



FILE NO: CH095614
 API NO: 05045224310000
 COMPANY: WPX ENERGY
 WELL: GM 728-14-33-HN1
 FIELD: GRAND VALLEY
 COUNTY: GARFIELD STATE: COLORADO

Ver. 4.01
 33 6S 96W
 GR 14-28 PAD
 NABORS X21
 LOCATION:
 SHL: 592' FSL & 385' FWL 28 6S 96W
 BHL: 192' FSL & 592' FWL 33 6S 96W
 SEC 33 TWP 6S RGE 96W
 OTHER SERVICES: NONE

PERMANENT DATUM: GL ELEVATION 5518 FT
 LOG MEASURED FROM: K.B. 33 FT ABOVE P.D.
 DRILL. MEAS. FROM: K.B.
 ELEVATIONS:
 KB 5551 FT
 DF
 GL 5518 FT

DATE	21-Mar-2015
RUN	1
TRIP	1
SERVICE ORDER	US095614
DEPTH DRILLER	9788 FT
DEPTH LOGGER	9677 FT
BOTTOM LOGGED INTERVAL	9667 FT
TOP LOGGED INTERVAL	0 FT
TIME STARTED	21:00
TIME FINISHED	3:30
OPERATOR RIG TIME	6.5 HOURS
TYPE OF FLUID IN HOLE	MUD
FLUID DENSITY	12.7 LB/G
FLUID SALINITY	NA
FLUID LEVEL	30 FT
LOGGED CEMENT TOP	SEE LOG
WELLHEAD PRESSURE	0 PSI
MAXIMUM HOLE DEVIATION	NA
NOMINAL LOGGING SPEED	60 FMIN
MAX. RECORDED TEMP.	288 DEGF
REFERENCE LOG	BAKER HUGHES HDIL/ZDL
REFERENCE LOG DATE	16-MAR-2015
EQUIP. NO.	6670
LOCATION	GRAND JCT
RECORDED BY	P. EDWARDS
WITNESSED BY	M. BRUNK

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
24 IN	0 FT	80 FT
17.5 IN	80 FT	2616 FT
12.25 IN	2616 FT	9926 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
20 IN			0 FT	80 FT
13.375 IN			0 FT	2616 FT
9.625 IN	53.5 LB/F		0 FT	9788 FT

REMARKS

RUN 1 TRIP 1: All data on this log is shifted and depth matched using the Gamma Ray curve to the Baker Hughes HDIL/ZDL/CN/GR log dated 16/MAR/2015 at the client's request.

SBT pad #5 lost contact with casing wall from 9205' - 9243' creating an invalid cement map in this section.

The amount of linear shift is 5.5'

BHT = 288 degF

DV TOOL @ 3498'

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	CCL	2346XA	11997944	CENTRALIZED
1	1	GR	1309XA	41737	FREE
1	1	TELEMETRY	1633XA	10060173	FREE
1	1	CENTRALIZER	4341XA	1202020	CENTRALIZED
1	1	SBT PAD	1424XA	119555	CENTRALIZED
1	1	VDL	1424PA	119583	CENTRALIZED
1	1	CENTRALIZER	4341XA	10239054	CENTRALIZED

MAIN PASS 0PSI

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

Updates: 1 Patches: 6

Plotted: Sun Mar 22 04:35:40 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH095614/n331d03.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 27.500 ft BOTTOM DEPTH: 9682.915 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GR	FILTER ()	medium (1)		TOP	BOTTOM
SBT	FILTER, 2pf	light (2)		TOP	9613.500
		medium (1)		9613.500	BOTTOM
	FILTER, 4pf	light (2)		TOP	9612.500
		medium (1)		9612.500	BOTTOM
TENSION	FILTER ()	medium (1)		TOP	BOTTOM

SBT PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
SBT	CASING OD	9.625	in	TOP	BOTTOM
	CASING WT	53.500	lbm/ft	"	"
	FREE PIPE AMP.	57.415	mV	"	"
	FREE PIPE ATTN.	3.511	dB/ft	"	"
	CORR. FACTOR 1 (1424XA 1)	-0.121	dB/ft	"	"
	CORR. FACTOR 2 (1424XA 1)	-0.910	dB/ft	"	"
	CORR. FACTOR 3 (1424XA 1)	0.330	dB/ft	"	"
	CORR. FACTOR 4 (1424XA 1)	-0.022	dB/ft	"	"
	CORR. FACTOR 5 (1424XA 1)	0.887	dB/ft	"	"
	CORR. FACTOR 6 (1424XA 1)	-0.163	dB/ft	"	"
	SPACING	0.701	ft	"	"
	SPREADING FACTOR	4.281	dB/ft	"	"
	CEMENT STRENGTH	1500	psi	"	"
	HI CUTOFF (1424XA 1)	8.417	dB/ft	"	"
	LOW CUTOFF (1424XA 1)	4.737	dB/ft	"	"

CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:AMAV	Mar 22 04:32:33 2015	AVERAGE AMPLITUDE
F1:ATAV	Mar 22 04:32:33 2015	AVERAGE ATTENUATION
F1:ATC1	Mar 22 04:32:33 2015	ATTENUATION PAD 1
F1:ATC2	Mar 22 04:32:33 2015	ATTENUATION PAD 2
F1:ATC3	Mar 22 04:32:33 2015	ATTENUATION PAD 3
F1:ATC4	Mar 22 04:32:33 2015	ATTENUATION PAD 4
F1:ATC5	Mar 22 04:32:33 2015	ATTENUATION PAD 5
F1:ATC6	Mar 22 04:32:33 2015	ATTENUATION PAD 6

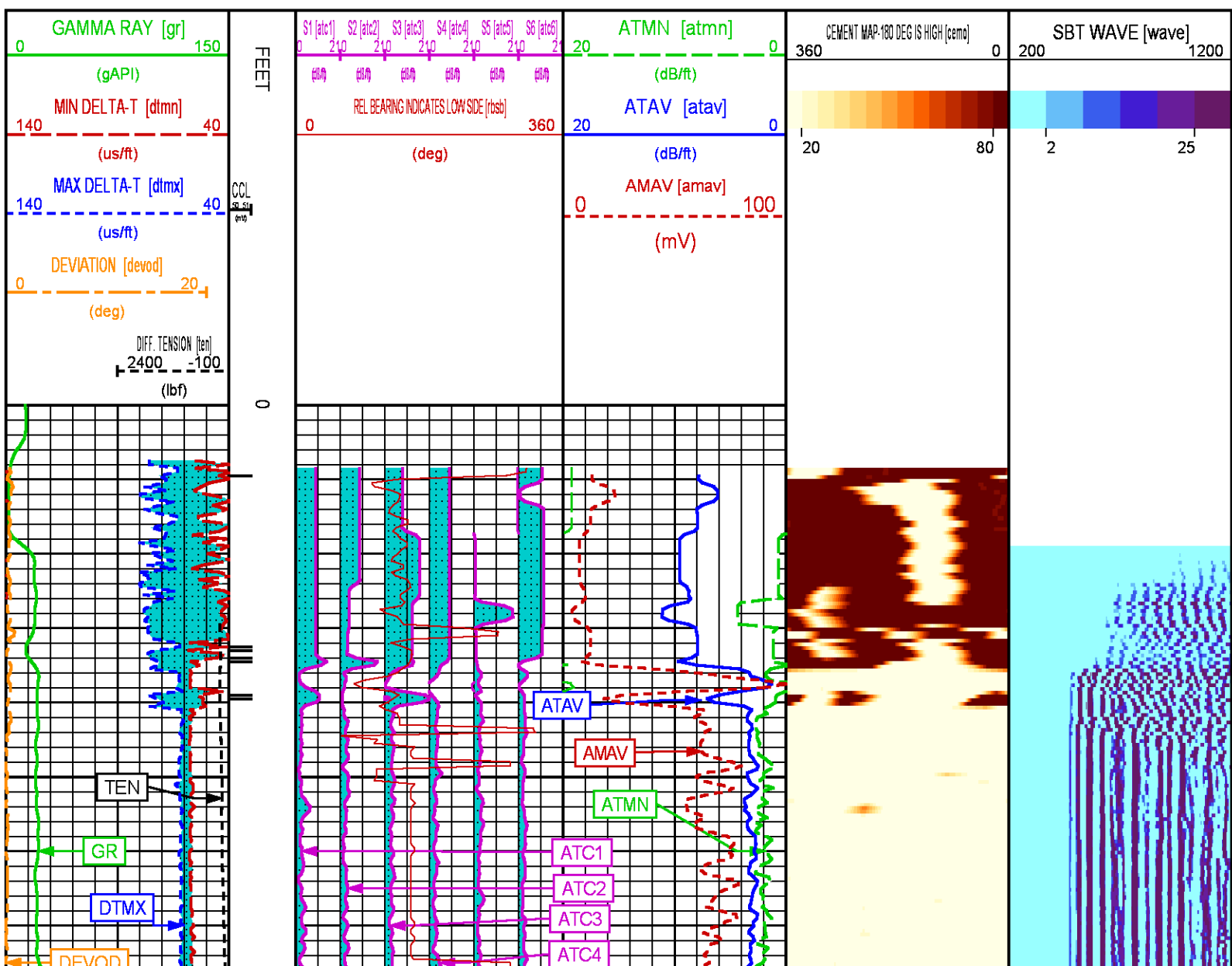
F1:ATC6	Mar 22 04:32:33 2015	ATTENUATION PAD 6
F1:ATMN	Mar 22 04:32:33 2015	ATTENUATION MINIMUM
F1:CCL	Mar 22 04:32:34 2015	CASING COLLAR LOCATOR
F1:CEMO	Mar 22 04:32:49 2015	CALIBRATED AND ORIENTED CEMENT MAP
F1:DEVOD	Mar 22 04:33:01 2015	DEVIATION
F1:DTMN	Mar 22 04:33:01 2015	MINIMAL SLOWNESS
F1:DTMX	Mar 22 04:33:01 2015	MAXIMAL SLOWNESS
F1:GR	Mar 22 04:33:01 2015	GAMMA RAY
F1:RBSB	Mar 22 04:33:01 2015	RELATIVE BEARING (RELATIVE TO BOREHOLE LOW SIDE) FOR SBT
F1:TEN	Mar 22 04:33:01 2015	DIFFERENTIAL TENSION
F1:WAVE	Mar 22 04:33:05 2015	DIGITIZED WAVEFORM

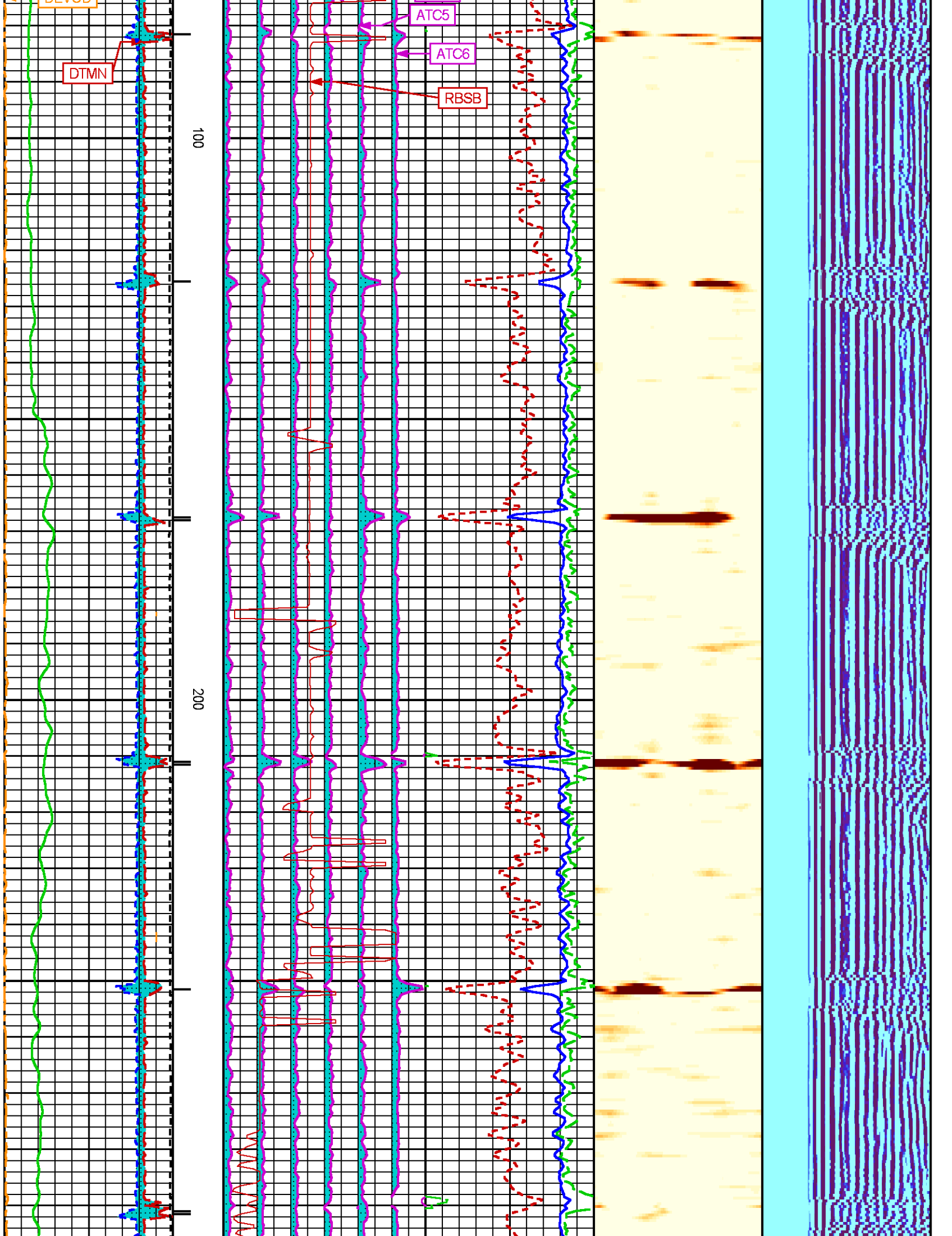
CURVE MEASURE POINT OFFSET

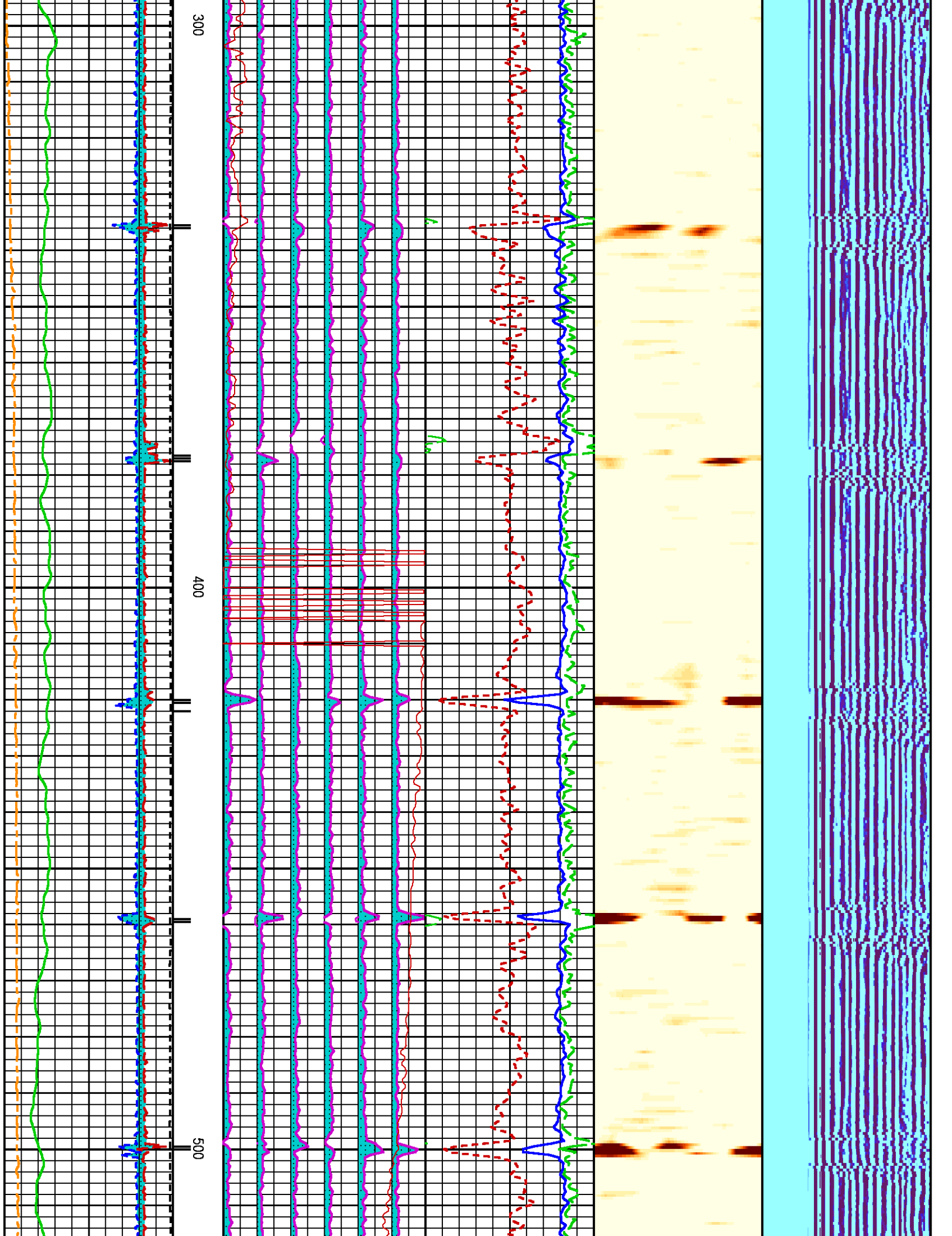
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
AMAV	19.50	ATC3	19.50	ATMN	19.50	DTMX	19.50
ATAV	19.50	ATC4	19.50	CCL	52.00	GR	43.00
ATC1	19.50	ATC5	19.50	DEVOD	19.50	RBSB	19.50
ATC2	19.50	ATC6	19.50	DTMN	19.50	TEN	0.00

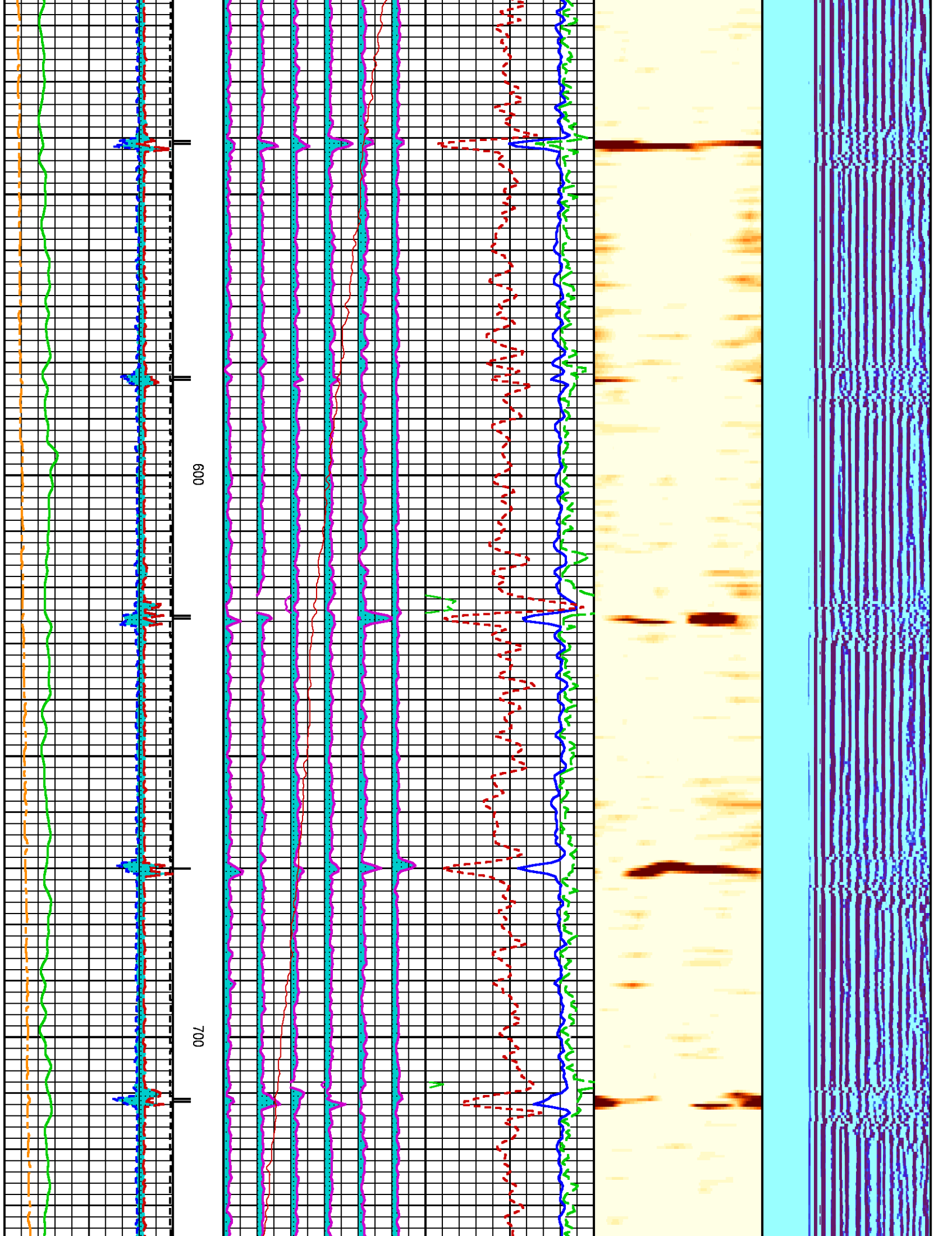
Presentation : HL6670:/dat1a/CH095614/MAIN.fvpdf [5"/100' Scale]
Plot Interval : 0 - 9682 Feet

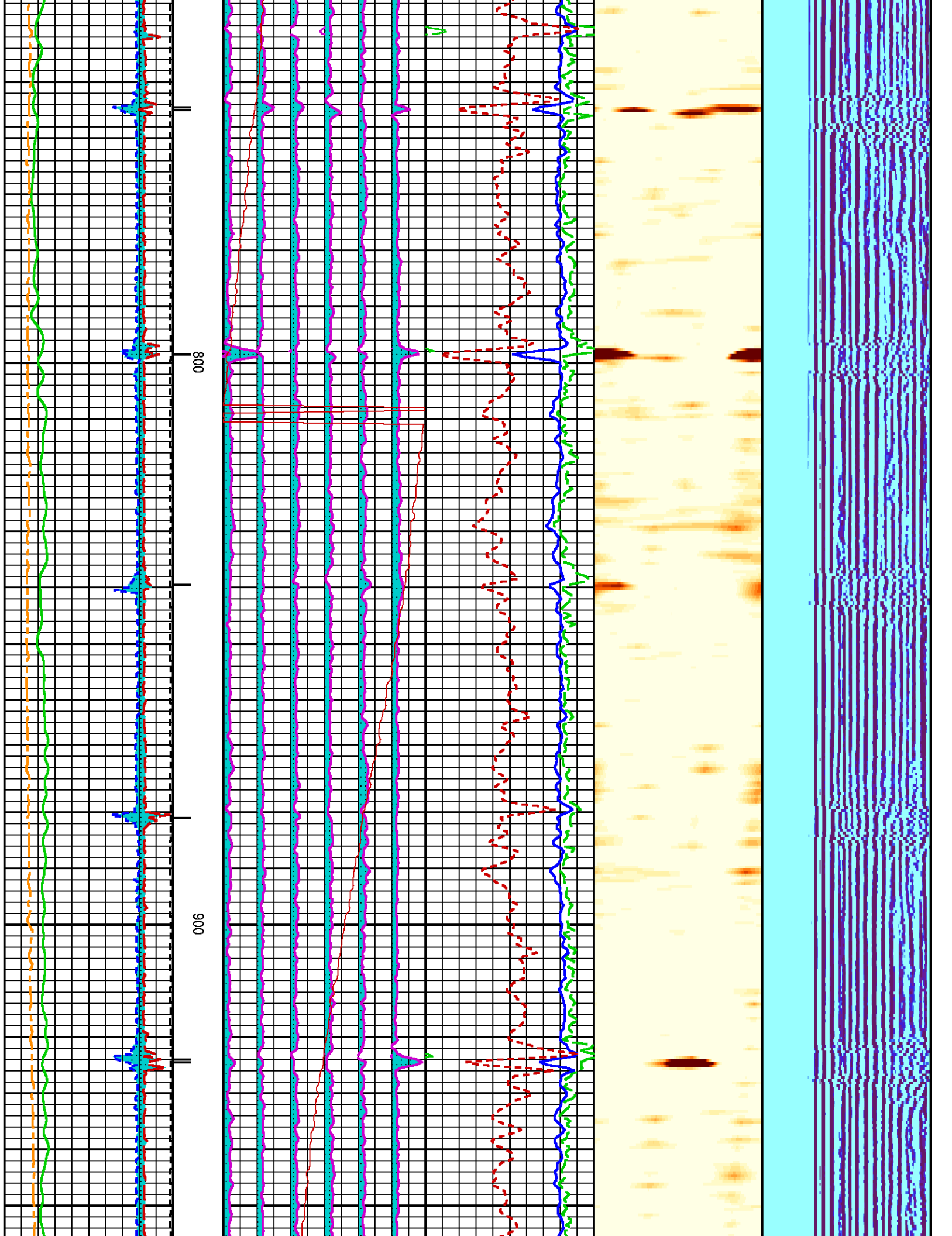
Data File 1 : F1 : HL6670:/dat1a/CH095614/MAIN.xtf
Created On : Mar 22 04:32:33 2015
Company : WPX ENERGY
Well : GM 728-14-33-HN1
Field : GRAND VALLEY
File Interval : -25 - 9682.5 Feet
OCT : n331d

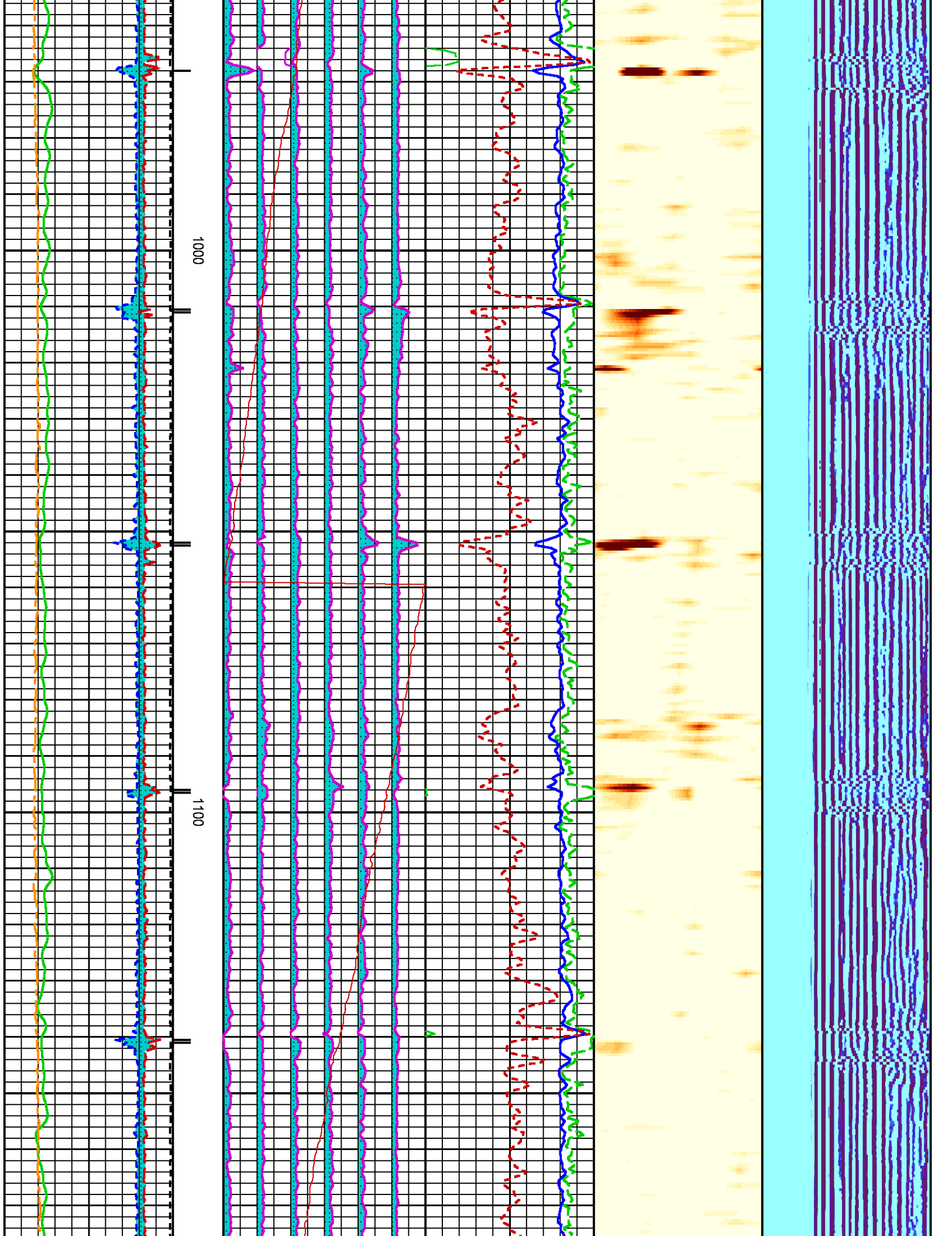


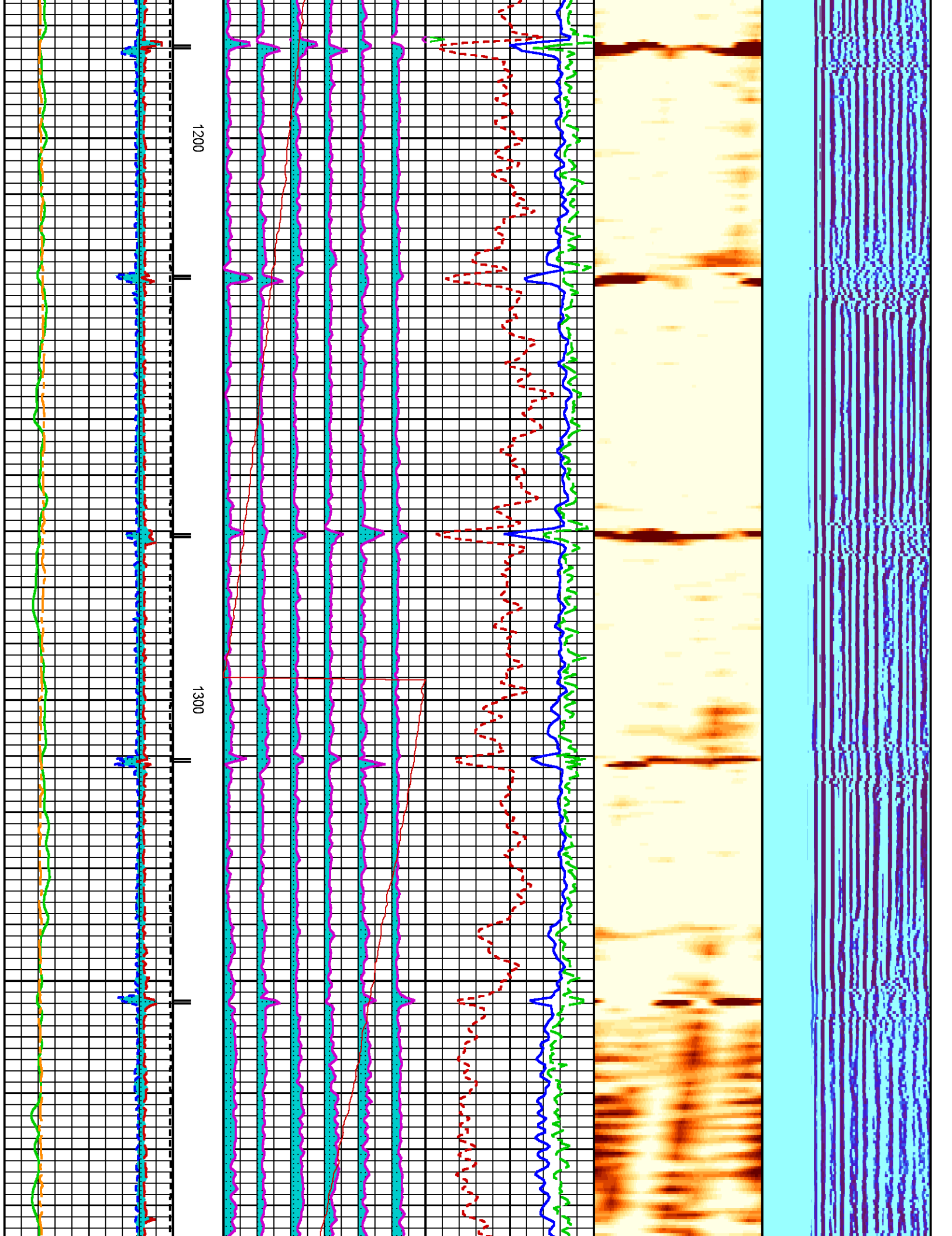


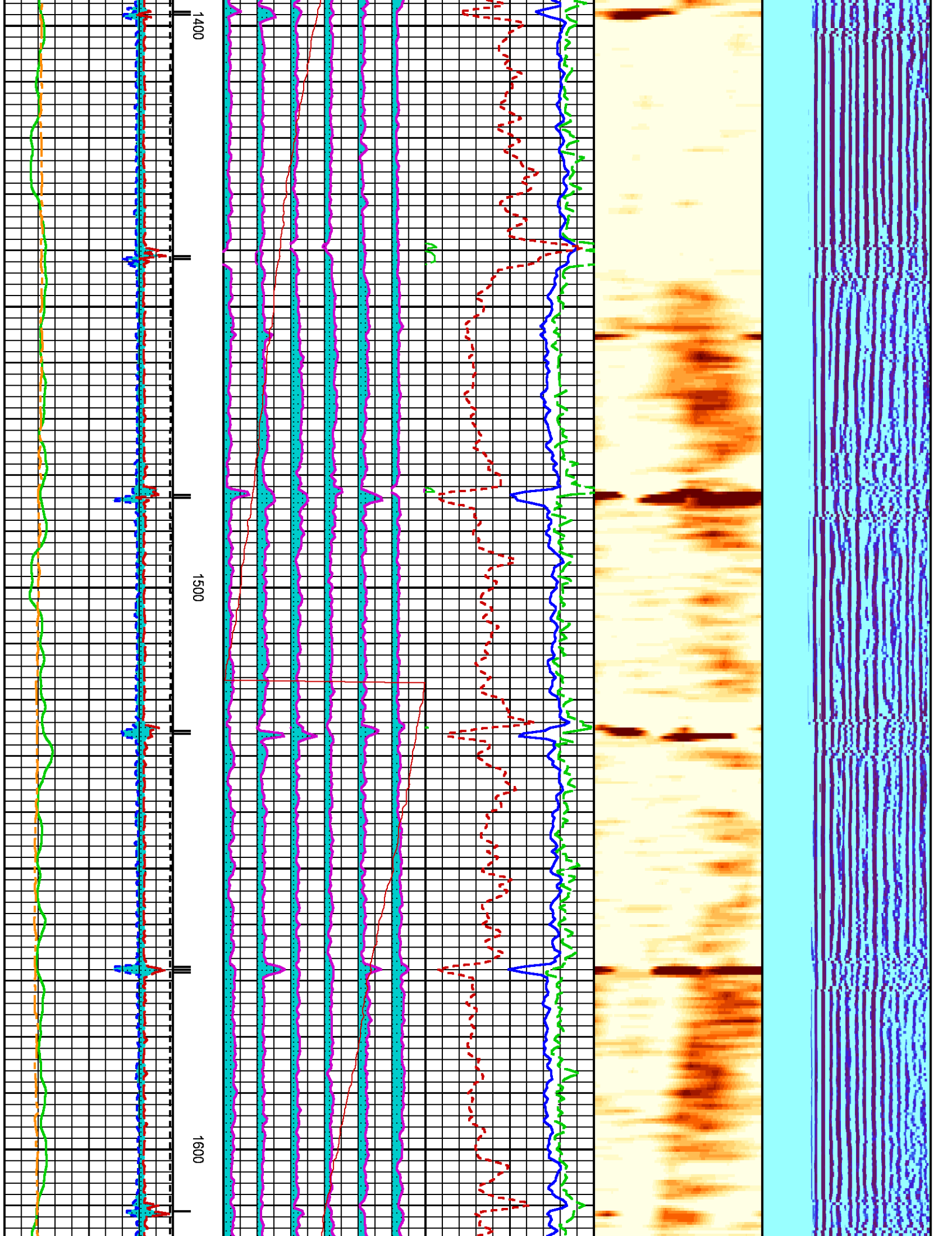


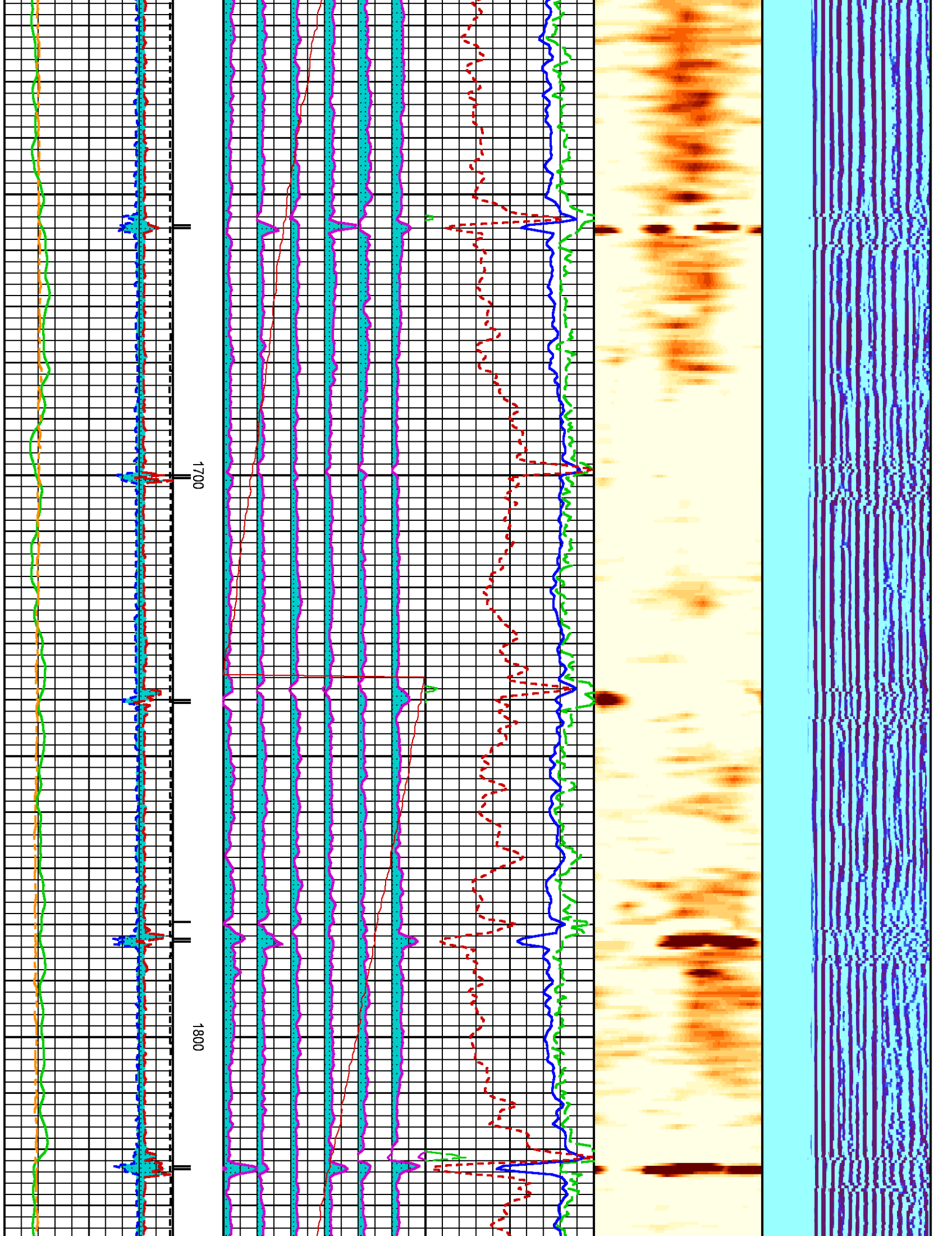


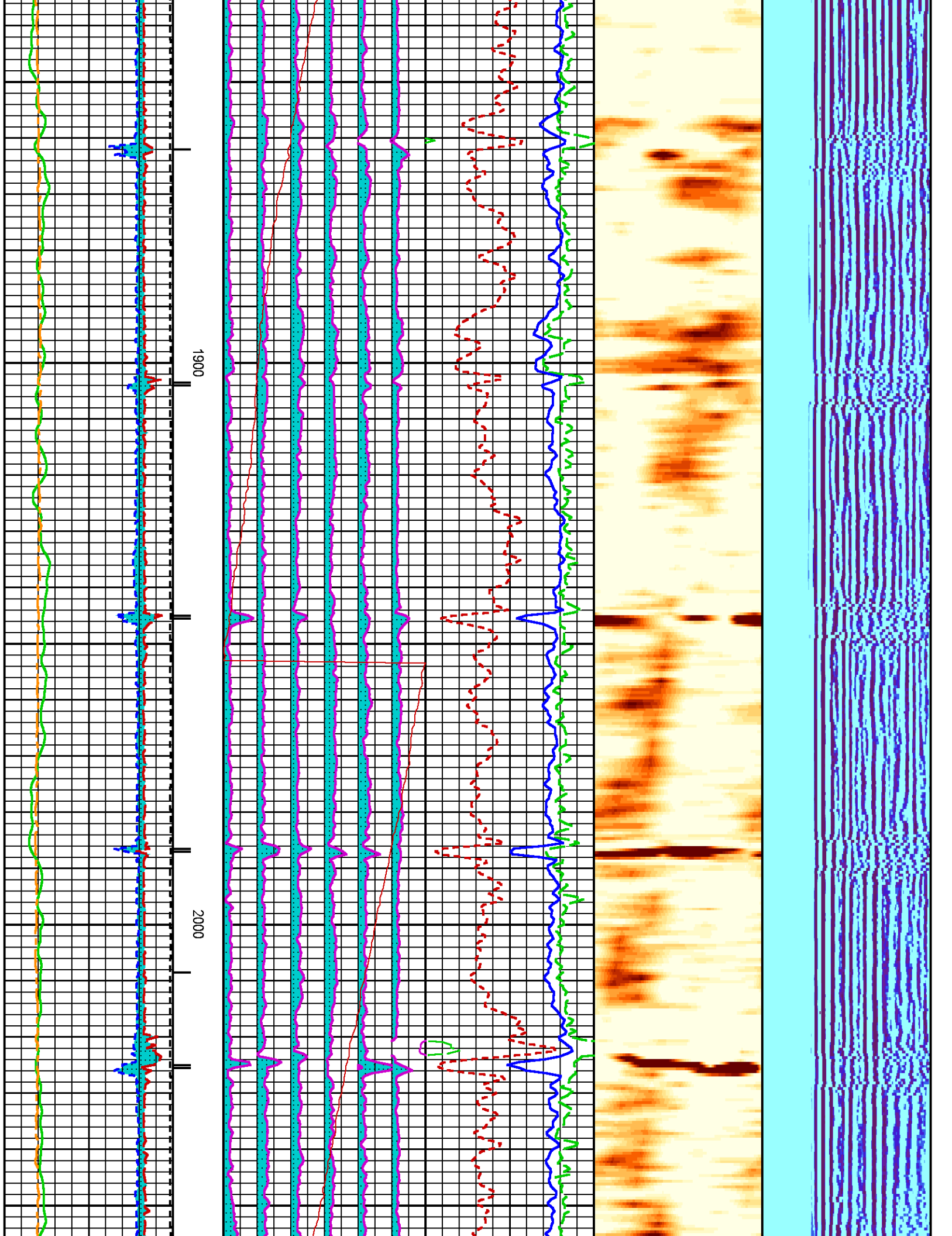


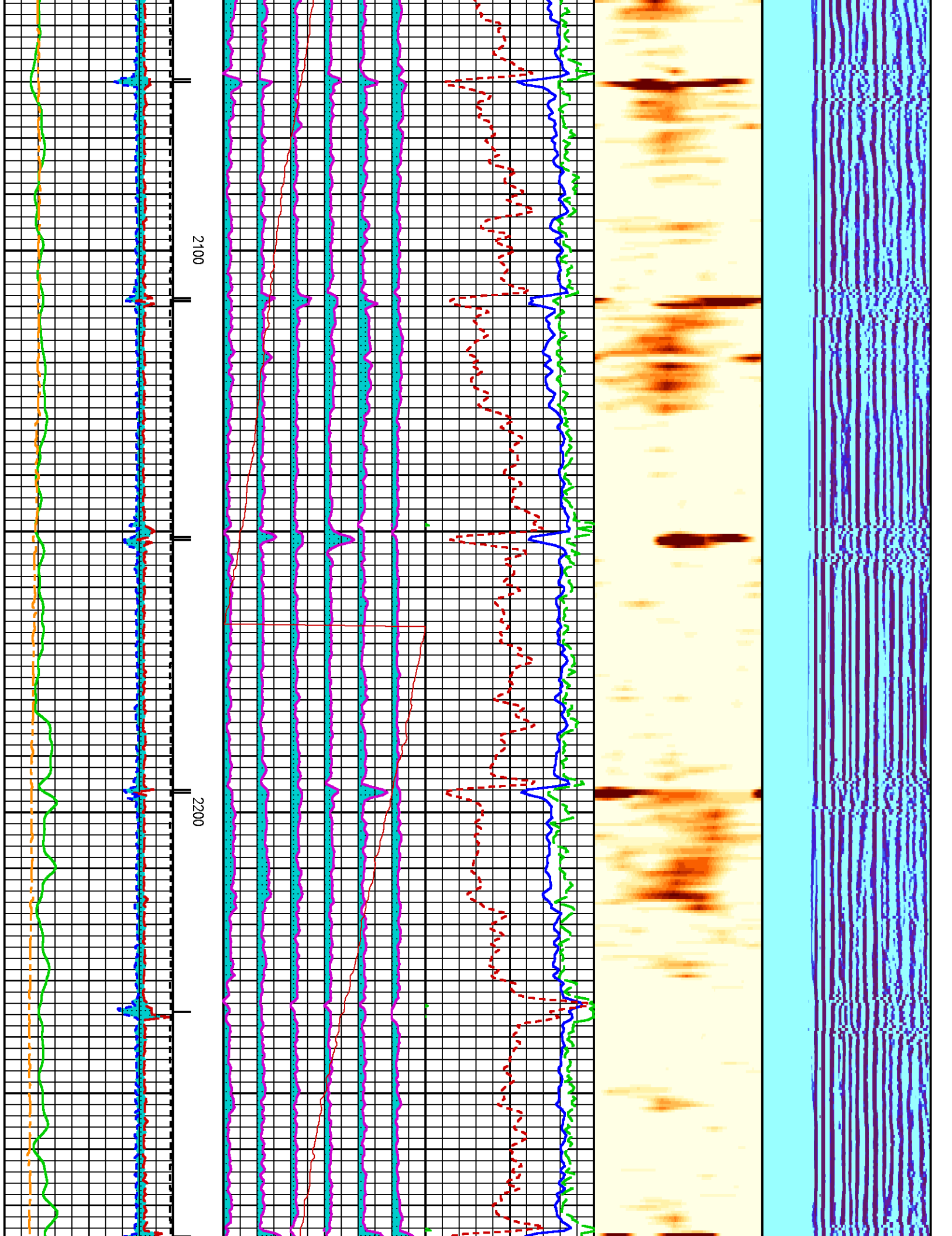


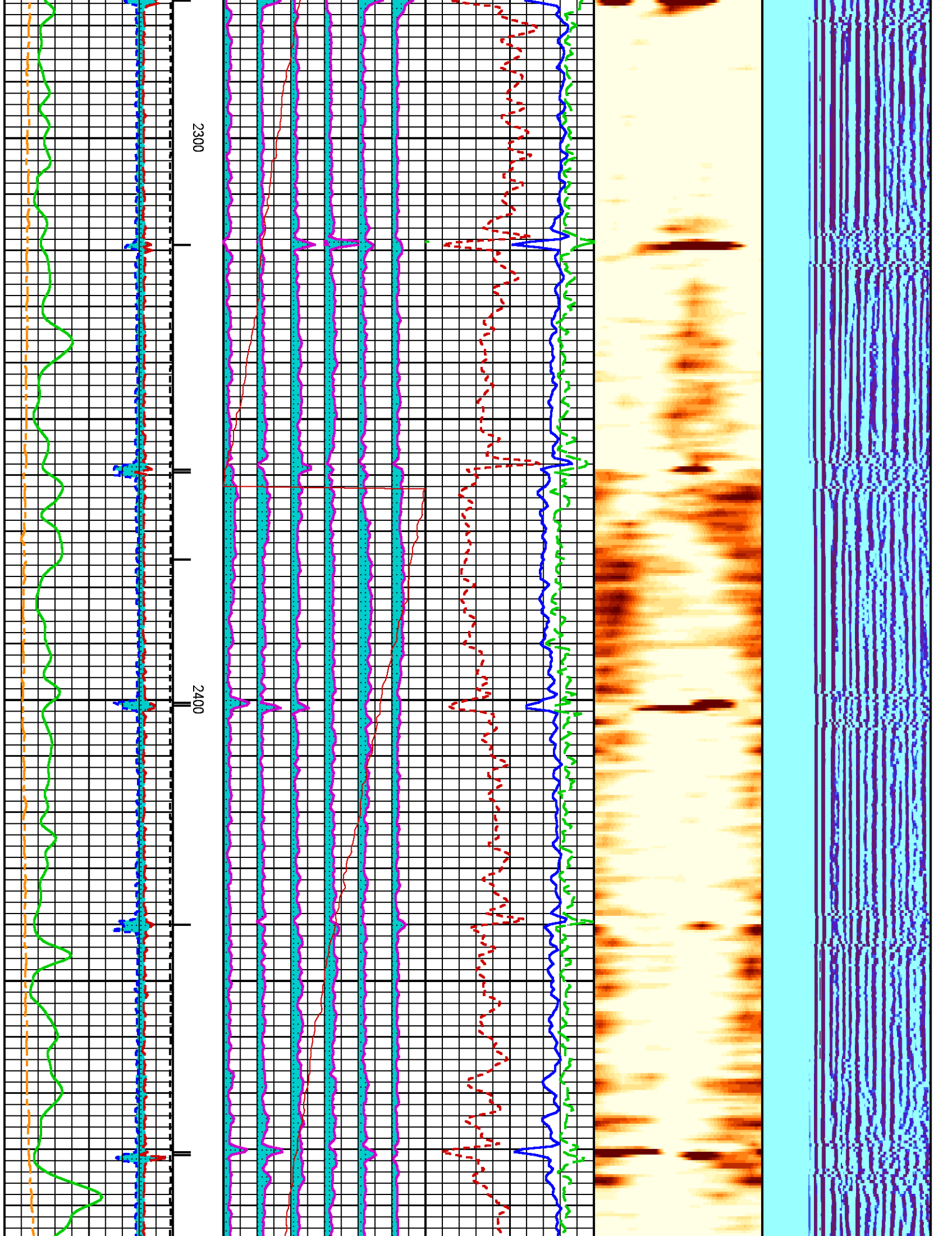


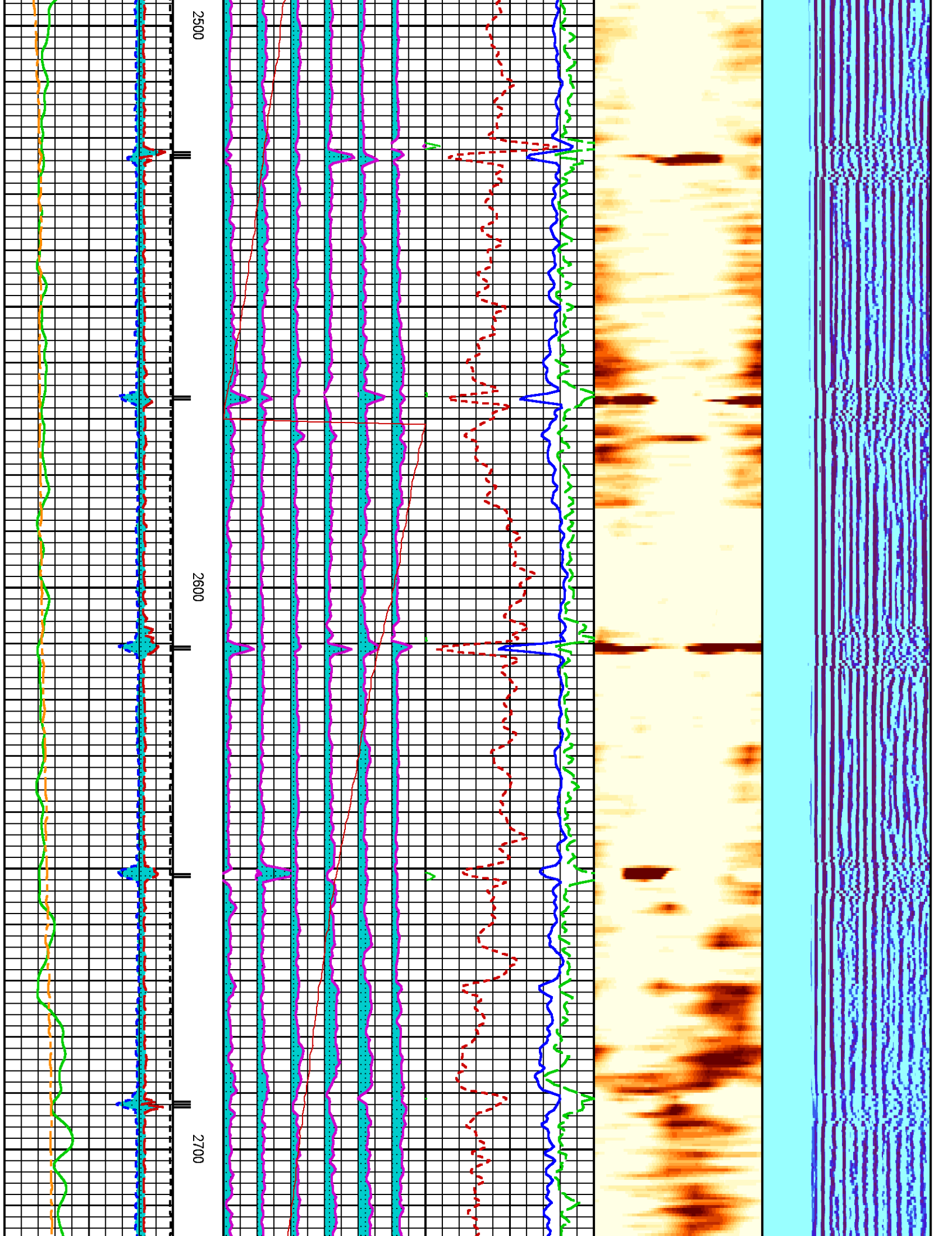


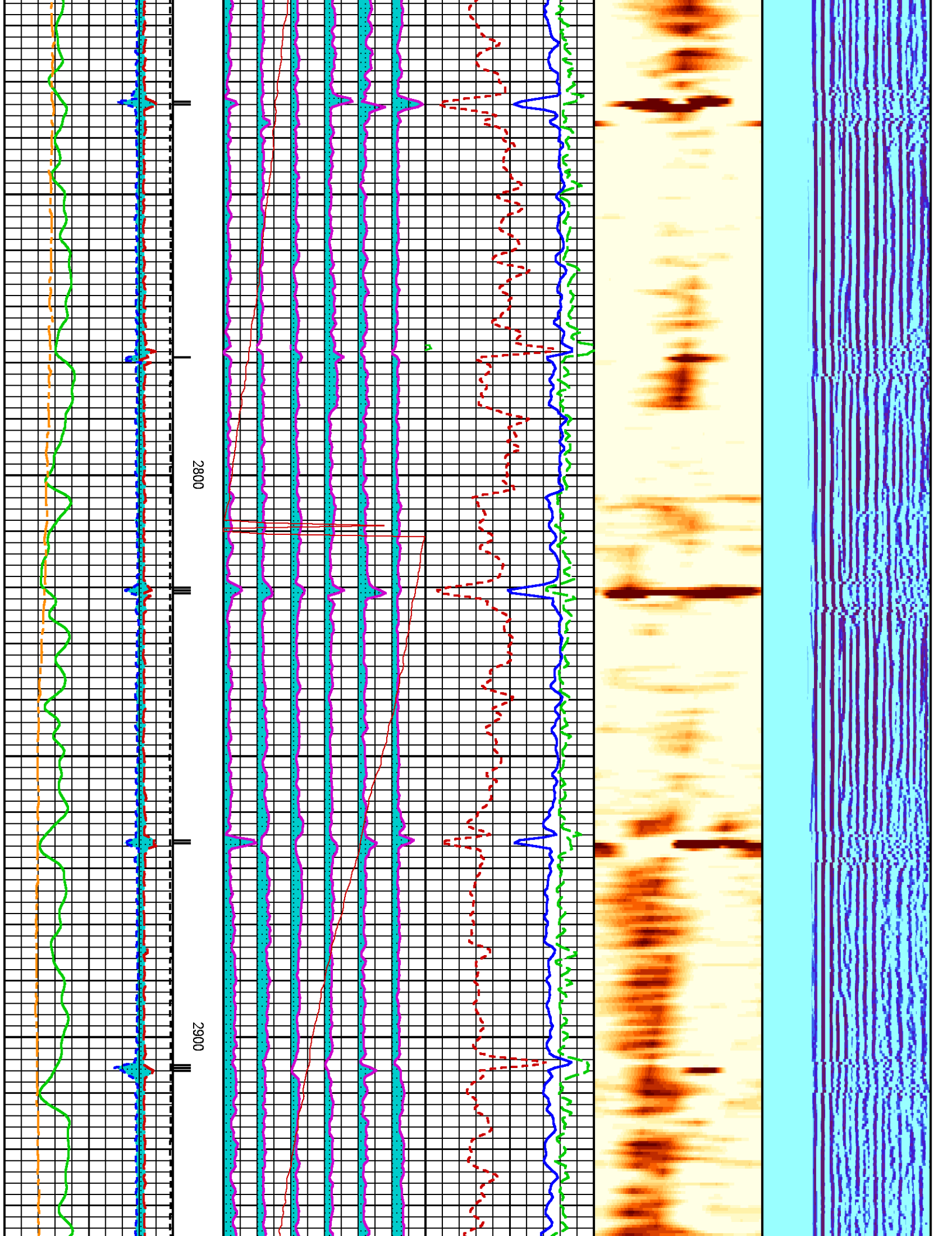


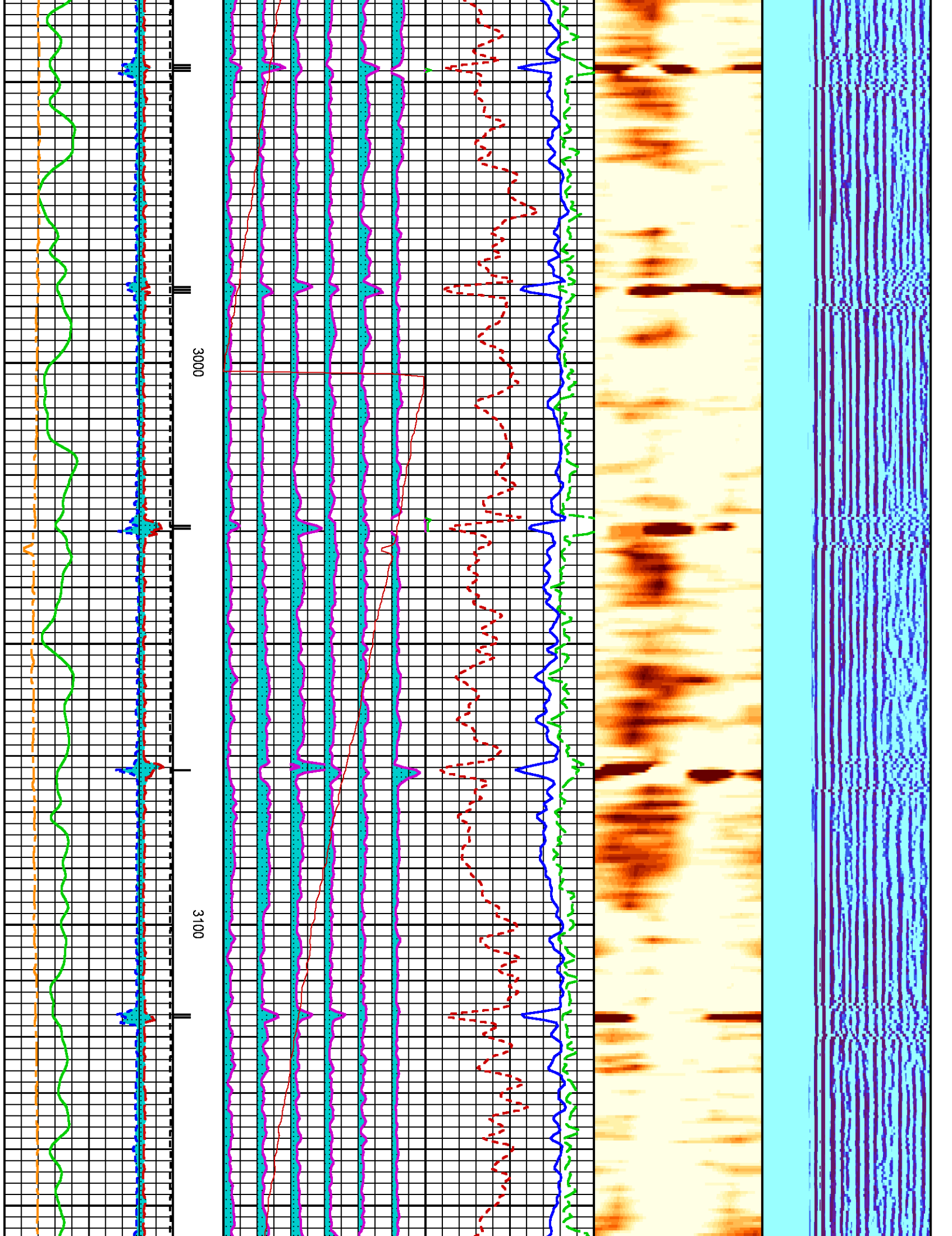


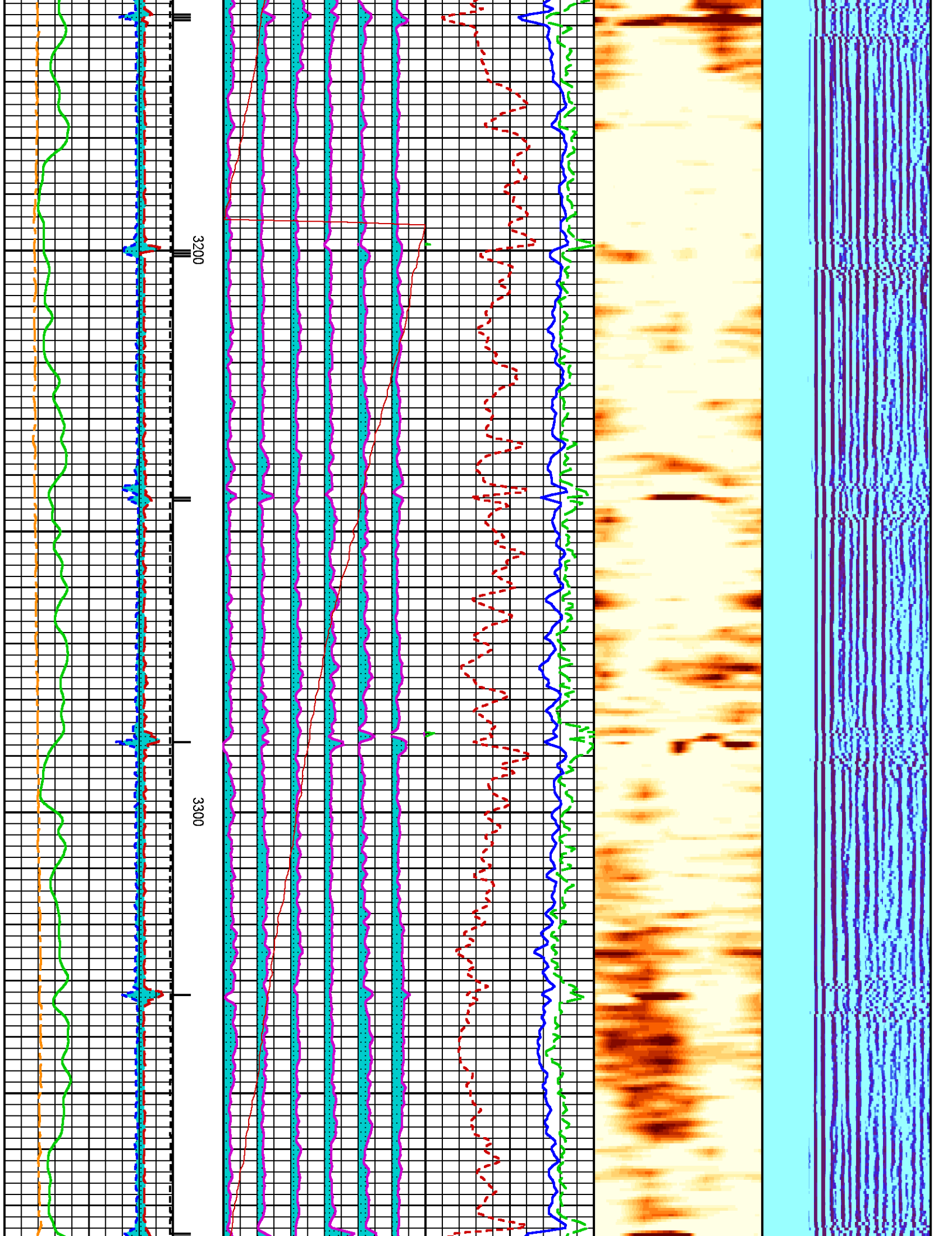


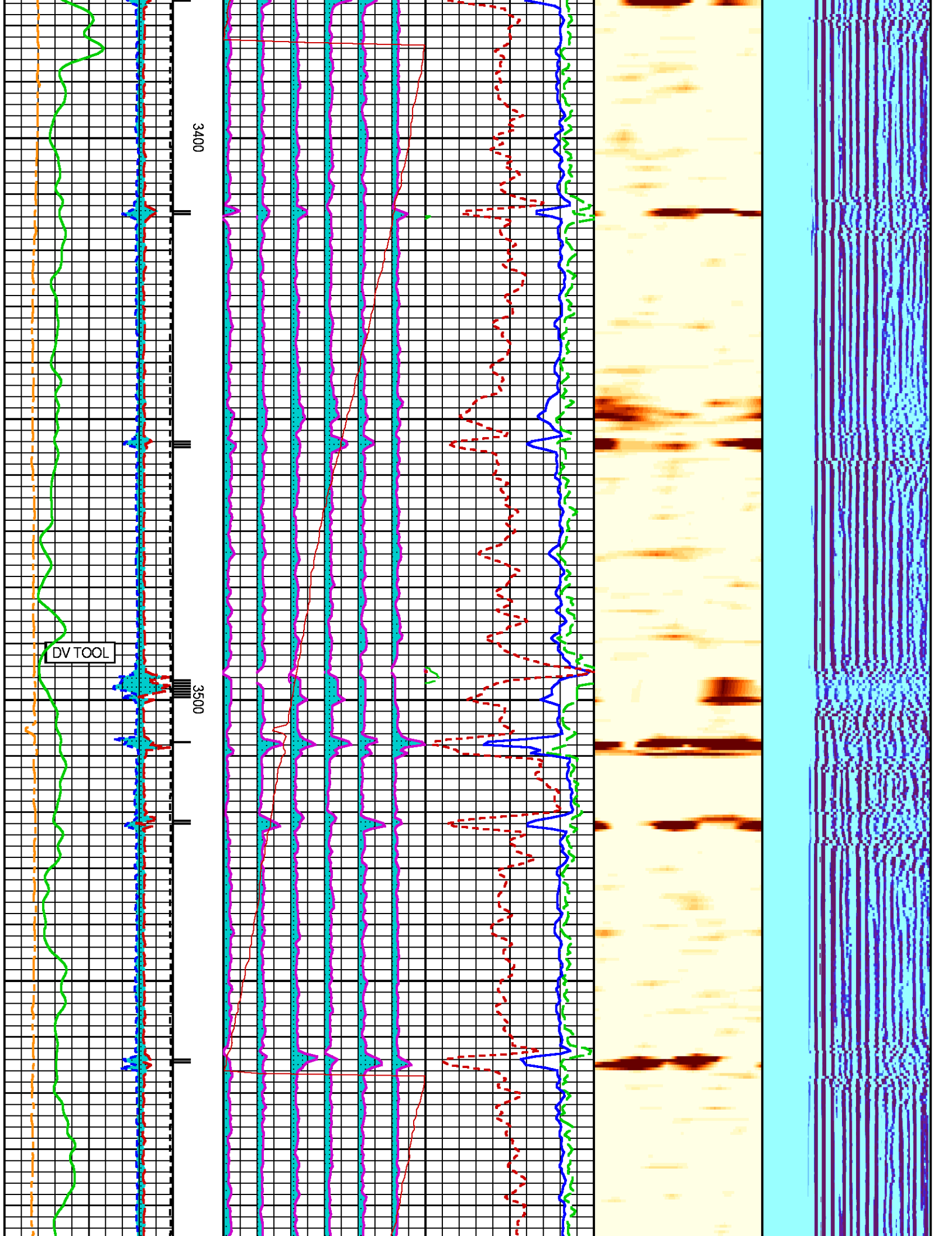


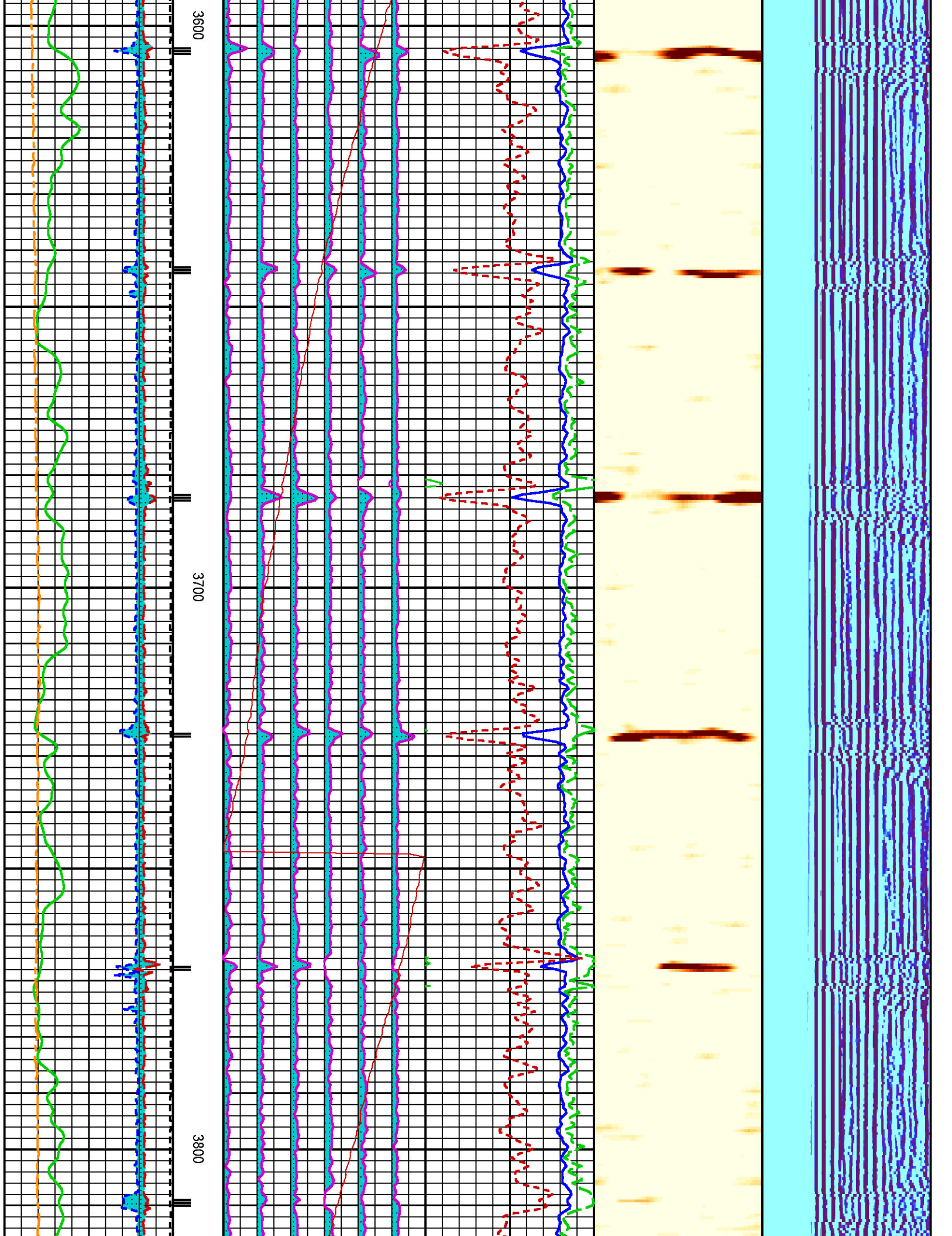


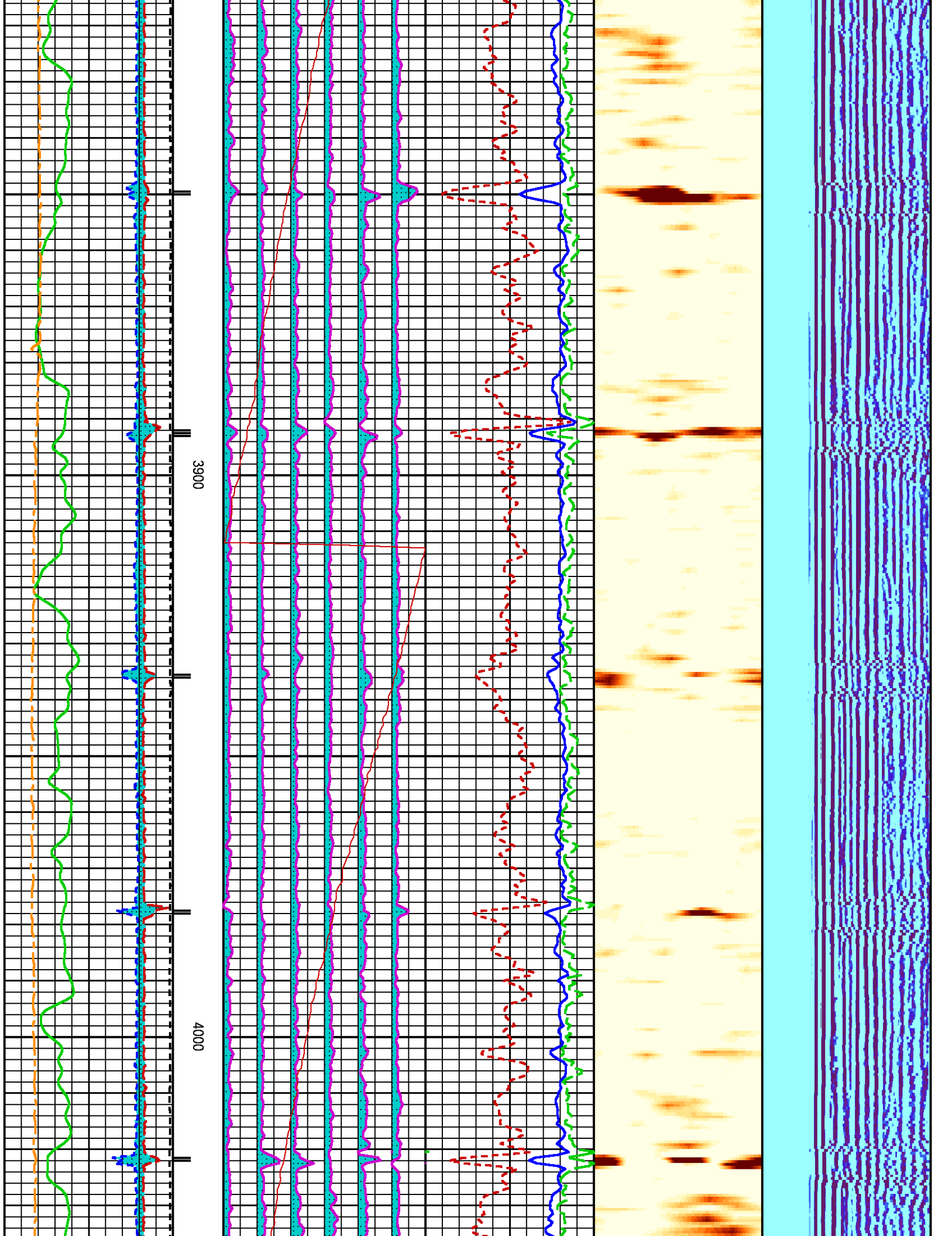


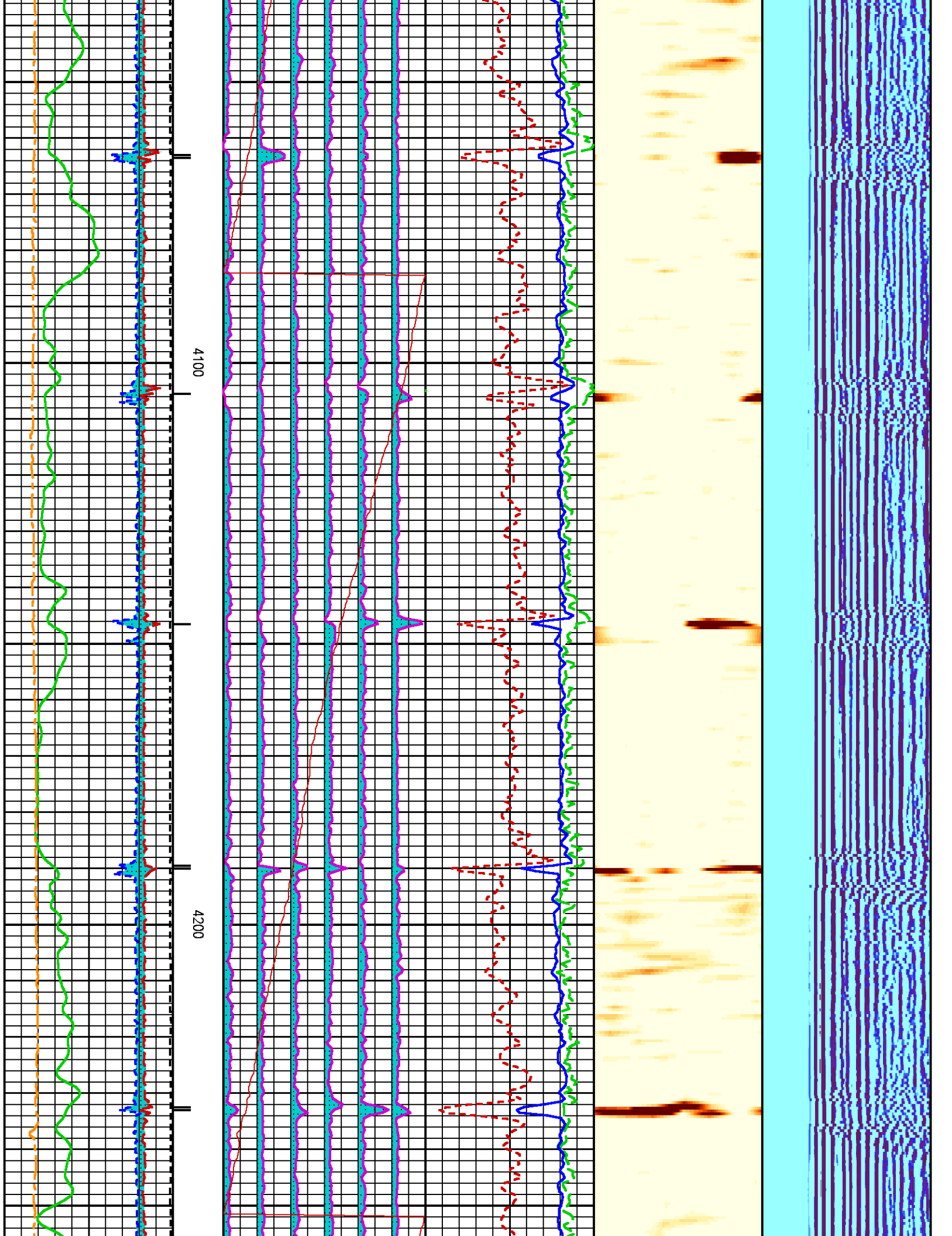


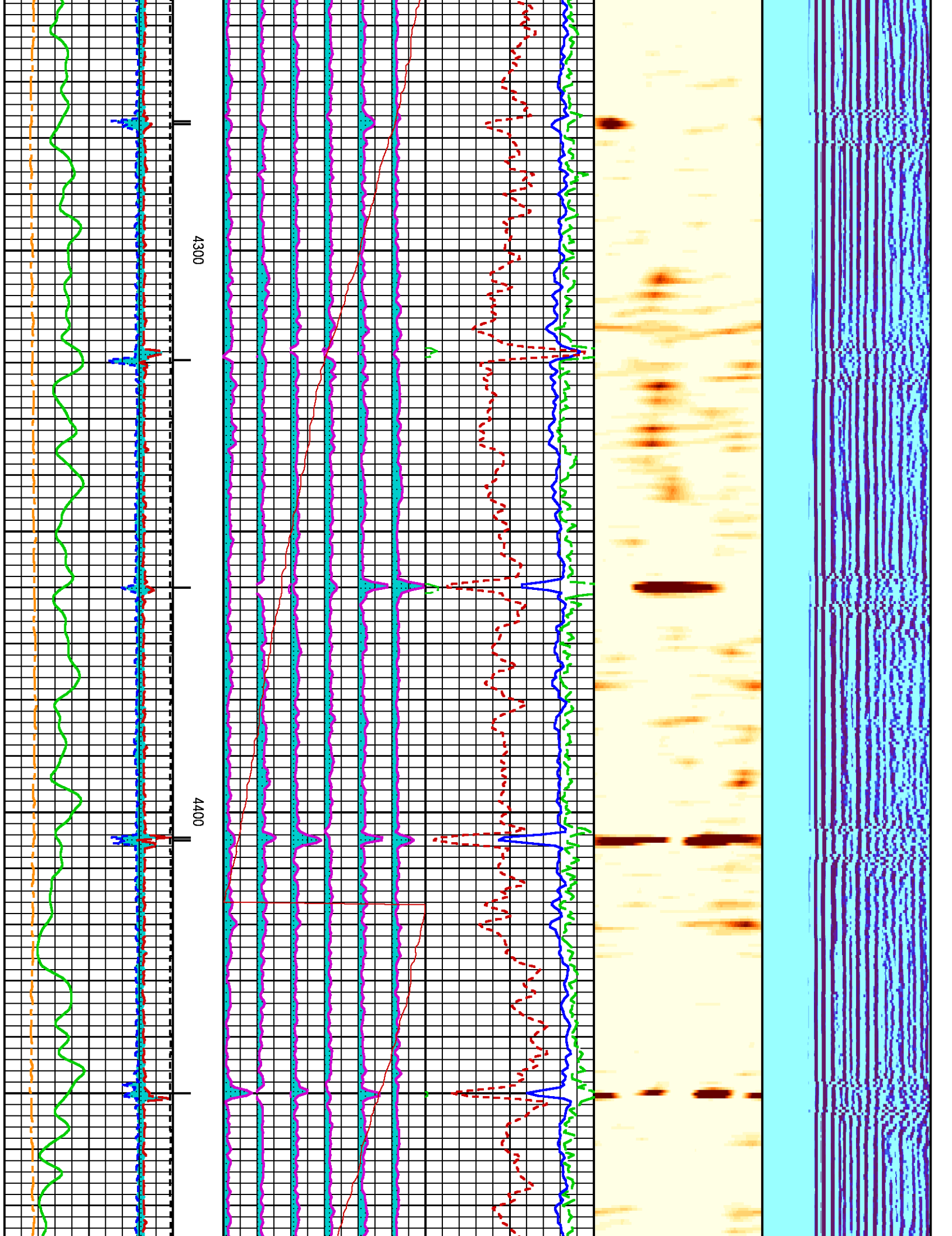


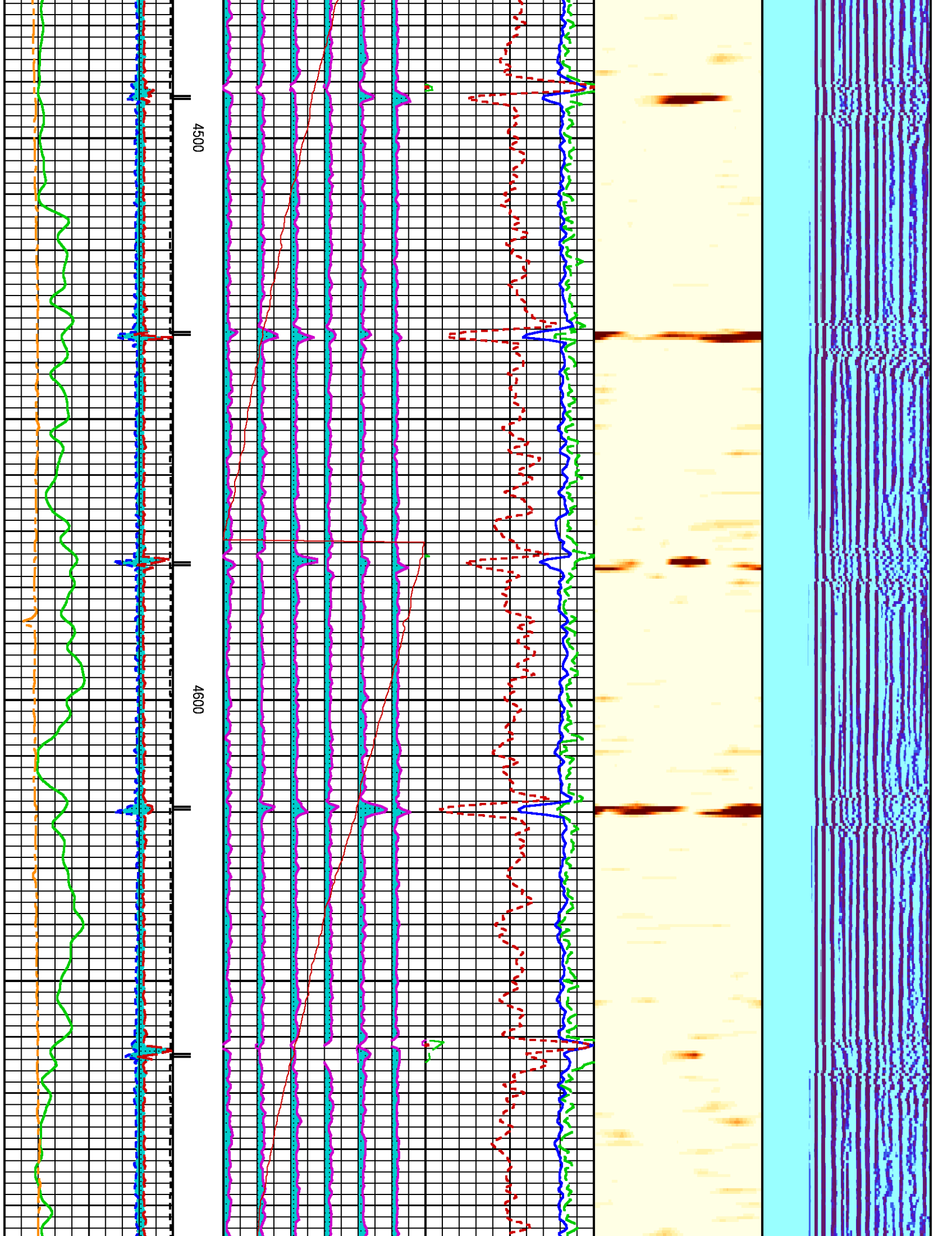


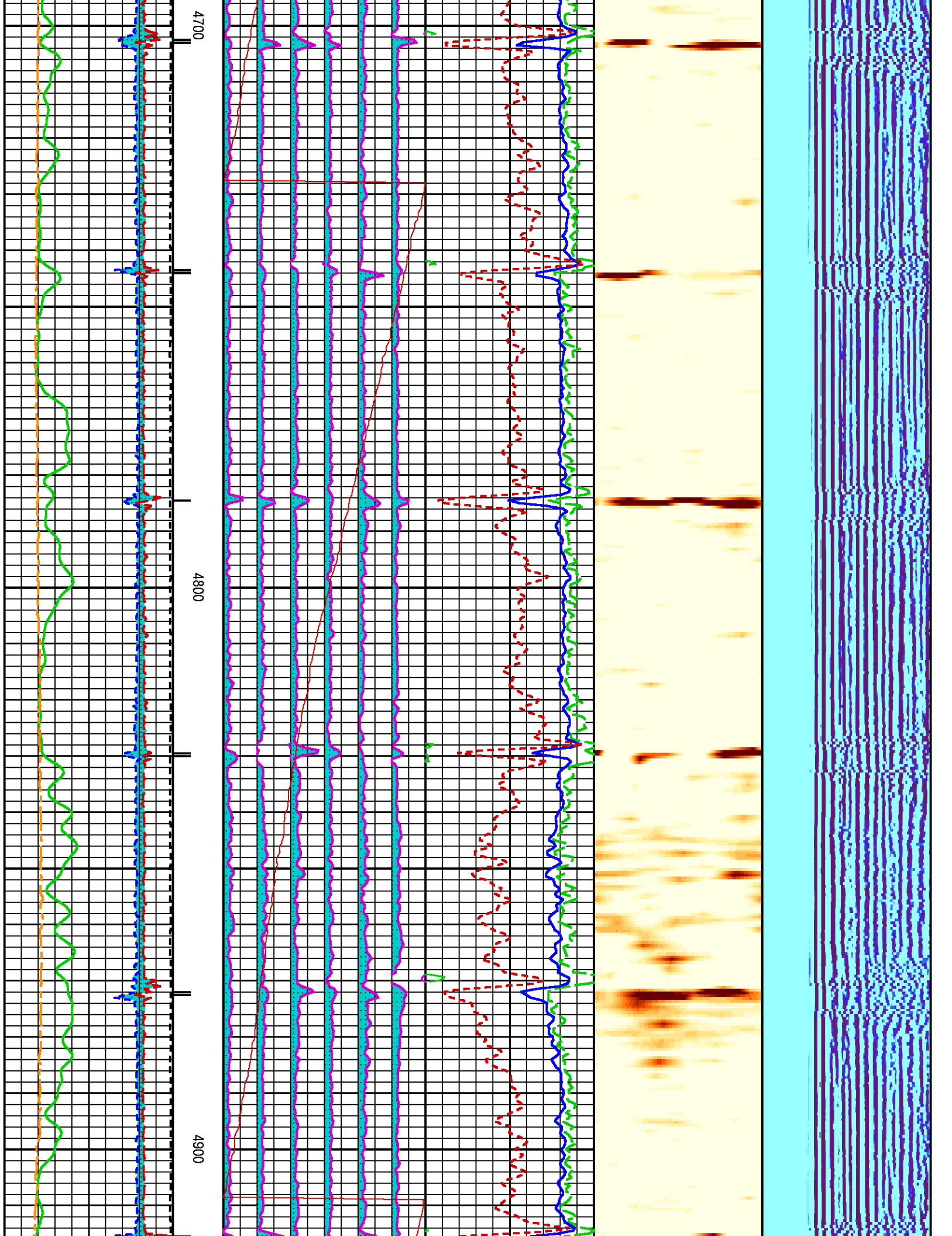


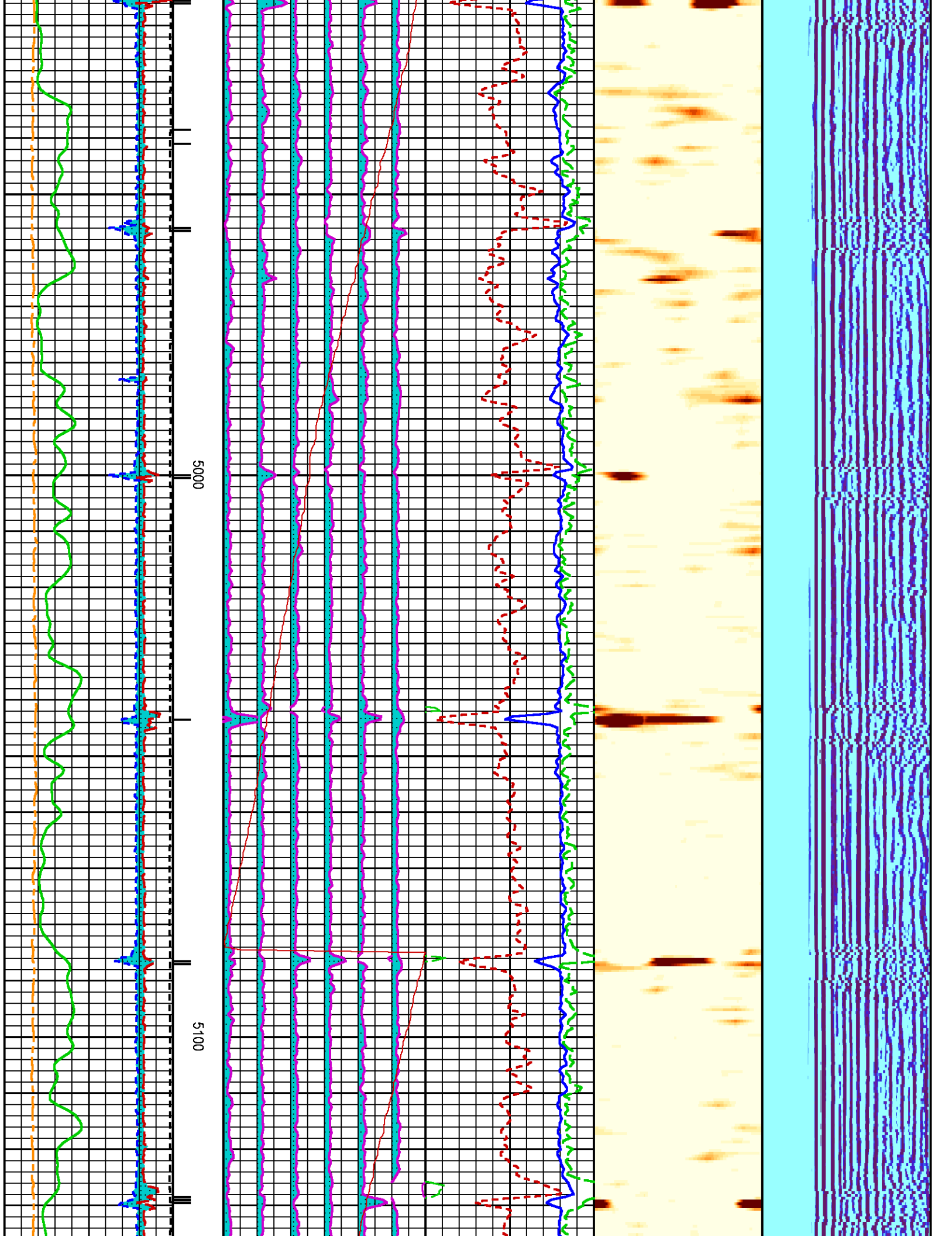


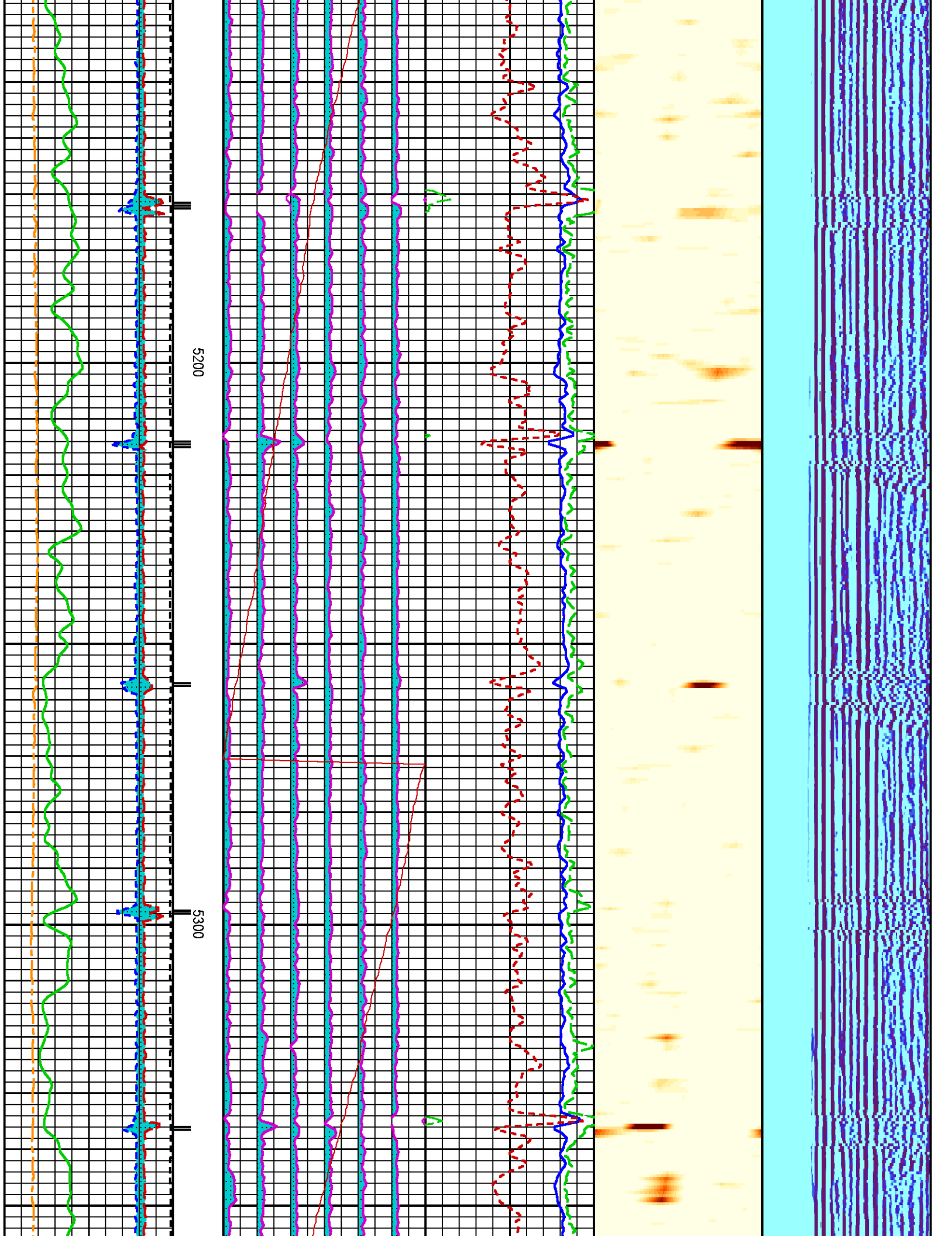


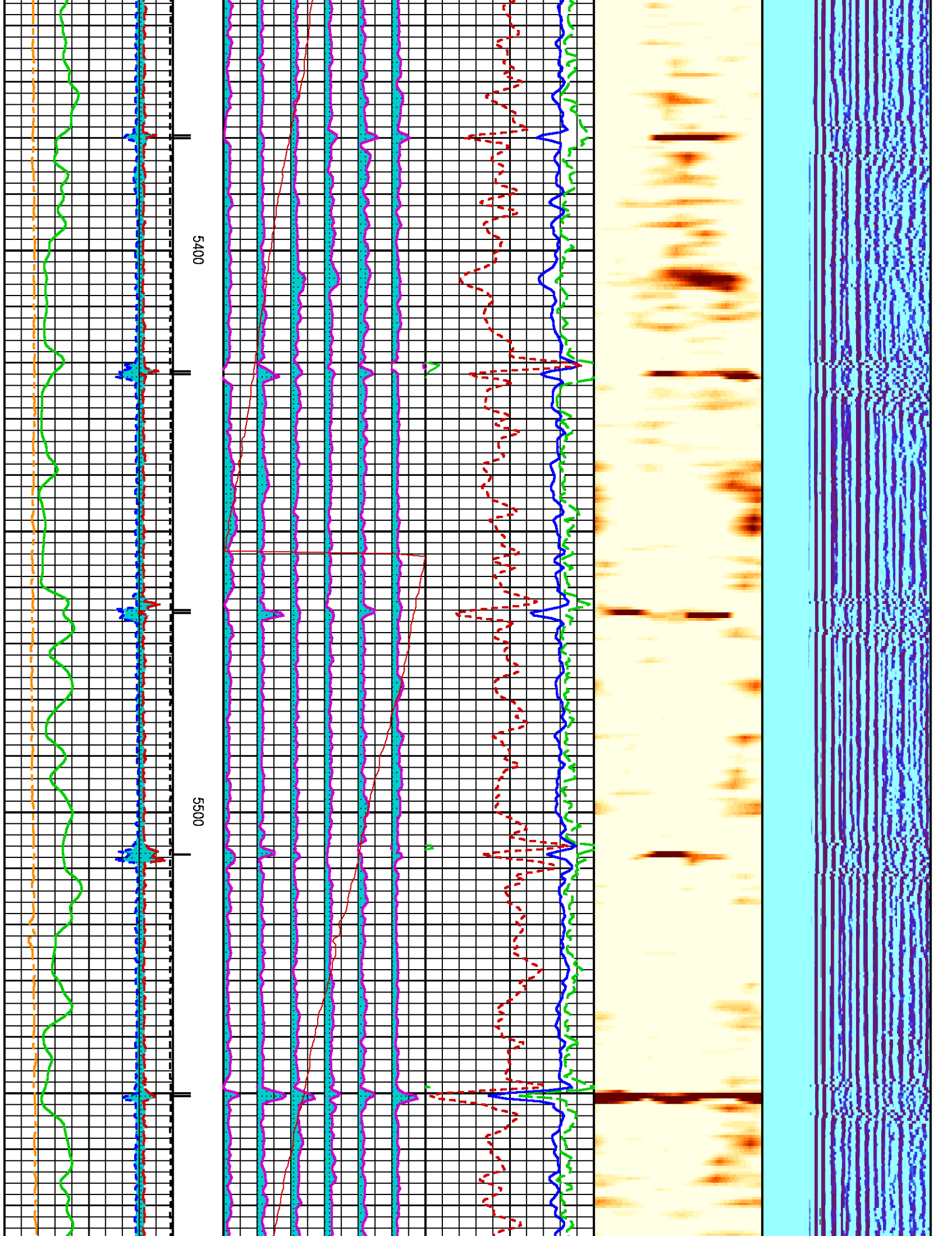


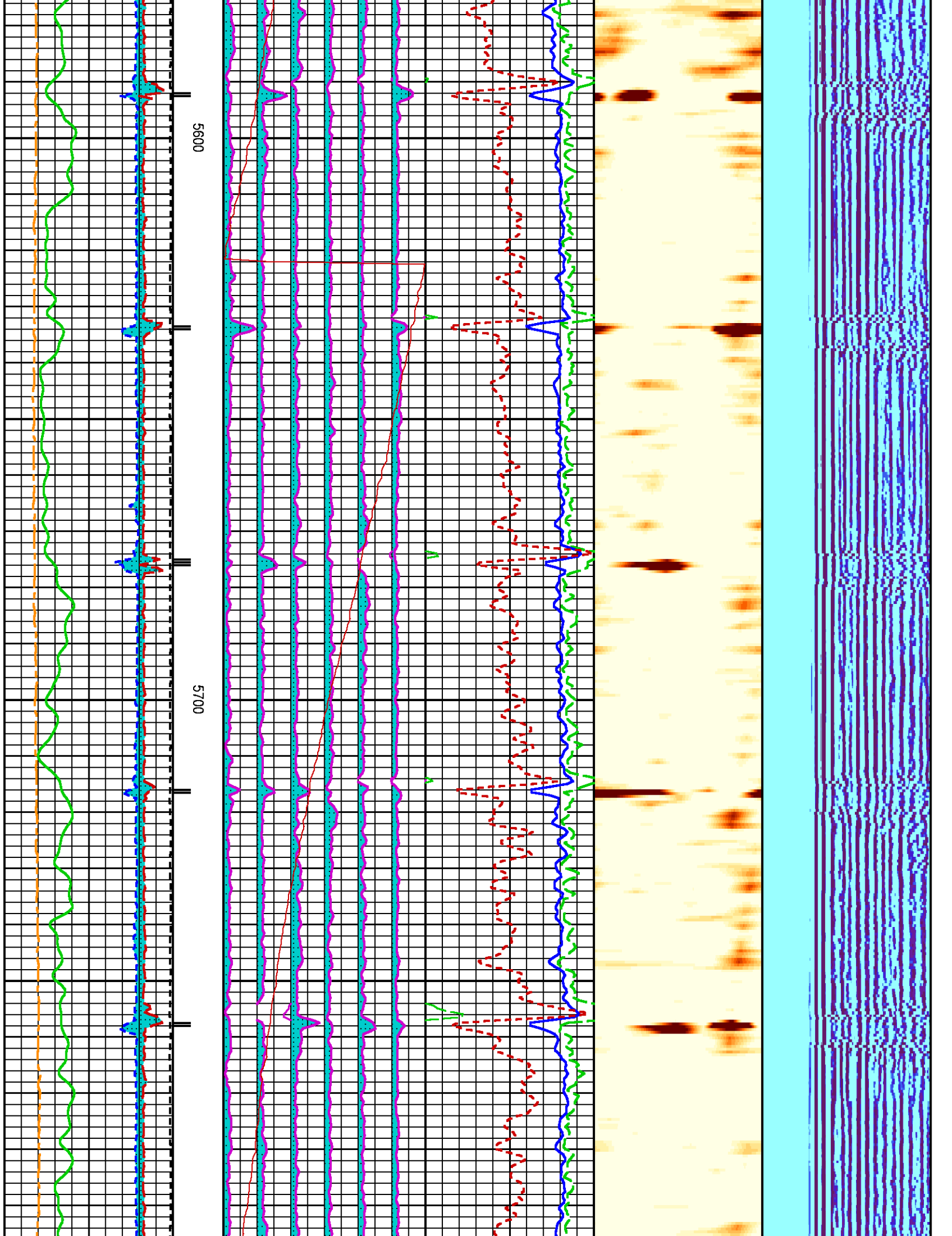


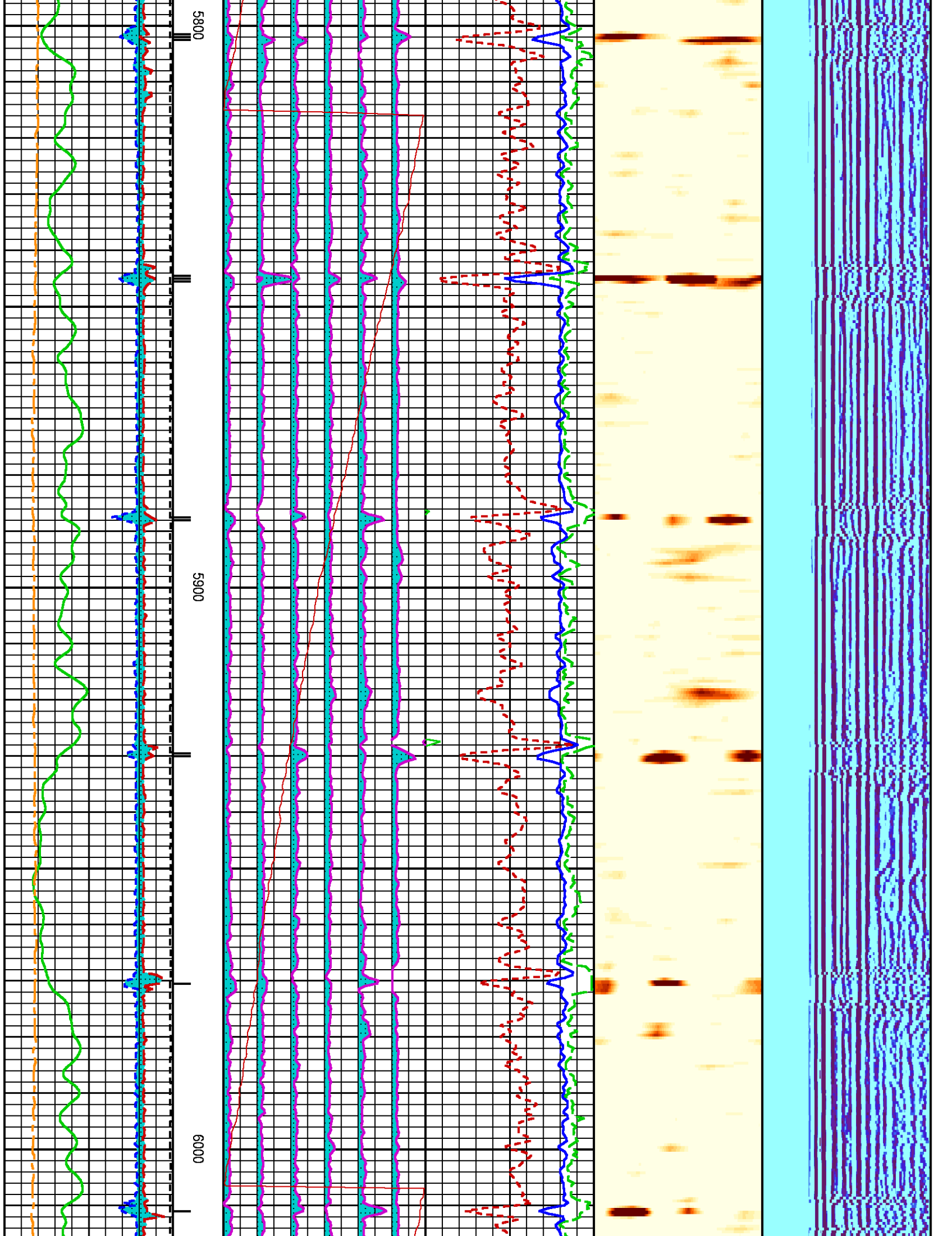


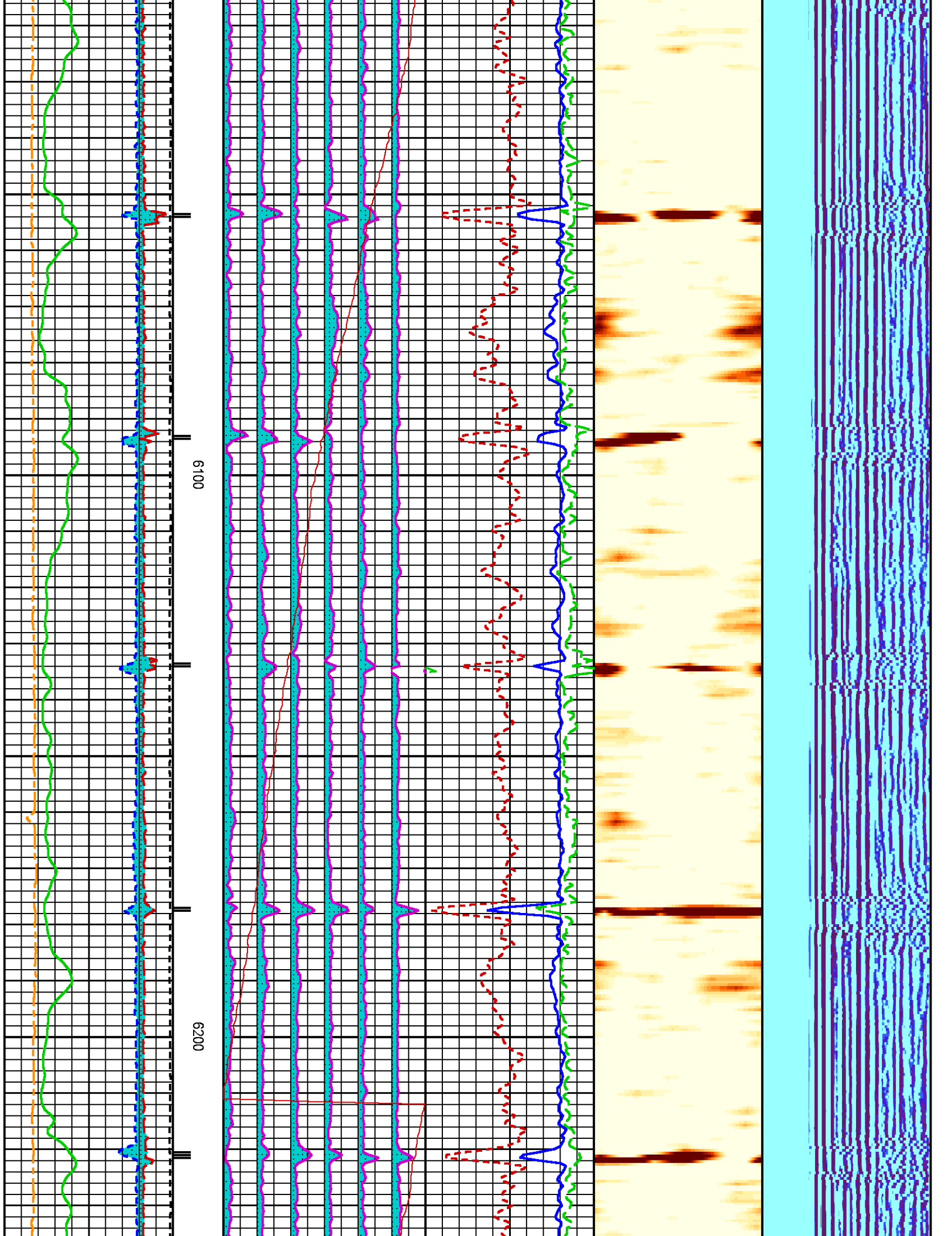


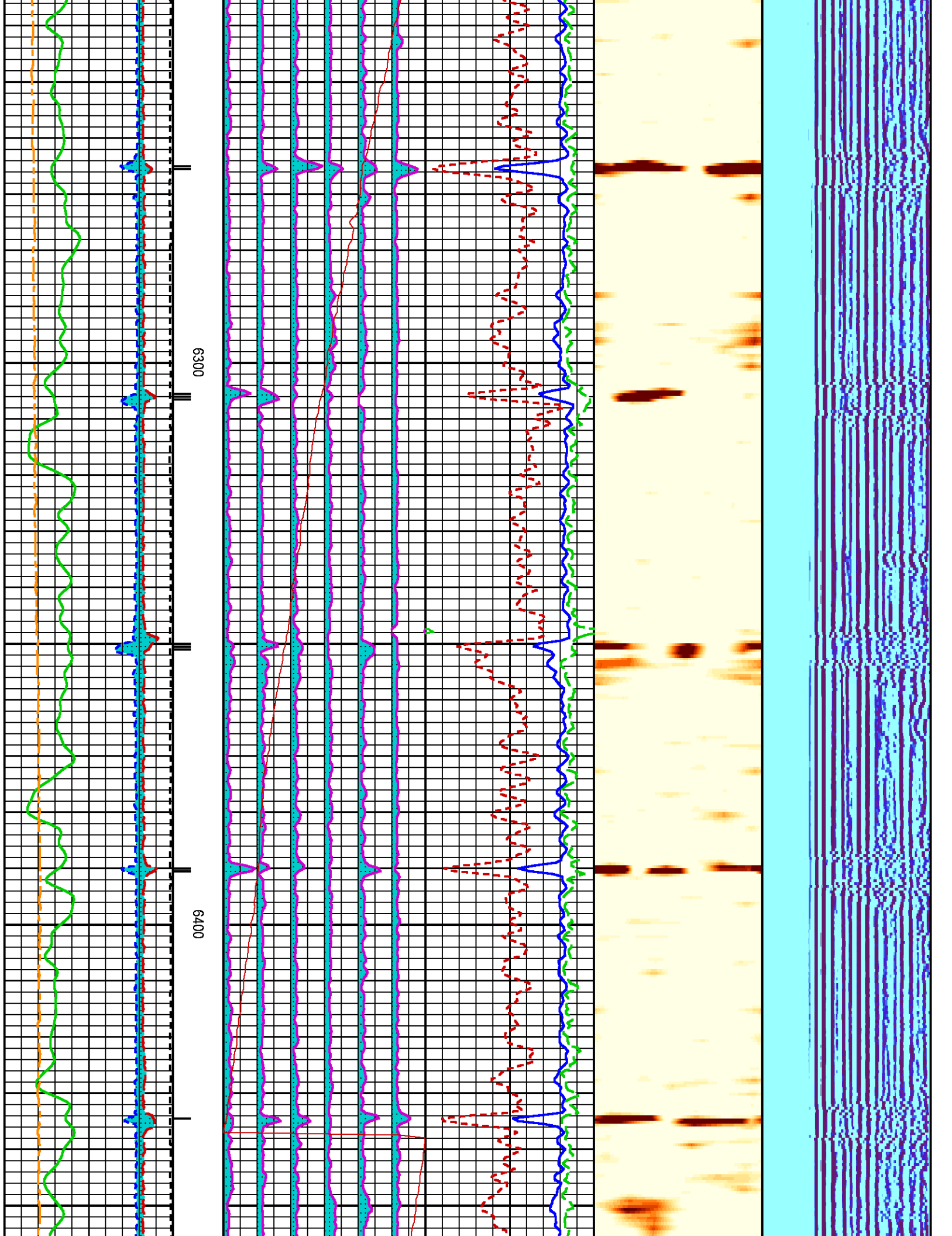


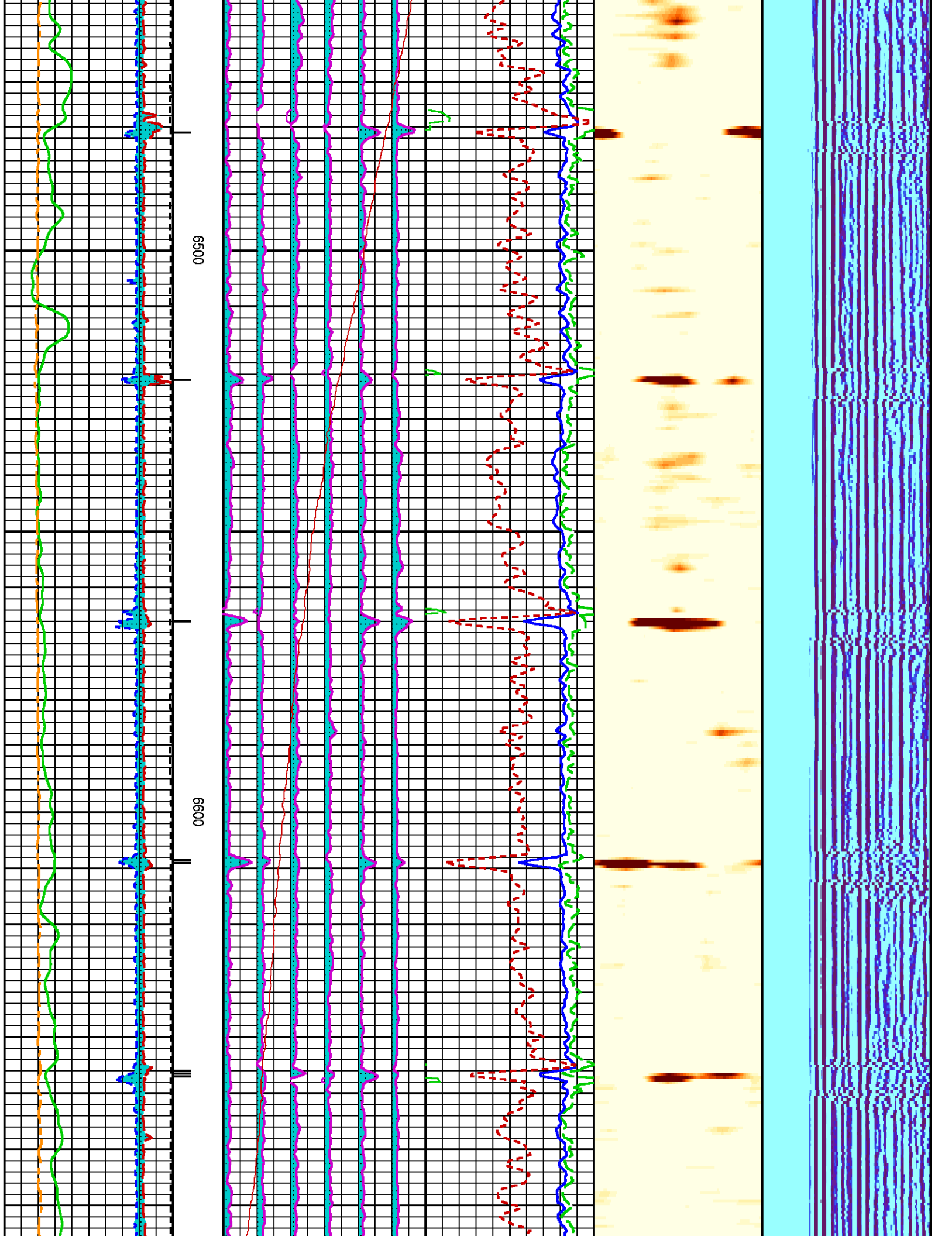


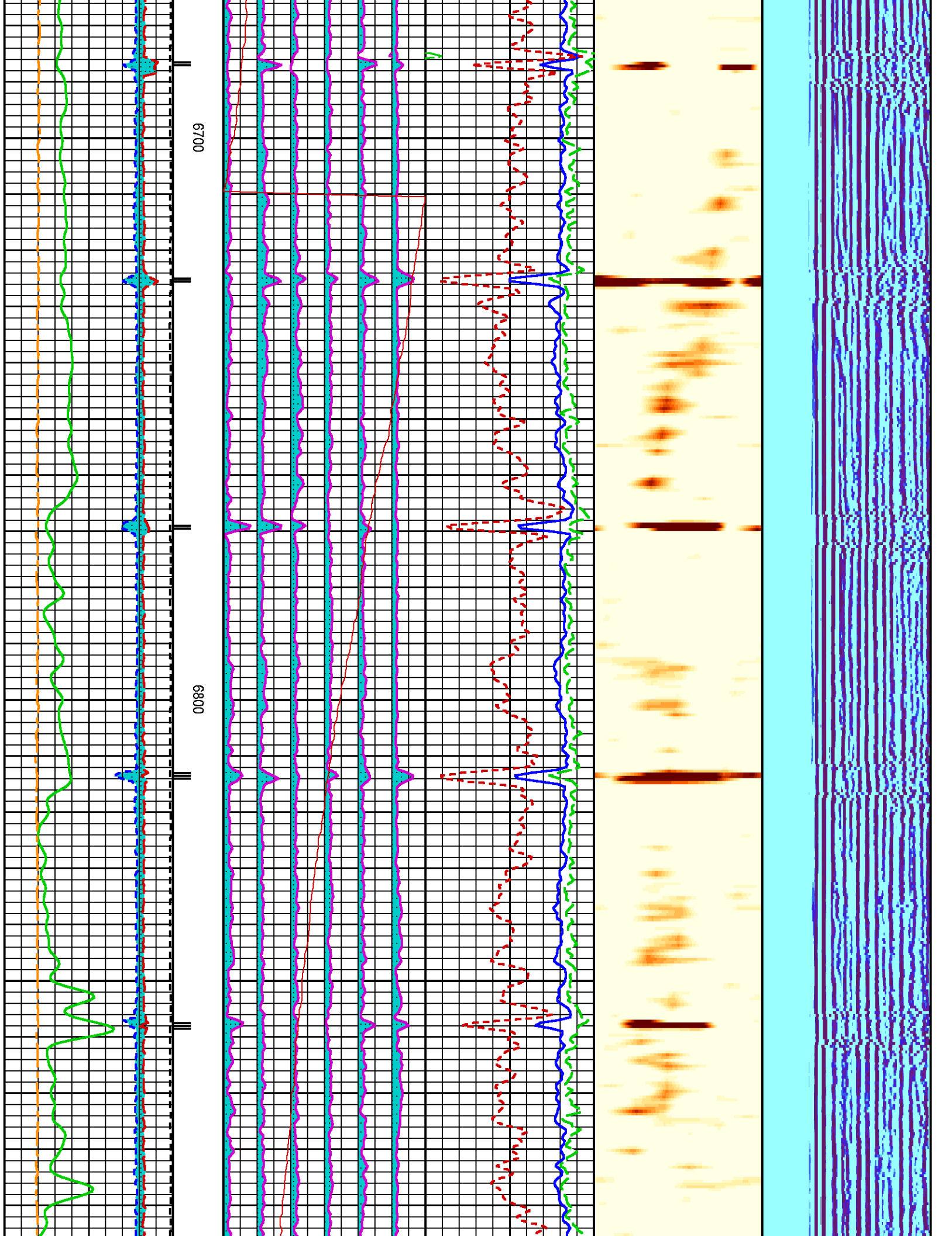


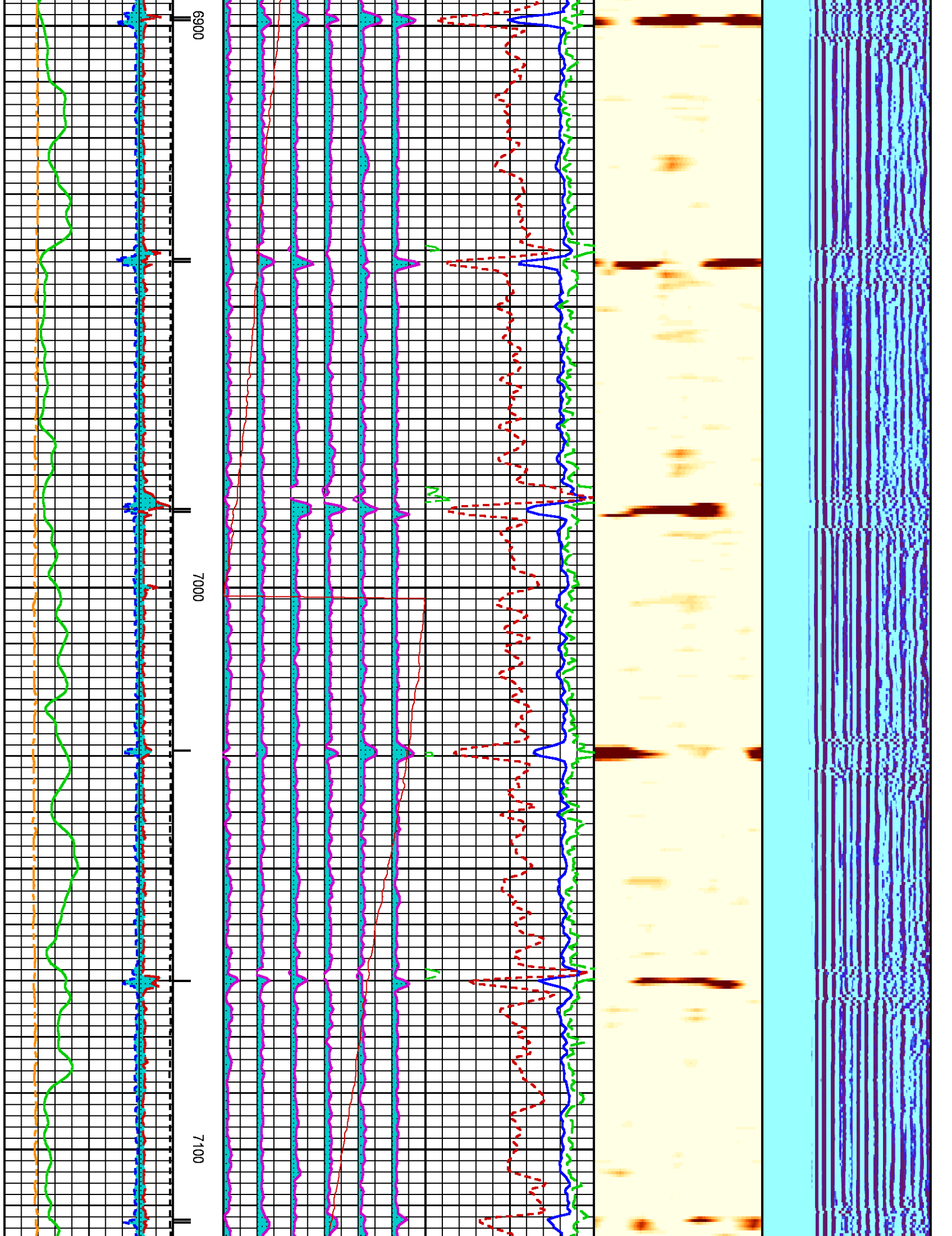


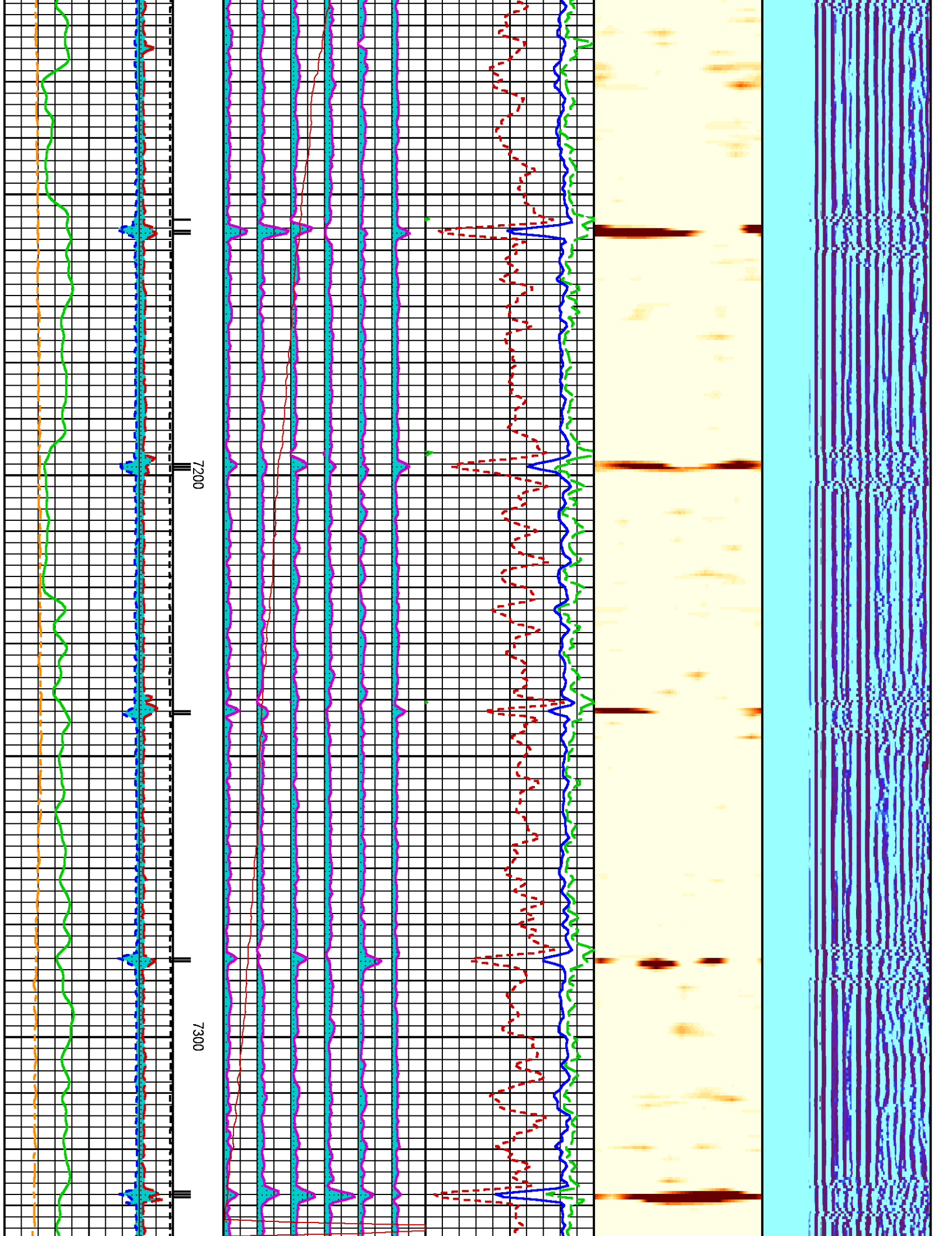


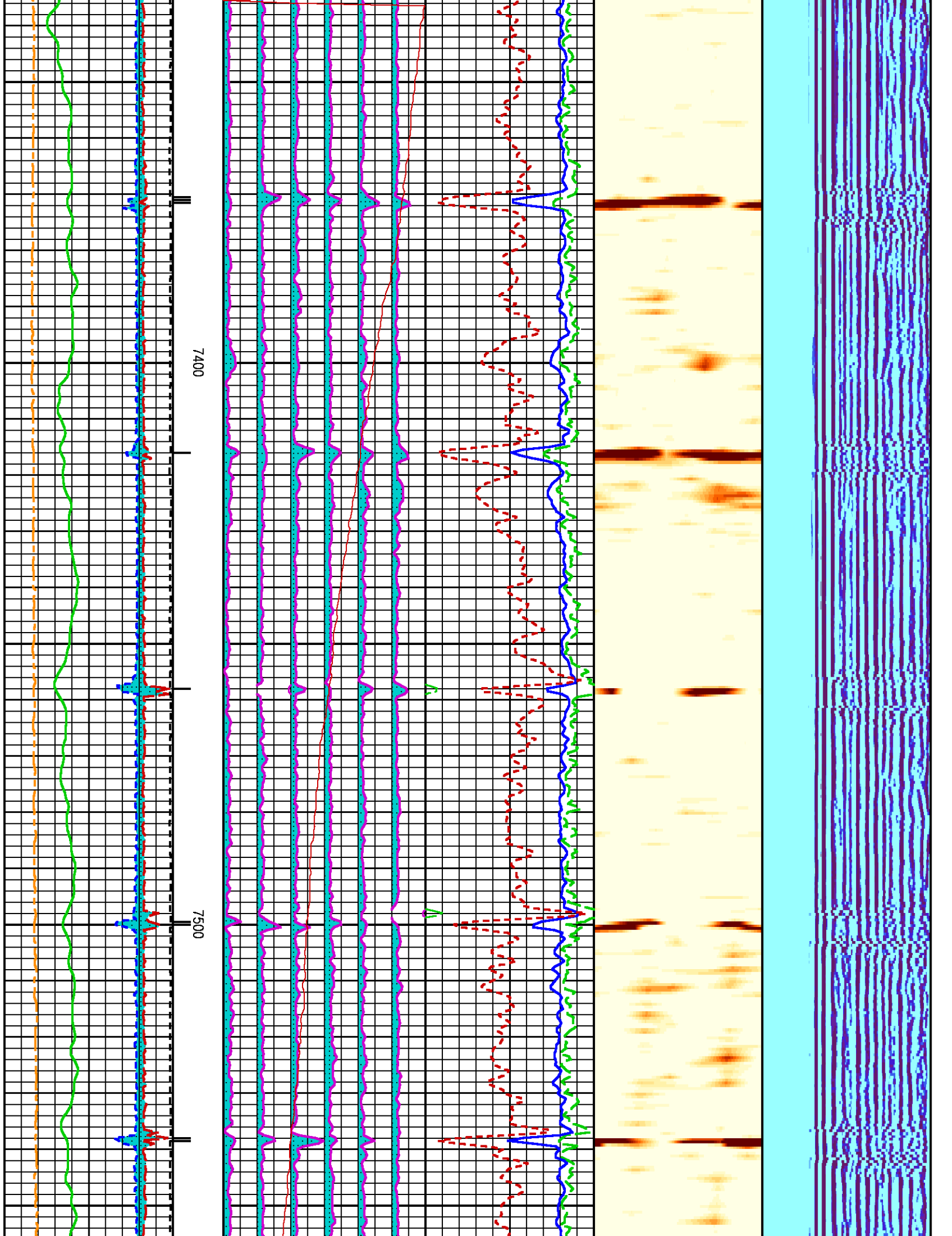


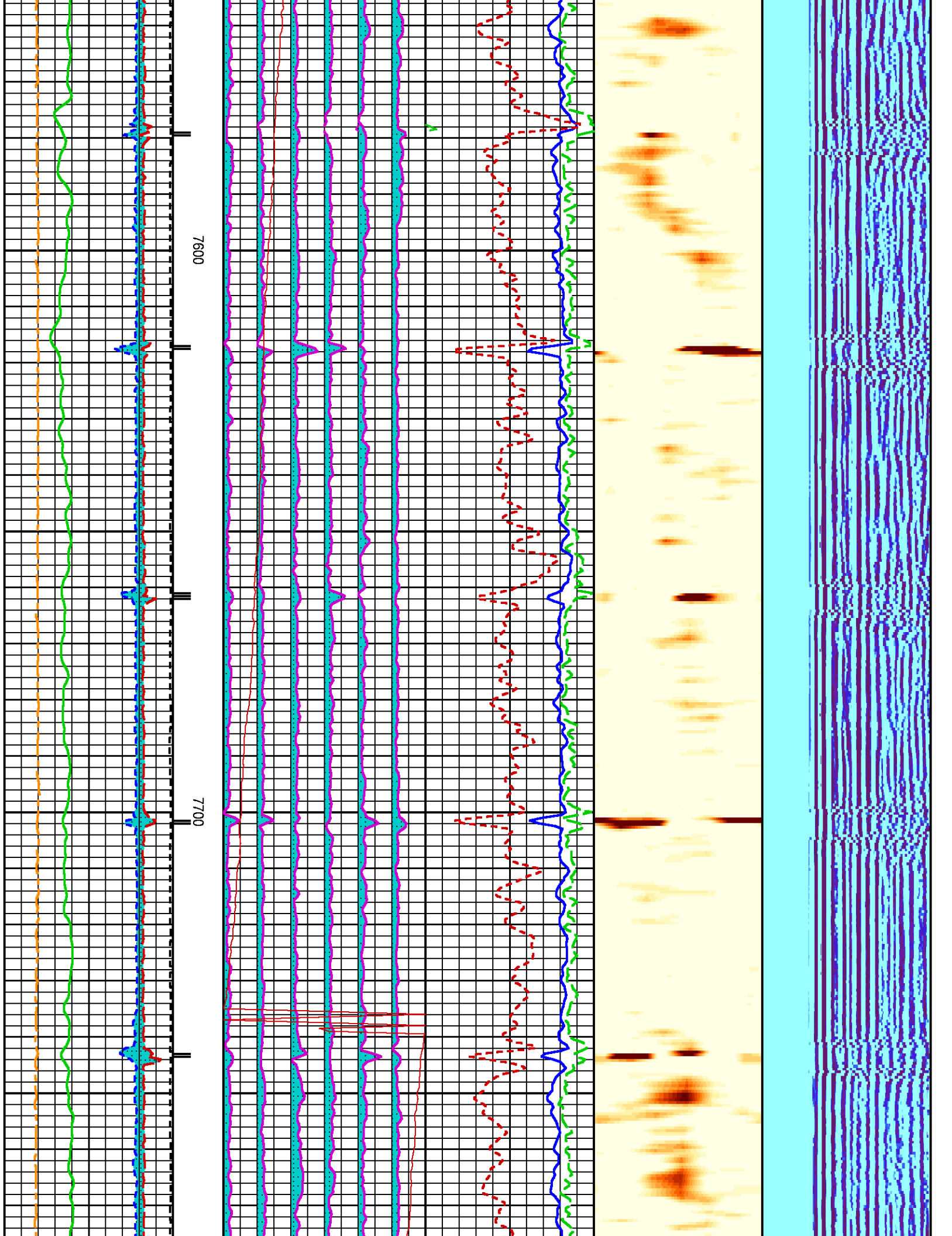


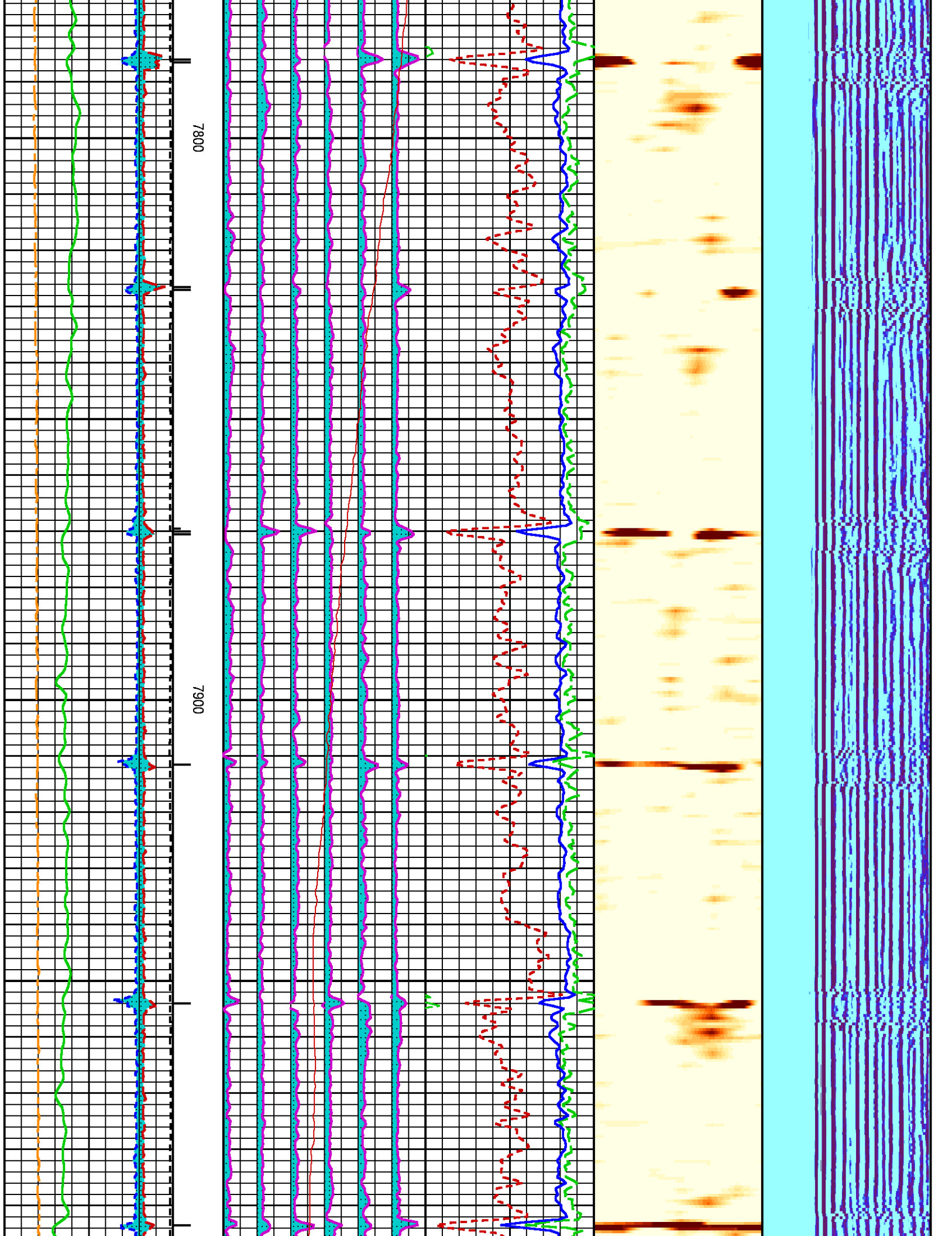


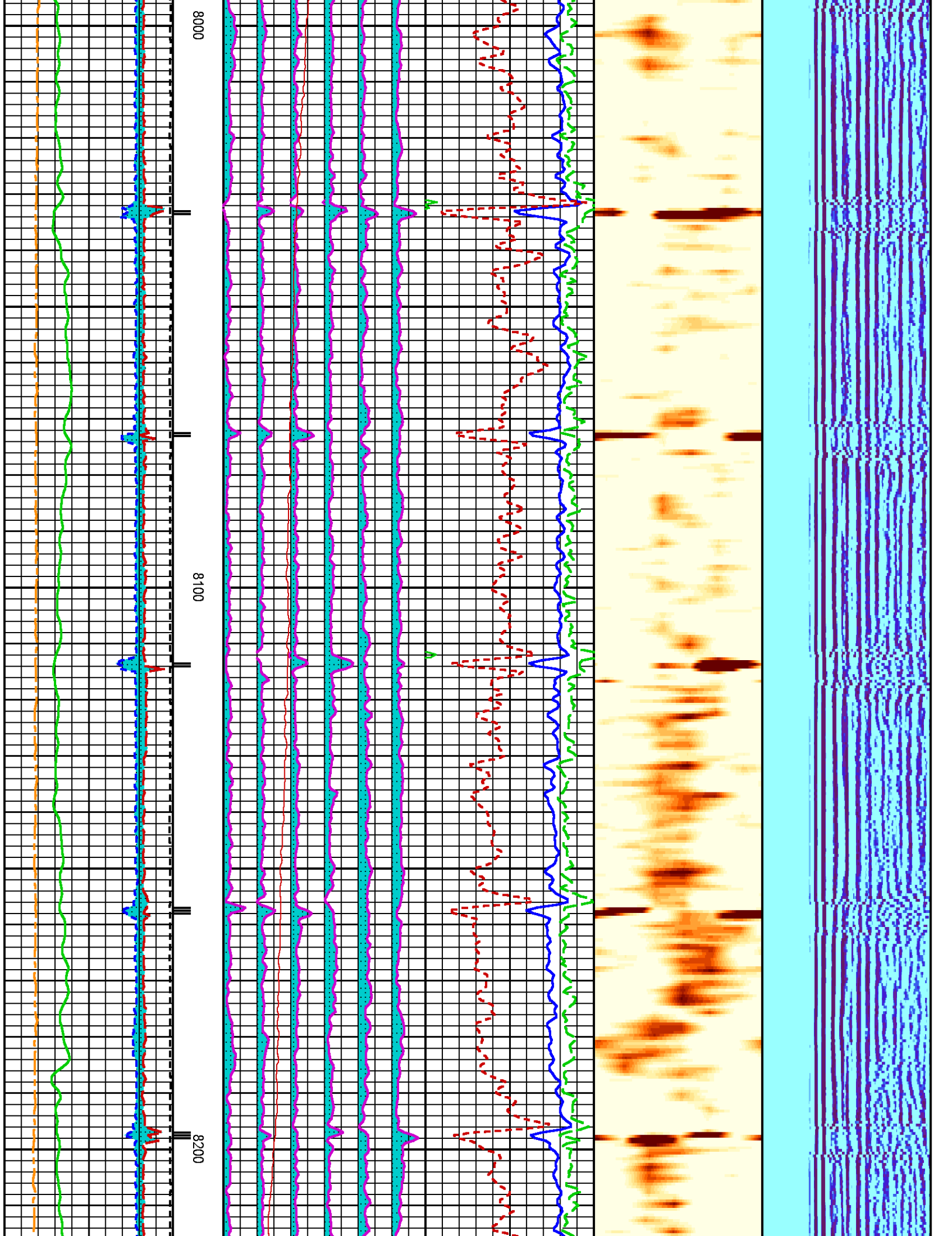


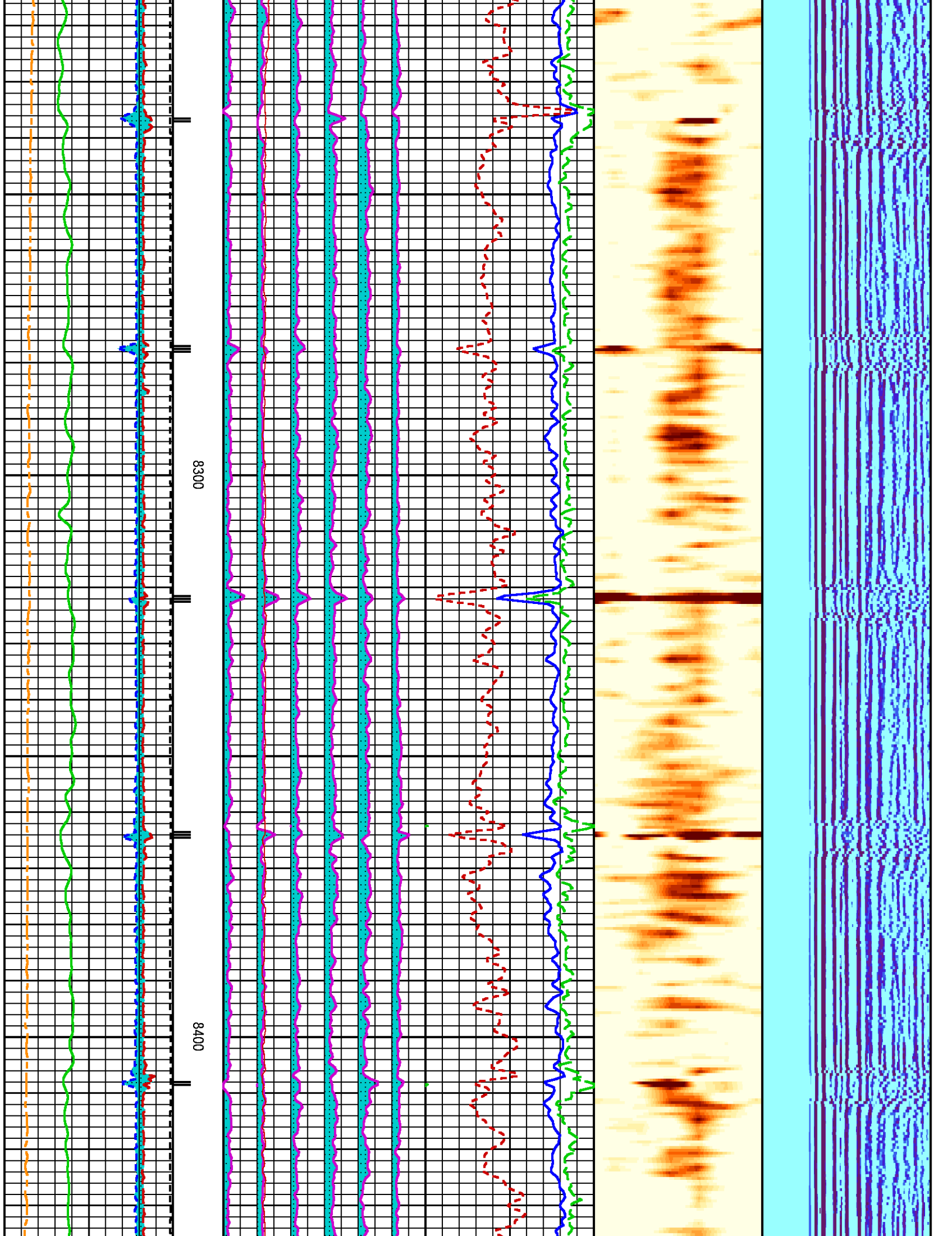


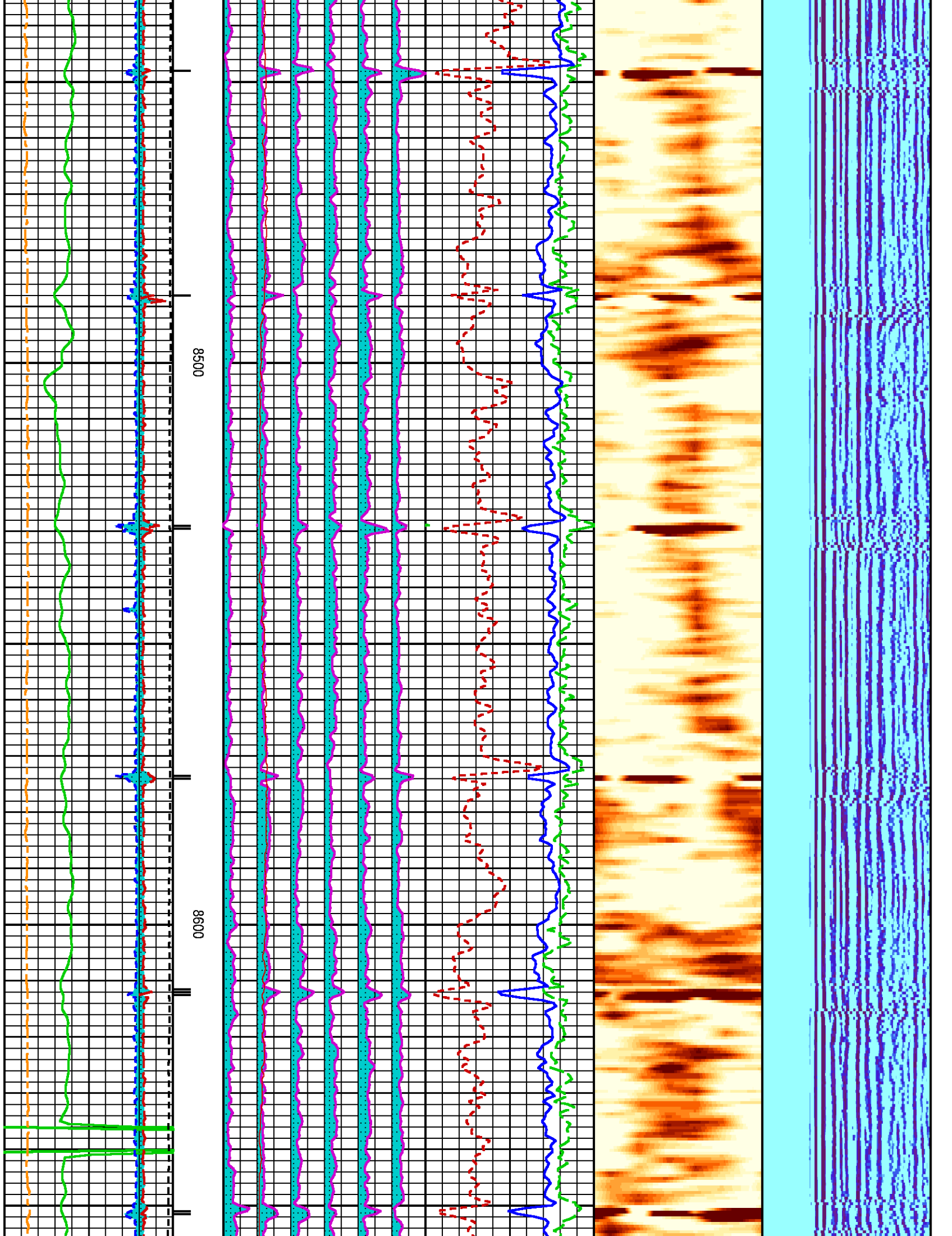


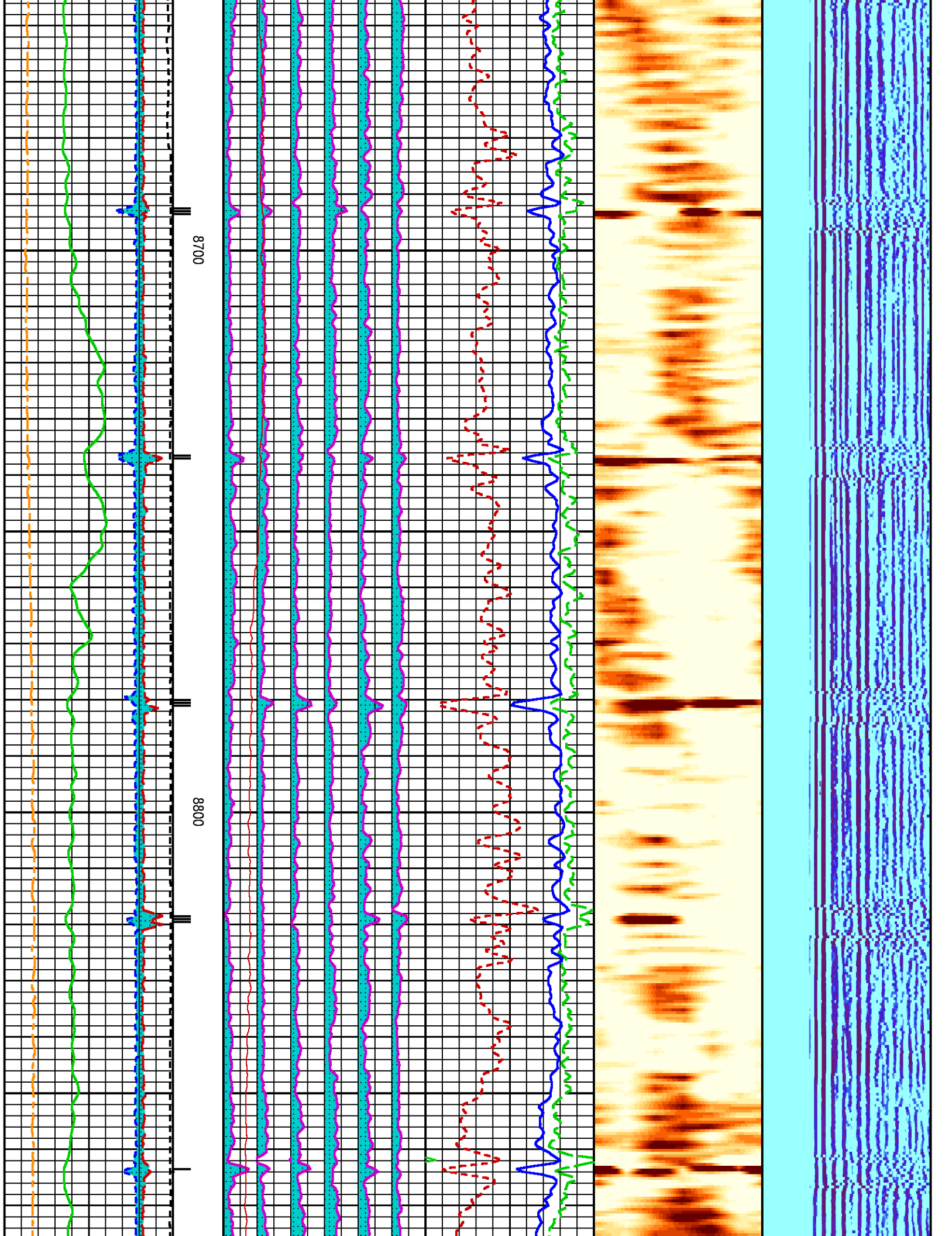


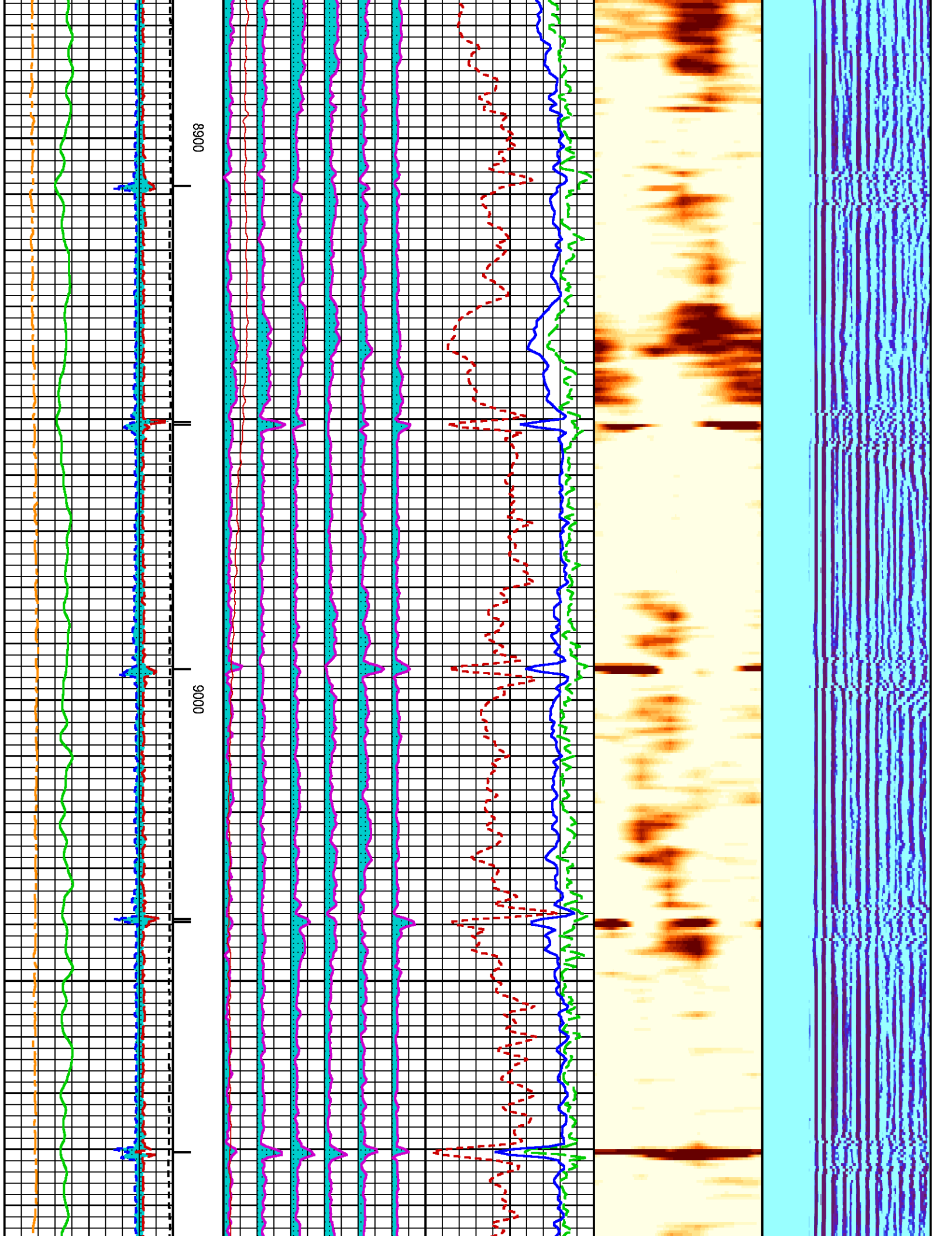


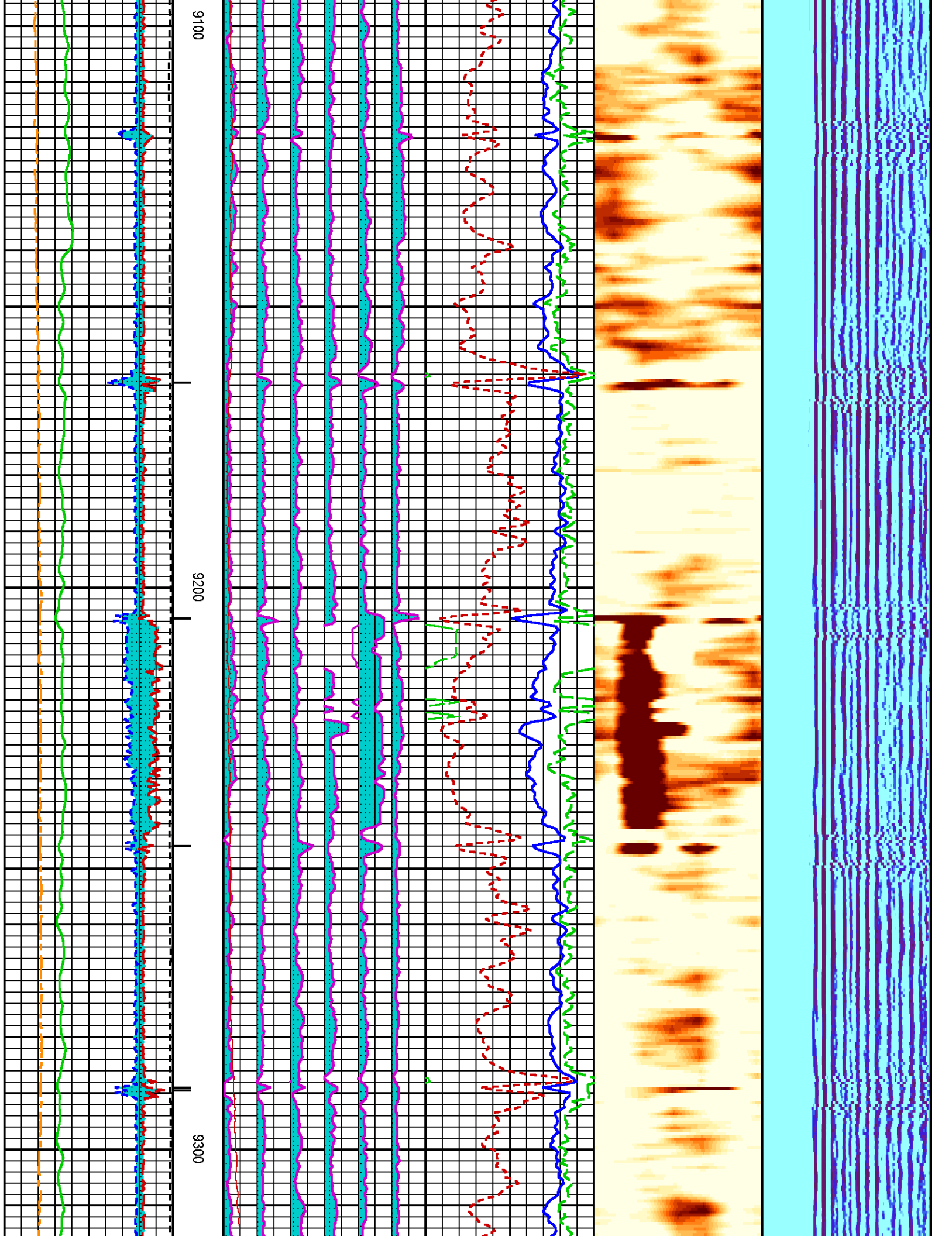


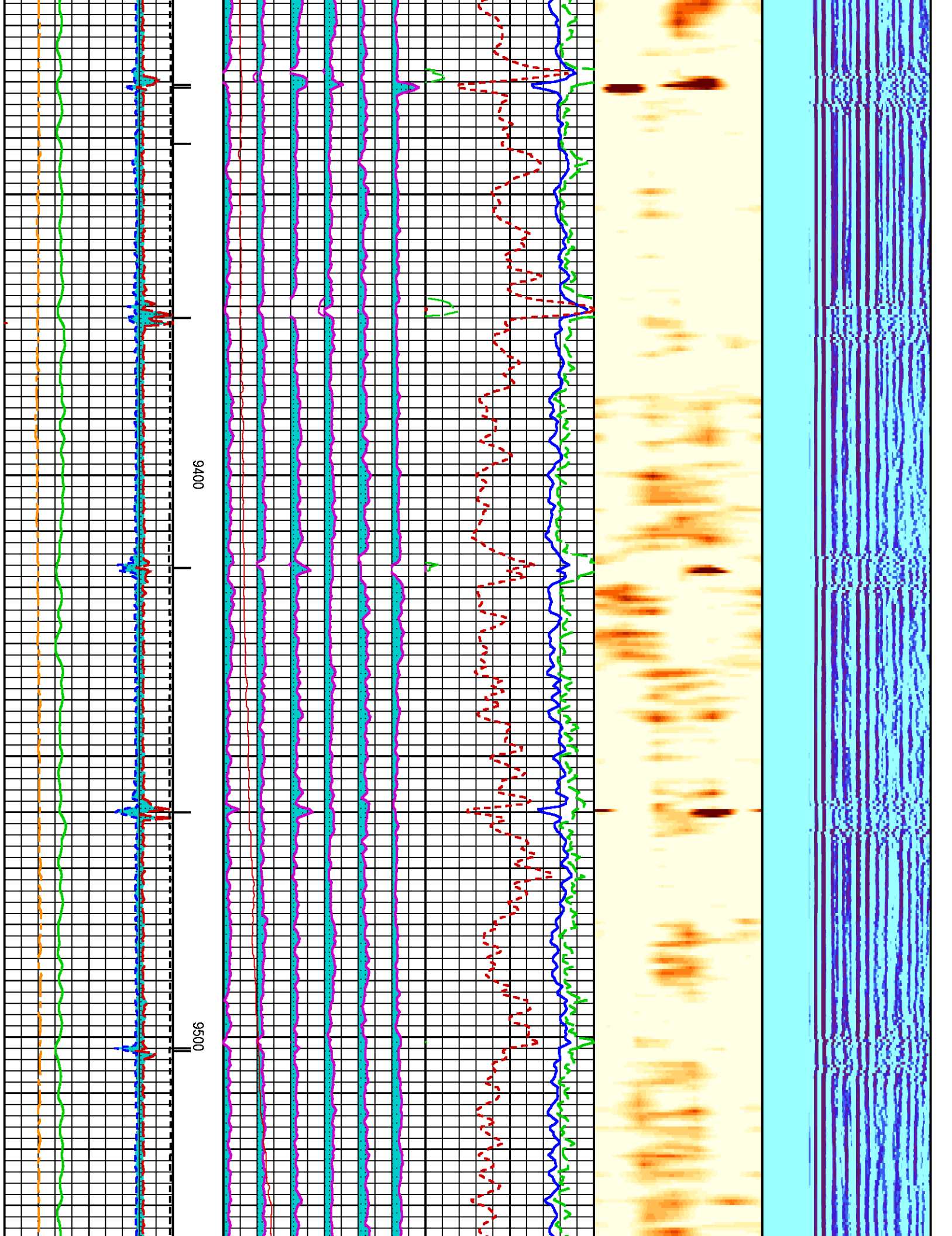


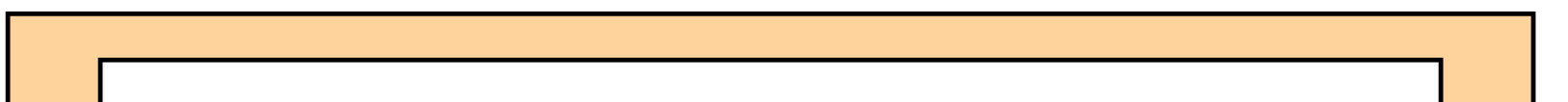
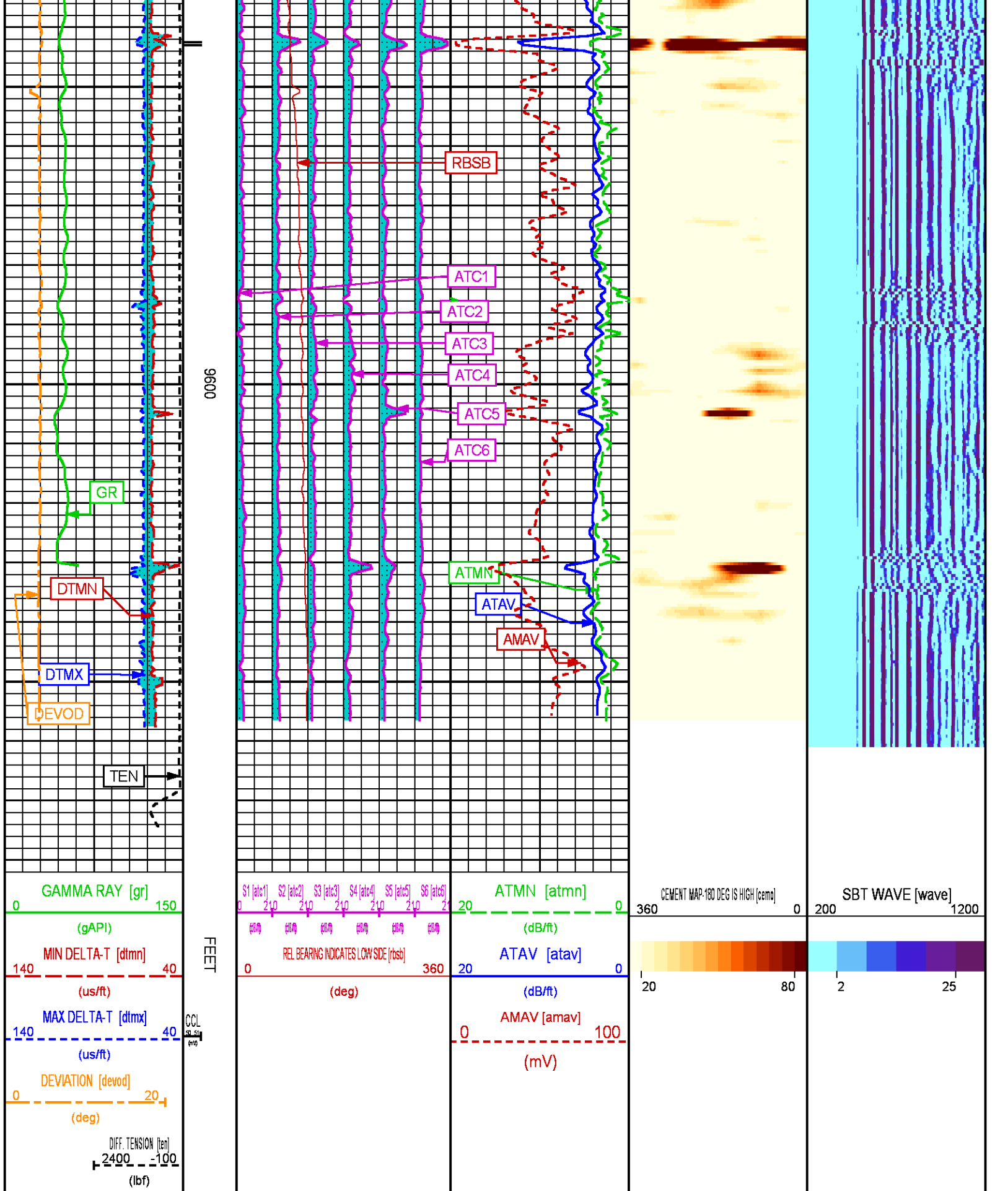












REPEAT PASS OPSI

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

Updates: 1 Patches: 6

Plotted: Sun Mar 22 04:44:58 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH095614/n331dR04.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 160.000 ft BOTTOM DEPTH: 521.500 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GR	FILTER ()	medium (1)		TOP	BOTTOM
SBT	FILTER, 2pf	light (2)		"	"
	FILTER, 4pf	light (2)		"	"
TENSION	FILTER ()	medium (1)		"	"

SBT PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
SBT	CASING OD	5.500	in	TOP	BOTTOM
	CASING WT	17.000	lbm/ft	"	"
	FREE PIPE AMP.	80.344	mV	"	"
	FREE PIPE ATTN.	0.777	dB/ft	"	"
	CORR. FACTOR 1 (1424XA 1)	-0.121	dB/ft	"	"
	CORR. FACTOR 2 (1424XA 1)	-0.910	dB/ft	"	"
	CORR. FACTOR 3 (1424XA 1)	0.330	dB/ft	"	"
	CORR. FACTOR 4 (1424XA 1)	-0.022	dB/ft	"	"
	CORR. FACTOR 5 (1424XA 1)	0.887	dB/ft	"	"
	CORR. FACTOR 6 (1424XA 1)	-0.163	dB/ft	"	"
	SPACING	0.631	ft	"	"
	SPREADING FACTOR	4.755	dB/ft	"	"
	CEMENT STRENGTH	2500	psi	"	"
	HI CUTOFF (1424XA 1)	10.417	dB/ft	"	"
	LOW CUTOFF (1424XA 1)	3.187	dB/ft	"	"

CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:AMAV	Mar 22 03:29:47 2015	AVERAGE AMPLITUDE
F1:ATAV	Mar 22 03:29:47 2015	AVERAGE ATTENUATION
F1:ATC1	Mar 22 03:29:47 2015	ATTENUATION PAD 1
F1:ATC2	Mar 22 03:29:47 2015	ATTENUATION PAD 2
F1:ATC3	Mar 22 03:29:47 2015	ATTENUATION PAD 3
F1:ATC4	Mar 22 03:29:47 2015	ATTENUATION PAD 4
F1:ATC5	Mar 22 03:29:47 2015	ATTENUATION PAD 5
F1:ATC6	Mar 22 03:29:47 2015	ATTENUATION PAD 6
F1:ATMN	Mar 22 03:29:47 2015	ATTENUATION MINIMUM
F1:CCL	Mar 22 03:29:47 2015	CASING COLLAR LOCATOR
F1:CEMO	Mar 22 03:29:47 2015	CALIBRATED AND ORIENTED CEMENT MAP
F1:CYQ	Mar 22 03:29:47 2015	CYCLE QUALITY
F1:DEVOD	Mar 22 03:29:47 2015	DEVIATION
F1:DTMN	Mar 22 03:29:47 2015	MINIMAL SLOWNESS
F1:DTMX	Mar 22 03:29:47 2015	MAXIMAL SLOWNESS
F1:GR	Mar 22 03:29:47 2015	GAMMA RAY
F1:RBSB	Mar 22 03:29:47 2015	RELATIVE BEARING (RELATIVE TO BOREHOLE LOW SIDE) FOR SBT
F1:TEN	Mar 22 03:29:47 2015	DIFFERENTIAL TENSION
F1:WAVE	Mar 22 03:29:47 2015	DIGITIZED WAVEFORM

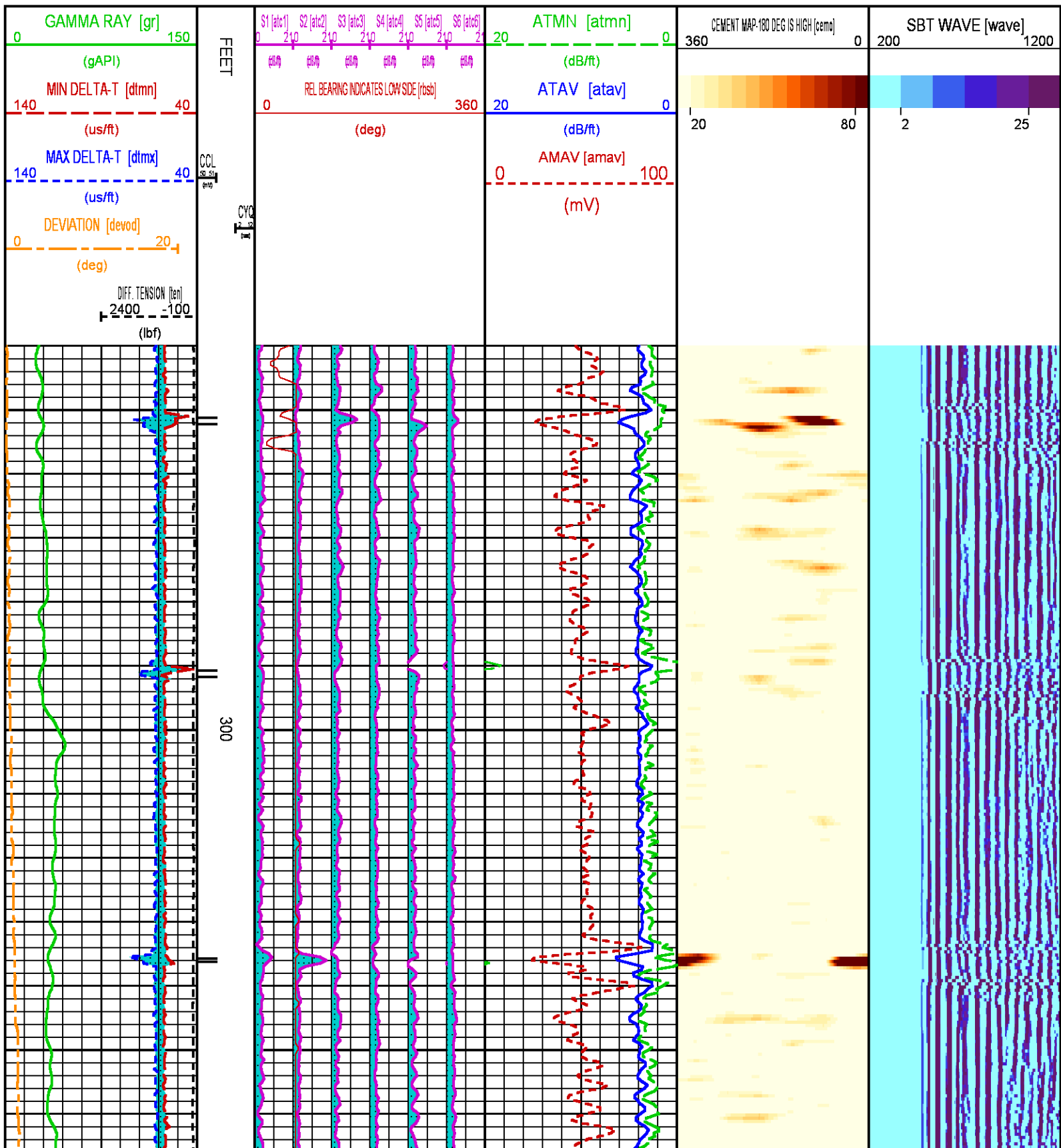
CURVE MEASURE POINT OFFSET

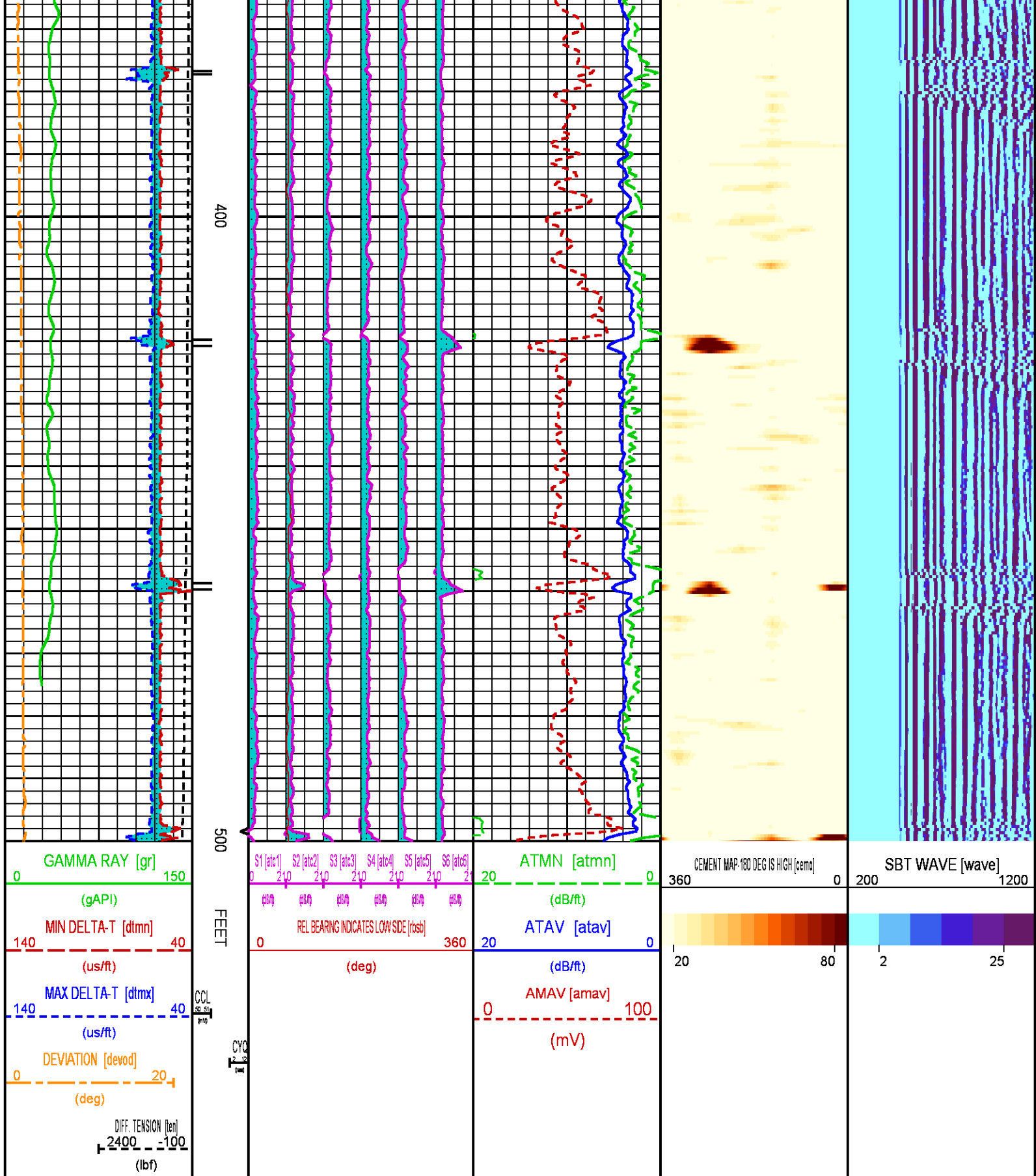
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
AMAV	19.50	ATC4	19.50	CYQ	19.50	RBSB	19.50
ATAV	19.50	ATC5	19.50	DEVOD	19.50	TEN	0.00
ATC1	19.50	ATC6	19.50	DTMN	19.50		

ATC1	19.50	ATC3	19.50	ATMN	19.50
ATC2	19.50	CCL	52.00	DTMX	43.00
ATC3	19.50			GR	43.00

Presentation : HL6670:/dat1a/CH095614/REPEAT.fvpdf [5"/100' Scale]
Plot Interval : 240 - 500 Feet

Data File 1 : F1 : HL6670:/dat1a/CH095614/REPEAT.xtf
Created On : Mar 22 03:29:47 2015
Company : WPX ENERGY
Well : GM 728-14-33-HN1
Field : GRAND VALLEY
File Interval : 108 - 521.5 Feet
OCT : n331d





CALIBRATION / VERIFICATION SUMMARY

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 1309XA 041737 DATE/TIME PERFORMED: Mon Feb 23 10:28:03 2015

UNIT #: 3885TC 6685 CALB JIG #: 4702NK VBA-905

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	GR DIFF (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	CALBRTR (gAPI)
GR	76.27	265.33	189.1 <small>170.0 242.0</small>	0.793	60.51	210.51	150

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 1309XA 041737 DATE/TIME PERFORMED: Mon Feb 23 10:30:34 2015

UNIT #: 3885TC 6685 VERI JIG #: 4702NK VBA-905

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	78.73	264.24	0.793	62.46	209.64	147.18 <small>140.00 160.00</small>

RB PRIMARY CALIBRATION SUMMARY

TOOL #: 1424XA 119555 DATE/TIME PERFORMED: Wed Mar 18 13:45:46 2015

UNIT #: 3880TA HL6670

	X-ATT (raw)	Y-ATT (raw)	OFFSET (deg)	X-MAX	Y-MAX	RB (deg)
PAD 2	-207.6	-436.6				0.00 <small>355.00 5.00</small>
PAD 3	-474.7	-61.3				56.92 <small>55.00 65.00</small>
			-64.14	-475.94	485.19	

SBT PRIMARY CALIBRATION SUMMARY

TOOL #: 1424XA 119555 DATE/TIME PERFORMED: Wed Mar 18 13:44:14 2015

UNIT #: 3880TA HL6670

	PAD 1	PAD 2	PAD 3	PAD 4	PAD 5	PAD 6
NOISE LEVEL	2.1 <small>10.0</small>	2.3 <small>10.0</small>	1.8 <small>10.0</small>	2.3 <small>10.0</small>	2.3 <small>10.0</small>	2.8 <small>10.0</small>
PAD SENS	154.0 <small>150.0</small>	172.6 <small>150.0</small>	294.4 <small>150.0</small>	222.7 <small>150.0</small>	287.8 <small>150.0</small>	246.8 <small>150.0</small>

INSTRUMENT CONFIGURATION

CABLEHEAD

Diameter : 3.38"
Length : 5.50'
Weight : 24 lbs
Series : CABL338
Mnemonic : CBLH
Measure Point: 2.75': CABLEHEAD TOP

CABLEHEAD TOP — 61.51'

TENSION SUB

Diameter : 3.63"
Length : 3.73'
Weight : 90 lbs
Series : 3974XA
Mnemonic : CHT

CCL

Diameter : 3.38"
Length : 6.78'
Weight : 97 lbs
Series : 2346XA
Mnemonic : CCL
Measure Point: 4.15': CCL MP

CCL MP — 52.40'

GAMMA RAY

Diameter : 3.63"
Length : 6.51'
Weight : 120 lbs
Series : 1309XA
Mnemonic : GR
Measure Point: 1.33': GR MP

GR MP — 43.07'

ACOUSTIC DIGITIZER

Diameter : 3.38"
Length : 8.00'
Weight : 133 lbs
Series : 1633EA
Mnemonic : AC



4 ARM BOW SPRING CENTRALIZER

Diameter : 3.38"
Length : 4.12'
Weight : 72 lbs
Series : 4341XA
Mnemonic : CENT



SEGMENTED BOND TOOL

Diameter : 3.38"
Length : 17.33'
Weight : 240 lbs
Series : 1424XA
Mnemonic : SBT
Measure Point: 7.54': ATT MP

ATT MP — 19.83'

SEGMENTED BOND TOOL VDL SUB

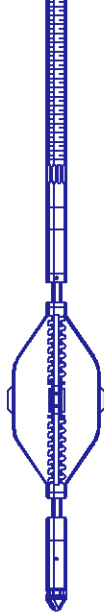
Diameter : 3.38"
Length : 7.89'
Weight : 108 lbs
Series : 1424PA

SBT MP — 8.40'

SERIES : 4341XA
 Mnemonic : SBT
 Measure Point: 4.00': SBT MP

4 ARM BOW SPRING CENTRALIZER


Diameter : 3.38"
 Length : 4.12'
 Weight : 72 lbs
 Series : 4341XA
 Mnemonic : CENT



BULL PLUG 3 3/8

0.00'

TOTAL LENGTH: 64.26'
 TOTAL WEIGHT: 958 lbs
 MAX DIAMETER: 0'3.63"

	COMPANY <u>WPX ENERGY</u> WELL <u>GM 728-14-33-HN1</u> FIELD <u>GRAND VALLEY</u> COUNTY <u>GARFIELD</u> STATE <u>COLORADO</u>	FILE NO: <u>CH095614</u> API NO: <u>05045224310000</u>
	LOCATION: SHL: 592' FSL & 385' FWL 28 6S 96W BHL: 192' FSL & 592' FWL 33 6S 96W SEC <u>33</u> TWP <u>6S</u> RGE <u>96W</u>	ELEVATIONS: KB 5551 FT DF GL 5518 FT DATE <u>21-Mar-2015</u>