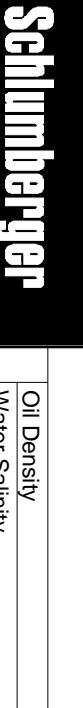


County: RIO BLANCO
Field: PICEANCE CREEK

Logg
Run N
Depth
Schlu
Bottom
Top L
Casin
Salini
Densi
Fluid
BIT/
Bit Si
From
To
Casin
Weigl
Gradd
From
To
Maxin
Logge
Unit N
Recon
Witne



Company: **EXXONMOBIL PRODUCTION CO**

Well: **PCU 197-34B7**
 Wellbore ID: **PICEANCE CREEK**
 Locality: **RIO BLANCO**

State: **COLORADO**

IMAGING BEHIND CASING
 ULTRASONIC TOOL
 GAMMA RAY / CCL

Location: SESE, 831' FSL & 951' FEL
 Well: PCU 197-34B7
 Company: EXXONMOBIL PRODUCTION CO

LOCATION		Elev.:	K.B.	6678.10 ft
SESE, 831' FSL & 951' FEL		G.L.	6647.90 ft	
		D.F.	6677.10 ft	
Permanent Datum:	GROUND LEVEL	Elev.:	6647.90 ft	
Log Measured From:	KELLY BUSHING	30.20 ft	above Perm. Datum	
Drilling Measured From:	KELLY BUSHING			
API Serial No.	05-103-11086-0C	Section	34	
Well Date	3-Nov-2009	Township	1S	Range 97W

Well Date	3-Nov-2009	Section	34	Township	1S	Range	97W
Well Number	1						
Driller	9220 ft						
Slumberger Depth	7402 ft						
Minimum Log Interval	7402 ft						
Log Interval	3500 ft						
Log Fluid Type	WBM						
Fluid Type	400 ppm						
Fluid Density	9.7 lbm/gal						
Fluid Level	10 ft						
BIT/CASING/TUBING STRING	9.875 in						
	3900 ft						
	9220 ft						
	7,000 in						
	26 lbm/ft						
	30.2 ft						
	9220 ft						
Maximum Recorded Temperatures	192 degF						
Logger On Bottom	3-Nov-2009						
Unit Number	2379	VERNAL					
Recorded By	Ryan Stewart						
Witnessed By	Stacy Guyote						

PVT DATA			
	Run 1	Run 2	Run 3
Oil Density			
Water Salinity	400 ppm		
Gas Gravity			
Bo			
Bw			
1/Bq			
Bubble Point Pressure			
Bubble Point Temperature			
Solution GOR			
Maximum Deviation	10 deg		
CEMENTING DATA			
Primary/Squeeze	Primary		
Casing String No			
Lead Cement Type	LIGHT		
Volume			
Density	10.5 lbm/gal		
Water Loss			
Additives			
Tail Cement Type			
Volume			
Density	12 lbm/gal		
Water Loss			
Additives			
Expected Cement Top	4000 ft		
Logging Date			
Run Number			
Depth Driller			
Slumberger 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			
Unit Number			
Recorded By			
Witnessed By			

DEPTH SUMMARY LISTING

Date Created: 3-NOV-2009 18:22:06

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B Serial Number: 6195 Calibration Date: 22-OCT-2009 Calibrator Serial Number: 33 Calibration Cable Type: 7-46P Wheel Correction 1: -13 Wheel Correction 2: -11	Type: CMTD-B/A Serial Number: 8093 Calibration Date: 17-OCT-200 Calibrator Serial Number: 1 Number of Calibration Points: 9 Calibration RMS: 23 Calibration Peak Error: 41	Type: 7-46V XS Serial Number: 709025 Length: 30100 FT Conveyance Method: Wireline Rig Type: LAND

Depth Control Parameters

Log Sequence: First Log In the Well
Rig Up Length At Surface: 211.00 FT
Rig Up Length At Bottom: 210.30 FT
Rig Up Length Correction: 0.70 FT
Stretch Correction: 7.50 FT
Tool Zero Check At Surface: 0.50 FT

Depth Control Remarks

1. All Schlumberger depth control policies followed
2. IDW used as primary depth reference, z-chart used as secondary reference
3.
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: IBC/USIT	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
Tool run as per tool sketch	
Tool run with 2 x gemcos and 2 x in-line centralizers	
Neutron run for gamma ray purpose only	
Transducer angle = 33 degrees	
Log taken from 7402 ft due to obstruction in well	
Vertical resolution = 6 inch	
Horizontal resolution = 5 degree	
UFAO = -14	
Max temp = 192 F	
IBC log stopped at 3500 ft at clients request	

RUN 1			RUN 2		
SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:			SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

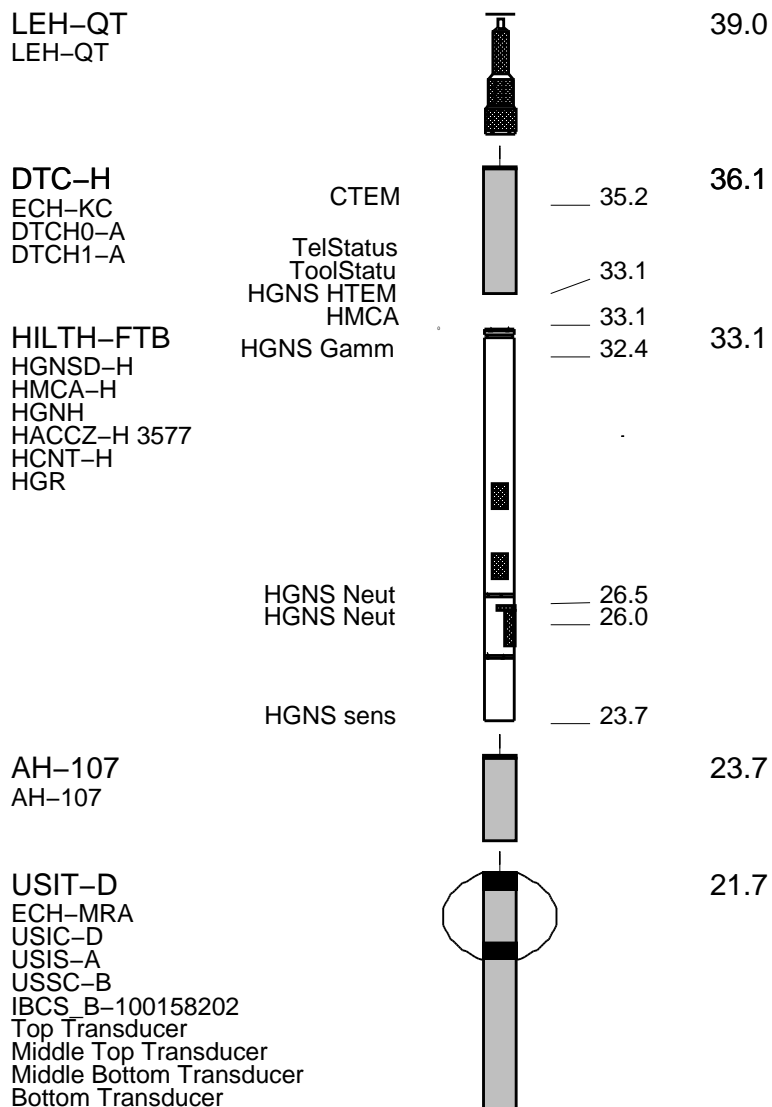
EQUIPMENT DESCRIPTION

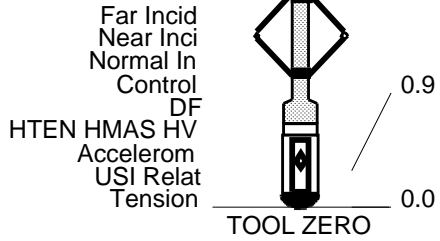
RUN 1	RUN 2
-------	-------

SURFACE EQUIPMENT

GSR-U/Y
NCT-B
CNB-AB
WITM (DTS)-A

DOWNHOLE EQUIPMENT





MAXIMUM STRING DIAMETER 7.50 IN
 MEASUREMENTS RELATIVE TO TOOL ZERO
 ALL LENGTHS IN FEET

Client: EXXONMOBIL PRODUCTION CO

Well: PCU 197-34B7

Field: PICEANCE CREEK

State: COLORADO

Country: USA

Drawing Date: 11/3/2009

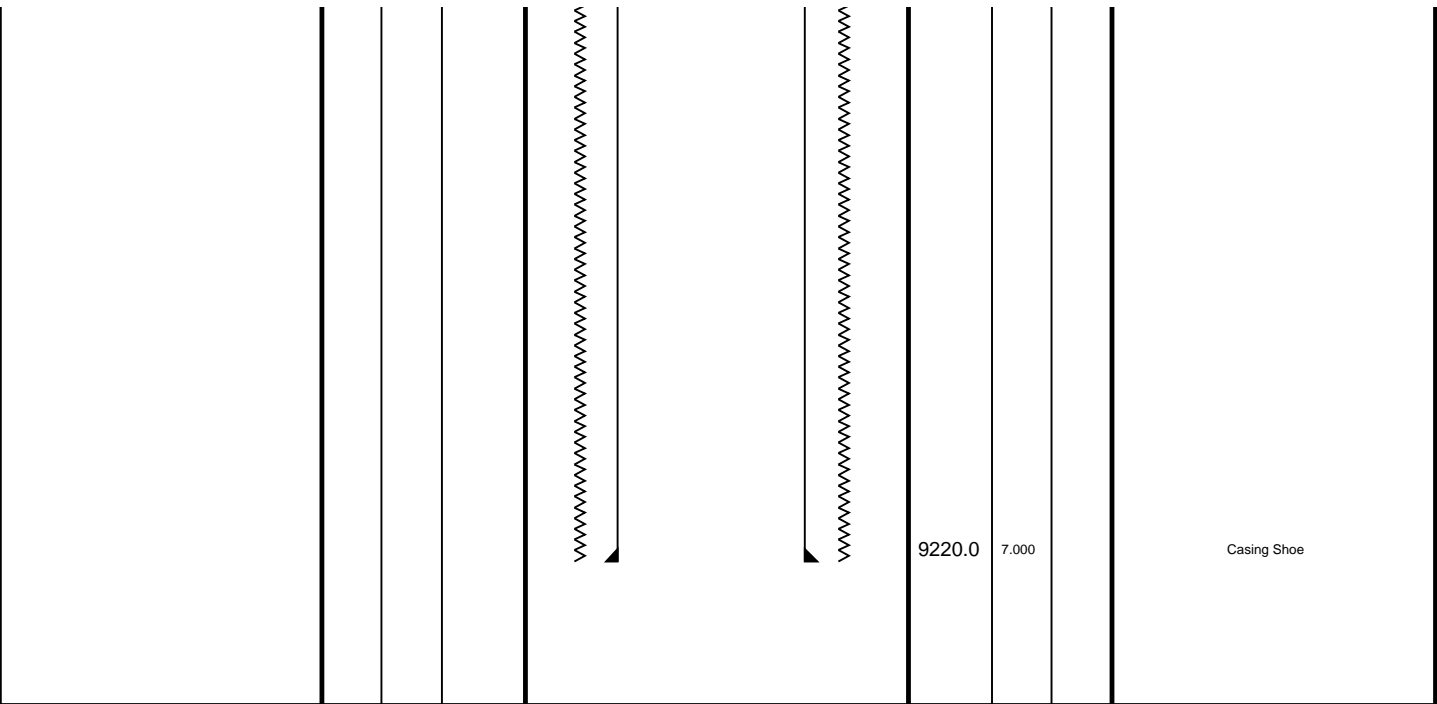
API #: 05-103-11086-00

Rig Name: Mast

Reference Datum: GROUND LEVEL

Elevation: 6647.8 ft

Production String	(in)		(ft)	Well Schematic		(ft)	(in)		Casing String
	OD	ID	MD			MD	OD	ID	
						30.2	10.000 7.000	10.750	Casing String Liner Hanger
						3900.0 3900.0	10.750 9.875		Casing Shoe Borehole Segment



IBC SLG COMPOSITE

MAXIS Field Log

Company: EXXONMOBIL PRODUCTION CO Well: PCU 197-34B7

Input DLIS Files

DEFAULT USI_TLD_MCFL_CNL_011LUP FN:10 PRODUCER 03-Nov-2009 14:08 7397.0 FT 199.5 FT

Output DLIS Files

DEFAULT USI_TLD_MCFL_CNL_014PUP FN:13 PRODUCER 03-Nov-2009 19:04

OP System Version: 17C0-154

Changed Parameter Summary

DLIS Name

New Value

Previous Value

Depth & Time

ZMUD

1.98 MRAY

2.1 MRAY

5001.5 19:08:26

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

RSAV (RSBV) (RPS)
6 7.5

CCL (CCLU) (----)
-20 20

Min of Internal radius (IRMN) (IN)	Min of Internal radius (IRMN) (IN)
3.7 2.7	2.7 3.7

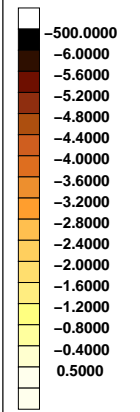
Internal radius Maximum (IRMX) (IN)	Internal radius Maximum (IRMX) (IN)
3.7 2.7	2.7 3.7

Maximum of Thickness (THMX) (IN)
0.1 0.6

Internal radius Average (IRAV) (IN)	Internal radius Average (IRAV) (IN)
3.7 2.7	2.7 3.7

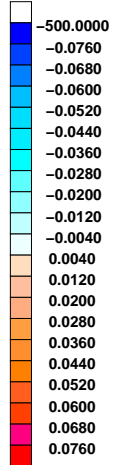
Average of Thickness (THAV) (IN)
0.1 0.6

Eccent. (ECCE) (IN)
0 0.5



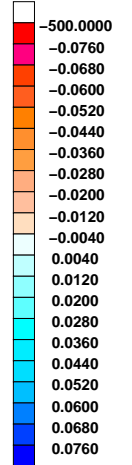
Amplitude of echo minus Max (AWBK) (DB)

External radius Average (ERAV) (IN)	External radius Average (ERAV) (IN)
3.7 2.7	2.7 3.7

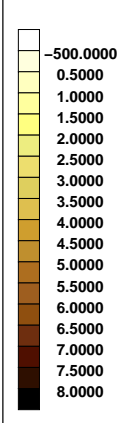


Internal radii minus Ave (IRBK) (IN)

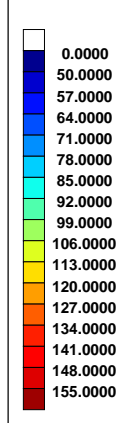
Min of Thickness (THMN) (IN)
0.1 0.6



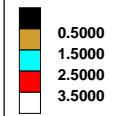
Thickness minus Ave (THBK) (IN)



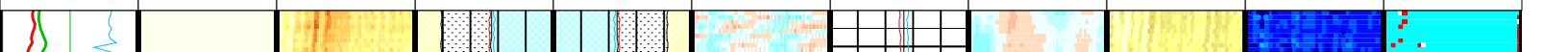
Raw Acoustic Imped. (AIBK) (MRAY)

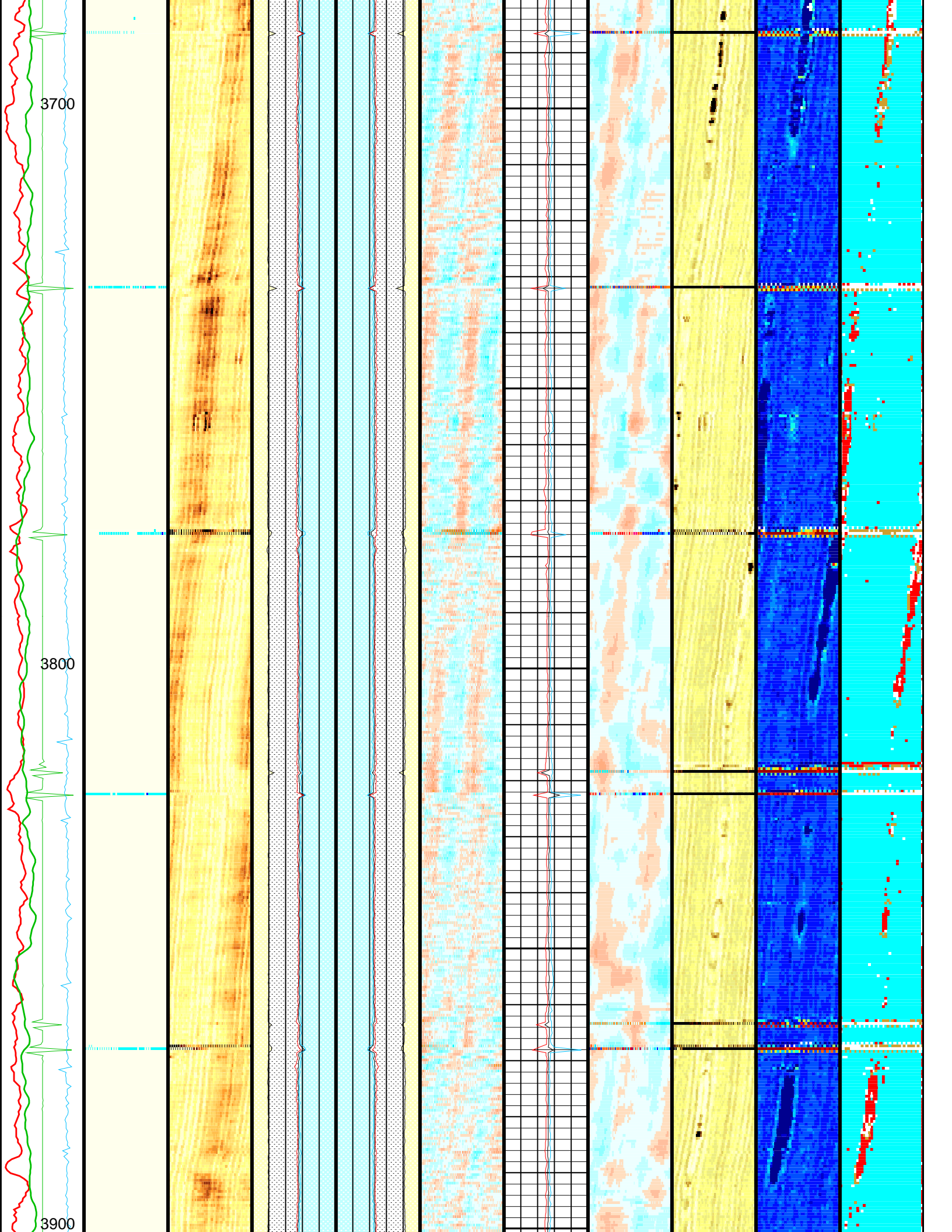


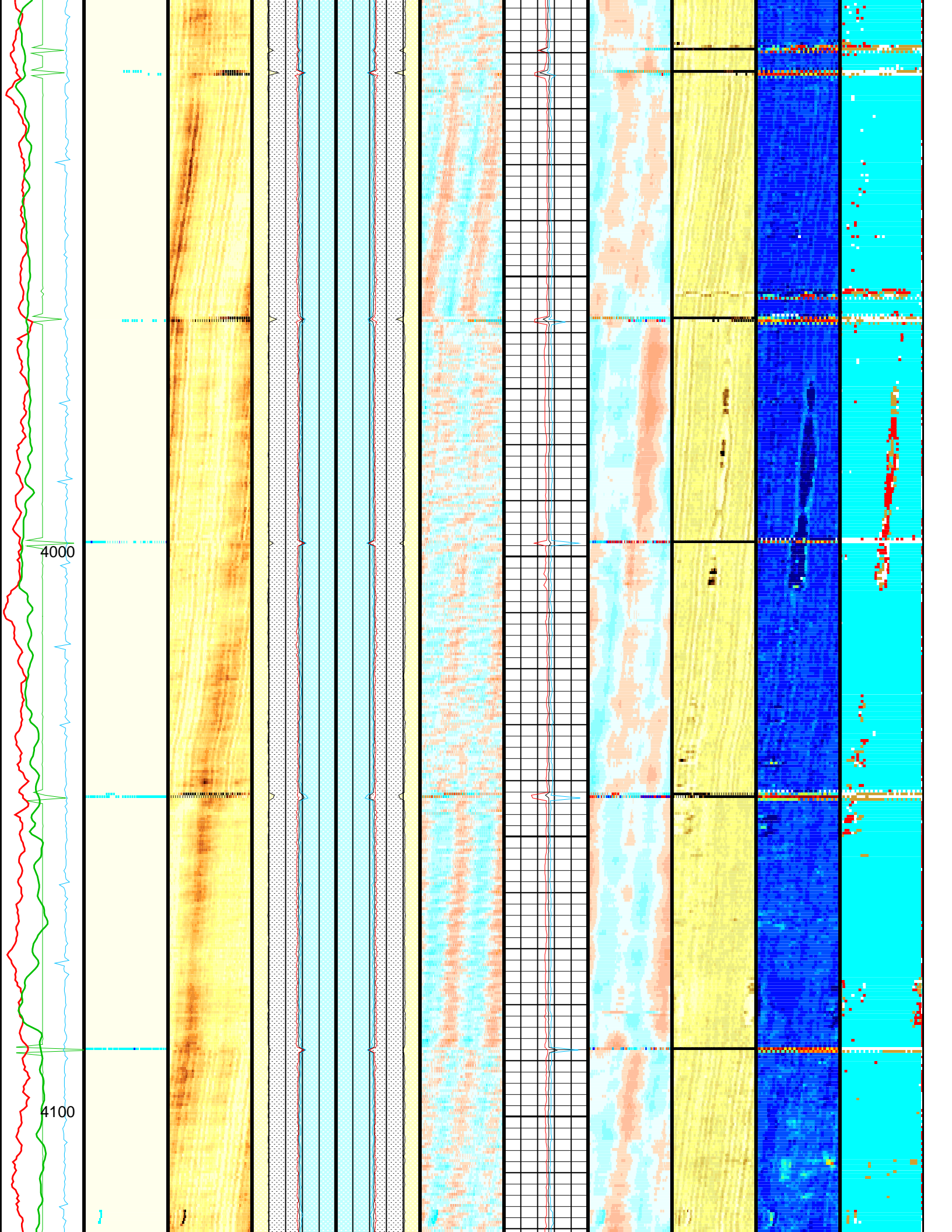
Flexural Attenuation (U-USIT_UFAK) (DB/M)

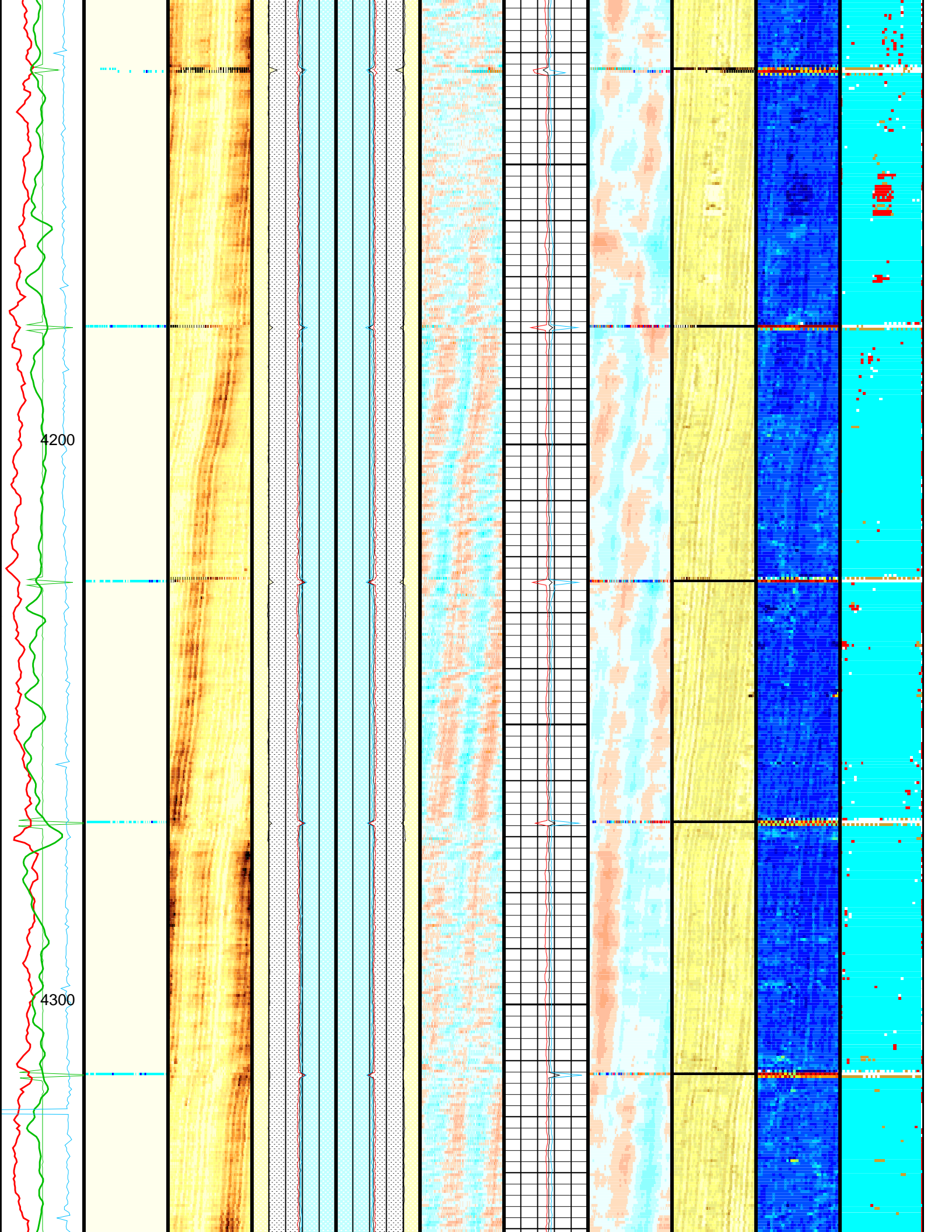


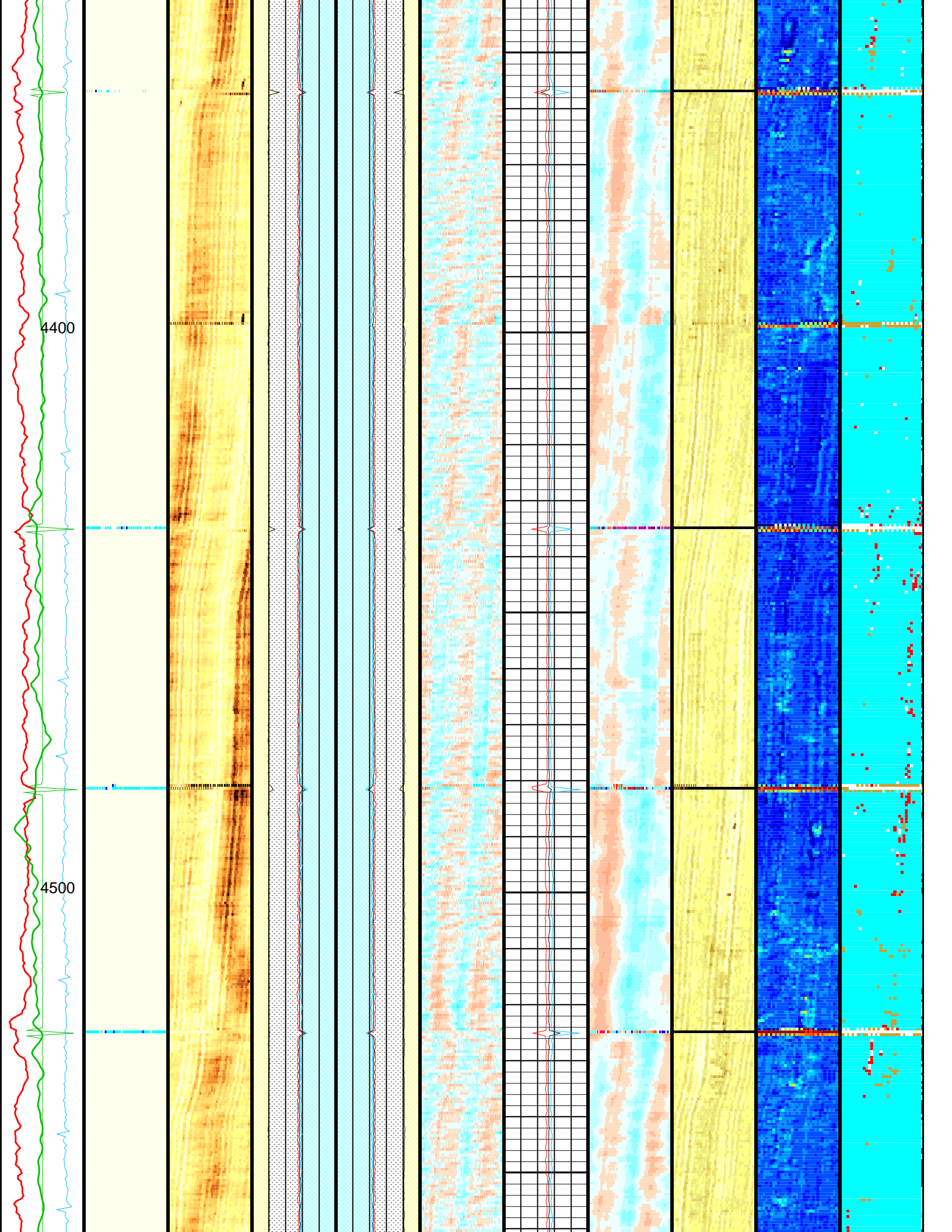
Solid Liquid Gas Map (U-USIT_USLP) (----)

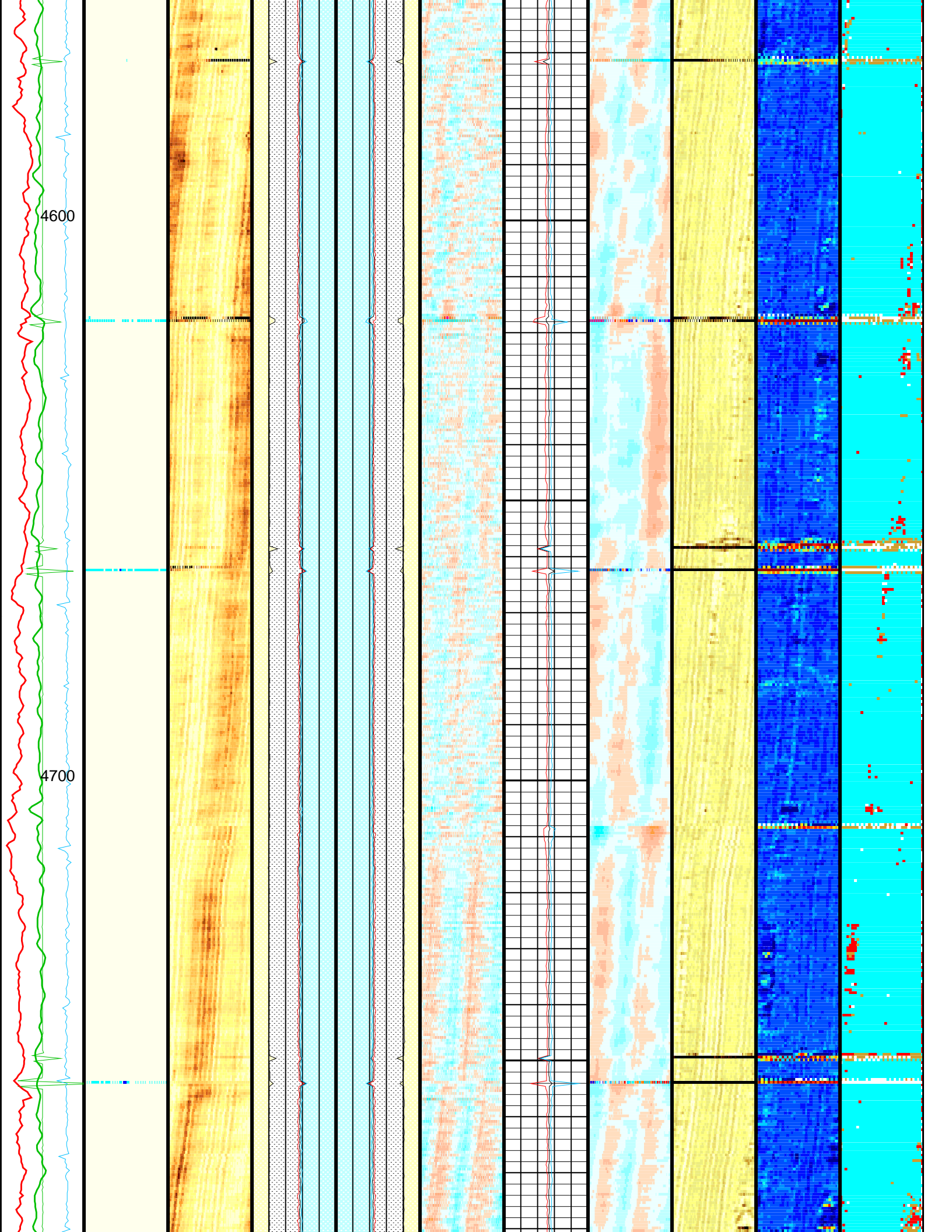


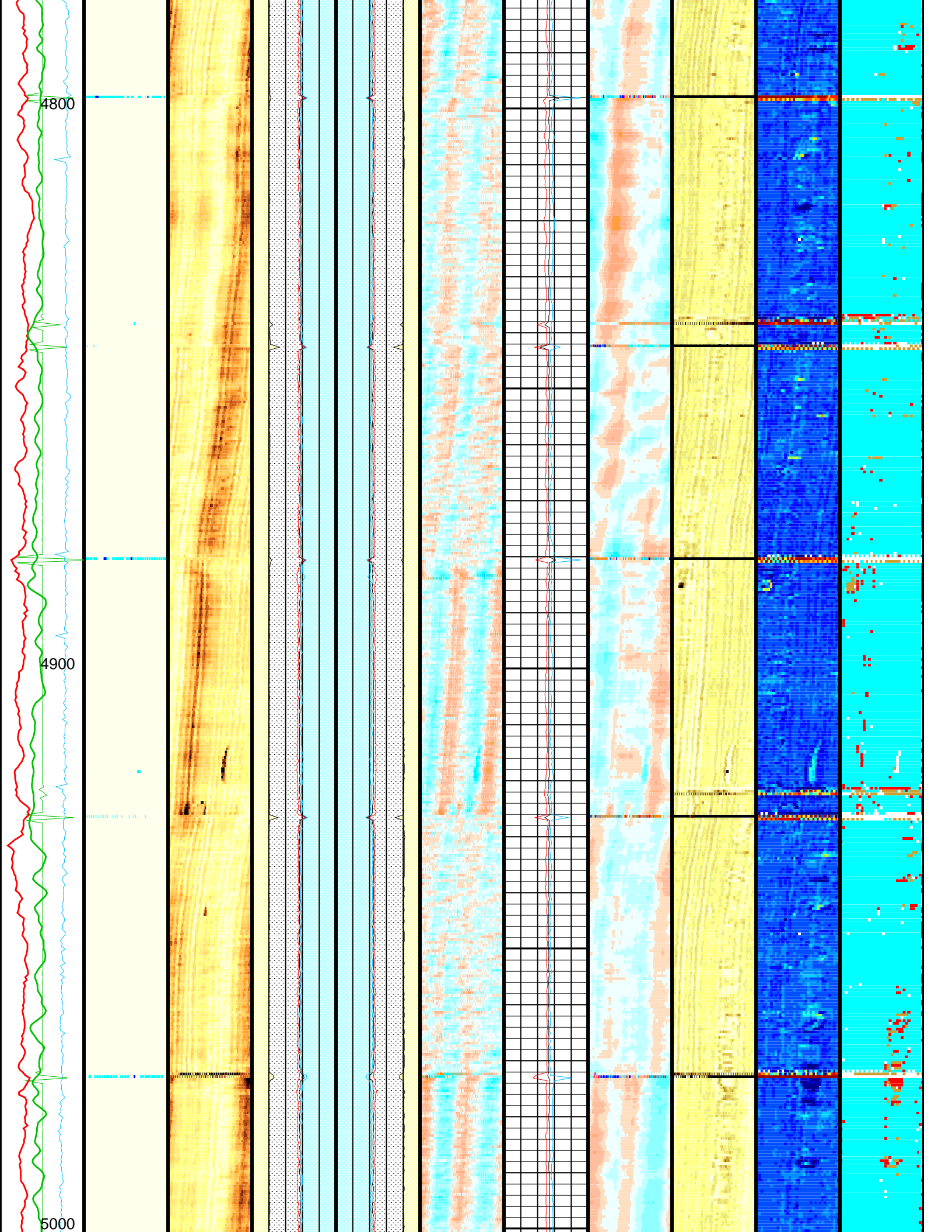


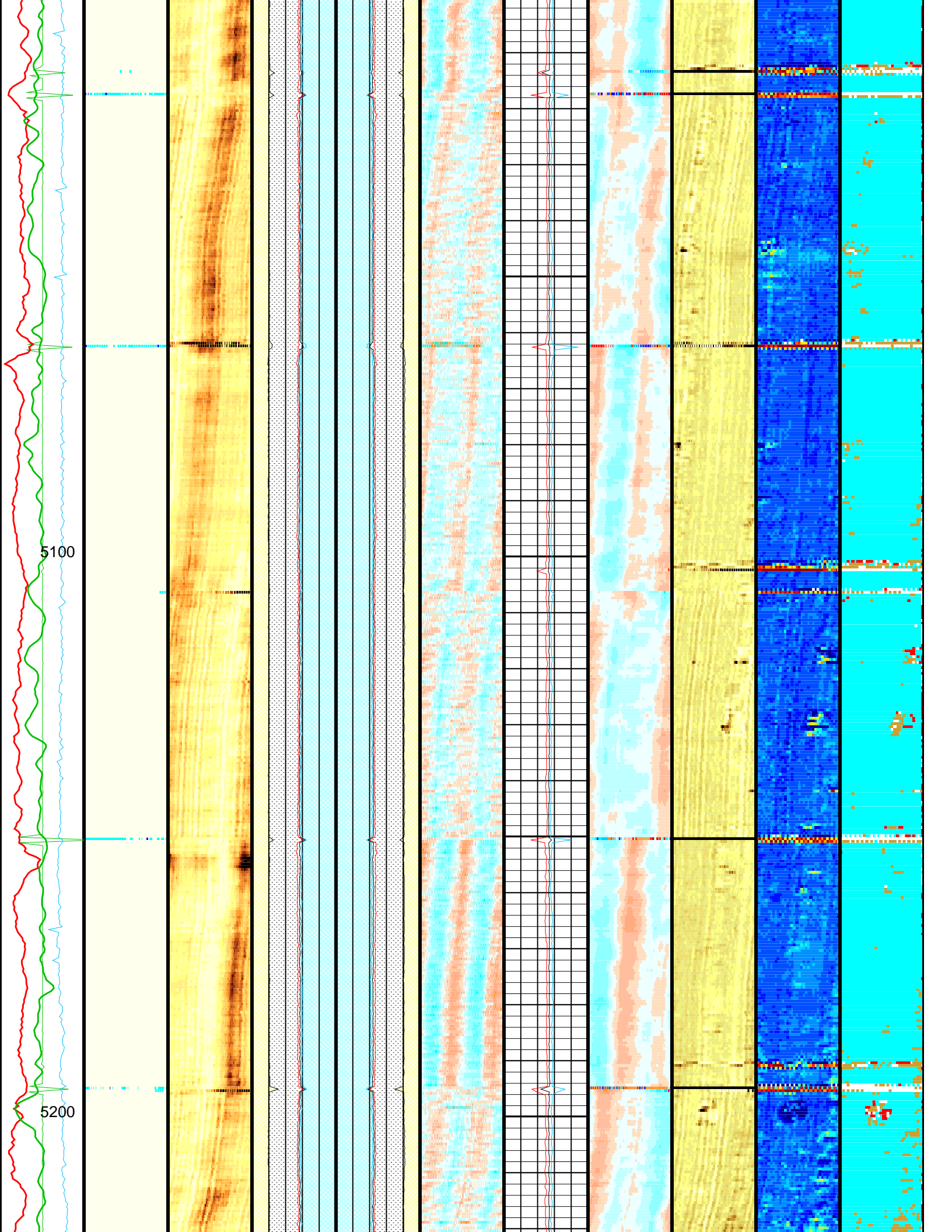


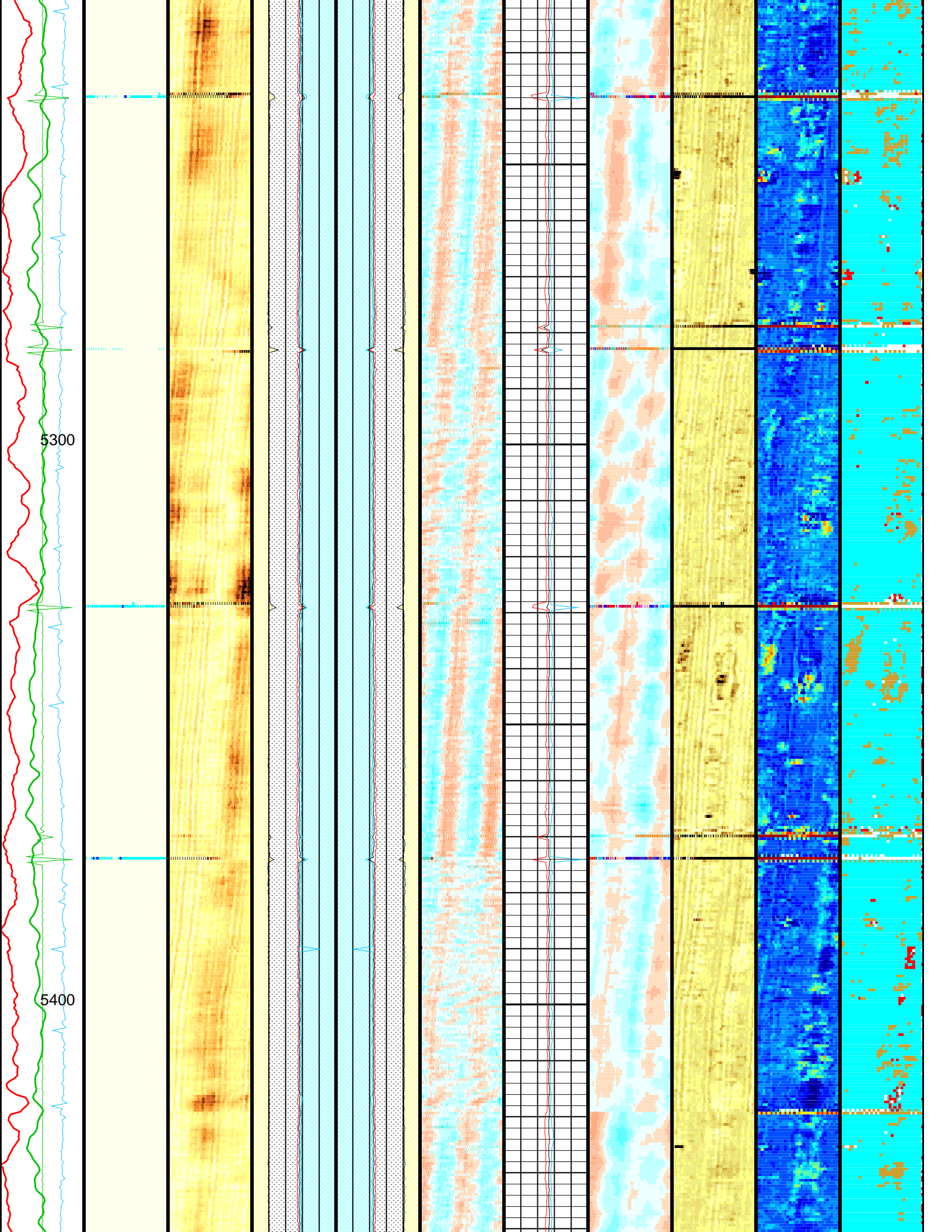


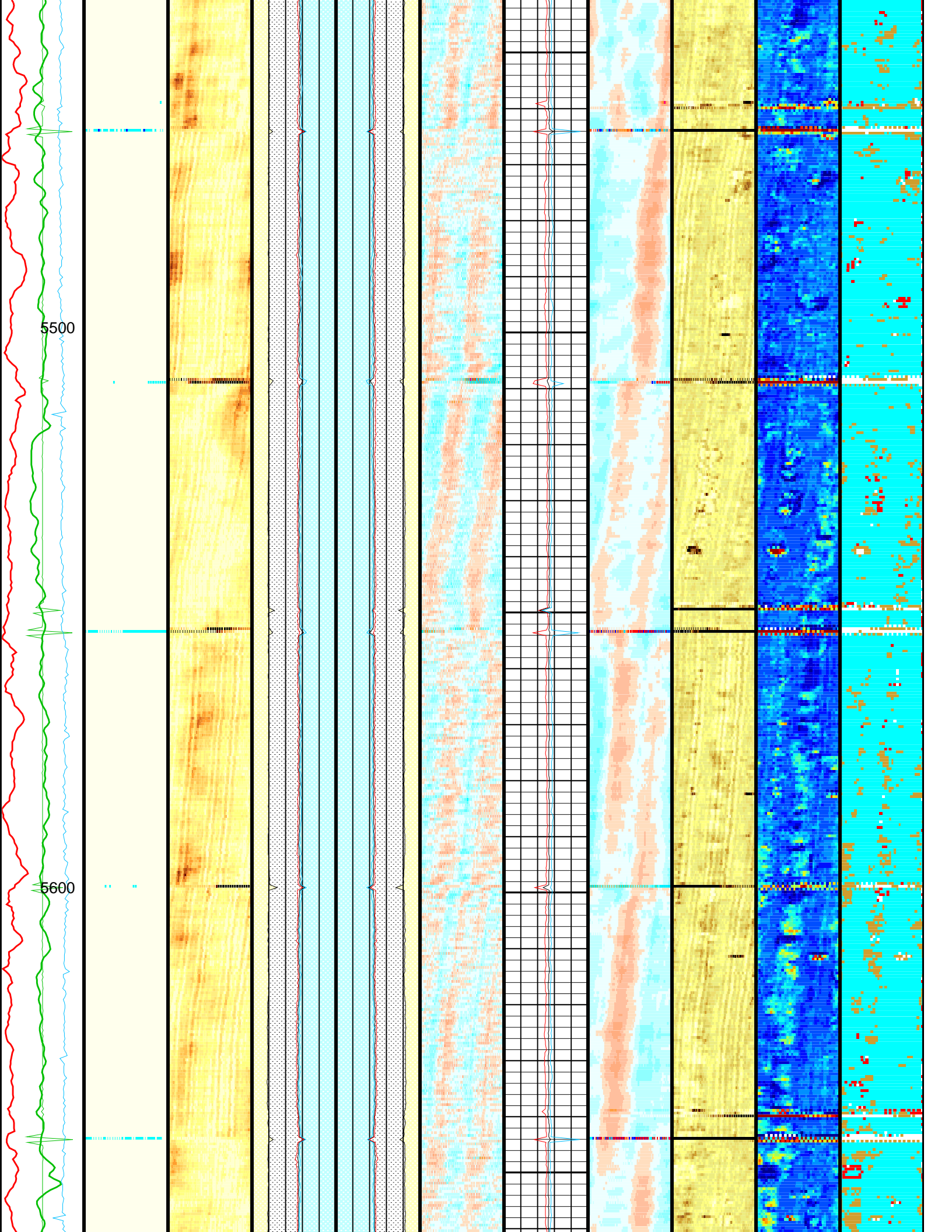


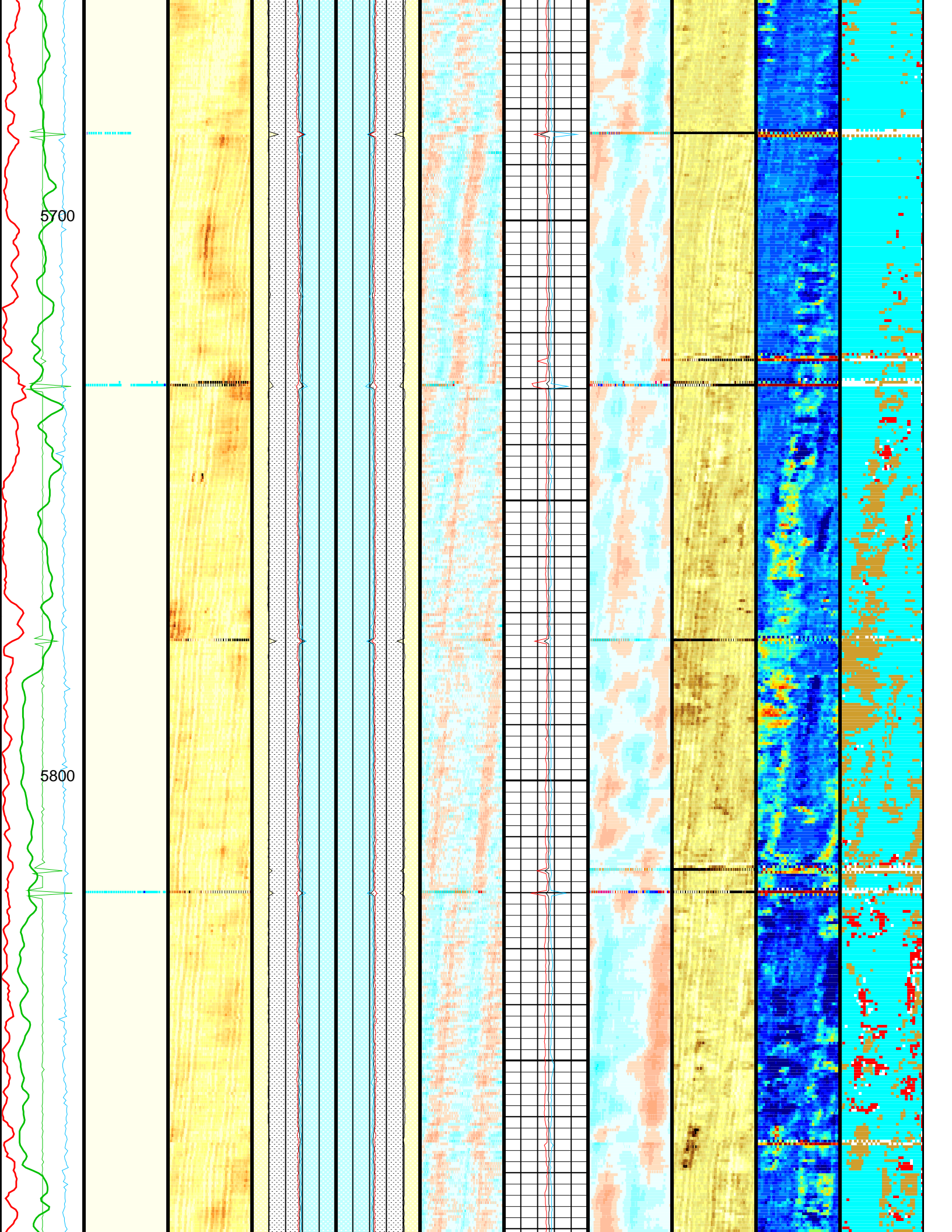


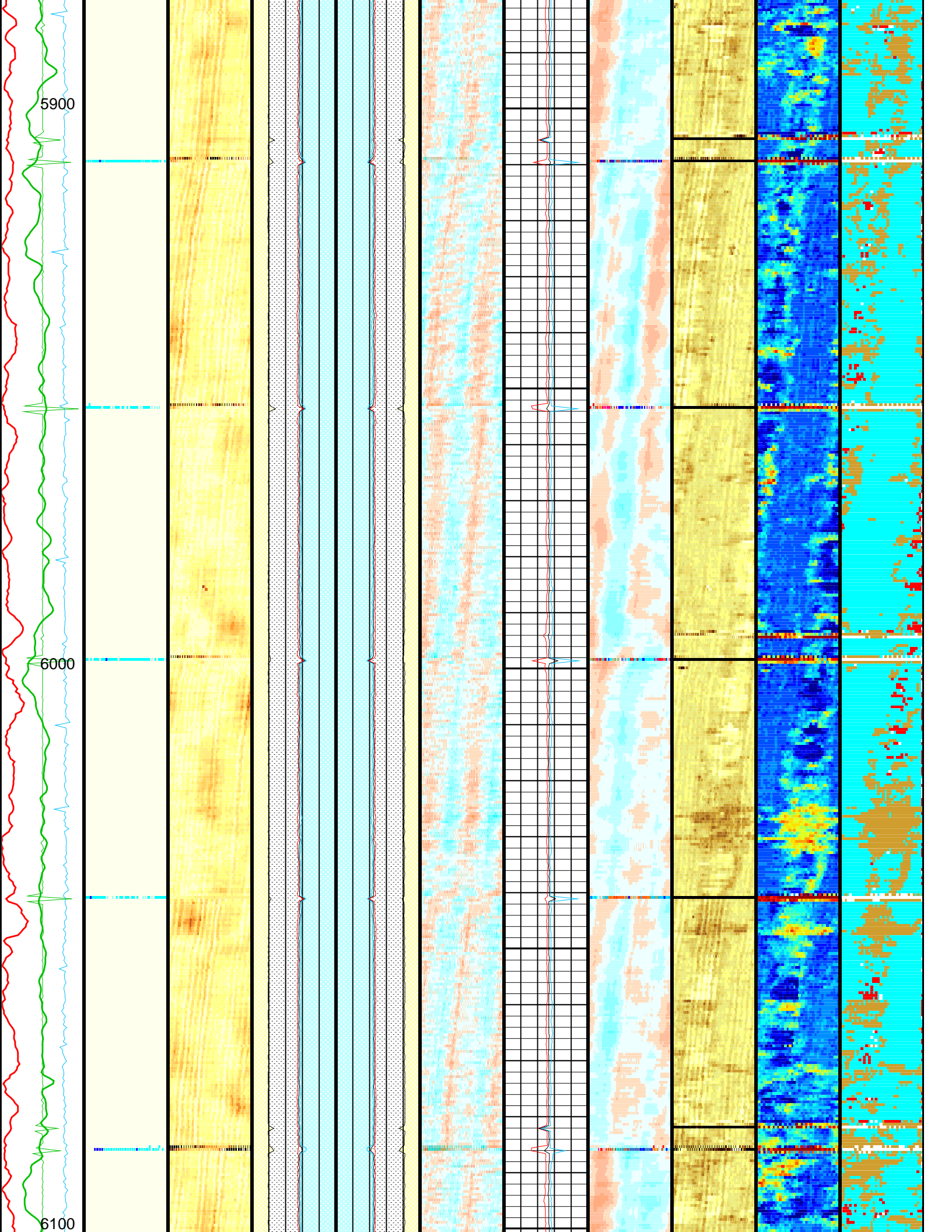


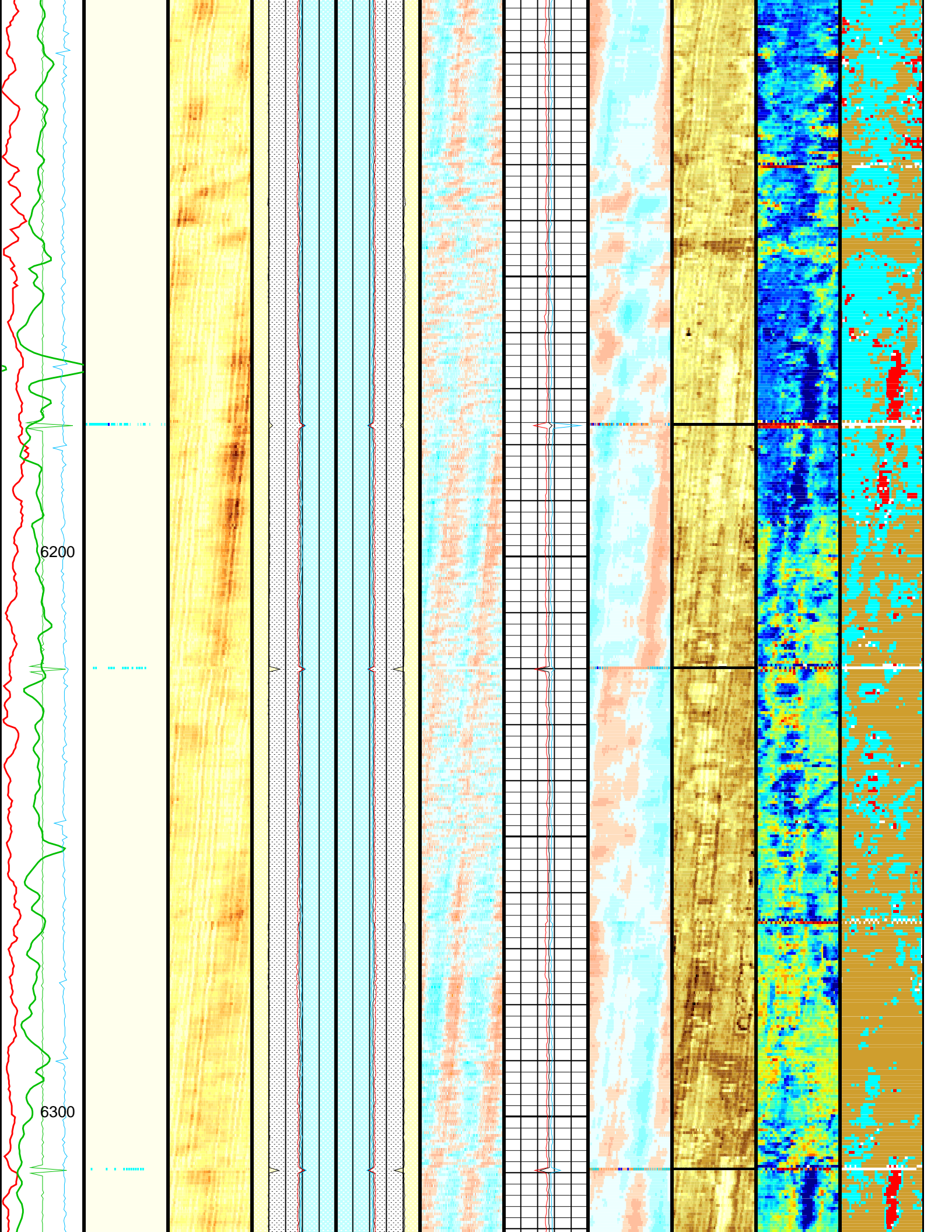


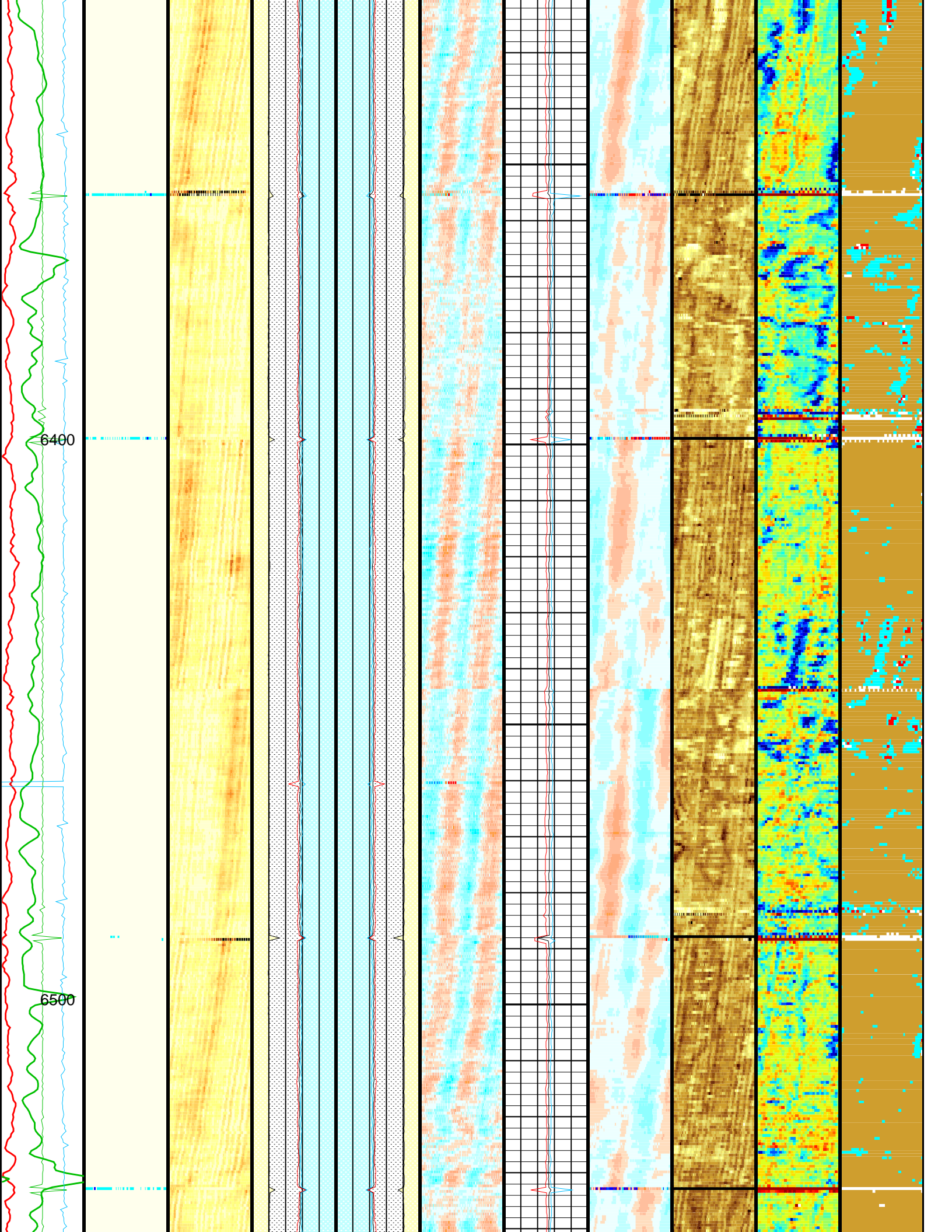


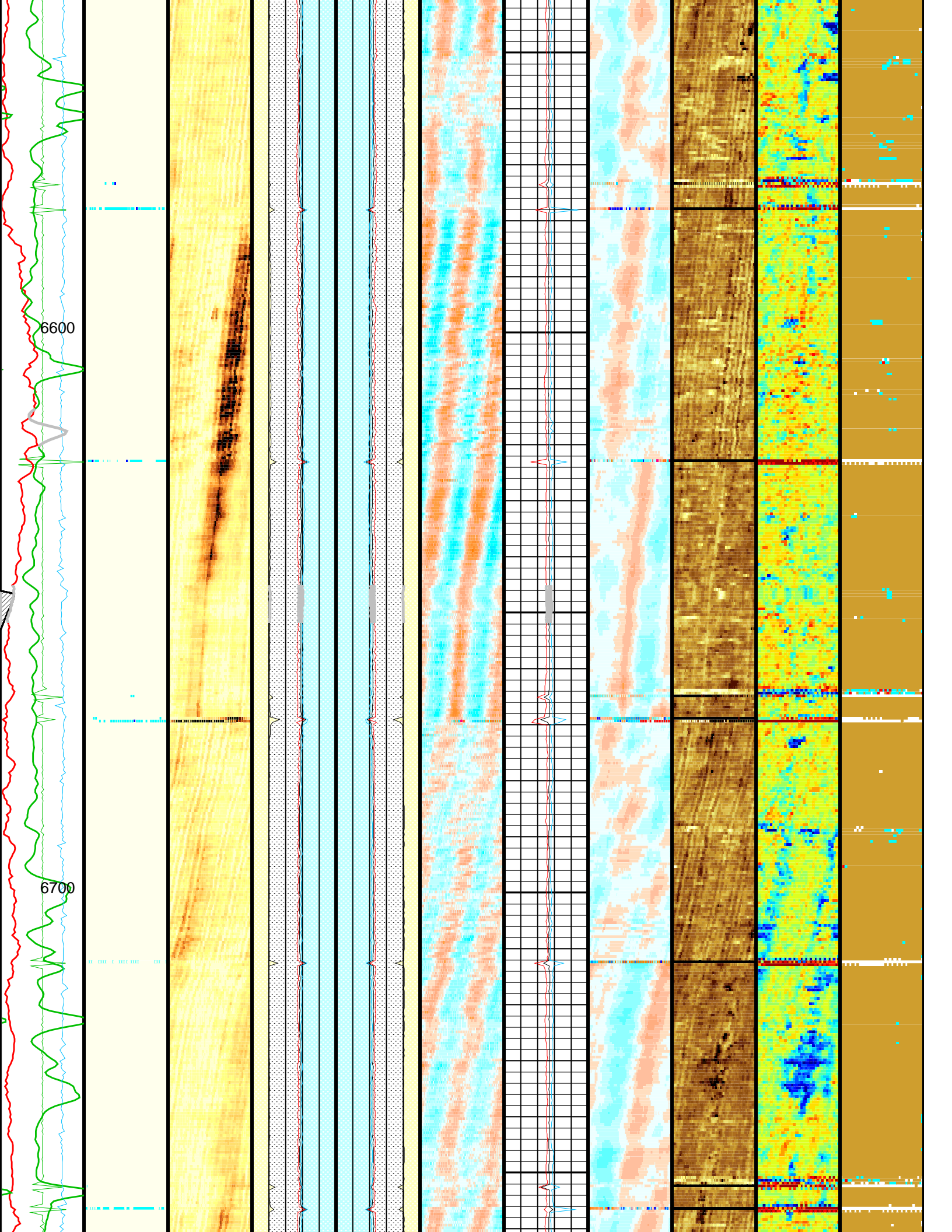


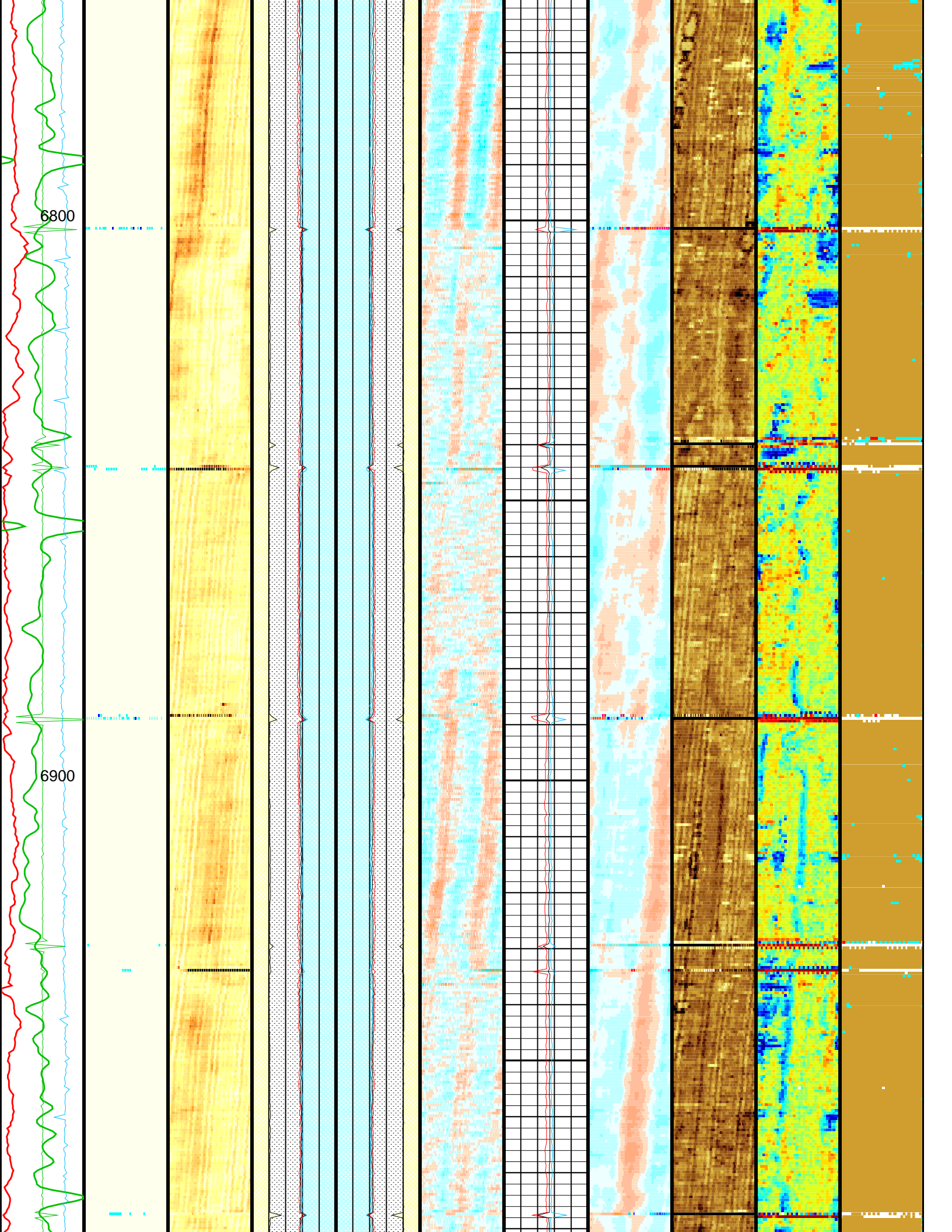


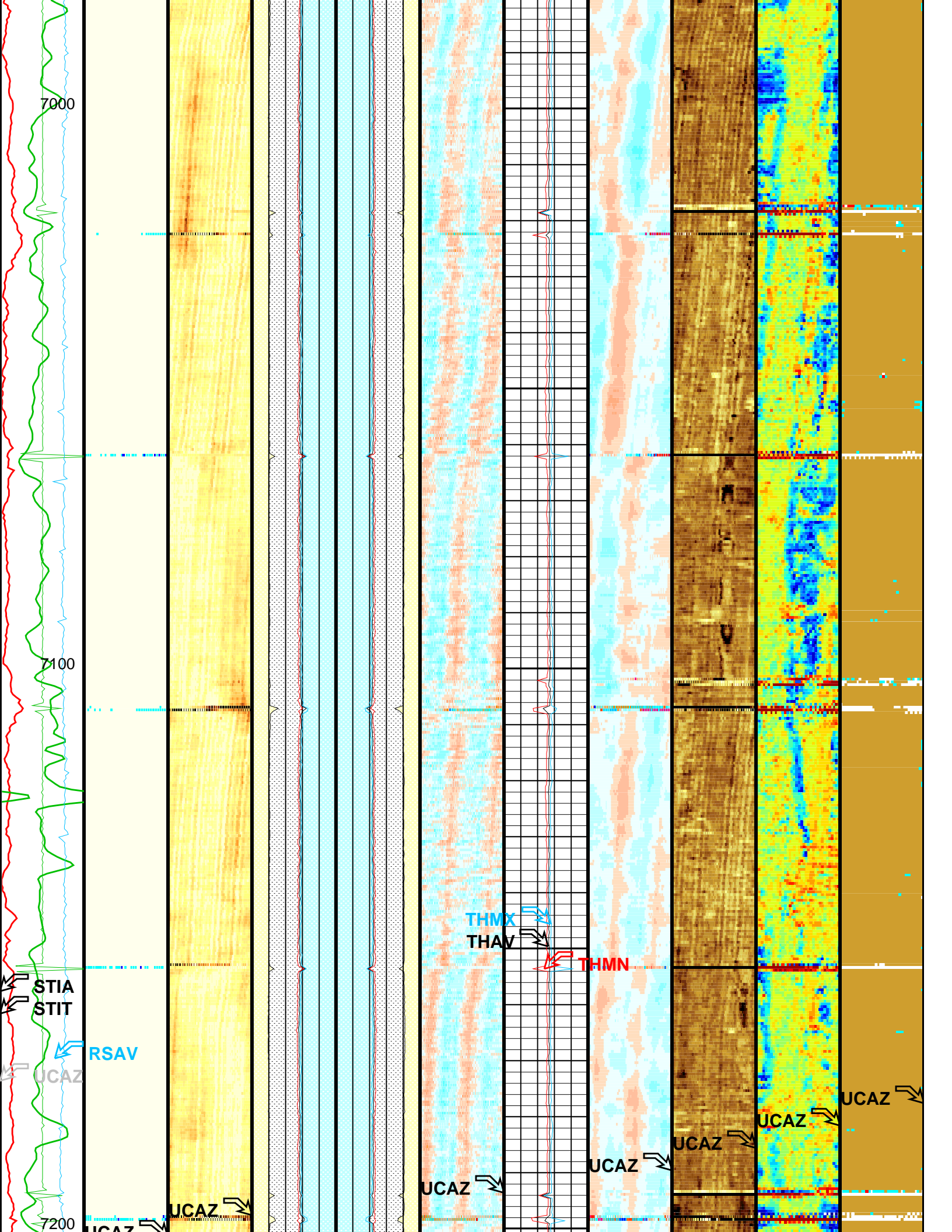


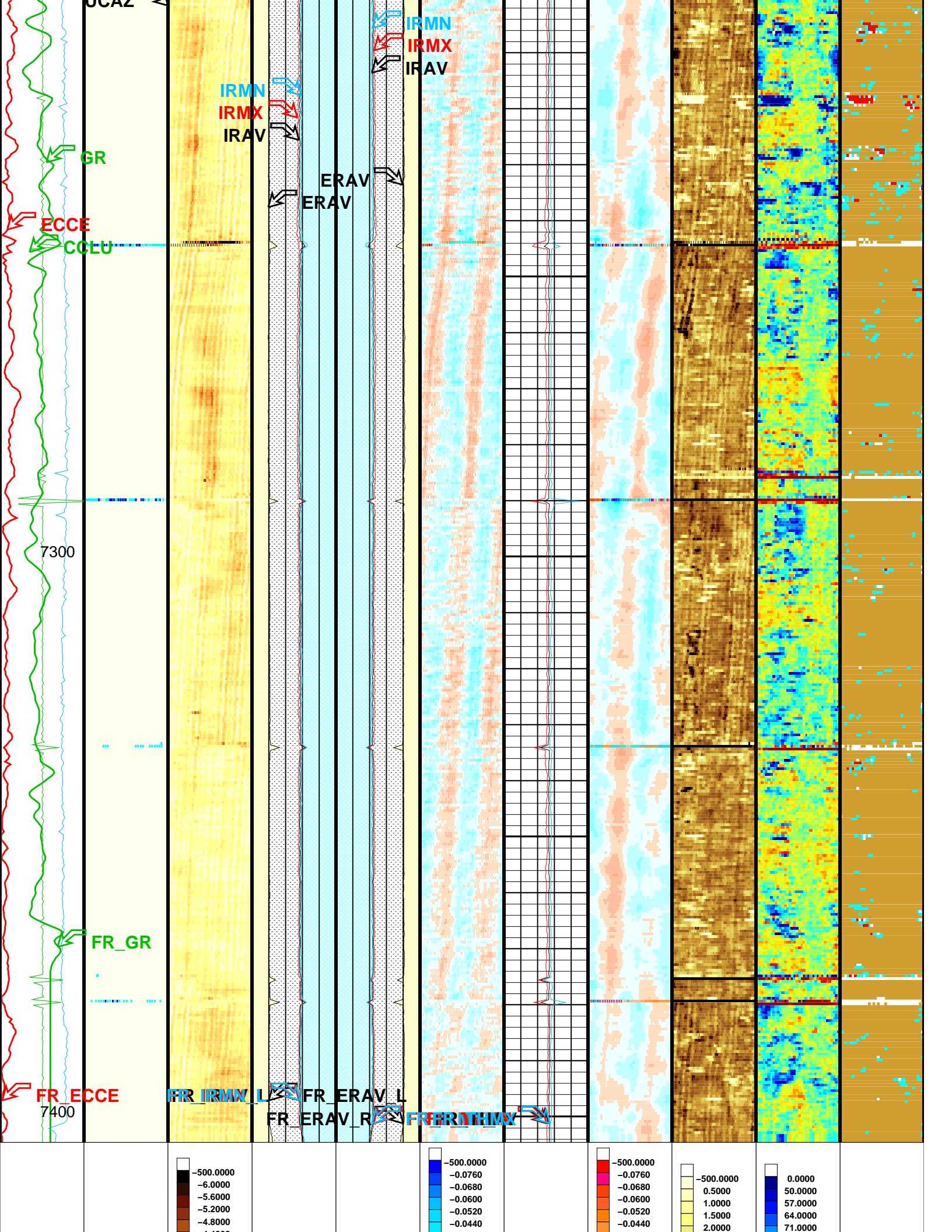


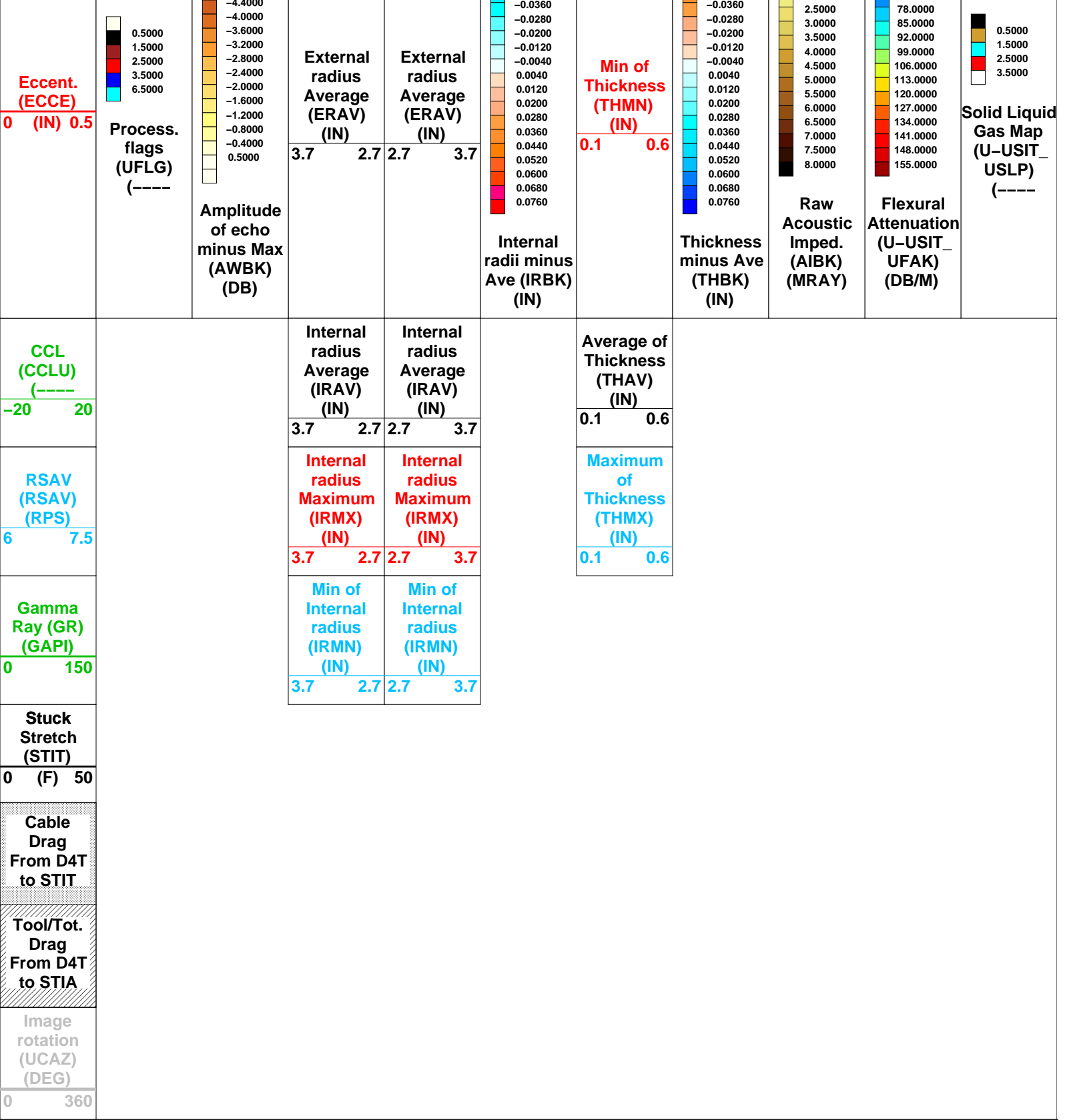












Format: USI_IBC_SLG_Composite Vertical Scale: 5" per 100' Graphics File Created: 03-Nov-2009 19:04

OP System Version: 17C0-154

USIT-D DTC-H	SRPC-3779-Q1_2009_OP17_b 17C0-154	HILTH-FTB	SRPC-3779-Q1_2009_OP17_b
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All USI Images are outside views

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	203	US/F
DOT	Diameter of Transducer Sensor	2.874	IN
EMXV	EMEX Voltage	120	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	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	10.75	IN
U-USIT_OCSH	USIT Outer Casing Shoe	4318	FT
U-USIT_OCWE	USIT Outer Casing Weight	45	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	-14	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	46.25	MRAY
ZINI	Initial Estimate of Cement Impedance	-1	MRAY
ZMUD	Acoustic Impedance of Mud	2.1	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	5	FT
TDD	Total Depth - Driller	9220.00	FT
TDL	Total Depth - Logger	7402.00	FT
System and Miscellaneous			
BS	Bit Size	9.875	IN
CWEI	Casing Weight	26.00	LB/F
DO	Depth Offset for Playback	7.5	FT
DORL	Depth Offset for Repeat Analysis	0.0	FT
PP	Playback Processing	RECOMPUTE	

Input DLIS Files

DEFAULT USI_TLD_MCFL_CNL_011LUP FN:10 PRODUCER 03-Nov-2009 14:08 7397.0 FT 199.5 FT

Output DLIS Files

DEFAULT USI_TLD_MCFL_CNL_014PUP FN:13 PRODUCER 03-Nov-2009 19:04

Company: EXXONMOBIL PRODUCTION CO Well: PCU 197-34B7

Input DLIS Files

DEFAULT USI_TLD_MCFL_CNL_011LUP FN:10 PRODUCER 03-Nov-2009 14:08 7397.0 FT 199.5 FT

Output DLIS Files

DEFAULT USI_TLD_MCFL_CNL_014PUP FN:13 PRODUCER 03-Nov-2009 19:04

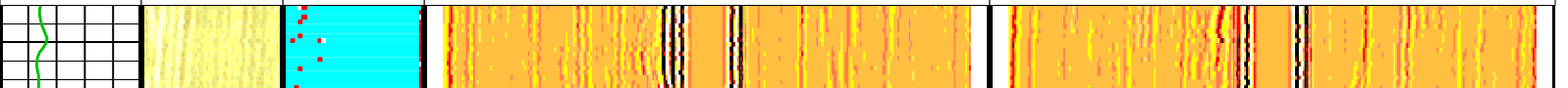
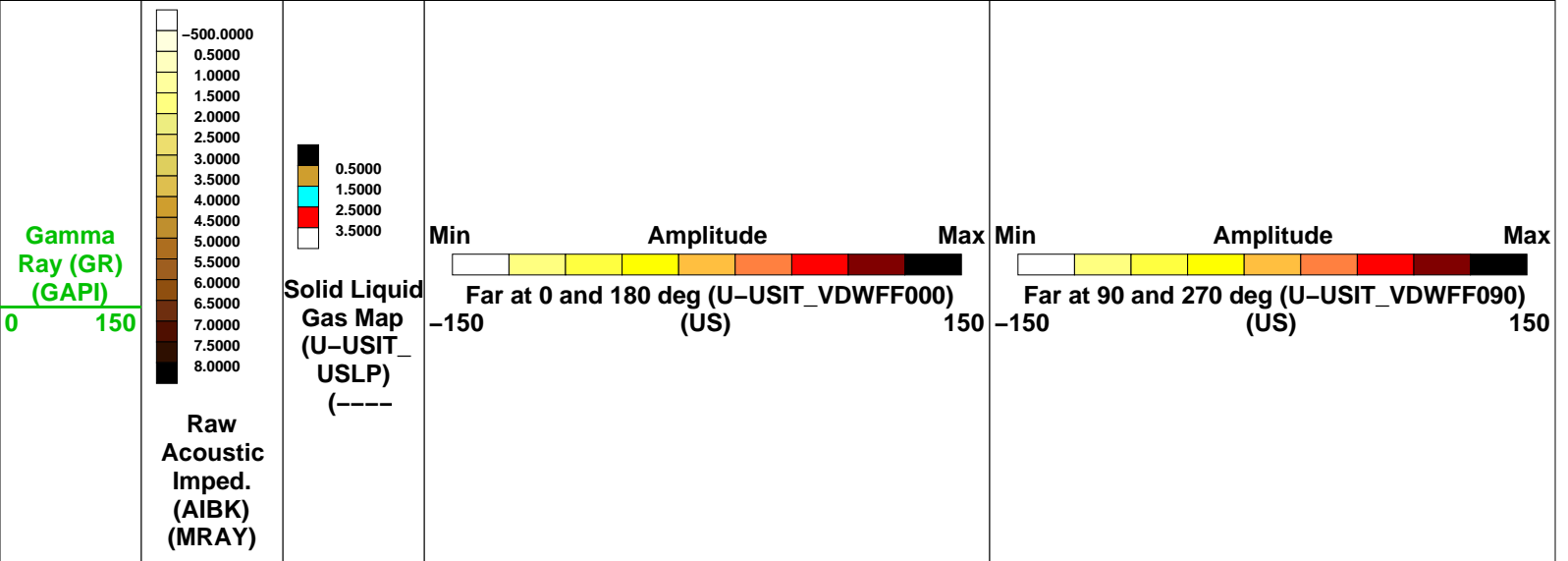
OP System Version: 17C0-154

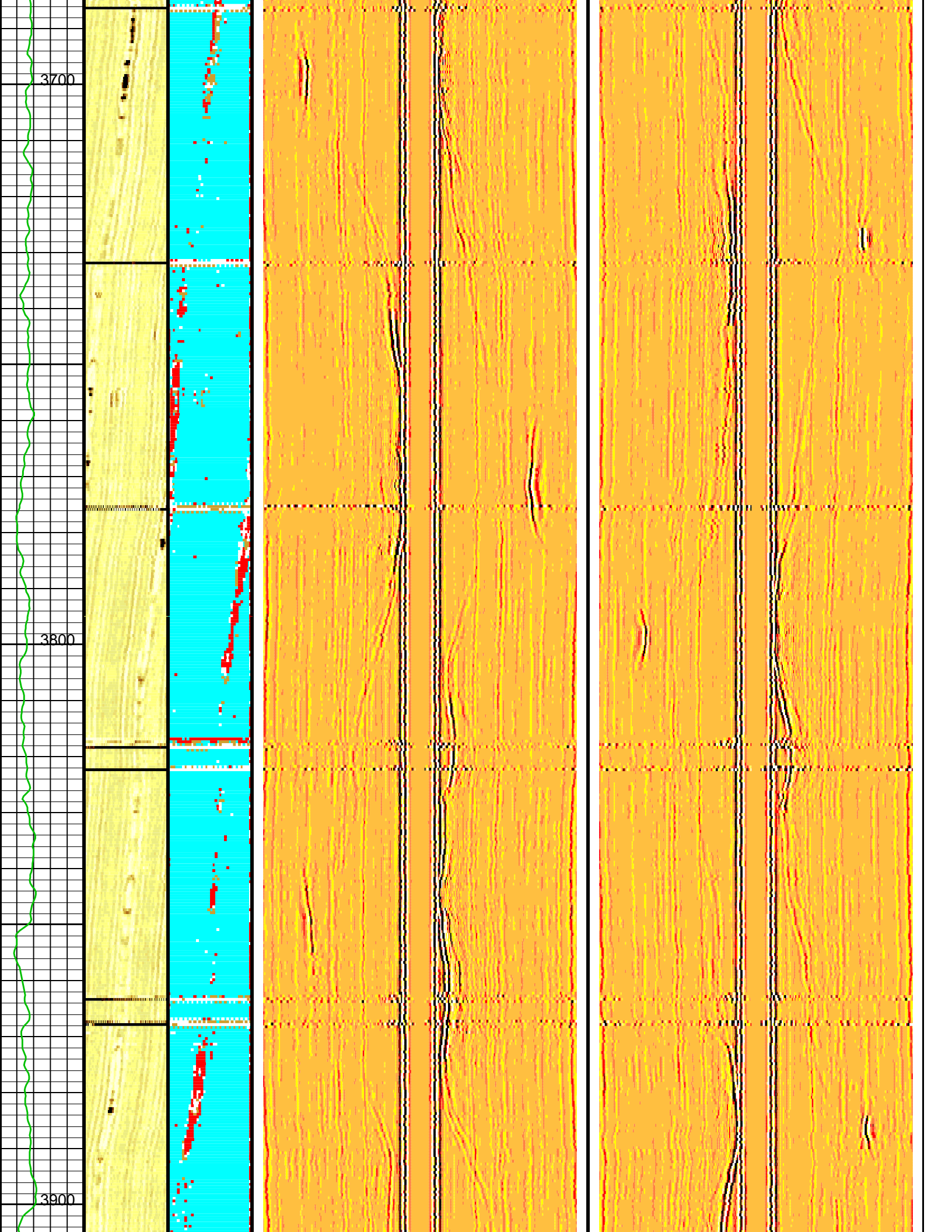
USIT-D SRPC-3779-Q1_2009_OP17_b HILTH-FTB SRPC-3779-Q1_2009_OP17_b
 DTC-H 17C0-154

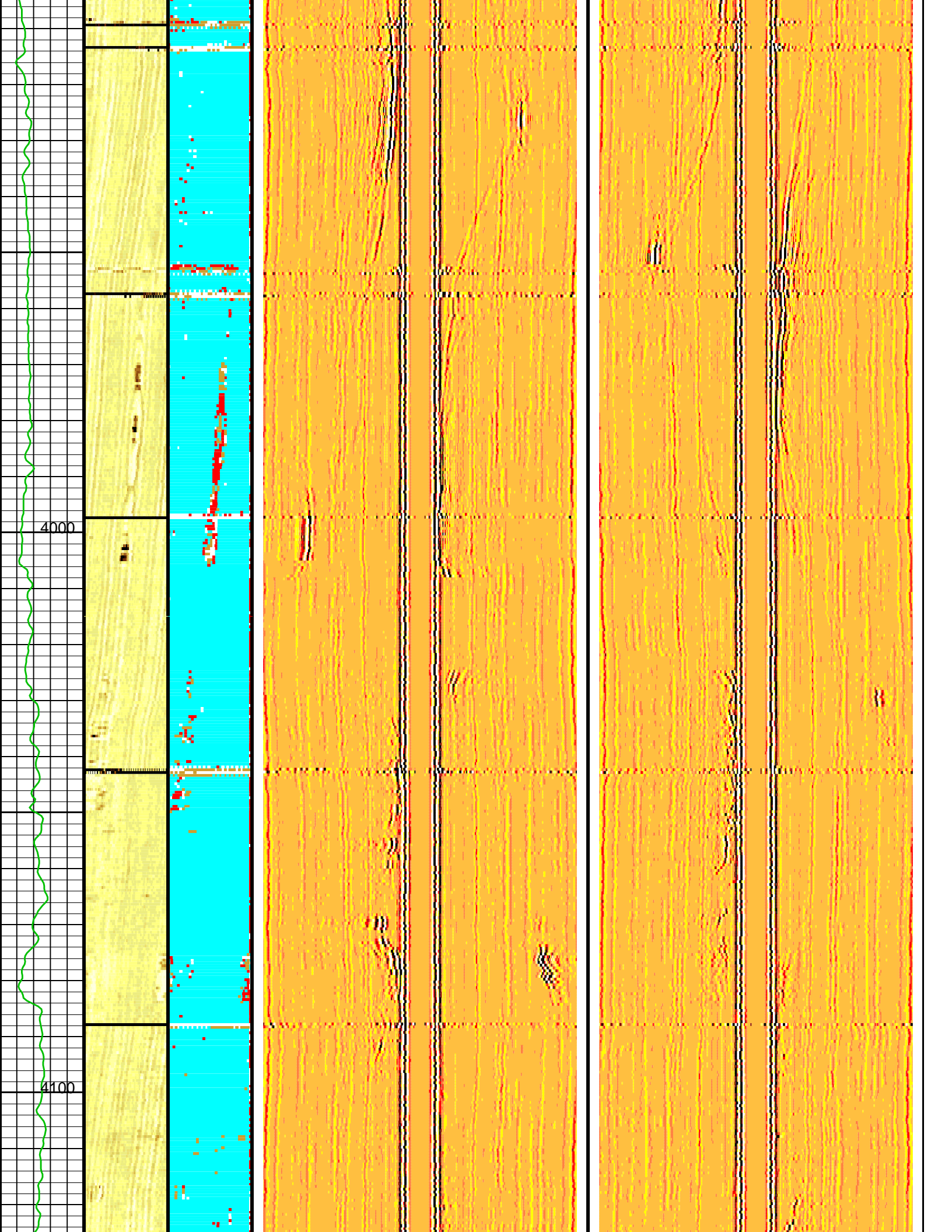
Changed Parameter Summary

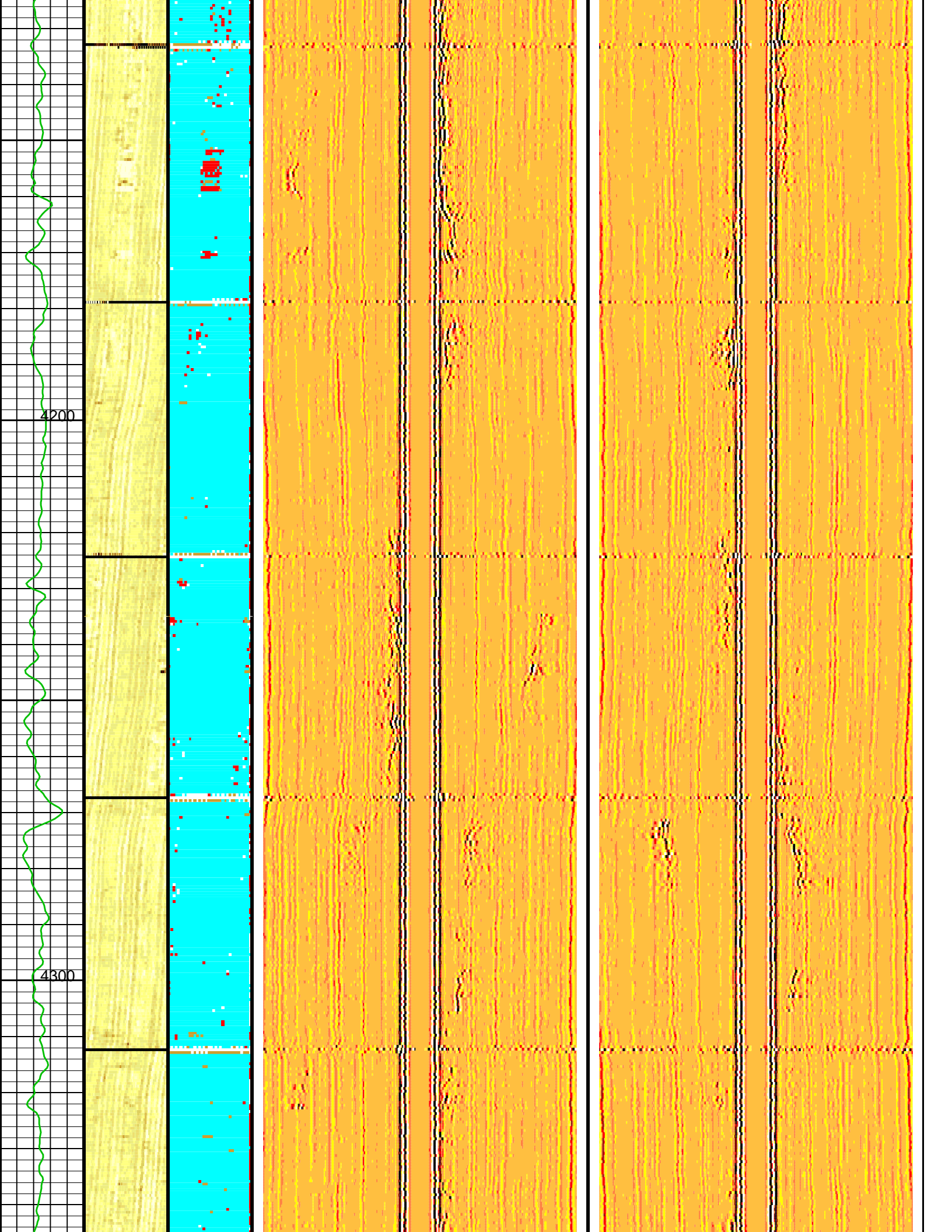
DLIS Name	New Value	Previous Value	Depth & Time
ZMUD	1.98 MRAY	2.1 MRAY	5001.5 19:08:26

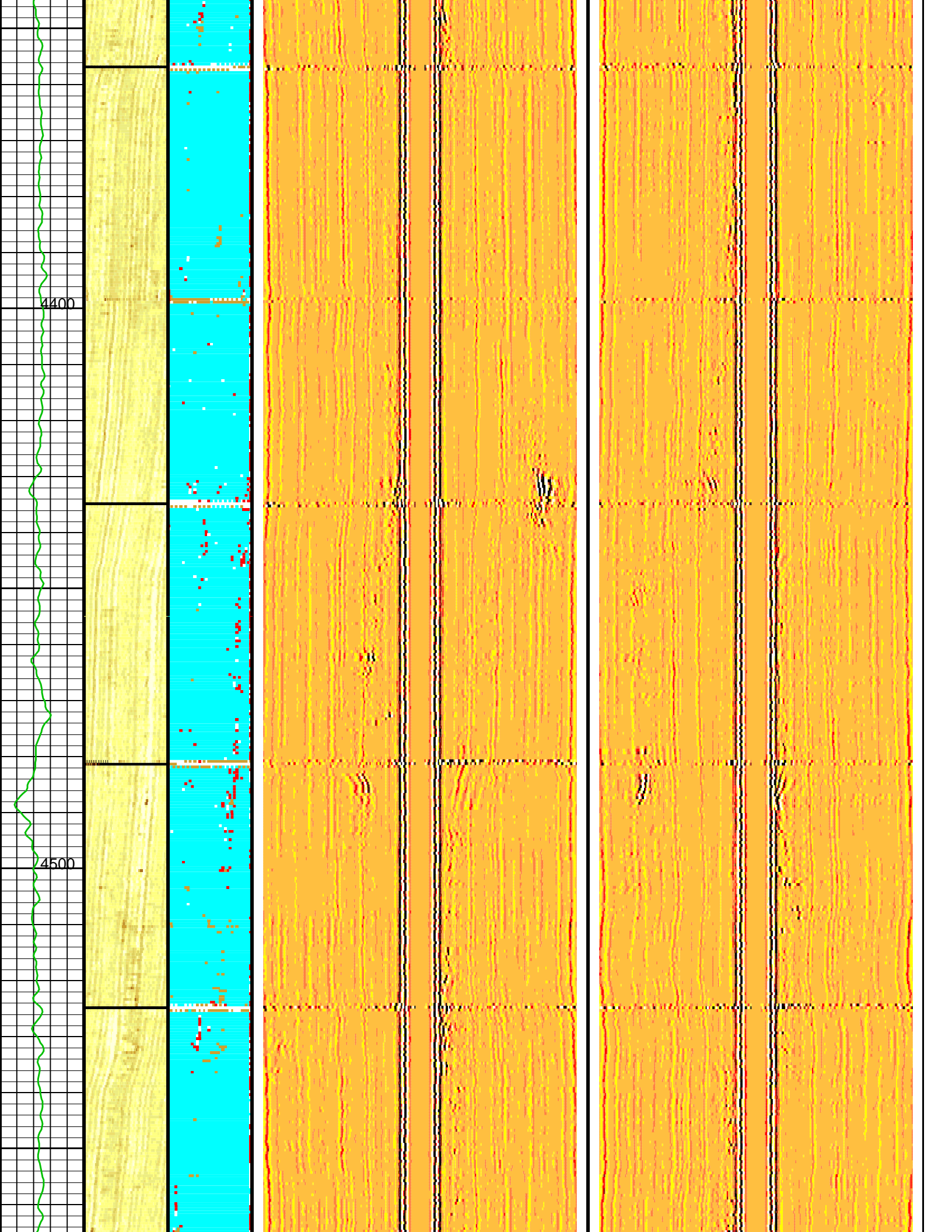
Tool/Tot. Drag From D4T to STIA			
Cable Drag From D4T to STIT			
Stuck Stretch (STIT)			
0 (F) 50			

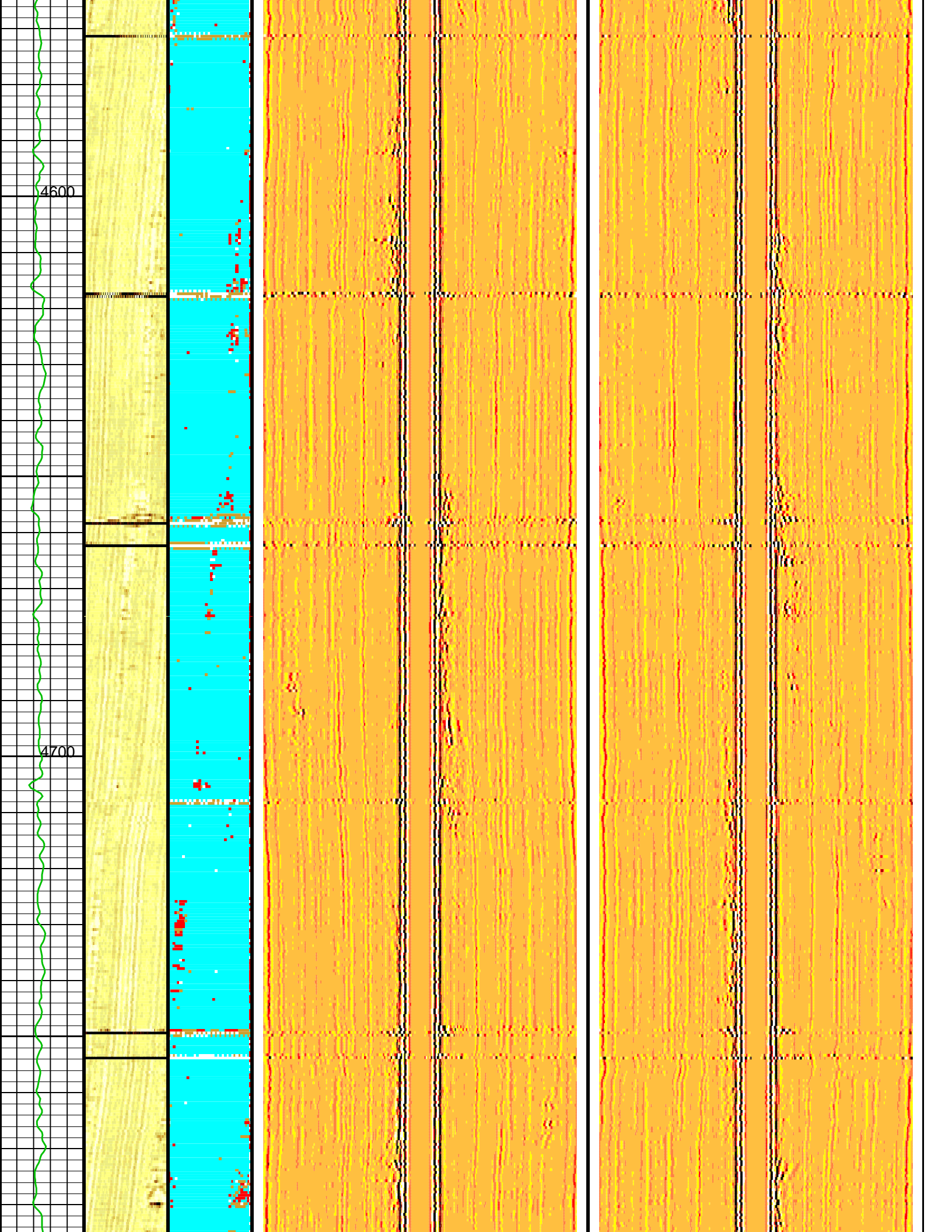












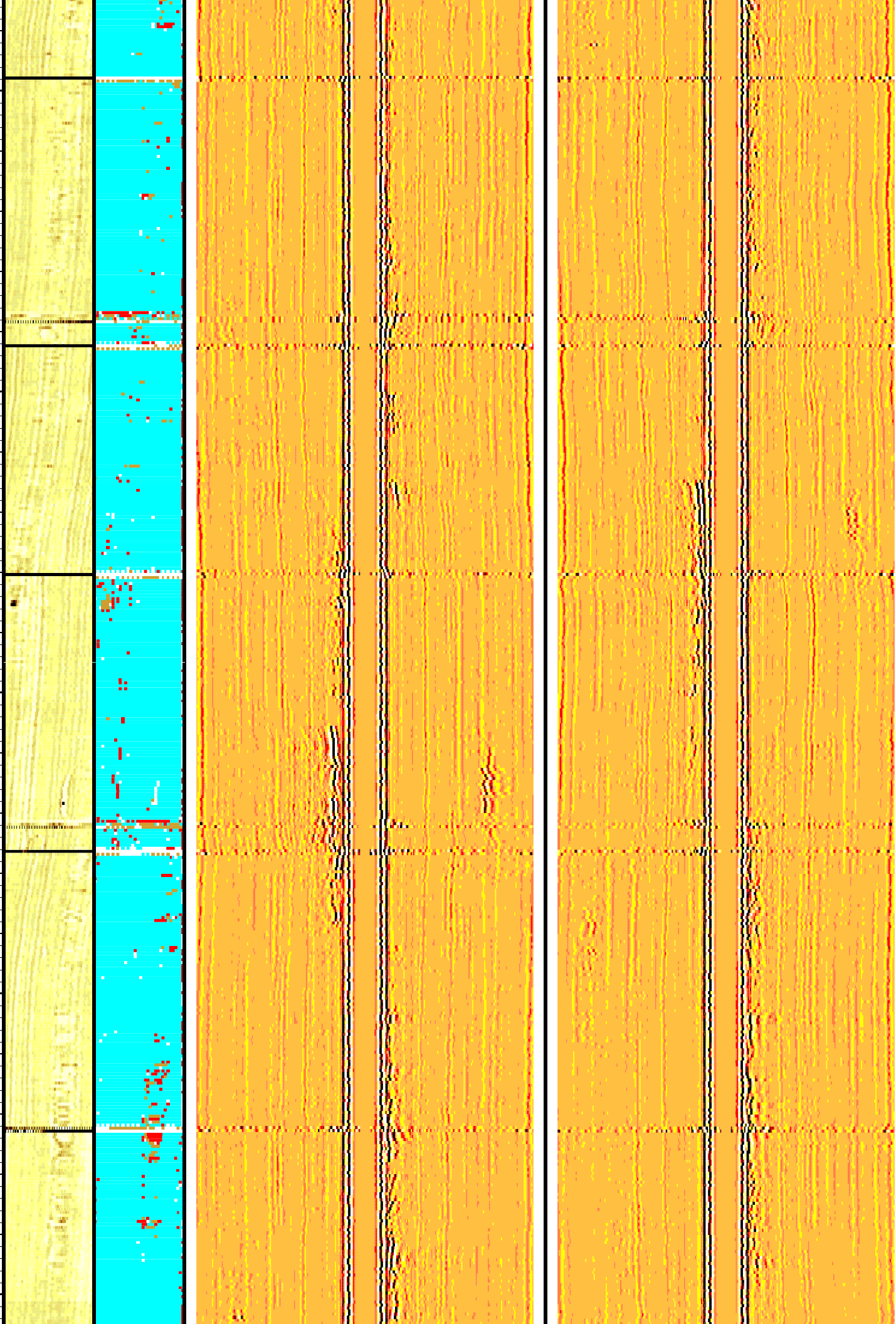
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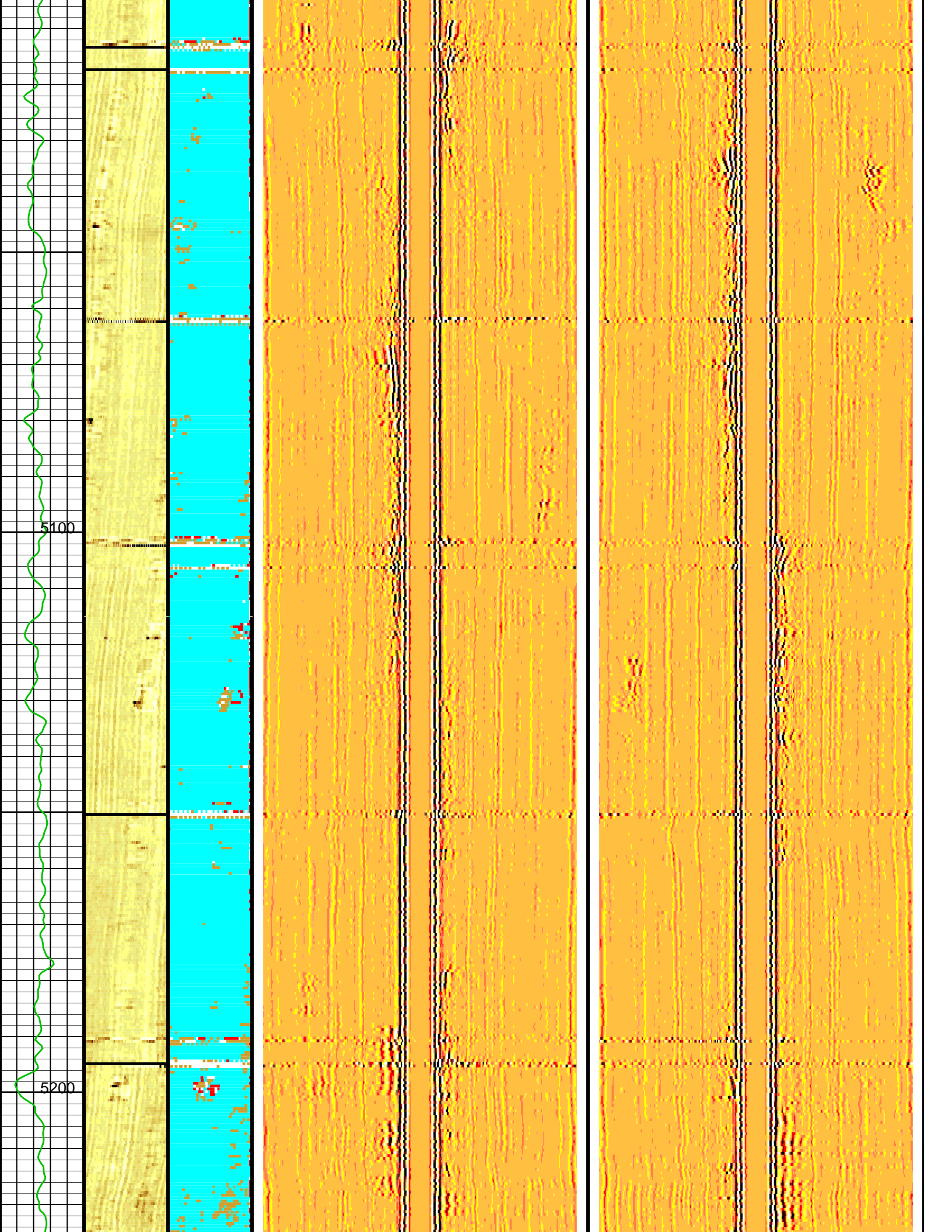
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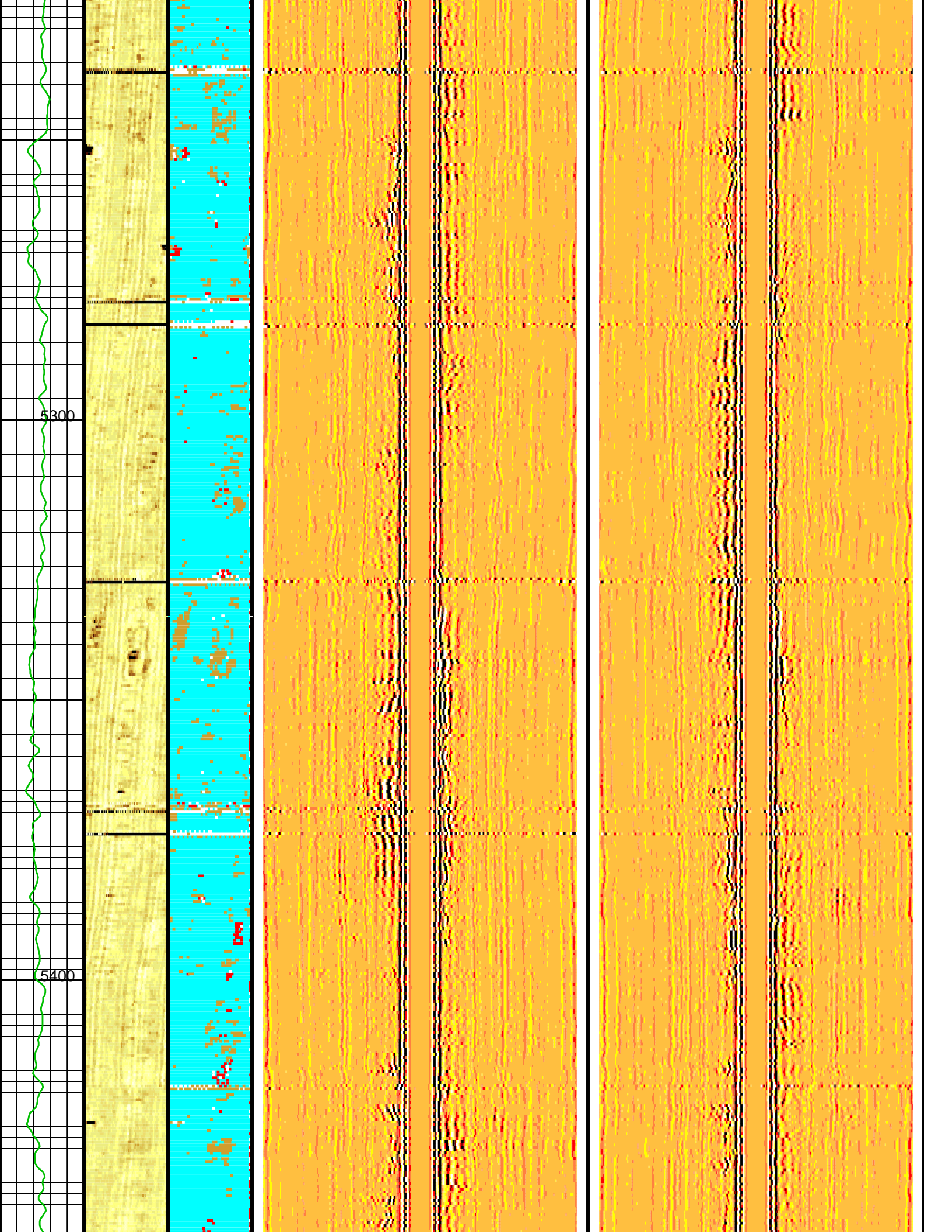
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4900

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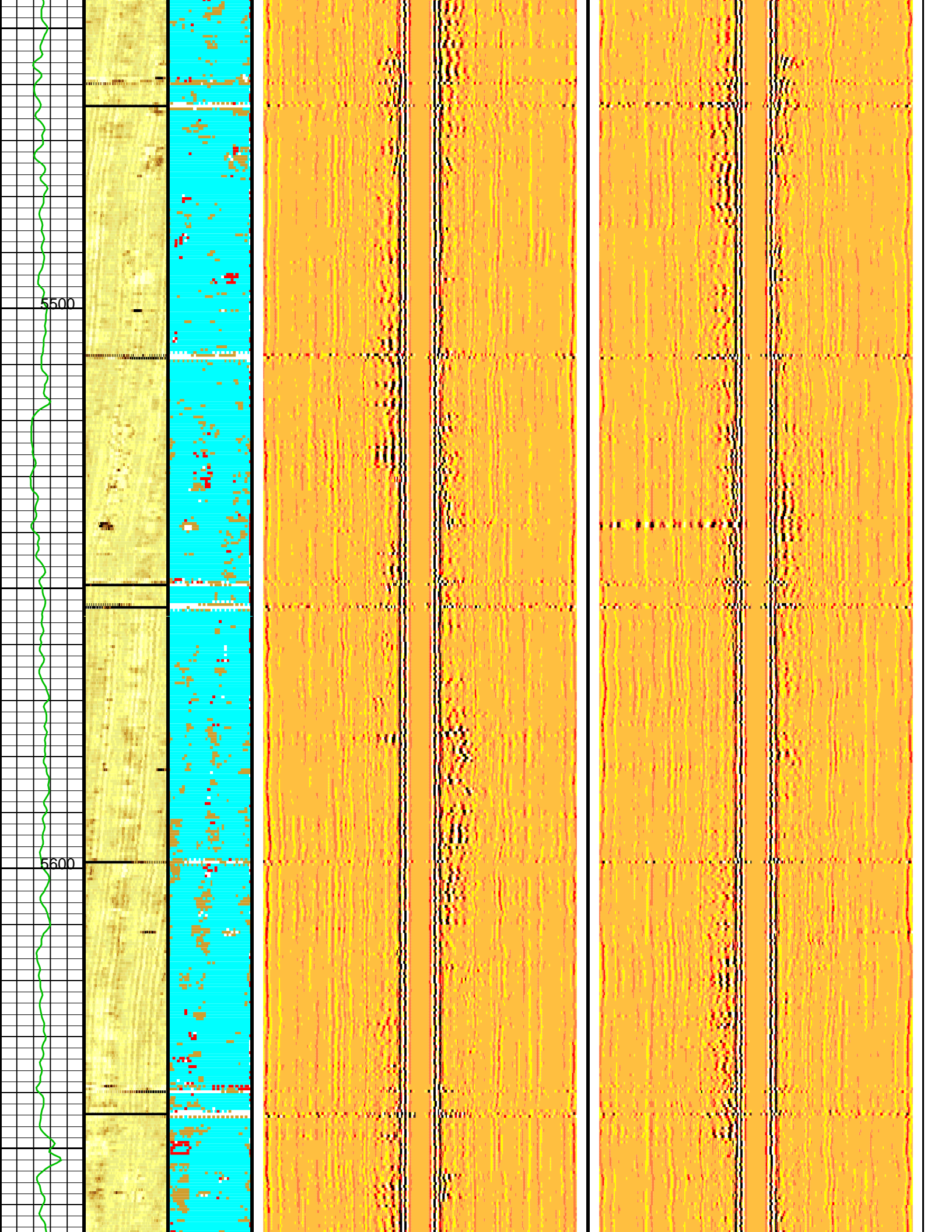






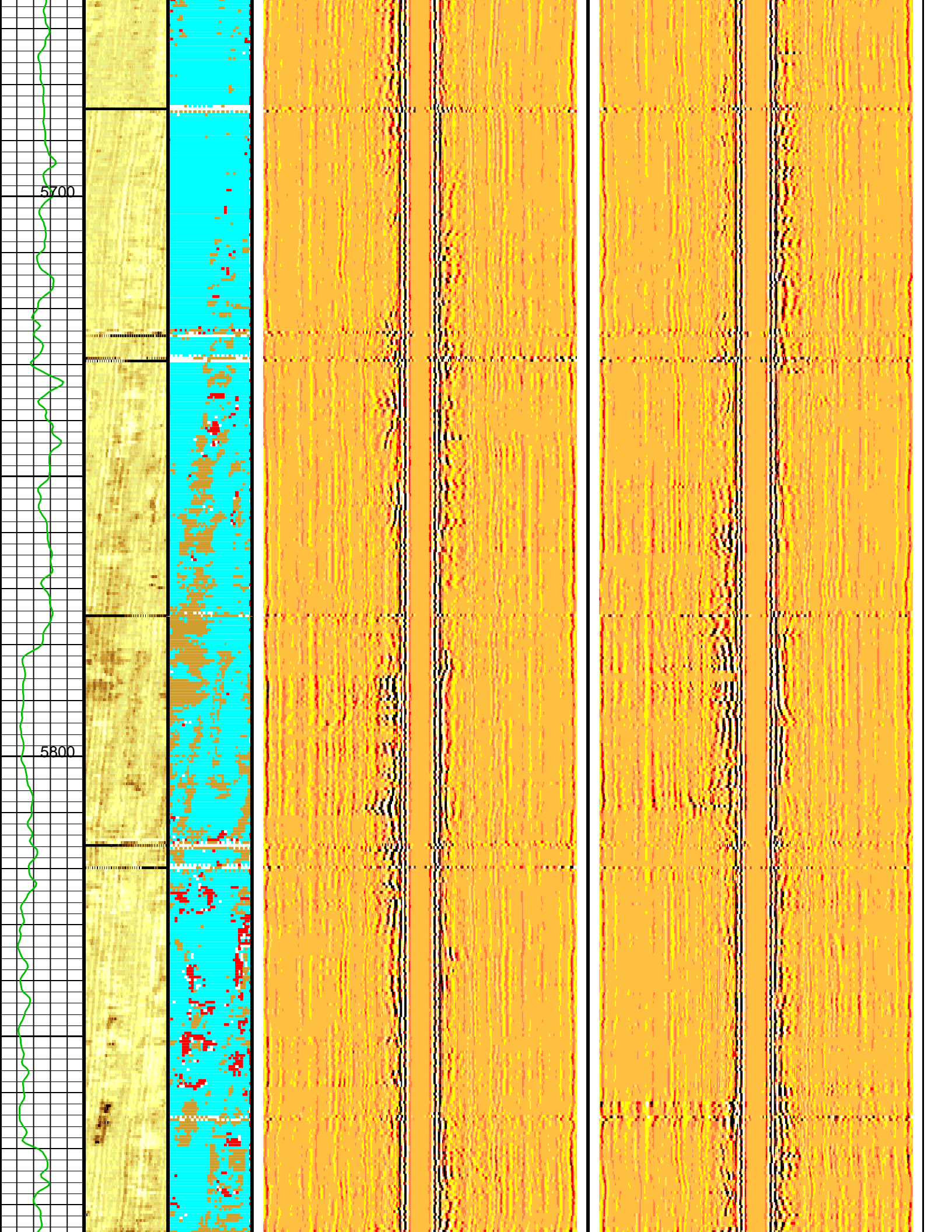
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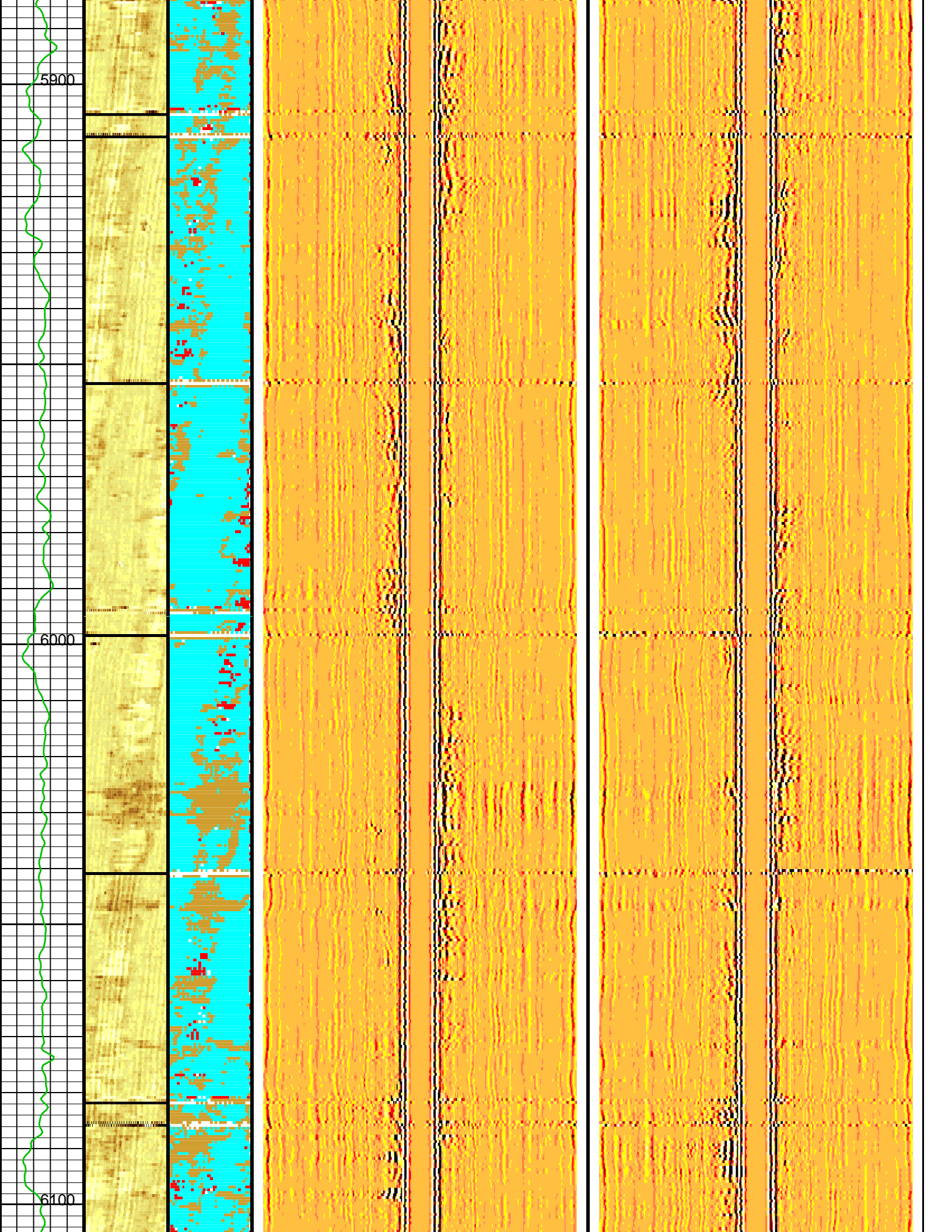
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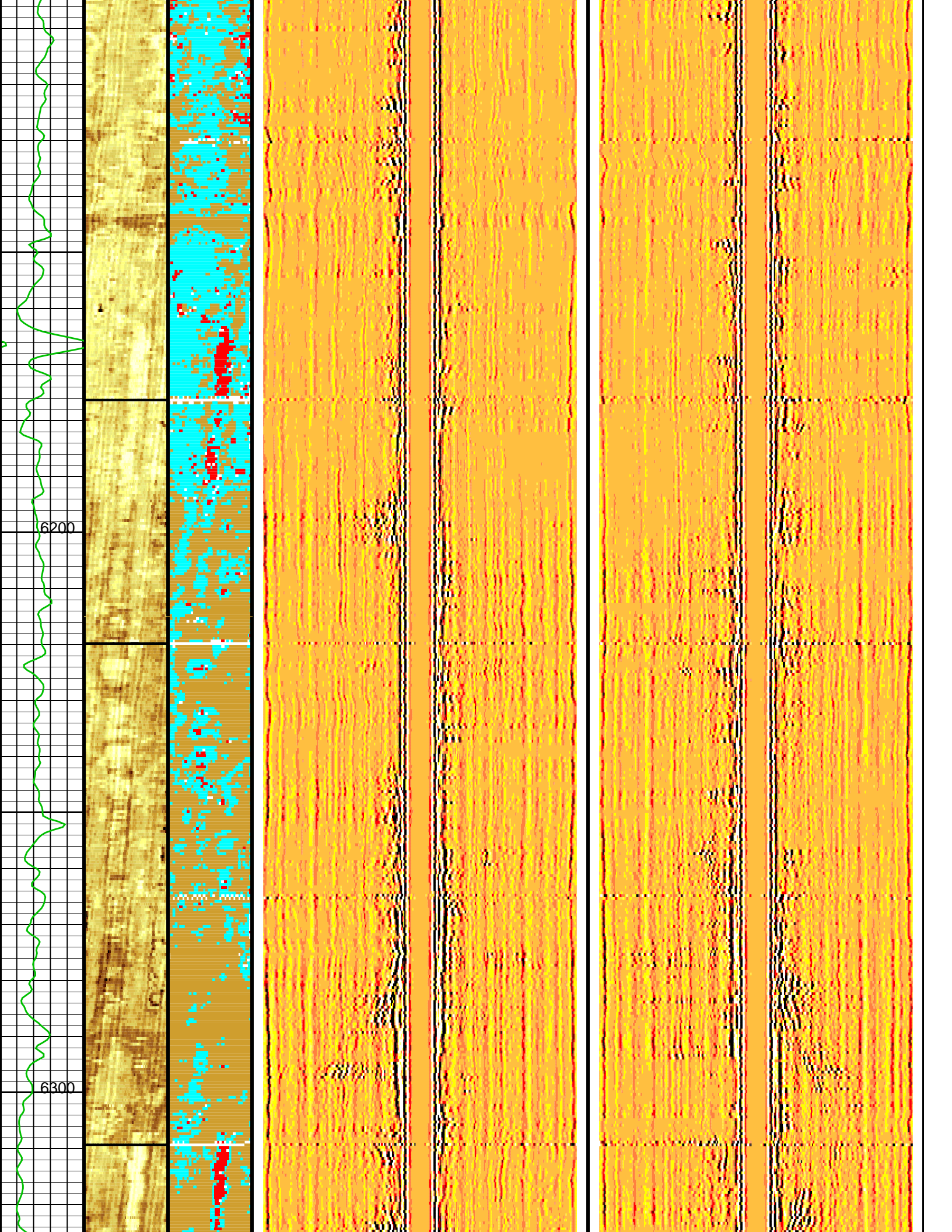


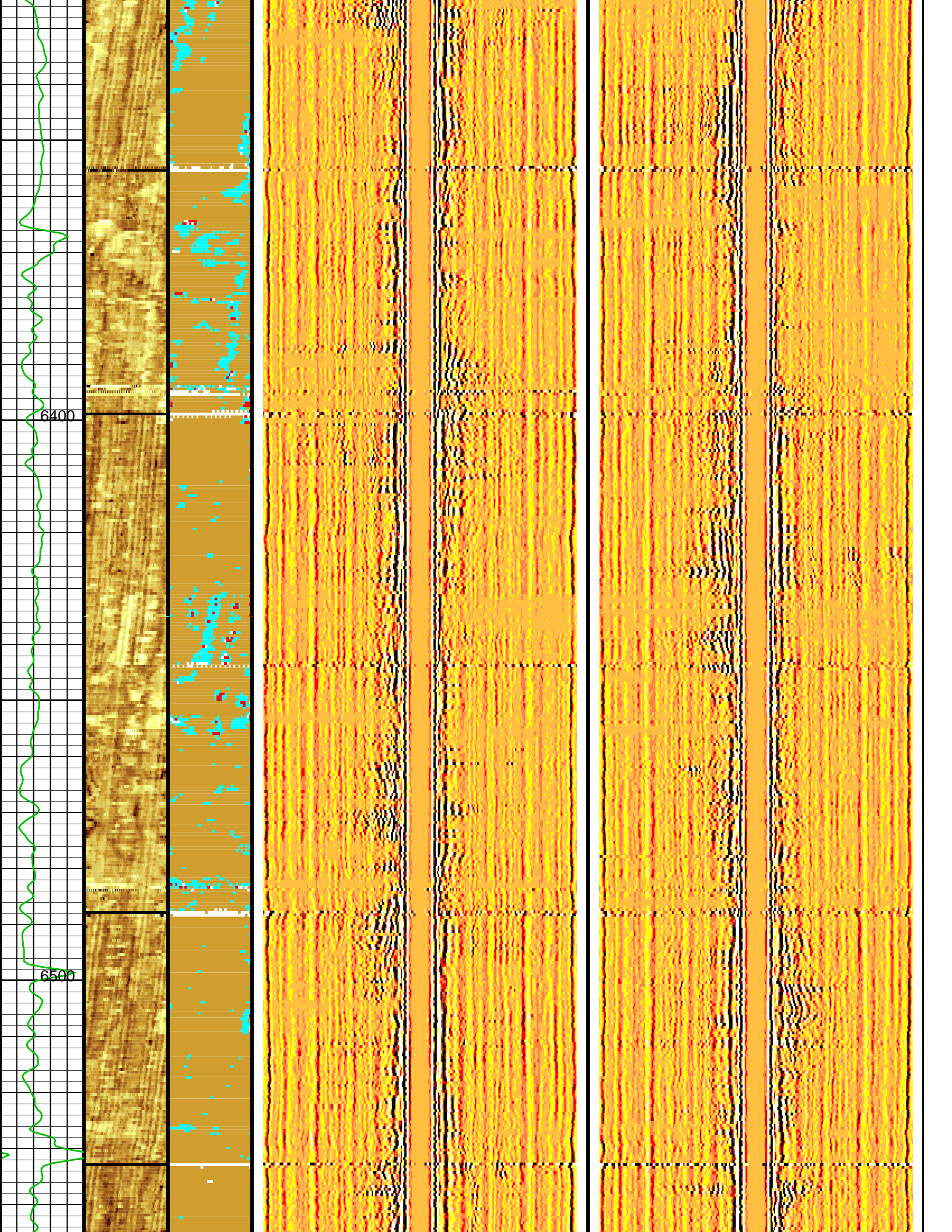
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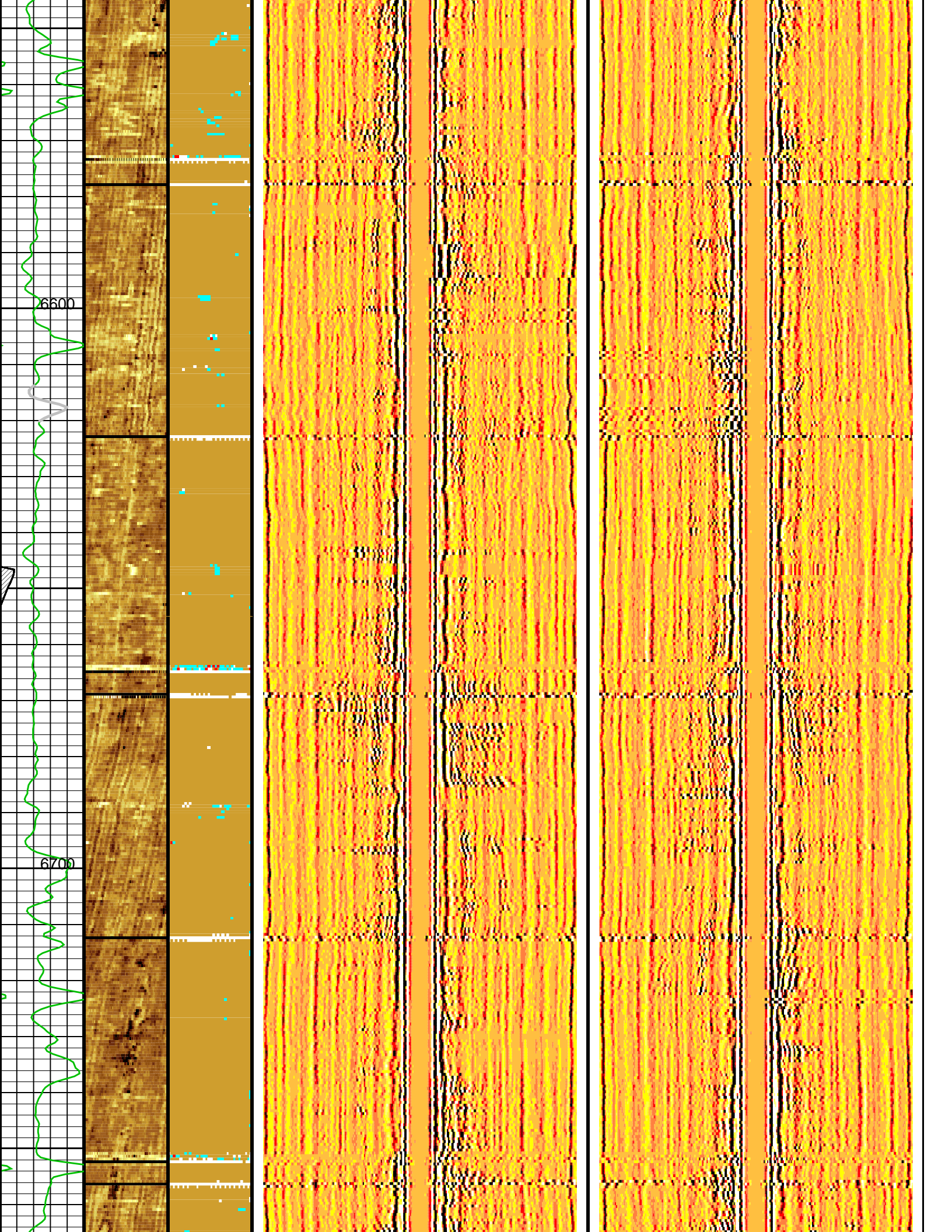
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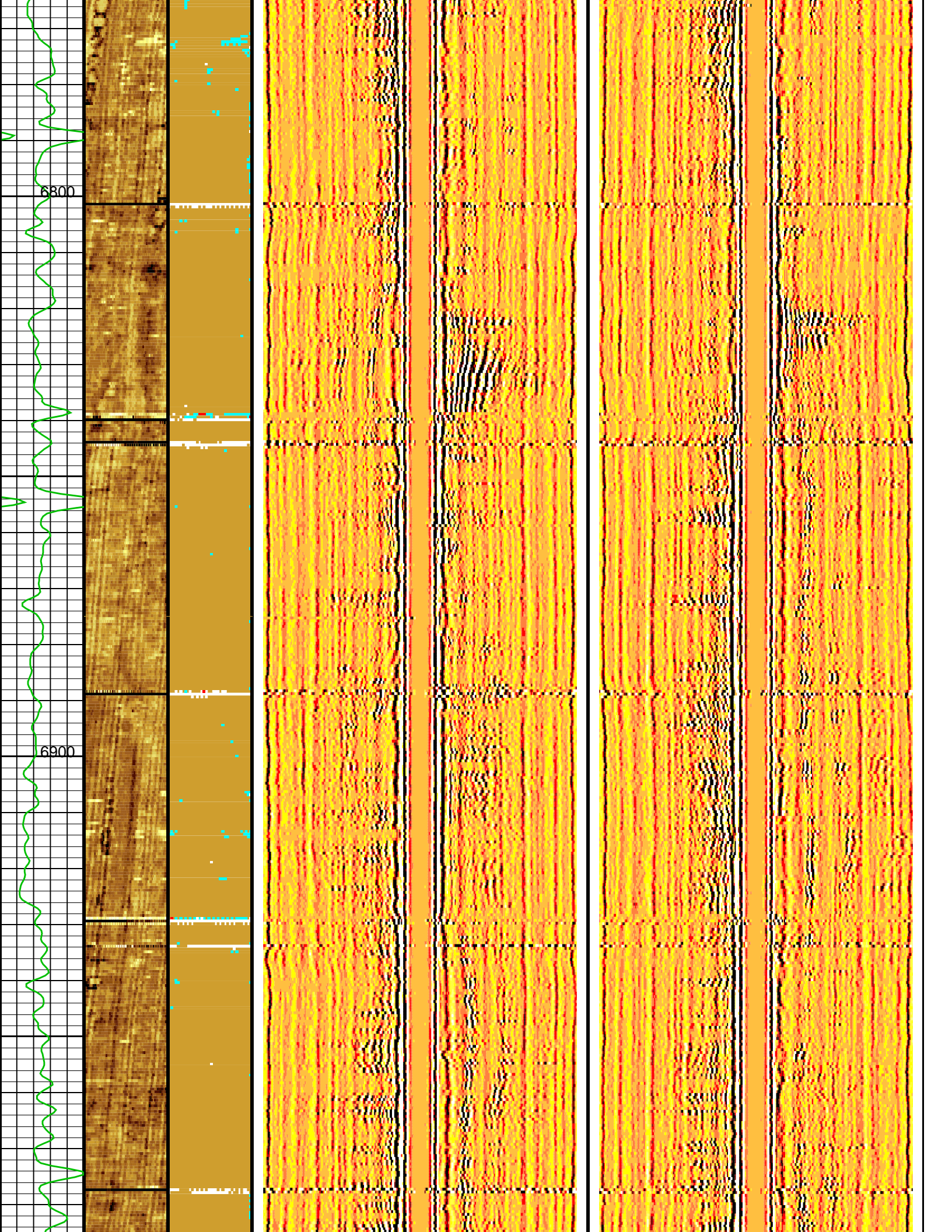


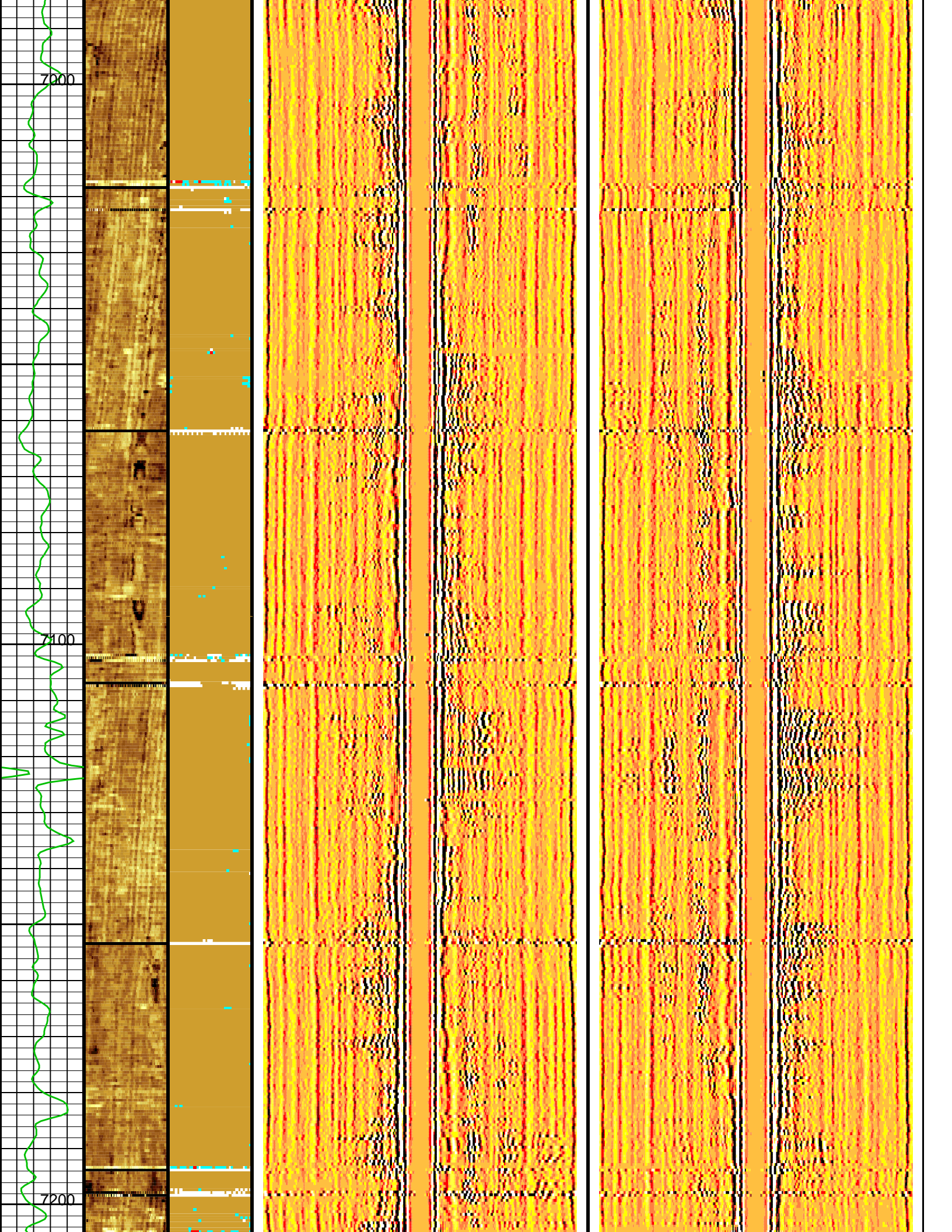


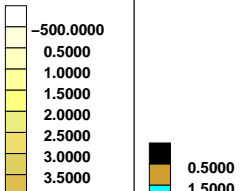
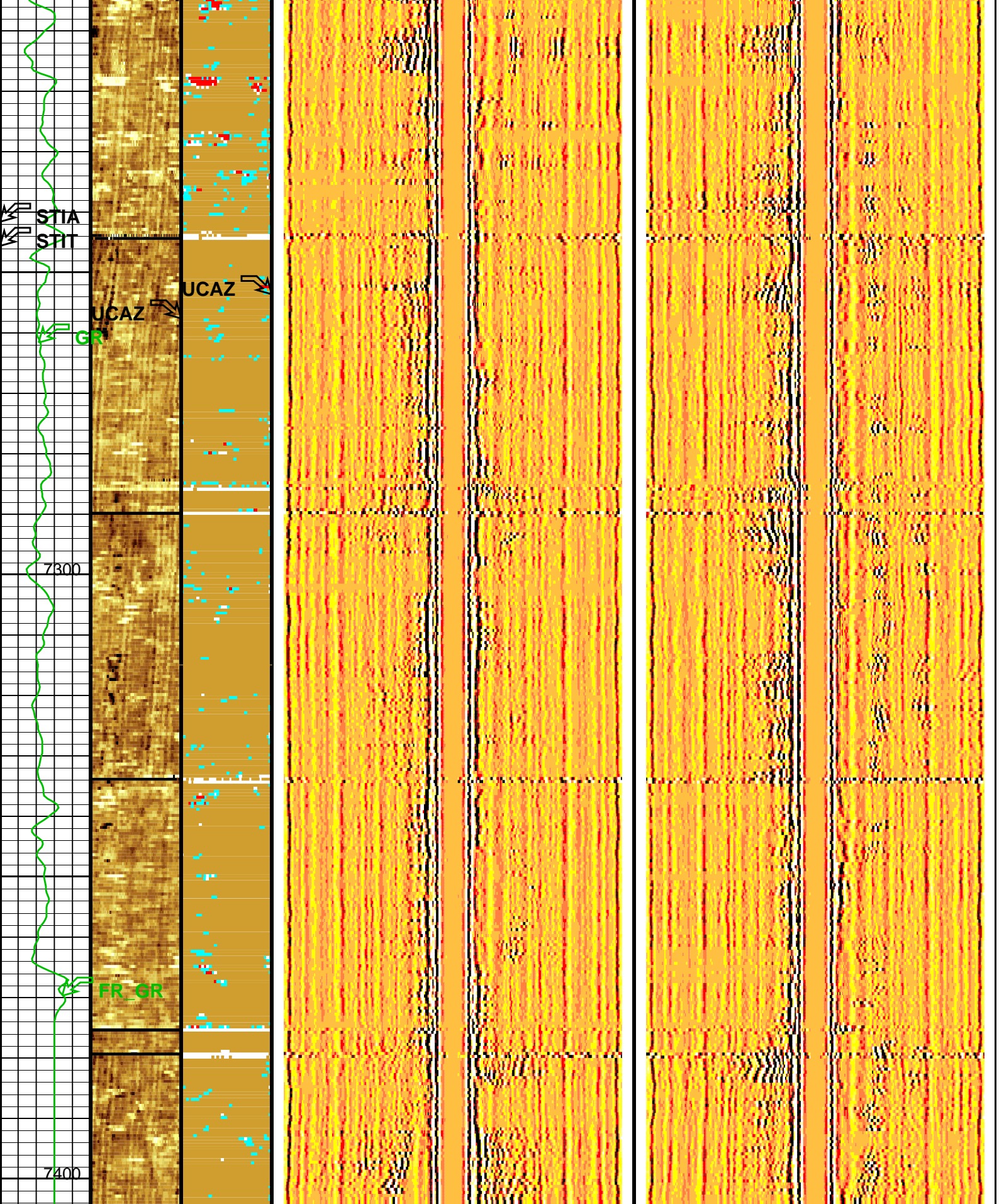


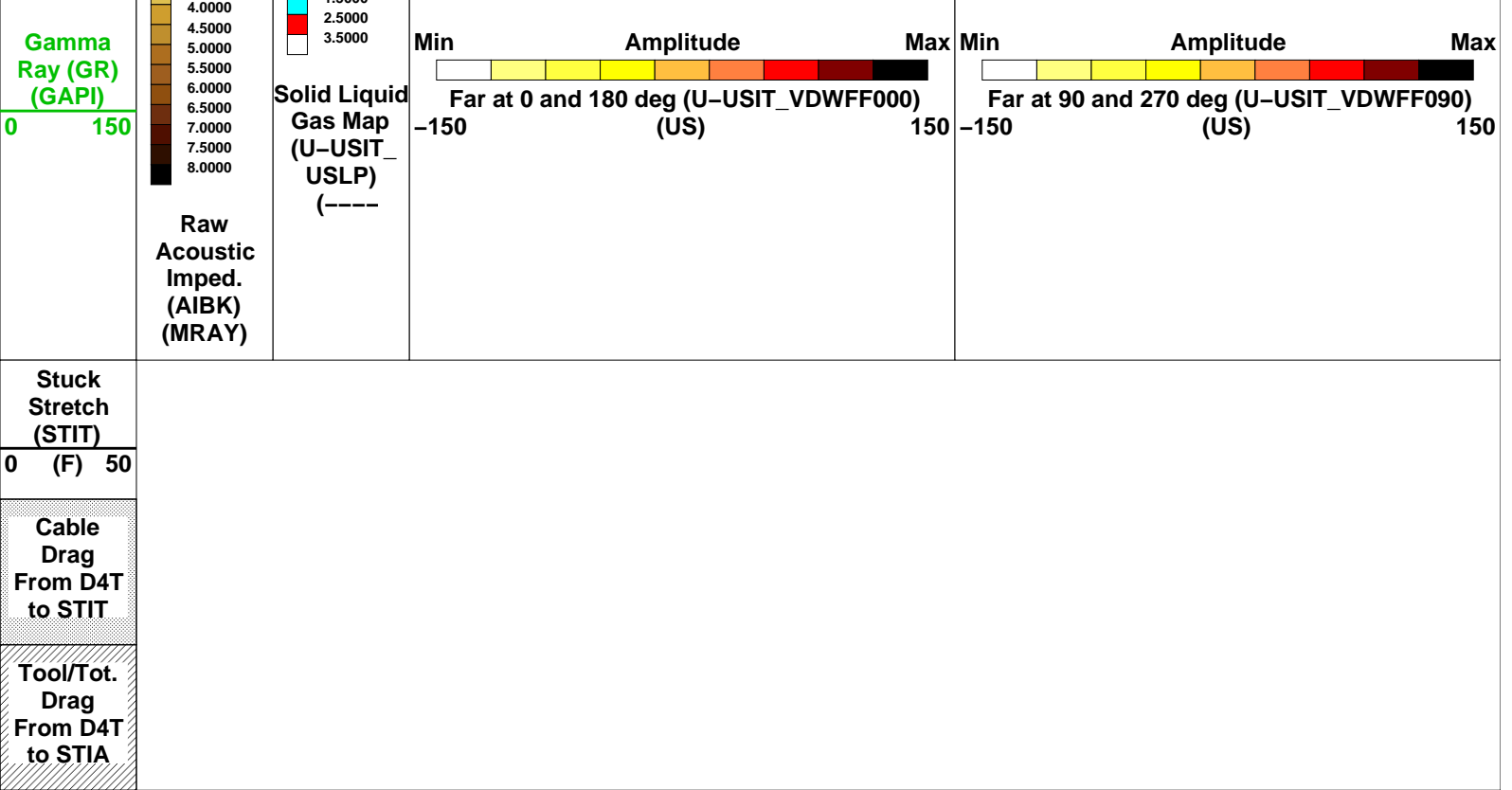












Parameters

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	203 US/F
DOT	Diameter of Transducer Sensor	2.874 IN
EMXV	EMEX Voltage	120 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	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	10.75 IN
U-USIT_OCSH	USIT Outer Casing Shoe	4318 FT
U-USIT_OCWE	USIT Outer Casing Weight	45 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	-14 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
WCAS	T^3 Processing Length	21.7078 US
ZCAS	Acoustic Impedance of Casing	46.25 MRAY

ZCAS	Acoustic Impedance of Casing	48.25	MRAY
ZINI	Initial Estimate of Cement Impedance	-1	MRAY
ZMUD	Acoustic Impedance of Mud	2.1	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	5	FT
TDD	Total Depth - Driller	9220.00	FT
TDL	Total Depth - Logger	7402.00	FT
System and Miscellaneous			
BS	Bit Size	9.875	IN
CWEI	Casing Weight	26.00	LB/F
DO	Depth Offset for Playback	7.5	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: 03-Nov-2009 19:04

OP System Version: 17C0-154

USIT-D SRPC-3779-Q1_2009_OP17_b HILTH-FTB SRPC-3779-Q1_2009_OP17_b
DTC-H 17C0-154

Input DLIS Files

DEFAULT USI_TLD_MCFL_CNL_011LUP FN:10 PRODUCER 03-Nov-2009 14:08 7397.0 FT 199.5 FT

Output DLIS Files

DEFAULT USI_TLD_MCFL_CNL_014PUP FN:13 PRODUCER 03-Nov-2009 19:04



MAXIS Field Log

Company: EXXONMOBIL PRODUCTION CO Well: PCU 197-34B7

Input DLIS Files

DEFAULT USI_TLD_MCFL_CNL_011LUP FN:10 PRODUCER 03-Nov-2009 14:08 7397.0 FT 199.5 FT

Output DLIS Files

DEFAULT USI_TLD_MCFL_CNL_014PUP FN:13 PRODUCER 03-Nov-2009 19:04

OP System Version: 17C0-154

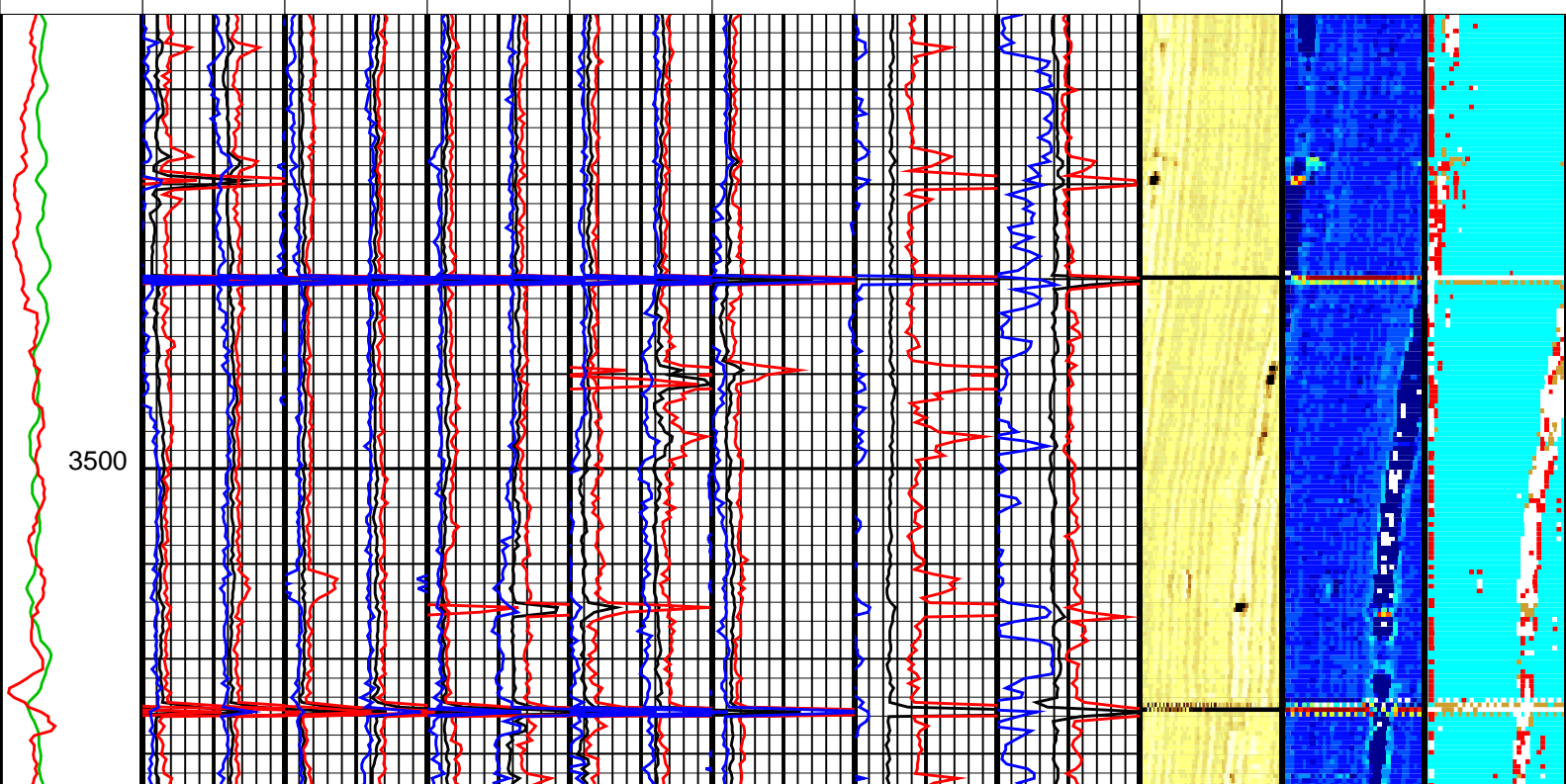
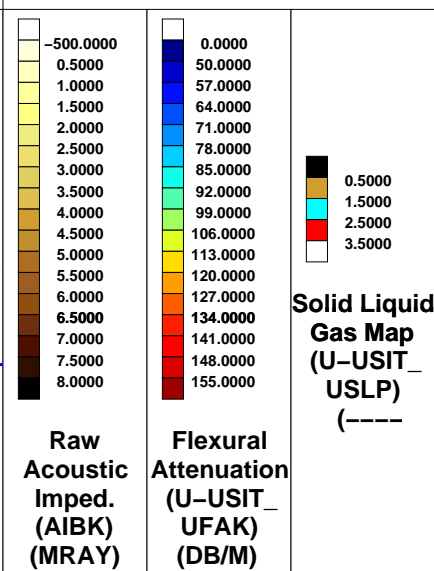
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DTC-H 17C0-154

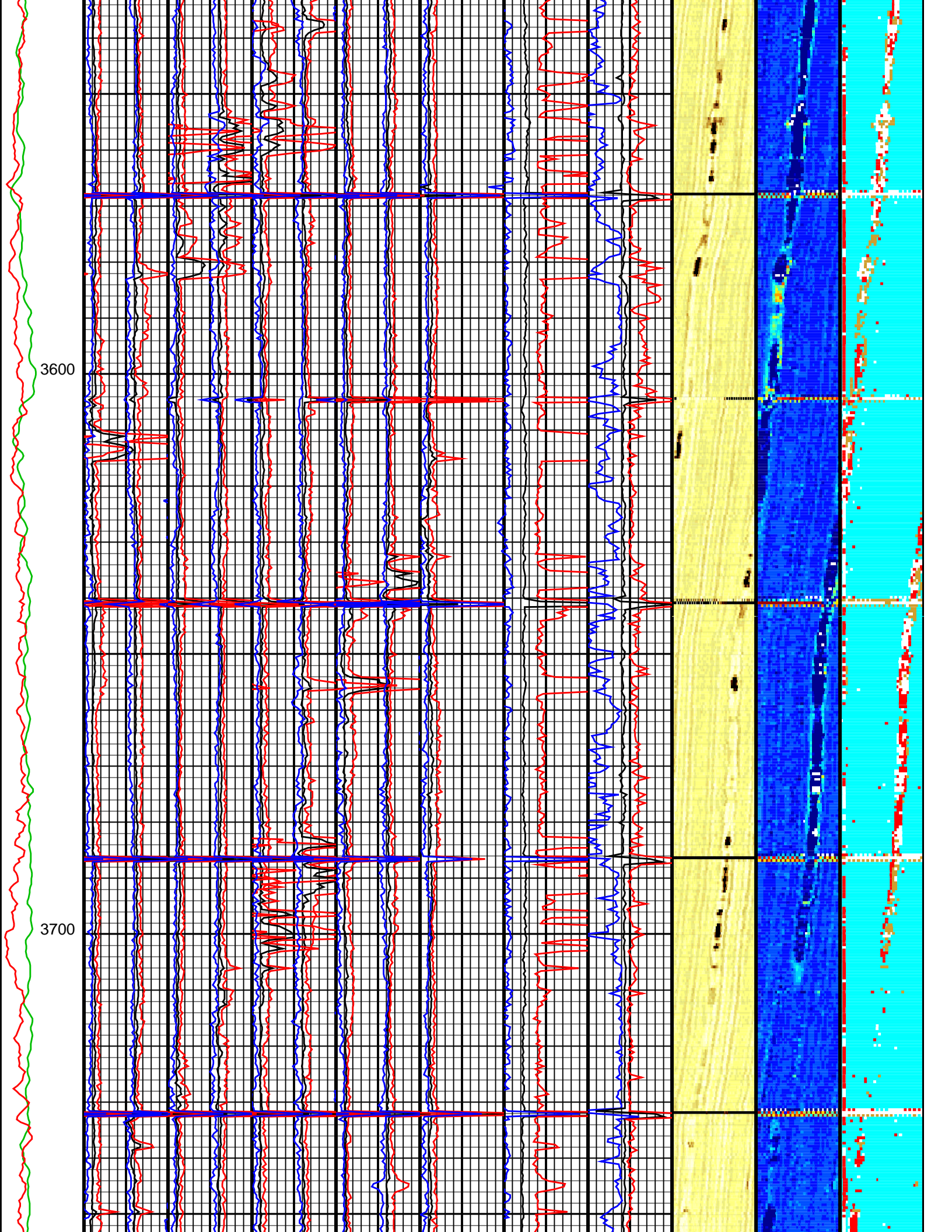
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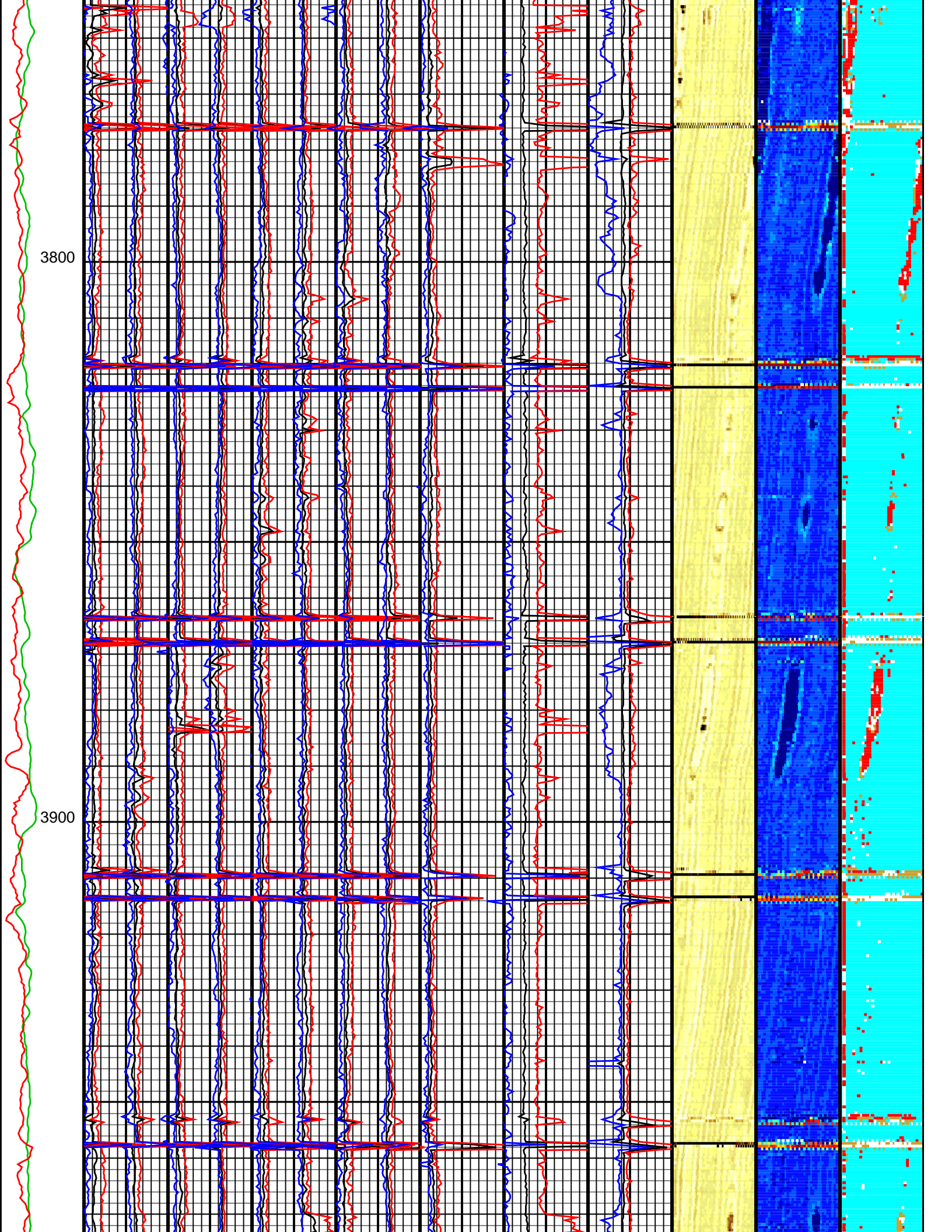
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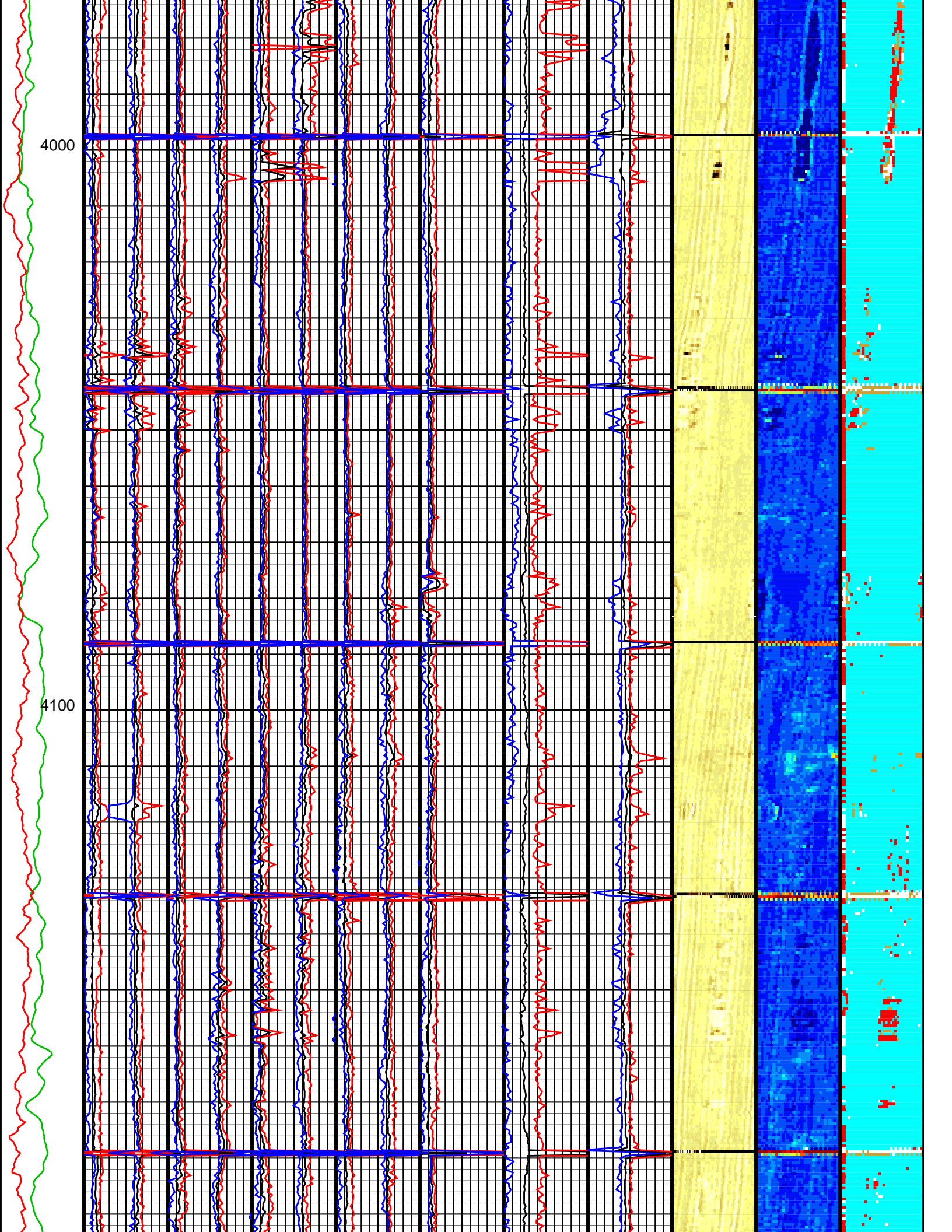
	(MRAY)	(MRAY)	(MRAY)	(MRAY)			
	0 15	0 15	0 15	0 15			
	Maximum Acoustic Impedance #2 (MAX_AI2) (MRAY)	Maximum Acoustic Impedance #4 (MAX_AI4) (MRAY)	Maximum Acoustic Impedance #6 (MAX_AI6) (MRAY)	Maximum Acoustic Impedance #8 (MAX_AI8) (MRAY)			
	-7.5 7.5	-7.5 7.5	-7.5 7.5	-7.5 7.5			
	Maximum Acoustic 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)
	0 15	0 15	0 15	0 15	0 15	0 7.5	0 150
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)
0 150	-7.5 7.5	-7.5 7.5	-7.5 7.5	-7.5 7.5	0 15	0 7.5	0 150

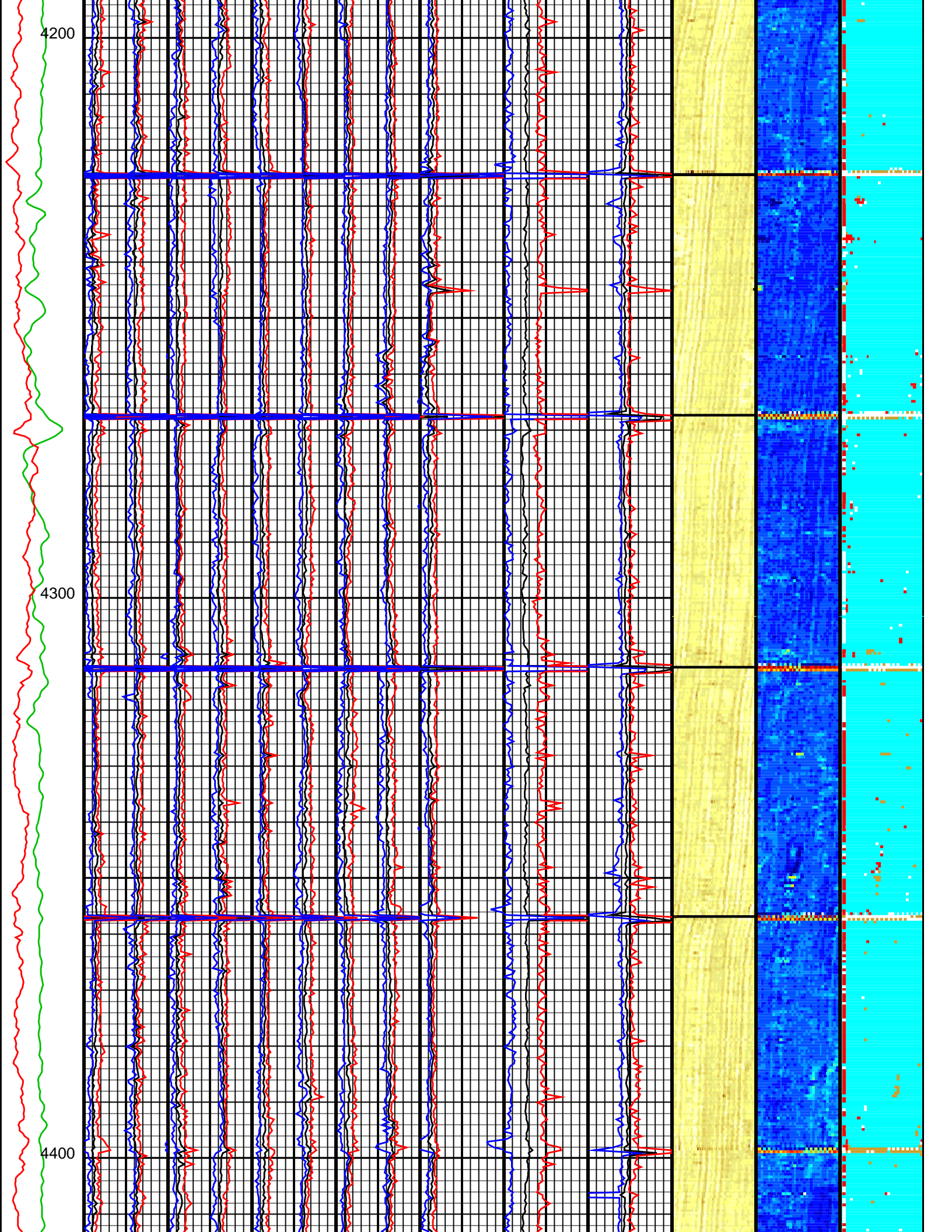
	0 15	0 15	0 15	0 15	0 15	0 7.5	0 150
Eccent. (ECCE)	Average Acoustic Impedance #1 (AV_AI1) (MRAY)	Average Acoustic Impedance #3 (AV_AI3) (MRAY)	Average Acoustic Impedance #5 (AV_AI5) (MRAY)	Average Acoustic Impedance #7 (AV_AI7) (MRAY)	Average Acoustic Impedance #9 (AV_AI9) (MRAY)	Average of AI (AIAV) (MRAY)	Minimum Flexural Attenuation (U-USIT_UFAN) (DB/M)
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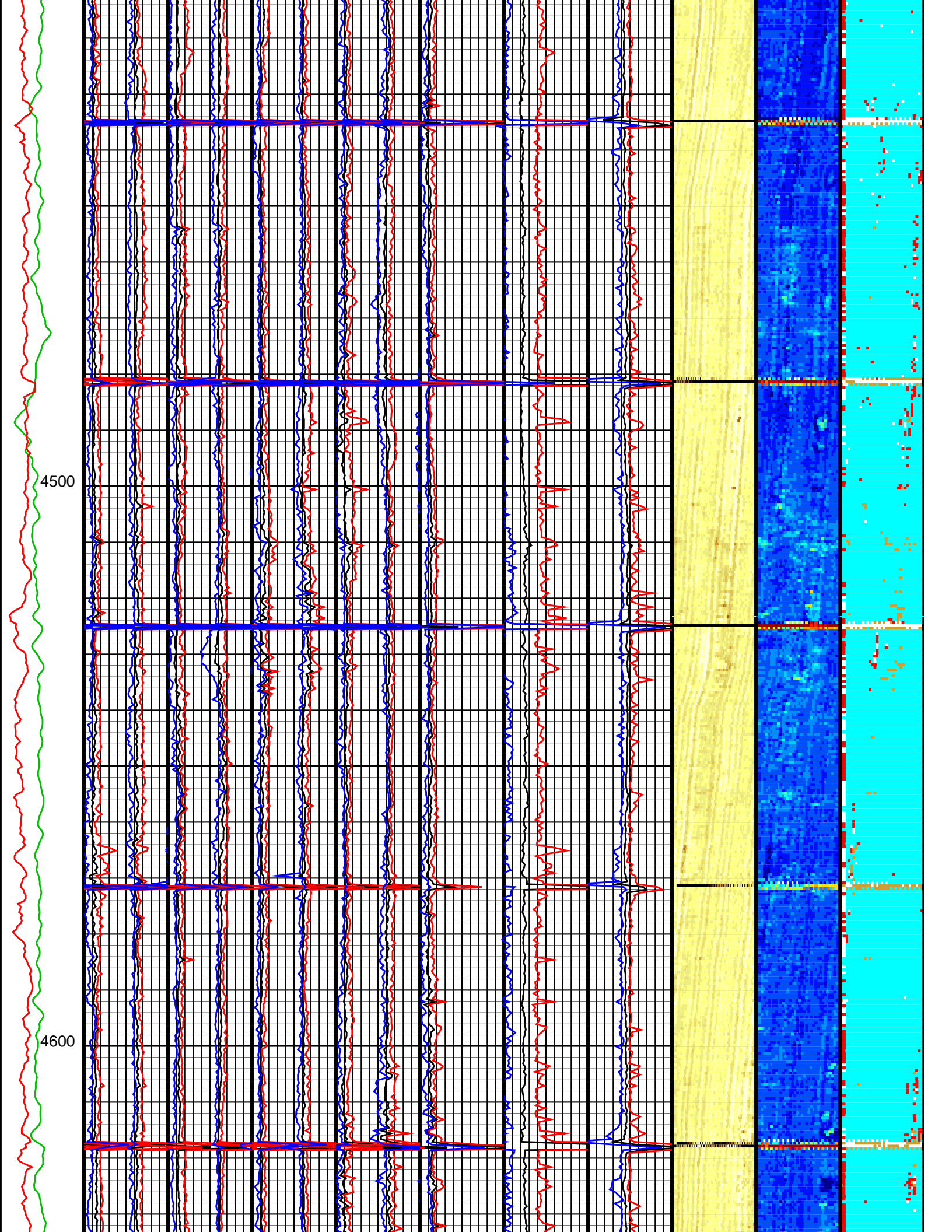


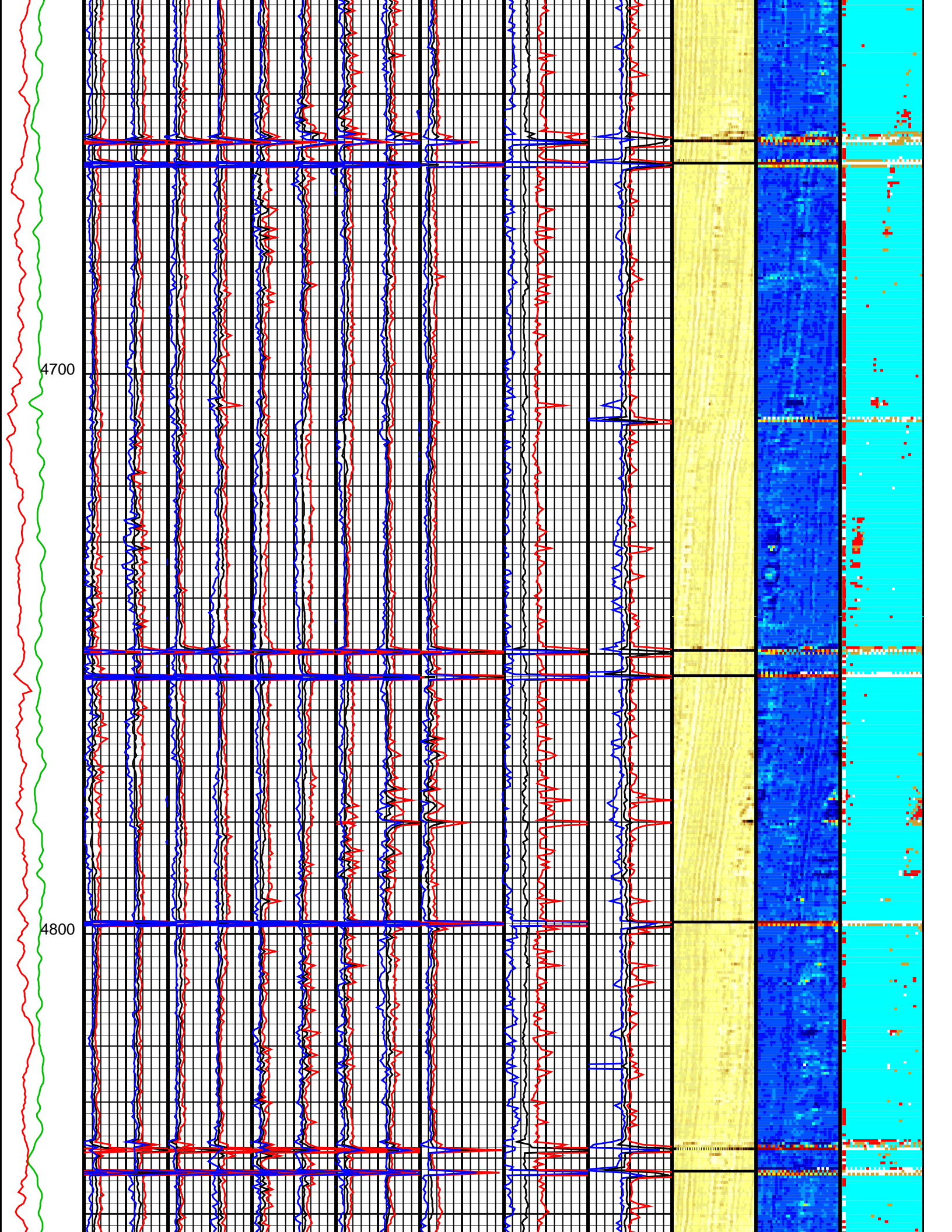


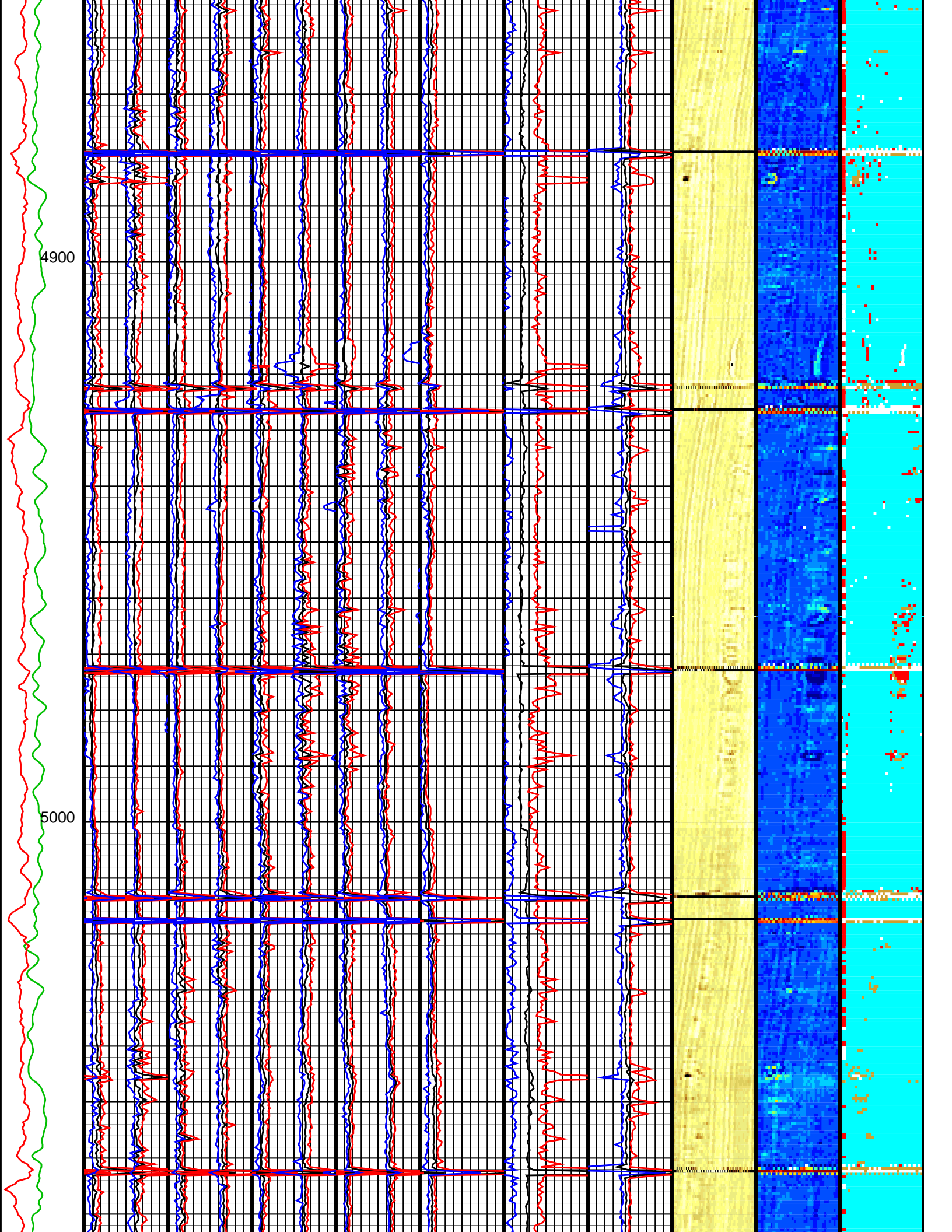


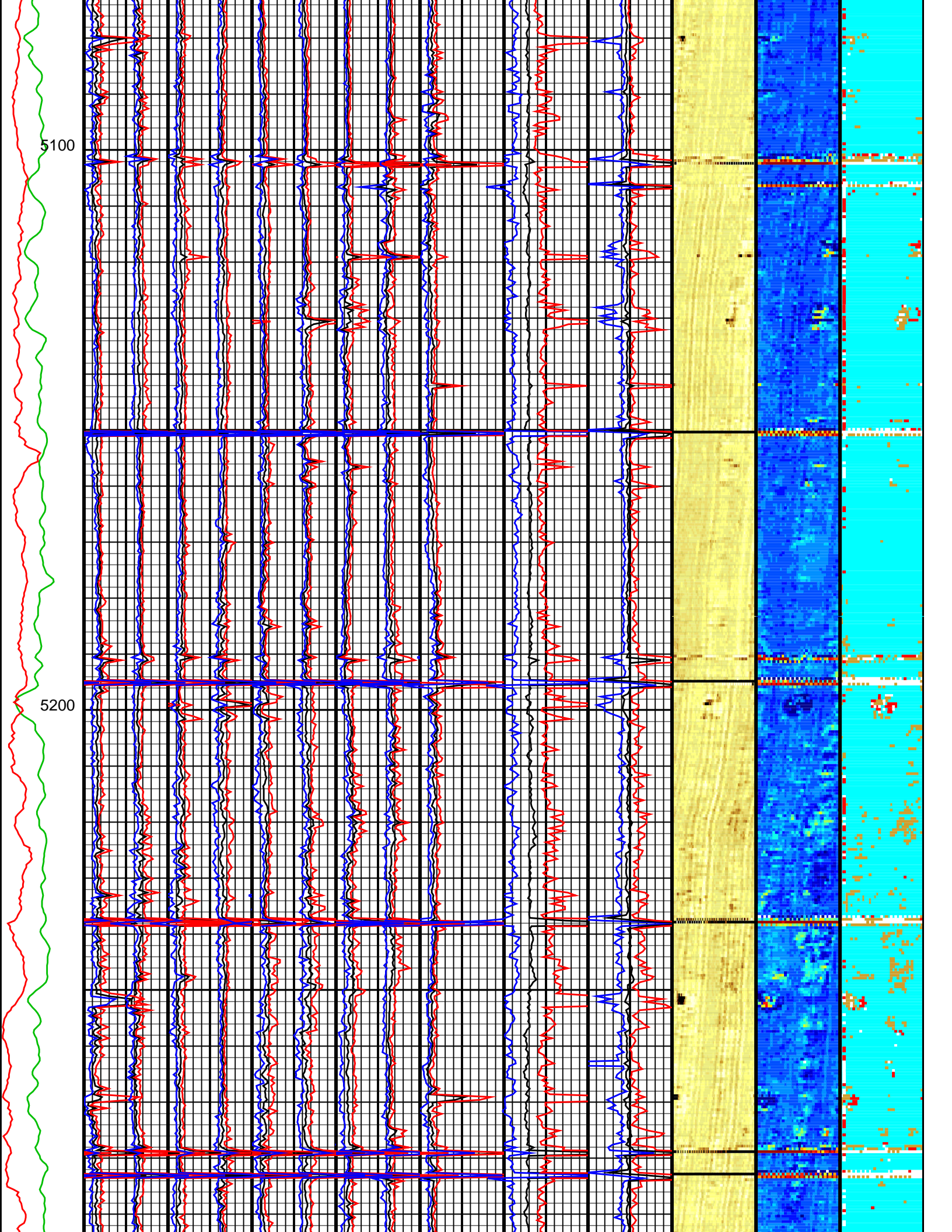


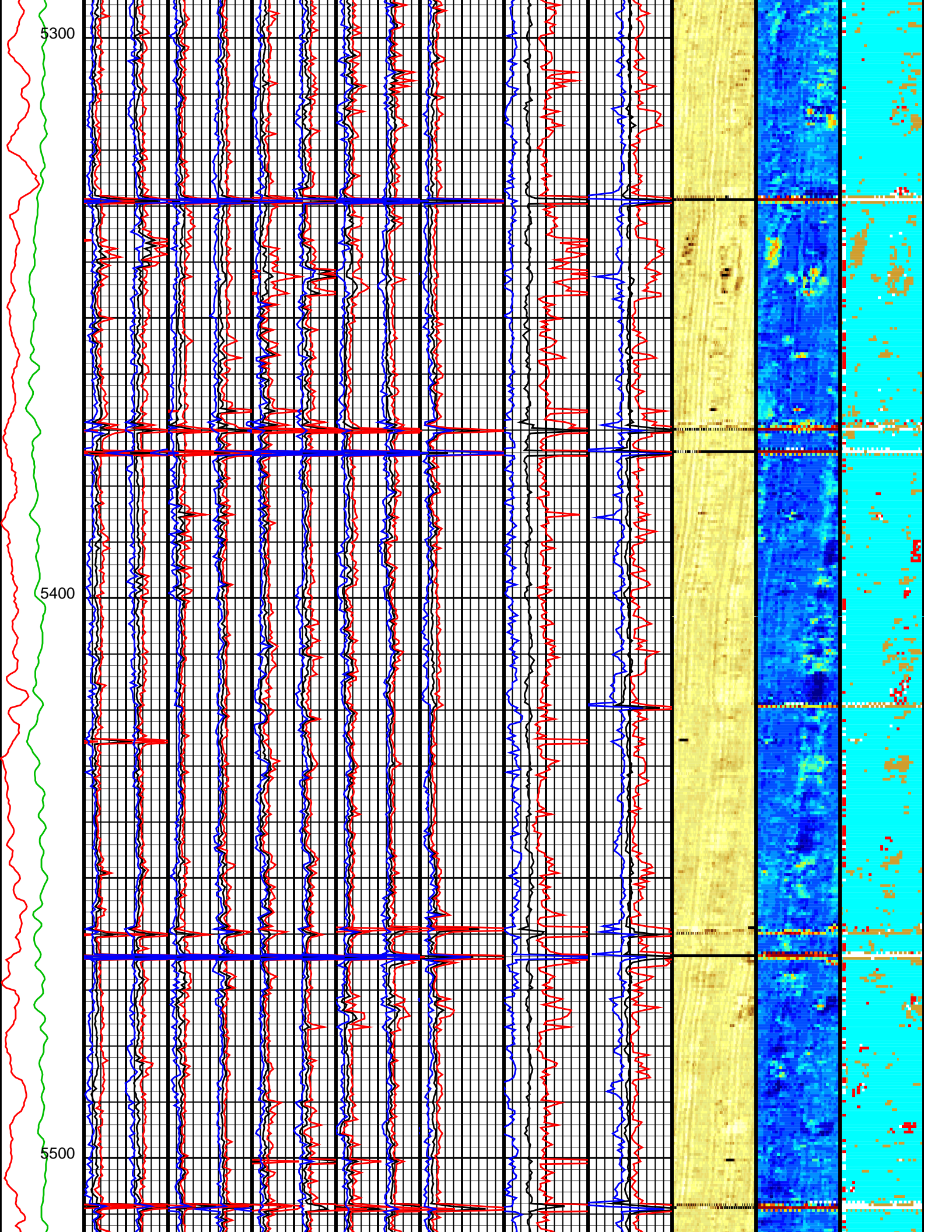


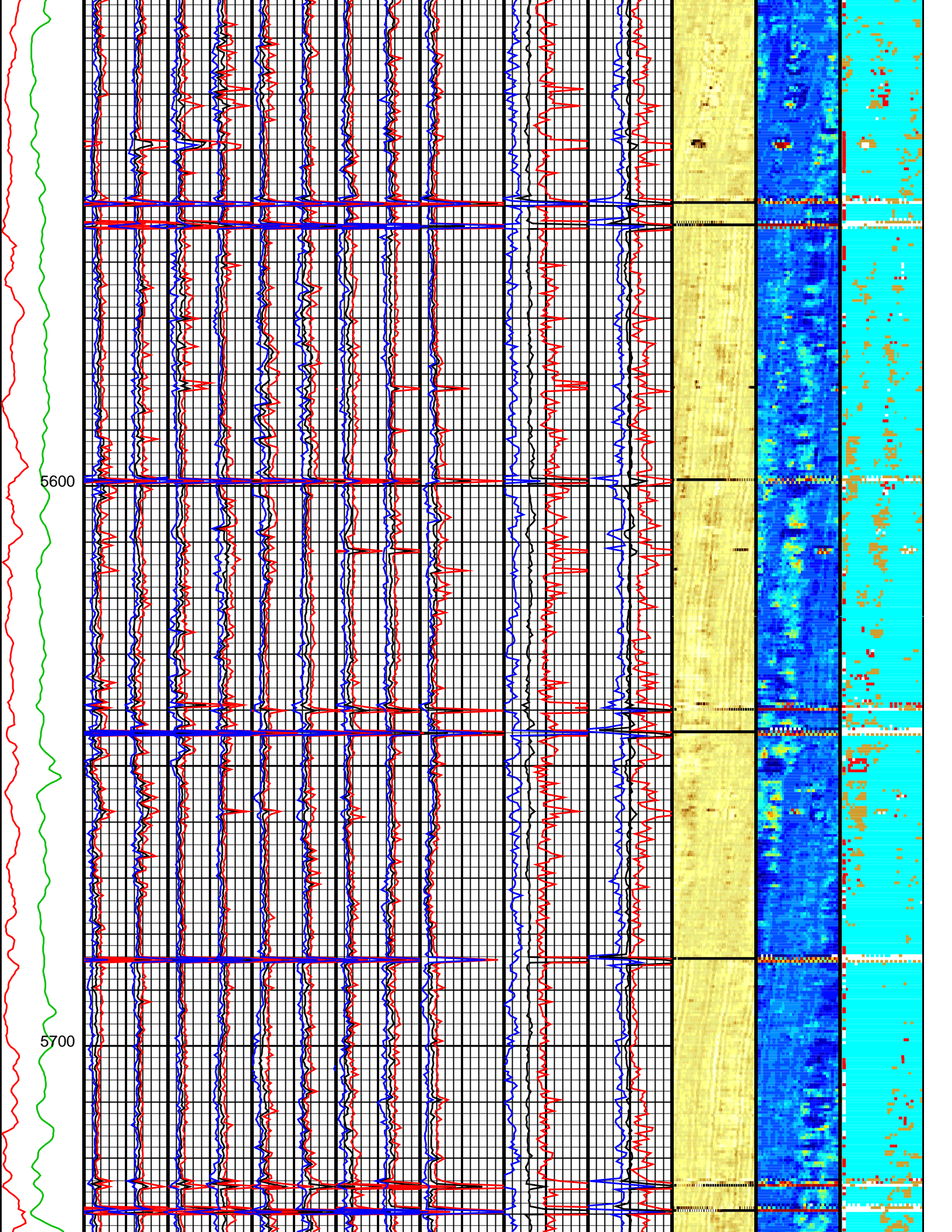


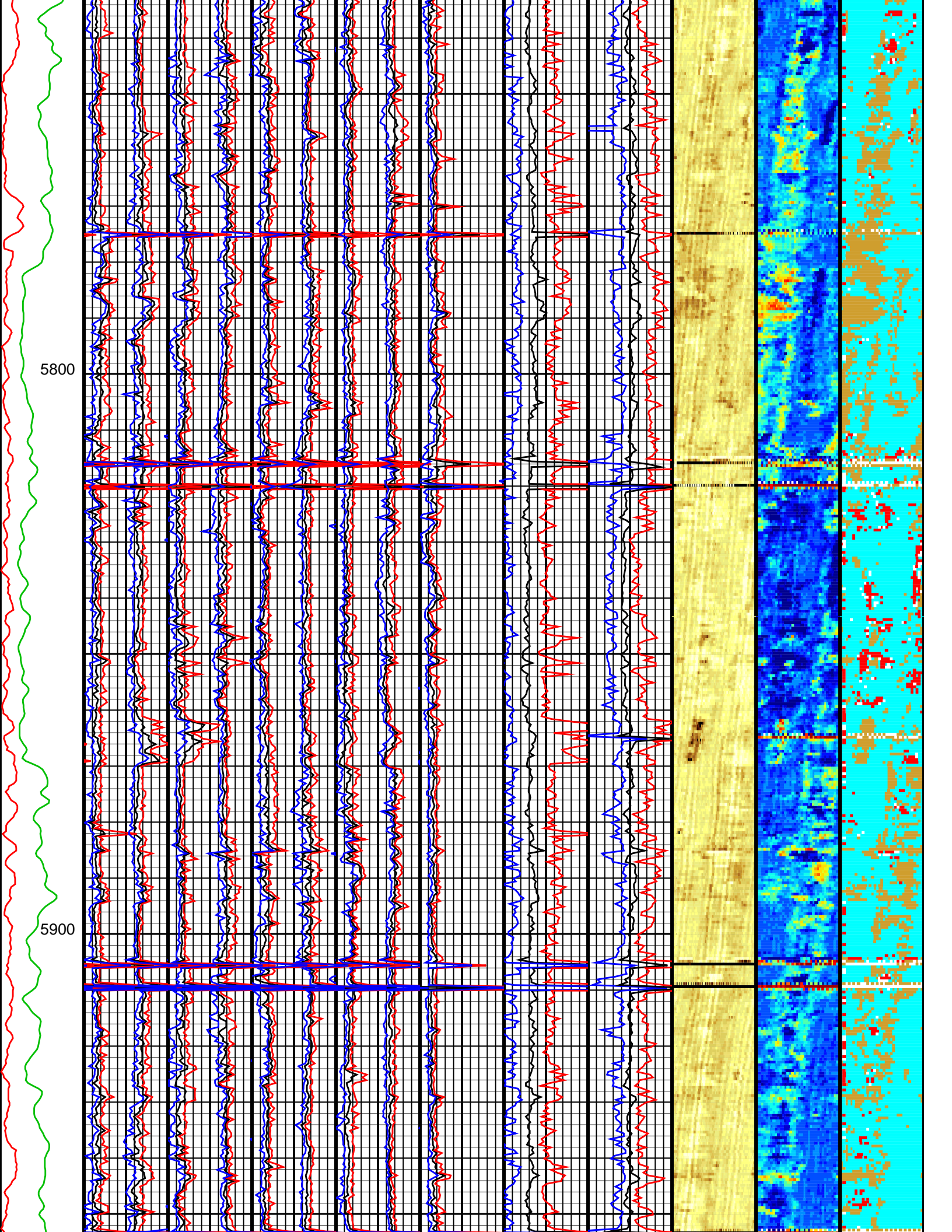


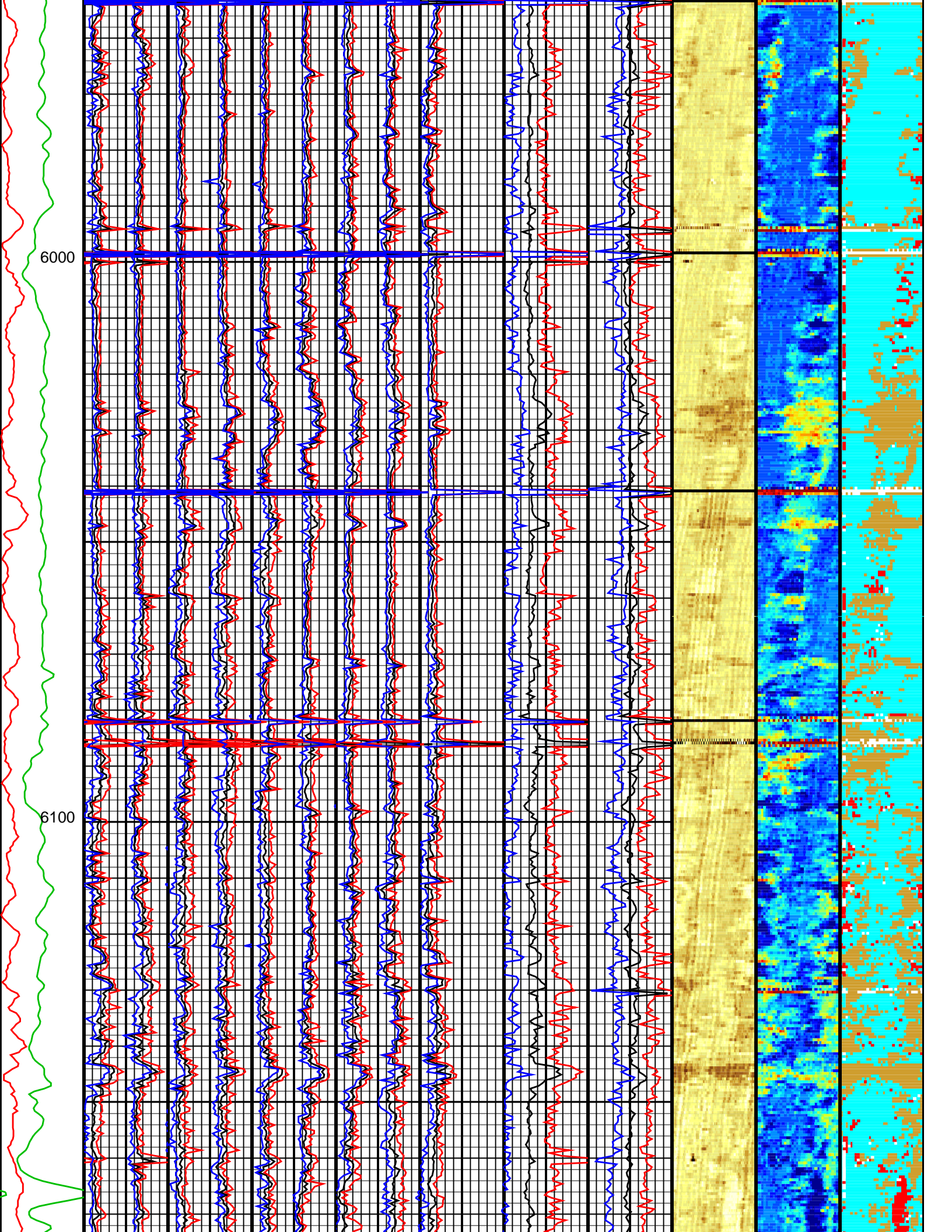


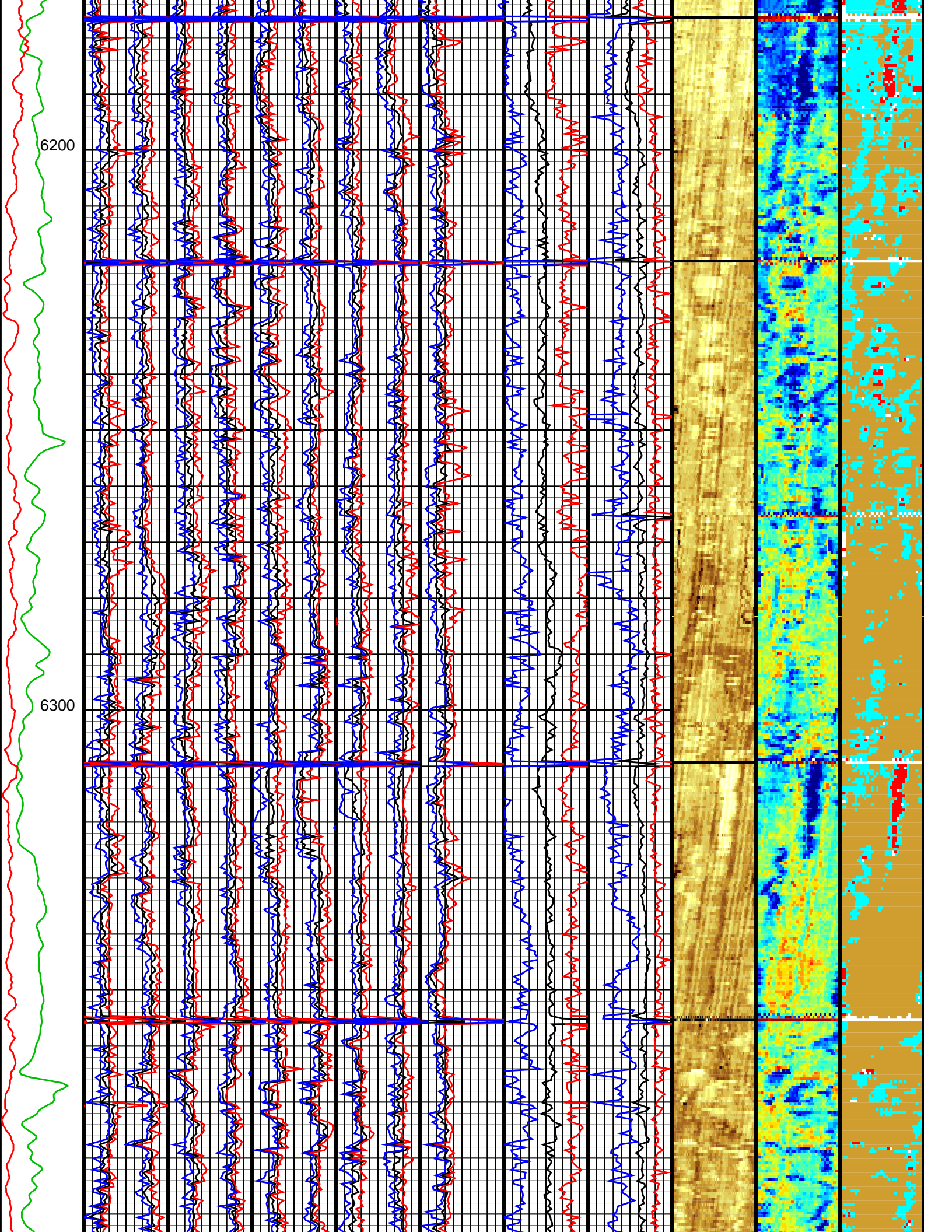






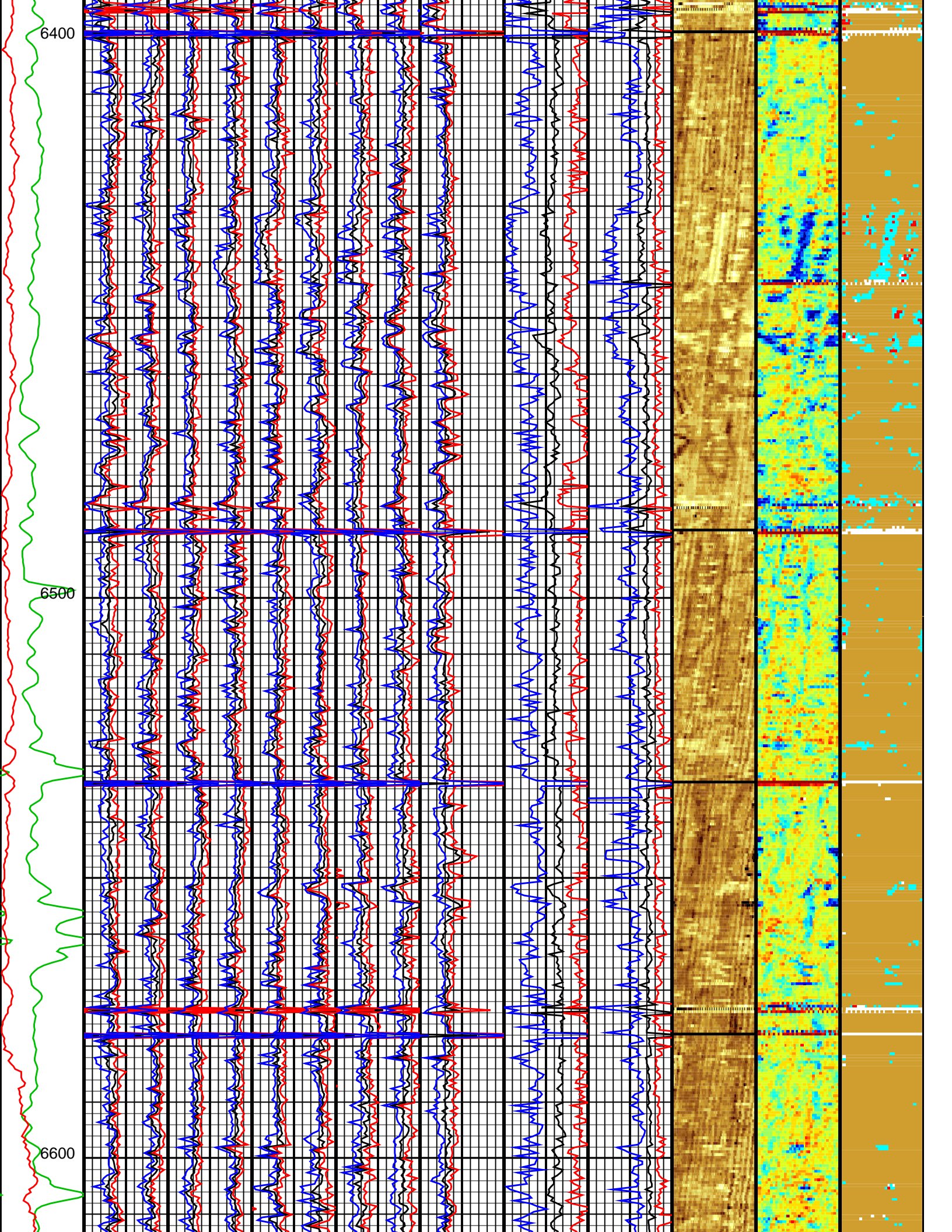


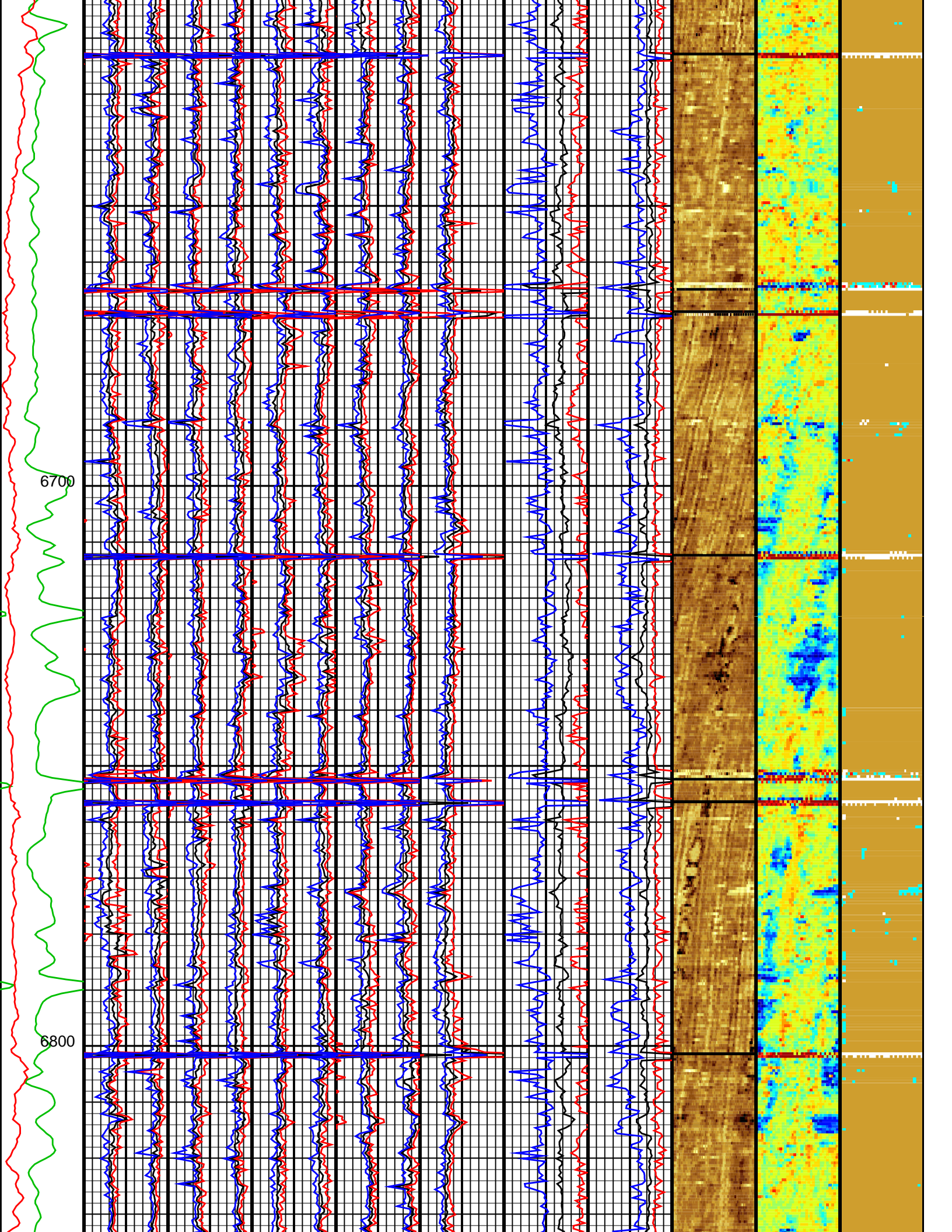


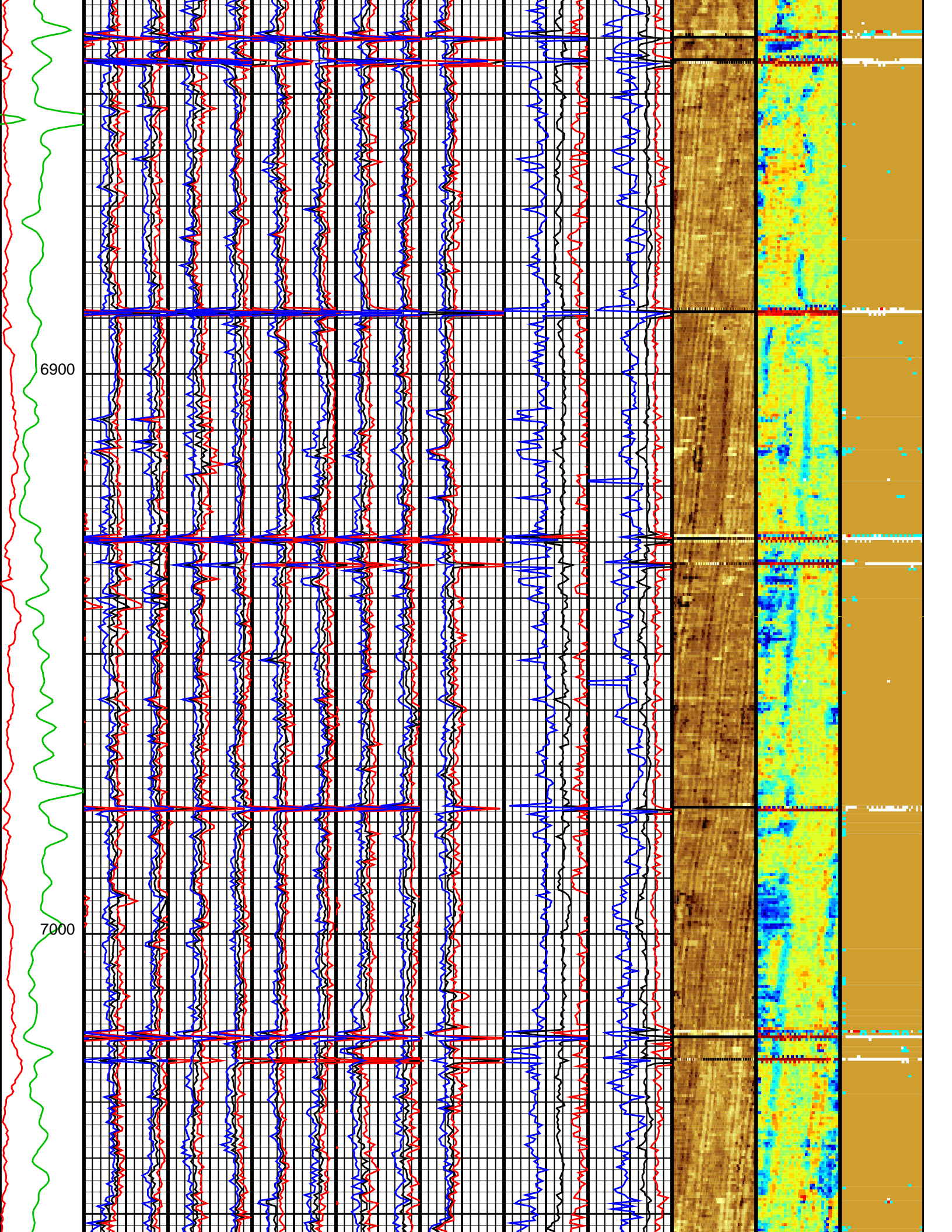


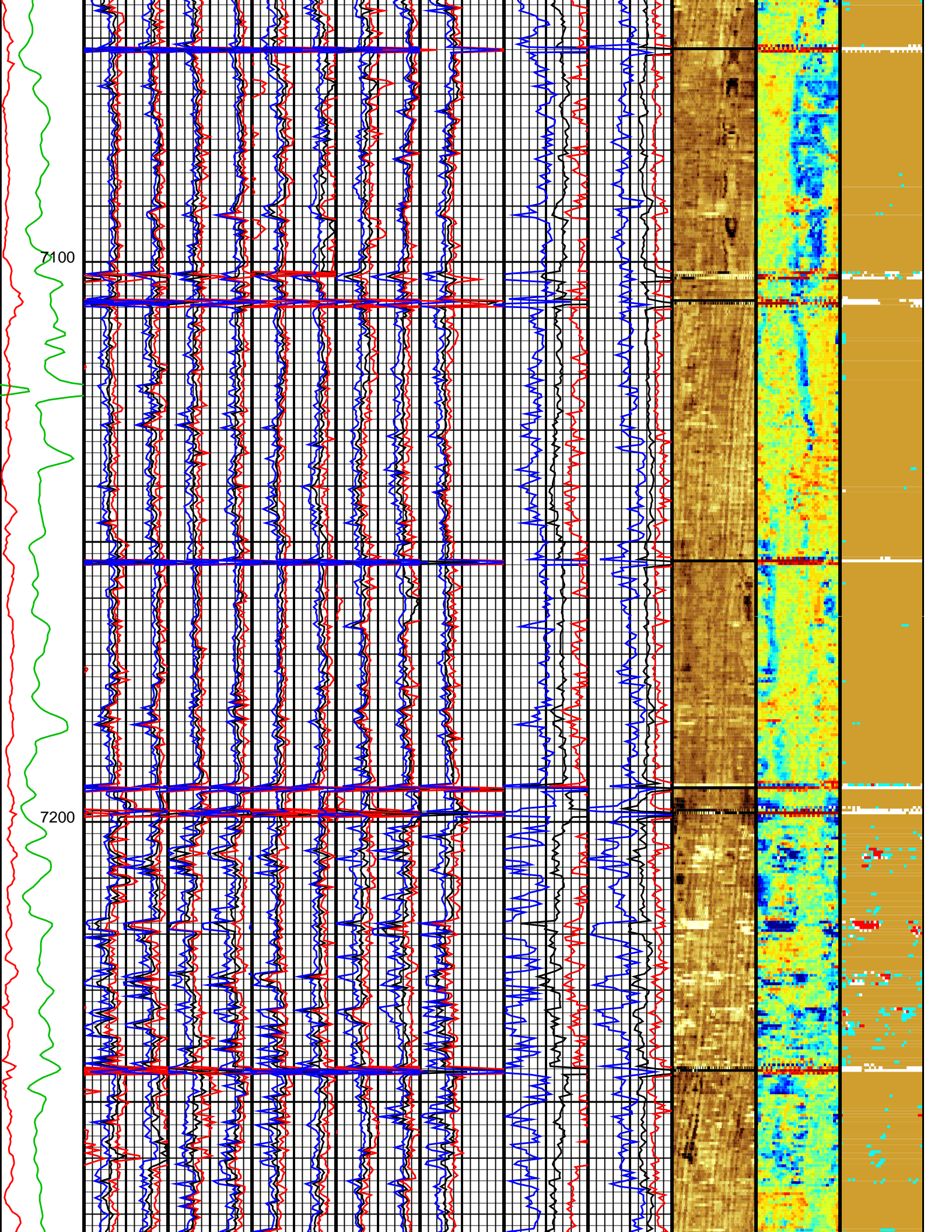
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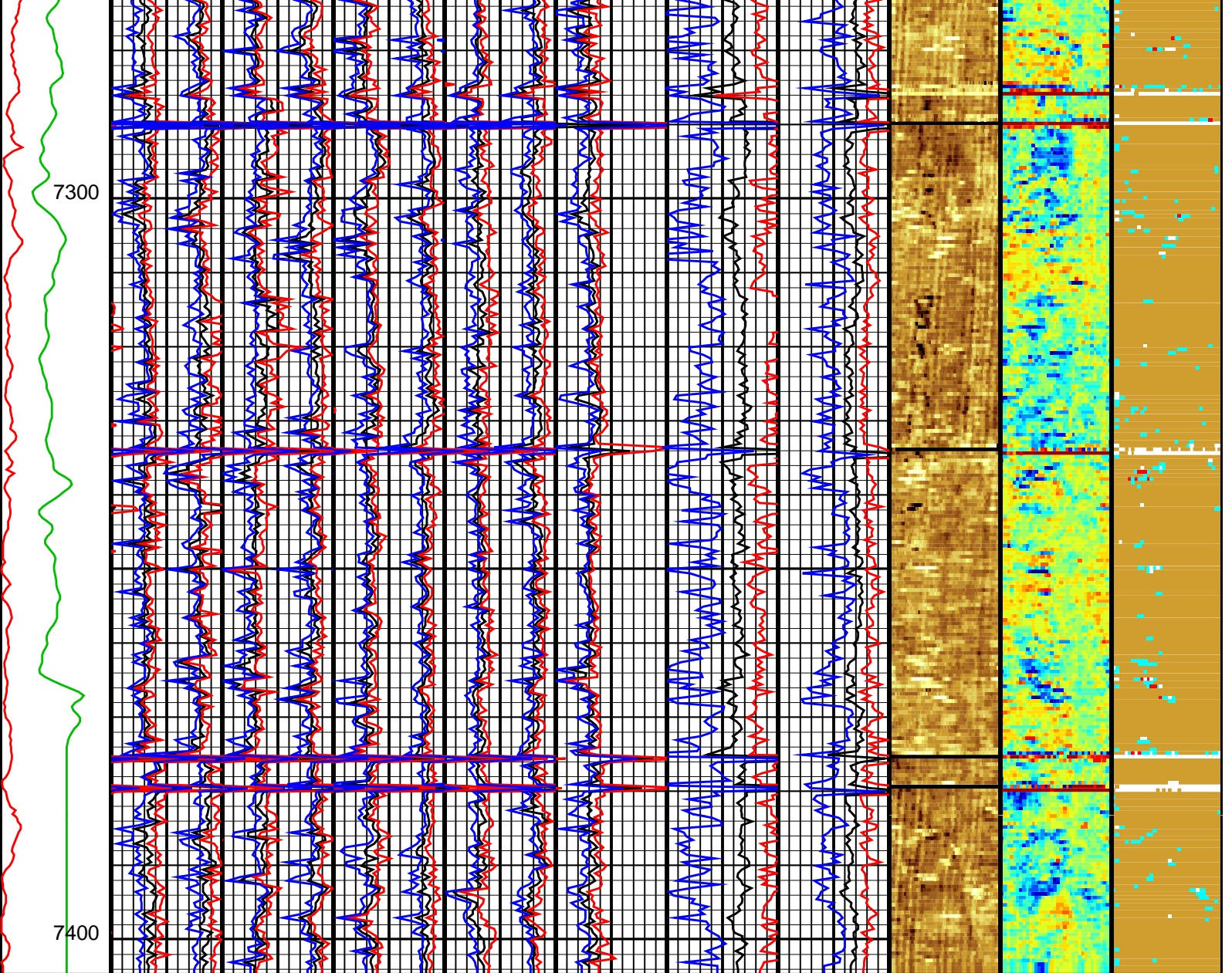
6300











<p>Eccent. (ECCE) (IN) 0.5</p> <p>0 0.5</p>	<p>Average Acoustic Impedance #1 (AV_ AI1) (MRAY)</p> <p>0 15 0 15</p>	<p>Average Acoustic Impedance #3 (AV_ AI3) (MRAY)</p> <p>0 15 0 15</p>	<p>Average Acoustic Impedance #5 (AV_ AI5) (MRAY)</p> <p>0 15 0 15</p>	<p>Average Acoustic Impedance #7 (AV_ AI7) (MRAY)</p> <p>0 15 0 15</p>	<p>Average Acoustic Impedance #9 (AV_ AI9) (MRAY)</p> <p>0 15 0 15</p>	<p>Average of AI (AIAV) (MRAY)</p> <p>0 7.5</p>	<p>Minimum Flexural Attenuation (U-USIT_ UFAN) (DB/M)</p> <p>0 150</p>	<p>Raw Acoustic Imped. (AIBK) (MRAY)</p> <p>-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</p>	<p>Flexural Attenuation (U-USIT_ UFAK) (DB/M)</p> <p>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</p>	<p>Solid Liquid Gas Map (U-USIT_ USLP) (----)</p> <p>0.5000 1.5000 2.5000 3.5000</p>
<p>Gamma Ray (GR) (GAPI) 0 150</p> <p>0 150</p>	<p>Average Acoustic Impedance #2 (AV_ AI2) (MRAY)</p> <p>-7.5 7.5 -7.5 7.5</p>	<p>Average Acoustic Impedance #4 (AV_ AI4) (MRAY)</p> <p>-7.5 7.5 -7.5 7.5</p>	<p>Average Acoustic Impedance #6 (AV_ AI6) (MRAY)</p> <p>-7.5 7.5 -7.5 7.5</p>	<p>Average Acoustic Impedance #8 (AV_ AI8) (MRAY)</p> <p>-7.5 7.5 -7.5 7.5</p>	<p>Maximum Acoustic Impedance #9 (MAX_ AI9) (MRAY)</p> <p>0 15</p>	<p>Minimum of AI (AIMN) (MRAY)</p> <p>0 7.5</p>	<p>Average Flexural Attenuation (U-USIT_ UFAV) (DB/M)</p> <p>0 150</p>			
	<p>Maximum Acoustic</p>	<p>Maximum Acoustic</p>	<p>Maximum Acoustic</p>	<p>Maximum Acoustic</p>	<p>Minimum Acoustic</p>	<p>Maximum</p>	<p>Maximum Flexural</p>			

Acoustic Impedance #1 (MAX_A11) (MRAY)	Acoustic Impedance #3 (MAX_A13) (MRAY)	Acoustic Impedance #5 (MAX_A15) (MRAY)	Acoustic Impedance #7 (MAX_A17) (MRAY)	Acoustic Impedance #9 (MIN_A19) (MRAY)	Maximum of AI (AIMX) (MRAY)	Flexural Attenuation (U-USIT_UFAX) (DB/M)
0 15	0 15	0 15	0 15	0 15	0 7.5	0 150
Maximum Acoustic Impedance #2 (MAX_A12) (MRAY)	Maximum Acoustic Impedance #4 (MAX_A14) (MRAY)	Maximum Acoustic Impedance #6 (MAX_A16) (MRAY)	Maximum Acoustic Impedance #8 (MAX_A18) (MRAY)			
-7.5 7.5	-7.5 7.5	-7.5 7.5	-7.5 7.5			
Minimum Acoustic Impedance #1 (MIN_A11) (MRAY)	Minimum Acoustic Impedance #3 (MIN_A13) (MRAY)	Minimum Acoustic Impedance #5 (MIN_A15) (MRAY)	Minimum Acoustic Impedance #7 (MIN_A17) (MRAY)			
0 15	0 15	0 15	0 15			
Minimum Acoustic Impedance #2 (MIN_A12) (MRAY)	Minimum Acoustic Impedance #4 (MIN_A14) (MRAY)	Minimum Acoustic Impedance #6 (MIN_A16) (MRAY)	Minimum Acoustic Impedance #8 (MIN_A18) (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: 03-Nov-2009 19:04

OP System Version: 17C0-154

USIT-D SRPC-3779-Q1_2009_OP17_b HILTH-FTB SRPC-3779-Q1_2009_OP17_b
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_011LUP FN:10 PRODUCER 03-Nov-2009 14:08 7397.0 FT 199.5 FT

Output DLIS Files

DEFAULT USI_TLD_MCFL_CNL_014PUP FN:13 PRODUCER 03-Nov-2009 19:04



GOODWIN 0.1 INCH

Input DLIS Files

DEFAULT USI_TLD_MCFL_CNL_011LUP FN:10 PRODUCER 03-Nov-2009 14:08 7397.0 FT 199.5 FT

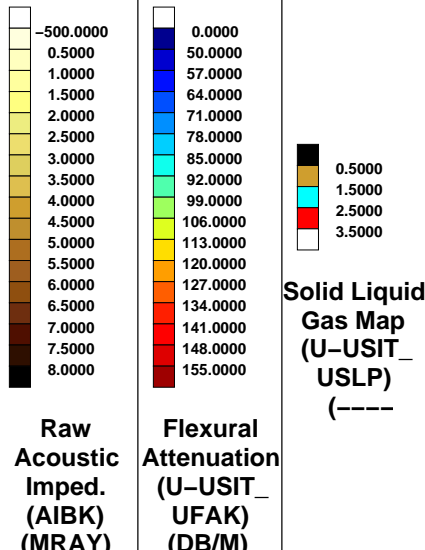
Output DLIS Files

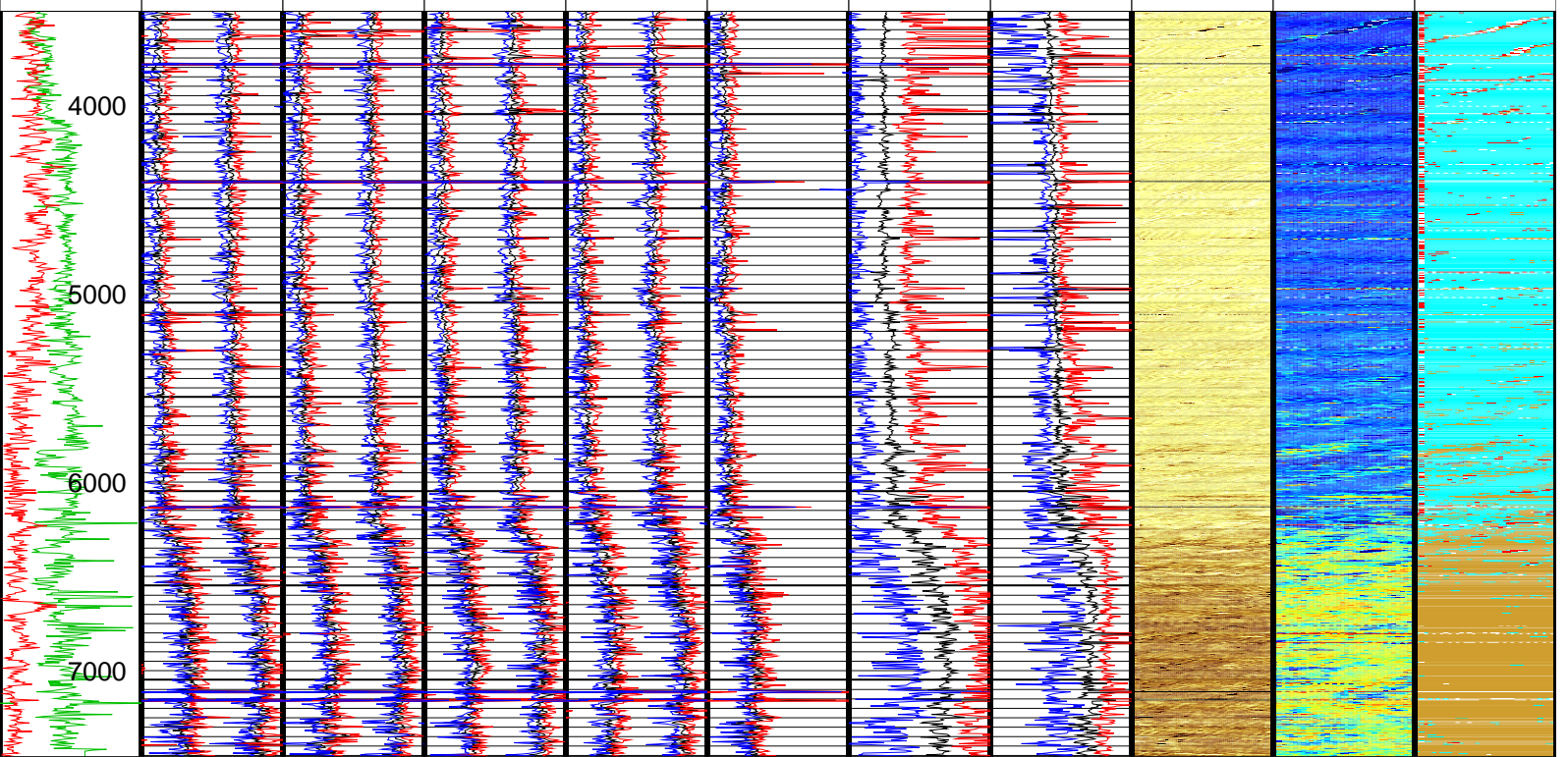
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OP System Version: 17C0-154

USIT-D SRPC-3779-Q1_2009_OP17_b HILTH-FTB SRPC-3779-Q1_2009_OP17_b
 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 #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)				
		0 15	0 15	0 15	0 15				
		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)				
		-7.5 7.5	-7.5 7.5	-7.5 7.5	-7.5 7.5				
		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)	
		0 15	0 15	0 15	0 15	0 15	0 7.5	0 150	
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)	
0 150		-7.5 7.5	-7.5 7.5	-7.5 7.5	-7.5 7.5	0 15	0 7.5	0 150	
Eccent. (ECCE) (IN) 0.5		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 0.5		0 15	0 15	0 15	0 15	0 15	0 7.5	0 150	





Eccent. (ECCE) 0 (IN) 0.5	Average Acoustic Impedance #1 (AV_A1) (MRAY)	Average Acoustic Impedance #3 (AV_A3) (MRAY)	Average Acoustic Impedance #5 (AV_A5) (MRAY)	Average Acoustic Impedance #7 (AV_A7) (MRAY)	Average Acoustic Impedance #9 (AV_A9) (MRAY)	Average of AI (AIAV) (MRAY)	Minimum Flexural Attenuation (U-USIT_UFAN) (DB/M)	 Raw Acoustic Imped. (AIBK) (MRAY)	 Flexural Attenuation (U-USIT_UFAK) (DB/M)	 Solid Liquid Gas Map (U-USIT_USLP) (----)
	0 15	0 15	0 15	0 15	0 15	0 7.5	0 150			

Gamma Ray (GR) (GAPI) 0 150	Average Acoustic Impedance #2 (AV_A2) (MRAY)	Average Acoustic Impedance #4 (AV_A4) (MRAY)	Average Acoustic Impedance #6 (AV_A6) (MRAY)	Average Acoustic Impedance #8 (AV_A8) (MRAY)	Maximum Acoustic Impedance #9 (MAX_A9) (MRAY)	Minimum of AI (AIMN) (MRAY)	Average Flexural Attenuation (U-USIT_UFAV) (DB/M)	 Raw Acoustic Imped. (AIBK) (MRAY)	 Flexural Attenuation (U-USIT_UFAK) (DB/M)	 Solid Liquid Gas Map (U-USIT_USLP) (----)
	-7.5 7.5	-7.5 7.5	-7.5 7.5	-7.5 7.5	0 15	0 7.5	0 150			

	Maximum Acoustic Impedance #1 (MAX_A1) (MRAY)	Maximum Acoustic Impedance #3 (MAX_A3) (MRAY)	Maximum Acoustic Impedance #5 (MAX_A5) (MRAY)	Maximum Acoustic Impedance #7 (MAX_A7) (MRAY)	Minimum Acoustic Impedance #9 (MIN_A9) (MRAY)	Maximum of AI (AIMX) (MRAY)	Maximum Flexural Attenuation (U-USIT_UFAX) (DB/M)	 Raw Acoustic Imped. (AIBK) (MRAY)	 Flexural Attenuation (U-USIT_UFAK) (DB/M)	 Solid Liquid Gas Map (U-USIT_USLP) (----)
	0 15	0 15	0 15	0 15	0 15	0 7.5	0 150			

	Maximum Acoustic Impedance #2 (MAX_A2) (MRAY)	Maximum Acoustic Impedance #4 (MAX_A4) (MRAY)	Maximum Acoustic Impedance #6 (MAX_A6) (MRAY)	Maximum Acoustic Impedance #8 (MAX_A8) (MRAY)				 Raw Acoustic Imped. (AIBK) (MRAY)	 Flexural Attenuation (U-USIT_UFAK) (DB/M)	 Solid Liquid Gas Map (U-USIT_USLP) (----)
	-7.5 7.5	-7.5 7.5	-7.5 7.5	-7.5 7.5						

	Minimum Acoustic Impedance #1 (MIN_A1) (MRAY)	Minimum Acoustic Impedance #3 (MIN_A3) (MRAY)	Minimum Acoustic Impedance #5 (MIN_A5) (MRAY)	Minimum Acoustic Impedance #7 (MIN_A7) (MRAY)				 Raw Acoustic Imped. (AIBK) (MRAY)	 Flexural Attenuation (U-USIT_UFAK) (DB/M)	 Solid Liquid Gas Map (U-USIT_USLP) (----)

#1 (MIN_ AI1) (MRAY)	#3 (MIN_ AI3) (MRAY)	#5 (MIN_ AI5) (MRAY)	#7 (MIN_ AI7) (MRAY)
0 15	0 15	0 15	0 15
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

Format: M_Goodwin_Compressed Vertical Scale: 0.1" per 100' Graphics File Created: 03-Nov-2009 19:04

OP System Version: 17C0-154

USIT-D SRPC-3779-Q1_2009_OP17_b HILTH-FTB SRPC-3779-Q1_2009_OP17_b
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_011LUP FN:10 PRODUCER 03-Nov-2009 14:08 7397.0 FT 199.5 FT

Output DLIS Files

DEFAULT USI_TLD_MCFL_CNL_014PUP FN:13 PRODUCER 03-Nov-2009 19:04



REPEAT PASS

MAXIS Field Log

Company: EXXONMOBIL PRODUCTION CO Well: PCU 197-34B7

Input DLIS Files

DEFAULT USI_TLD_MCFL_CNL_010LUP FN:9 PRODUCER 03-Nov-2009 13:40 7399.0 FT 7111.7 FT

Output DLIS Files

DEFAULT USI_TLD_MCFL_CNL_013PUP FN:12 PRODUCER 03-Nov-2009 19:01 7406.5 FT 7119.5 FT

OP System Version: 17C0-154

USIT-D SRPC-3779-Q1_2009_OP17_b HILTH-FTB SRPC-3779-Q1_2009_OP17_b
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

RSV
(RSV)
(RPS)
6 7.5

CCL
(CCLU)
(----)
-20 20

Min of Internal radius (IRMN) (IN)	Min of Internal radius (IRMN) (IN)
3.7 2.7	2.7 3.7

Internal radius Maximum (IRMX) (IN)	Internal radius Maximum (IRMX) (IN)
3.7 2.7	2.7 3.7

Maximum of Thickness (THMX) (IN)
0.1 0.6

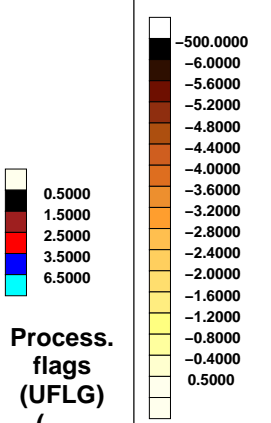
Internal radius Average (IRAV) (IN)	Internal radius Average (IRAV) (IN)
3.7 2.7	2.7 3.7

Average of Thickness (THAV) (IN)
0.1 0.6

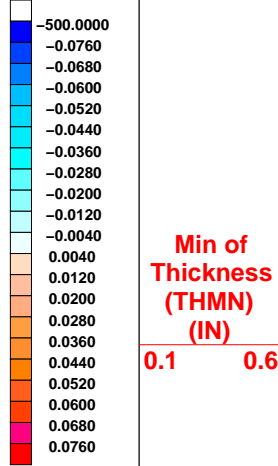
Eccent.
(ECCE)
0 (IN) 0.5

Process.
flags
(UFLG)
(----)

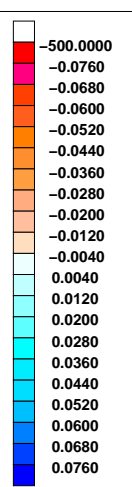
Amplitude
of echo
minus Max
(AWBK)
(DB)



External radius Average (ERAV) (IN)	External radius Average (ERAV) (IN)
3.7 2.7	2.7 3.7

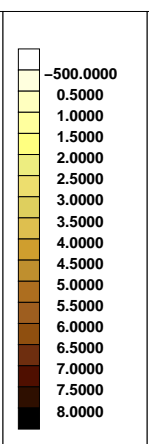


Internal
radii minus
Ave (IRBK)
(IN)

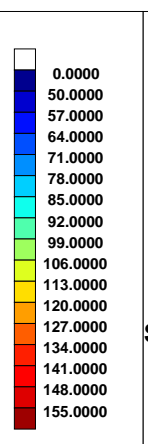


Min of
Thickness
(THMN)
(IN)
0.1 0.6

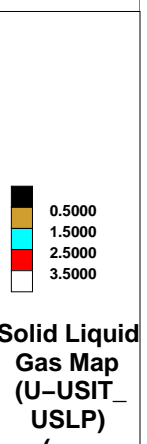
Thickness
minus Ave
(THBK)
(IN)



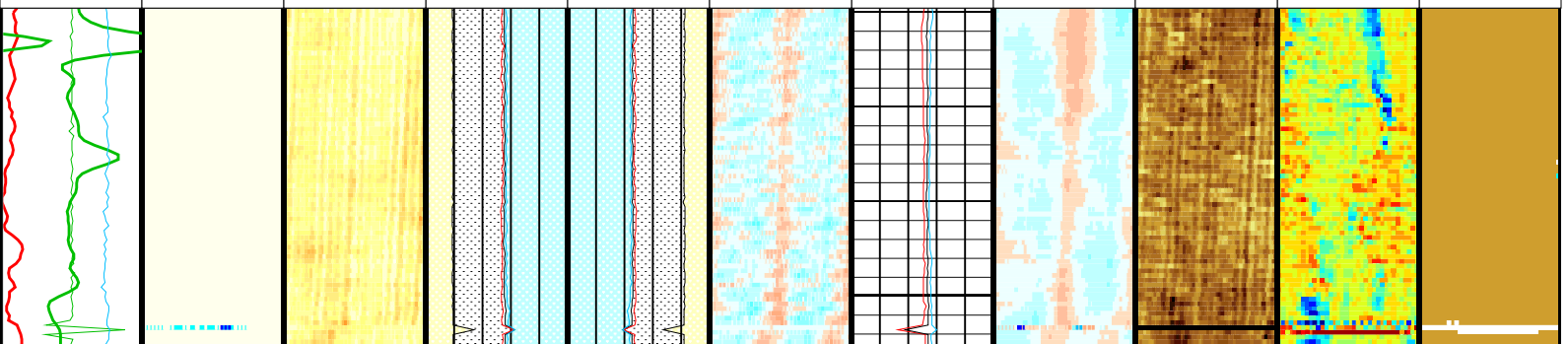
Raw
Acoustic
Imped.
(AIBK)
(MRAY)

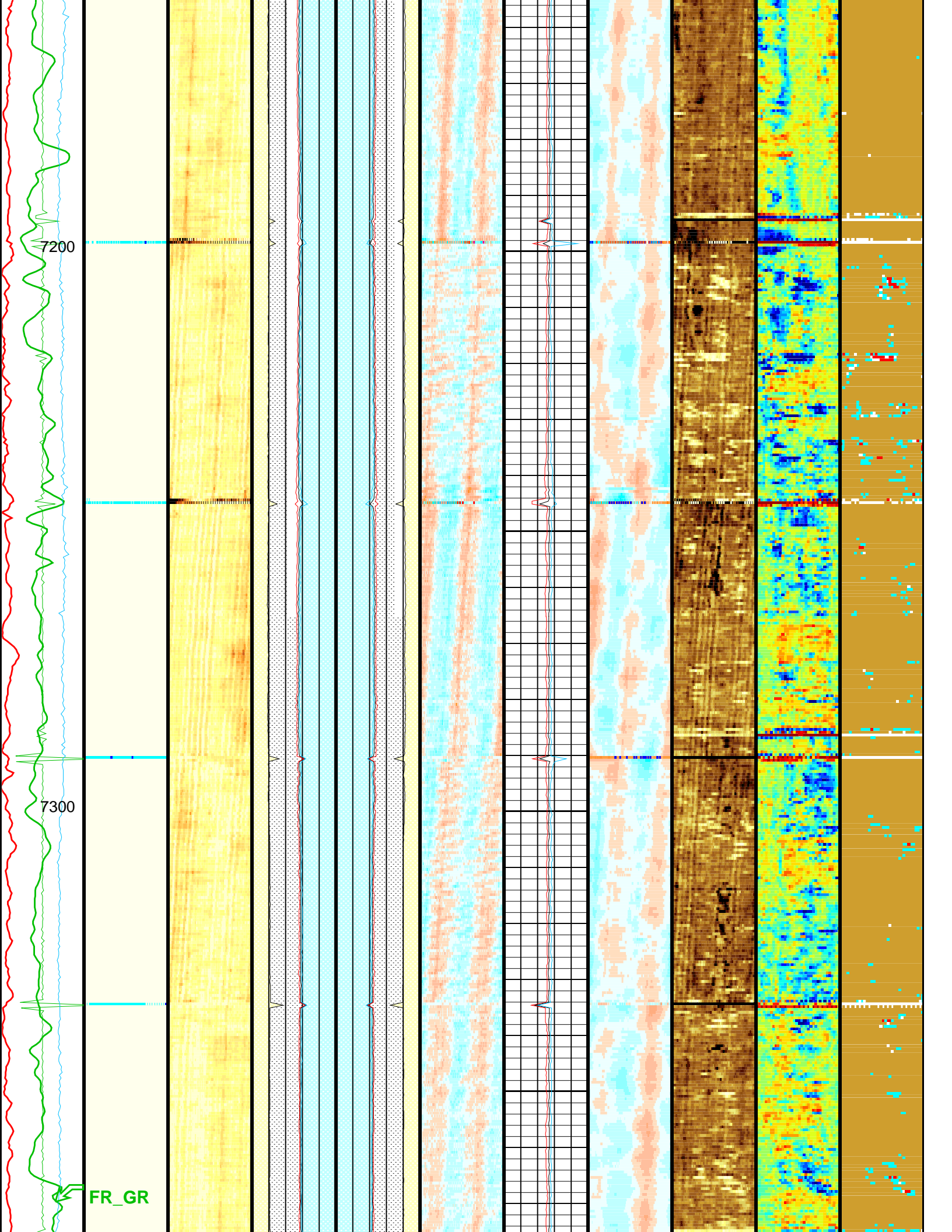


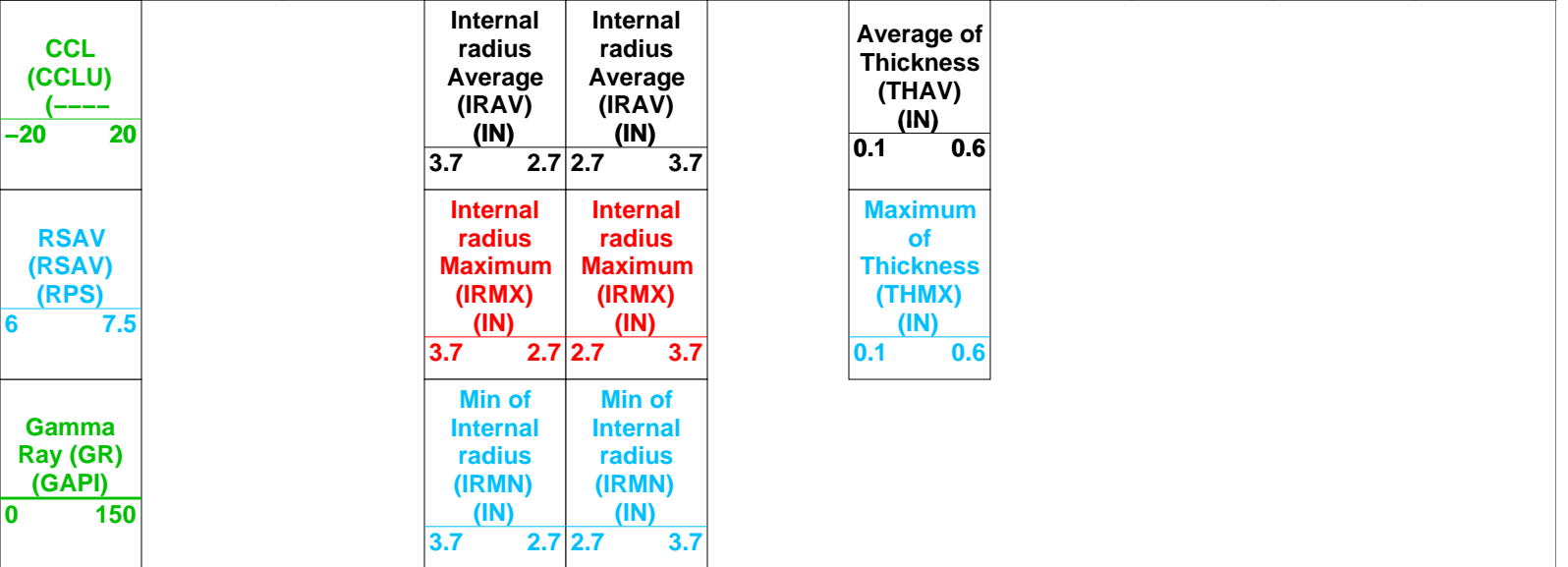
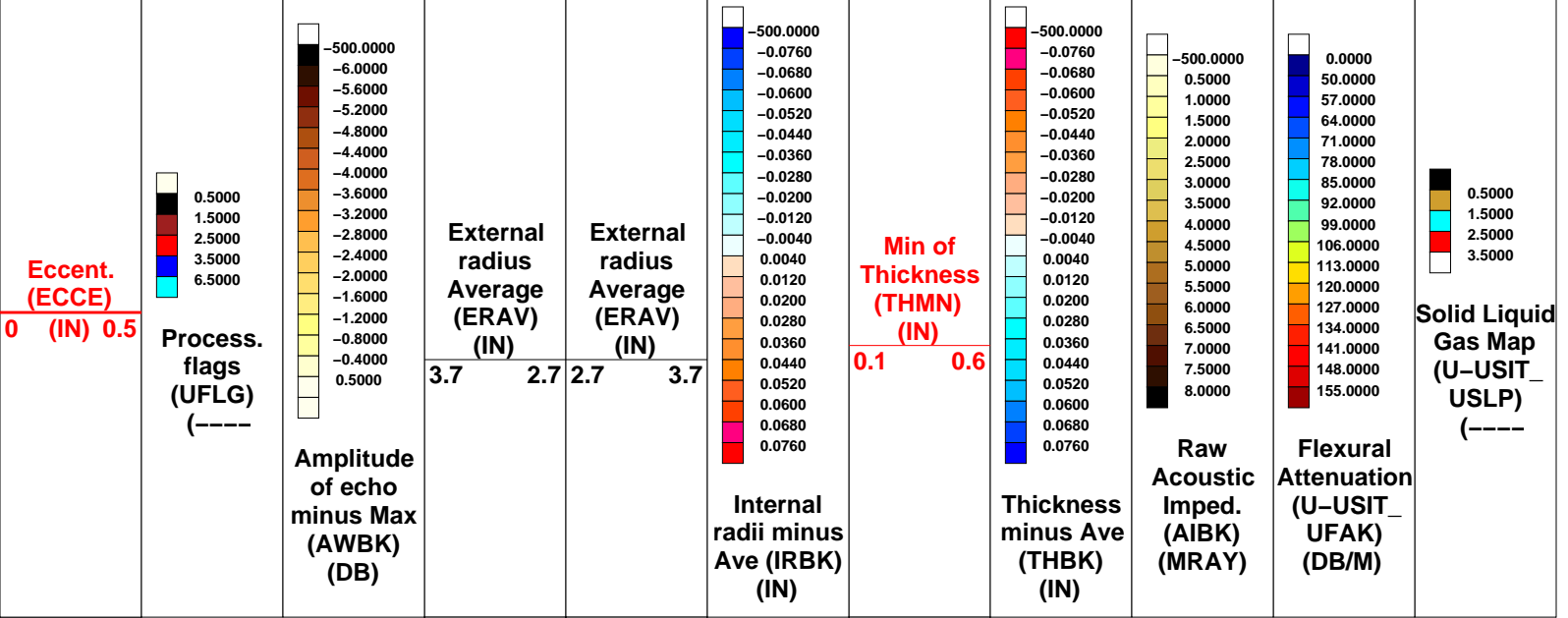
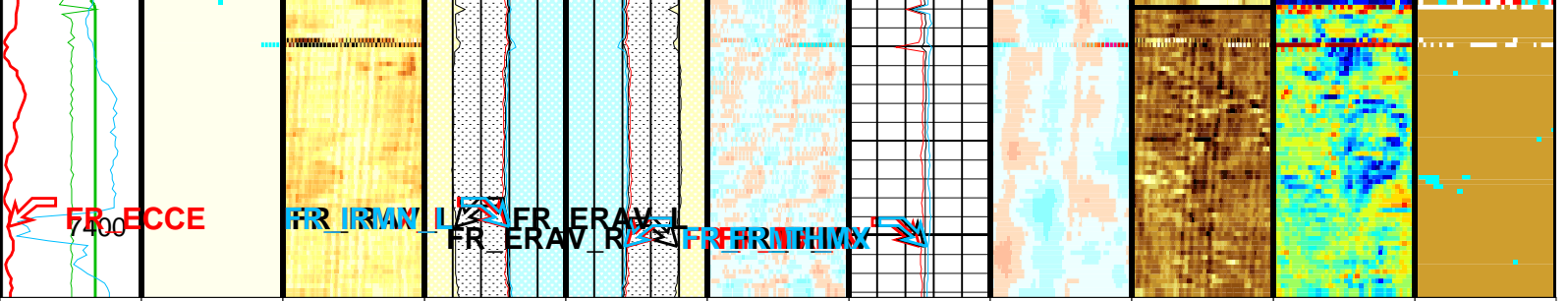
Flexural
Attenuation
(U-USIT_
UFAK)
(DB/M)



Solid Liquid
Gas Map
(U-USIT_
USLP)
(----)







Stuck Stretch (STIT)

0 (F) 50

Cable Drag From D4T to STIT

Tool/Tot. Drag From D4T to STIA

Image rotation (UCAZ) (DEG)

0 360

OP System Version: 17C0-154

USIT-D
DTC-HSRPC-3779-Q1_2009_OP17_b
17C0-154

HILTH-FTB

SRPC-3779-Q1_2009_OP17_b

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	203	US/F
DOT	Diameter of Transducer Sensor	2.874	IN
EMXV	EMEX Voltage	120	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	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	10.75	IN
U-USIT_OCSH	USIT Outer Casing Shoe	4318	FT
U-USIT_OCWE	USIT Outer Casing Weight	45	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	-14	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	46.25	MRAY
ZINI	Initial Estimate of Cement Impedance	-1	MRAY
ZMUD	Acoustic Impedance of Mud	2.1	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	5	FT
TDD	Total Depth - Driller	9220.00	FT
TDL	Total Depth - Logger	7402.00	FT
System and Miscellaneous			

System and Miscellaneous

BS
CWEI
DO
PP
Bit Size
Casing Weight
Depth Offset for Playback
Playback Processing

9.875 IN
26.00 LB/F
7.5 FT
RECOMPUTE

Input DLIS Files

DEFAULT USI_TLD_MCFL_CNL_010LUP FN:9 PRODUCER 03-Nov-2009 13:40 7399.0 FT 7111.7 FT

Output DLIS Files

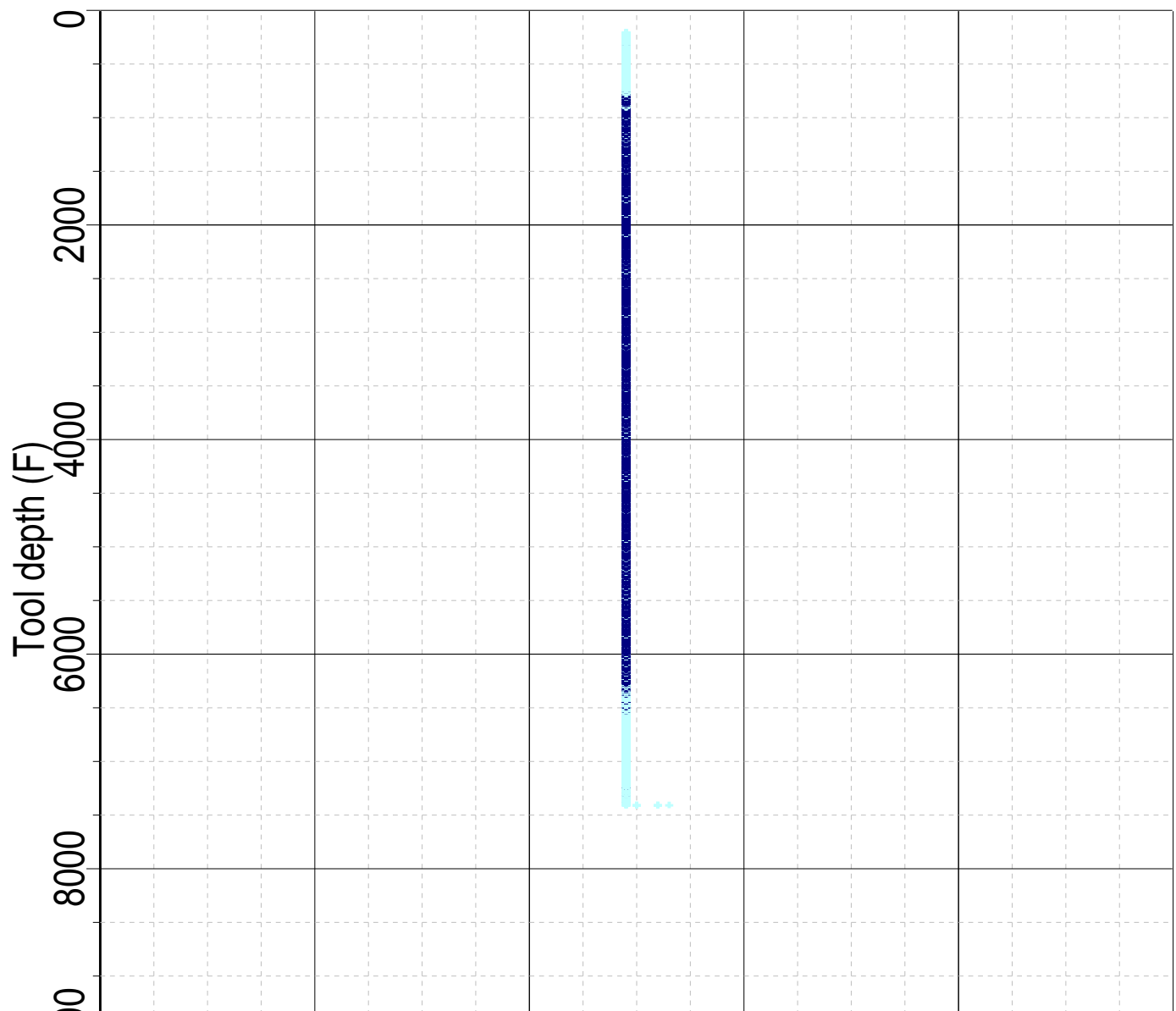
DEFAULT USI_TLD_MCFL_CNL_013PUP FN:12 PRODUCER 03-Nov-2009 19:01

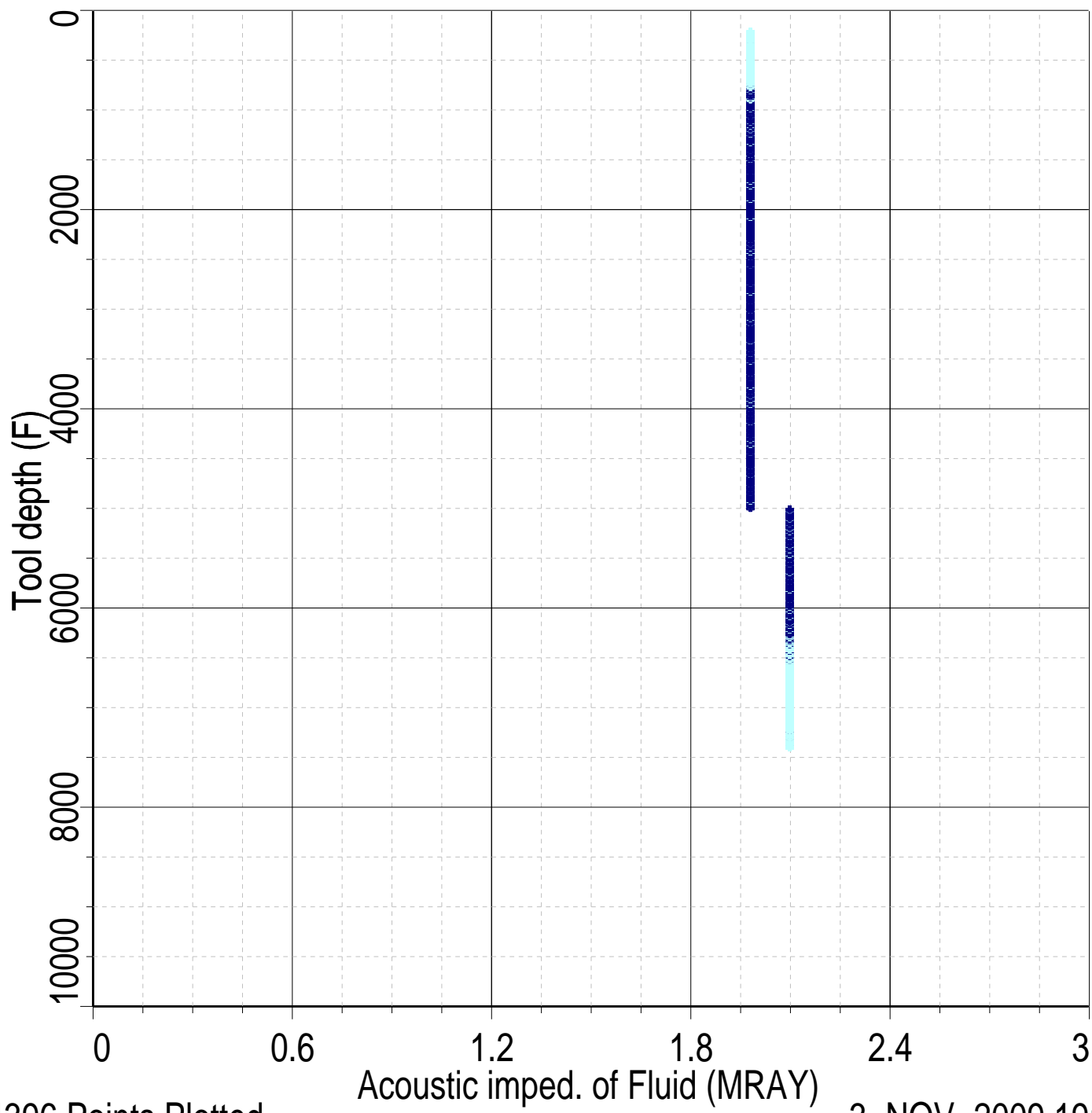
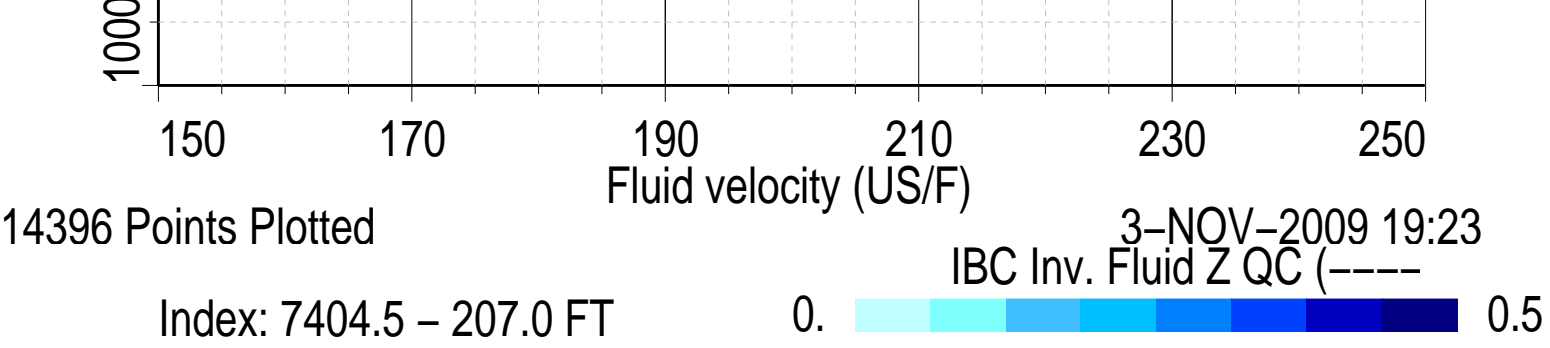


FLUID PROPERTIES

MAXIS Field Log

Index: 7404.5 – 207.0 FT IBC Inv. Fluid Z QC (----) 0. 0.5





CALIBRATIONS

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
High resolution Integrated Logging Tool–DTS Wellsite Calibration – Detector Calibration							
Before: 31–Oct–2009 13:26							
Gamma Ray Background	30.00	N/A	15.63	N/A	N/A	N/A	GAPI
Gamma Ray (Jig – Bkgd)	165.0	N/A	168.9	N/A	N/A	15.00	GAPI
High resolution Integrated Logging Tool–DTS Wellsite Calibration – Zero Measurement							
Master: 14–Aug–2009 10:31 Before: 1–Nov–2009 17:29							
CNTC Background	27.70	27.70	27.61	N/A	N/A	4.155	CPS
CFTC Background	32.32	32.32	36.17	N/A	N/A	4.848	CPS
High resolution Integrated Logging Tool–DTS Wellsite Calibration – Ratio Measurement							
Master: 14–Aug–2009 10:31							
Thermal Near Corr. (Tank)	5800	5240	N/A	N/A	N/A	N/A	CPS
Thermal Far Corr. (Tank)	2400	2150	N/A	N/A	N/A	N/A	CPS
CNTC/CFTC (Tank)	2.159	2.437	N/A	N/A	N/A	N/A	
High resolution Integrated Logging Tool–DTS Wellsite Calibration – Accelerometer Calibration							
Before: 31–Oct–2009 13:25							
Z–Axis Acceleration	32.19	N/A	32.14	N/A	N/A	N/A	F/S2

The HGNS Neutron Master Calibration was done with the following parameters :

NCT–B Water Temperature 67.8 DEGF.
 Thermal Housing Size 3.374 IN.
 NSR–F serial number 0

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 3577
 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 HGNSH –

High resolution Integrated Logging Tool–DTS Wellsite Calibration

Detector Calibration

Phase	Gamma Ray Background GAPI	Value	Phase	Gamma Ray (Jig – Bkgd) GAPI	Value
Before		15.63	Before		168.9
	0 (Minimum) 30.00 (Nominal) 120.0 (Maximum)			157.1 (Minimum) 165.0 (Nominal) 206.3 (Maximum)	

Before: 31–Oct–2009 13:26

High resolution Integrated Logging Tool–DTS Wellsite Calibration

Zero Measurement

Phase	CNTC Background CPS	Value	Phase	CFTC Background CPS	Value
Master		27.70	Master		32.32
Before		27.61	Before		36.17
	5.000 (Minimum) 27.70 (Nominal) 40.00 (Maximum)			5.000 (Minimum) 32.32 (Nominal) 40.00 (Maximum)	

Master: 14–Aug–2009 10:31

Before: 1–Nov–2009 17:29

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			5240	Master			2150	Master			2.437
	4700 (Minimum)	5800 (Nominal)	6900 (Maximum)		1900 (Minimum)	2400 (Nominal)	2900 (Maximum)		2.120 (Minimum)	2.159 (Nominal)	2.540 (Maximum)
Master: 14–Aug–2009 10:31											

High resolution Integrated Logging Tool–DTS Wellsite Calibration			
Accelerometer Calibration			
Phase	Z–Axis Acceleration F/S2	Value	
Before		32.14	
	31.53 (Minimum)	32.19 (Nominal)	32.84 (Maximum)
Before: 31–Oct–2009 13:25			

High resolution Integrated Logging Tool–DTS Master Calibration							
Zero Measurement							
Phase	CNTC Background CPS		Value	Phase	CFTC Background CPS		Value
Master			27.70	Master			32.32
	5.000 (Minimum)	27.70 (Nominal)	40.00 (Maximum)		5.000 (Minimum)	32.32 (Nominal)	40.00 (Maximum)
Master: 14–Aug–2009 10:31							

High resolution Integrated Logging Tool–DTS Master Calibration											
Tank Measurement											
Phase	Thermal Near Corr. (Tank) CPS		Value	Phase	Thermal Far Corr. (Tank) CPS		Value	Phase	CNTC/CFTC (Tank)		Value
Master			5240	Master			2150	Master			2.437
	4700 (Minimum)	5800 (Nominal)	6900 (Maximum)		1900 (Minimum)	2400 (Nominal)	2900 (Maximum)		2.120 (Minimum)	2.159 (Nominal)	2.540 (Maximum)
Master: 14–Aug–2009 10:31											

DTS Telemetry Tool / Equipment Identification	
Primary Equipment:	
DTC–H Auxiliary Cartridge	DTCH – A
DTC–H Telemetry Cartridge	DTCH – A
Auxiliary Equipment:	
DTCH Telemetry Cartridge Housing	ECH – KC

Company: **EXXONMOBIL PRODUCTION CO**

Schlumberger

Well: **PCU 197–34B7**
 Field: **PICEANCE CREEK**
 County: **RIO BLANCO**
 State: **COLORADO**

IMAGING BEHIND CASING
 ULTRASONIC TOOL
 GAMMA RAY / CCL