

Company: Crestone Peak Resources Operating, LLC

Well: Dream Weaver North 3A-21H-N268

Field: Wattenberg

County: Weld State: Colorado

Isolation Scanner  
Cement Evaluation  
Gamma Ray - CCLCounty: Weld  
Field: Wattenberg  
Location: SESW Sec 21, T2N, R68W  
Well: Dream Weaver North 3A-21H-N268  
Company: Crestone Peak Resources Operating, LLC

Location:	SESW Sec 21, T2N, R68W	Elev.:	K.B.	4929.00 ft
	SHL: 1158' FSL X 1779' FWL		G.L.	4901.00 ft
			D.F.	4928.00 ft
Permanent Datum:		Ground Level		
Log Measured From:		Kelly Bushing	28.00 ft	above Perm.Datum
Drilling Measured From:		Kelly Bushing		
API Serial No.	Section:	Township:	Range:	
05-123-48300-00	21	2N	68W	

Logging Date 07-Aug-2020

Run Number One

Depth Driller 19820.00 ft

Schlumberger Depth 19820.00 ft

Bottom Log Interval 7395.00 ft

Top Log Interval 100.00 ft

Casing Fluid Type Water

Salinity

Density 9.5 lbm/gal

Fluid Level 8.00 ft

BIT/CASING/TUBING STRING

Bit Size 8.50 in

From 2285.00 ft

To 19820.00 ft

Casing/Tubing Size 5.5 in

Weight 20 lbm/ft

Grade P110

From 0.00 ft

To 19803.00 ft

Max Recorded Temperatures 199 degF

Logger on Bottom 08-Aug-2020 09:00:00

Unit Number 9102 Location: FtMorgan, CO

Recorded By Avery Becker

Witnessed By Keith Kurchenick

## 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 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.

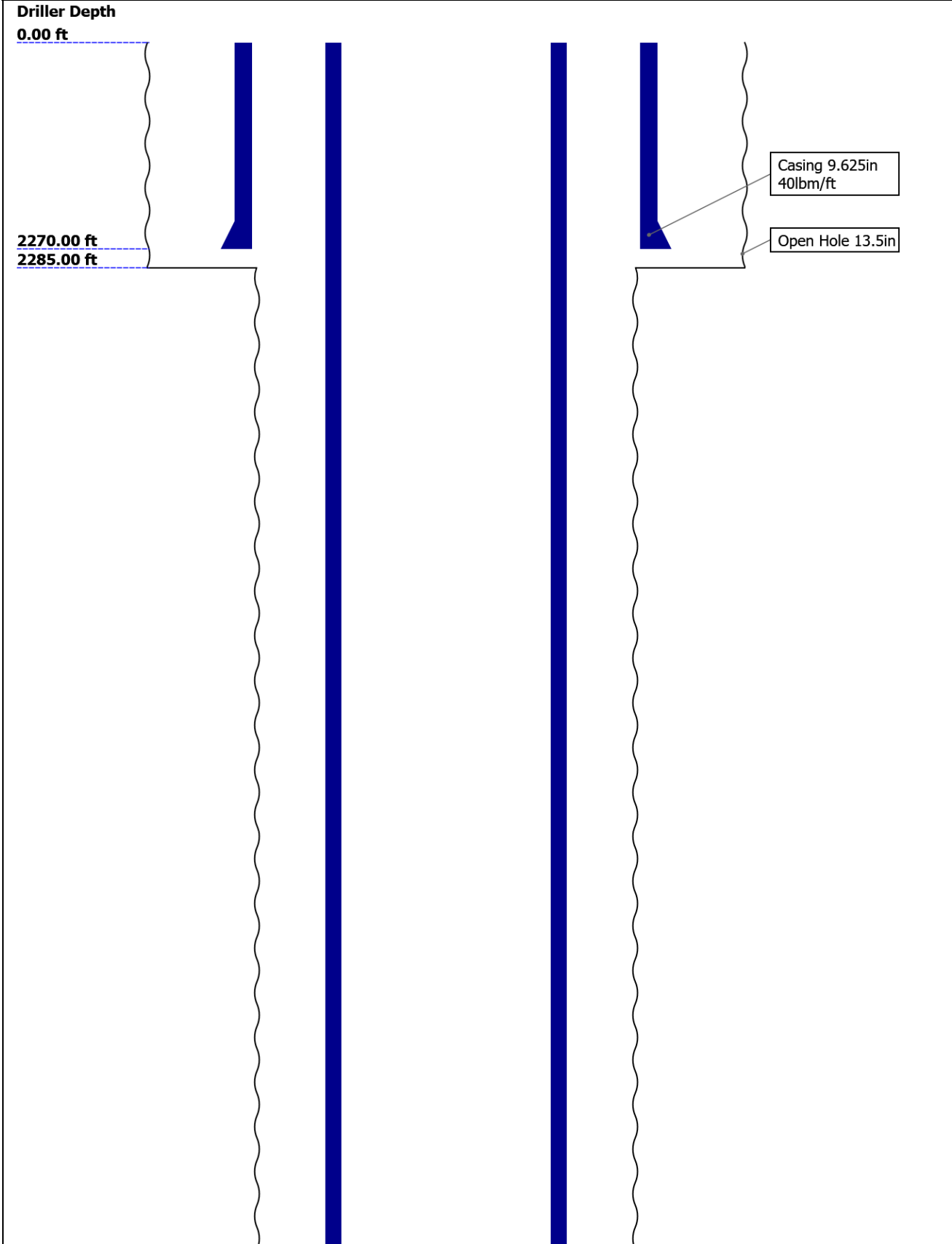
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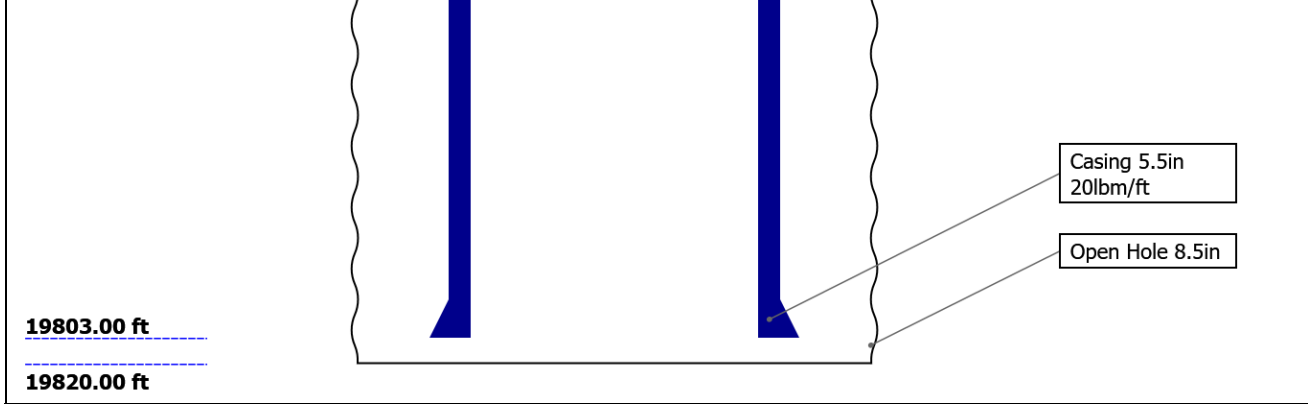
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Well Sketch

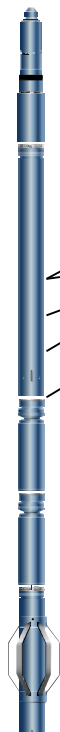




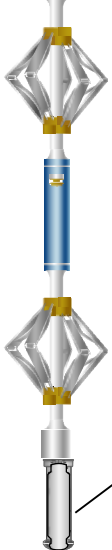
Borehole Size/Casing/Tubing Record

Bit						
Bit Size ( in )	13.5	8.5				
Top Driller ( ft )	0	2285				
Top Logger ( ft )	0	2285				
Bottom Driller ( ft )	2285	19820				
Bottom Logger ( ft )	2285	19820				
Casing						
Size ( in )	9.625	5.5				
Weight ( lbm/ft )	40	20				
Inner Diameter ( in )	8.835	4.778				
Grade	N/A	P110				
Top Driller ( ft )	0	0				
Top Logger ( ft )	0	0				
Bottom Driller ( ft )	2270	19803				
Bottom Logger ( ft )	2270	19803				

Remarks and Equipment Summary

One: Toolstring			One: Remarks	
<div><div><div>Equip nameLengthMP nameOffset</div><div>LEH-QT30.63LEH-QT</div><div>EDTC-B:927.14301EDTH-B:8442EDTG-A:79500EDTC-B:9301</div><div>AH-184[2]:370920.64</div><div>AH-184[1]:GP1418.64</div><div>USIT-E:9616.640ECH-MFA:1931USAC-A:960USIT-A:10</div></div><div></div><div><div>CTEM23.64</div><div>ACCZ0.00</div><div>HV0.00</div><div>Gamma Ray21.77</div><div>TelStatu s20.64</div></div></div>	Tool was run as per tool sketch			
	All logging intervals as per client request			
	Log recorded without surface induced pressure			
	Log recorded 10deg, 6 inch resolution			

USIS-A:18  
32  
USSC-B:17  
20  
IBCS-A:75  
3  
FAR-SENS  
OR:4791  
IBC-TX  
NEAR-SEN  
SOR:809  
IBC-TX  
USI-SENS  
OR:4385  
IBC-TX  
EMITTER-  
SENSOR:2  
009  
IBC-TX



**USI Sensor Head Tension**  
TOOL\_ZERO

Lengths are in ft  
Maximum Outer Diameter = 5.000 in  
Line: Sensor Location, Value: Gating Offset  
All measurements are relative to TOOL\_ZERO

Depth Summary

	One		
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Depth Measuring Device

Type	IDW-B		
Serial Number			
Calibration Date			
Calibrator Serial Number			
Calibration Cable Type			
Wheel Correction 1	0		
Wheel Correction 2	0		

Tension Device

Type	CMTD-B/A		
Serial Number			
Calibration Date			
Calibrator Serial Number			
Number of Calibration Points	0		

Logging Cable

Type	7-46NT-XS		
Serial Number			
Length	24000.00 ft		
Conveyance Type	Wireline		
Rig Type			

One:Depth Control Parameters

Depth Control Remarks

Log Sequence	First Log In the Well	Schlumberger depth control procedures followed
Rig Up Length At Surface		IDW used as primary depth control system
Rig Up Length At Bottom		Z-Chart used as secondary depth control system
Rig Up Length Correction		
Stretch Correction		
Tool Zero Check At Surface		



# USIT - Fluid Properties Measurement

Run Name	Pass Name	Start Depth(ft)	Stop Depth(ft)
Run 1	Log[7]:Up	7395.24	87.33

Fluid Velocity = "Automatic".  
CFVL equals DFSL channel

Start Depth(ft)	Stop Depth(ft)	Start Value(us/ft)	End Value(us/ft)
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Mud Impedance = "FreePipe Norm."  
Free Pipe normalization zone is : 93.75m(307.59ft) to 99.31m(325.81ft)  
MUD\_N\_FRP = 1.14  
DFD = 1.14g/cm3(9.50lbm/gal)  
CZMD median computed in free pipe normalization interval = 1.77 MRayl

Start Depth(ft)	Stop Depth(ft)	Start Value(Mrayl)	End Value(Mrayl)
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One

IBC SLG

Software Version

Acquisition System	Version
Maxwell 2020.0	10.0.202864.3100

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
One	Log[7]:Up	Up	87.33 ft	7395.24 ft	08-Aug-2020 9:03:27 AM	08-Aug-2020 10:49:31 AM	ON	0.00 ft	Yes






All depths are referenced to toolstring zero

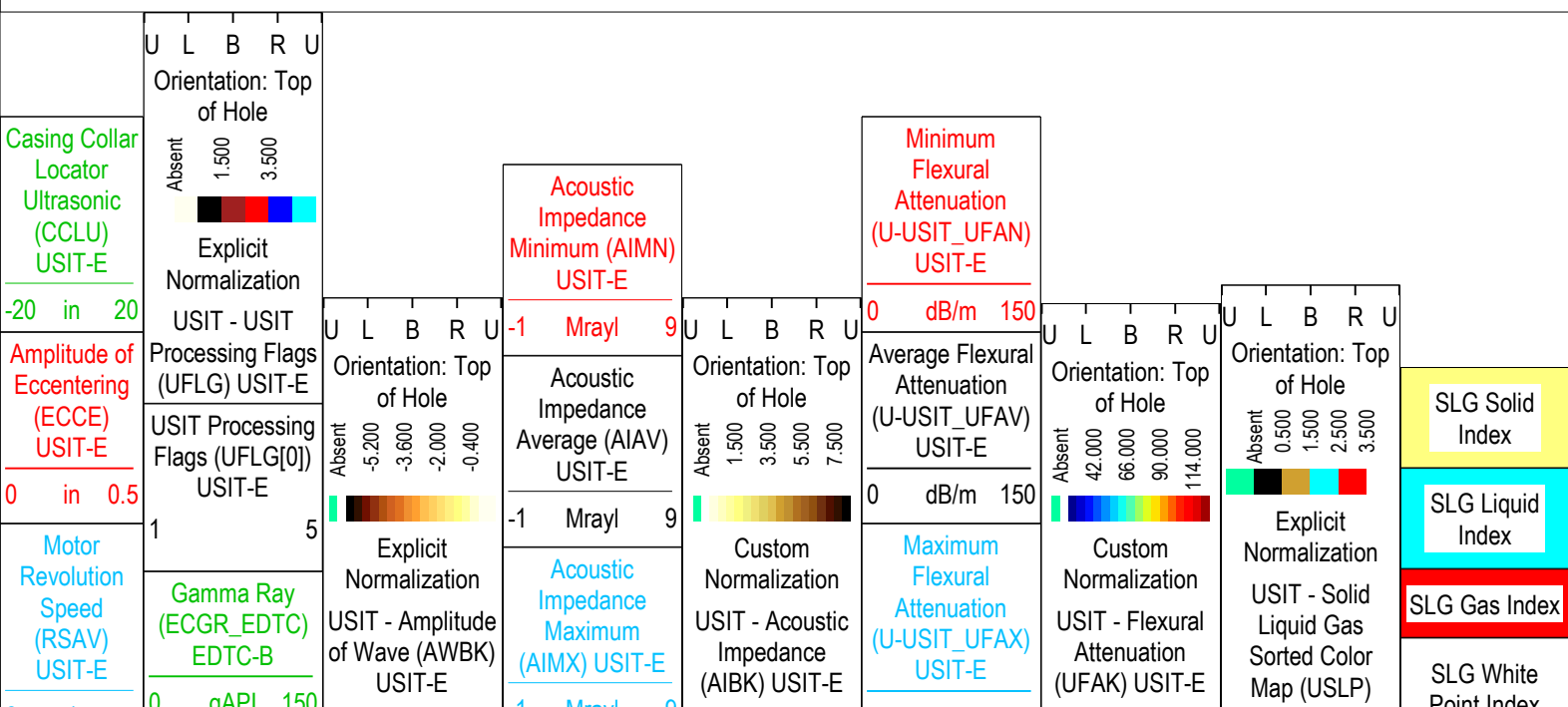
Log	Company:Crestone Peak Resources Operating, LLC      Well:Dream Weaver North 3A-21H-N268 One: Log[7]:Up:S011
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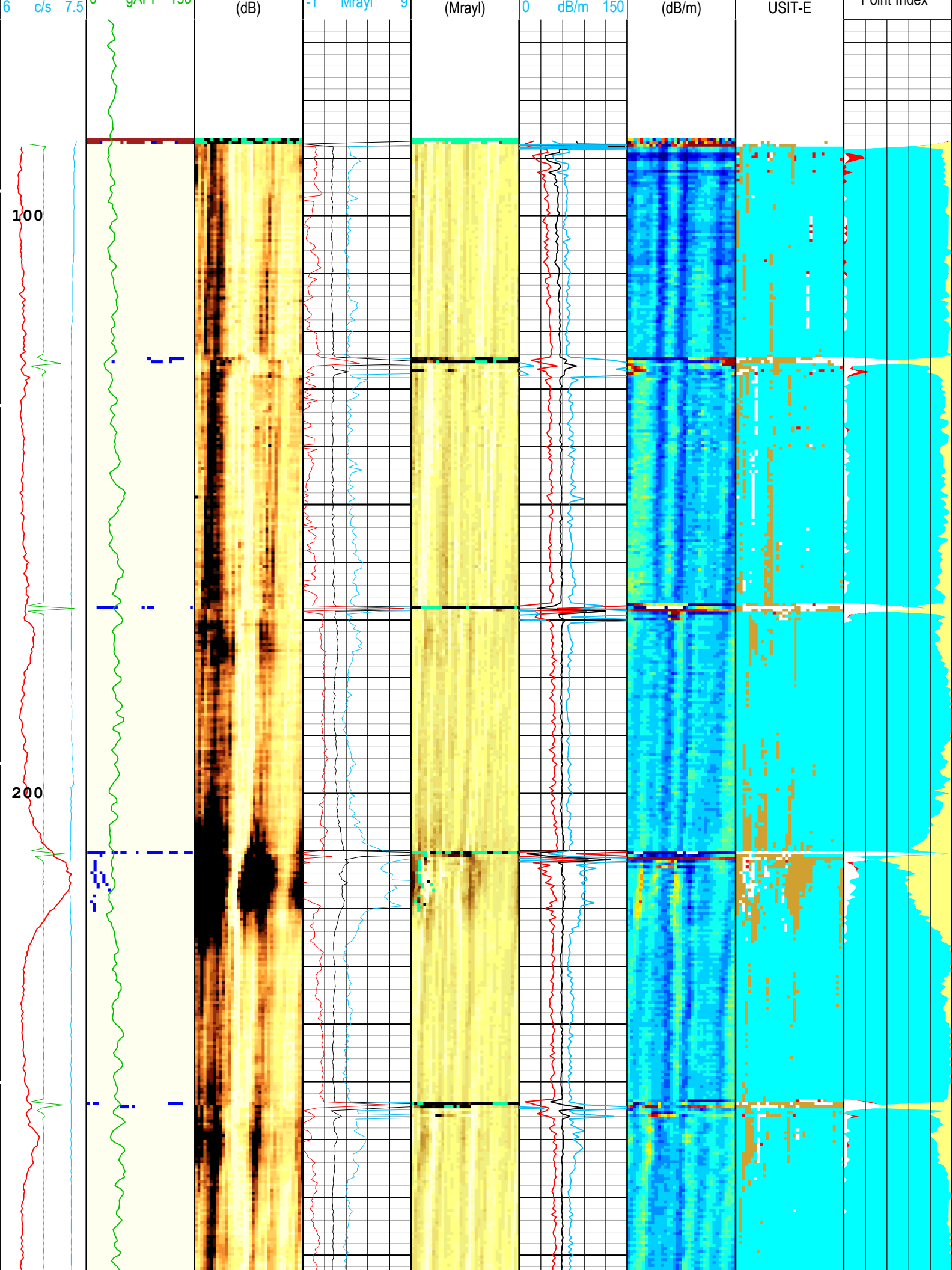
Description: USI IBC SLG    Format: Log ( IBC SLG )    Index Scale: 5 in per 100 ft    Index Unit: ft    Index Type: Measured Depth    Creation Date: 08-Aug-2020 13:35:10

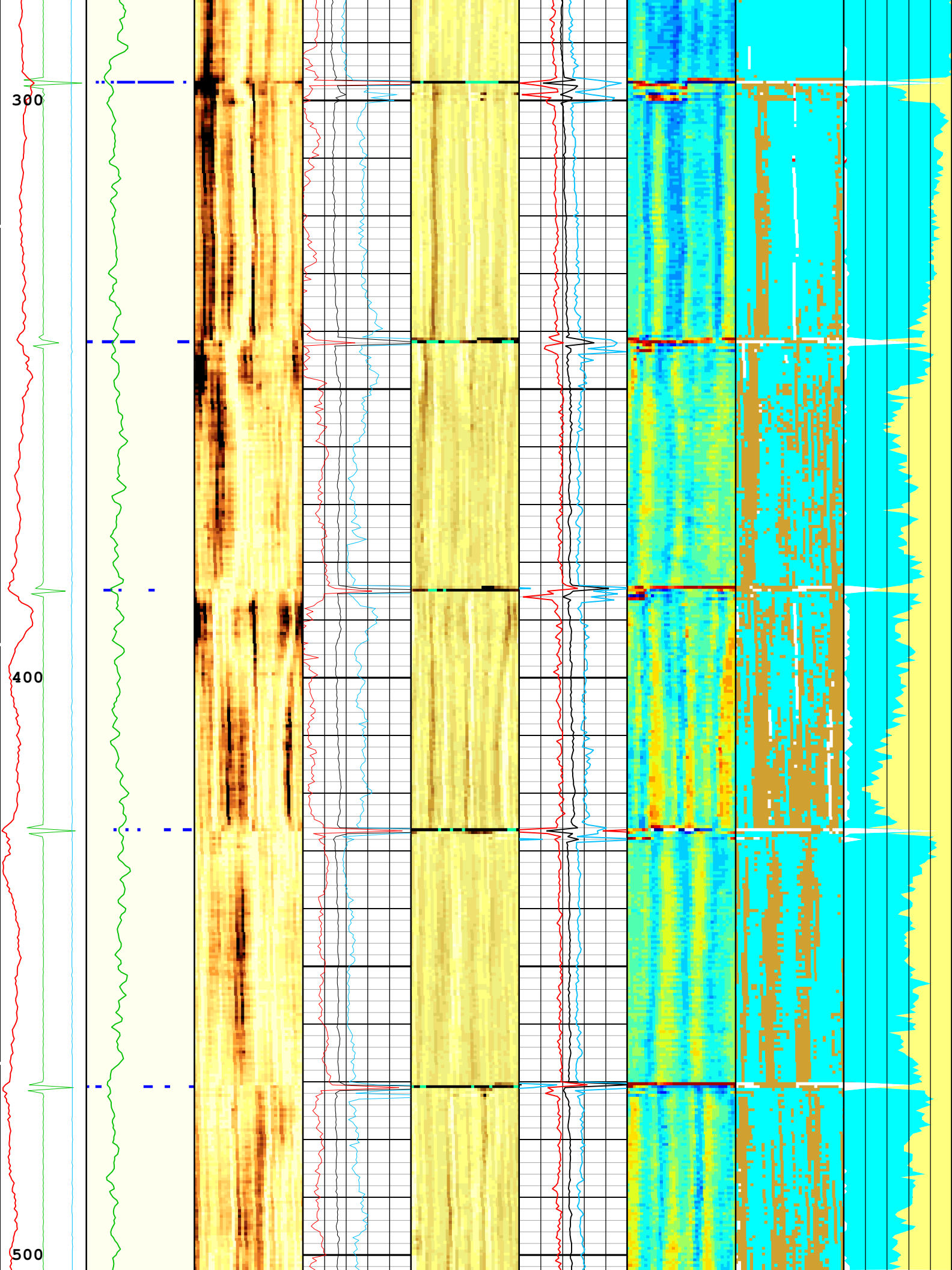
TIME\_1900 - Time Marked every 60.00 (s)

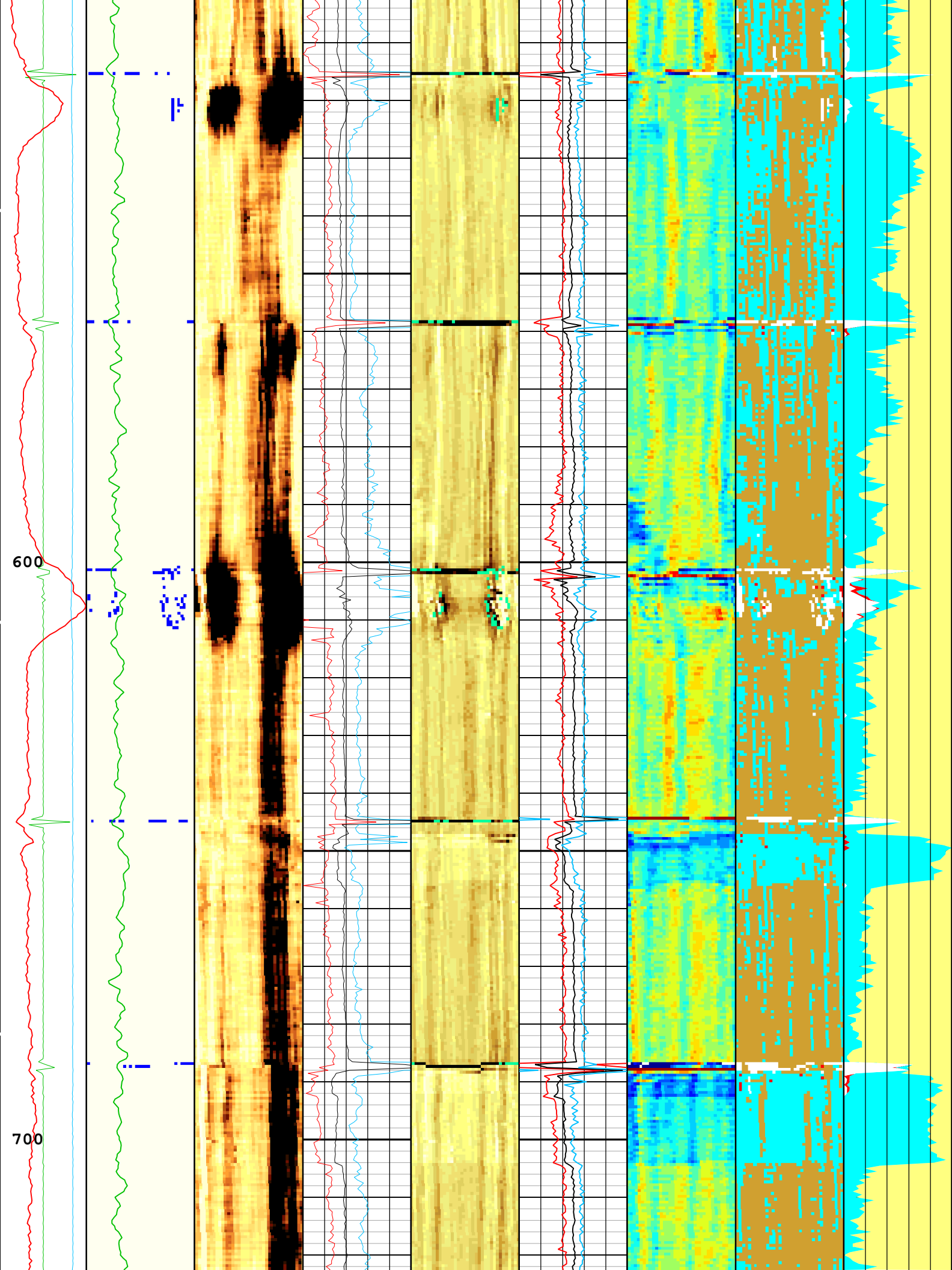
USIT Processing Flags (UFLG[0]) USIT-E

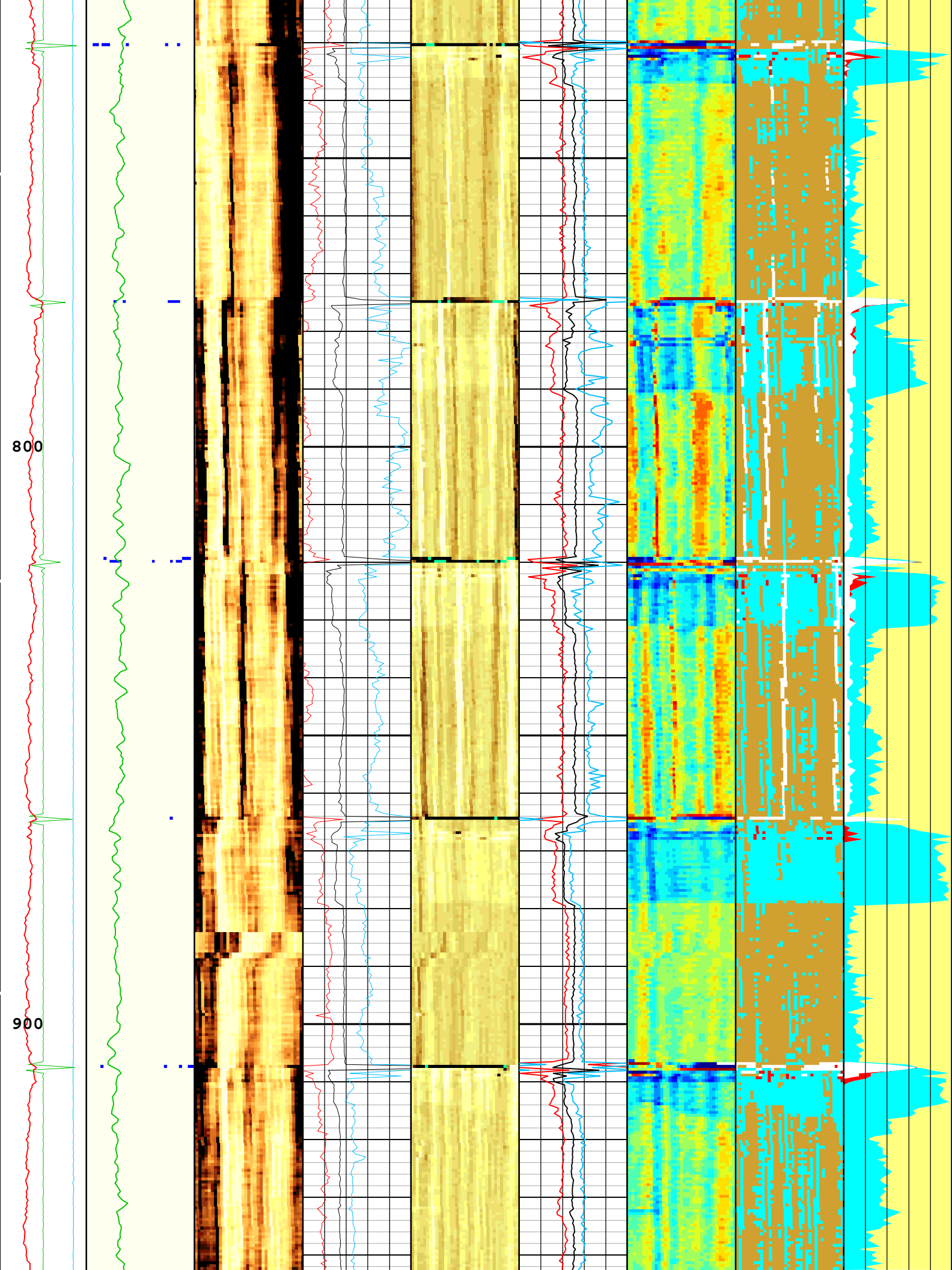
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- 2 - UFLG 2 Value within [1.5 - 2.5] - :  Pulse Origin Not Detected
- 3 - UFLG 3 Value within [2.5 - 3.5] - :  WINLEN Error
- 4 - UFLG 4    UFLG 5    UFLG 6 Value within [3.5 - 6.5] - :  Casing Thickness Error
- 5 - UFLG 7    UFLG 8    UFLG 9 Value within [6.5 - 10 ] - :  Loop Processing Error

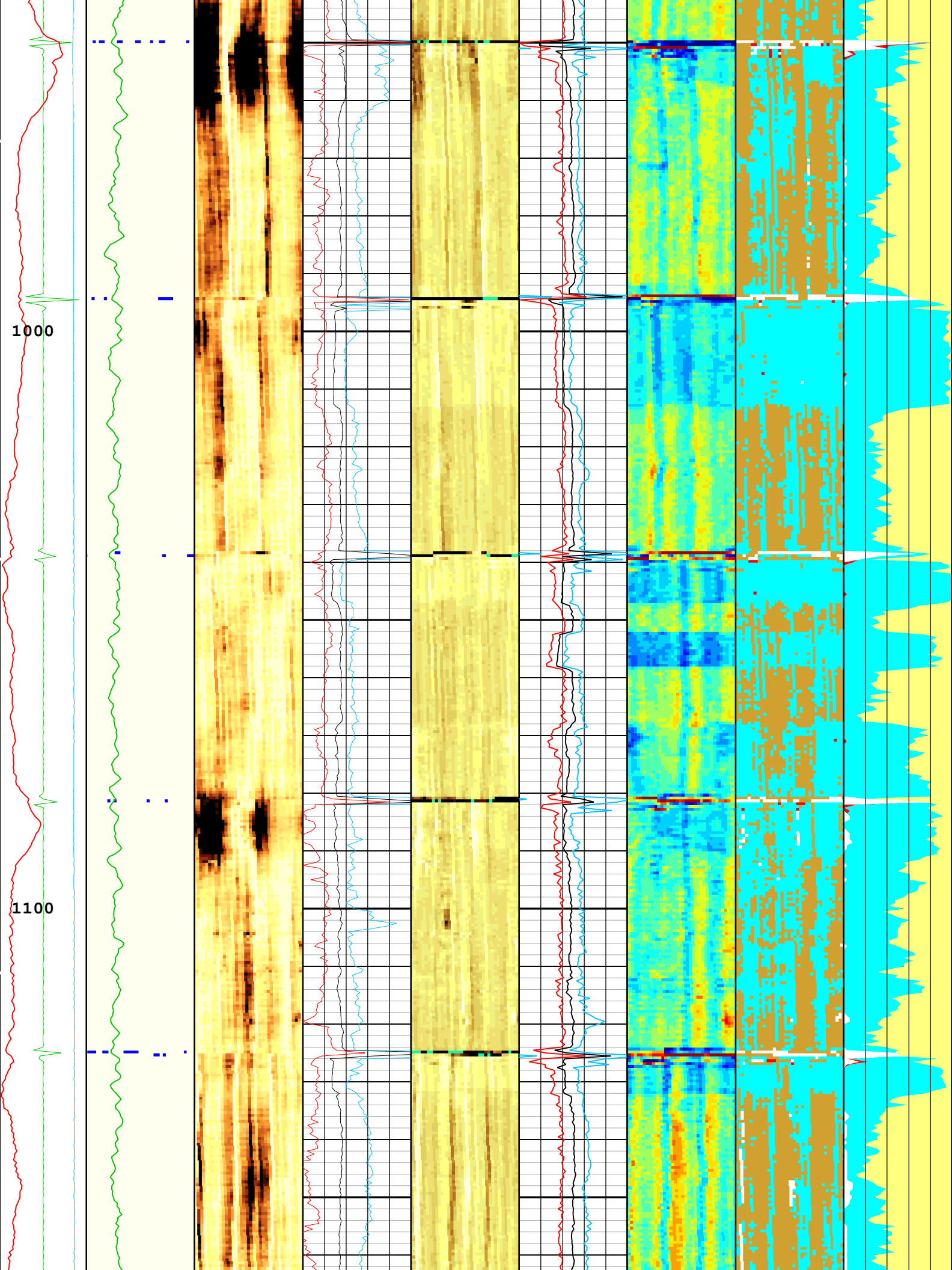




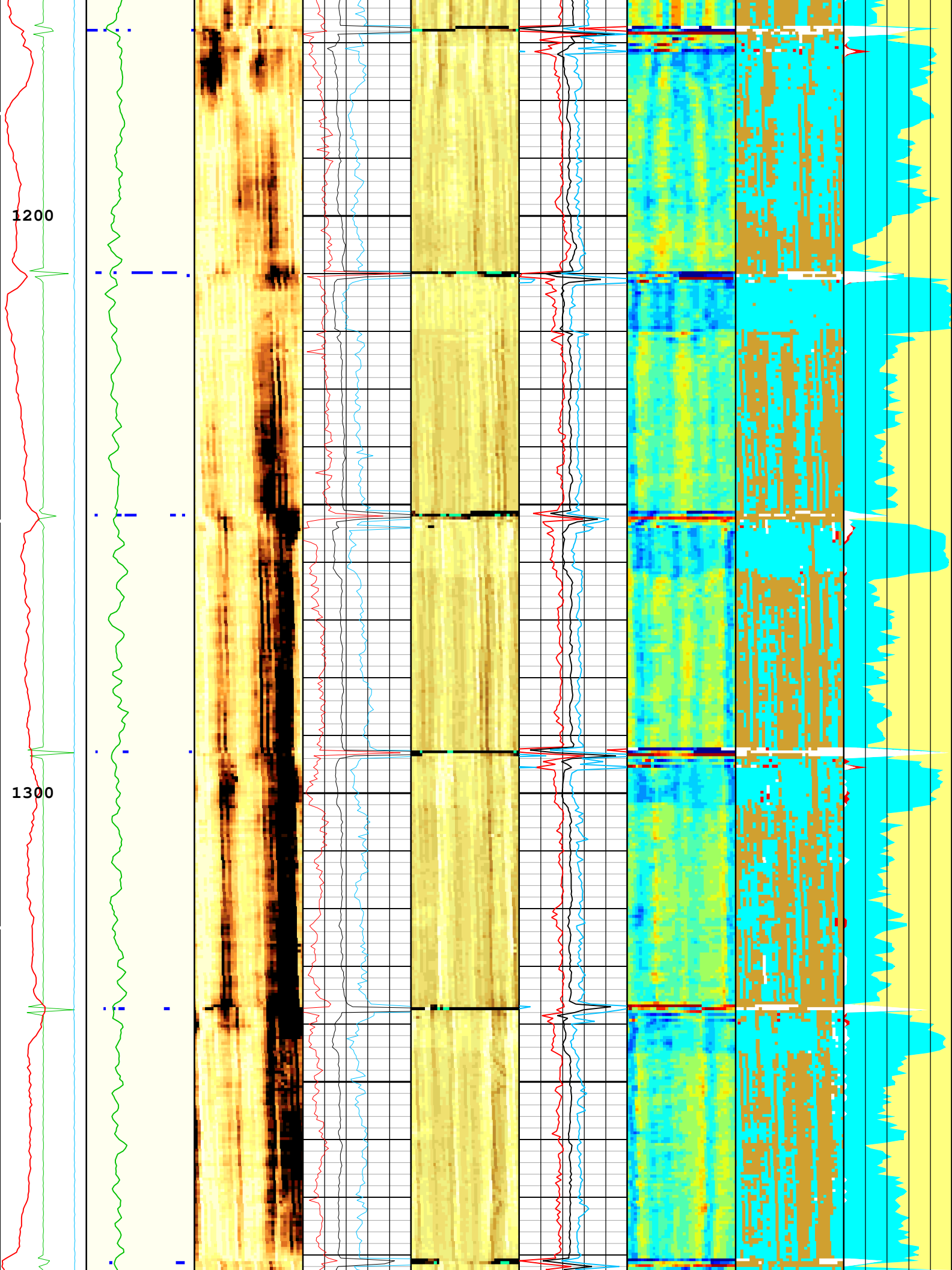


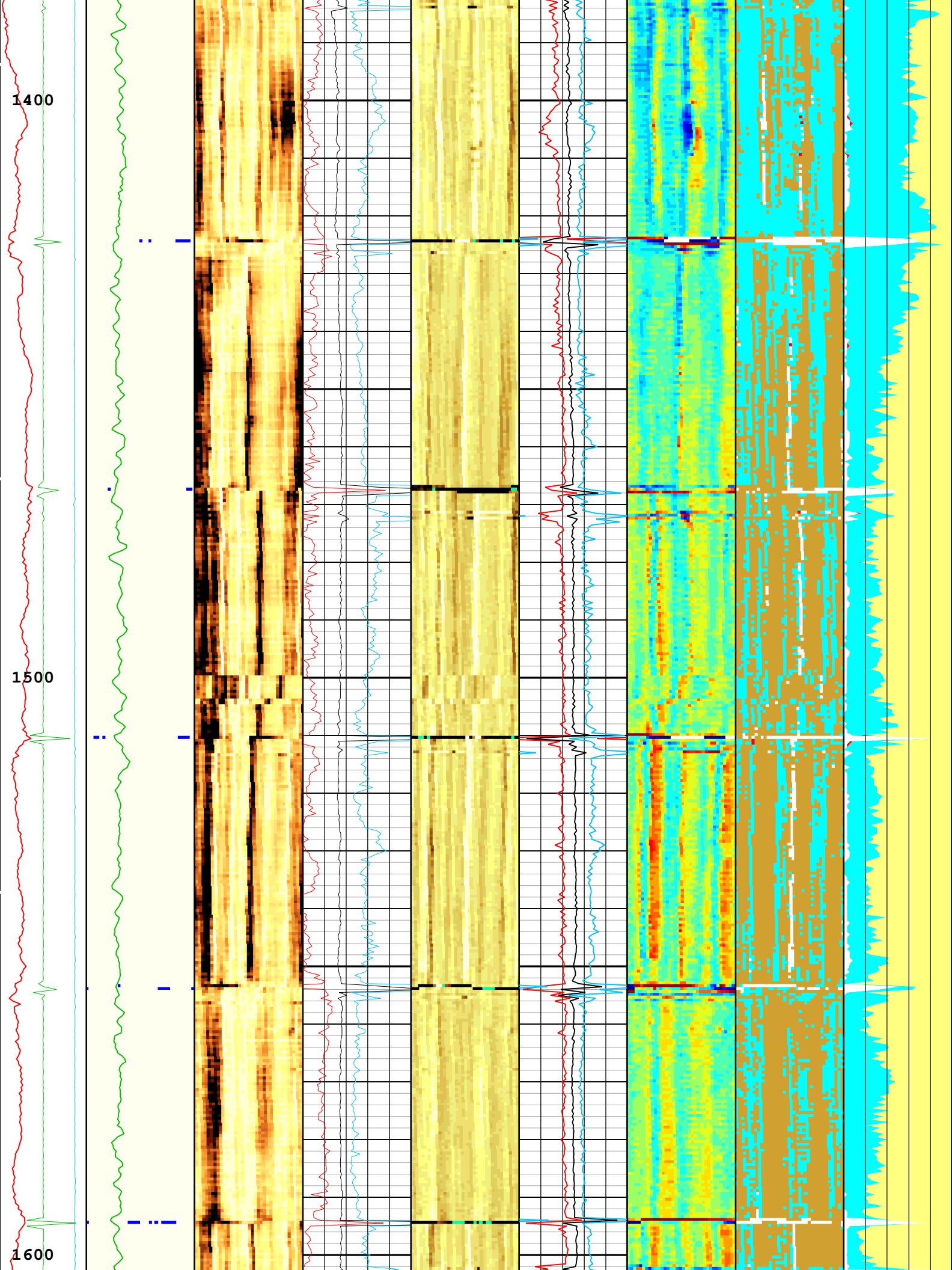




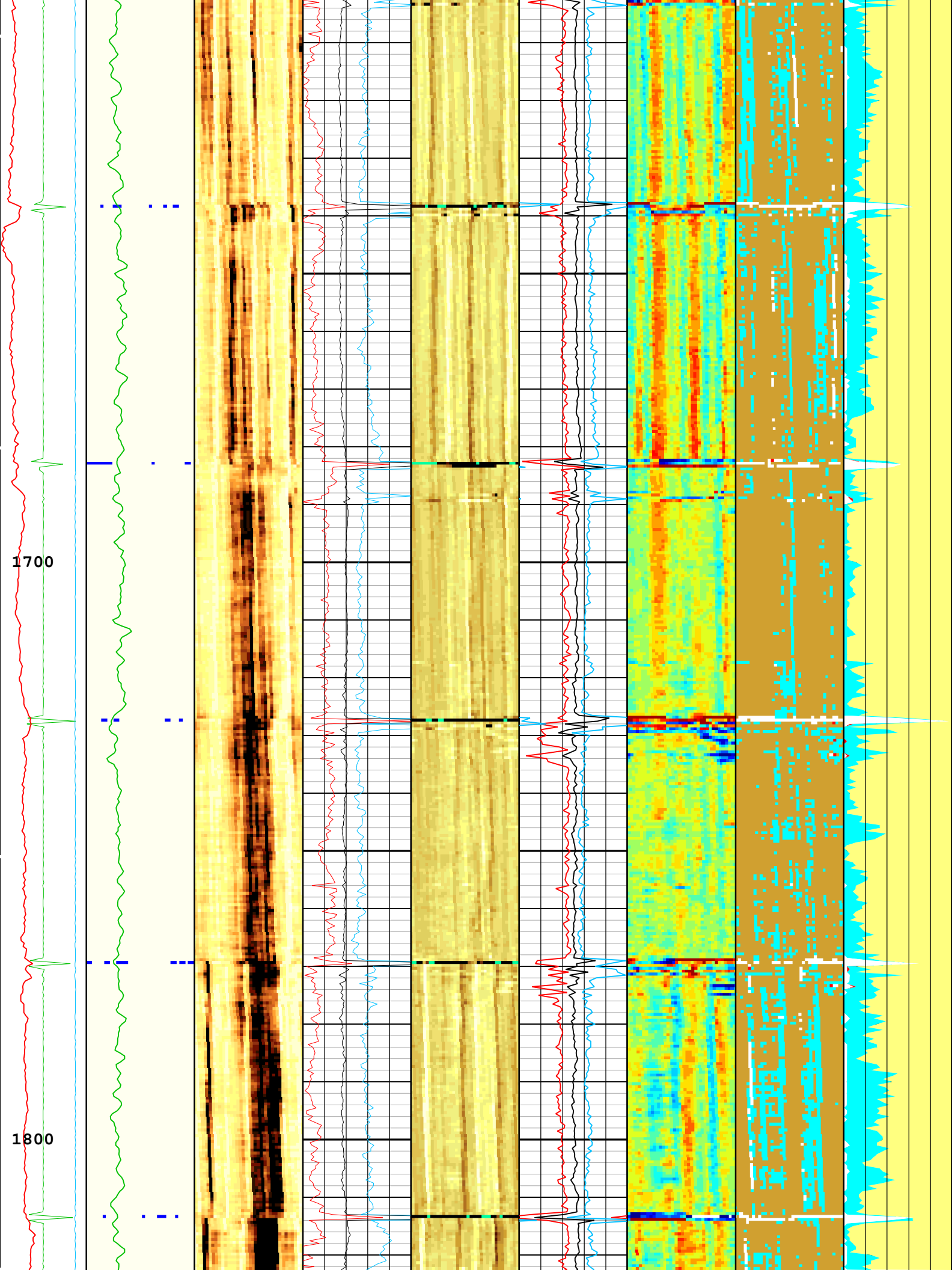


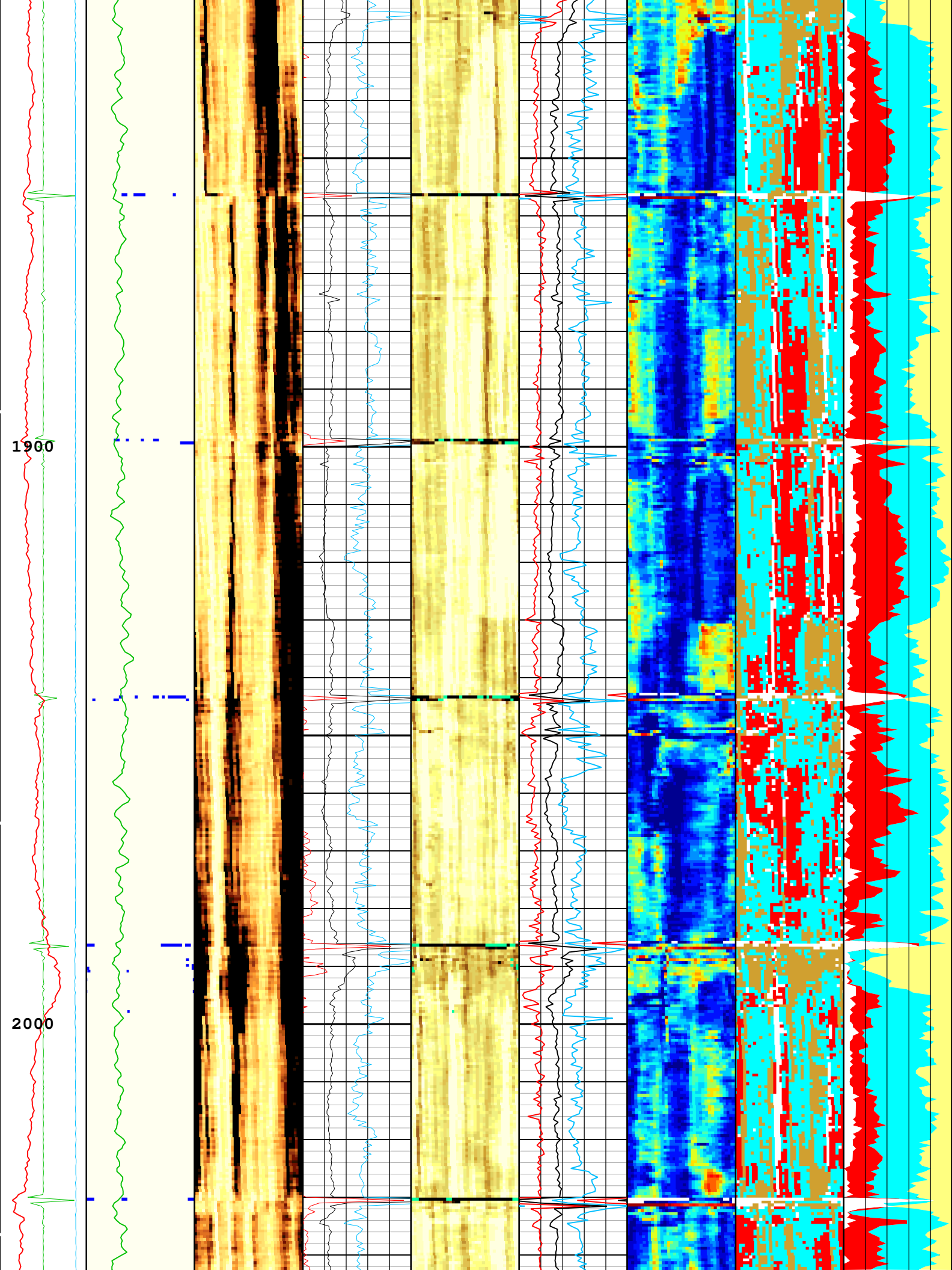


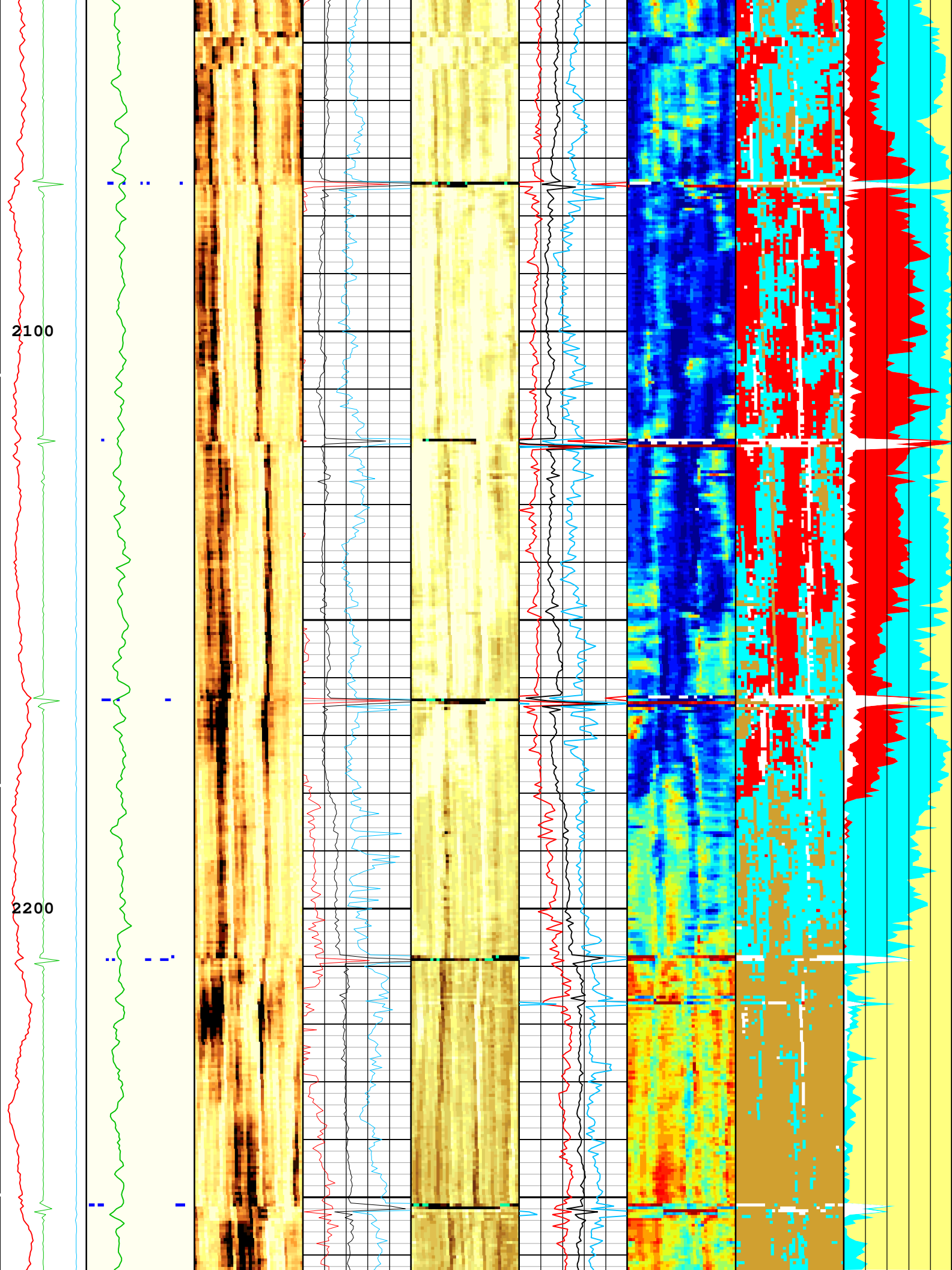


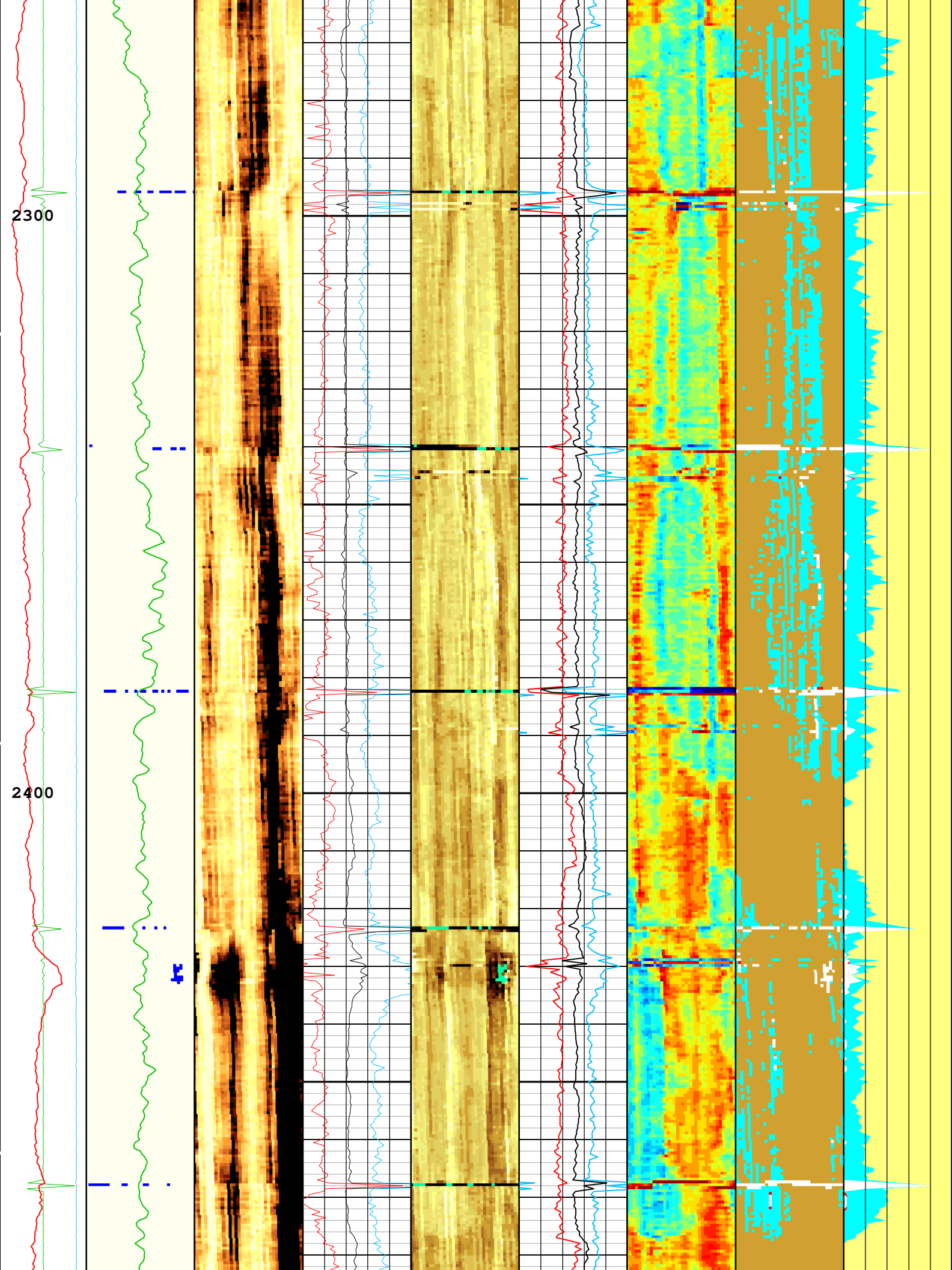


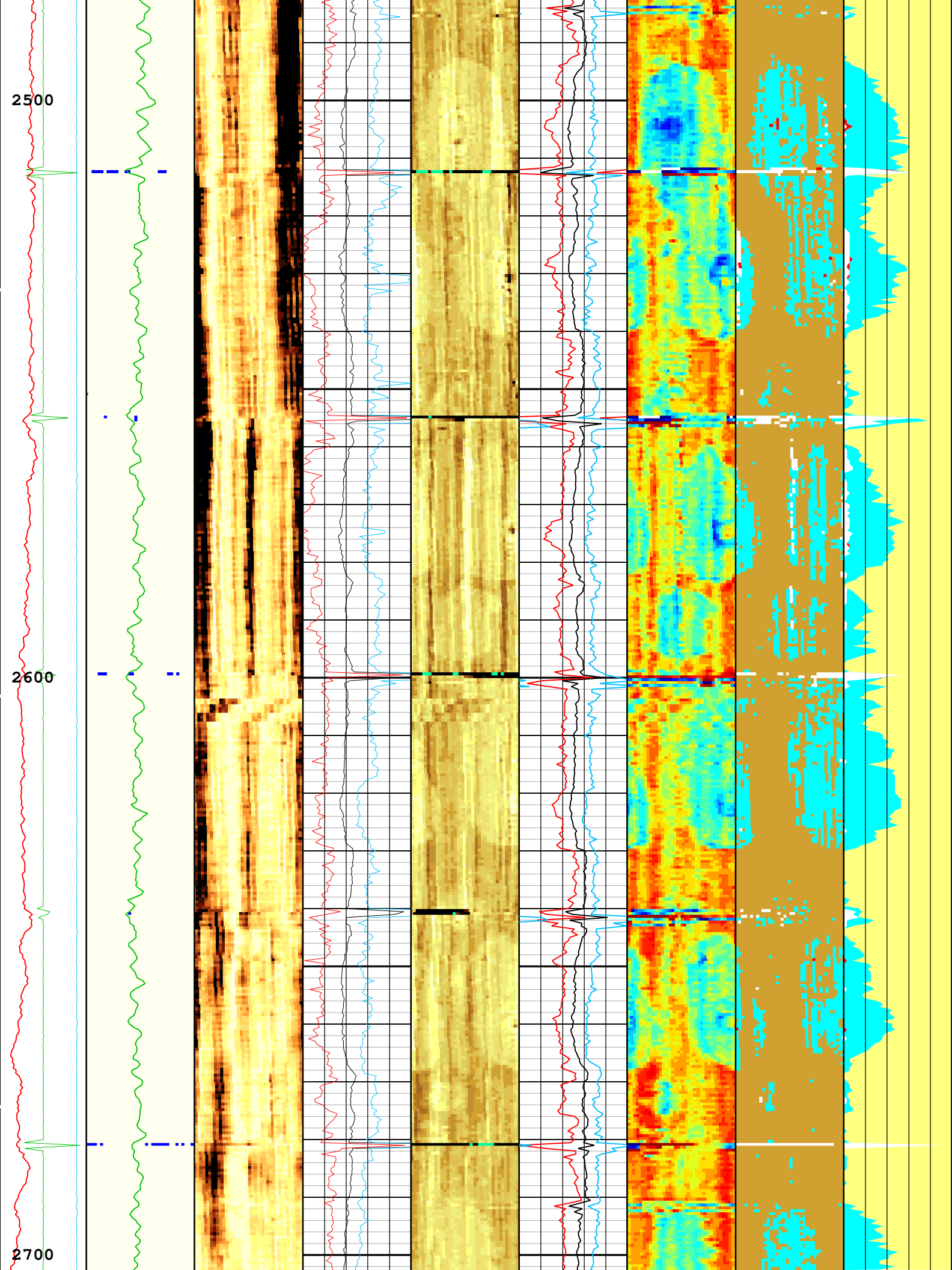




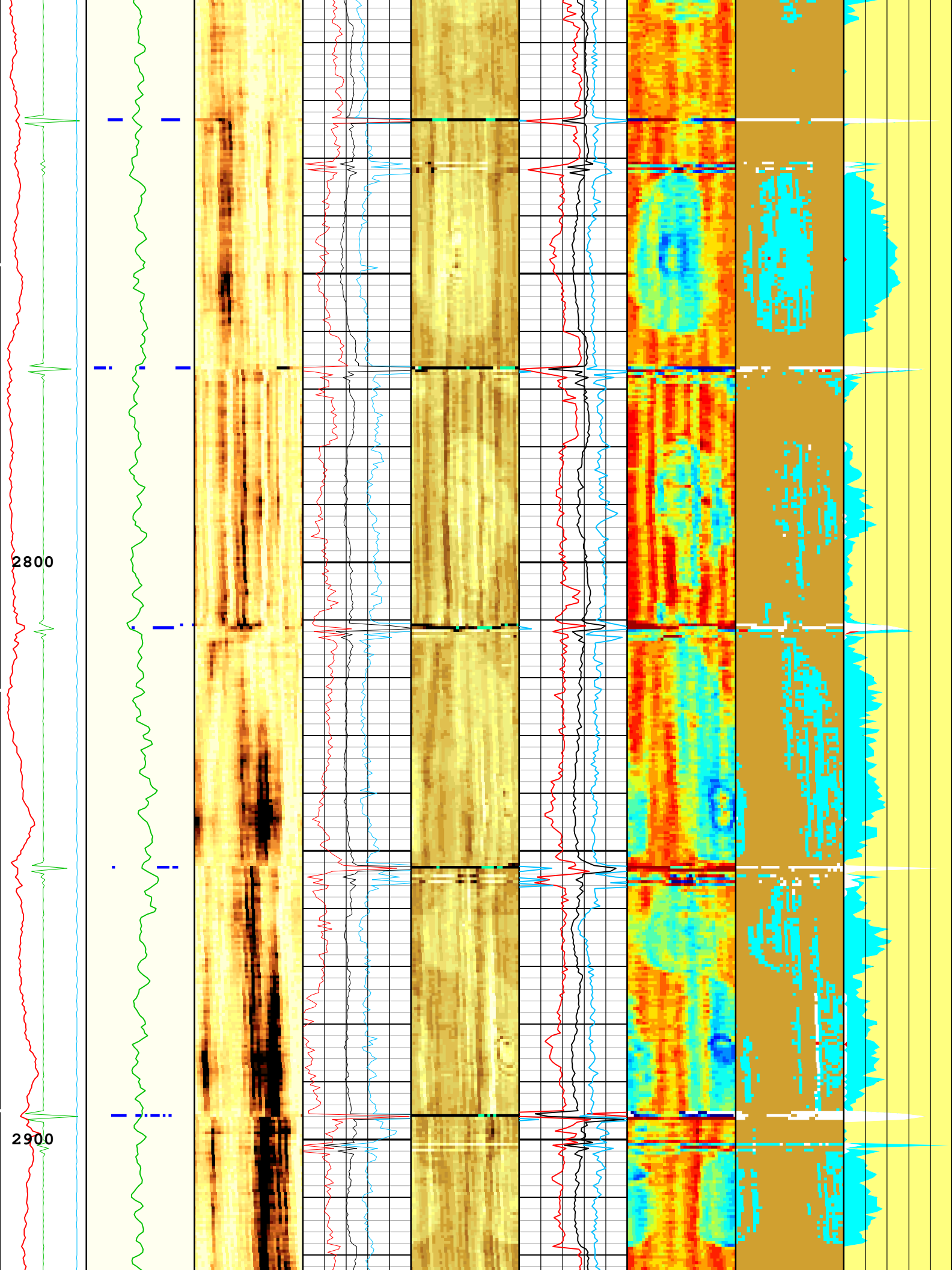


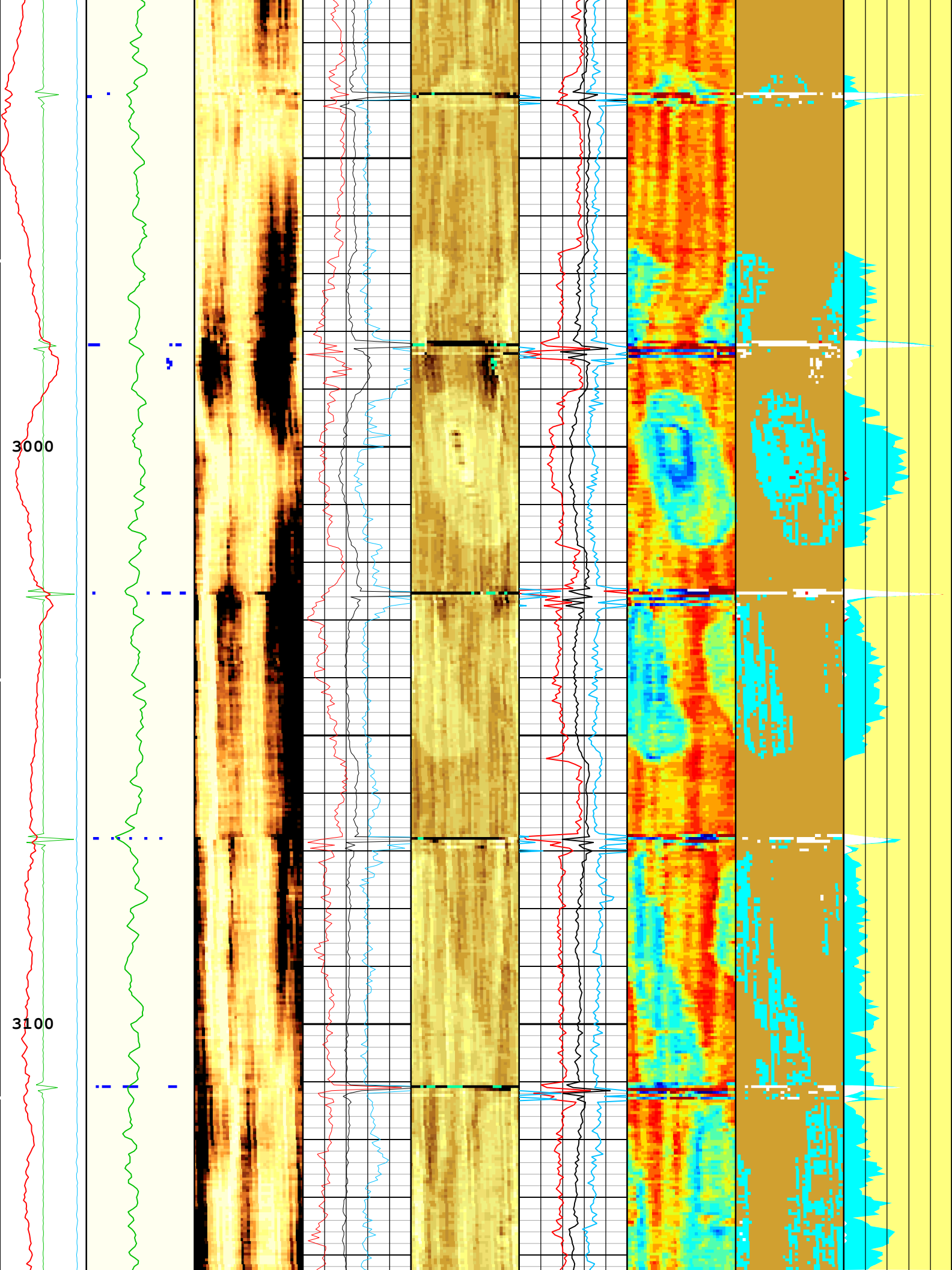


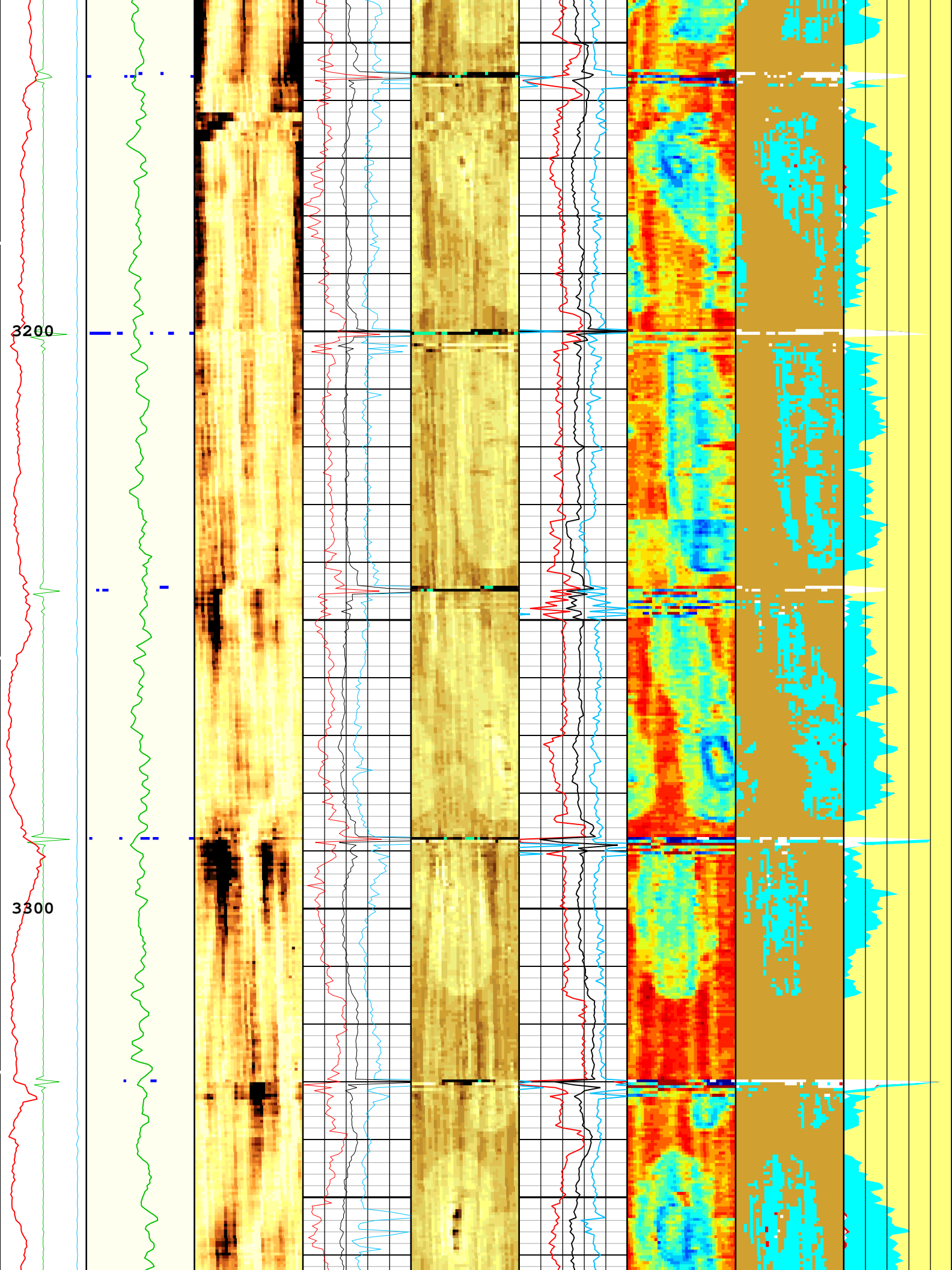




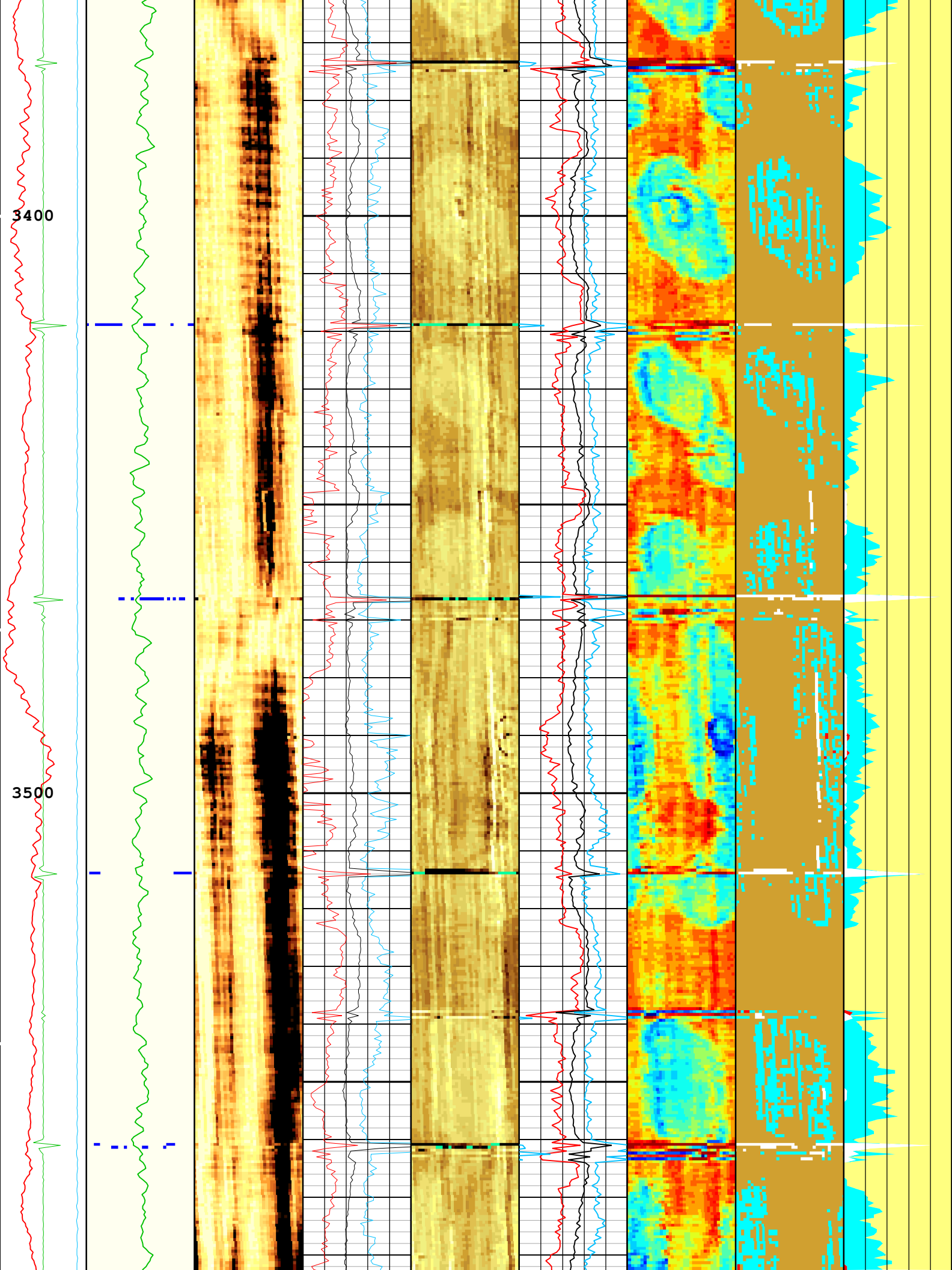


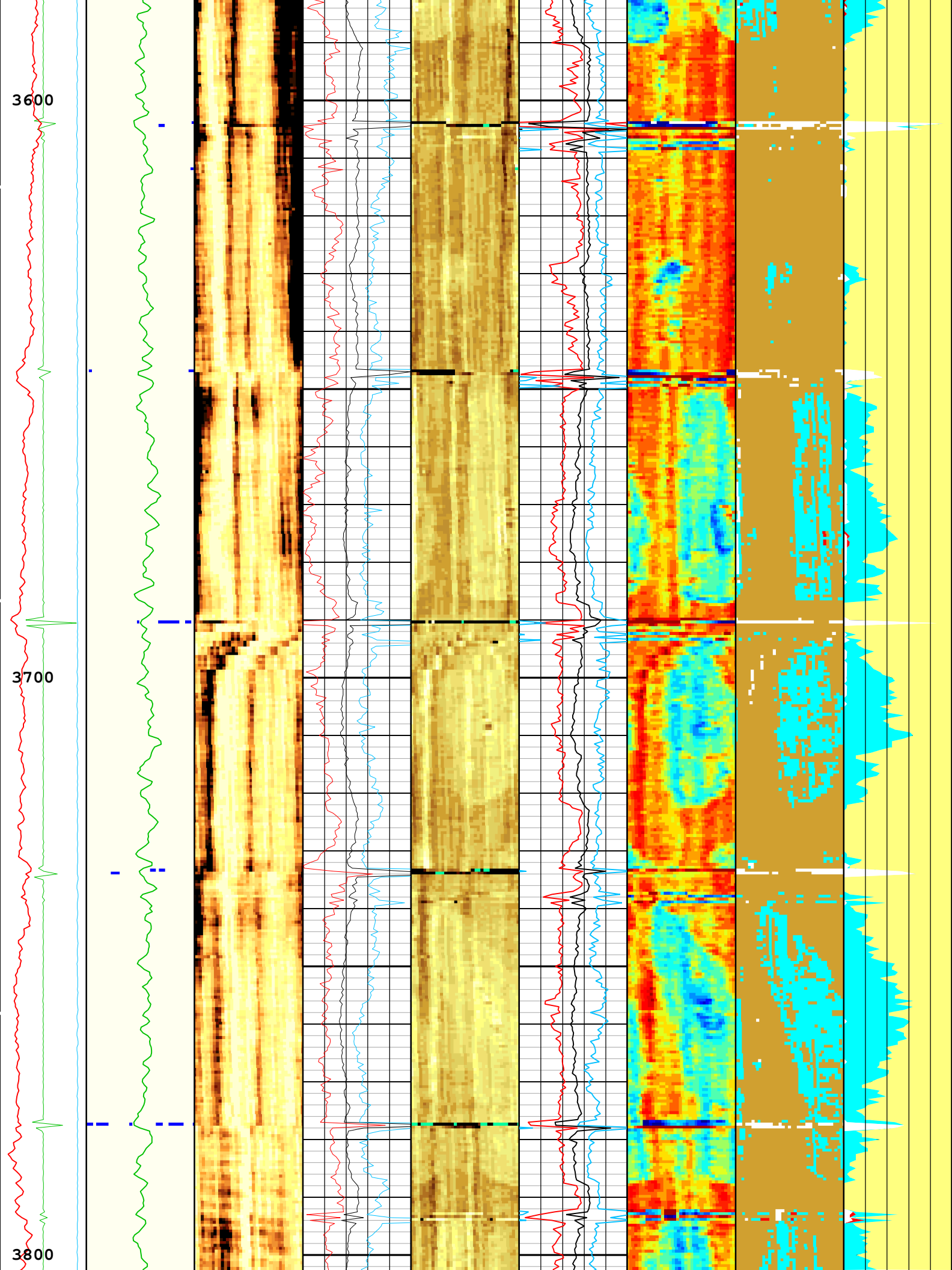


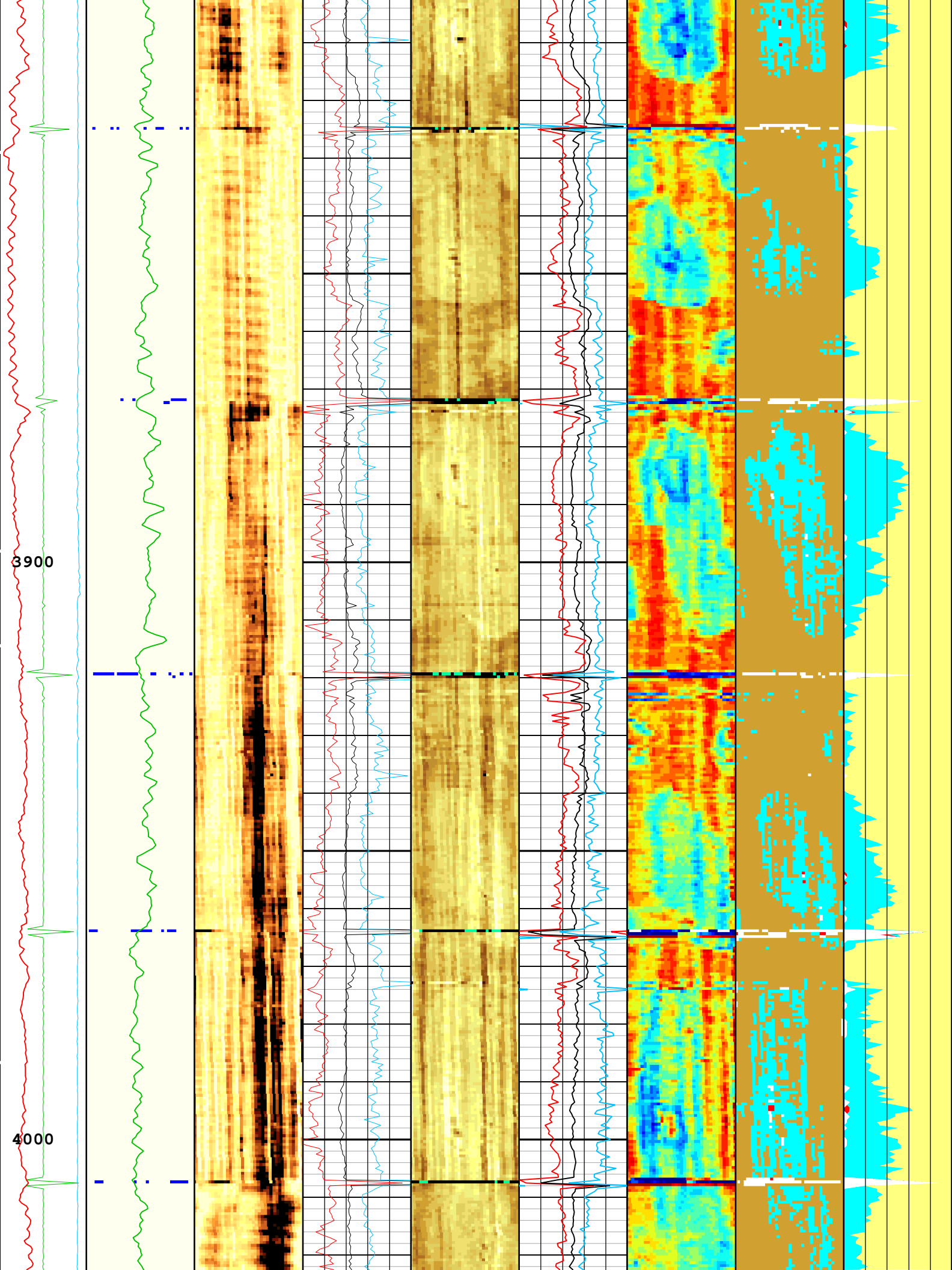


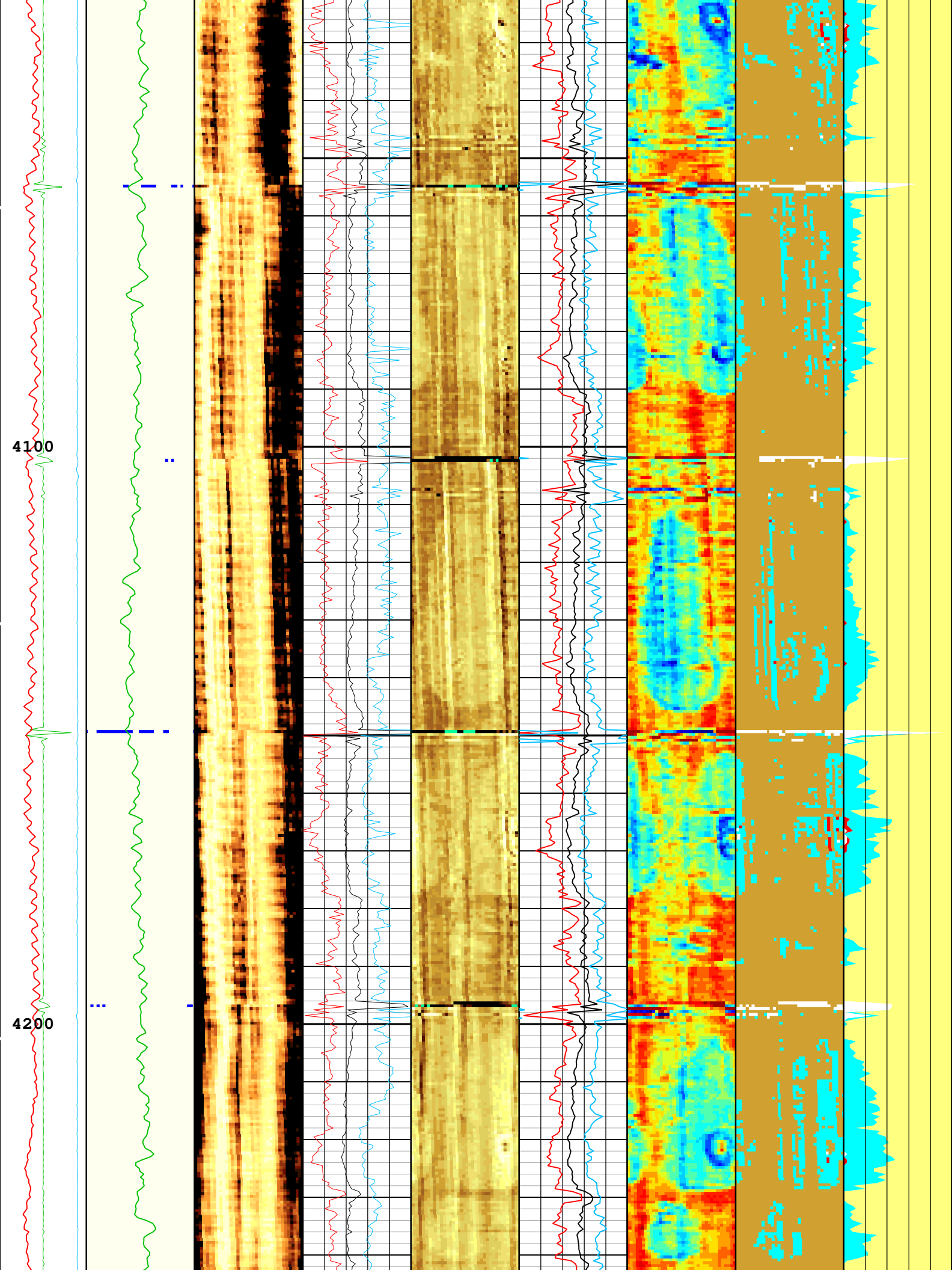


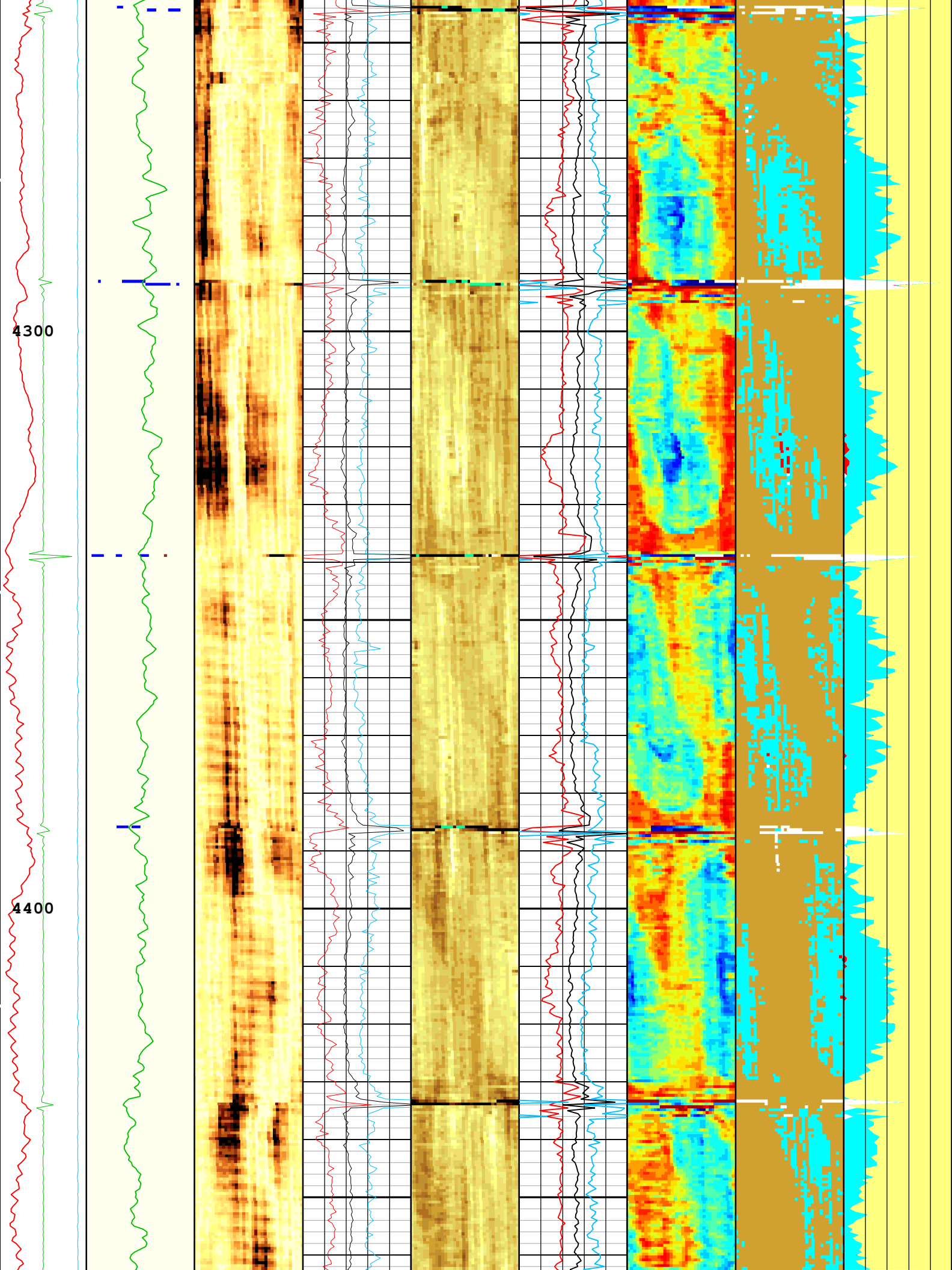




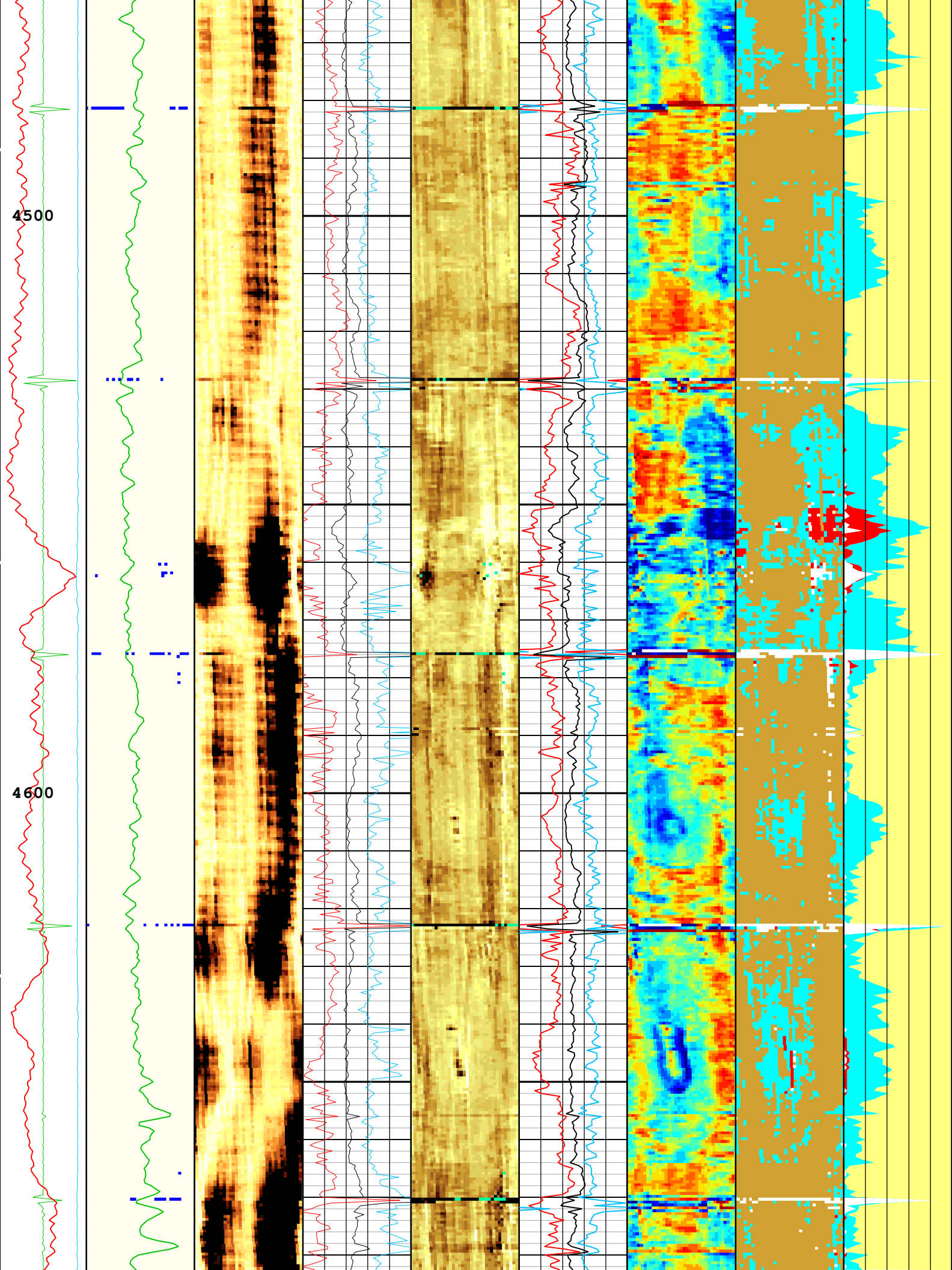


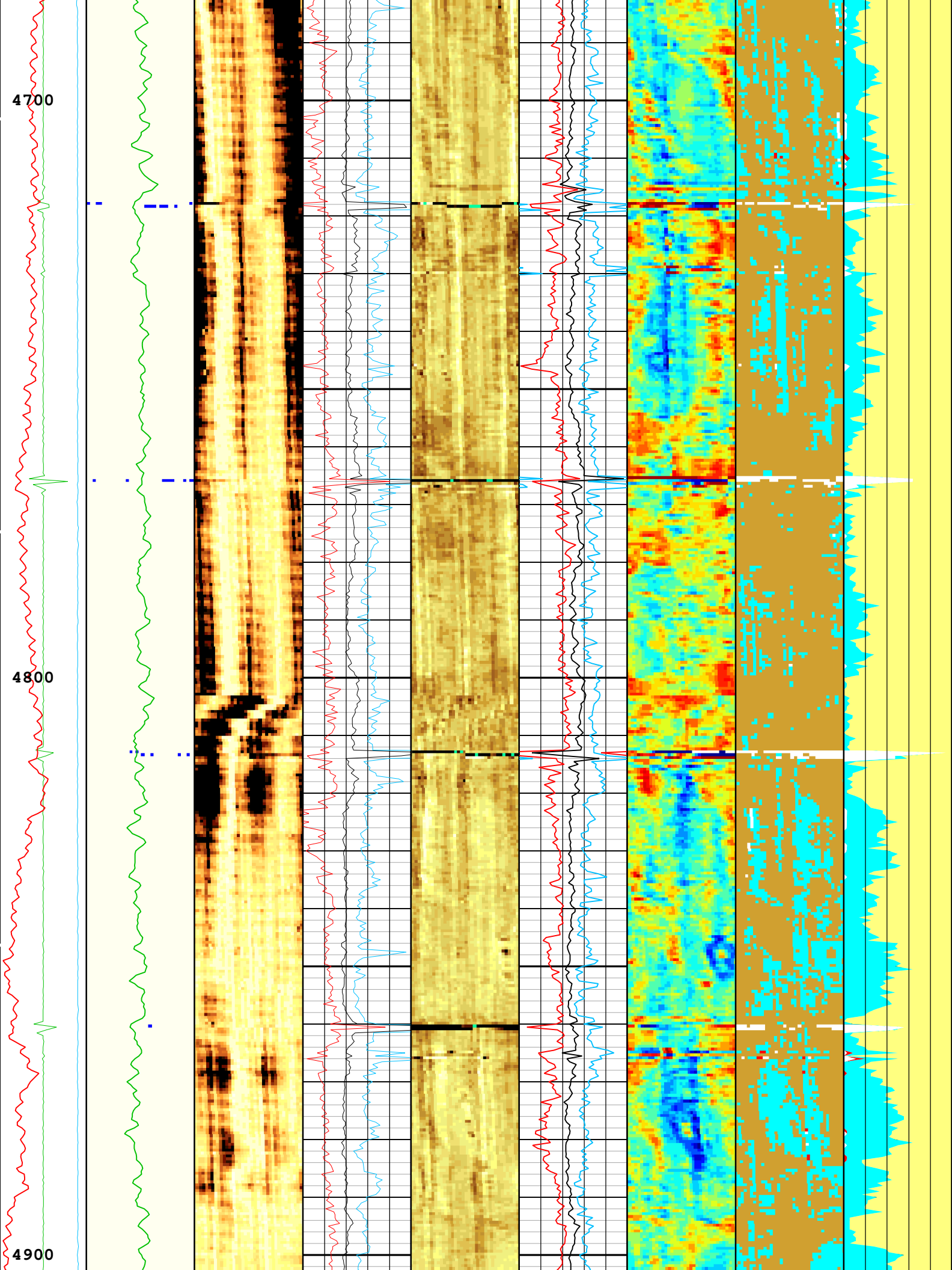


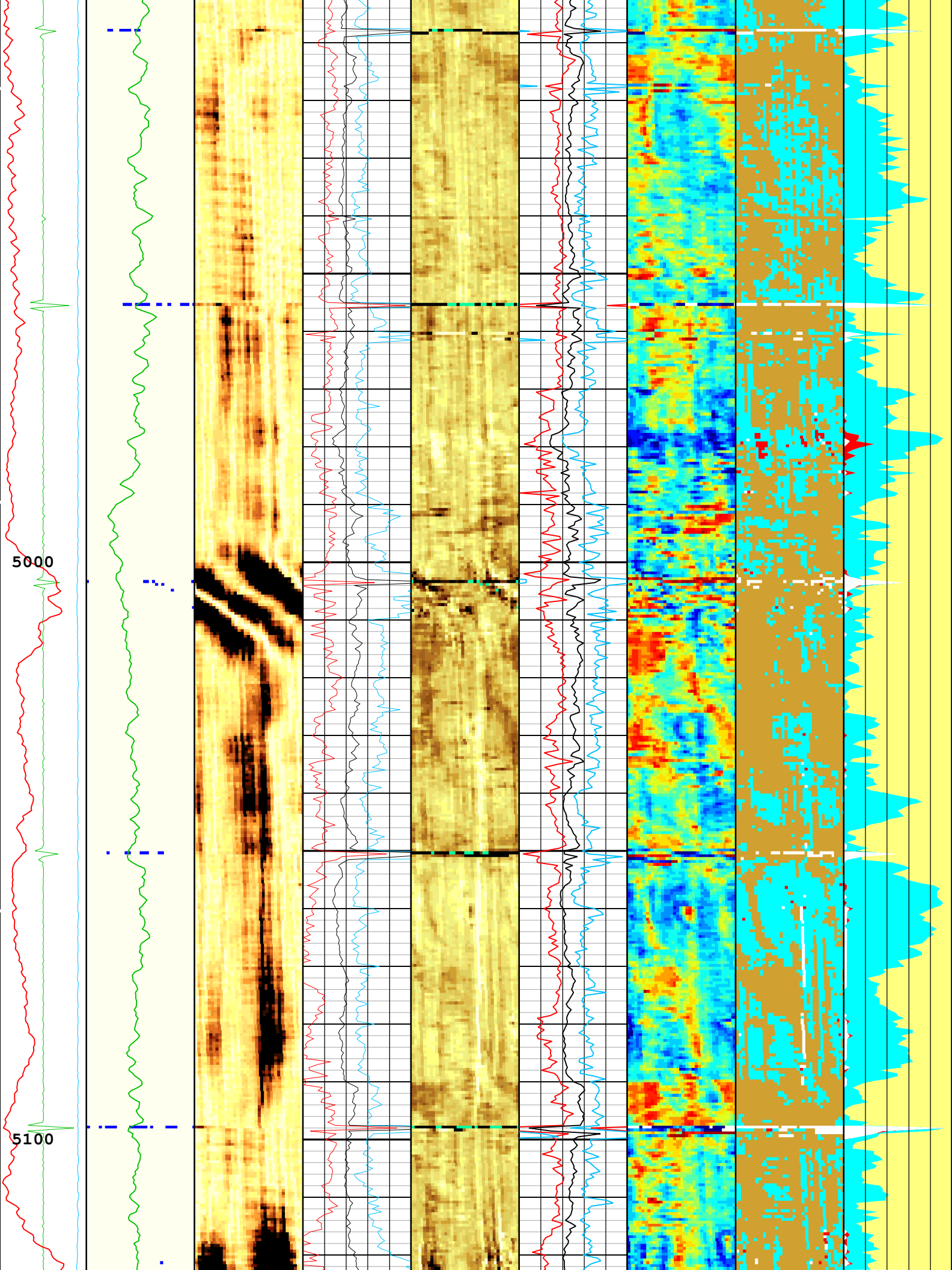




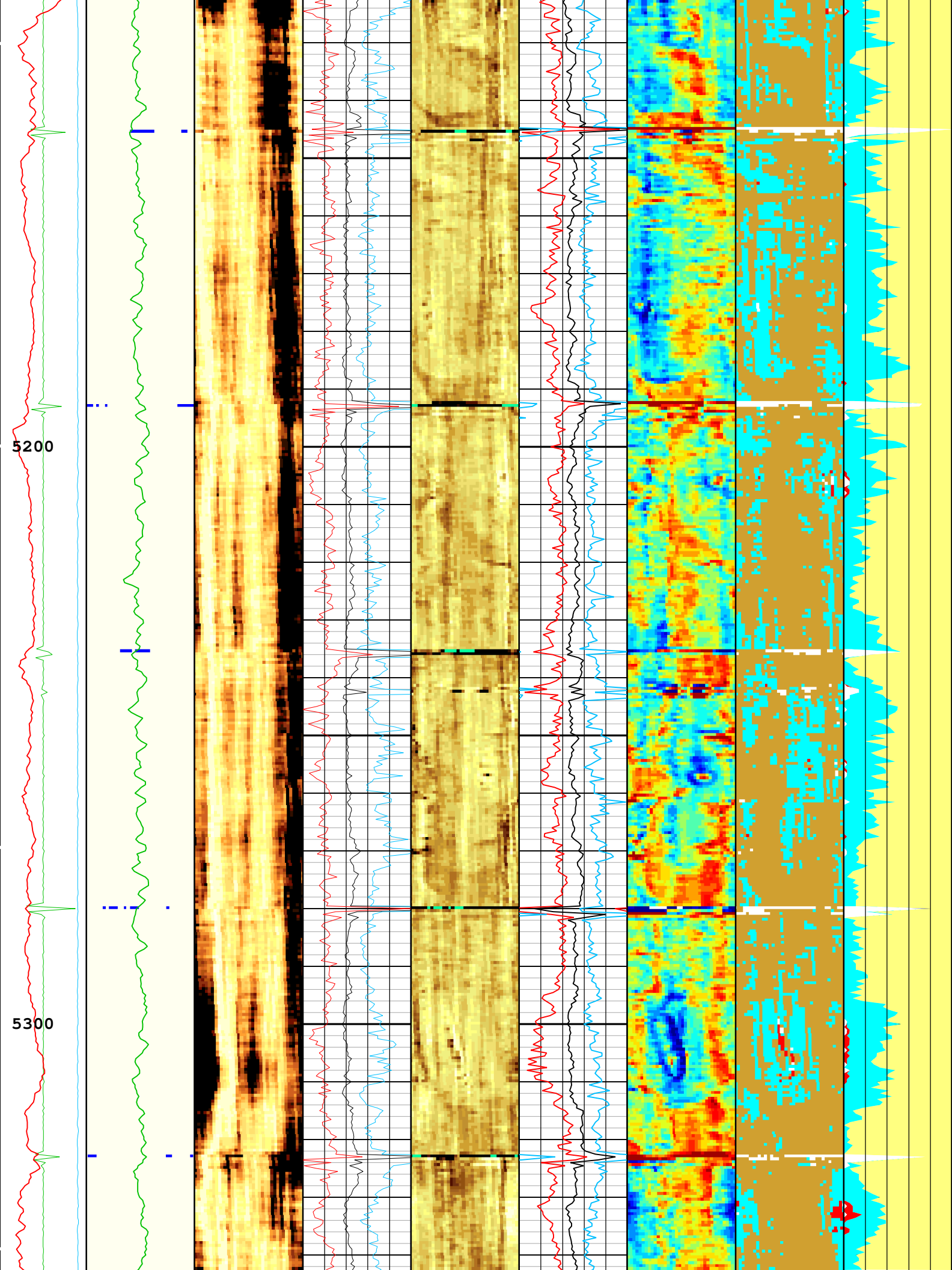


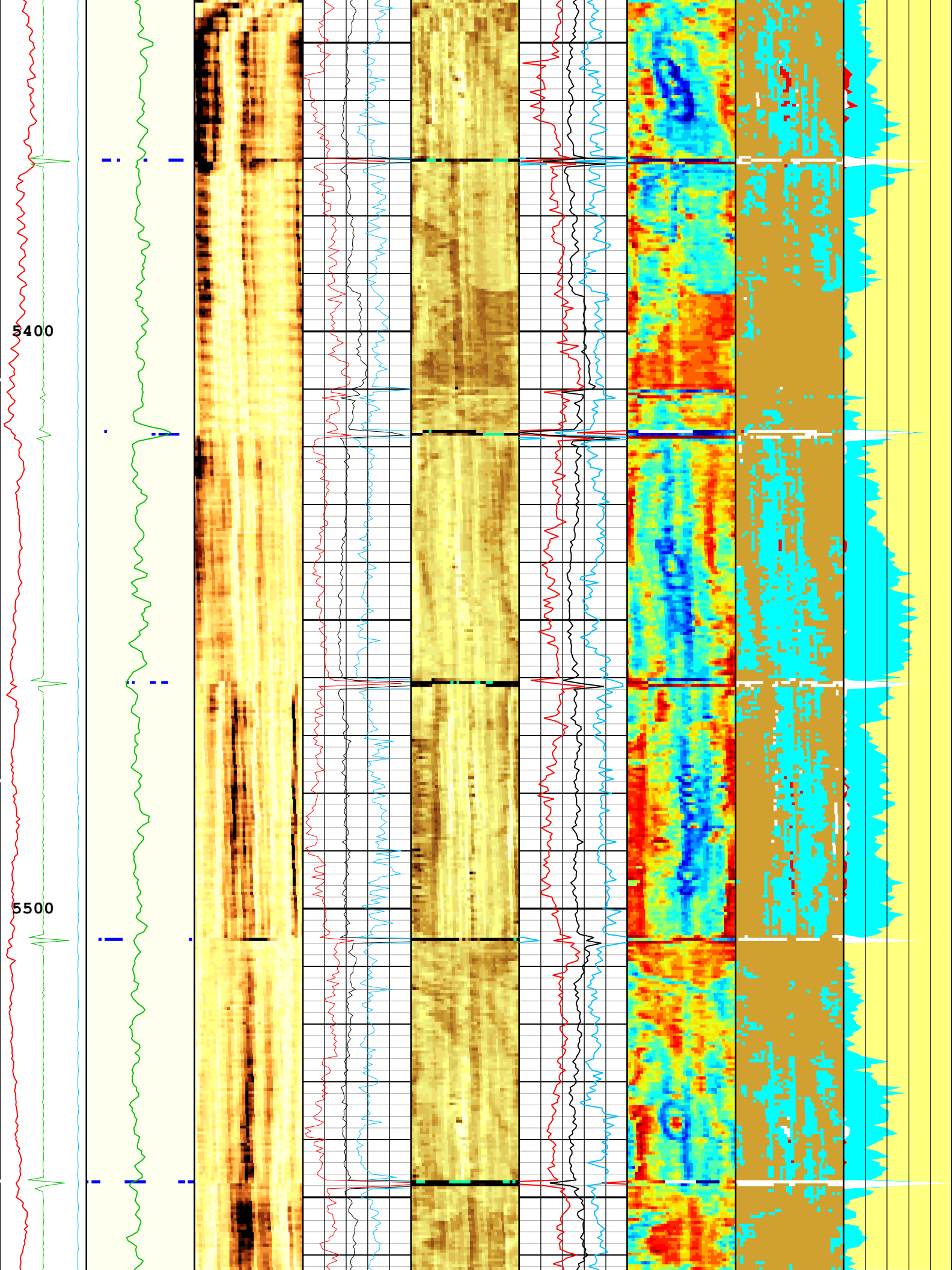


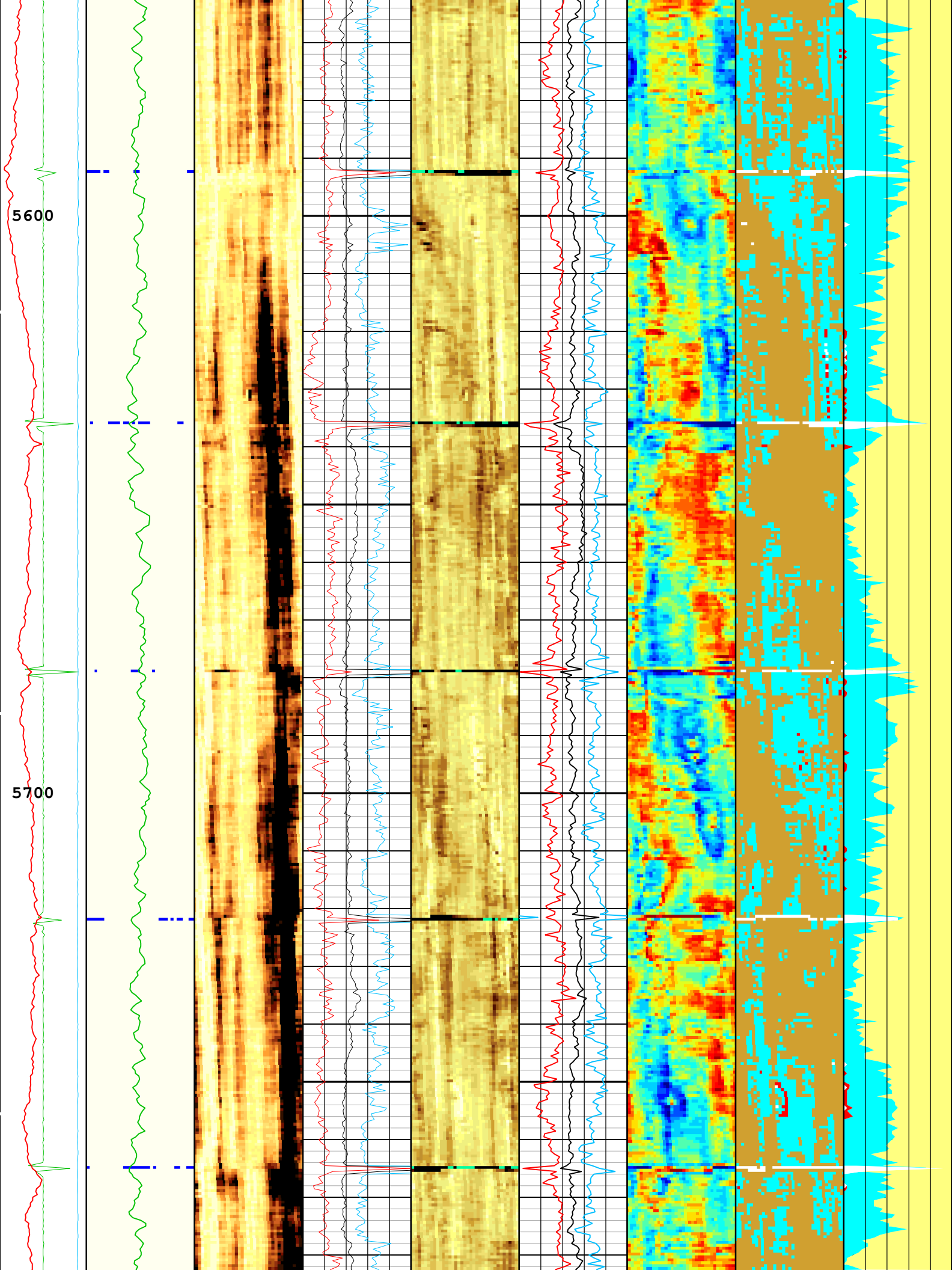


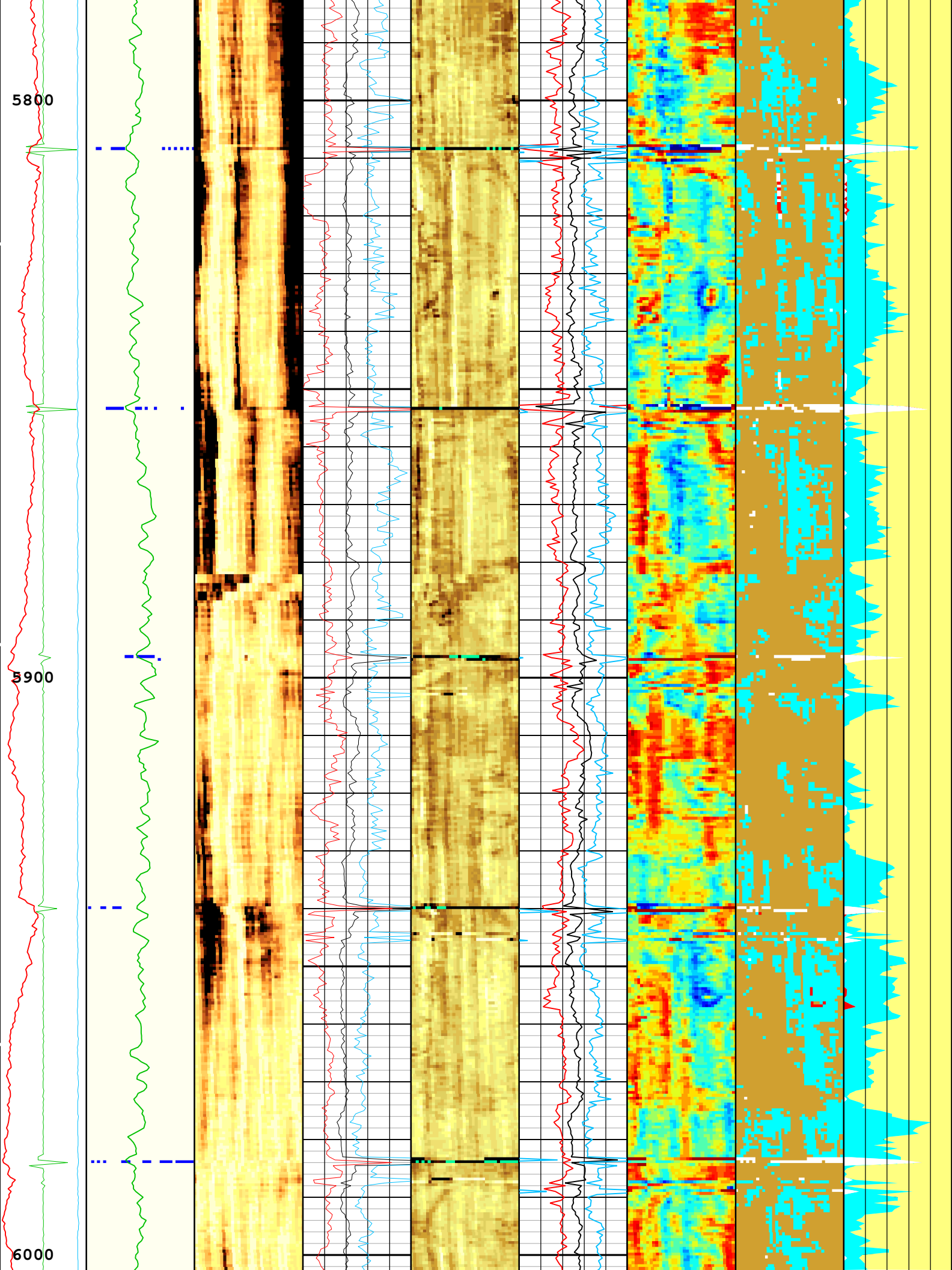


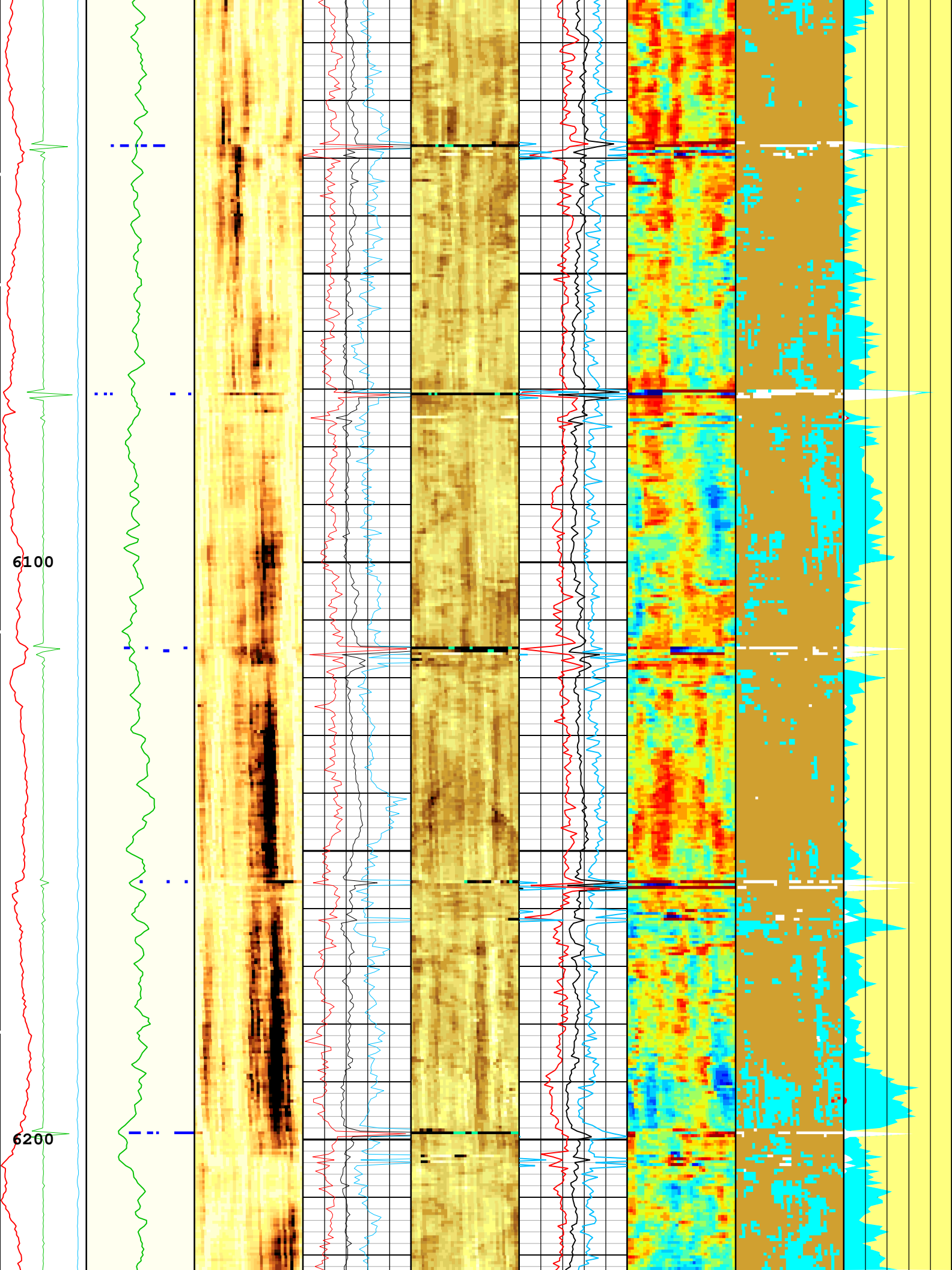




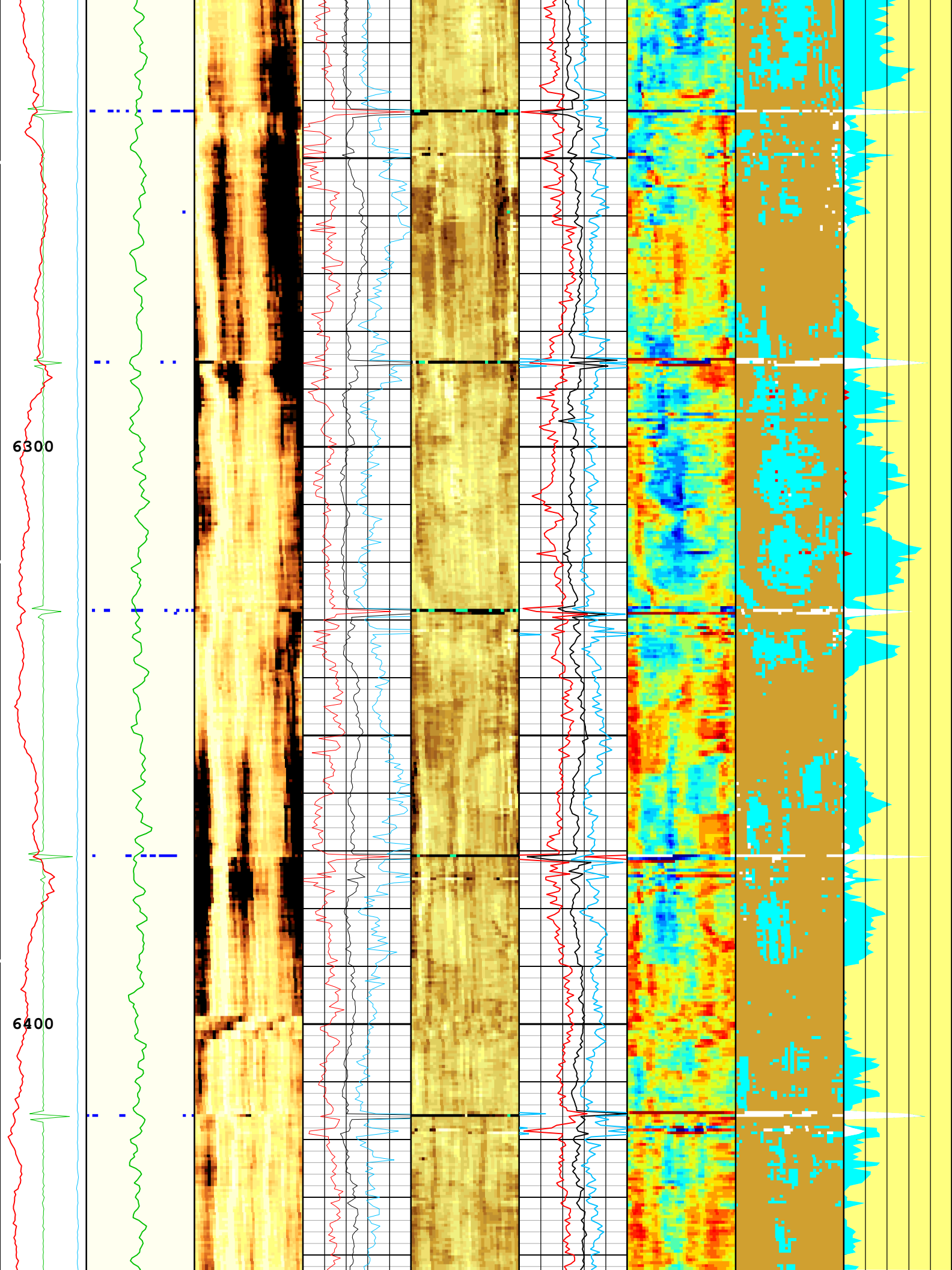


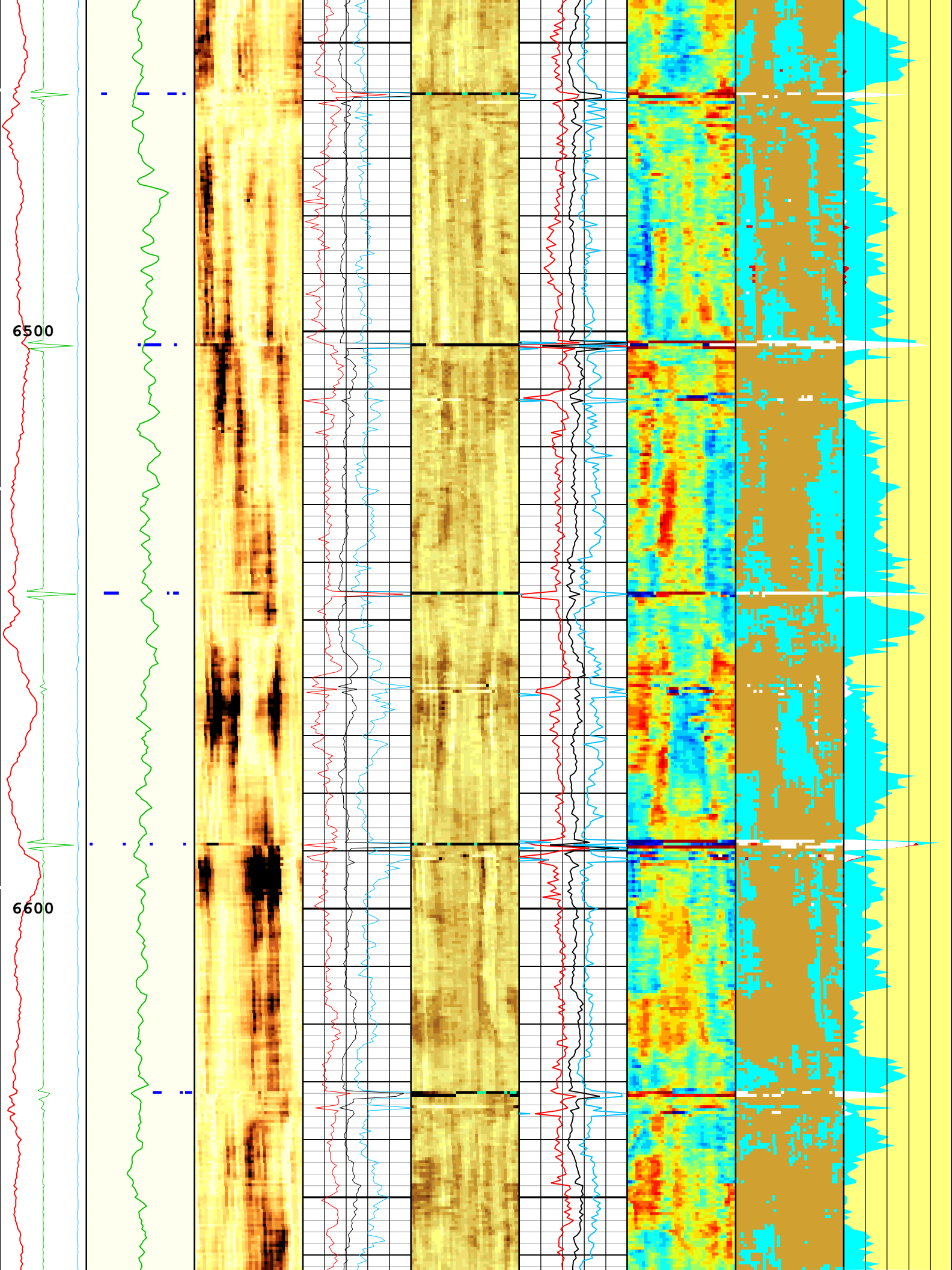


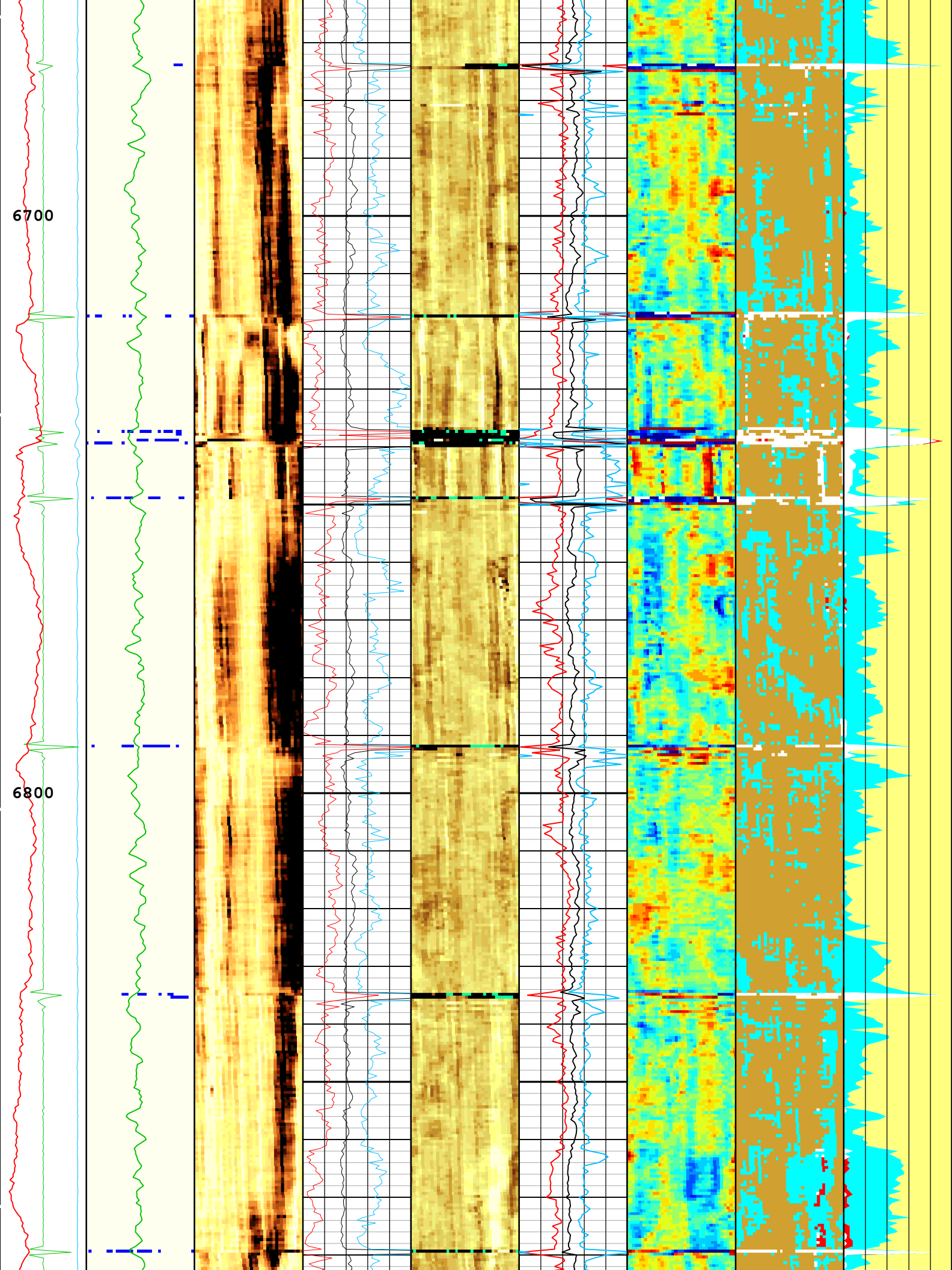




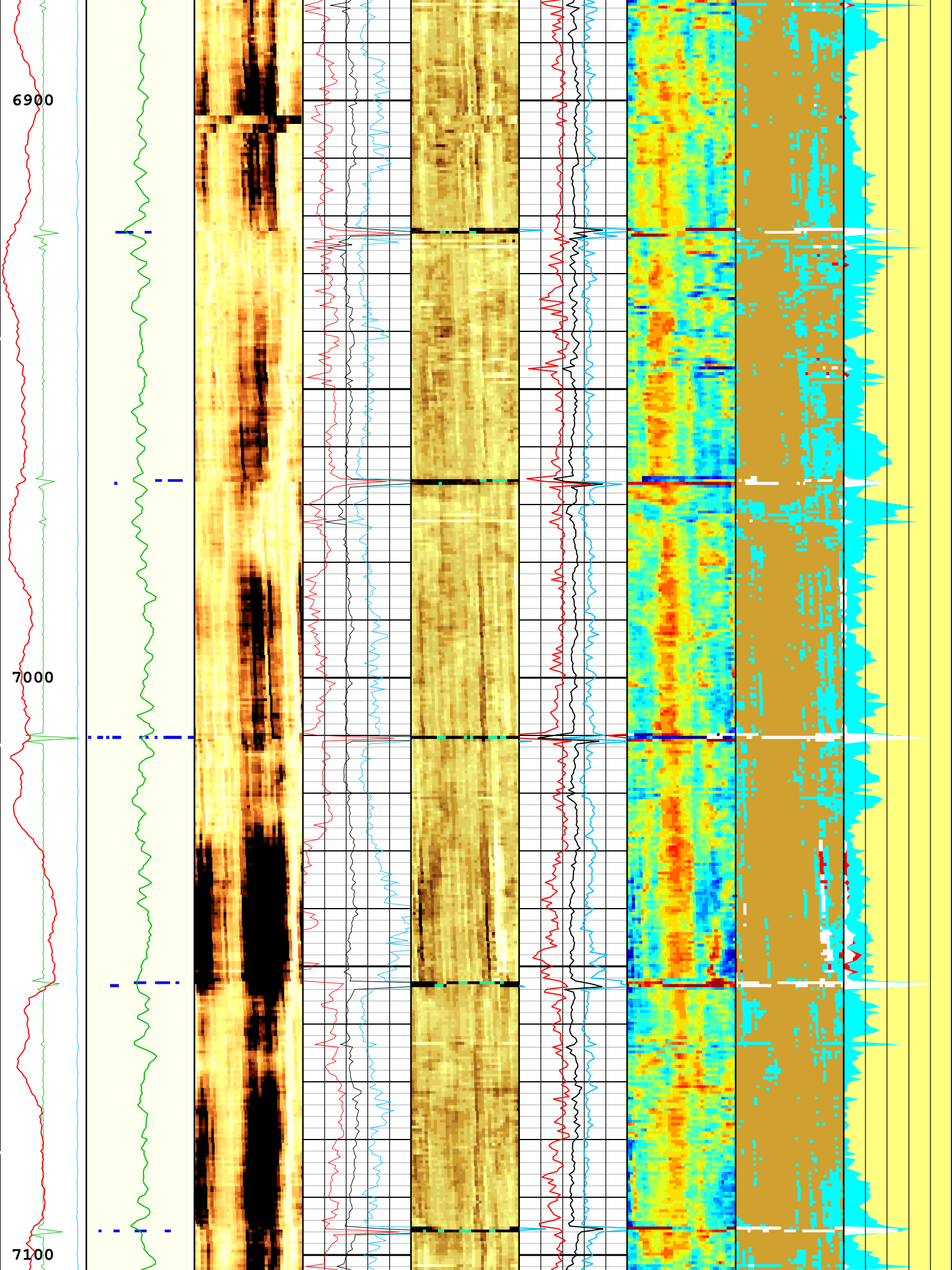


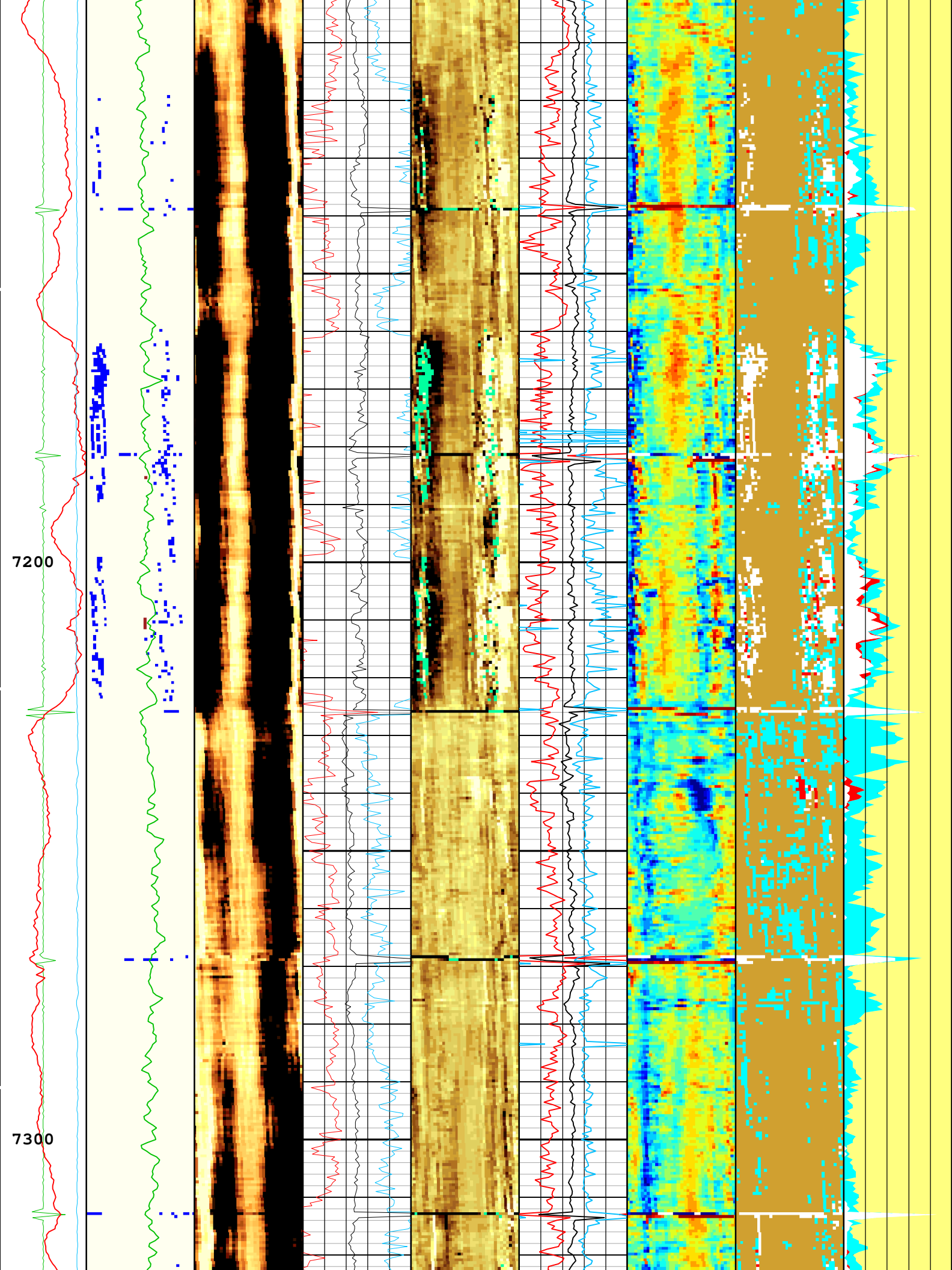


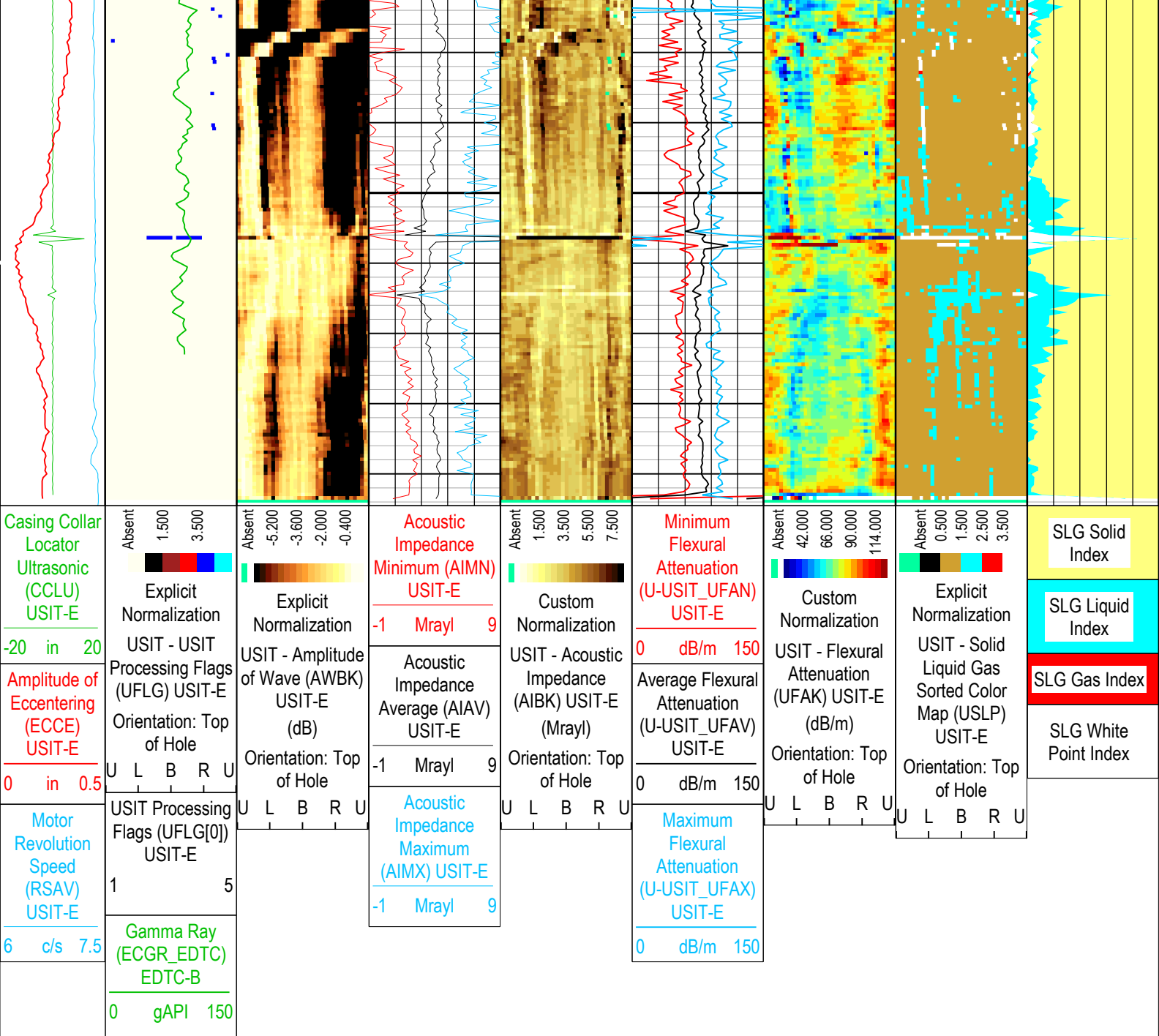












USIT Processing Flags (UFLG[0]) USIT-E

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TIME\_1900 - Time Marked every 60.00 (s)

Description: USI IBC SLG    Format: Log ( IBC SLG )    Index Scale: 5 in per 100 ft    Index Unit: ft    Index Type: Measured Depth    Creation Date: 08-Aug-2020 13:35:10

Channel Processing Parameters				
One: Parameters				
Parameter	Description	Tool	Value	Unit
BARI(ISSBAR)	Barite Mud Presence Flag	Borehole	No	
BERJ	Bad Echo Rejection	USIT-E	On	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Cased	
BS	Bit Size	WLSESSION	Depth Zoned	in

CASING_PRATIO	Casing Poisson Ratio	USIT-E	Standard Poisson Ratio	
CBLO	Casing Bottom (Logger)	WLSESSION	19803	ft
CDEN	Cement Density	USIT-E	12.5	lbm/gal
CDEN	Cement Density	EDTC-B	16.69	lbm/gal
CMTY(U-USIT_CEMT)	Cement Type	USIT-E	Regular Cement	
DFD	Drilling Fluid Density	Borehole	9.5	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
FD	Fluid Density	USIT-E	10.5	lbm/gal
FDII	FPM Data Interpolation Interval	USIT-E	0	ft
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS(RT)	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	BS(RT)	
GR_MULTIPLIER	Gamma Ray Multiplier	EDTC-B	1	
HEMA	Hematite Presence Flag	Borehole	No	
IBC_FRP_OFFSET	IBC Flexural Offset from Free Pipe	USIT-E	33.12	dB/m
IBC_FVEL_SEL	IBC Fluid Velocity Selection	USIT-E	Automatic	
IBC_OFFSET_SEL	IBC Flexural Offset Selector	USIT-E	UFAO	
IBC_ZMUD_SEL	IBC Mud Impedance Selection	USIT-E	FreePipe Norm.	
IMAR	Image Rotation	USIT-E	RB	
MEAS_WLEN	Tcube Processing Window Length in Measurement Mode	USIT-E	22.44	us
MUD_N_FRP	Free Pipe Mud Normalization Factor	USIT-E	1.14	
MUD_N_THE	Theoretical Mud Normalization Factor	USIT-E	1.07	
RCOD	Reference Calibrator Outer Diameter	USIT-E	4.5	in
RCSO	Reference Calibrator Standoff	USIT-E	0.842	in
RCTH	Reference Calibrator Thickness	USIT-E	0.216	in
RPLUS_PROCESS	Ultrasonic R+ Processing	USIT-E	No	
SOCN	Standoff Distance	EDTC-B	0.125	in
SOCO	Standoff Correction Option	EDTC-B	No	
THDH	Maximum Search Thickness (percentage of nominal)	USIT-E	130	%
THDL	Minimum Search Thickness (percentage of nominal)	USIT-E	70	%
TPOS_EDTC	Tool Position: Centered or Eccentered	EDTC-B	Eccentered	
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	USIT-E	1.68	Mrayl
U-USIT_UFAO	SIT Flexural Attenuation Offset	USIT-E	Time Zoned	dB/m
U-USIT_UIAP	IBC Answer Product Enabled	USIT-E	SolidLiquidGasMap	
THDP	Thickness Detection Policy	USIT-E	Fundamental	
VCAS	Ultrasonic Transversal Velocity in Casing	USIT-E	51.4	us/ft
ZCAS	Acoustic Impedance of Casing	USIT-E	46.25	Mrayl
ZINI	Initial Estimate of Cement Impedance	USIT-E	-1	Mrayl
ZMUD	Acoustic Impedance of Mud	Borehole	1.8	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement	USIT-E	2.6	Mrayl
ZTGS	Acoustic Impedance Threshold for Gas	USIT-E	0.3	Mrayl

## Depth Zone Parameters

Parameter	Value	Start ( ft )	Stop ( ft )
BS	13.5	66	2285
BS	8.5	2285	7394.5

All depth are actual.

## Time Zone Parameters

Parameter	Value	Start Time	Stop Time	Start Depth ( ft )	Stop Depth ( ft )
U-USIT_UFAO	48.12	08-Aug-2020 09:03:27	08-Aug-2020 10:04:05	7395.24	3250.62

U-USIT_UFAO	33.12	08-Aug-2020 10:04:05	08-Aug-2020 10:49:31	3250.62	87.33
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All depth are at tool zero.

Tool Control Parameters

One: Parameters

Parameter	Description	Tool	Value	Unit
AGMN	Minimum Gain of Cartridge	USIT-E	-12	dB
AGMX	Maximum Gain of Cartridge	USIT-E	48	dB
U-USIT_DDT5	USIC Downhole Decimation for T5 only	USIT-E	0_NONE	
DOT(DOS)	Distance between Opposite Transducer Faces	USIT-E	1.756	in
EMXV	EMEX Voltage	USIT-E	95	V
HRES	Horizontal Resolution	USIT-E	10 deg	
IBC_ACQTYPE	IBC Acquisition type	USIT-E	1 MHz	
IBC_FLEXDBP	IBC Flex Duration Before Peak	USIT-E	30	us
ICE2_ACQ	Ultrasonic ICE2 Acquisition	USIT-E	Yes	
MOTOR_PROTECT	Motor Protection	USIT-E	On	
UACLV_PERM	Ultrasonic ACLV Permanent	USIT-E	Yes	
U-USIT_UFWB	Far Receiver Window Begin Time	USIT-E	Time Zoned	us
U-USIT_UFWE	Far Receiver Window End Time	USIT-E	177	us
U-USIT_UNWB	Near Receiver Window Begin Time	USIT-E	Time Zoned	us
U-USIT_UNWE	Near Receiver Window End Time	USIT-E	146	us
USFR	Ultrasonic Sampling Frequency	USIT-E	666667	Hz
UPAT	USIT Emission Pattern	USIT-E	Pattern 375 KHz	
UWKM	USIT Working Mode	USIT-E	10 deg at 6.0 in	
USSP	Ultrasonic Service	USIT-E	IBC	
U-USIT_UTAN	Transducer Angles	USIT-E	33_DEG	
VRES	Vertical Resolution	USIT-E	6.0 in	
WINB	Window Begin Time	USIT-E	Time Zoned	us
WINE	Window End Time	USIT-E	85.69	us

Time Zone Parameters

Parameter	Value	Start Time	Stop Time	Start Depth ( ft )	Stop Depth ( ft )
U-USIT_UFWB	137	08-Aug-2020 09:03:27	08-Aug-2020 09:18:31	7395.24	6353.24
U-USIT_UFWB	131.5	08-Aug-2020 09:18:31	08-Aug-2020 10:49:31	6353.24	87.33
U-USIT_UNWB	106	08-Aug-2020 09:03:27	08-Aug-2020 09:18:38	7395.24	6345.22
U-USIT_UNWB	101.15	08-Aug-2020 09:18:38	08-Aug-2020 10:49:31	6345.22	87.33
WINB	31.88	08-Aug-2020 09:03:27	08-Aug-2020 09:03:44	7395.24	7378.11
WINB	26.6	08-Aug-2020 09:03:44	08-Aug-2020 10:49:31	7378.11	87.33

All depth are at tool zero.

One

IBC SLG Composite

Pass Summary






Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
One	Log[7]:Up	Up	87.33 ft	7395.24 ft	08-Aug-2020 9:03:27 AM	08-Aug-2020 10:49:31 AM	ON	0.00 ft	Yes

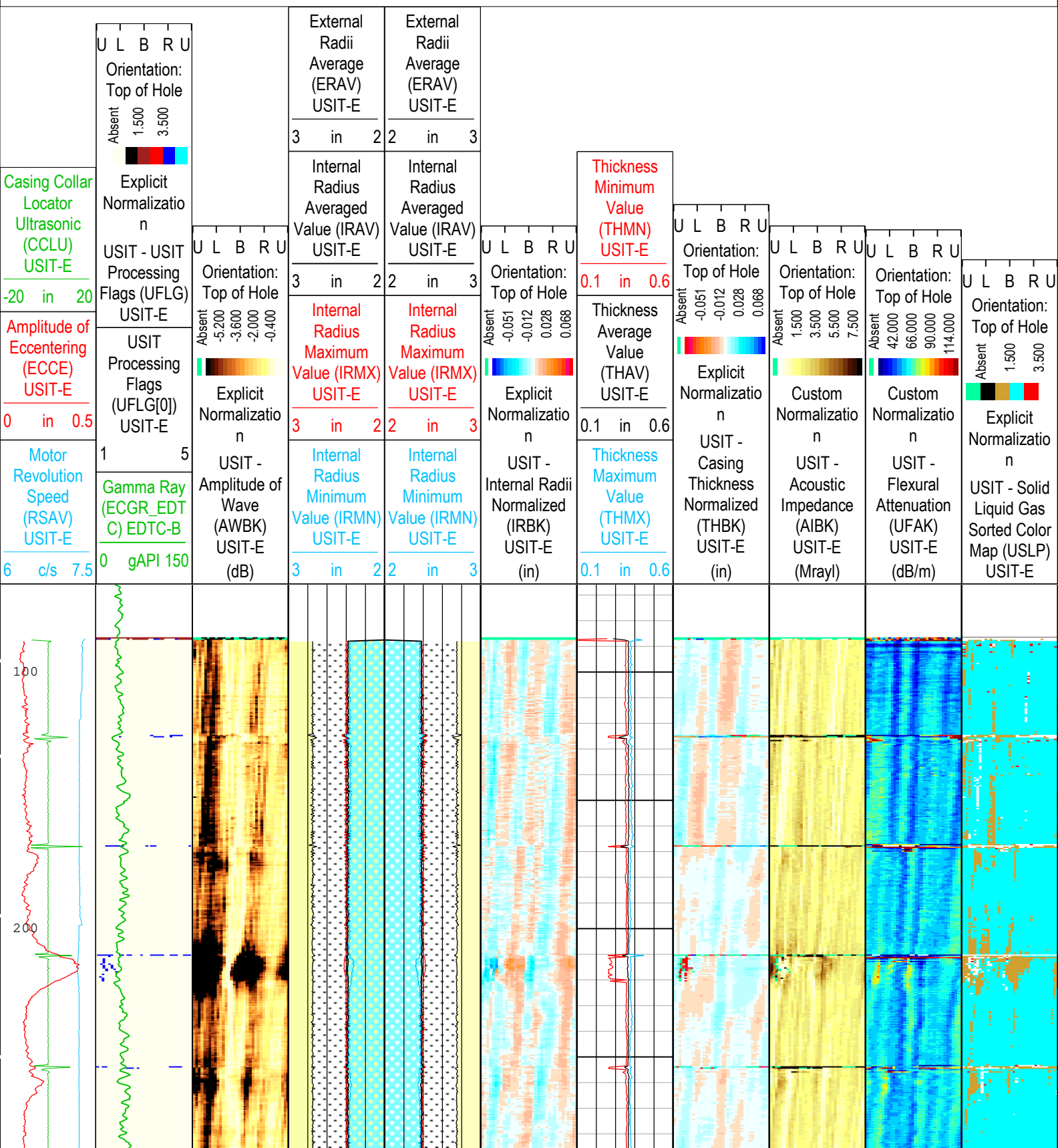
All depths are referenced to toolstring zero

Description: USI IBC SLG Composite Format: Log ( IBC SLG Composite 5.5IN ) Index Scale: 2 in per 100 ft Index Unit: ft Index Type: Measured Depth  
 Creation Date: 08-Aug-2020 13:35:29

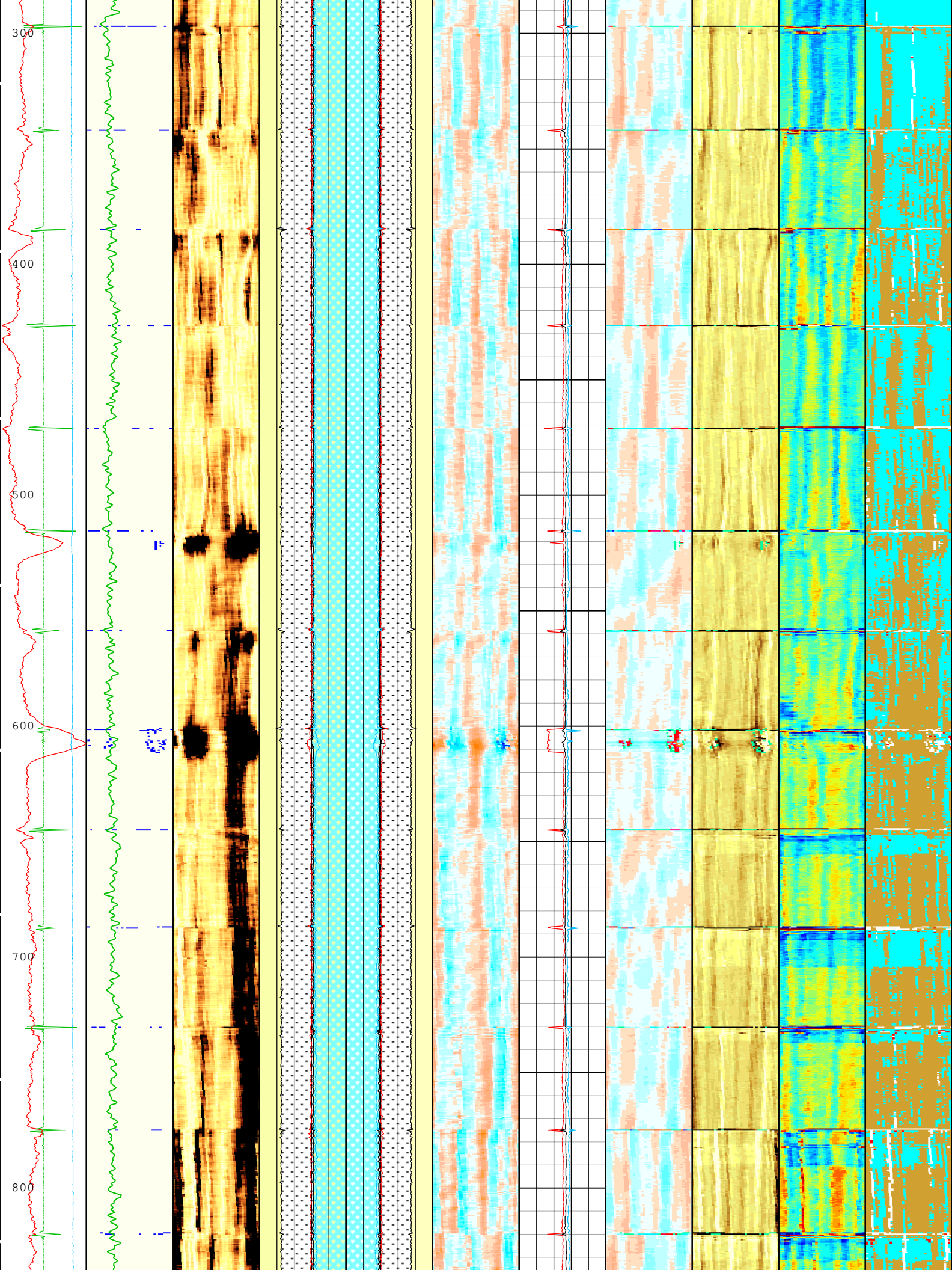
TIME\_1900 - Time Marked every 60.00 (s)

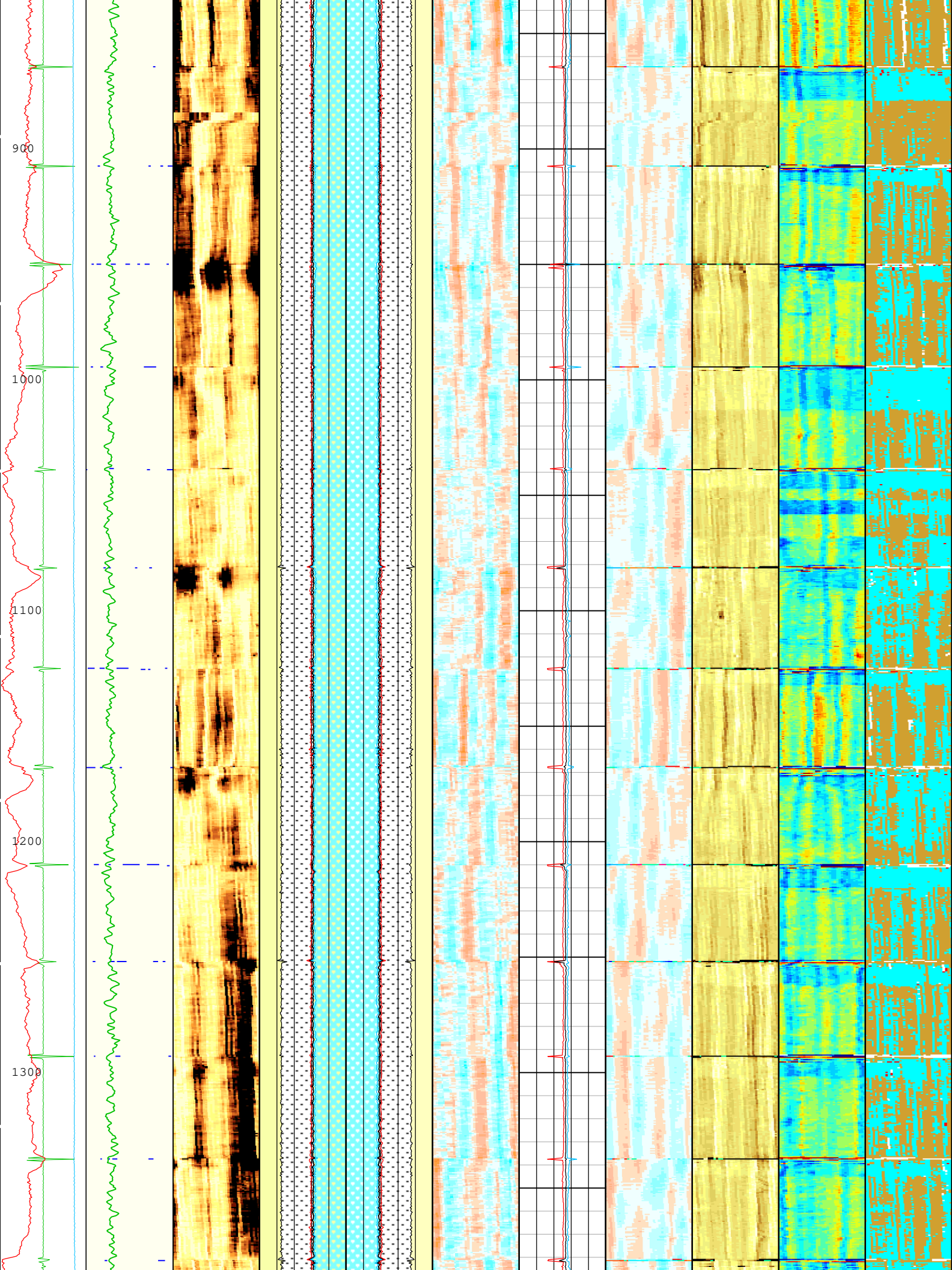
USIT Processing Flags (UFLG[0]) USIT-E

- 1 - UFLG 1 Value within [0.0 - 1.5] - :  UTIM Error  
 2 - UFLG 2 Value within [1.5 - 2.5] - :  Pulse Origin Not Detected  
 3 - UFLG 3 Value within [2.5 - 3.5] - :  WINLEN Error  
 4 - UFLG 4 UFLG 5 UFLG 6 Value within [3.5 - 6.5] - :  Casing Thickness Error  
 5 - UFLG 7 UFLG 8 UFLG 9 Value within [6.5 - 10] - :  Loop Processing Error

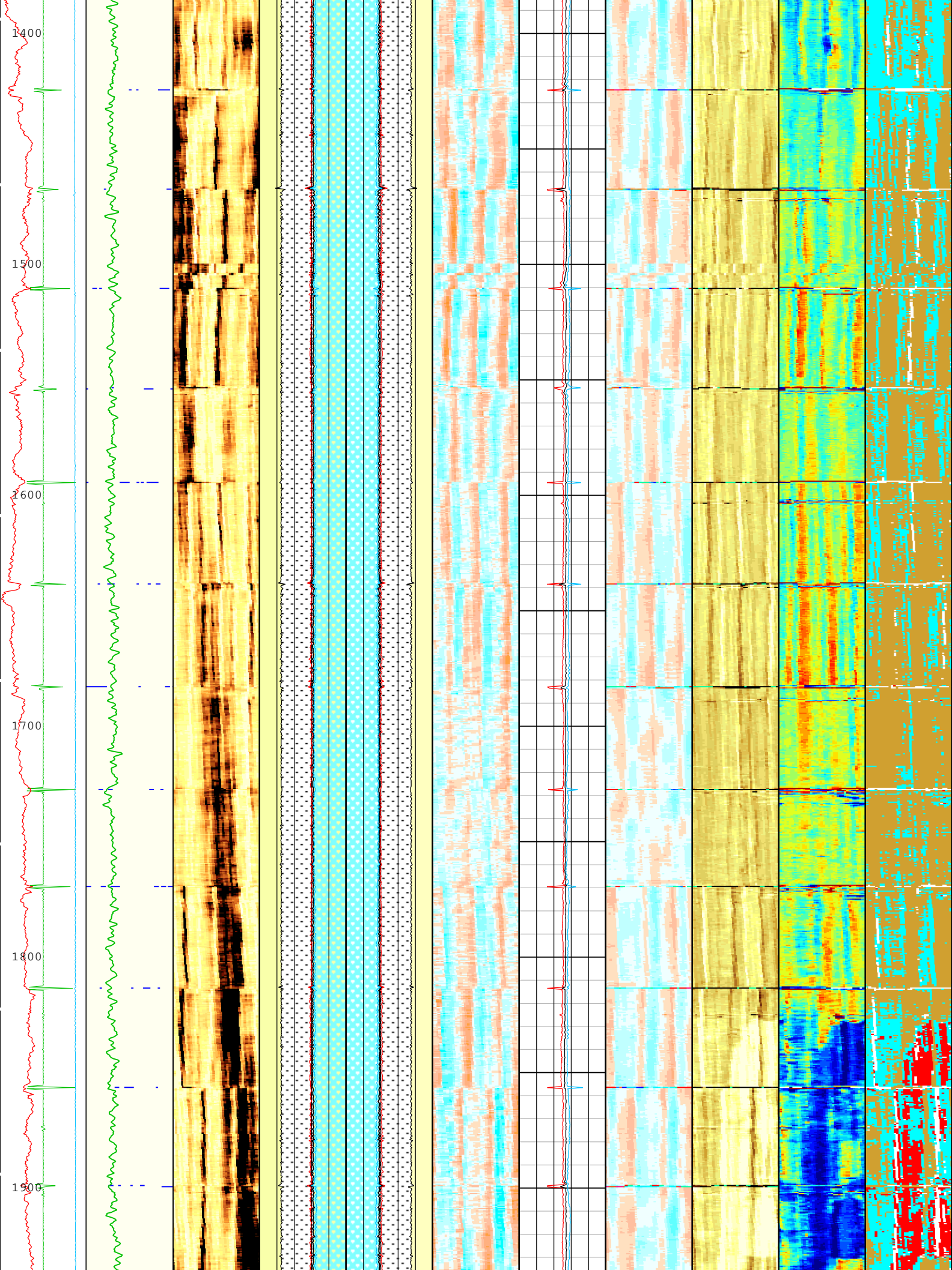


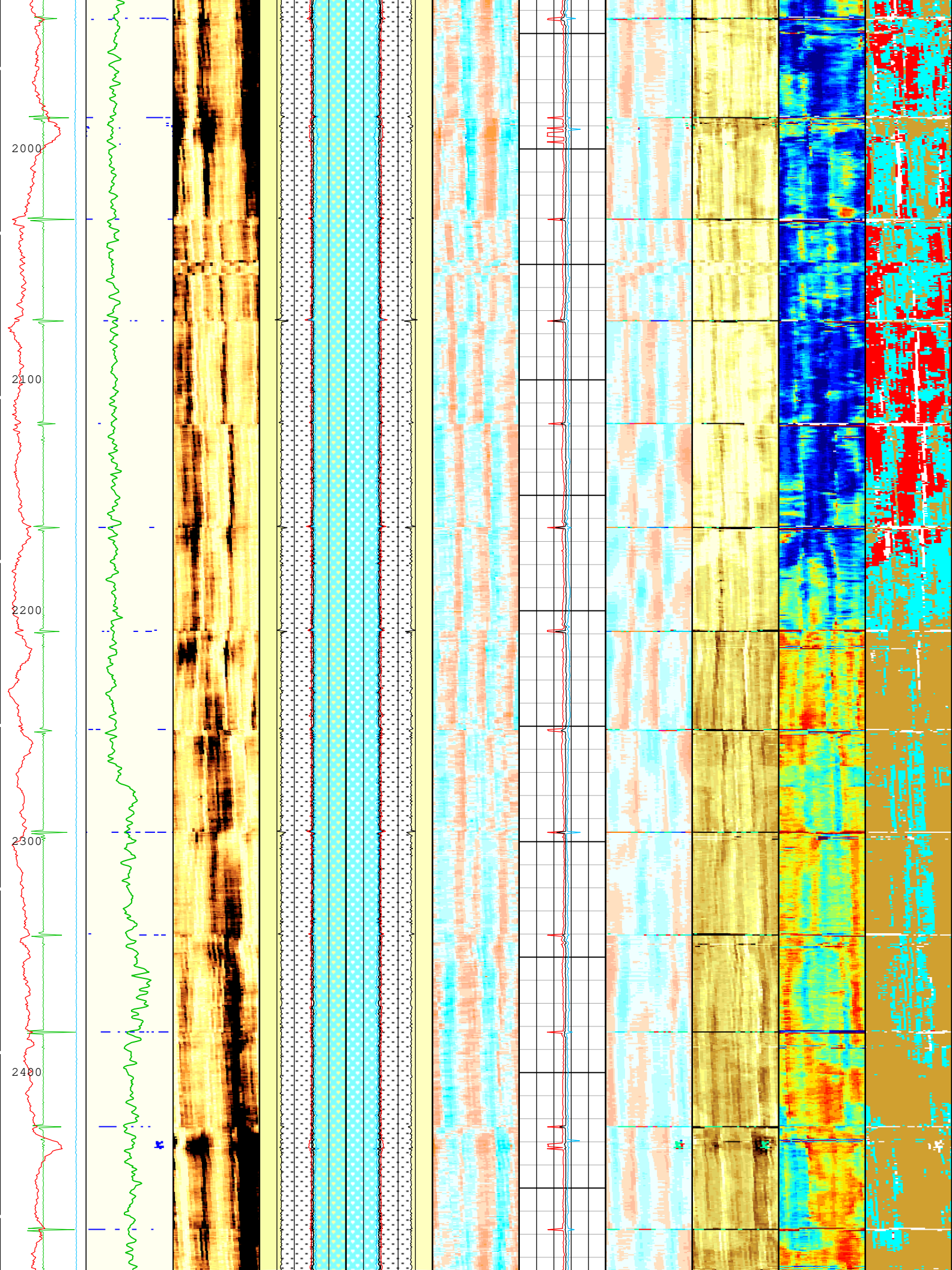




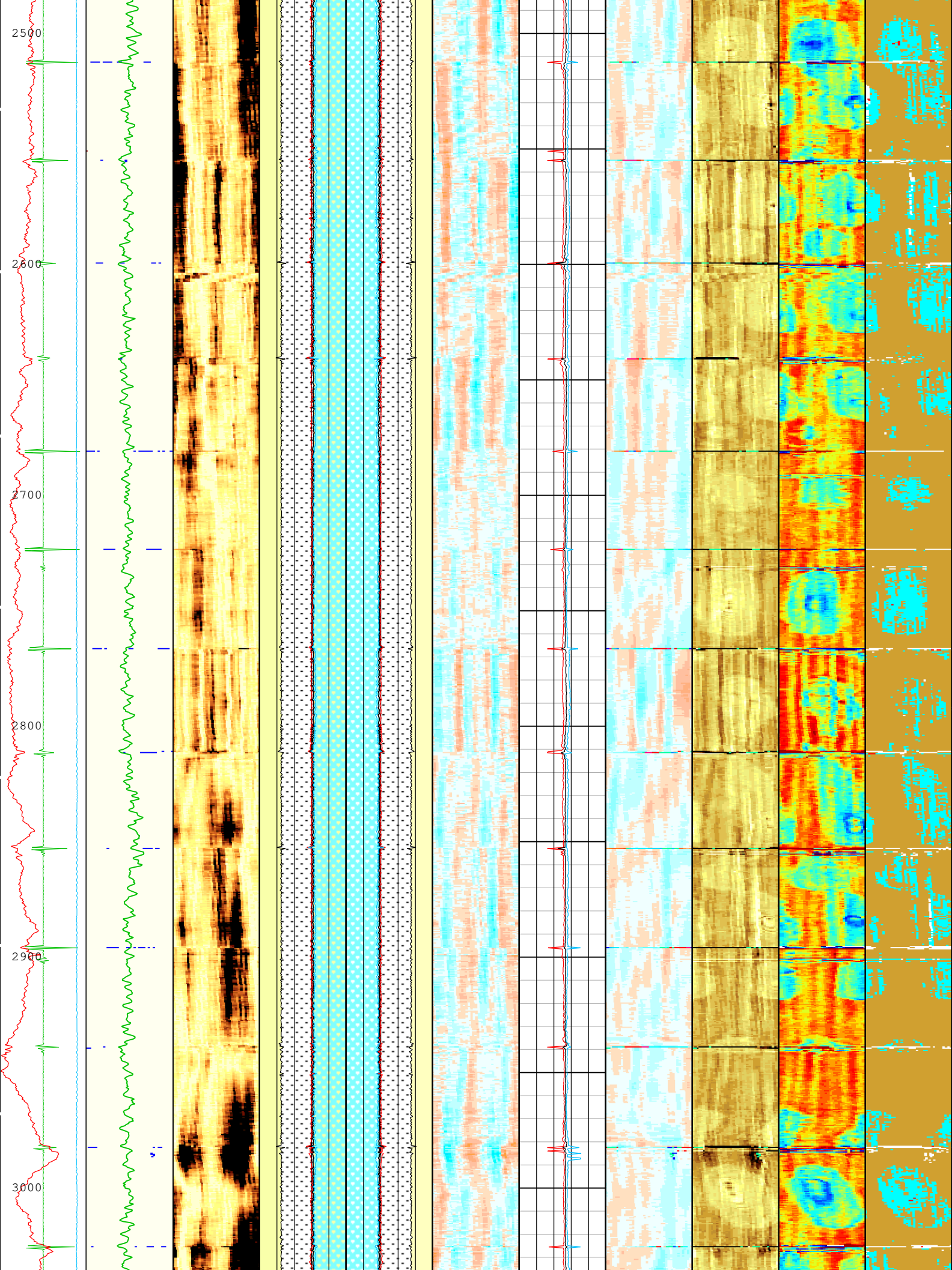




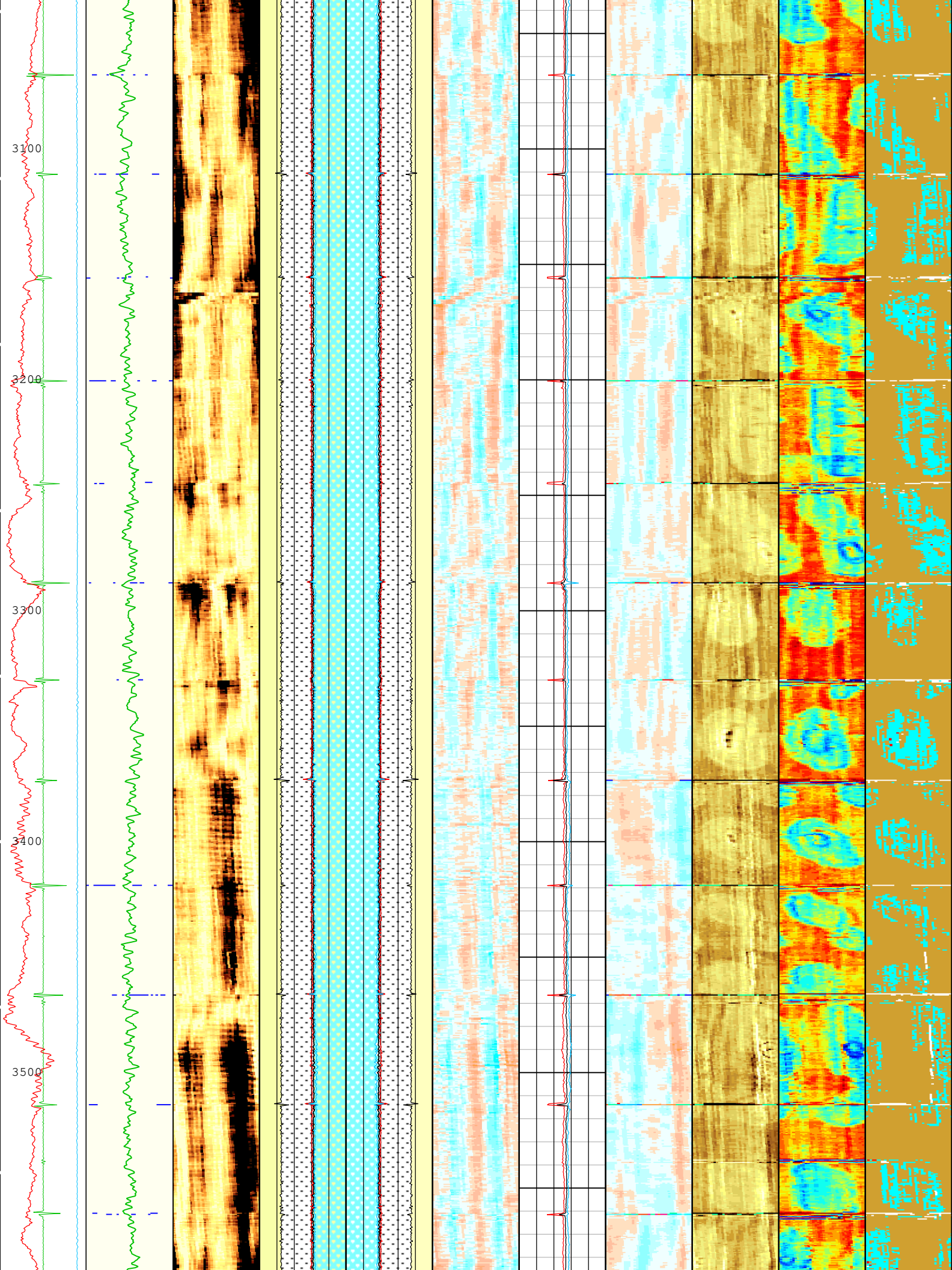


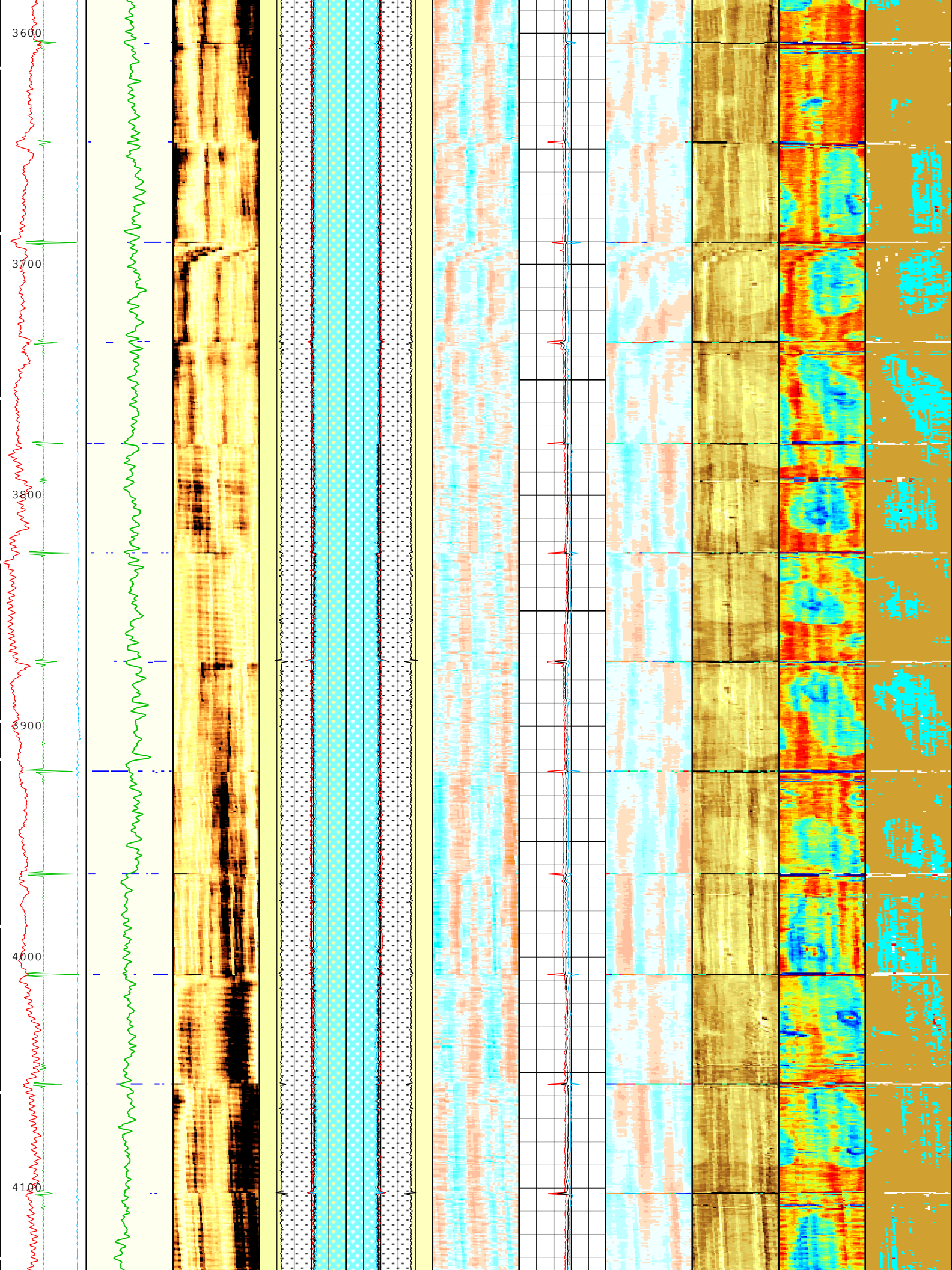




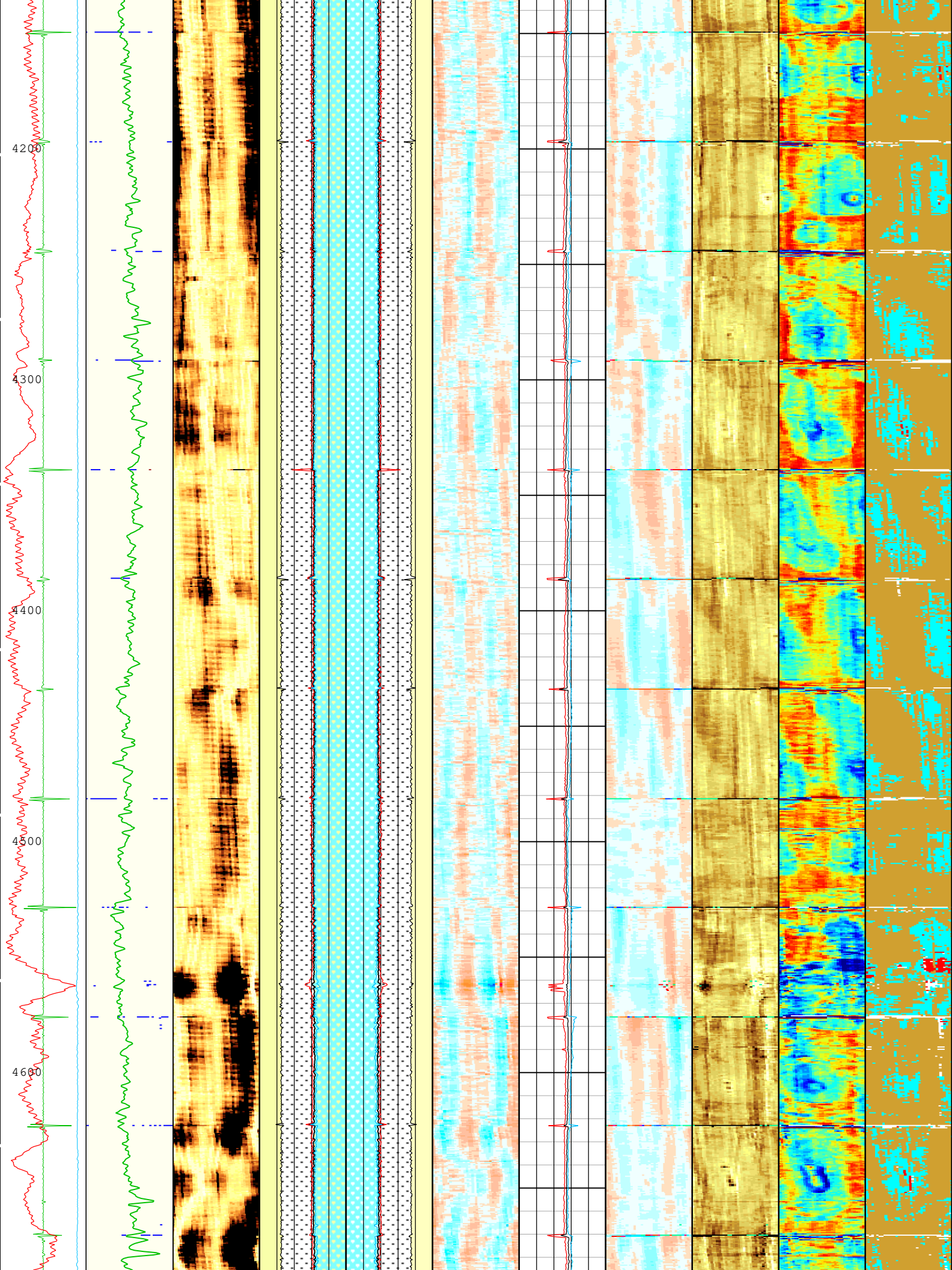


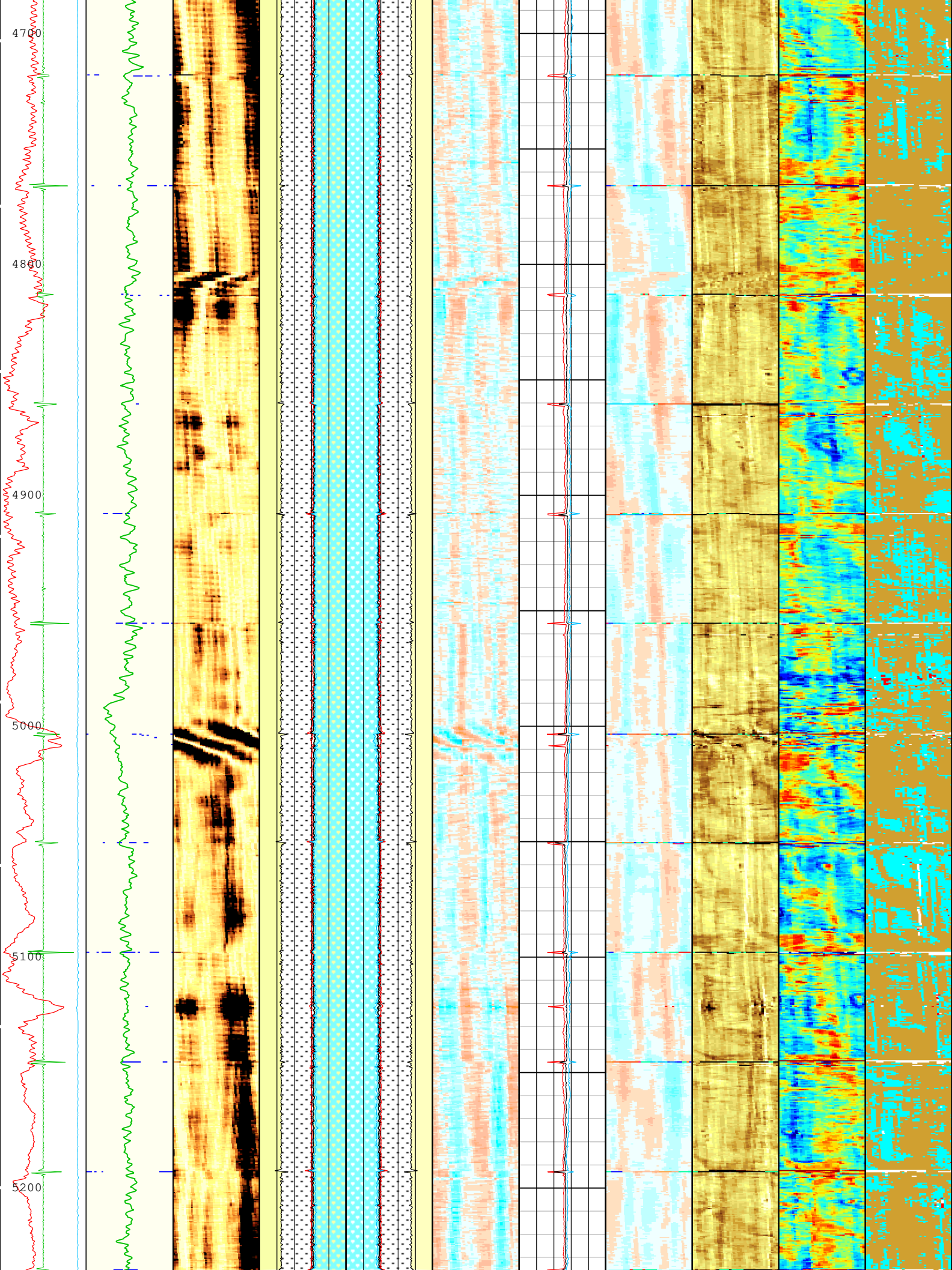




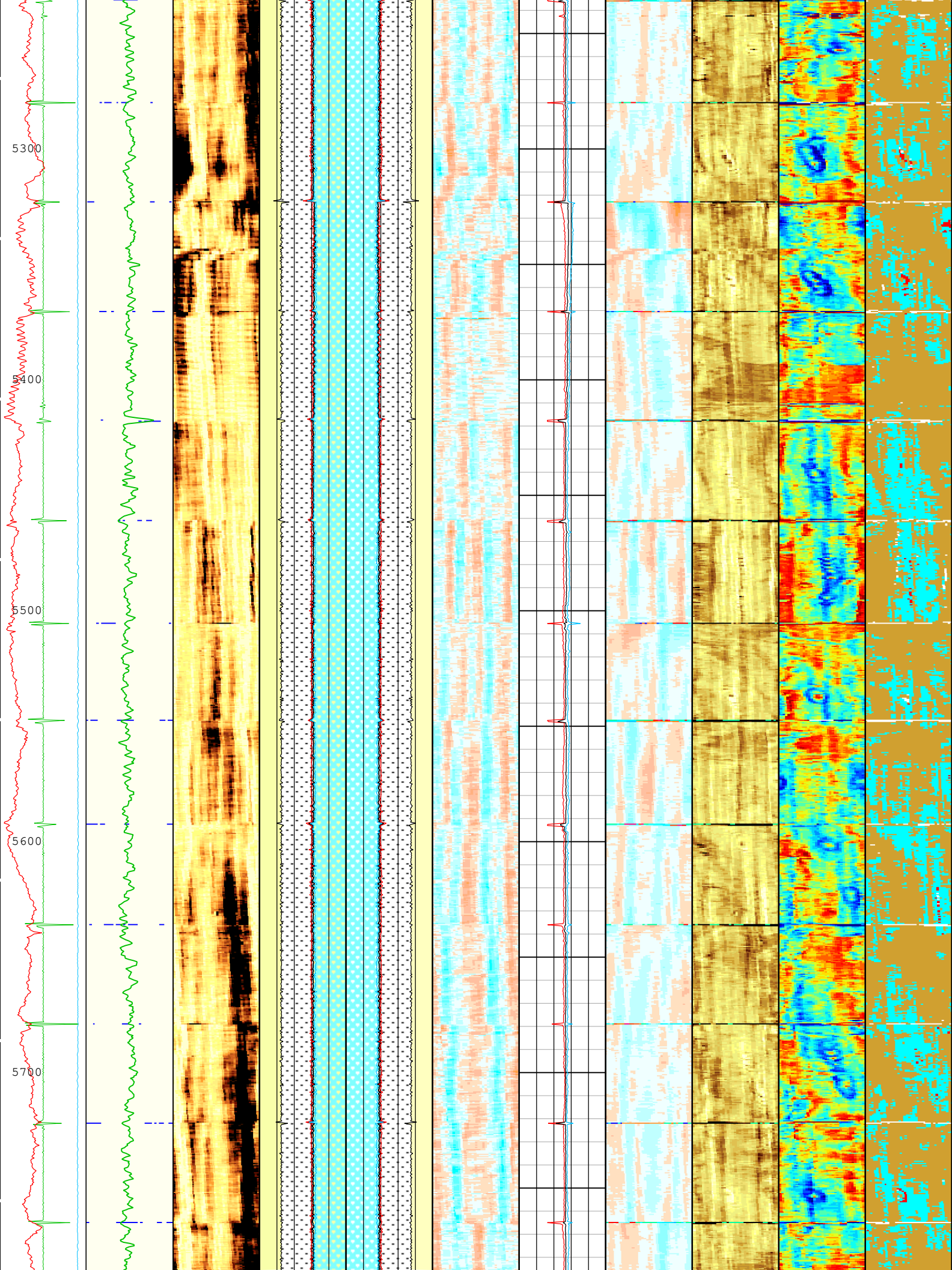




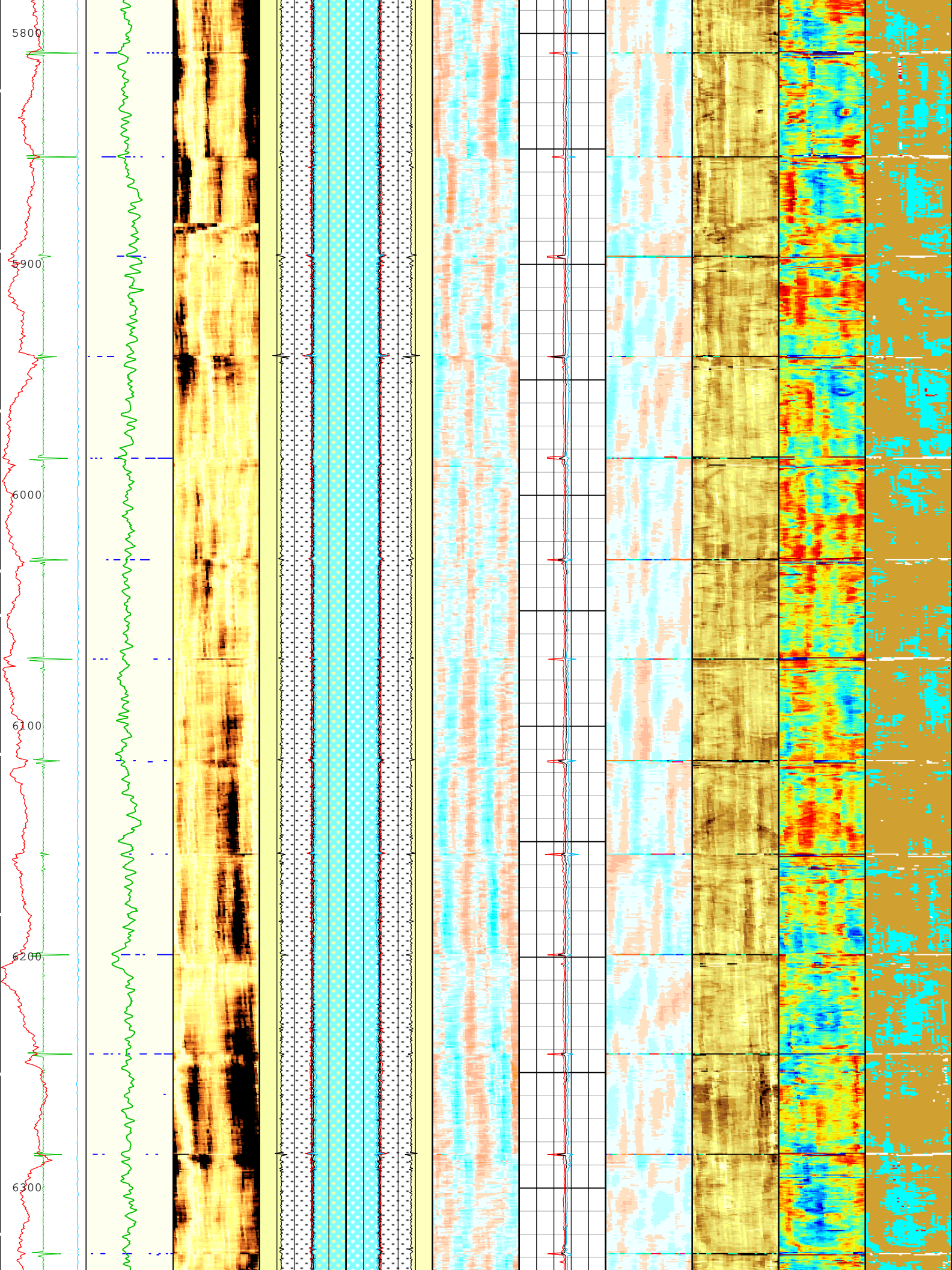


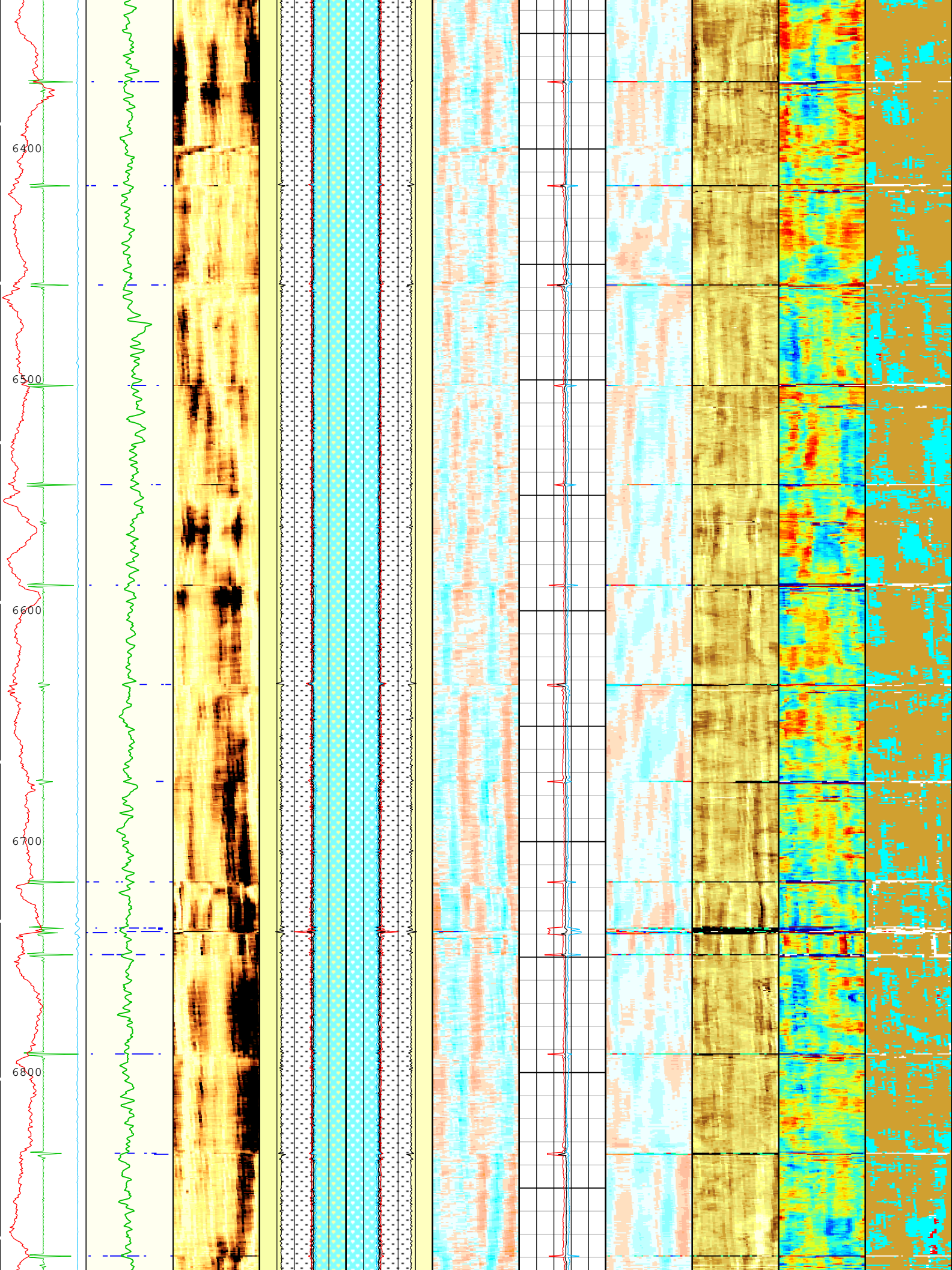




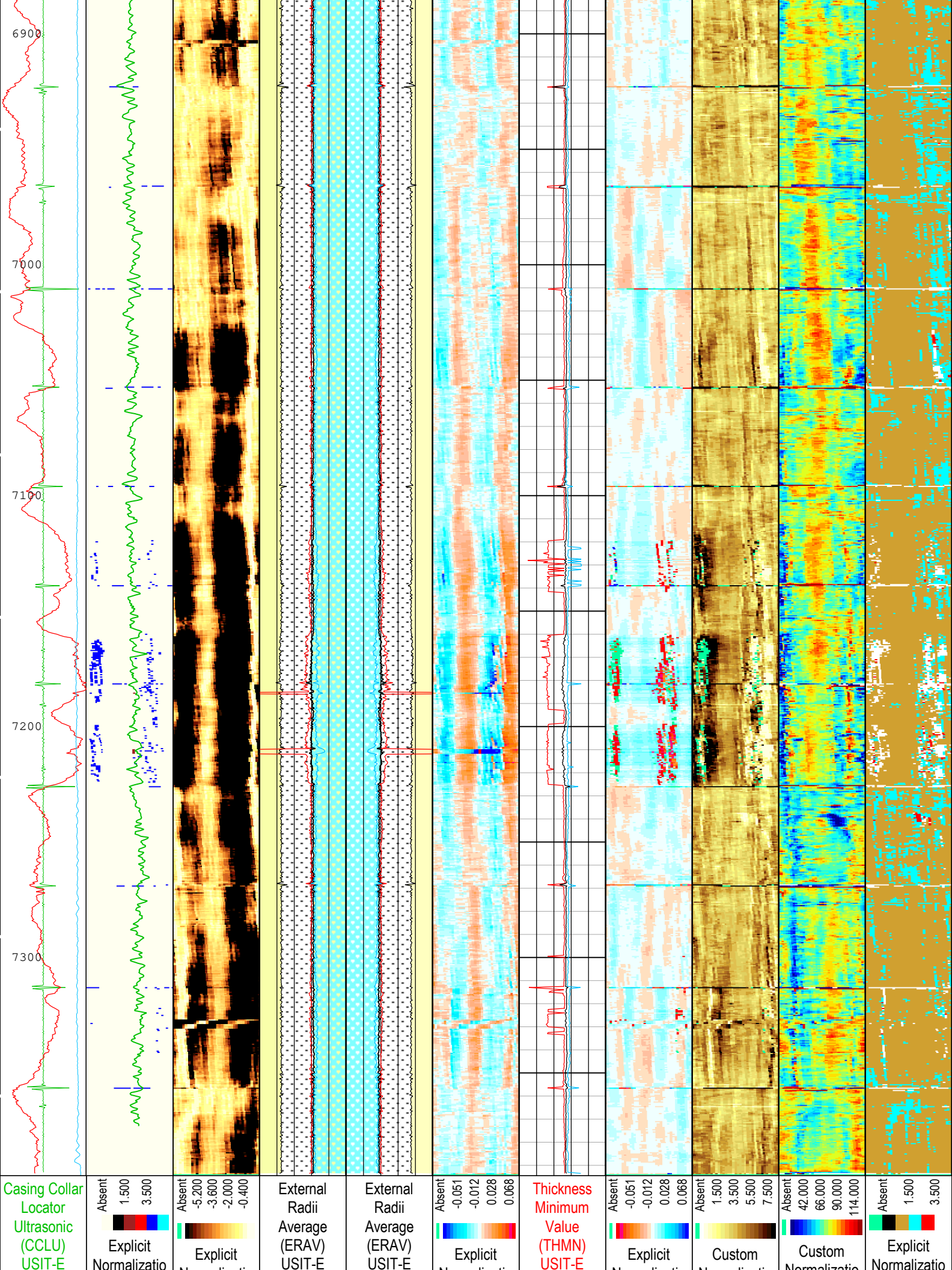












Amplitude of Eccentering (ECCE) USIT-E	USIT - USIT Processing Flags (UFLG) USIT-E	USIT - Amplitude of Wave (AWBK) USIT-E (dB)	Internal Radius Averaged Value (IRAV) USIT-E	Internal Radius Averaged Value (IRAV) USIT-E	USIT - Internal Radii Normalized (IRBK) USIT-E (in)	Thickness Average Value (THAV) USIT-E	USIT - Casing Thickness Normalized (THBK) USIT-E (in)	USIT - Acoustic Impedance (AIBK) USIT-E (Mrayl)	USIT - Flexural Attenuation (UFAK) USIT-E (dB/m)	USIT - Solid Liquid Gas Sorted Color Map (USLP) USIT-E
0 in 0.5	Orientation: Top of Hole	Orientation: Top of Hole	3 in 2	2 in 3	Orientation: Top of Hole	0.1 in 0.6	Orientation: Top of Hole	Orientation: Top of Hole	Orientation: Top of Hole	Orientation: Top of Hole
Motor Revolution Speed (RSAV) USIT-E	USIT Processing Flags (UFLG[0]) USIT-E		Internal Radius Maximum Value (IRMX) USIT-E	Internal Radius Maximum Value (IRMX) USIT-E		Thickness Maximum Value (THMX) USIT-E				
6 c/s 7.5	1 5		3 in 2	2 in 3		0.1 in 0.6				
	Gamma Ray (ECGR_EDT C) EDTC-B		Internal Radius Minimum Value (IRMN) USIT-E	Internal Radius Minimum Value (IRMN) USIT-E						
	0 gAPI 150		3 in 2	2 in 3						

USIT Processing Flags (UFLG[0]) USIT-E	
1 - UFLG 1 Value within [0.0 - 1.5] - :	UTIM Error
2 - UFLG 2 Value within [1.5 - 2.5] - :	Pulse Origin Not Detected
3 - UFLG 3 Value within [2.5 - 3.5] - :	WINLEN Error
4 - UFLG 4 UFLG 5 UFLG 6 Value within [3.5 - 6.5] - :	Casing Thickness Error
5 - UFLG 7 UFLG 8 UFLG 9 Value within [6.5 - 10 ] - :	Loop Processing Error

TIME_1900 - Time Marked every 60.00 (s)
Description: USI IBC SLG Composite    Format: Log ( IBC SLG Composite 5.5IN )    Index Scale: 2 in per 100 ft    Index Unit: ft    Index Type: Measured Depth
Creation Date: 08-Aug-2020 13:35:29

Channel Processing Parameters				
One: Parameters				
Parameter	Description	Tool	Value	Unit
BAR(ISSBAR)	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Cased	
BS	Bit Size	WLSESSION	Depth Zoned	in
CBLO	Casing Bottom (Logger)	WLSESSION	19803	ft
CDEN	Cement Density	USIT-E	12.5	lbm/gal
CDEN	Cement Density	EDTC-B	16.69	lbm/gal
CMTY(U-USIT_CEMT)	Cement Type	USIT-E	Regular Cement	
DFD	Drilling Fluid Density	Borehole	9.5	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
FD	Fluid Density	USIT-E	10.5	lbm/gal
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS(RT)	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	BS(RT)	
HEMA	Hematite Presence Flag	Borehole	No	
IBC_FRP_OFFSET	IBC Flexural Offset from Free Pipe	USIT-E	33.12	dB/m
IBC_FVEL_SEL	IBC Fluid Velocity Selection	USIT-E	Automatic	
IBC_OFFSET_SEL	IBC Flexural Offset Selector	USIT-E	UFAO	
IBC_ZMUD_SEL	IBC Mud Impedance Selection	USIT-E	FreePipe Norm.	
IMAR	Image Rotation	USIT-E	RB	
MEAS_WLEN	Tcube Processing Window Length in Measurement Mode	USIT-E	22.44	us
MUD_N_FRP	Free Pipe Mud Normalization Factor	USIT-E	1.14	

MUD_N_THE	Theoretical Mud Normalization Factor	USIT-E	1.07	
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	USIT-E	1.68	Mrayl
U-USIT_UFAO	SIT Flexural Attenuation Offset	USIT-E	Time Zoned	dB/m
U-USIT_UIAP	IBC Answer Product Enabled	USIT-E	SolidLiquidGasMap	
ZMUD	Acoustic Impedance of Mud	Borehole	1.8	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement	USIT-E	2.6	Mrayl
ZTGS	Acoustic Impedance Threshold for Gas	USIT-E	0.3	Mrayl

Depth Zone Parameters				
Parameter	Value	Start ( ft )	Stop ( ft )	
BS	13.5	66	2285	
BS	8.5	2285	7394.5	

All depth are actual.

Time Zone Parameters					
Parameter	Value	Start Time	Stop Time	Start Depth ( ft )	Stop Depth ( ft )
U-USIT_UFAO	48.12	08-Aug-2020 09:03:27	08-Aug-2020 10:04:05	7395.24	3250.62
U-USIT_UFAO	33.12	08-Aug-2020 10:04:05	08-Aug-2020 10:49:31	3250.62	87.33

All depth are at tool zero.

Tool Control Parameters				
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One: Parameters				
Parameter	Description	Tool	Value	Unit
AGMN	Minimum Gain of Cartridge	USIT-E	-12	dB
AGMX	Maximum Gain of Cartridge	USIT-E	48	dB
EMXV	EMEX Voltage	USIT-E	95	V
IBC_ACQTYPE	IBC Acquisition type	USIT-E	1 MHz	
IBC_FLEXDBP	IBC Flex Duration Before Peak	USIT-E	30	us
ICE2_ACQ	Ultrasonic ICE2 Acquisition	USIT-E	Yes	
U-USIT_UFWB	Far Receiver Window Begin Time	USIT-E	Time Zoned	us
U-USIT_UFWE	Far Receiver Window End Time	USIT-E	177	us
U-USIT_UNWB	Near Receiver Window Begin Time	USIT-E	Time Zoned	us
U-USIT_UNWE	Near Receiver Window End Time	USIT-E	146	us
UPAT	USIT Emission Pattern	USIT-E	Pattern 375 KHz	
UWKM	USIT Working Mode	USIT-E	10 deg at 6.0 in	
U-USIT_UTAN	Transducer Angles	USIT-E	33_DEG	
VRES	Vertical Resolution	USIT-E	6.0 in	
WINB	Window Begin Time	USIT-E	Time Zoned	us
WINE	Window End Time	USIT-E	85.69	us

Time Zone Parameters					
Parameter	Value	Start Time	Stop Time	Start Depth ( ft )	Stop Depth ( ft )
U-USIT_UFWB	137	08-Aug-2020 09:03:27	08-Aug-2020 09:18:31	7395.24	6353.24
U-USIT_UFWB	131.5	08-Aug-2020 09:18:31	08-Aug-2020 10:49:31	6353.24	87.33
U-USIT_UNWB	106	08-Aug-2020 09:03:27	08-Aug-2020 09:18:38	7395.24	6345.22
U-USIT_UNWB	101.15	08-Aug-2020 09:18:38	08-Aug-2020 10:49:31	6345.22	87.33
WINB	31.88	08-Aug-2020 09:03:27	08-Aug-2020 09:03:44	7395.24	7378.11
WINB	26.6	08-Aug-2020 09:03:44	08-Aug-2020 10:49:31	7378.11	87.33

All depth are at tool zero.





TIME_1900 - Time Marked every 60.00 (s)					
Description: USI Goodwin	Format: Log ( IBC Goodwin )	Index Scale: 0.1 in per 100 ft	Index Unit: ft	Index Type: Measured Depth	Creation Date: 08-Aug-2020 13:35:43

One									
IBC SLG									
Software Version									
Acquisition System						Version			
Maxwell 2020.0						10.0.202864.3100			
Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
One	Log[3]:Up	Up	1637.67 ft	2411.02 ft	08-Aug-2020 8:18:51 AM	08-Aug-2020 8:29:51 AM	ON	0.00 ft	Yes

TIME\_1900 - Time Marked every 60.00 (s)

USIT Processing Flags (UFLG[0]) USIT-E

- 1 - UFLG 1 Value within [0.0 - 1.5] - :

2 - UFLG 2 Value within [1.5 - 2.5] - :

3 - UFLG 3 Value within [2.5 - 3.5] - :

4 - UFLG 4    UFLG 5    UFLG 6 Value within [3.5 - 6.5] - :

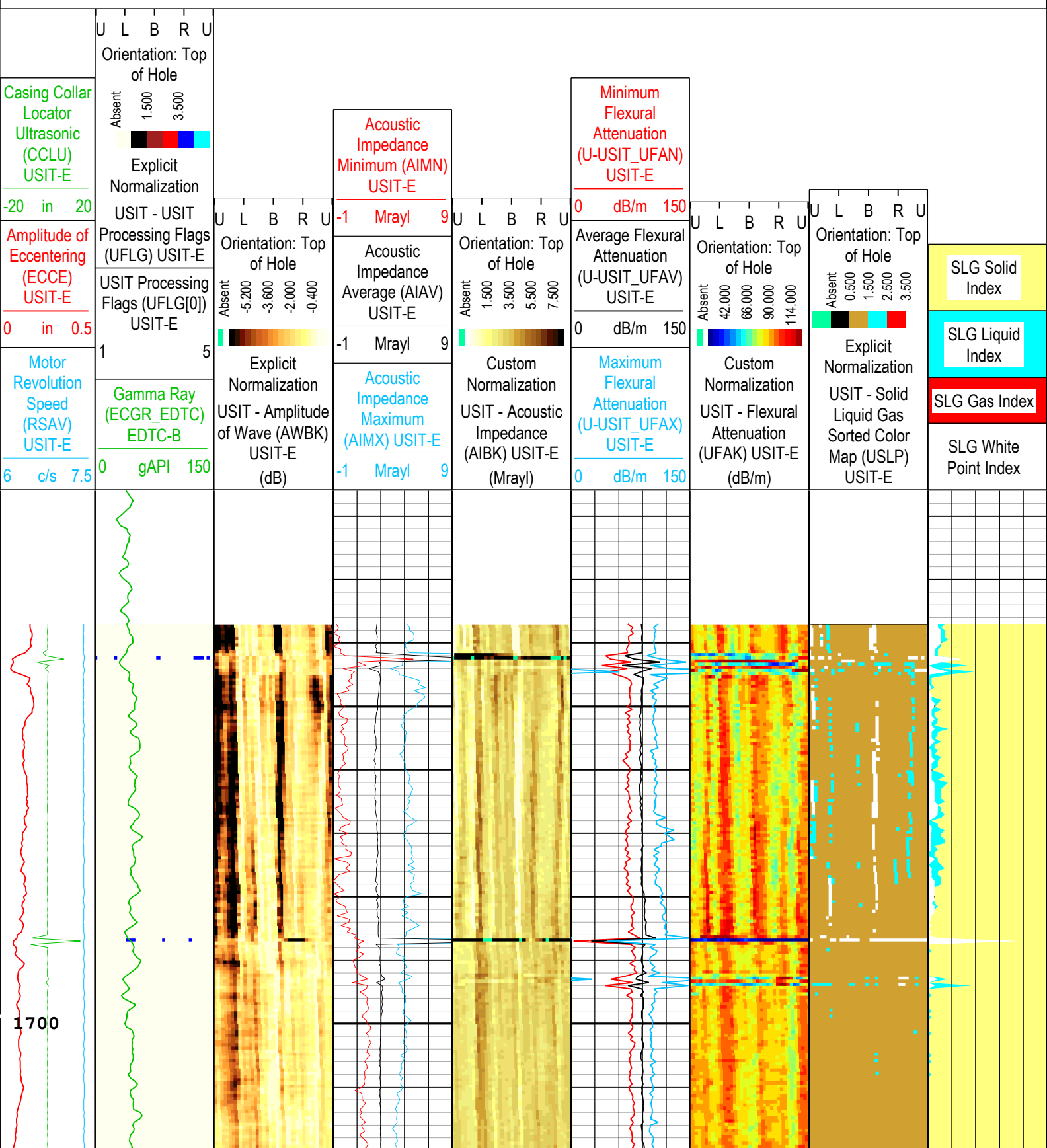
5 - UFLG 7    UFLG 8    UFLG 9 Value within [6.5 - 10 ] - :
- UTIM Error

■ Pulse Origin Not Detected

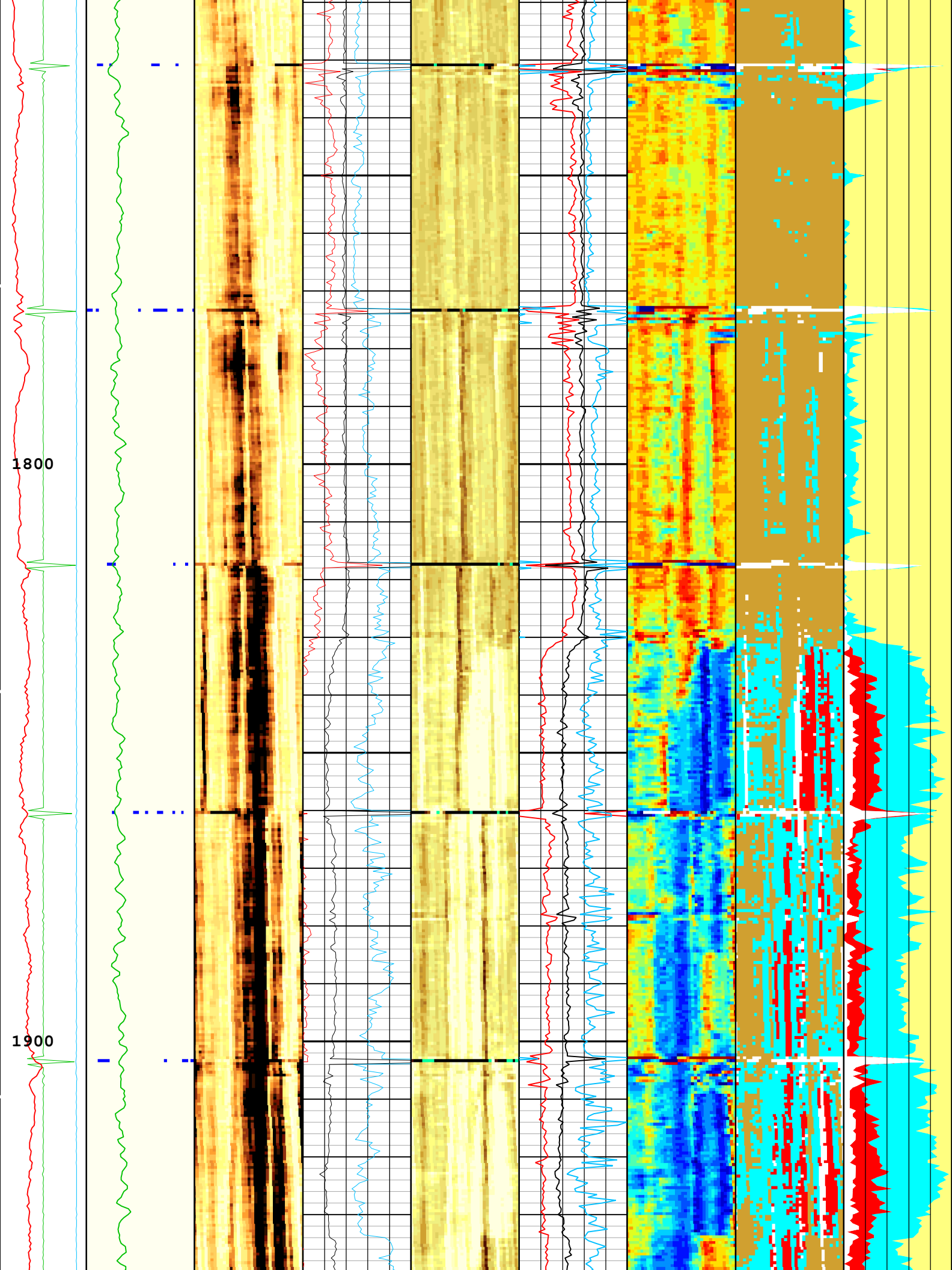
■ WINLEN Error

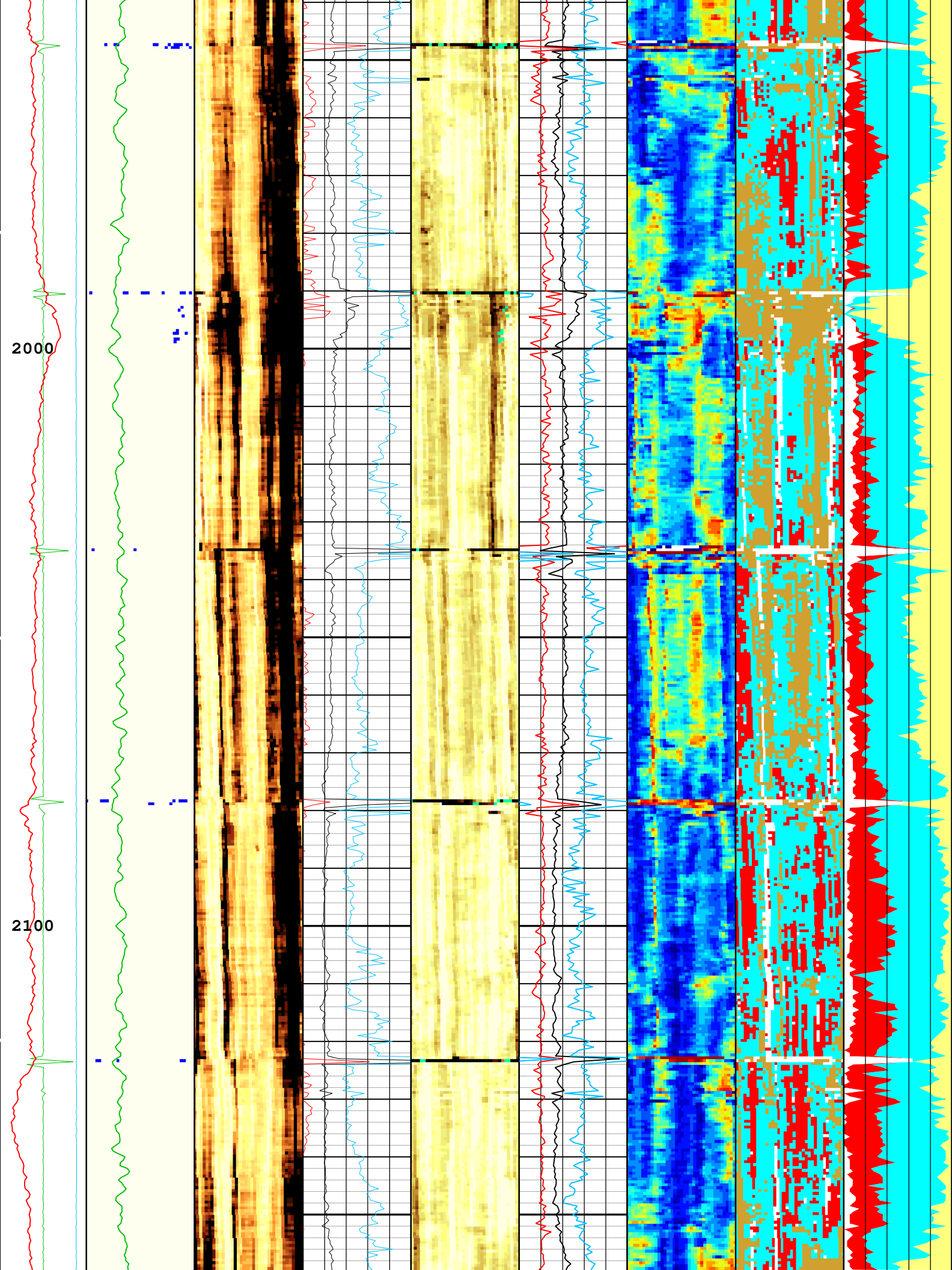
■ Casing Thickness Error

■ Loop Processing Error











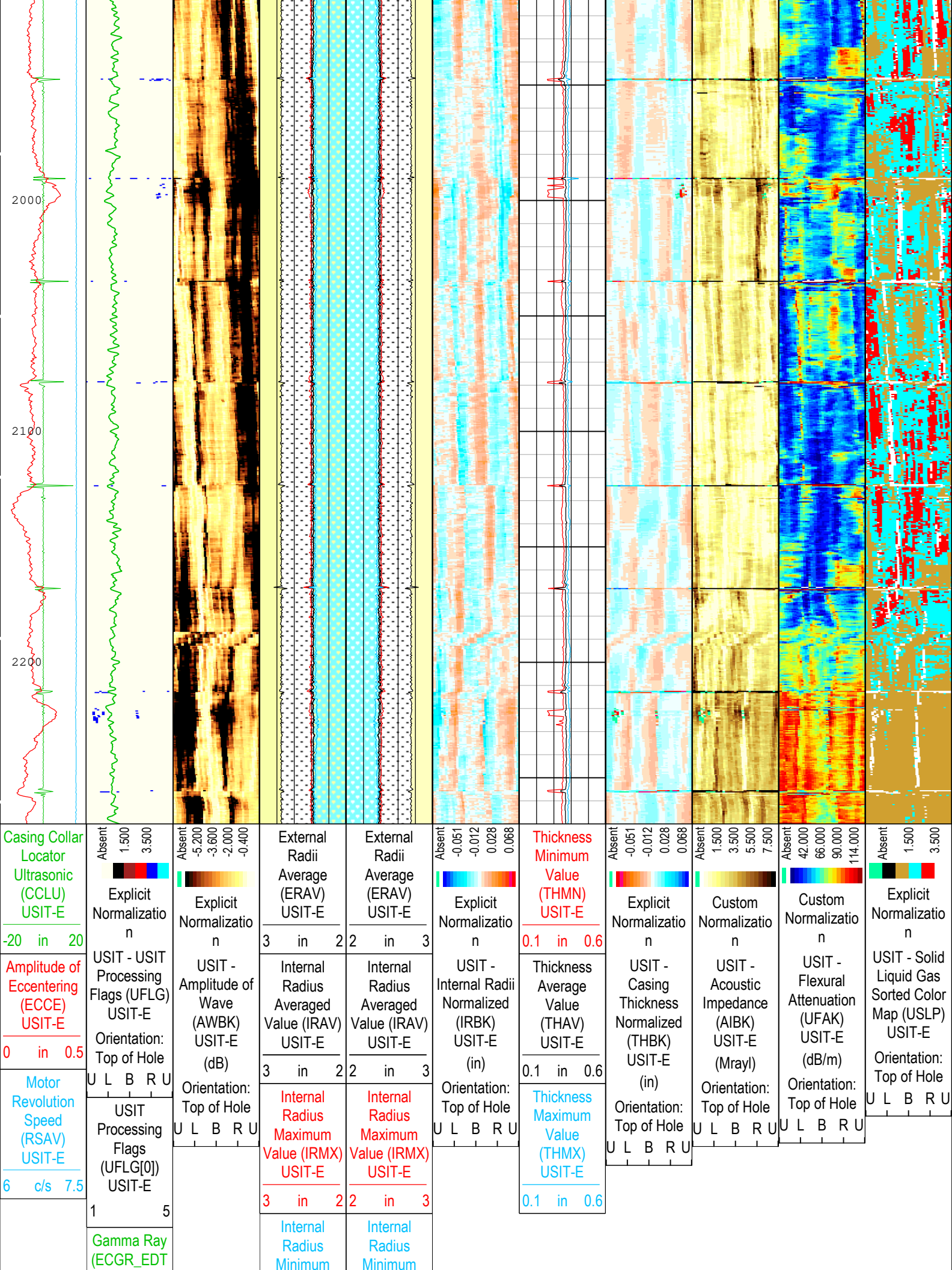


Channel Processing Parameters				
One: Parameters				
Parameter	Description	Tool	Value	Unit
BARI(ISSBAR)	Barite Mud Presence Flag	Borehole	No	
BERJ	Bad Echo Rejection	USIT-E	On	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Cased	
BS	Bit Size	WLSESSION	13.5	in
CASING_PRATIO	Casing Poisson Ratio	USIT-E	Standard Poisson Ratio	
CBLO	Casing Bottom (Logger)	WLSESSION	19803	ft
CDEN	Cement Density	USIT-E	12.5	lbm/gal
CDEN	Cement Density	EDTC-B	16.69	lbm/gal
CMTY(U-USIT_CEMT)	Cement Type	USIT-E	Regular Cement	
DFD	Drilling Fluid Density	Borehole	9.5	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
FD	Fluid Density	USIT-E	10.5	lbm/gal
FDII	FPM Data Interpolation Interval	USIT-E	0	ft
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS(RT)	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	BS(RT)	
GR_MULTIPLIER	Gamma Ray Multiplier	EDTC-B	1	
HEMA	Hematite Presence Flag	Borehole	No	
IBC_FRP_OFFSET	IBC Flexural Offset from Free Pipe	USIT-E	33.12	dB/m
IBC_FVEL_SEL	IBC Fluid Velocity Selection	USIT-E	Automatic	
IBC_OFFSET_SEL	IBC Flexural Offset Selector	USIT-E	UFAO	
IBC_ZMUD_SEL	IBC Mud Impedance Selection	USIT-E	FreePipe Norm.	
IMAR	Image Rotation	USIT-E	RB	
MEAS_WLEN	Tcube Processing Window Length in Measurement Mode	USIT-E	22.44	us
MUD_N_FRP	Free Pipe Mud Normalization Factor	USIT-E	1.14	
MUD_N_THE	Theoretical Mud Normalization Factor	USIT-E	1.07	
RCOD	Reference Calibrator Outer Diameter	USIT-E	4.5	in
RCSO	Reference Calibrator Standoff	USIT-E	0.842	in
RCTH	Reference Calibrator Thickness	USIT-E	0.216	in
RPLUS_PROCESS	Ultrasonic R+ Processing	USIT-E	No	
SOCN	Standoff Distance	EDTC-B	0.125	in
SOCO	Standoff Correction Option	EDTC-B	No	
THDH	Maximum Search Thickness (percentage of nominal)	USIT-E	130	%
THDL	Minimum Search Thickness (percentage of nominal)	USIT-E	70	%
TPOS_EDTC	Tool Position: Centered or Eccentered	EDTC-B	Eccentered	
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	USIT-E	1.68	Mrayl
U-USIT_UFAO	SIT Flexural Attenuation Offset	USIT-E	48.12	dB/m
U-USIT_UIAP	IBC Answer Product Enabled	USIT-E	SolidLiquidGasMap	
THDP	Thickness Detection Policy	USIT-E	Fundamental	
VCAS	Ultrasonic Transversal Velocity in Casing	USIT-E	51.4	us/ft
ZCAS	Acoustic Impedance of Casing	USIT-E	46.25	Mrayl
ZINI	Initial Estimate of Cement Impedance	USIT-E	-1	Mrayl
ZMUD	Acoustic Impedance of Mud	Borehole	1.8	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement	USIT-E	2.6	Mrayl
ZTGS	Acoustic Impedance Threshold for Gas	USIT-E	0.3	Mrayl

Tool Control Parameters									
One: Parameters									
Parameter	Description				Tool	Value		Unit	
AGMN	Minimum Gain of Cartridge				USIT-E	-12		dB	
AGMX	Maximum Gain of Cartridge				USIT-E	48		dB	
U-USIT_DDT5	USIC Downhole Decimation for T5 only				USIT-E	0_NONE			
DOT(DOS)	Distance between Opposite Transducer Faces				USIT-E	1.756		in	
EMXV	EMEX Voltage				USIT-E	85		V	
HRES	Horizontal Resolution				USIT-E	10 deg			
IBC_ACQTYPE	IBC Acquisition type				USIT-E	1 MHz			
IBC_FLEXDBP	IBC Flex Duration Before Peak				USIT-E	30		us	
ICE2_ACQ	Ultrasonic ICE2 Acquisition				USIT-E	Yes			
MOTOR_PROTECT	Motor Protection				USIT-E	On			
UACLV_PERM	Ultrasonic ACLV Permanent				USIT-E	Yes			
U-USIT_UFWB	Far Receiver Window Begin Time				USIT-E	137		us	
U-USIT_UFWE	Far Receiver Window End Time				USIT-E	177		us	
U-USIT_UNWB	Near Receiver Window Begin Time				USIT-E	106		us	
U-USIT_UNWE	Near Receiver Window End Time				USIT-E	146		us	
USFR	Ultrasonic Sampling Frequency				USIT-E	666667		Hz	
UPAT	USIT Emission Pattern				USIT-E	Pattern 375 KHz			
UWKM	USIT Working Mode				USIT-E	10 deg at 6.0 in			
USSP	Ultrasonic Service				USIT-E	IBC			
U-USIT_UTAN	Transducer Angles				USIT-E	33_DEG			
VRES	Vertical Resolution				USIT-E	6.0 in			
WINB	Window Begin Time				USIT-E	31.88		us	
WINE	Window End Time				USIT-E	Time Zoned		us	
Time Zone Parameters									
Parameter	Value		Start Time		Stop Time		Start Depth ( ft )		Stop Depth ( ft )
WINE	71.88		08-Aug-2020 08:18:51		08-Aug-2020 08:20:54		2411.02		2267.18
WINE	76.48		08-Aug-2020 08:20:54		08-Aug-2020 08:29:51		2267.18		1637.67
All depth are at tool zero.									
One									
IBC SLG Composite									
Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
One	Log[3]:Up	Up	1637.67 ft	2411.02 ft	08-Aug-2020 8:18:51 AM	08-Aug-2020 8:29:51 AM	ON	0.00 ft	Yes
All depths are referenced to toolstring zero									
Log	Company:Crestone Peak Resources Operating, LLC				Well:Dream Weaver North 3A-21H-N268				
One: Log[3]:Up:S011									
Description: USI IBC SLG Composite    Format: Log ( IBC SLG Composite 5.5IN )    Index Scale: 2 in per 100 ft    Index Unit: ft    Index Type: Measured Depth									
Creation Date: 08-Aug-2020 13:35:58									
USIT Processing Flags (UFLG[0]) USIT-E									
1 - UFLG 1 Value within [0.0 - 1.5] - :				<div></div> UTIM Error					
2 - UFLG 2 Value within [1.5 - 2.5] - :				<div></div> Pulse Origin Not Detected					
3 - UFLG 3 Value within [2.5 - 3.5] - :				<div></div> WINLEN Error					
4 - UFLG 4    UFLG 5    UFLG 6 Value within [3.5 - 6.5] - :				<div></div> Casing Thickness Error					

Casing Collar Locator Ultrasonic (CCLU) USIT-E		Amplitude of Eccentering (ECCE) USIT-E		Motor Revolution Speed (RSAV) USIT-E		Orientation: Top of Hole		Explicit Normalization		USIT - USIT Processing Flags (UFLG) USIT-E		USIT Processing Flags (UFLG[0]) USIT-E		Gamma Ray (ECGR_EDT C) EDTC-B		USIT - Amplitude of Wave (AWBK) USIT-E (dB)		External Radii Average (ERAV) USIT-E		Internal Radius Averaged Value (IRAV) USIT-E		Internal Radius Maximum Value (IRMX) USIT-E		Internal Radius Minimum Value (IRMN) USIT-E		USIT - Internal Radii Normalized (IRBK) USIT-E (in)		Thickness Minimum Value (THMN) USIT-E		Thickness Average Value (THAV) USIT-E		Thickness Maximum Value (THMX) USIT-E		Explicit Normalization		USIT - Casing Thickness Normalized (THBK) USIT-E (in)		USIT - Acoustic Impedance (AIBK) USIT-E (Mrayl)		USIT - Flexural Attenuation (UFAK) USIT-E (dB/m)		USIT - Solid Liquid Gas Sorted Color Map (USLP) USIT-E	
-20 in 20		0 in 0.5		6 c/s 7.5		Absent 1.500 3.500		Absent 1.500 3.500		Absent 1.500 3.500		Absent 1.500 3.500		0 gAPI 150		Absent 1.500 3.500		3 in 2		3 in 2		3 in 2		3 in 2		3 in 2		0.1 in 0.6		0.1 in 0.6		0.1 in 0.6		Absent 1.500 3.500		Absent 1.500 3.500		Absent 1.500 3.500		Absent 1.500 3.500			





C) EDTC-B

0gAPI150

Value (IRMN)  
USIT-E

3in2

Value (IRMN)  
USIT-E

2in3

TIME\_1900 - Time Marked every 60.00 (s)

USIT Processing Flags (UFLG[0]) USIT-E

1 - UFLG 1 Value within [0.0 - 1.5] - :

UTIM Error

2 - UFLG 2 Value within [1.5 - 2.5] - :

Pulse Origin Not Detected

3 - UFLG 3 Value within [2.5 - 3.5] - :

WINLEN Error

4 - UFLG 4 UFLG 5 UFLG 6 Value within [3.5 - 6.5] - :

Casing Thickness Error

5 - UFLG 7 UFLG 8 UFLG 9 Value within [6.5 - 10 ] - :

Loop Processing Error

Description: USI IBC SLG CompositeFormat: Log ( IBC SLG Composite 5.5IN )Index Scale: 2 in per 100 ftIndex Unit: ftIndex Type: Measured Depth

Creation Date: 08-Aug-2020 13:35:58

Channel Processing Parameters

One: Parameters

Parameter	Description	Tool	Value	Unit
BARI(ISSBAR)	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Cased	
BS	Bit Size	WLSESSION	13.5	in
CBLO	Casing Bottom (Logger)	WLSESSION	19803	ft
CDEN	Cement Density	USIT-E	12.5	lbm/gal
CDEN	Cement Density	EDTC-B	16.69	lbm/gal
CMTY(U-USIT_CEMT)	Cement Type	USIT-E	Regular Cement	
DFD	Drilling Fluid Density	Borehole	9.5	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
FD	Fluid Density	USIT-E	10.5	lbm/gal
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS(RT)	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	BS(RT)	
HEMA	Hematite Presence Flag	Borehole	No	
IBC_FRP_OFFSET	IBC Flexural Offset from Free Pipe	USIT-E	33.12	dB/m
IBC_FVEL_SEL	IBC Fluid Velocity Selection	USIT-E	Automatic	
IBC_OFFSET_SEL	IBC Flexural Offset Selector	USIT-E	UFAO	
IBC_ZMUD_SEL	IBC Mud Impedance Selection	USIT-E	FreePipe Norm.	
IMAR	Image Rotation	USIT-E	RB	
MEAS_WLEN	Tcube Processing Window Length in Measurement Mode	USIT-E	22.44	us
MUD_N_FRP	Free Pipe Mud Normalization Factor	USIT-E	1.14	
MUD_N_THE	Theoretical Mud Normalization Factor	USIT-E	1.07	
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	USIT-E	1.68	Mrayl
U-USIT_UFAO	SIT Flexural Attenuation Offset	USIT-E	48.12	dB/m
U-USIT_UIAP	IBC Answer Product Enabled	USIT-E	SolidLiquidGasMap	
ZMUD	Acoustic Impedance of Mud	Borehole	1.8	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement	USIT-E	2.6	Mrayl
ZTGS	Acoustic Impedance Threshold for Gas	USIT-E	0.3	Mrayl

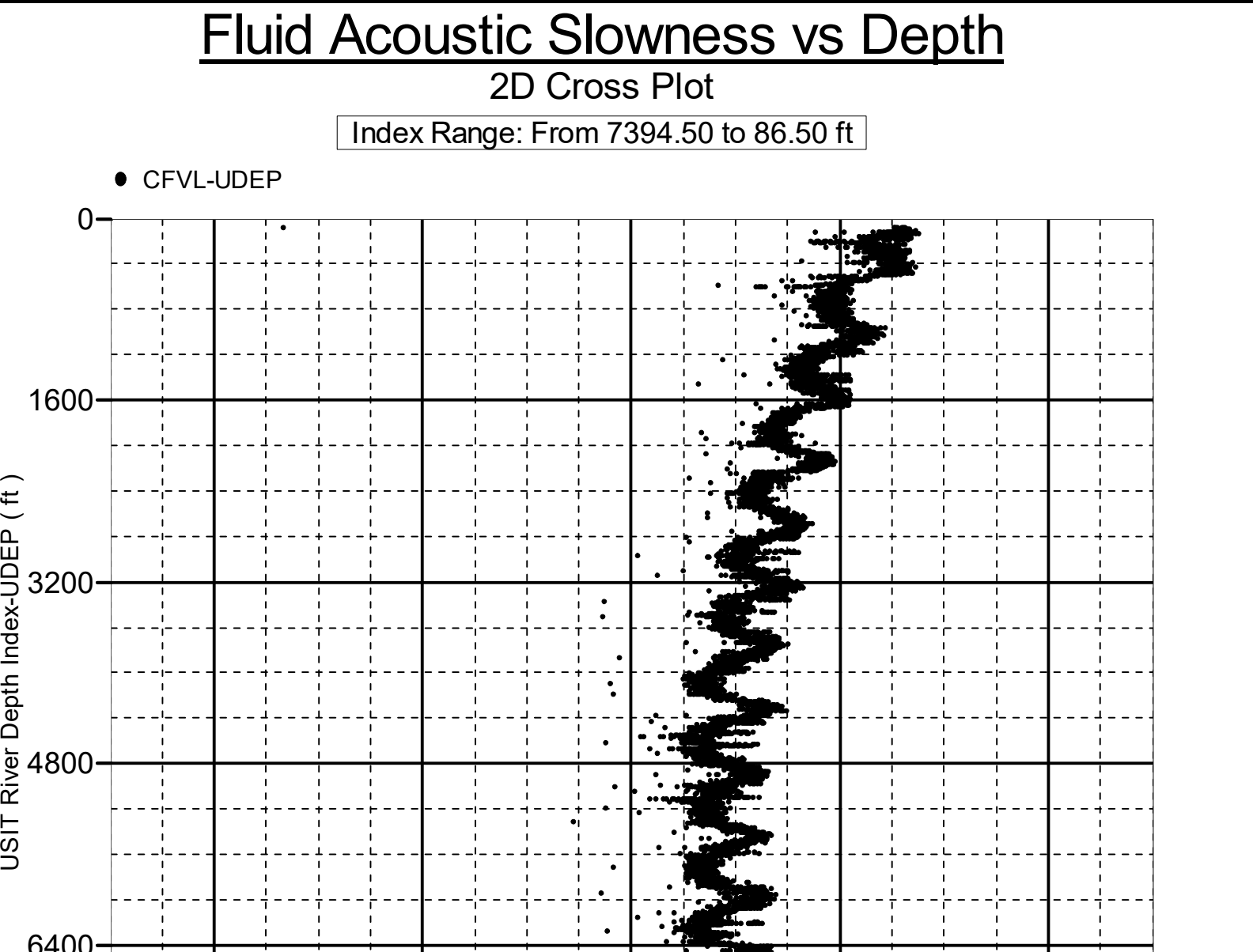
Tool Control Parameters

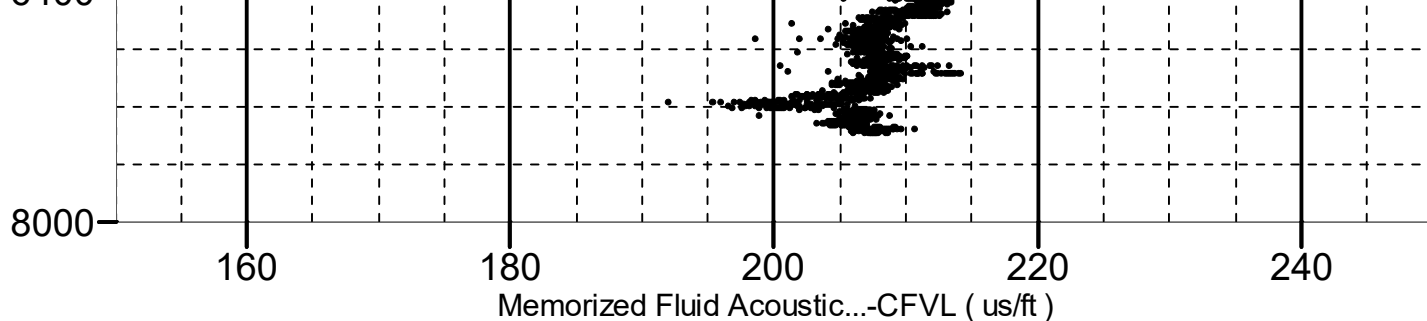
One: Parameters

Parameter	Description	Tool	Value	Unit
AGMN	Minimum Gain of Cartridge	USIT-E	-12	dB
AGMX	Maximum Gain of Cartridge	USIT-E	48	dB
EMXV	EMEX Voltage	USIT-E	85	V

EMXV	EMEX Voltage	USIT-E	33	v
IBC_ACQTYPE	IBC Acquisition type	USIT-E	1 MHz	
IBC_FLEXDBP	IBC Flex Duration Before Peak	USIT-E	30	us
ICE2_ACQ	Ultrasonic ICE2 Acquisition	USIT-E	Yes	
U-USIT_UFWB	Far Receiver Window Begin Time	USIT-E	137	us
U-USIT_UFWE	Far Receiver Window End Time	USIT-E	177	us
U-USIT_UNWB	Near Receiver Window Begin Time	USIT-E	106	us
U-USIT_UNWE	Near Receiver Window End Time	USIT-E	146	us
UPAT	USIT Emission Pattern	USIT-E	Pattern 375 KHz	
UWKM	USIT Working Mode	USIT-E	10 deg at 6.0 in	
U-USIT_UTAN	Transducer Angles	USIT-E	33_DEG	
VRES	Vertical Resolution	USIT-E	6.0 in	
WINB	Window Begin Time	USIT-E	31.88	us
WINE	Window End Time	USIT-E	Time Zoned	us

Time Zone Parameters					
Parameter	Value	Start Time	Stop Time	Start Depth ( ft )	Stop Depth ( ft )
WINE	71.88	08-Aug-2020 08:18:51	08-Aug-2020 08:20:54	2411.02	2267.18
WINE	76.48	08-Aug-2020 08:20:54	08-Aug-2020 08:29:51	2267.18	1637.67
All depth are at tool zero.					
XYZ	Company:Crestone Peak Resources Operating, LLC Well:Dream Weaver North 3A-21H-N268 One: Log[7]:Up:S011				





XYZ

Company:Crestone Peak Resources Operating, LLC Well:Dream Weaver North 3A-21H-N268

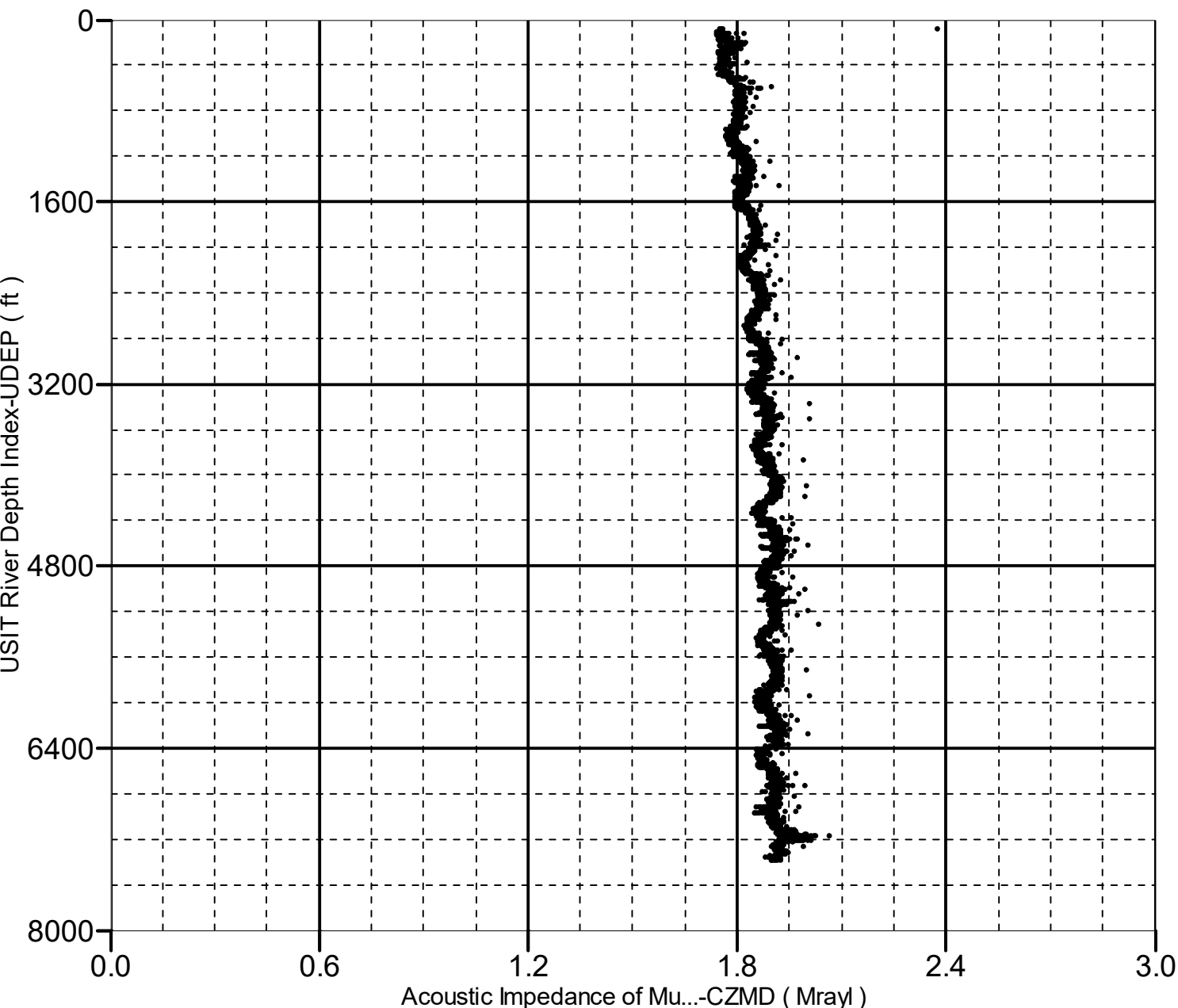
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## Acoustic Impedance of Mud vs Depth

2D Cross Plot

Index Range: From 7394.50 to 86.50 ft

● CZMD-UDEP





Company:	Crestone Peak Resources Operating, LLC	Schlumberger
Well:	Dream Weaver North 3A-21H-N268	
Field:	Wattenberg	
County:	Weld	
State:	Colorado	
Isolation Scanner		
Cement Evaluation		
Gamma Ray - CCL		