

County: Rio Blanco

Field: Piceance Creek

Location: 749' FNL & 551' FWL

Logging
Run Num
Depth D
Schlumb
Bottom L
Top Log
Casing F
Salinity
Density
Fluid Lev
BIT/CA
Bit Size
From
To
Casing/T
Weight
Grade
From
To
Maximur
Logger C
Unit Num
Record
Witness

Well: PCU 296-5A5

Company: ExxonMobil Production Corp

State: Colorado

PCU 296-5A5

Piceance Creek

Rio Blanco

IMAGIN BEHIND CASING

ULTRASONIC TOOL

CCL-GAMMA RAY

749' FNL & 551' FWL

Elev.: K.B. 7309.00 ft
G.L. 7296.00 ft
D.F. 7308.00 ft

Permanent Datum: _____

Log Measured From: _____

Drilling Measured From: _____

GROUND LEVEL

Elev.: 7296.00 ft

13.00 ft above Perm. Datum

PERMANENT BUSHING

DRILLING BUSHING

API Serial No. 05-103-1124900

Section 5

Township 2S

Range 96W

Date	20-Nov-2010
Number	1
Driller	9967 ft
Logger Depth	9850 ft
Log Interval	9850 ft
Interval	200 ft
Fluid Type	WATER BASED MUD
	1300 ppm
	9.4 lbm/gal
Level	
STRING/TUBING STRING	
	9.875 in
	0 ft
	9967 ft
Tubing Size	7.000 in
	26 lbm/ft
	0 ft
	9967 ft
Recorded Temperatures	198 degF
On Bottom	20-Nov-2010
Time	16:25
Number	2276
Location	VERNAL
Recorded By	AMILCAR FUENTES
Witnessed By	MARC HUDON

PVT DATA			Run 1	Run 2	Run 3
Oil Density					
Water Salinity			1300 ppm		
Gas Gravity					
Bo					
Bw					
1/Bg					
Bubble Point Pressure					
Bubble Point Temperature					
Solution GOR					
Maximum Deviation					
CEMENTING DATA					
Primary/Squeeze		Primary			
Casing String No					
Lead Cement Type					
Volume					
Density		11 lbm/gal			
Water Loss					
Additives					
Tail Cement Type					
Volume					
Density					
Water Loss					
Additives					
Expected Cement Top					
Logging Date					
Run Number					
Depth Driller					
Schlumberger Depth					
Bottom Log Interval					
Top Log Interval					
Casing Fluid Type					
Salinity					
Density					
Fluid Level					
BIT/CASING/TUBING STRING					
Bit Size					
From					
To					
Casing/Tubing Size					
Weight					
Grade					
From					
To					
Maximum Recorded Temperatures					
Logger On Bottom					
Time					
Unit Number					
Location					
Recorded By					
Witnessed By					

DEPTH SUMMARY LISTING

Date Created: 20-NOV-2010 19:52:24

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-B	Type:	CMTD-B/A	Type:	7-46A XS
Serial Number:	6074	Serial Number:	7296	Serial Number:	100734
Calibration Date:	24-Sep-2010	Calibration Date:	12-Nov-2010	Length:	22608 FT
Calibrator Serial Number:	33	Calibrator Serial Number:	100443	Conveyance Method: Wireline Rig Type: LAND	
Calibration Cable Type:	7-46P	Number of Calibration Points:	10		
Wheel Correction 1:	-9	Calibration RMS:	21		
Wheel Correction 2:	-8	Calibration Peak Error:	43		

Depth Control Parameters

Log Sequence:	First Log In the Well
Rig Up Length At Surface:	186.40 FT
Rig Up Length At Bottom:	185.20 FT
Rig Up Length Correction:	1.20 FT
Stretch Correction:	6.00 FT
Tool Zero Check At Surface:	1.00 FT

Depth Control Remarks

1. All Schlumberger Depth Measurement & Control Standard dated 7-April-2010 followed
2. IDW used as primary depth control measurement device
3. Z-Chart used as secondary depth control measurement device
4.
5.
6.

DISCLAIMER

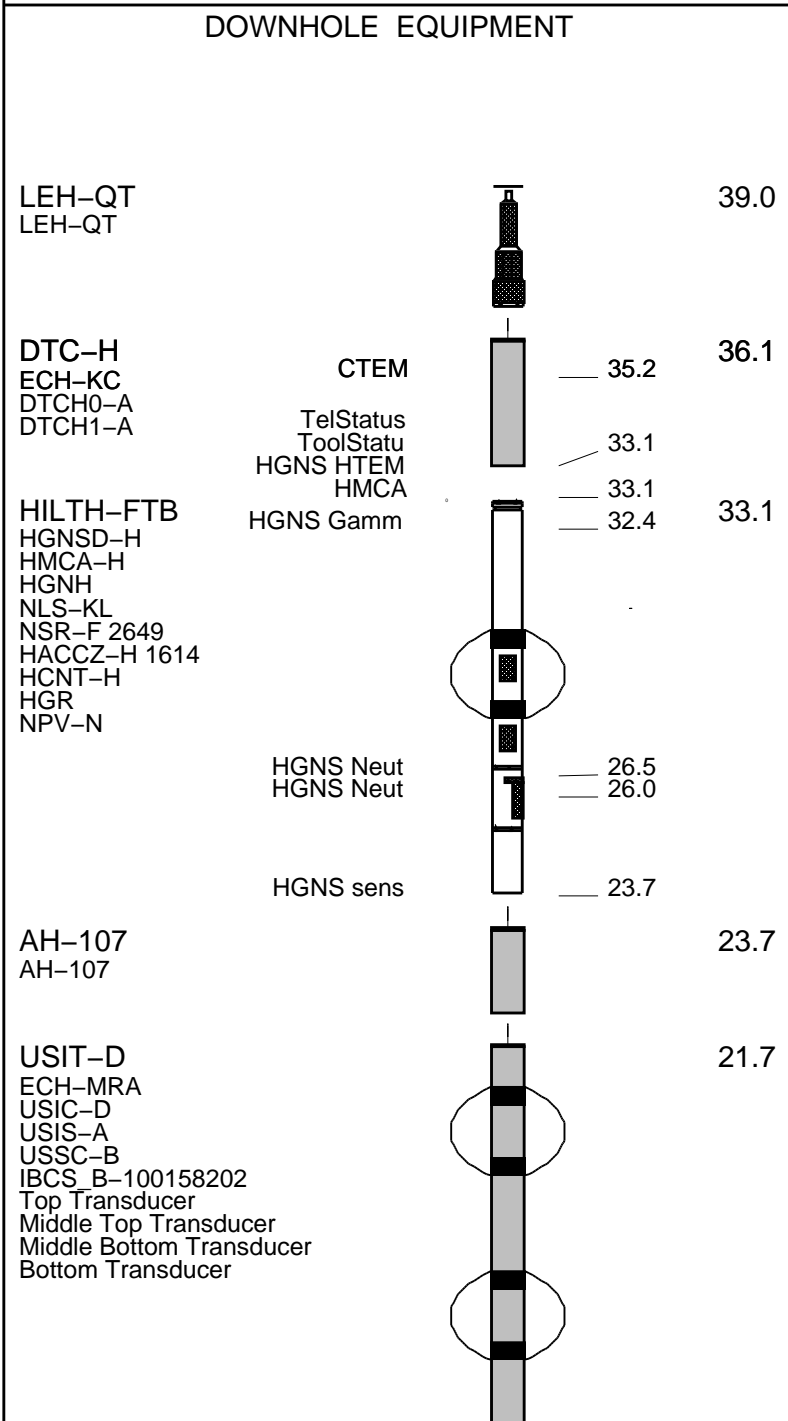
THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

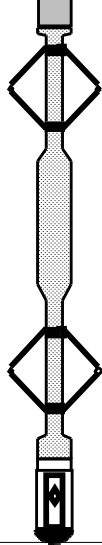
OTHER SERVICES1	OTHER SERVICES2
OS1: GAMMA RAY CORRLATION	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
1. Tool ran as per tool sketch	
2. Tool ran centralized using 2 X In-Line centralizers and 2 X GEMCOs	
3. HGNS Neutron tool only ran for formation's GR purposes only	
4. Logging speed less than 1800 ft/hr	
5. Expected casing thickness = 0.362in Observed = 0.363in	
6. Expected internal radius = 3.13in Observed 3.14in	
7. Expected flexural attenuation in free pipe = 55dB Observed 57.2dB	
8. Log monitored real time by Netviewer SQC	
9. Main Pass corrlated to Down Log	

RUN 1			RUN 2		
SERVICE ORDER #:		BFJT-00021	SERVICE ORDER #:		
PROGRAM VERSION:		17C0-154	PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		



SURFACE EQUIPMENT
WITM (DTS)-A
GSR-U/Y
NCT-B
CNB-AB
NCS-VB

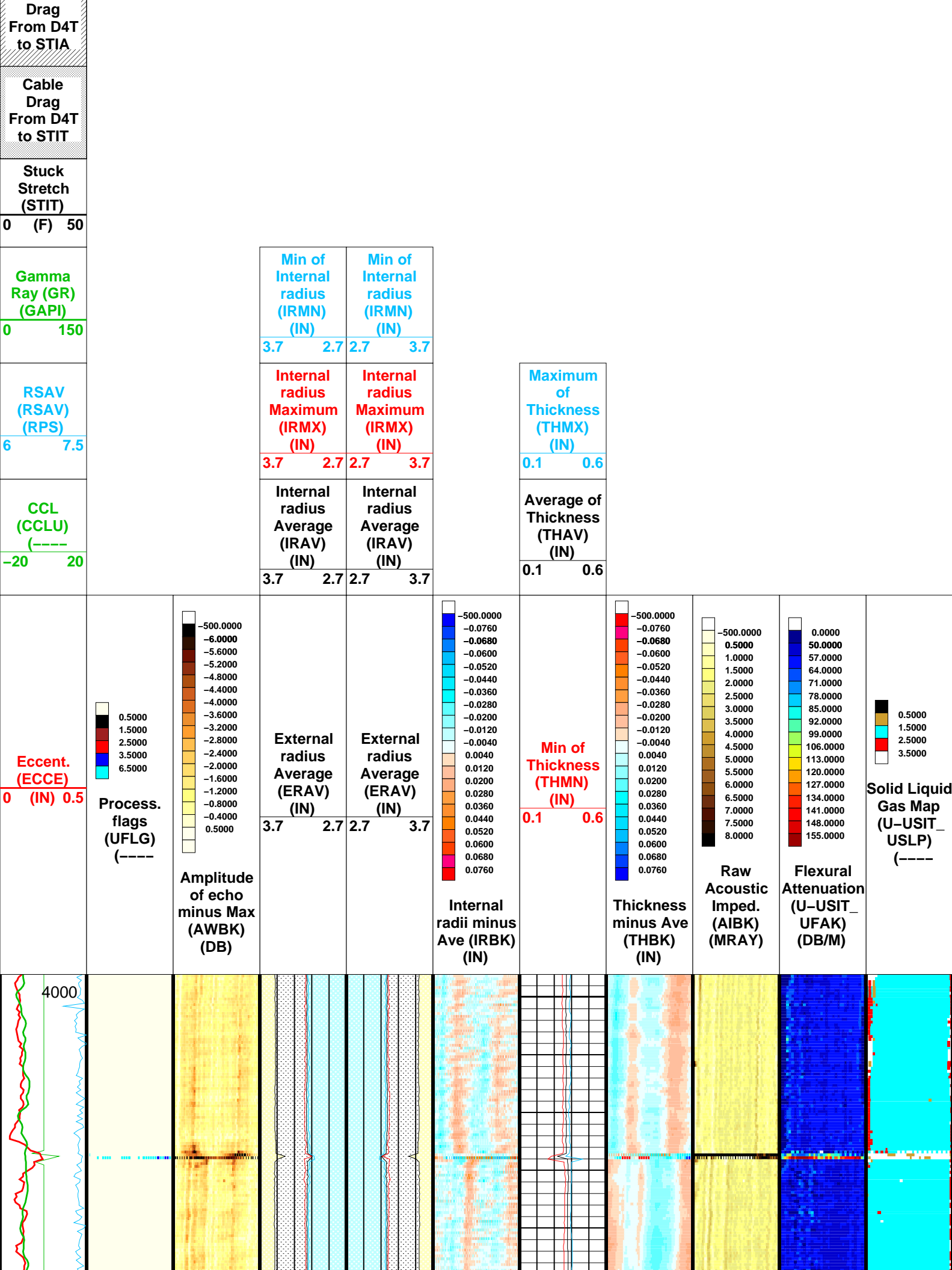


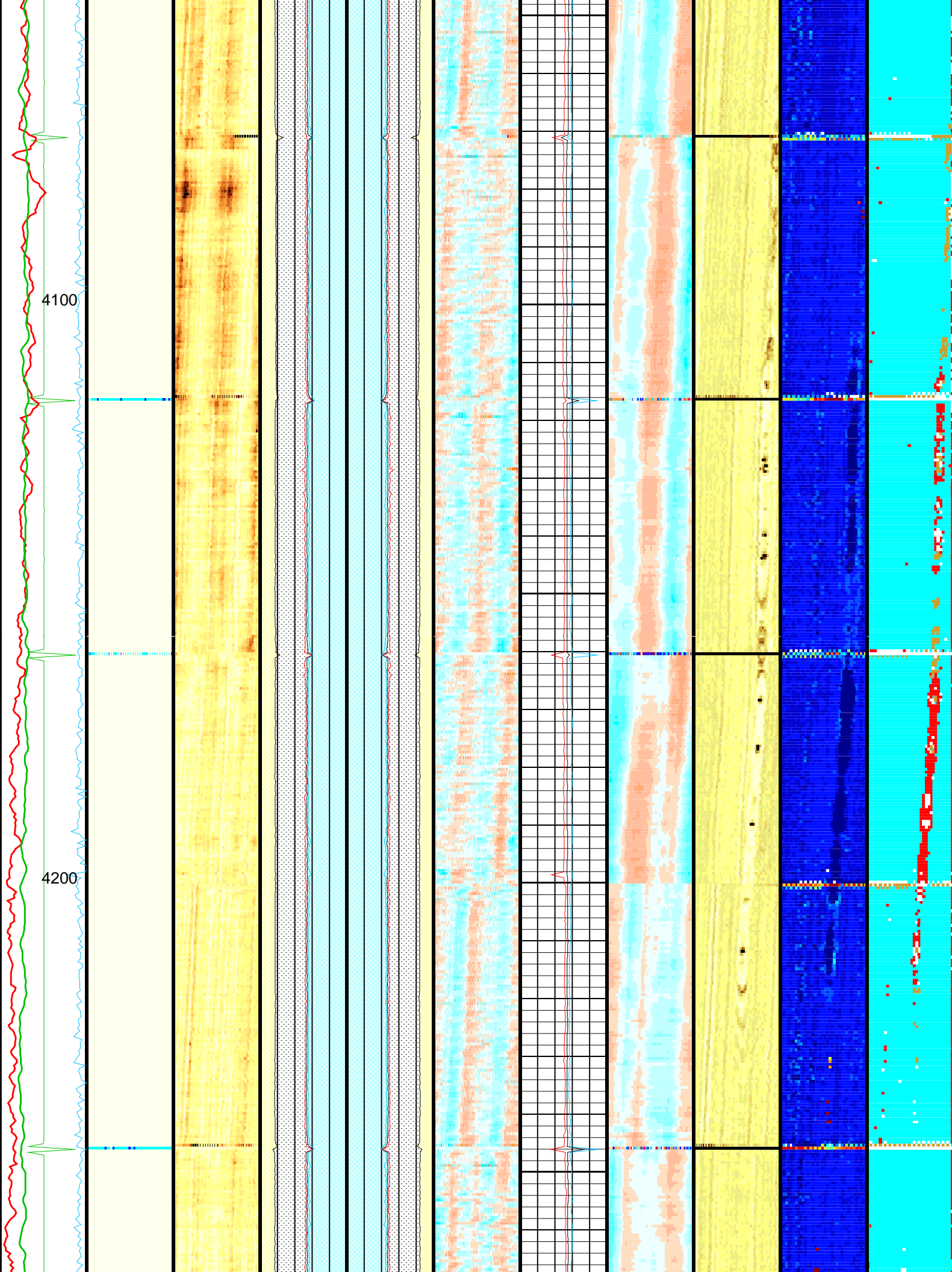


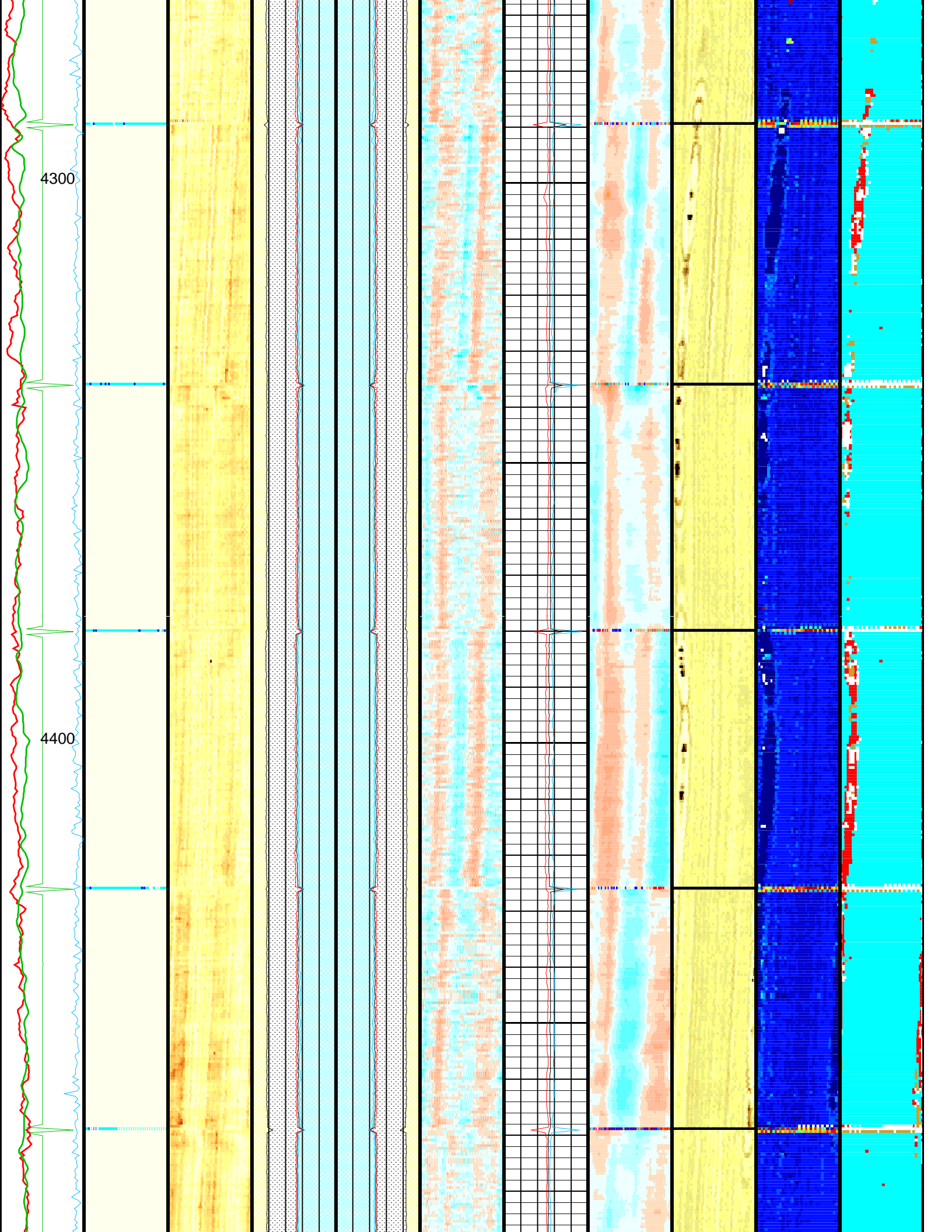
Client: ExxonMobil Production Corp
Well: PCU 296-5A5
Field: Piceance Creek
State: Colorado
Country: usa

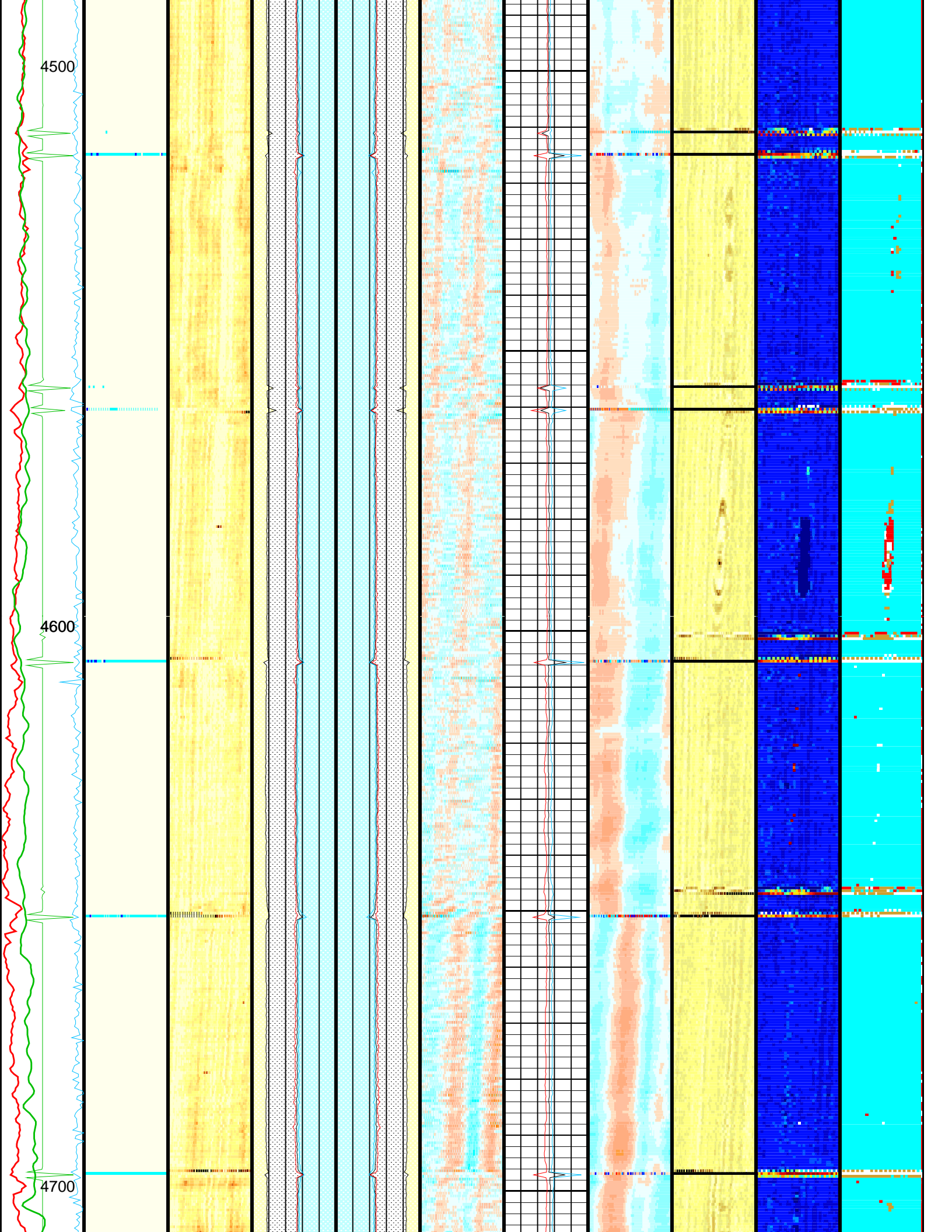
Rig Name: h&p321
Reference Datum: Kelly Bushing
Elevation: 7296.0 ft

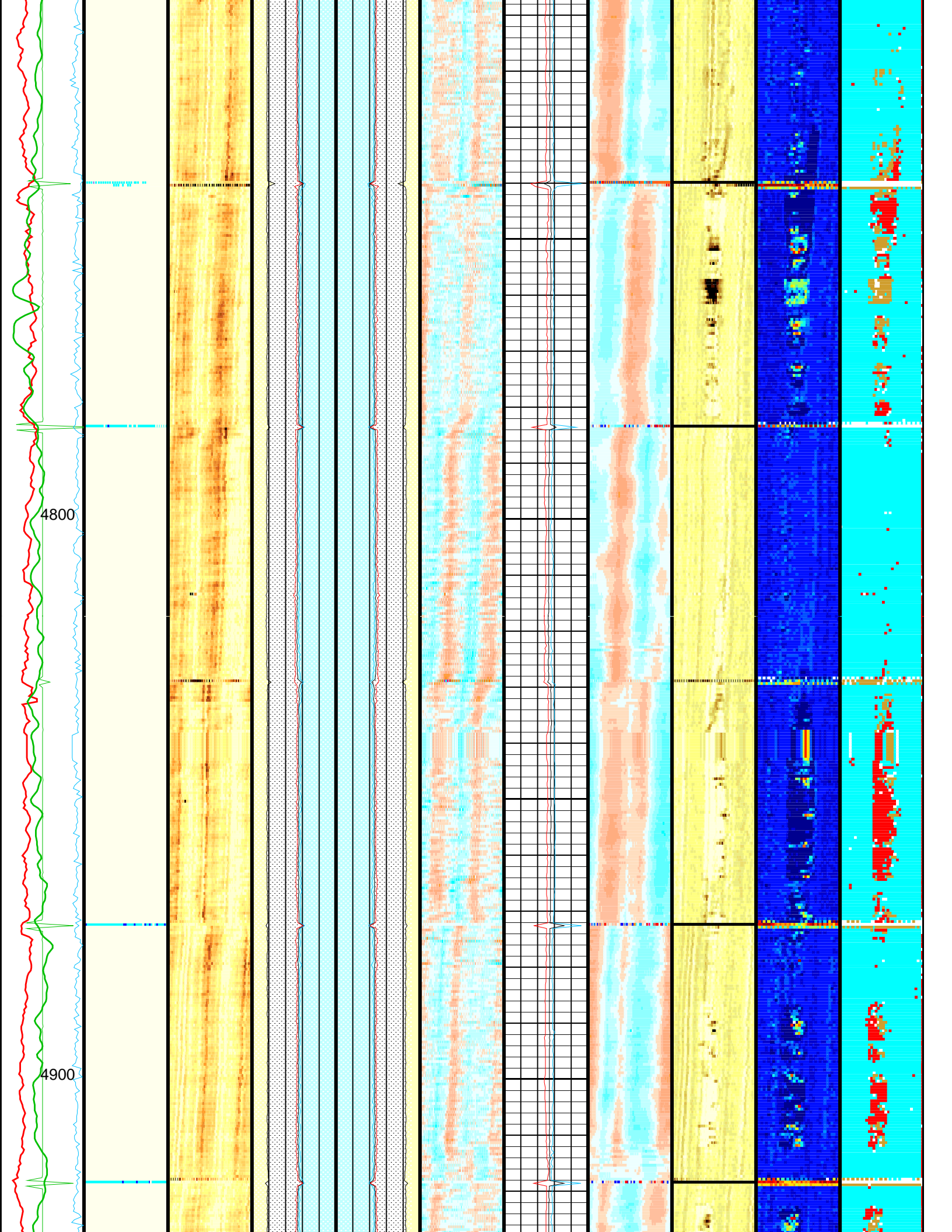
Production String	(in)		(ft)	Well Schematic		(ft)		(in)	Casing String	
	OD	ID	MD			MD	OD	ID		
							0.0	9.806		Boresighting

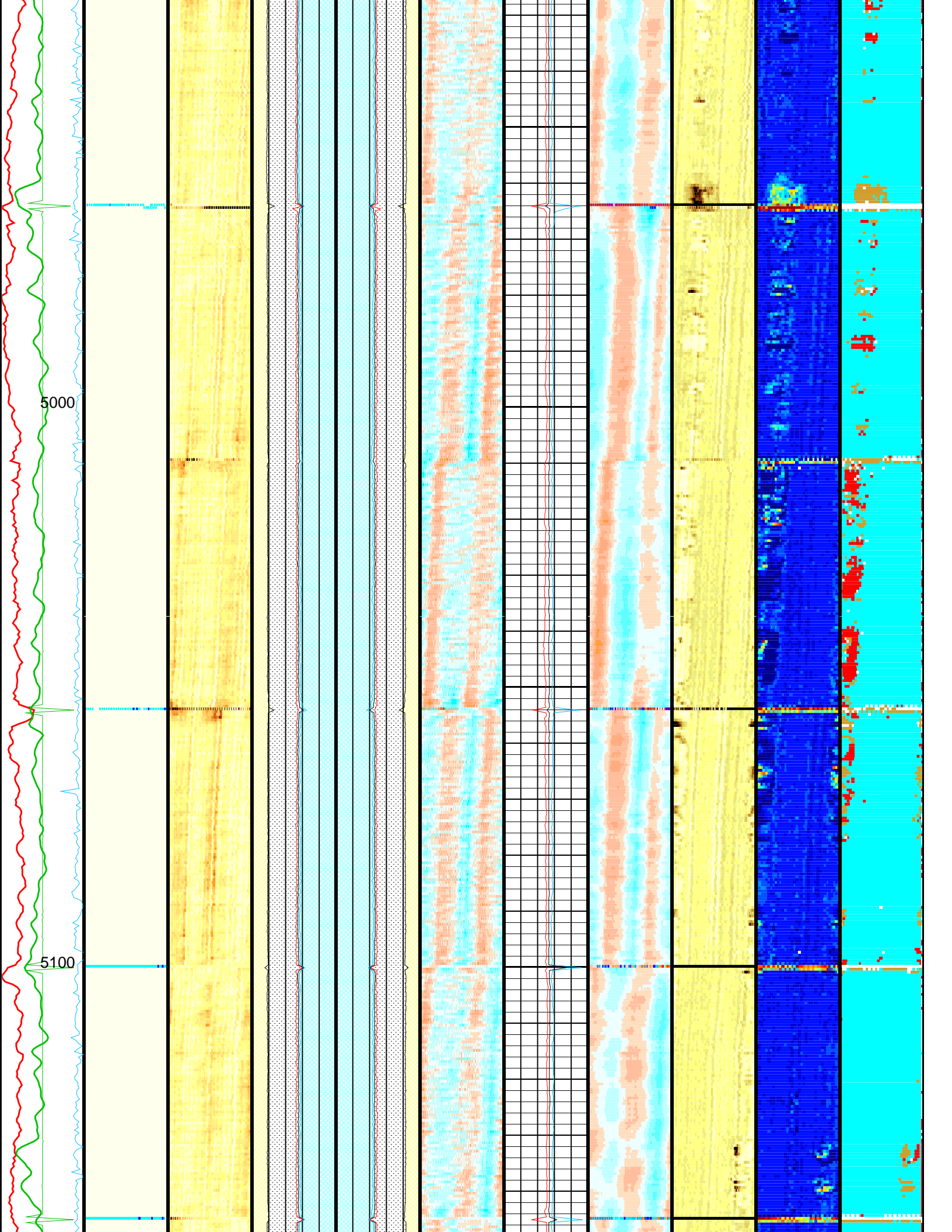


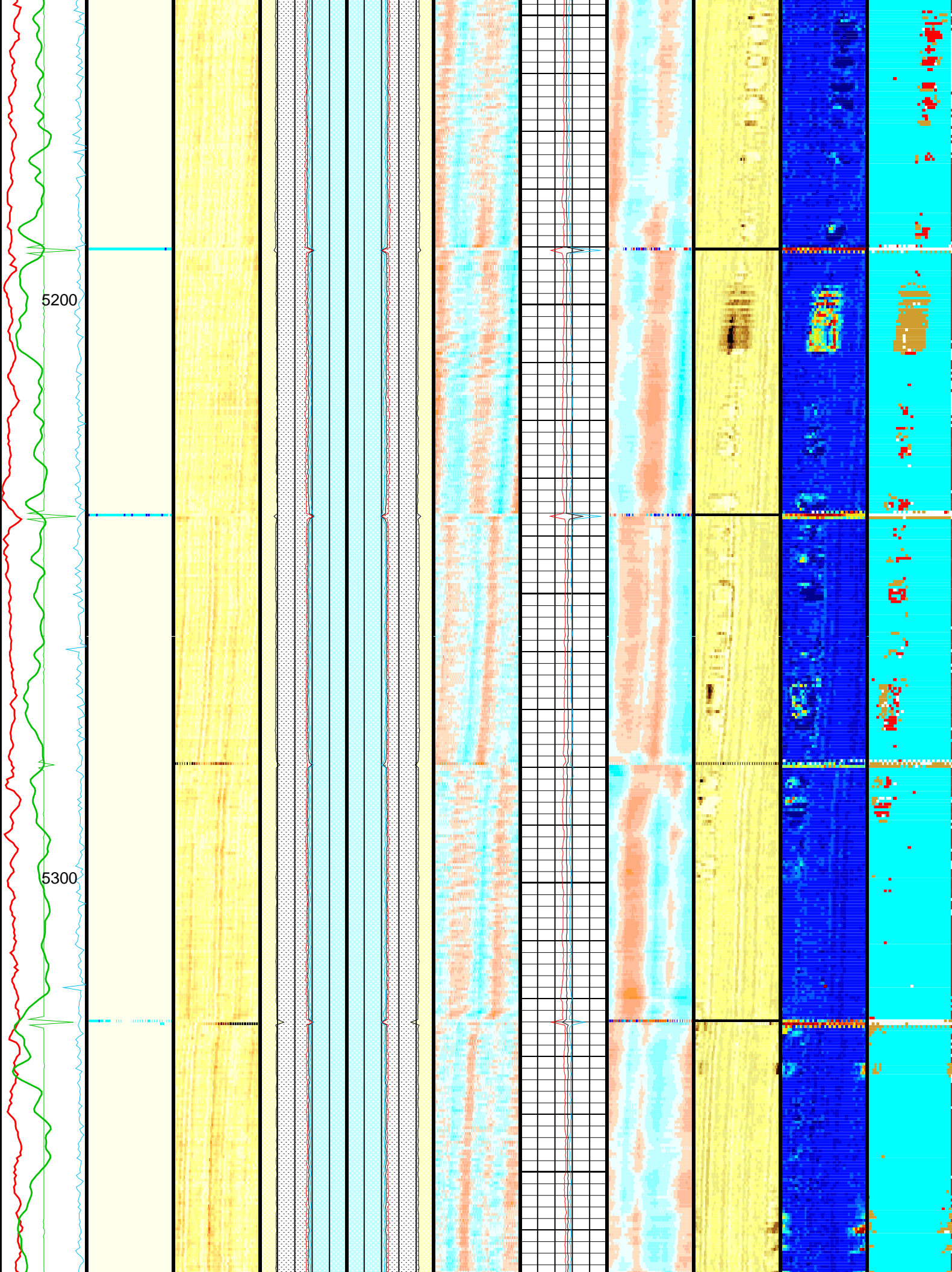


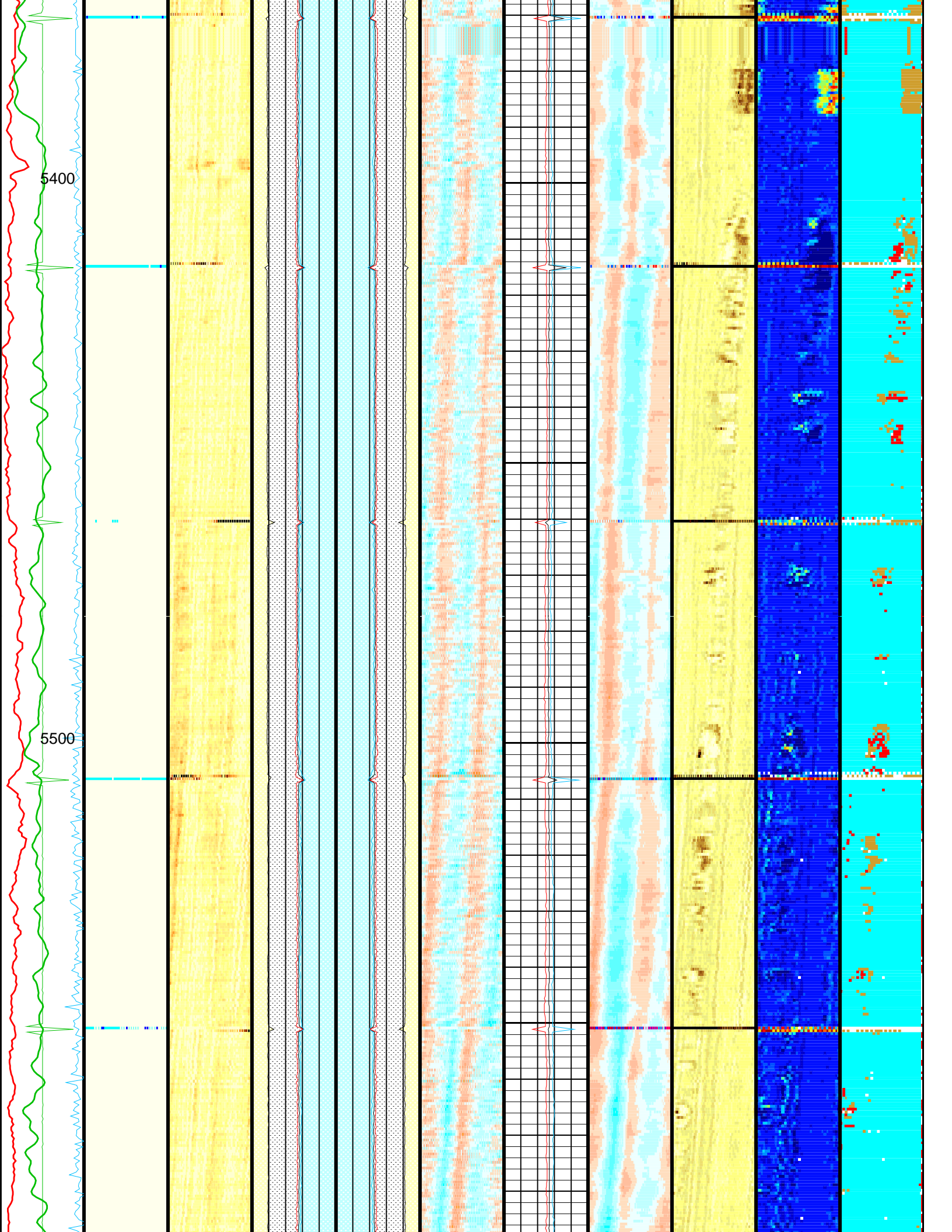


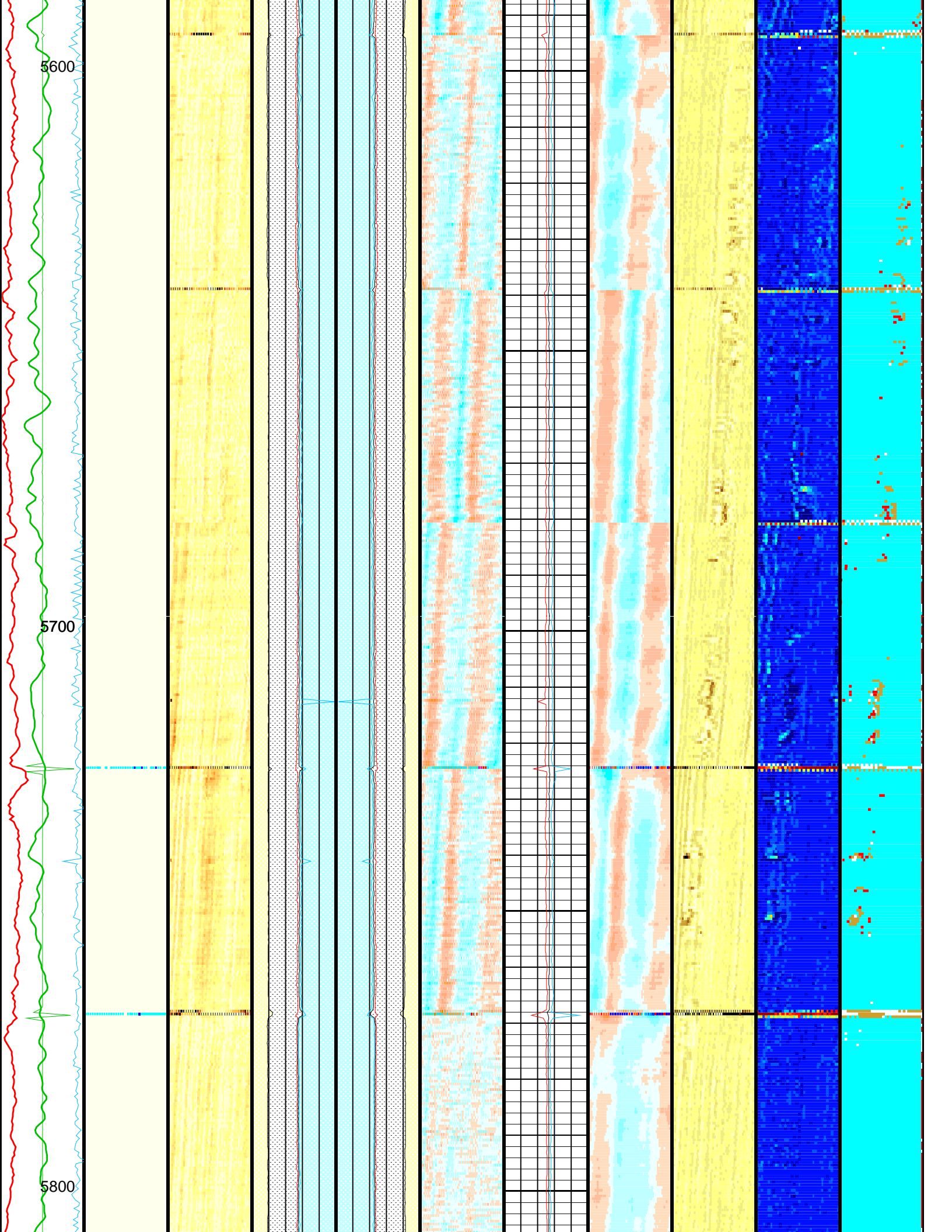


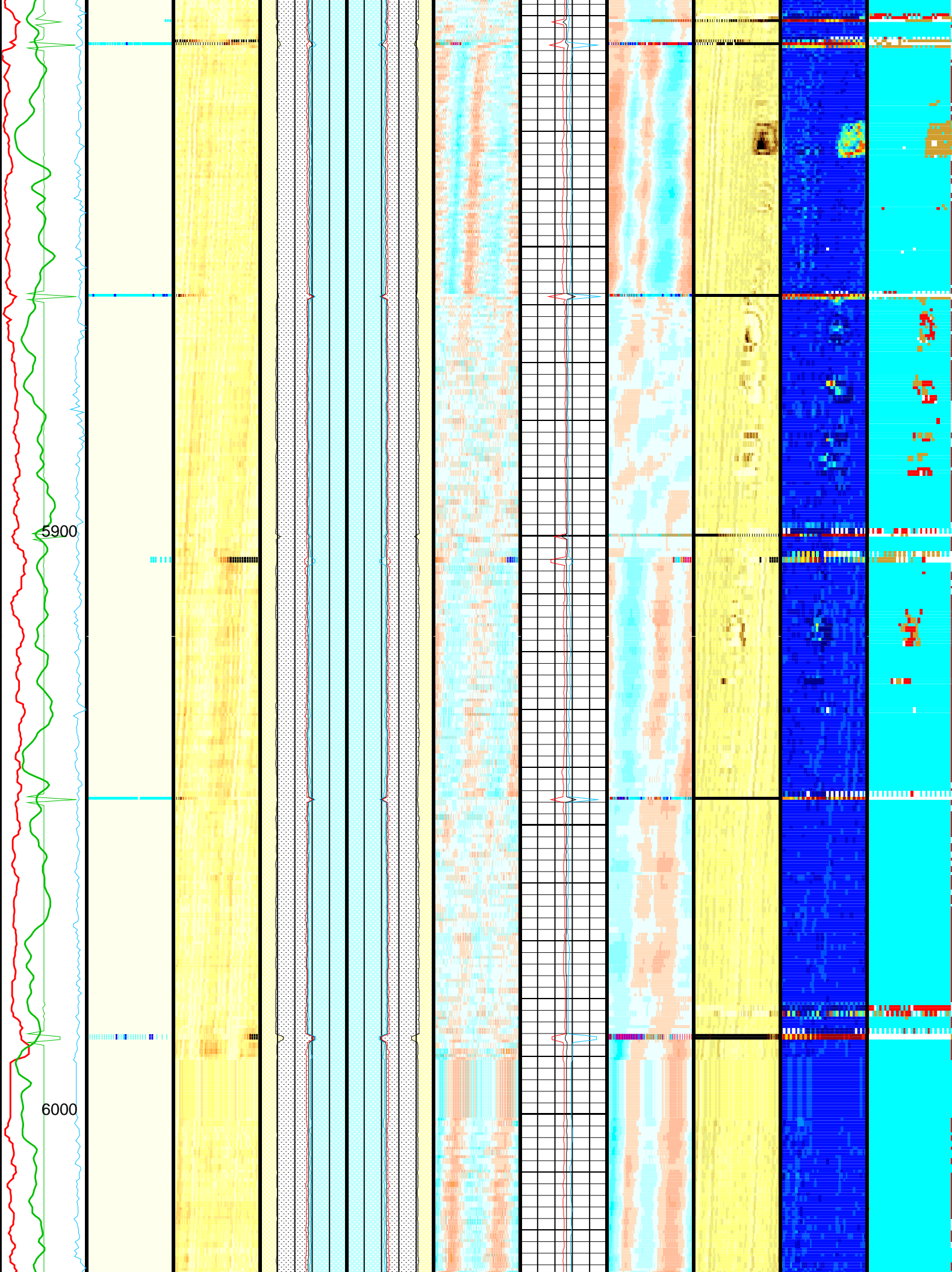


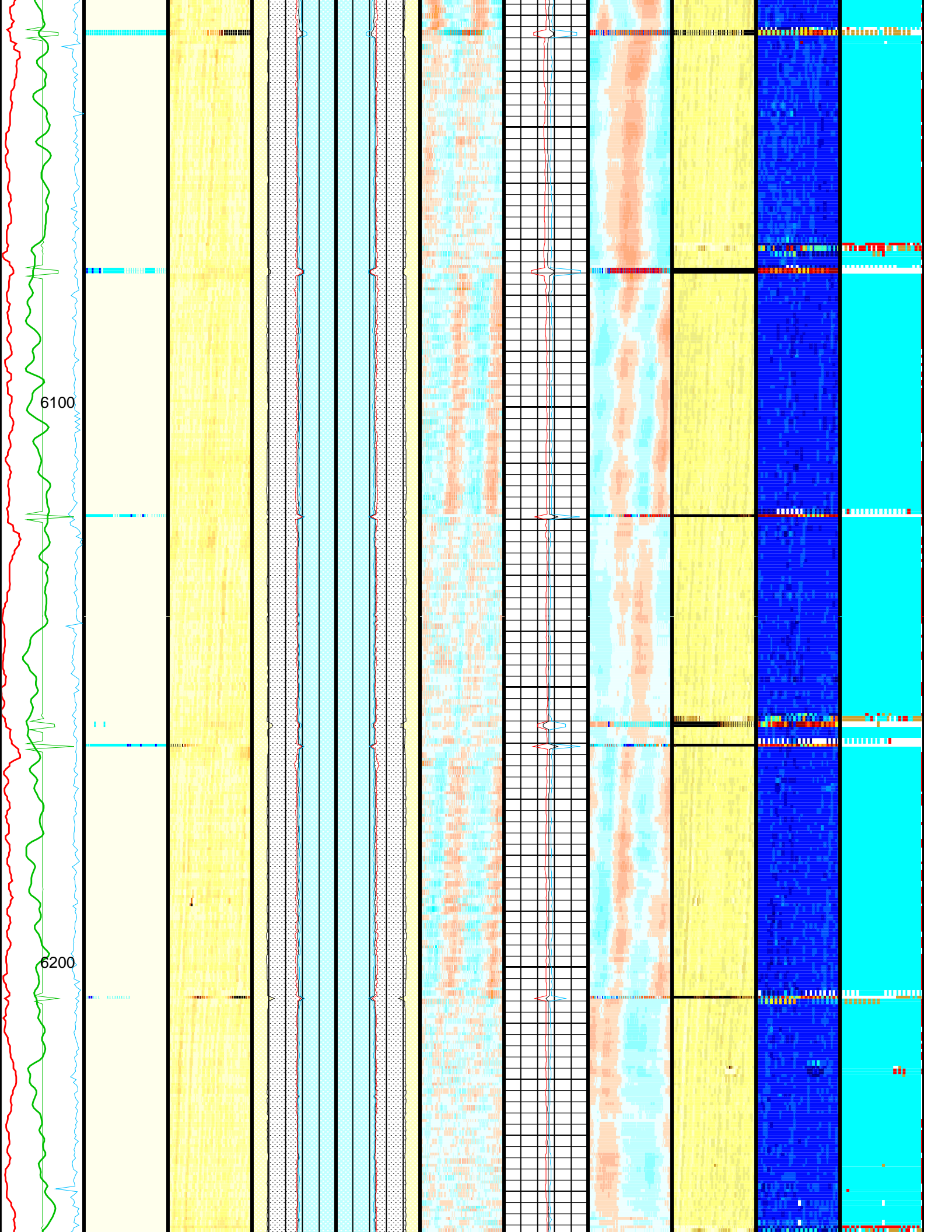


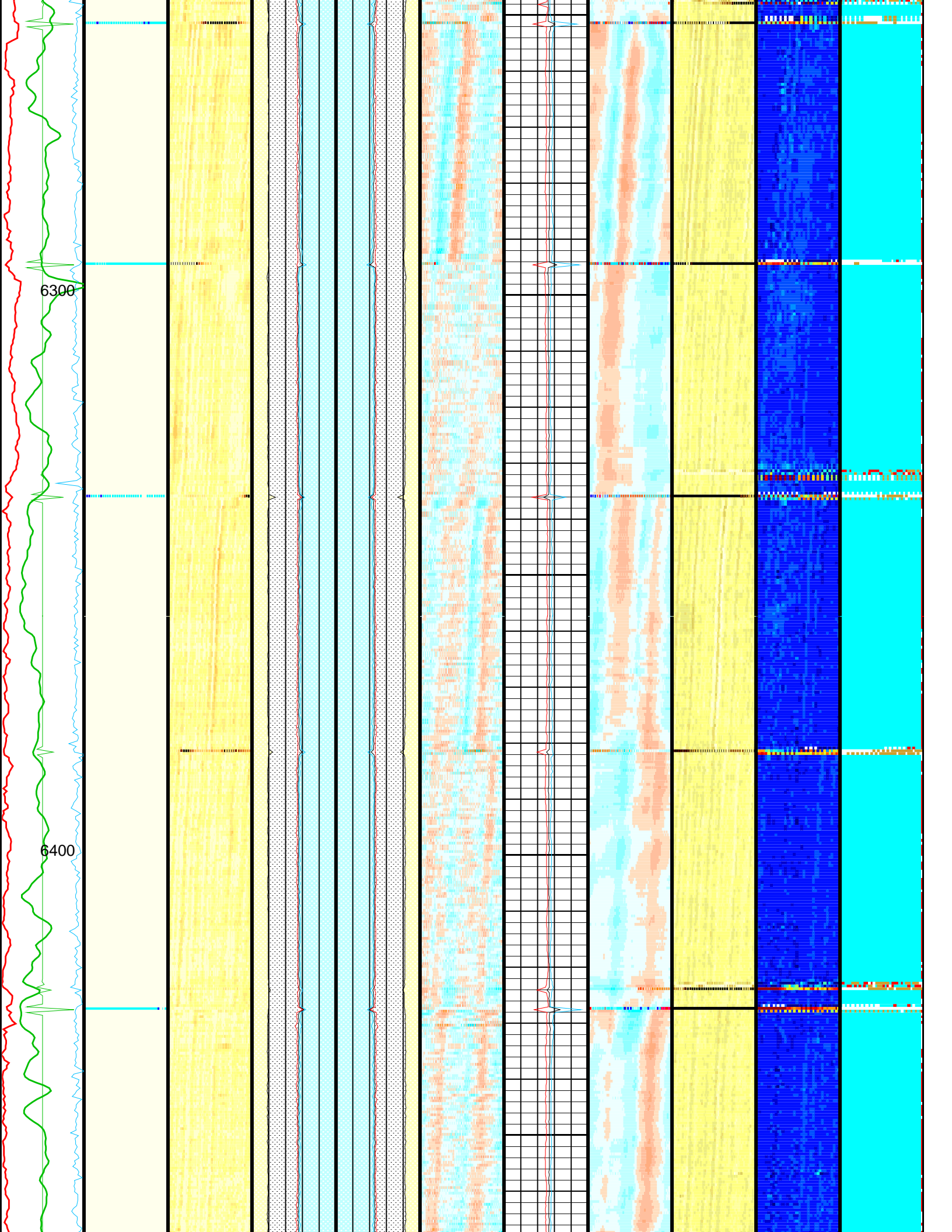


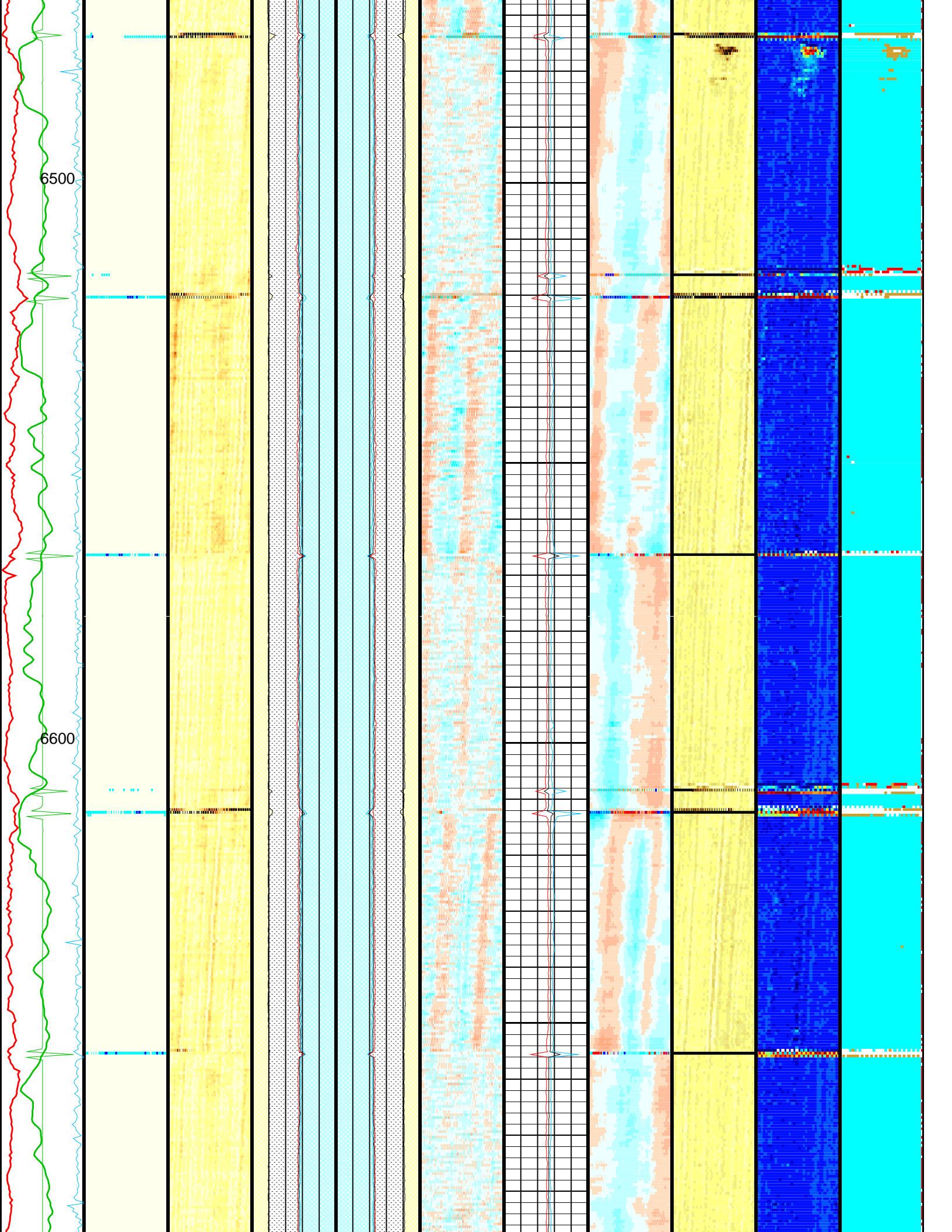


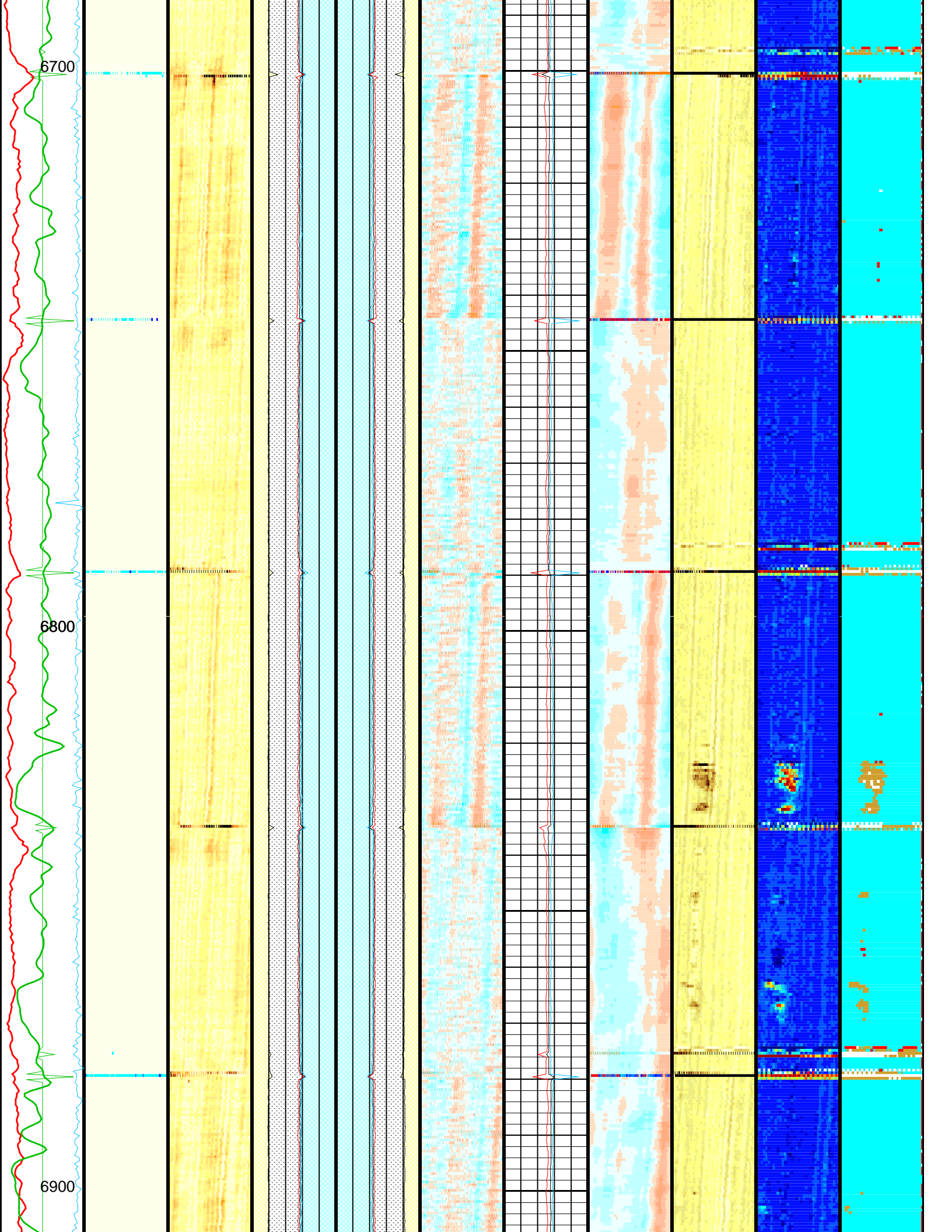


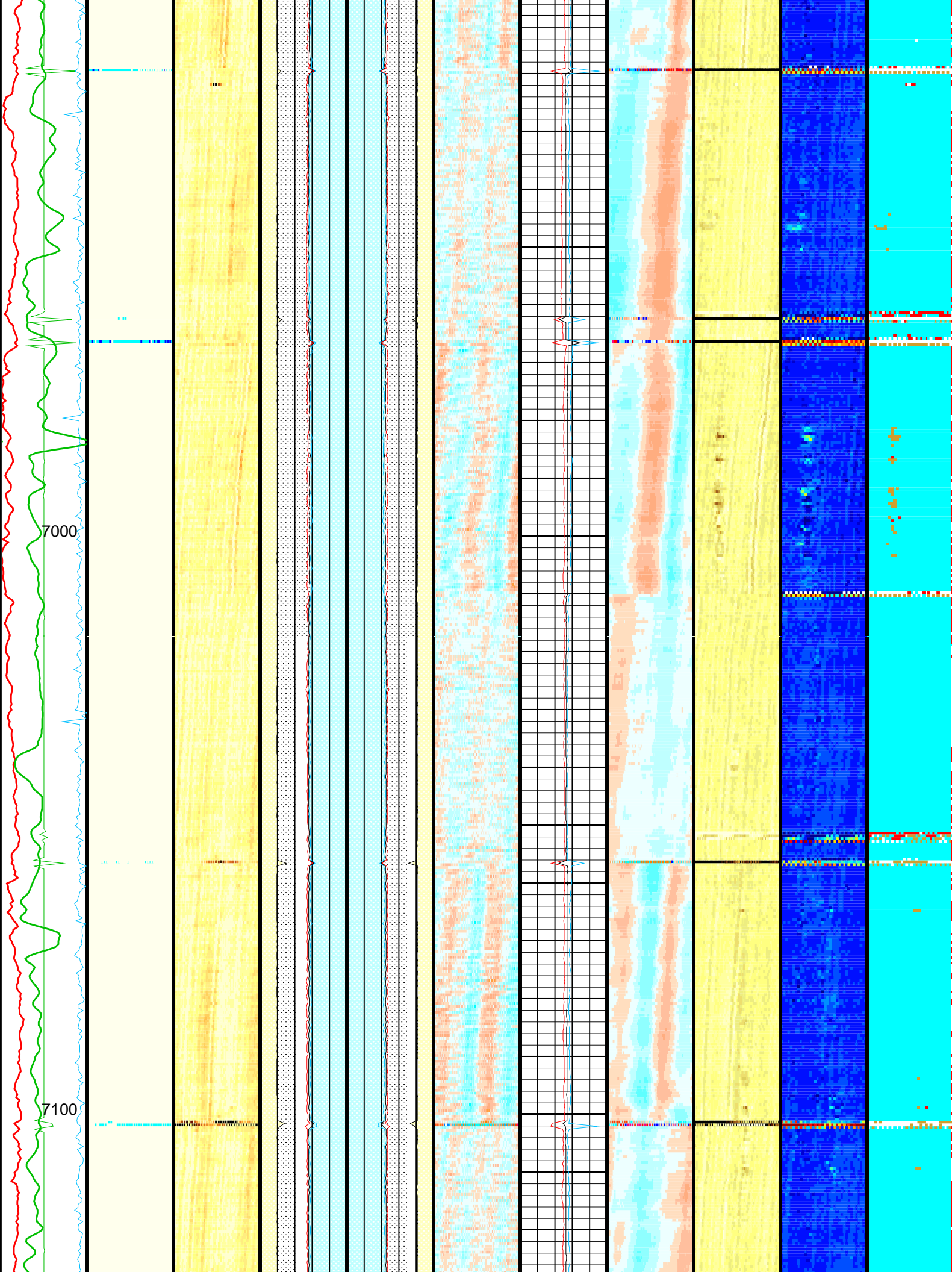


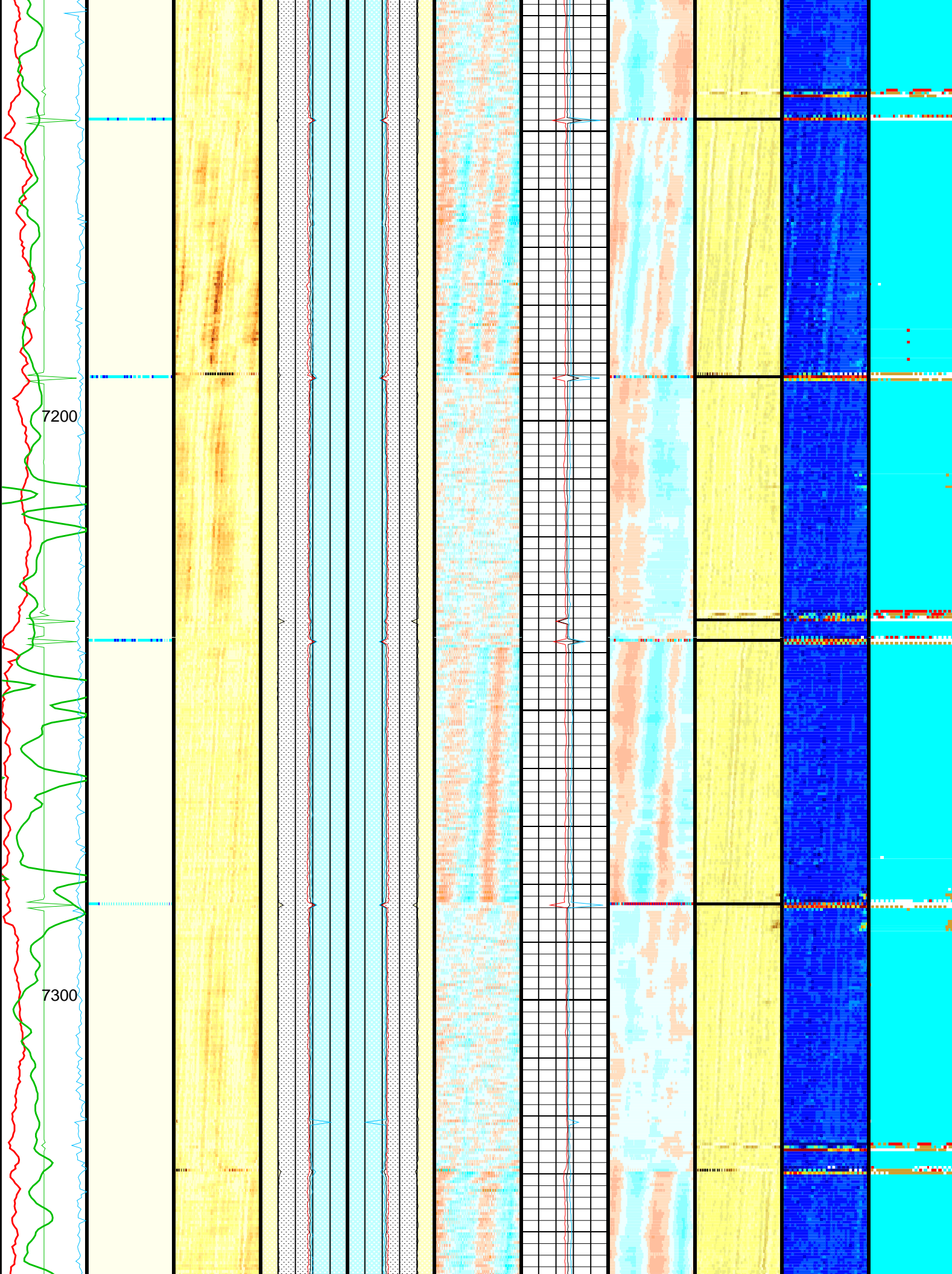


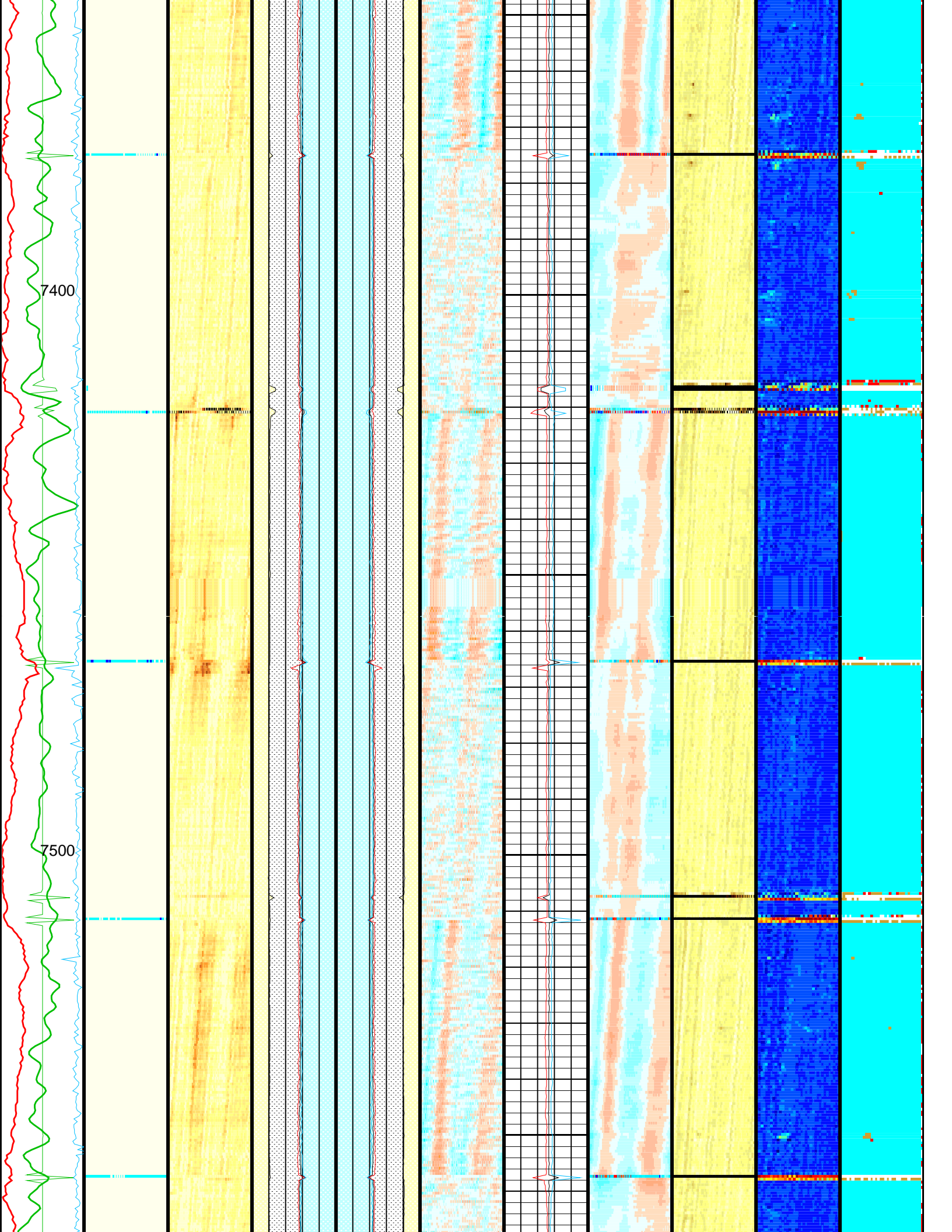


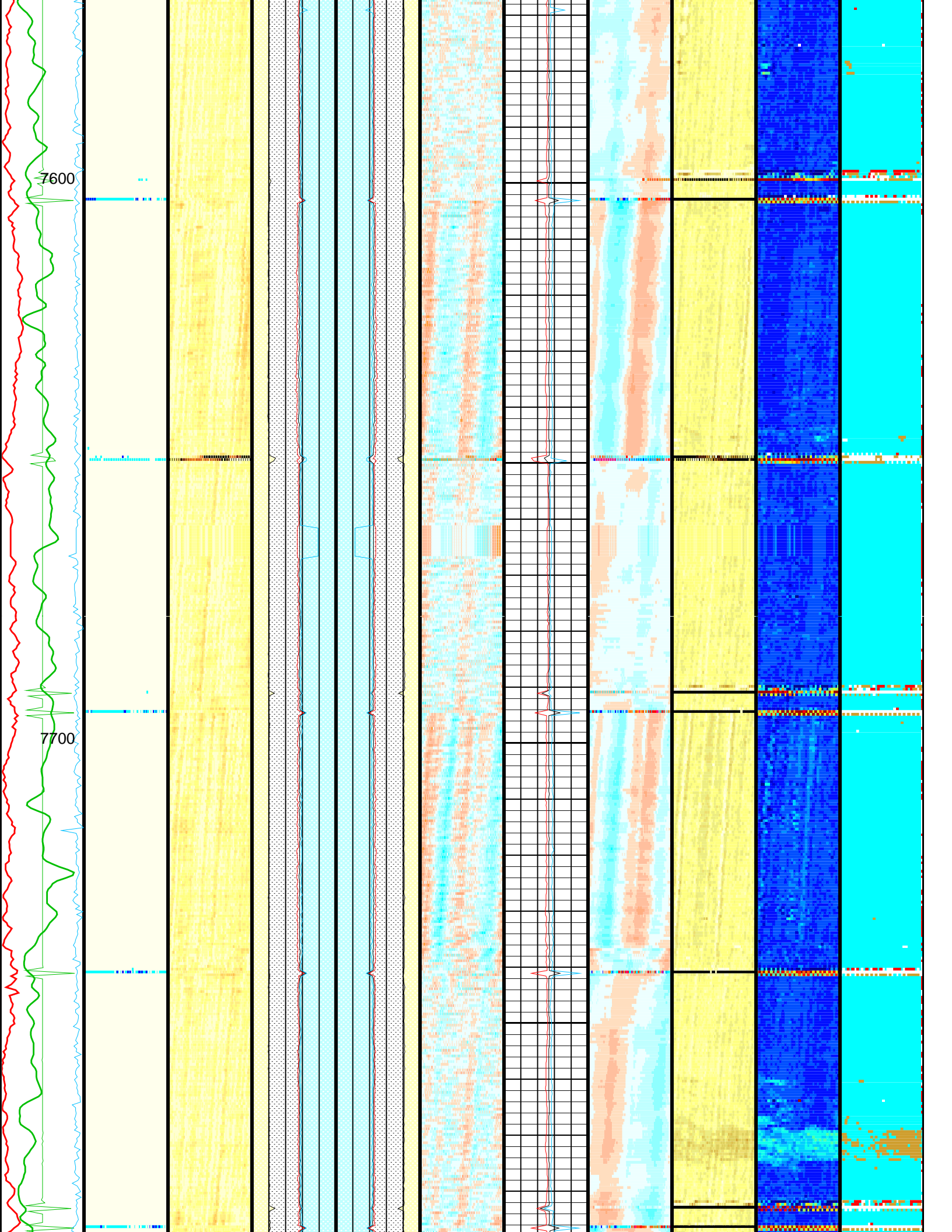


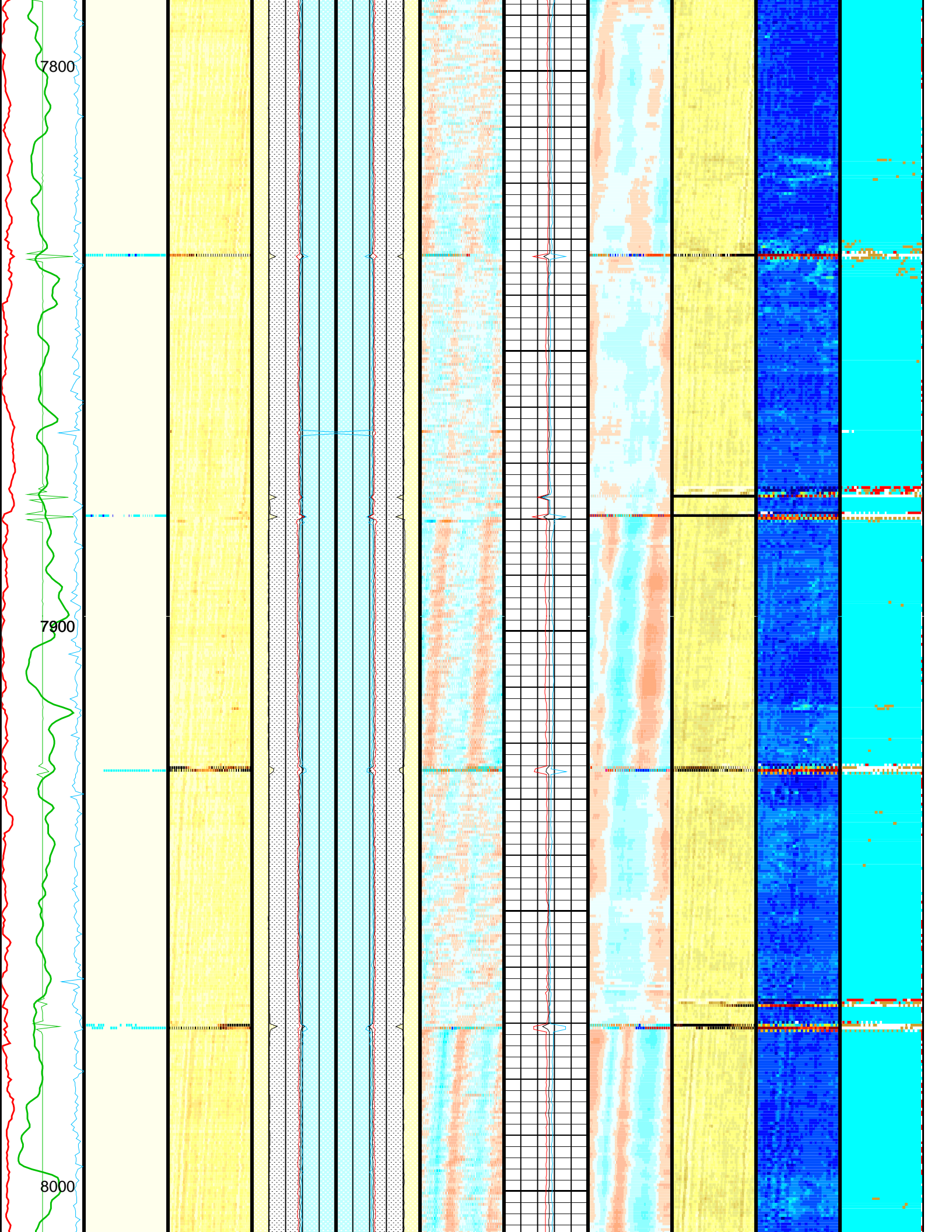


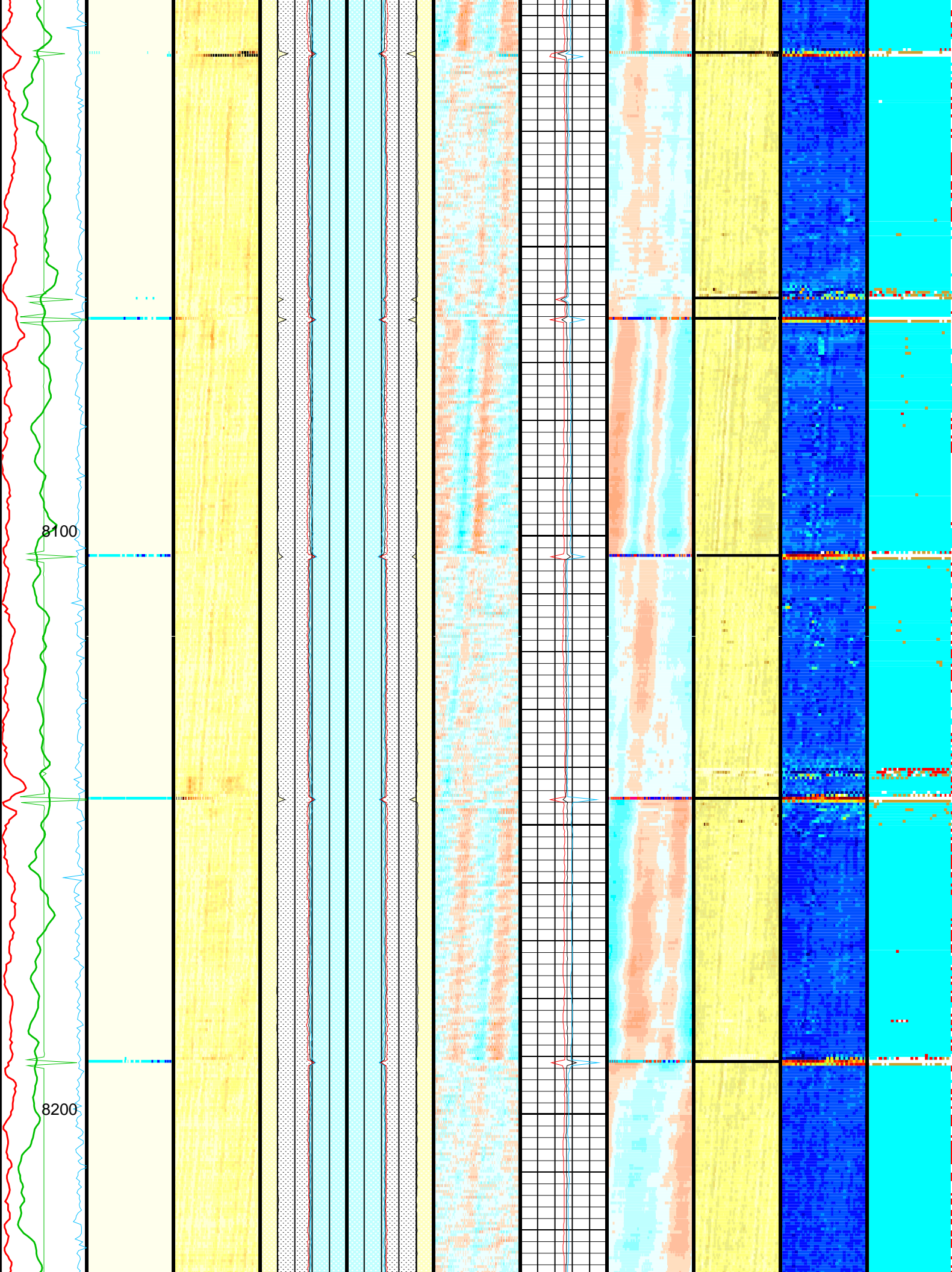


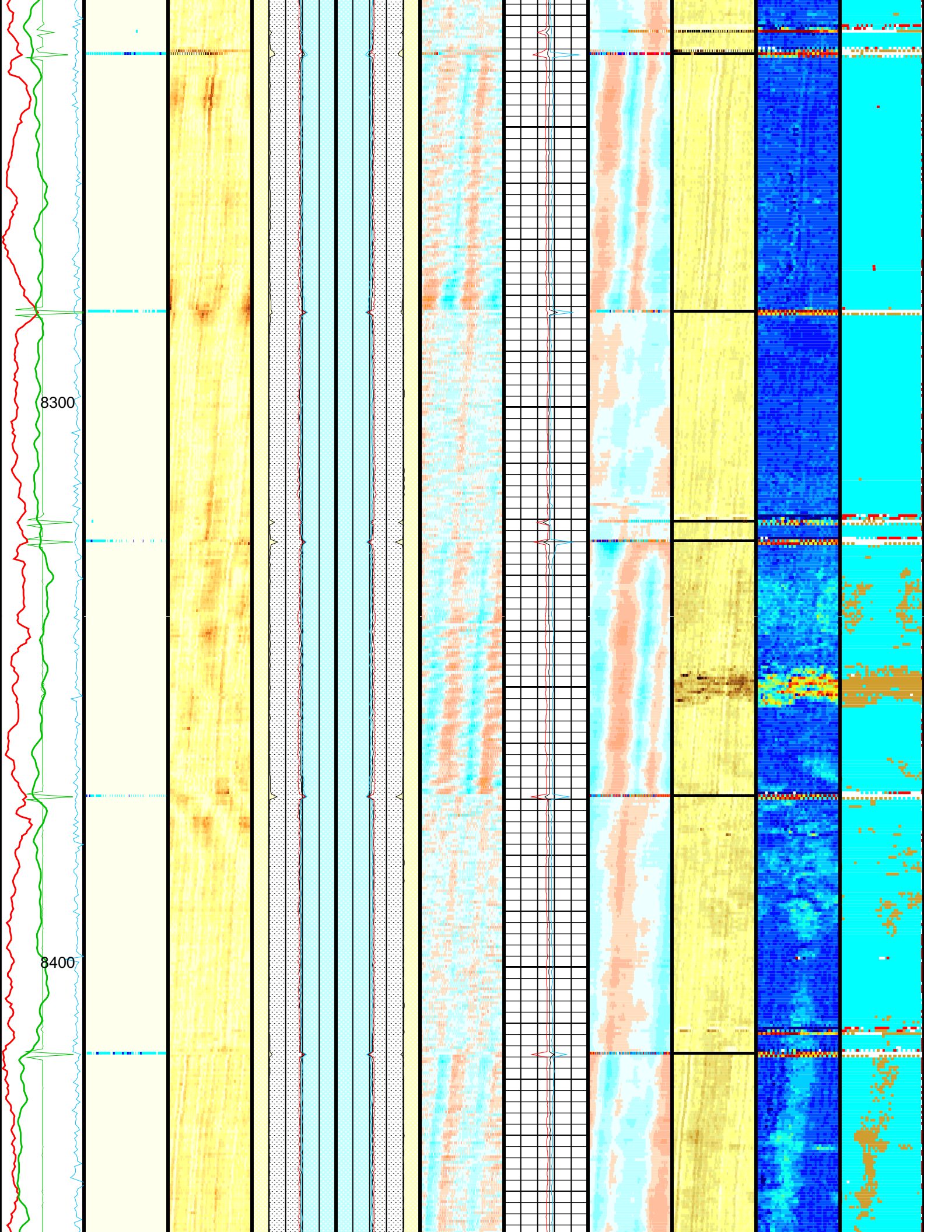


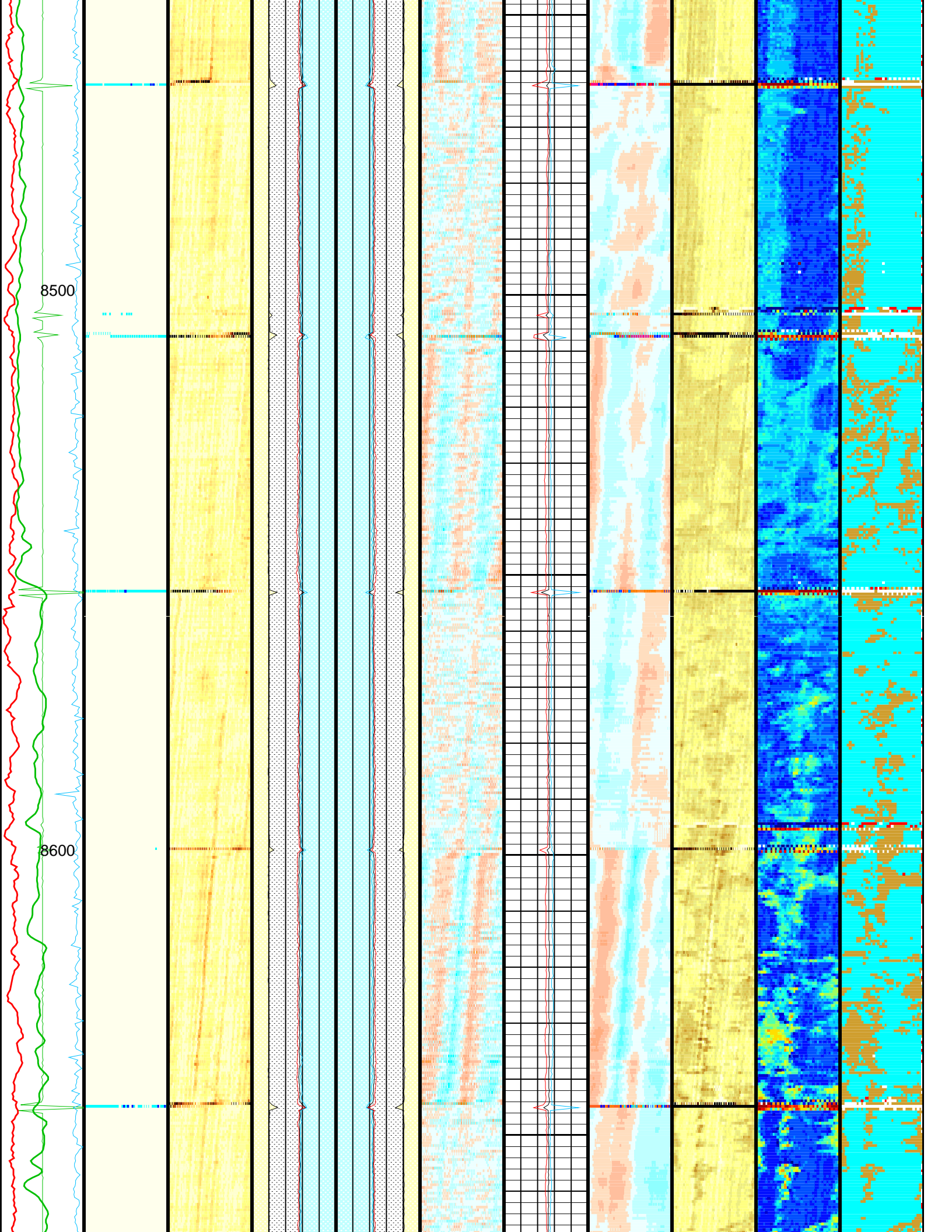


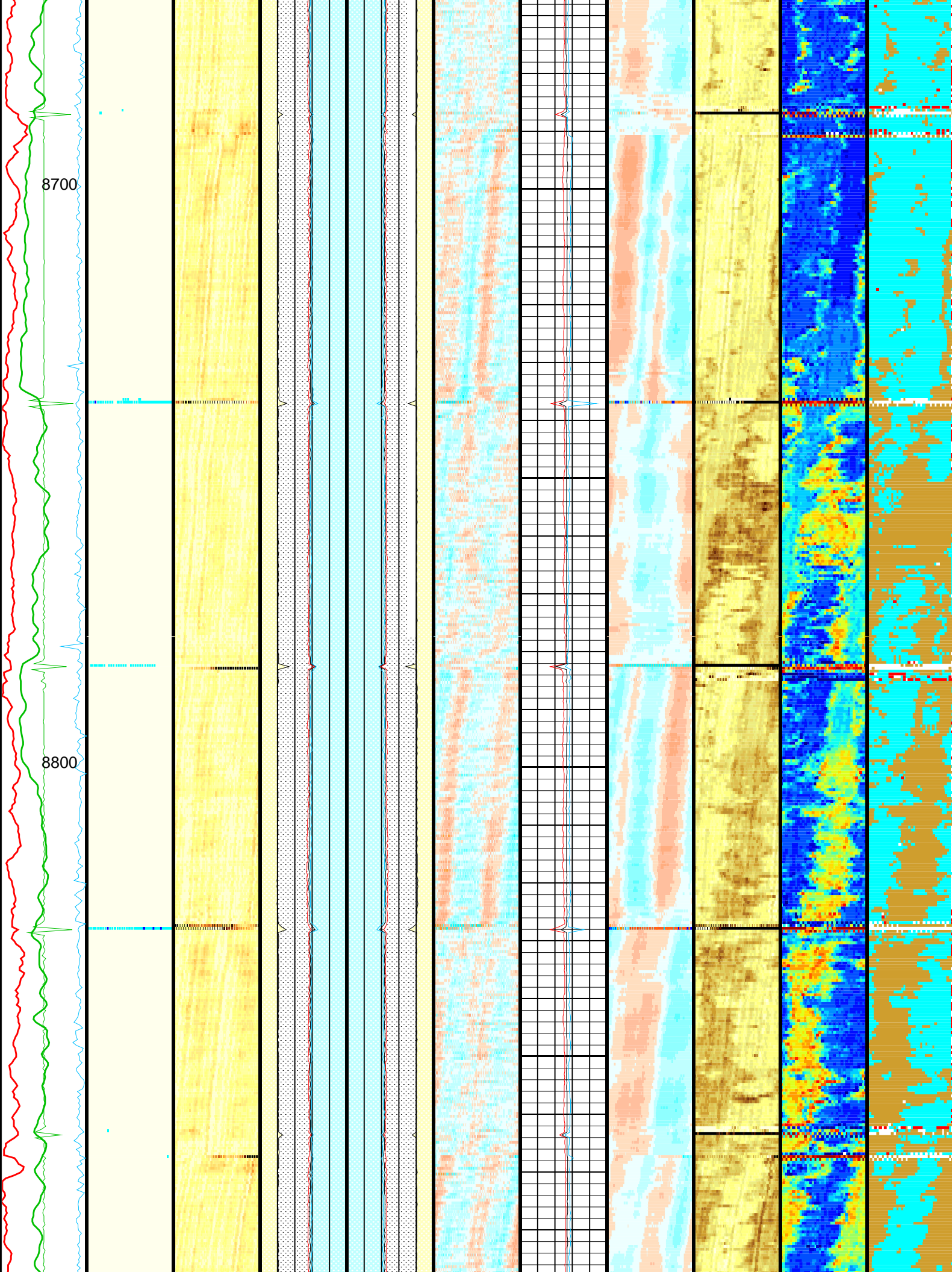


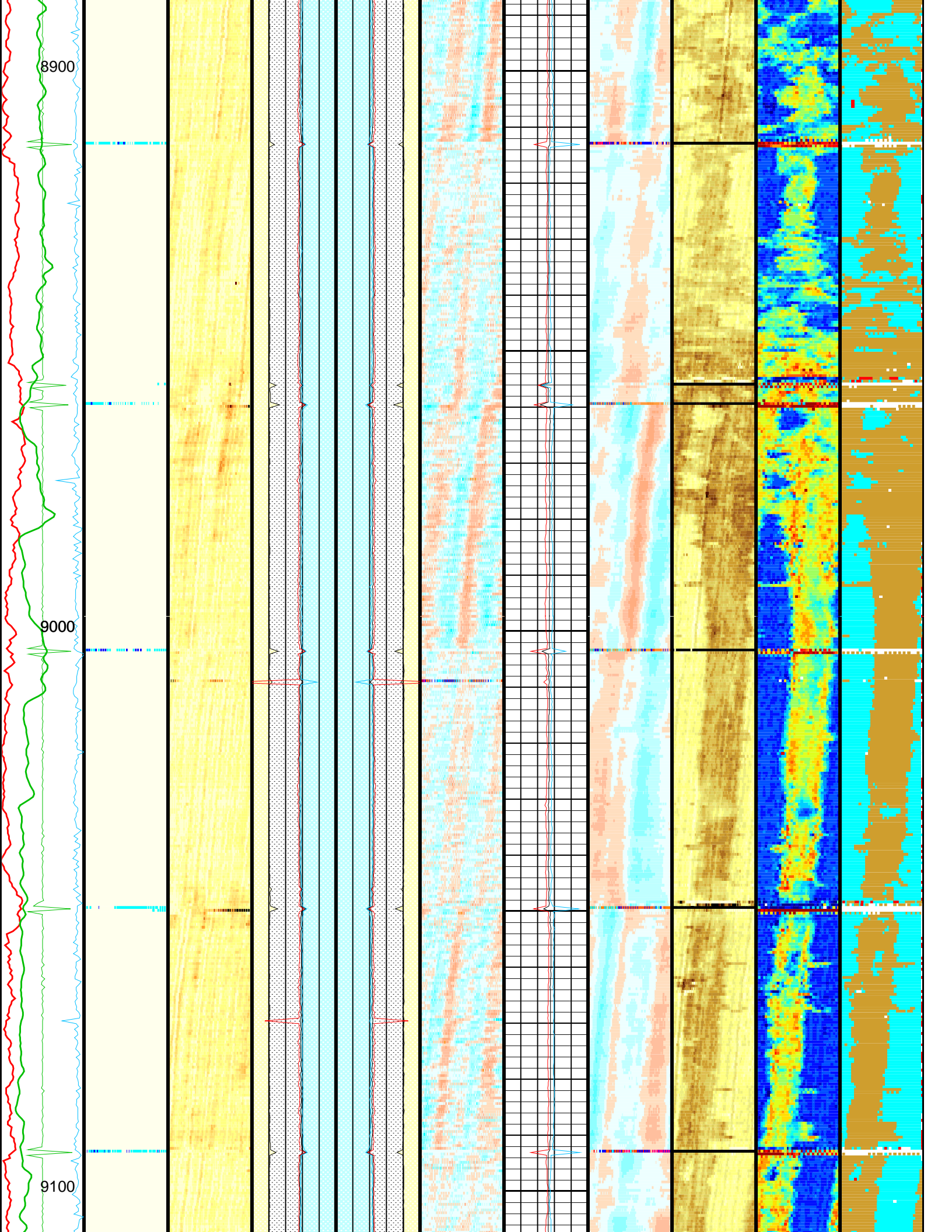


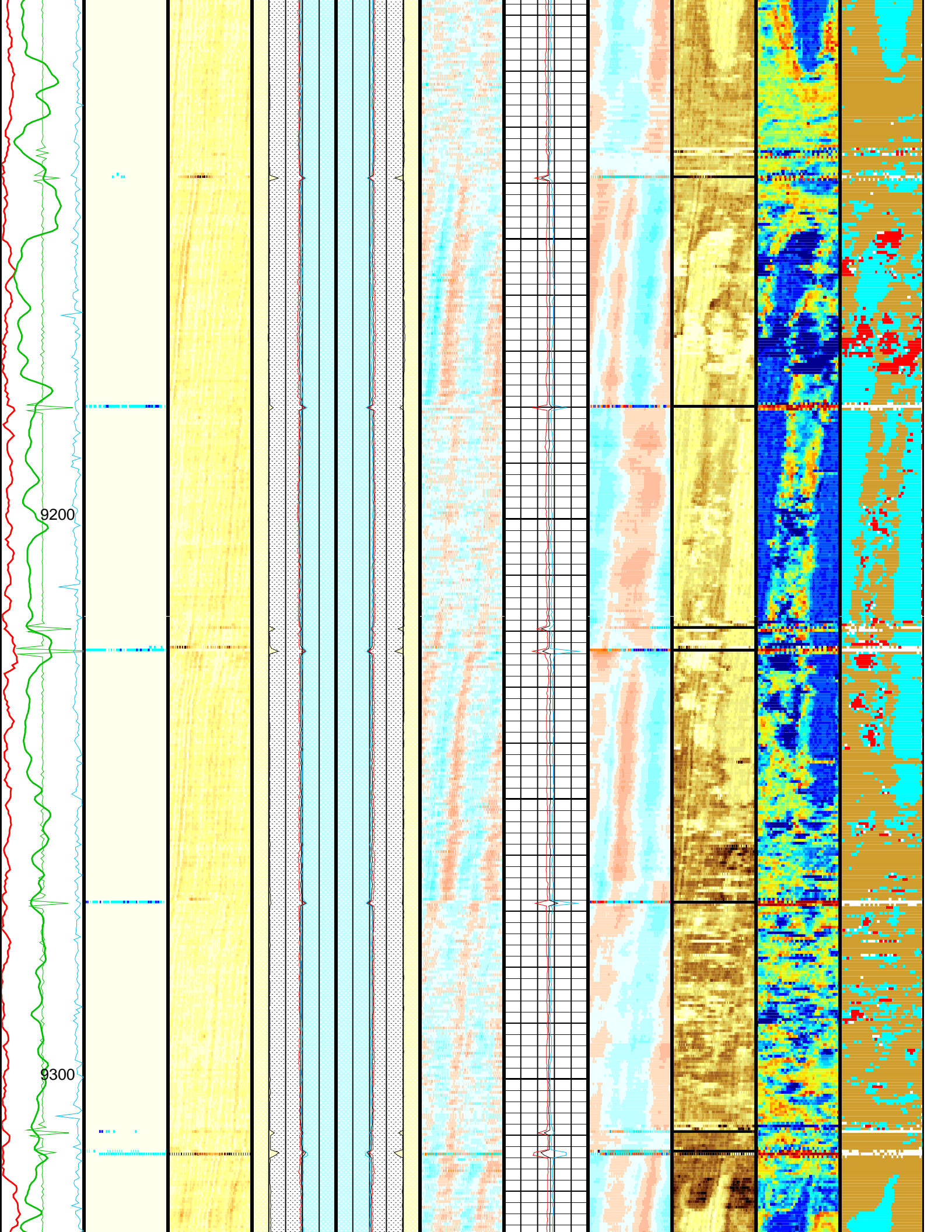


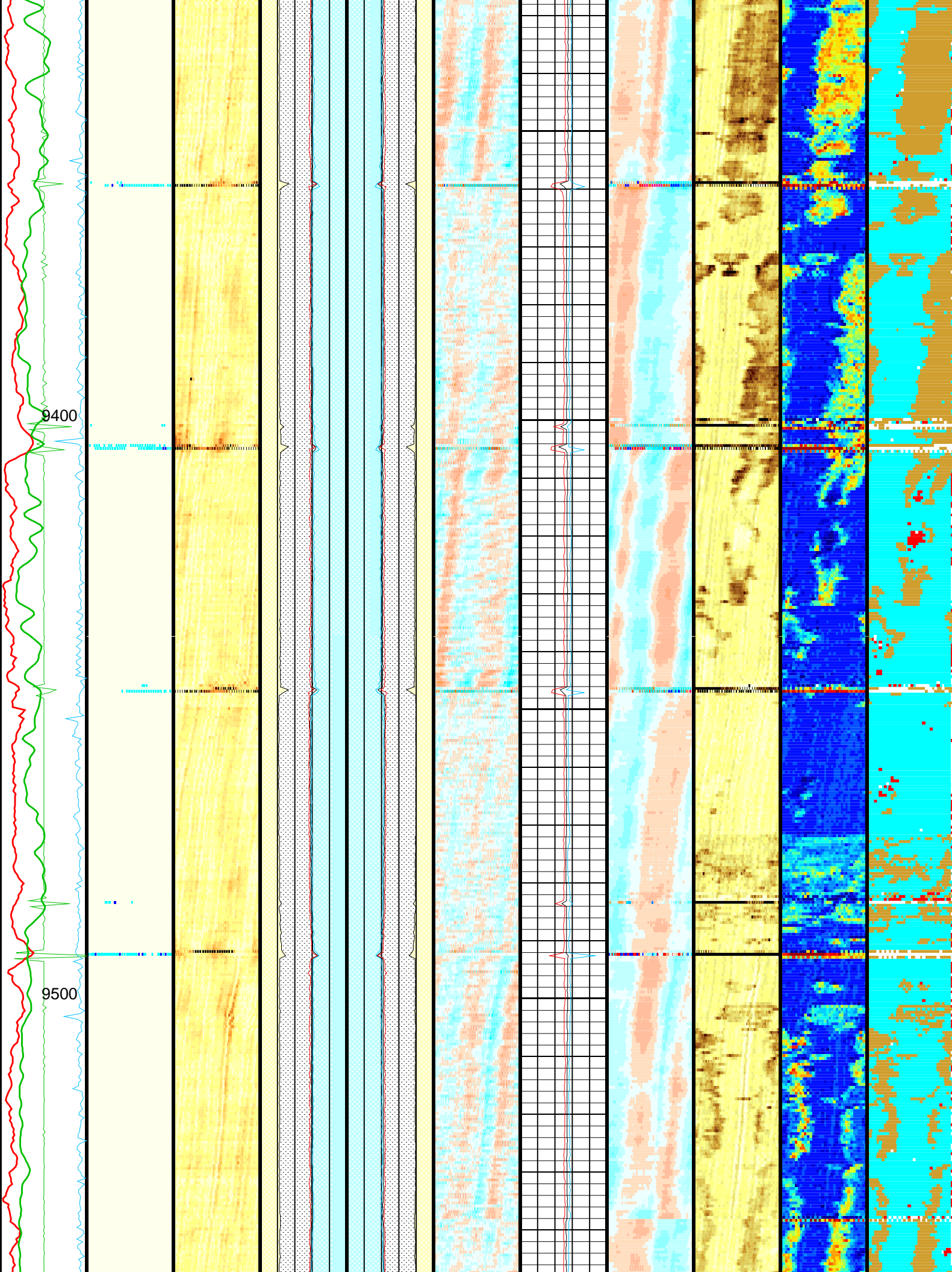


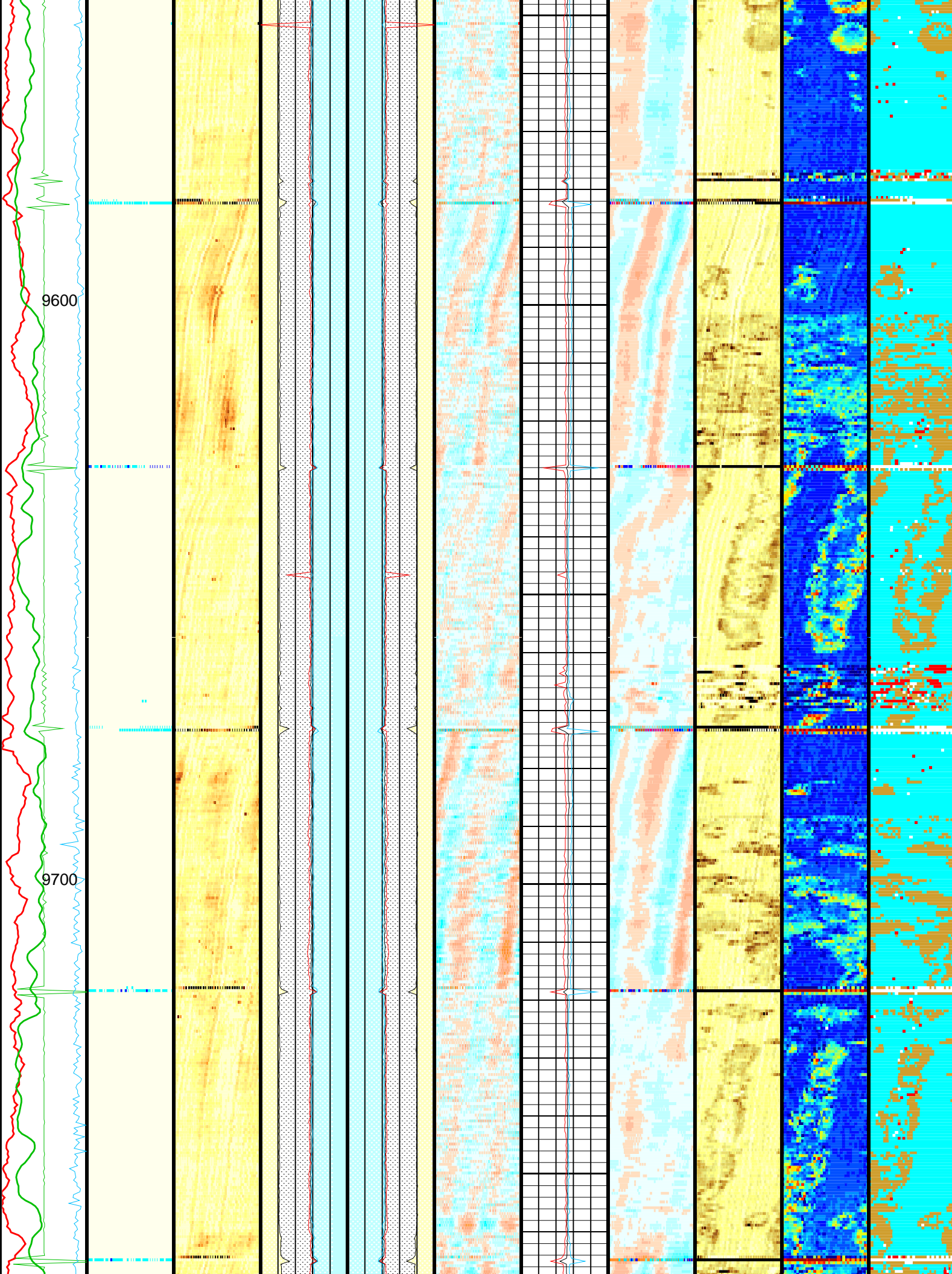


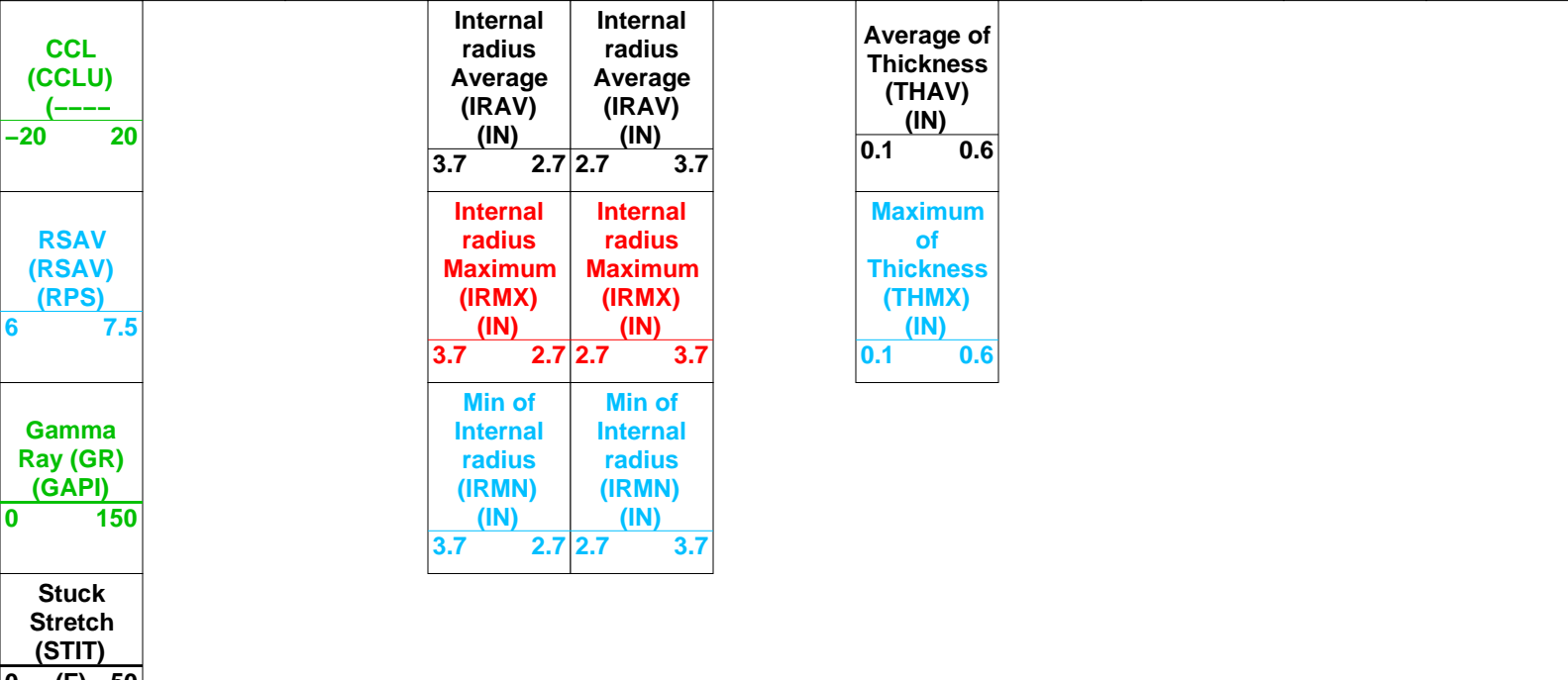
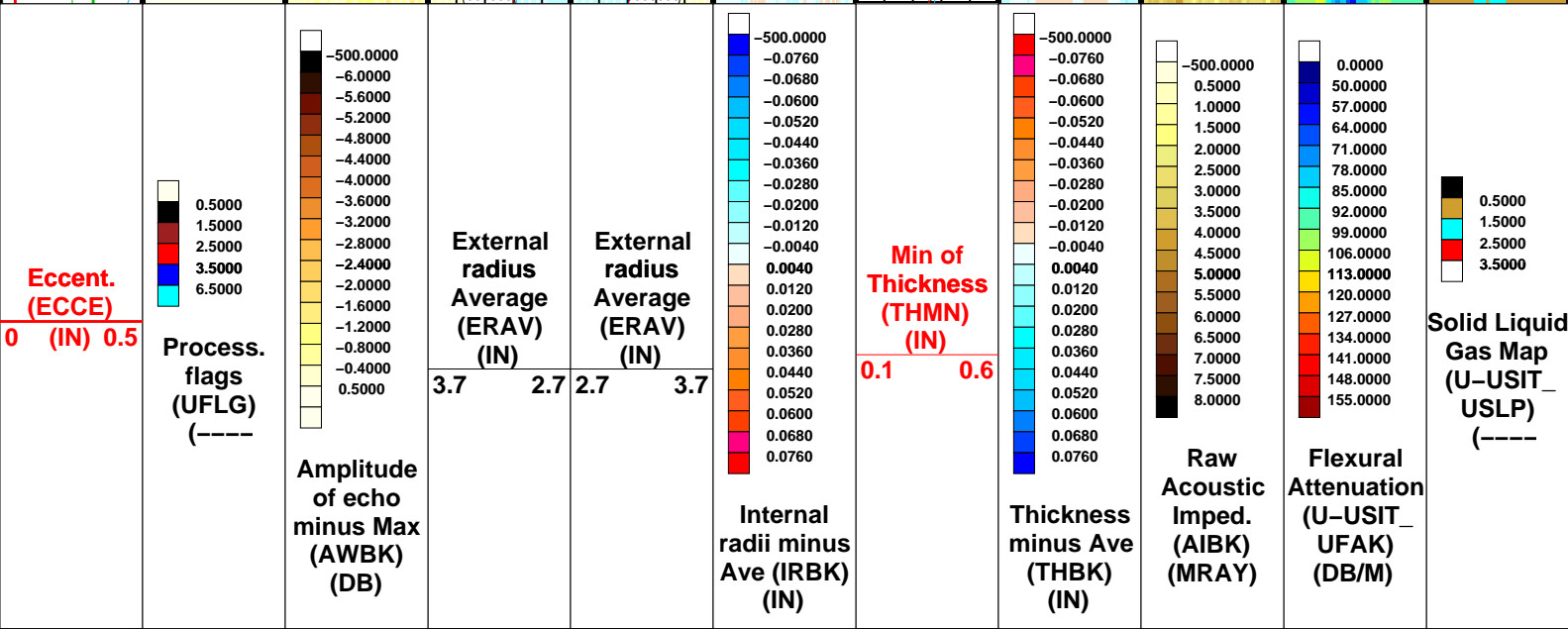
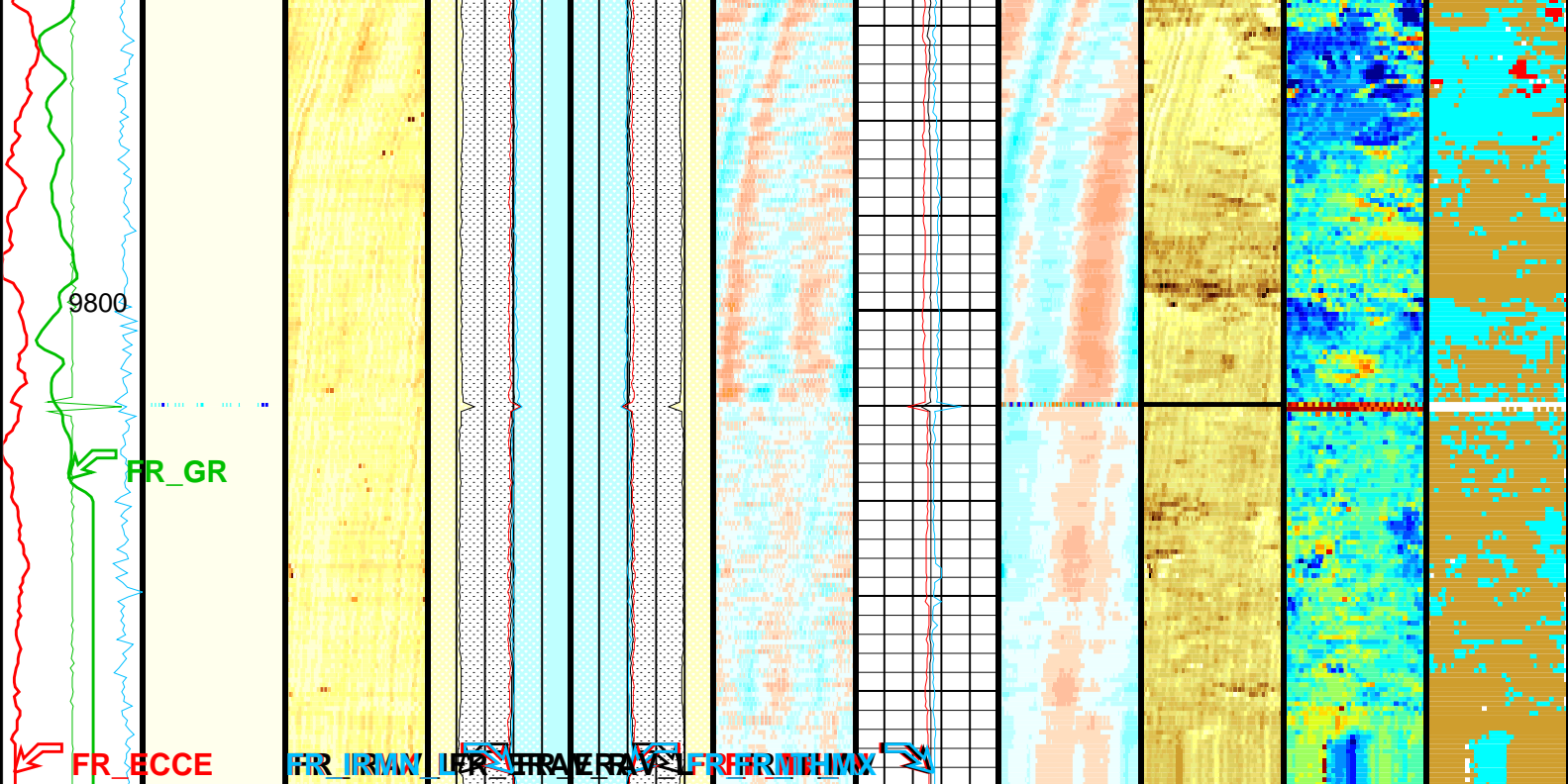












(F)	50
Cable Drag From D4T to STIT	
Tool/Tot. Drag From D4T to STIA	
Image rotation (UCAZ) (DEG)	
0	360

Format: USI_IBC_SLG_Composite

Vertical Scale: 5" per 100'

Graphics File Created: 20-Nov-2010 17:32

OP System Version: 17C0-154

USIT-D	17C0-154	HILTH-FTB	17C0-154
DTC-H	17C0-154		

All USI Images are outside views

USI : LOW Frequency Compression Mode Used For Logging.

Recommended casing thickness range for optimum cement impedance measurement : 0.27 to 0.6 IN.

Parameters

DLIS Name	Description	Value	
USIT-D: Ultrasonic Imaging - D			
AGMN	Minimum Gain of Cartridge	-4	DB
AGMX	Maximum Gain of Cartridge	20	DB
BERJ	Bad Echo Rejection	ON	
CDIA	Casing Outer Diameter	7	IN
CSDE	Casing Density	486.94	LBCF
CSID	Casing Inner Diameter	6.276	IN
DFVL	Default Fluid Velocity	206	US/F
DOT	Diameter of Transducer Sensor	2.874	IN
EMXV	EMEX Voltage	20	V
FSOD	Fluid Slowness Fits Casing Outer Diameter	5_UFSL_N_ZMUD	
IMAR	Image Rotation	OFF	
MW	Mud Weight	9.4	LB/G
RCOD	Reference Calibrator Outer Diameter	7	IN
RCSO	Reference Calibrator Standoff	1.1811	IN
RCTH	Reference Calibrator Thickness	0.2952	IN
TCUB	T^3 Processing Level	Vax_Loop	
THDH	Maximum Search Thickness (percentage of nominal)	130	
THDL	Minimum Search Thickness (percentage of nominal)	70	
THDP	Thickness Detection Policy	Fundamental	
THNO	Nominal Thickness of Casing	0.362	IN
U-USIT_CEMT	USIT Cement Type	ULTRA_LIGHT	
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	0	MRAY
U-USIT_IISR	USIT IBC Inverted Fluid Slowness Resolution	1.0_US_P_FT	
U-USIT_IIZR	USIT IBC Inverted ZMUD Resolution	0.050_MRAY	
U-USIT_OCDI	USIT Outer Casing Diameter	0	IN
U-USIT_OCSH	USIT Outer Casing Shoe	0	FT
U-USIT_OCWE	USIT Outer Casing Weight	0	LB/F
U-USIT_TIEB	IBC Third Interface Echo Bin Processing	YES	
U-USIT_TIEC	IBC Third Interface Echo Cleaning	NONE	
U-USIT_TIEM	IBC Third Interface Echo Multi Tracking	NO	
U-USIT_TIEP	IBC Third Interface Echo Policy	BFEP	
U-USIT_TIER	IBC Third Interface Echo Receivers	BOTH	
U-USIT_U3WE	Third Interface Echo Window End	110	US
U-USIT_UBTP	USIT Bottom Transducer Position	UNKNOWN	
U-USIT_UFAO	USIT Flexural Attenuation Offset	-5	DB/M

U-USIT_UIAP	USIT IBC Answer Product Enabled	SolidLiquidGasMap	
U-USIT_UIST	Ultrasonic IBC Sonde Type	Sub_ibcs_B	
U-USIT_UTAN	USIT Transducer Angles	33_DEG	
UMAO	USIT Measurement Angular Offset	-10	DEG
USTO	Ultrasonic Time Offset	-2	US
USUB	Ultrasonic Subassembly Identifier	Sub_7_inch	
UWKM	Ultrasonic Working Mode	5DEG_6IN_136UNF_LF	
VCAS	Ultrasonic Transversal Velocity in Casing	51.4	US/F
WLEN	T^3 Processing Length	21.7078	US
ZCAS	Acoustic Impedance of Casing	46.2537	MRAY
ZINI	Initial Estimate of Cement Impedance	-1	MRAY
ZMUD	Acoustic Impedance of Mud	1.9	MRAY
ZTCM	Acoustic Impedance Threshold for Cement	2.6	MRAY
ZTGS	Acoustic Impedance Threshold for Gas	0.3	MRAY
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth – Driller	9967.00	FT
TDL	Total Depth – Logger	9850.00	FT
System and Miscellaneous			
BS	Bit Size	9.875	IN
CWEI	Casing Weight	26.00	LB/F
DO	Depth Offset for Playback	0.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	RECOMPUTE	

Input DLIS Files				
DEFAULT	USI_TLD_MCFL_CNL_010LUP	FN:9	PRODUCER	20-Nov-2010 16:25
Output DLIS Files				
DEFAULT	USI_TLD_MCFL_CNL_004PUP	FN:3	PRODUCER	20-Nov-2010 17:32

Schlumberger

VDL WIDE

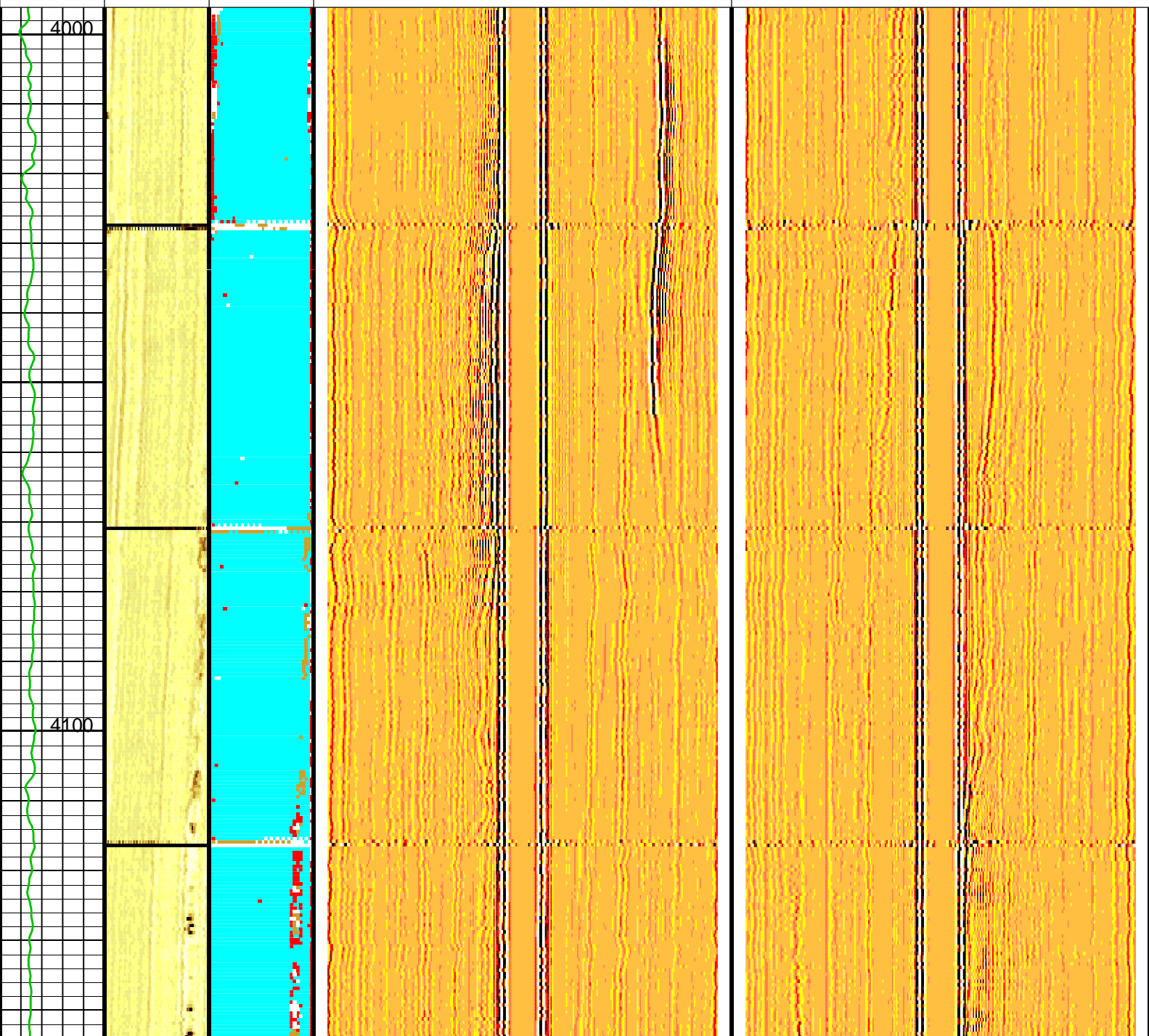
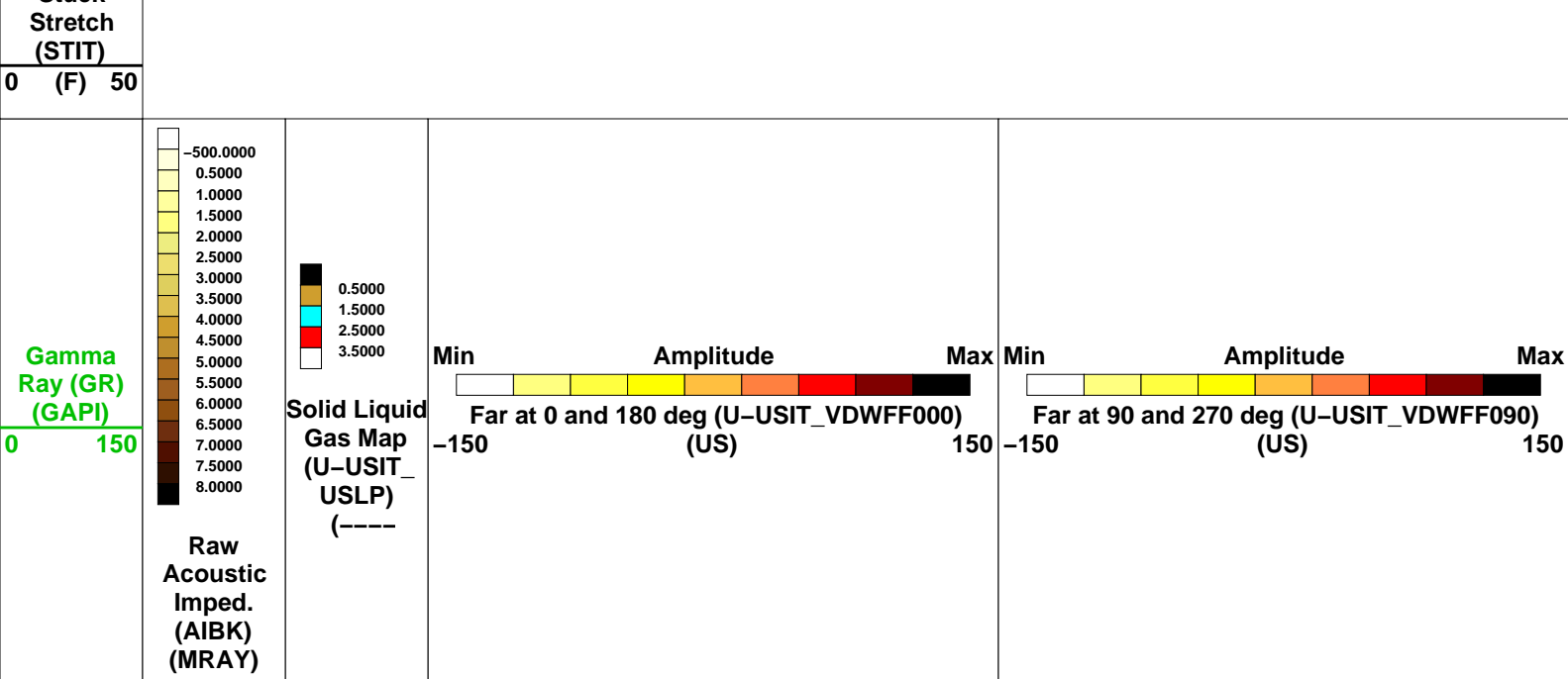
MAXIS Field Log

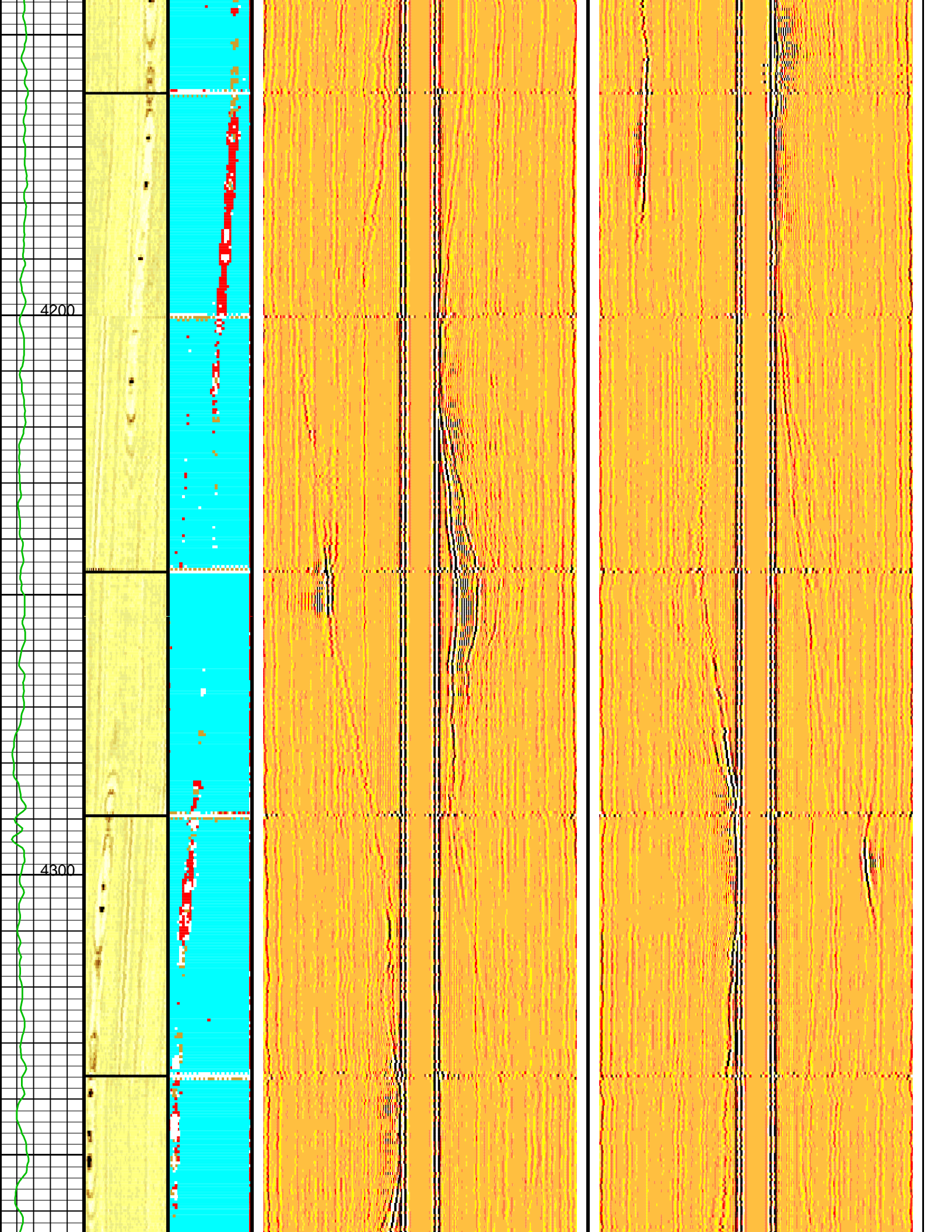
Company: ExxonMobil Production Corp				Well: PCU 296-5A5
Input DLIS Files				
DEFAULT	USI_TLD_MCFL_CNL_010LUP	FN:9	PRODUCER	20-Nov-2010 16:25
Output DLIS Files				
DEFAULT	USI_TLD_MCFL_CNL_004PUP	FN:3	PRODUCER	20-Nov-2010 17:32
OP System Version: 17C0-154				
USIT-D	17C0-154	HILTH-FTB	17C0-154	
DTC-H	17C0-154			

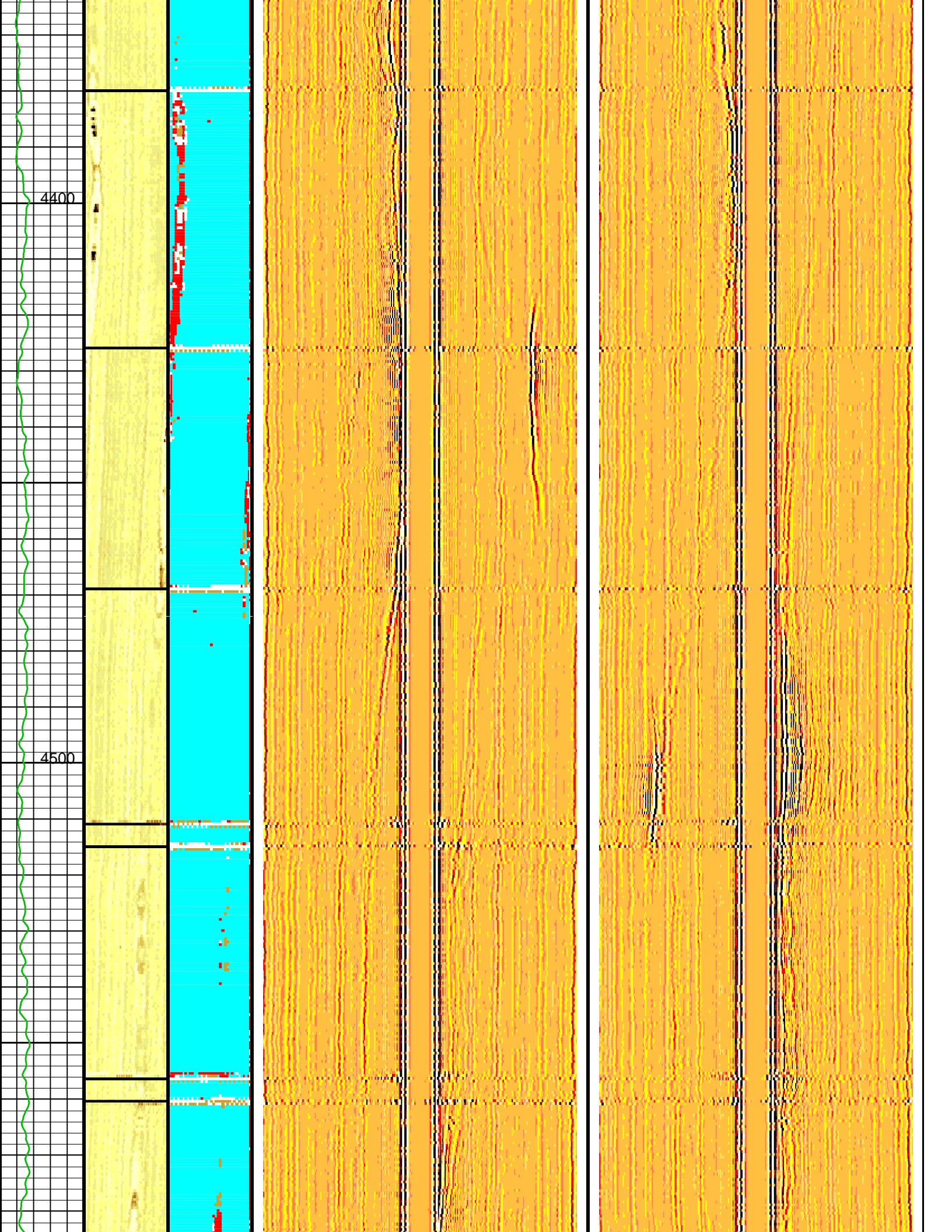
Tool/Tot.
Drag
From D4T
to STIA

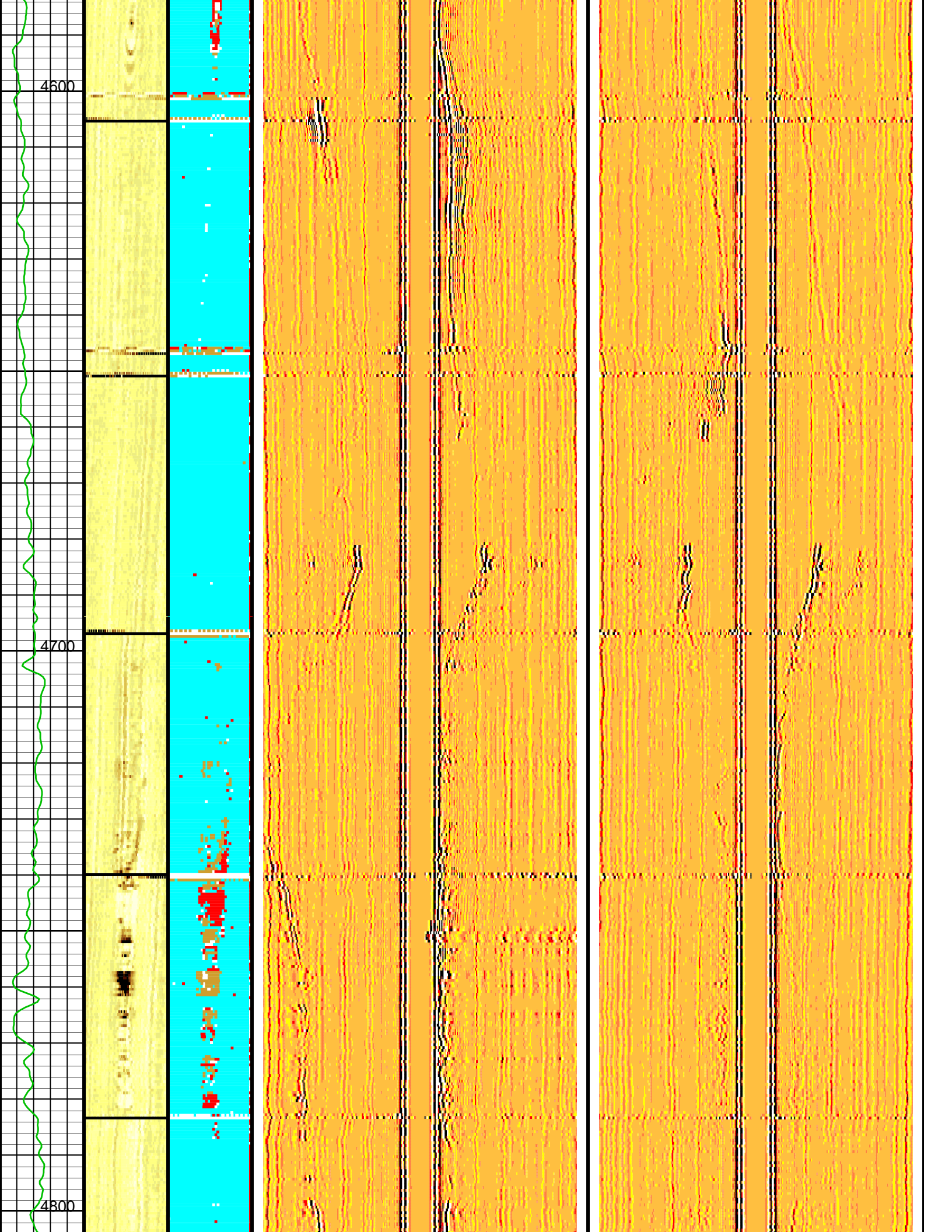
Cable
Drag
From D4T
to STIT

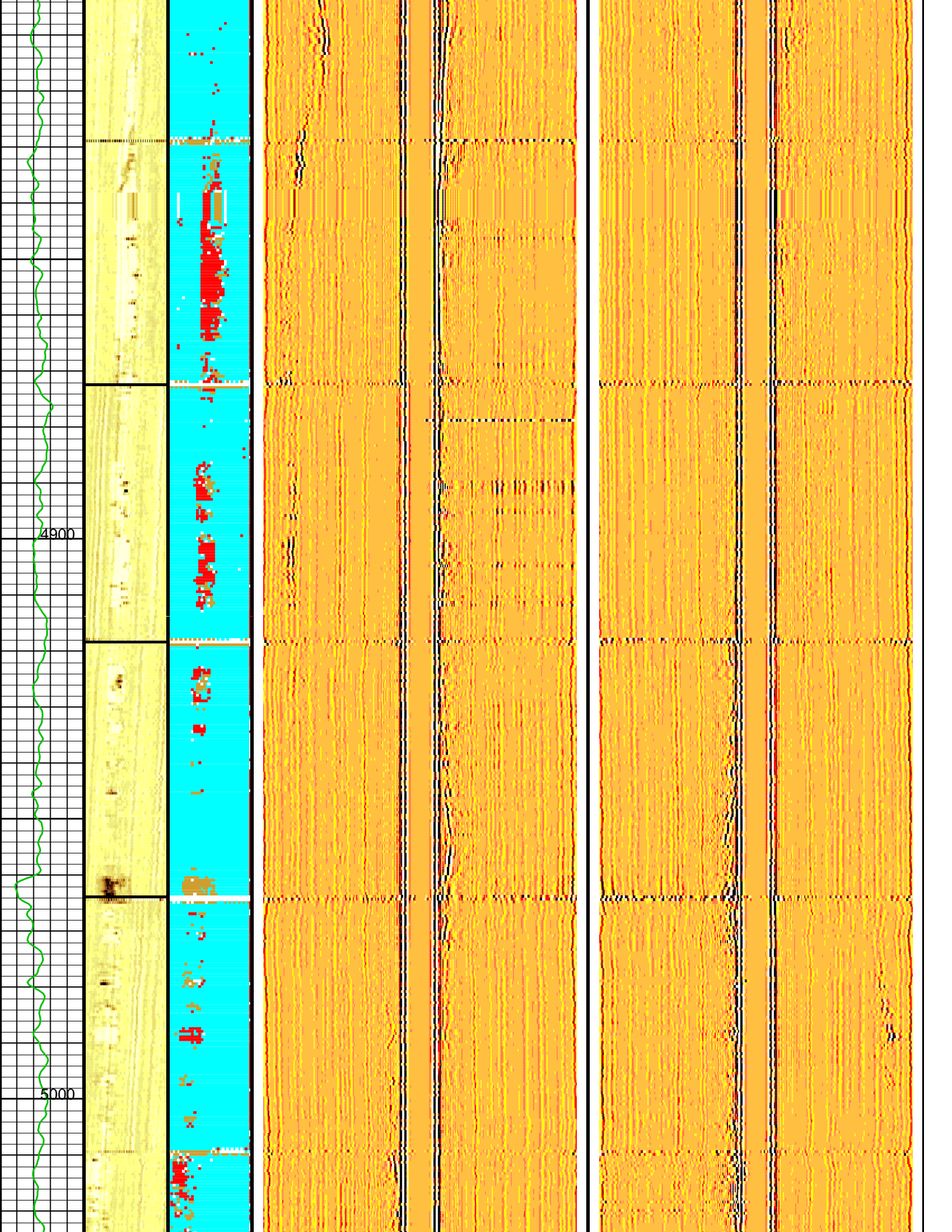
Stuck

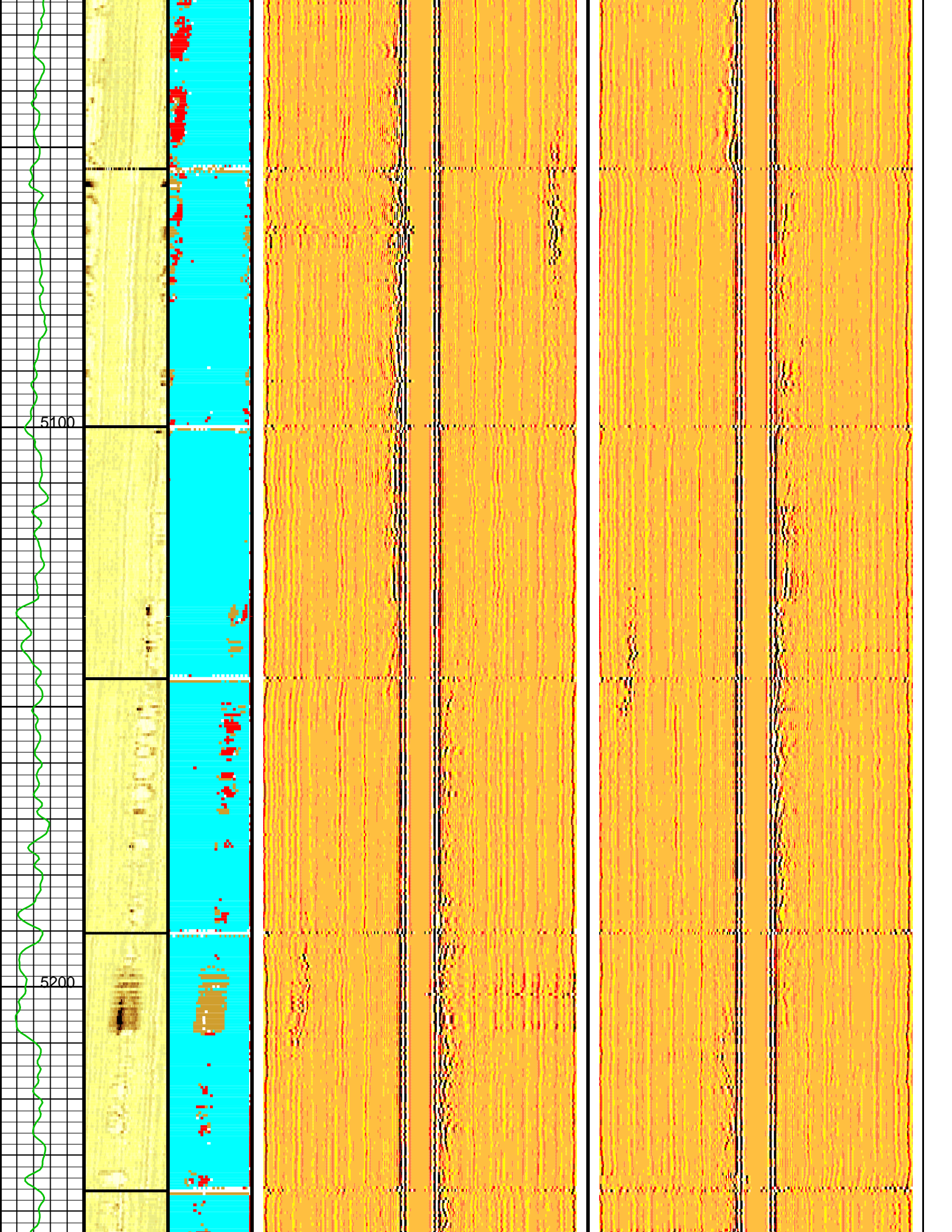


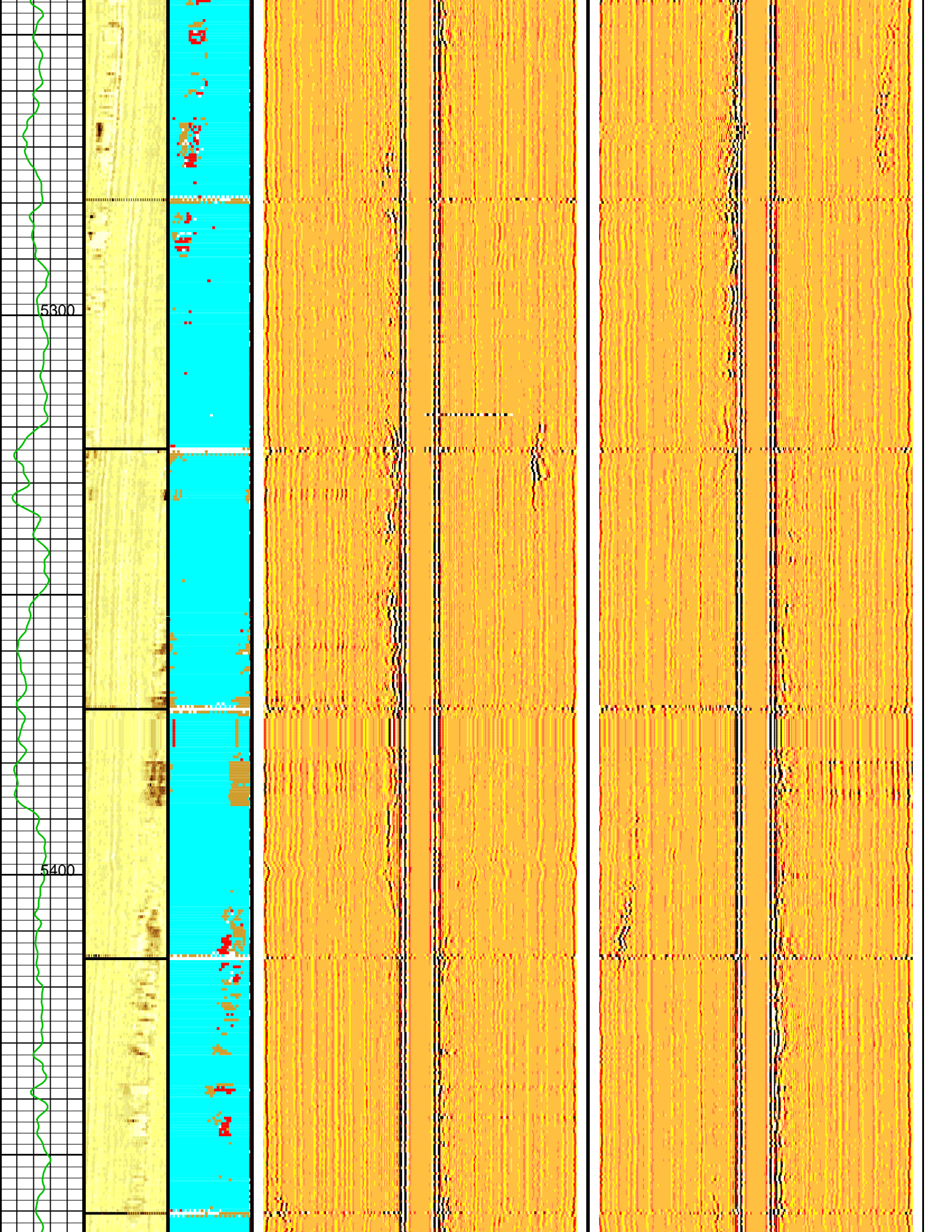


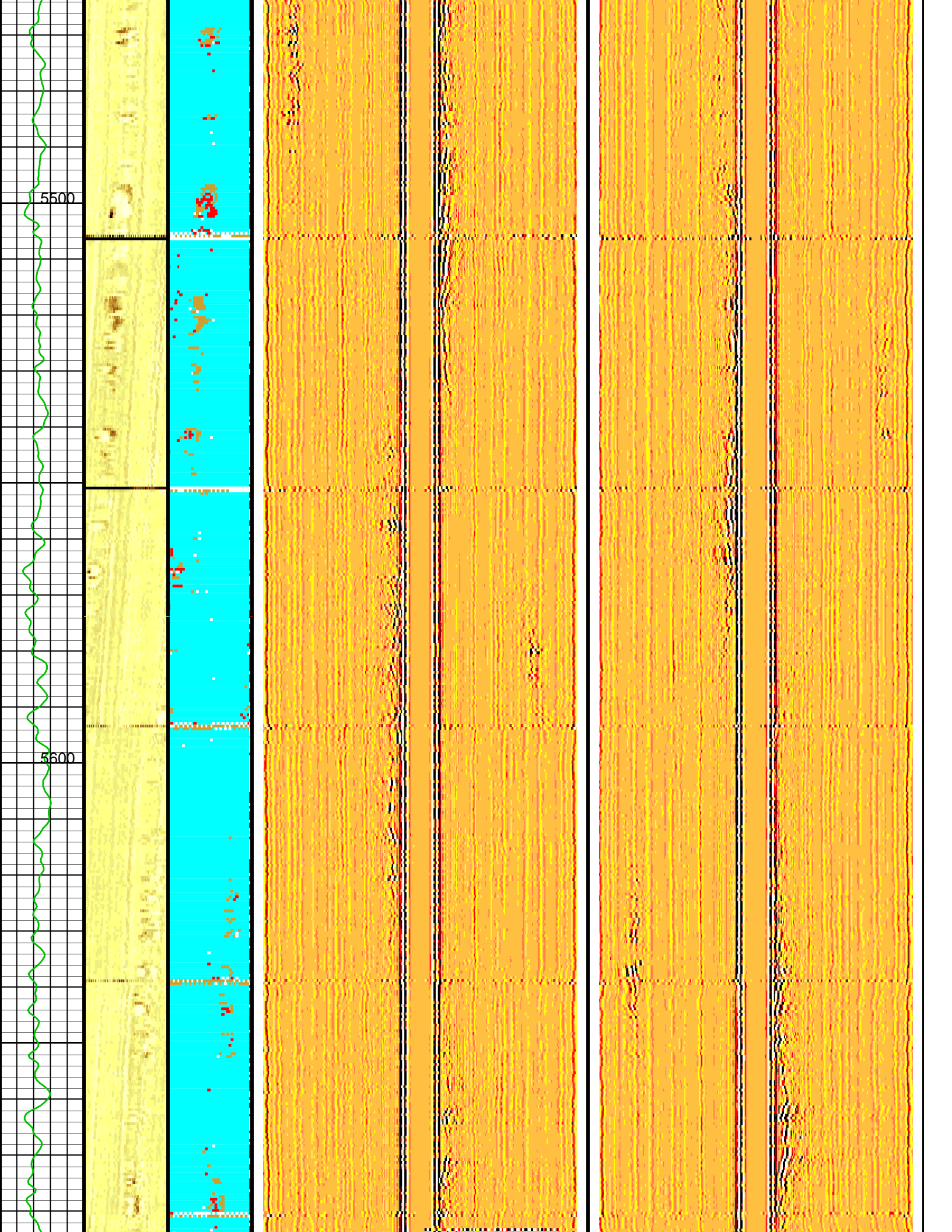


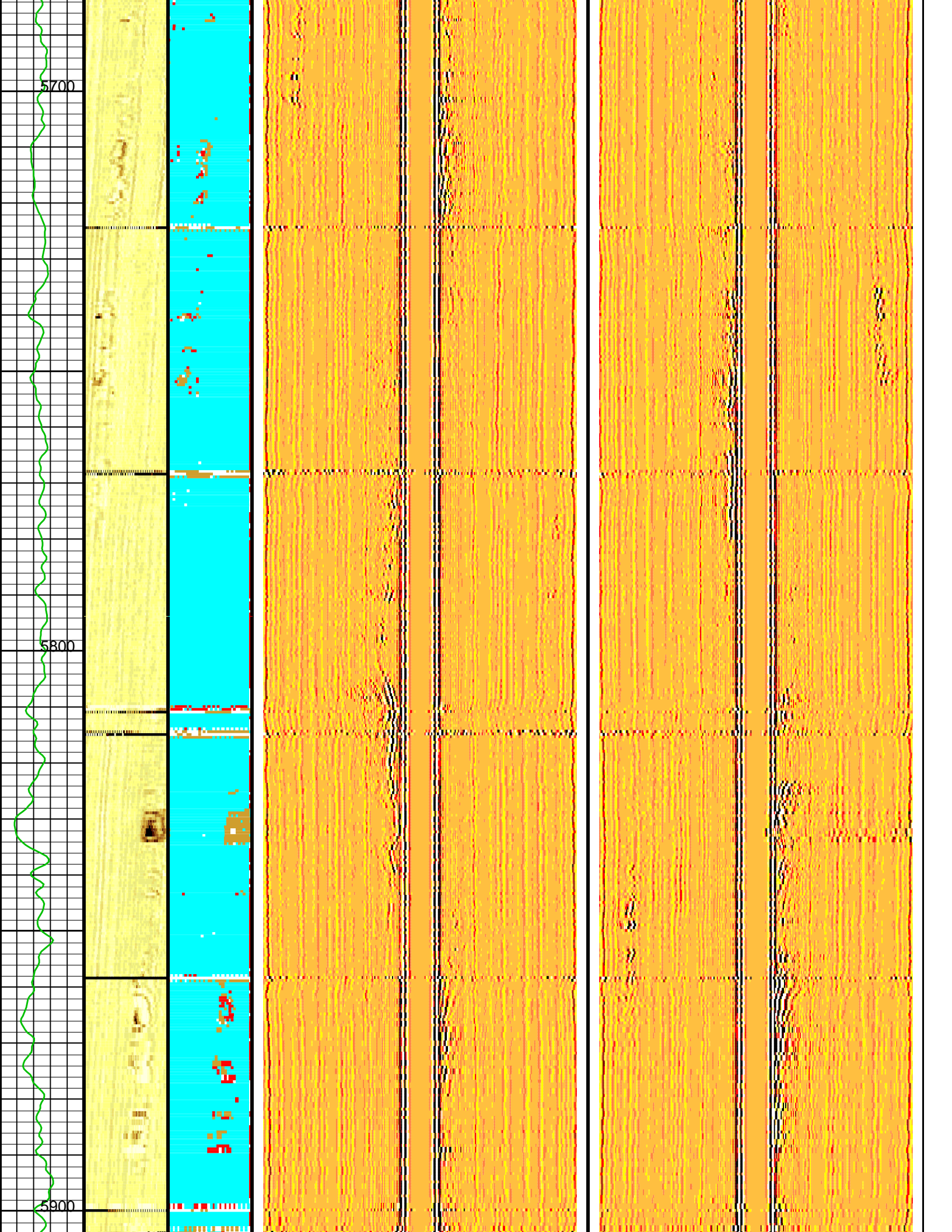


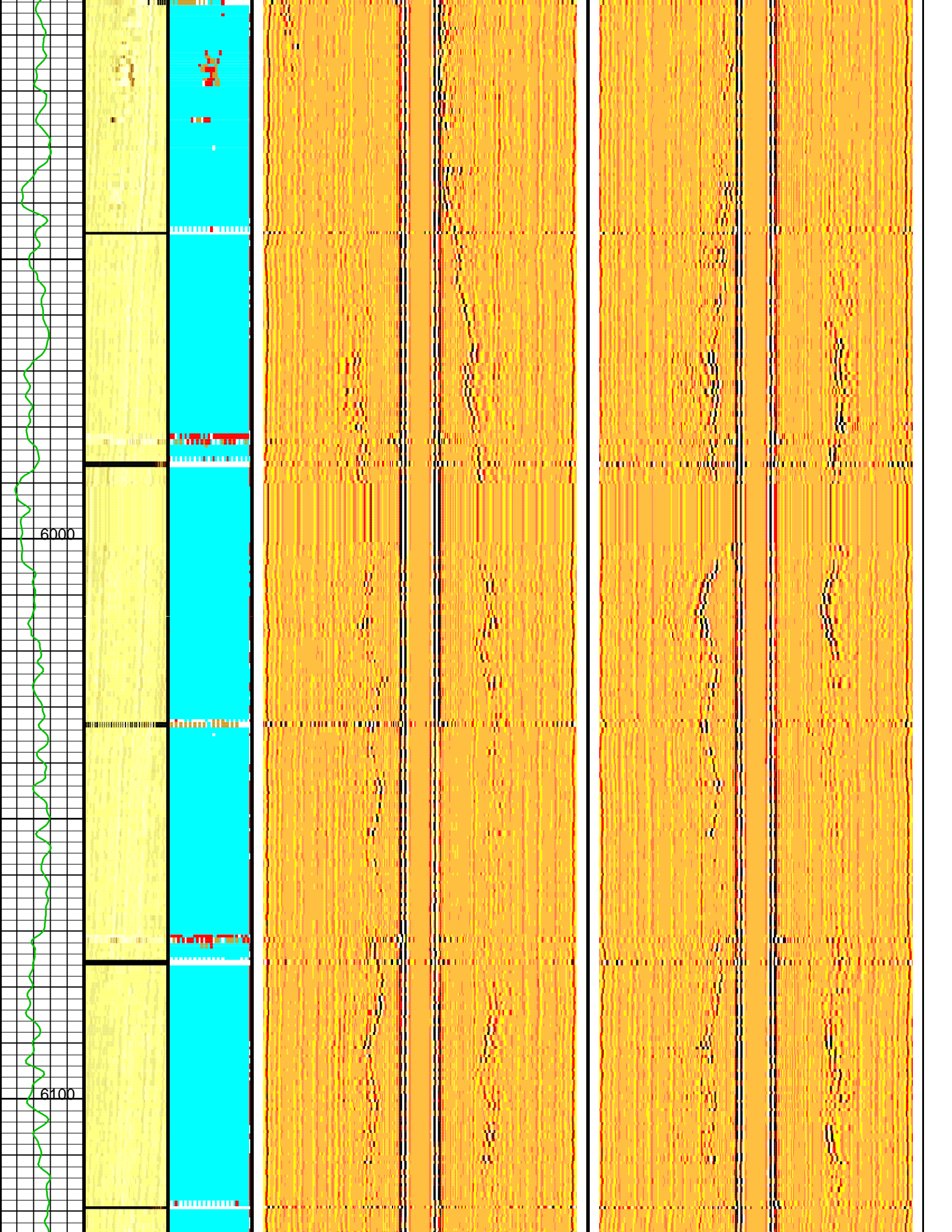


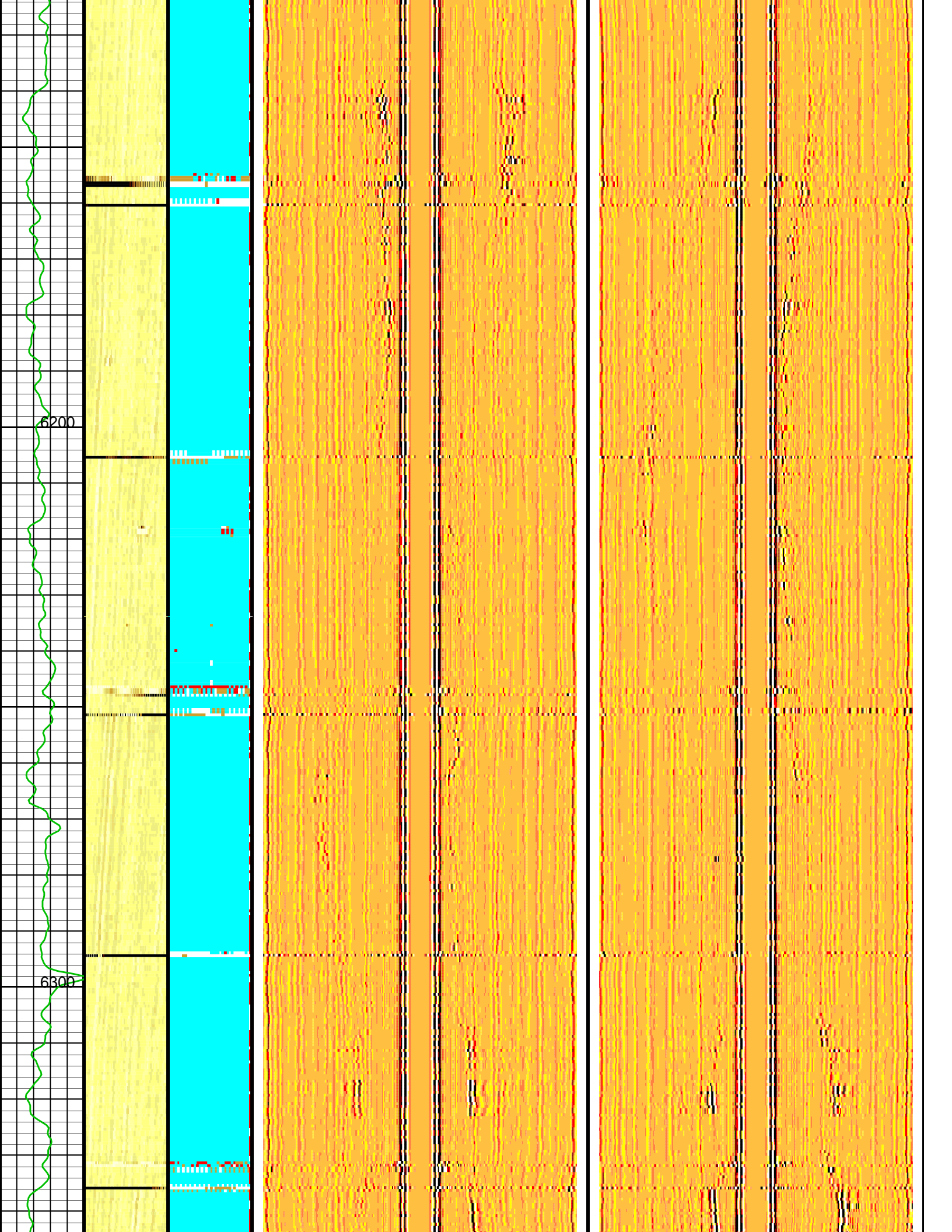


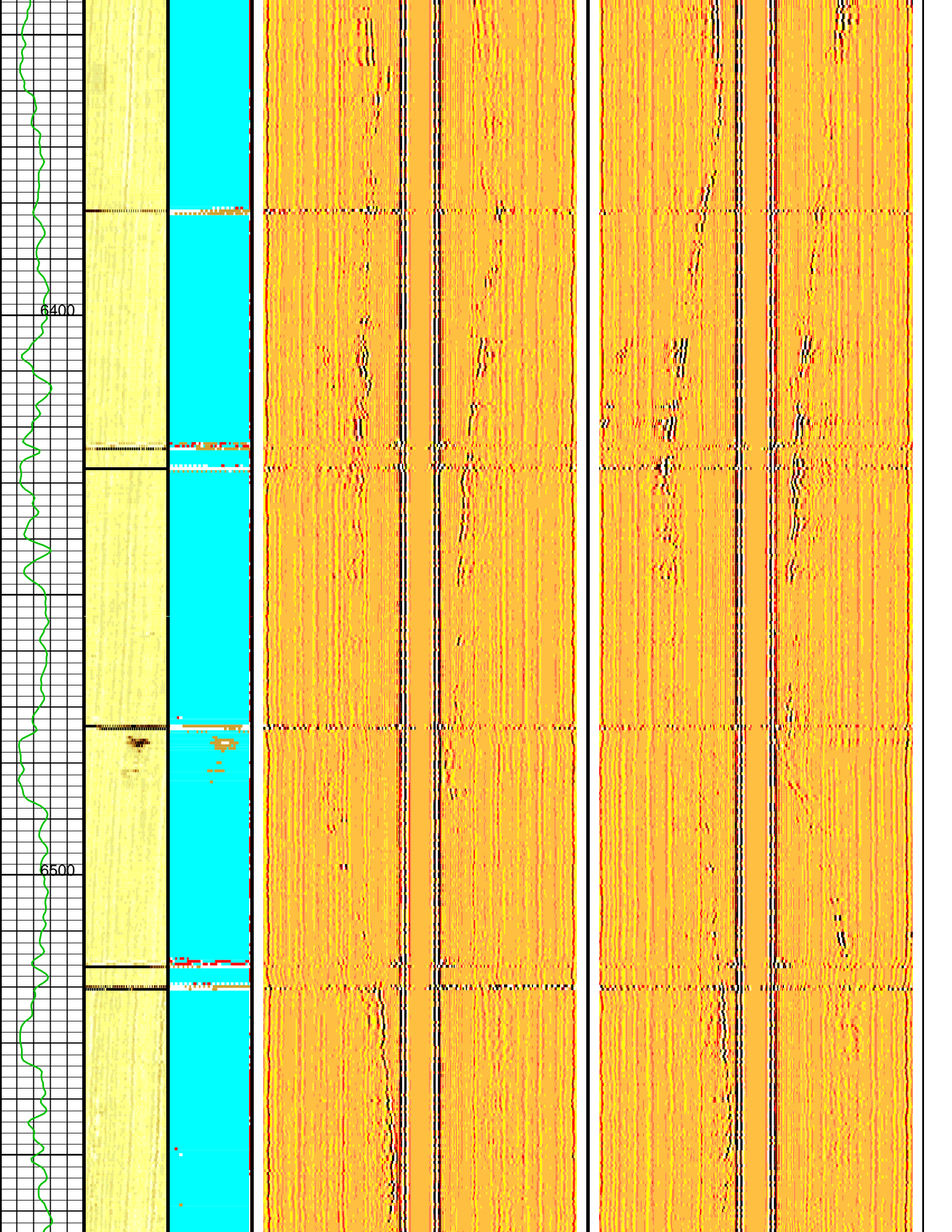


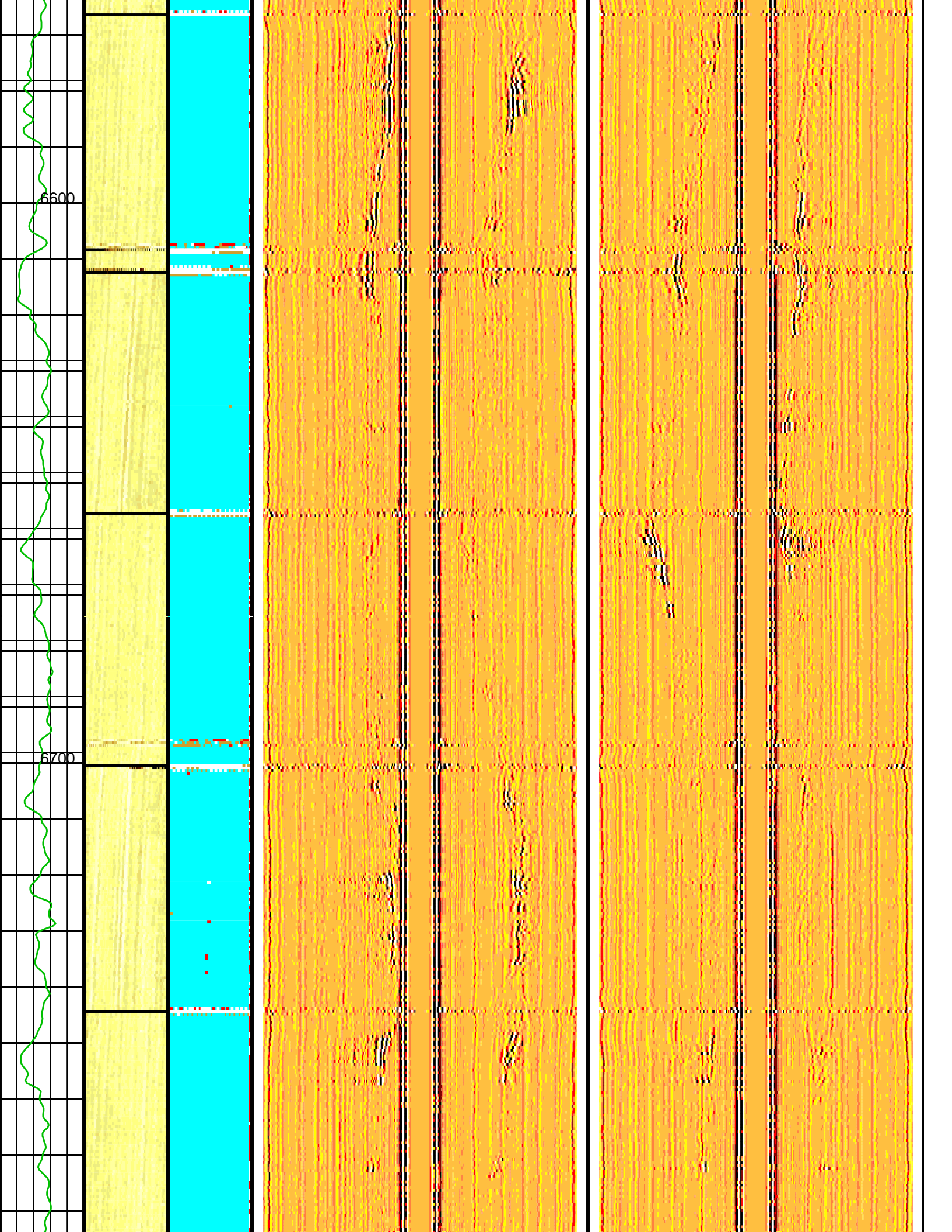


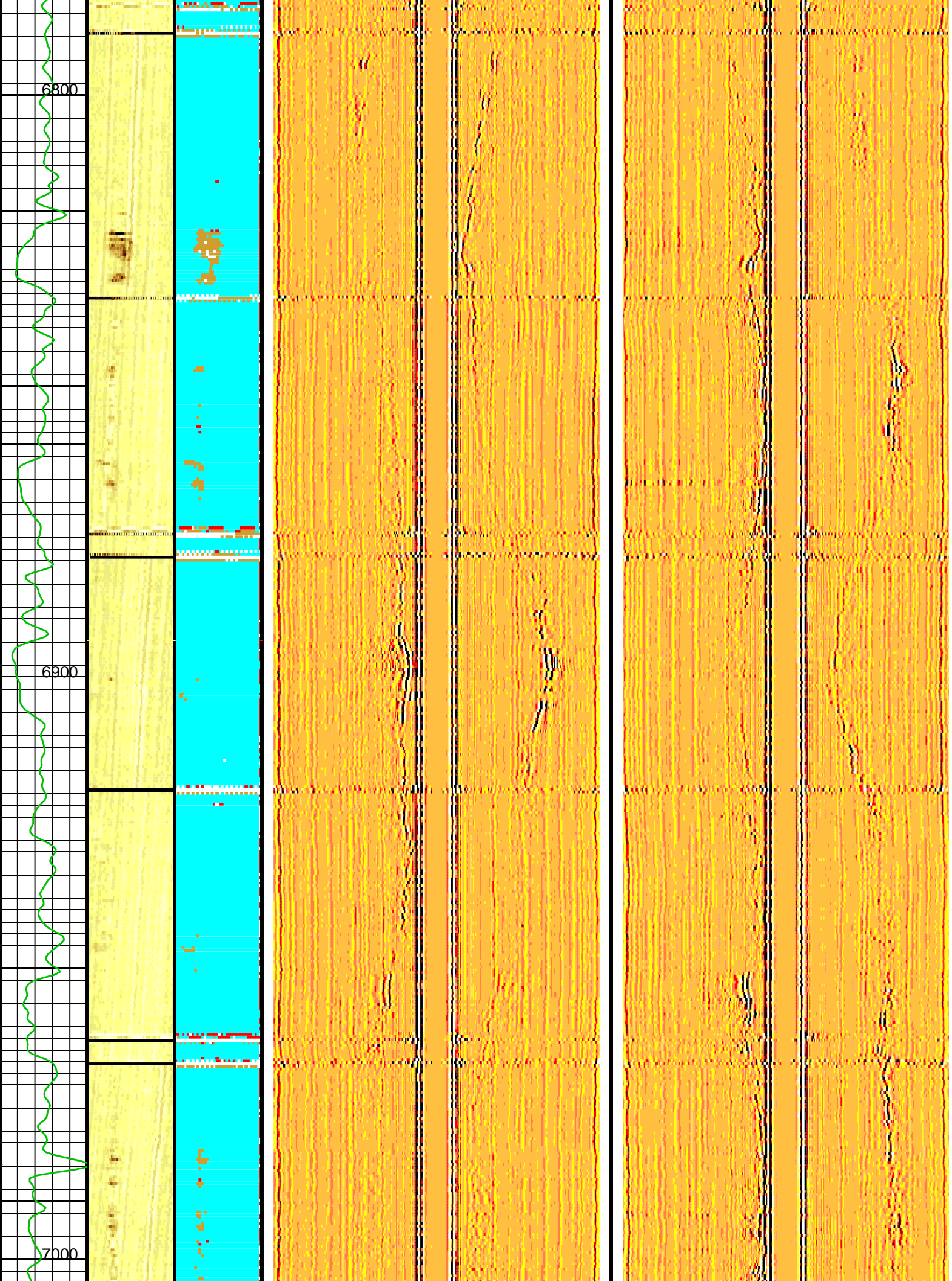


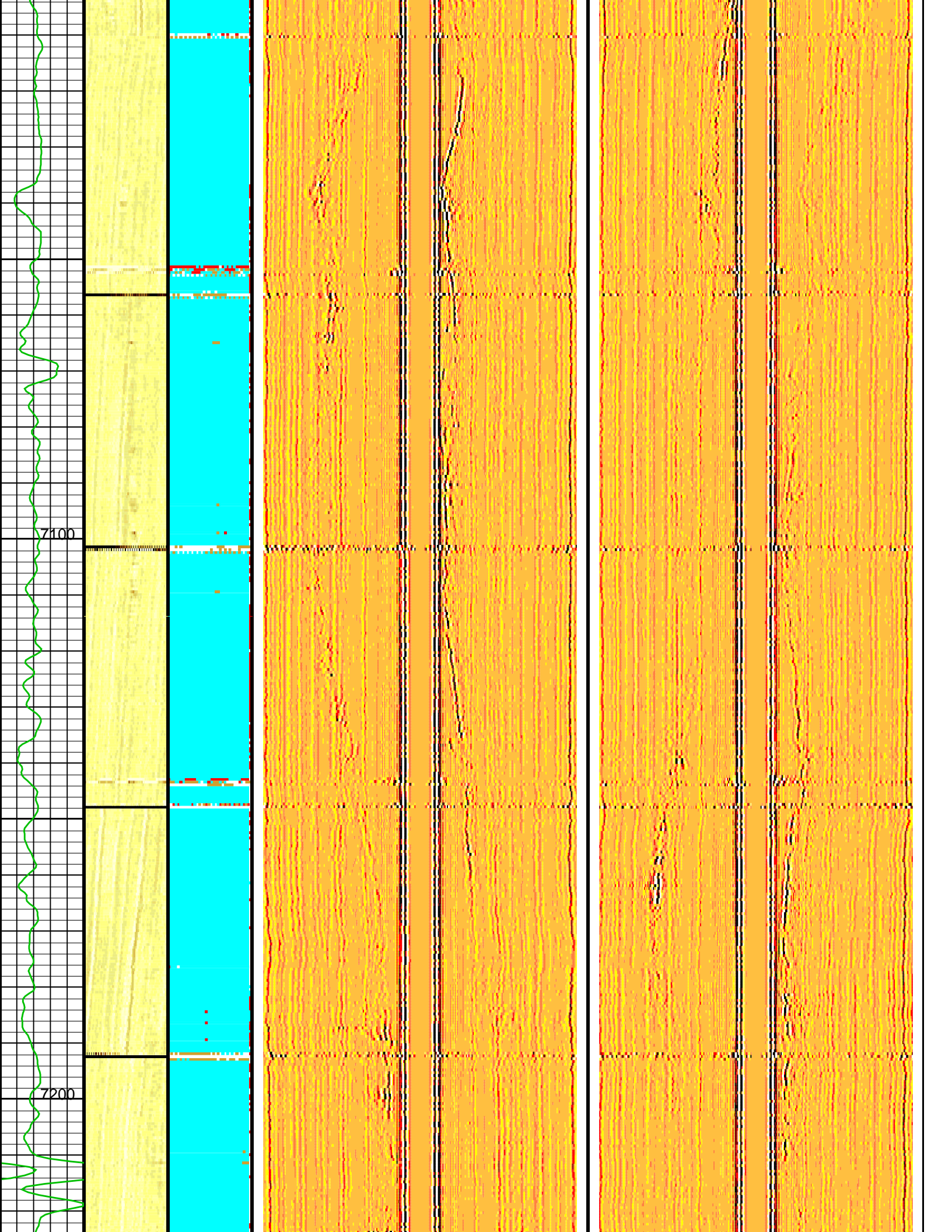


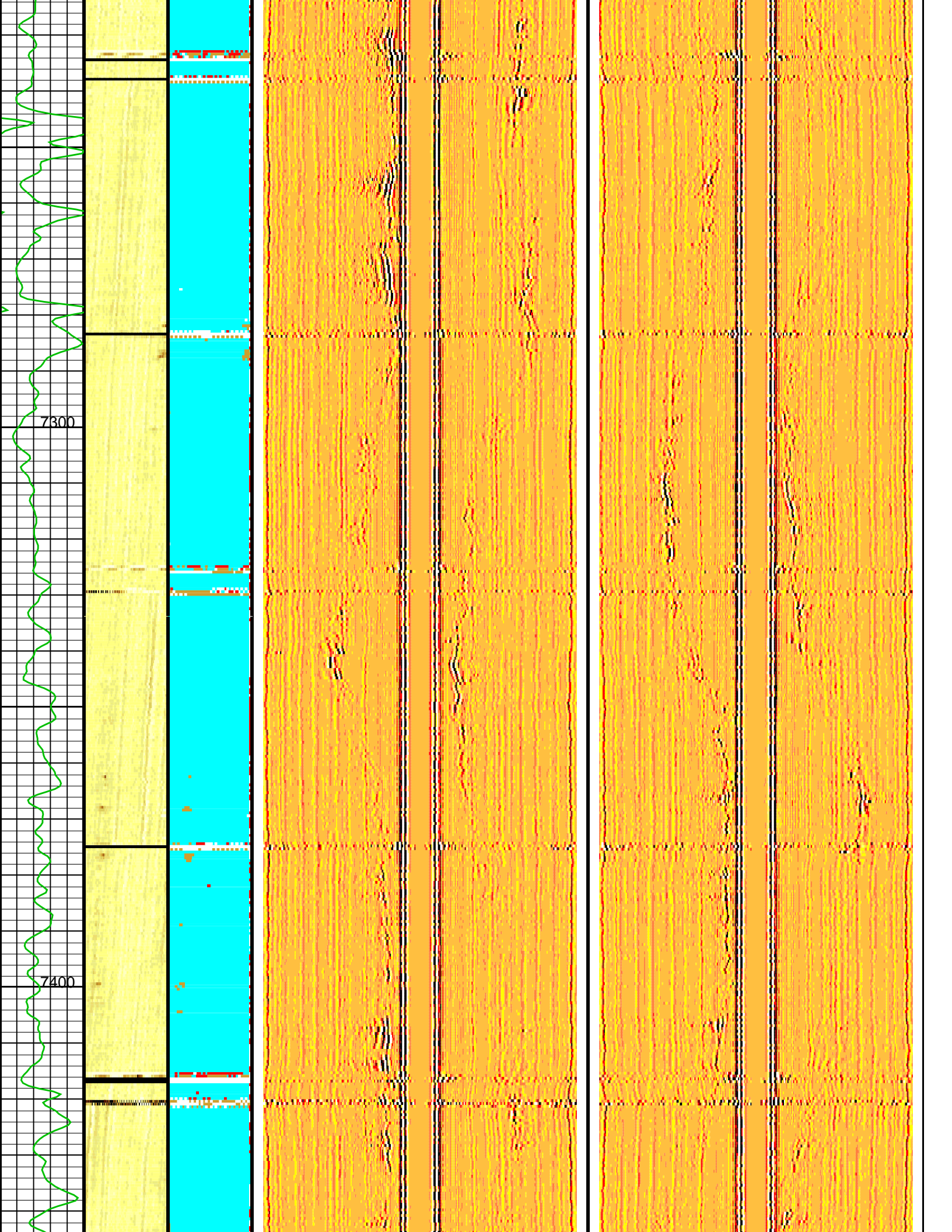


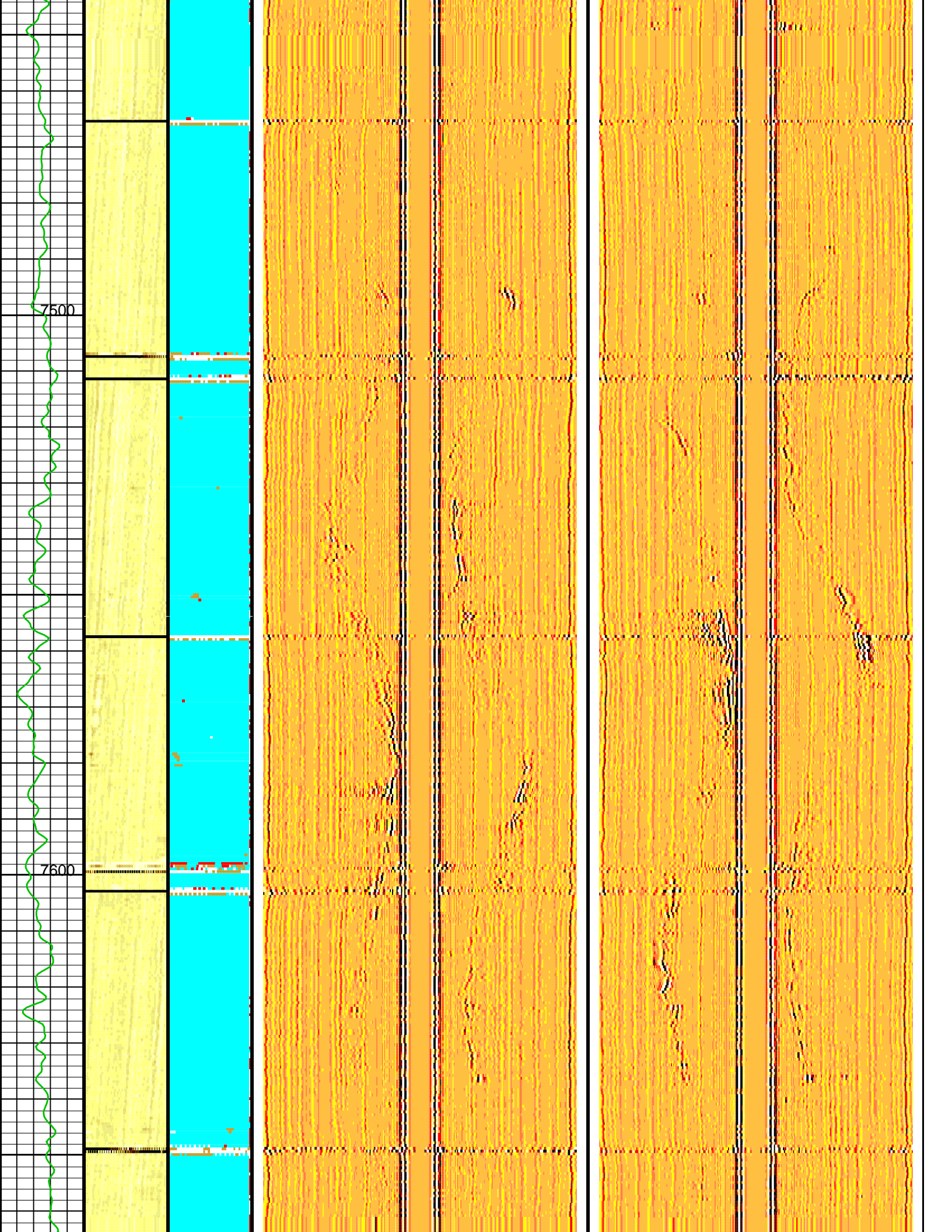


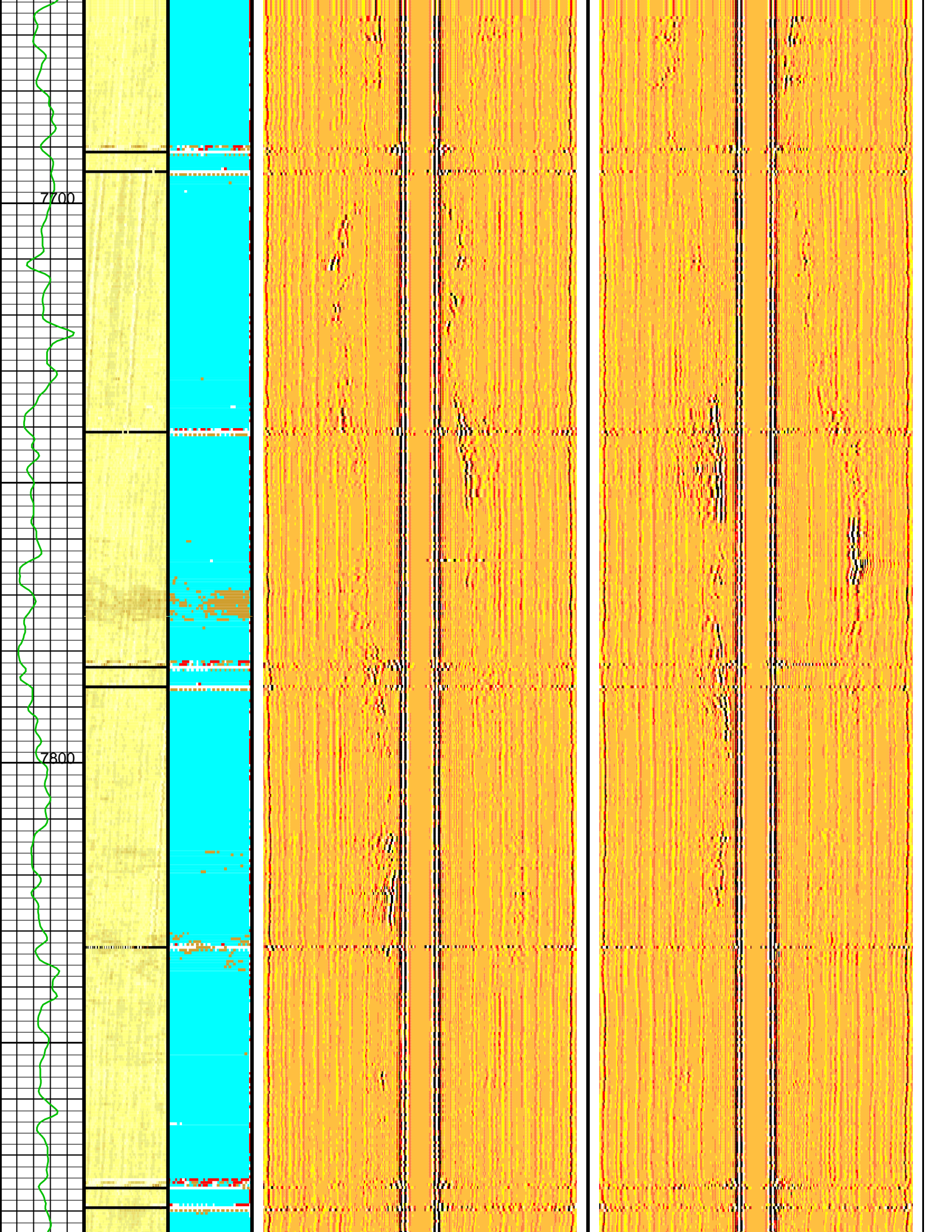


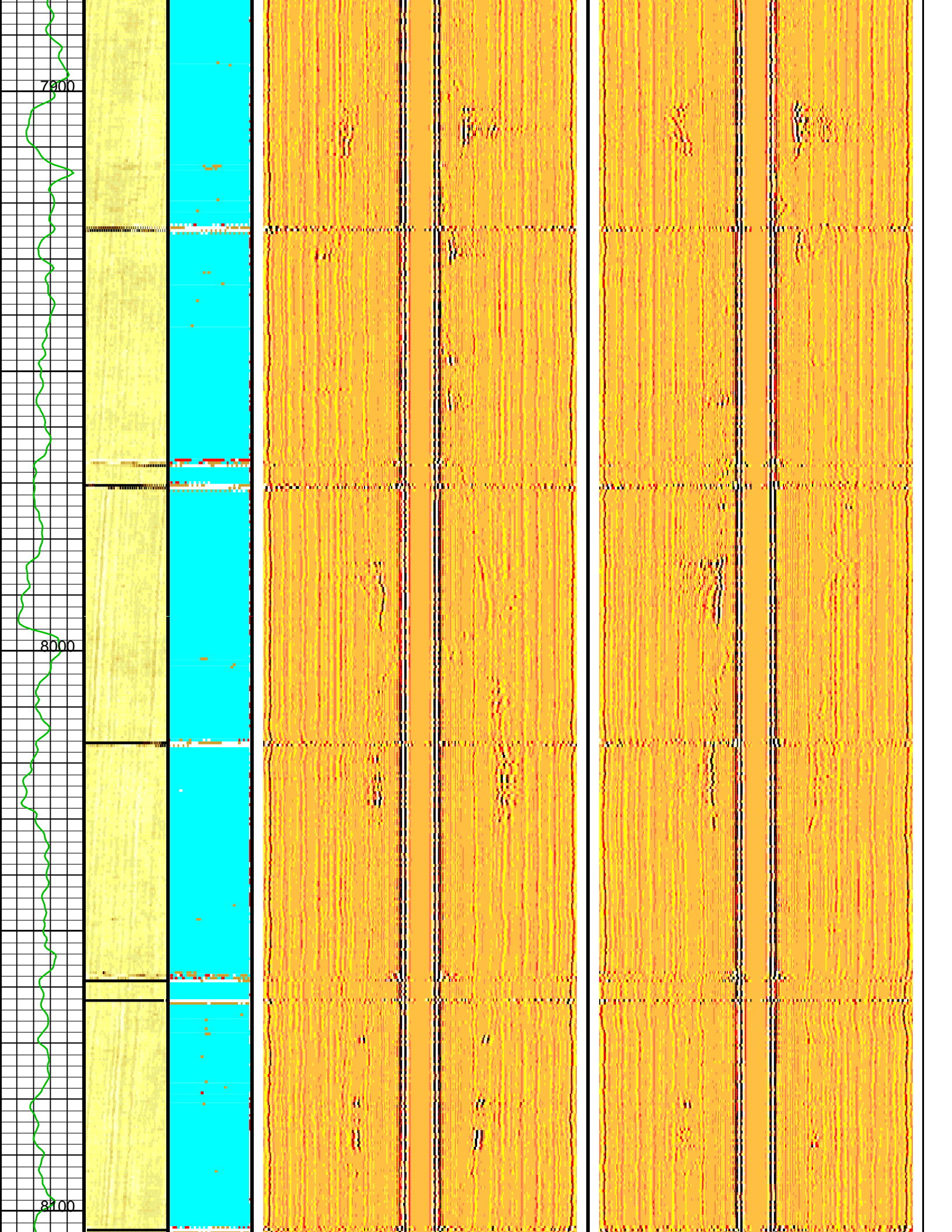


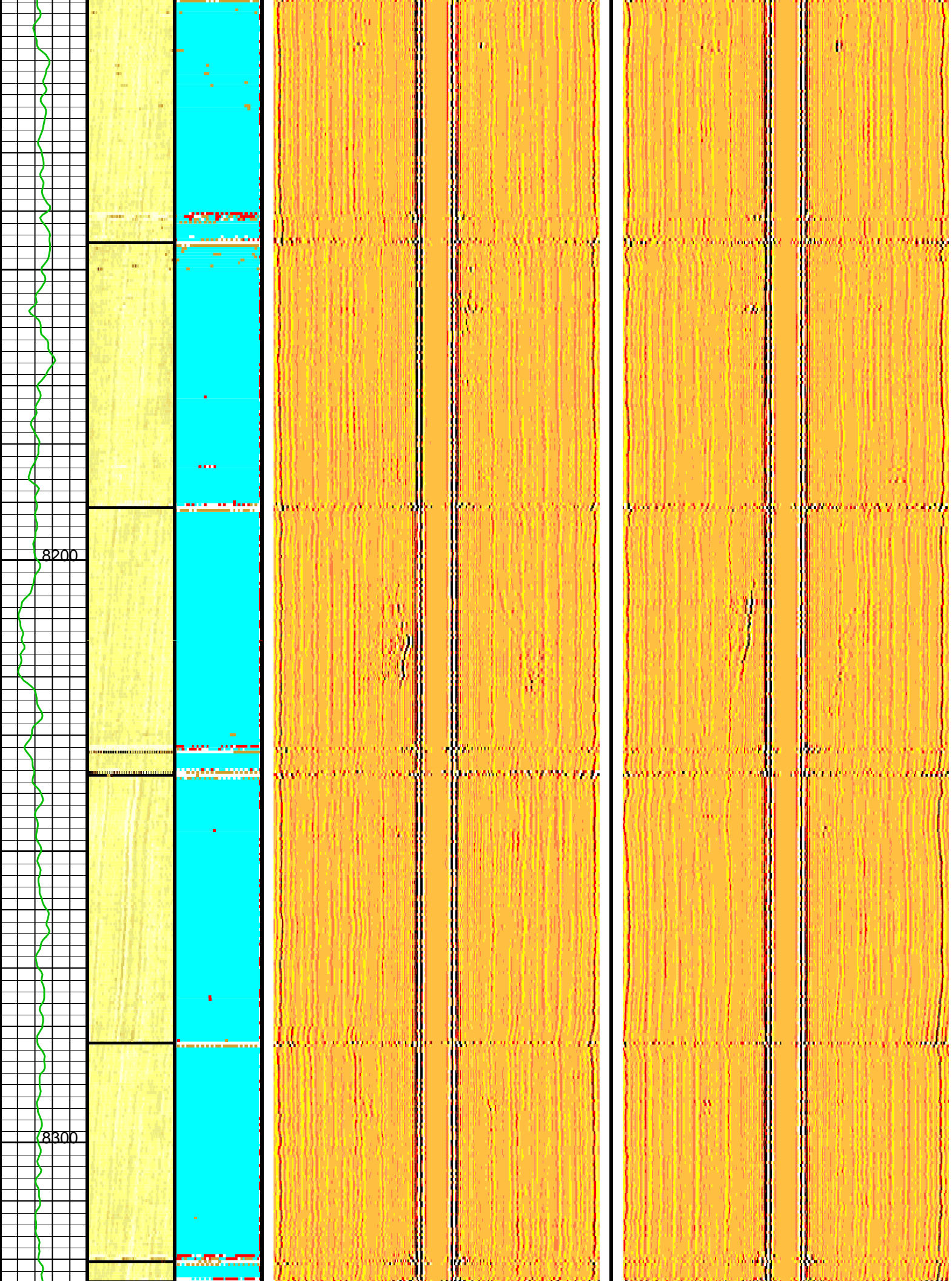


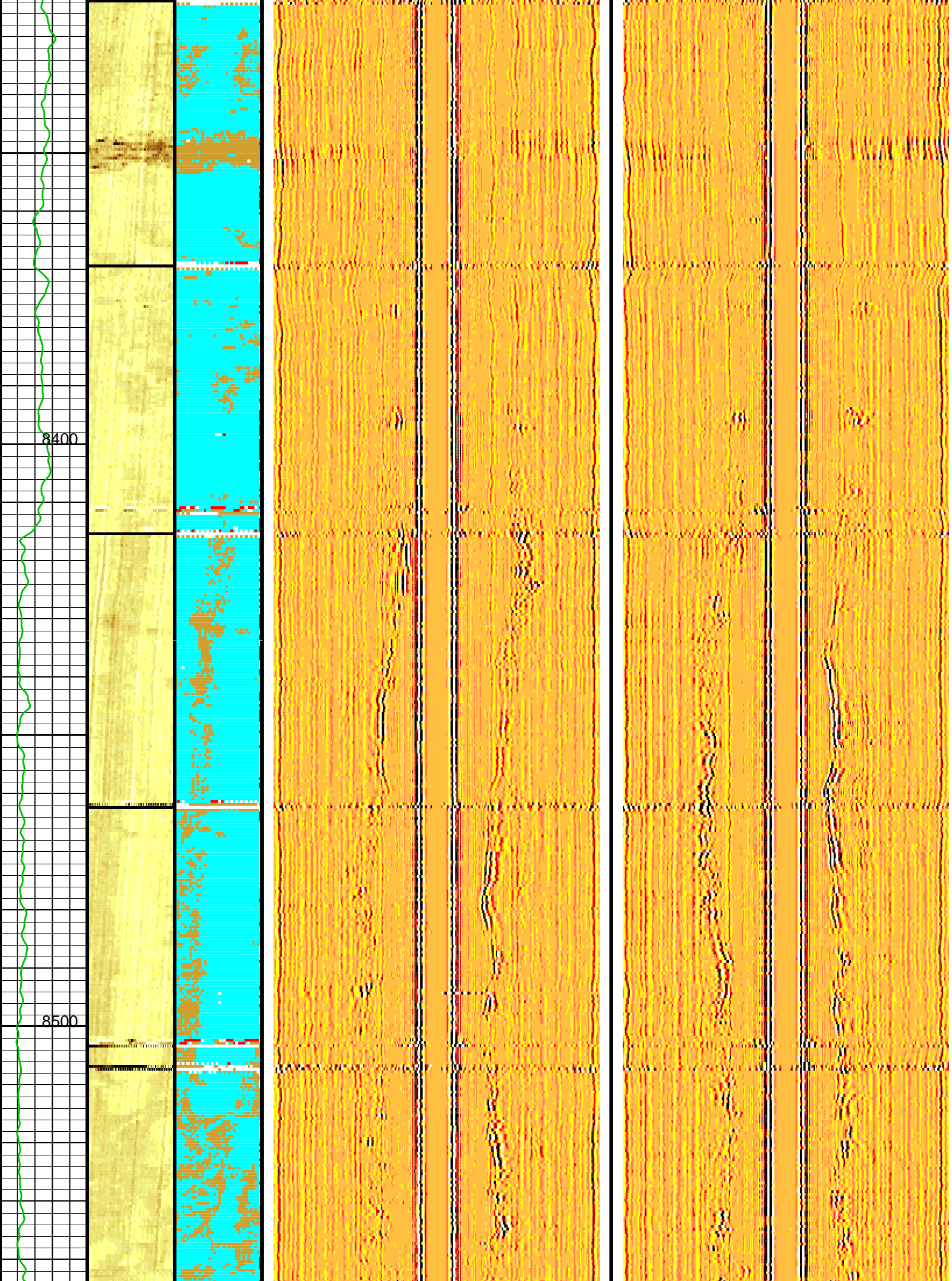


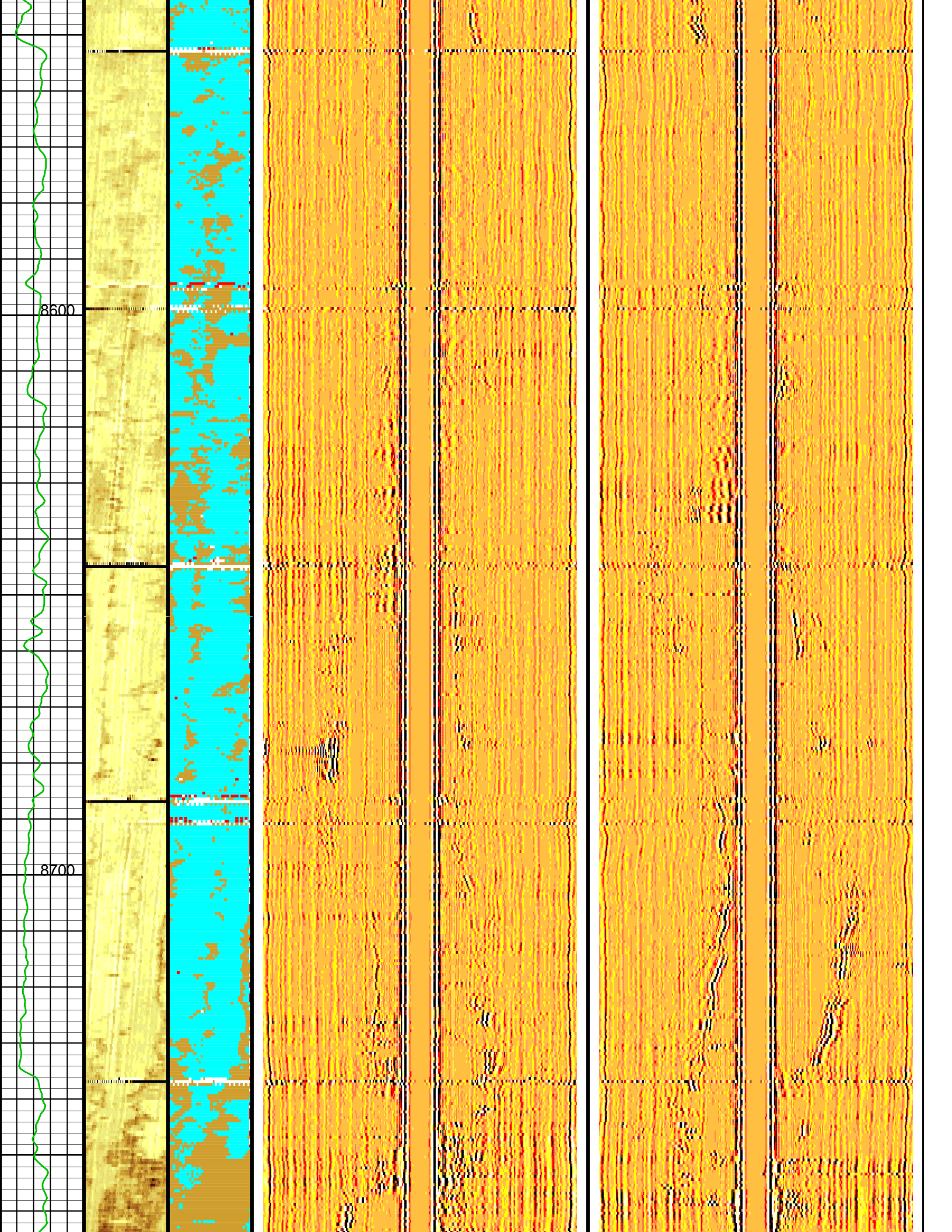


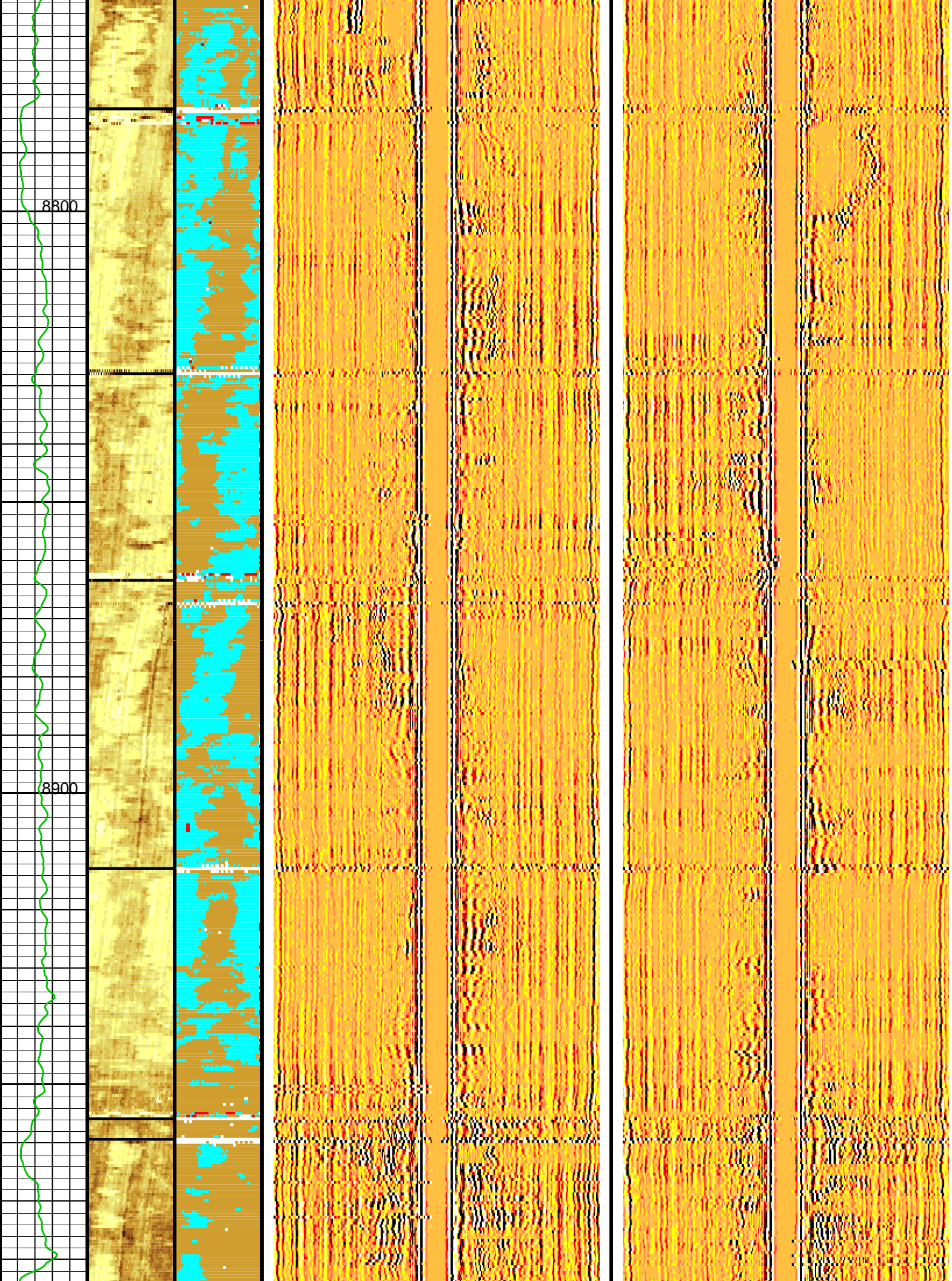


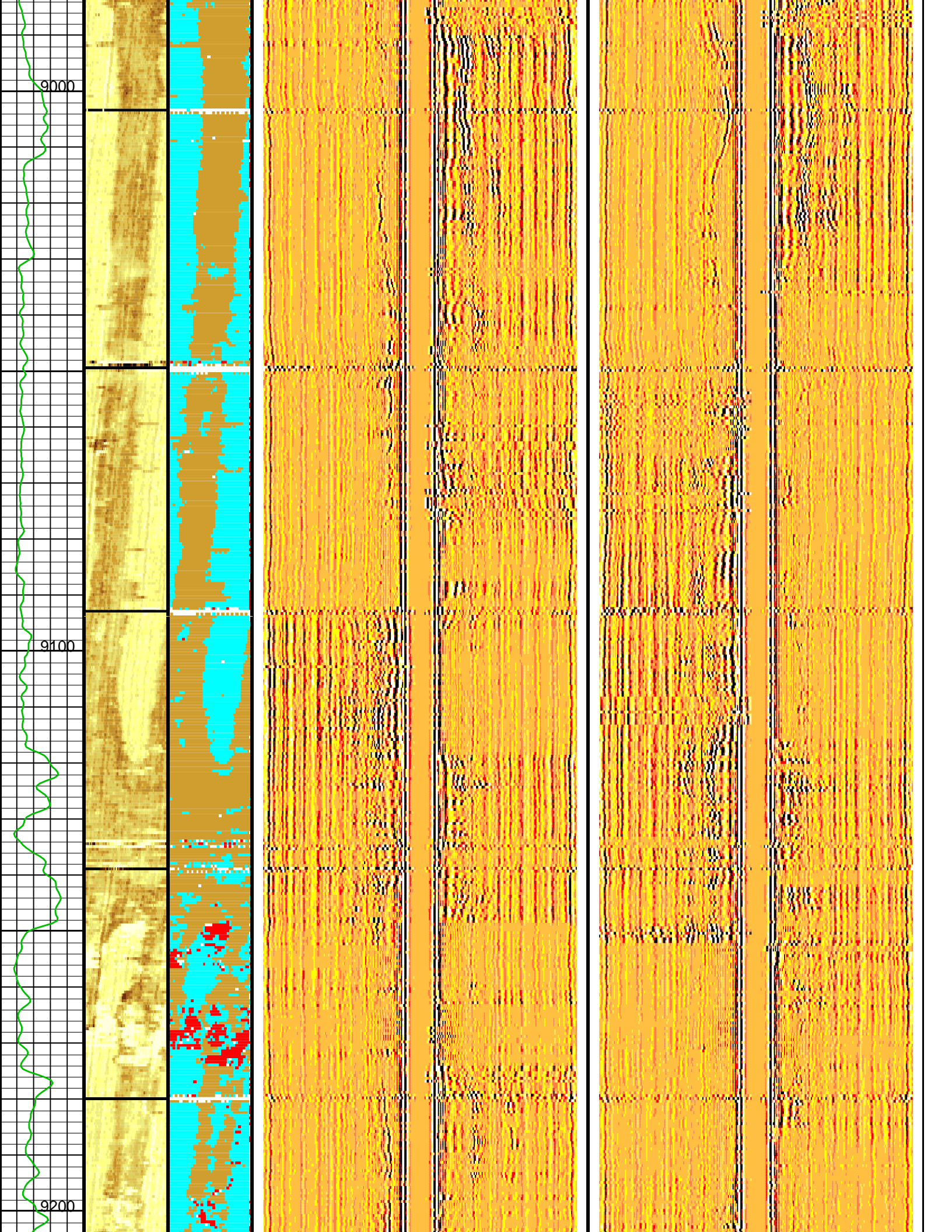


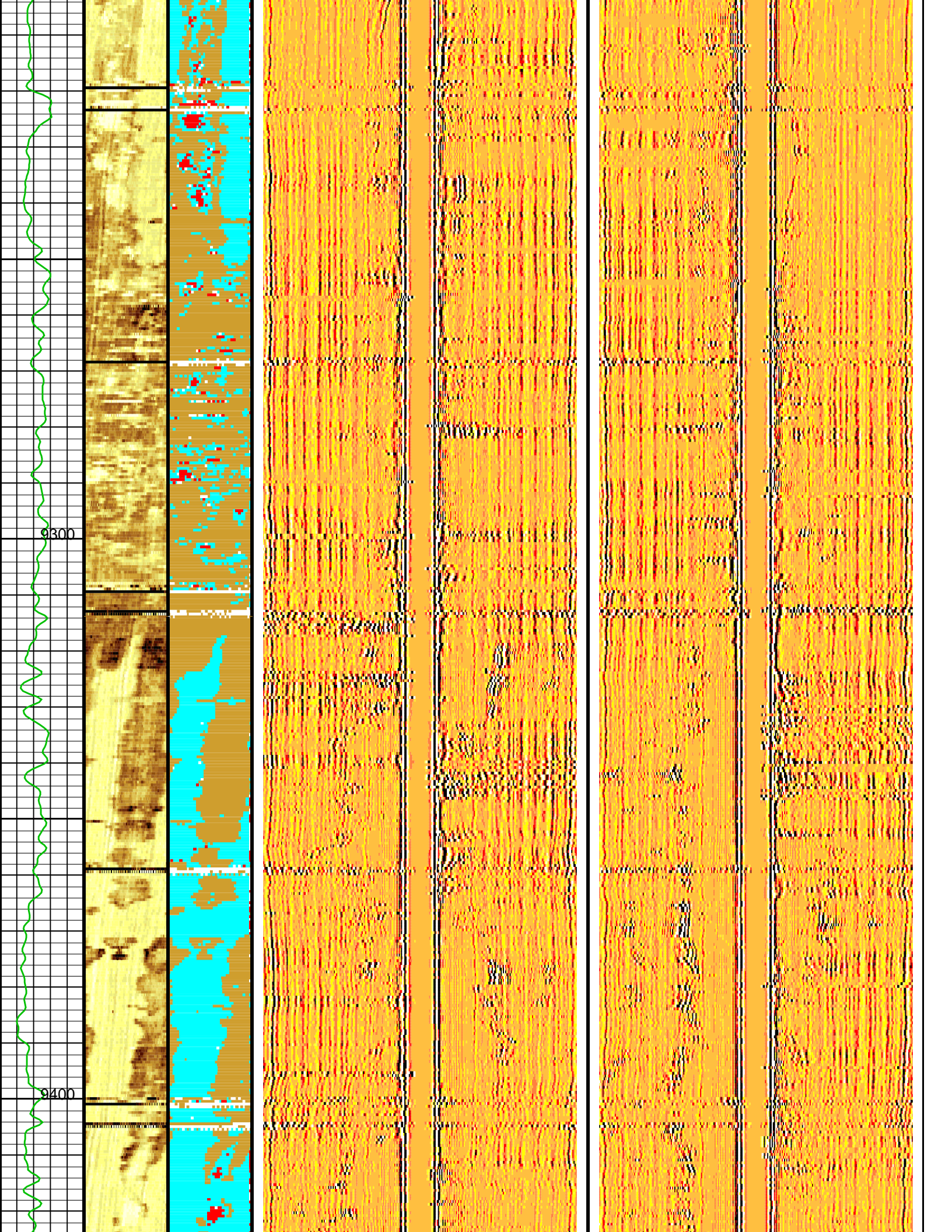


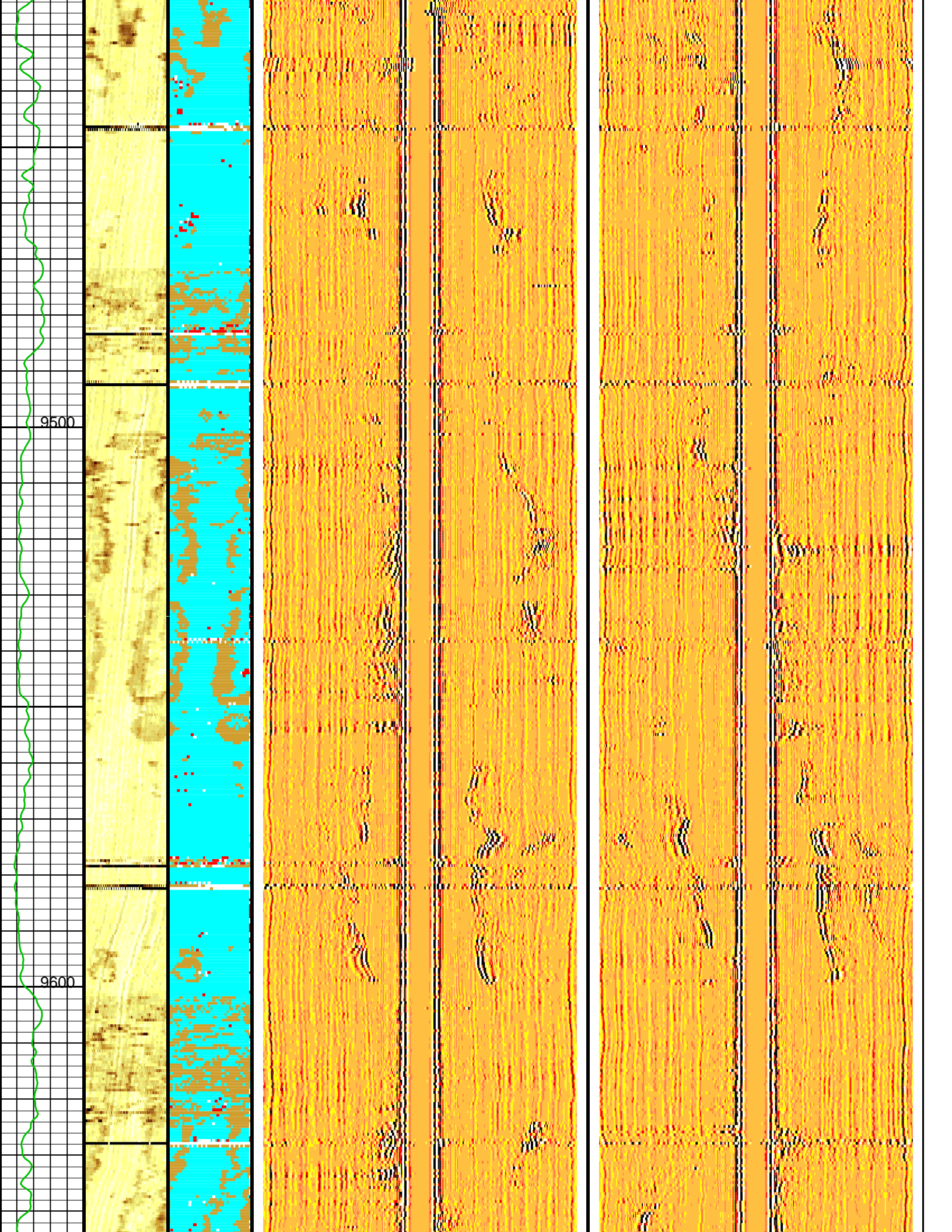


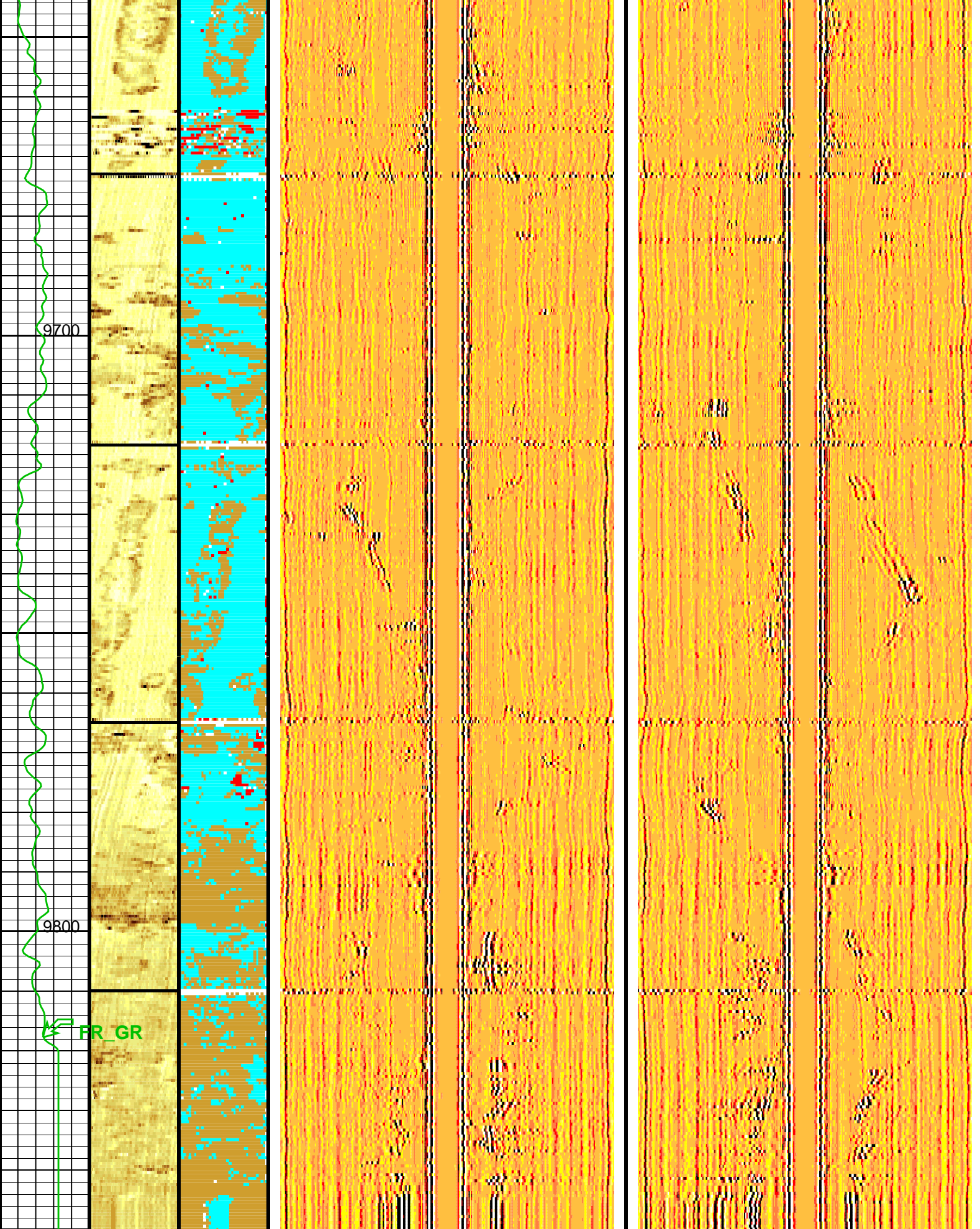








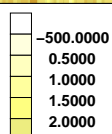


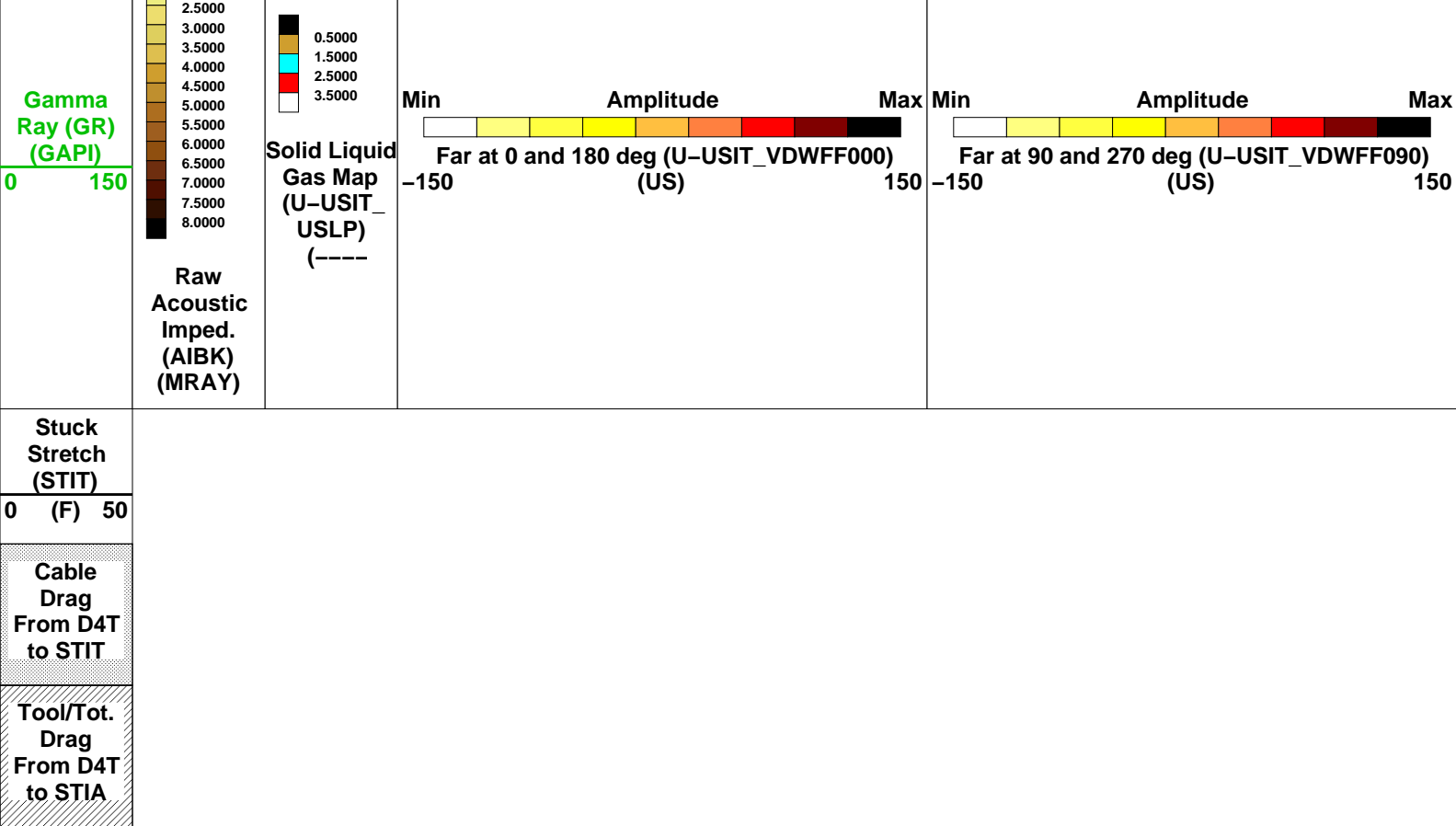


9700

9800

FR GR





Parameters			
DLIS Name	Description	Value	
USIT-D: Ultrasonic Imaging - D			
AGMN	Minimum Gain of Cartridge	-4	DB
AGMX	Maximum Gain of Cartridge	20	DB
BERJ	Bad Echo Rejection	ON	
CDIA	Casing Outer Diameter	7	IN
CSDE	Casing Density	486.94	LBCF
CSID	Casing Inner Diameter	6.276	IN
DFVL	Default Fluid Velocity	206	US/F
DOT	Diameter of Transducer Sensor	2.874	IN
EMXV	EMEX Voltage	20	V
FSOD	Fluid Slowness Fits Casing Outer Diameter	5_UFSL_N_ZMUD	
IMAR	Image Rotation	OFF	
MW	Mud Weight	9.4	LB/G
RCOD	Reference Calibrator Outer Diameter	7	IN
RCSO	Reference Calibrator Standoff	1.1811	IN
RCTH	Reference Calibrator Thickness	0.2952	IN
TCUB	T^3 Processing Level	Vax_Loop	
THDH	Maximum Search Thickness (percentage of nominal)	130	
THDL	Minimum Search Thickness (percentage of nominal)	70	
THDP	Thickness Detection Policy	Fundamental	
THNO	Nominal Thickness of Casing	0.362	IN
U-USIT_CENT	USIT Cement Type	ULTRA_LIGHT	
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	0	MRAY
U-USIT_IISR	USIT IBC Inverted Fluid Slowness Resolution	1.0_US_P_FT	
U-USIT_IIZR	USIT IBC Inverted ZMUD Resolution	0.050_MRAY	
U-USIT_OCDI	USIT Outer Casing Diameter	0	IN
U-USIT_OCSH	USIT Outer Casing Shoe	0	FT
U-USIT_OCWE	USIT Outer Casing Weight	0	LB/F
U-USIT_TIEB	IBC Third Interface Echo Bin Processing	YES	
U-USIT_TIEC	IBC Third Interface Echo Cleaning	NONE	
U-USIT_TIEM	IBC Third Interface Echo Multi Tracking	NO	
U-USIT_TIEP	IBC Third Interface Echo Policy	BFEP	
U-USIT_TIER	IBC Third Interface Echo Receivers	BOTH	
U-USIT_U3WE	Third Interface Echo Window End	110	US
U-USIT_UBTP	USIT Bottom Transducer Position	UNKNOWN	
U-USIT_UFAO	USIT Flexural Attenuation Offset	-5	DB/M
U-USIT_UIAP	USIT IBC Answer Product Enabled	SolidLiquidGasMap	
U-USIT_UIST	Ultrasonic IBC Sonde Type	Sub_ibcs_B	
U-USIT_UTAN	USIT Transducer Angles	33_DEG	
UMAO	USIT Measurement Angular Offset	-10	DEG
USTO	Ultrasonic Time Offset	-2	US
USUB	Ultrasonic Subassembly Identifier	Sub_7_inch	
UWKM	Ultrasonic Working Mode	5DEG 6IN 136UNF LF	

VCAS	Ultrasonic Transversal Velocity in Casing	51.4	US/F
WLEN	T^3 Processing Length	21.7078	US
ZCAS	Acoustic Impedance of Casing	46.2537	MRAY
ZINI	Initial Estimate of Cement Impedance	-1	MRAY
ZMUD	Acoustic Impedance of Mud	1.9	MRAY
ZTCM	Acoustic Impedance Threshold for Cement	2.6	MRAY
ZTGS	Acoustic Impedance Threshold for Gas	0.3	MRAY
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth - Driller	9967.00	FT
TDL	Total Depth - Logger	9850.00	FT
System and Miscellaneous			
BS	Bit Size	9.875	IN
CWEI	Casing Weight	26.00	LB/F
DO	Depth Offset for Playback	0.0	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	RECOMPUTE	

Format: USI_IBC_VDL_WIDE Vertical Scale: 5" per 100' Graphics File Created: 20-Nov-2010 17:32

OP System Version: 17C0-154

USIT-D	17C0-154	HILTH-FTB	17C0-154
DTC-H	17C0-154		

Input DLIS Files

DEFAULT	USI_TLD_MCFL_CNL_010LUP	FN:9	PRODUCER	20-Nov-2010 16:25
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Output DLIS Files

DEFAULT	USI_TLD_MCFL_CNL_004PUP	FN:3	PRODUCER	20-Nov-2010 17:32
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Schlumberger

GOODWIN 5 INCH

MAXIS Field Log

Company: ExxonMobil Production Corp Well: PCU 296-5A5

Input DLIS Files

DEFAULT	USI_TLD_MCFL_CNL_010LUP	FN:9	PRODUCER	20-Nov-2010 16:25
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Output DLIS Files

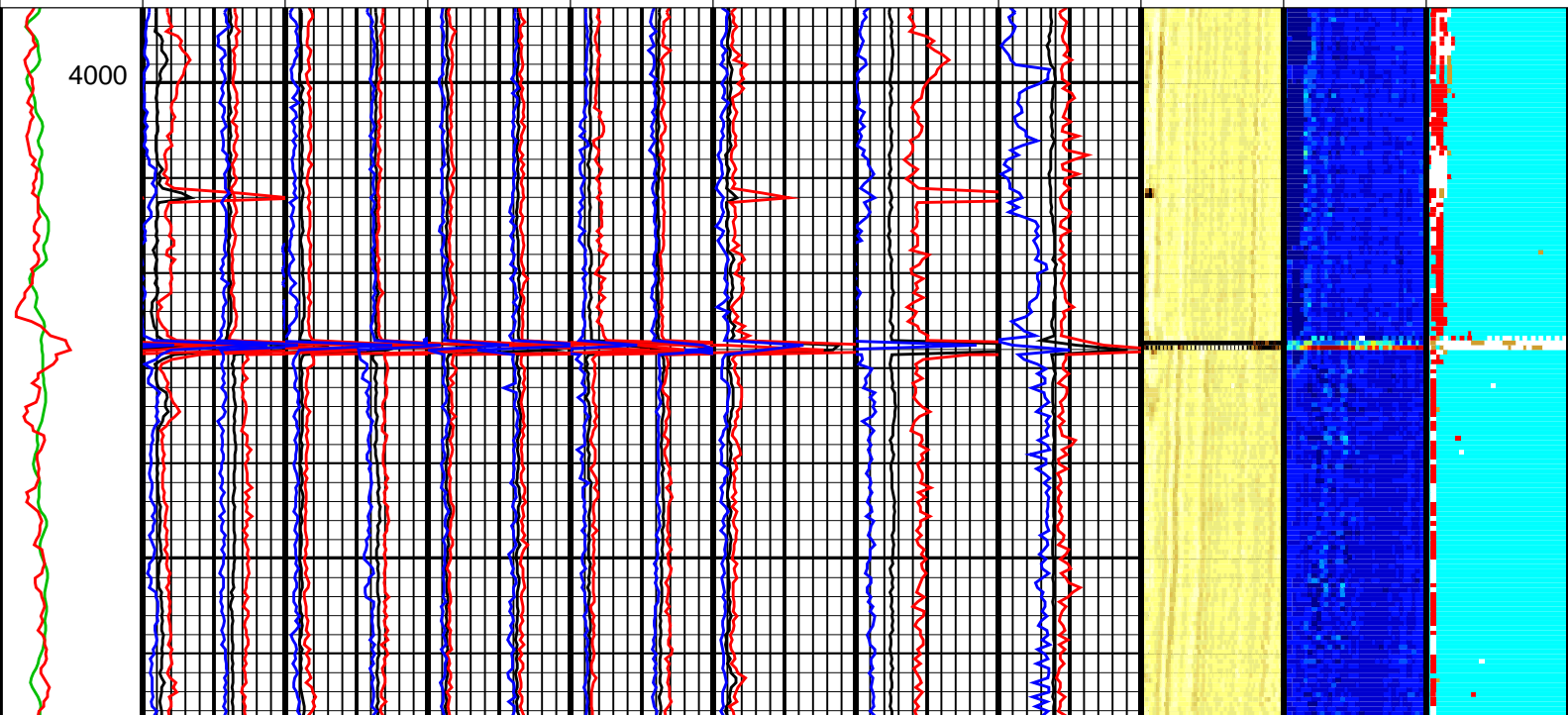
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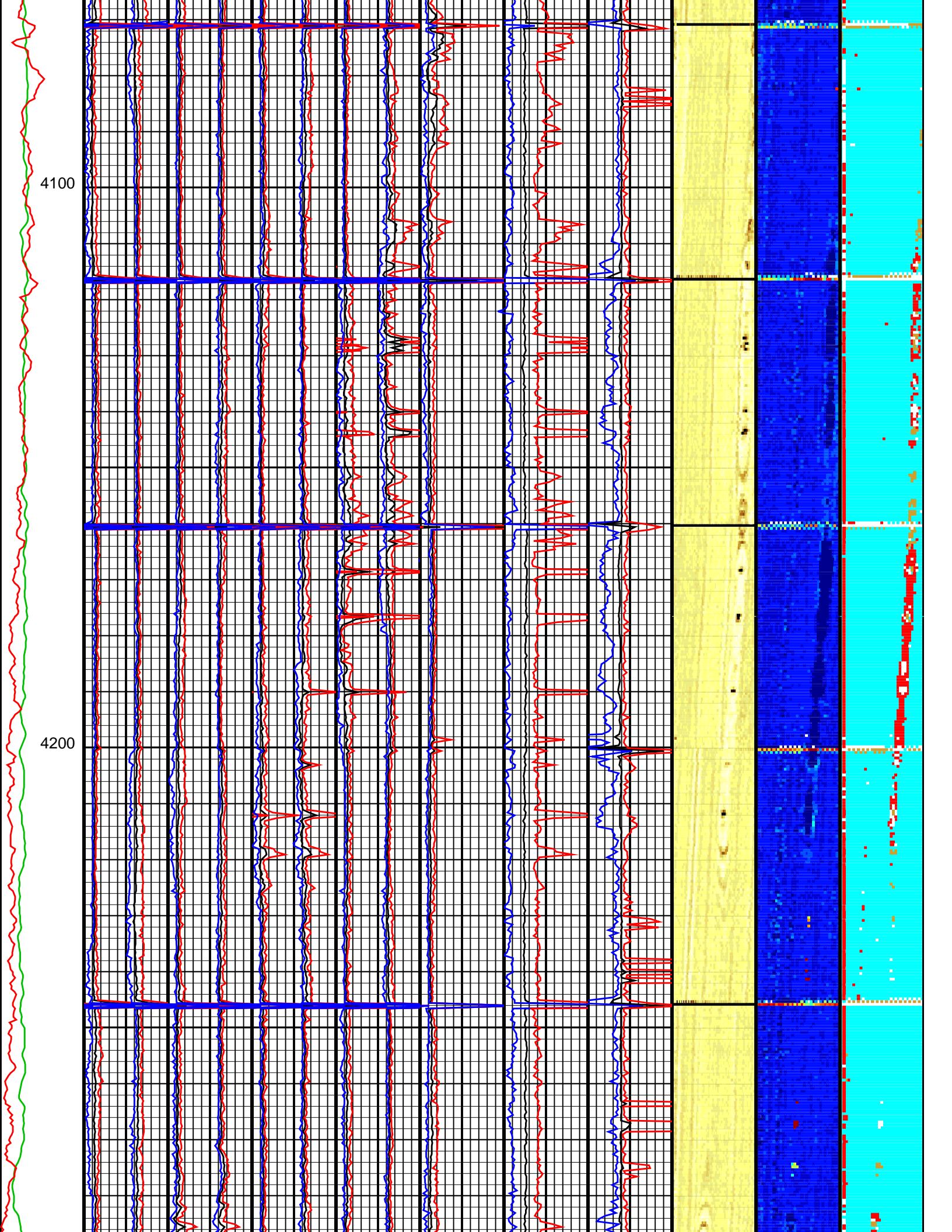
OP System Version: 17C0-154

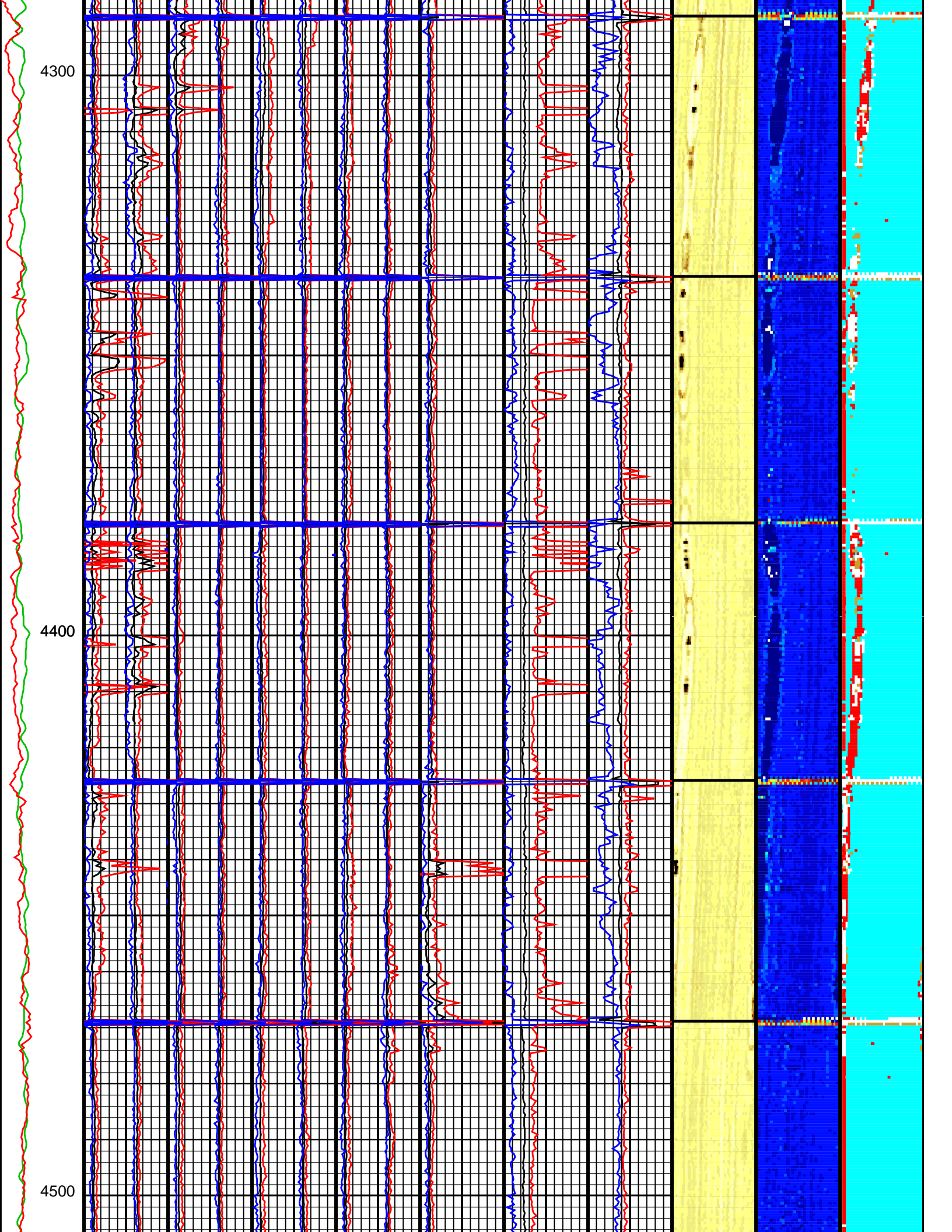
USIT-D	17C0-154	HILTH-FTB	17C0-154
DTC-H	17C0-154		

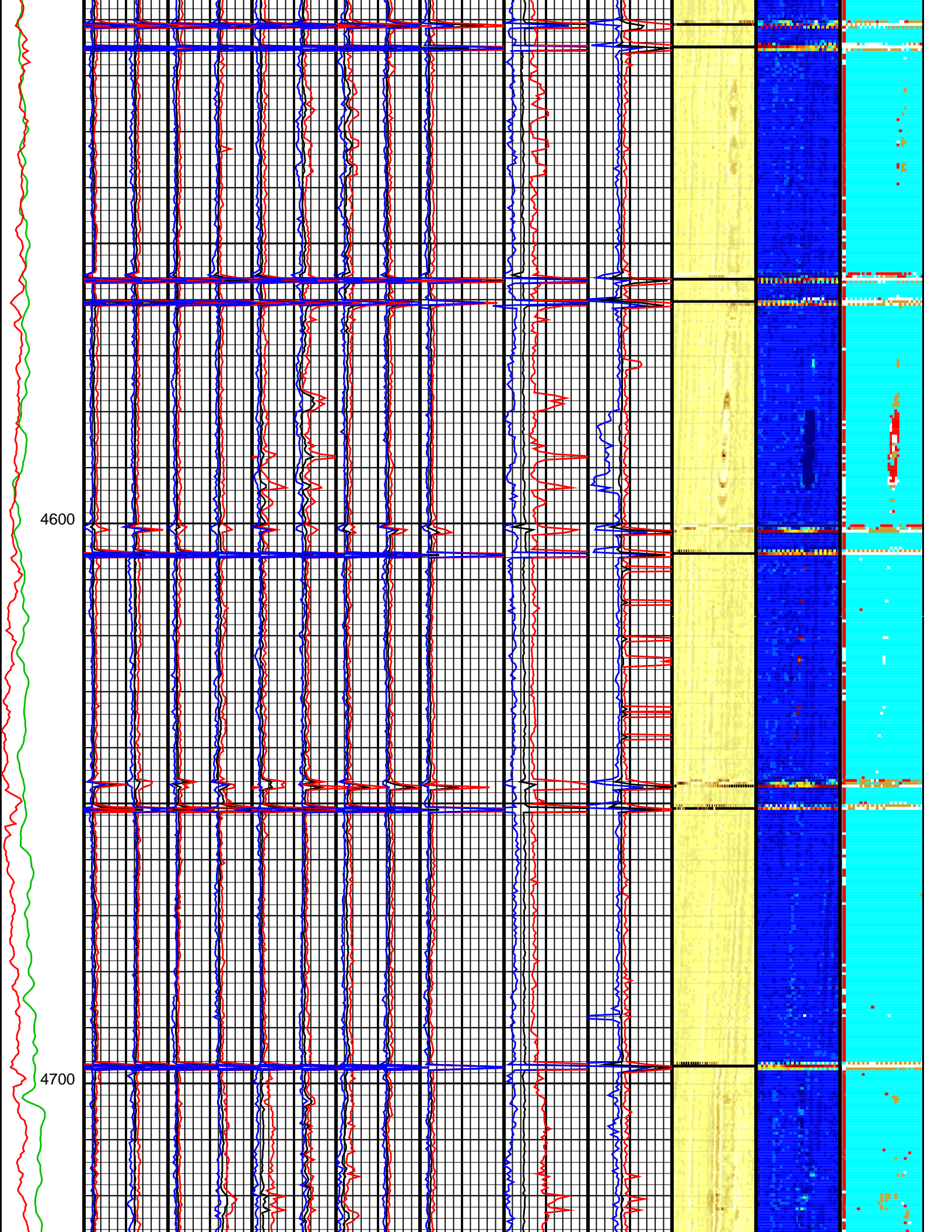
Minimum Acoustic Impedance #2 (MIN_ AI2) (MRAY)	Minimum Acoustic Impedance #4 (MIN_ AI4) (MRAY)	Minimum Acoustic Impedance #6 (MIN_ AI6) (MRAY)	Minimum Acoustic Impedance #8 (MIN_ AI8) (MRAY)
-7.5 7.5	-7.5 7.5	-7.5 7.5	-7.5 7.5
Minimum Acoustic Impedance #2 (MIN_ AI2) (MRAY)	Minimum Acoustic Impedance #4 (MIN_ AI4) (MRAY)	Minimum Acoustic Impedance #6 (MIN_ AI6) (MRAY)	Minimum Acoustic Impedance #8 (MIN_ AI8) (MRAY)
-7.5 7.5	-7.5 7.5	-7.5 7.5	-7.5 7.5

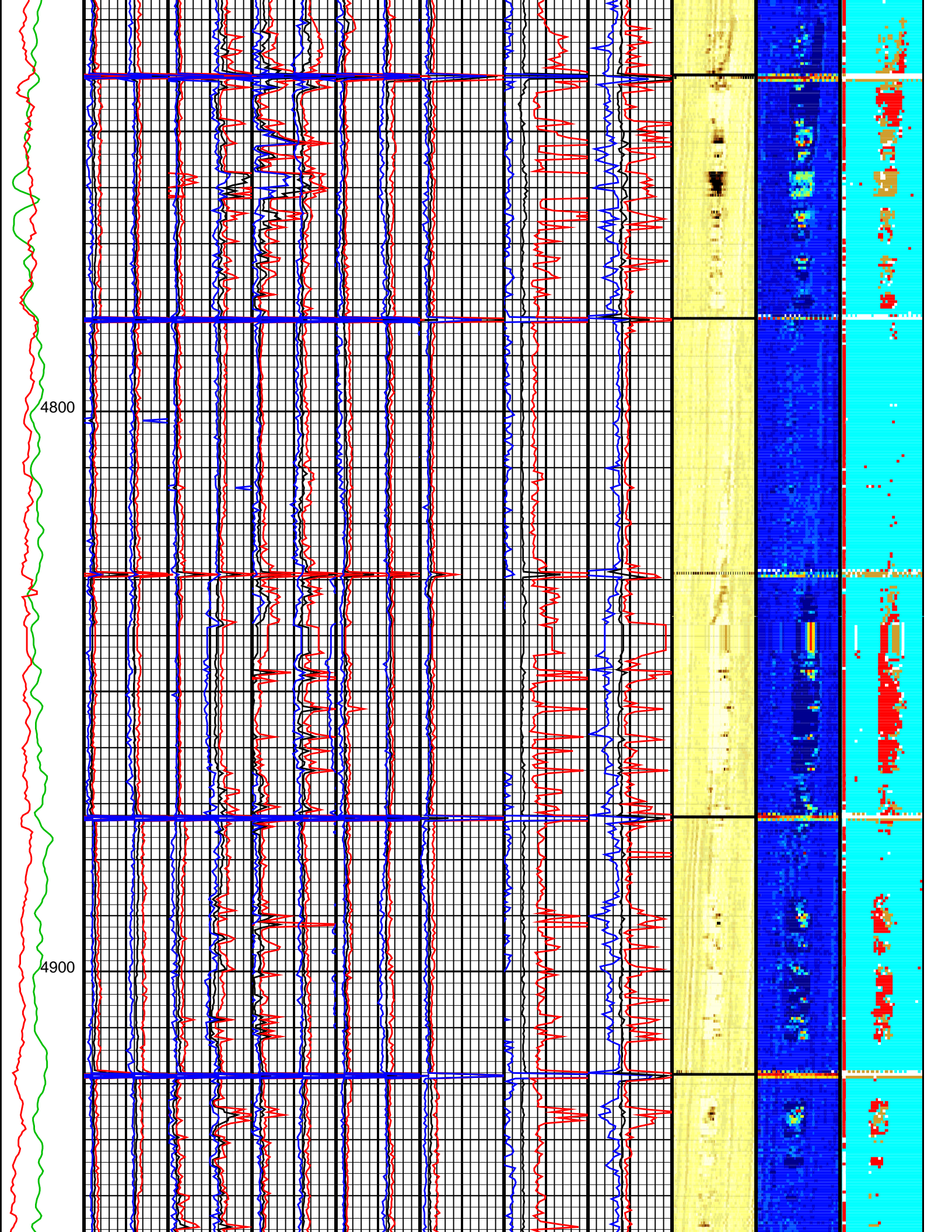
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	015	015	015	015			
	Maximum Acoustic Impedance #2 (MAX_ AI2) (MRAY)	Maximum Acoustic Impedance #4 (MAX_ AI4) (MRAY)	Maximum Acoustic Impedance #6 (MAX_ AI6) (MRAY)	Maximum Acoustic Impedance #8 (MAX_ AI8) (MRAY)			
	-7.57.5	-7.57.5	-7.57.5	-7.57.5			
	Maximum Acoustic Impedance #1 (MAX_ AI1) (MRAY)	Maximum Acoustic Impedance #3 (MAX_ AI3) (MRAY)	Maximum Acoustic Impedance #5 (MAX_ AI5) (MRAY)	Maximum Acoustic Impedance #7 (MAX_ AI7) (MRAY)	Minimum Acoustic Impedance #9 (MIN_ AI9) (MRAY)	Maximum of AI (AIMX) (MRAY)	Maximum Flexural Attenuation (U-USIT_ UFAX) (DB/M)
	015	015	015	015	015	07.5	0150
Gamma Ray (GR) (GAPI)	Average Acoustic Impedance #2 (AV_ AI2) (MRAY)	Average Acoustic Impedance #4 (AV_ AI4) (MRAY)	Average Acoustic Impedance #6 (AV_ AI6) (MRAY)	Average Acoustic Impedance #8 (AV_ AI8) (MRAY)	Maximum Acoustic Impedance #9 (MAX_ AI9) (MRAY)	Minimum of AI (AIMN) (MRAY)	Average Flexural Attenuation (U-USIT_ UFAV) (DB/M)
0150	-7.57.5	-7.57.5	-7.57.5	-7.57.5	015	07.5	0150
Eccent. (ECCE)	Average Acoustic Impedance #1 (AV_ AI1) (MRAY)	Average Acoustic Impedance #3 (AV_ AI3) (MRAY)	Average Acoustic Impedance #5 (AV_ AI5) (MRAY)	Average Acoustic Impedance #7 (AV_ AI7) (MRAY)	Average Acoustic Impedance #9 (AV_ AI9) (MRAY)	Average of AI (AIAV) (MRAY)	Minimum Flexural Attenuation (U-USIT_ UFAN) (DB/M)
0 (IN) 0.5	015	015	015	015	015	07.5	0150
							<div> <div> -500.0000 0.5000 1.0000 1.5000 2.0000 2.5000 3.0000 3.5000 4.0000 4.5000 5.0000 5.5000 6.0000 6.5000 7.0000 7.5000 8.0000 </div> <div> 0.0000 50.0000 57.0000 64.0000 71.0000 78.0000 85.0000 92.0000 99.0000 106.0000 113.0000 120.0000 127.0000 134.0000 141.0000 148.0000 155.0000 </div> <div> 0.5000 1.5000 2.5000 3.5000 </div> </div> <div>Raw Acoustic Imped. (AIBK) (MRAY)</div> <div>Flexural Attenuation (U-USIT_ UFAK) (DB/M)</div> <div>Solid Liquid Gas Map (U-USIT_ USLP) (----</div>

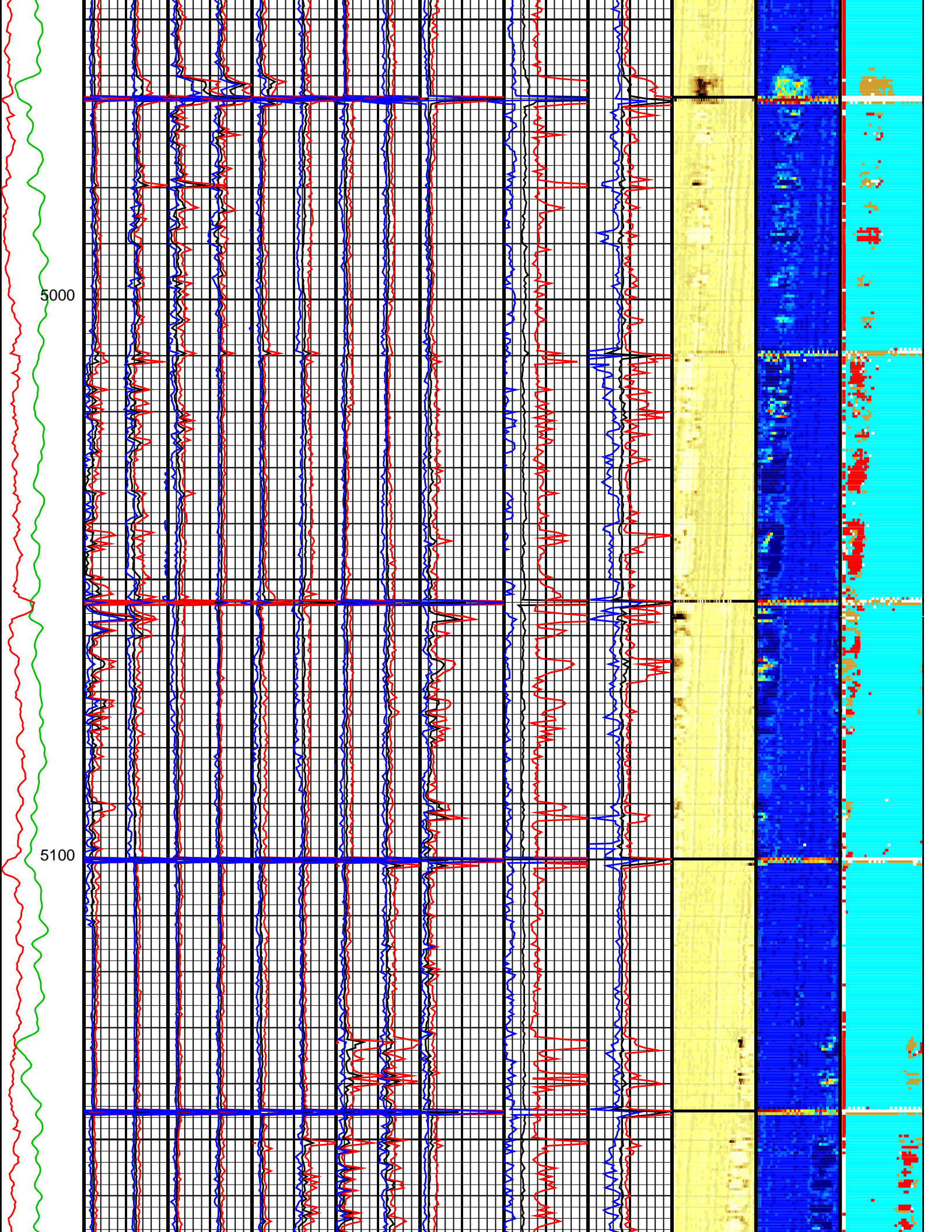


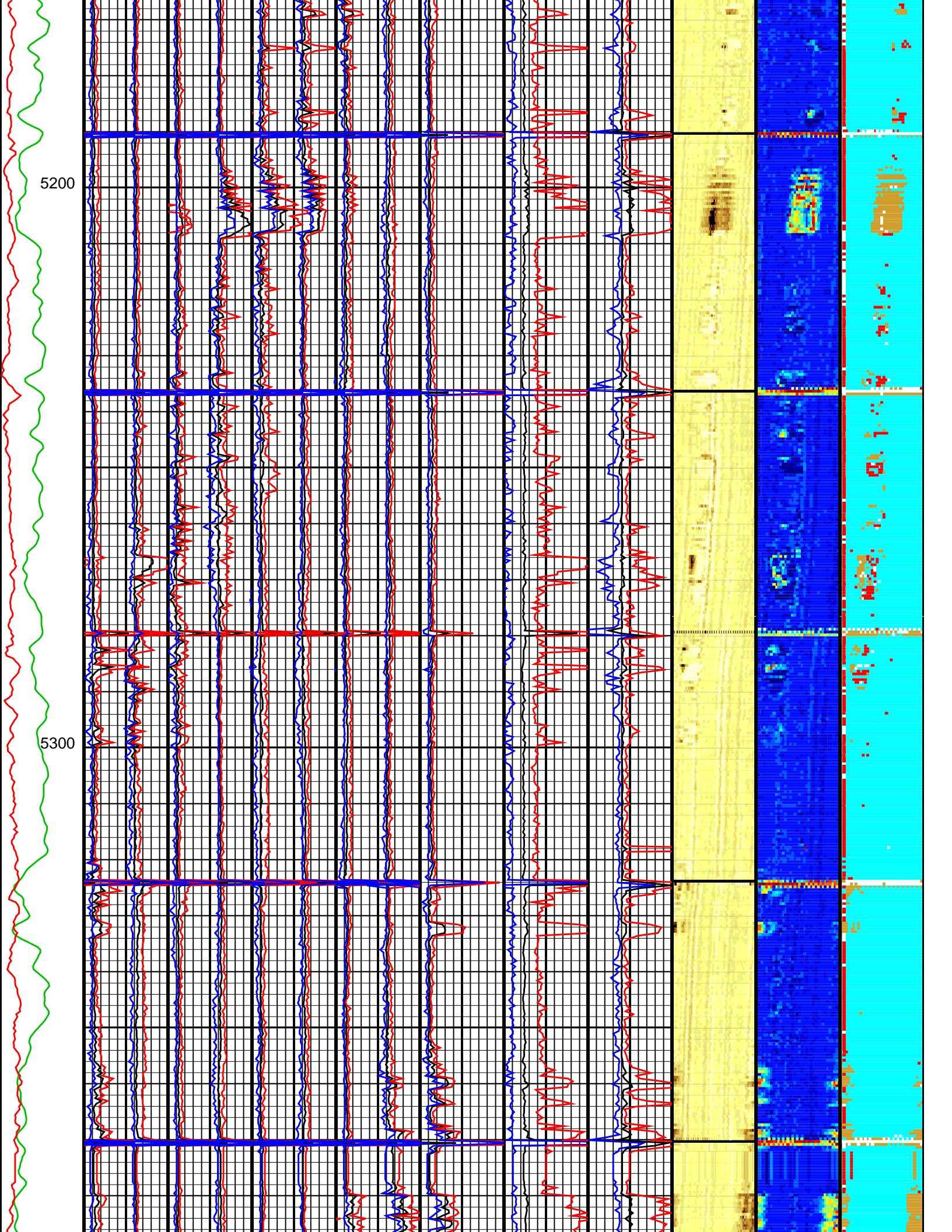


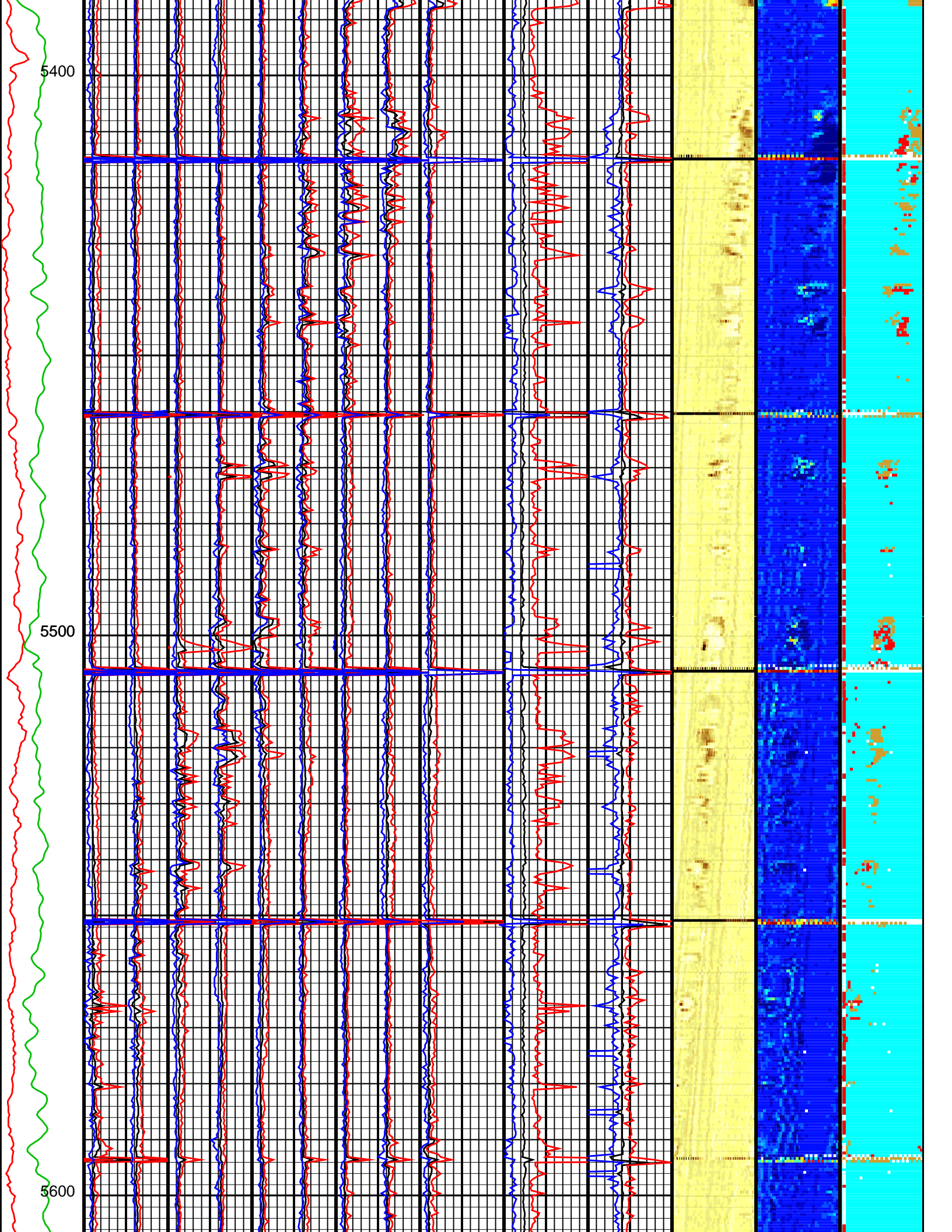


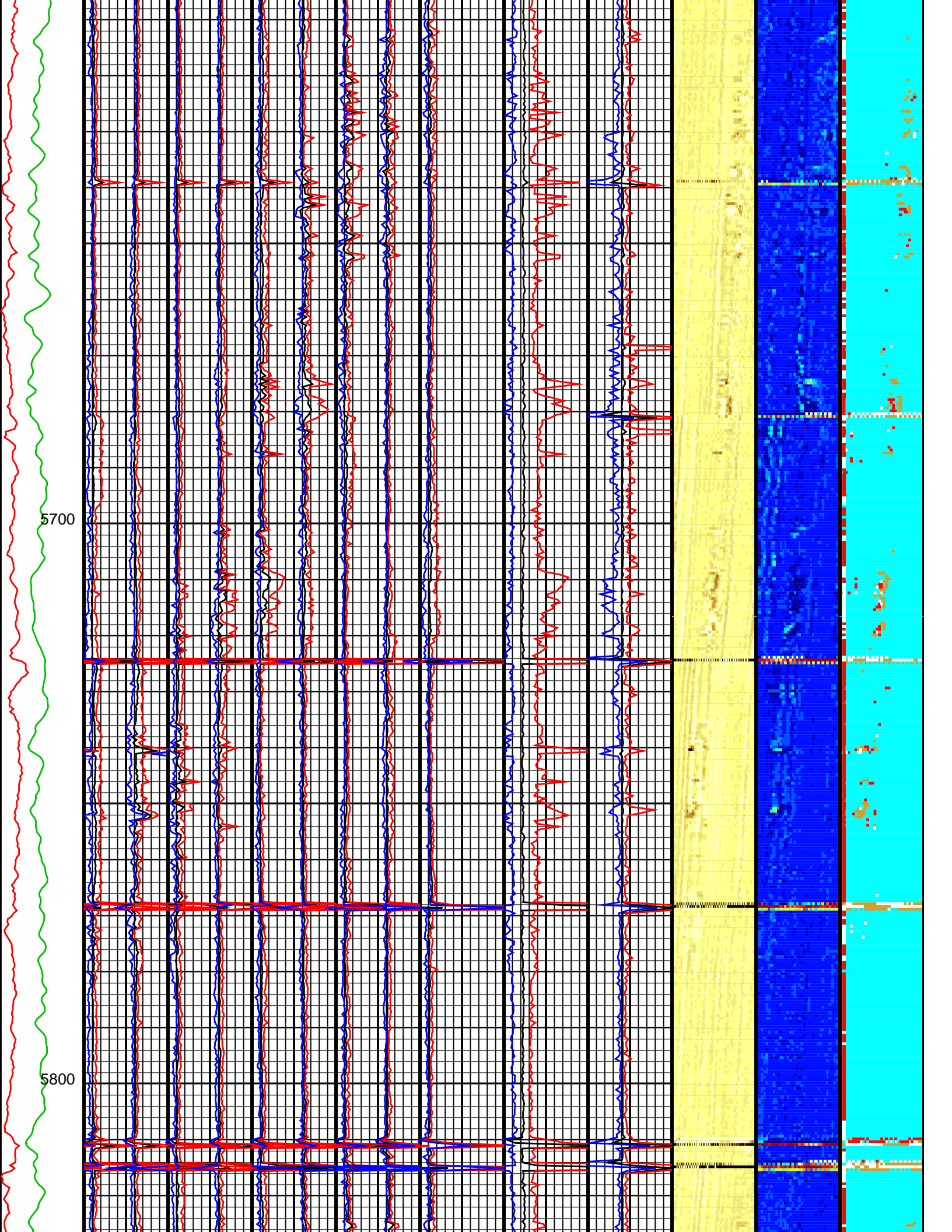


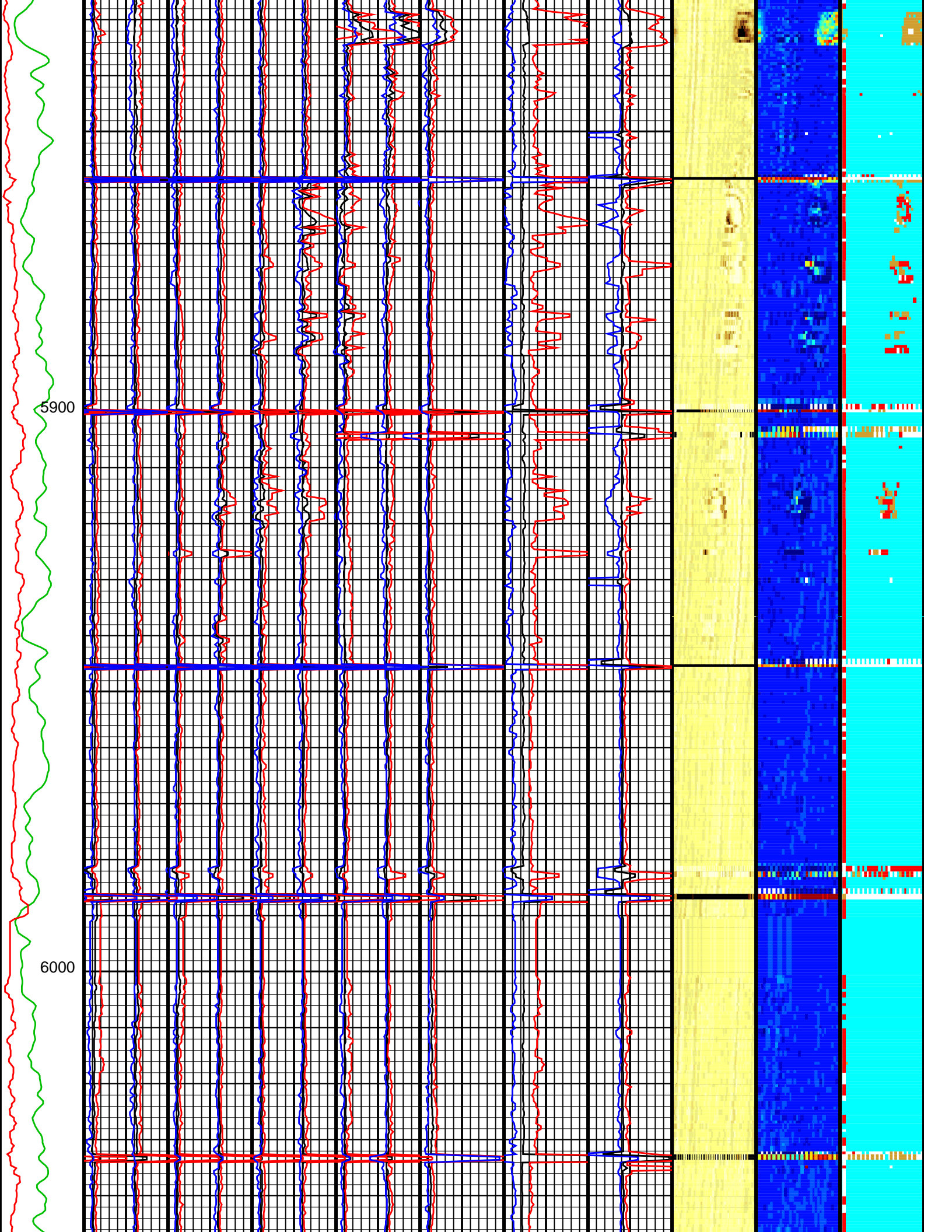


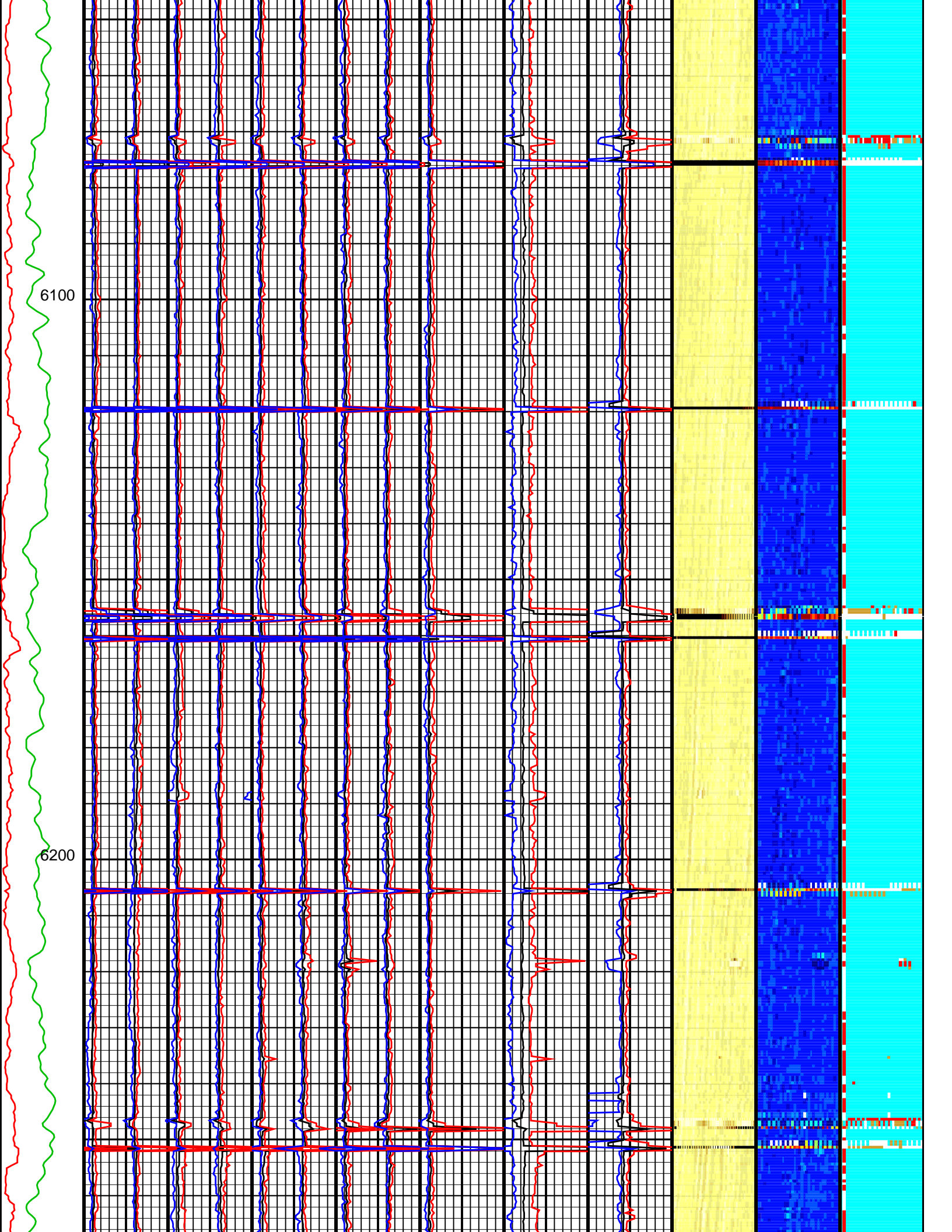


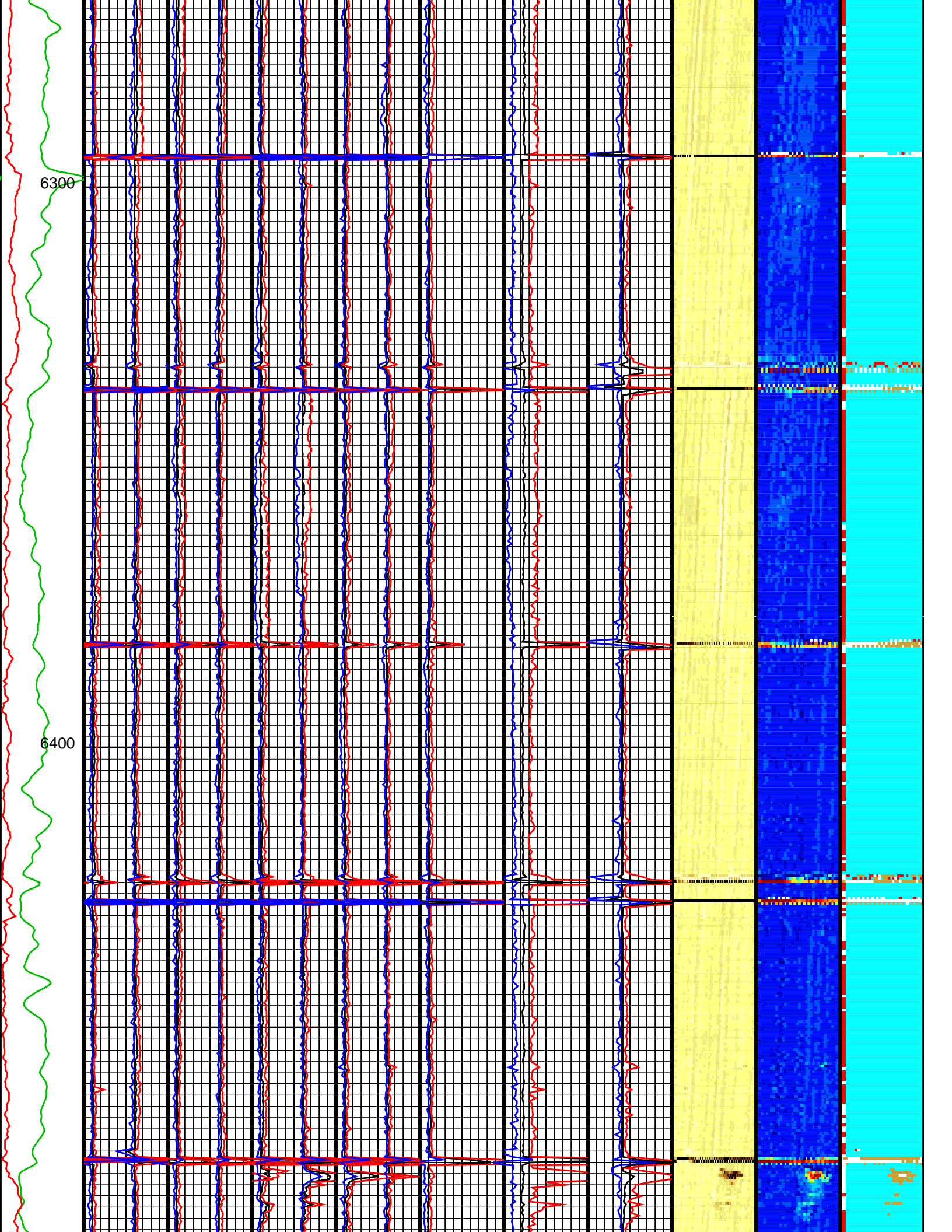


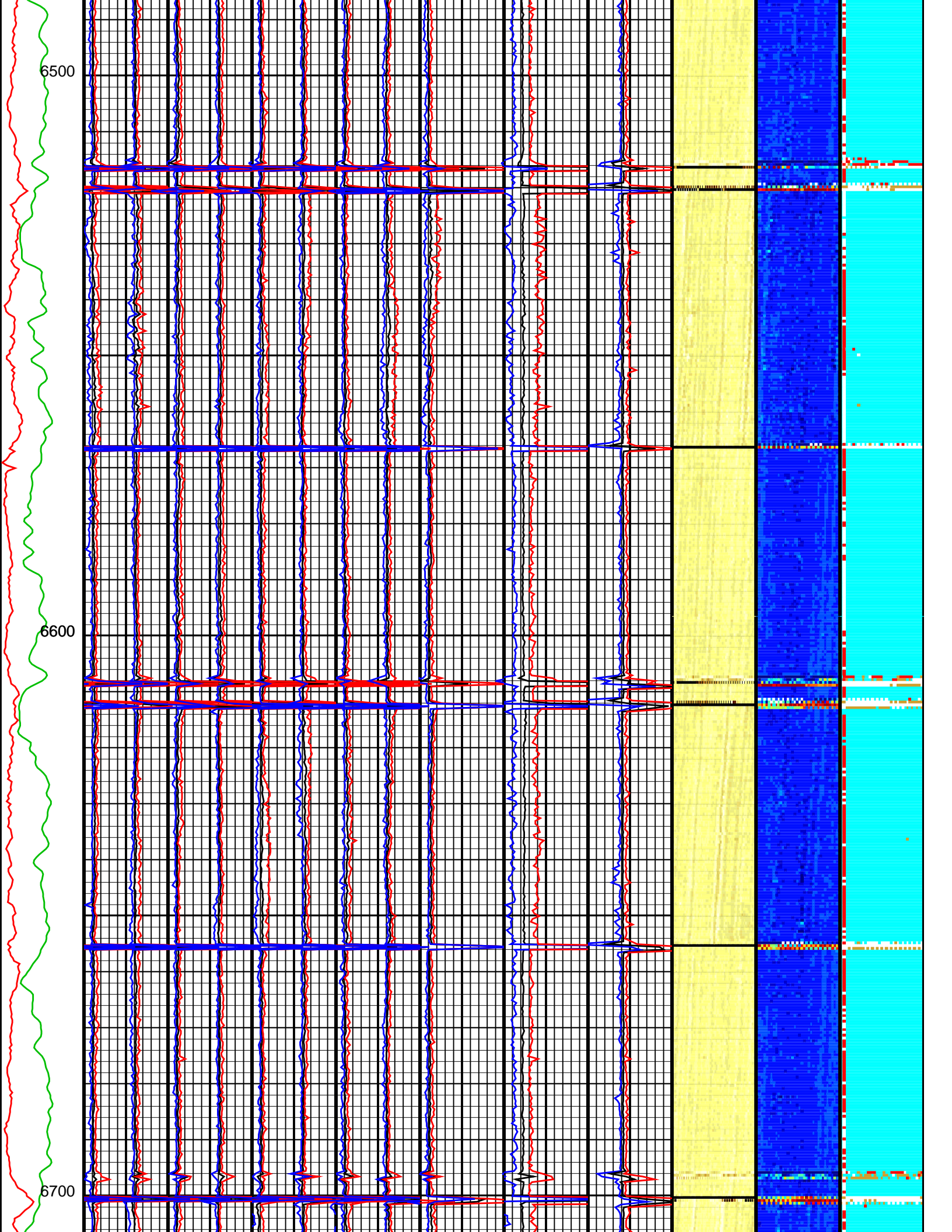


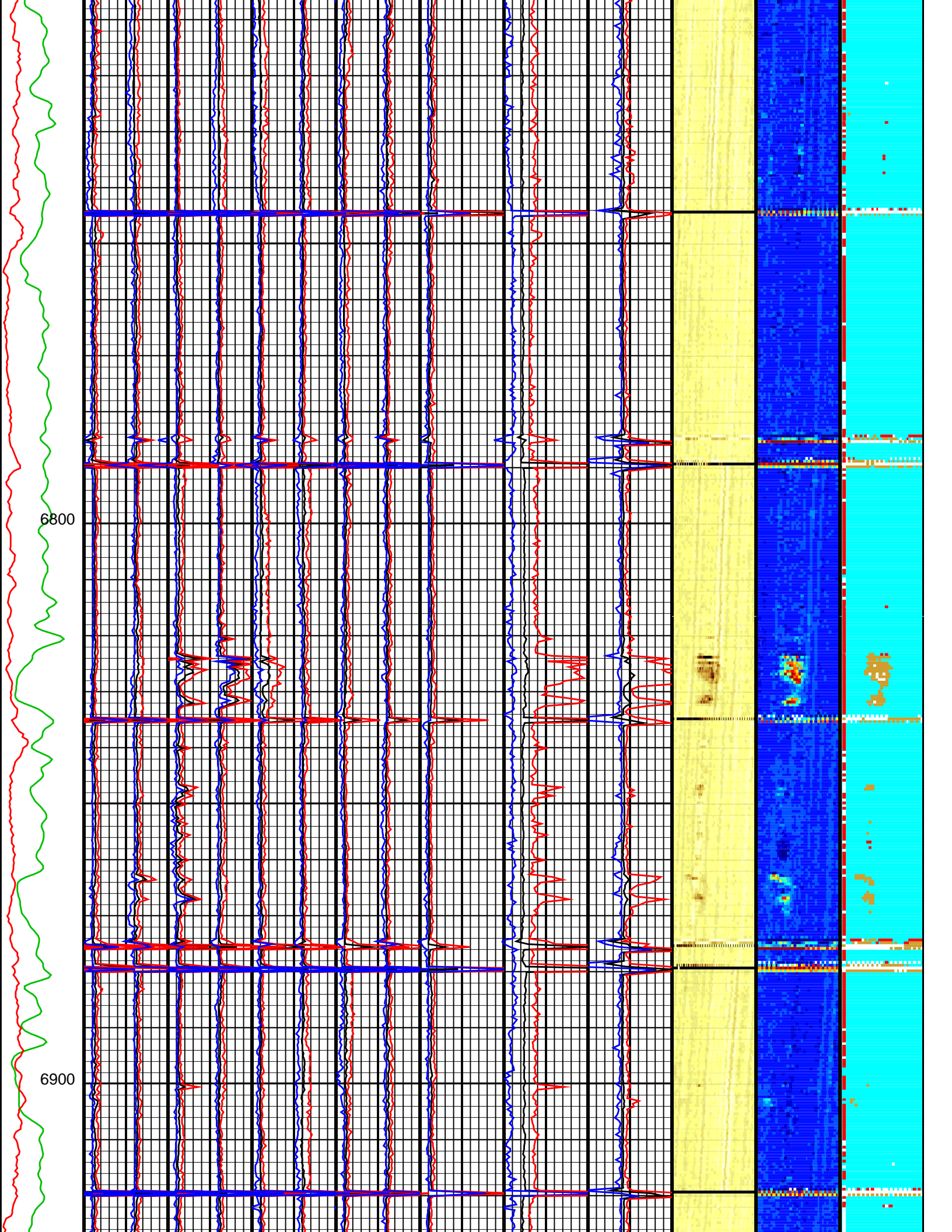


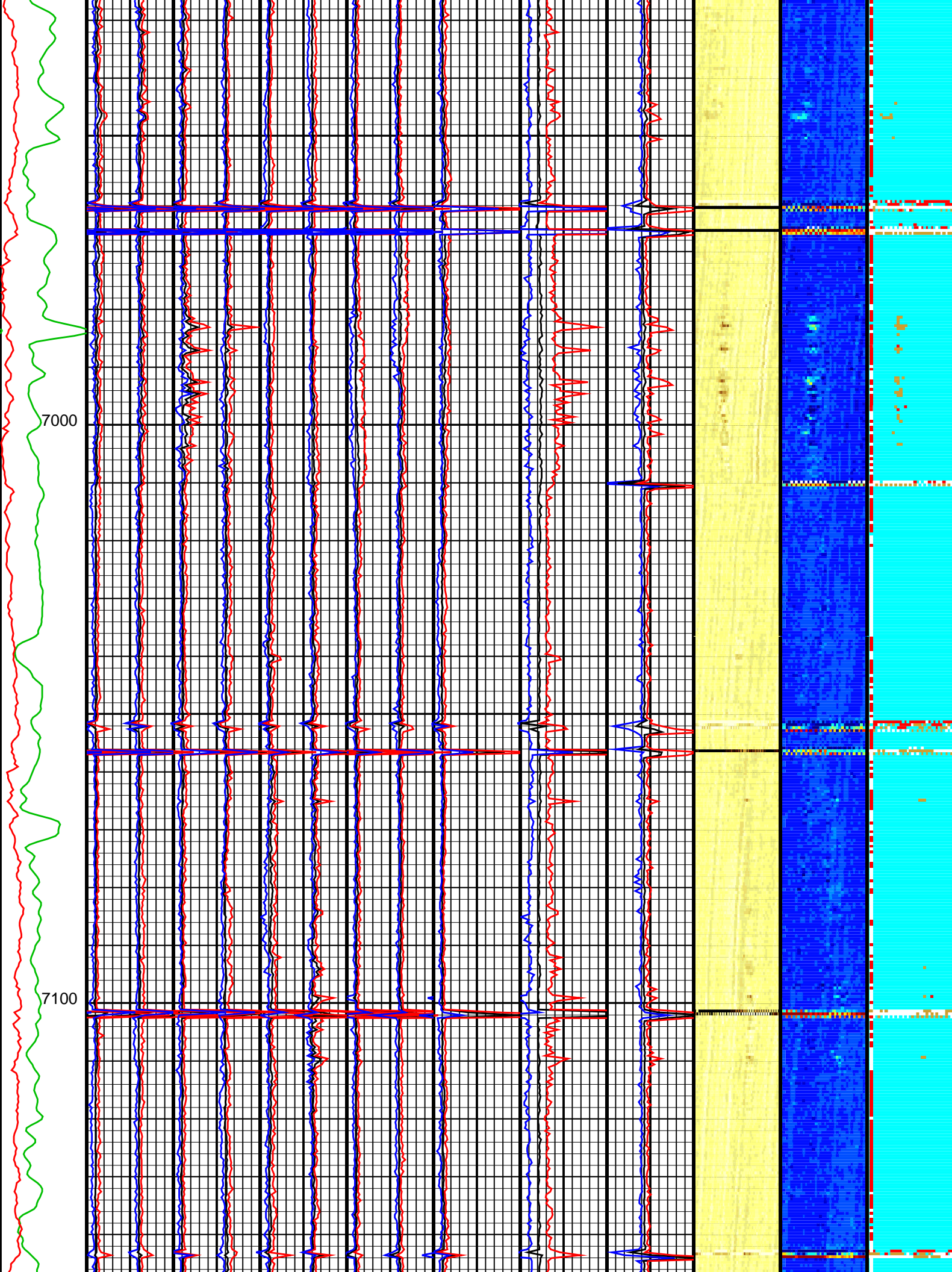


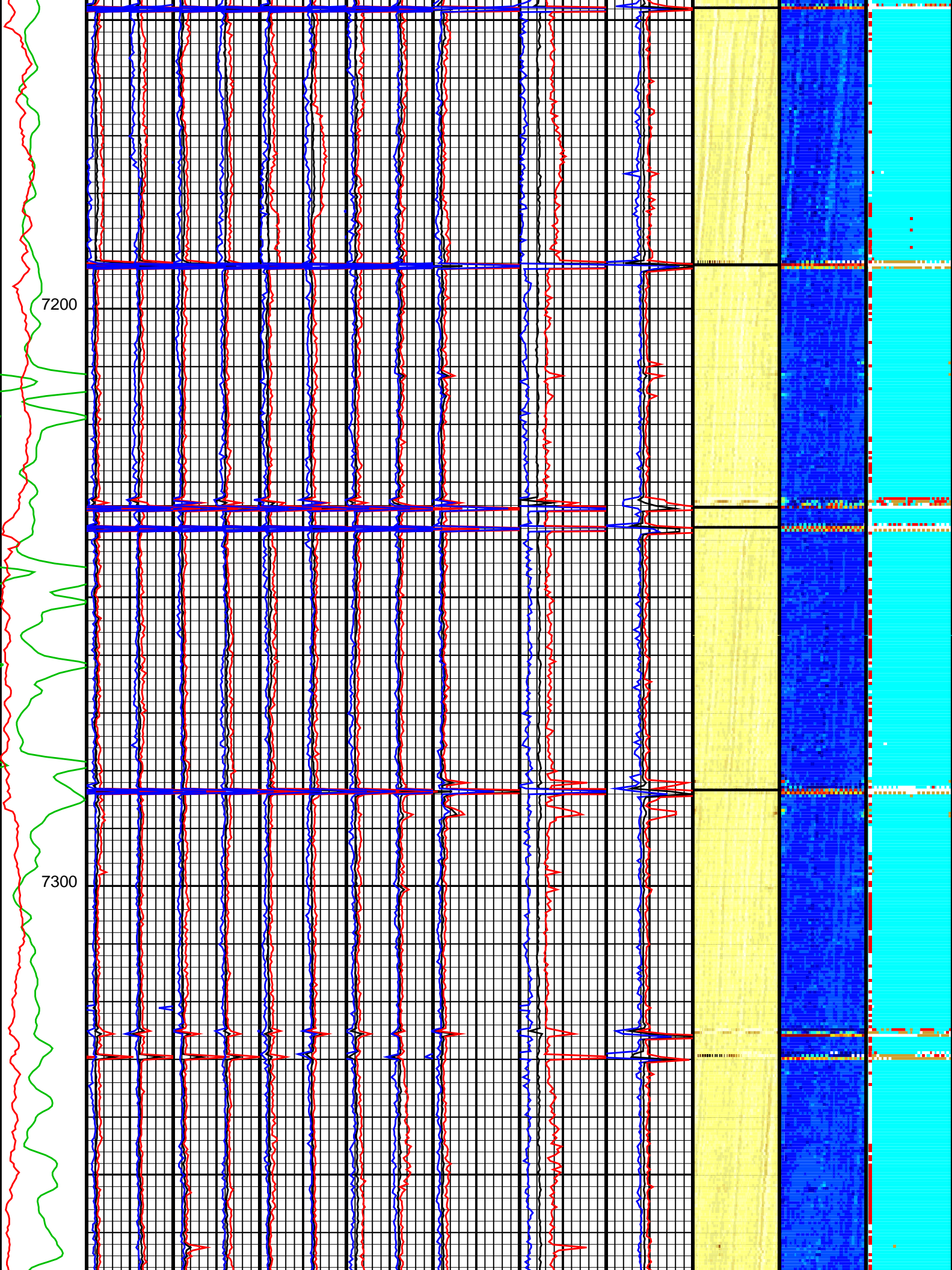


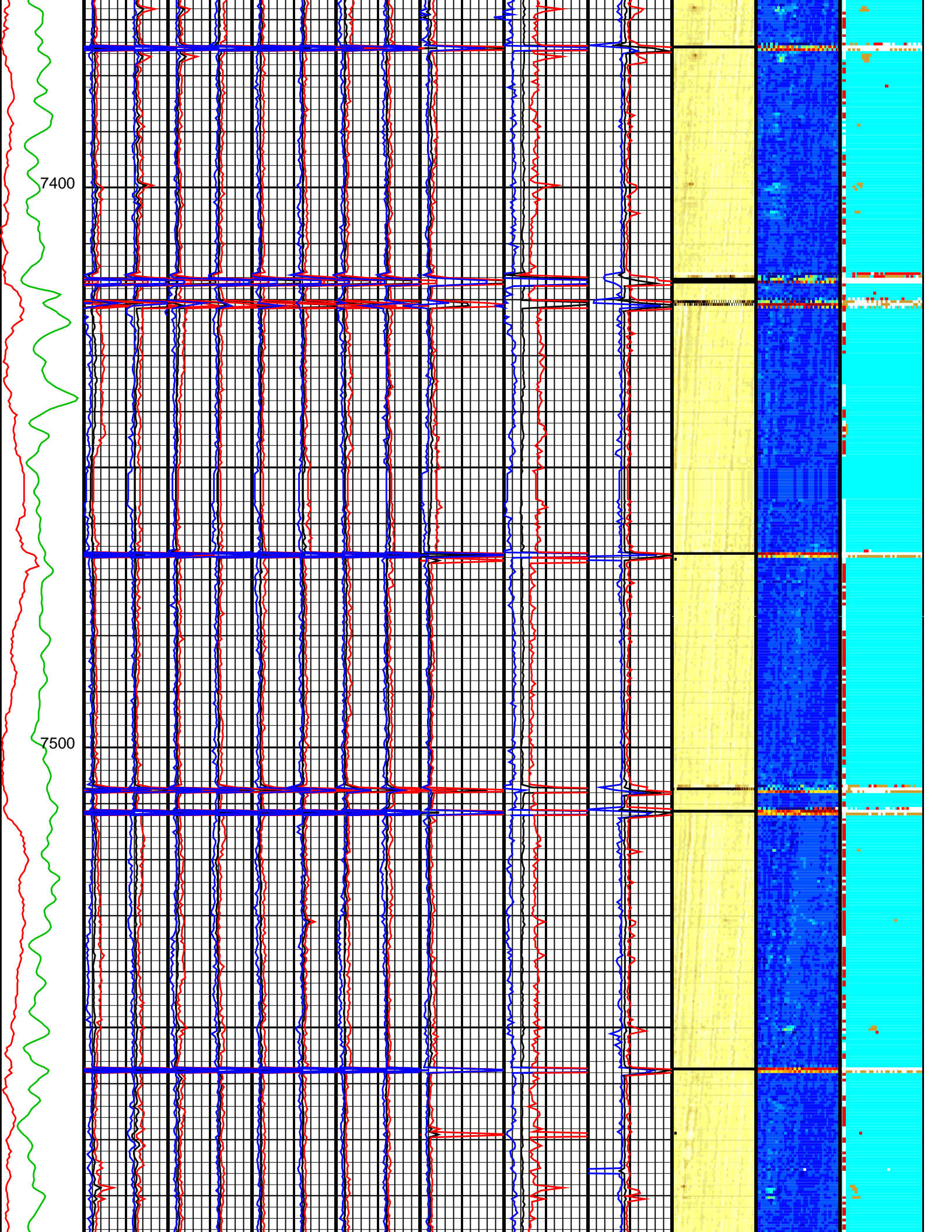


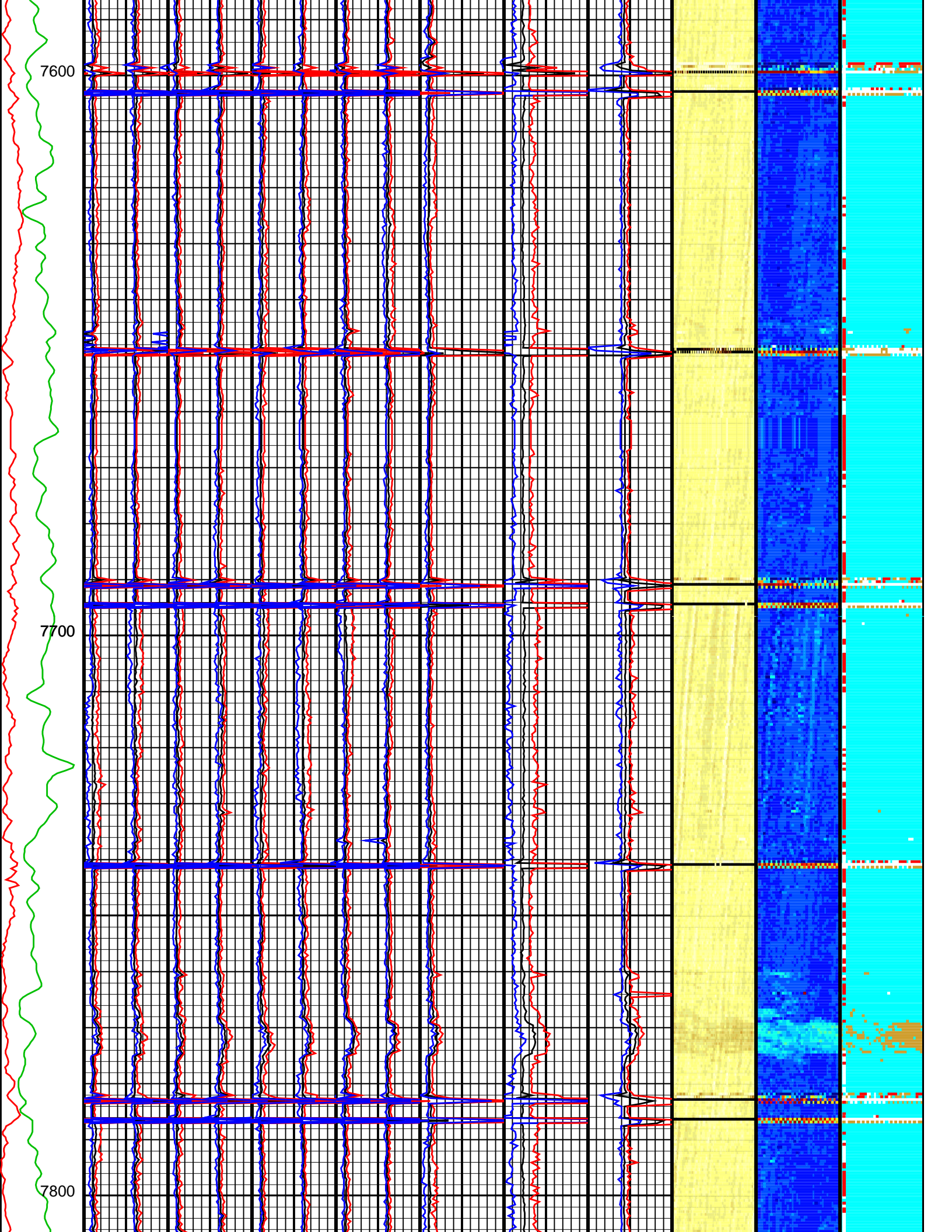


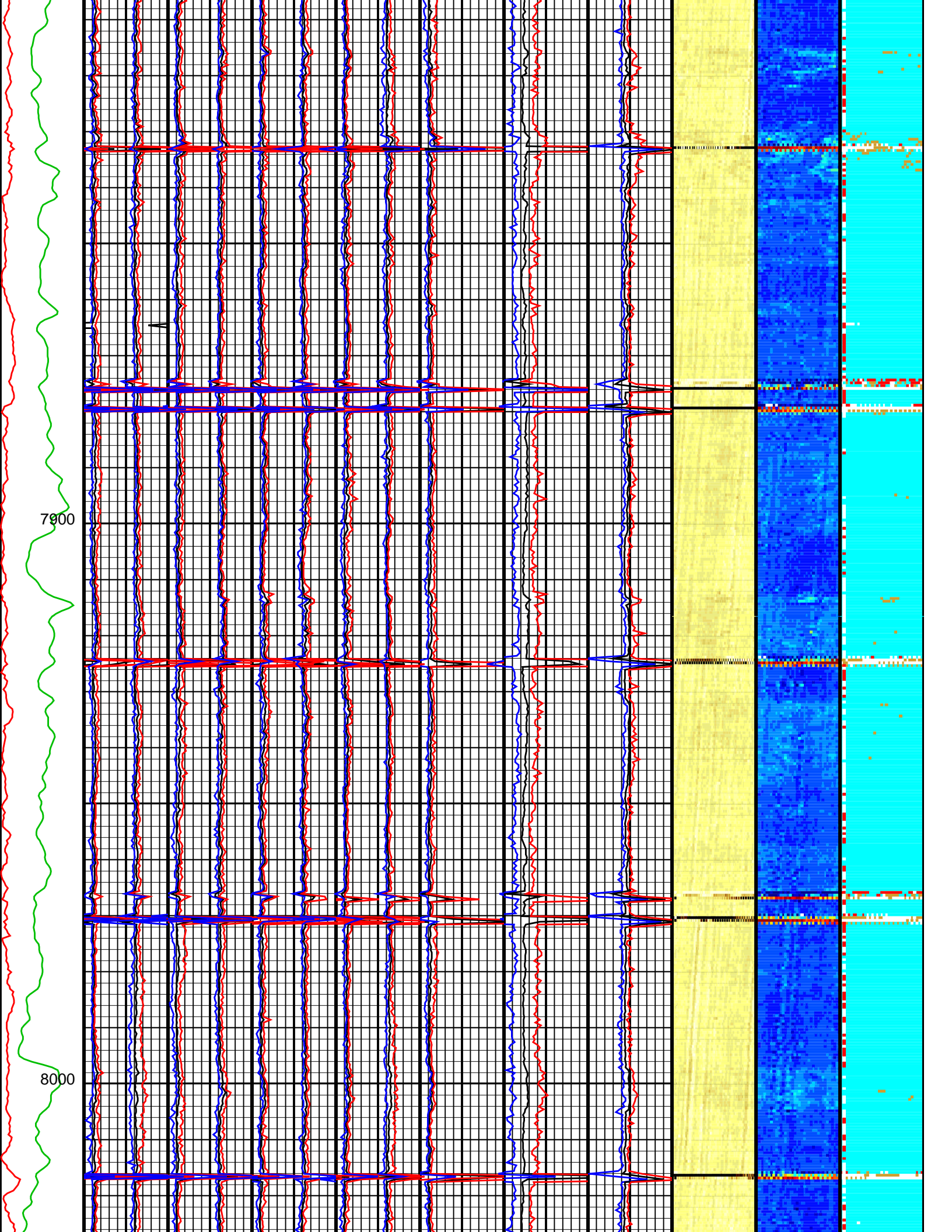


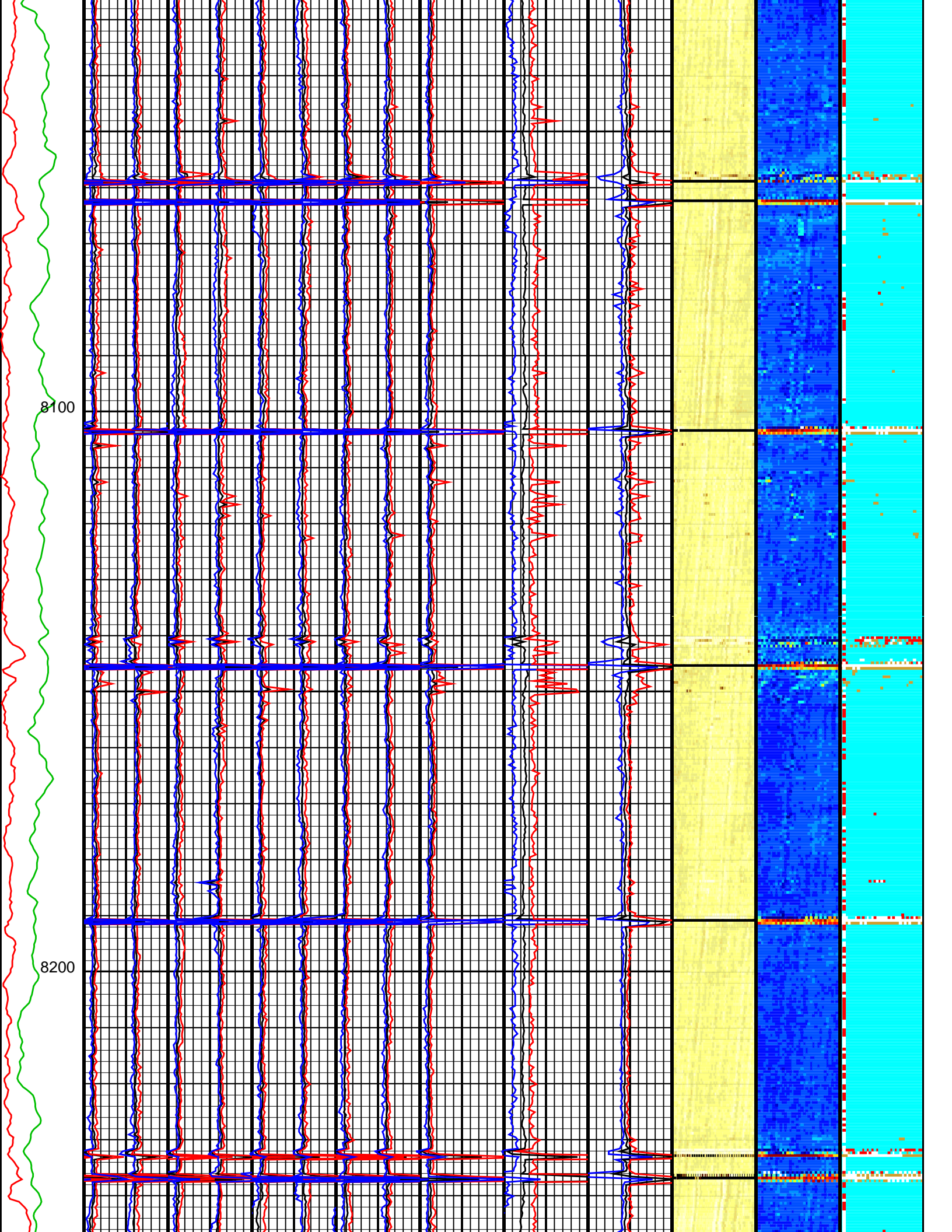


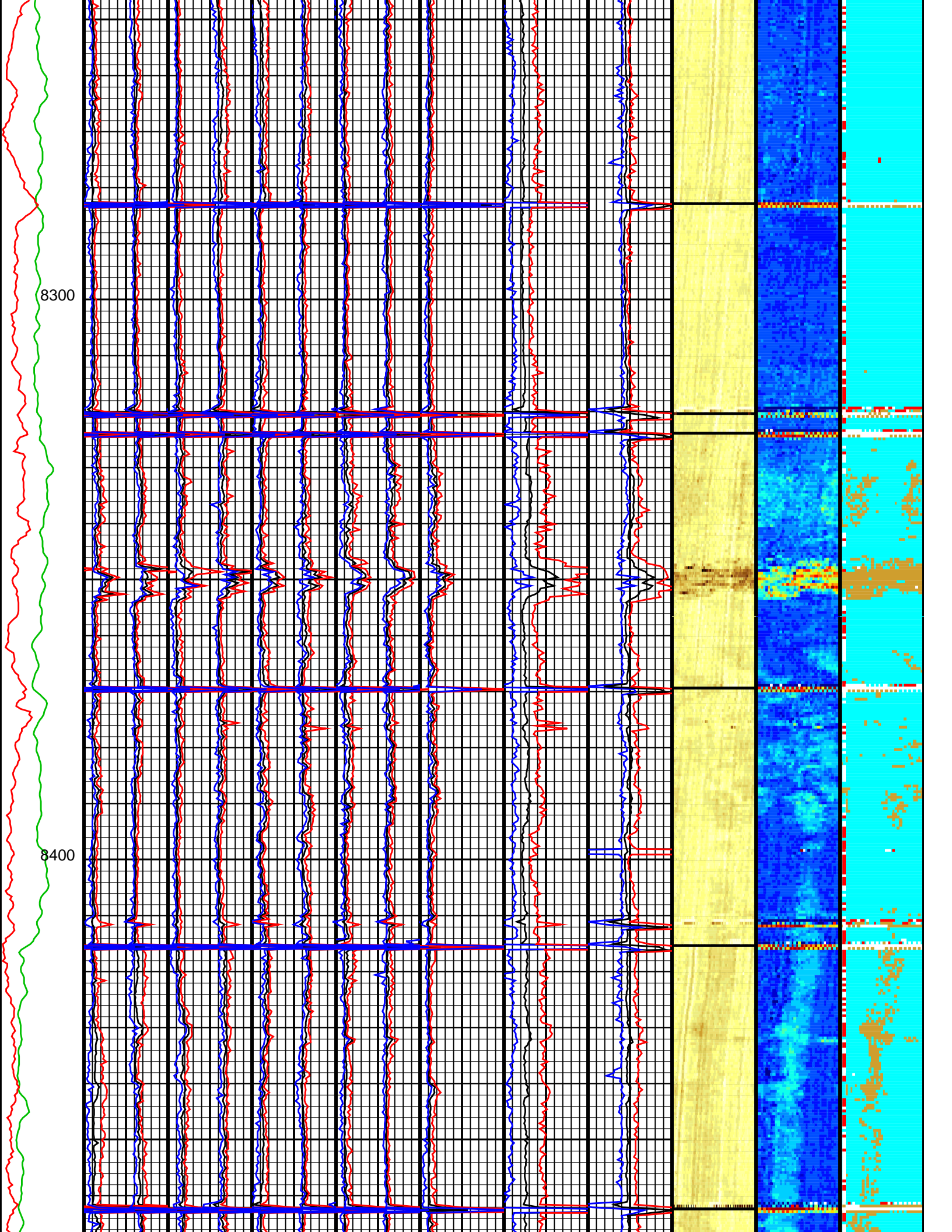


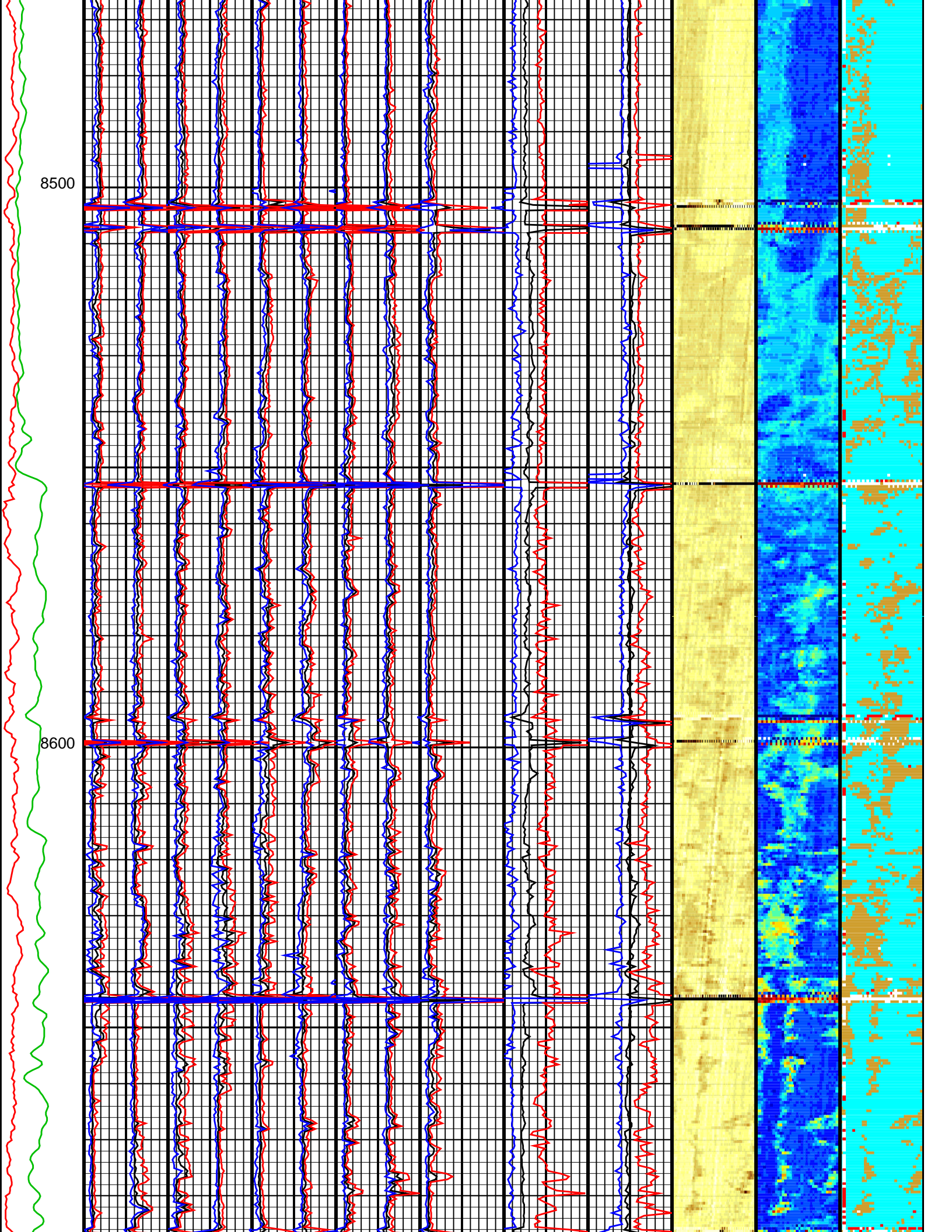


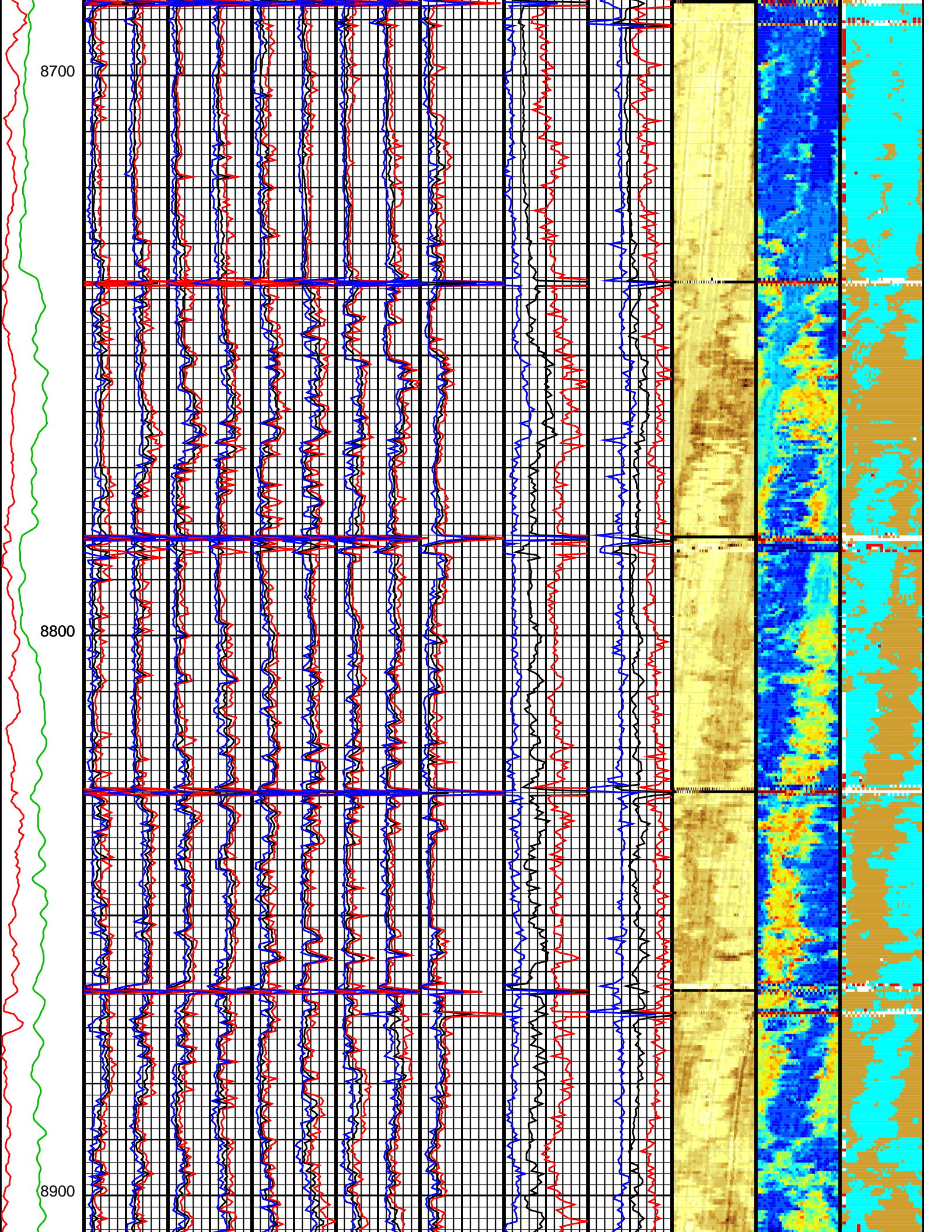


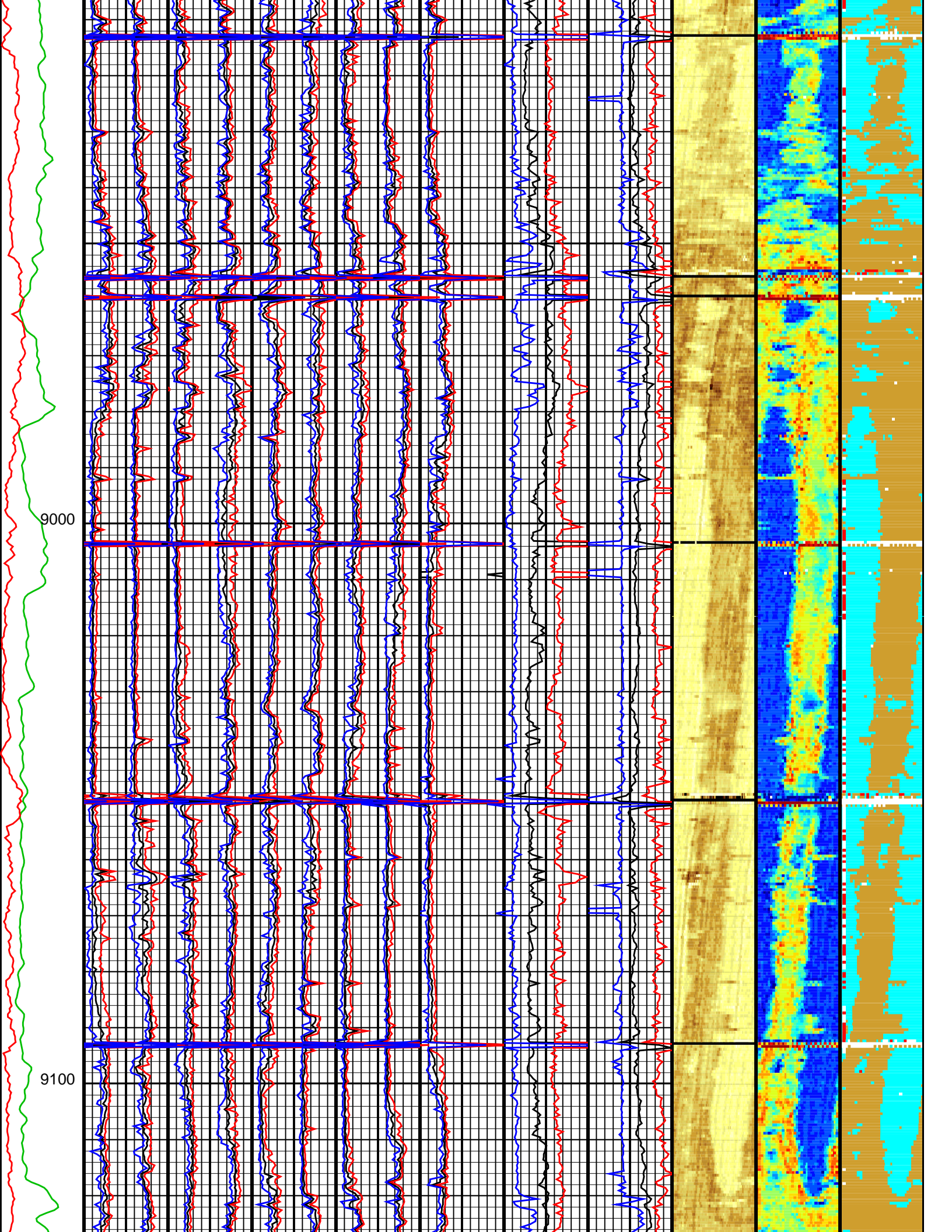


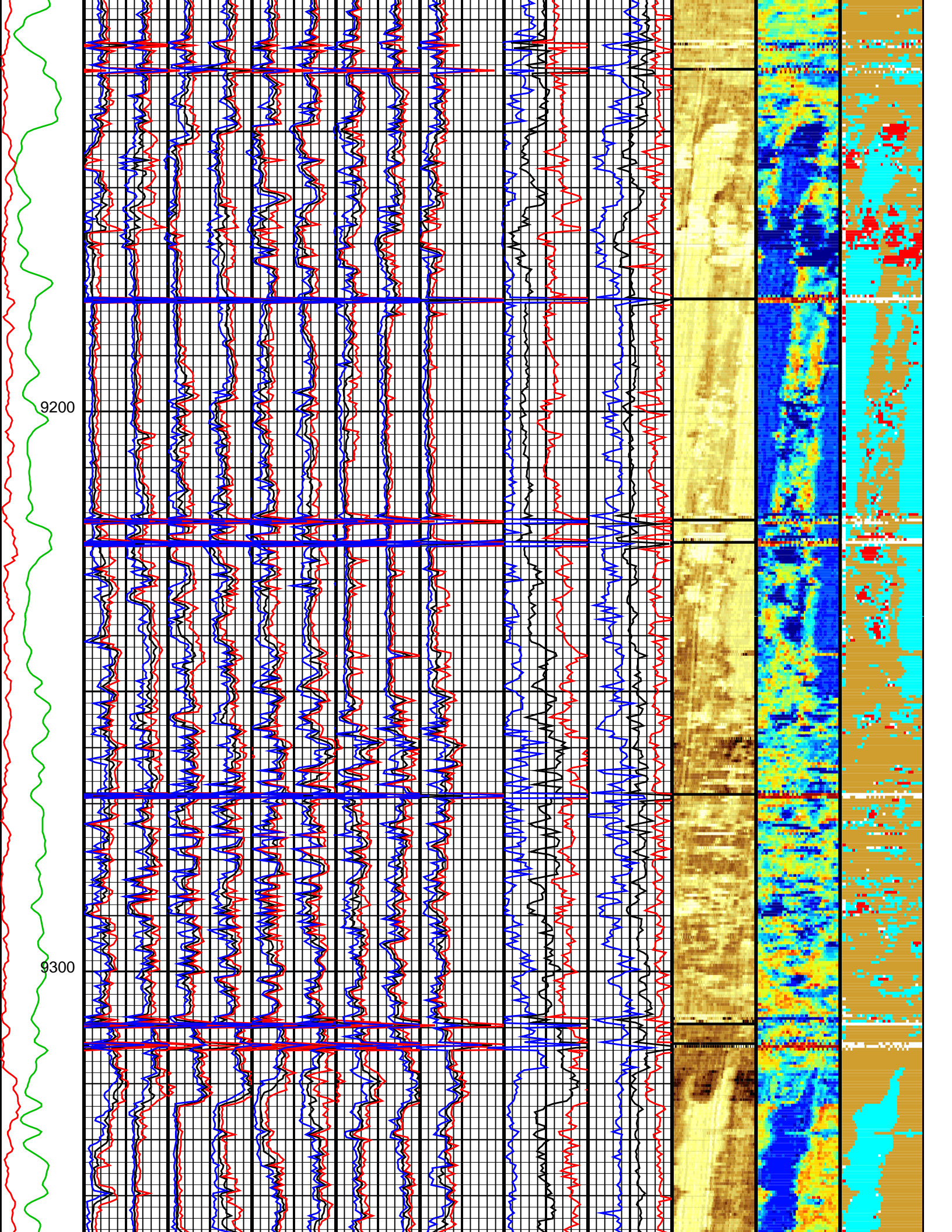


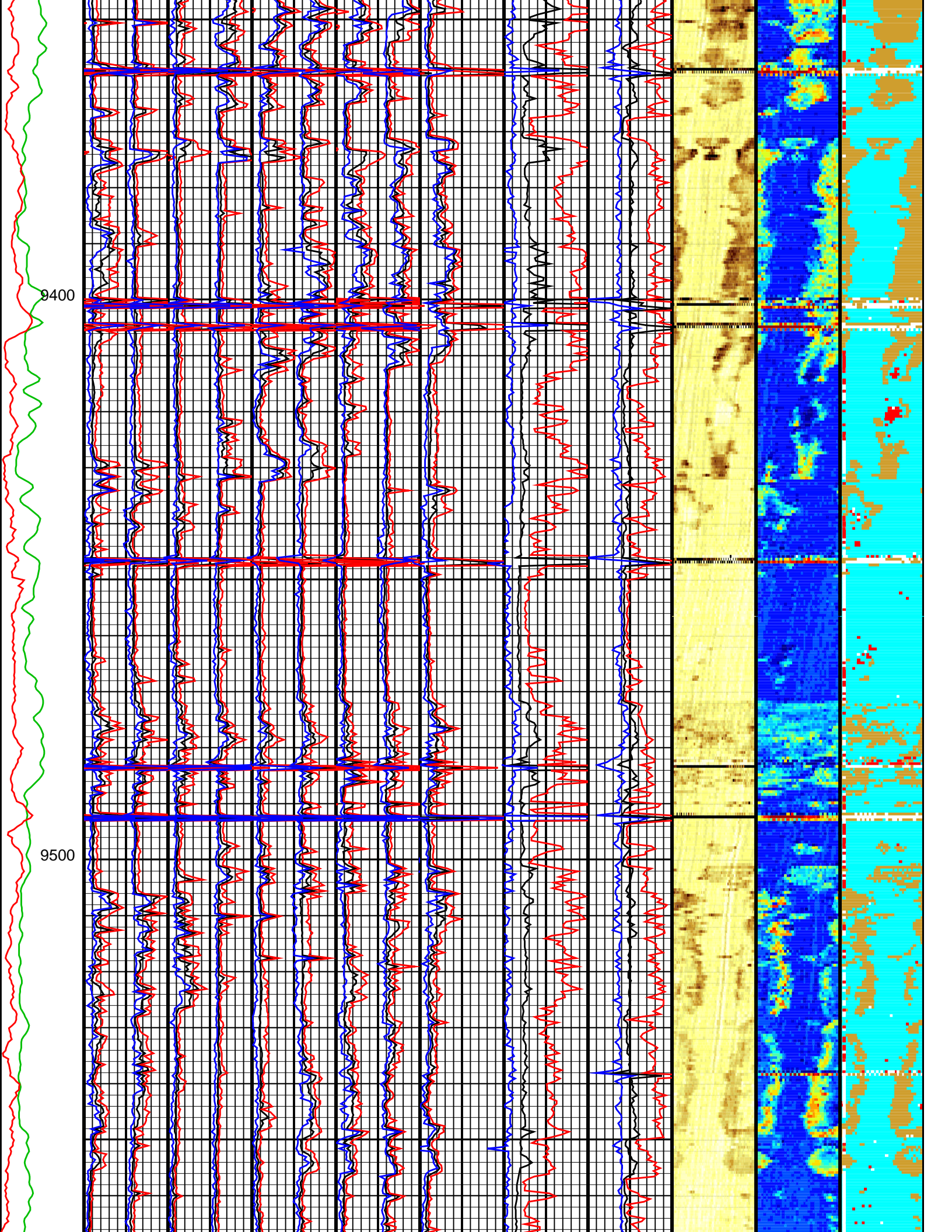


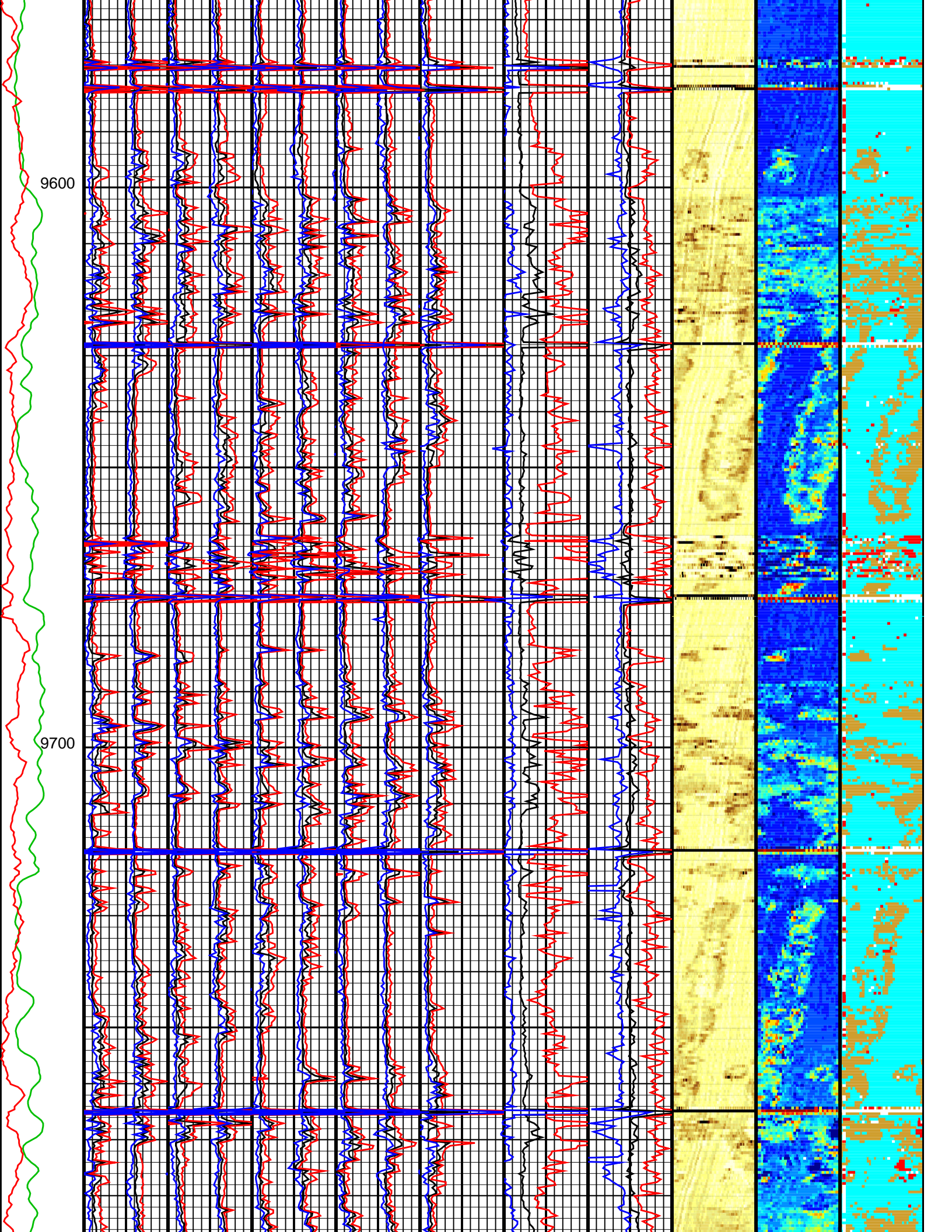


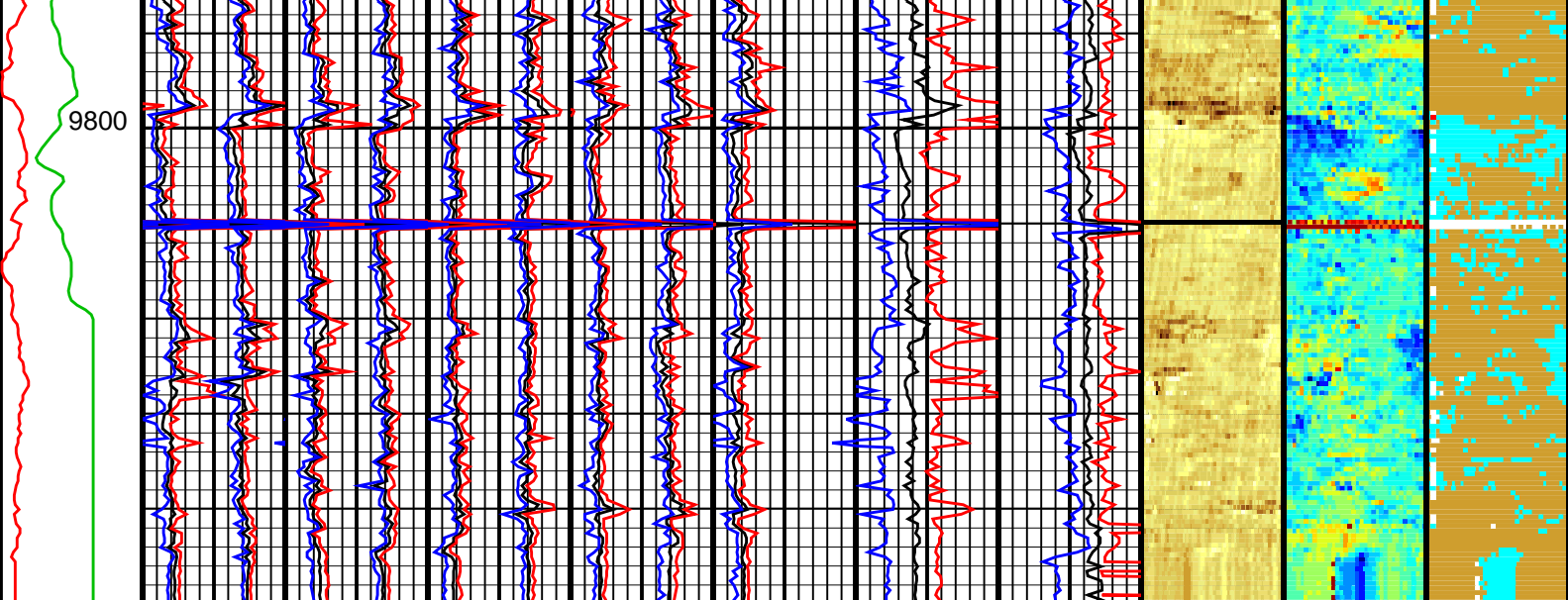












<div><div>Eccent. (ECCE)</div><div>0 (IN) 0.5</div></div>	Average Acoustic Impedance #1 (AV_ AI1) (MRAY)		Average Acoustic Impedance #3 (AV_ AI3) (MRAY)		Average Acoustic Impedance #5 (AV_ AI5) (MRAY)		Average Acoustic Impedance #7 (AV_ AI7) (MRAY)		Average Acoustic Impedance #9 (AV_ AI9) (MRAY)		Average of AI (AIAV) (MRAY)		Minimum Flexural Attenuation (U-USIT_ UFAN) (DB/M)		<div><div>Raw Acoustic Imped. (AIBK) (MRAY)</div><div>Flexural Attenuation (U-USIT_ UFAK) (DB/M)</div></div> <div>Solid Liquid Gas Map (U-USIT_ USLP) (-----)</div> <div><div>0.5000 1.5000 2.5000 3.5000</div></div>		
	015		015		015		015		015		07.5		0150				
<div><div>Gamma Ray (GR) (GAPI)</div><div>0150</div></div>	Average Acoustic Impedance #2 (AV_ AI2) (MRAY)		Average Acoustic Impedance #4 (AV_ AI4) (MRAY)		Average Acoustic Impedance #6 (AV_ AI6) (MRAY)		Average Acoustic Impedance #8 (AV_ AI8) (MRAY)		Maximum Acoustic Impedance #9 (MAX_ AI9) (MRAY)		Minimum of AI (AIMN) (MRAY)		Average Flexural Attenuation (U-USIT_ UFAV) (DB/M)				
	-7.57.5		-7.57.5		-7.57.5		-7.57.5		015		07.5		0150				
	Maximum Acoustic Impedance #1 (MAX_ AI1) (MRAY)		Maximum Acoustic Impedance #3 (MAX_ AI3) (MRAY)		Maximum Acoustic Impedance #5 (MAX_ AI5) (MRAY)		Maximum Acoustic Impedance #7 (MAX_ AI7) (MRAY)		Minimum Acoustic Impedance #9 (MIN_ AI9) (MRAY)		Maximum of AI (AIMX) (MRAY)		Maximum Flexural Attenuation (U-USIT_ UFAX) (DB/M)				
	015		015		015		015		015		07.5		0150				
	Maximum Acoustic Impedance #2 (MAX_ AI2) (MRAY)		Maximum Acoustic Impedance #4 (MAX_ AI4) (MRAY)		Maximum Acoustic Impedance #6 (MAX_ AI6) (MRAY)		Maximum Acoustic Impedance #8 (MAX_ AI8) (MRAY)										
	-7.57.5		-7.57.5		-7.57.5		-7.57.5										
	Minimum Acoustic Impedance #1 (MIN_ AI1) (MRAY)		Minimum Acoustic Impedance #3 (MIN_ AI3) (MRAY)		Minimum Acoustic Impedance #5 (MIN_ AI5) (MRAY)		Minimum Acoustic Impedance #7 (MIN_ AI7) (MRAY)										
	015		015		015		015										
	Minimum		Minimum		Minimum		Minimum										


	Acoustic Impedance #2 (MIN_ AI2) (MRAY)	Acoustic Impedance #4 (MIN_ AI4) (MRAY)	Acoustic Impedance #6 (MIN_ AI6) (MRAY)	Acoustic Impedance #8 (MIN_ AI8) (MRAY)	
	-7.5 7.5	-7.5 7.5	-7.5 7.5	-7.5 7.5	

Format: M_Goodwin	Vertical Scale: 5" per 100'	Graphics File Created: 20-Nov-2010 17:32
OP System Version: 17C0-154		
USIT-D	17C0-154	HILTH-FTB 17C0-154
DTC-H	17C0-154	

All USI Images are outside views

USI : LOW Frequency Compression Mode Used For Logging.
Recommended casing thickness range for optimum cement impedance measurement : 0.27 to 0.6 IN.

Input DLIS Files				
DEFAULT	USI_TLD_MCFL_CNL_010LUP	FN:9	PRODUCER	20-Nov-2010 16:25
Output DLIS Files				
DEFAULT	USI_TLD_MCFL_CNL_004PUP	FN:3	PRODUCER	20-Nov-2010 17:32



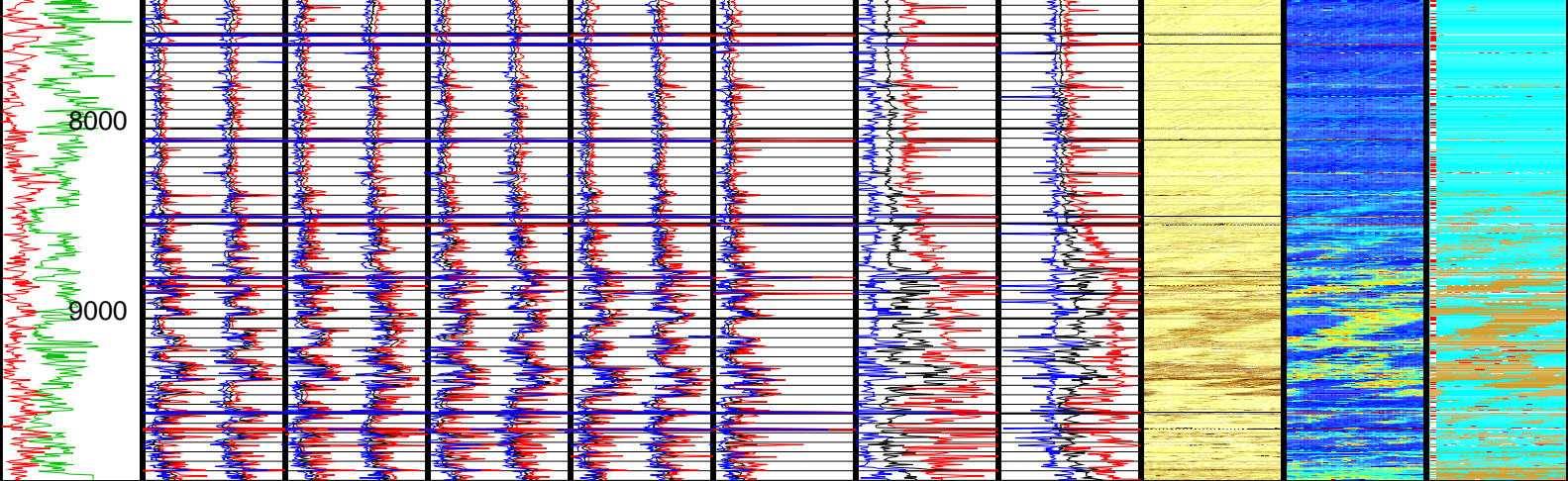
GOODWIN 0.1 INCH

MAXIS Field Log

Company: ExxonMobil Production Corp					Well: PCU 296-5A5				
Input DLIS Files									
DEFAULT		USI_TLD_MCFL_CNL_010LUP		FN:9		PRODUCER		20-Nov-2010 16:25	
Output DLIS Files									
DEFAULT		USI_TLD_MCFL_CNL_004PUP		FN:3		PRODUCER		20-Nov-2010 17:32	
OP System Version: 17C0-154									
USIT-D		17C0-154		HILTH-FTB		17C0-154			
DTC-H		17C0-154							

	Minimum Acoustic Impedance #2 (MIN_ AI2) (MRAY)	Minimum Acoustic Impedance #4 (MIN_ AI4) (MRAY)	Minimum Acoustic Impedance #6 (MIN_ AI6) (MRAY)	Minimum Acoustic Impedance #8 (MIN_ AI8) (MRAY)	
	-7.5 7.5	-7.5 7.5	-7.5 7.5	-7.5 7.5	

[illegible]



<div>Eccent. (ECCE) 0 (IN) 0.5</div>	Average Acoustic Impedance #1 (AV_ AI1) (MRAY)	Average Acoustic Impedance #3 (AV_ AI3) (MRAY)	Average Acoustic Impedance #5 (AV_ AI5) (MRAY)	Average Acoustic Impedance #7 (AV_ AI7) (MRAY)	Average Acoustic Impedance #9 (AV_ AI9) (MRAY)	Average of AI (AIAV) (MRAY)	Minimum Flexural Attenuation (U-USIT_ UFAN) (DB/M)	<div><div><div>-500.0000</div><div>0.5000</div><div>1.0000</div><div>1.5000</div><div>2.0000</div><div>2.5000</div><div>3.0000</div><div>3.5000</div><div>4.0000</div><div>4.5000</div><div>5.0000</div><div>5.5000</div><div>6.0000</div><div>6.5000</div><div>7.0000</div><div>7.5000</div><div>8.0000</div></div><div>Raw Acoustic Imped. (AIBK) (MRAY)</div></div> <div><div><div>0.0000</div><div>50.0000</div><div>57.0000</div><div>64.0000</div><div>71.0000</div><div>78.0000</div><div>85.0000</div><div>92.0000</div><div>99.0000</div><div>106.0000</div><div>113.0000</div><div>120.0000</div><div>127.0000</div><div>134.0000</div><div>141.0000</div><div>148.0000</div><div>155.0000</div></div><div>Flexural Attenuation (U-USIT_ UFAK) (DB/M)</div></div> <div><div><div>0.5000</div><div>1.5000</div><div>2.5000</div><div>3.5000</div></div><div>Solid Liquid Gas Map (U-USIT_ USLP) (----</div></div>
	015	015	015	015	015	07.5	0150	

<div>Gamma Ray (GR) (GAPI) 0150</div>	Average Acoustic Impedance #2 (AV_ AI2) (MRAY)	Average Acoustic Impedance #4 (AV_ AI4) (MRAY)	Average Acoustic Impedance #6 (AV_ AI6) (MRAY)	Average Acoustic Impedance #8 (AV_ AI8) (MRAY)	Maximum Acoustic Impedance #9 (MAX_ AI9) (MRAY)	Minimum of AI (AIMN) (MRAY)	Average Flexural Attenuation (U-USIT_ UFAV) (DB/M)	
	-7.57.5	-7.57.5	-7.57.5	-7.57.5	015	07.5	0150	

Maximum Acoustic Impedance #1 (MAX_ AI1) (MRAY)	Maximum Acoustic Impedance #3 (MAX_ AI3) (MRAY)	Maximum Acoustic Impedance #5 (MAX_ AI5) (MRAY)	Maximum Acoustic Impedance #7 (MAX_ AI7) (MRAY)	Minimum Acoustic Impedance #9 (MIN_ AI9) (MRAY)	Maximum of AI (AIMX) (MRAY)	Maximum Flexural Attenuation (U-USIT_ UFAX) (DB/M)
015	015	015	015	015	07.5	0150

Maximum Acoustic Impedance #2 (MAX_ AI2) (MRAY)	Maximum Acoustic Impedance #4 (MAX_ AI4) (MRAY)	Maximum Acoustic Impedance #6 (MAX_ AI6) (MRAY)	Maximum Acoustic Impedance #8 (MAX_ AI8) (MRAY)
-7.57.5	-7.57.5	-7.57.5	-7.57.5

Minimum Acoustic Impedance #1 (MIN_ AI1) (MRAY)	Minimum Acoustic Impedance #3 (MIN_ AI3) (MRAY)	Minimum Acoustic Impedance #5 (MIN_ AI5) (MRAY)	Minimum Acoustic Impedance #7 (MIN_ AI7) (MRAY)
015	015	015	015

Minimum Acoustic Impedance #2 (MIN_ AI2) (MRAY)	Minimum Acoustic Impedance #4 (MIN_ AI4) (MRAY)	Minimum Acoustic Impedance #6 (MIN_ AI6) (MRAY)	Minimum Acoustic Impedance #8 (MIN_ AI8) (MRAY)

(MKAT)	(MKAT)	(MKAT)	(MKAT)
-7.5	7.5	-7.5	7.5

OP System Version: 17C0-154

USIT-D

17C0-154

HILTH-FTB

17C0-154

DTC-H

17C0-154

All USI Images are outside views

USI : LOW Frequency Compression Mode Used For Logging.

Recommended casing thickness range for optimum cement impedance measurement : 0.27 to 0.6 IN.

Input DLIS Files

DEFAULT

USI_TLD_MCFL_CNL_010LUP

FN:9

PRODUCER

20-Nov-2010 16:25

Output DLIS Files


DEFAULT

USI_TLD_MCFL_CNL_004PUP

FN:3

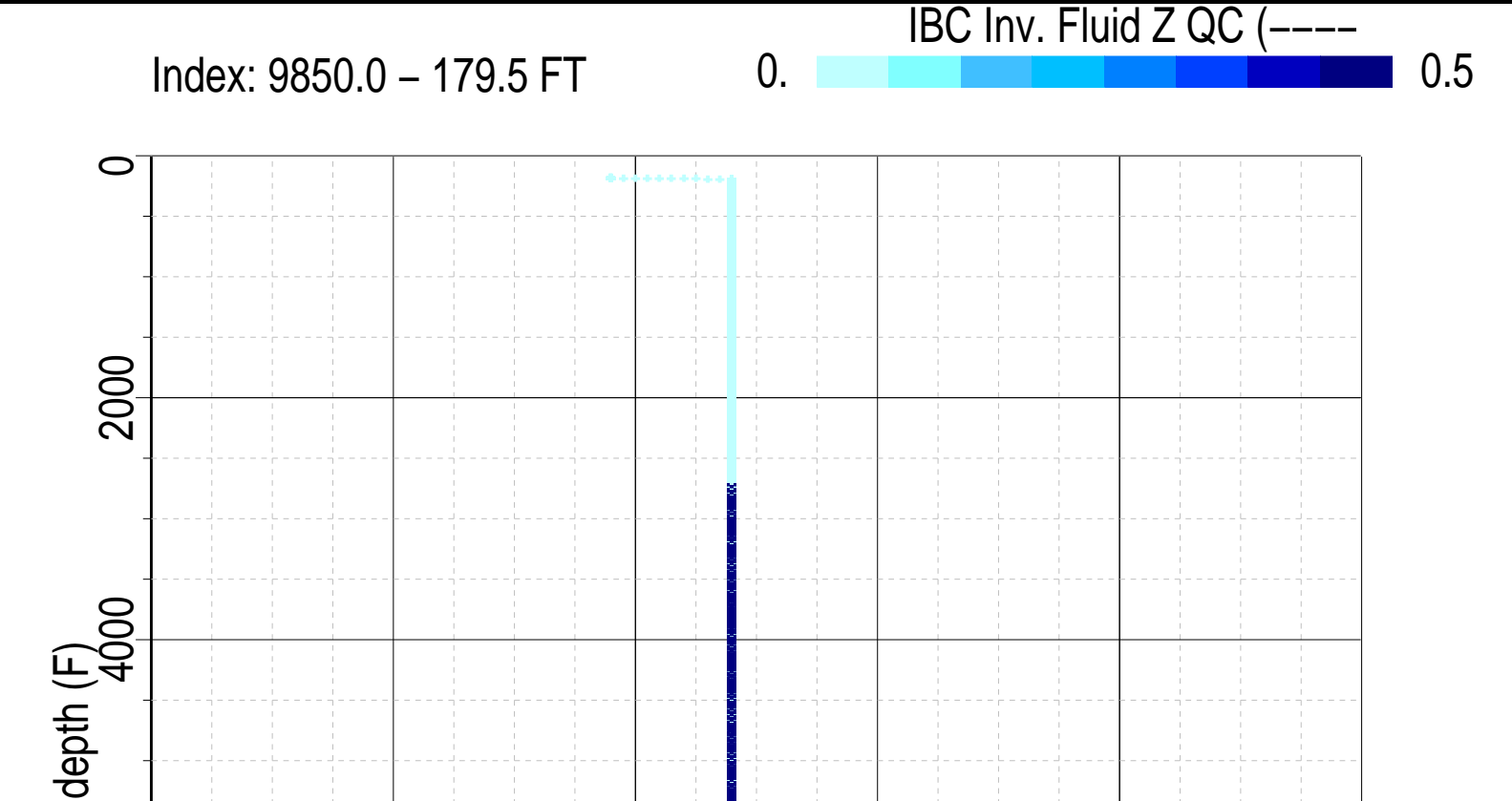
PRODUCER

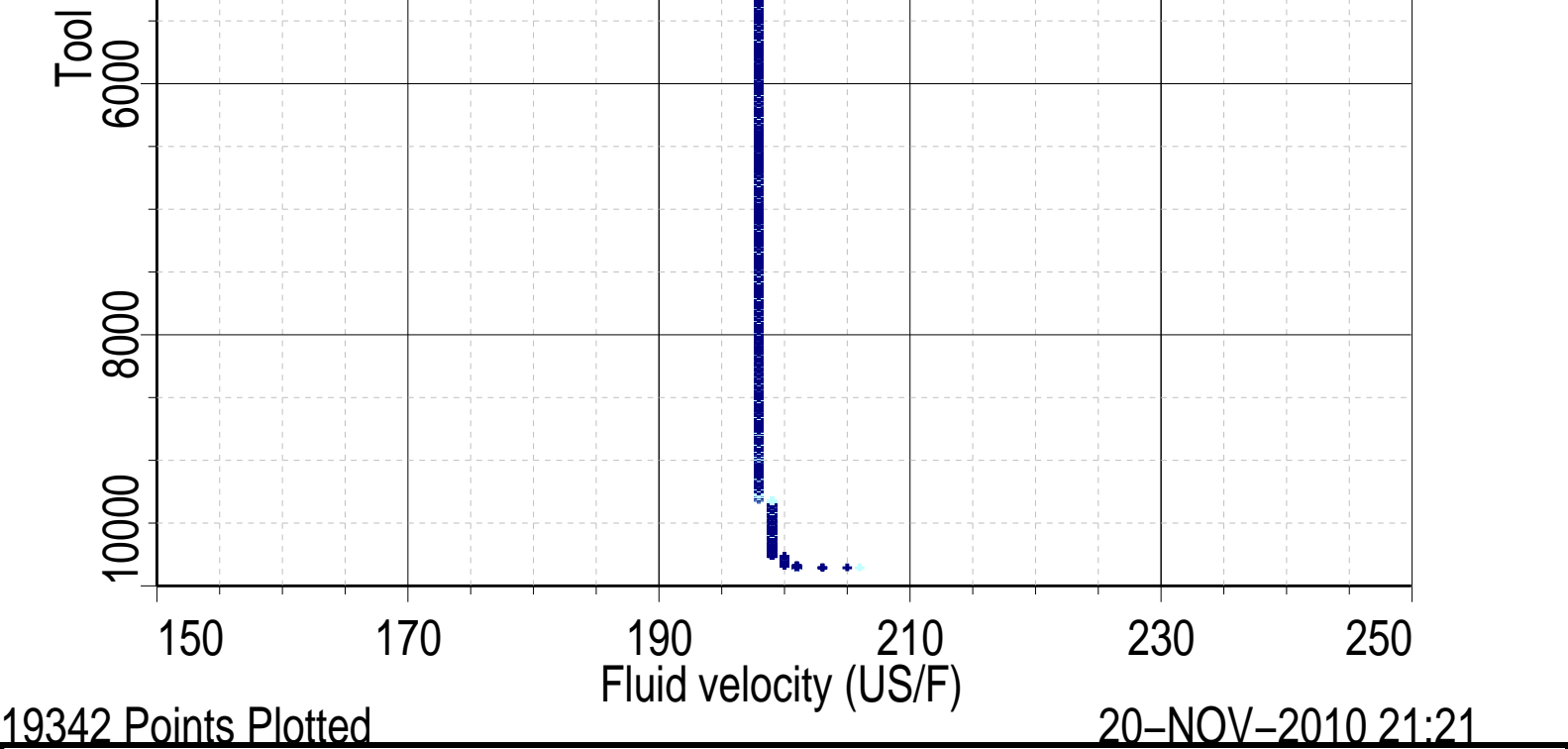
20-Nov-2010 17:32



FVEL

MAXIS Field Log



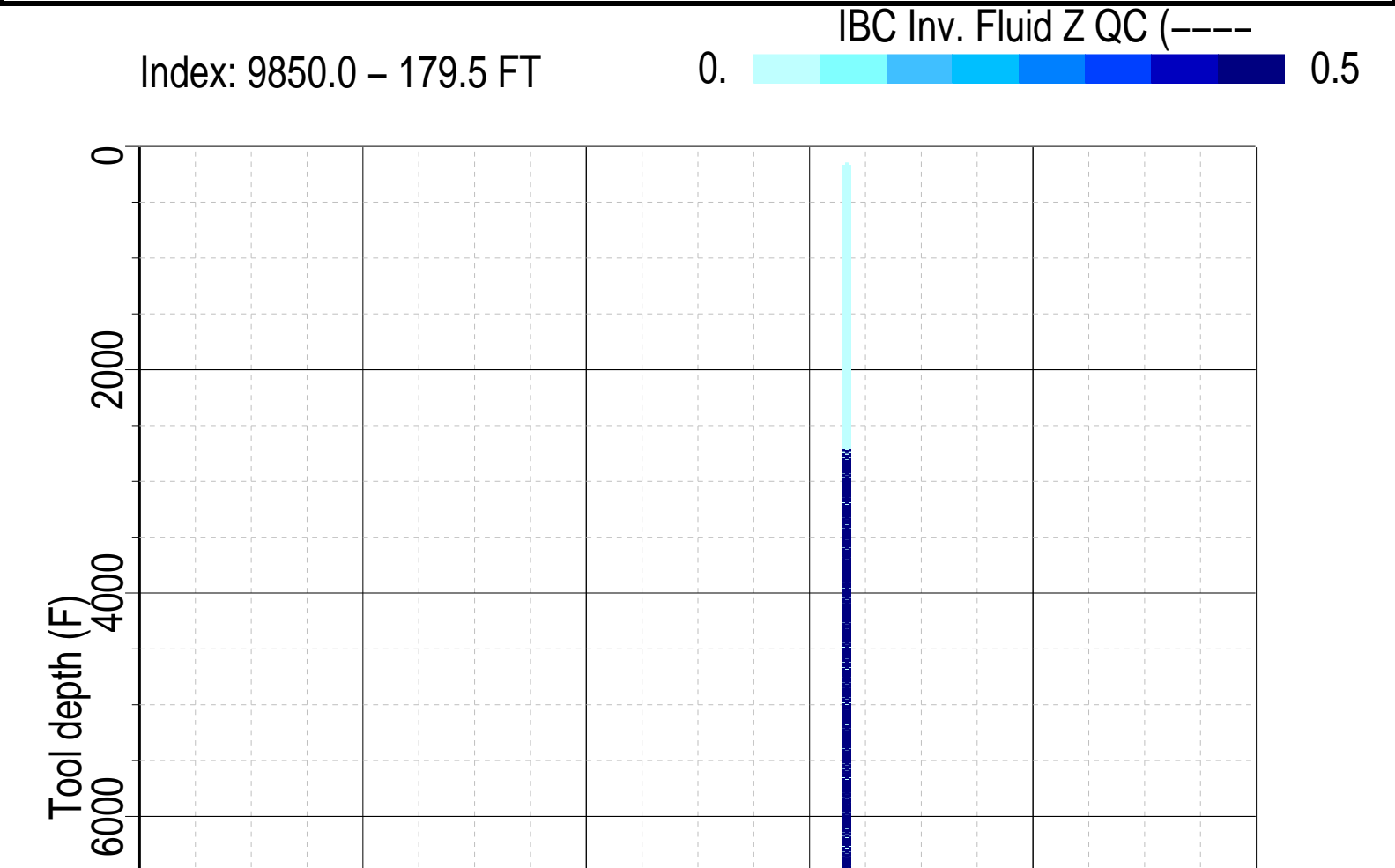


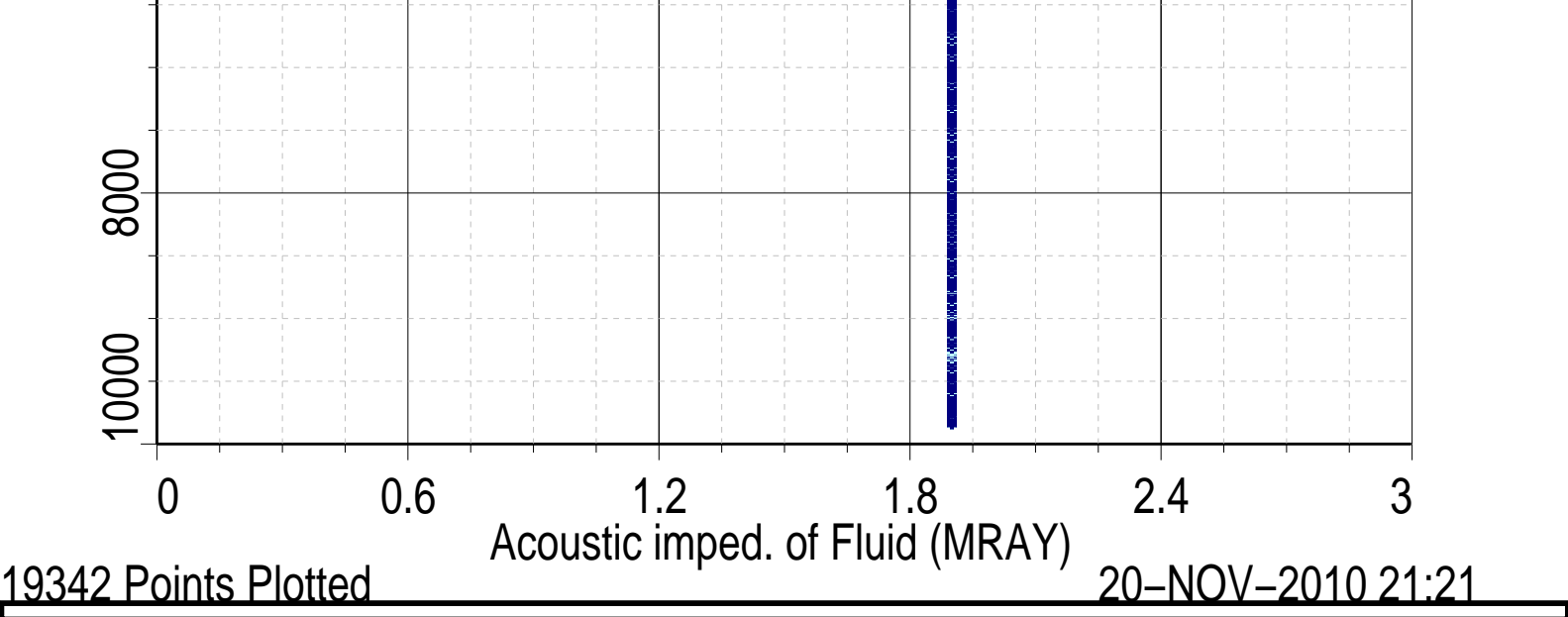
ZMUD

MAXIS Field Log

Index: 9850.0 – 179.5 FT

IBC Inv. Fluid Z QC (----) 0. 0.5





REPEAT PASS

MAXIS Field Log

Company: ExxonMobil Production Corp Well: PCU 296-5A5

Input DLIS Files						
DEFAULT	USI_TLD_MCFL_CNL_009LUP	FN:8	PRODUCER	20-Nov-2010 16:03	9850.0 FT	9470.7 FT
Output DLIS Files						
DEFAULT	USI_TLD_MCFL_CNL_002PUP	FN:1	PRODUCER	20-Nov-2010 16:40	9850.0 FT	9609.5 FT

OP System Version: 17C0-154			
USIT-D	17C0-154	HILTH-FTB	17C0-154
DTC-H	17C0-154		

Image rotation (UCAZ) (DEG)
0 360

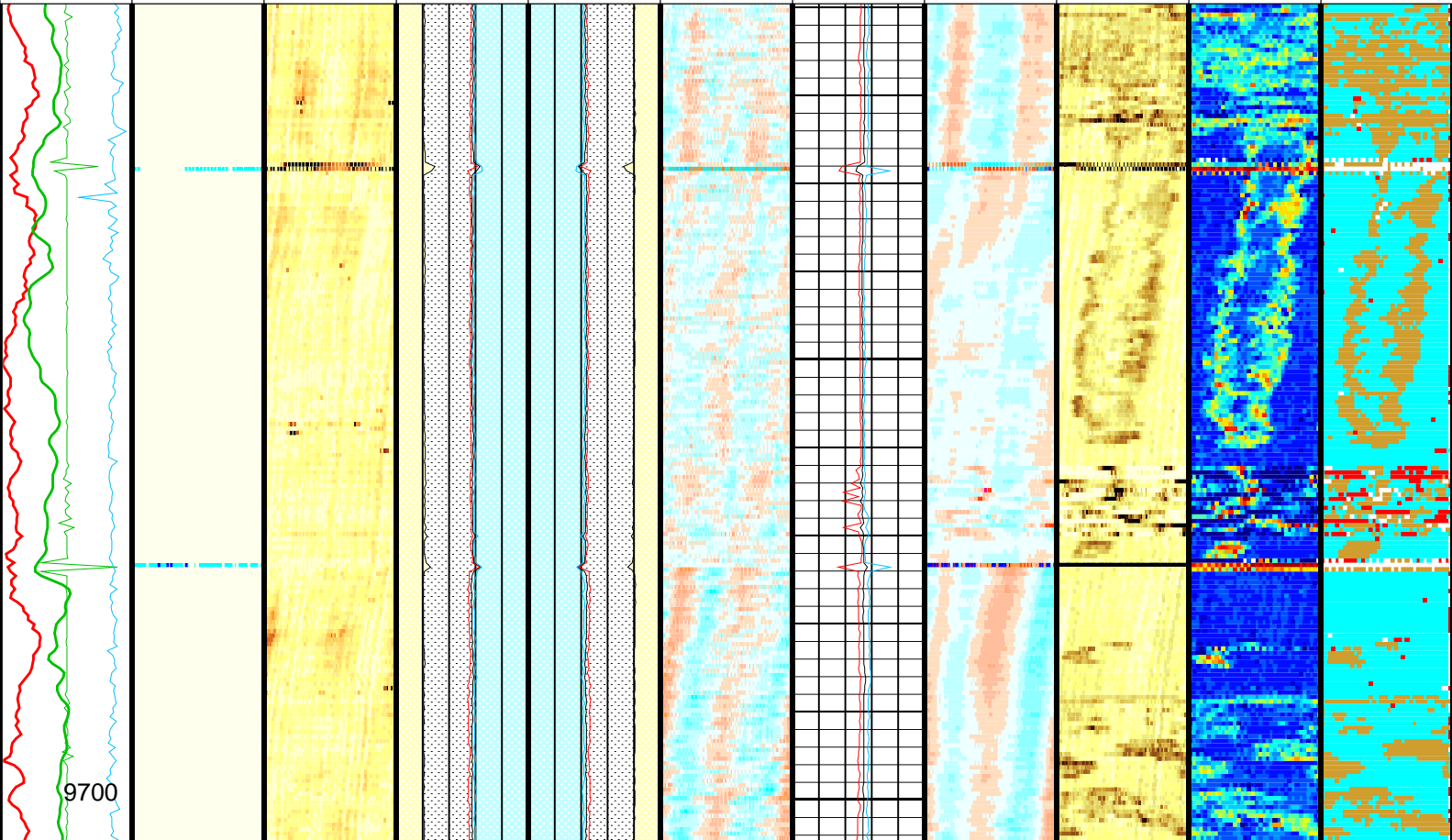
Tool/Tot. Drag From D4T to STIA

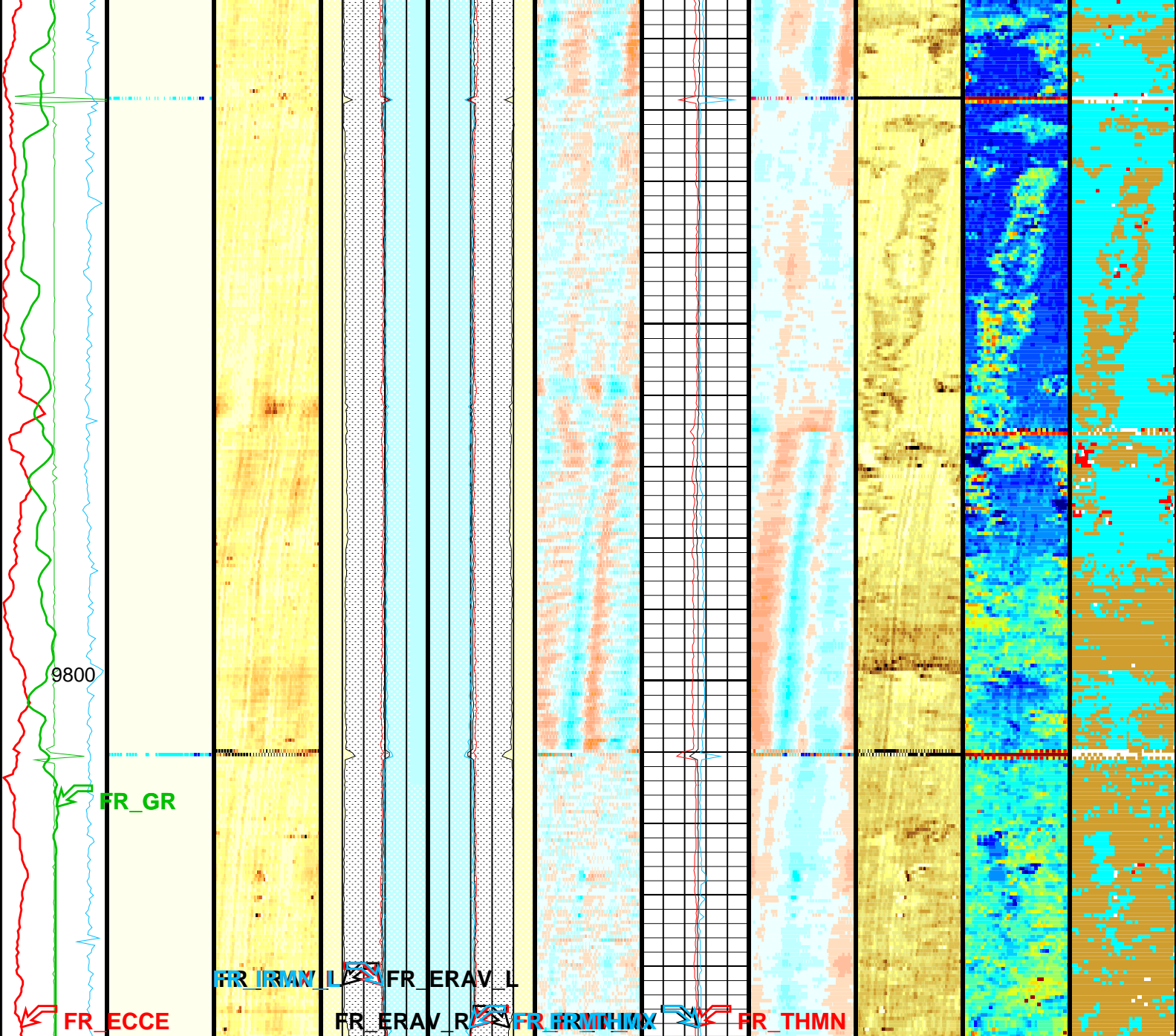
Cable Drag From D4T to STIT

Stuck Stretch (STIT)
0 (F) 50

Gamma Ray (GR) (GAPI) 0 150	Min of Internal radius (IRMN) (IN) 3.7 2.7 2.7 3.7	Min of Internal radius (IRMN) (IN) 3.7 2.7 2.7 3.7	
RSAV (RSAP) (RPS) 6 7.5	Internal radius Maximum (IRMX) (IN) 3.7 2.7 2.7 3.7	Internal radius Maximum (IRMX) (IN) 3.7 2.7 2.7 3.7	Maximum of Thickness (THMX) (IN) 0.1 0.6
CCL (CCLU) (----) -20 20	Internal radius Average (IRAV) (IN) 3.7 2.7 2.7 3.7	Internal radius Average (IRAV) (IN) 3.7 2.7 2.7 3.7	Average of Thickness (THAV) (IN) 0.1 0.6

Eccent. (ECCE) (IN) 0 0.5	<div> <div> 0.5000 1.5000 2.5000 3.5000 6.5000 </div> <div> Process. flags (UFLG) (----) </div> </div>	<div> <div> -500.0000 -6.0000 -5.6000 -5.2000 -4.8000 -4.4000 -4.0000 -3.6000 -3.2000 -2.8000 -2.4000 -2.0000 -1.6000 -1.2000 -0.8000 -0.4000 0.5000 </div> <div> Amplitude of echo minus Max (AWBK) (DB) </div> </div>	<div> <div> -500.0000 -0.0760 -0.0680 -0.0600 -0.0520 -0.0440 -0.0360 -0.0280 -0.0200 -0.0120 -0.0040 0.0040 0.0120 0.0200 0.0280 0.0360 0.0440 0.0520 0.0600 0.0680 0.0760 </div> <div> External radius Average (ERAV) (IN) 3.7 2.7 2.7 3.7 </div> <div> External radius Average (ERAV) (IN) 3.7 2.7 2.7 3.7 </div> </div>	<div> <div> -500.0000 -0.0760 -0.0680 -0.0600 -0.0520 -0.0440 -0.0360 -0.0280 -0.0200 -0.0120 -0.0040 0.0040 0.0120 0.0200 0.0280 0.0360 0.0440 0.0520 0.0600 0.0680 0.0760 </div> <div> Min of Thickness (THMN) (IN) 0.1 0.6 </div> </div>	<div> <div> -500.0000 -0.0760 -0.0680 -0.0600 -0.0520 -0.0440 -0.0360 -0.0280 -0.0200 -0.0120 -0.0040 0.0040 0.0120 0.0200 0.0280 0.0360 0.0440 0.0520 0.0600 0.0680 0.0760 </div> <div> Thickness minus Ave (THBK) (IN) </div> </div>	<div> <div> -500.0000 0.5000 1.0000 1.5000 2.0000 2.5000 3.0000 3.5000 4.0000 4.5000 5.0000 5.5000 6.0000 6.5000 7.0000 7.5000 8.0000 </div> <div> Raw Acoustic Imped. (AIBK) (MRAY) </div> </div>	<div> <div> 0.0000 50.0000 57.0000 64.0000 71.0000 78.0000 85.0000 92.0000 99.0000 106.0000 113.0000 120.0000 127.0000 134.0000 141.0000 148.0000 155.0000 </div> <div> Flexural Attenuation (U-USIT_ UFAK) (DB/M) </div> </div>	<div> <div> 0.5000 1.5000 2.5000 3.5000 </div> <div> Solid Liquid Gas Map (U-USIT_ USLP) (----) </div> </div>
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<div>Eccent. (ECCE)</div> <div>0 (IN) 0.5</div>	<div>Process. flags (UFLG) (----</div> <div><div>0.5000</div><div>1.5000</div><div>2.5000</div><div>3.5000</div><div>6.5000</div></div>	<div>Amplitude of echo minus Max (AWBK) (DB)</div> <div><div>-500.0000</div><div>-6.0000</div><div>-5.6000</div><div>-5.2000</div><div>-4.8000</div><div>-4.4000</div><div>-4.0000</div><div>-3.6000</div><div>-3.2000</div><div>-2.8000</div><div>-2.4000</div><div>-2.0000</div><div>-1.6000</div><div>-1.2000</div><div>-0.8000</div><div>-0.4000</div><div>0.5000</div></div>	<div>External radius Average (ERAV) (IN)</div> <div>3.7 2.7</div>	<div>External radius Average (ERAV) (IN)</div> <div>2.7 3.7</div>	<div>Internal radii minus Ave (IRBK) (IN)</div> <div><div>-500.0000</div><div>-0.0760</div><div>-0.0680</div><div>-0.0600</div><div>-0.0520</div><div>-0.0440</div><div>-0.0360</div><div>-0.0280</div><div>-0.0200</div><div>-0.0120</div><div>-0.0040</div><div>0.0040</div><div>0.0120</div><div>0.0200</div><div>0.0280</div><div>0.0360</div><div>0.0440</div><div>0.0520</div><div>0.0600</div><div>0.0680</div><div>0.0760</div></div>	<div>Min of Thickness (THMN) (IN)</div> <div>0.1 0.6</div>	<div>Thickness minus Ave (THBK) (IN)</div> <div><div>-500.0000</div><div>-0.0760</div><div>-0.0680</div><div>-0.0600</div><div>-0.0520</div><div>-0.0440</div><div>-0.0360</div><div>-0.0280</div><div>-0.0200</div><div>-0.0120</div><div>-0.0040</div><div>0.0040</div><div>0.0120</div><div>0.0200</div><div>0.0280</div><div>0.0360</div><div>0.0440</div><div>0.0520</div><div>0.0600</div><div>0.0680</div><div>0.0760</div></div>	<div>Raw Acoustic Imped. (AIBK) (MRAY)</div> <div><div>-500.0000</div><div>0.5000</div><div>1.0000</div><div>1.5000</div><div>2.0000</div><div>2.5000</div><div>3.0000</div><div>3.5000</div><div>4.0000</div><div>4.5000</div><div>5.0000</div><div>5.5000</div><div>6.0000</div><div>6.5000</div><div>7.0000</div><div>7.5000</div><div>8.0000</div></div>	<div>Flexural Attenuation (U-USIT_ UFAK) (DB/M)</div> <div><div>0.0000</div><div>50.0000</div><div>57.0000</div><div>64.0000</div><div>71.0000</div><div>78.0000</div><div>85.0000</div><div>92.0000</div><div>99.0000</div><div>106.0000</div><div>113.0000</div><div>120.0000</div><div>127.0000</div><div>134.0000</div><div>141.0000</div><div>148.0000</div><div>155.0000</div></div>	<div>Solid Liquid Gas Map (U-USIT_ USLP) (----</div> <div><div>0.5000</div><div>1.5000</div><div>2.5000</div><div>3.5000</div></div>
			<div>Internal radius Average</div>	<div>Internal radius Average</div>				<div>Average of Thickness (THMN)</div>		
<div>CCL (CCLU)</div>										

MW	Mud Weight	9.4	LB/G
RCOD	Reference Calibrator Outer Diameter	7	IN
RCSO	Reference Calibrator Standoff	1.1811	IN
RCTH	Reference Calibrator Thickness	0.2952	IN
TCUB	T^3 Processing Level	Vax_Loop	
THDH	Maximum Search Thickness (percentage of nominal)	130	
THDL	Minimum Search Thickness (percentage of nominal)	70	
THDP	Thickness Detection Policy	Fundamental	
THNO	Nominal Thickness of Casing	0.362	IN
U-USIT_CEMT	USIT Cement Type	ULTRA_LIGHT	
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	0	MRAY
U-USIT_IISR	USIT IBC Inverted Fluid Slowness Resolution	1.0_US_P_FT	
U-USIT_IIZR	USIT IBC Inverted ZMUD Resolution	0.050_MRAY	
U-USIT_OCDI	USIT Outer Casing Diameter	0	IN
U-USIT_OCSH	USIT Outer Casing Shoe	0	FT
U-USIT_OCWE	USIT Outer Casing Weight	0	LB/F
U-USIT_TIEB	IBC Third Interface Echo Bin Processing	YES	
U-USIT_TIEC	IBC Third Interface Echo Cleaning	NONE	
U-USIT_TIEM	IBC Third Interface Echo Multi Tracking	NO	
U-USIT_TIEP	IBC Third Interface Echo Policy	BFEP	
U-USIT_TIER	IBC Third Interface Echo Receivers	BOTH	
U-USIT_U3WE	Third Interface Echo Window End	110	US
U-USIT_UBTP	USIT Bottom Transducer Position	UNKNOWN	
U-USIT_UFAO	USIT Flexural Attenuation Offset	-5	DB/M
U-USIT_UIAP	USIT IBC Answer Product Enabled	SolidLiquidGasMap	
U-USIT_UIST	Ultrasonic IBC Sonde Type	Sub_ibcs_B	
U-USIT_UTAN	USIT Transducer Angles	33_DEG	
UMAO	USIT Measurement Angular Offset	-10	DEG
USTO	Ultrasonic Time Offset	-2	US
USUB	Ultrasonic Subassembly Identifier	Sub_7_inch	
UWKM	Ultrasonic Working Mode	5DEG_6IN_136UNF_LF	
VCAS	Ultrasonic Transversal Velocity in Casing	51.4	US/F
WLEN	T^3 Processing Length	21.7078	US
ZCAS	Acoustic Impedance of Casing	46.2537	MRAY
ZINI	Initial Estimate of Cement Impedance	-1	MRAY
ZMUD	Acoustic Impedance of Mud	1.9	MRAY
ZTCM	Acoustic Impedance Threshold for Cement	2.6	MRAY
ZTGS	Acoustic Impedance Threshold for Gas	0.3	MRAY
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth - Driller	-50000.00	FT
TDL	Total Depth - Logger	9850.00	FT
System and Miscellaneous			
BS	Bit Size	9.875	IN
CWEI	Casing Weight	26.00	LB/F
DO	Depth Offset for Playback	6.0	FT
PP	Playback Processing	RECOMPUTE	

Input DLIS Files

DEFAULT USI_TLD_MCFL_CNL_009LUP FN:8 PRODUCER 20-Nov-2010 16:03 9850.0 FT 9470.7 FT

Output DLIS Files

DEFAULT USI_TLD_MCFL_CNL_002PUP FN:1 PRODUCER 20-Nov-2010 16:40

Schlumberger

CALIBRATIONS

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
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Ultrasonic Imaging - D Wellsite Calibration - IBC CSI : Far versus Near Gain Offset

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Near Waveform for azimuth 001							
Before: Calibration not done	0	N/A	0	N/A	N/A	N/A	DB/M
High resolution Integrated Logging Tool–DTS Wellsite Calibration – Detector Calibration							
Before: 19–Nov–2010 22:35							
Gamma Ray Background	30.00	N/A	42.23	N/A	N/A	N/A	GAPI
Gamma Ray (Jig – Bkgd)	165.0	N/A	173.7	N/A	N/A	15.00	GAPI
High resolution Integrated Logging Tool–DTS Wellsite Calibration – Zero Measurement							
Master: Calibration out of date	2–Aug–2010 18:14	Before: 19–Nov–2010 22:51					
CNTC Background	26.68	26.68	27.47	N/A	N/A	4.002	CPS
CFTC Background	28.42	28.42	31.85	N/A	N/A	4.263	CPS
High resolution Integrated Logging Tool–DTS Wellsite Calibration – Ratio Measurement							
Master: Calibration out of date	2–Aug–2010 18:14						
Thermal Near Corr. (Tank)	5800	5387	N/A	N/A	N/A	N/A	CPS
Thermal Far Corr. (Tank)	2400	2189	N/A	N/A	N/A	N/A	CPS
CNTC/CFTC (Tank)	2.159	2.461	N/A	N/A	N/A	N/A	
High resolution Integrated Logging Tool–DTS Wellsite Calibration – Accelerometer Calibration							
Before: 20–Nov–2010 12:25							
Z–Axis Acceleration	32.19	N/A	32.26	N/A	N/A	N/A	F/S2
The HGNS Neutron Master Calibration was done with the following parameters :							
NCT–B Water Temperature	80.0	DEGF.					
Thermal Housing Size	3.373	IN.					
NSR–F serial number	2649						


Ultrasonic Imaging – D / Equipment Identification

Primary Equipment:

IBC 7 Inch Sub	IBCS – 100
Ultrasonic Transducer	Bott –
Ultrasonic Transducer	Midd –
Ultrasonic Transducer	Midd –
Ultrasonic Transducer	Top –
USIT sonde	USIS – A
USIT Sonde Cartridge For 4 Transducers	USSC – B
USIT Acquisition Cartridge DTS/FTB	USIC – D

Auxiliary Equipment:

USIT Housing/cartridge	ECH – MRA
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Ultrasonic Imaging – D Wellsite Calibration			
IBC CSL: Far versus Near Gain Offset			
Phase	Near Waveform for azimuth 001	DB/M	Value
Before			0
	–200.0 (Minimum)	0 (Nominal)	200.0 (Maximum)
Before: Calibration not done			

High resolution Integrated Logging Tool–DTS / Equipment Identification

Primary Equipment:



HILT Gamma–Ray Neutron Sonde–DTS	HGNS – H	
HGNS Gamma–Ray Device	HGR –	
HGNS Neutron Detector with Alpha Source	HCNT – H	
Z–Axis Accelerometer	HACC – H	1614
Neutron Logging Source	NLS – KL	
Neutron Source Radioactive	NSR – F	2649
Compensated Neutron Box	CNB – AB	
HTBC Communication Assembly DTS Mode	HMCA – H	

Auxiliary Equipment:

Neutron Calibration Tank	NCT – B
Gamma Source Radioactive	GSR – U/Y
HGNS Housing	HGNH –

High resolution Integrated Logging Tool–DTS Wellsite Calibration





Detector Calibration

Phase	Gamma Ray Background	GAPI	Value	Phase	Gamma Ray (Jig – Bkgd)	GAPI	Value
Before			42.23	Before			173.7
0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)		157.1 (Minimum)	165.0 (Nominal)	206.3 (Maximum)	

Before: 19–Nov–2010 22:35

High resolution Integrated Logging Tool–DTS Wellsite Calibration




Zero Measurement

Phase	CNTC Background	CPS	Value	Phase	CFTC Background	CPS	Value
Master			26.68	Master			28.42
Before			27.47	Before			31.85
5.000 (Minimum)	26.68 (Nominal)	40.00 (Maximum)		5.000 (Minimum)	28.42 (Nominal)	40.00 (Maximum)	

Master: Calibration out of date 2–Aug–2010 18:14 Before: 19–Nov–2010 22:51

High resolution Integrated Logging Tool–DTS Wellsite Calibration


Ratio Measurement

Phase	Thermal Near Corr. (Tank)	CPS	Value	Phase	Thermal Far Corr. (Tank)	CPS	Value	Phase	CNTC/CFTC (Tank)	Value
Master			5387	Master			2189	Master		2.461
4700 (Minimum)	5800 (Nominal)	6900 (Maximum)		1900 (Minimum)	2400 (Nominal)	2900 (Maximum)		2.120 (Minimum)	2.159 (Nominal)	2.540 (Maximum)

Master: Calibration out of date 2–Aug–2010 18:14

High resolution Integrated Logging Tool–DTS Wellsite Calibration

Accelerometer Calibration

Phase	Z–Axis Acceleration	F/S2	Value
Before			32.26
31.53 (Minimum)	32.19 (Nominal)	32.84 (Maximum)	

Before: 20–Nov–2010 12:25

DTS Telemetry Tool / Equipment Identification

Primary Equipment:

DTC–H Auxiliary Cartridge
DTC–H Telemetry Cartridge

DTCH – A
DTCH – A

Auxiliary Equipment:

DTCH Telemetry Cartridge Housing

ECH – KC

Company: **ExxonMobil Production Corp**

Schlumberger

Well: **PCU 296–5A5**

Field: **Piceance Creek**

County: **Rio Blanco**

State: **Colorado**

IMAGIN BEHIND CASING

ULTRASONIC TOOL

CCL–GAMMA RAY

