



FILE NO: CH099235	COMPANY WELL FIELD COUNTY	LARAMIE ENERGY PICEANCE 28-09M VEGA MESA	STATE COLORADO
API NO: 05077102380000			

Ver. 4.01 28 9S 93W 28-05 PAD PATTERSON 306	LOCATION: SHL: LAT 39.250911 LONG -107.779353 BHL: LAT 39.249467 LONG -107.774656 SEC 28 TWP 9S RGE 93W	OTHER SERVICES RPM
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PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM	GL KB KB	ELEVATION 22 FT ABOVE P.D.	ELEVATIONS: KB 7600 FT DF GL 7678 FT
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DATE	25-Aug-2015	
RUN	TRIP	1
SERVICE ORDER	US099235	
DEPTH DRILLER	7985 FT	
DEPTH LOGGER	7922 FT	
BOTTOM LOGGED INTERVAL	7912 FT	
TOP LOGGED INTERVAL	22 FT	
TIME STARTED	5:30	
TIME FINISHED	8:00	
OPERATOR RIG TIME	2.5 HOURS	
TYPE OF FLUID IN HOLE	WATER	
FLUID DENSITY	NA	
FLUID SALINITY	NA	
FLUID LEVEL	48 FT	
LOGGED CEMENT TOP	NA	
WELLHEAD PRESSURE	0 PSI	
MAXIMUM HOLE DEVIATION	NA	
NOMINAL LOGGING SPEED	100 F/MIN	
MAX. RECORDED TEMP.	NA	
REFERENCE LOG	NONE	
REFERENCE LOG DATE	NA	
EQUIP. NO.	LOCATION	HL-6670
RECORDED BY	P. 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

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
4.5 IN	11.6 LB/F		22 FT	8123 FT

REMARKS

RUN 1 TRIP 1: This is the fist log on this well

Logged with zero PSI at wellhead.

SJ = 6246' - 6268'

SJ = 7149' - 7170'

THANK YOU FOR CHOOSING BAKER HUGHES ... THE BEST CHOICE!

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	CBL	1426XA	10417452	CENTRALIZED
1	1	GR/CCL	1355XA	11871506	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: 6

Plotted: Tue Aug 25 10:15:09 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH099235/n012g02.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 18.000 ft BOTTOM DEPTH: 7939.153 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	"	"
TRAVEL TIME WINDOW (NEAR)	AMP WINDOW LENGTH	30	us	"	"
	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	"	"
BASELINE NOISE (NEAR)	TOOL DELAY (strn*)	-72	us	"	"
	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 1	80	mV	"	"
	FREE AMP REC 8	2	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	"	"

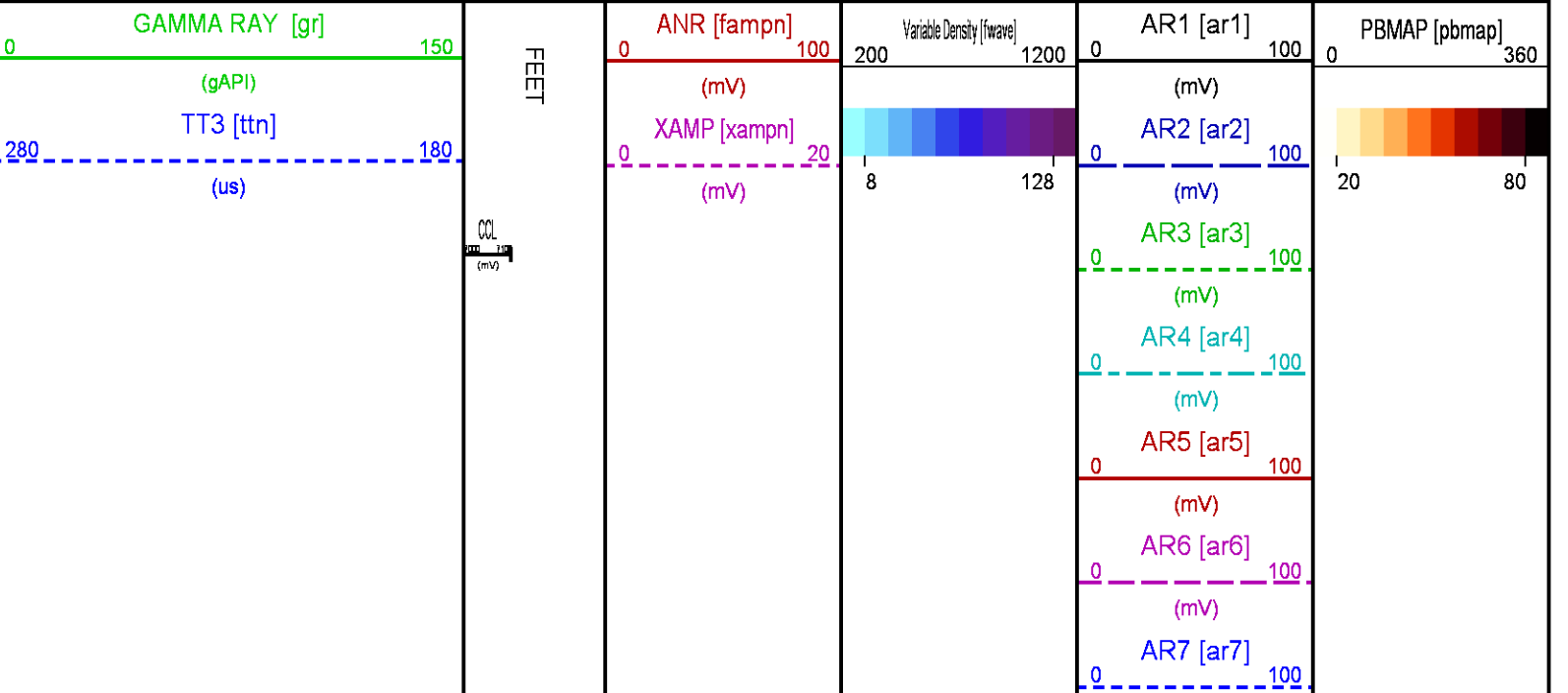
CURVE DESCRIPTION REPORT

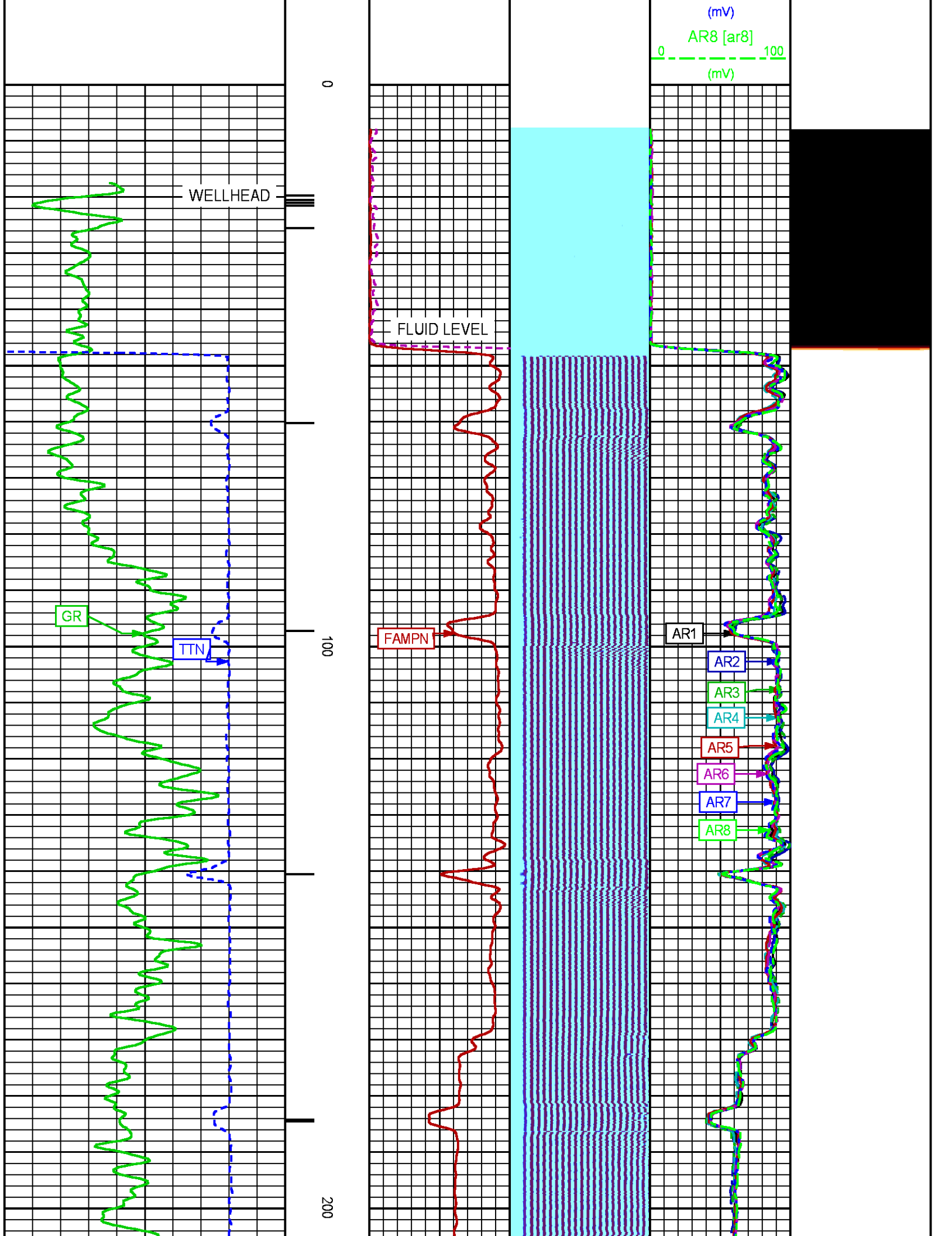
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:AR1	Aug 25 06:31:44 2015	FIXED GATE AMPLITUDE T-R1
F1:AR2	Aug 25 06:31:44 2015	FIXED GATE AMPLITUDE T-R2
F1:AR3	Aug 25 06:31:44 2015	FIXED GATE AMPLITUDE T-R3
F1:AR4	Aug 25 06:31:44 2015	FIXED GATE AMPLITUDE T-R4
F1:AR5	Aug 25 06:31:44 2015	FIXED GATE AMPLITUDE T-R5
F1:AR6	Aug 25 06:31:44 2015	FIXED GATE AMPLITUDE T-R6
F1:AR7	Aug 25 06:31:44 2015	FIXED GATE AMPLITUDE T-R7
F1:AR8	Aug 25 06:31:44 2015	FIXED GATE AMPLITUDE T-R8
F1:CCL	Aug 25 06:31:44 2015	CASING COLLAR LOCATOR
F1:FAMPN	Aug 25 06:31:44 2015	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Aug 25 06:31:44 2015	FAR WAVE FORM
F1:GR	Aug 25 06:31:44 2015	GAMMA RAY
F1:PBMAP	Aug 25 06:31:44 2015	PERCENT BOND CEMENT MAP
F1:TTN	Aug 25 06:31:44 2015	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Aug 25 06:31:44 2015	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

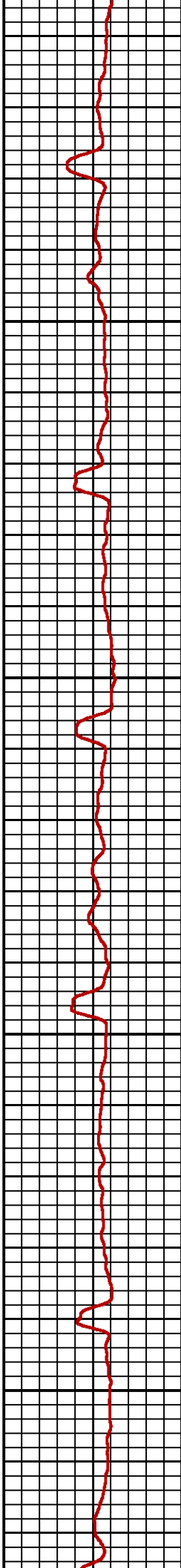
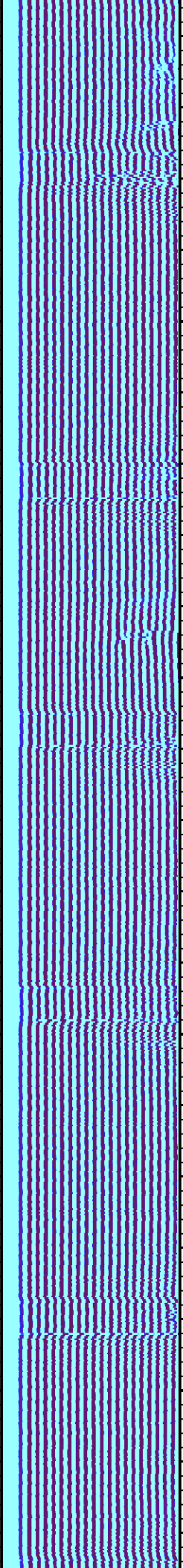
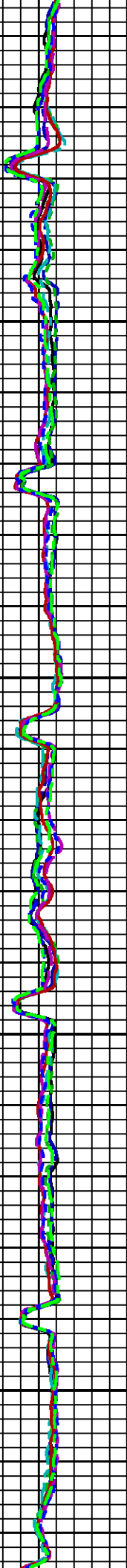
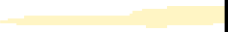
CURVE MEASURE POINT OFFSET

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		

Presentation	: HL6670:/dat1a/CH099235/9M_CBL_MAIN.fvpdf [5"/100' Scale]
Plot Interval	: 0 - 7927 Feet
Data File 1	: F1 : HL6670:/dat1a/CH099235/9M_CBL_MAIN.xtf
Created On	: Aug 25 06:31:44 2015
Company	: LARAMIE ENERGY
Well	: PICEANCE 28-09M
Field	: VEGA
File Interval	: 6.75 - 7936.25 Feet
OCT	: n012g

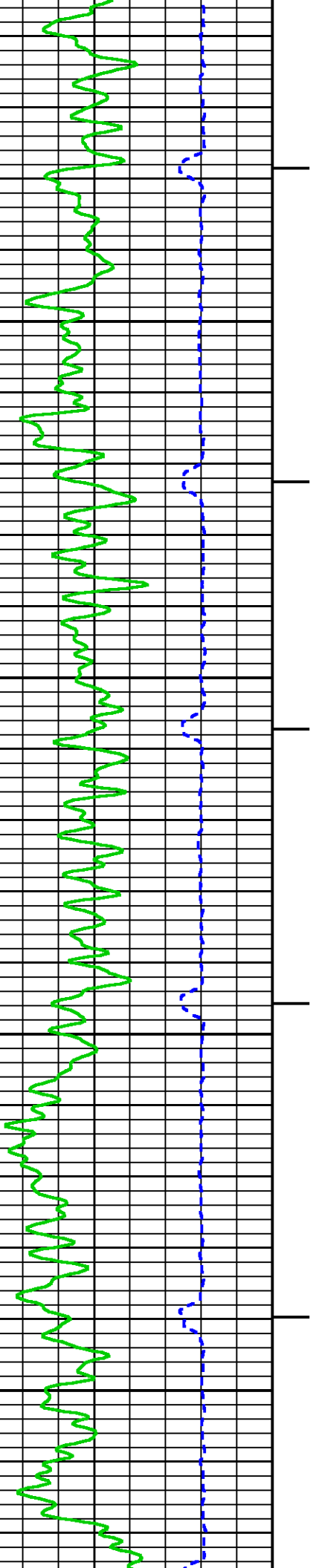


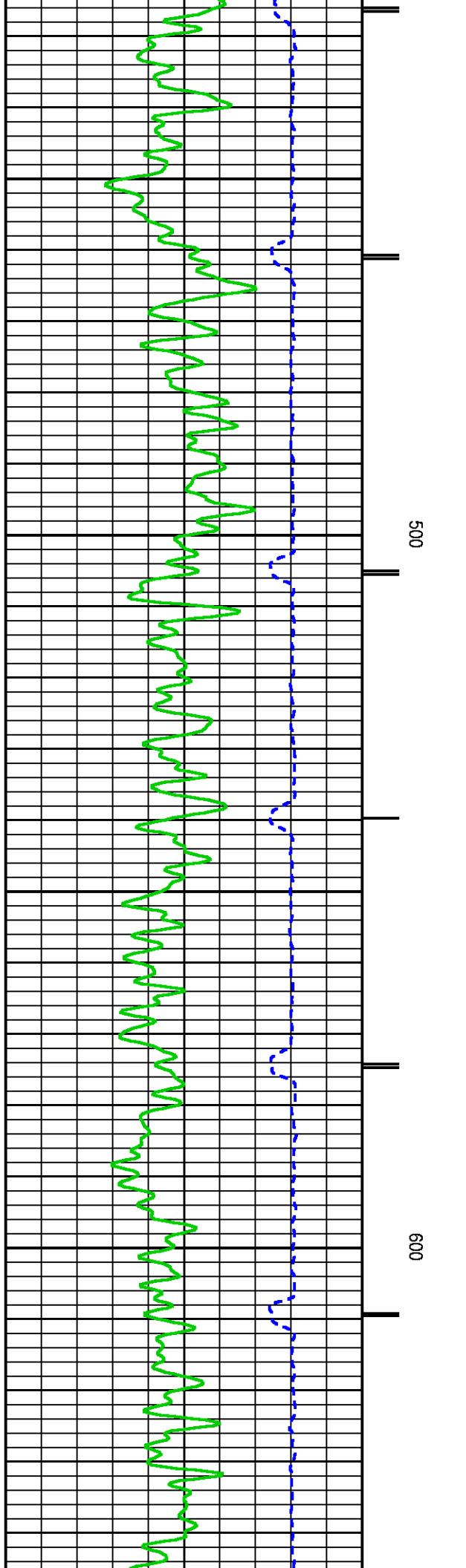
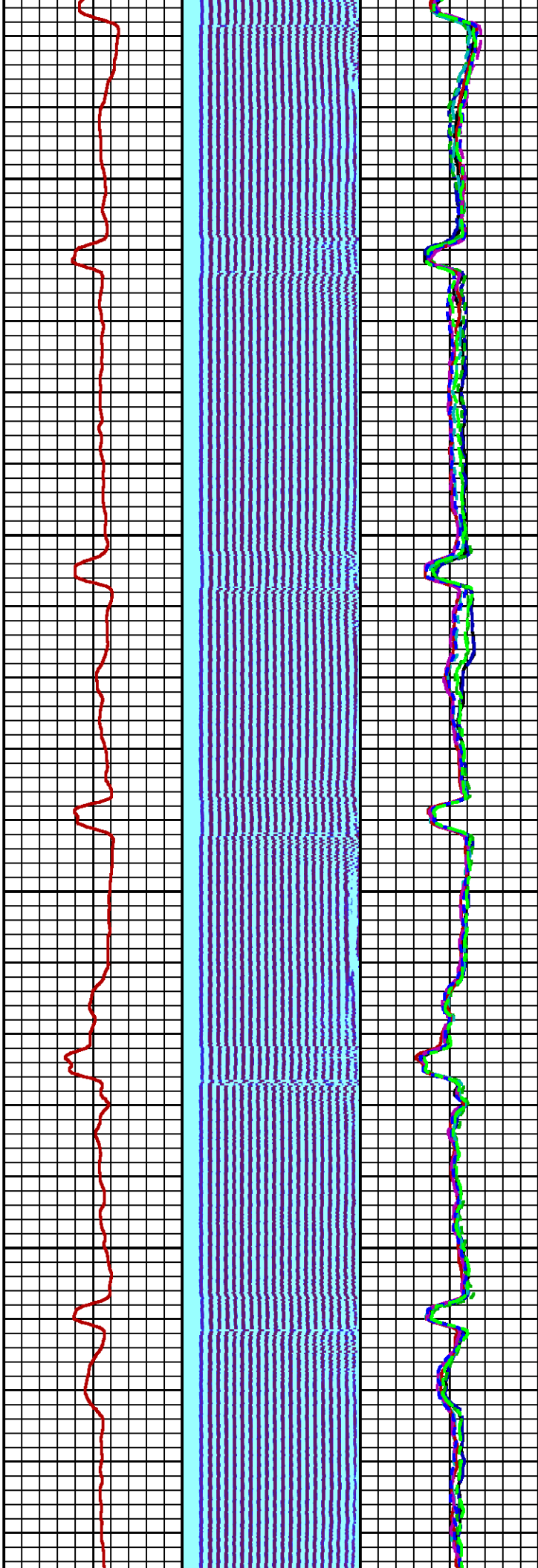
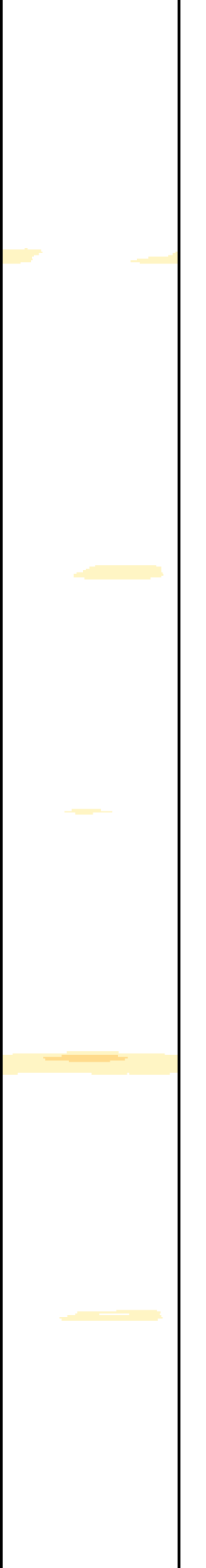


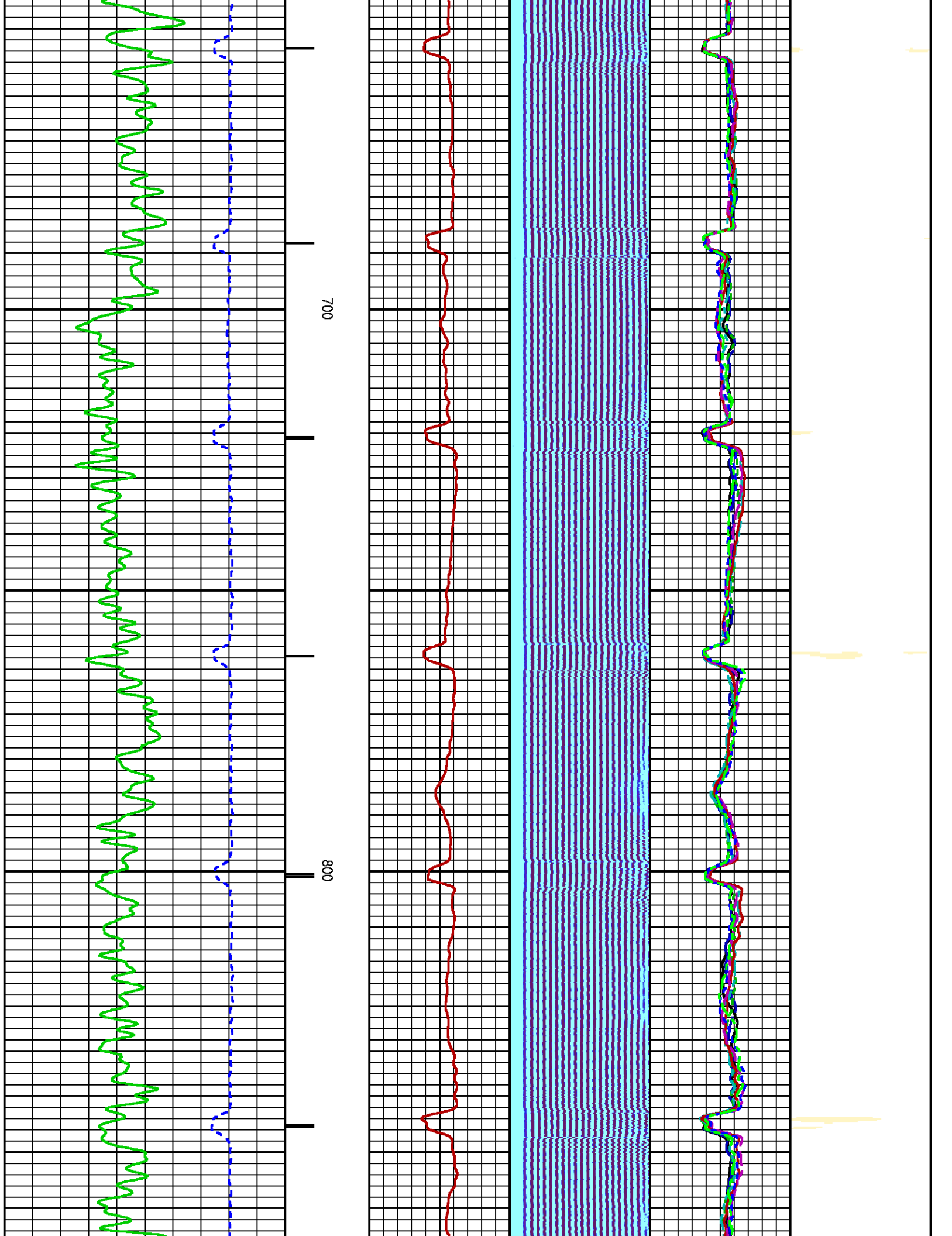


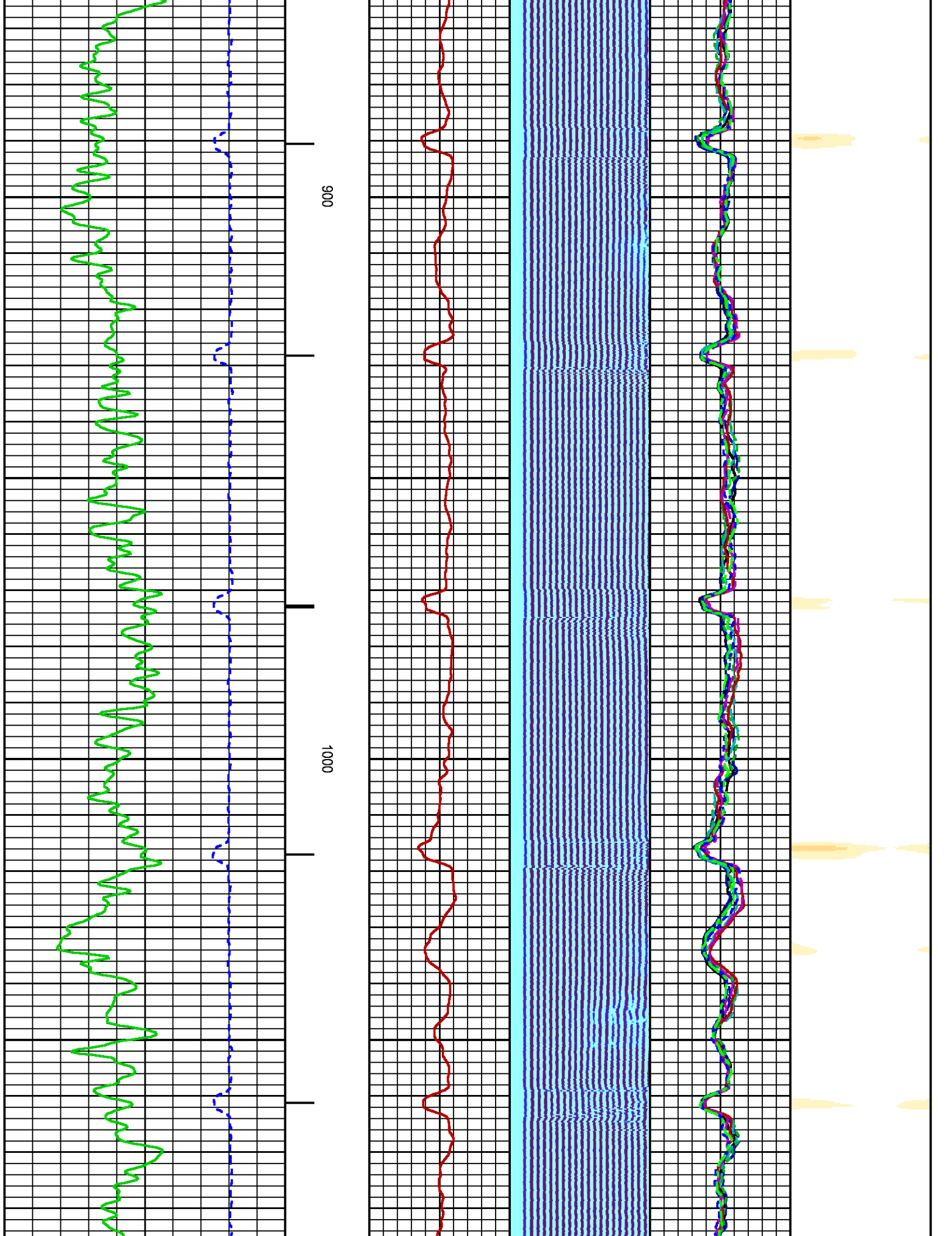
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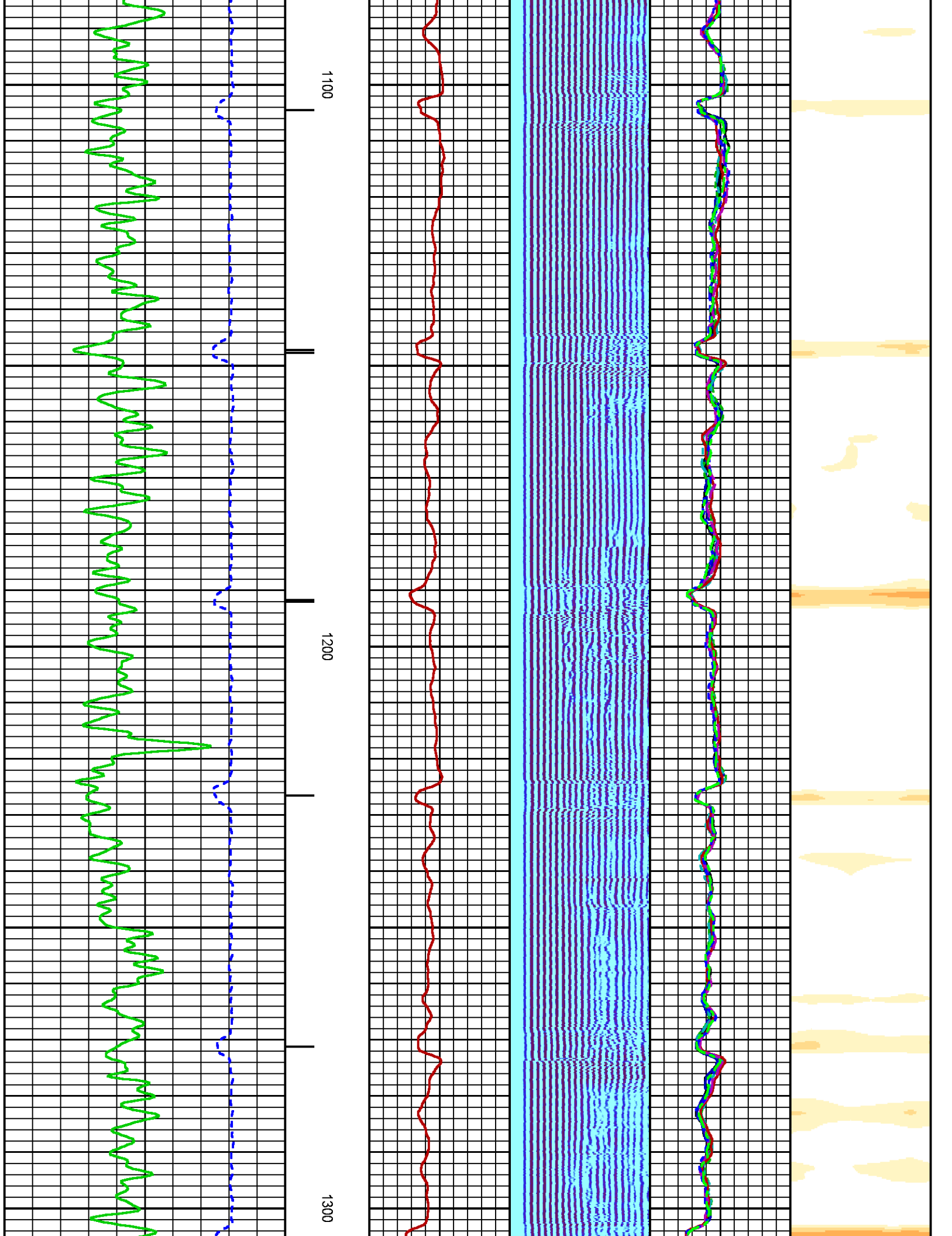
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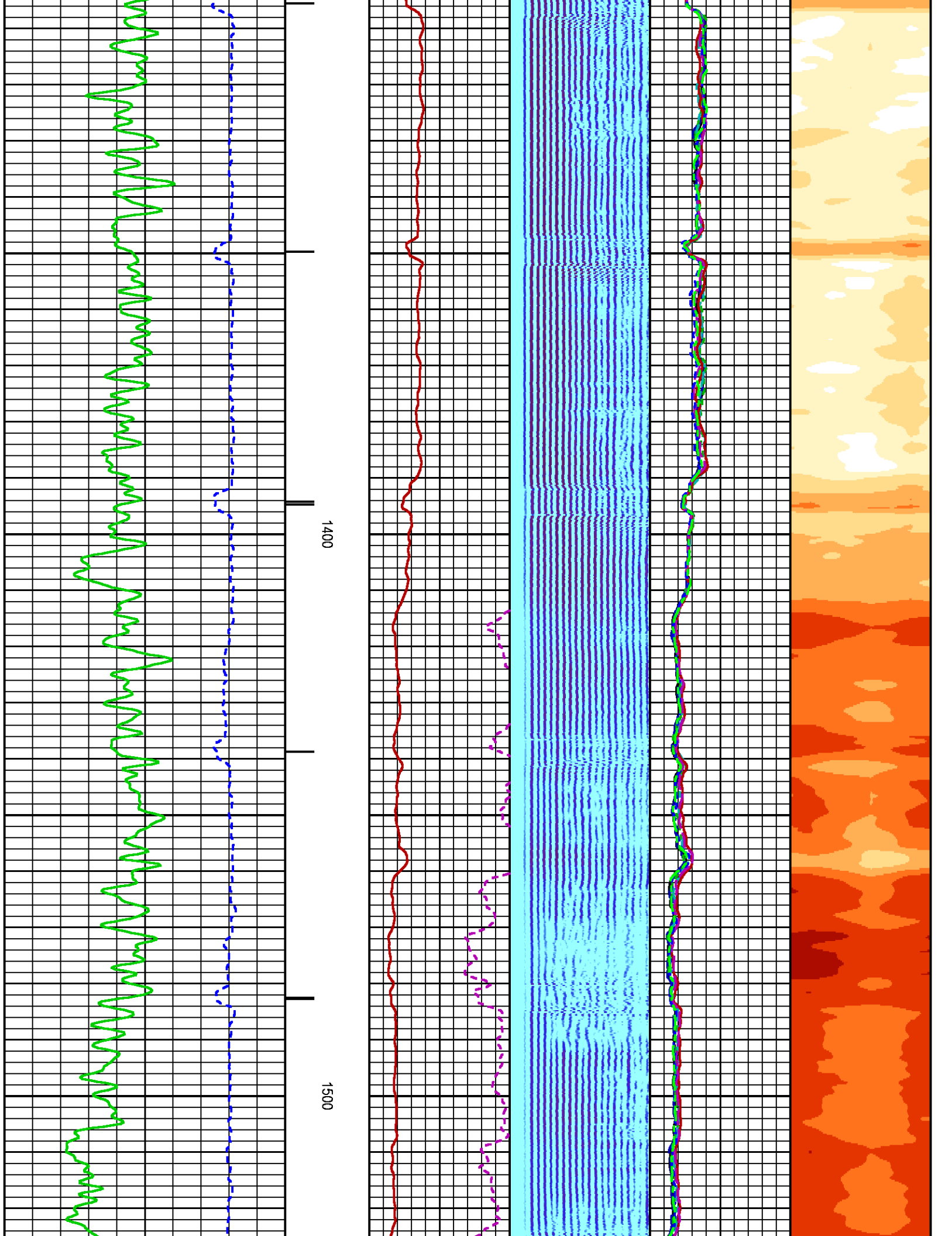


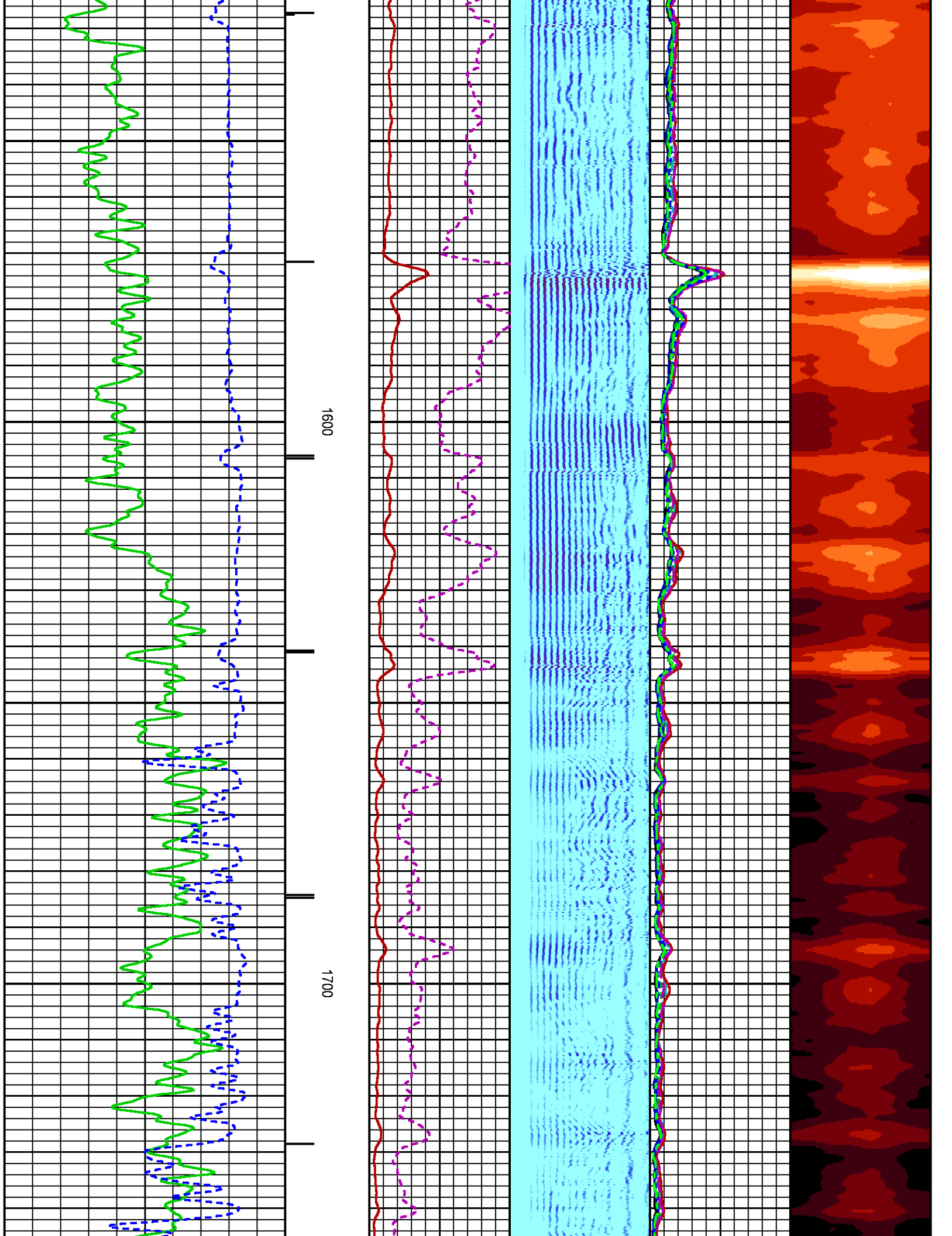


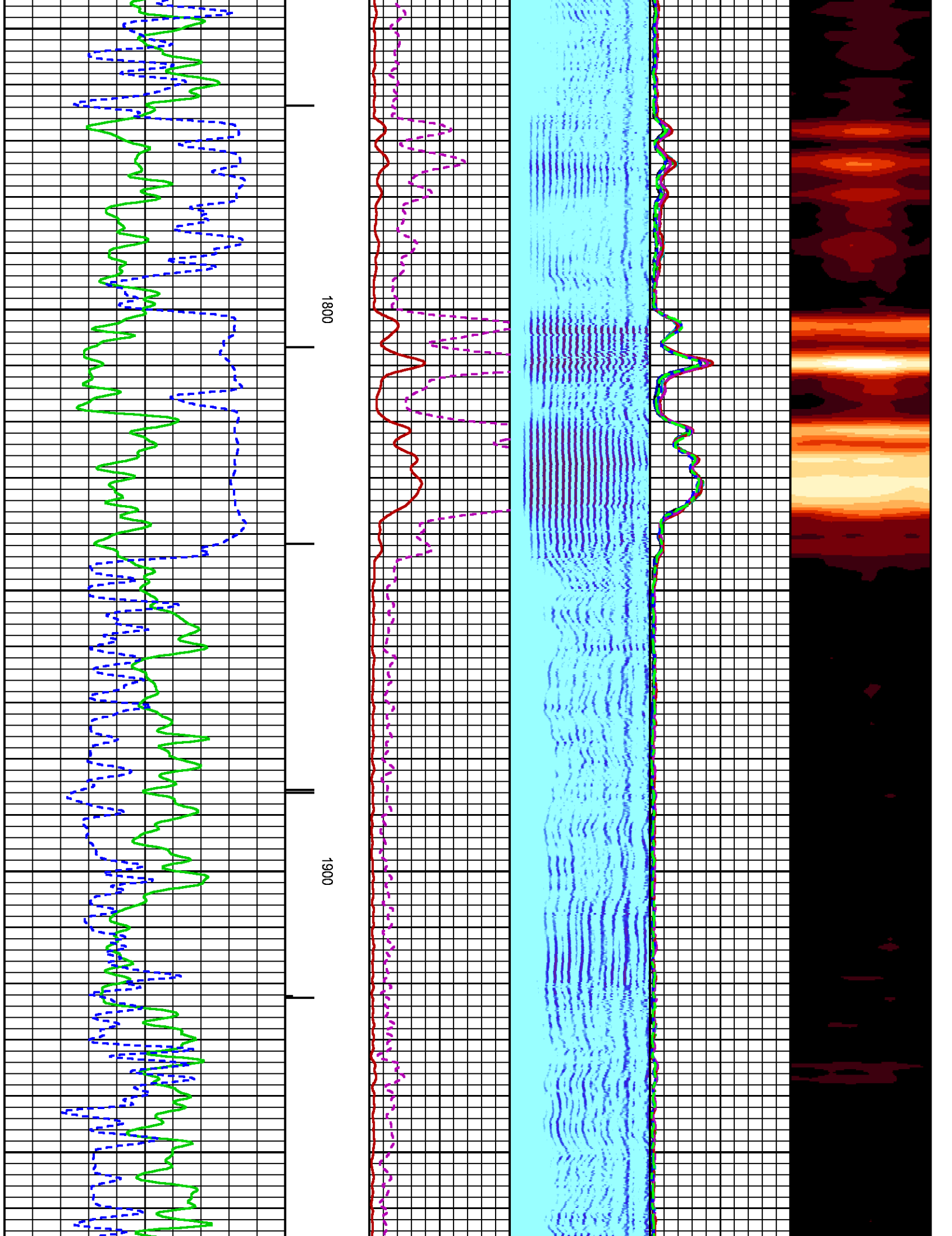


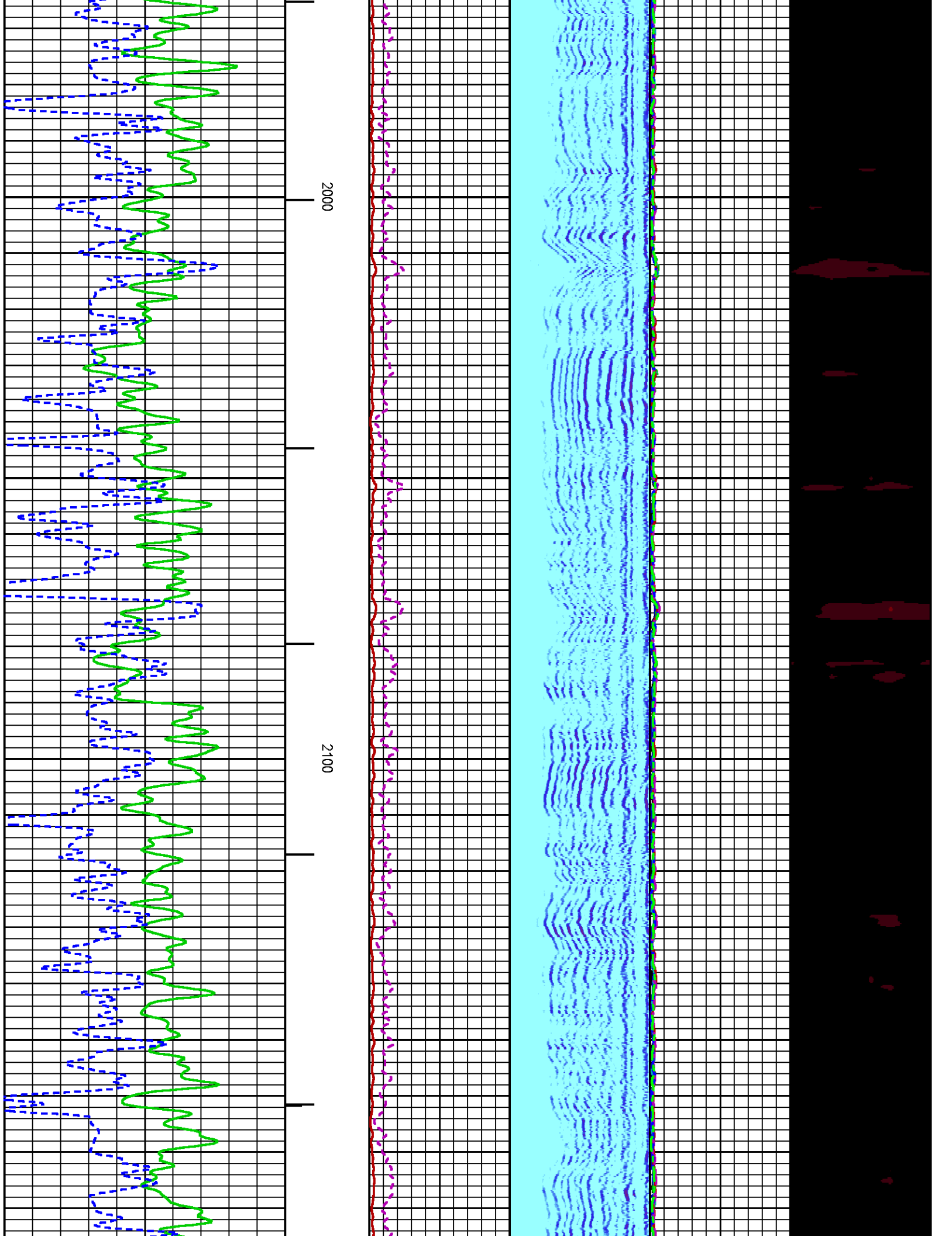


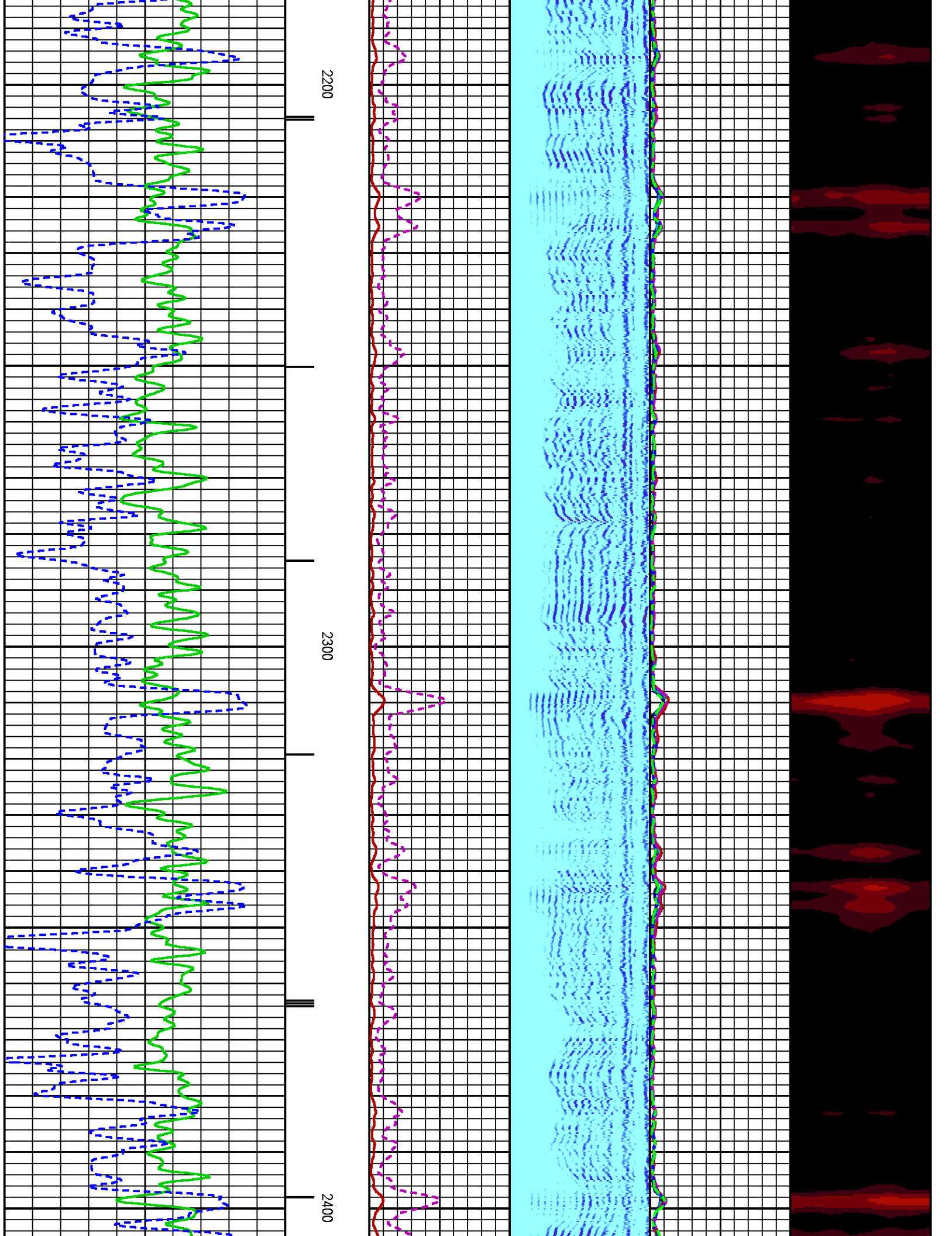


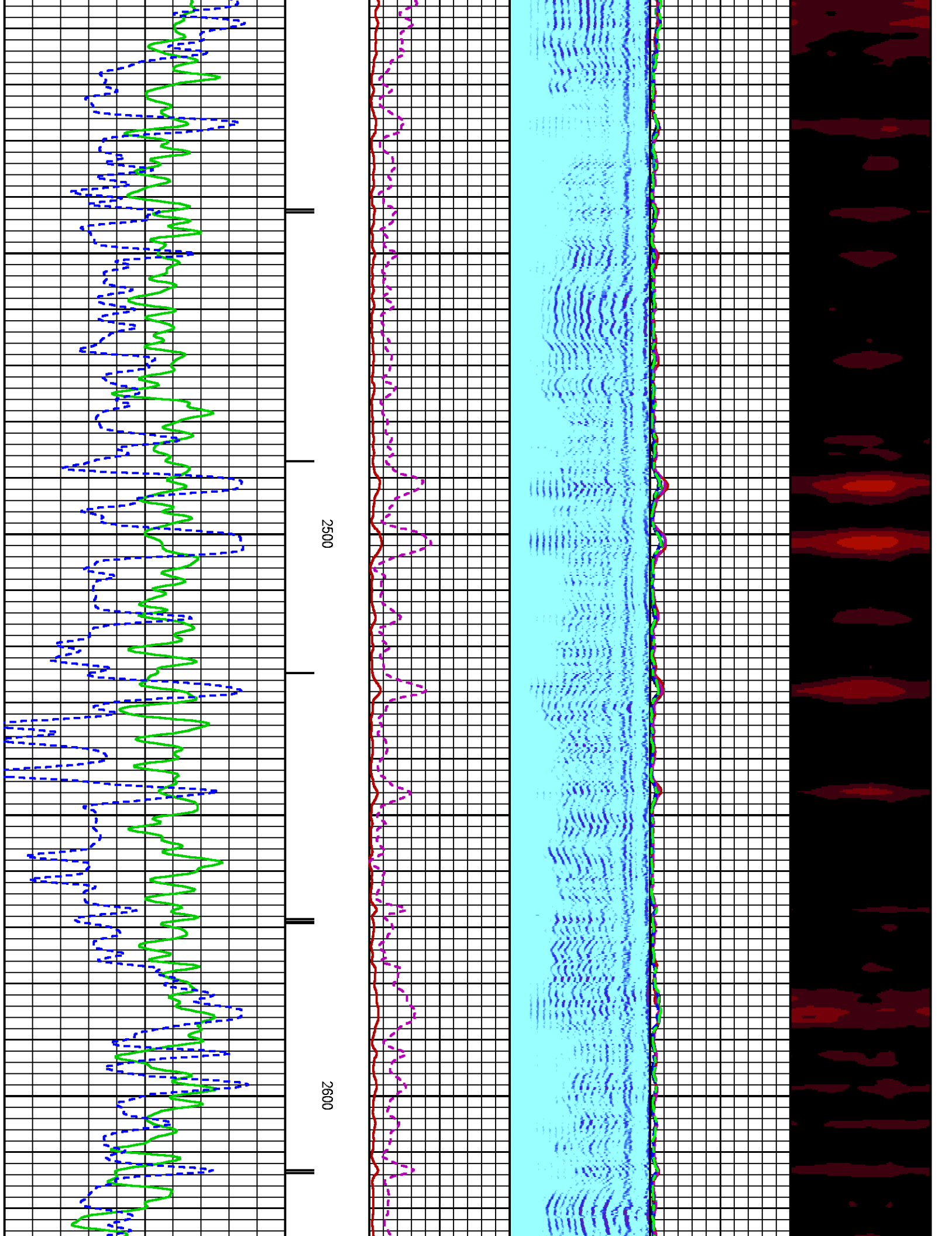


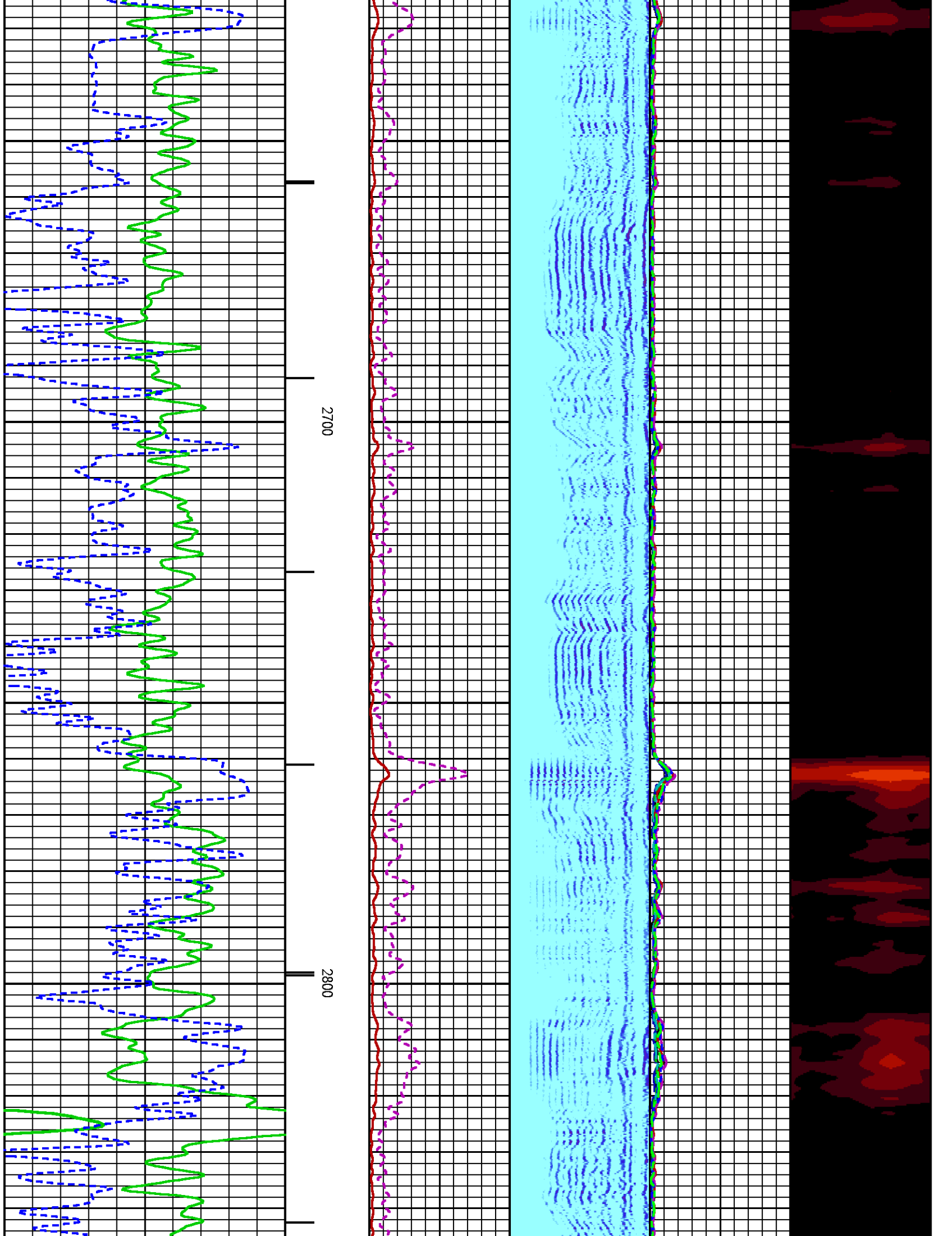


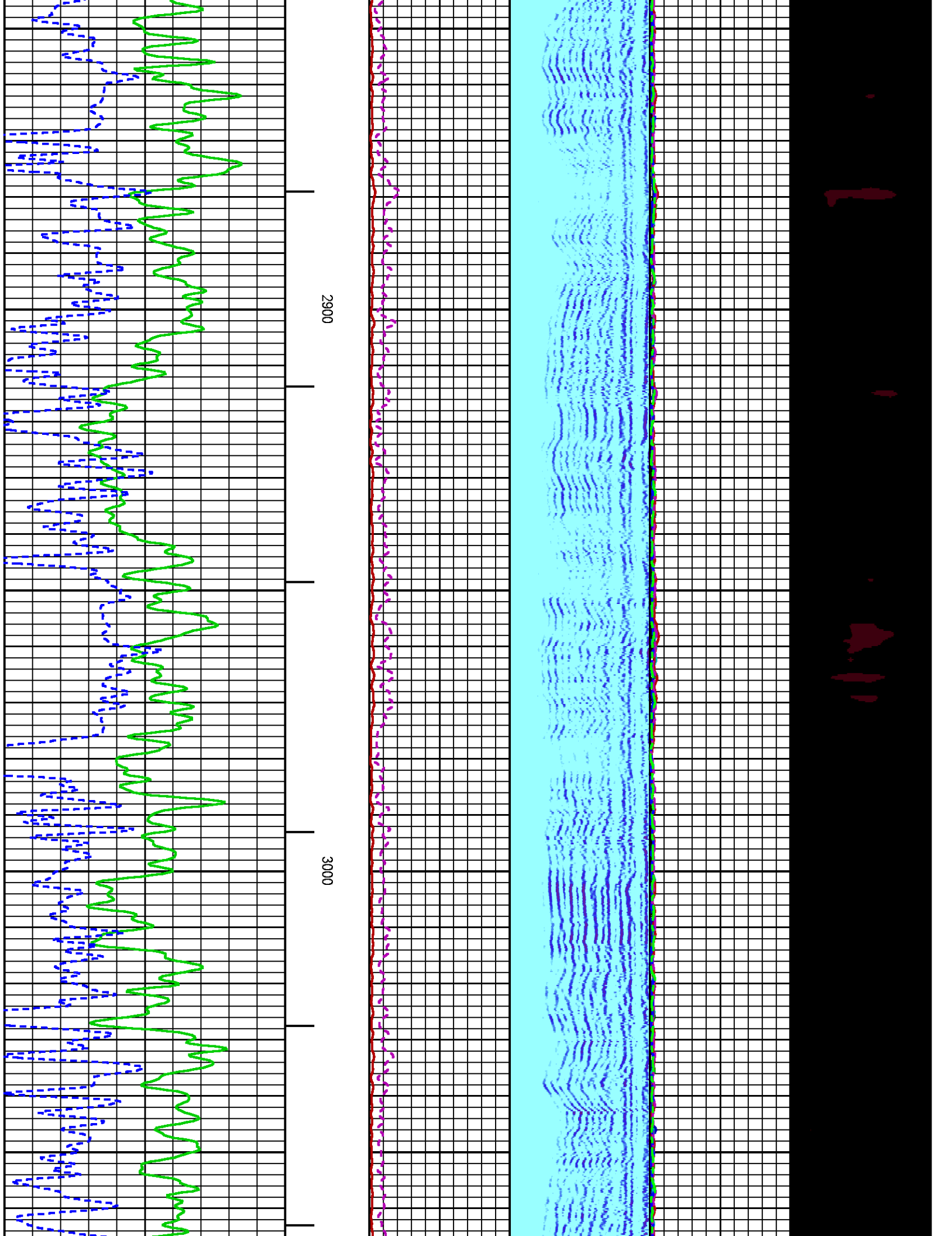


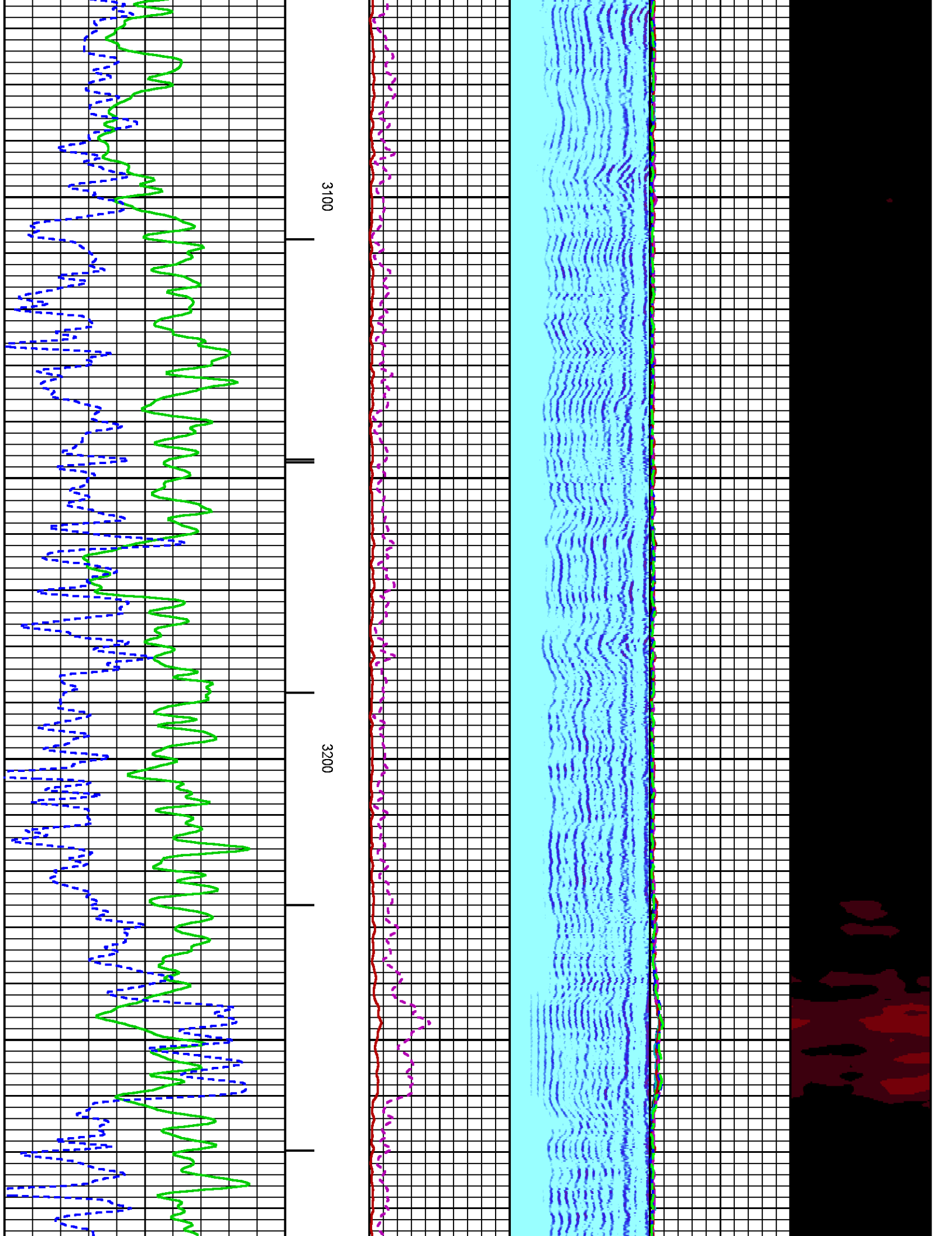


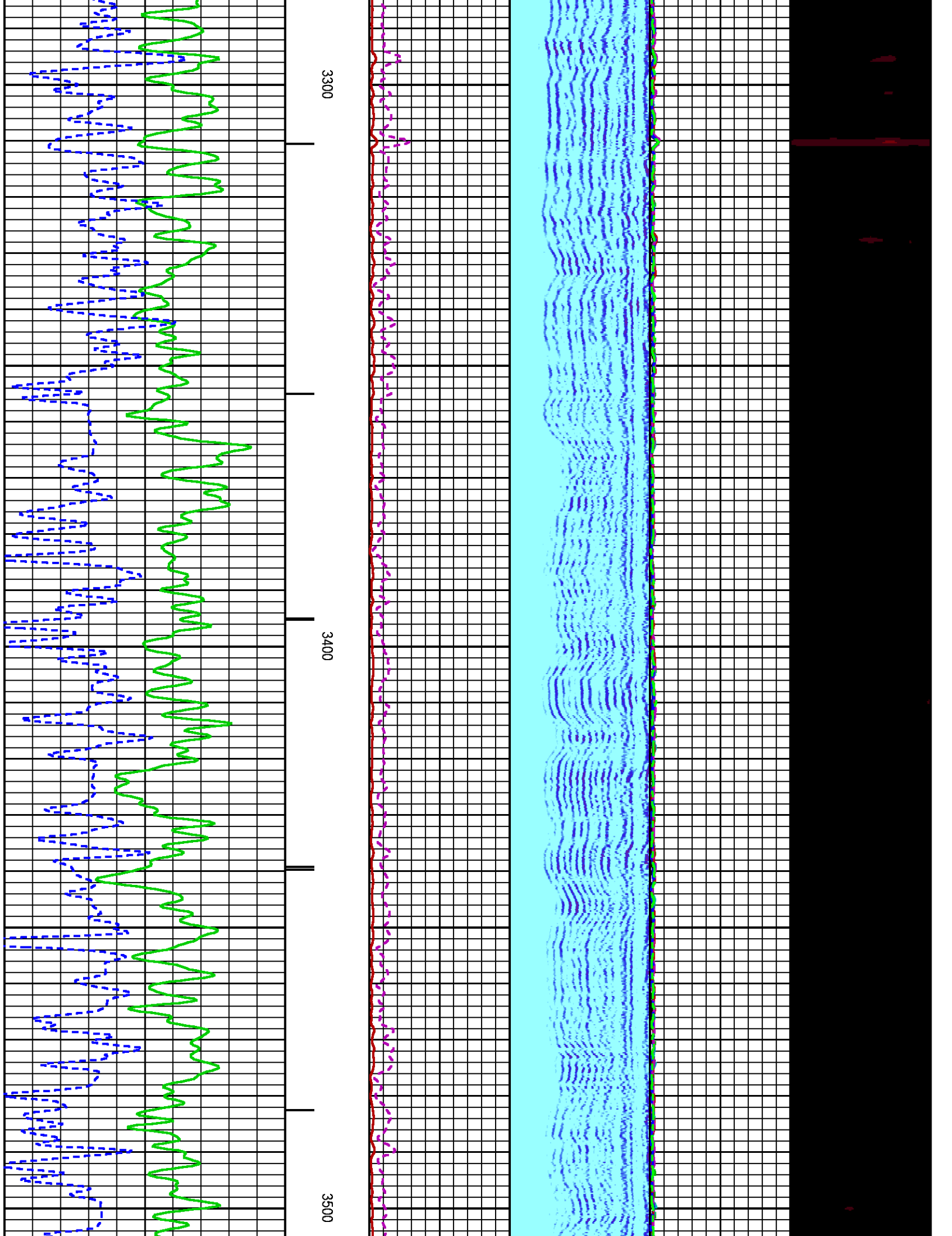


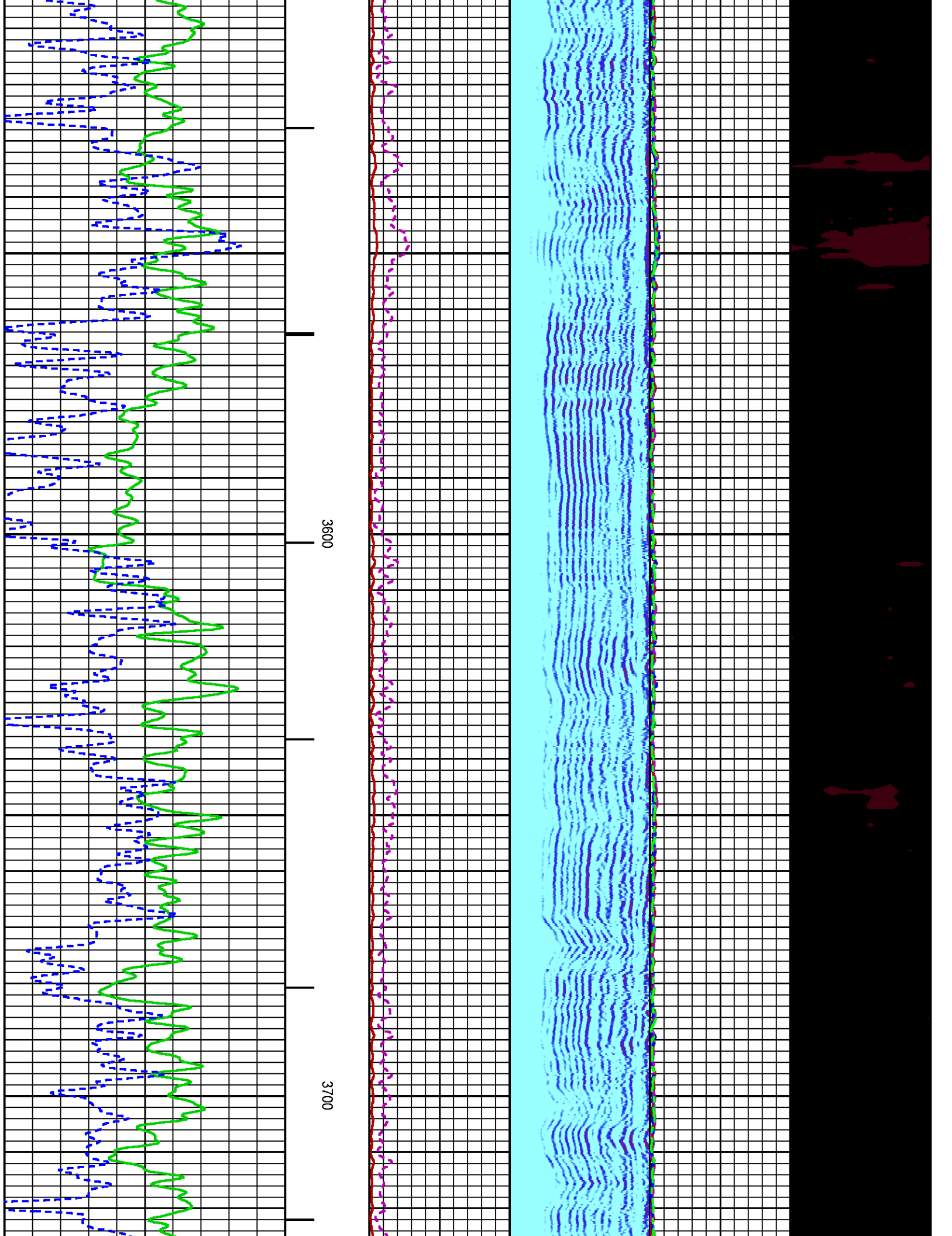


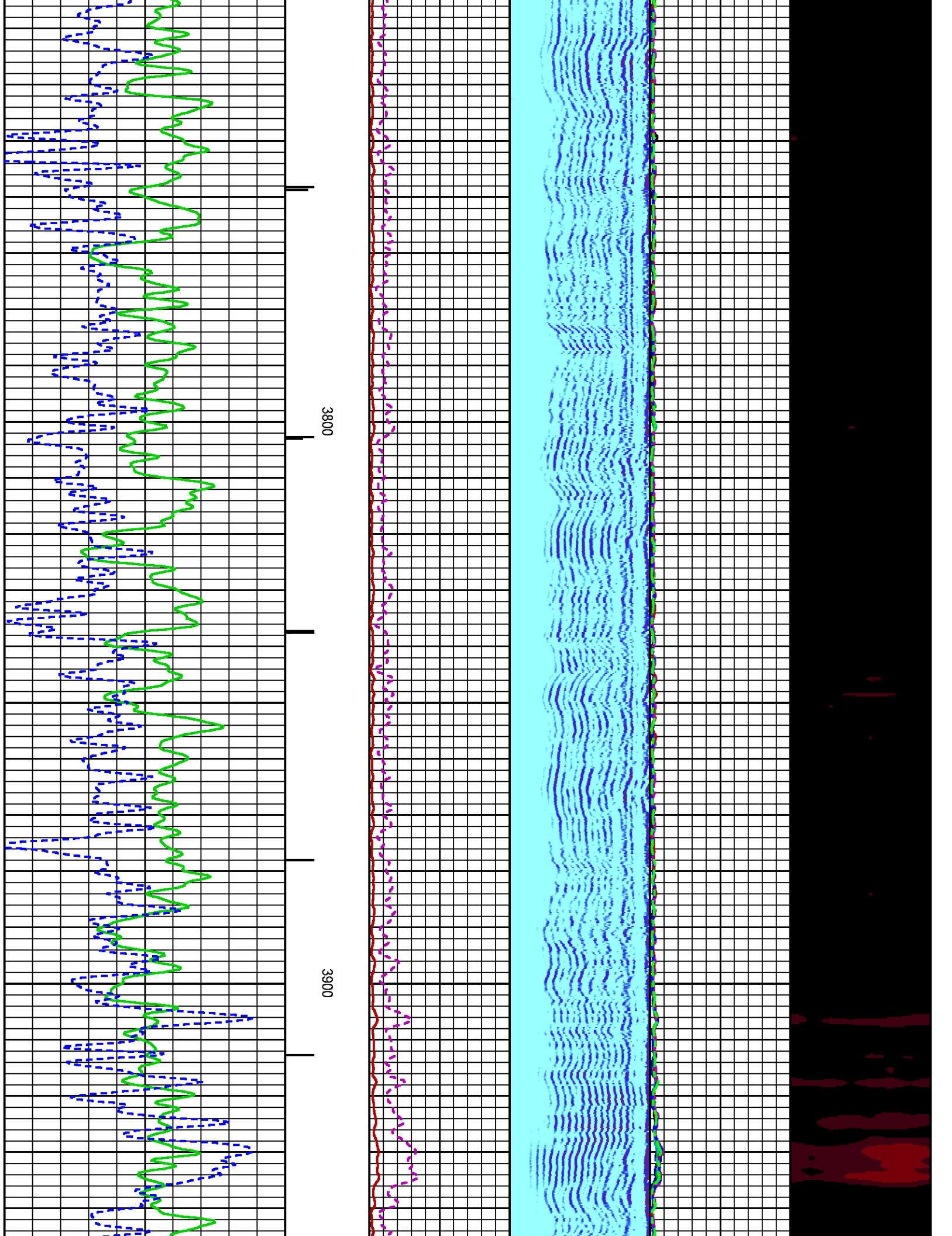


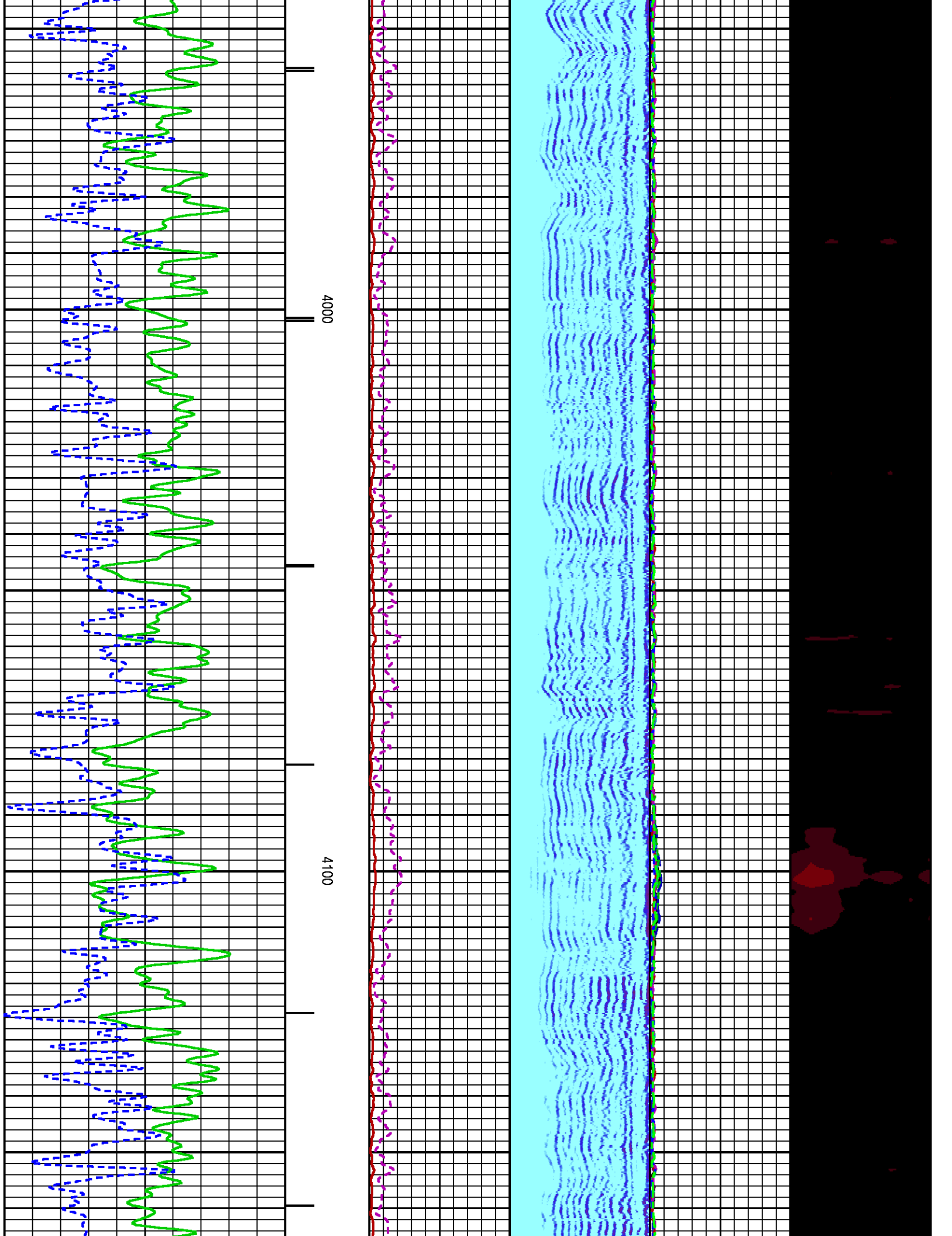


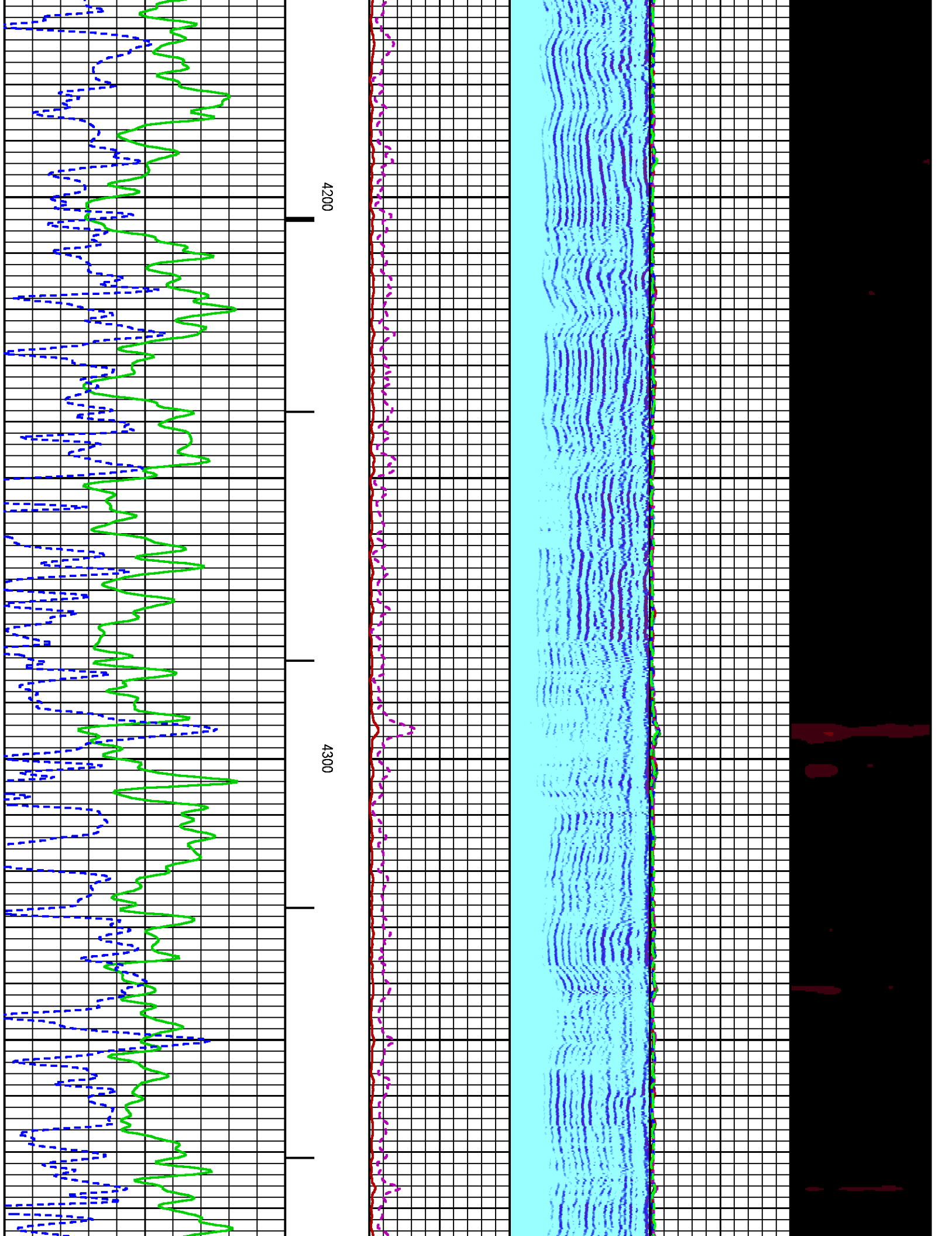


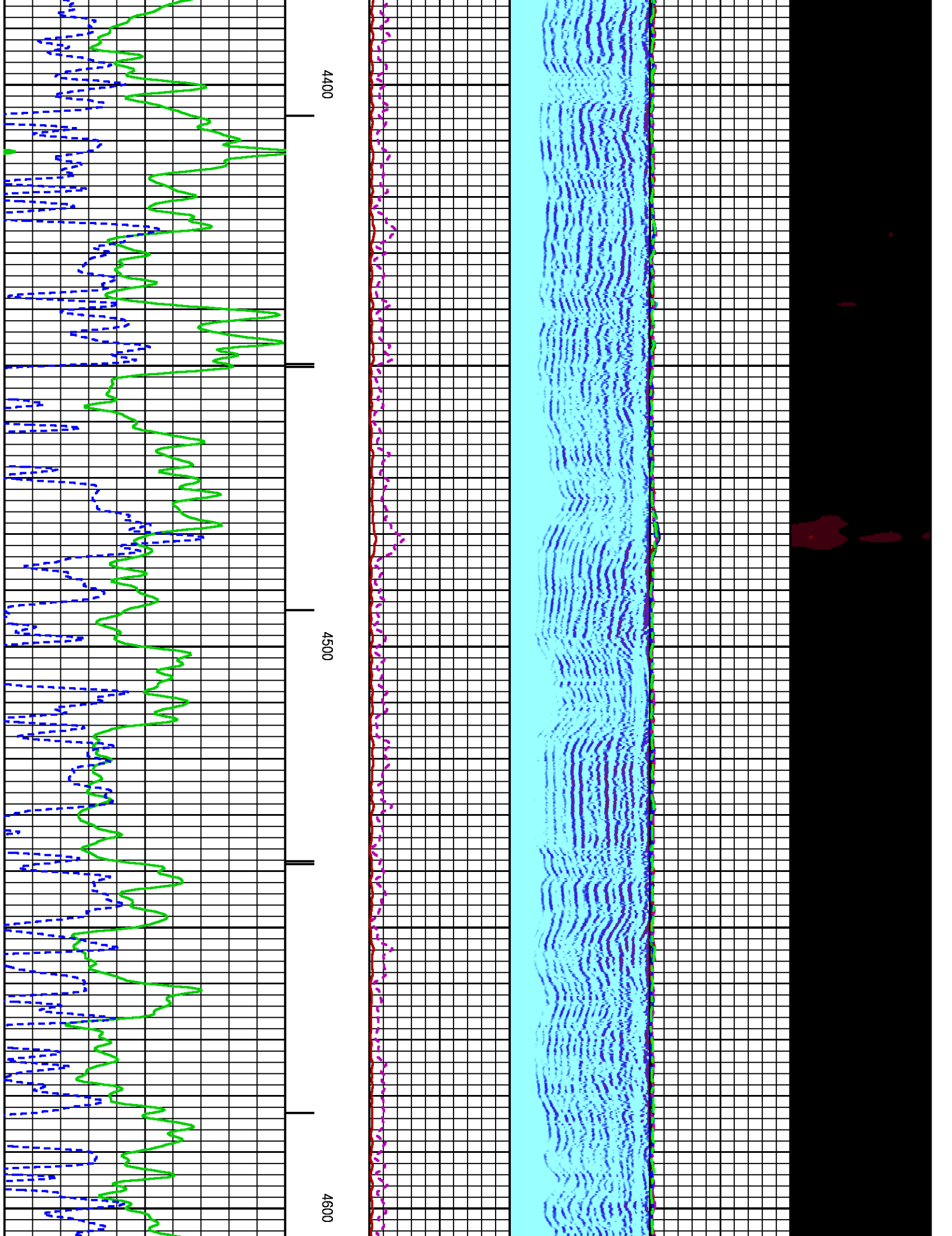


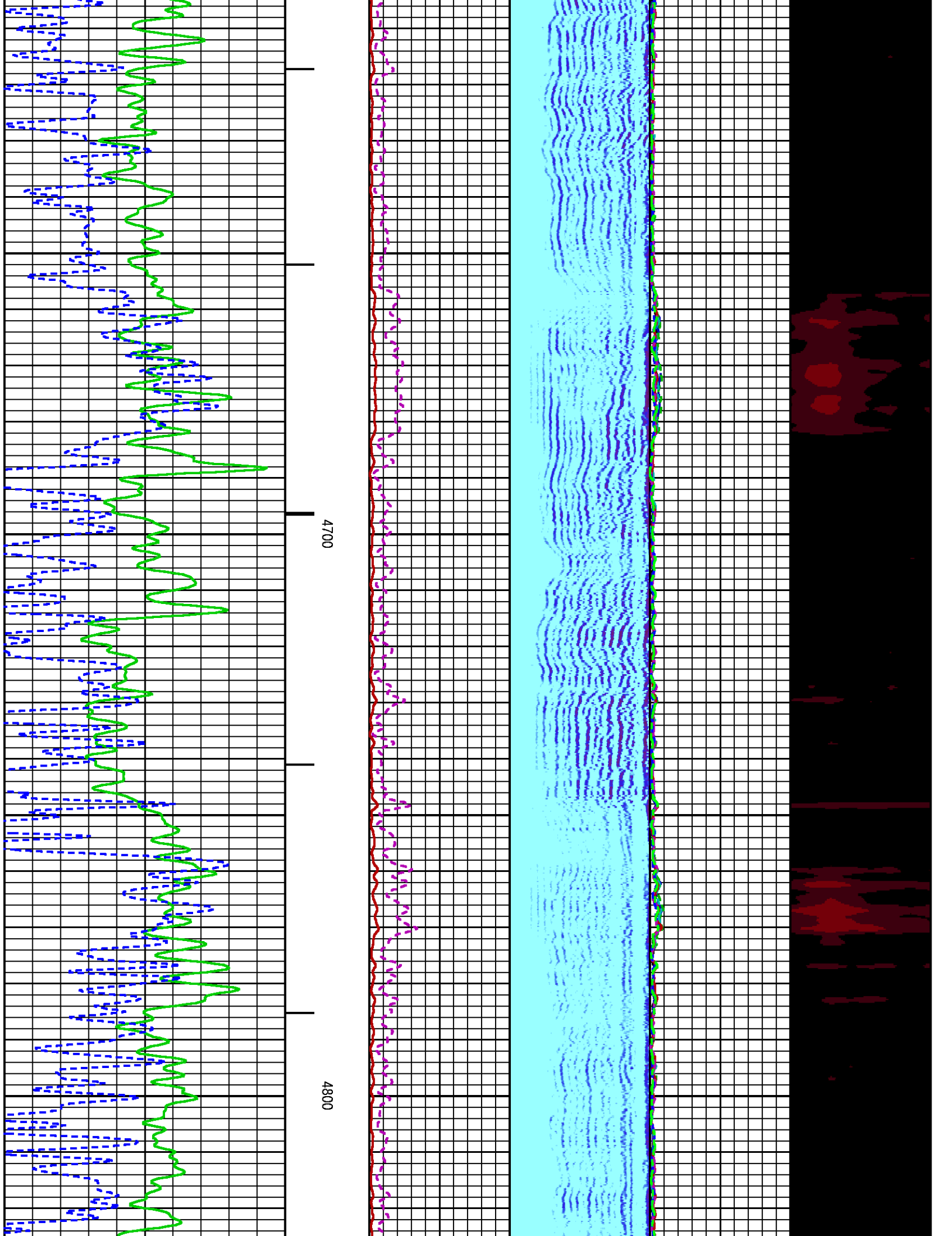


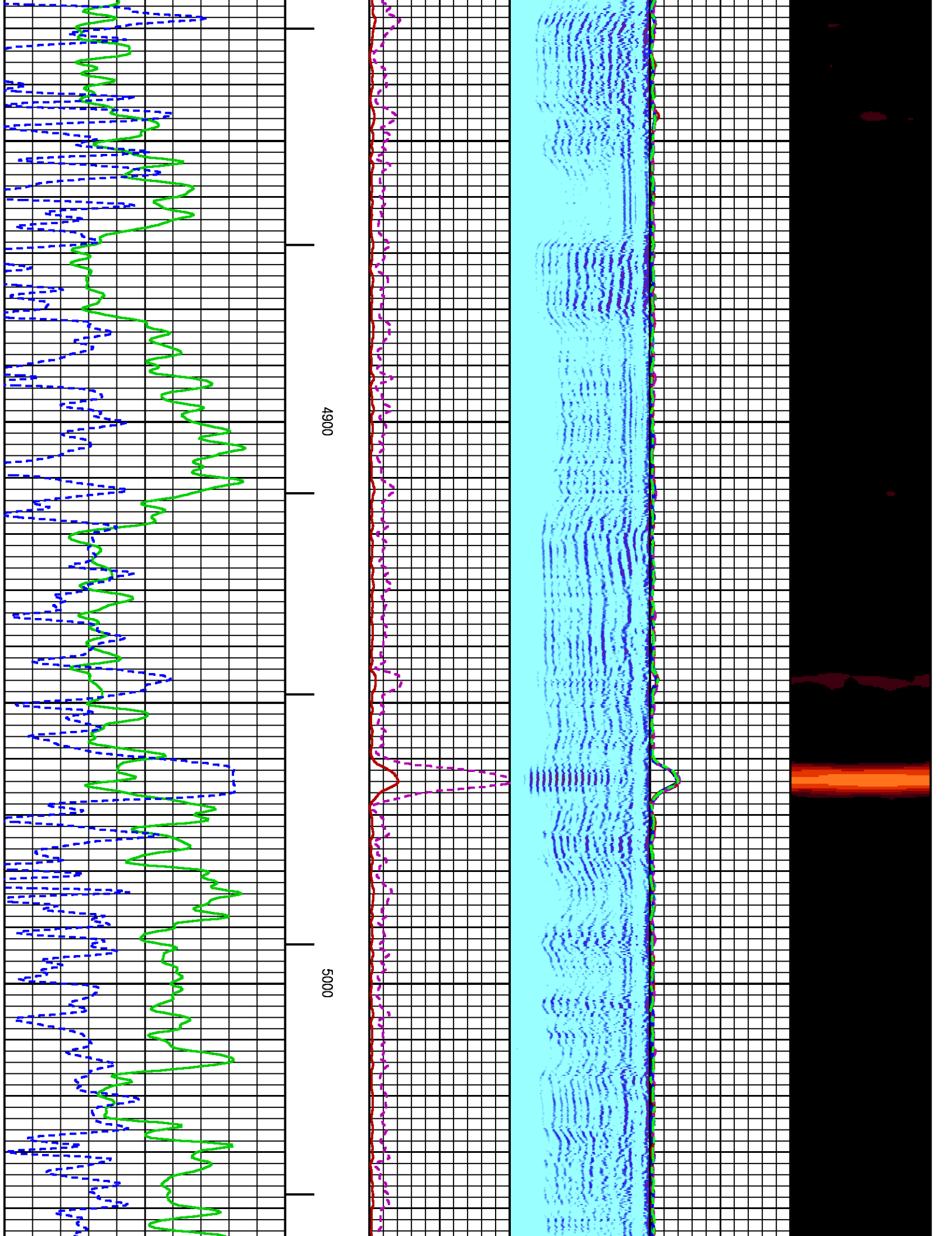


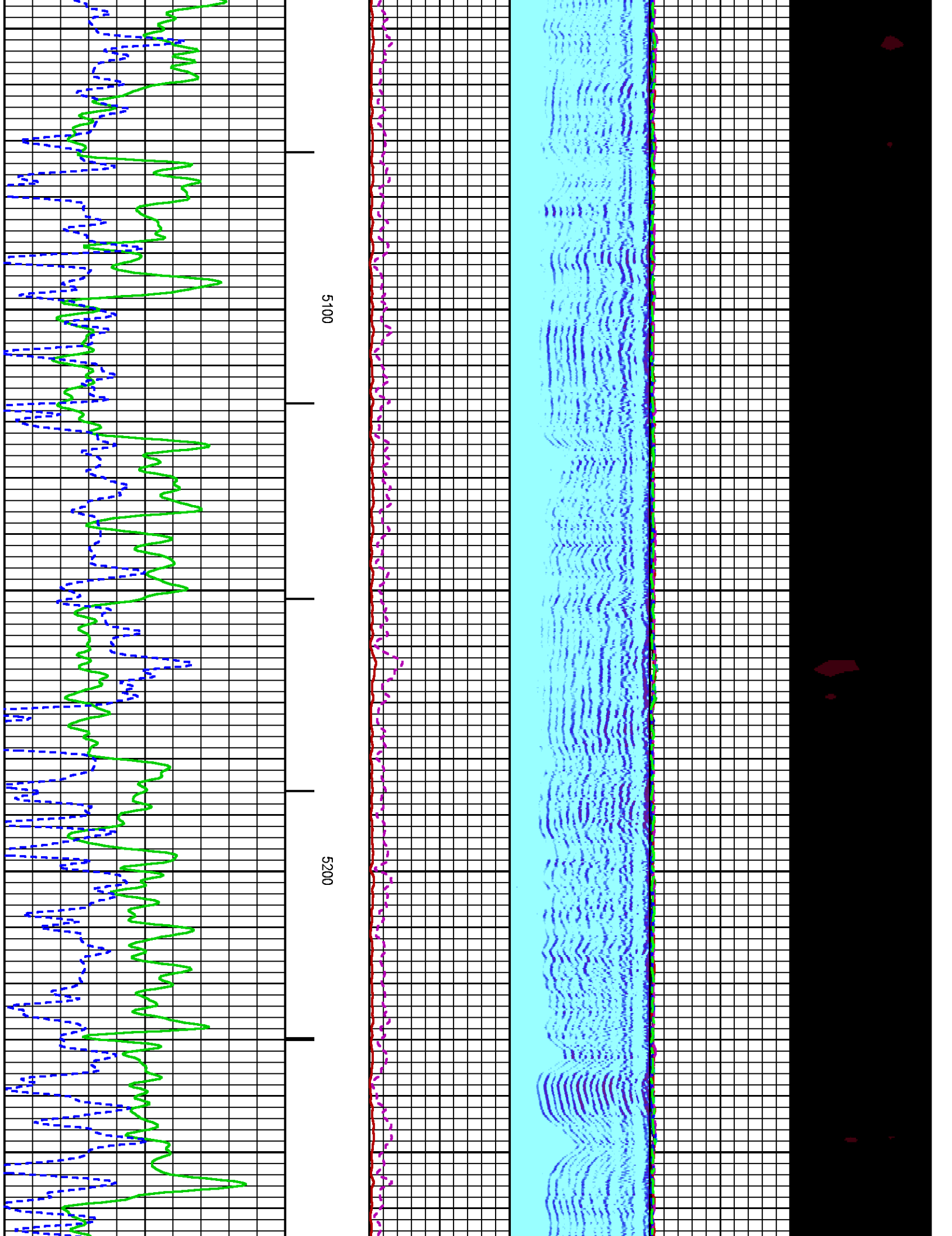


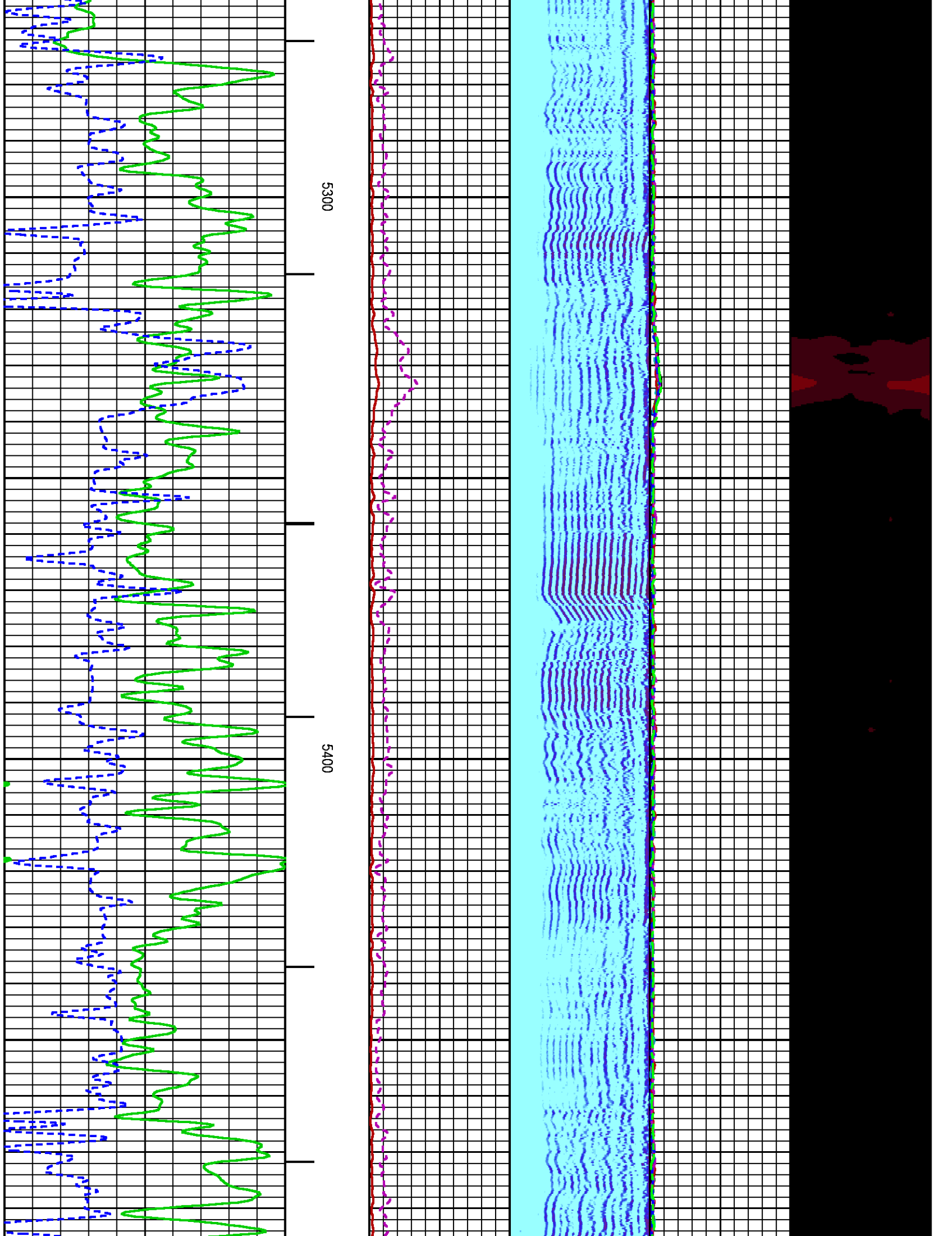


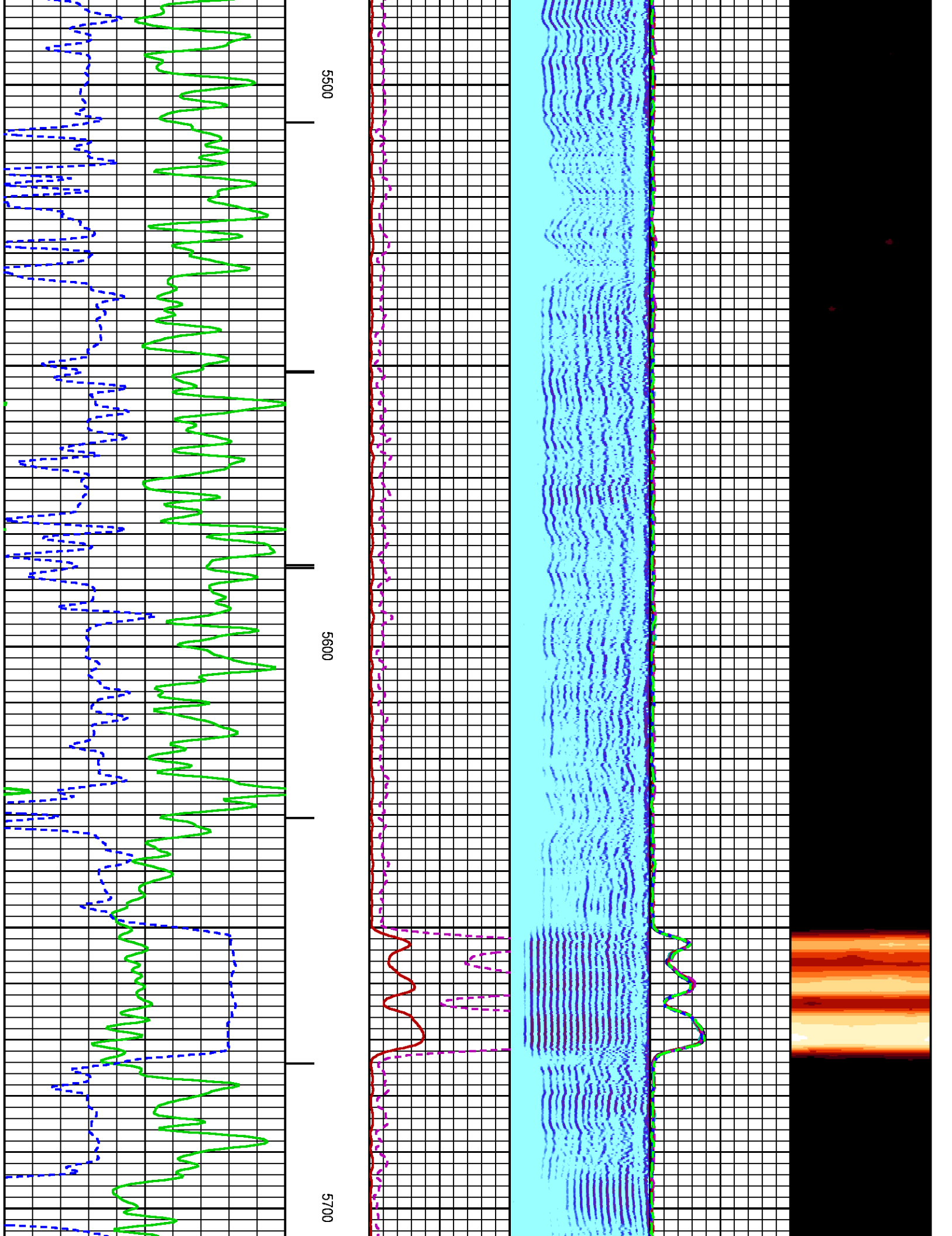


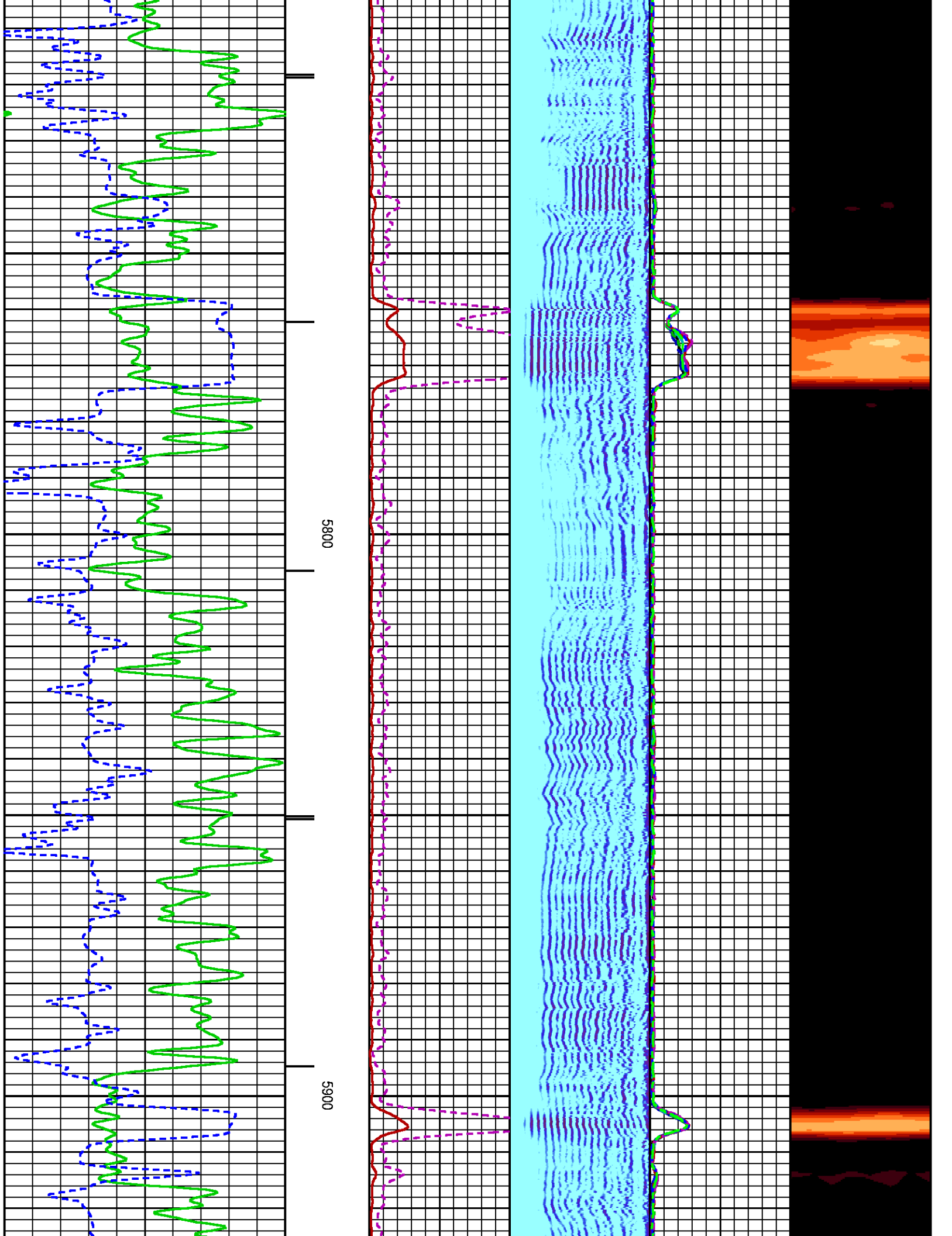


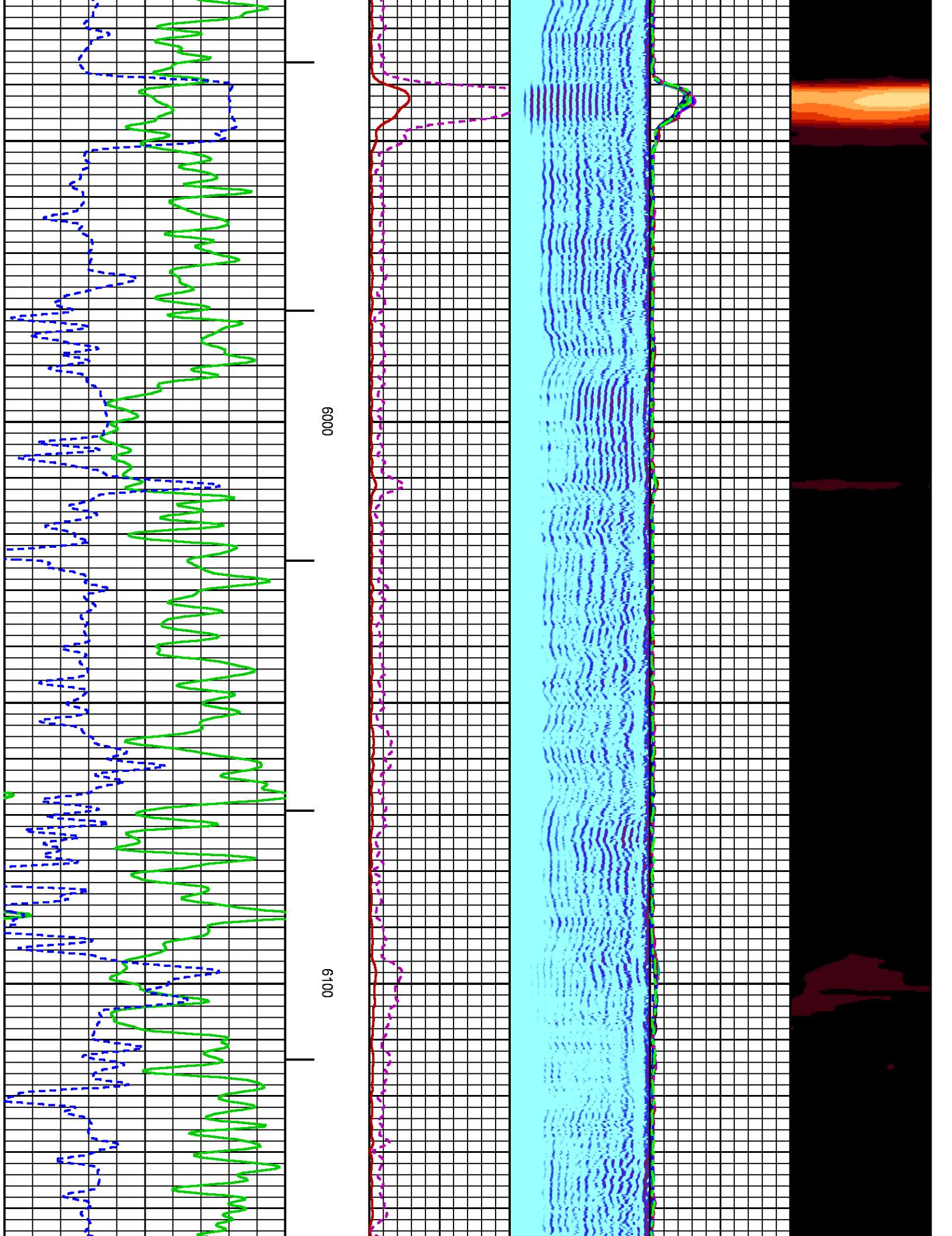


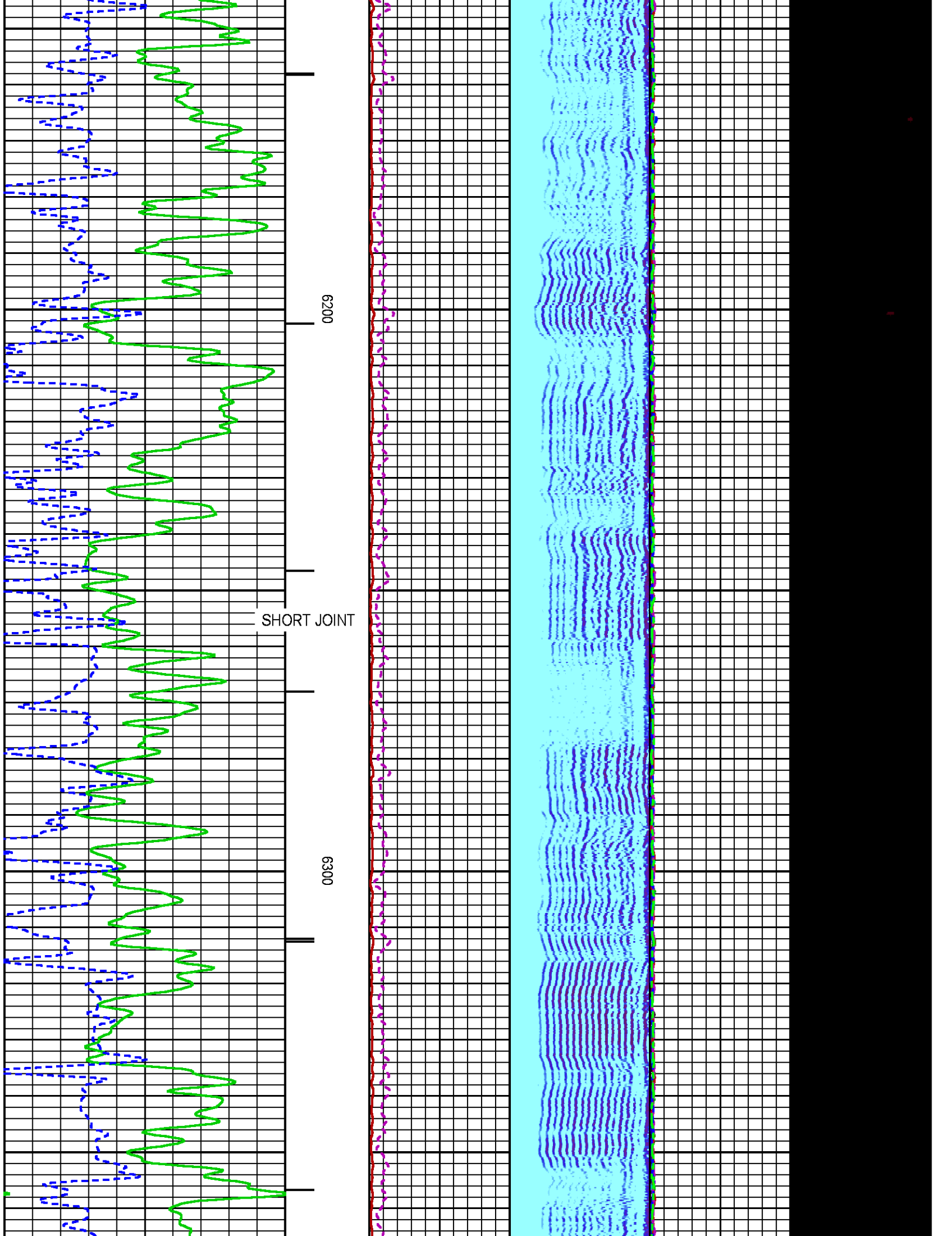


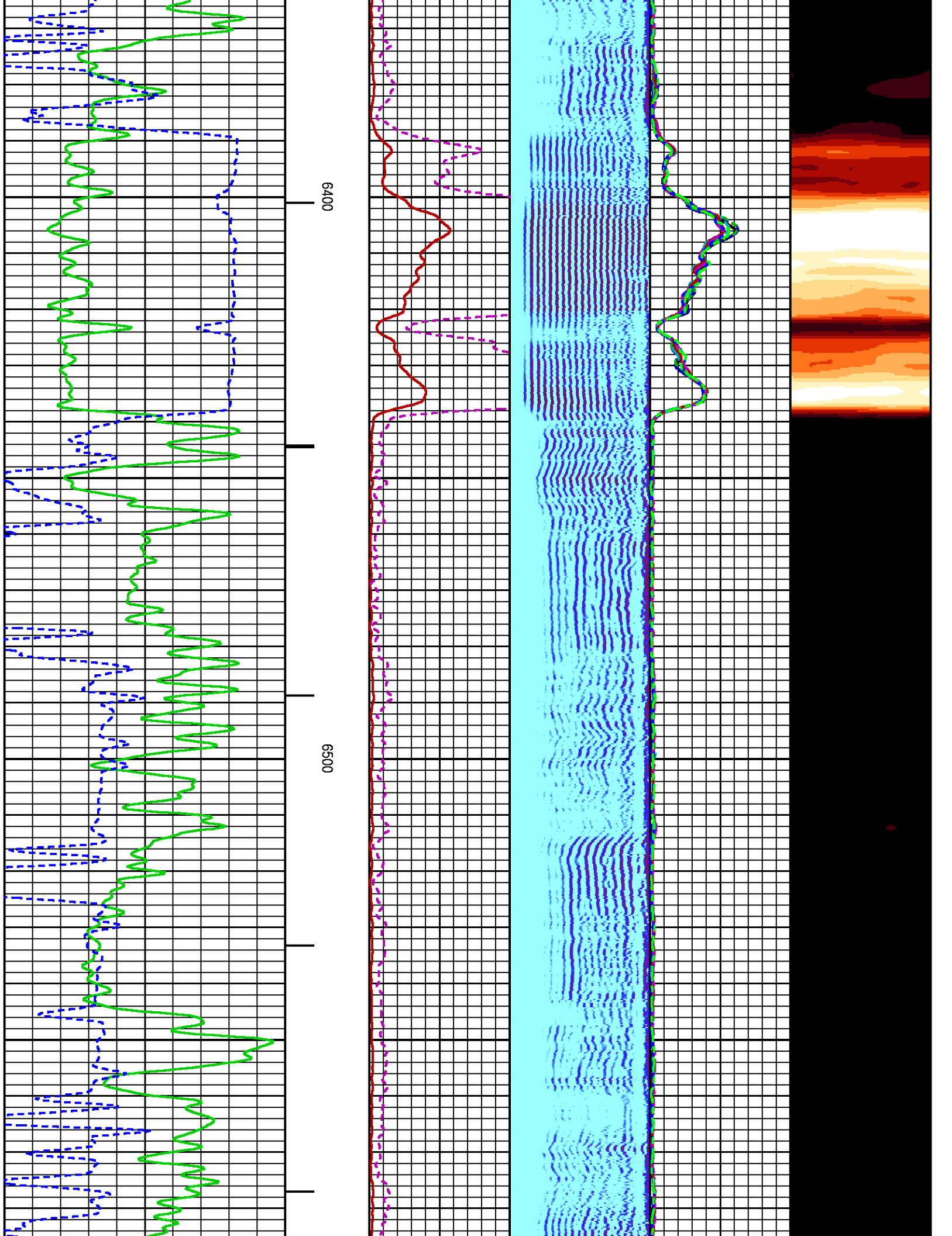


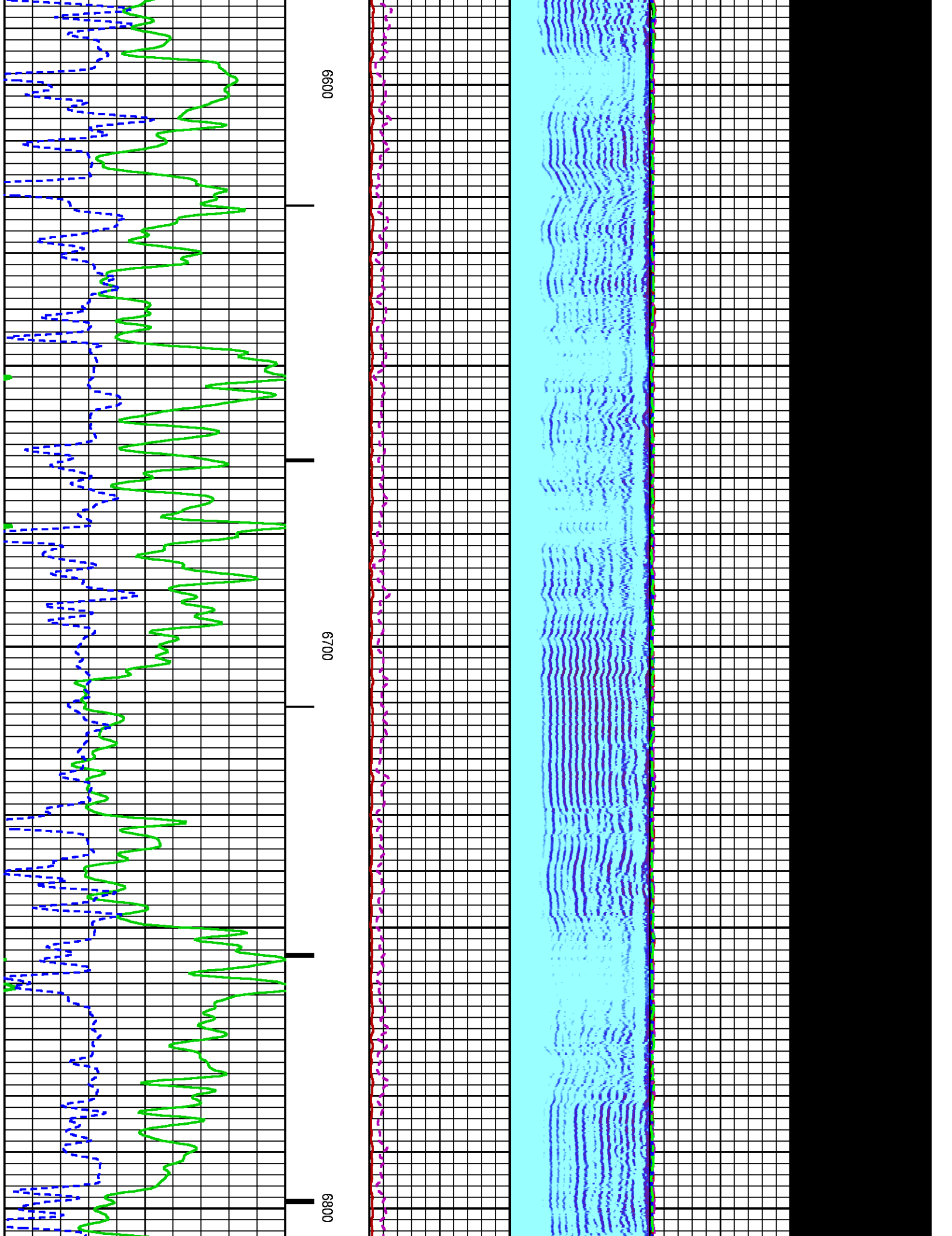


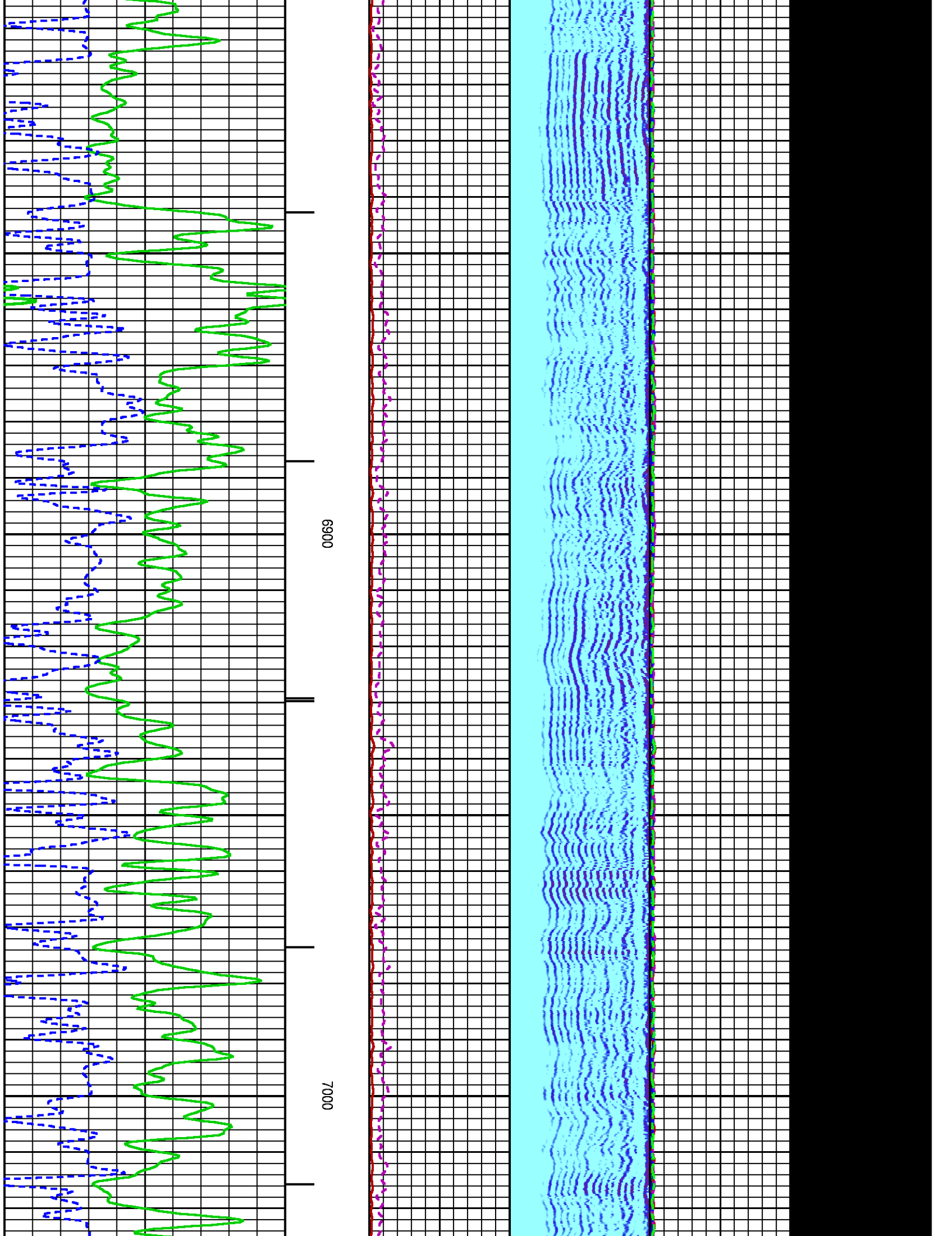


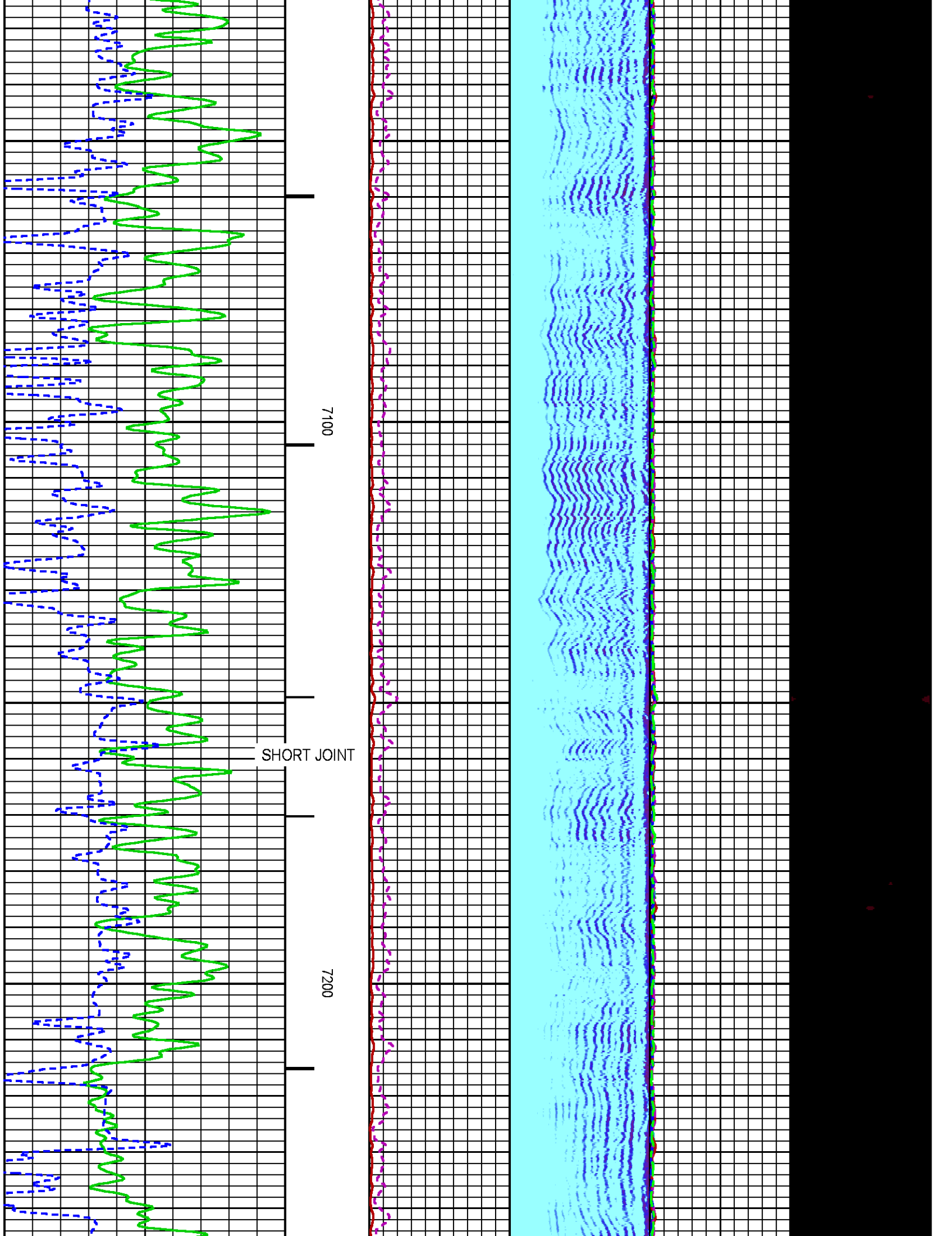


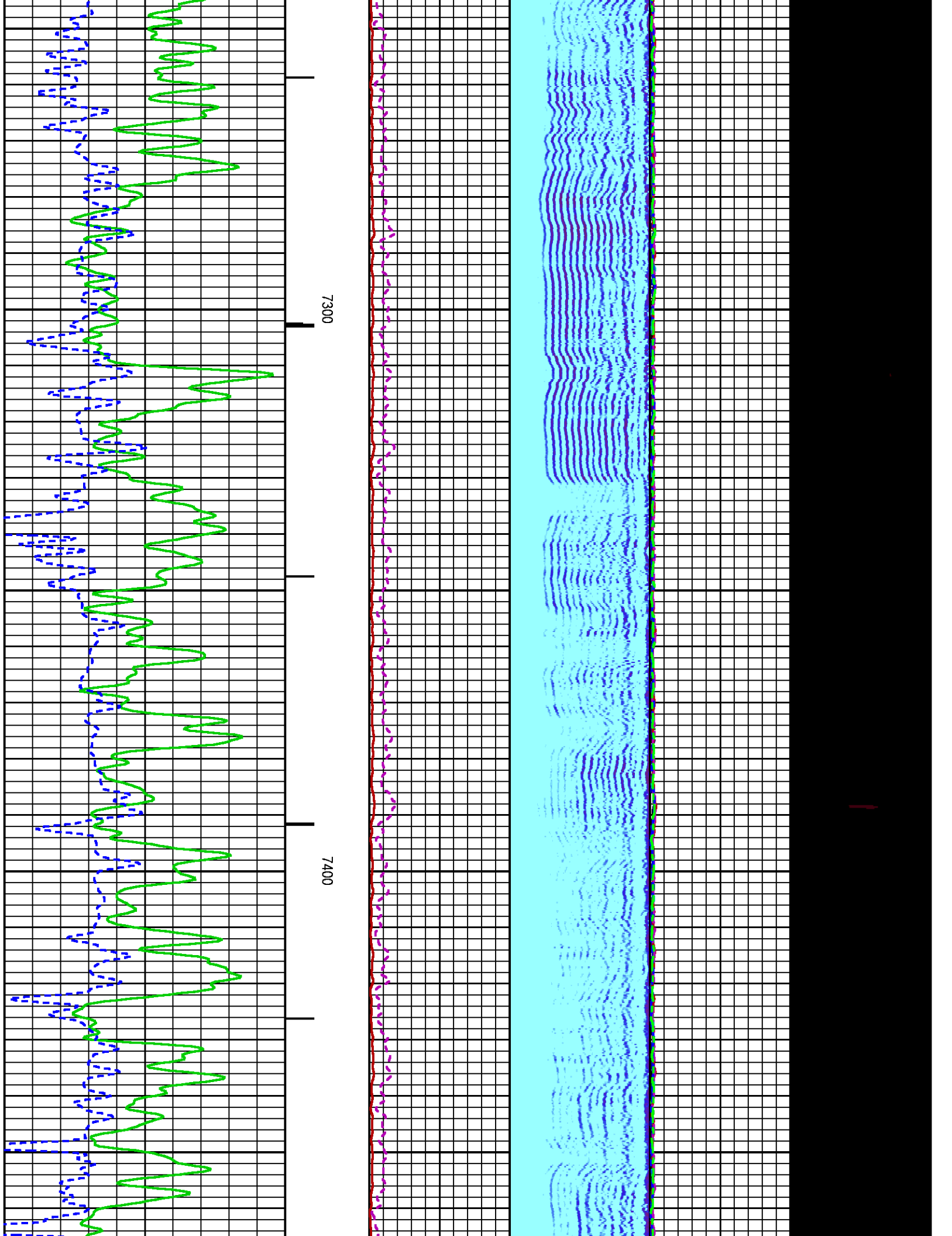


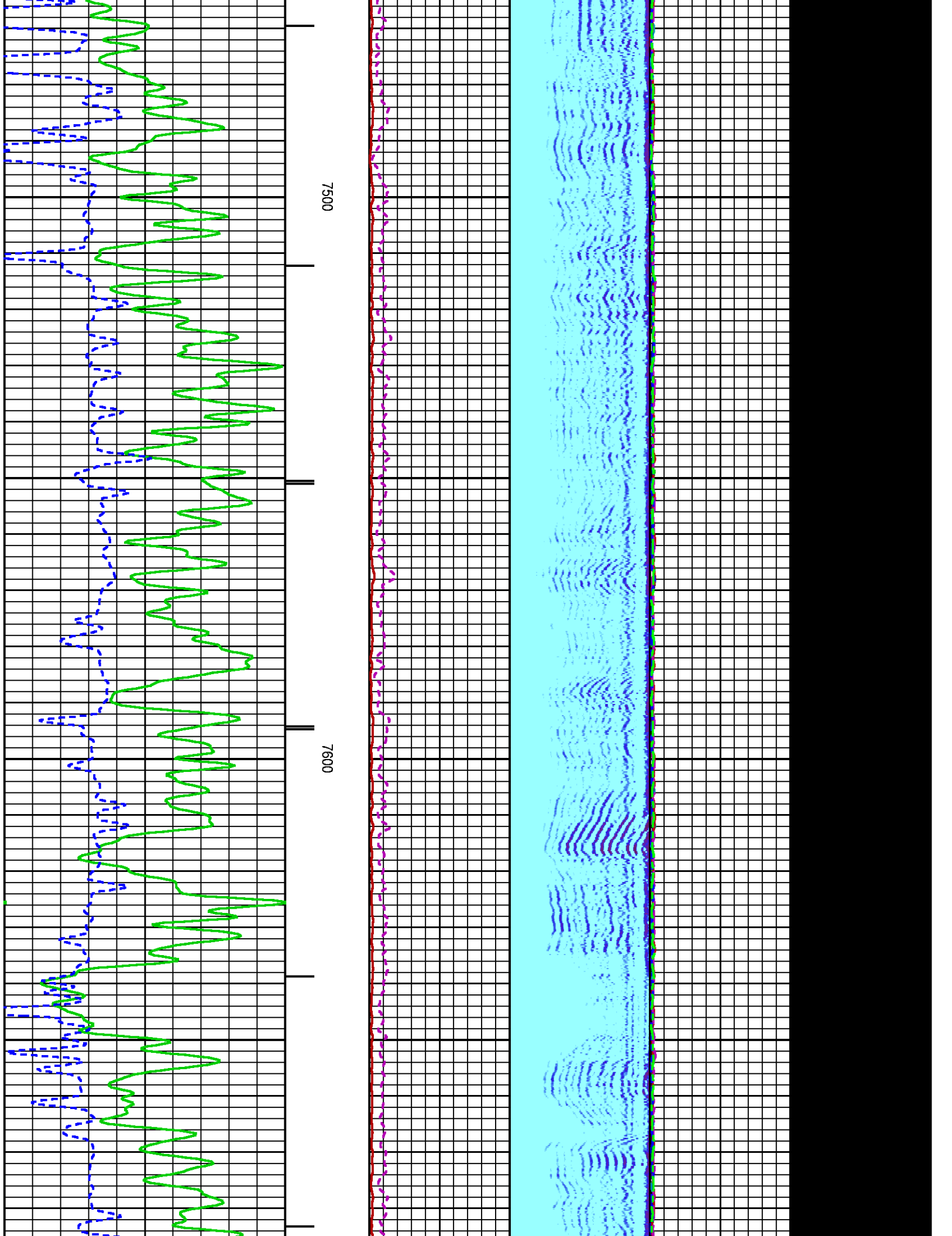


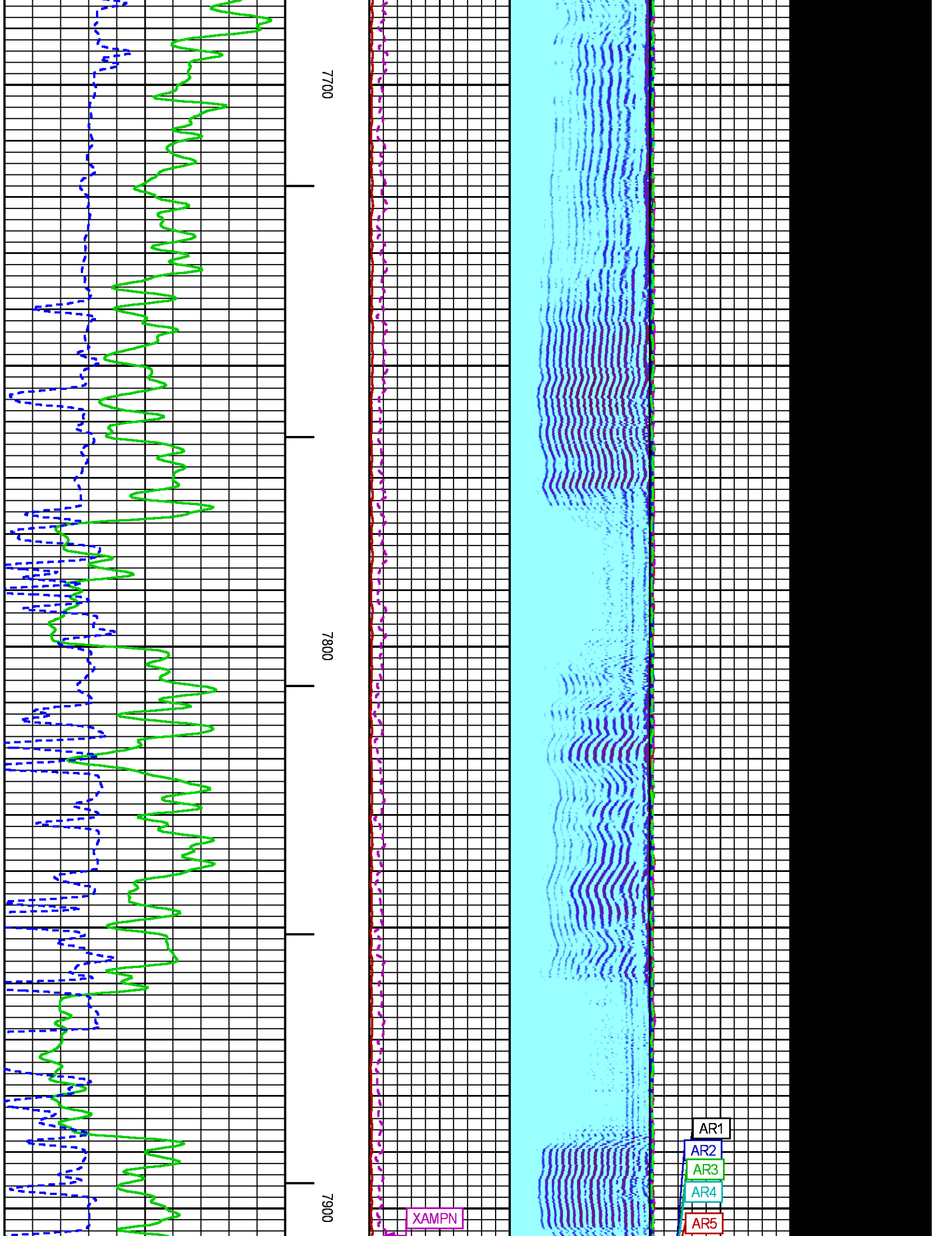


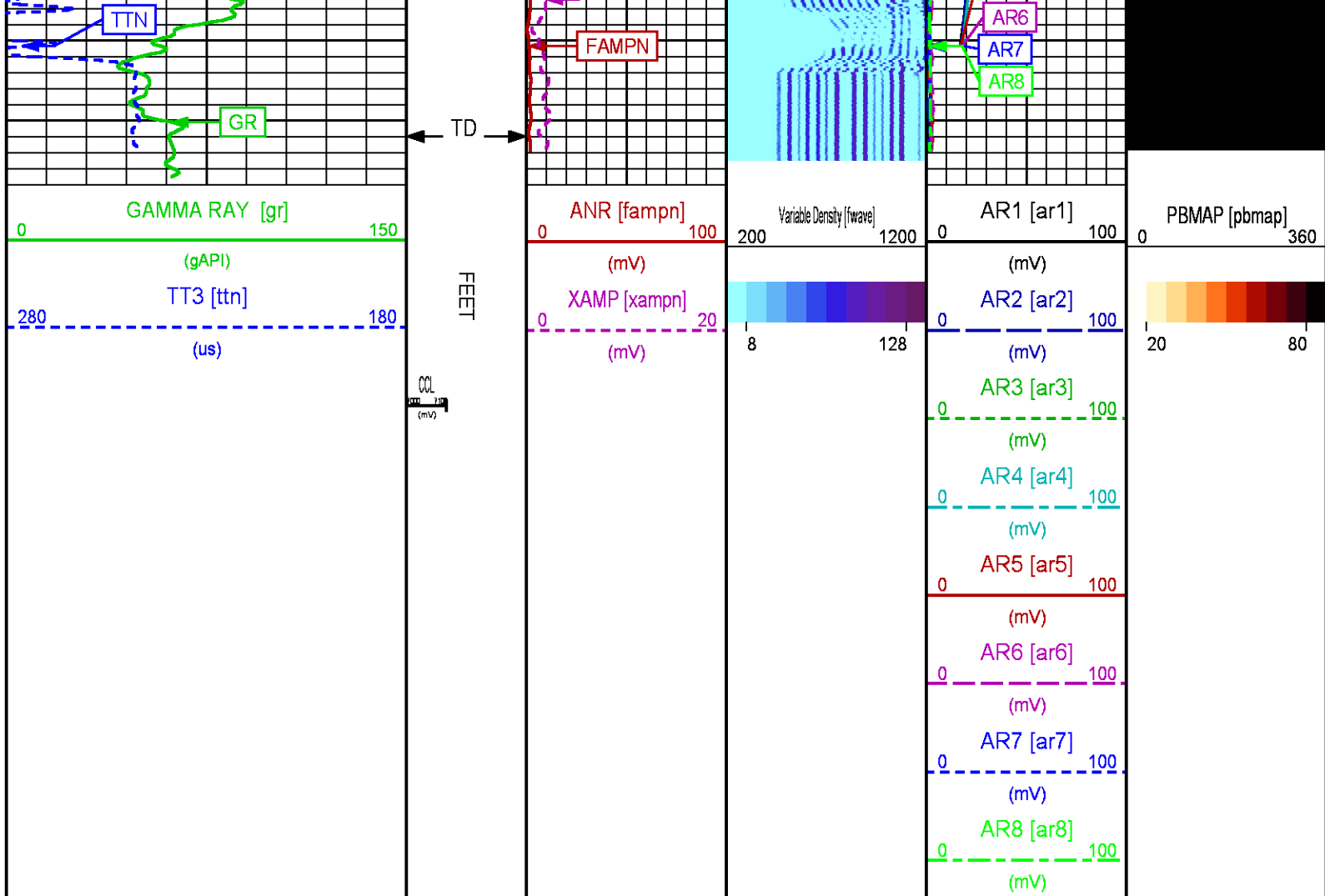












REPEAT PRESENTATION 0 PSI

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

Updates: 1 Patches: 6

Plotted: Tue Aug 25 10:00:23 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH099235/n012g01.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 7698.000 ft BOTTOM DEPTH: 7981.591 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	30	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	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	Aug 25 06:24:57 2015	FIXED GATE AMPLITUDE T-R1
F1:AR2	Aug 25 06:24:57 2015	FIXED GATE AMPLITUDE T-R2
F1:AR3	Aug 25 06:24:57 2015	FIXED GATE AMPLITUDE T-R3
F1:AR4	Aug 25 06:24:57 2015	FIXED GATE AMPLITUDE T-R4
F1:AR5	Aug 25 06:24:57 2015	FIXED GATE AMPLITUDE T-R5
F1:AR6	Aug 25 06:24:57 2015	FIXED GATE AMPLITUDE T-R6
F1:AR7	Aug 25 06:24:57 2015	FIXED GATE AMPLITUDE T-R7
F1:AR8	Aug 25 06:24:57 2015	FIXED GATE AMPLITUDE T-R8
F1:CCL	Aug 25 06:24:57 2015	CASING COLLAR LOCATOR
F1:FAMPN	Aug 25 06:24:57 2015	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Aug 25 06:24:57 2015	FAR WAVE FORM
F1:GR	Aug 25 06:24:57 2015	GAMMA RAY
F1:PBMAP	Aug 25 06:24:57 2015	PERCENT BOND CEMENT MAP
F1:TTN	Aug 25 06:24:57 2015	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Aug 25 06:24:57 2015	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

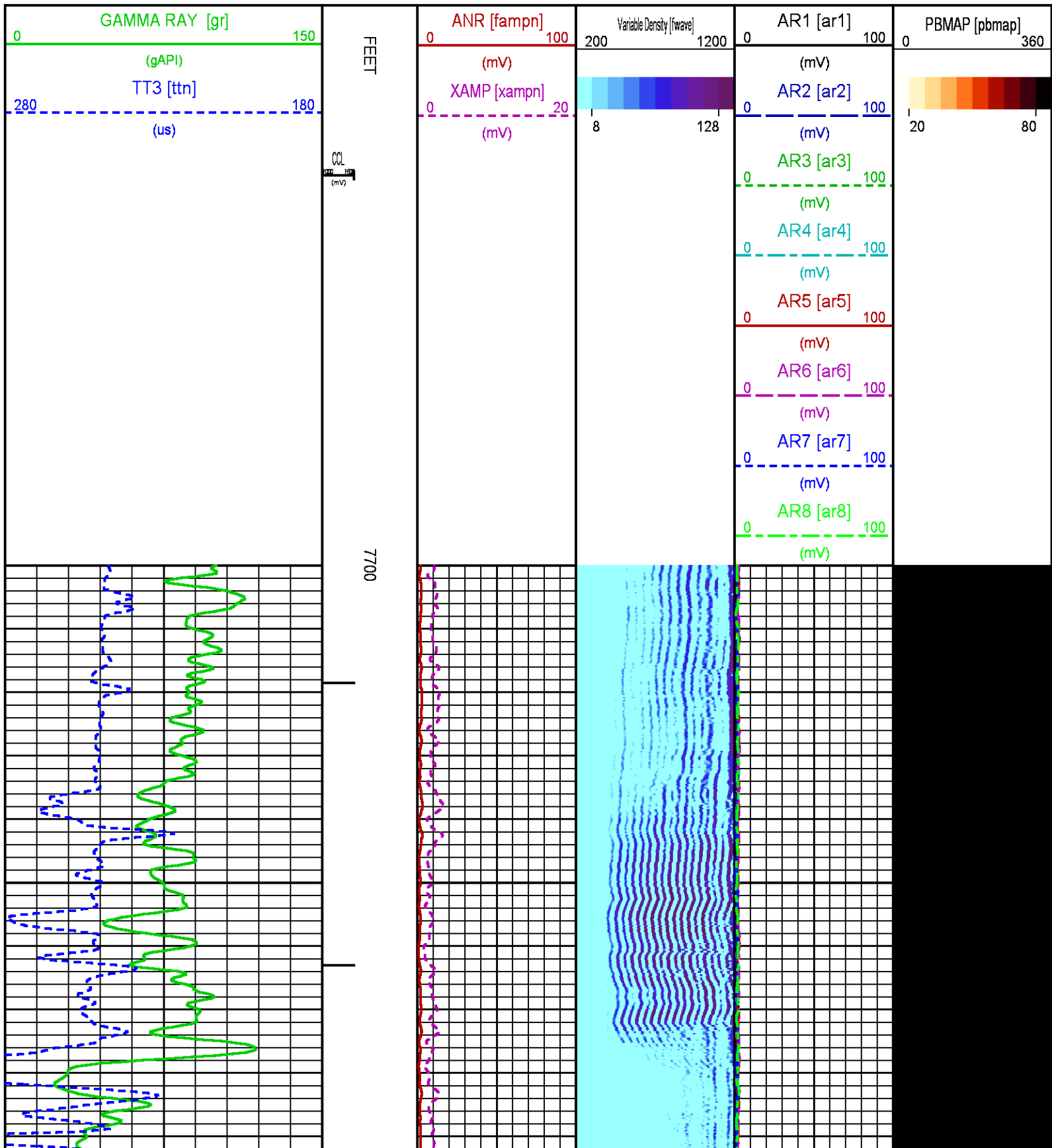
CURVE MEASURE POINT OFFSET

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

Presentation : HL6670:/dat1a/CH099235/9M_CBL_REPEAT.fvpdf [5"/100' Scale]
Plot Interval : 7700 - 7927 Feet

Data File 1 : F1 : HL6670:/dat1a/CH099235/9M_CBL_REPEAT.xtf
Created On : Aug 25 06:24:57 2015
Company : LARAMIE ENERGY
Well : PICEANCE 28-09M
Field : VEGA
File Interval : 7686.5 - 7981.5 Feet
OCT : n012g



(mV)

CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/CH099235/n012g.tp1

RAL PRIMARY CALIBRATION SUMMARY

TOOL #: 1426XA 10417452

DATE/TIME PERFORMED: Mon Aug 24 22:41:01 2015

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)	-0.05	-0.07	0.06	-0.07	-0.04	-0.04	-0.05	0.00	-0.04	0.41	-0.04
AMP FLUID (mV)	61	61	61	61	61	60	61	61	61	80	60
TT (us)	219	218	219	219	219	218	217	217	218	327	218
M FACTOR	1.64	1.64	1.65	1.65	1.64	1.65	1.65	1.65	1.64	1.89	1.66

RAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1426XA 10417452

DATE/TIME PERFORMED: Tue Aug 25 05:56:28 2015

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	-0.04	-0.01	-0.04	-0.05	-0.05	0.05	-0.02	0.10	-0.06	0.36	-0.02
AMP AIR	0.35	0.09	-0.15	0.89	0.79	0.89	1.15	-0.14	0.51	0.06	102.33

SHOP M FACTOR	SHOP A FACTOR	WIRELINE FACTOR
1.66	0.00	0.98

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 1355XA 11871506

DATE/TIME PERFORMED: Mon Aug 10 09:31:37 2015

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	54.04	208.18	154.1	0.973	52.60	202.60	150

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 1355XA 11871506

DATE/TIME PERFORMED: Mon Aug 10 09:33:01 2015

UNIT #: 3880TA HL6670

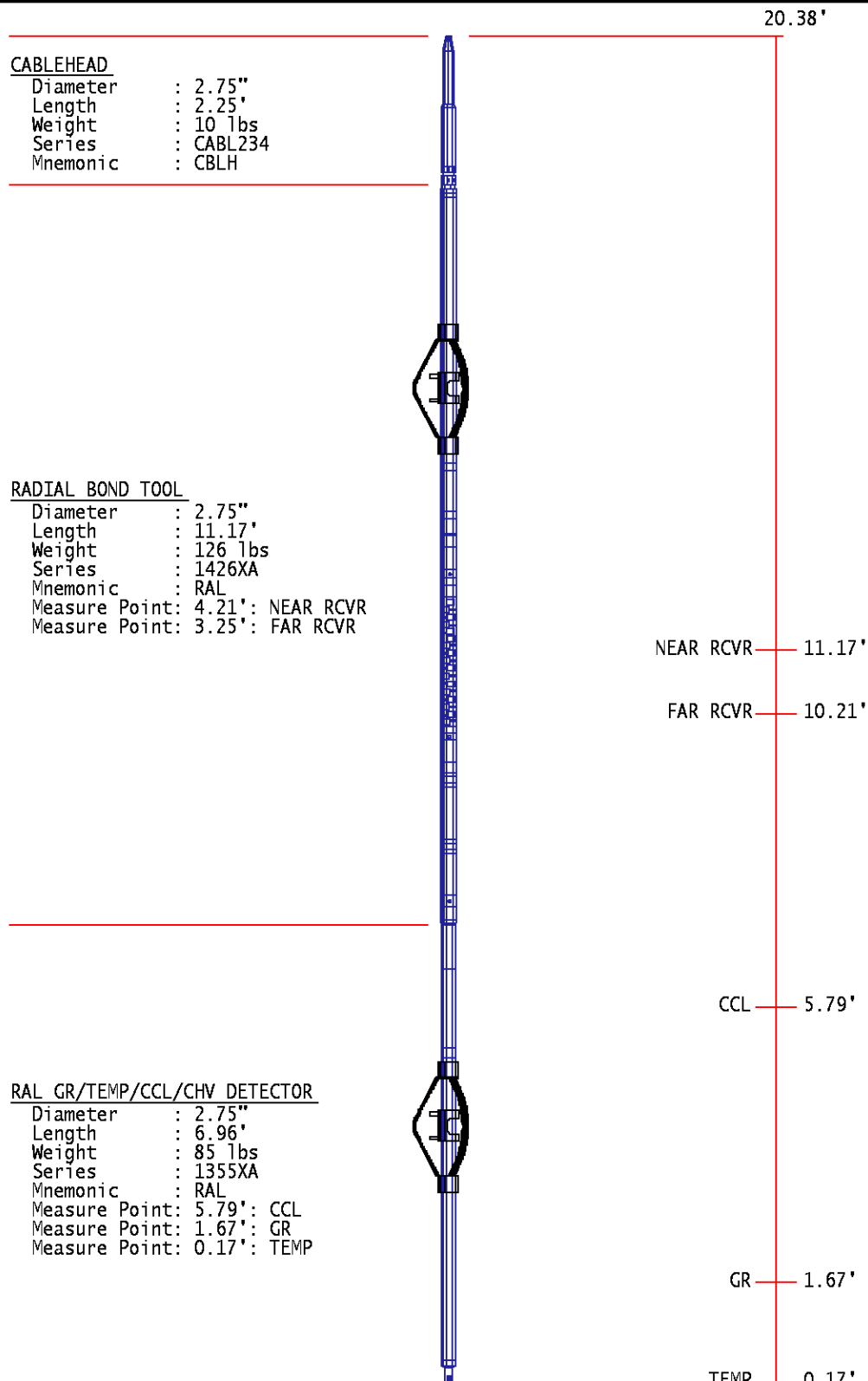
VERI JIG #: 4702NK WA-612

BACKGROUND (cts)	CALBRTR ON (cts)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)


GR	(GR)	(GR)	(GR)	(GR)	(GR)
	54.09	214.27	0.973	52.64	208.52
					155.88
					140.00 160.00

INSTRUMENT CONFIGURATION

Source File: /dat1a/CH099236/CBL-tdg



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

	COMPANY <u>LARAMIE ENERGY</u>		FILE NO:
	WELL <u>PICEANCE 28-09M</u>		<u>CH099235</u>
	FIELD <u>VEGA</u>		API NO:
	COUNTY <u>MESA</u>	STATE <u>COLORADO</u>	<u>05077102380000</u>
LOCATION: SHL: LAT 39.250911 LONG -107.779353 BHL: LAT 39.249467 LONG -107.774656		ELEVATIONS: KB 7600 FT DF GL 7578 FT	28 9S 93W 28-05 PAD PATTERSON 306
SEC <u>28</u> TWP <u>9S</u> RGE <u>93W</u>		DATE 25-Aug-2015	