



FILE NO: CH092510
 COMPANY: LARAMIE ENERGY
 WELL: SUP & SHEP FEDERAL 25-12W
 FIELD: VEGA
 COUNTY: MESA
 STATE: CO

Ver. 3.87
 25 9S 93W
 SUP & SHEP 25-11
 PATTERSON 306
 LOCATION:
 SHL: LAT 39.245018 LONG -107.722842
 BHL: LAT 39.244698 LONG -107.726800
 SEC 25 TWP 9S RGE 93W
 OTHER SERVICES: RPM

PERMANENT DATUM: GL ELEVATION 8074 FT
 LOG MEASURED FROM: KB 22 FT ABOVE P.D.
 DRILL. MEAS. FROM: KB
 ELEVATIONS: KB 8096 FT, DF, GL 8074 FT

DATE	02-Dec-2014
RUN	1
TRIP	1
SERVICE ORDER	US092510
DEPTH DRILLER	8561 FT
DEPTH LOGGER	8501 FT
BOTTOM LOGGED INTERVAL	8491 FT
TOP LOGGED INTERVAL	22 FT
TIME STARTED	8:30
TIME FINISHED	12:00
OPERATOR RIG TIME	3.5 HOURS
TYPE OF FLUID IN HOLE	WATER
FLUID DENSITY	NA
FLUID SALINITY	NA
FLUID LEVEL	80 FT
LOGGED CEMENT TOP	NA
WELLHEAD PRESSURE	0 PSI
MAXIMUM HOLE DEVIATION	NA
NOMINAL LOGGING SPEED	65 FMIN
MAX. RECORDED TEMP.	256 DEGF
REFERENCE LOG	NA
REFERENCE LOG DATE	NA
EQUIP. NO.	HL-6670
LOCATION	GRAND JCT.
RECORDED BY	RENEAU / 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		8642 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
4.5 IN	11.6 LB/F	I-80	0 FT	8642 FT

REMARKS

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

Logged with zero PSI at wellhead.

BHT = 256 degF

SJ = 5277' - 5299'
 SJ = 7505' - 7527'

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: Tue Dec 2 12:44:47 2014

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH092510/n012e03.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 33.000 ft BOTTOM DEPTH: 8505.939 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*)	185	us	TOP	BOTTOM
	AMP WINDOW START (fgp2*)	185	us	"	"
	AMP WINDOW START (fgp3*)	185	us	"	"
	AMP WINDOW START (fgp4*)	185	us	"	"
	AMP WINDOW START (fgp5*)	185	us	"	"
	AMP WINDOW START (fgp6*)	185	us	"	"
	AMP WINDOW START (fgp7*)	185	us	"	"
	AMP WINDOW START (fgp8*)	185	us	"	"
	AMP WINDOW START (fgpn*)	185	us	"	"
	AMP WINDOW LENGTH	25	us	"	"
TRAVEL TIME WINDOW (NEAR)	TT WINDOW START (ttn*)	173	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*)	-69	us	"	"
	TOOL DELAY (str2*)	-69	us	"	"
	TOOL DELAY (str3*)	-69	us	"	"
	TOOL DELAY (str4*)	-69	us	"	"
	TOOL DELAY (str5*)	-69	us	"	"
	TOOL DELAY (str6*)	-69	us	"	"
	TOOL DELAY (str7*)	-69	us	"	"
	TOOL DELAY (str8*)	-69	us	"	"
	TOOL DELAY (strn*)	-69	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

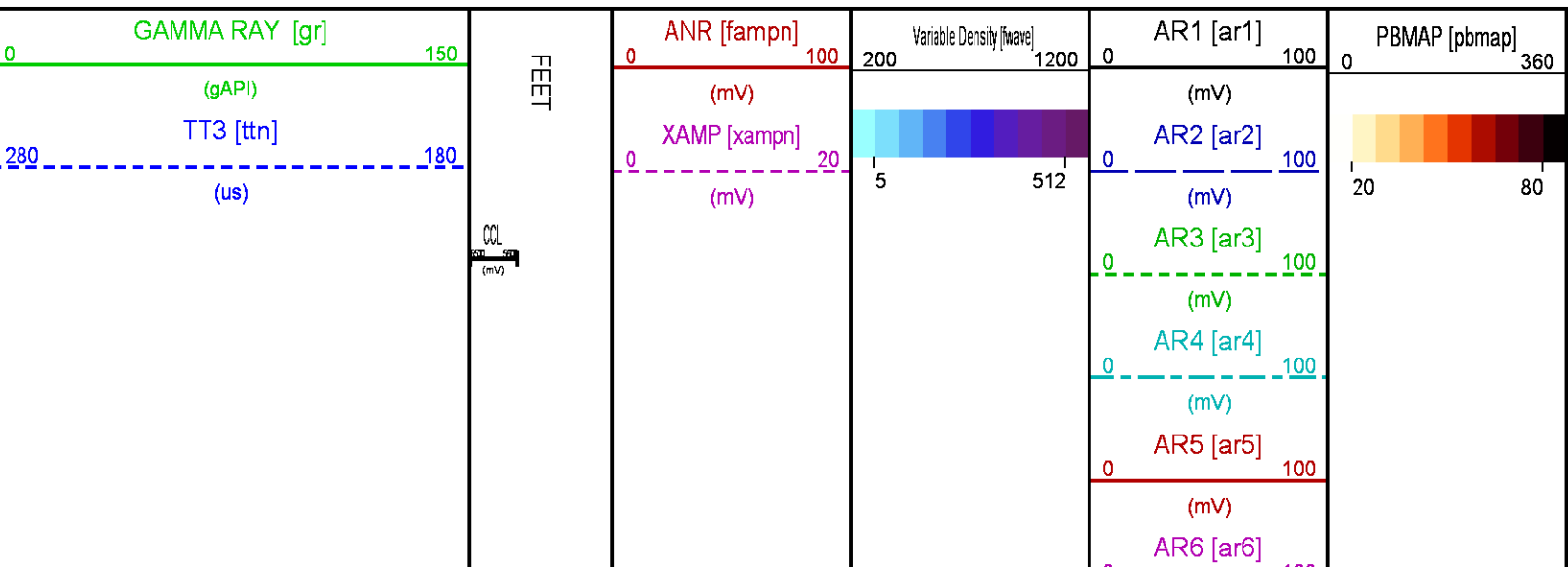
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:AR1	Dec 2 09:43:58 2014	FIXED GATE AMPLITUDE T-R1
F1:AR2	Dec 2 09:43:58 2014	FIXED GATE AMPLITUDE T-R2
F1:AR3	Dec 2 09:43:58 2014	FIXED GATE AMPLITUDE T-R3
F1:AR4	Dec 2 09:43:58 2014	FIXED GATE AMPLITUDE T-R4
F1:AR5	Dec 2 09:43:58 2014	FIXED GATE AMPLITUDE T-R5
F1:AR6	Dec 2 09:43:58 2014	FIXED GATE AMPLITUDE T-R6
F1:AR7	Dec 2 09:43:58 2014	FIXED GATE AMPLITUDE T-R7
F1:AR8	Dec 2 09:43:58 2014	FIXED GATE AMPLITUDE T-R8
F1:CCL	Dec 2 09:43:58 2014	CASING COLLAR LOCATOR
F1:FAMPN	Dec 2 09:43:58 2014	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Dec 2 09:43:58 2014	FAR WAVE FORM
F1:GR	Dec 2 09:43:58 2014	GAMMA RAY
F1:PBMAP	Dec 2 09:43:58 2014	PERCENT BOND CEMENT MAP
F1:TTN	Dec 2 09:43:58 2014	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Dec 2 09:43:58 2014	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

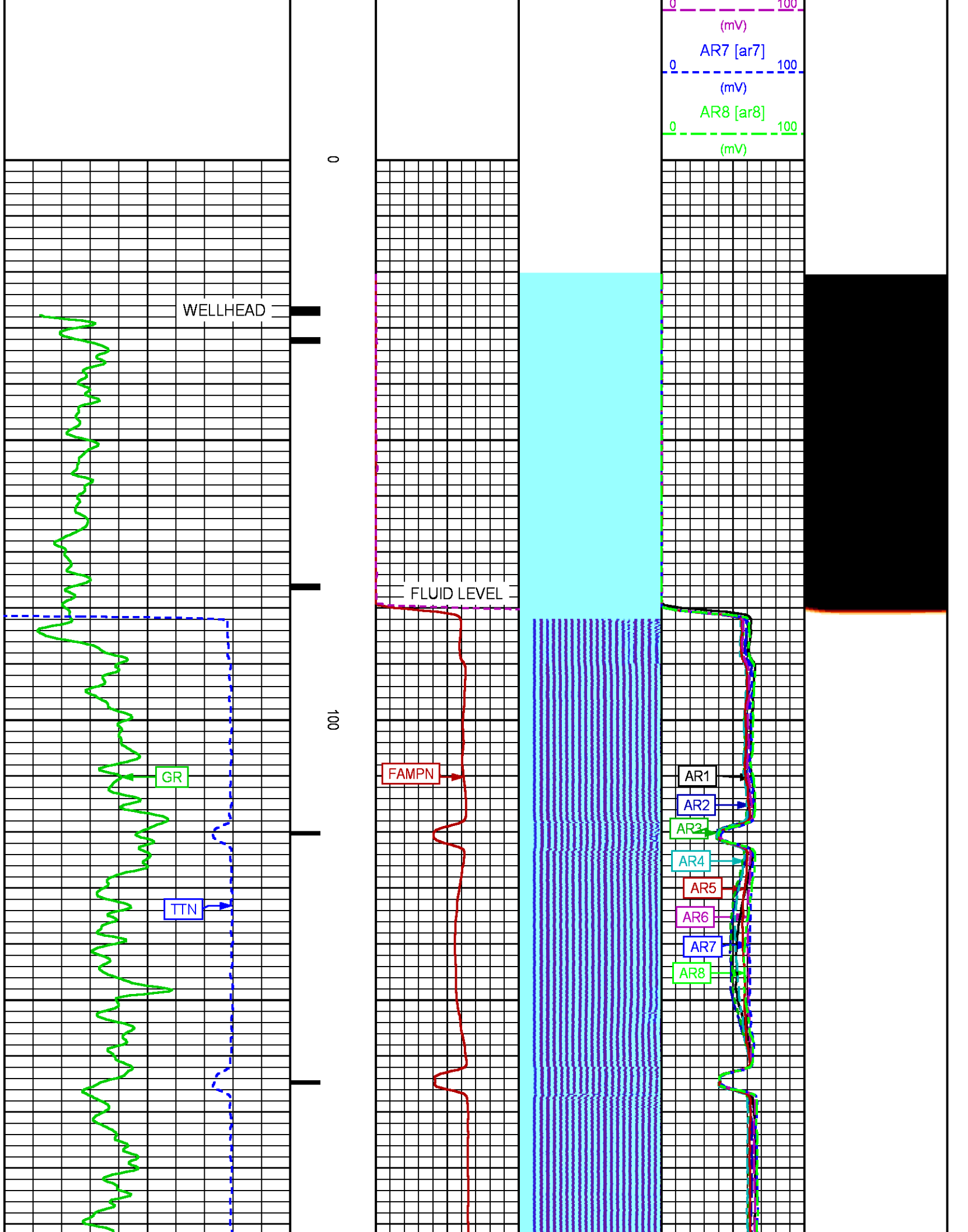
CURVE MEASURE POINT OFFSET

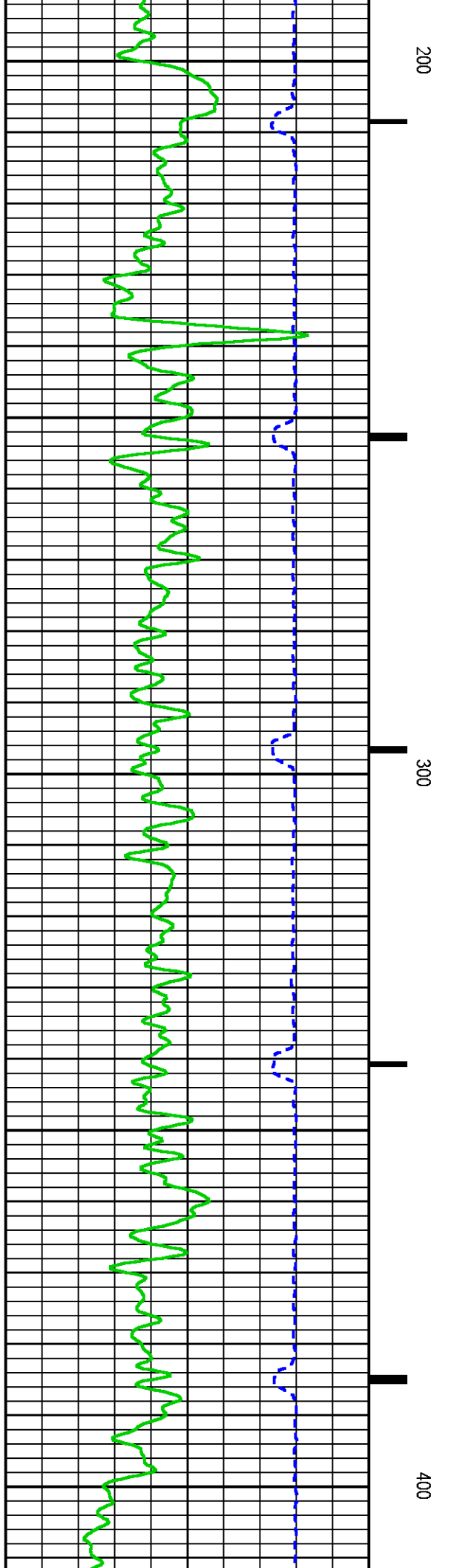
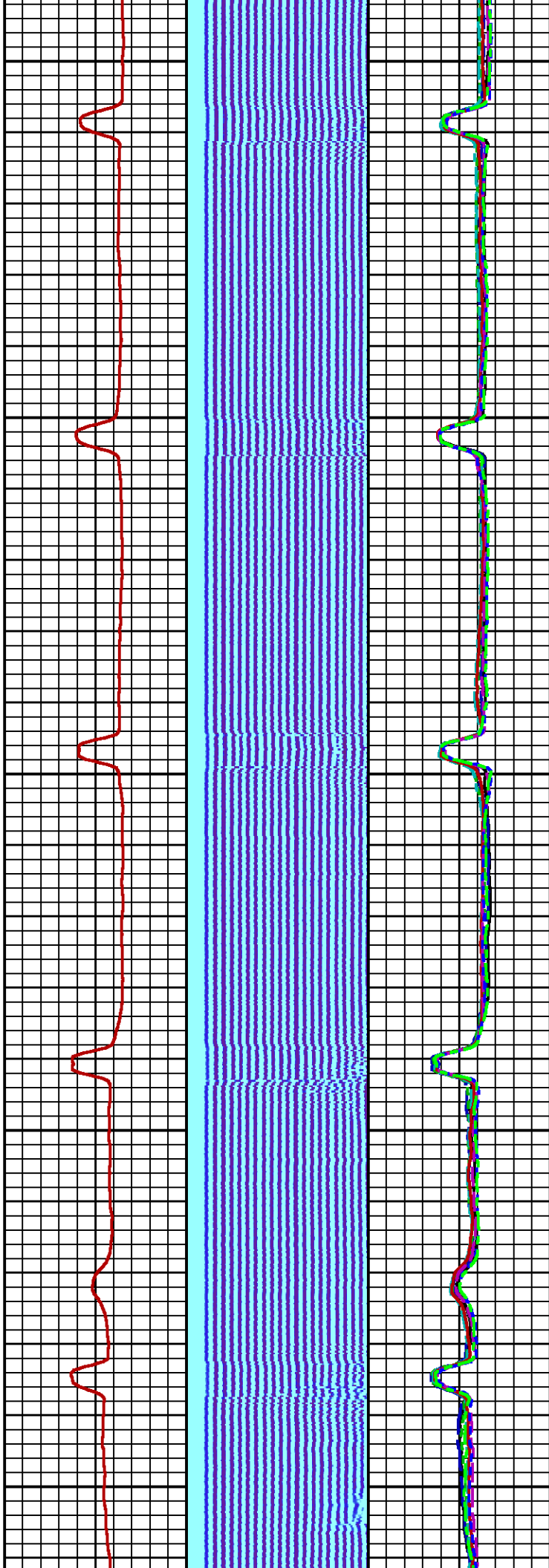
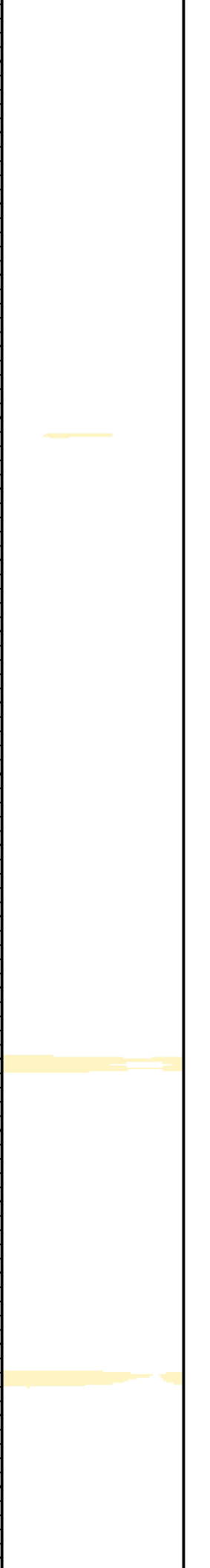
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
AR1	13.75	AR5	13.75	CCL	8.50	XAMPN	13.75
AR2	13.75	AR6	13.75	FAMPN	13.75		
AR3	13.75	AR7	13.75	GR	6.50		
AR4	13.75	AR8	13.75	TTN	13.75		

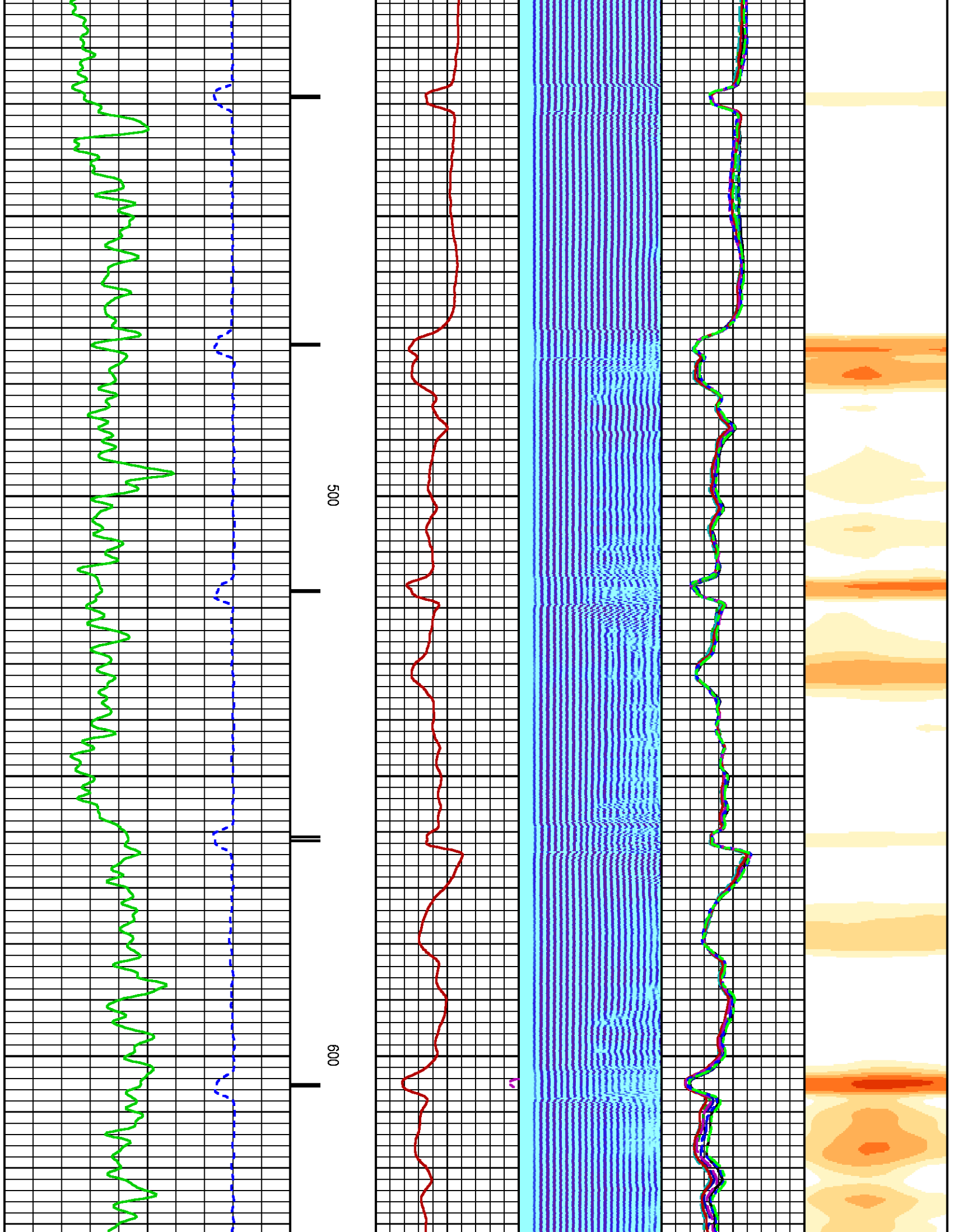
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Plot Interval : 0 - 8506 Feet

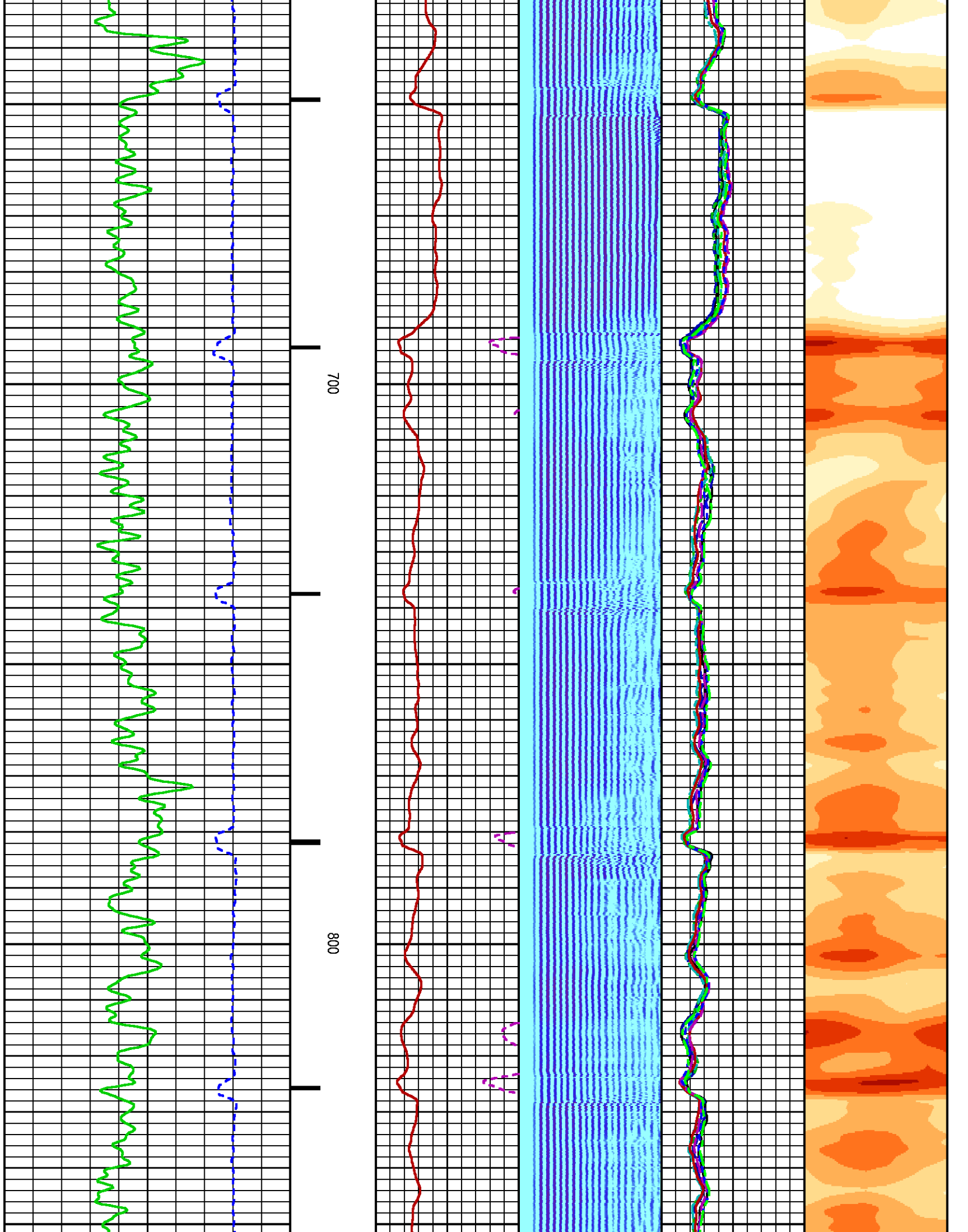
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Created On : Dec 2 09:43:58 2014
Company : LARAMIE ENERGY
Well : SUP SHEP FEDERAL 25-12W
Field : VEGA
File Interval : 19.25 - 8505.75 Feet
OCT : n012e

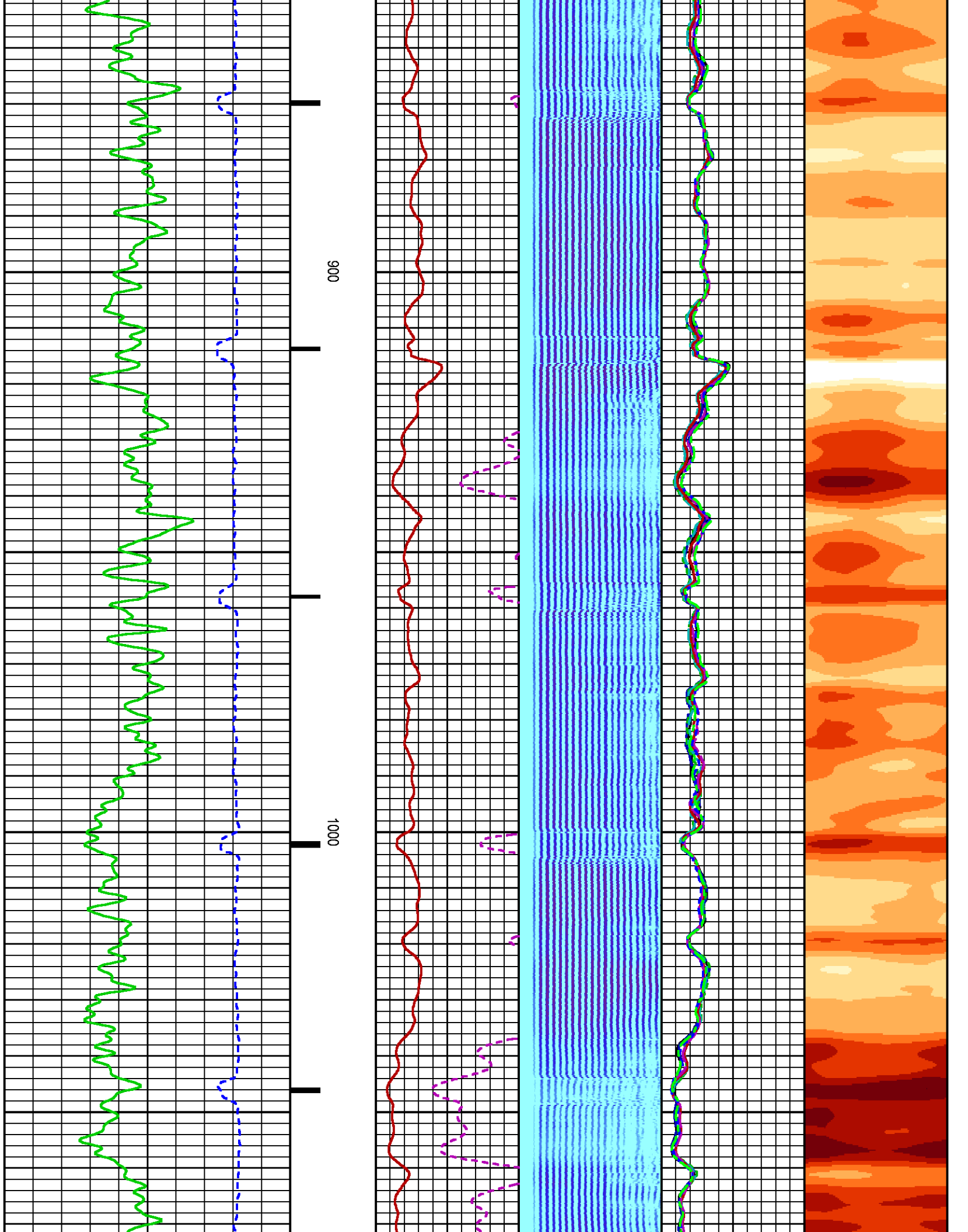


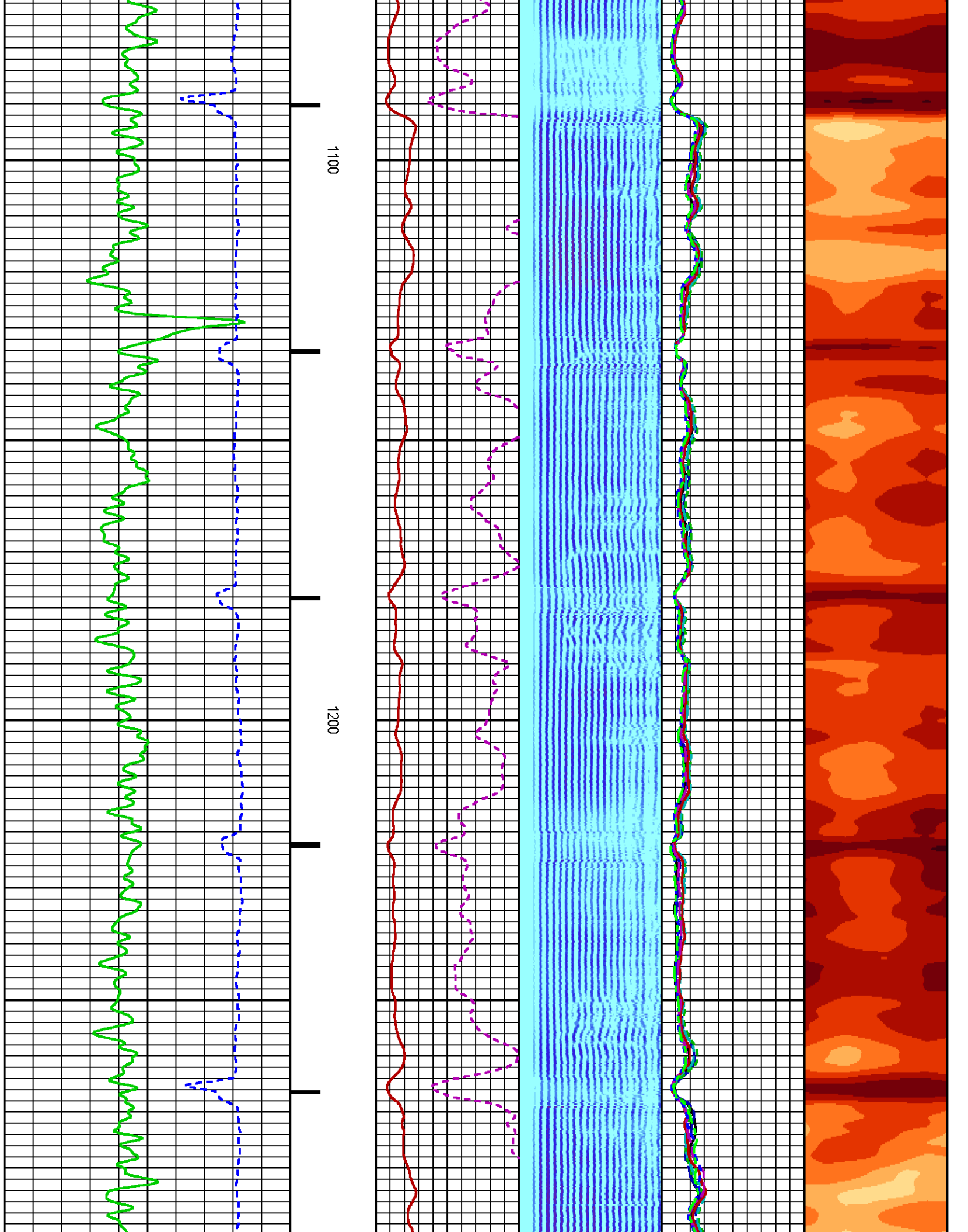


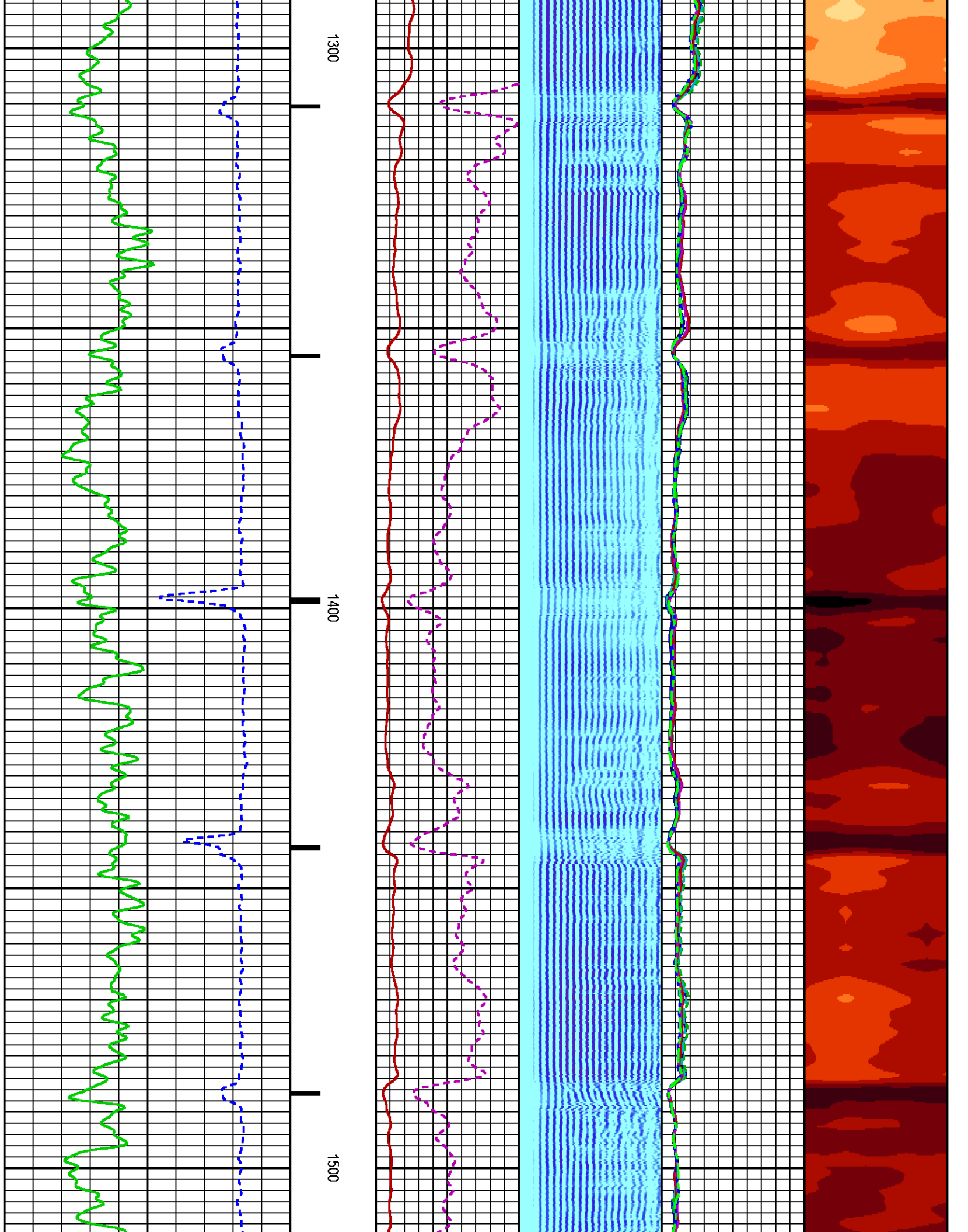


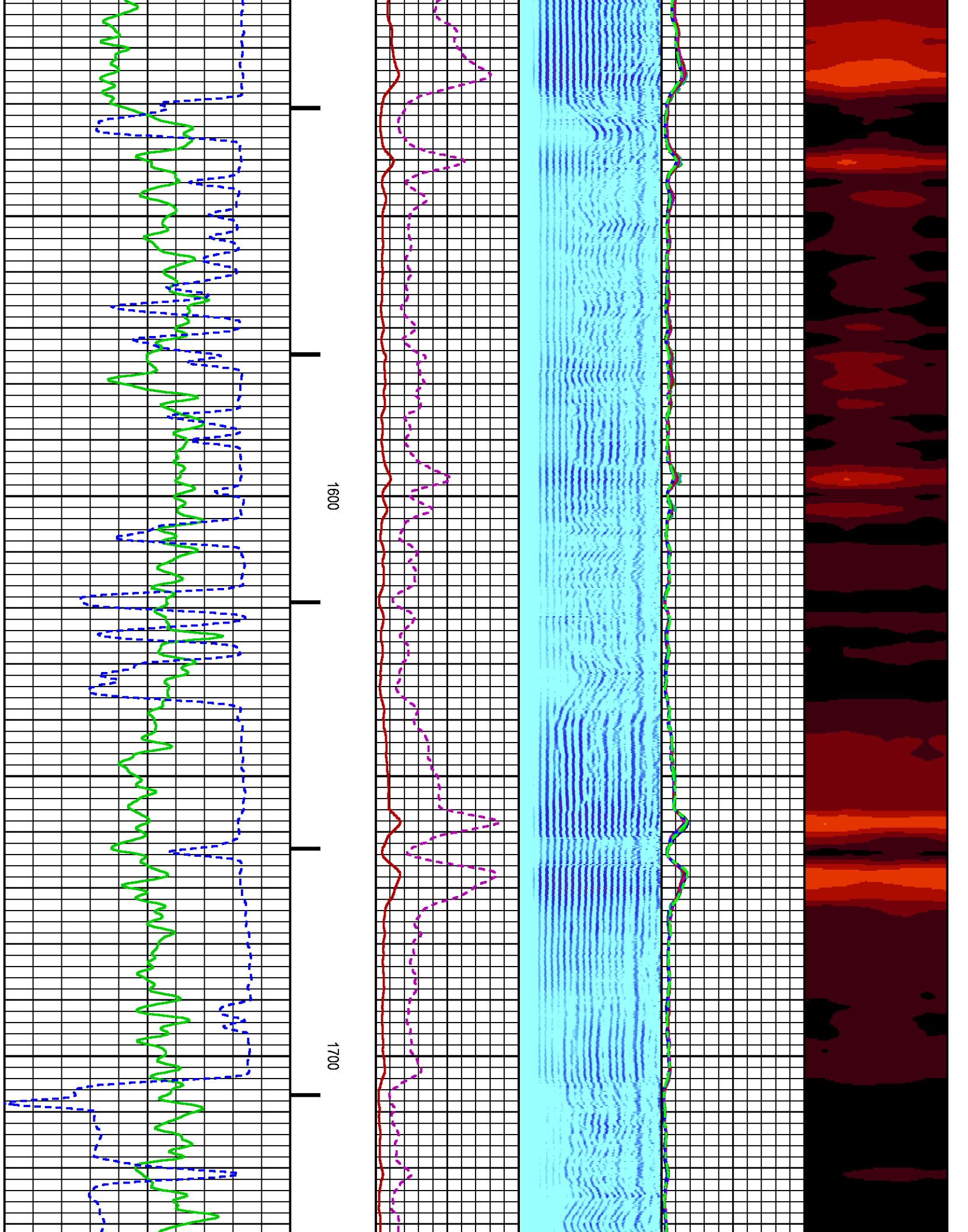


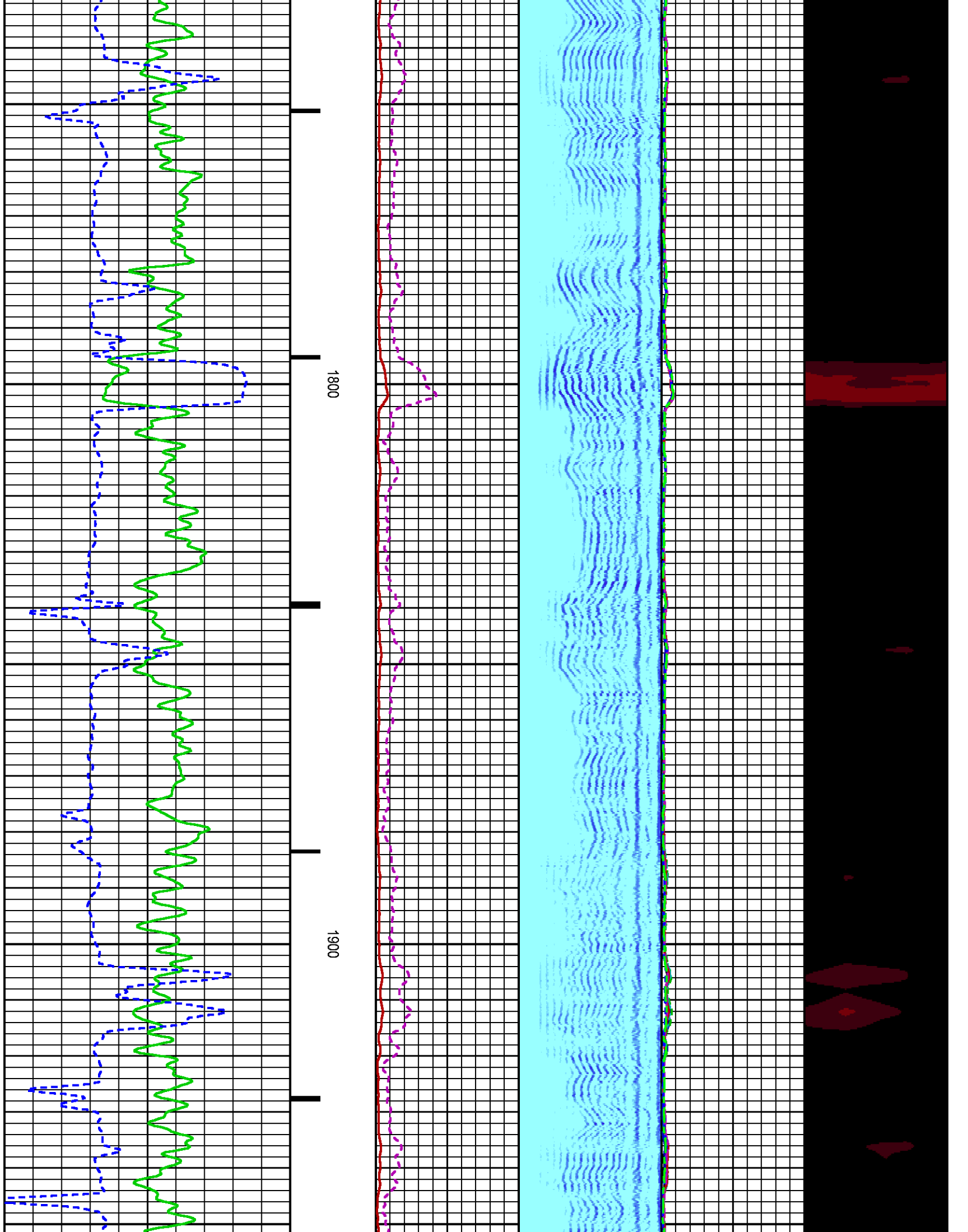


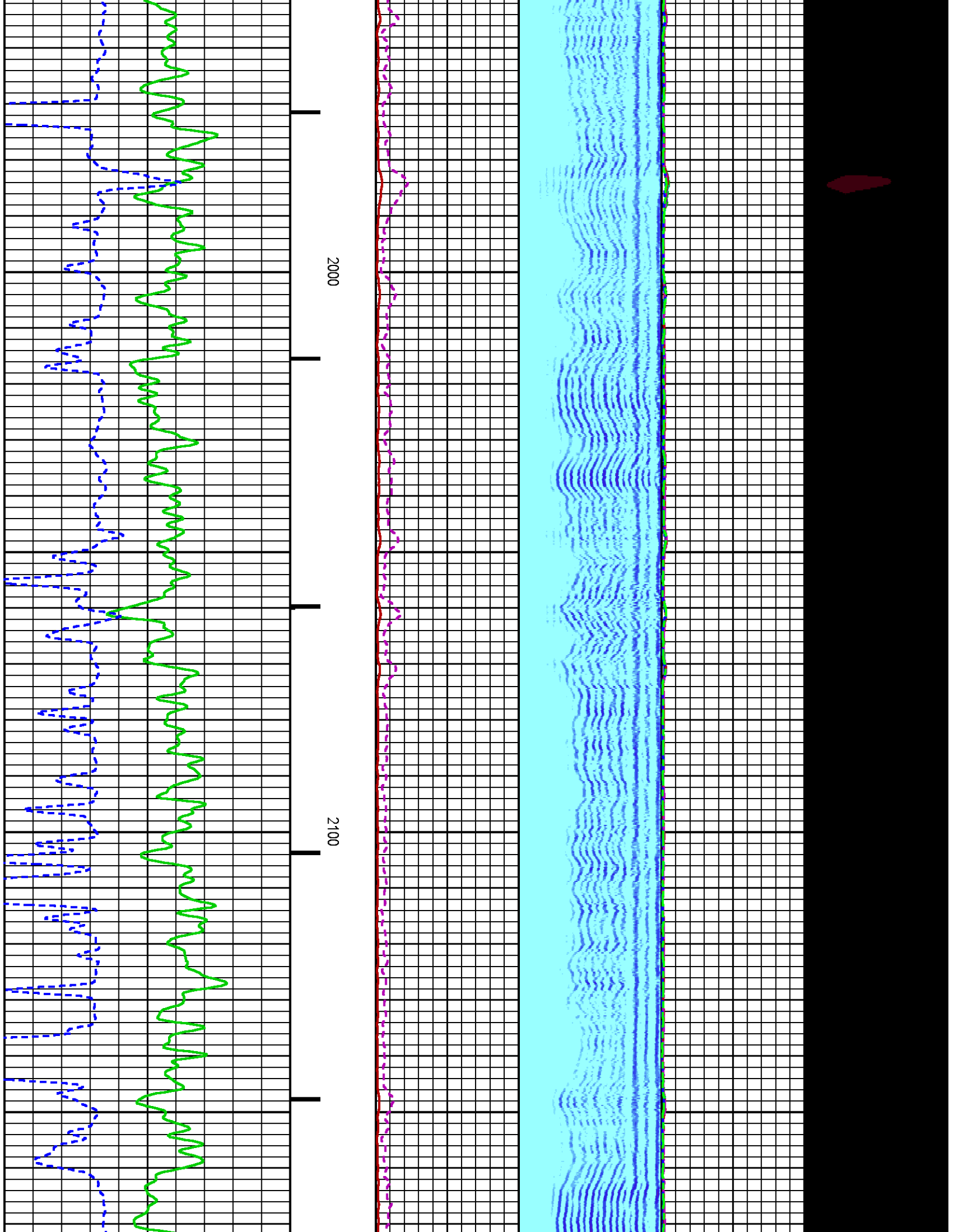


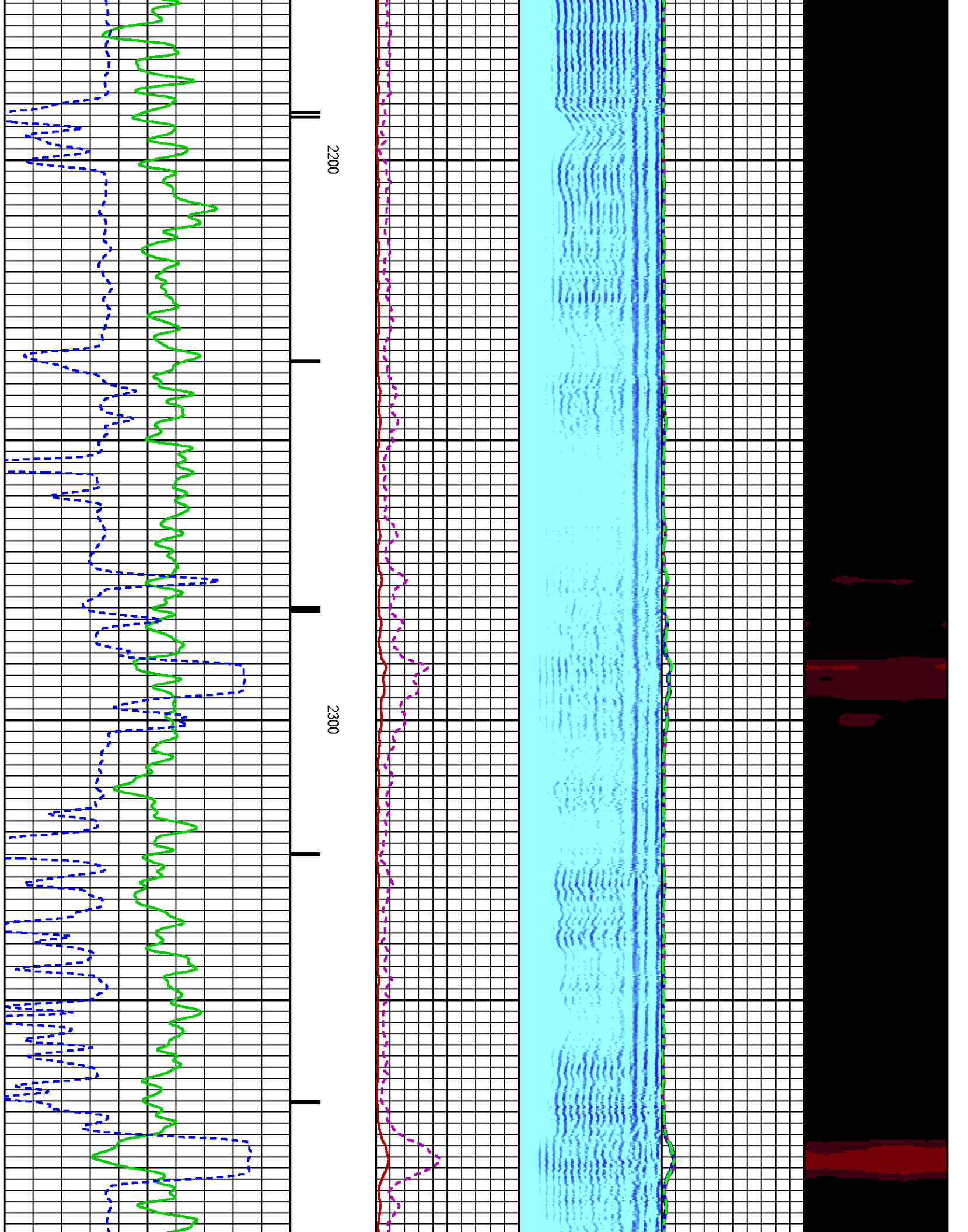


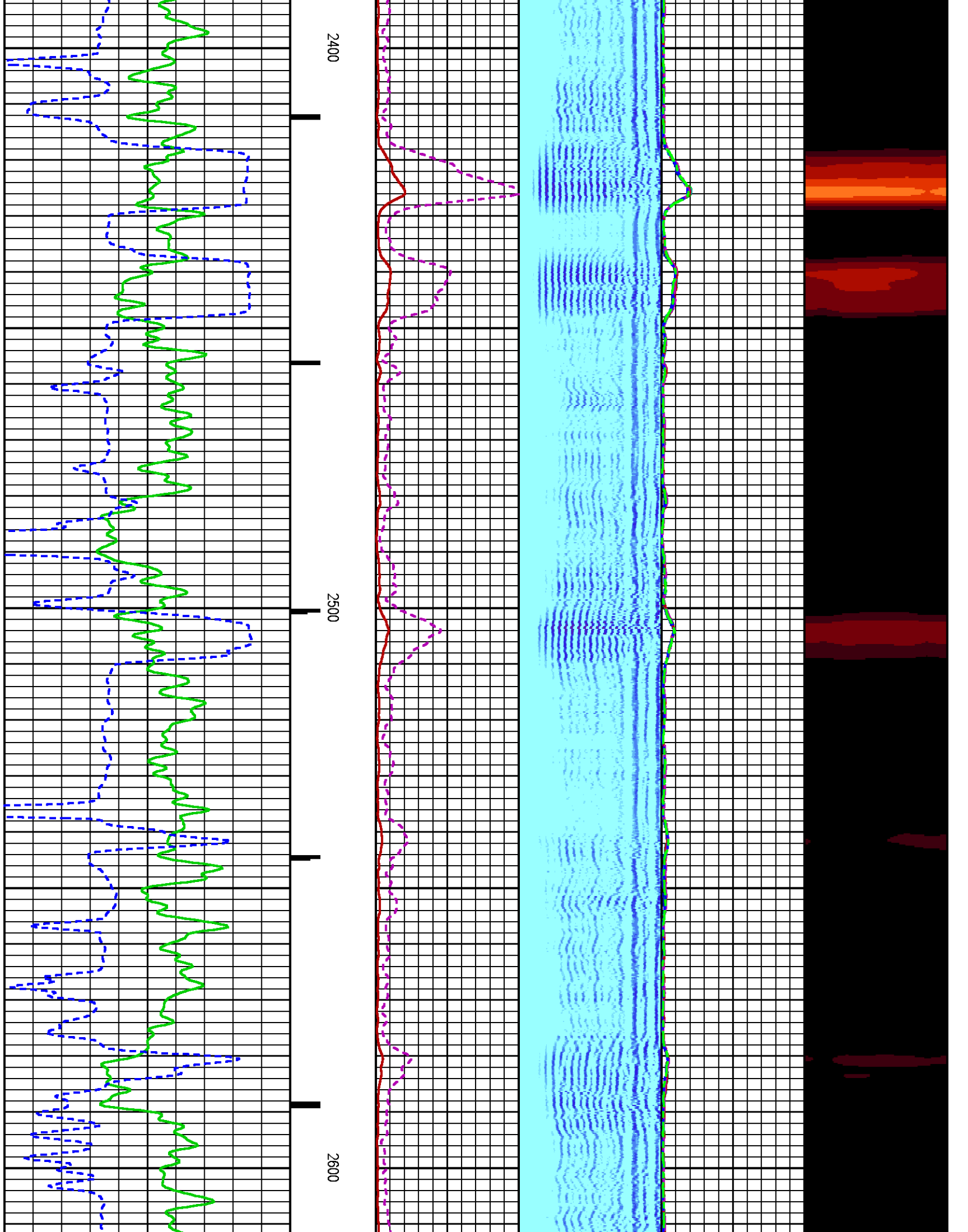


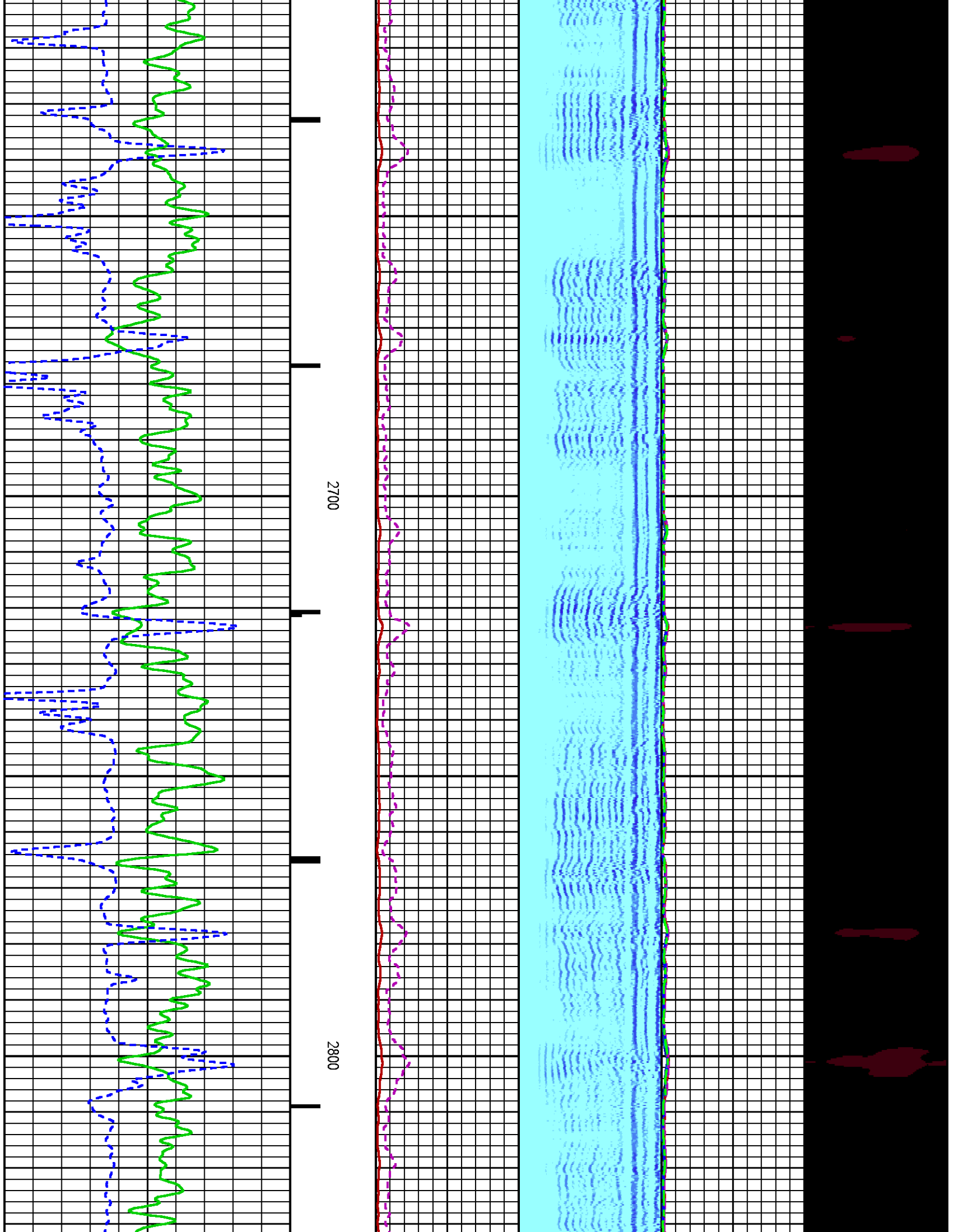


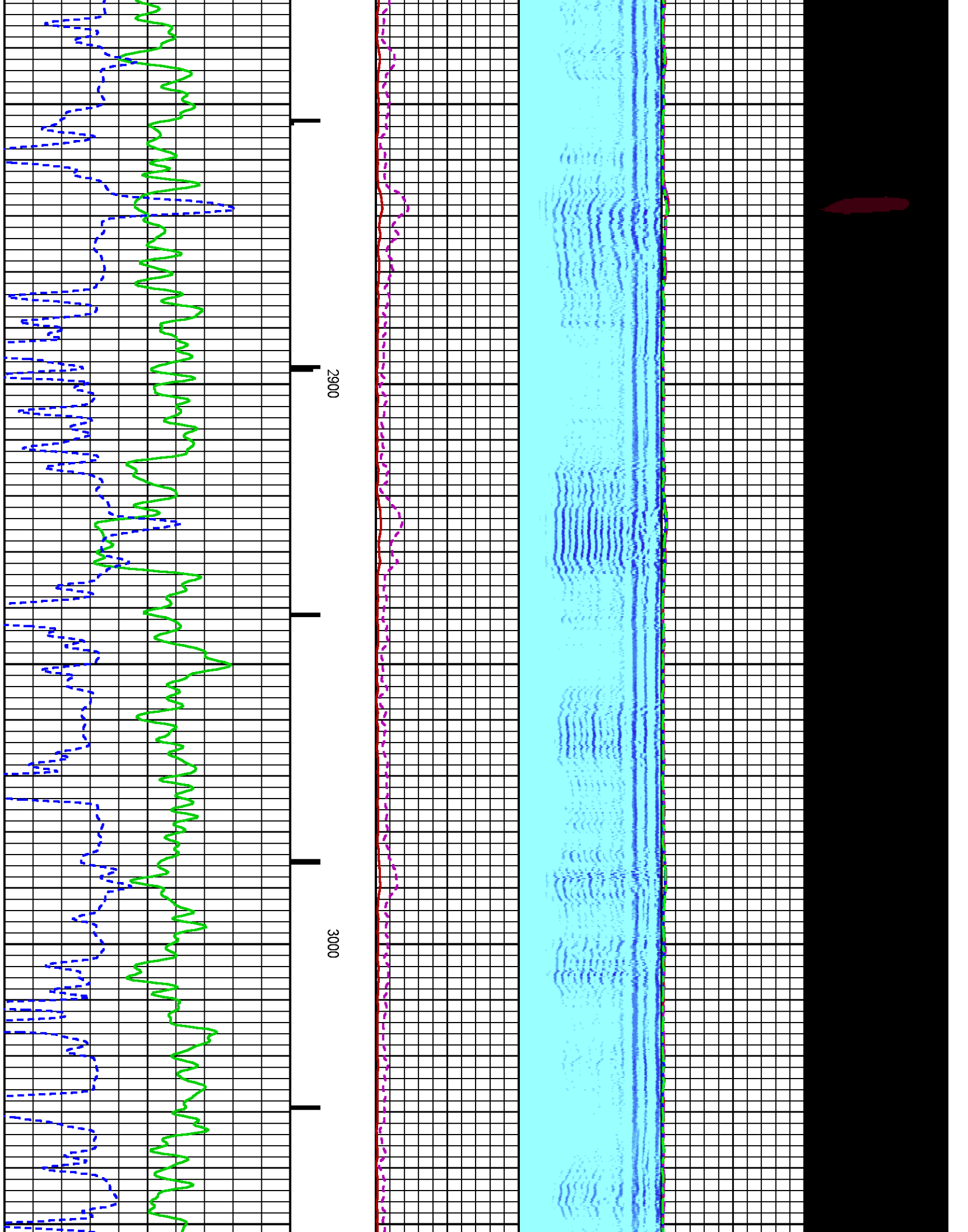


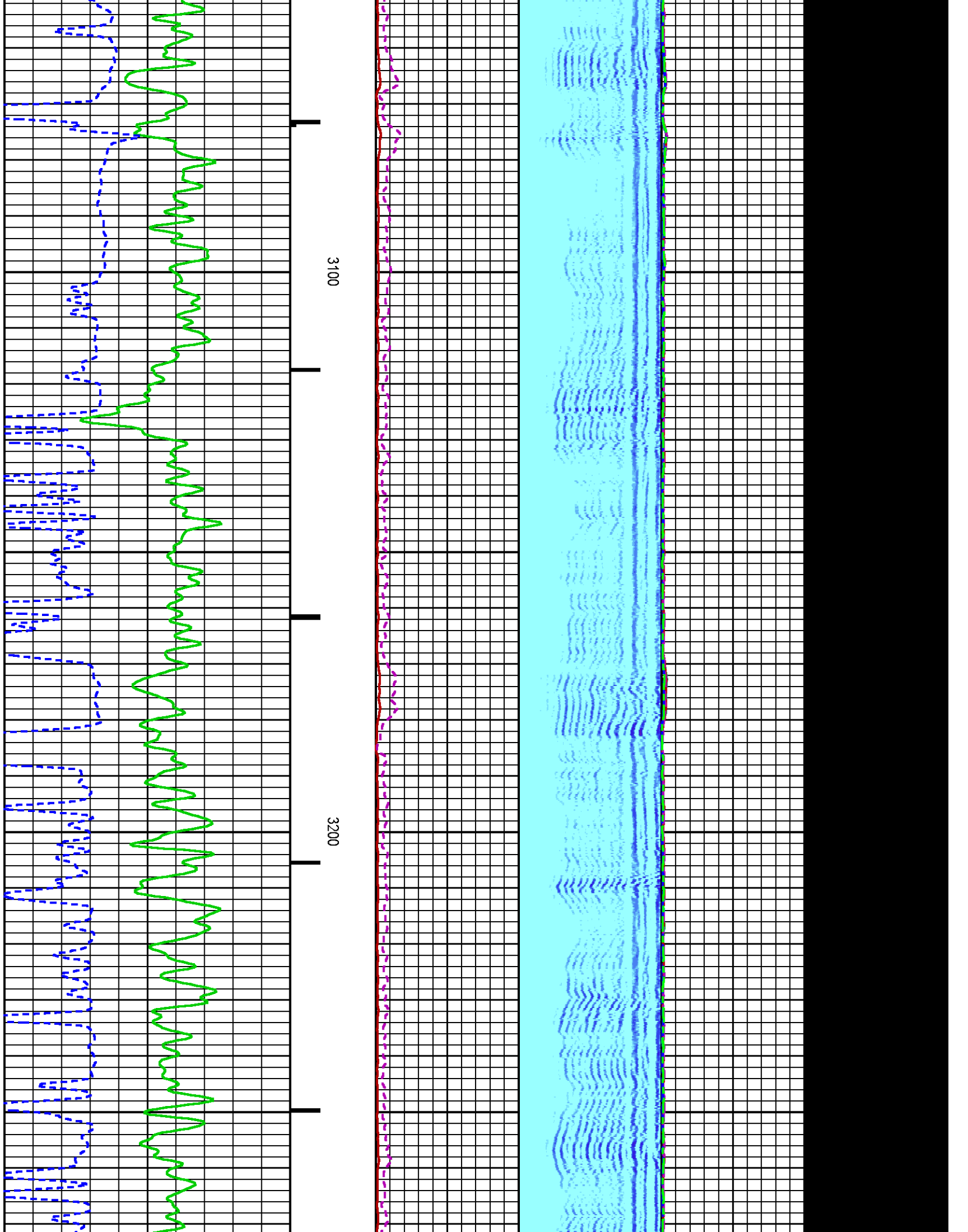


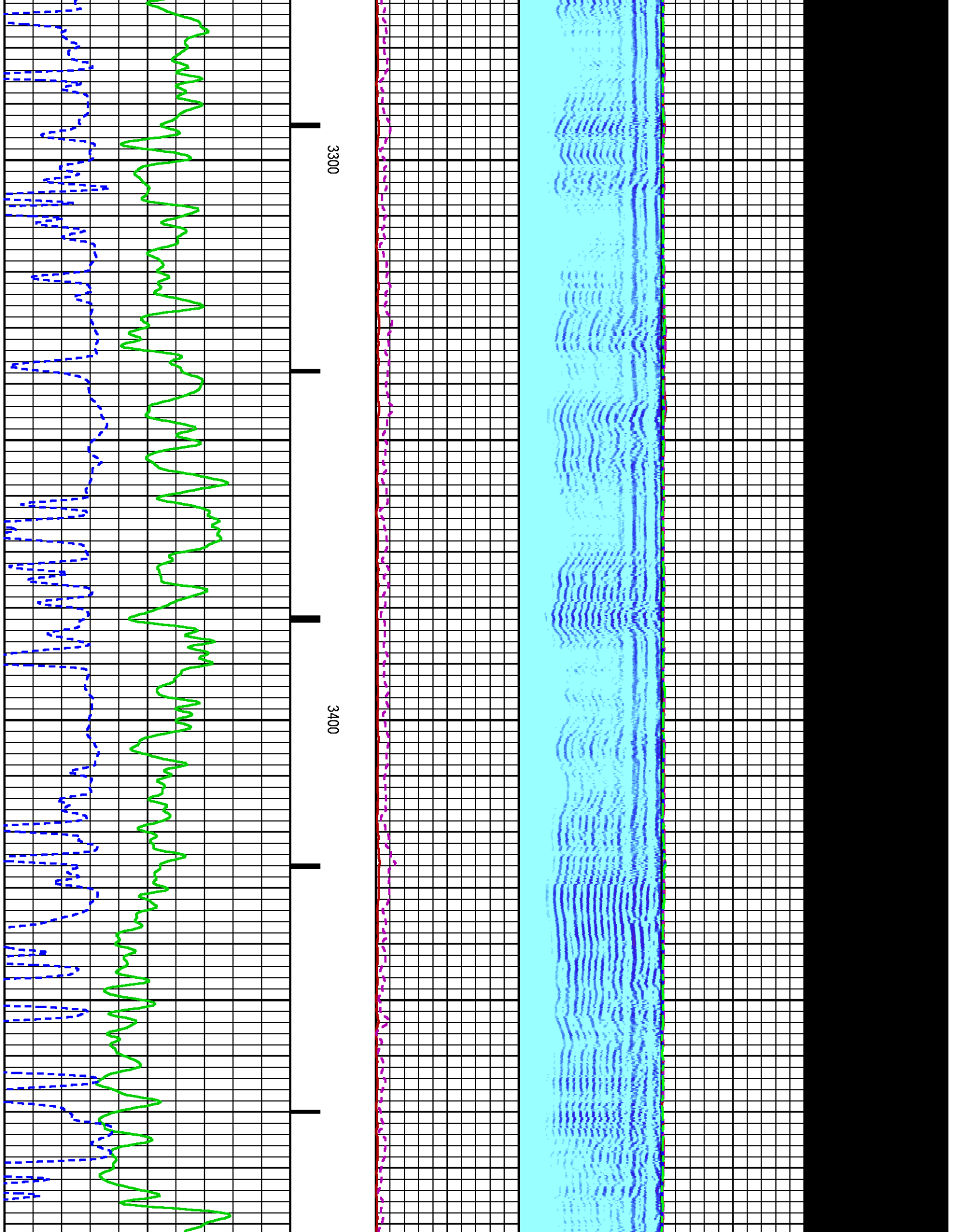


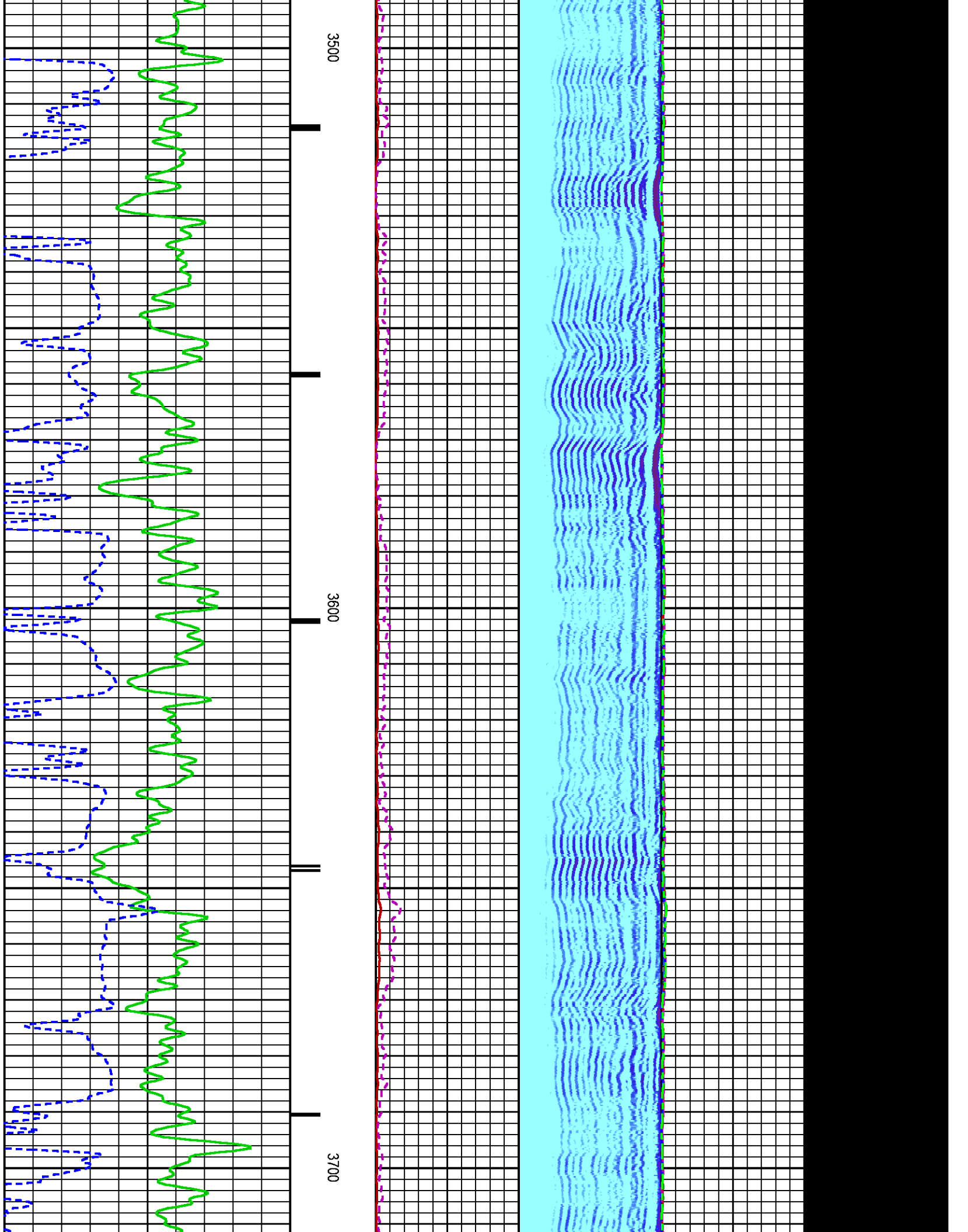


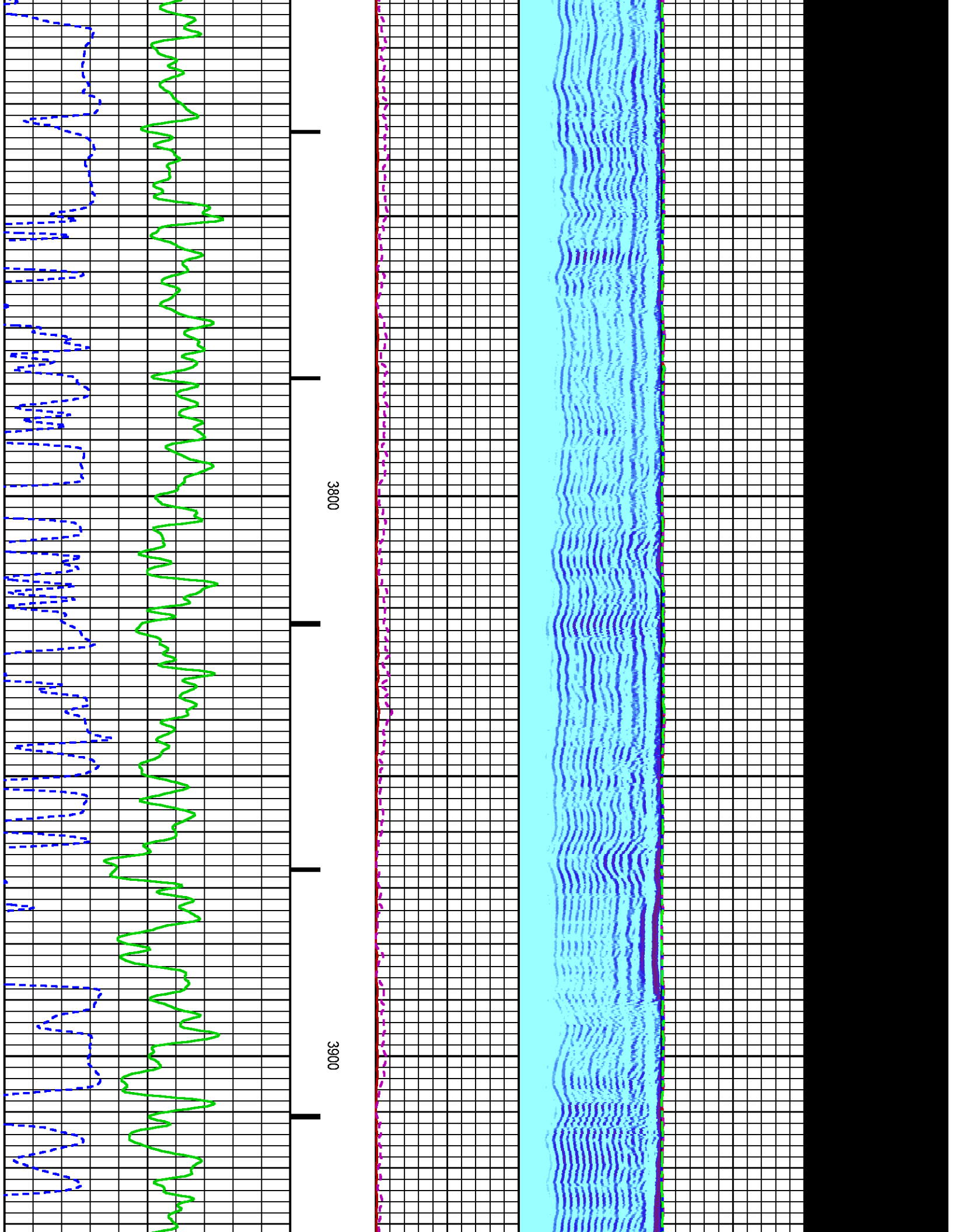


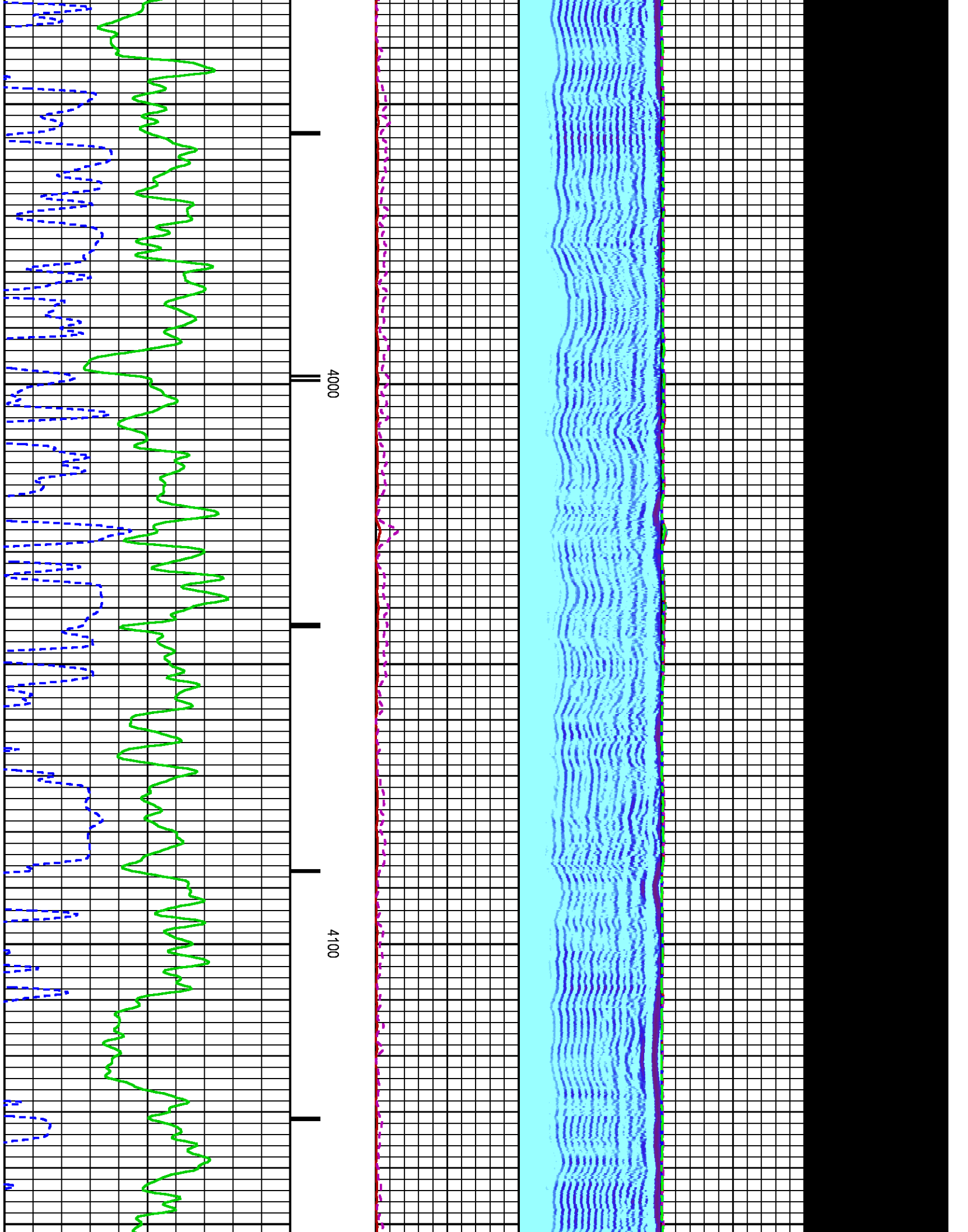


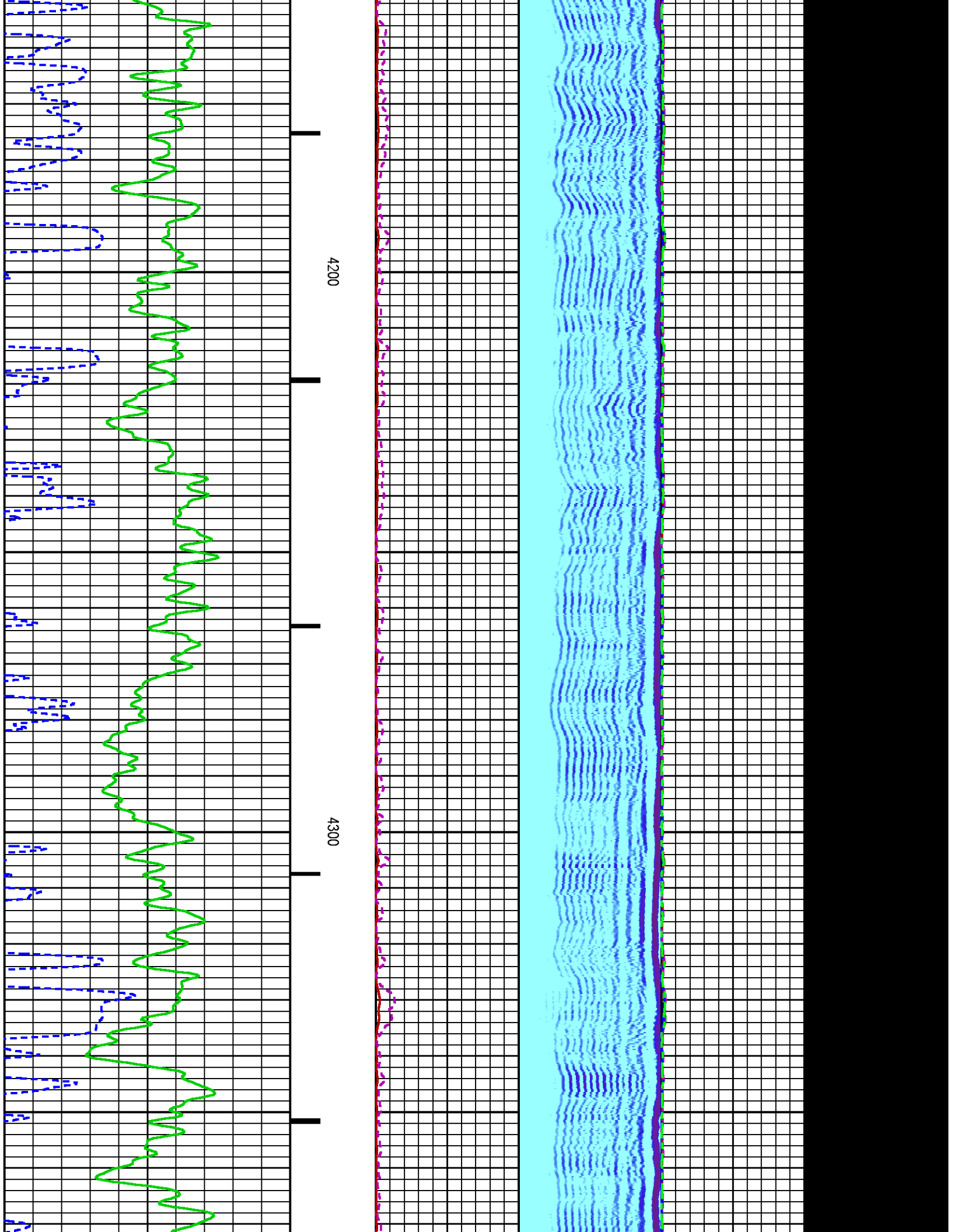


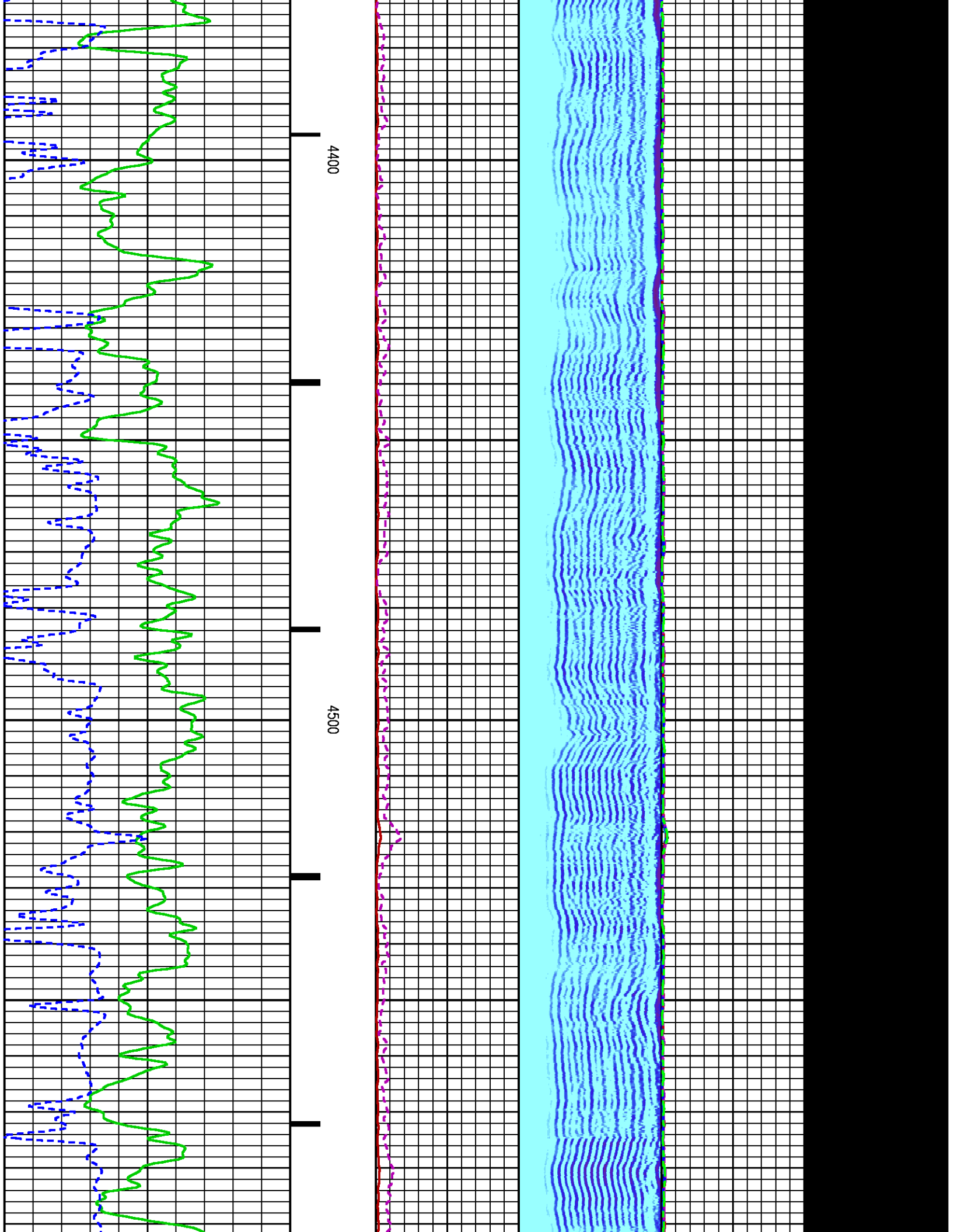


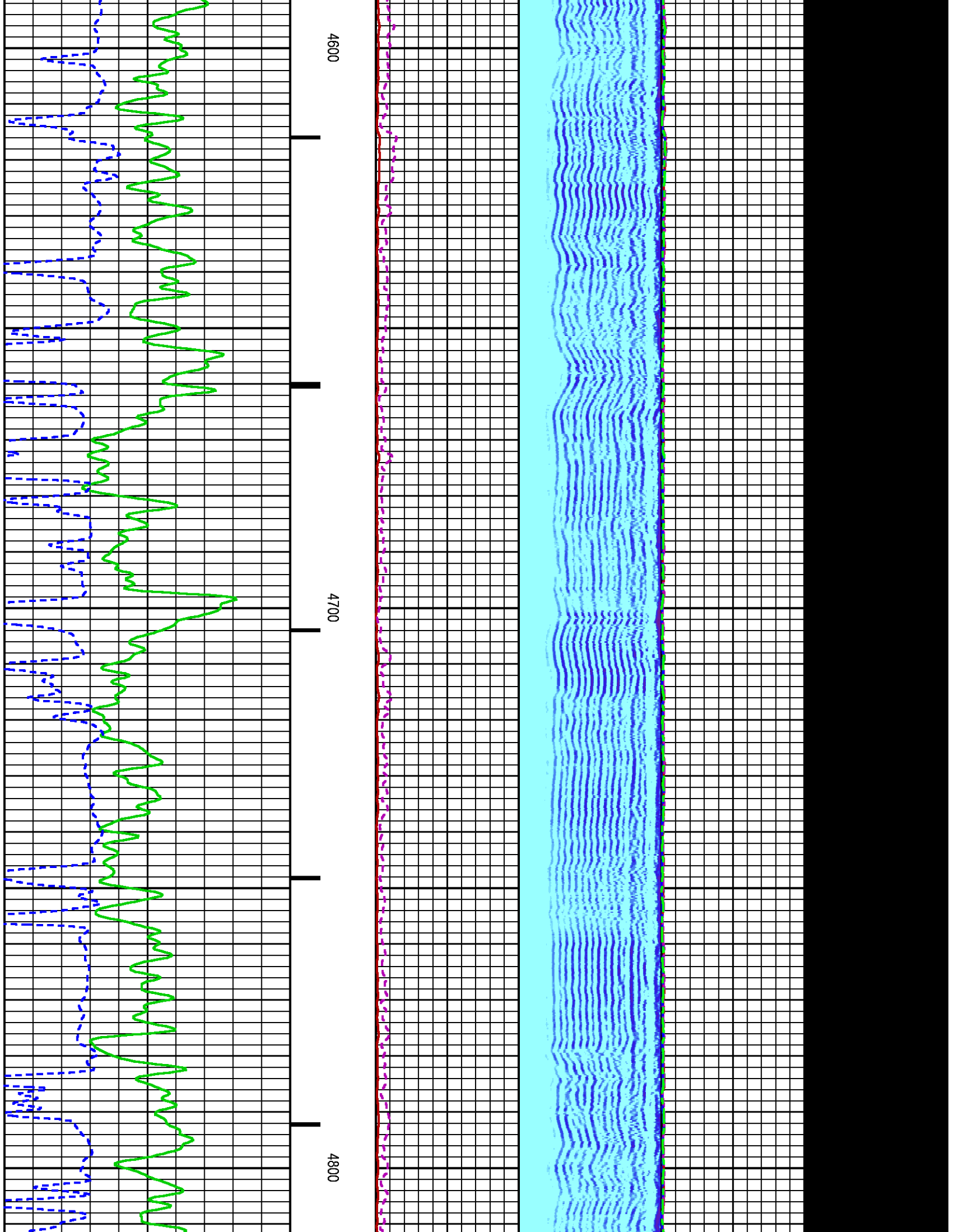


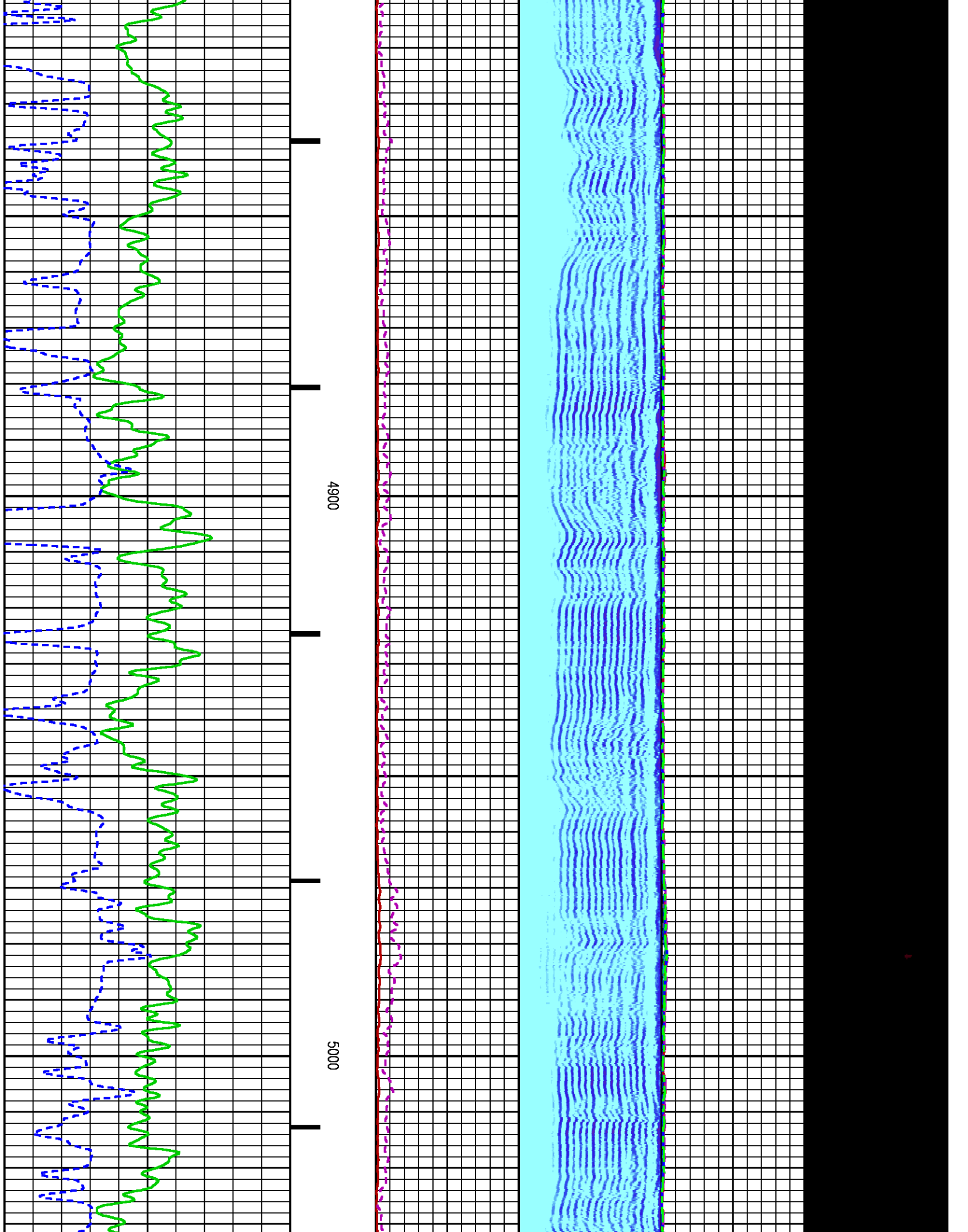


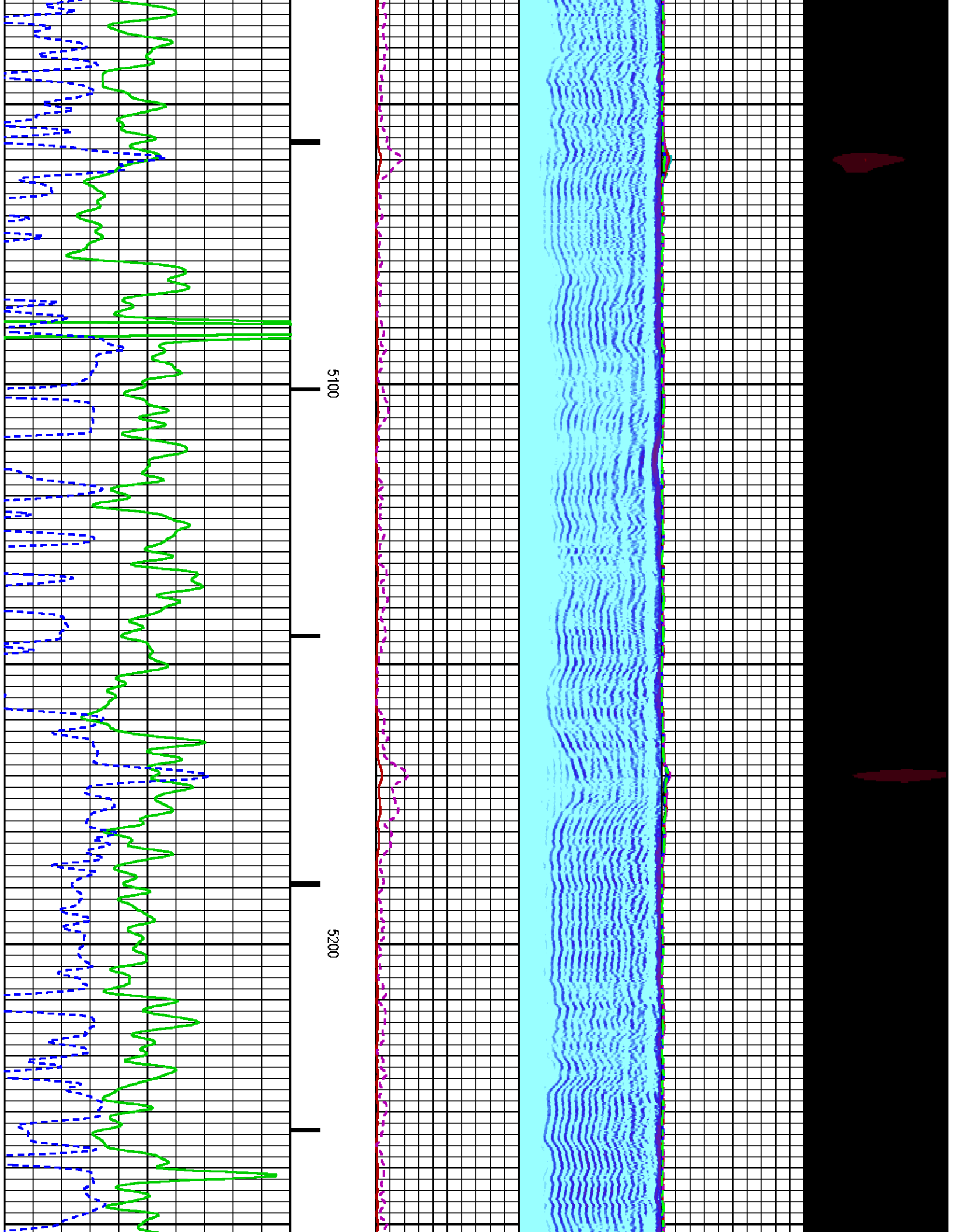


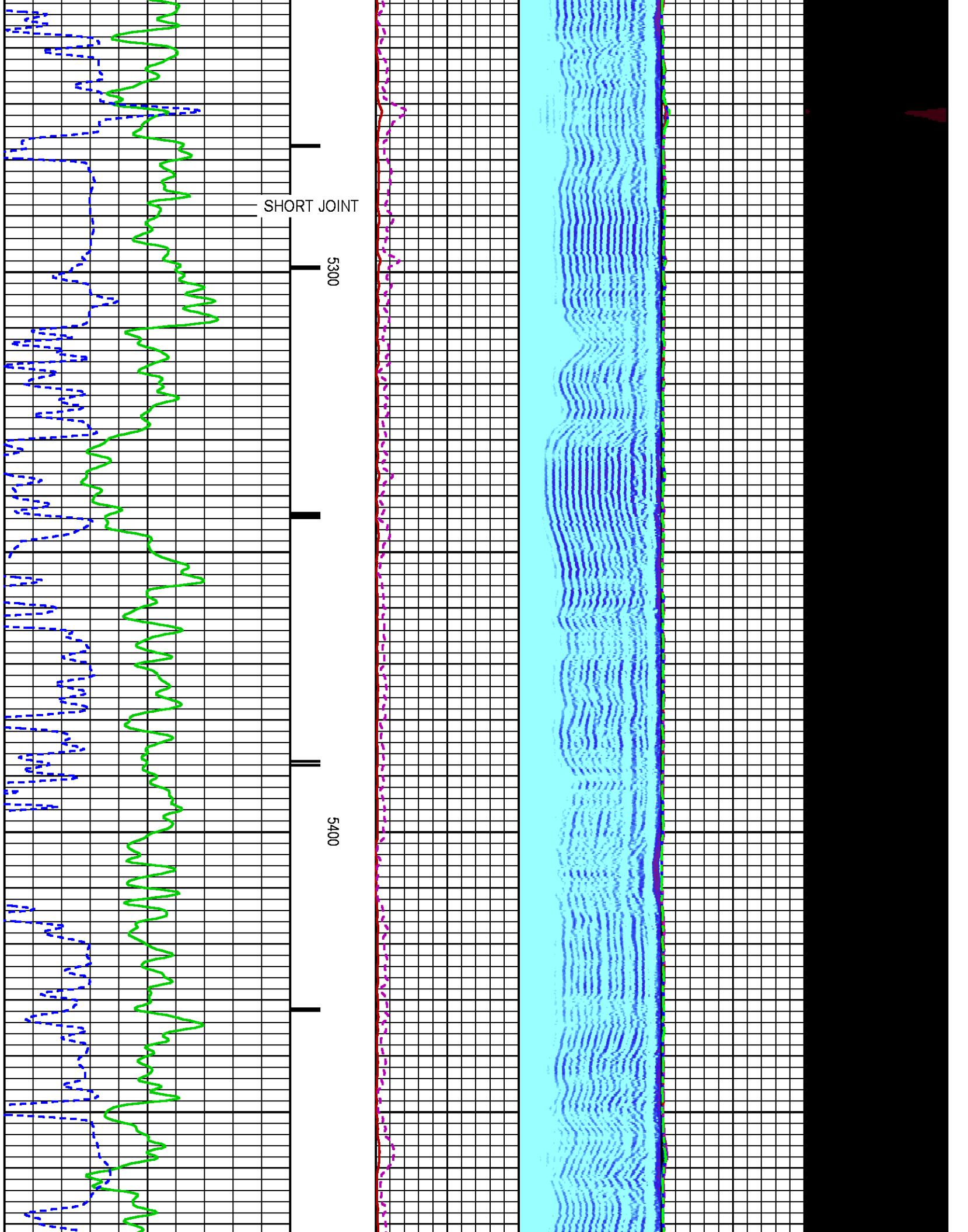


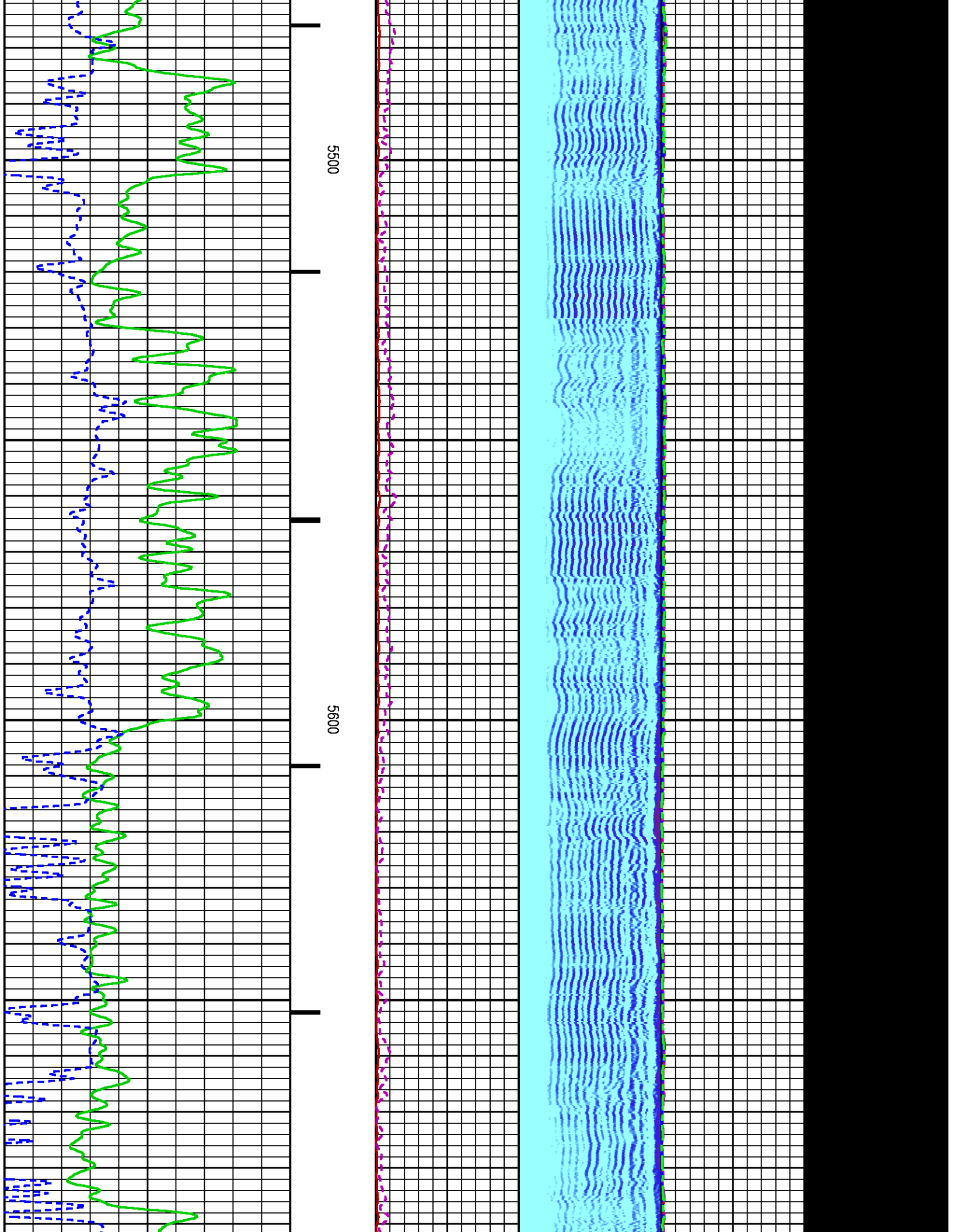


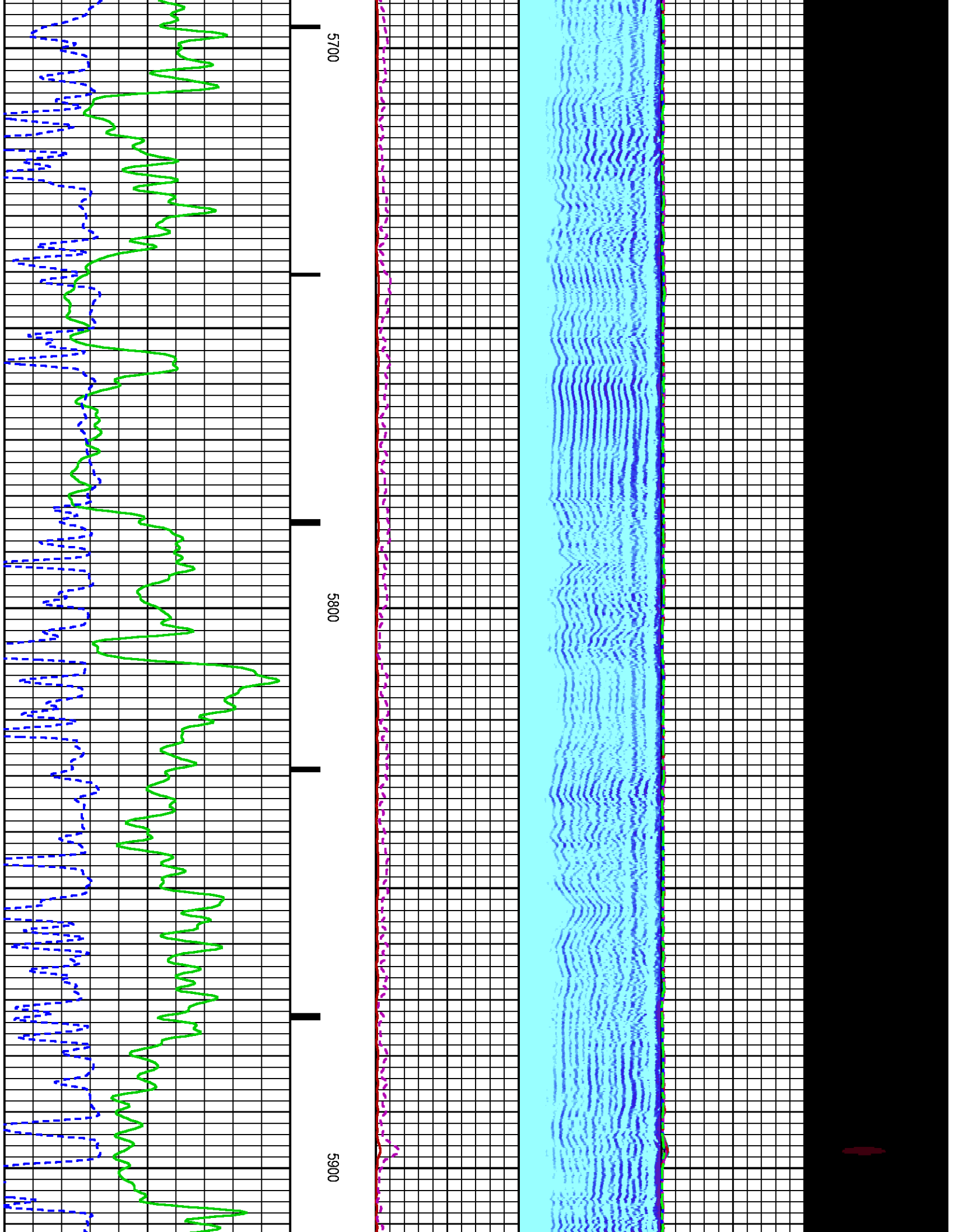


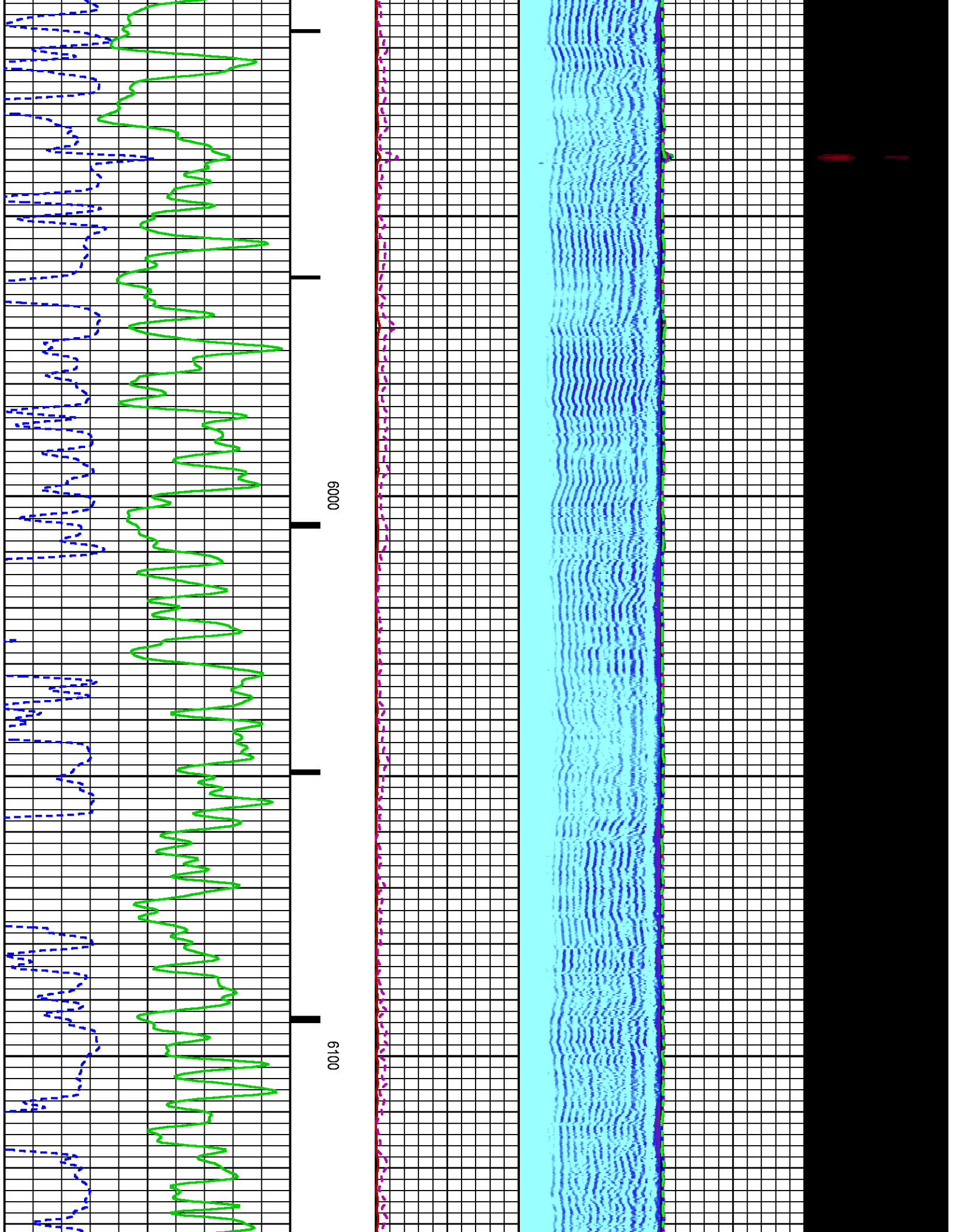


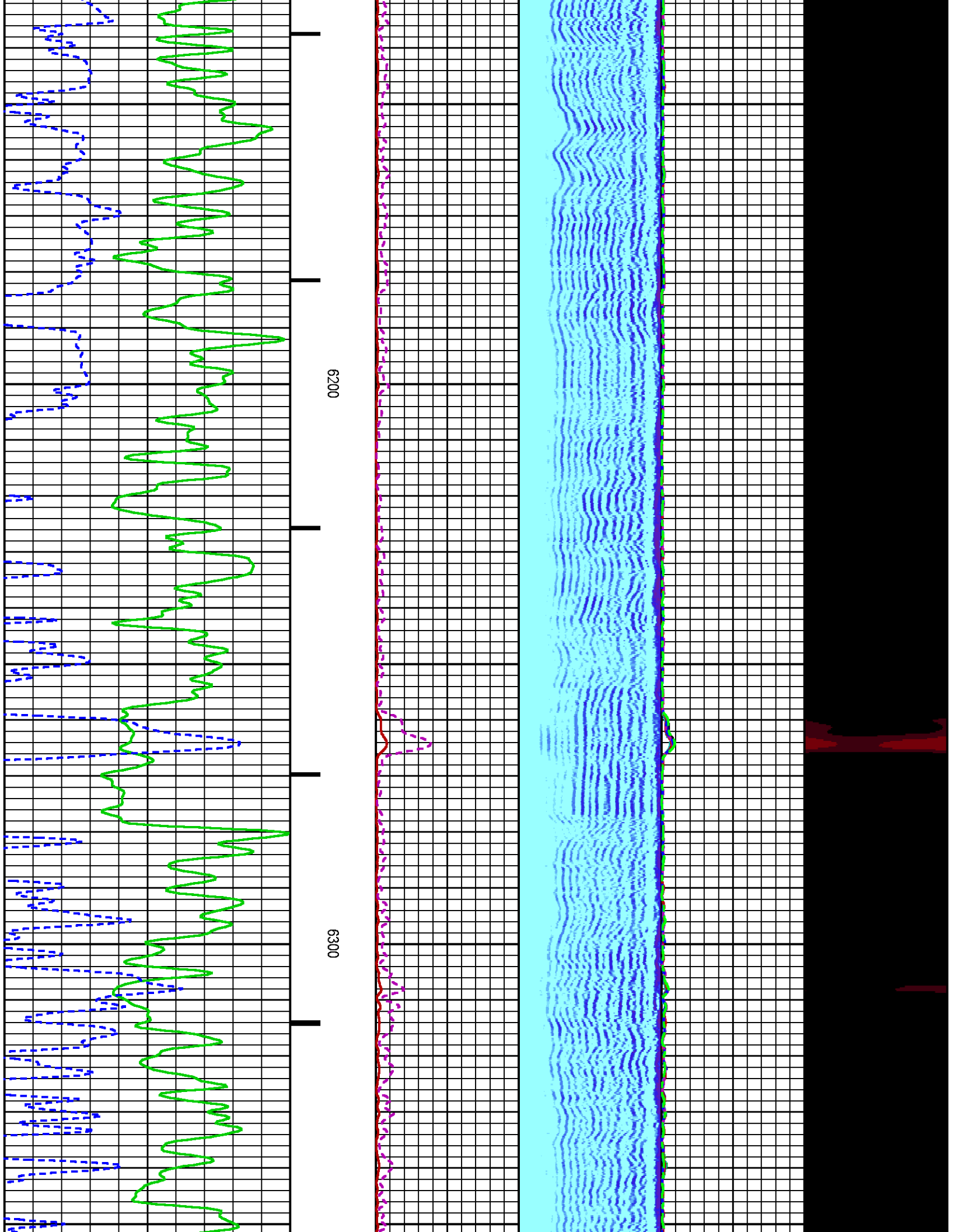


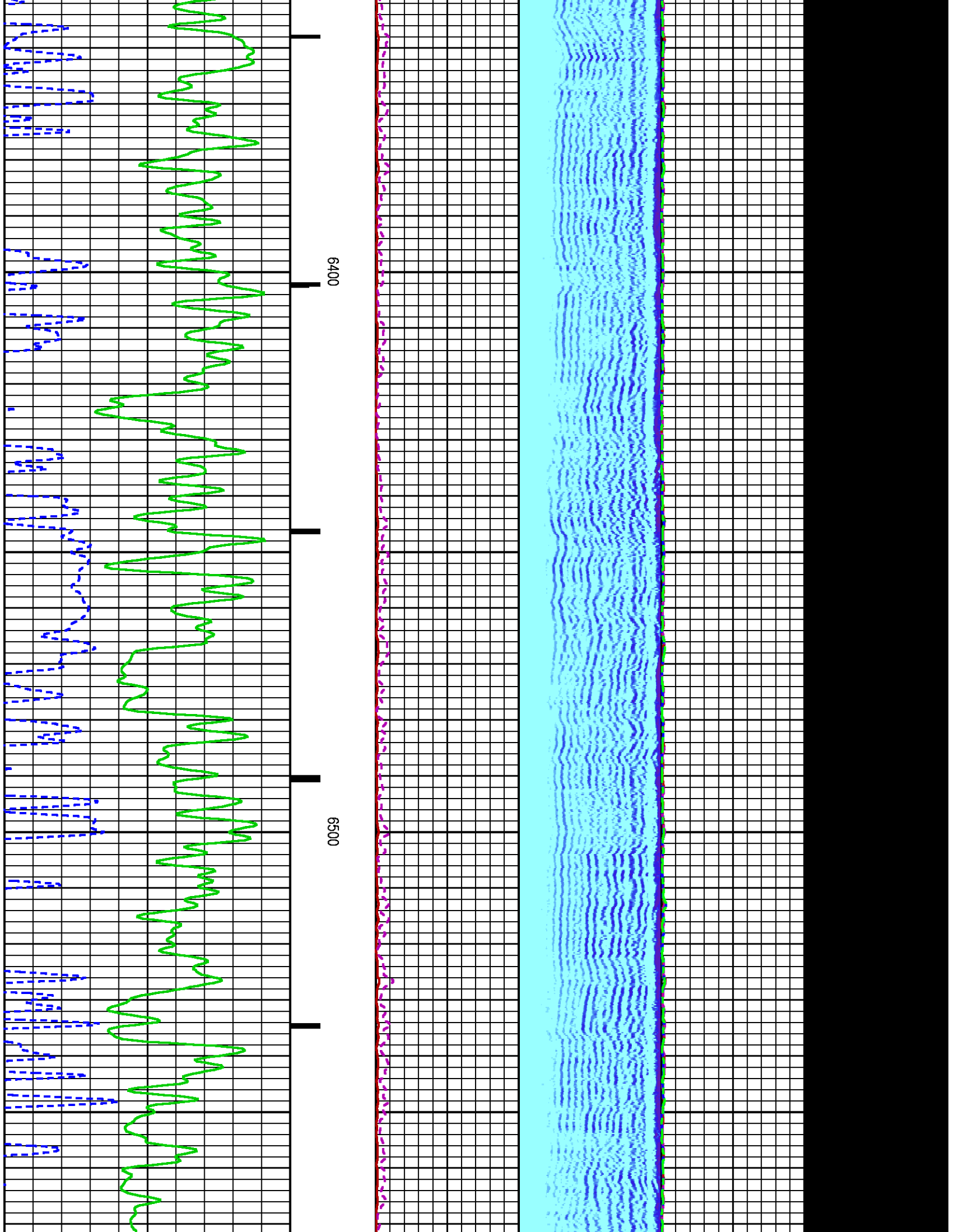


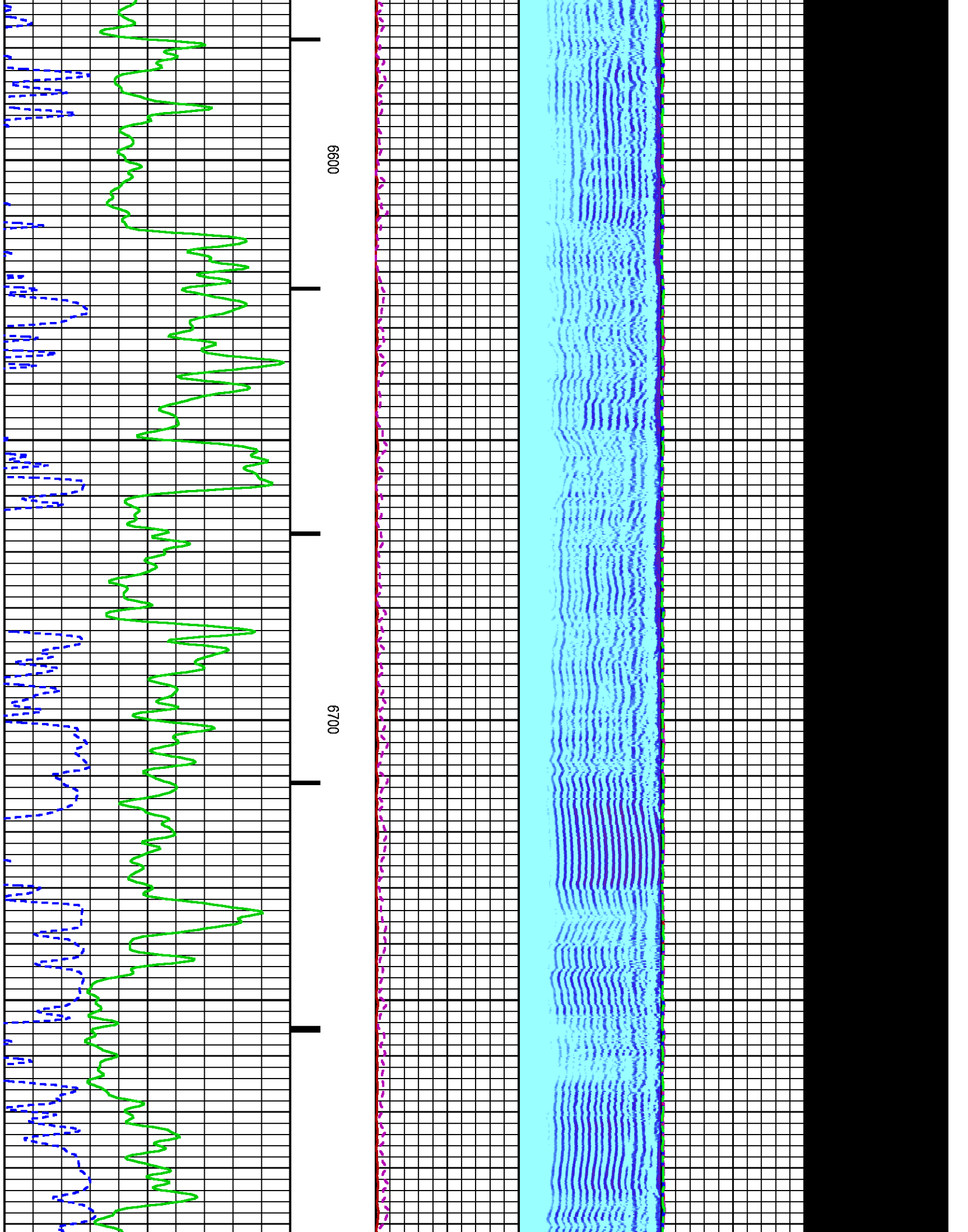


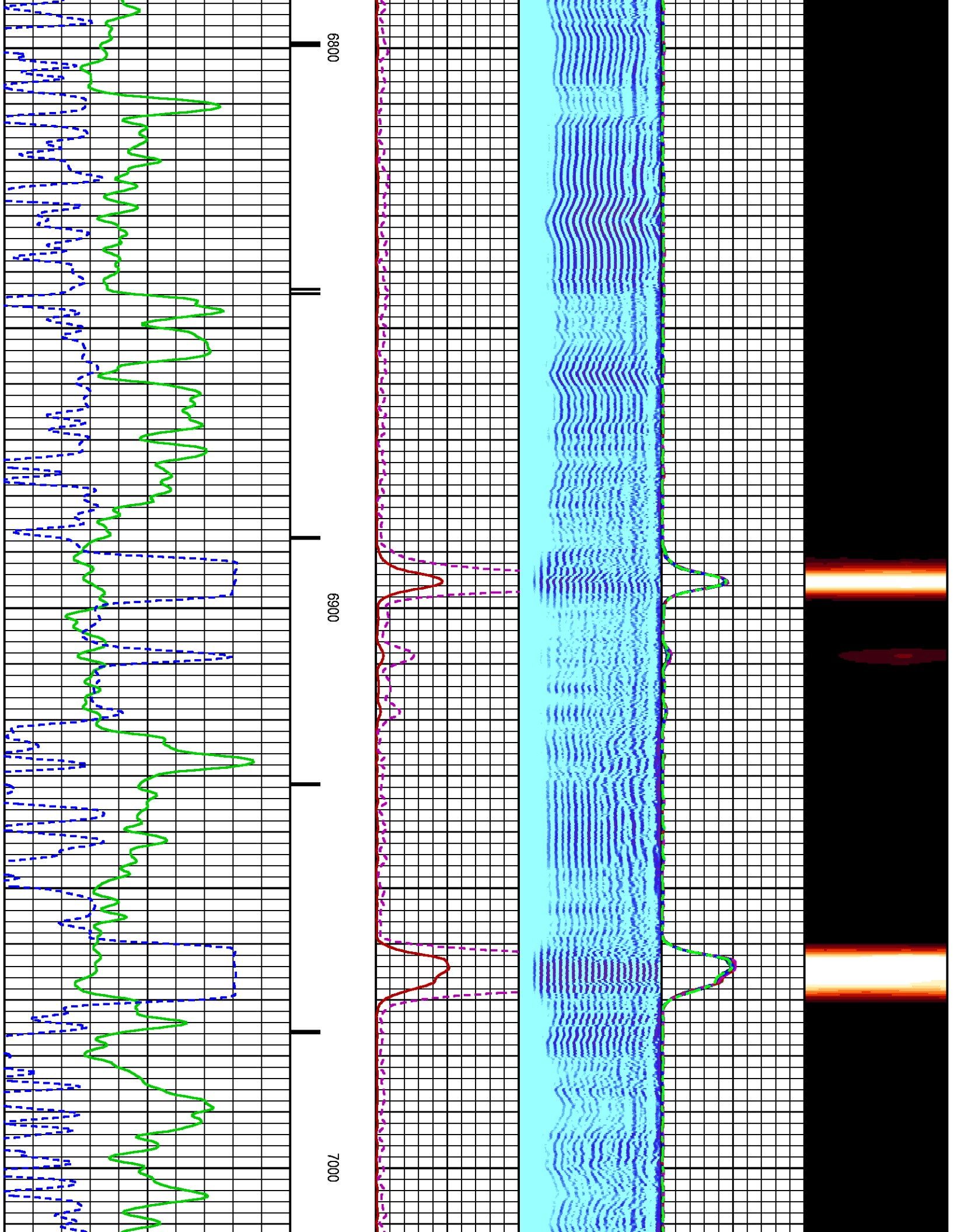


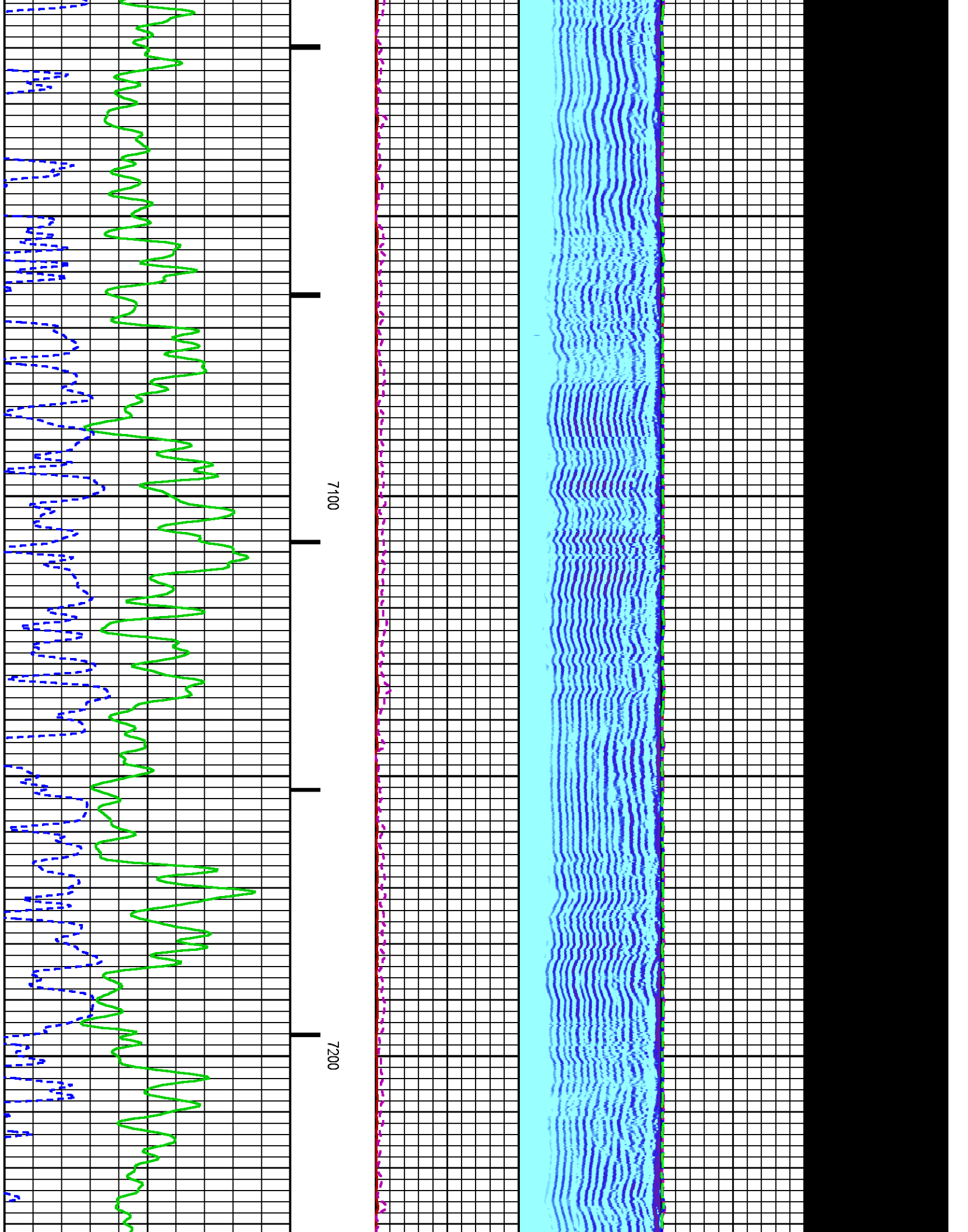


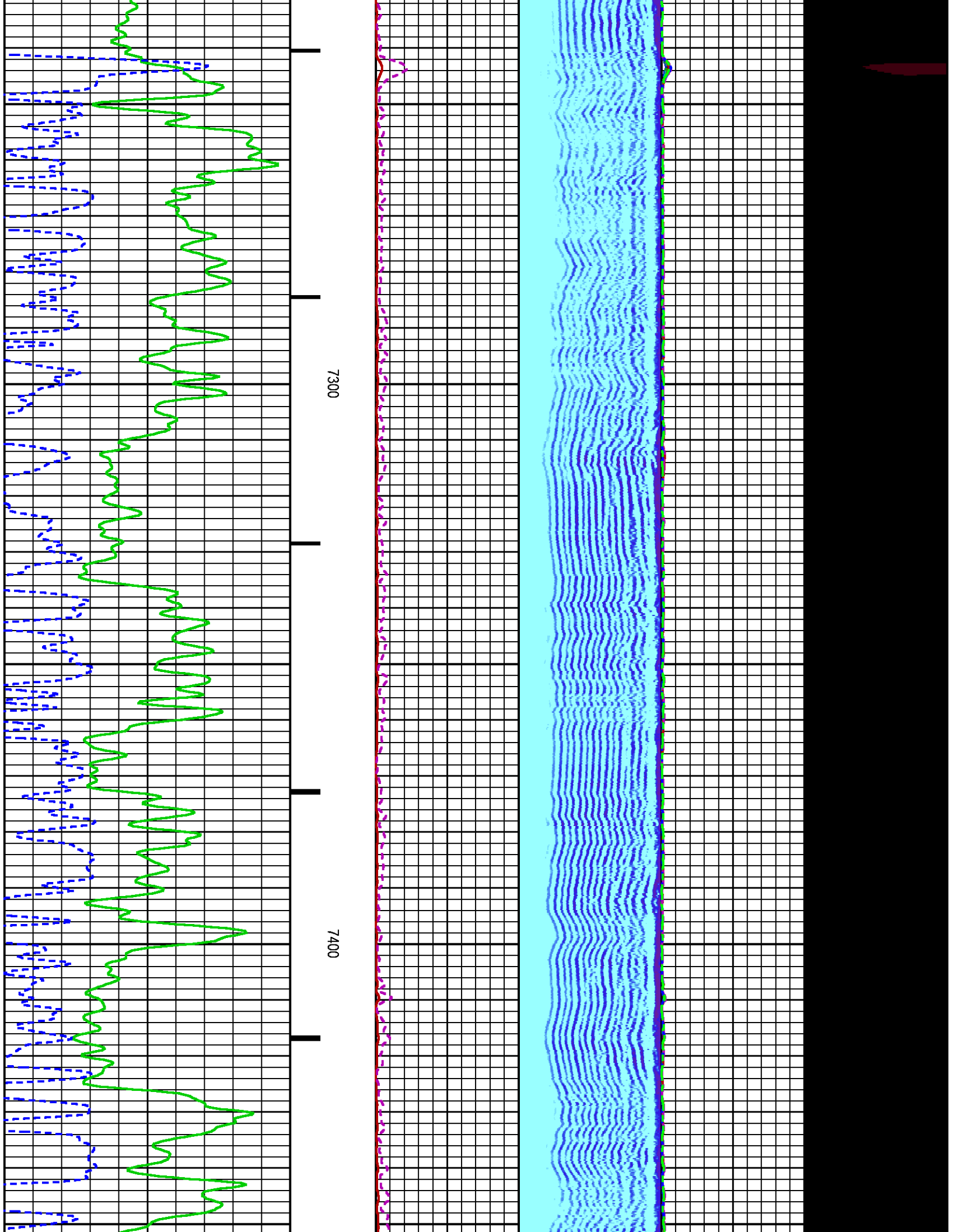


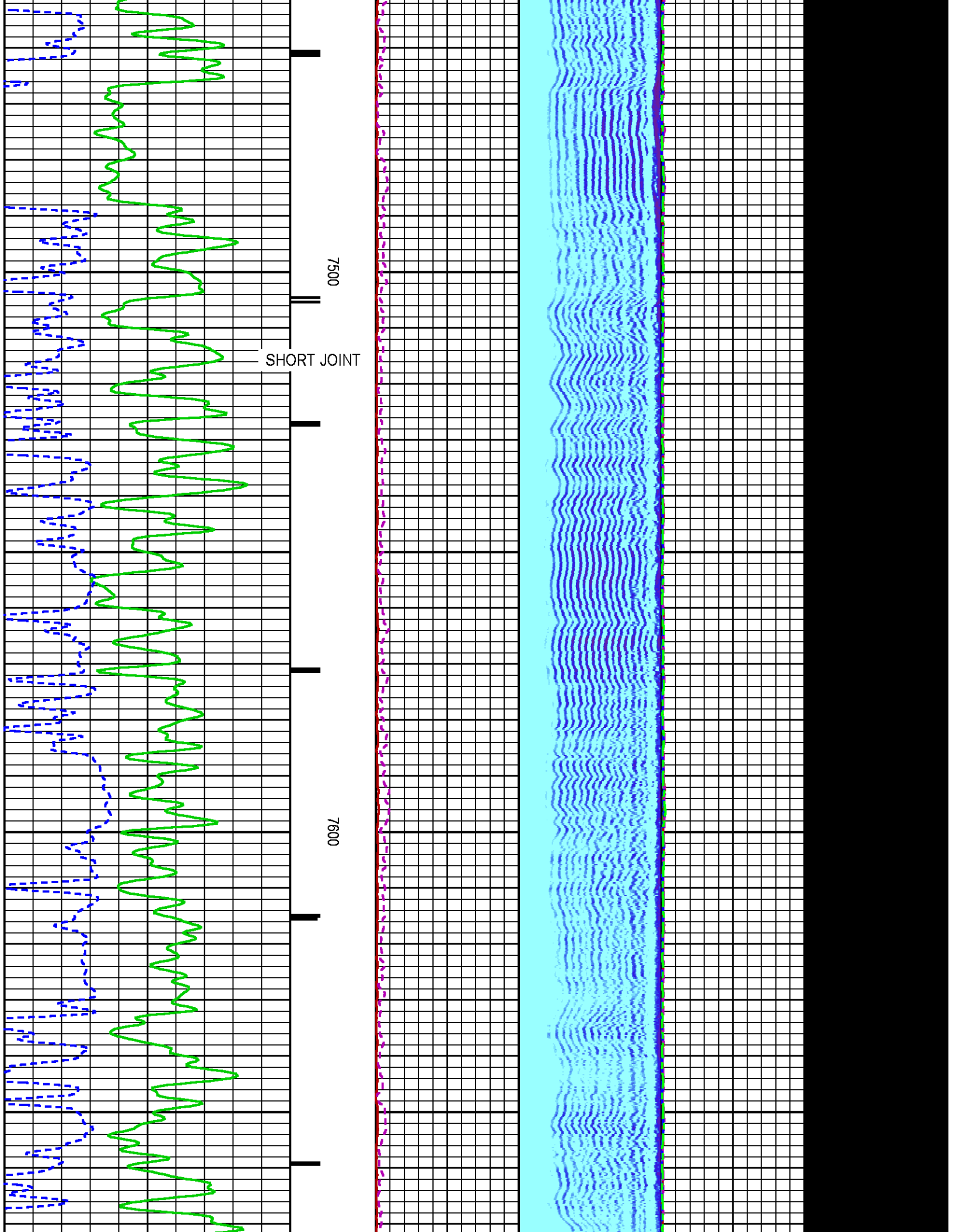


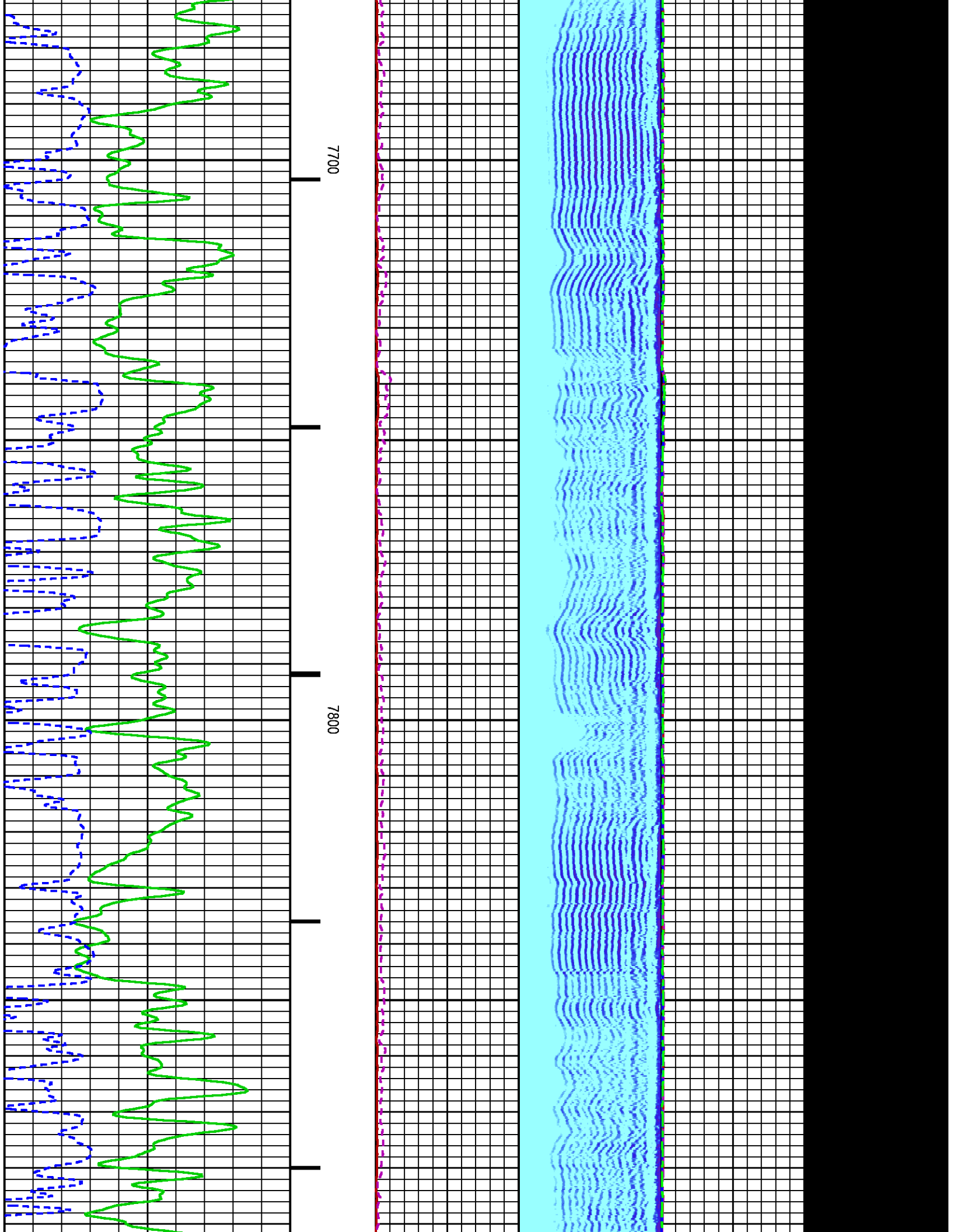


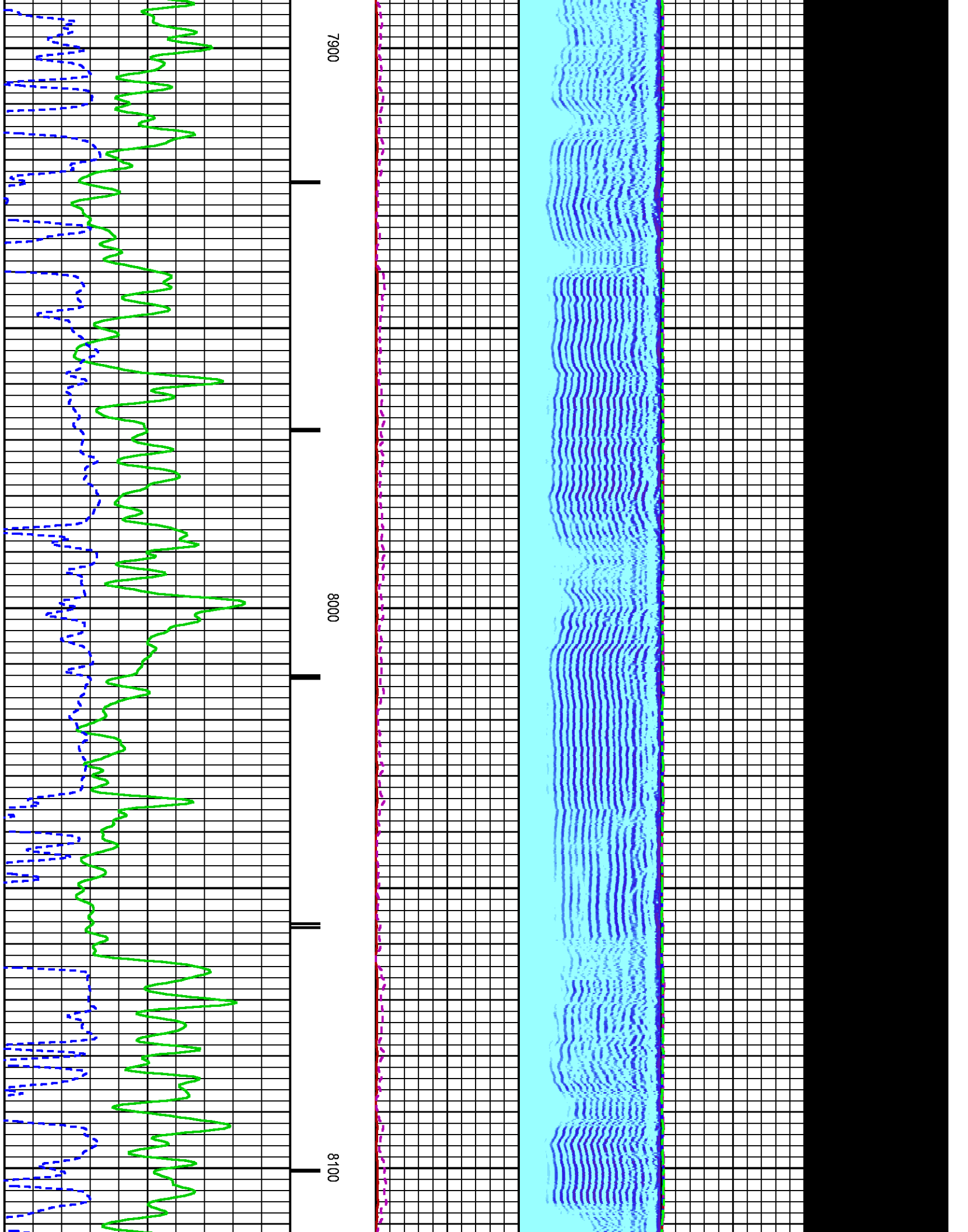


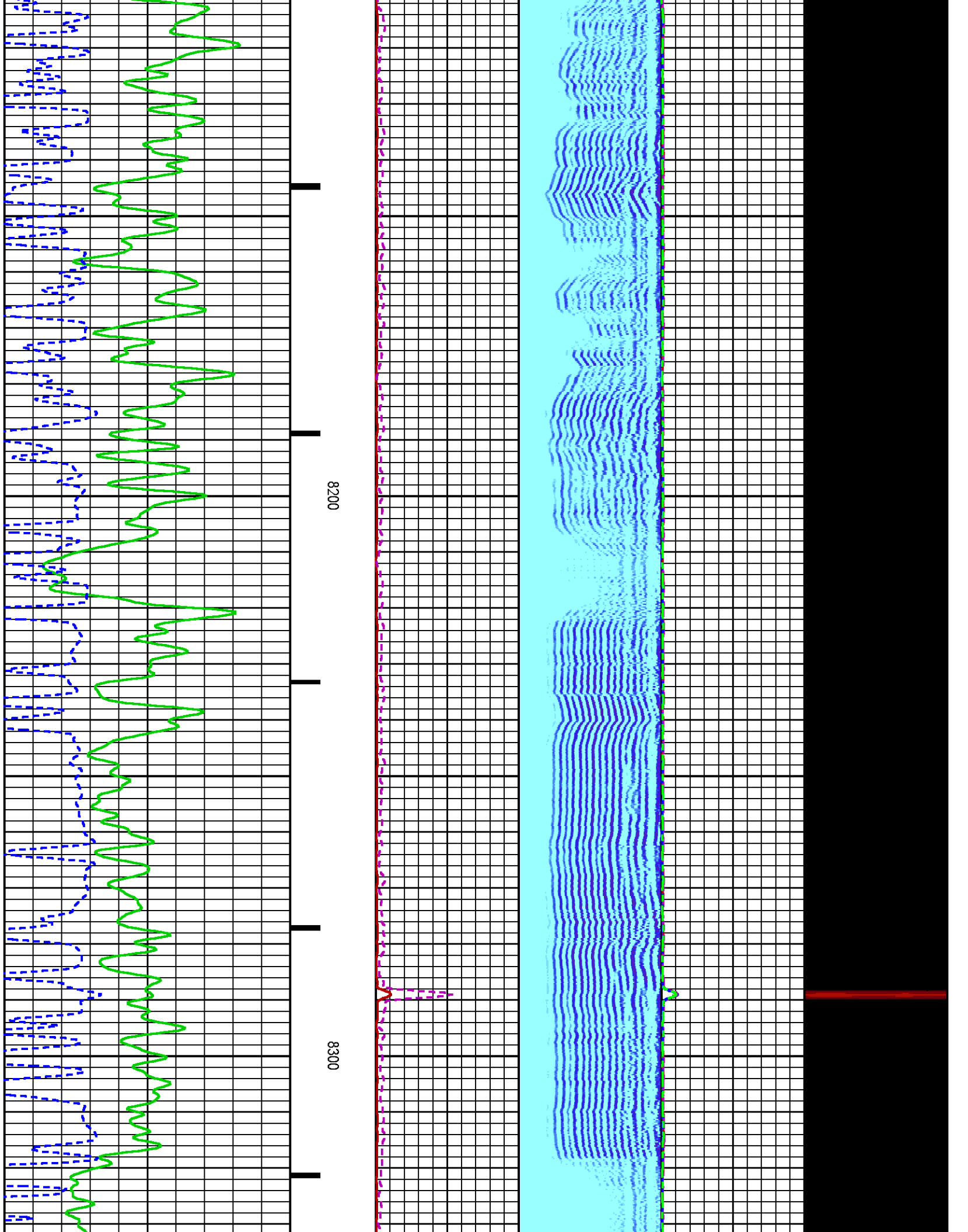


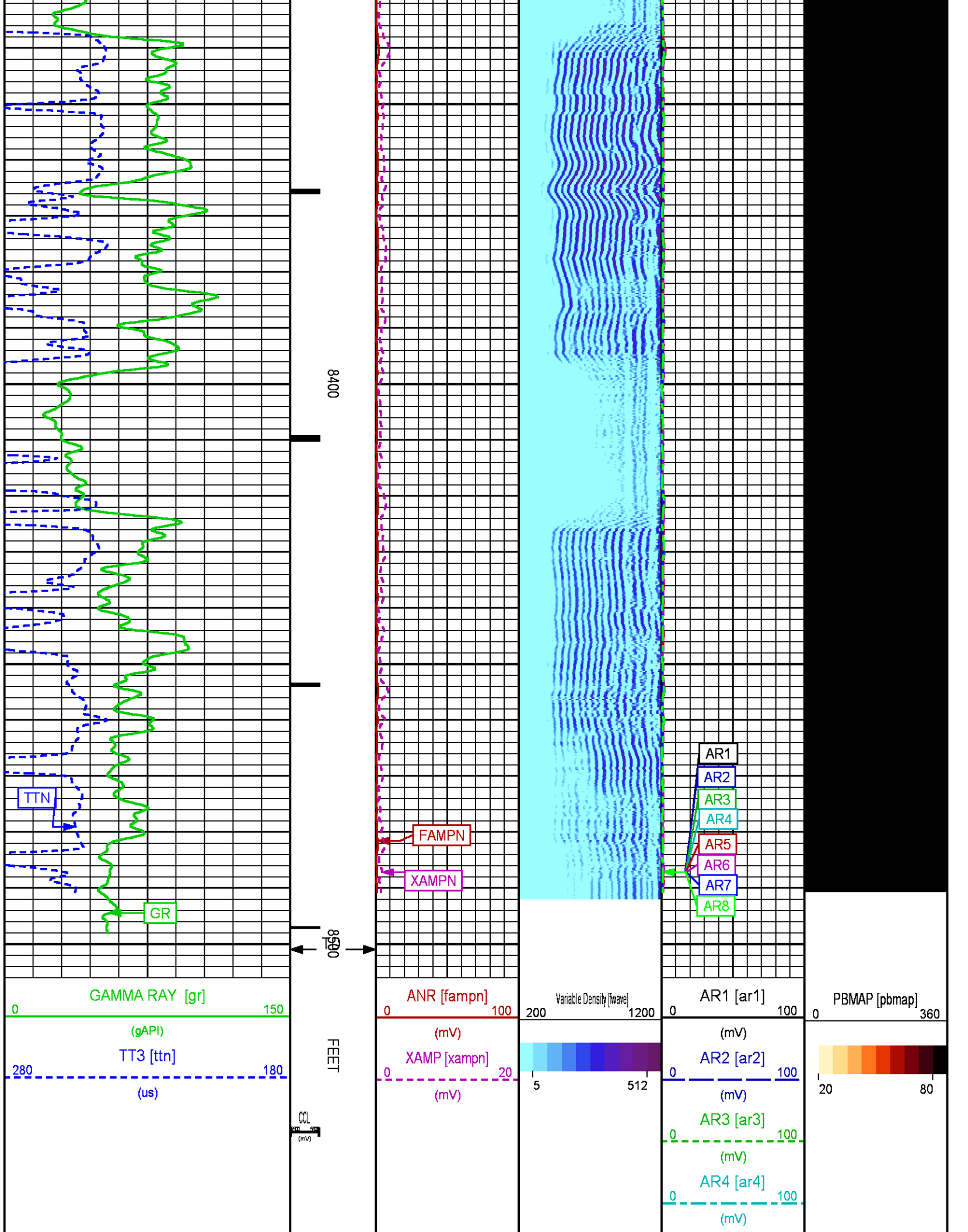


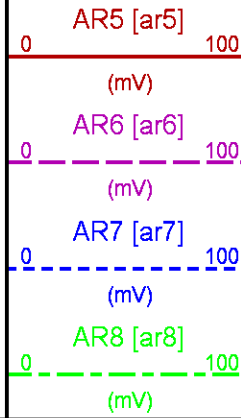












REPEAT PRESENTATION 0 PSI

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013
 Updates: 1 Patches: 4

Plotted: Tue Dec 2 13:02:56 2014

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH092510/n012e01.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 8308.250 ft BOTTOM DEPTH: 8505.750 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*)	185	us	TOP	BOTTOM
	AMP WINDOW START (fgp2*)	185	us	"	"
	AMP WINDOW START (fgp3*)	185	us	"	"
	AMP WINDOW START (fgp4*)	185	us	"	"
	AMP WINDOW START (fgp5*)	185	us	"	"
	AMP WINDOW START (fgp6*)	185	us	"	"
	AMP WINDOW START (fgp7*)	185	us	"	"
	AMP WINDOW START (fgp8*)	185	us	"	"
	AMP WINDOW START (fgpn*)	185	us	"	"
	AMP WINDOW LENGTH	25	us	"	"
TRAVEL TIME WINDOW (NEAR)	TT WINDOW START (ttn*)	173	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*)	-69	us	"	"
	TOOL DELAY (str2*)	-69	us	"	"
	TOOL DELAY (str3*)	-69	us	"	"
	TOOL DELAY (str4*)	-69	us	"	"
	TOOL DELAY (str5*)	-69	us	"	"
	TOOL DELAY (str6*)	-69	us	"	"
	TOOL DELAY (str7*)	-69	us	"	"

	TOOL DELAY (str7*)	-69	us	"	"
	TOOL DELAY (str8*)	-69	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

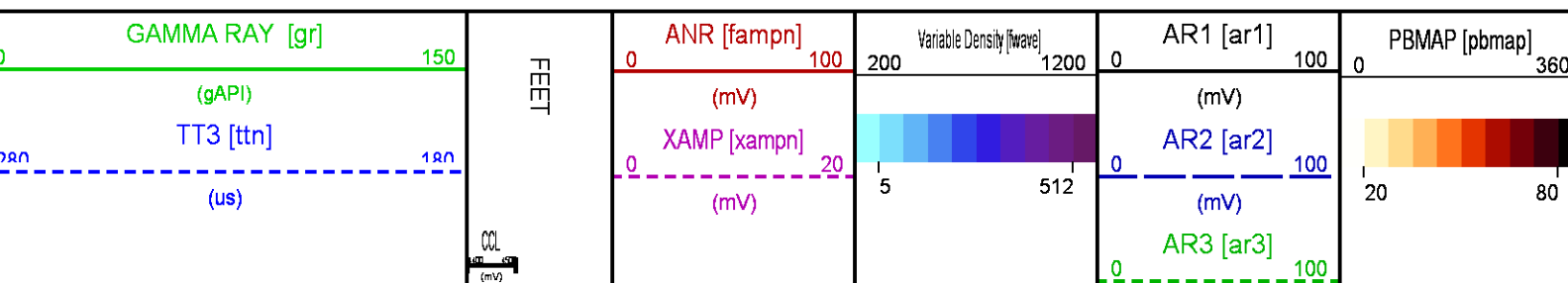
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:AR1	Dec 2 09:29:38 2014	FIXED GATE AMPLITUDE T-R1
F1:AR2	Dec 2 09:29:38 2014	FIXED GATE AMPLITUDE T-R2
F1:AR3	Dec 2 09:29:38 2014	FIXED GATE AMPLITUDE T-R3
F1:AR4	Dec 2 09:29:38 2014	FIXED GATE AMPLITUDE T-R4
F1:AR5	Dec 2 09:29:38 2014	FIXED GATE AMPLITUDE T-R5
F1:AR6	Dec 2 09:29:38 2014	FIXED GATE AMPLITUDE T-R6
F1:AR7	Dec 2 09:29:38 2014	FIXED GATE AMPLITUDE T-R7
F1:AR8	Dec 2 09:29:38 2014	FIXED GATE AMPLITUDE T-R8
F1:CCL	Dec 2 09:29:38 2014	CASING COLLAR LOCATOR
F1:FAMPN	Dec 2 09:29:38 2014	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Dec 2 09:29:38 2014	FAR WAVE FORM
F1:GR	Dec 2 09:29:38 2014	GAMMA RAY
F1:PBMAP	Dec 2 09:29:38 2014	PERCENT BOND CEMENT MAP
F1:TTN	Dec 2 09:29:38 2014	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Dec 2 09:29:38 2014	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

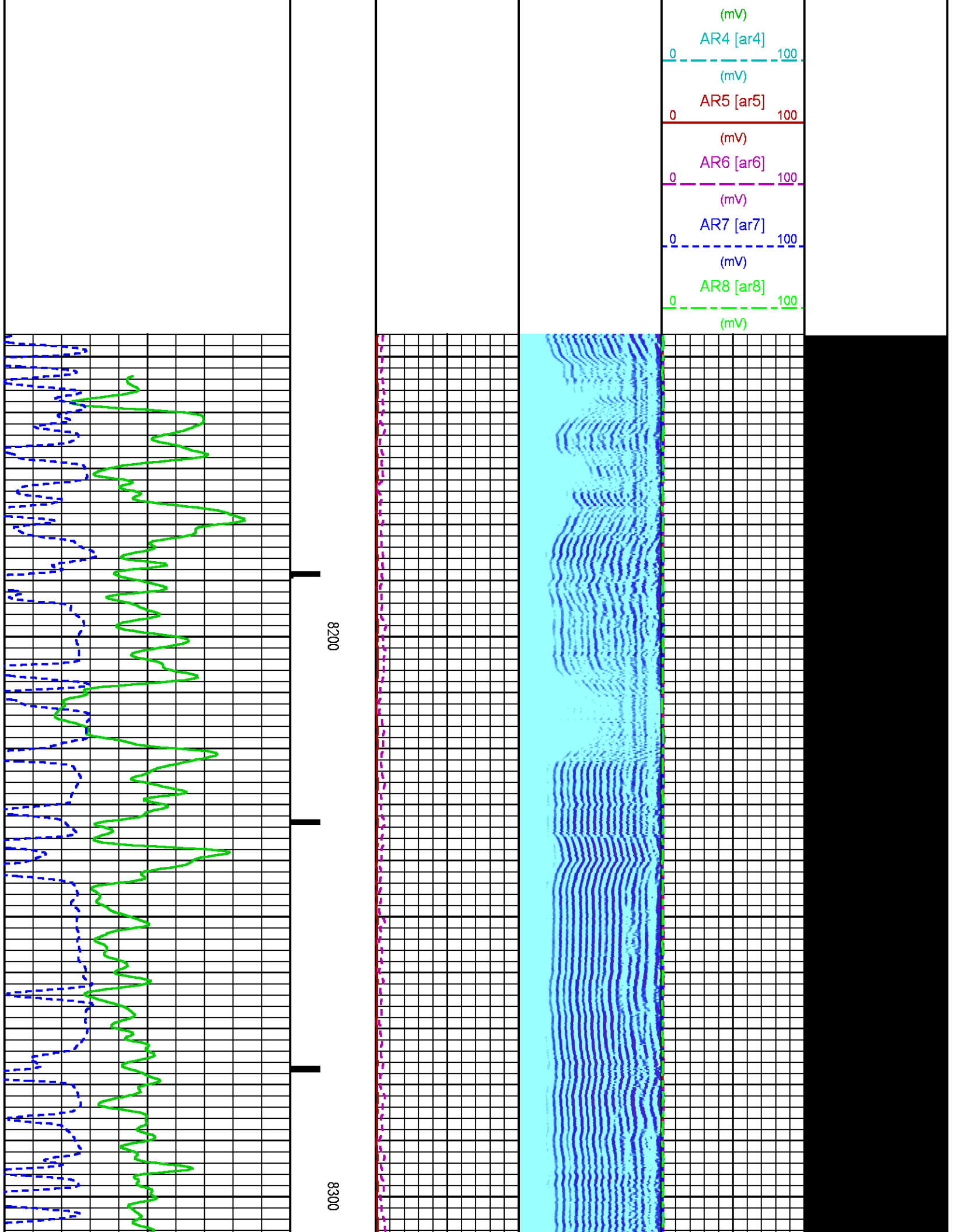
CURVE MEASURE POINT OFFSET

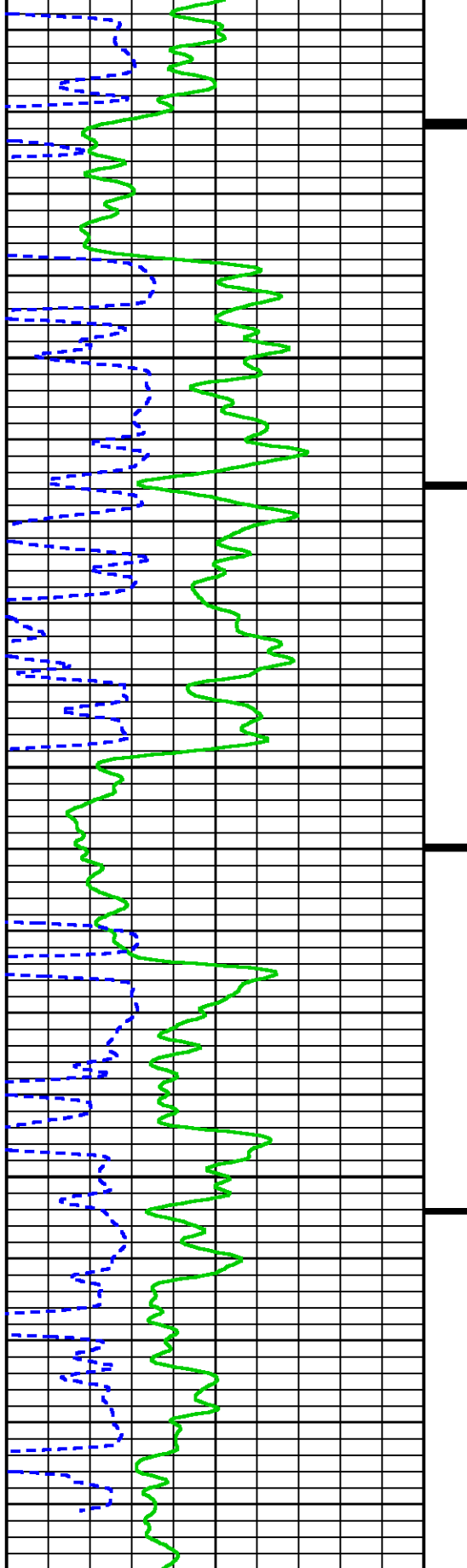
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
AR1	13.75	AR5	13.75	CCL	8.50	XAMPN	13.75
AR2	13.75	AR6	13.75	FAMPN	13.75		
AR3	13.75	AR7	13.75	GR	6.50		
AR4	13.75	AR8	13.75	TTN	13.75		

Presentation : HL6670:/dat1a/CH092510/12W_CBL_REPEAT_PRESENTATION.fvpdf [5"/100' Scale]
Plot Interval : 8146 - 8504.5 Feet

Data File 1 : F1 : HL6670:/dat1a/CH092510/12W_CBL_REPEAT.xtf
Created On : Dec 2 09:29:38 2014
Company : LARAMIE ENERGY
Well : SUP SHEP FEDERAL 25-12W
Field : VEGA
File Interval : 8145 - 8505.75 Feet
OCT : n012e







8400

FEET

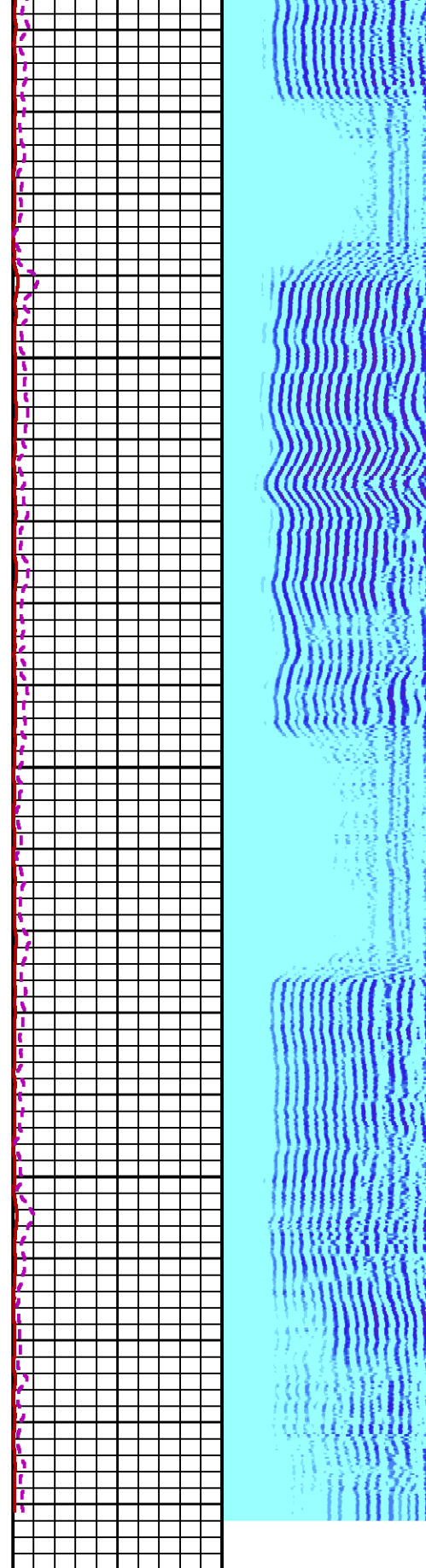
GAMMA RAY [gr] 0 150

(gAPI)

TT3 [ttn]

(us)

280 180



ANR [fampn] 0 100

(mV)

XAMP [xampn]

(mV)

0 20

Variable Density [wave] 200 1200

5 512

AR1 [ar1] 0 100

(mV)

AR2 [ar2]

(mV)

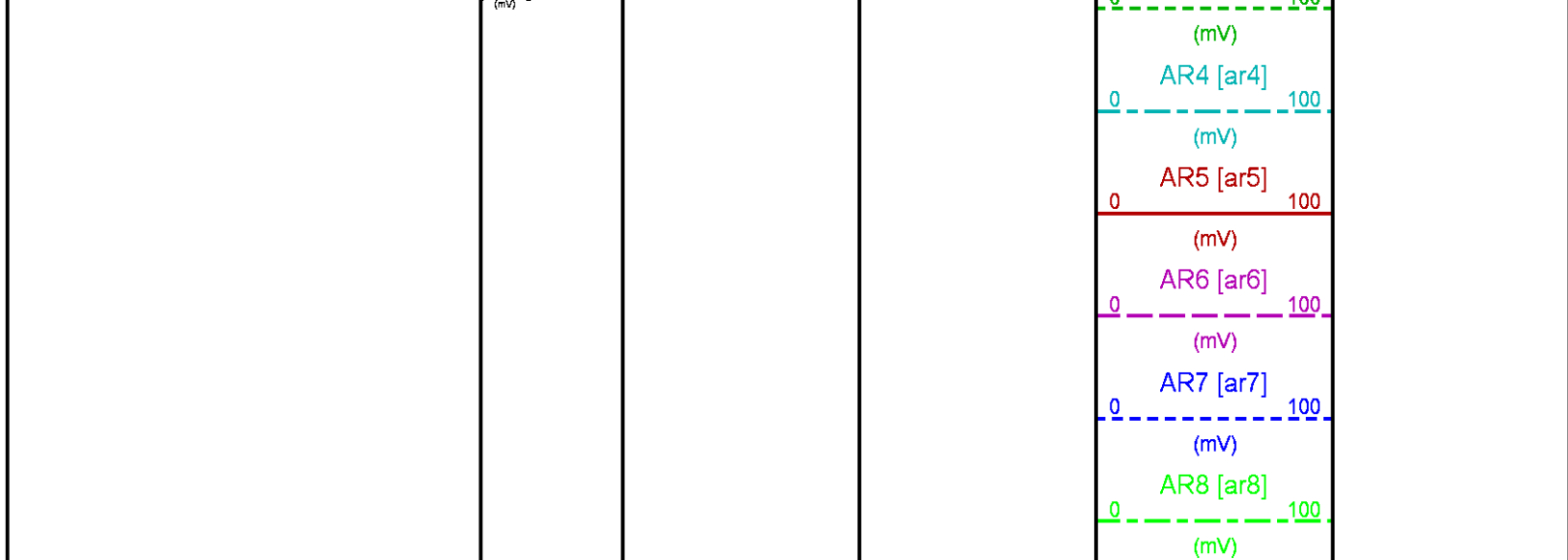
0 100

AR3 [ar3] 0 100

PBMAP [pbmap] 0 360

20 80





CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/CH092510/n012e.tp1

RAL PRIMARY CALIBRATION SUMMARY

TOOL #: 1426XA 10417452

DATE/TIME PERFORMED: Mon Dec 1 11:35:47 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	0.29	0.03	-0.23	-0.21	0.08	0.02	-0.10	-0.14	0.79	-0.00
AMP FLUID (mV)	169	170	169	168	168	169	168	168	170	226	168
TT (us)	218	217	218	218	218	218	217	216	218	326	217
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: Tue Dec 2 08:55:13 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	0.36	-0.13	-0.29	0.57	0.52	1.12	1.19	0.15	0.31	0.37	100.15

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 CALBRTR ON (cts)	CR DIFF (cts/s)	MULT	BACKGROUND 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 CALBRTR ON (cts)	MULT	BACKGROUND CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	108.58	381.73	0.652	70.81
				248.94
				178.13
				175.00
				195.00

INSTRUMENT CONFIGURATION

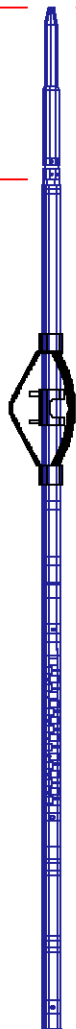
Source File: /dat1a/CH092510/CBL-tdg

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



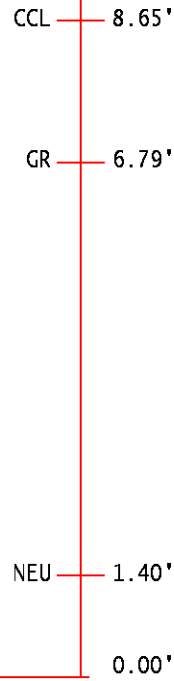
23.02'

NEAR RCVR — 13.81'

FAR RCVR — 12.85'


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

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

	COMPANY <u>LARAMIE ENERGY</u> WELL <u>SUP & SHEP FEDERAL 25-12W</u> FIELD <u>VEGA</u> COUNTY <u>MESA</u> STATE <u>CO</u>	FILE NO: <u>CH092510</u> API NO: <u>05077100100000</u>
	LOCATION: SHL: LAT 39.245018 LONG -107.722842 BHL: LAT 39.244698 LONG -107.726800 SEC <u>25</u> TWP <u>9S</u> RGE <u>93W</u>	ELEVATIONS: KB 8096 FT DF GL 8074 FT DATE <u>02-Dec-2014</u>