



FILE NO: CH092511	COMPANY LARAMIE ENERGY
API NO: 05077100270000	WELL SUP & SHEP FEDERAL 25-13W
	FIELD VEGA
	COUNTY MESA
	STATE CO

Ver. 3.87 25 9S 93W SUP & SHEP 25-11 PATTERSON 306	LOCATION: SHL: LAT 39.245006 LONG -107.722874 BHL: LAT 39.243978 LONG -107.726799 SEC 25 TWP 9S RGE 93W	OTHER SERVICES RPM
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PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM	GL ELEVATION 8074 FT KB 8096 FT DF GL 8074 FT
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DATE		03-Dec-2014	
RUN	TRIP	1	1
SERVICE ORDER		US092511	
DEPTH DRILLER		8632 FT	
DEPTH LOGGER		8542 FT	
BOTTOM LOGGED INTERVAL		8532 FT	
TOP LOGGED INTERVAL		22 FT	
TIME STARTED		15:00	
TIME FINISHED		18:30	
OPERATOR RIG TIME		3.5 HOURS	
TYPE OF FLUID IN HOLE		WATER	
FLUID DENSITY		NA	
FLUID SALINITY		NA	
FLUID LEVEL		78 FT	
LOGGED CEMENT TOP		NA	
WELLHEAD PRESSURE		0 PSI	
MAXIMUM HOLE DEVIATION		NA	
NOMINAL LOGGING SPEED		65 F/MIN	
MAX. RECORDED TEMP.		256 DEGF	
REFERENCE LOG		NA	
REFERENCE LOG DATE		NA	
EQUIP. NO.	LOCATION	HL-6670	GRAND JCT.
RECORDED BY	NEWELL / EDWARDS		
WITNESSED BY	JOHN GRUBICH		

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
7.875 IN		8632 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
4.5 IN	11.6 LB/F	I-80	0 FT	8632 FT

### REMARKS

RUN 1 TRIP 1: This is the first log on this well.

Logged with zero PSI at wellhead.

BHT = 256 degF

SJ = 5376' - 5348'

SJ = 7735' - 7759'

THANK YOU FOR CHOOSING BAKER HUGHES WIRELINE SERVICES

### EQUIPMENT DATA

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

MAIN 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: Thu Dec 4 11:56:19 2014

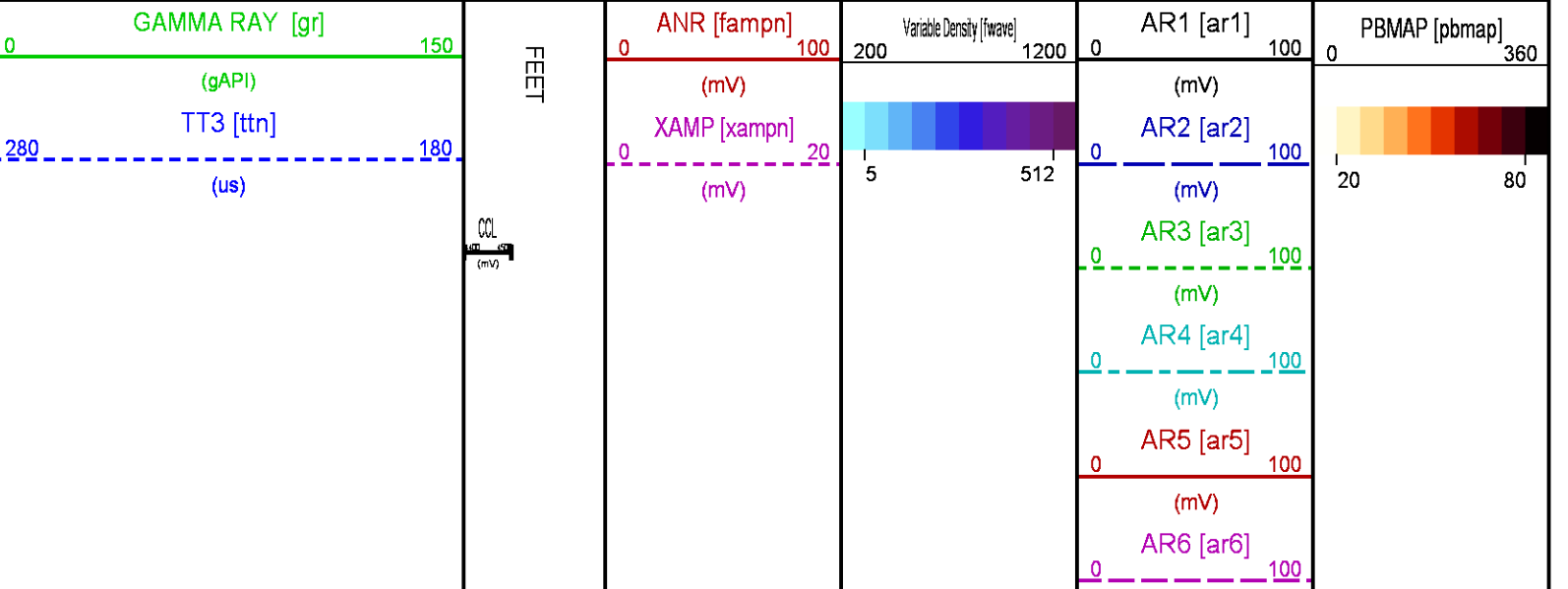
PARAMETER AND FILTER SUMMARY REPORT					
FILE: /dat1a/CH092511/n012e02.prm LOGGING MODE: DEPTH DIRECTION: UP TOP DEPTH: 30.000 ft BOTTOM DEPTH: 8546.500 ft					
SYMMETRIC FILTER					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GR	FILTER ()	medium (1)		TOP	BOTTOM
AMPLITUDE	FILTER ()	medium (1)		"	"
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*)	174	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*)	-72	us	"	"
	TOOL DELAY (str2*)	-72	us	"	"
	TOOL DELAY (str3*)	-72	us	"	"
	TOOL DELAY (str4*)	-72	us	"	"
	TOOL DELAY (str5*)	-72	us	"	"
	TOOL DELAY (str6*)	-72	us	"	"
	TOOL DELAY (str7*)	-72	us	"	"
	TOOL DELAY (str8*)	-72	us	"	"
	TOOL DELAY (strn*)	-72	us	"	"
BASELINE NOISE (NEAR)	NOISE WINDOW START	134	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	"	"

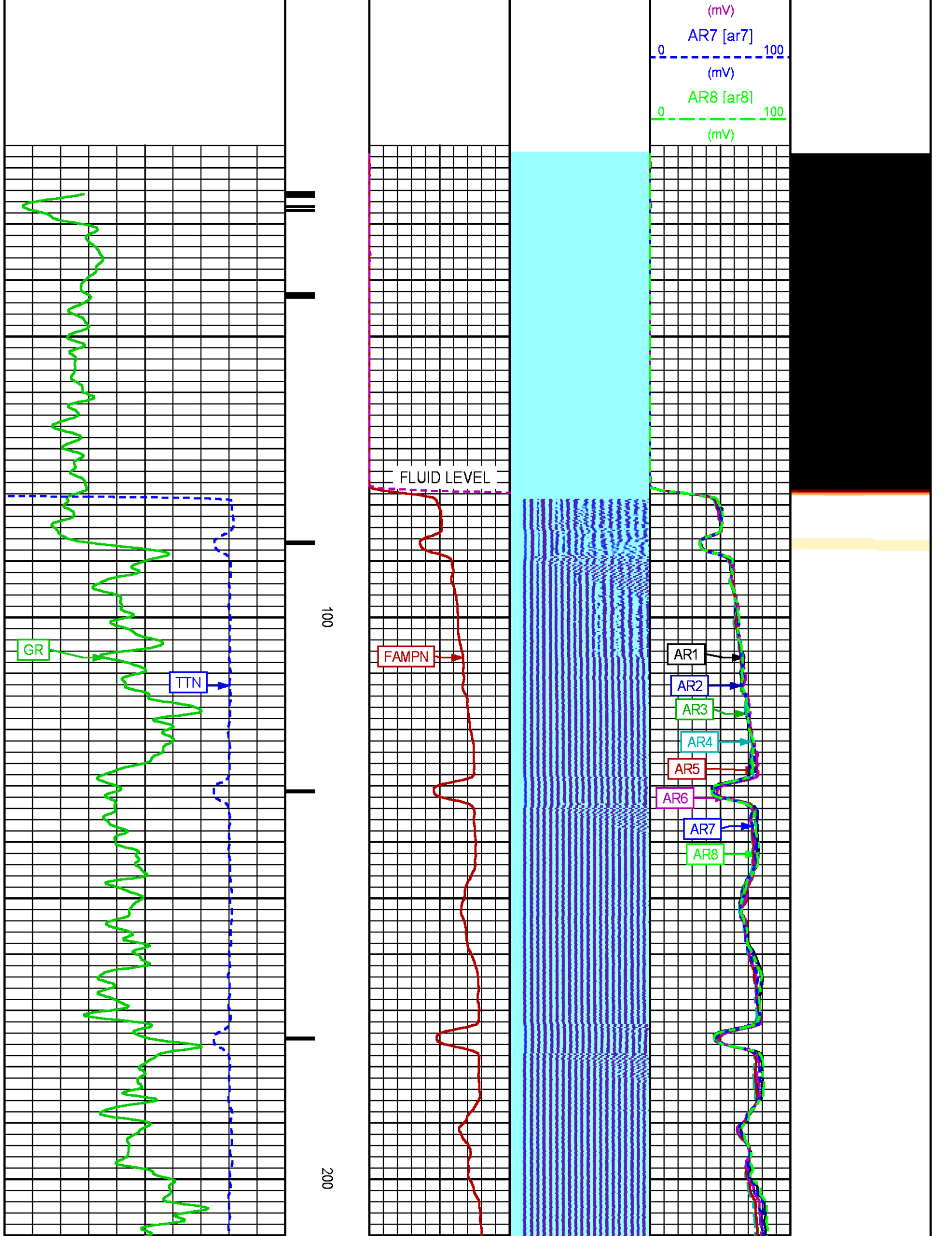
	FREE AMP REC 4	80	mV	"	"
	FREE AMP REC 5	80	mV	"	"
	FREE AMP REC 6	80	mV	"	"
	FREE AMP REC 7	80	mV	"	"
	FREE AMP REC 8	80	mV	"	"
RAL FULL BOND AMPLITUDE	FULL BOND AMP REC 1	2	mV	"	"
	FULL BOND AMP REC 2	2	mV	"	"
	FULL BOND AMP REC 3	2	mV	"	"
	FULL BOND AMP REC 4	2	mV	"	"
	FULL BOND AMP REC 5	2	mV	"	"
	FULL BOND AMP REC 6	2	mV	"	"
	FULL BOND AMP REC 7	2	mV	"	"
	FULL BOND AMP REC 8	2	mV	"	"

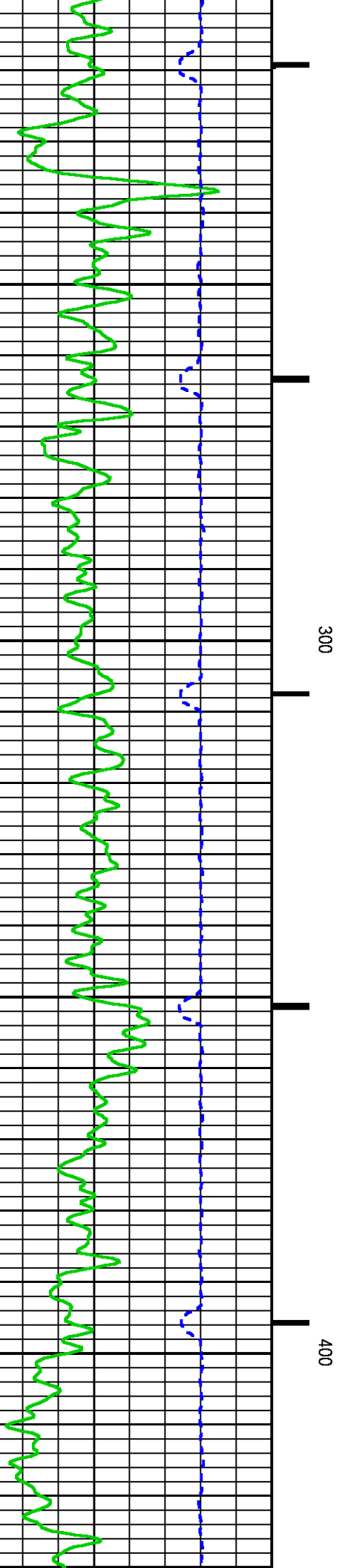
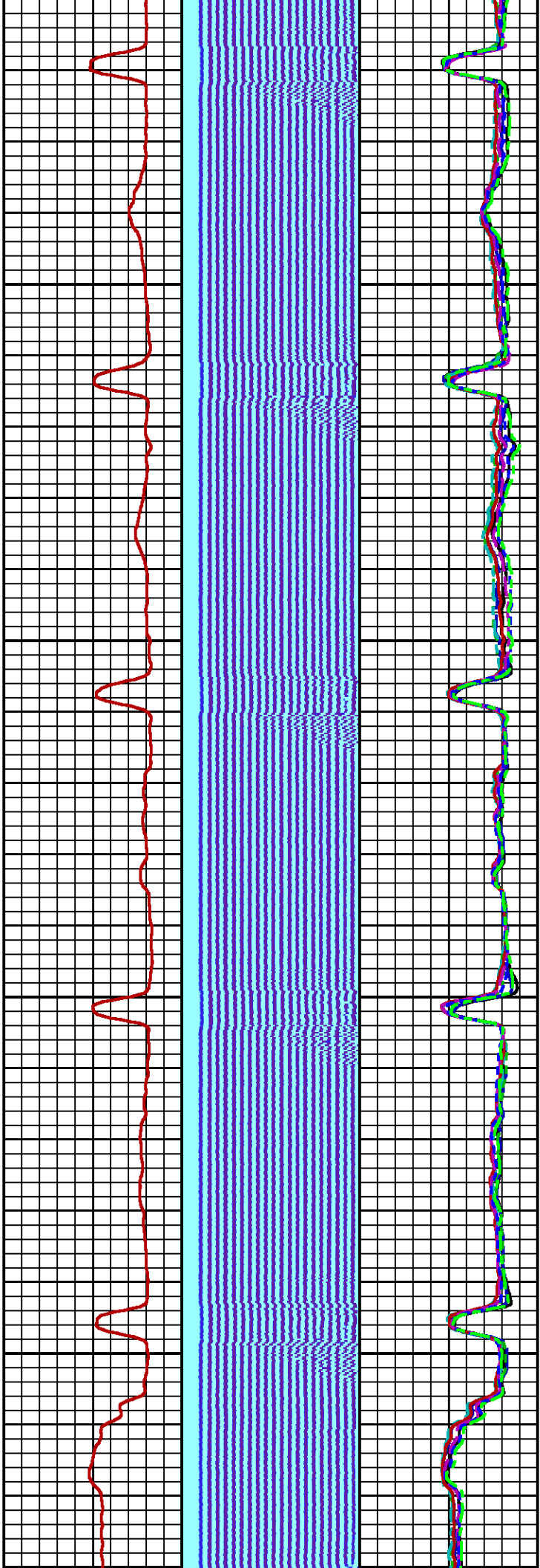
CURVE DESCRIPTION REPORT		
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:AR1	Dec 3 16:22:32 2014	FIXED GATE AMPLITUDE T-R1
F1:AR2	Dec 3 16:22:32 2014	FIXED GATE AMPLITUDE T-R2
F1:AR3	Dec 3 16:22:32 2014	FIXED GATE AMPLITUDE T-R3
F1:AR4	Dec 3 16:22:32 2014	FIXED GATE AMPLITUDE T-R4
F1:AR5	Dec 3 16:22:32 2014	FIXED GATE AMPLITUDE T-R5
F1:AR6	Dec 3 16:22:32 2014	FIXED GATE AMPLITUDE T-R6
F1:AR7	Dec 3 16:22:32 2014	FIXED GATE AMPLITUDE T-R7
F1:AR8	Dec 3 16:22:32 2014	FIXED GATE AMPLITUDE T-R8
F1:CCL	Dec 3 16:22:32 2014	CASING COLLAR LOCATOR
F1:FAMPN	Dec 3 16:22:32 2014	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Dec 3 16:22:32 2014	FAR WAVE FORM
F1:GR	Dec 3 16:22:32 2014	GAMMA RAY
F1:PBMAP	Dec 3 16:22:32 2014	PERCENT BOND CEMENT MAP
F1:TTN	Dec 3 16:22:32 2014	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Dec 3 16:22:32 2014	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

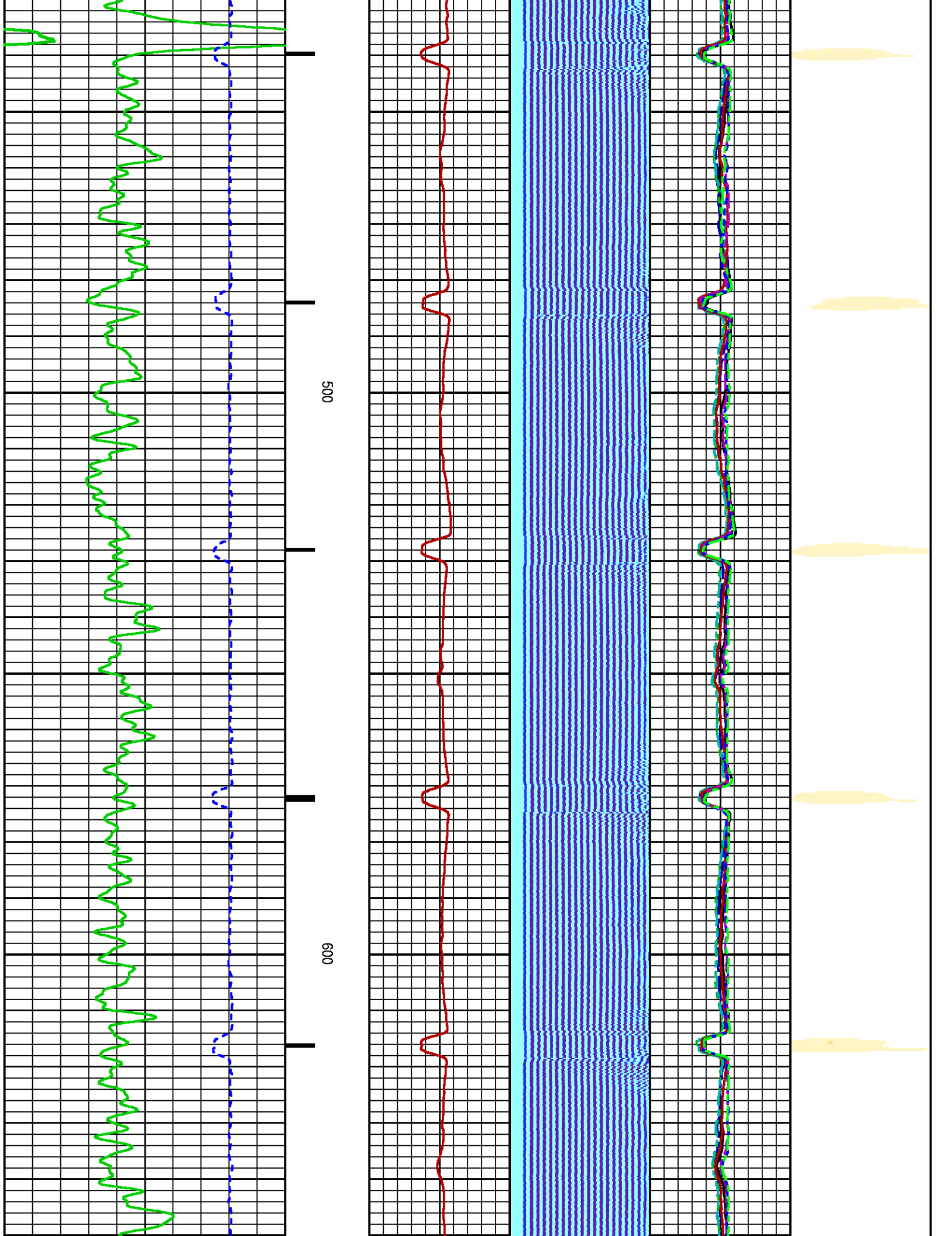
CURVE MEASURE POINT OFFSET					
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
AR1	13.75	AR5	13.75	CCL	8.50
AR2	13.75	AR6	13.75	FAMPN	13.75
AR3	13.75	AR7	13.75	GR	6.50
AR4	13.75	AR8	13.75	TTN	13.75
				XAMPN	13.75

Presentation	: HL6670:/dat1a/CH092511/13W_CBL_MAIN.fvpdf [5"/100' Scale]
Plot Interval	: 17.25 - 8547 Feet
Data File 1	: F1 : HL6670:/dat1a/CH092511/13W_CBL_MAIN.xtf
Created On	: Dec 3 16:22:32 2014
Company	: LARAMIE ENERGY
Well	: SUP & SHEP FED
Field	: VEGA
File Interval	: 16.25 - 8546.5 Feet
OCT	: n012e

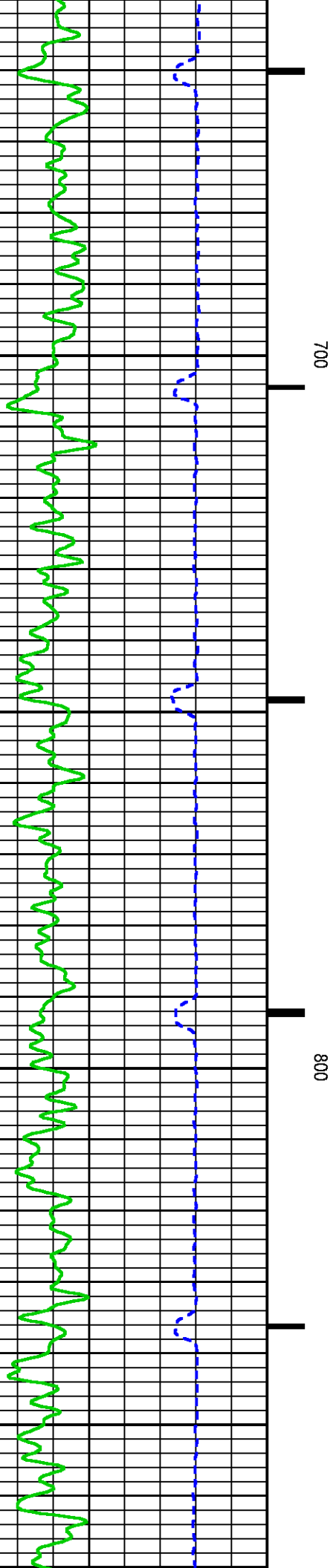
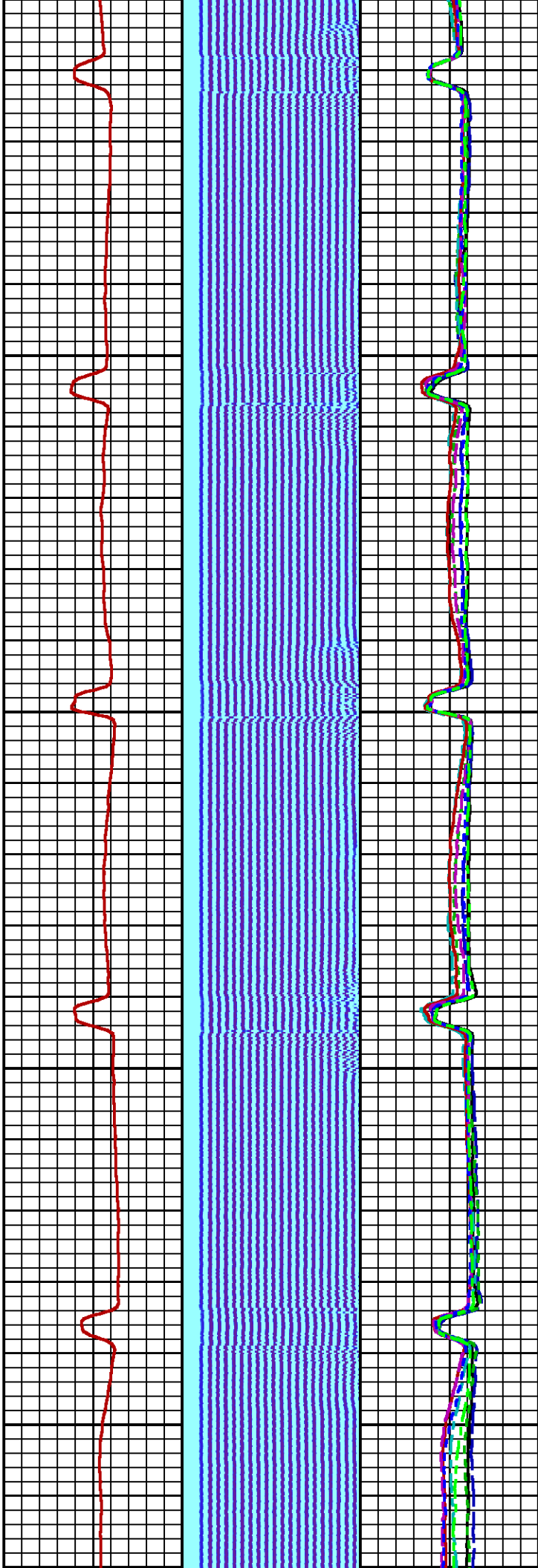
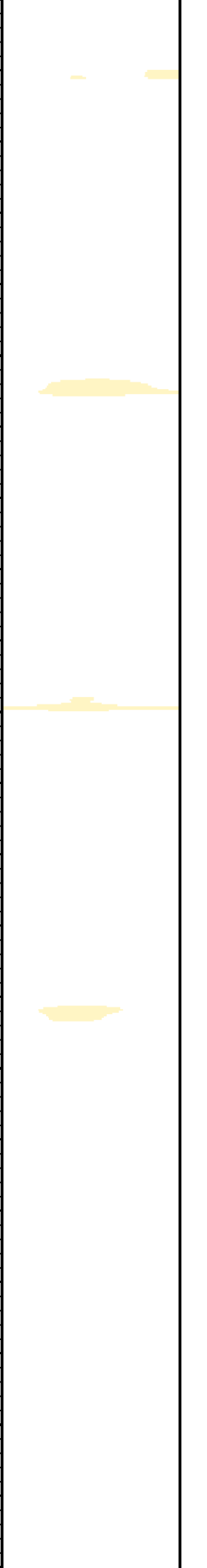


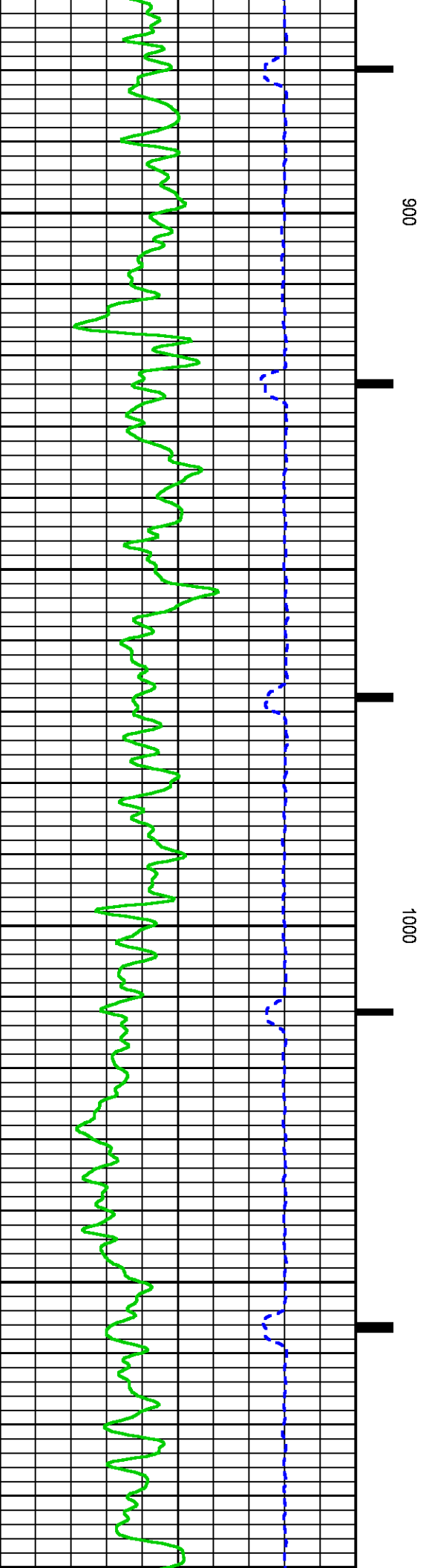
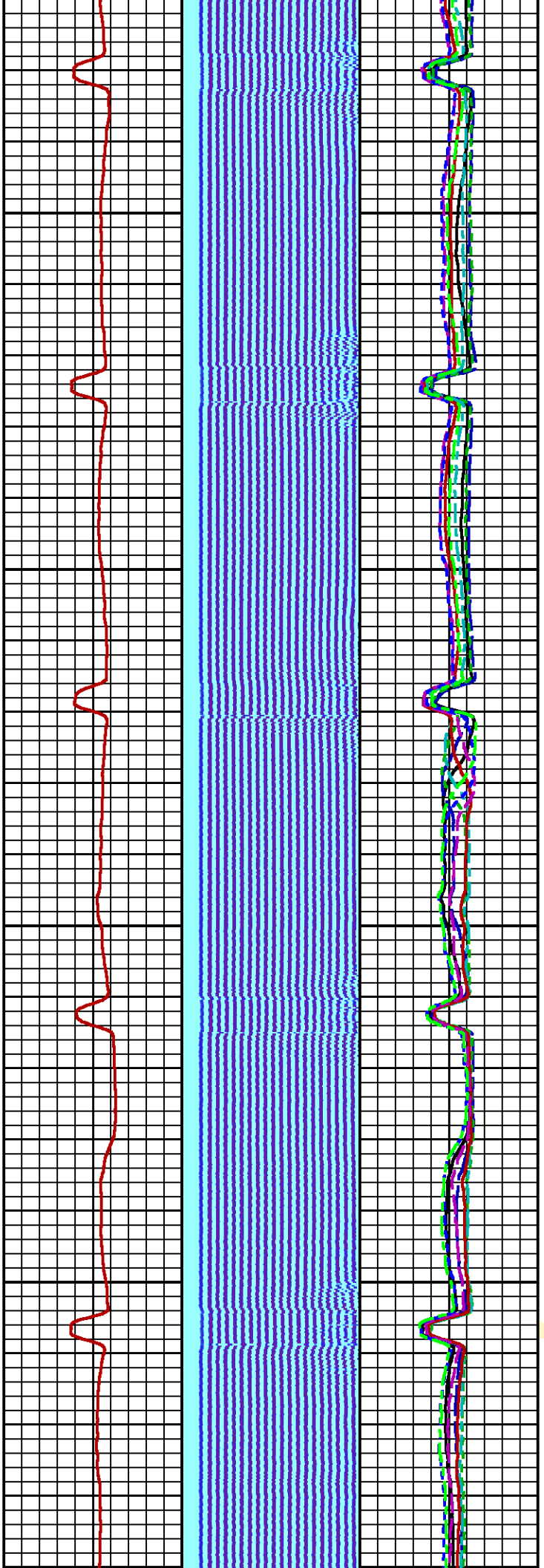
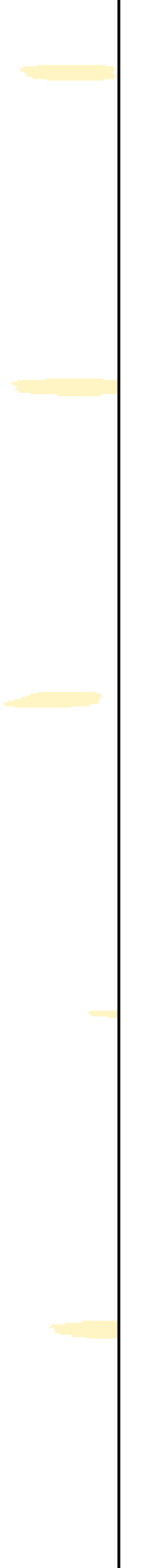




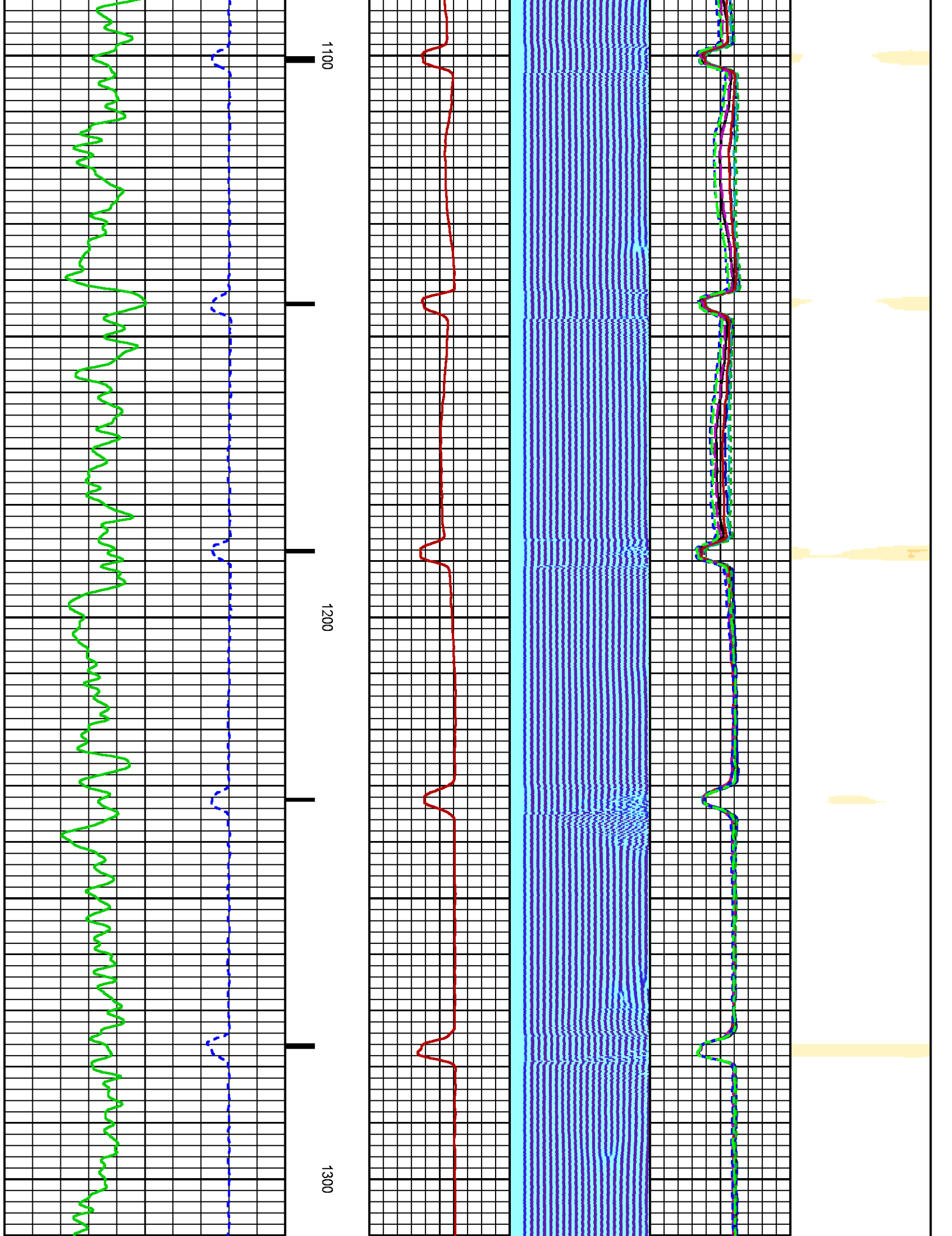


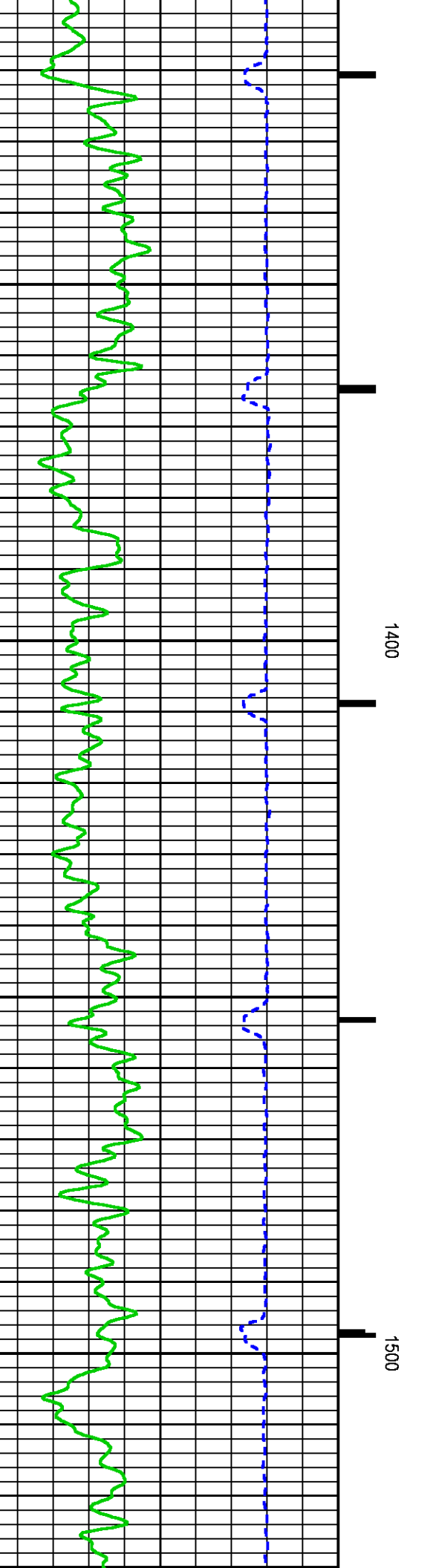
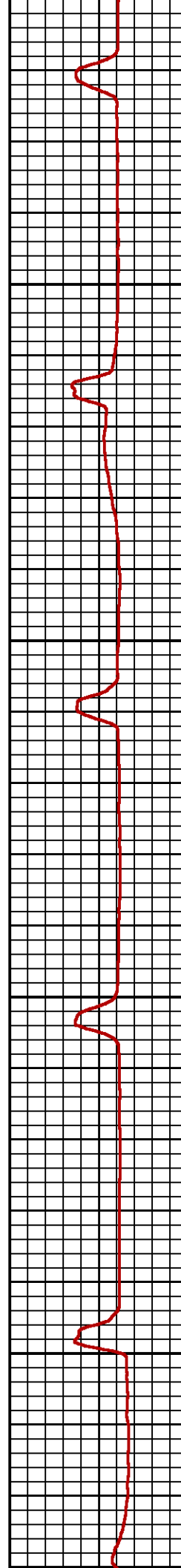
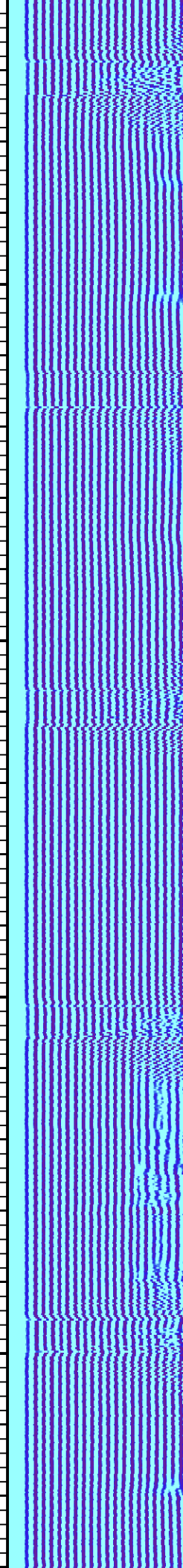
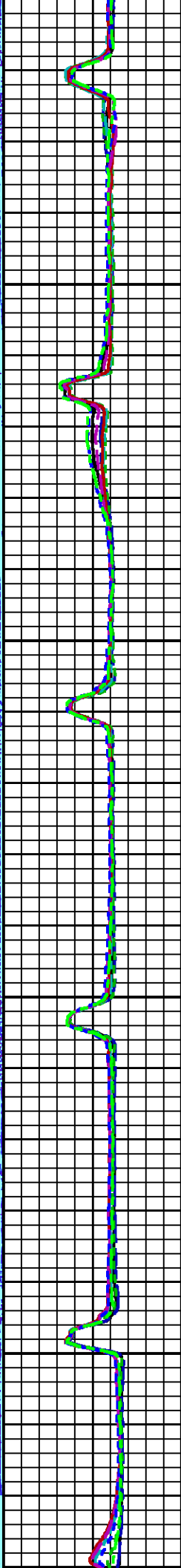


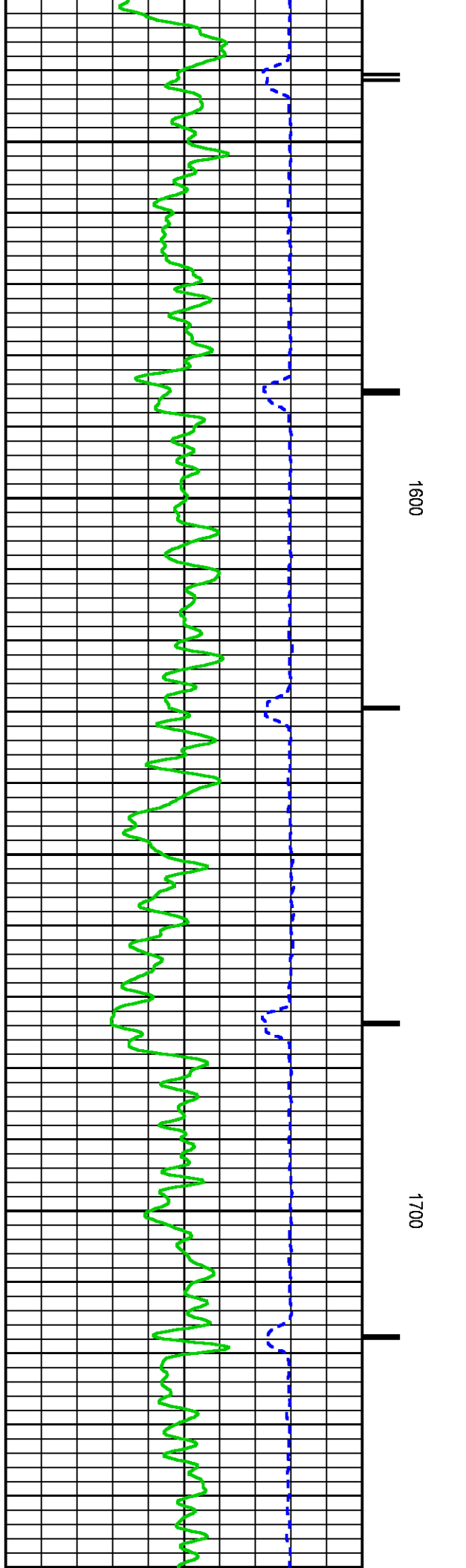
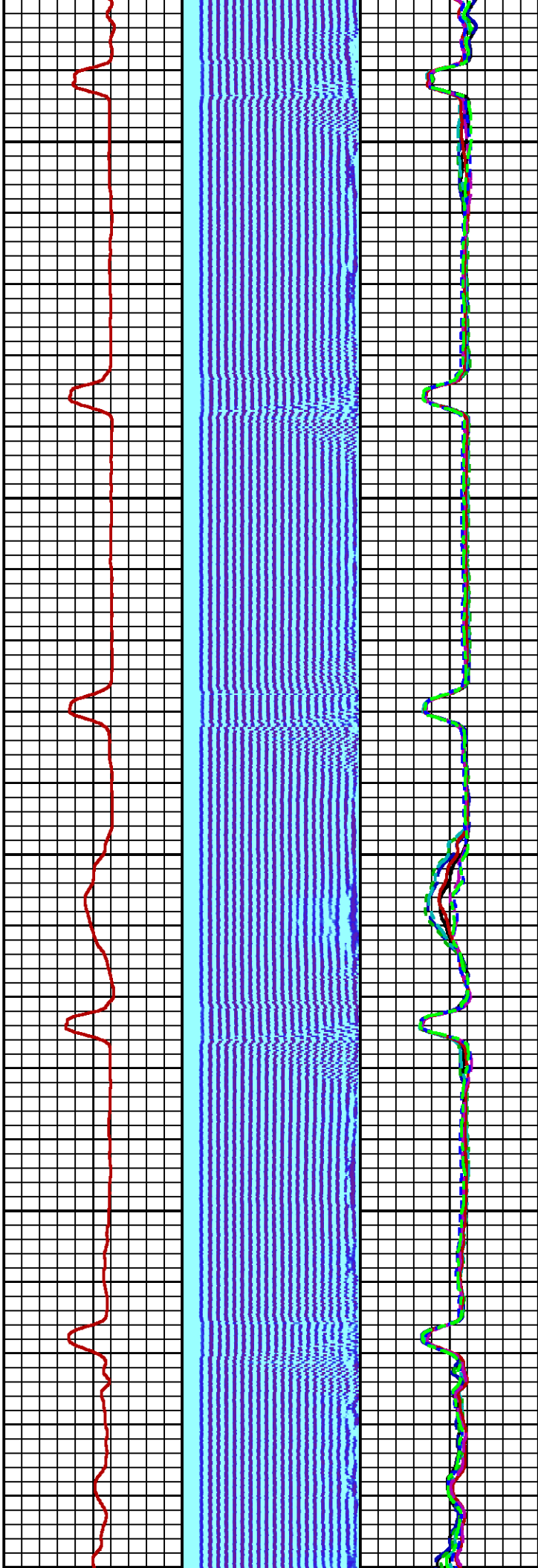
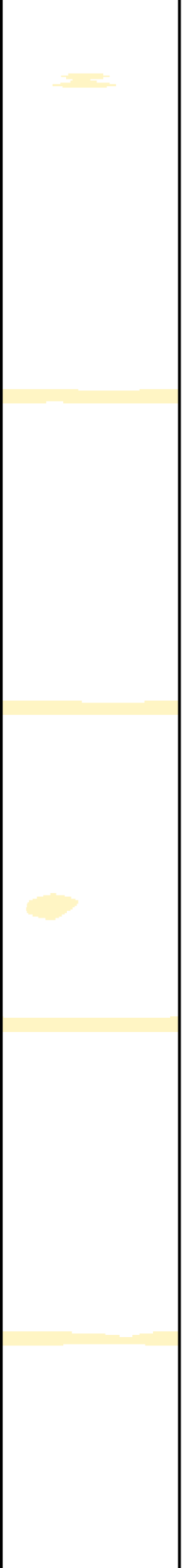


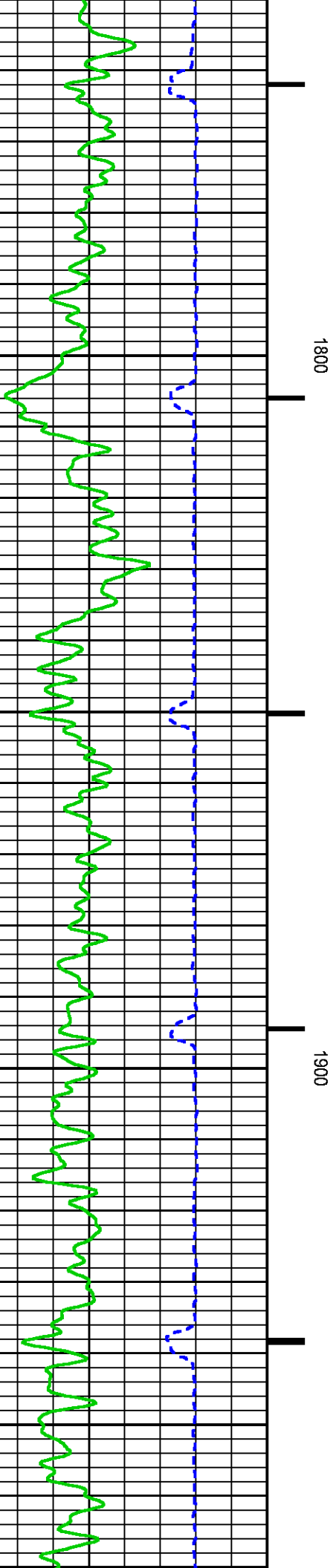
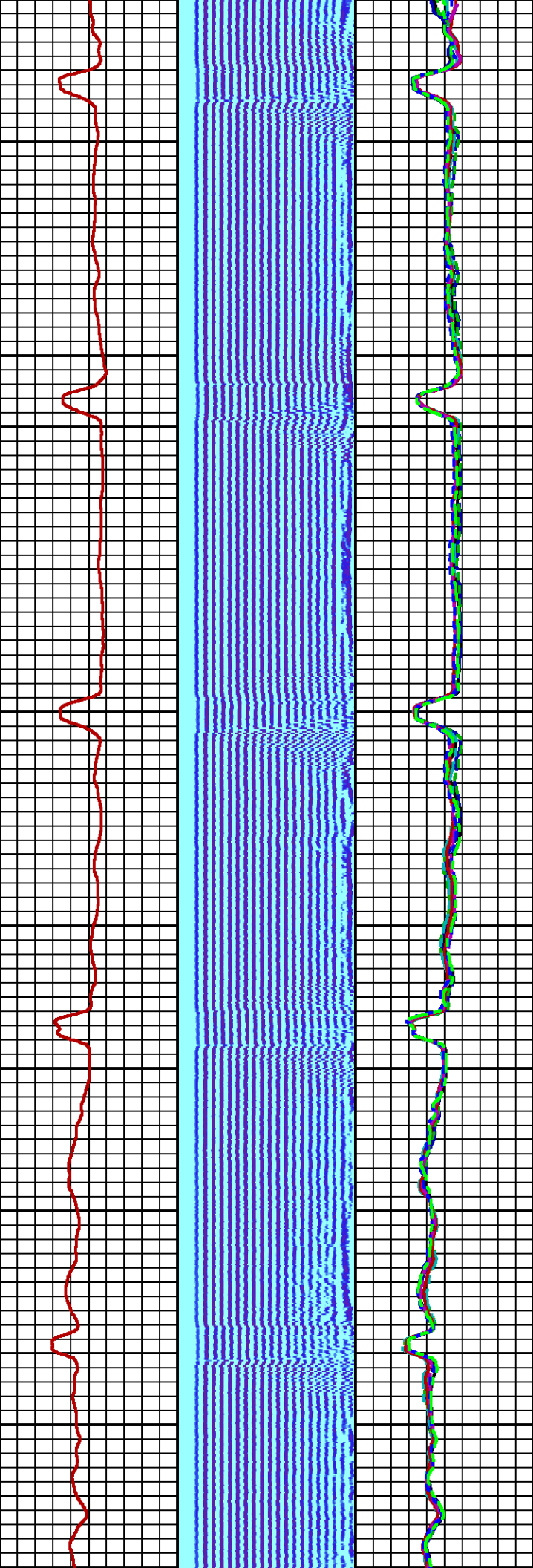


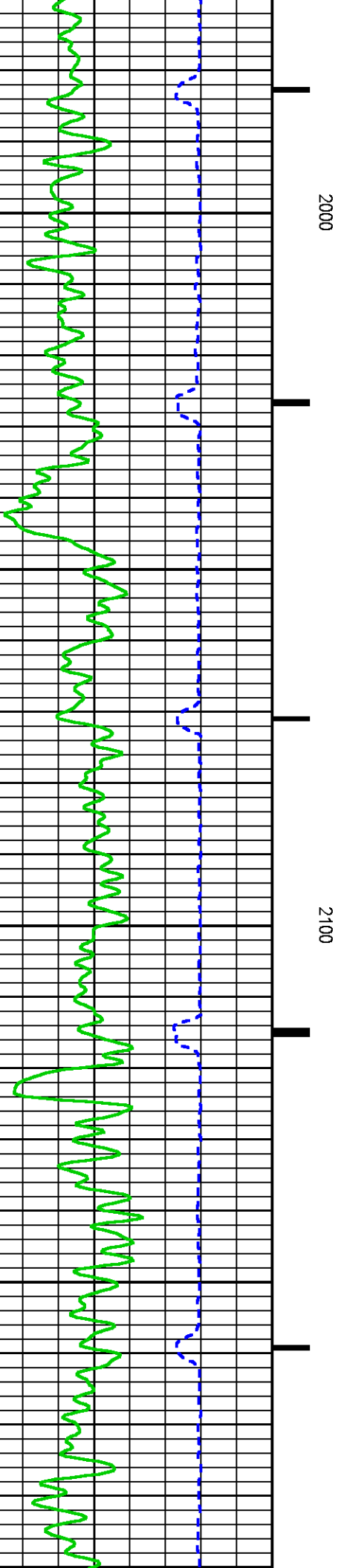
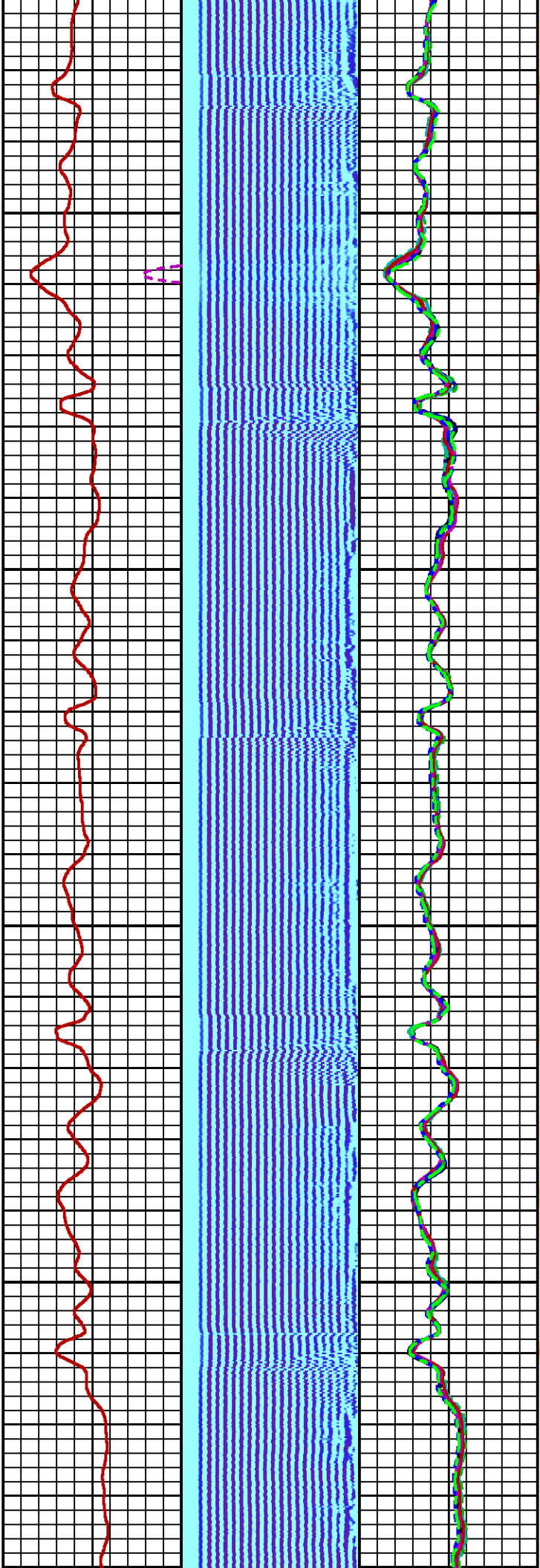
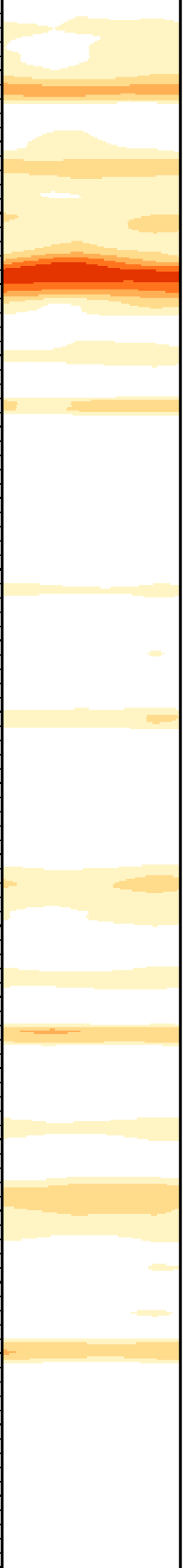




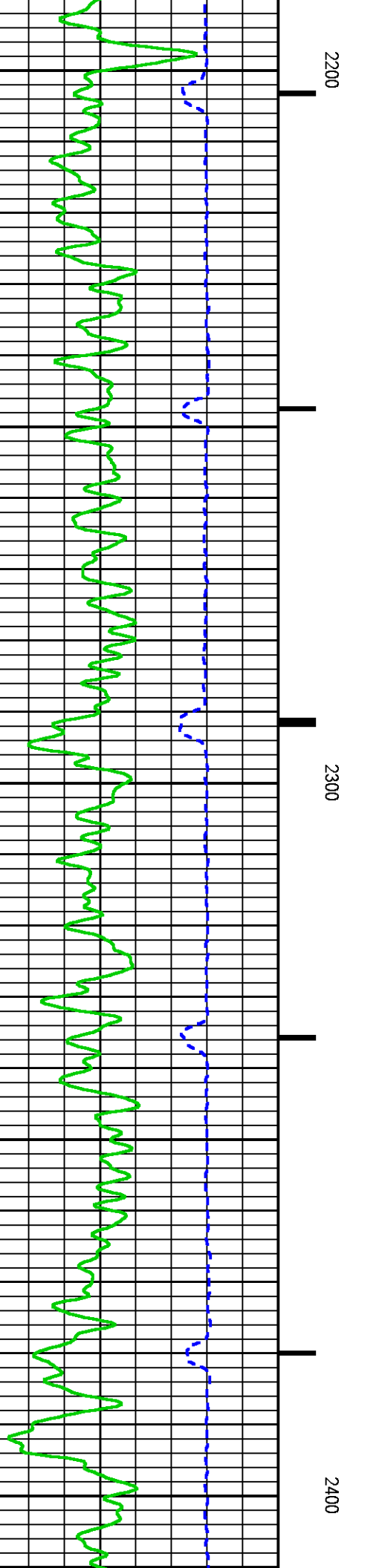
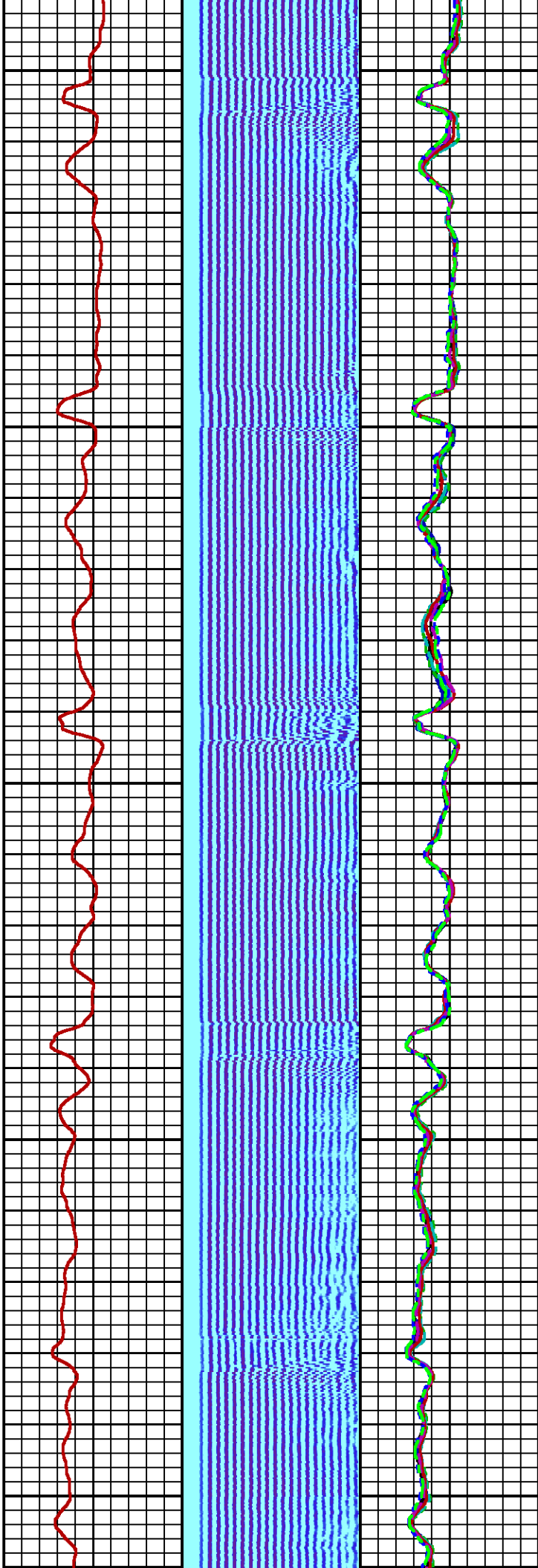




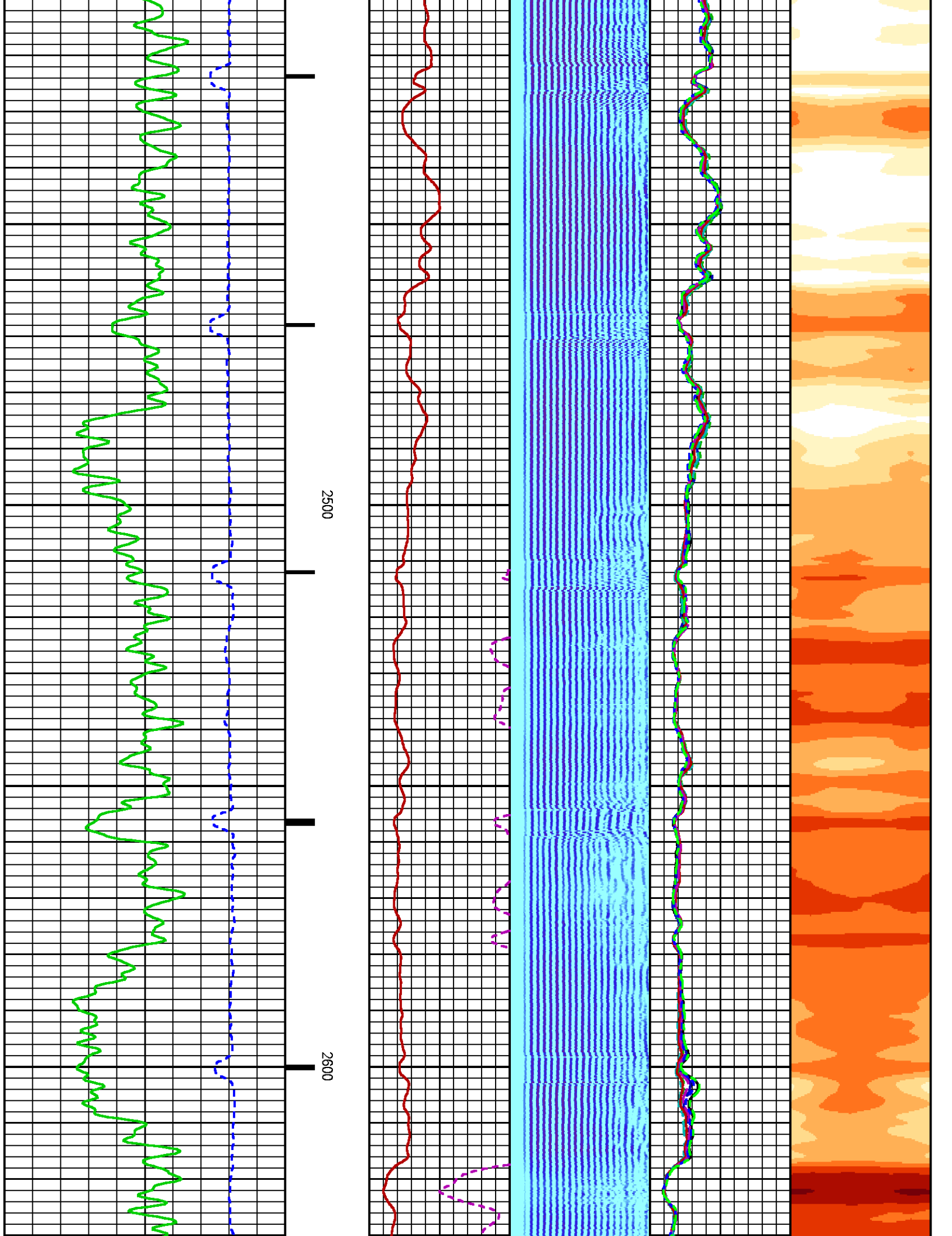


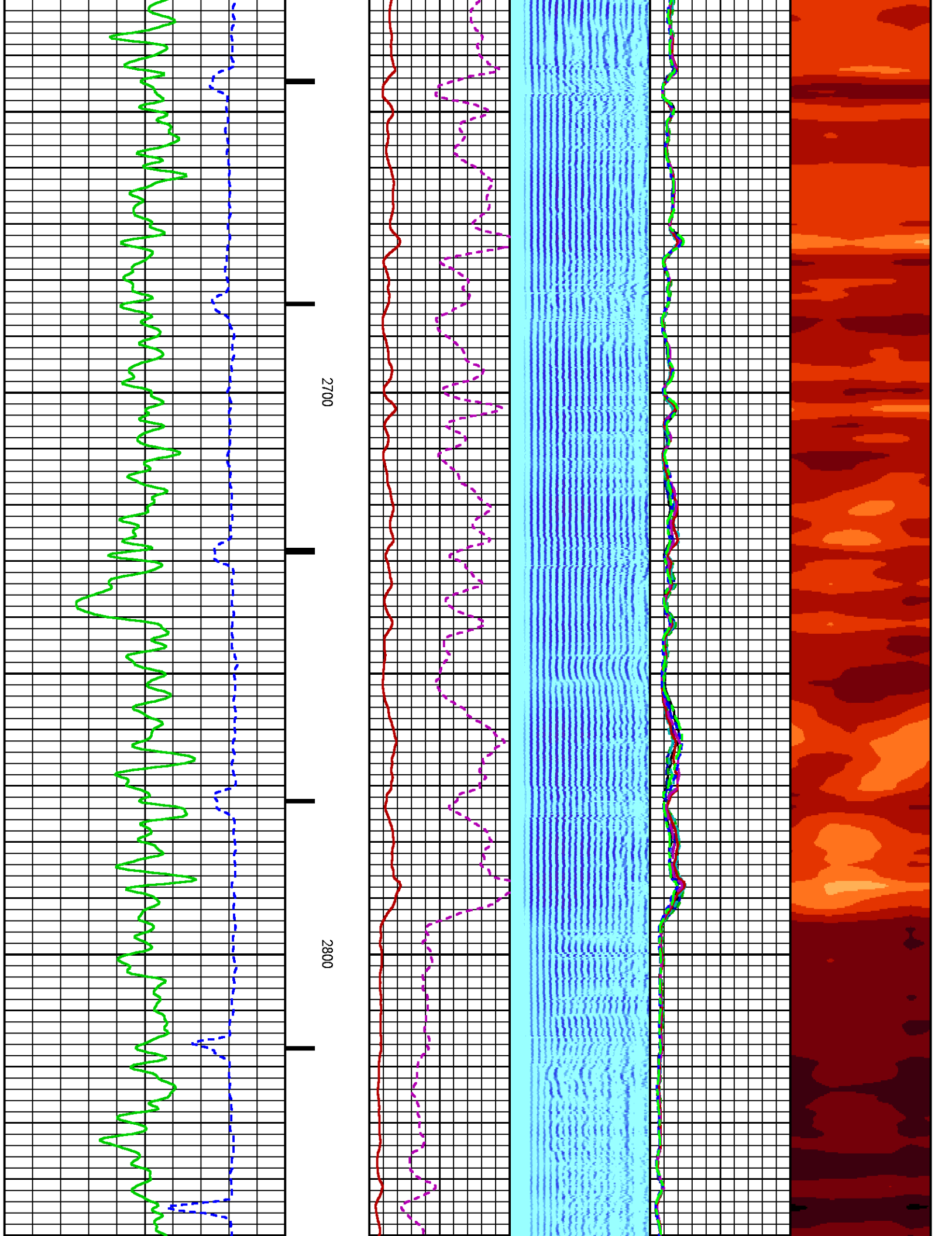


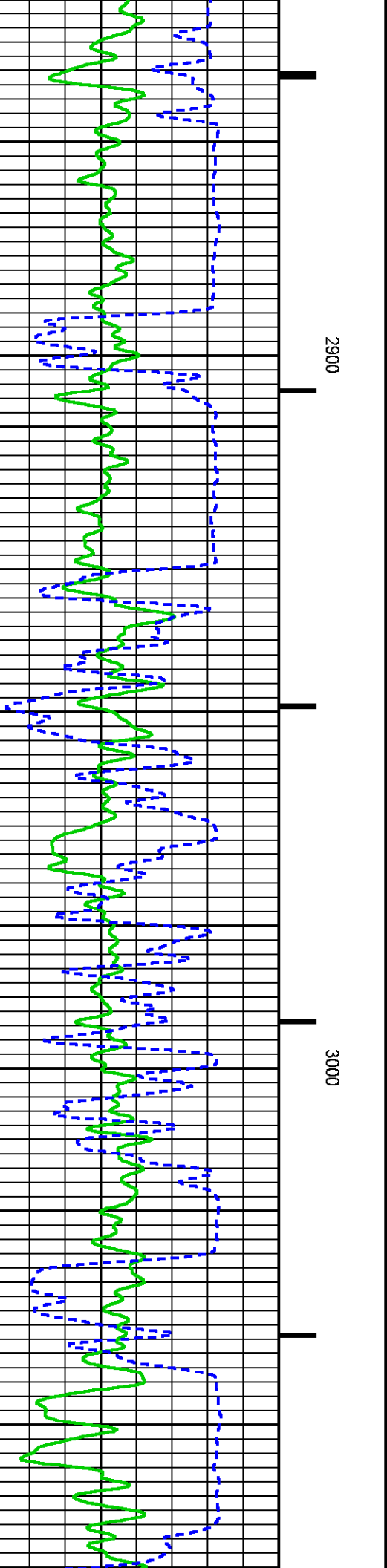
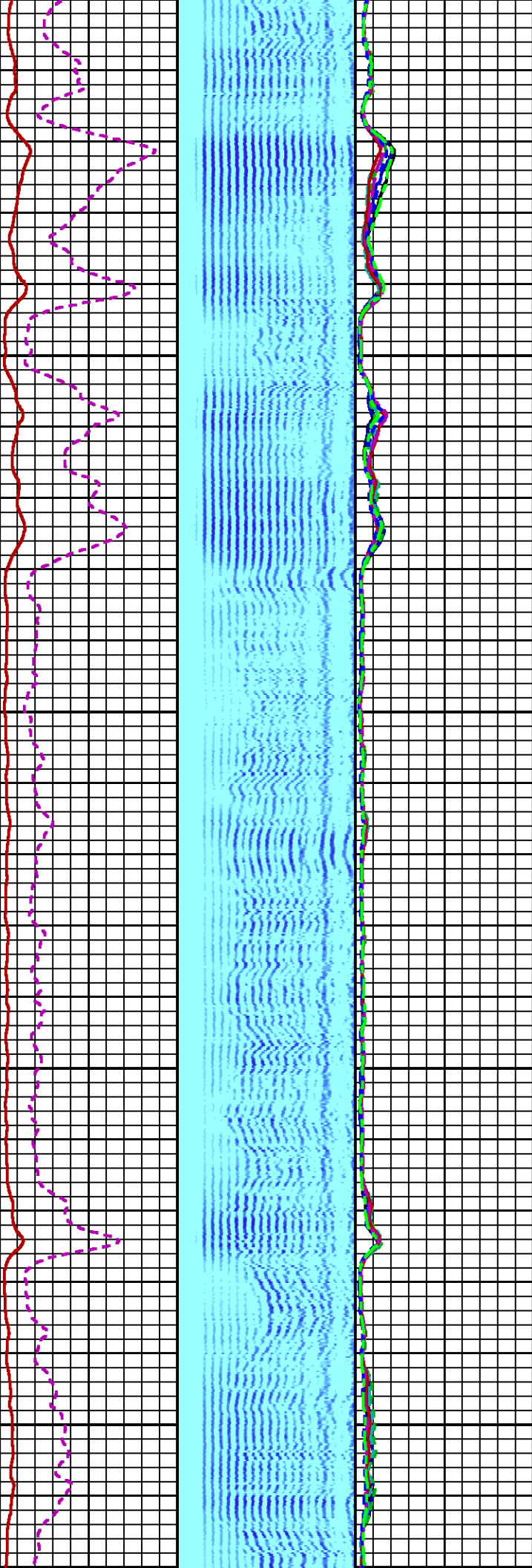


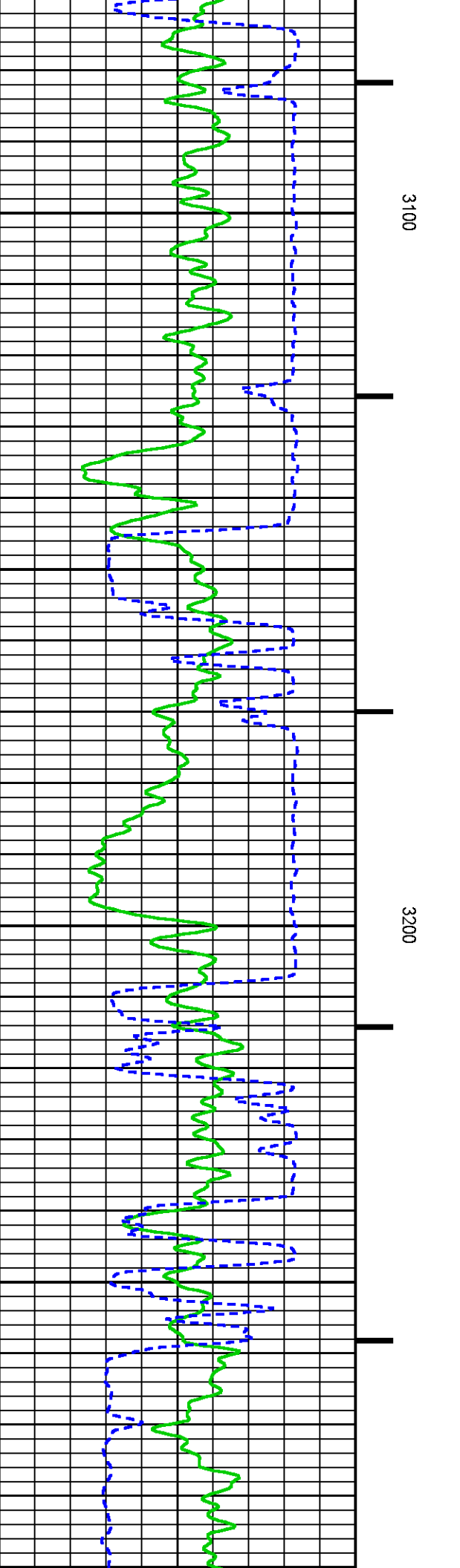
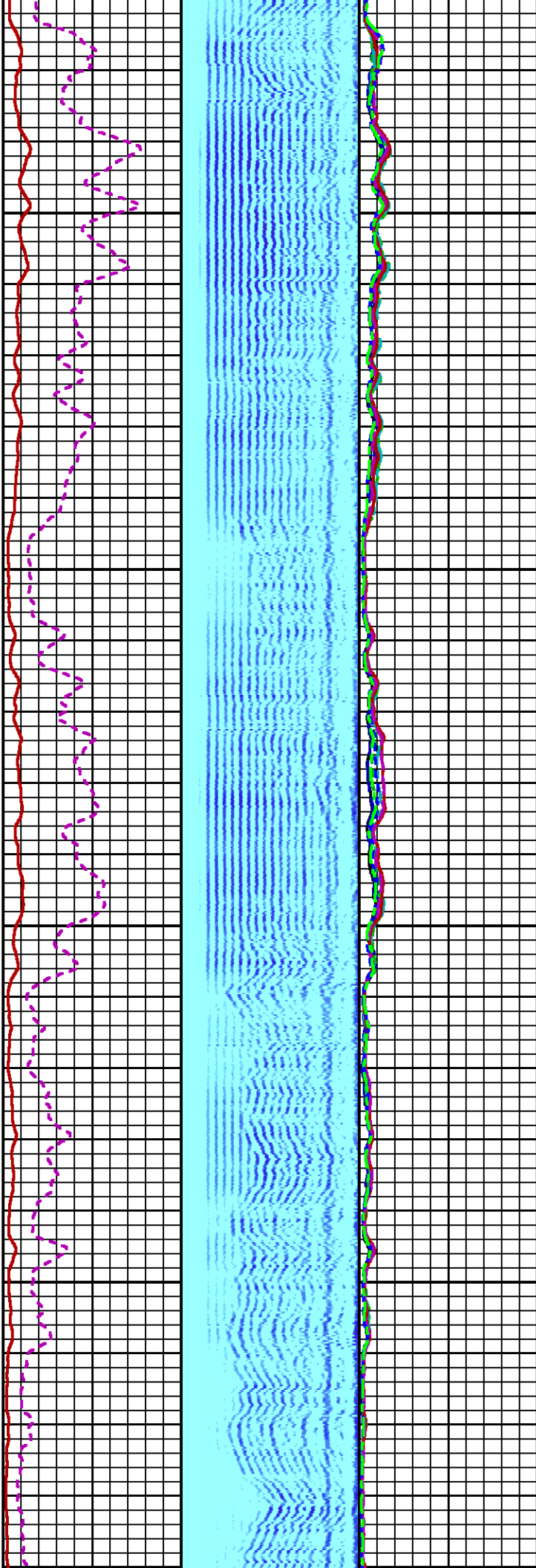
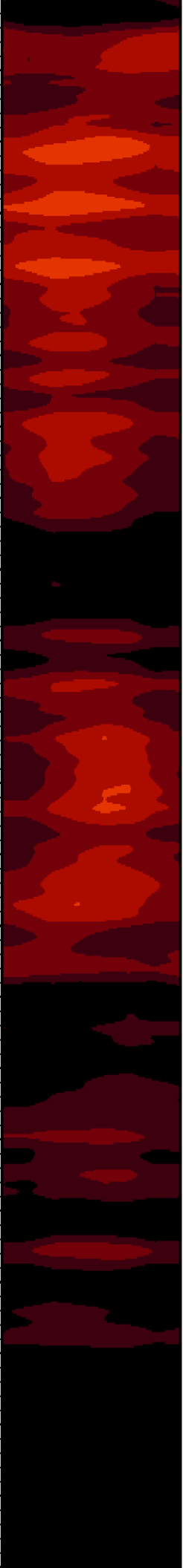


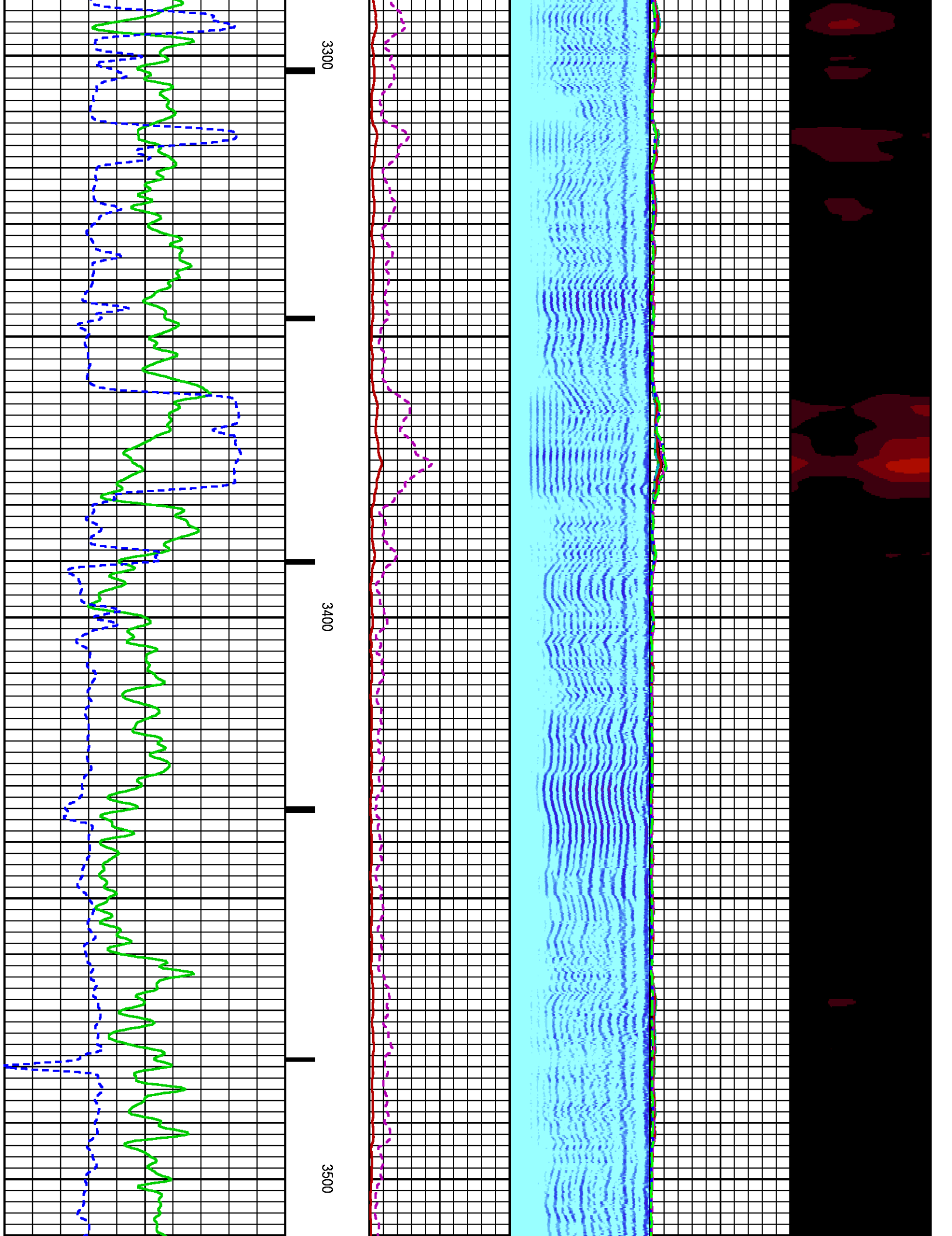




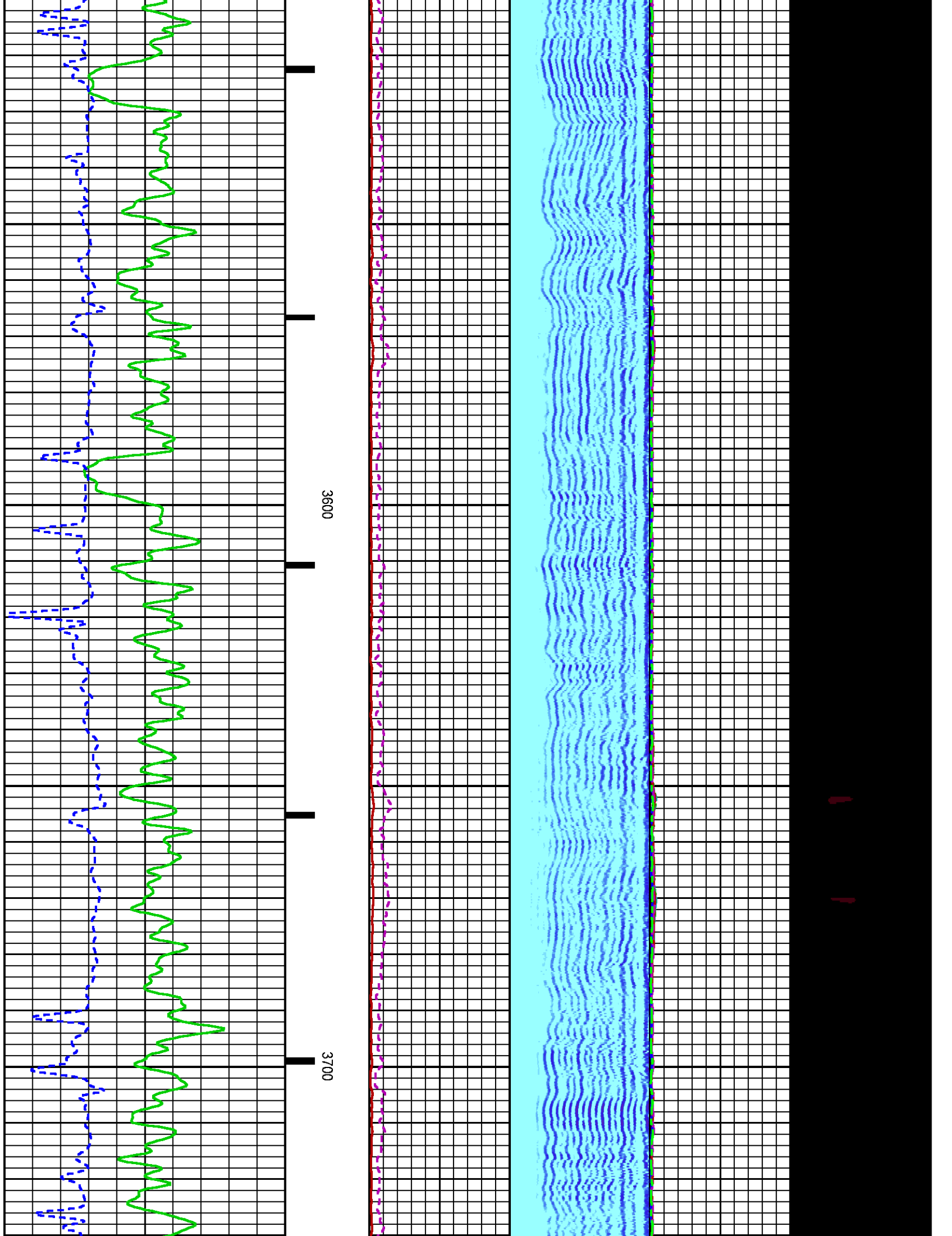




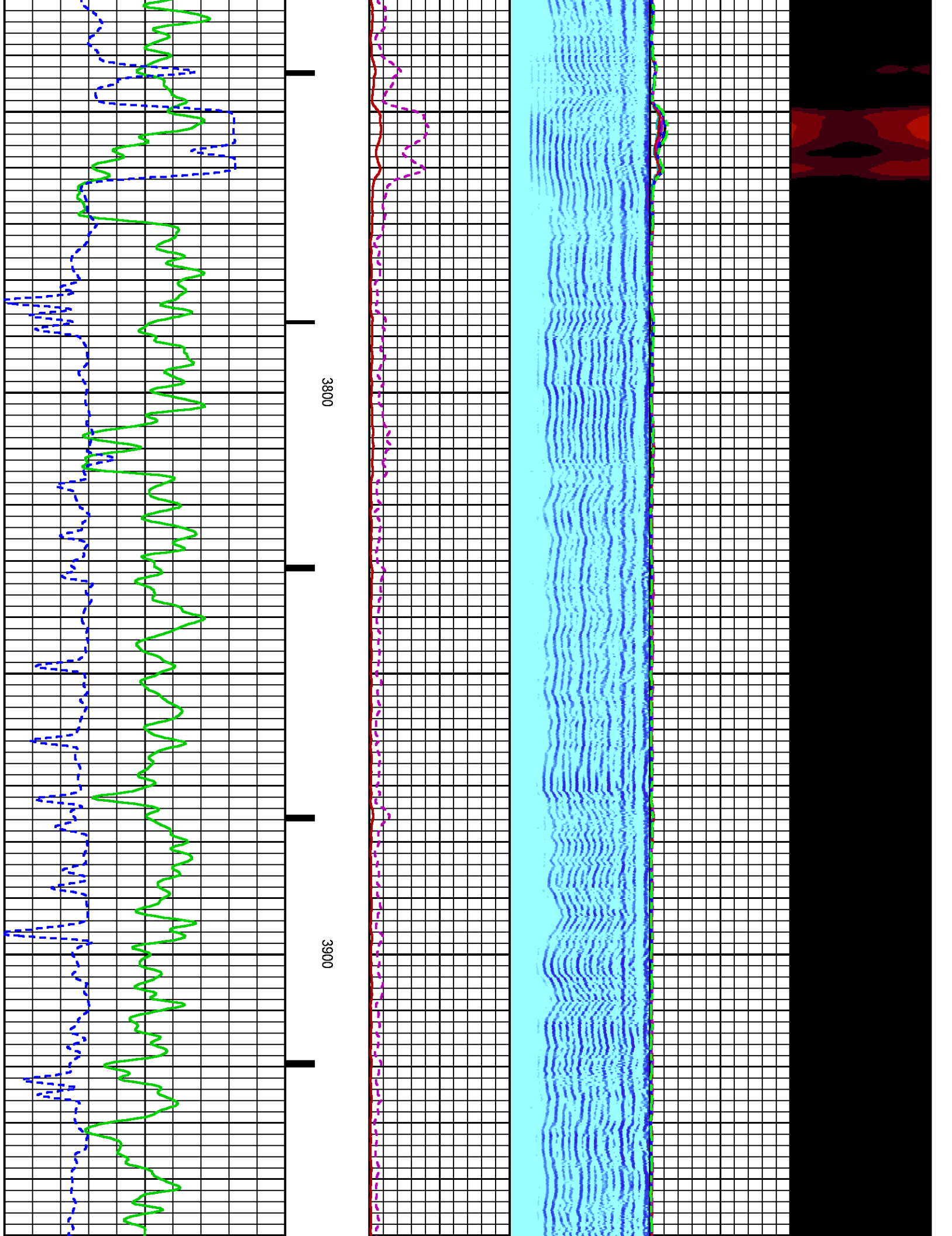


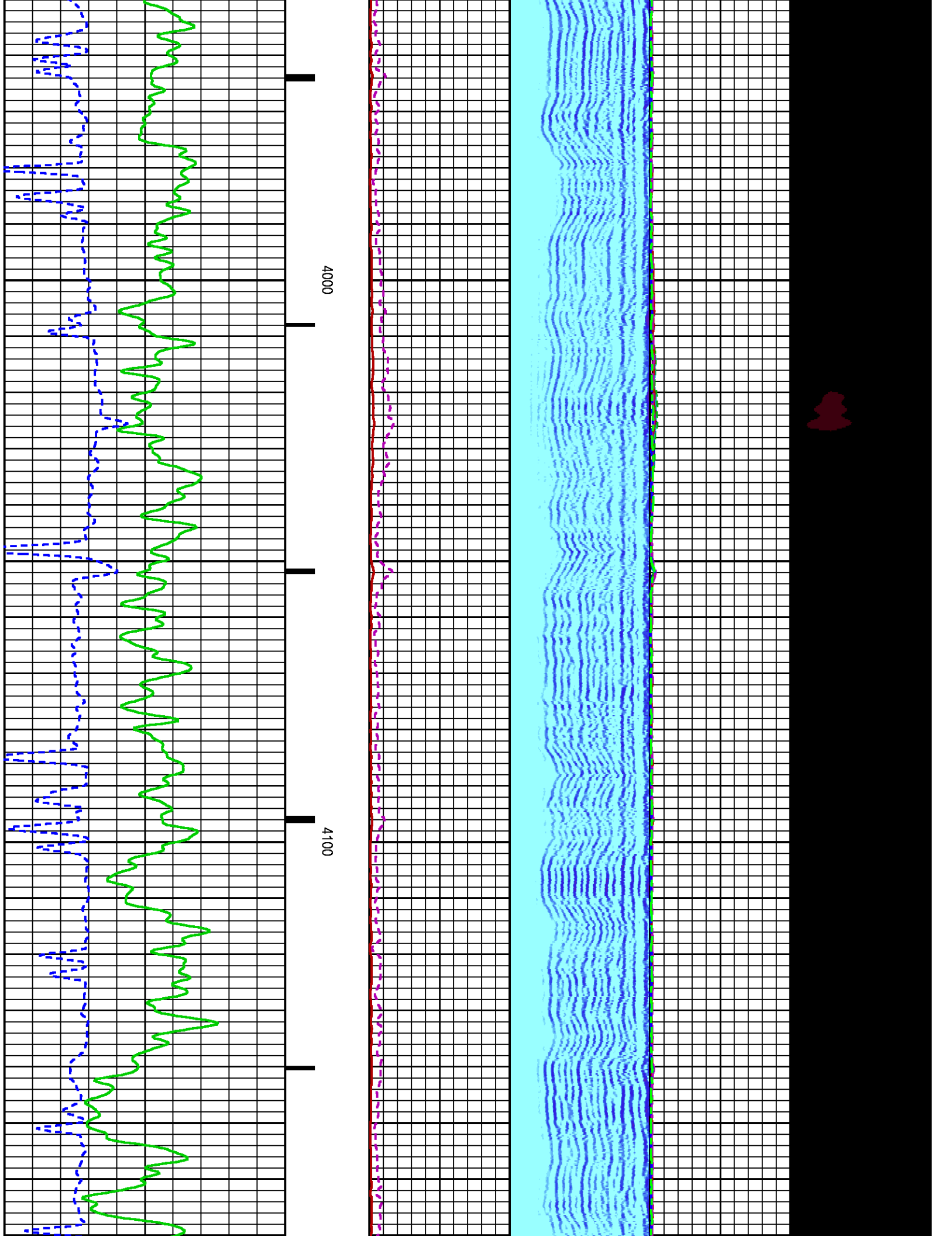


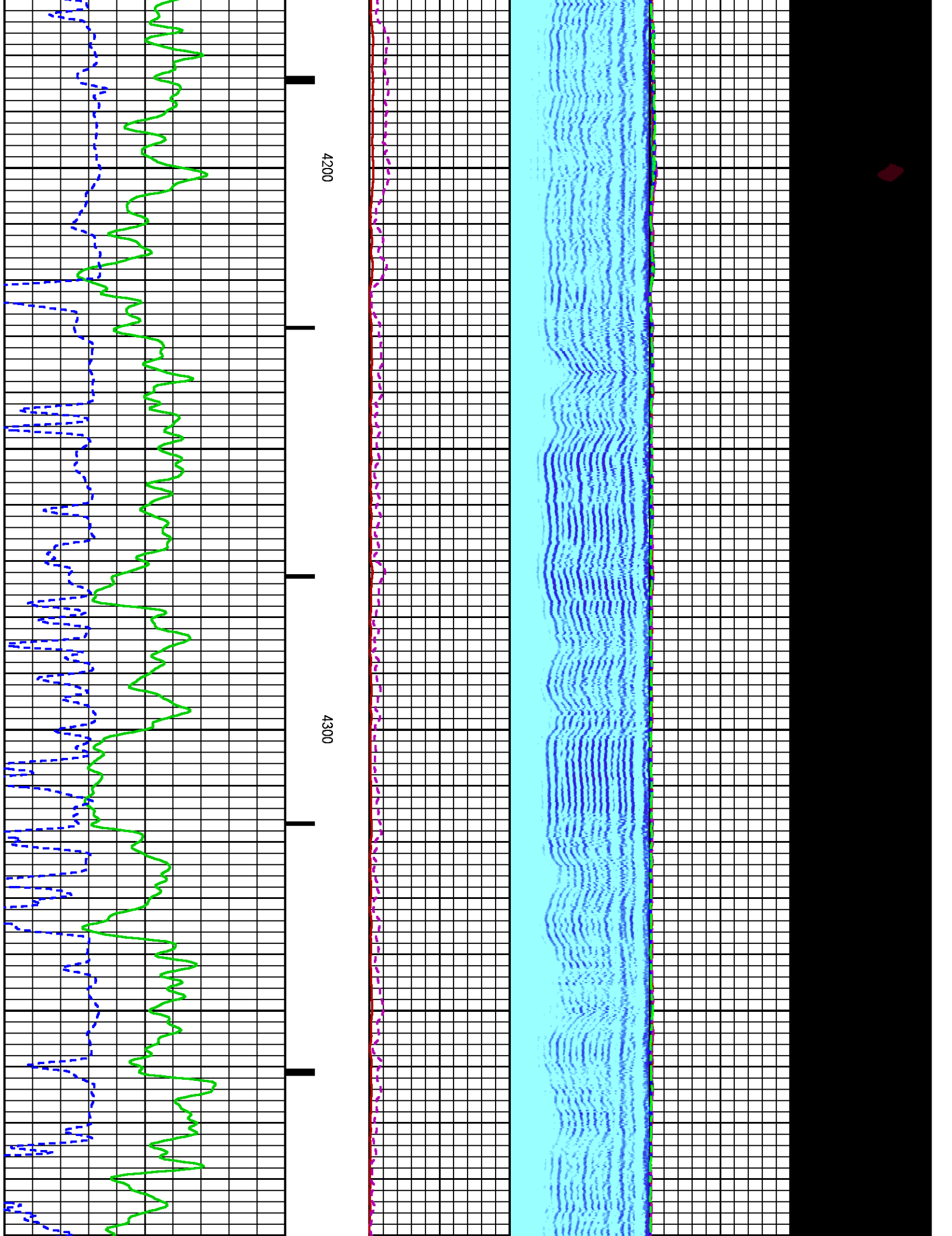


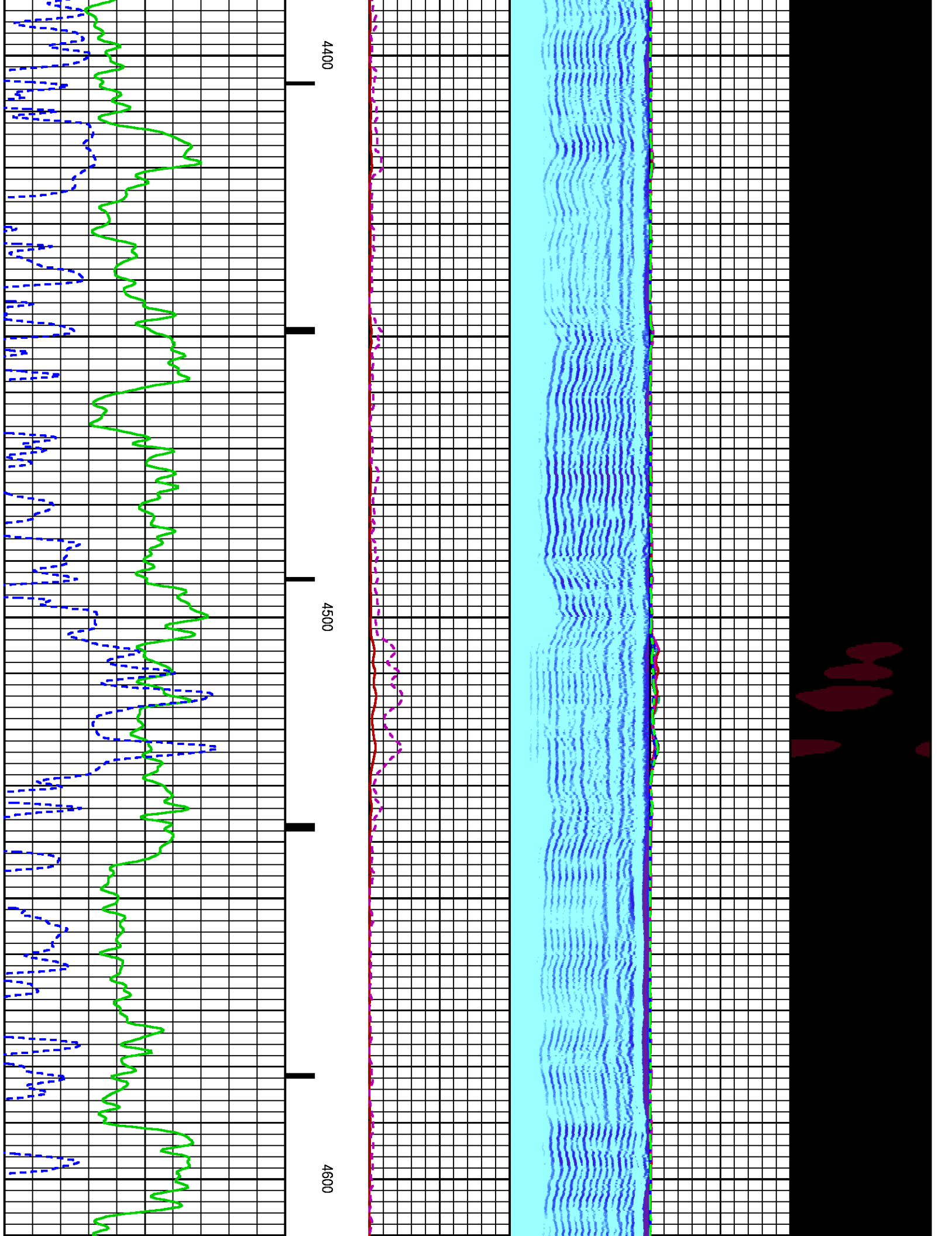


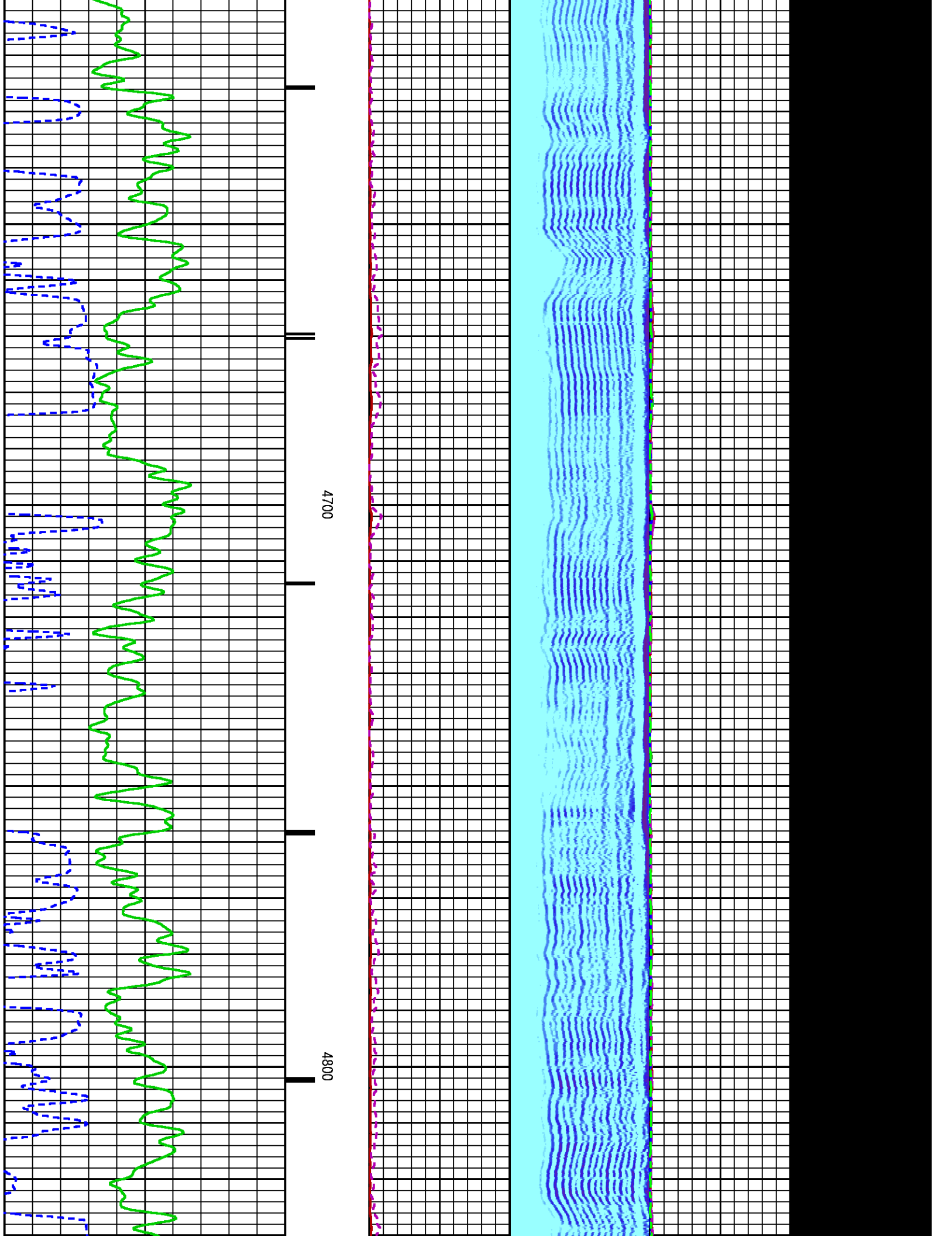


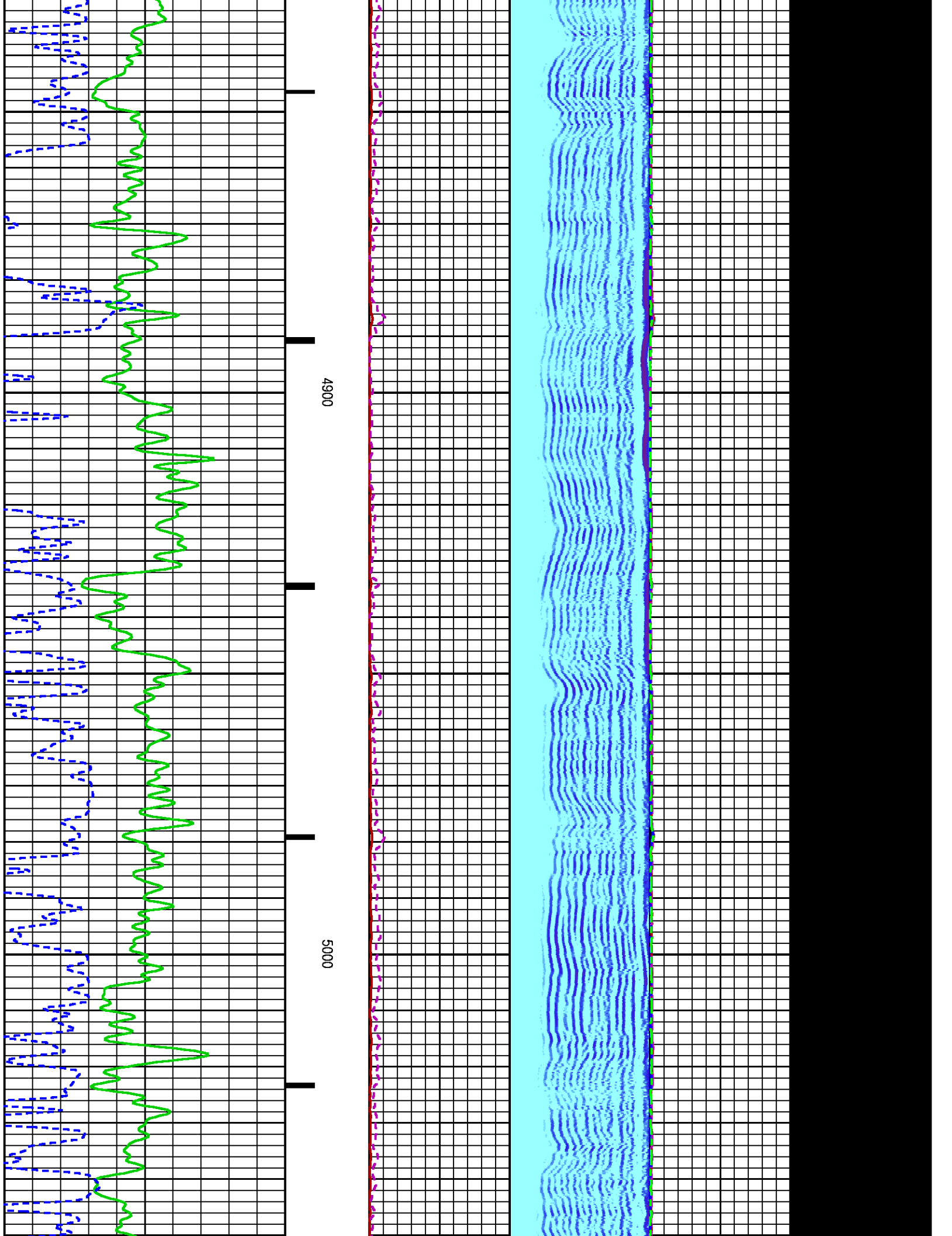




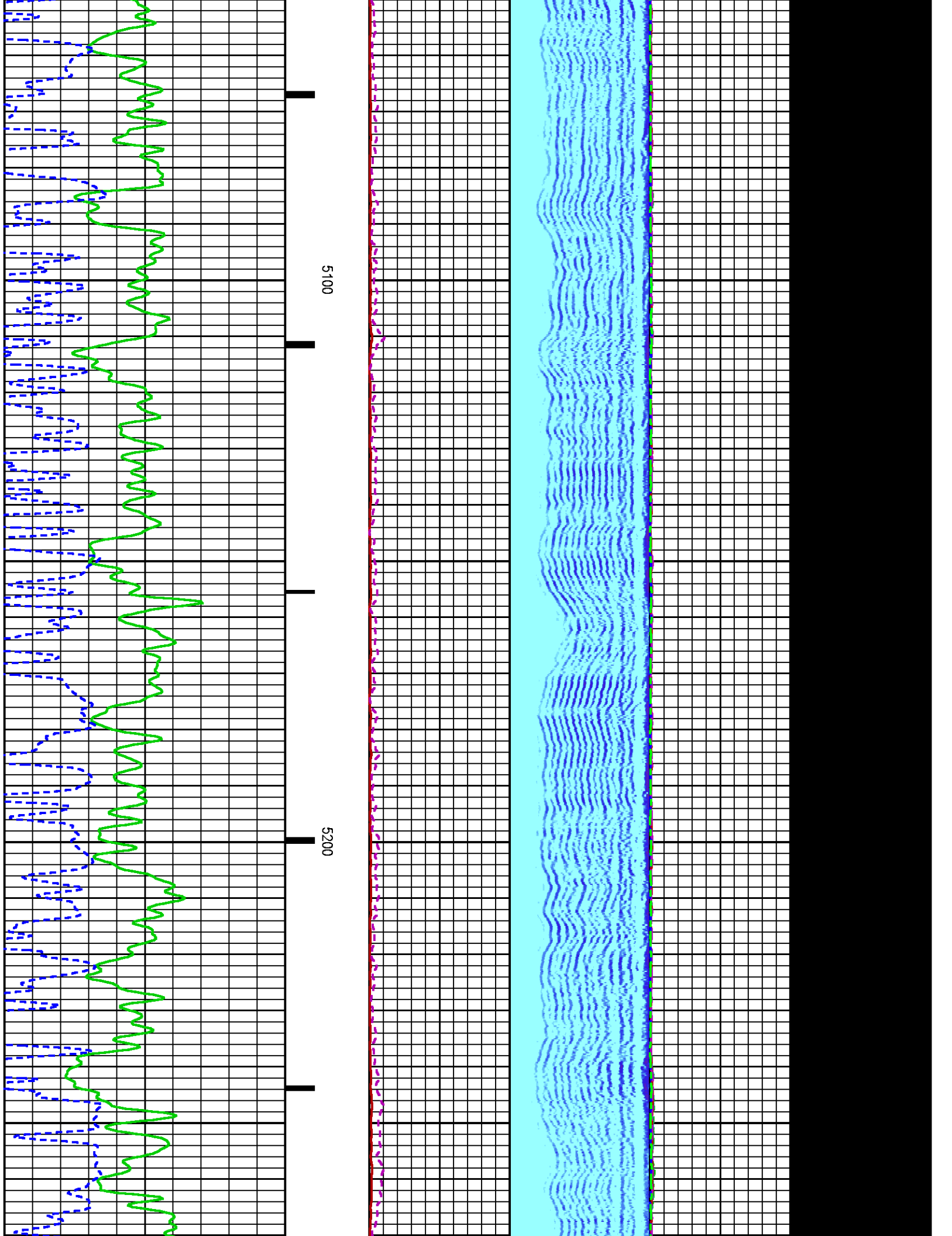


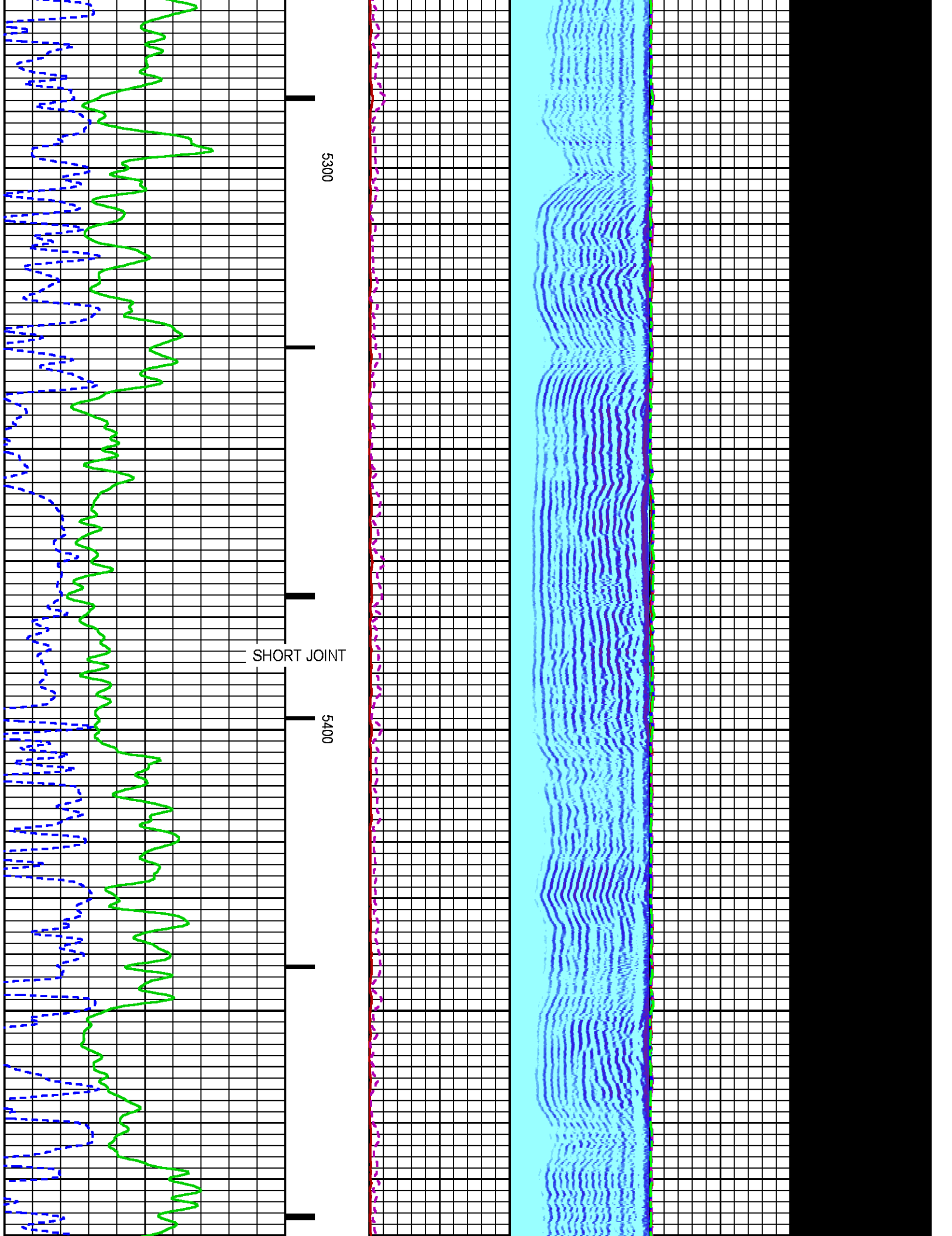


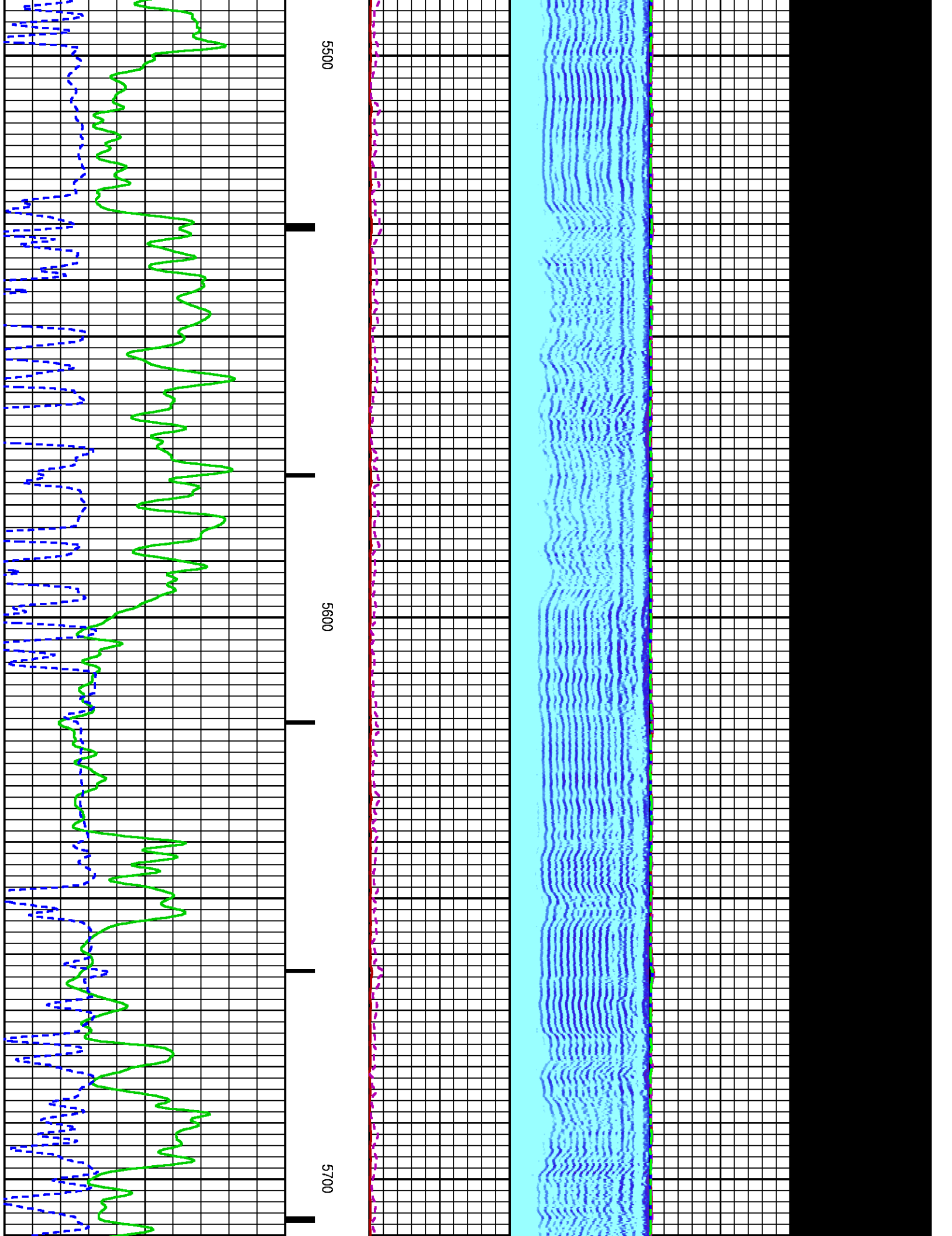


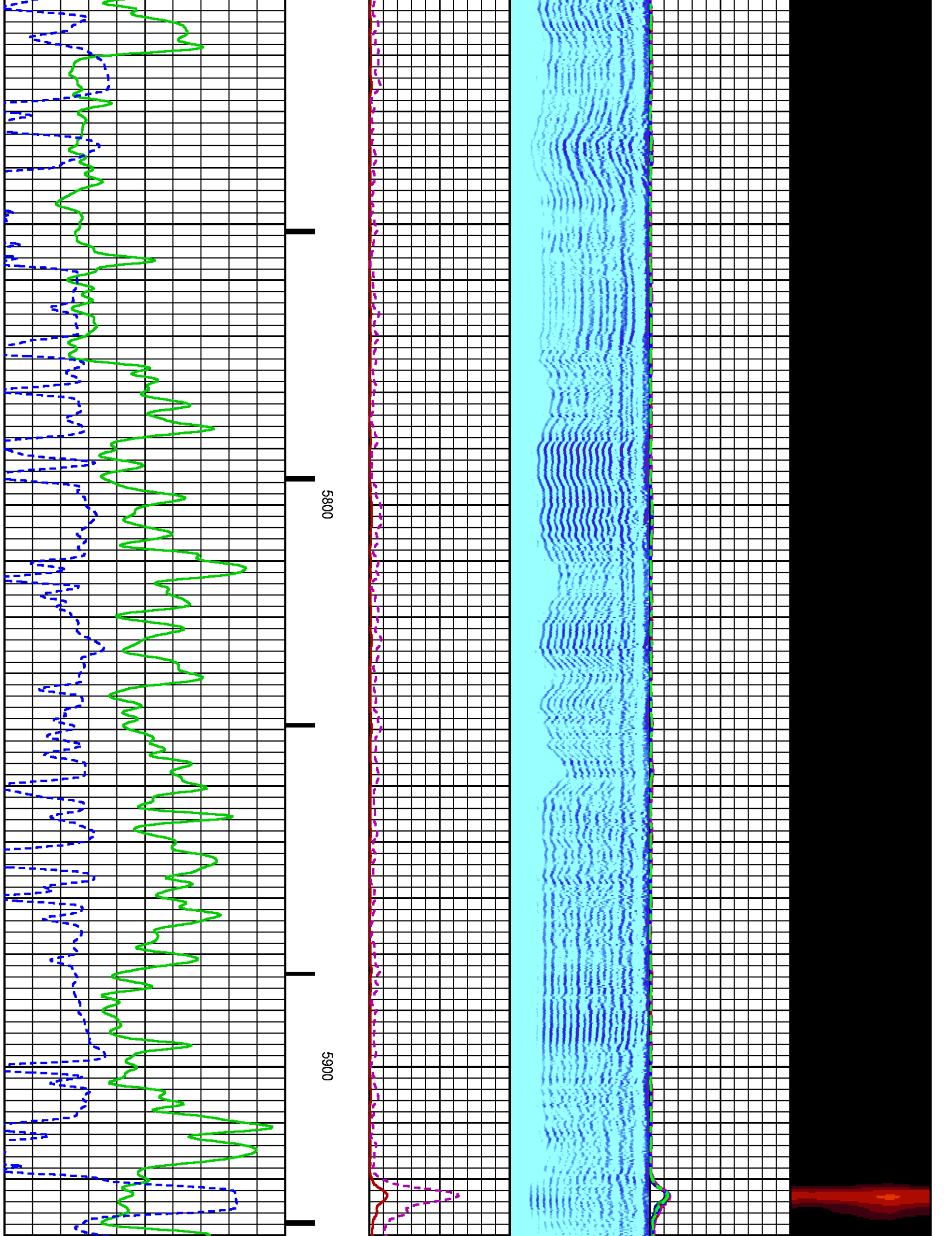


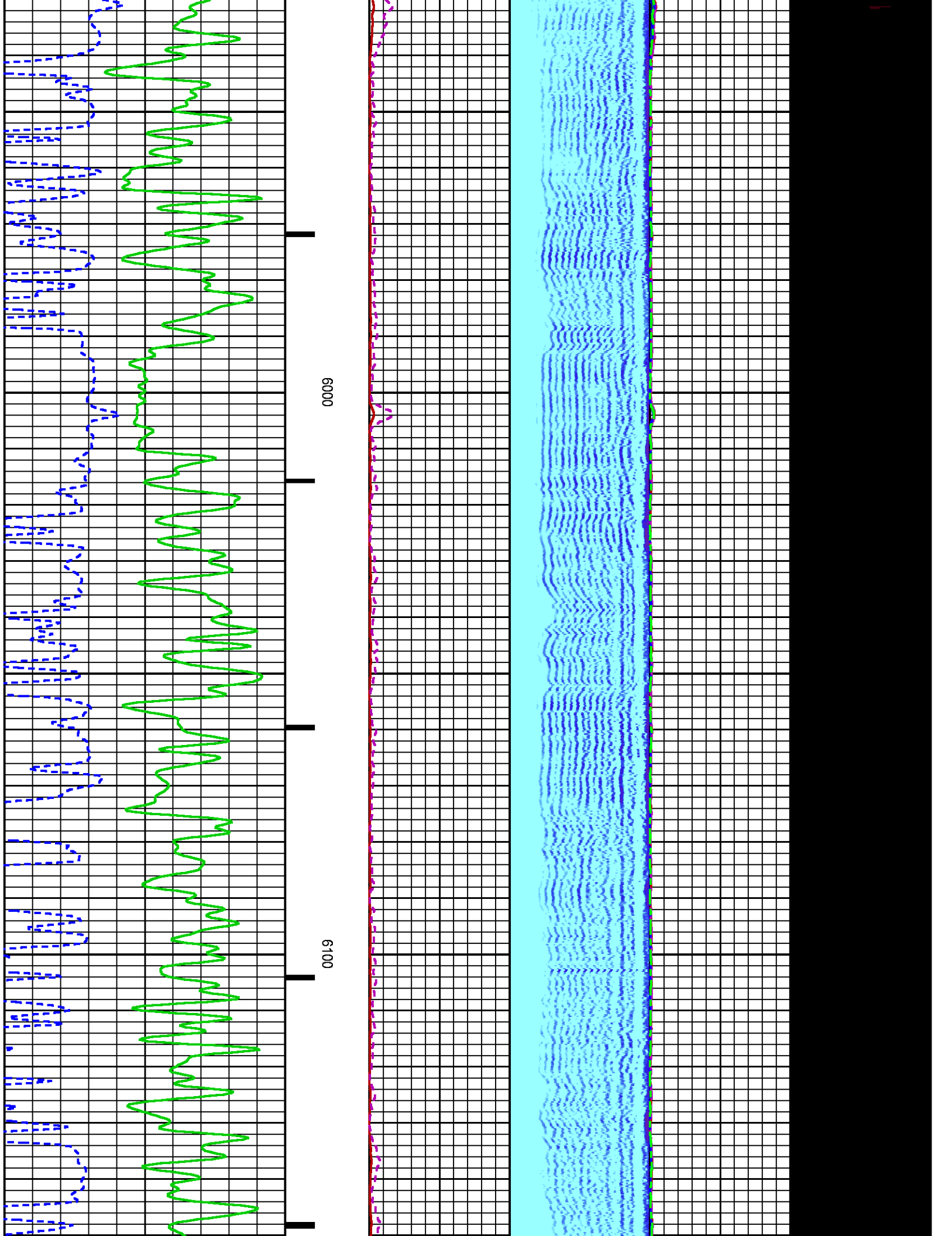




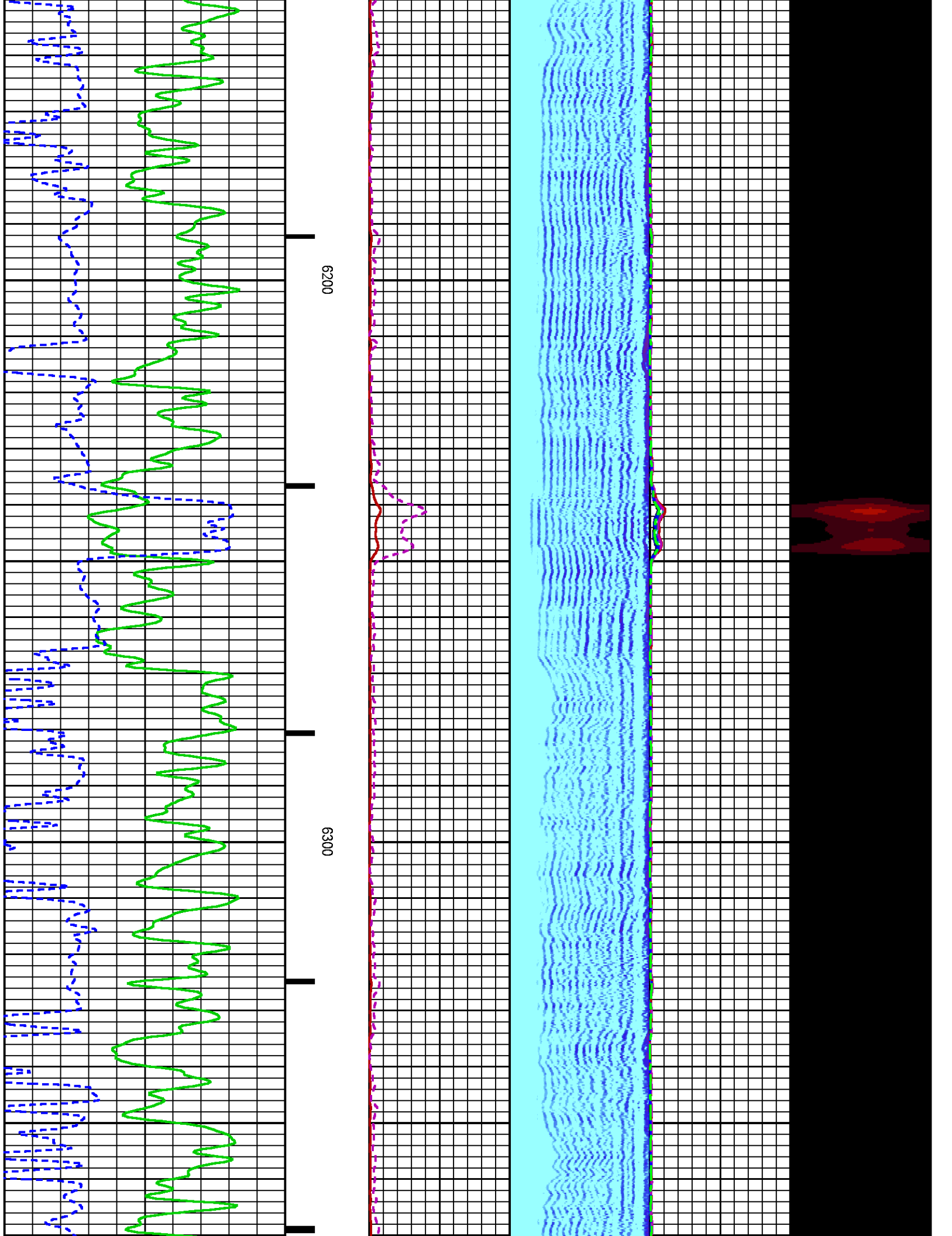




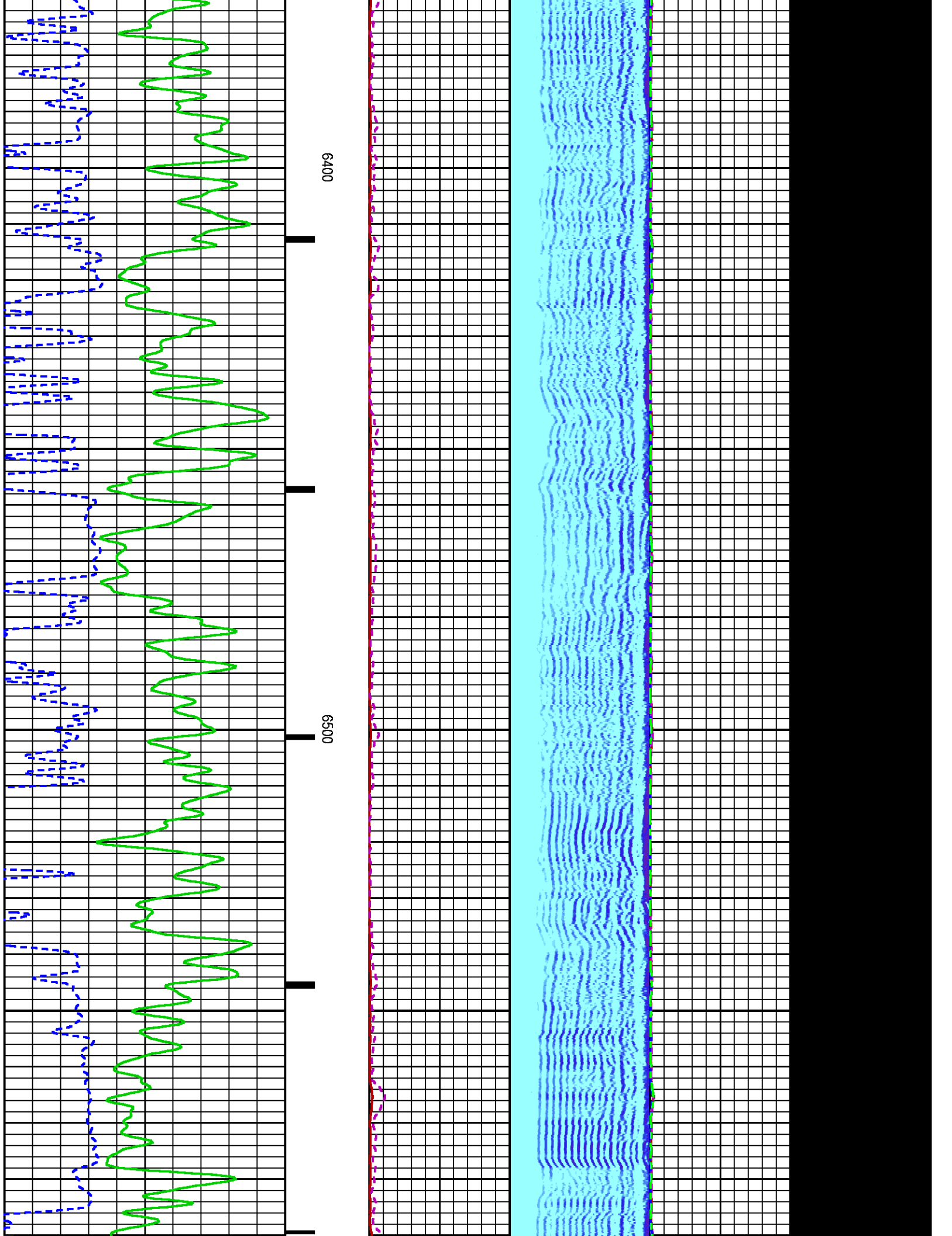


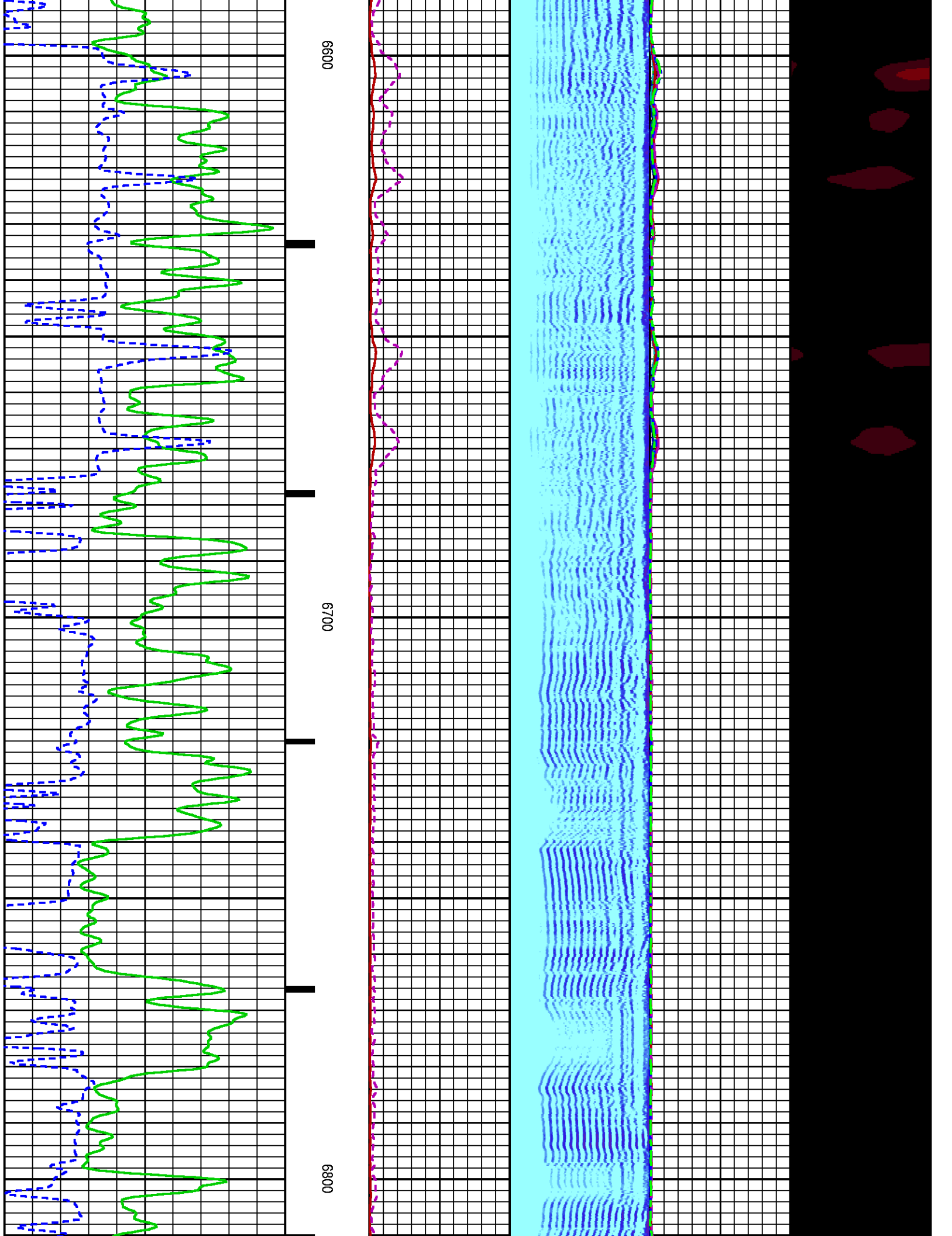


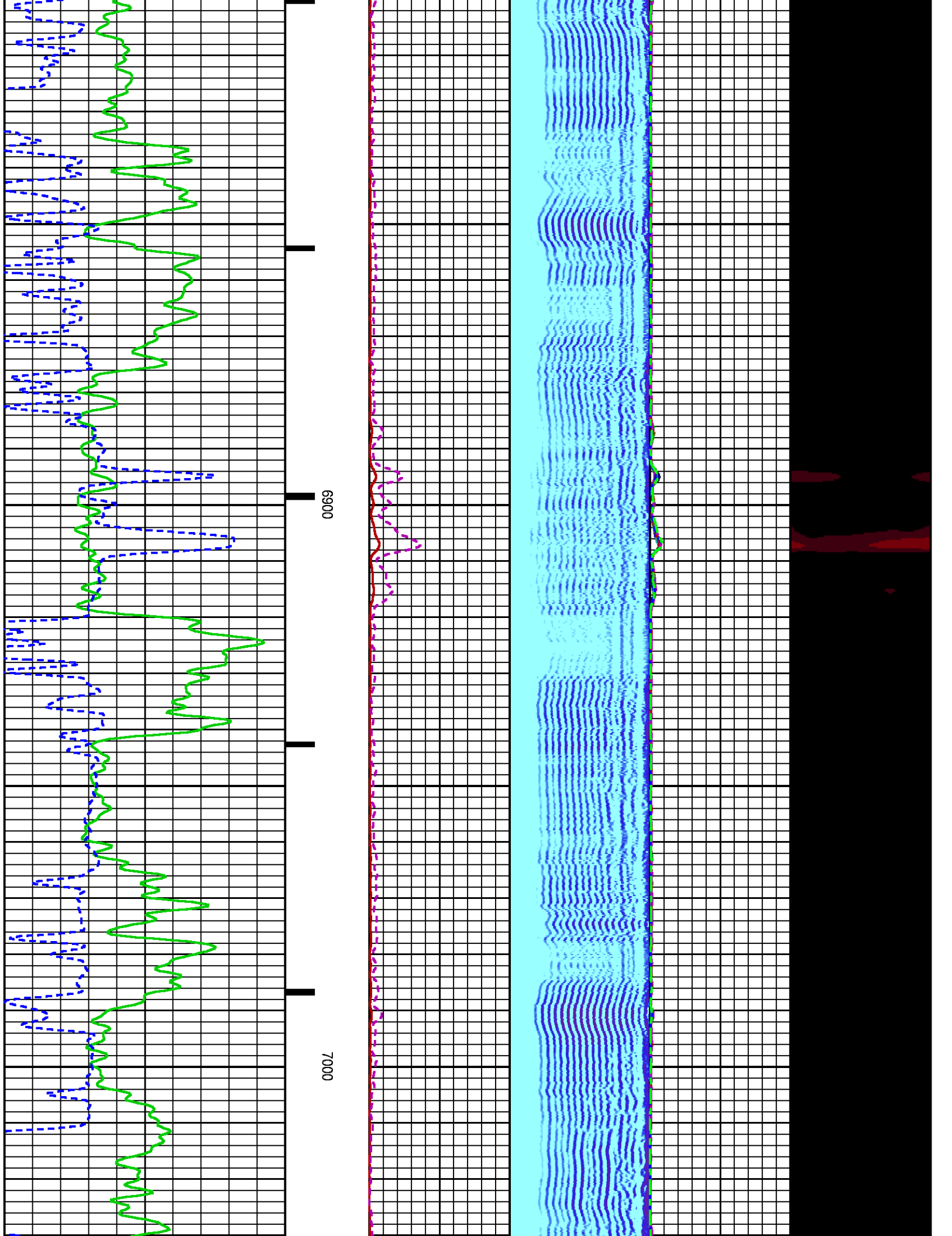


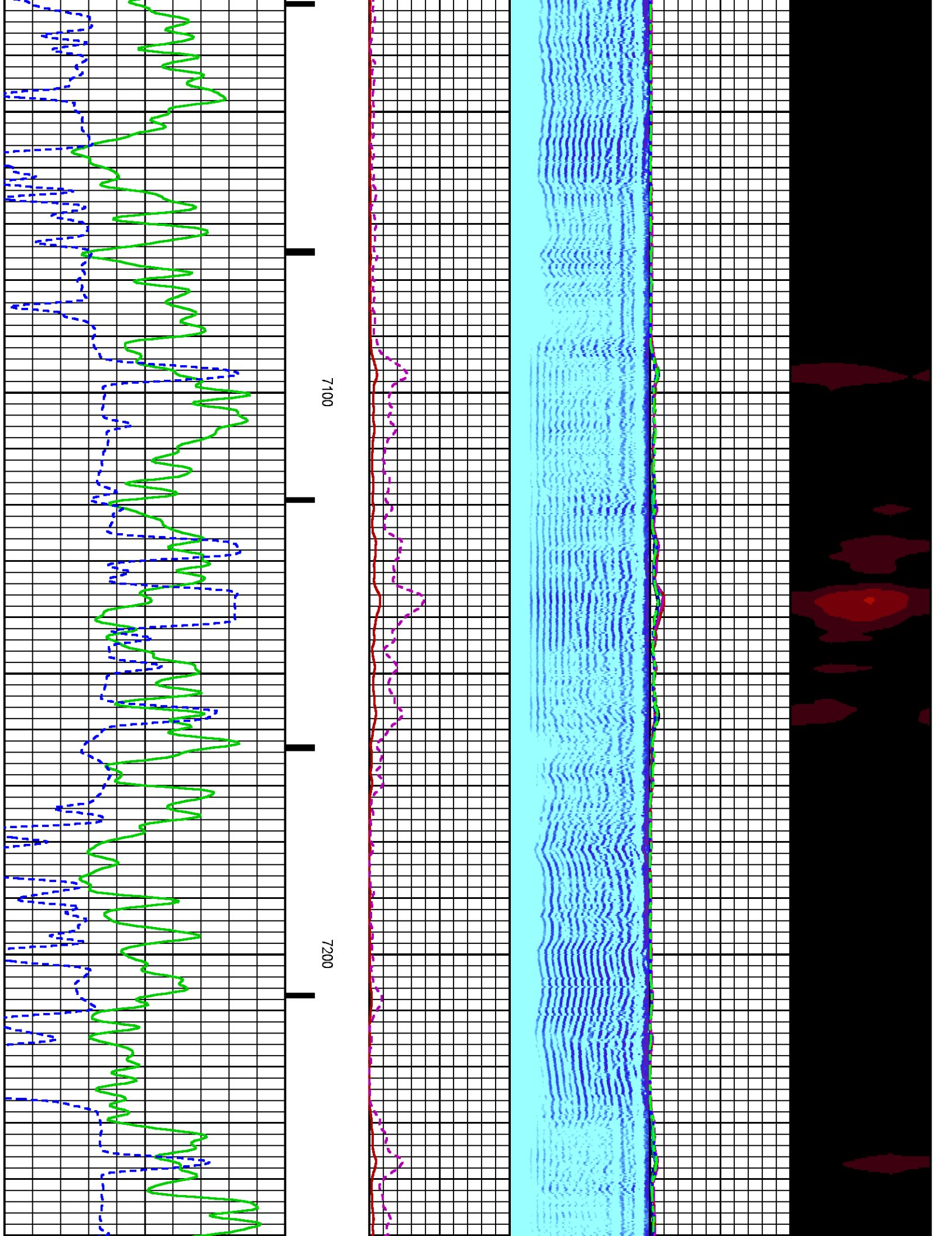


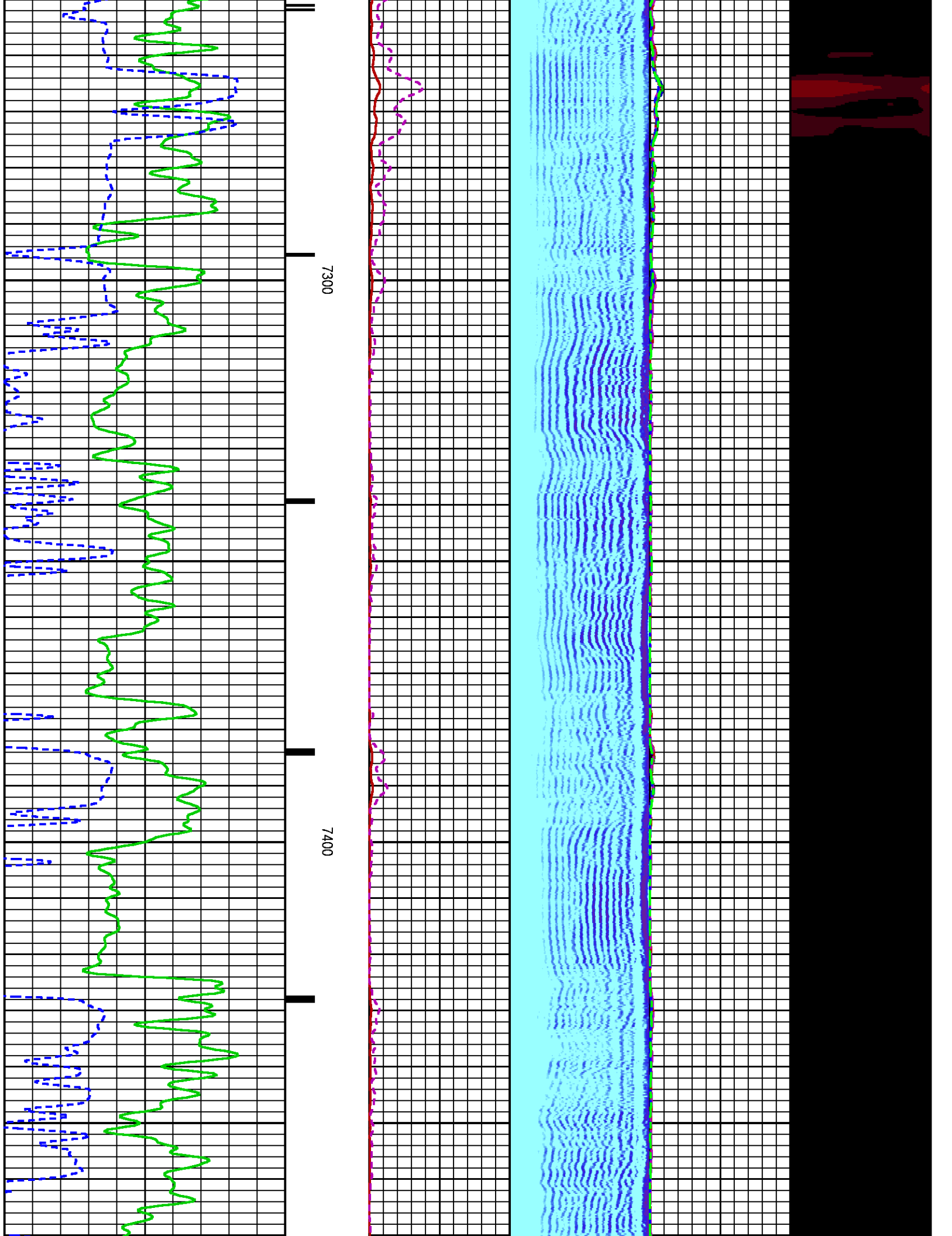




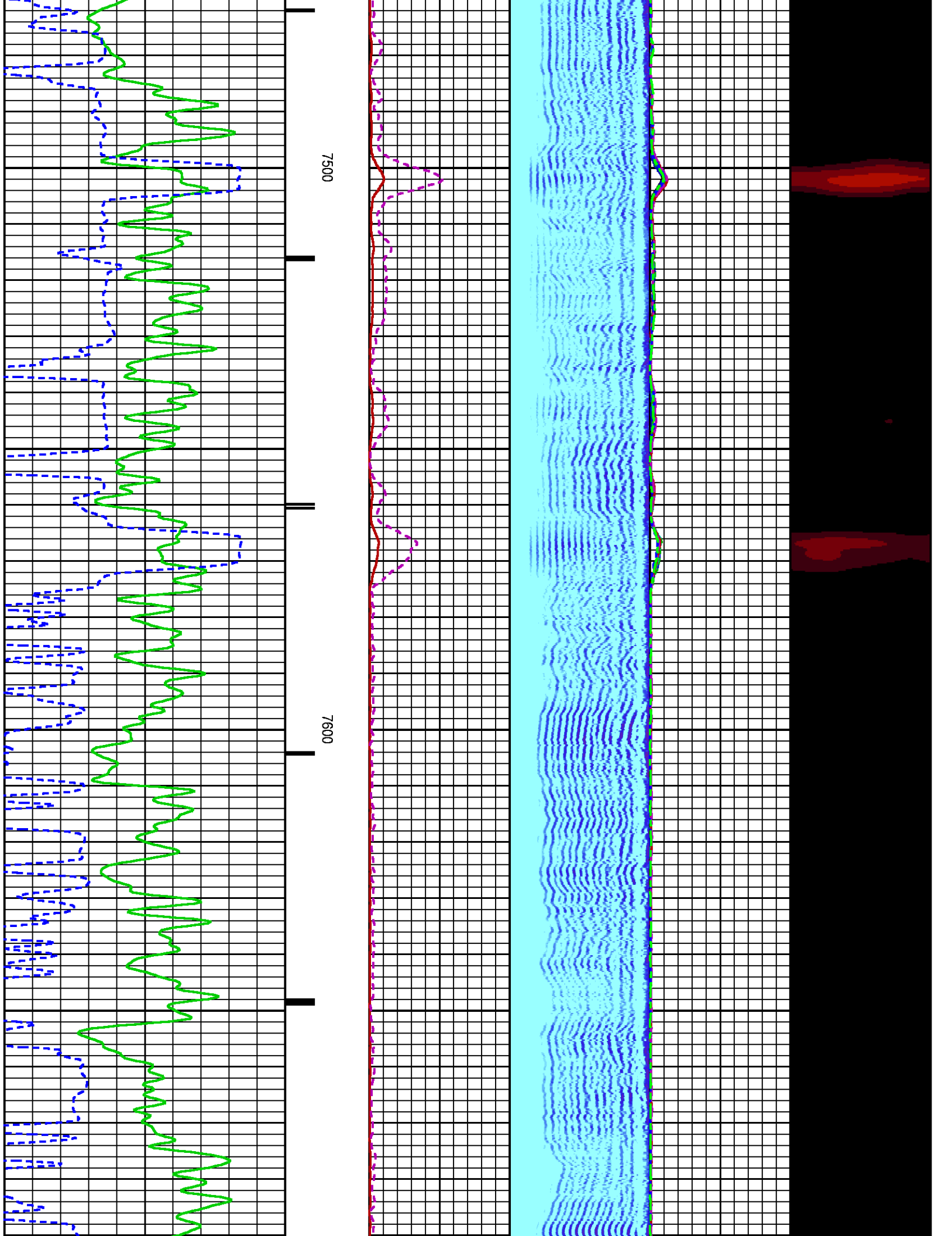


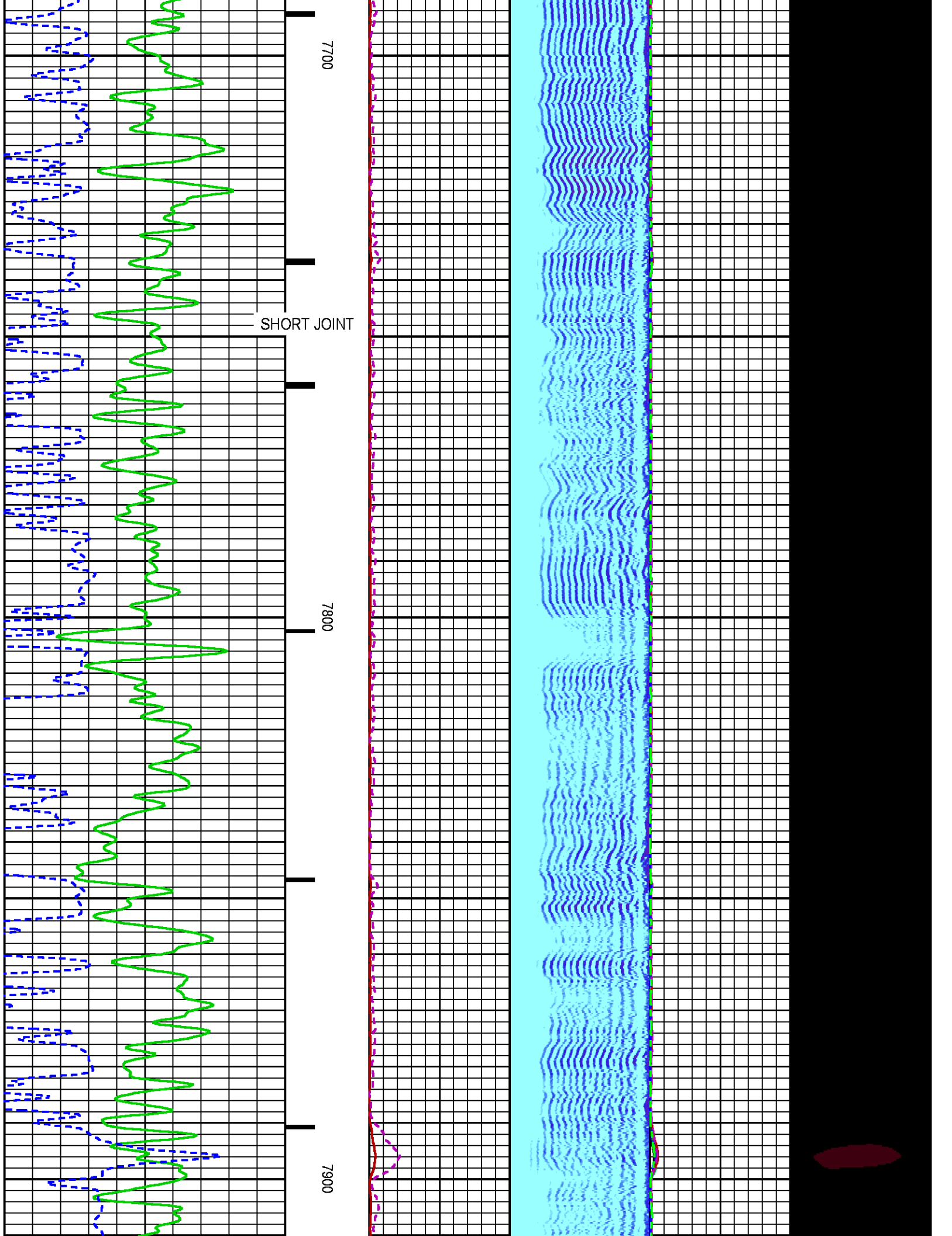


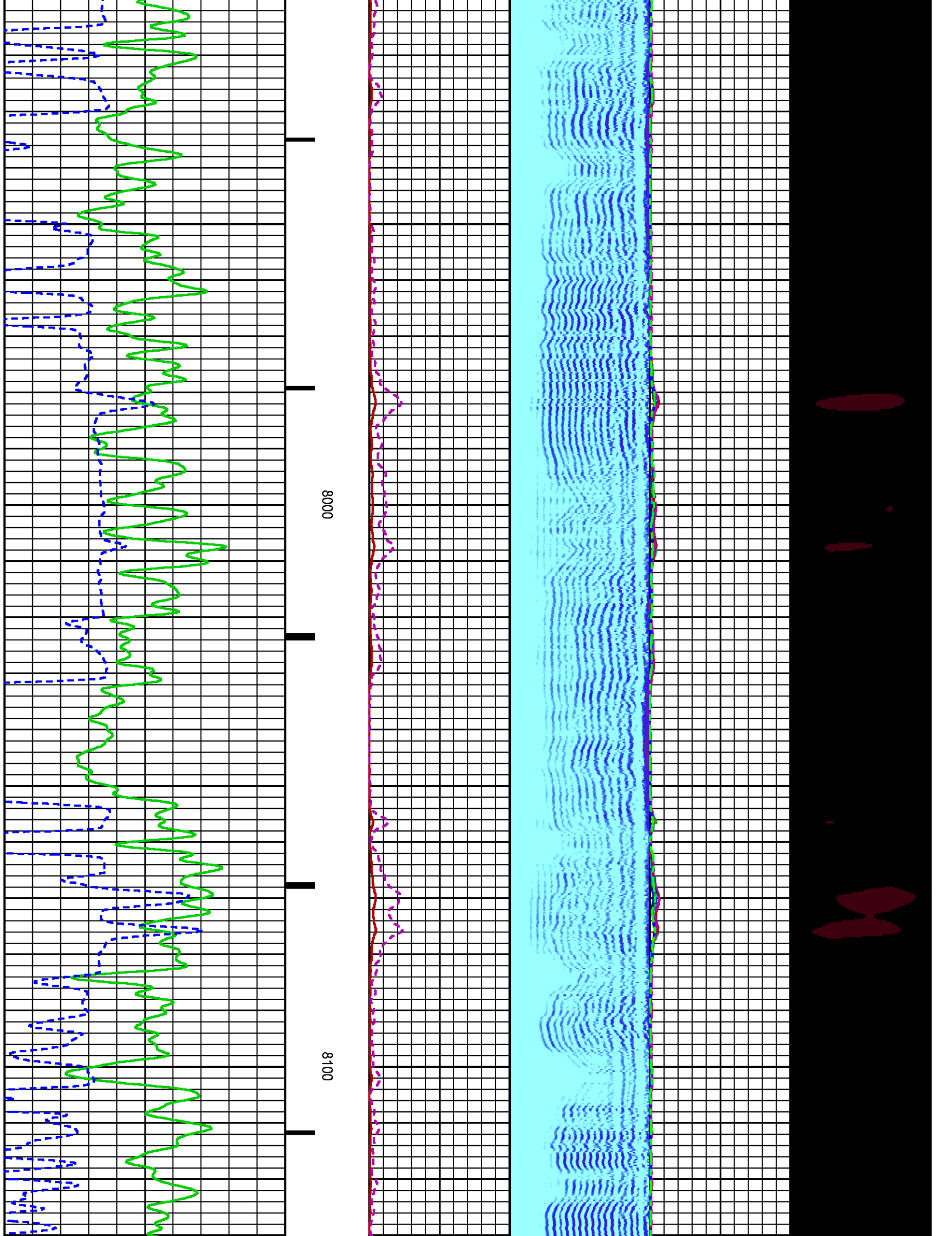


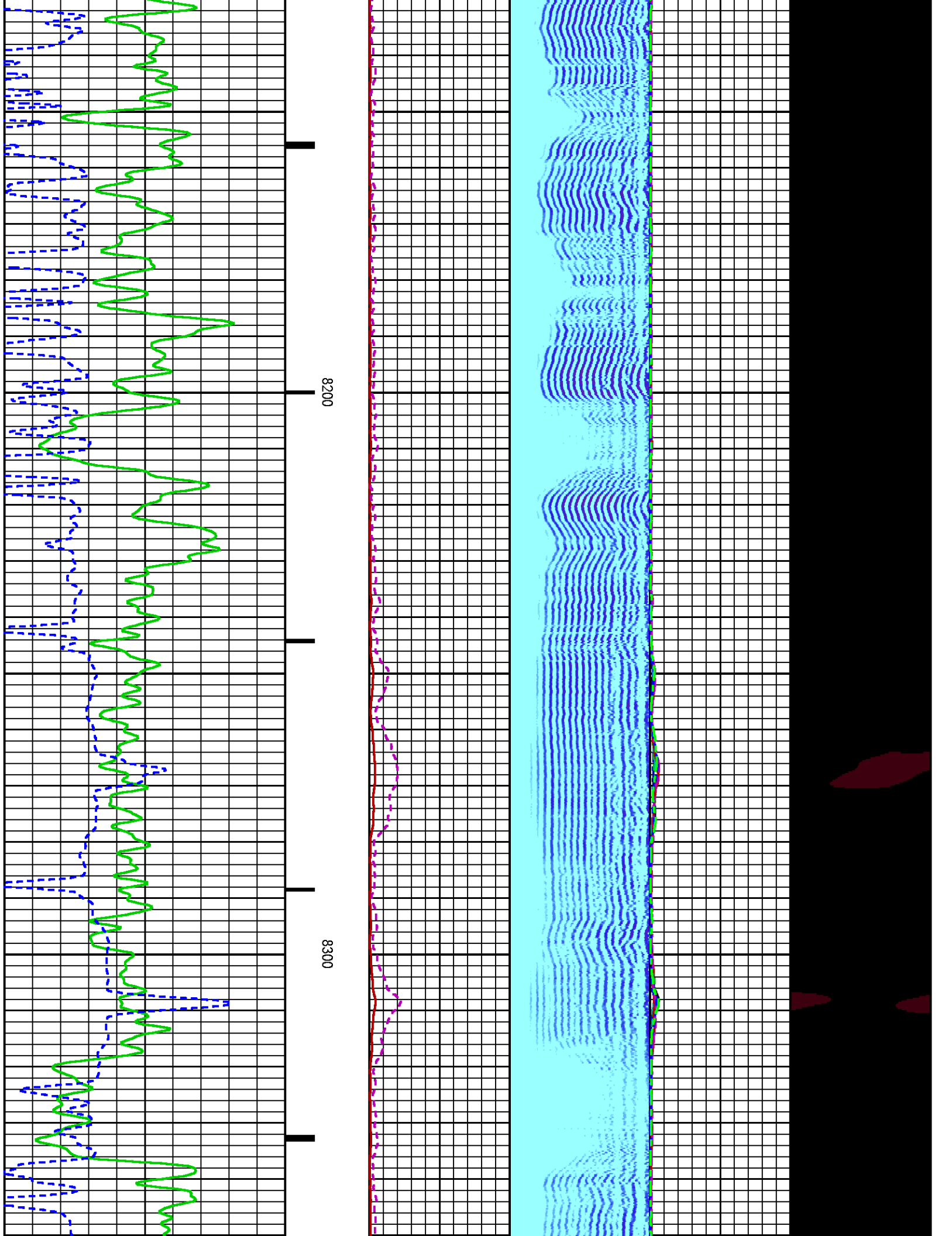


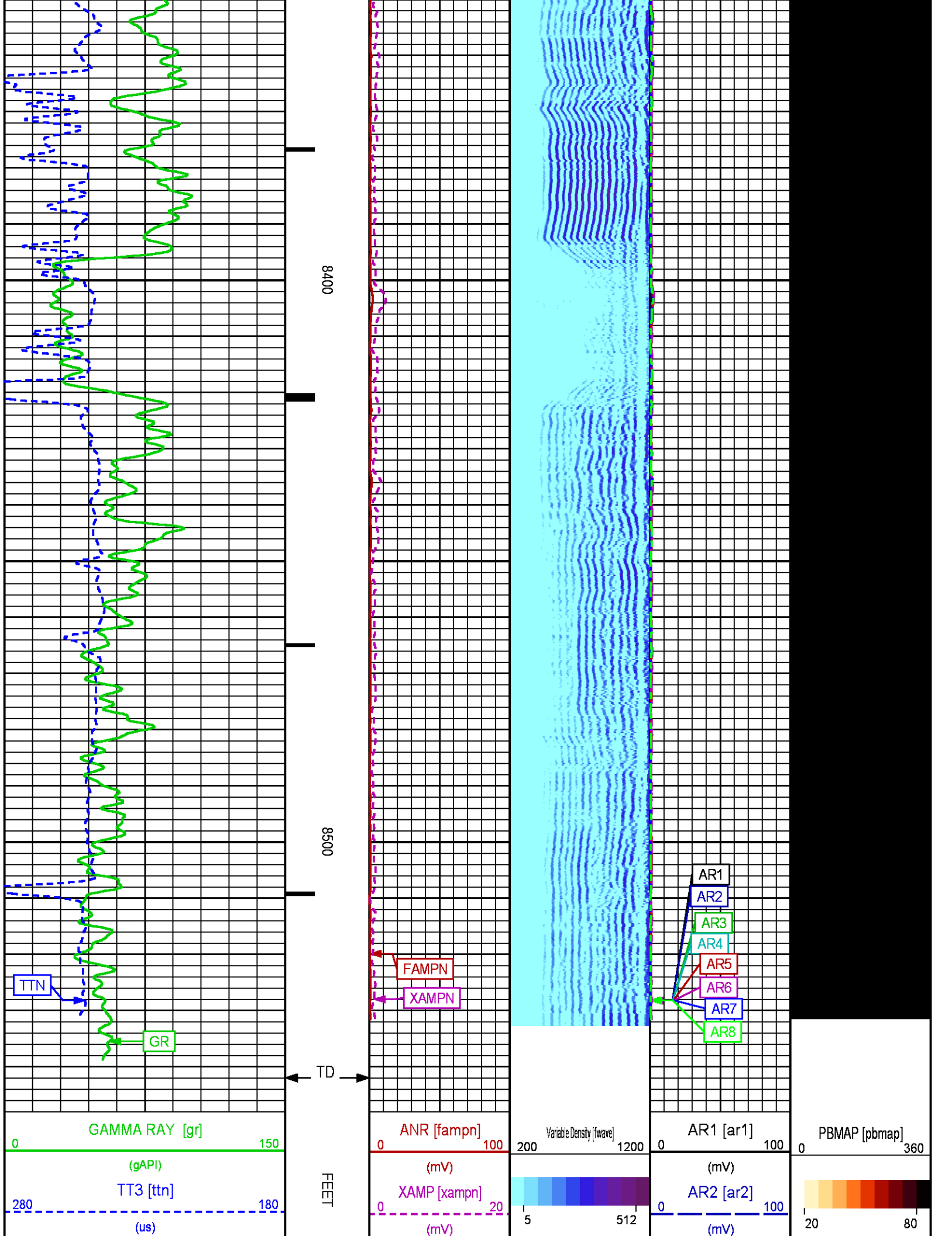






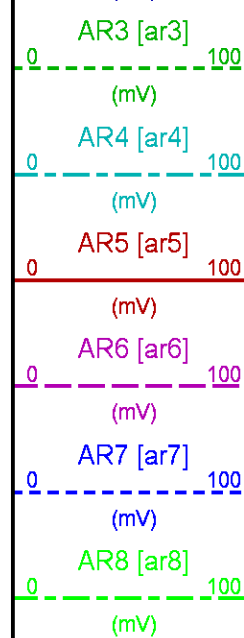








CCL  
(mV)



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: Thu Dec 4 17:21:36 2014

### PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH092511/n012e01.prm  
LOGGING MODE: DEPTH DIRECTION: UP  
TOP DEPTH: 8283.000 ft BOTTOM DEPTH: 8548.000 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*)	174	us	"	"
	TT WINDOW LENGTH	500	us	"	"
	FIRST DATA THRESHOLD (ft)	4	ft	"	"

	FIRST BRK THRESHOLD (ttt*)	4	mV	"	"
RAL CASING PARAMETERS	PPT NEAR	200.391	us	"	"
RAL TOOL DELAY	TOOL DELAY (str1*)	-72	us	"	"
	TOOL DELAY (str2*)	-72	us	"	"
	TOOL DELAY (str3*)	-72	us	"	"
	TOOL DELAY (str4*)	-72	us	"	"
	TOOL DELAY (str5*)	-72	us	"	"
	TOOL DELAY (str6*)	-72	us	"	"
	TOOL DELAY (str7*)	-72	us	"	"
	TOOL DELAY (str8*)	-72	us	"	"
	TOOL DELAY (strn*)	-72	us	"	"
BASELINE NOISE (NEAR)	NOISE WINDOW START	134	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	Dec 3 16:15:44 2014	FIXED GATE AMPLITUDE T-R1
F1:AR2	Dec 3 16:15:44 2014	FIXED GATE AMPLITUDE T-R2
F1:AR3	Dec 3 16:15:44 2014	FIXED GATE AMPLITUDE T-R3
F1:AR4	Dec 3 16:15:44 2014	FIXED GATE AMPLITUDE T-R4
F1:AR5	Dec 3 16:15:44 2014	FIXED GATE AMPLITUDE T-R5
F1:AR6	Dec 3 16:15:44 2014	FIXED GATE AMPLITUDE T-R6
F1:AR7	Dec 3 16:15:44 2014	FIXED GATE AMPLITUDE T-R7
F1:AR8	Dec 3 16:15:44 2014	FIXED GATE AMPLITUDE T-R8
F1:CCL	Dec 3 16:15:44 2014	CASING COLLAR LOCATOR
F1:FAMPN	Dec 3 16:15:44 2014	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Dec 3 16:15:44 2014	FAR WAVE FORM
F1:GR	Dec 3 16:15:44 2014	GAMMA RAY
F1:PBMAP	Dec 3 16:15:44 2014	PERCENT BOND CEMENT MAP
F1:TTN	Dec 3 16:15:44 2014	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Dec 3 16:15:44 2014	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

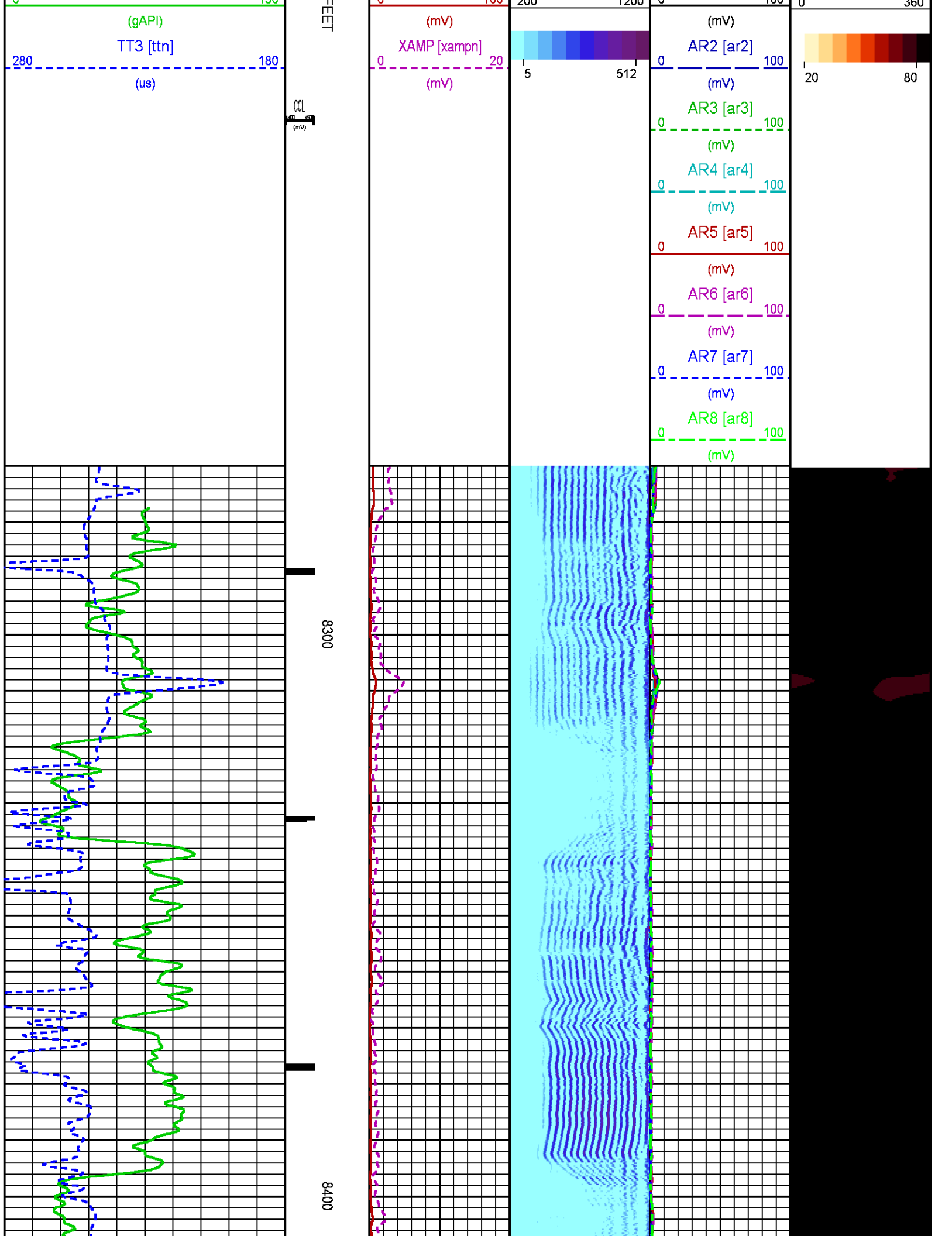
### CURVE MEASURE POINT OFFSET

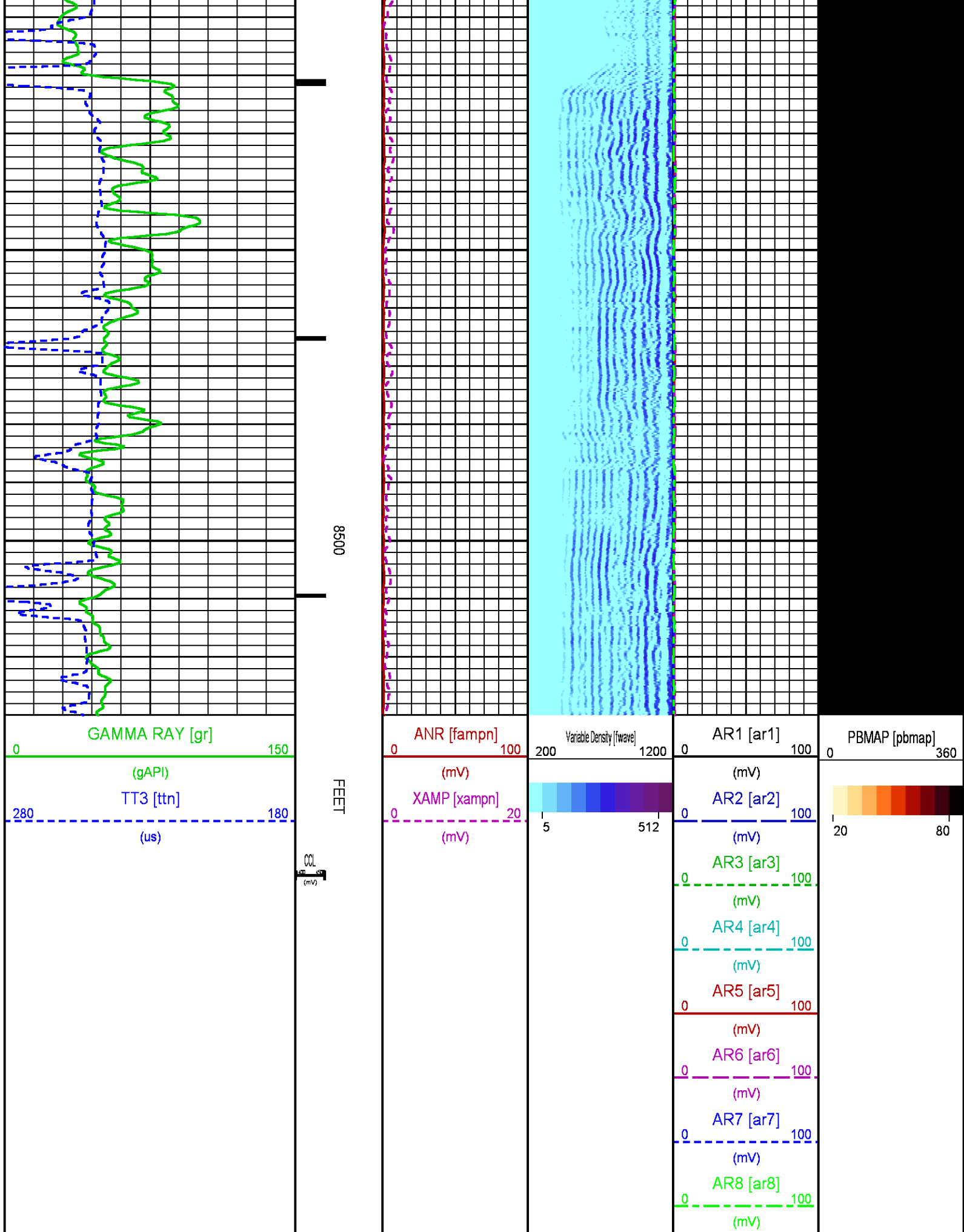
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
AR1	13.75	AR5	13.75	CCL	8.50	XAMPN	13.75
AR2	13.75	AR6	13.75	FAMPN	13.75		
AR3	13.75	AR7	13.75	GR	6.50		
AR4	13.75	AR8	13.75	TTN	13.75		

**Presentation** : HL6670:/dat1a/CH092511/13W\_CBL\_REPEAT.fvpdf [5"/100' Scale]  
**Plot Interval** : 8270 - 8530 Feet

**Data File 1** : F1 : HL6670:/dat1a/CH092511/13W\_CBL\_REPEAT.xtf  
**Created On** : Dec 3 16:15:44 2014  
**Company** : LARAMIE ENERGY  
**Well** : SUP & SHEP FED  
**Field** : VEGA  
**File Interval** : 8269 - 8546.5 Feet  
**OCT** : n012e

GAMMA RAY [gr]	150	ANR [fampn]	100	Variable Density [fwave]	1200	AR1 [ar1]	100	PBMAP [pbmap]	200
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# CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/CH092511/m012e.tp1

## RAL PRIMARY CALIBRATION SUMMARY

TOOL #: 1426XA 10417452

DATE/TIME PERFORMED: Wed Dec 3 15:38:28 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)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00
AMP FLUID (mV)	169	170	169	169	169	168	169	169	169	224	168
TT (us)	220	219	220	220	220	219	218	217	219	328	219
M FACTOR	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.67	0.60

## RAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1426XA 10417452

DATE/TIME PERFORMED: Wed Dec 3 15:39:57 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMP AIR	-0.38	-0.72	-0.93	-0.45	-0.45	-0.22	-0.20	-0.65	-0.54	-0.67	100.02

SHOP M FACTOR	SHOP A FACTOR	WIRELINE FACTOR
0.60	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)	CALBRTR ON (cts)	CR DIFF (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	CALBRTR (gAPI)
GR	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/CH092511/CBL-tdg

## CABLEHEAD

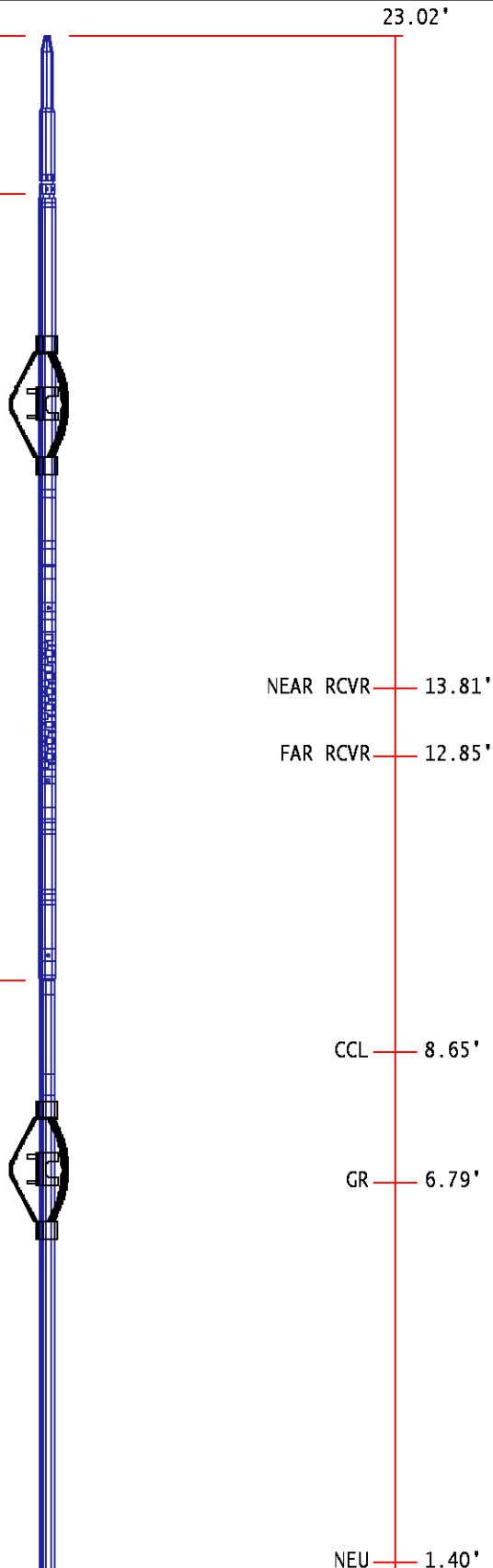
Diameter : 2.75"  
Length : 2.25'  
Weight : 10 lbs  
Series : CABL234  
Mnemonic : CBLH

## 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

## 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



BULL PLUG 2 3/4

0.00'

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

	COMPANY	LARAMIE ENERGY		FILE NO:	CH092511			
	WELL	SUP & SHEP FEDERAL 25-13W		API NO:	05077100270000			
	FIELD	VEGA						
	COUNTY	MESA	STATE	CO				
	LOCATION:	SHL: LAT 39.245006 LONG -107.722874 BHL: LAT 39.243978 LONG -107.726799		ELEVATIONS:	25 9S 93W SUP & SHEP 25-11 PATTERSON 306			
	SEC	25	TWP	9S	RGE	93W	DATE	03-Dec-2014