

Company: Crestone Peak Resources Operating LLC

Well: Melbon Ranch 4F-17H-M265

Field: Wattenburg

County: Weld State: Colorado

Isolation Scanner
Cement Evaluation
Gamma Ray - CCL Log

County: Weld
Field: Wattenburg
Location: SWSW S17 T2N R65W
Well: Melbon Ranch 4F-17H-M265
Company: Crestone Peak Resources Operating LLC

Location:	SWSW S17 T2N R65W	Elev.:	K.B.	4979.00 ft
	SHL: 1245 FSL & 219 FWL		G.L.	4956.00 ft
	Lat/Long: 40.13477, -104.696636		D.F.	4978.00 ft
	Permanent Datum:	Ground Level	Elev.:	4956.00 f
Log Measured From:		Kelly Bushing	23.00 ft	above Perm.Datum
Drilling Measured From:		Kelly Bushing		
API Serial No.	Section:	Township:	Range:	
05-123-47756	17	2N	65W	

Logging Date	22-Nov-2018		
Run Number	One		
Depth Driller	12127.00 ft		
Schlumberger Depth	12127.00 ft		
Bottom Log Interval	7122.00 ft		
Top Log Interval	92.00 ft		
Casing Fluid Type	WBM		
Salinity			
Density	8.4 lbm/gal		
Fluid Level	92.00 ft		
BIT/CASING/TUBING STRING			
Bit Size	8.50 in		
From	2394.00 ft		
To	12127.00 ft		
Casing/Tubing Size	5.5 in		
Weight	20 lbm/ft		
Grade	N/A		
From	0.00 ft		
To	12116.00 ft		
Max Recorded Temperatures	154 degF	217	
Logger on Bottom	22-Nov-2018	16:51:00	
Unit Number	9102	Fort Morgan	
Recorded By	C. Stiles/L. Lewis		
Witnessed By	Keith Kirshisnik		

Disclaimer

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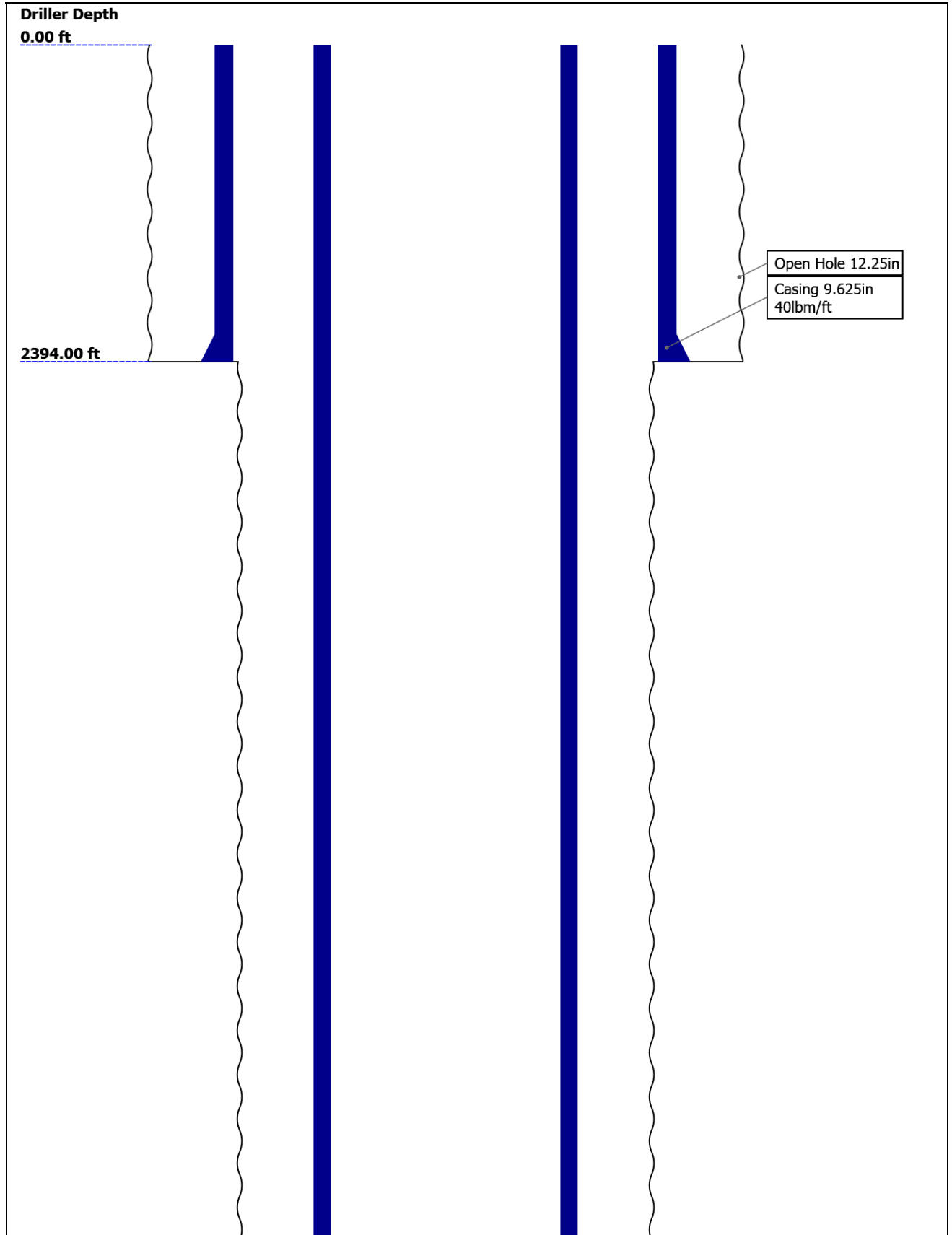
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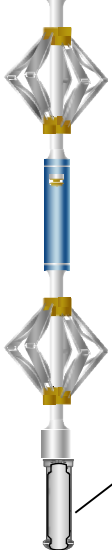
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Well Sketch



USLS-A:18 20 USSC-B:79 9 IBCS-A:77 4 FAR-SENS OR:4778 IBC-TX NEAR-SEN SOR:3798 IBC-TX USI-SENS OR:4628 IBC-TX EMITTER- SENSOR:4 642 IBC-TX	 <p>USI Sen 0.84 sor Head Te nsion</p> <p>TOOL_ZERO</p> <p>Lengths are in ft Maximum Outer Diameter = 6.250 in Line: Sensor Location, Value: Gating Offset All measurements are relative to TOOL_ZERO</p>	
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Depth Summary			
	One		
Depth Measuring Device			
Type	IDW-B		
Serial Number	5822		
Calibration Date	14-Oct-2018		
Calibrator Serial Number	57		
Calibration Cable Type	7-46A XS		
Wheel Correction 1	-2		
Wheel Correction 2	-2		
Tension Device			
Type	CMTD-B/A		
Serial Number	1106		
Calibration Date	19-Oct-2018		
Calibrator Serial Number	78135A		
Number of Calibration Points	10		
Calibration Root Mean Square Error	69		
Calibration Peak Error	116		
Logging Cable			
Type	7-46A-XS		
Serial Number			
Length	24000.00 ft		
Conveyance Type	Wireline		
Rig Type	Crane		
One:Depth Control Parameters		Depth Control Remarks	
Log Sequence	First Log In the Well	All Schlumberger depth control procedures followed.	
Rig Up Length At Surface		IDW used as primary depth control method.	
Rig Up Length At Bottom		Z-chart used as secondary method.	
Rig Up Length Correction			

Stretch Correction8.32 ft

Tool Zero Check At Surface

USIT - Fluid Properties Measurement

Run Name	Pass Name	Start Depth(ft)	Stop Depth(ft)
Run 1	Log[6]:Up	6823.46	49.98

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 : 767.48m(2517.99ft) to 773.90m(2539.03ft)
MUD_N_FRP = 1.19
DFD = 1.01g/cm3(8.40lbm/gal)
CZMD median computed in free pipe normalization interval = 1.75 MRayl

Start Depth(ft)	Stop Depth(ft)	Start Value(Mrayl)	End Value(Mrayl)
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Composite 1

IBC SLG

Software Version

Acquisition System	Version
Maxwell 2018 SP2	8.2.104493.3100

Composite Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
One	Log[4]:Up	Up	6513.89 ft	7122.85 ft	22-Nov-2018 4:27:02 PM	22-Nov-2018 4:37:01 PM	ON	8.04 ft	Yes
One	Log[6]:Up	Up	49.98 ft	6823.46 ft	22-Nov-2018 4:51:00 PM	22-Nov-2018 6:25:42 PM	ON	8.32 ft	Yes

All depths are referenced to toolstring zero

Log	Company:Crestone Peak Resources Operating LLC	Well:Melbon Ranch 4F-17H-M265	Composite 1:S012
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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: 27-Nov-2018 12:53:02

USIT Processing Flags (UFLG[0]) USIT-E[1]

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

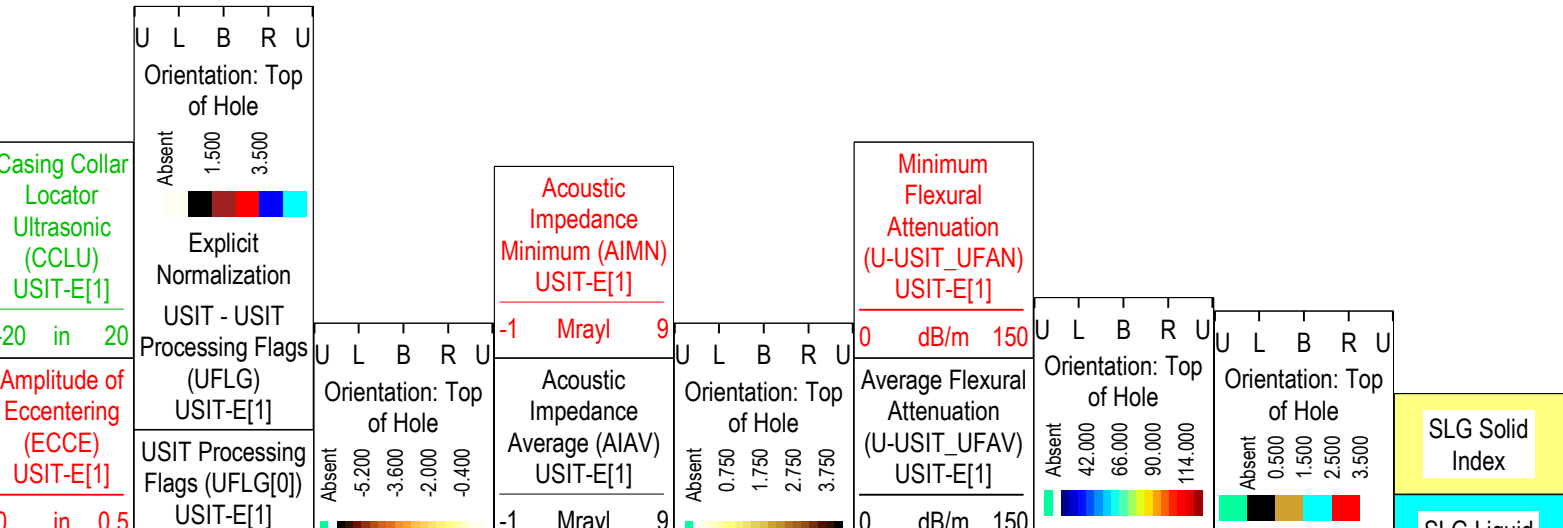
Pulse Origin Not Detected

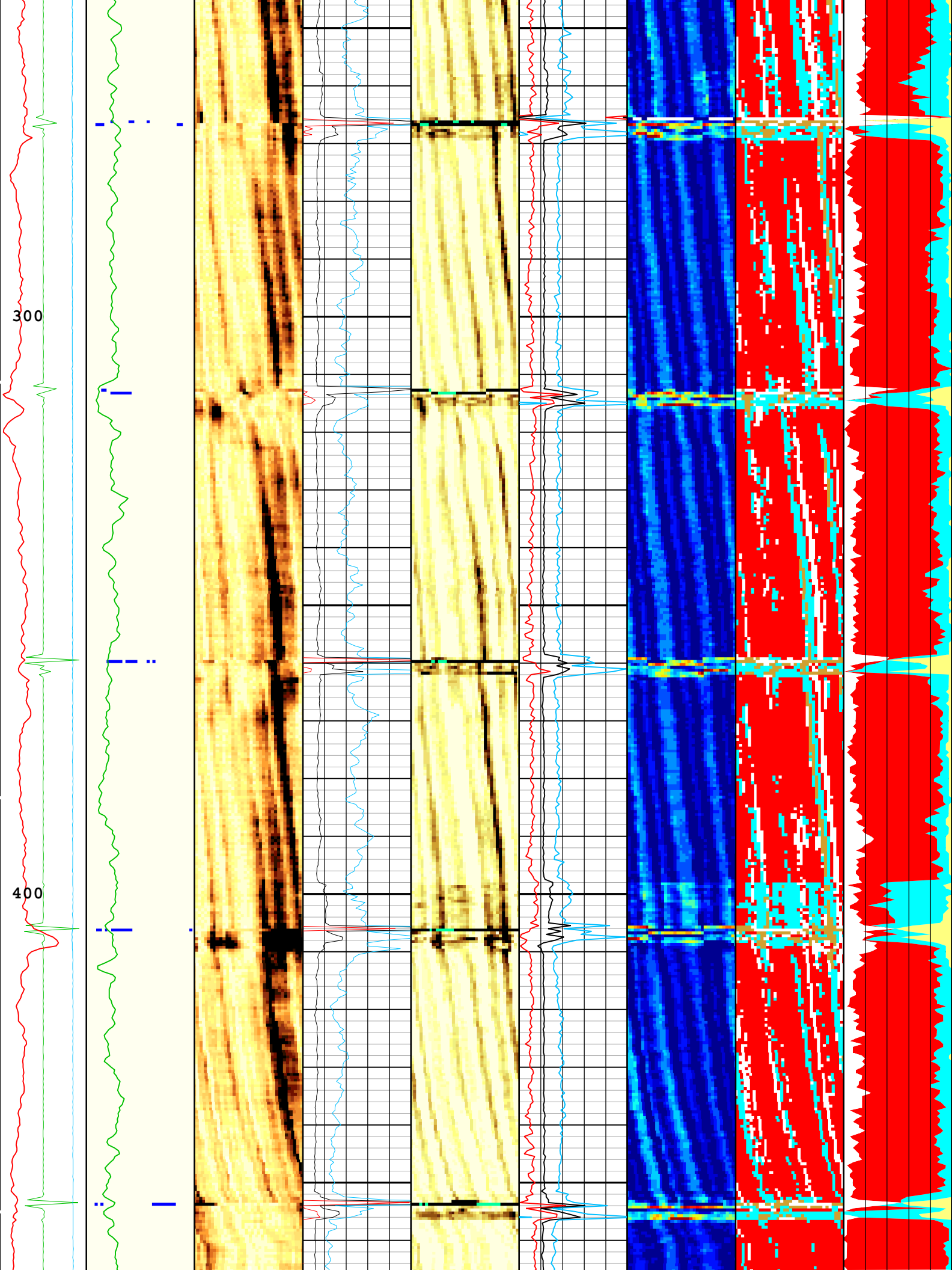
WINLEN Error

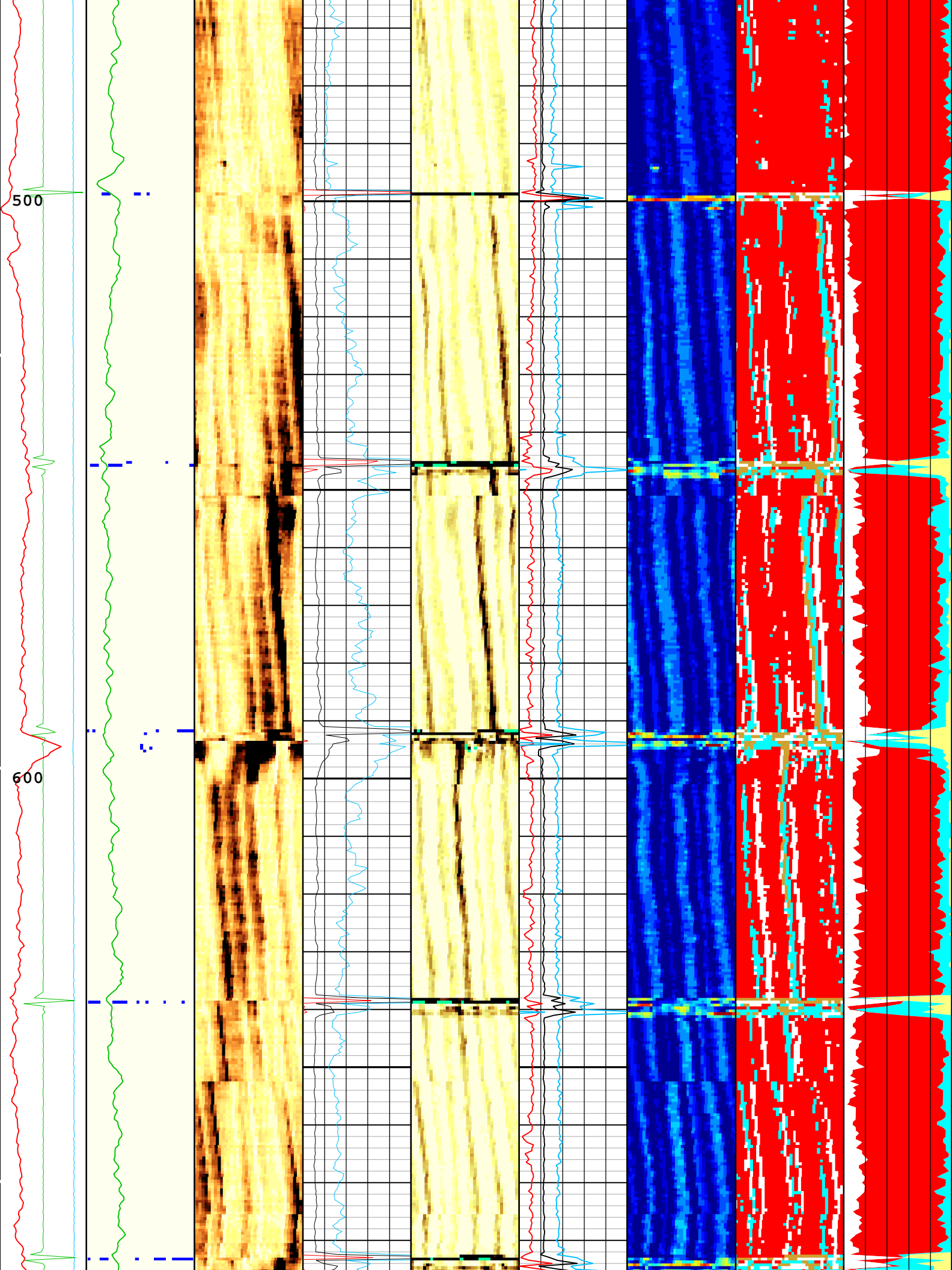
Casing Thickness Error

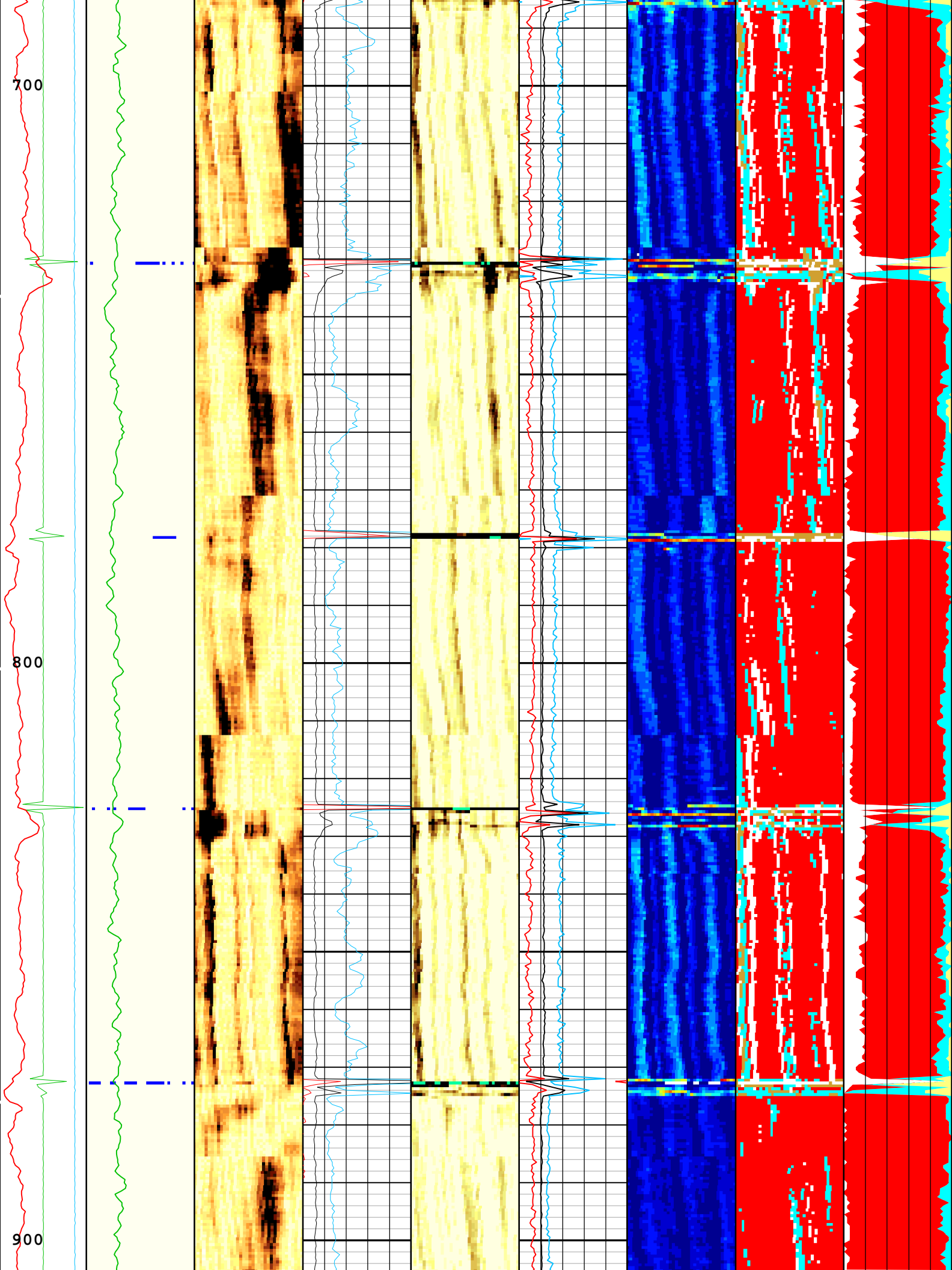
Loop Processing Error

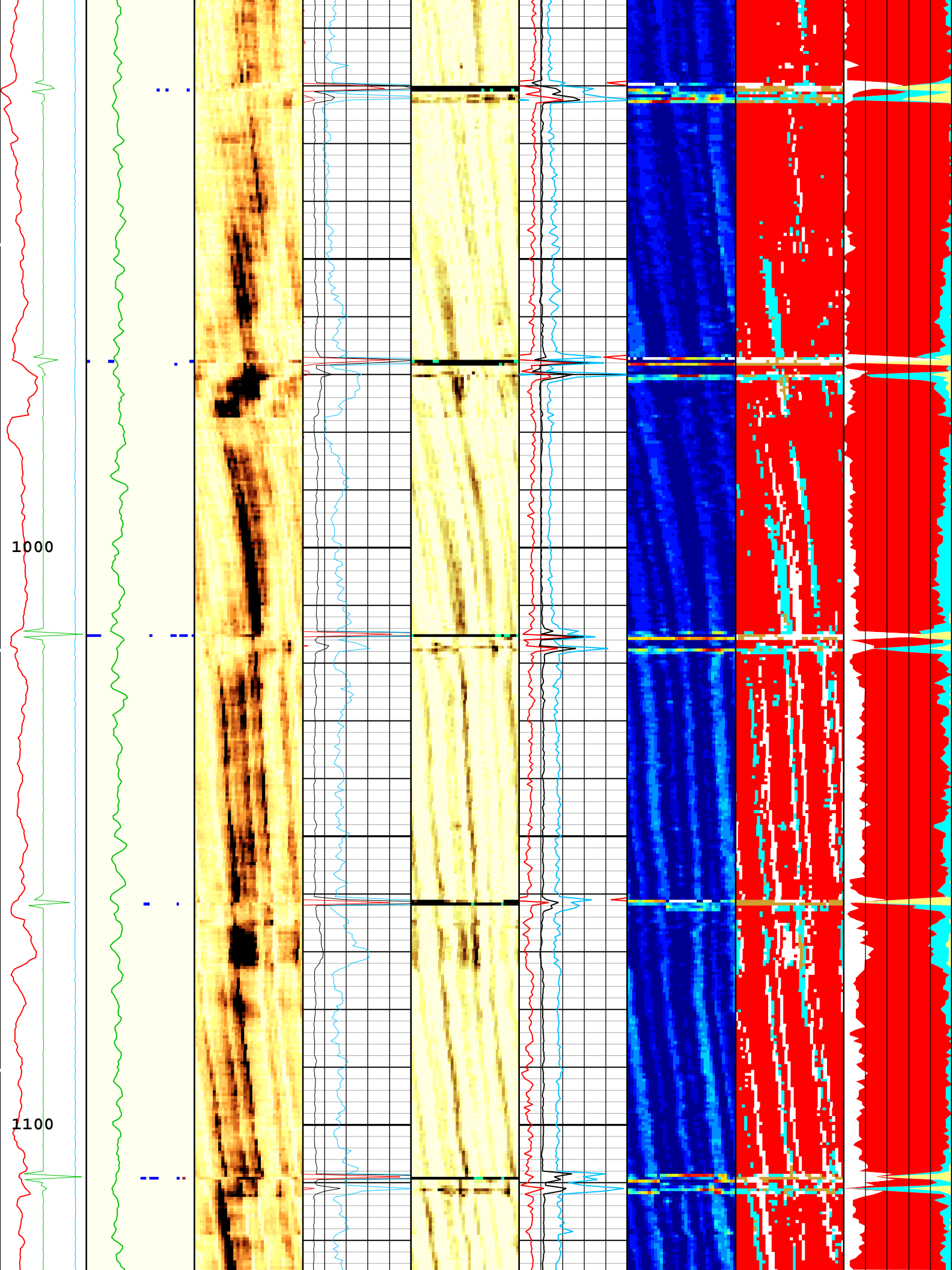
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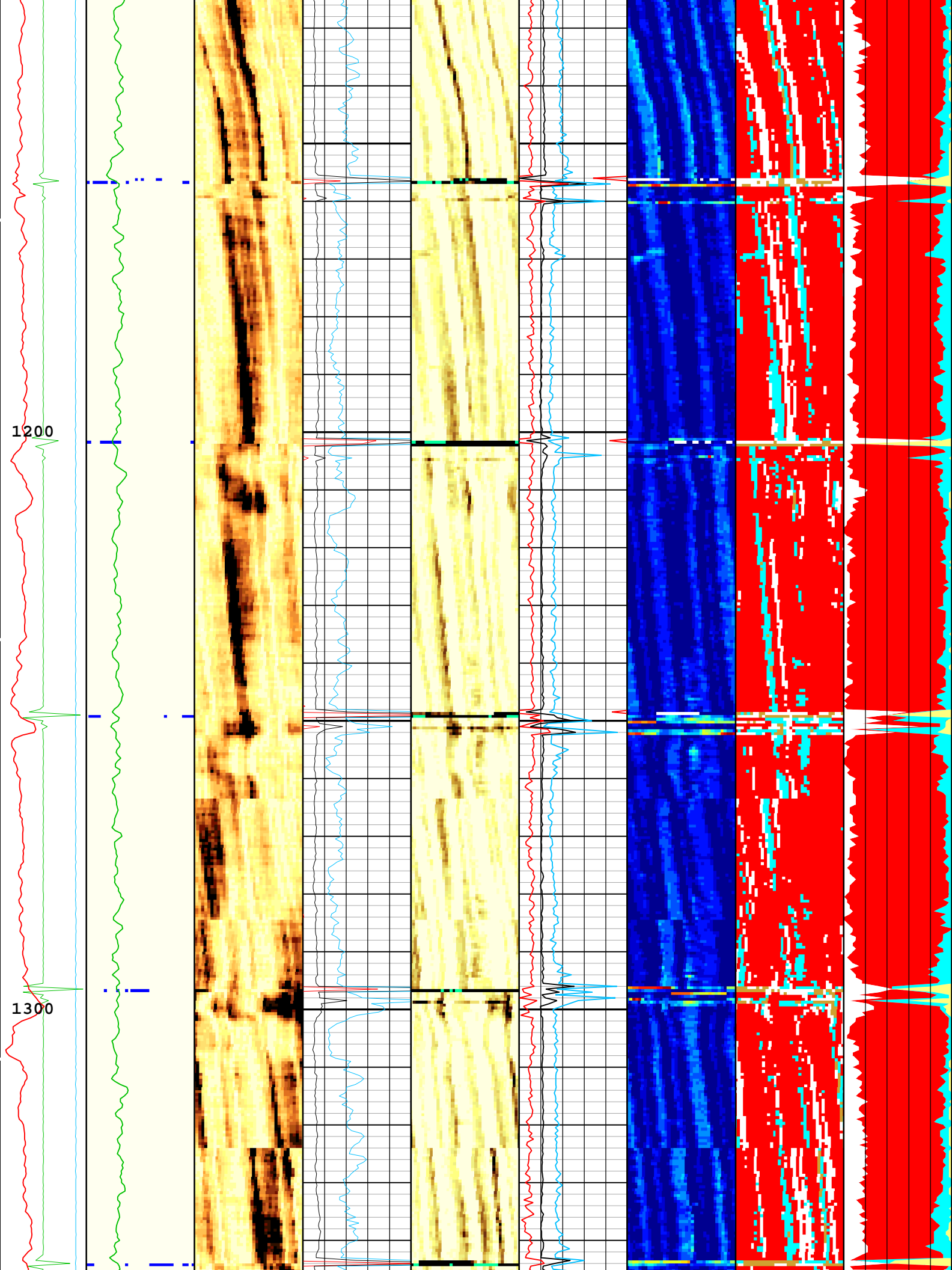


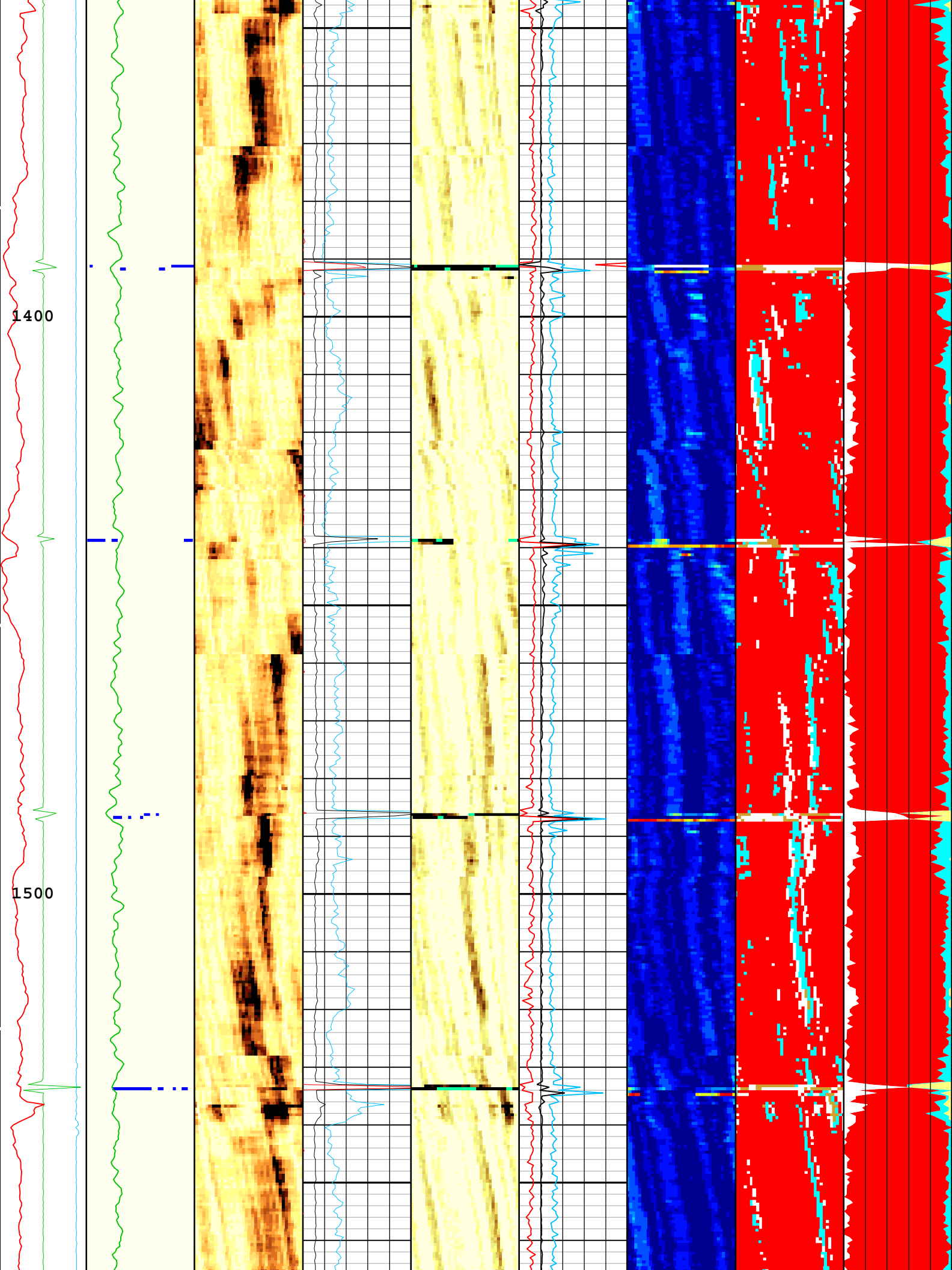


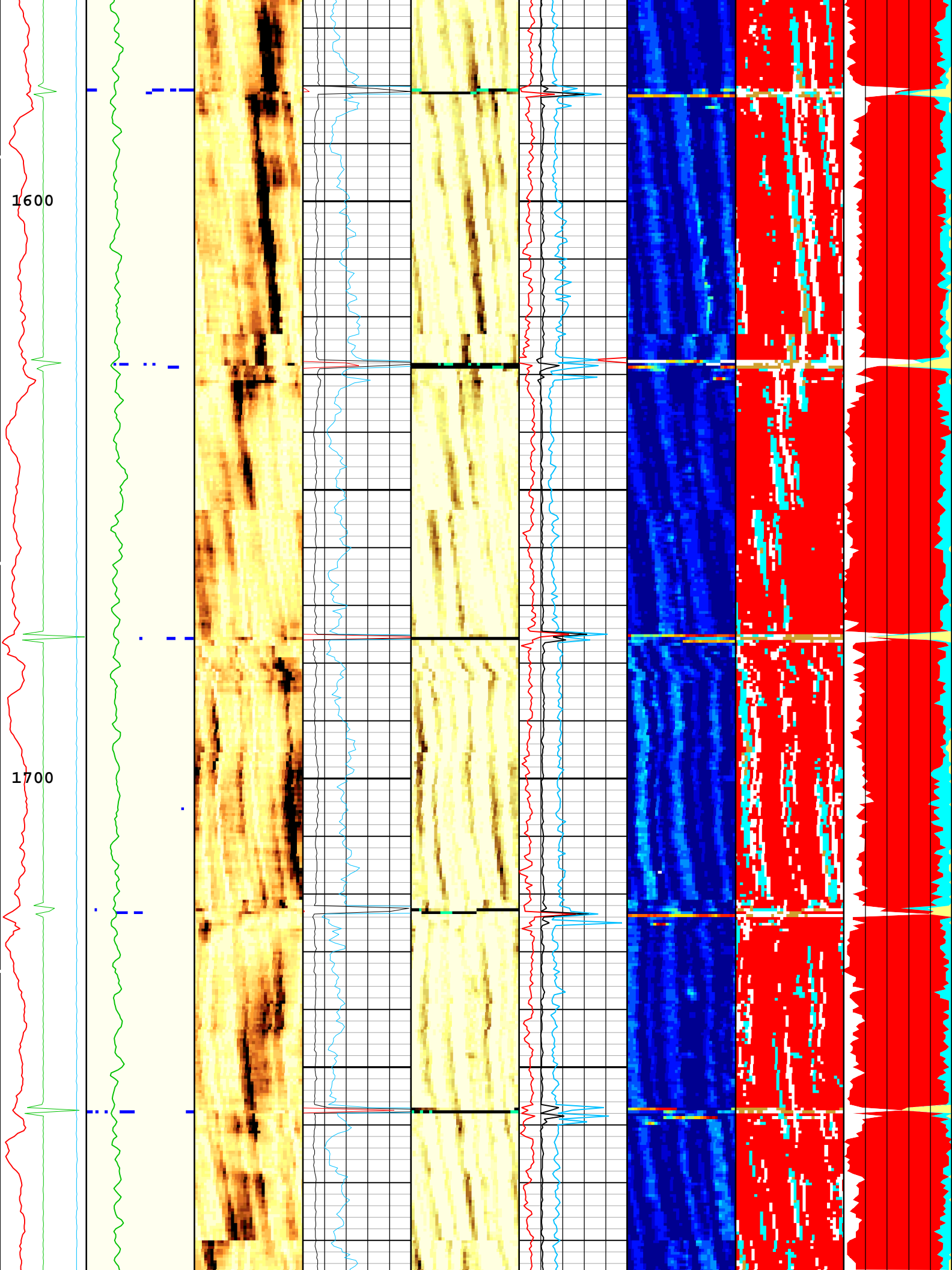


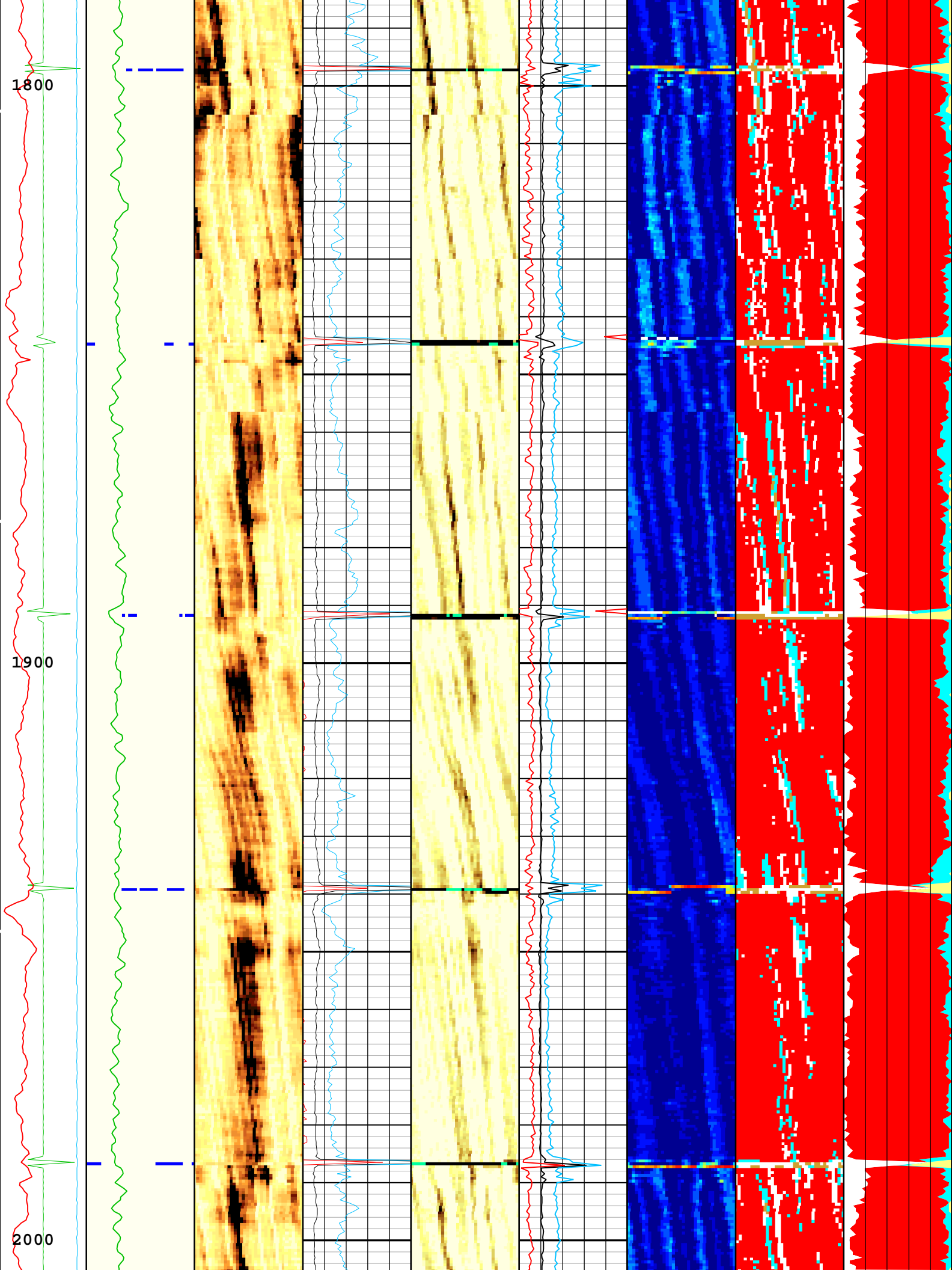


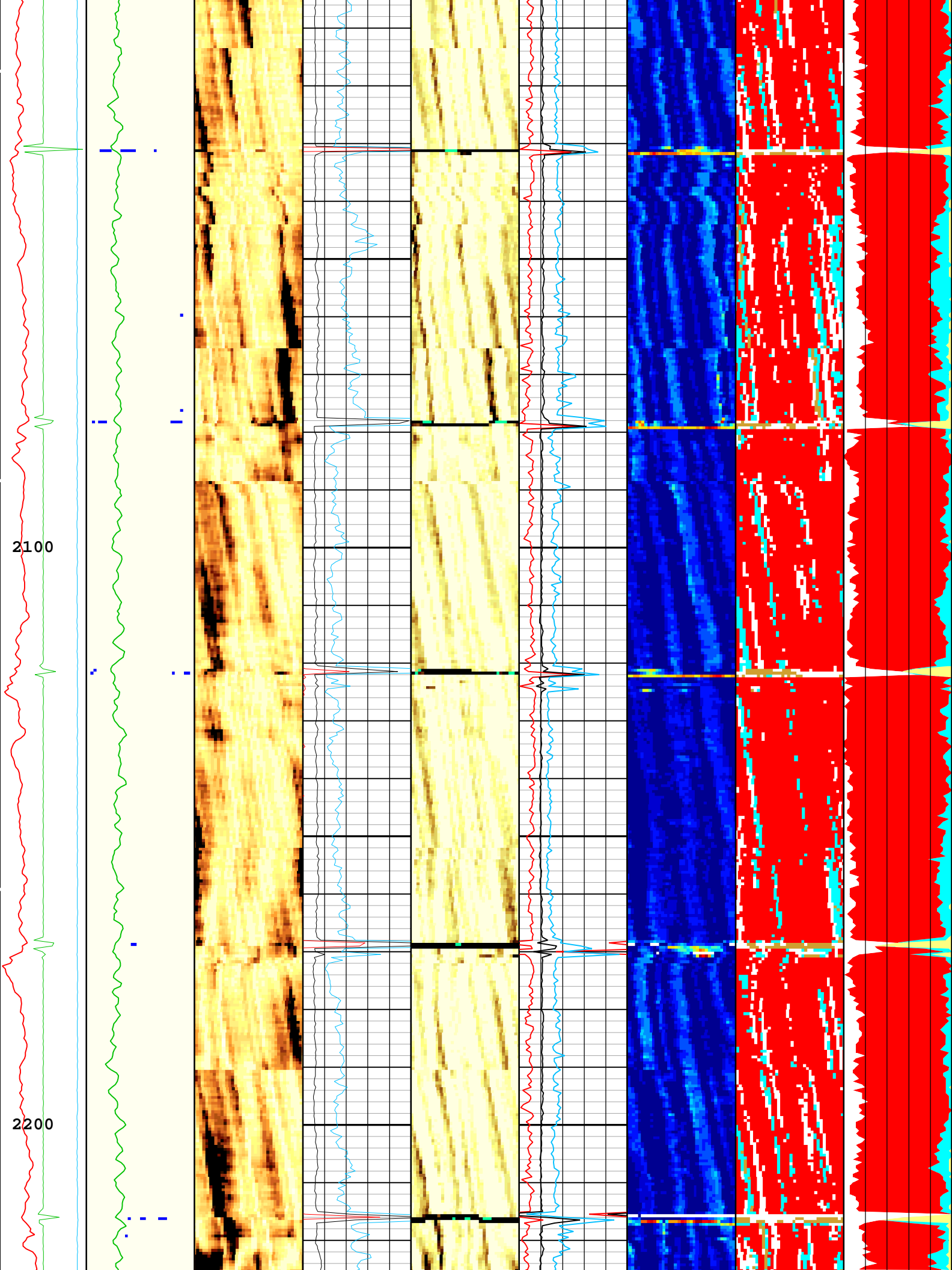


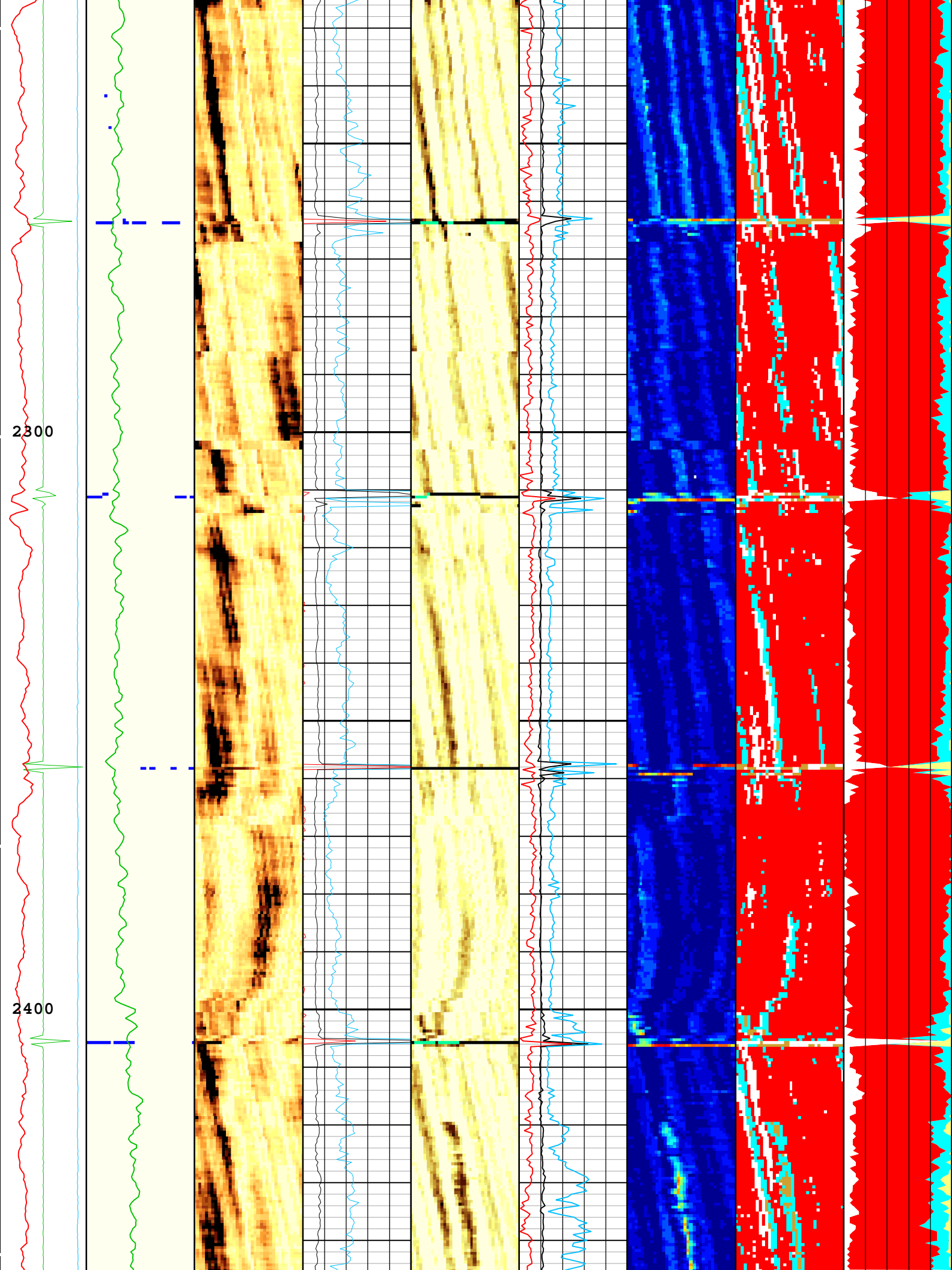


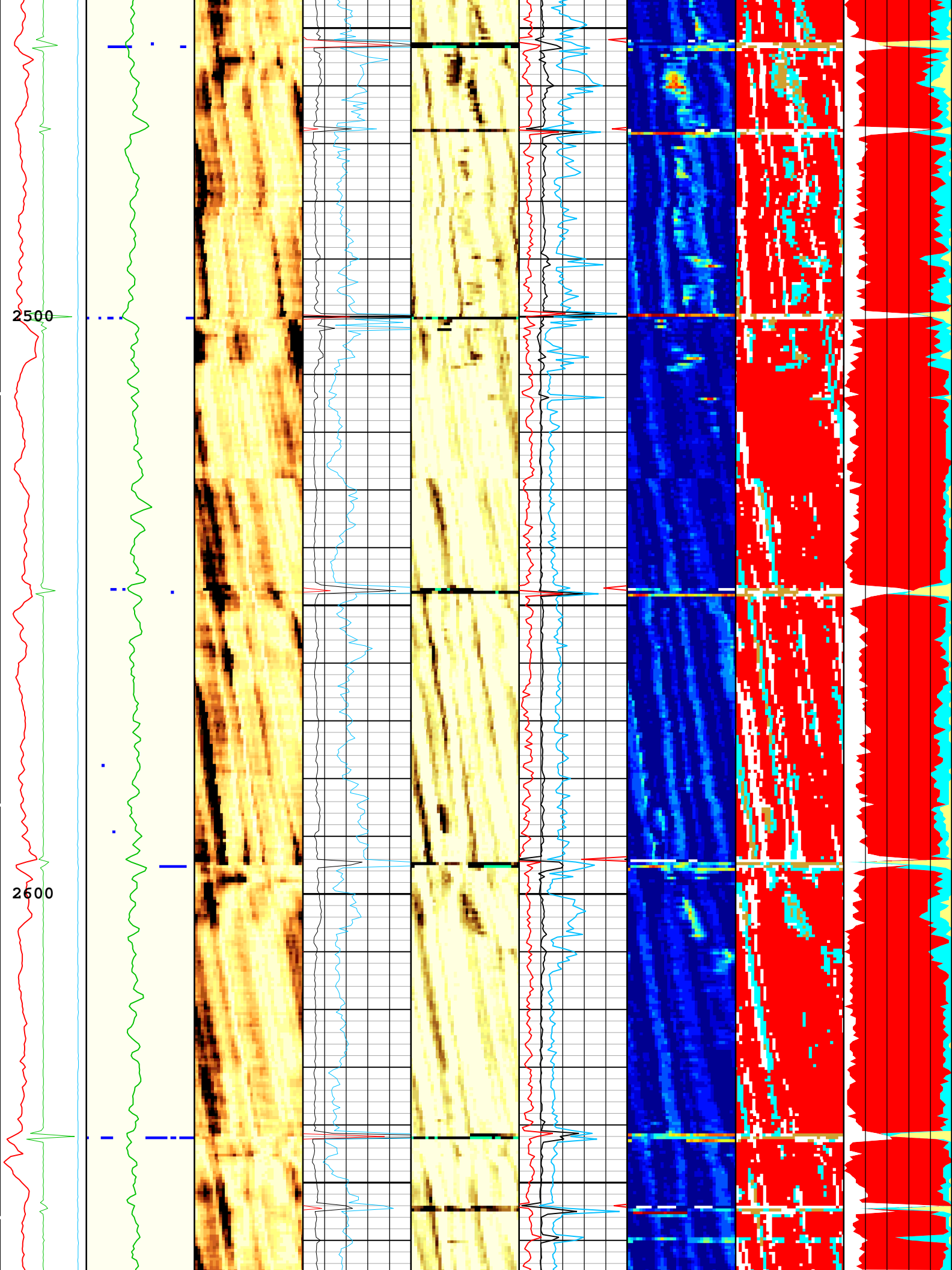


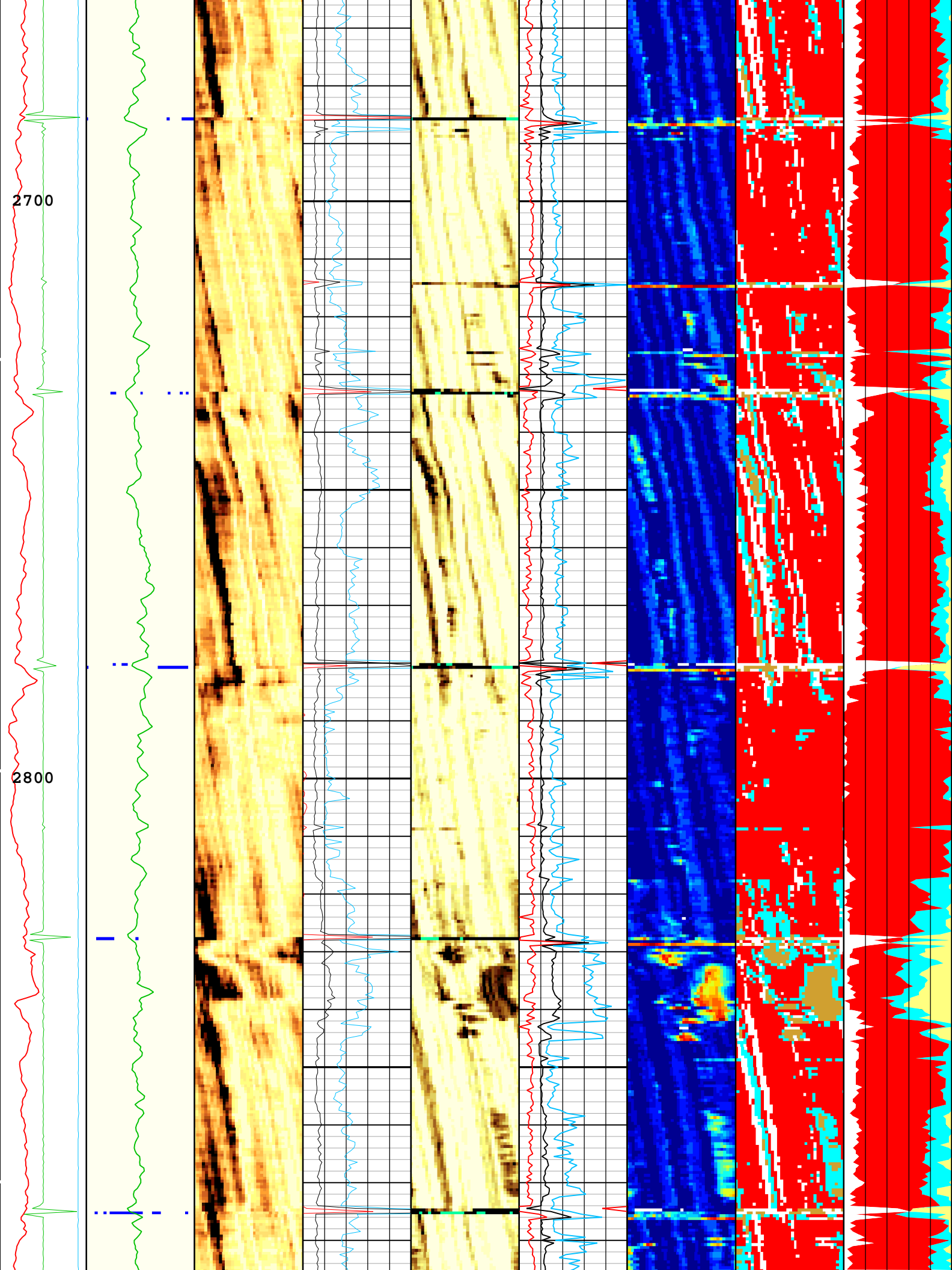


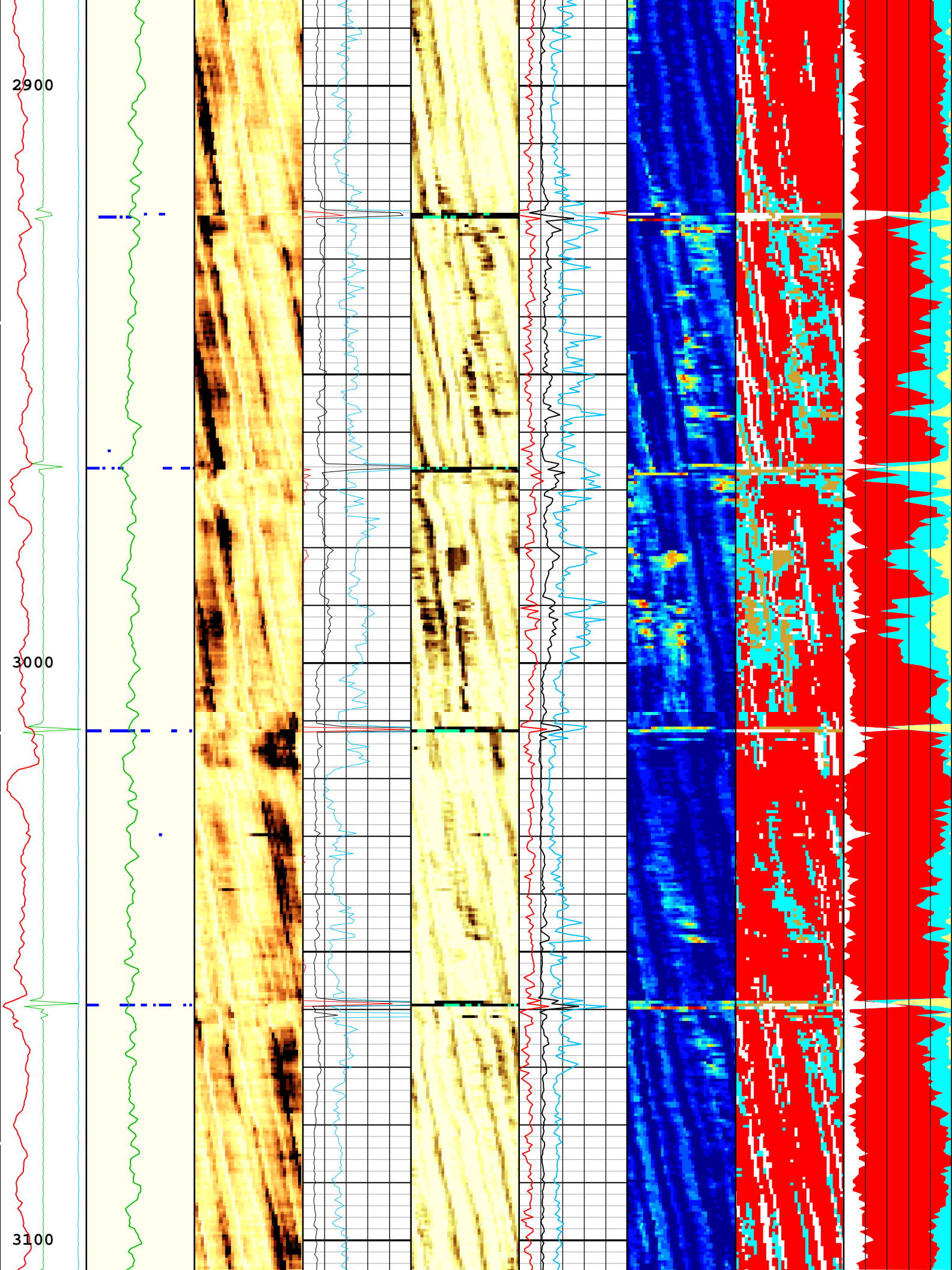


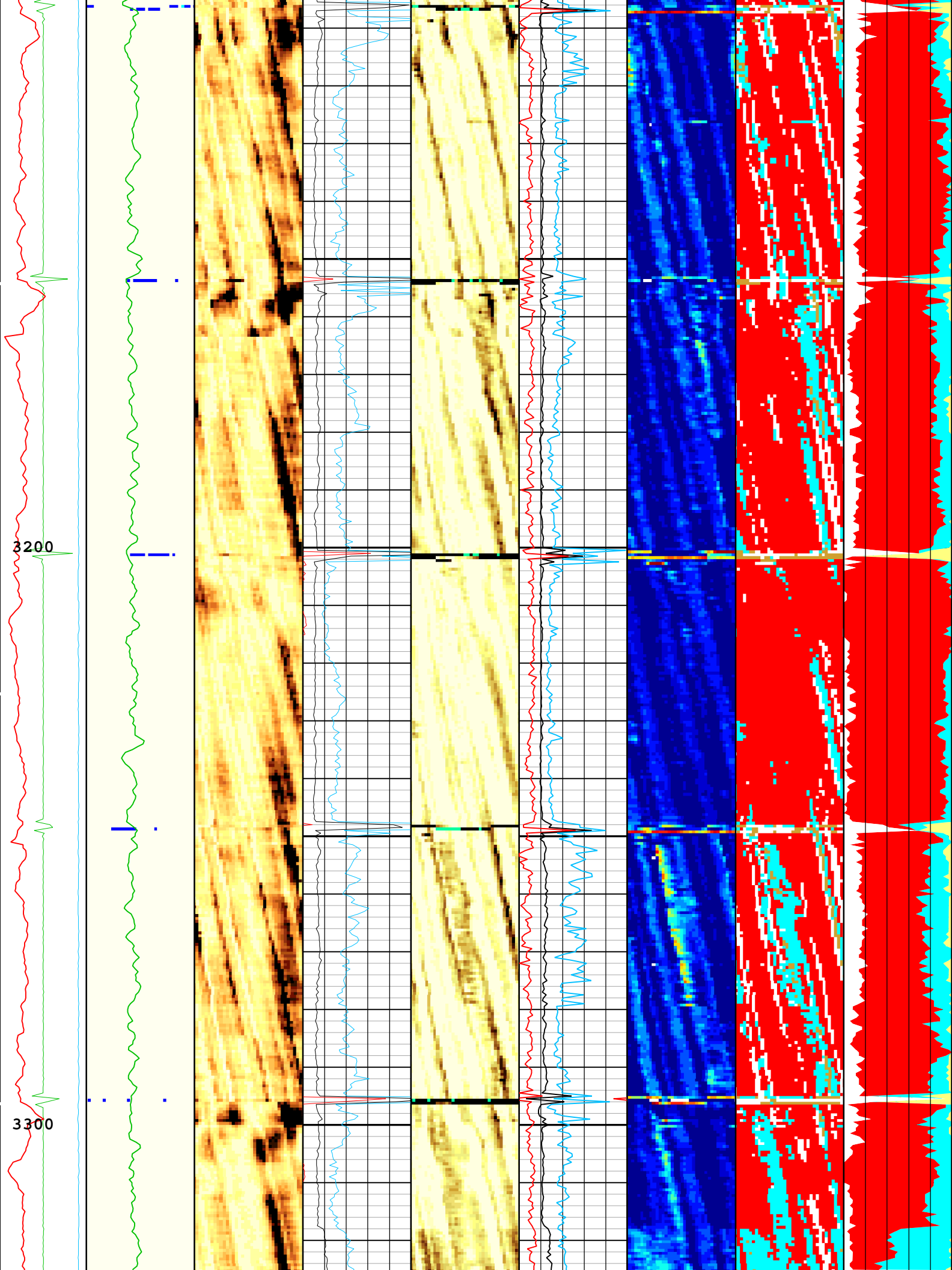


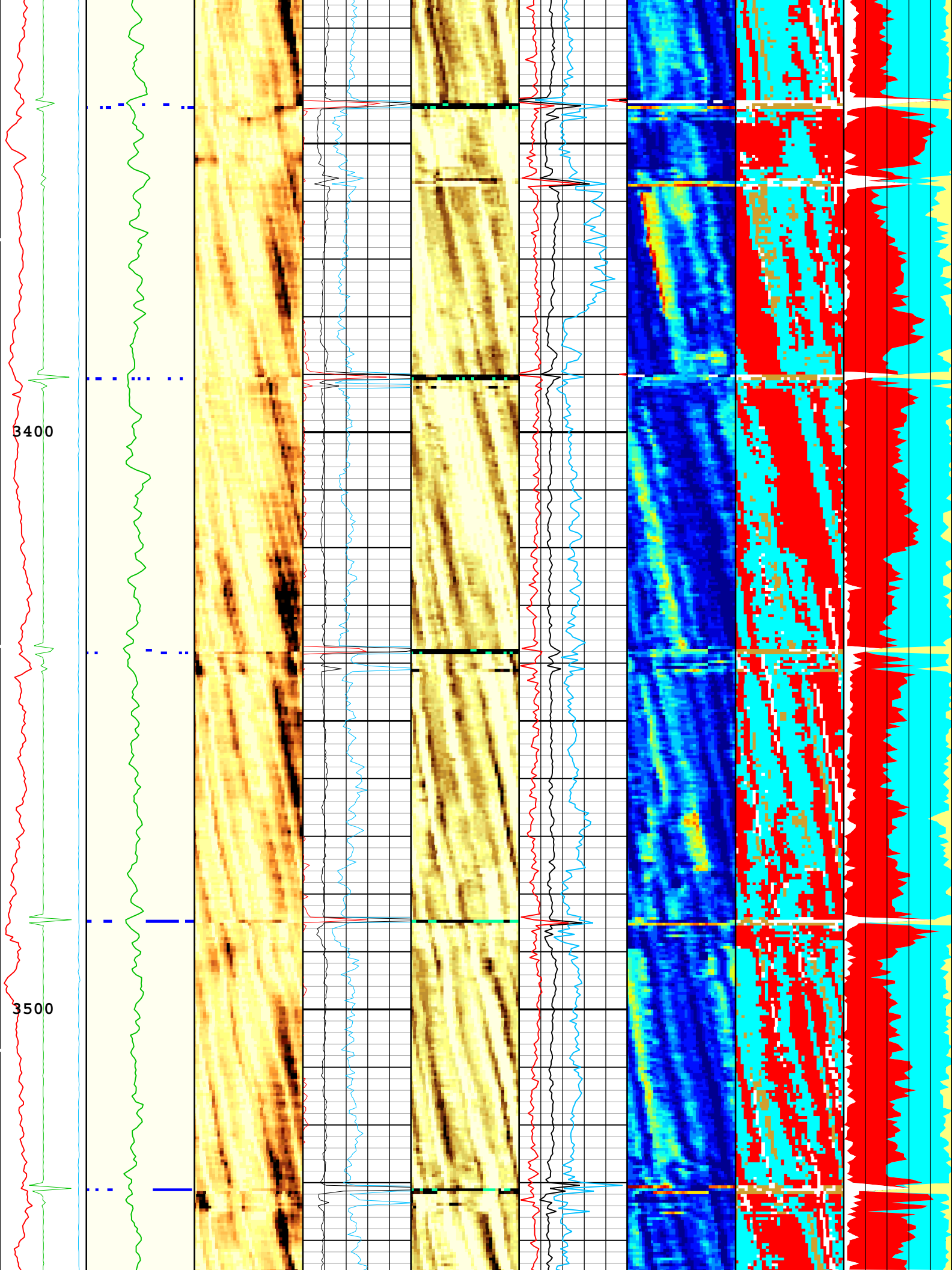


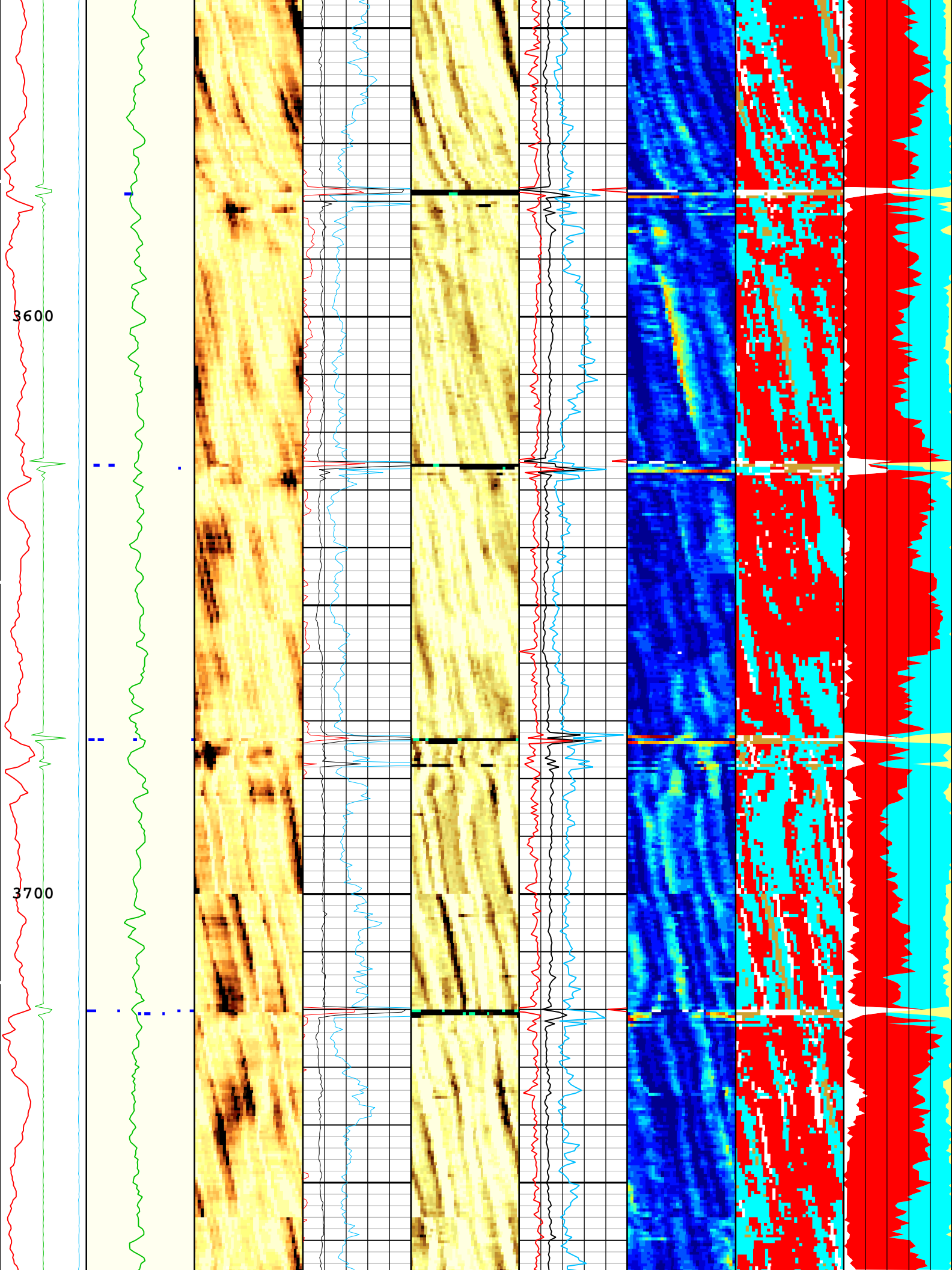


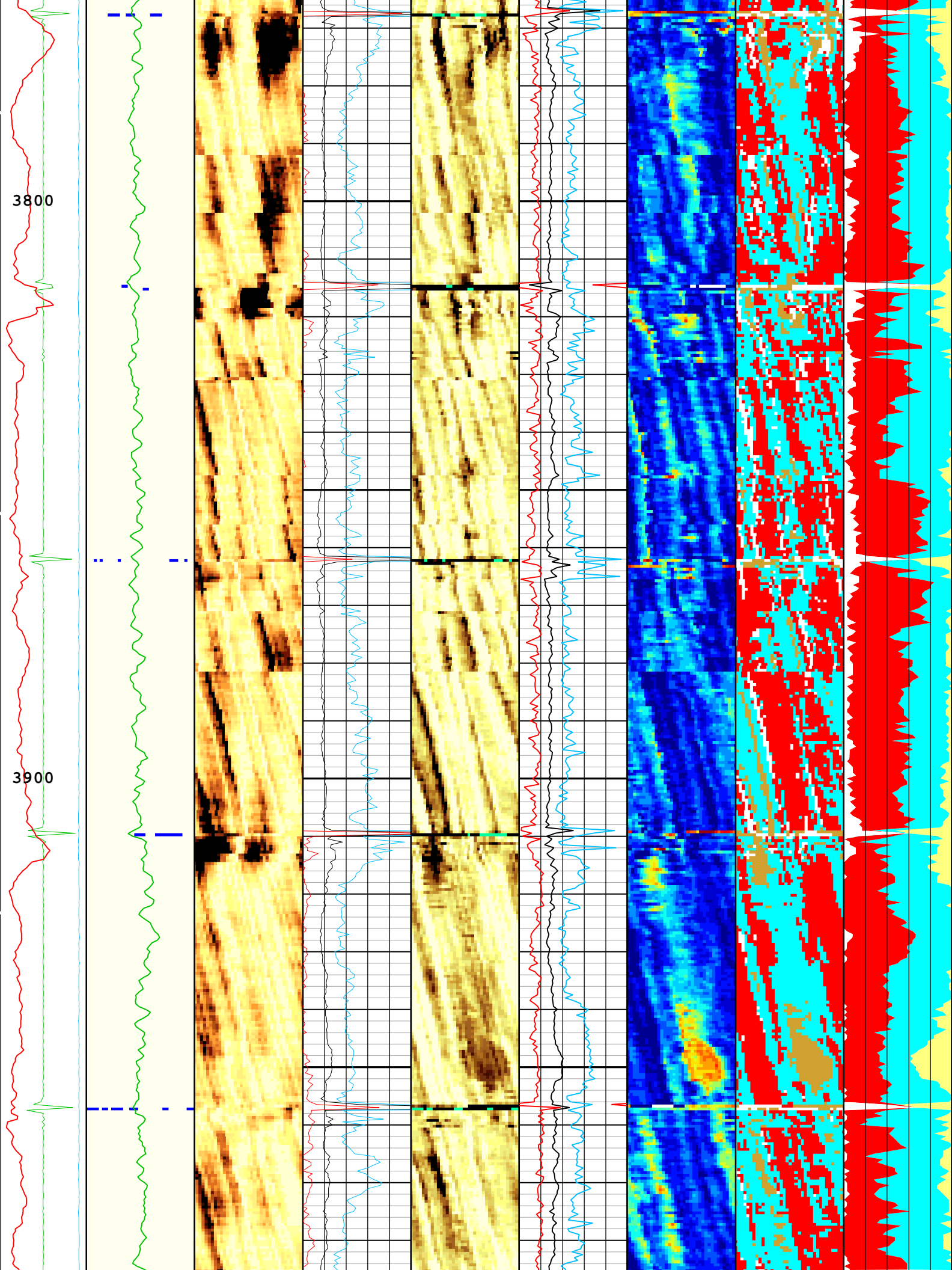


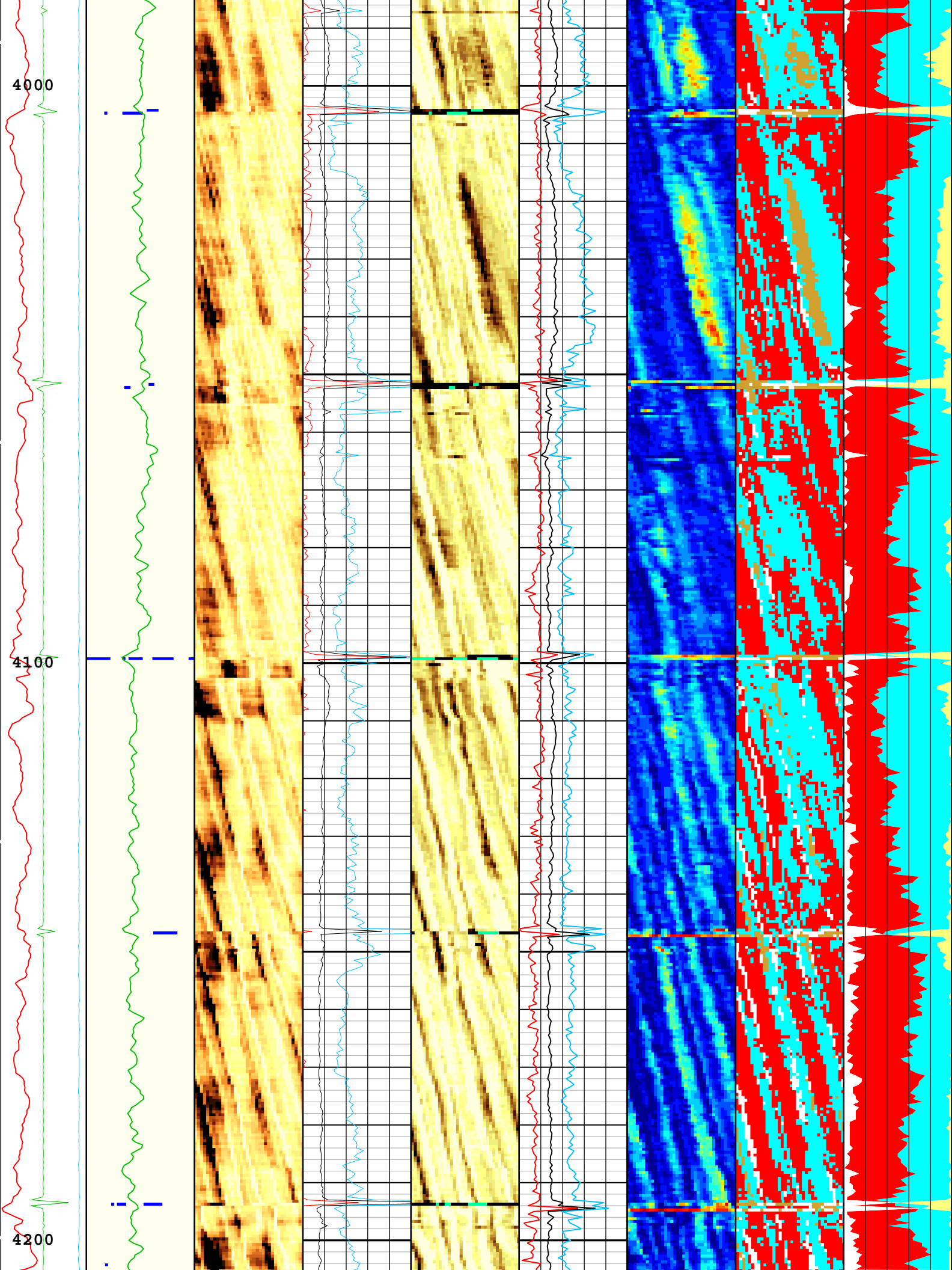


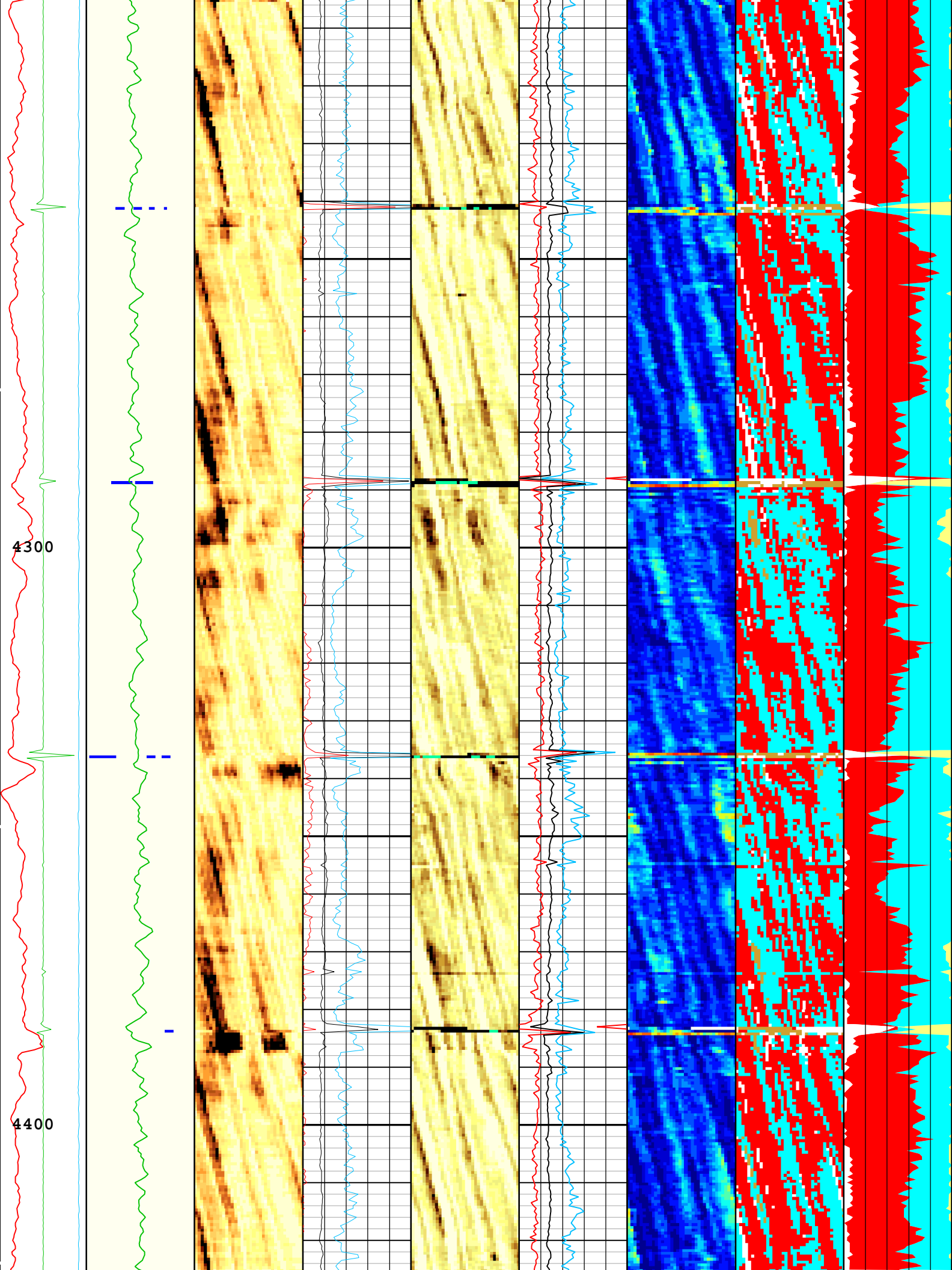


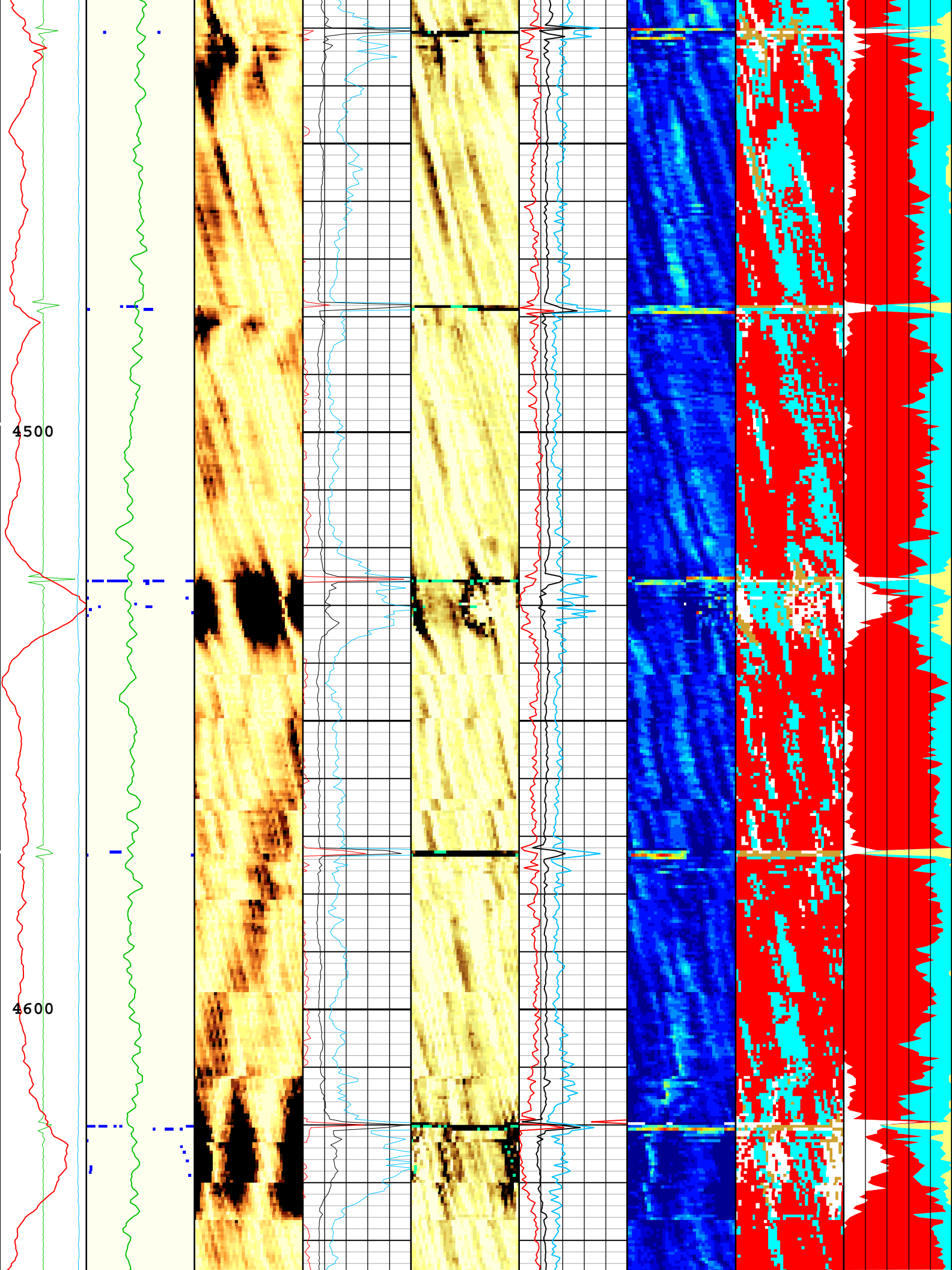


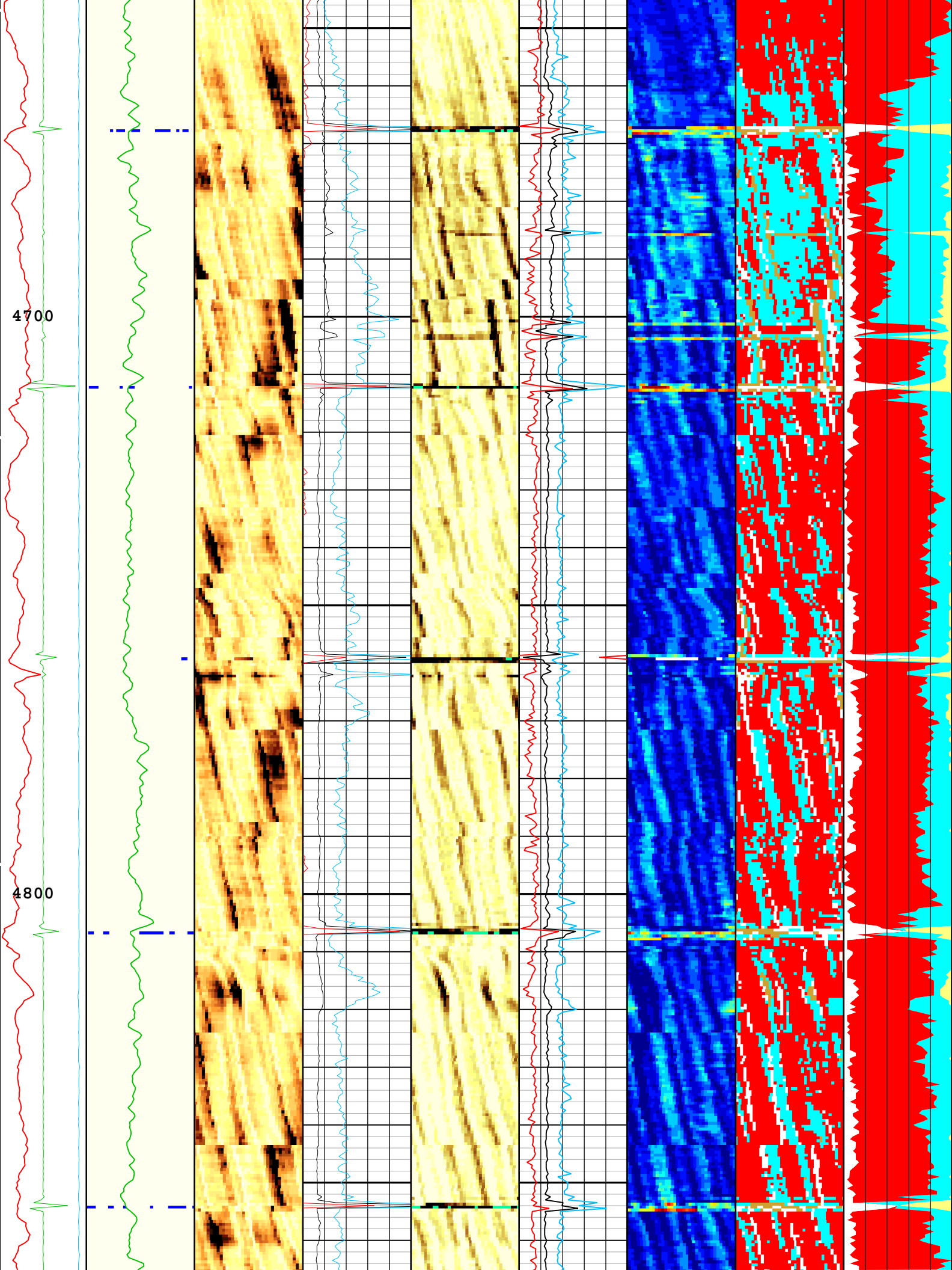


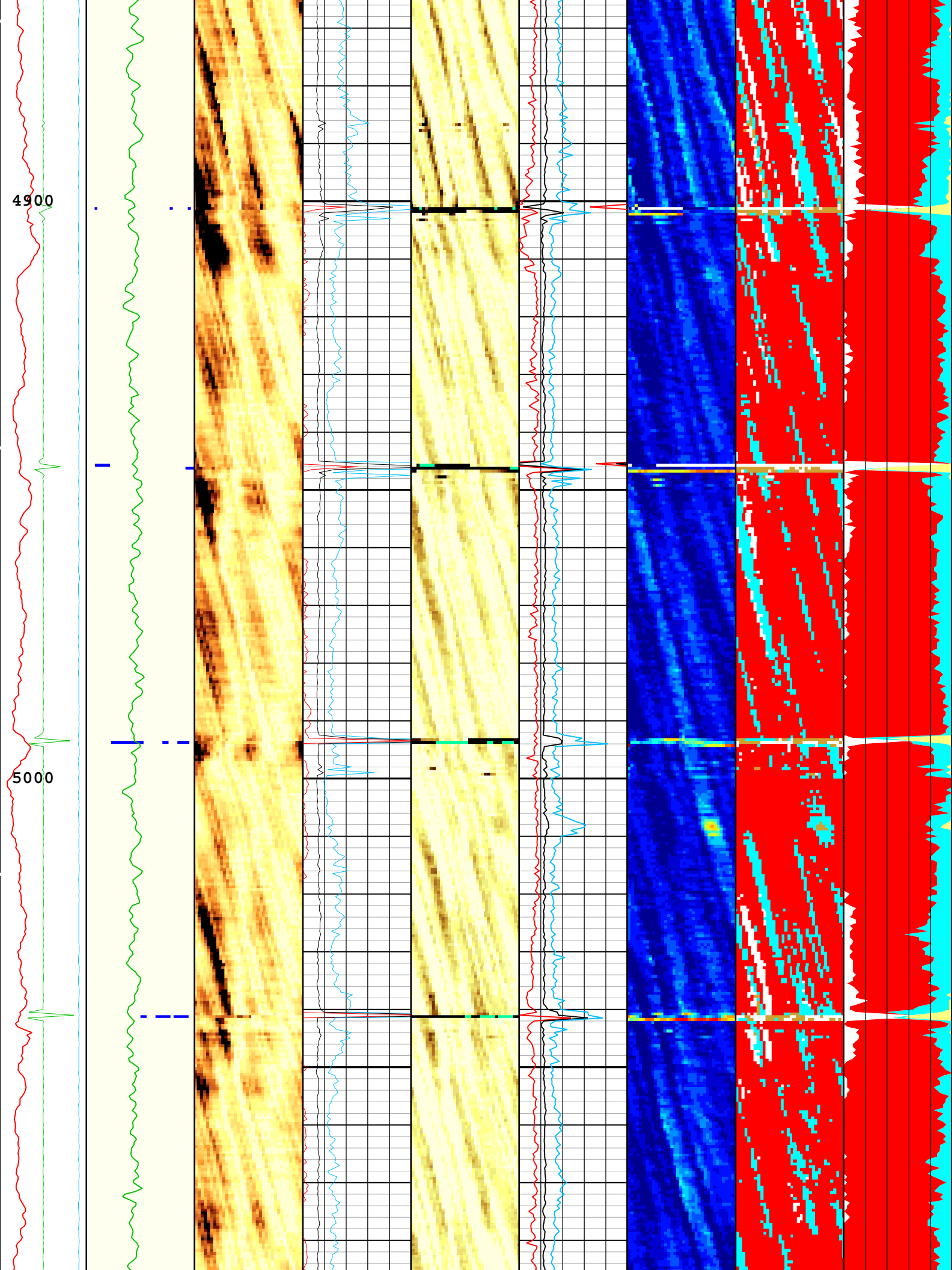


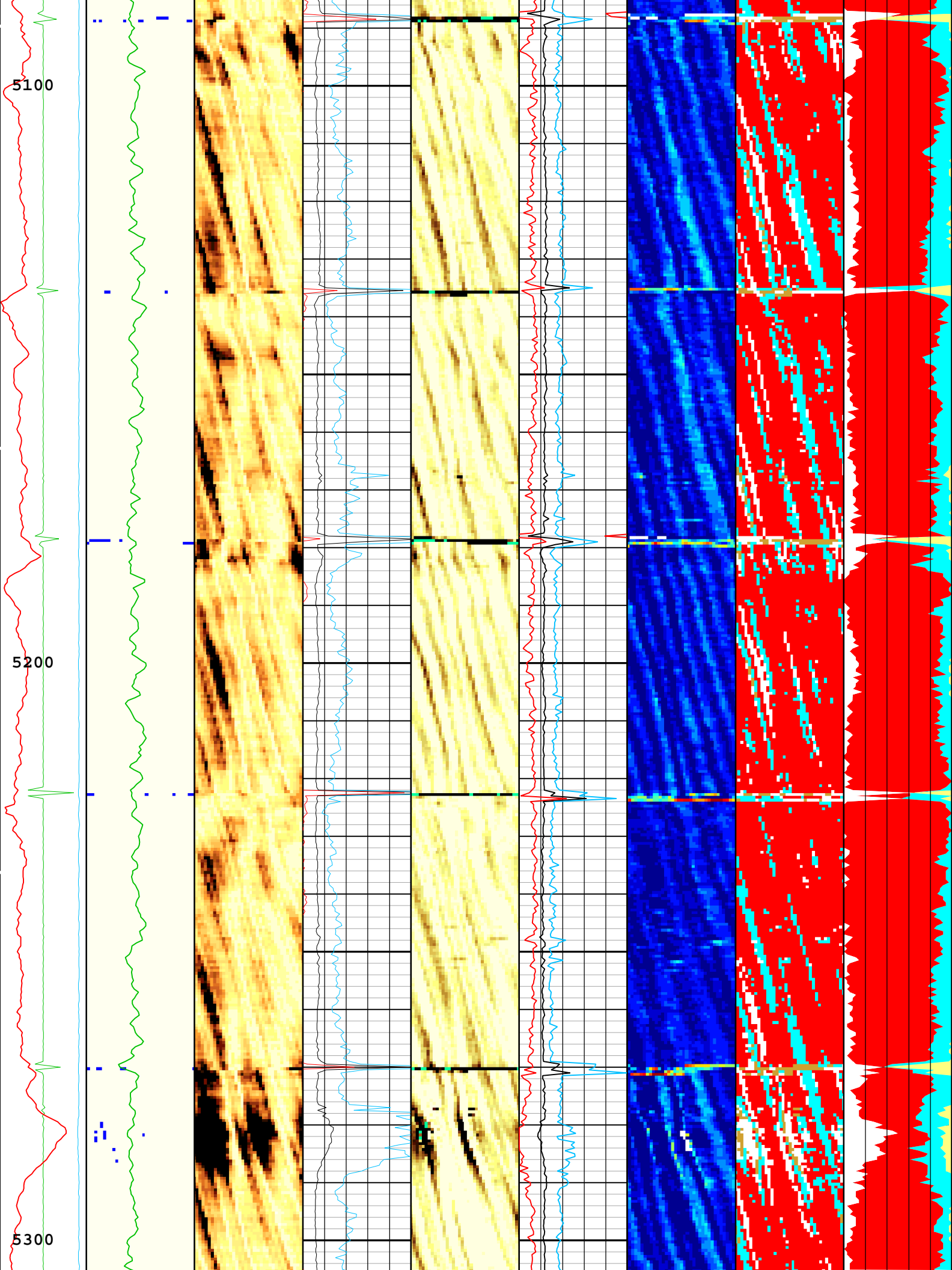


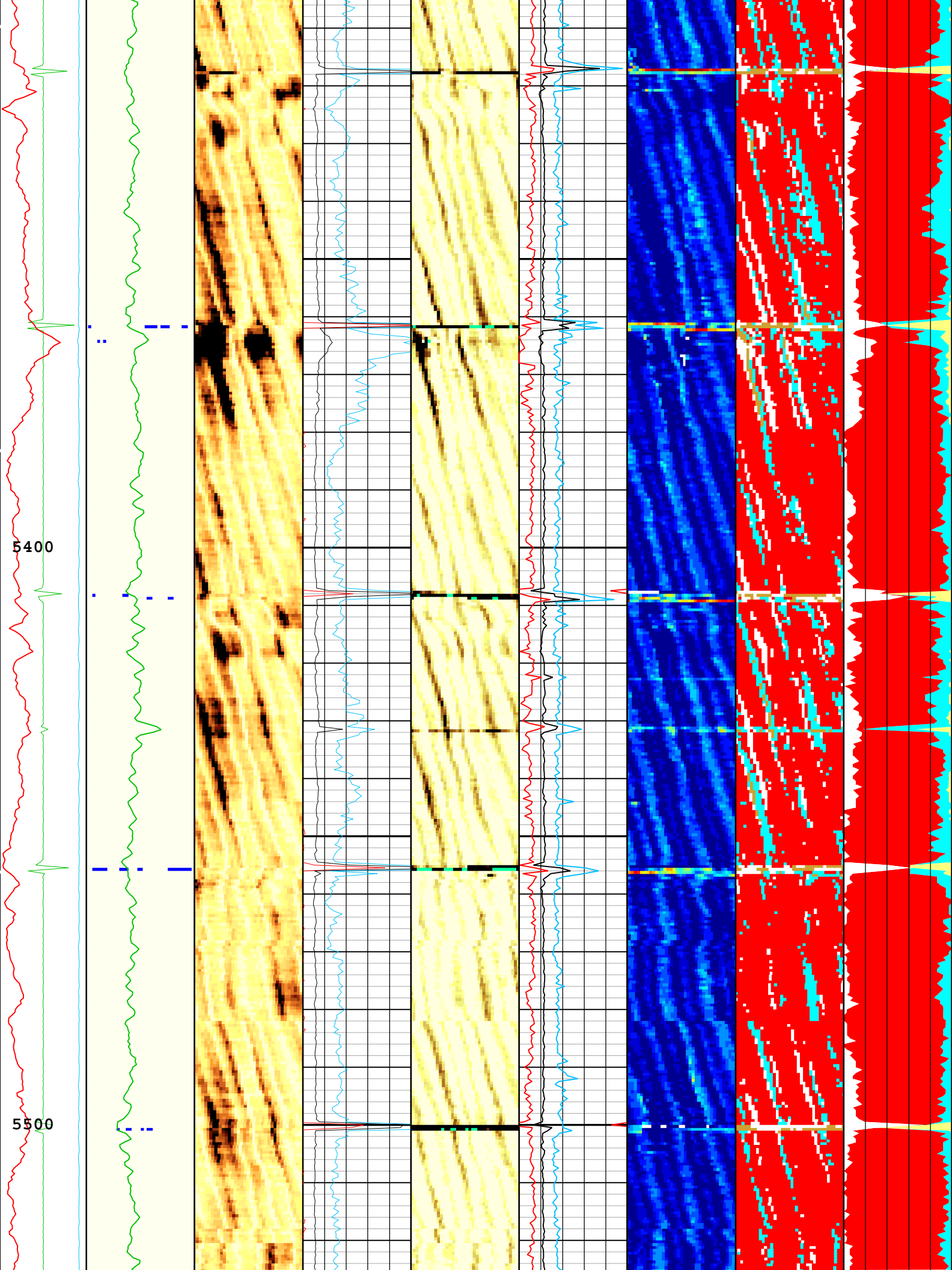


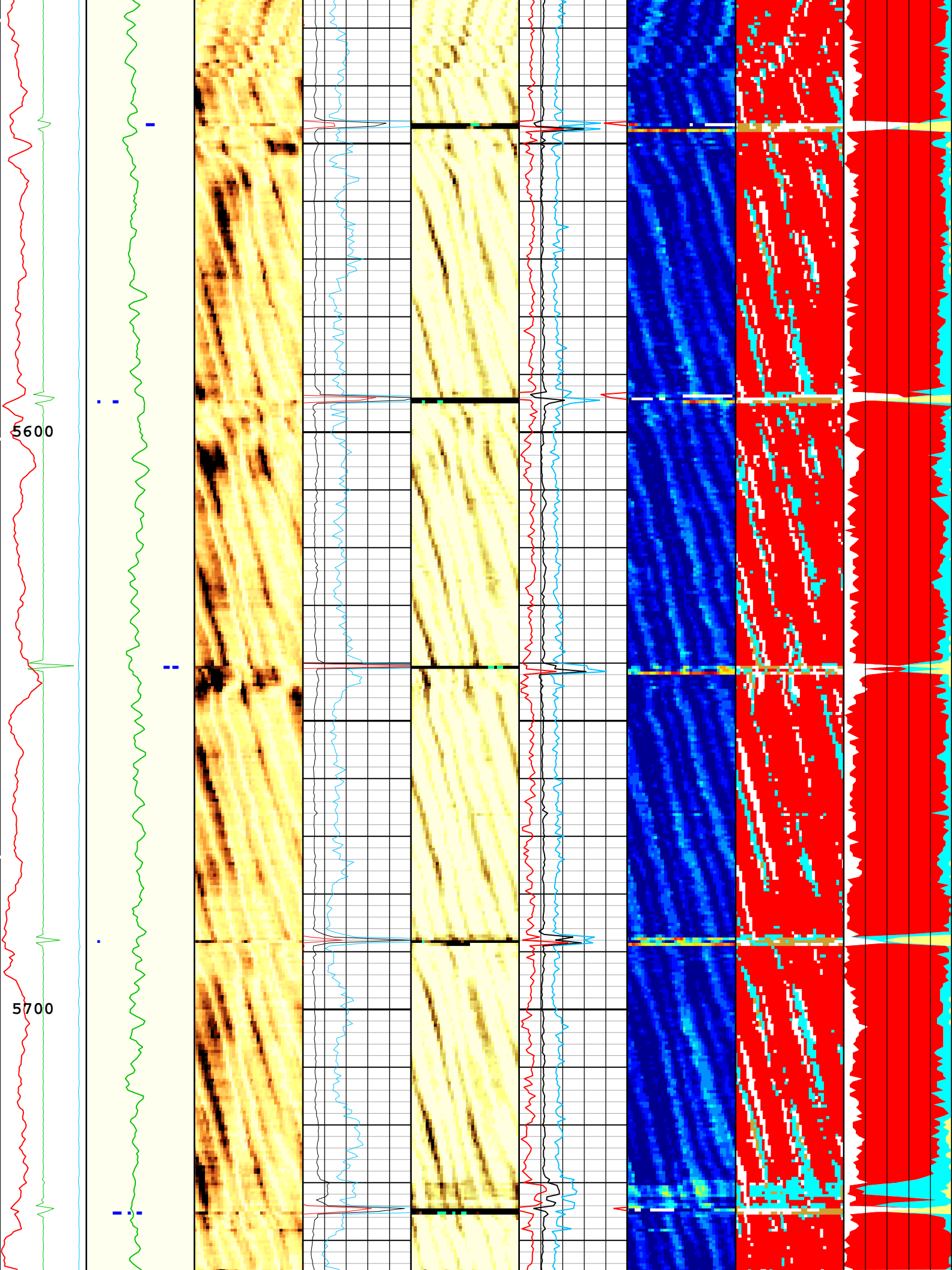


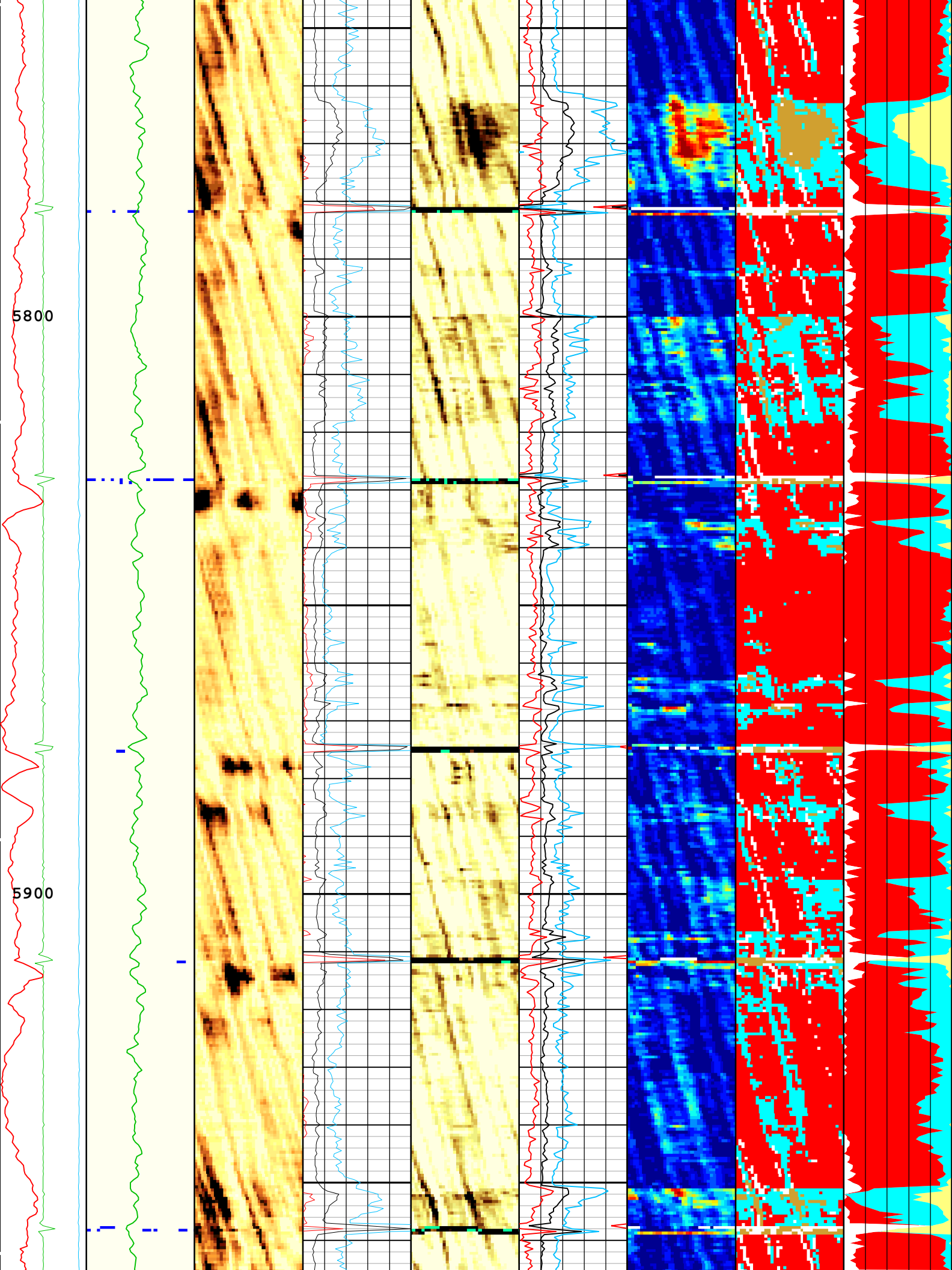


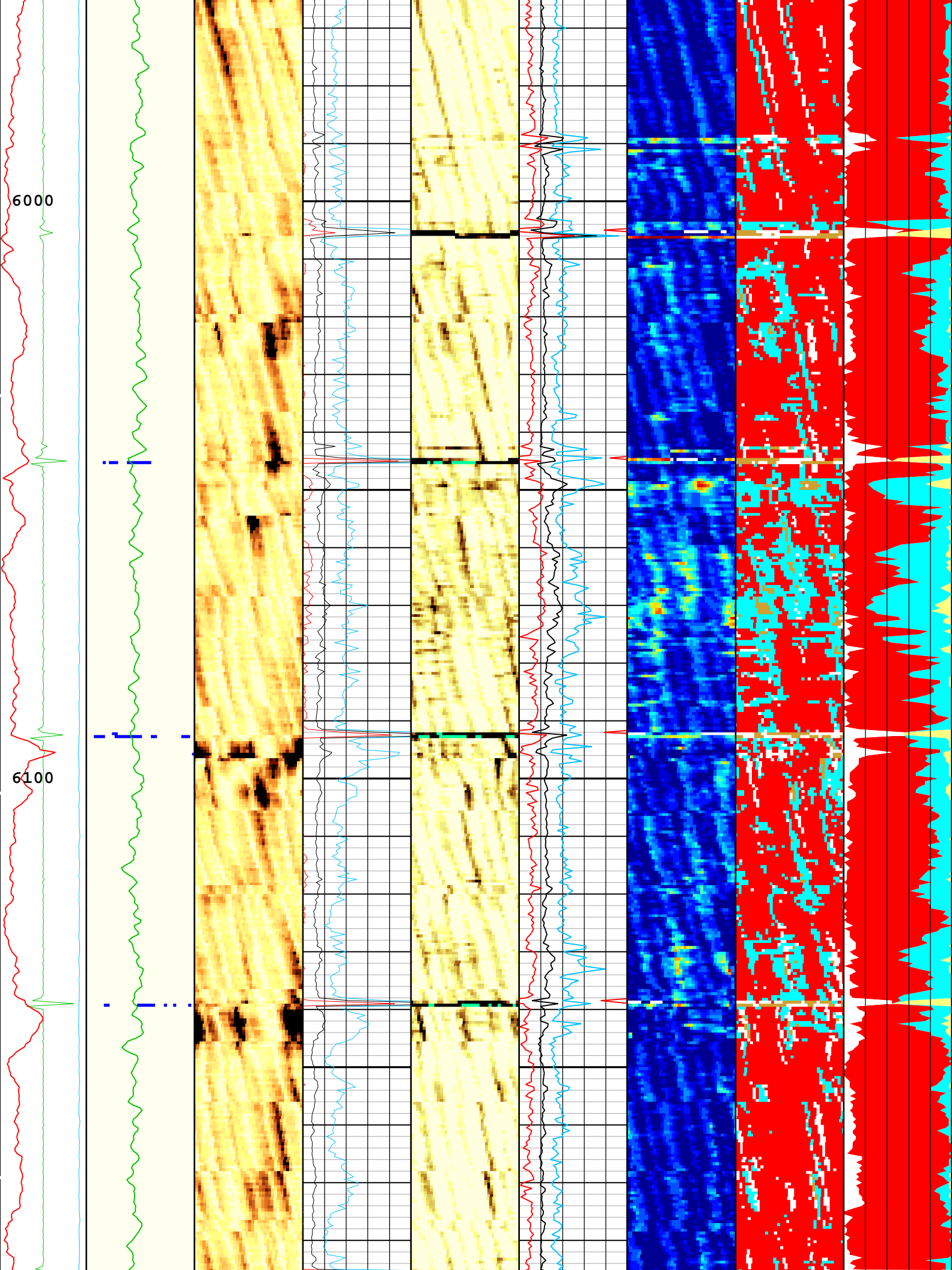


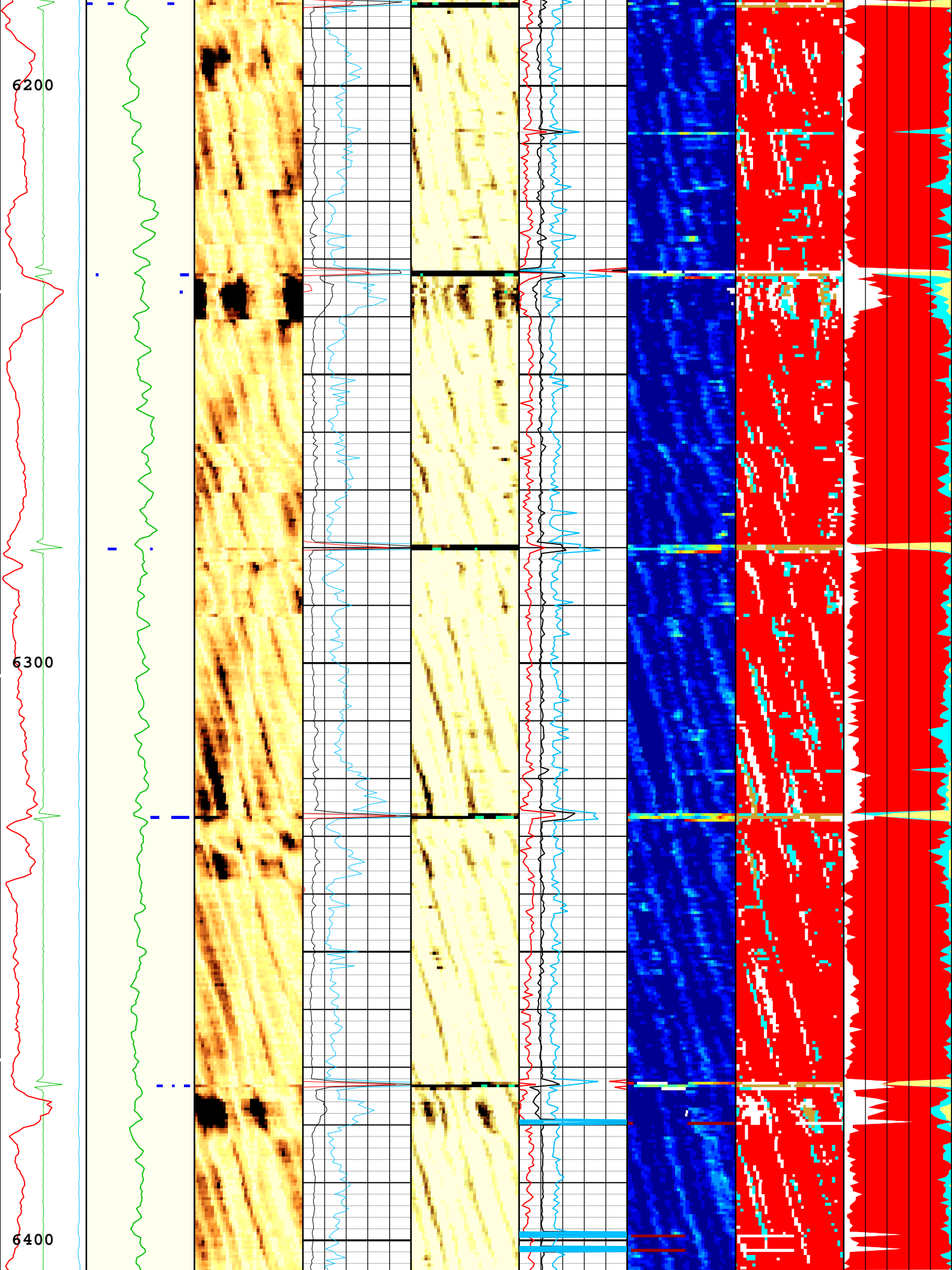


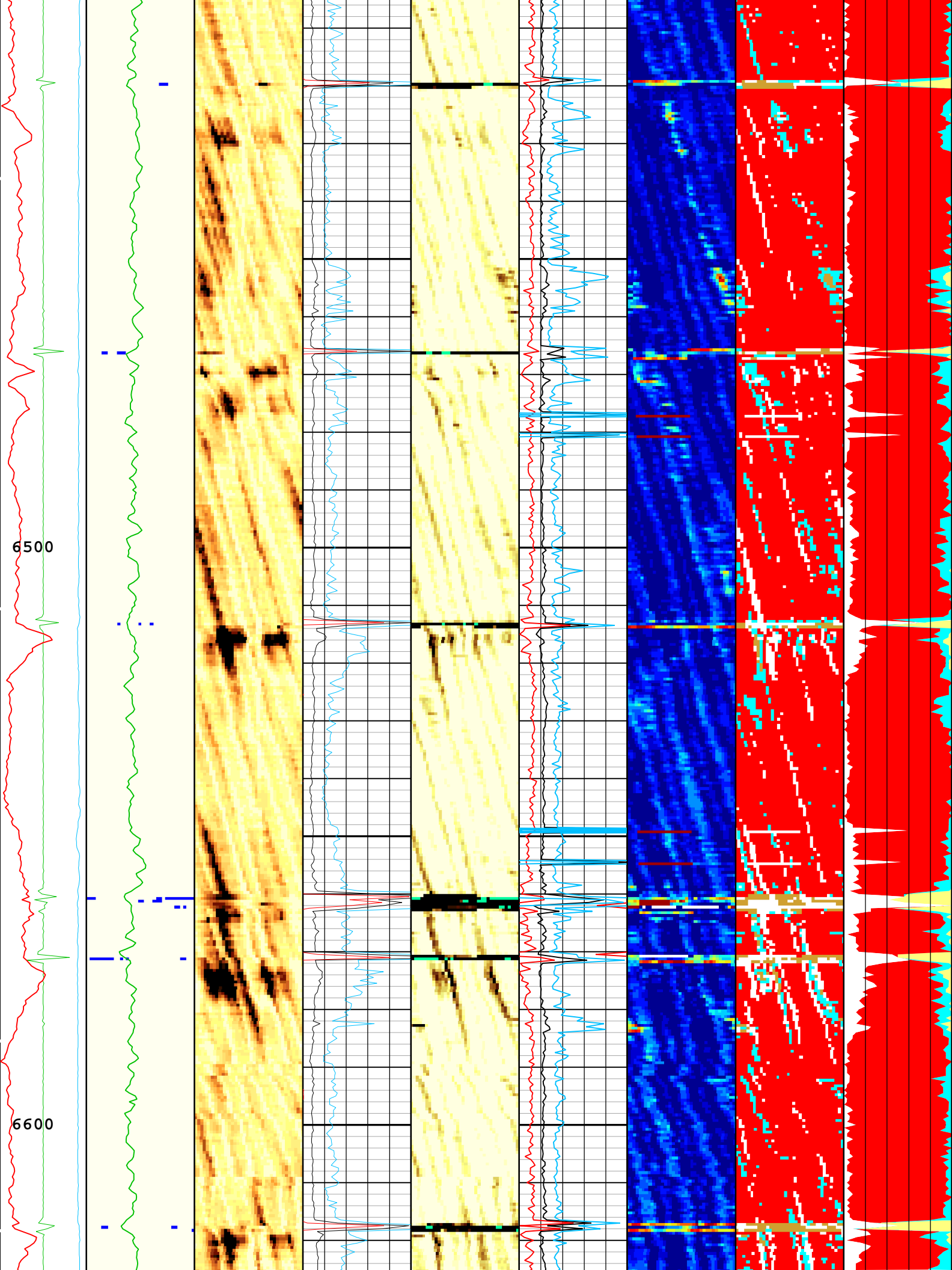


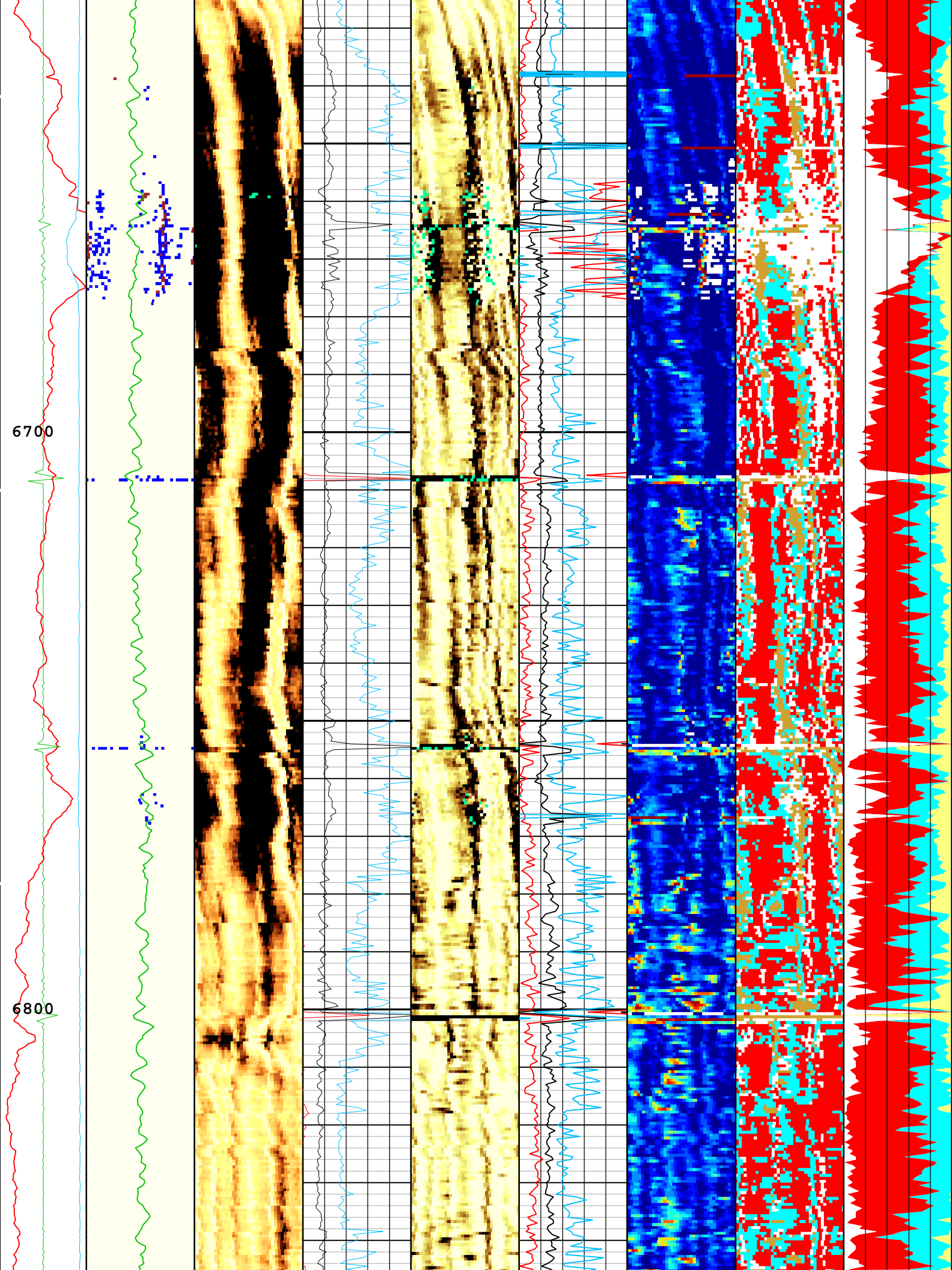


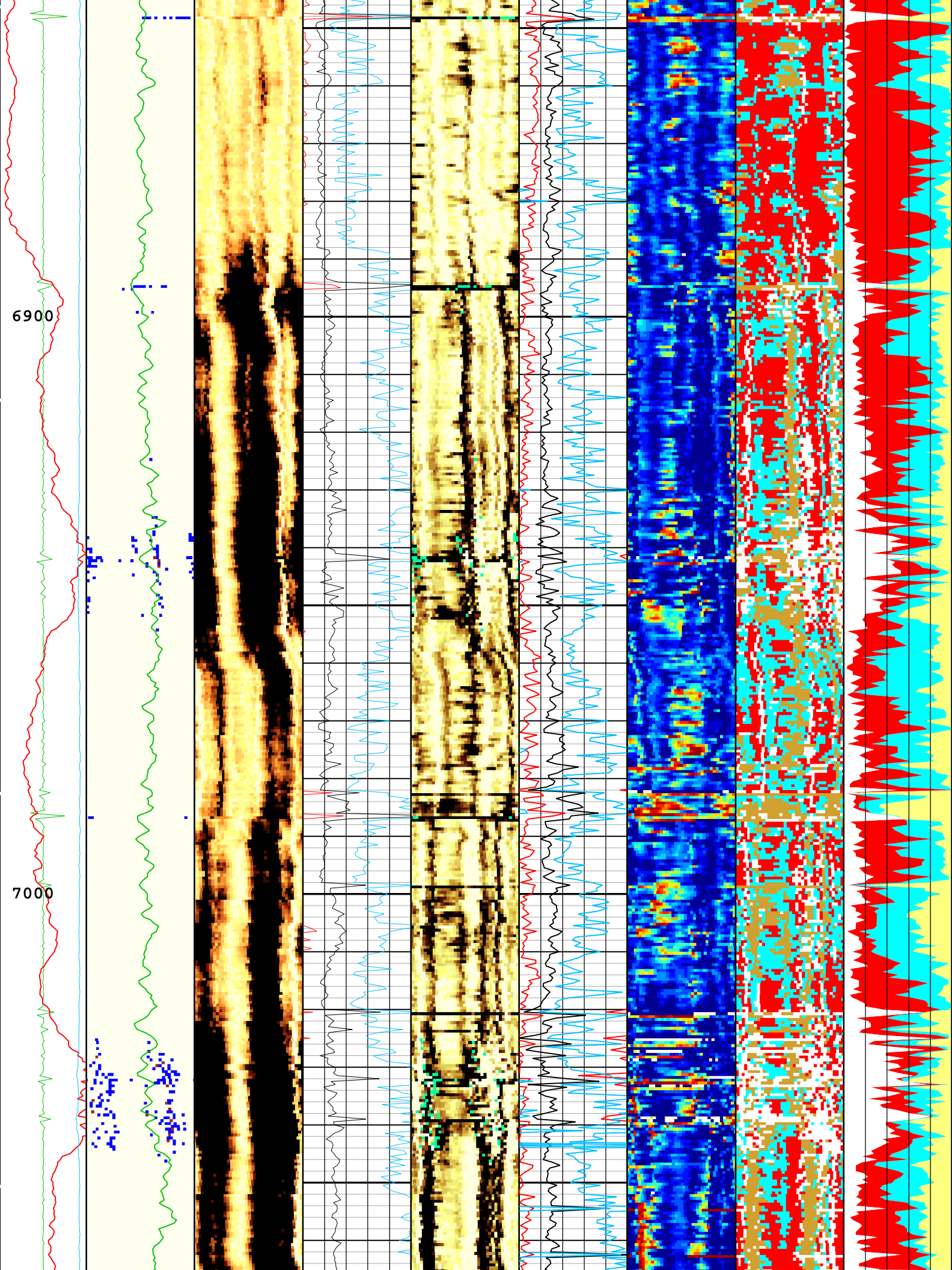


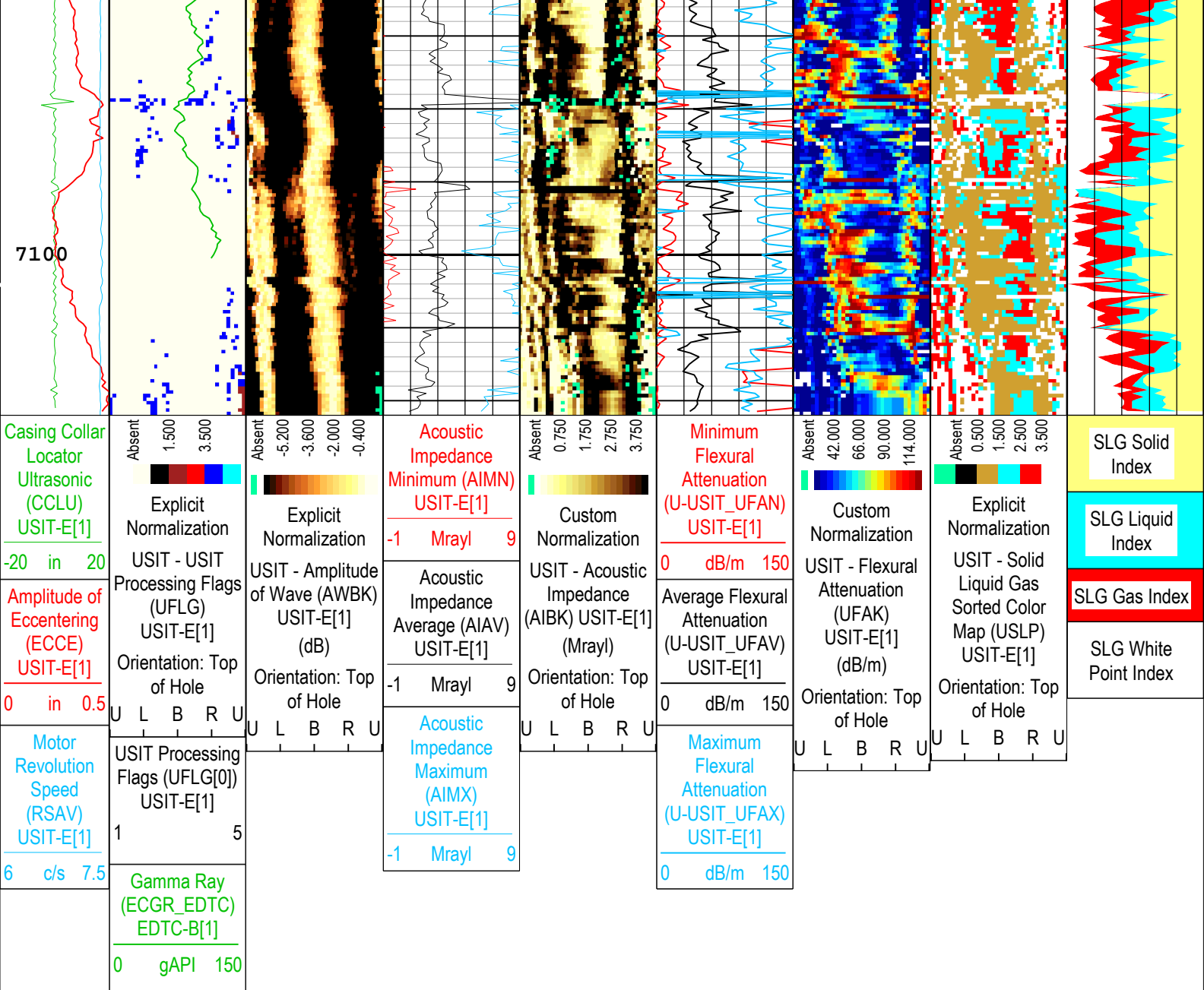












TIME_1900 - Time Marked every 60.00 (s)

USIT Processing Flags (UFLG[0]) USIT-E[1]

- | | |
|---|---------------------------|
| 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 Format: Log (IBC SLG) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 27-Nov-2018 12:25:02

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	12116	ft

CDEN	Cement Density	USIT-E	12	lbm/gal
CDEN	Cement Density	EDTC-B	16.69	lbm/gal
CMTY(U-USIT_CEMT)	Cement Type	USIT-E	Light Cement	
DFD	Drilling Fluid Density	Borehole	8.4	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	204	us/ft
FD	Fluid Density	USIT-E	10.7	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	1.32	dB/m
IBC_FVEL_SEL	IBC Fluid Velocity Selection	USIT-E	Automatic	
IBC_OFFSET_SEL	IBC Flexural Offset Selector	USIT-E	IBC_FRP_OFFSET	
IBC_ZMUD_SEL	IBC Mud Impedance Selection	USIT-E	FreePipe Norm.	
ICE_PROCESS	ICE Processing	USIT-E	Yes	
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	1.19	
MUD_N_THE	Theoretical Mud Normalization Factor	USIT-E	1	
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
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	1.75	Mrayl
U-USIT_UFAO	SIT Flexural Attenuation Offset	USIT-E	-9.41	dB/m
U-USIT_UIAP	IBC Answer Product Enabled	USIT-E	SolidLiquidGasMap	
USI_RPLUS	Ultrasonic R+ Processing	USIT-E	No	
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	1.7	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement	USIT-E	2.6	Mrayl
ZTGS	Acoustic Impedance Threshold for Gas	USIT-E	0.3	Mrayl

OneDepth Zoned Parameters				
Parameter	Value	Start (ft)	Stop (ft)	
BS	12.25	50	2394	
BS	8.5	2394	7122	
All depth are actual.				

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
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	Time Zoned	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	Time Zoned	us
U-USIT_UNWB	Near Receiver Window Begin Time	USIT-E	Time Zoned	us
U-USIT_UNWE	Near Receiver Window End Time	USIT-E	Time Zoned	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	Time Zoned	us

OneTime Zoned Parameters

Pass Log[4]:Up

Parameter	Value	Start Time	Stop Time	Start Depth (ft)	Stop Depth (ft)
EMXV	80	22-Nov-2018 16:27:37	22-Nov-2018 16:37:01	7122.84	6618.34
U-USIT_UFWB	136	22-Nov-2018 16:27:02	22-Nov-2018 16:27:53	7122.84	7108.64
U-USIT_UFWB	126.03	22-Nov-2018 16:27:53	22-Nov-2018 16:28:12	7108.64	7095.24
U-USIT_UFWB	110.44	22-Nov-2018 16:28:12	22-Nov-2018 16:37:01	7095.24	6618.34
U-USIT_UFWE	176	22-Nov-2018 16:27:02	22-Nov-2018 16:27:51	7122.84	7111.65
U-USIT_UFWE	187.37	22-Nov-2018 16:27:51	22-Nov-2018 16:28:39	7111.65	7072.87
U-USIT_UFWE	197.43	22-Nov-2018 16:28:39	22-Nov-2018 16:34:47	7072.87	6656.49
U-USIT_UFWE	203.71	22-Nov-2018 16:34:47	22-Nov-2018 16:37:01	6656.49	6618.34
U-USIT_UNWB	105	22-Nov-2018 16:27:02	22-Nov-2018 16:27:56	7122.84	7106.58
U-USIT_UNWB	92.34	22-Nov-2018 16:27:56	22-Nov-2018 16:28:07	7106.58	7099.04
U-USIT_UNWB	77.76	22-Nov-2018 16:28:07	22-Nov-2018 16:37:01	7099.04	6618.34
U-USIT_UNWE	145	22-Nov-2018 16:27:02	22-Nov-2018 16:27:49	7122.84	7114.12
U-USIT_UNWE	161.73	22-Nov-2018 16:27:49	22-Nov-2018 16:28:37	7114.12	7074.65
U-USIT_UNWE	175.45	22-Nov-2018 16:28:37	22-Nov-2018 16:37:01	7074.65	6618.34
WINB	31.37	22-Nov-2018 16:27:02	22-Nov-2018 16:27:59	7122.84	7104.52
WINB	22.74	22-Nov-2018 16:27:59	22-Nov-2018 16:34:43	7104.52	6660.44
WINB	32.74	22-Nov-2018 16:34:43	22-Nov-2018 16:34:51	6660.44	6652.08
WINB	27.37	22-Nov-2018 16:34:51	22-Nov-2018 16:37:01	6652.08	6618.34
WINE	71.37	22-Nov-2018 16:27:02	22-Nov-2018 16:27:48	7122.84	7115.42
WINE	78.78	22-Nov-2018 16:27:48	22-Nov-2018 16:28:00	7115.42	7103.68
WINE	72.14	22-Nov-2018 16:28:00	22-Nov-2018 16:28:17	7103.68	7091.54

WINE	71.77	22-Nov-2018 16:28:17	22-Nov-2018 16:28:18	7091.54	7090.8
WINE	73.25	22-Nov-2018 16:28:18	22-Nov-2018 16:28:32	7090.8	7079.26
WINE	77.25	22-Nov-2018 16:28:32	22-Nov-2018 16:28:48	7079.26	7064.29
WINE	82.62	22-Nov-2018 16:28:48	22-Nov-2018 16:28:55	7064.29	7055.89
WINE	80.32	22-Nov-2018 16:28:55	22-Nov-2018 16:33:09	7055.89	6767.77
WINE	71.88	22-Nov-2018 16:33:09	22-Nov-2018 16:33:37	6767.77	6736.12
WINE	79.55	22-Nov-2018 16:33:37	22-Nov-2018 16:34:41	6736.12	6663.39
WINE	87.23	22-Nov-2018 16:34:41	22-Nov-2018 16:35:02	6663.39	6639.36
WINE	83.39	22-Nov-2018 16:35:02	22-Nov-2018 16:37:01	6639.36	6618.34

Pass Log[6]:Up					
EMXV	110	22-Nov-2018 16:53:36	22-Nov-2018 18:25:42	6618.34	50.34
U-USIT_UFWB	121.04	22-Nov-2018 16:51:00	22-Nov-2018 16:56:44	6618.34	6386.23
U-USIT_UFWB	111.62	22-Nov-2018 16:56:44	22-Nov-2018 18:25:42	6386.23	50.34
U-USIT_UFWE	199.52	22-Nov-2018 16:53:36	22-Nov-2018 18:25:42	6618.34	50.34
U-USIT_UNWB	87.55	22-Nov-2018 16:51:00	22-Nov-2018 16:56:48	6618.34	6381.12
U-USIT_UNWB	82.32	22-Nov-2018 16:56:48	22-Nov-2018 18:25:42	6381.12	50.34
U-USIT_UNWE	192.2	22-Nov-2018 16:51:00	22-Nov-2018 16:54:30	6618.34	6545.17
U-USIT_UNWE	188.01	22-Nov-2018 16:54:30	22-Nov-2018 16:54:31	6545.17	6543.57
U-USIT_UNWE	179.64	22-Nov-2018 16:54:31	22-Nov-2018 18:25:42	6543.57	50.34
WINB	31.37	22-Nov-2018 16:51:00	22-Nov-2018 16:55:22	6618.34	6482.15
WINB	27.37	22-Nov-2018 16:55:22	22-Nov-2018 16:56:33	6482.15	6397.82
WINB	29.67	22-Nov-2018 16:56:33	22-Nov-2018 18:25:42	6397.82	50.34
WINE	94.13	22-Nov-2018 16:51:00	22-Nov-2018 16:54:21	6618.34	6556.22
WINE	87.99	22-Nov-2018 16:54:21	22-Nov-2018 16:54:25	6556.22	6550.62
WINE	82.62	22-Nov-2018 16:54:25	22-Nov-2018 16:55:25	6550.62	6478.35
WINE	81.85	22-Nov-2018 16:55:25	22-Nov-2018 16:56:29	6478.35	6402.59
WINE	76.48	22-Nov-2018 16:56:29	22-Nov-2018 16:56:31	6402.59	6400.17
WINE	78.02	22-Nov-2018 16:56:31	22-Nov-2018 18:25:42	6400.17	50.34

All depth are at tool zero.

Composite 1

IBC SLG Composite




Composite Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
One	Log[4]:Up	Up	6513.89 ft	7122.85 ft	22-Nov-2018 4:27:02 PM	22-Nov-2018 4:37:01 PM	ON	8.04 ft	Yes
One	Log[6]:Up	Up	49.98 ft	6823.46 ft	22-Nov-2018 4:51:00 PM	22-Nov-2018 6:25:42 PM	ON	8.32 ft	Yes

All depths are referenced to toolstring zero

Log	Company:Crestone Peak Resources Operating LLC	Well:Melbon Ranch 4F-17H-M265
		Composite 1:S012

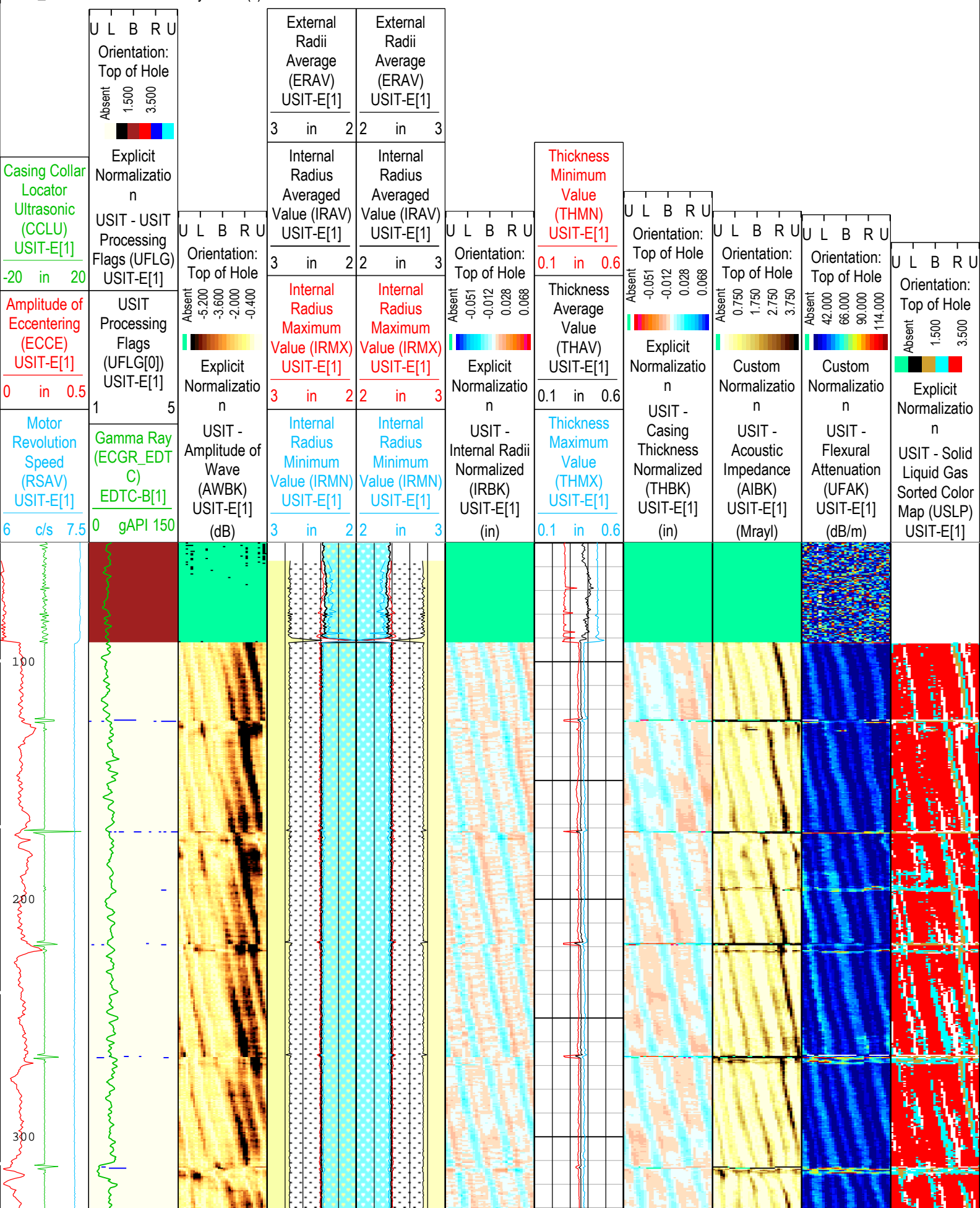
Description: USI IBC SLG Composite Format: Log (IBC SLG Composite) Index Scale: 2 in per 100 ft Index Unit: ft Index Type: Measured Depth
Creation Date: 27-Nov-2018 12:53:23

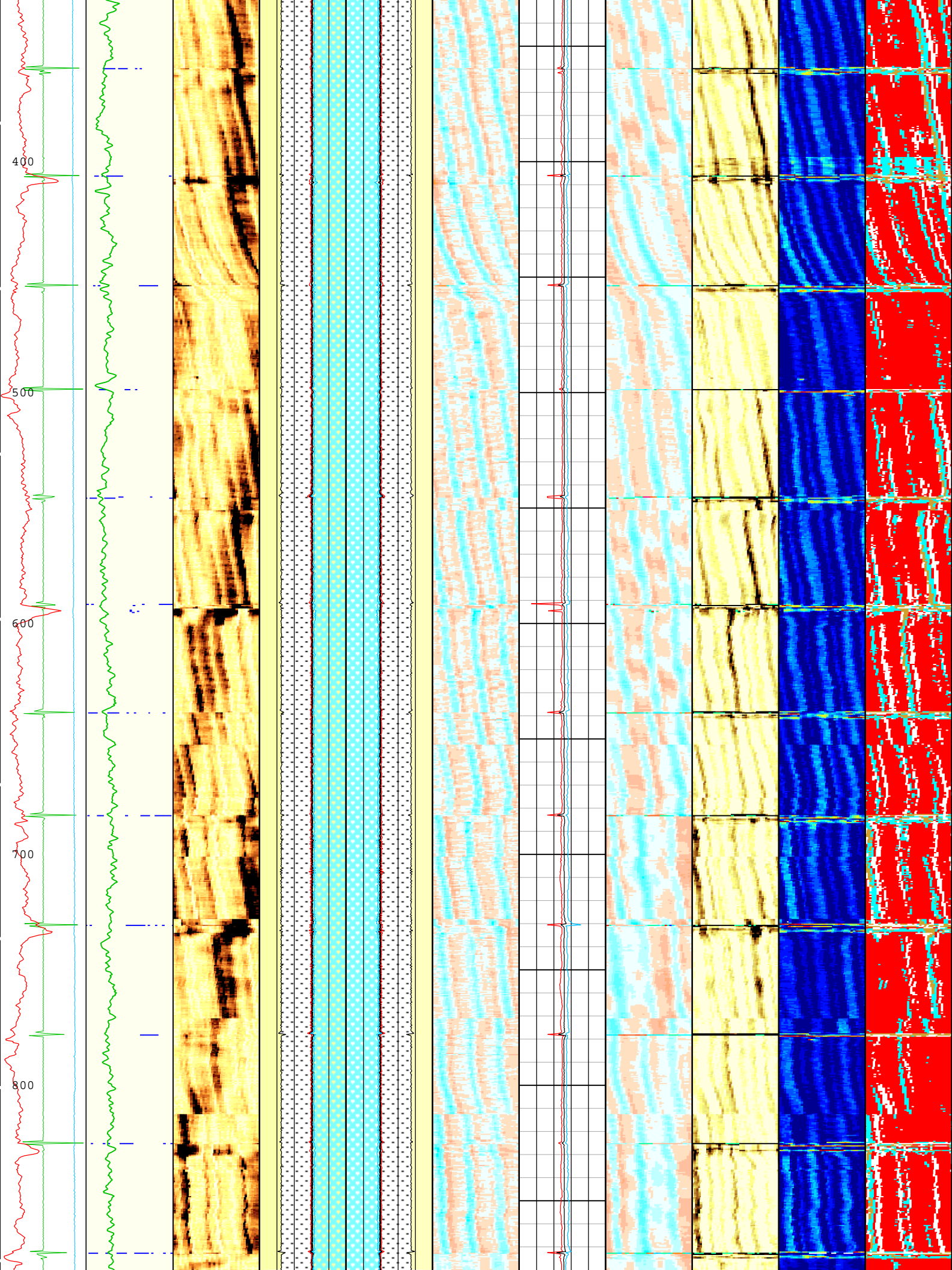
USIT Processing Flags (UFLG[0]) USIT-E[1]

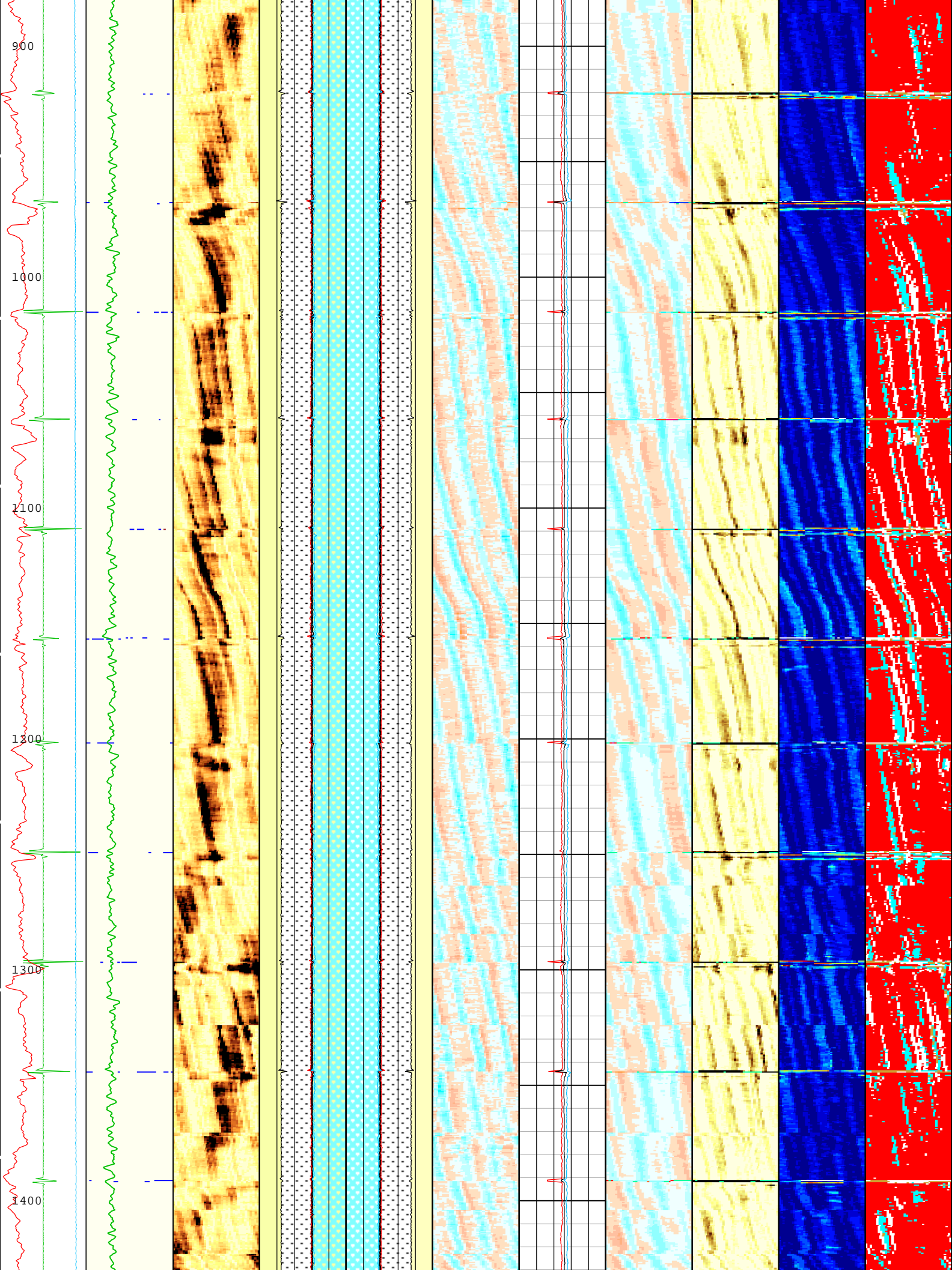
- 1 - UFLG 1 Value within [0.0 - 1.5] - :
2 - UFLG 2 Value within [1.5 - 2.5] - :
3 - UFLG 3 Value within [2.5 - 3.5] - :
-  UTIM Error
 Pulse Origin Not Detected
 WINLEN Error

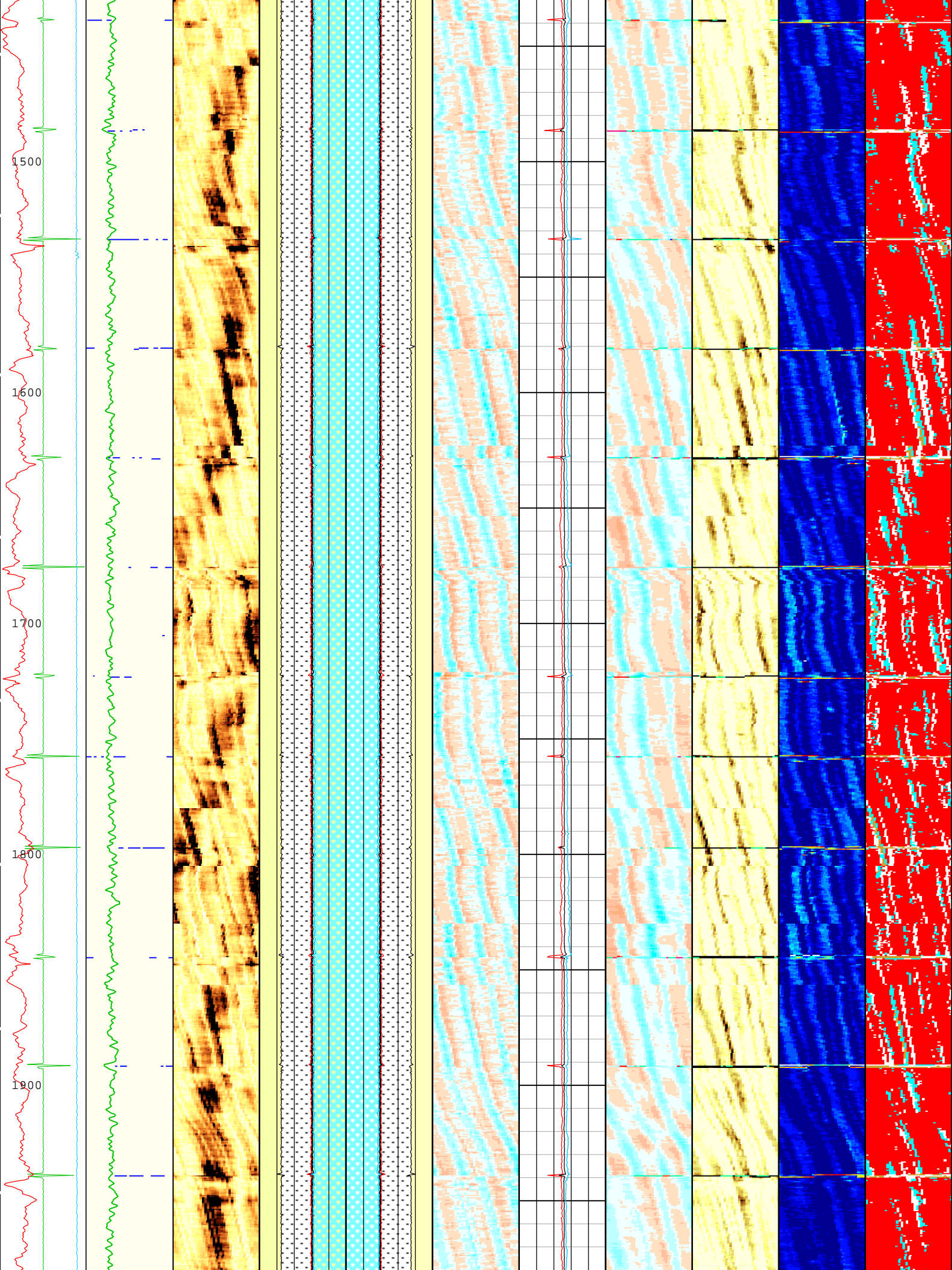
3 - UFLG 3 Value within [2.5 - 3.5] - : WINLEN Error
4 - UFLG 4 UFLG 5 UFLG 6 Value within [3.5 - 6.5] - : Casing Thickness Error
5 - UFLG 7 UFLG 8 UFLG 9 Value within [6.5 - 10] - : Loop Processing Error

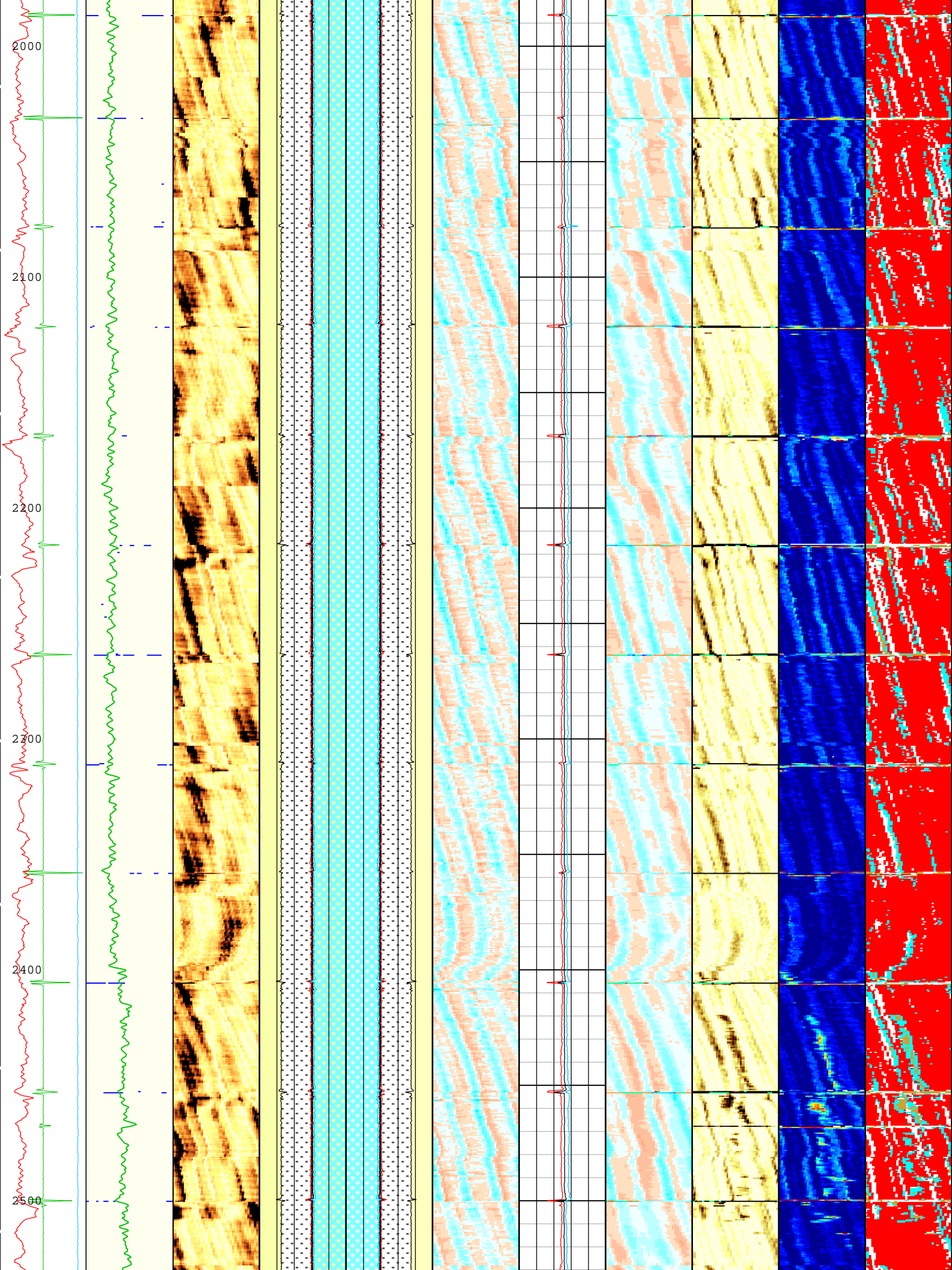
TIME_1900 - Time Marked every 60.00 (s)

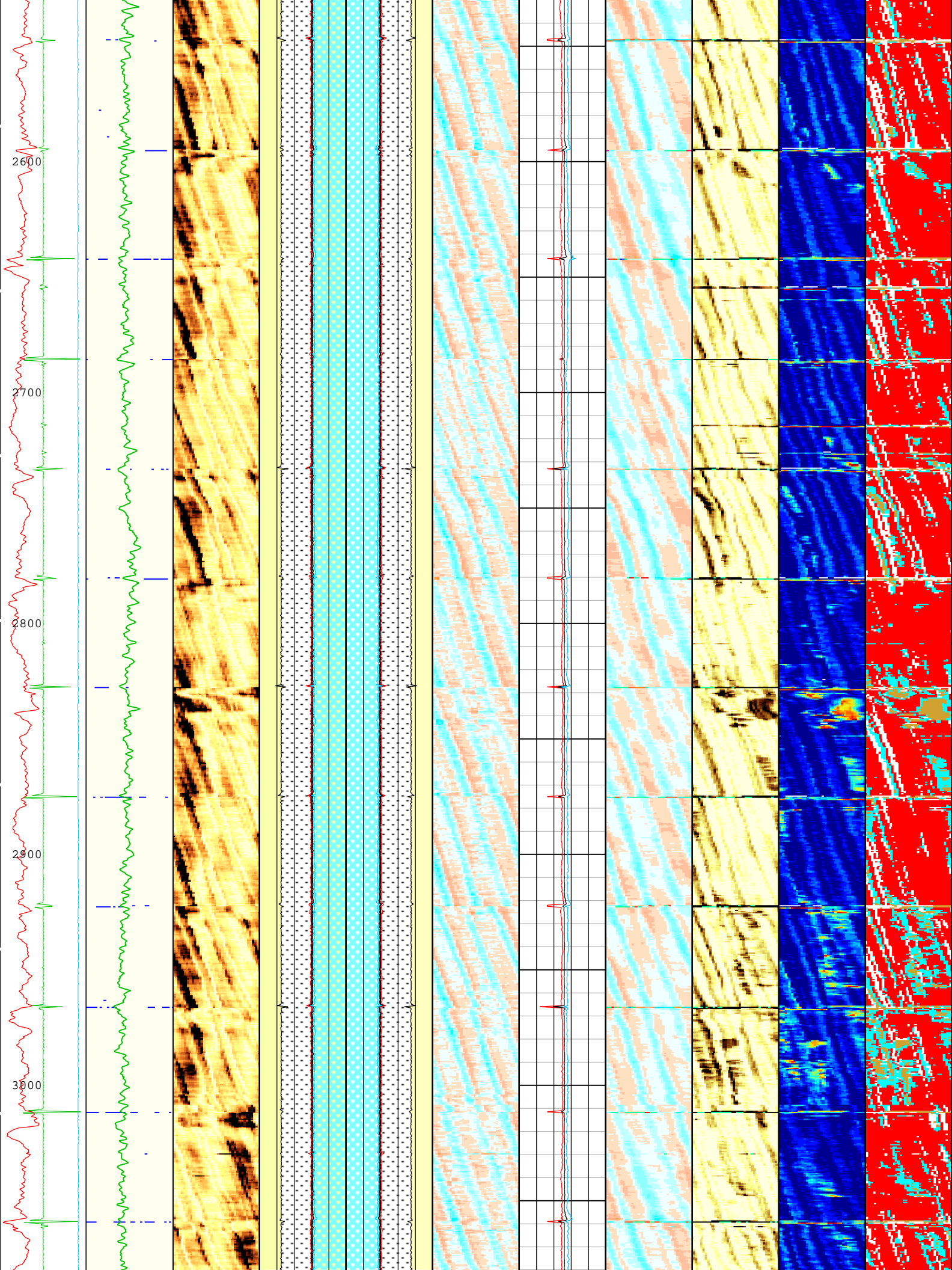


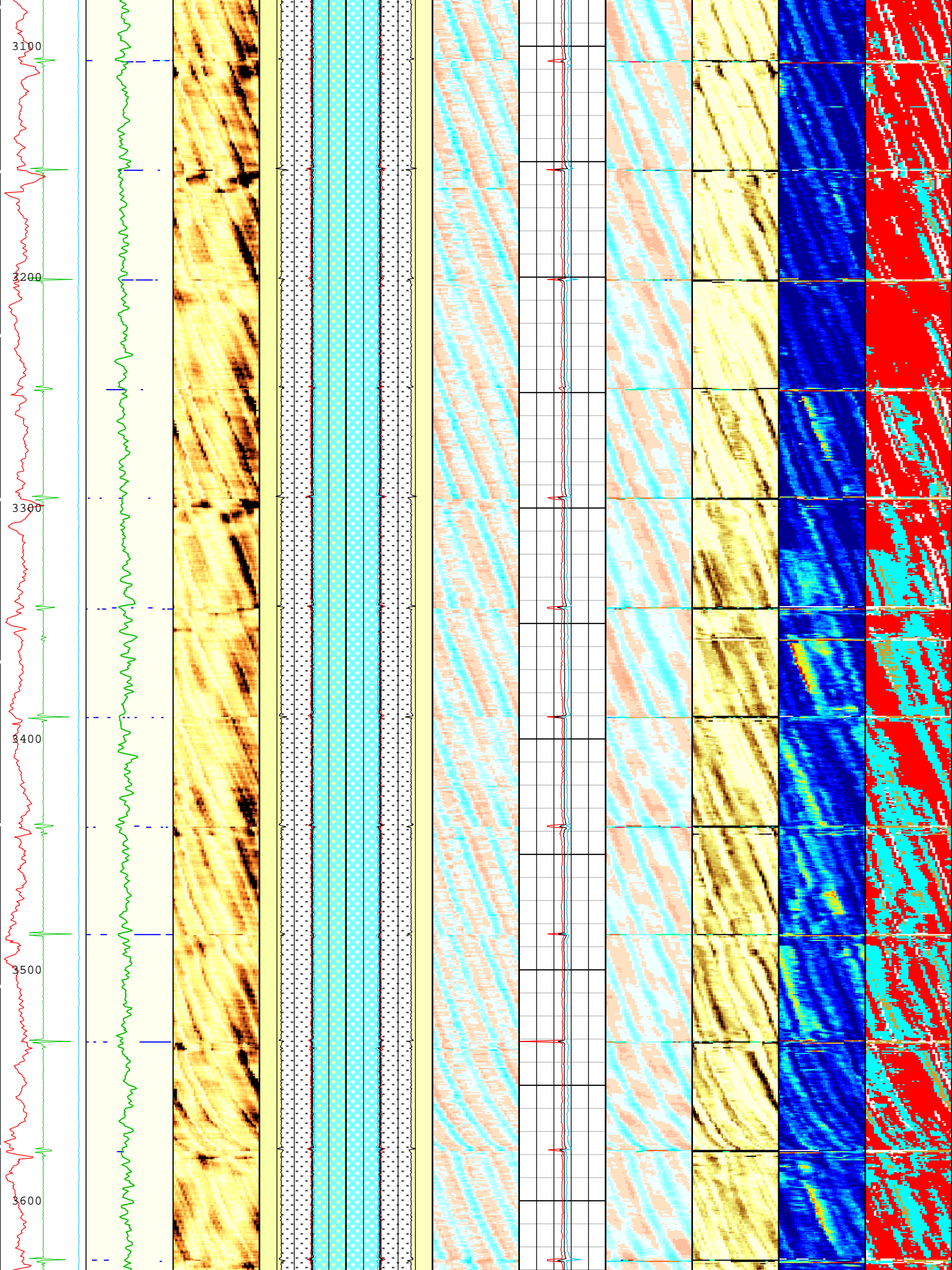


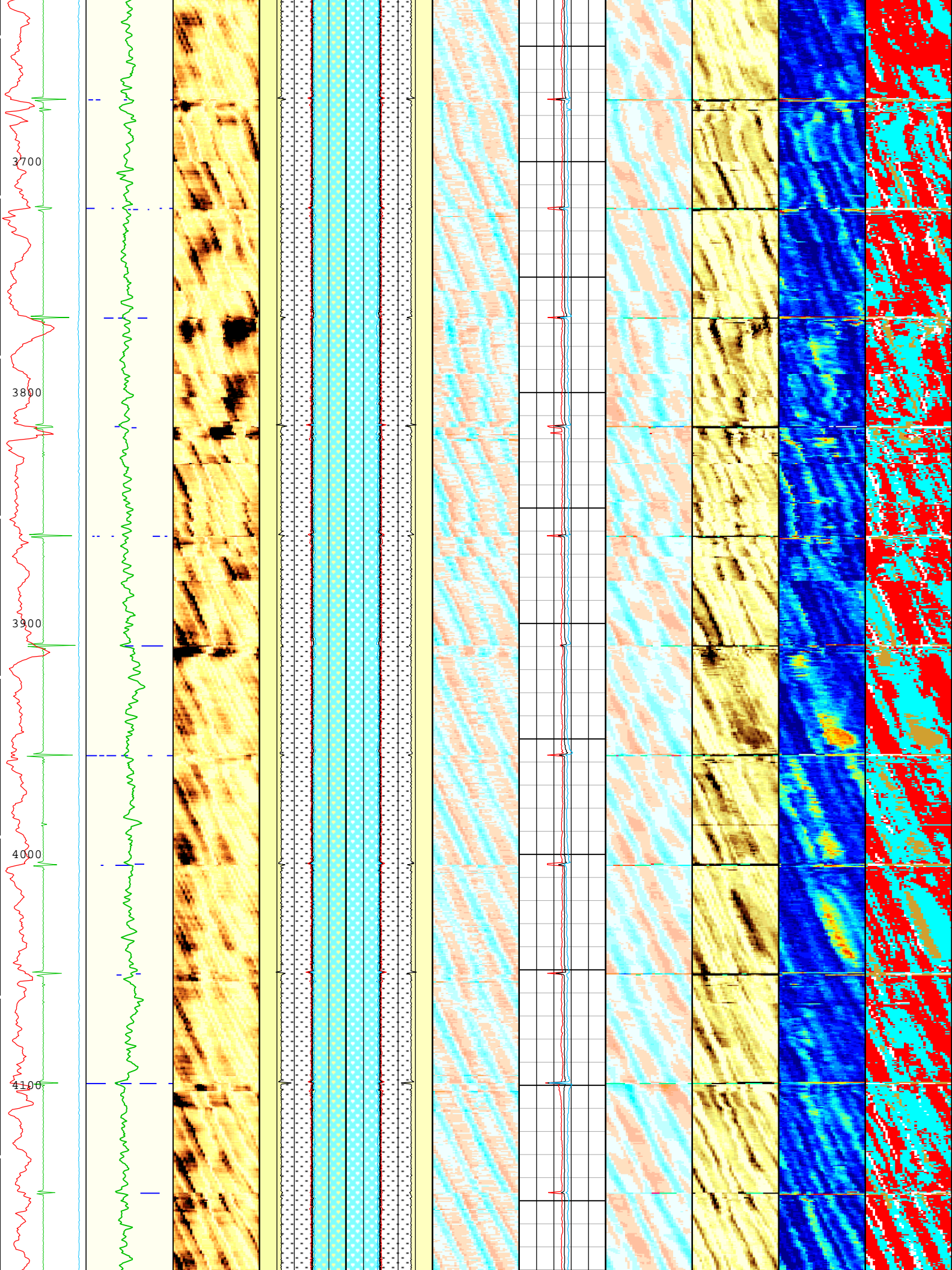


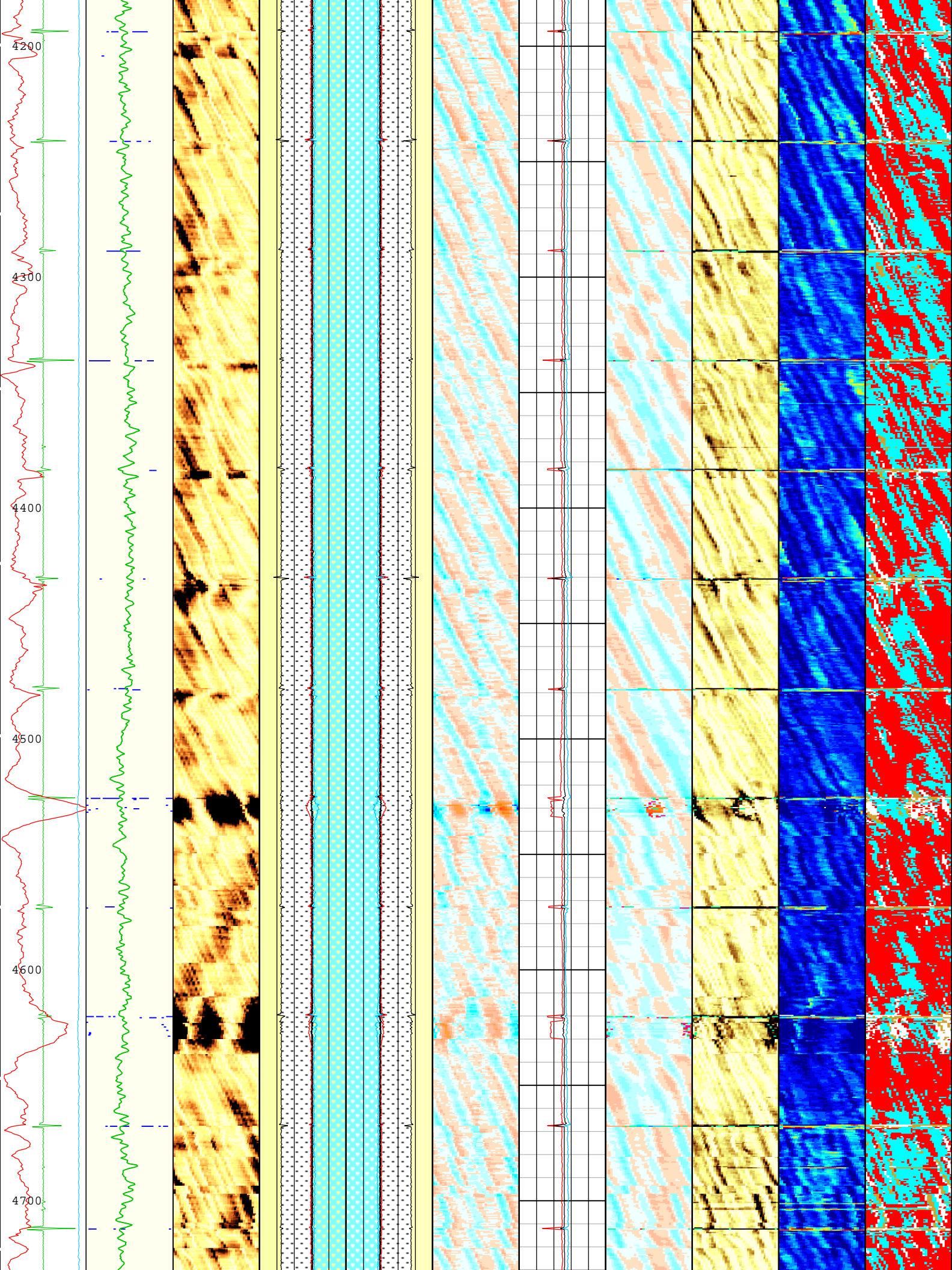


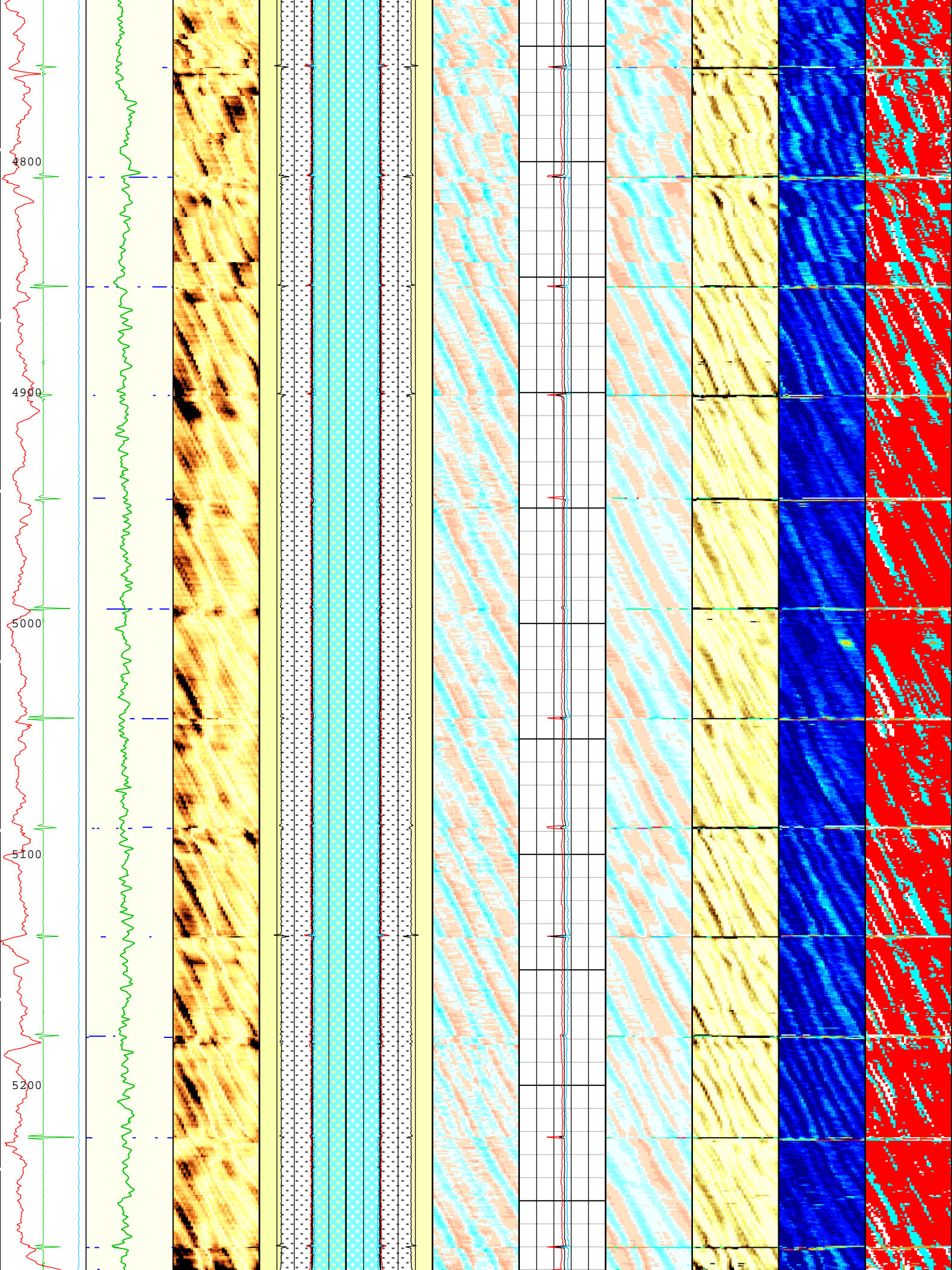


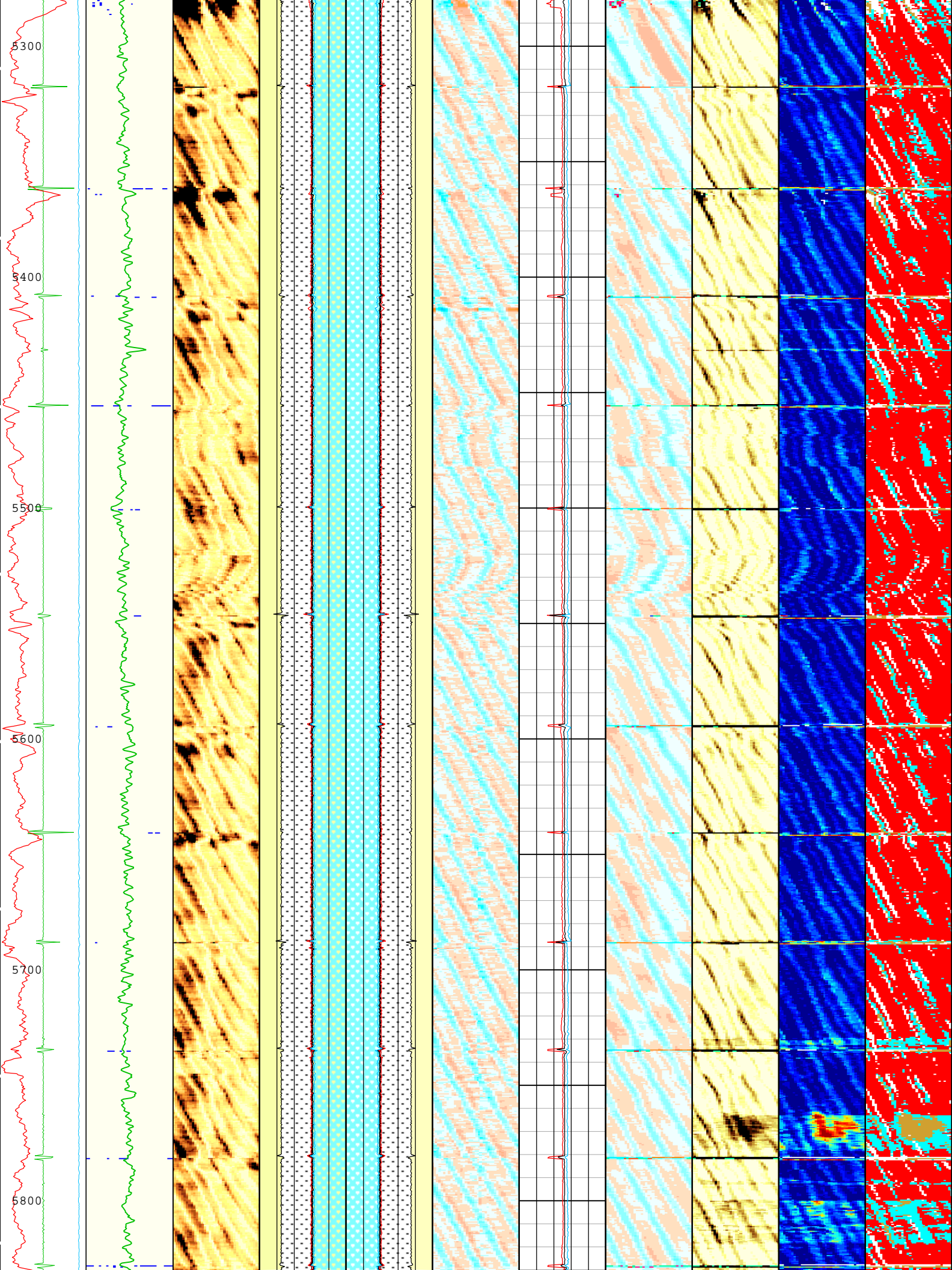


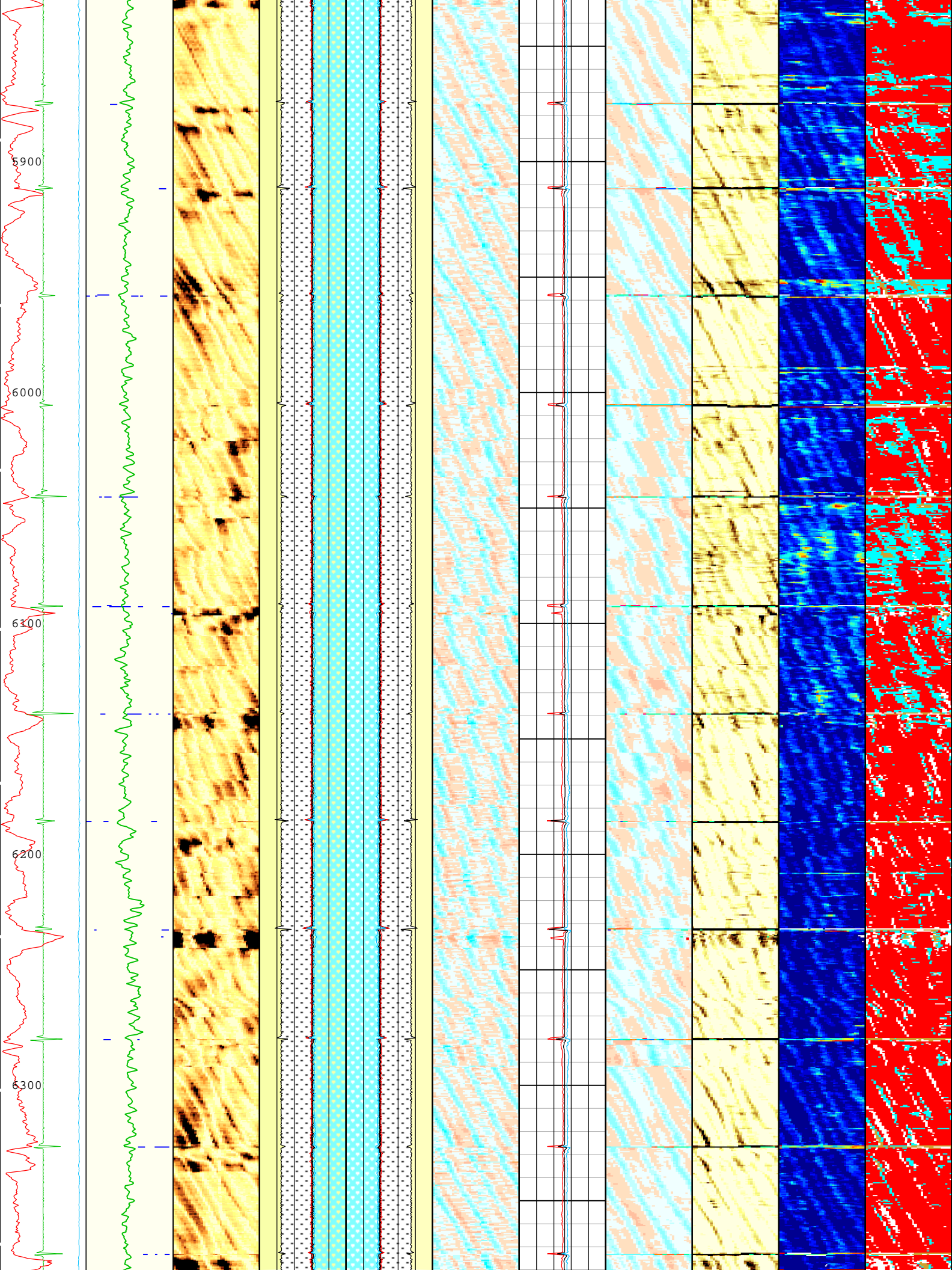


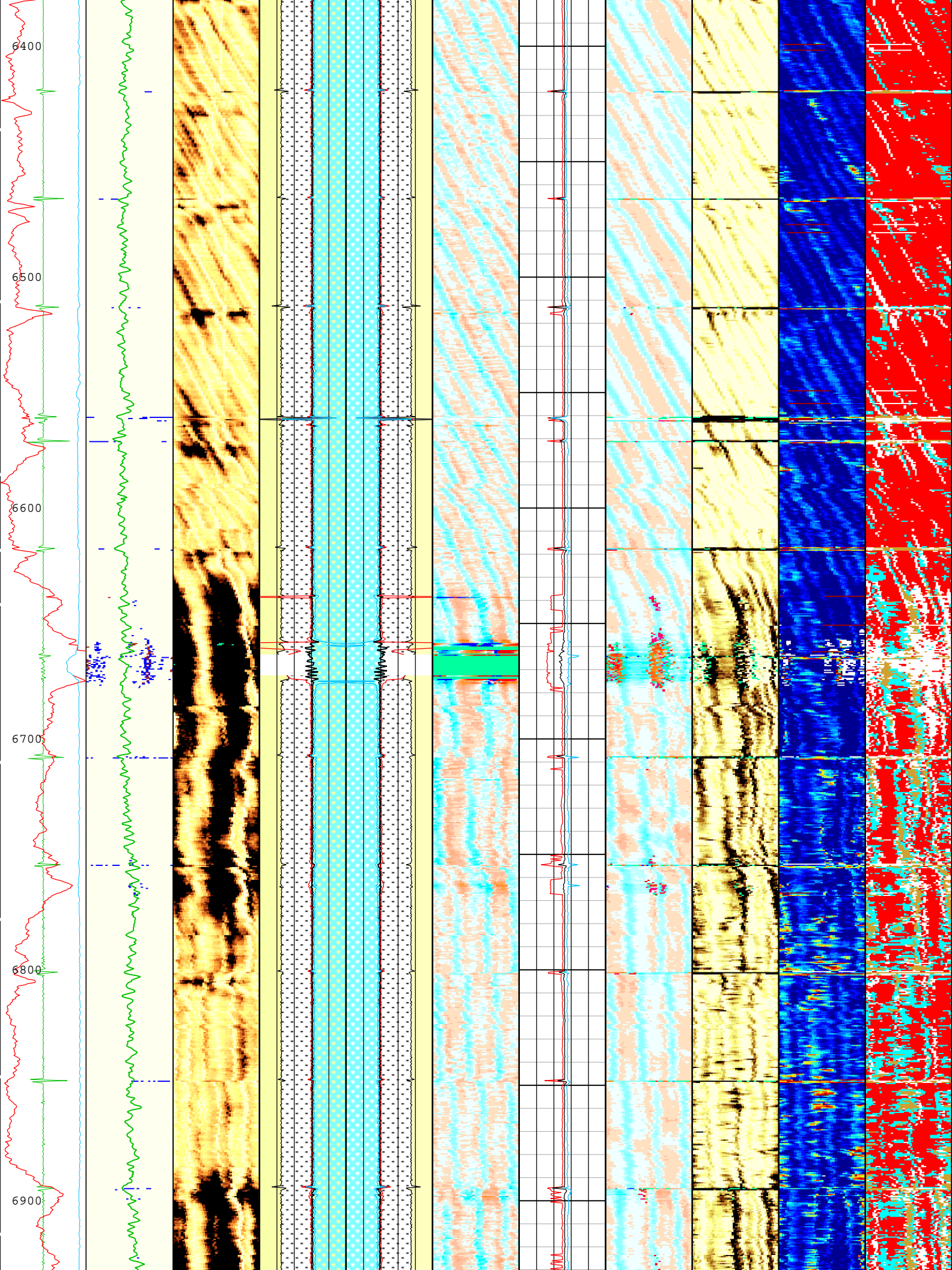


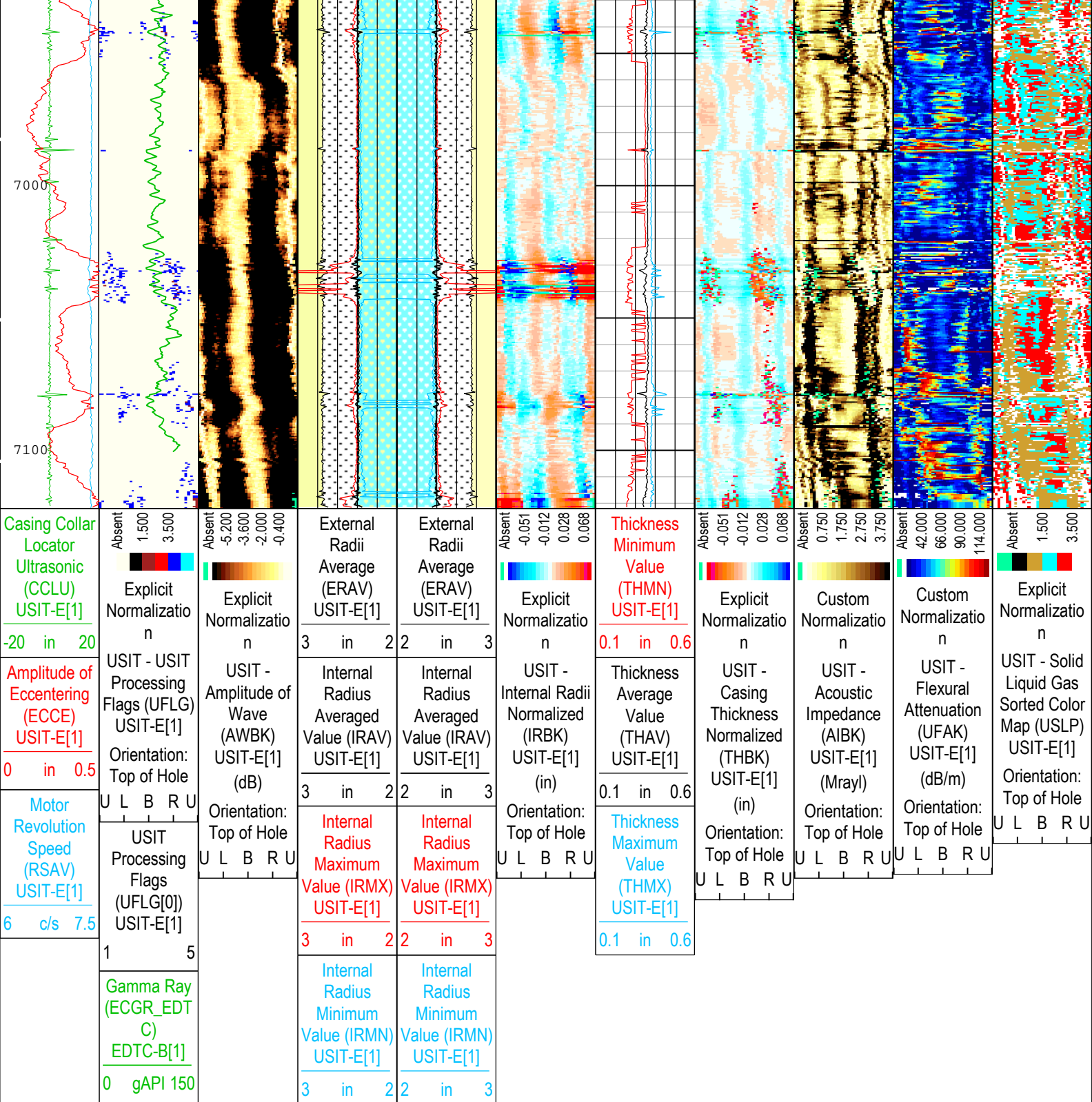












TIME_1900 - Time Marked every 60.00 (s)

USIT Processing Flags (UFLG[0]) USIT-E[1]

- 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 Composite Format: Log (IBC SLG Composite) Index Scale: 2 in per 100 ft Index Unit: ft Index Type: Measured Depth
Creation Date: 27-Nov-2018 12:53:23

Channel Processing Parameters

One: Parameters

Parameter	Description	Tool	Value	Unit
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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	12116	ft
CDEN	Cement Density	USIT-E	12	lbm/gal
CDEN	Cement Density	EDTC-B	16.69	lbm/gal
CMTY(U-USIT_CEMT)	Cement Type	USIT-E	Light Cement	
DFD	Drilling Fluid Density	Borehole	8.4	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	204	us/ft
FD	Fluid Density	USIT-E	10.7	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	1.32	dB/m
IBC_FVEL_SEL	IBC Fluid Velocity Selection	USIT-E	Automatic	
IBC_OFFSET_SEL	IBC Flexural Offset Selector	USIT-E	IBC_FRP_OFFSET	
IBC_ZMUD_SEL	IBC Mud Impedance Selection	USIT-E	FreePipe Norm.	
ICE_PROCESS	ICE Processing	USIT-E	Yes	
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	1.19	
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	USIT-E	1.75	Mrayl
U-USIT_UFAO	SIT Flexural Attenuation Offset	USIT-E	-9.41	dB/m
U-USIT_UIAP	IBC Answer Product Enabled	USIT-E	SolidLiquidGasMap	
ZMUD	Acoustic Impedance of Mud	Borehole	1.7	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement	USIT-E	2.6	Mrayl
ZTGS	Acoustic Impedance Threshold for Gas	USIT-E	0.3	Mrayl

OneDepth Zoned Parameters			
Parameter	Value	Start (ft)	Stop (ft)
BS	12.25	50	2394
BS	8.5	2394	7122

All depth are actual.

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	Time Zoned	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	Time Zoned	us
U-USIT_UNWB	Near Receiver Window Begin Time	USIT-E	Time Zoned	us
U-USIT_UNWE	Near Receiver Window End Time	USIT-E	Time Zoned	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	Time Zoned	us

OneTime Zoned Parameters

Pass Log[4]:Up

Parameter	Value	Start Time	Stop Time	Start Depth (ft)	Stop Depth (ft)
EMXV	80	22-Nov-2018 16:27:37	22-Nov-2018 16:37:01	7122.84	6618.34
U-USIT_UFWB	136	22-Nov-2018 16:27:02	22-Nov-2018 16:27:53	7122.84	7108.64
U-USIT_UFWB	126.03	22-Nov-2018 16:27:53	22-Nov-2018 16:28:12	7108.64	7095.24
U-USIT_UFWB	110.44	22-Nov-2018 16:28:12	22-Nov-2018 16:37:01	7095.24	6618.34
U-USIT_UFWE	176	22-Nov-2018 16:27:02	22-Nov-2018 16:27:51	7122.84	7111.65
U-USIT_UFWE	187.37	22-Nov-2018 16:27:51	22-Nov-2018 16:28:39	7111.65	7072.87
U-USIT_UFWE	197.43	22-Nov-2018 16:28:39	22-Nov-2018 16:34:47	7072.87	6656.49
U-USIT_UFWE	203.71	22-Nov-2018 16:34:47	22-Nov-2018 16:37:01	6656.49	6618.34
U-USIT_UNWB	105	22-Nov-2018 16:27:02	22-Nov-2018 16:27:56	7122.84	7106.58
U-USIT_UNWB	92.34	22-Nov-2018 16:27:56	22-Nov-2018 16:28:07	7106.58	7099.04
U-USIT_UNWB	77.76	22-Nov-2018 16:28:07	22-Nov-2018 16:37:01	7099.04	6618.34
U-USIT_UNWE	145	22-Nov-2018 16:27:02	22-Nov-2018 16:27:49	7122.84	7114.12
U-USIT_UNWE	161.73	22-Nov-2018 16:27:49	22-Nov-2018 16:28:37	7114.12	7074.65
U-USIT_UNWE	175.45	22-Nov-2018 16:28:37	22-Nov-2018 16:37:01	7074.65	6618.34
WINB	31.37	22-Nov-2018 16:27:02	22-Nov-2018 16:27:59	7122.84	7104.52
WINB	22.74	22-Nov-2018 16:27:59	22-Nov-2018 16:34:43	7104.52	6660.44
WINB	32.74	22-Nov-2018 16:34:43	22-Nov-2018 16:34:51	6660.44	6652.08
WINB	27.37	22-Nov-2018 16:34:51	22-Nov-2018 16:37:01	6652.08	6618.34
WINE	71.37	22-Nov-2018 16:27:02	22-Nov-2018 16:27:48	7122.84	7115.42
WINE	78.78	22-Nov-2018 16:27:48	22-Nov-2018 16:28:00	7115.42	7103.68
WINE	72.14	22-Nov-2018 16:28:00	22-Nov-2018 16:28:17	7103.68	7091.54
WINE	71.77	22-Nov-2018 16:28:17	22-Nov-2018 16:28:18	7091.54	7090.8
WINE	73.25	22-Nov-2018 16:28:18	22-Nov-2018 16:28:32	7090.8	7079.26
WINE	77.25	22-Nov-2018 16:28:32	22-Nov-2018 16:28:48	7079.26	7064.29
WINE	82.62	22-Nov-2018 16:28:48	22-Nov-2018 16:28:55	7064.29	7055.89
WINE	80.32	22-Nov-2018 16:28:55	22-Nov-2018 16:33:09	7055.89	6767.77
WINE	71.88	22-Nov-2018 16:33:09	22-Nov-2018 16:33:37	6767.77	6736.12
WINE	79.55	22-Nov-2018 16:33:37	22-Nov-2018 16:34:41	6736.12	6663.39
WINE	87.23	22-Nov-2018 16:34:41	22-Nov-2018 16:35:02	6663.39	6639.36
WINE	83.39	22-Nov-2018 16:35:02	22-Nov-2018 16:37:01	6639.36	6618.34

Pass Log[6]:Up

EMXV	110	22-Nov-2018 16:53:36	22-Nov-2018 18:25:42	6618.34	50.34
U-USIT_UFWB	121.04	22-Nov-2018 16:51:00	22-Nov-2018 16:56:44	6618.34	6386.23
U-USIT_UFWB	111.62	22-Nov-2018 16:56:44	22-Nov-2018 18:25:42	6386.23	50.34
U-USIT_UFWE	199.52	22-Nov-2018 16:53:36	22-Nov-2018 18:25:42	6618.34	50.34
U-USIT_UNWB	87.55	22-Nov-2018 16:51:00	22-Nov-2018 16:56:48	6618.34	6381.12
U-USIT_UNWB	82.32	22-Nov-2018 16:56:48	22-Nov-2018 18:25:42	6381.12	50.34

U-USIT_UNWE	192.2	22-Nov-2018 16:51:00	22-Nov-2018 16:54:30	6618.34	6545.17
U-USIT_UNWE	188.01	22-Nov-2018 16:54:30	22-Nov-2018 16:54:31	6545.17	6543.57
U-USIT_UNWE	179.64	22-Nov-2018 16:54:31	22-Nov-2018 18:25:42	6543.57	50.34
WINB	31.37	22-Nov-2018 16:51:00	22-Nov-2018 16:55:22	6618.34	6482.15
WINB	27.37	22-Nov-2018 16:55:22	22-Nov-2018 16:56:33	6482.15	6397.82
WINB	29.67	22-Nov-2018 16:56:33	22-Nov-2018 18:25:42	6397.82	50.34
WINE	94.13	22-Nov-2018 16:51:00	22-Nov-2018 16:54:21	6618.34	6556.22
WINE	87.99	22-Nov-2018 16:54:21	22-Nov-2018 16:54:25	6556.22	6550.62
WINE	82.62	22-Nov-2018 16:54:25	22-Nov-2018 16:55:25	6550.62	6478.35
WINE	81.85	22-Nov-2018 16:55:25	22-Nov-2018 16:56:29	6478.35	6402.59
WINE	76.48	22-Nov-2018 16:56:29	22-Nov-2018 16:56:31	6402.59	6400.17
WINE	78.02	22-Nov-2018 16:56:31	22-Nov-2018 18:25:42	6400.17	50.34

All depth are at tool zero.

Composite 1

IBC Goodwin Compressed

Composite Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
One	Log[4]:Up	Up	6513.89 ft	7122.85 ft	22-Nov-2018 4:27:02 PM	22-Nov-2018 4:37:01 PM	ON	8.04 ft	Yes
One	Log[6]:Up	Up	49.98 ft	6823.46 ft	22-Nov-2018 4:51:00 PM	22-Nov-2018 6:25:42 PM	ON	8.32 ft	Yes

All depths are referenced to toolstring zero

Log

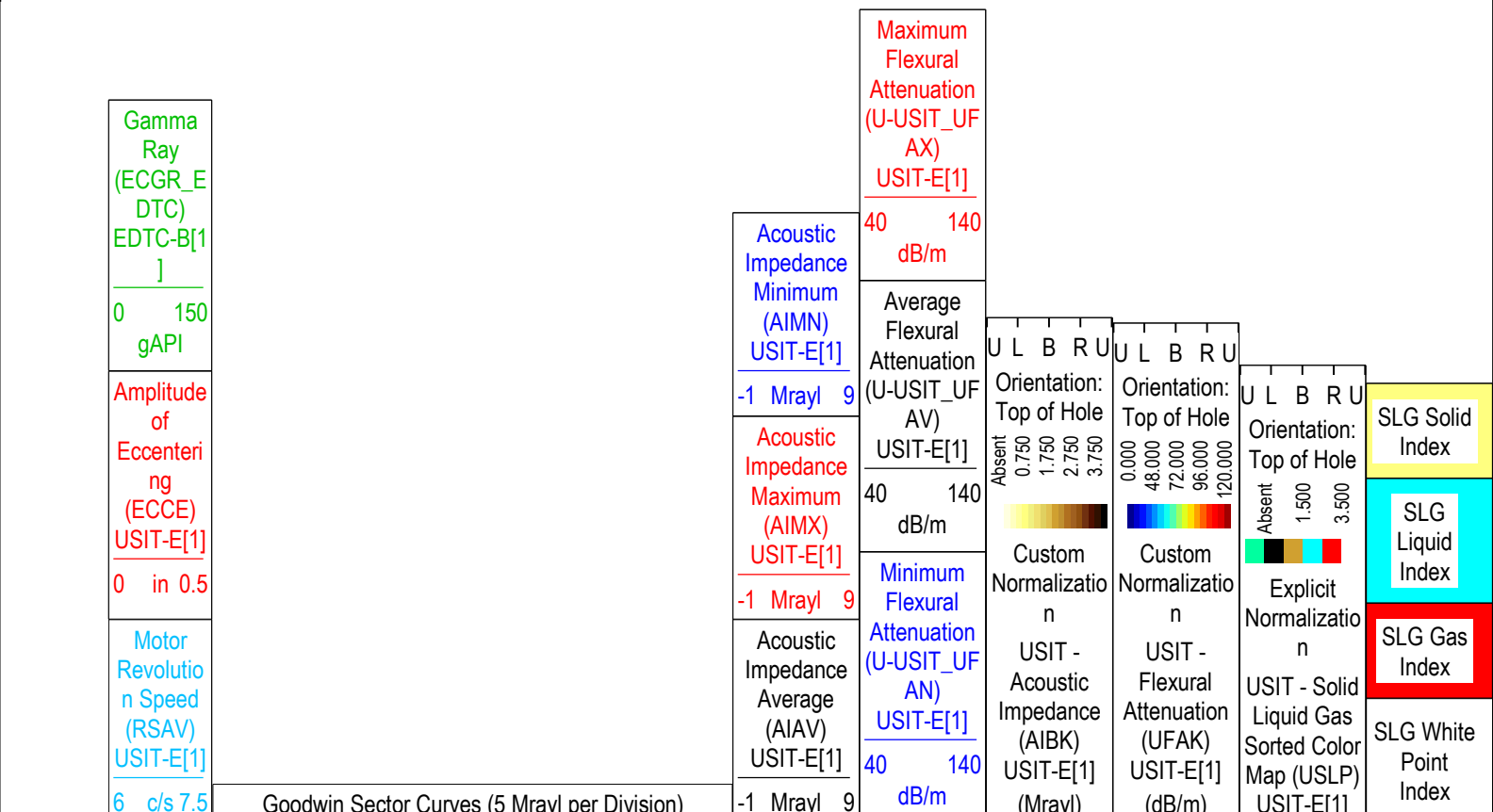
Company:Crestone Peak Resources Operating LLC

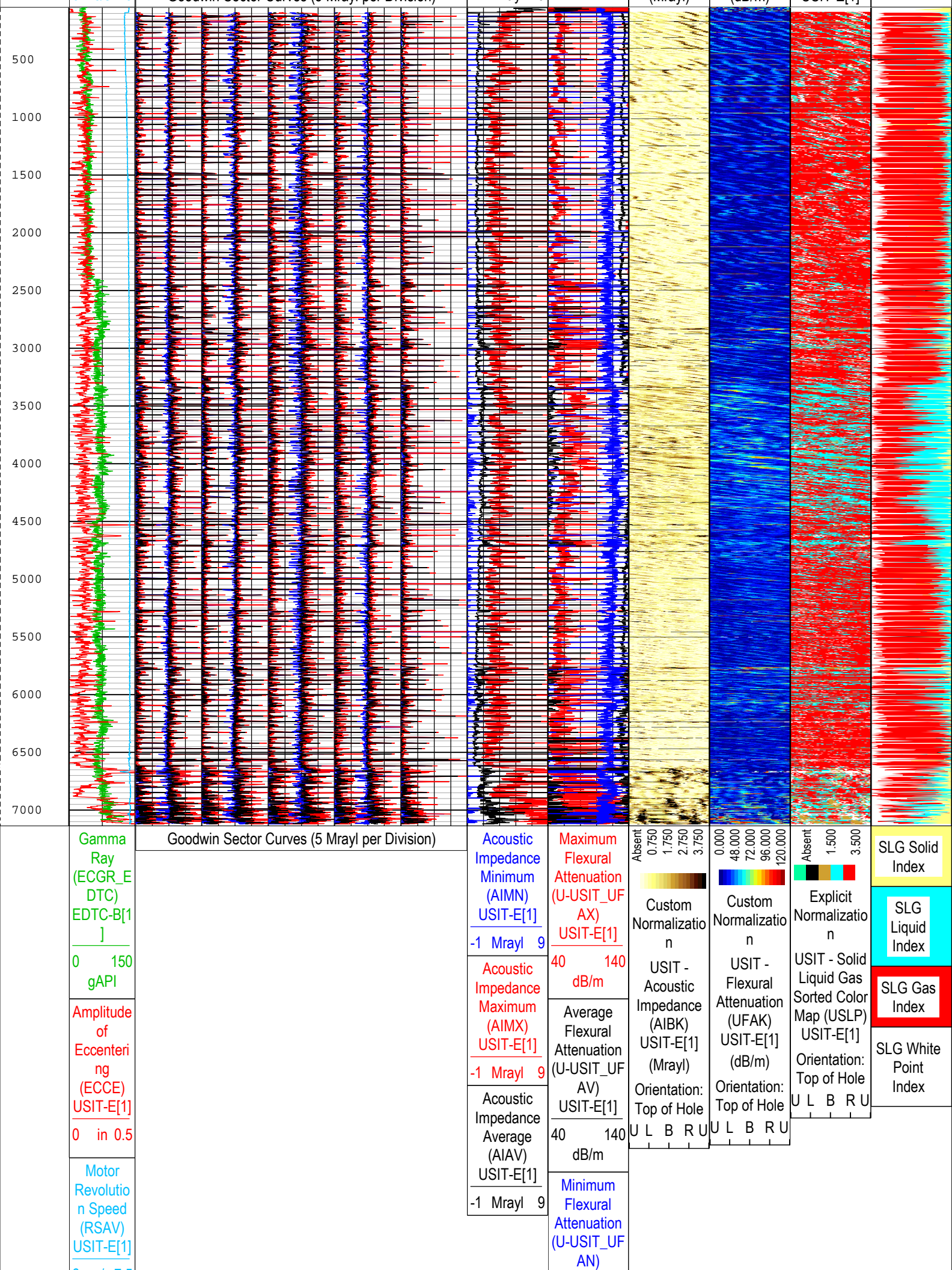
Well:Melbon Ranch 4F-17H-M265

Composite 1:S012

Description: USI Goodwin Format: Log (IBC Goodwin) Index Scale: 0.1 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 27-Nov-2018 12:53:40

TIME_1900 - Time Marked every 60.00 (s)





6 c/s 7.5

USIT-E[1]
40 140
dB/m

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: 27-Nov-2018 12:53:40

One

IBC SLG

Software Version

Acquisition System	Version
Maxwell 2018 SP2	8.2.104493.3100

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
One	Log[1]:Up	Up	2197.12 ft	2705.15 ft	22-Nov-2018 4:03:44 PM	22-Nov-2018 4:11:40 PM	ON	3.64 ft	Yes

All depths are referenced to toolstring zero

Log

Company:Crestone Peak Resources Operating LLC

Well:Melbon Ranch 4F-17H-M265

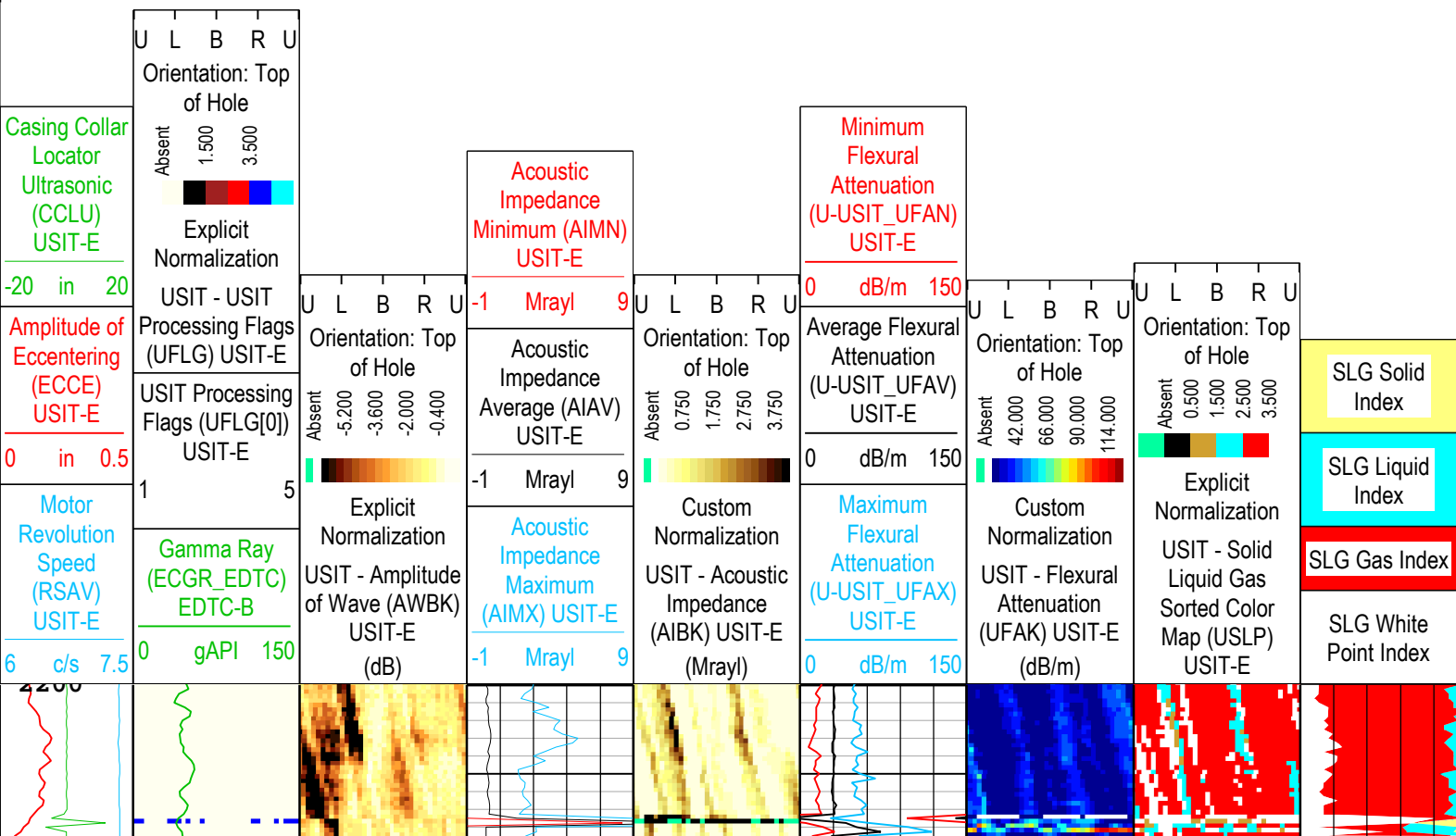
One: Log[1]:Up:S012

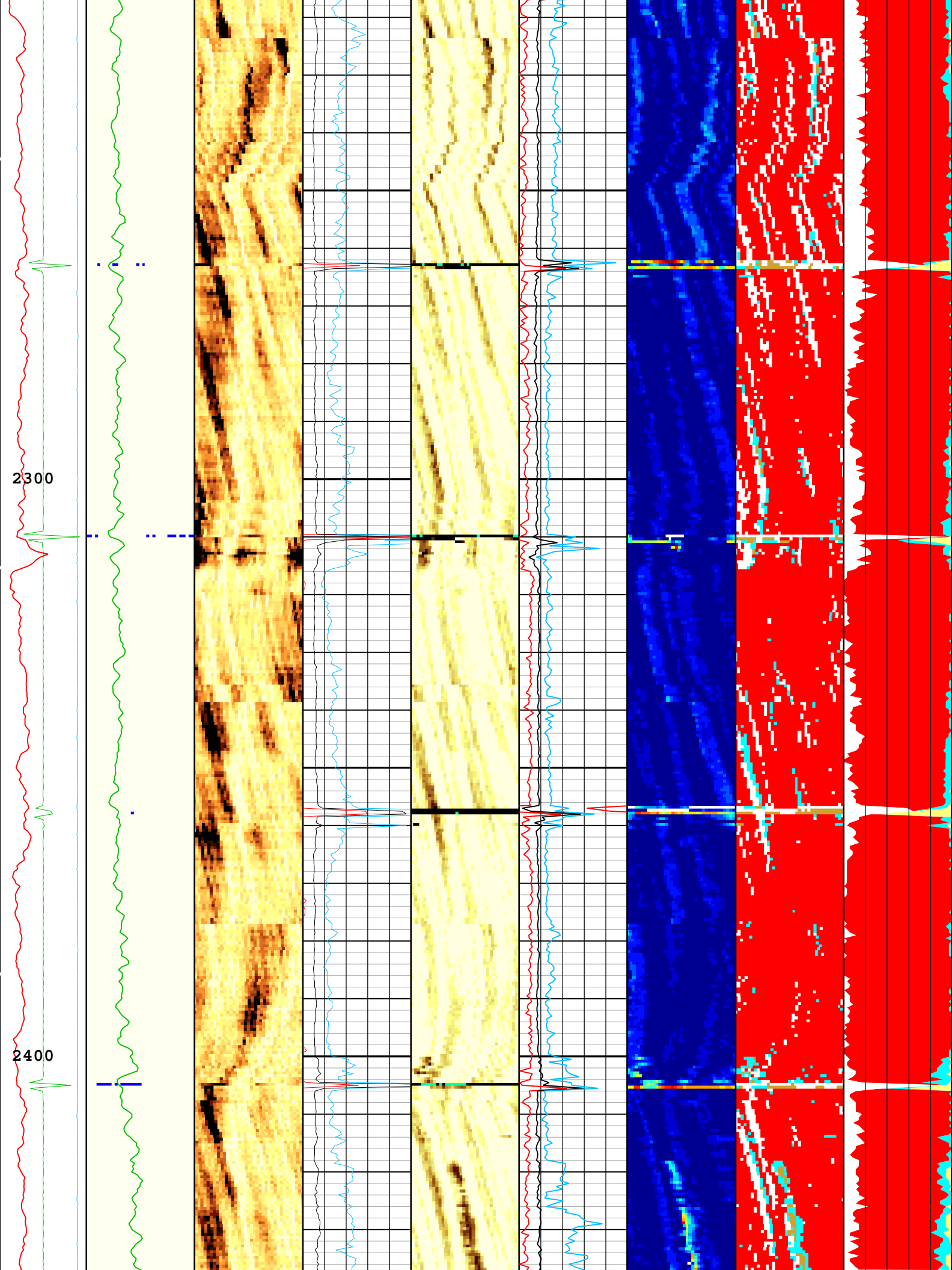
Description: USI IBC SLG Format: Log (IBC SLG) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 27-Nov-2018 12:53:46

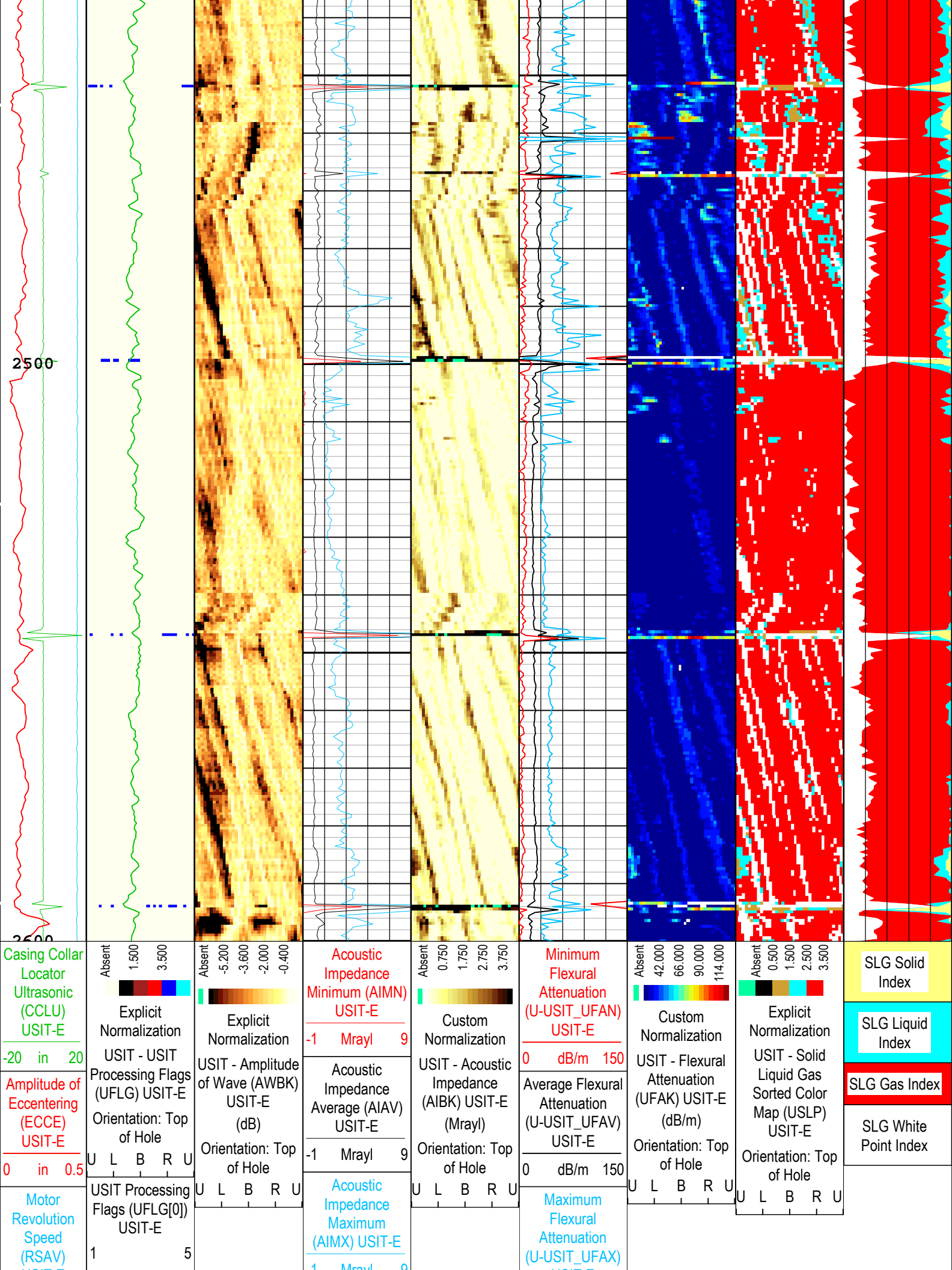
USIT Processing Flags (UFLG[0]) USIT-E

- | | |
|---|-----------------------------|
| 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)







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	12116	ft
CDEN	Cement Density	USIT-E	12	lbm/gal
CDEN	Cement Density	EDTC-B	16.69	lbm/gal
CMTY(U-USIT_CEMT)	Cement Type	USIT-E	Light Cement	
DFD	Drilling Fluid Density	Borehole	8.4	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	204	us/ft
FD	Fluid Density	USIT-E	10.7	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	1.32	dB/m
IBC_FVEL_SEL	IBC Fluid Velocity Selection	USIT-E	Automatic	
IBC_OFFSET_SEL	IBC Flexural Offset Selector	USIT-E	IBC_FRP_OFFSET	
IBC_ZMUD_SEL	IBC Mud Impedance Selection	USIT-E	FreePipe Norm.	
ICE_PROCESS	ICE Processing	USIT-E	Yes	
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	1.19	
MUD_N_THE	Theoretical Mud Normalization Factor	USIT-E	1	
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
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	1.75	Mrayl
U-USIT_UFAO	SIT Flexural Attenuation Offset	USIT-E	-9.41	dB/m
U-USIT_UIAP	IBC Answer Product Enabled	USIT-E	SolidLiquidGasMap	
USI_RPLUS	Ultrasonic R+ Processing	USIT-E	No	
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	1.7	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	12.25	2200	2394
BS	8.5	2394	2600
All depth are actual.			

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
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	80	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	Time Zoned	us
U-USIT_UNWB	Near Receiver Window Begin Time	USIT-E	Time Zoned	us
U-USIT_UNWE	Near Receiver Window End Time	USIT-E	Time Zoned	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	Time Zoned	us

Time Zone Parameters					
Parameter	Value	Start Time	Stop Time	Start Depth (ft)	Stop Depth (ft)
U-USIT_UFWB	136	22-Nov-2018 16:03:44	22-Nov-2018 16:07:53	2705.15	2462.66
U-USIT_UFWB	119.99	22-Nov-2018 16:07:53	22-Nov-2018 16:11:40	2462.66	2197.12

U-USIT_UFWE	176	22-Nov-2018 16:03:44	22-Nov-2018 16:04:23	2705.15	2700.18
U-USIT_UFWE	189.38	22-Nov-2018 16:04:23	22-Nov-2018 16:11:40	2700.18	2197.12
U-USIT_UNWB	105	22-Nov-2018 16:03:44	22-Nov-2018 16:04:28	2705.15	2693.65
U-USIT_UNWB	90.33	22-Nov-2018 16:04:28	22-Nov-2018 16:11:40	2693.65	2197.12
U-USIT_UNWE	145	22-Nov-2018 16:03:44	22-Nov-2018 16:04:27	2705.15	2695.38
U-USIT_UNWE	166.75	22-Nov-2018 16:04:27	22-Nov-2018 16:11:40	2695.38	2197.12
WINB	31.37	22-Nov-2018 16:03:44	22-Nov-2018 16:04:32	2705.15	2689.13
WINB	28.63	22-Nov-2018 16:04:32	22-Nov-2018 16:11:40	2689.13	2197.12
WINE	71.37	22-Nov-2018 16:03:44	22-Nov-2018 16:04:30	2705.15	2690.91
WINE	78.41	22-Nov-2018 16:04:30	22-Nov-2018 16:11:40	2690.91	2197.12

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[1]:Up	Up	2197.12 ft	2705.15 ft	22-Nov-2018 4:03:44 PM	22-Nov-2018 4:11:40 PM	ON	3.64 ft	Yes

All depths are referenced to toolstring zero

Log

Company:Crestone Peak Resources Operating LLC






Well:Melbon Ranch 4F-17H-M265

One: Log[1]:Up:S012

Description: USI IBC SLG Composite Format: Log (IBC SLG Composite) Index Scale: 2 in per 100 ft Index Unit: ft Index Type: Measured Depth
Creation Date: 27-Nov-2018 12:53:50

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

Casing Collar Locator Ultrasonic (CCLU) USIT-E

-20 in 20

Amplitude of Eccentering (ECCE) USIT-E

0 in 0.5

Motor Revolution Speed

U L B R U

Orientation: Top of Hole

Absent 1.500 3.500

Explicit Normalization

USIT - USIT Processing Flags (UFLG) USIT-E

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

1 5

Gamma Ray (ECGR) USIT-E

U L B R U

Orientation: Top of Hole

Absent -5.200 -3.600 -2.000 -0.400

Explicit Normalization

USIT - Amplitude of Wave

External Radii Average (ERAV) USIT-E

3 in 2

Internal Radius Averaged Value (IRAV) USIT-E

3 in 2

Internal Radius Maximum Value (IRMX) USIT-E

3 in 2

Internal Radius Minimum

2 in 3

External Radii Average (ERAV) USIT-E

2 in 3

Internal Radius Averaged Value (IRAV) USIT-E

2 in 3

Internal Radius Maximum Value (IRMX) USIT-E

2 in 3

Internal Radius Minimum

3 in 2

U L B R U

Orientation: Top of Hole

Absent -0.051 -0.012 0.028 0.068

Explicit Normalization

USIT - Internal Radii Normalized

Thickness Minimum Value (THMN) USIT-E

0.1 in 0.6

Thickness Average Value (THAV) USIT-E

0.1 in 0.6

Thickness Maximum Value

U L B R U

Orientation: Top of Hole

Absent -0.051 -0.012 0.028 0.068

Explicit Normalization

USIT - Casing Thickness Normalized

U L B R U

Orientation: Top of Hole

Absent 0.750 1.750 2.750 3.750

Custom Normalization

USIT - Acoustic Impedance

U L B R U

Orientation: Top of Hole

Absent 42.000 66.000 90.000 114.000

Custom Normalization

USIT - Flexural Attenuation

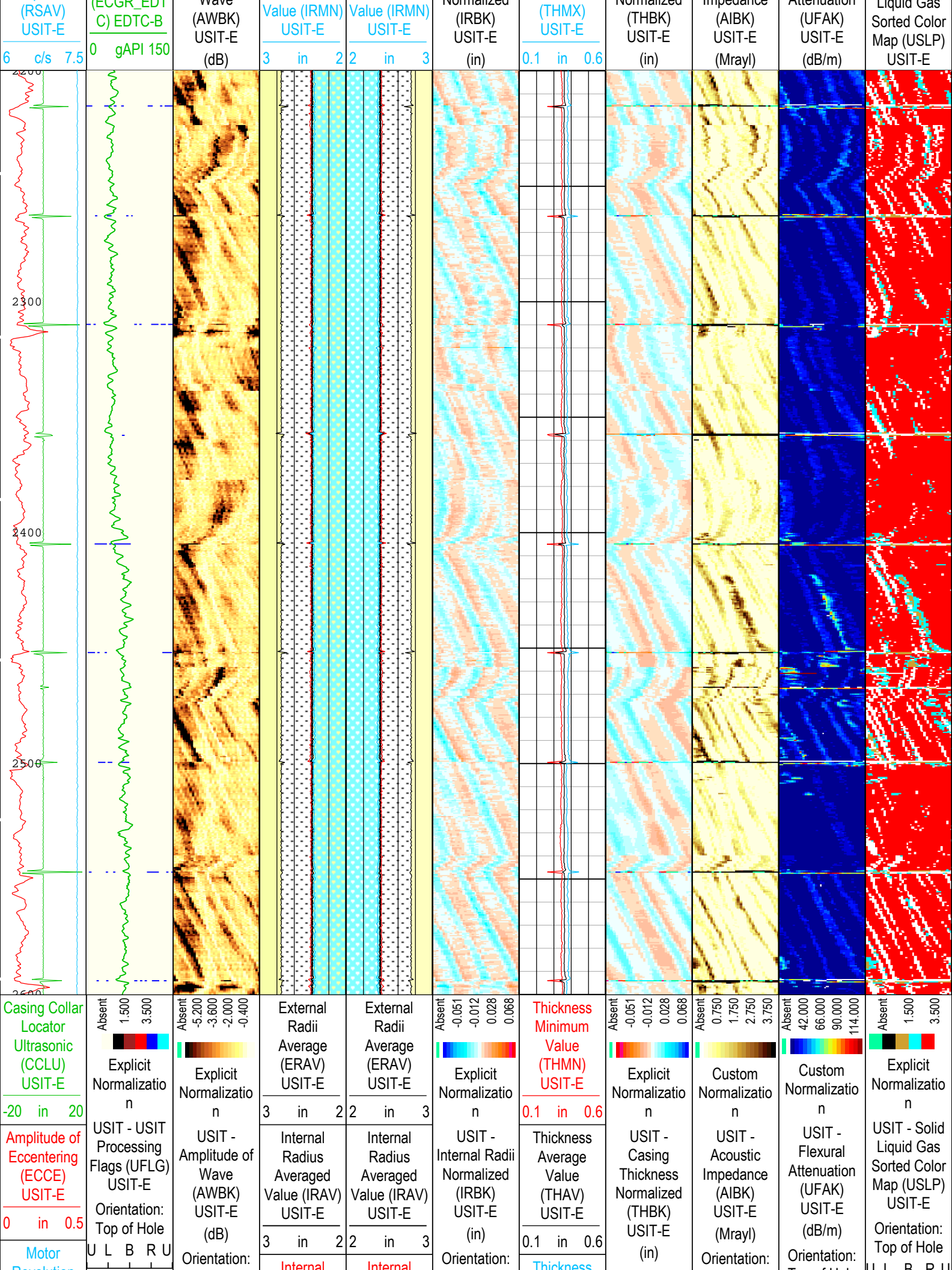
U L B R U

Orientation: Top of Hole

Absent 1.500 3.500

Explicit Normalization

USIT - Solid Liquid Co



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	12116	ft
CDEN	Cement Density	USIT-E	12	lbm/gal
CDEN	Cement Density	EDTC-B	16.69	lbm/gal
CMTY(U-USIT_CEMT)	Cement Type	USIT-E	Light Cement	
DFD	Drilling Fluid Density	Borehole	8.4	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	204	us/ft
FD	Fluid Density	USIT-E	10.7	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	1.32	dB/m
IBC_FVEL_SEL	IBC Fluid Velocity Selection	USIT-E	Automatic	
IBC_OFFSET_SEL	IBC Flexural Offset Selector	USIT-E	IBC_FRP_OFFSET	
IBC_ZMUD_SEL	IBC Mud Impedance Selection	USIT-E	FreePipe Norm.	
ICE_PROCESS	ICE Processing	USIT-E	Yes	
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	1.19	
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	USIT-E	1.75	Mrayl
U-USIT_UFAO	SIT Flexural Attenuation Offset	USIT-E	-9.41	dB/m
U-USIT_UIAP	IBC Answer Product Enabled	USIT-E	SolidLiquidGasMap	
ZMUD	Acoustic Impedance of Mud	Borehole	1.7	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement	USIT-E	2.6	Mrayl
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Depth Zone Parameters

Parameter	Value	Start (ft)	Stop (ft)
BS	12.25	2200	2394
BS	8.5	2394	2600

All depth are actual.

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	80	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	Time Zoned	us
U-USIT_UNWB	Near Receiver Window Begin Time	USIT-E	Time Zoned	us
U-USIT_UNWE	Near Receiver Window End Time	USIT-E	Time Zoned	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	Time Zoned	us

Time Zone Parameters

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WINE	78.41	22-Nov-2018 16:04:30	22-Nov-2018 16:11:40	2690.91	2197.12

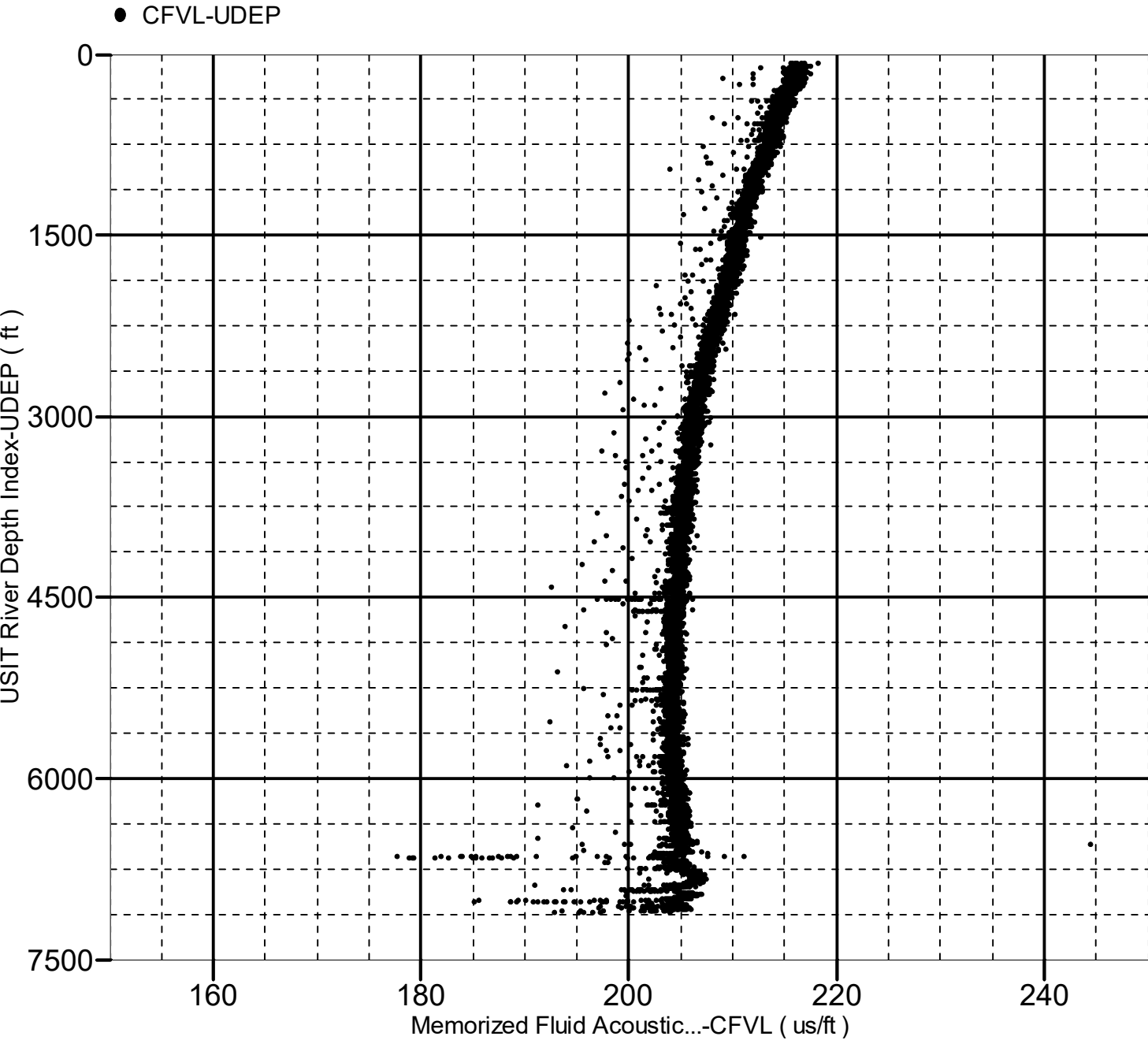
All depth are at tool zero.

XYZ

Company:Crestone Peak Resources Operating LLC Well:Melbon Ranch 4F-17H-M265
Composite 1:S012

Fluid Acoustic Slowness vs Depth
2D Cross Plot

Index Range: From 49.50 to 7122.00 ft



XYZ

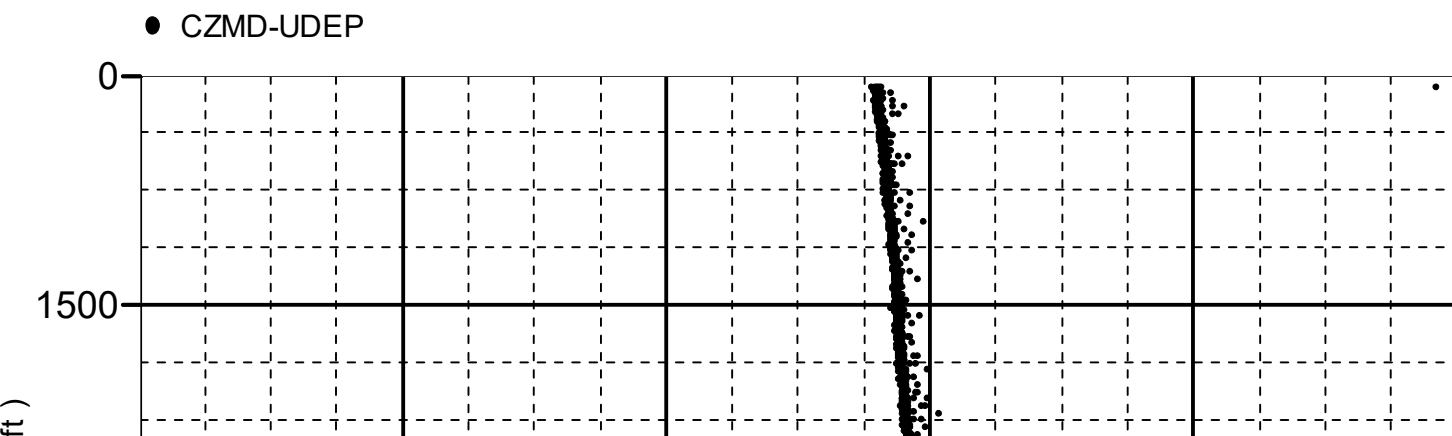
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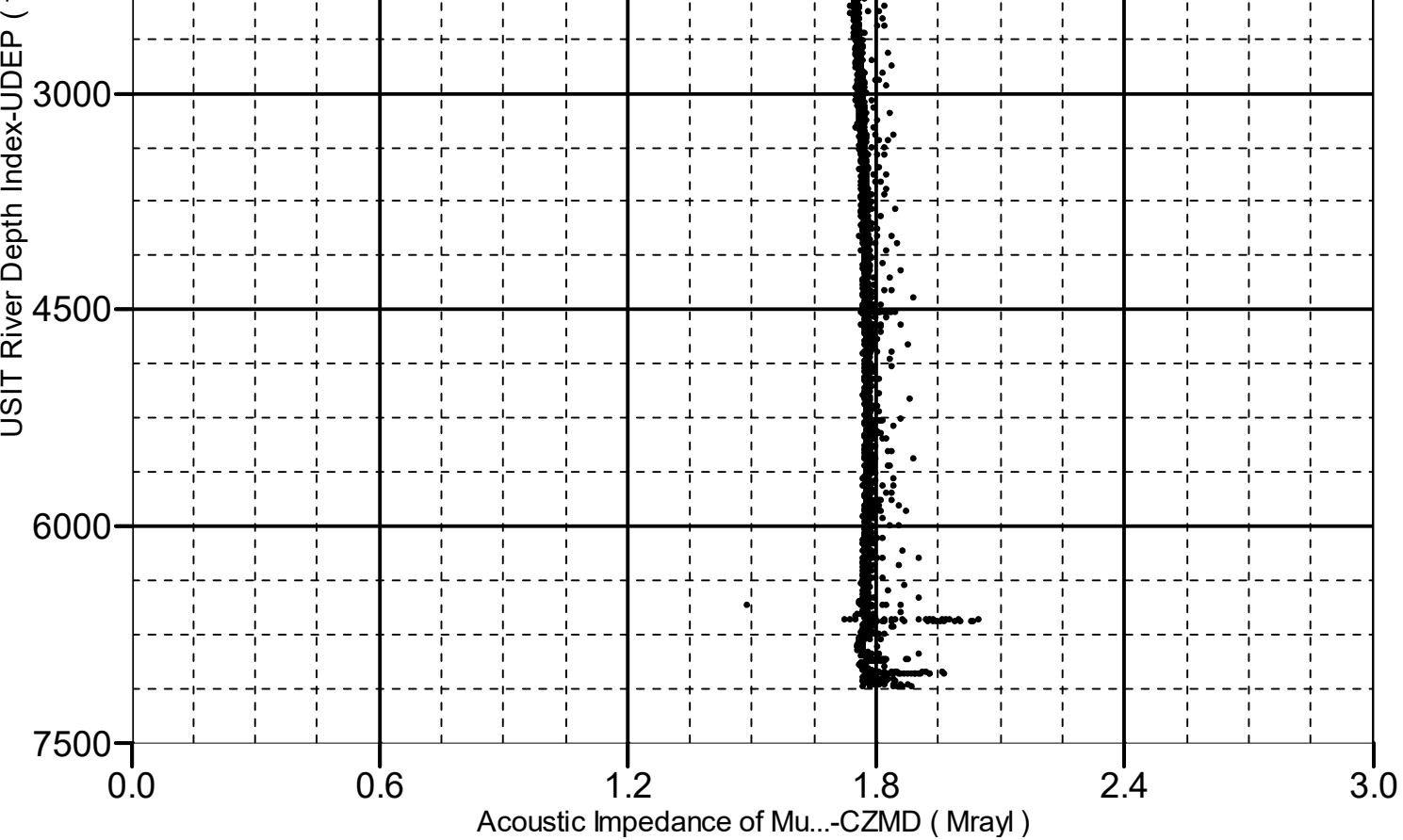
Composite 1:S012

Acoustic Impedance of M ud vs Depth

2D Cross Plot

Index Range: From 49.50 to 7122.00 ft





Company:	Crestone Peak Resources Operating LLC	Schlumberger
Well:	Melbon Ranch 4F-17H-M265	
Field:	Wattenburg	
County:	Weld	
State:	Colorado	
Isolation Scanner		
Cement Evaluation		
Gamma Ray - CCL Log		