

DISCLAIMER

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OTHER SERVICES1

- OS1: HNGS
- OS2: HRLA
- OS3: HLDS
- OS4: MSS
- OS5: FMS

REMARKS: RUN NUMBER 1

Hole drilled and cored using APC/XCB coring system.

Modified MCD devices run above and below DSI for centralization.

FMS Caliper closed during downlog; Opened at TD (fully open by 245mbsf); Closed at 110mbsf on up logs.

DSI P&S Mode run in Standard frequency, Odd array for all passes.

DSI Lower Dipole run in Standard frequency, Even array for downlog and main pass

DSI Lower Dipole run in Low Frequency Dipole mode, Even array for first up pass



DSI Upper Dipole run in Standard frequency, Odd array for all passes

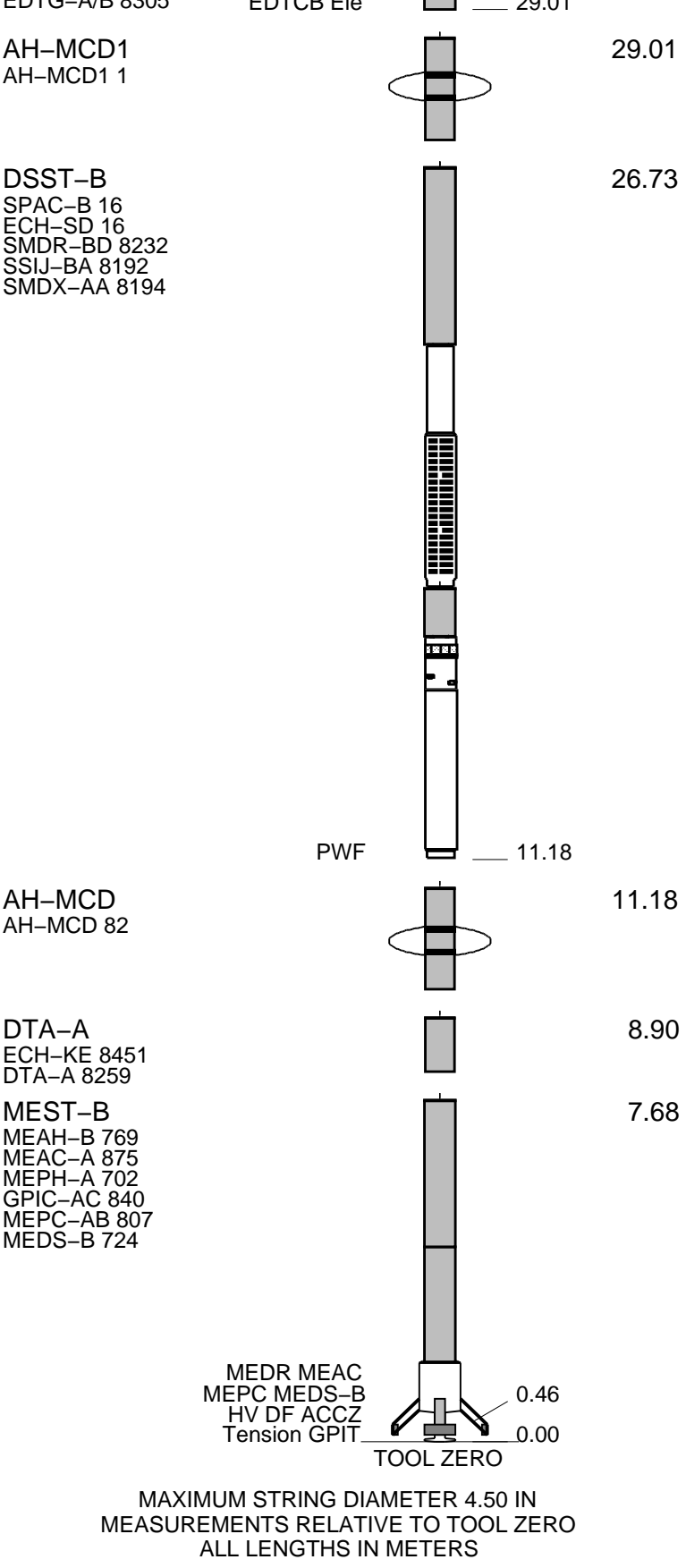
DSI Stoneley Mode run in Standard frequency, Even array for all passes

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

EQUIPMENT DESCRIPTION

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

DOWNHOLE EQUIPMENT			
LEH-MT 101	MDSB_EDTC		31.95
LEH-MT 101 101	Mud Tempe		30.99
	CTEM		29.92
EDTC-B	Gamma Ray		30.99
EDTH-B 8303	EFTB DIAG		29.35
EDTC-B 8317	TelStatus		
EDTC A/B 8305	EDTCB_Ele		30.04



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

Kelly Bushing Elevation

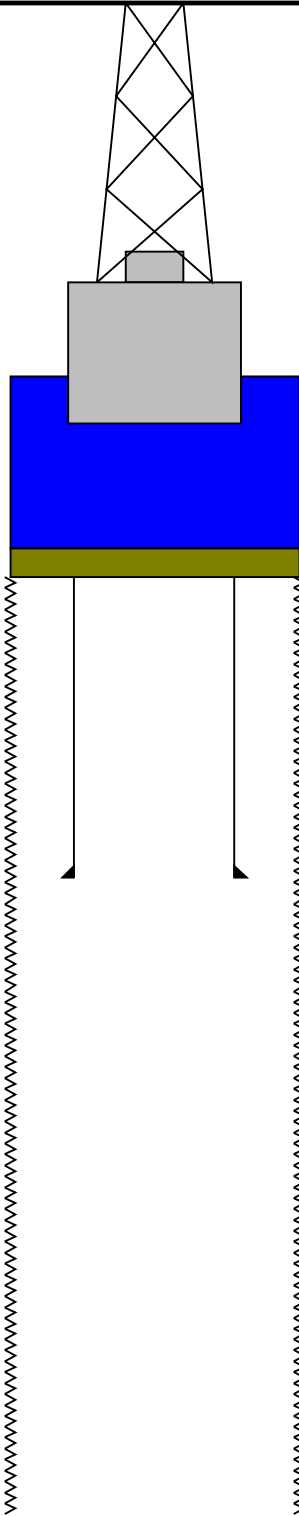
Derrick Floor Elevation

Mean Sea Level

-1796.8

-1796.8

-1785.8



0.0

9.875

4.000

Sea Floor

80.0

5.500

4.000

Bit

249.1

9.875

TD - Driller

Schlumberger

**Downlog
1:200 Scale**

MAXIS Field Log

Company: Lamont Doherty Earth Observatory

Well: Expedition 346, Site U1430B

Input DLIS Files

DEFAULT	FMS_DSI_057PUP	FN:73	PRODUCER	24-Aug-2013 13:46	249.9 M	-11.3 M
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Output DLIS Files

DEFAULT	FMS_DSI_NGS_064PUP	FN:2	PRODUCER	20-Sep-2013 13:25	249.9 M	-11.3 M
CLIENT	FMS_DSI_NGS_064PUC	FN:3	CUSTOMER	20-Sep-2013 13:25	249.9 M	-11.3 M

OP System Version: 19C0-187

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

PIP SUMMARY

Time Mark Every 60 S

Caliper 2 (C2)
(IN) 0 20

Caliper 1 (C1)
(IN) 0 20

Bit Size (BS)
(IN) 0 20

Delta-T Stoneley (DTST)
(US/F) 440 40

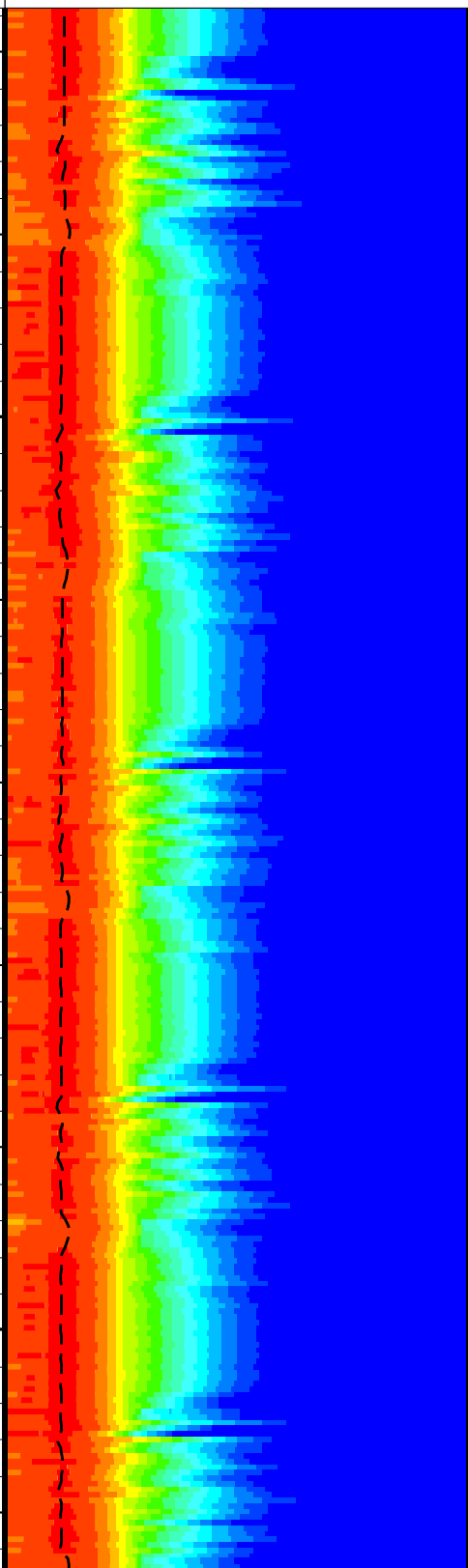
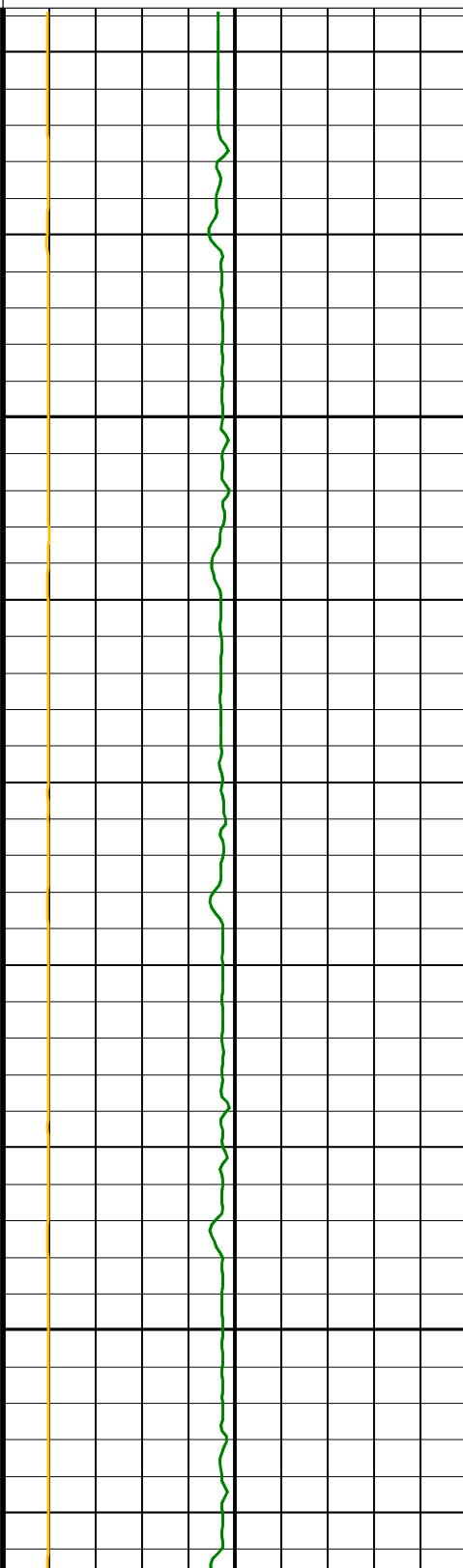
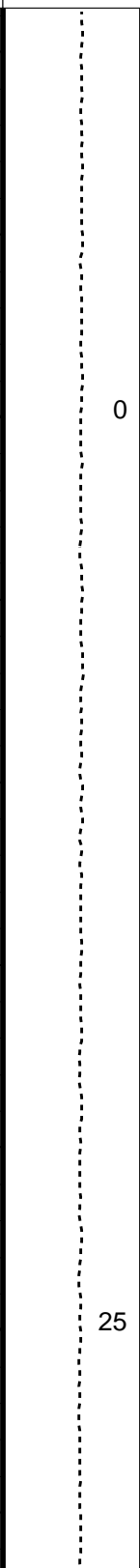
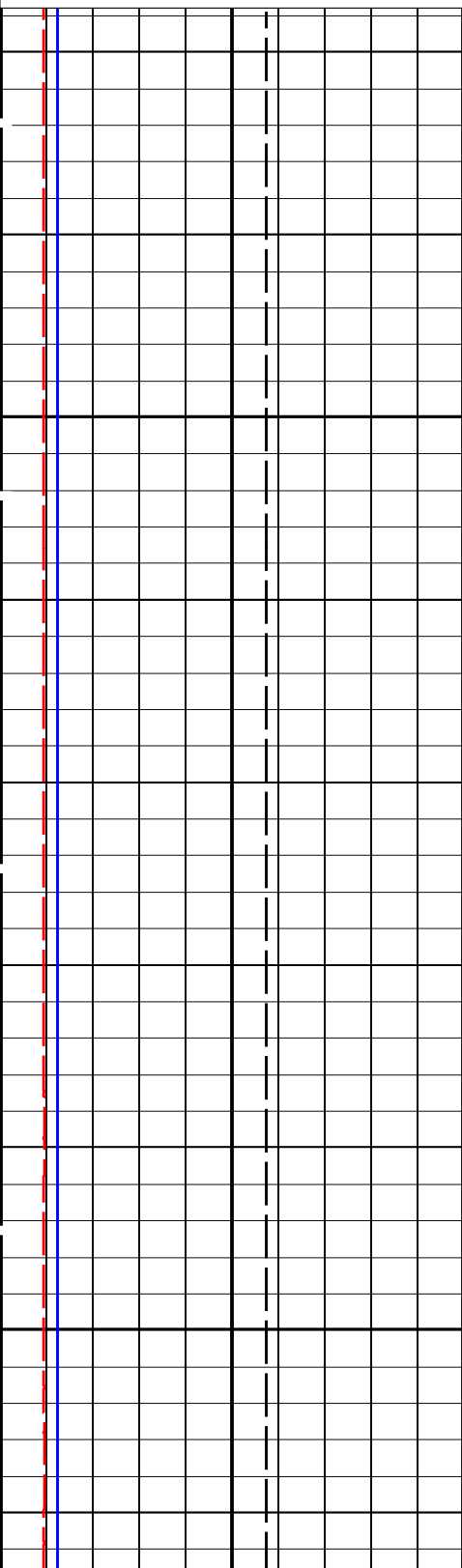
Delta-T Stoneley / RA (DT3R)
(US/F) 440 40

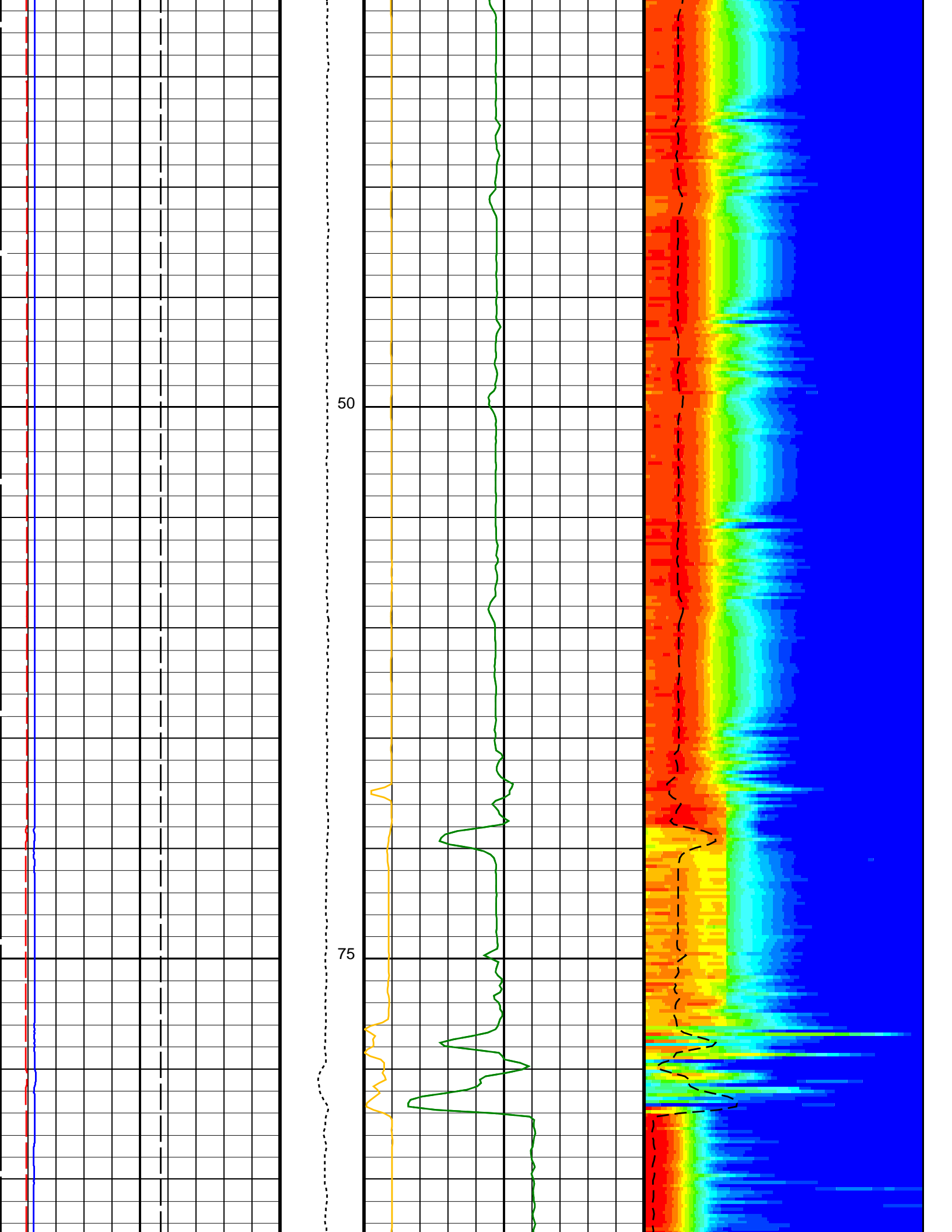
Peak Coherence / RA - Stoneley (CHR3)
(----) 0 10

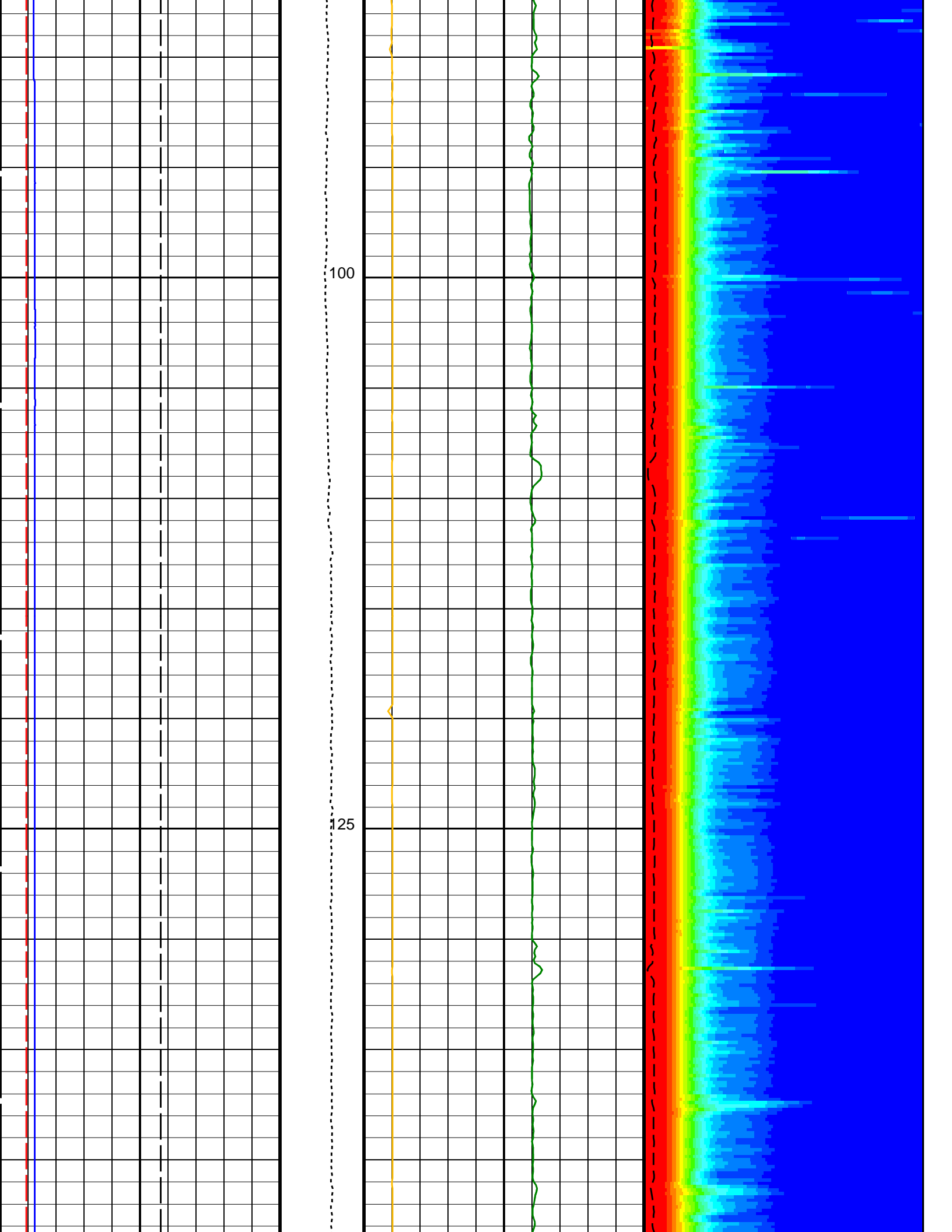
Tension
(TENS)
(LBF) 0 5000

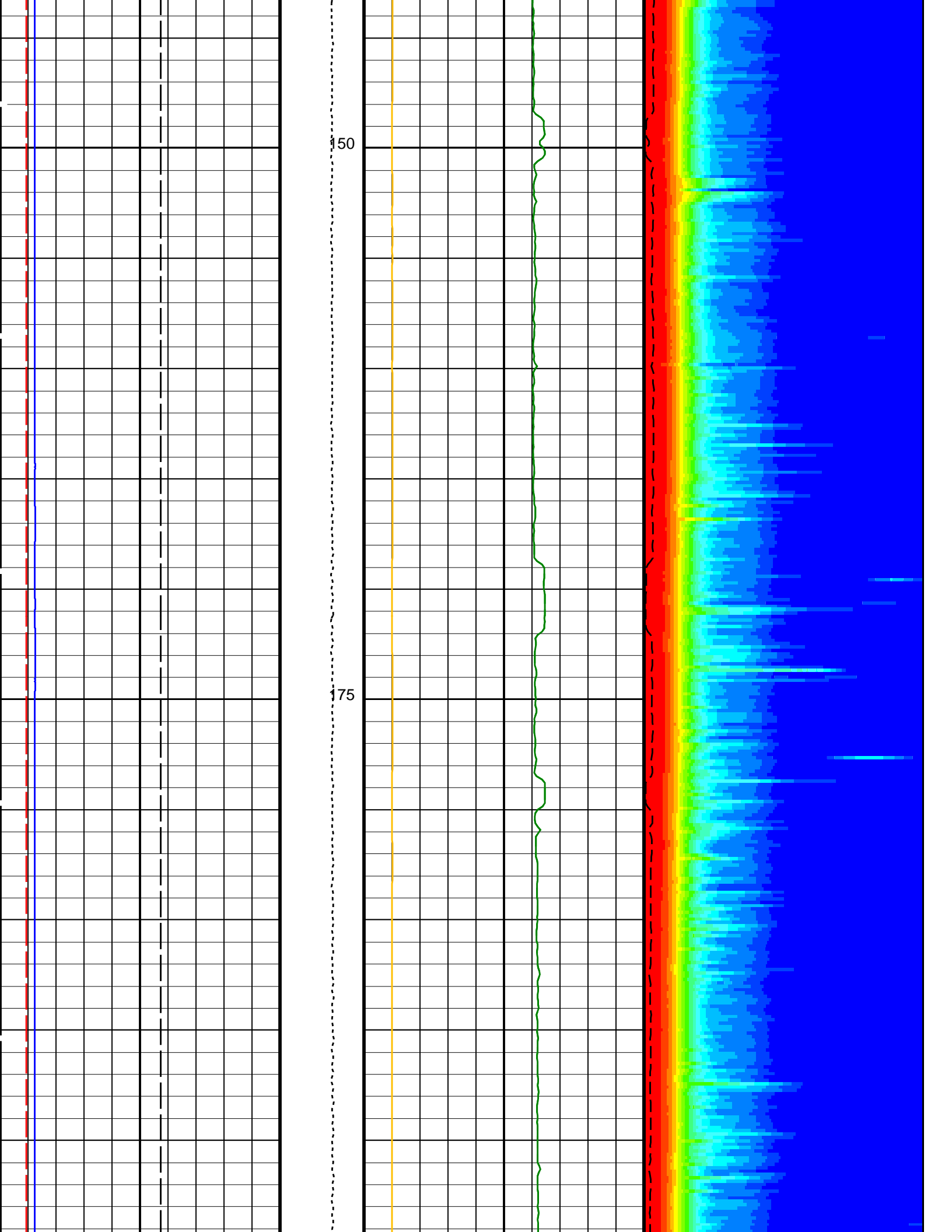
Min Amplitude Max
Rec.Array Stoneley Slow Proj. CVDL
(SPR3)
(US/F) 180 780

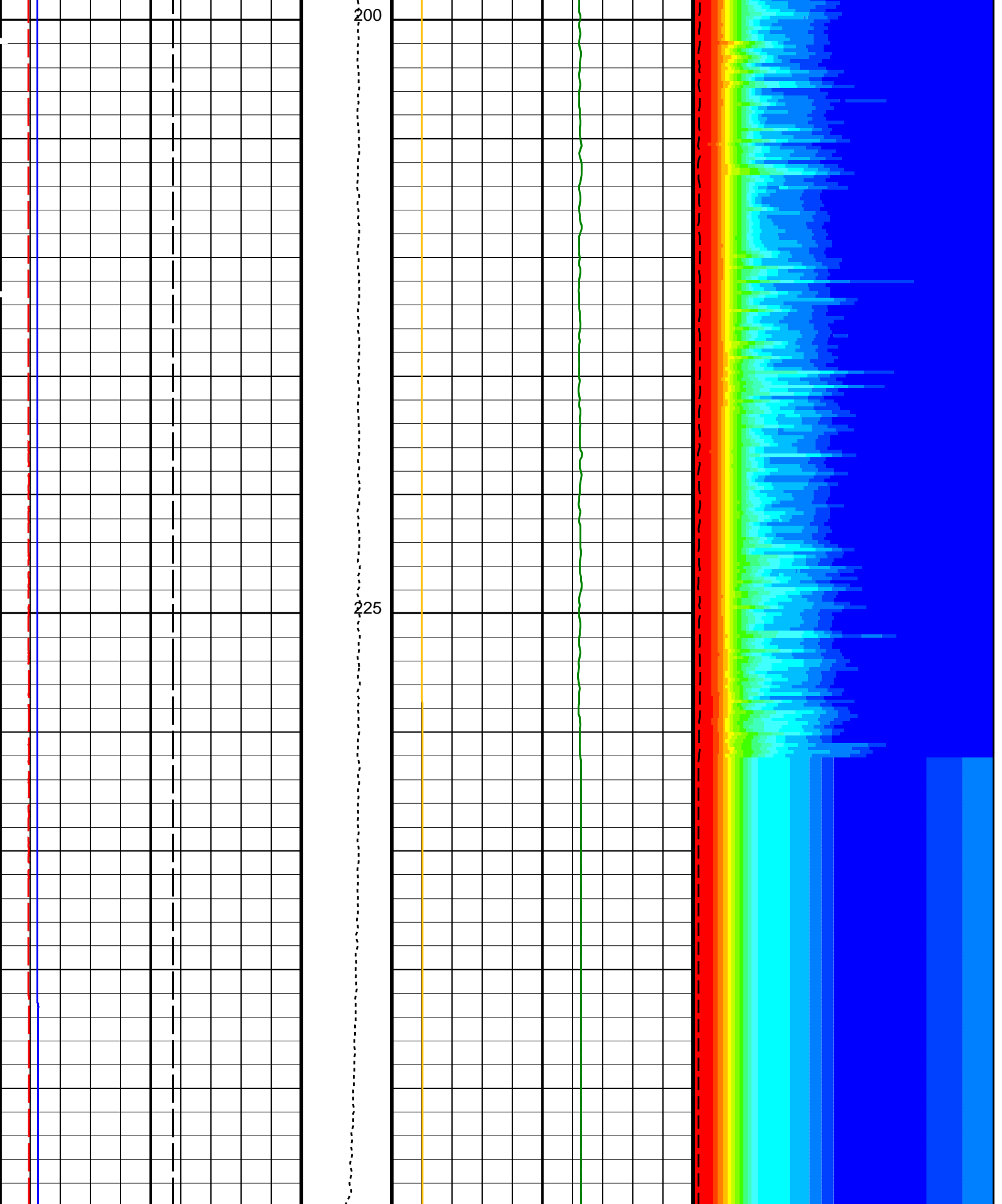
Delta-T Stoneley / RA (DT3R)
(US/F) 180 780











200

225

0 **Bit Size (BS)** (IN) 20

0 **Tension (TENS)** (LBF) 5000

0 **Peak Coherence / RA - Stoneley (CHR3)** (----) 10

180 **Delta-T Stoneley / RA (DT3R)** (US/F) 780

Min **Amplitude** **Max**

Caliper 1 (C1)

Delta T Stoneley / RA (DT3R)

0	Caliper 1 (C1) (IN)	20	440	Delta-T Stoneley / RA (D13R) (US/F)	40	Rec.Array Stoneley Slow Proj. CVDL (SPR3) (US/F)	180	780
0	Caliper 2 (C2) (IN)	20	440	Delta-T Stoneley (DTST) (US/F)	40			

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
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	EVEN
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	11.438 IN
DO	Depth Offset for Playback	0.0 M
PP	Playback Processing	RECOMPUTE

Format: DSST_STONELEY_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 20-Sep-2013 13:25

OP System Version: 19C0-187

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

Input DLIS Files

DEFAULT	FMS_DSI_057PUP	FN:73	PRODUCER	24-Aug-2013 13:46	249.9 M	-11.3 M
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Output DLIS Files

DEFAULT	FMS_DSI_NGS_064PUP	FN:2	PRODUCER	20-Sep-2013 13:25
CLIENT	FMS_DSI_NGS_064PUC	FN:3	CUSTOMER	20-Sep-2013 13:25

Company: Lamont Doherty Earth Observatory

Well: Expedition 346, Site U1430B

Input DLIS Files

DEFAULT	FMS_DSI_056PUP	FN:71	PRODUCER	24-Aug-2013 13:41	250.5 M	89.2 M
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Output DLIS Files

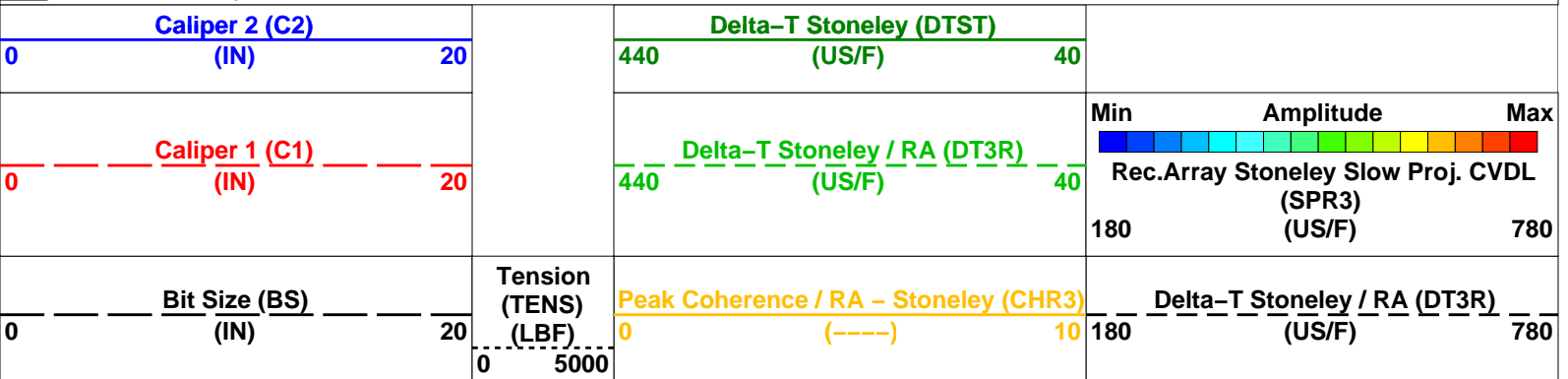
DEFAULT	FMS_DSI_NGS_065PUP	FN:4	PRODUCER	20-Sep-2013 13:29	250.5 M	89.2 M
CLIENT	FMS_DSI_NGS_065PUC	FN:5	CUSTOMER	20-Sep-2013 13:29	250.5 M	89.2 M

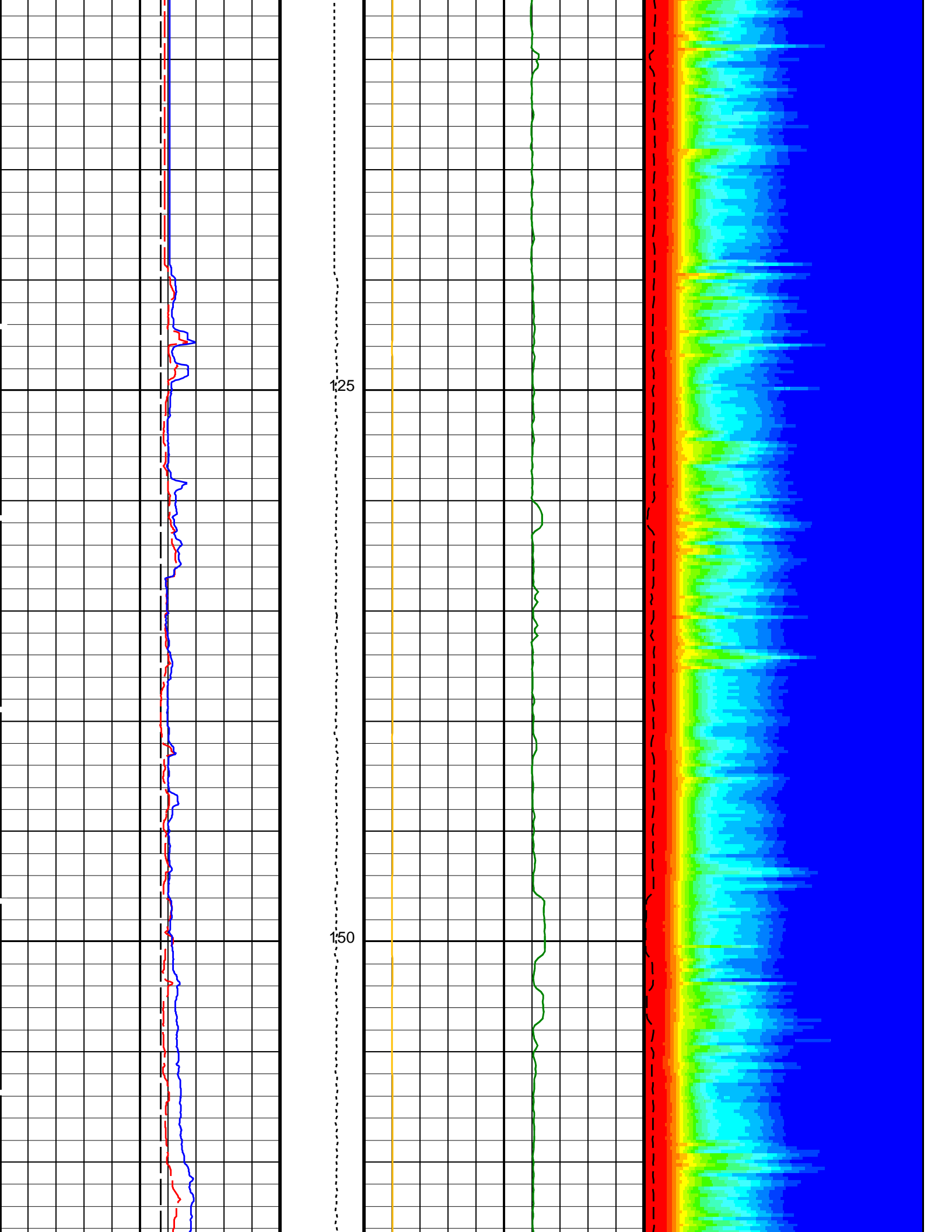
OP System Version: 19C0-187

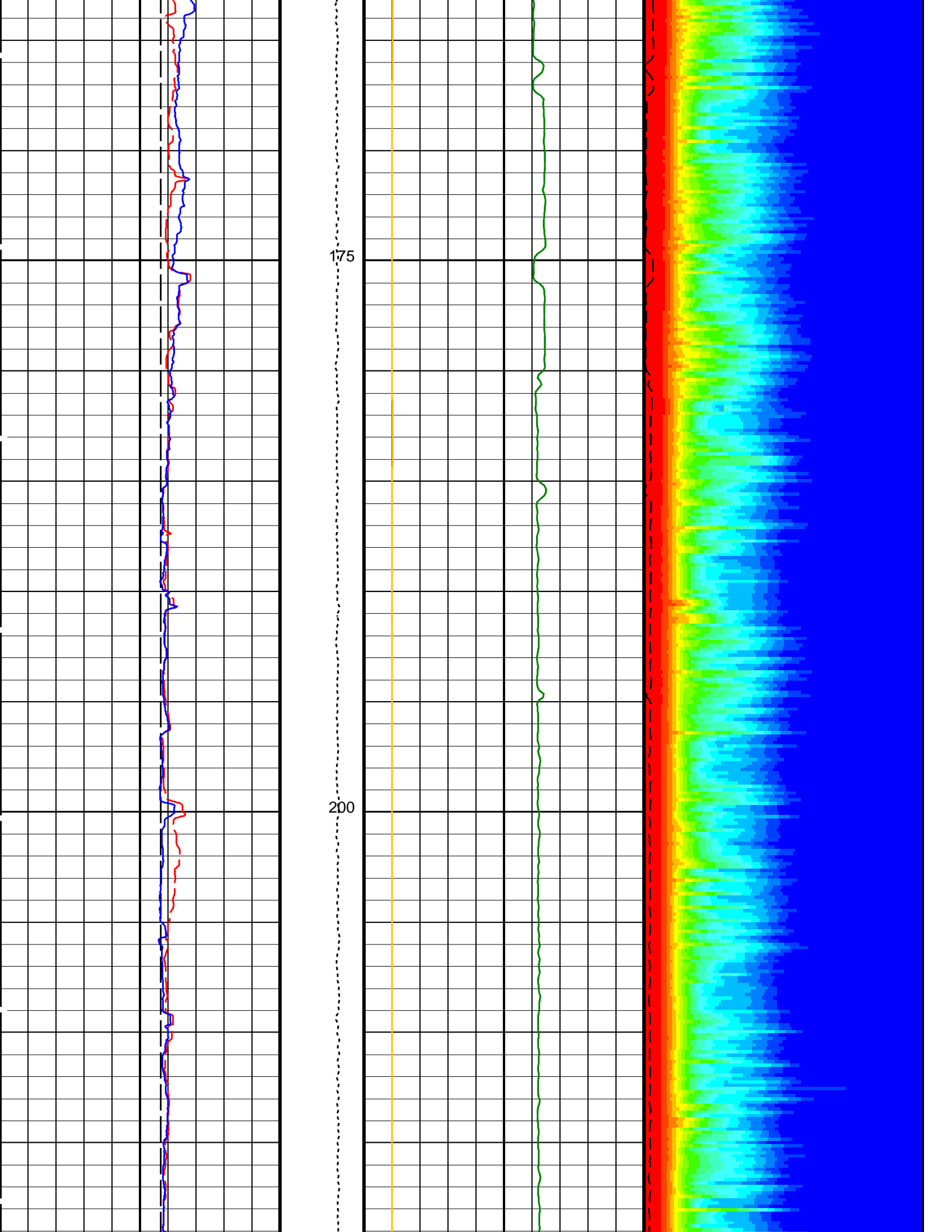
MEST-B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

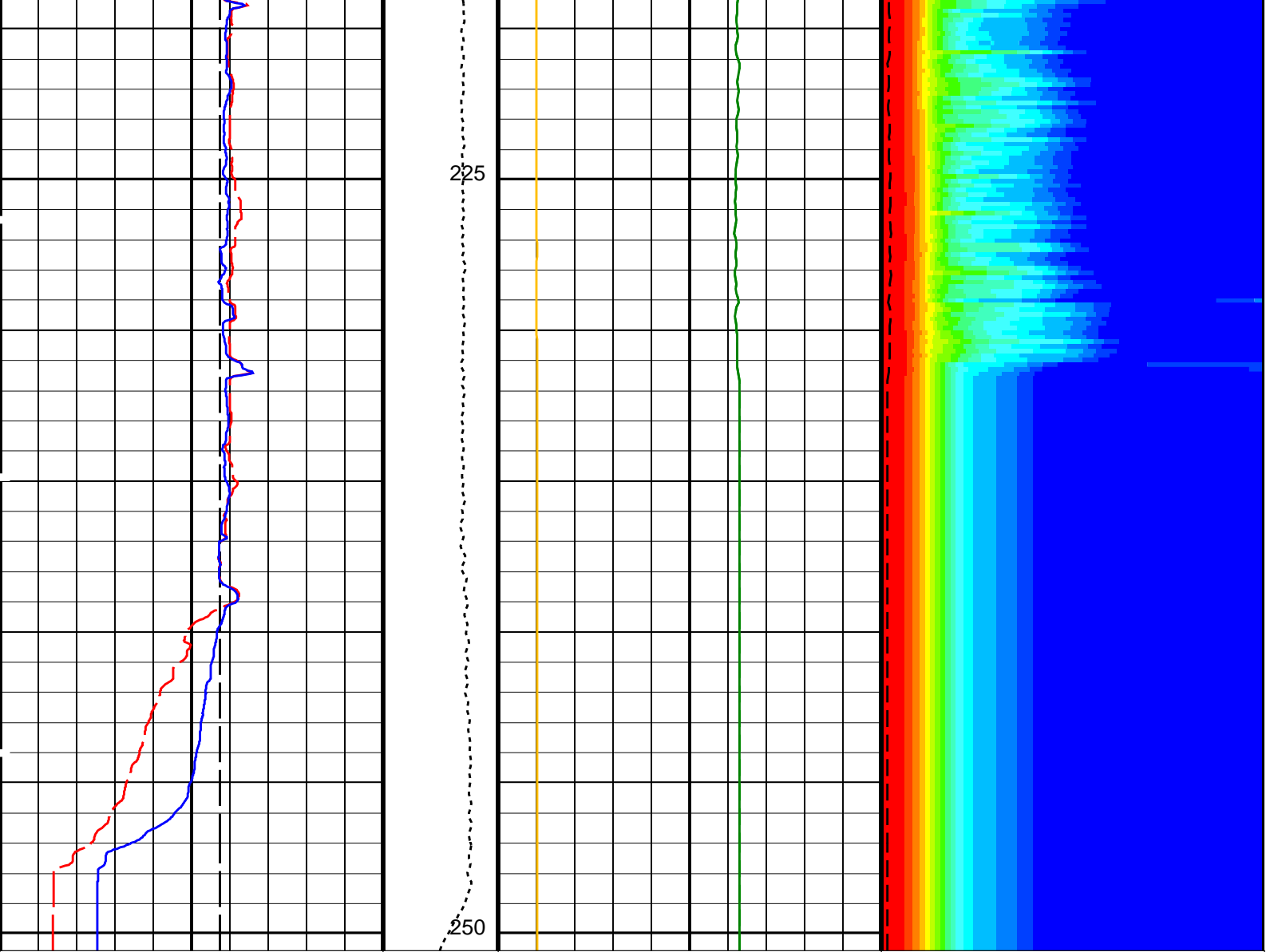
PIP SUMMARY

Time Mark Every 60 S









<p>Bit Size (BS) (IN)</p> <p>0 20</p>	<p>Tension (TENS) (LBF)</p> <p>0 5000</p>	<p>Peak Coherence / RA - Stoneley (CHR3) (-----)</p> <p>0 10</p>	<p>Delta-T Stoneley / RA (DT3R) (US/F)</p> <p>180 780</p>
<p>Caliper 1 (C1) (IN)</p> <p>0 20</p>		<p>Delta-T Stoneley / RA (DT3R) (US/F)</p> <p>440 40</p>	<p>Min Amplitude Max Rec.Array Stoneley Slow Proj. CVDL (SPR3) (US/F)</p> <p>180 780</p>
<p>Caliper 2 (C2) (IN)</p> <p>0 20</p>		<p>Delta-T Stoneley (DTST) (US/F)</p> <p>440 40</p>	

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 DT3R Channel	PS_COMP
DWC3	Digitizer Word Count 3	512
DWCX	Digitizer Word Count X	512
MTXG	Monopole Transmitter Geometry	186 IN
NW13	Number Waveform Items 3	8
NW1X	Number Waveform Items X	0
RX1G	Receiver 1 Geometry	294 IN
RX2G	Receiver 2 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	EVEN	
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	11.438	IN
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	RECOMPUTE	

Format: DSST_STONELEY_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 20-Sep-2013 13:29

OP System Version: 19C0-187

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

Input DLIS Files

DEFAULT	FMS_DSI_056PUP	FN:71	PRODUCER	24-Aug-2013 13:41	250.5 M	89.2 M
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Output DLIS Files

DEFAULT	FMS_DSI_NGS_065PUP	FN:4	PRODUCER	20-Sep-2013 13:29		
CLIENT	FMS_DSI_NGS_065PUC	FN:5	CUSTOMER	20-Sep-2013 13:29		



Main Pass
1:200 Scale

MAXIS Field Log

Company: Lamont Doherty Earth Observatory Well: Expedition 346, Site U1430B

Input DLIS Files

DEFAULT	FMS_DSI_055PUP	FN:69	PRODUCER	24-Aug-2013 13:33	249.3 M	-11.1 M
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Output DLIS Files

DEFAULT	FMS_DSI_NGS_066PUP	FN:6	PRODUCER	20-Sep-2013 13:30	249.3 M	-11.1 M
CLIENT	FMS_DSI_NGS_066PUC	FN:7	CUSTOMER	20-Sep-2013 13:30	249.3 M	-11.1 M

OP System Version: 19C0-187

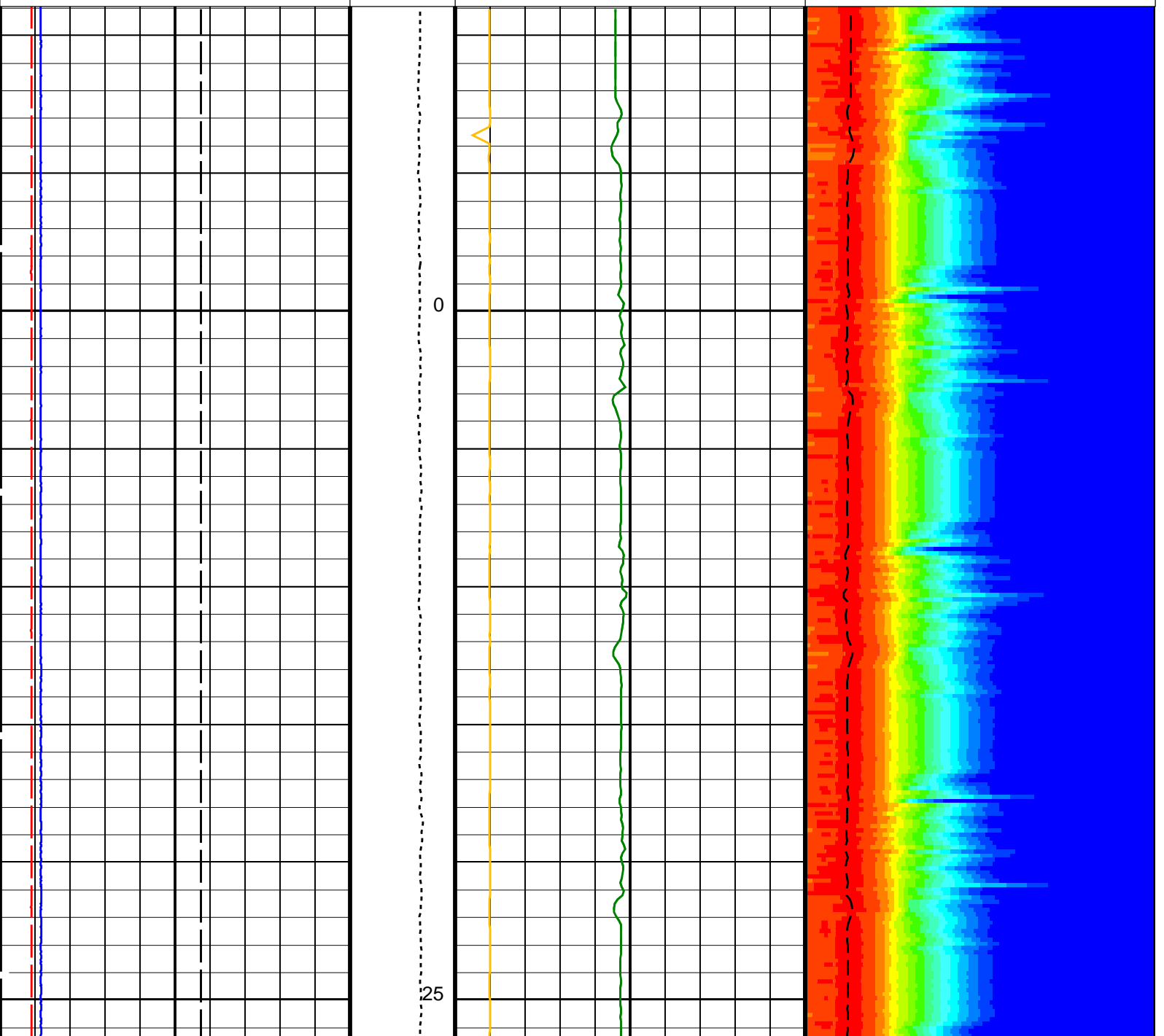
MEST-B 19C0-187
 DSST-B 19C0-187
 HNGS-BA 19C0-187

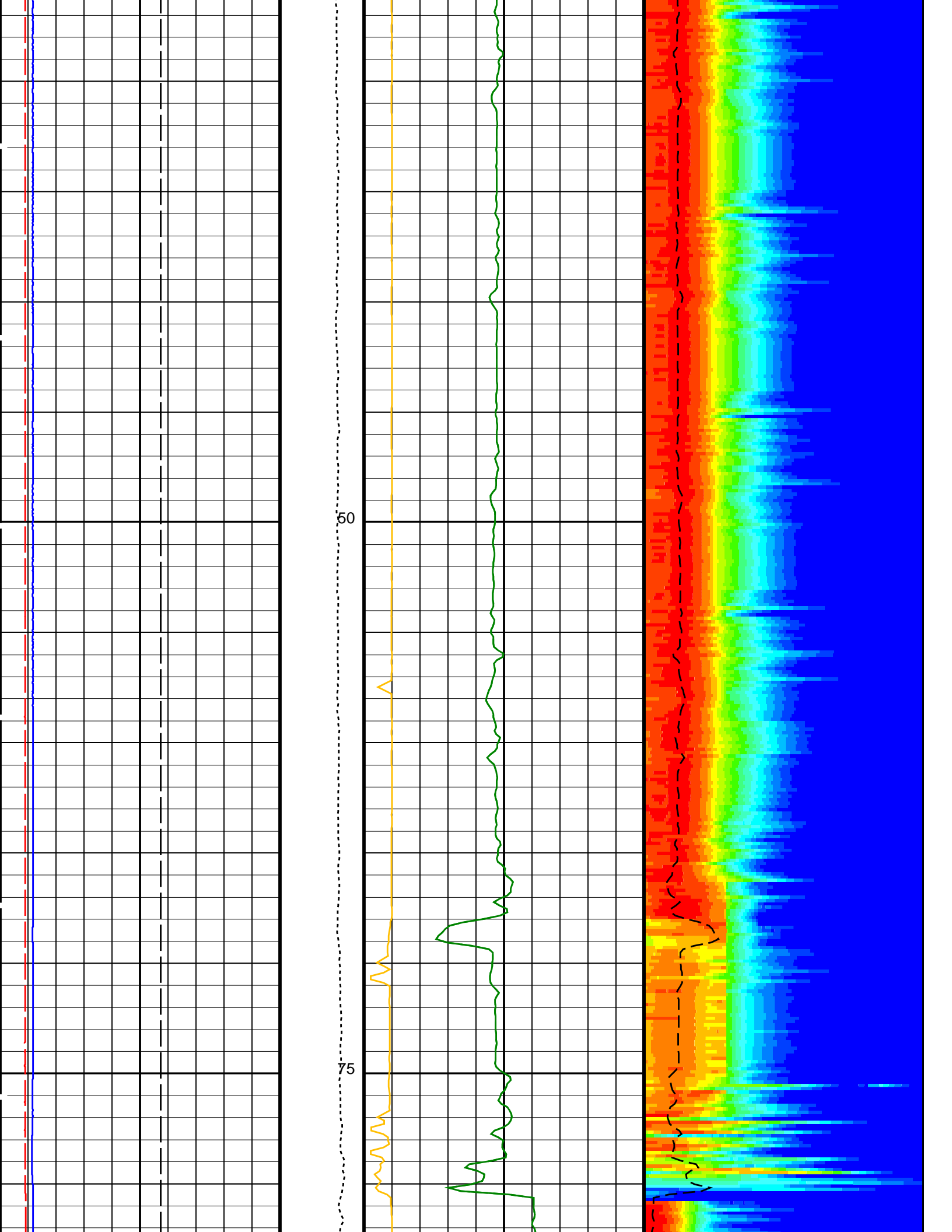
DTA-A 19C0-187
 HNGC-B 19C0-187
 EDTC-B SKK-5169-EDTCB

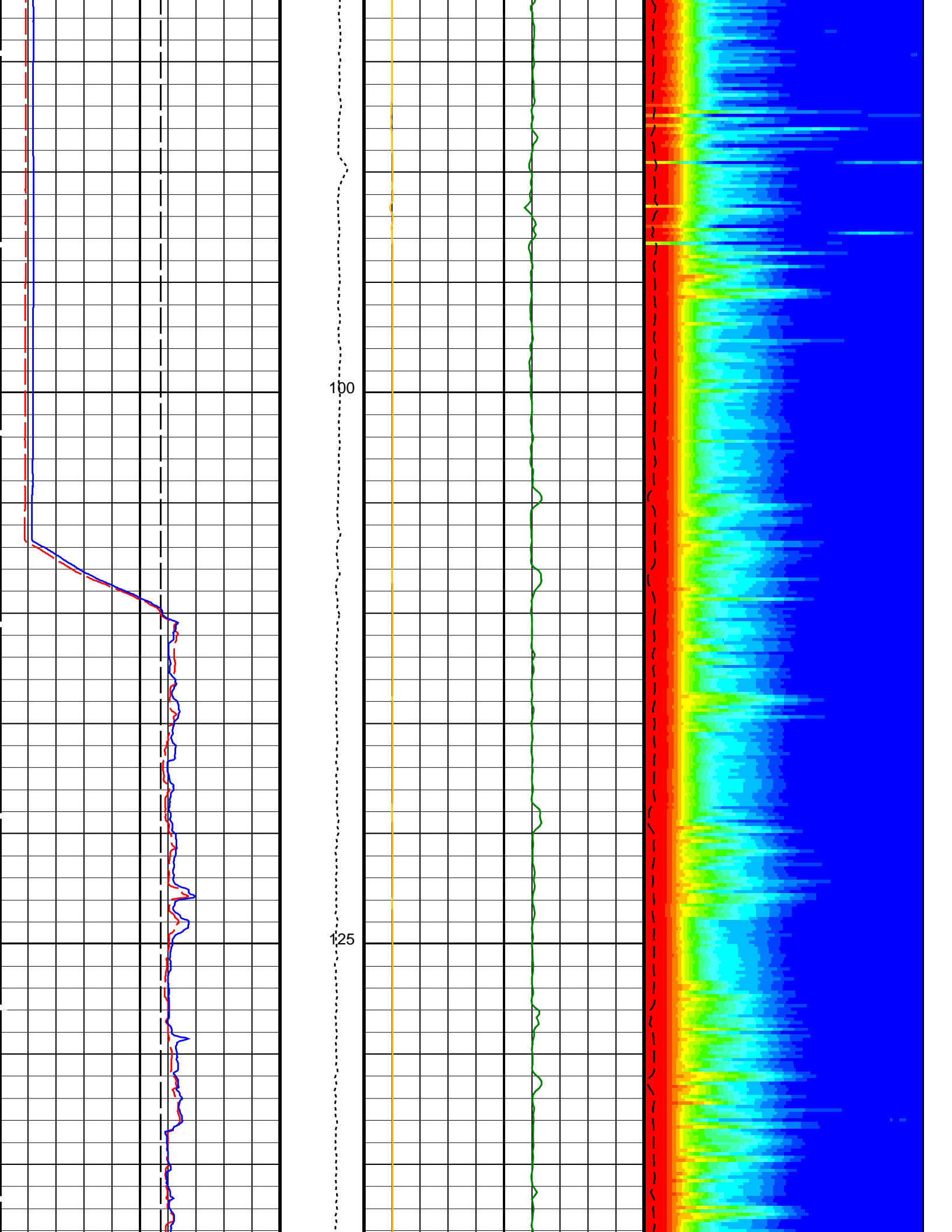
PIP SUMMARY

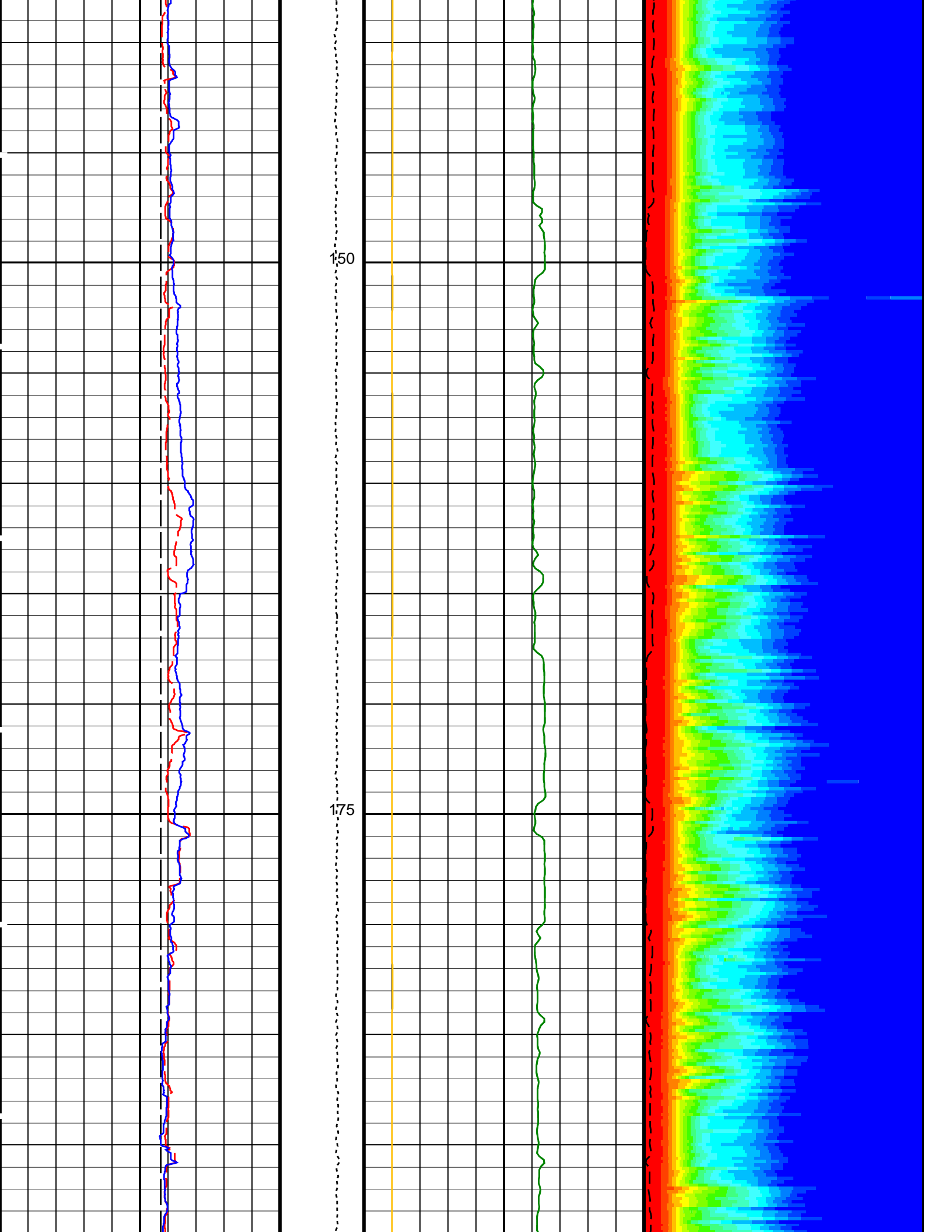
Time Mark Every 60 S

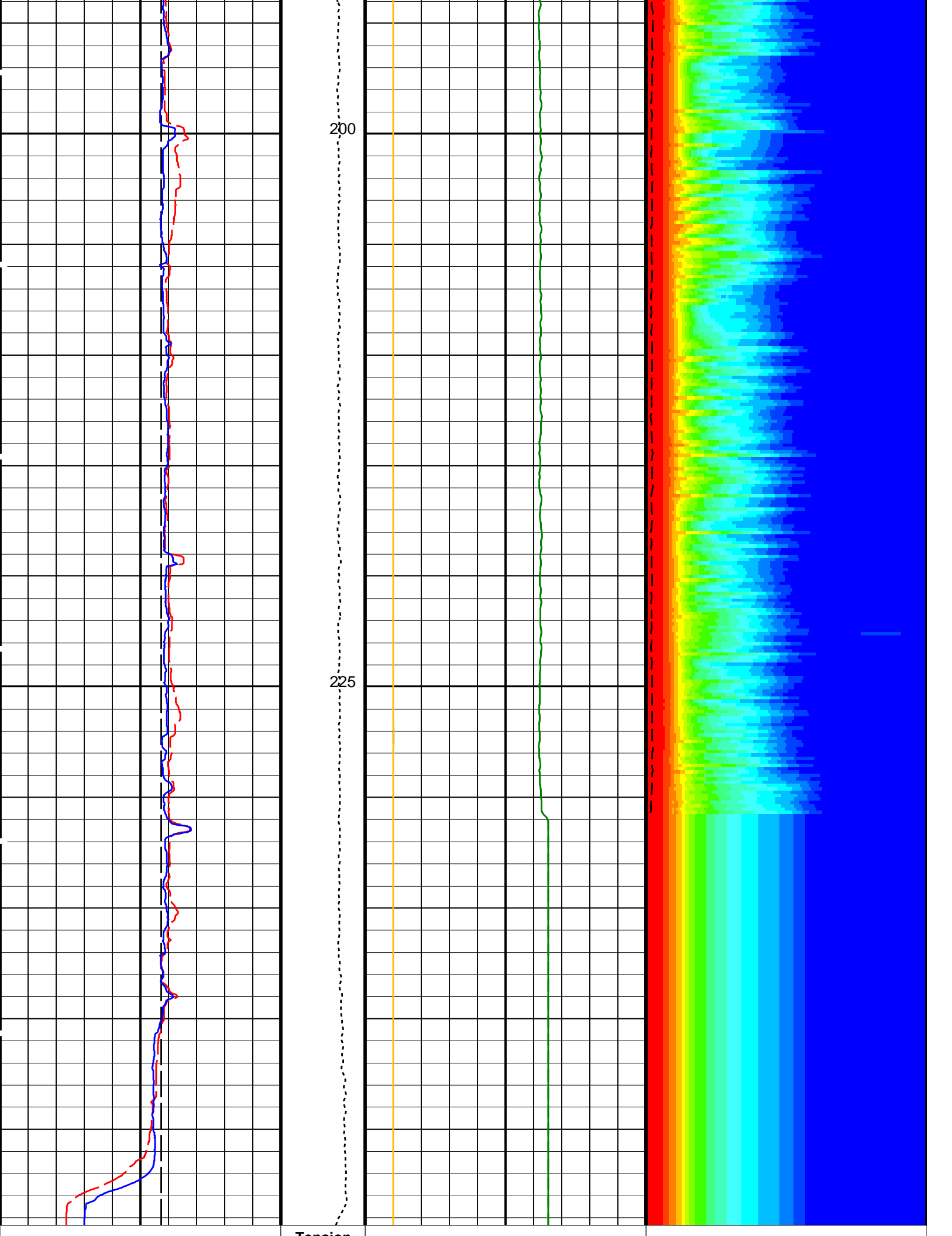
<p style="text-align: center; color: blue;">Caliper 2 (C2)</p> <p style="text-align: center;">0 (IN) 20</p>	<p style="text-align: center; color: green;">Delta-T Stoneley (DTST)</p> <p style="text-align: center;">440 (US/F) 40</p>	<p style="text-align: center;">Min █ █ █ █ █ █ Max</p> <p style="text-align: center;">Rec.Array Stoneley Slow Proj. CVDL (SPR3)</p> <p style="text-align: center;">180 (US/F) 780</p>
<p style="text-align: center; color: red;">Caliper 1 (C1)</p> <p style="text-align: center;">0 (IN) 20</p>	<p style="text-align: center; color: green;">Delta-T Stoneley / RA (DT3R)</p> <p style="text-align: center;">440 (US/F) 40</p>	
<p style="text-align: center;">Bit Size (BS)</p> <p style="text-align: center;">0 (IN) 20</p>	<p style="text-align: center;">Tension (TENS)</p> <p style="text-align: center;">(LBF)</p> <p style="text-align: center;">0 5000</p>	<p style="text-align: center; color: orange;">Peak Coherence / RA - Stoneley (CHR3)</p> <p style="text-align: center;">0 (----) 10</p>



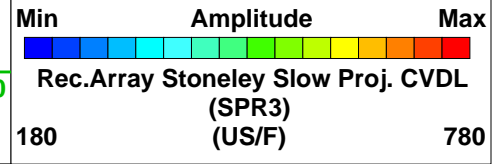








0	Bit Size (BS) (IN)	20	Tension (TENS) (LBF)	0	5000	10	180	Delta-T Stoneley / RA (DT3R) (US/F)	780
0	Caliper 1 (C1) (IN)	20		440		40	180	Delta-T Stoneley / RA (DT3R) (US/F)	780
0	Caliper 2 (C2) (IN)	20		440		40		Delta-T Stoneley (DTST) (US/F)	



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
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	EVEN
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	11.438 IN
DO	Depth Offset for Playback	0.0 M
PP	Playback Processing	RECOMPUTE

Format: DSST_STONELEY_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 20-Sep-2013 13:30

OP System Version: 19C0-187

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

Input DLIS Files

DEFAULT FMS_DSI_055PUP FN:69 PRODUCER 24-Aug-2013 13:33 249.3 M -11.1 M

Output DLIS Files

DEFAULT FMS_DSI_NGS_066PUP FN:6 PRODUCER 20-Sep-2013 13:30
 CLIENT FMS_DSI_NGS_066PUC FN:7 CUSTOMER 20-Sep-2013 13:30



Calibrations

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Enhanced DTS Cartridge Wellsite Calibration – EDTC Accelerometer Calibration							
Before: 23-Aug-2013 9:25							
EDTC Z-Axis Acceleration	9.810	N/A	9.753	N/A	N/A	N/A	M/S2
Enhanced DTS Cartridge Wellsite Calibration – Detector Calibration							
Before: 23-Aug-2013 9:29							
Gamma Ray (Jig – Bkg)	184.4	N/A	184.4	N/A	N/A	16.77	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	N/A	N/A	15.00	GAPI

Litho-Density Spectroscopy Cartridge – B / Equipment Identification

Primary Equipment:							
LDSC Cartridge				LDSC – B		326	
Auxiliary Equipment:							
LDSC Housing				LDSH – A		303	

Hostile Natural Gamma Ray Cartridge – B / Equipment Identification

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

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/S2	Value
Before		9.753

9.610 (Minimum)	9.810 (Nominal)	10.01 (Maximum)
Before: 23-Aug-2013 9:25		

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			10.48	Before			184.4	Before			165.0
	0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)		167.7 (Minimum)	184.4 (Nominal)	201.2 (Maximum)		150.0 (Minimum)	165.0 (Nominal)	180.0 (Maximum)
Before: 23-Aug-2013 9:29											

Company: **Lamont Doherty Earth Observatory**

Schlumberger

Well: **Expedition 346, Site U1423C**

Field: **Asian Monsoon**

Rig: **JOIDES Resolution**

Country: **USA**

DSI
Stoneley