Rig: **JOIDES Resolution** Country: **USA**

Rig: JOIDES Resolution Field: Baffin Bay Location: Latitude: N 75° 42' 58.35" Well: Expedition 344S, U0060A (USC68) Company: Lamont Doherty Earth Observatory	DSI Sonic Imager Upper Dipole			
	LOCATION	Latitude: N 75° 42' 58.35" Longitude: W 65° 57' 12.19"		Elev.: K.B. −603.20 m G.L. −592.20 m D.F. −603.20 m
		Permanent Datum: <u>Mean Sea Level</u>		Elev.: <u>0.00 m</u>
		Log Measured From: <u>Sea Floor</u>		11.00 m above Perm. Datum
	Drilling Measured From: <u>Drill Floor</u>			
	Ocean: Atlantic	Max. Well Deviation 0 deg	Longitude N 75° 42' 58.35"	Latitude W 65° 57' 12.19"

Logging Date			27-Sep-2012					
Run Number			1					
Depth Driller			239.1 m					
Schlumberger Depth			195.5 m					
Bottom Log Interval			174 m					
Top Log Interval			43 m					
Casing Driller Size @ Depth			7.000 in @ 33 m			@		
Casing Schlumberger			31 m					
Bit Size			9.875 in					
Type Fluid In Hole			Seawater					
MUD	Density	Viscosity	1.05 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	@ 9	@ 9	@	@			
Maximum Recorded Temperatures			9 degC					
Circulation Stopped		Time	27-Sep-2012		18:00			
Logger On Bottom		Time	27-Sep-2012		22:20			
Unit Number	Location	625003 Houston						
Recorded By			C. Furman					
Witnessed By			G. Guerin, H. Evans					

[illegible]

Run 4

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OS1: MSS
OS2: HRLA
OS3: HNGS

Site U0060A, client designation USC 060, was cored for exploration using the RCB system.

This site is subcontracted to Shell from LDEO, not a standard USIO/IODP site!

Tools were not able to reach TD due to hole obstruction; maximum depth was 195.5mbsf.

Centralized tools run using modified MCD chassis as inline centralizer, as per tool sketch.

Hole size corrections made using bit size, as no caliper was present in the string.

Tools conveyed to hole on wireline through drill pipe, as is standard for this riser-less operation.

Logs recorded from Drill Floor, but played back with zero reference at sea bed for compatibility with core data.

Original sea bed, as measured from drill floor, was 594.0m uncorrected measured depth below drill floor.

Heave compensation was not required due to exceptionally calm sea state and favorable weather during logging.

- P&S Monopole in Standard Frequency
- Upper Dipole in Low Frequency
- Lower Dipole in Standard Frequency
- Stoneley in Standard Frequency

SERVICE ORDER #:
PROGRAM VERSION: 19C0-187
FLUID LEVEL:

SERVICE ORDER #:
 PROGRAM VERSION:
 FLUID LEVEL:

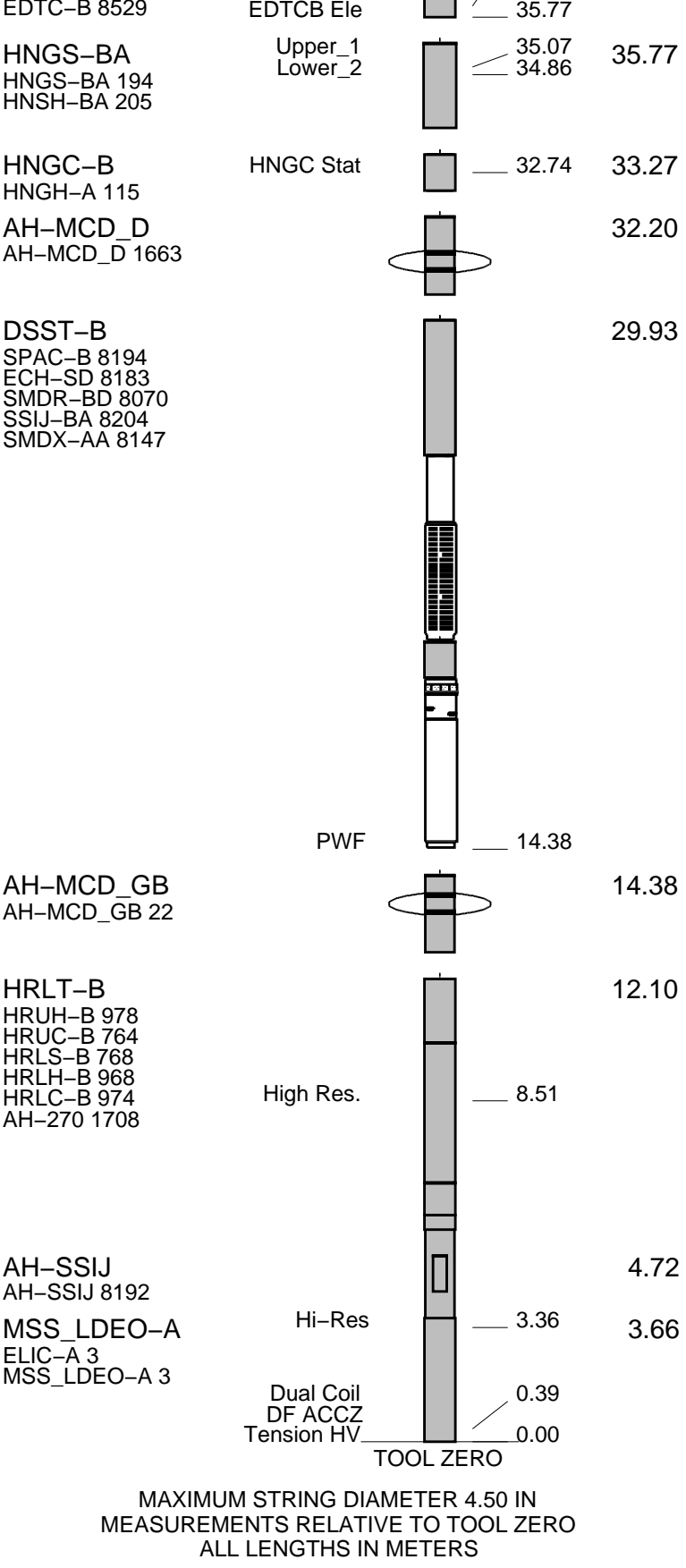
LOGGED INTERVAL	START	STOP
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RUN 1

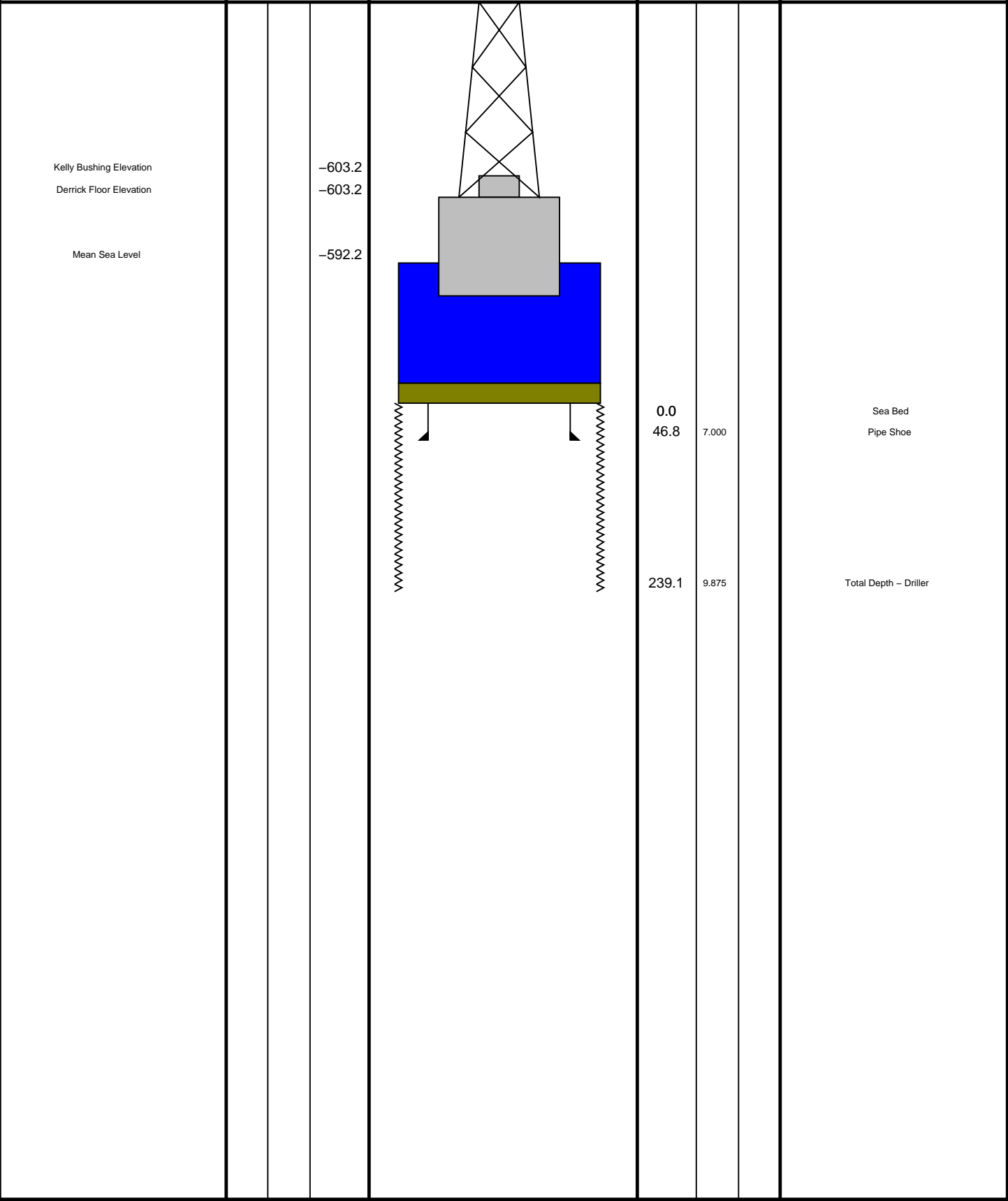
SURFACE EQUIPMENT

GSR-U 616008
WITM (EDTS)-A

LEH-MT			39.15
LEH-MT 101	MDSB_EDTC		
AH-369	Mud Tempe		37.75
	CTEM		36.69
EDTC-B	Gamma Ray		36.12
EDTH-B 8528	EFTB DIAG		37.75
	TelStatus		



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





Up Log

MAXIS Field Log

Input DLIS Files

DEFAULT	MSS_LDEO_HRLA_DSI_007LUP	FN:6	PRODUCER	28-Sep-2012 00:21	788.7 M	579.3 M
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Output DLIS Files

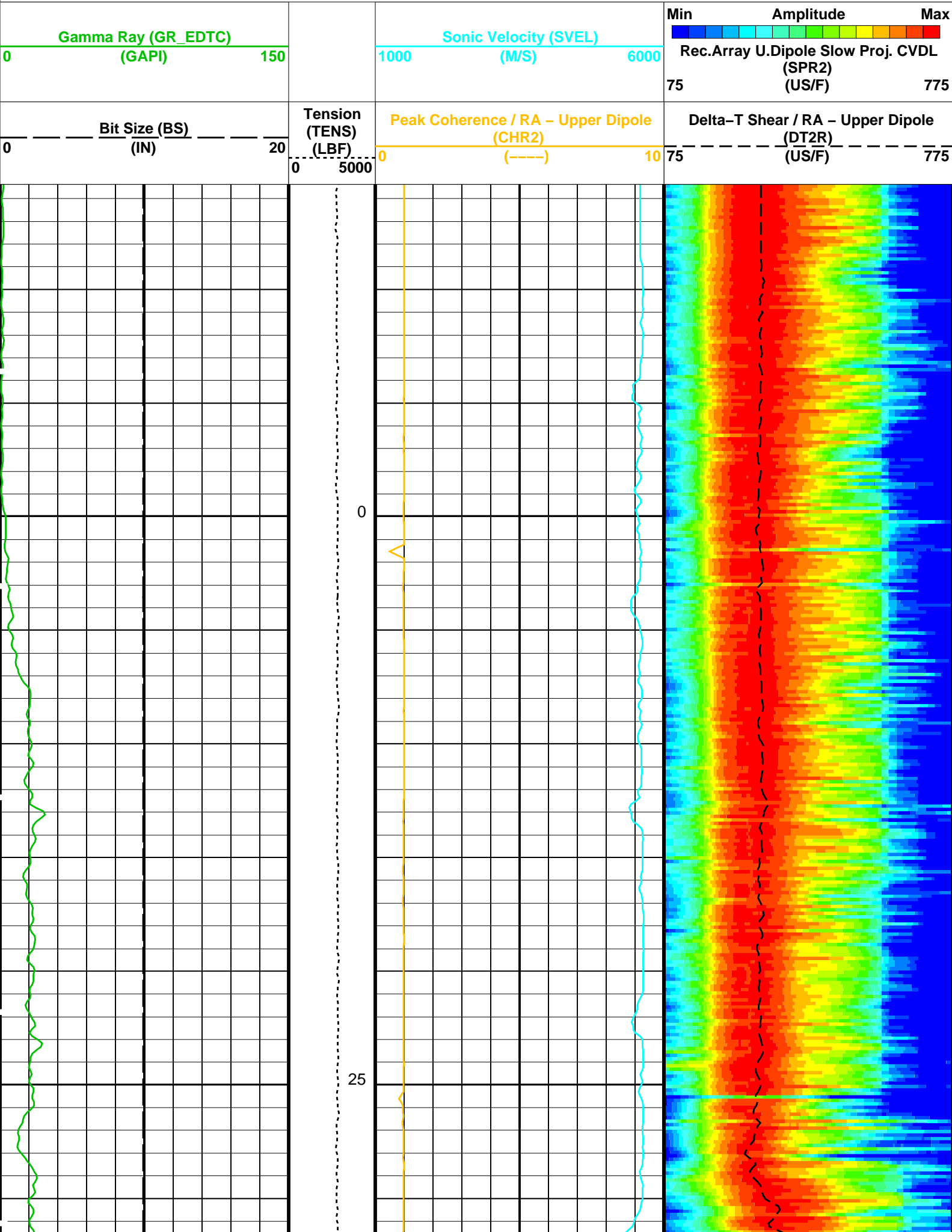
DEFAULT	MSS_LDEO_HRLA_DSI_011PUP	FN:10	PRODUCER	28-Sep-2012 20:08	194.3 M	-14.6 M
CLIENT	MSS_LDEO_HRLA_DSI_011PUC	FN:11	CUSTOMER	28-Sep-2012 20:08	194.3 M	-14.6 M

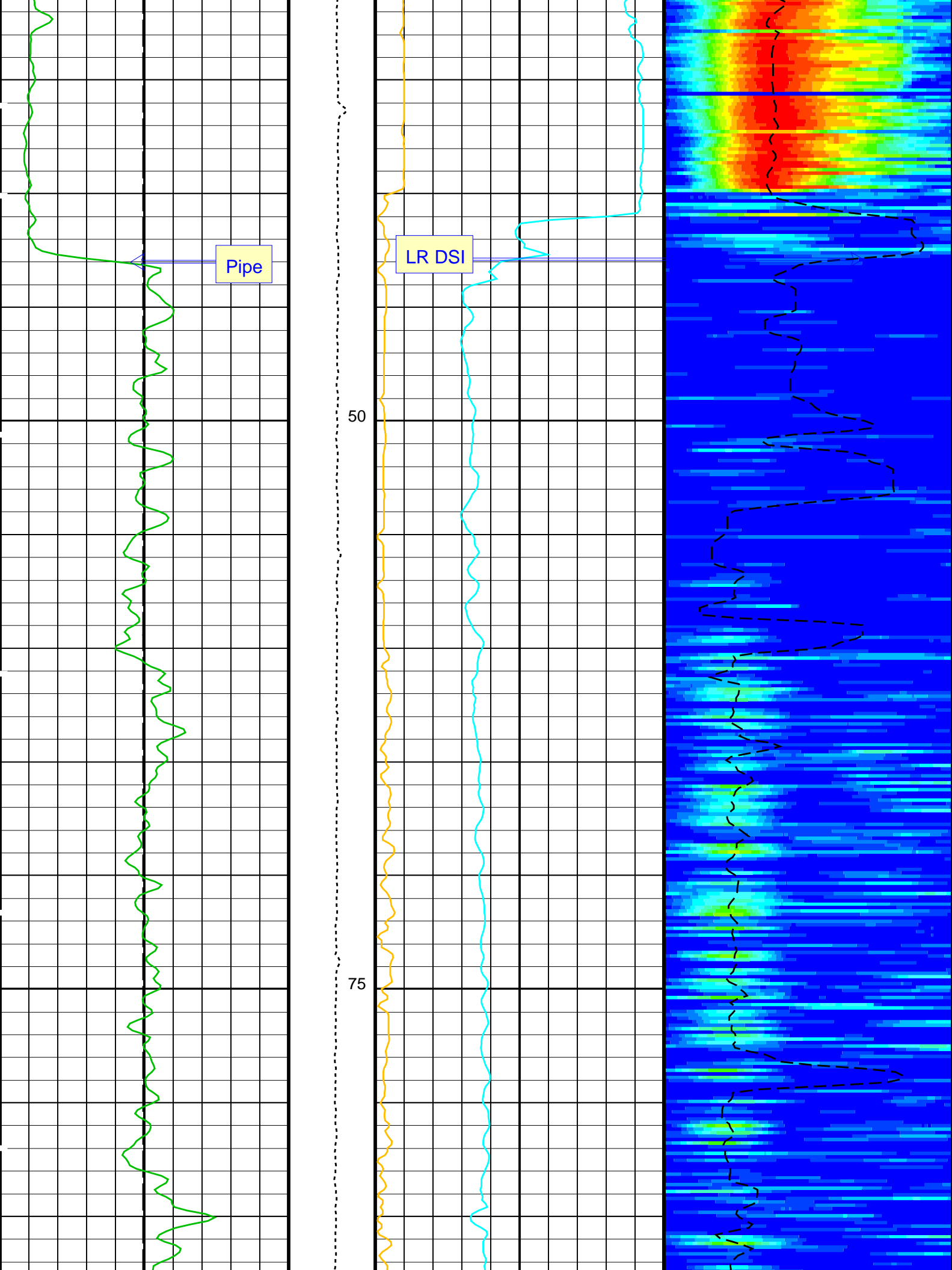
OP System Version: 19C0-187

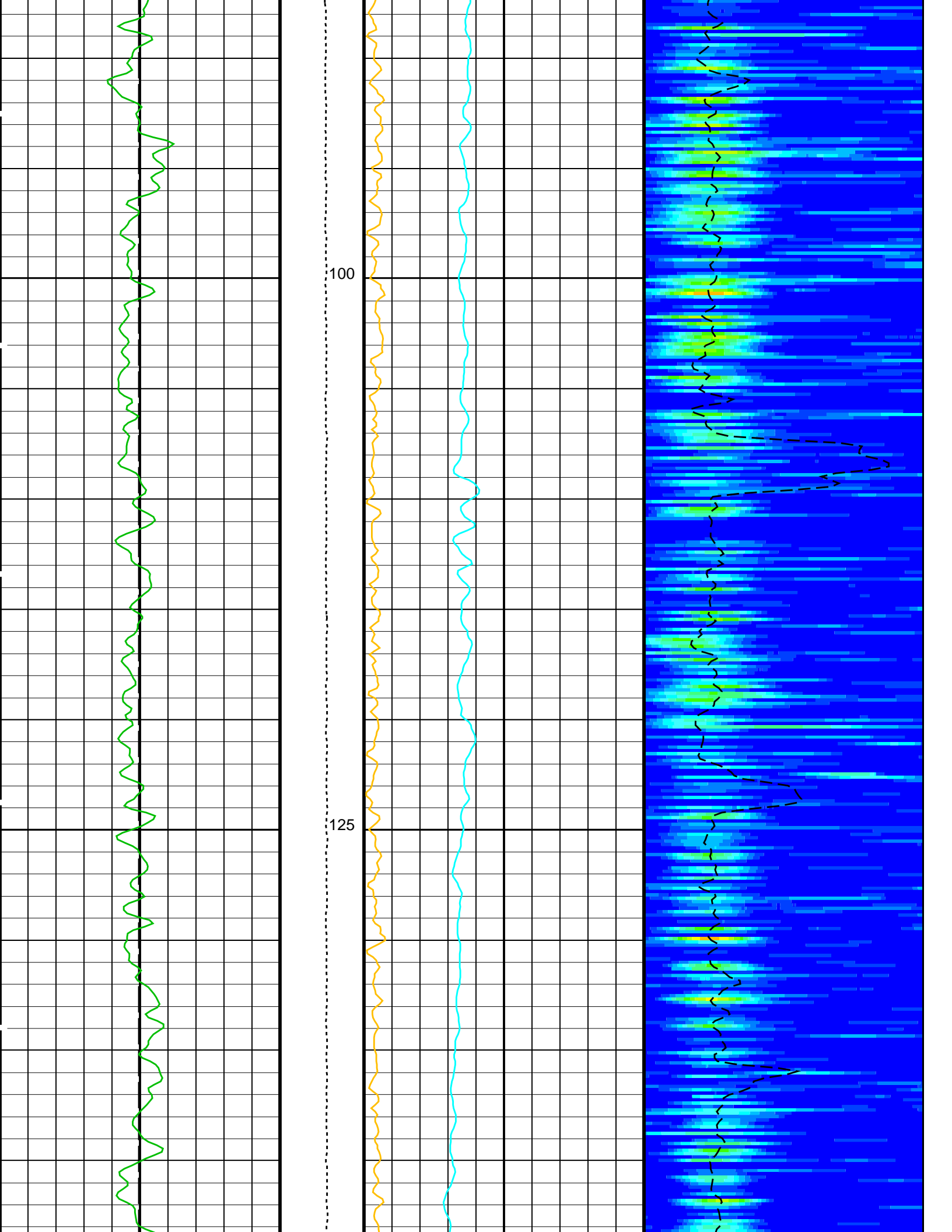
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

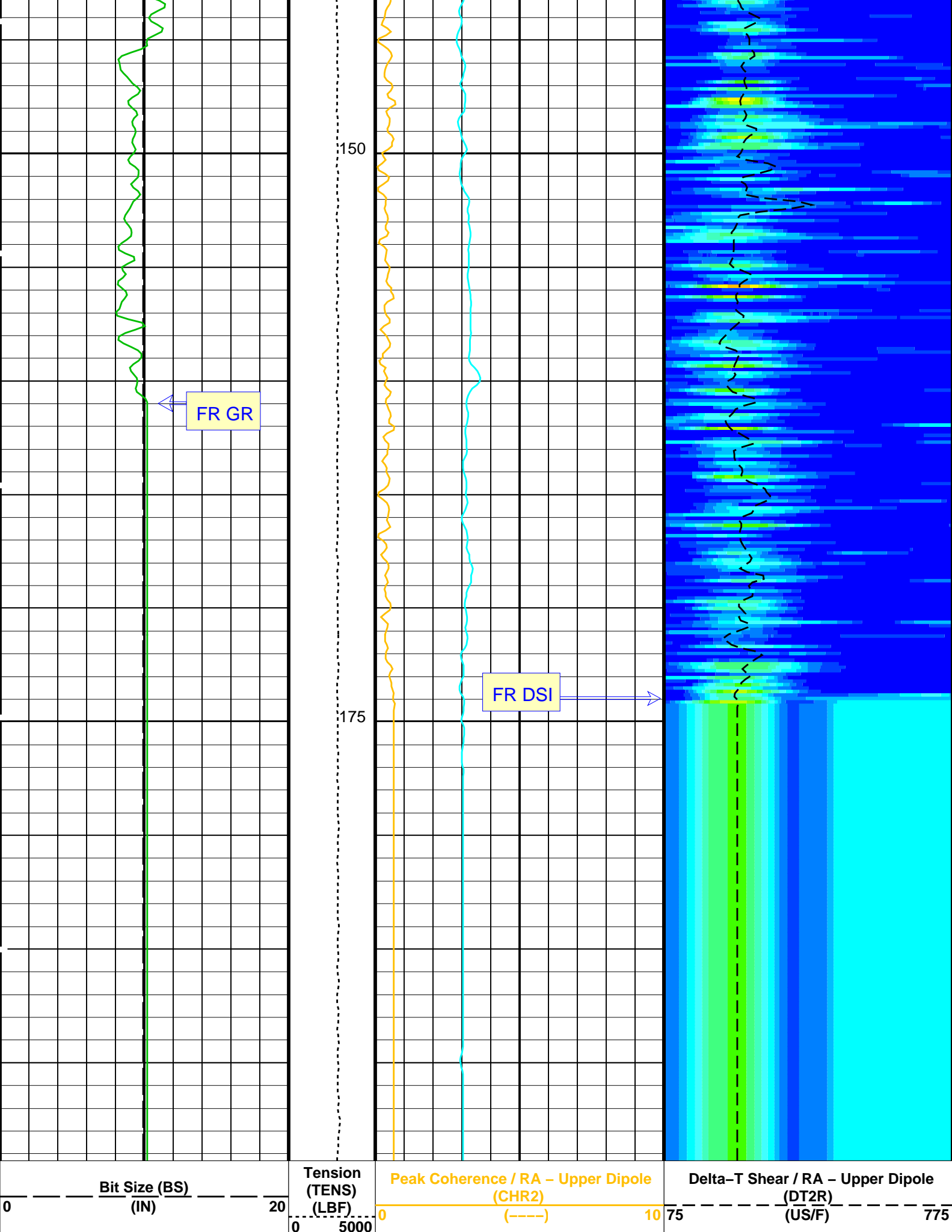
PIP SUMMARY

Time Mark Every 60 S









Gamma Ray (GR_EDTC)		Sonic Velocity (SVEL)		Rec.Array U.Dipole Slow Proj. CVDL	
0	(GAPI)	150	1000	(M/S)	6000
				75	775
				(US/F)	

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	LFD_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	B.3–1.5K	
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	–594.0	M
PP	Playback Processing	NORMAL	
Format: DSST_UPPER_DIPOLE_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 28-Sep-2012 20:08			
OP System Version: 19C0–187			
MSS_LDEO–A	19C0–187	HRLT–B	19C0–187
DSST–B	19C0–187	HNGC–B	19C0–187
HNGS–BA	19C0–187	EDTC–B	SKK–5169–EDTCB
Input DLIS Files			
DEFAULT	MSS_LDEO_HRLA_DSI_007LUP	FN:6	PRODUCER 28-Sep-2012 00:21 788.7 M 579.3 M
Output DLIS Files			
DEFAULT	MSS_LDEO_HRLA_DSI_011PUP	FN:10	PRODUCER 28-Sep-2012 20:08
CLIENT	MSS_LDEO_HRLA_DSI_011PUC	FN:11	CUSTOMER 28-Sep-2012 20:08

MAXIS Field Log

Input DLIS Files

DEFAULT	Flip_MSS_LDEO_HRLA_020PUP	PRODUCER	28-Sep-2012 20:28	153.0 M	-10.1 M
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Output DLIS Files

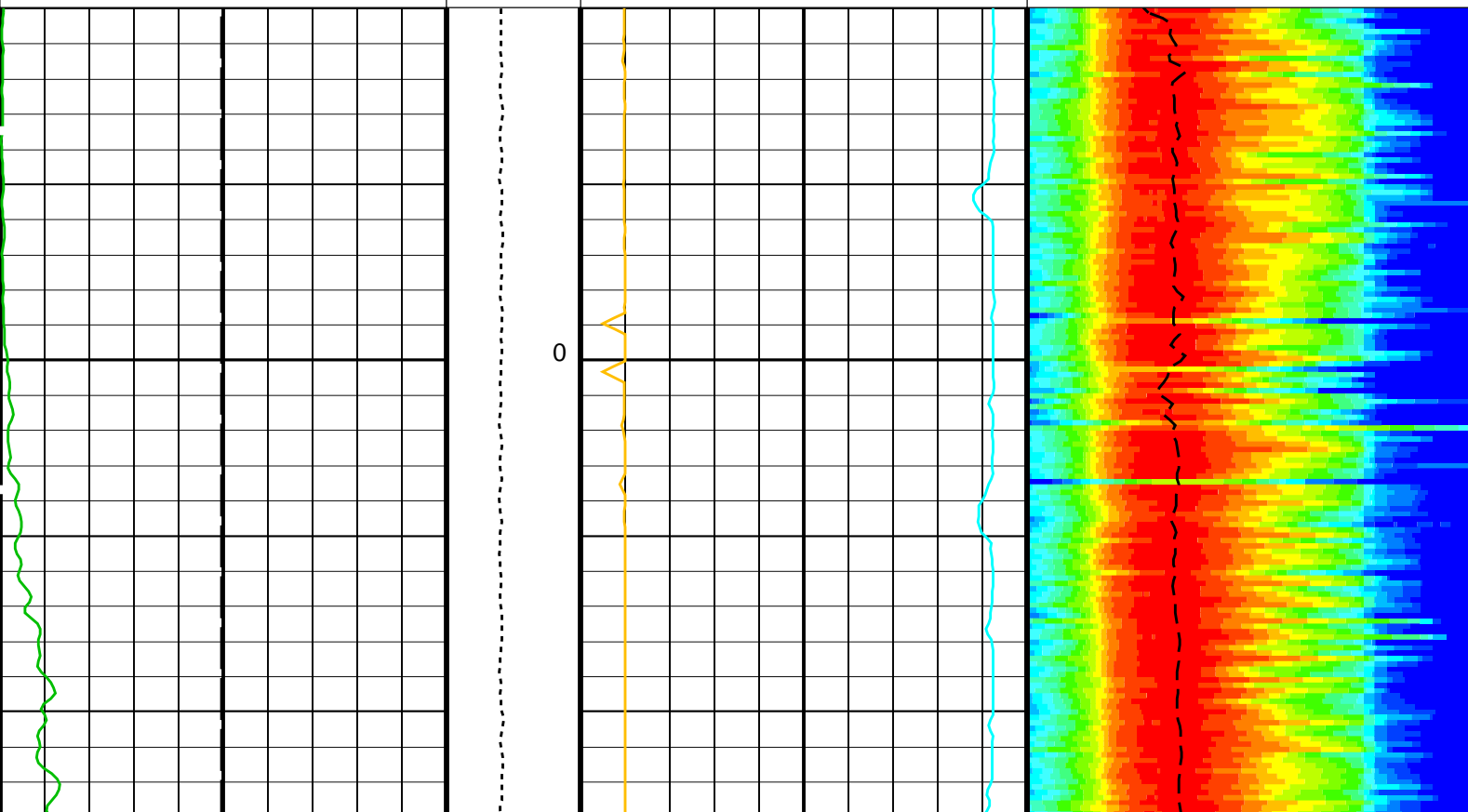
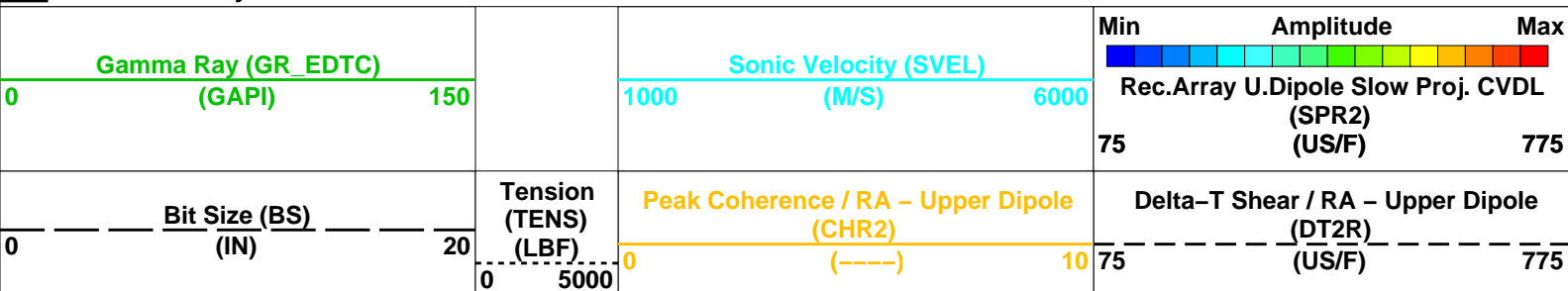
DEFAULT	MSS_LDEO_HRLA_DSI_021PUP	FN:26	PRODUCER	28-Sep-2012 20:29	153.0 M	-10.1 M
CLIENT	MSS_LDEO_HRLA_DSI_021PUC	FN:27	CUSTOMER	28-Sep-2012 20:29	153.0 M	-10.1 M

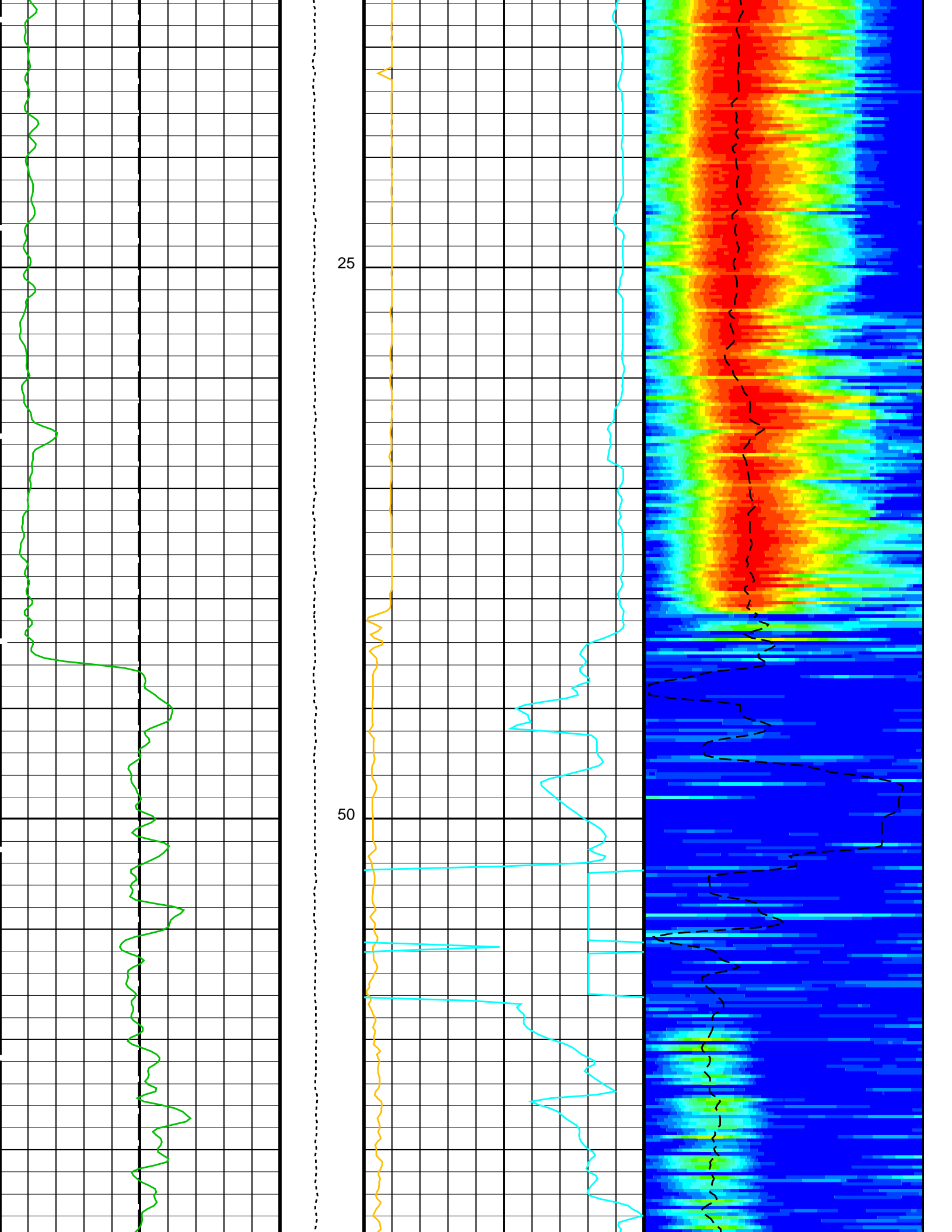
OP System Version: 19C0-187

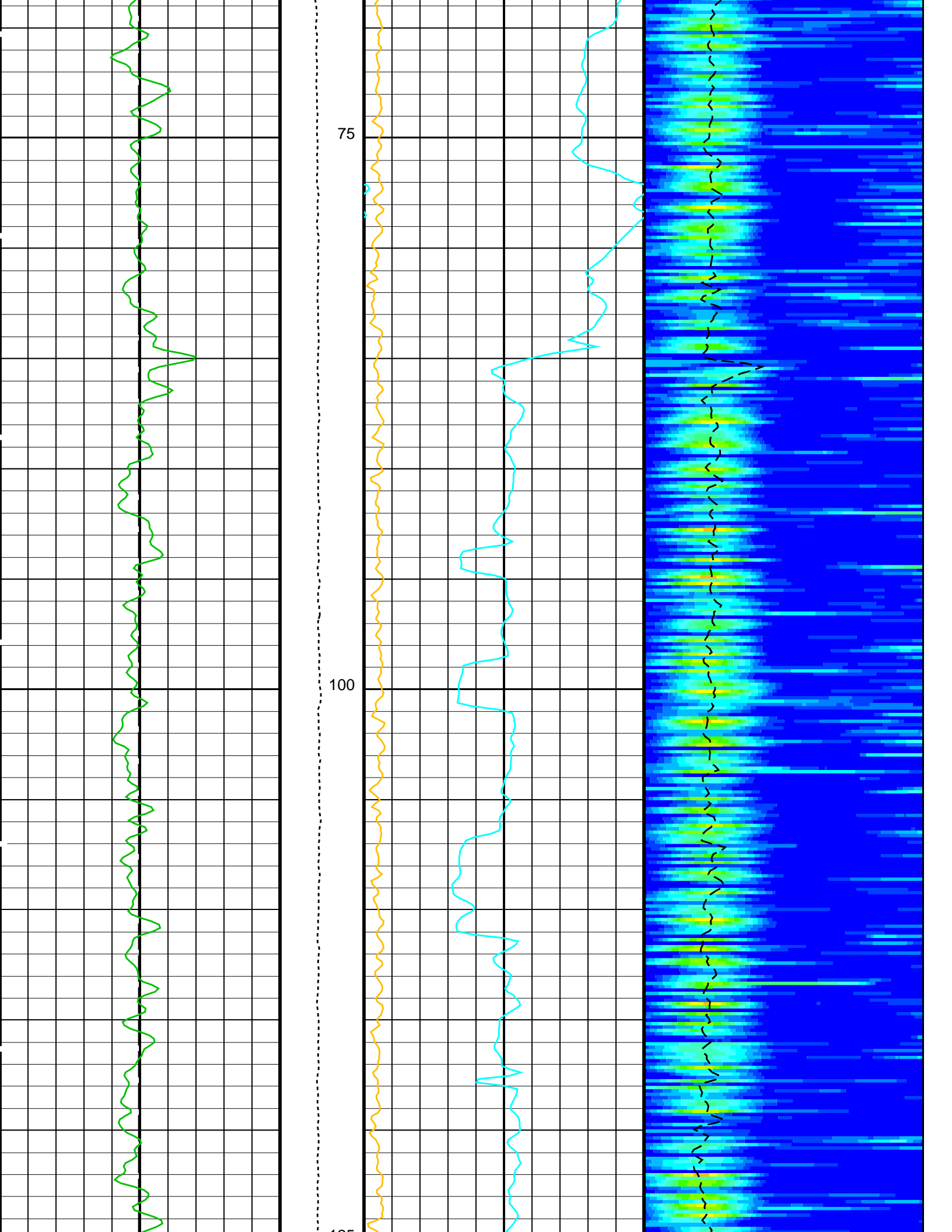
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

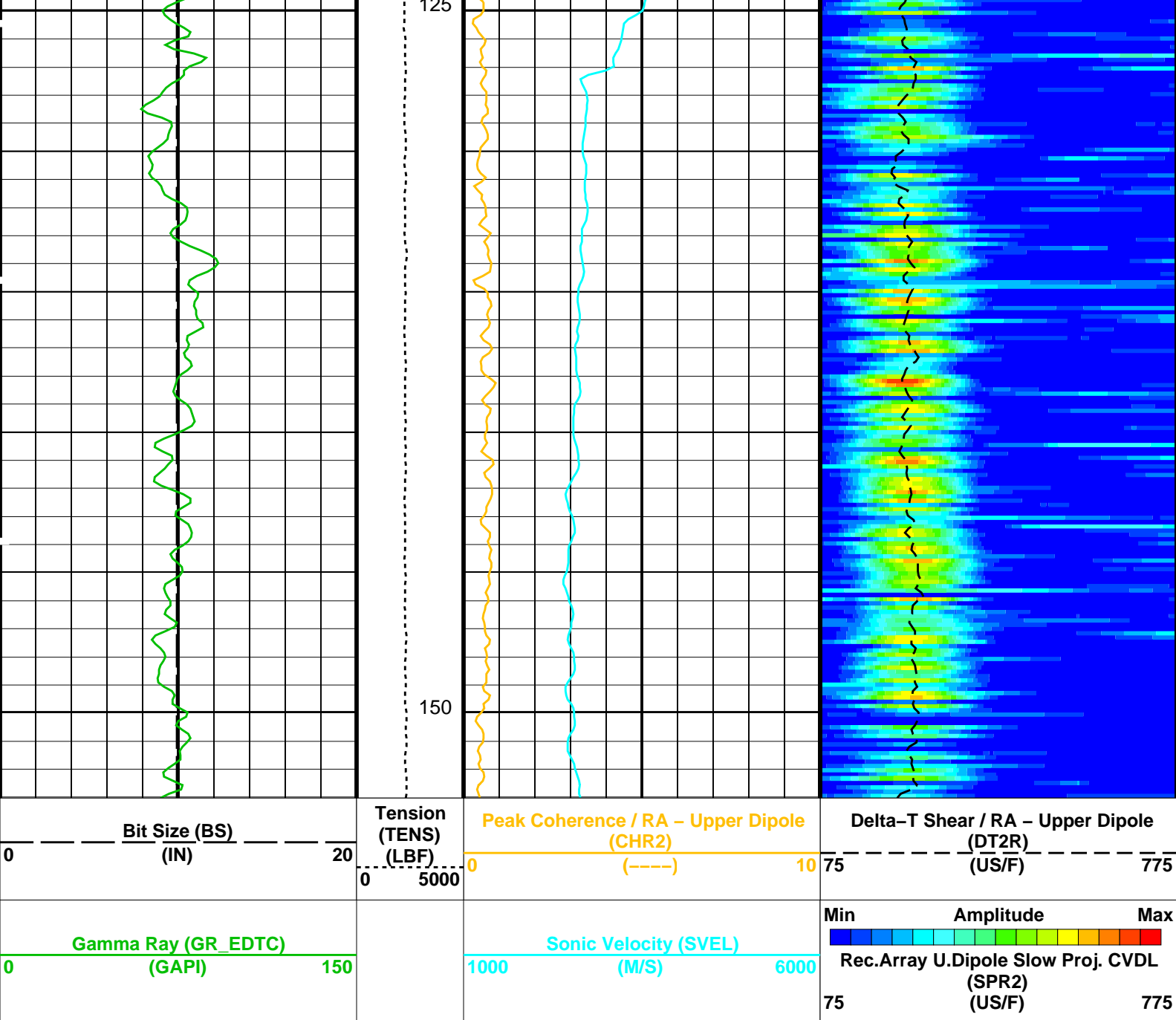
PIP SUMMARY

Time Mark Every 60 S









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

RX00	Receiver Geometry	LFD_ODD	330	IN
SAM2	DSST Sonic Acquisition Mode 2 – Upper Dipole Mode	OFF		
SAMX	DSST Sonic Acquisition Mode X – Both Dipoles or Monopole Mode for Expert			
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	B.3–1.5K		
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		

Format: DSST_UPPER_DIPOLE_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 28-Sep-2012 20:29

OP System Version: 19C0-187

MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

Input DLIS Files

DEFAULT	Flip_MSS_LDEO_HRLA_020PUP	PRODUCER	28-Sep-2012 20:28	153.0 M	-10.1 M
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Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_DSI_021PUP	FN:26	PRODUCER	28-Sep-2012 20:29
CLIENT	MSS_LDEO_HRLA_DSI_021PUC	FN:27	CUSTOMER	28-Sep-2012 20:29

Schlumberger

Calibrations

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
High Resolution Laterolog Array – B Wellsite Calibration – HRLT M01							
Before: 20-Sep-2012 18:03 After: 20-Sep-2012 20:45							
HRLT M0-M1 Voltage Plus – 0	0	N/A	-320.1	-319.3	0.7999	9.681	UV
HRLT M0-M1 Voltage Plus – 1	0	N/A	-341.6	-338.6	2.980	9.681	UV
HRLT M0-M1 Voltage Plus – 2	0	N/A	-339.5	-337.3	2.248	9.681	UV
HRLT M0-M1 Voltage Plus – 3	0	N/A	-342.4	-340.5	1.922	9.681	UV
HRLT M0-M1 Voltage Plus – 4	0	N/A	-328.1	-327.0	1.090	9.681	UV
HRLT M0-M1 Voltage Plus – 5	0	N/A	-323.6	-322.7	0.8422	9.681	UV
HRLT M0-M1 Voltage Plus – 6	0	N/A	332.2	329.8	-2.436	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 M01

High Resolution Laterolog Array – B Wellsite Calibration – HRLT M12
Before: 20-Sep-2012 18:03 After: 20-Sep-2012 20:45

HRLT M1-M2 Voltage Plus – 0	0	N/A	1758	1755	-2.932	53.42	UV
HRLT M1-M2 Voltage Plus – 1	0	N/A	1876	1860	-16.31	53.42	UV
HRLT M1-M2 Voltage Plus – 2	0	N/A	1860	1848	-11.92	53.42	UV
HRLT M1-M2 Voltage Plus – 3	0	N/A	1876	1866	-9.832	53.42	UV
HRLT M1-M2 Voltage Plus – 4	0	N/A	1799	1794	-5.057	53.42	UV
HRLT M1-M2 Voltage Plus – 5	0	N/A	1776	1772	-3.489	53.42	UV
HRLT M1-M2 Voltage Plus – 6	0	N/A	-1832	-1820	12.60	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: 20-Sep-2012 18:03 After: 20-Sep-2012 20:45

HRLT M2-M3 Voltage Plus – 0	0	N/A	1745	1741	-3.911	53.42	UV
HRLT M2-M3 Voltage Plus – 1	0	N/A	1875	1857	-17.45	53.42	UV
HRLT M2-M3 Voltage Plus – 2	0	N/A	1860	1847	-13.26	53.42	UV
HRLT M2-M3 Voltage Plus – 3	0	N/A	1879	1868	-10.97	53.42	UV
HRLT M2-M3 Voltage Plus – 4	0	N/A	1796	1789	-6.424	53.42	UV
HRLT M2-M3 Voltage Plus – 5	0	N/A	1773	1769	-4.405	53.42	UV
HRLT M2-M3 Voltage Plus – 6	0	N/A	-1819	-1805	13.85	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: 20-Sep-2012 18:03 After: 20-Sep-2012 20:45

HRLT A3-A4 Voltage Plus – 0	0	N/A	68580	68470	-107.9	2100	UV
HRLT A3-A4 Voltage Plus – 1	0	N/A	73460	72830	-631.8	2100	UV
HRLT A3-A4 Voltage Plus – 2	0	N/A	73170	72710	-458.4	2100	UV
HRLT A3-A4 Voltage Plus – 3	0	N/A	74220	73830	-386.3	2100	UV
HRLT A3-A4 Voltage Plus – 4	0	N/A	70890	70690	-197.9	2100	UV
HRLT A3-A4 Voltage Plus – 5	0	N/A	70020	69890	-123.6	2100	UV
HRLT A3-A4 Voltage Plus – 6	0	N/A	-70280	-69810	468.9	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: 20-Sep-2012 18:03 After: 20-Sep-2012 20:45

HRLT A4-A5 Voltage Plus – 0	0	N/A	68870	68760	-110.4	2100	UV
HRLT A4-A5 Voltage Plus – 1	0	N/A	73860	73240	-616.3	2100	UV
HRLT A4-A5 Voltage Plus – 2	0	N/A	73540	73080	-459.3	2100	UV
HRLT A4-A5 Voltage Plus – 3	0	N/A	74570	74180	-394.7	2100	UV
HRLT A4-A5 Voltage Plus – 4	0	N/A	71190	70990	-199.9	2100	UV
HRLT A4-A5 Voltage Plus – 5	0	N/A	70310	70180	-130.1	2100	UV
HRLT A4-A5 Voltage Plus – 6	0	N/A	-70670	-70200	471.5	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: 20-Sep-2012 18:03 After: 20-Sep-2012 20:45

HRLT A5-A6 Voltage Plus – 0	0	N/A	68760	68650	-113.5	2100	UV
HRLT A5-A6 Voltage Plus – 1	0	N/A	73580	72960	-610.8	2100	UV
HRLT A5-A6 Voltage Plus – 2	0	N/A	73290	72840	-458.4	2100	UV
HRLT A5-A6 Voltage Plus – 3	0	N/A	74370	74000	-375.0	2100	UV
HRLT A5-A6 Voltage Plus – 4	0	N/A	71050	70850	-198.5	2100	UV
HRLT A5-A6 Voltage Plus – 5	0	N/A	70190	70050	-145.6	2100	UV
HRLT A5-A6 Voltage Plus – 6	0	N/A	-70390	-69900	494.1	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: 20-Sep-2012 18:03 After: 20-Sep-2012 20:45

HRLT Torpedo-M0 Voltage – 0	0	N/A	-68440	-68340	106.0	2100	UV
HRLT Torpedo-M0 Voltage – 1	0	N/A	-73930	-73290	640.7	2100	UV
HRLT Torpedo-M0 Voltage – 2	0	N/A	-73610	-73150	462.2	2100	UV
HRLT Torpedo-M0 Voltage – 3	0	N/A	-74670	-74280	396.4	2100	UV
HRLT Torpedo-M0 Voltage – 4	0	N/A	-71250	-71050	203.0	2100	UV
HRLT Torpedo-M0 Voltage – 5	0	N/A	-70360	-70210	147.7	2100	UV
HRLT Torpedo-M0 Voltage – 6	0	N/A	70680	70180	-490.6	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: 20-Sep-2012 18:03 After: 20-Sep-2012 20:45

HRLT Bridle#9-M0 Voltage – 0	0	N/A	-68430	-68320	110.2	2100	UV
HRLT Bridle#9-M0 Voltage – 1	0	N/A	-73910	-73280	637.2	2100	UV
HRLT Bridle#9-M0 Voltage – 2	0	N/A	-73590	-73130	456.7	2100	UV
HRLT Bridle#9-M0 Voltage – 3	0	N/A	-74650	-74260	384.8	2100	UV
HRLT Bridle#9-M0 Voltage – 4	0	N/A	-71250	-71040	204.3	2100	UV
HRLT Bridle#9-M0 Voltage – 5	0	N/A	-70340	-70210	134.8	2100	UV
HRLT Bridle#9-M0 Voltage – 6	0	N/A	70650	70160	-490.6	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: 20-Sep-2012 18:03 After: 20-Sep-2012 20:45

HRLT Source Current Plus – 0	0	N/A	285.3	284.9	-0.3990	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: 20–Sep–2012 18:03 After: 20–Sep–2012 20:45

HRLT Vertical Voltage PI – 0	0	N/A	–322.3	–321.4	0.8523	9.681	UV
HRLT Vertical Voltage PI – 1	0	N/A	–335.6	–332.5	3.175	9.681	UV
HRLT Vertical Voltage PI – 2	0	N/A	–332.8	–330.4	2.353	9.681	UV
HRLT Vertical Voltage PI – 3	0	N/A	–333.9	–331.9	2.034	9.681	UV
HRLT Vertical Voltage PI – 4	0	N/A	–317.3	–316.2	1.169	9.681	UV
HRLT Vertical Voltage PI – 5	0	N/A	–328.1	–327.2	0.9027	9.681	UV
HRLT Vertical Voltage PI – 6	0	N/A	339.4	336.7	–2.633	9.681	UV
HRLT Vertical Voltage PI – 7	0	N/A	–322.7	–322.7	0	9.681	UV

Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 1 Check

Master: 15–Jul–2012 1:37 Before: 21–Sep–2012 1:23 After: 21–Sep–2012 1:28

Na 511 Peak Loc	40.00	39.55	39.64	39.63	–0.01205	1.000	
Na 511 Peak Res	15.50	15.74	14.62	14.61	–0.01343	2.000	%
High Voltage	1150	1192	1133	1131	–1.140	N/A	V
Na 1785 Peak Loc	142.6	141.9	143.3	142.5	–0.8368	7.000	
Na 1785 Peak Res	8.500	8.399	8.136	7.484	–0.6517	2.000	%
Temperature	15.50	30.02	5.829	5.848	0.01951	N/A	DEGC
Na Count Rate	45.00	18.00	15.48	15.98	0.5035	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check

Master: 15–Jul–2012 1:37 Before: 21–Sep–2012 1:23 After: 21–Sep–2012 1:28

Na 511 Peak Loc	40.00	39.55	39.64	39.78	0.1437	1.000	
Na 511 Peak Res	15.50	16.74	16.05	14.99	–1.060	2.000	%
High Voltage	1150	1112	1067	1067	0.09460	N/A	V
Na 1785 Peak Loc	142.6	142.2	141.8	141.9	0.09863	7.000	
Na 1785 Peak Res	8.500	9.140	8.464	9.198	0.7344	2.000	%
Temperature	15.50	30.92	6.453	6.596	0.1431	N/A	DEGC
Na Count Rate	45.00	18.43	15.49	16.22	0.7288	8.000	CPS

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

Master: 15–Jul–2012 1:37 Before: 21–Sep–2012 1:23 After: 21–Sep–2012 1:28

Coincidence Count Rate Ratio	1.000	0.9742	0.9968	0.9870	–0.009778	0.05000	
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Enhanced DTS Cartridge Wellsite Calibration – EDTC Accelerometer Calibration

Before: 20–Sep–2012 18:08

EDTC Z–Axis Acceleration	9.810	N/A	9.852	N/A	N/A	N/A	M/S2
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Enhanced DTS Cartridge Wellsite Calibration – Detector Calibration

Before: 20–Sep–2012 18:08 After: 20–Sep–2012 21:12

Gamma Ray (Jig – Bkg)	159.7	N/A	159.7	162.2	2.544	14.52	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	167.6	2.629	15.00	GAPI

High Resolution Laterolog Array – B / Equipment Identification

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		–320.1	–322.7	–280.7	–379.7
	After		–319.3			
1	Before		–341.6	–322.7	–280.7	–379.7
	After		–338.6			
2	Before		–339.5	–322.7	–280.7	–379.7
	After		–337.3			







Before: 20-Sep-2012 18:03
After: 20-Sep-2012 20:45

Before: 20-Sep-2012 18:03
After: 20-Sep-2012 20:45

4	Before		1796	1781	2095	1549
	After		1789			
5	Before		1773	1781	2095	1549
	After		1769			
6	Before		-1819	-1781	-1549	-2095
	After		-1805			
7	Before		1781	1781	2095	1549
	After		1781			
(Minimum) (Nominal) (Maximum)						
Before: 20-Sep-2012 18:03						
After: 20-Sep-2012 20:45						

















High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V34						
Idx	Phase	HRLT A3–A4 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68580	70000	82360	60900
	After		68470			
1	Before		73460	70000	82360	60900
	After		72830			
2	Before		73170	70000	82360	60900
	After		72710			
3	Before		74220	70000	82360	60900
	After		73830			
4	Before		70890	70000	82360	60900
	After		70690			
5	Before		70020	70000	82360	60900
	After		69890			
6	Before		-70280	-70000	-60900	-82360
	After		-69810			
7	Before		70000	70000	82360	60900
	After		70000			
(Minimum) (Nominal) (Maximum)						
Before: 20-Sep-2012 18:03						
After: 20-Sep-2012 20:45						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V45						
Idx	Phase	HRLT A4–A5 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68870	70000	82360	60900
	After		68760			
1	Before		73860	70000	82360	60900
	After		73240			
2	Before		73540	70000	82360	60900
	After		73080			
3	Before		74570	70000	82360	60900
	After		74180			
4	Before		71190	70000	82360	60900
	After		70990			

5	Before		70310	70000	82360	60900
	After		70180			
6	Before		-70670	-70000	-60900	-82360
	After		-70200			
7	Before		70000	70000	82360	60900
	After		70000			
(Minimum) (Nominal) (Maximum)						













Before: 20-Sep-2012 18:03





After: 20-Sep-2012 20:45

















High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V56						
Idx	Phase	HRLT A5–A6 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68760	70000	82360	60900
	After		68650			
1	Before		73580	70000	82360	60900
	After		72960			
2	Before		73290	70000	82360	60900
	After		72840			
3	Before		74370	70000	82360	60900
	After		74000			
4	Before		71050	70000	82360	60900
	After		70850			
5	Before		70190	70000	82360	60900
	After		70050			
6	Before		-70390	-70000	-60900	-82360
	After		-69900			
7	Before		70000	70000	82360	60900
	After		70000			
(Minimum) (Nominal) (Maximum)						















Before: 20-Sep-2012 18:03



After: 20-Sep-2012 20:45

















High Resolution Laterolog Array – B Wellsite Calibration						
HRLT VTP						
Idx	Phase	HRLT Torpedo–M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68440	-70000	-60900	-82360
	After		-68340			
1	Before		-73930	-70000	-60900	-82360
	After		-73290			
2	Before		-73610	-70000	-60900	-82360
	After		-73150			
3	Before		-74670	-70000	-60900	-82360
	After		-74280			
4	Before		-71250	-70000	-60900	-82360
	After		-71050			
5	Before		-70360	-70000	-60900	-82360
	After		-70210			

6	Before		70680	70000	82360	60900
	After		70180			
7	Before		-70000	-70000	-60900	-82360
	After		-70000			
(Minimum) (Nominal) (Maximum)						
Before: 20-Sep-2012 18:03						
After: 20-Sep-2012 20:45						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT VBD						
Idx	Phase	HRLT Bridle#9–M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68430	-70000	-60900	-82360
	After		-68320			
1	Before		-73910	-70000	-60900	-82360
	After		-73280			
2	Before		-73590	-70000	-60900	-82360
	After		-73130			
3	Before		-74650	-70000	-60900	-82360
	After		-74260			
4	Before		-71250	-70000	-60900	-82360
	After		-71040			
5	Before		-70340	-70000	-60900	-82360
	After		-70210			
6	Before		70650	70000	82360	60900
	After		70160			
7	Before		-70000	-70000	-60900	-82360
	After		-70000			
(Minimum) (Nominal) (Maximum)						
Before: 20-Sep-2012 18:03						
After: 20-Sep-2012 20:45						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT ISO						
Idx	Phase	HRLT Source Current Plus UA	Value	Nominal	Maximum	Minimum
0	Before		285.3	284.0	334.1	247.0
	After		284.9			
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: 20-Sep-2012 18:03						
After: 20-Sep-2012 20:45						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT MV						
Idx	Phase	HRLT Vertical Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-322.3	-322.7	-280.7	-379.7
	After		-321.4			
1	Before		-335.6	-322.7	-280.7	-379.7
	After		-332.5			
2	Before		-332.8	-322.7	-280.7	-379.7
	After		-330.4			
3	Before		-333.9	-322.7	-280.7	-379.7
	After		-331.9			
4	Before		-317.3	-322.7	-280.7	-379.7
	After		-316.2			
5	Before		-328.1	-322.7	-280.7	-379.7
	After		-327.2			
6	Before		339.4	322.7	379.7	280.7
	After		336.7			
7	Before		-322.7	-322.7	-280.7	-379.7
	After		-322.7			
(Minimum) (Nominal) (Maximum)						
Before: 20-Sep-2012 18:03						
After: 20-Sep-2012 20:45						

Hostile Natural Gamma Ray Cartridge – B / Equipment Identification










Primary Equipment:
HNGC Cartridge HNGC – B 300

Auxiliary Equipment:
HNGC Housing HNGH – A 115

Hostile Natural Gamma Ray Sonde / Equipment Identification




Primary Equipment:
HNGS Sonde HNGS – BA 194

Auxiliary Equipment:
HNGS Sonde Housing HNSH – BA 205
Gamma Source Radioactive GSR – U 616008

Hostile Natural Gamma Ray Sonde Wellsite Calibration								
Detector 1 Check								
Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Master		39.55	Master		15.74	Master		1192
Before		39.64	Before		14.62	Before		1133
After		39.63	After		14.61	After		1131
37.50 40.00 43.50			12.00 15.50 19.00			900.0 1150 1600		

(Minimum) (Nominal) (Maximum)			(Minimum) (Nominal) (Maximum)			(Minimum) (Nominal) (Maximum)					
Phase	Na 1785 Peak Loc		Value	Phase	Na 1785 Peak Res %		Value	Phase	Temperature DEGC		Value
Master			141.9	Master			8.399	Master			30.02
Before			143.3	Before			8.136	Before			5.829
After			142.5	After			7.484	After			5.848
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			18.00								
Before			15.48								
After			15.98								
10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)											
Master: 15-Jul-2012 1:37				Before: 21-Sep-2012 1:23				After: 21-Sep-2012 1:28			

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			39.55	Master			16.74	Master			1112			
Before			39.64	Before			16.05	Before			1067			
After			39.78	After			14.99	After			1067			
37.50 (Minimum)			40.00 (Nominal)	43.50 (Maximum)			12.00 (Minimum)	15.50 (Nominal)	19.00 (Maximum)			900.0 (Minimum)	1150 (Nominal)	1600 (Maximum)
Phase	Na 1785 Peak Loc		Value	Phase	Na 1785 Peak Res %		Value	Phase	Temperature DEGC		Value			
Master			142.2	Master			9.140	Master			30.92			
Before			141.8	Before			8.464	Before			6.453			
After			141.9	After			9.198	After			6.596			
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			18.43											
Before			15.49											
After			16.22											
10.00 (Minimum)			45.00 (Nominal)									100.0 (Maximum)		
Master: 15-Jul-2012 1:37				Before: 21-Sep-2012 1:23				After: 21-Sep-2012 1:28						

Hostile Natural Gamma Ray Sonde Wellsite Calibration			
Ratio Of Detector 1 To Detector 2			
Phase	Coincidence Count Rate Ratio	Value	
Master		0.9742	
Before		0.9968	
After		0.9870	
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)
Master: 15-Jul-2012 1:37			
Before: 21-Sep-2012 1:23			
After: 21-Sep-2012 1:28			

Enhanced DTS Cartridge / Equipment Identification

Primary Equipment:


EDTC Gamma Ray Detector
Enhanced DTS Cartridge







EDTG - A/B 77693
EDTC - B 8529

Auxiliary Equipment:

EDTC Housing

EDTH - B 8528

EDTC Accelerometer Calibration		
Phase	EDTC Z-Axis Acceleration M/S2	Value
Before		9.852
	9.610 (Minimum) 9.810 (Nominal) 10.01 (Maximum)	
Before: 20-Sep-2012 18:08		

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			4.007	Before			159.7	Before			165.0
After			4.426	After			162.2	After			167.6
	0 (Minimum) 30.00 (Nominal) 120.0 (Maximum)				145.2 (Minimum) 159.7 (Nominal) 174.2 (Maximum)				150.0 (Minimum) 165.0 (Nominal) 180.0 (Maximum)		
Before: 20-Sep-2012 18:08				After: 20-Sep-2012 21:12							

Company: **Lamont Doherty Earth Observatory**
Shell
 Well: **Expedition 344S, U0060A (USC60)**
 Field: **Baffin Bay**
 Rig: **JOIDES Resolution**
 Country: **USA**

Schlumberger

DSI Sonic Imager
 Upper Dipole