

COMPANY: Lamont Doherty

WELL: ODP Leg 189, Site 1168 (WT-1A)

FIELD: Tasmanian Seaway, West Tasmania Site

COUNTRY: Offshore STATE: Indian Ocean

COUNTY: Offshore
 Field: Tasmanian Seaway, West Tasm
 Location:
 Well: ODP Leg 189, Site 1168 (WT-1A)
 Company: Lamont Doherty

Schlumberger		Dipole Sonic Upper Dipole Shear, Gamma Ray	
LOCATION		Elev.: K.B. 11.2 M. G.L. -2474 M. D.F. 10.9 M.	
Permanent Datum:	MSL	Elev.: 0 M.	
Log Measured From:	RKB	11.2 M. above Perm. Datum	
Drilling Measured From:	RKB		
API Serial No.		LATITUDE: 42° 36.58' S	RIG: JOIDES Resolution
		LONGITUDE: 144° 24.76' E	

	Run 1	Run 2	Run

Logging Date	24-MAR-2000		
Run Number	One		
Depth Driller	3357.7 M.		
Schlumberger Depth	3204 M.		
Bottom Log Interval	3180 M.		
Top Log Interval	2574 M.		
Casing Driller Size @ Depth	0.000 in	@	8444.88 ft
Casing Schlumberger	2574 M.		
Bit Size	9.875 in		
Type Fluid In Hole	Salt Water Base		
Density	8.51234 lbm/gal		
Fluid Loss	PH		
Source Of Sample	Salt water		
RM @ Measured Temperature	0.216 ohm.m	@	62 degF
RMF @ Measured Temperature		@	
RMC @ Measured Temperature		@	
Source RMF	RMC		
RM @ MRT	0.171 @ 80		@ 80
Maximum Recorded Temperatures	80 degF		
Circulation Stopped	23-MAR-2000	Time	6:30
Logger On Bottom	24-MAR-2000	Time	4:28
Unit Number	99	Location	Houston OS
Recorded By	Kerry M. Swain		
Witnessed By	Patrick Fothergill, Ulysses S. Nimmemann		

Logging Date			
Run Number			
Depth Driller			
Schlumberger Depth			
Bottom Log Interval			
Top Log Interval			
Casing Driller Size @ Depth		@	
Casing Schlumberger			
Bit Size			
Type Fluid In Hole			
Density			
Fluid Loss			
Source Of Sample			
RM @ Measured Temperature		@	
RMF @ Measured Temperature		@	
RMC @ Measured Temperature		@	
Source RMF			
RM @ MRT		@	
Maximum Recorded Temperatures			
Circulation Stopped		Time	
Logger On Bottom		Time	
Unit Number		Location	
Recorded By			
Witnessed By			

ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS AND WE CANNOT, AND DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATIONS, AND WE SHALL NOT, EXCEPT IN THE CASE OF GROSS OR WILLFUL NEGLIGENCE ON OUR PART, BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COSTS, DAMAGES OR EXPENSES INCURRED OR SUSTAINED BY ANYONE RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR OFFICERS, AGENTS OR EMPLOYEES. THESE INTERPRETATIONS ARE ALSO SUBJECT TO CLAUSE 4 OF OUR GENERAL TERMS AND CONDITIONS AS SET OUT IN OUR CURRENT PRICE SCHEDULE.

OTHER SERVICES1
 OS1: GHMT
 OS2: DITE/HLDS/APS/HNGS
 OS3:
 OS4:
 OS5:

OTHER SERVICES2
 OS1:
 OS2:
 OS3:
 OS4:
 OS5:

REMARKS: RUN NUMBER 1
 Hole cored with APC/XCB.
 Sea Floor at 2475.5 MBRF.
 Log presented in Meters below rig floww (MBRF).
 Lamont Temperature Tool (TAP) run on DITE/HLDS/APS/HNGS only.
 Toolstring- GHMT/NGTC/DSSTB.
 Wireline Heave Compensator was used on all descents.
 Sepiolite mud was used to displace the hole.
 Drillers TD- 3357.7 MBRF.
 Loggers TD- 3351 MBRF.
 Drill Pipe Logger- 2574 MBRF.
 GHMT/NGT/DSI was unable to get below ledge at 3204 MBRF.
 A conditioning trip was made before running GHMT/NGT/DSI.
 2 Descents were attempted with the GHMT/NGT/DSI to get below 3204 MBRF.
 After the last attempt, additional logging was cancelled.

REMARKS: RUN NUMBER 2

RUN 1		
SERVICE ORDER #:	PROGRAM VERSION:	FLUID LEVEL:
	9C1-303	
LOGGED INTERVAL	START	STOP

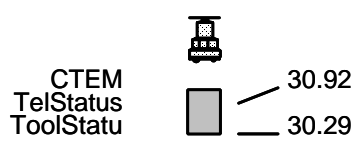
RUN 2		
SERVICE ORDER #:	PROGRAM VERSION:	FLUID LEVEL:
LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1
SURFACE EQUIPMENT
 GSR-U
 WITM (DTS)-A

RUN 2

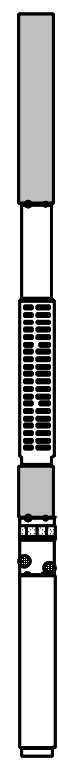
RUN 1
DOWNHOLE EQUIPMENT
 LEH-QT 32.09
 LEH-QT
 DTC-H 31.20
 ECH-KC 8253
 AH-CMEAY 30.29
 AH-CMEAY 765



AH-CMEAY 764

DSST-B
SPAC-B 18
ECH-SD 18
SMDR-BD 8070
SSIJ-BA 65
SMDX-AA 8026

29.00



PWF 13.45

AH-CMEAY
AH-CMEAY 764

13.45



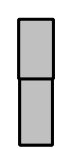
DTA-A
ECH-KE 8261
DTA-A 8261

12.16



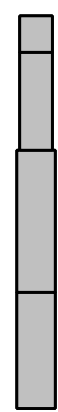
NGT-C
NGD-A 1736
NGH-B 3
NGC-C 1921
NGCH-A 752

Detector 10.56 10.94



GHMT-A
GHMC-B 701
ECH-MBA 701
NMTE-C 703
SUMS-B 702
NMRS-C 702

8.33



SUMS 4.08

NMRS 1.07

BNS-CCS

STATUS HV DF
Tension 0.00

0.14

TOOL ZERO

MAXIMUM STRING DIAMETER 4.00 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Input DLIS Files

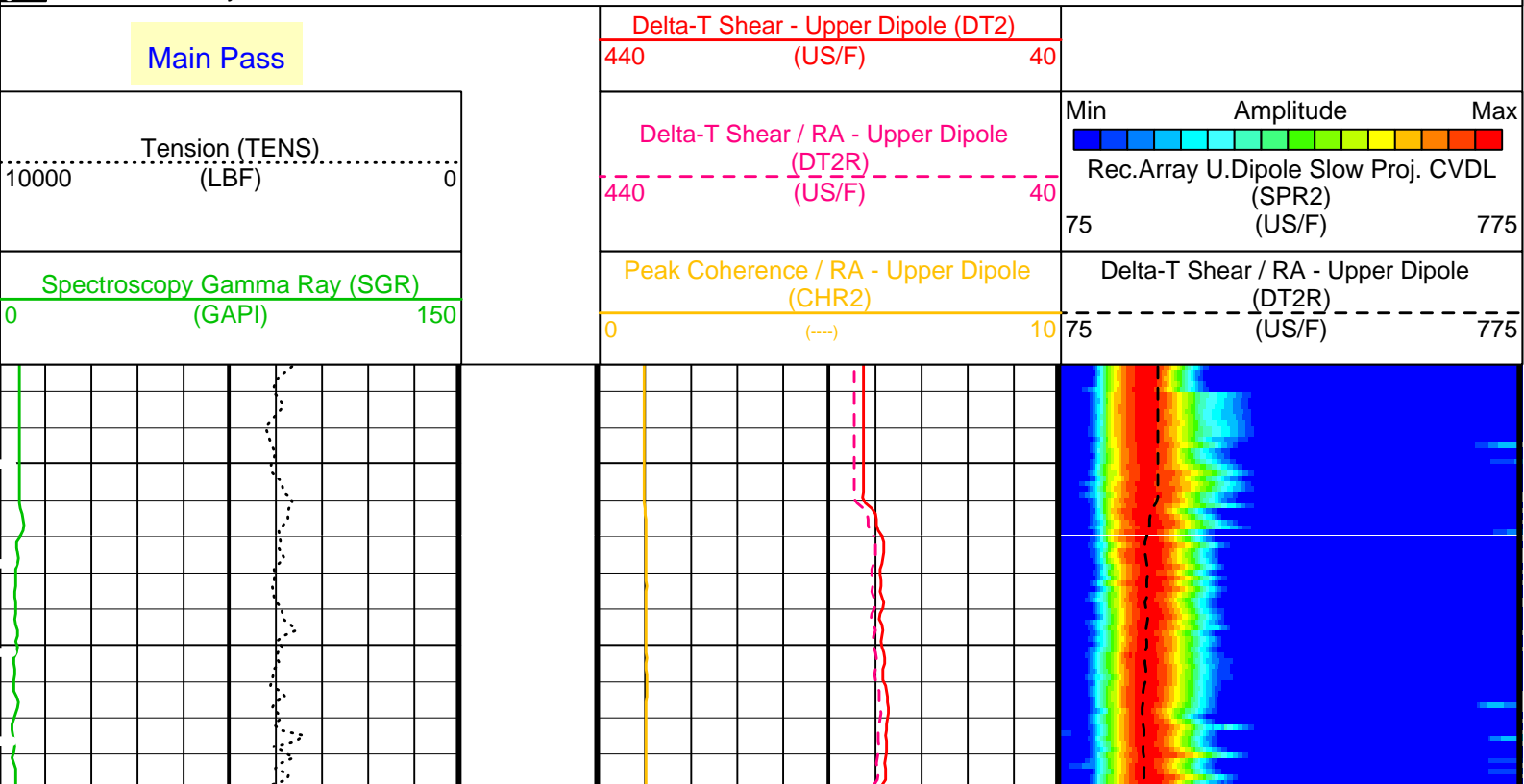
DEFAULT GHMT .044 FN:49 PRODUCER 25-Mar-2000 16:49 3206.6 M 2557.3 M

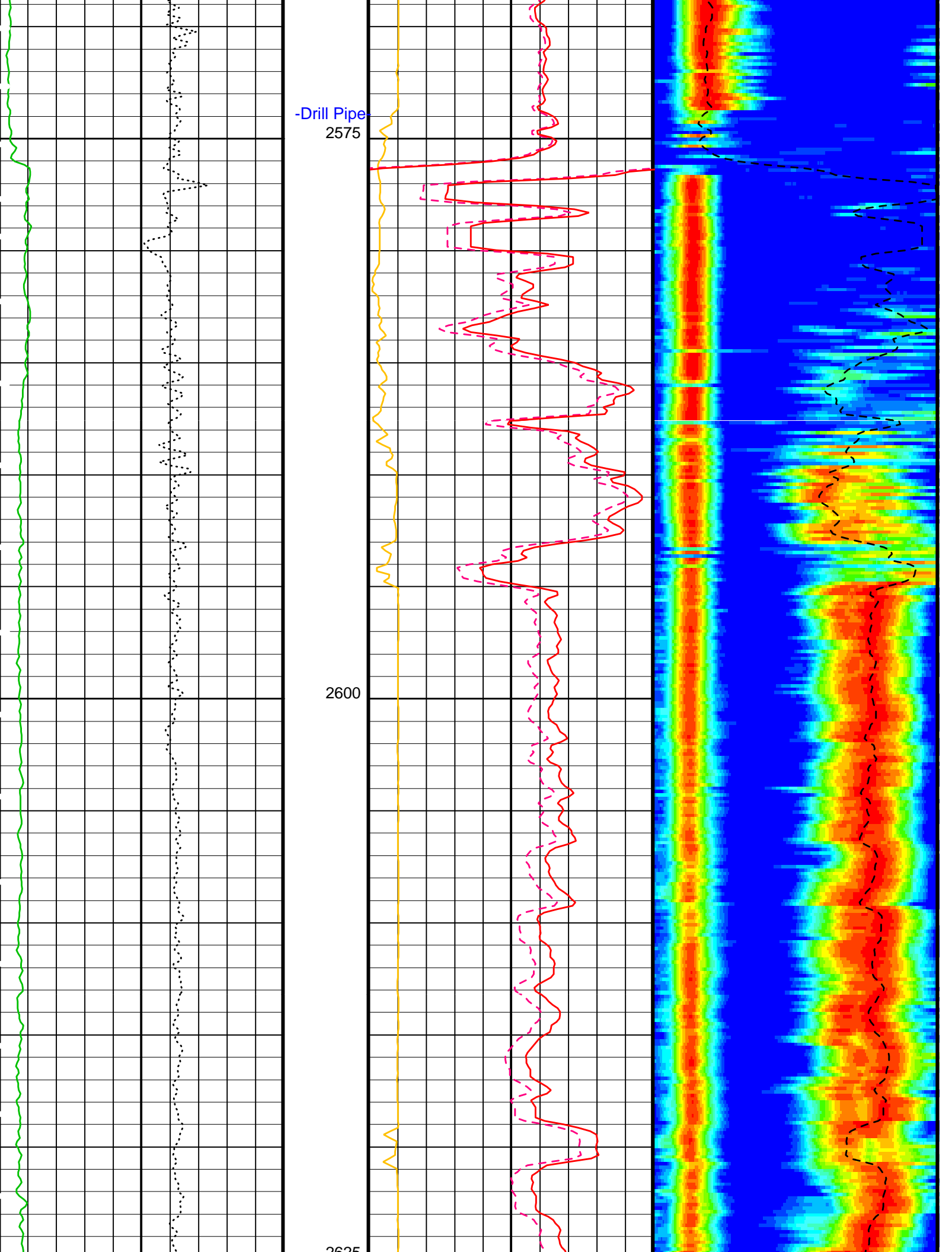
OP System Version: 9C1-303 MCM

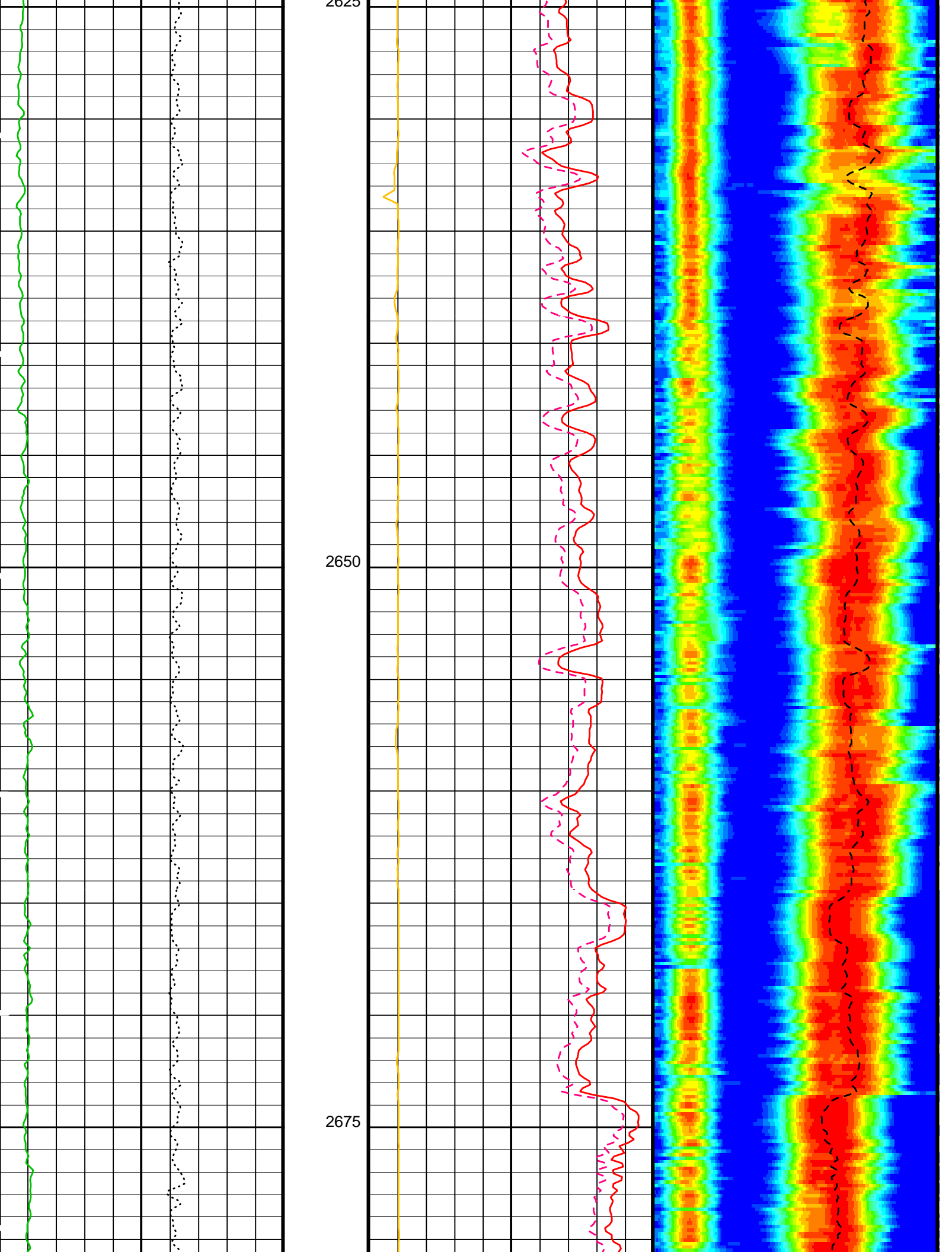
GHMT-A	9C1-303	NGT-C	9C1-303
DTA-A	9C1-303	DSST-B	9C1-303
DTC-H	9C1-303		

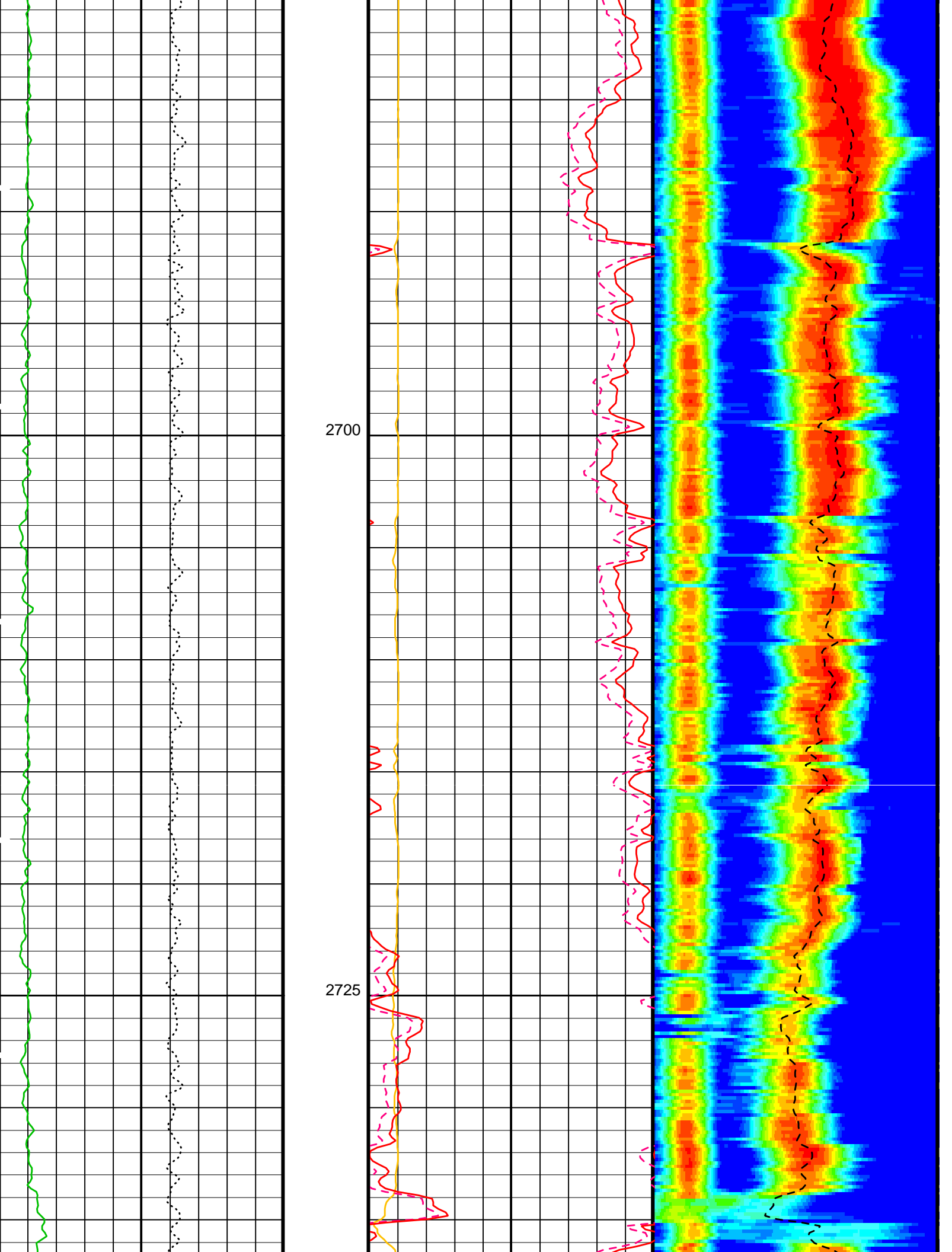
PIP SUMMARY

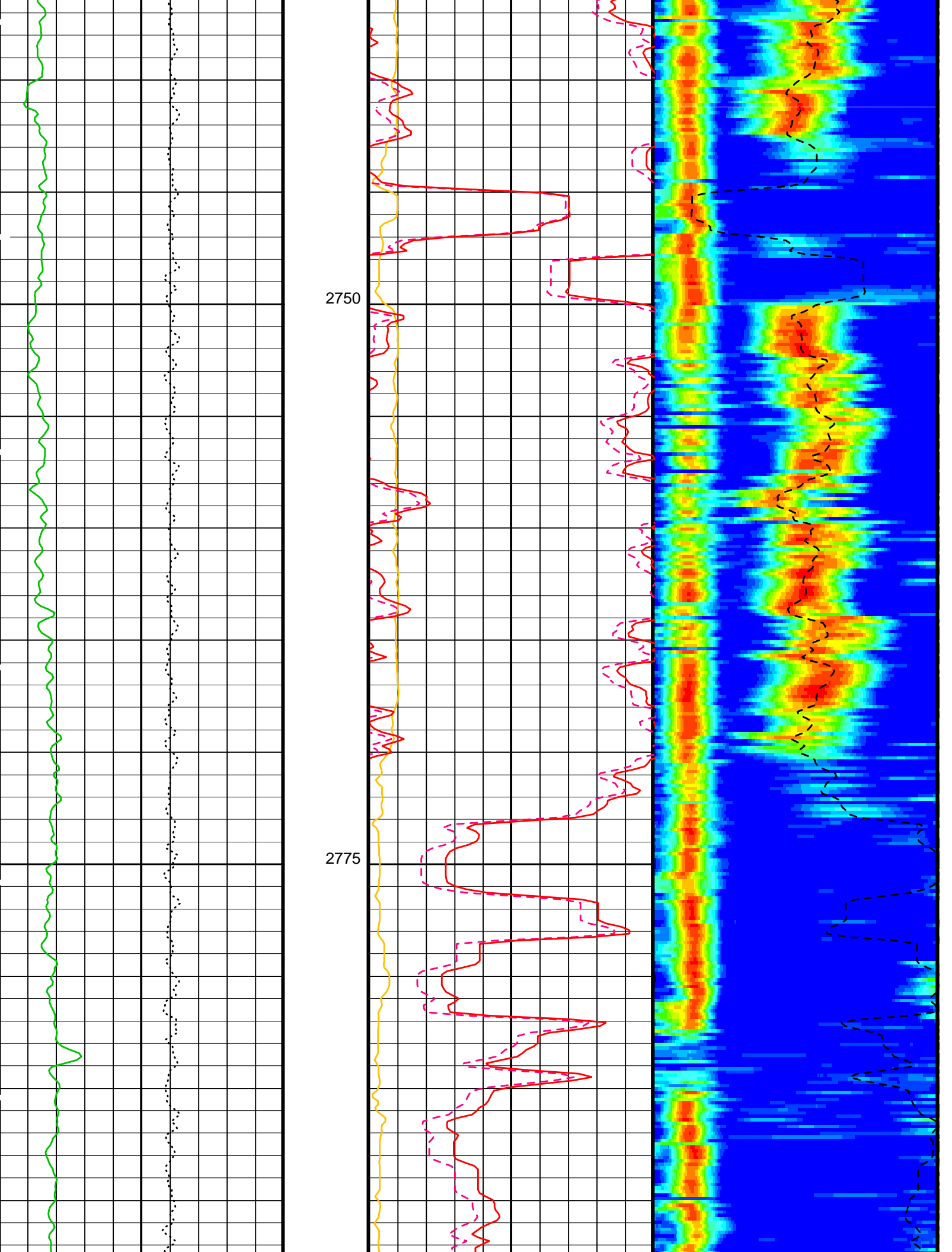
Time Mark Every 60 S

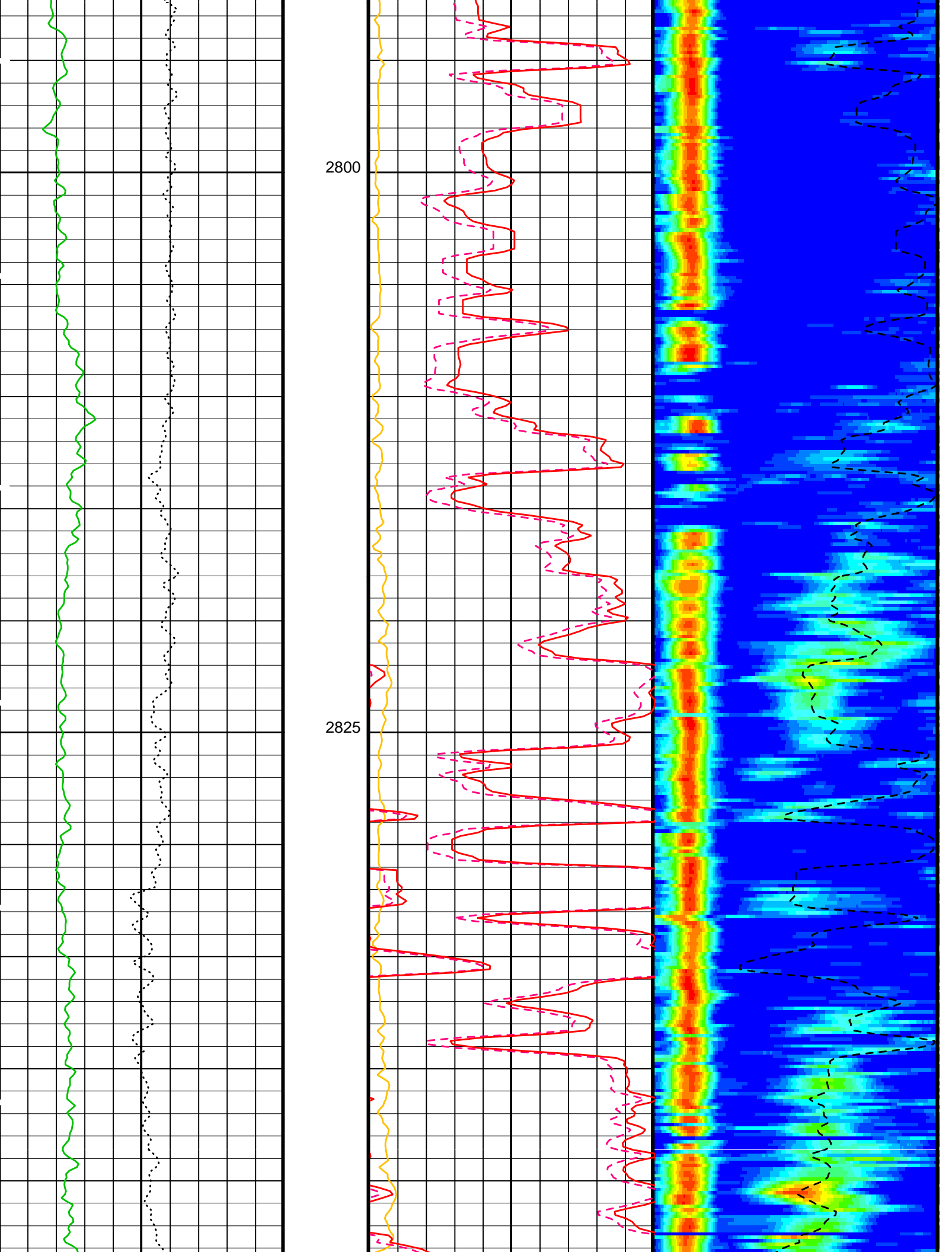


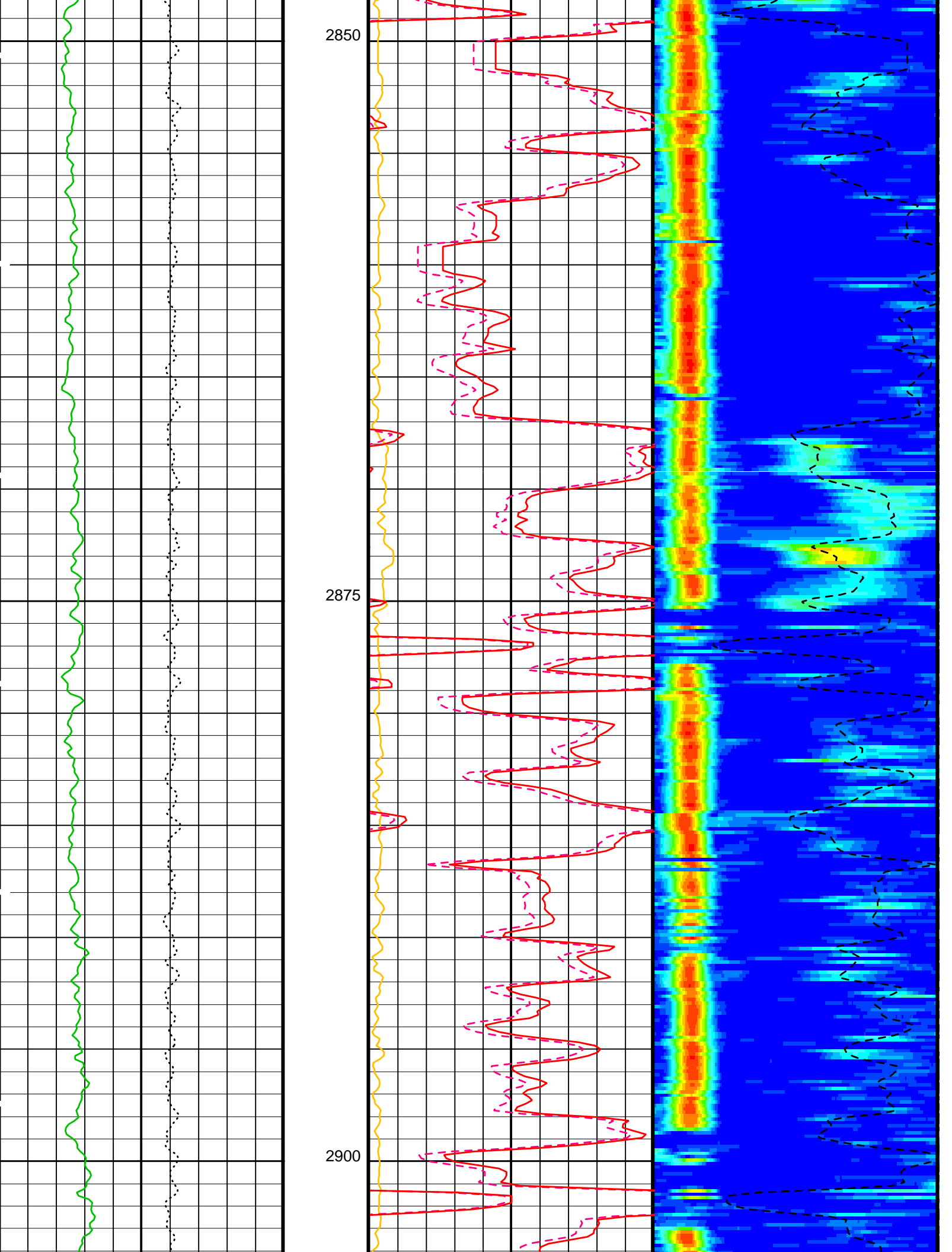


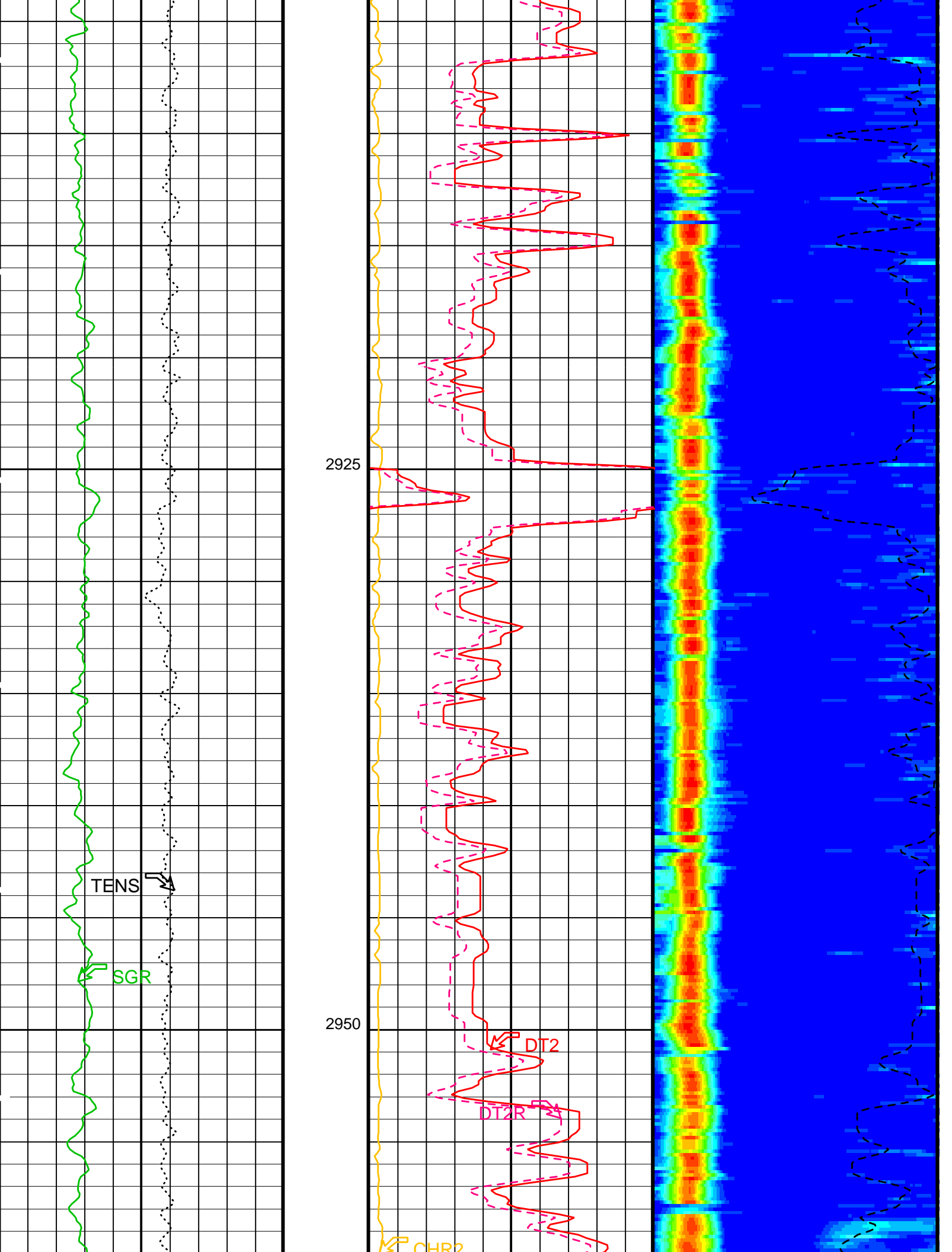


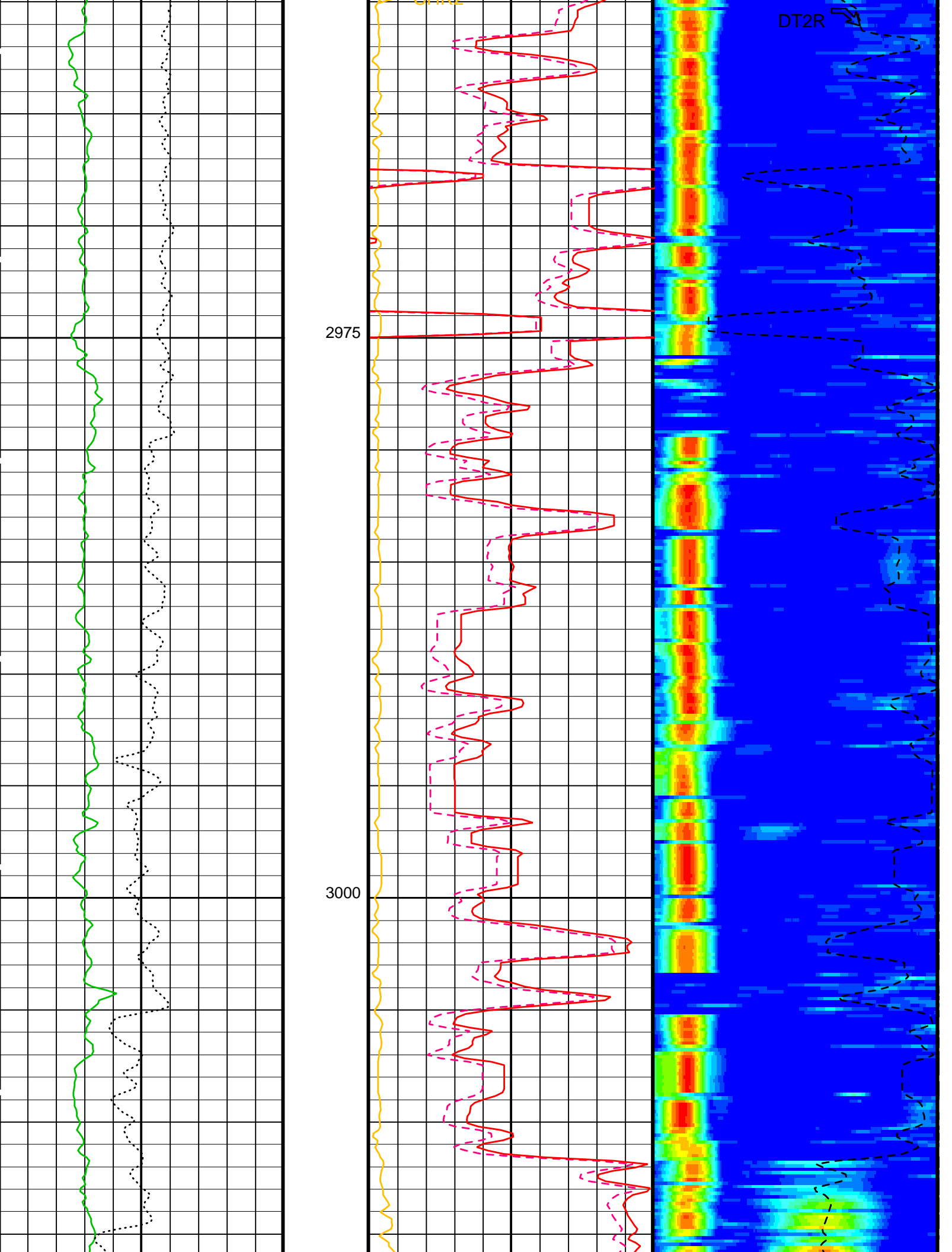


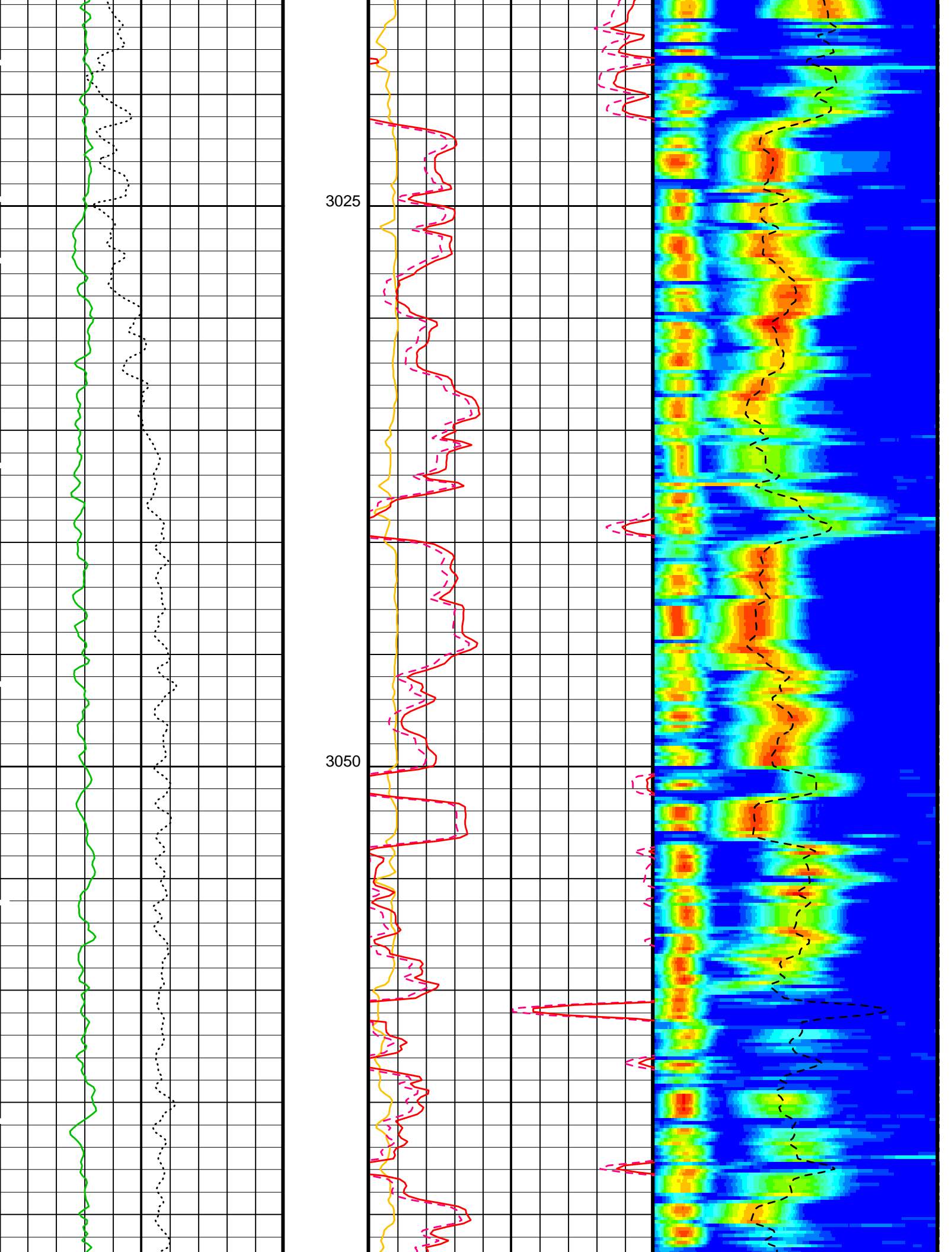


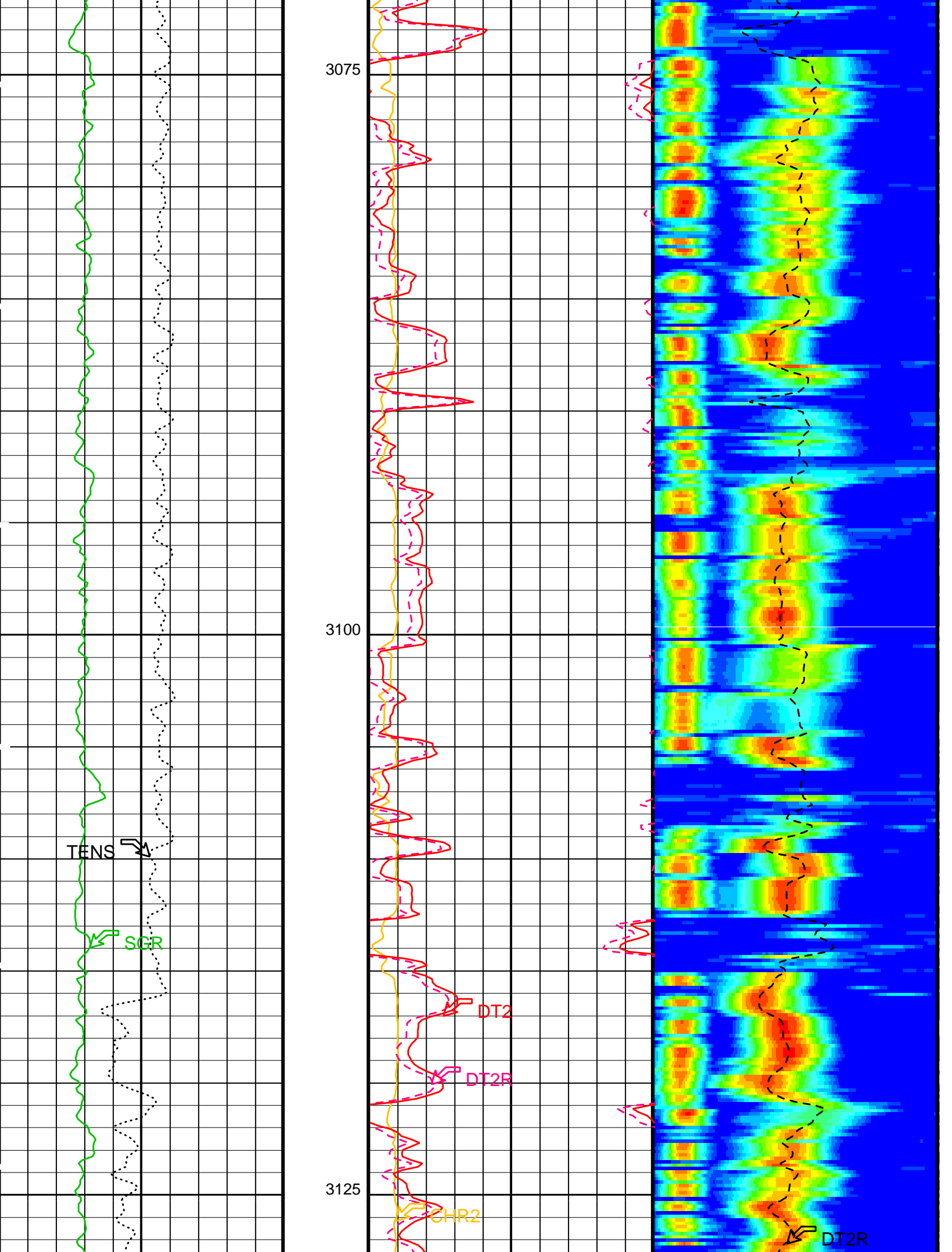


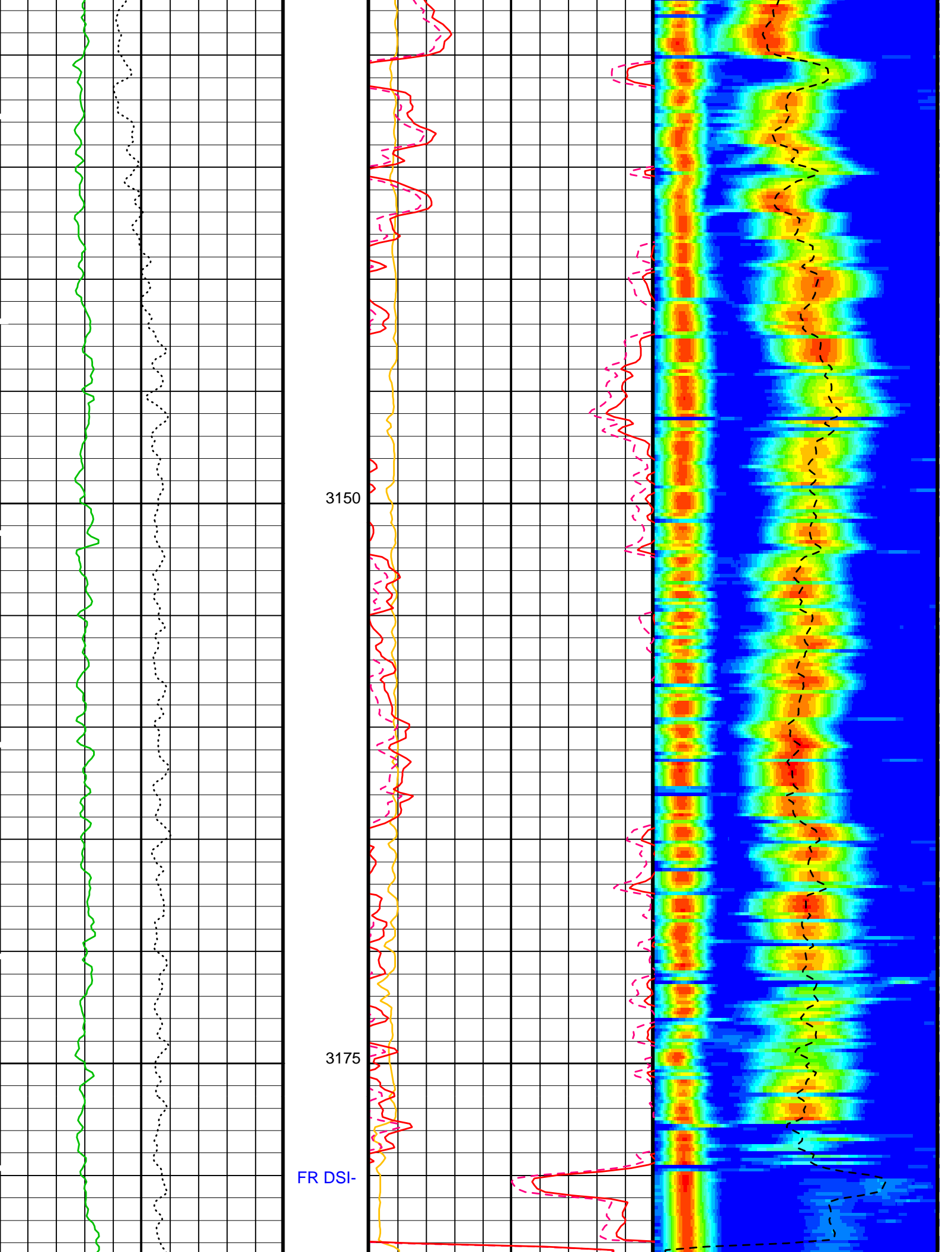








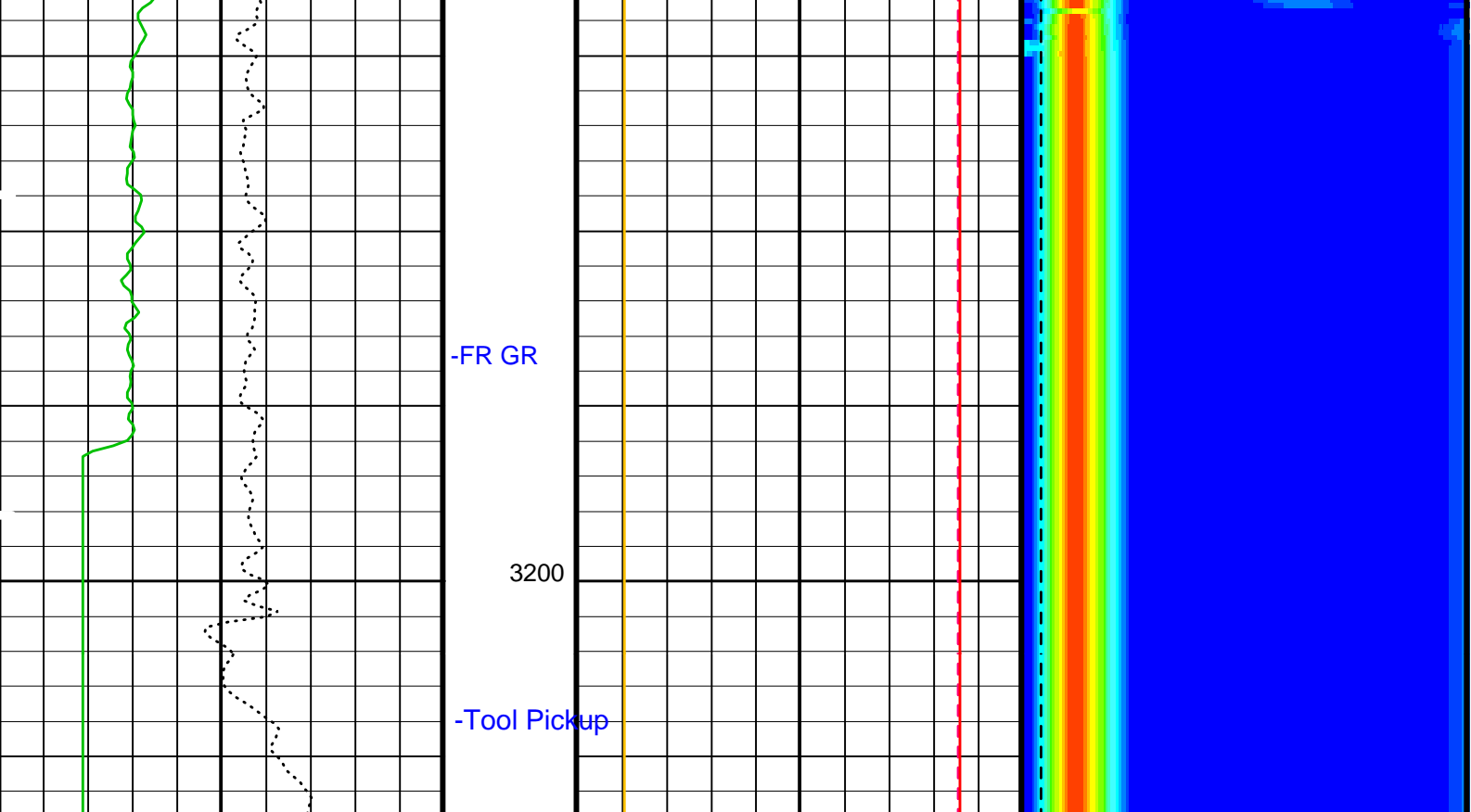


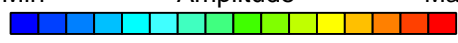


3150

3175

FR DSI-



<p>Spectroscopy Gamma Ray (SGR) 0 (GAPI) 150</p> <p>Tension (TENS) 10000 (LBF) 0</p> <p>Main Pass TD not reached</p>	<p>Peak Coherence / RA - Upper Dipole (CHR2) 0 (---) 10</p> <p>Delta-T Shear / RA - Upper Dipole (DT2R) 440 (US/F) 40</p> <p>Delta-T Shear - Upper Dipole (DT2) 440 (US/F) 40</p>	<p>Delta-T Shear / RA - Upper Dipole (DT2R) 75 (US/F) 775</p> <p>Min Amplitude Max  Rec.Array U.Dipole Slow Proj. CVDL (SPR2) 75 (US/F) 775</p>
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PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
BS	Bit Size	9.875	IN
CBAR	Constant Barite	1	
CGMI	Spectro Computed Gamma Ray Minimum	0	GAPI
CGSH	Spectro Computed Gamma Ray Shale	100	GAPI
DDE2	Digitizing Delay 2	0	US
DDEX	Digitizing Delay X	0	US
DFD	Drilling Fluid Density	8.51	LB/G
DLCS	Label Compressional Source - Dipole Shear	USE	
DO	Depth Offset for Logical Unit 1	0.0	M
DSHL	Label Slowness Lower Limit - Dipole Shear	75	US/F
DSHU	Label Slowness Upper Limit - Dipole Shear	775	US/F
DSI2	Digitizer Sample Interval 2	40	US
DSIX	Digitizer Sample Interval X	40	US
DTCS	Compressional Delta-T Source for DT2R Channel	PS_COMP	
DWC2	Digitizer Word Count 2	512	
DWCX	Digitizer Word Count X	512	
KMIN	Potassium Minimum	0	
KSHA	Potassium Shale	0.02	
NFO	NGT Filtering Option	KALMAN	
PMUD	Potassium Mud	0	%
PP	Playback Processing	OFF	
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	OFF	
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	
SGMI	Spectro Gamma Ray Minimum	0	GAPI
SGSH	Spectro Gamma Ray Shale	100	GAPI
SLL2	STC Slowness Lower Limit - Upper Dipole	75	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	775	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
TMIN	Thorium Minimum	0	PPM
TSHA	Thorium Shale	12	PPM
TST2	STC Time Step - Upper Dipole	200	US
TUL2	STC Time Upper Limit - Upper Dipole	15525	US
TWD2	STC Time Width - Upper Dipole	2000	US
TWI2	STC Integration Time Window - Upper Dipole	1600	US
TWSX	Transmitter Waveform Select X	0	
UMIN	Uranium Minimum	0	PPM
USHA	Uranium Shale	3	PPM
UTXG	Upper Dipole Transmitter Geometry	162	IN

Format: DSST_UPPER_DIPOLE_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 25-Mar-2000 17:45

OP System Version: 9C1-303

MCM

GHMT-A	9C1-303	NGT-C	9C1-303
DTA-A	9C1-303	DSST-B	9C1-303
DTC-H	9C1-303		

Input DLIS Files

DEFAULT	GHMT .044	FN:49 PRODUCER	25-Mar-2000 16:49	3206.6 M	2557.3 M
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Input DLIS Files

DEFAULT	GHMT .016	FN:22 PRODUCER	24-Mar-2000 06:14	2850.2 M	2719.4 M
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Output DLIS Files

DEFAULT	GHMT .045	FN:51 PRODUCER	25-Mar-2000 16:55	2850.2 M	2719.4 M
DSIGHMT_CUST	GHMT .045	FN:52 PRODUCER	25-Mar-2000 16:55	2850.2 M	2719.4 M

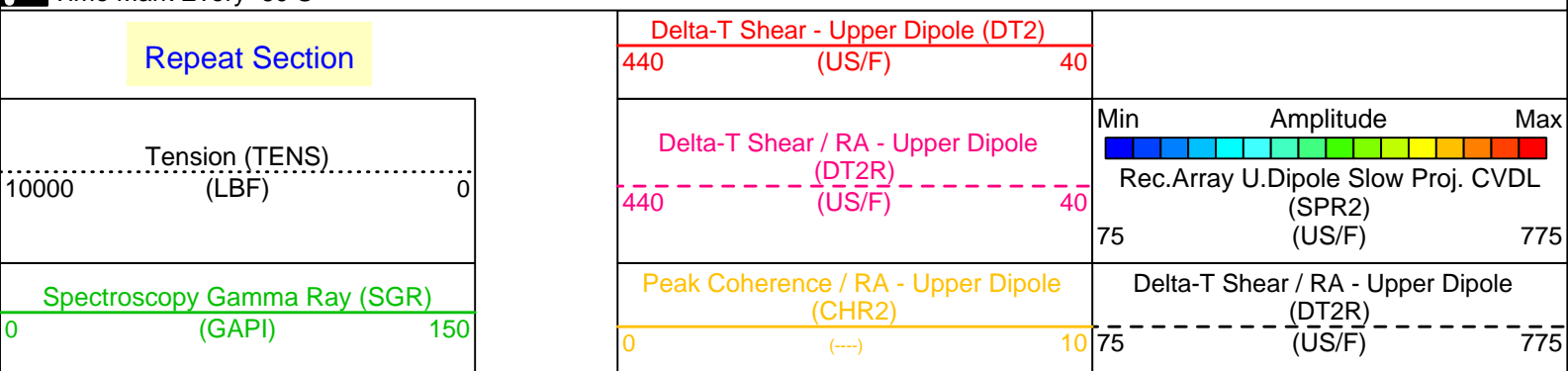
OP System Version: 9C1-303

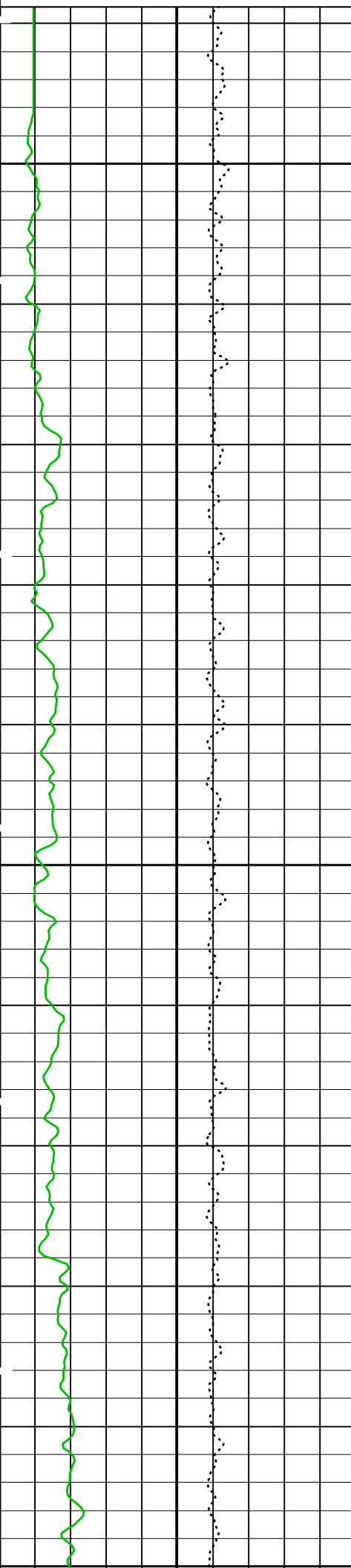
MCM

GHMT-A	9C1-303	NGT-C	9C1-303
DTA-A	9C1-303	DSST-B	9C1-303
DTC-H	9C1-303		

PIP SUMMARY

Time Mark Every 60 S

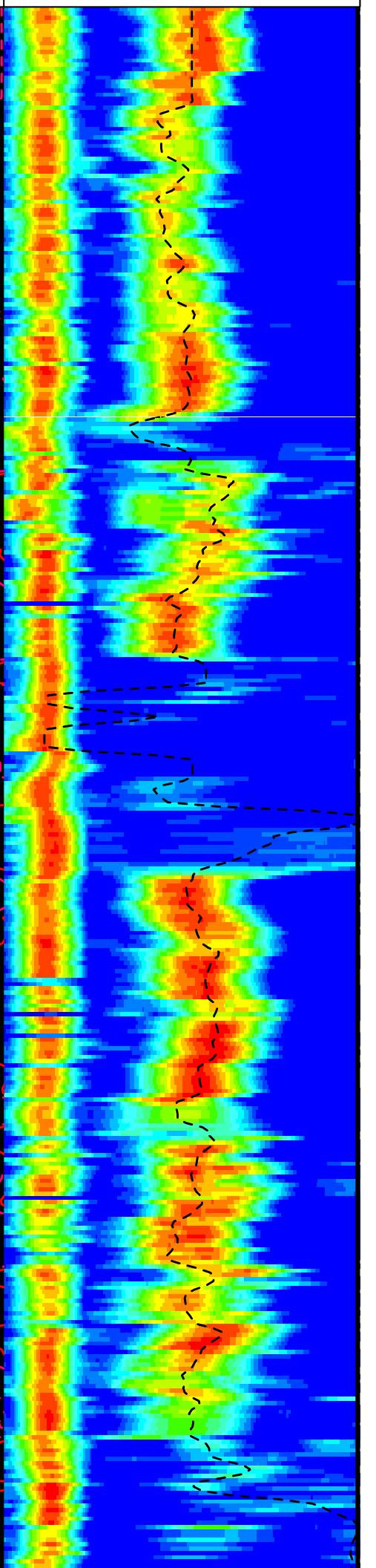
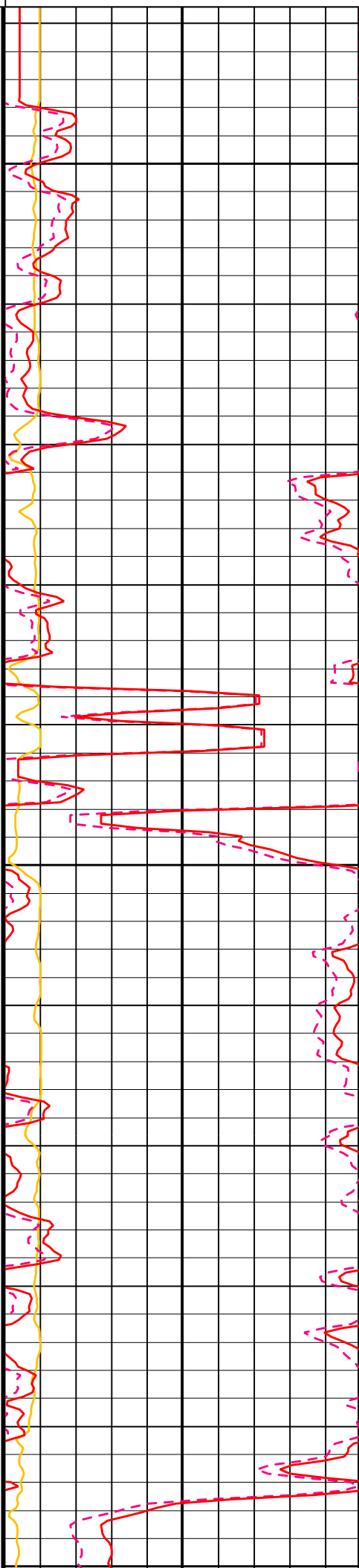


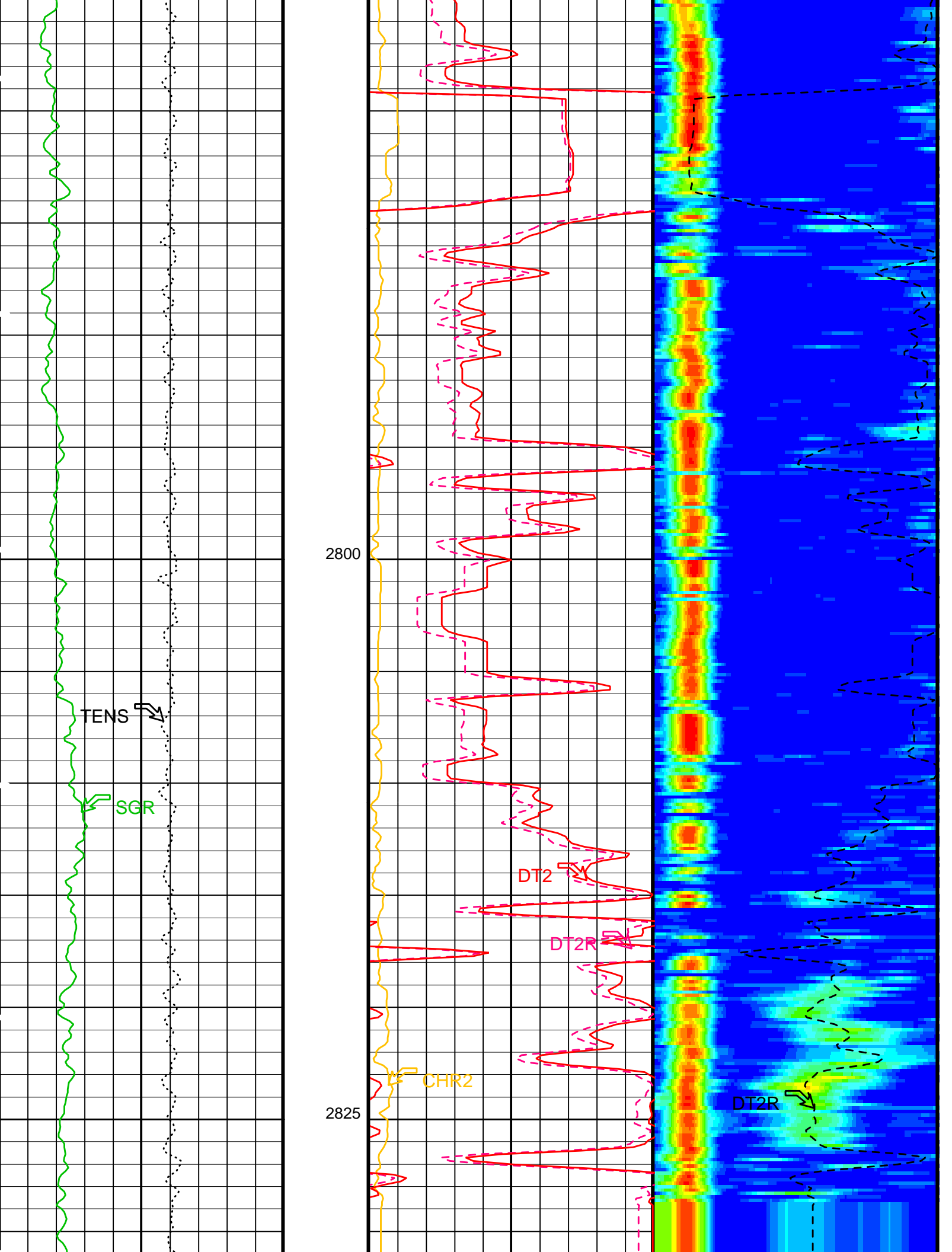


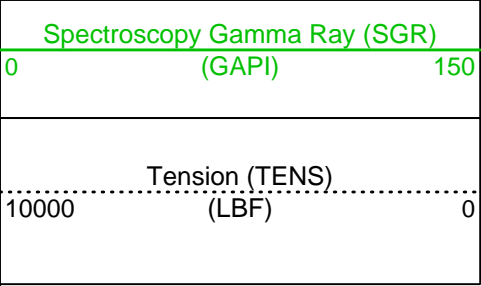
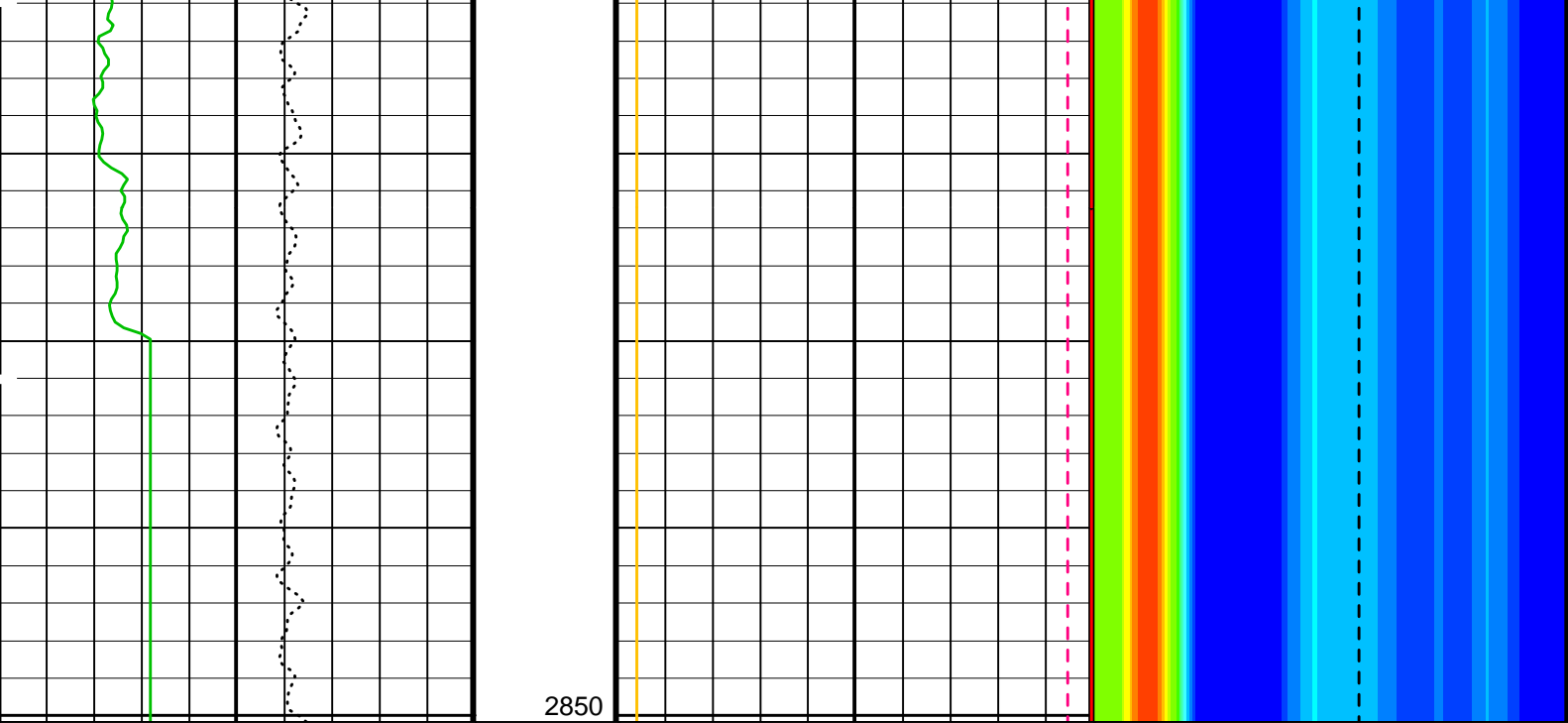
2725

2750

2775







2850

Repeat Section

Peak Coherence / RA - Upper Dipole (CHR2)	
0	10
Delta-T Shear / RA - Upper Dipole (DT2R) (US/F)	
440	40
Delta-T Shear - Upper Dipole (DT2) (US/F)	
440	40

Delta-T Shear / RA - Upper Dipole (DT2R) (US/F)	
75	775
Min	Max
Amplitude	
Rec.Array U.Dipole Slow Proj. CVDL (SPR2) (US/F)	
75	775

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
BS	Bit Size	9.875 IN
CBAR	Constant Barite	1
CGMI	Spectro Computed Gamma Ray Minimum	0 GAPI
CGSH	Spectro Computed Gamma Ray Shale	100 GAPI
DDE2	Digitizing Delay 2	0 US
DDEX	Digitizing Delay X	0 US
DFD	Drilling Fluid Density	8.51 LB/G
DLCS	Label Compressional Source - Dipole Shear	USE
DO	Depth Offset for Logical Unit 1	0.0 M
DSHL	Label Slowness Lower Limit - Dipole Shear	75 US/F
DSHU	Label Slowness Upper Limit - Dipole Shear	775 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
KMIN	Potassium Minimum	0
KSHA	Potassium Shale	0.02
NFO	NGT Filtering Option	KALMAN
PMUD	Potassium Mud	0 %
PP	Playback Processing	RECOMPUTE
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	OFF

SAS2	STC Search 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	
SGMI	Spectro Gamma Ray Minimum	0	GAPI
SGSH	Spectro Gamma Ray Shale	100	GAPI
SLL2	STC Slowness Lower Limit - Upper Dipole	75	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	775	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
TMIN	Thorium Minimum	0	PPM
TSHA	Thorium Shale	12	PPM
TST2	STC Time Step - Upper Dipole	200	US
TUL2	STC Time Upper Limit - Upper Dipole	15525	US
TWD2	STC Time Width - Upper Dipole	2000	US
TWI2	STC Integration Time Window - Upper Dipole	1600	US
TWSX	Transmitter Waveform Select X	0	
UMIN	Uranium Minimum	0	PPM
USHA	Uranium Shale	3	PPM
UTXG	Upper Dipole Transmitter Geometry	162	IN

Format: DSST_UPPER_DIPOLE_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 25-Mar-2000 16:55

OP System Version: 9C1-303			
MCM			
GHMT-A	9C1-303	NGT-C	9C1-303
DTA-A	9C1-303	DSST-B	9C1-303
DTC-H	9C1-303		

Input DLIS Files						
DEFAULT	GHMT .016	FN:22	PRODUCER	24-Mar-2000 06:14	2850.2 M	2719.4 M
Output DLIS Files						
DEFAULT	GHMT .045	FN:51	PRODUCER	25-Mar-2000 16:55		
DSIGHMT_CUST	GHMT .045	FN:52	PRODUCER	25-Mar-2000 16:55		

Calibration and Check Summary							
Measurement	Nominal	Master	Before	After	Change	Limit	Units
Natural Gamma Spectroscopy - C Wellsite Calibration - Background Measurement							
Master: 6-JAN-2000 4:01 Before: 18-MAR-2000 8:16							
WINDOW 1 Background	100.0	11.24	12.46	N/A	N/A	100.0	CPS
WINDOW 2 Background	50.00	2.775	3.522	N/A	N/A	50.00	CPS
WINDOW 3 Background	10.00	0.8498	0.9159	N/A	N/A	10.00	CPS
WINDOW 4 Background	6.000	0.3150	0.3186	N/A	N/A	6.000	CPS
WINDOW 5 Background	10.00	0.4801	0.4875	N/A	N/A	10.00	CPS
SGR Background	30.00	4.096	4.631	N/A	N/A	N/A	GAPI
Natural Gamma Spectroscopy - C Wellsite Calibration - Normalized Jig Measurement							
Master: 6-JAN-2000 3:55 Before: 18-MAR-2000 8:21							
WINDOW 1 Jig	376.0	383.7	380.7	N/A	N/A	22.56	CPS
WINDOW 2 Jig	167.0	168.9	168.6	N/A	N/A	10.02	CPS
WINDOW 3 Jig	24.00	23.84	23.73	N/A	N/A	1.440	CPS
WINDOW 4 Jig	14.00	13.72	13.77	N/A	N/A	2.800	CPS
WINDOW 5 Jig	22.50	22.02	22.83	N/A	N/A	4.500	CPS
SGR Jig	160.0	160.7	160.0	N/A	N/A	7.000	GAPI
Natural Gamma Spectroscopy - C Master Calibration - Master Quality Control Values							
Master: 6-JAN-2000 3:52							
Photomultiplier Res. CARC3	8.000	9.090	--	--	--	--	
APU WINDOW Jig	1350	963.1	--	--	--	--	CPS
APL WINDOW Jig	1350	962.8	--	--	--	--	CPS

The NGT PCSL Value is set to 83.674 KEV

Natural Gamma Spectroscopy - C / Equipment Identification

Primary Equipment:

NGT Cartridge
NGT Sonde

NGC - C 1921
NGD - A 1736

Auxiliary Equipment:

NGT Cartridge Housing
NGT Sonde Housing
Gamma Source Radioactive

NGCH - A 752
NGH - B 3
GSR - U

Natural Gamma Spectroscopy - C Wellsite Calibration

Background Measurement

Phase	WINDOW 1 Background CPS	Value	Phase	WINDOW 2 Background CPS	Value	Phase	WINDOW 3 Background CPS	Value
Master		11.24	Master		2.775	Master		0.8498
Before		12.46	Before		3.522	Before		0.9159
	0 (Minimum) 100.0 (Nominal) 400.0 (Maximum)			0 (Minimum) 50.00 (Nominal) 200.0 (Maximum)			0 (Minimum) 10.00 (Nominal) 40.00 (Maximum)	
Phase	WINDOW 4 Background CPS	Value	Phase	WINDOW 5 Background CPS	Value	Phase	SGR Background GAPI	Value
Master		0.3150	Master		0.4801	Master		4.096
Before		0.3186	Before		0.4875	Before		4.631
	0 (Minimum) 6.000 (Nominal) 24.00 (Maximum)			0 (Minimum) 10.00 (Nominal) 40.00 (Maximum)			0 (Minimum) 30.00 (Nominal) 120.0 (Maximum)	
Master: 6-JAN-2000 4:01			Before: 18-MAR-2000 8:16					

Natural Gamma Spectroscopy - C Wellsite Calibration

Normalized Jig Measurement

Phase	WINDOW 1 Jig CPS	Value	Phase	WINDOW 2 Jig CPS	Value	Phase	WINDOW 3 Jig CPS	Value
Master		383.7	Master		168.9	Master		23.84
Before		380.7	Before		168.6	Before		23.73
	354.0 (Minimum) 376.0 (Nominal) 398.0 (Maximum)			155.0 (Minimum) 167.0 (Nominal) 179.0 (Maximum)			21.50 (Minimum) 24.00 (Nominal) 26.50 (Maximum)	
Phase	WINDOW 4 Jig CPS	Value	Phase	WINDOW 5 Jig CPS	Value	Phase	SGR Jig GAPI	Value
Master		13.72	Master		22.02	Master		160.7
Before		13.77	Before		22.83	Before		160.0
	12.50 (Minimum) 14.00 (Nominal) 15.50 (Maximum)			20.00 (Minimum) 22.50 (Nominal) 25.00 (Maximum)			148.0 (Minimum) 160.0 (Nominal) 172.0 (Maximum)	
Master: 6-JAN-2000 3:55			Before: 18-MAR-2000 8:21					

Natural Gamma Spectroscopy - C Wellsite Calibration

Quality Control Values

Phase	DHVF Jig V	Value	Phase	Quality Windows Ratio Jig	Value
Master		1503	Master		2.272
Before		1516	Before		2.258
	1088 (Minimum) 1450 (Nominal) 1813 (Maximum)			2.150 (Minimum) 2.240 (Nominal) 2.330 (Maximum)	
Master: 6-JAN-2000 3:55			Before: 18-MAR-2000 8:21		

Natural Gamma Spectroscopy - C Wellsite Calibration


Quality Control Values Check

Phase	Thorium peak Form Factor Jig	Value
Before		-0.03137
	-0.2000 (Minimum) 0 (Nominal) 0.2000 (Maximum)	
Before: 18-MAR-2000 8:21		

Natural Gamma Spectroscopy - C Master Calibration

Master Quality Control Values

Phase	Photomultiplier Res. CARC3	Value	Phase	APU WINDOW Jig CPS	Value	Phase	APL WINDOW Jig CPS	Value
Master		9.090	Master		963.1	Master		962.8

4.500 (Minimum)		8.000 (Nominal)		11.50 (Maximum)		700.0 (Minimum)		1350 (Nominal)		1600 (Maximum)		700.0 (Minimum)		1350 (Nominal)		1600 (Maximum)	
Phase	Thorium peak Form Factor Jig			Value													
Master				-0.05460													
-0.1000 (Minimum)		0 (Nominal)		0.1000 (Maximum)													
Master: 6-JAN-2000 3:52																	

COMPANY: Lamont Doherty WELL: ODP Leg 189, Site 1168 (WT-1A) FIELD: Tasmanian Seaway, West Tasmania Site COUNTY: Offshore STATE: Indian Ocean	BOTTOM LOG INTERVAL	3180 M.
	SCHLUMBERGER DEPTH	3204 M.
	DEPTH DRILLER	3357.7 M.
	KELLY BUSHING	11.2 M.
	DRILL FLOOR	10.9 M.
	GROUND LEVEL	-2474 M.



Dipole Sonic Upper Dipole Shear
Gamma Ray