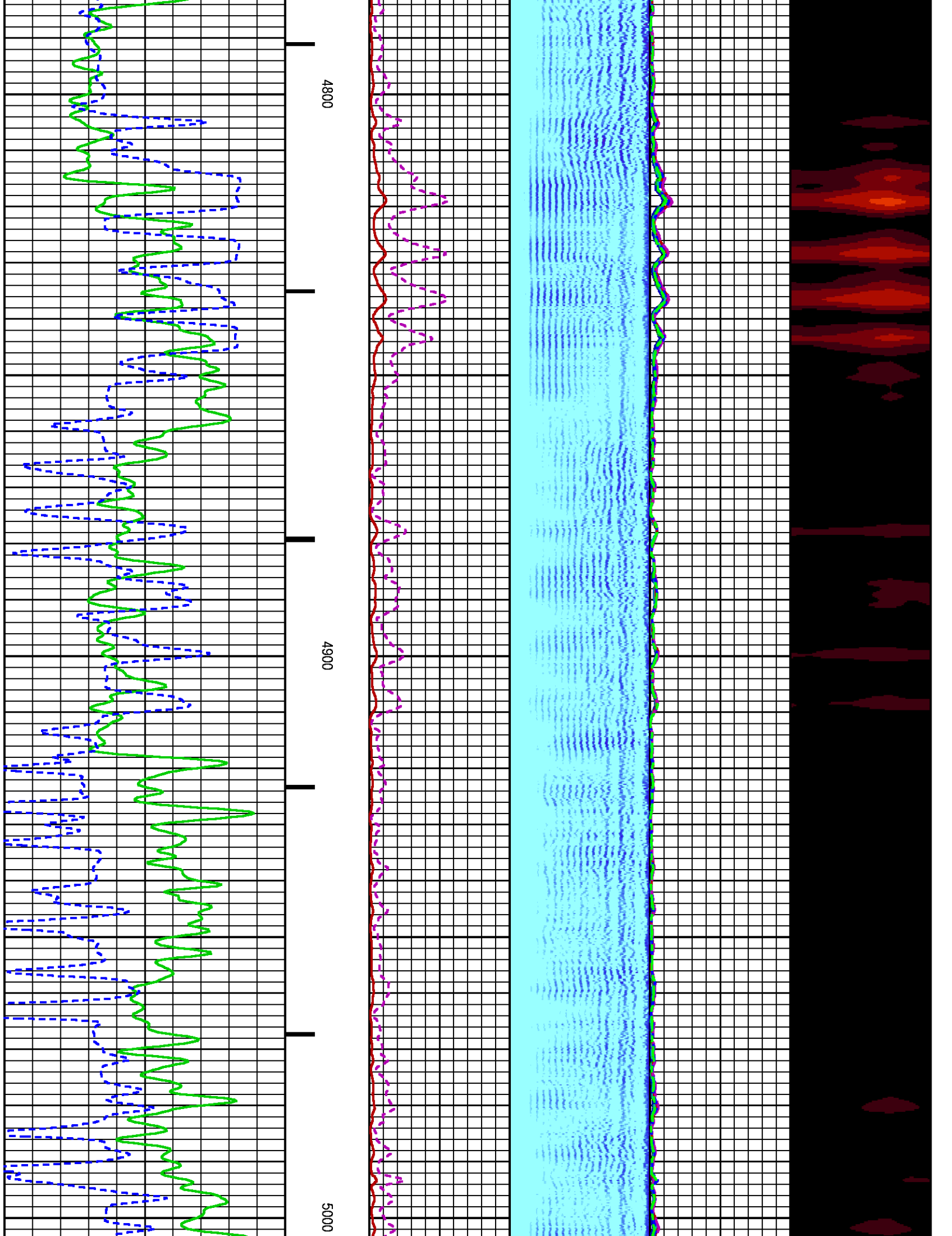


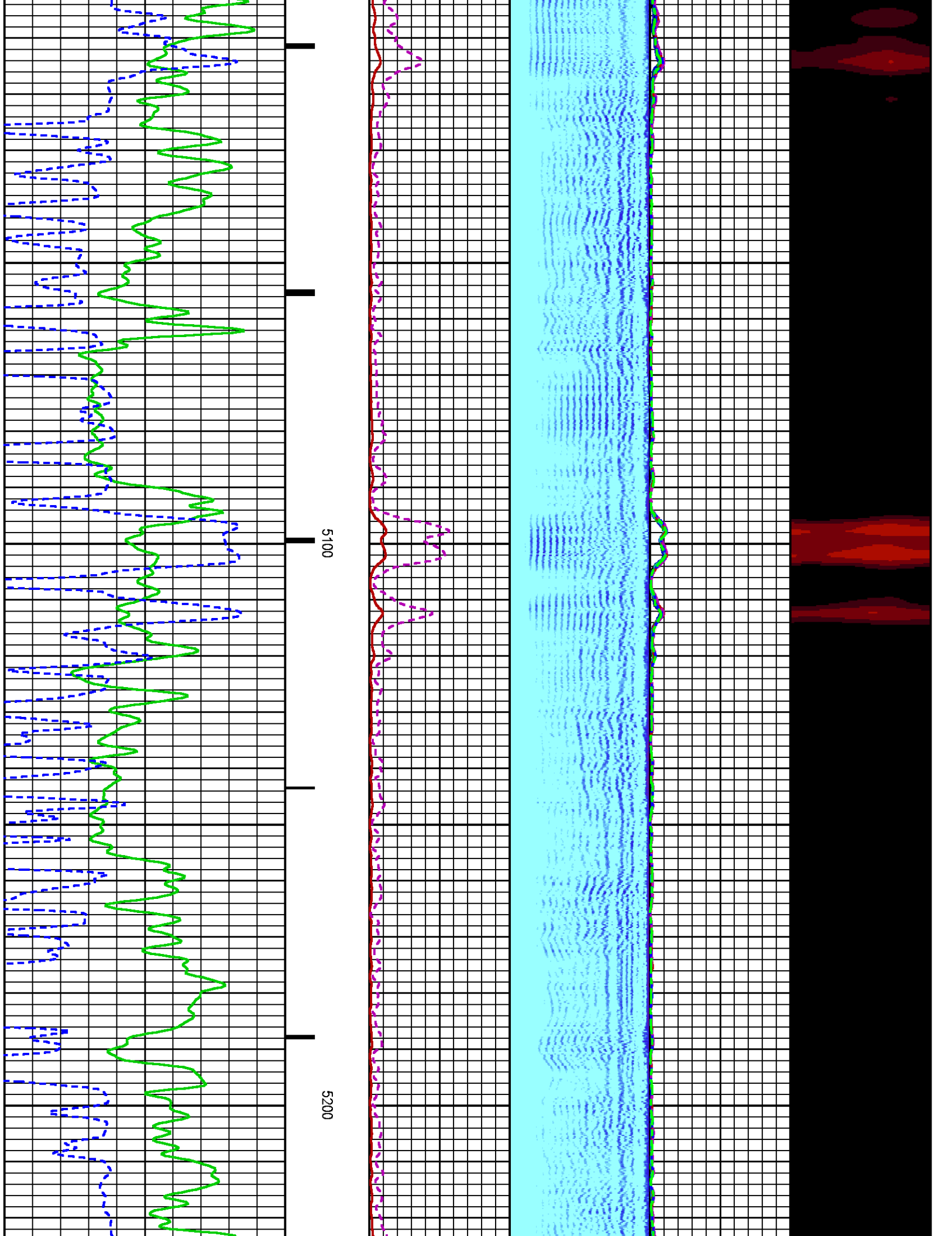


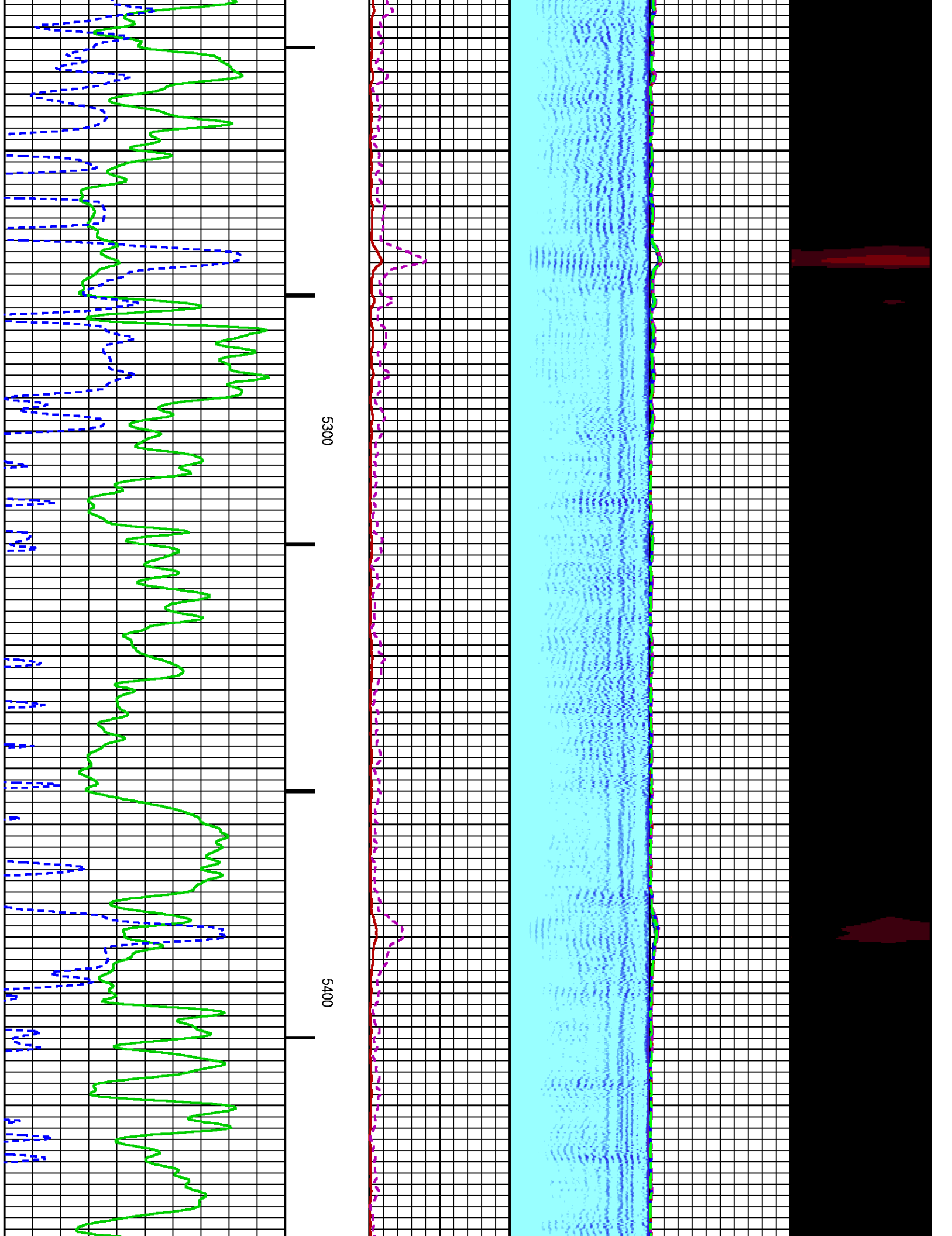


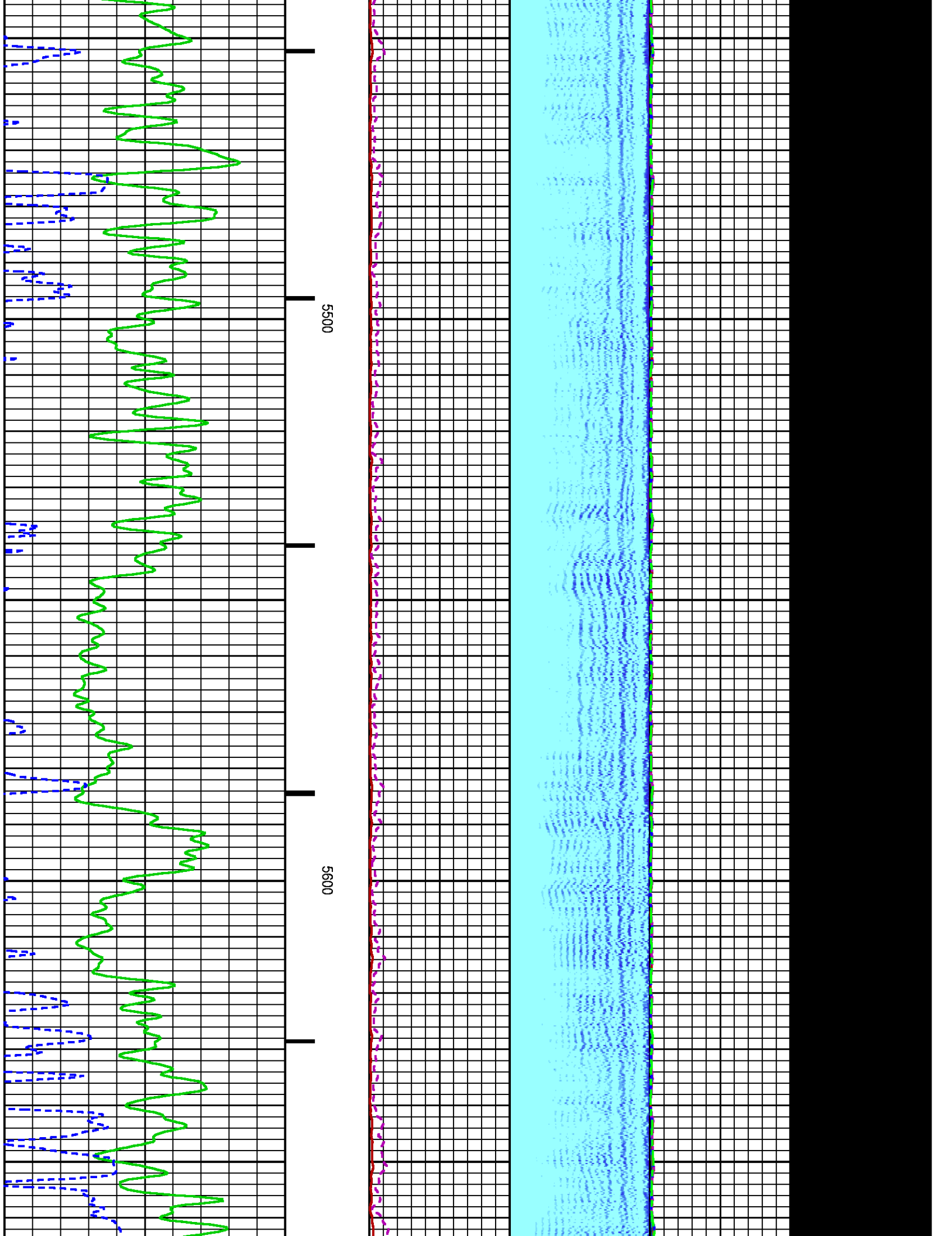


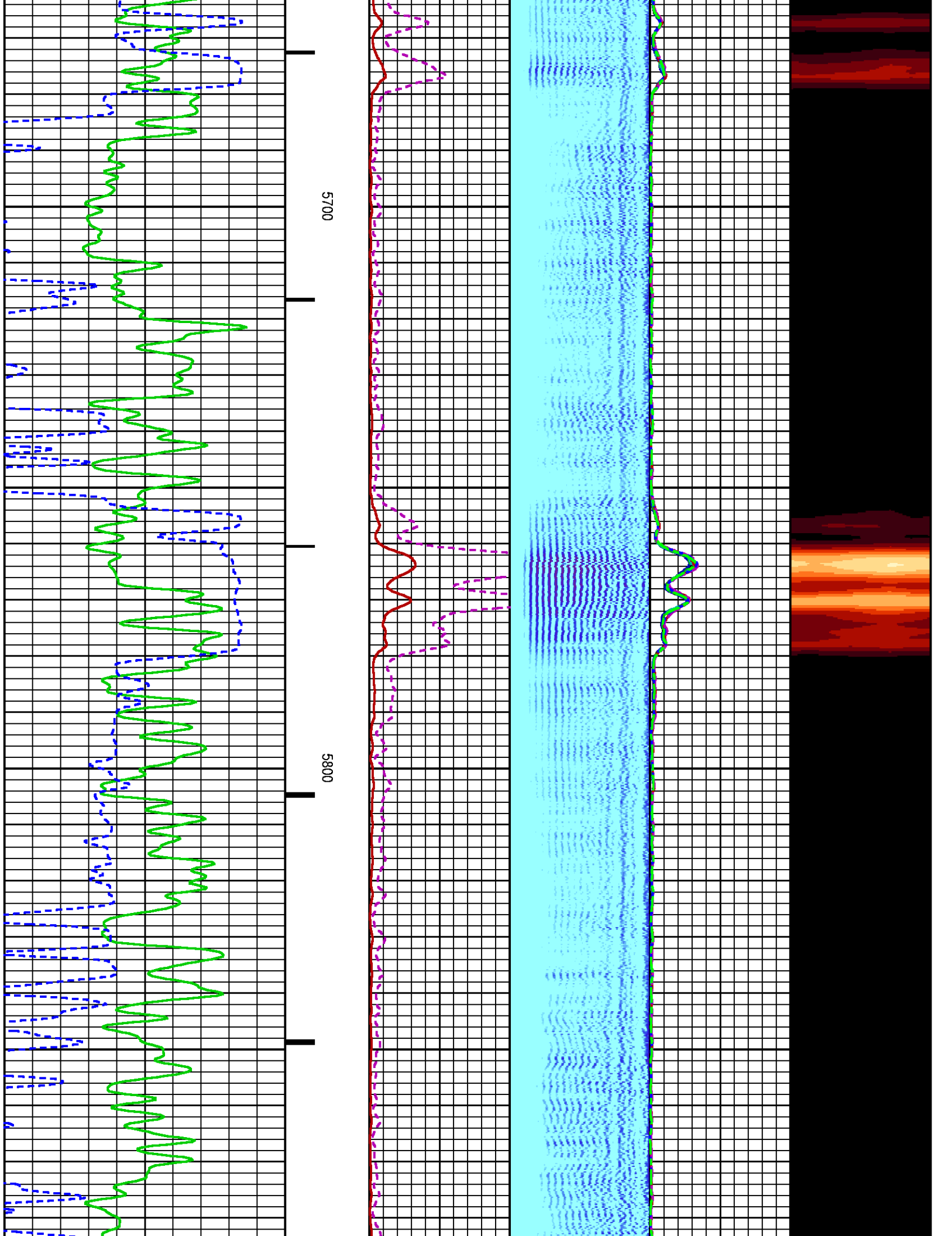


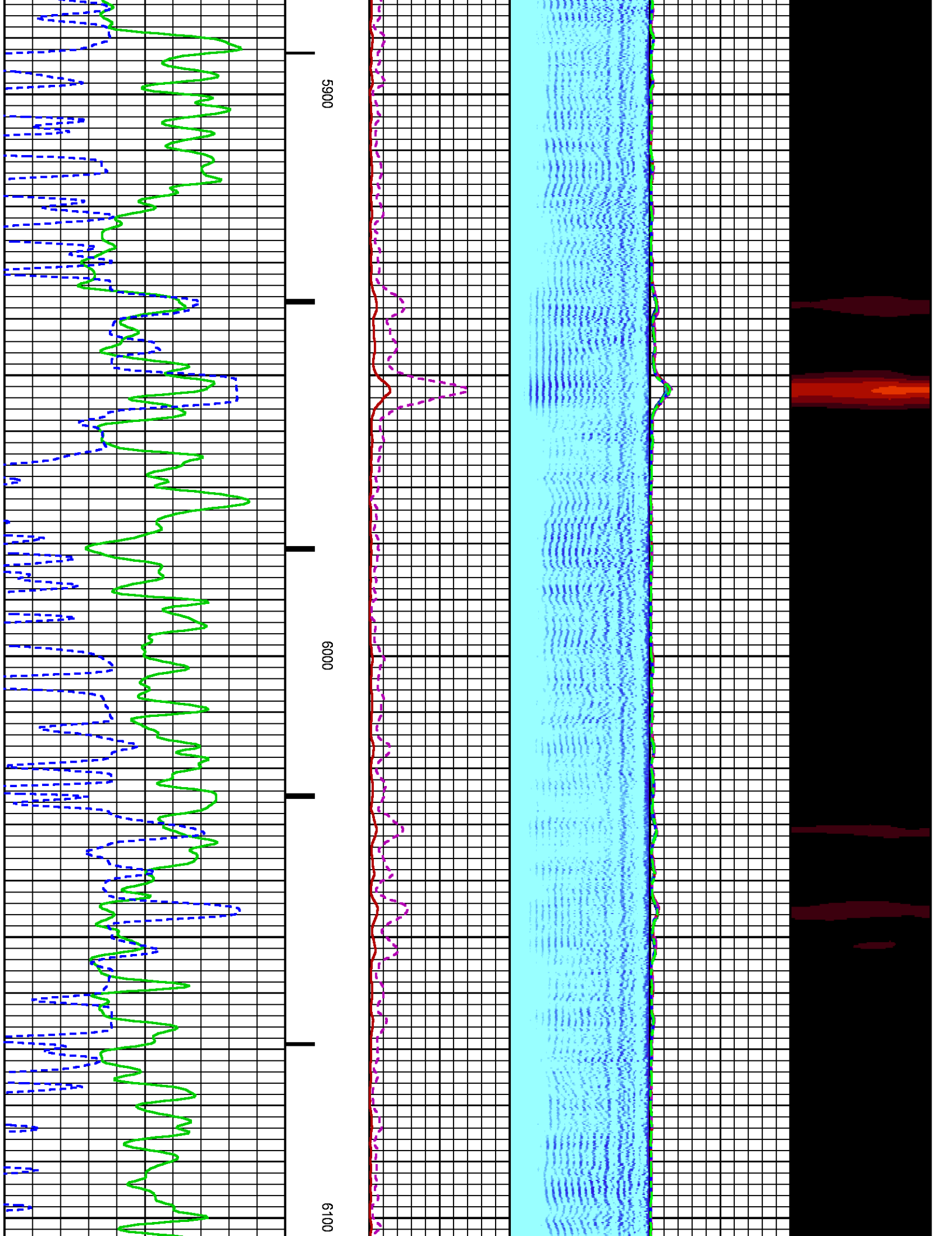


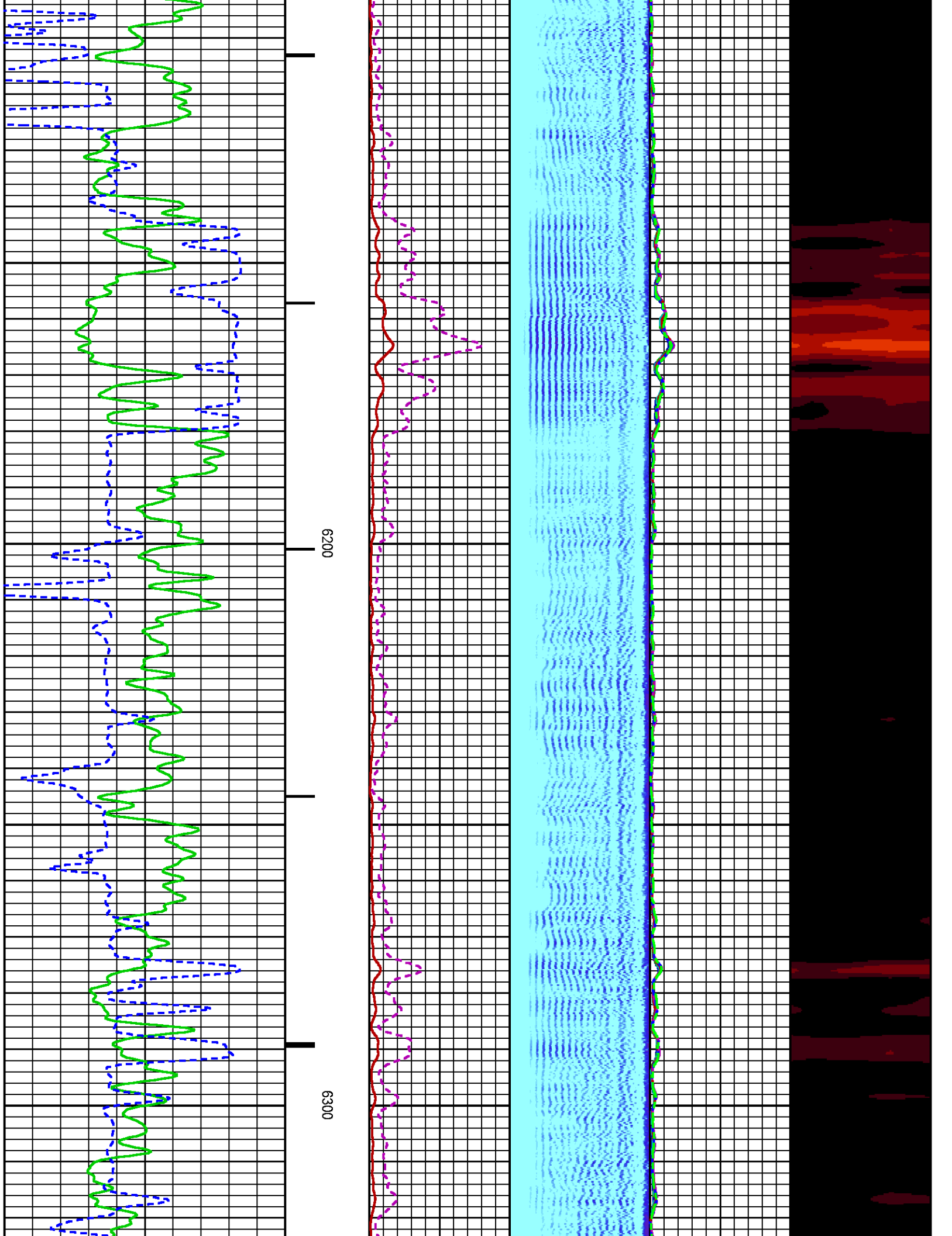


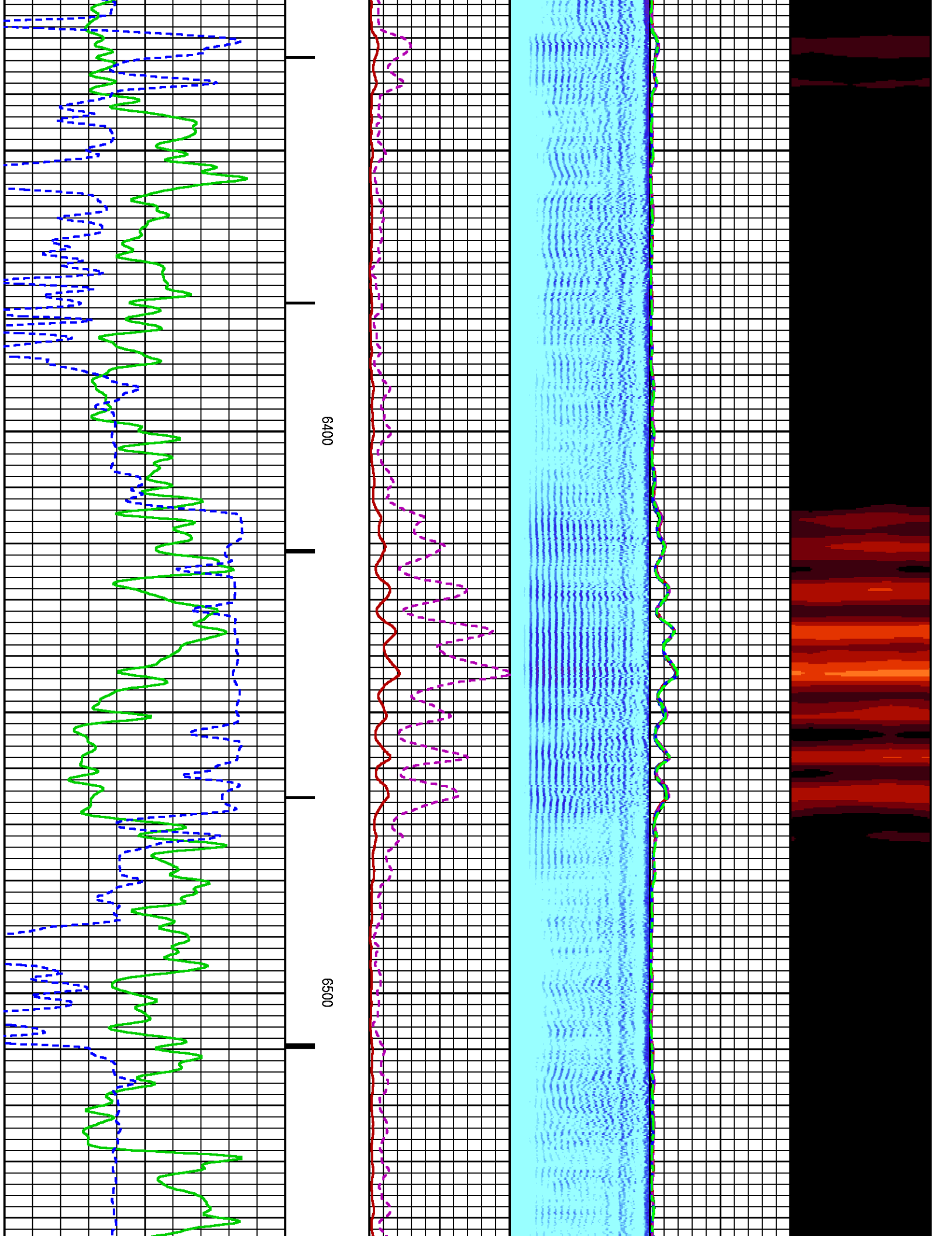


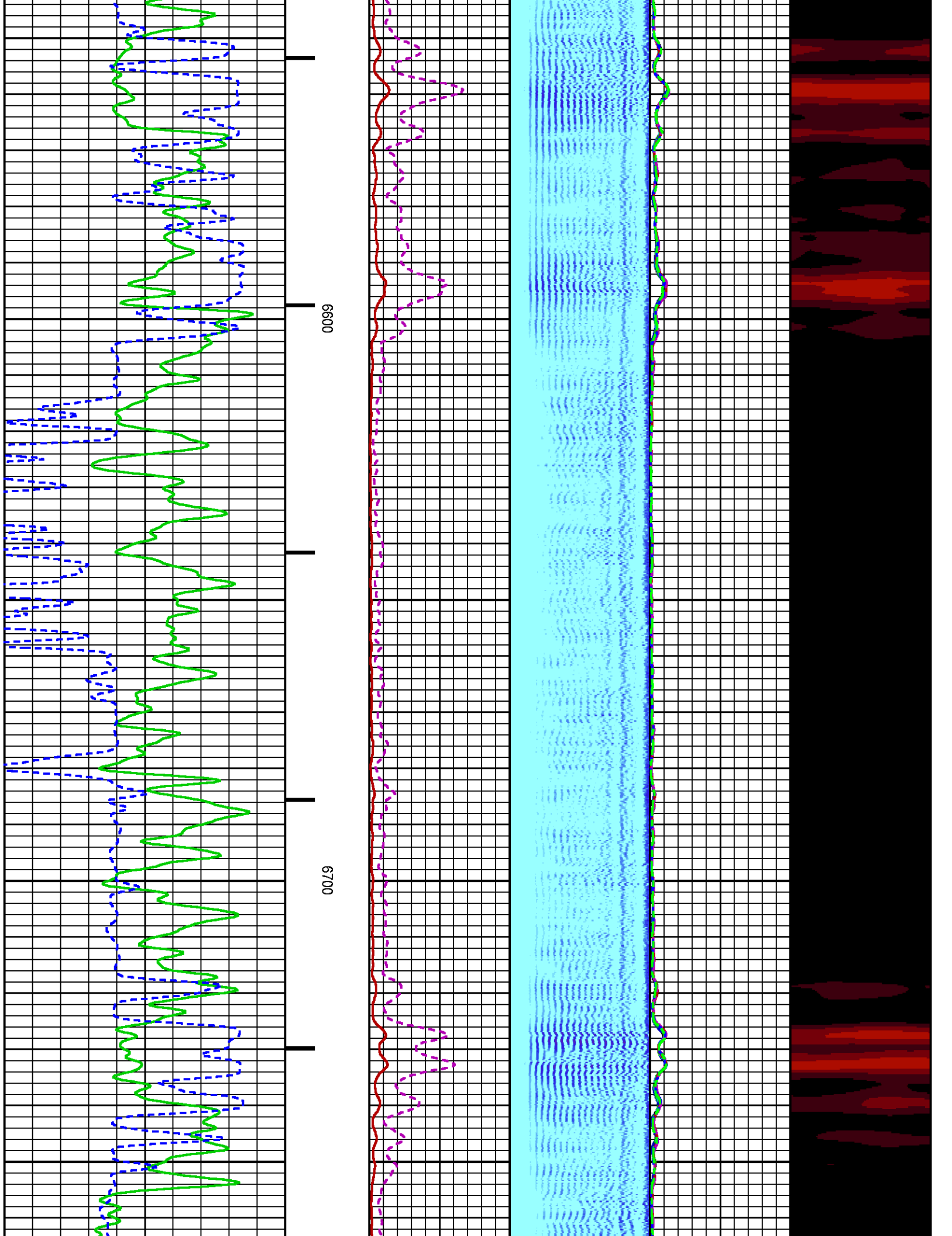


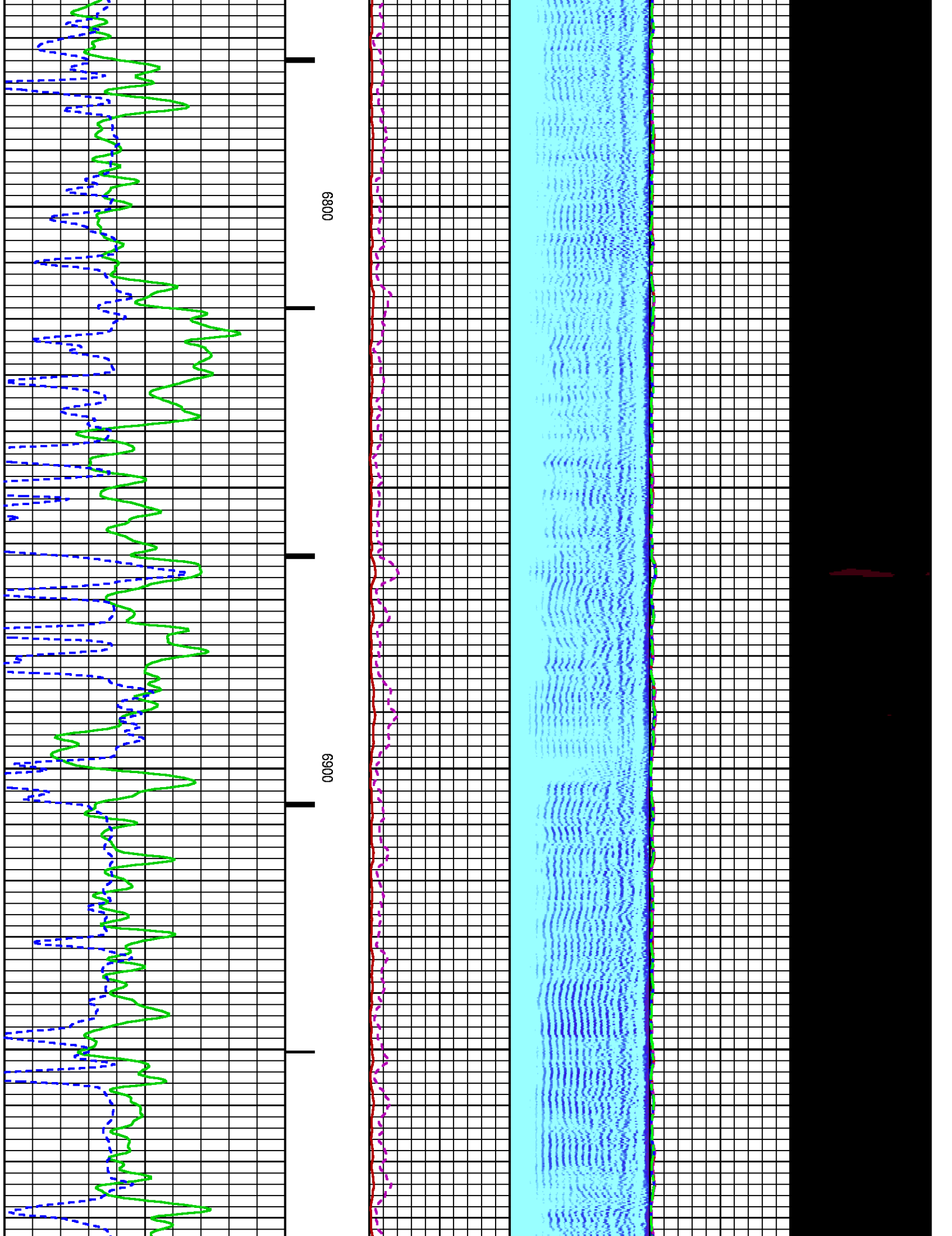


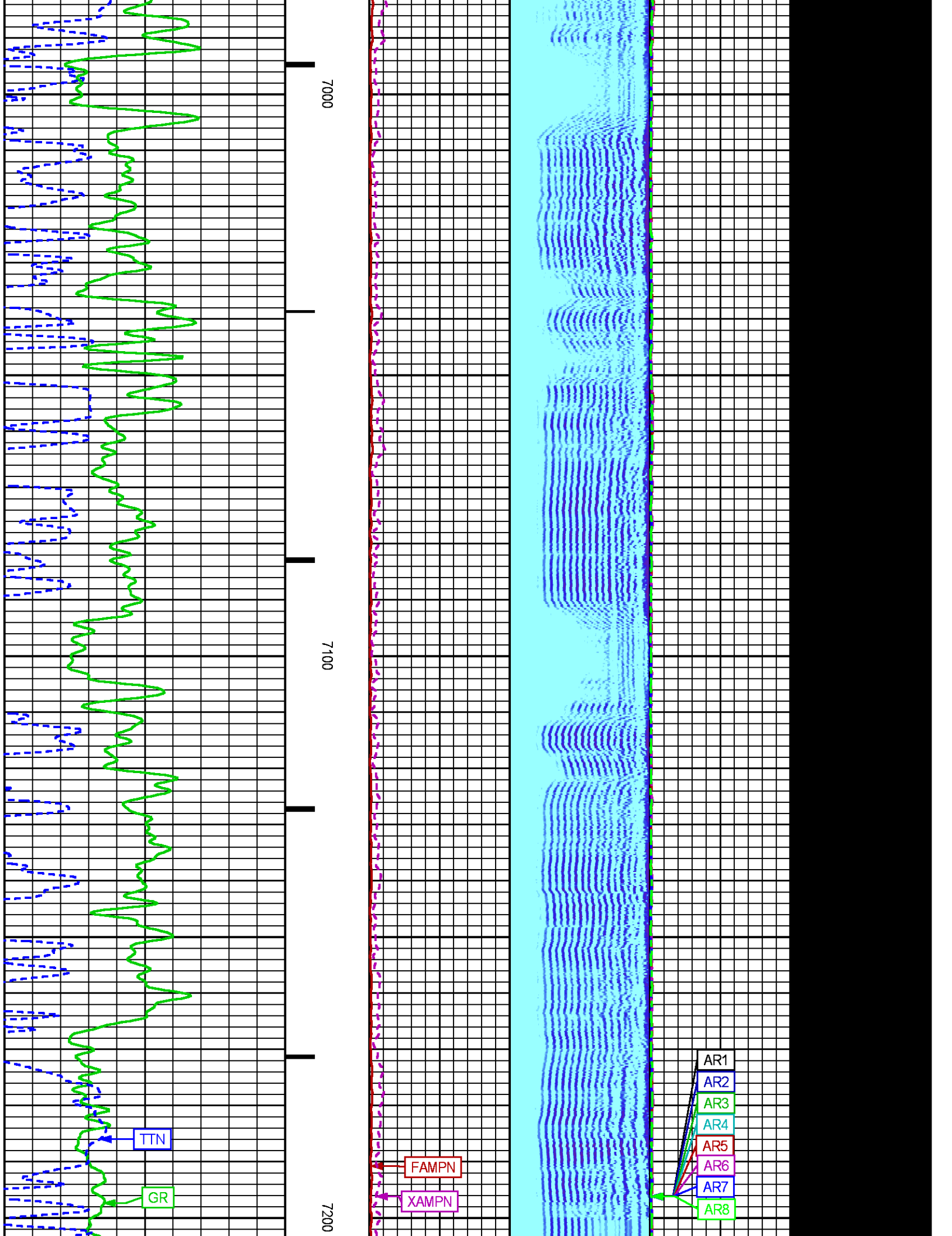


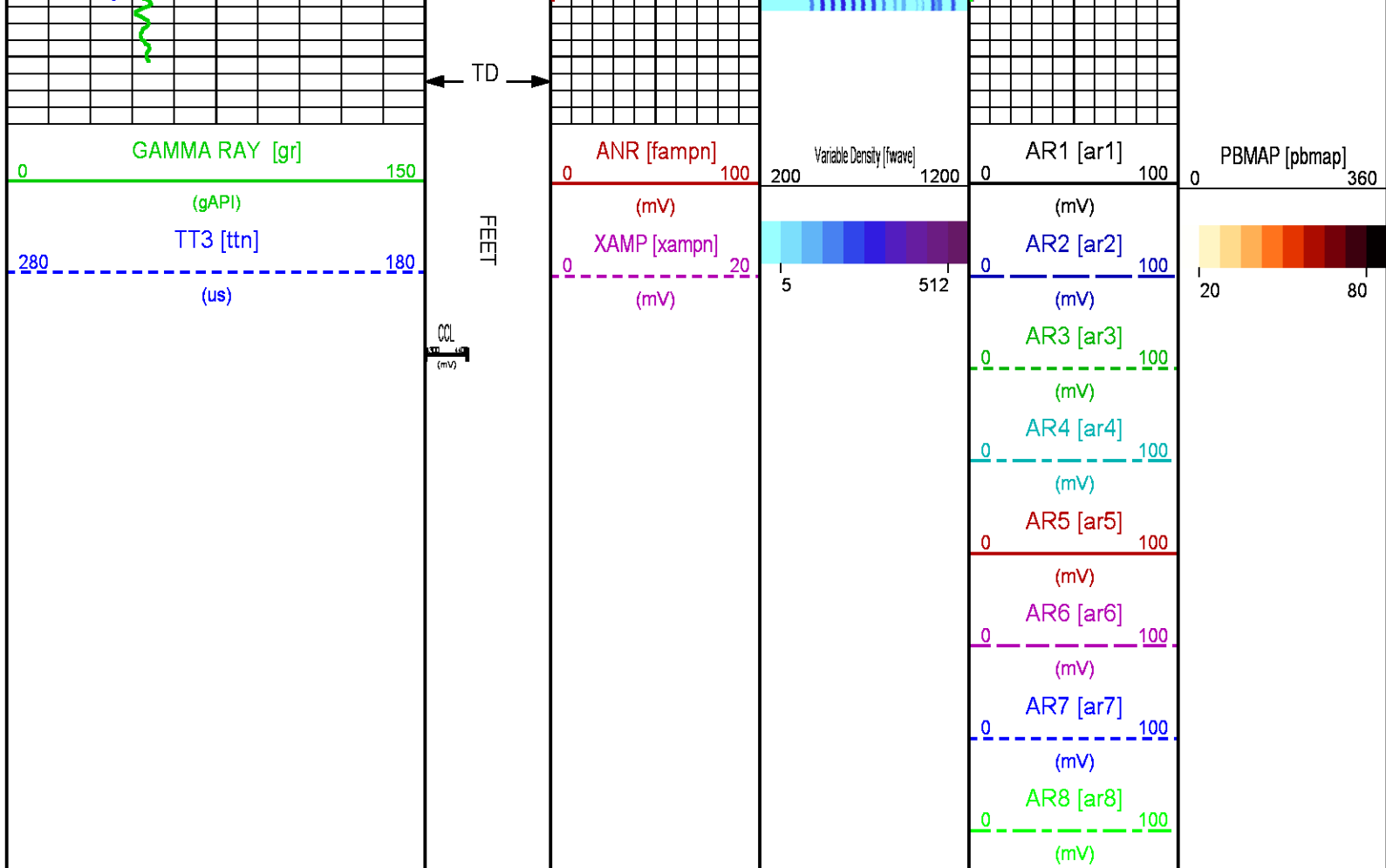












REPEAT PRESENTATION 0 PSI

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013

Updates: 1 Patches: 4

Plotted: Wed Nov 19 13:24:47 2014

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH092541/n012e01.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 6891.500 ft BOTTOM DEPTH: 7221.250 ft

SYMMETRIC FILTER

| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | INTERVAL (ft) | |
|------------------|-----------|------------|-------|---------------|--------|
| GR | FILTER () | medium (1) | | TOP | BOTTOM |
| AMPLITUDE | FILTER () | medium (1) | | " | " |
| TRAVEL TIME | FILTER () | medium (1) | | " | " |

RAL CCL PROCESSING

| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | INTERVAL (ft) | |
|------------------|-----------|-------|-------|---------------|--------|
| CCL FLOOR | CCL FLOOR | 0 | | TOP | BOTTOM |

ANALOG RAL PROCESSING

| MEASUREMENT TYPE | PARAMETER | VALUE | UNITS | INTERVAL (ft) | |
|------------------|-----------|-------|-------|---------------|--|
|------------------|-----------|-------|-------|---------------|--|

| | | | | | |
|---------------------------|----------------------------|---------|----|-----|--------|
| AMPLITUDE WINDOW (NEAR) | AMP WINDOW START (fgpn*) | 187 | us | TOP | BOTTOM |
| | AMP WINDOW LENGTH | 25 | us | " | " |
| TRAVEL TIME WINDOW (NEAR) | TT WINDOW START (ttn*) | 160 | us | " | " |
| | TT WINDOW LENGTH | 500 | us | " | " |
| | FIRST BRK THRESHOLD (ttn*) | 4 | mV | " | " |
| RAL CASING PARAMETERS | PPT NEAR | 200.391 | us | " | " |
| RAL TOOL DELAY | TOOL DELAY (strn*) | -70 | us | " | " |
| BASELINE NOISE (NEAR) | NOISE WINDOW START | 125 | us | " | " |
| | NOISE WINDOW LENGTH | 25 | us | " | " |

CURVE DESCRIPTION REPORT

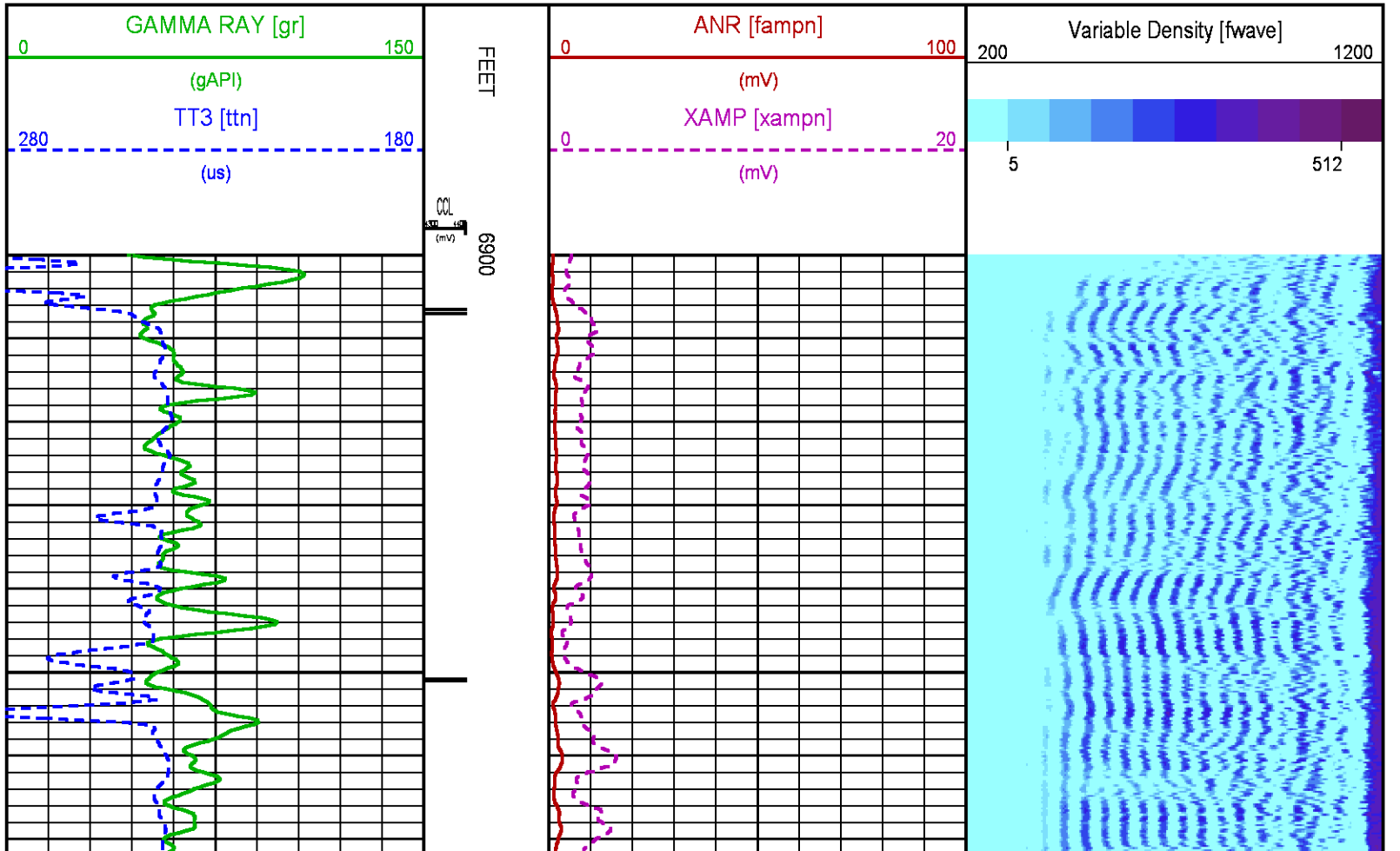
| CURVE NAME | CREATION DATE | CURVE DESCRIPTION |
|------------|----------------------|---|
| F1:CCL | Nov 19 10:46:47 2014 | CASING COLLAR LOCATOR |
| F1:FAMPN | Nov 19 10:46:47 2014 | FIXED GATE AMPLITUDE NEAR RECEIVER |
| F1:FWAVE | Nov 19 10:46:47 2014 | FAR WAVE FORM |
| F1:GR | Nov 19 10:46:47 2014 | GAMMA RAY |
| F1:TTN | Nov 19 10:46:47 2014 | TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER |
| F1:XAMPN | Nov 19 10:46:47 2014 | FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE |

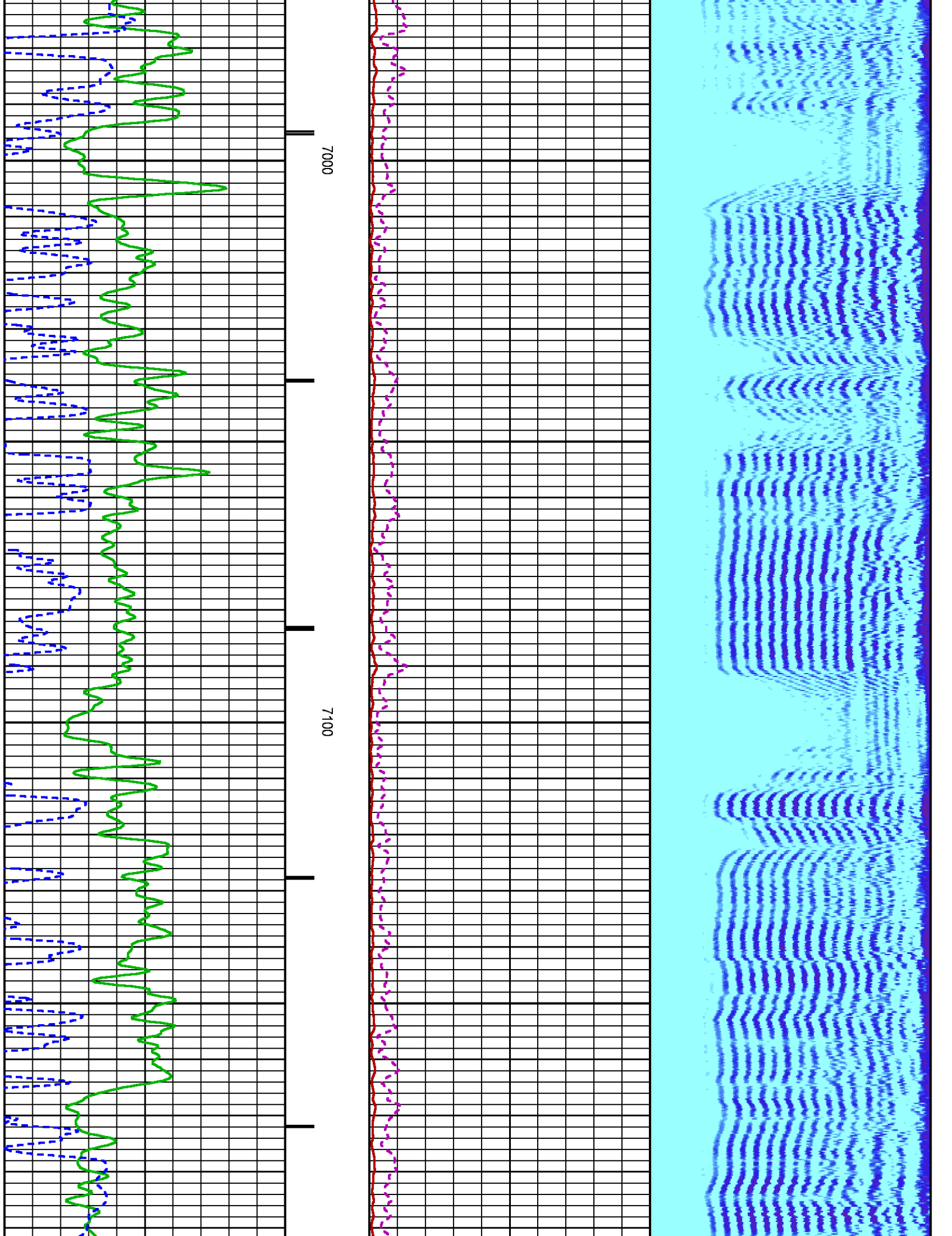
CURVE MEASURE POINT OFFSET

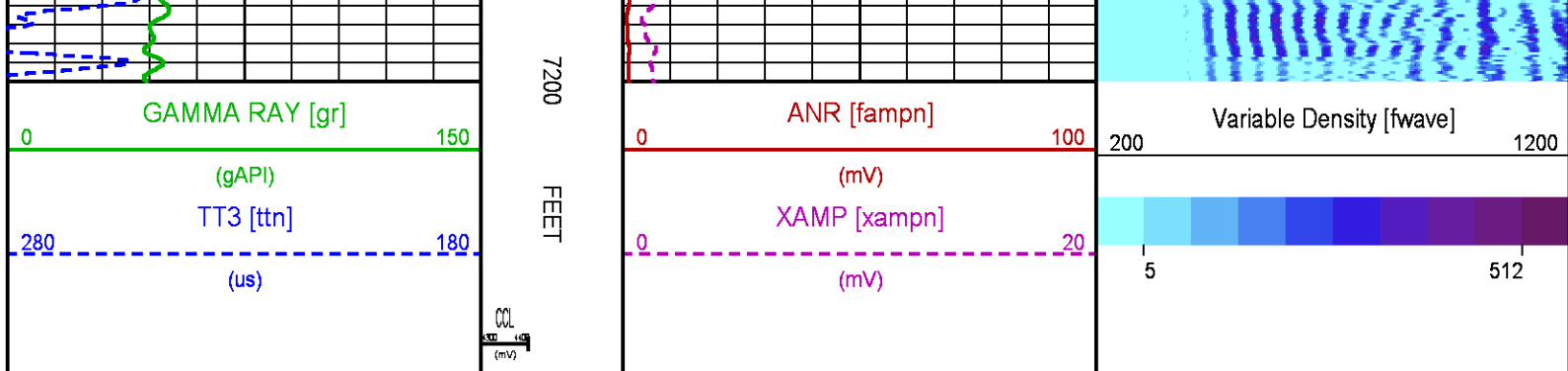
| CURVE | OFFSET (ft) | CURVE | OFFSET (ft) | CURVE | OFFSET (ft) | CURVE | OFFSET (ft) |
|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| CCL | 8.50 | GR | 6.50 | XAMPN | 13.75 | | |
| FAMPN | 13.75 | TTN | 13.75 | | | | |

Presentation : HL6670:/dat1a/CH092541/43CBL_REPEAT_PRIMARY.fvpdf [5"/100' Scale]
Plot Interval : 6900 - 7200 Feet

Data File 1 : F1 : HL6670:/dat1a/CH092541/43CBL_REPEAT.xtf
Created On : Nov 19 10:46:47 2014
Company : WPX ENERGY
Well : GM 43-12
Field : GRAND VALLEY
File Interval : 6874.5 - 7218.25 Feet
OCT : n012e







CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/CH092541/n012e.tp1

RAL PRIMARY CALIBRATION SUMMARY

TOOL #: 1426XA 10417452

DATE/TIME PERFORMED: Wed Nov 19 10:09:29 2014

UNIT #: 3880TA HL6670

| | NEAR (mV) | RADIAL (mV) | FAR (mV) |
|---------|--------------|----------------|-------------|
| TARGETS | 100.00 | 100.00 | 150.00 |

| | NEAR | R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | FAR | CAL |
|----------------|-------|------|-------|------|------|-------|-------|-------|------|------|-------|
| ZERO (mV) | -0.01 | 0.01 | -0.02 | 0.00 | 0.00 | -0.03 | -0.07 | -0.02 | 0.00 | 0.10 | -0.03 |
| AMP FLUID (mV) | 332 | 333 | 331 | 330 | 330 | 330 | 330 | 330 | 331 | 411 | 331 |
| TT (us) | 218 | 218 | 218 | 190 | 183 | 218 | 217 | 217 | 218 | 328 | 218 |
| M FACTOR | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.36 | 0.30 |

RAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1426XA 10417452

DATE/TIME PERFORMED: Wed Nov 19 10:12:03 2014

DAYS SINCE CAL: 0

UNIT #: 3880TA HL6670

CABLE #: 6670SM SMALL1

| | NEAR (mV) | R1 (mV) | R2 (mV) | R3 (mV) | R4 (mV) | R5 (mV) | R6 (mV) | R7 (mV) | R8 (mV) | FAR (mV) | CAL (mV) |
|---------|--------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|
| ZERO | -0.00 | 0.01 | -0.00 | 0.00 | 0.00 | -0.00 | -0.00 | -0.01 | 0.00 | 0.02 | 0.00 |
| AMP AIR | -0.11 | -0.37 | -0.43 | -0.21 | -0.08 | 0.14 | 0.25 | -0.26 | -0.17 | -0.01 | 99.99 |

| SHOP M FACTOR | SHOP A FACTOR | WIRELIN E FACTOR |
|------------------|------------------|---------------------|
| 0.30 | 0.00 | 1.00 |

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 2459XA 10218503

DATE/TIME PERFORMED: Thu Nov 13 08:54:47 2014

UNIT #: 3880TA HL6670

CALB JIG #: 4702NK WA-612

| BACKGROUND (cts) | CALBTR ON (cts) | CR DIFF (cts/s) | MULT | BACKGROUND (gAPI) | CALBTR ON (gAPI) | CALBTR (gAPI) |
|---------------------|--------------------|--------------------|------|----------------------|---------------------|------------------|
|---------------------|--------------------|--------------------|------|----------------------|---------------------|------------------|

| | | | | | | |
|----|--------|--------|--------|--------|--------|--------|
| GR | (gAPI) | (gAPI) | (gAPI) | (gAPI) | (gAPI) | (gAPI) |
| | 102.04 | 385.73 | 283.7 | 0.652 | 66.55 | 251.55 |
| | | | | | | 185 |

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 2459XA 10218503

DATE/TIME PERFORMED: Thu Nov 13 08:56:37 2014

UNIT #: 3880TA HL6670

VERI JIG #: 4702NK WA-612

| | BACKGROUND (cts) | CALBRTR ON (cts) | MULT | BACKGROUND (gAPI) | CALBRTR ON (gAPI) | DIFF. (gAPI) |
|----|---------------------|---------------------|-------|----------------------|----------------------|-----------------|
| GR | 108.58 | 381.73 | 0.652 | 70.81 | 248.94 | 178.13 |
| | | | | | | 175.00 195.00 |

INSTRUMENT CONFIGURATION

Source File: /dat1a/CH092541/CBL-tdg

CABLEHEAD

Diameter : 2.75"
Length : 2.25"
Weight : 10 lbs
Series : CABL234
Mnemonic : CBLH

RADIAL BOND TOOL

Diameter : 2.75"
Length : 11.17'
Weight : 126 lbs
Series : 1426XA
Mnemonic : RAL
Measure Point: 4.21': NEAR RCVR
Measure Point: 3.25': FAR RCVR



23.02'

NEAR RCVR 13.81'

FAR RCVR 12.85'

CCL 8.65'

RAL NEUTRON/GR/CCL/CHV DETECTOR

Diameter : 2.75"
Length : 9.42'
Weight : 106 lbs
Series : 2459XA
Mnemonic : RAL
Measure Point: 8.46': CCL
Measure Point: 6.60': GR
Measure Point: 1.21': NEU



GR 6.79'

NEU 1.40'

BULL PLUG 2 3/4

0.00'

TOTAL LENGTH: 23.02'
TOTAL WEIGHT: 258 lbs
MAX DIAMETER: 0'4.00"



COMPANY
WELL
FIELD

WPX ENERGY
GM 43-12
GRAND VALLEY

FILE NO:
CH092541

APL NO:



| | | | |
|---|--|---|---|
| FIELD COUNTY | <u>GRAND VALLEY</u> <u>GARFIELD</u> | STATE <u>COLORADO</u> | APPRO. <u>05045224640000</u> |
| LOCATION: SHL: 1205' FNL & 1941' FWL BHL: 2396' FSL & 1191' FEL | | ELEVATIONS: KB 5151 FT DF GL 5125 FT | 12 7S 96W GM 21-12 PAD NABORS 573 |
| SEC <u>12</u> TWP <u>7S</u> RGE <u>96W</u> | | DATE <u>19-Nov-2014</u> | |