

DISCLAIMER

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OTHER SERVICES1

- OS1: HRLA
- OS2: HLDS
- OS3: MTT
- OS4: MSS
- OS5: VSI

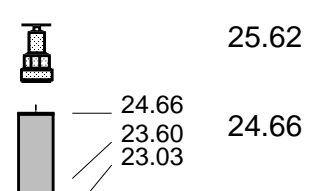
REMARKS: RUN NUMBER 1

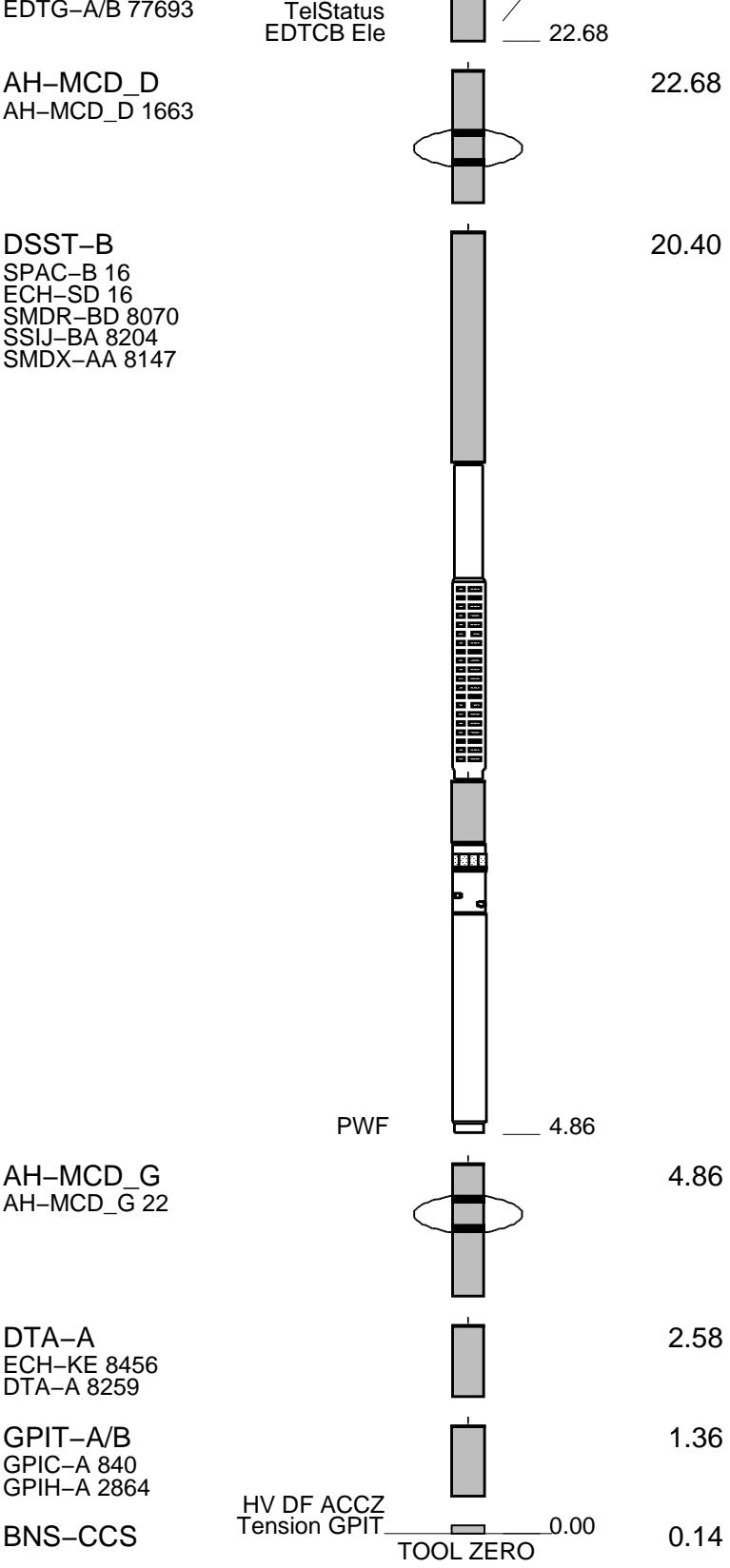
Hole U1309D was originally drilled during ODP Leg 304 in 2004 and deepened during Leg 305 in 2005.
 Log data recorded on expeditions 304 and 305 provides sonic measurements to approximately 2450mbrf.
 After the first run in hole on this expedition, it was discovered that the MCD centralizer arms suffered extreme wear, so to avoid this problem on the DSI run, the pipe was lowered to 2356mbrf and only the lower section of the hole where sonic data had not previously been recorded was logged.
 Logs were correlated to the "Dual-Laterolog Tool" log recorded by Schlumberger on 31 JAN 05.
 The DSI was run with the following modes:
 Upper Dipole in Standard Frequency (Odd Receiver Array)
 Lower Dipole in Standard Frequency (Even Receiver Array)
 Stoneley (Even)
 Monopole P&S in Standard Frequency (Odd array, DDBHC mode)
 Both Cross Dipole (BCR)
 Tools hung up on an apparent ledge at 3043m; up log was recorded from that depth.
 Dipole STC processing windows adjusted to 60uS to 360uS range at client request based on down-log observations.
 Downlog flipped and reprocessed using same processing parameters as uplog in lieu of a repeat pass to prevent centralizer wear.

RUN 1			RUN 2		
SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:			SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
	19C0-187				
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

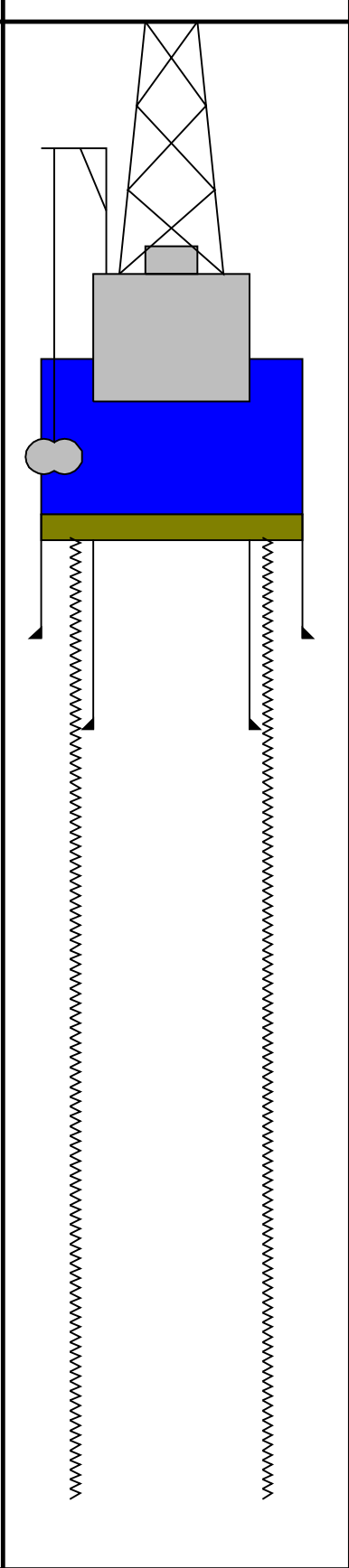
RUN 1	RUN 2
SURFACE EQUIPMENT WITM (EDTS)-A	

RUN 1	RUN 2
DOWNHOLE EQUIPMENT	
LEH-MT LEH-MT 101 EDTC-B EDTH-B 8528 EDTC-B 8529	25.62 24.66 24.66
MDSB_EDTC Mud Tempe CTEM Gamma Ray EFTB DIAG	 24.66 23.60 23.03



Production String	(in)	(m)	Well Schematic	(m)	(in)	Casing String
	OP	ID		MD	MD	

CD ID MD



MD CD ID

Kelly Bushing Elevation
Derrick Floor Elevation

0.0
0.0

Mean Sea Level

11.0

Seismic Gun depth below MSL

7.0

1650.0

Top of Re-entry Cone
Sea Bed

1656.0

9.875

1676.0

13.375

Casing Shoe

1711.0

8.000

Drill Pipe (Driller's Depth)
1711mbrf for Triple-Combo
1759mbrf for VSI & MSS
2356mbrf for DSI

3071.5

9.875

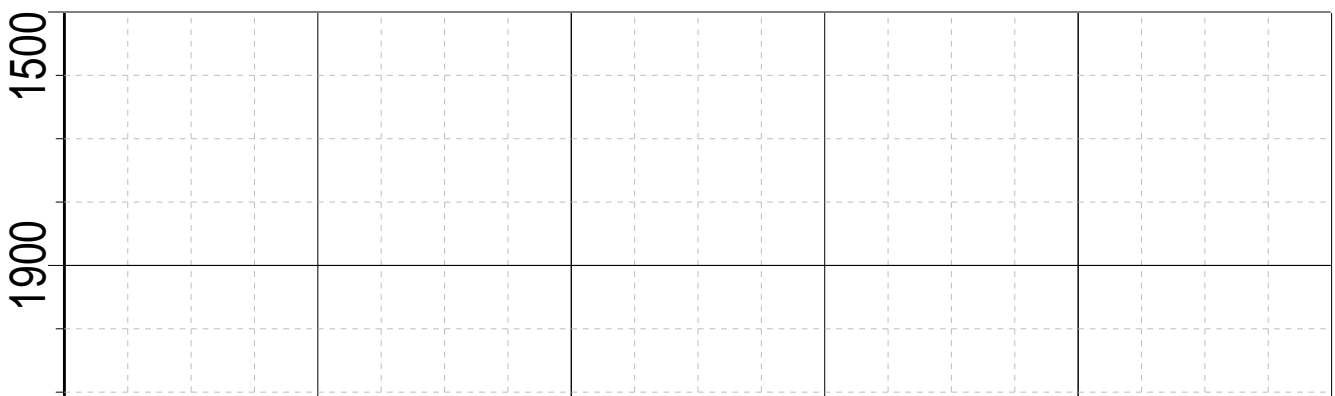
Driller's Total Depth

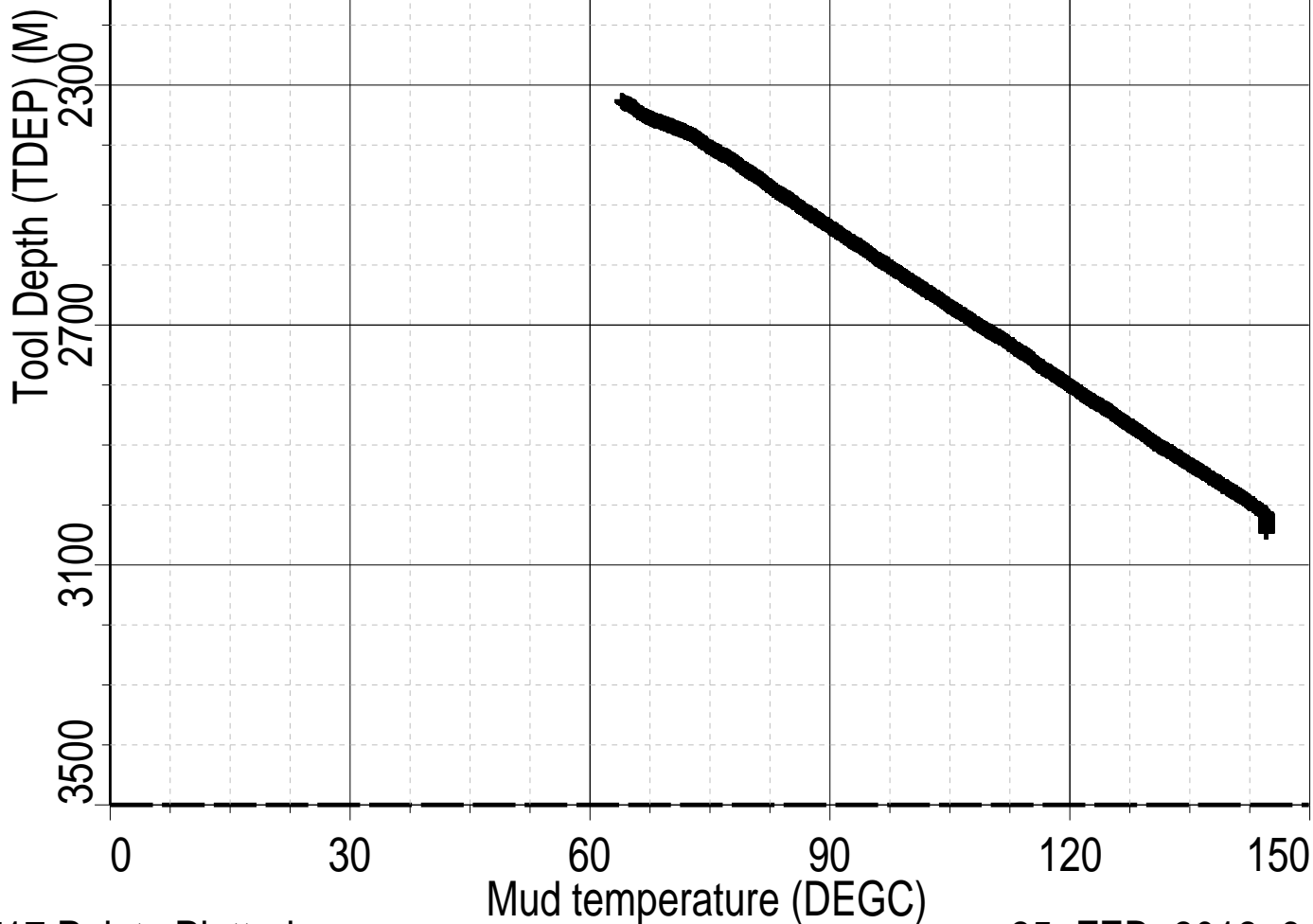
Schlumberger

LEH-MT Mud Temperature

MAXIS Field Log

Index: 3045.0 – 2326.2 M





4717 Points Plotted

25-FEB-2012 6:19

Schlumberger

Down Log

MAXIS Field Log

Company: Lamont Doherty

Well: Expedition 340T, Site U1309D

Input DLIS Files

DEFAULT	Flip_DSI_026LUP	PRODUCER	25-Feb-2012 06:12	3040.5 M	2308.7 M
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Output DLIS Files

DEFAULT	DSI_027PUP	FN:14	PRODUCER	25-Feb-2012 06:14	3043.6 M	2311.8 M
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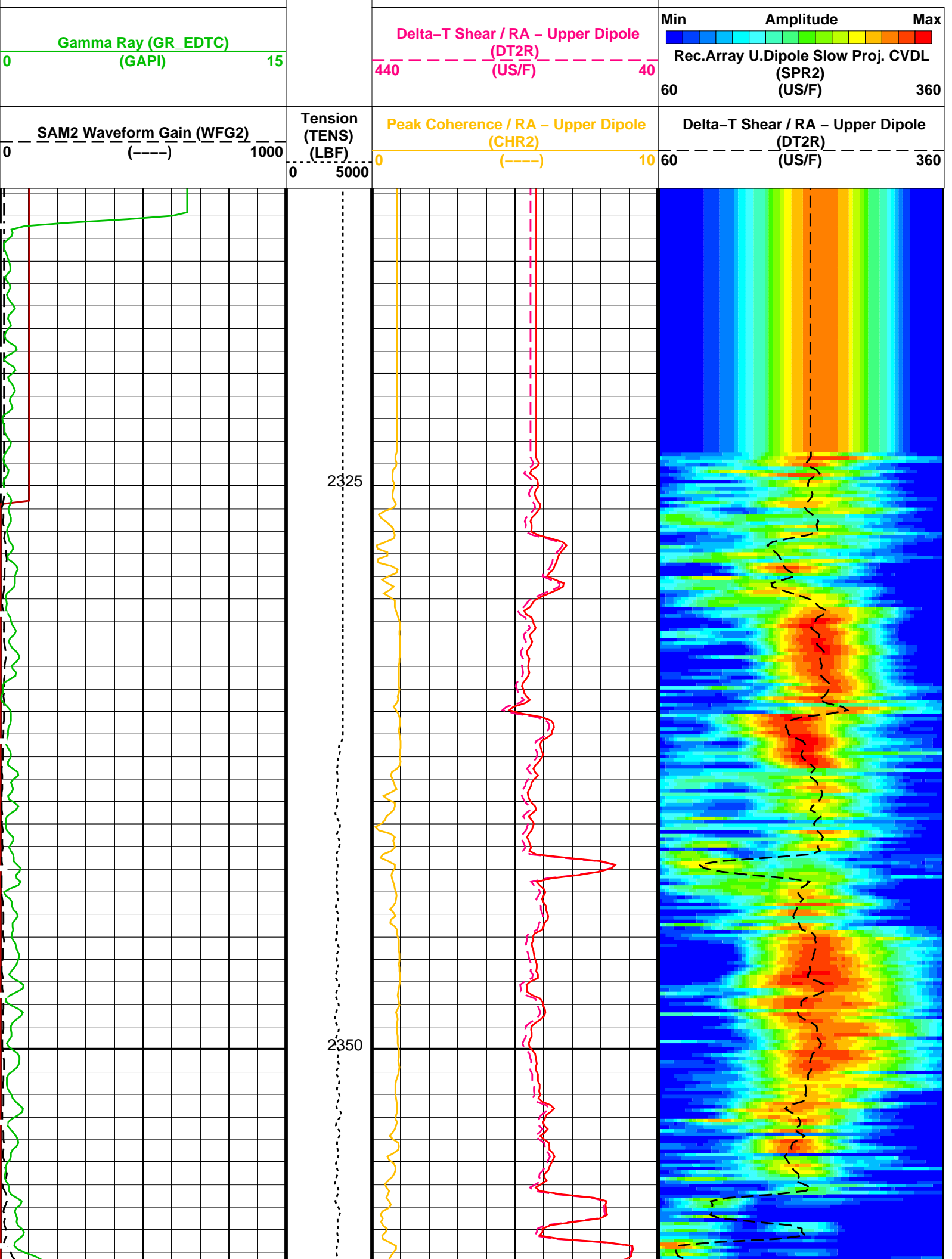
OP System Version: 19C0-187

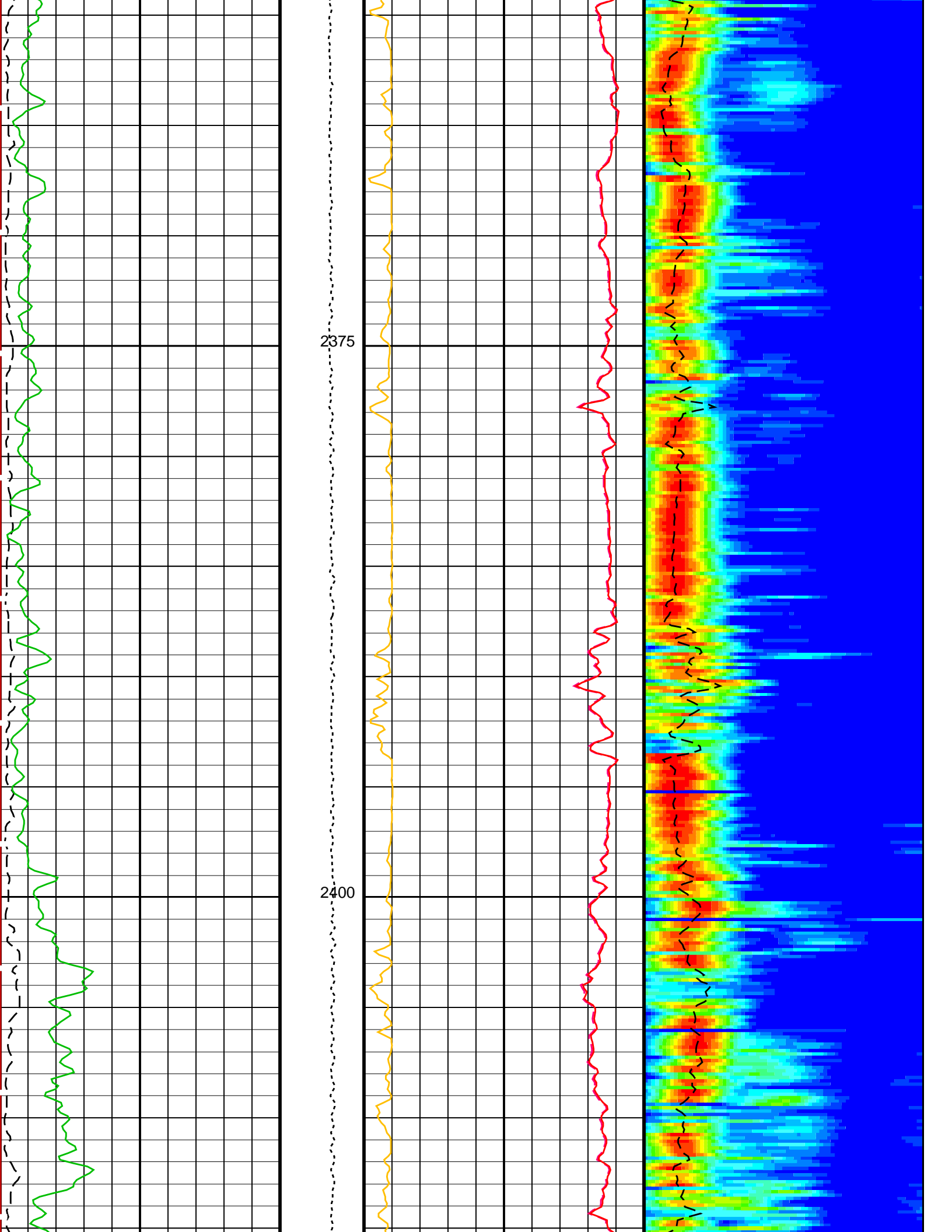
GPIT-A/B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	EDTC-B	19C0-187

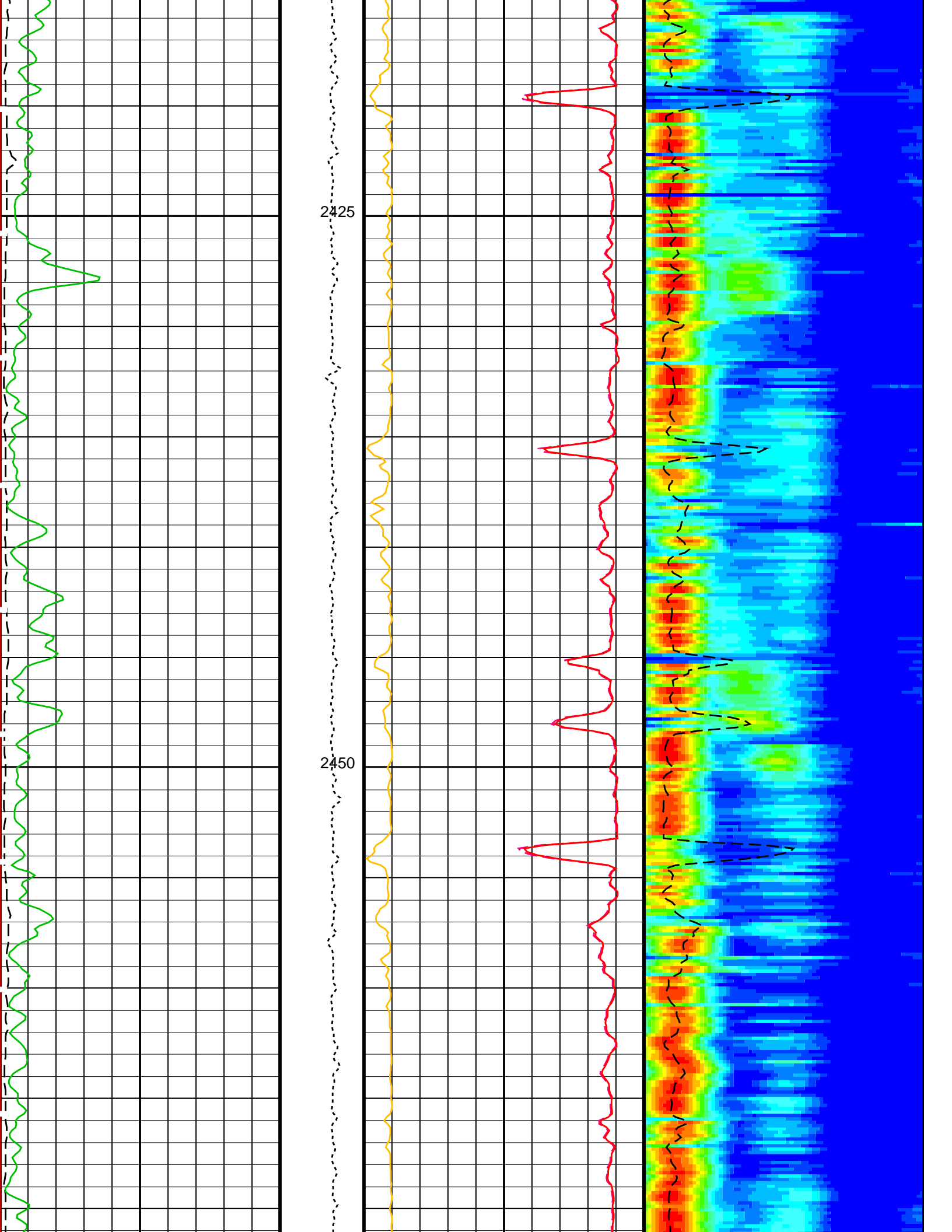
PIP SUMMARY

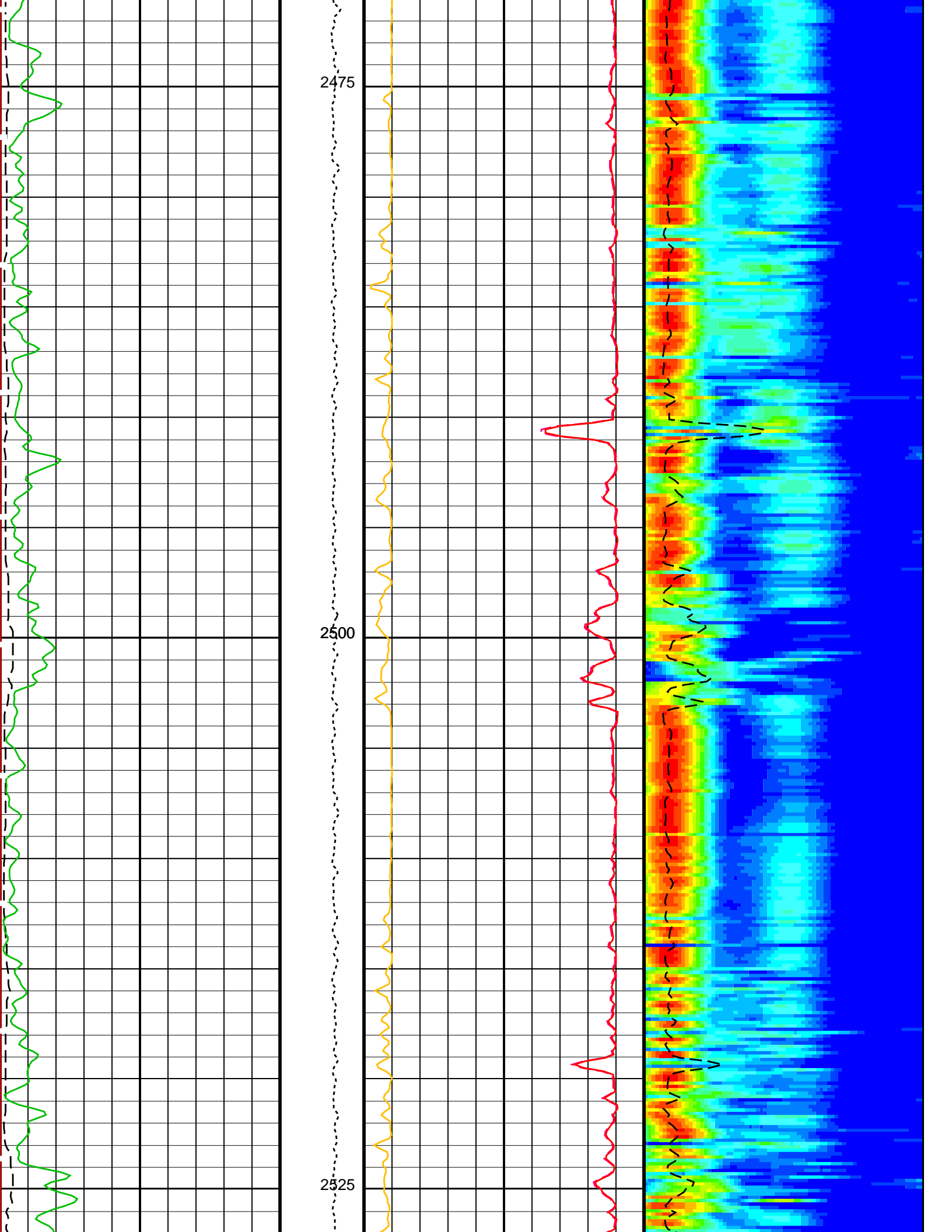
Time Mark Every 60 S

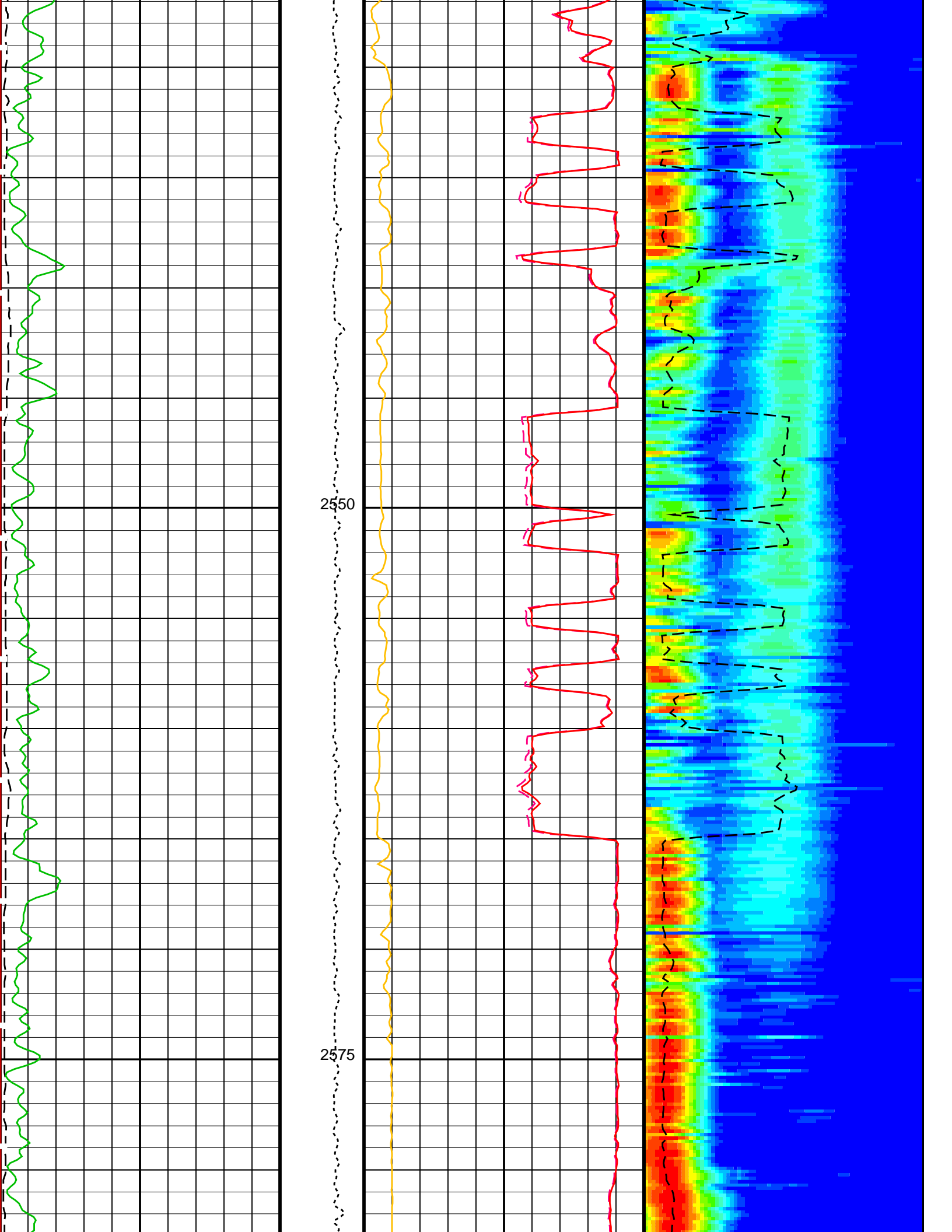
Waveform Data Copy Indicator 2 - Upper Dipole (WC12)		Delta-T Shear - Upper Dipole (DT2)	
0	(----)	440	40
		(US/F)	

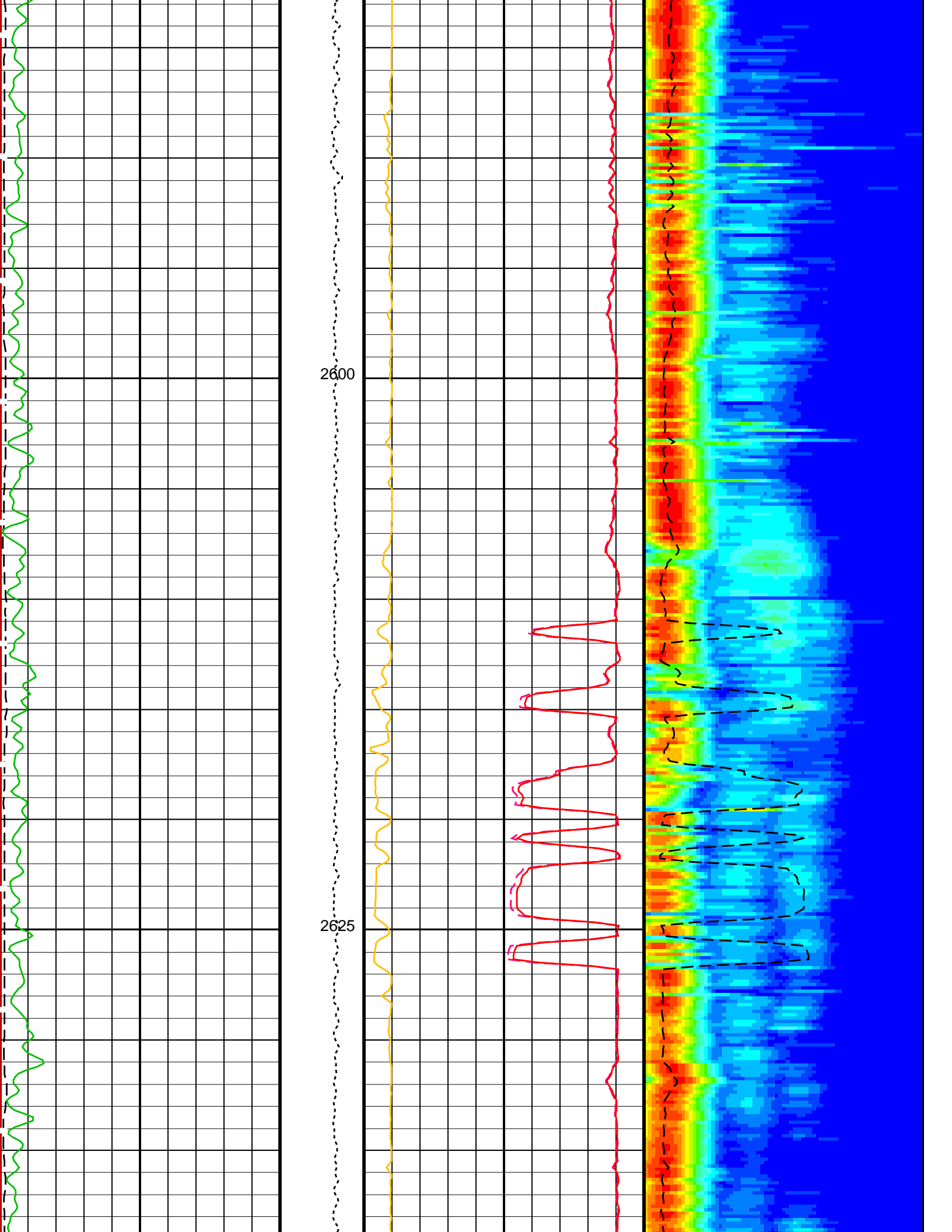


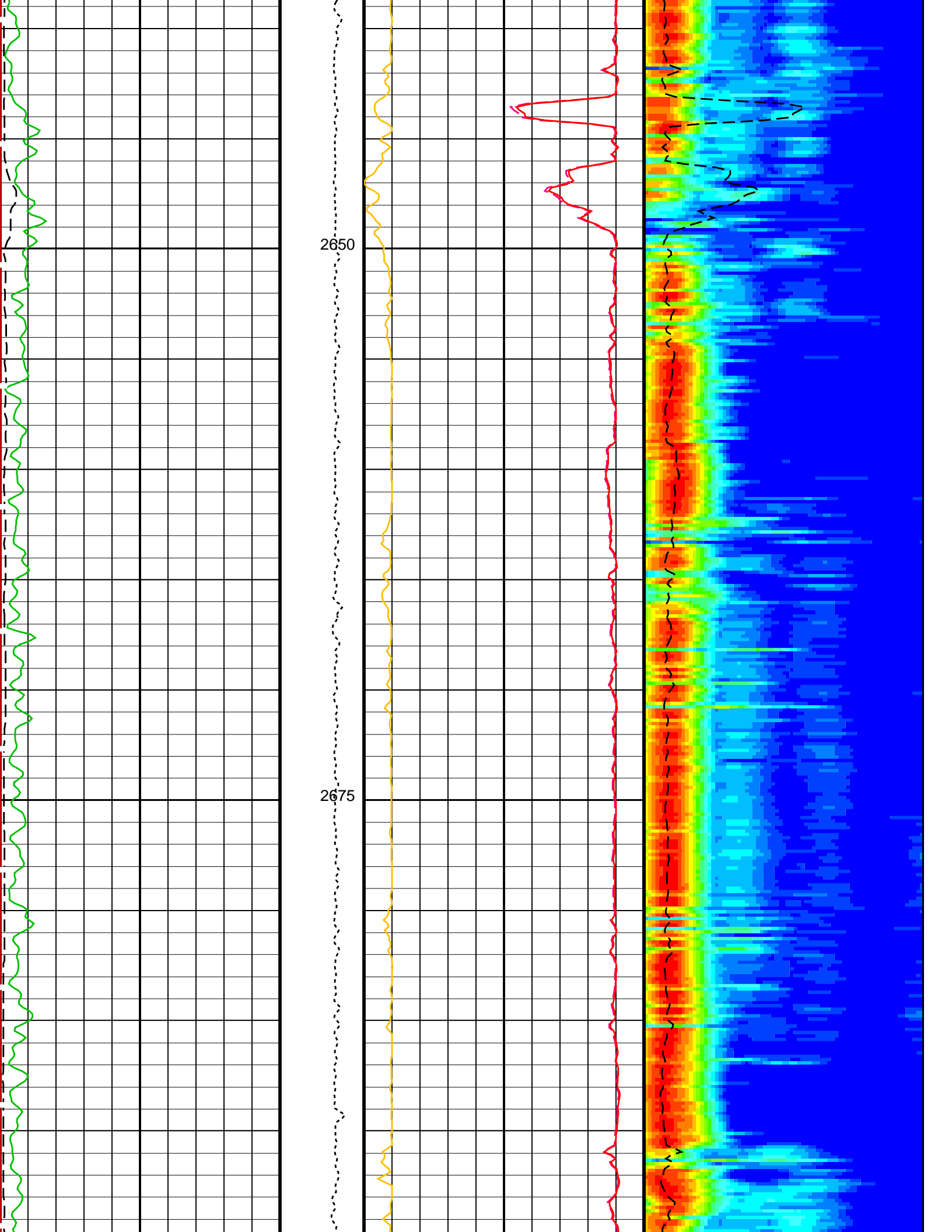


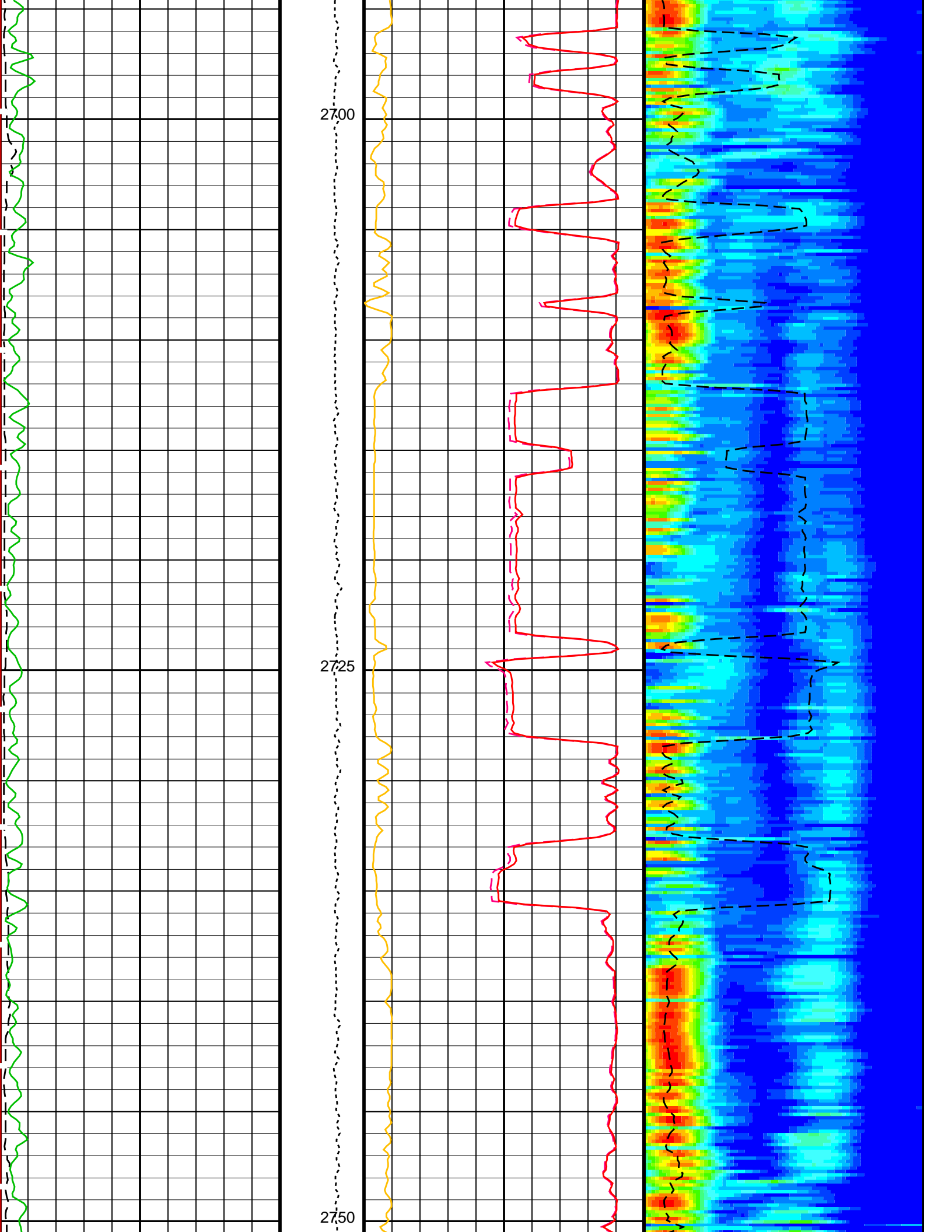


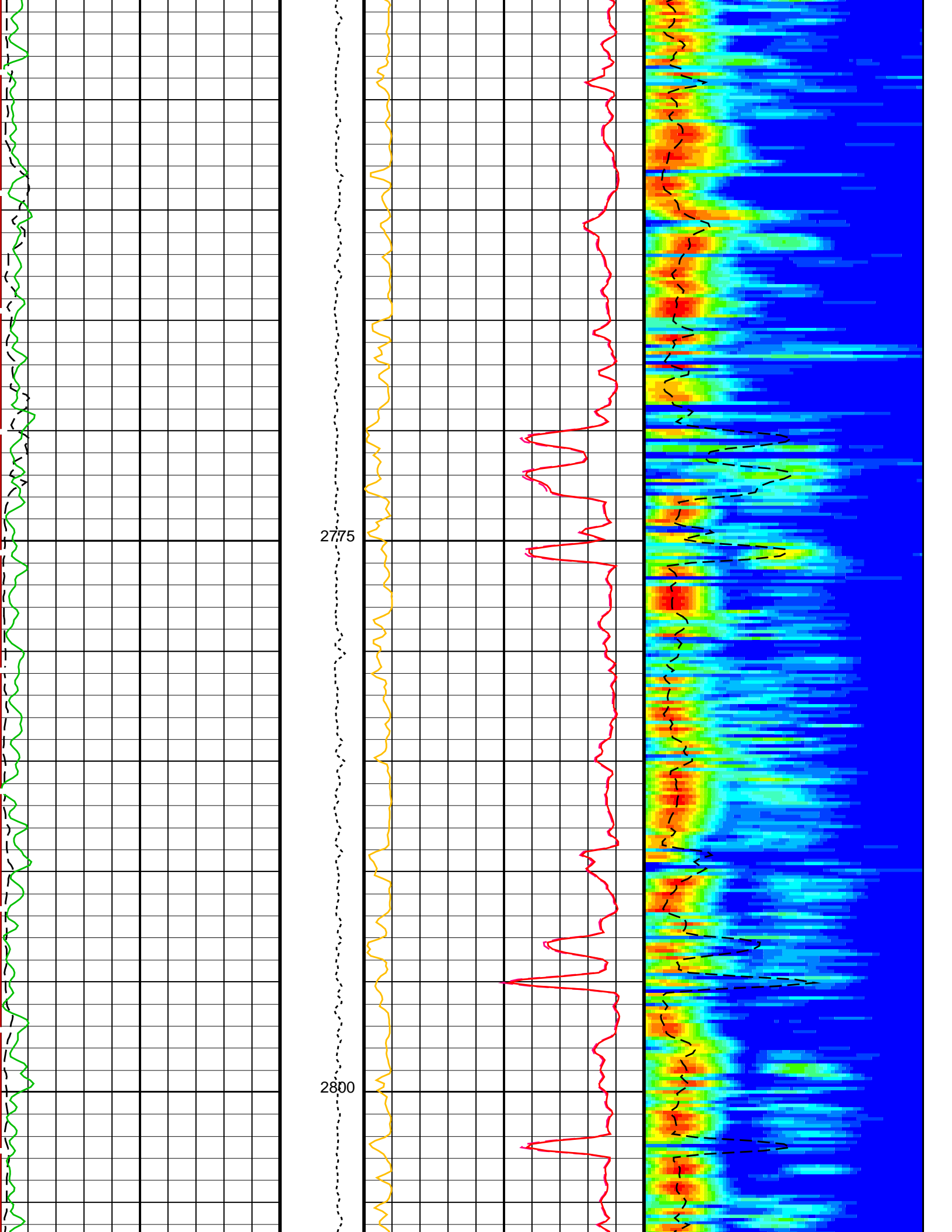


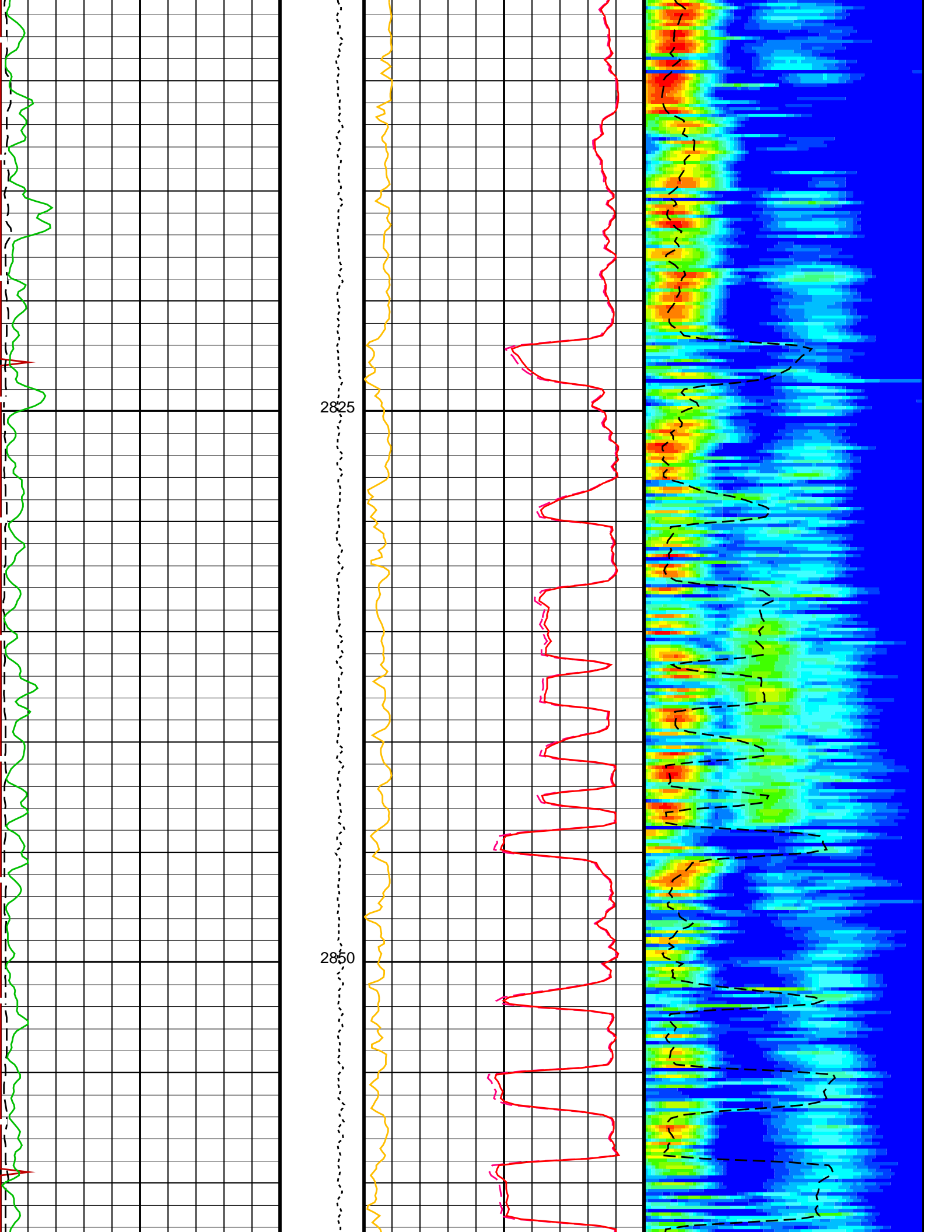


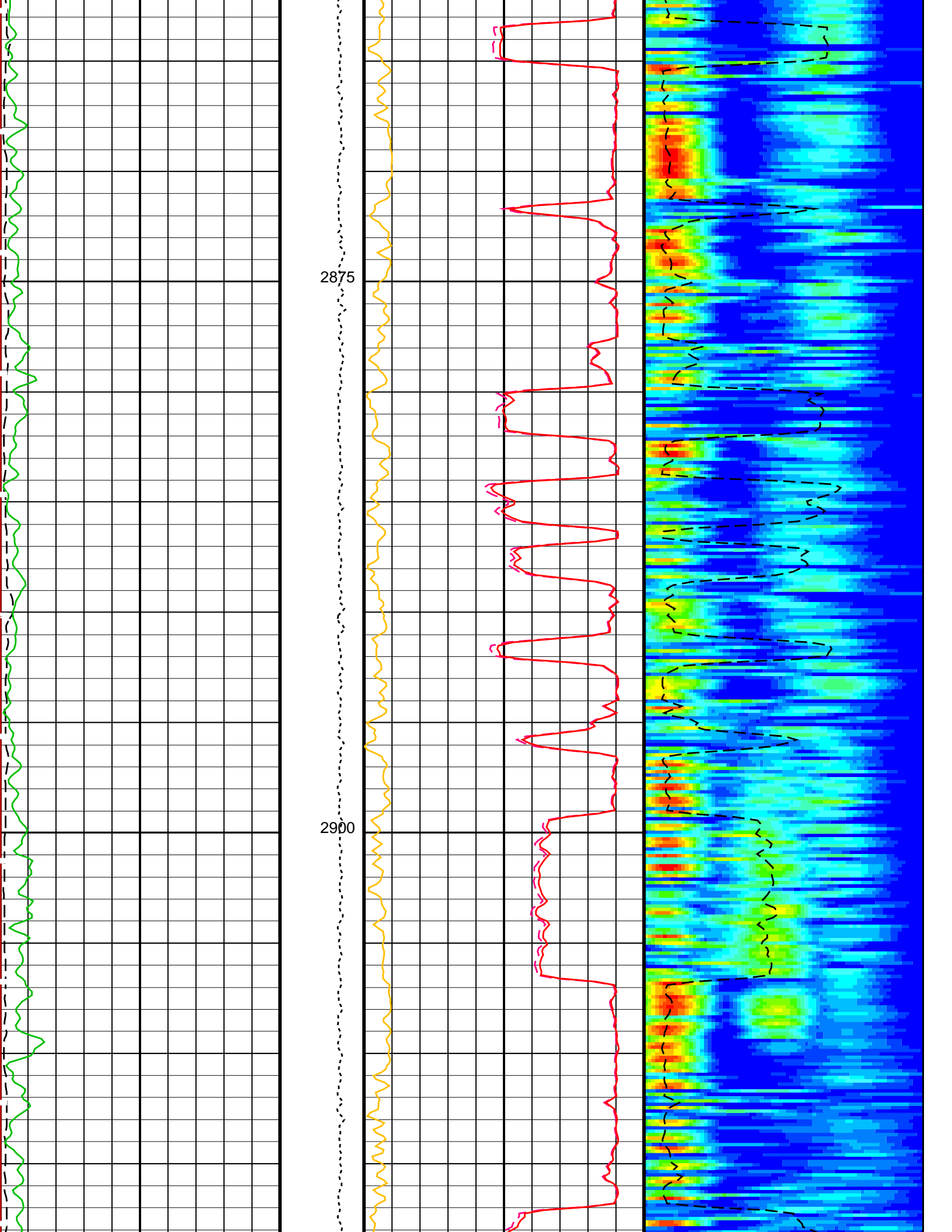


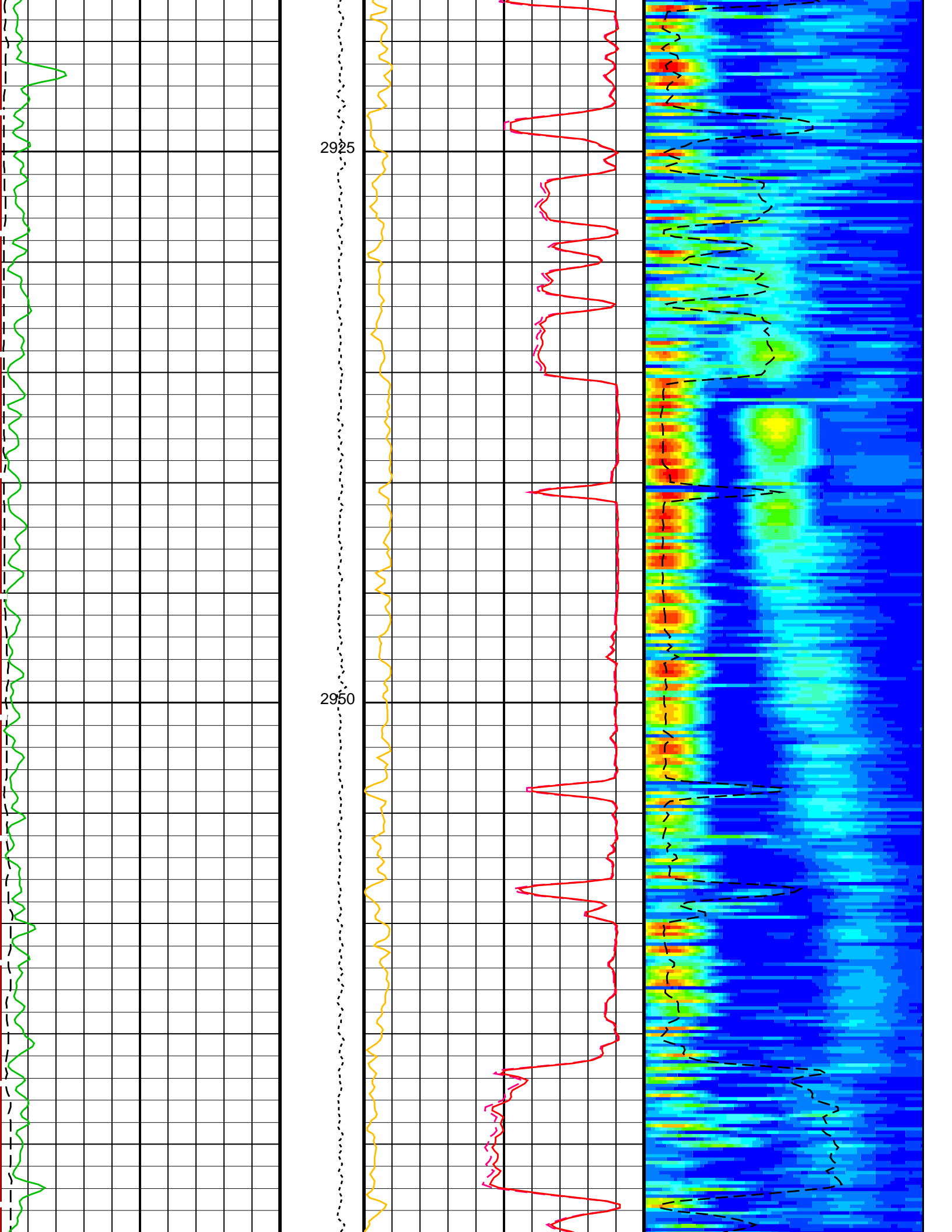


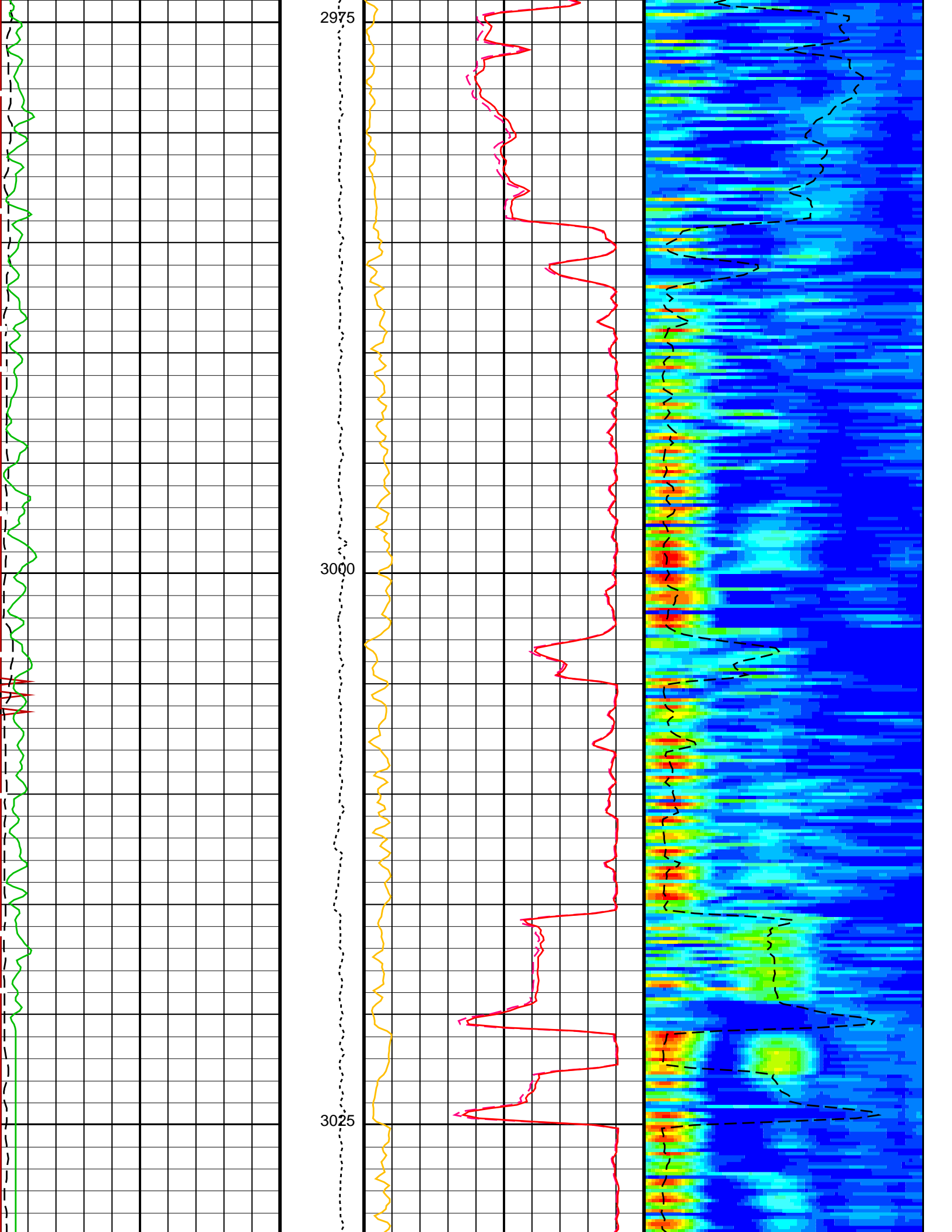


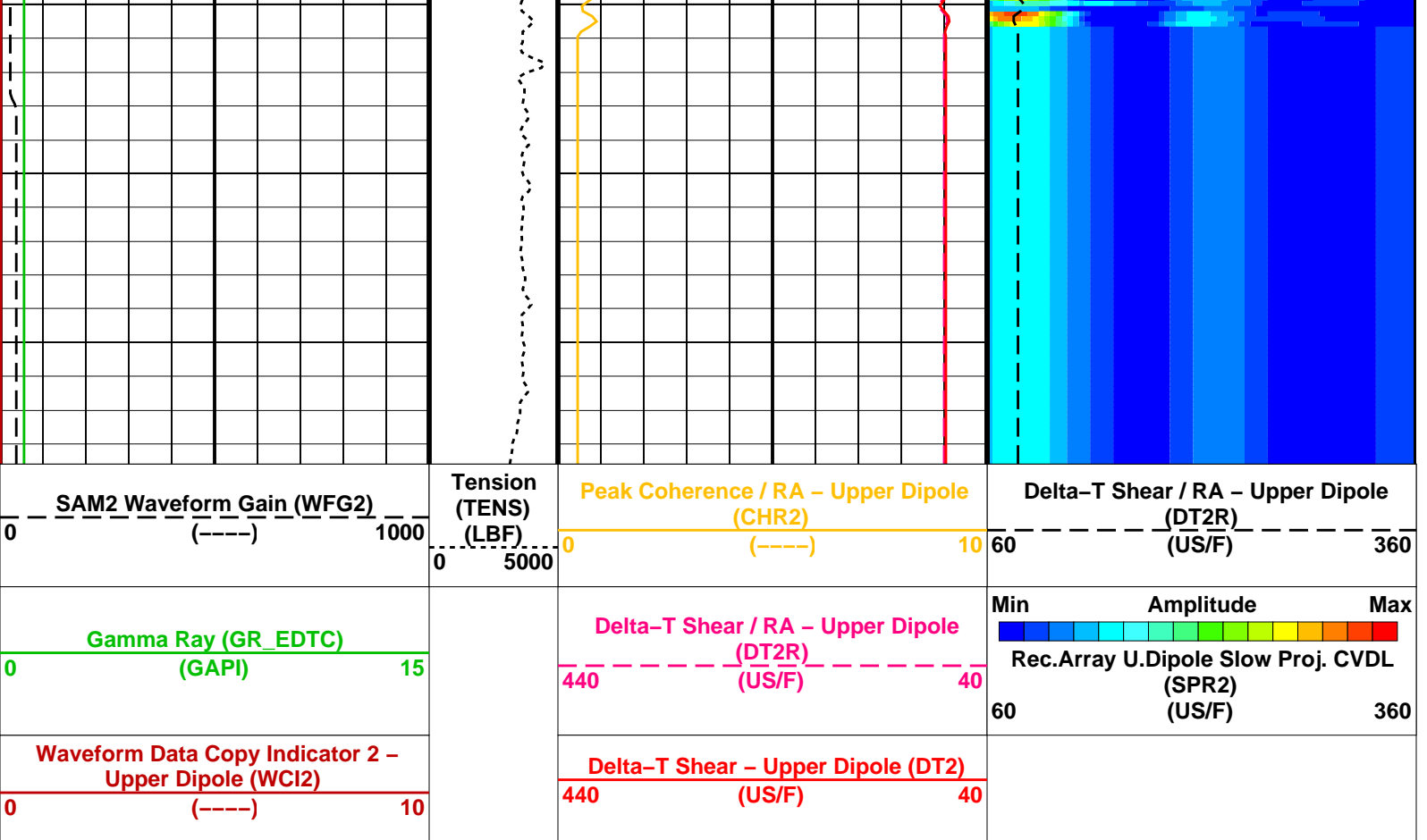












PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
DSST-B: Dipole Shear Imager - B			
DDE2	Digitizing Delay 2	0	US
DDEX	Digitizing Delay X	0	US
DLCS	Label Compressional Source - Dipole Shear	USE	
DSHL	Label Slowness Lower Limit - Dipole Shear	75	US/F
DSHU	Label Slowness Upper Limit - Dipole Shear	360	US/F
DSI2	Digitizer Sample Interval 2	40	US
DSIX	Digitizer Sample Interval X	40	US
DTCS	Compressional Delta-T Source for DTCO Channel	PS_COMP	
DWC2	Digitizer Word Count 2	512	
DWCX	Digitizer Word Count X	512	
NWI2	Number Waveform Items 2	8	
NWIX	Number Waveform Items X	32	
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
SAM2	DSST Sonic Acquisition Mode 2 - Upper Dipole Mode	ODD	
SAMX	DSST Sonic Acquisition Mode X - Both Dipoles or Monopole Mode for Expert	BCR	
SAS2	STC Sonic Array Status - Upper Dipole	255	
SBO2	STC Search Band Offset - Upper Dipole	3000	US
SBW2	STC Search Bandwidth - Upper Dipole	8000	US
SFC2	STC Formation Character - Upper Dipole	SELECTABLE	
SFM2	STC Filter - Upper Dipole	B1-3K	
SLL2	STC Slowness Lower Limit - Upper Dipole	60	US/F
SST2	STC Slowness Step - Upper Dipole	4	US/F
SSW2	STC Source Waveform - Upper Dipole	WF_SAM2	
SUL2	STC Slowness Upper Limit - Upper Dipole	360	US/F
SWD2	STC Slowness Width - Upper Dipole	40	US/F
TBF2	STC Time for Baseline Fill - Upper Dipole	0	US
TLL2	STC Time Lower Limit - Upper Dipole	600	US
TST2	STC Time Step - Upper Dipole	200	US
TUL2	STC Time Upper Limit - Upper Dipole	10960	US

TWD2	STC Time Width - Upper Dipole	2000	US
TWI2	STC Integration Time Window - Upper Dipole	1600	US
TWSX	Transmitter Waveform Select X	0	
UTXG	Upper Dipole Transmitter Geometry	162	IN
WFM2	Waveform Mode 2	W1	
System and Miscellaneous			
DO	Depth Offset for Playback	3.0	M
PP	Playback Processing	RECOMPUTE	

Format: DSST_UPPER_DIPOLE_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 25-Feb-2012 06:14

OP System Version: 19C0-187

GPIT-A/B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	EDTC-B	19C0-187

Input DLIS Files

DEFAULT	Flip_DSI_026LUP	PRODUCER	25-Feb-2012 06:12	3040.5 M	2308.7 M
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Output DLIS Files

DEFAULT	DSI_027PUP	FN:14	PRODUCER	25-Feb-2012 06:14
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Up Log

MAXIS Field Log

Company: Lamont Doherty Well: Expedition 340T, Site U1309D

Input DLIS Files

DEFAULT	DSI_037LUP	FN:36	PRODUCER	25-Feb-2012 05:42	3040.5 M	2321.8 M
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Output DLIS Files

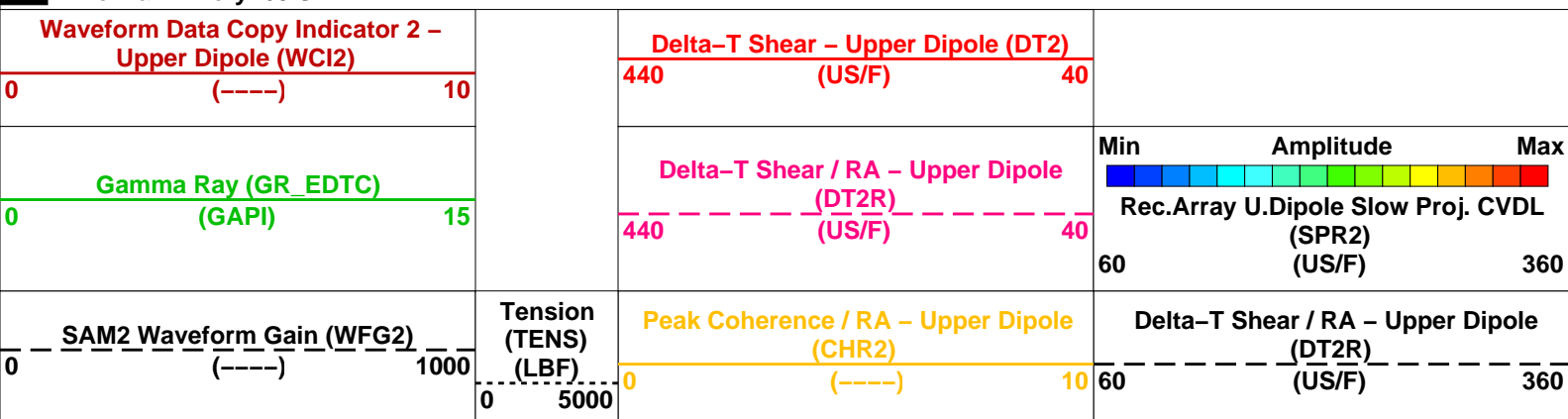
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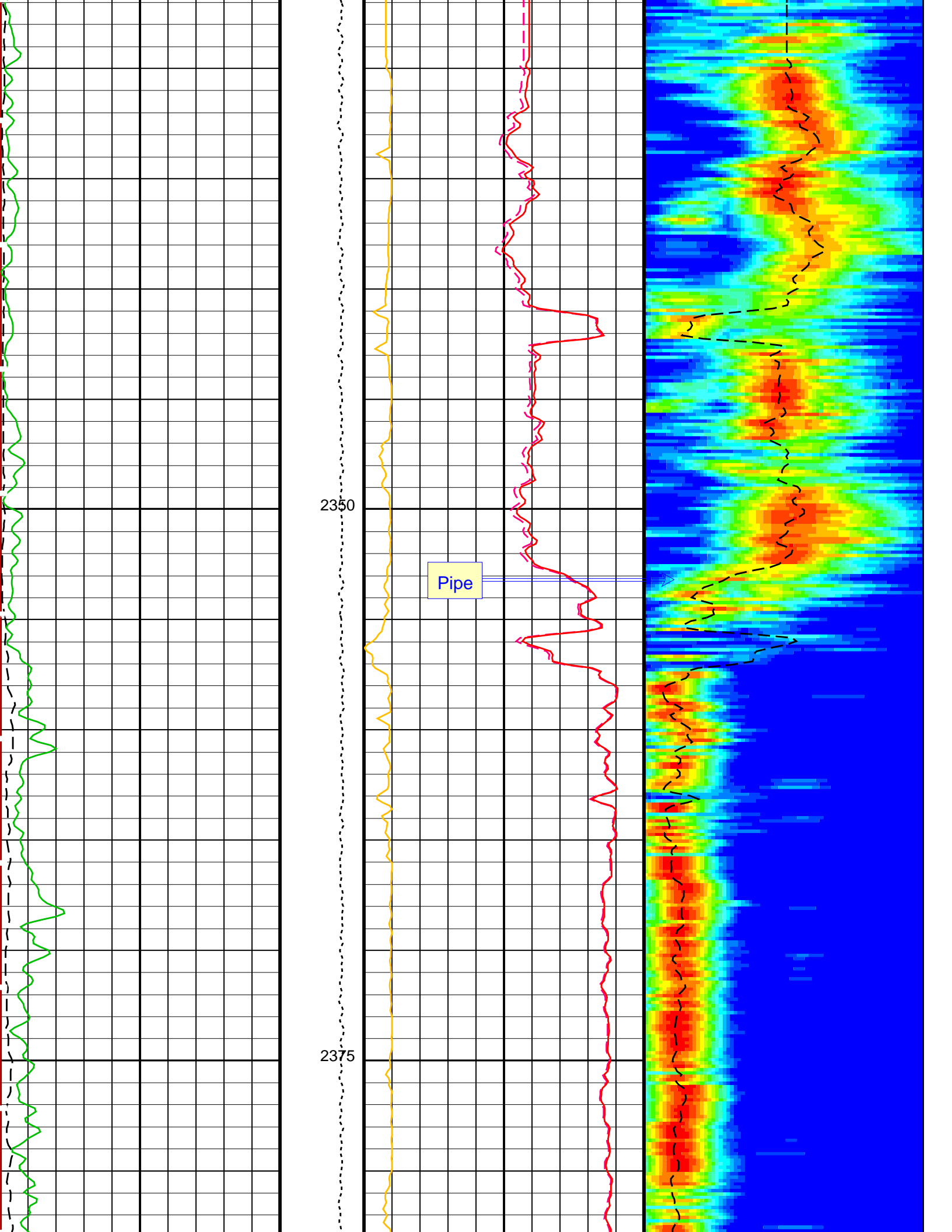
OP System Version: 19C0-187

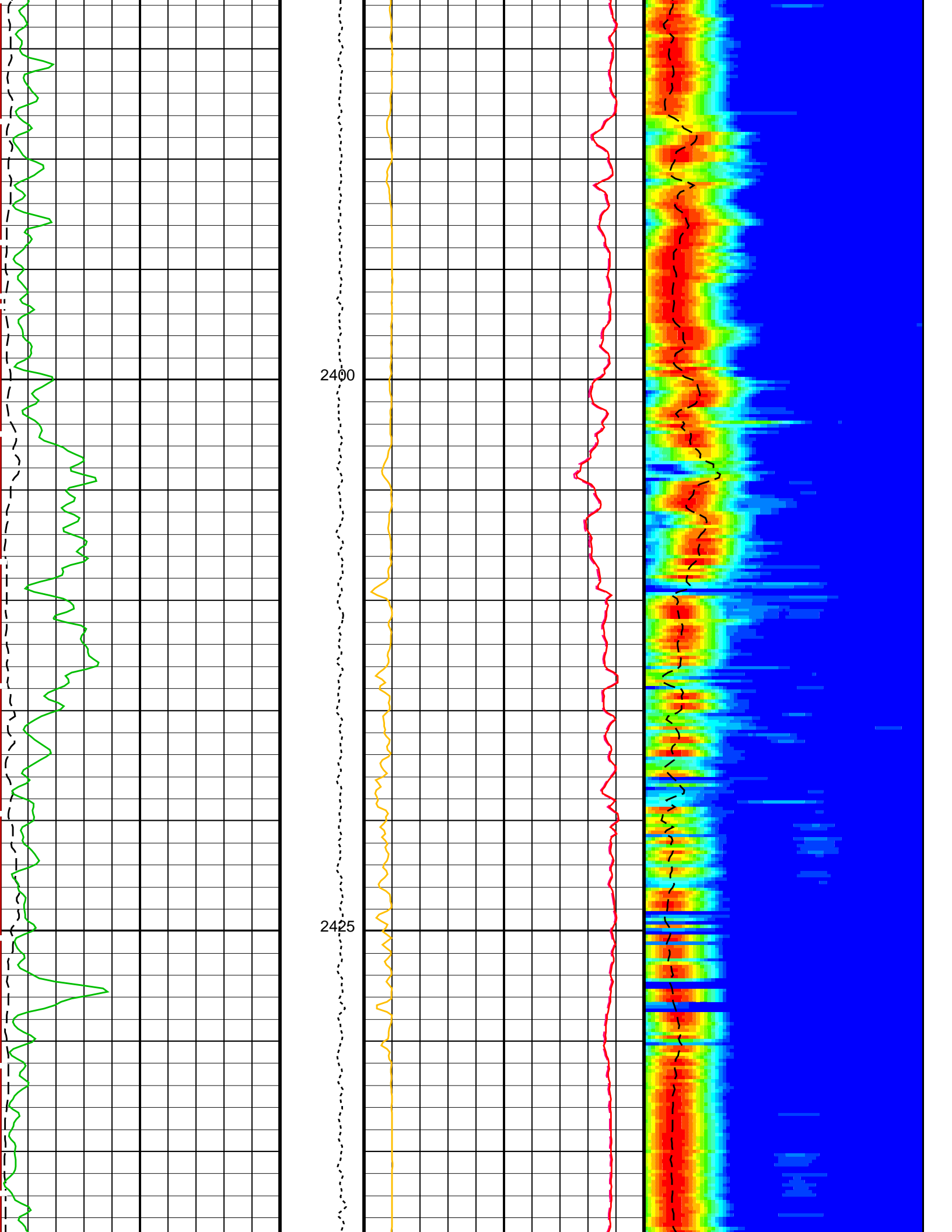
GPIT-A/B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	EDTC-B	19C0-187

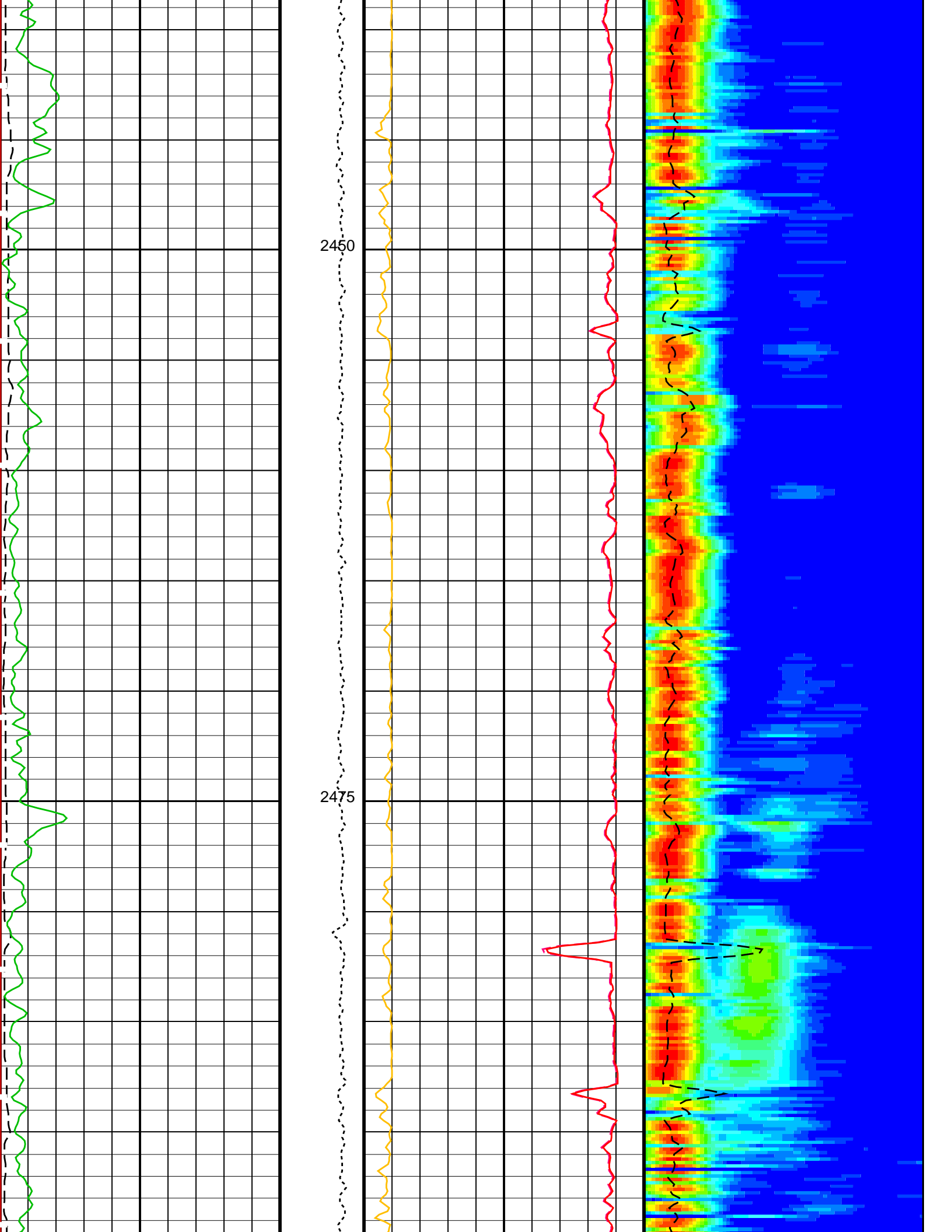
PIP SUMMARY

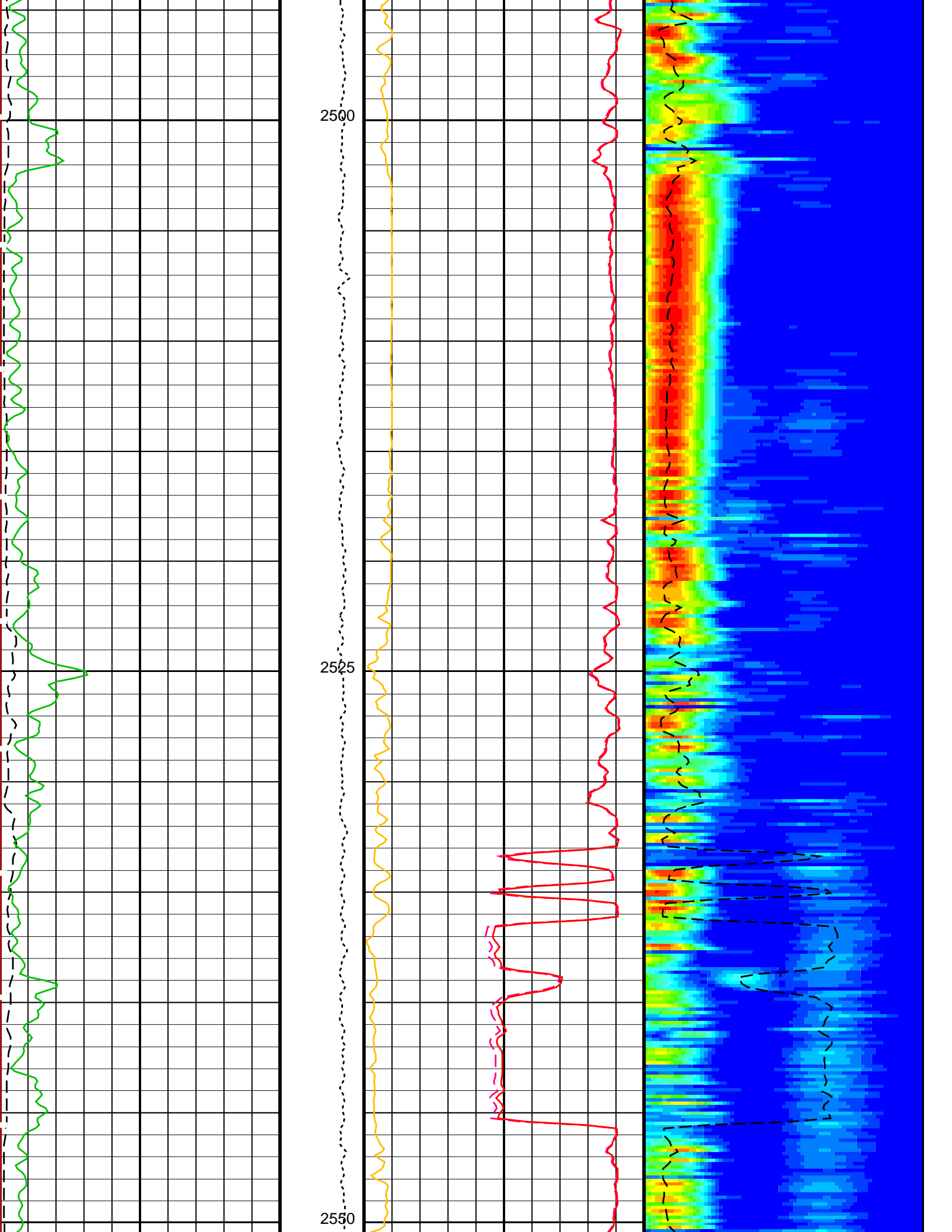
Time Mark Every 60 S

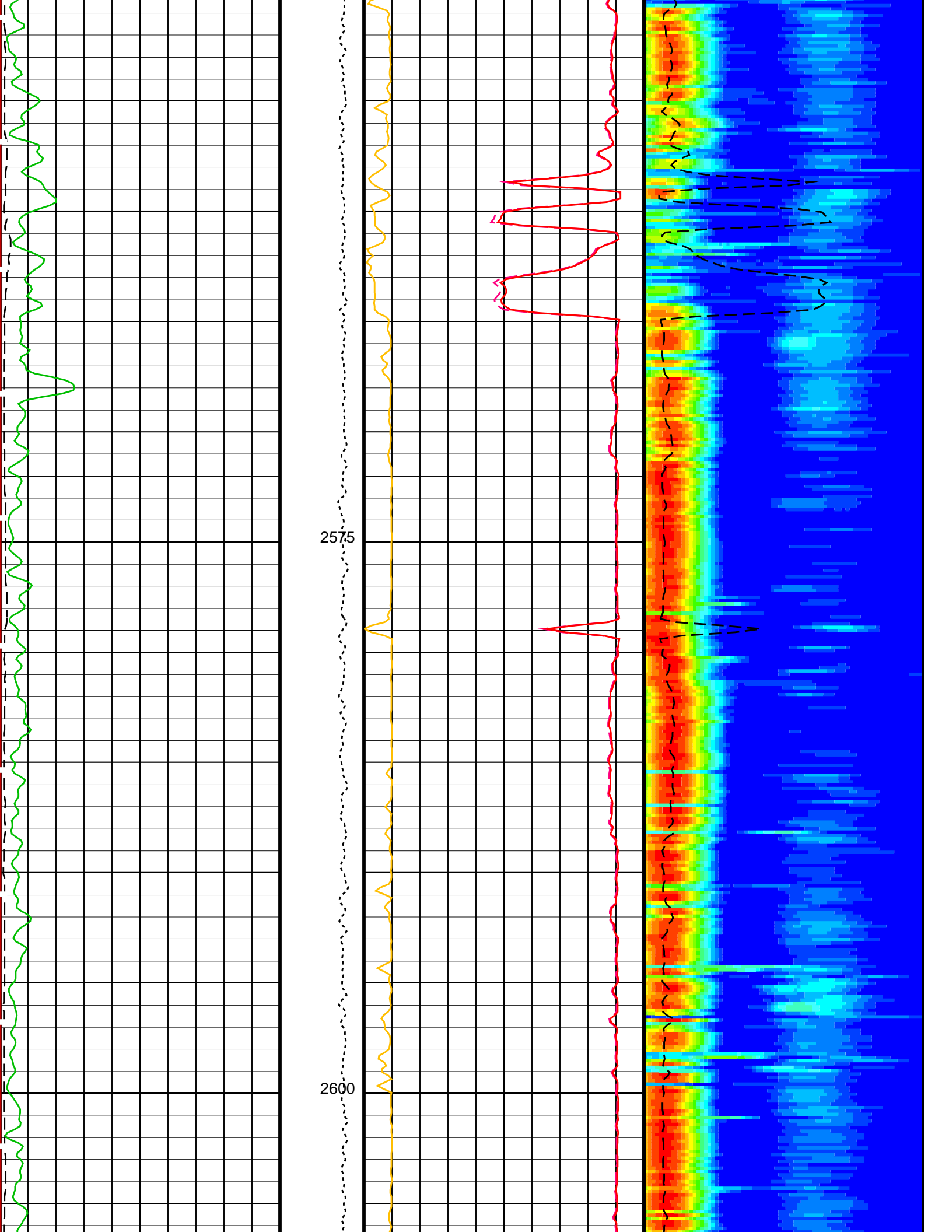


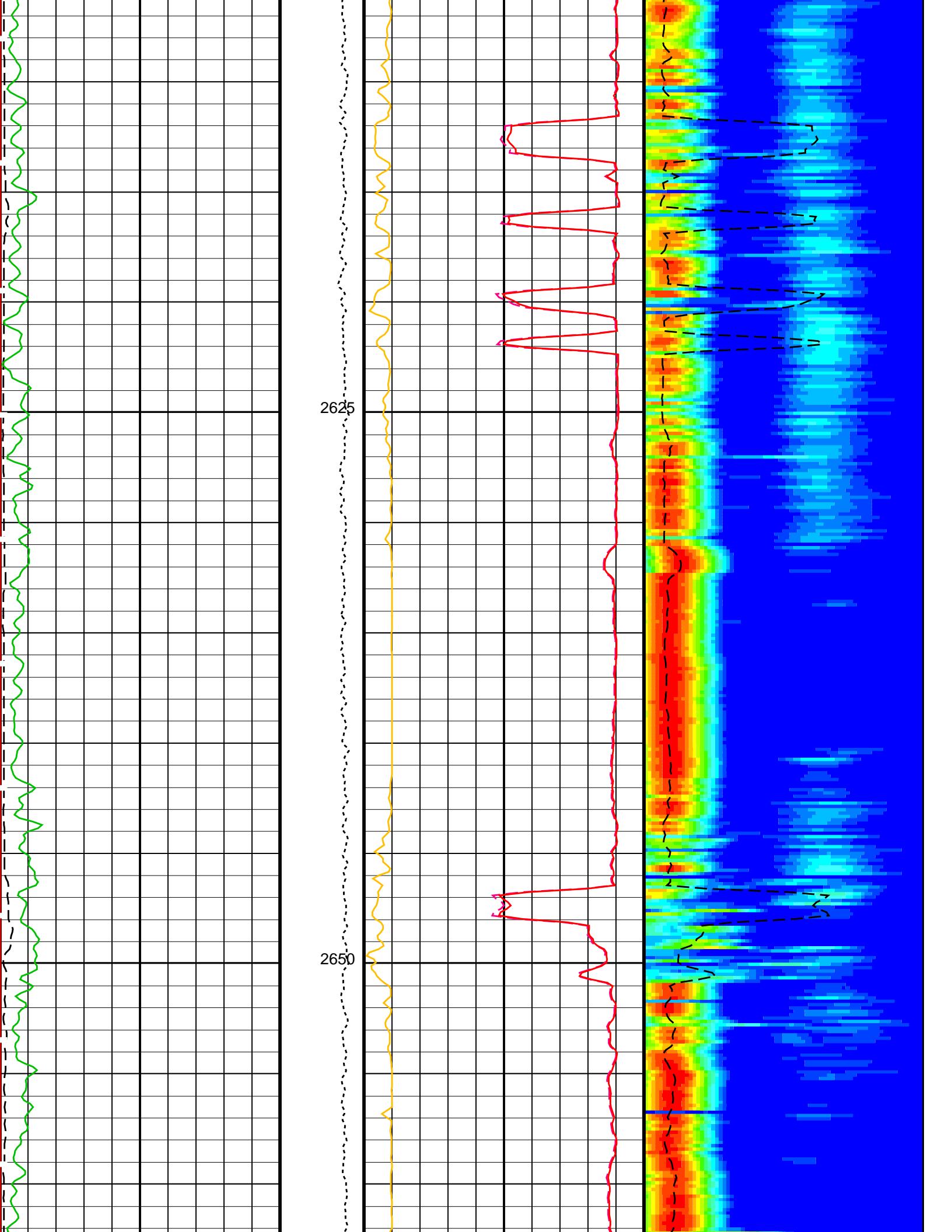


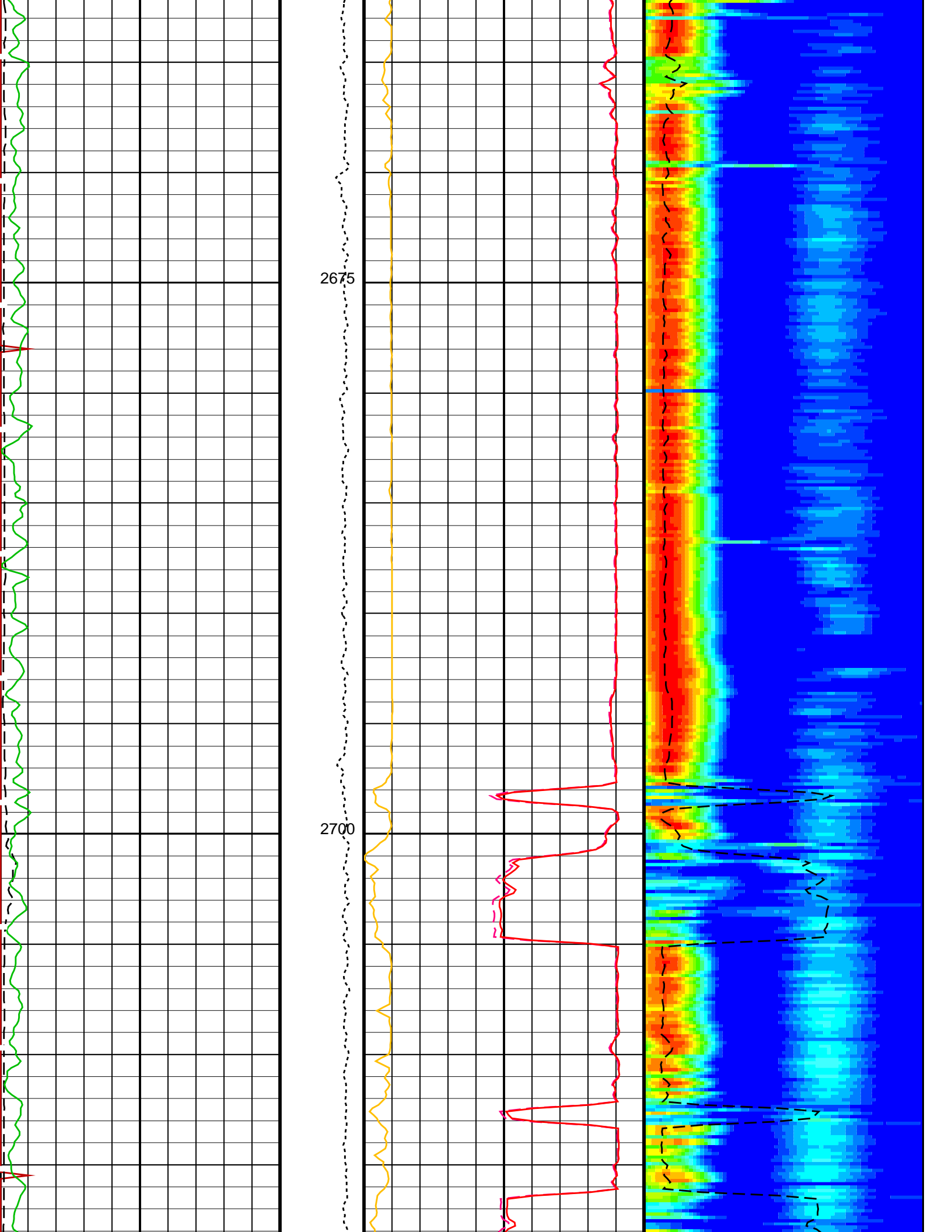


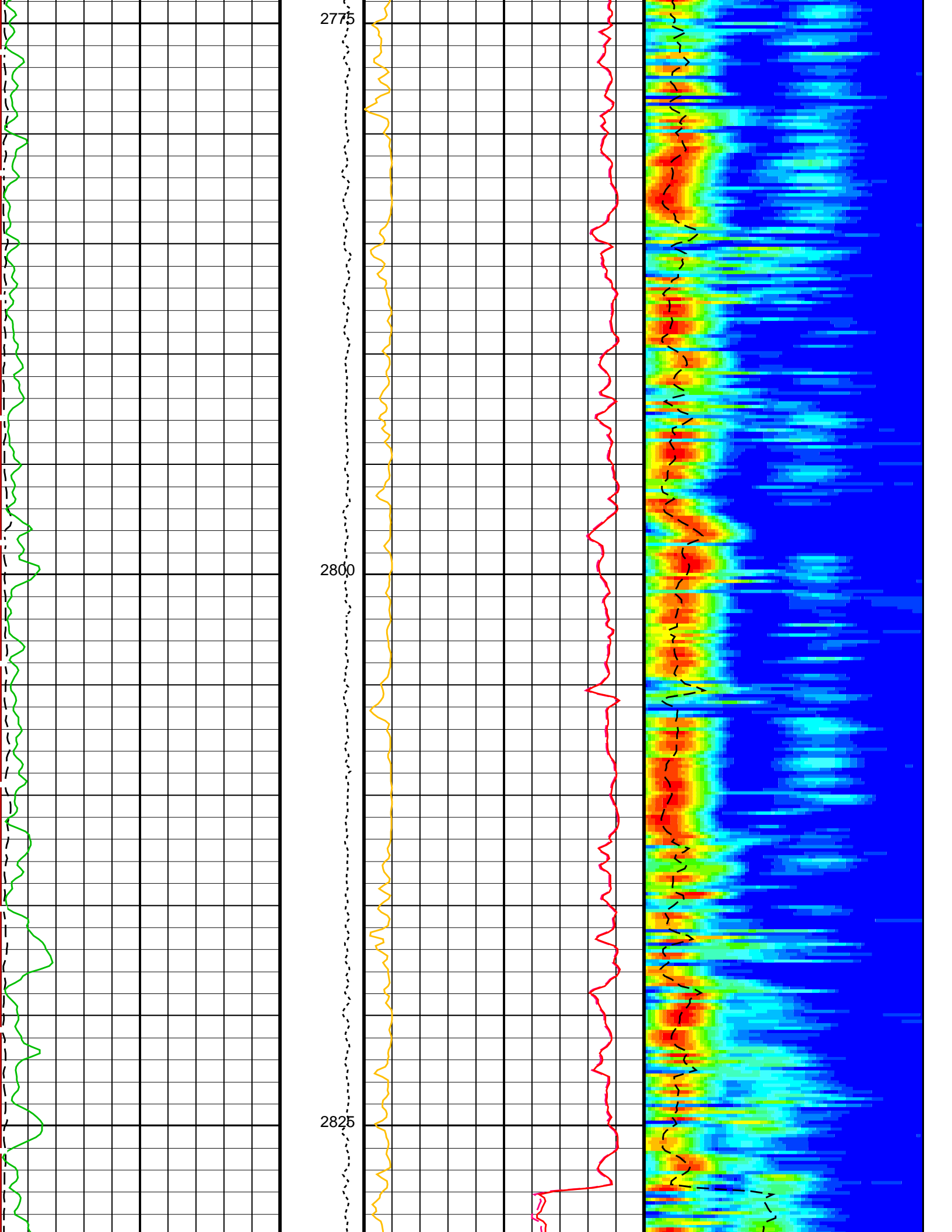


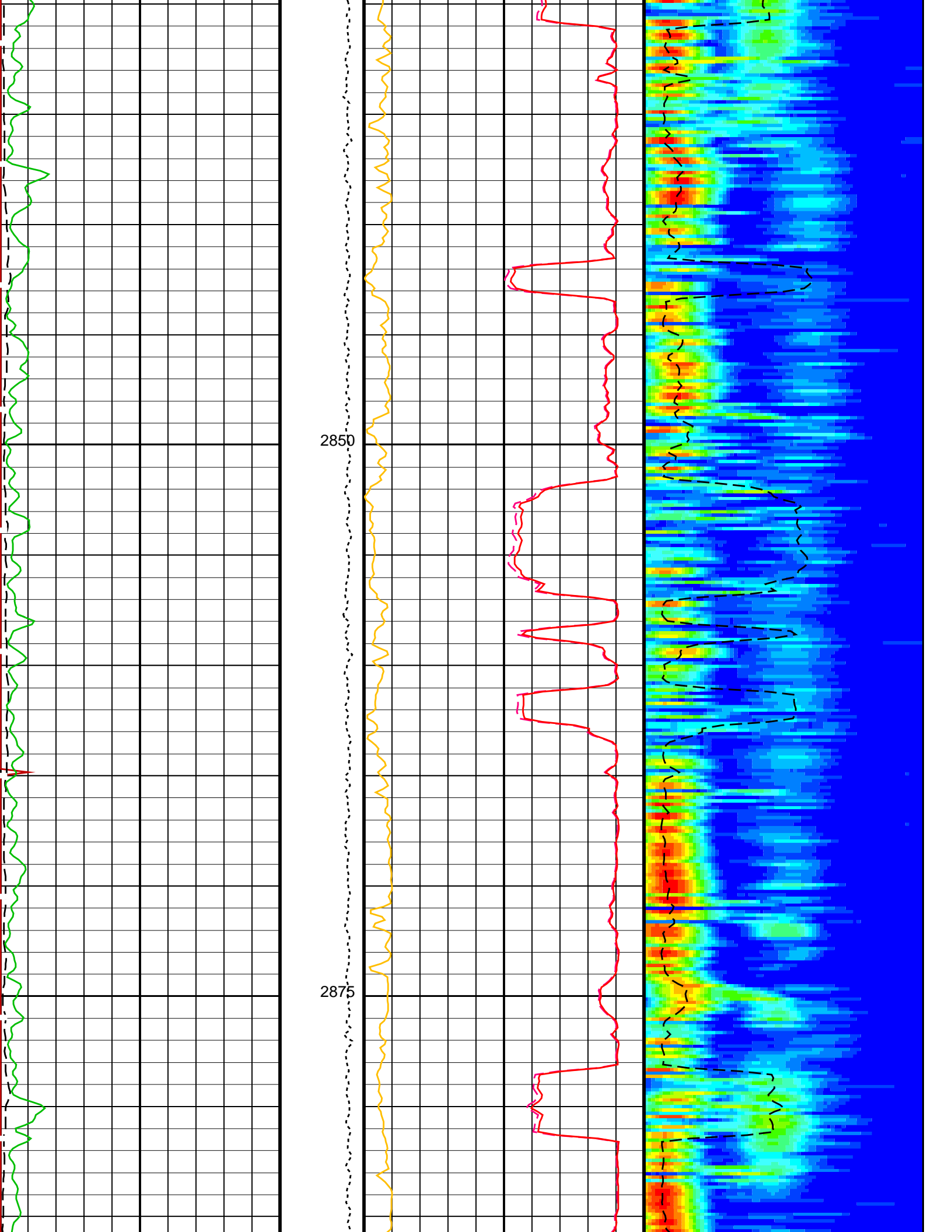


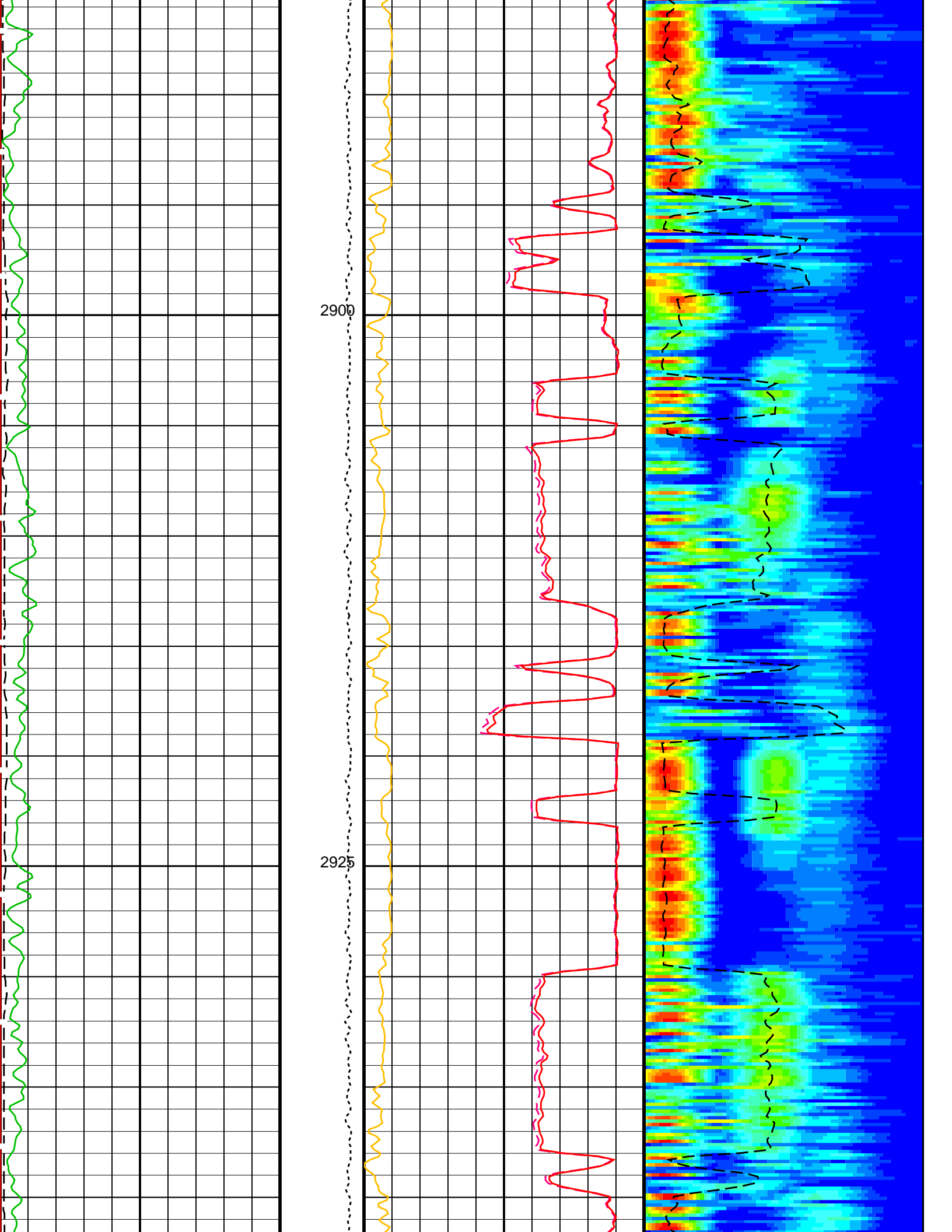


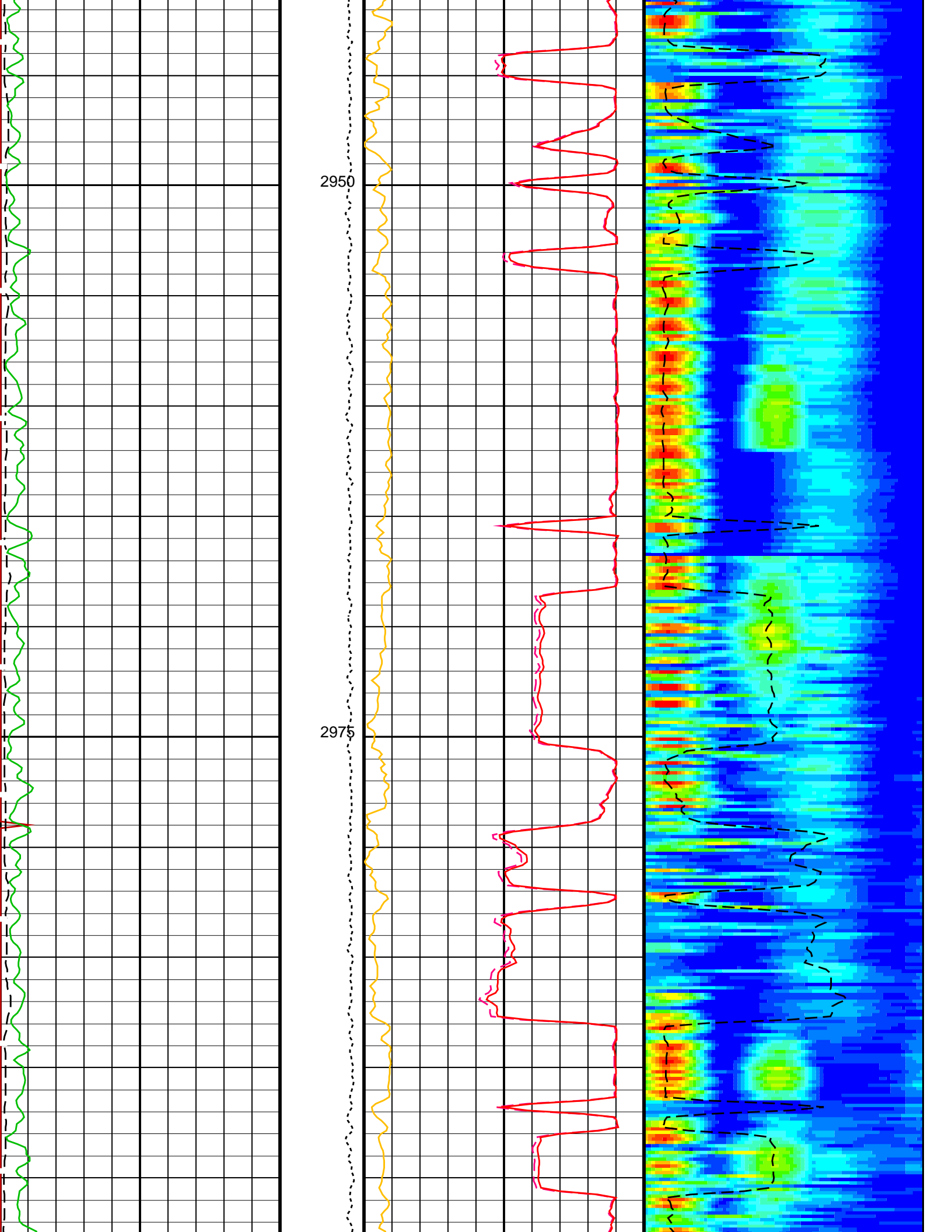


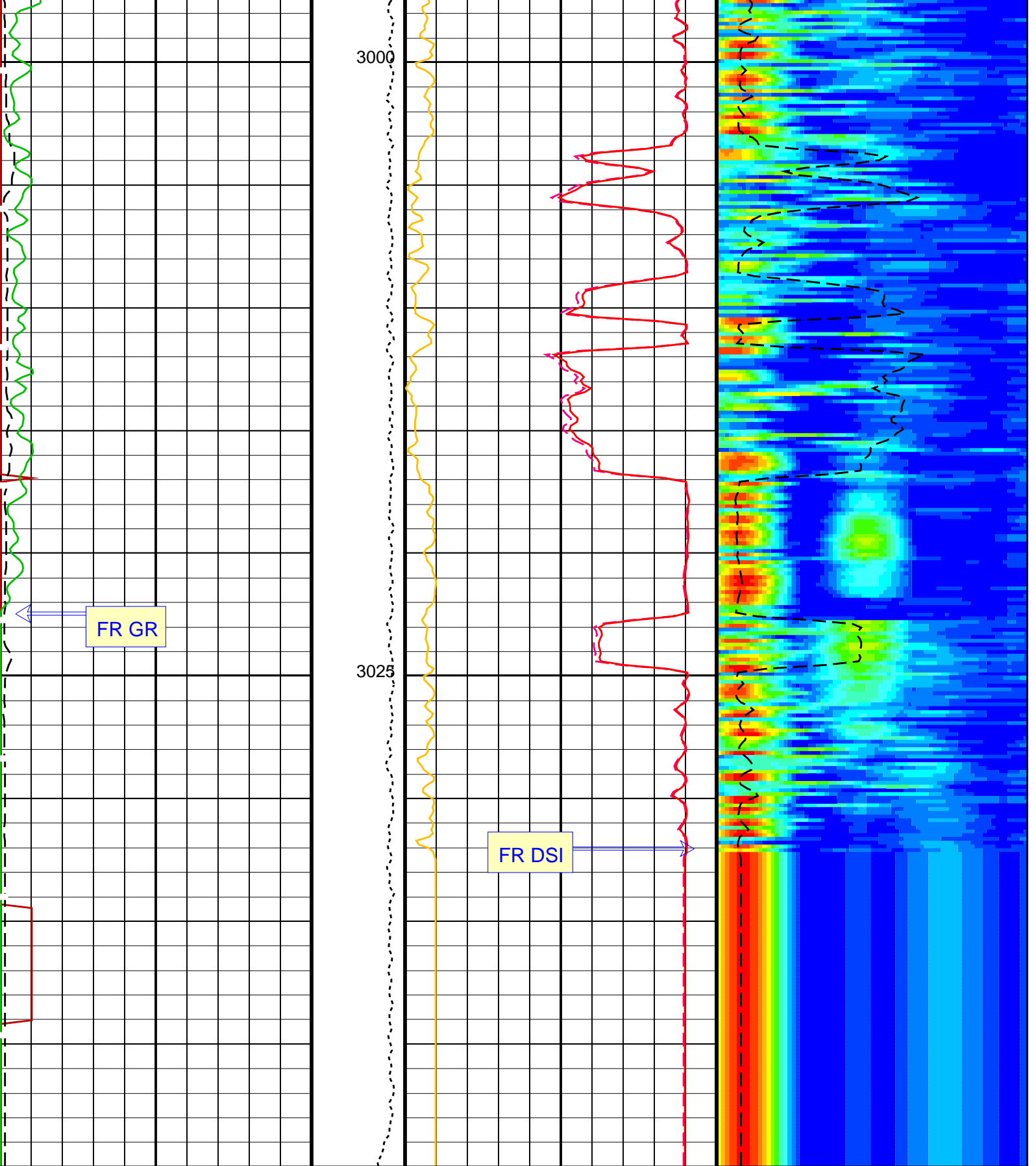






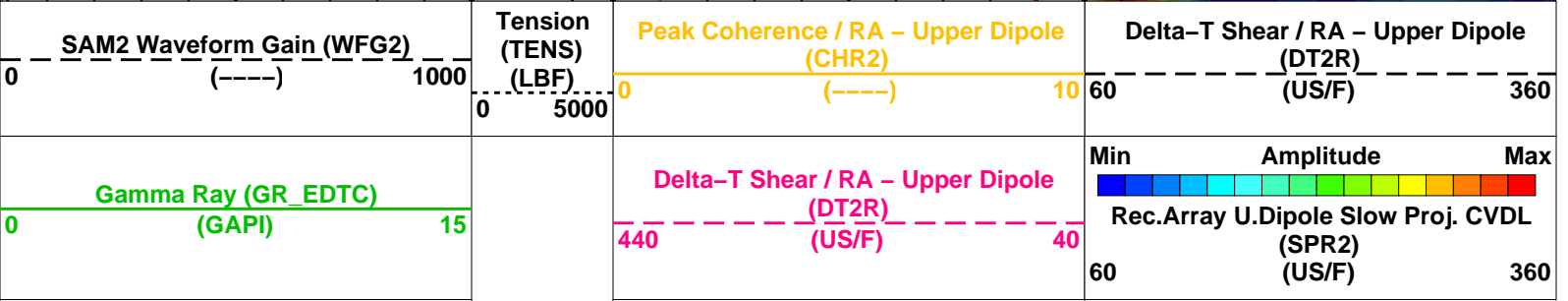






FR GR

FR DSI



PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
DSST-B: Dipole Shear Imager - B			
DDE2	Digitizing Delay 2	0	US
DDEX	Digitizing Delay X	0	US
DLCS	Label Compressional Source - Dipole Shear	USE	
DSHL	Label Slowness Lower Limit - Dipole Shear	75	US/F
DSHU	Label Slowness Upper Limit - Dipole Shear	360	US/F
DSI2	Digitizer Sample Interval 2	40	US
DSIX	Digitizer Sample Interval X	40	US
DTCS	Compressional Delta-T Source for DTCO Channel	PS_COMP	
DWC2	Digitizer Word Count 2	512	
DWCX	Digitizer Word Count X	512	
NWI2	Number Waveform Items 2	8	
NWIX	Number Waveform Items X	32	
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
SAM2	DSST Sonic Acquisition Mode 2 - Upper Dipole Mode	ODD	
SAMX	DSST Sonic Acquisition Mode X - Both Dipoles or Monopole Mode for Expert	BCR	
SAS2	STC Sonic Array Status - Upper Dipole	255	
SBO2	STC Search Band Offset - Upper Dipole	3000	US
SBW2	STC Search Bandwidth - Upper Dipole	8000	US
SFC2	STC Formation Character - Upper Dipole	SELECTABLE	
SFM2	STC Filter - Upper Dipole	B1-3K	
SLL2	STC Slowness Lower Limit - Upper Dipole	60	US/F
SST2	STC Slowness Step - Upper Dipole	4	US/F
SSW2	STC Source Waveform - Upper Dipole	WF_SAM2	
SUL2	STC Slowness Upper Limit - Upper Dipole	360	US/F
SWD2	STC Slowness Width - Upper Dipole	40	US/F
TBF2	STC Time for Baseline Fill - Upper Dipole	0	US
TLL2	STC Time Lower Limit - Upper Dipole	600	US
TST2	STC Time Step - Upper Dipole	200	US
TUL2	STC Time Upper Limit - Upper Dipole	10960	US
TWD2	STC Time Width - Upper Dipole	2000	US
TWI2	STC Integration Time Window - Upper Dipole	1600	US
TWSX	Transmitter Waveform Select X	0	
UTXG	Upper Dipole Transmitter Geometry	162	IN
WFM2	Waveform Mode 2	W1	
System and Miscellaneous			
DO	Depth Offset for Playback	4.4	M
PP	Playback Processing	NORMAL	

Format: DSST_UPPER_DIPOLE_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 25-Feb-2012 06:18

OP System Version: 19C0-187

GPIT-A/B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	EDTC-B	19C0-187

Input DLIS Files

DEFAULT	DSI_037LUP	FN:36	PRODUCER	25-Feb-2012 05:42	3040.5 M	2321.8 M
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Output DLIS Files

DEFAULT	DSI_028PUP	FN:15	PRODUCER	25-Feb-2012 06:18
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MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Enhanced DTS Cartridge Wellsite Calibration – EDTC Accelerometer Calibration							
Before: 23–Feb–2012 11:41							
EDTC Z–Axis Acceleration	9.810	N/A	9.784	N/A	N/A	N/A	M/S2
Enhanced DTS Cartridge Wellsite Calibration – Detector Calibration							
Before: 23–Feb–2012 11:36 After: 25–Feb–2012 12:59							
Gamma Ray (Jig – Bkg)	156.5	N/A	156.5	158.5	2.013	14.23	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	167.1	2.122	15.00	GAPI

Enhanced DTS Cartridge / Equipment Identification

Primary Equipment:


EDTC Gamma Ray Detector	EDTG – A/B	77693
Enhanced DTS Cartridge	EDTC – B	8529

Auxiliary Equipment:

EDTC Housing	EDTH – B	8528
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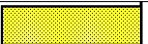





Enhanced DTS Cartridge Wellsite Calibration

EDTC Accelerometer Calibration

Phase	EDTC Z–Axis Acceleration M/S2	Value
Before		9.784
	9.610 (Minimum) 9.810 (Nominal) 10.01 (Maximum)	
Before: 23–Feb–2012 11:41		

Enhanced DTS Cartridge Wellsite Calibration

Detector Calibration

Phase	Gamma Ray Background GAPI	Value	Phase	Gamma Ray (Jig – Bkg) GAPI	Value	Phase	Gamma Ray (Calibrated) GAPI	Value
Before		3.372	Before		156.5	Before		165.0
After		2.808	After		158.5	After		167.1
	0 (Minimum) 30.00 (Nominal) 120.0 (Maximum)			142.3 (Minimum) 156.5 (Nominal) 170.8 (Maximum)			150.0 (Minimum) 165.0 (Nominal) 180.0 (Maximum)	
Before: 23–Feb–2012 11:36			After: 25–Feb–2012 12:59					

Company: Lamont Doherty Earth Observatory

Well: Expedition 340T, Site U1309D

Field: Atlantis Massif

Rig: IOIDES Resolution

Rig: **JOIDES Resolution**

Country: **USA**

Dipole Shear Sonic Tool
Upper Dipole