

Company: Lamont Doherty
Well: Expedition 321 Site U1338B
Field: PEAT
Rig: JOIDES Resolution Ocean: Pacific

Rig: JOIDES Resolution Field: PEAT Location: Latitude: N 2° 30.471' Well: Expedition 321 Site U1338B Company: Lamont Doherty	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Dipole</td> <td style="text-align: center;">Elev.: K.B. 11.00 m</td> </tr> <tr> <td style="text-align: center;">Shear Sonic</td> <td style="text-align: center;">G.L. -4199.00 m</td> </tr> <tr> <td style="text-align: center;">Natural Gamma Ray</td> <td style="text-align: center;">D.F. 11.00 m</td> </tr> </table>	Dipole	Elev.: K.B. 11.00 m	Shear Sonic	G.L. -4199.00 m	Natural Gamma Ray	D.F. 11.00 m
Dipole	Elev.: K.B. 11.00 m						
Shear Sonic	G.L. -4199.00 m						
Natural Gamma Ray	D.F. 11.00 m						
LOCATION Latitude: N 2° 30.471' Longitude: W 117° 58.162'							
Permanent Datum: Mean Sea Level _____ Elev.: 0.00 m Log Measured From: Drill Floor _____ 11.00 m above Perm. Datum Drilling Measured From: Drill Floor _____							
API Serial No.	N 2° 30.471' 117° 58.162'						

Logging Date	9-Jun-2009	
Run Number	1	
Depth Driller	4626 m	
Schlumberger Depth	4622 m	
Bottom Log Interval	4603 m	
Top Log Interval	4210 m	
Casing Driller Size @ Depth	4.500 in @ 4353 m	
Casing Schlumberger	4348 m	
Bit Size	11.438 in	
Type Fluid In Hole	Seawater Gel	
Density	1.258 g/cm3	
Fluid Loss	PH	
Source Of Sample	N/A	
RM @ Measured Temperature	@ @	
RMF @ Measured Temperature	@ @	
RMC @ Measured Temperature	@ @	
Source RMF	RMC	N/A
RM @ MRT	RMF @ MRT	N/A
Maximum Recorded Temperatures	7 degC @ 15	@ 15
Circulation Stopped	9-Jun-2009	11:00
Logger On Bottom	10-Jun-2009	1:18
Unit Number	625003	Houston
Recorded By	K. Swain	
Witnessed By	Alberto Malinverno, Louise Anderson	

Logging Date			Run 1	Run 2	Run 3
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	RMC				
RM @ MRT	RMF @ MRT				
Maximum Recorded Temperatures					
Circulation Stopped					
Logger On Bottom					
Unit Number					
Recorded By					
Witnessed By					

DISCLAIMER

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OTHER SERVICES1
 OS1: FMS/HNGS
 OS2: DITE/HLDS/HNGS/GPIT
 OS3: VSI
 OS4:
 OS5:

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

REMARKS: RUN NUMBER 1

REMARKS: RUN NUMBER 2

Logging tools deployed inside drillpipe with wireline.
 BHA consisted of LFV and seal bore collar at 3.80" ID.
 HLDS caliper calibration used 12" and 15.19" rings as reference to improve large hole size accuracy.
 Depths referenced from drill floor which is 11m above sea level.
 Pipe depth set at 4353 mbrf.
 Ship heave averaged approximately 0.7m to -0.7m heave.

Best DT (Geoframe) processing recommended to repair labeling of the Monopole P&S and Dipole shear data.
 See log for frequencies used in acquisition.

RUN 1
 SERVICE ORDER #:
 PROGRAM VERSION: 17C0-154
 FLUID LEVEL:

RUN 2
 SERVICE ORDER #:
 PROGRAM VERSION:
 FLUID LEVEL:

LOGGED INTERVAL	START	STOP




LOGGED INTERVAL	START	STOP

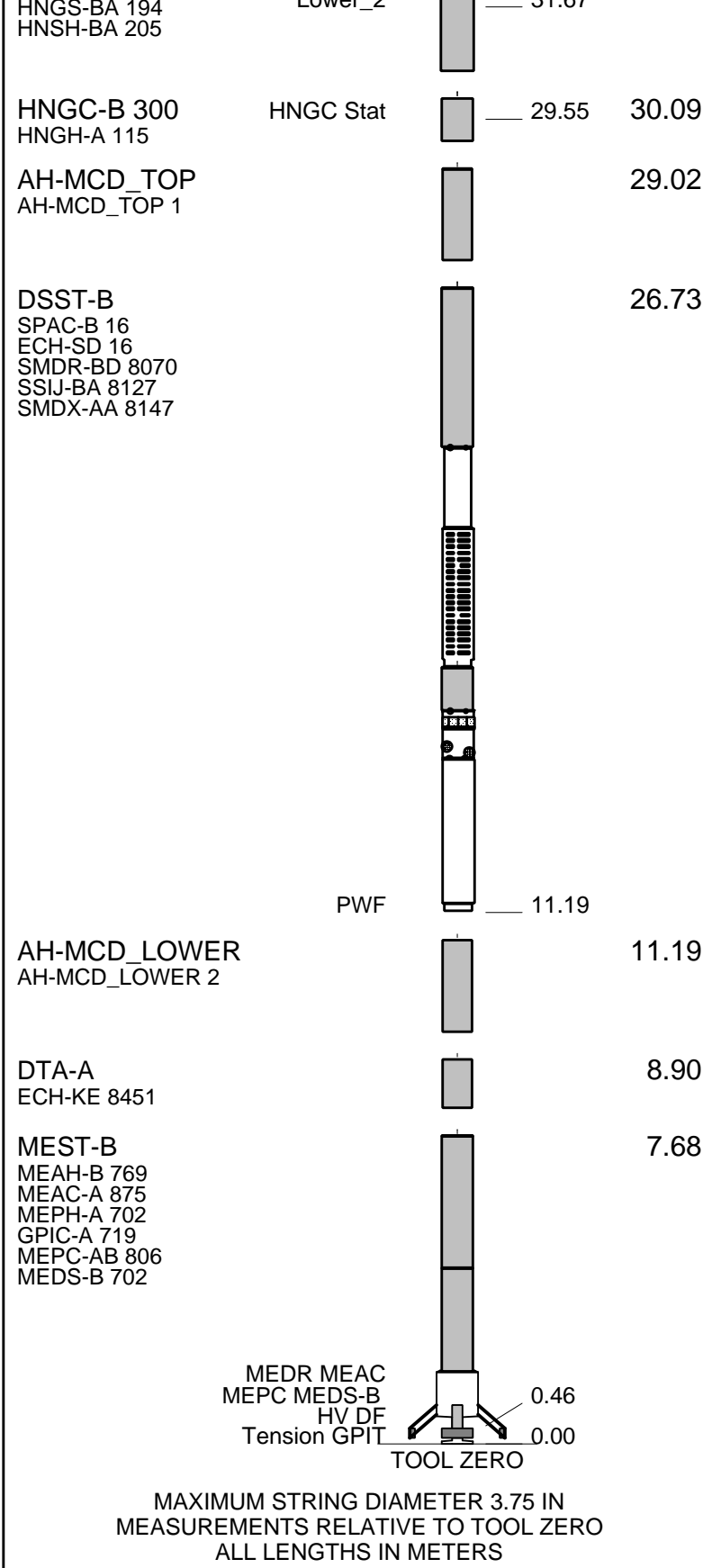
EQUIPMENT DESCRIPTION

RUN 1
 SURFACE EQUIPMENT
 GSR-U 616008
 WITM (DTS)-A

RUN 2

DOWNHOLE EQUIPMENT

LEH-QT			34.39
LEH-QT 301			
DTC-H	CTEM		33.22
ECH-KC 2304	TelStatus		32.59
	ToolStatu		
HNGS-BA 194	Upper_1		31.89
	Lower_2		31.67
			32.59



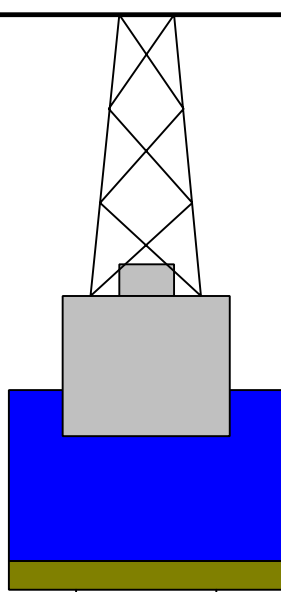
Production String	(in)	(M)	Well Schematic	(M)	(in)	Casing String
	OD	ID		MD	MD	

Kelly Bushing Elevation
Derrick Floor Elevation

11.0
11.0

Mean Sea Level

0.0



4210 4.20

Casing String



4210 9.875

Borehole Segment

4353 3.80

Casing Shoe

4626

Company: Lamont Doherty

Well: Expedition 321 Site U1338B

Output DLIS Files

DEFAULT	FMS_DSI_NGS_025LUP	FN:37	PRODUCER	10-Jun-2009 16:18	4629.1 M	4199.4 M
BACKUP	FMS_DSI_NGS_025LUP	FN:38	PRODUCER	10-Jun-2009 16:19	4629.1 M	4198.8 M

OP System Version: 17C0-154

MEST-B	SRPC-3762-Q1_2009_OP17	DTA-A	17C0-154
DSST-B	17C0-154	HNGC-B	17C0-154
HNGS-BA	17C0-154	DTC-H	17C0-154

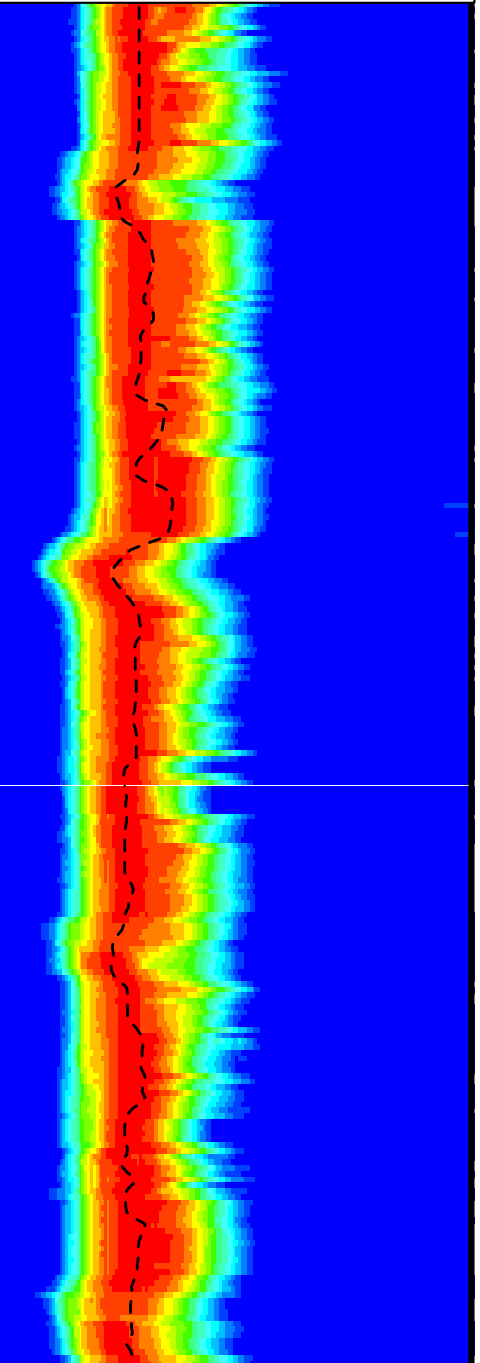
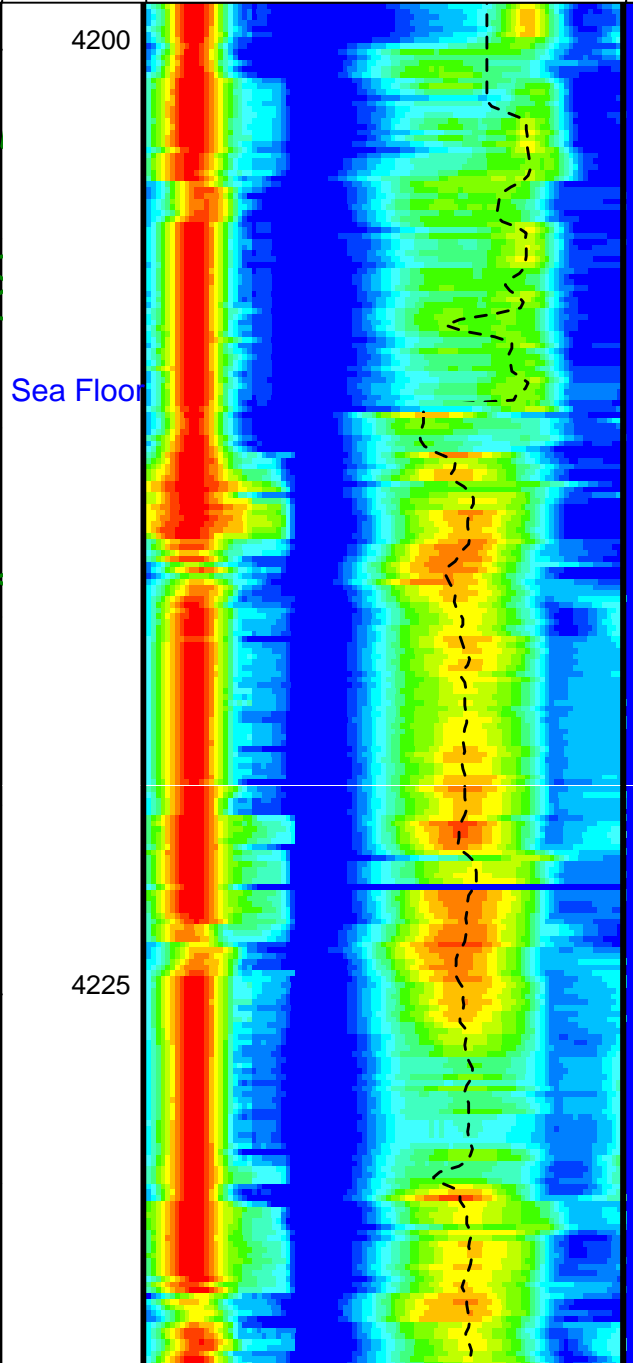
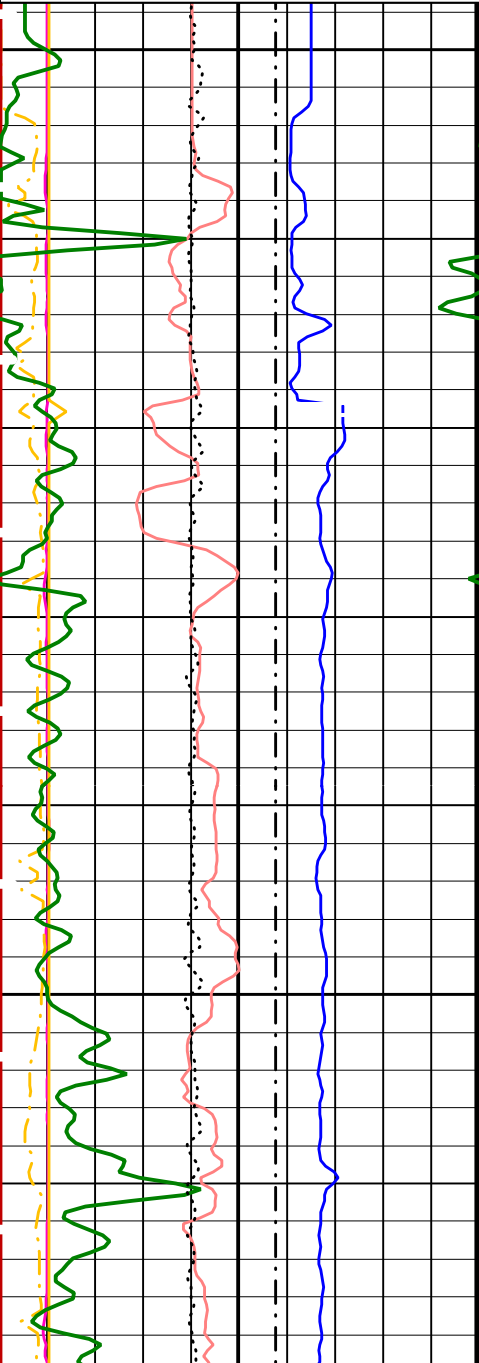
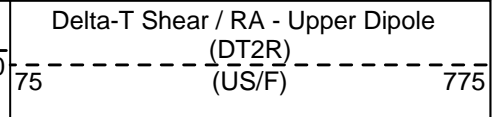
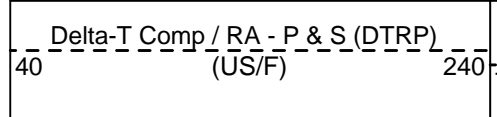
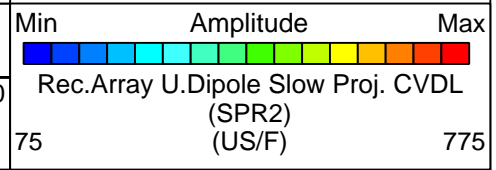
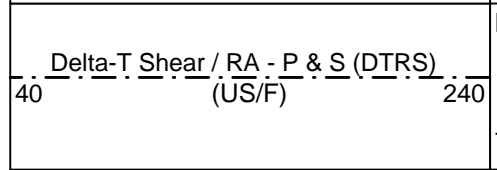
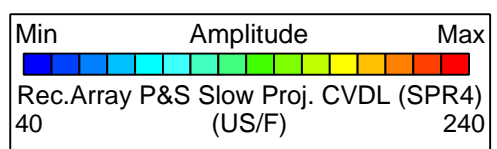
PIP SUMMARY

 Time Mark Every 60 S

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
Peak Coherence / RA - Upper Dipole (CHR2)		

0	(---)	10
HNCS Computed Gamma Ray (HCGR)		
0	(GAPI)	15
Tension (TENS)		
10000	(LBF)	0
Delta-T Shear - P & S (DT4S)		
440	(US/F)	40
Delta-T Comp - P & S (DT4P)		
440	(US/F)	40
Delta-T Shear - Upper Dipole (DT2)		
440	(US/F)	40
Bit Size (BS)		
0	(IN)	20

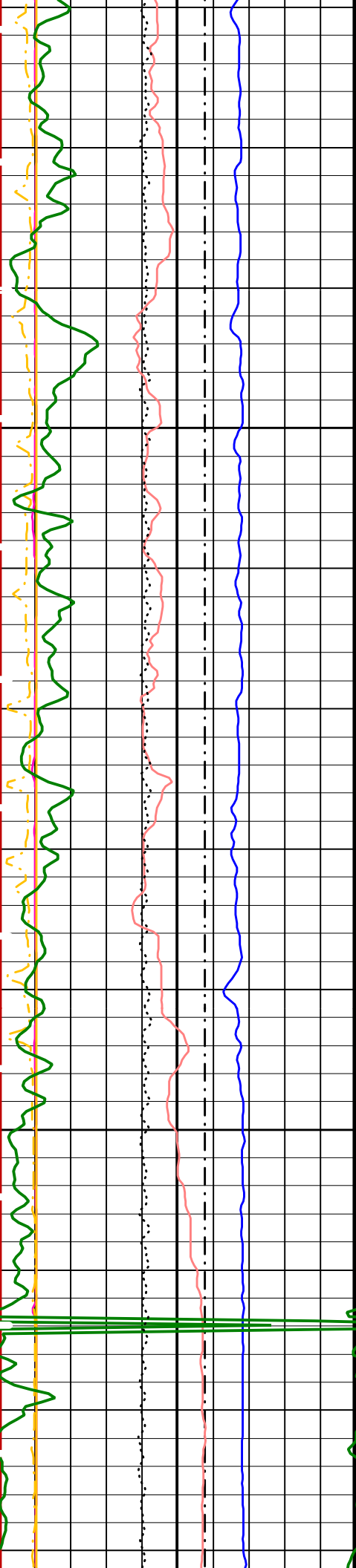
Main Log Pass #2



Sea Floor

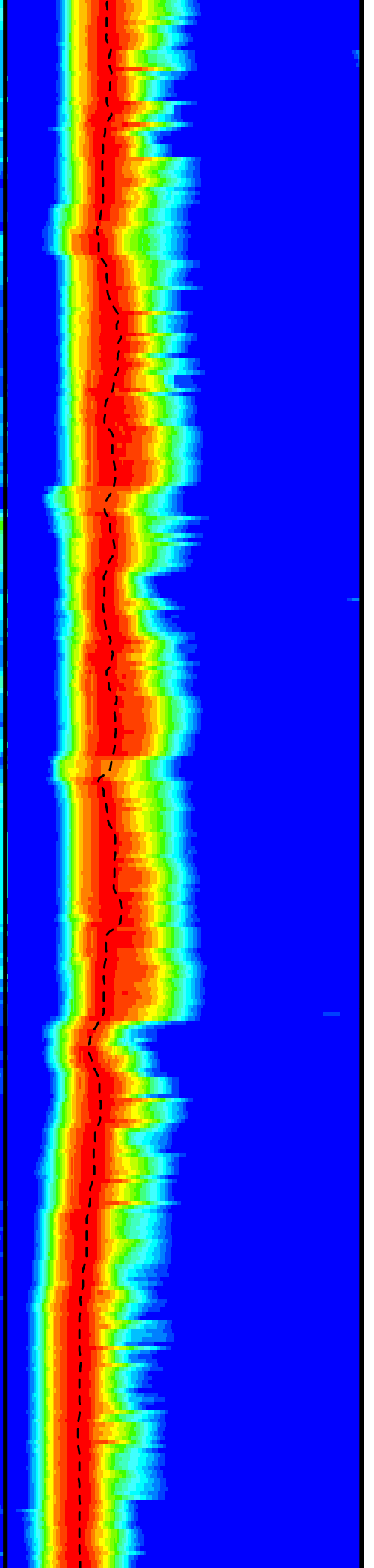
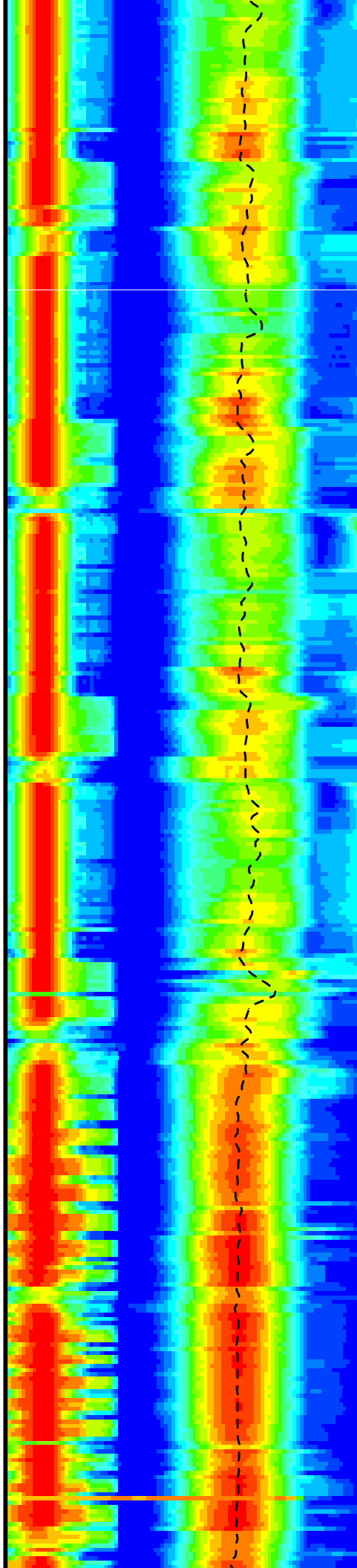
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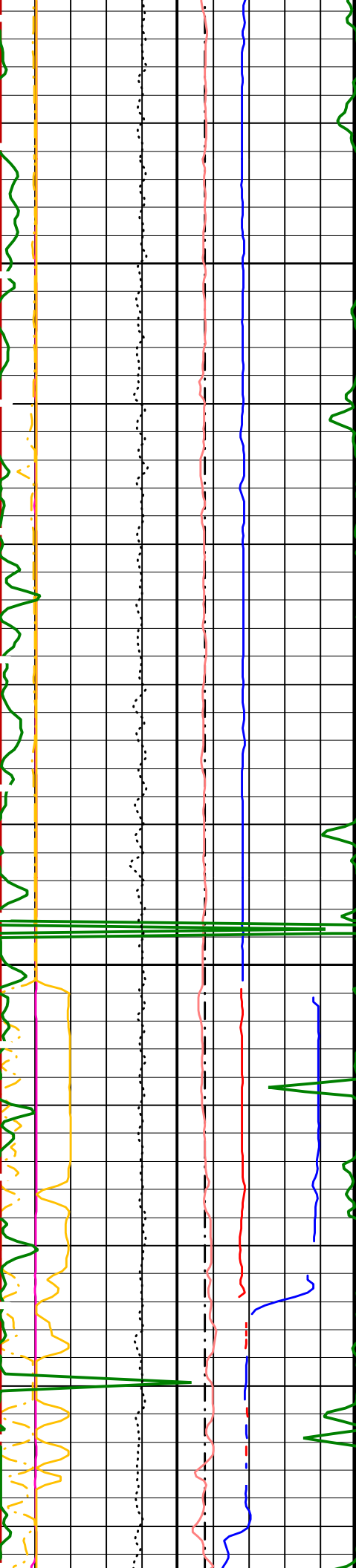
4225



4250

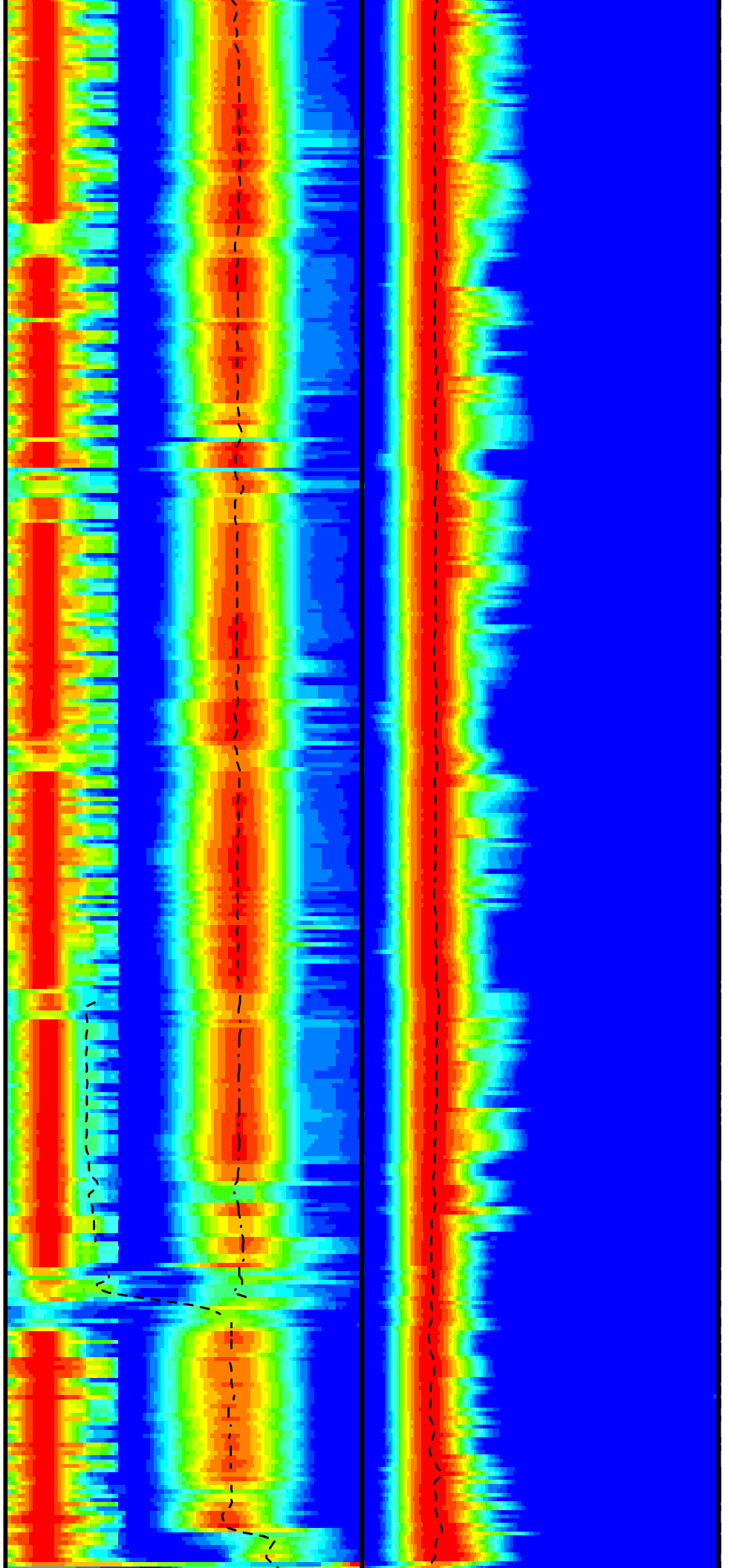
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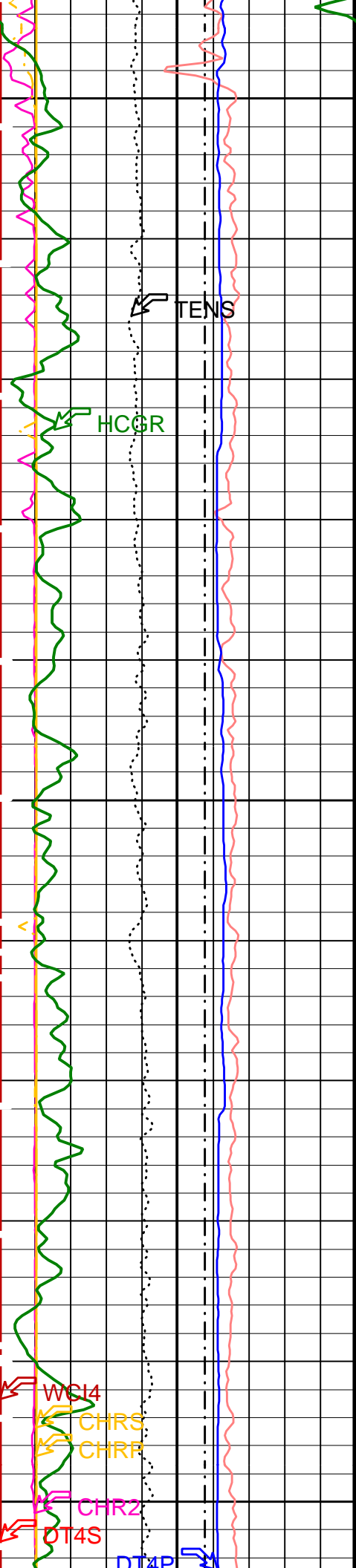




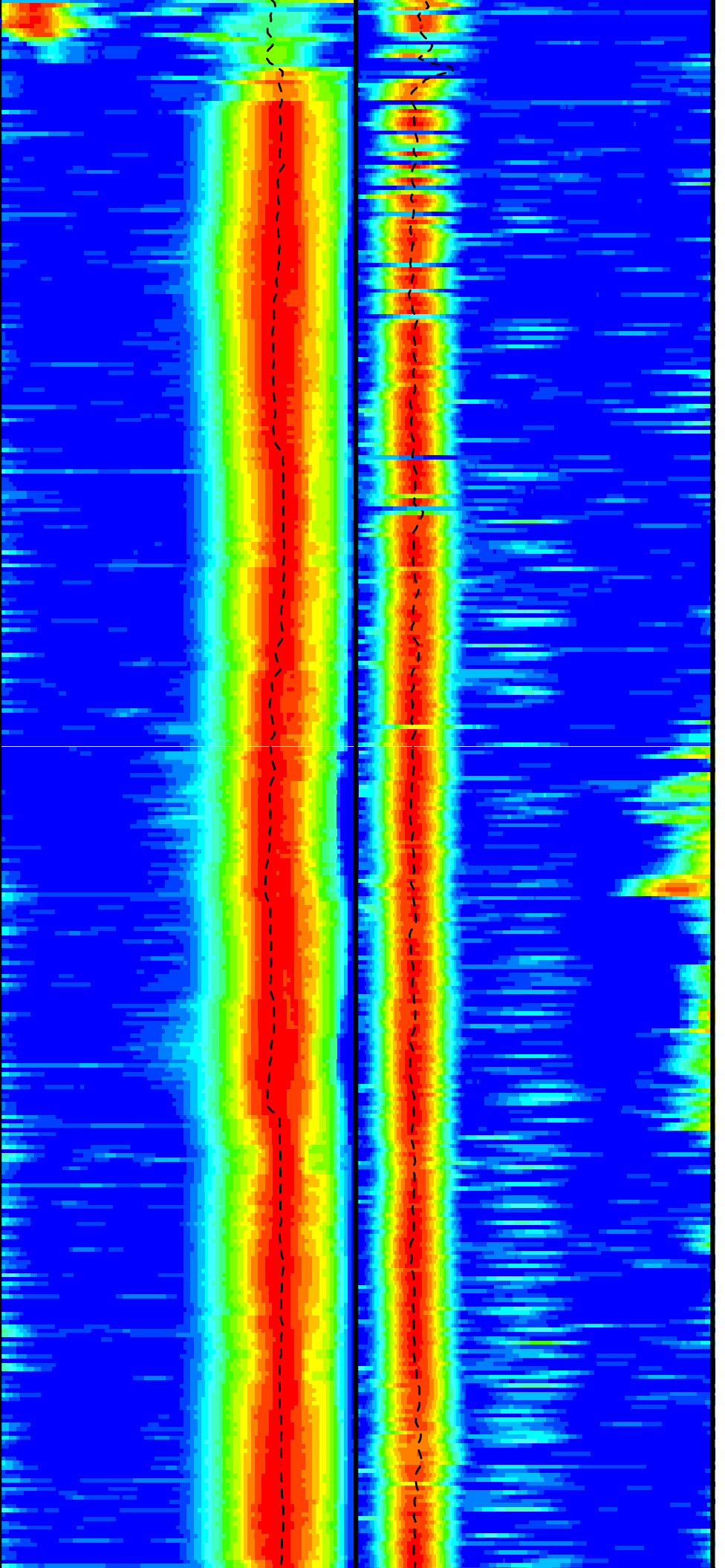
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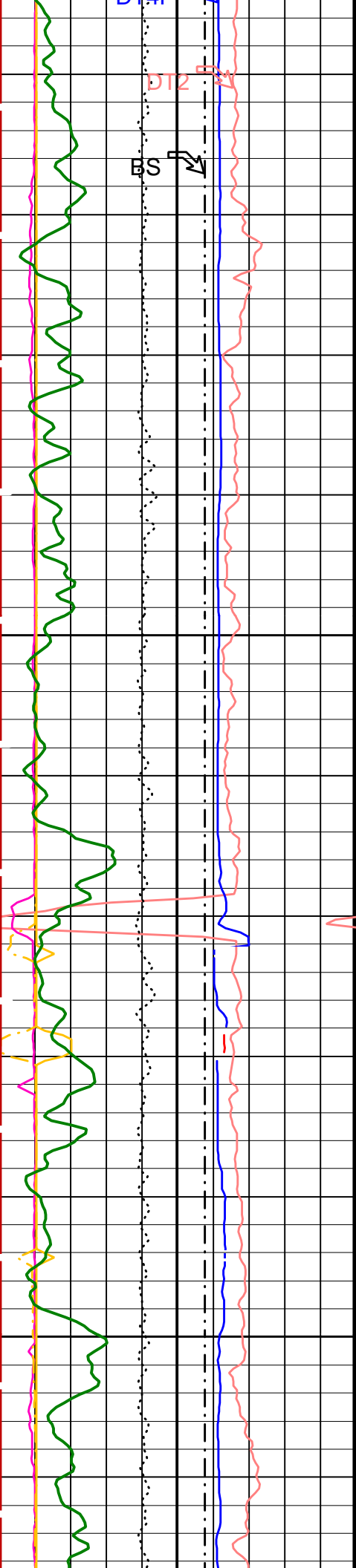
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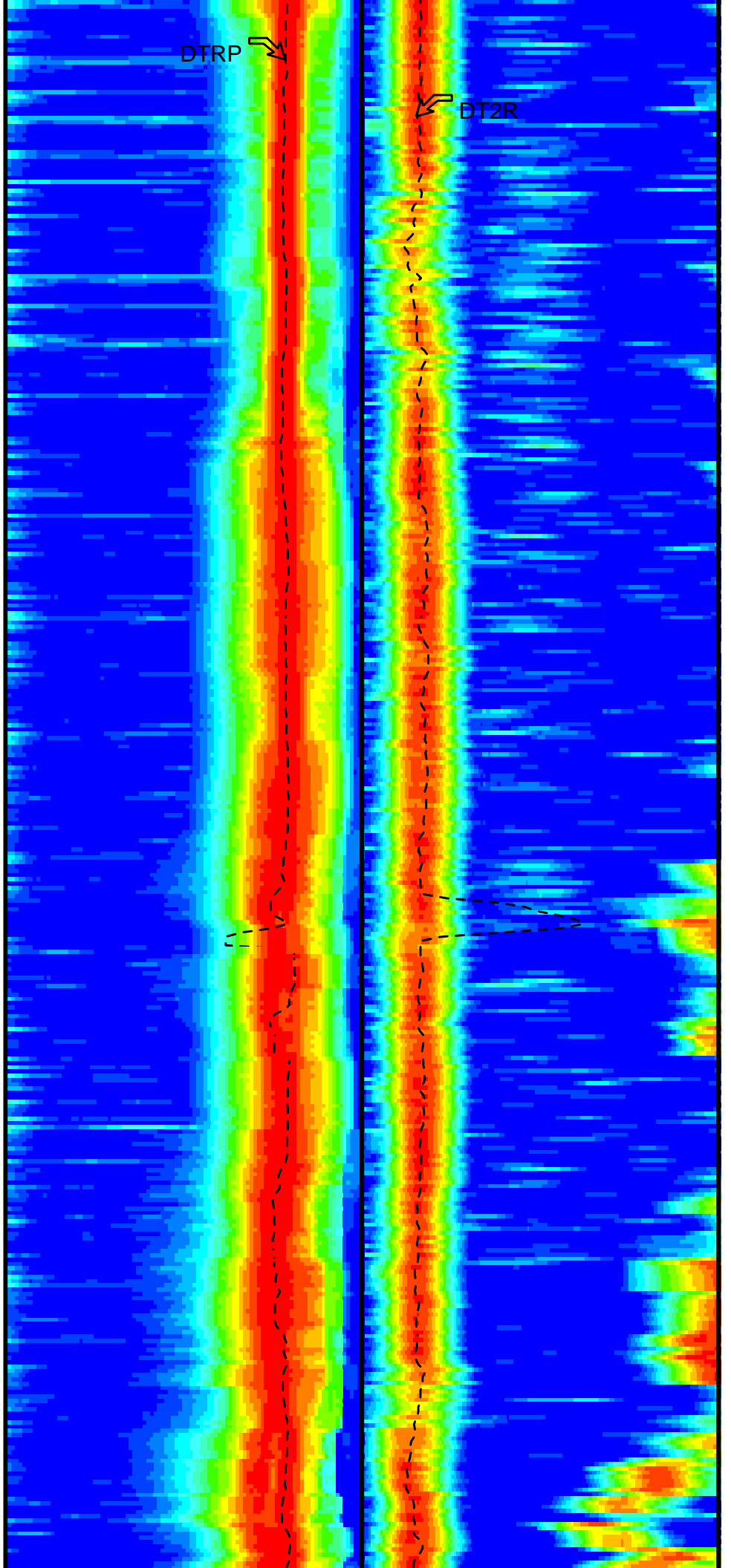
Drill Pipe
4350
4375
4400

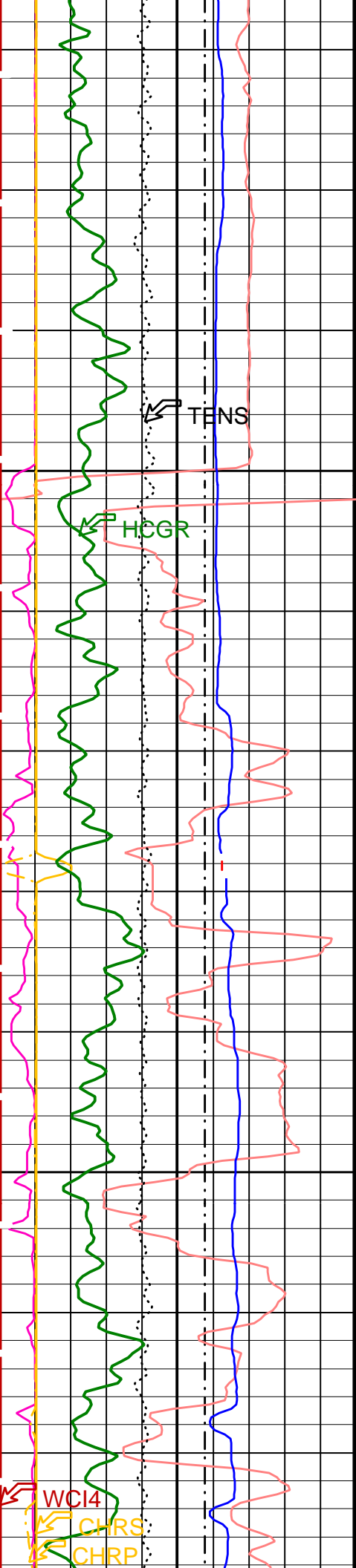




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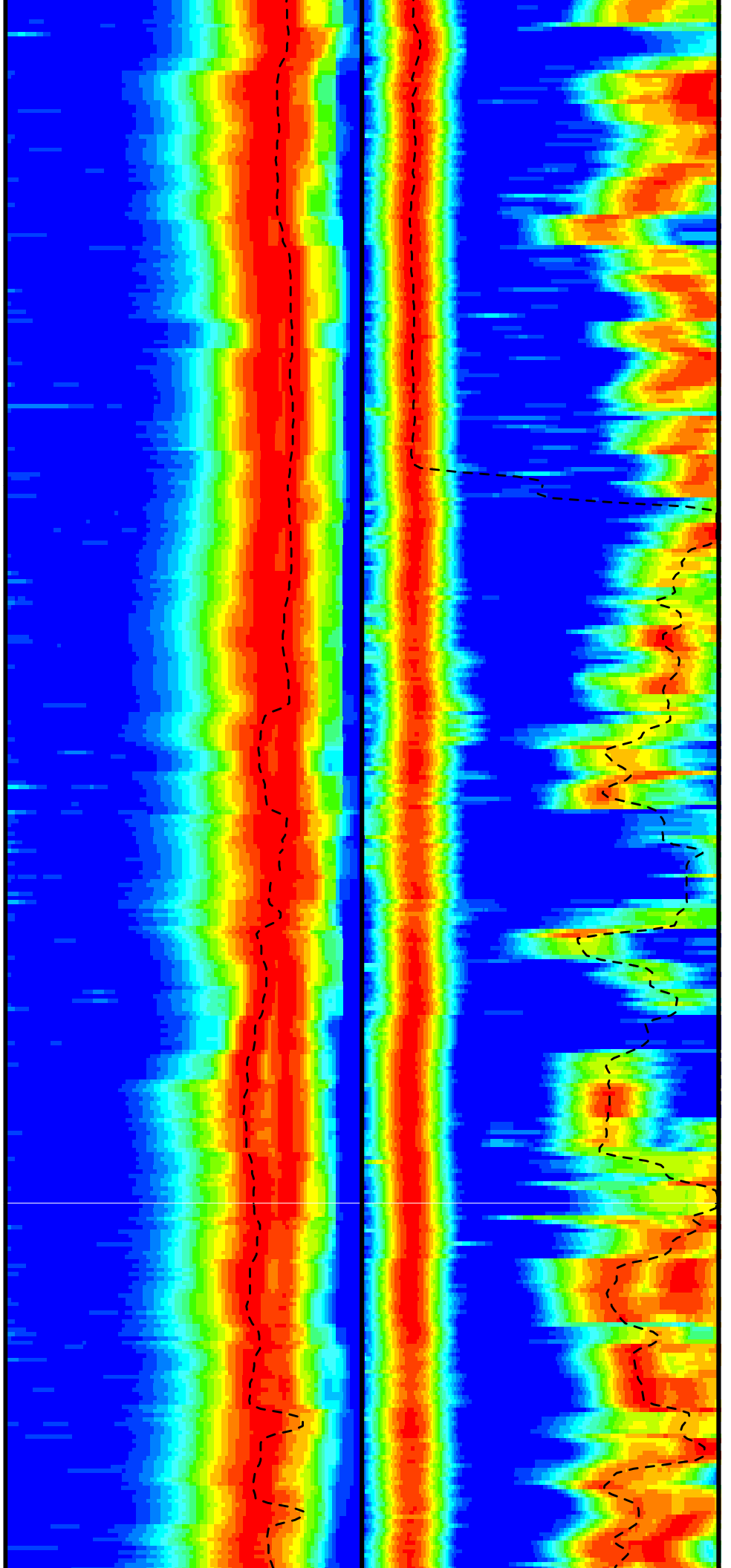
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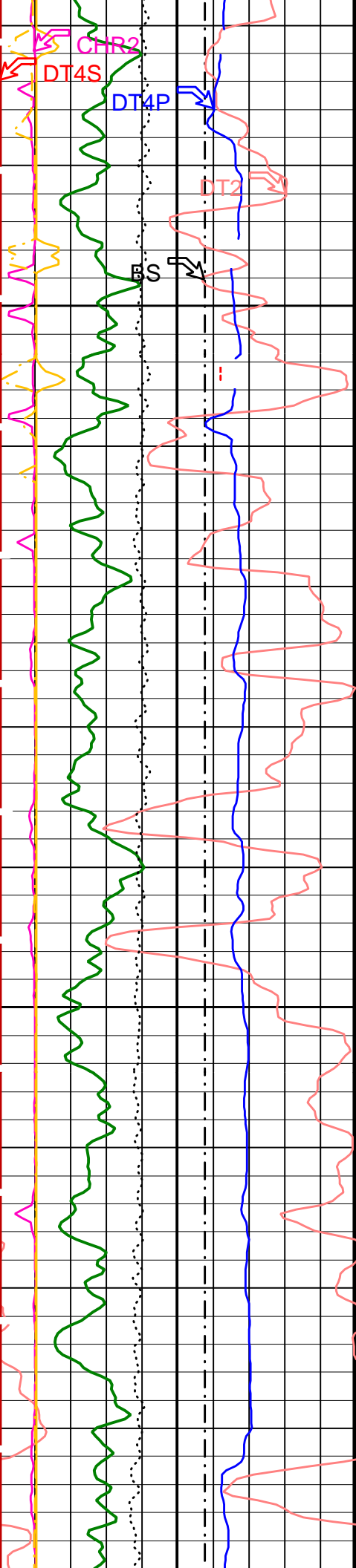




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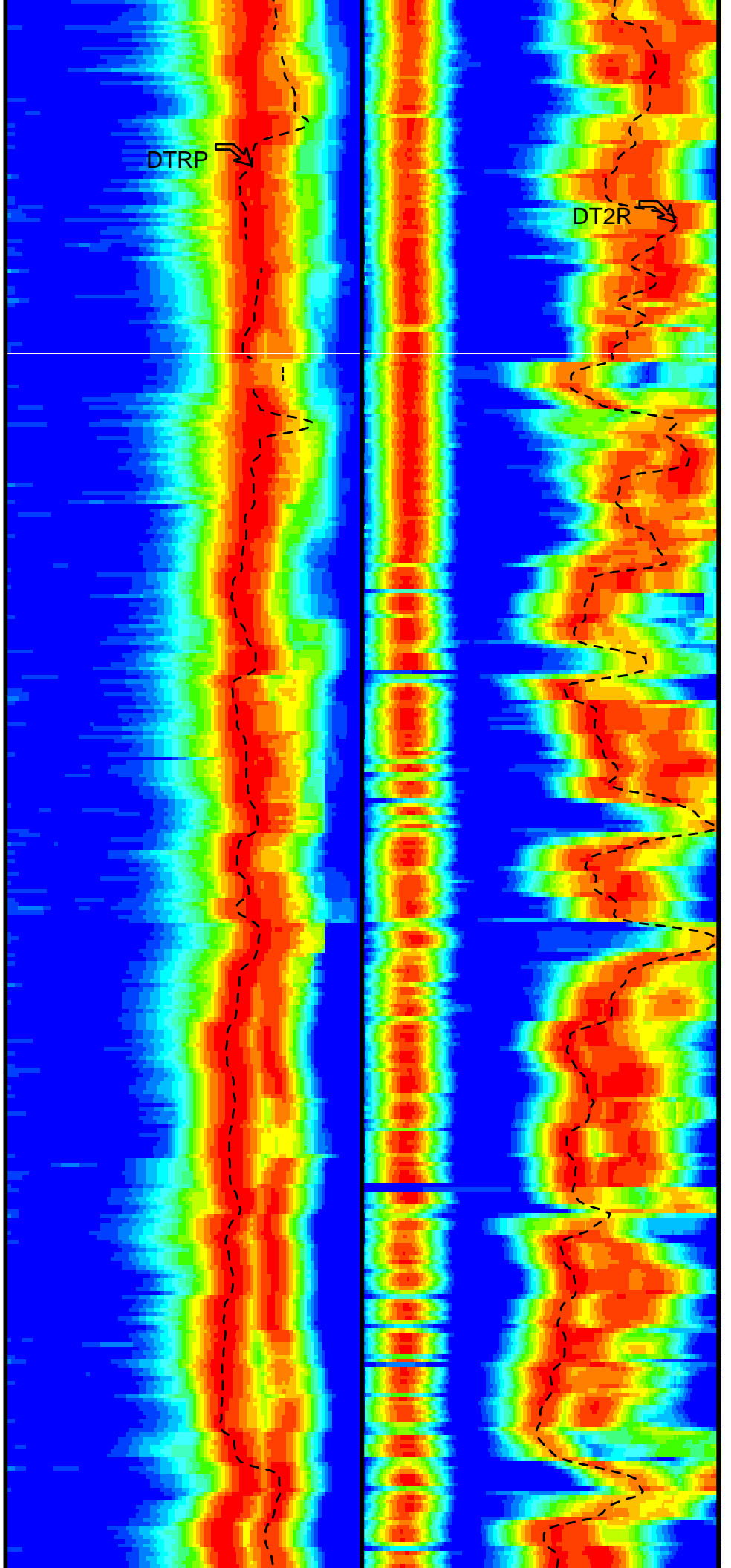
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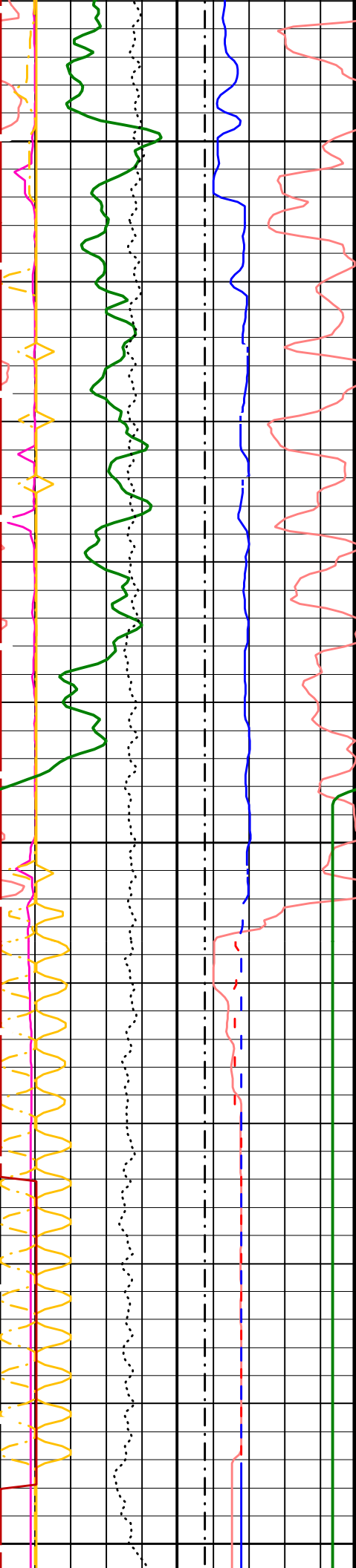
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4550



DTRP

DT2R



4575

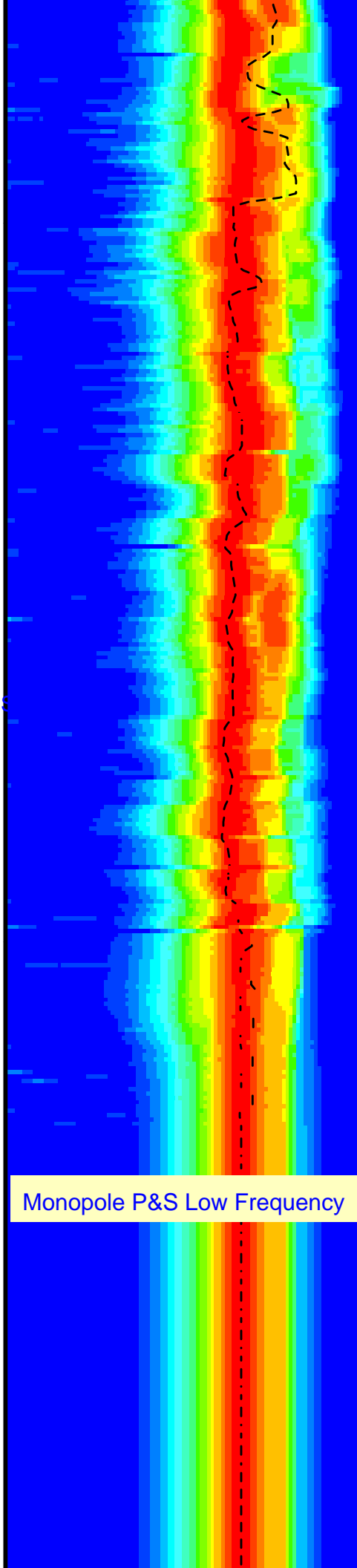
-FR HNGS

4600

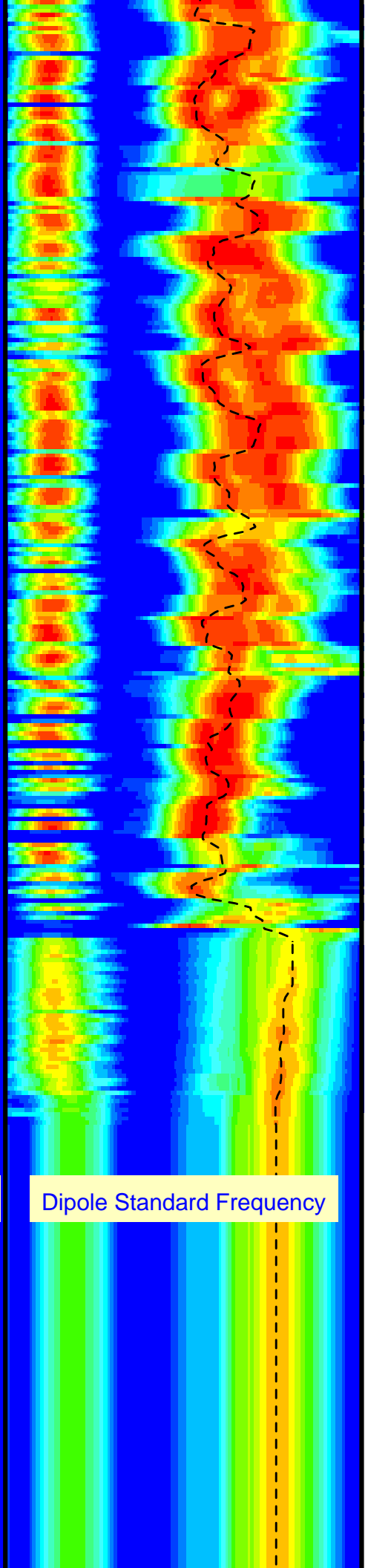
FR DSI-

-TD-

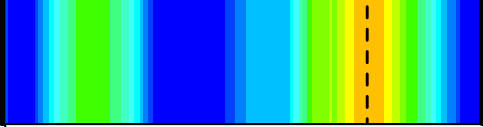
4625



Monopole P&S Low Frequency



Dipole Standard Frequency



Bit Size (BS) (IN)	0	20
Delta-T Shear - Upper Dipole (DT2) (US/F)	440	40
Delta-T Comp - P & S (DT4P) (US/F)	440	40
Delta-T Shear - P & S (DT4S) (US/F)	440	40
Tension (TENS) (LBF)	10000	0
HNGS Computed Gamma Ray (HCGR) (GAPI)	0	15
Peak Coherence / RA - Upper Dipole (CHR2)	0	10
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

Delta-T Comp / RA - P & S (DTRP) (US/F)	40	240
Delta-T Shear / RA - P & S (DTRS) (US/F)	40	240
Min	Amplitude	Max
Rec.Array P&S Slow Proj. CVDL (SPR4) (US/F)		
40		240

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

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
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	80 US/F
COUL	Label Slowness Upper Limit - Monopole P&S Compressional	220 US/F
DDE2	Digitizing Delay 2	0 US
DDE4	Digitizing Delay 4	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	775 US/F
DSI2	Digitizer Sample Interval 2	40 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	204.5 US/F
DWC2	Digitizer Word Count 2	512
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	BS
LFC	Label Formation Character - Monopole P&S	DYNAMIC
MCS	Mean Casing Slowness	57 US/F
MTXG	Monopole Transmitter Geometry	186 IN

NWI2	Number Waveform Items 2	8	
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
SAM2	DSST Sonic Acquisition Mode 2 - Upper Dipole Mode	ODD	
SAM4	DSST Sonic Acquisition Mode 4 - High Frequency Monopole Mode for P&S	LFD_EVEN	
SAMX	DSST Sonic Acquisition Mode X - Both Dipoles or Monopole Mode for Expert	OFF	
SAS2	STC Sonic Array Status - Upper Dipole	255	
SAS4	STC Sonic Array Status - Monopole P&S	255	
SBO2	STC Search Band Offset - Upper Dipole	3000	US
SBO4	STC Search Band Offset - Monopole P&S	500	US
SBR4	STC Baseline Removal - Monopole P&S	ON	
SBW2	STC Search Bandwidth - Upper Dipole	8000	US
SBW4	STC Search Bandwidth - Monopole P&S	2000	US
SFC2	STC Formation Character - Upper Dipole	SELECTABLE	
SFC4	STC Formation Character - Monopole P&S	SELECTABLE	
SFM2	STC Filter - Upper Dipole	B1-2K	
SFM4	STC Filter - Monopole P&S	B3-12K	
SHLL	Label Slowness Lower Limit - Monopole P&S Shear	100	US/F
SHUL	Label Slowness Upper Limit - Monopole P&S Shear	220	US/F
SLL2	STC Slowness Lower Limit - Upper Dipole	75	US/F
SLL4	STC Slowness Lower Limit - Monopole P&S	40	US/F
SST2	STC Slowness Step - Upper Dipole	4	US/F
SST4	STC Slowness Step - Monopole P&S	2	US/F
SSW2	STC Source Waveform - Upper Dipole	WF_SAM2	
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
SUL2	STC Slowness Upper Limit - Upper Dipole	775	US/F
SUL4	STC Slowness Upper Limit - Monopole P&S	240	US/F
SWD2	STC Slowness Width - Upper Dipole	40	US/F
SWD4	STC Slowness Width - Monopole P&S	10	US/F
TBF2	STC Time for Baseline Fill - Upper Dipole	0	US
TBF4	STC Time for Baseline Fill - Monopole P&S	300	US
TLL2	STC Time Lower Limit - Upper Dipole	600	US
TLL4	STC Time Lower Limit - Monopole P&S	150	US
TST2	STC Time Step - Upper Dipole	200	US
TST4	STC Time Step - Monopole P&S	50	US
TUL2	STC Time Upper Limit - Upper Dipole	15525	US
TUL4	STC Time Upper Limit - Monopole P&S	3660	US
TWD2	STC Time Width - Upper Dipole	2000	US
TWD4	STC Time Width - Monopole P&S	1000	US
TWI2	STC Integration Time Window - Upper Dipole	1600	US
TWI4	STC Integration Time Window - Monopole P&S	500	US
TWSX	Transmitter Waveform Select X	0	
UTXG	Upper Dipole Transmitter Geometry	162	IN
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	BS	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.00136138	
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	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.0781	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.08805	
System and Miscellaneous			
BS	Bit Size	11.438	IN
DFD	Drilling Fluid Density	1.26	G/C3

OP System Version: 17C0-154

MEST-B	SRPC-3762-Q1_2009_OP17	DTA-A	17C0-154
DSST-B	17C0-154	HNGC-B	17C0-154
HNGS-BA	17C0-154	DTC-H	17C0-154

Output DLIS Files

DEFAULT	FMS_DSI_NGS_025LUP	FN:37	PRODUCER	10-Jun-2009 16:18
BACKUP	FMS_DSI_NGS_025LUP	FN:38	PRODUCER	10-Jun-2009 16:19

Company: Lamont Doherty

Well: Expedition 321 Site U1338B

Input DLIS Files

DEFAULT	FMS_DSI_NGS_022LUP	FN:31	PRODUCER	10-Jun-2009 13:18	4626.9 M	4394.5 M
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Output DLIS Files

DEFAULT	FMS_DSI_NGS_042PUP	FN:55	PRODUCER	21-Jun-2009 20:11	4626.9 M	4394.5 M
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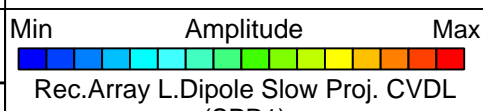
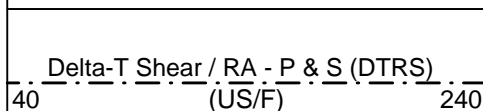
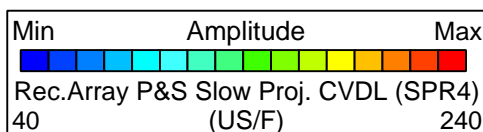
OP System Version: 17C0-154

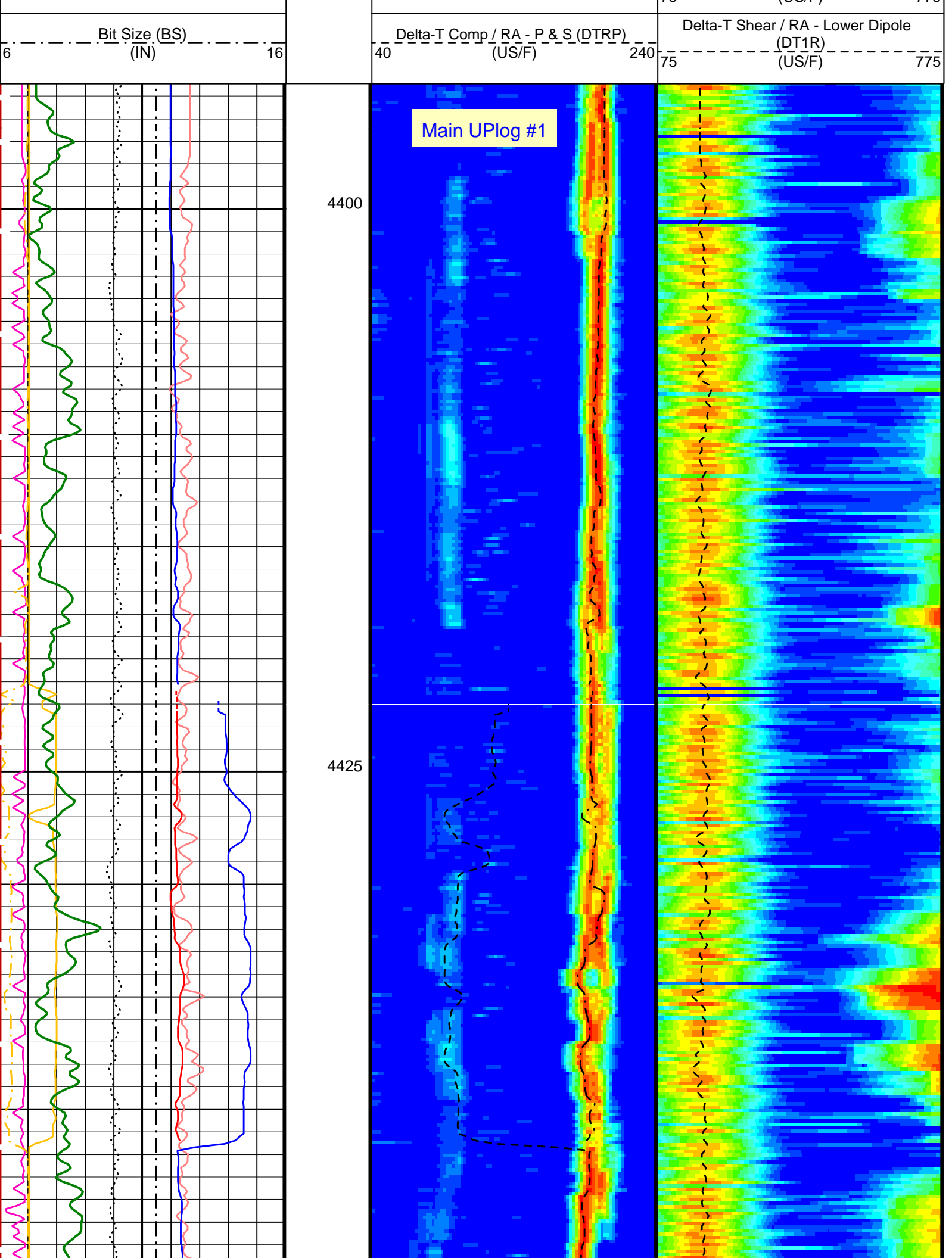
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DSST-B	17C0-154	HNGC-B	17C0-154
HNGS-BA	17C0-154	DTC-H	17C0-154

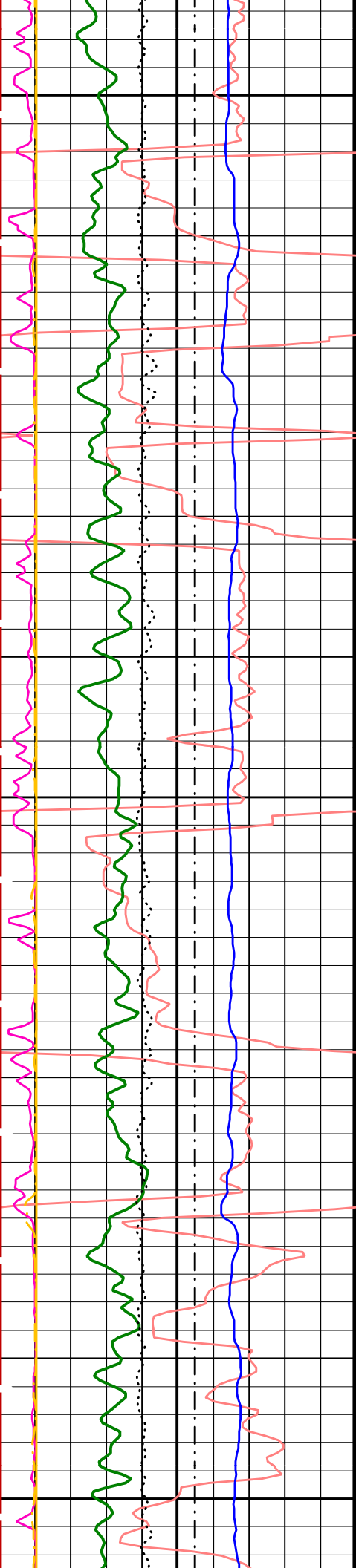
PIP SUMMARY

Time Mark Every 60 S

HNGS Spectroscopy Gamma Ray (HSGR)	(GAPI)	15
Waveform Data Copy Indicator 4 - Monopole P&S (WCI4)	(----)	10
Peak Coherence / RA - P & S Shear (CHRS)	(----)	9
Peak Coherence / RA - P & S Comp (CHRP)	(----)	10
Peak Coherence / RA - Lower Dipole (CHR1)	(----)	10
Tension (TENS)	(LBF)	0
Delta-T Shear - P & S (DT4S)	(US/F)	40
Delta-T Comp - P & S (DT4P)	(US/F)	40
Delta-T Shear - Lower Dipole (DT1)	(US/F)	40



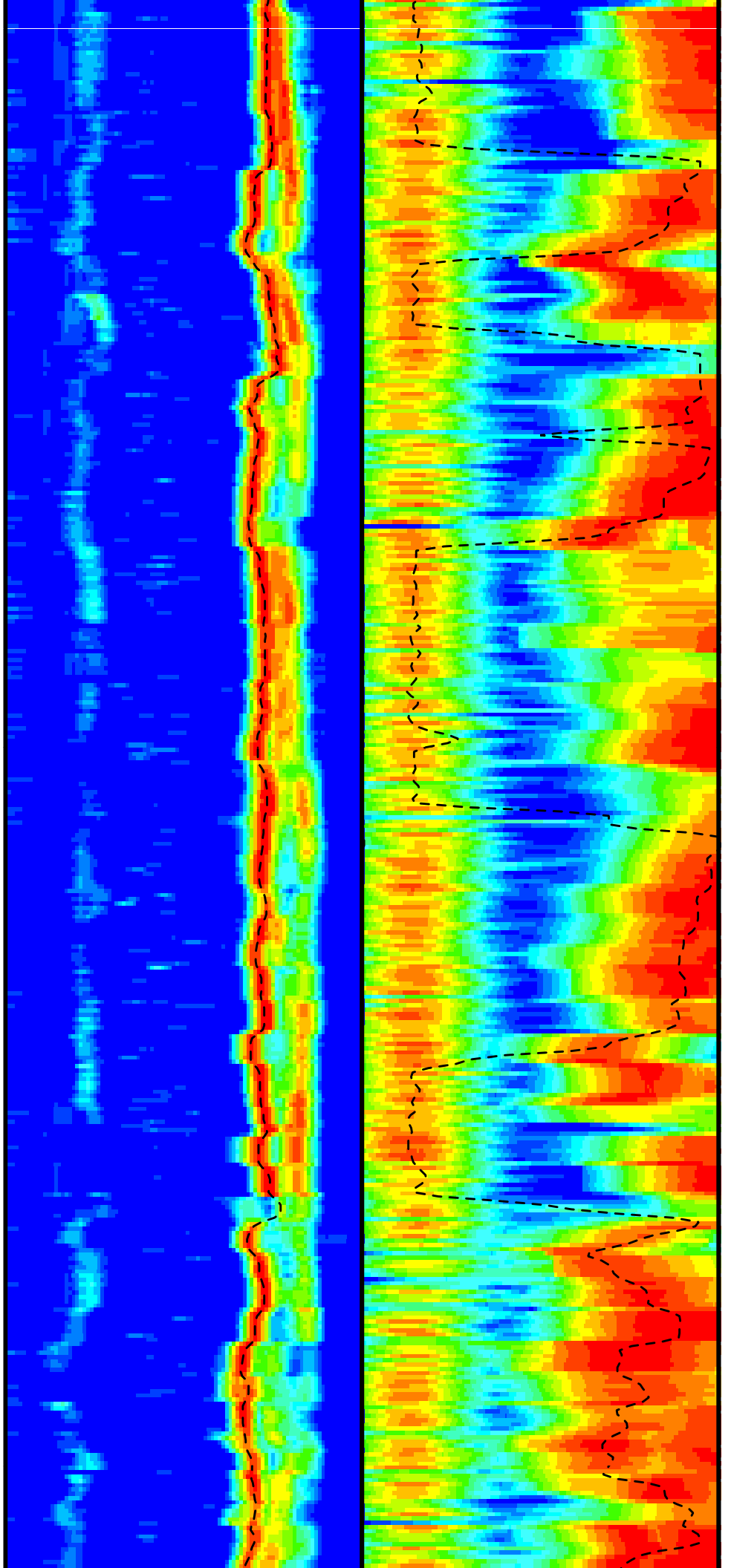


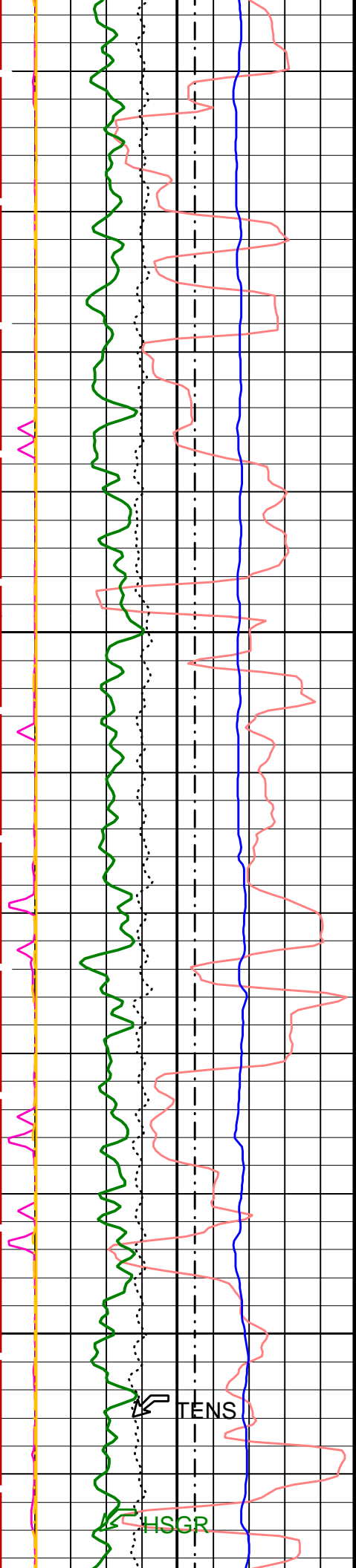


4450

4475

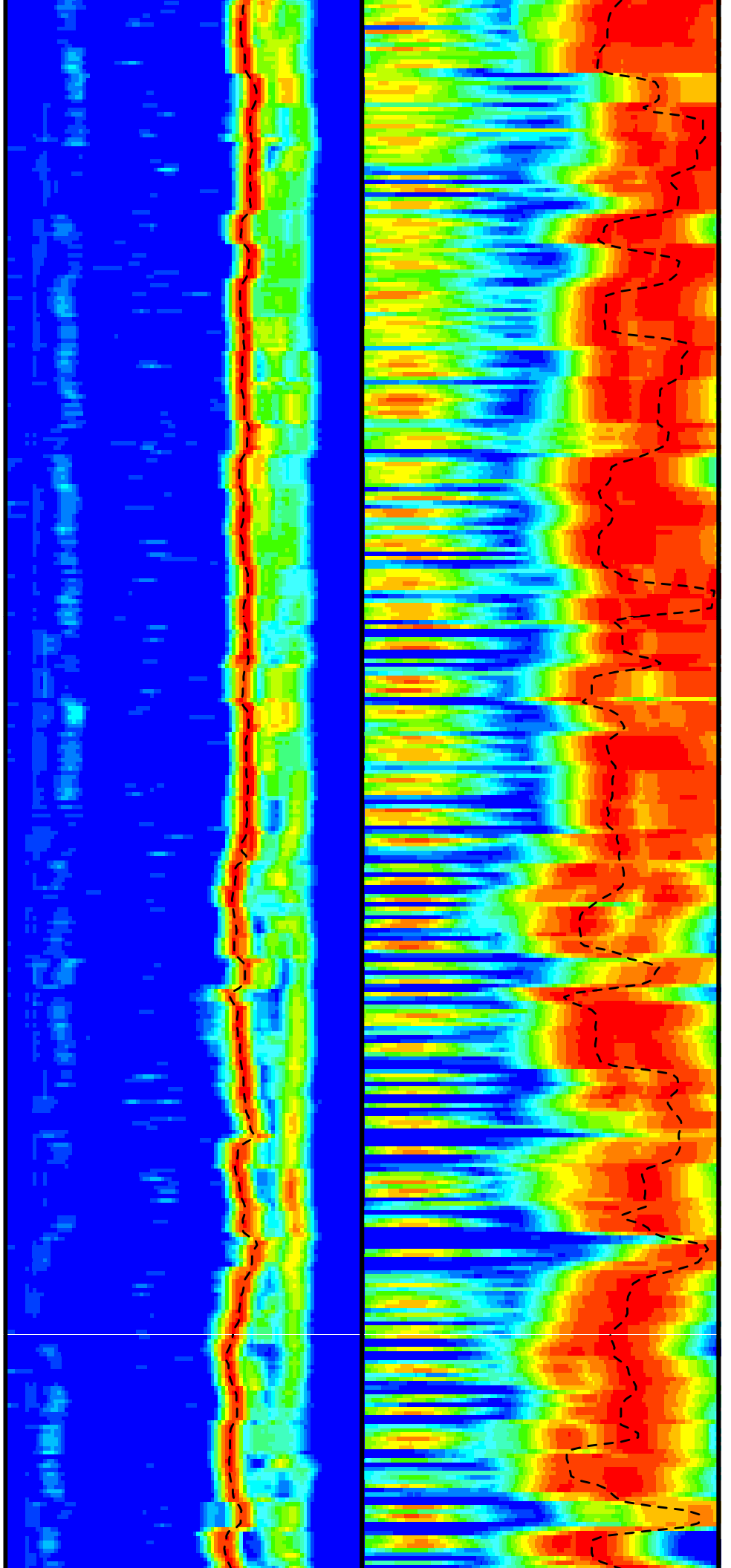
4500

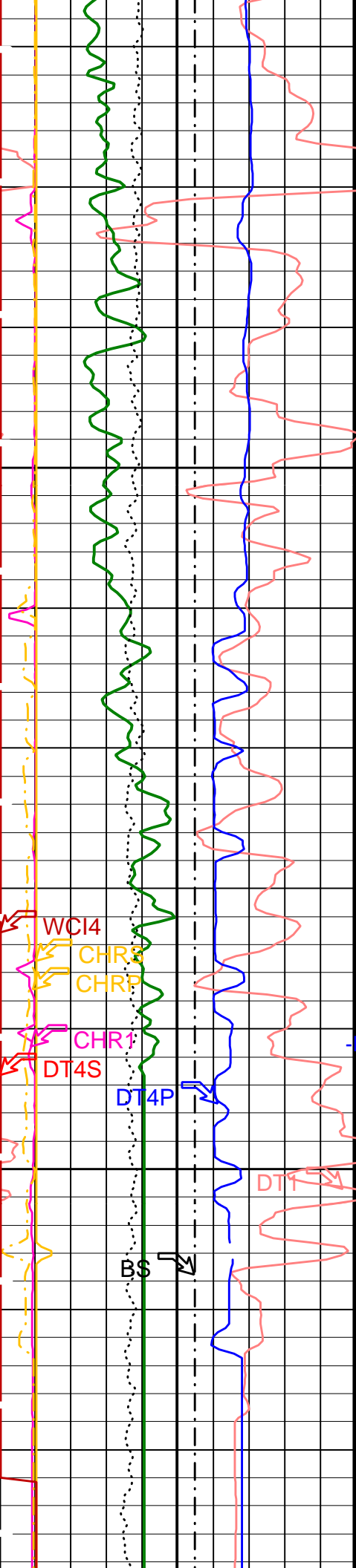




4525

4550



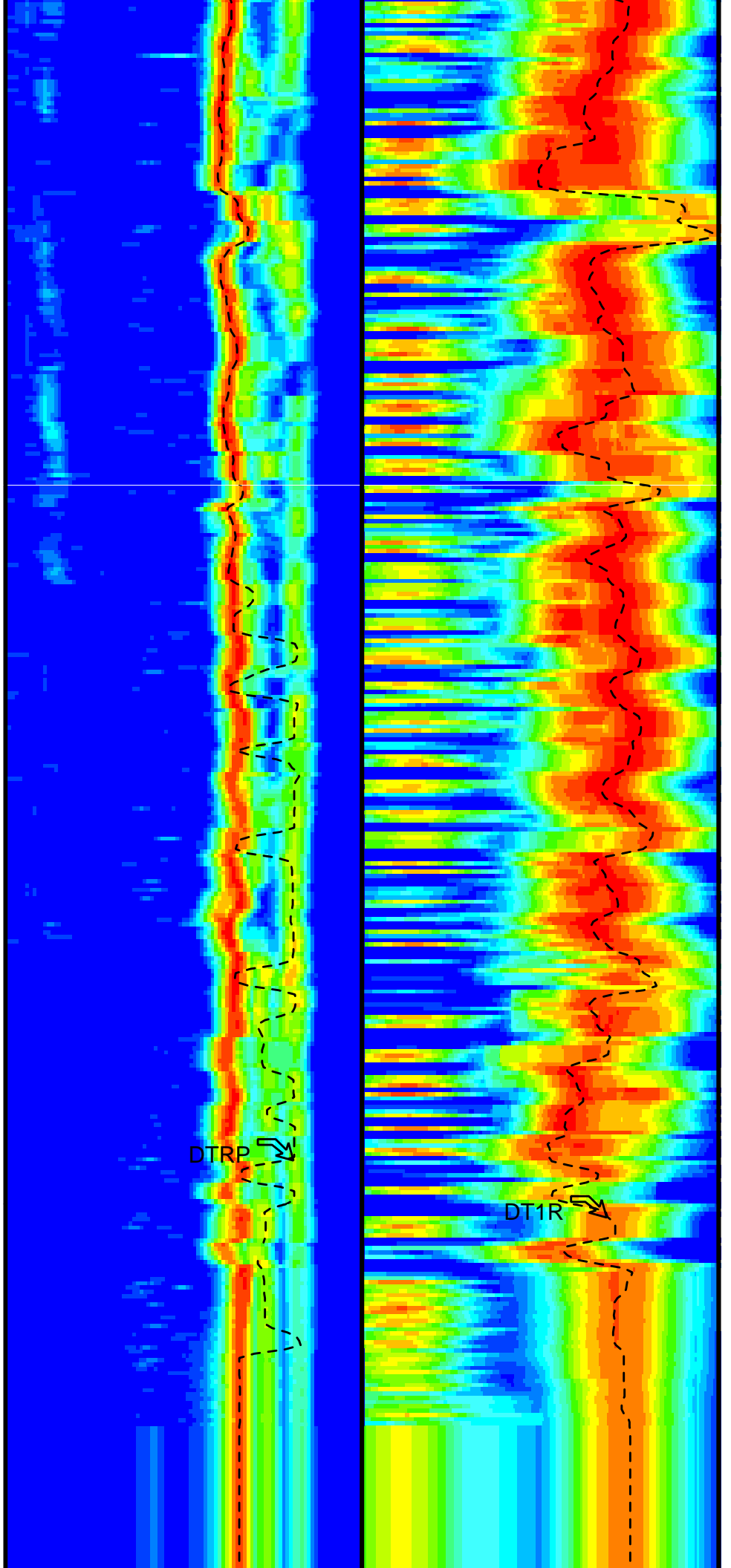


4575

-FR HNGS

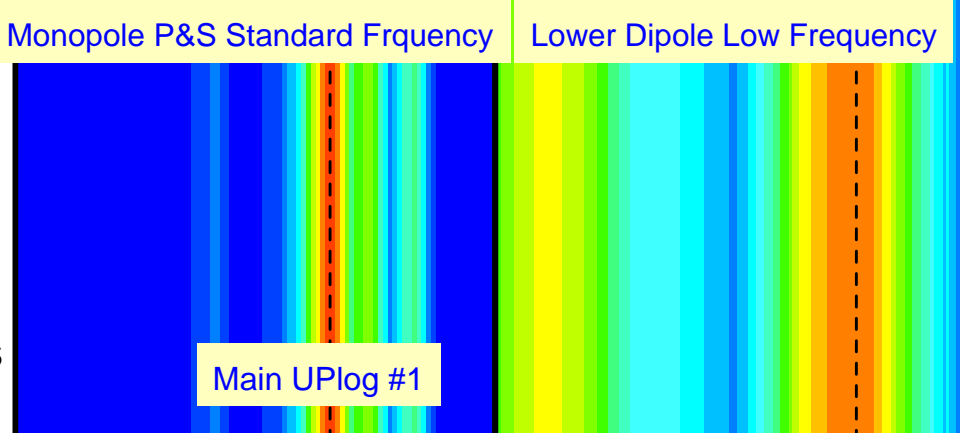
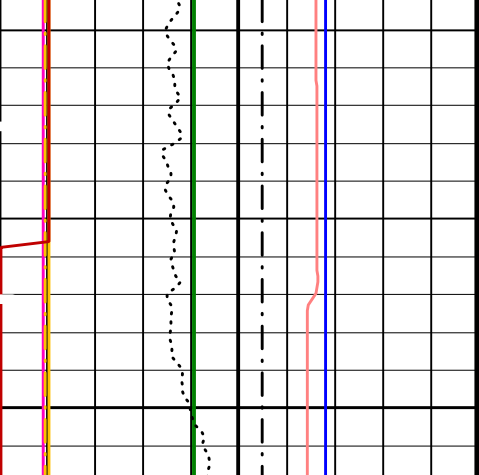
4600

FR DSI-



DTRP

DT1R



-TD-
4625

Bit Size (BS) (IN)		
6		16
Delta-T Shear - Lower Dipole (DT1) (US/F)		
440		40
Delta-T Comp - P & S (DT4P) (US/F)		
440		40
Delta-T Shear - P & S (DT4S) (US/F)		
440		40
Tension (TENS) (LBF)		
10000		0
Peak Coherence / RA - Lower Dipole (CHR1)		
0	(---)	10
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)	15

Delta-T Comp / RA - P & S (DTRP) (US/F)		
40		240
Delta-T Shear / RA - P & S (DTRS) (US/F)		
40		240
Min Amplitude Max Rec.Array P&S Slow Proj. CVDL (SPR4) (US/F)		
40		240

Delta-T Shear / RA - Lower Dipole (DT1R) (US/F)		
75		775
Min Amplitude Max Rec.Array L.Dipole Slow Proj. CVDL (SPR1) (US/F)		
75		775

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
BHS	DSST-B: Dipole Shear Imager - B Borehole Status	OPEN
CASF	Label Casing Function - Monopole P&S	50
COLL	Label Slowness Lower Limit - Monopole P&S Compressional	80 US/F
COUL	Label Slowness Upper Limit - Monopole P&S Compressional	220 US/F
DDE1	Digitizing Delay 1	0 US
DDE4	Digitizing Delay 4	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	775	US/F
DSI1	Digitizer Sample Interval 1	40	US
DSI4	Digitizer Sample Interval 4	10	US
DSIX	Digitizer Sample Interval X	40	US
DTCS	Compressional Delta-T Source for DTCS Channel	PS_COMP	
DTF	Delta-T Fluid	204.5	US/F
DWC1	Digitizer Word Count 1	512	
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	BS	
LFC	Label Formation Character - Monopole P&S	DYNAMIC	
LTXG	Lower Dipole Transmitter Geometry	156	IN
MCS	Mean Casing Slowness	57	US/F
MTXG	Monopole Transmitter Geometry	186	IN
NWI1	Number Waveform Items 1	8	
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
SAM1	DSST Sonic Acquisition Mode 1 - Lower Dipole Mode	LFD_EVEN	
SAM4	DSST Sonic Acquisition Mode 4 - High Frequency Monopole Mode for P&S	EVEN	
SAMX	DSST Sonic Acquisition Mode X - Both Dipoles or Monopole Mode for Expert	OFF	
SAS1	STC Sonic Array Status - Lower Dipole	255	
SAS4	STC Sonic Array Status - Monopole P&S	255	
SBO1	STC Search Band Offset - Lower Dipole	3000	US
SBO4	STC Search Band Offset - Monopole P&S	500	US
SBR4	STC Baseline Removal - Monopole P&S	ON	
SBW1	STC Search Bandwidth - Lower Dipole	8000	US
SBW4	STC Search Bandwidth - Monopole P&S	2000	US
SFC1	STC Formation Character - Lower Dipole	SELECTABLE	
SFC4	STC Formation Character - Monopole P&S	SELECTABLE	
SFM1	STC Filter - Lower Dipole	B.3-1.5K	
SFM4	STC Filter - Monopole P&S	B3-20K	
SHLL	Label Slowness Lower Limit - Monopole P&S Shear	100	US/F
SHUL	Label Slowness Upper Limit - Monopole P&S Shear	220	US/F
LLL1	STC Slowness Lower Limit - Lower Dipole	75	US/F
LLL4	STC Slowness Lower Limit - Monopole P&S	40	US/F
SST1	STC Slowness Step - Lower Dipole	4	US/F
SST4	STC Slowness Step - Monopole P&S	2	US/F
SSW1	STC Source Waveform - Lower Dipole	WF_SAM1	
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
SUL1	STC Slowness Upper Limit - Lower Dipole	775	US/F
SUL4	STC Slowness Upper Limit - Monopole P&S	240	US/F
SWD1	STC Slowness Width - Lower Dipole	40	US/F
SWD4	STC Slowness Width - Monopole P&S	10	US/F
TBF1	STC Time for Baseline Fill - Lower Dipole	0	US
TBF4	STC Time for Baseline Fill - Monopole P&S	300	US
TLL1	STC Time Lower Limit - Lower Dipole	600	US
TLL4	STC Time Lower Limit - Monopole P&S	150	US
TST1	STC Time Step - Lower Dipole	200	US
TST4	STC Time Step - Monopole P&S	50	US
TUL1	STC Time Upper Limit - Lower Dipole	15912.5	US
TUL4	STC Time Upper Limit - Monopole P&S	3660	US
TWD1	STC Time Width - Lower Dipole	2000	US
TWD4	STC Time Width - Monopole P&S	1000	US
TWI1	STC Integration Time Window - Lower Dipole	1600	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	BS	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	

PTH	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.0012723	
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	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.22479	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.853849	
System and Miscellaneous			
BS	Bit Size	11.438	IN
DFD	Drilling Fluid Density	1.26	G/C3
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: DSST_P_S_LOWER_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 21-Jun-2009 20:11

OP System Version: 17C0-154

MEST-B	SRPC-3762-Q1_2009_OP17	DTA-A	17C0-154
DSST-B	17C0-154	HNGC-B	17C0-154
HNGS-BA	17C0-154	DTC-H	17C0-154

Input DLIS Files

DEFAULT	FMS_DSI_NGS_022LUP	FN:31	PRODUCER	10-Jun-2009 13:18	4626.9 M	4394.5 M
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Output DLIS Files

DEFAULT	FMS_DSI_NGS_042PUP	FN:55	PRODUCER	21-Jun-2009 20:11		
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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: 4-Jun-2009 2:47							
Caliper 1 Zero Measurement	12.00	N/A	12.57	N/A	N/A	N/A	IN
Caliper 2 Zero Measurement	12.00	N/A	12.44	N/A	N/A	N/A	IN
Caliper 1 Plus Measurement	15.19	N/A	15.77	N/A	N/A	N/A	IN
Caliper 2 Plus Measurement	15.19	N/A	15.68	N/A	N/A	N/A	IN
Micro Electrical Scanner - B (Slim) Wellsite Calibration - CROUZET ACCELEROMETER							
PROM HAS BEEN READ CORRECTLY							
Before: 10-Jun-2009 12:33							
TEMPERATURE REFERENCE :	N/A	N/A	20	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	92	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	10	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	448	N/A	N/A	N/A	
Micro Electrical Scanner - B (Slim) Wellsite Calibration - CROUZET MAGNETOMETER							
PROM HAS BEEN READ CORRECTLY							
Before: 10-Jun-2009 12:33							
TEMPERATURE REFERENCE :	N/A	N/A	19	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	12	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	428	N/A	N/A	N/A	
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 1 Check							
Master: Calibration out of date 12-Mar-2009 20:35 Before: 16-May-2009 19:11 After: 24-May-2009 0:43							
Na 511 Peak Loc	40.00	39.63	39.53	39.69	0.1544	1.000	
Na 511 Peak Res	15.50	14.89	16.37	15.16	-1.211	2.000	%
High Voltage	1150	1168	1179	1182	2.899	N/A	V
Na 1785 Peak Loc	142.6	142.1	141.7	142.3	0.5758	7.000	
Na 1785 Peak Res	8.500	8.613	9.055	8.876	-0.1792	2.000	%
Temperature	15.50	27.34	32.56	31.31	-1.242	N/A	DEGC
Na Count Rate	45.00	41.11	38.79	38.87	0.08134	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 2 Check							
Master: Calibration out of date 12-Mar-2009 20:35 Before: 16-May-2009 19:11 After: 24-May-2009 0:43							
Na 511 Peak Loc	40.00	39.72	39.75	39.57	-0.1780	1.000	
Na 511 Peak Res	15.50	15.49	15.15	16.24	1.096	2.000	%

High Voltage	1150	1102	1113	1115	1.885	N/A	V
Na 1785 Peak Loc	142.6	142.7	142.3	142.0	-0.3518	7.000	
Na 1785 Peak Res	8.500	7.944	8.759	8.750	-0.008512	2.000	%
Temperature	15.50	27.88	33.15	33.20	0.05202	N/A	DEGC
Na Count Rate	45.00	41.22	39.43	39.10	-0.3307	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Ratio Of Detector 1 To Detector 2

Master: Calibration out of date	12-Mar-2009 20:35	Before: 16-May-2009 19:11	After: 24-May-2009 0:43
Coincidence Count Rate Ratio	1.000	0.9971	0.9835 0.9958 0.01234 0.05000

Hostile Natural Gamma Ray Sonde Master Calibration - Detector 1 Calibration

Master: Calibration out of date	12-Mar-2009 20:35						
Na 511 Peak Set Point	40.00	41.00	--	--	--	--	
Th Peak Loc	209.6	211.0	--	--	--	--	
Th Peak Res	7.000	6.897	--	--	--	--	%
Background Count Rate	142.5	19.53	--	--	--	--	CPS
Gain Ratio	1.000	1.013	--	--	--	--	

Hostile Natural Gamma Ray Sonde Master Calibration - Detector 2 Calibration

Master: Calibration out of date	12-Mar-2009 20:35						
Na 511 Peak Set Point	40.00	41.00	--	--	--	--	
Th Peak Loc	209.6	208.9	--	--	--	--	
Th Peak Res	7.000	7.130	--	--	--	--	%
Background Count Rate	142.5	20.80	--	--	--	--	CPS
Gain Ratio	1.000	1.001	--	--	--	--	

Micro Electrical Scanner - B (Slim) / Equipment Identification

Primary Equipment:		
MEST Sonde - B	MEDS - B	702
MEST Preamplifier Cartridge - AB	MEPC - AB	806
GPIT Cartridge - A	GPIC - A	719
MEST Acquisition Cartridge - A	MEAC - A	875
Auxiliary Equipment:		
MEST-B Preamplifier Cartridge Housing	MEPH - A	702
MEST Acquisition Cartridge Housing (Slim)	MEAH - B	769

Hostile Natural Gamma Ray Cartridge - B / Equipment Identification

Primary Equipment:		
HNGC Cartridge	HNGC - B	300
Auxiliary Equipment:		
HNGC Housing	HNGH - A	115

Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment:		
HNGS Sonde	HNGS - BA	194
Auxiliary Equipment:		
HNGS Sonde Housing	HNSH - BA	205
Gamma Source Radioactive	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		39.63	Master		14.89	Master		1168
Before		39.53	Before		16.37	Before		1179
After		39.69	After		15.16	After		1182
	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		142.1	Master		8.613	Master		27.34
Before		141.7	Before		9.055	Before		32.56

After		142.3	After		8.876	After		31.31	
	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			41.11						
Before			38.79						
After			38.87						
	10.00 (Minimum)	45.00 (Nominal)	100.0 (Maximum)						
Master: Calibration out of date 12-Mar-2009 20:35			Before: 16-May-2009 19:11			After: 24-May-2009 0:43			

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			39.72	Master			15.49	Master			1102
Before			39.75	Before			15.15	Before			1113
After			39.57	After			16.24	After			1115
	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			142.7	Master			7.944	Master			27.88
Before			142.3	Before			8.759	Before			33.15
After			142.0	After			8.750	After			33.20
	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			41.22								
Before			39.43								
After			39.10								
	10.00 (Minimum)	45.00 (Nominal)	100.0 (Maximum)								
Master: Calibration out of date 12-Mar-2009 20:35			Before: 16-May-2009 19:11			After: 24-May-2009 0:43					

Hostile Natural Gamma Ray Sonde Wellsite Calibration			
Ratio Of Detector 1 To Detector 2			
Phase	Coincidence Count Rate Ratio	Value	
Master		0.9971	
Before		0.9835	
After		0.9958	
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)
Master: Calibration out of date 12-Mar-2009 20:35			
Before: 16-May-2009 19:11			
After: 24-May-2009 0:43			

Hostile Natural Gamma Ray Sonde Master Calibration											
Detector 1 Calibration											
Phase	Na 511 Peak Set Point		Value	Phase	Th Peak Loc		Value	Phase	Th Peak Res %		Value
Master			41.00	Master			211.0	Master			6.897
	38.00 (Minimum)	40.00 (Nominal)	43.00 (Maximum)	201.0 (Minimum)	209.6 (Nominal)	218.3 (Maximum)	5.000 (Minimum)	7.000 (Nominal)	9.000 (Maximum)		
Phase	Background Count Rate CPS		Value	Phase	Gain Ratio		Value				
Master			19.53	Master			1.013				
	10.00 (Minimum)	142.5 (Nominal)	265.0 (Maximum)	0.9400 (Minimum)	1.000 (Nominal)	1.060 (Maximum)					
Master: Calibration out of date 12-Mar-2009 20:35											

Hostile Natural Gamma Ray Sonde Master Calibration											
Detector 2 Calibration											
Phase	Na 511 Peak Set Point		Value	Phase	Th Peak Loc		Value	Phase	Th Peak Res %		Value

Master		41.00	Master		208.9	Master		7.130	
	38.00 (Minimum)	40.00 (Nominal)	43.00 (Maximum)	201.0 (Minimum)	209.6 (Nominal)	218.3 (Maximum)	5.000 (Minimum)	7.000 (Nominal)	9.000 (Maximum)
Phase	Background Count Rate CPS		Value	Phase	Gain Ratio		Value		
Master			20.80	Master			1.001		
	10.00 (Minimum)	142.5 (Nominal)	265.0 (Maximum)		0.9400 (Minimum)	1.000 (Nominal)	1.060 (Maximum)		
Master: Calibration out of date 12-Mar-2009 20:35									

DTS Telemetry Tool / Equipment Identification

Primary Equipment:

DTC-H Auxiliary Cartridge
DTC-H Telemetry Cartridge

DTCH - A
DTCH - A 8753

Auxiliary Equipment:

DTCH Telemetry Cartridge Housing

ECH - KC 2304

Company: Lamont Doherty

Schlumberger

Well: Expedition 321 Site U1338B

Field: PEAT

Rig: JOIDES Resolution

Ocean: Pacific

Dipole

Shear Sonic

Natural Gamma Ray