



FILE NO: CH10851

API NO: 05045232320000

Ver. 4.06

COMPANY: TEP ROCKY MOUNTAIN LLC  
WELL: YOUNBERG RU 23-7  
FIELD: RULISON  
COUNTY: GARFIELD STATE: COLORADO

LOCATION: SHL: 2018' FNL & 1890' FWL  
BHL: 2256' FSL & 1596' FWL  
SEC 7 TWP 7S RGE 93W

OTHER SERVICES: RPM  
ELEVATIONS: KB 7363 FT  
DF  
GL 7339 FT

PERMANENT DATUM: GL ELEVATION 7339 FT  
LOG MEASURED FROM: KB 24 FT ABOVE P.D.  
DRILL. MEAS. FROM: KB

DATE: 02-Sep-2016

RUN: 1 TRIP: 1

SERVICE ORDER: US108951J

DEPTH DRILLER: 9433 FT

DEPTH LOGGER: 9359 FT

BOTTOM LOGGED INTERVAL: 9357 FT

TOP LOGGED INTERVAL: 24 FT

TIME STARTED: 13:00

TIME FINISHED: 16:30

OPERATOR RIG TIME: 3.5 HRS

TYPE OF FLUID IN HOLE: WATER

FLUID DENSITY: NA

FLUID SALINITY: NA

FLUID LEVEL: 54 FT

LOGGED CEMENT TOP: see log

WELLHEAD PRESSURE: 0 PSI

MAXIMUM HOLE DEVIATION: NA

NOMINAL LOGGING SPEED: 100 FMN

MAX. RECORDED TEMP.: 242 DEGF

REFERENCE LOG: BAKER OPEN HOLE

REFERENCE LOG DATE: AUG-14-2016

EQUIP. NO.: HL 6670 LOCATION: GRAND JCT.

RECORDED BY: M.MENTZER/H.ALTSCHEFFEL

WITNESSED BY: B. OAKS

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	24 FT	1140 FT
8.75 IN	1140 FT	9674 FT

### CASING RECORD

SIZE	WEIGHT	GRADE	FROM	TO
9.625 IN	32.3 LB/F		24 FT	1140 FT
4.5 IN	11.6 LB/F	P-110	24 FT	9674 FT

### REMARKS

RUN 1 TRIP 1: LOGS CORREALTED TO BAKER HUGHES OPEN HOLE LOGS RECORDED ON AUG-14-16

THE AMOUNT OF LINEAR SHIFT IS 3 FEET

LOGGED WITH ZERO PSI AT WELLHEAD

BHT = 242 DEGF

SJ = 5198' - 5220'

### EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	DAI	1122X1	12121122	CEMENT BOND LOG

1	1	RAL	1426XA	10124106	CENTRALIZED
1	1	GR/CCL	1355XA	11871507	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: 9

Plotted: Fri Sep 2 19:20:45 2016

### PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH108951/n012g02.prm  
 LOGGING MODE: DEPTH DIRECTION: UP  
 TOP DEPTH: 19.250 ft BOTTOM DEPTH: 9387.500 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*)	-75	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	Sep 2 14:46:50 2016	CASING COLLAR LOCATOR
F1:FAMPN	Sep 2 14:46:50 2016	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Sep 2 14:46:50 2016	FAR WAVE FORM
F1:GR	Sep 2 14:46:50 2016	GAMMA RAY
F1:TTN	Sep 2 14:46:50 2016	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Sep 2 14:46:50 2016	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

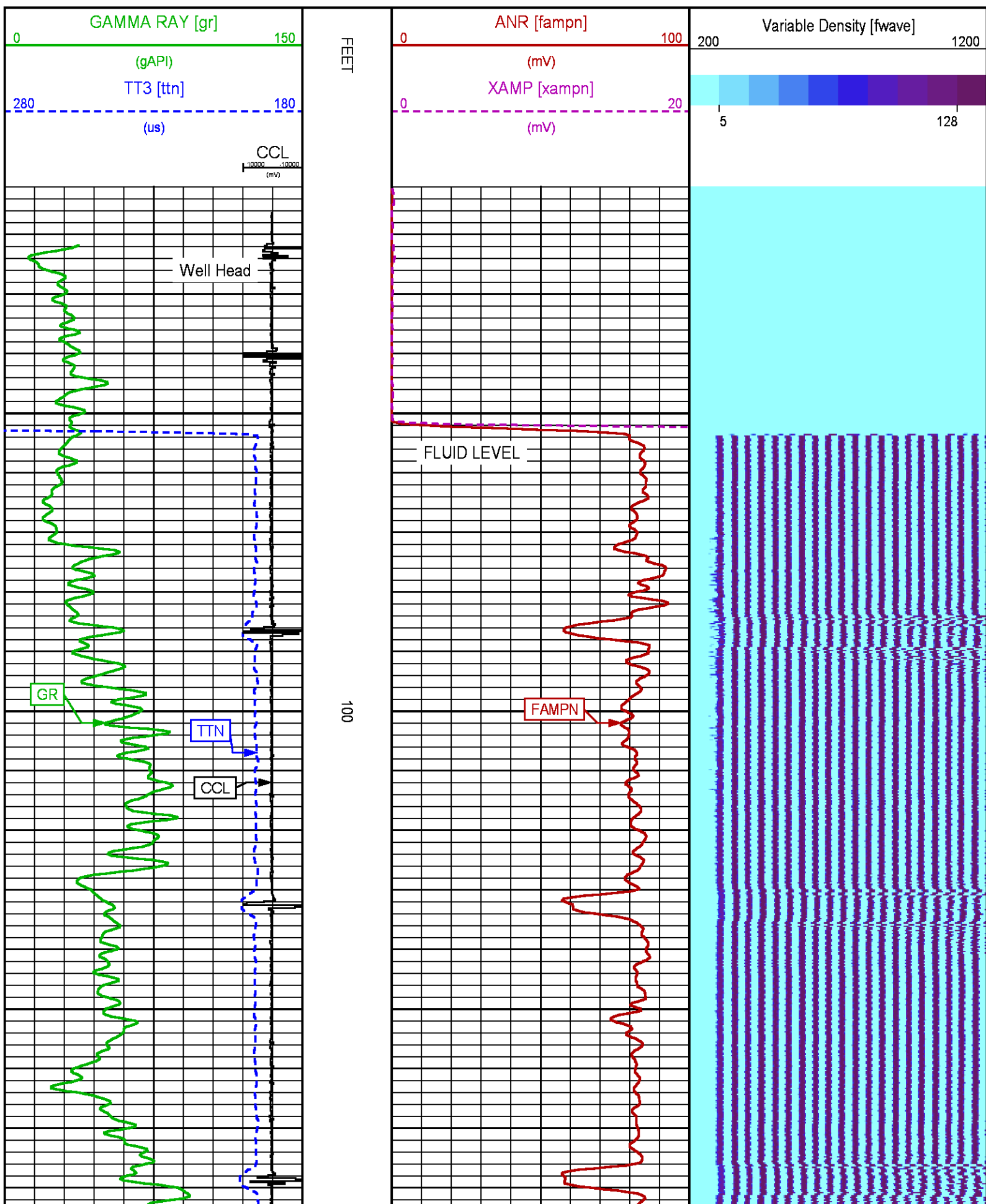
### CURVE MEASURE POINT OFFSET

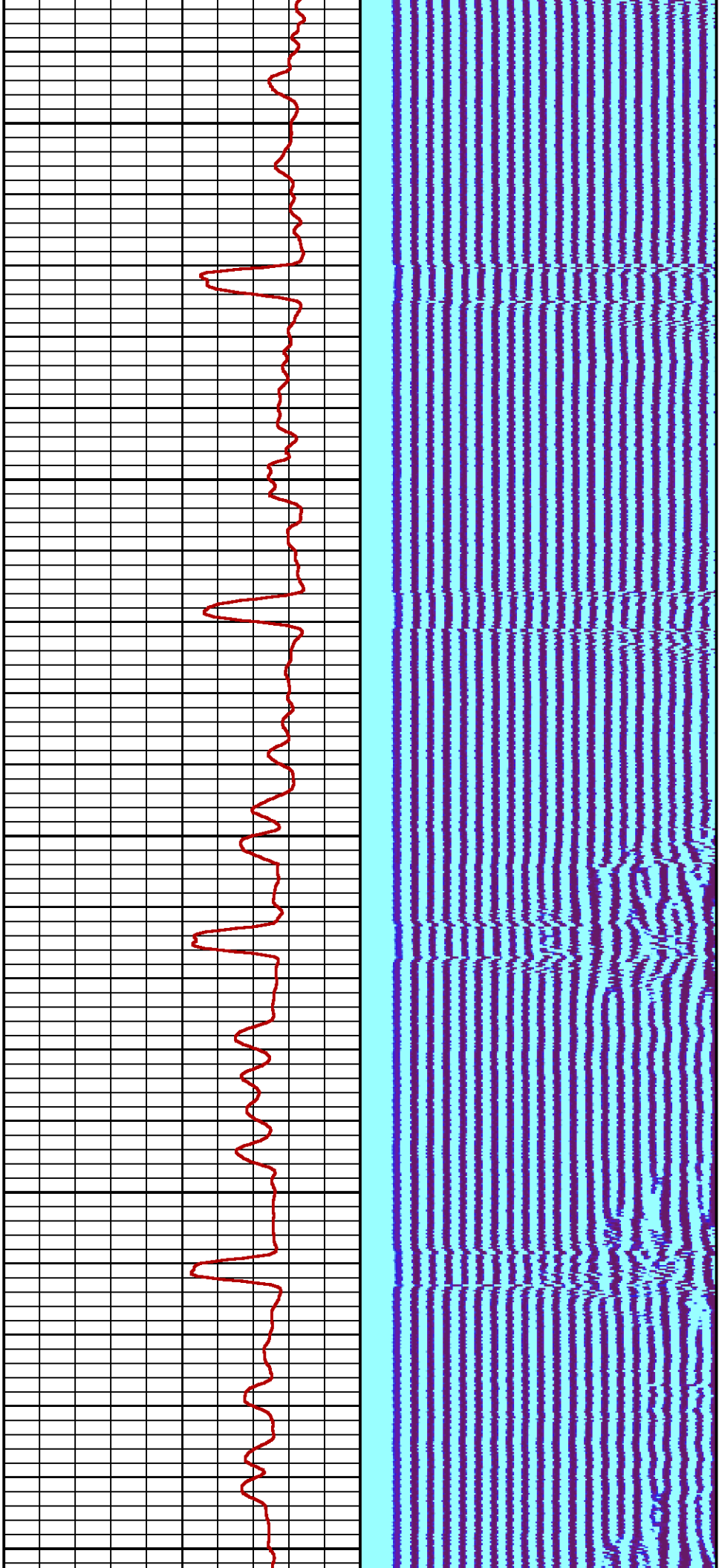
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	5.75	GR	1.75	XAMPN	11.25		
FAMPN	11.25	TTN	11.25				

Presentation : cpu100:/dat1a/CH108951/523MAIN+01-PRIMARY-MN-5.fvpdf [5"/100' Scale]  
 Plot Interval : 12 - 9389.5 Feet

Data File 1 : F1 : cpu100:/dat1a/CH108951/MN.xtf  
 Created On : Sep 2 14:46:50 2016

Created On : Sep 2 14:40:50 2016  
Company : TEP ROCKY MOUNTAIN LLC  
Well : YOUNBERG RU 23-7  
Field : RULISON  
File Interval : 11 - 9390.75 Feet  
OCT : n012g

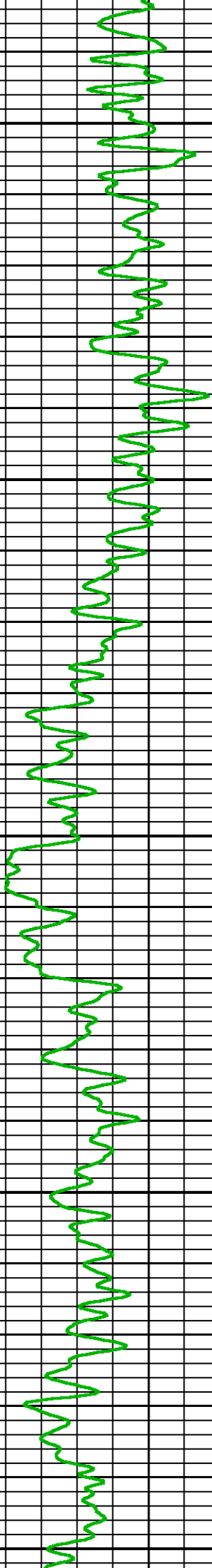
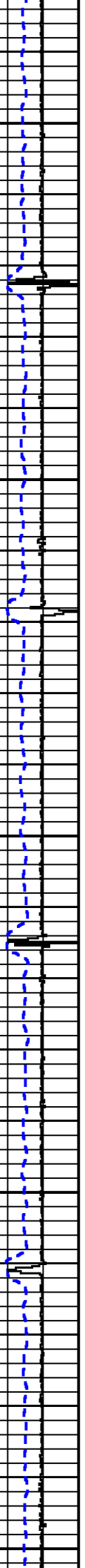




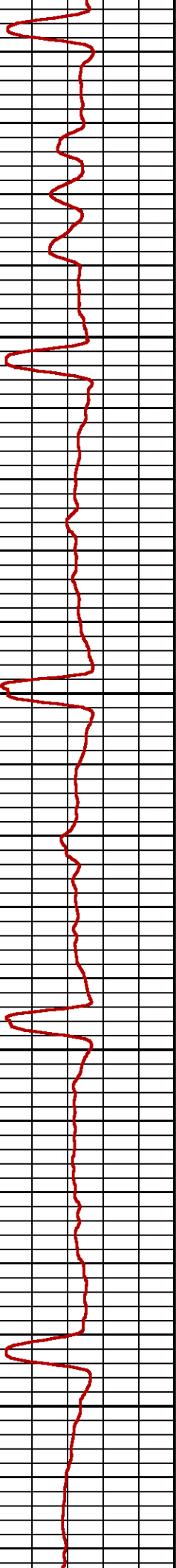
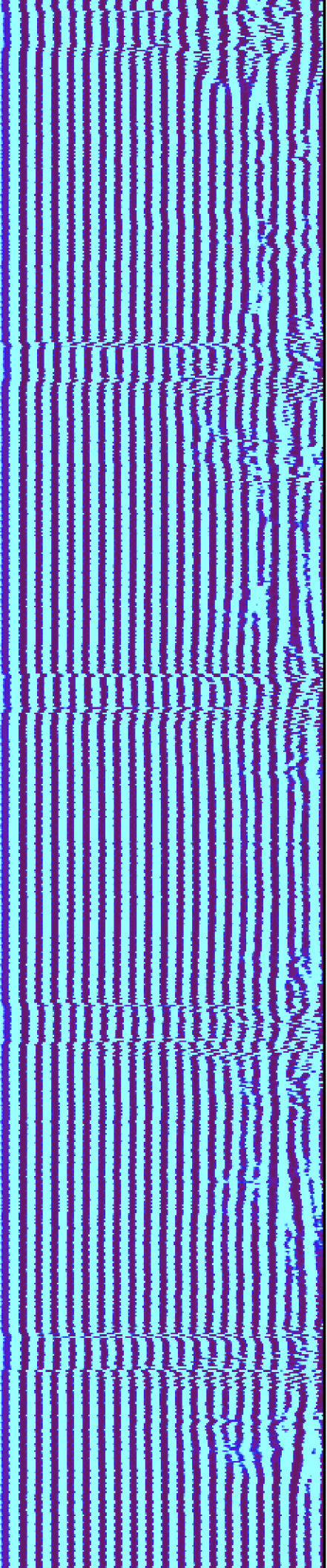
200

300

400

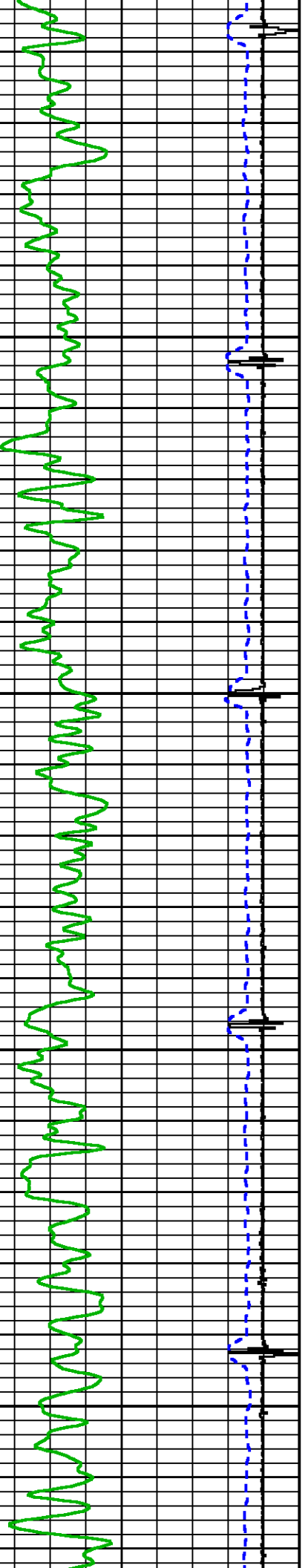


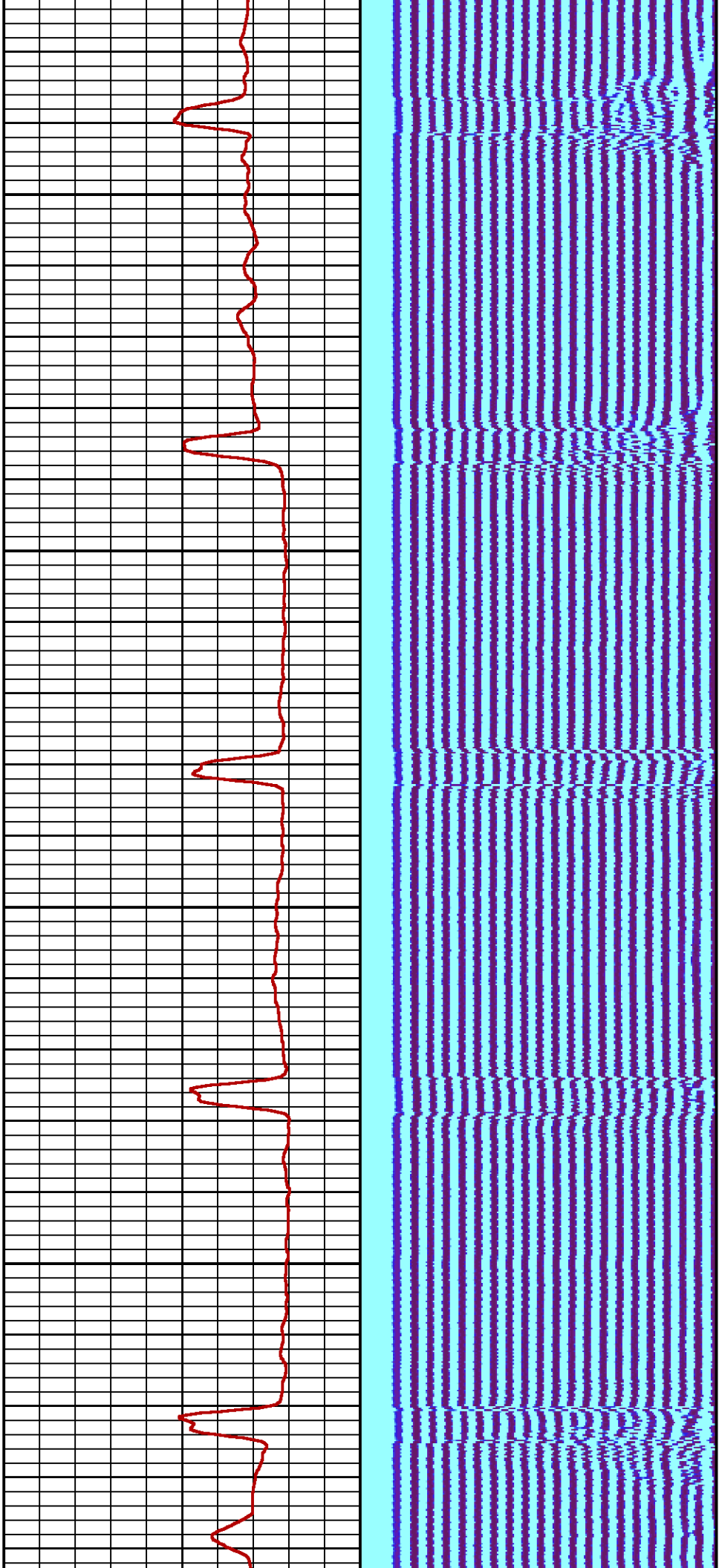




500

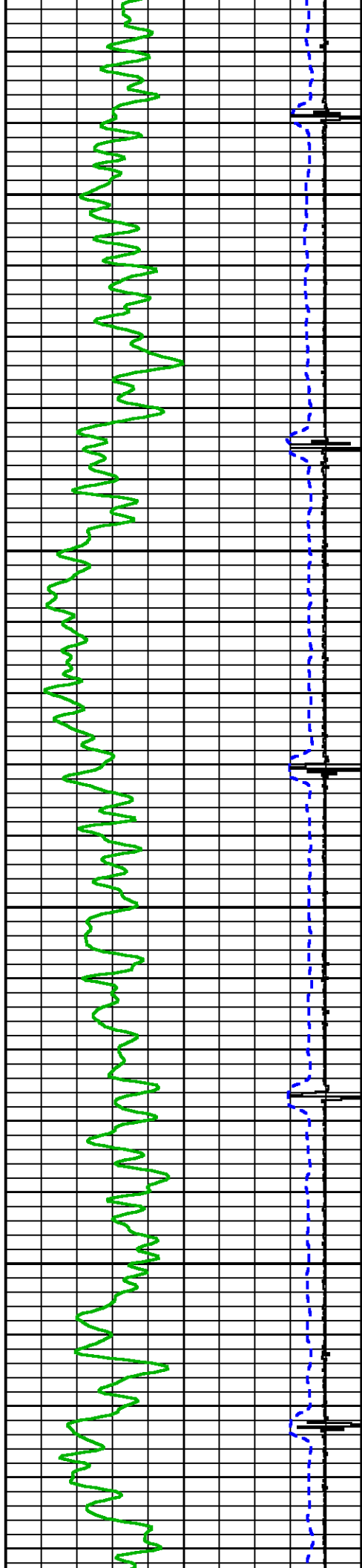
600

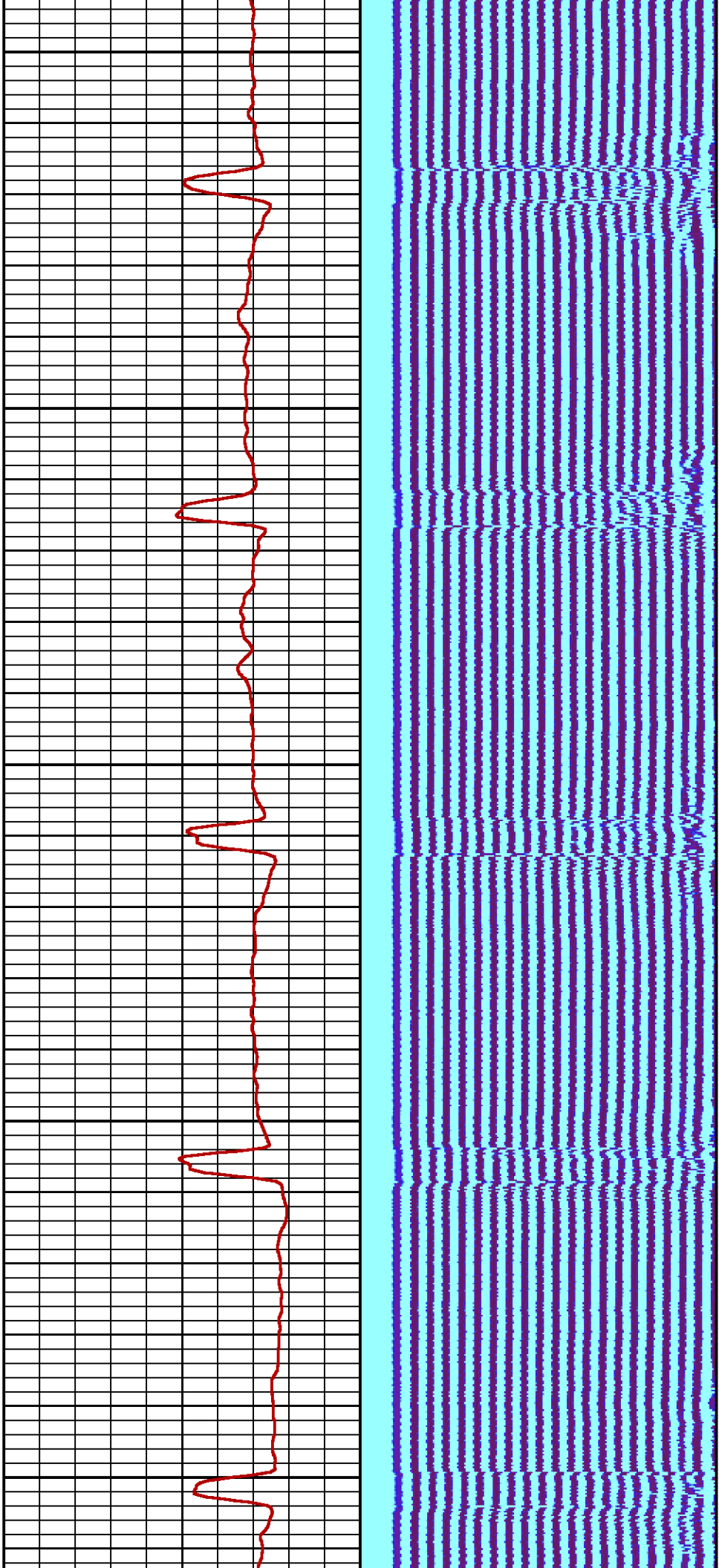




700

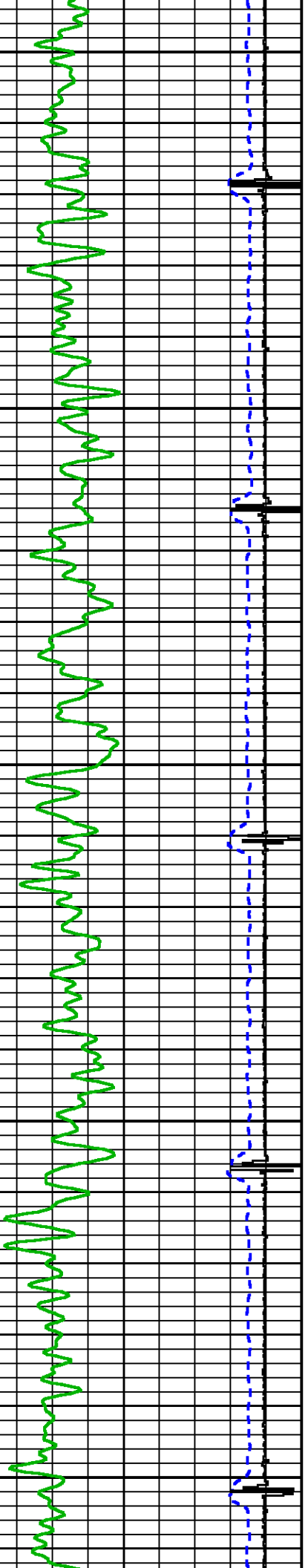
800



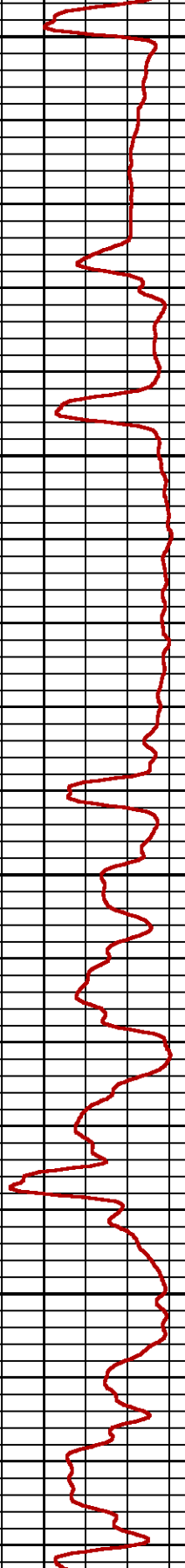
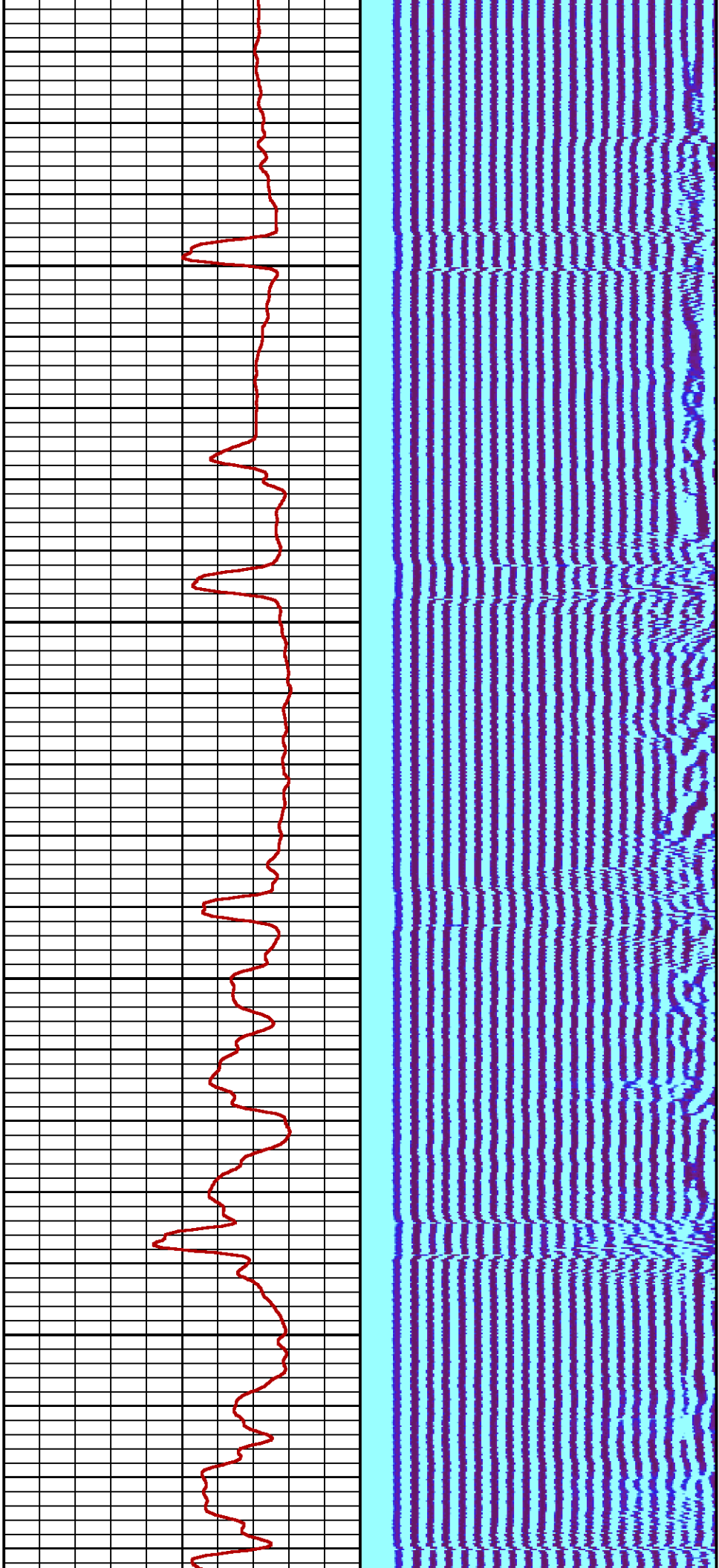


900

1000

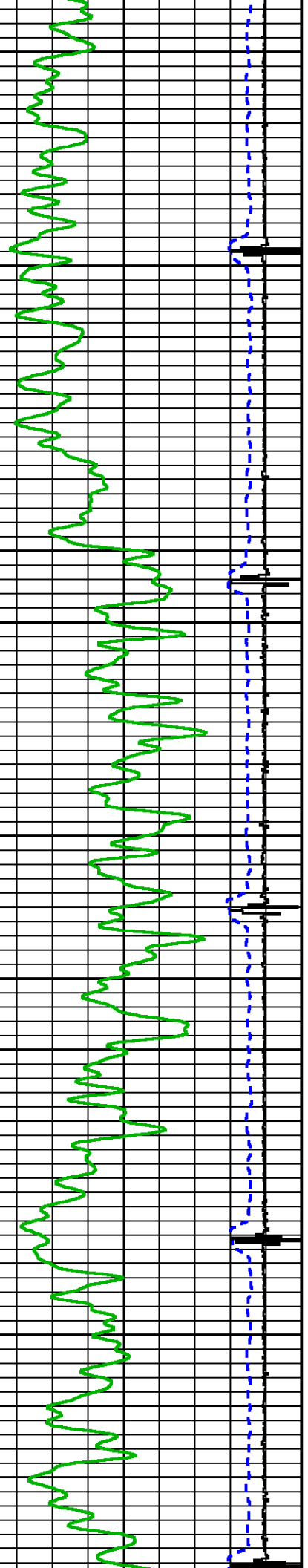


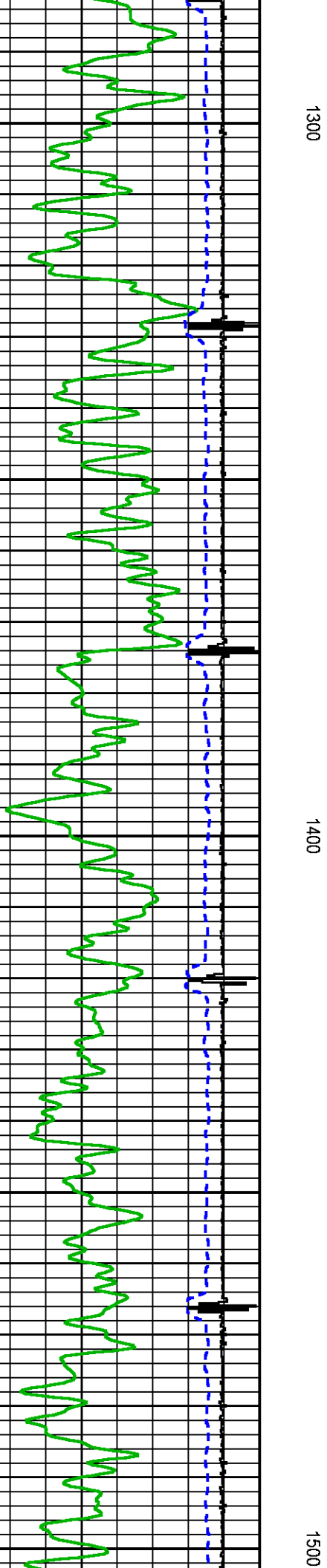
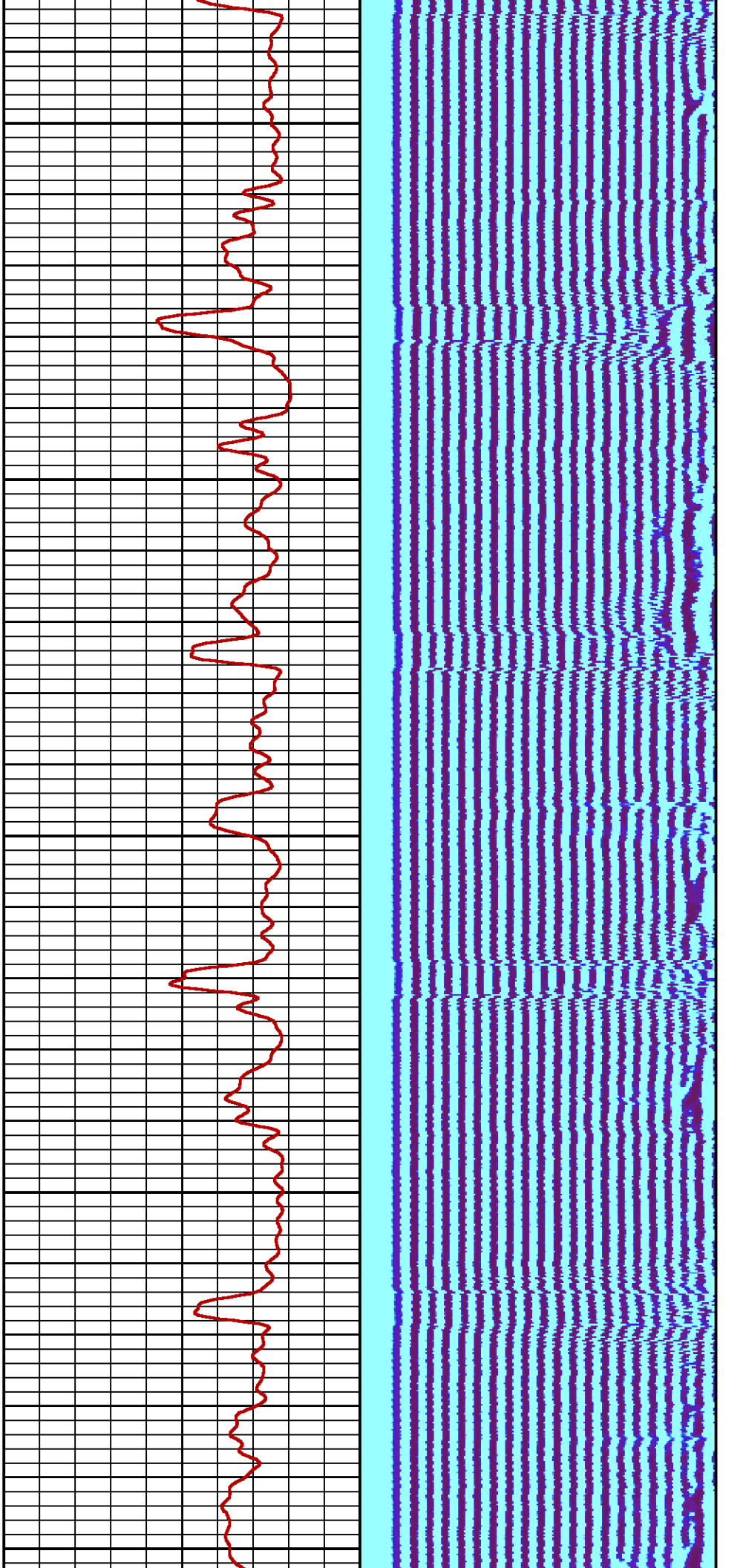


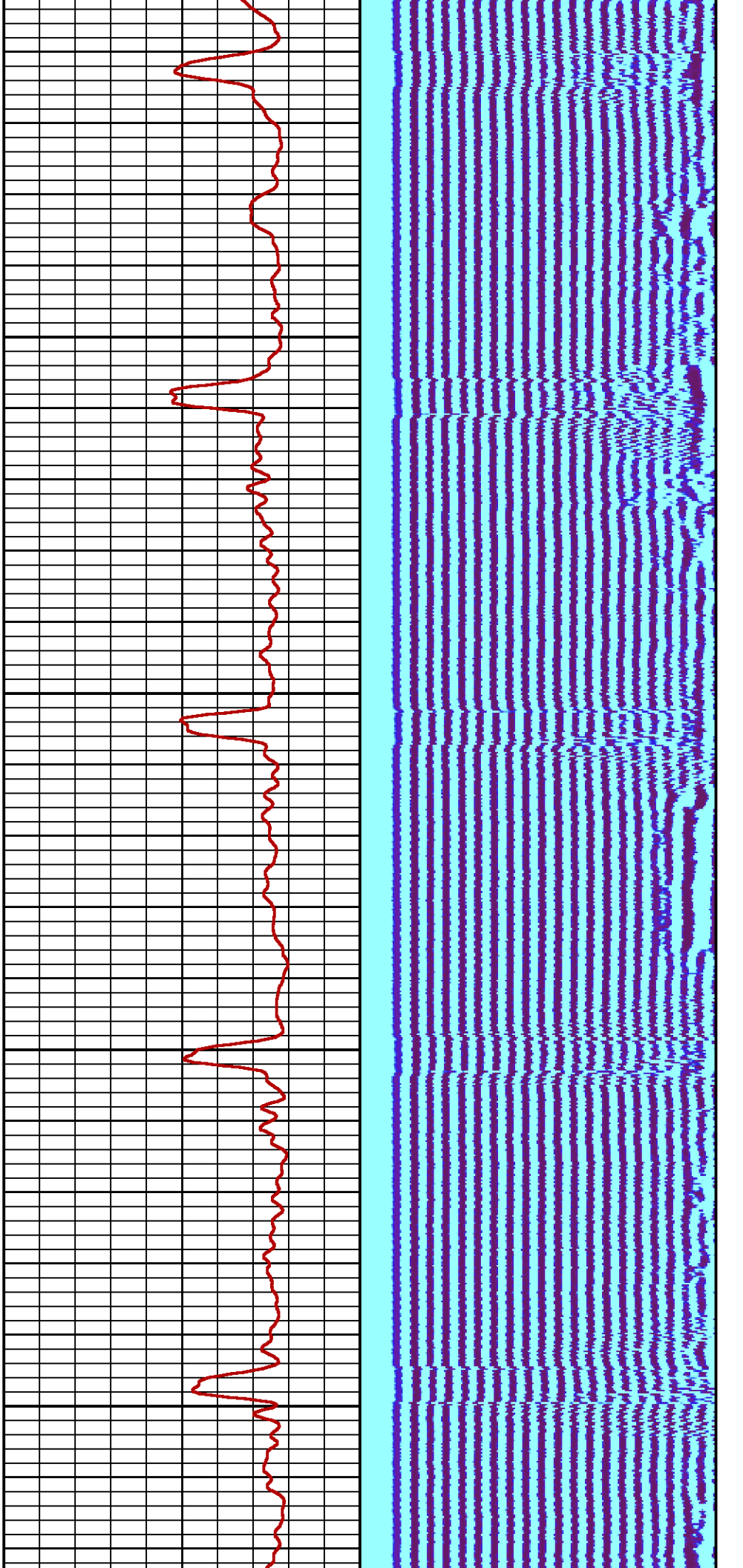


1100

1200

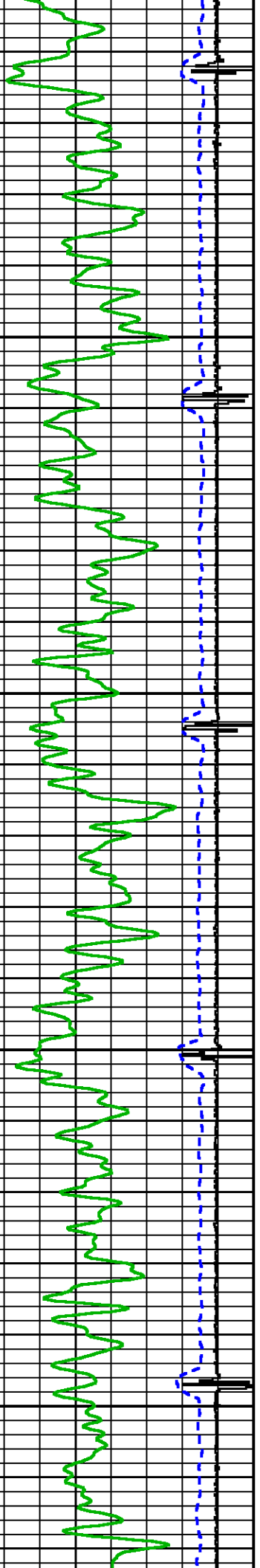




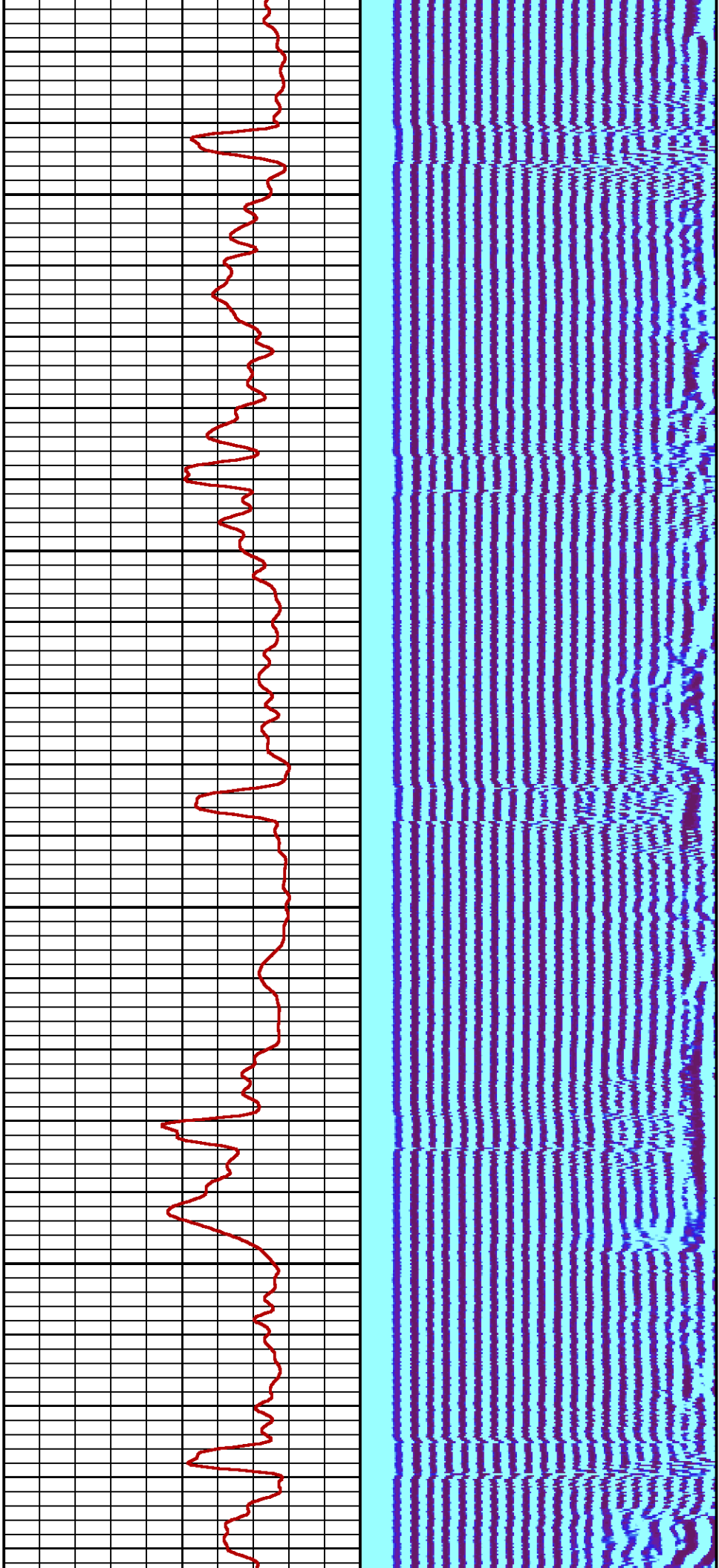


1600

1700

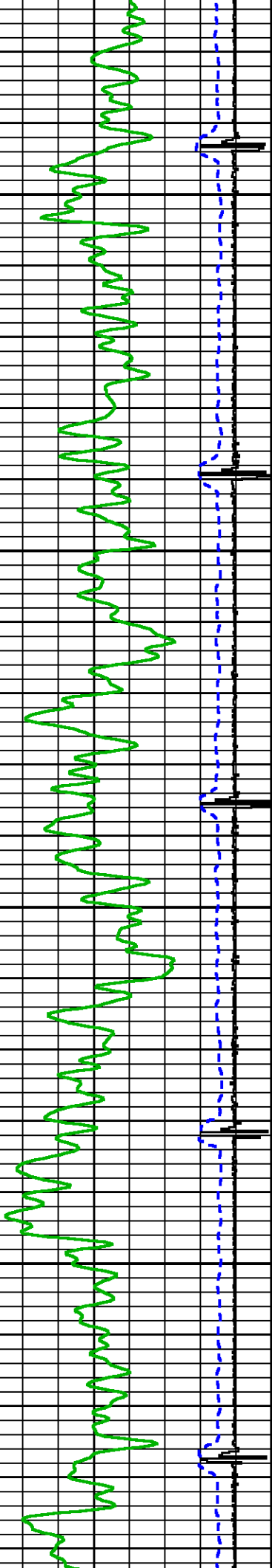


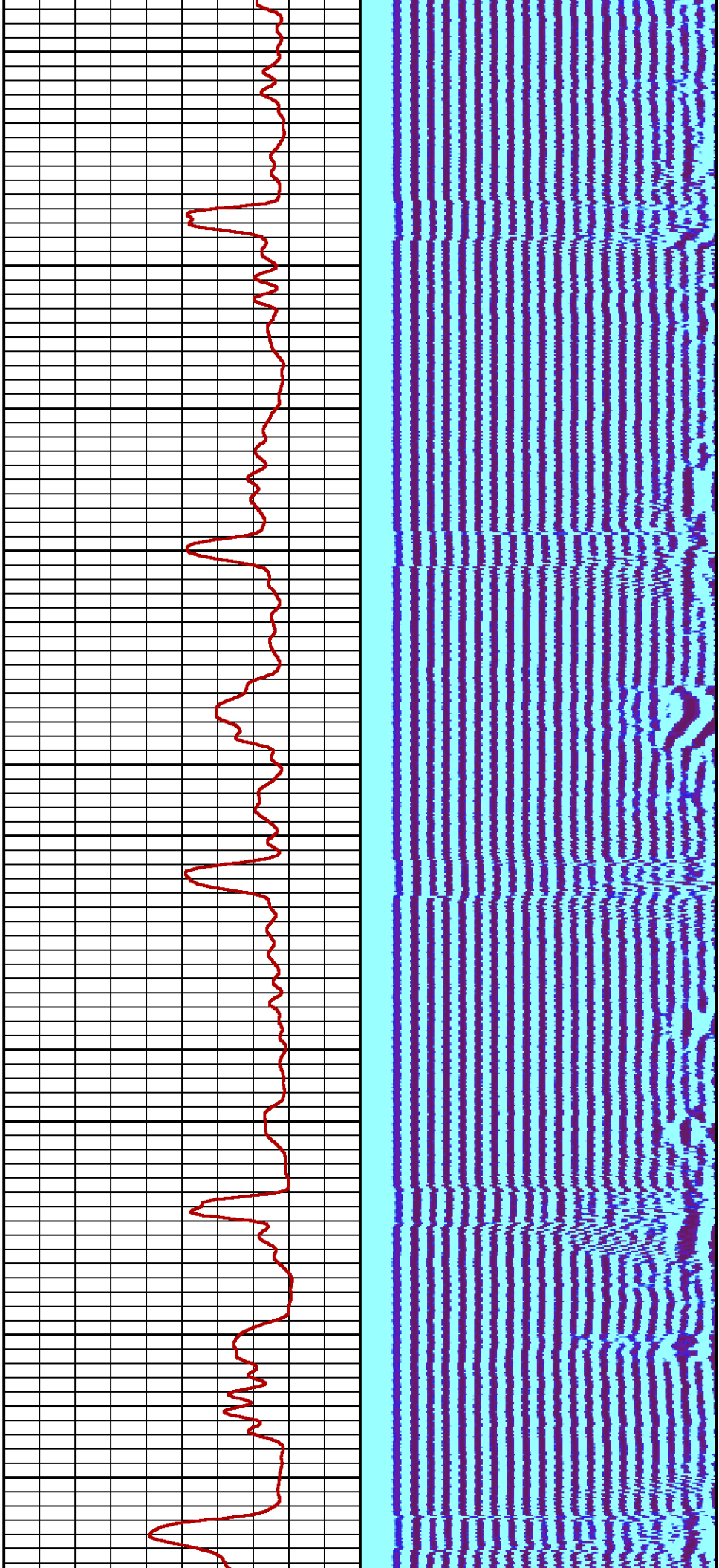




1800

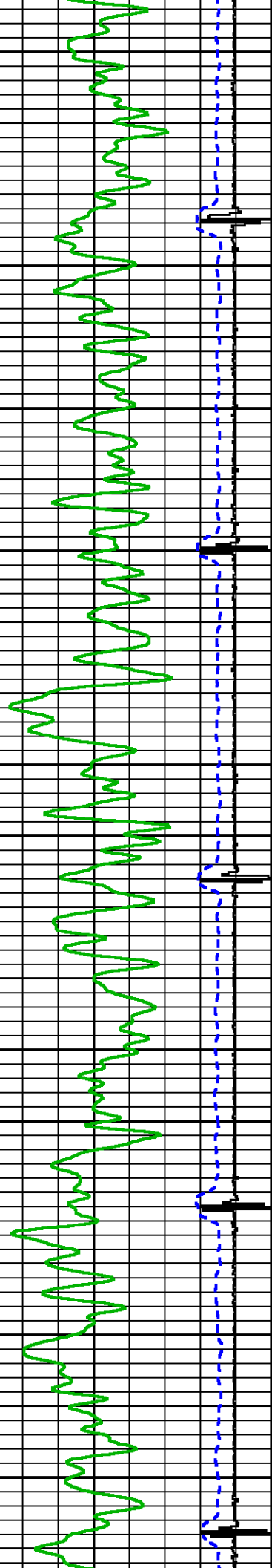
1900

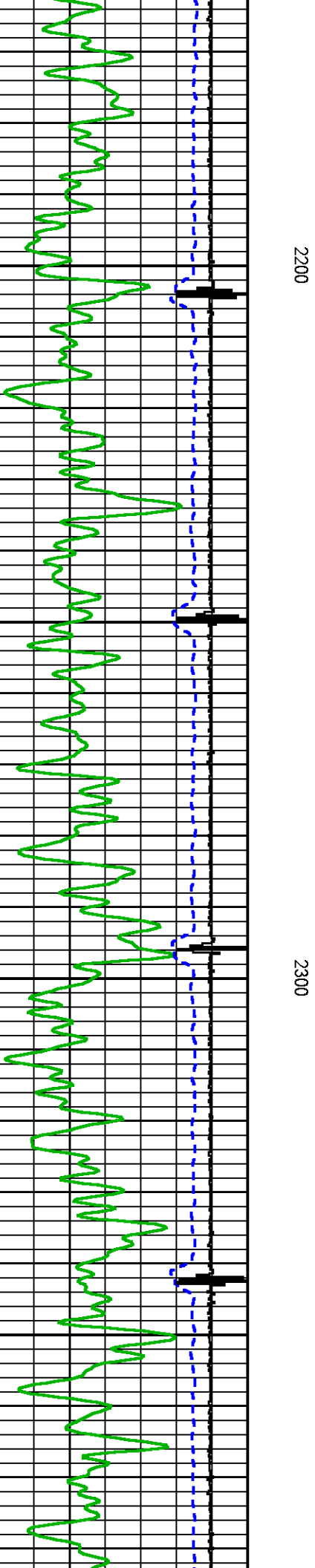
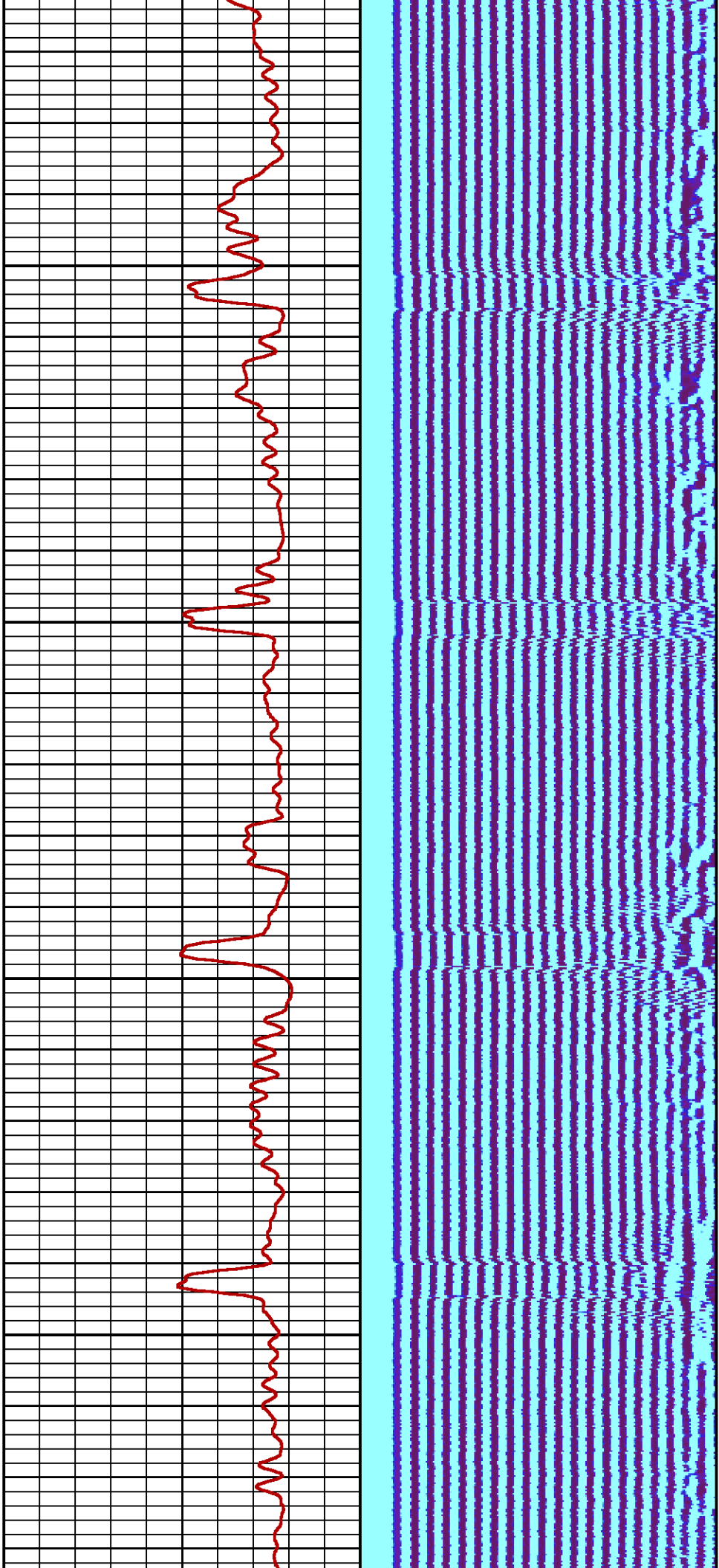




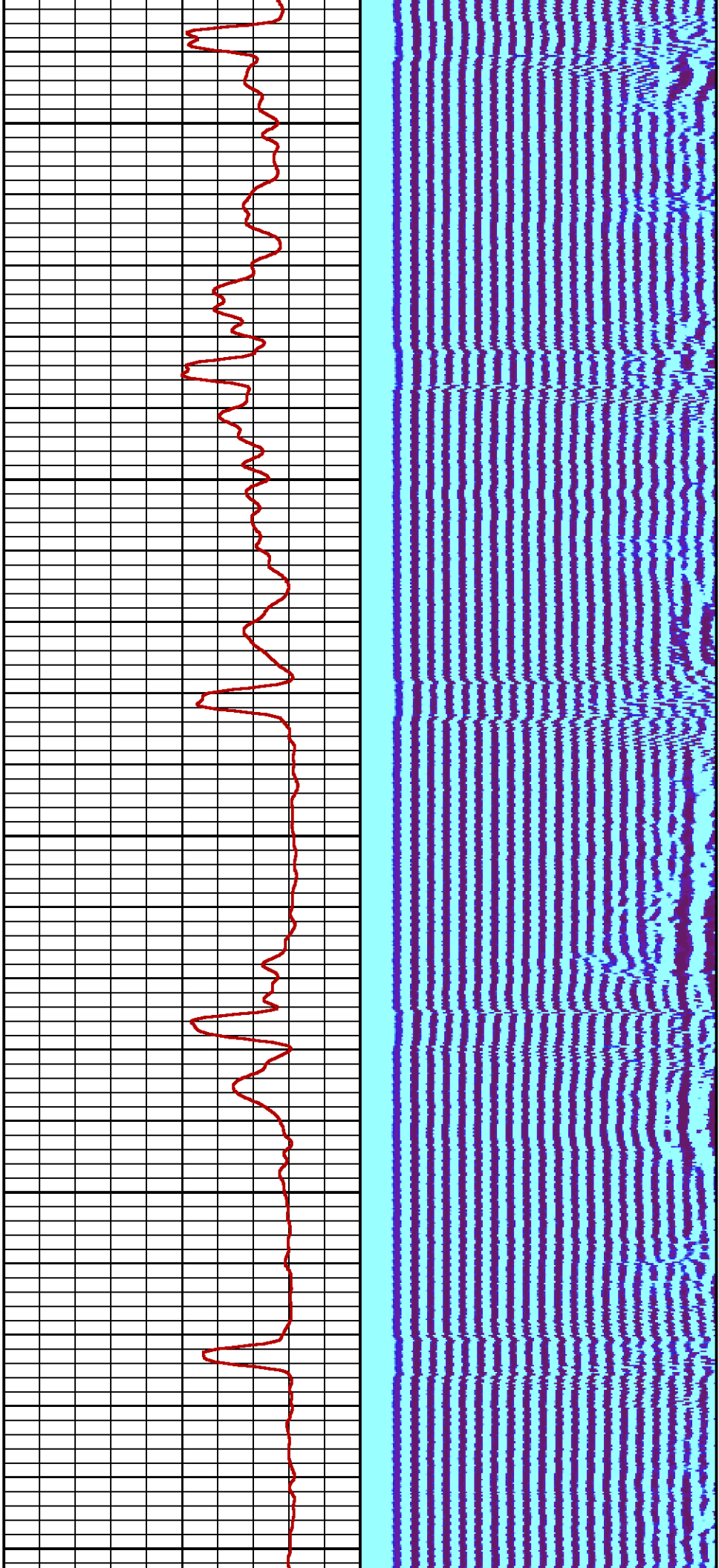
2000

2100





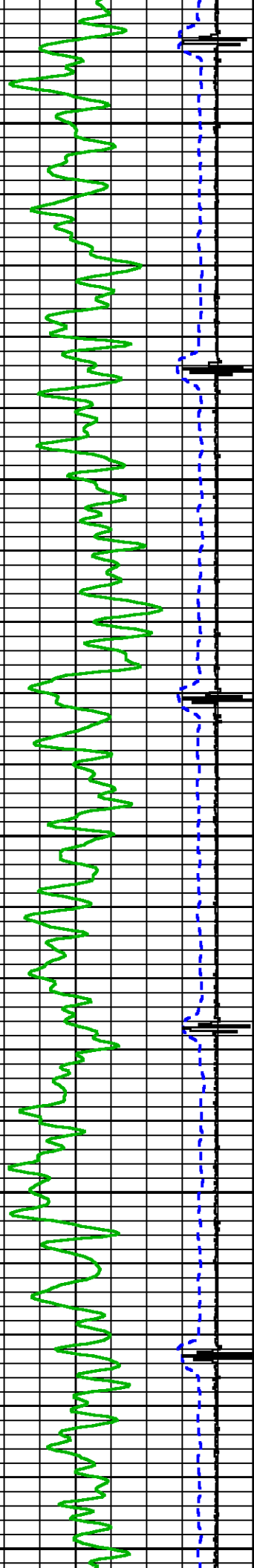


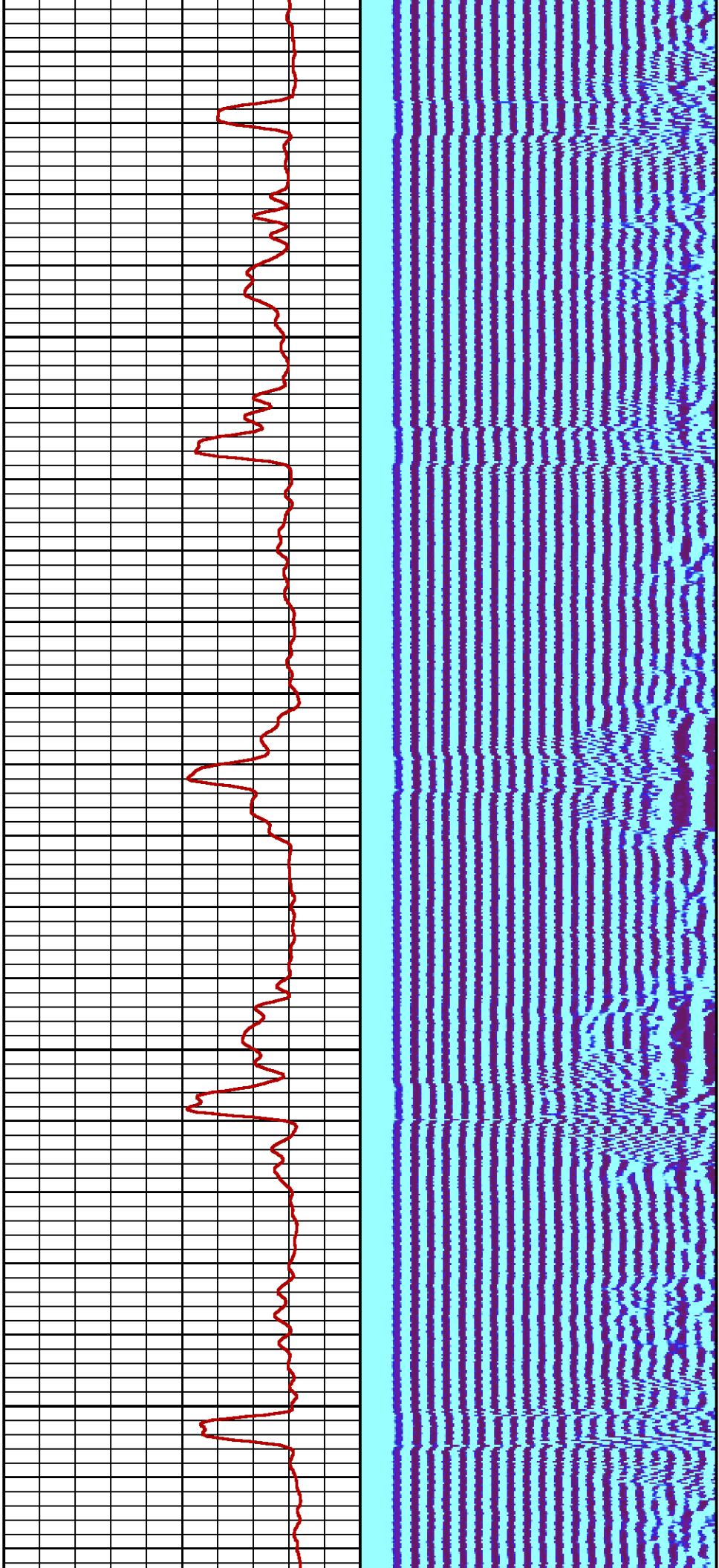


2400

2500

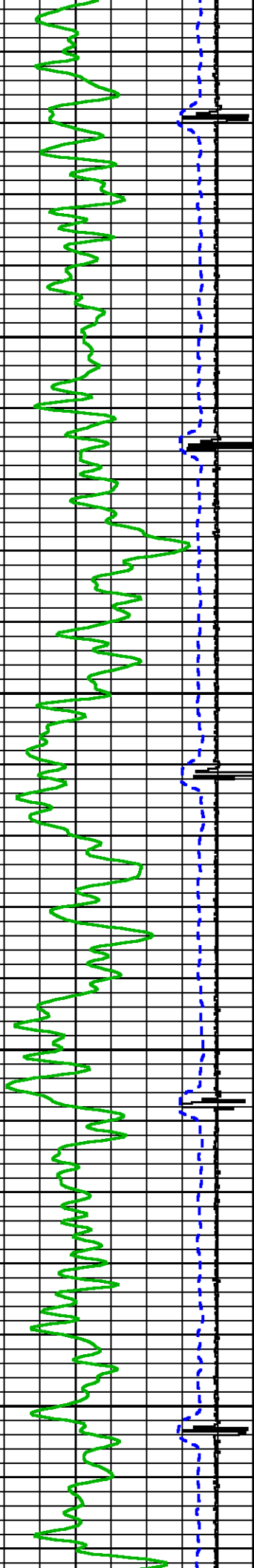
2600

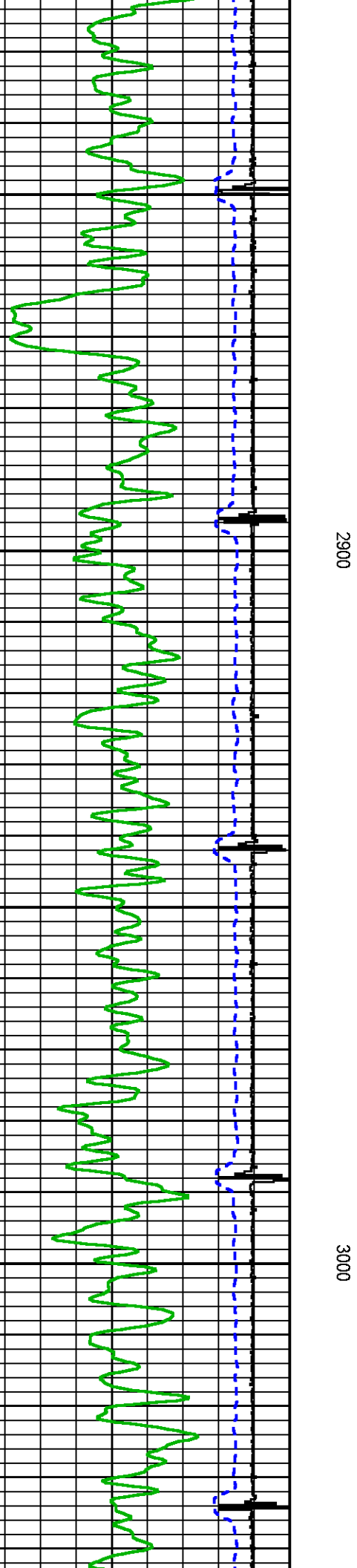
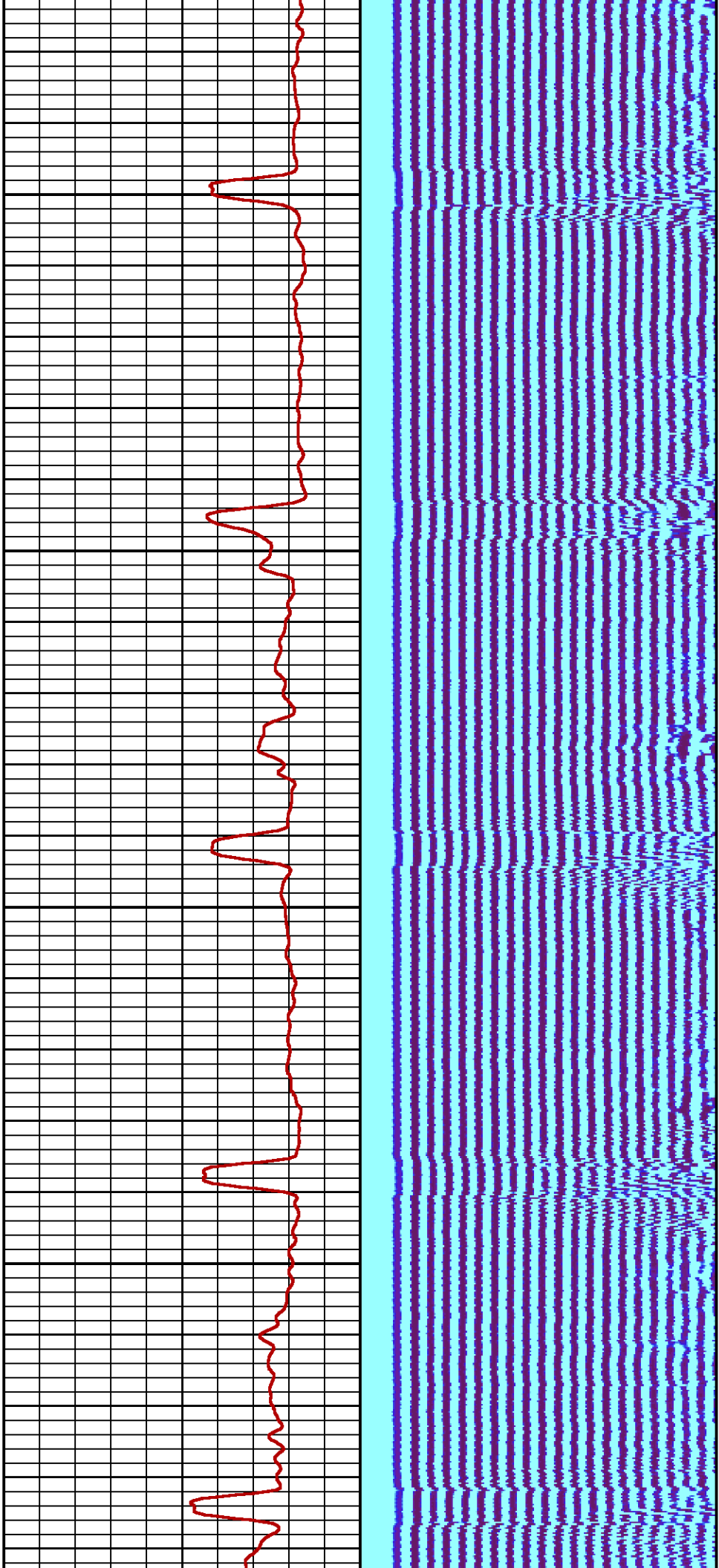




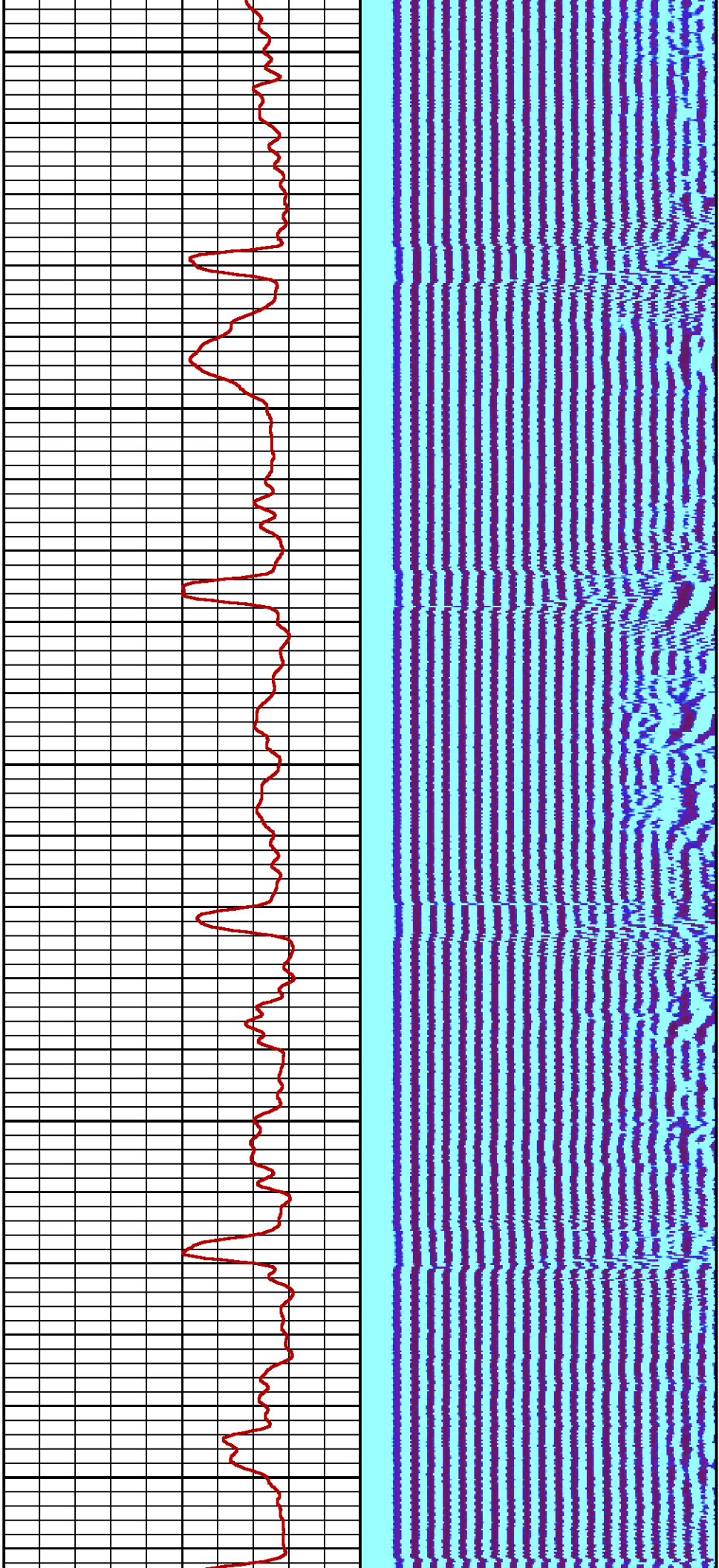
2700

2800



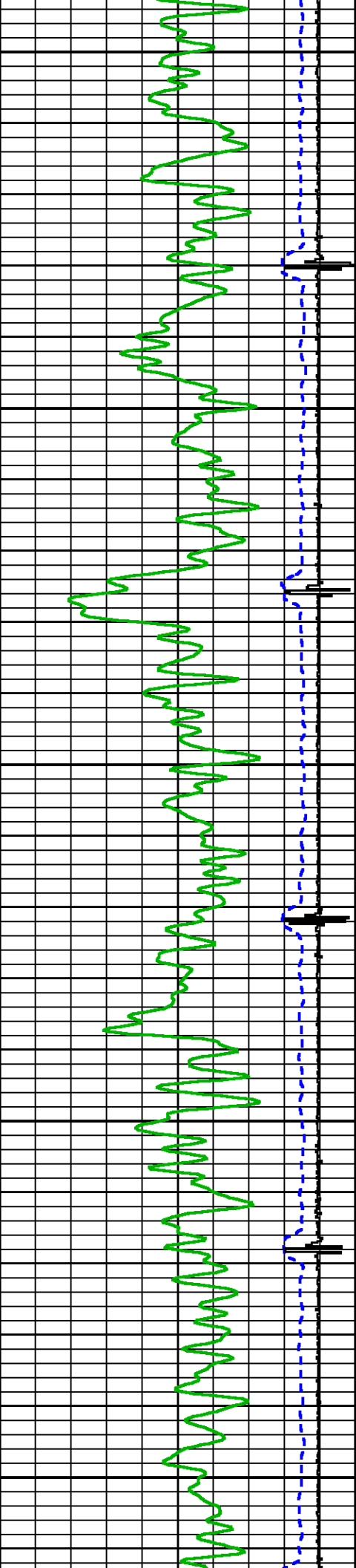


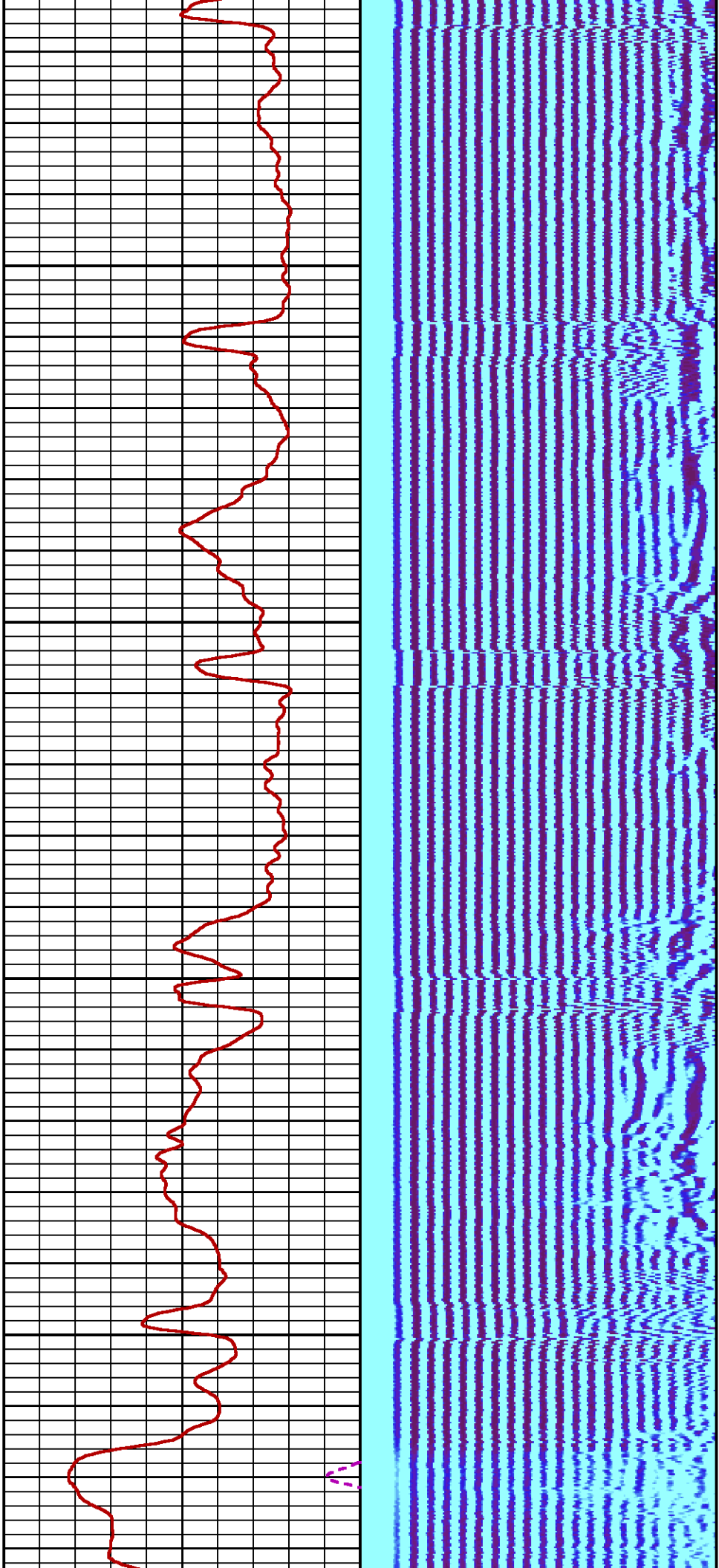




3100

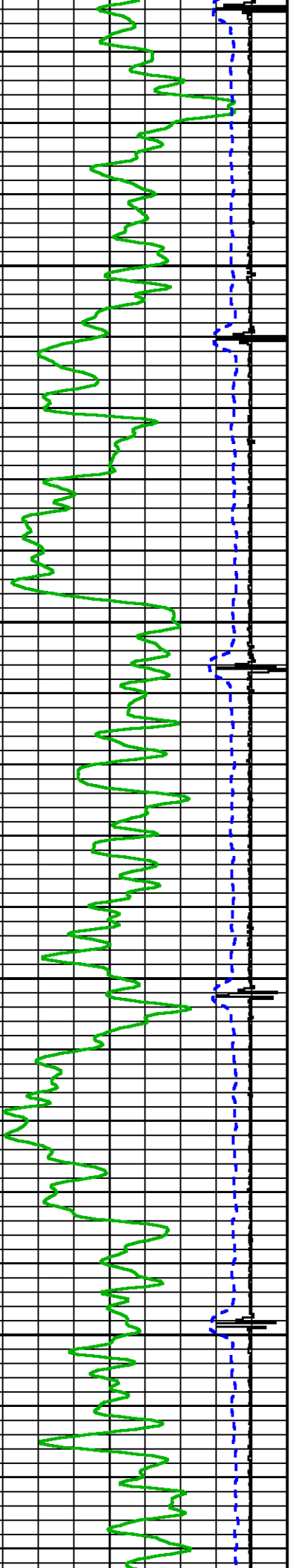
3200

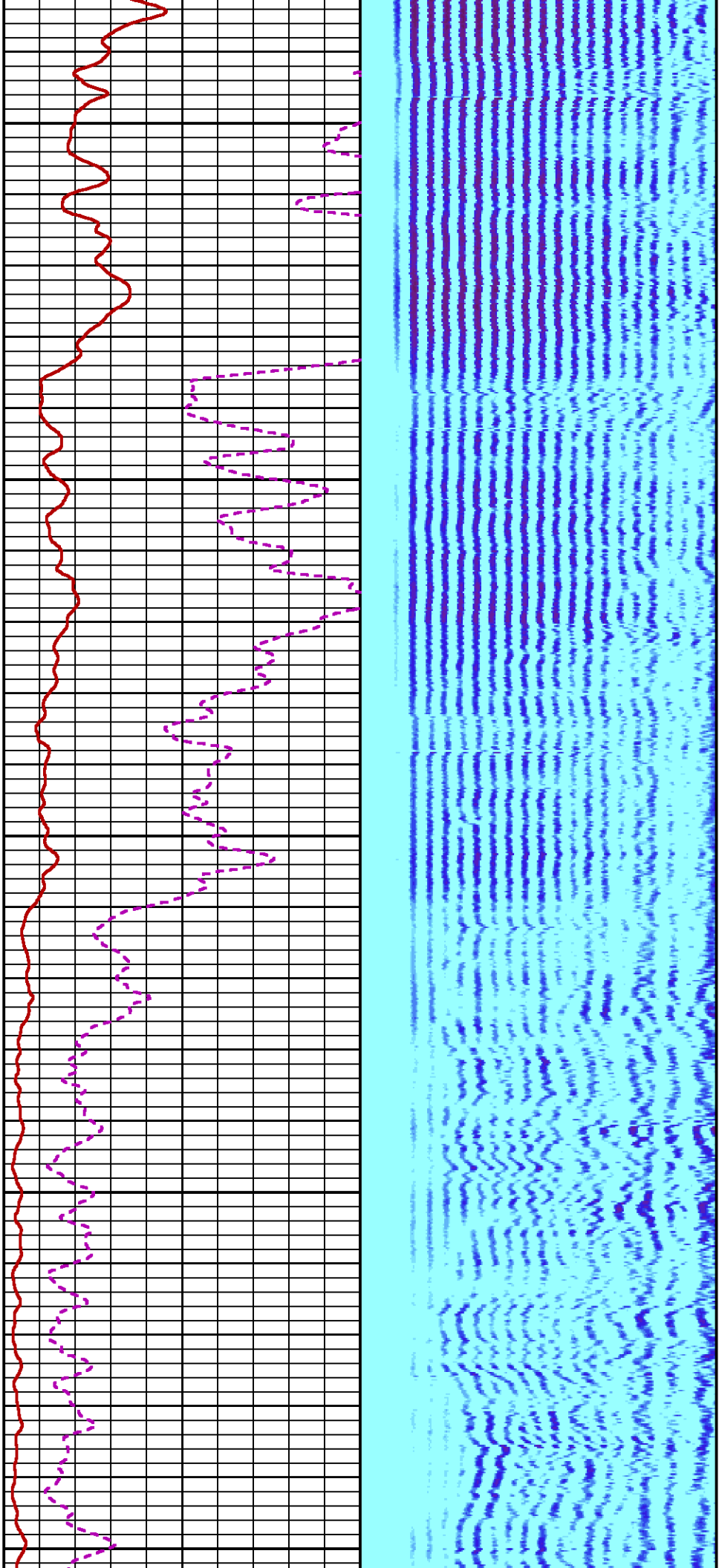




3300

3400

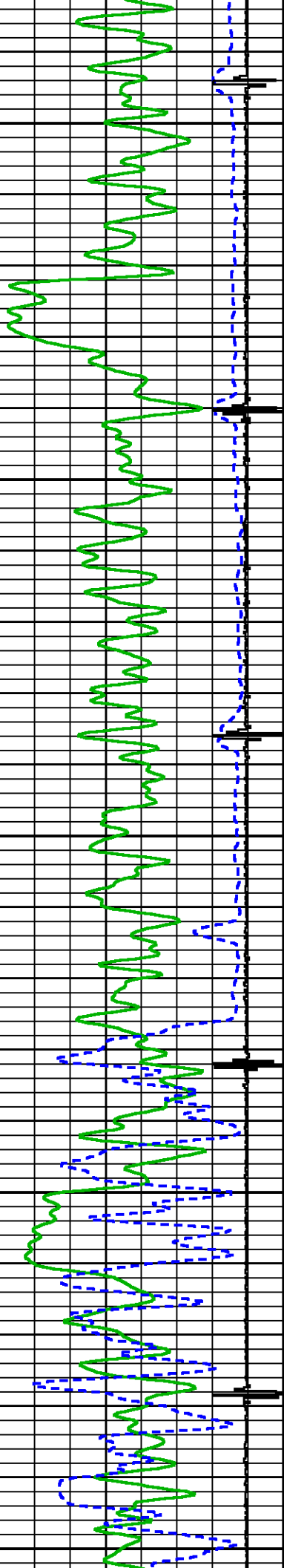


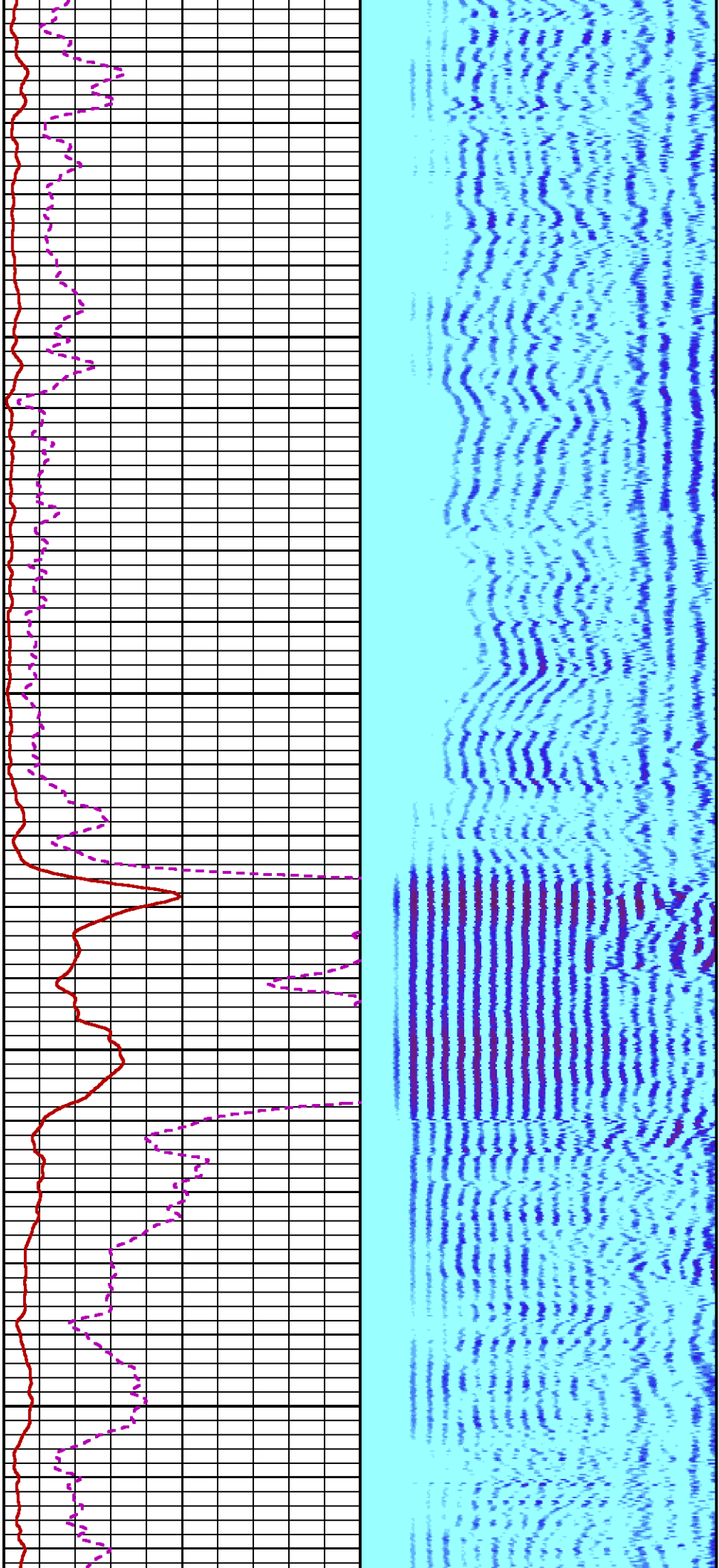


3500

3600

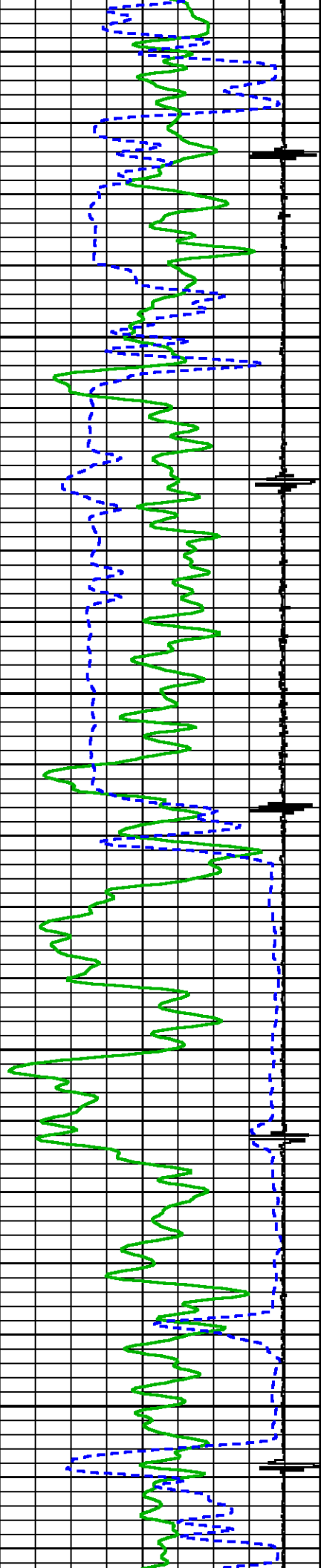
3700



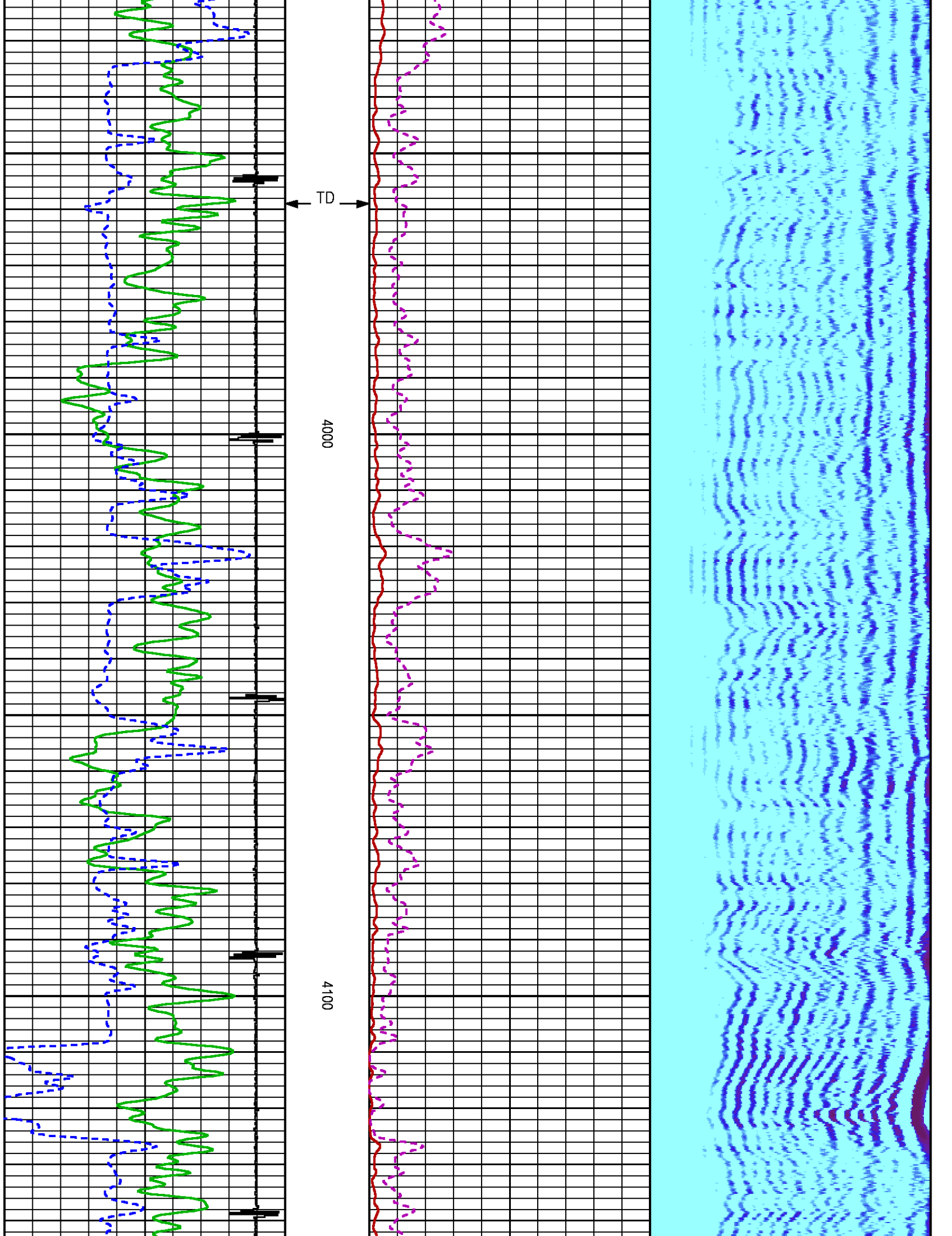


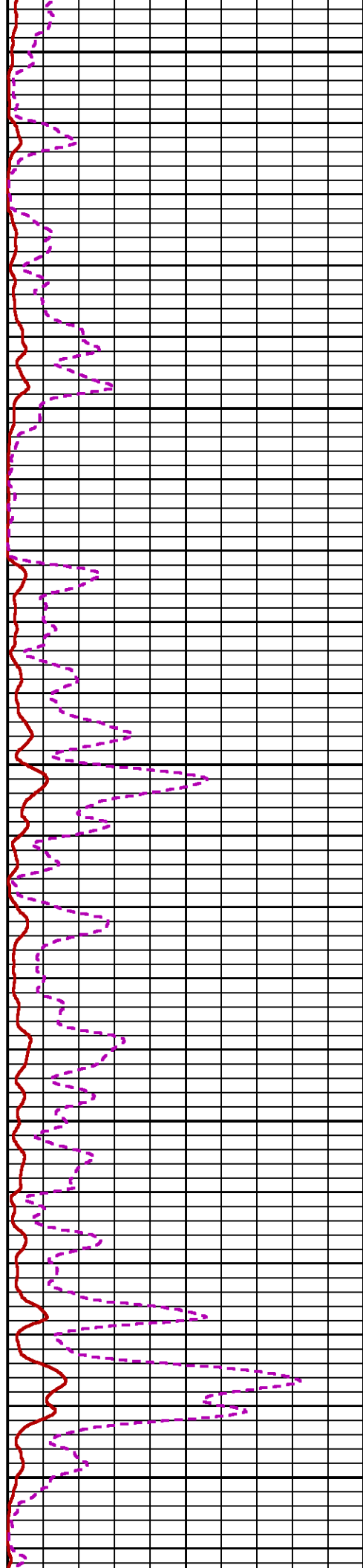
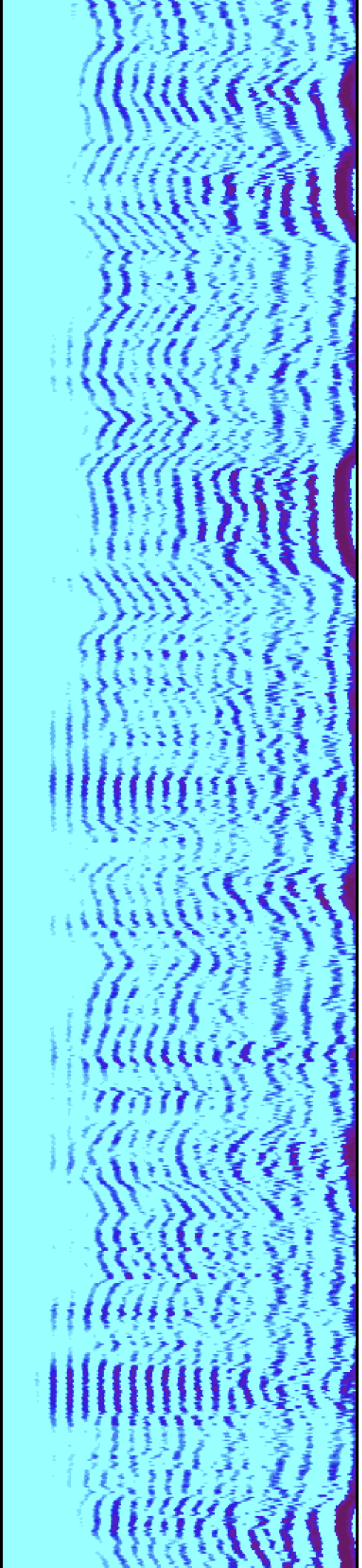
3800

3900



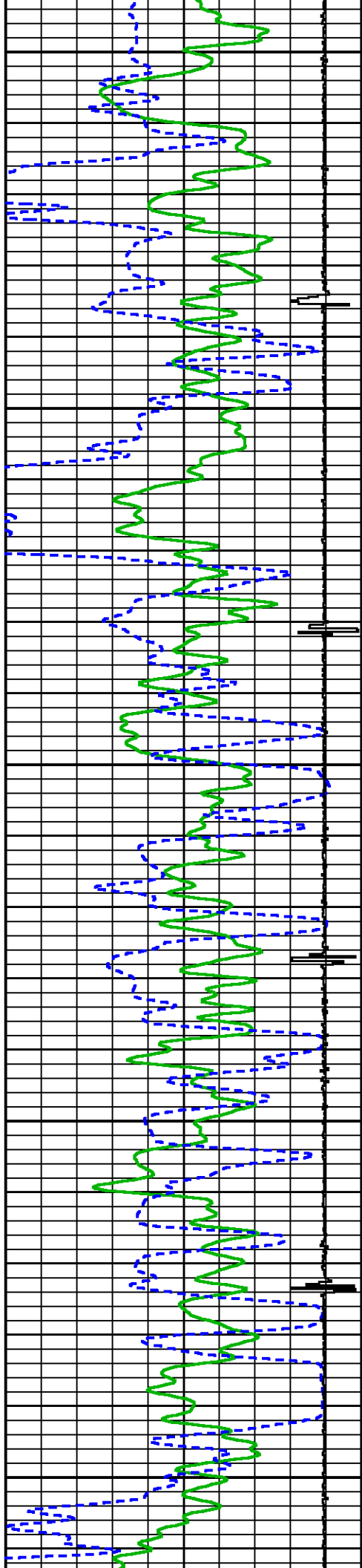




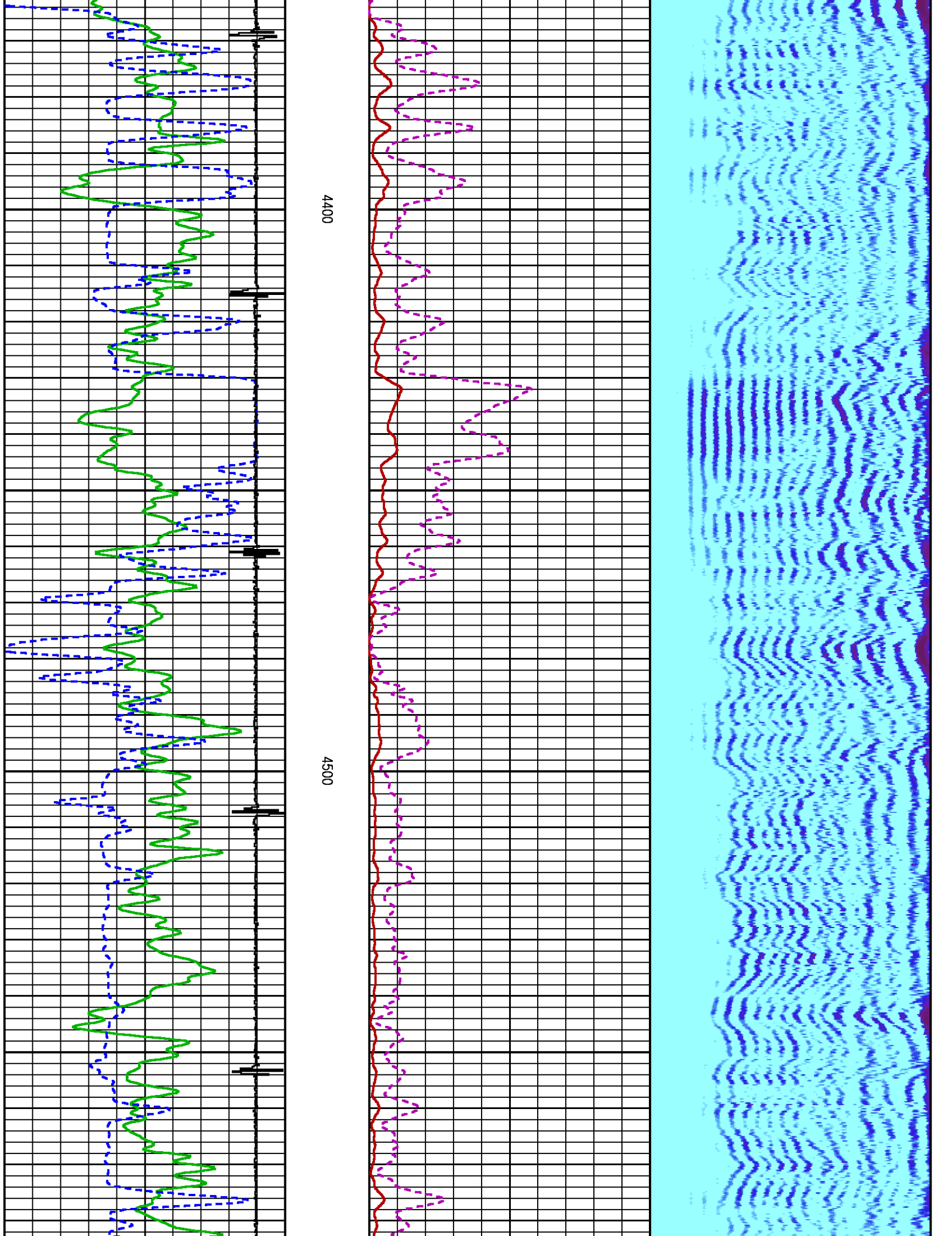


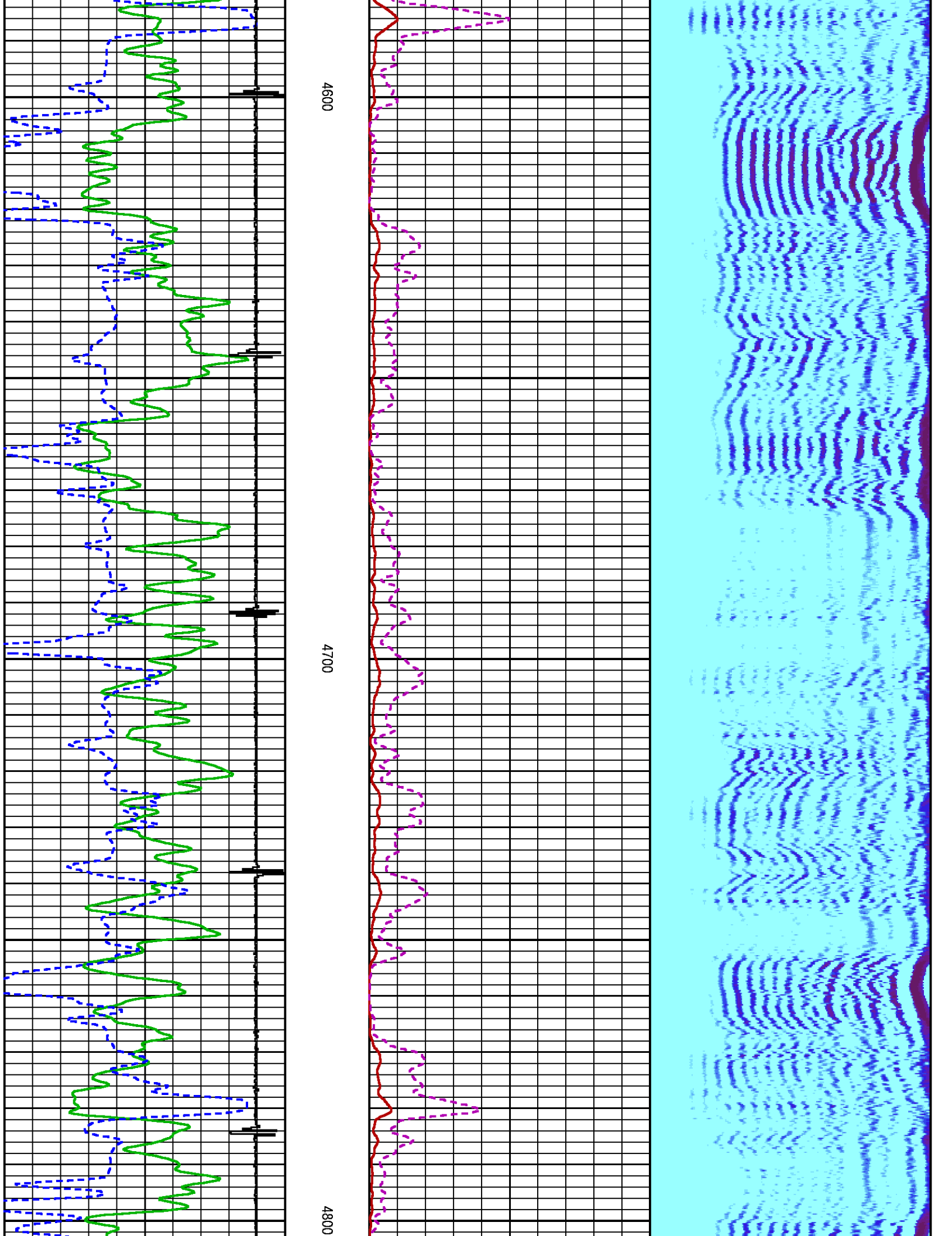
4200

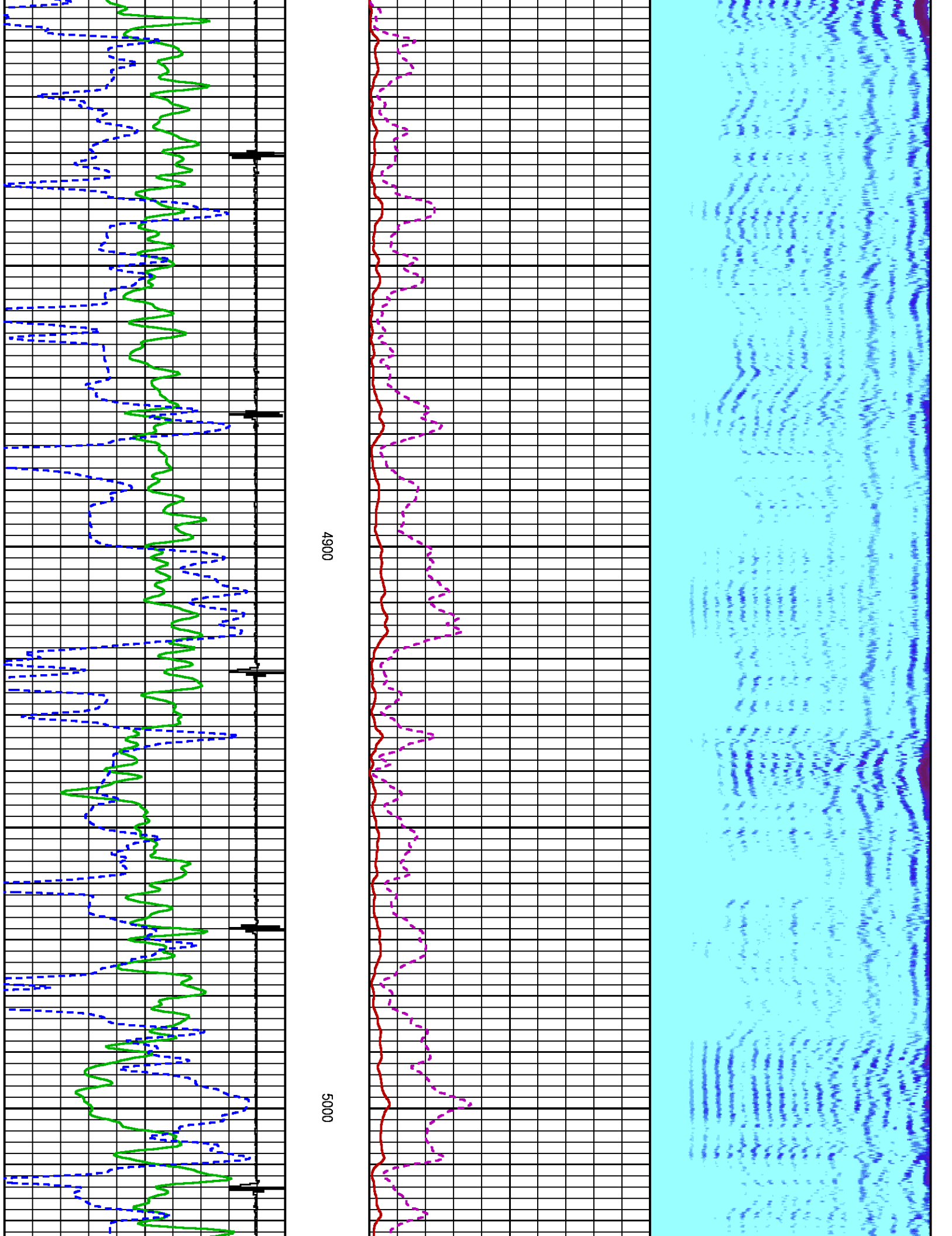
4300

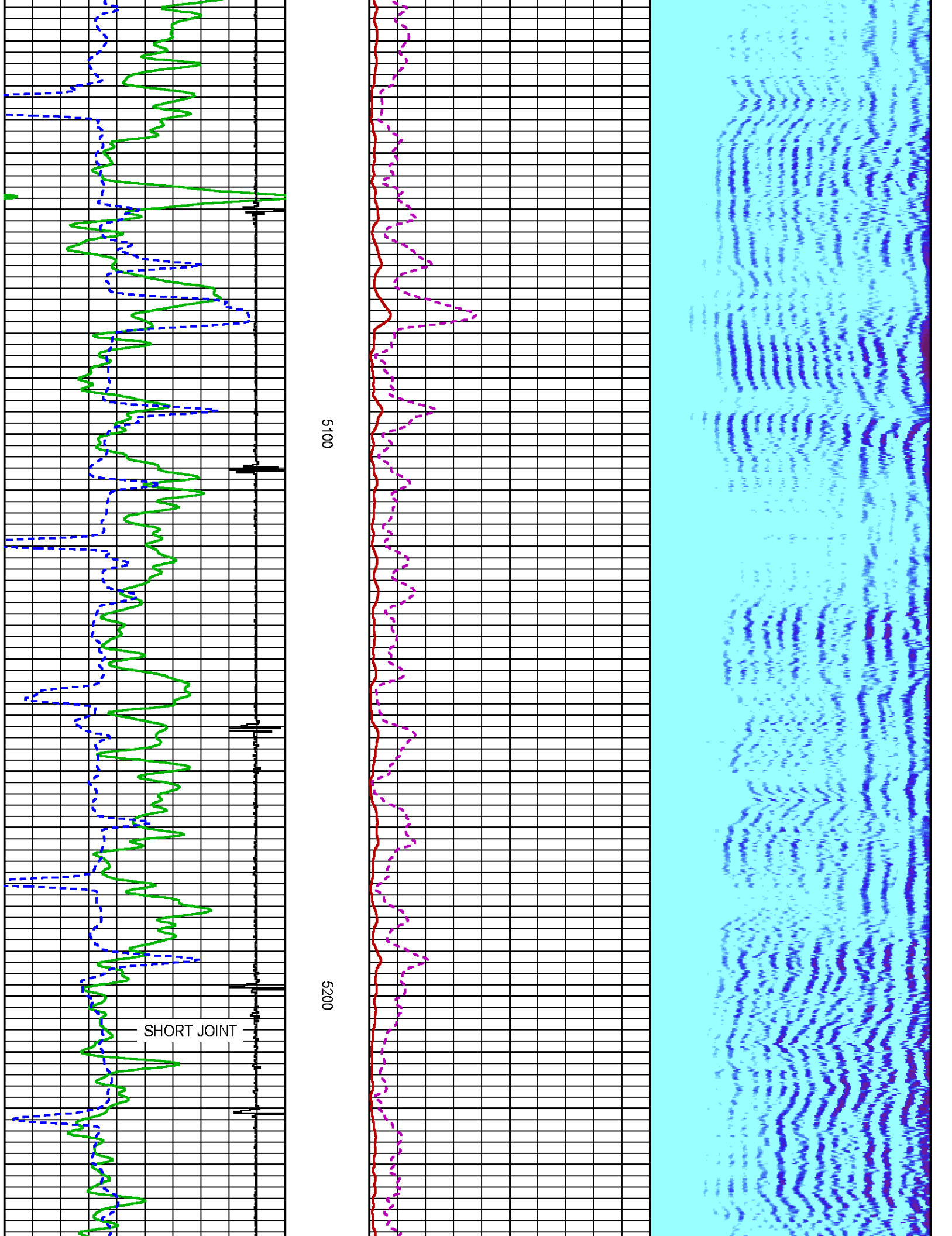


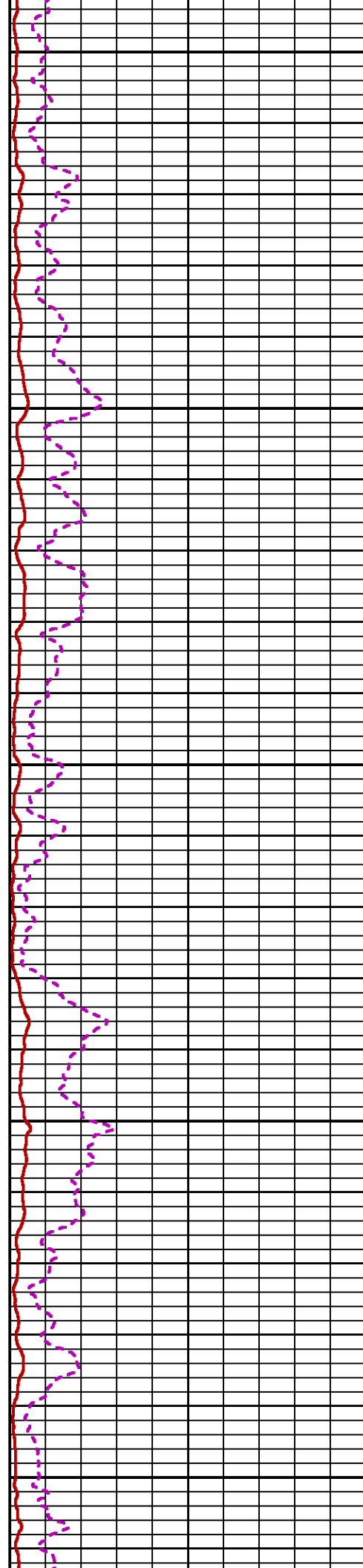
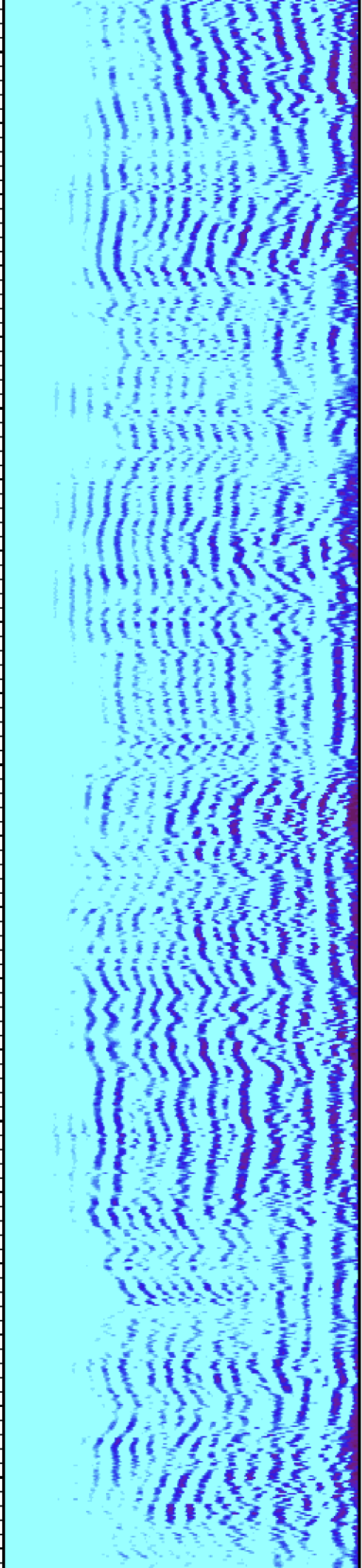






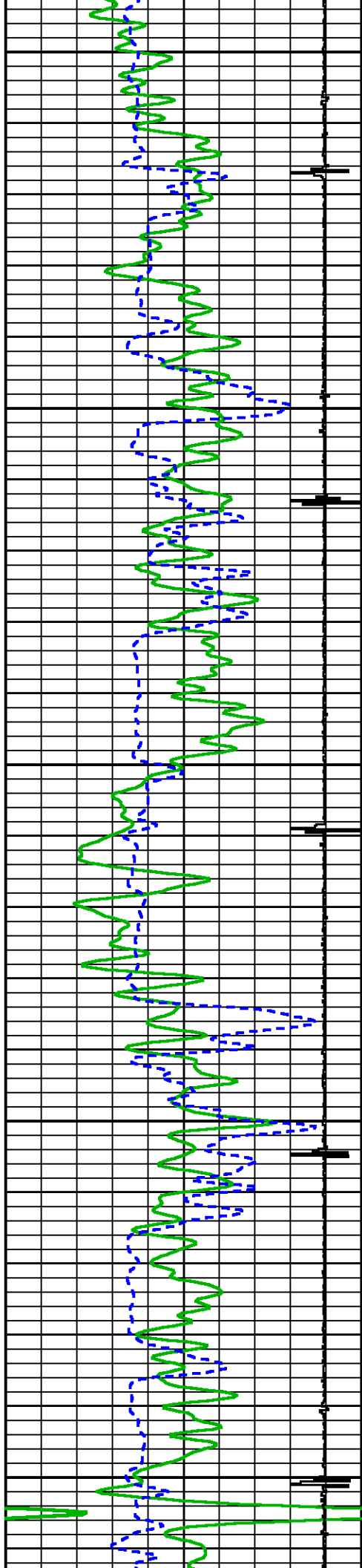




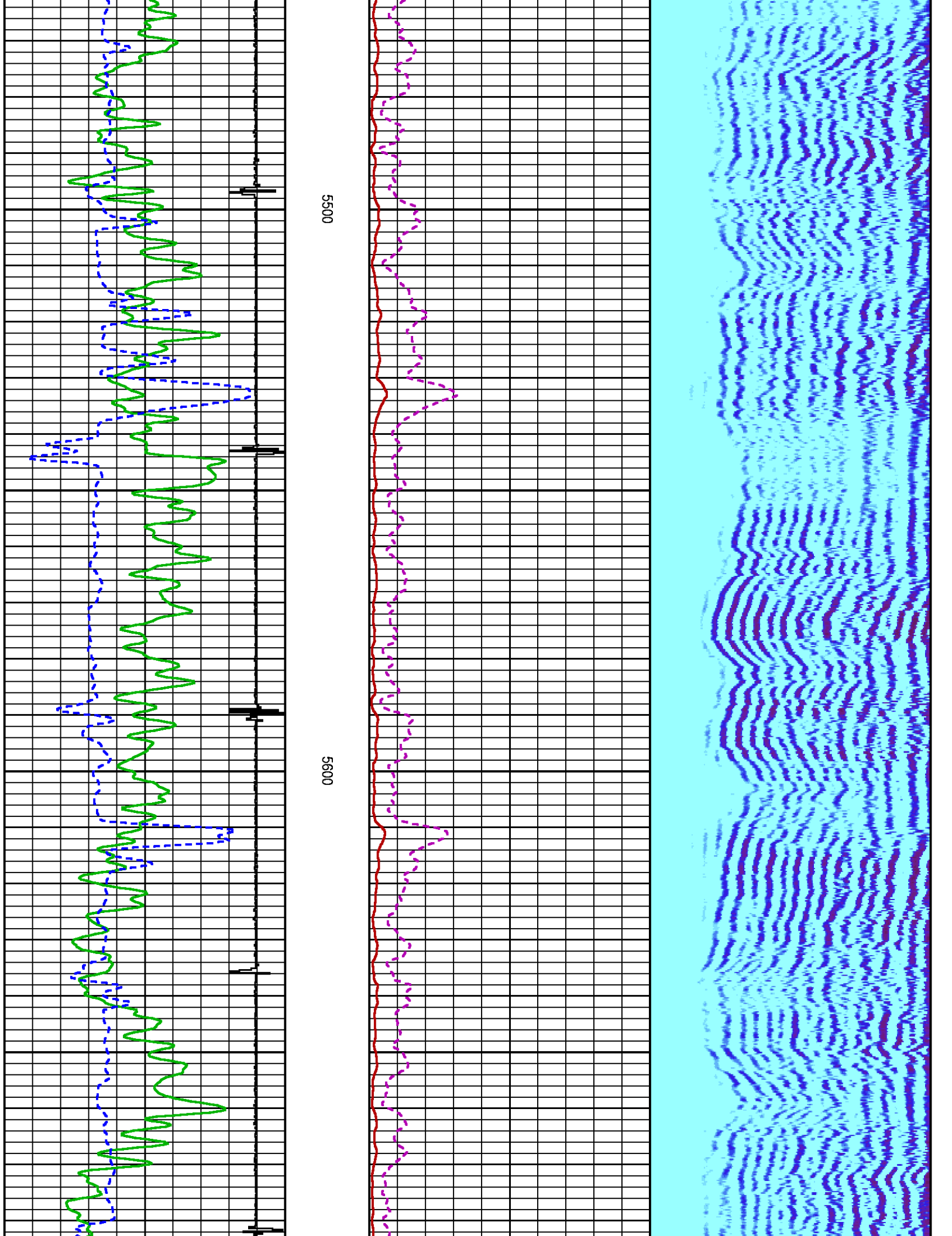


5300

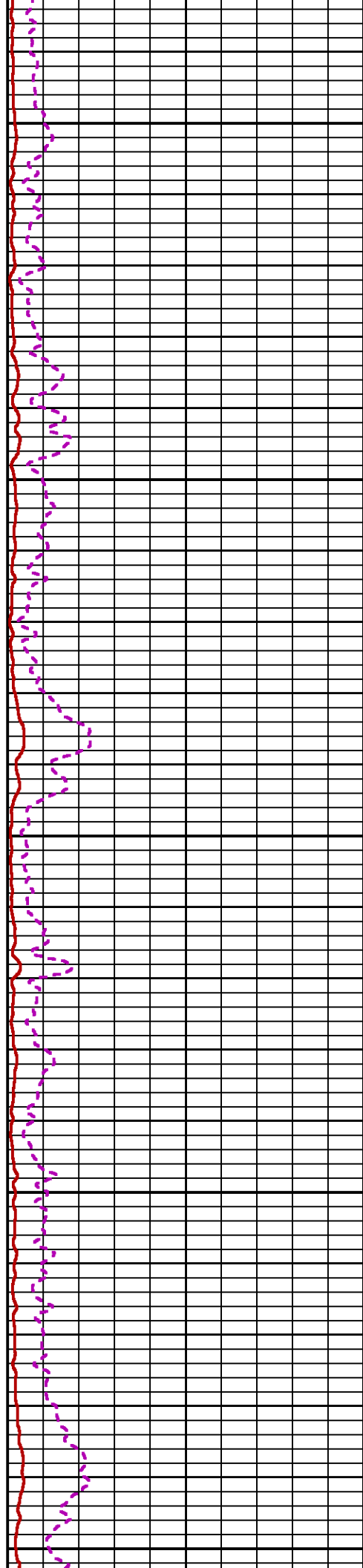
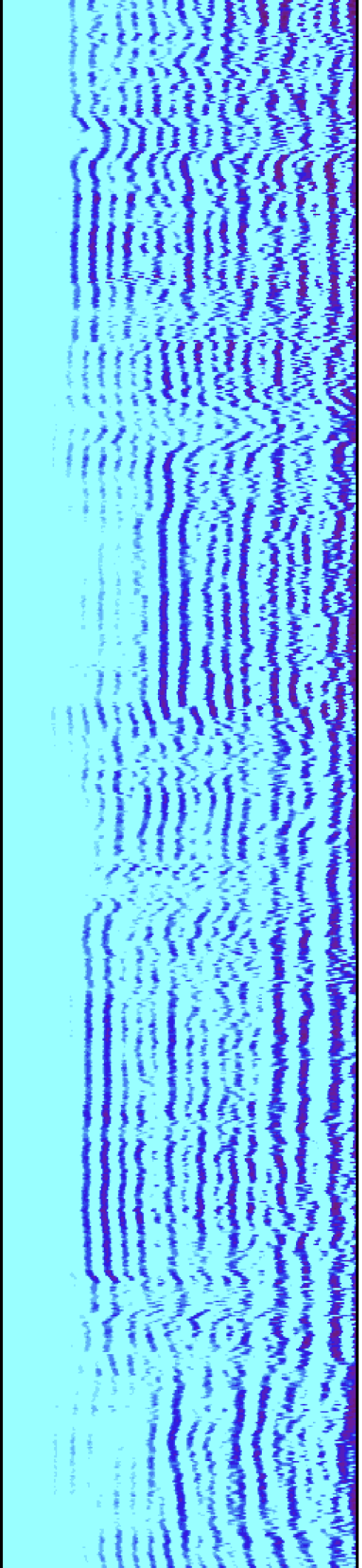
5400







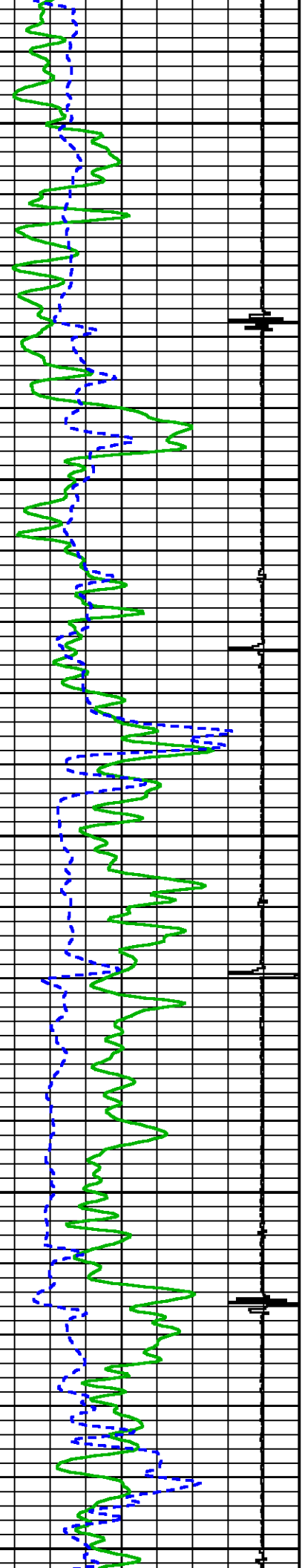


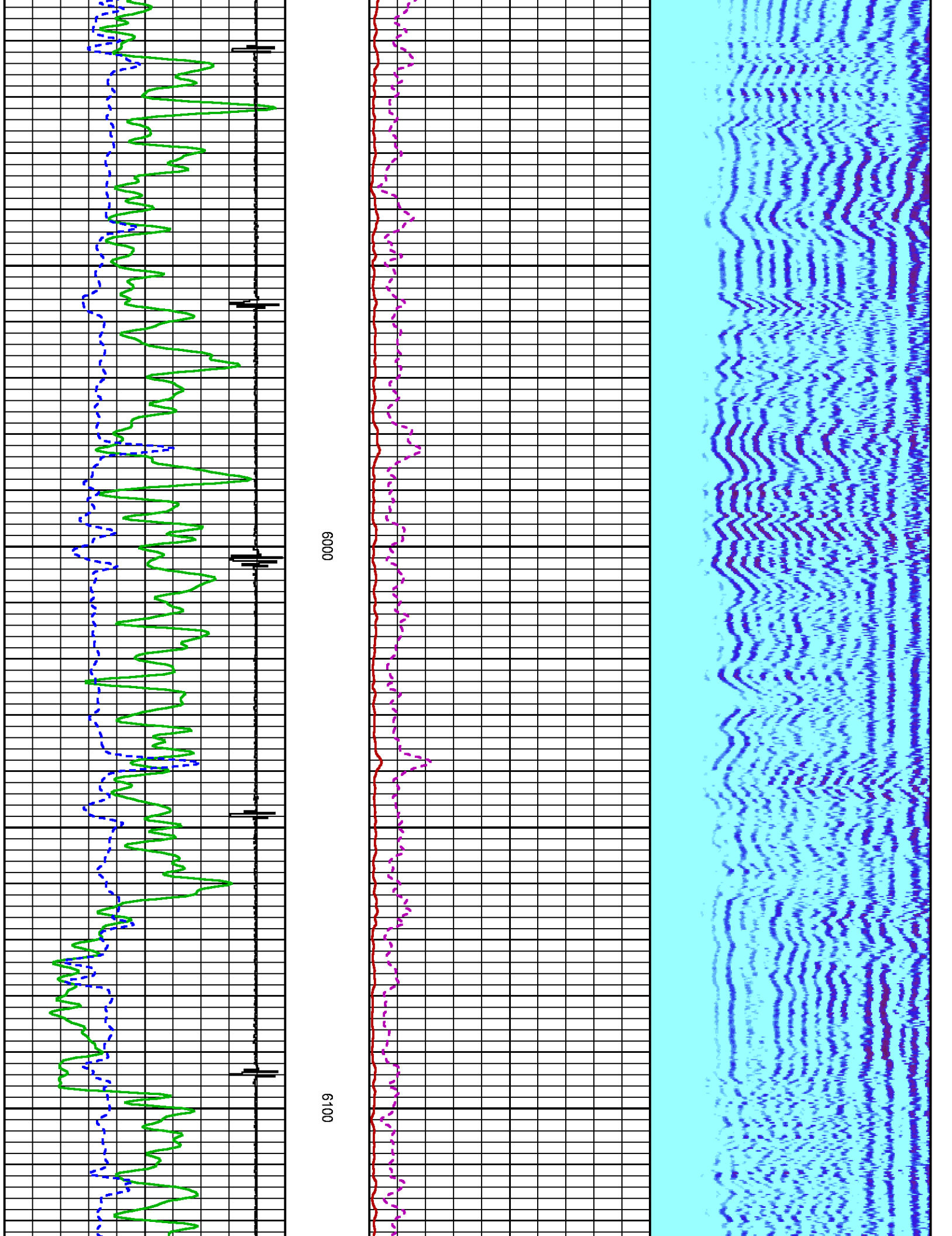


5700

5800

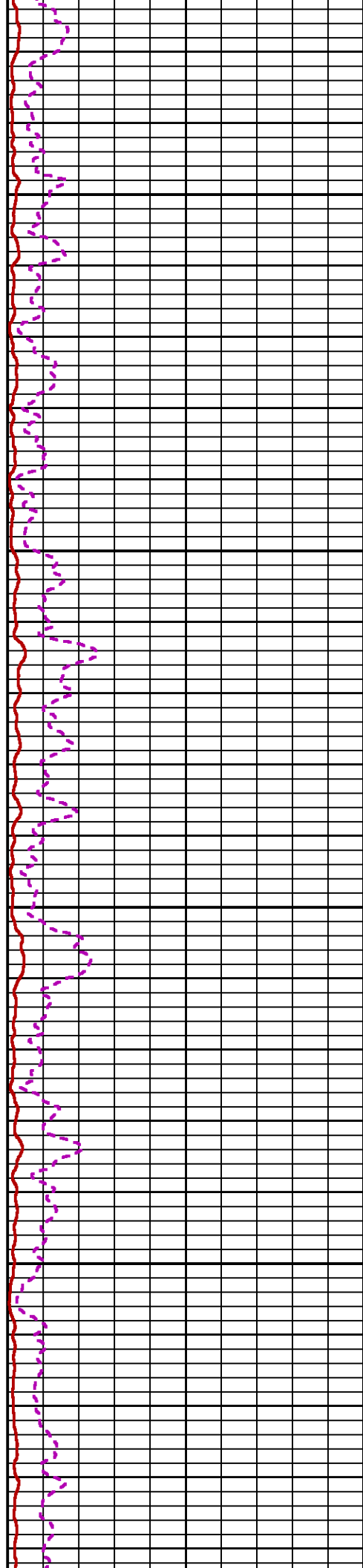
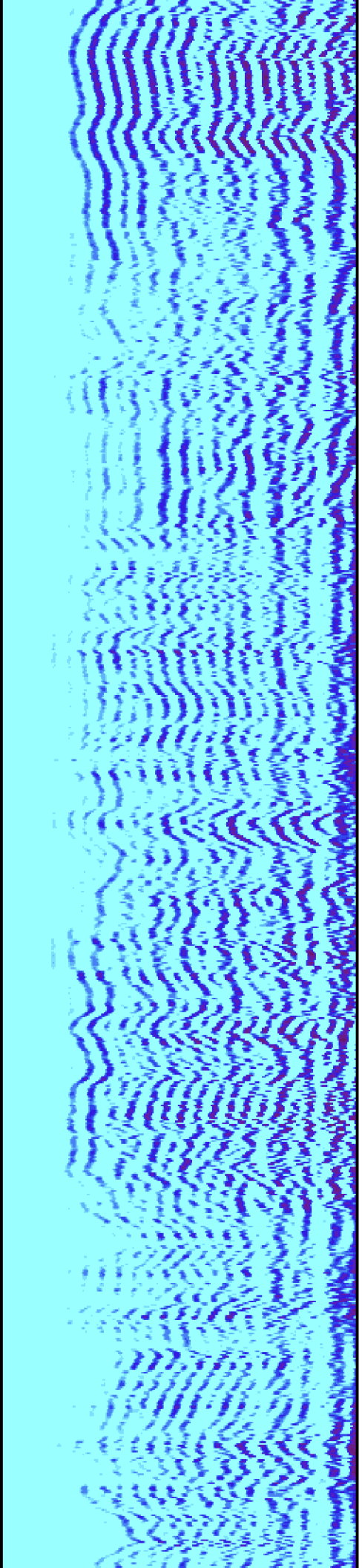
5900





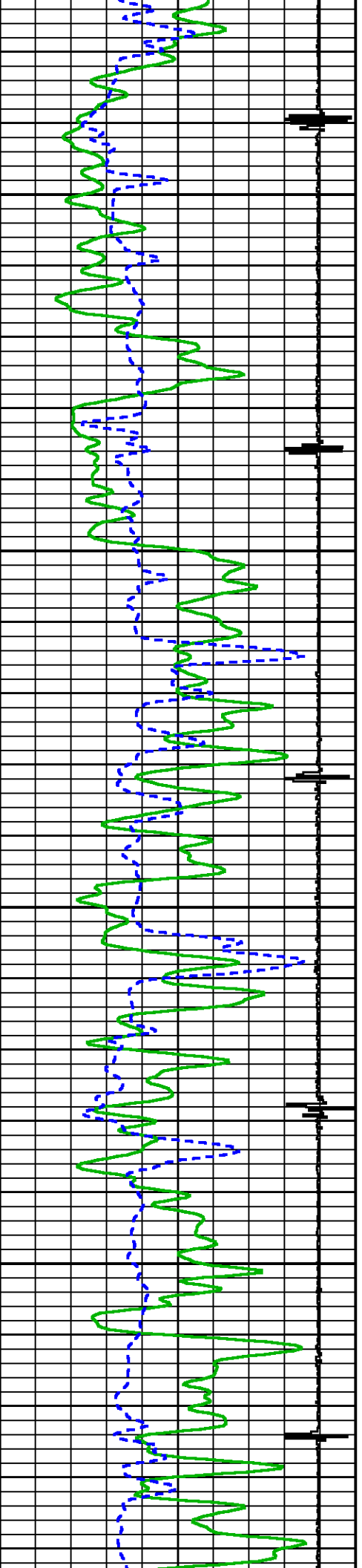
0009

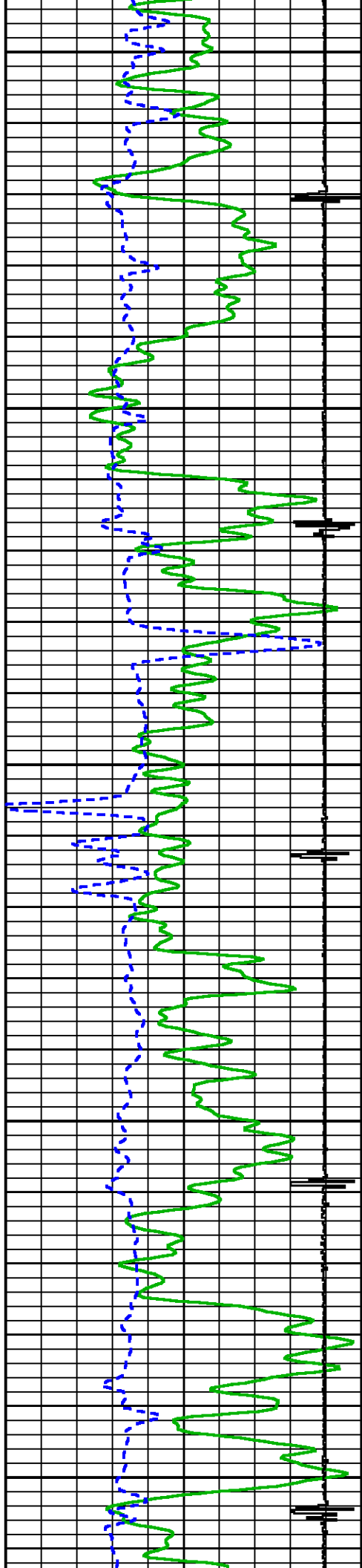
6100



6200

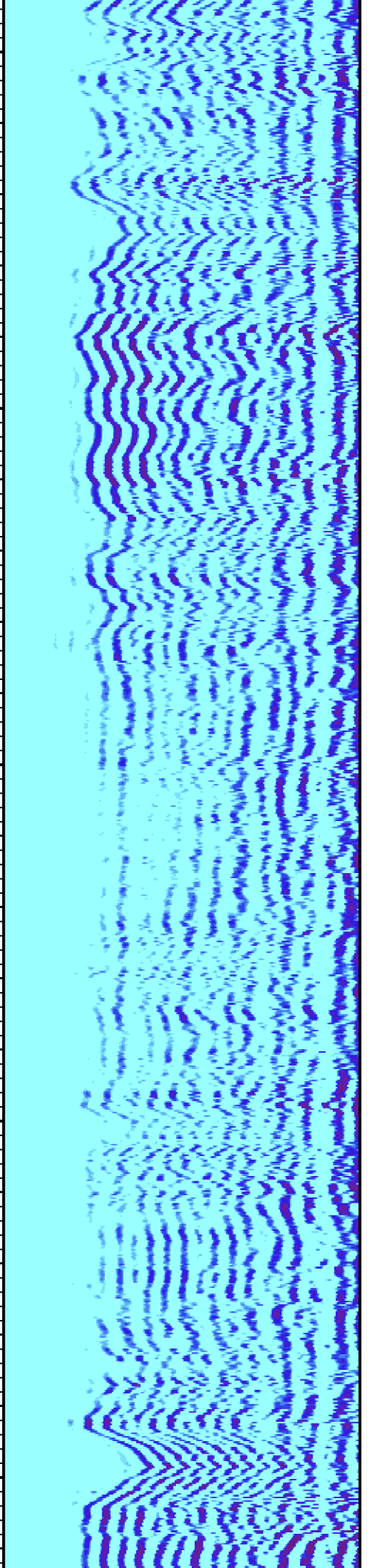
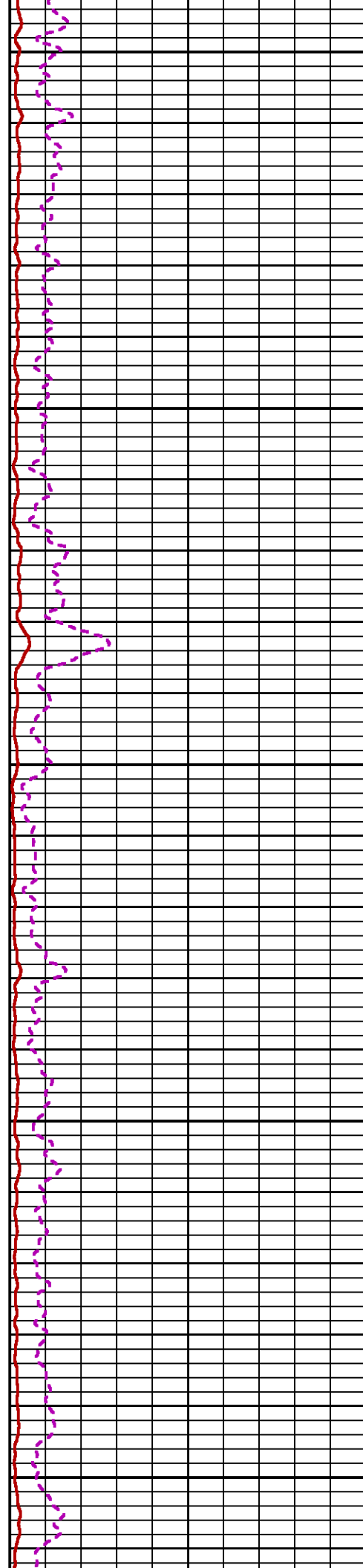
6300



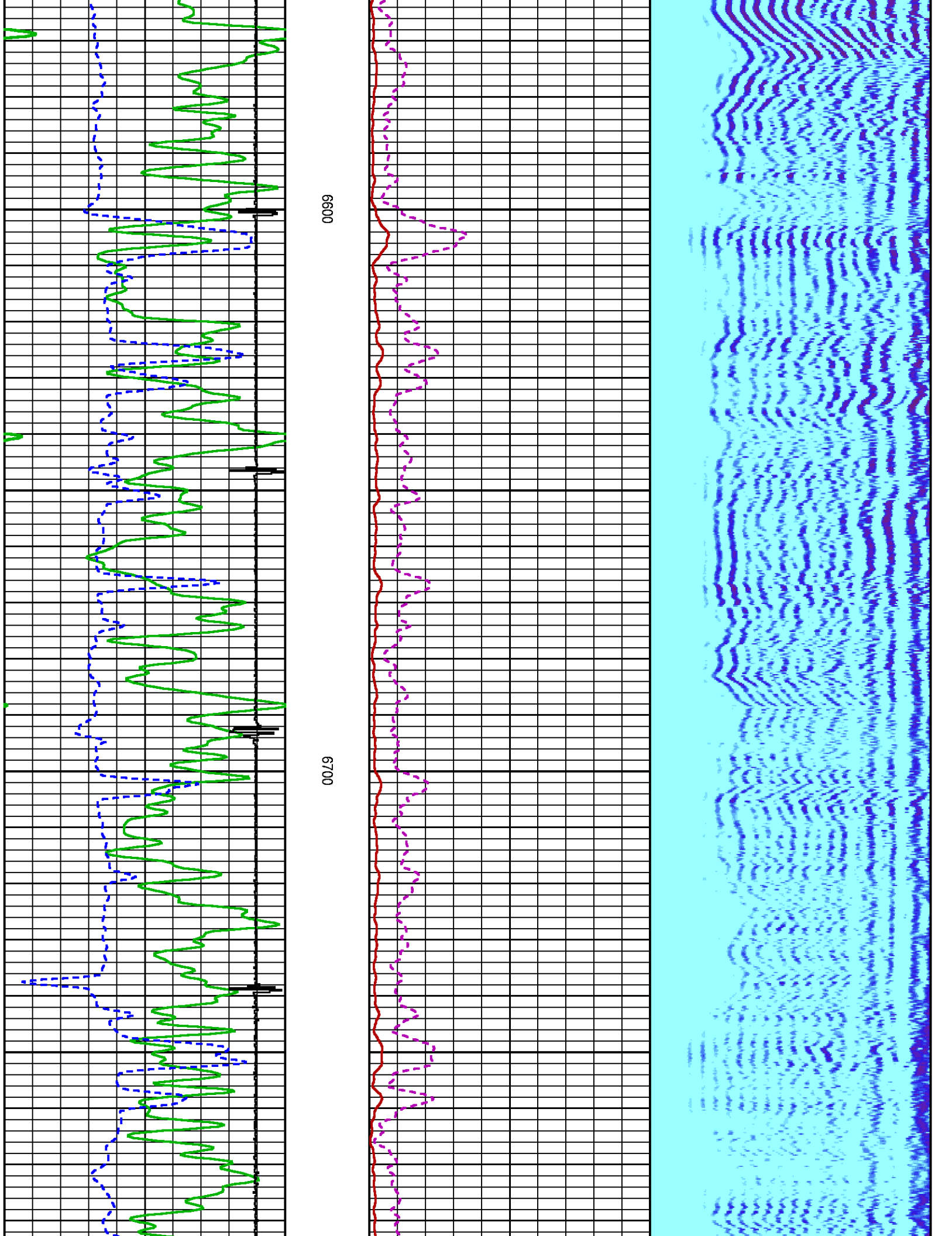


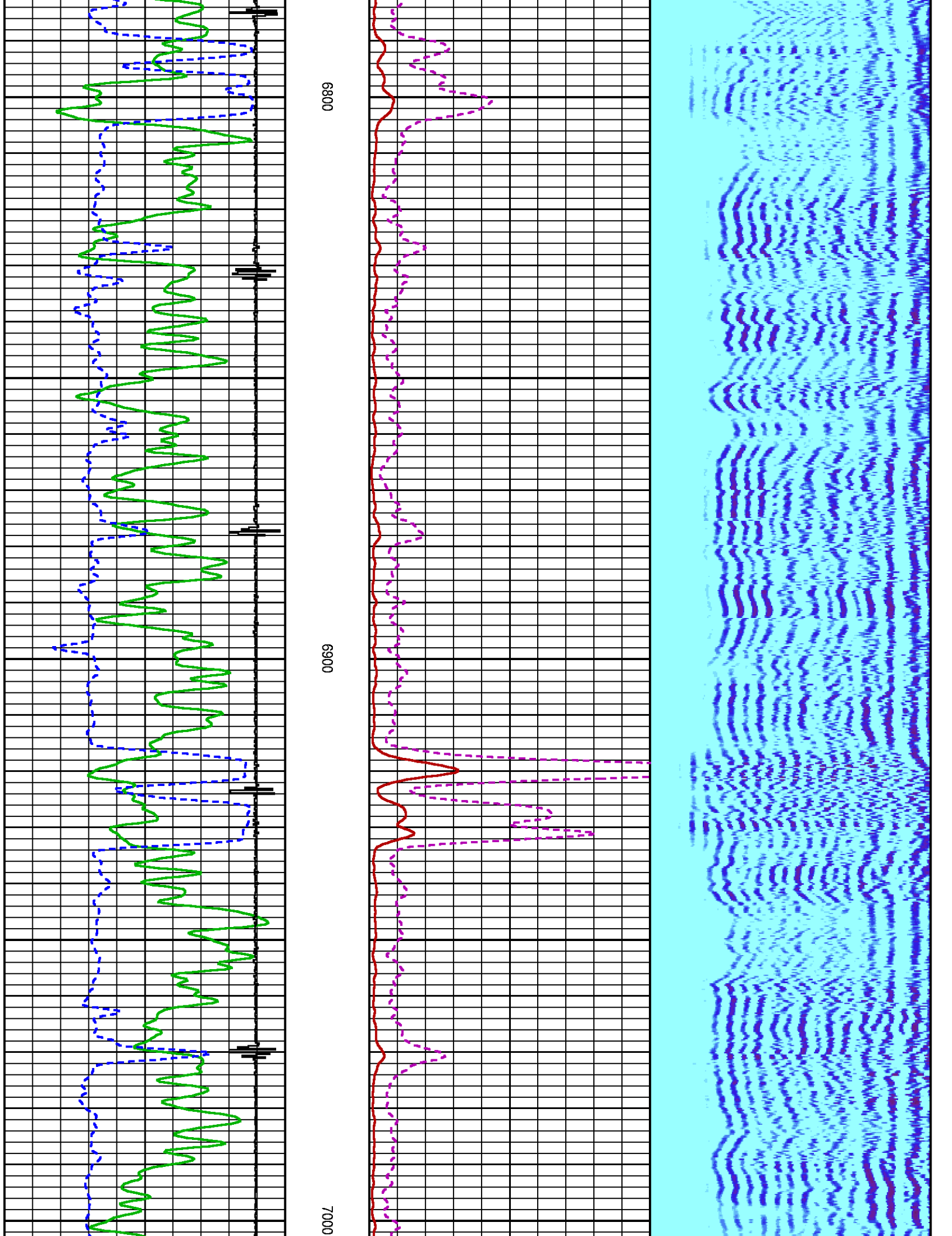
6400

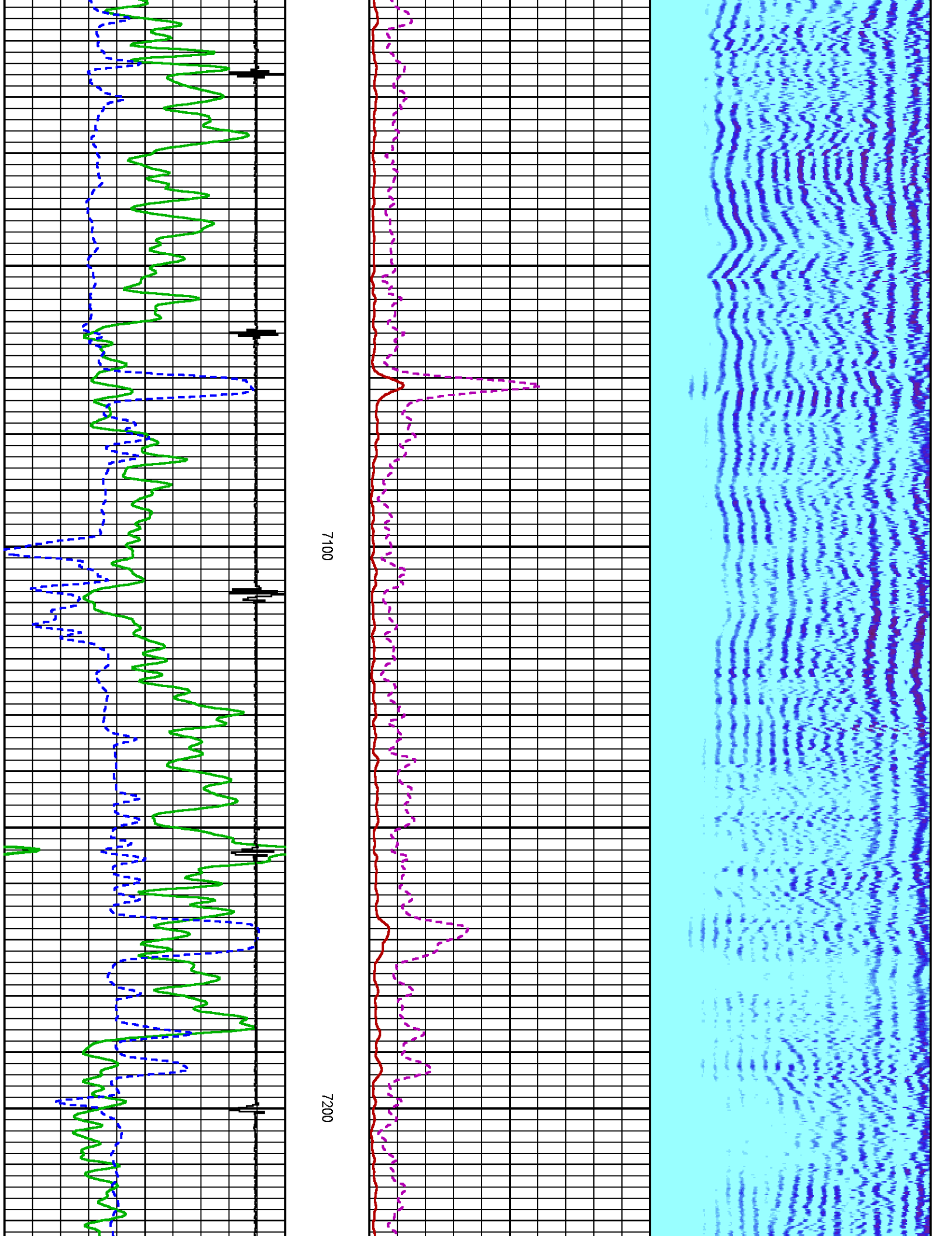
6500

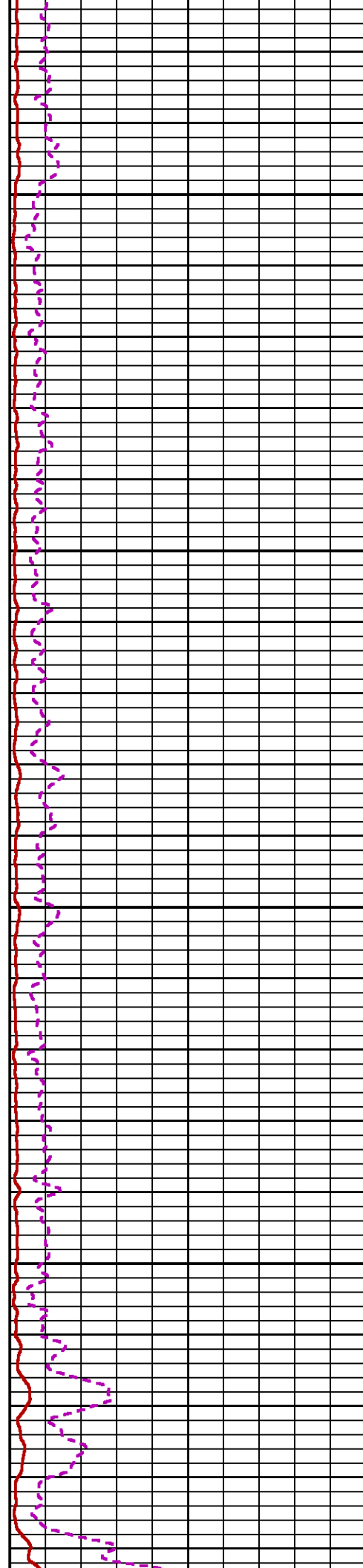
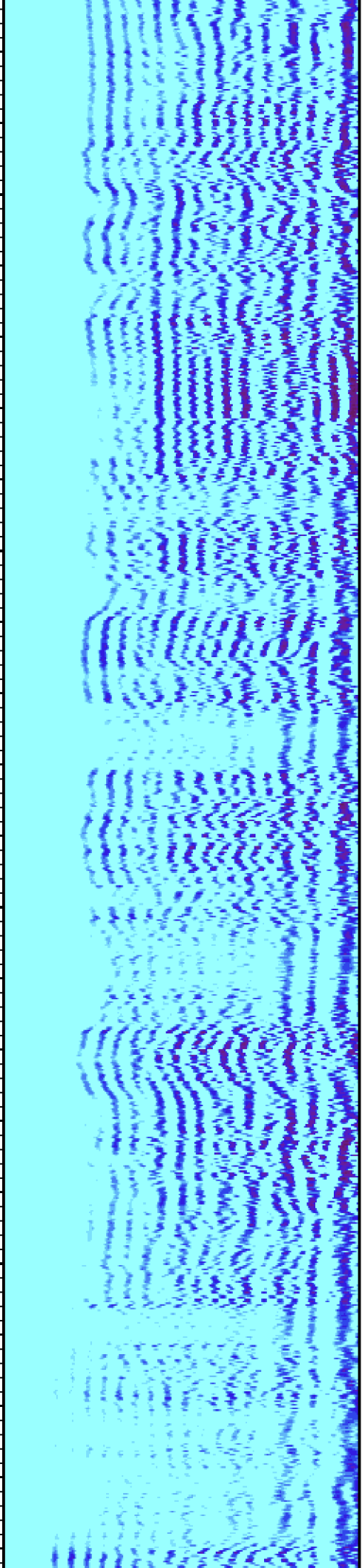






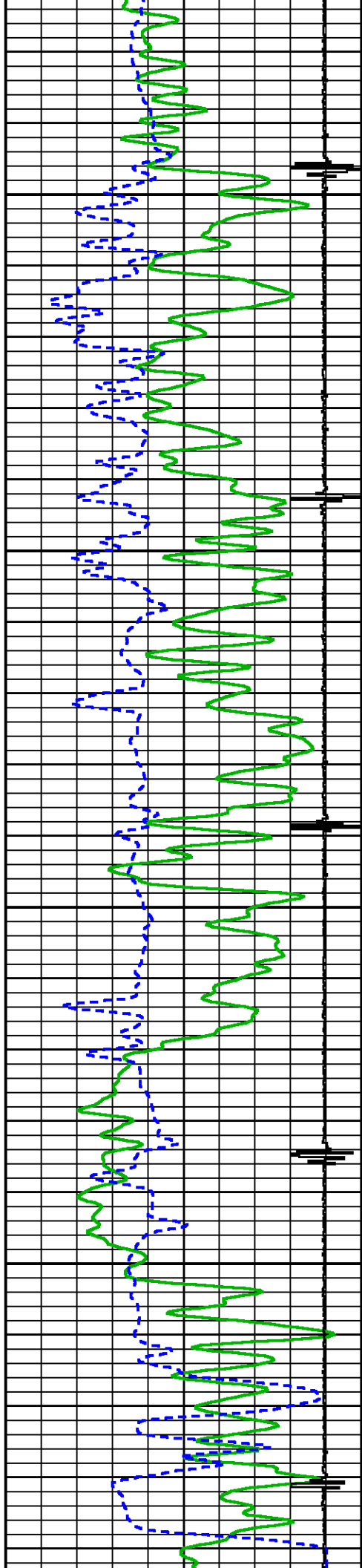




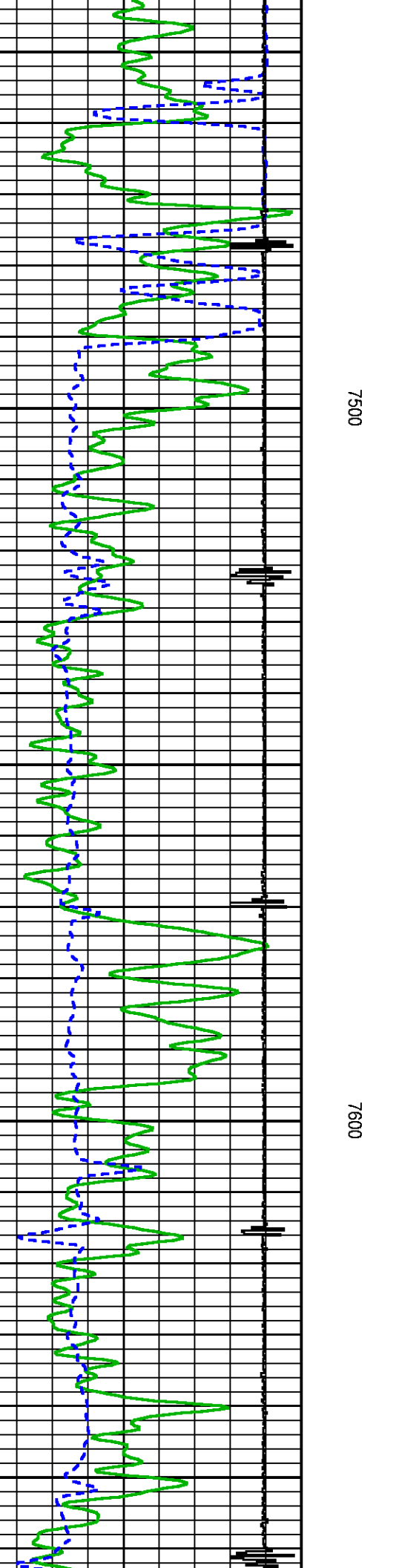
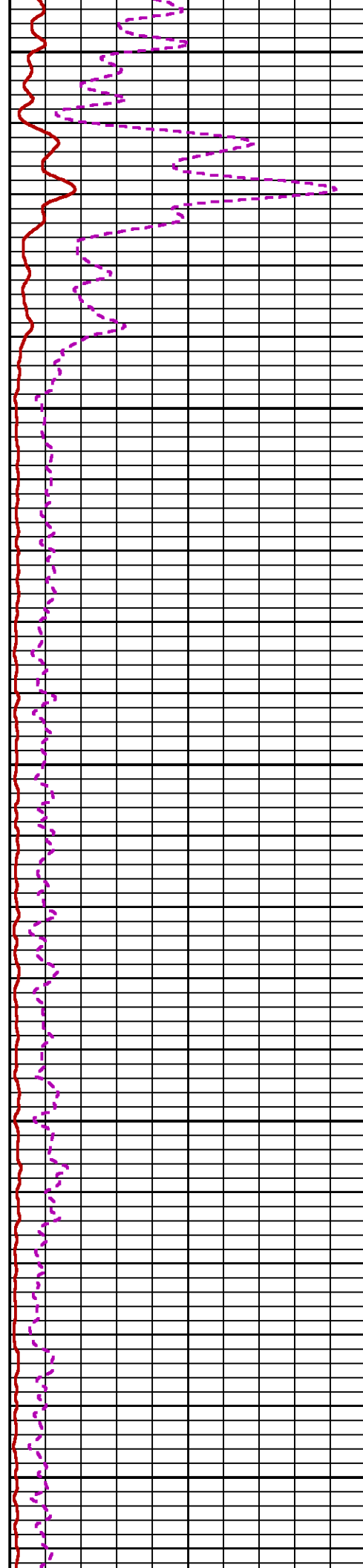
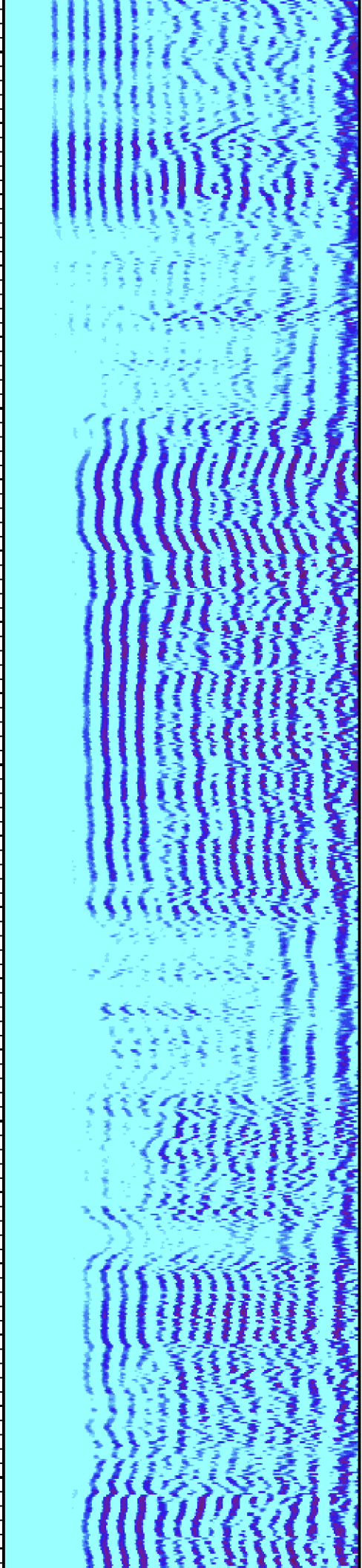


7300

7400

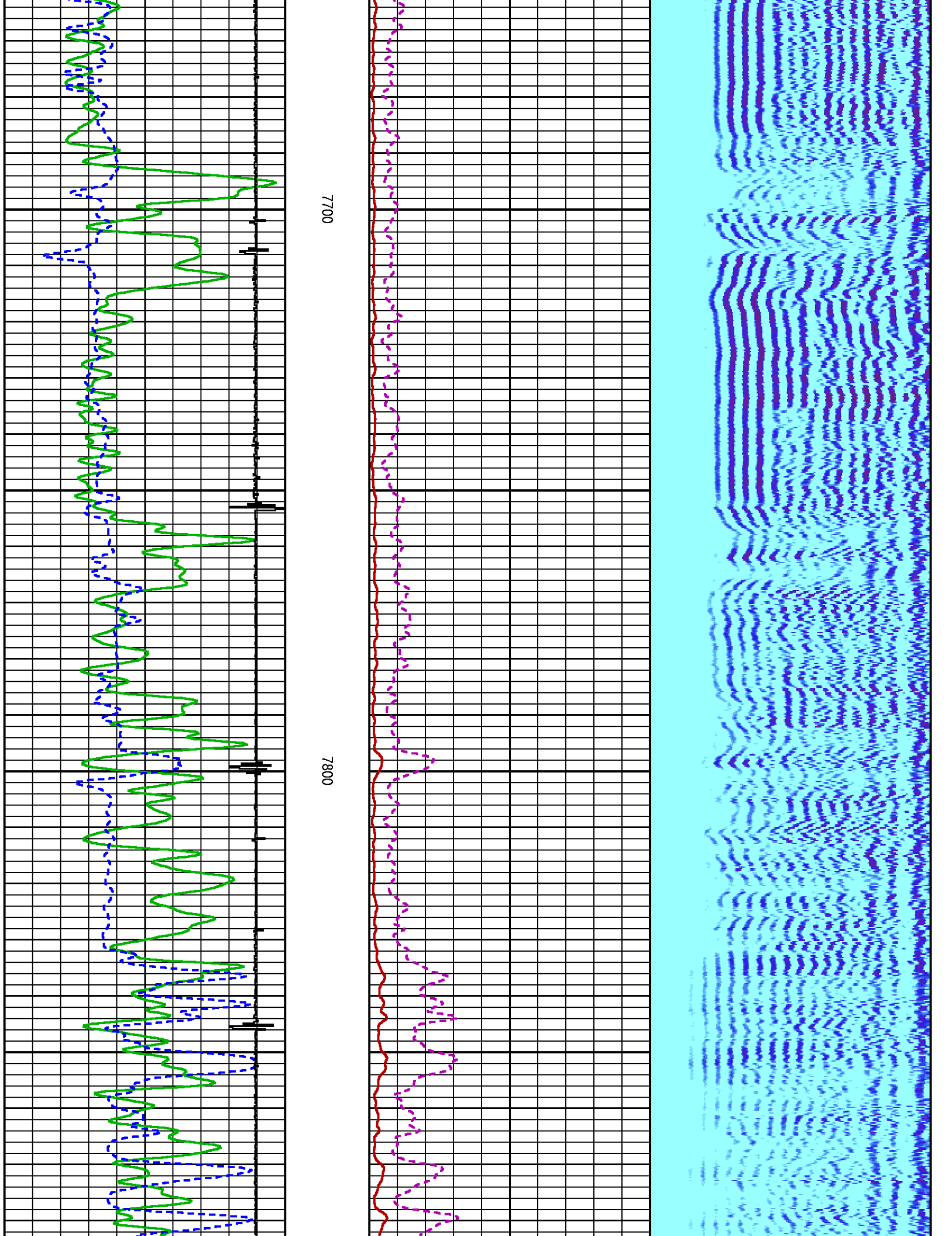


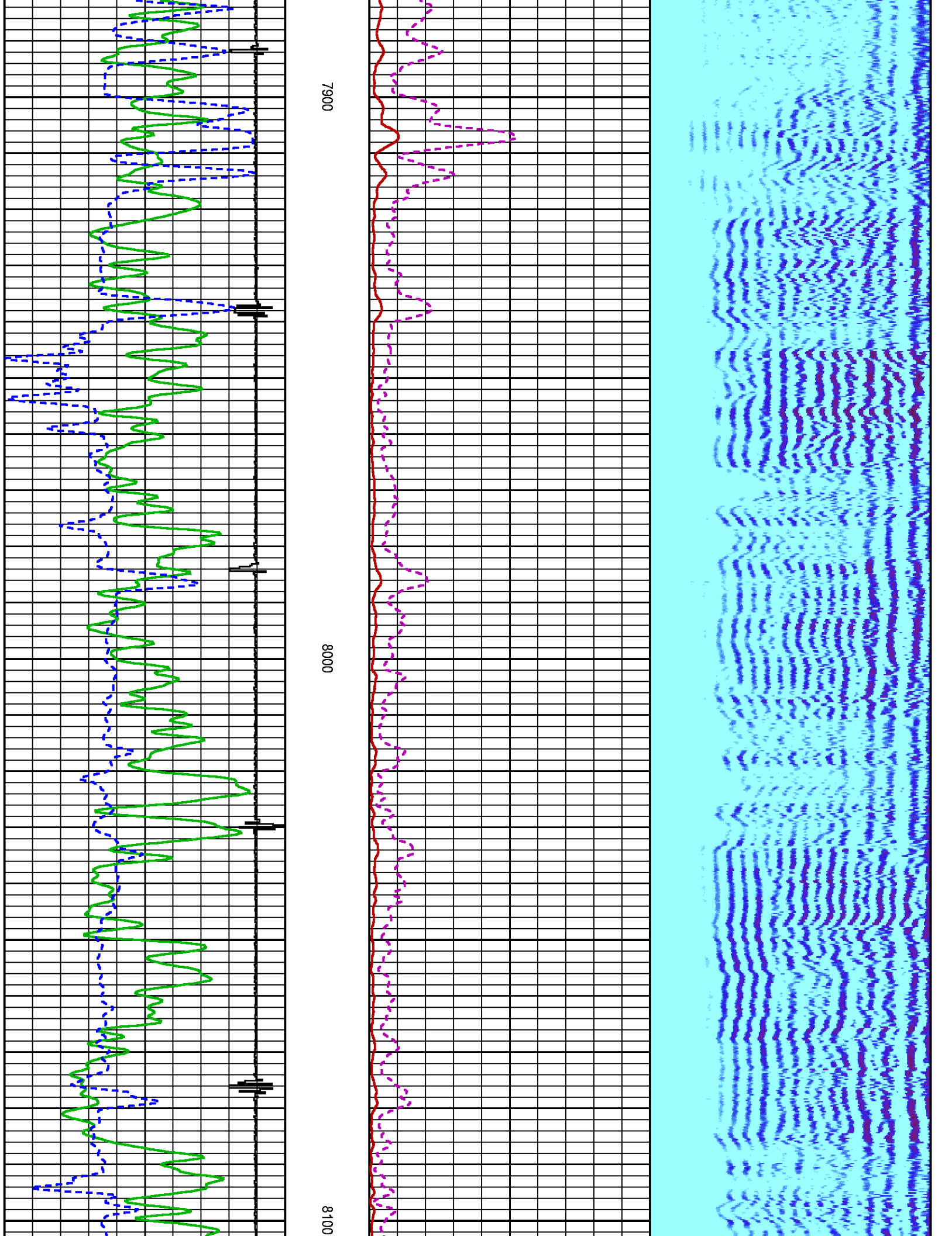


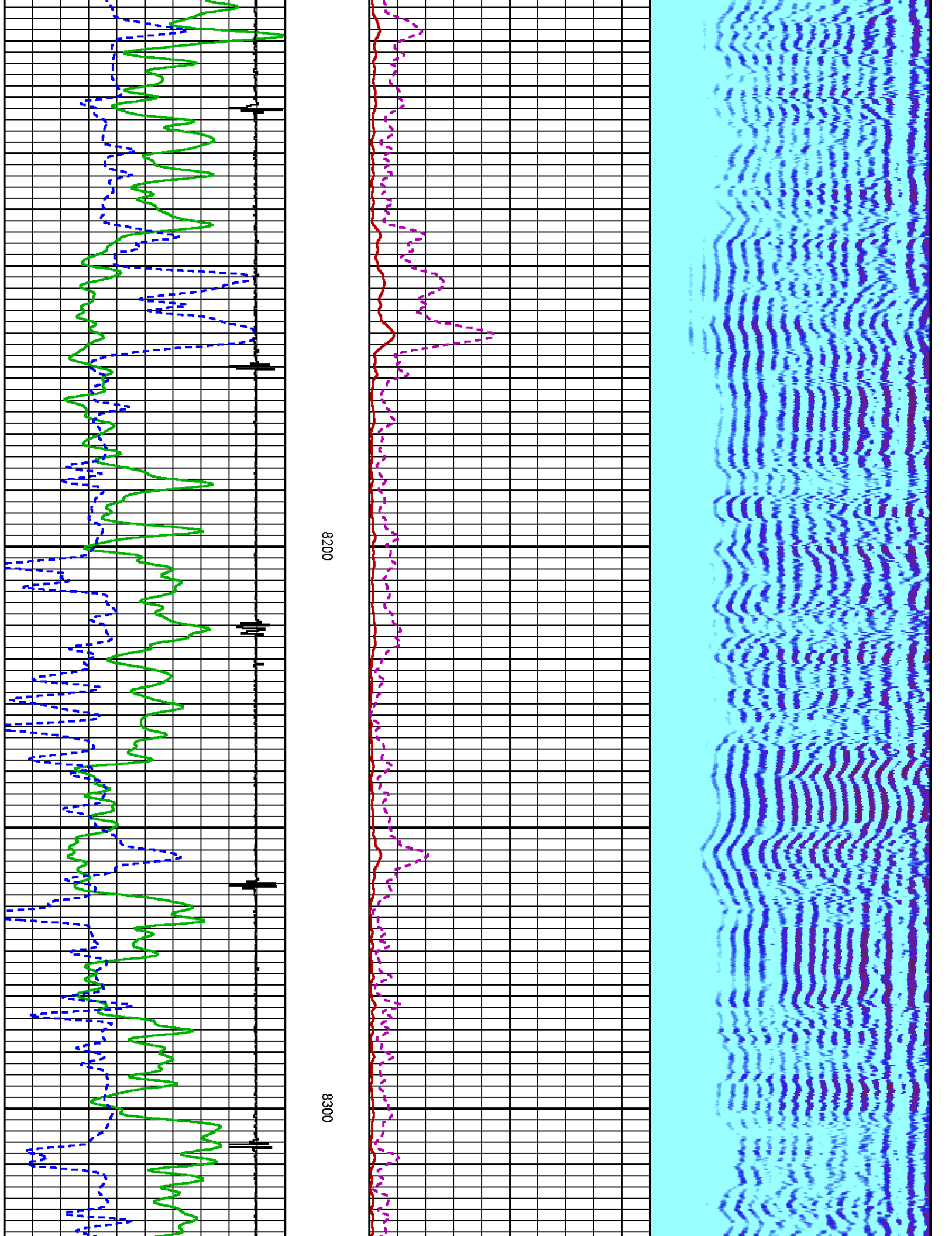


7500

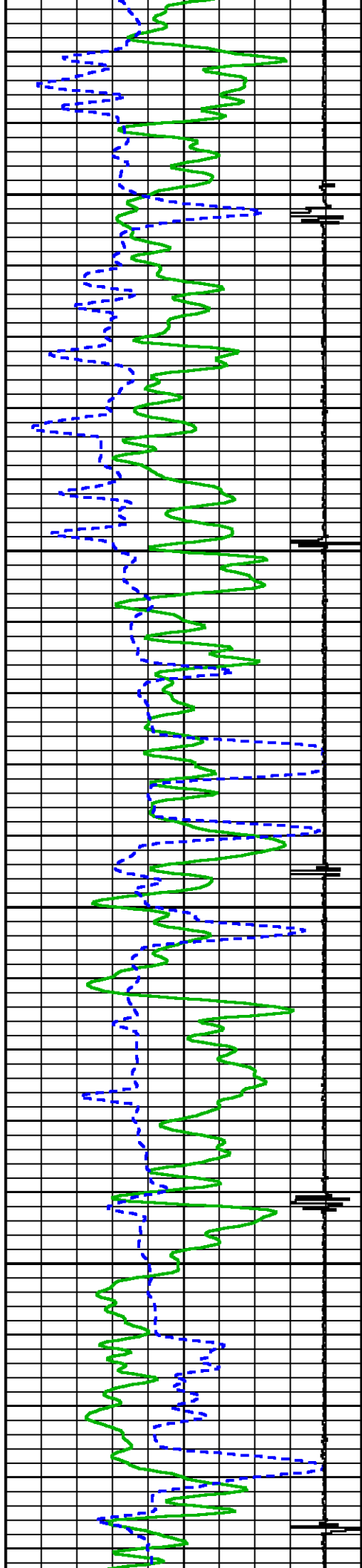
7600





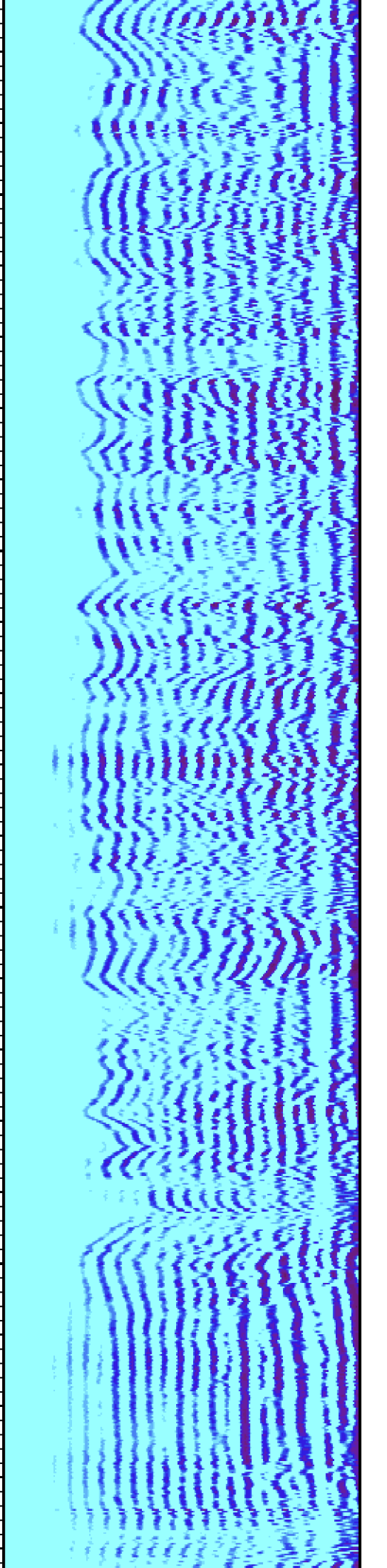
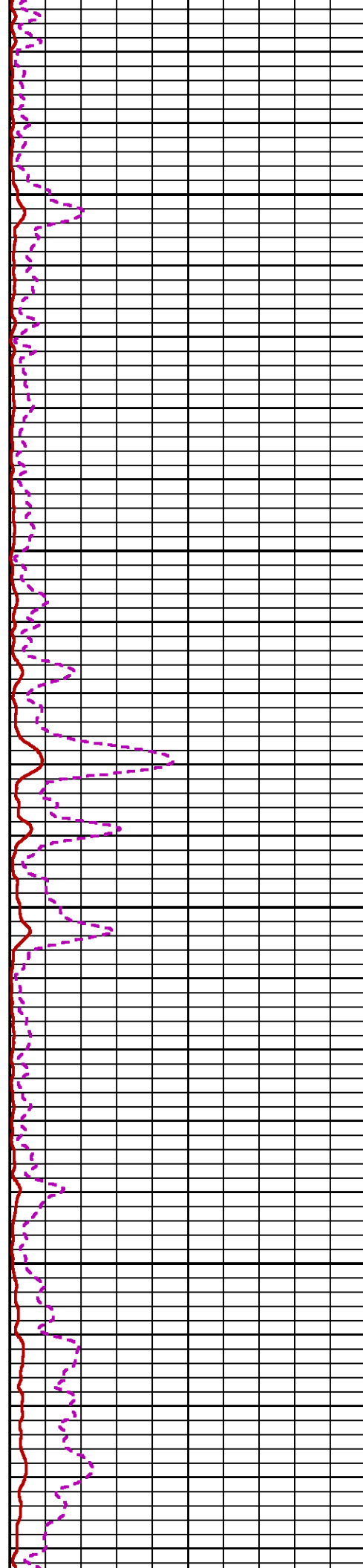


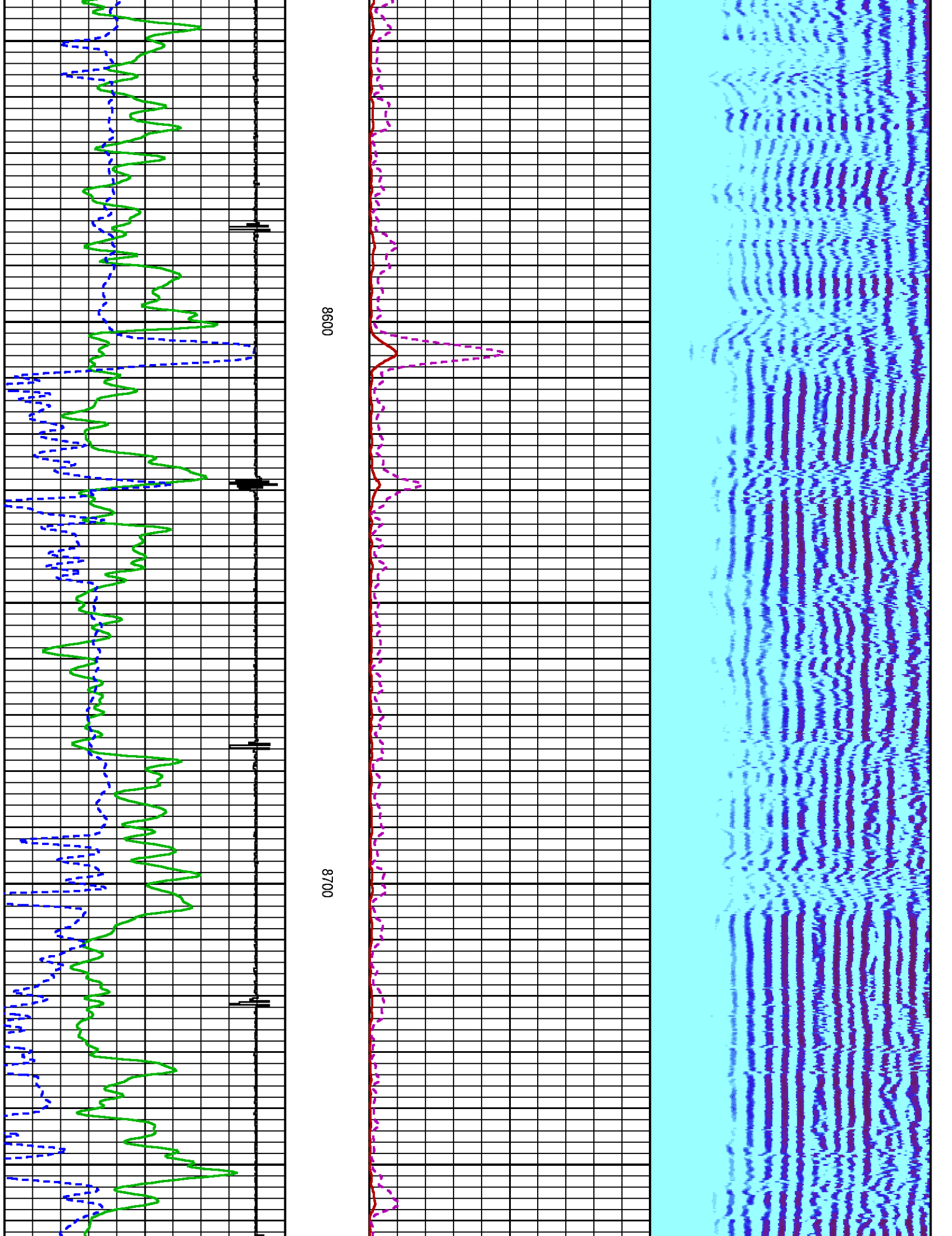


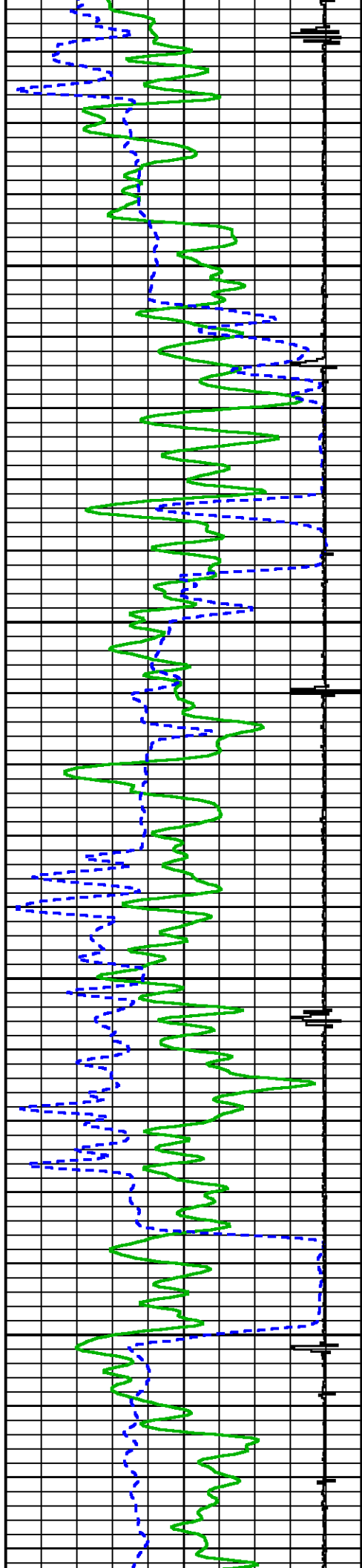


8400

8500

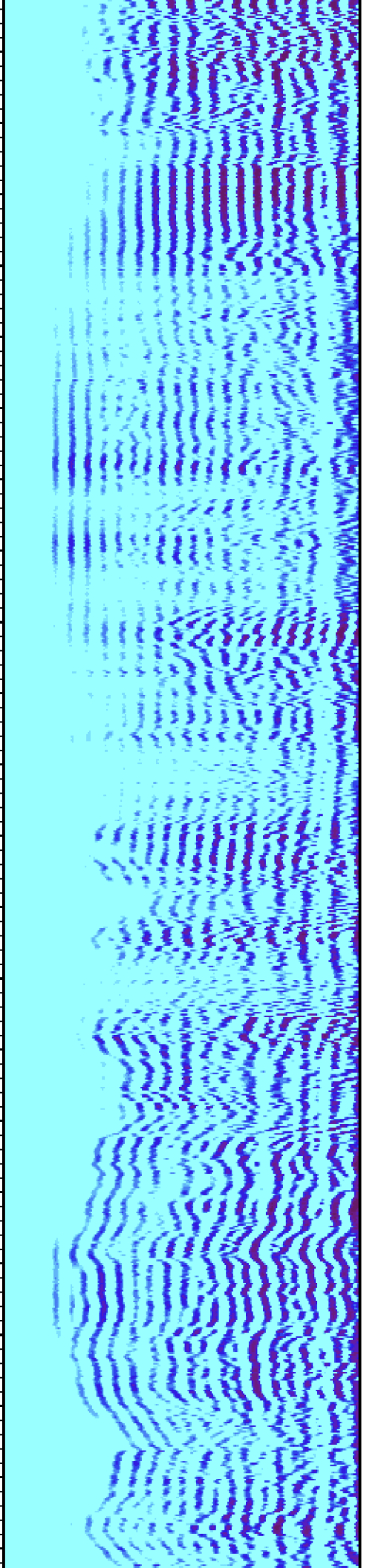
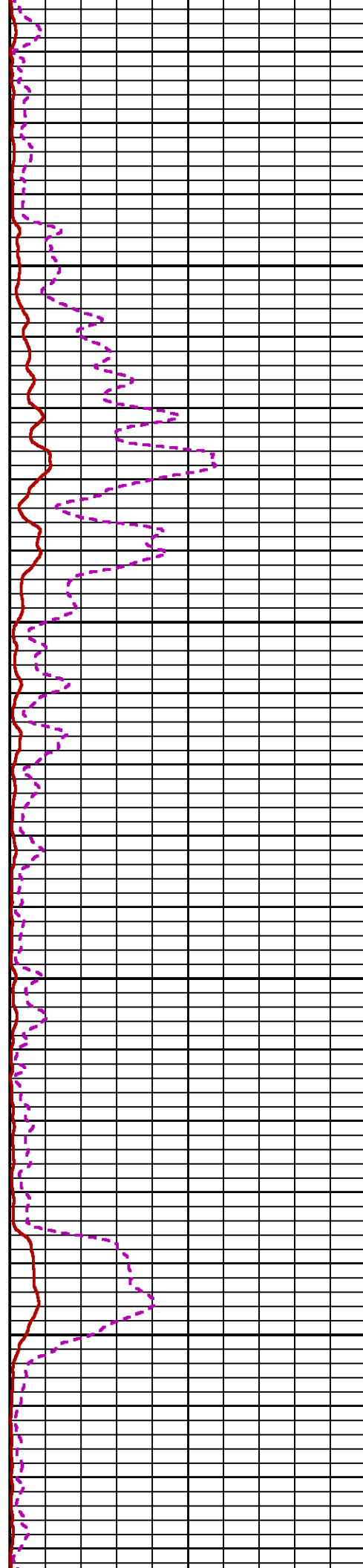


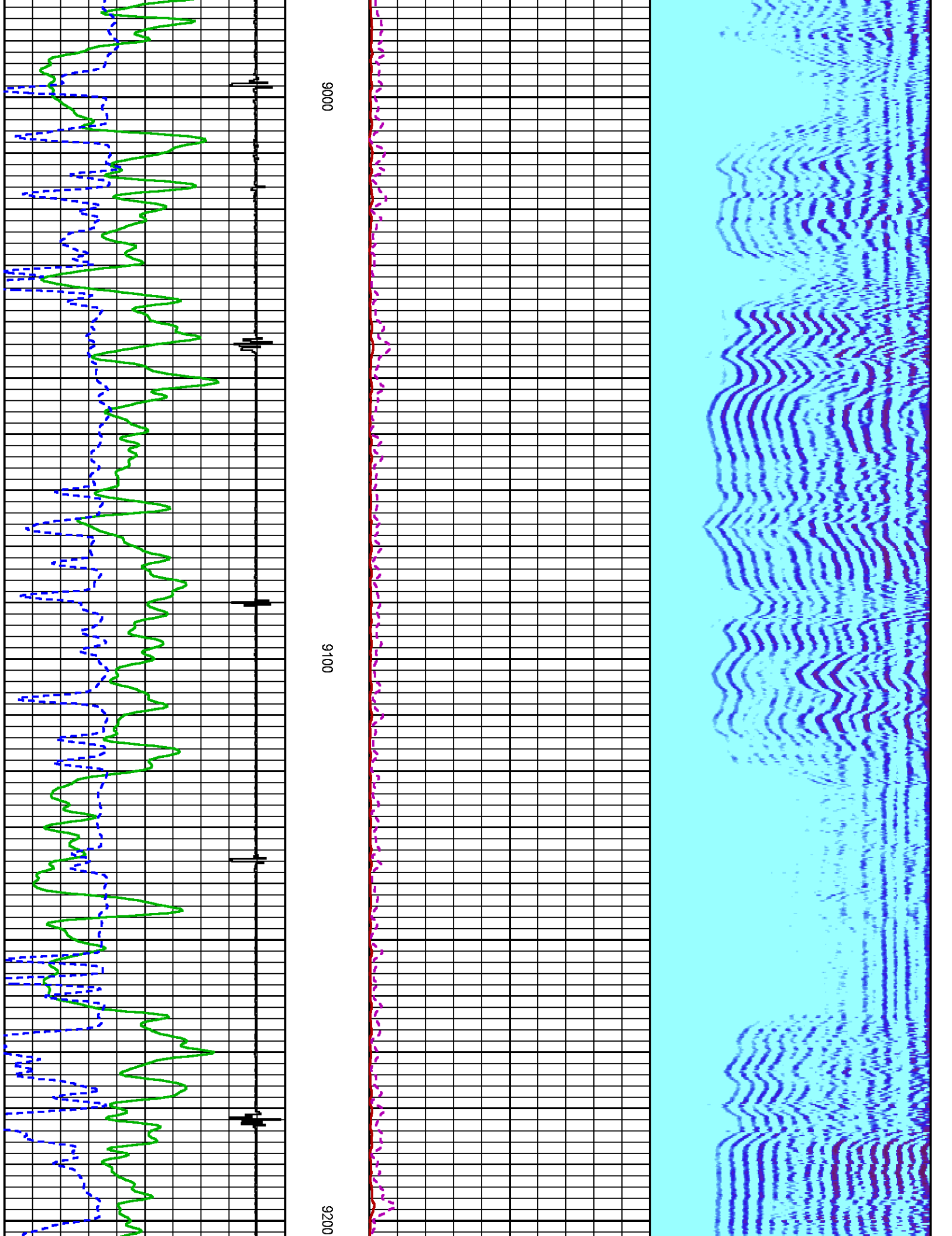




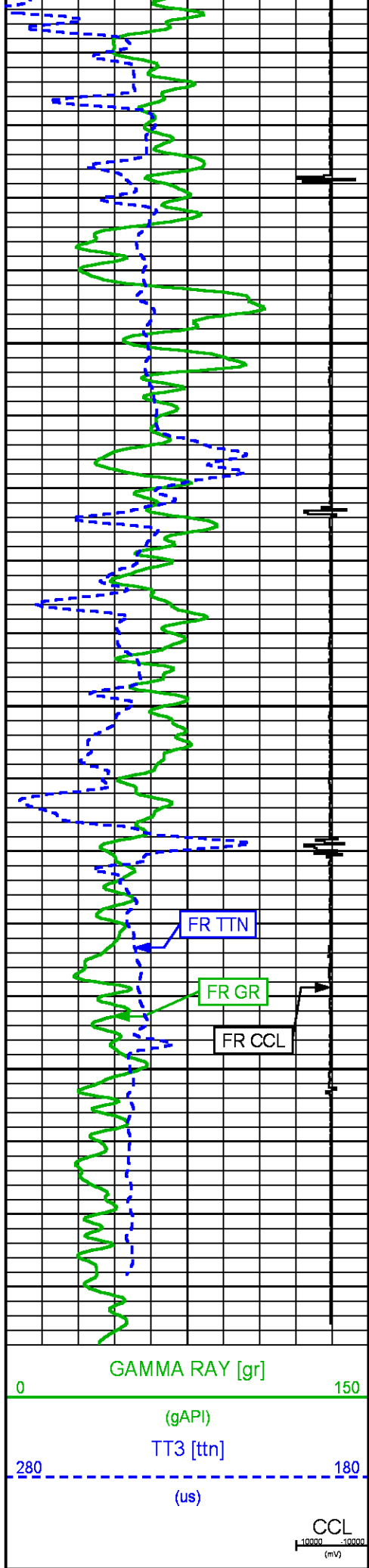
8800

8900



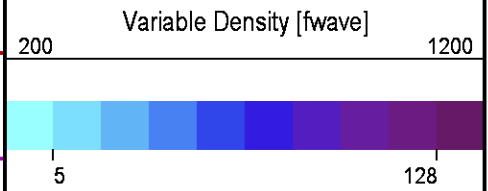
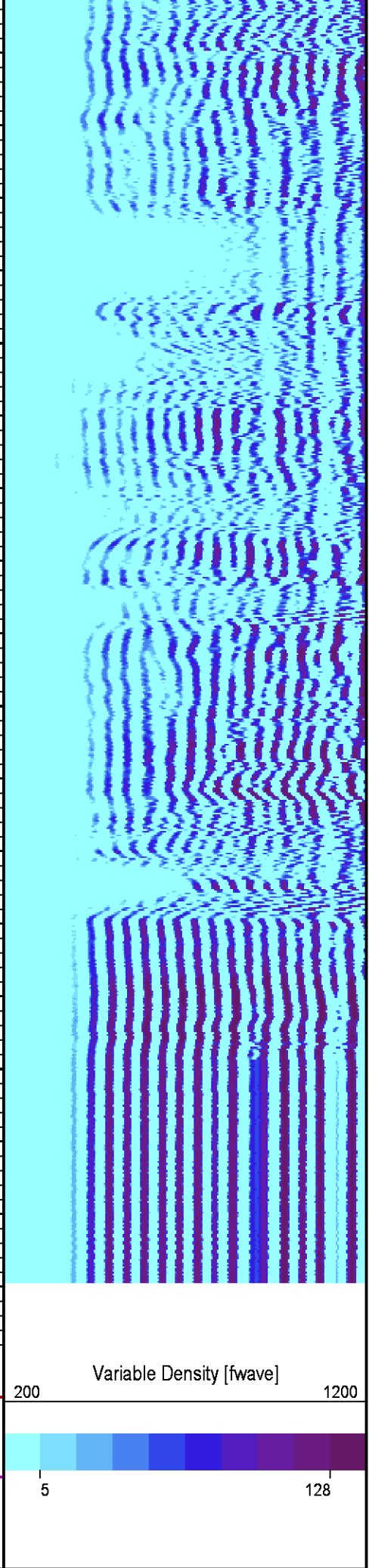
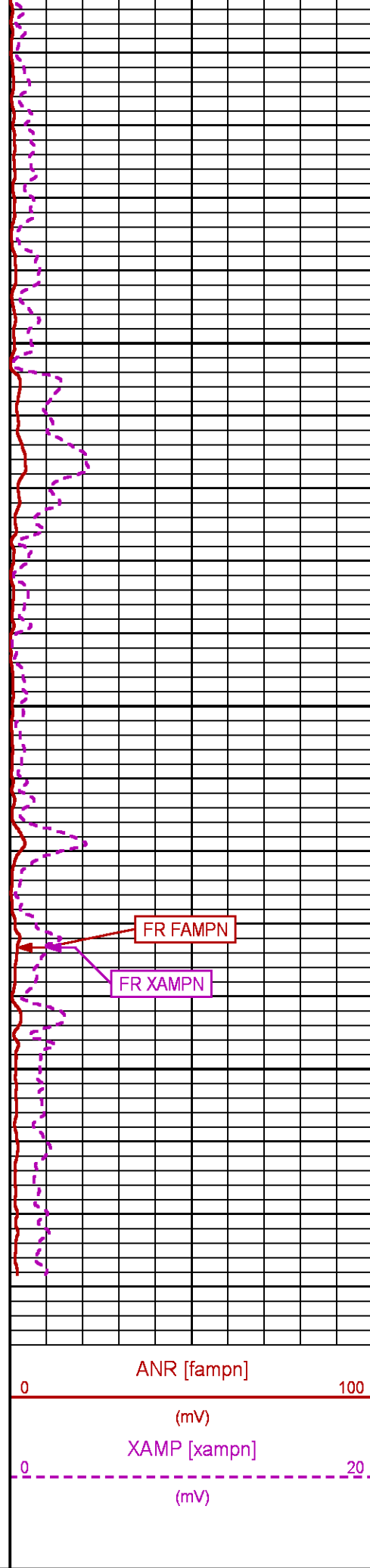






9300

FEET



# REPEAT LOG 0 PSI

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

Updates: 1 Patches: 9

Plotted: Fri Sep 2 17:54:38 2016

## PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH108951/n012g01.prm  
 LOGGING MODE: DEPTH DIRECTION: UP  
 TOP DEPTH: 9027.000 ft BOTTOM DEPTH: 9389.500 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*)	-75	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	Sep 2 14:37:47 2016	CASING COLLAR LOCATOR
F1:FAMPN	Sep 2 14:37:47 2016	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Sep 2 14:37:47 2016	FAR WAVE FORM
F1:GR	Sep 2 14:37:47 2016	GAMMA RAY
F1:TTN	Sep 2 14:37:47 2016	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Sep 2 14:37:47 2016	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

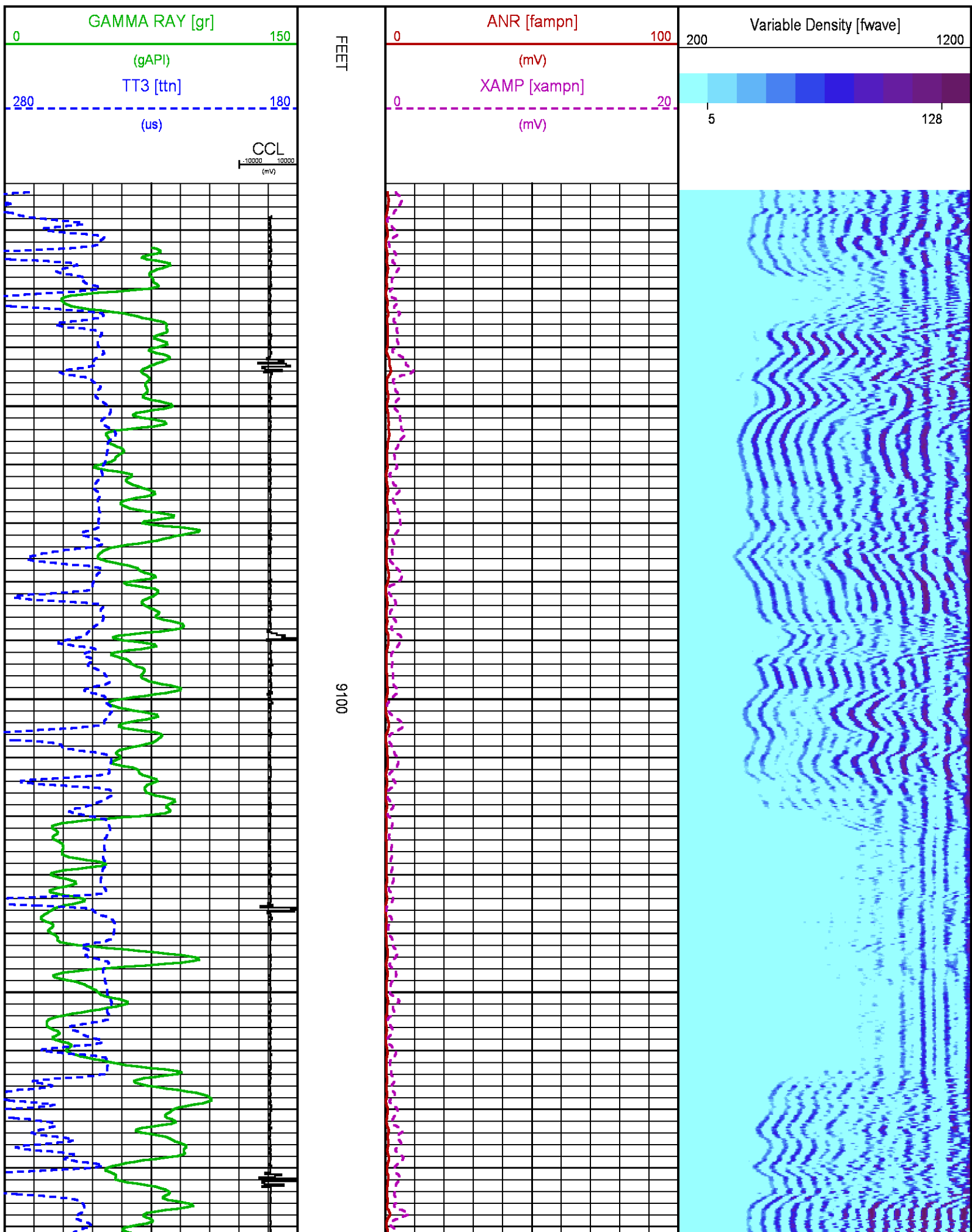
## CURVE MEASURE POINT OFFSET

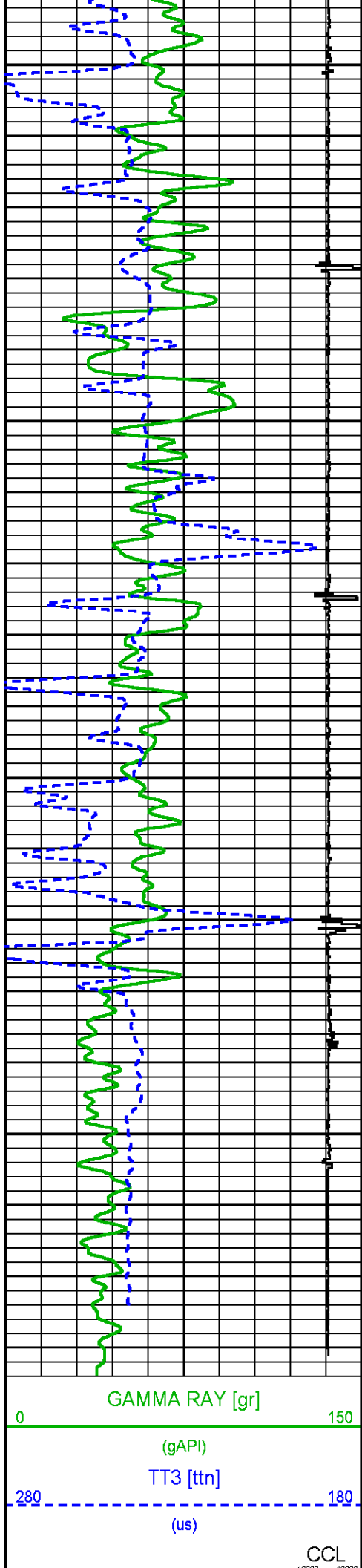
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	5.75	GR	1.75	XAMPN	11.25		
FAMPN	11.25	TTN	11.25				

Presentation : cpu100:/dat1a/CH108951/523REPEAT+01-REPEAT-RPT-5.fvpdf [5"/100' Scale]  
 Plot Interval : 9010.25 - 9382.25 Feet

Data File 1 : F1 : cpu100:/dat1a/CH108951/RPT.xtf  
 Created On : Sep 2 14:37:47 2016  
 Company : TEP ROCKY MOUNTAIN LLC  
 Well : YOUNBERG RU 23-7  
 Field : BULLION

Field : RULISON  
File Interval : 9009.25 - 9383.75 Feet  
OCT : n012g

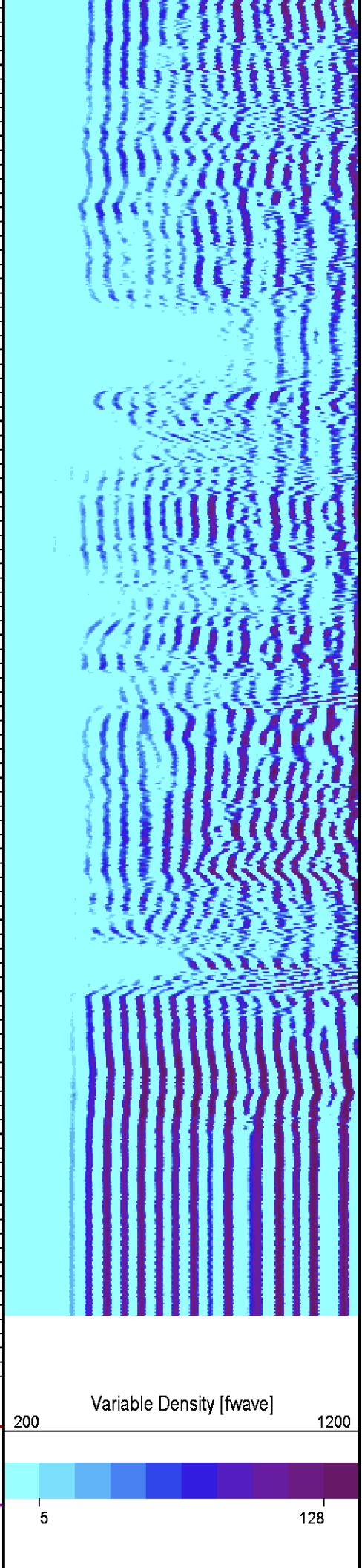
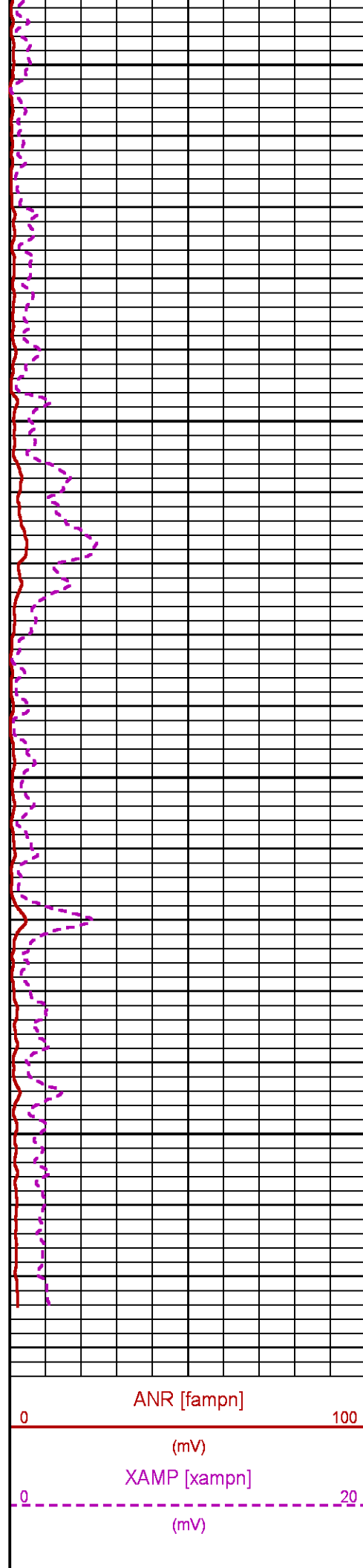




9200

9300

FEET





## SECONDARY PRESENTATION 0 PSI

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013  
 Updates: 1 Patches: 9

Plotted: Fri Sep 2 18:38:10 2016

### PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH108951/n012g02.prm  
 LOGGING MODE: DEPTH DIRECTION: UP  
 TOP DEPTH: 19.250 ft BOTTOM DEPTH: 9387.500 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*)	-75	us	"	"
	TOOL DELAY (str2*)	-75	us	"	"
	TOOL DELAY (str3*)	-75	us	"	"
	TOOL DELAY (str4*)	-75	us	"	"
	TOOL DELAY (str5*)	-75	us	"	"
	TOOL DELAY (str6*)	-75	us	"	"
	TOOL DELAY (str7*)	-75	us	"	"
	TOOL DELAY (str8*)	-75	us	"	"
	TOOL DELAY (strn*)	-75	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	80	mV	TOP	BOTTOM
	FREE AMP REC 2	80	mV	"	"
	FREE AMP REC 3	80	mV	"	"
	FREE AMP REC 4	80	mV	"	"
	FREE AMP REC 5	80	mV	"	"

	FREE AMP REC 6	80	mV	"	"
	FREE AMP REC 7	80	mV	"	"
	FREE AMP REC 8	80	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	"	"

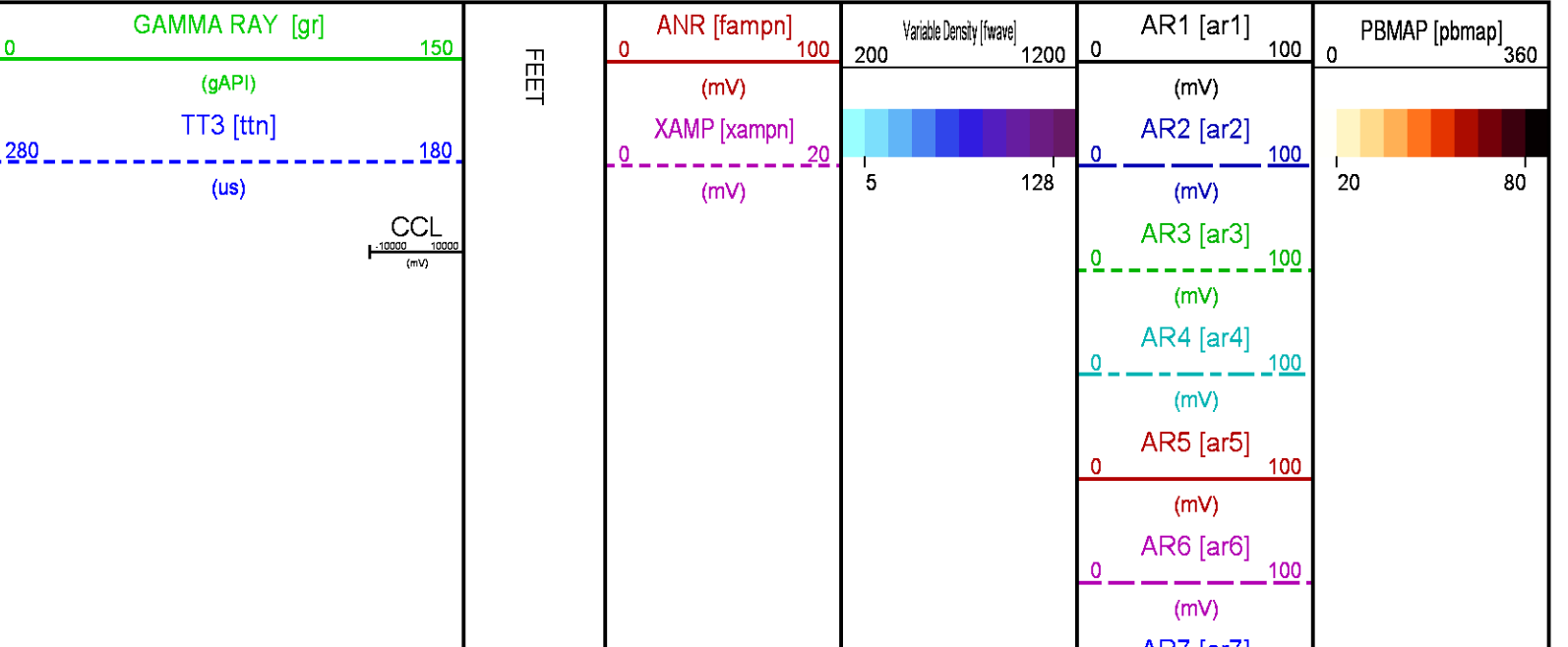
### CURVE DESCRIPTION REPORT

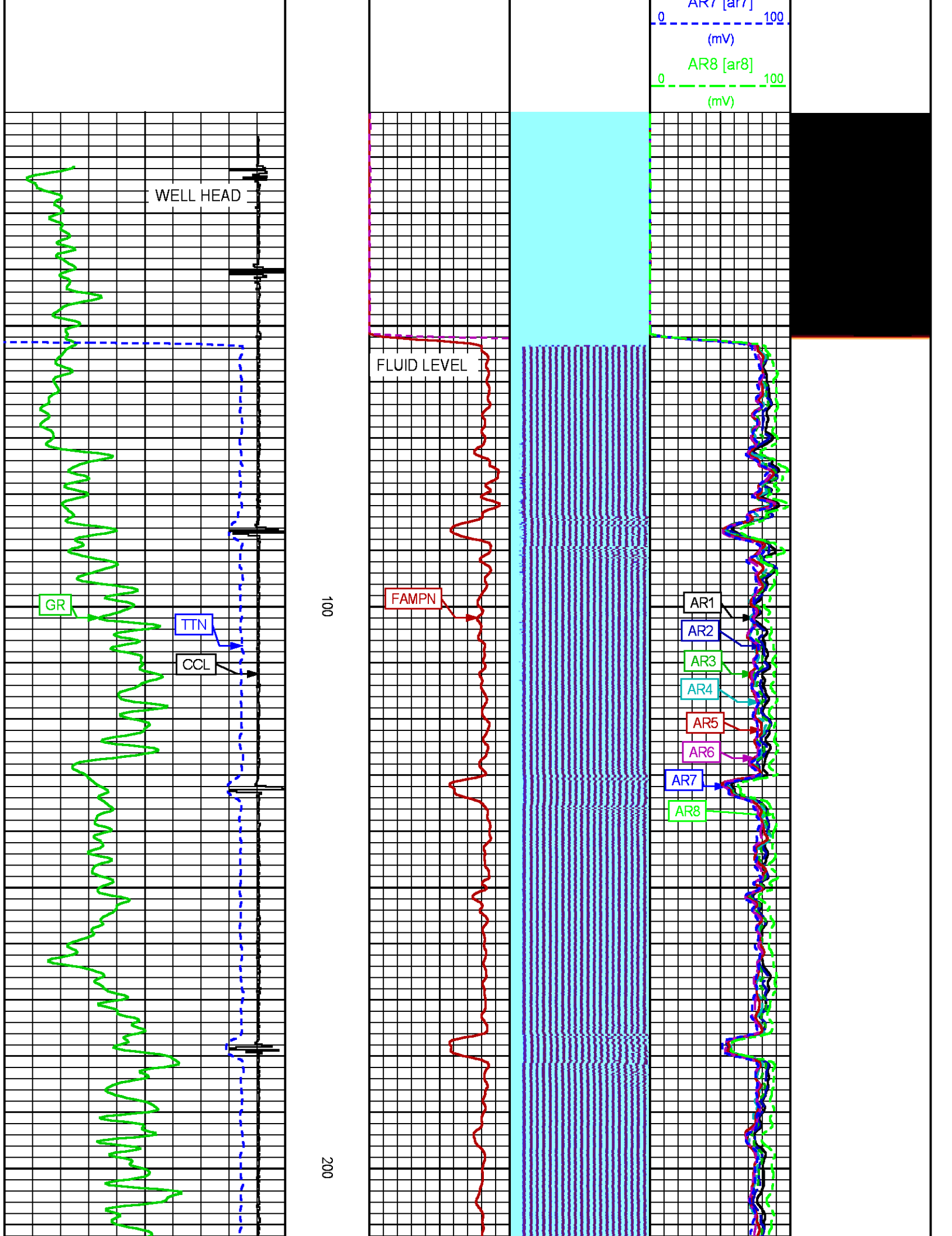
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:AR1	Sep 2 14:46:50 2016	FIXED GATE AMPLITUDE T-R1
F1:AR2	Sep 2 14:46:50 2016	FIXED GATE AMPLITUDE T-R2
F1:AR3	Sep 2 14:46:50 2016	FIXED GATE AMPLITUDE T-R3
F1:AR4	Sep 2 14:46:50 2016	FIXED GATE AMPLITUDE T-R4
F1:AR5	Sep 2 14:46:50 2016	FIXED GATE AMPLITUDE T-R5
F1:AR6	Sep 2 14:46:50 2016	FIXED GATE AMPLITUDE T-R6
F1:AR7	Sep 2 14:46:50 2016	FIXED GATE AMPLITUDE T-R7
F1:AR8	Sep 2 14:46:50 2016	FIXED GATE AMPLITUDE T-R8
F1:CCL	Sep 2 14:46:50 2016	CASING COLLAR LOCATOR
F1:FAMPN	Sep 2 14:46:50 2016	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Sep 2 14:46:50 2016	FAR WAVE FORM
F1:GR	Sep 2 14:46:50 2016	GAMMA RAY
F1:PBMAP	Sep 2 14:46:50 2016	PERCENT BOND CEMENT MAP
F1:TTN	Sep 2 14:46:50 2016	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Sep 2 14:46:50 2016	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

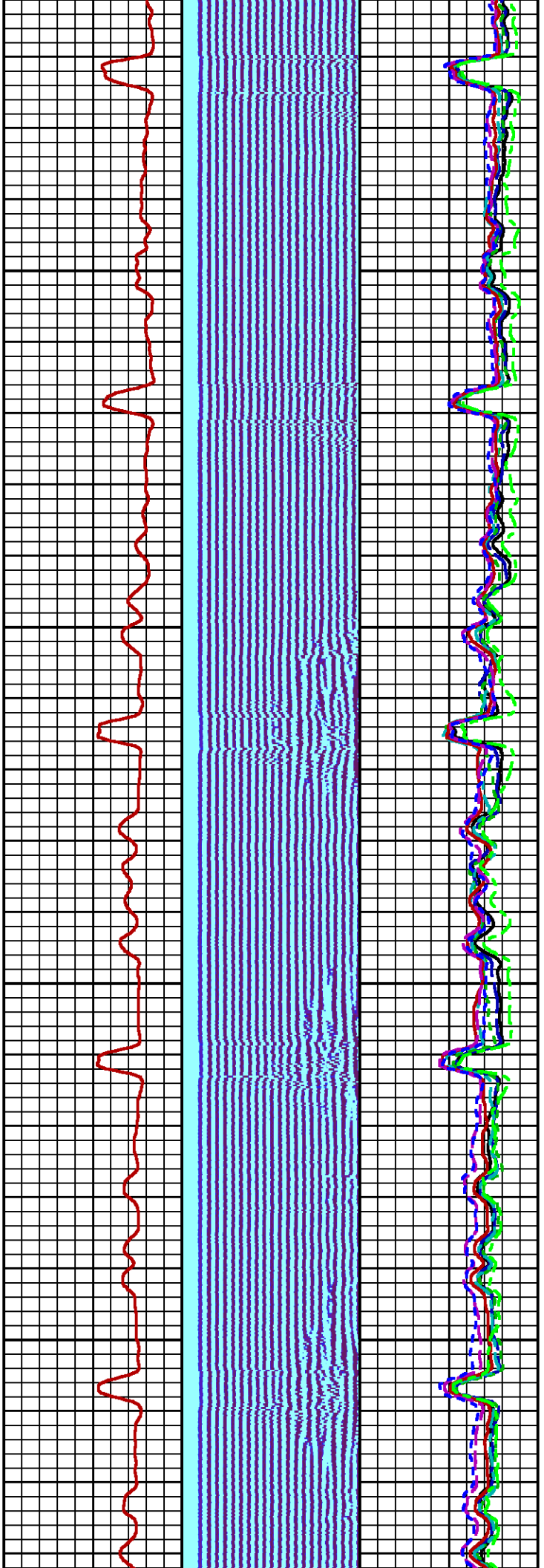
### CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
AR1	11.25	AR5	11.25	CCL	5.75	XAMPN	11.25
AR2	11.25	AR6	11.25	FAMPN	11.25		
AR3	11.25	AR7	11.25	GR	1.75		
AR4	11.25	AR8	11.25	TTN	11.25		

<b>Presentation</b>	: cpu100:/dat1a/CH108951/523MAIN2+01-SECONDARY-MN-5.fvpdf [5"/100' Scale]
<b>Plot Interval</b>	: 12 - 9389.5 Feet
<b>Data File 1</b>	: F1 : cpu100:/dat1a/CH108951/MN.xtf
<b>Created On</b>	: Sep 2 14:46:50 2016
<b>Company</b>	: TEP ROCKY MOUNTAIN LLC
<b>Well</b>	: YOUNBERG RU 23-7
<b>Field</b>	: RULISON
<b>File Interval</b>	: 11 - 9390.75 Feet
<b>OCT</b>	: n012g

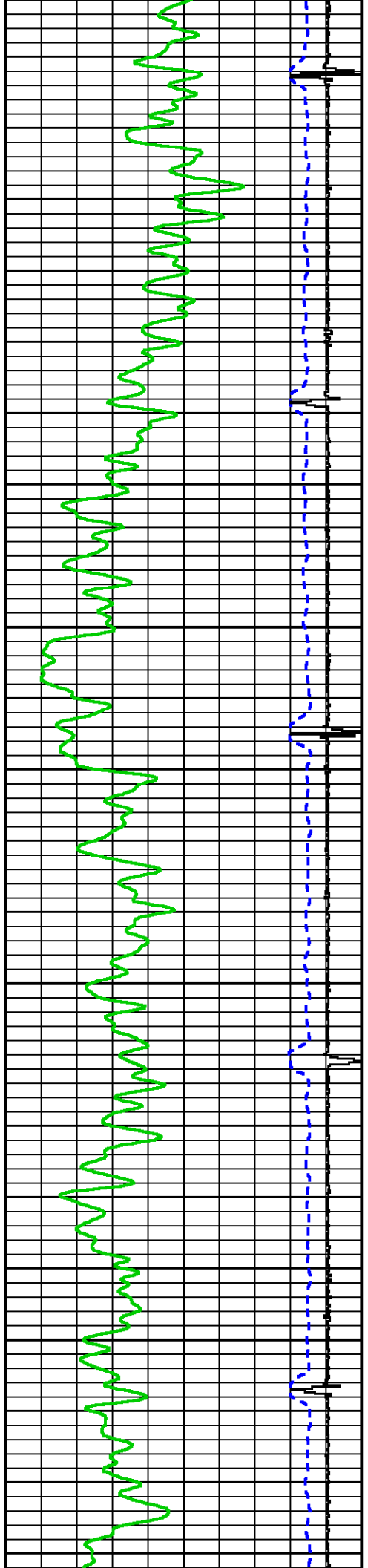




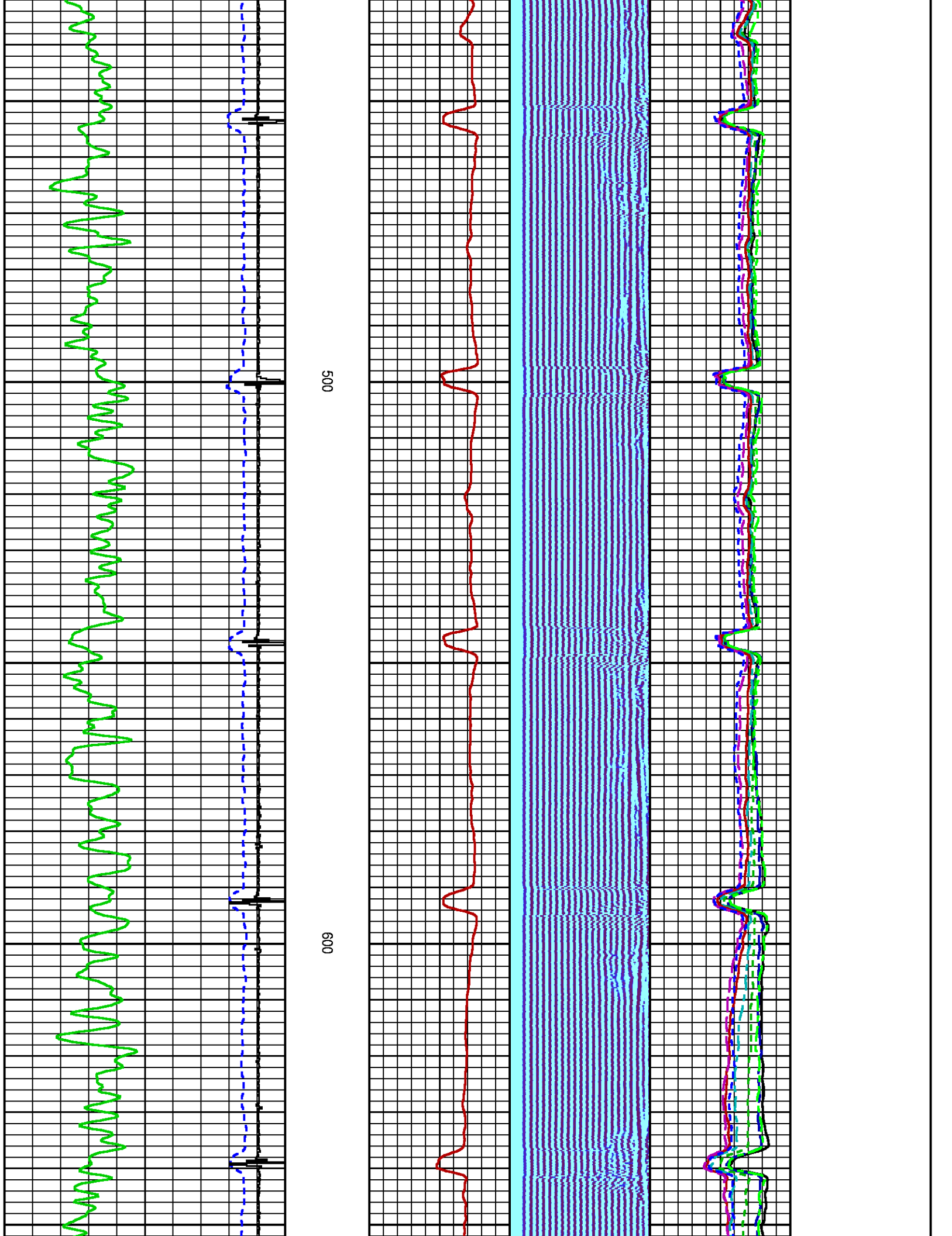


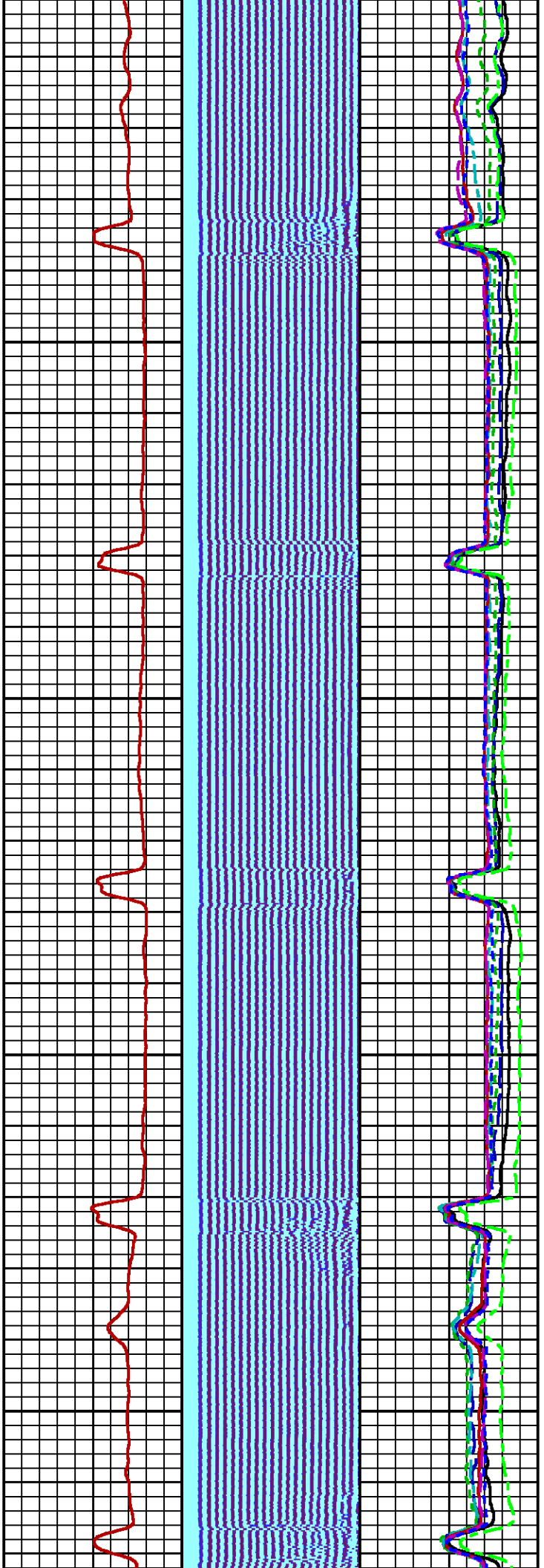
300

400



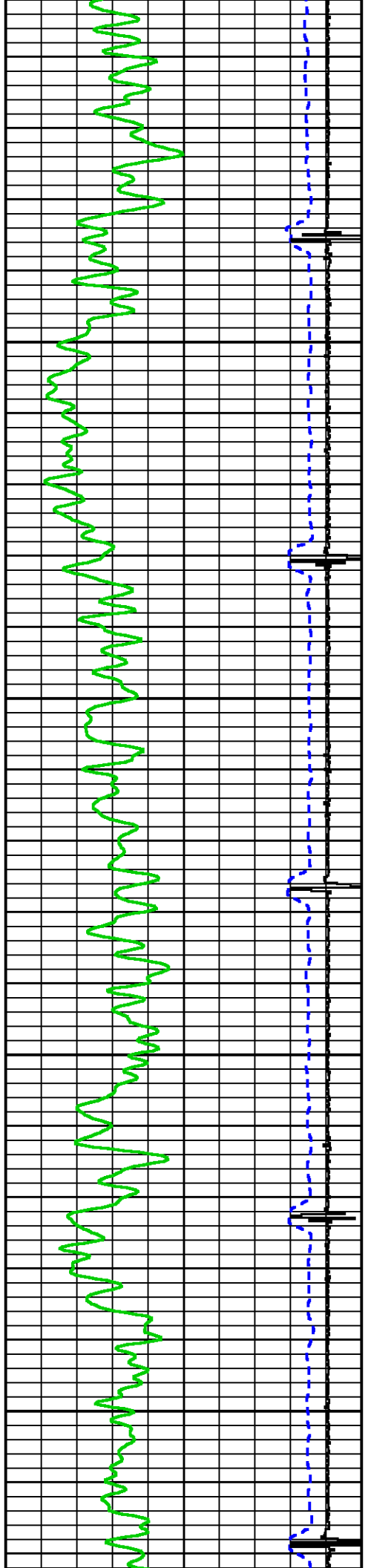


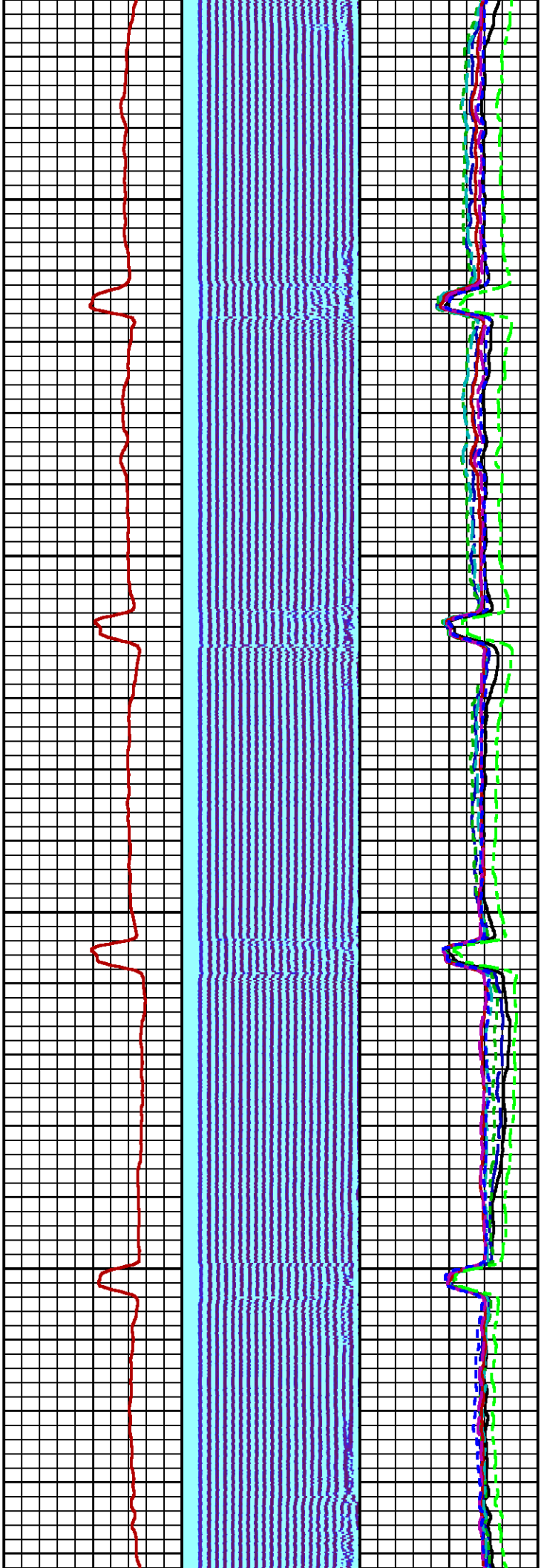




700

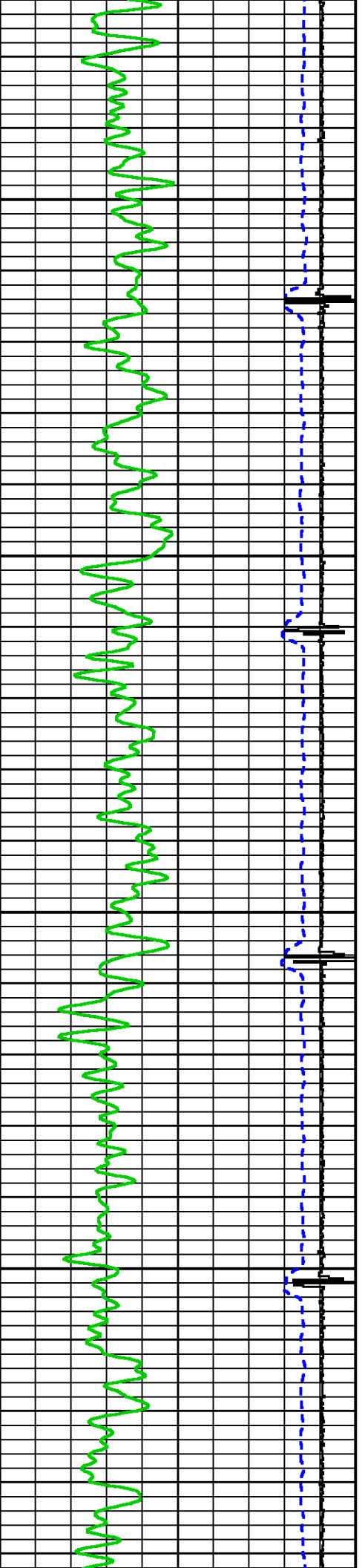
800

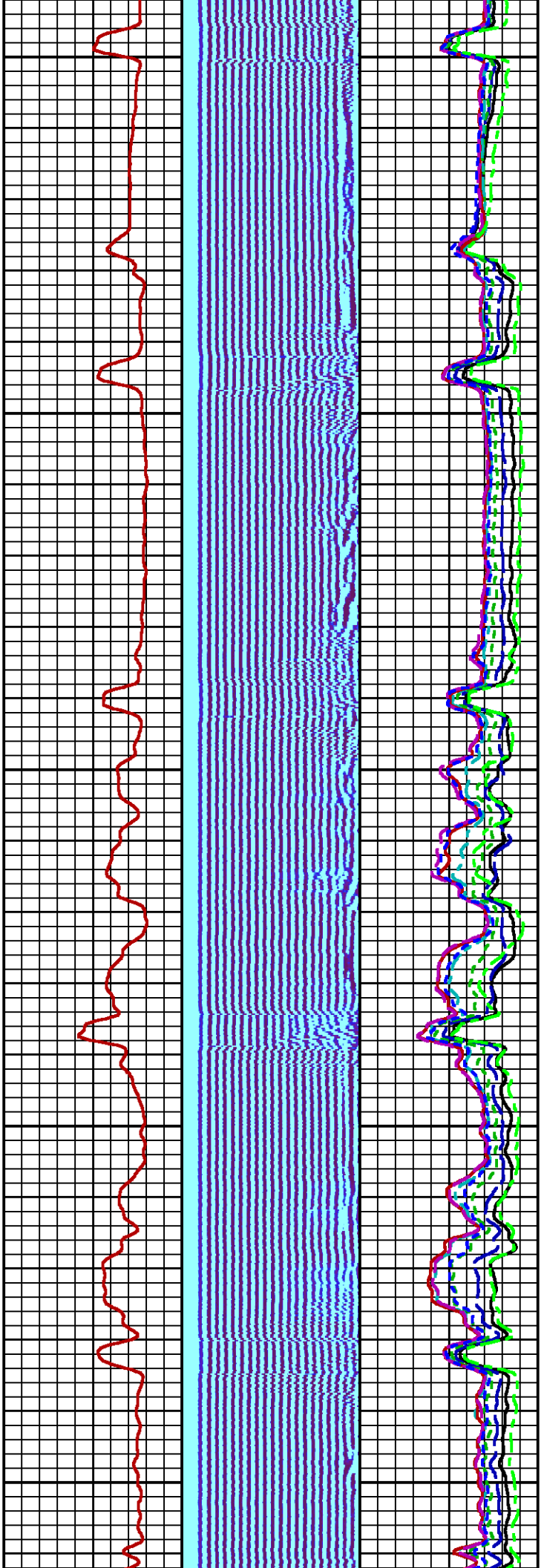




900

1000

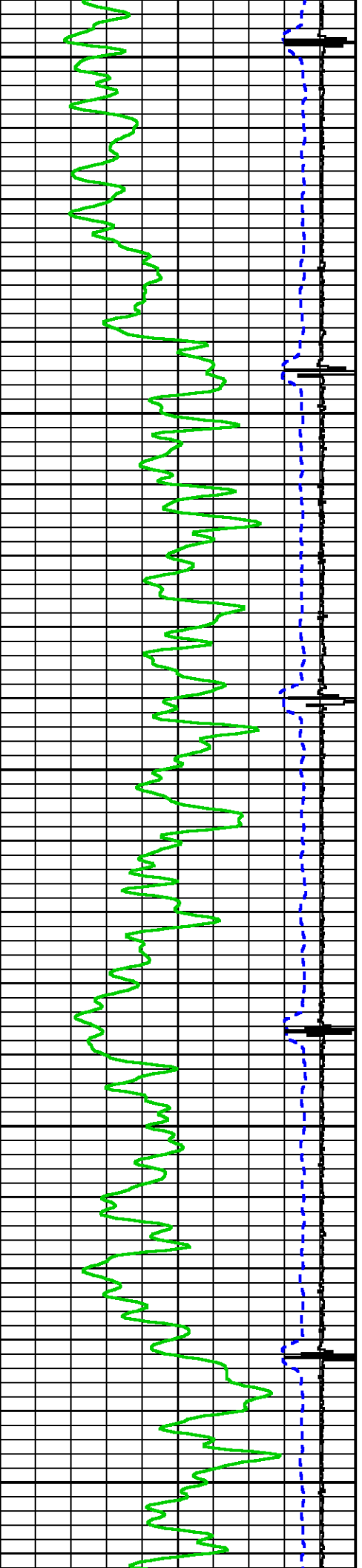




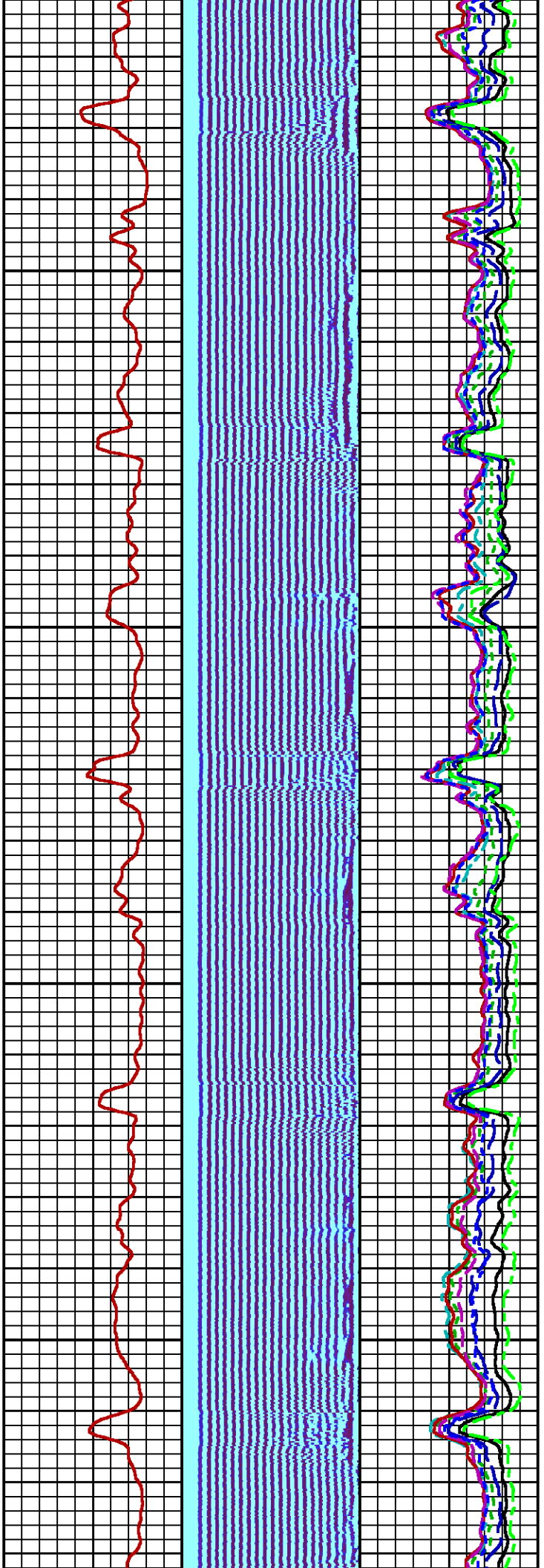
1100

1200

1300

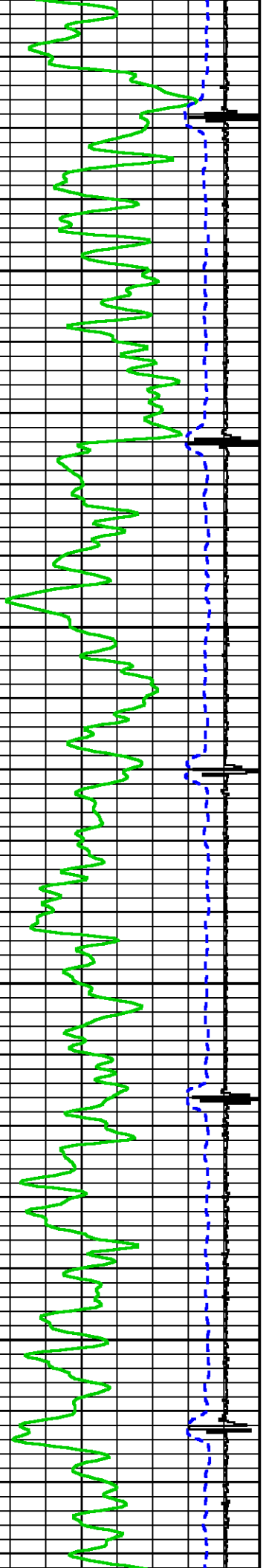


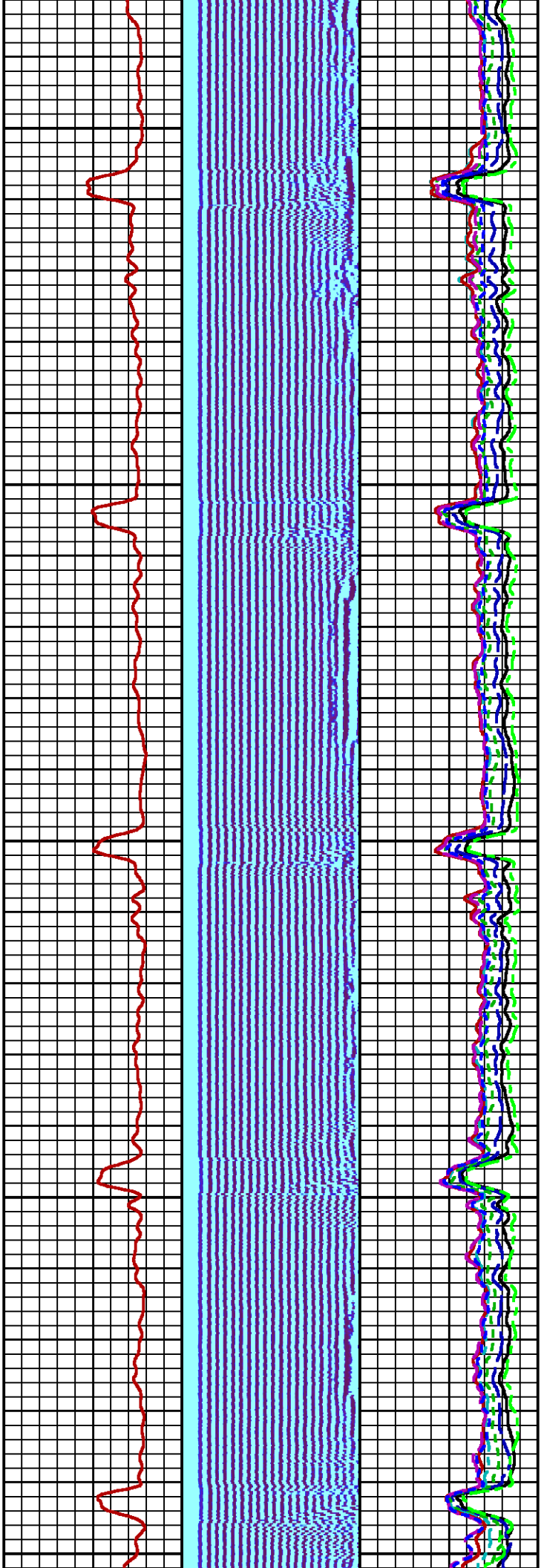




1400

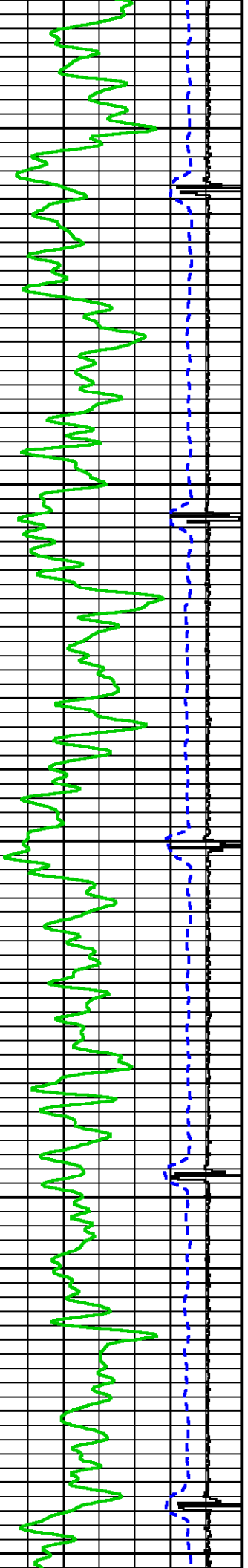
1500

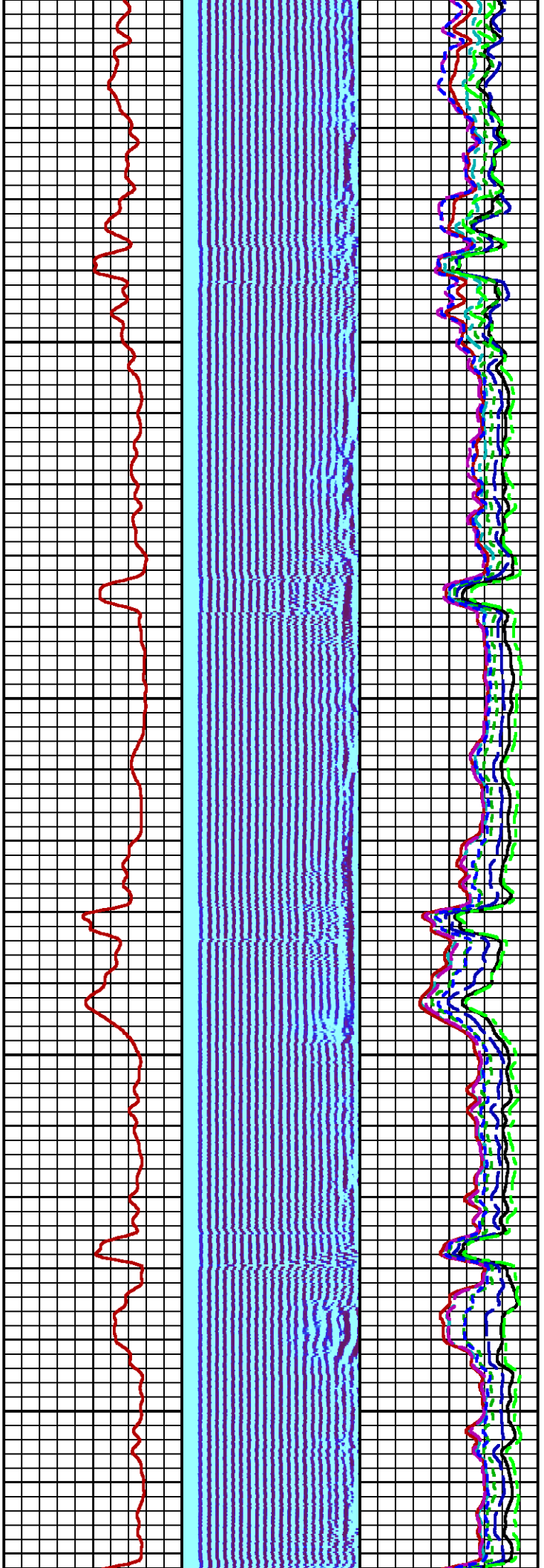




1600

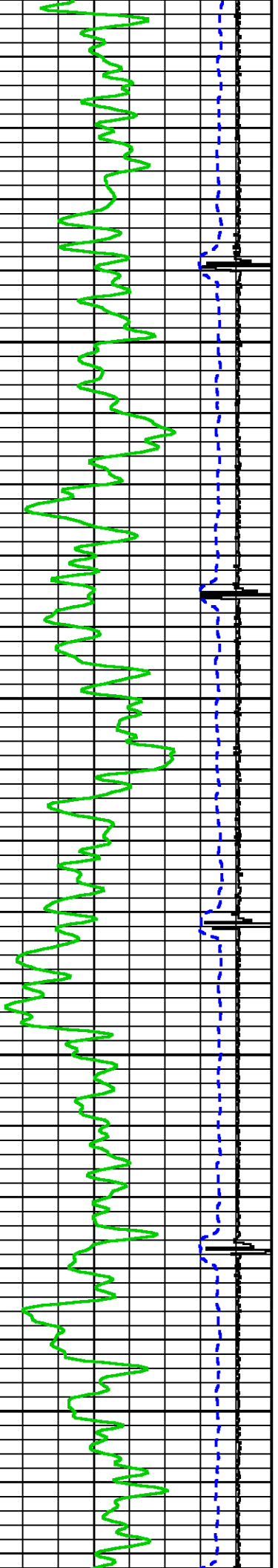
1700

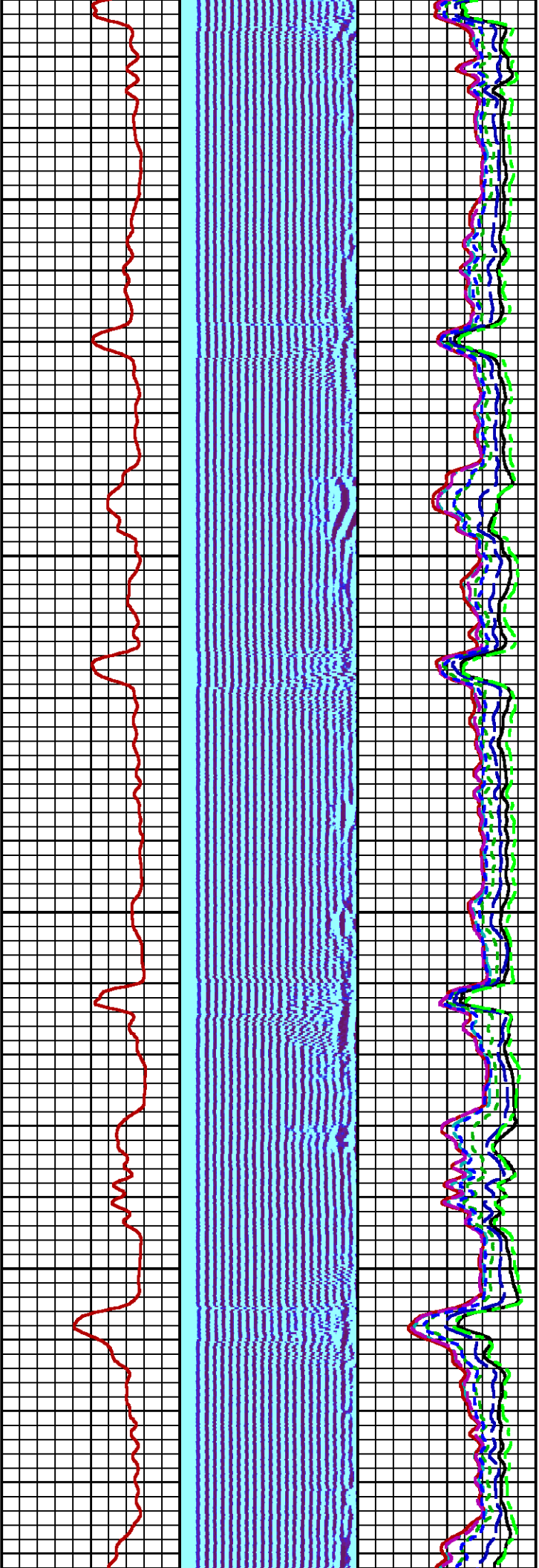




1800

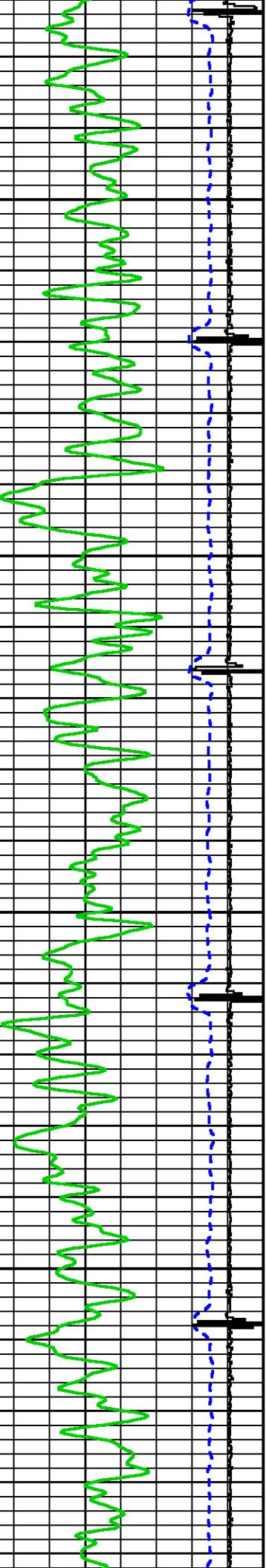
1900



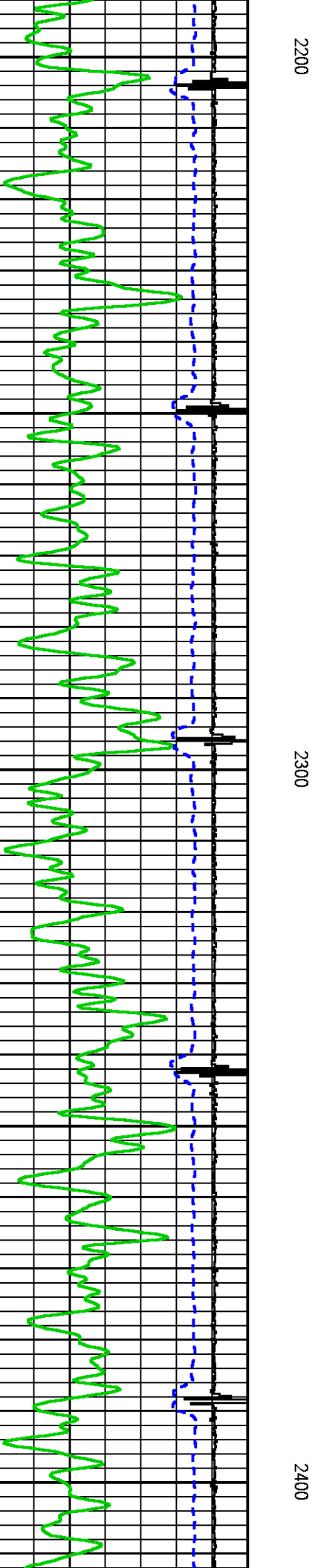
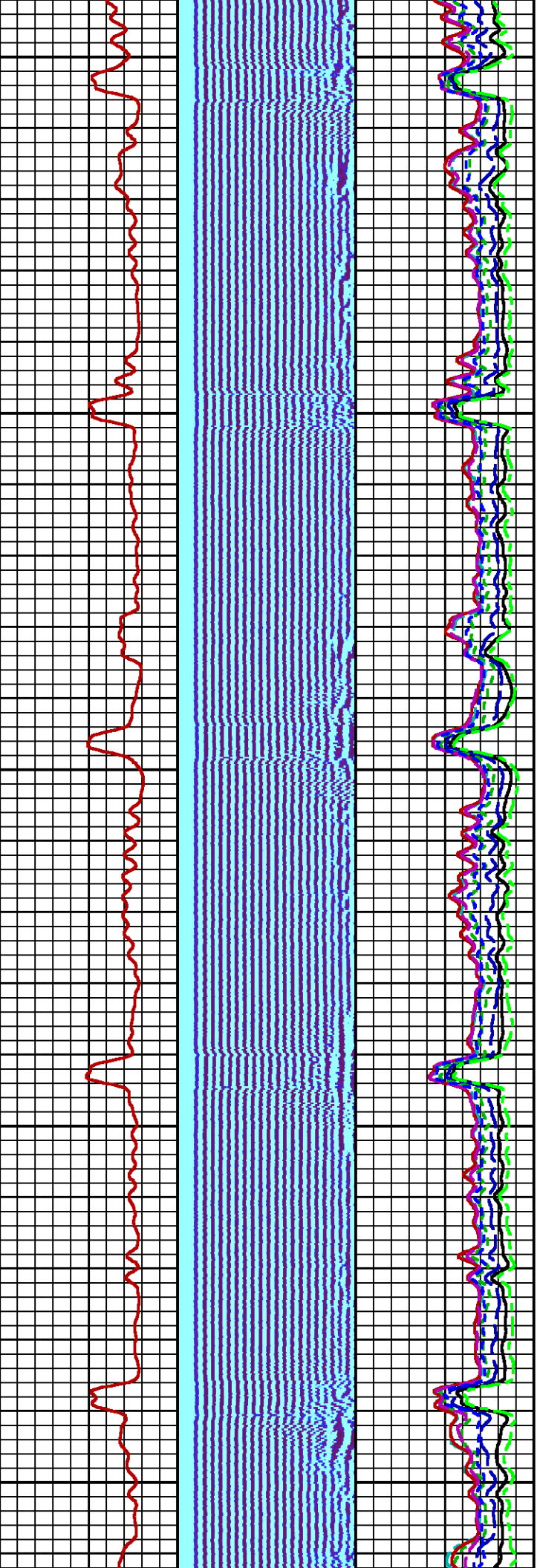


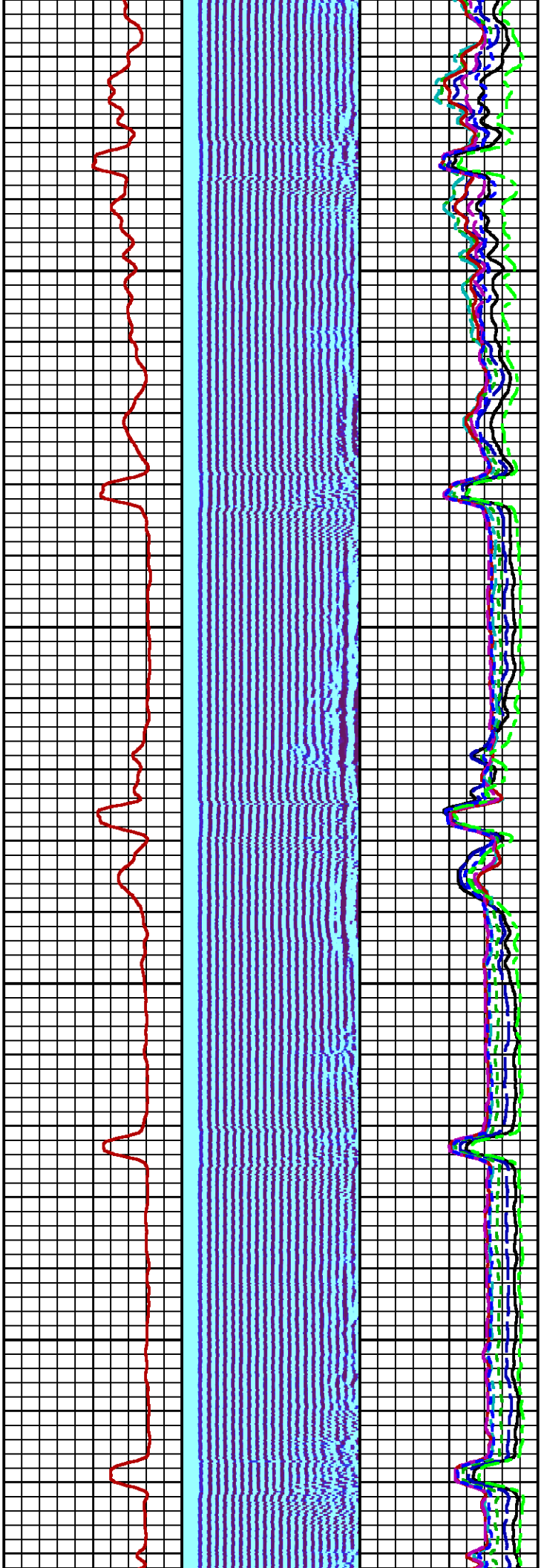
2000

2100



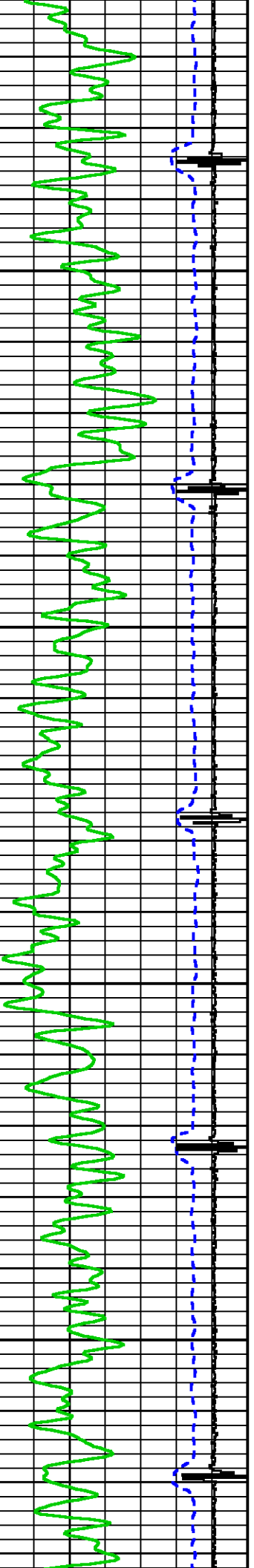


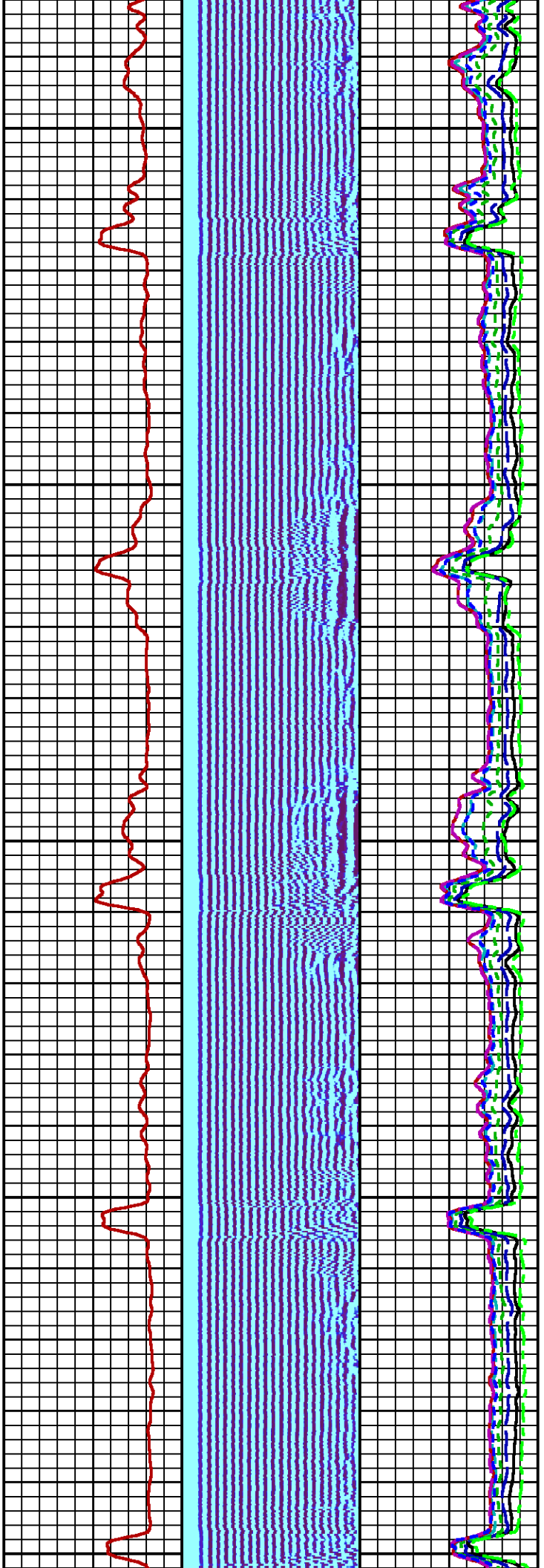




2500

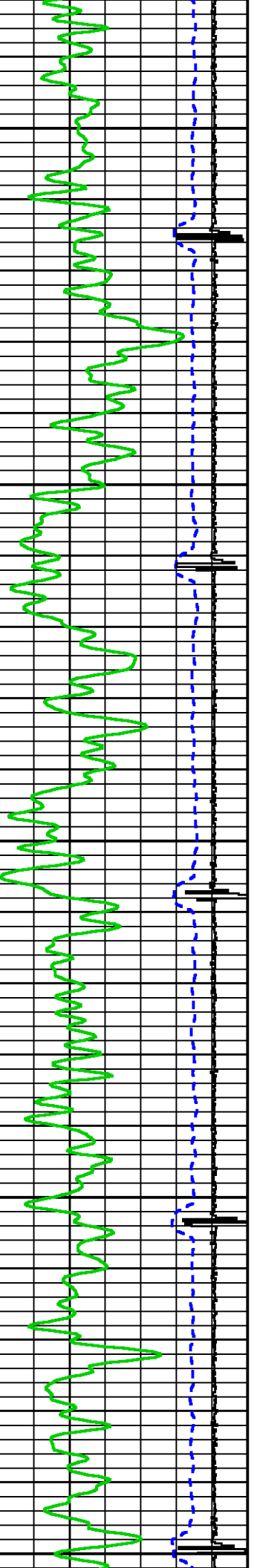
2600

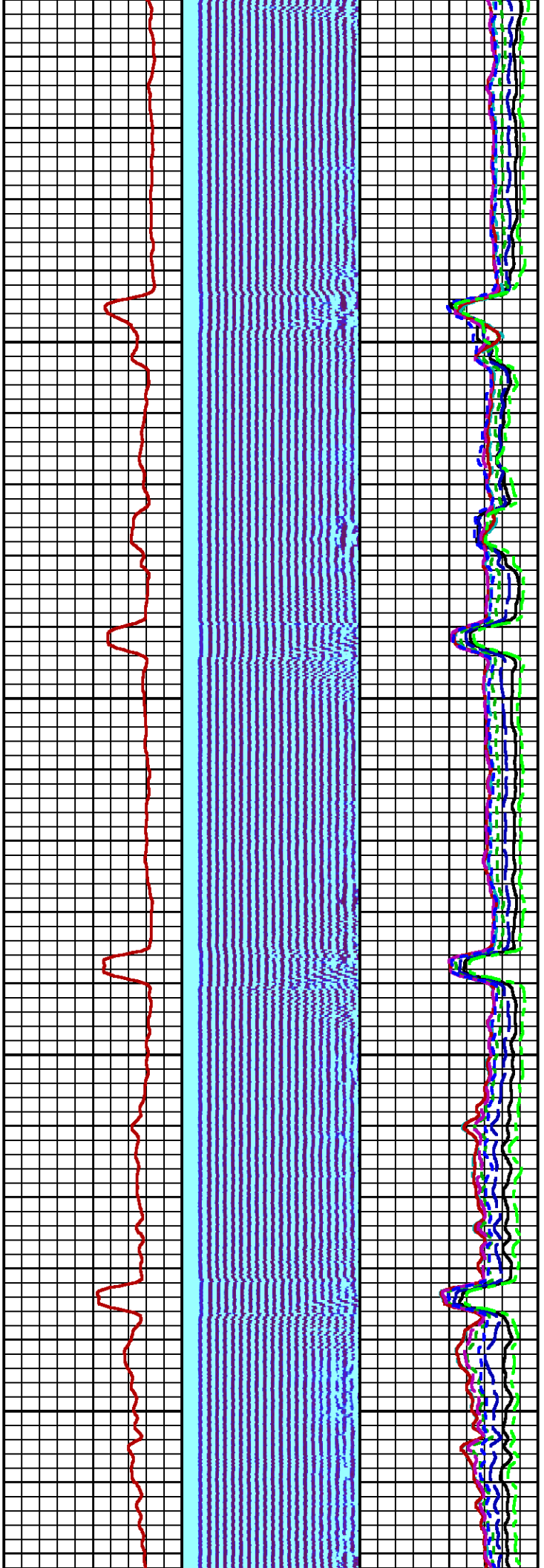




2700

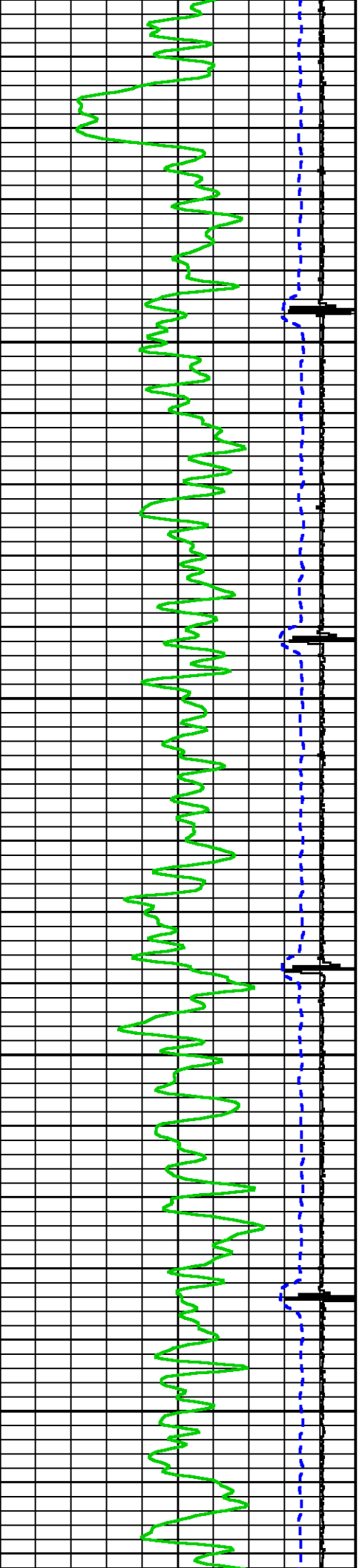
2800



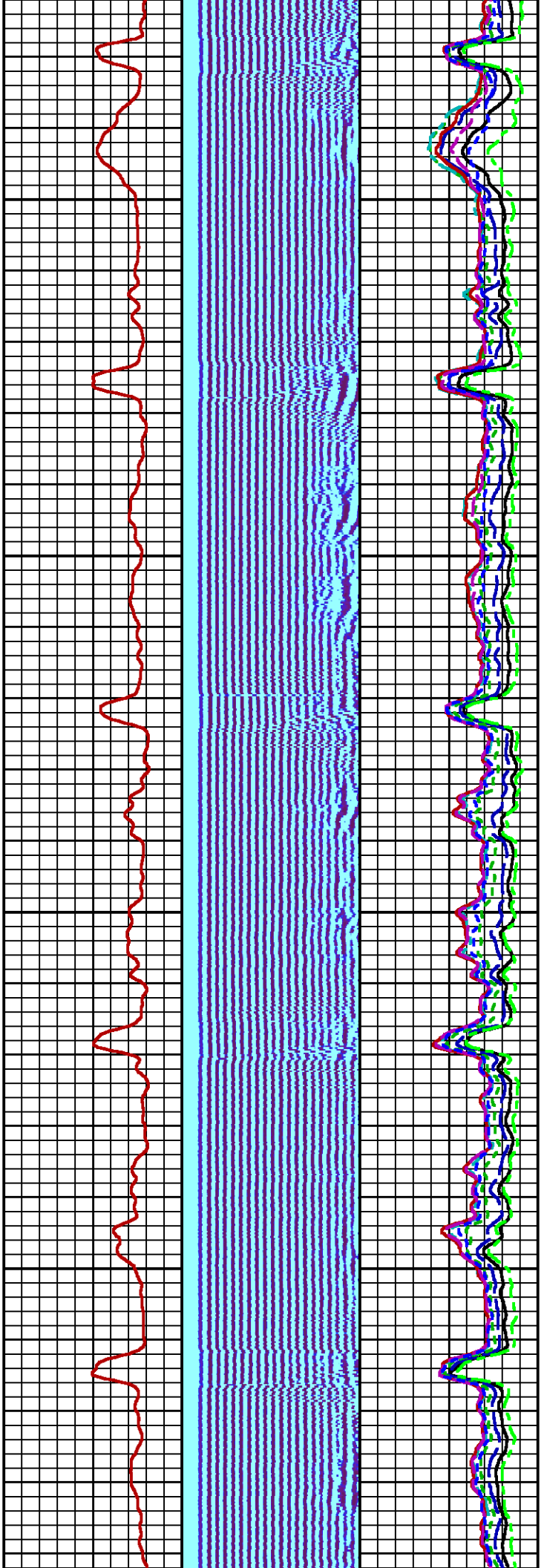


2900

3000

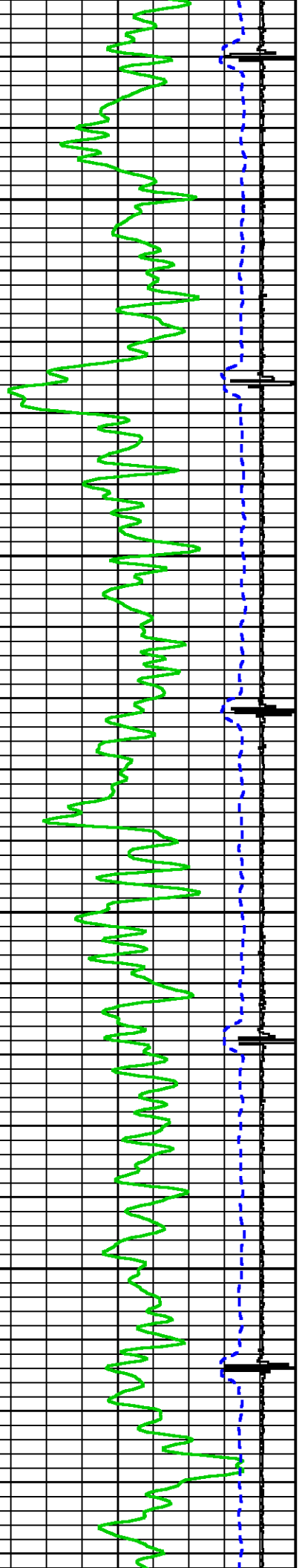


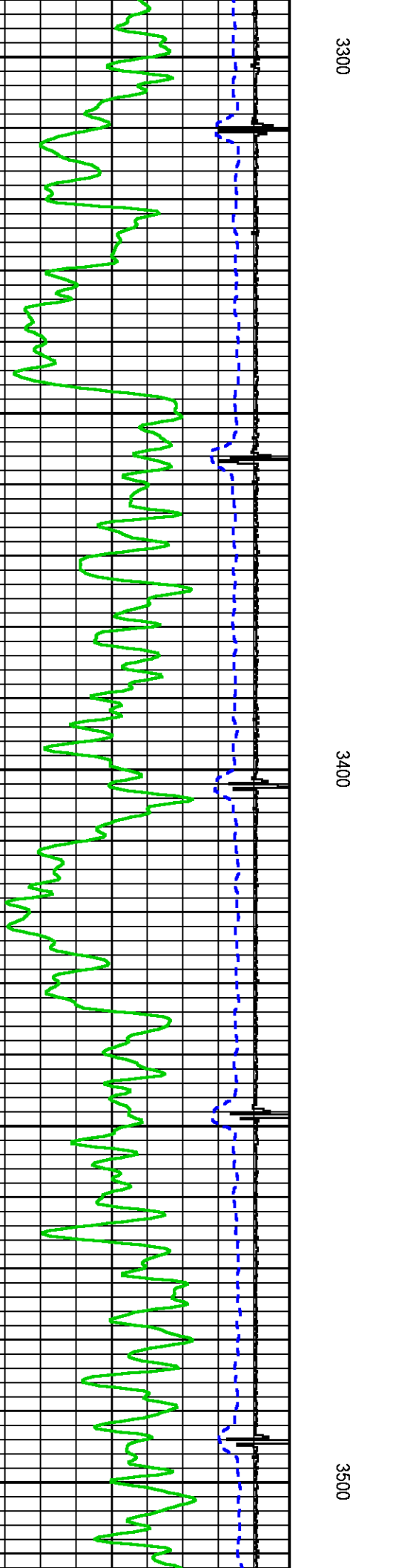
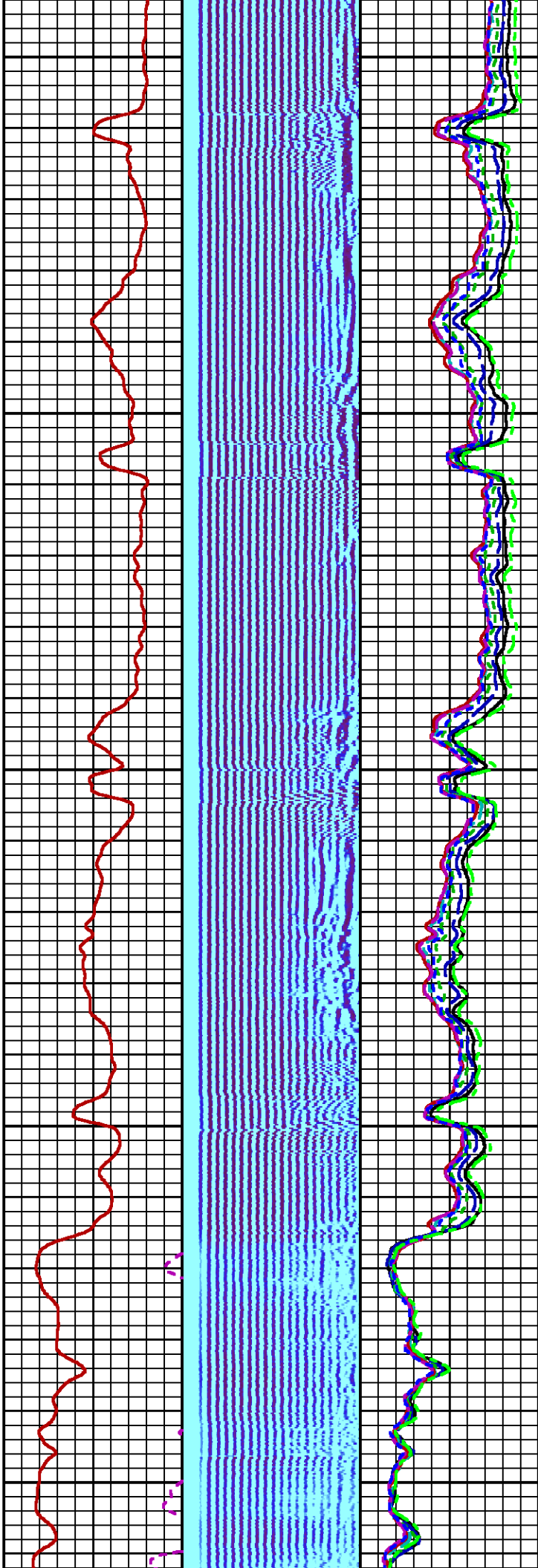
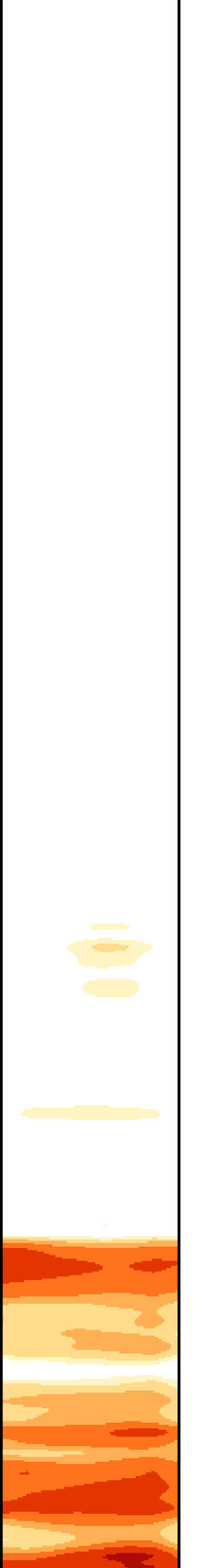


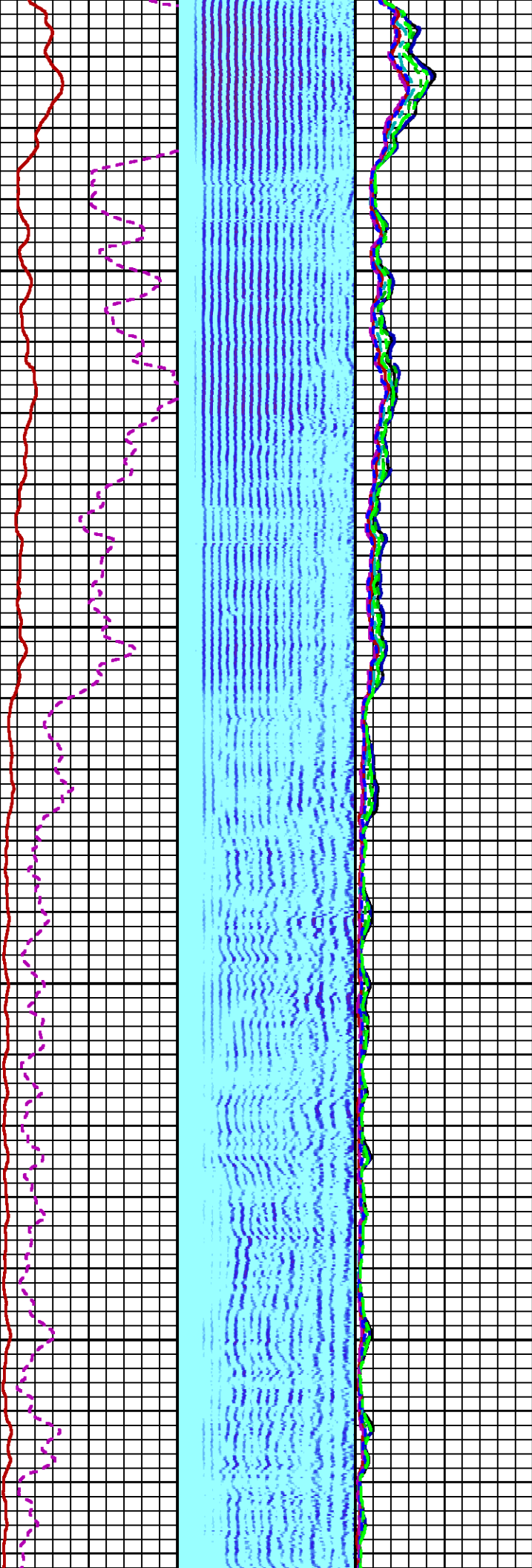


3100

3200

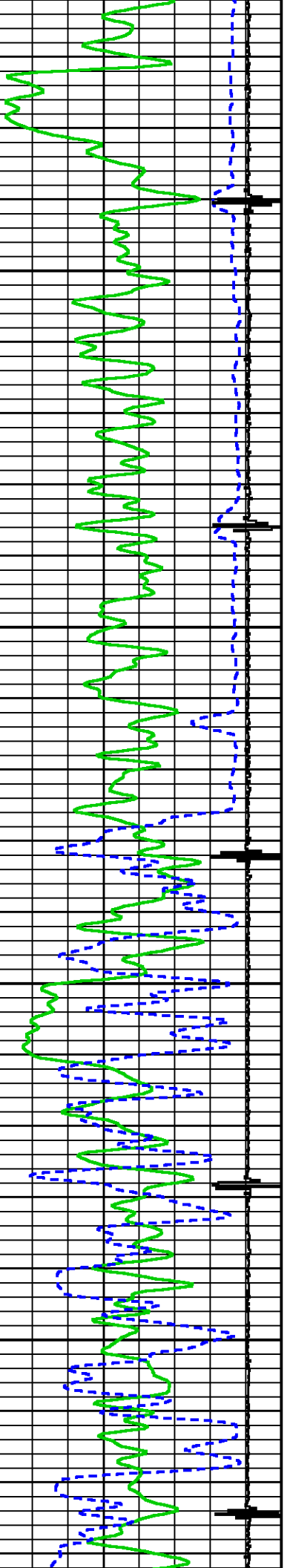


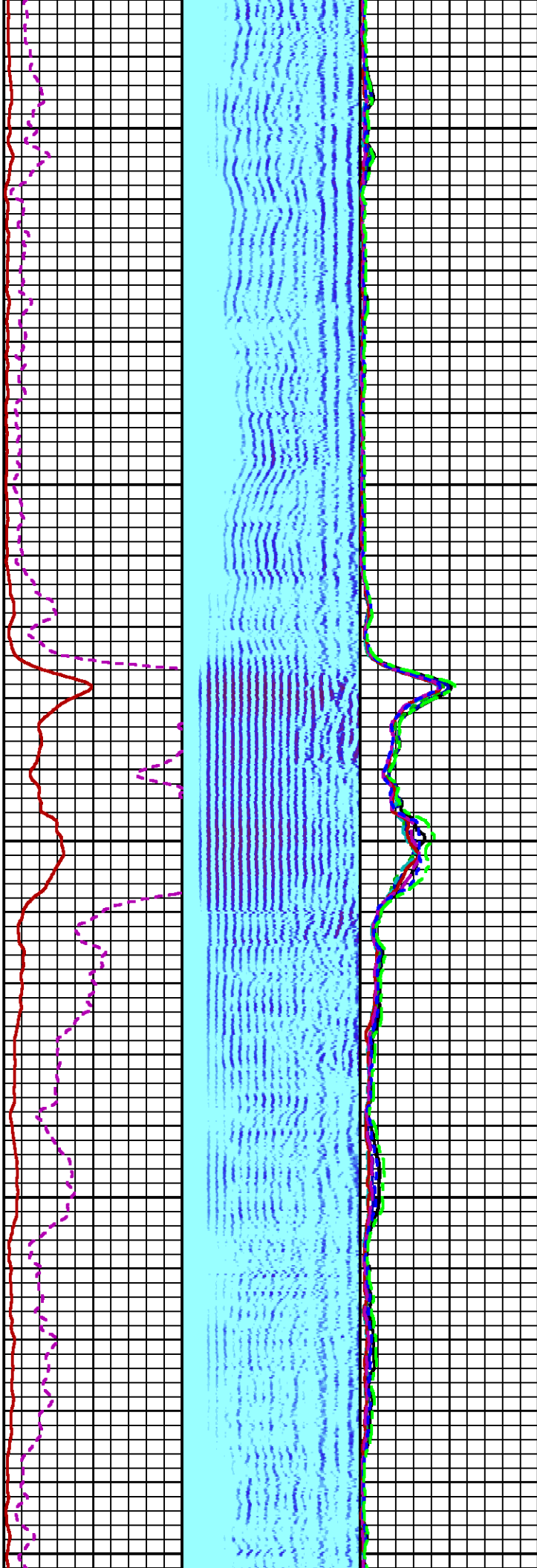
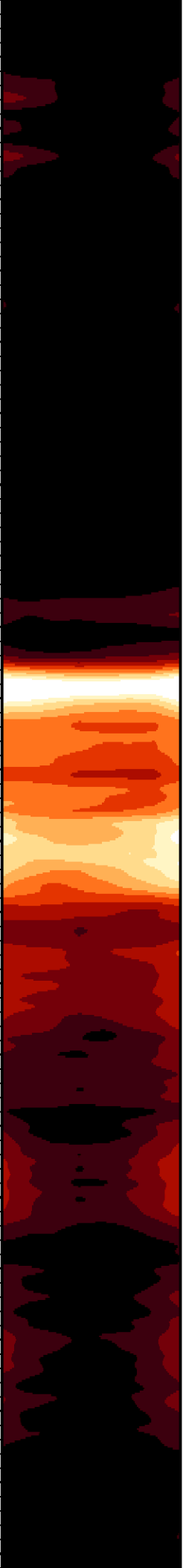




3600

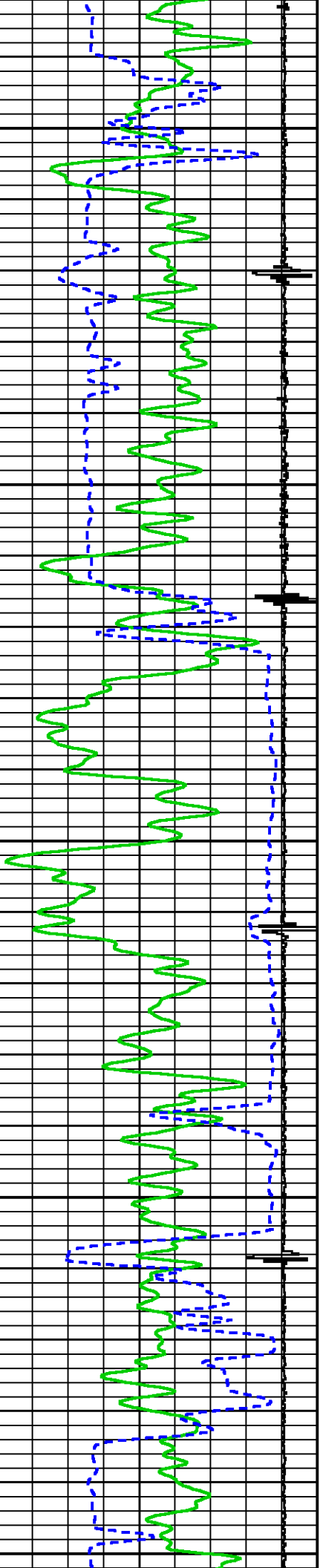
3700



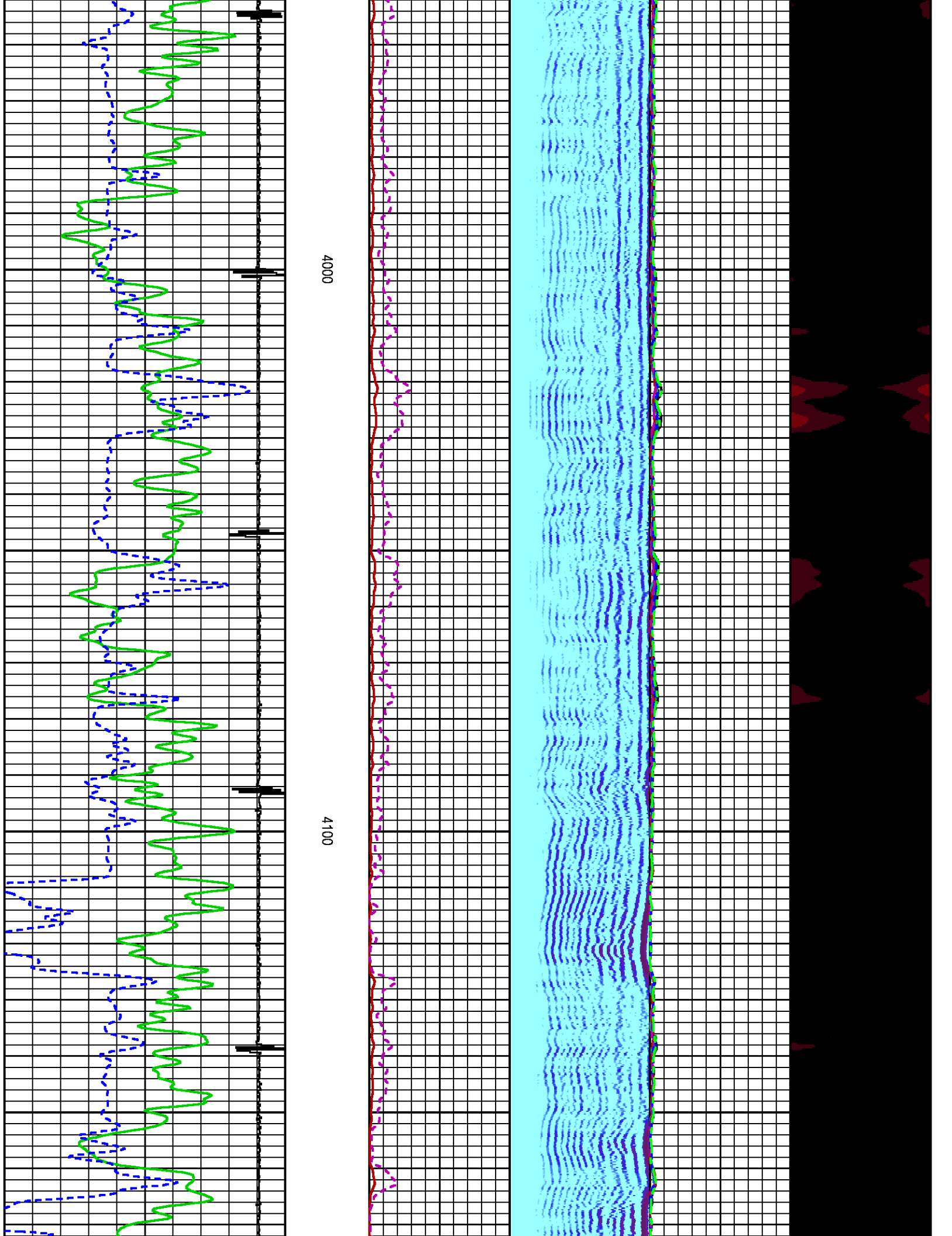


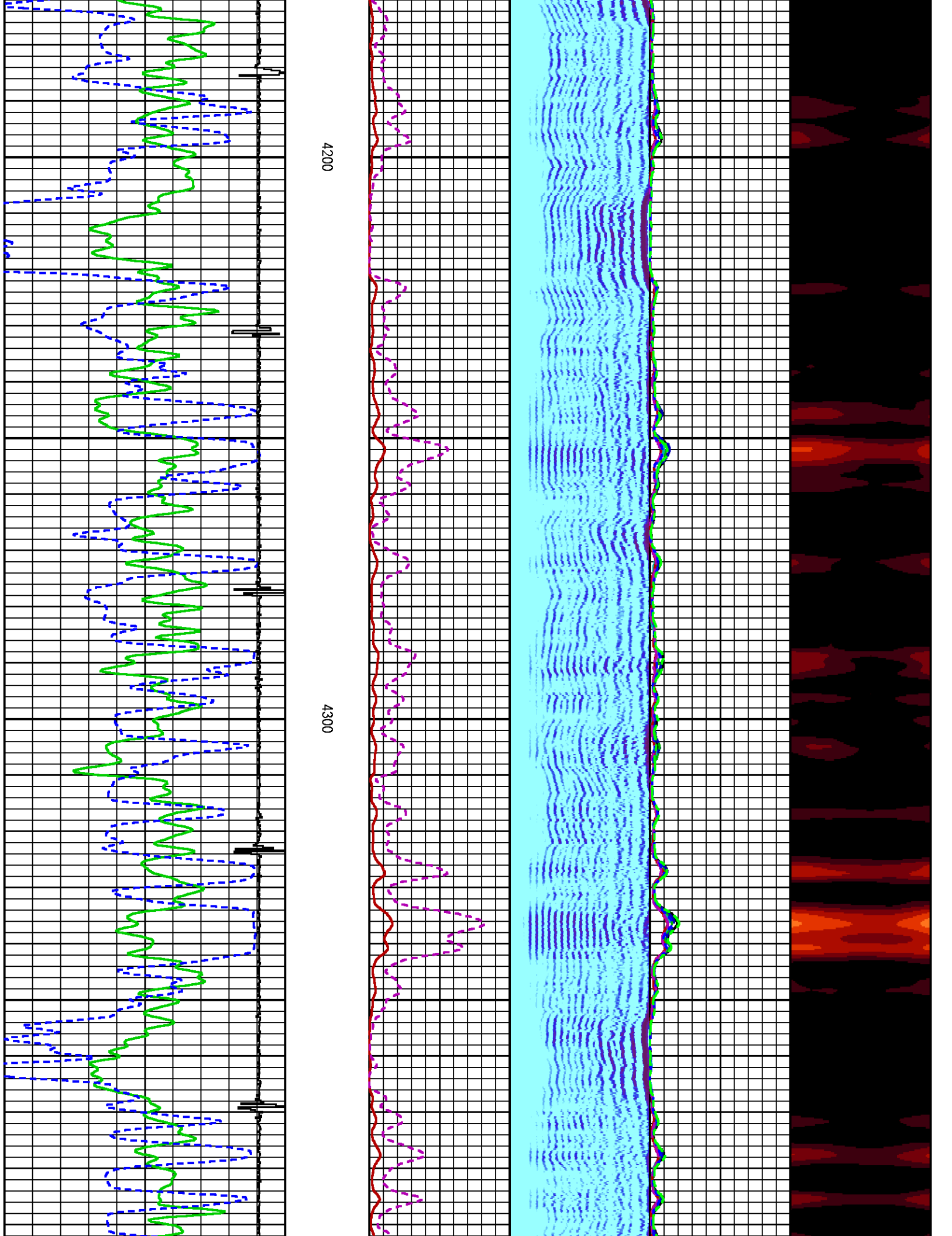
3800

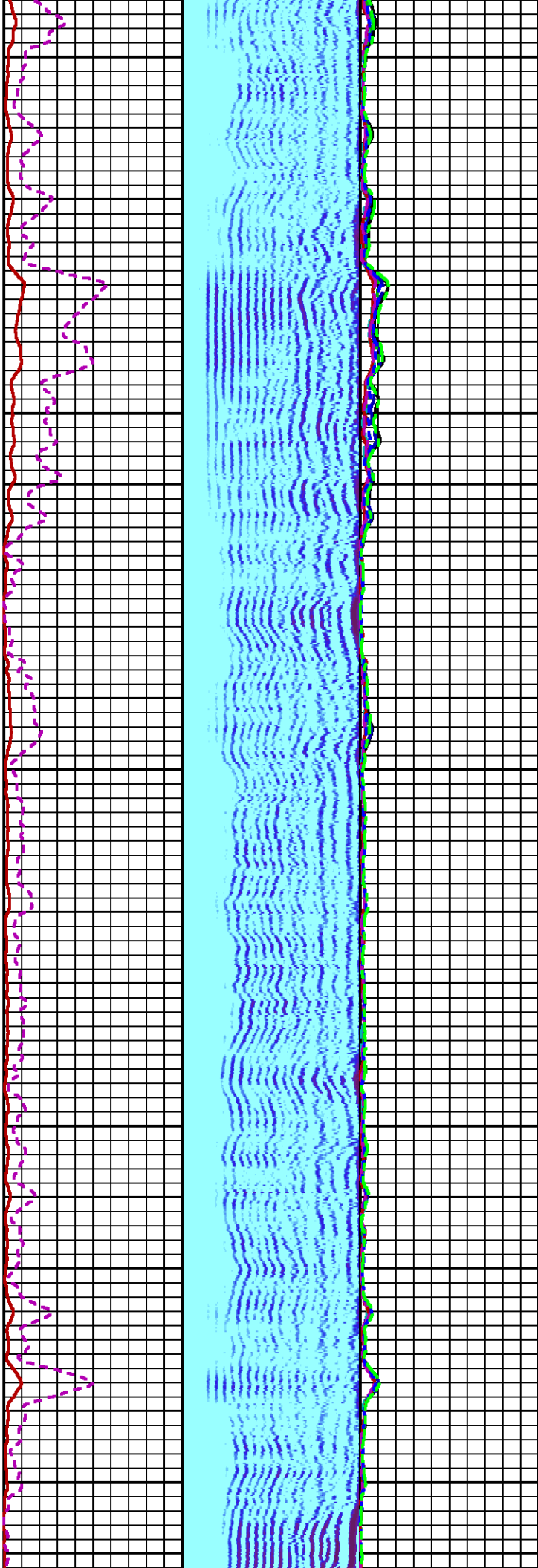
3900







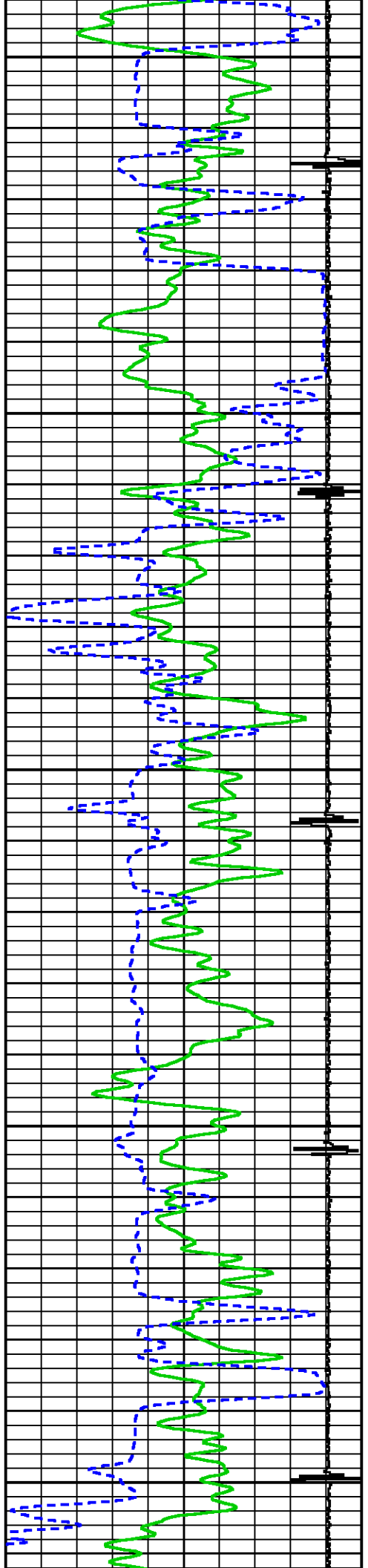


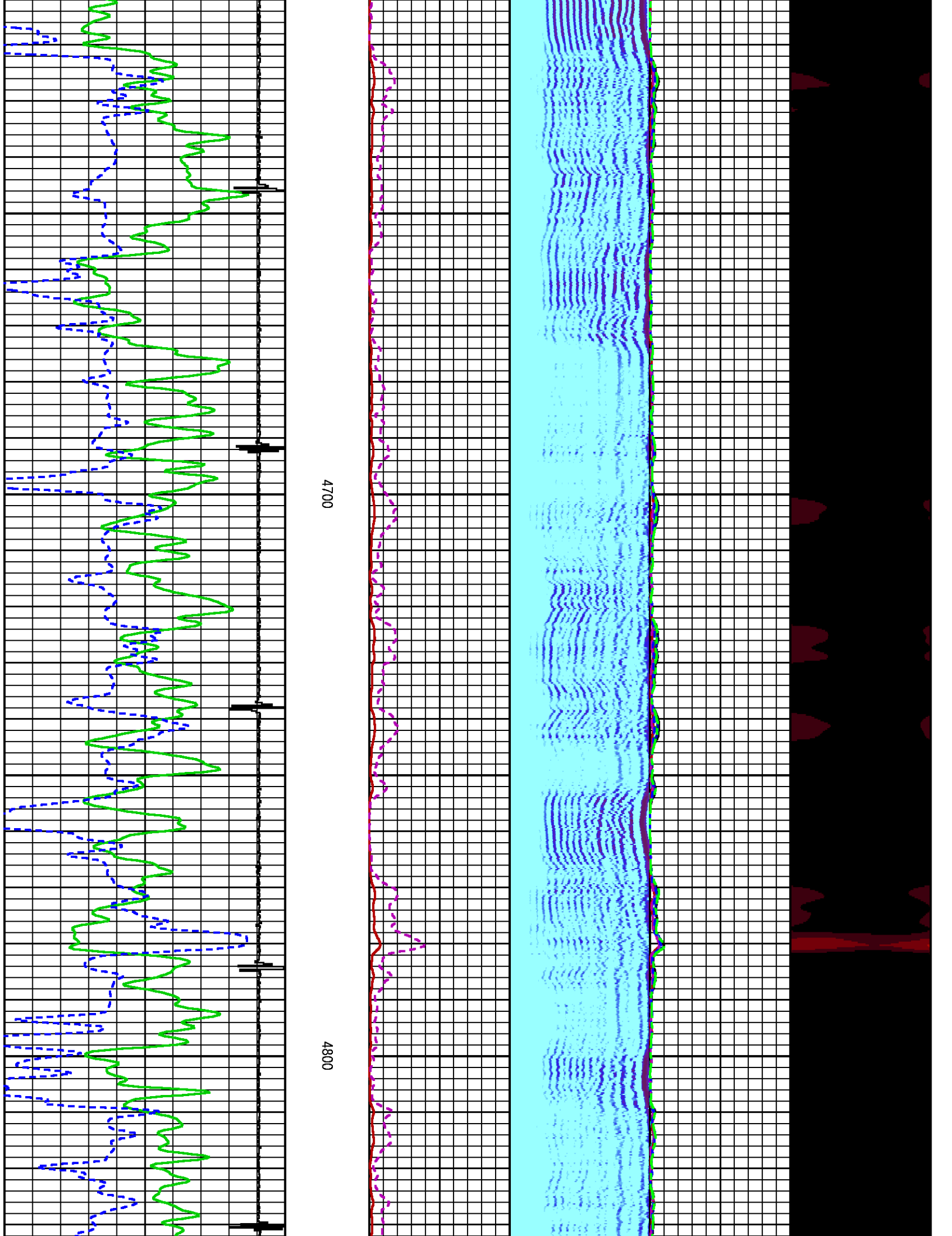


4400

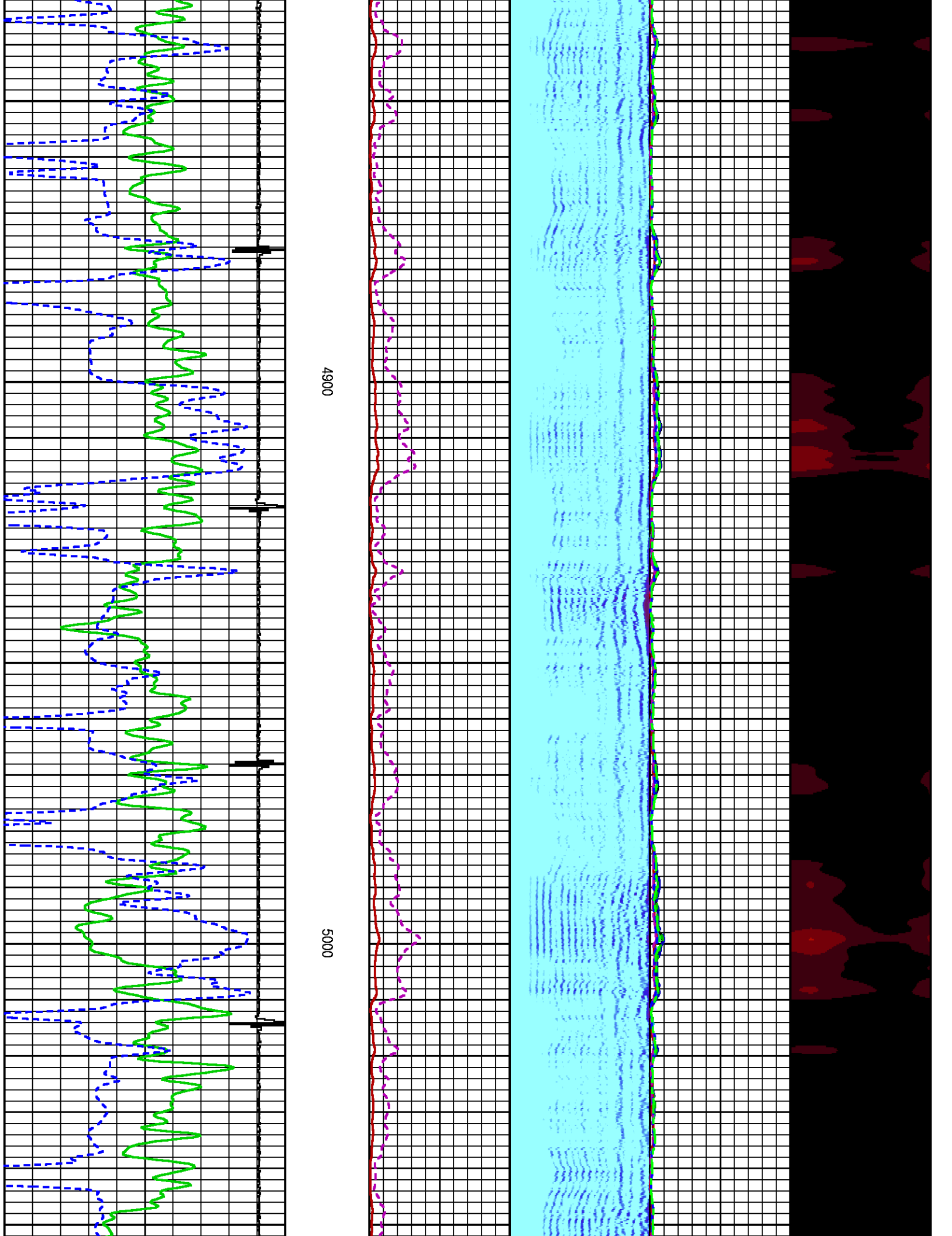
4500

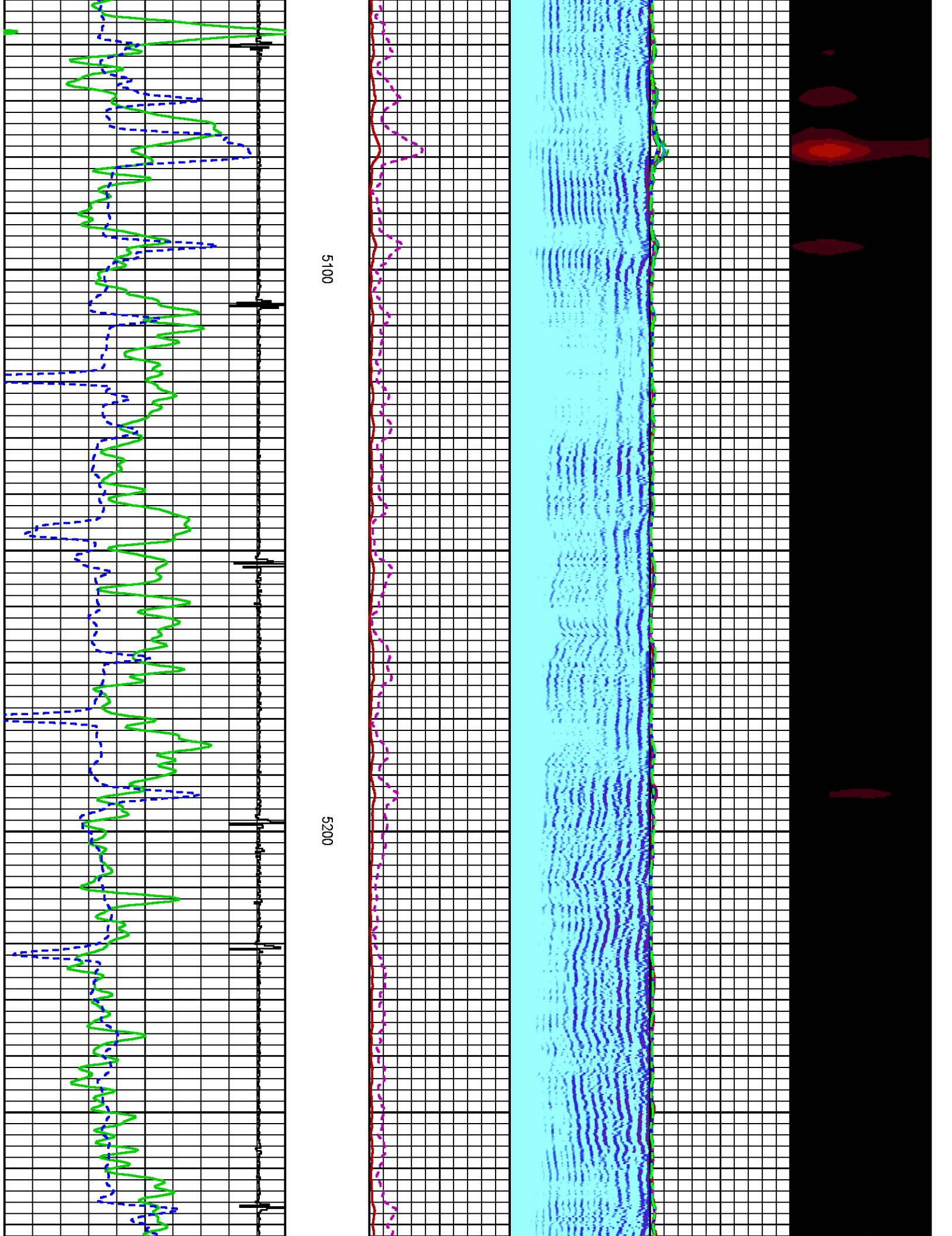
4600

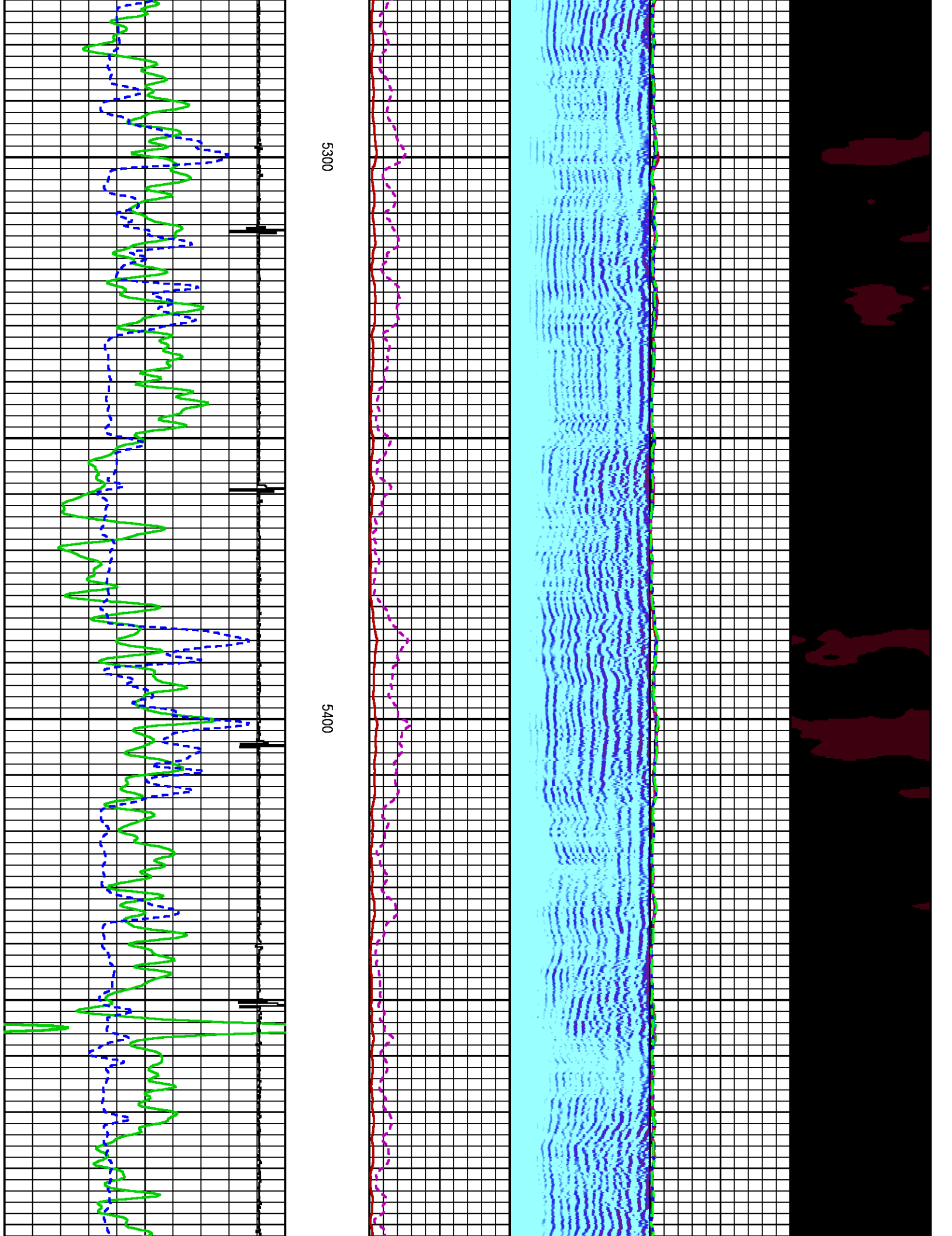


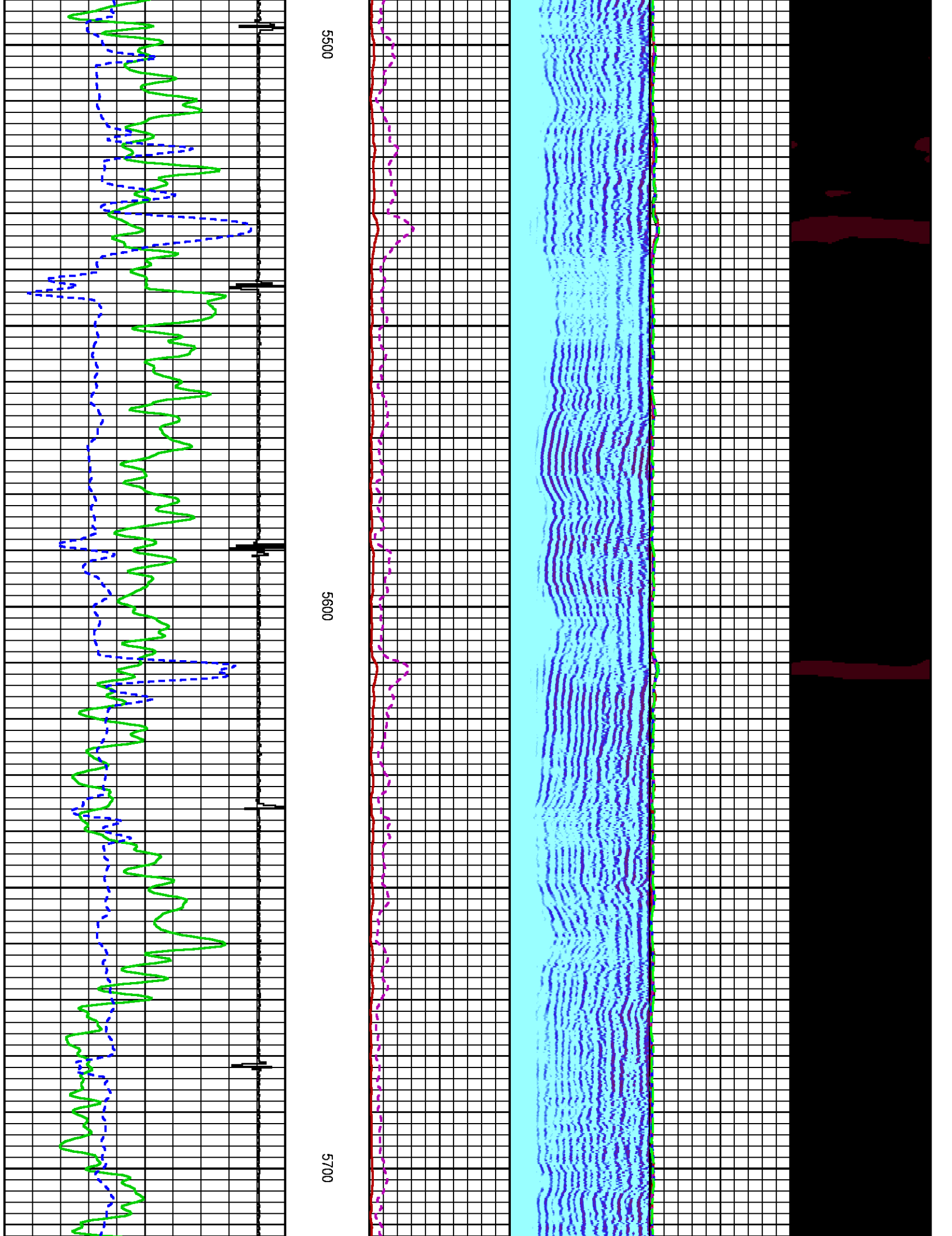




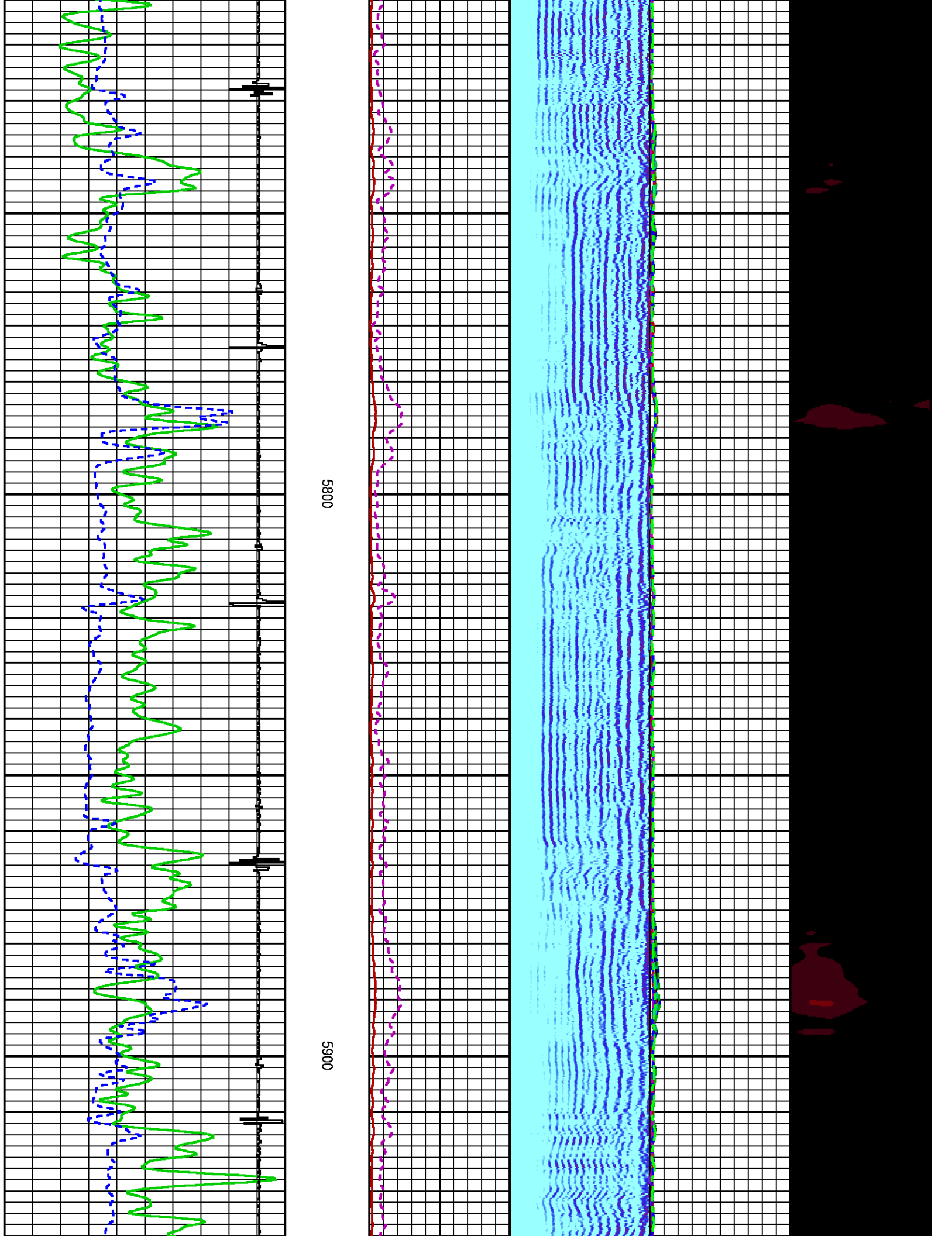


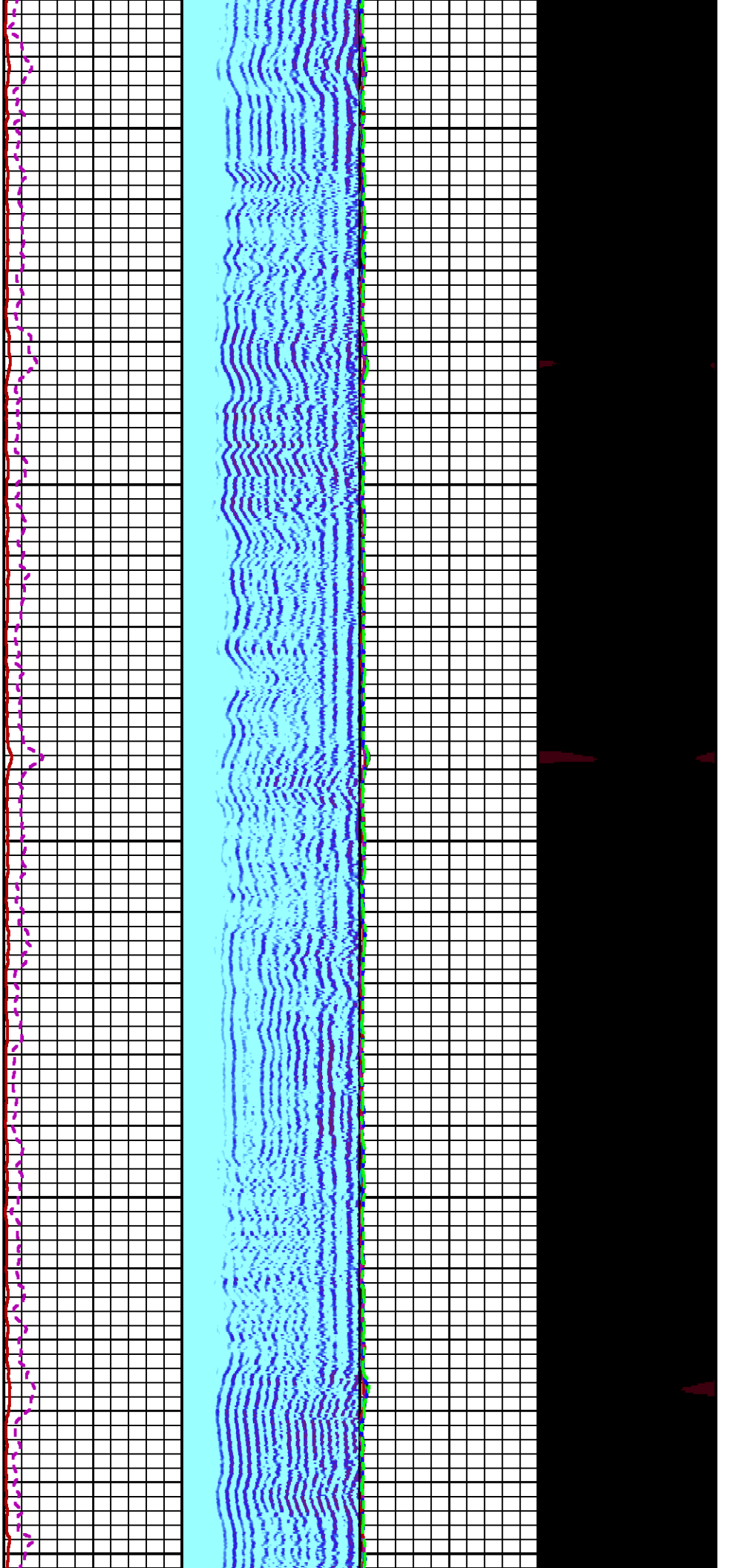






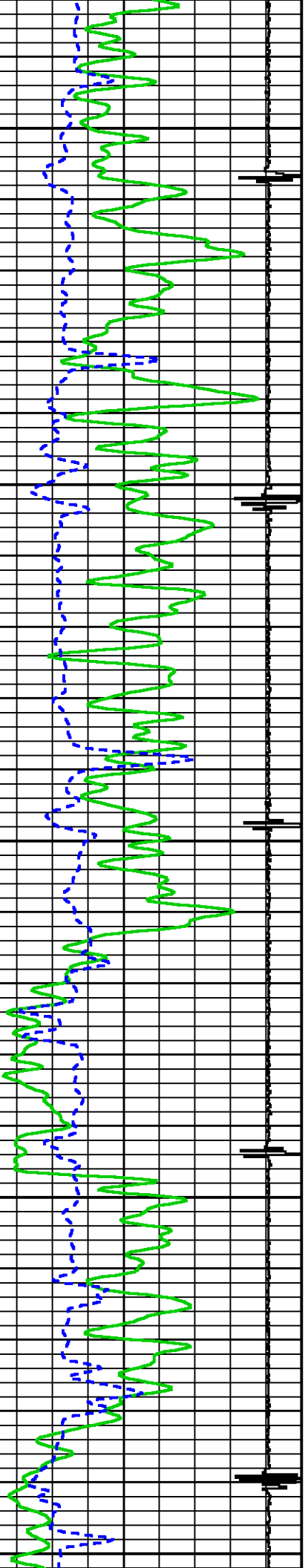


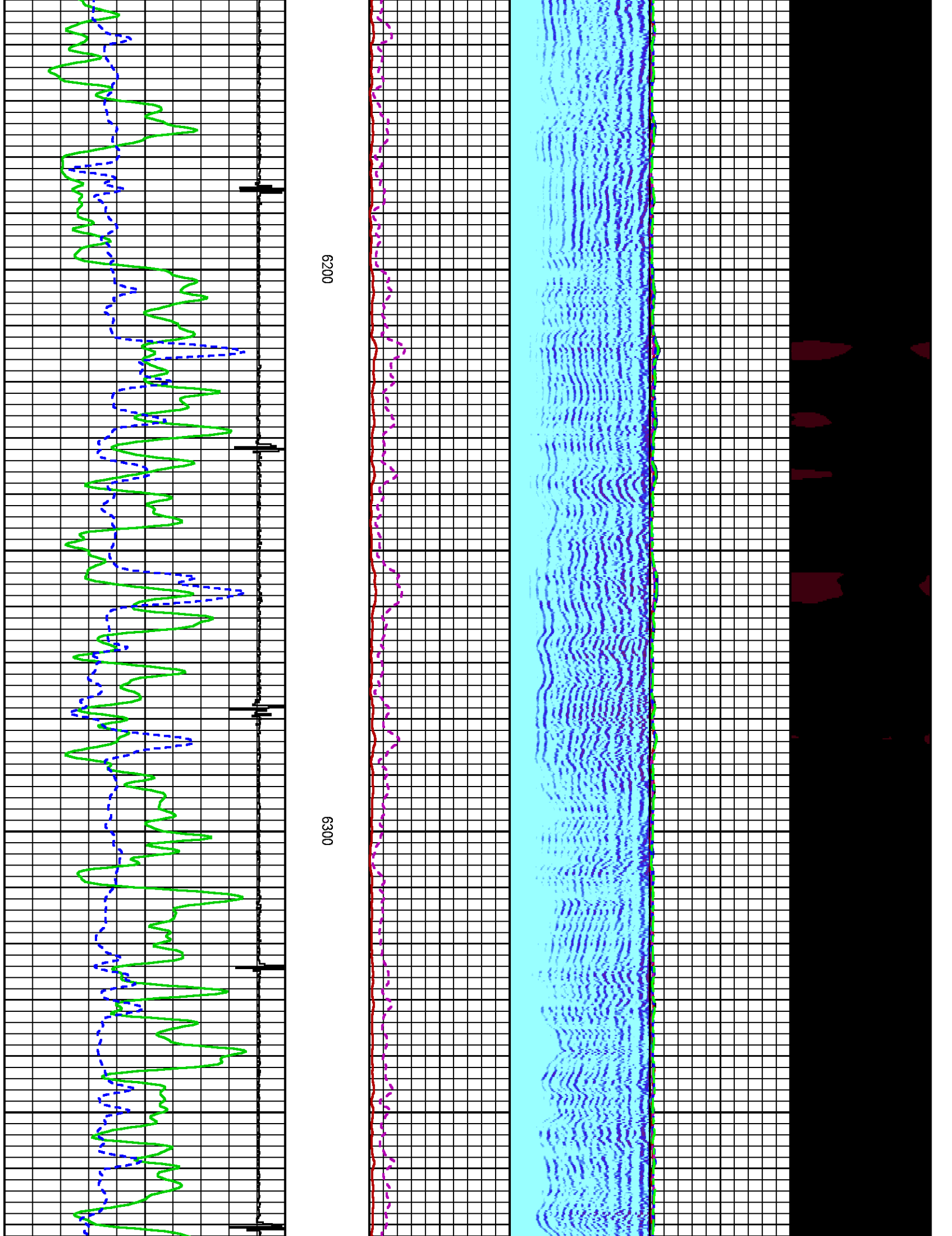


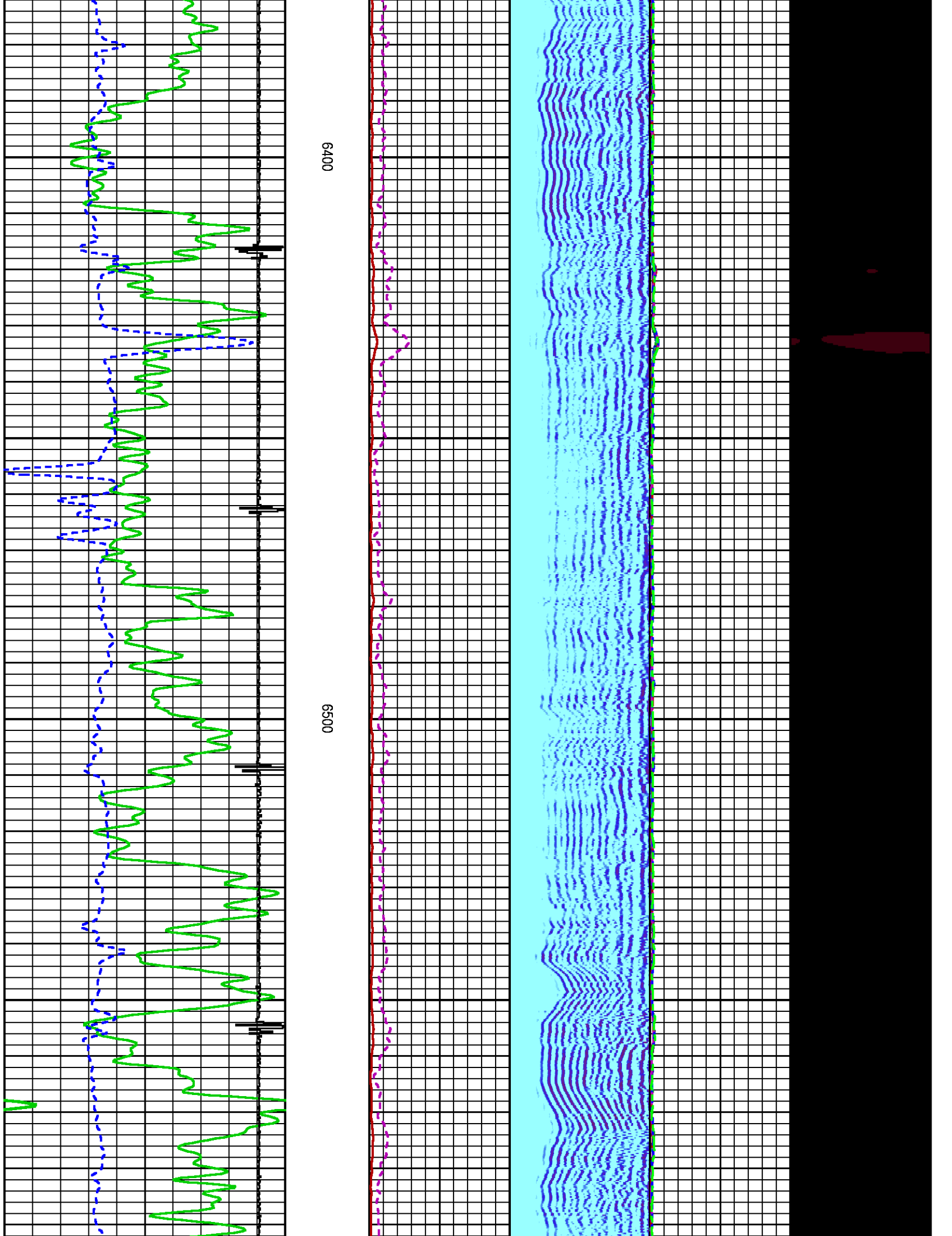


6000

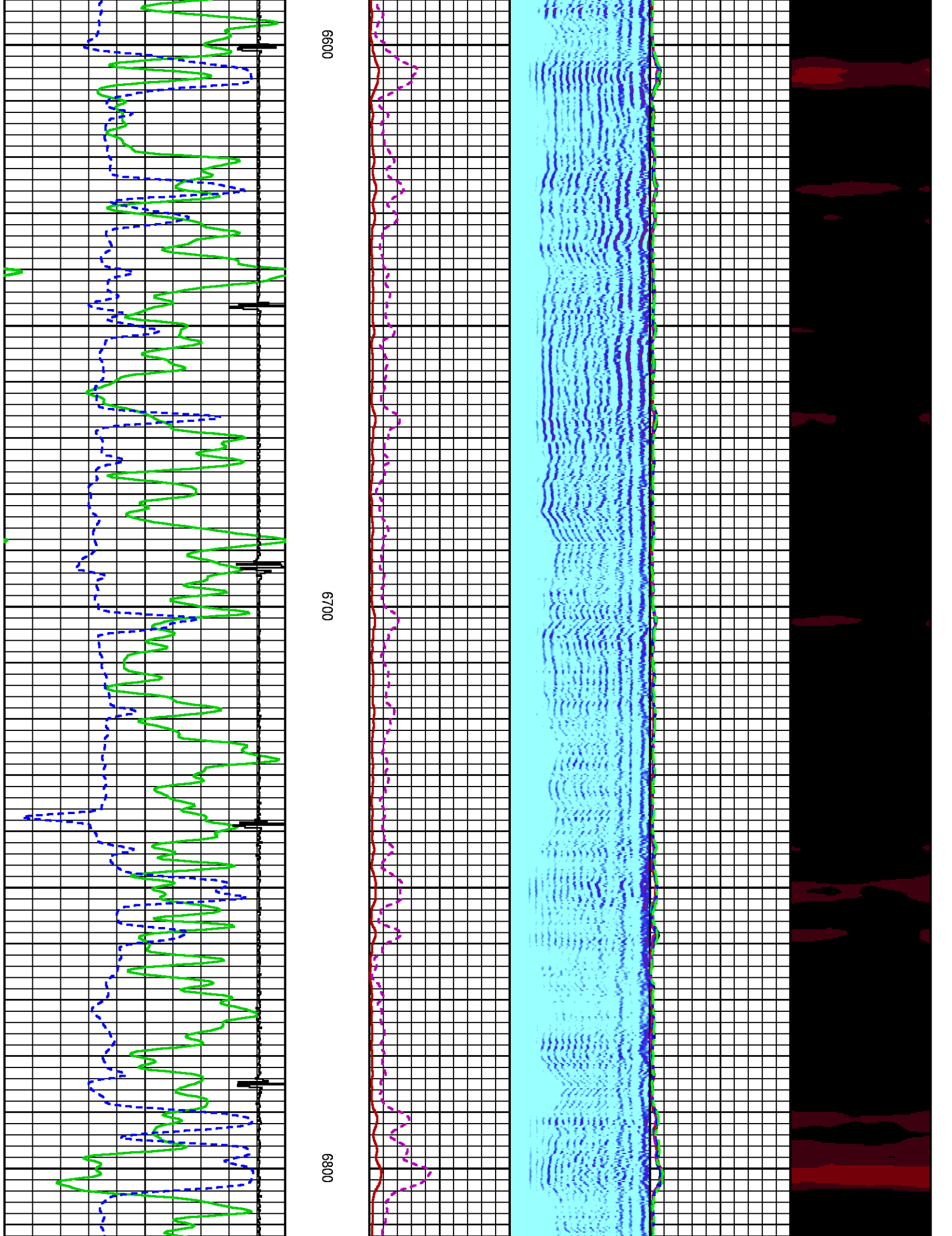
6100

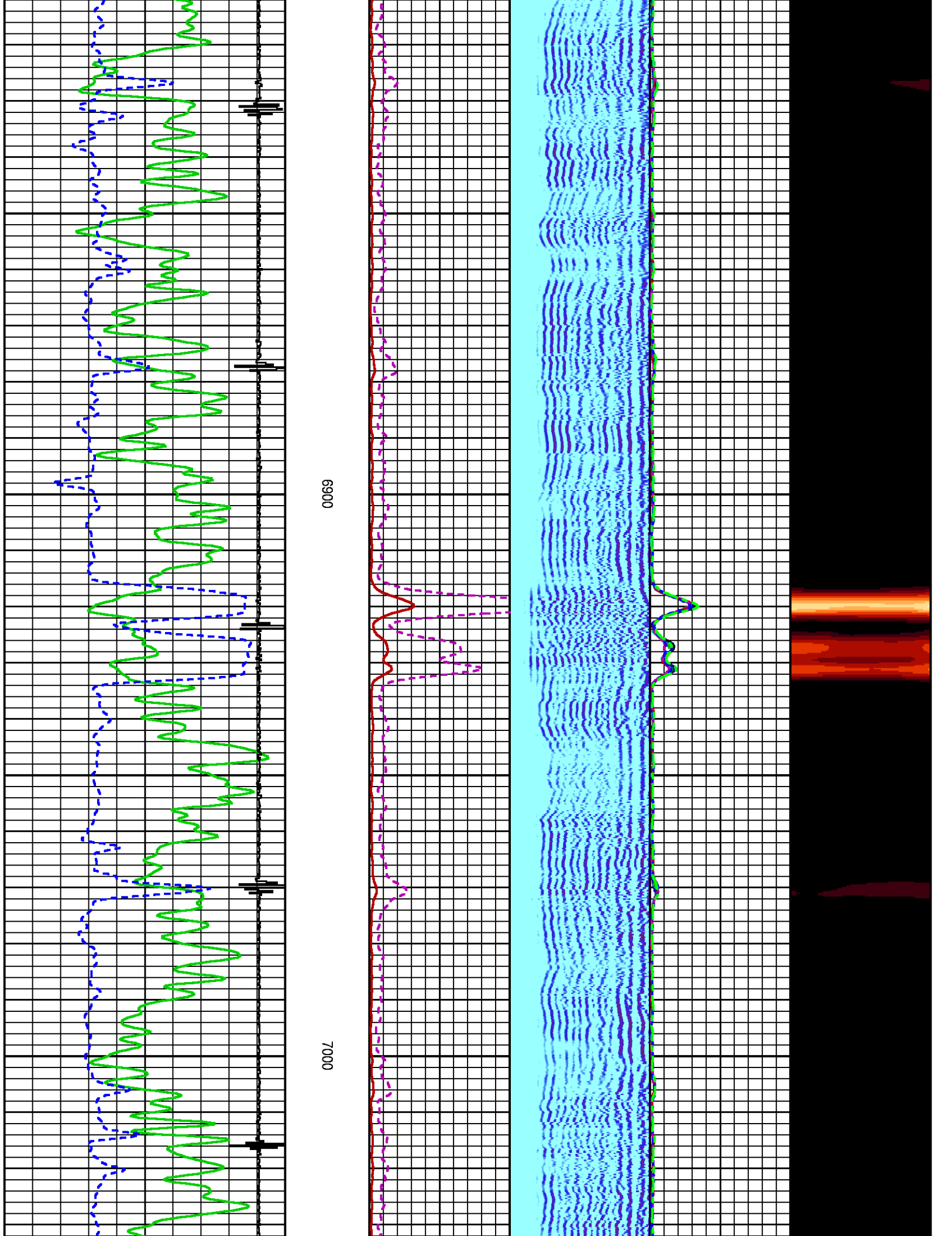


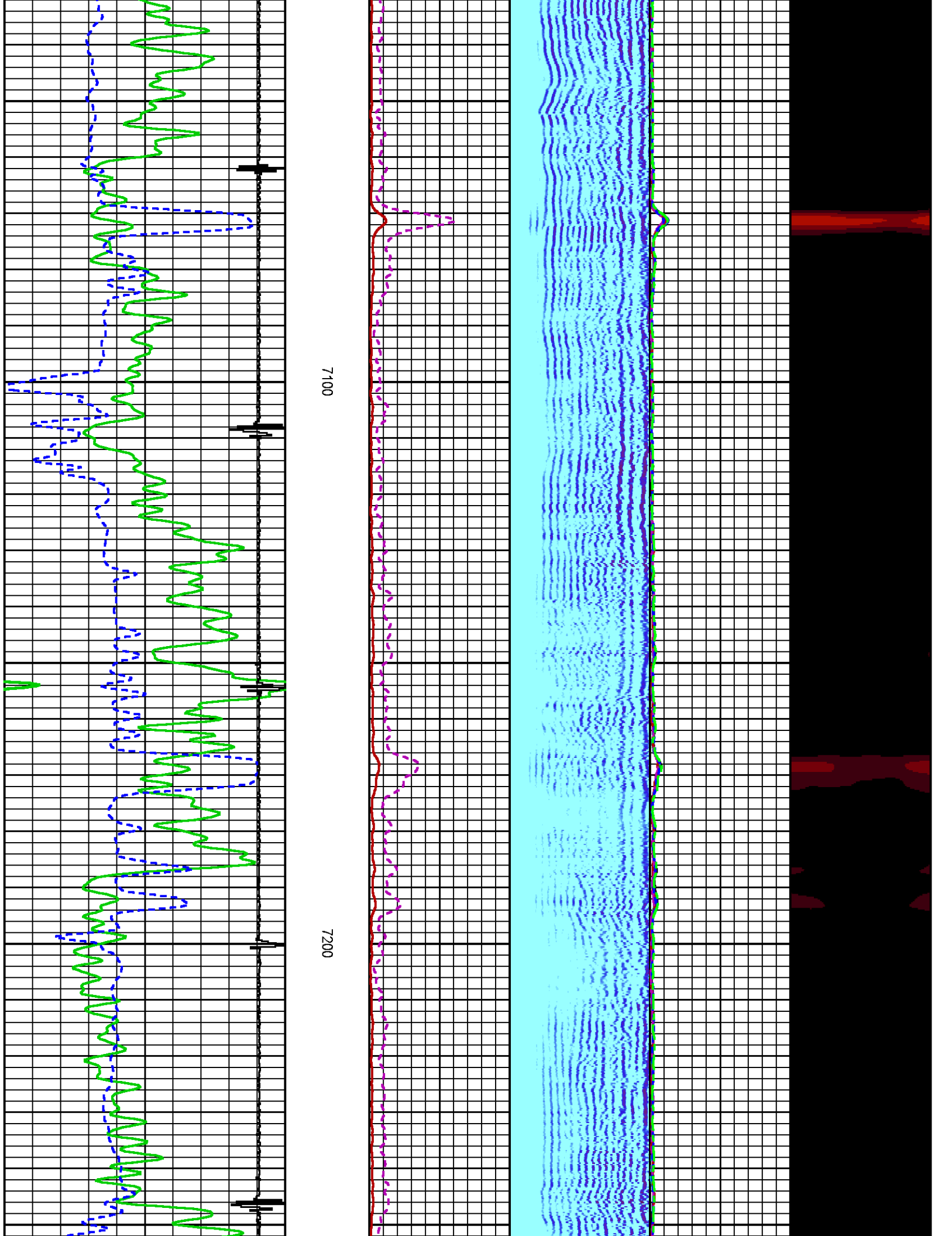


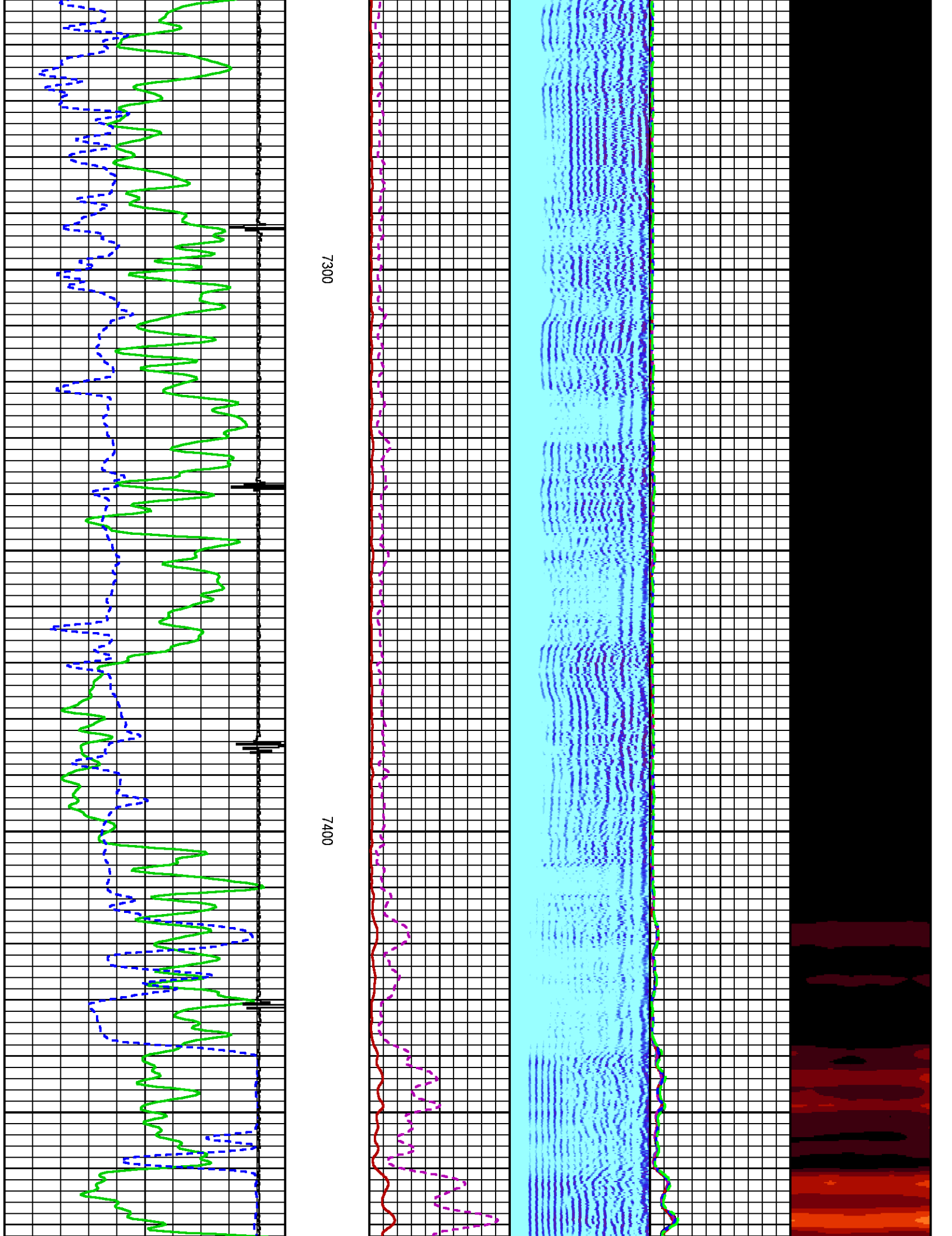




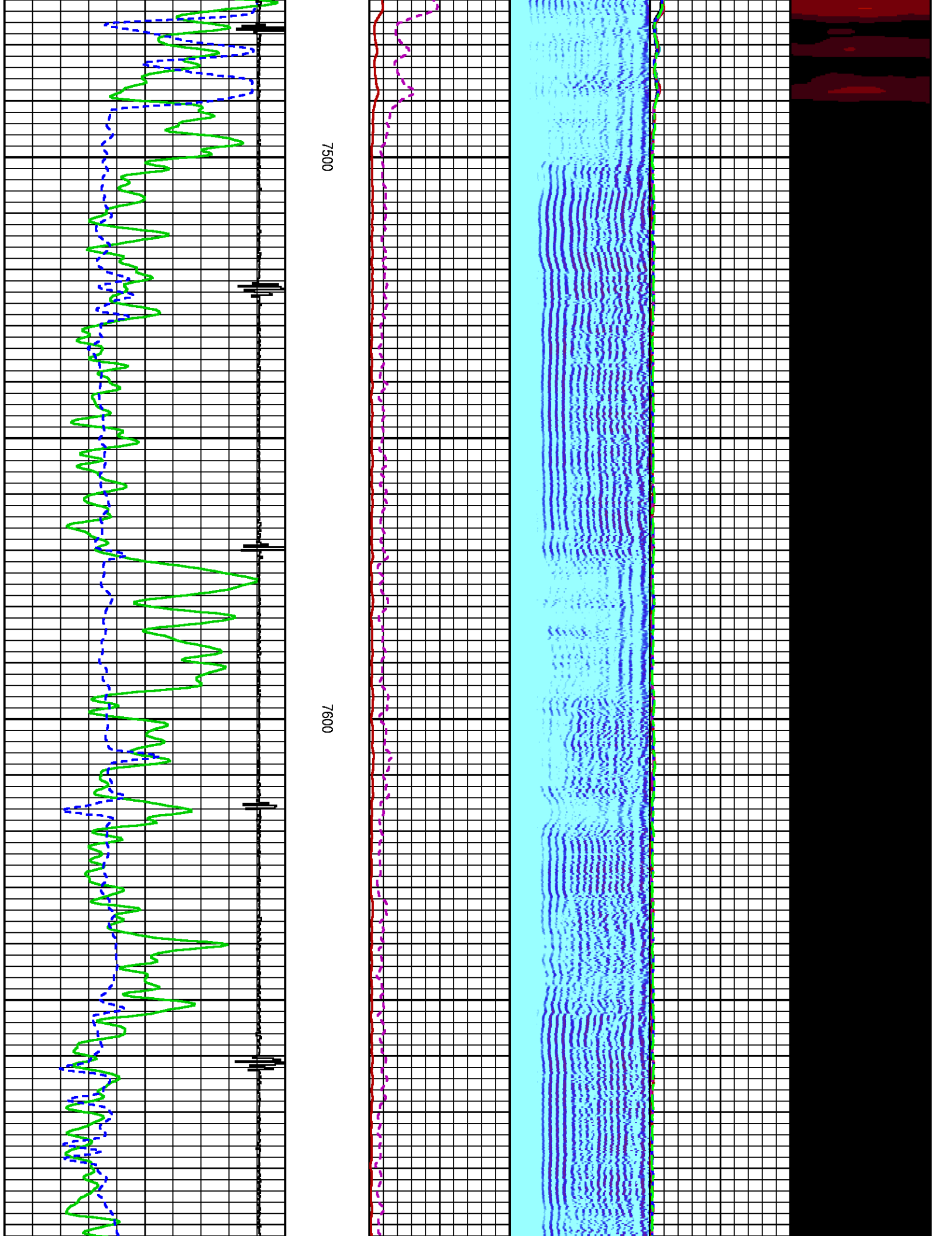


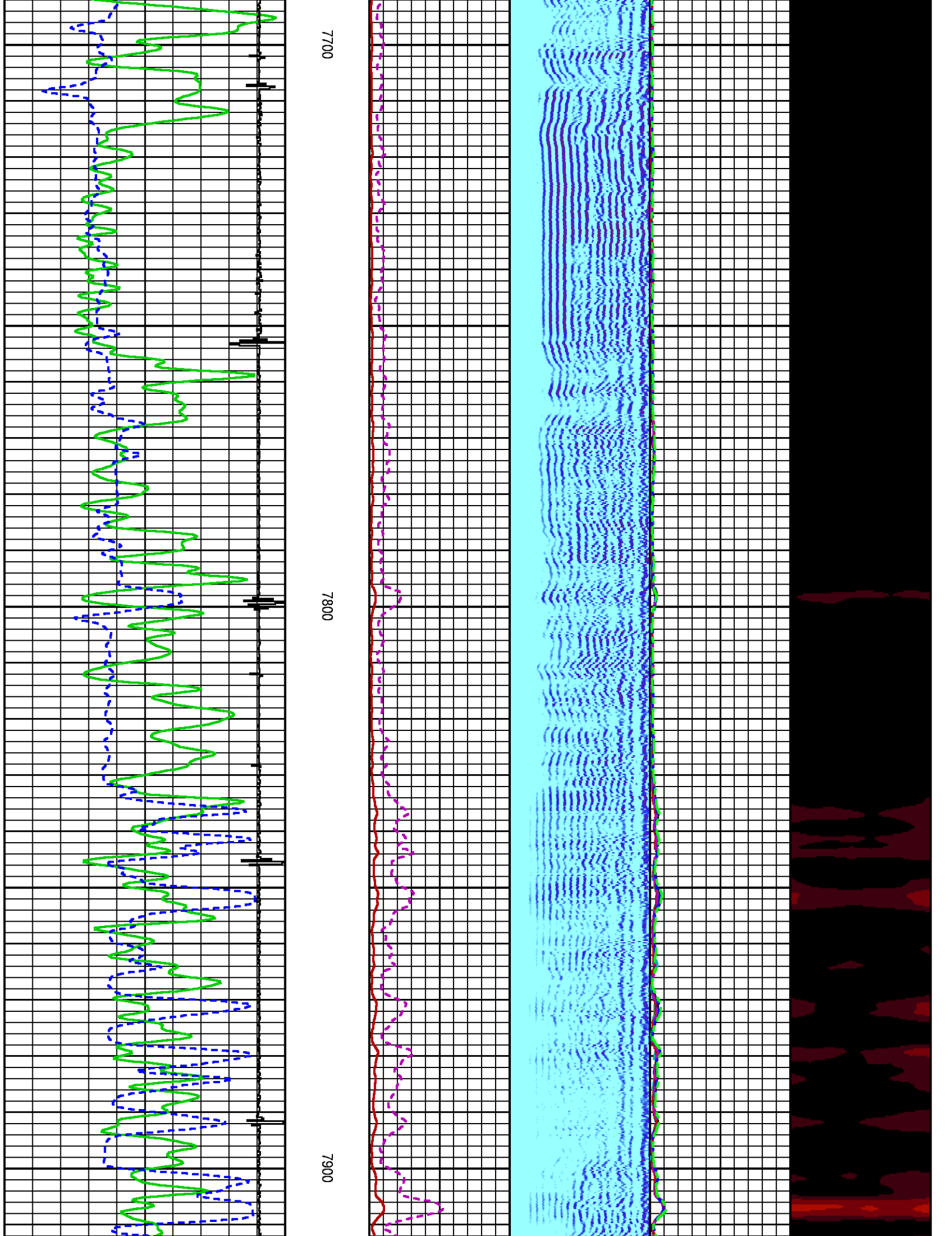


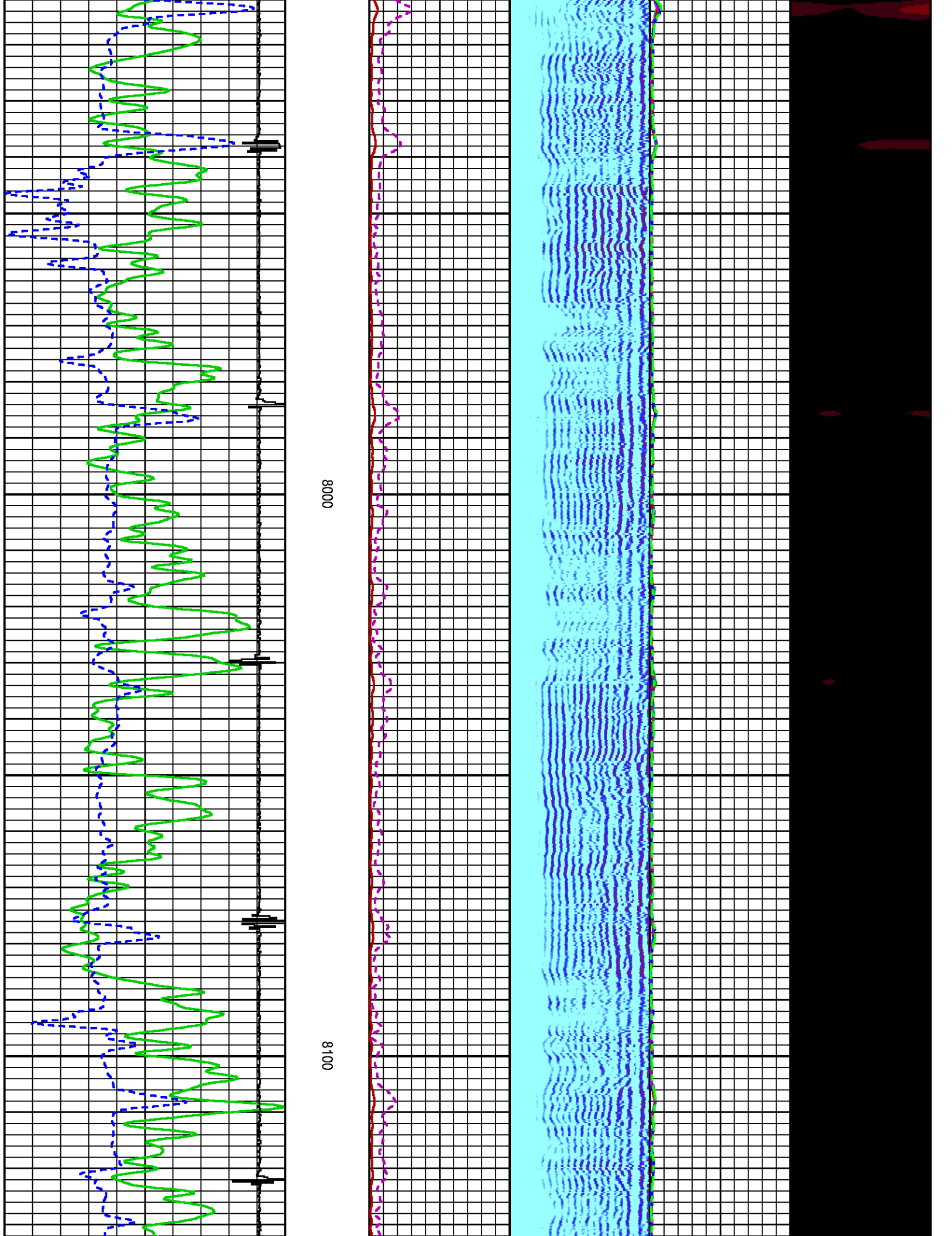


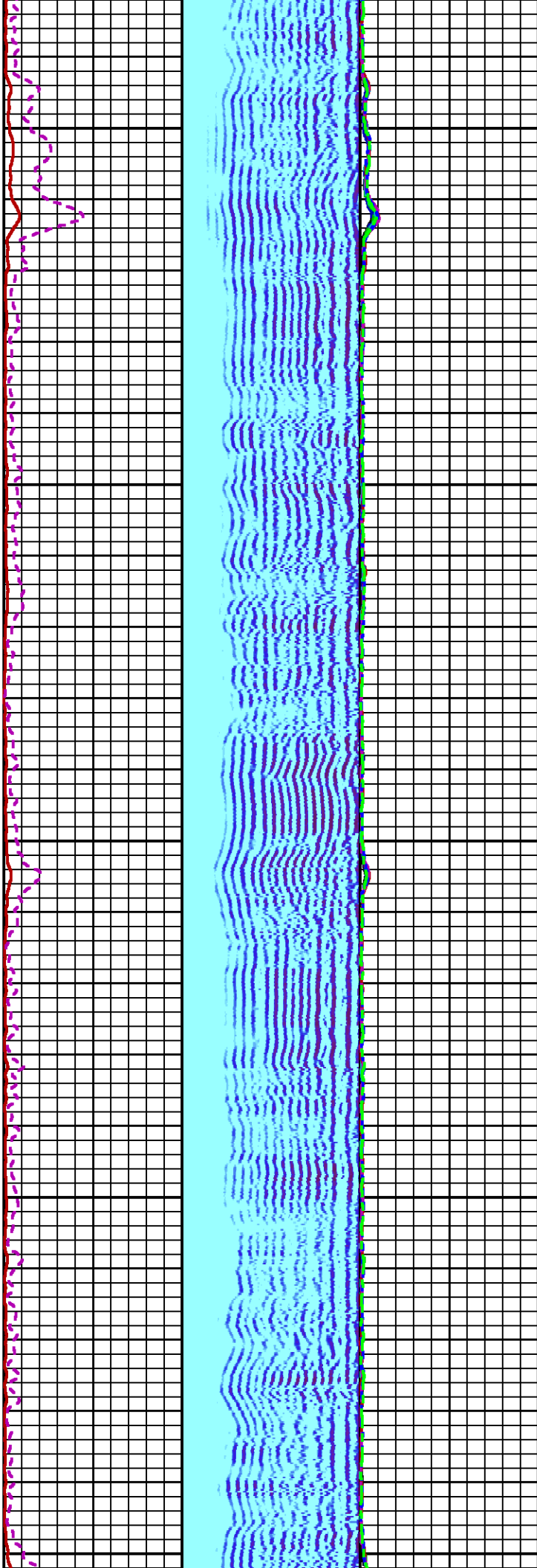
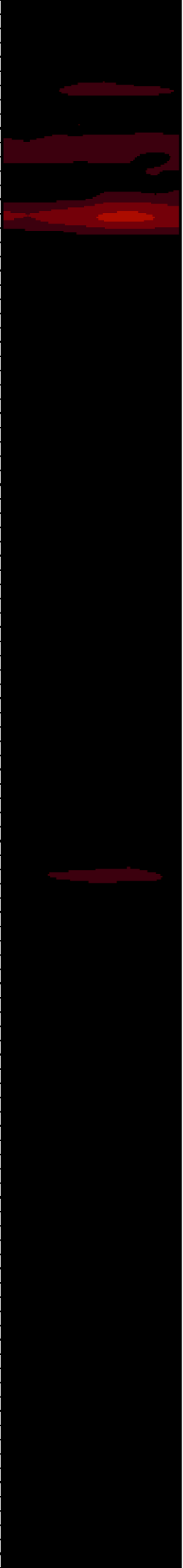






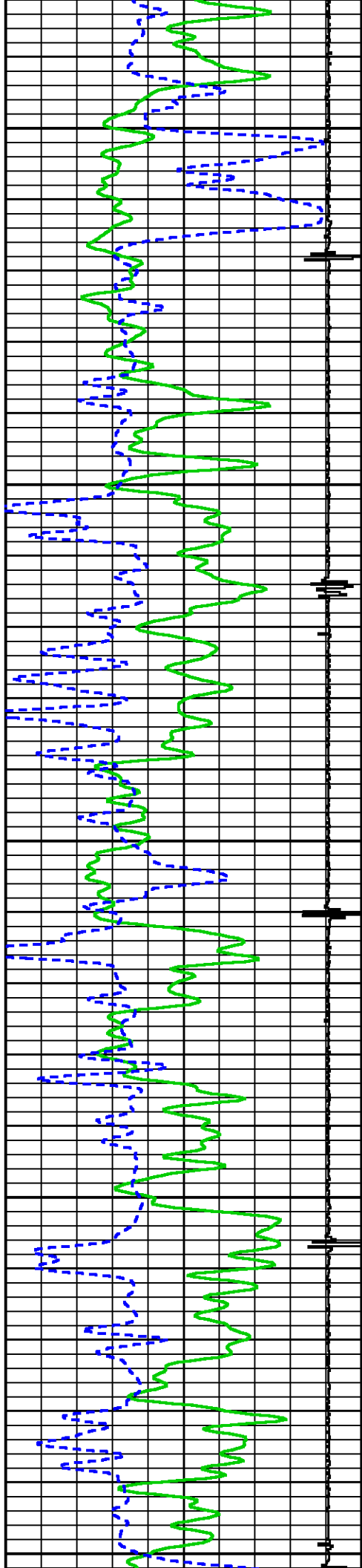




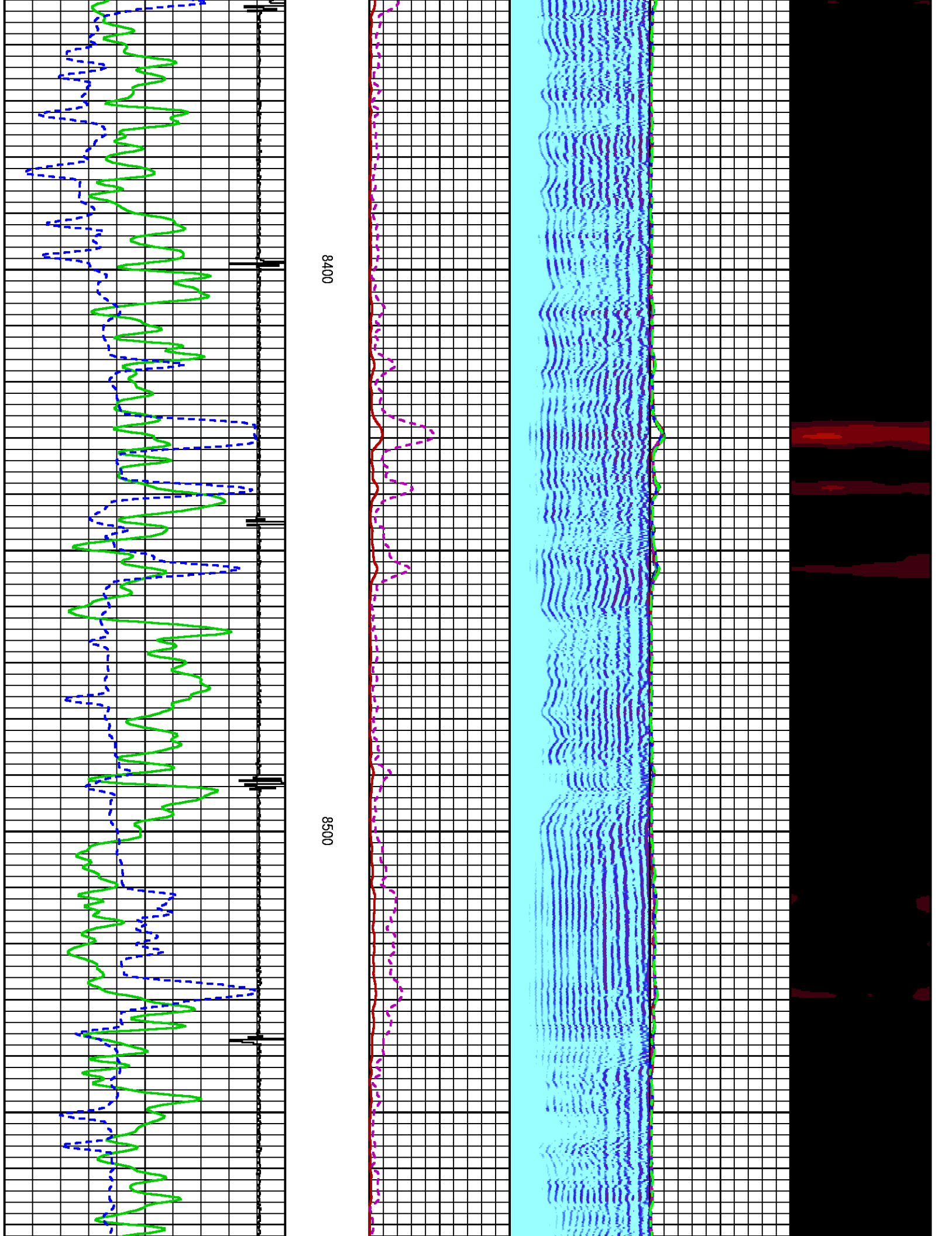


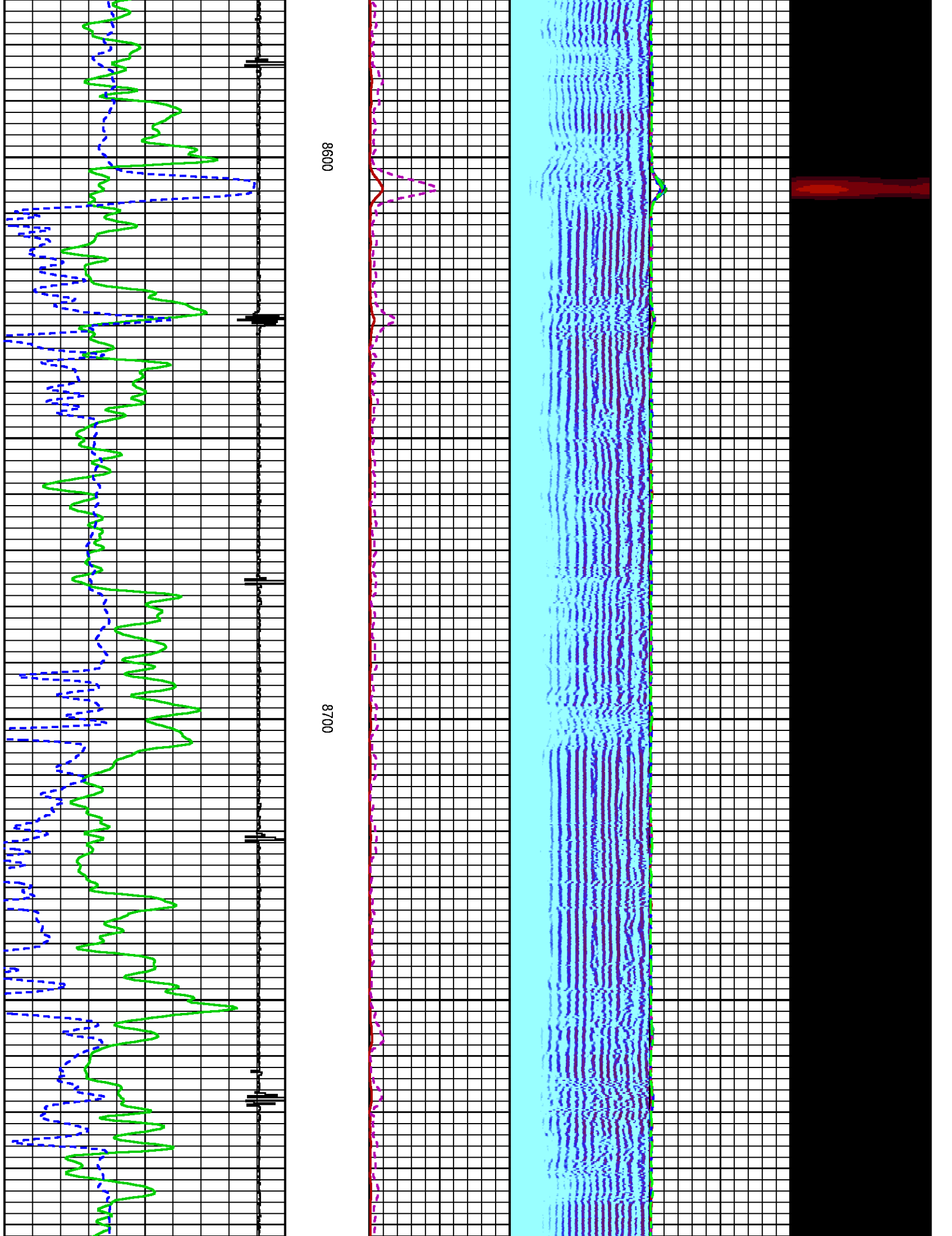
8200

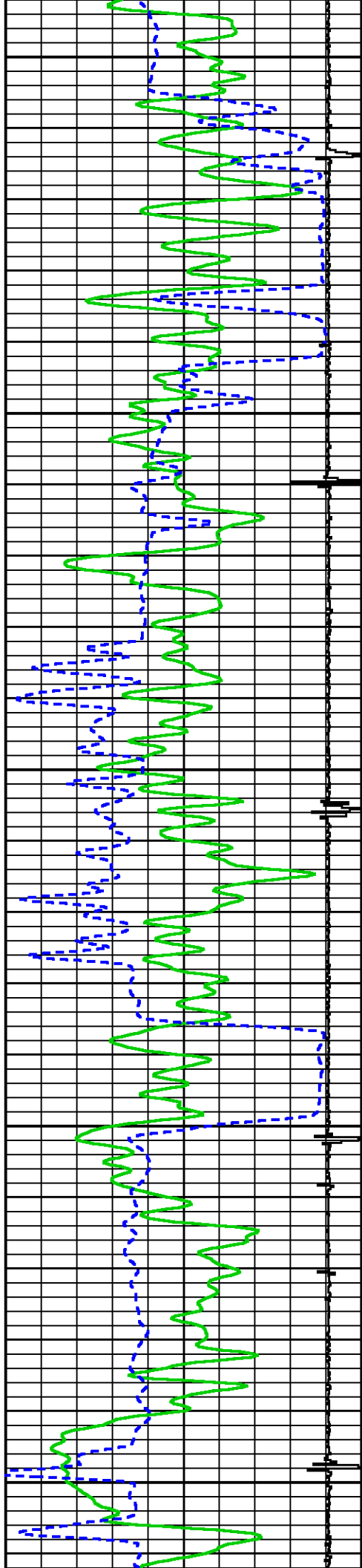
8300







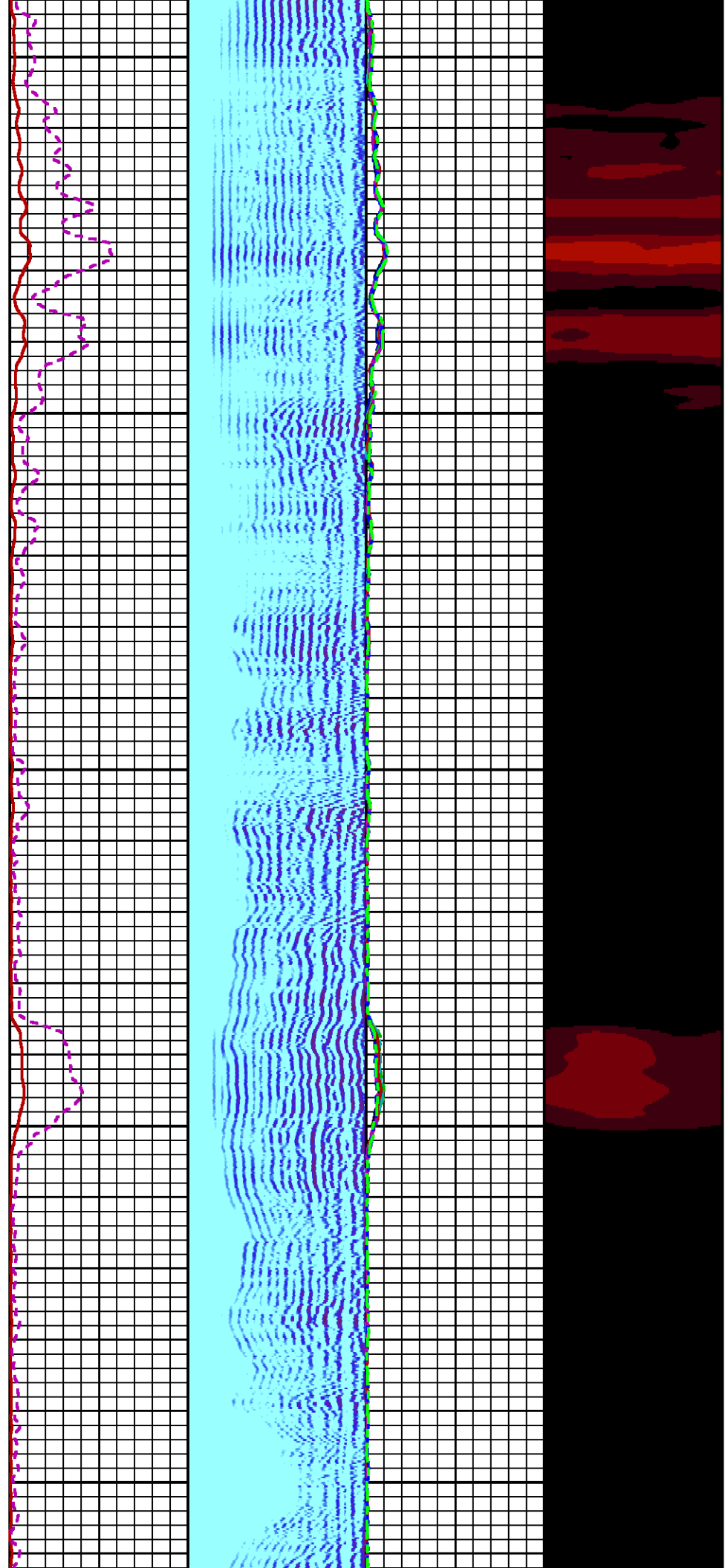


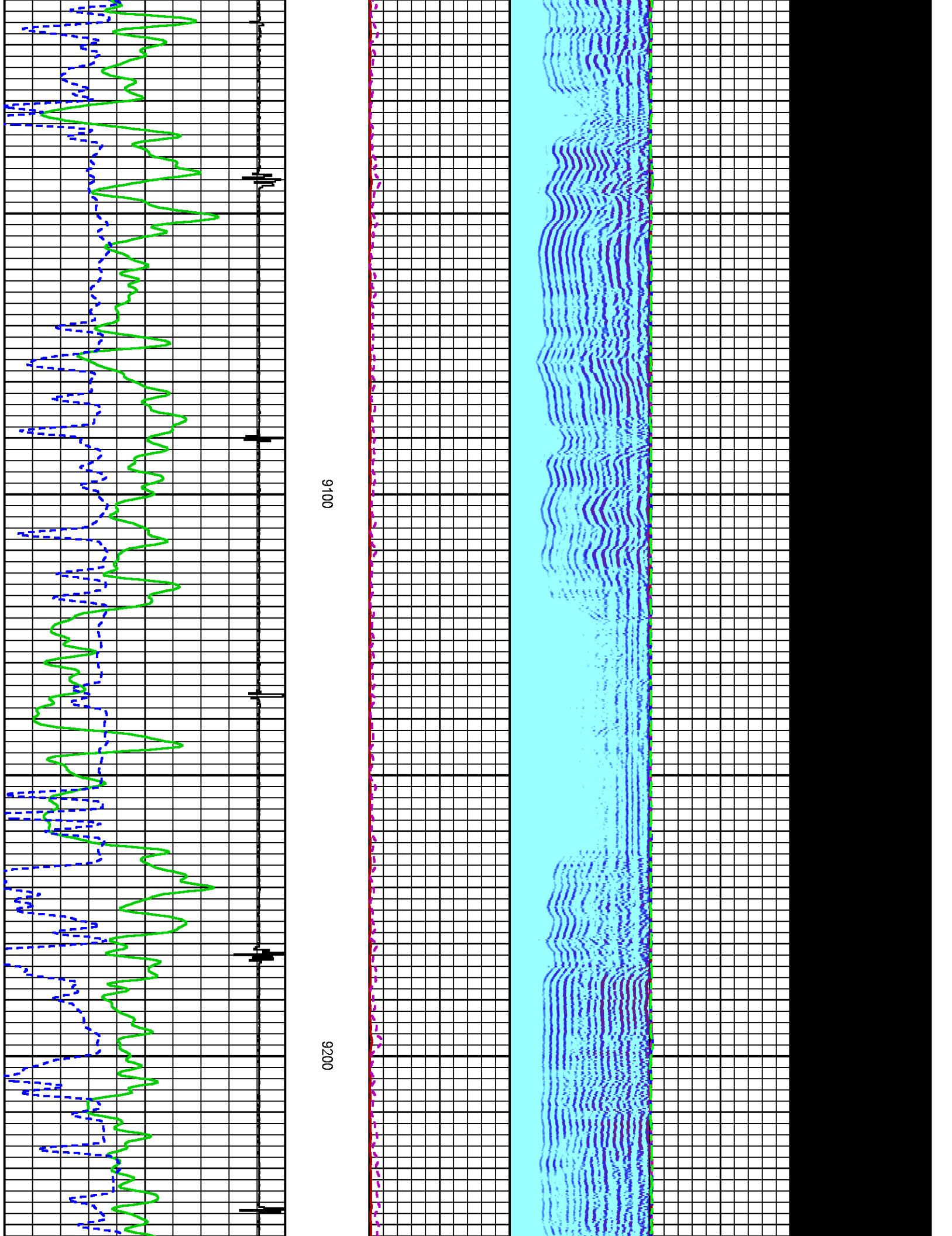


9000

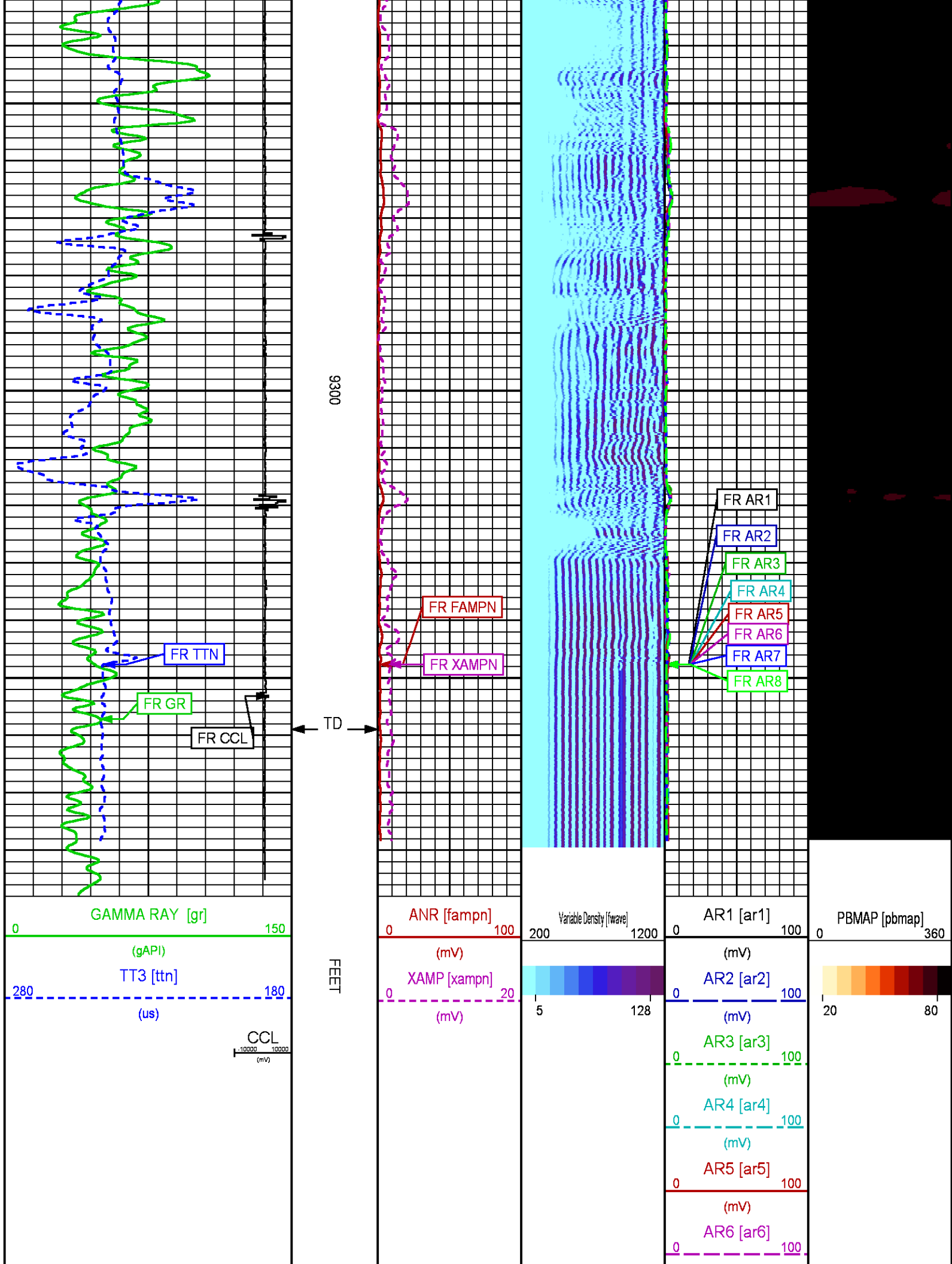
8900

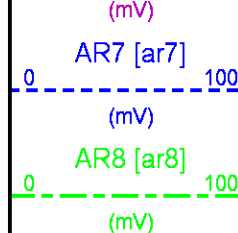
8800











## CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/CH108951/n012g.tp1

### RAL PRIMARY CALIBRATION SUMMARY

TOOL #: 1426XA 10124106

DATE/TIME PERFORMED: Fri Sep 2 13:43:59 2016

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	0.07	0.03	-0.04	0.02	0.04	0.04	0.05	-0.04	-0.02
AMP FLUID (mV)	81	86	85	80	78	80	85	91	83	149	88
TT (us)	215	214	214	215	215	215	214	213	215	322	214
M FACTOR	1.23	1.16	1.18	1.24	1.28	1.25	1.18	1.10	1.21	1.00	1.14

### RAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1426XA 10124106

DATE/TIME PERFORMED: Fri Sep 2 14:03:07 2016

DAYS SINCE CAL: 0

UNIT #: 3880TA HL6670

CABLE #: 6670SM SMALL6670

	NEAR (mV)	R1 (mV)	R2 (mV)	R3 (mV)	R4 (mV)	R5 (mV)	R6 (mV)	R7 (mV)	R8 (mV)	FAR (mV)	CAL (mV)
ZERO	-0.01	-0.08	-0.05	-0.06	-0.07	-0.02	0.02	-0.12	-0.10	0.04	0.06
AMP AIR	-0.47	-0.69	-0.52	-0.30	-0.61	-0.41	-0.47	-0.16	-0.44	0.09	122.43

SHOP M FACTOR	SHOP A FACTOR	WIRELINE FACTOR
1.14	0.00	0.82

### GR PRIMARY CALIBRATION SUMMARY

TOOL #: 1355XA 11871507

DATE/TIME PERFORMED: Fri Sep 2 09:17:59 2016

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	49.60	195.60	146.0	1.027	50.96	200.96	150

### GR PRIMARY VERIFICATION SUMMARY

TOOL #: 1355XA 11871507

DATE/TIME PERFORMED: Fri Sep 2 09:19:17 2016

UNIT #: 3880TA HL6670

VERI JIG #: 4702NK WA-612

	BACKGROUND (cts)	CALBRTR ON (cts)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	50.49	193.29	1.027	51.87	198.58	146.71
						140.00 160.00

## INSTRUMENT CONFIGURATION

Source File: /dat1a/CH108951/n012g--tdg

### CABLEHEAD

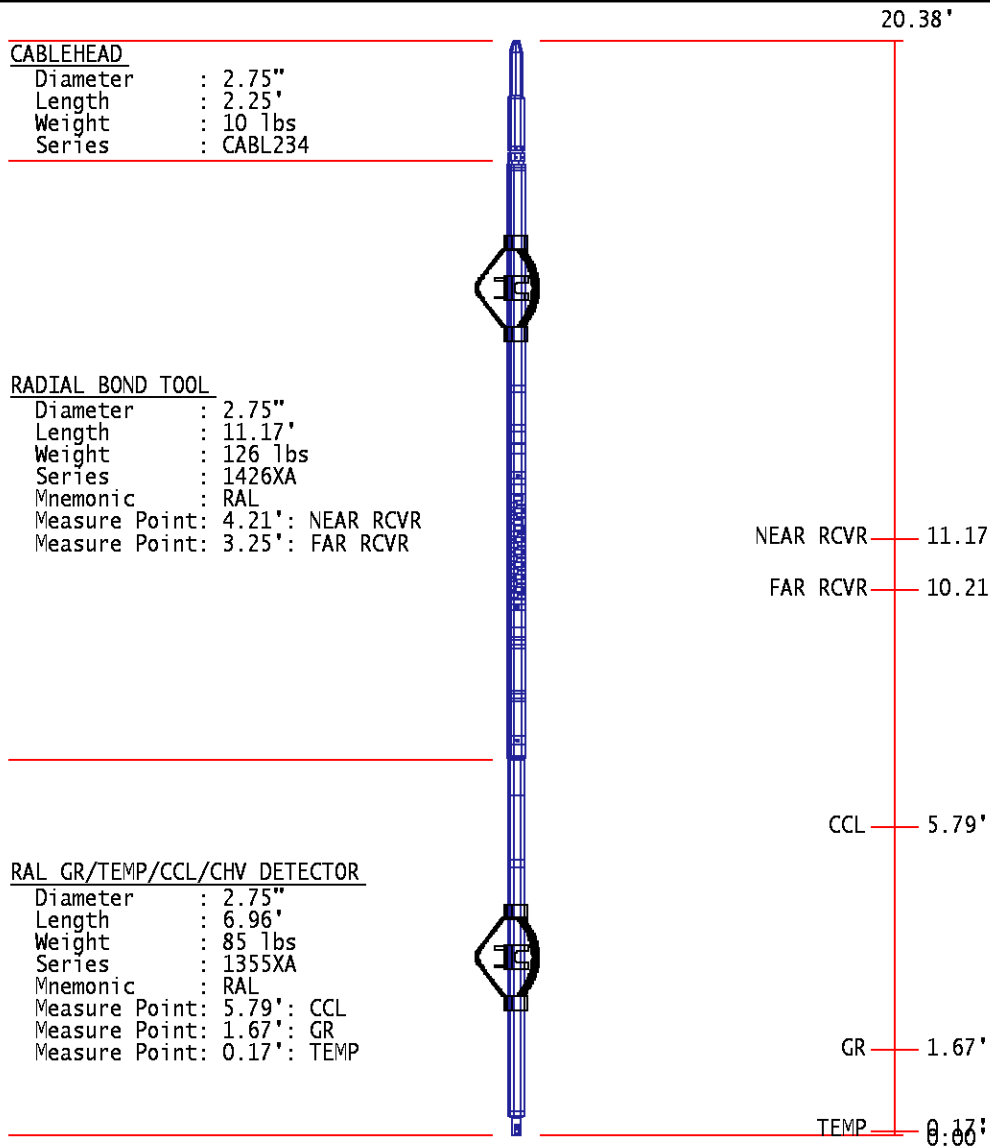
Diameter : 2.75"  
Length : 2.25"  
Weight : 10 lbs  
Series : CABL234

### 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

### RAL GR/TEMP/CCL/CHV DETECTOR

Diameter : 2.75"  
Length : 6.96'  
Weight : 85 lbs  
Series : 1355XA  
Mnemonic : RAL  
Measure Point: 5.79': CCL  
Measure Point: 1.67': GR  
Measure Point: 0.17': TEMP




TOTAL LENGTH: 20.38'  
TOTAL WEIGHT: 235 lbs  
MAX DIAMETER: 0'4.00"



COMPANY

TEP ROCKY MOUNTAIN LLC

FILE NO:

	WELL	YOUBERG RU 23-7		CH10851
	FIELD	RULISON		API NO:
	COUNTY	GARFIELD	STATE	COLORADO
	LOCATION:		ELEVATIONS:	
	SHL: 2018' FNL & 1890' FWL BHL: 2256' FSL & 1596' FWL		KB 7363 FT DF GL 7339 FT	
SEC 7		TWP 7S	RGE 93W	DATE 02-Sep-2016