



Baker Atlas

FILE NO:	COMPANY	NALCOR ENERGY
API NO:	WELL	NALCOR ET AL FINNEGAN #1
	FIELD	FINNEGAN
	PROVINCE	NEWFOUNDLAND AND LABRADOR
Ver. 3.87	LOCATION:	OTHER SERVICES XMAC-GR-3CAL HDIL-GR-CAL DZDL-CN-GR-XYCAL RCOR VSP / DLL
LICENSE: 2010-12B-04	LAT 49.92 N LONG 63.33 W	ELEVATIONS: KB 125.00 M DF GL 118.75 M
PERMANENT DATUM LOG MEASURED FROM DRILL MEAS. FROM	G.L. ELEVATION 118.75 M K.B. 6.25 M ABOVE P.D. KELLY BUSHING	

DATE	27-NOV-2010		
RUN	2	TRIP	6
SERVICE ORDER	CA209243		
DEPTH DRILLER	3130.0 M		
DEPTH LOGGER	MA		
BOTTOM LOGGED INTERVAL	2270.0 M		
TOP LOGGED INTERVAL	11.0 M		
CASING DRILLER	244.5 MM	2276.0 M	
CASING LOGGER	2275.0 M		
BIT SIZE	216.0 MM		
TYPE OF FLUID IN HOLE	GELCHEM		
DENSITY	1245.0 G/L	82.0 S	
PH	10.0	5.7 ML	
SOURCE OF SAMPLE	TOOL MEASURED		
RM AT MEAS. TEMP.	0.657 OHMM	49.2 DEGC	
RMF AT MEAS. TEMP.	0.568 OHMM	49.2 DEGC	
RMC AT MEAS. TEMP.	0.788 OHMM	49.2 DEGC	
SOURCE OF RMF	CALCULATED		
RM AT BHT	0.585 OHMM	54.6 DEGC	
TIME SINCE CIRCULATION	48.2 HOURS		
MAX. RECORDED TEMP.	54.6 DEGC		
EQUIP. NO.	HL4291	OH NISKU	
RECORDED BY	S. CREWE\J. HOUSE		
WITNESSED BY	R. STRICKLAND\N. WATSON		

IN MAKING INTERPRETATIONS OF LOGS OUR EMPLOYEES WILL GIVE 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
444.5 MM	0.0 M	570.0 M
311.0 MM	570.0 M	2285.0 M
216.0 MM	2285.0 M	3130.0 M

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
339.7 MM	81.1 KG/M	K-55	0.0 M	570.0 M
244.5 MM	64.7 KG/M	NA	570.0 M	2276.0 M
177.8 MM				

REMARKS

RUN 2 TRIP 6 : TIME STOPPED CIRCULATION: 27-NOV-2010 09:30 AM

PRELIMINARY LOG. FURTHER PROCESSING MAY BE REQUIRED.

DEPTH CORRELATED TO OPENHOLE LOGS RECORDED BY BAKER ATLAS ON 02-NOV-10.

CEMENT COMPRESSIVE STRENGTH OF 10,000 KPA USED FOR CEMENT MAP.

SAMPLE MEASURED:
RM 0.955 @ 15.2 DEG
RMF 0.825 @ 15.2 DEG
RMC 1.146 @ 15.2 DEG

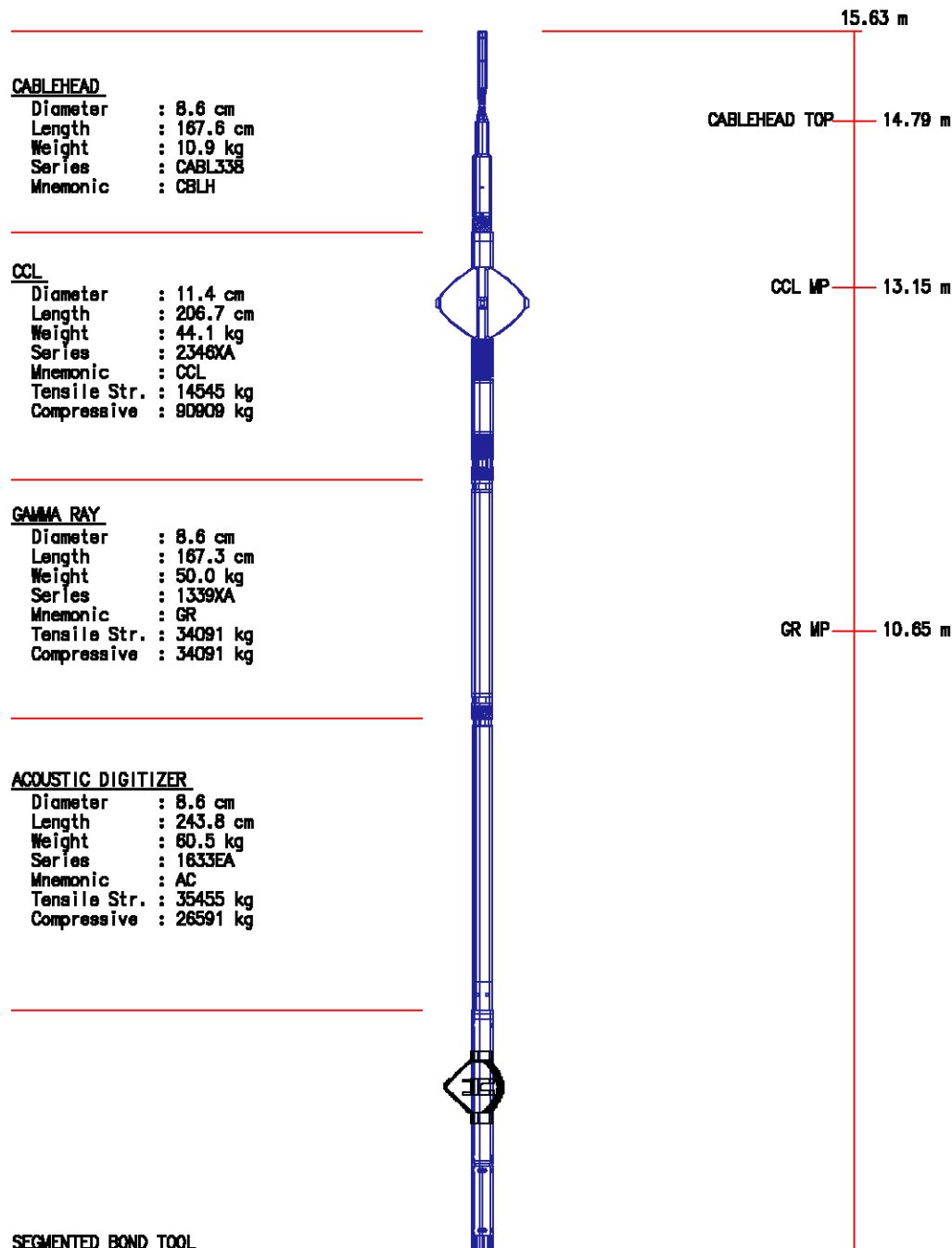
RIG: STONEHAM 11

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
2	6	CCL	2346XA	10197975	FREE
2	6	GR	1339XA	10195042	FREE
2	6	SBT ELEC	1633EA	10186915	CENTRALIZED
2	6	SBT MAND	1424XB	10185716	PAD DEVICE
2	6	VDL	1424PA	10187842	CENTRALIZED

INSTRUMENT CONFIGURATION

Source File: /data/pass/nalcor_finn_run2/r2t6-tdg



Diameter : 11.4 cm
 Length : 528.3 cm
 Weight : 109.1 kg
 Series : 1424XA
 Mnemonic : SBT
 Tensile Str. : 2045 kg
 Compressive : 5909 kg



ATT WP 4.79 m

SBT WP 1.30 m

0.00 m

SEGMENTED BOND TOOL VDL SUB

Diameter : 8.6 cm
 Length : 240.5 cm
 Weight : 49.1 kg
 Series : 1424PA
 Mnemonic : SBT
 Tensile Str. : 5000 kg
 Compressive : 7273 kg

BULL PLUG 3 3/8

TOTAL LENGTH: 15.63 m
 TOTAL WEIGHT: 330.9 kg
 MAX DIAMETER: 11.4 cm

MAIN LOG 1:240 SCALE

ECLIPS 6.1i Aug 06, 2010
 Patches: 1

Mon Nov 29 12:06:28 2010

Pcrplt /main/62

Cplot

Pdf_Cpp /main/16

Fileview 5.50

PARAMETER AND FILTER SUMMARY REPORT

FILE: /data/pass/nalcor_finn_run2/m331d04.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 15.392 m BOTTOM DEPTH: 2273.266 m

SYMMETRIC FILTER

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

SBT PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
SBT	CASING OD	244.500	mm	TOP	BOTTOM
	CASING WT	64.699	kg/m	"	"
	CORR. FACTOR 1	-1.369	dB/m	"	"
	CORR. FACTOR 2	0.564	dB/m	"	"
	CORR. FACTOR 3	0.225	dB/m	"	"
	CORR. FACTOR 4	1.021	dB/m	"	"
	CORR. FACTOR 5	0.001	dB/m	"	"
	CORR. FACTOR 6	-0.441	dB/m	"	"
	SPACING	0.215	m	"	"
	SPREADING FACTOR	13.946	dB/m	"	"

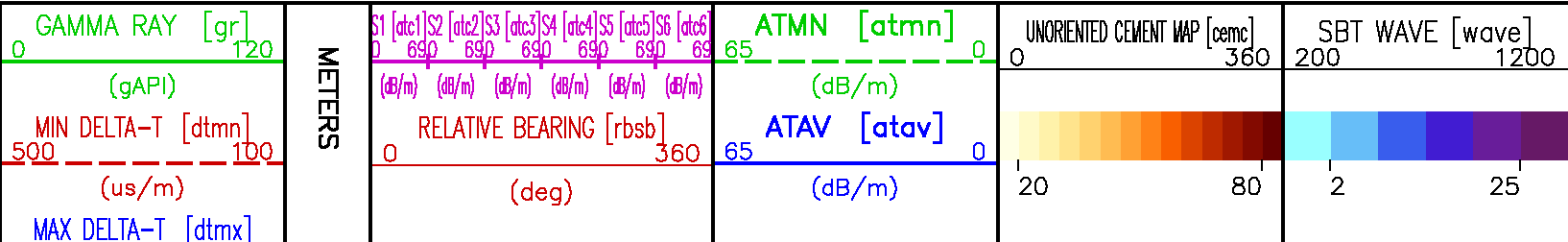
SPREADING FACTOR	18.948	dB/m	''	''
CEMENT STRENGTH	9997	kPa	''	''
HI CUTOFF	25.741	dB/m	''	''
LOW CUTOFF	11.457	dB/m	''	''

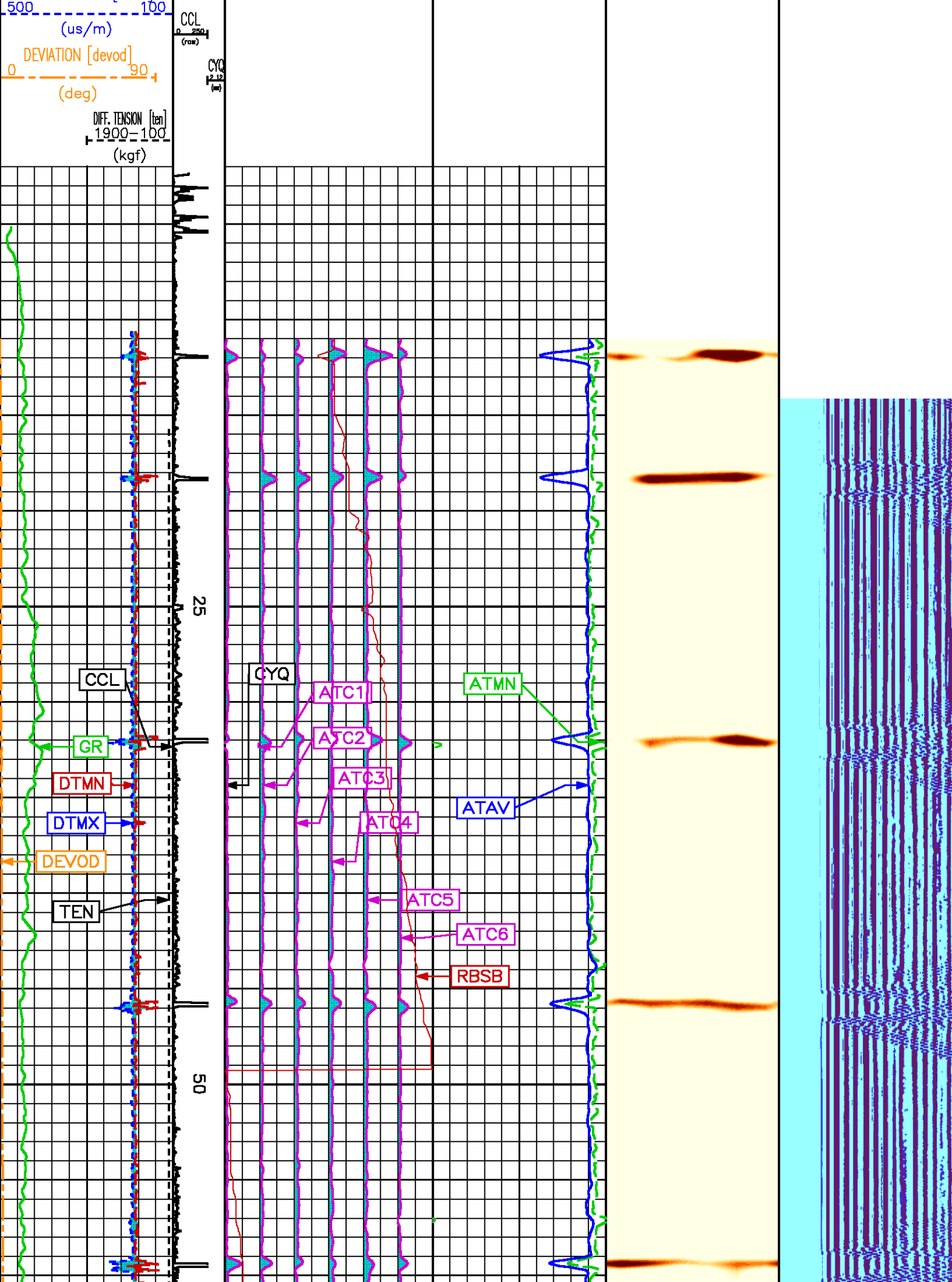
SBT NORMALIZATION RESULTS			
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS
SBT	CORR. FACTOR1	-0.187	dB/m
	CORR. FACTOR2	0.708	dB/m
	CORR. FACTOR3	-0.772	dB/m
	CORR. FACTOR4	0.413	dB/m
	CORR. FACTOR5	-0.548	dB/m
	CORR. FACTOR6	0.385	dB/m
FILE: /data/pass/nalcor_finn_run2/m331d04.sbt.qc.meta			

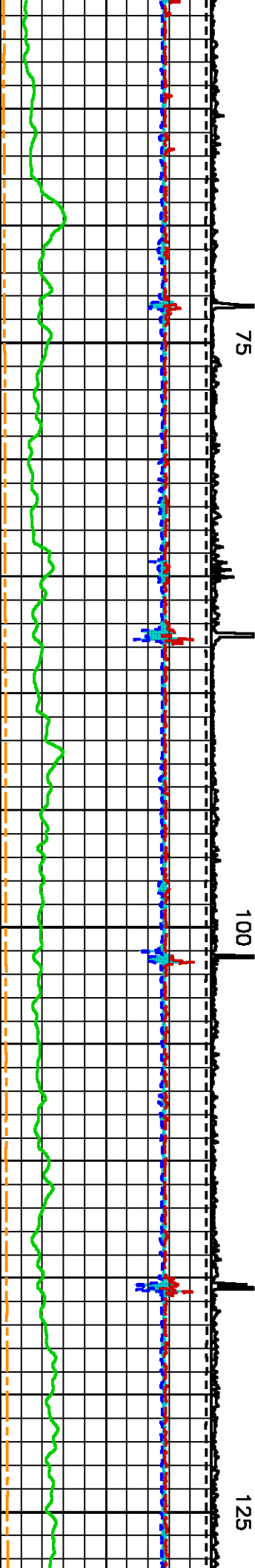
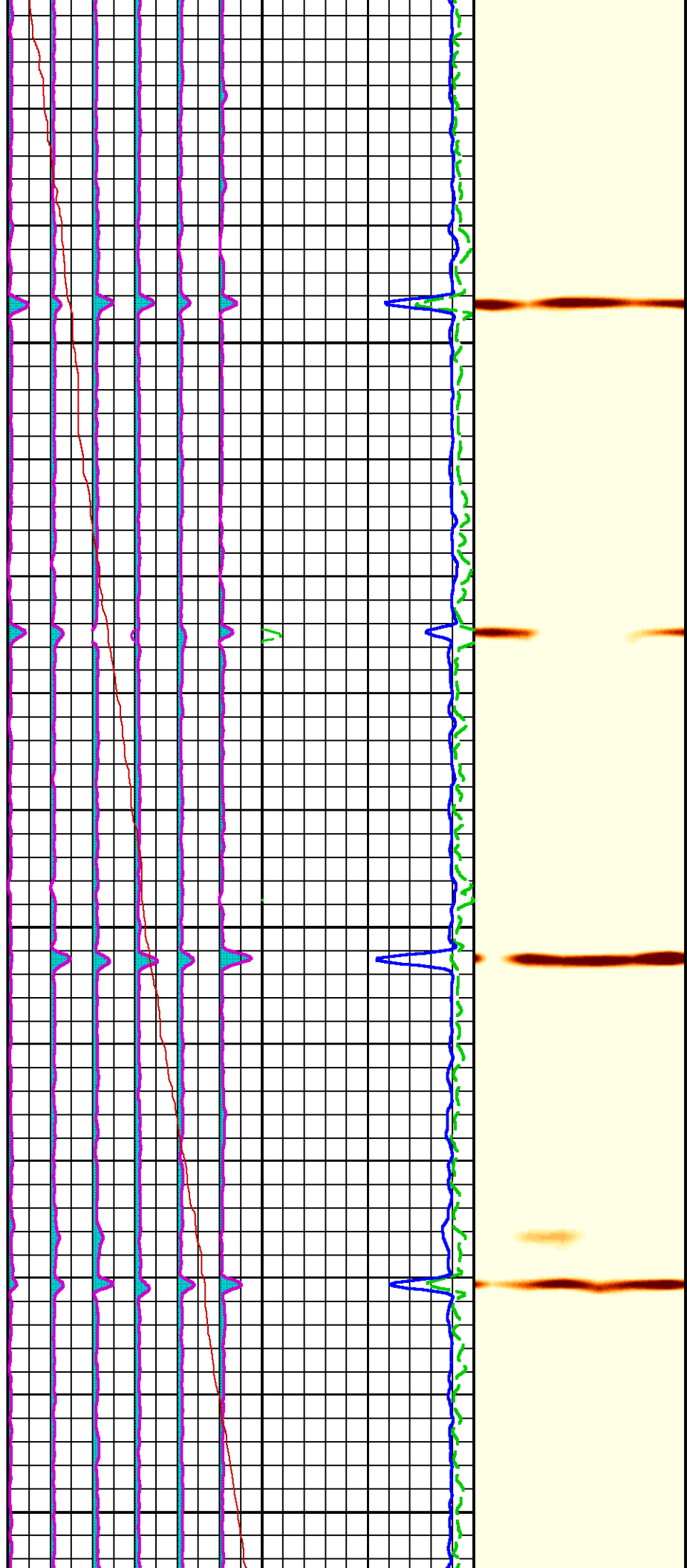
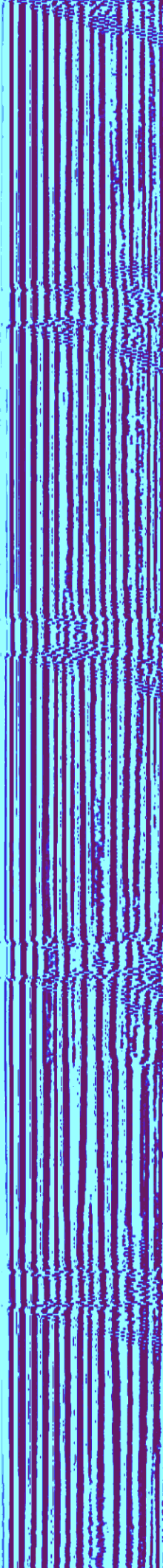
CURVE DESCRIPTION REPORT		
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:ATAV	Nov 29 06:47:43 2010	AVERAGE ATTENUATION
F1:ATC1	Nov 29 06:47:43 2010	ATTENUATION PAD 1
F1:ATC2	Nov 29 06:47:43 2010	ATTENUATION PAD 2
F1:ATC3	Nov 29 06:47:43 2010	ATTENUATION PAD 3
F1:ATC4	Nov 29 06:47:43 2010	ATTENUATION PAD 4
F1:ATC5	Nov 29 06:47:43 2010	ATTENUATION PAD 5
F1:ATC6	Nov 29 06:47:43 2010	ATTENUATION PAD 6
F1:ATMN	Nov 29 06:47:43 2010	ATTENUATION MINIMUM
F1:CCL	Nov 29 06:47:43 2010	CASING COLLAR LOCATOR
F1:CEMC	Nov 29 06:47:43 2010	CALIBRATED CEMENT MAP
F1:CYQ	Nov 29 06:47:43 2010	CYCLE QUALITY
F1:DEVOD	Nov 29 06:47:43 2010	DEVIATION
F1:DTMN	Nov 29 06:47:43 2010	MINIMAL SLOWNESS
F1:DTMX	Nov 29 06:47:43 2010	MAXIMAL SLOWNESS
F1:GR	Nov 29 06:47:43 2010	GAMMA RAY
F1:RBSB	Nov 29 06:47:43 2010	RELATIVE BEARING (RELATIVE TO BOREHOLE LOW SIDE) FOR SBT
F1:TEN	Nov 29 06:47:43 2010	DIFFERENTIAL TENSION
F1:WAVE	Nov 29 06:47:43 2010	DIGITIZED WAVEFORM

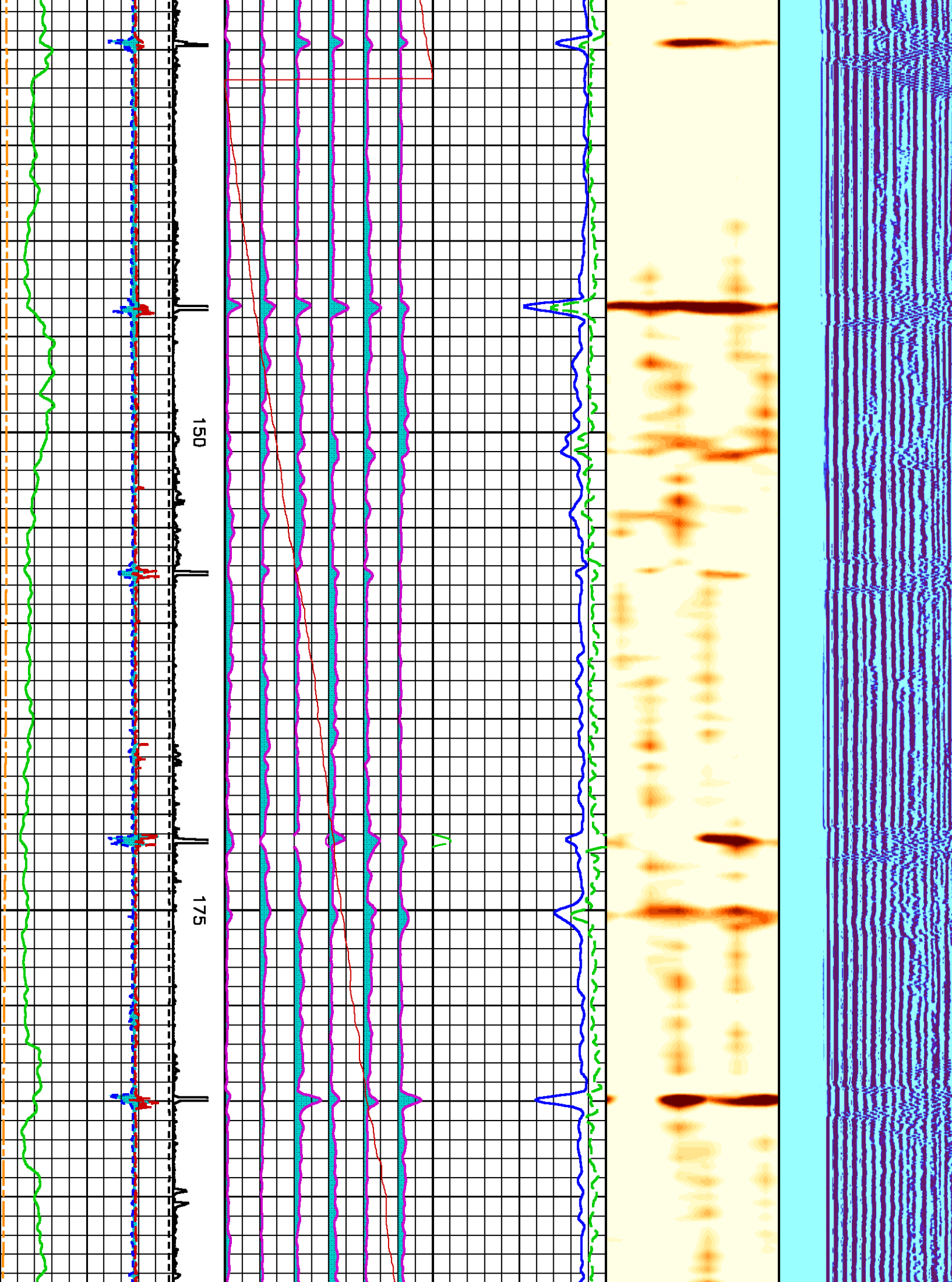
CURVE MEASURE POINT OFFSET							
CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)
ATAV	4.72	ATC4	4.72	CCL	13.03	DTMX	4.72
ATC1	4.72	ATC5	4.72	CYQ	4.72	GR	10.59
ATC2	4.72	ATC6	4.72	DEVOD	4.72	RBSB	4.72
ATC3	4.72	ATMN	4.72	DTMN	4.72	TEN	0.00

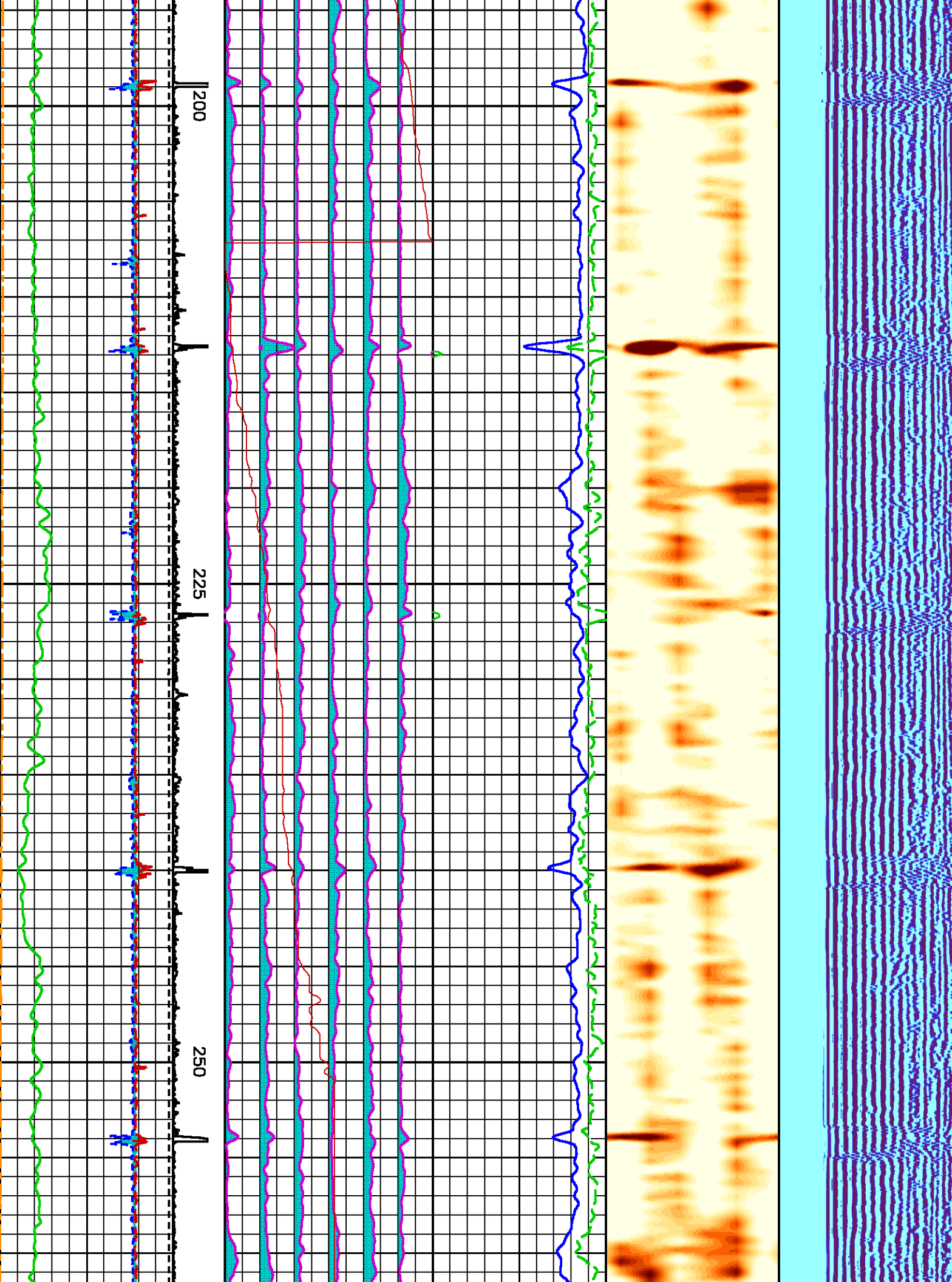
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Plot Interval	: 2.3622 - 2271.6 Meters
Data File 1	: F1 : cpu1:/data/pass/nalcor_finn_run2/m331d04.aff
Created On	: Nov 29 06:47:43 2010
Company	: NALCOR ENERGY
Well	: NALCOR ET AL FINNEGAN 1
Field	: FINNEGAN
File Interval	: 2.3622 - 2271.98 Meters
Oct	: m331d

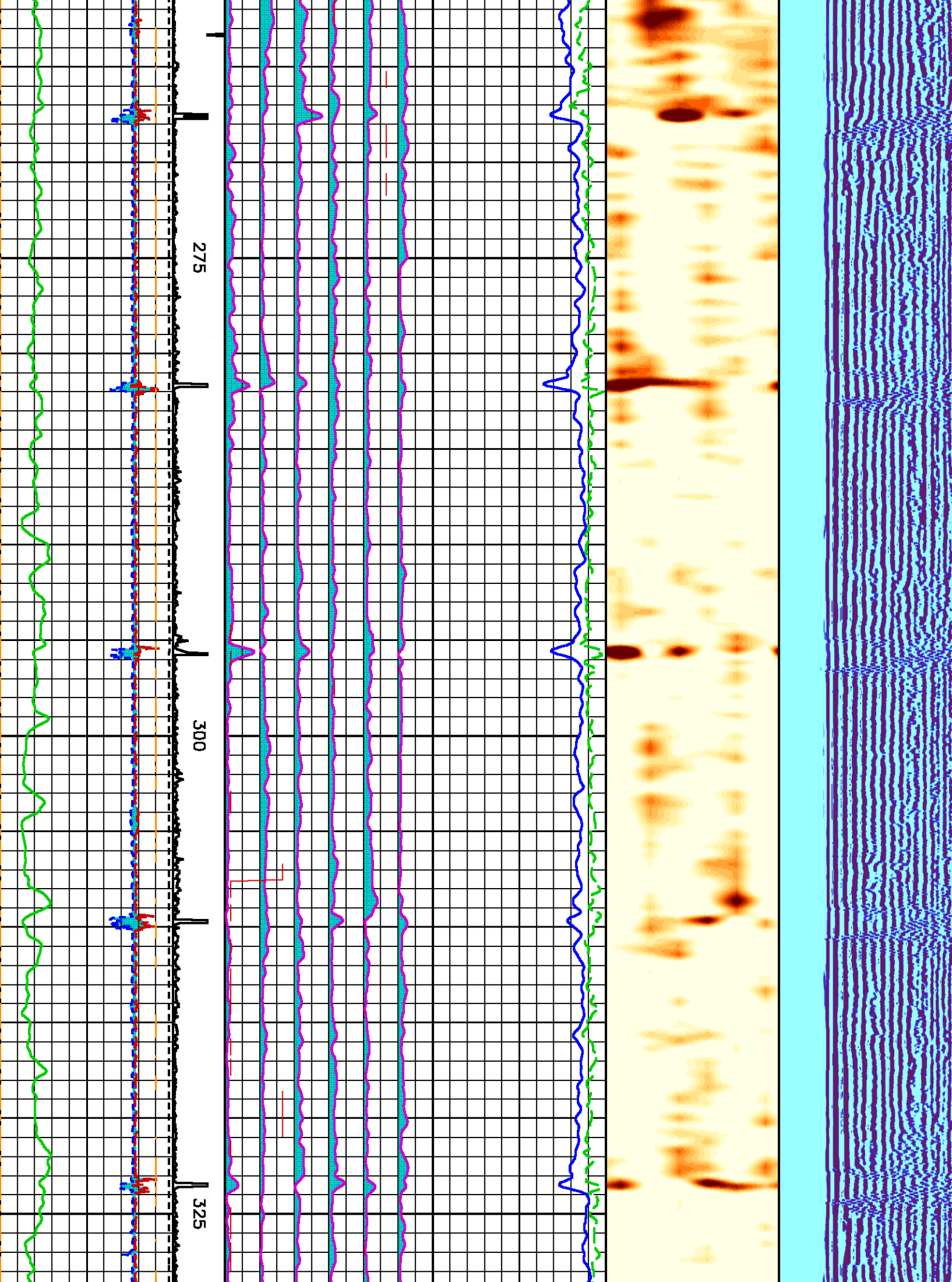


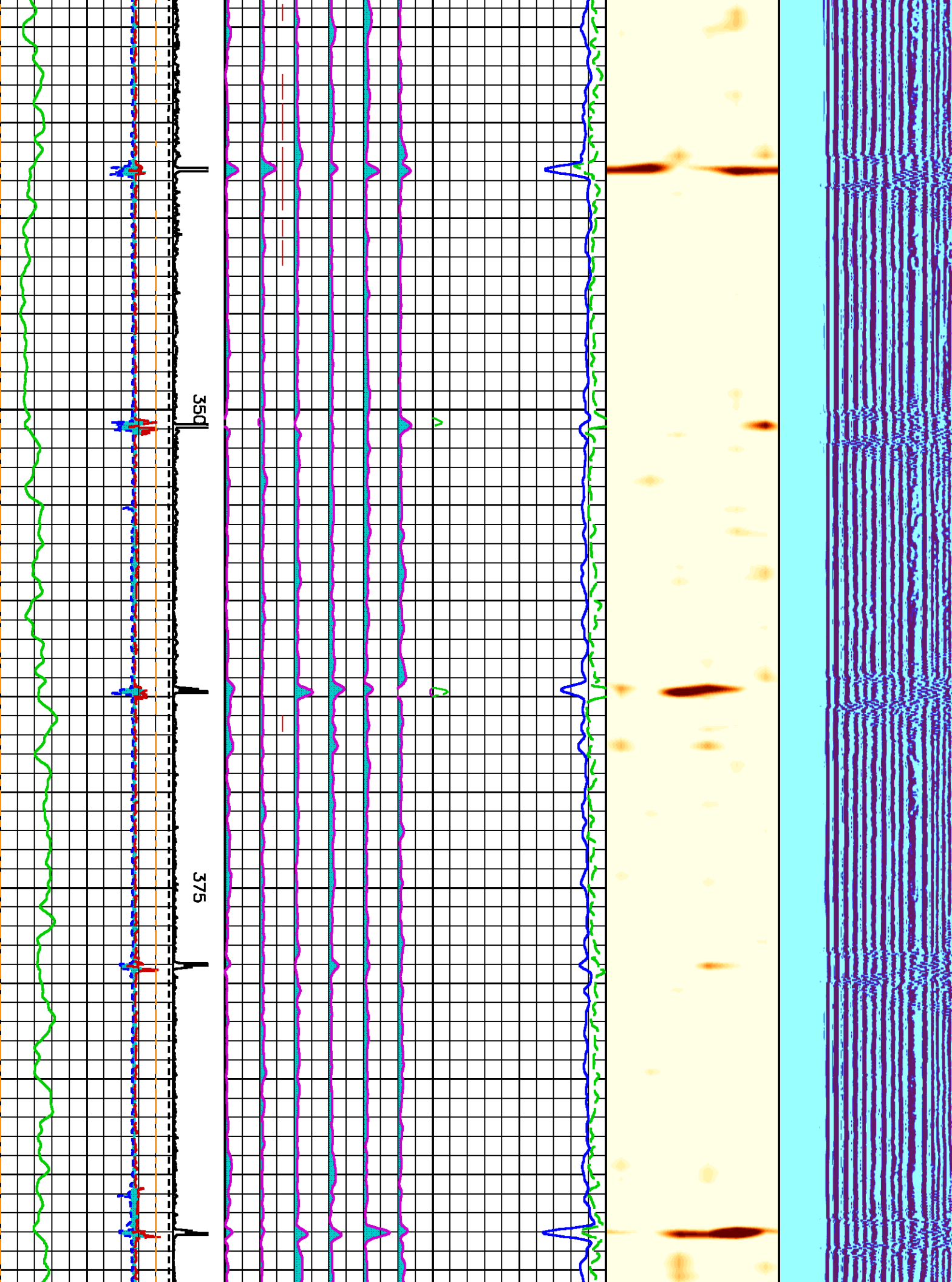


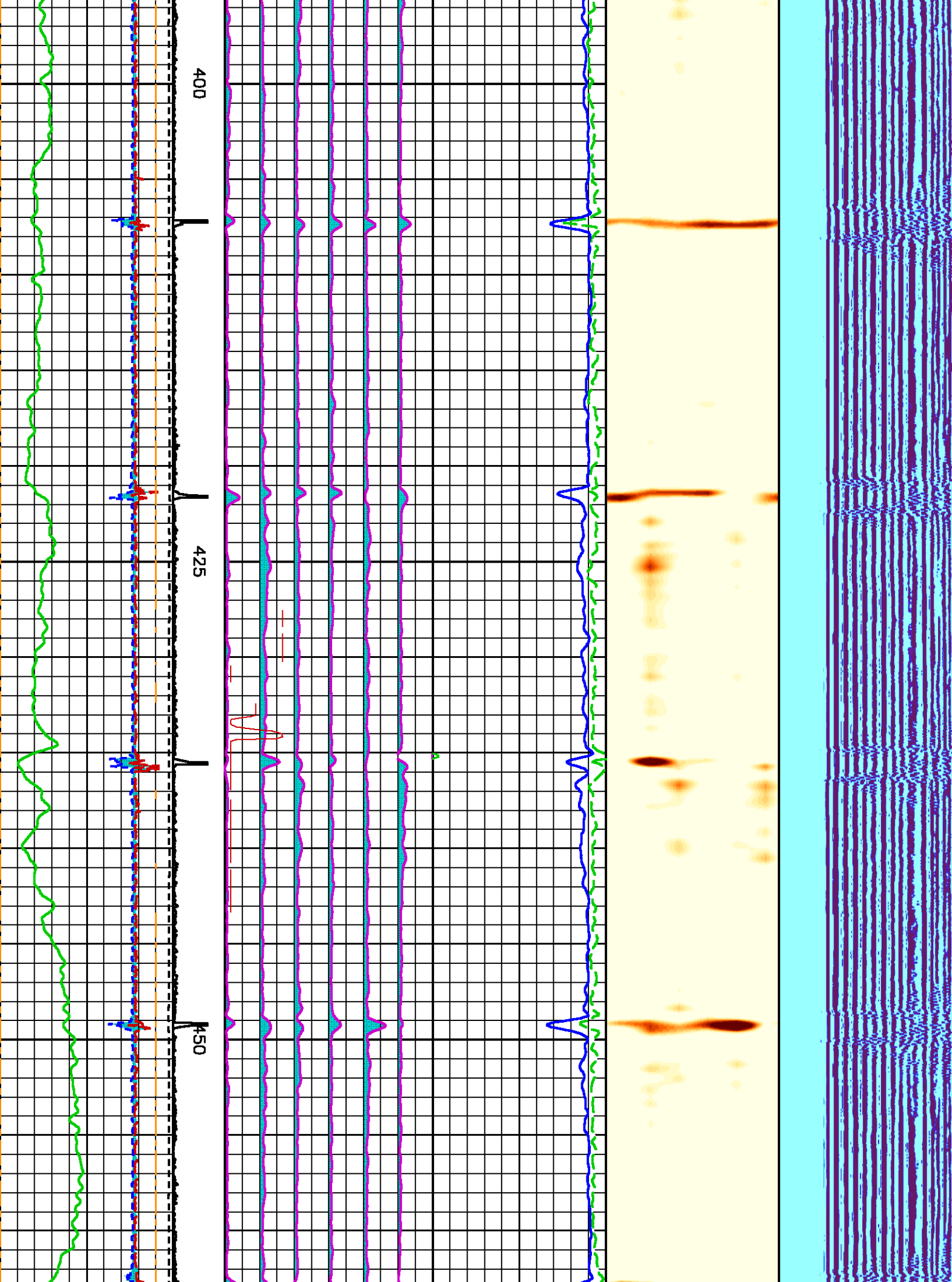


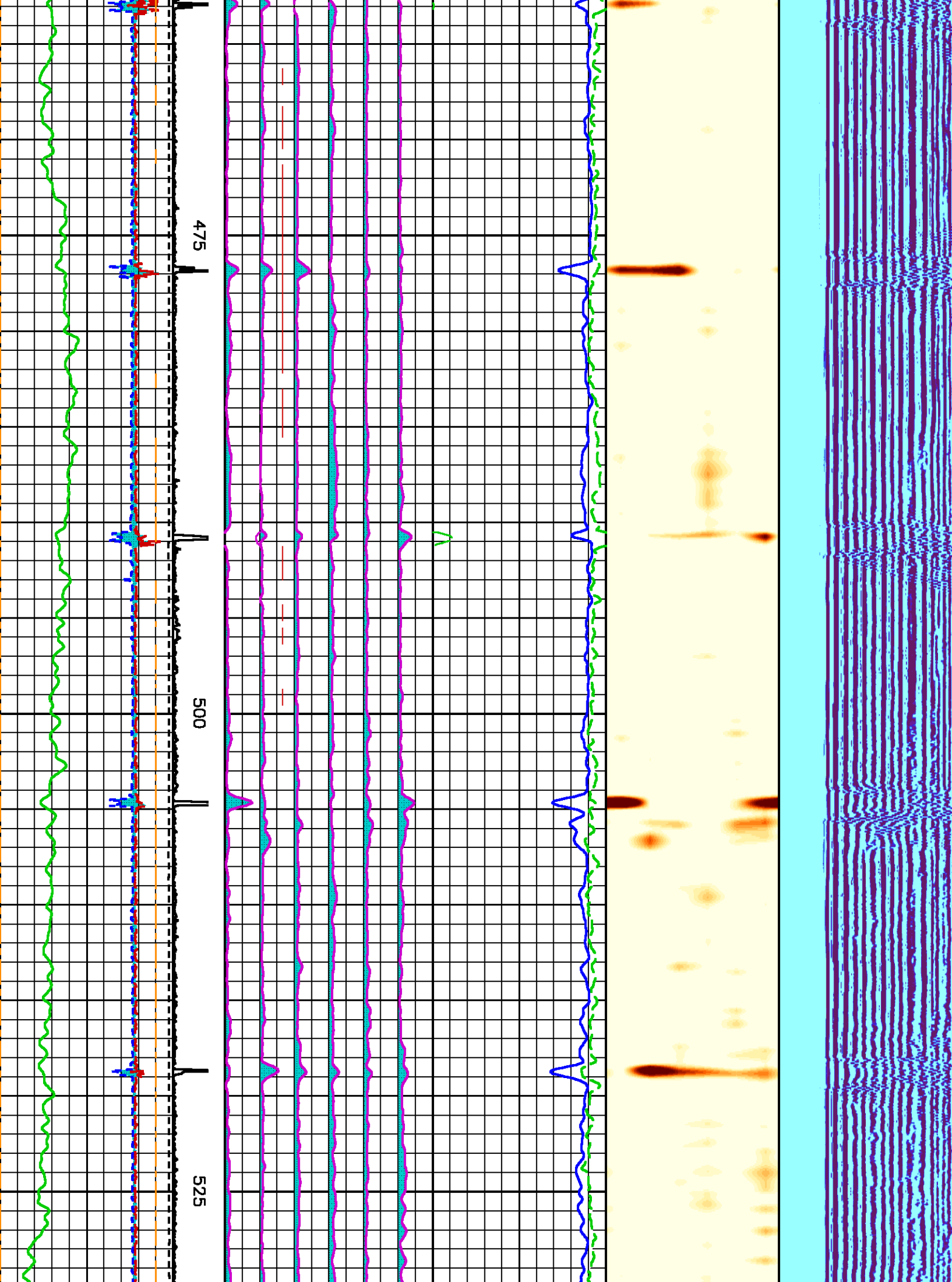


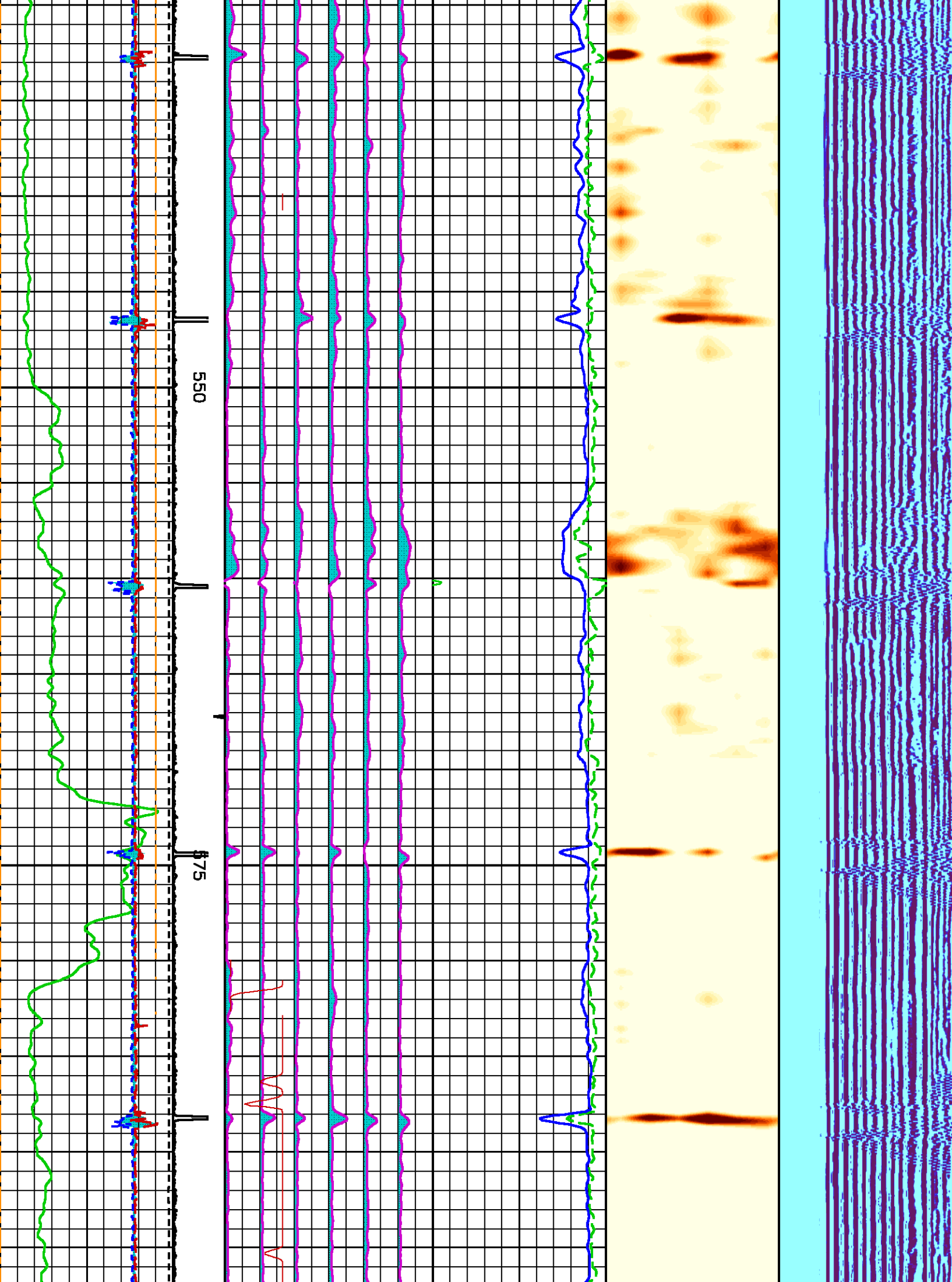


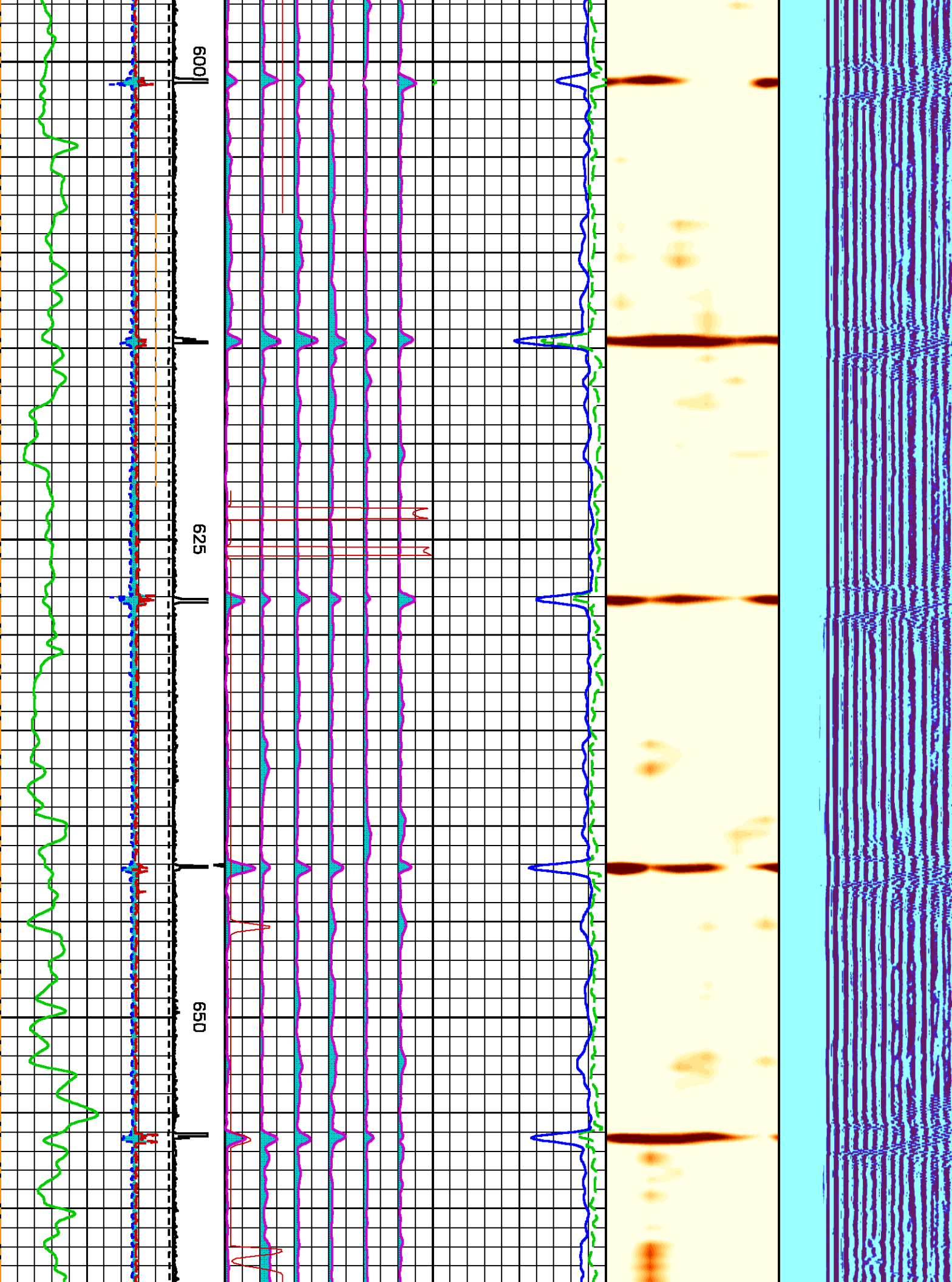


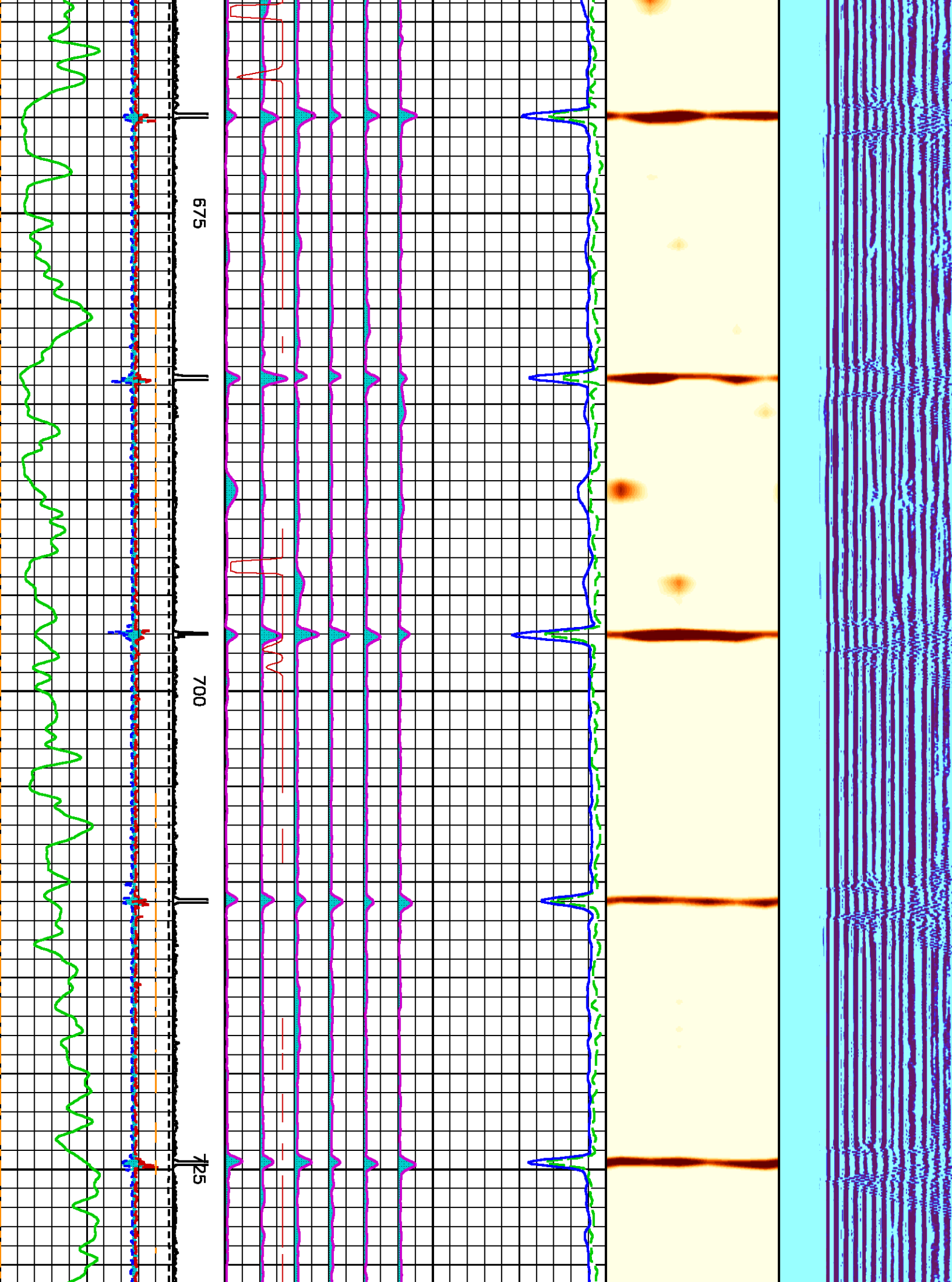


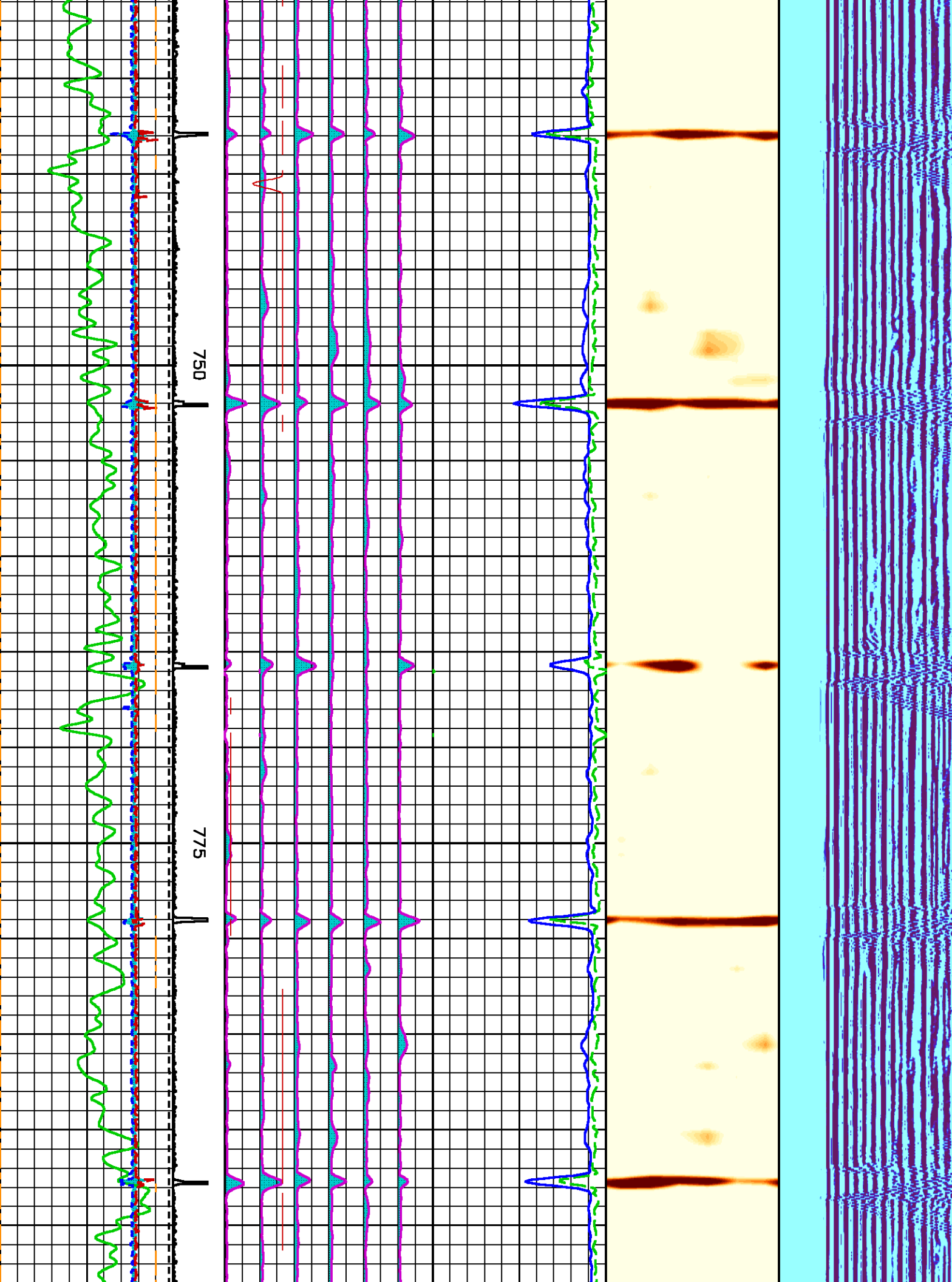


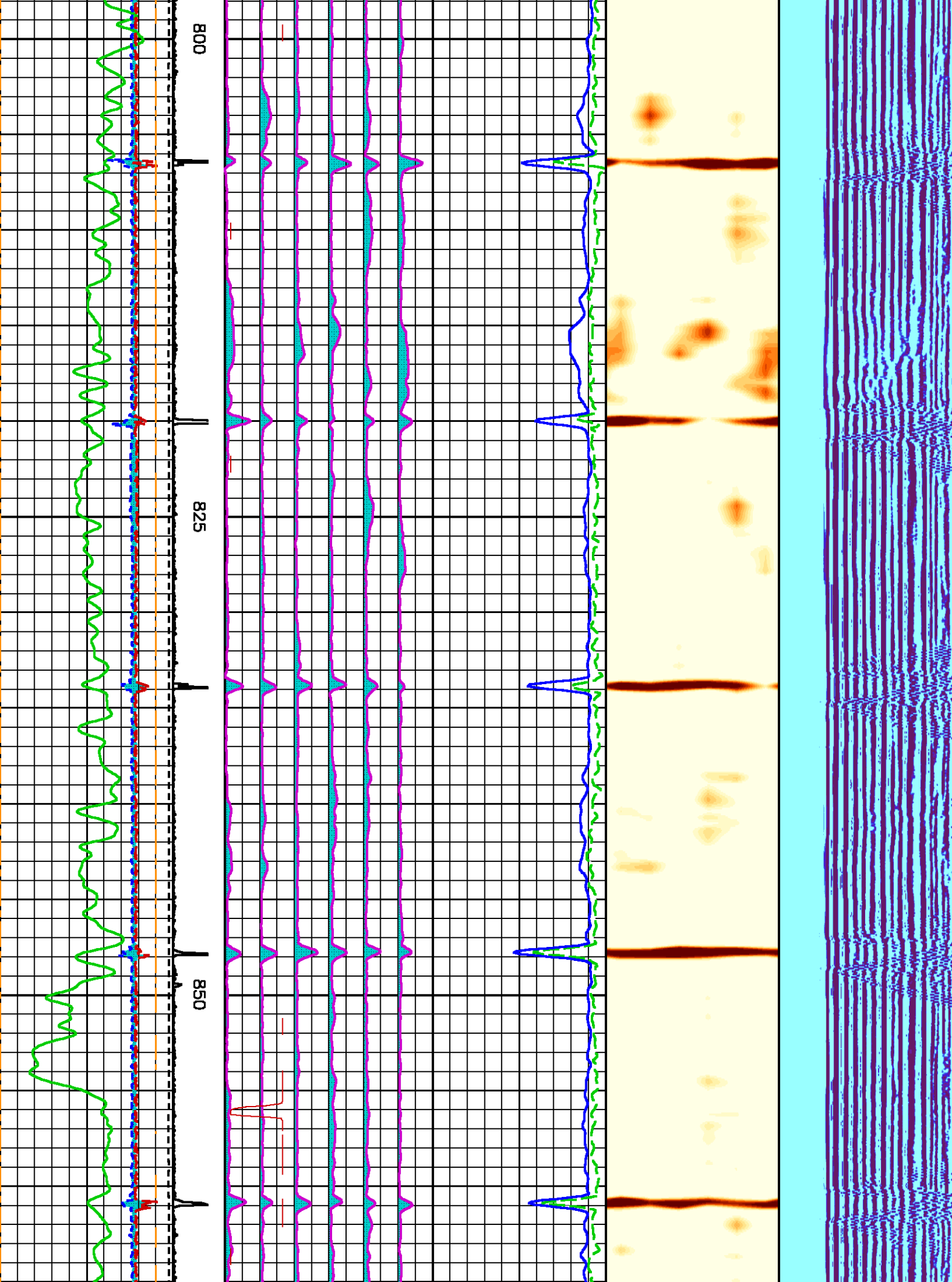


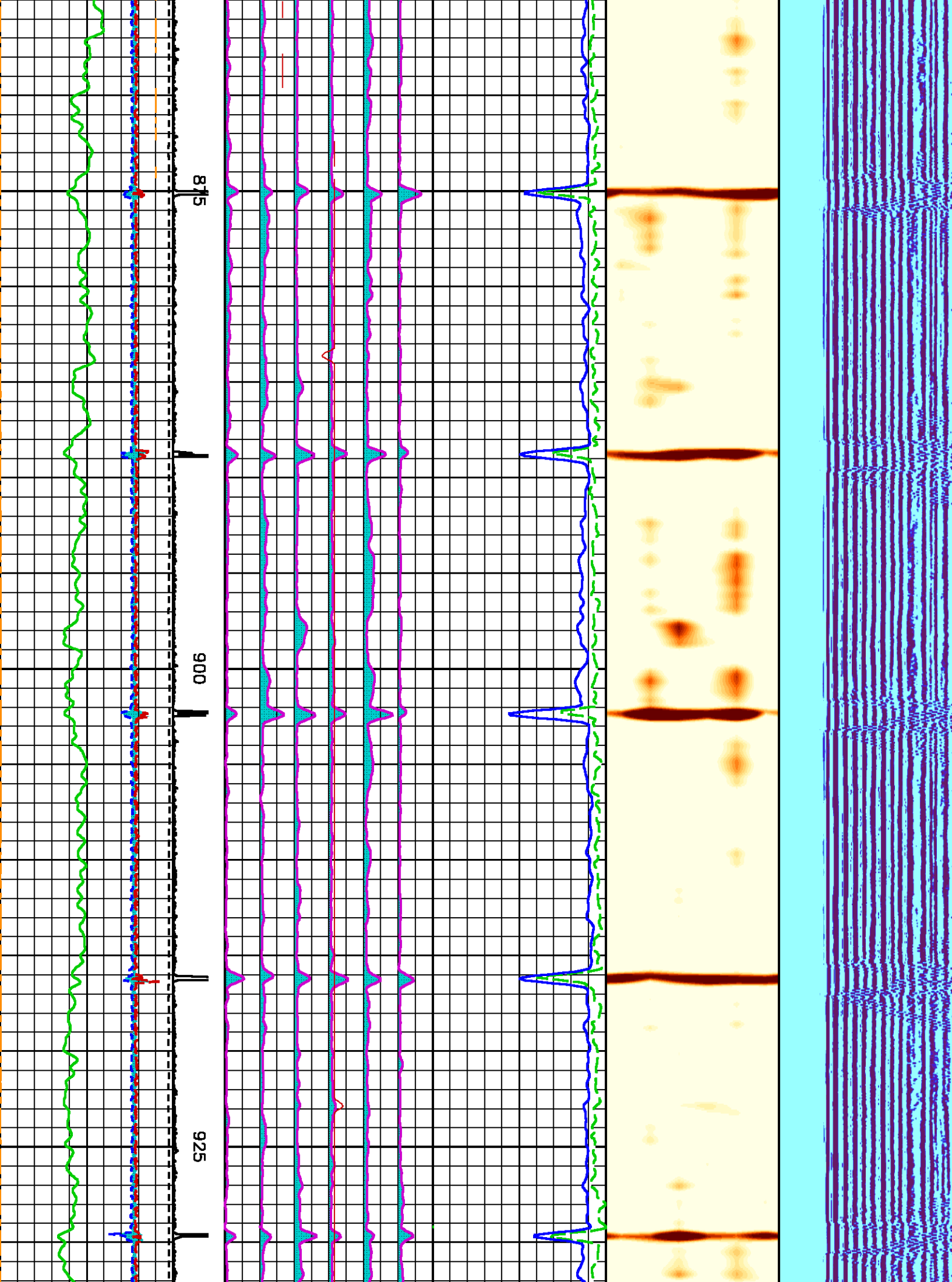


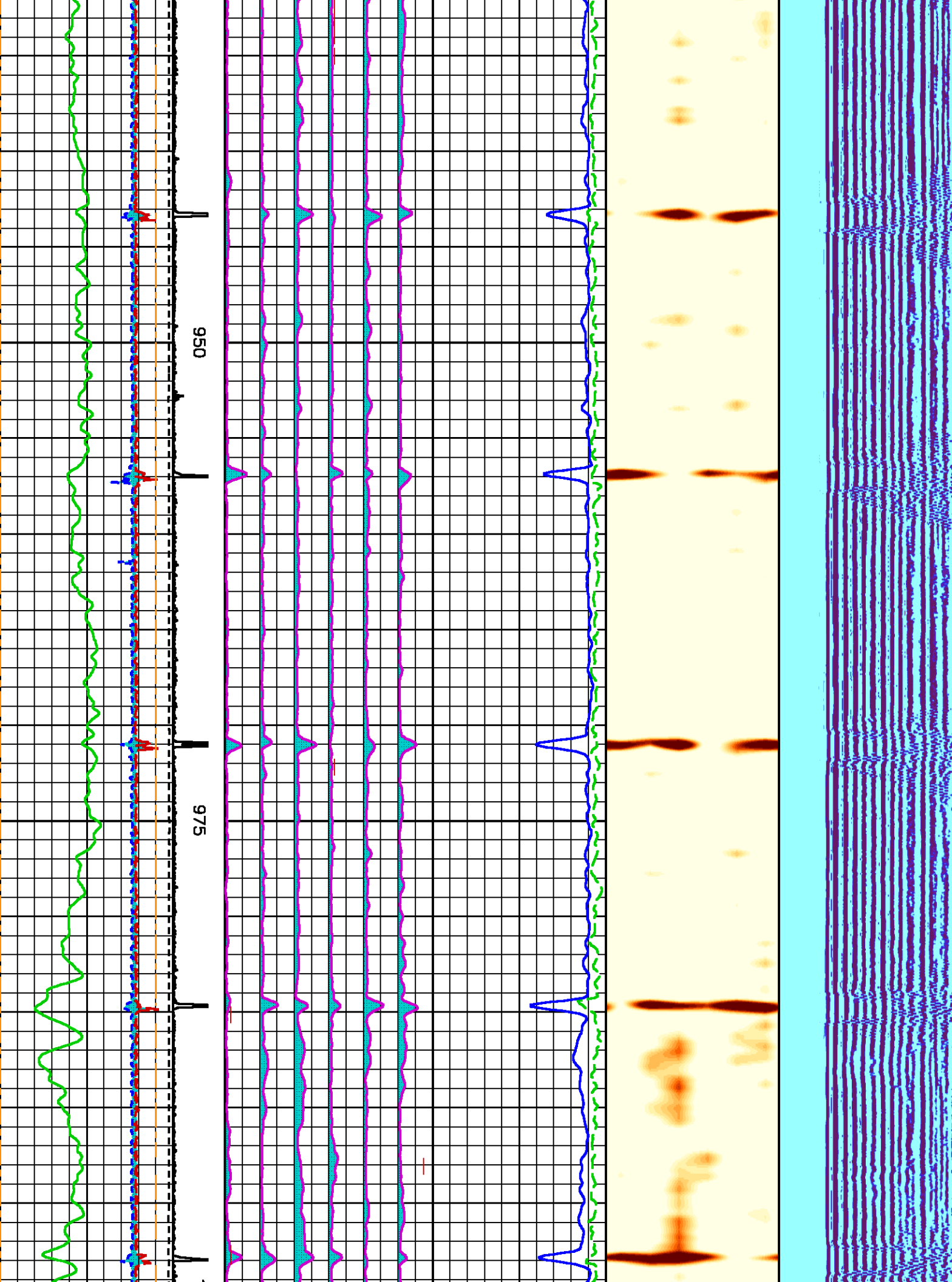


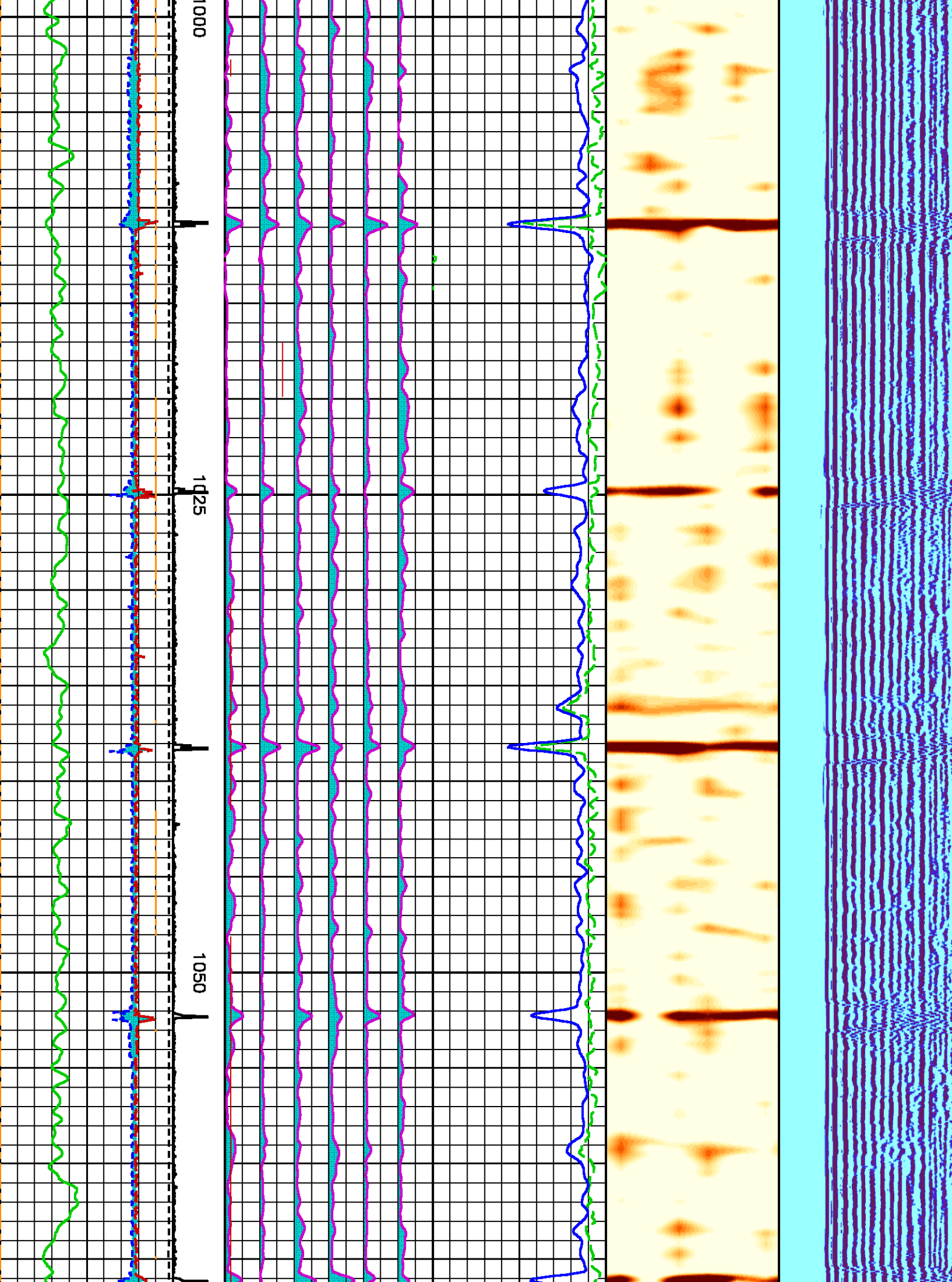


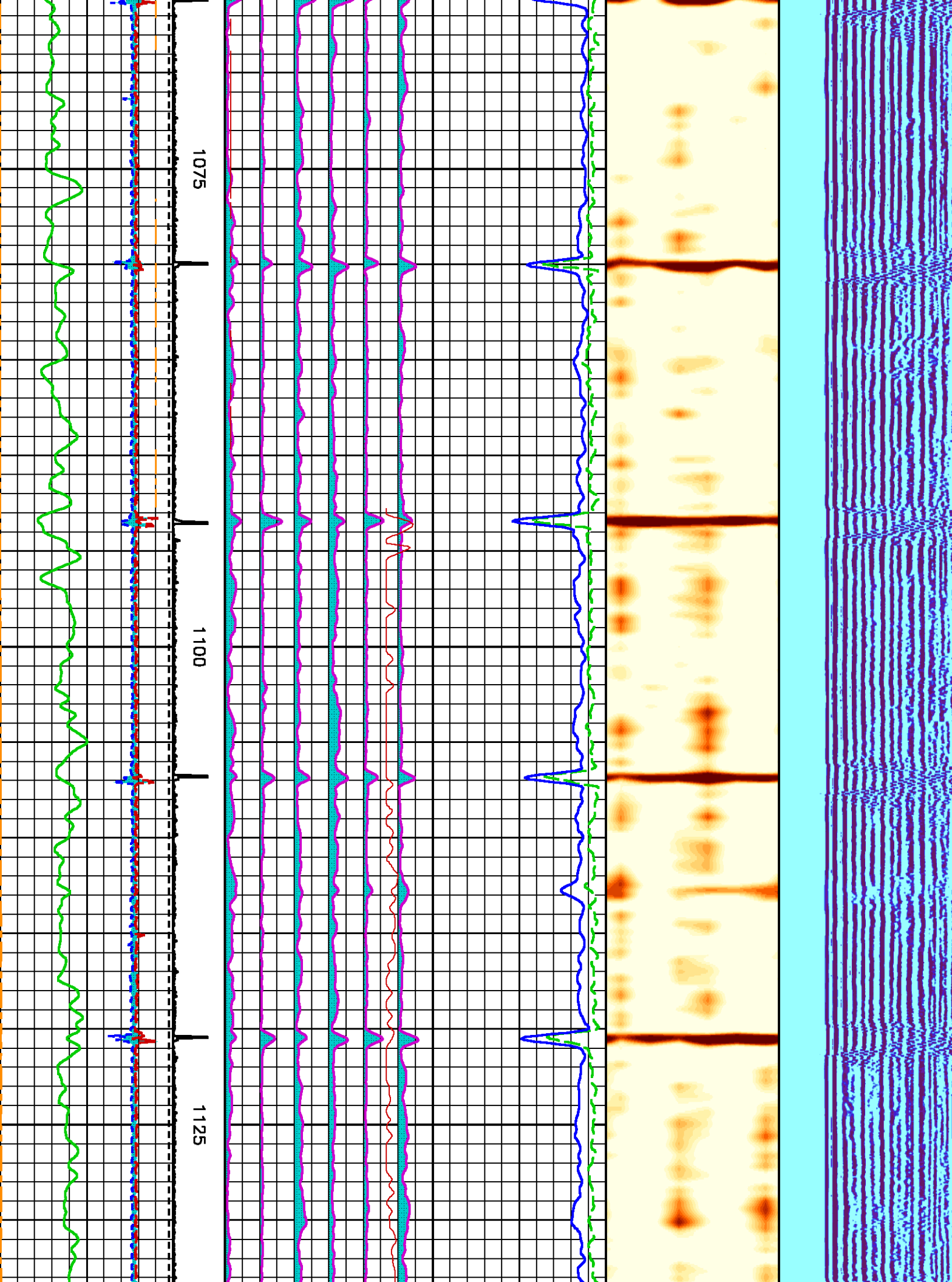


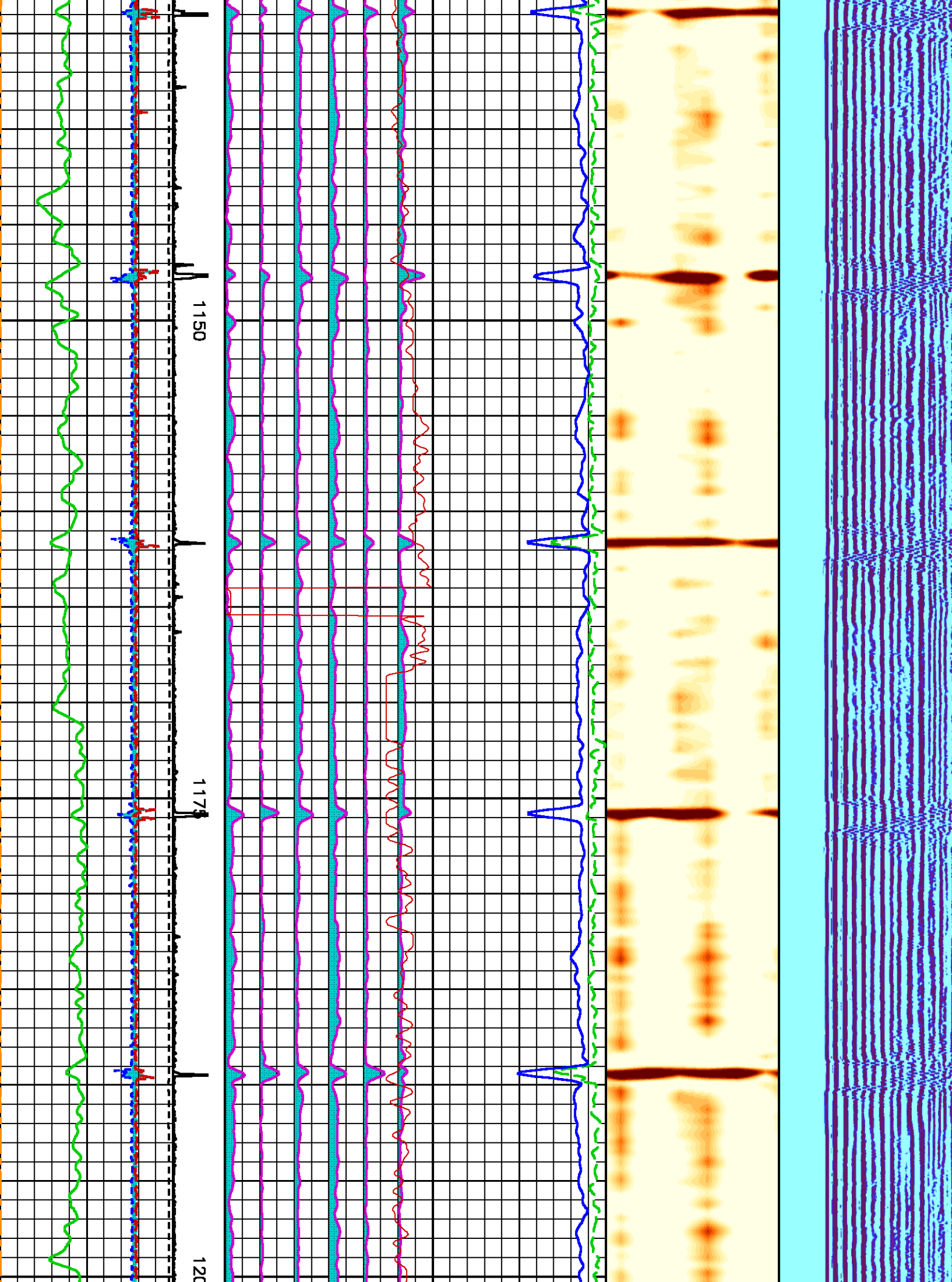


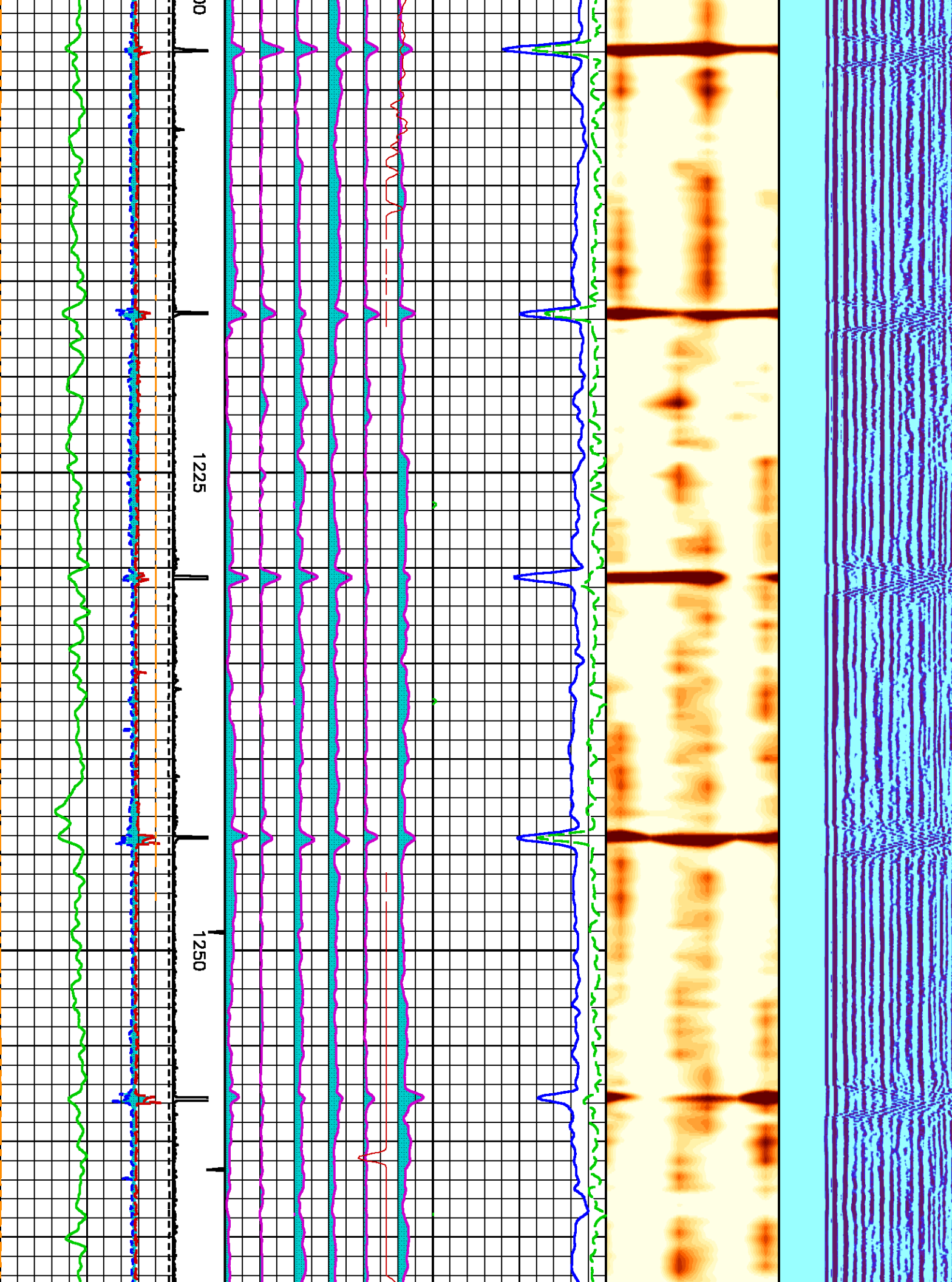


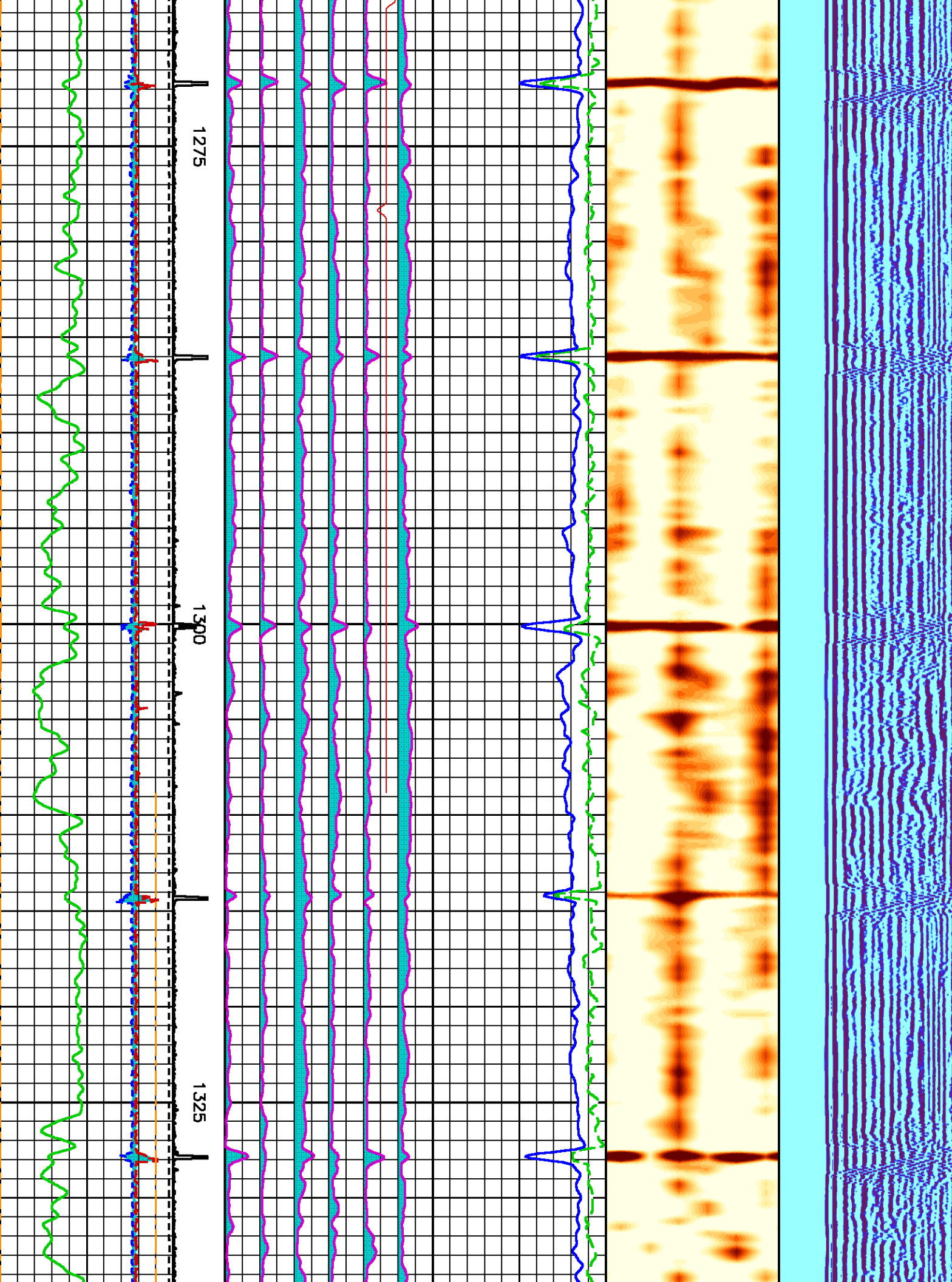


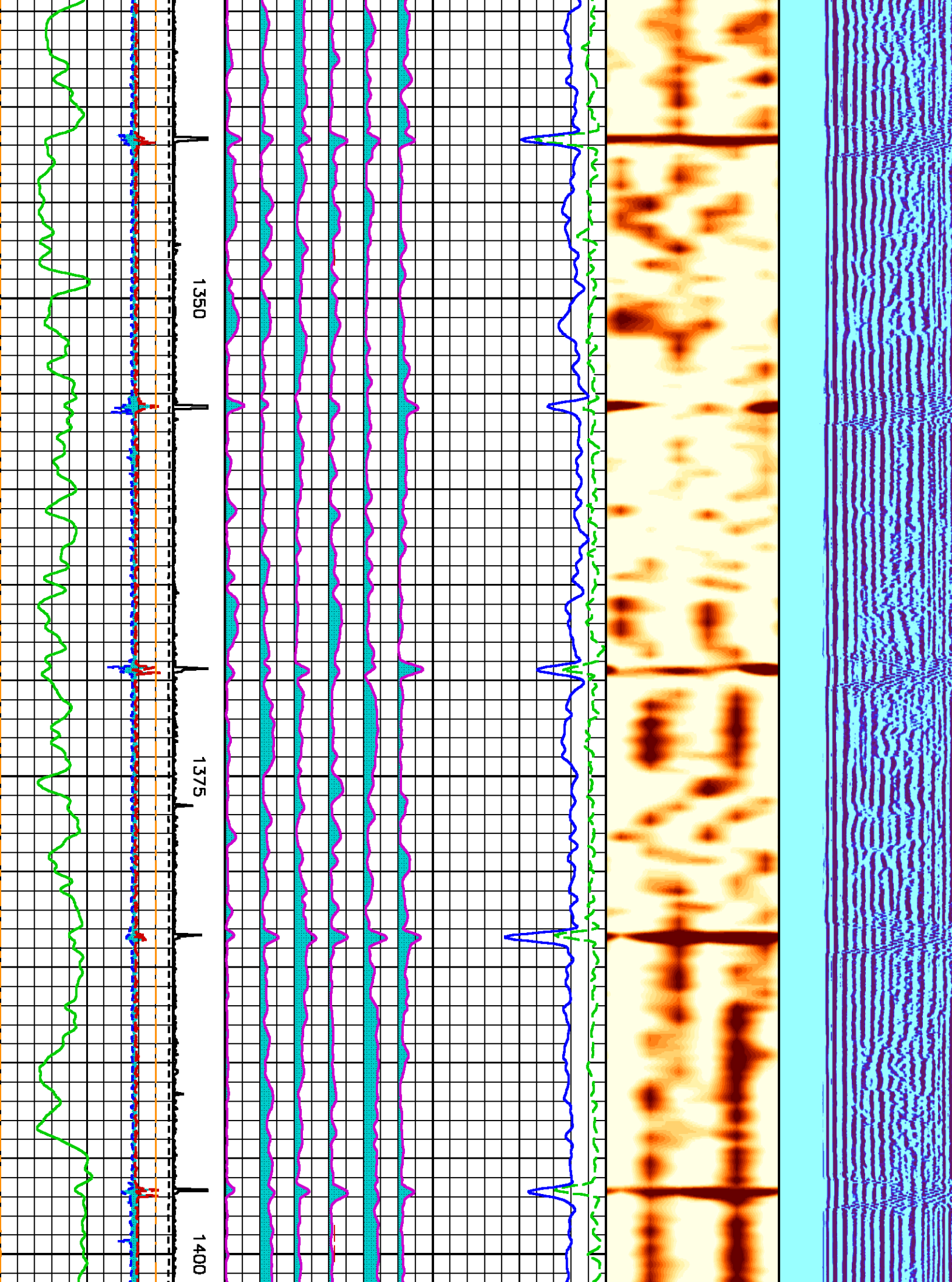


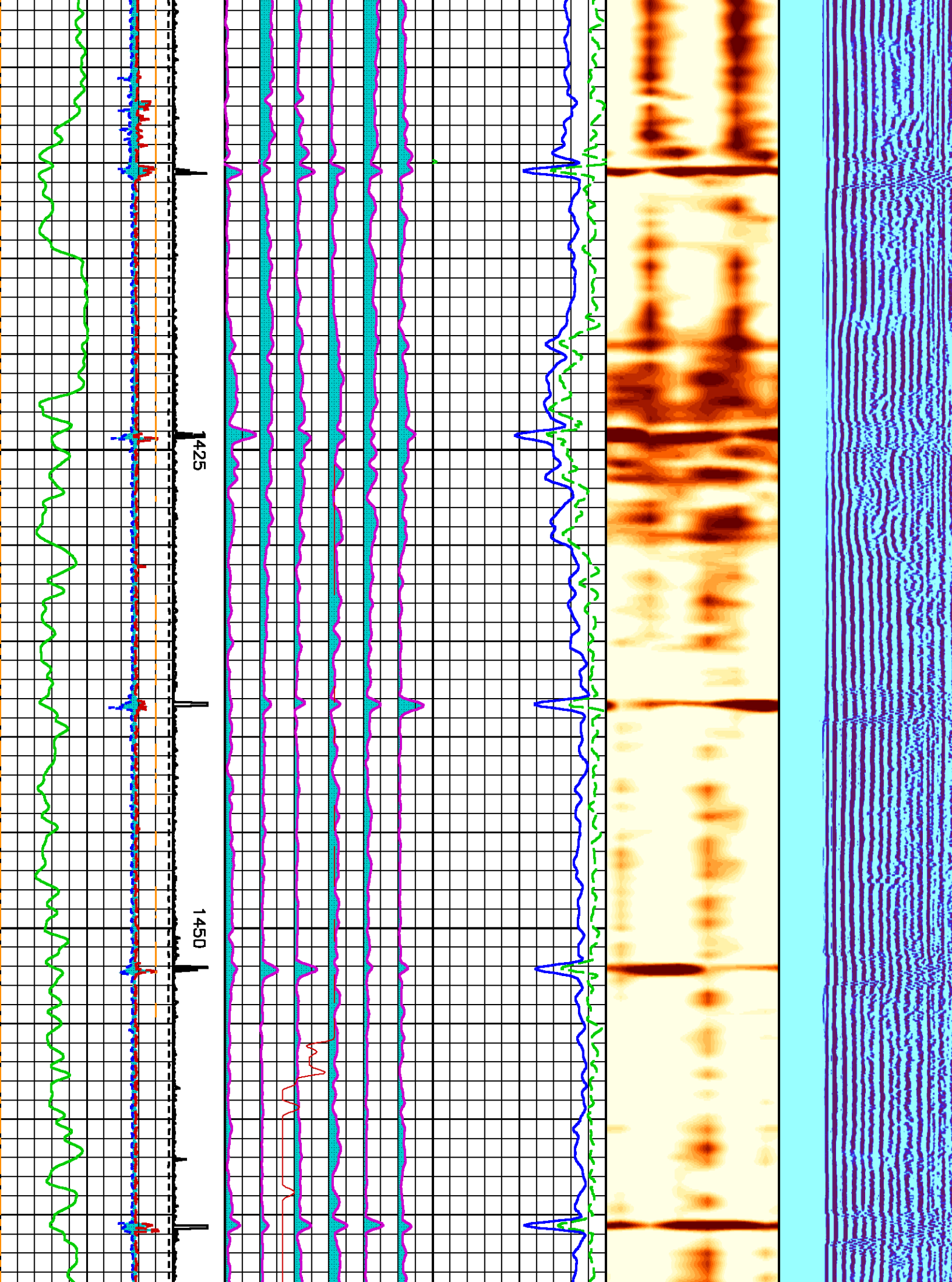


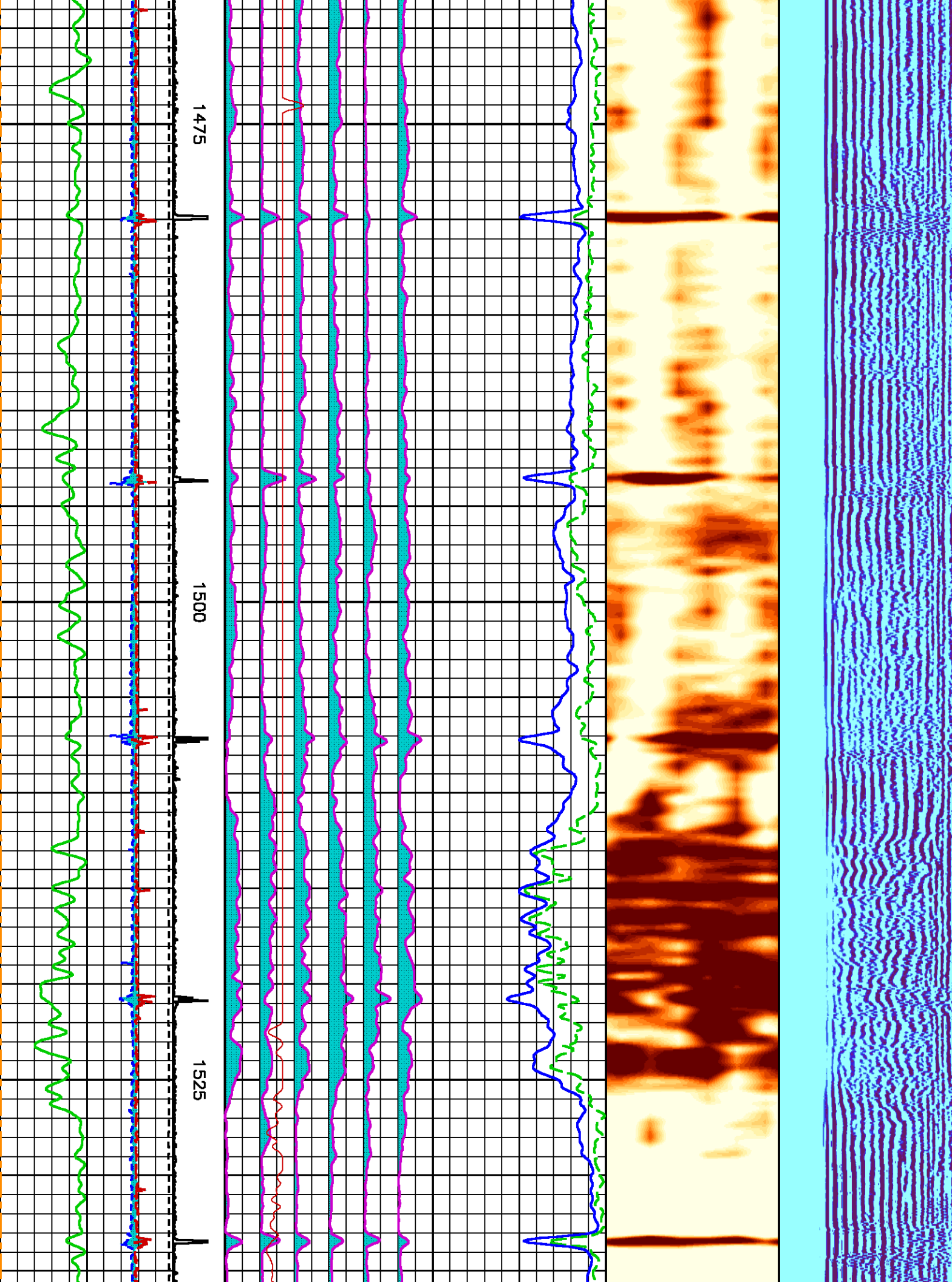


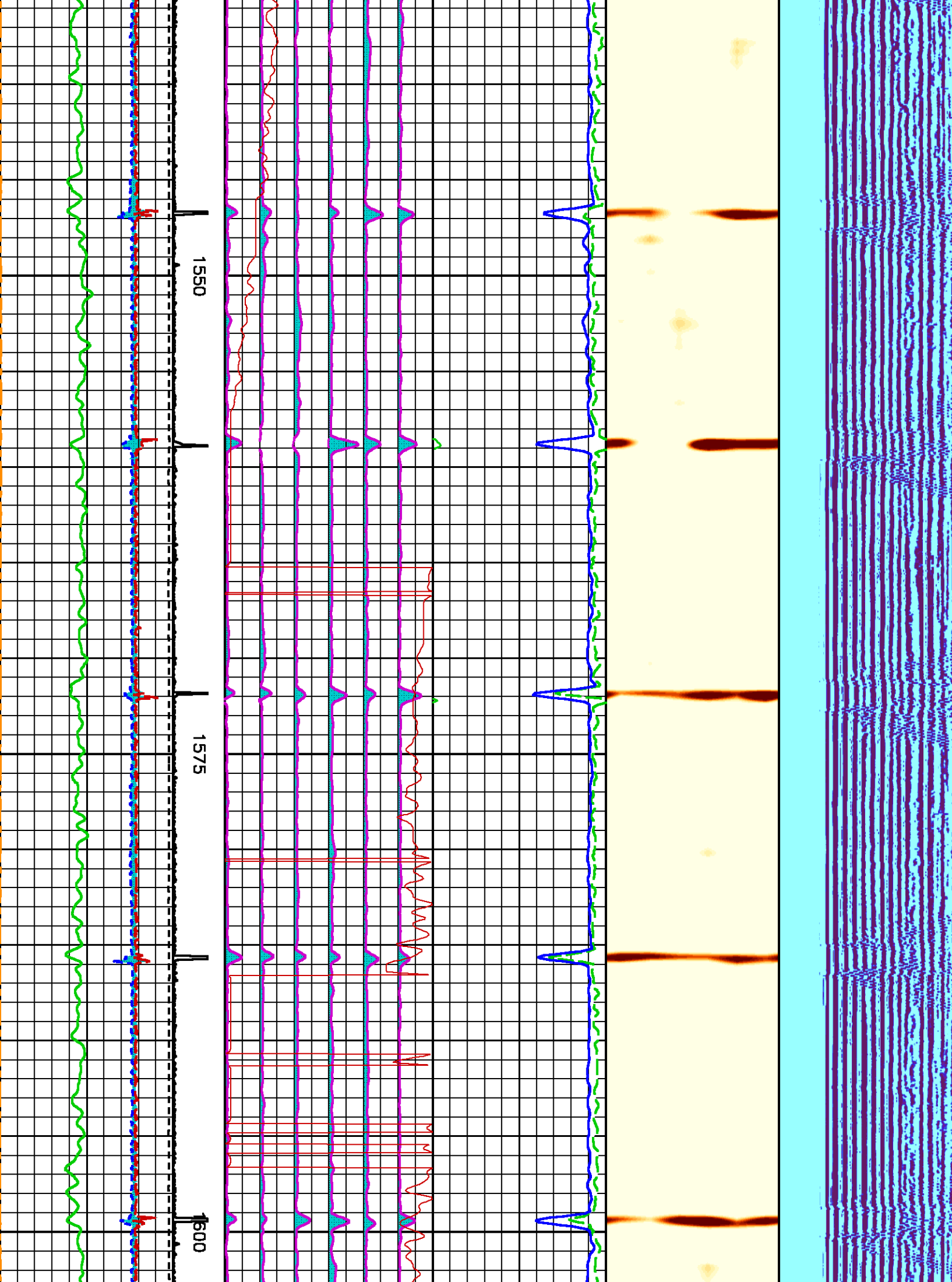


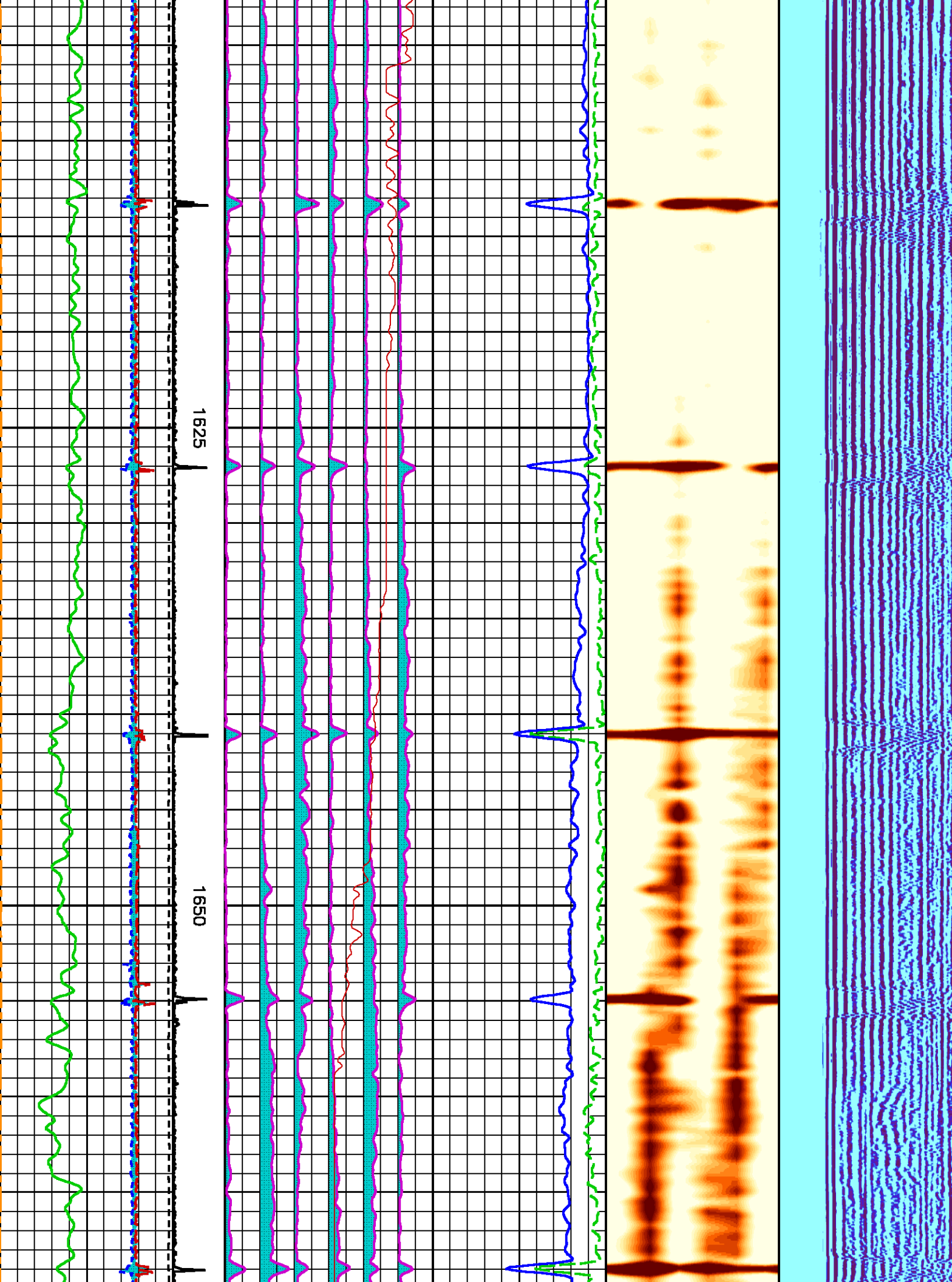


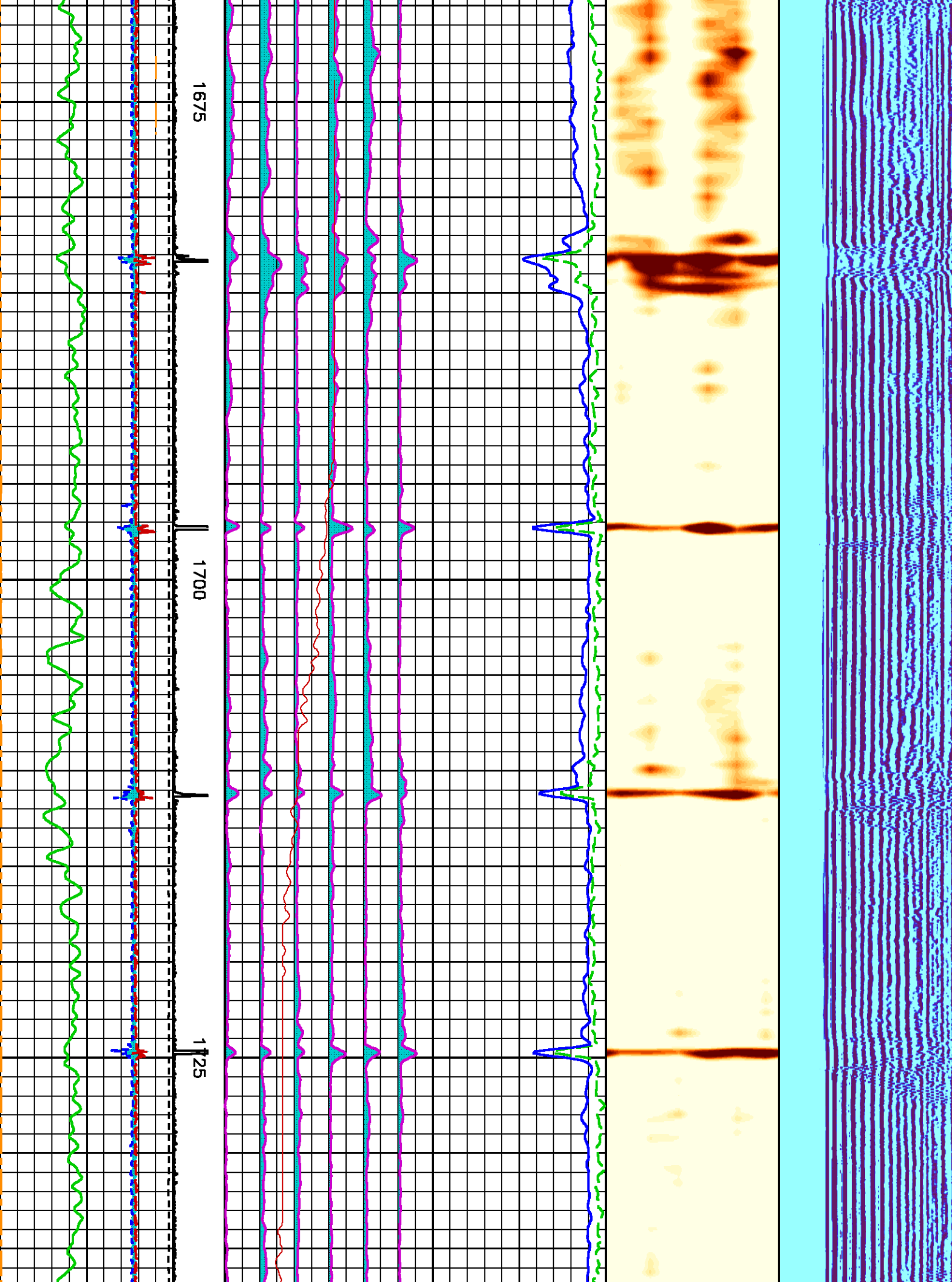


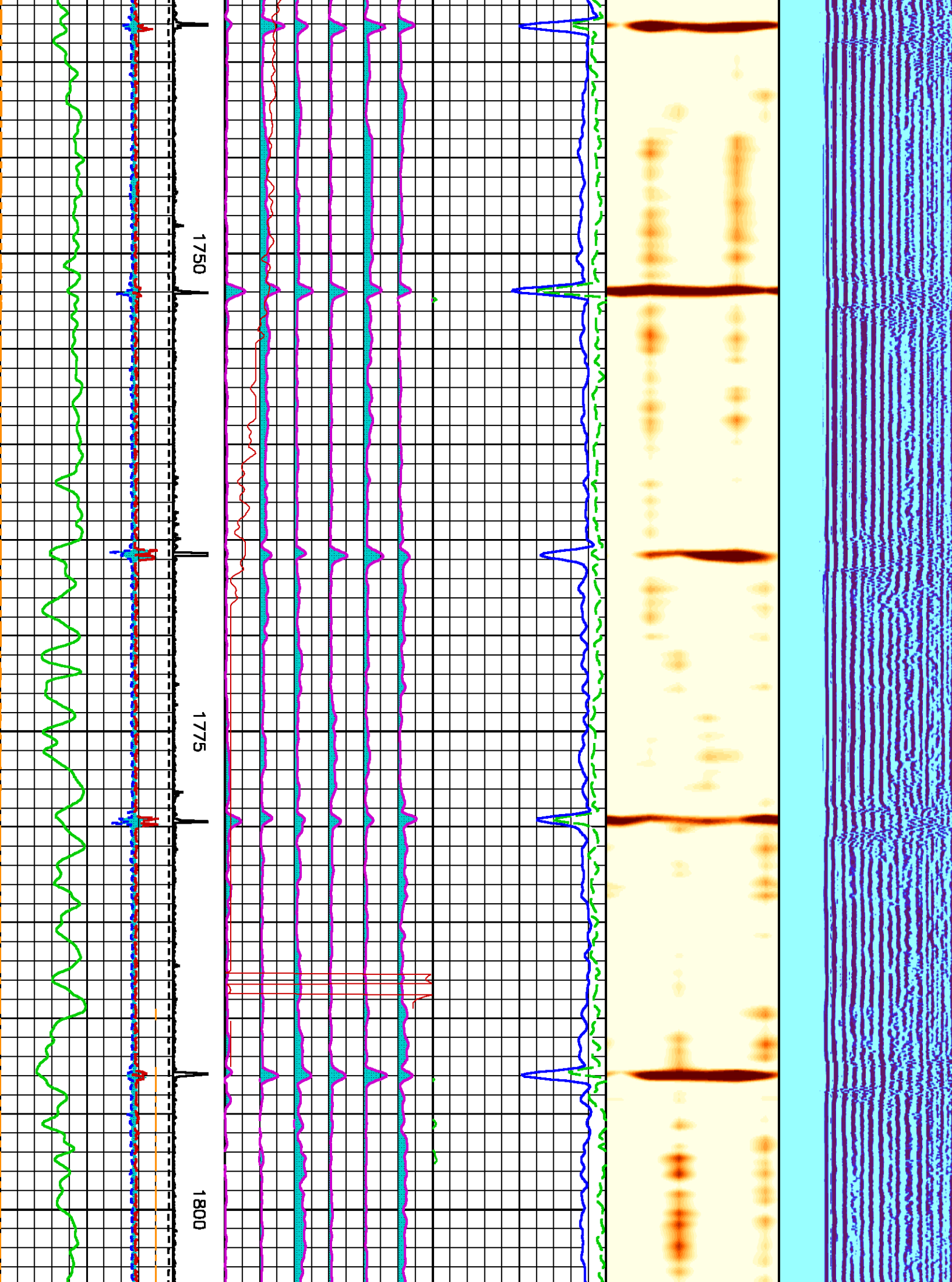


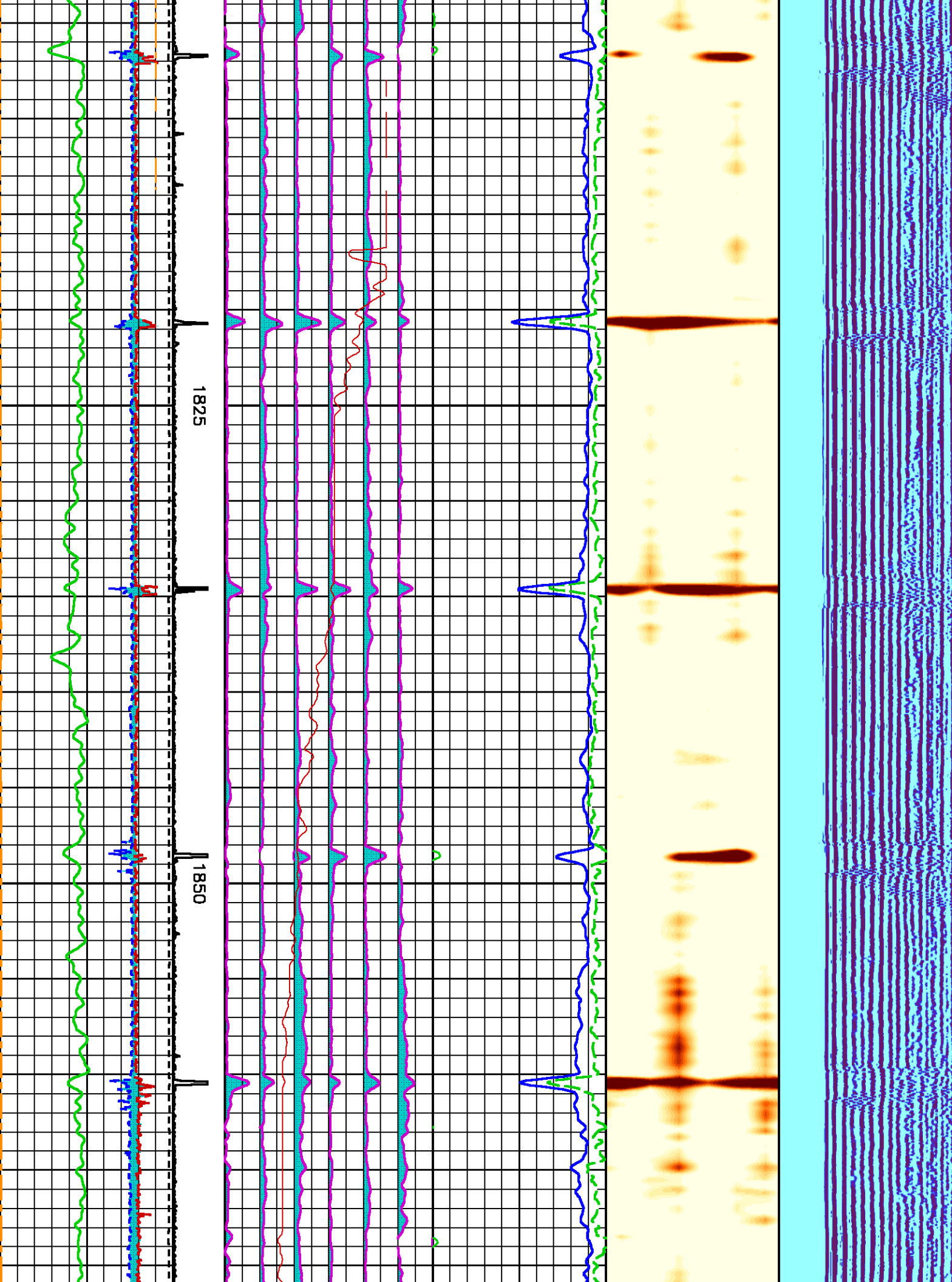


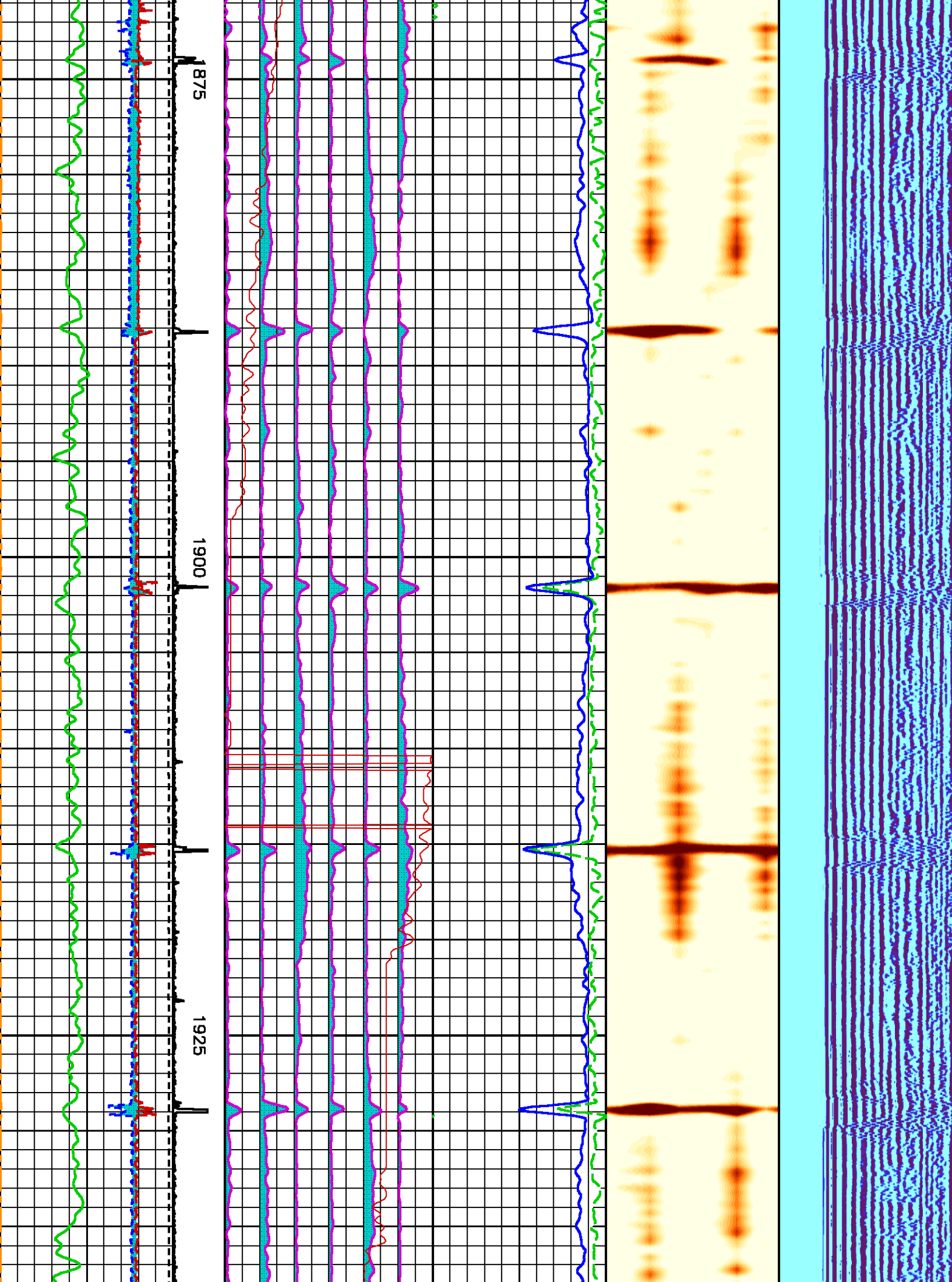


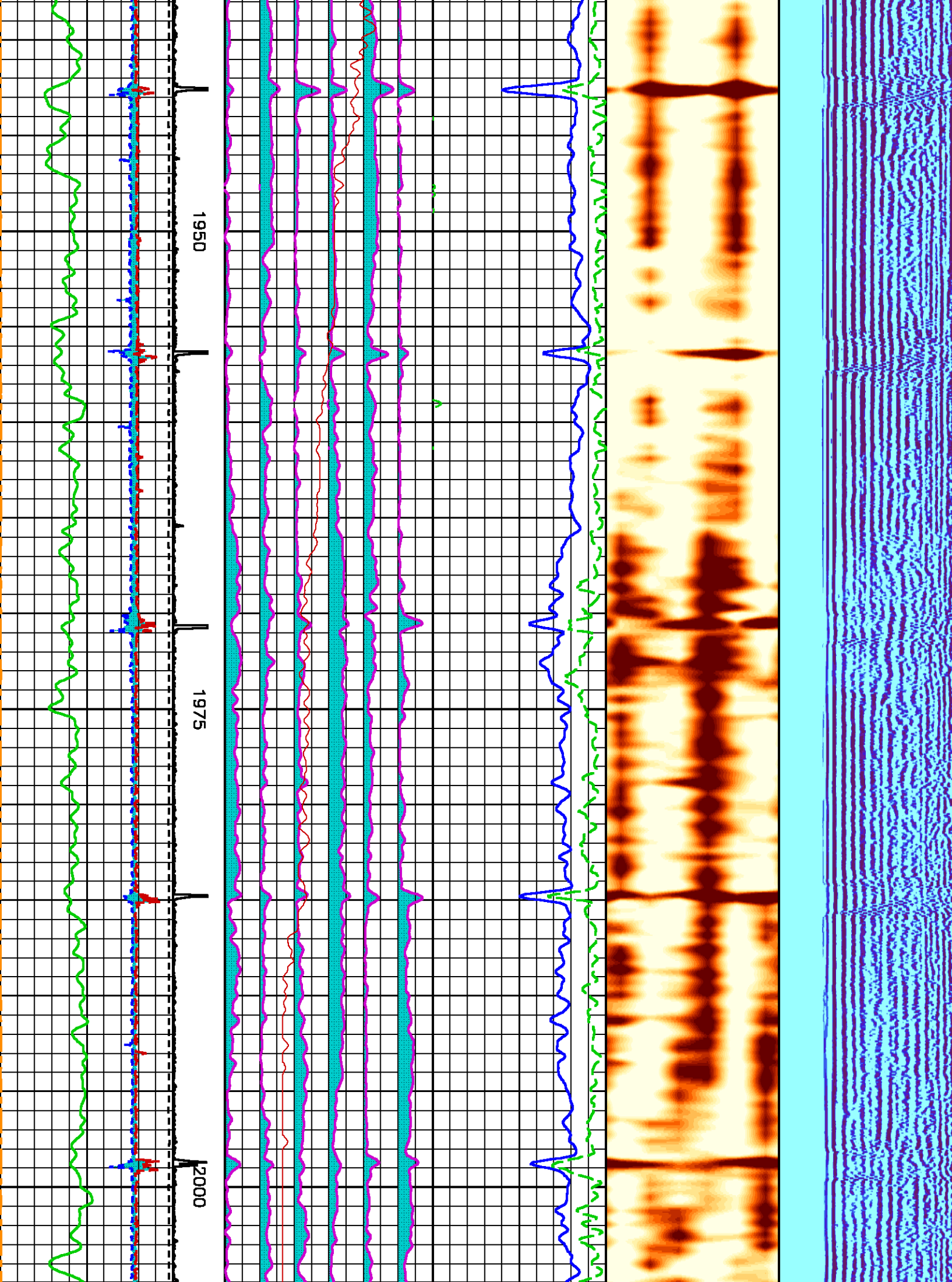


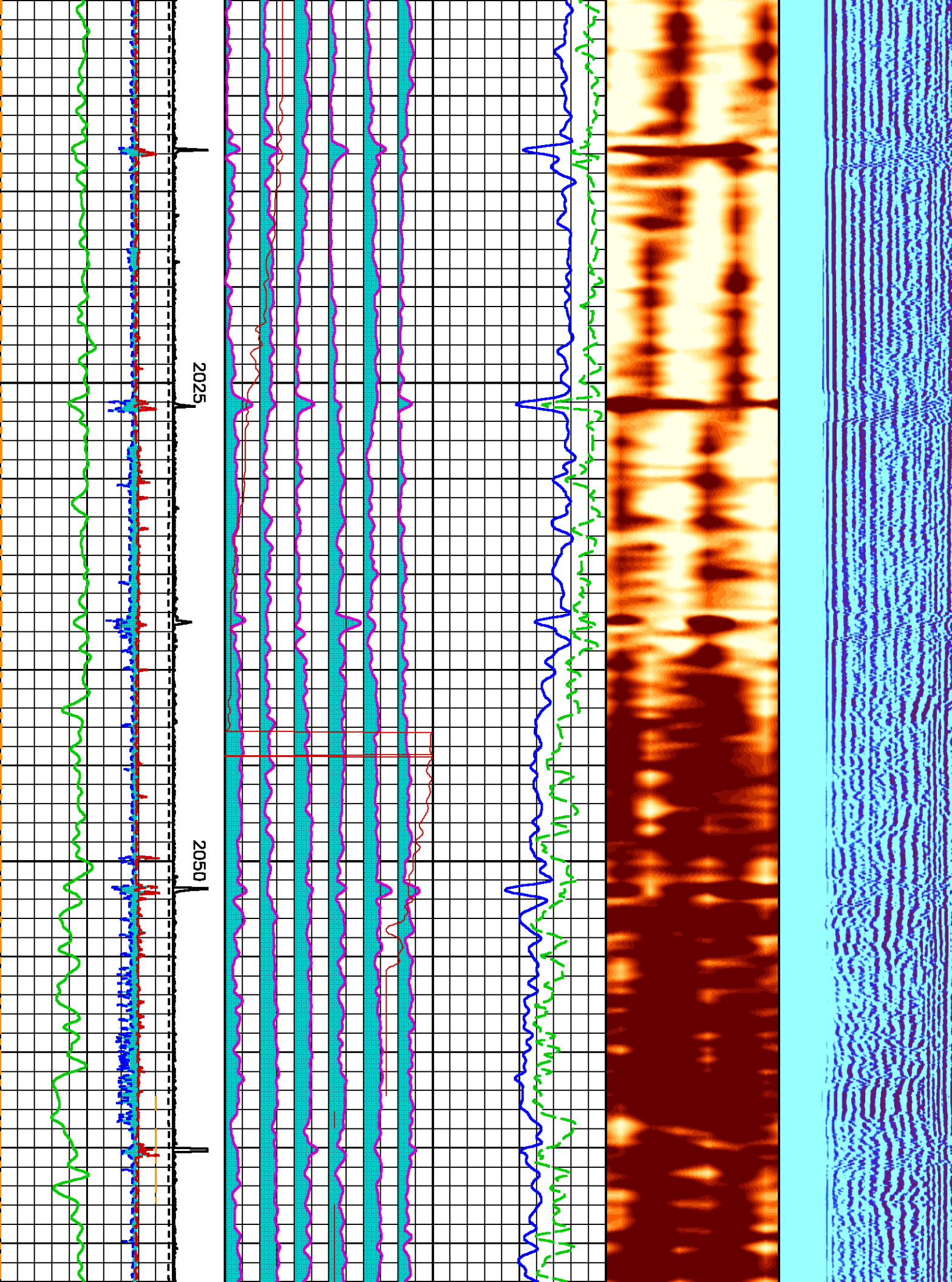


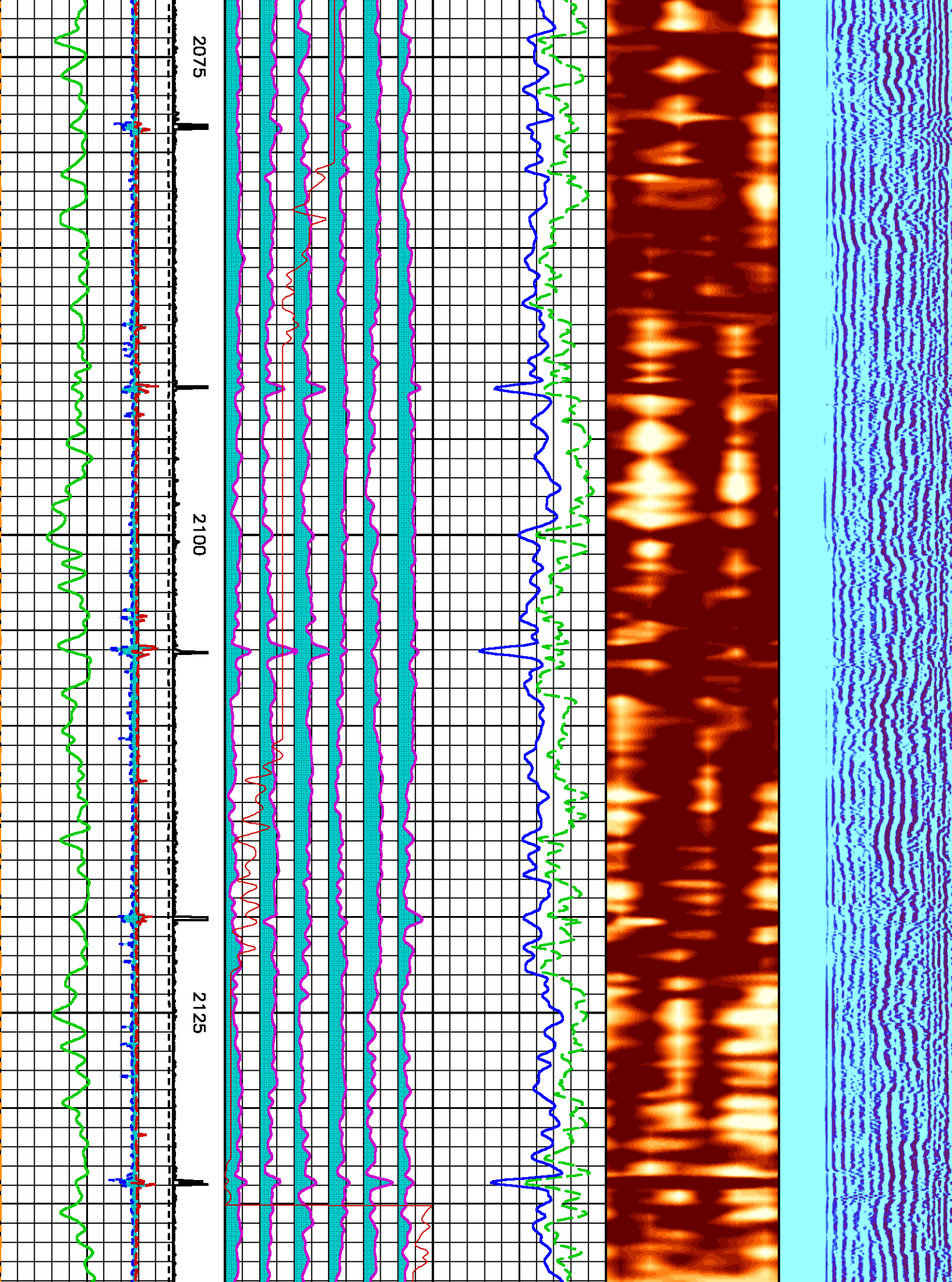


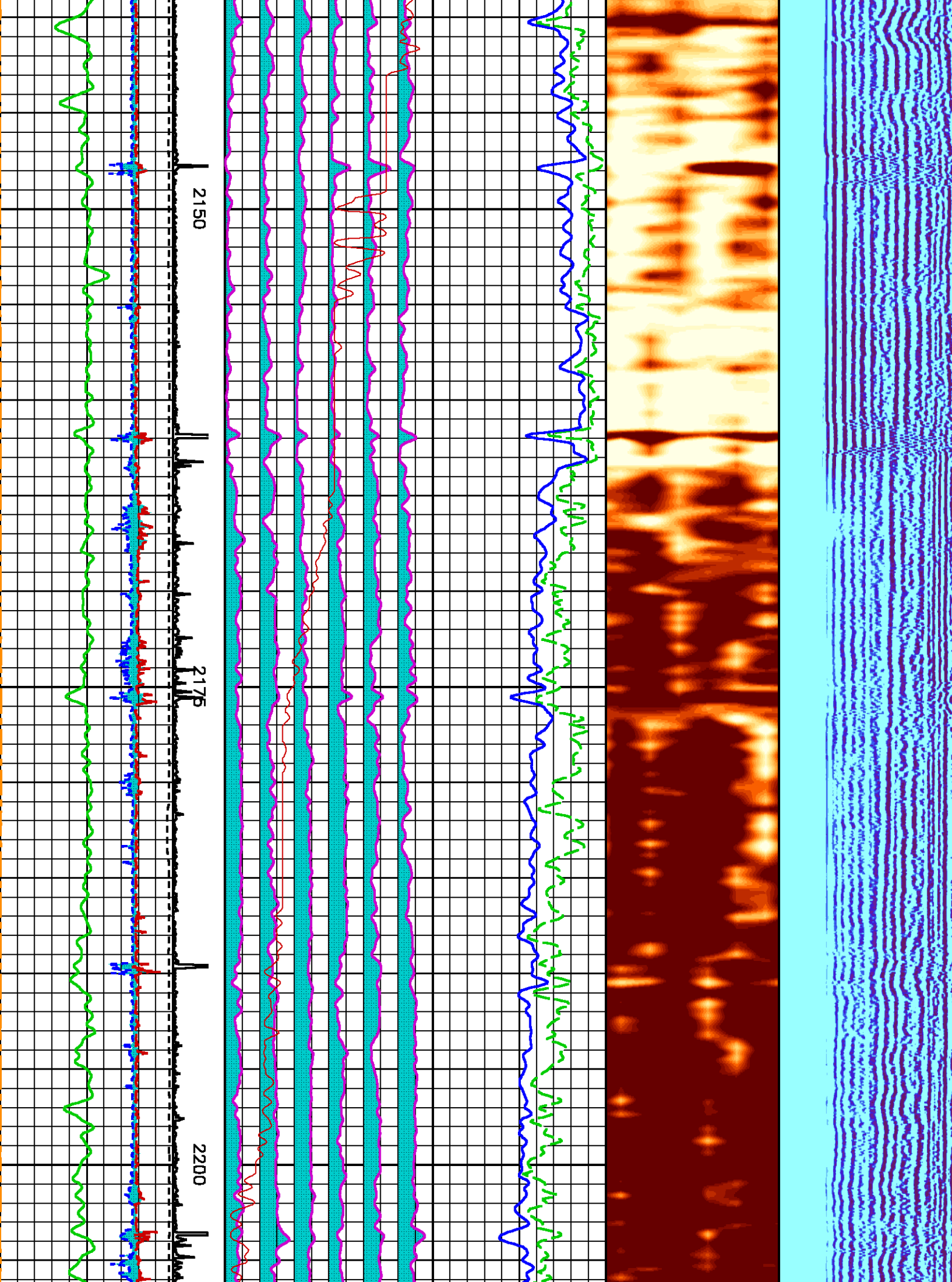


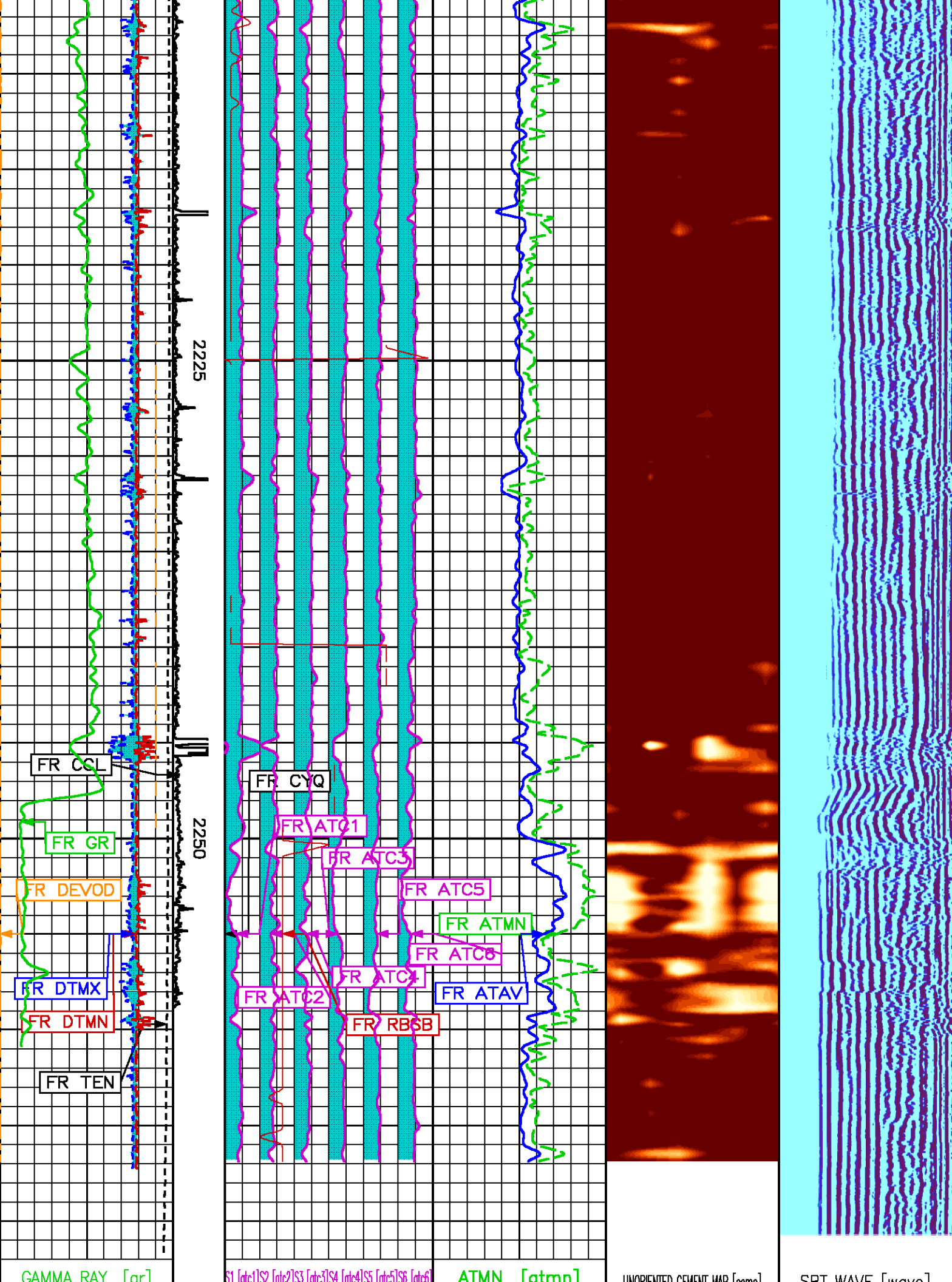


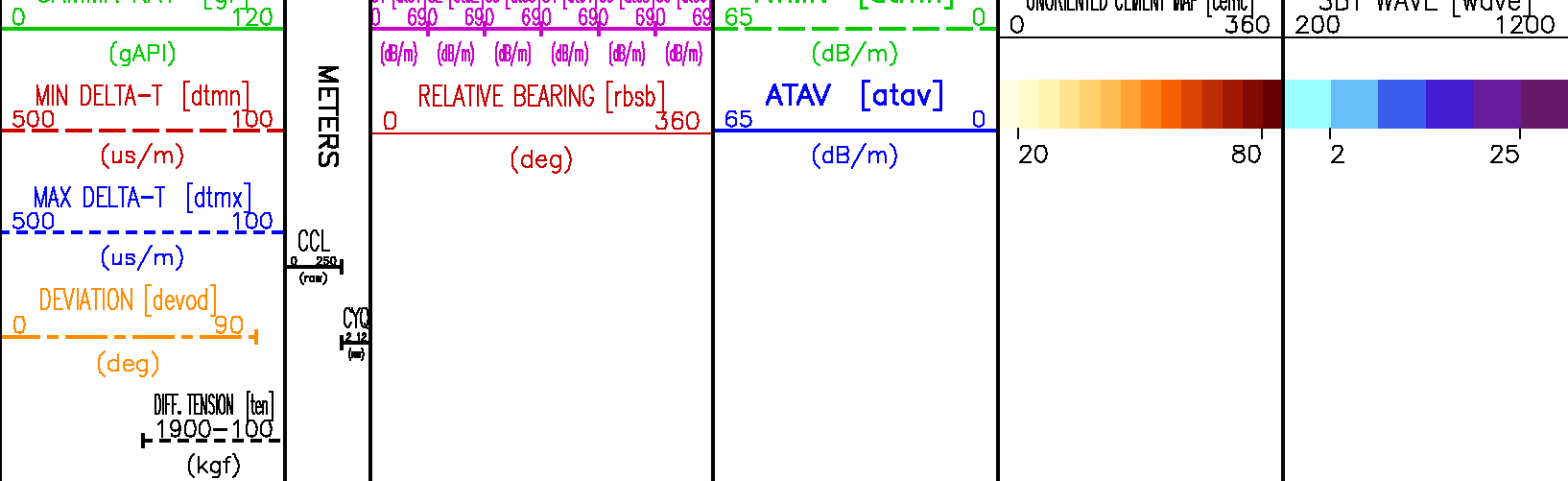












REPEAT LOG 1:240 SCALE

ECLIPS 6.11 Aug 06, 2010
Patches: 1

Mon Nov 29 12:16:18 2010

Pcrplt /main/62

Cplot

Pdf_Cpp /main/16

Fileview 5.50

PARAMETER AND FILTER SUMMARY REPORT

FILE: /data/pass/nalcor_finn_run2/m331d03.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 2080.870 m BOTTOM DEPTH: 2273.293 m

SYMMETRIC FILTER

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

SBT PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
SBT	CASING OD	244.500	mm	TOP	BOTTOM
	CASING WT	64.699	kg/m	"	"
	CORR. FACTOR 1	0.000	dB/m	"	"
	CORR. FACTOR 2	0.000	dB/m	"	"
	CORR. FACTOR 3	0.000	dB/m	"	"
	CORR. FACTOR 4	0.000	dB/m	"	"
	CORR. FACTOR 5	0.000	dB/m	"	"
	CORR. FACTOR 6	0.000	dB/m	"	"
	SPACING	0.215	m	"	"
	SPREADING FACTOR	13.946	dB/m	"	"
	CEMENT STRENGTH	9997	kPa	"	"
	HI CUTOFF	25.741	dB/m	"	"
	LOW CUTOFF	11.457	dB/m	"	"

SBT NORMALIZATION RESULTS

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS
SBT	CORR. FACTOR1	-1.369	dB/m
	CORR. FACTOR2	0.564	dB/m
	CORR. FACTOR3	0.225	dB/m
	CORR. FACTOR4	1.024	dB/m

CORR. FACTOR4	1.021	dB/m
CORR. FACTOR5	0.001	dB/m
CORR. FACTOR6	-0.441	dB/m

CURVE DESCRIPTION REPORT

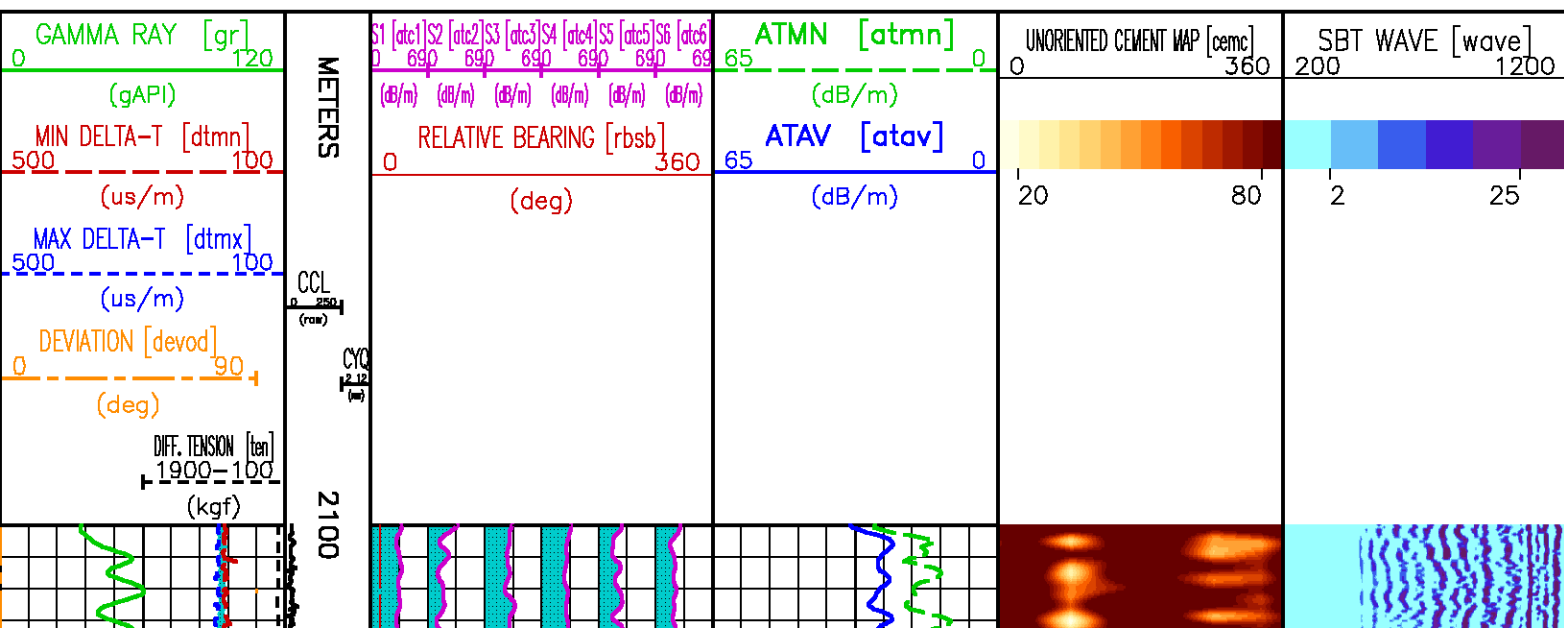
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:ATAV	Nov 29 06:10:15 2010	AVERAGE ATTENUATION
F1:ATC1	Nov 29 06:10:15 2010	ATTENUATION PAD 1
F1:ATC2	Nov 29 06:10:15 2010	ATTENUATION PAD 2
F1:ATC3	Nov 29 06:10:15 2010	ATTENUATION PAD 3
F1:ATC4	Nov 29 06:10:15 2010	ATTENUATION PAD 4
F1:ATC5	Nov 29 06:10:15 2010	ATTENUATION PAD 5
F1:ATC6	Nov 29 06:10:15 2010	ATTENUATION PAD 6
F1:ATMN	Nov 29 06:10:15 2010	ATTENUATION MINIMUM
F1:CCL	Nov 29 06:10:15 2010	CASING COLLAR LOCATOR
F1:CEMC	Nov 29 06:10:15 2010	CALIBRATED CEMENT MAP
F1:CYQ	Nov 29 06:10:15 2010	CYCLE QUALITY
F1:DEVOD	Nov 29 06:10:15 2010	DEVIATION
F1:DTMN	Nov 29 06:10:15 2010	MINIMAL SLOWNESS
F1:DTMX	Nov 29 06:10:15 2010	MAXIMAL SLOWNESS
F1:GR	Nov 29 06:10:15 2010	GAMMA RAY
F1:RBSB	Nov 29 06:10:15 2010	RELATIVE BEARING (RELATIVE TO BOREHOLE LOW SIDE) FOR SBT
F1:TEN	Nov 29 06:10:15 2010	DIFFERENTIAL TENSION
F1:WAVE	Nov 29 06:10:15 2010	DIGITIZED WAVEFORM

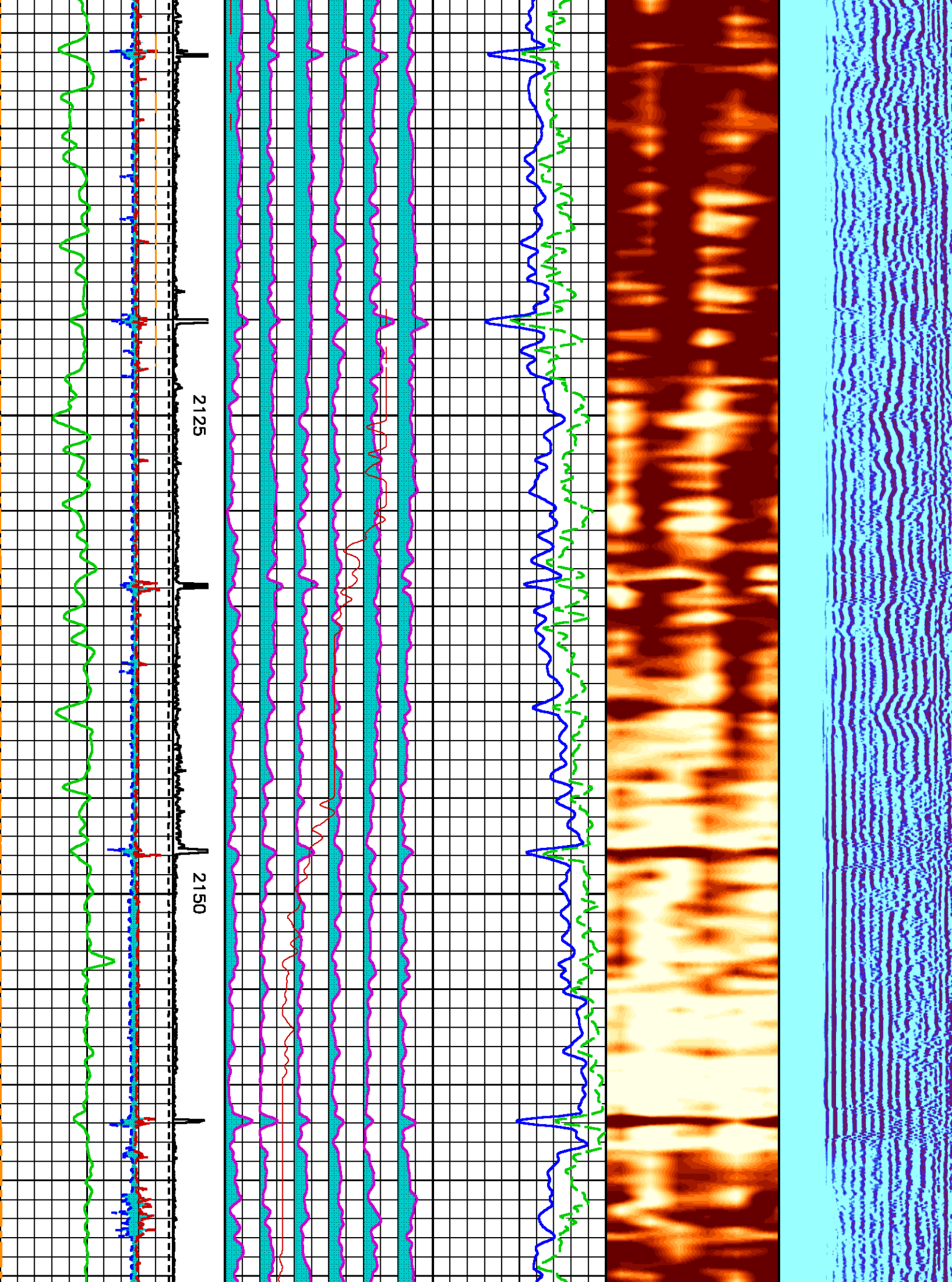
CURVE MEASURE POINT OFFSET

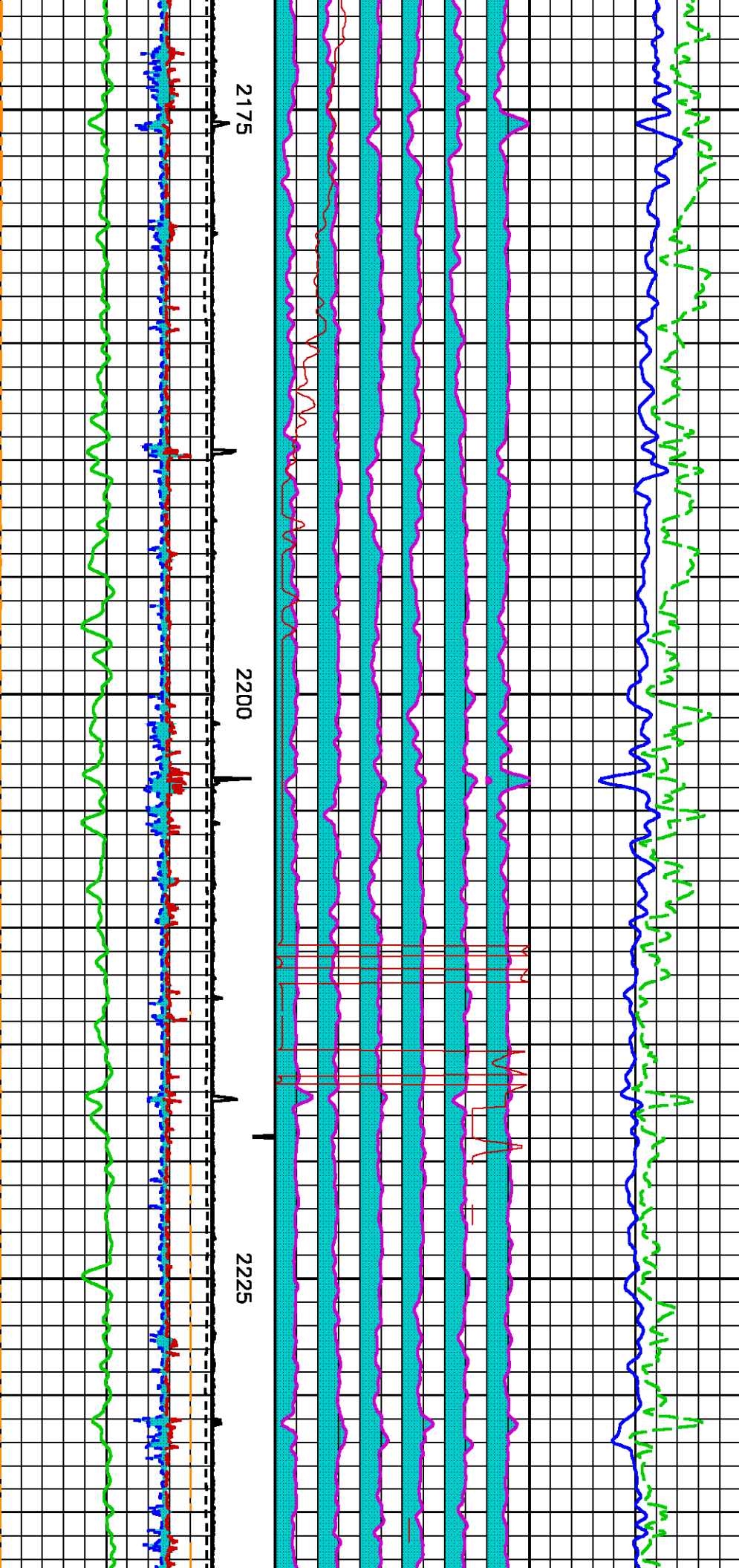
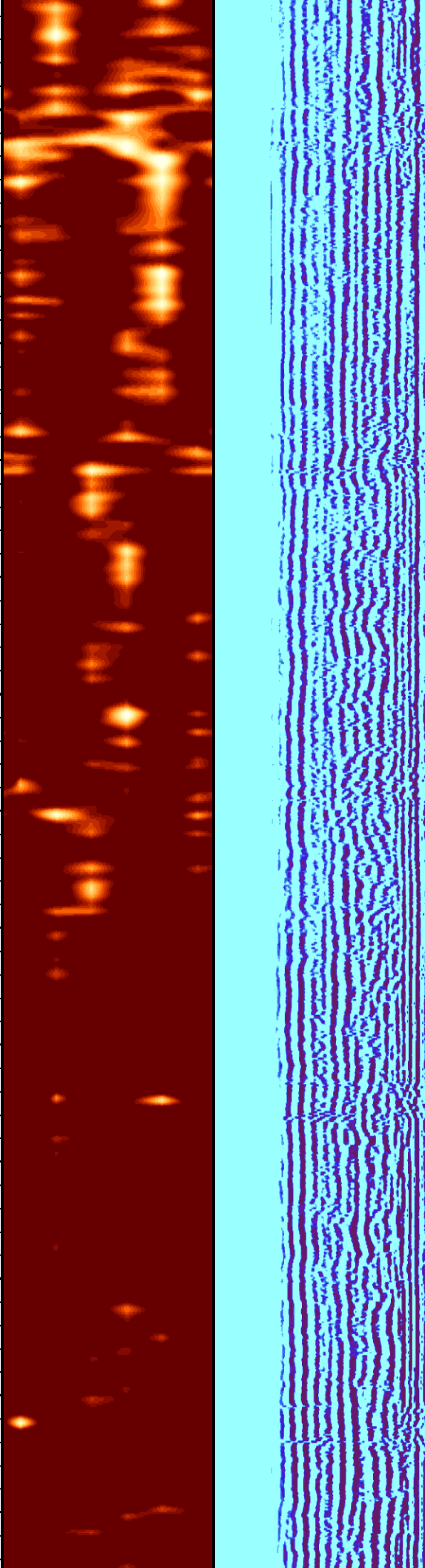
CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)
ATAV	4.72	ATC4	4.72	CCL	13.03	DTMX	4.72
ATC1	4.72	ATC5	4.72	CYQ	4.72	GR	10.59
ATC2	4.72	ATC6	4.72	DEVOD	4.72	RBSB	4.72
ATC3	4.72	ATMN	4.72	DTMN	4.72	TEN	0.00

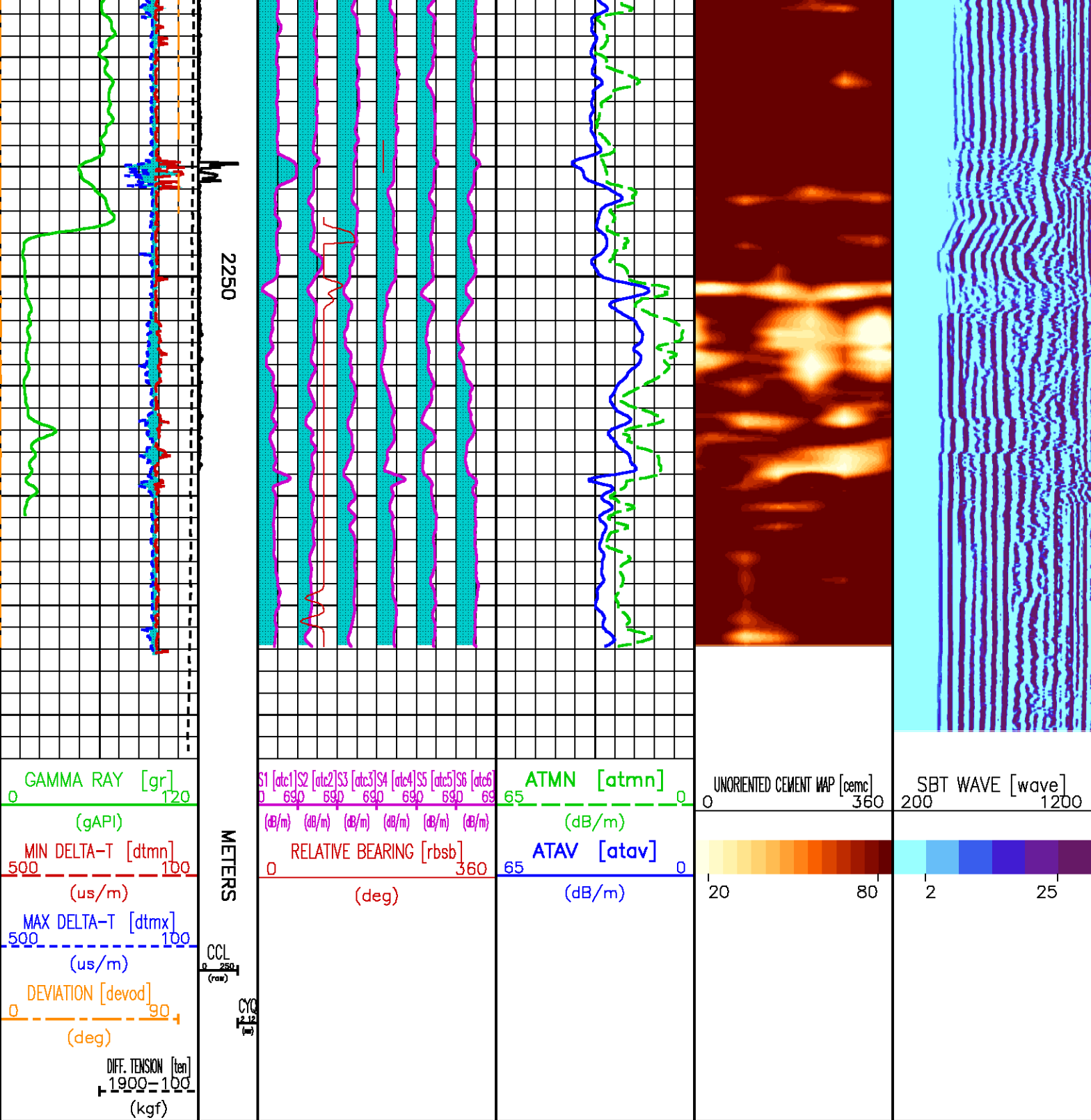
Presentation : cpu1:/dat1a/pass/nalcor_finn_run2/sbtmon-rb_metric_rpt.pdf [1:240 Scale]
Plot Interval : 2100 - 2271.6 Meters

Data File 1 : F1 : cpu1:/dat1a/pass/nalcor_finn_run2/m331d03.aff
Created On : Nov 29 06:10:15 2010
Company : NALCOR ENERGY
Well : NALCOR ET AL FINNEGAN 1
Field : FINNEGAN
File Interval : 2067.76 - 2271.98 Meters
Oct : m331d









TOOL #: 1339XA 10195042

DATE/TIME PERFORMED: Sun Nov 21 17:37:50 2010

UNIT #: 3885TF 004291

CALB JIG #: 4702NK DA-549

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	CR DIFF (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	CALBRTR (gAPI)
GR	64.04	229.09	165.0 155.0 195.0	0.909	58.21	208.21	150

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 1339XA 10195042

DATE/TIME PERFORMED: Sun Nov 21 17:42:20 2010

UNIT #: 3885TF 004291

VERI JIG #: 4702NK DA-549

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	63.89	230.00	0.909	58.07	209.03	150.97 140.00 160.00

RB PRIMARY CALIBRATION SUMMARY

TOOL #: 1424XA 10185716

DATE/TIME PERFORMED: Sun Nov 21 17:10:10 2010

UNIT #: 3885TF 004291

	X-ATT (raw)	Y-ATT (raw)	OFFSET (deg)	X-MAX	Y-MAX	RB (deg)
PAD 2	-405.0	-54.0				2.55 355.00 5.00
PAD 3	-263.0	331.6				60.00 55.00 65.00
			-9.79	-410.98	431.53	

RB BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1424XA 10185716

DATE/TIME PERFORMED: Sun Nov 21 17:15:02 2010

DAYS SINCE CAL: 0

UNIT #: 3885TF 004291

	X-ATT (raw)	Y-ATT (raw)	RB (deg)
PAD 3	-263.0	331.6	60.0 55.0 65.0
PAD 4	144.0	403.6	120.3 115.0 125.0
PAD 5	417.7	71.0	180.6 175.0 185.0

PAD 6	264.8	-324.0	239.1 235.0 245.0
PAD 1	-136.0	-384.0	300.2 295.0 305.0
PAD 2	-396.8	-71.0	0.1 355.0 5.0



SBT PRIMARY CALIBRATION SUMMARY

TOOL #: 1424XA 10185716

DATE/TIME PERFORMED: Sun Nov 21 17:05:57 2010

UNIT #: 3885TF 004291

	PAD 1	PAD 2	PAD 3	PAD 4	PAD 5	PAD 6
NOISE LEVEL	0.9 10.0	1.5 10.0	1.7 10.0	1.5 10.0	1.6 10.0	1.4 10.0
PAD SENS	282.0 150.0	254.3 150.0	278.8 150.0	238.6 150.0	260.0 150.0	284.2 150.0

 Baker Atlas 	COMPANY <u>NALCOR ENERGY</u> WELL <u>NALCOR ET AL FINNEGAN #1</u> FIELD <u>FINNEGAN</u> PROVINCE <u>NEWFOUNDLAND AND LABRADOR</u>	FILE NO: _____ API NO: _____	
	LOCATION:	ELEVATIONS: KB 125.00 M DF GL 118.75 M	LICENSE: 2010-128-04
	LAT <u>49.92 N</u> LONG <u>63.33 W</u>	DATE <u>27-NOV-2010</u>	