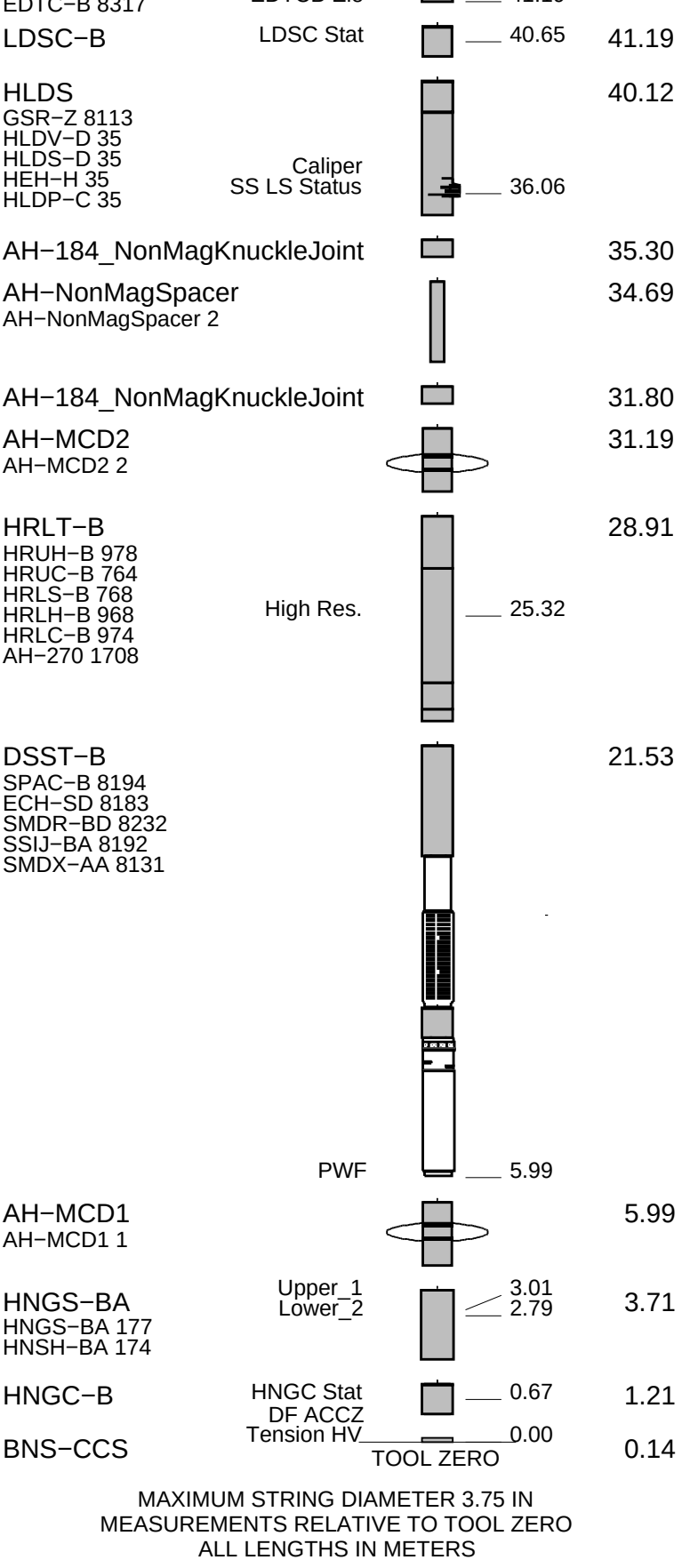
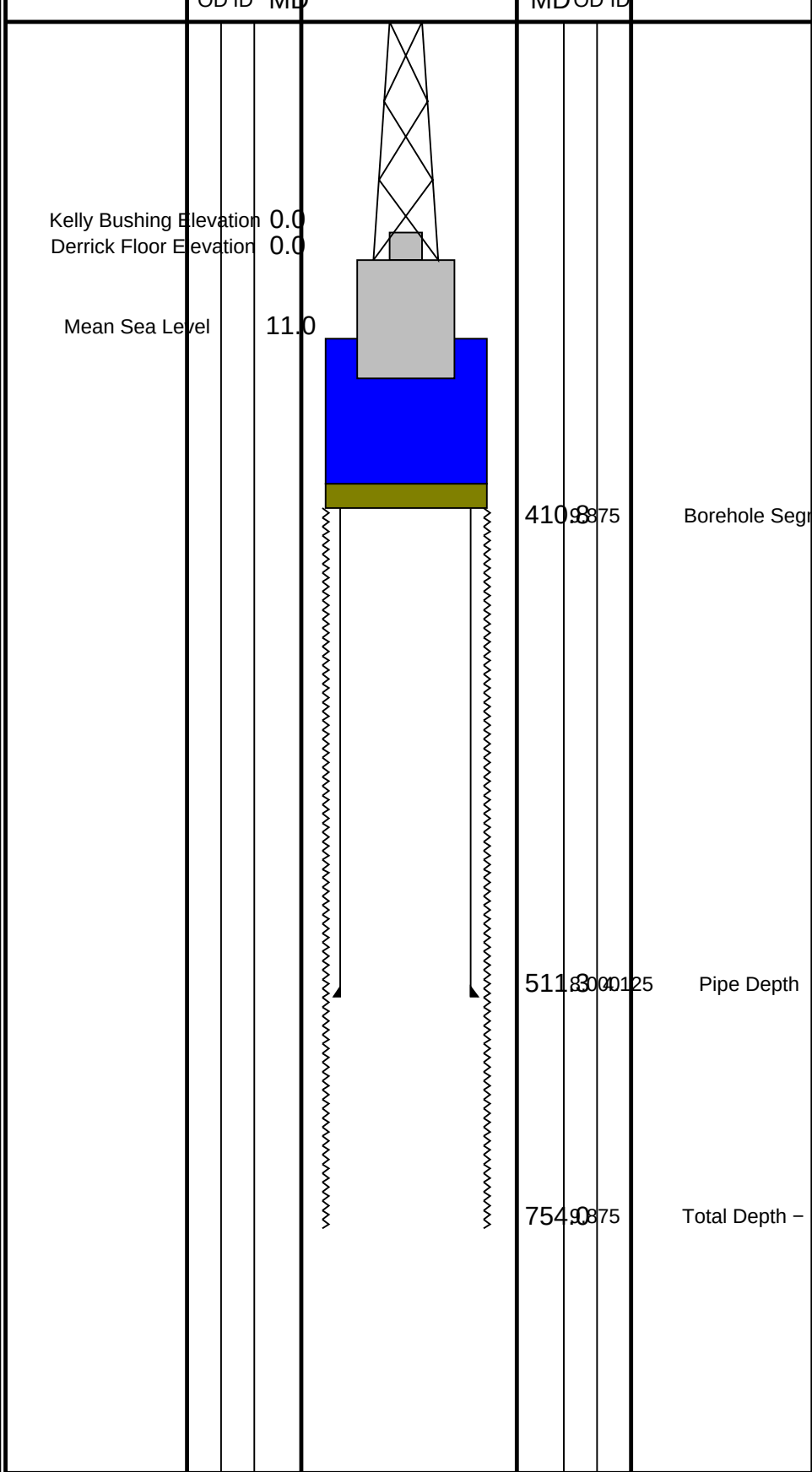




Logging Date			17-Nov-2015					
Run Number			1					
Depth Driller			754 m					
Schlumberger Depth			754 m					
Bottom Log Interval			754 m					
Top Log Interval			410.8 m					
Casing Driller Size @ Depth			5.500 in @ 511.3 m			@		
Casing Schlumberger			511.3 m					
Bit Size			9.875 in					
Type Fluid In Hole			Seawater					
MUD	Density	Viscosity	1.05 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	0.078 @ 104	@ 104			@	@	
Maximum Recorded Temperatures			104 degC					
Circulation Stopped		Time	12-Nov-2015 20:00					
Logger On Bottom		Time	17-Nov-2015 5:00					
Unit Number	Location		627314 Houma, LA					
Recorded By			C. Furman					
Witnessed By			A. Slagle, T. Ludmann					

[illegible]





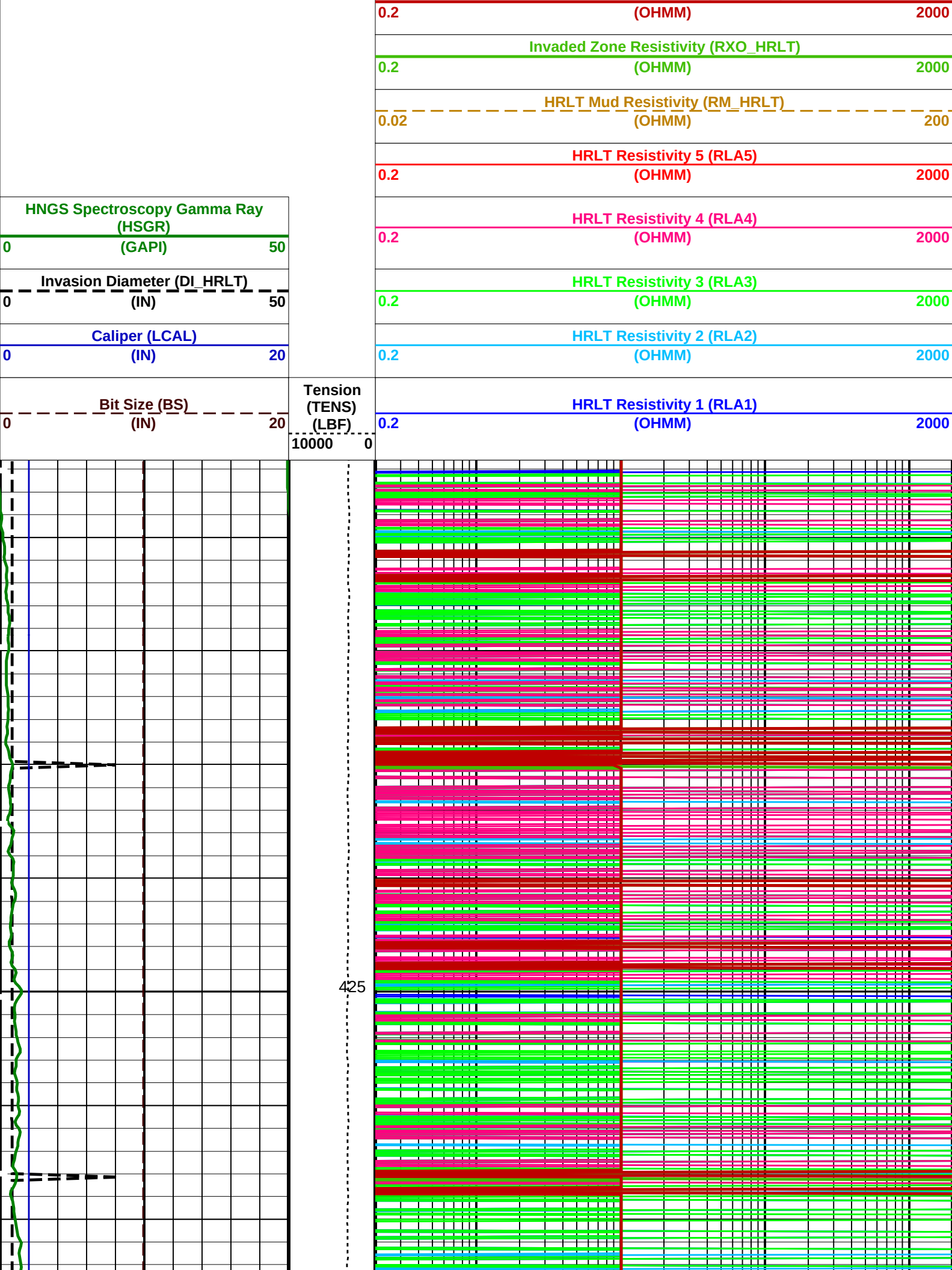
Schlumberger

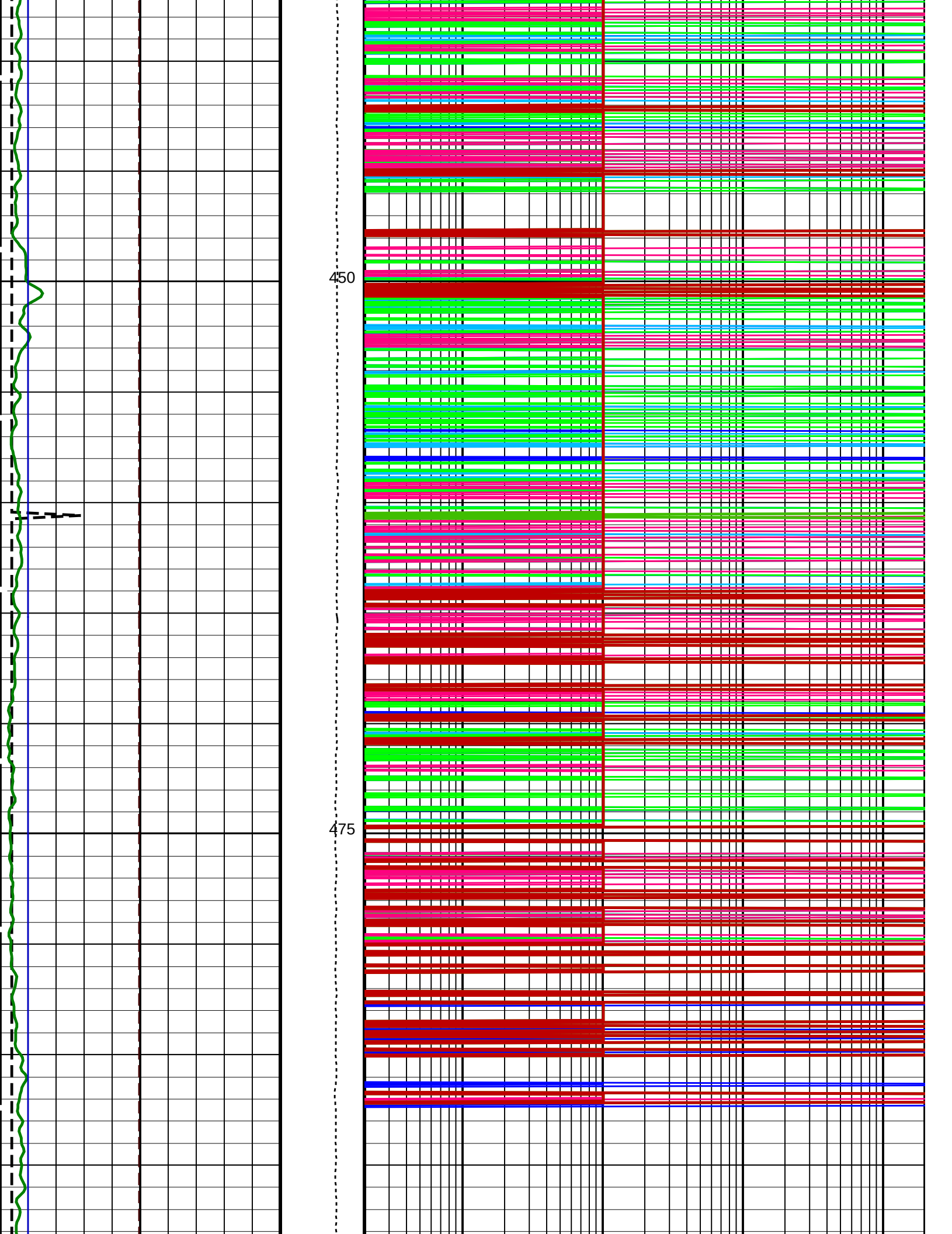
Uplog

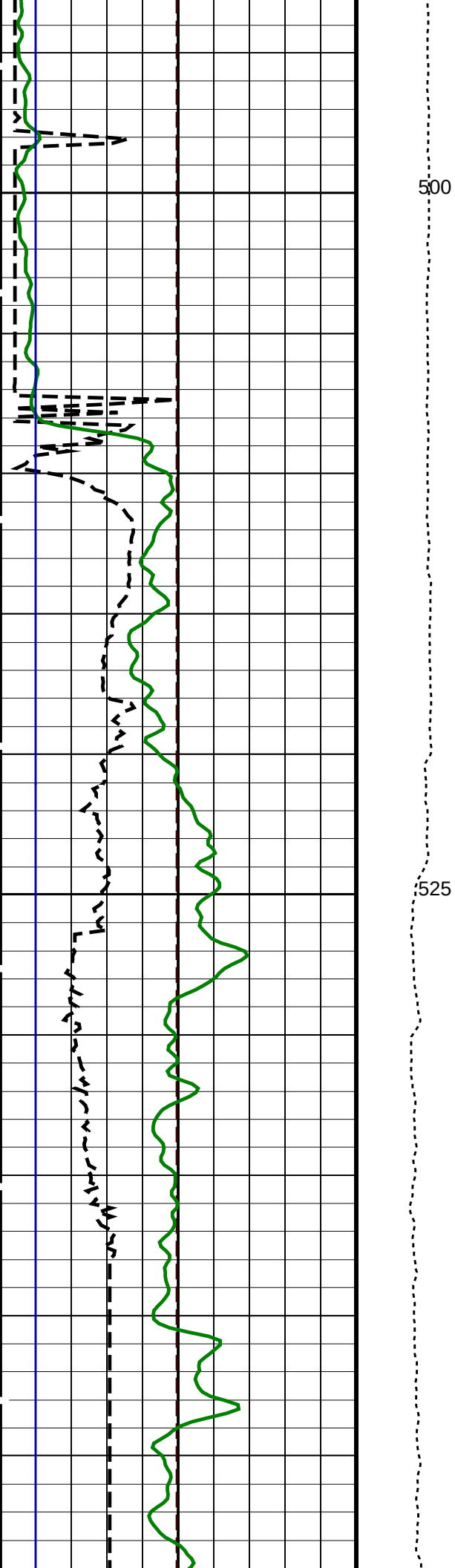
MAXIS Field Log

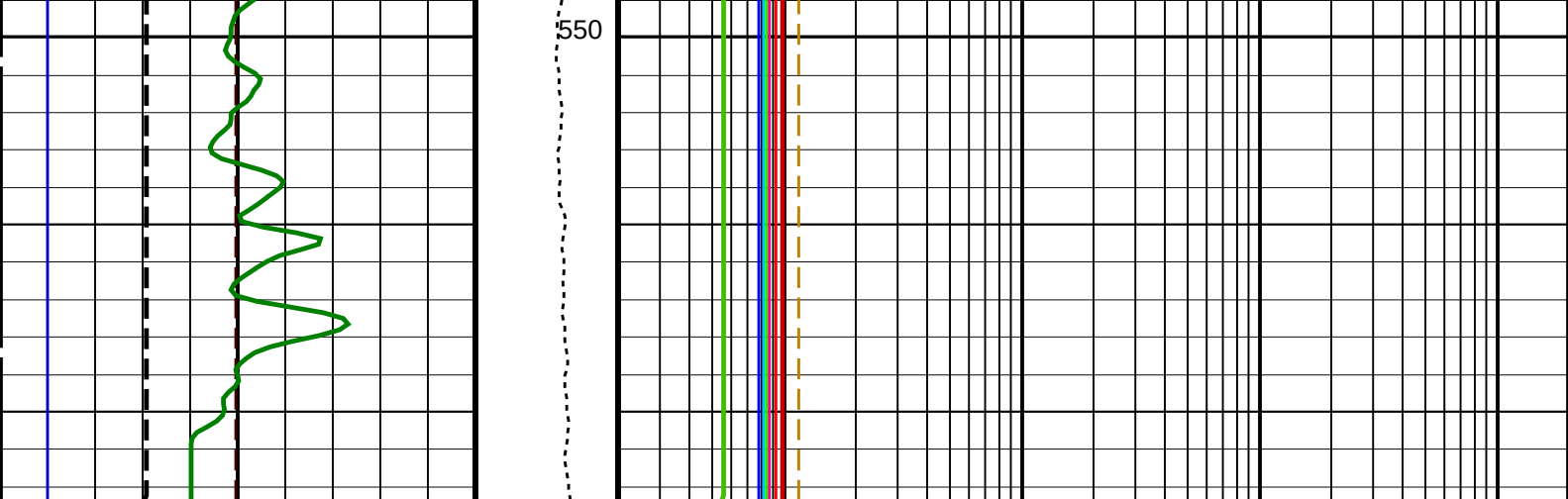
Company: International Ocean Discovery Program Well: Expedition 359, Site U1470B

Output DLIS Files					
DEFAULT	NGS_DSI_HRLA_LDL_008LUP	FN:7	PRODUCER	17-Nov-2015 05:18	562.4 M 401.6 M
OP System Version: 19C0-187					
HNGC-B	19C0-187		HNGS-BA	19C0-187	
DSST-B	19C0-187		HRLT-B	19C0-187	
HLDS	19C0-187		LDSC-B	19C0-187	
EDTC-B	SKK-5169-EDTCB				
PIP SUMMARY					
Time Mark Every 60 S					









Bit Size (BS)		Tension (TENS) (LBF)	HRLT Resistivity 1 (RLA1)	
0	(IN) 20		0.2	(OHMM) 2000
Caliper (LCAL)		10000	HRLT Resistivity 2 (RLA2)	
0	(IN) 20		0.2	(OHMM) 2000
Invasion Diameter (DI_HRLT)		0	HRLT Resistivity 3 (RLA3)	
0	(IN) 50		0.2	(OHMM) 2000
HNGS Spectroscopy Gamma Ray (HSGR)		50	HRLT Resistivity 4 (RLA4)	
0	(GAPI) 50		0.2	(OHMM) 2000
			HRLT Resistivity 5 (RLA5)	
			0.2	(OHMM) 2000
			HRLT Mud Resistivity (RM_HRLT)	
			0.02	(OHMM) 200
			Invaded Zone Resistivity (RXO_HRLT)	
			0.2	(OHMM) 2000
			HRLT True Resistivity (RT_HRLT)	
			0.2	(OHMM) 2000

PIP SUMMARY	
Time Mark Every 60 S	

Parameters		
DLIS Name	Description	Value
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
BHT	Bottom Hole Temperature (used in calculations)	40 DEGC
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	LCAL
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW
HABK	HNGS Borehole Potassium Running Average	-0.0311143
HALF	HNGS Alpha Filter Length	60 IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE
HMWM	Mud Weighting Material	NATU
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 Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SHT	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Surface Hole Temperature	20	DEGC
VBA1	Tool Position	ECCE	
VBA2	HNGS Detector 1 Variable Barite Factor Running Average	1.11223	
	HNGS Detector 2 Variable Barite Factor Running Average	0.946281	
DSST-B: Dipole Shear Imager - B			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	40	DEGC
GCSE	Generalized Caliper Selection	LCAL	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
HRLT-B: High Resolution Laterolog Array - B			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	40	DEGC
GCSE	Generalized Caliper Selection	LCAL	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
PROCINV	Inversion Selection	ON	
PROCML	Inversion Micro-Resistivity Selection	NO_EXTERNAL_RXO	
PROCMSO	Mechanical Standoff Fin Size	0	IN
PROCRM	Processing Mud Resistivity Select	HRLT_Compute	
PROCSPO	Sonde Position	Centered	
SHT	Surface Hole Temperature	20	DEGC
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	40	DEGC
GCSE	Generalized Caliper Selection	LCAL	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
System and Miscellaneous			
BS	Bit Size	9.875	IN
MST	Mud Sample Temperature	23.00	DEGC
TD	Total Depth	1212.2	M

Format: HRLT

Vertical Scale: 1:200

Graphics File Created: 17-Nov-2015 05:18

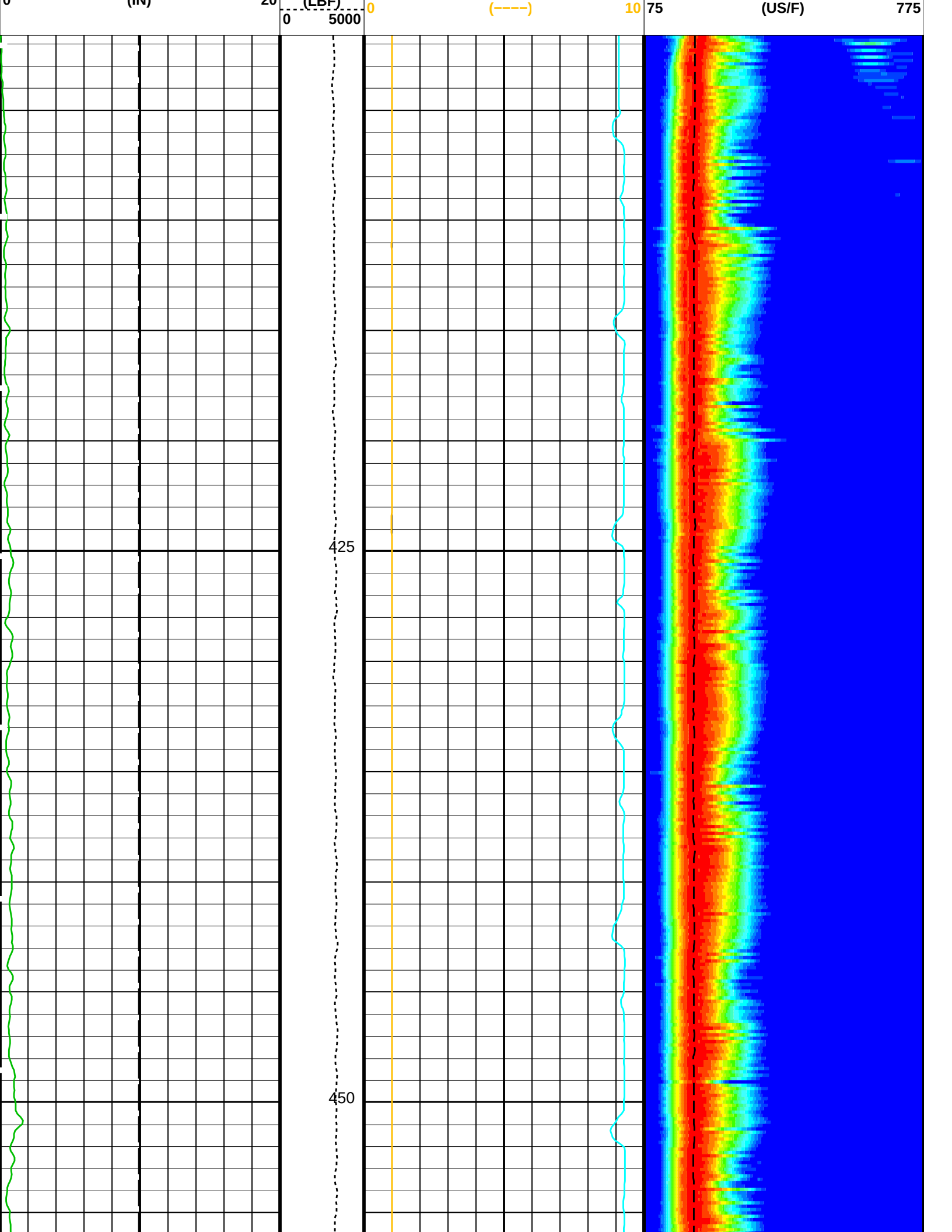
OP System Version: 19C0-187			
HNGC-B	19C0-187	HNGS-BA	19C0-187
DSST-B	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
EDTC-B	SKK-5169-EDTCB		

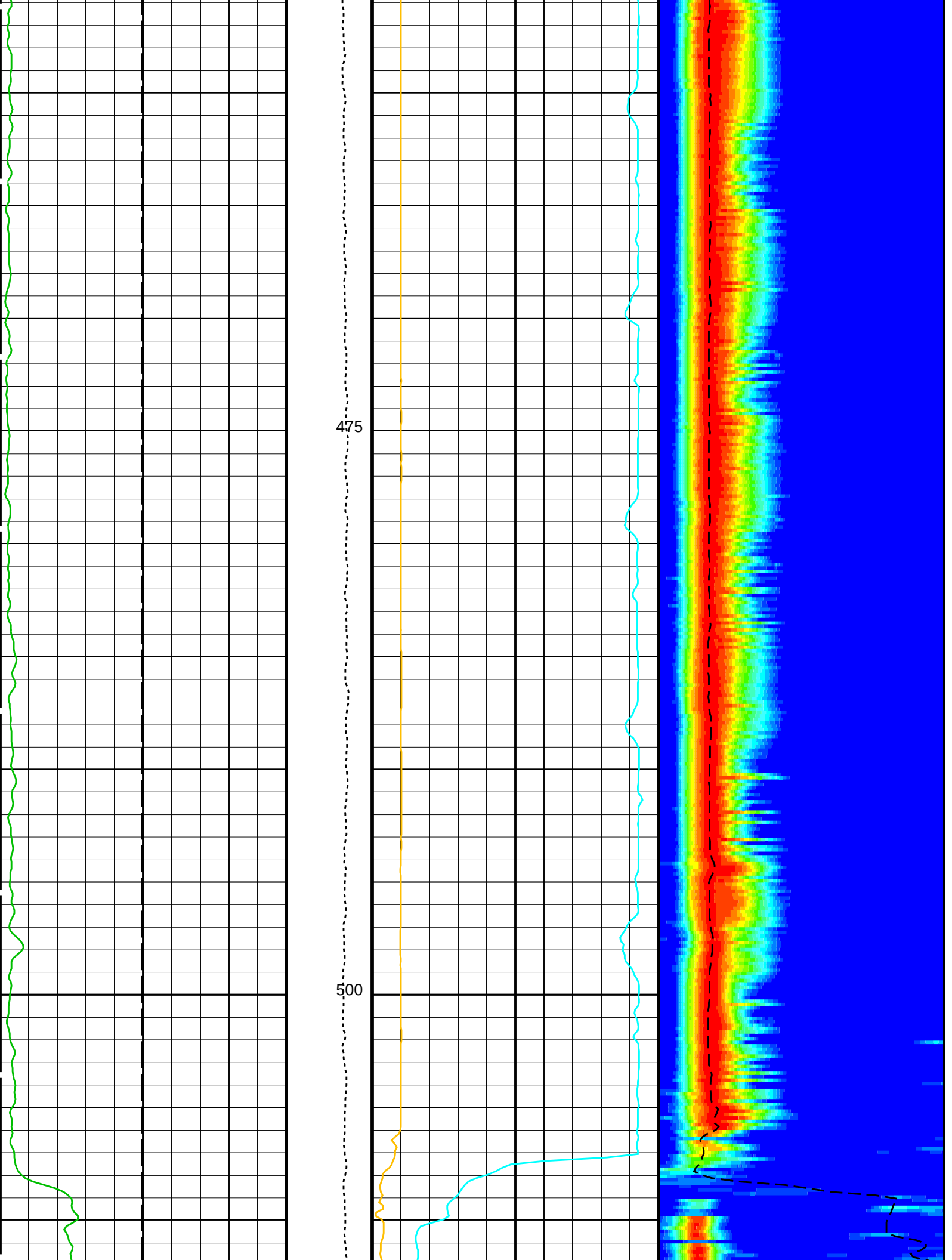
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DEFAULT	NGS_DSI_HRLA_LDL_008LUP	FN:7	PRODUCER 17-Nov-2015 05:18

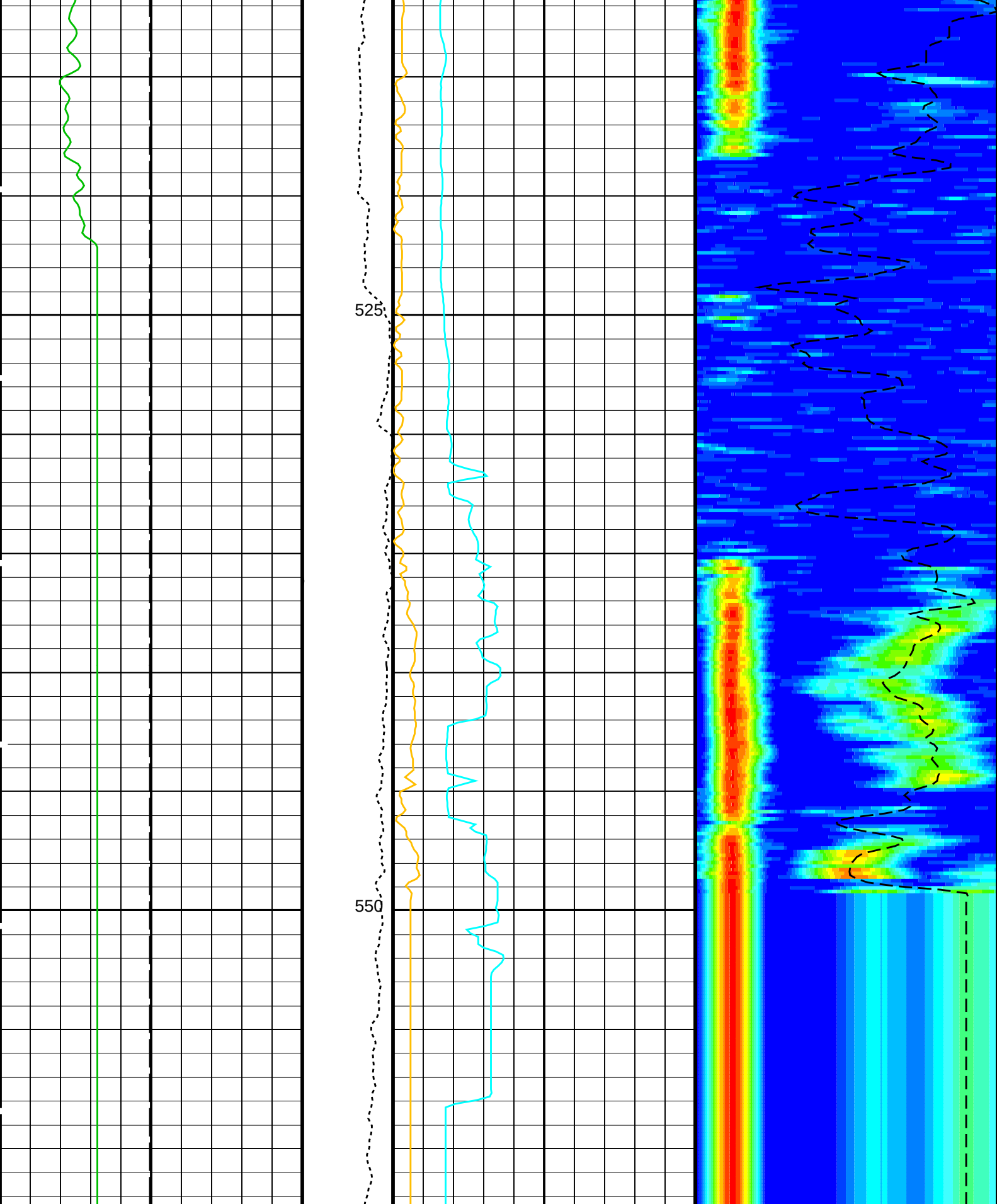
Output DLIS Files			
DEFAULT	NGS_DSI_HRLA_LDL_008LUP	FN:7	PRODUCER 17-Nov-2015 05:18 562.4 M 401.6 M

OP System Version: 19C0-187			
HNGC-B	19C0-187	HNGS-BA	19C0-187
DSST-B	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
EDTC-B	SKK-5169-EDTCB		

PIP SUMMARY			
Time Mark Every 60 S			
Gamma Ray (GR_EDTC) 0150 (GAPI)		Sonic Velocity (SVEL) 10006000 (M/S)	
		Min Max Rec.Array U.Dipole Slow Proj. CVDL (SPR2) (US/F) 75775	
Bit Size (BS) 020 (IN)		Tension (TENS) Peak Coherence / RA - Upper Dipole (CHR2) (LBS)	
		Delta-T Shear / RA - Upper Dipole (DT2R)	







Bit Size (BS) (IN)	Tension (TENS) (LBF)	Peak Coherence / RA - Upper Dipole (CHR2)	Delta-T Shear / RA - Upper Dipole (DT2R) (US/F)
0	0	0	75
20	5000	10	775

Gamma Ray (GR EDTC)	Sonic Velocity (SVEL)	Min	Amplitude	Max

0	Gamma Ray (GR EDTC) (GAPI)	150	1000	Sonic Velocity (SVEL) (M/S)	6000	Rec.Array U.Dipole Slow Proj. CVDL (SPR2) (US/F)	75	775
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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	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	
NWI2	Number Waveform Items 2	8	
NWIX	Number Waveform Items X	0	
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	
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
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	
UTXG	Upper Dipole Transmitter Geometry	162	IN
System and Miscellaneous			
BS	Bit Size	9.875	IN

Format: DSST_UPPER_DIPOLE_VDL_COLOR

Vertical Scale: 1:200

Graphics File Created: 17-Nov-2015 05:18

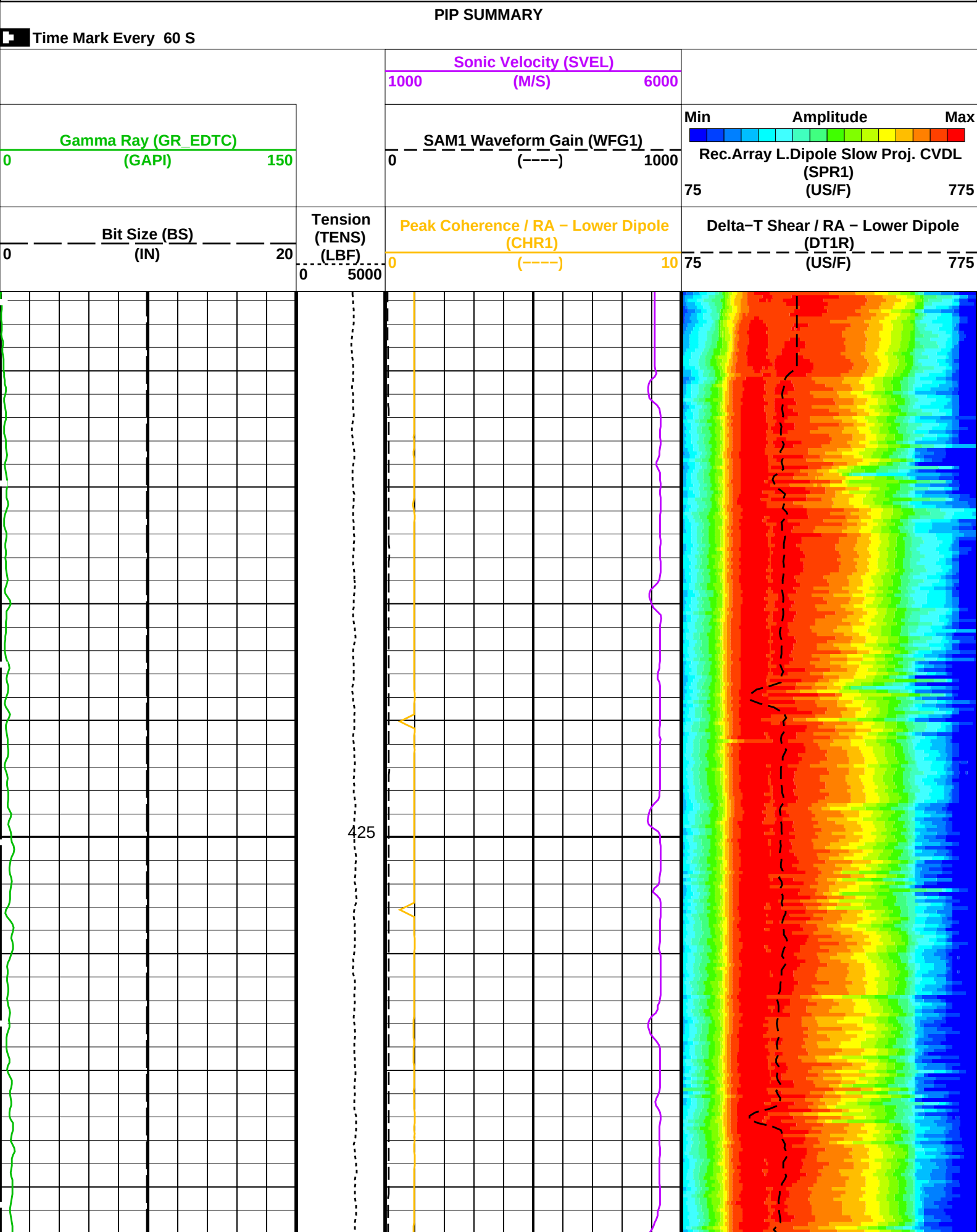
OP System Version: 19C0-187				
HNGC-B	19C0-187	HNGS-BA	19C0-187	
DSST-B	19C0-187	HRLT-B	19C0-187	
HLDS	19C0-187	LDSC-B	19C0-187	
EDTC-B	SKK-5169-EDTCB			

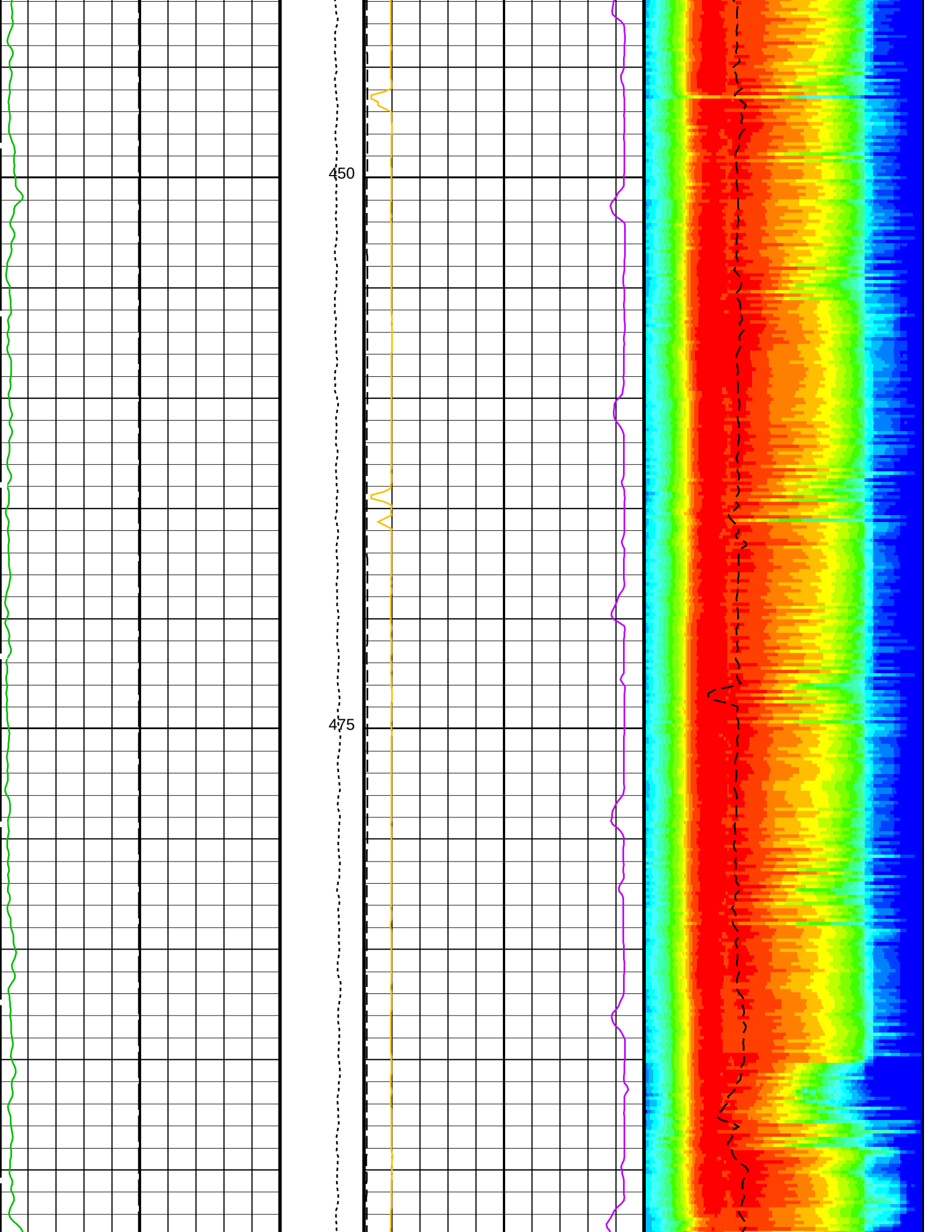
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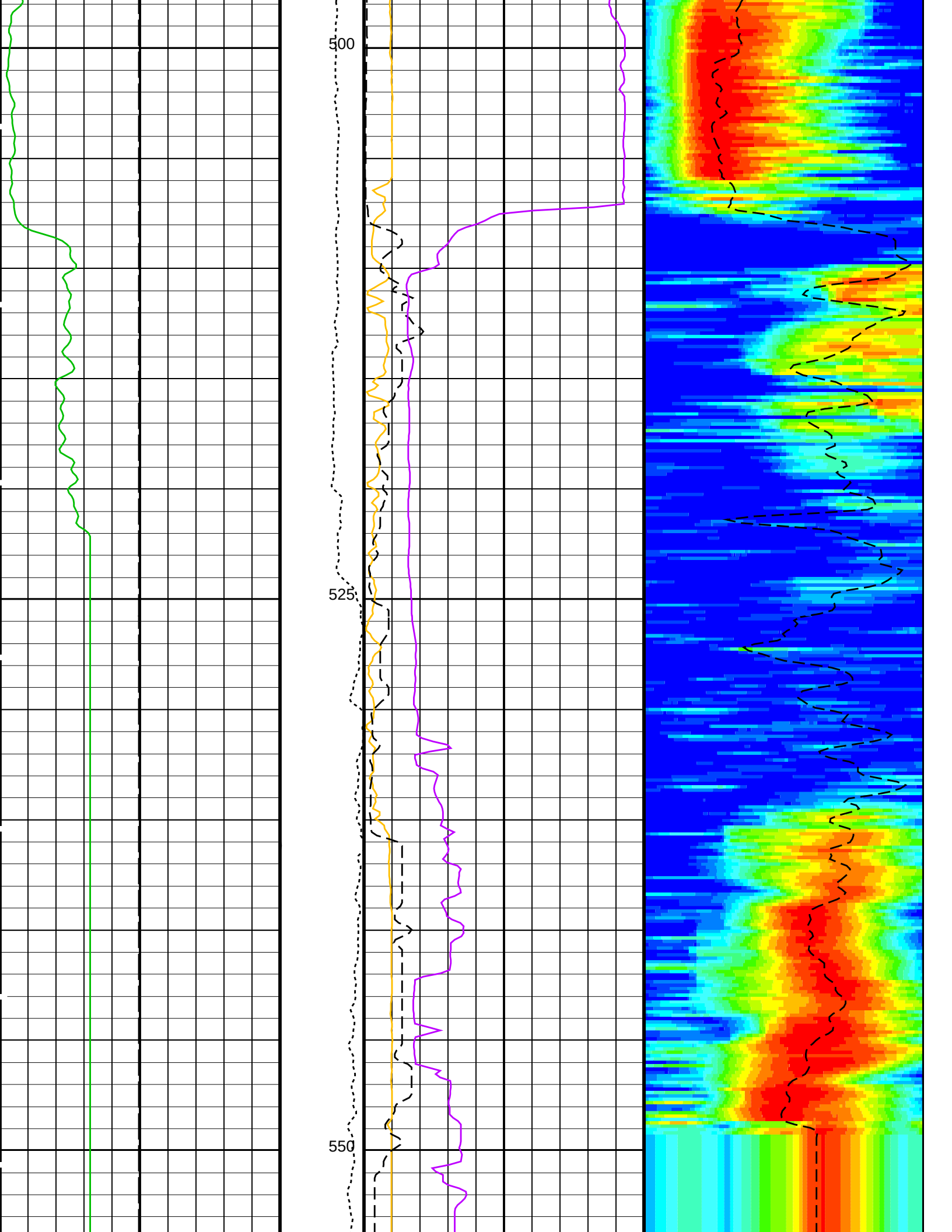
Output DLIS Files				
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			562.4 M	401.6 M

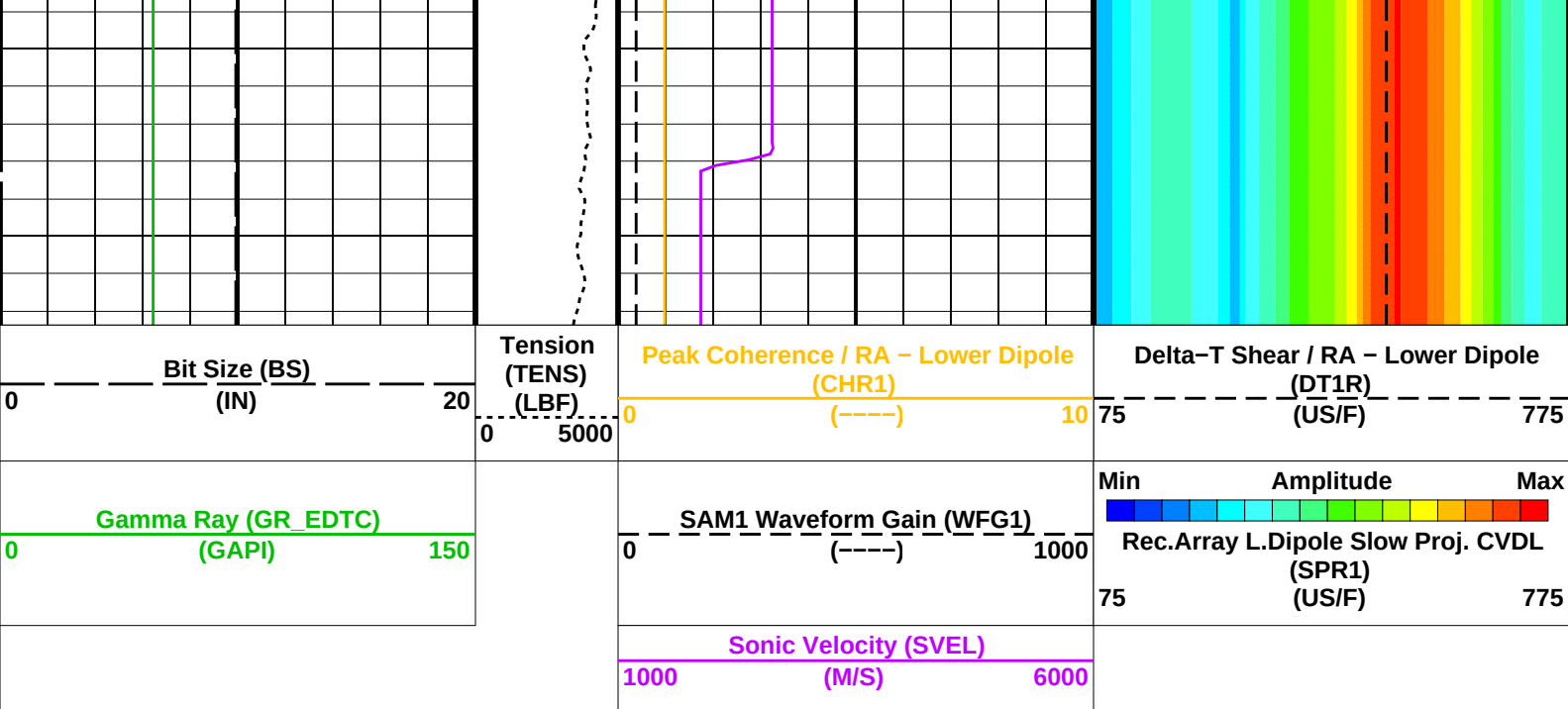
OP System Version: 19C0-187				
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HNGC-B	19C0-187	HNGS-BA	19C0-187
DSST-B	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
EDTC-B	SKK-5169-EDTCB		









PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
DSST-B: Dipole Shear Imager - B		
DDE1	Digitizing Delay 1	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
DSIX	Digitizer Sample Interval X	40 US
DTCS	Compressional Delta-T Source for DTCO Channel	PS_COMP
DWC1	Digitizer Word Count 1	512
DWCX	Digitizer Word Count X	512
LTXG	Lower Dipole Transmitter Geometry	156 IN
NWI1	Number Waveform Items 1	8
NWIX	Number Waveform Items X	0
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
SAMX	DSST Sonic Acquisition Mode X - Both Dipoles or Monopole Mode for Expert	OFF
SAS1	STC Sonic Array Status - Lower Dipole	255
SBO1	STC Search Band Offset - Lower Dipole	3000 US
SBW1	STC Search Bandwidth - Lower Dipole	8000 US
SFC1	STC Formation Character - Lower Dipole	SELECTABLE
SFM1	STC Filter - Lower Dipole	B.3-1.5K
SLL1	STC Slowness Lower Limit - Lower Dipole	75 US/F
SST1	STC Slowness Step - Lower Dipole	4 US/F
SSW1	STC Source Waveform - Lower Dipole	WF_SAM1
SUL1	STC Slowness Upper Limit - Lower Dipole	775 US/F
SWD1	STC Slowness Width - Lower Dipole	40 US/F
TBF1	STC Time for Baseline Fill - Lower Dipole	0 US
TLL1	STC Time Lower Limit - Lower Dipole	600 US
TST1	STC Time Step - Lower Dipole	200 US
TUL1	STC Time Upper Limit - Lower Dipole	15912.5 US
TWD1	STC Time Width - Lower Dipole	2000 US
TWI1	STC Integration Time Window - Lower Dipole	1600 US
TWSX	Transmitter Waveform Select X	0
WFM1	Waveform Mode 1	W1
System and Miscellaneous		
BS	Bit Size	9.875 IN

OP System Version: 19C0-187

HNGC-B	19C0-187	HNGS-BA	19C0-187
DSST-B	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
EDTC-B	SKK-5169-EDTCB		

Output DLIS Files

DEFAULT NGS_DSI_HRLA_LDL_008LUP FN:7 PRODUCER 17-Nov-2015 05:18

Company: International Ocean Discovery Program Well: Expedition 359, Site U1470B

Output DLIS Files

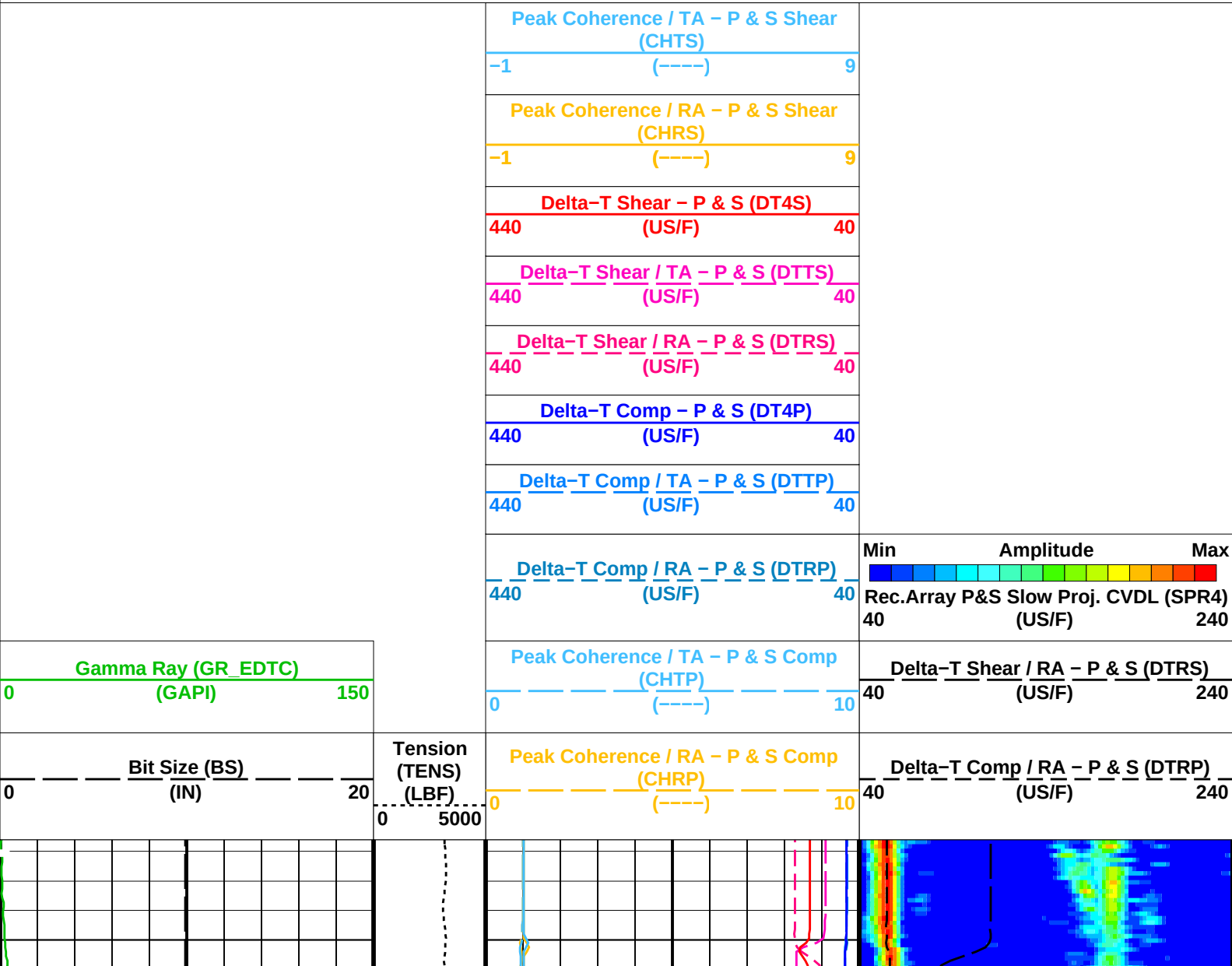
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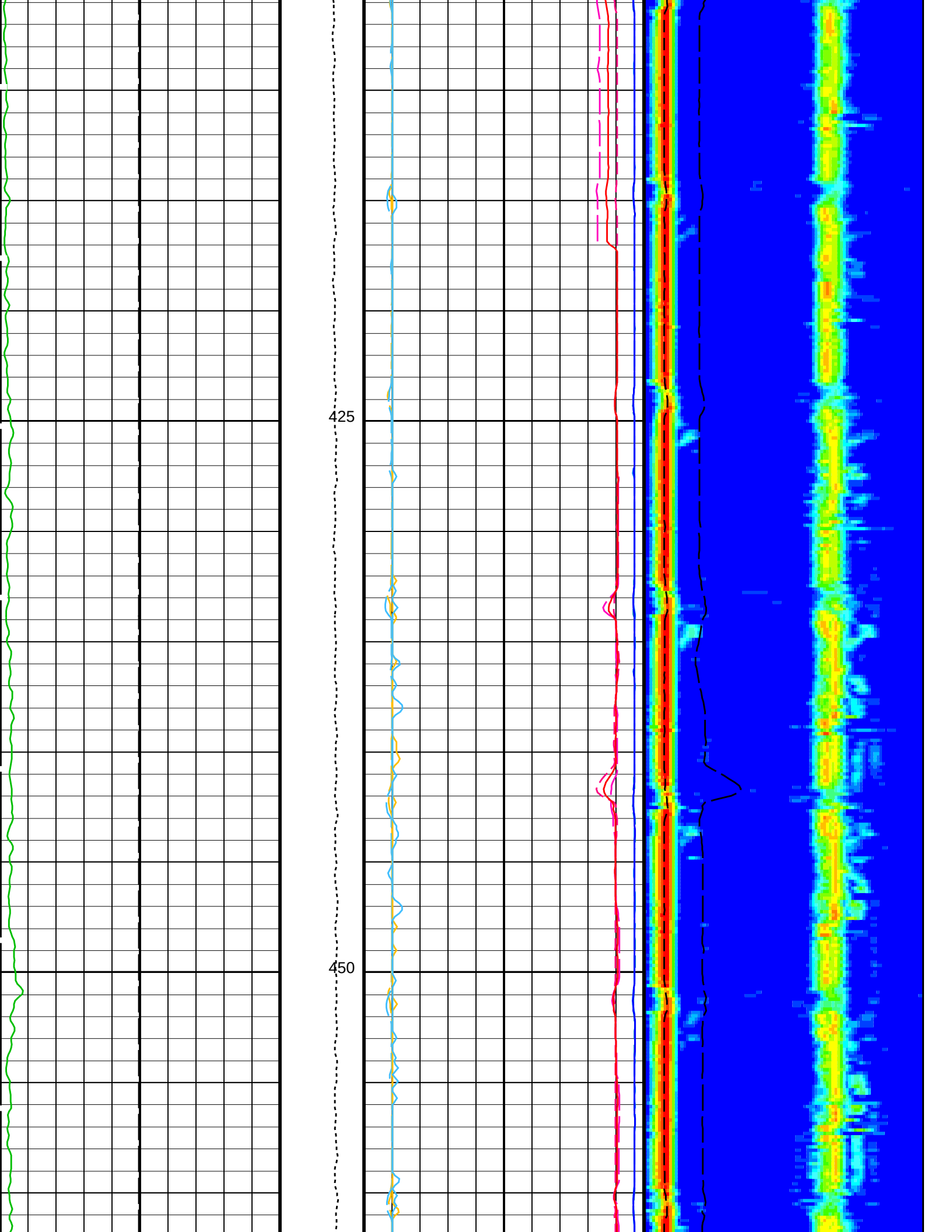
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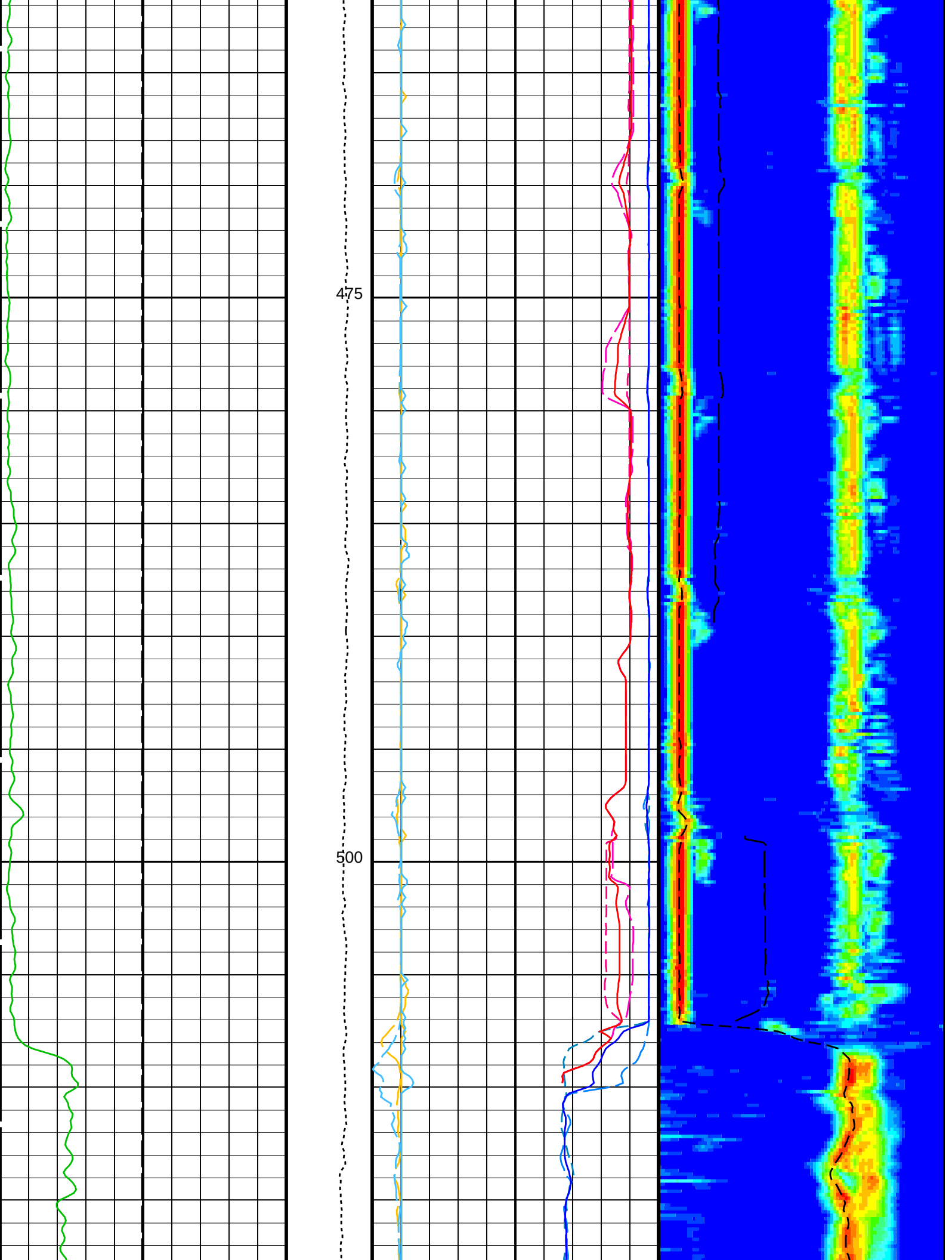
HNGC-B	19C0-187	HNGS-BA	19C0-187
DSST-B	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
EDTC-B	SKK-5169-EDTCB		

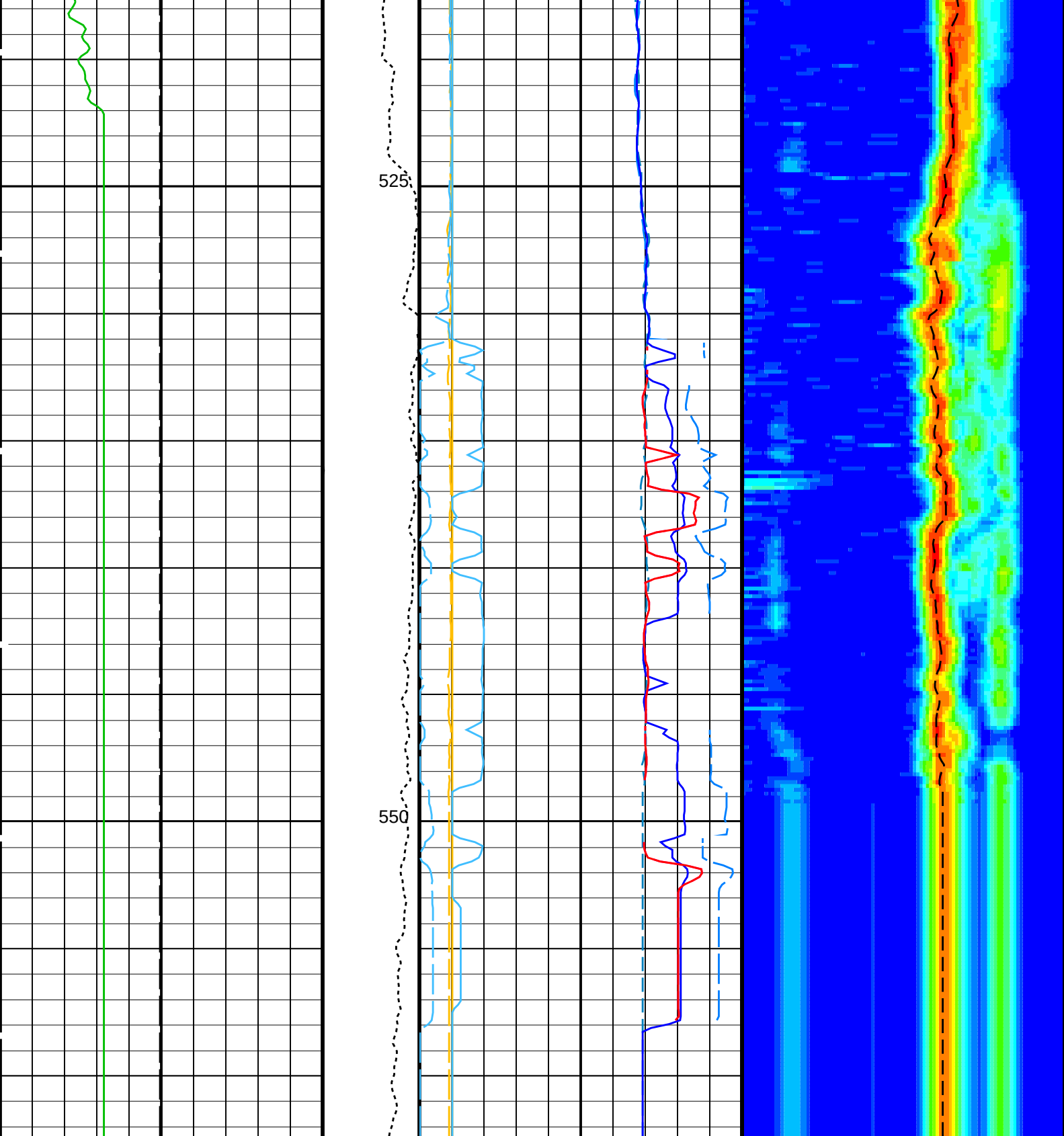
PIP SUMMARY

Time Mark Every 60 S









Bit Size (BS) (IN) 020	Tension (TENS) (LBF) 05000	Peak Coherence / RA - P & S Comp (CHRP) (-----) 010	Delta-T Comp / RA - P & S (DTRP) (US/F) 40240
Gamma Ray (GR_EDTC) (GAPI) 0150		Peak Coherence / TA - P & S Comp (CHTP) (-----) 010	Delta-T Shear / RA - P & S (DTRS) (US/F) 40240
		Delta-T Comp / RA - P & S (DTRP) (US/F) 44040	MinAmplitudeMax Rec.Array P&S Slow Proj. CVDL (SPR4) 40240 (US/F)
		Delta-T Comp / TA - P & S (DTTP)	

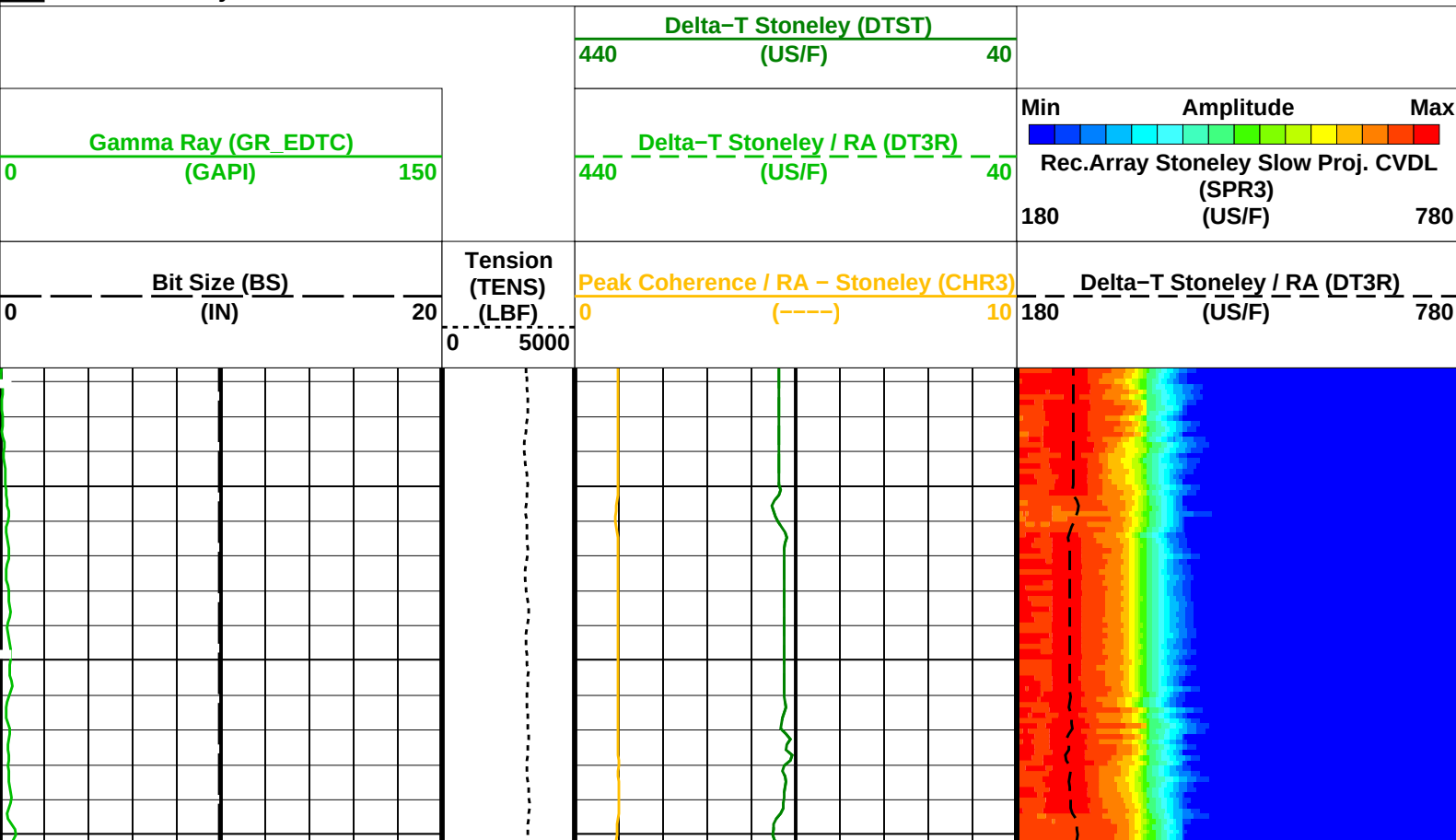
440	(US/F)	40
Delta-T Comp - P & S (DT4P)		
440	(US/F)	40
Delta-T Shear / RA - P & S (DTRS)		
440	(US/F)	40
Delta-T Shear / TA - P & S (DTTS)		
440	(US/F)	40
Delta-T Shear - P & S (DT4S)		
440	(US/F)	40
Peak Coherence / RA - P & S Shear (CHRS)		
-1	(-----)	9
Peak Coherence / TA - P & S Shear (CHTS)		
-1	(-----)	9

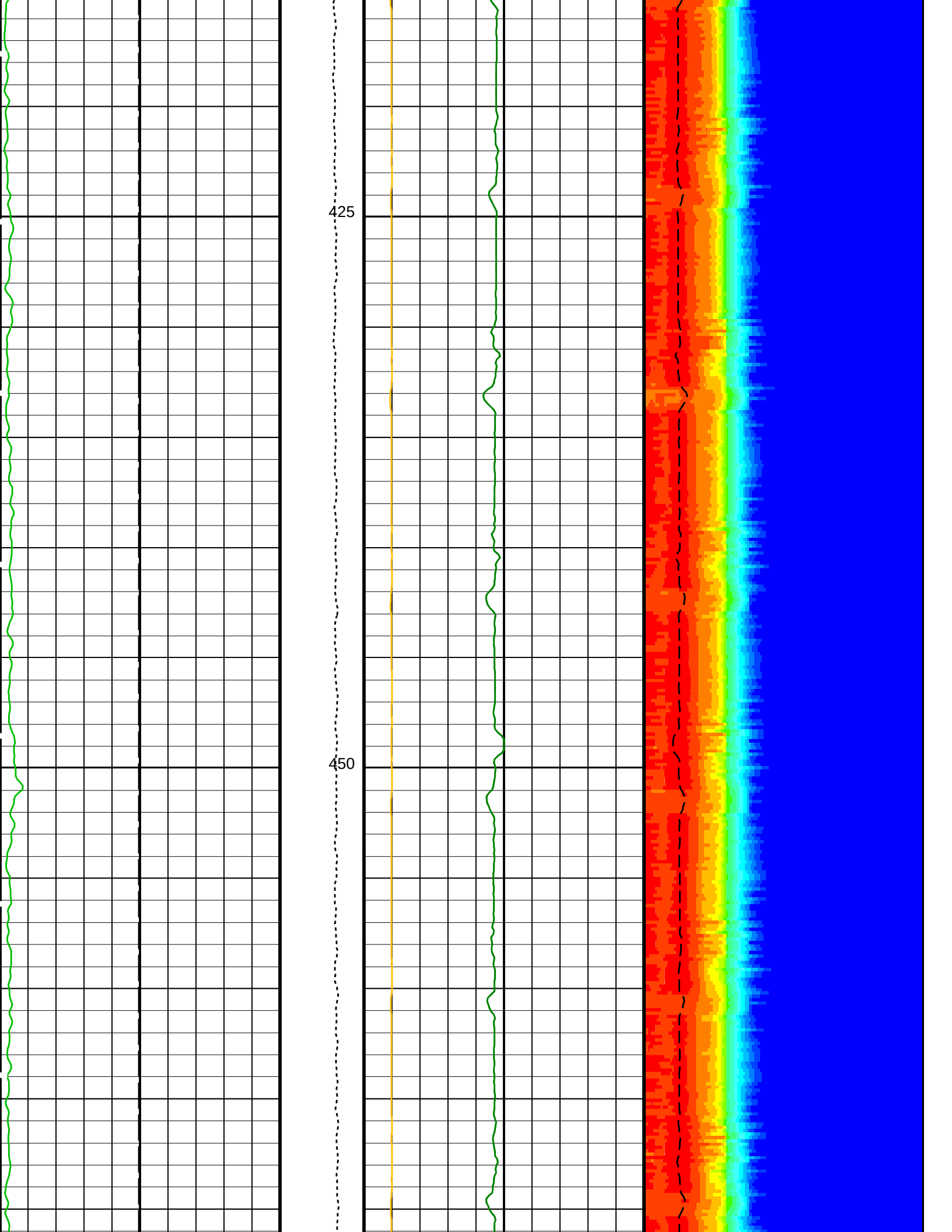
PIP SUMMARY

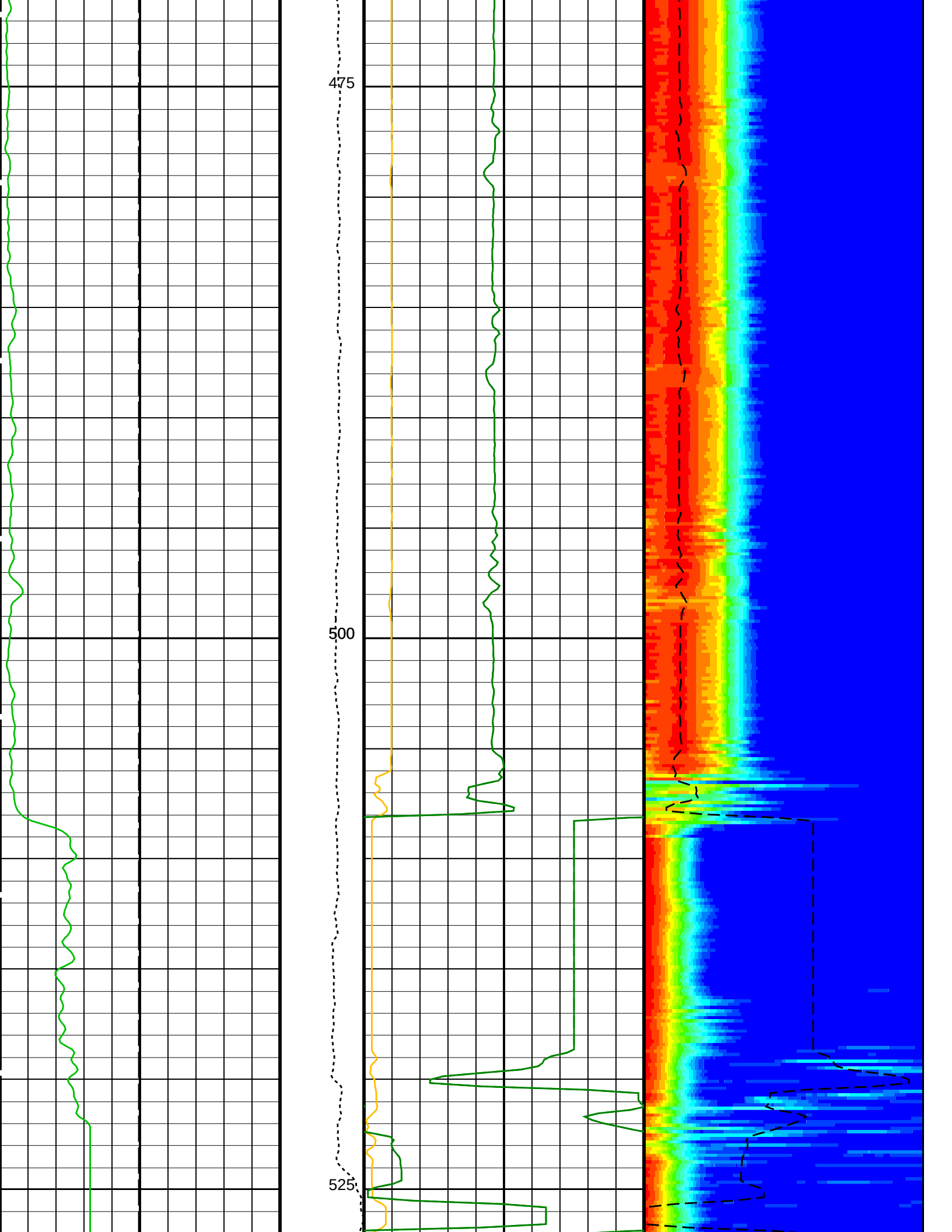
Time Mark Every 60 S

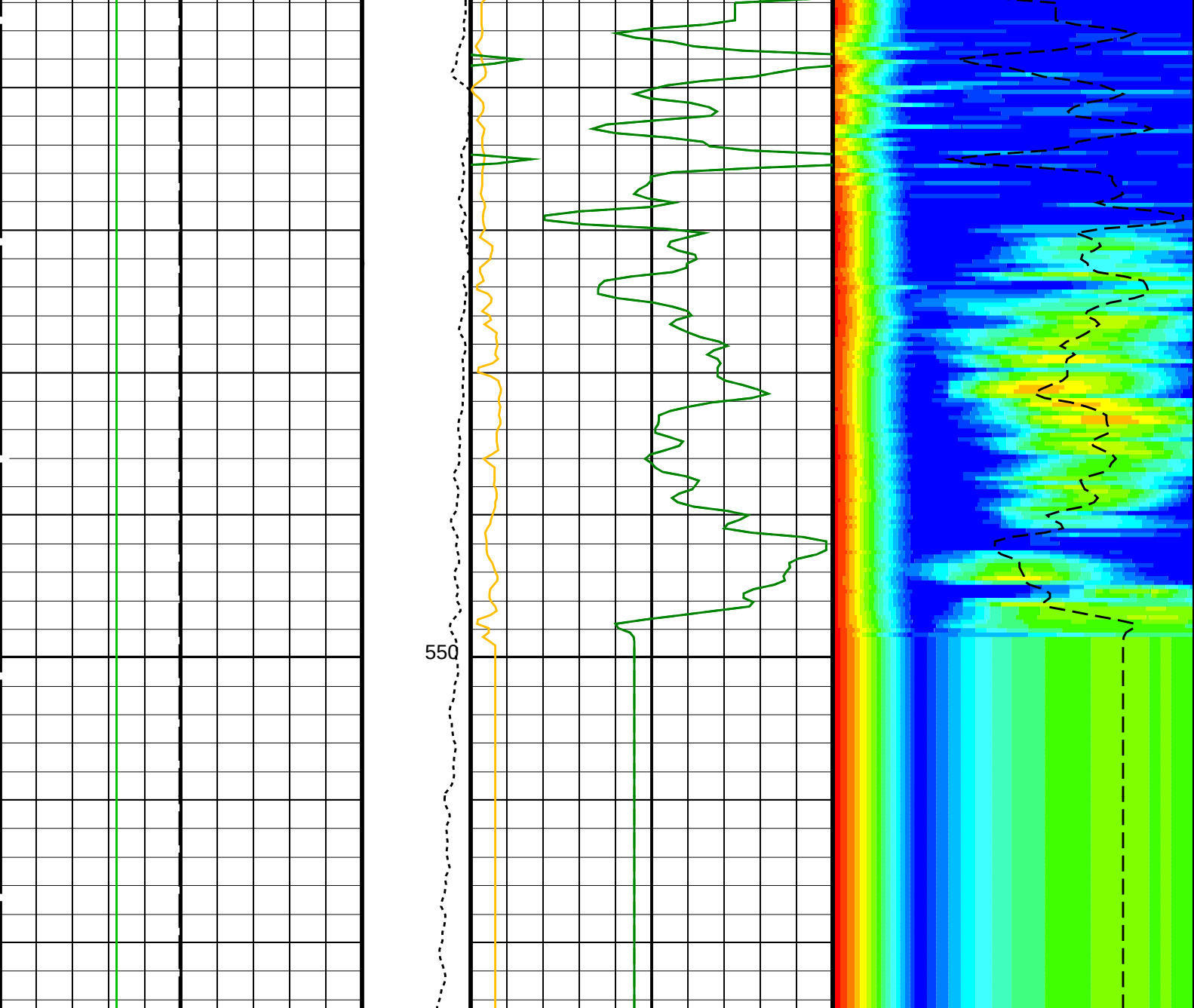
Parameters

DLIS Name	Description	Value	
BHS	HNGS-BA: Hostile Natural Gamma Ray Sonde Borehole Status	OPEN	
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	40	US/F
COUL	Label Slowness Upper Limit - Monopole P&S Compressional	180	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
DTF	Delta-T Fluid	189	US/F
DWC4	Digitizer Word Count 4	512	
DWCX	Digitizer Word Count X	512	
FILG	Label Fill Gap Control - Monopole P&S	COMP_SHEAR	
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	75	US/F
SHUL	Label Slowness Upper Limit - Monopole P&S Shear	180	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
TLI4	STC Time Lower Limit - Monopole P&S	150	US









Bit Size (BS) (IN) 020		Tension (TENS) (LBF) 05000	Peak Coherence / RA - Stoneley (CHR3) (-----) 010	Delta-T Stoneley / RA (DT3R) (US/F) 180780
Gamma Ray (GR_EDTC) (GAPI) 0150			Delta-T Stoneley / RA (DT3R) (US/F) 44040	MinAmplitudeMax Rec.Array Stoneley Slow Proj. CVDL (SPR3) (US/F) 180780
			Delta-T Stoneley (DTST) (US/F) 44040	

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
DSST-B: Dipole Shear Imager – B			
DDE3	Digitizing Delay 3	0	US
DDEX	Digitizing Delay X	0	US
DSI3	Digitizer Sample Interval 3	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	

DWC3	Digitizer Word Count 3	512	
DWCX	Digitizer Word Count X	512	IN
MTXG	Monopole Transmitter Geometry	186	
NWI3	Number Waveform Items 3	8	
NWIX	Number Waveform Items X	0	
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
SAM3	DSST Sonic Acquisition Mode 3 – Monopole Mode for Stoneley	ODD	
SAMX	DSST Sonic Acquisition Mode X – Both Dipoles or Monopole Mode for Expert	OFF	
SAS3	STC Sonic Array Status – Monopole Stoneley	255	
SBO3	STC Search Band Offset – Monopole Stoneley	2000	US
SBW3	STC Search Bandwidth – Monopole Stoneley	6000	US
SFC3	STC Formation Character – Monopole Stoneley	SELECTABLE	
SFM3	STC Filter – Monopole Stoneley	B.5–1.5K	
SLL3	STC Slowness Lower Limit – Monopole Stoneley	180	US/F
SST3	STC Slowness Step – Monopole Stoneley	4	US/F
SSW3	STC Source Waveform – Monopole Stoneley	WF_SAM3	
STLL	Label Slowness Lower Limit – Monopole Stoneley	180	US/F
STUL	Label Slowness Upper Limit – Monopole Stoneley	780	US/F
SUL3	STC Slowness Upper Limit – Monopole Stoneley	780	US/F
SWD3	STC Slowness Width – Monopole Stoneley	40	US/F
TBF3	STC Time for Baseline Fill – Monopole Stoneley	0	US
TLL3	STC Time Lower Limit – Monopole Stoneley	620	US
TST3	STC Time Step – Monopole Stoneley	200	US
TUL3	STC Time Upper Limit – Monopole Stoneley	12020	US
TWD3	STC Time Width – Monopole Stoneley	2000	US
TWI3	STC Integration Time Window – Monopole Stoneley	1600	US
TWSX	Transmitter Waveform Select X	0	
System and Miscellaneous			
BS	Bit Size	9.875	IN

Format: DSST_STONELEY_VDL_COLOR

Vertical Scale: 1:200

Graphics File Created: 17-Nov-2015 05:18

OP System Version: 19C0–187

HNGC–B	19C0–187	HNGS–BA	19C0–187
DSST–B	19C0–187	HRLT–B	19C0–187
HLDS	19C0–187	LDSC–B	19C0–187
EDTC–B	SKK–5169–EDTCB		

Output DLIS Files

DEFAULT

NGS_DSI_HRLA_LDL_008LUP

FN:7

PRODUCER

17-Nov-2015 05:18

Output DLIS Files

DEFAULT

NGS_DSI_HRLA_LDL_008LUP

FN:7

PRODUCER

17-Nov-2015 05:18

562.4 M

401.6 M

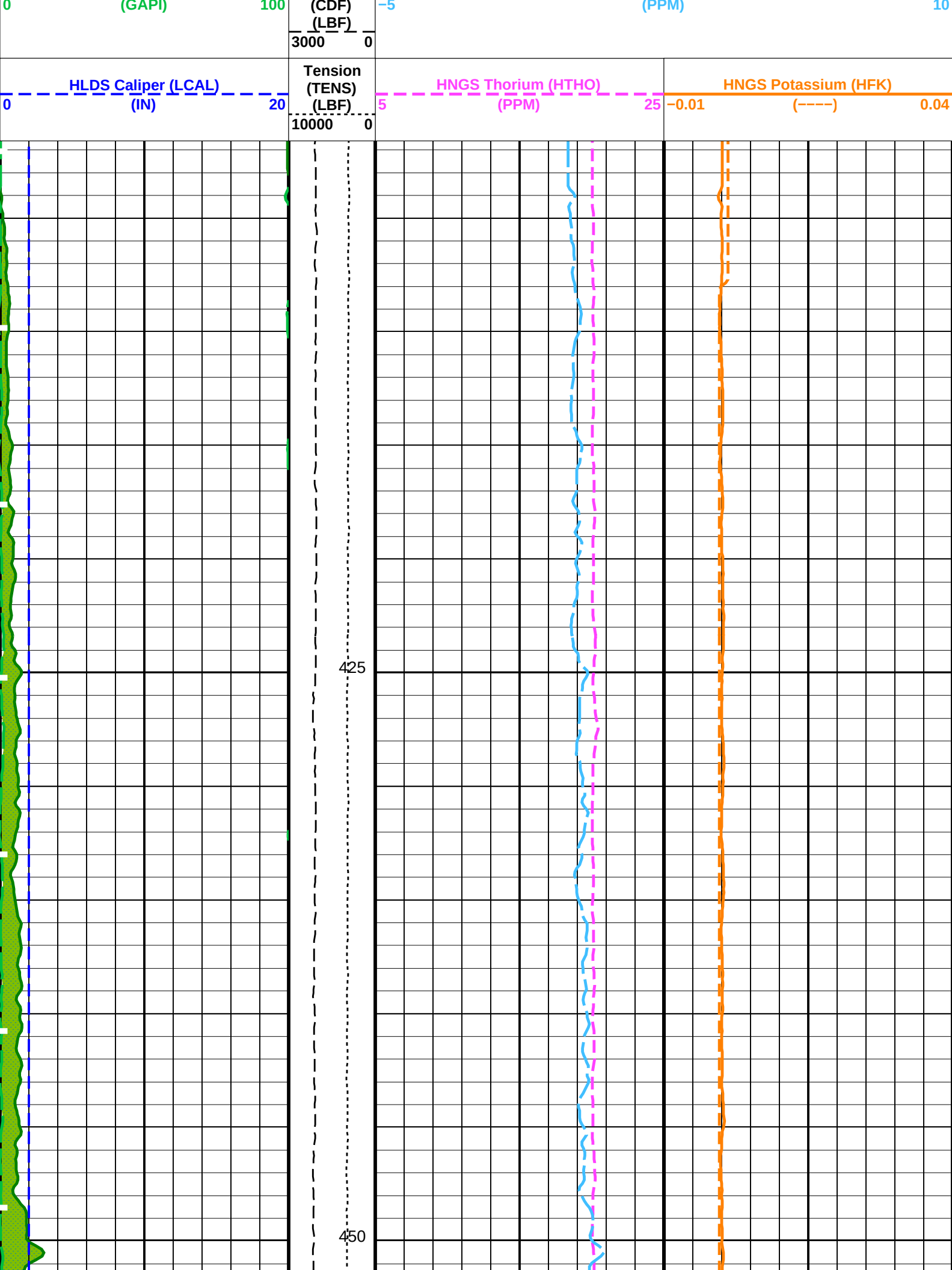
OP System Version: 19C0–187

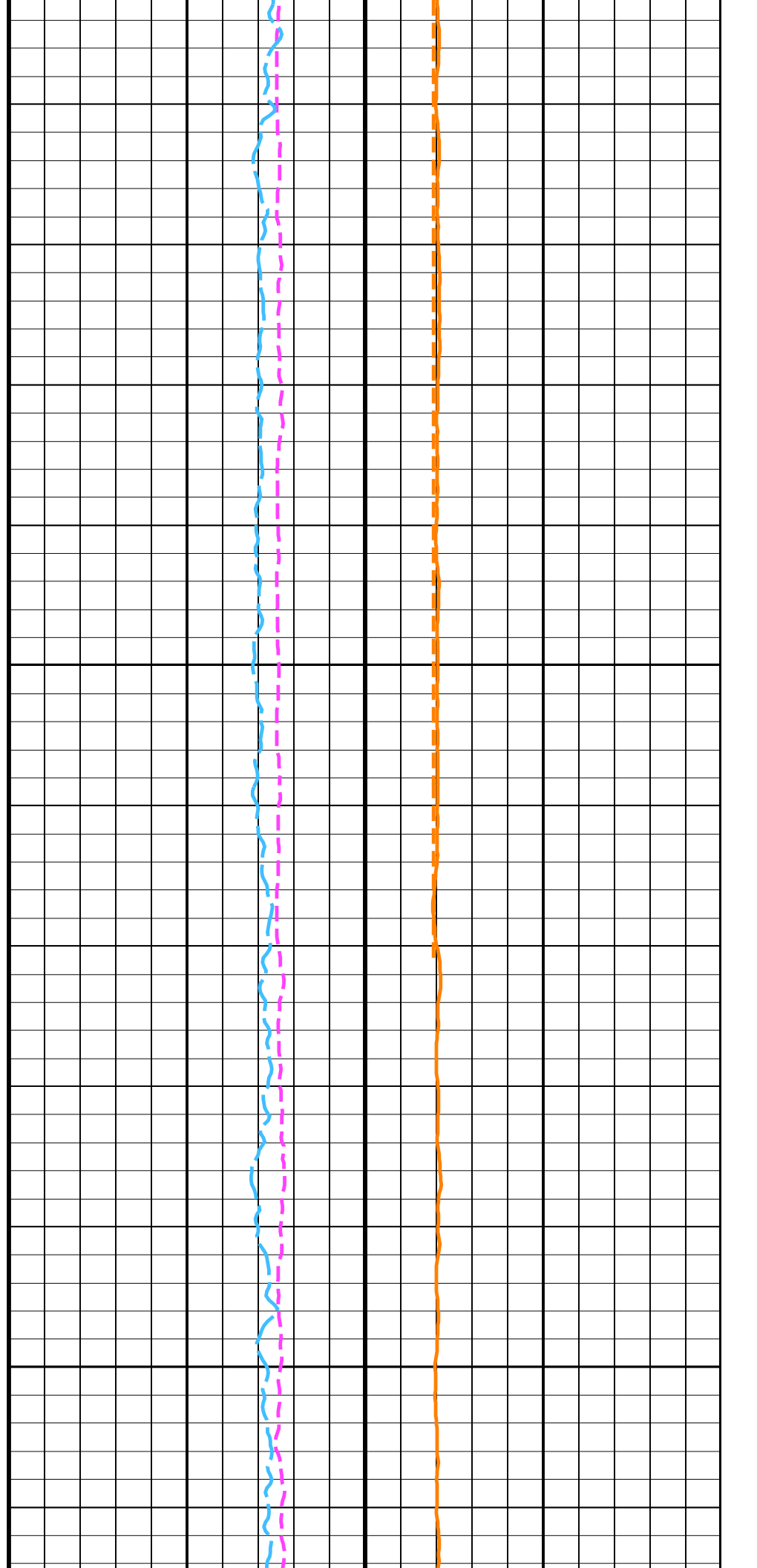
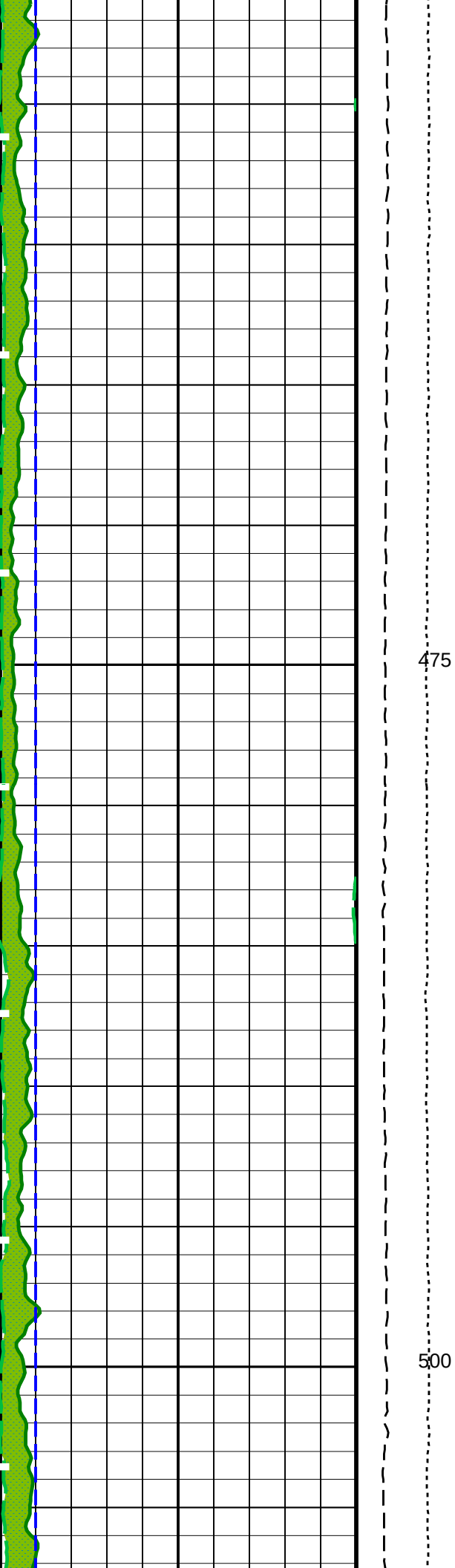
HNGC–B	19C0–187	HNGS–BA	19C0–187
DSST–B	19C0–187	HRLT–B	19C0–187
HLDS	19C0–187	LDSC–B	19C0–187
EDTC–B	SKK–5169–EDTCB		

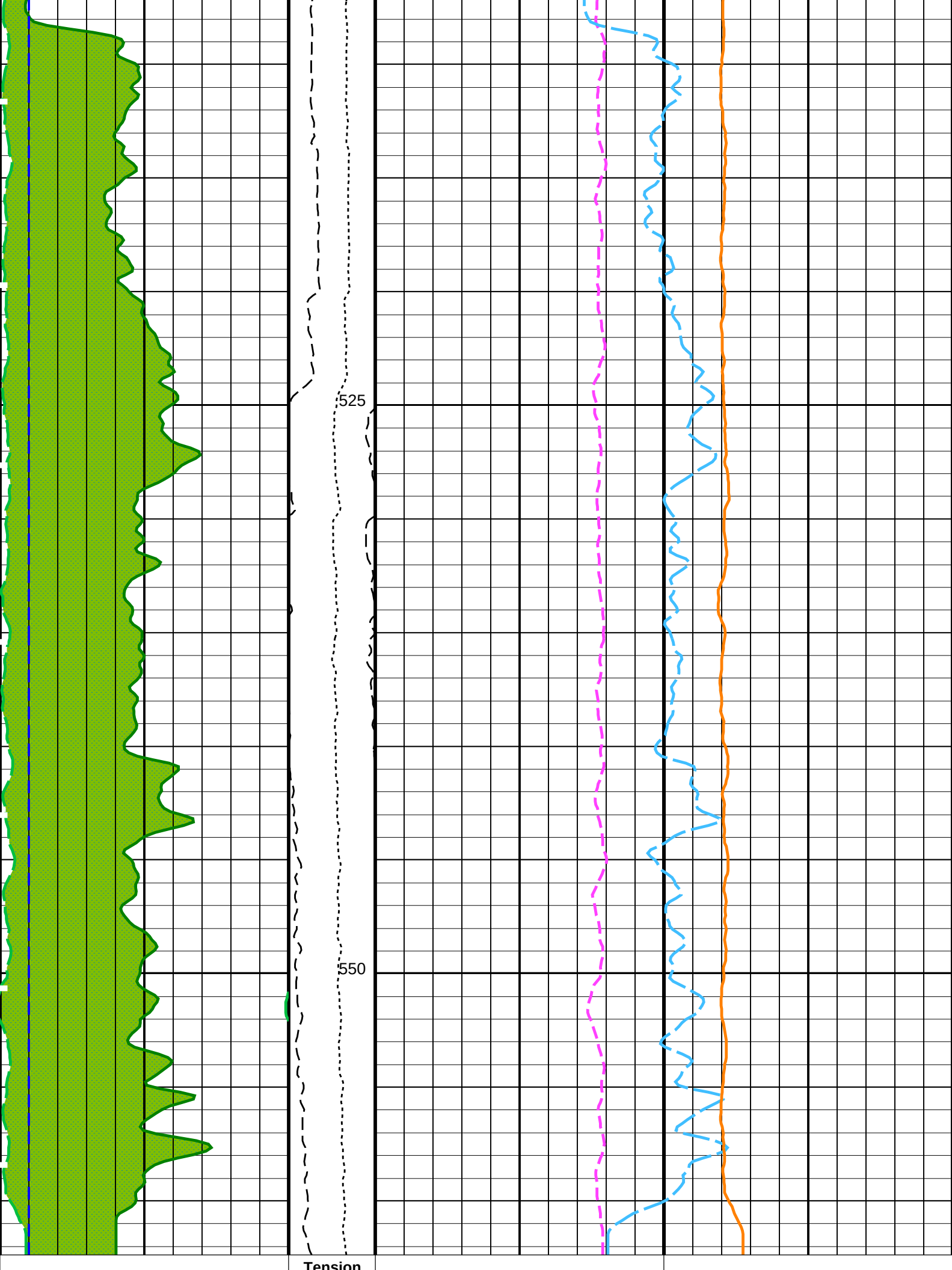
PIP SUMMARY

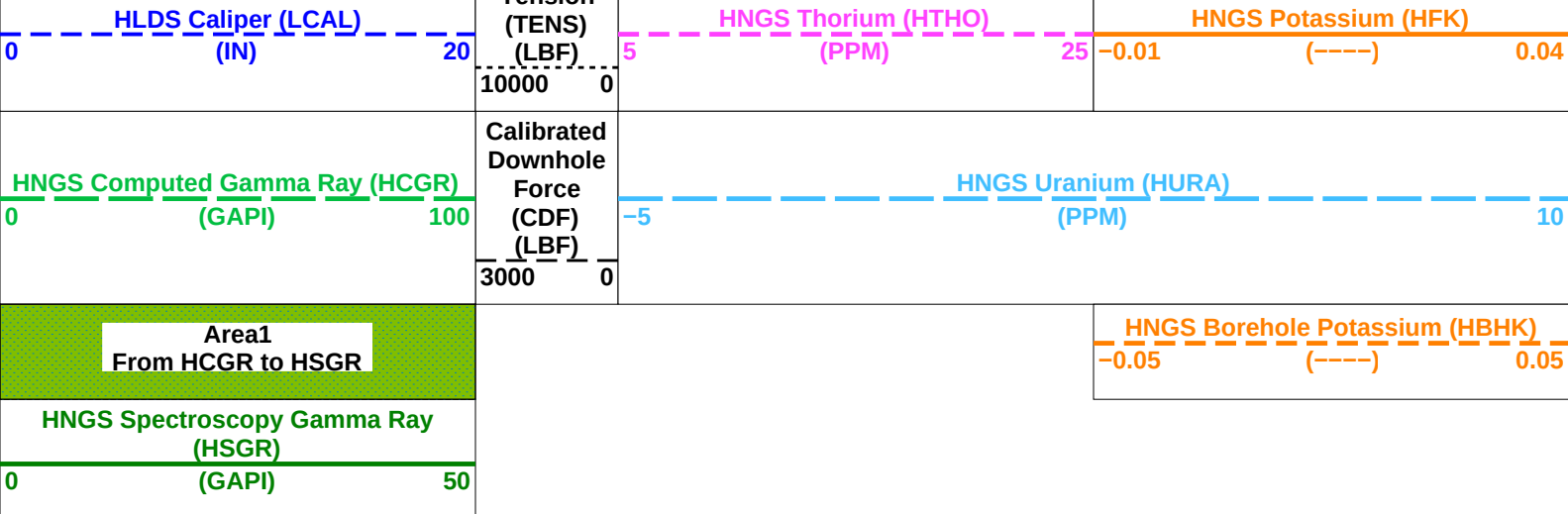
Time Mark Every 60 S

HNGS Spectroscopy Gamma Ray (HSGR) 0 (GAPI) 50			
Area1 From HCGR to HSGR		HNGS Borehole Potassium (HBHK) –0.05 (----) 0.05	
HNGS Computed Gamma Ray (HCGR)		Calibrated Downhole Force	HNGS Uranium (HURA)









PIP SUMMARY

Time Mark Every 60 S

Parameters			
DLIS Name	Description	Value	
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	LCAL	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.0311143	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
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	1.11223	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.946281	
DSST-B: Dipole Shear Imager - B			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
HRLT-B: High Resolution Laterolog Array - B			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
System and Miscellaneous			
BS	Bit Size	9.875	IN

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 17-Nov-2015 05:18

OP System Version: 19C0-187			
HNGC-B	19C0-187	HNGS-BA	19C0-187
DSST-B	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
EDTC-B	SKK-5169-EDTCB		

Output DLIS Files

DEFAULT NGS_DSI_HRLA_LDL_008LUP FN:7 PRODUCER 17-Nov-2015 05:18

Company: International Ocean Discovery Program

Well: Expedition 359, Site U1470B

Input DLIS Files

DEFAULT

Flip_NGS_DSI_HRLA_012LUP

PRODUCER

17-Nov-2015 08:41

519.7 M

358.9 M

Output DLIS Files

DEFAULT

NGS_DSI_HRLA_LDL_013PUP

FN:11

PRODUCER

17-Nov-2015 08:41

520.0 M

358.9 M

OP System Version: 19C0-187

HNGC-B19C0-187HNGS-BA19C0-187

DSST-B19C0-187HRLT-B19C0-187

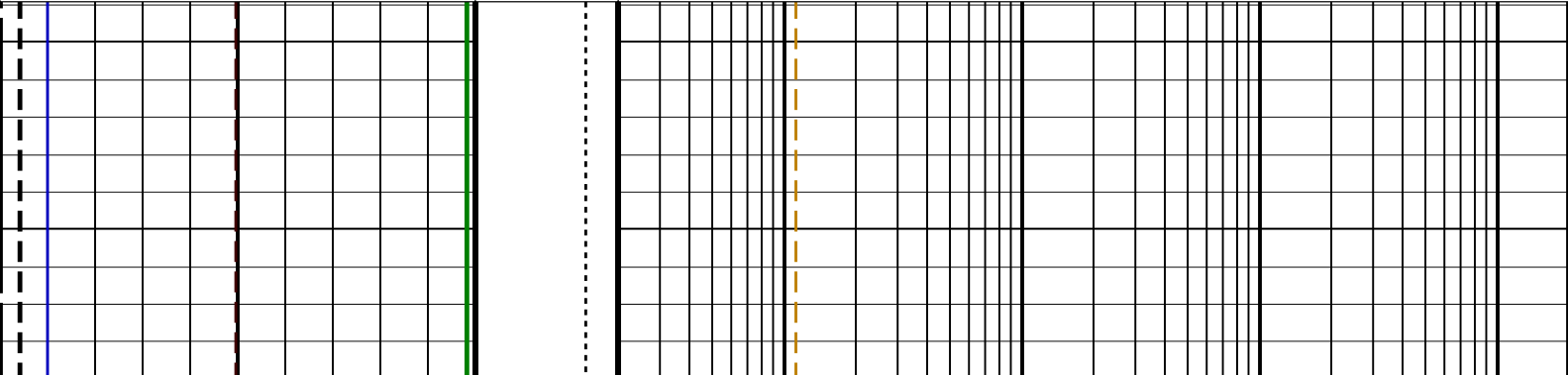
HLDS19C0-187LDSC-B19C0-187

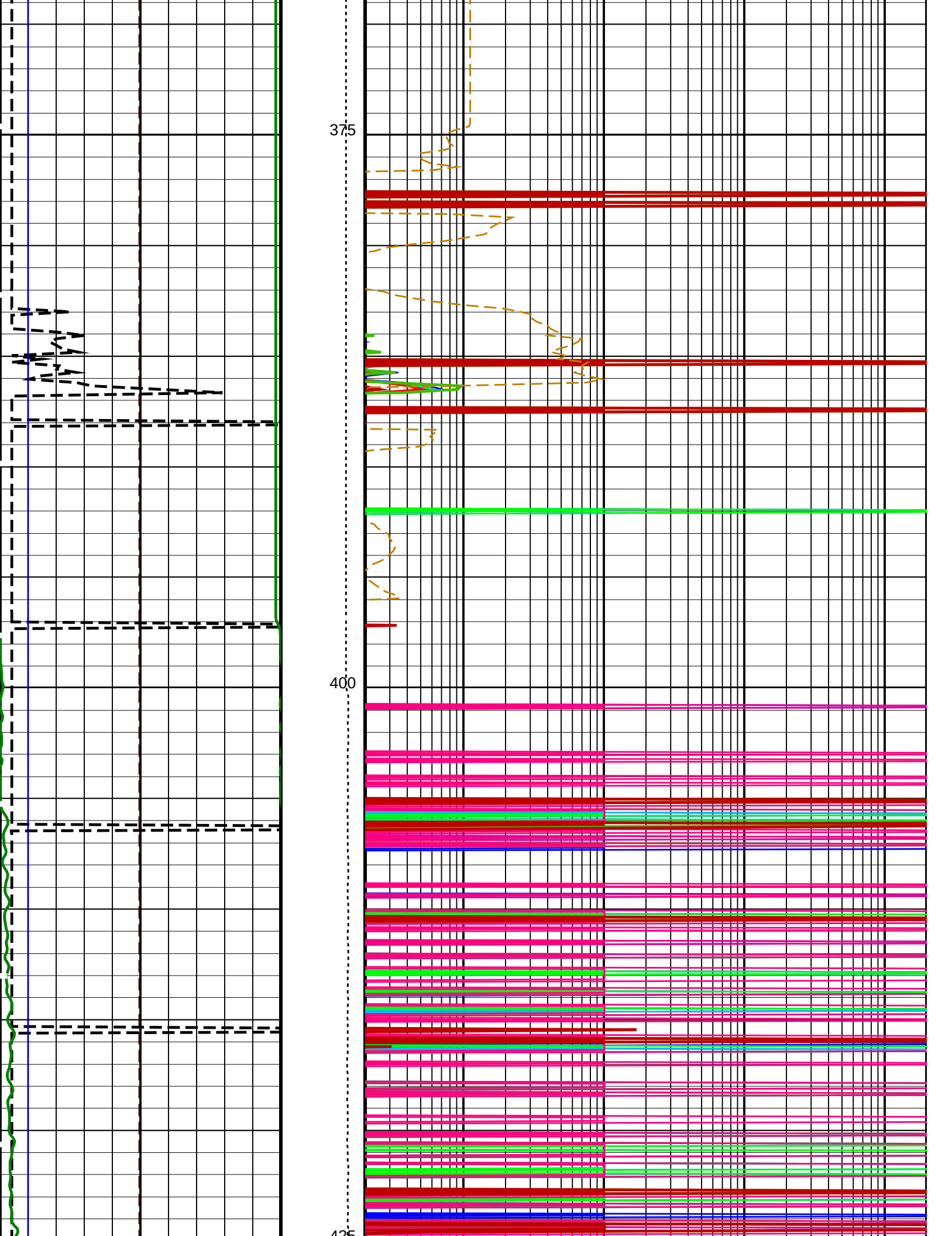
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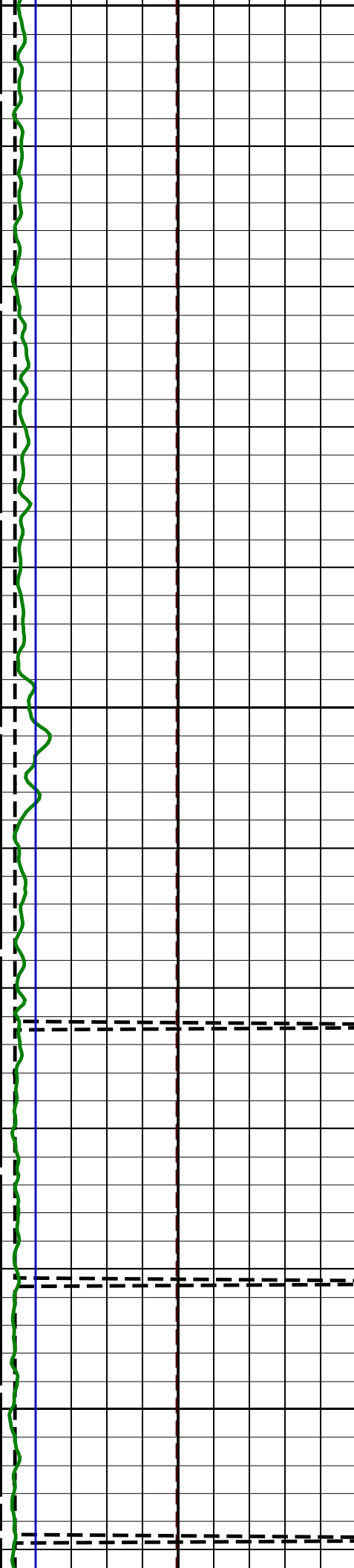
PIP SUMMARY

Time Mark Every 60 S

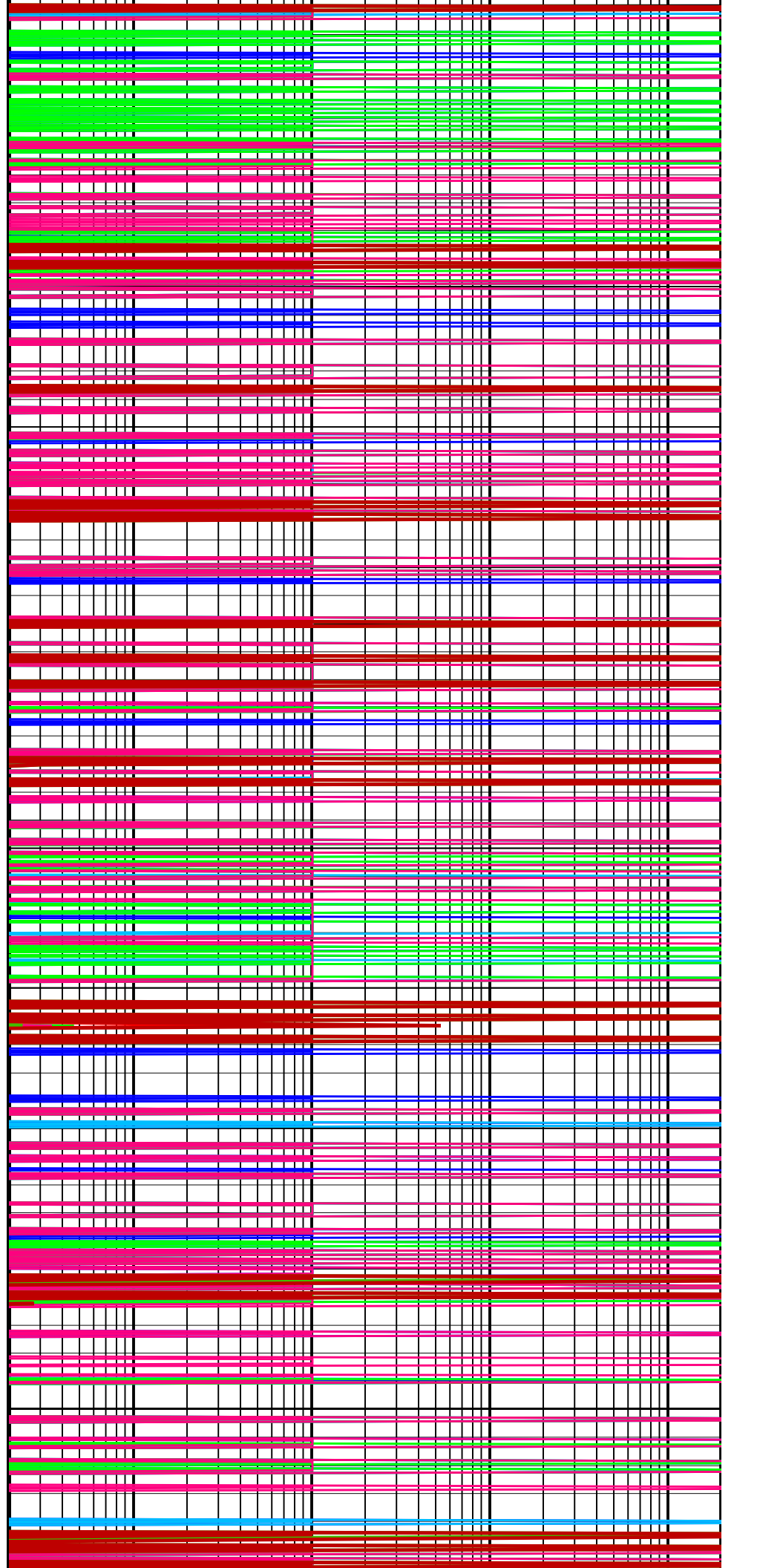
HNGS Spectroscopy Gamma Ray (HSGR) 050 (GAPI) Invasion Diameter (DI_HRLT) 050 (IN) Caliper (LCAL) 020 (IN) Bit Size (BS) 020 (IN)			HRLT True Resistivity (RT_HRLT) 0.22000 (OHMM)		
			Invaded Zone Resistivity (RXO_HRLT) 0.22000 (OHMM)		
			HRLT Mud Resistivity (RM_HRLT) 0.02200 (OHMM)		
			HRLT Resistivity 5 (RLA5) 0.22000 (OHMM)		
			HRLT Resistivity 4 (RLA4) 0.22000 (OHMM)		
			HRLT Resistivity 3 (RLA3) 0.22000 (OHMM)		
			HRLT Resistivity 2 (RLA2) 0.22000 (OHMM)		
			HRLT Resistivity 1 (RLA1) 0.22000 (OHMM)		
Tension (TENS) (LBF) 100000					

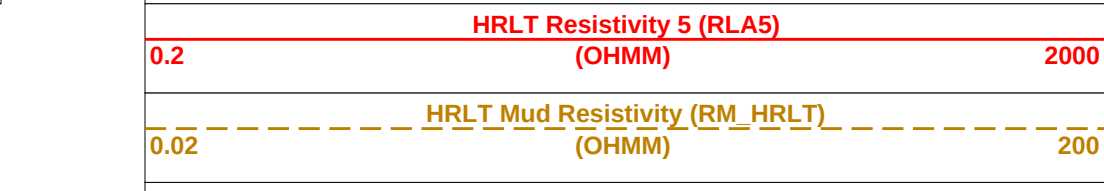
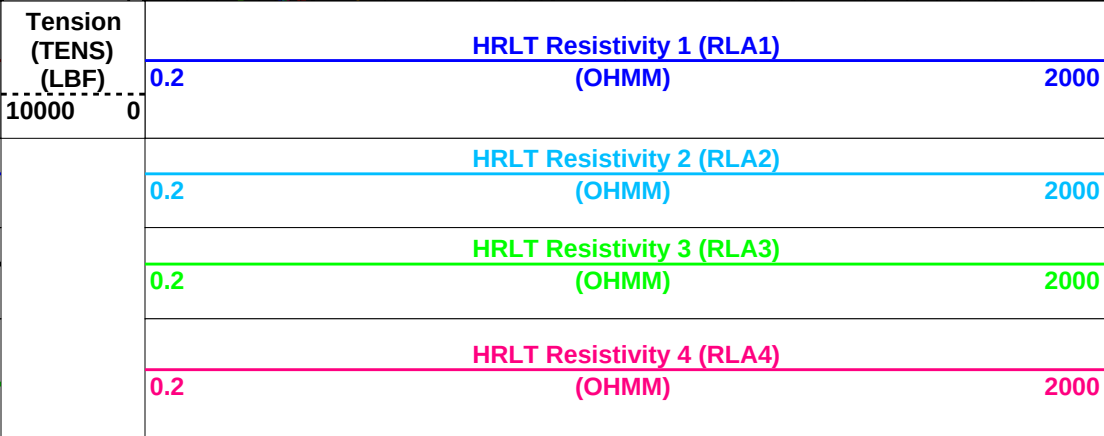
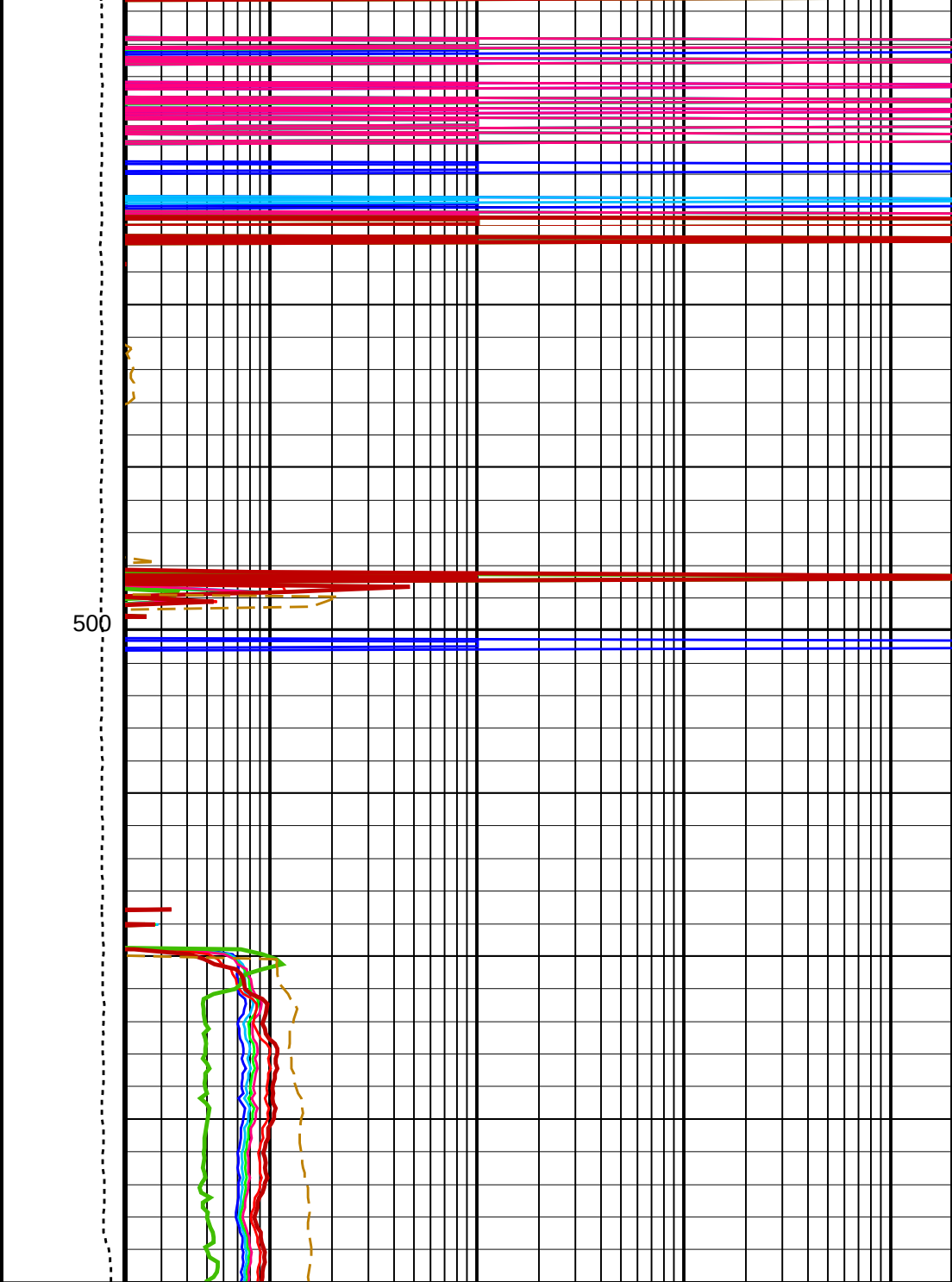
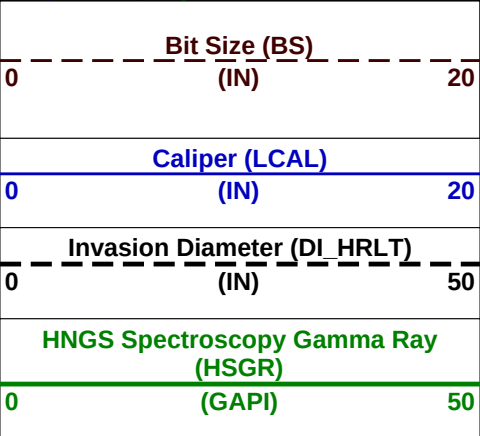
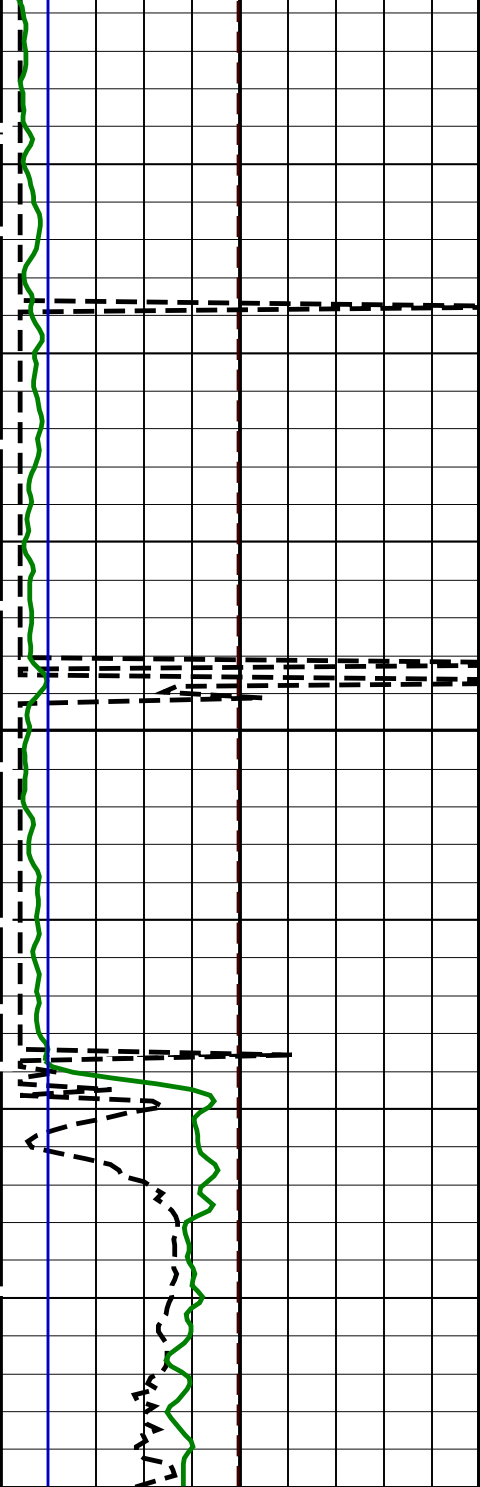






420
450
475

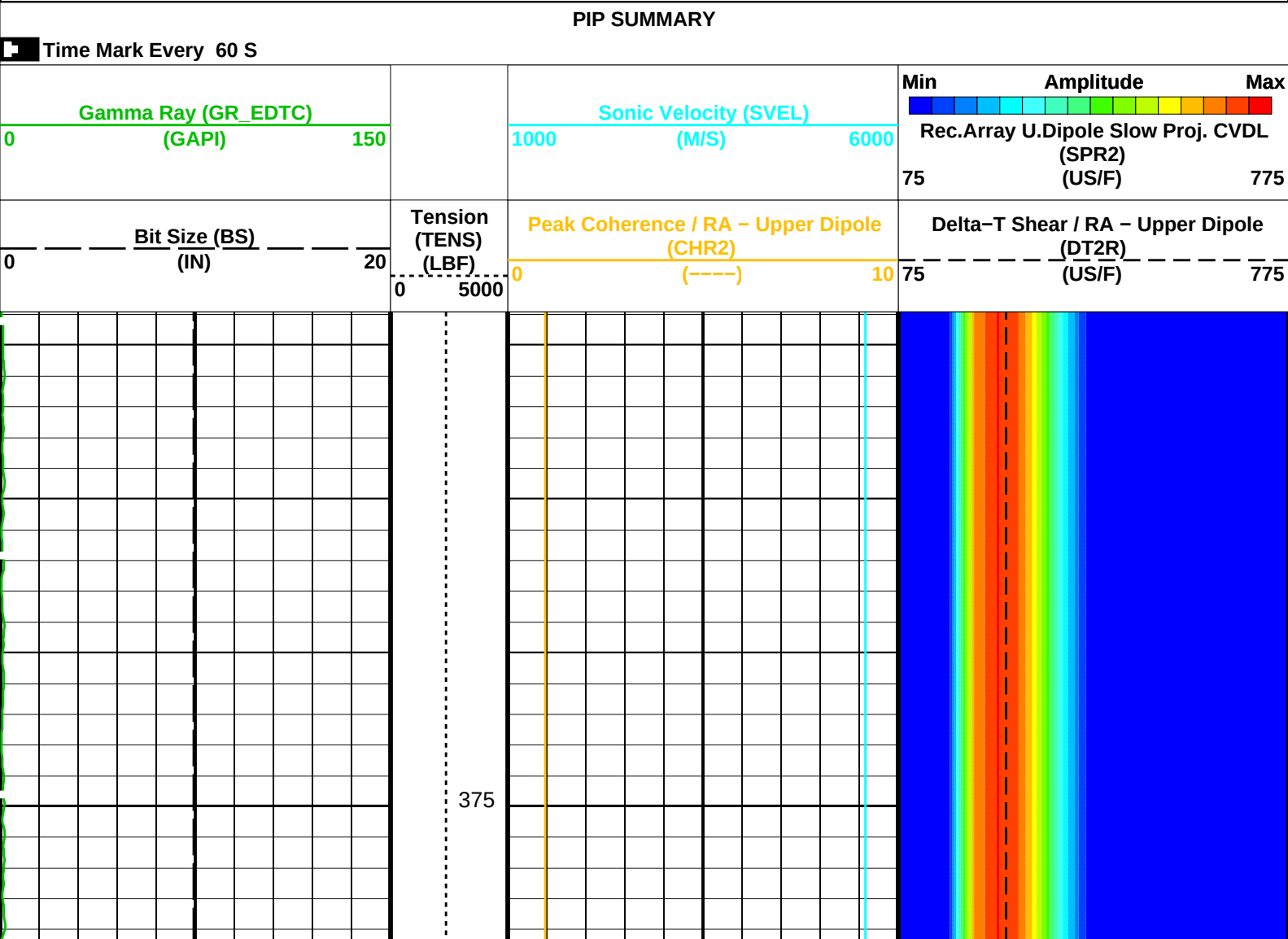


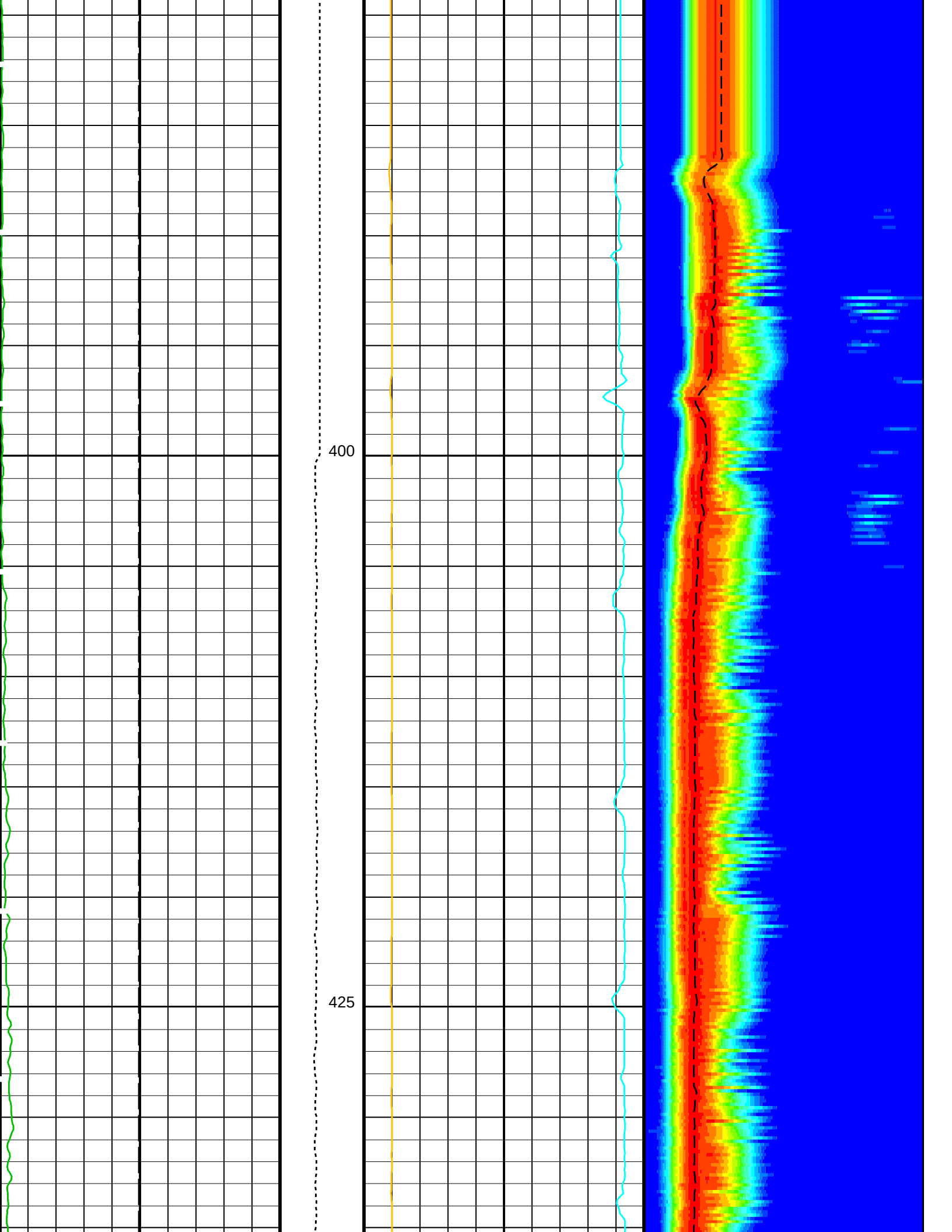


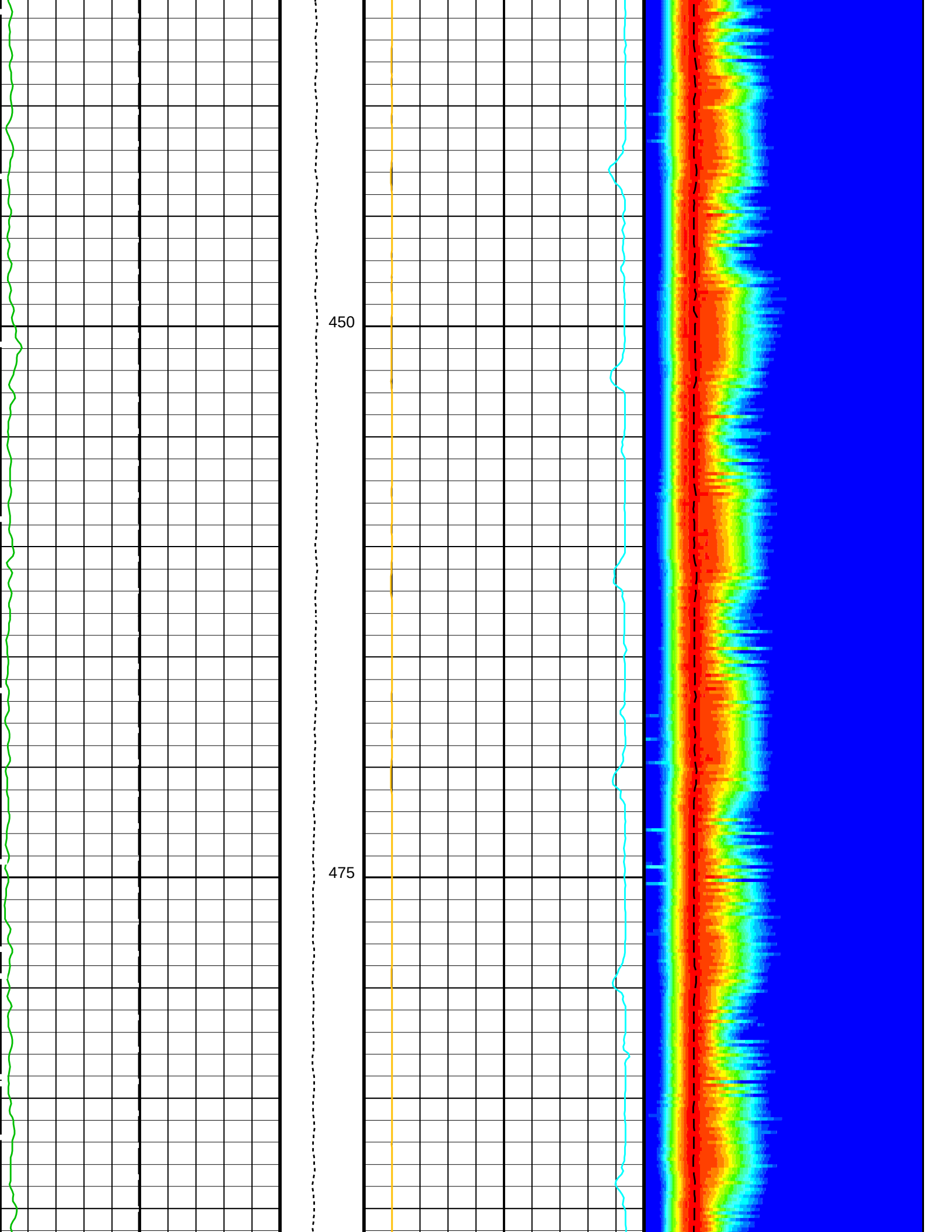
		Invaded Zone Resistivity (RXO_HRLT)		2000
		0.2	(OHMM)	
		HRLT True Resistivity (RT_HRLT)		
		0.2	(OHMM)	2000
PIP SUMMARY				
Time Mark Every 60 S				
Parameters				
DLIS Name	Description	Value		
HNGS-BA: Hostile Natural Gamma Ray Sonde				
BAR1	HNGS Detector 1 Barite Constant	1		
BAR2	HNGS Detector 2 Barite Constant	1		
BHK	HNGS Borehole Potassium Correction Concentration	0		
BHS	Borehole Status	OPEN		
BHT	Bottom Hole Temperature (used in calculations)	40	DEGC	
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	LCAL		
GGRD	Geothermal Gradient	0.018227	DC/M	
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9		
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE		
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW		
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW		
HABK	HNGS Borehole Potassium Running Average	-0.0295355		
HALF	HNGS Alpha Filter Length	60	IN	
HCRB	HNGS Apply Borehole Potassium Correction	NONE		
HMWM	Mud Weighting Material	NATU		
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		
SHT	Surface Hole Temperature	20	DEGC	
TPOS	Tool Position	ECCE		
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.01624		
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.944238		
DSST-B: Dipole Shear Imager - B				
BHS	Borehole Status	OPEN		
BHT	Bottom Hole Temperature (used in calculations)	40	DEGC	
GCSE	Generalized Caliper Selection	LCAL		
GGRD	Geothermal Gradient	0.018227	DC/M	
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9		
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE		
SHT	Surface Hole Temperature	20	DEGC	
HRLT-B: High Resolution Laterolog Array - B				
BHS	Borehole Status	OPEN		
BHT	Bottom Hole Temperature (used in calculations)	40	DEGC	
GCSE	Generalized Caliper Selection	LCAL		
GGRD	Geothermal Gradient	0.018227	DC/M	
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9		
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE		
KFAC_HRLT	HRLT K Factor Option	SONDE		
PROCI NV	Inversion Selection	ON		
PROCMFL	Inversion Micro-Resistivity Selection	NO_EXTERNAL_RXO		
PROCMSO	Mechanical Standoff Fin Size	0	IN	
PROCRM	Processing Mud Resistivity Select	HRLT_Compute		
PROCSPO	Sonde Position	Centered		
SHT	Surface Hole Temperature	20	DEGC	
EDTC-B: Enhanced DTS Cartridge				
BHS	Borehole Status	OPEN		
BHT	Bottom Hole Temperature (used in calculations)	40	DEGC	
GCSE	Generalized Caliper Selection	LCAL		
GGRD	Geothermal Gradient	0.018227	DC/M	
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9		
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE		
SHT	Surface Hole Temperature	20	DEGC	
System and Miscellaneous				
BS	Bit Size	9.875	IN	
DO	Depth Offset for Playback	0.0	M	
MST	Mud Sample Temperature	23.00	DEGC	
PP	Playback Processing	NORMAL		
TD	Total Depth	1212.2	M	
Format: HRLT Vertical Scale: 1:200 Graphics File Created: 17-Nov-2015 08:41				
OP System Version: 19C0-187				

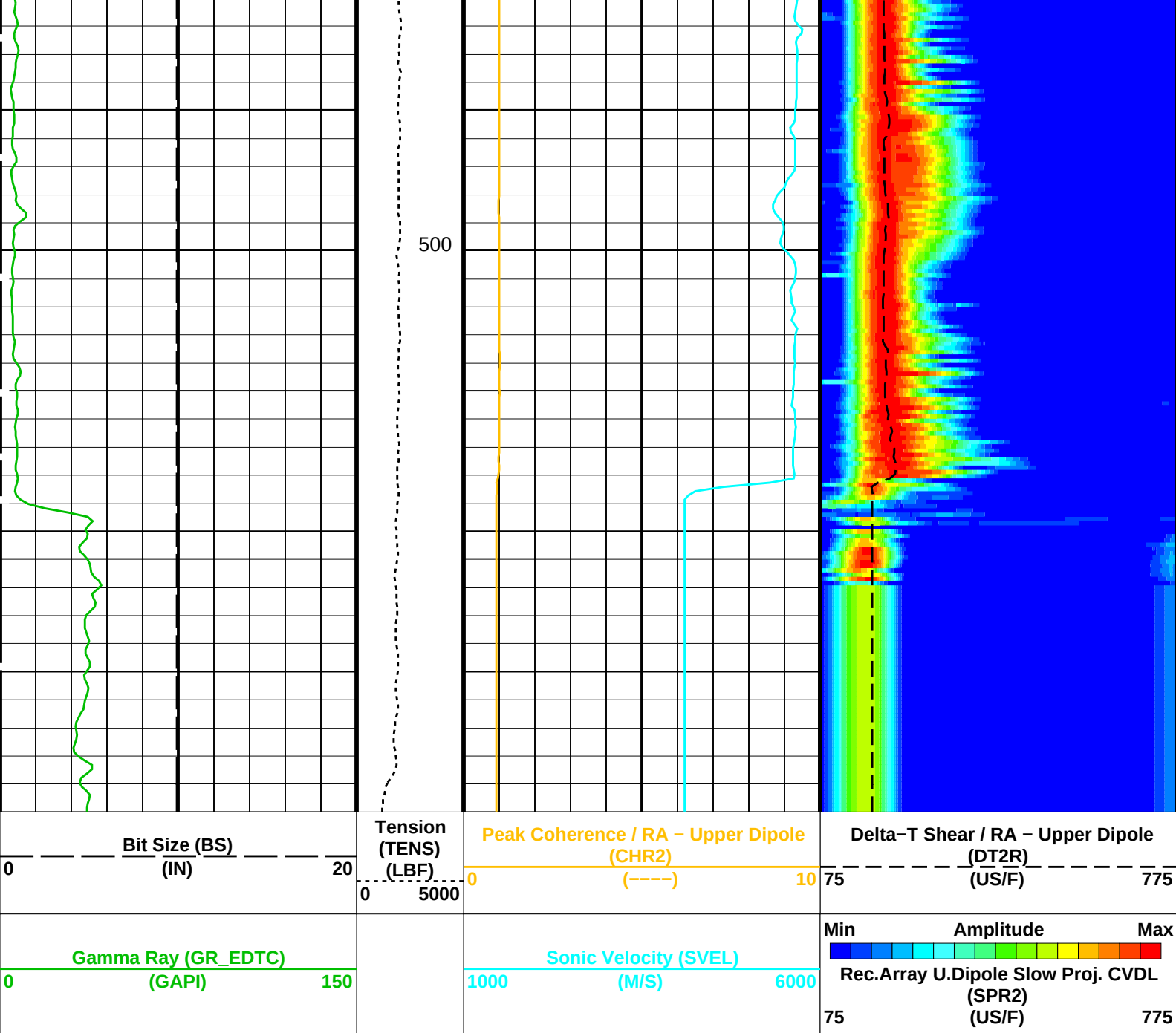
OP System Version: 19C0-187						
HNGC-B	19C0-187		HNGS-BA	19C0-187		
DSST-B	19C0-187		HRLT-B	19C0-187		
HLDS	19C0-187		LDSC-B	19C0-187		
EDTC-B	SKK-5169-EDTCB					
Input DLIS Files						
DEFAULT	Flip_NGS_DSI_HRLA_012LUP	PRODUCER	17-Nov-2015 08:41	519.7 M		358.9 M
Output DLIS Files						
DEFAULT	NGS_DSI_HRLA_LDL_013PUP	FN:11	PRODUCER	17-Nov-2015 08:41		

Input DLIS Files						
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Output DLIS Files						
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OP System Version: 19C0-187						
HNGC-B	19C0-187		HNGS-BA	19C0-187		
DSST-B	19C0-187		HRLT-B	19C0-187		
HLDS	19C0-187		LDSC-B	19C0-187		
EDTC-B	SKK-5169-EDTCB					









PIP SUMMARY

Time Mark Every 60 S

Parameters

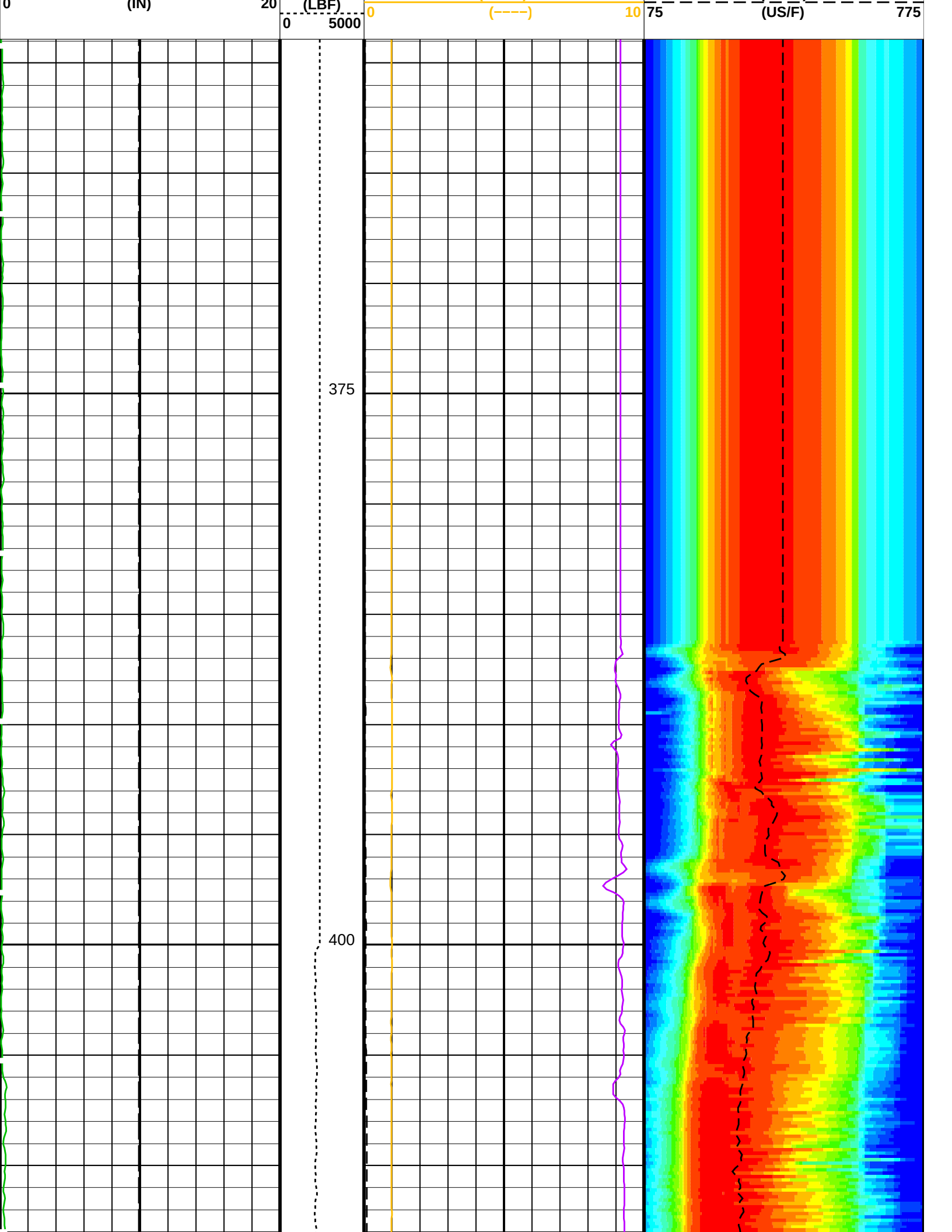
DLIS Name	Description	Value
DSST-B: Dipole Shear Imager - B		
DDE2	Digitizing Delay 2	0 US
DDEX	Digitizing Delay X	0 US
DLCS	Label Compressional Source - Dipole Shear	USE
DSHL	Label Slowness Lower Limit - Dipole Shear	75 US/F
DSHU	Label Slowness Upper Limit - Dipole Shear	775 US/F
DSI2	Digitizer Sample 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
NWI2	Number Waveform Items 2	8
NWIX	Number Waveform Items X	0
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

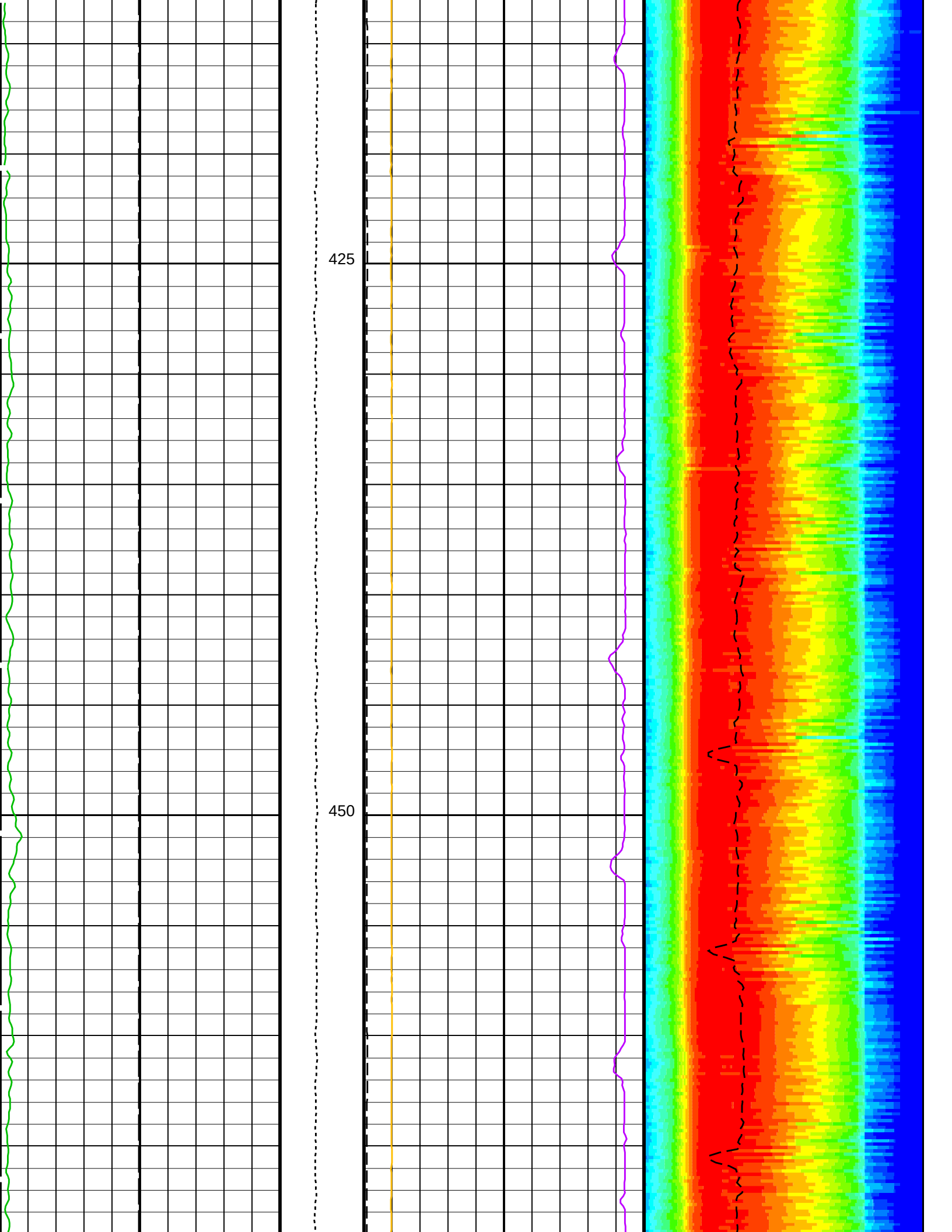
RX8G	Receiver 8 Geometry	336	IN
SAM2	DSST Sonic Acquisition Mode 2 – Upper Dipole Mode	ODD	
SAMX	DSST Sonic Acquisition Mode X – Both Dipoles or Monopole Mode for Expert	OFF	
SAS2	STC Sonic Array Status – Upper Dipole	255	
SBO2	STC Search Band Offset – Upper Dipole	3000	US
SBW2	STC Search Bandwidth – Upper Dipole	8000	US
SFC2	STC Formation Character – Upper Dipole	SELECTABLE	
SFM2	STC Filter – Upper Dipole	B1–3K	
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
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	
UTXG	Upper Dipole Transmitter Geometry	162	IN
System and Miscellaneous			
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

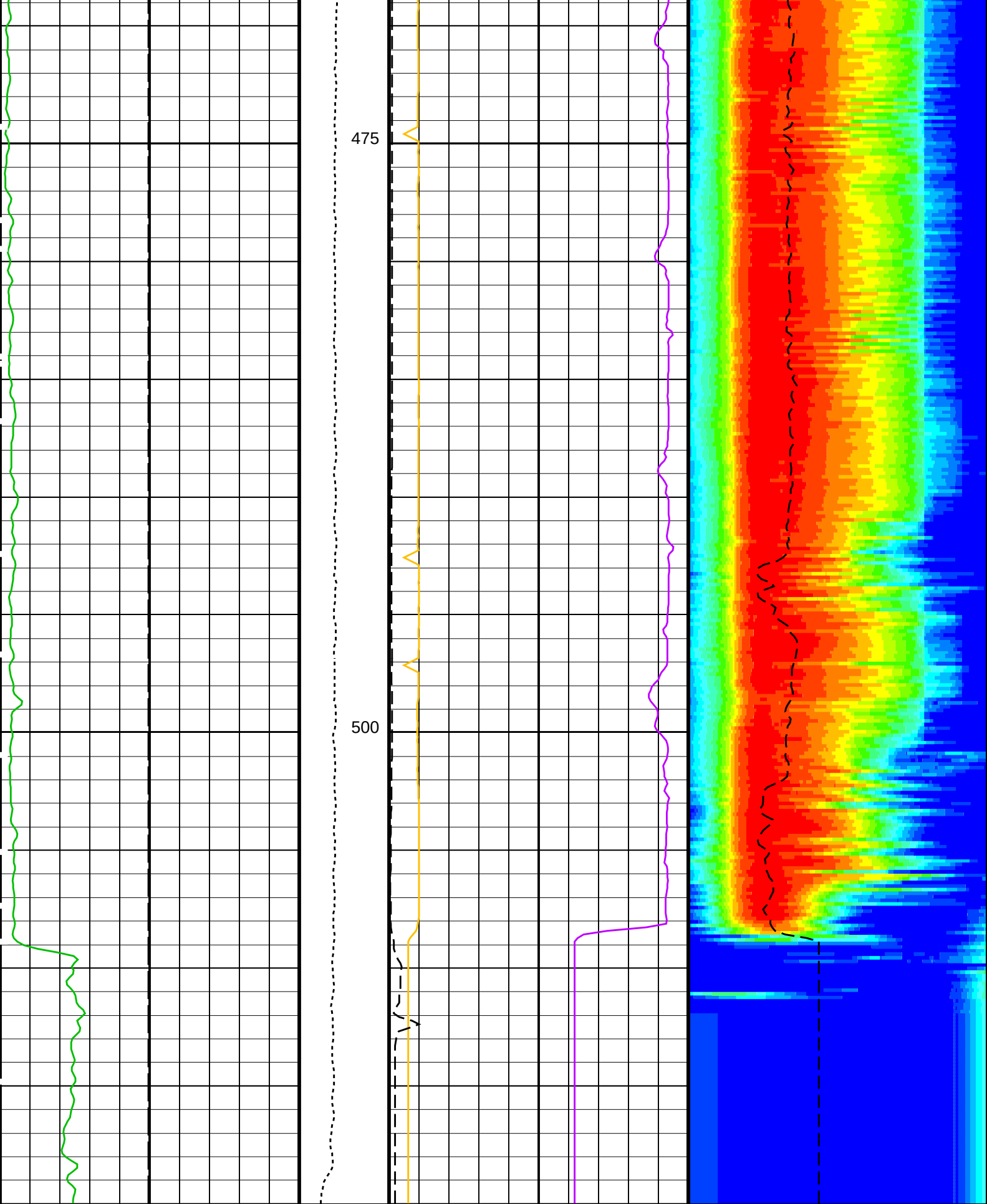
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OP System Version: 19C0-187							
HNGC-B	19C0-187		HNGS-BA	19C0-187			
DSST-B	19C0-187		HRLT-B	19C0-187			
HLDS	19C0-187		LDSC-B	19C0-187			
EDTC-B	SKK-5169-EDTCB						
Input DLIS Files							
DEFAULT	Flip_NGS_DSI_HRLA_012LUP	PRODUCER	17-Nov-2015 08:41	519.7 M	358.9 M		
Output DLIS Files							
DEFAULT	NGS_DSI_HRLA_LDL_013PUP	FN:11	PRODUCER	17-Nov-2015 08:41			

Input DLIS Files						
DEFAULT	Flip_NGS_DSI_HRLA_012LUP	PRODUCER	17-Nov-2015 08:41	519.7 M	358.9 M	
Output DLIS Files						
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HNGC-B	19C0-187	HNGS-BA	19C0-187			
DSST-B	19C0-187	HRLT-B	19C0-187			
HLDS	19C0-187	LDSC-B	19C0-187			
EDTC-B	SKK-5169-EDTCB					

PIP SUMMARY			
Time Mark Every 60 S			
		Sonic Velocity (SVEL)	
		1000 (M/S) 6000	
Gamma Ray (GR_EDTC)		SAM1 Waveform Gain (WFG1)	Min Amplitude Max
0 (GAPI) 150		0 (----) 1000	Rec.Array L.Dipole Slow Proj. CVDL (SPR1) (US/F) 775
Bit Size (BS)		Tension (TENS)	Delta–T Shear / RA – Lower Dipole (DT1R)
		Peak Coherence / RA – Lower Dipole (CHR1)	







Bit Size (BS) (IN)	Tension (TENS) (LBF)	Peak Coherence / RA - Lower Dipole (CHR1) (-----)	Delta-T Shear / RA - Lower Dipole (DT1R) (US/F)
0	0	0	75
20	5000	10	775

Min Amplitude Max

Gamma Ray (GR_EDTC)			SAM1 Waveform Gain (WFG1)					
---------------------	--	--	---------------------------	--	--	--	--	--

Input DLIS Files

DEFAULT

Flip_NGS_DSI_HRLA_012LUP

PRODUCER

17-Nov-2015 08:41

519.7 M

358.9 M

Output DLIS Files

DEFAULT

NGS_DSI_HRLA_LDL_013PUP

FN:11

PRODUCER

17-Nov-2015 08:41

520.0 M

358.9 M

OP System Version: 19C0-187

HNGC-B

19C0-187

DSST-B

19C0-187

HLDS

19C0-187

EDTC-B

SKK-5169-EDTCB

HNGS-BA

19C0-187

HRLT-B

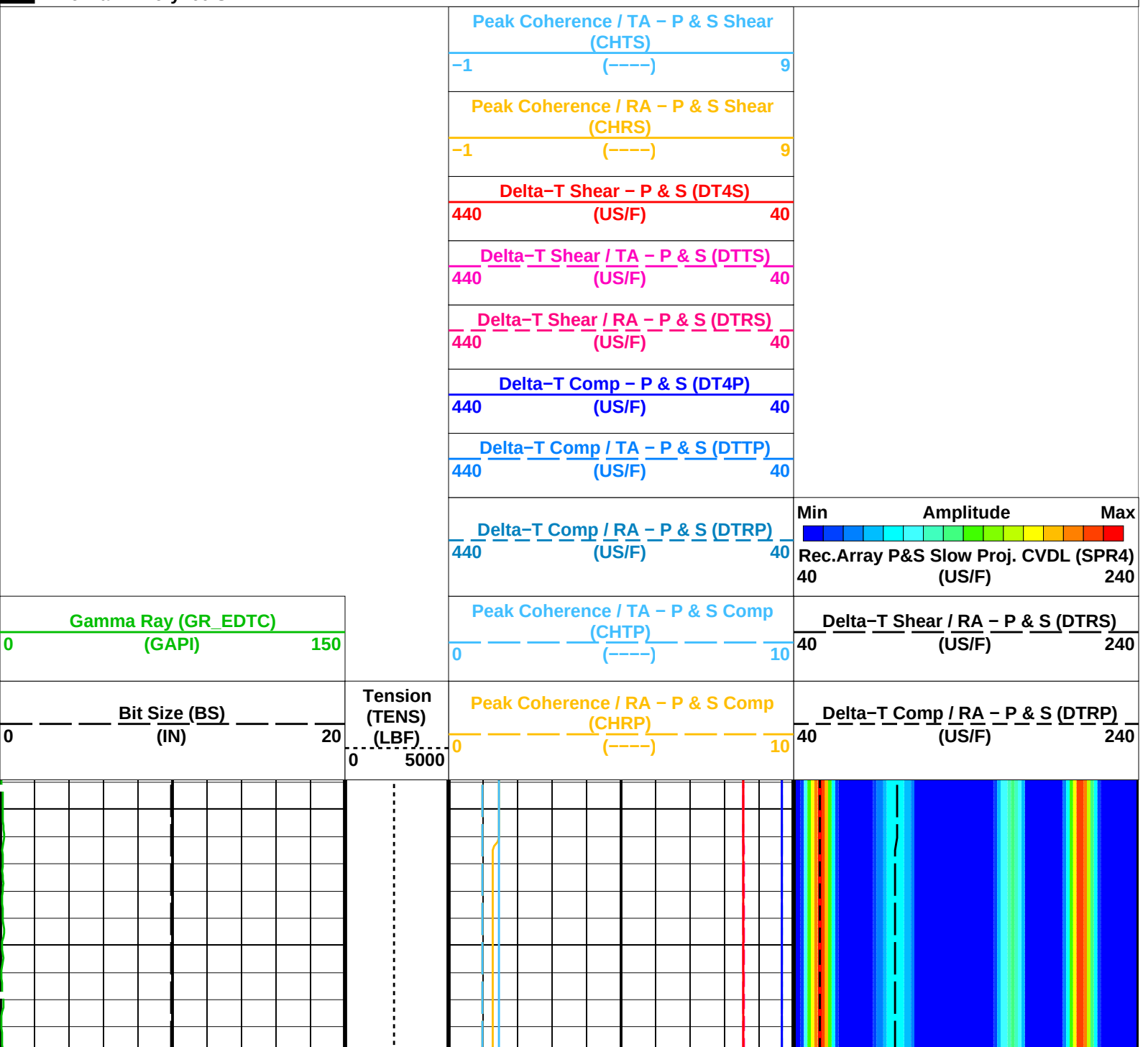
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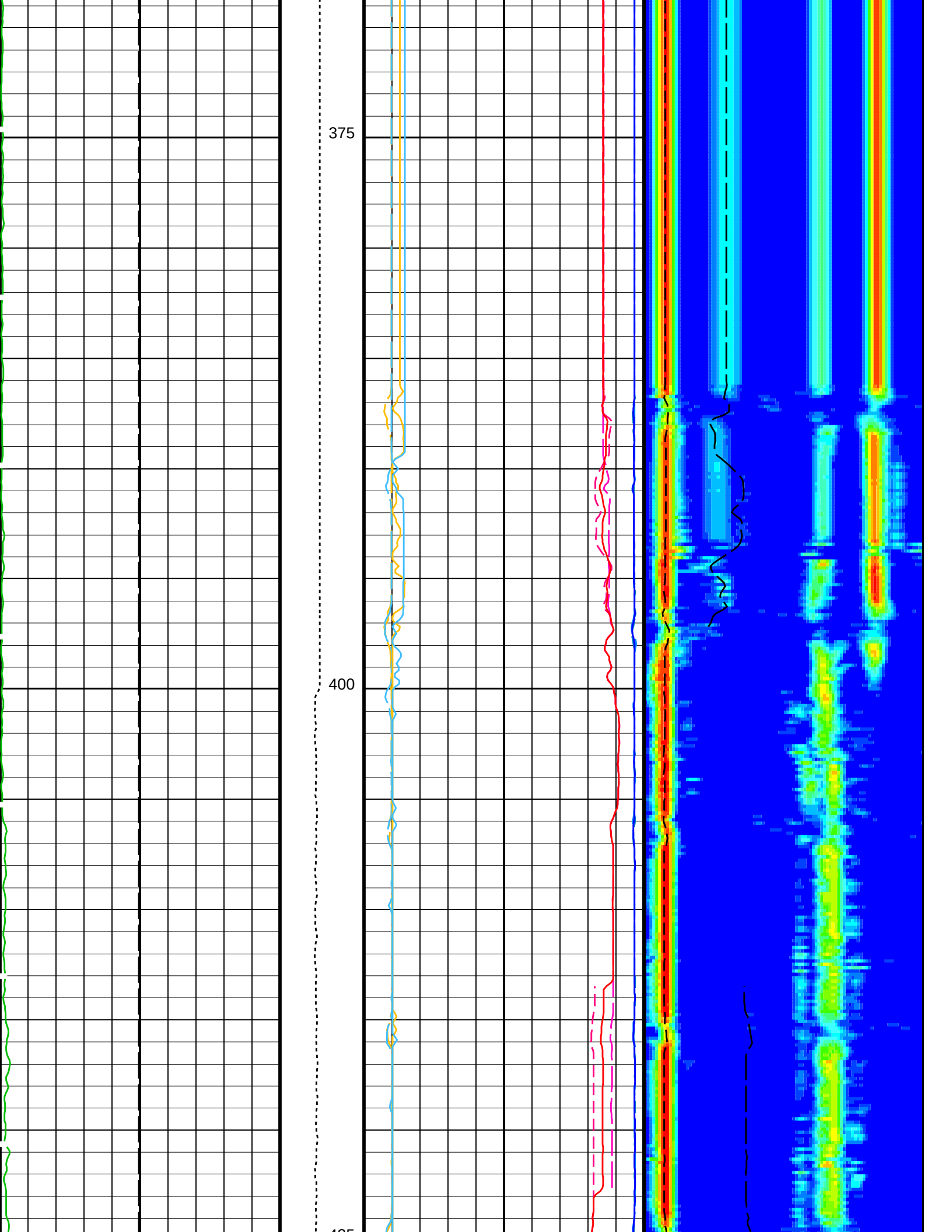
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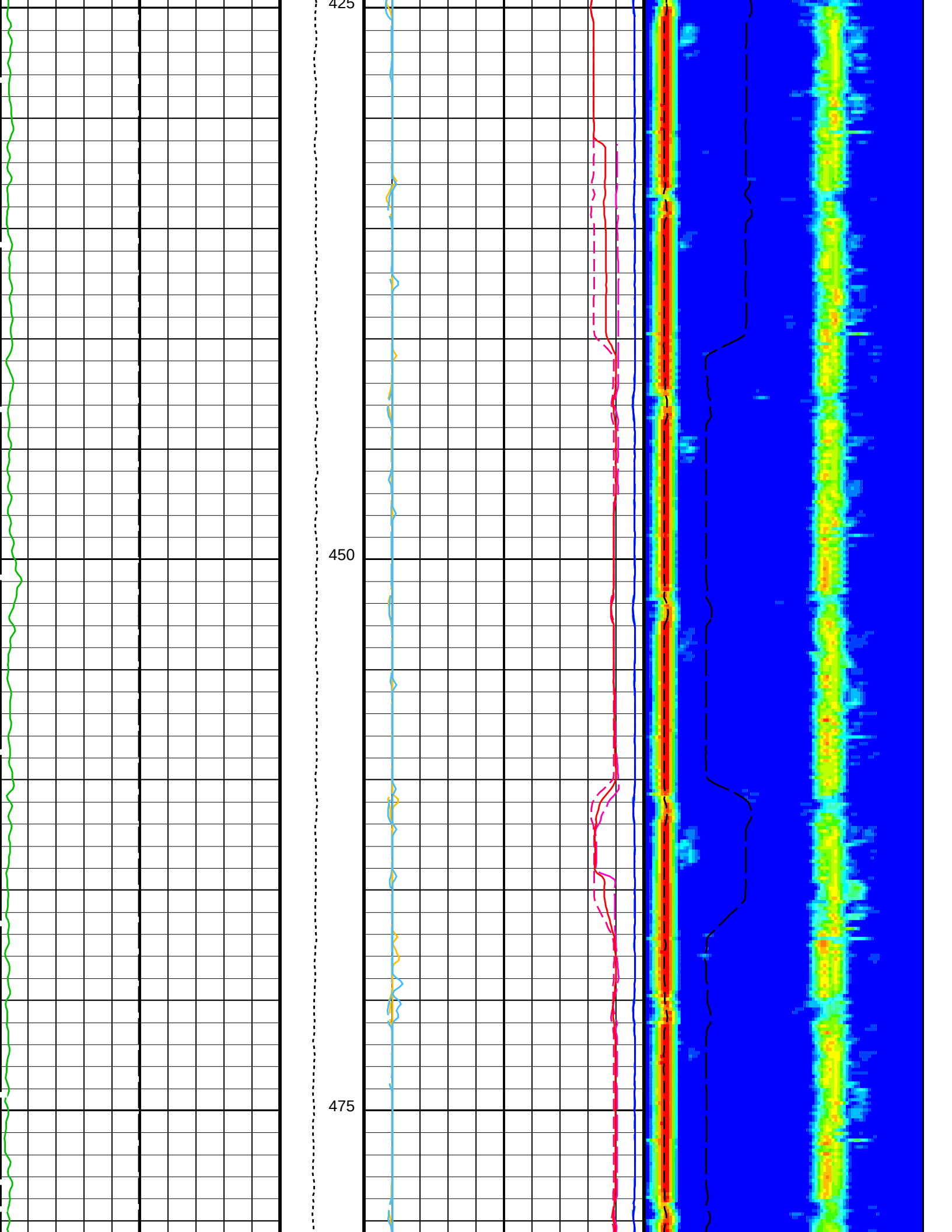
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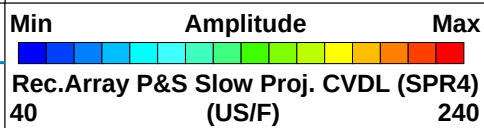
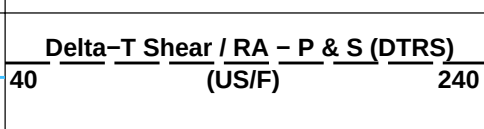
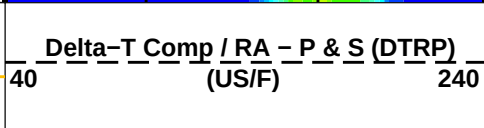
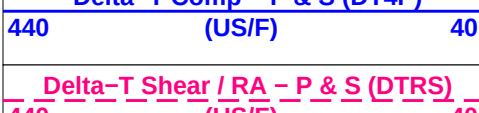
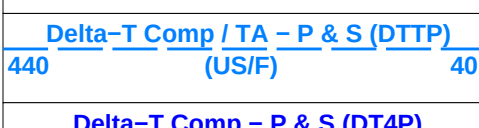
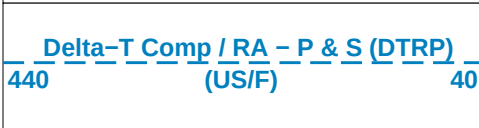
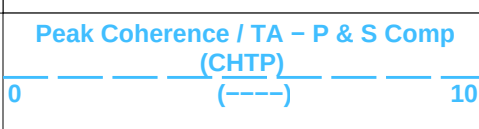
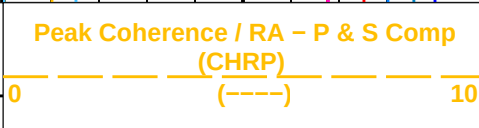
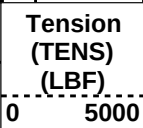
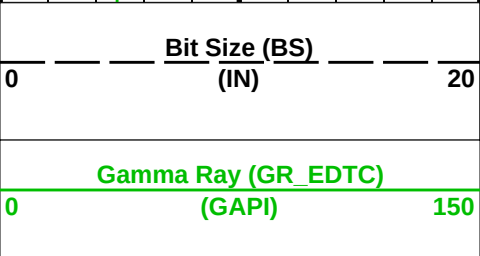
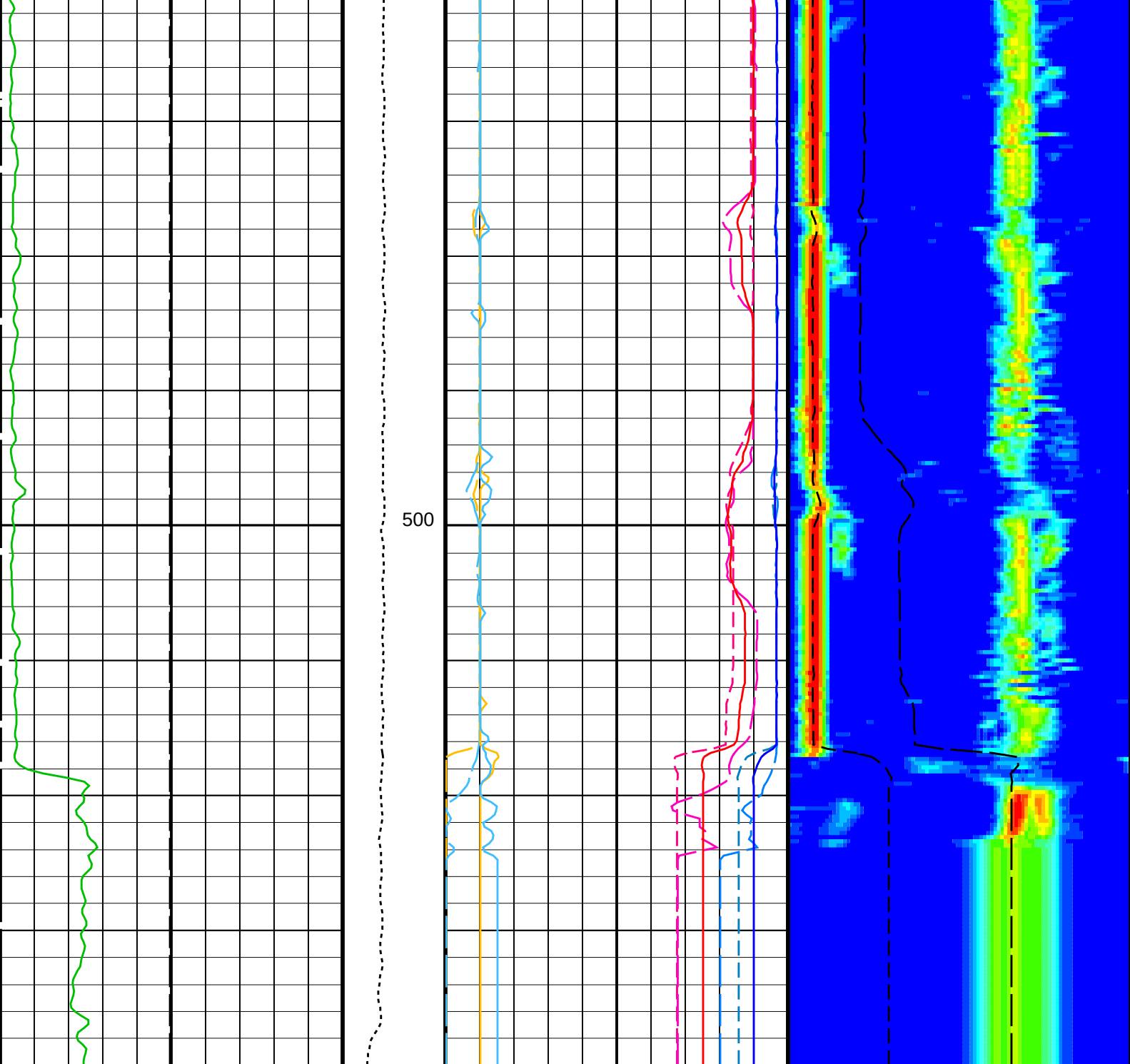
PIP SUMMARY

Time Mark Every 60 S









	440	(US/F)	40
	Delta-T Shear / TA - P & S (DTTS)		
	440	(US/F)	40
	Delta-T Shear - P & S (DT4S)		
	440	(US/F)	40
	Peak Coherence / RA - P & S Shear (CHRS)		
	-1	(-----)	9
	Peak Coherence / TA - P & S Shear (CHTS)		
	-1	(-----)	9

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
BHS	HNGS-BA: Hostile Natural Gamma Ray Sonde Borehole Status	OPEN
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	40 US/F
COUL	Label Slowness Upper Limit - Monopole P&S Compressional	180 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
DTF	Delta-T Fluid	189 US/F
DWC4	Digitizer Word Count 4	512
DWCX	Digitizer Word Count X	512
FILG	Label Fill Gap Control - Monopole P&S	COMP_SHEAR
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	75 US/F
SHUL	Label Slowness Upper Limit - Monopole P&S Shear	180 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
BHS	HRLT-B: High Resolution Laterolog Array - B Borehole Status	OPEN
	EDTC-B: Enhanced DTS Cartridge	

BHS	EDTC-B: Enhanced DTS Cartridge	Borehole Status	OPEN	
	System and Miscellaneous			
BS	Bit Size		9.875	IN
DO	Depth Offset for Playback		0.0	M
PP	Playback Processing		NORMAL	

Format: DSST_P_S_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 17-Nov-2015 08:41

OP System Version: 19C0-187				
HNGC-B	19C0-187	HNGS-BA	19C0-187	
DSST-B	19C0-187	HRLT-B	19C0-187	
HLDS	19C0-187	LDSC-B	19C0-187	
EDTC-B	SKK-5169-EDTCB			

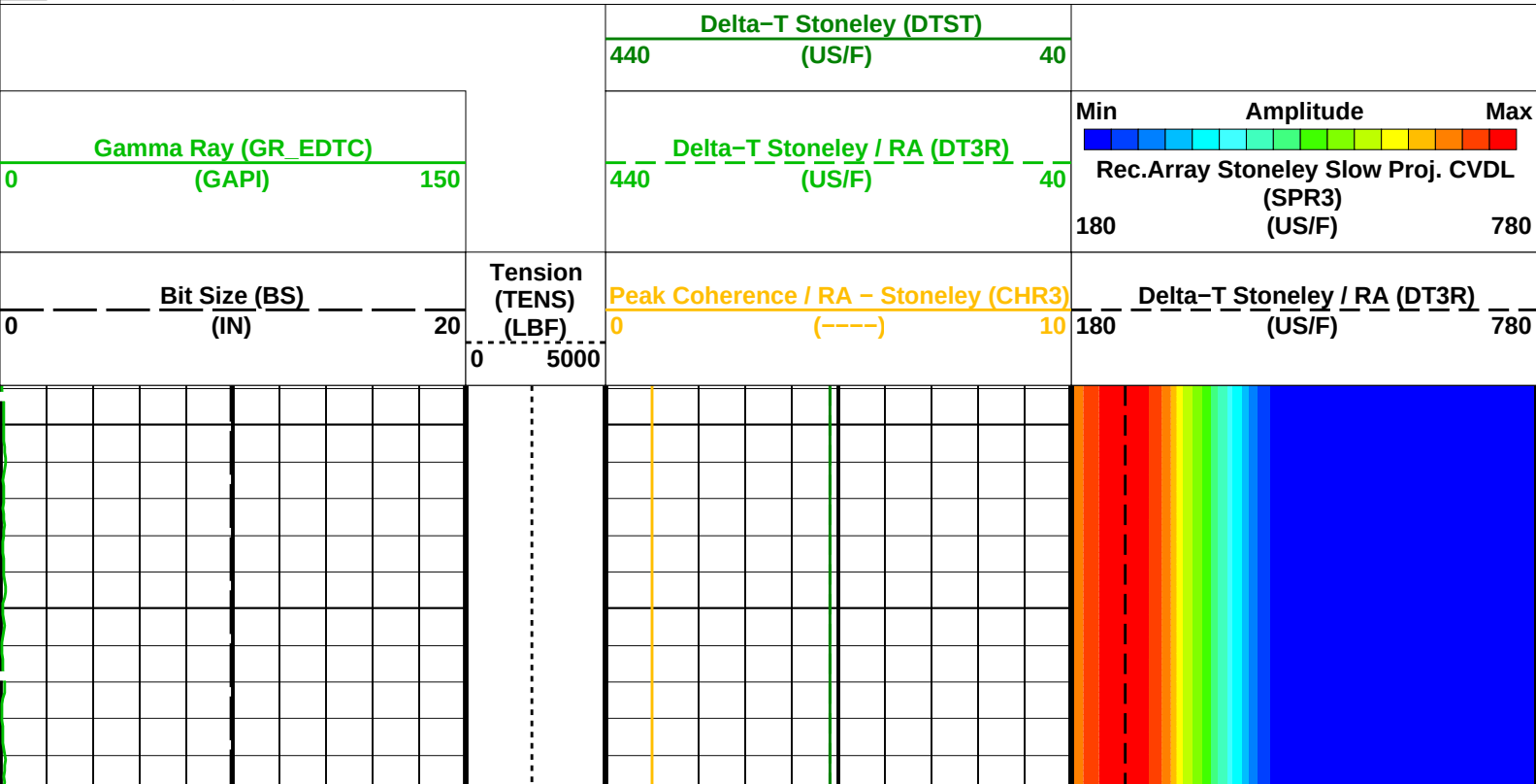
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DEFAULT	Flip_NGS_DSI_HRLA_012LUP	PRODUCER	17-Nov-2015 08:41	519.7 M 358.9 M
Output DLIS Files				
DEFAULT	NGS_DSI_HRLA_LDL_013PUP	FN:11	PRODUCER	17-Nov-2015 08:41

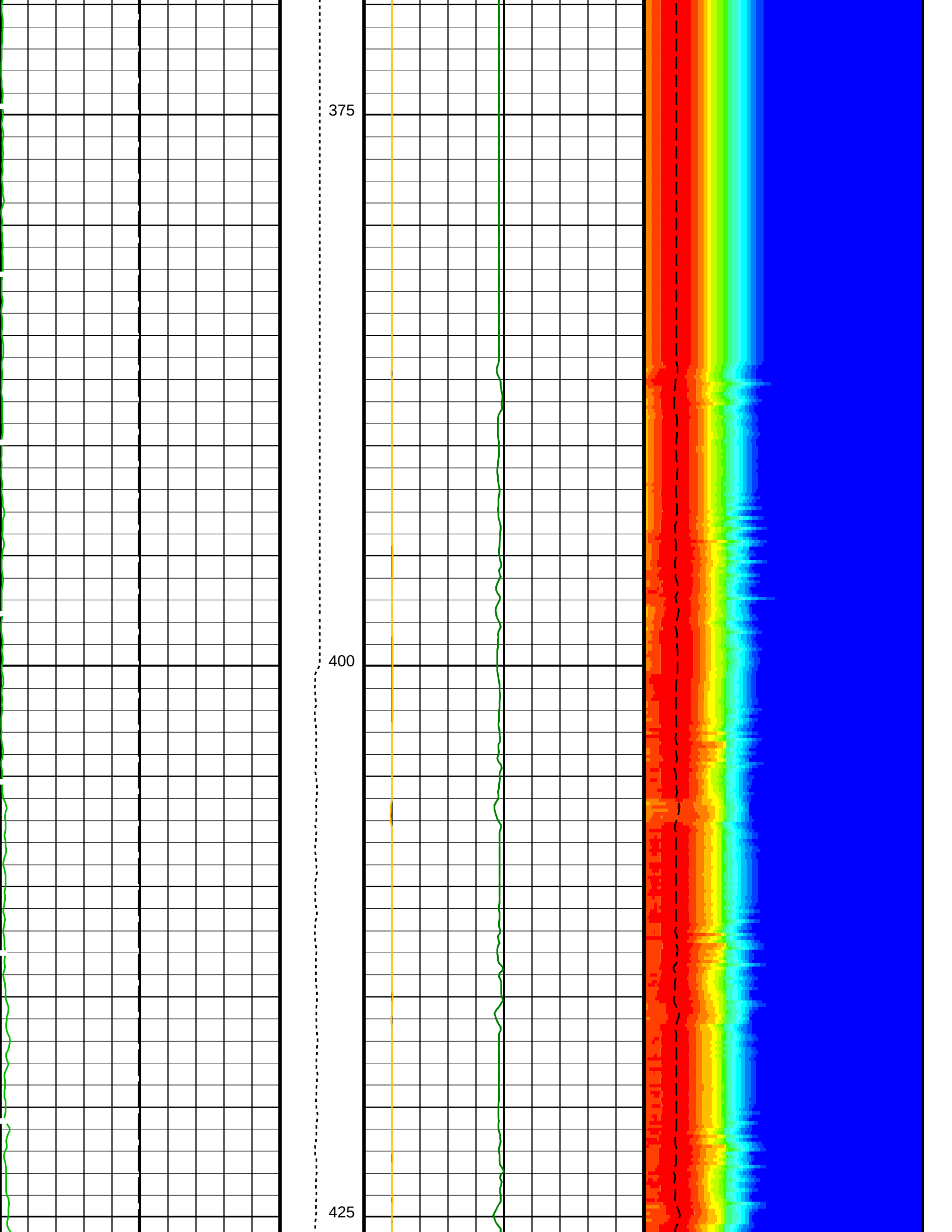
Company: International Ocean Discovery Program Well: Expedition 359, Site U1470B

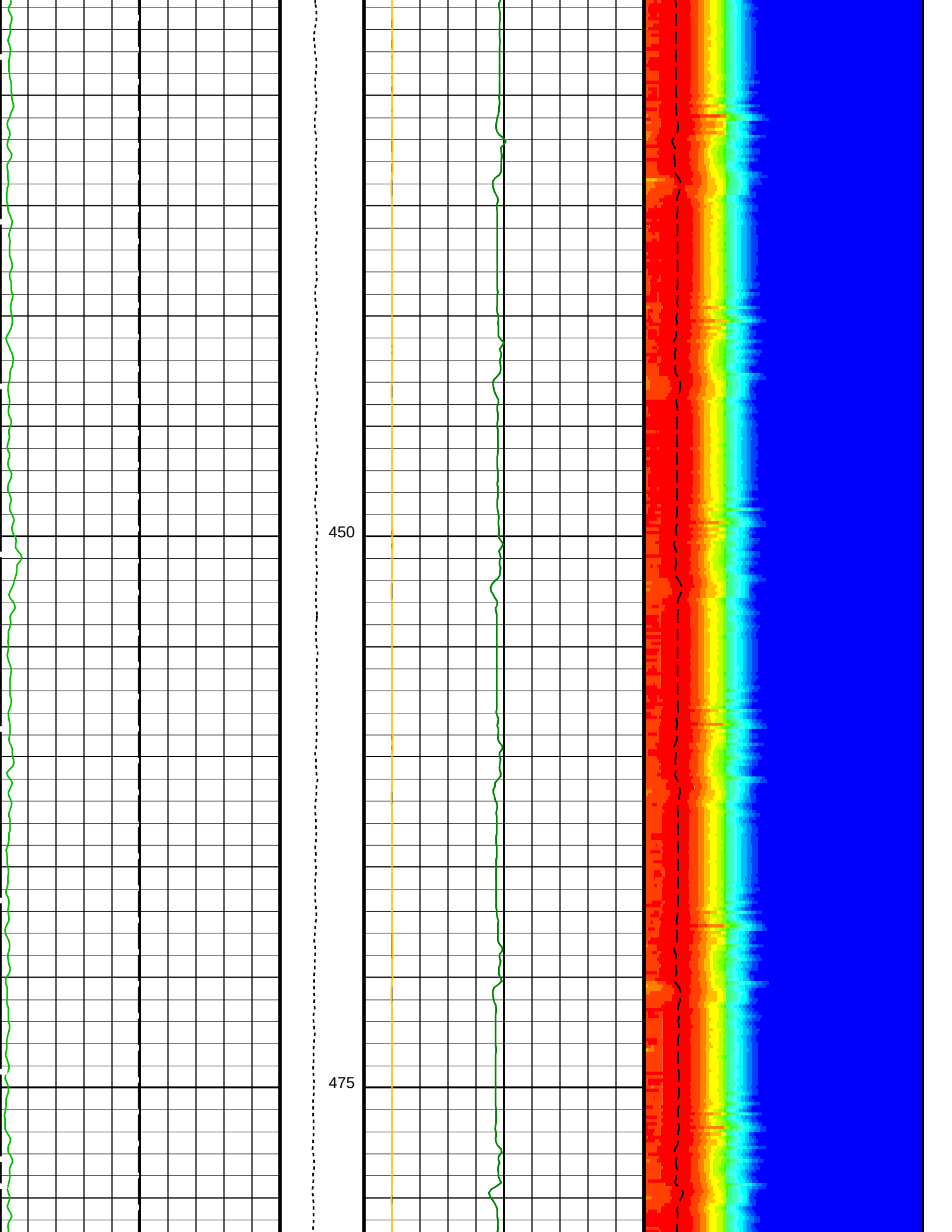
Input DLIS Files				
DEFAULT	Flip_NGS_DSI_HRLA_012LUP	PRODUCER	17-Nov-2015 08:41	519.7 M 358.9 M
Output DLIS Files				
DEFAULT	NGS_DSI_HRLA_LDL_013PUP	FN:11	PRODUCER	17-Nov-2015 08:41 520.0 M 358.9 M

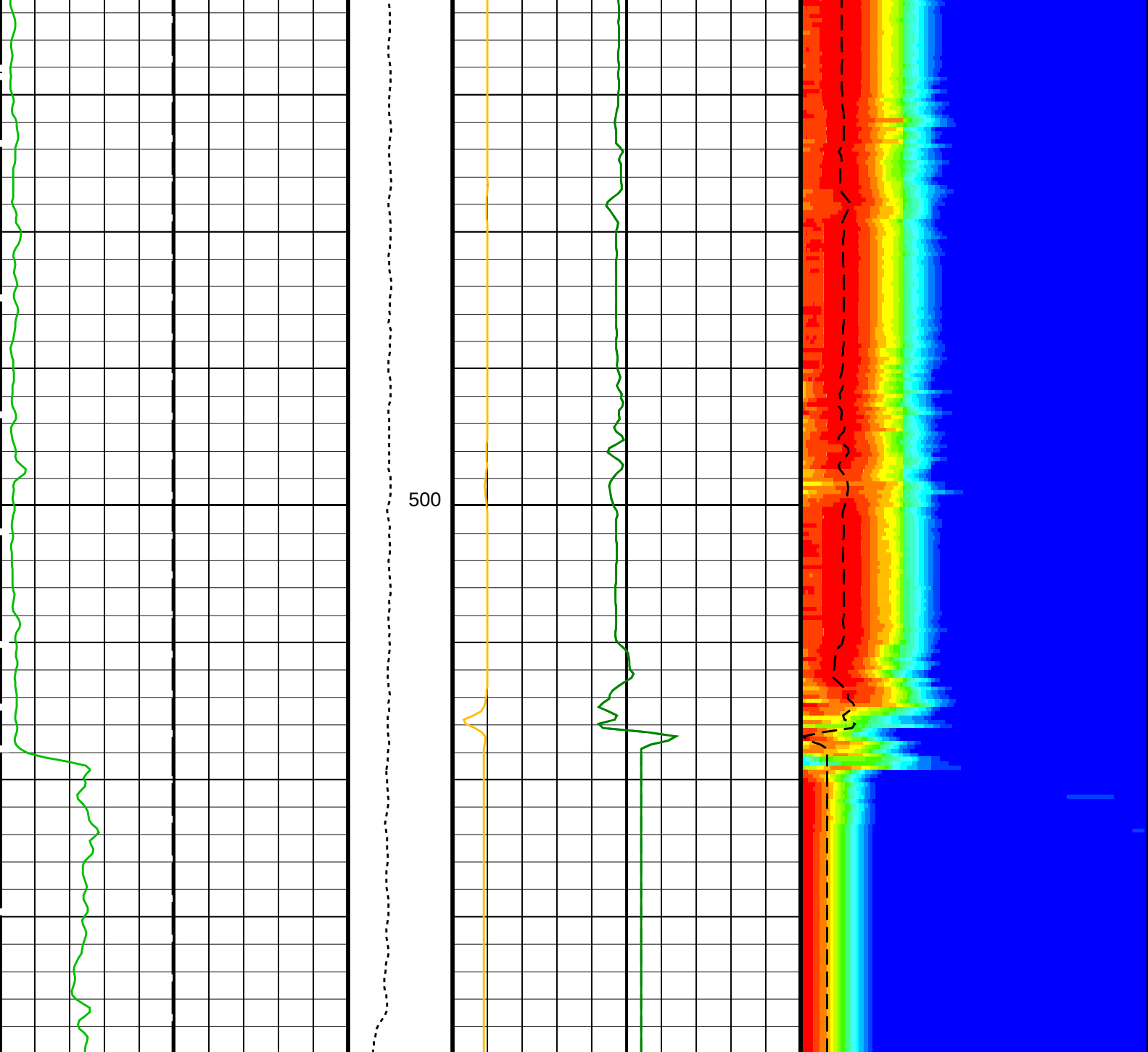
OP System Version: 19C0-187				
HNGC-B	19C0-187	HNGS-BA	19C0-187	
DSST-B	19C0-187	HRLT-B	19C0-187	
HLDS	19C0-187	LDSC-B	19C0-187	
EDTC-B	SKK-5169-EDTCB			

PIP SUMMARY
Time Mark Every 60 S









Bit Size (BS) (IN)		Tension (TENS) (LBF)	Peak Coherence / RA - Stoneley (CHR3) (-----)	Delta-T Stoneley / RA (DT3R) (US/F)
0 20		0 5000	0 10	180 780
Gamma Ray (GR_EDTC) (GAPI)		Delta-T Stoneley / RA (DT3R) (US/F)		Min Amplitude Max Rec.Array Stoneley Slow Proj. CVDL (SPR3) (US/F)
0 150		440 40		180 780
		Delta-T Stoneley (DTST) (US/F)		
		440 40		

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
DDE3	DSST-B: Dipole Shear Imager - B Digitizing Delay 3	0 US

DDEX	Digitizing Delay X	0	US
DSI3	Digitizer Sample Interval 3	40	US
DSIX	Digitizer Sample Interval X	40	US
DTCS	Compressional Delta-T Source for DTCO Channel	PS_COMP	
DWC3	Digitizer Word Count 3	512	
DWCX	Digitizer Word Count X	512	
MTXG	Monopole Transmitter Geometry	186	IN
NWI3	Number Waveform Items 3	8	
NWIX	Number Waveform Items X	0	
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
SAM3	DSST Sonic Acquisition Mode 3 – Monopole Mode for Stoneley	ODD	
SAMX	DSST Sonic Acquisition Mode X – Both Dipoles or Monopole Mode for Expert	OFF	
SAS3	STC Sonic Array Status – Monopole Stoneley	255	
SBO3	STC Search Band Offset – Monopole Stoneley	2000	US
SBW3	STC Search Bandwidth – Monopole Stoneley	6000	US
SFC3	STC Formation Character – Monopole Stoneley	SELECTABLE	
SFM3	STC Filter – Monopole Stoneley	B.5–1.5K	
SLL3	STC Slowness Lower Limit – Monopole Stoneley	180	US/F
SST3	STC Slowness Step – Monopole Stoneley	4	US/F
SSW3	STC Source Waveform – Monopole Stoneley	WF_SAM3	
STLL	Label Slowness Lower Limit – Monopole Stoneley	180	US/F
STUL	Label Slowness Upper Limit – Monopole Stoneley	780	US/F
SUL3	STC Slowness Upper Limit – Monopole Stoneley	780	US/F
SWD3	STC Slowness Width – Monopole Stoneley	40	US/F
TBF3	STC Time for Baseline Fill – Monopole Stoneley	0	US
TLL3	STC Time Lower Limit – Monopole Stoneley	620	US
TST3	STC Time Step – Monopole Stoneley	200	US
TUL3	STC Time Upper Limit – Monopole Stoneley	12020	US
TWD3	STC Time Width – Monopole Stoneley	2000	US
TWI3	STC Integration Time Window – Monopole Stoneley	1600	US
TWSX	Transmitter Waveform Select X	0	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: DSST_STONELEY_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 17-Nov-2015 08:41

OP System Version: 19C0-187

HNGC-B	19C0-187	HNGS-BA	19C0-187
DSST-B	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
EDTC-B	SKK-5169-EDTCB		

Input DLIS Files

DEFAULT	Flip_NGS_DSI_HRLA_012LUP	PRODUCER	17-Nov-2015 08:41	519.7 M	358.9 M
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Output DLIS Files

DEFAULT	NGS_DSI_HRLA_LDL_013PUP	FN:11	PRODUCER	17-Nov-2015 08:41
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Input DLIS Files

DEFAULT	Flip_NGS_DSI_HRLA_012LUP	PRODUCER	17-Nov-2015 08:41	519.7 M	358.9 M
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Output DLIS Files

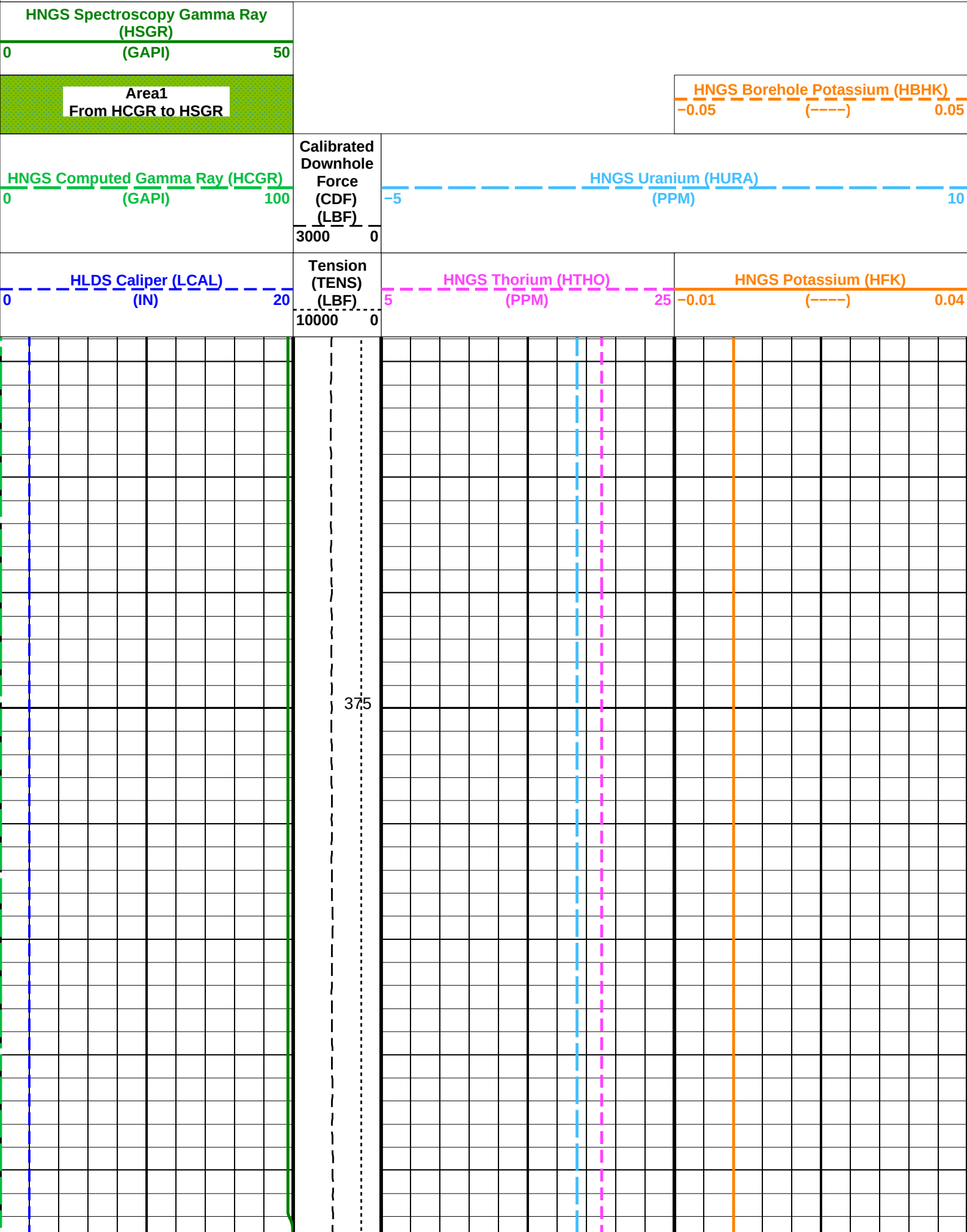
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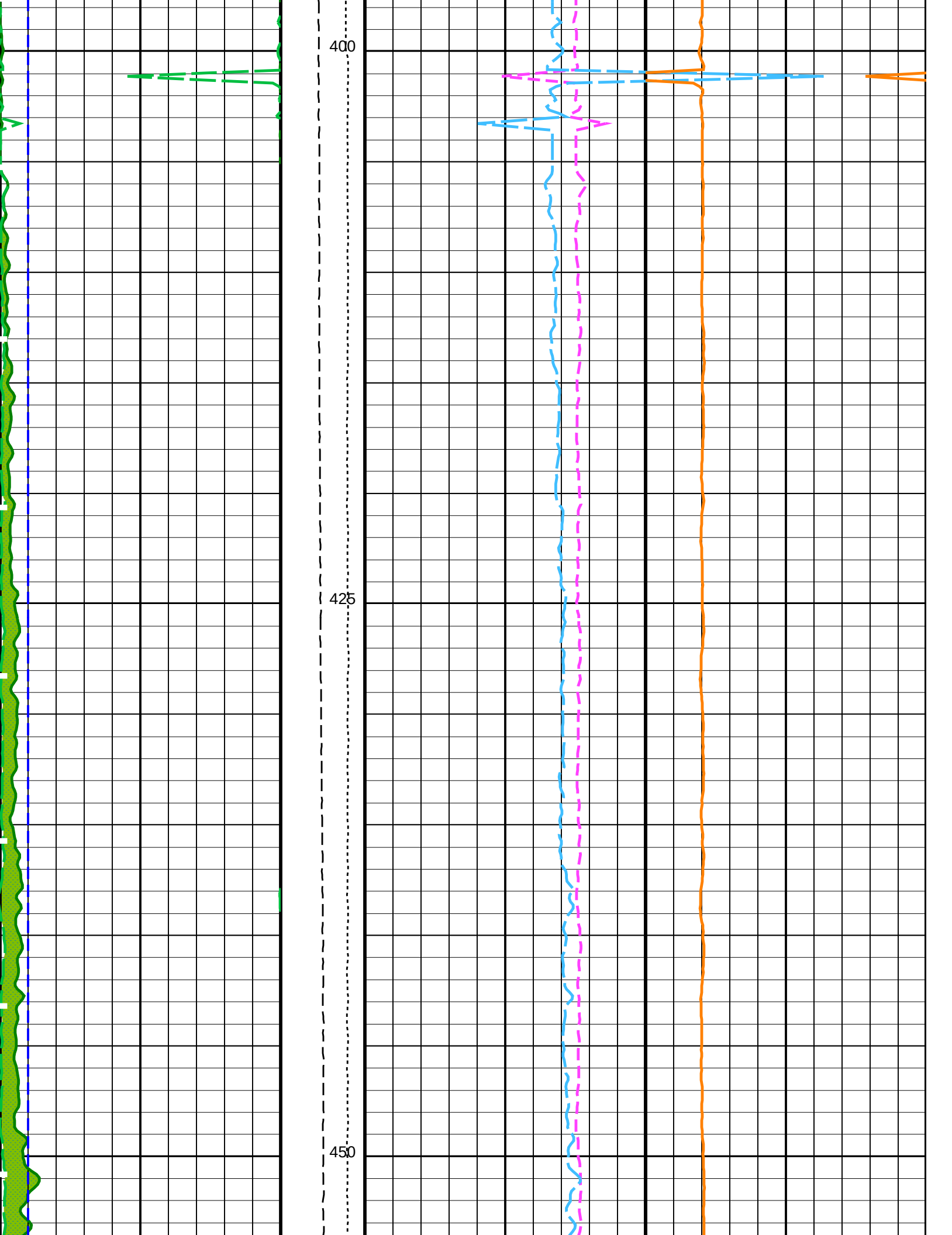
OP System Version: 19C0-187

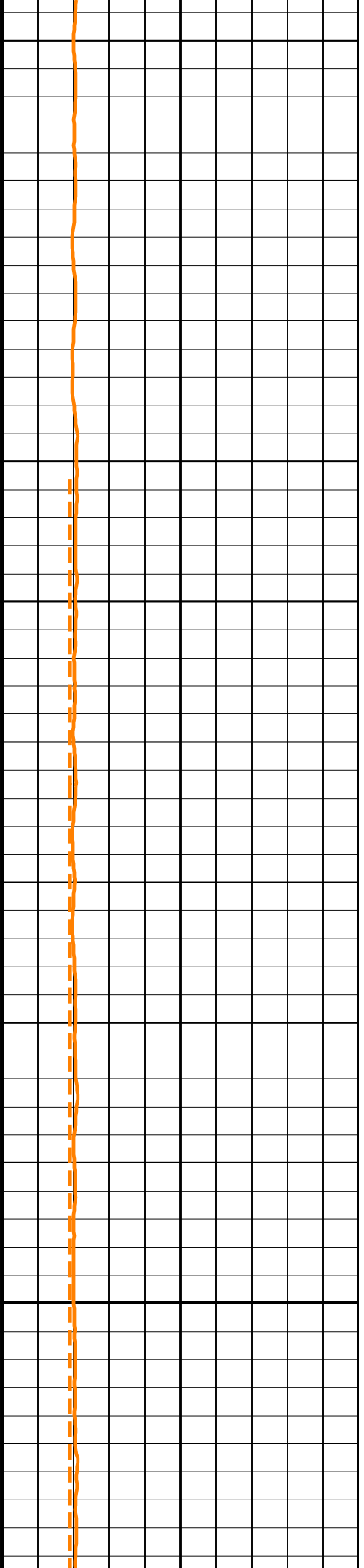
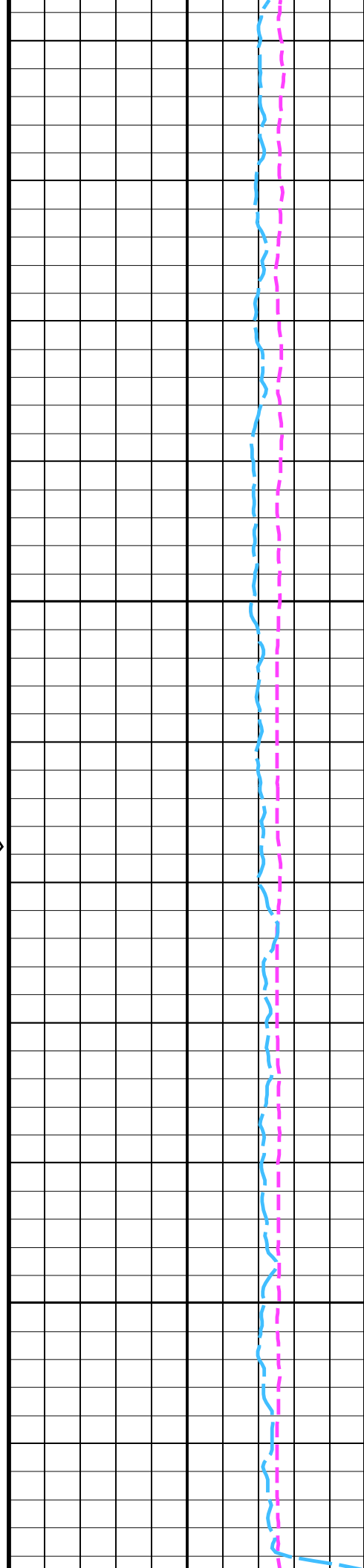
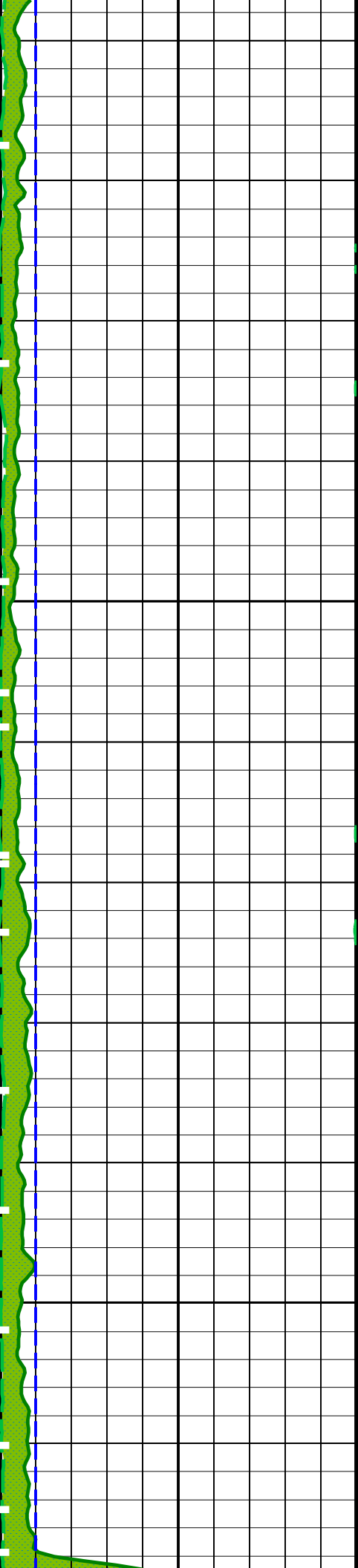
HNGC-B	19C0-187	HNGS-BA	19C0-187
DSST-B	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
EDTC-B	SKK-5169-EDTCB		

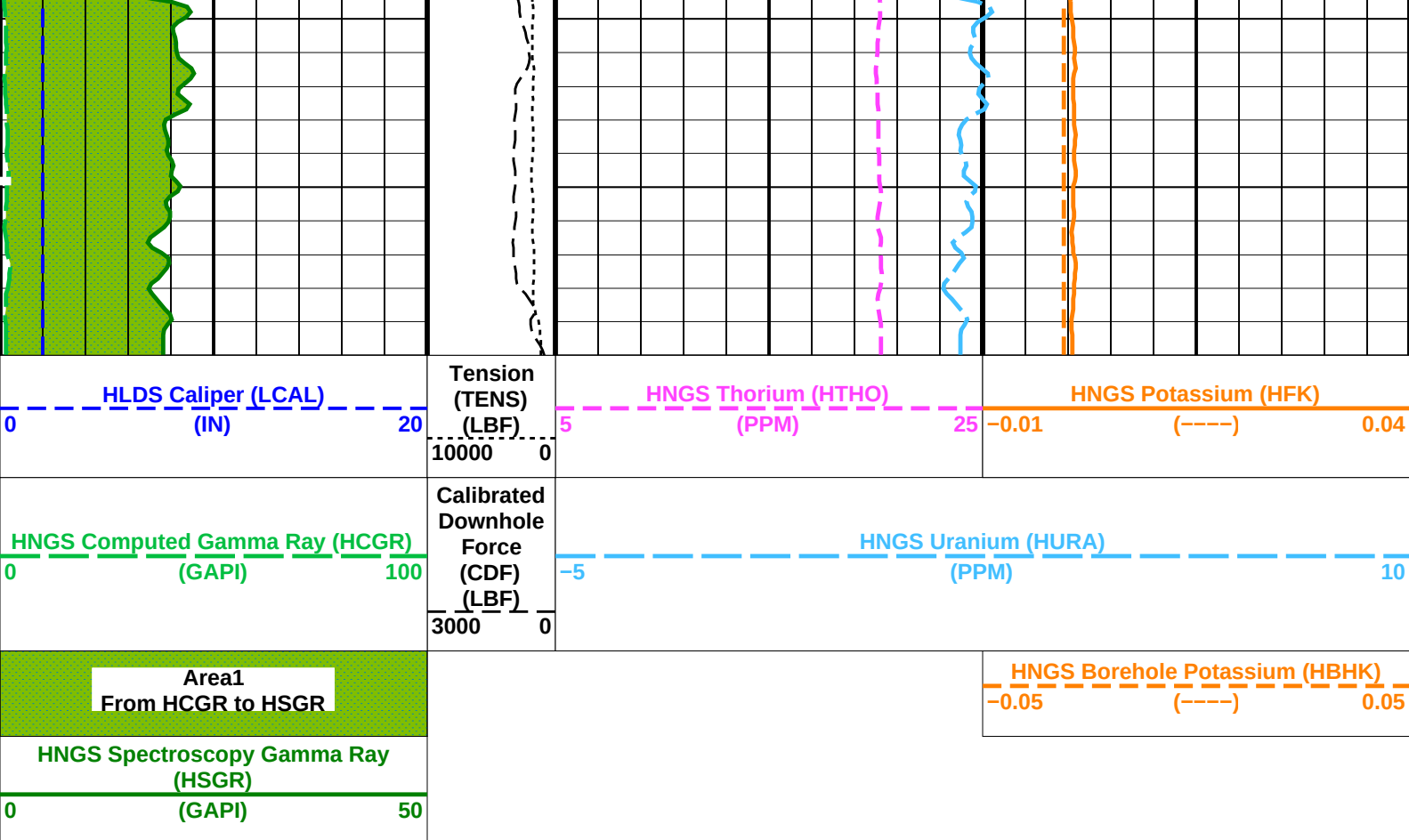
PIP SUMMARY

Time Mark Every 60 S









PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
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	LCAL	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.0295355	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
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	1.01624	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.944238	
DSST-B: Dipole Shear Imager - B			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
HRLT-B: High Resolution Laterolog Array - B			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: HNGS Fields Vertical Scale: 1.200 Graphics File Created: 17-Nov-2015 08:41

OP System Version: 19C0-187			
HNGC-B	19C0-187	HNGS-BA	19C0-187
DSST-B	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
EDTC-B	SKK-5169-EDTCB		

Input DLIS Files					
DEFAULT	Flip_NGS_DSI_HRLA_012LUP	PRODUCER	17-Nov-2015 08:41	519.7 M	358.9 M
Output DLIS Files					
DEFAULT	NGS_DSI_HRLA_LDL_013PUP	FN:11	PRODUCER	17-Nov-2015 08:41	

Calibration and Check Summary							
Measurement	Nominal	Master	Before	After	Change	Limit	Units
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 1 Check							
Master: 28-Sep-2015 4:37	Before: 17-Nov-2015 4:13	After: 6-Nov-2015 0:09					
Na 511 Peak Loc	40.00	37.67	37.52	37.52	0.004429	1.000	
Na 511 Peak Res	15.50	16.19	16.87	16.68	-0.1939	2.000	%
High Voltage	1150	1229	1230	1226	-4.379	N/A	V
Na 1785 Peak Loc	142.6	136.2	136.5	136.4	-0.1347	7.000	
Na 1785 Peak Res	8.500	9.111	9.649	9.704	0.05527	2.000	%
Temperature	15.50	32.00	34.79	31.91	-2.884	N/A	DEGC
Na Count Rate	45.00	42.40	40.36	40.79	0.4352	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check							
Master: 28-Sep-2015 4:37	Before: 17-Nov-2015 4:13	After: 6-Nov-2015 0:09					
Na 511 Peak Loc	40.00	39.57	39.49	39.77	0.2775	1.000	
Na 511 Peak Res	15.50	16.65	16.69	15.66	-1.033	2.000	%
High Voltage	1150	1107	1110	1107	-3.079	N/A	V
Na 1785 Peak Loc	142.6	143.5	142.6	143.2	0.5872	7.000	
Na 1785 Peak Res	8.500	9.036	8.945	9.170	0.2246	2.000	%
Temperature	15.50	31.75	34.51	32.46	-2.048	N/A	DEGC
Na Count Rate	45.00	42.43	40.30	40.89	0.5874	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Ratio Of Detector 1 To Detector 2							
Master: 28-Sep-2015 4:37	Before: 17-Nov-2015 4:13	After: 6-Nov-2015 0:09					
Coincidence Count Rate Ratio	1.000	0.9929	0.9939	0.9906	-0.003309	0.05000	
High Resolution Laterolog Array – B Wellsite Calibration – HRLT M01							
Before: 17-Nov-2015 4:09	After: 6-Nov-2015 0:05						
HRLT M0-M1 Voltage Plus – 0	0	N/A	-318.6	-318.7	-0.1158	9.681	UV
HRLT M0-M1 Voltage Plus – 1	0	N/A	-332.3	-332.2	0.09564	9.681	UV
HRLT M0-M1 Voltage Plus – 2	0	N/A	-339.7	-339.7	0.003357	9.681	UV
HRLT M0-M1 Voltage Plus – 3	0	N/A	-330.3	-329.9	0.3964	9.681	UV
HRLT M0-M1 Voltage Plus – 4	0	N/A	-320.2	-320.1	0.1413	9.681	UV
HRLT M0-M1 Voltage Plus – 5	0	N/A	-322.1	-322.0	0.1493	9.681	UV
HRLT M0-M1 Voltage Plus – 6	0	N/A	322.7	321.9	-0.7579	9.681	UV
HRLT M0-M1 Voltage Plus – 7	0	N/A	-322.7	-322.7	0	9.681	UV
High Resolution Laterolog Array – B Wellsite Calibration – HRLT M12							
Before: 17-Nov-2015 4:09	After: 6-Nov-2015 0:05						
HRLT M1-M2 Voltage Plus – 0	0	N/A	1742	1742	-0.02466	53.42	UV
HRLT M1-M2 Voltage Plus – 1	0	N/A	1824	1822	-1.310	53.42	UV
HRLT M1-M2 Voltage Plus – 2	0	N/A	1857	1856	-0.6367	53.42	UV
HRLT M1-M2 Voltage Plus – 3	0	N/A	1804	1801	-2.831	53.42	UV
HRLT M1-M2 Voltage Plus – 4	0	N/A	1748	1747	-1.638	53.42	UV
HRLT M1-M2 Voltage Plus – 5	0	N/A	1759	1757	-1.763	53.42	UV
HRLT M1-M2 Voltage Plus – 6	0	N/A	-1779	-1774	4.644	53.42	UV
HRLT M1-M2 Voltage Plus – 7	0	N/A	1781	1781	0	53.42	UV
High Resolution Laterolog Array – B Wellsite Calibration – HRLT M23							
Before: 17-Nov-2015 4:09	After: 6-Nov-2015 0:05						
HRLT M2-M3 Voltage Plus – 0	0	N/A	1733	1733	-0.1287	53.42	UV
HRLT M2-M3 Voltage Plus – 1	0	N/A	1825	1824	-1.435	53.42	UV
HRLT M2-M3 Voltage Plus – 2	0	N/A	1861	1860	-1.409	53.42	UV
HRLT M2-M3 Voltage Plus – 3	0	N/A	1812	1808	-3.632	53.42	UV
HRLT M2-M3 Voltage Plus – 4	0	N/A	1758	1757	-0.888	53.42	UV
HRLT M2-M3 Voltage Plus – 5	0	N/A	1758	1757	-0.888	53.42	UV
HRLT M2-M3 Voltage Plus – 6	0	N/A	1758	1757	-0.888	53.42	UV
HRLT M2-M3 Voltage Plus – 7	0	N/A	1758	1757	-0.888	53.42	UV

HRLT M2-M3 Voltage Plus - 4	0	N/A	1750	1747	-2.383	53.42	UV
HRLT M2-M3 Voltage Plus - 5	0	N/A	1761	1759	-2.017	53.42	UV
HRLT M2-M3 Voltage Plus - 6	0	N/A	-1770	-1765	5.819	53.42	UV
HRLT M2-M3 Voltage Plus - 7	0	N/A	1781	1781	0	53.42	UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT V34

Before: 17-Nov-2015 4:09 After: 6-Nov-2015 0:05

HRLT A3-A4 Voltage Plus - 0	0	N/A	68650	68690	43.91	2100	UV
HRLT A3-A4 Voltage Plus - 1	0	N/A	72140	72110	-29.26	2100	UV
HRLT A3-A4 Voltage Plus - 2	0	N/A	73820	73820	-1.648	2100	UV
HRLT A3-A4 Voltage Plus - 3	0	N/A	72120	72030	-88.05	2100	UV
HRLT A3-A4 Voltage Plus - 4	0	N/A	69620	69590	-28.08	2100	UV
HRLT A3-A4 Voltage Plus - 5	0	N/A	70120	70090	-31.06	2100	UV
HRLT A3-A4 Voltage Plus - 6	0	N/A	-68940	-68780	153.4	2100	UV
HRLT A3-A4 Voltage Plus - 7	0	N/A	70000	70000	0	2100	UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT V45

Before: 17-Nov-2015 4:09 After: 6-Nov-2015 0:05

HRLT A4-A5 Voltage Plus - 0	0	N/A	68740	68790	46.42	2100	UV
HRLT A4-A5 Voltage Plus - 1	0	N/A	72350	72320	-31.09	2100	UV
HRLT A4-A5 Voltage Plus - 2	0	N/A	74000	74000	-1.641	2100	UV
HRLT A4-A5 Voltage Plus - 3	0	N/A	72260	72190	-71.35	2100	UV
HRLT A4-A5 Voltage Plus - 4	0	N/A	69740	69690	-42.79	2100	UV
HRLT A4-A5 Voltage Plus - 5	0	N/A	70210	70180	-31.06	2100	UV
HRLT A4-A5 Voltage Plus - 6	0	N/A	-69140	-68990	150.0	2100	UV
HRLT A4-A5 Voltage Plus - 7	0	N/A	70000	70000	0	2100	UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT V56

Before: 17-Nov-2015 4:09 After: 6-Nov-2015 0:05

HRLT A5-A6 Voltage Plus - 0	0	N/A	68600	68640	45.16	2100	UV
HRLT A5-A6 Voltage Plus - 1	0	N/A	72190	72150	-42.97	2100	UV
HRLT A5-A6 Voltage Plus - 2	0	N/A	73850	73860	7.391	2100	UV
HRLT A5-A6 Voltage Plus - 3	0	N/A	72130	72060	-66.80	2100	UV
HRLT A5-A6 Voltage Plus - 4	0	N/A	69600	69560	-38.11	2100	UV
HRLT A5-A6 Voltage Plus - 5	0	N/A	70090	70050	-44.66	2100	UV
HRLT A5-A6 Voltage Plus - 6	0	N/A	-68980	-68840	148.2	2100	UV
HRLT A5-A6 Voltage Plus - 7	0	N/A	70000	70000	0	2100	UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT VTP

Before: 17-Nov-2015 4:09 After: 6-Nov-2015 0:05

HRLT Torpedo-M0 Voltage - 0	0	N/A	-68110	-68150	-37.74	2100	UV
HRLT Torpedo-M0 Voltage - 1	0	N/A	-72010	-71960	44.34	2100	UV
HRLT Torpedo-M0 Voltage - 2	0	N/A	-73690	-73680	13.30	2100	UV
HRLT Torpedo-M0 Voltage - 3	0	N/A	-72050	-71950	96.20	2100	UV
HRLT Torpedo-M0 Voltage - 4	0	N/A	-69550	-69510	42.13	2100	UV
HRLT Torpedo-M0 Voltage - 5	0	N/A	-70040	-69980	56.26	2100	UV
HRLT Torpedo-M0 Voltage - 6	0	N/A	68760	68590	-164.9	2100	UV
HRLT Torpedo-M0 Voltage - 7	0	N/A	-70000	-70000	0	2100	UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT VBD

Before: 17-Nov-2015 4:09 After: 6-Nov-2015 0:05

HRLT Bridle#9-M0 Voltage - 0	0	N/A	-68140	-68190	-46.73	2100	UV
HRLT Bridle#9-M0 Voltage - 1	0	N/A	-72070	-72050	26.07	2100	UV
HRLT Bridle#9-M0 Voltage - 2	0	N/A	-73780	-73780	-7.039	2100	UV
HRLT Bridle#9-M0 Voltage - 3	0	N/A	-72100	-72040	60.03	2100	UV
HRLT Bridle#9-M0 Voltage - 4	0	N/A	-69590	-69560	26.81	2100	UV
HRLT Bridle#9-M0 Voltage - 5	0	N/A	-70060	-70020	39.55	2100	UV
HRLT Bridle#9-M0 Voltage - 6	0	N/A	68830	68680	-148.4	2100	UV
HRLT Bridle#9-M0 Voltage - 7	0	N/A	-70000	-70000	0	2100	UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT ISO

Before: 17-Nov-2015 4:09 After: 6-Nov-2015 0:05

HRLT Source Current Plus - 0	0	N/A	284.3	284.5	0.1680	8.520	UA
HRLT Source Current Plus - 1	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 2	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 3	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 4	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 5	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 6	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 7	0	N/A	281.1	281.1	0	8.520	UA

High Resolution Laterolog Array - B Wellsite Calibration - HRLT MV

Before: 17-Nov-2015 4:09 After: 6-Nov-2015 0:05

HRLT Vertical Voltage PI - 0	0	N/A	-320.1	-320.4	-0.2325	9.681	UV
HRLT Vertical Voltage PI - 1	0	N/A	-326.7	-326.8	-0.08356	9.681	UV
HRLT Vertical Voltage PI - 2	0	N/A	-332.8	-333.1	-0.2682	9.681	UV
HRLT Vertical Voltage PI - 3	0	N/A	-321.7	-321.5	0.2034	9.681	UV
HRLT Vertical Voltage PI - 4	0	N/A	-309.1	-309.0	0.03781	9.681	UV
HRLT Vertical Voltage PI - 5	0	N/A	-325.9	-325.8	0.04562	9.681	UV
HRLT Vertical Voltage PI - 6	0	N/A	330.0	329.4	-0.5960	9.681	UV
HRLT Vertical Voltage PI - 7	0	N/A	-322.7	-322.7	0	9.681	UV

Hostile Litho-Density Sonde Wellsite Calibration – Background Measurement

Master: 22-Sep-2015 6:15 Before: 22-Sep-2015 8:11 After: 22-Sep-2015 8:17

SS Cs Resolution Bkg	9.000	7.728	7.766	7.753	-0.01262	1.800	%
LS Cs Resolution Bkg	9.000	8.059	8.033	7.996	-0.03655	1.800	%
LSW1 Background	100.0	81.31	80.58	80.69	0.1195	3.000	CPS
LSW2 Background	100.0	75.17	73.86	73.12	-0.7346	3.000	CPS
LSW3 Background	200.0	168.0	165.4	165.9	0.5533	6.000	CPS
LSW4 Background	250.0	205.6	204.8	204.6	-0.1577	7.500	CPS
LSW5 Background	600.0	476.6	479.7	480.3	0.5366	18.00	CPS
SSW1 Background	100.0	78.62	78.56	78.06	-0.5040	3.000	CPS
SSW2 Background	200.0	135.7	134.5	134.2	-0.2933	6.000	CPS
SSW3 Background	500.0	379.3	376.0	380.3	4.311	15.00	CPS
SSW4 Background	270.0	203.8	202.8	203.4	0.5407	8.100	CPS
SSW5 Background	200.0	144.7	144.4	145.8	1.427	6.000	CPS

Hostile Litho-Density Sonde Wellsite Calibration – Aluminum Measurement

Master: 22-Sep-2015 6:39

LSW1 Aluminum	600.0	462.8	N/A	N/A	N/A	N/A	CPS
LSW2 Aluminum	900.0	677.5	N/A	N/A	N/A	N/A	CPS
LSW3 Aluminum	1100	817.0	N/A	N/A	N/A	N/A	CPS
LSW4 Aluminum	580.0	409.5	N/A	N/A	N/A	N/A	CPS
LSW5 Aluminum	570.0	376.3	N/A	N/A	N/A	N/A	CPS
SSW1 Aluminum	2800	2135	N/A	N/A	N/A	N/A	CPS
SSW2 Aluminum	8000	5895	N/A	N/A	N/A	N/A	CPS
SSW3 Aluminum	11600	8280	N/A	N/A	N/A	N/A	CPS
SSW4 Aluminum	5000	3414	N/A	N/A	N/A	N/A	CPS
SSW5 Aluminum	660.0	402.0	N/A	N/A	N/A	N/A	CPS

Hostile Litho-Density Sonde Wellsite Calibration – Lithology Measurement

Master: 22-Sep-2015 6:34

LSW1 Iron	400.0	334.3	N/A	N/A	N/A	N/A	CPS
LSW2 Iron	730.0	571.3	N/A	N/A	N/A	N/A	CPS
LSW3 Iron	1000	757.3	N/A	N/A	N/A	N/A	CPS
LSW4 Iron	520.0	393.2	N/A	N/A	N/A	N/A	CPS
LSW5 Iron	470.0	363.5	N/A	N/A	N/A	N/A	CPS
SSW1 Iron	2100	1631	N/A	N/A	N/A	N/A	CPS
SSW2 Iron	6800	5118	N/A	N/A	N/A	N/A	CPS
SSW3 Iron	10800	7868	N/A	N/A	N/A	N/A	CPS
SSW4 Iron	4600	3269	N/A	N/A	N/A	N/A	CPS
SSW5 Iron	580.0	378.7	N/A	N/A	N/A	N/A	CPS

Hostile Litho-Density Sonde Wellsite Calibration – Caliper Calibration

Before: 22-Sep-2015 8:12

HLDS Caliper Small Ring	12.00	N/A	14.62	N/A	N/A	N/A	IN
HLDS Caliper Large Ring	15.19	N/A	18.14	N/A	N/A	N/A	IN

Enhanced DTS Cartridge Wellsite Calibration – EDTC Accelerometer Calibration

Before: 17-Nov-2015 4:08

EDTC Z-Axis Acceleration	9.810	N/A	9.808	N/A	N/A	N/A	M/S2
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Enhanced DTS Cartridge Wellsite Calibration – Detector Calibration

Before: 3-Nov-2015 12:51 After: 3-Nov-2015 17:49

Gamma Ray (Jig – Bkg)	159.8	N/A	159.8	151.2	-8.569	14.53	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	156.2	-8.849	15.00	GAPI

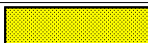
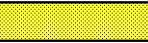
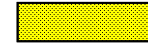
Hostile Natural Gamma Ray Cartridge – B / Equipment Identification

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	HNSH – BA	174
Gamma Source Radioactive	GSR – U	616008

Detector 1 Check

Phase	Na 511 Peak Loc		Value	Phase	Na 511 Peak Res %		Value	Phase	High Voltage V		Value		
Master			37.67	Master			16.19	Master			1229		
Before			37.52	Before			16.87	Before			1230		
After			37.52	After			16.68	After			1226		
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			136.2	Master			9.111	Master			32.00		
Before			136.5	Before			9.649	Before			34.79		
After			136.4	After			9.704	After			31.91		
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			42.40										
Before			40.36										
After			40.79										
10.00 (Minimum)			45.00 (Nominal)										100.0 (Maximum)
Master: 28-Sep-2015 4:37				Before: 17-Nov-2015 4:13				After: 6-Nov-2015 0:09					

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		39.57	Master		16.65	Master		1107
Before		39.49	Before		16.69	Before		1110
After		39.77	After		15.66	After		1107
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		143.5	Master		9.036	Master		31.75
Before		142.6	Before		8.945	Before		34.51
After		143.2	After		9.170	After		32.46
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		42.43						
Before		40.30						
After		40.89						
10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)								
Master: 28-Sep-2015 4:37			Before: 17-Nov-2015 4:13			After: 6-Nov-2015 0:09		

Hostile Natural Gamma Ray Sonde Wellsite Calibration		
Ratio Of Detector 1 To Detector 2		
Phase	Coincidence Count Rate Ratio	Value
Master		0.9929
Before		0.9939
After		0.9906
0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		
Master: 28-Sep-2015 4:37		
Before: 17-Nov-2015 4:13		
After: 6-Nov-2015 0:09		

High Resolution Laterolog Array – B / Equipment Identification

Primary Equipment:

Primary Equipment:

HRLT Sonde

HRLS - B

768

Auxiliary Equipment:

HRLT lower Housing

HRLH - B

968

HRLT Lower Cartridge

HRLC - B

974

HRLT upper Housing

HRUH - B

978

HRLT Upper Cartridge

HRUC - B

764

High Resolution Laterolog Array - B Wellsite Calibration						
HRLT M01						
Idx	Phase	HRLT M0-M1 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-318.6	-322.7	-280.7	-379.7
	After		-318.7			
1	Before		-332.3	-322.7	-280.7	-379.7
	After		-332.2			
2	Before		-339.7	-322.7	-280.7	-379.7
	After		-339.7			
3	Before		-330.3	-322.7	-280.7	-379.7
	After		-329.9			
4	Before		-320.2	-322.7	-280.7	-379.7
	After		-320.1			
5	Before		-322.1	-322.7	-280.7	-379.7
	After		-322.0			
6	Before		322.7	322.7	379.7	280.7
	After		321.9			
7	Before		-322.7	-322.7	-280.7	-379.7
	After		-322.7			
(Minimum) (Nominal) (Maximum)						
Before: 17-Nov-2015 4:09						
After: 6-Nov-2015 0:05						

High Resolution Laterolog Array - B Wellsite Calibration						
HRLT M12						
Idx	Phase	HRLT M1-M2 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1742	1781	2095	1549
	After		1742			
1	Before		1824	1781	2095	1549
	After		1822			
2	Before		1857	1781	2095	1549
	After		1856			
3	Before		1804	1781	2095	1549
	After		1801			
4	Before		1748	1781	2095	1549
	After		1747			
5	Before		1759	1781	2095	1549
	After		1757			
6	Before		-1779	-1781	-1549	-2095
	After		-1774			
7	Before		1781	1781	2095	1549
	After		1781			

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V45						
Idx	Phase	HRLT A4-A5 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68740	70000	82360	60900
	After		68790			
1	Before		72350	70000	82360	60900
	After		72320			
2	Before		74000	70000	82360	60900
	After		74000			
3	Before		72260	70000	82360	60900
	After		72190			
4	Before		69740	70000	82360	60900
	After		69690			
5	Before		70210	70000	82360	60900
	After		70180			
6	Before		-69140	-70000	-60900	-82360
	After		-68990			
7	Before		70000	70000	82360	60900
	After		70000			
(Minimum) (Nominal) (Maximum)						
Before: 17-Nov-2015 4:09						
After: 6-Nov-2015 0:05						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V56						
Idx	Phase	HRLT A5-A6 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68600	70000	82360	60900
	After		68640			
1	Before		72190	70000	82360	60900
	After		72150			
2	Before		73850	70000	82360	60900
	After		73860			
3	Before		72130	70000	82360	60900
	After		72060			
4	Before		69600	70000	82360	60900
	After		69560			
5	Before		70090	70000	82360	60900
	After		70050			
6	Before		-68980	-70000	-60900	-82360
	After		-68840			
7	Before		70000	70000	82360	60900
	After		70000			
(Minimum) (Nominal) (Maximum)						
Before: 17-Nov-2015 4:09						
After: 6-Nov-2015 0:05						

HRLT VTP

Idx	Phase	HRLT Torpedo-M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68110	-70000	-60900	-82360
	After		-68150			
1	Before		-72010	-70000	-60900	-82360
	After		-71960			
2	Before		-73690	-70000	-60900	-82360
	After		-73680			
3	Before		-72050	-70000	-60900	-82360
	After		-71950			
4	Before		-69550	-70000	-60900	-82360
	After		-69510			
5	Before		-70040	-70000	-60900	-82360
	After		-69980			
6	Before		68760	70000	82360	60900
	After		68590			
7	Before		-70000	-70000	-60900	-82360
	After		-70000			
(Minimum) (Nominal) (Maximum)						

Before: 17-Nov-2015 4:09

After: 6-Nov-2015 0:05

High Resolution Laterolog Array – B Wellsite Calibration

HRLT VBD

Idx	Phase	HRLT Bridle#9-M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68140	-70000	-60900	-82360
	After		-68190			
1	Before		-72070	-70000	-60900	-82360
	After		-72050			
2	Before		-73780	-70000	-60900	-82360
	After		-73780			
3	Before		-72100	-70000	-60900	-82360
	After		-72040			
4	Before		-69590	-70000	-60900	-82360
	After		-69560			
5	Before		-70060	-70000	-60900	-82360
	After		-70020			
6	Before		68830	70000	82360	60900
	After		68680			
7	Before		-70000	-70000	-60900	-82360
	After		-70000			
(Minimum) (Nominal) (Maximum)						

Before: 17-Nov-2015 4:09

After: 6-Nov-2015 0:05

High Resolution Laterolog Array – B Wellsite Calibration

HRLT ISO

Idx	Phase	HRLT Source Current Plus UA	Value	Nominal	Maximum	Minimum
	Before		284.3			

0	After		284.5	284.0	334.1	247.0
1	Before		281.1	281.1	330.7	244.4
	After		281.1			
2	Before		281.1	281.1	330.7	244.4
	After		281.1			
3	Before		281.1	281.1	330.7	244.4
	After		281.1			
4	Before		281.1	281.1	330.7	244.4
	After		281.1			
5	Before		281.1	281.1	330.7	244.4
	After		281.1			
6	Before		281.1	281.1	330.7	244.4
	After		281.1			
7	Before		281.1	281.1	330.7	244.4
	After		281.1			
(Minimum) (Nominal) (Maximum)						

Before: 17-Nov-2015 4:09

After: 6-Nov-2015 0:05

High Resolution Laterolog Array - B Wellsite Calibration						
HRLT MV						
Idx	Phase	HRLT Vertical Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-320.1	-322.7	-280.7	-379.7
	After		-320.4			
1	Before		-326.7	-322.7	-280.7	-379.7
	After		-326.8			
2	Before		-332.8	-322.7	-280.7	-379.7
	After		-333.1			
3	Before		-321.7	-322.7	-280.7	-379.7
	After		-321.5			
4	Before		-309.1	-322.7	-280.7	-379.7
	After		-309.0			
5	Before		-325.9	-322.7	-280.7	-379.7
	After		-325.8			
6	Before		330.0	322.7	379.7	280.7
	After		329.4			
7	Before		-322.7	-322.7	-280.7	-379.7
	After		-322.7			
(Minimum) (Nominal) (Maximum)						

Before: 17-Nov-2015 4:09

After: 6-Nov-2015 0:05

Hostile Litho-Density Sonde / Equipment Identification

Primary Equipment:

Hostile Litho Density Sonde
Hostile Litho Density High Voltage
Gamma Source Radioactive

HLDS - D 35
HLDV - D 35
GSR - Z 8113

HLDP – C	35
HEH – H	35

Hostile Litho-Density Sonde Wellsite Calibration											
Background Measurement											
Phase	SS Cs Resolution Bkg %		Value	Phase	LS Cs Resolution Bkg %		Value	Phase	LSW1 Background CPS		Value
Master			7.728	Master			8.059	Master			81.31
Before			7.766	Before			8.033	Before			80.58
After			7.753	After			7.996	After			80.69
7.000 (Minimum)				7.000 (Minimum)				55.00 (Minimum)			
9.000 (Nominal)				9.000 (Nominal)				100.0 (Nominal)			
11.00 (Maximum)				11.00 (Maximum)				150.0 (Maximum)			
Phase	LSW2 Background CPS		Value	Phase	LSW3 Background CPS		Value	Phase	LSW4 Background CPS		Value
Master			75.17	Master			168.0	Master			205.6
Before			73.86	Before			165.4	Before			204.8
After			73.12	After			165.9	After			204.6
50.00 (Minimum)				110.0 (Minimum)				140.0 (Minimum)			
100.0 (Nominal)				200.0 (Nominal)				250.0 (Nominal)			
140.0 (Maximum)				290.0 (Maximum)				360.0 (Maximum)			
Phase	LSW5 Background CPS		Value	Phase	SSW1 Background CPS		Value	Phase	SSW2 Background CPS		Value
Master			476.6	Master			78.62	Master			135.7
Before			479.7	Before			78.56	Before			134.5
After			480.3	After			78.06	After			134.2
330.0 (Minimum)				55.00 (Minimum)				100.0 (Minimum)			
600.0 (Nominal)				100.0 (Nominal)				200.0 (Nominal)			
830.0 (Maximum)				150.0 (Maximum)				260.0 (Maximum)			
Phase	SSW3 Background CPS		Value	Phase	SSW4 Background CPS		Value	Phase	SSW5 Background CPS		Value
Master			379.3	Master			203.8	Master			144.7
Before			376.0	Before			202.8	Before			144.4
After			380.3	After			203.4	After			145.8
280.0 (Minimum)				150.0 (Minimum)				110.0 (Minimum)			
500.0 (Nominal)				270.0 (Nominal)				200.0 (Nominal)			
700.0 (Maximum)				380.0 (Maximum)				270.0 (Maximum)			
Master: 22-Sep-2015 6:15				Before: 22-Sep-2015 8:11				After: 22-Sep-2015 8:17			

Litho-Density Spectroscopy Cartridge – B / Equipment Identification		
Primary Equipment: LDSC Cartridge	LDSC – B	326
Auxiliary Equipment: LDSC Housing	LDSH – A	303

Enhanced DTS Cartridge / Equipment Identification			
Primary Equipment:			
EDTC Gamma Ray Detector	EDTG – A/B	8305	
Enhanced DTS Cartridge	EDTC – B	8317	
Auxiliary Equipment:			
EDTC Housing	EDTH – B	8303	

Enhanced DTS Cartridge Wellsite Calibration		
EDTC Accelerometer Calibration		
Phase	EDTC Z-Axis Acceleration M/S ²	Value
Before		9.808
	9.610 (Minimum) 9.810 (Nominal) 10.01 (Maximum)	

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			1.551	Before			159.8	Before			165.0
After			11.13	After			151.2	After			156.2
0 (Minimum)			30.00 (Nominal)	120.0 (Maximum)			145.3 (Minimum)	159.8 (Nominal)			174.3 (Maximum)
Before: 3-Nov-2015 12:51				After: 3-Nov-2015 17:49							

Schlumberger

Calibrations

MAXIS Field Log

Company: **International Ocean Discovery Program**

Schlumberger

Well: **Expedition 359, Site U1470B**

Field: **Maldives Monsoon & Sea Level**

Rig: **JOIDES Resolution**

Country:

High Resolution Laterolog Array (HRLA)

Dipole Shear Sonic (DSI)

Spectral Gamma Ray (HNGS)