



Well: **Expedition 356, Site U1462 A**
Field: **Indonesian Throughflow**
Rig: **JOIDES Resolution** Ocean: **Indian**

Rig: JOIDES Resolution Field: Indonesian Throughflow Location: Latitude: S 19.821428 Deg Well: Expedition 356, Site U1462 A Company: International Ocean Discovery Program	Formation Micro Scanner (FMS)			
	Dipole Sonic P&S Compressional (DSI)			
	Hostile Natural Gamma Ray (HNGS)			
	LOCATION	Latitude: S 19.821428 Deg Longitude: E 115.7099733 Deg		Elev.: K.B. -98.00 m G.L. 0.00 m D.F. -98.00 m
		Permanent Datum: <u>Sea Floor</u> Log Measured From: <u>Sea Floor</u> Drilling Measured From: <u>Sea Floor</u>		Elev.: <u>0.00 m</u> 0.00 m above Perm. Datum
API Serial No.		Max. Hole Devi. 0 deg	Longitude E 115.7099733	Latitude S 19.821428

Logging Date		3-Sep-2015			
Run Number		1			
Depth Driller		855 m			
Schlumberger Depth		800 m			
Bottom Log Interval		800 m			
Top Log Interval		0 m			
Casing Driller Size @ Depth		5.500 in @ 82 m		@	
Casing Schlumberger		81 m			
Bit Size		11.438 in			
Type Fluid In Hole		Sepiolite with Barite			
MUD	Density	Viscosity	1.318 g/cm3		
	Fluid Loss	PH		8.07	
	Source Of Sample		Mudpit		
	RM @ Measured Temperature		0.220 ohm.m @ 23 degC		@
	RMF @ Measured Temperature		@		@
RMC @ Measured Temperature		@		@	
Source RMF	RMC	N/A	N/A		
RM @ MRT	RMF @ MRT	0.170 @ 36	@ 36	@	@
Maximum Recorded Temperatures		36 degC			
Circulation Stopped		Time	3-Sep-2015 13:30		
Logger On Bottom		Time	3-Sep-2015 6:15		
Unit Number	Location	627314 Houma, LA			
Recorded By		K. Swain			
Witnessed By		M. Gurnis, Z. Mateo, E. Garrett			

[illegible]

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.

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
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Downlog run with corrections computed using bit size; uplogs corrected for actual hole size using caliper.

Collapsed hole above logging tools caused significant pull at surface for most
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Fluid type was sepiolite+barite at 11 lbs/gal. Corrections for this applied.	
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All logs presented in measured depth below sea floor (MDBSF).	
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	RUN 1	RUN 2
1	1	1
2	1	1
3	1	1
4	1	1
5	1	1
6	1	1
7	1	1
8	1	1
9	1	1
10	1	1
11	1	1
12	1	1
13	1	1
14	1	1
15	1	1
16	1	1
17	1	1
18	1	1
19	1	1
20	1	1
21	1	1
22	1	1
23	1	1
24	1	1
25	1	1
26	1	1
27	1	1
28	1	1
29	1	1
30	1	1
31	1	1
32	1	1
33	1	1
34	1	1
35	1	1
36	1	1
37	1	1
38	1	1
39	1	1
40	1	1
41	1	1
42	1	1
43	1	1
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90	1	1
91	1	1
92	1	1
93	1	1
94	1	1
95	1	1
96	1	1
97	1	1
98	1	1
99	1	1
100	1	1

PROGRAM VERSION: FLUID LEVEL:	19C0-187	PROGRAM VERSION: FLUID LEVEL:
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LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION					

	RUN 1	RUN 2
1	1	1
2	1	1
3	1	1
4	1	1
5	1	1
6	1	1
7	1	1
8	1	1
9	1	1
10	1	1
11	1	1
12	1	1
13	1	1
14	1	1
15	1	1
16	1	1
17	1	1
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96	1	1
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98	1	1
99	1	1
100	1	1

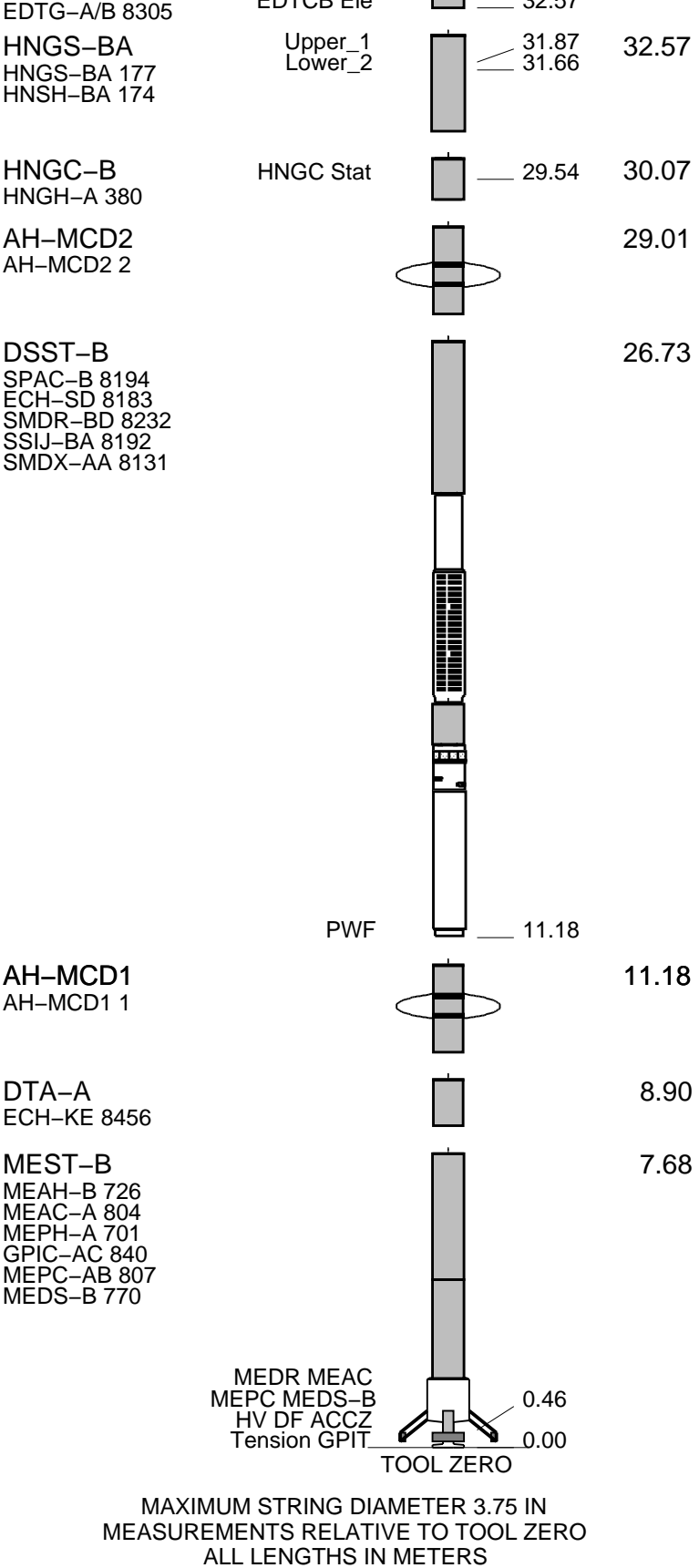
GSR-U 616008	
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DOWNHOLE EQUIPMENT	
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LEH-QT			33.33
LEH-QT 301	MDSB, EDIC		

ATI-309	max. force	33.49	34.99
	CTEM		

EDTH-B 8303	EFTB DIAG		//	
EFTC-B 8317	TelStatus			



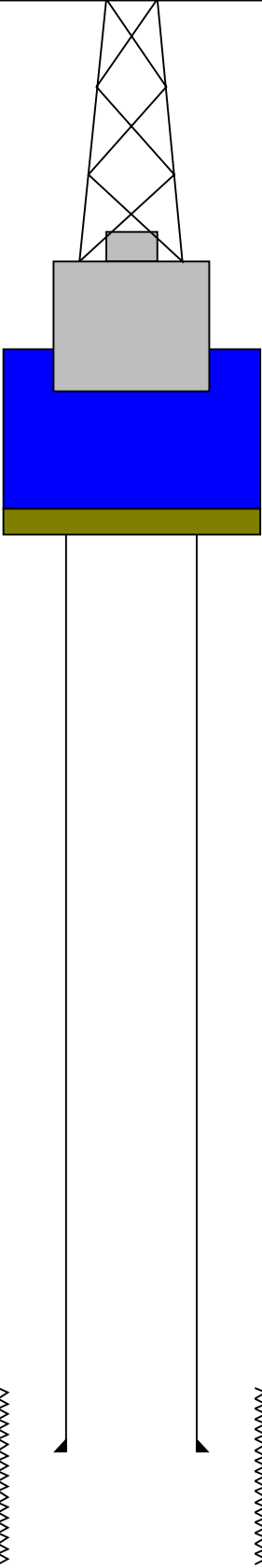
Production String	(in)	(M)	Well Schematic	(M)	(in)	Casing String
	OD	ID	MD	MD	OD	ID

Kelly Bushing Elevation
Derrick Floor Elevation

Mean Sea Level

---98
-98

-87



4.1

0
82

855

4.1
9.875

Sea Floor
Open Hole

Total Depth

Well: Expedition 356, Site U1462 A

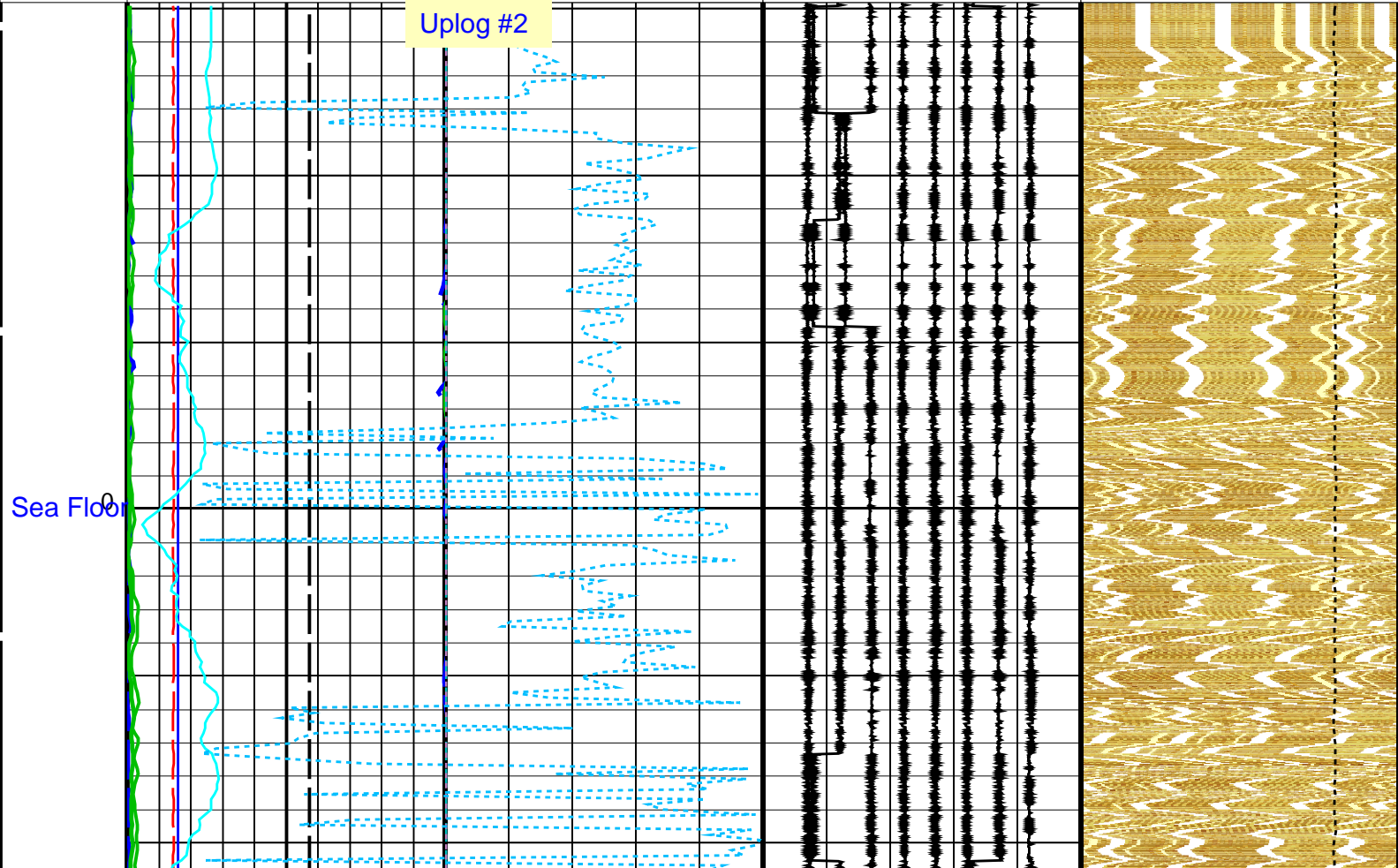
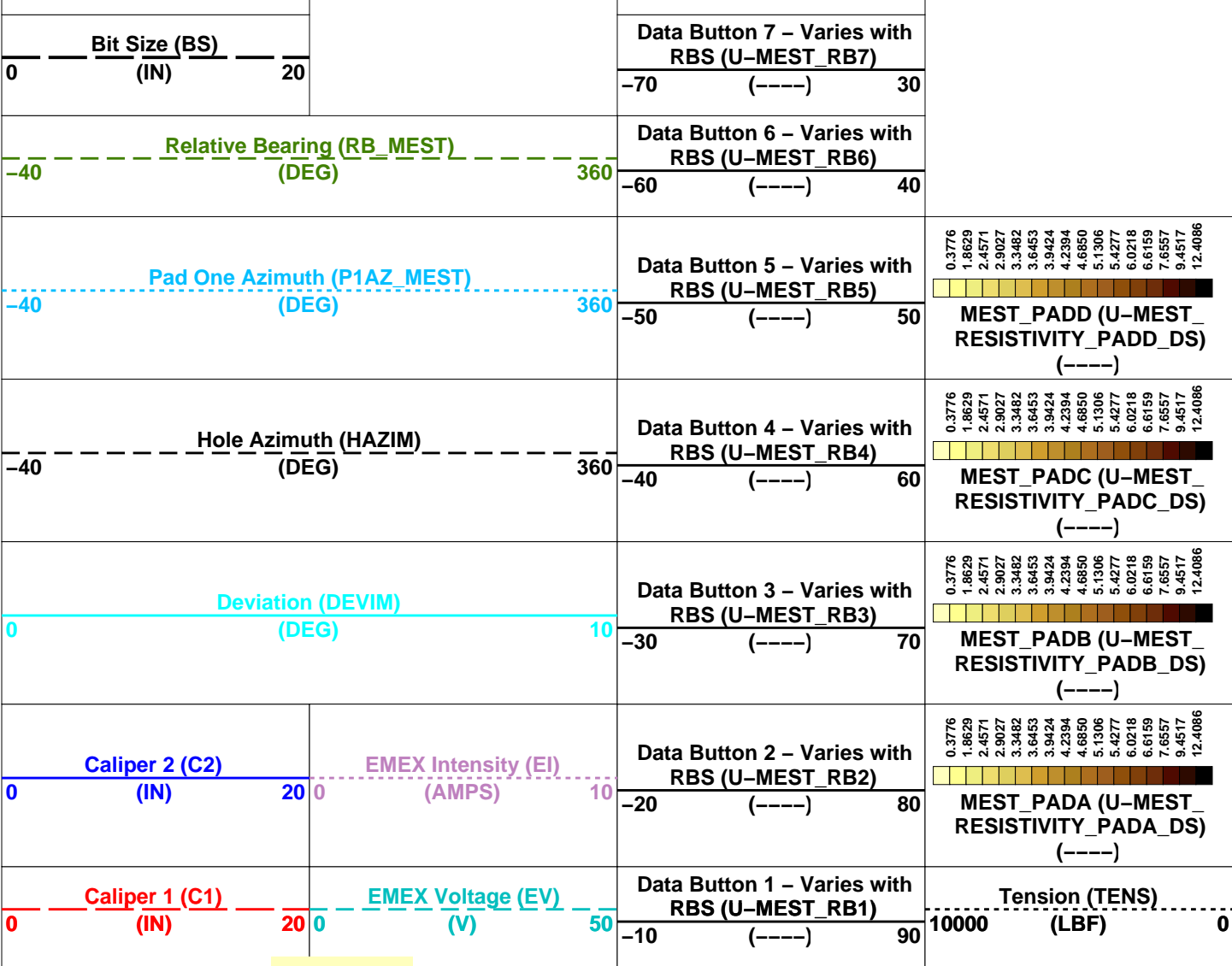
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MEST-B	19C0-187	DTA-A	19C0-187
OSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

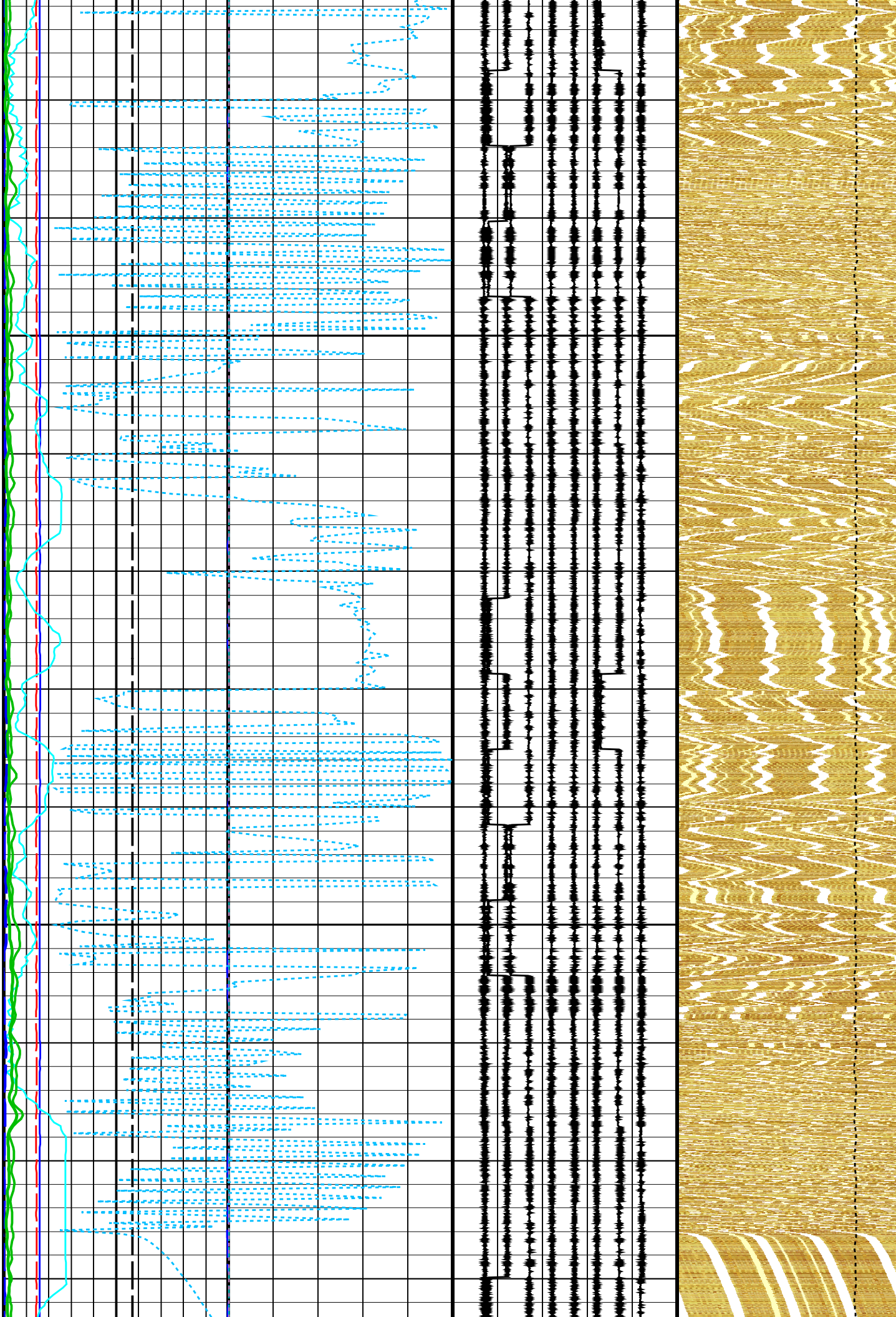
Time Mark Every 60 S

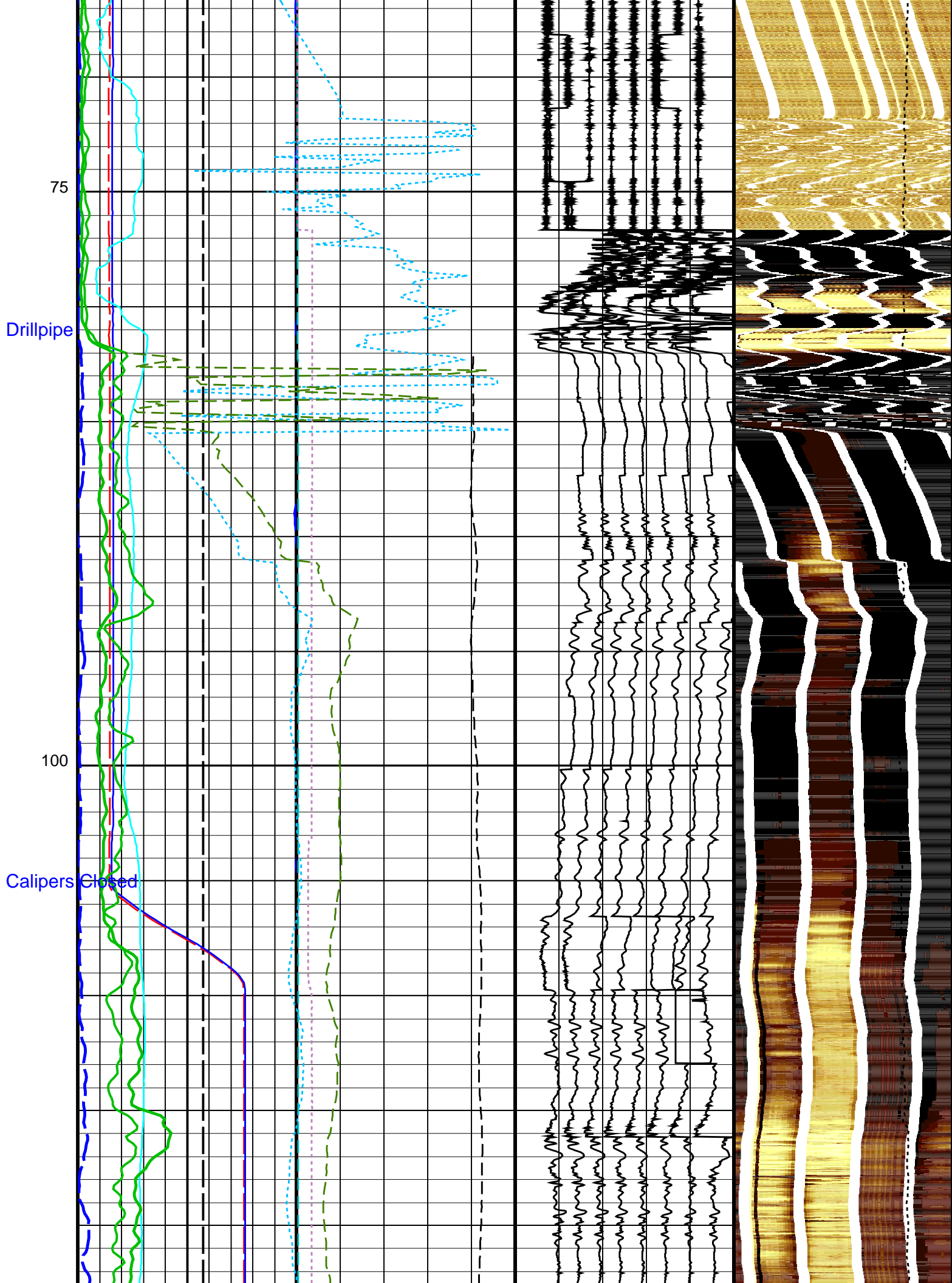
Data Button 8 – Varies with RBS (U-MEST_RB8)		
-80	(----	20



25

50

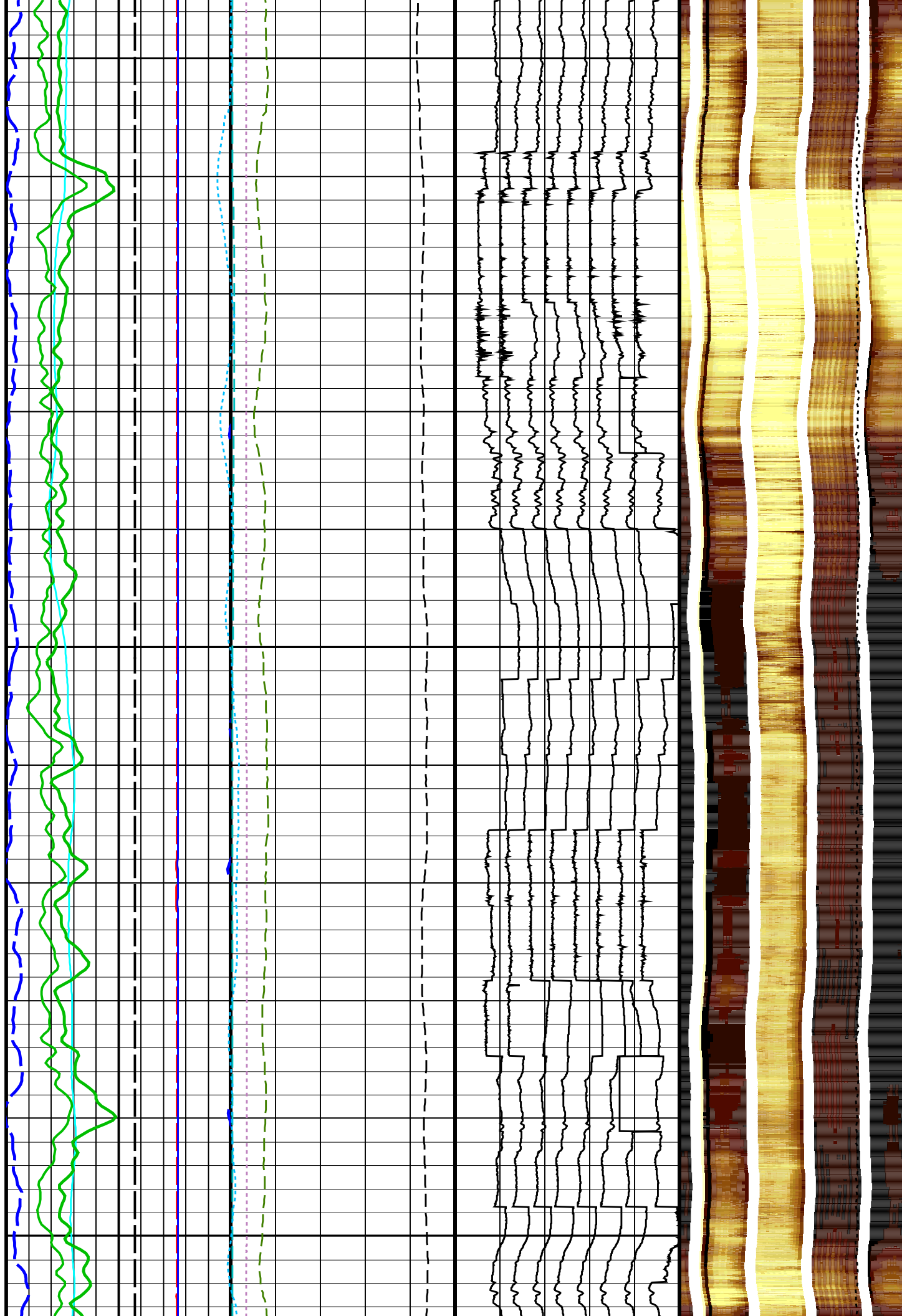




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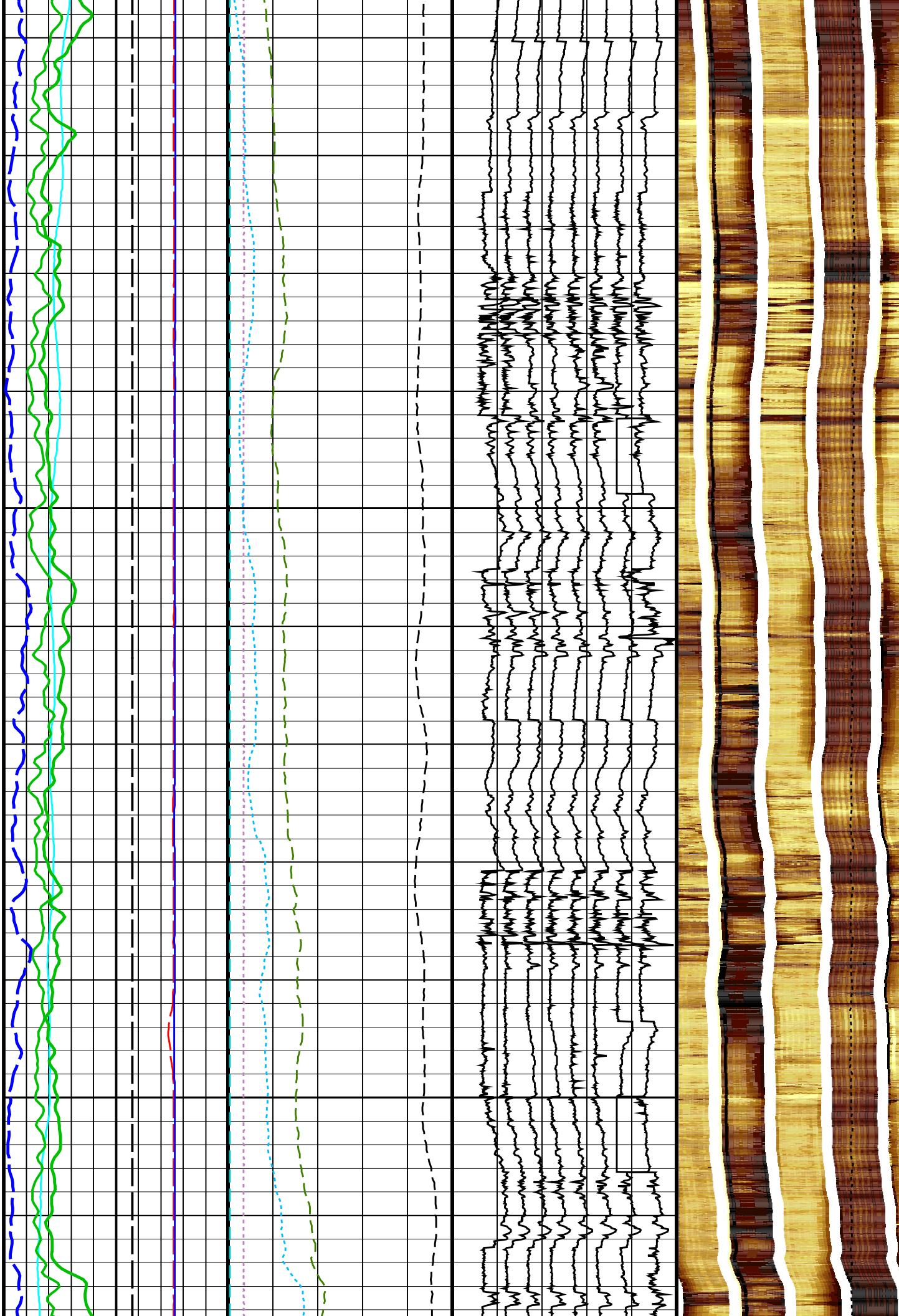
150

175



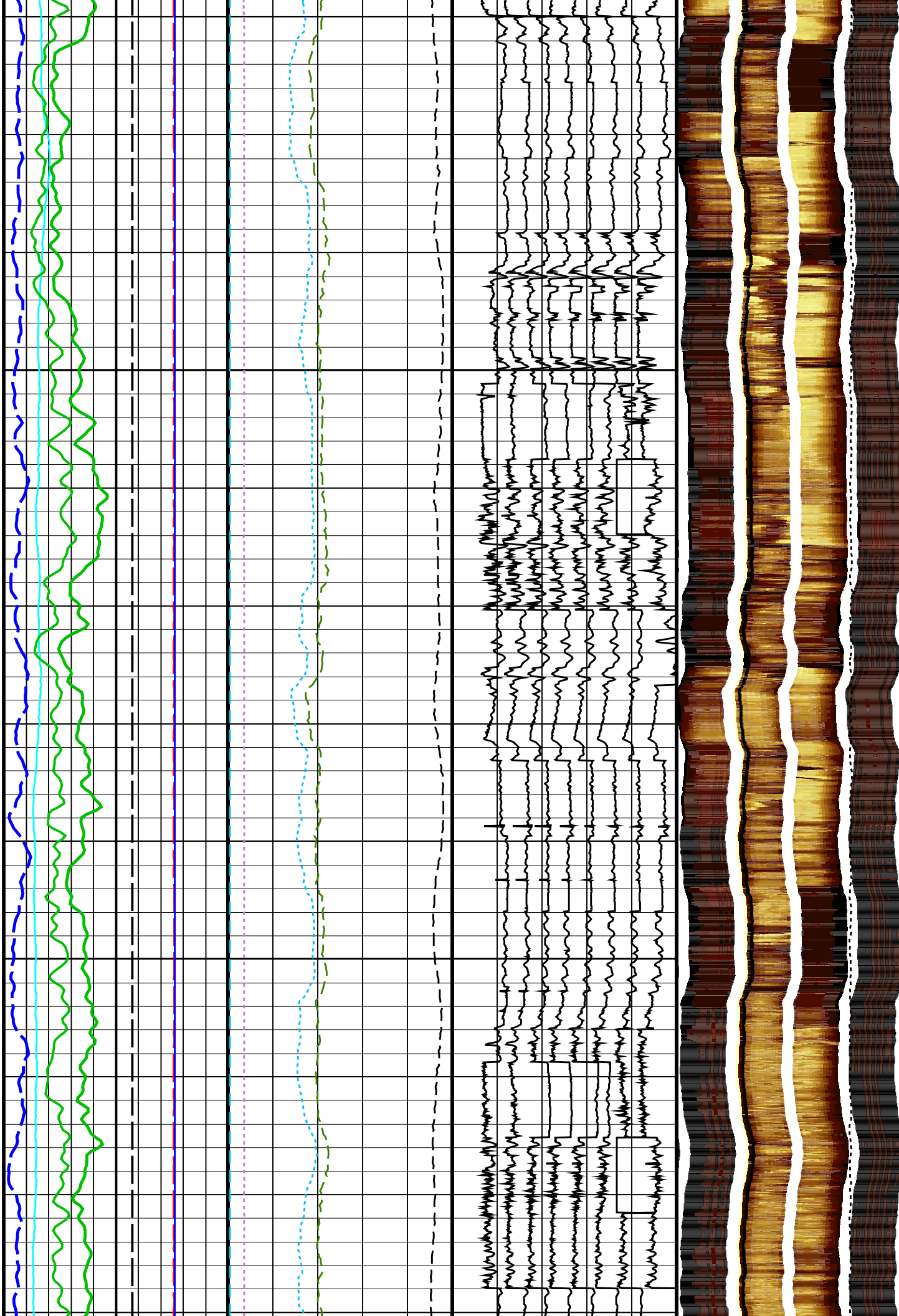
200

225



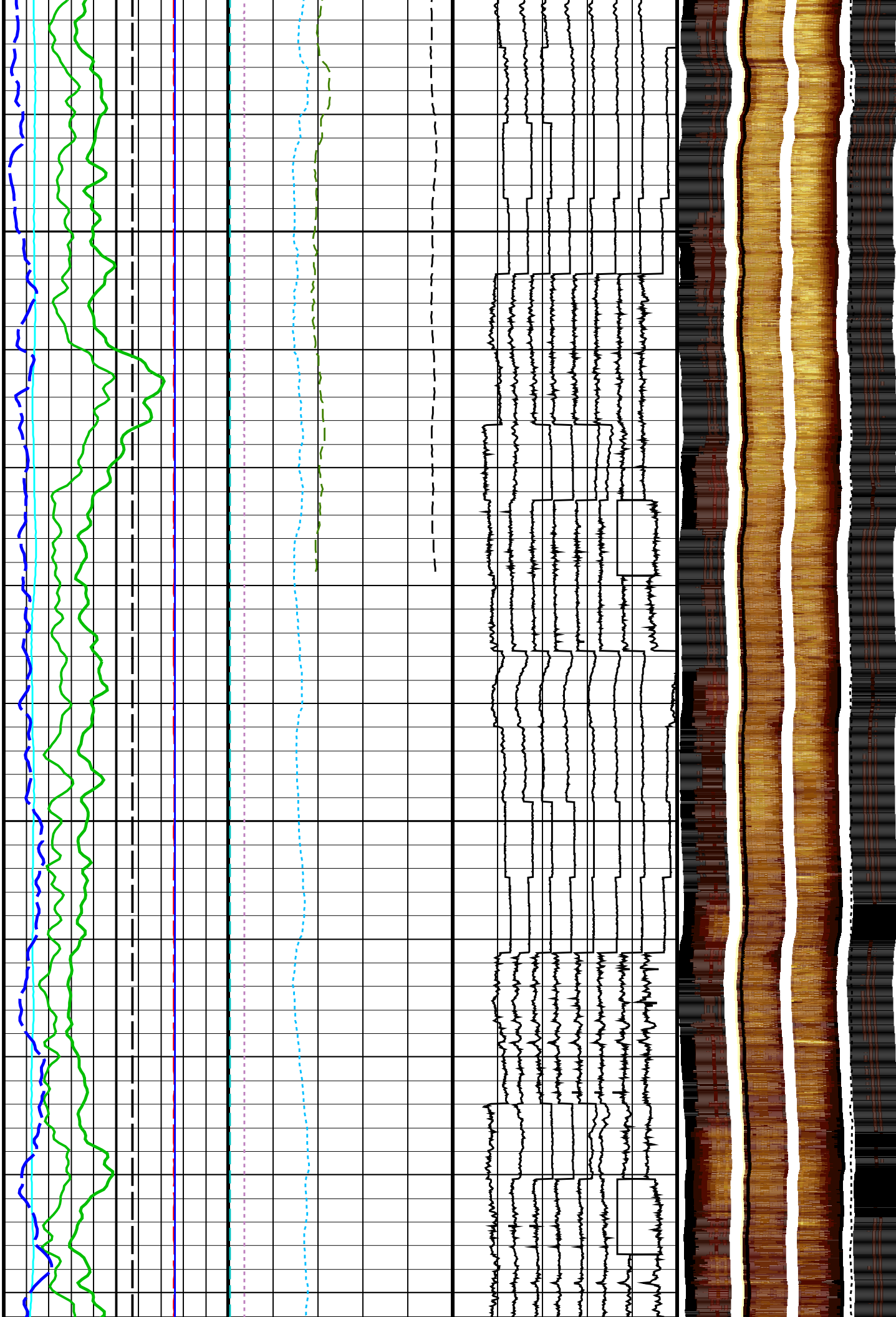
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275



300

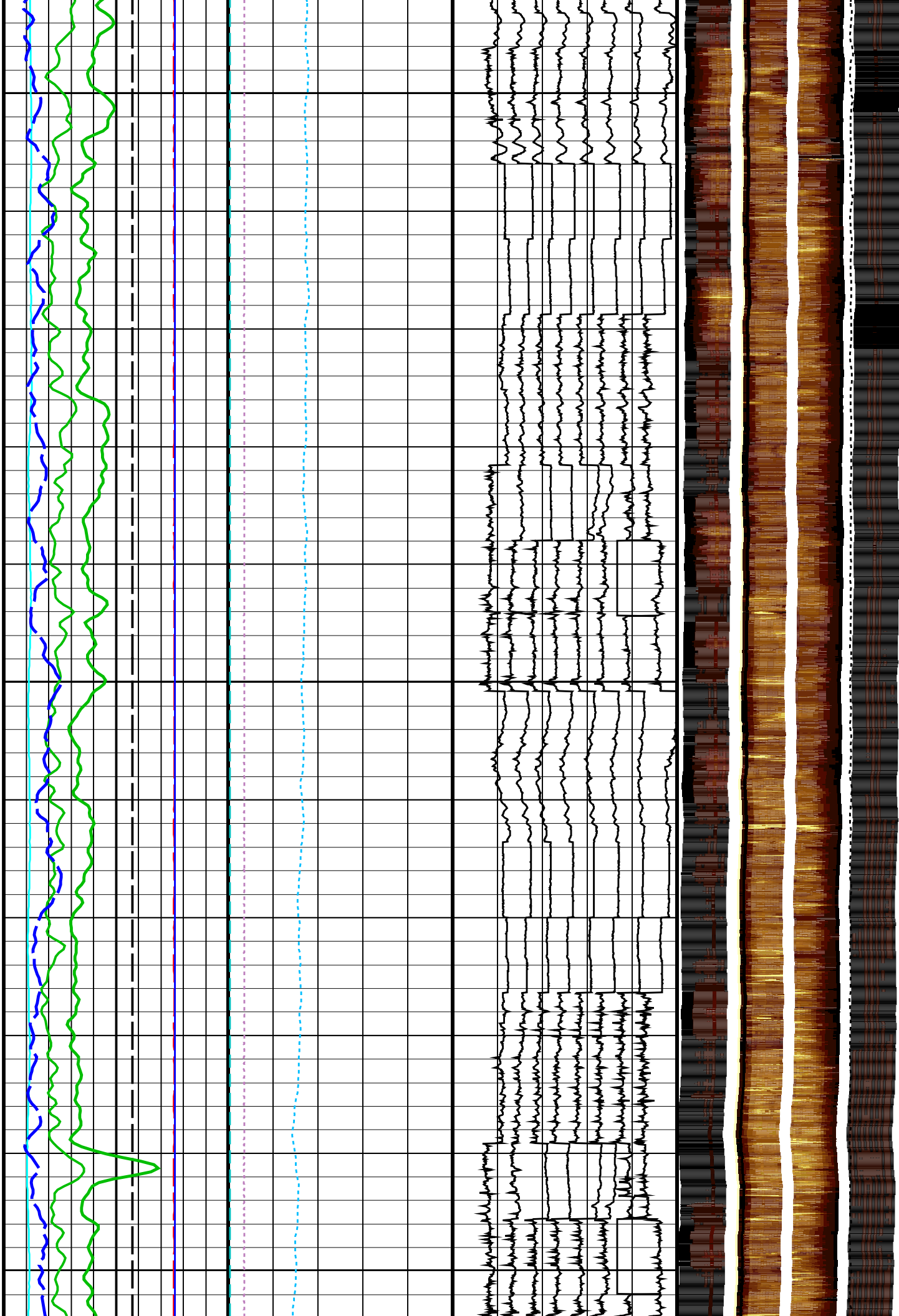
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350

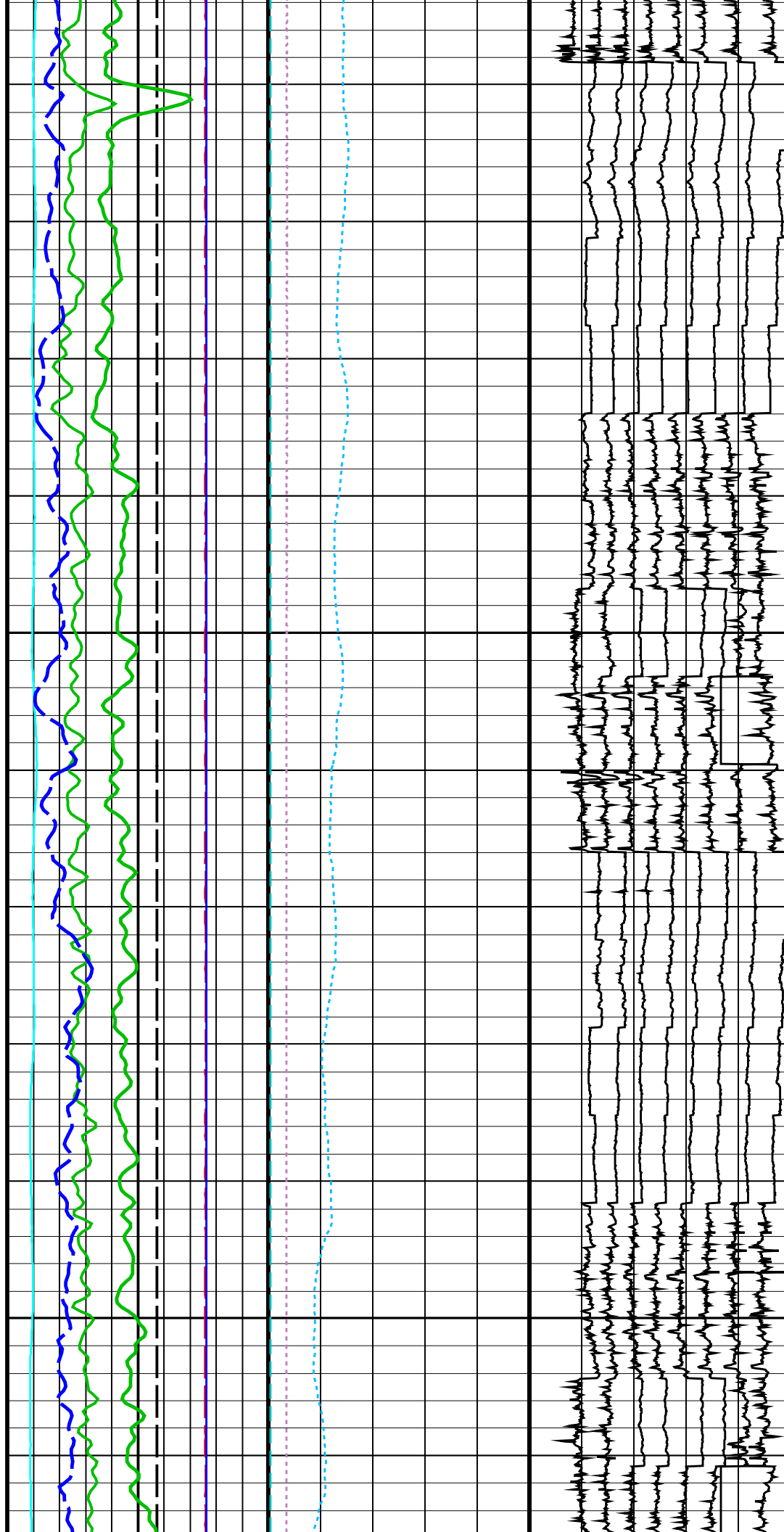
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400



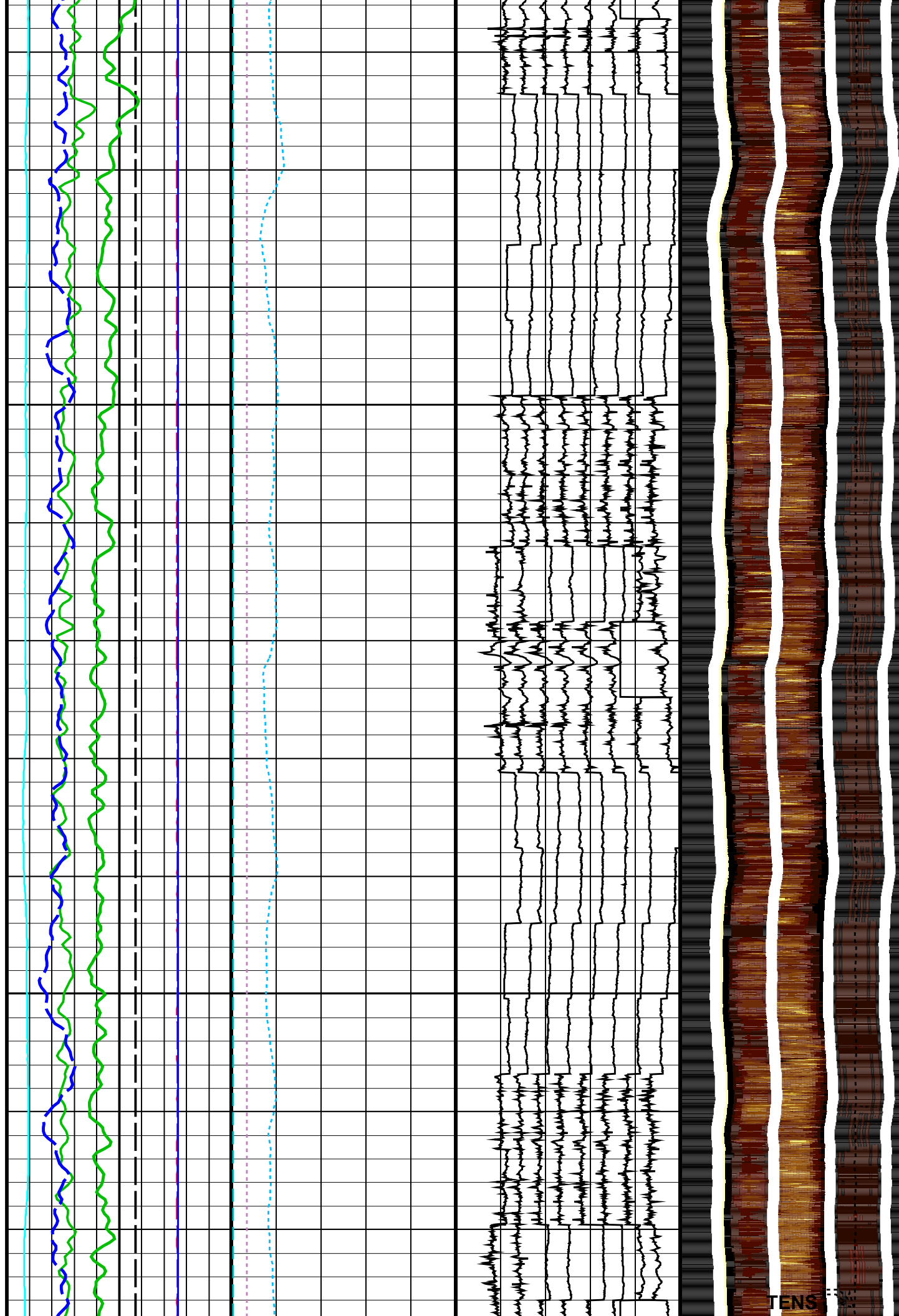
425

450



475

500



525

550

RB_MEST
P1AZ_MEST

PadD wrapped by P1AZ

PadC wrapped by P1AZ

PadB wrapped by P1AZ

PadA wrapped by P1AZ

U-MEST_RB8

U-MEST_RB7

U-MEST_RB6

U-MEST_RB5

U-MEST_RB4

U-MEST_RB3

U-MEST_RB2

U-MEST_RB1

HSGR

HCGR

GR EDTC

HAZIM

EI

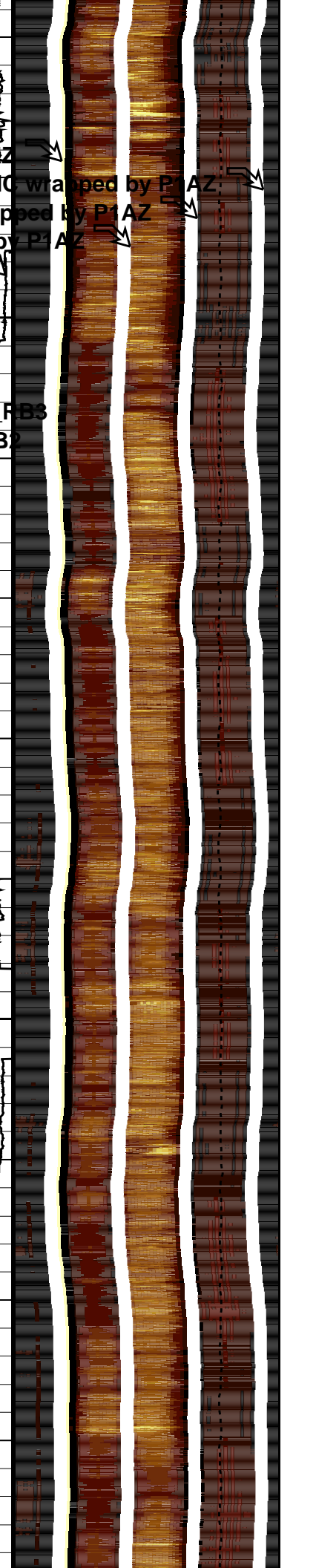
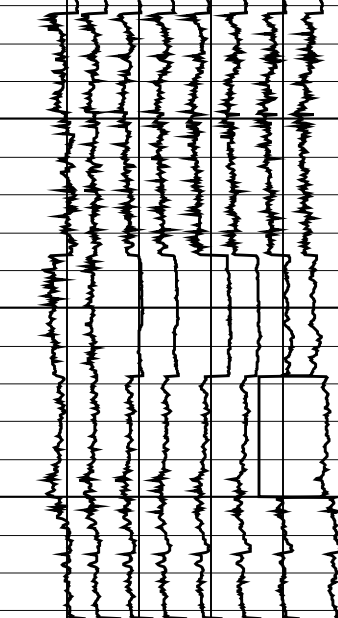
EV

DEVIM

C2

C1

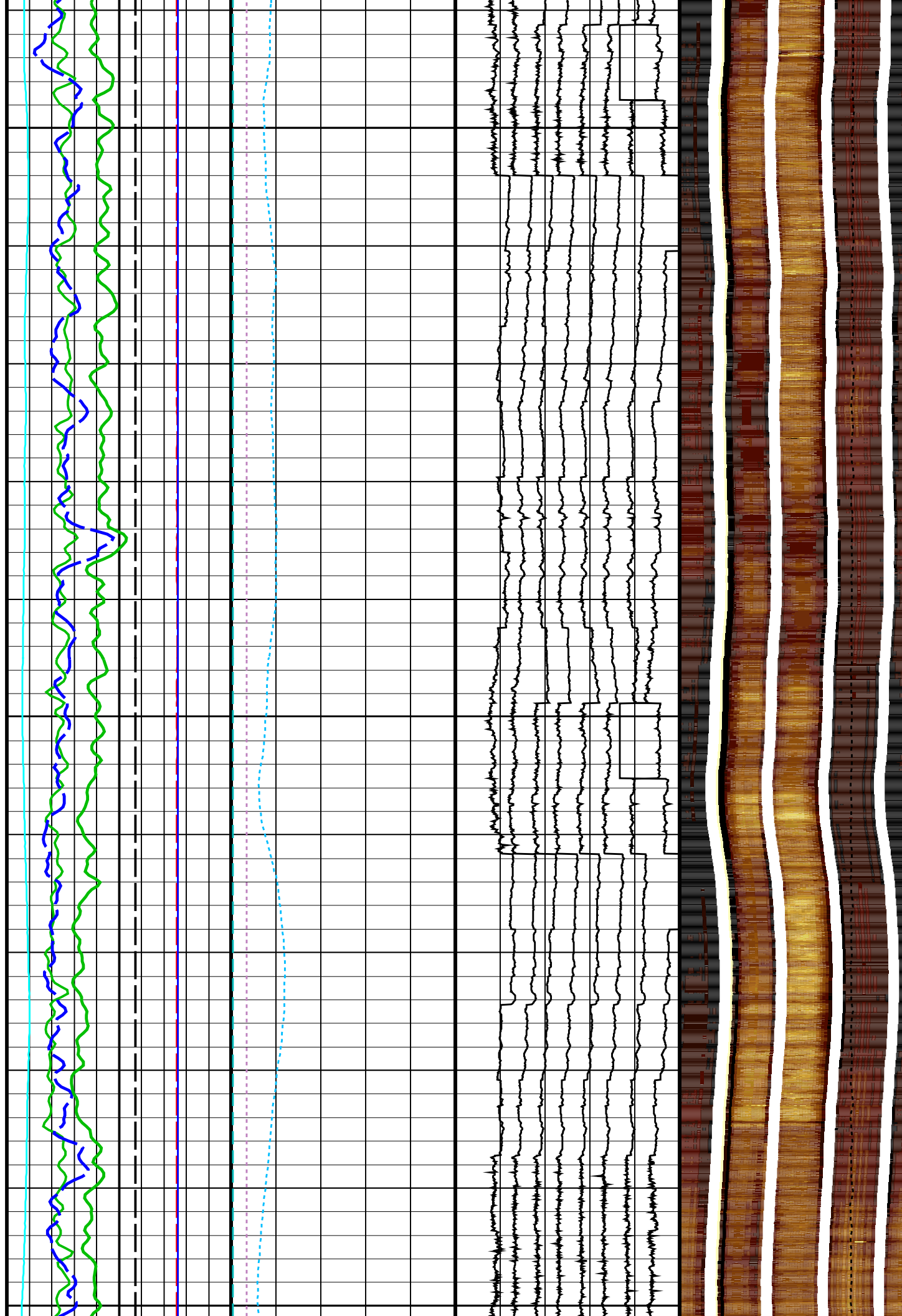
B9



575

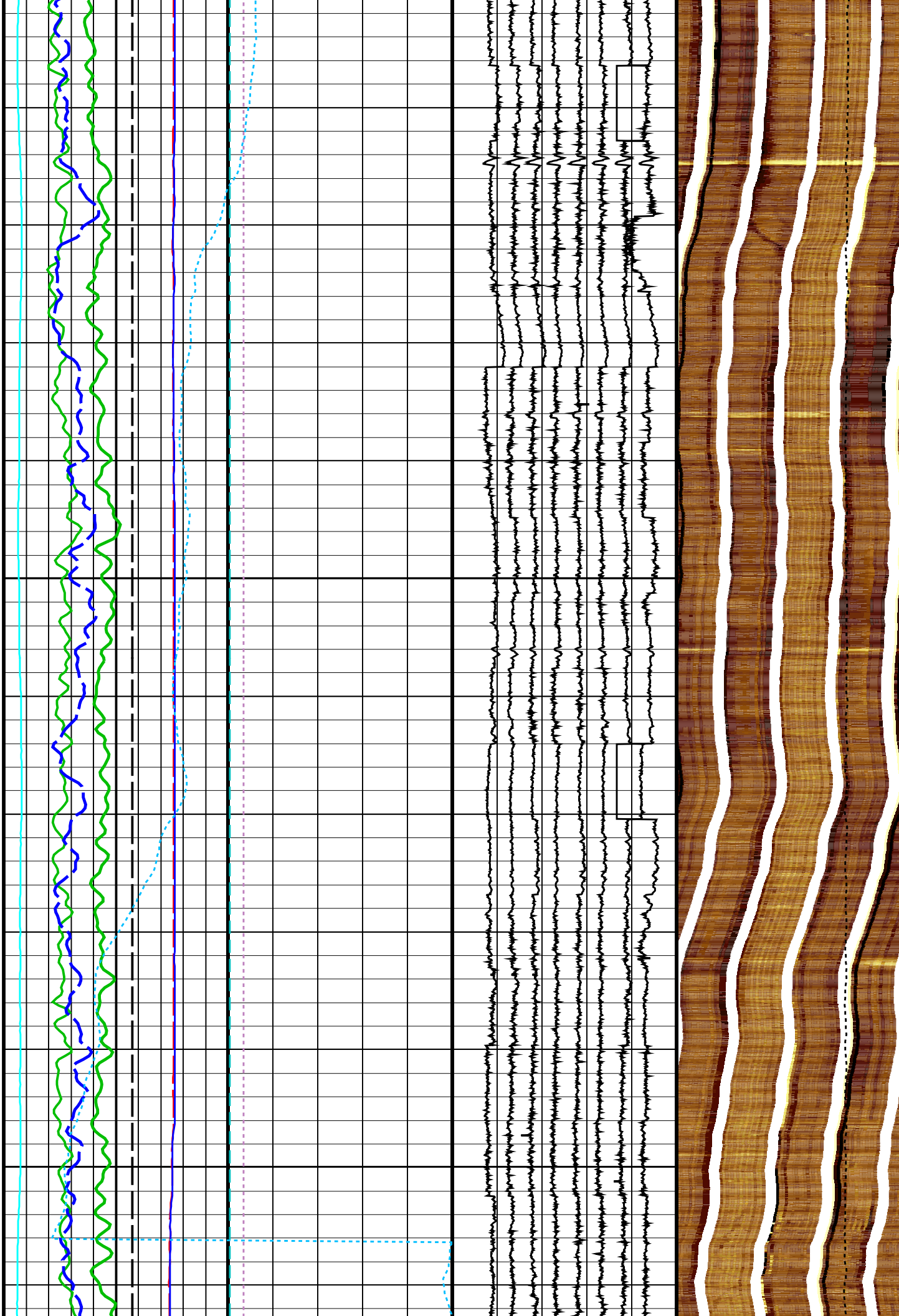
600

625



650

675



700

725

HSGR

HCGR

RB_MEST

P1AZ_MEST

HAZIM

PadD wrapped by P1AZ

PadC wrapped by P1AZ

PadB wrapped by P1AZ

PadA wrapped by P1AZ

U-MEST RB8

U-MEST RB7

U-MEST RB6

U-MEST RB5

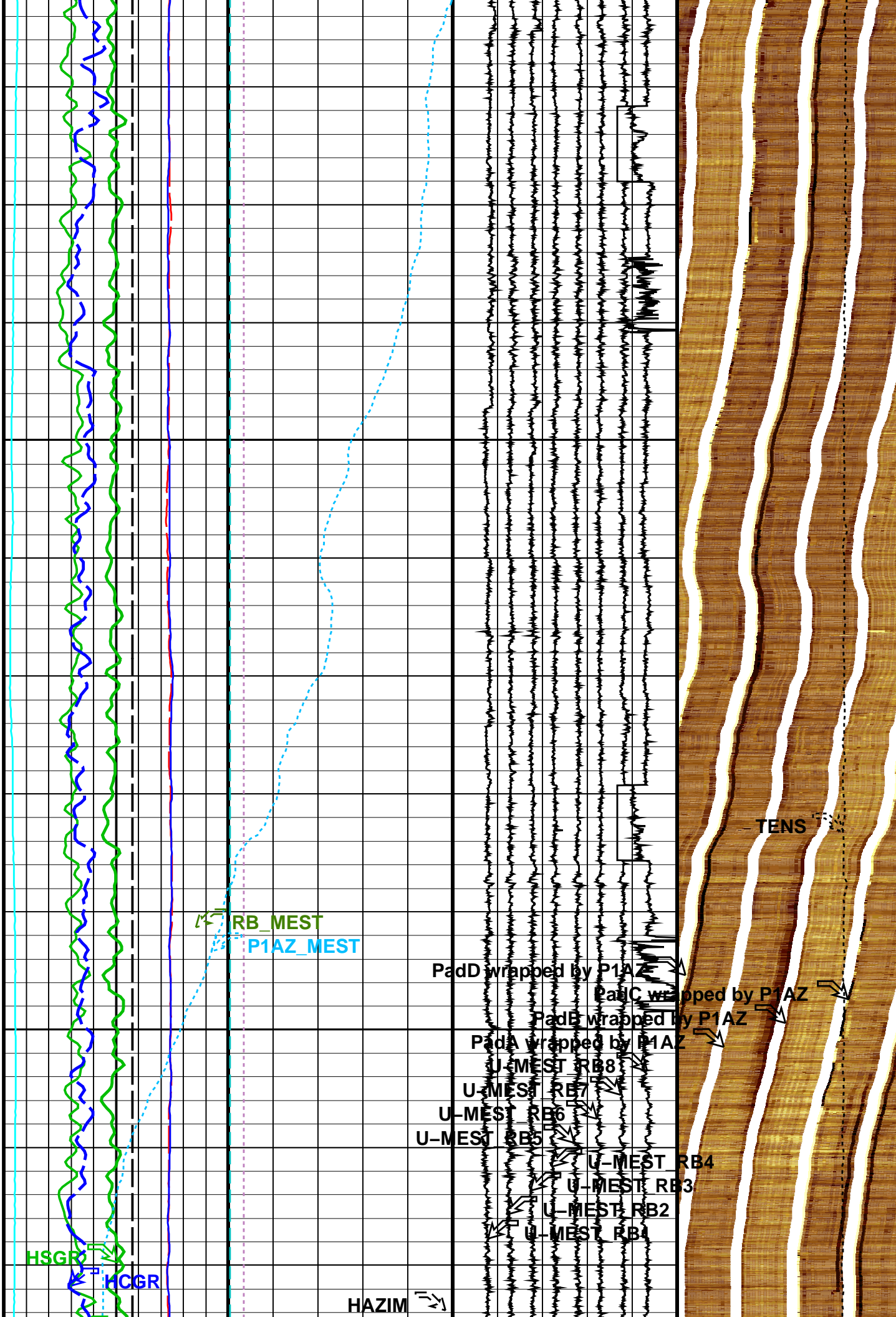
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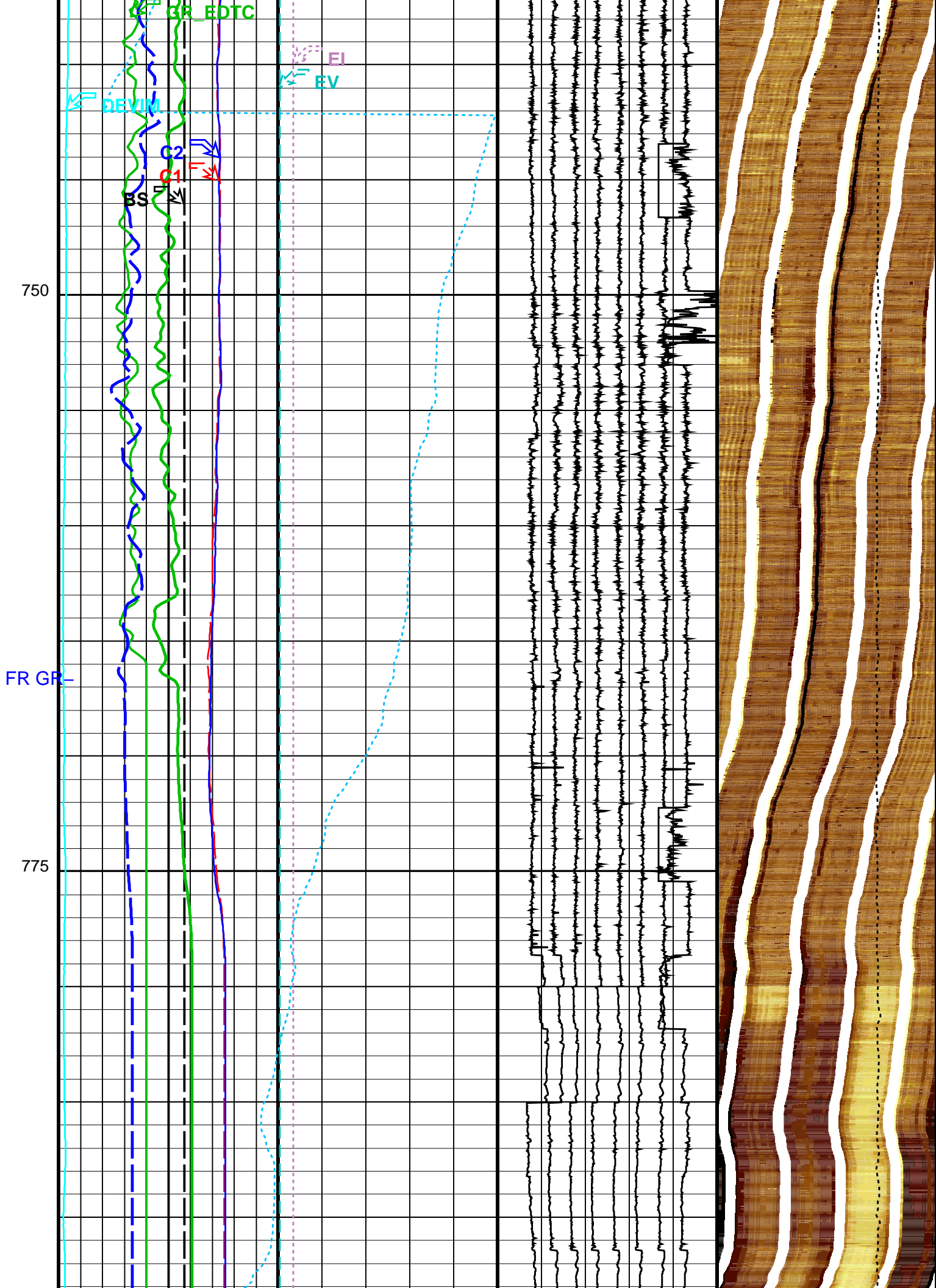
U-MEST RB3

U-MEST RB2

U-MEST RB1

TENS

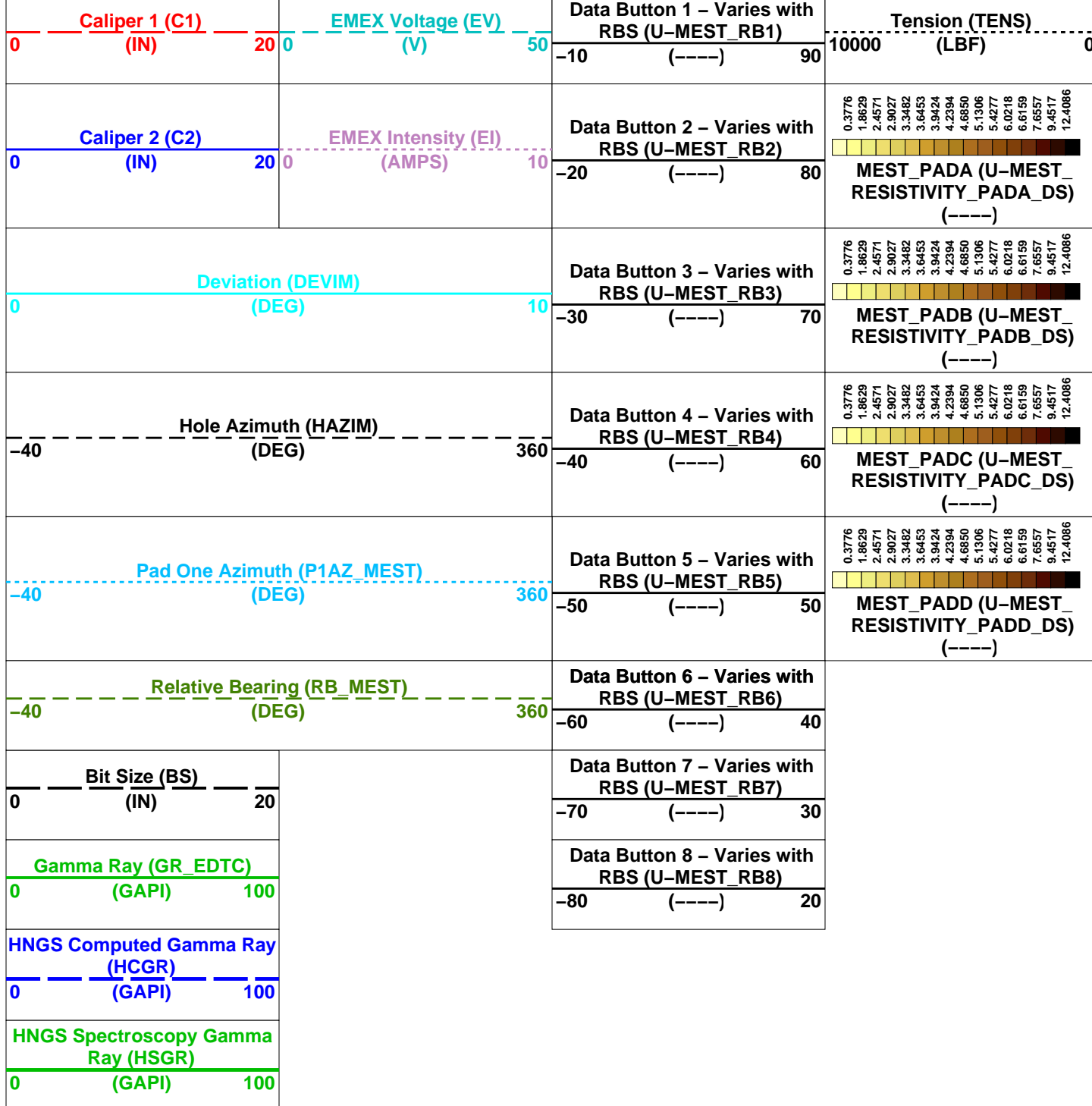
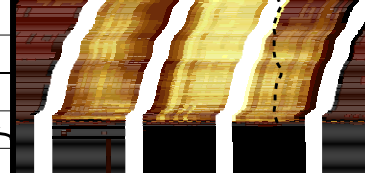
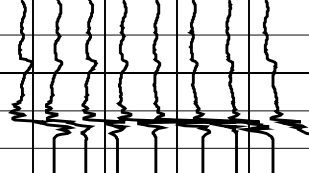




Calipers Opened

TD

Main Log



PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
	MEST-B: Micro Electrical Scanner – B (Slim)	
AFMO	Accelerometer Filtering Mode	MOVING_AVERAGE
ICMO	Inclinometry Computation Mode	AUTOMATIC_SELECTION
MDEC	Magnetic Field Declination	0.998583 DEG
MLM	MEST Logging Mode	SCAN1800
RBS	Resistivity Button Selection	AUTO
XGAI	Gain	GAIN_2
XOFF	Offset	OFFSET_0
	DSST-B: Dipole Shear Imager – B	
BHS	Borehole Status	OPEN

GCSE	HNGS-BA: Hostile Natural Gamma Ray Sonde	Generalized Caliper Selection	C1	
BAR1	HNGS Detector 1 Barite Constant		1	
BAR2	HNGS Detector 2 Barite Constant		1	
BHK	HNGS Borehole Potassium Correction Concentration		0	
BHS	Borehole Status		OPEN	
CSD1	Inner Casing Outer Diameter		0	IN
CSD2	Outer Casing Outer Diameter		0	IN
CSW1	Inner Casing Weight		0	LB/F
CSW2	Outer Casing Weight		0	LB/F
DBCC	HNGS Barite Constant Correction Flag		NONE	
GCSE	Generalized Caliper Selection		C1	
H1P	HNGS Detector 1 Allow/Disallow In Processing		ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing		ALLOW	
HABK	HNGS Borehole Potassium Running Average		-0.0014351	
HALF	HNGS Alpha Filter Length		60	IN
HCRB	HNGS Apply Borehole Potassium Correction		NONE	
HMWM	Mud Weighting Material		BARI	
HNPE	HNGS Processing Enable		YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate		1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate		1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag		YES	
TPOS	Tool Position		CENT	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average		1.01566	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average		0.983072	
	EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status		OPEN	
GCSE	Generalized Caliper Selection		C1	
	System and Miscellaneous			
BS	Bit Size		11.438	IN
DO	Depth Offset for Playback		-97.0	M
PP	Playback Processing		RECOMPUTE	

Format: MEST_C_WRAP_BY_P1AZ Vertical Scale: 1:200 Graphics File Created: 10-Sep-2015 13:52

OP System Version: 19C0-187

MEST-B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

Input DLIS Files

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Output DLIS Files

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Company: International Ocean Discovery Program Well: Expedition 356, Site U1462 A

Input DLIS Files

DEFAULT	FMS_DSI_NGS_021LUP	FN:35	PRODUCER	04-Sep-2015 00:10	893.8 M	81.7 M
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Output DLIS Files

DEFAULT	FMS_DSI_NGS_041PUP	FN:60	PRODUCER	10-Sep-2015 13:52	797.8 M	-15.2 M
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OP System Version: 19C0-187

MEST-B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

PIP SUMMARY

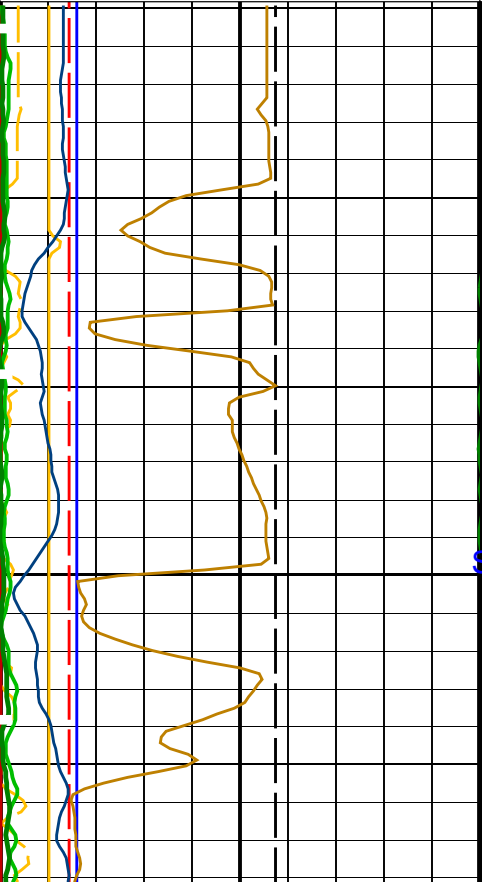
☒ Time Mark Every 60 S

HNGS Spectroscopy Gamma Ray (HSGR)		
0	(GAPI)	100

Waveform Data Copy Indicator 4 -

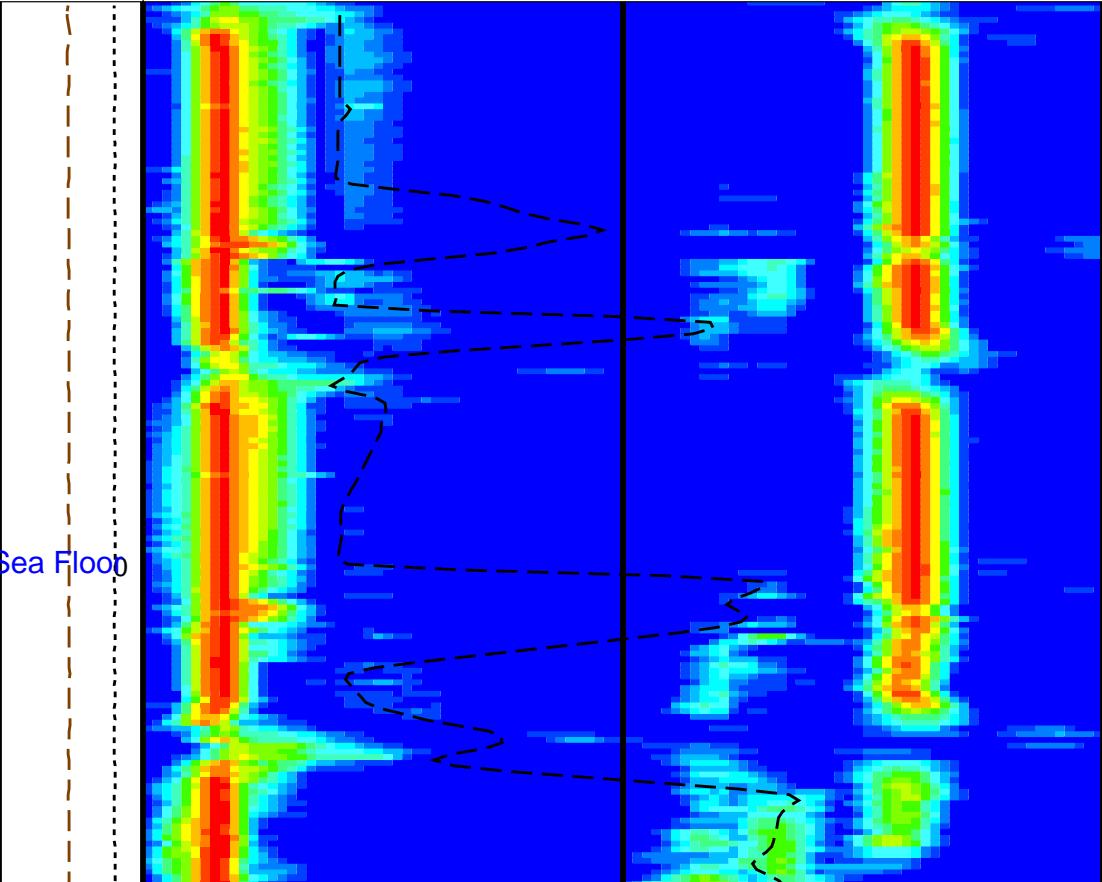
Monopole P&S (WCI4)		
0	(-----)	10
Peak Coherence / RA – P & S Shear (CHRS)		
-1	(-----)	9
Peak Coherence / RA – P & S Comp (CHRP)		
0	(-----)	10
Gamma Ray (GR_EDTC) (GAPI)		
0		100
Poisson's Ratio (PR)		
0	(-----)	0.5
Sonic Velocity (SVEL)		
1000	(M/S)	6000
Sonde Deviation (SDEVM) (DEG)		
0		10
Poisson's Ratio (PR)		
0	(-----)	0.5

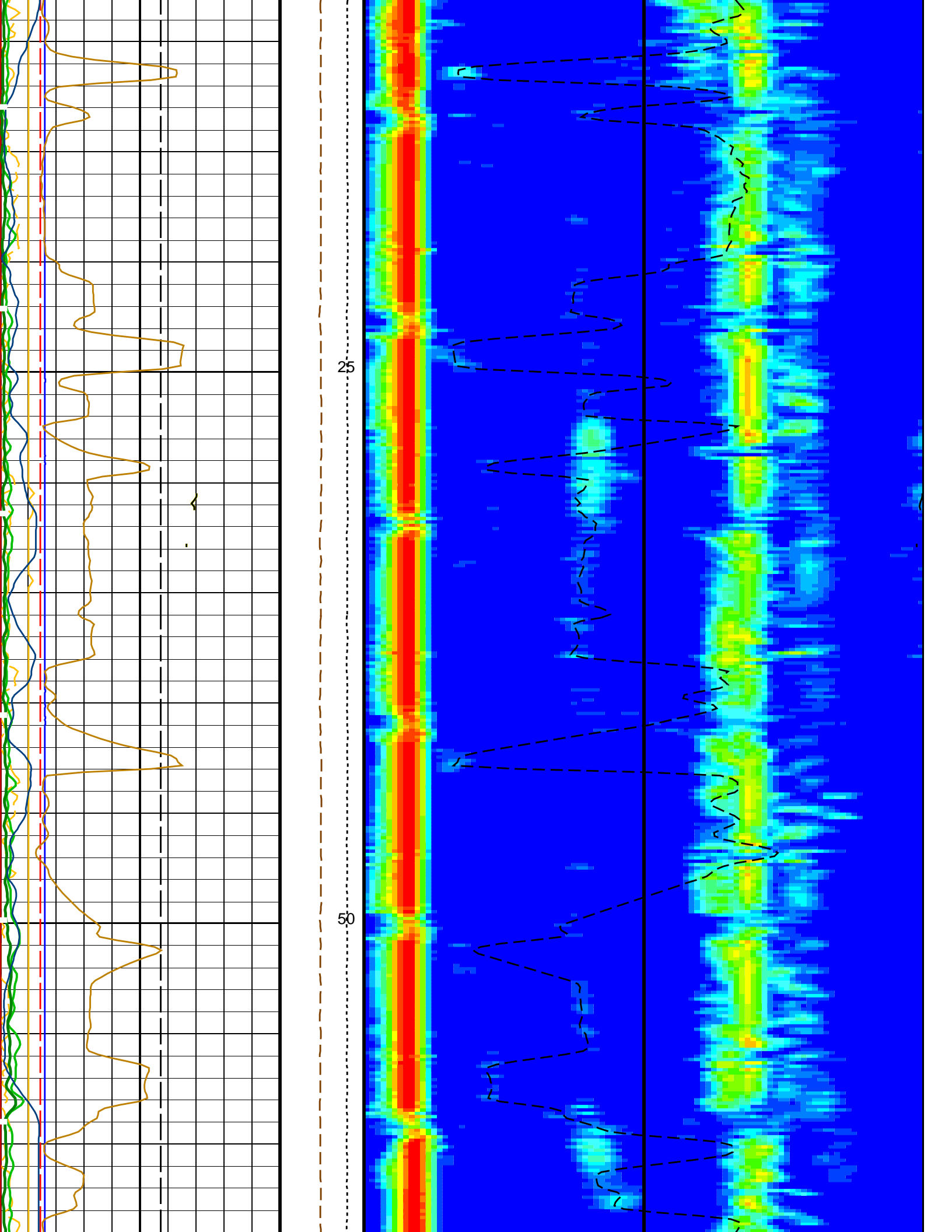
Caliper 1 (C1) (IN)		
0		20
Caliper 2 (C2) (IN)		
0		20
Bit Size (BS) (IN)		
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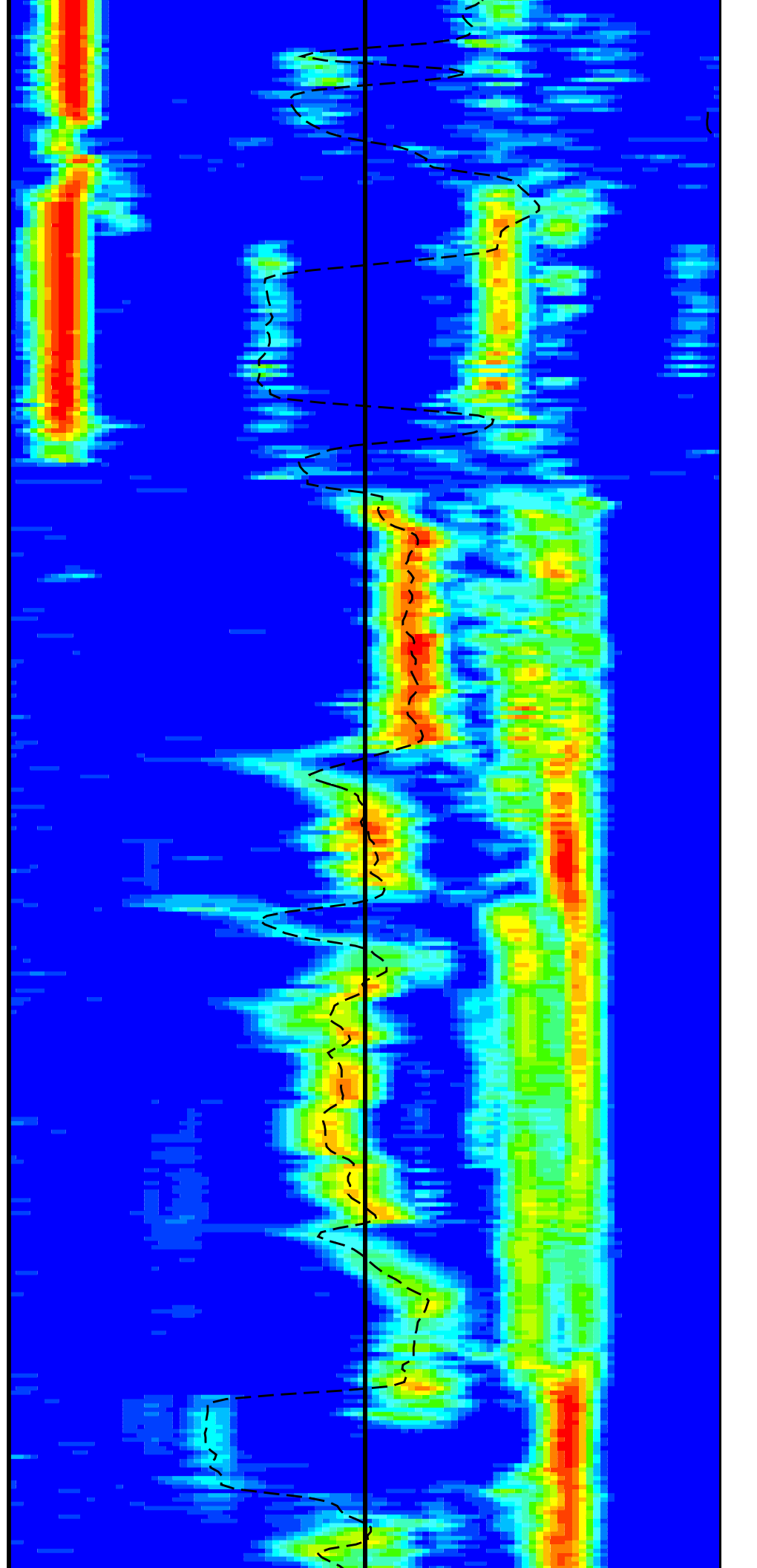
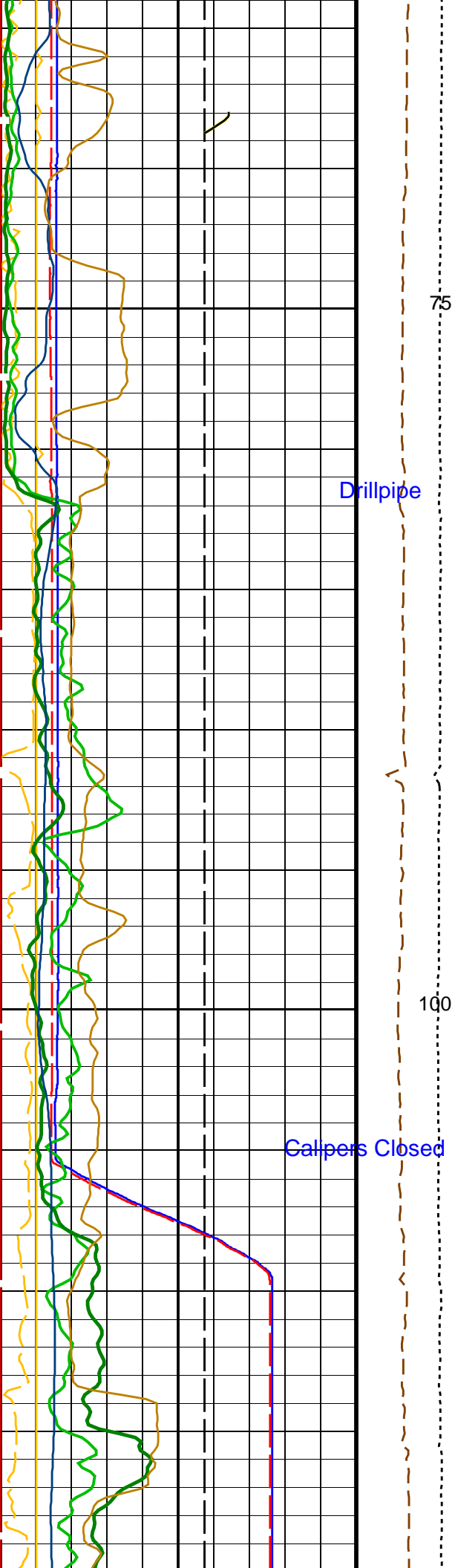


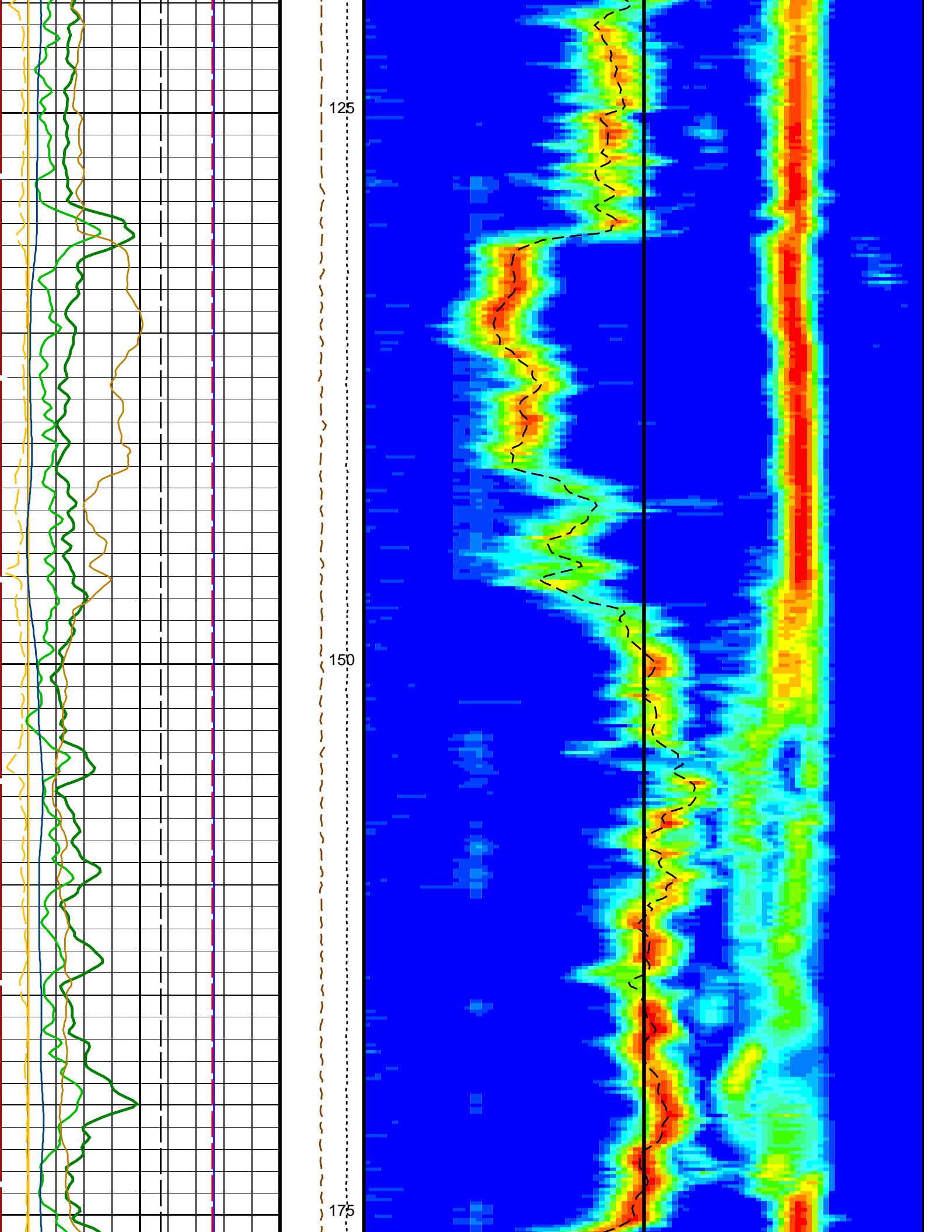
Uplog #2

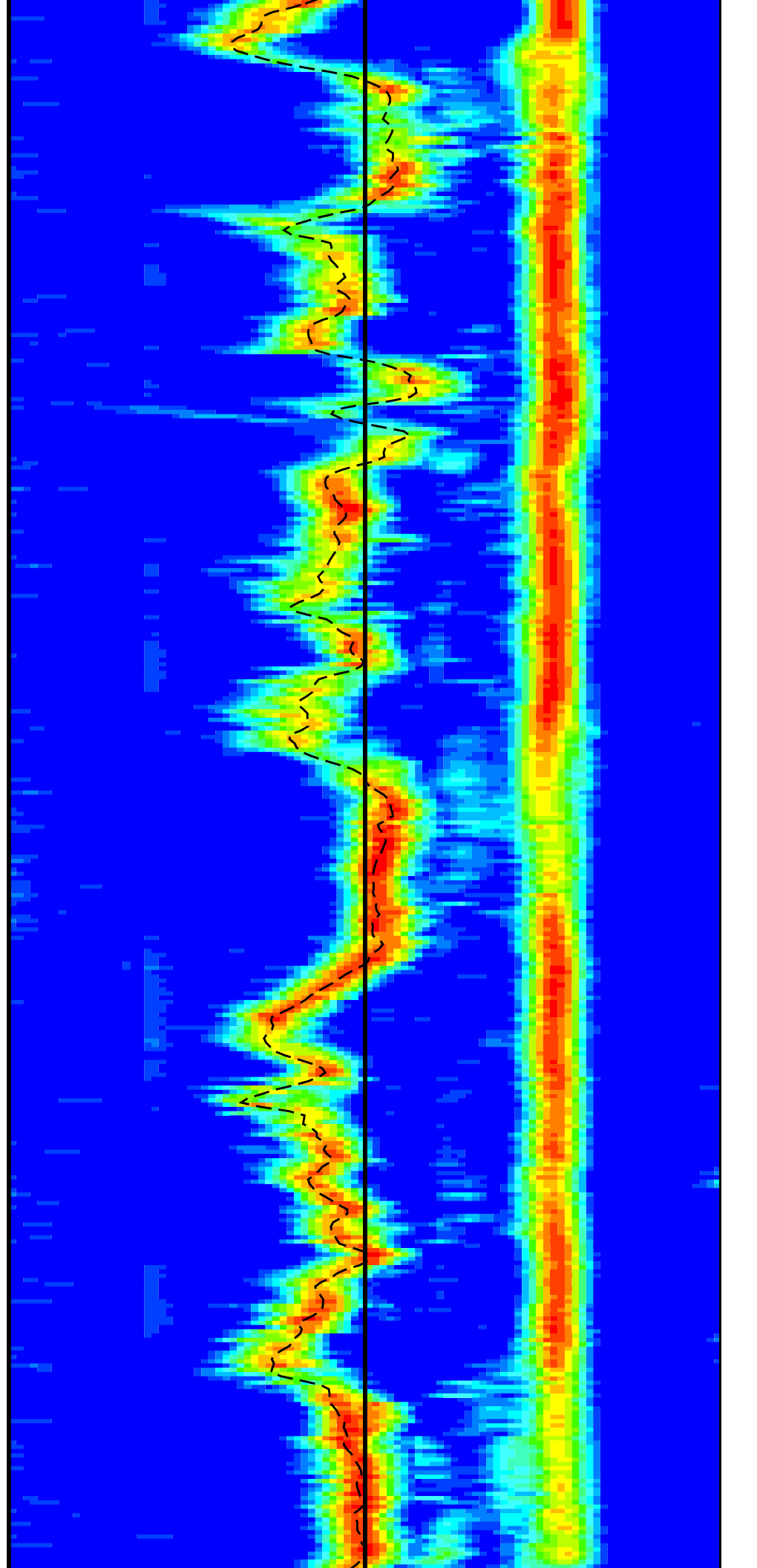
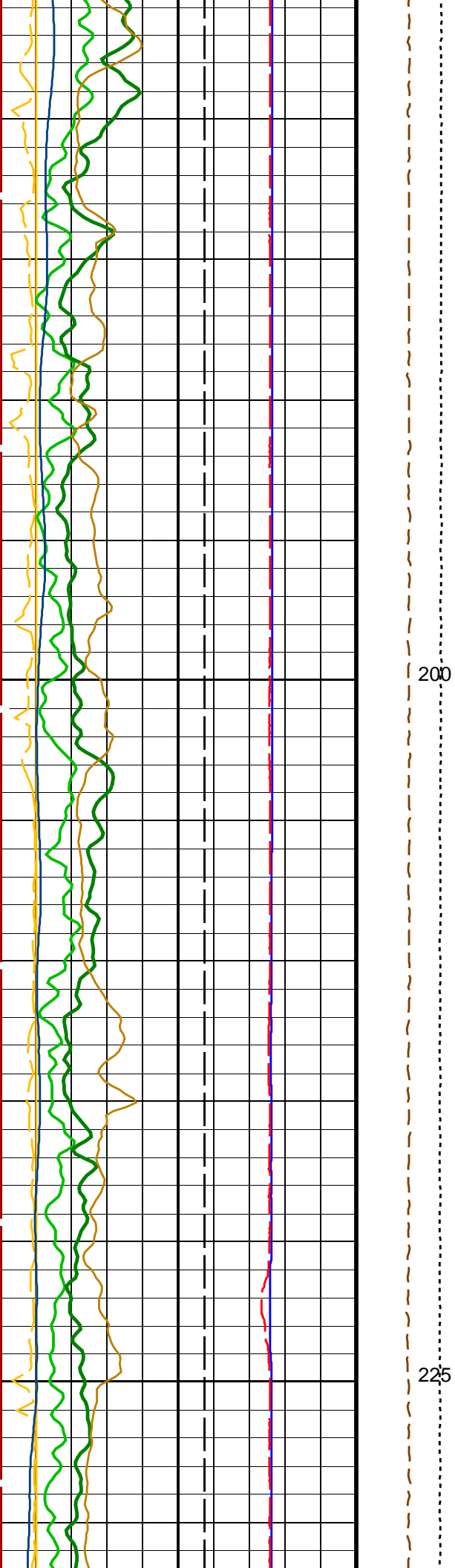
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<div> <div>40</div> <div>Delta-T Shear / RA – P & S (DTRS) (US/F)</div> <div>240</div> </div>		
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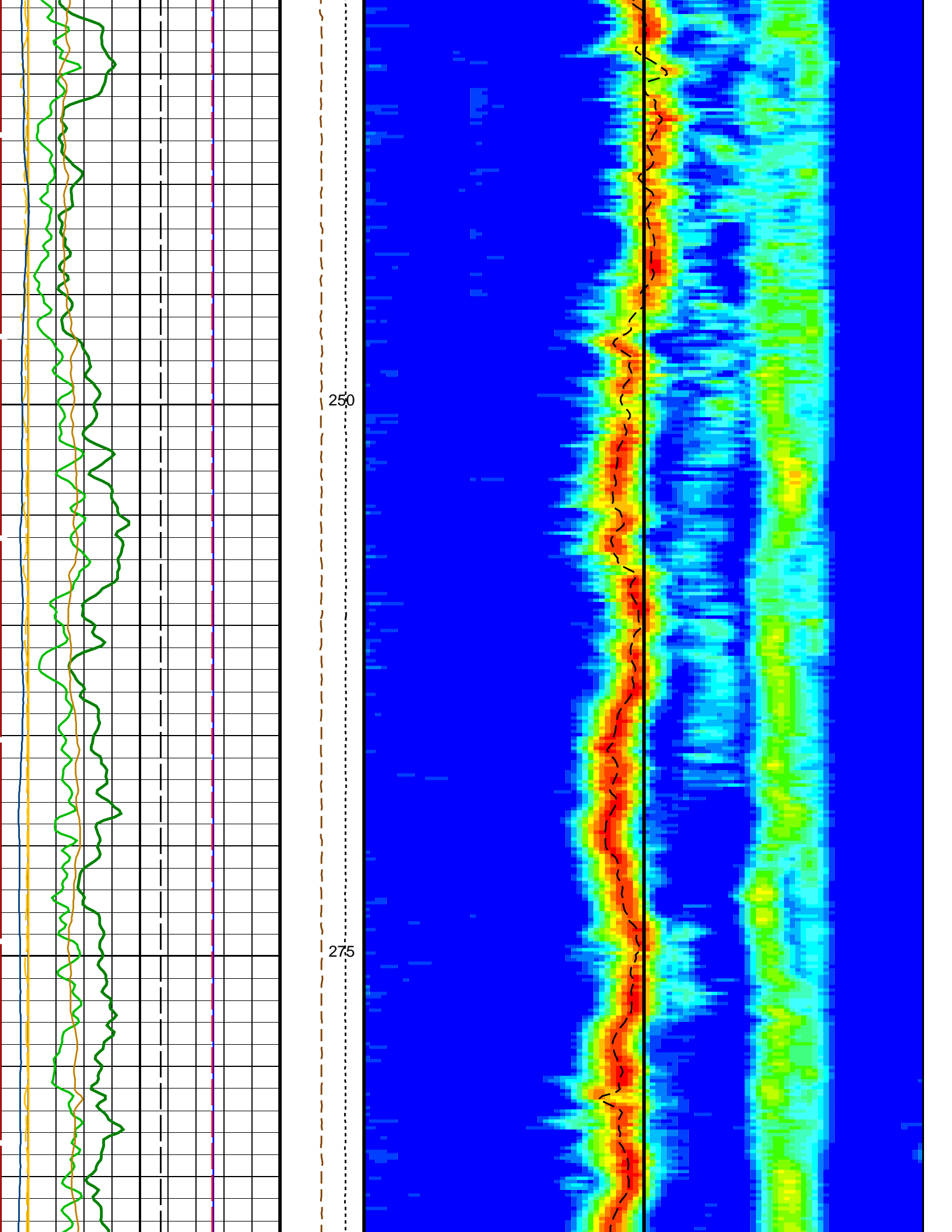


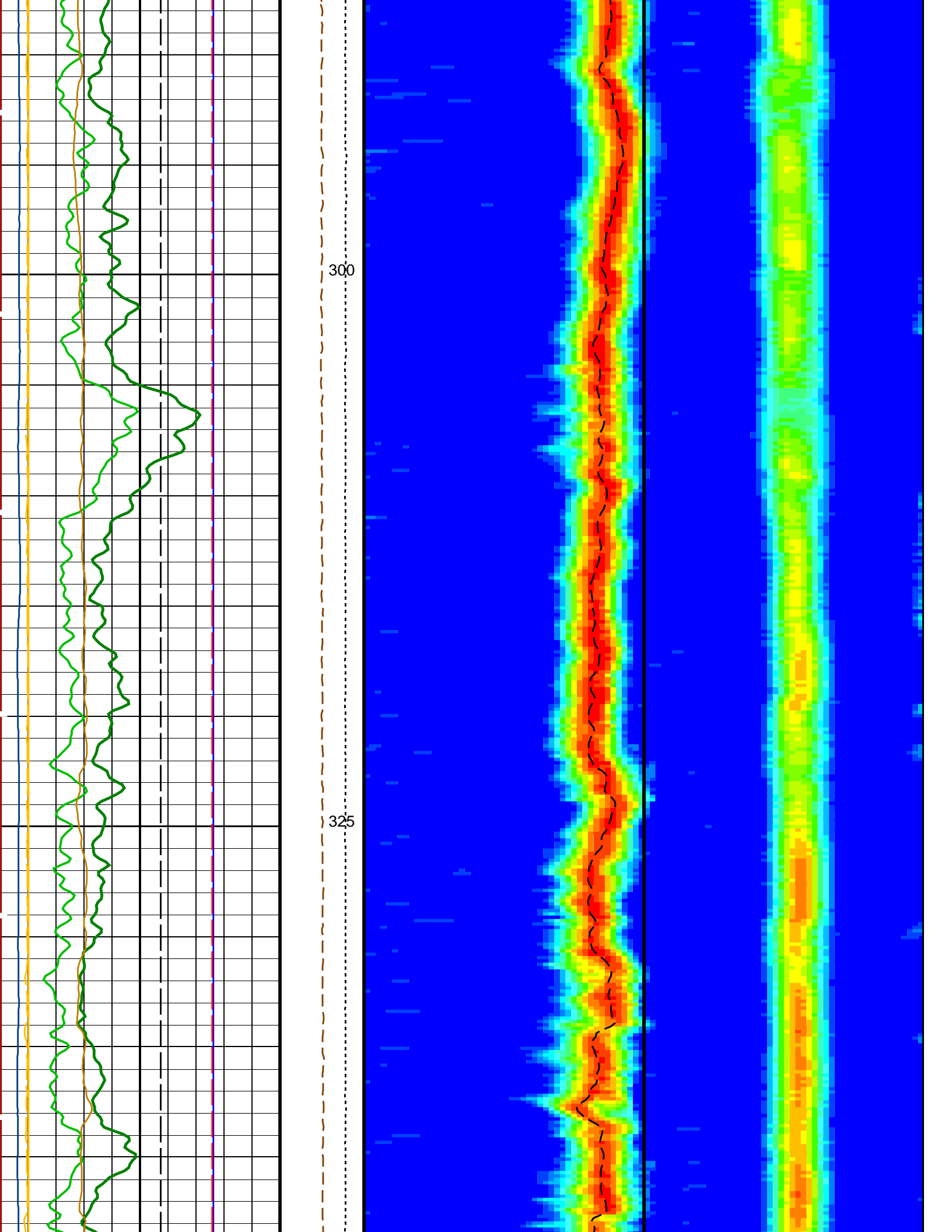


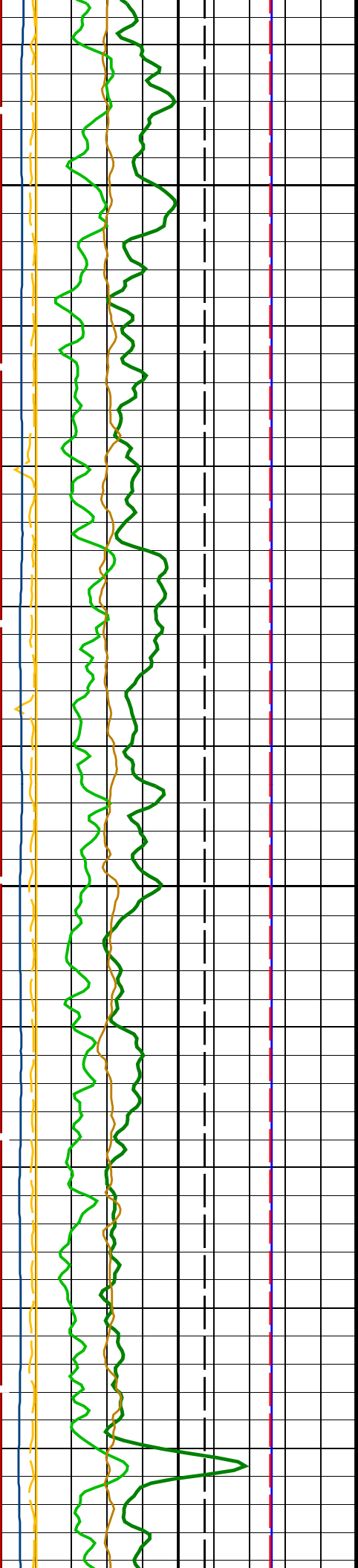






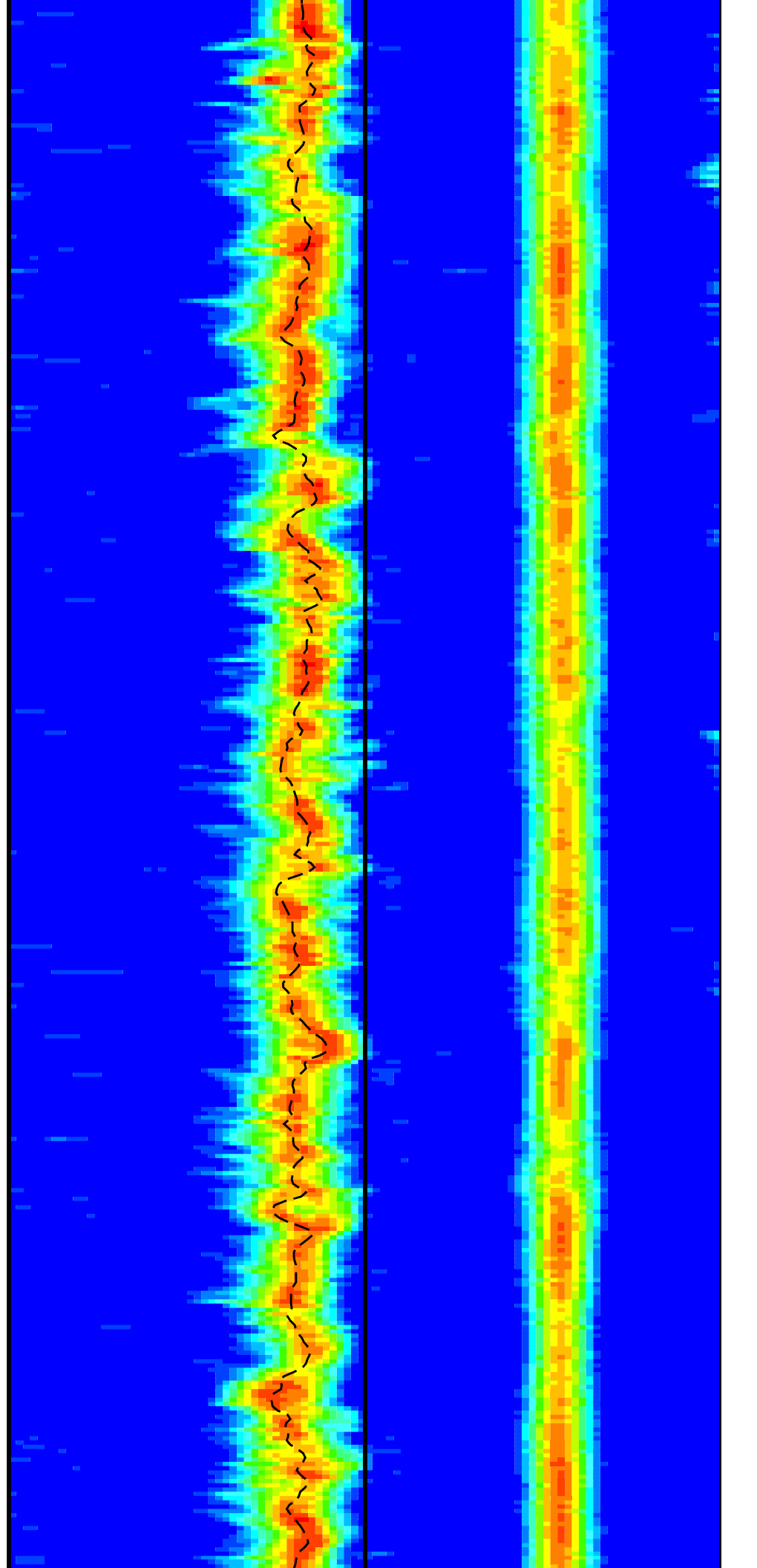


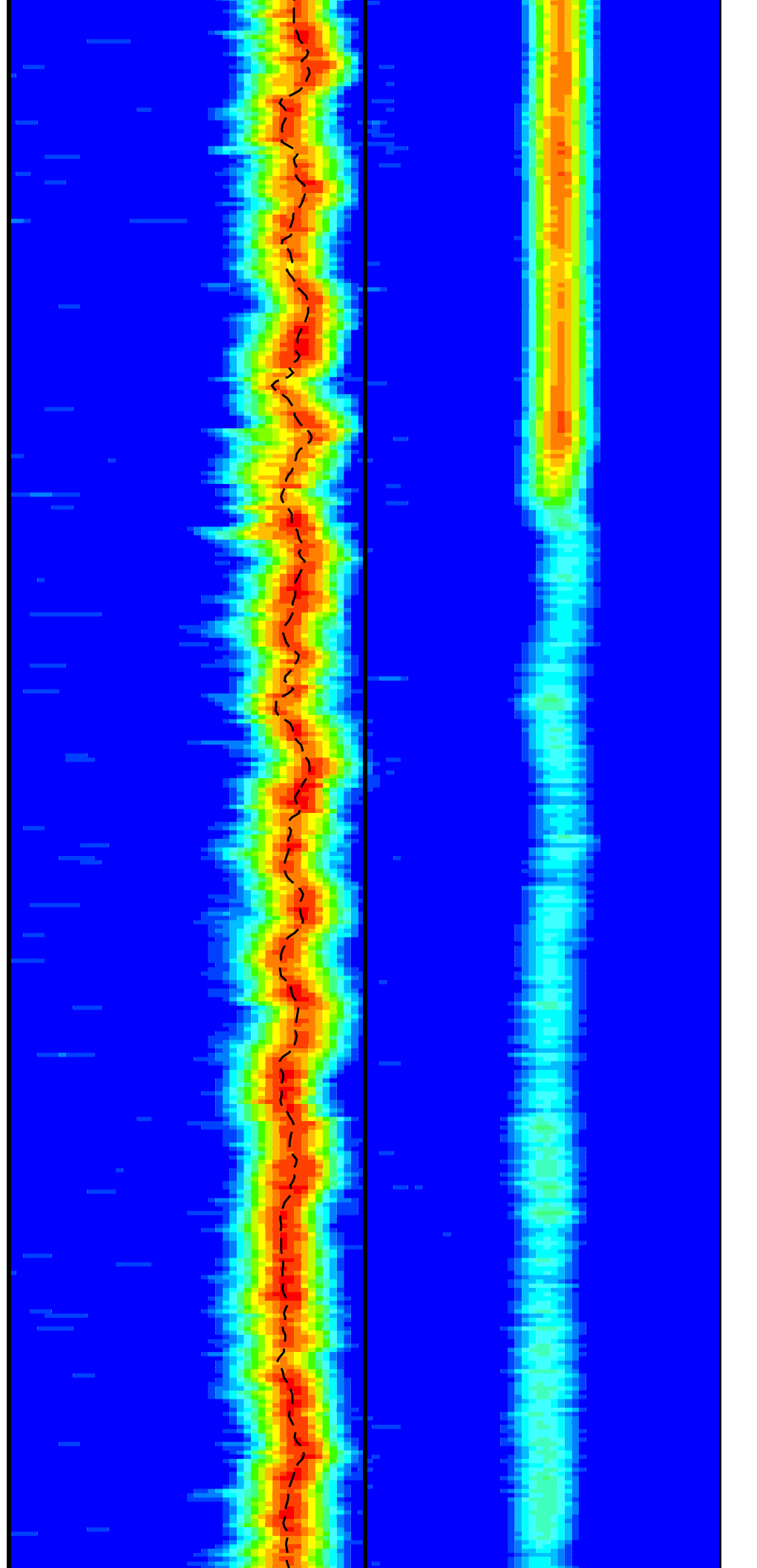
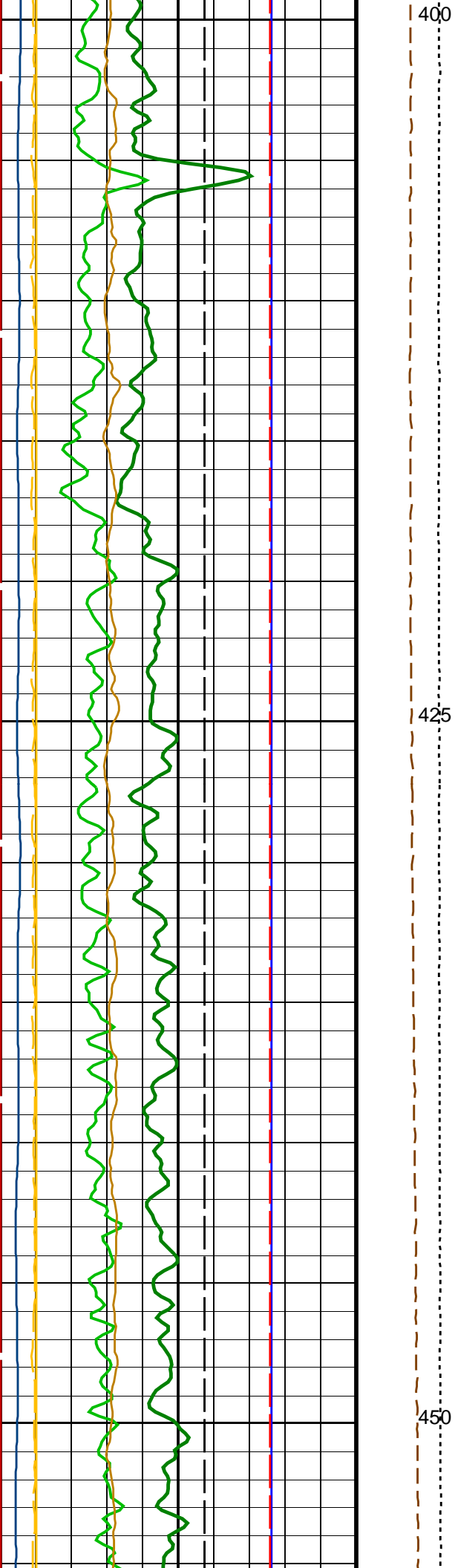


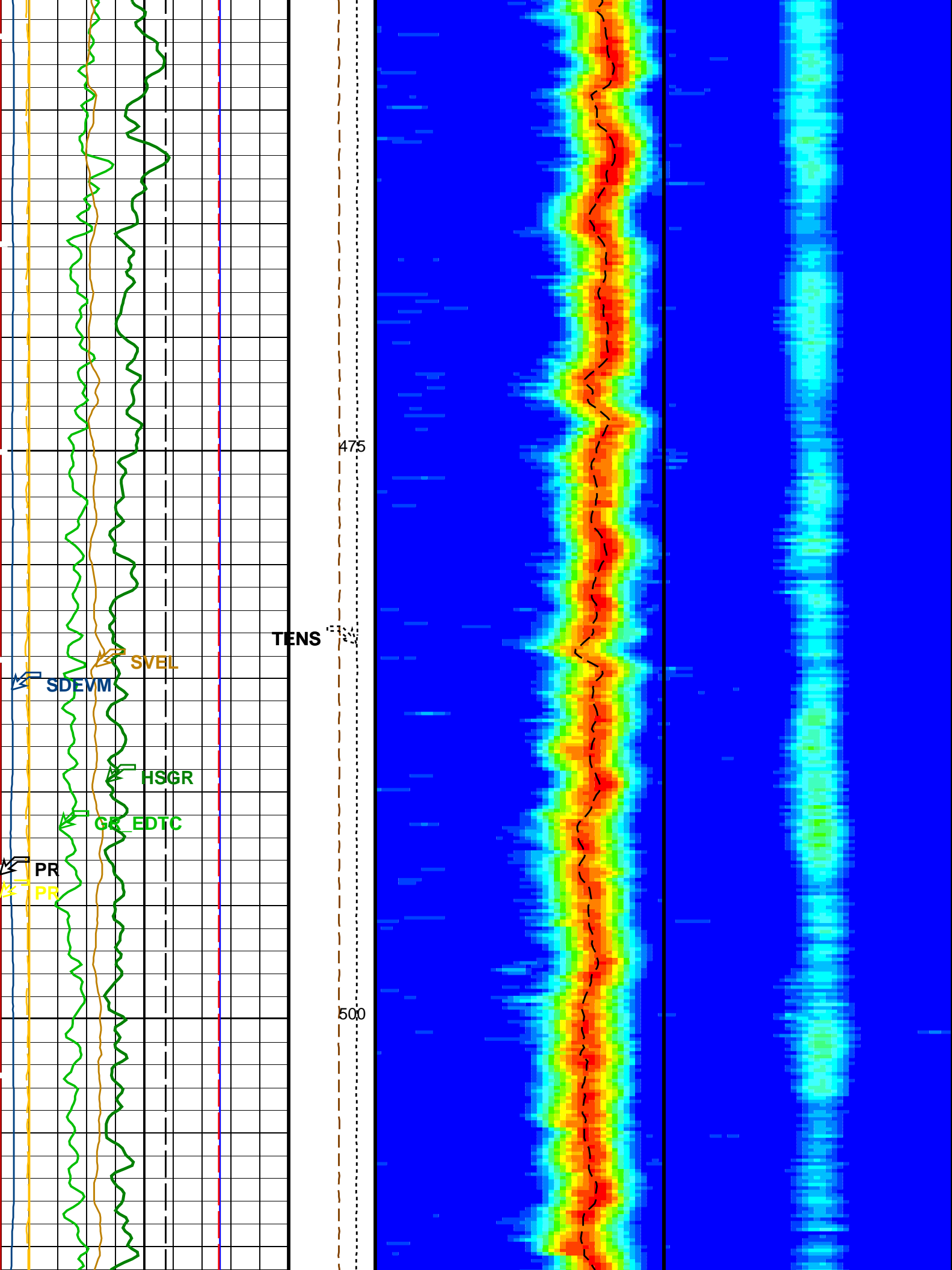


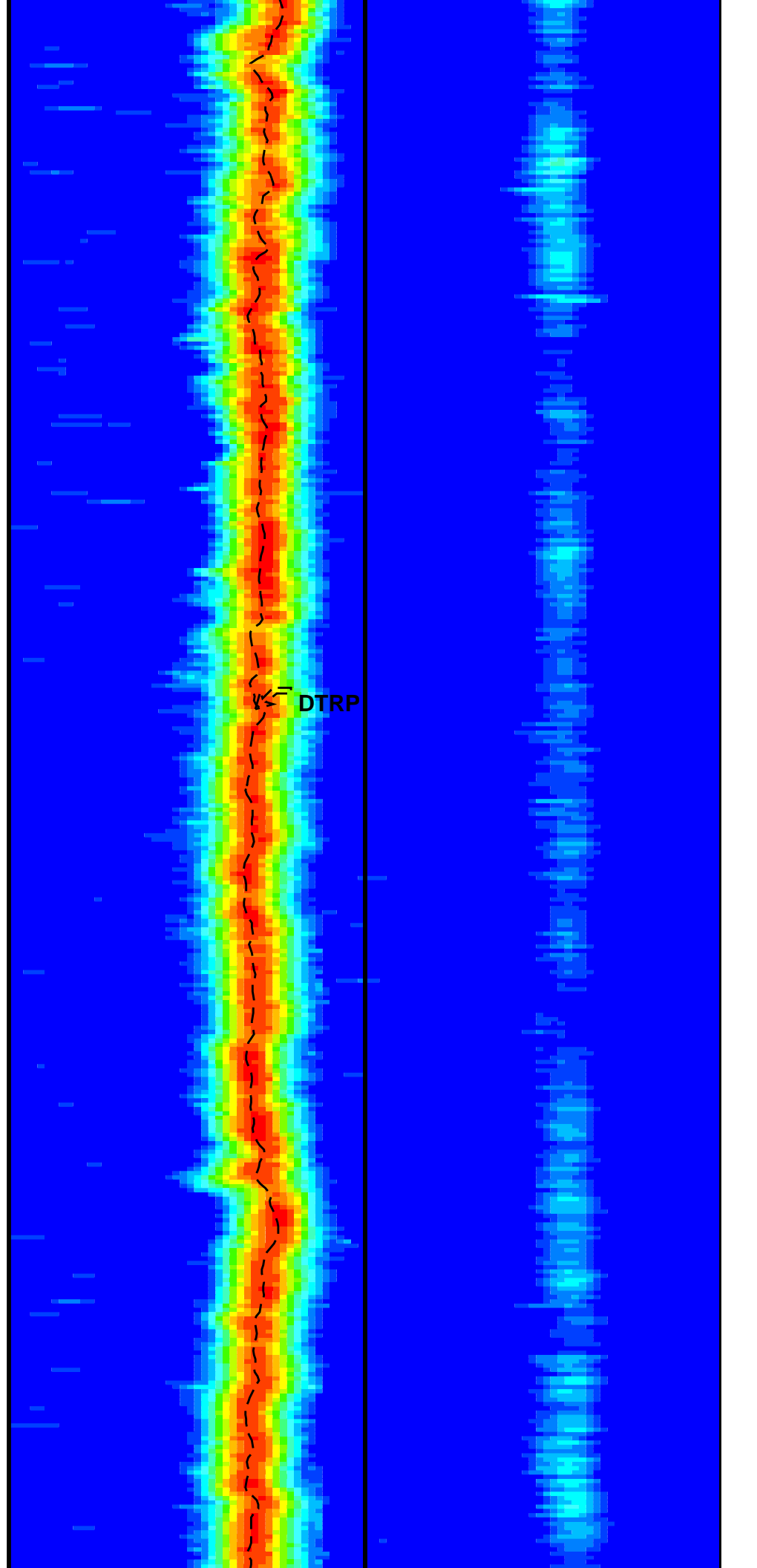
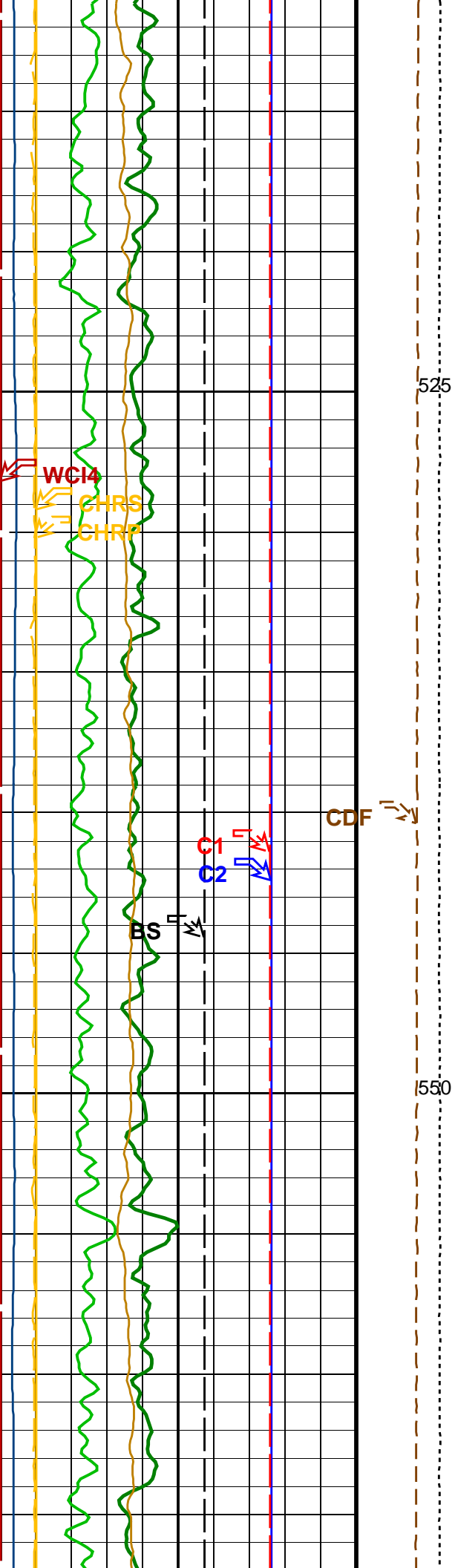
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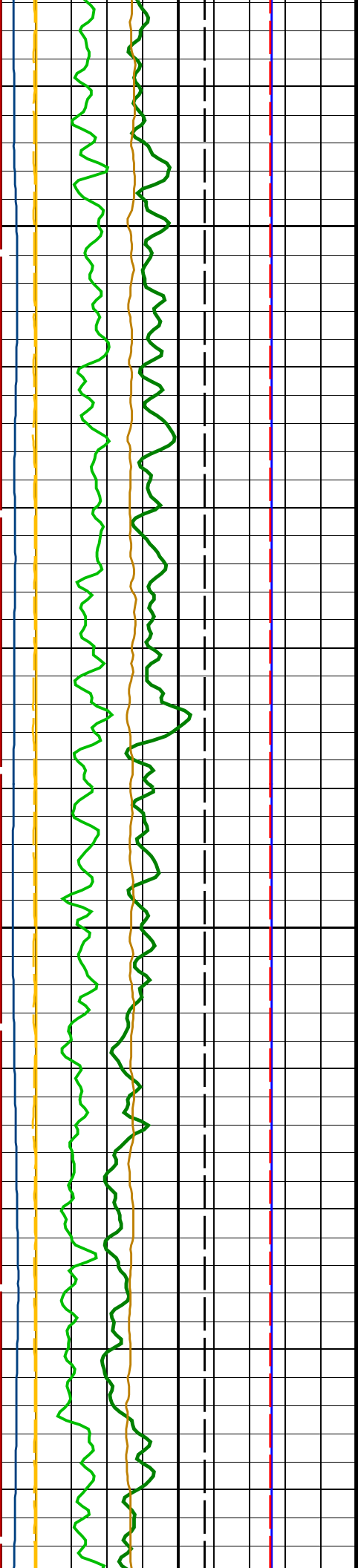
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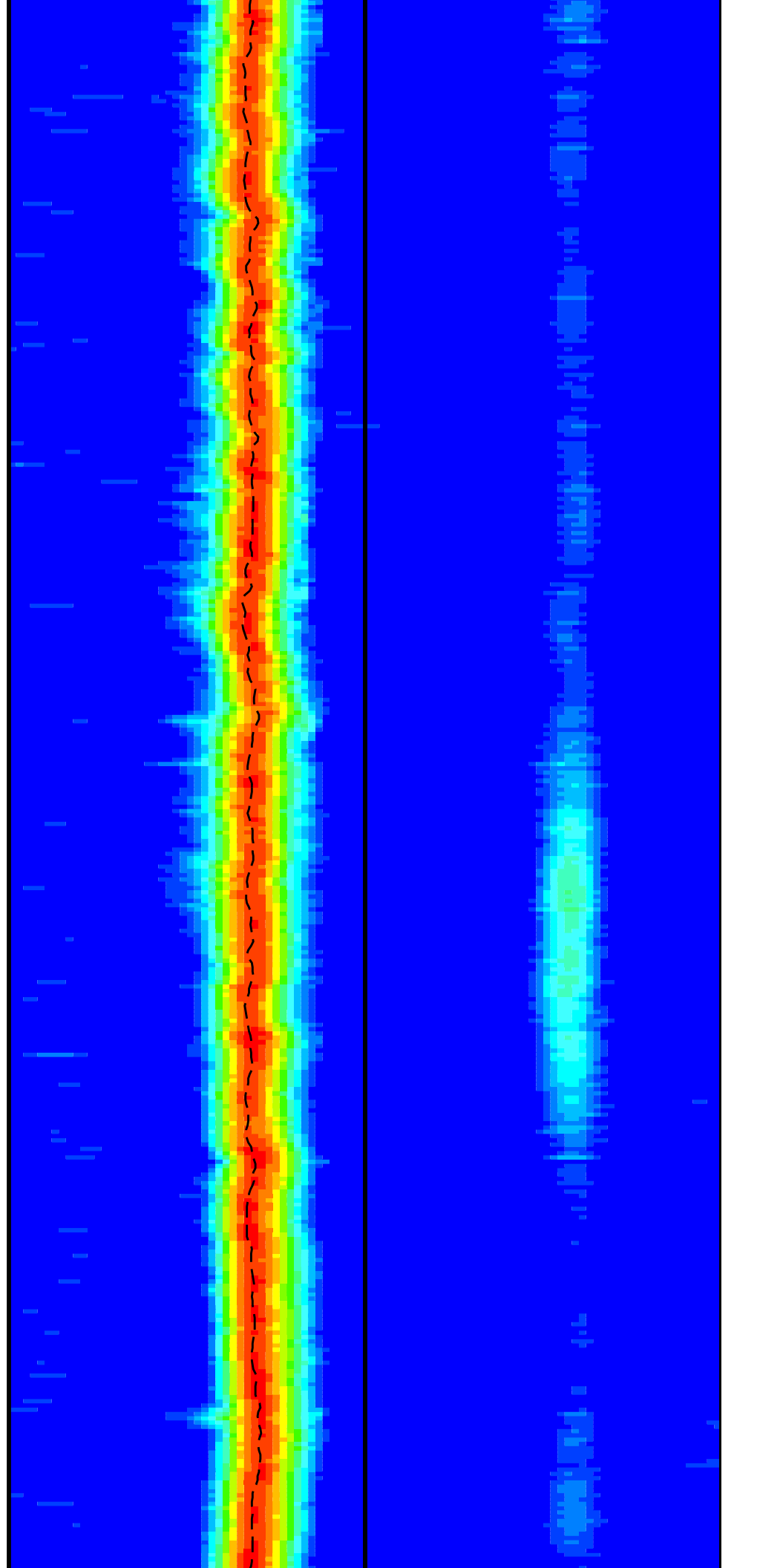


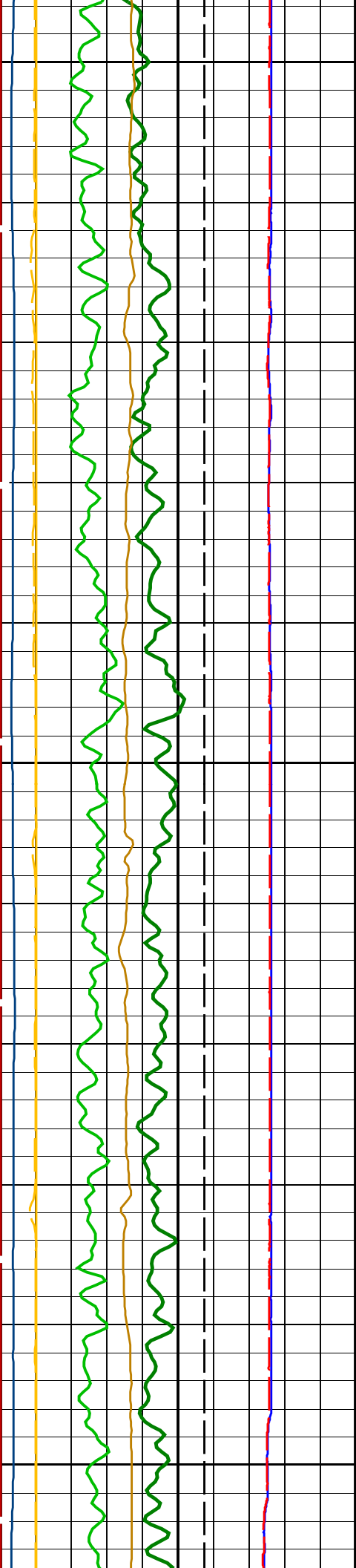




575

600

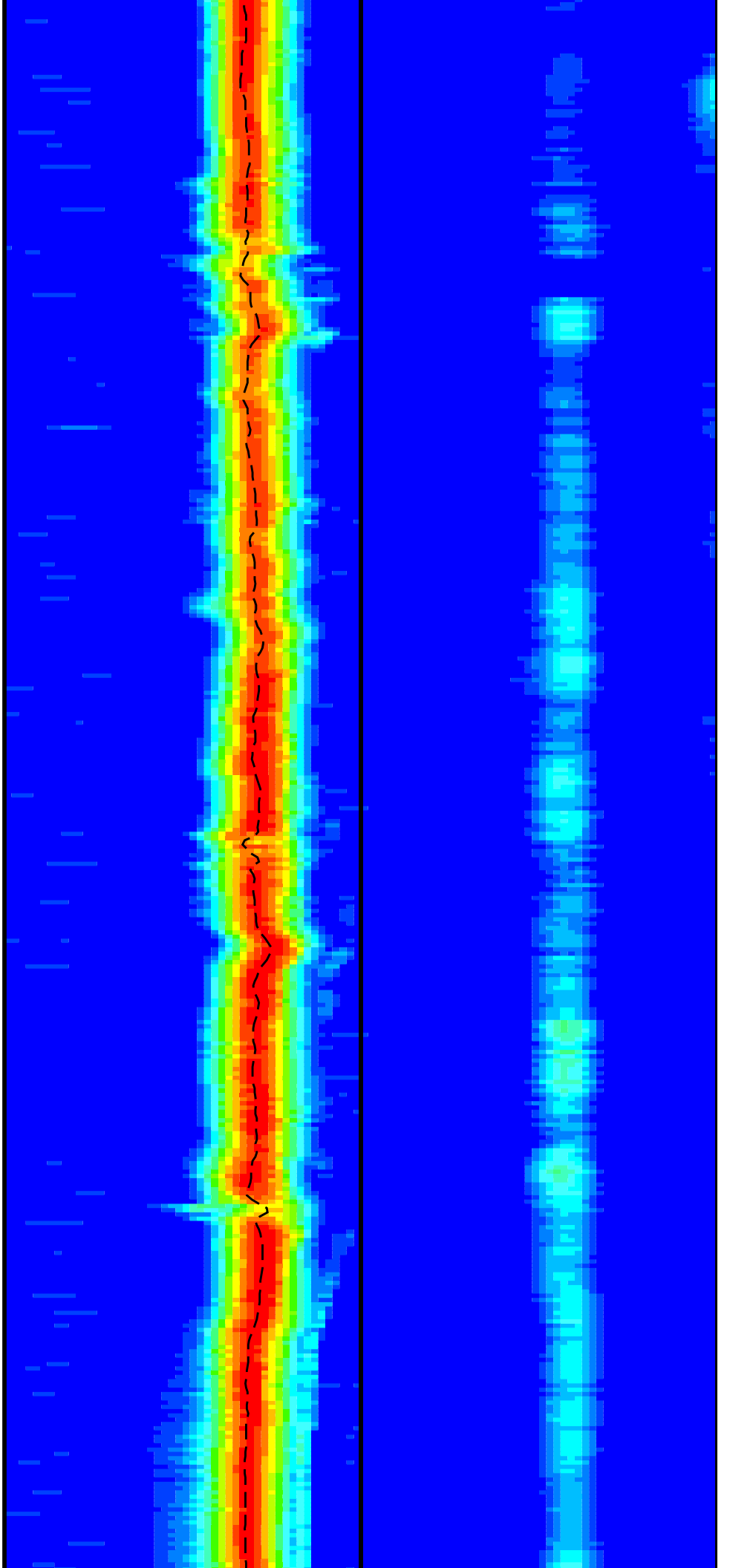


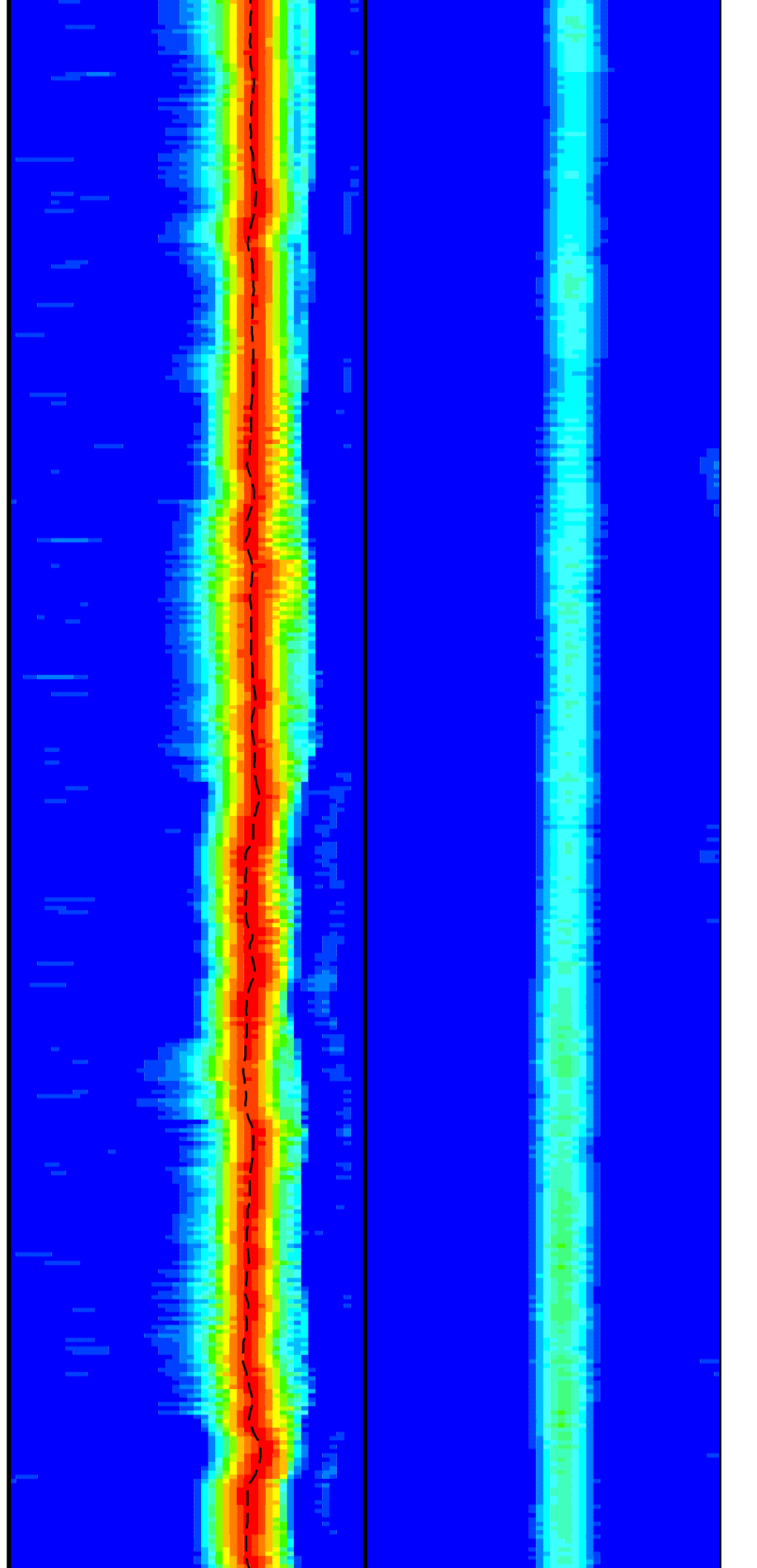
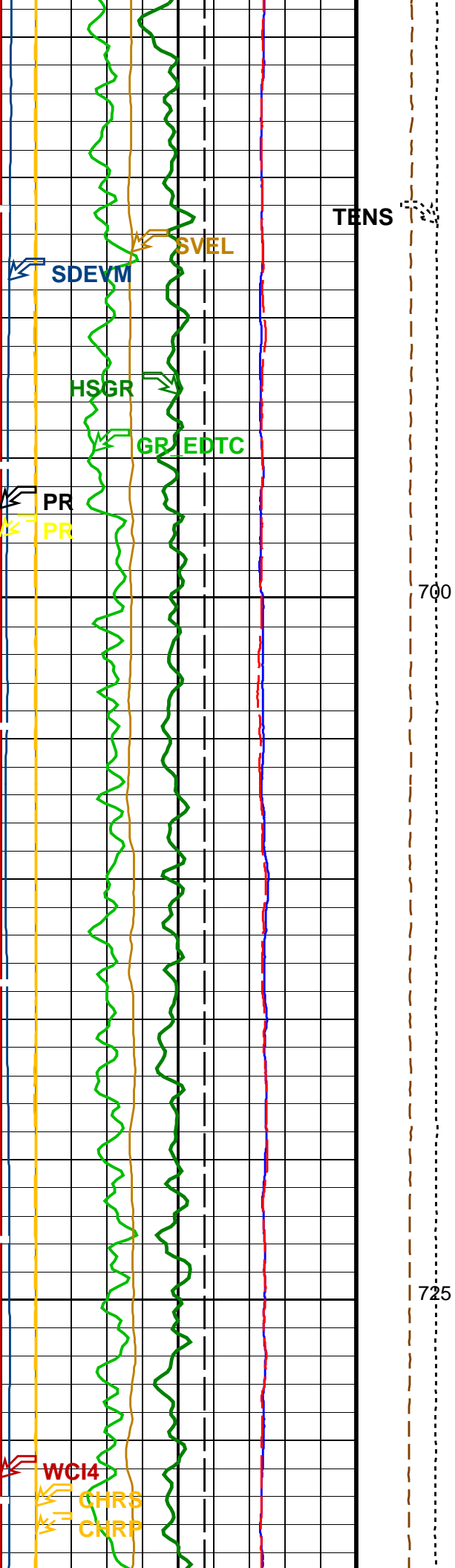


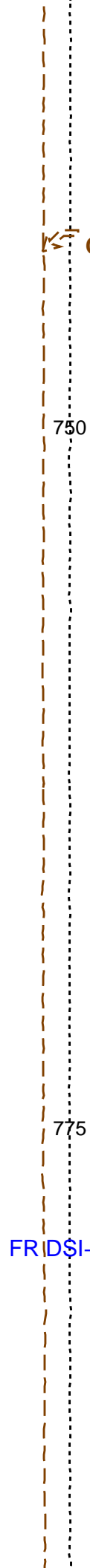
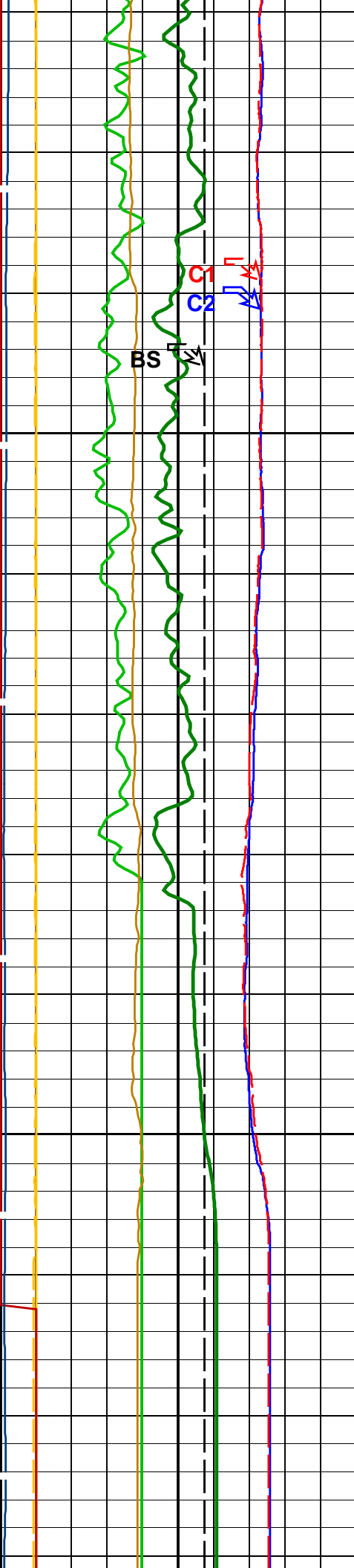
625

650

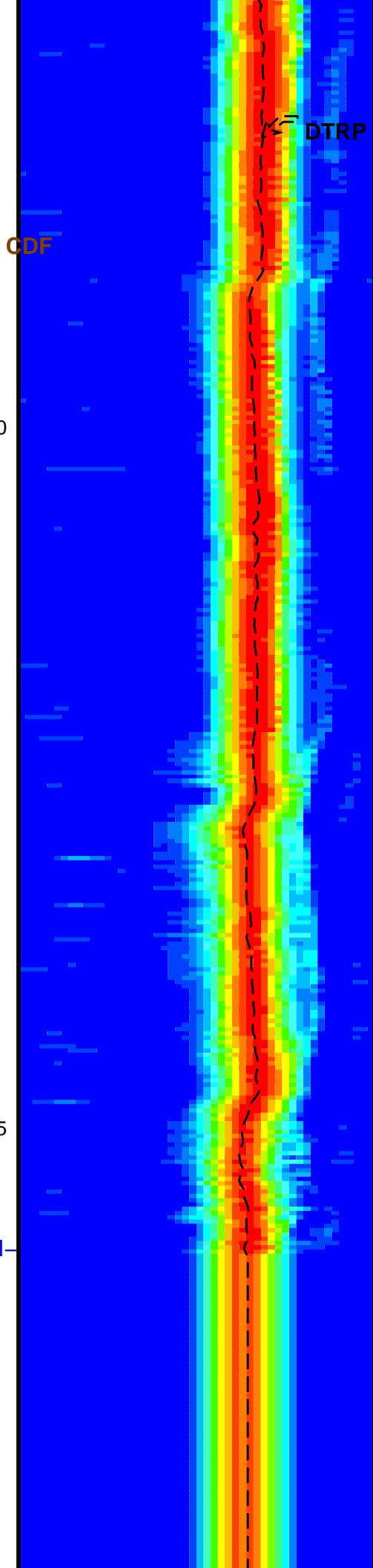
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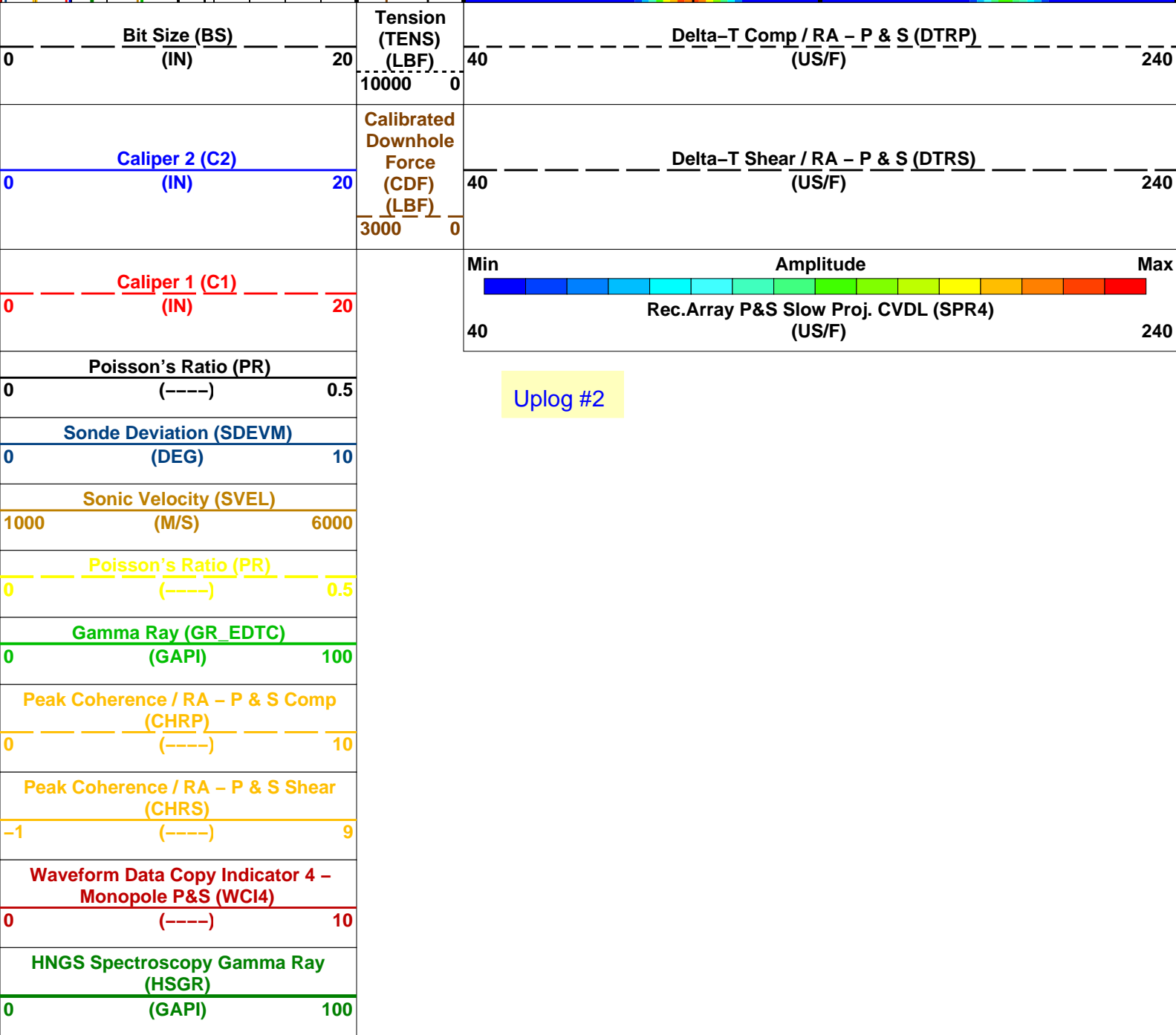
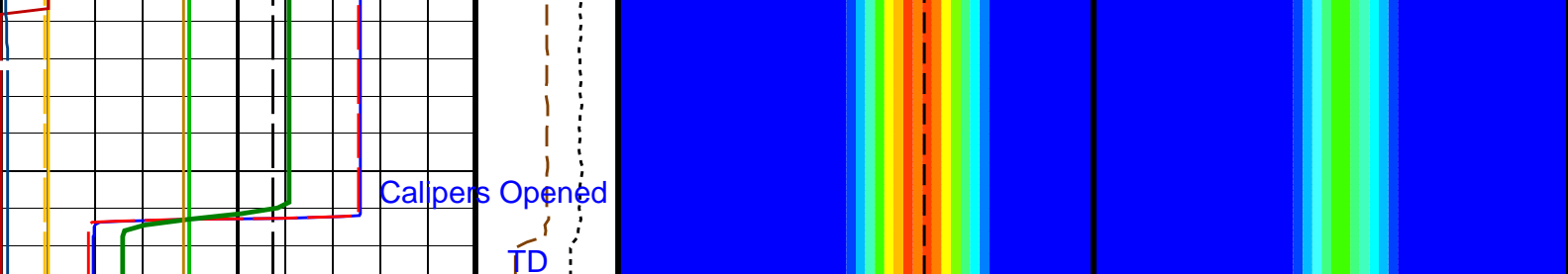






FRIDSI





PIP SUMMARY

Time Mark Every 60 S

Parameters			
DLIS Name	Description	Value	
MEST-B: Micro Electrical Scanner – B (Slim)			
AFMO	Accelerometer Filtering Mode	MOVING_AVERAGE	
ICMO	Inclinometry Computation Mode	AUTOMATIC_SELECTION	
MDEC	Magnetic Field Declination	0.998583	DEG
DSST-B: Dipole Shear Imager – B			
BHS	Borehole Status	OPEN	
CASF	Label Casing Function – Monopole P&S	50	
COLL	Label Slowness Lower Limit – Monopole P&S Compressional	70	US/F
COUL	Label Slowness Upper Limit – Monopole P&S Compressional	190	US/F

DDE4	Digitizing Delay 4	0	US
DDEX	Digitizing Delay X	0	US
DSI4	Digitizer Sample Interval 4	10	US
DSIX	Digitizer Sample Interval X	40	US
DTCS	Compressional Delta-T Source for DTCO Channel	PS_COMP	
DTF	Delta-T Fluid	195	US/F
DTSS	Shear Delta-T Source for DTSM Channel	PS_SHEAR	
DWC4	Digitizer Word Count 4	512	
DWCX	Digitizer Word Count X	512	
FILG	Label Fill Gap Control - Monopole P&S	COMP_SHEAR	
GCSE	Generalized Caliper Selection	C1	
LFC	Label Formation Character - Monopole P&S	DYNAMIC	
MCS	Mean Casing Slowness	57	US/F
MTXG	Monopole Transmitter Geometry	186	IN
NWI4	Number Waveform Items 4	8	
NWIX	Number Waveform Items X	0	
RSMN	Label Shear/Compressional Minimum Ratio - Monopole P&S	1.4	
RSMX	Label Shear/Compressional Maximum Ratio - Monopole P&S	2.12	
RX1G	Receiver 1 Geometry	294	IN
RX2G	Receiver 2 Geometry	300	IN
RX3G	Receiver 3 Geometry	306	IN
RX4G	Receiver 4 Geometry	312	IN
RX5G	Receiver 5 Geometry	318	IN
RX6G	Receiver 6 Geometry	324	IN
RX7G	Receiver 7 Geometry	330	IN
RX8G	Receiver 8 Geometry	336	IN
SAM4	DSST Sonic Acquisition Mode 4 - Monopole Mode for P&S	EVEN	
SAMX	DSST Sonic Acquisition Mode X - Both Dipoles or Monopole Mode for Expert	OFF	
SAS4	STC Sonic Array Status - Monopole P&S	255	
SBO4	STC Search Band Offset - Monopole P&S	500	US
SBR4	STC Baseline Removal - Monopole P&S	ON	
SBW4	STC Search Bandwidth - Monopole P&S	2000	US
SFC4	STC Formation Character - Monopole P&S	SELECTABLE	
SFM4	STC Filter - Monopole P&S	B3-20K	
SHLL	Label Slowness Lower Limit - Monopole P&S Shear	235	US/F
SHUL	Label Slowness Upper Limit - Monopole P&S Shear	240	US/F
SLL4	STC Slowness Lower Limit - Monopole P&S	40	US/F
SST4	STC Slowness Step - Monopole P&S	2	US/F
SSW4	STC Source Waveform - Monopole P&S	WF_SAM4	
STLL	Label Slowness Lower Limit - Monopole Stoneley	180	US/F
STUL	Label Slowness Upper Limit - Monopole Stoneley	780	US/F
SUL4	STC Slowness Upper Limit - Monopole P&S	240	US/F
SWD4	STC Slowness Width - Monopole P&S	10	US/F
TBF4	STC Time for Baseline Fill - Monopole P&S	300	US
TLL4	STC Time Lower Limit - Monopole P&S	150	US
TST4	STC Time Step - Monopole P&S	50	US
TUL4	STC Time Upper Limit - Monopole P&S	3660	US
TWD4	STC Time Width - Monopole P&S	1000	US
TWI4	STC Integration Time Window - Monopole P&S	500	US
TWSX	Transmitter Waveform Select X	0	
WFM4	Waveform Mode 4	W1	
HNGS-BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	C1	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.0014351	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	CENT	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.01566	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.983072	
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	C1	
System and Miscellaneous			
BS	Bit Size	11.438	IN
DO	Depth Offset for Playback	-97.0	M
PP	Playback Processing	RECOMPUTE	

OP System Version: 19C0-187

MEST-B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

Input DLIS Files						
DEFAULT	FMS_DSI_NGS_021LUP	FN:35	PRODUCER	04-Sep-2015 00:10	893.8 M	81.7 M
Output DLIS Files						
DEFAULT	FMS_DSI_NGS_041PUP	FN:60	PRODUCER	10-Sep-2015 13:52		

Company: International Ocean Discovery Program				Well: Expedition 356, Site U1462 A		
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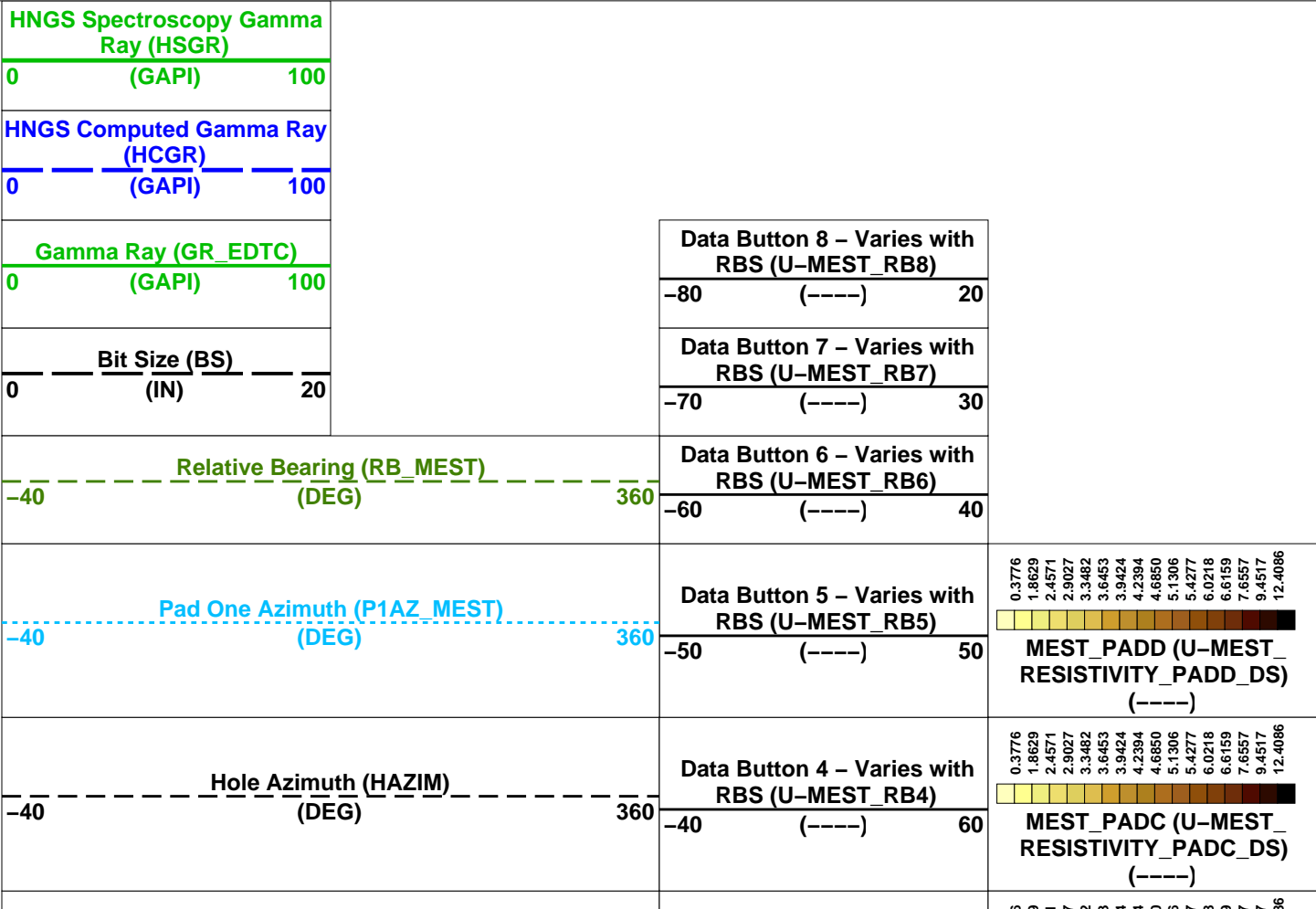
Input DLIS Files						
DEFAULT	FMS_DSI_NGS_020LUP	FN:33	PRODUCER	03-Sep-2015 22:35	896.1 M	226.7 M
Output DLIS Files						
DEFAULT	FMS_DSI_NGS_040PUP	FN:59	PRODUCER	10-Sep-2015 13:40	800.1 M	129.8 M

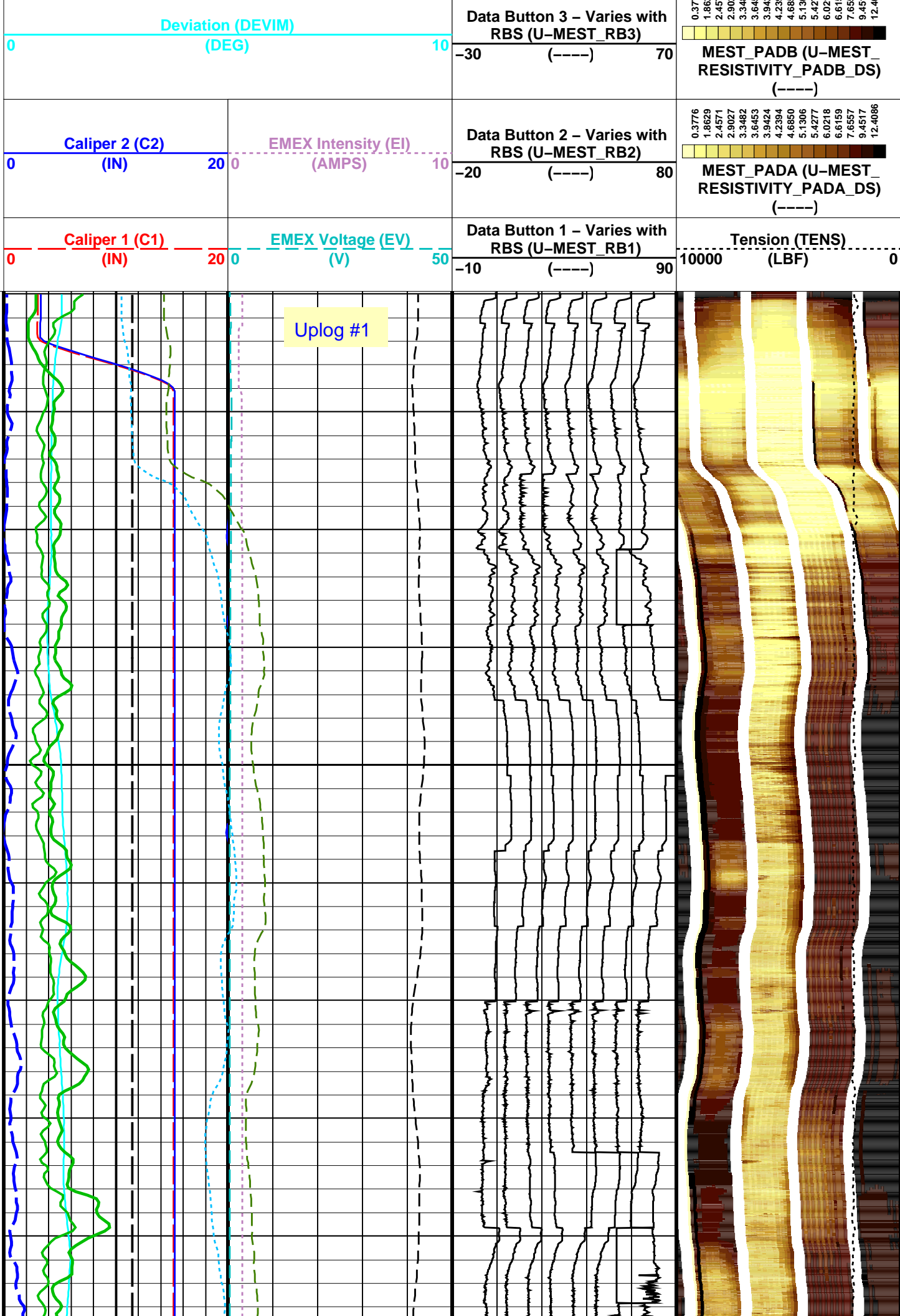
OP System Version: 19C0-187

MEST-B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

PIP SUMMARY

Time Mark Every 60 S

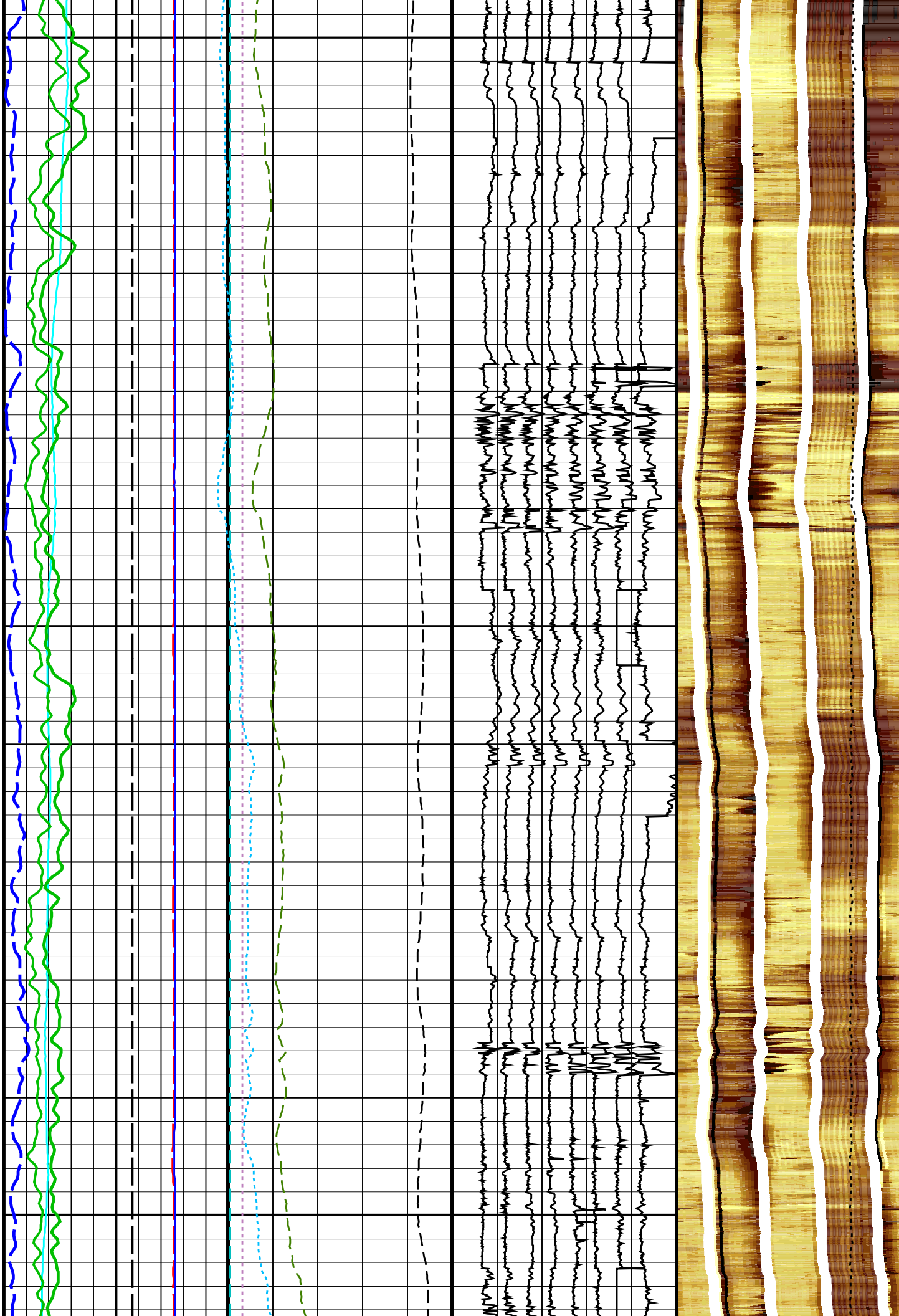




175

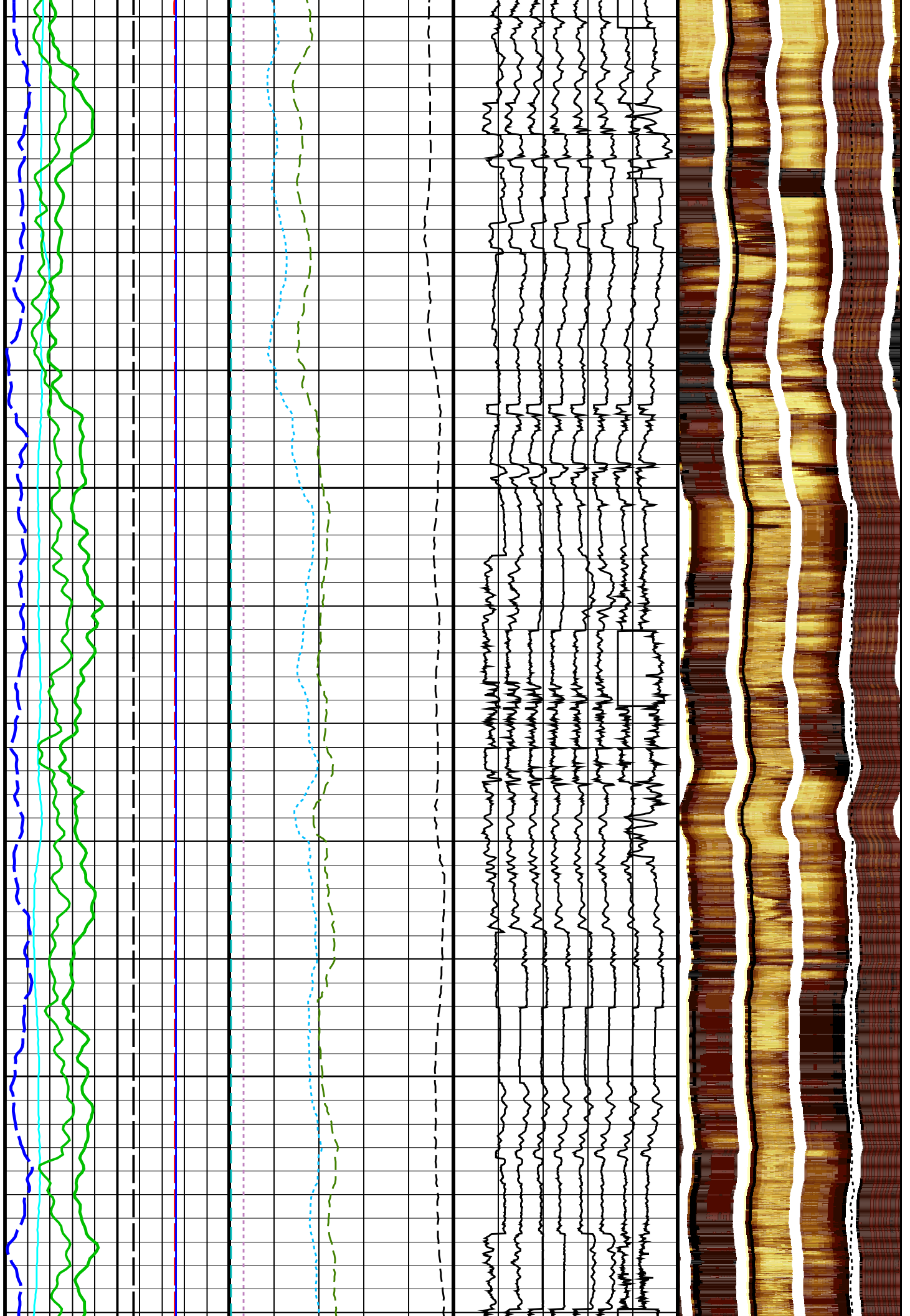
200

225



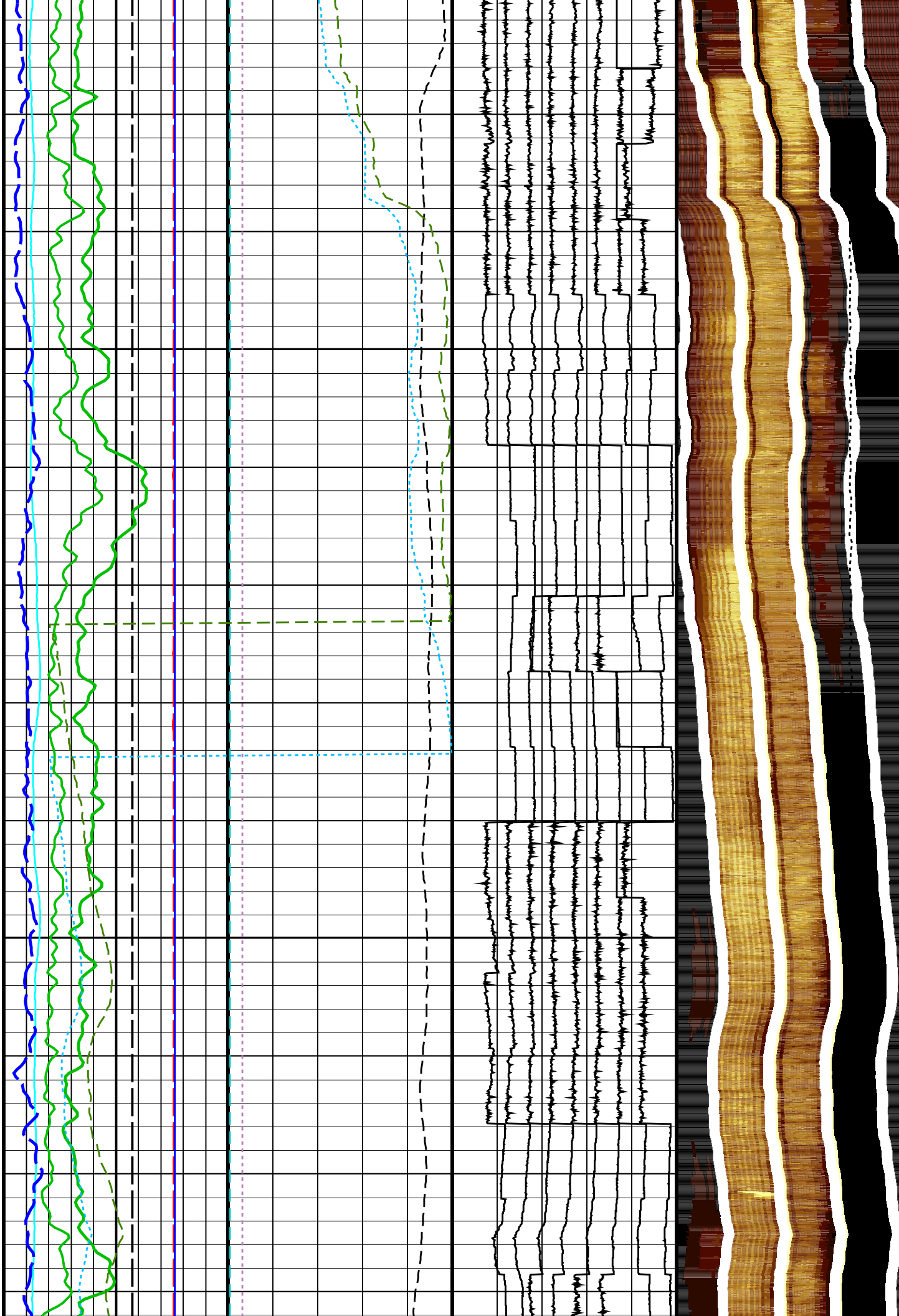
250

275



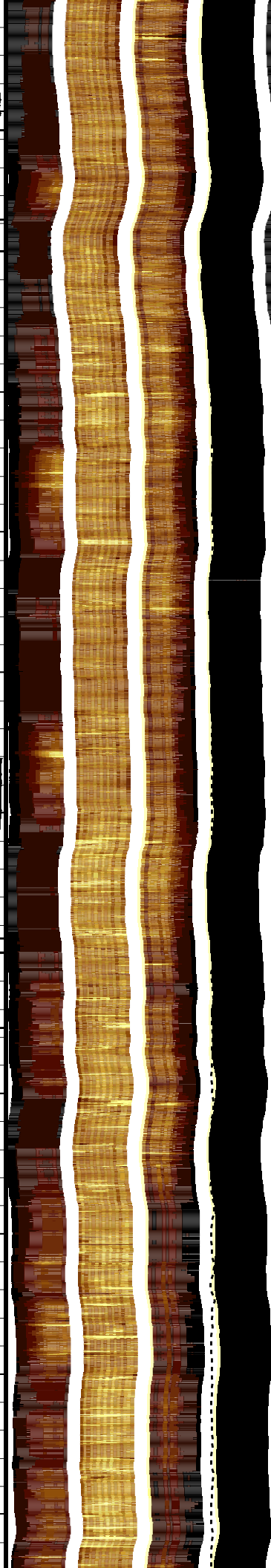
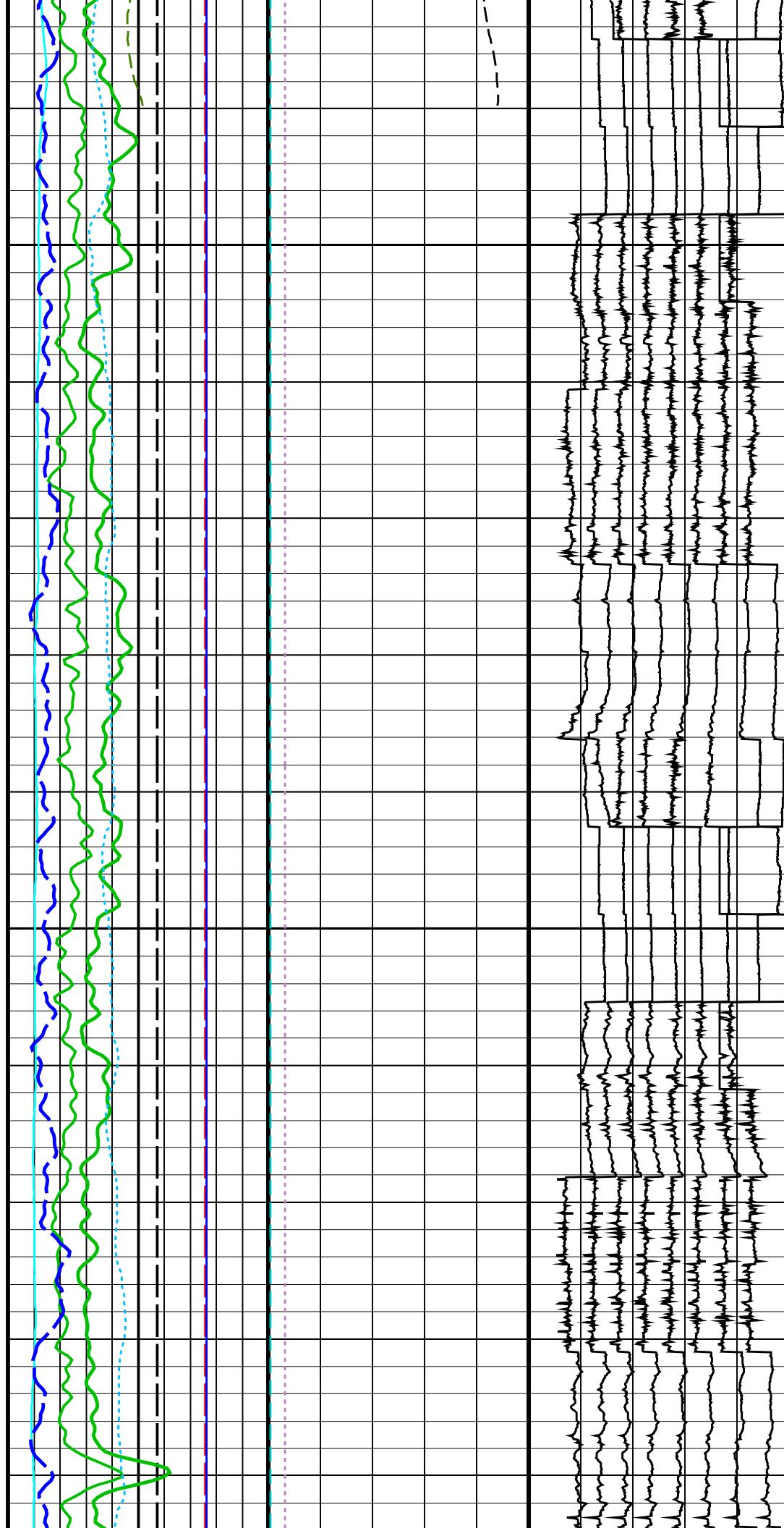
300

325



350

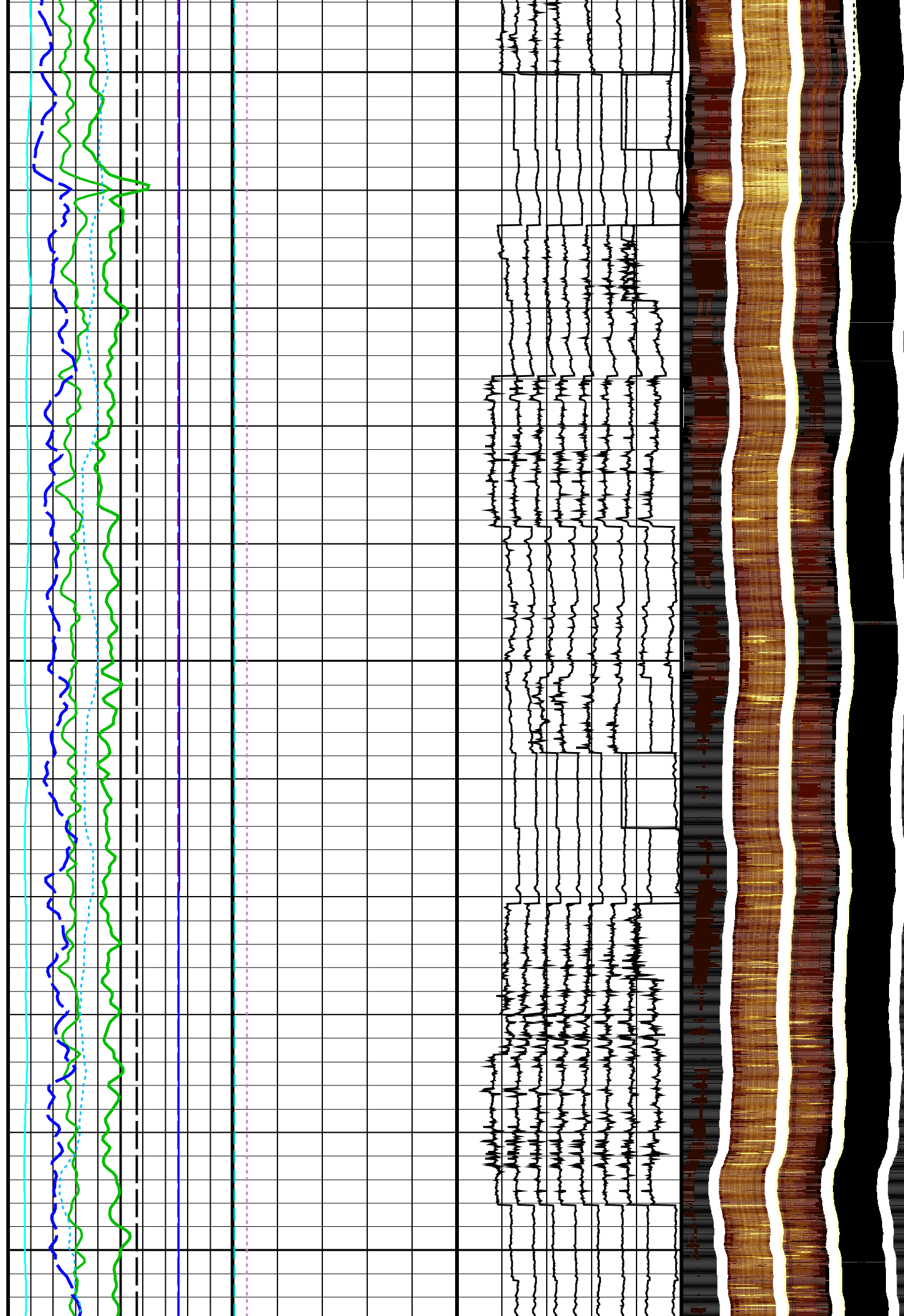
375



400

425

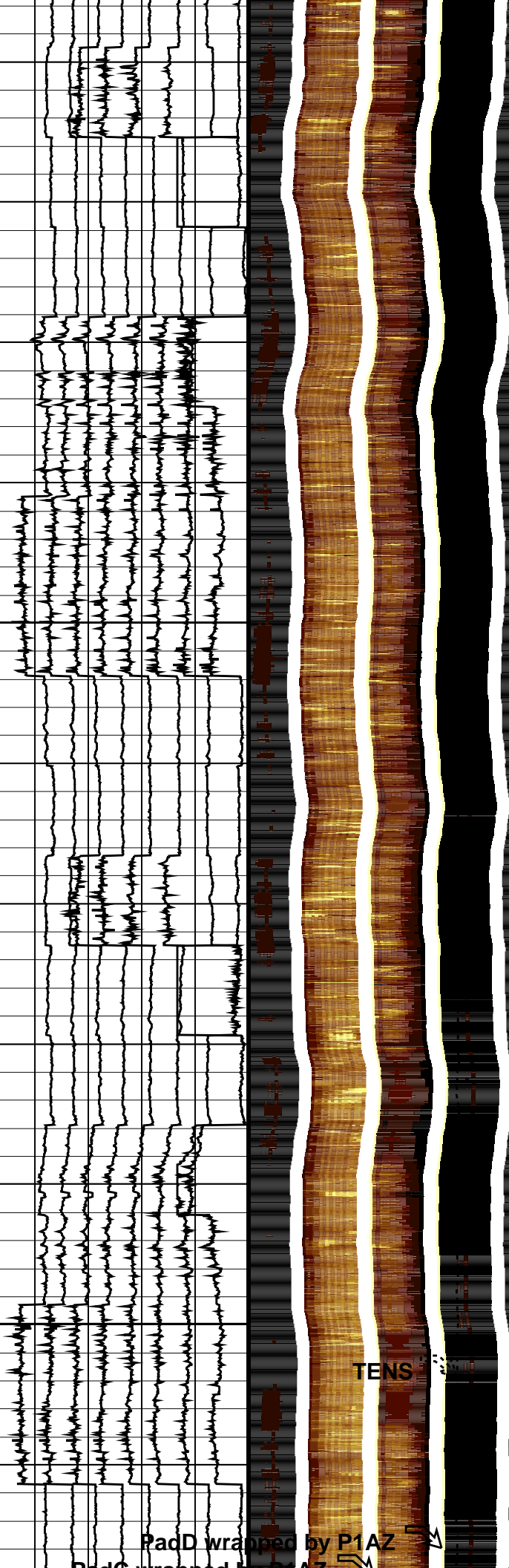
450



475

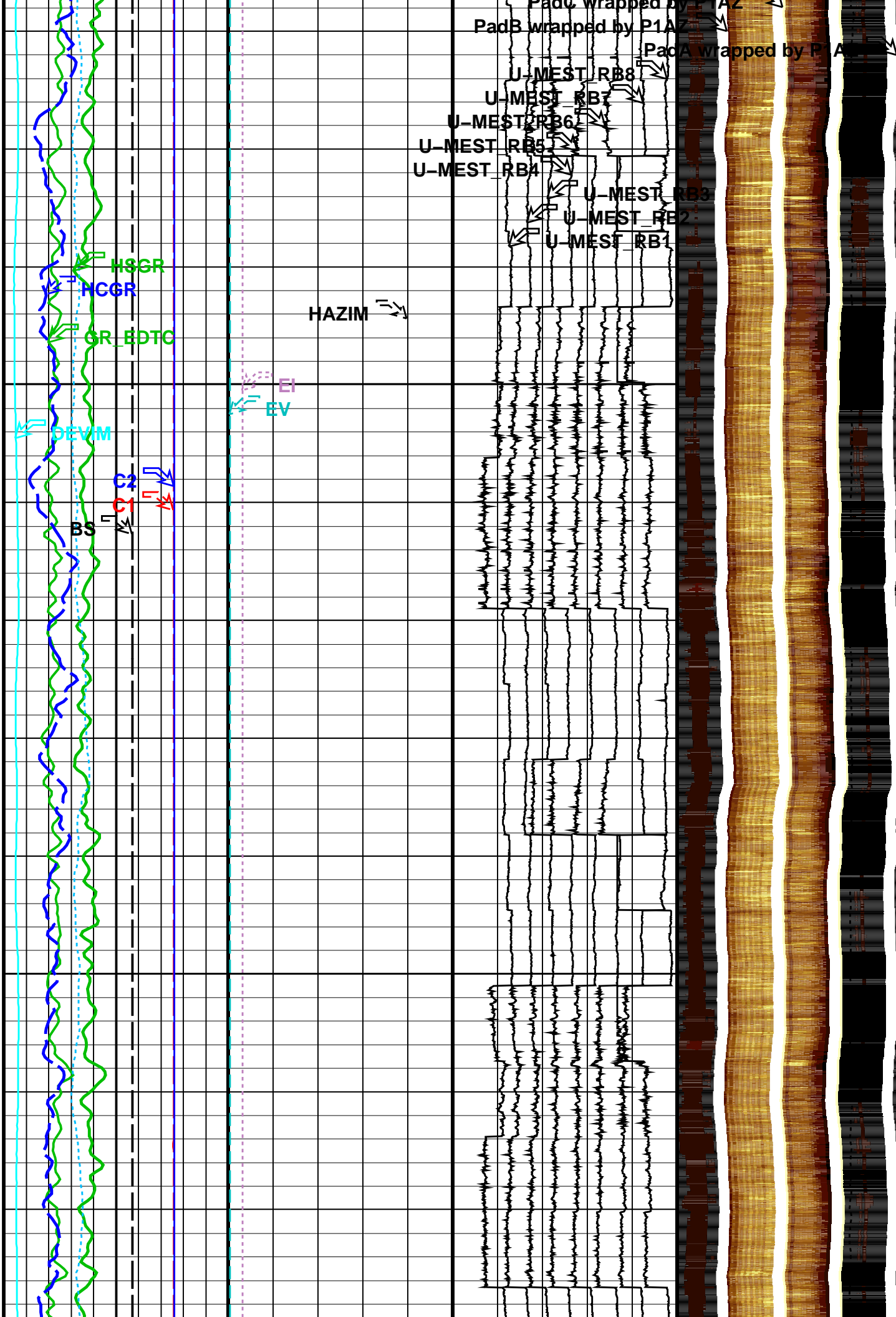
500

RB_MEST
P1AZ_MEST



525

550

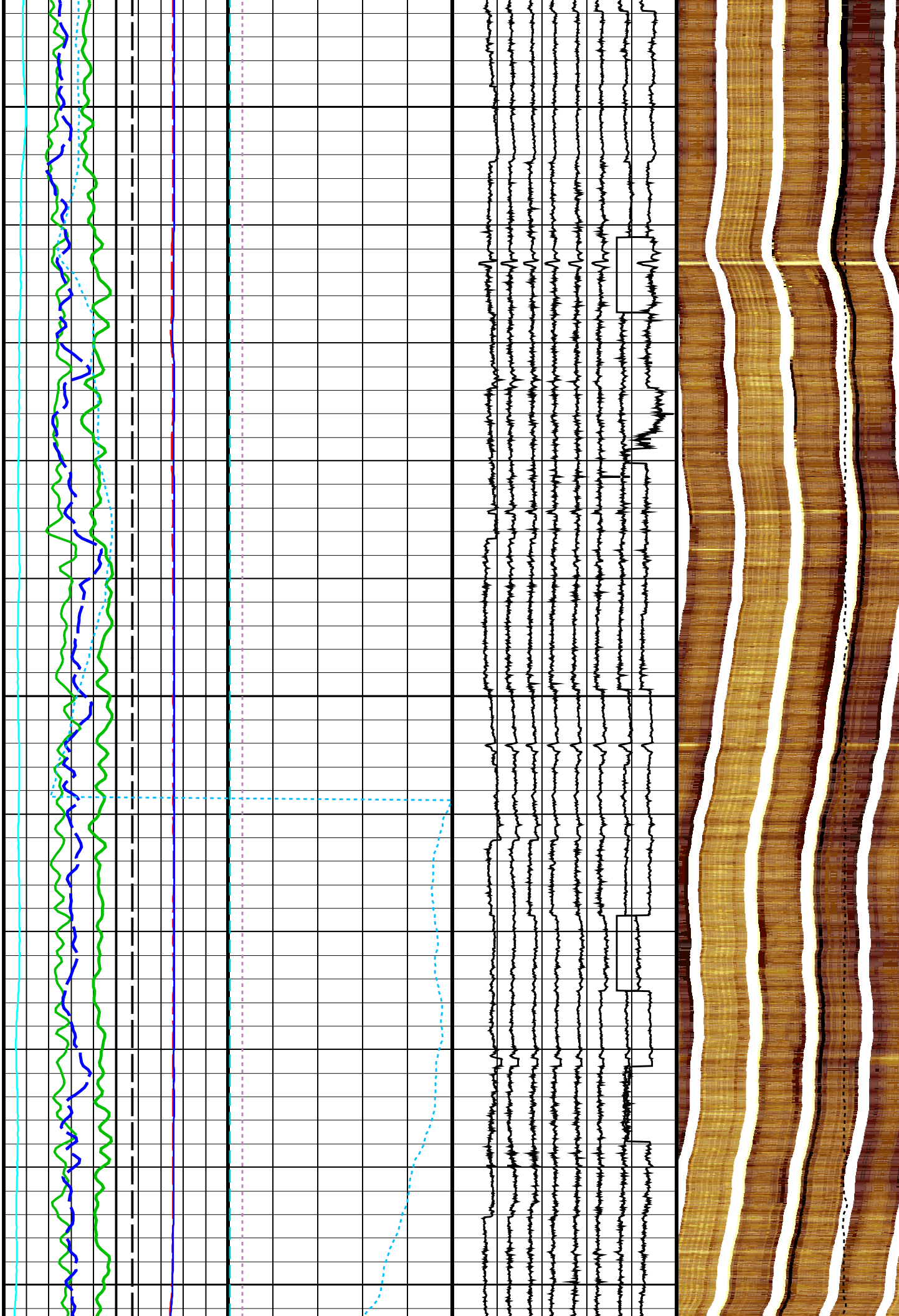




625

650

675



700

725

RB MEST

P1AZ MEST

U-MEST RB8

U-MEST RB7

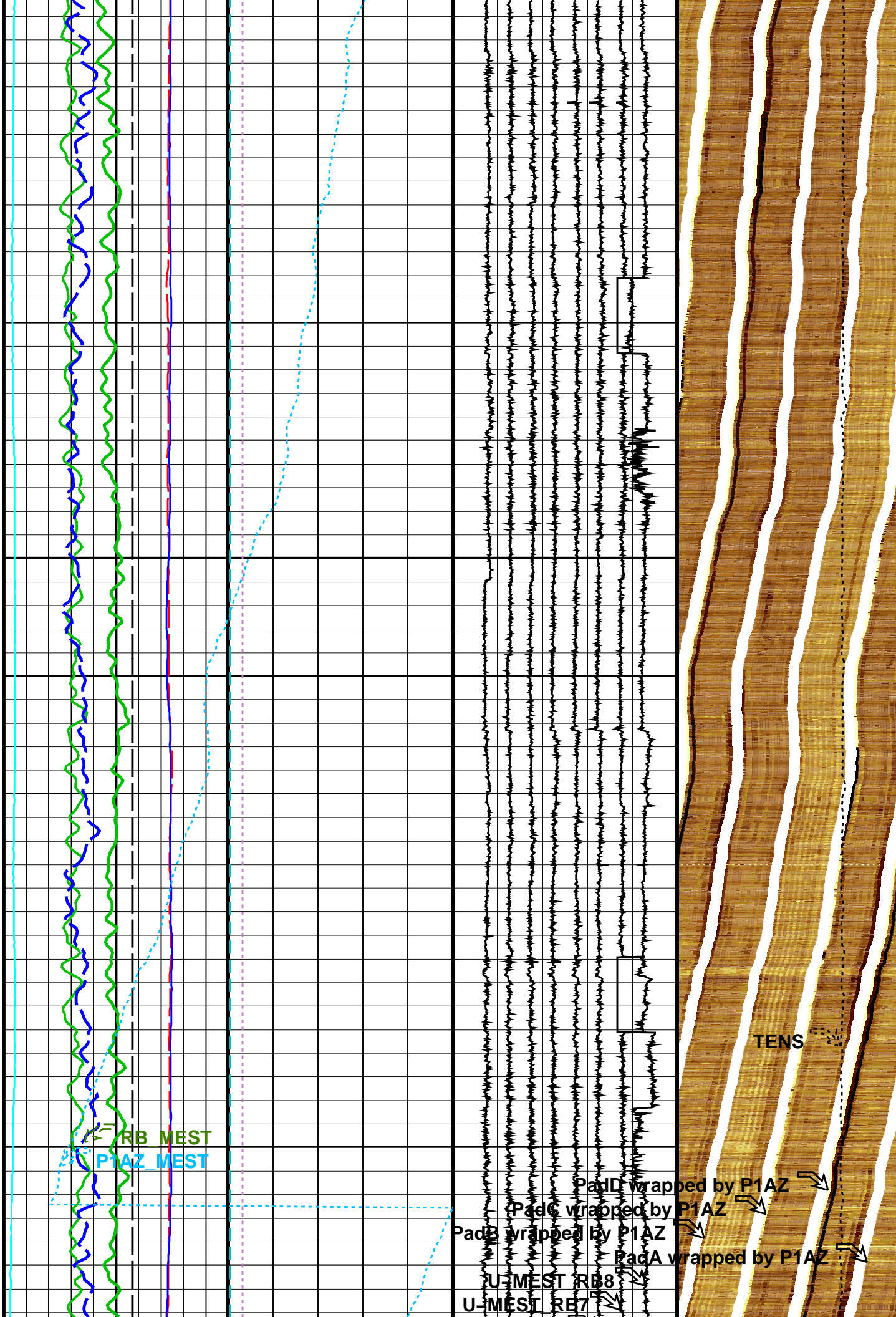
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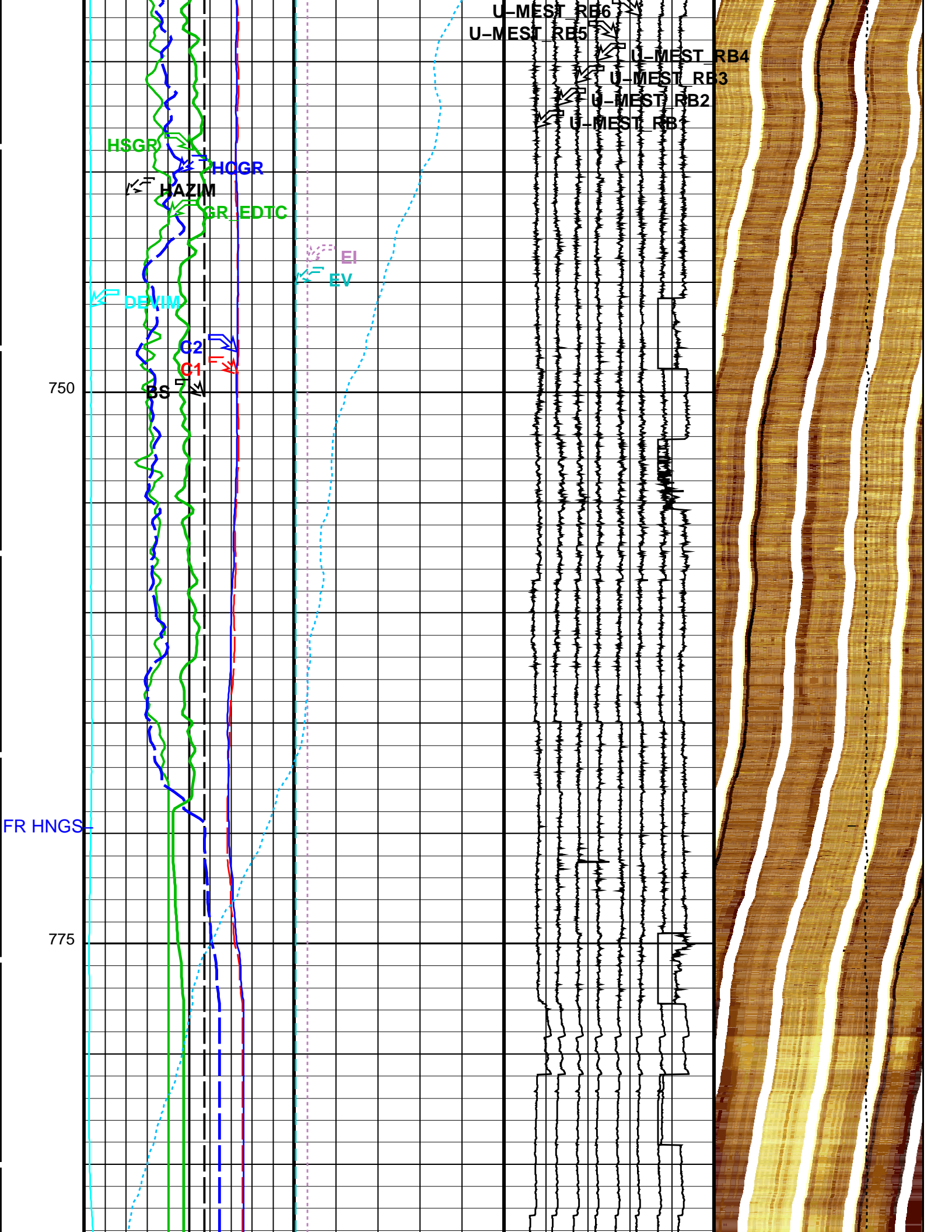
PadC wrapped by P1AZ

PadB wrapped by P1AZ

PadA wrapped by P1AZ

TENS





DEIO Name	Description	Value	
MEST-B: Micro Electrical Scanner – B (Slim)			
AFMO	Accelerometer Filtering Mode	MOVING_AVERAGE	
ICMO	Inclinometry Computation Mode	AUTOMATIC_SELECTION	
MDEC	Magnetic Field Declination	0.998583	DEG
MLM	MEST Logging Mode	SCAN1800	
RBS	Resistivity Button Selection	AUTO	
XGAI	Gain	GAIN_2	
XOFF	Offset	OFFSET_0	
DSST-B: Dipole Shear Imager – B			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	C1	
HNGS-BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	C1	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.00154711	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	CENT	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.20713	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.980476	
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	C1	
System and Miscellaneous			
BS	Bit Size	11.438	IN
DO	Depth Offset for Playback	-97.0	M
PP	Playback Processing	RECOMPUTE	

Format: MEST_C_WRAP_BY_P1AZ Vertical Scale: 1:200 Graphics File Created: 10-Sep-2015 13:40

OP System Version: 19C0-187

MEST-B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

Input DLIS Files

DEFAULT	FMS_DSI_NGS_020LUP	FN:33	PRODUCER	03-Sep-2015 22:35	896.1 M	226.7 M
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Output DLIS Files

DEFAULT	FMS_DSI_NGS_040PUP	FN:59	PRODUCER	10-Sep-2015 13:40		
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Company: International Ocean Discovery Program Well: Expedition 356, Site U1462 A

Input DLIS Files

DEFAULT	FMS_DSI_NGS_020LUP	FN:33	PRODUCER	03-Sep-2015 22:35	896.1 M	226.7 M
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Output DLIS Files

DEFAULT	FMS_DSI_NGS_040PUP	FN:59	PRODUCER	10-Sep-2015 13:40	800.1 M	129.8 M
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OP System Version: 19C0-187

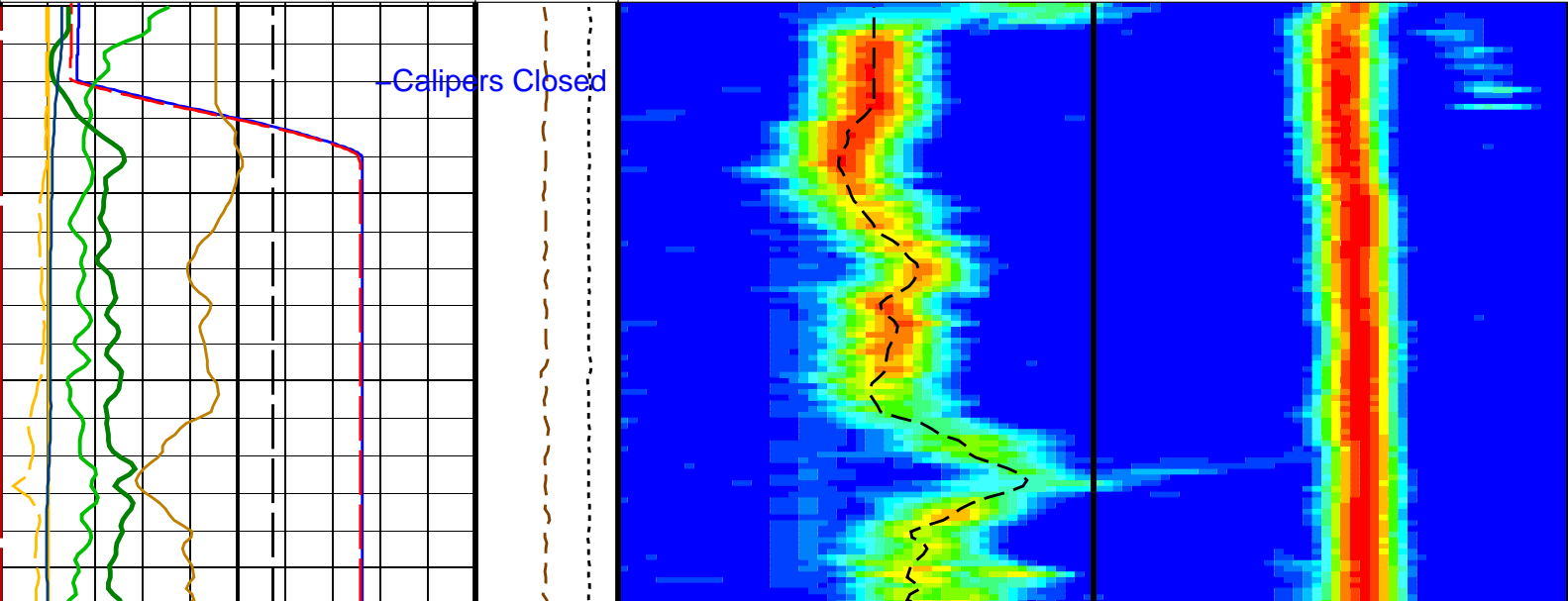
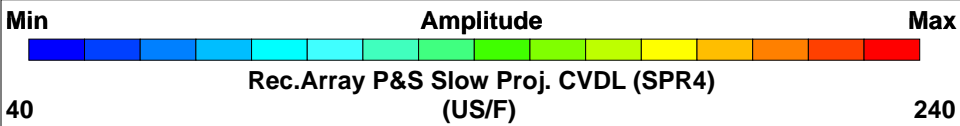
MEST-B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

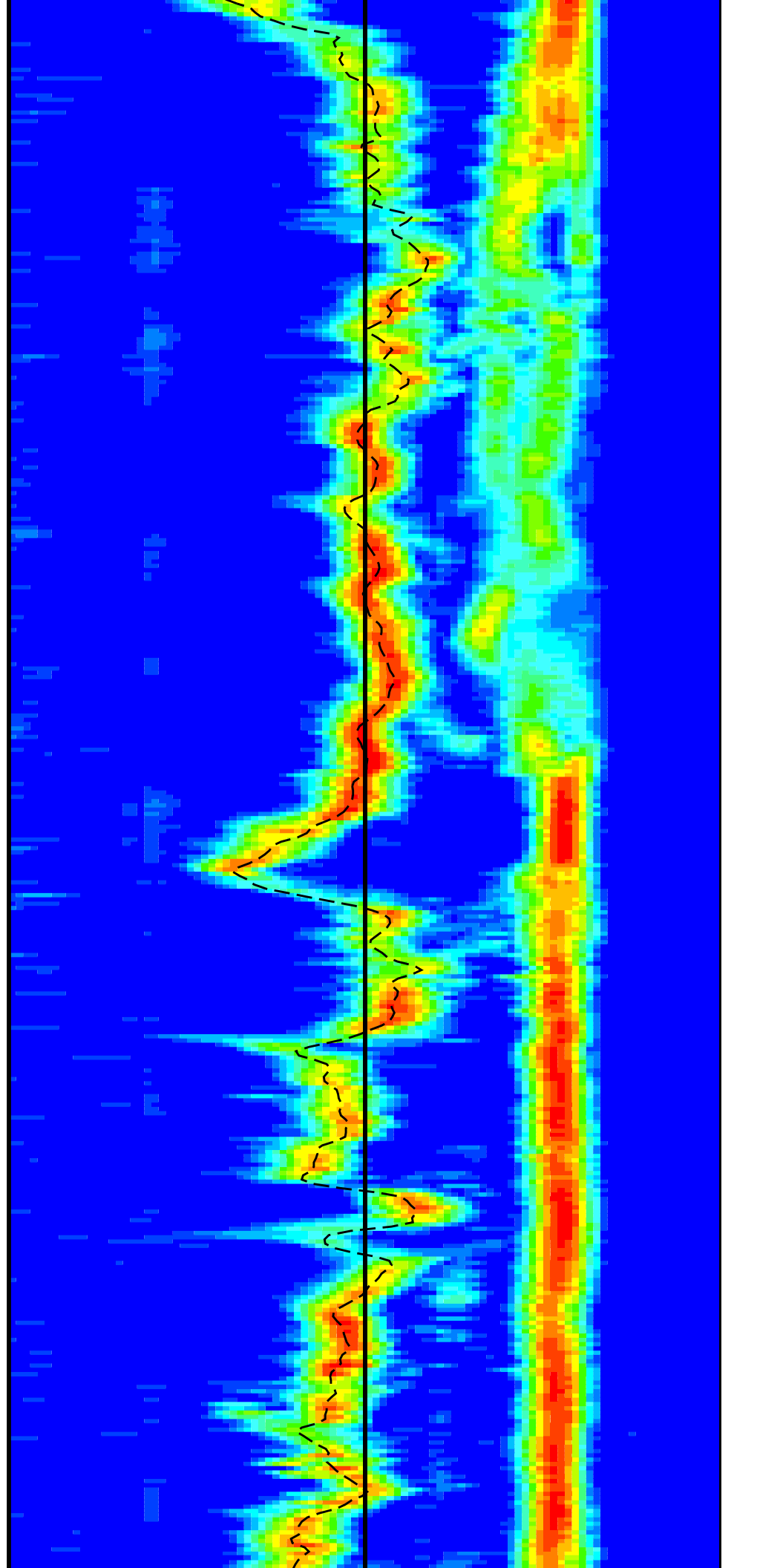
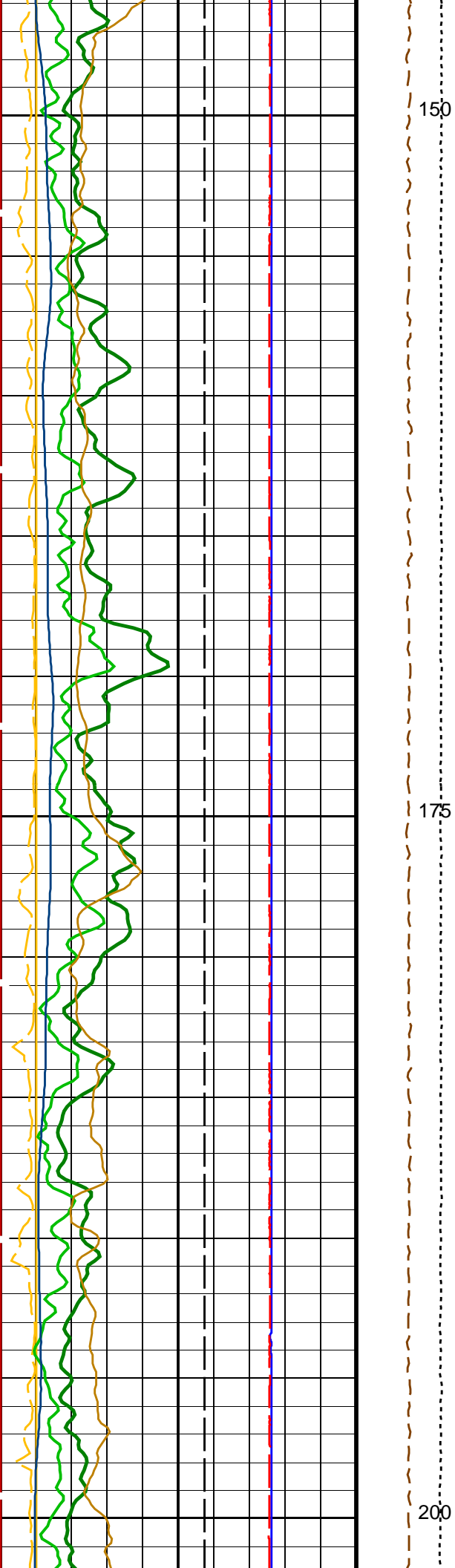
PIP SUMMARY

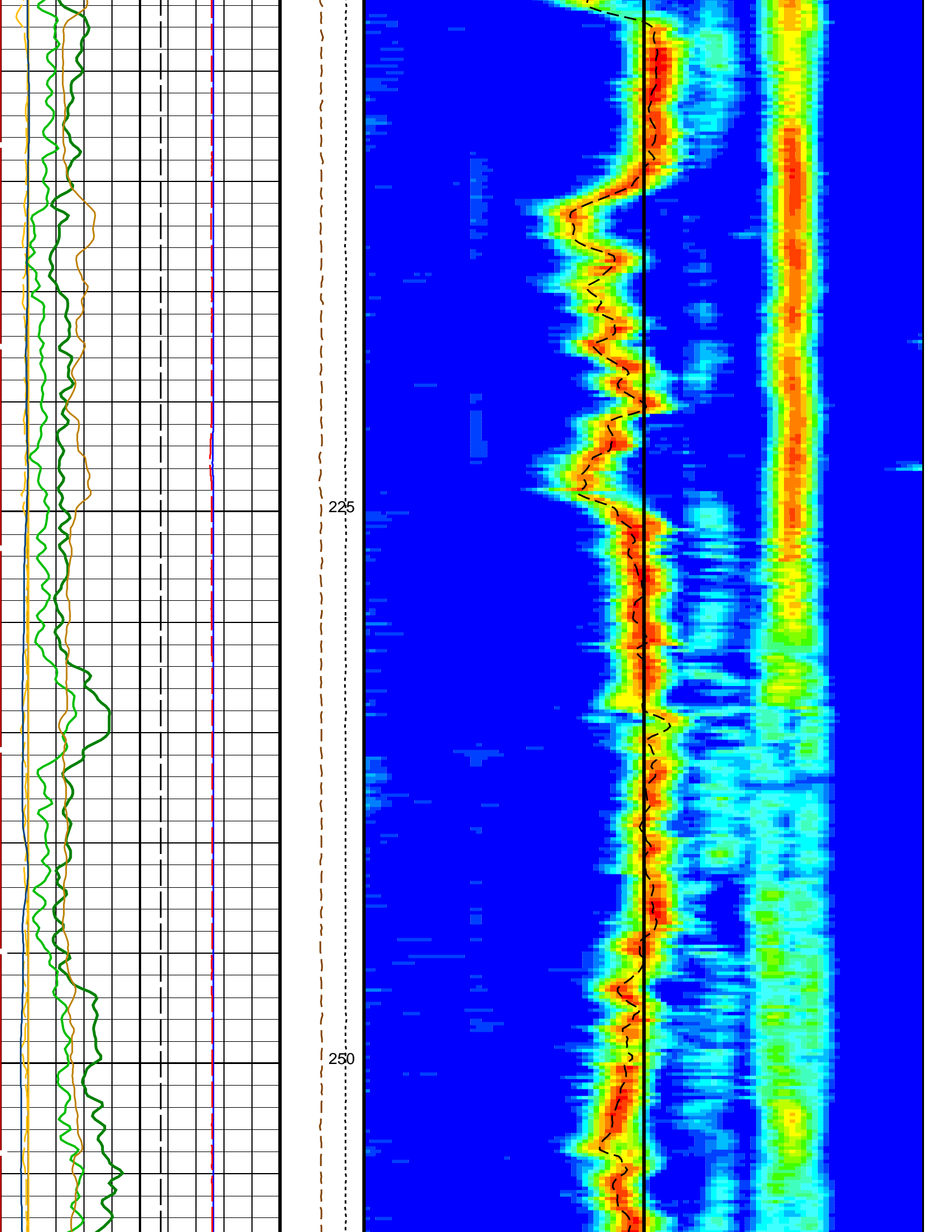
Time Mark Every 60 S

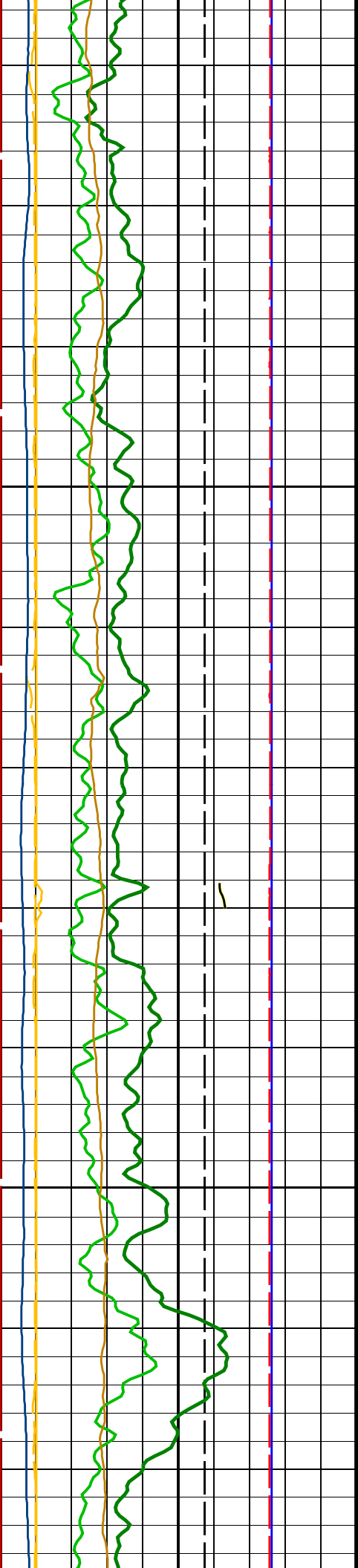
HNGS Spectroscopy Gamma Ray (HSGR)		
0	(GAPI)	100
Waveform Data Copy Indicator 4 – Monopole P&S (WCI4)		
0	(-----)	10
Peak Coherence / RA – P & S Shear (CHRS)		
-1	(-----)	9
Peak Coherence / RA – P & S Comp (CHRP)		
0	(-----)	10
Gamma Ray (GR_EDTC)		
0	(GAPI)	100
Poisson's Ratio (PR)		
0	(-----)	0.5
Sonic Velocity (SVEL)		
1000	(M/S)	6000
Sonde Deviation (SDEVM)		
0	(DEG)	10
Poisson's Ratio (PR)		
0	(-----)	0.5
Caliper 1 (C1)		
0	(IN)	20
Caliper 2 (C2)		
0	(IN)	20
Bit Size (BS)		
0	(IN)	20
Tension (TENS) (LBF)		
10000		0
Calibrated Downhole Force (CDF) (LBF)		
3000		0
Delta-T Shear / RA – P & S (DTRS)		
40	(US/F)	240
Delta-T Comp / RA – P & S (DTRP)		
40	(US/F)	240

Uplog #1



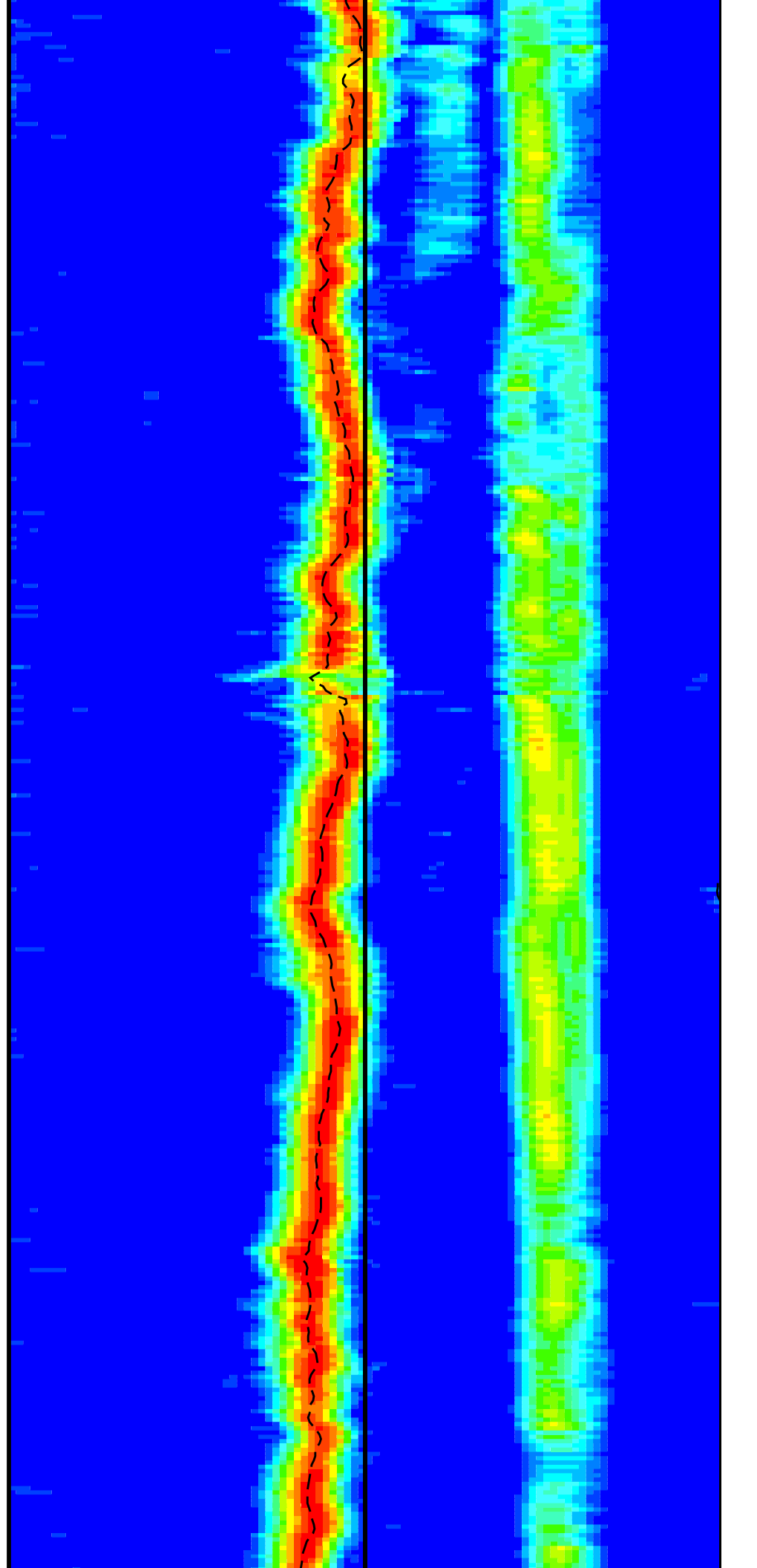


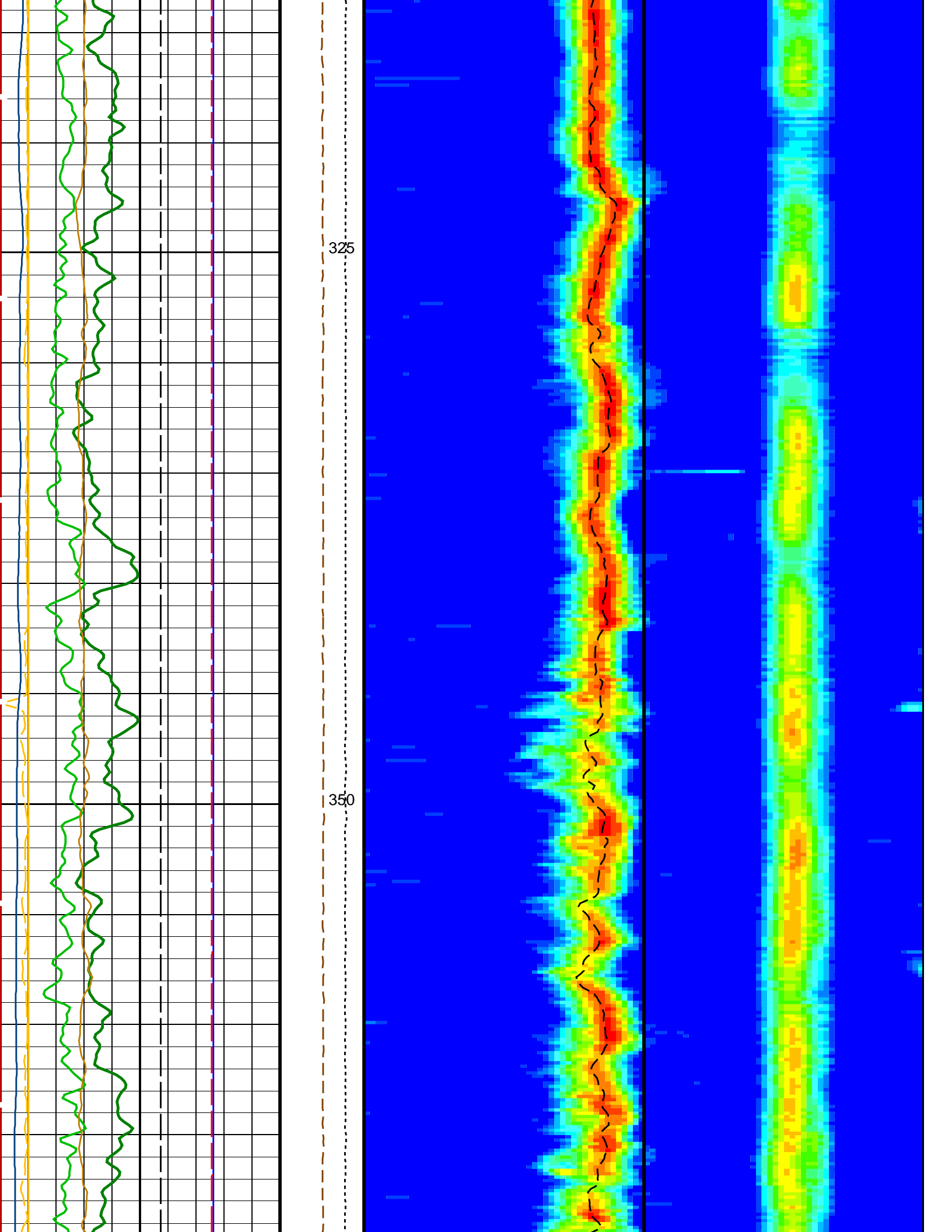


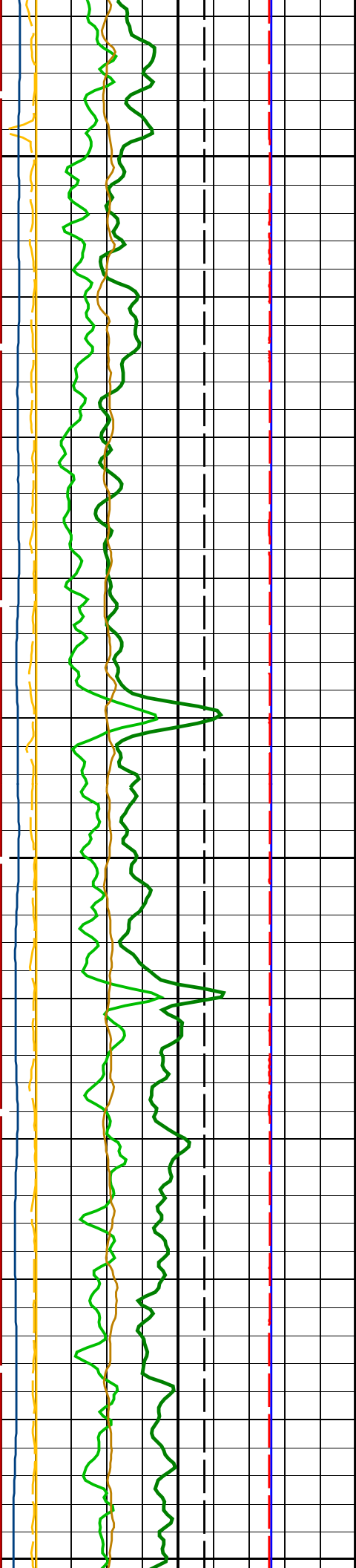


275

300



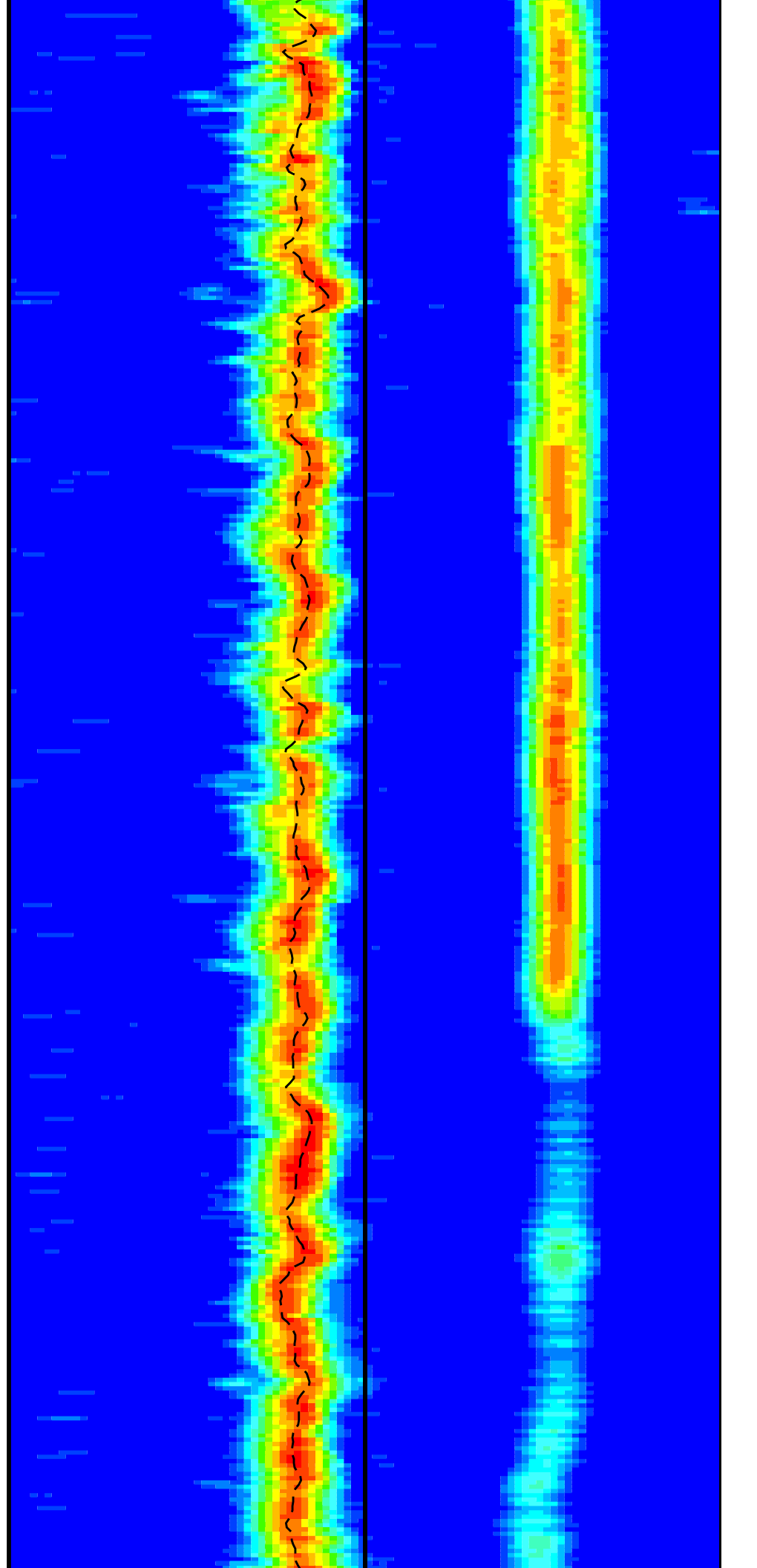


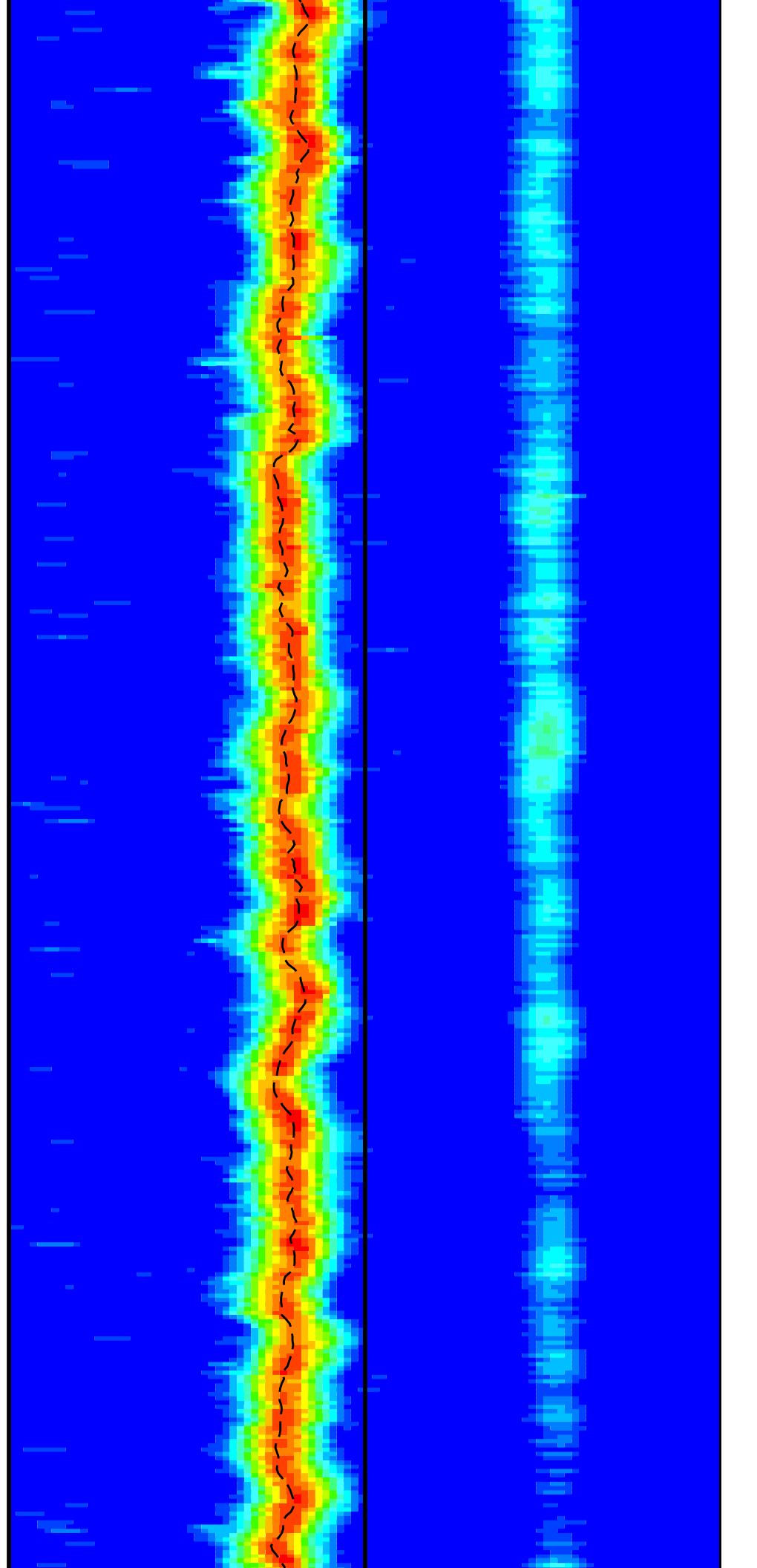
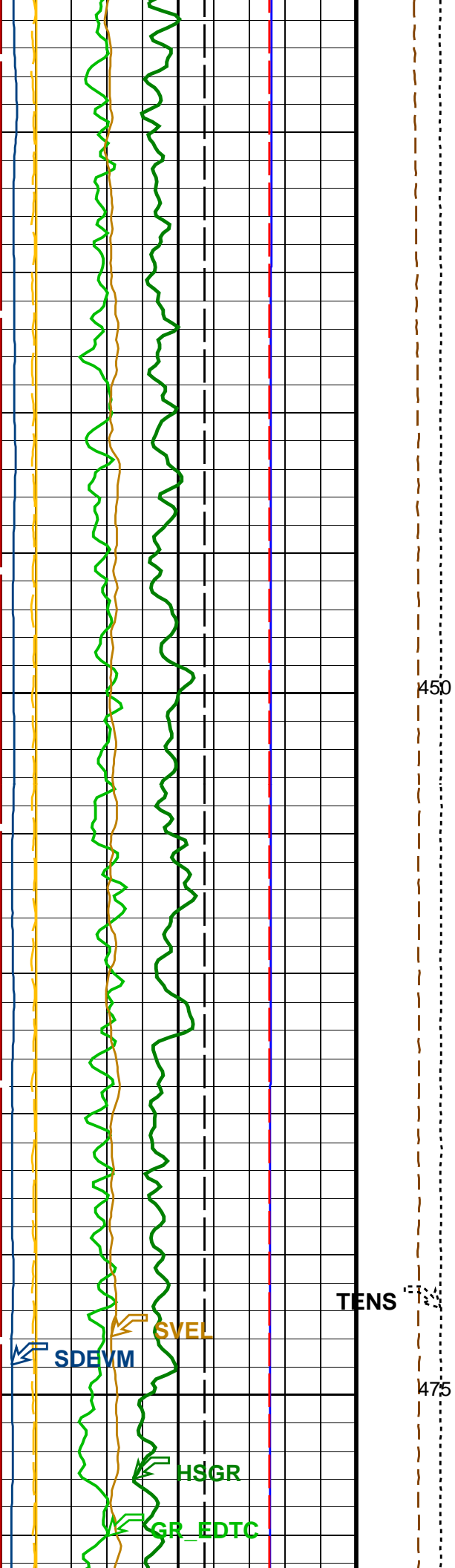


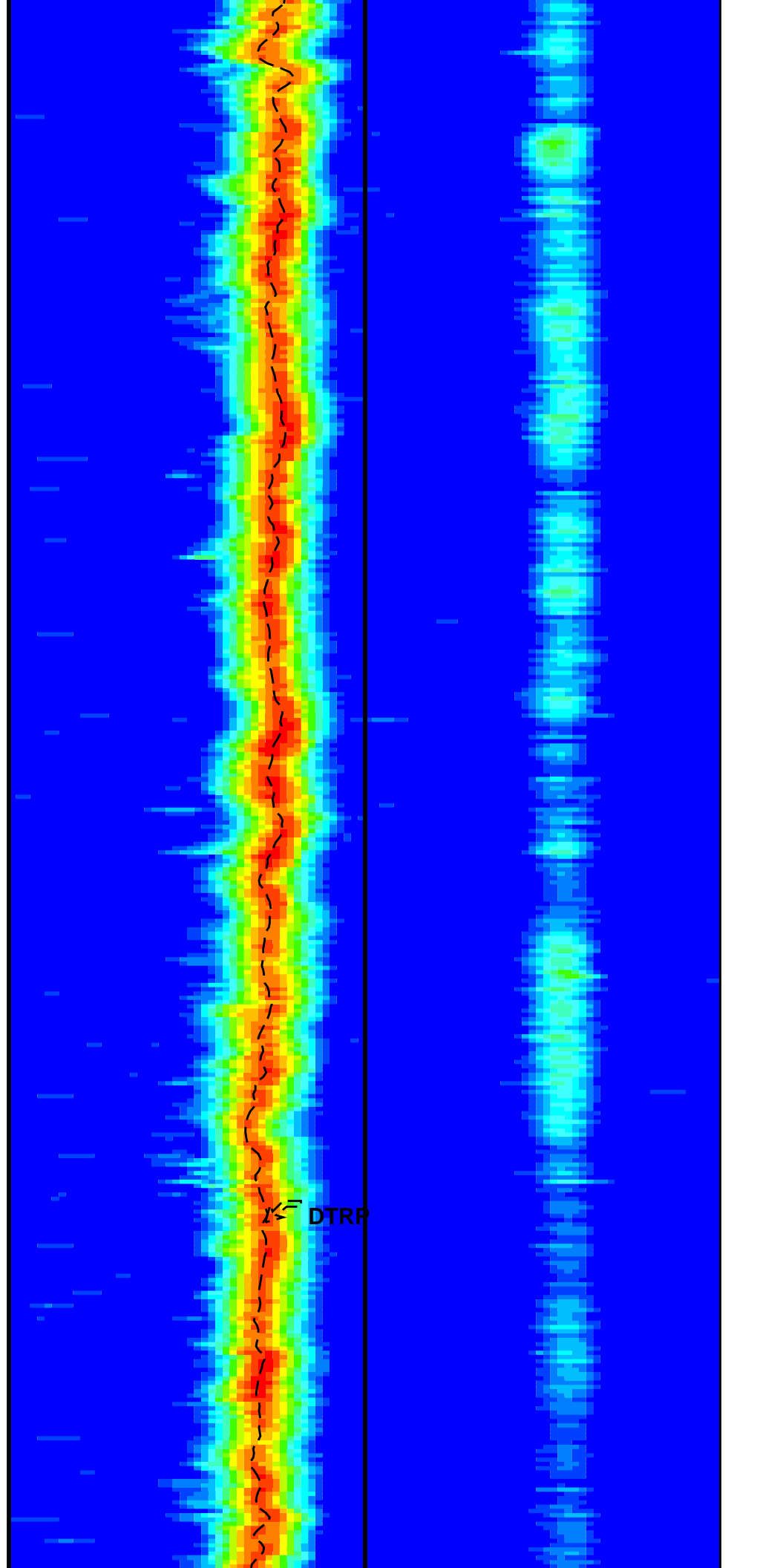
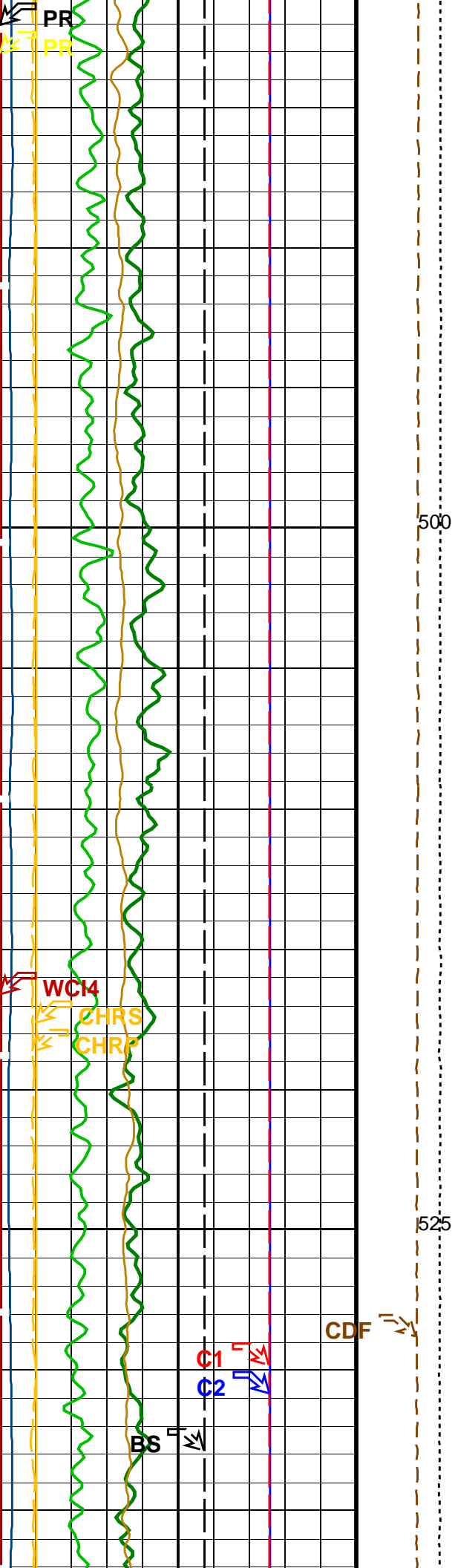
375

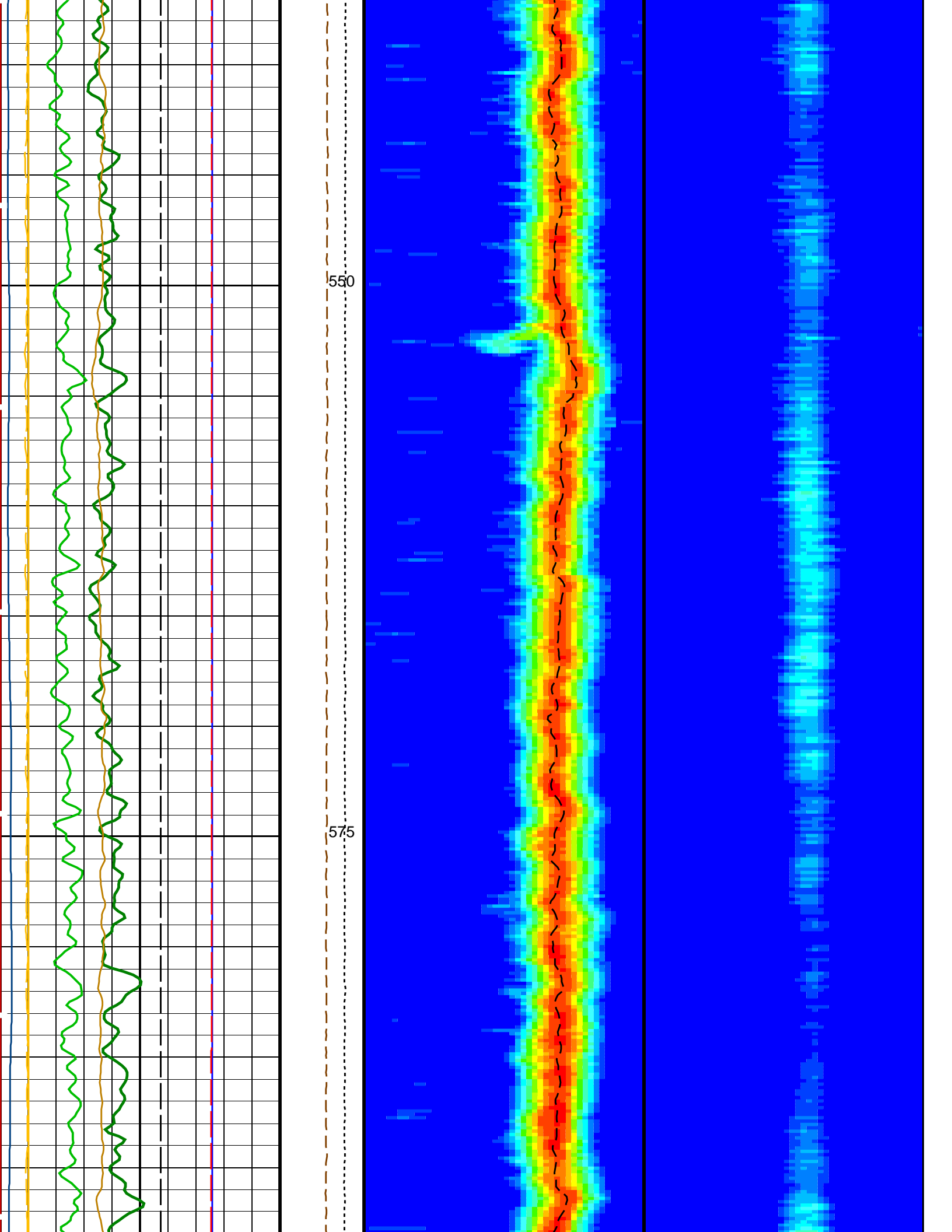
400

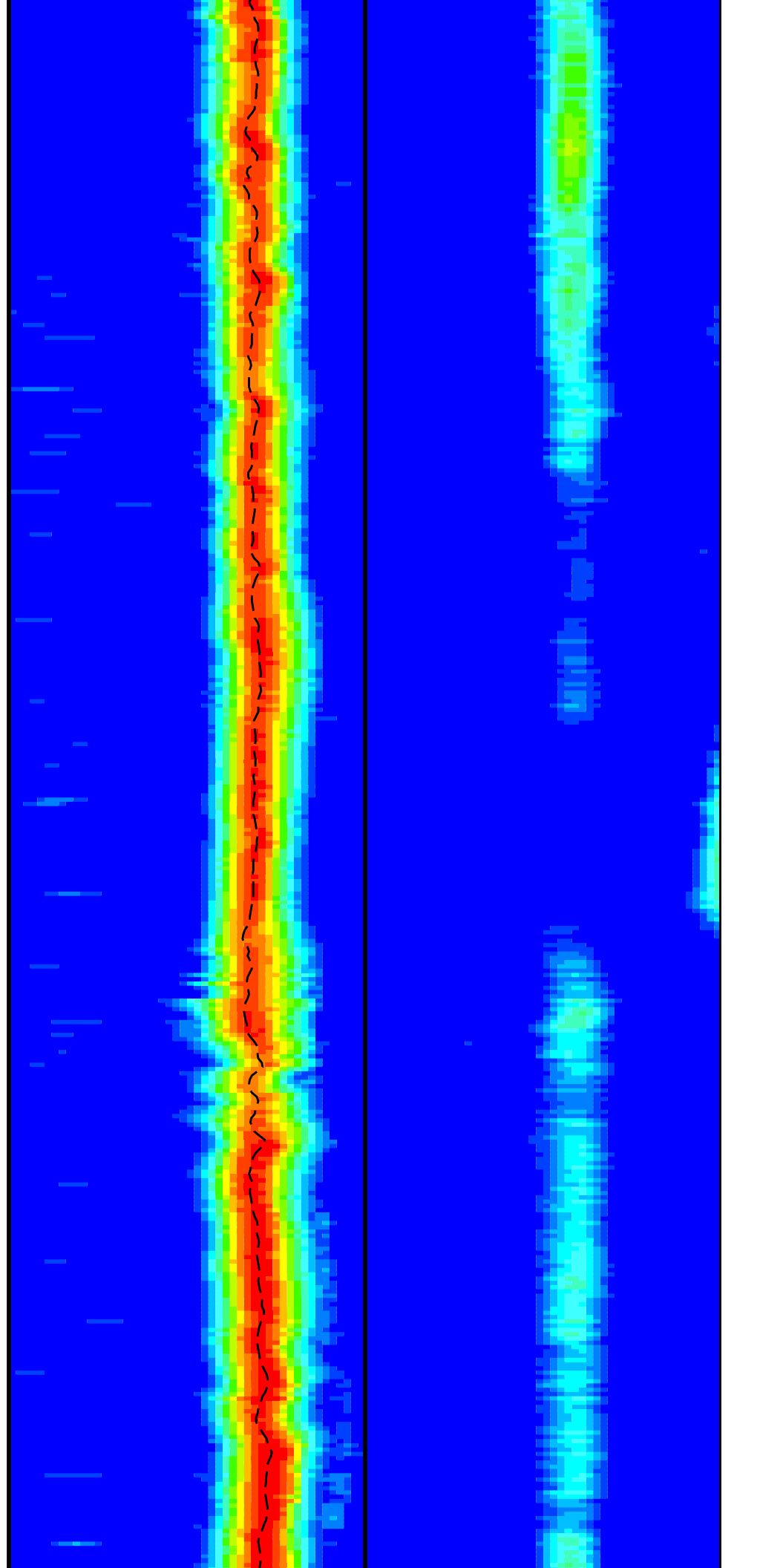
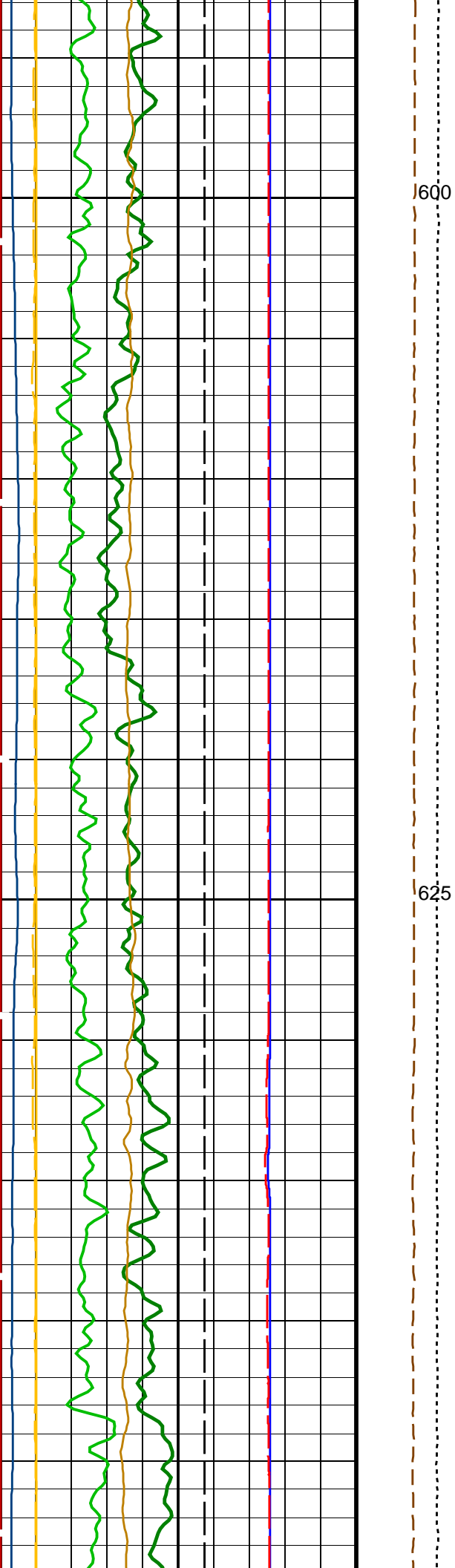
425

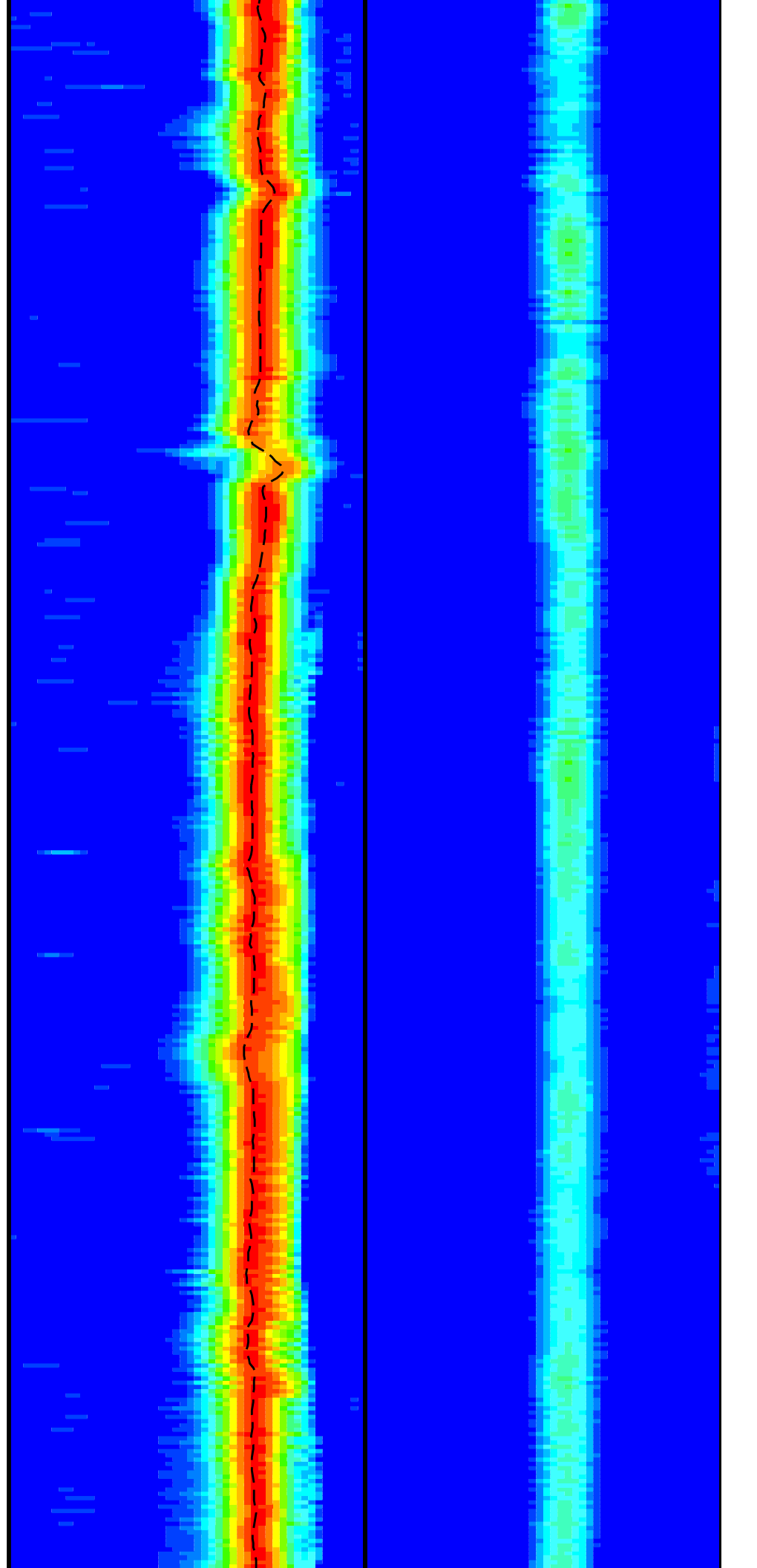
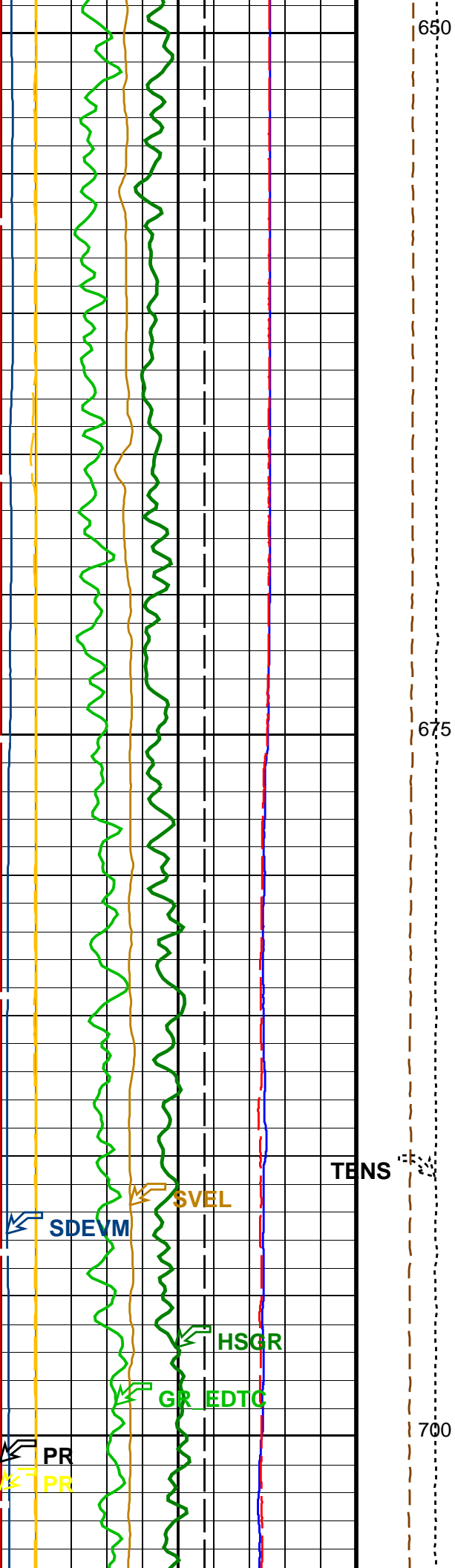


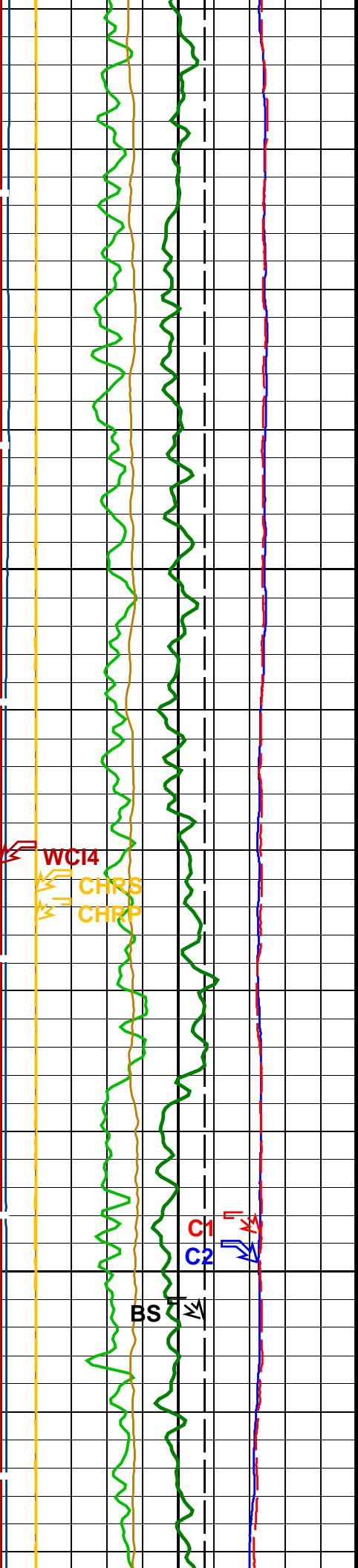










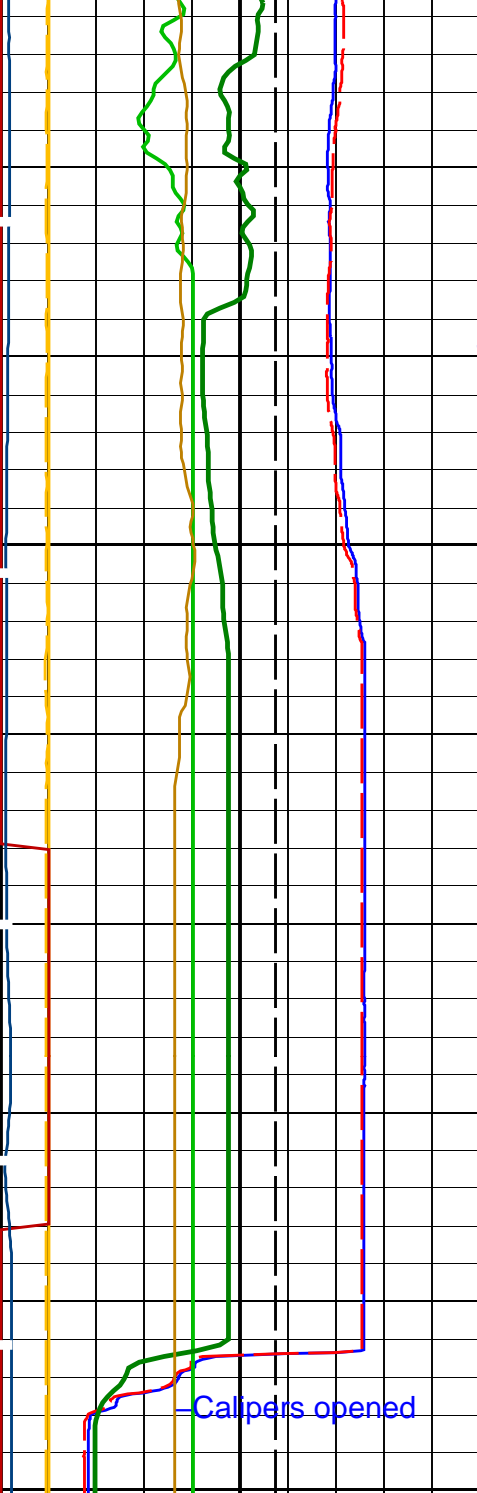


725

750

CDF

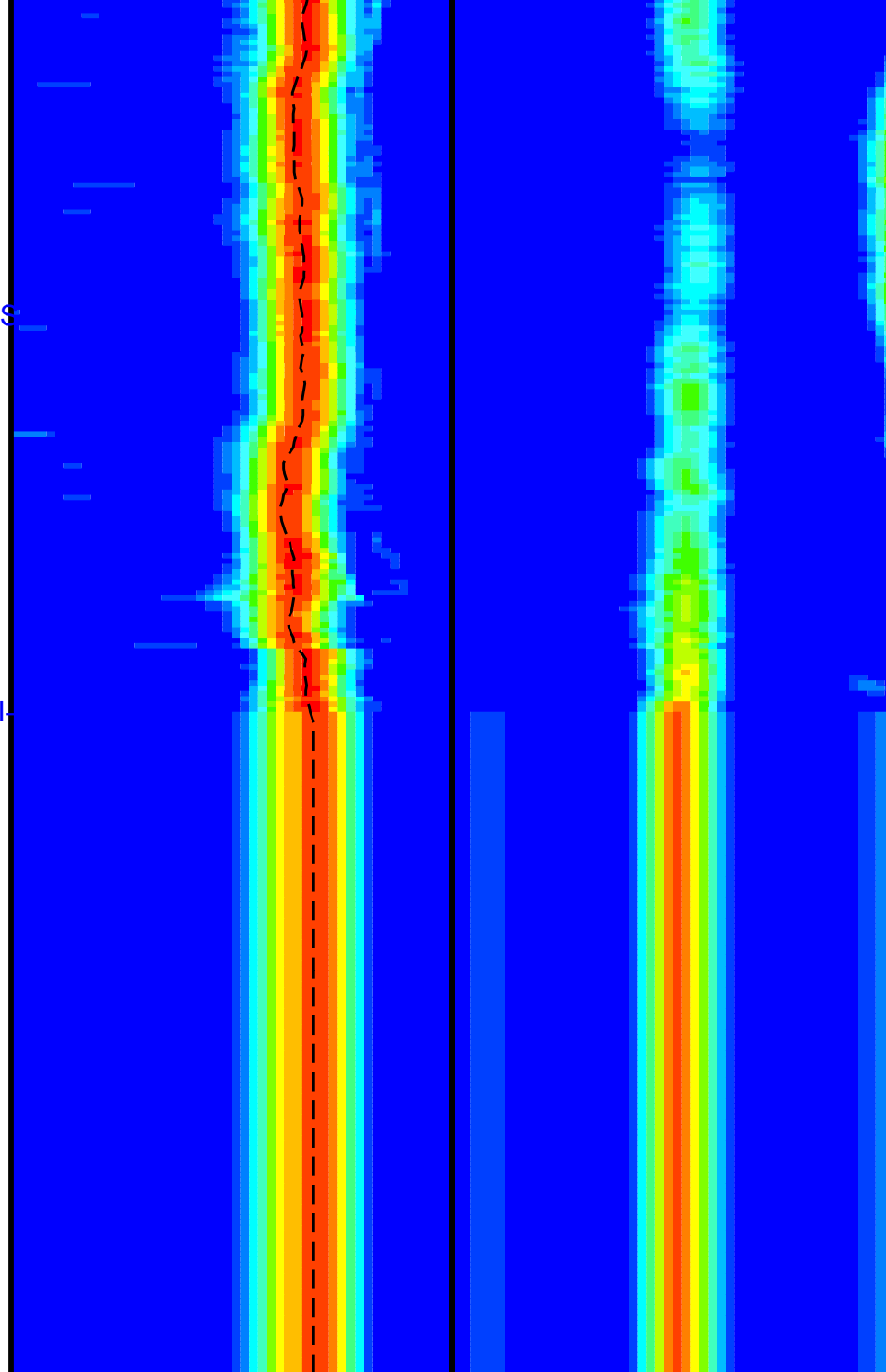
DTRP



-FR HNGS

FR DSI

TD 800



Bit Size (BS)
(IN) 0 20

Caliper 2 (C2)
(IN) 0 20

Caliper 1 (C1)
(IN) 0 20

Poisson's Ratio (PR)
(----) 0 0.5

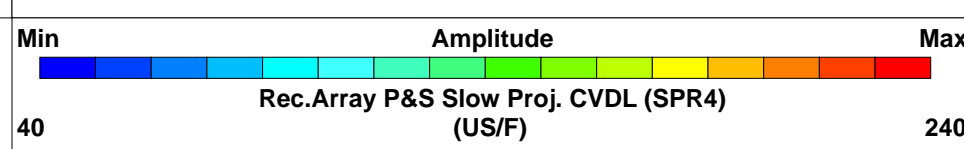
Sonde Deviation (SDEVM)
(DEG) 0 10

Tension
(TENS)
(LBF) 10000 0

Calibrated
Downhole
Force
(CDF)
(LBF) 3000 0

Delta-T Comp / RA - P & S (DTRP)
(US/F) 40 240

Delta-T Shear / RA - P & S (DTRS)
(US/F) 40 240



Uplong #1

Sonic Velocity (SVEL)		
1000	(M/S)	6000
Poisson's Ratio (PR)		
0	(-----)	0.5
Gamma Ray (GR_EDTC)		
0	(GAPI)	100
Peak Coherence / RA – P & S Comp (CHRP)		
0	(-----)	10
Peak Coherence / RA – P & S Shear (CHRS)		
-1	(-----)	9
Waveform Data Copy Indicator 4 – Monopole P&S (WCI4)		
0	(-----)	10
HNGS Spectroscopy Gamma Ray (HSGR)		
0	(GAPI)	100

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
MEST-B: Micro Electrical Scanner – B (Slim)			
AFMO	Accelerometer Filtering Mode	MOVING_AVERAGE	
ICMO	Inclinometry Computation Mode	AUTOMATIC_SELECTION	
MDEC	Magnetic Field Declination	0.998583	DEG
DSST-B: Dipole Shear Imager – B			
BHS	Borehole Status	OPEN	
CASF	Label Casing Function – Monopole P&S	50	
COLL	Label Slowness Lower Limit – Monopole P&S Compressional	70	US/F
COUL	Label Slowness Upper Limit – Monopole P&S Compressional	190	US/F
DDE4	Digitizing Delay 4	0	US
DDEX	Digitizing Delay X	0	US
DSI4	Digitizer Sample Interval 4	10	US
DSIX	Digitizer Sample Interval X	40	US
DTCS	Compressional Delta-T Source for DTCO Channel	PS_COMP	
DTF	Delta-T Fluid	195	US/F
DTSS	Shear Delta-T Source for DTSM Channel	PS_SHEAR	
DWC4	Digitizer Word Count 4	512	
DWCX	Digitizer Word Count X	512	
FILG	Label Fill Gap Control – Monopole P&S	COMP_SHEAR	
GCSE	Generalized Caliper Selection	C1	
LFC	Label Formation Character – Monopole P&S	DYNAMIC	
MCS	Mean Casing Slowness	57	US/F
MTXG	Monopole Transmitter Geometry	186	IN
NWI4	Number Waveform Items 4	8	
NWIX	Number Waveform Items X	0	
RSMN	Label Shear/Compressional Minimum Ratio – Monopole P&S	1.4	
RSMX	Label Shear/Compressional Maximum Ratio – Monopole P&S	2.12	
RX1G	Receiver 1 Geometry	294	IN
RX2G	Receiver 2 Geometry	300	IN
RX3G	Receiver 3 Geometry	306	IN
RX4G	Receiver 4 Geometry	312	IN
RX5G	Receiver 5 Geometry	318	IN
RX6G	Receiver 6 Geometry	324	IN
RX7G	Receiver 7 Geometry	330	IN
RX8G	Receiver 8 Geometry	336	IN
SAM4	DSST Sonic Acquisition Mode 4 – Monopole Mode for P&S	EVEN	
SAMX	DSST Sonic Acquisition Mode X – Both Dipoles or Monopole Mode for Expert	OFF	
SAS4	STC Sonic Array Status – Monopole P&S	255	
SBO4	STC Search Band Offset – Monopole P&S	500	US
SBR4	STC Baseline Removal – Monopole P&S	ON	
SBW4	STC Search Bandwidth – Monopole P&S	2000	US
SFC4	STC Formation Character – Monopole P&S	SELECTABLE	
SFM4	STC Filter – Monopole P&S	B3-20K	
SHLL	Label Slowness Lower Limit – Monopole P&S Shear	235	US/F

SHUL	Label Slowness Upper Limit – Monopole P&S Shear	240	US/F
SLL4	STC Slowness Lower Limit – Monopole P&S	40	US/F
SST4	STC Slowness Step – Monopole P&S	2	US/F
SSW4	STC Source Waveform – Monopole P&S	WF_SAM4	
STLL	Label Slowness Lower Limit – Monopole Stoneley	180	US/F
STUL	Label Slowness Upper Limit – Monopole Stoneley	780	US/F
SUL4	STC Slowness Upper Limit – Monopole P&S	240	US/F
SWD4	STC Slowness Width – Monopole P&S	10	US/F
TBF4	STC Time for Baseline Fill – Monopole P&S	300	US
TLL4	STC Time Lower Limit – Monopole P&S	150	US
TST4	STC Time Step – Monopole P&S	50	US
TUL4	STC Time Upper Limit – Monopole P&S	3660	US
TWD4	STC Time Width – Monopole P&S	1000	US
TWI4	STC Integration Time Window – Monopole P&S	500	US
TWSX	Transmitter Waveform Select X	0	
WFM4	Waveform Mode 4	W1	
HNGB–BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGB Detector 1 Barite Constant	1	
BAR2	HNGB Detector 2 Barite Constant	1	
BHK	HNGB Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGB Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	C1	
H1P	HNGB Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGB Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGB Borehole Potassium Running Average	-0.00154711	
HALF	HNGB Alpha Filter Length	60	IN
HCRB	HNGB Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
HNPE	HNGB Processing Enable	YES	
S1BI	HNGB Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGB Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGB Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	CENT	
VBA1	HNGB Detector 1 Variable Barite Factor Running Average	1.20713	
VBA2	HNGB Detector 2 Variable Barite Factor Running Average	0.980476	
EDTC–B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	C1	
System and Miscellaneous			
BS	Bit Size	11.438	IN
DO	Depth Offset for Playback	-97.0	M
PP	Playback Processing	RECOMPUTE	

Format: DSST_P_S_Only Vertical Scale: 1:200 Graphics File Created: 10-Sep-2015 13:40

OP System Version: 19C0-187

MEST-B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGB-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

Input DLIS Files

DEFAULT	FMS_DSI_NGS_020LUP	FN:33	PRODUCER	03-Sep-2015 22:35	896.1 M	226.7 M
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Output DLIS Files

DEFAULT	FMS_DSI_NGS_040PUP	FN:59	PRODUCER	10-Sep-2015 13:40
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Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Micro Electrical Scanner – B (Slim) Wellsite Calibration – Caliper Calibration							
Before: Calibration out of date 5-Aug-2015 16:41							
Caliper 1 Zero Measurement	12.00	N/A	12.07	N/A	N/A	N/A	IN
Caliper 2 Zero Measurement	12.00	N/A	11.92	N/A	N/A	N/A	IN
Caliper 1 Plus Measurement	15.13	N/A	15.36	N/A	N/A	N/A	IN
Caliper 2 Plus Measurement	15.13	N/A	15.29	N/A	N/A	N/A	IN

Micro Electrical Scanner – B (Slim) Wellsite Calibration – CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY							
Before: 3–Sep–2015 20:42							
TEMPERATURE REFERENCE :	N/A	N/A	20	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	99	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	3	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	743	N/A	N/A	N/A	
Micro Electrical Scanner – B (Slim) Wellsite Calibration – CROUZET MAGNETOMETER PROM HAS BEEN READ CORRECTLY							
Before: 3–Sep–2015 20:42							
TEMPERATURE REFERENCE :	N/A	N/A	23	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	3	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	9	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	507	N/A	N/A	N/A	
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 1 Check							
Master: 31–Jul–2015 10:01 Before: 5–Aug–2015 7:59 After: 5–Aug–2015 9:23							
Na 511 Peak Loc	40.00	37.71	37.63	37.62	–0.01348	1.000	
Na 511 Peak Res	15.50	16.11	15.42	15.72	0.3043	2.000	%
High Voltage	1150	1211	1201	1204	2.856	N/A	V
Na 1785 Peak Loc	142.6	136.7	136.8	136.3	–0.4773	7.000	
Na 1785 Peak Res	8.500	10.13	8.646	8.654	0.007848	2.000	%
Temperature	15.50	22.16	22.65	22.78	0.1236	N/A	DEGC
Na Count Rate	45.00	43.96	43.37	42.72	–0.6500	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check							
Master: 31–Jul–2015 10:01 Before: 5–Aug–2015 7:59 After: 5–Aug–2015 9:23							
Na 511 Peak Loc	40.00	39.69	39.55	39.58	0.02773	1.000	
Na 511 Peak Res	15.50	15.27	16.42	15.01	–1.409	2.000	%
High Voltage	1150	1084	1083	1085	2.161	N/A	V
Na 1785 Peak Loc	142.6	143.4	143.2	142.7	–0.5449	7.000	
Na 1785 Peak Res	8.500	8.457	8.664	8.451	–0.2128	2.000	%
Temperature	15.50	21.65	22.00	22.57	0.5625	N/A	DEGC
Na Count Rate	45.00	44.18	43.52	42.99	–0.5368	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Ratio Of Detector 1 To Detector 2							
Master: 31–Jul–2015 10:01 Before: 5–Aug–2015 7:59 After: 5–Aug–2015 9:23							
Coincidence Count Rate Ratio	1.000	0.9887	0.9903	0.9926	0.002269	0.05000	
Hostile Natural Gamma Ray Sonde Master Calibration – Detector 1 Calibration							
Master: 31–Jul–2015 9:56							
Na 511 Peak Set Point	40.00	39.00	---	---	---	---	
Th Peak Loc	209.6	206.7	---	---	---	---	
Th Peak Res	7.000	8.351	---	---	---	---	%
Background Count Rate	142.5	37.67	---	---	---	---	CPS
Gain Ratio	1.000	1.042	---	---	---	---	
Hostile Natural Gamma Ray Sonde Master Calibration – Detector 2 Calibration							
Master: 31–Jul–2015 9:56							
Na 511 Peak Set Point	40.00	41.00	---	---	---	---	
Th Peak Loc	209.6	211.5	---	---	---	---	
Th Peak Res	7.000	6.877	---	---	---	---	%
Background Count Rate	142.5	39.84	---	---	---	---	CPS
Gain Ratio	1.000	1.014	---	---	---	---	
Enhanced DTS Cartridge Wellsite Calibration – EDTC Accelerometer Calibration							
Before: 11–Aug–2015 23:33							
EDTC Z–Axis Acceleration	9.810	N/A	9.856	N/A	N/A	N/A	M/S2
Enhanced DTS Cartridge Wellsite Calibration – Detector Calibration							
Before: Calibration out of date 5–Aug–2015 7:56 After: Calibration out of date 5–Aug–2015 9:33							
Gamma Ray (Jig – Bkg)	152.3	N/A	152.3	152.9	0.5175	13.85	GAPI
Gamma Ray (Calibrated)	164.0	N/A	164.0	164.6	0.5571	15.00	GAPI

Micro Electrical Scanner – B (Slim) / Equipment Identification		
Primary Equipment:		
MEST Sonde – B	MEDS – B	770
MEST Preamplifier Cartridge – AB	MEPC – AB	807
GPIT Cartridge – AC	GPIC – AC	840
MEST Acquisition Cartridge – A	MEAC – A	804
Auxiliary Equipment:		
MEST–B Preamplifier Cartridge Housing	MEPH – A	701
MEST Acquisition Cartridge Housing (Slim)	MEAH – B	726

Hostile Natural Gamma Ray Cartridge – B / Equipment Identification

Primary Equipment:
HNGC Cartridge

HNGC – B 439

Auxiliary Equipment:
HNGC Housing

HNGH – A 380

Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment:
HNGS Sonde

HNGS – BA 177

Auxiliary Equipment:
HNGS Sonde Housing
Gamma Source Radioactive

HNSH – BA 174
GSR – U 616008

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 1 Check

Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Master		37.71	Master		16.11	Master		1211
Before		37.63	Before		15.42	Before		1201
After		37.62	After		15.72	After		1204
	37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)			12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)			900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)	
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value
Master		136.7	Master		10.13	Master		22.16
Before		136.8	Before		8.646	Before		22.65
After		136.3	After		8.654	After		22.78
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)	
Phase	Na Count Rate CPS	Value						
Master		43.96						
Before		43.37						
After		42.72						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							
Master: 31-Jul-2015 10:01			Before: 5-Aug-2015 7:59			After: 5-Aug-2015 9:23		

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 2 Check

Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Master		39.69	Master		15.27	Master		1084
Before		39.55	Before		16.42	Before		1083
After		39.58	After		15.01	After		1085
	37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)			12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)			900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)	
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value
Master		143.4	Master		8.457	Master		21.65
Before		143.2	Before		8.664	Before		22.00
After		142.7	After		8.451	After		22.57
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)	
Phase	Na Count Rate CPS	Value						
Master		44.18						
Before		43.52						
After		42.99						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							

After: Calibration out of date 5-Aug-2015 9:33

Company: **International Ocean Discovery Program**

Schlumberger

Well: **Expedition 356, Site U1462 A**

Field: **Indonesian Throughflow**

Rig: **JOIDES Resolution**

Ocean: **Indian**

Formation Micro Scanner (FMS)

Dipole Sonic P&S Compressional (DSI)

Hostile Natural Gamma Ray (HNGS)