



**Company: Lamont Doherty Earth Observatory**

**Well: Expedition 346, Site U1423C**

**Field: Asian Monsoon**

**Rig: JOIDES Resolution Country: USA**

Rig: JOIDES Resolution Field: Asian Monsoon Location: Latitude: N 43* 45.9897' Well: Expedition 346, Site U1423C Company: Lamont Doherty Earth Observatory	DSI			
	Lower Dipole			
	Latitude: N 43* 45.9897' Longitude: W 138* 50.0002'		Elev.: K.B. -1796.00 m G.L. 0.00 m D.F. -1796.00 m	
	Permanent Datum:	Sea Floor	Elev.: 0.00 m	
	Log Measured From:	Drill Floor	-1796.00 m above Perm. Datum	
Drilling Measured From:		Drill Floor		
Ocean:	Max. Well Deviation	Longitude	Latitude	
Pacific	0 deg	W 138.83334	N 43.7665	

Logging Date	24-Aug-2013
Run Number	2
Depth Driller	249.1 m
Schlumberger Depth	249 m
Bottom Log Interval	231 m
Top Log Interval	80.6 m
Casing Driller Size @ Depth	5.500 in @ 80 m
Casing Schlumberger	80 m
Bit Size	9.875 in
Type Fluid In Hole	Seawater
Density	Viscosity
1.03 g/cm3	
Fluid Loss	PH
Source Of Sample	N/A
RM @ Measured Temperature	@
RMF @ Measured Temperature	@
RMC @ Measured Temperature	@
Source RMF	RMC
N/A	N/A
RM @ MRT	RMF @ MRT
@ 15	@ 15
Maximum Recorded Temperatures	15 degC
Circulation Stopped	Time
24-Aug-2013	8:00
Logger On Bottom	Time
24-Aug-2013	1:00
Unit Number	Location
625003	Houston
Recorded By	C. Furman
Witnessed By	J. Lofi

		Run 1	Run 2	R
Logging Date				
Run Number				
Depth Driller				
Schlumberger Depth				
Bottom Log Interval				
Top Log Interval				
Casing Driller Size @ Depth			@	
Casing Schlumberger				
Bit Size				
Type Fluid In Hole				
Density	Viscosity			
Fluid Loss	PH			
Source Of Sample				
RM @ Measured Temperature			@	
RMF @ Measured Temperature			@	
RMC @ Measured Temperature			@	
Source RMF	RMC			
RM @ MRT	RMF @ MRT		@	@
Maximum Recorded Temperatures				
Circulation Stopped	Time			
Logger On Bottom	Time			
Unit Number	Location			
Recorded By				
Witnessed By				

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

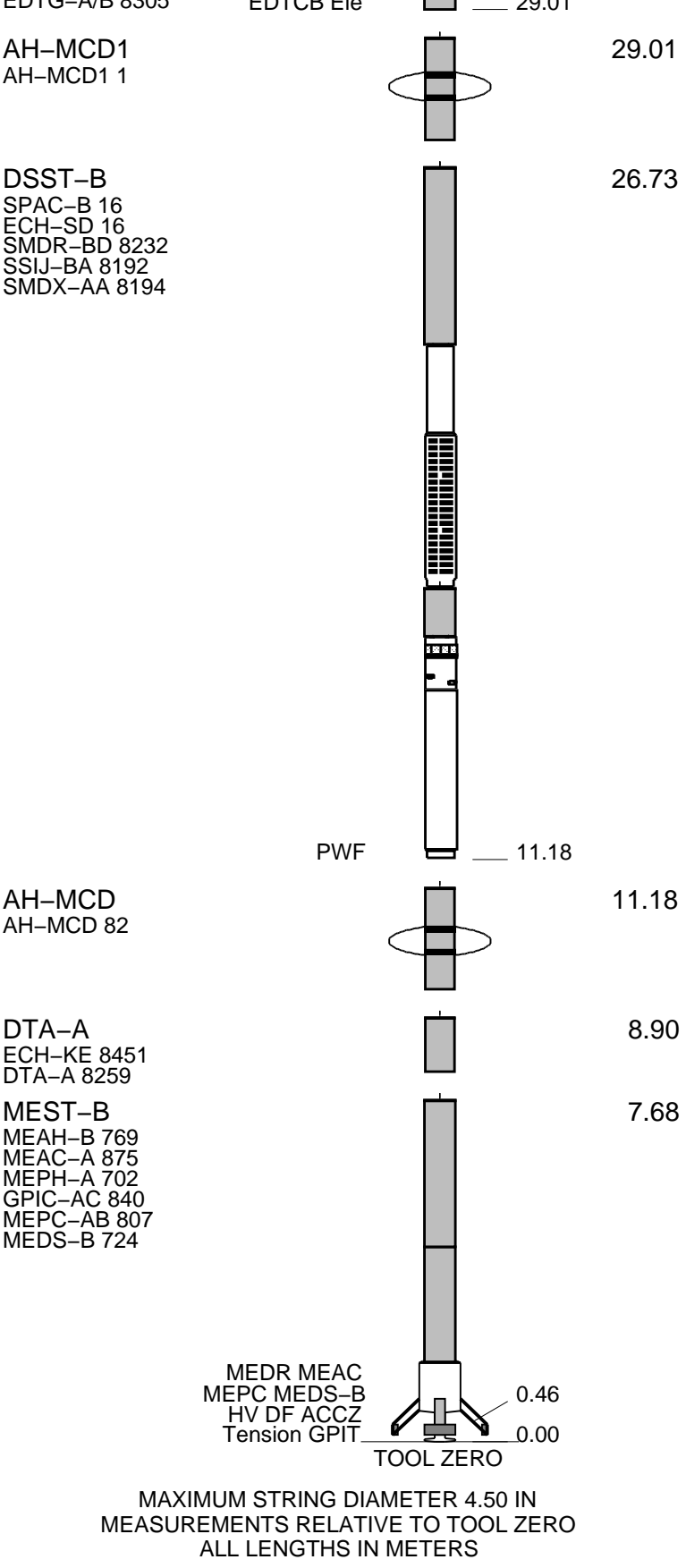
DSI Stoneley Mode run in Standard frequency, Even array for all passes

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
<b>SURFACE EQUIPMENT</b>	
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

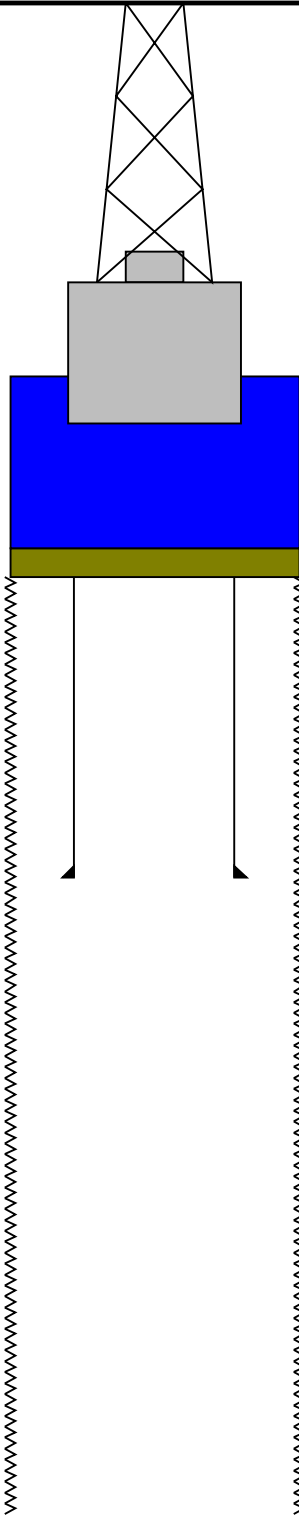
Derrick Floor Elevation

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



## Downlog 1:200 Scale

MAXIS Field Log

### 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

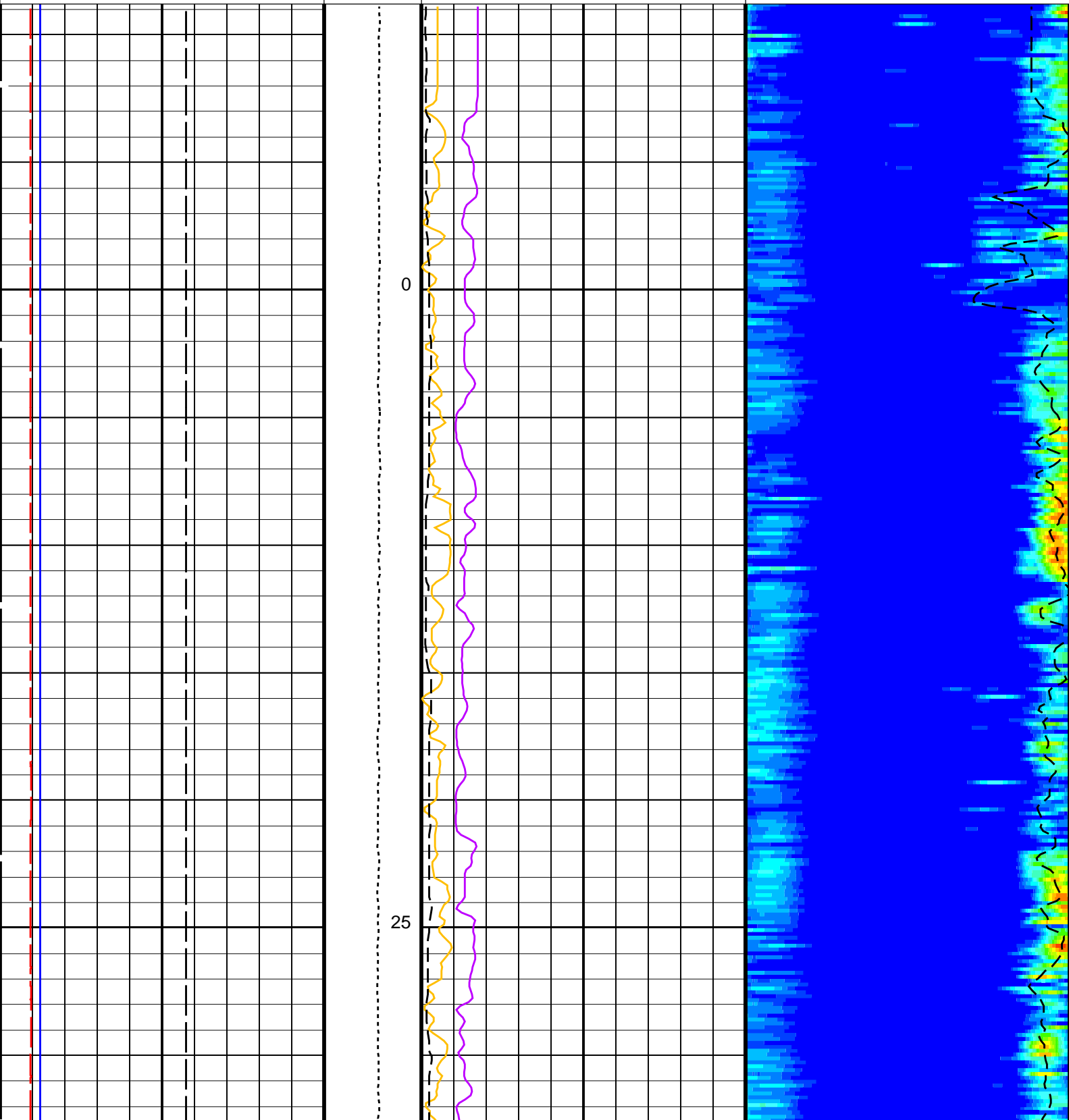
### OP System Version: 19C0-187

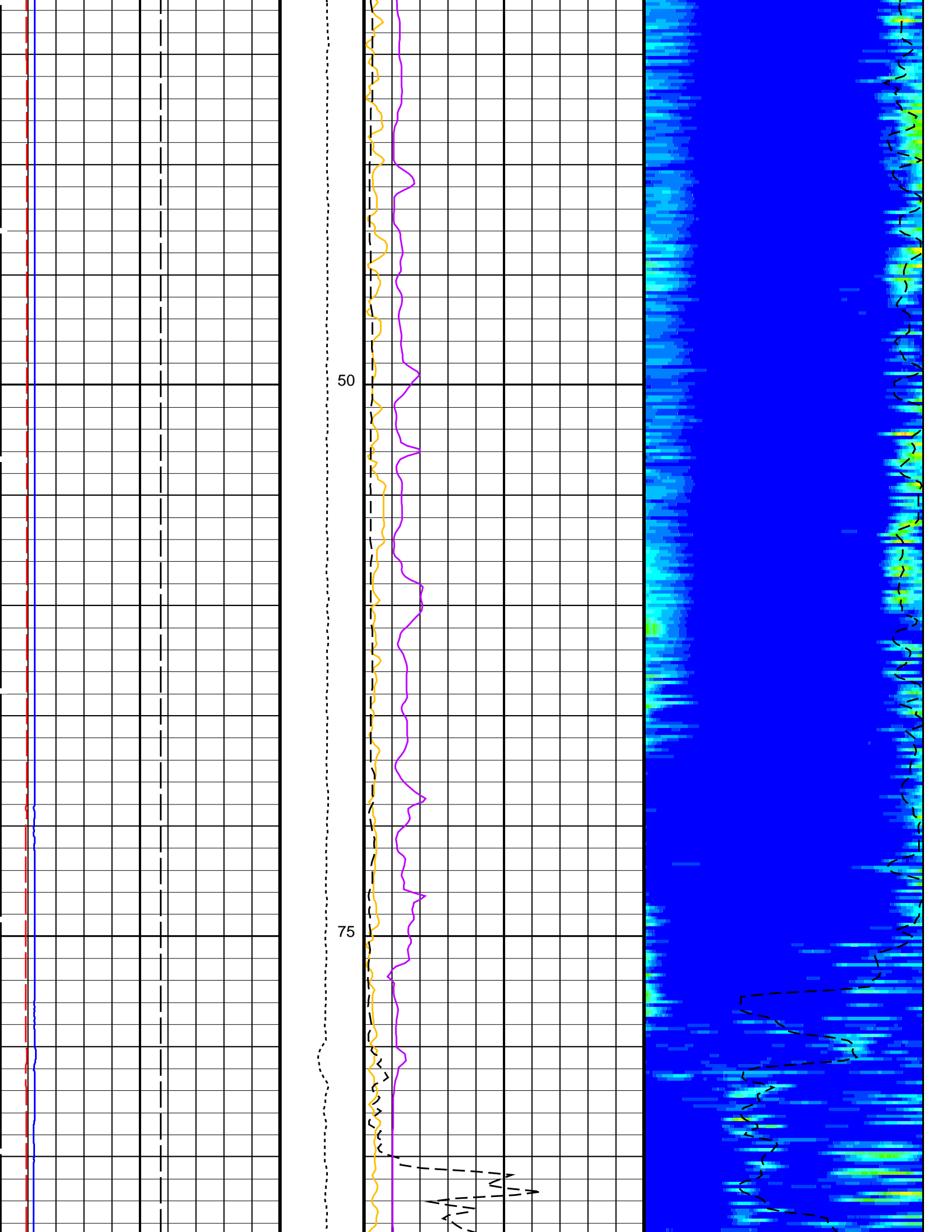
MEST-B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

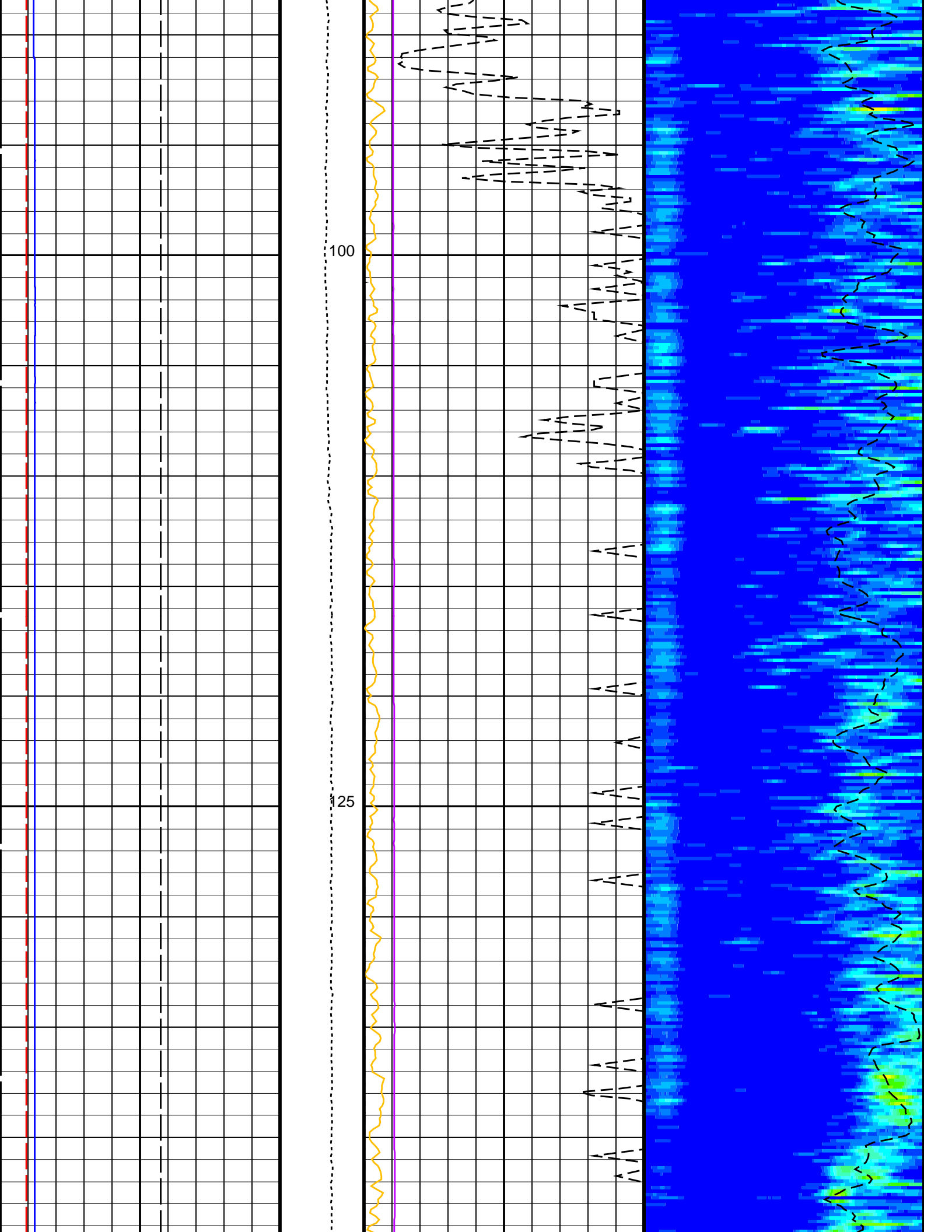
PIP SUMMARY

Time Mark Every 60 S

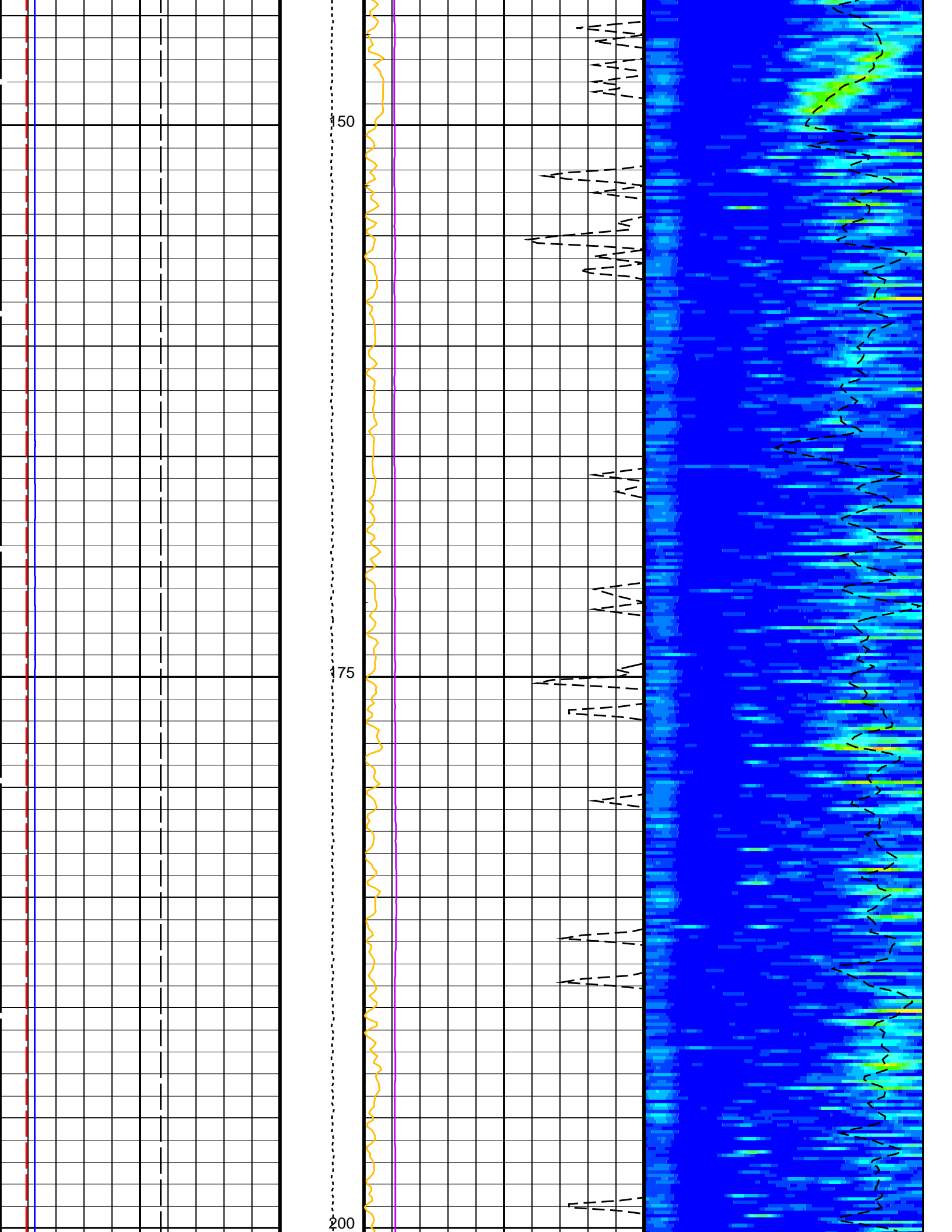
<b>Caliper 1 (C1)</b> (IN) 0 20	<b>Sonic Velocity (SVEL)</b> (M/S) 1000 6000	<b>Min</b>  <b>Max</b> <b>Amplitude</b> Rec.Array L.Dipole Slow Proj. CVDL (SPR1) (US/F) 300 1200	
<b>Caliper 2 (C2)</b> (IN) 0 20	<b>SAM1 Waveform Gain (WFG1)</b> (----) 0 1000		
<b>Bit Size (BS)</b> (IN) 0 20	<b>Tension (TENS)</b> (LBF) 0 5000	<b>Peak Coherence / RA - Lower Dipole</b> (CHR1) 0 10	<b>Delta-T Shear / RA - Lower Dipole</b> (DT1R) (US/F) 300 1200

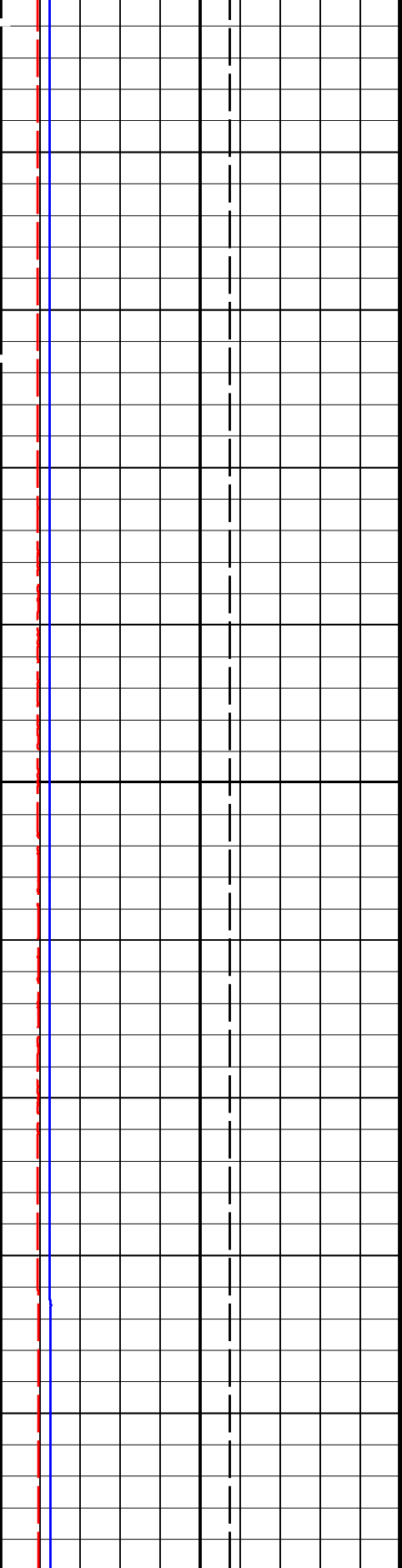






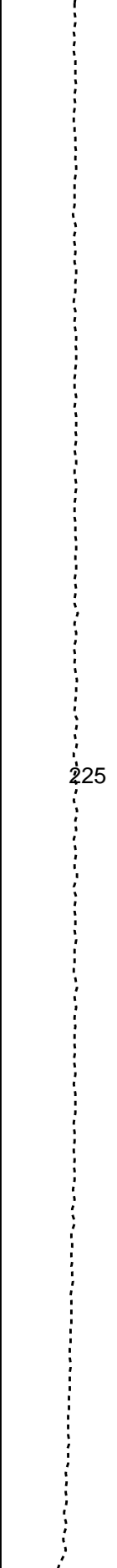




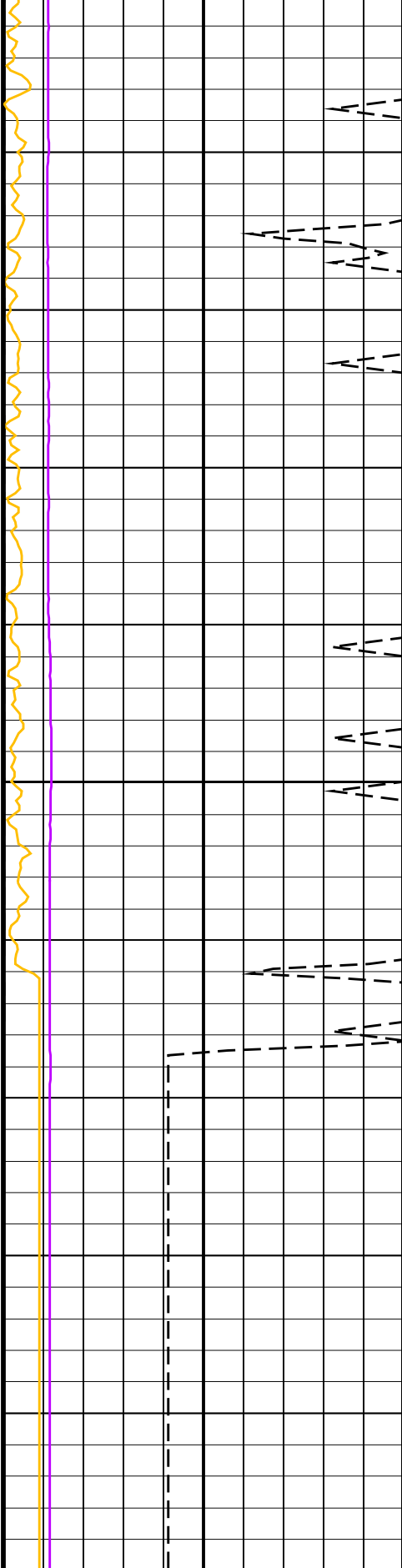


Bit Size (BS)  
(IN) 0 20

Caliper 2 (C2)  
(IN) 0 20

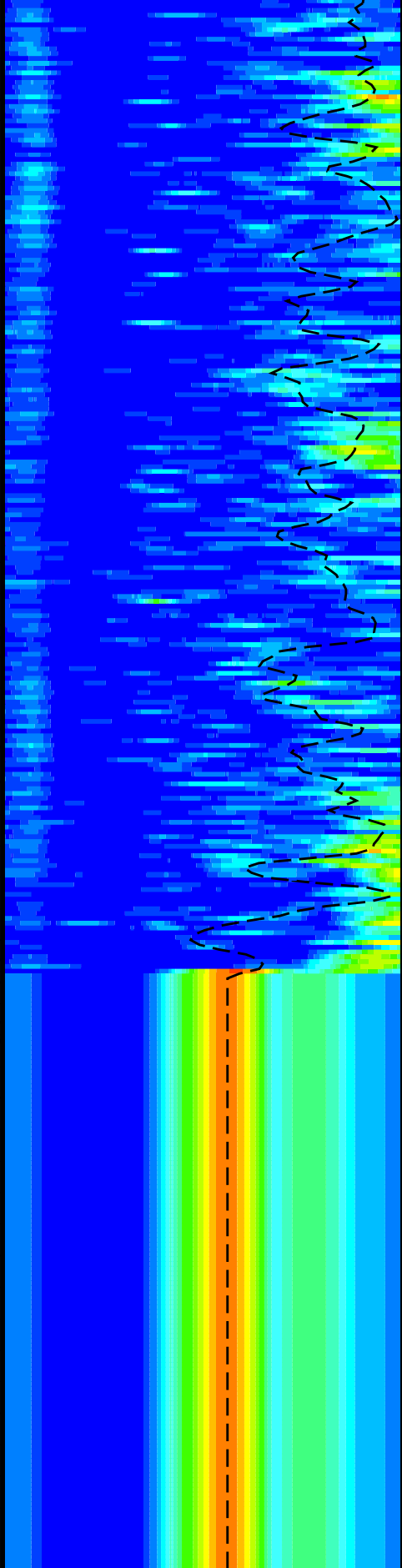


Tension (TENS)  
(LBF) 0 5000



Peak Coherence / RA - Lower Dipole  
(CHR1) 0 10

SAM1 Waveform Gain (WFG1)  
(-----) 0 1000



Delta-T Shear / RA - Lower Dipole  
(DT1R)  
(US/F) 300 1200

Min Amplitude Max  
Rec.Array L.Dipole Slow Proj. CVDL

	20		1000	300	(SPR1) (US/F)	1200
0	Caliper 1 (C1) (IN)	20	Sonic Velocity (SVEL) (M/S)	1000	6000	

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	300	US/F
DSHU	Label Slowness Upper Limit - Dipole Shear	1200	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	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	B1-3K	
SLL1	STC Slowness Lower Limit - Lower Dipole	300	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	1200	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	2450	US
TST1	STC Time Step - Lower Dipole	200	US
TUL1	STC Time Upper Limit - Lower Dipole	20440	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	11.438	IN
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	RECOMPUTE	

Format: DSST\_LOWER\_DIPOLE\_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

**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**

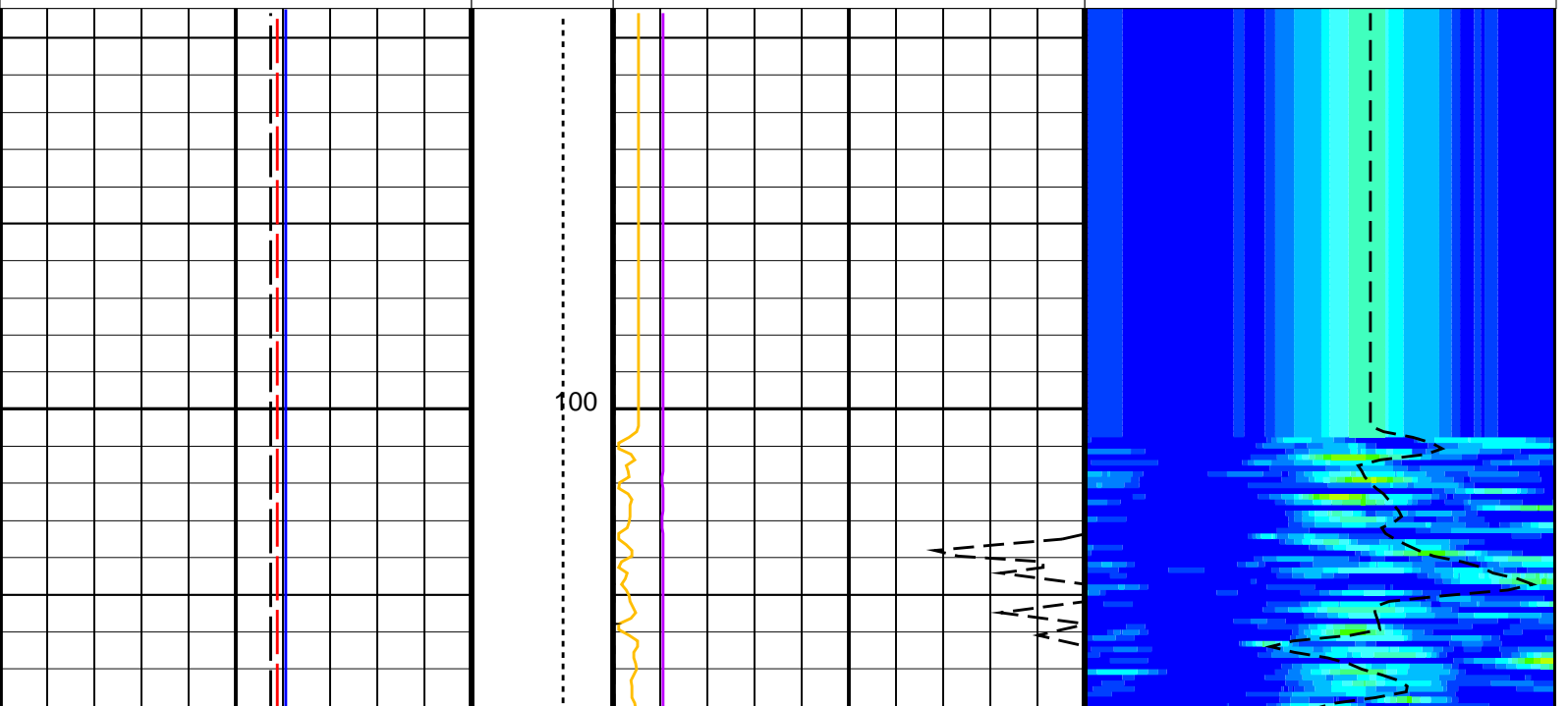
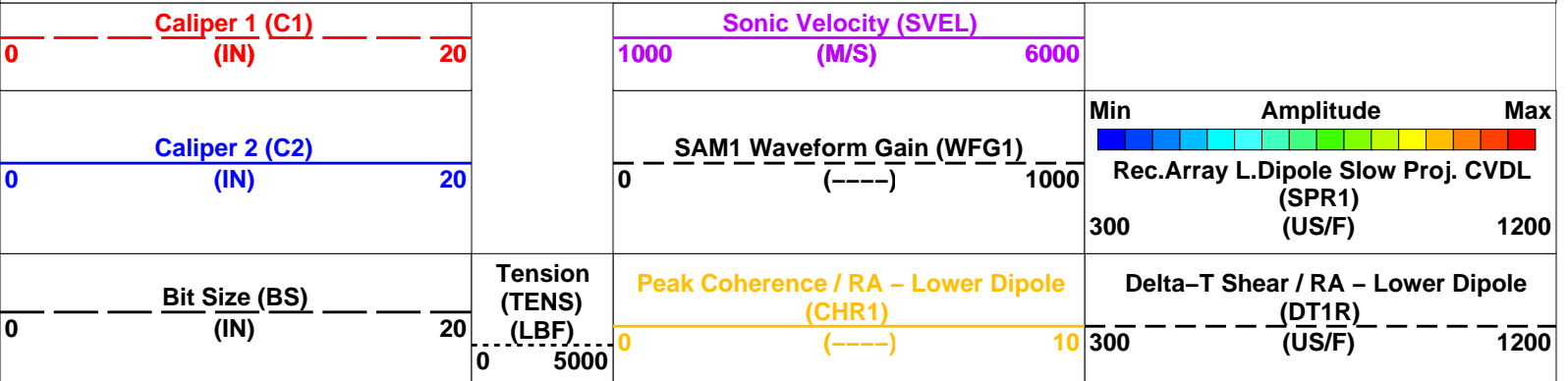
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CLIENT	FMS_DSI_NGS_065PUC	FN:5	CUSTOMER	20-Sep-2013 13:29	250.5 M	89.2 M

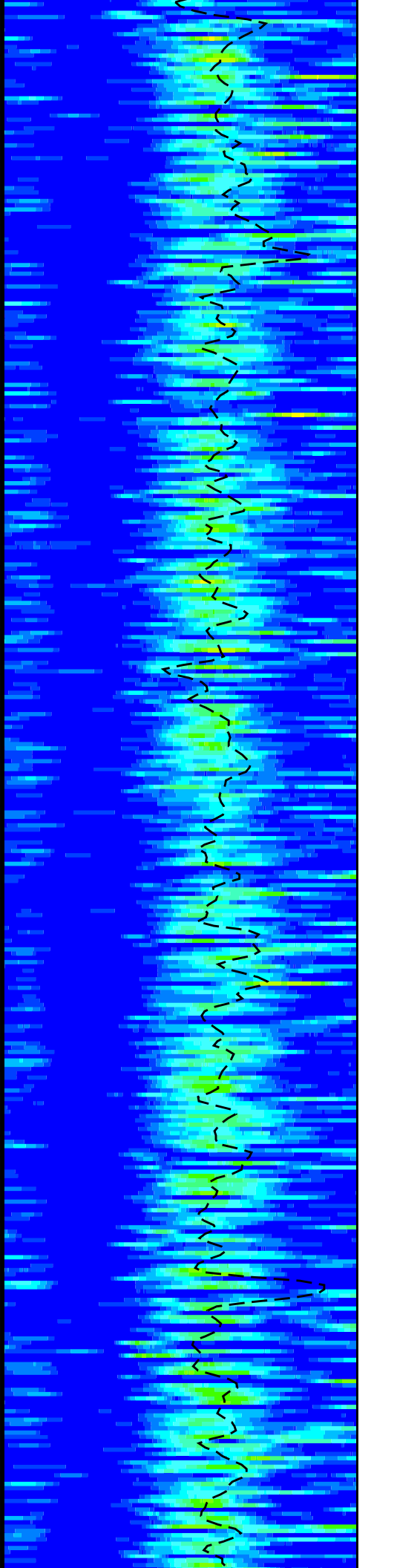
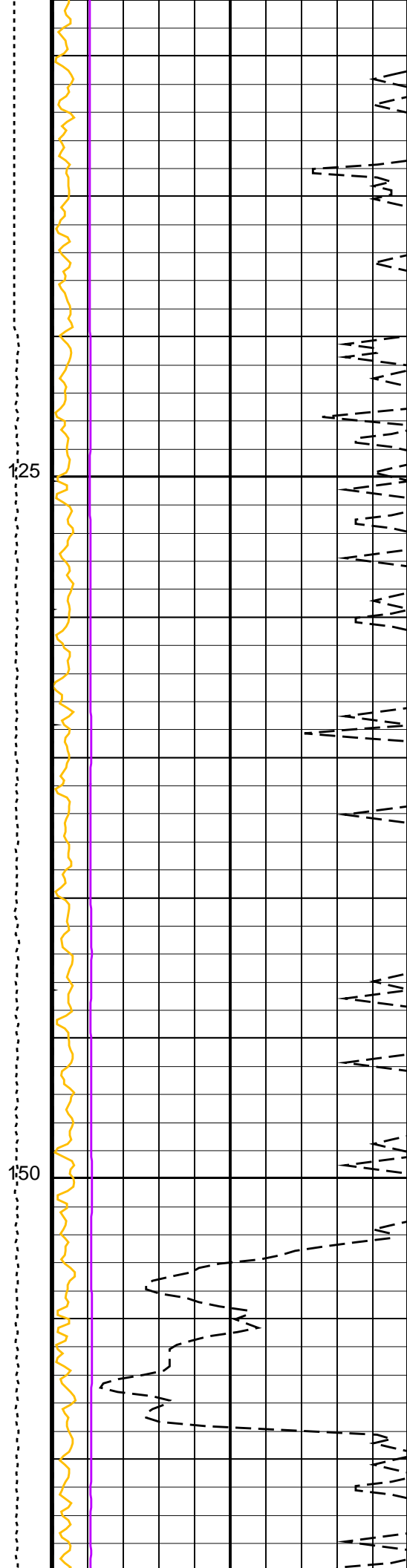
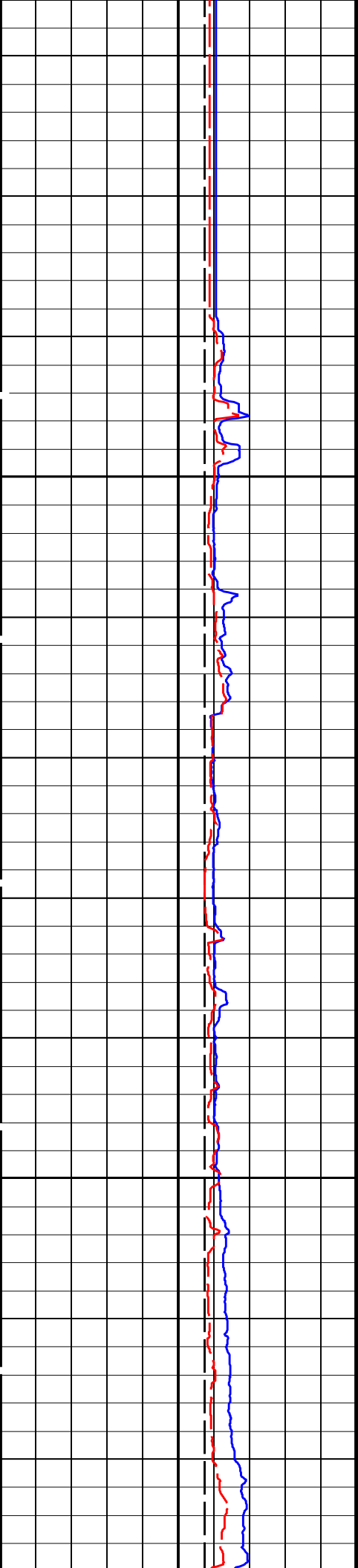
**OP System Version: 19C0-187**

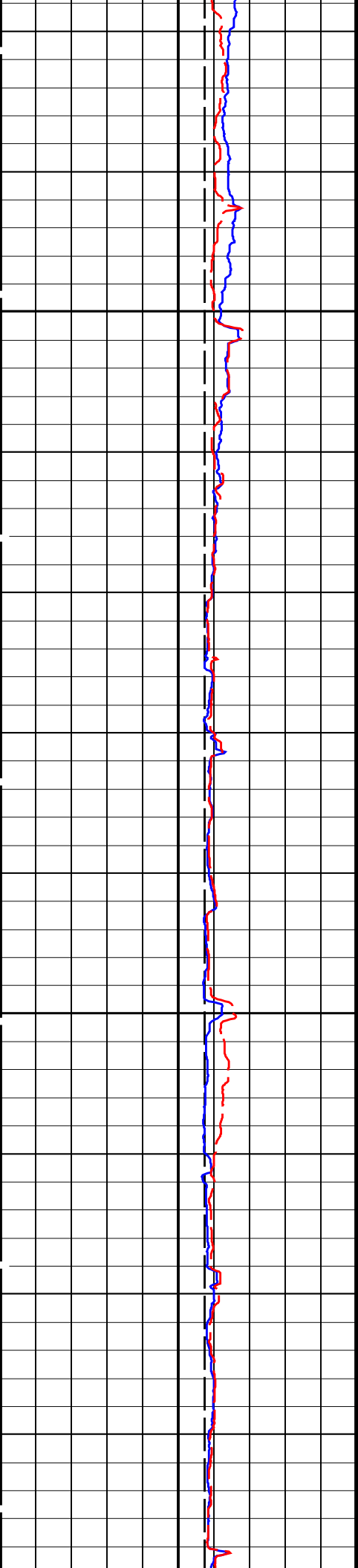
MEST-B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

**PIP SUMMARY**

Time Mark Every 60 S

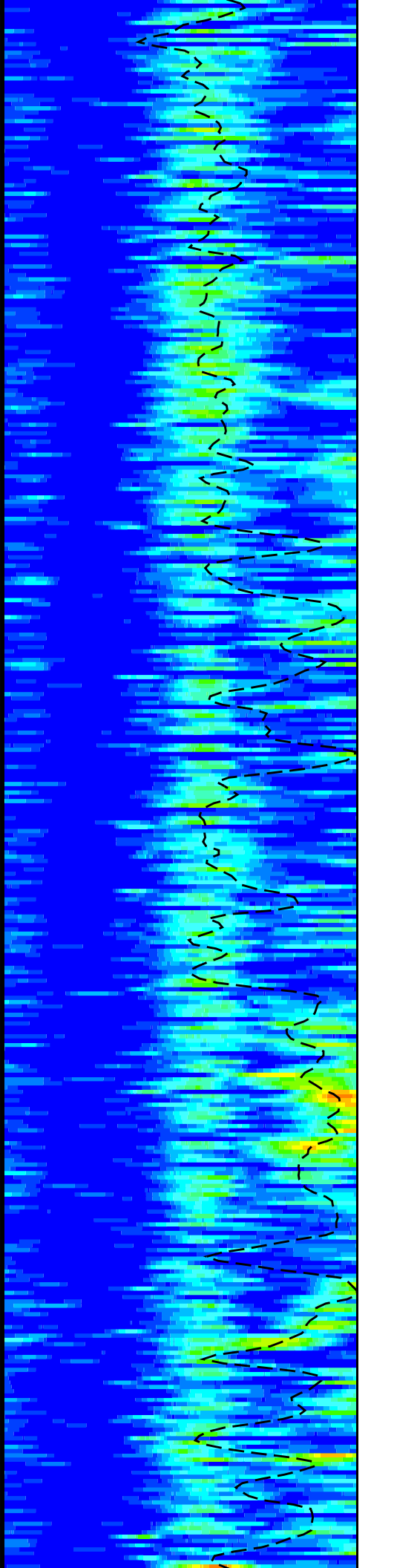
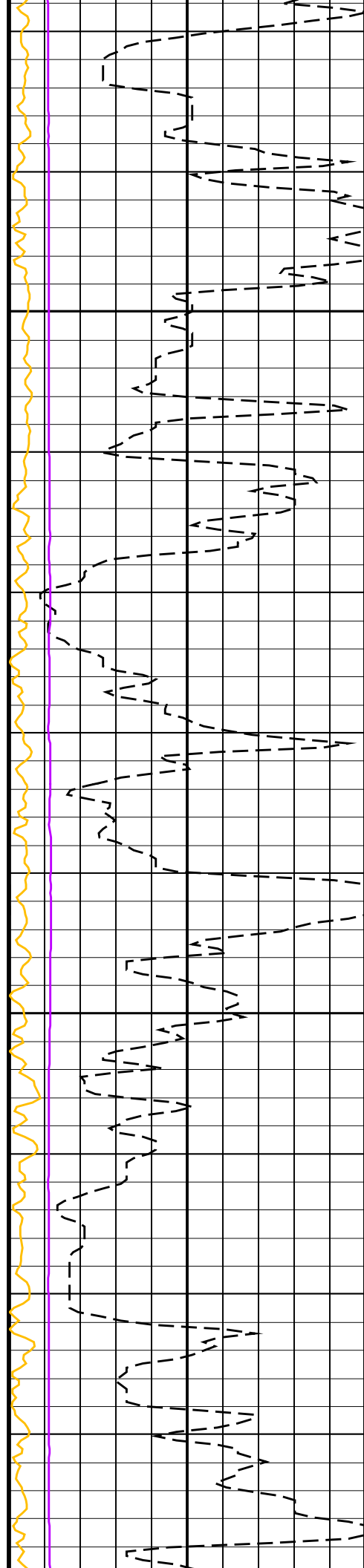


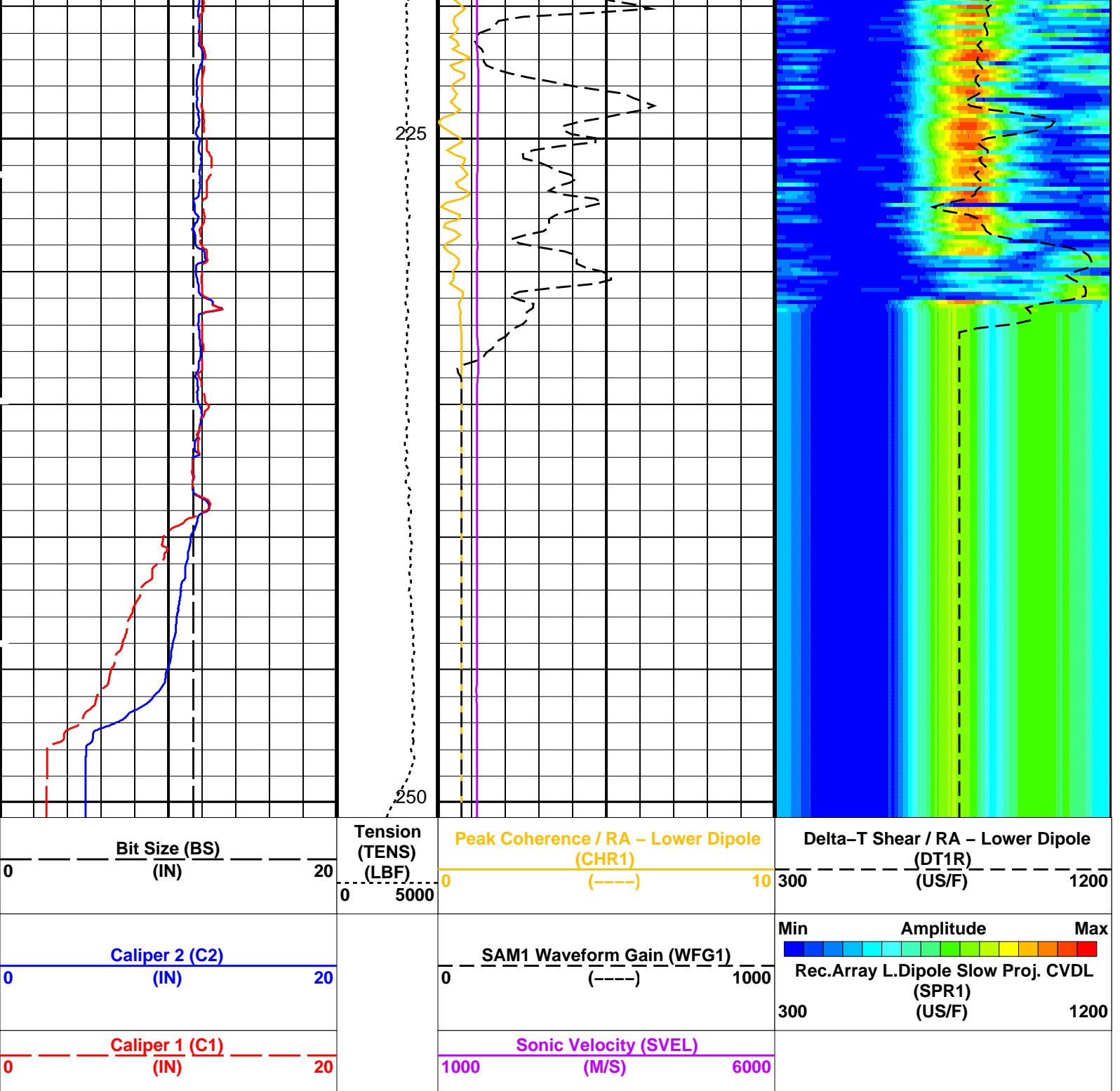




175

200





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	300 US/F
DSHU	Label Slowness Upper Limit - Dipole Shear	1200 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
NW11	Number Waveform Items 1	8
NW1X	Number Waveform Items X	8

NW1X	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	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	B1–3K	
SLL1	STC Slowness Lower Limit – Lower Dipole	300	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	1200	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	2450	US
TST1	STC Time Step – Lower Dipole	200	US
TUL1	STC Time Upper Limit – Lower Dipole	20440	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	11.438	IN
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	RECOMPUTE	

Format: DSST\_LOWER\_DIPOLE\_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

### 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



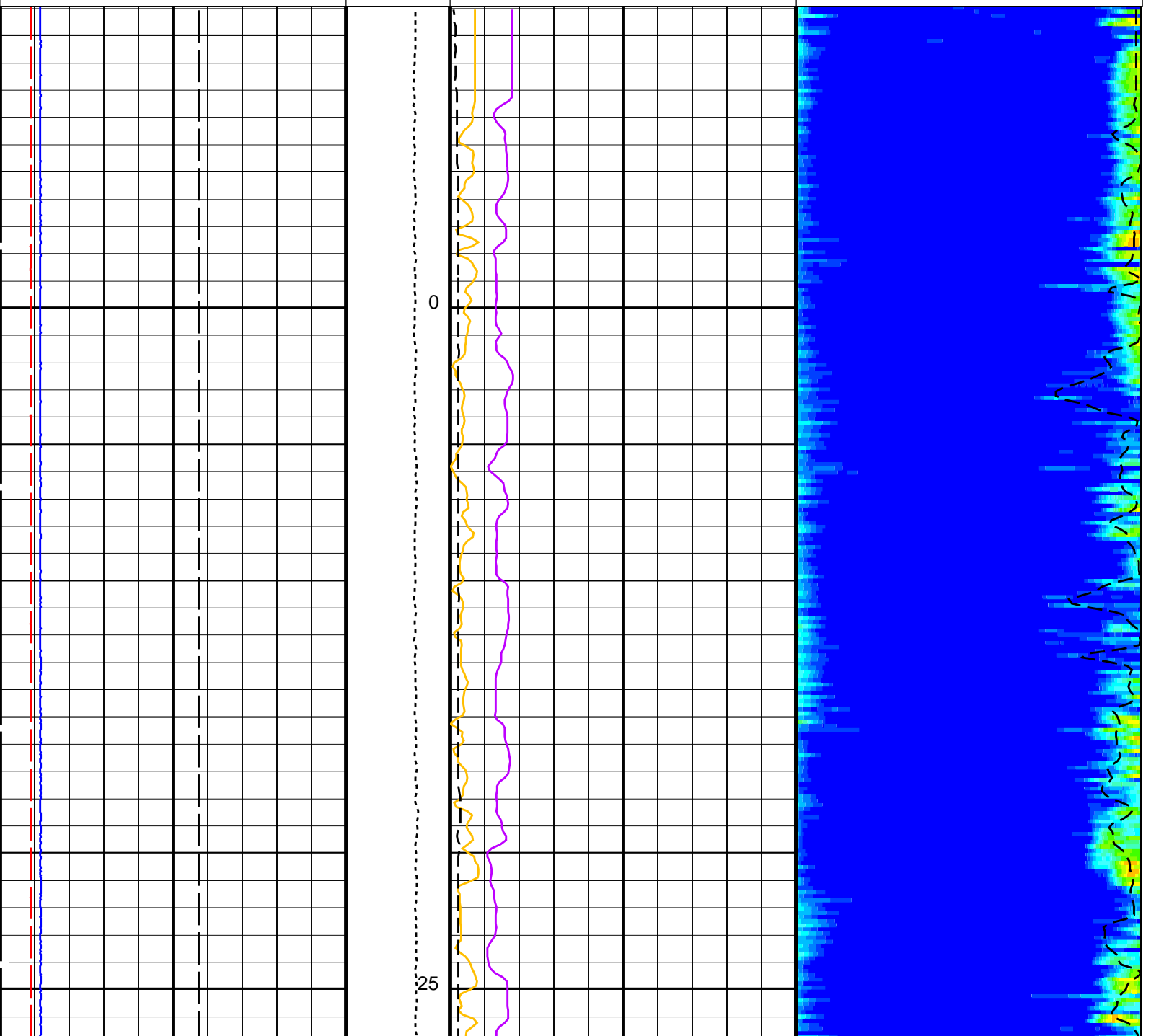
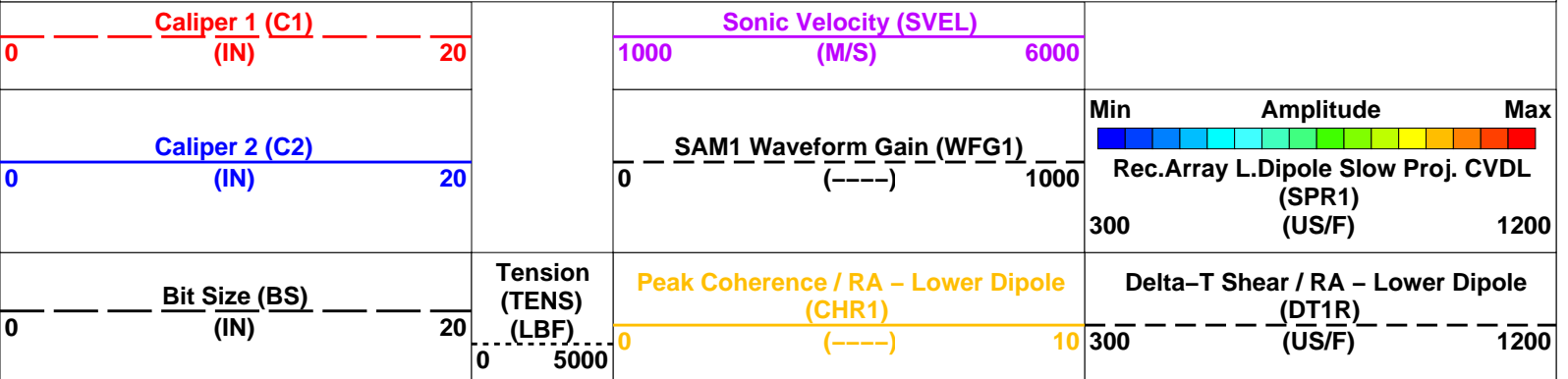
# OP System Version: 19C0-187

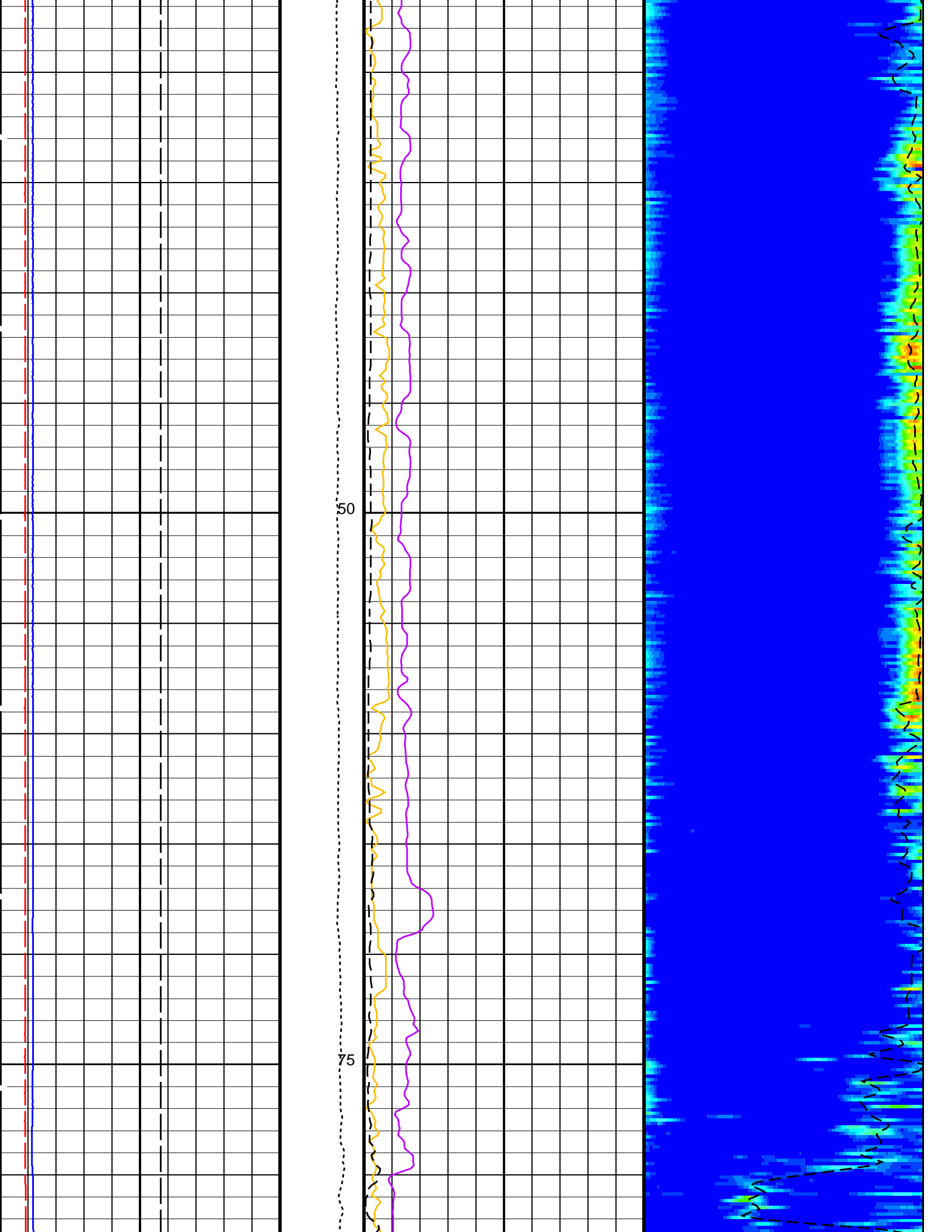
MEST-B 19C0-187  
 DSST-B 19C0-187  
 HNGS-BA 19C0-187

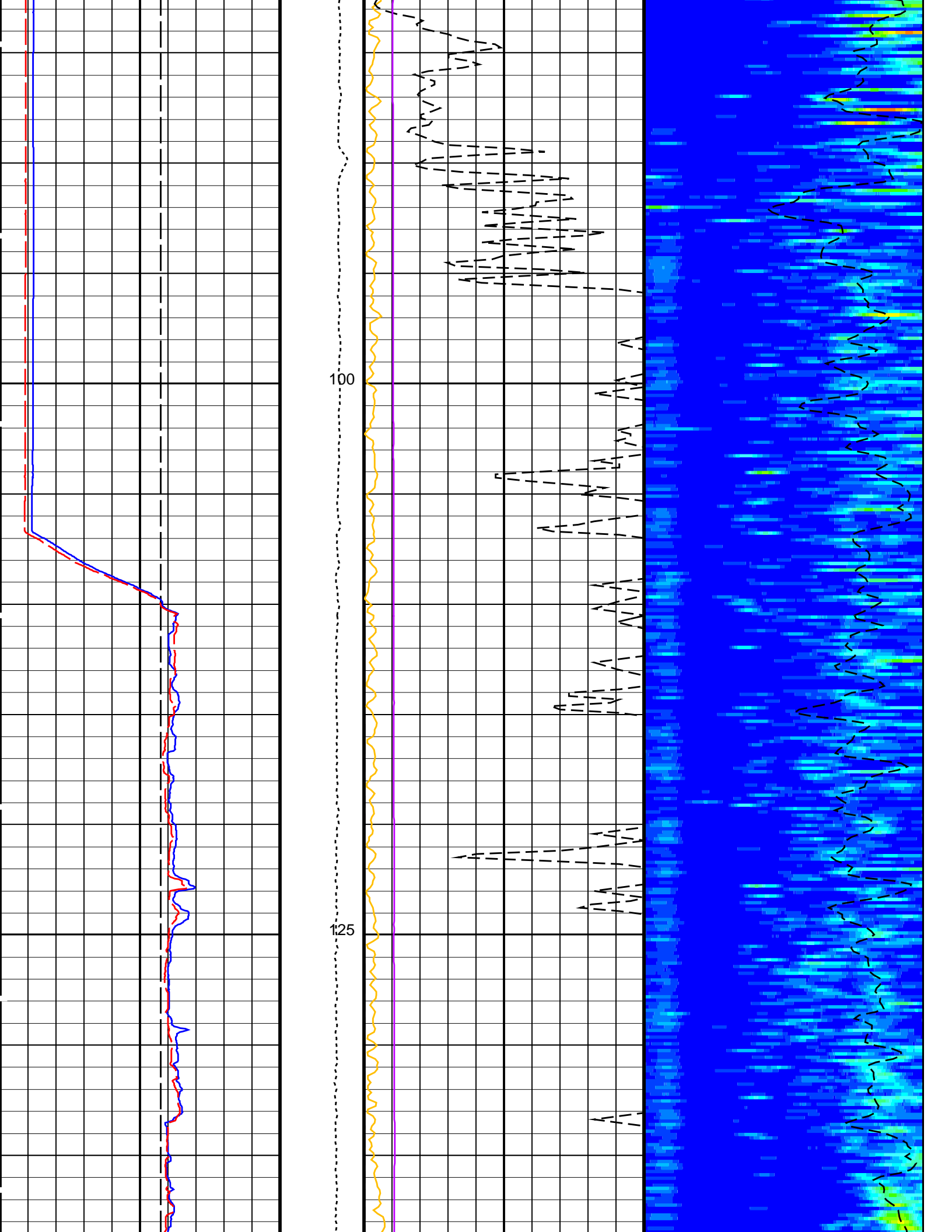
DTA-A 19C0-187  
 HNGC-B 19C0-187  
 EDTC-B SKK-5169-EDTCB

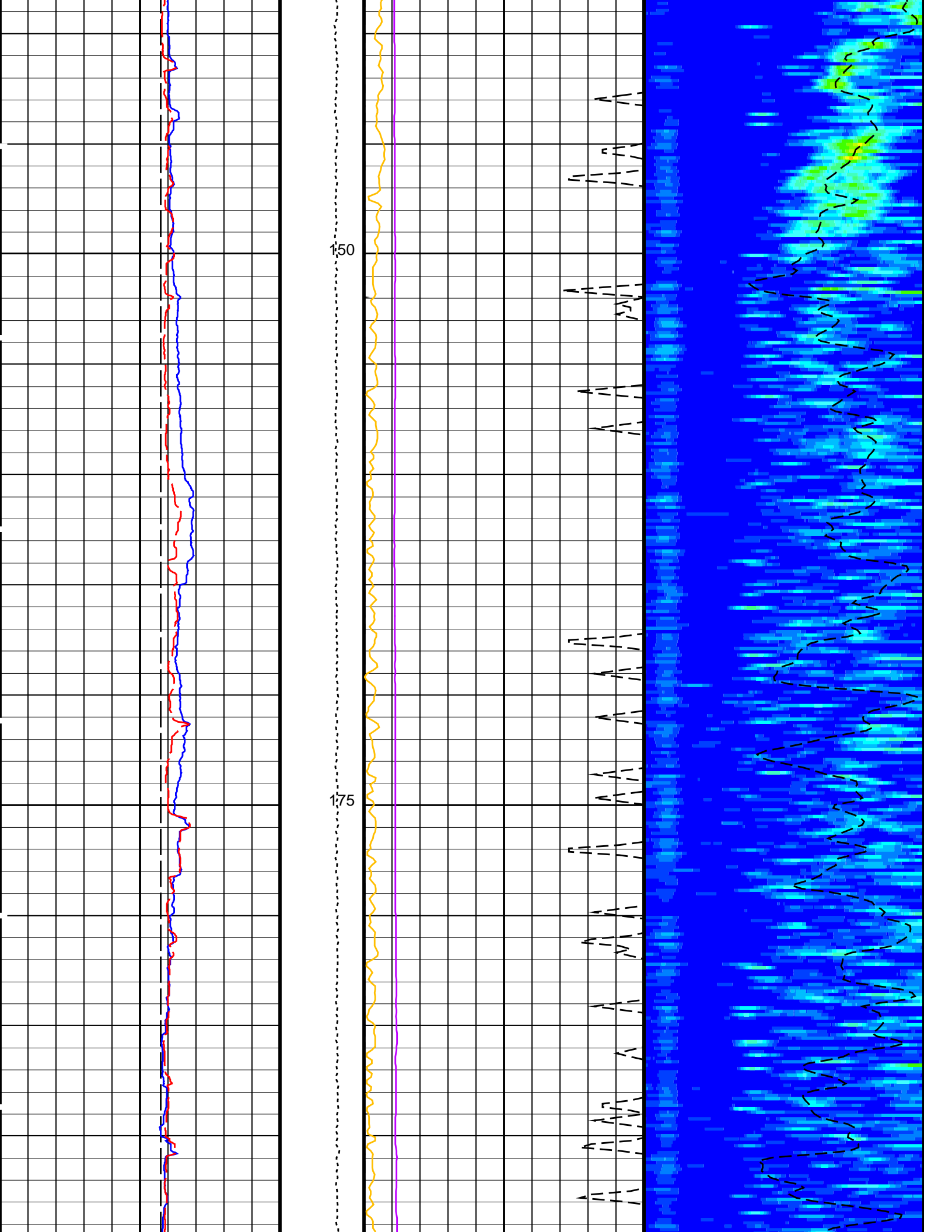
## PIP SUMMARY

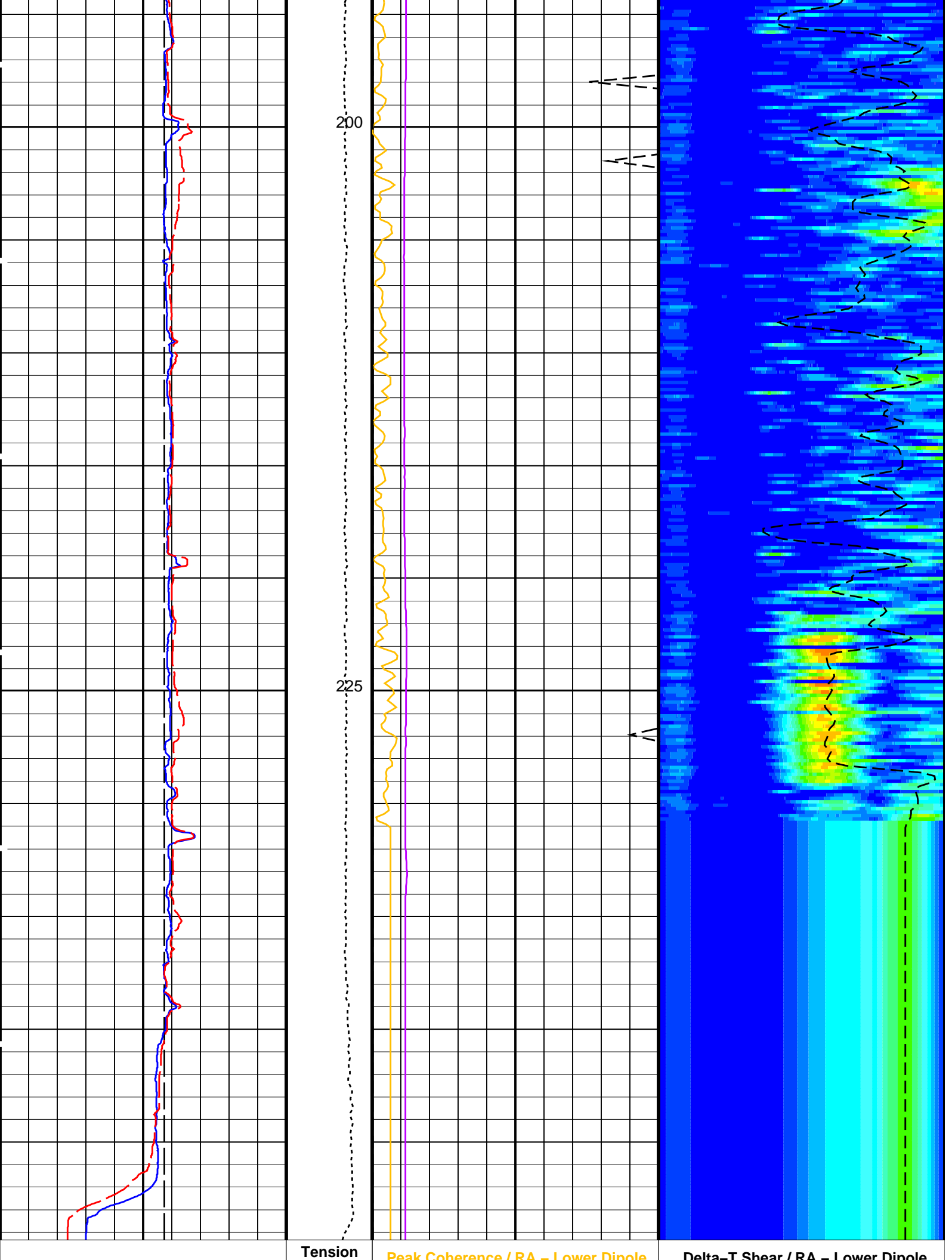
Time Mark Every 60 S











Tension

Peak Coherence / RA - Lower Dipole

Delta-T Shear / RA - Lower Dipole

0	Bit Size (BS) (IN)	20	0	Peak Coherence / RA (CHR1)	10	300	Delta / Central / RA (DT1R)	1200
0	Caliper 2 (C2) (IN)	20	0	5000	(LBF)	1000	SAM1 Waveform Gain (WFG1) (US/F)	1200
0	Caliper 1 (C1) (IN)	20	1000	Sonic Velocity (SVEL) (M/S)	6000			

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	300 US/F
DSHU	Label Slowness Upper Limit - Dipole Shear	1200 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	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	B1-3K
SLL1	STC Slowness Lower Limit - Lower Dipole	300 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	1200 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	2450 US
TST1	STC Time Step - Lower Dipole	200 US
TUL1	STC Time Upper Limit - Lower Dipole	20440 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	11.438 IN
DO	Depth Offset for Playback	0.0 M
PP	Playback Processing	RECOMPUTE

Format: DSST\_LOWER\_DIPOLE\_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 EMS\_DSI\_055PIP EN-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	9.753

Before		9.733
	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  
Lower Dipole