



Company: Lamont Doherty Earth Observatory

Well: Expedition 340, Site U1395B

Field: Lesser Antilles Volcanism and Landslides

Rig: JOIDES Resolution Ocean: Caribbean

Rig: Field: Location: Well: Company:	JOIDES Resolution Lesser Antilles Volcanism and Landslides Latitude: N 16° 29.60' Expedition 340, Site U1395B Lamont Doherty Earth Observatory			
	High Resolution Laterolog Array Log Quality Control			
	LOCATION		Elev.: K.B. -1211.60 m G.L. 0.00 m D.F. -1211.60 m	
	Permanent Datum: Sea Floor		Elev.: 0.00 m	
Log Measured From: Sea Floor		0.00 m above Perm. Datum		
Drilling Measured From: Sea Floor				
API Serial No.		Max. Hole Devi. 0 deg	Longitude W 61° 57.09	Latitude N 16° 29.60'

Logging Date	16-Mar-2012		
Run Number	1		
Depth Driller	204 m		
Schlumberger Depth	203 m		
Bottom Log Interval	203 m		
Top Log Interval	0 m		
Casing Driller Size @ Depth	13.375 in	@	83 m
Casing Schlumberger	82 m		
Bit Size	11.438 in		
Type Fluid In Hole	Seawater		
MUD	Density	Viscosity	1.25 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	@ 21	@ 21
Maximum Recorded Temperatures	21 degC		
Circulation Stopped	Time	16-Mar-2012	12:00
Logger On Bottom	Time	16-Mar-2012	6:12
Unit Number	Location	625003	Houston
Recorded By	K. Swain		
Witnessed By	A. Slagle, S. Morgan		

	Run 1	Run 2	Run 3
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			
MUD	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: FMS
 OS2: MSS
 OS3: DSI
 OS4: HLDS
 OS5:

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

REMARKS: RUN NUMBER 1
 Hole drilled with APC/XCB coring bit and bottom hole assembly (BHA) 11 7/16" bit
 Lamont Magnetic Susceptibility (MSS) tool run in combination with HRLA/HLDS/HNGS
 4 knuckle joints decouple the eccentered HLDS and HNGS from the centered HRLA and MSS.
 MSS tool run but susceptibility data not available due to electronic problem.
 Log played back using a zone parameter for GCSE using input for BS or LCAL.
 BS is used where caliper is closing or closed. LCAL is used where caliper is valid.
 Density data is valid only where the caliper is open.

REMARKS: RUN NUMBER 2

RUN 1

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

LOGGED INTERVAL	START	STOP

RUN 2

SERVICE ORDER #: _____
 PROGRAM VERSION: _____
 FLUID LEVEL: _____

LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION




RUN 1

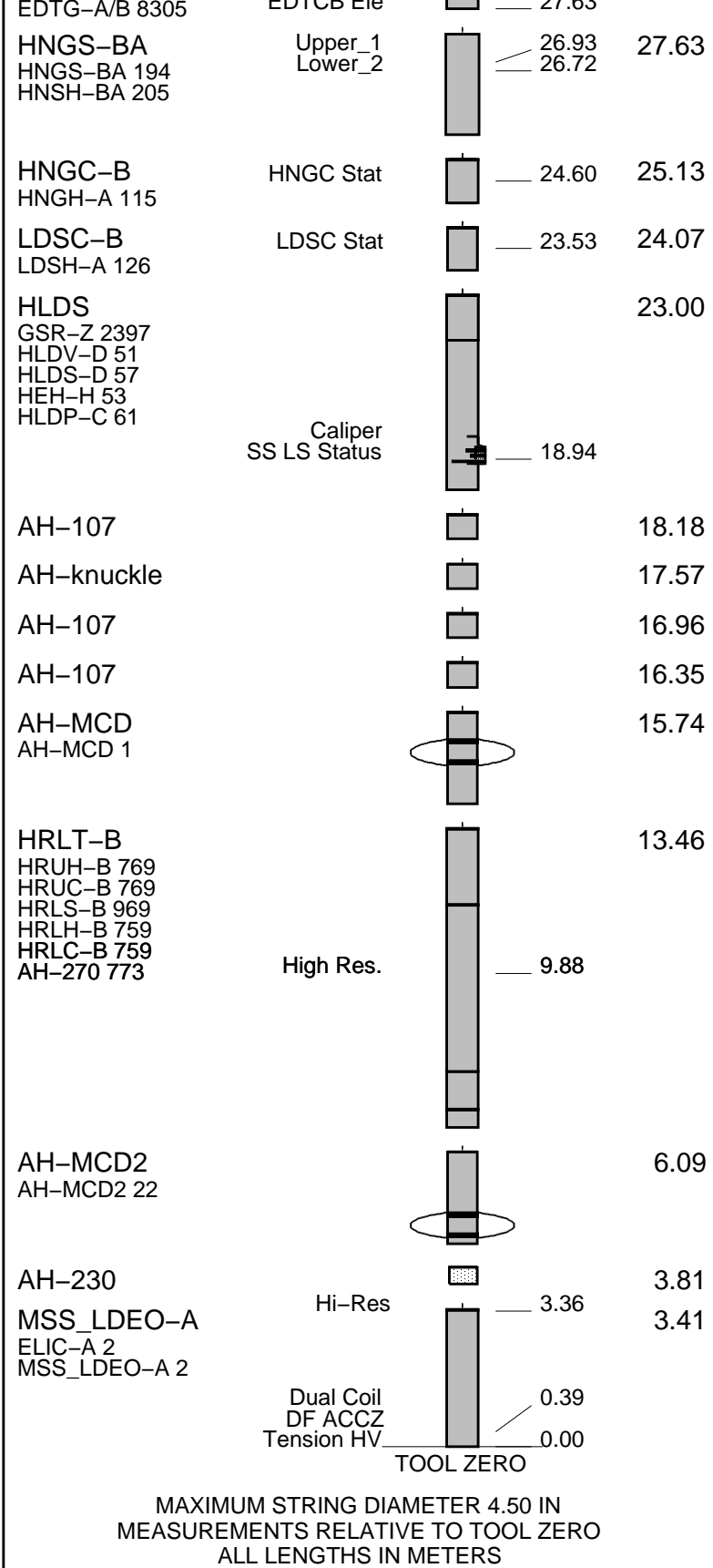
SURFACE EQUIPMENT

GSR-U 616008
 WITM (EDTS)-A 1

RUN 2

DOWNHOLE EQUIPMENT

LEH-QT			30.94
LEH-QT 301			
AH-369	MDSB_EDTC		29.61
	Mud Tempe		30.05
	CTEM		28.55
EDTC-B	Gamma Ray		27.98
EDTH-B 8303	EFTB DIAG		29.61
EDTC-B 8317	TelStatus		
	EDTCB_Ele		27.62



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

Kelly Bushing Elevation

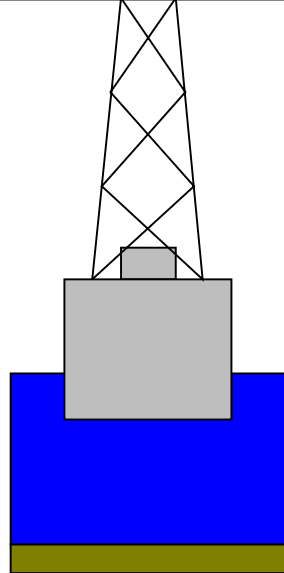
Derrick Floor Elevation

Mean Sea Level

-1211.6

-1211.6

-1200.6



4.1



0

3.80

83

11.43

204

Sea Floor

Open Hole

Total Depth

Input DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_036PUP	FN:50	PRODUCER	18-Mar-2012 15:05	1412.7 M	1191.5 M
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Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_038PUP	FN:52	PRODUCER	18-Mar-2012 15:13	203.5 M	-17.5 M
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OP System Version: 19C0-187

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

Changed Parameter Summary

DLIS Name	New Value	Previous Value	Depth & Time
GCSE	BS	BS	203.5 15:13:40

PIP SUMMARY

Time Mark Every 60 S

(RT_HRLT)		
0.2	(OHMM)	2000
(RM_HRLT)		
0.02	(OHMM)	200

(MONSYM5) () -4 (----) 4	(CCRA5) (----) 0.8 1.2	Inversion	(INVERR5) (----) -15 15	(RXO_HRLT) (OHMM) 2000
(MONSYM4) () -4 (----) 4	(CCRA4) (----) 0.8 1.2		(INVERR4) (----) -15 15	(RLA5) (OHMM) 2000
(MONSYM3) () -4 (----) 4	(CCRA3) (----) 0.8 1.2		(INVERR3) (----) -15 15	(RLA4) (OHMM) 2000
(MONSYM2) () -4 (----) 4	(CCRA2) (----) 0.8 1.2		(INVERR2) (----) -15 15	(RLA3) (OHMM) 2000
(MONSYM1) () -4 (----) 4	(CCRA1) (----) 0.8 1.2	Inversion Weight	(DI_HRLT) (IN) 6 26	(RLA2) (OHMM) 2000
Hardware	Borehole Correction	(WEI_FLAGS) (----) 0.4000 0.8000	(INVERR1) (----) -15 15	(BS) (IN) 6 26
			(RES_FLAGS) (----) 0.4000 0.8000	Tension (TENS) (LBF) 10000 0
				(RLA1) (OHMM) 2000

*** HRLT FLAG TRACKS ***

BLACK areas show that the c **2nd Pass, Sea Floor Depth Reference**

TRACK R3_LQC

INVERSION WEIGHT

Contribution from each hrlt channel in Inversion alorythm, and from left to right :

| Wei1 | Wei2 | Wei3 | Wei4 | Wei5 |

GREEN = OK

YELLOW = Contribution QUESTIONABLE

BLACK = Contribution UNRELIABLE

TRACK R5_LQC

RESISTIVITY QUALITY INDICATOR

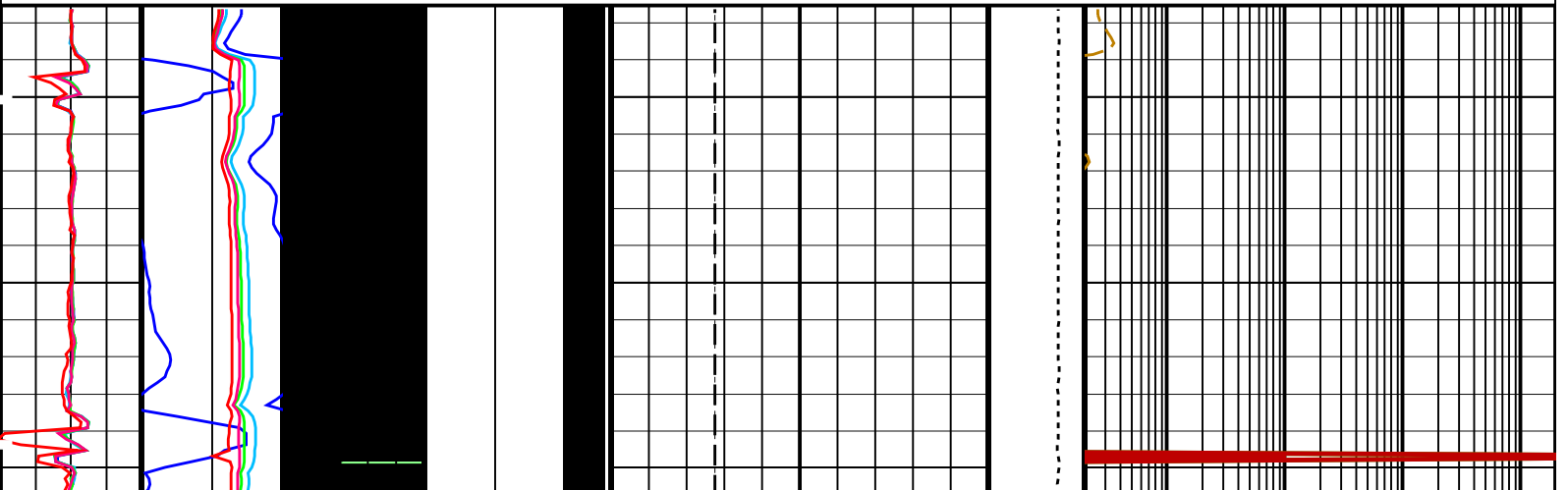
LQC flags on RXO_HRLT & RT_HRLT, and from left to right :

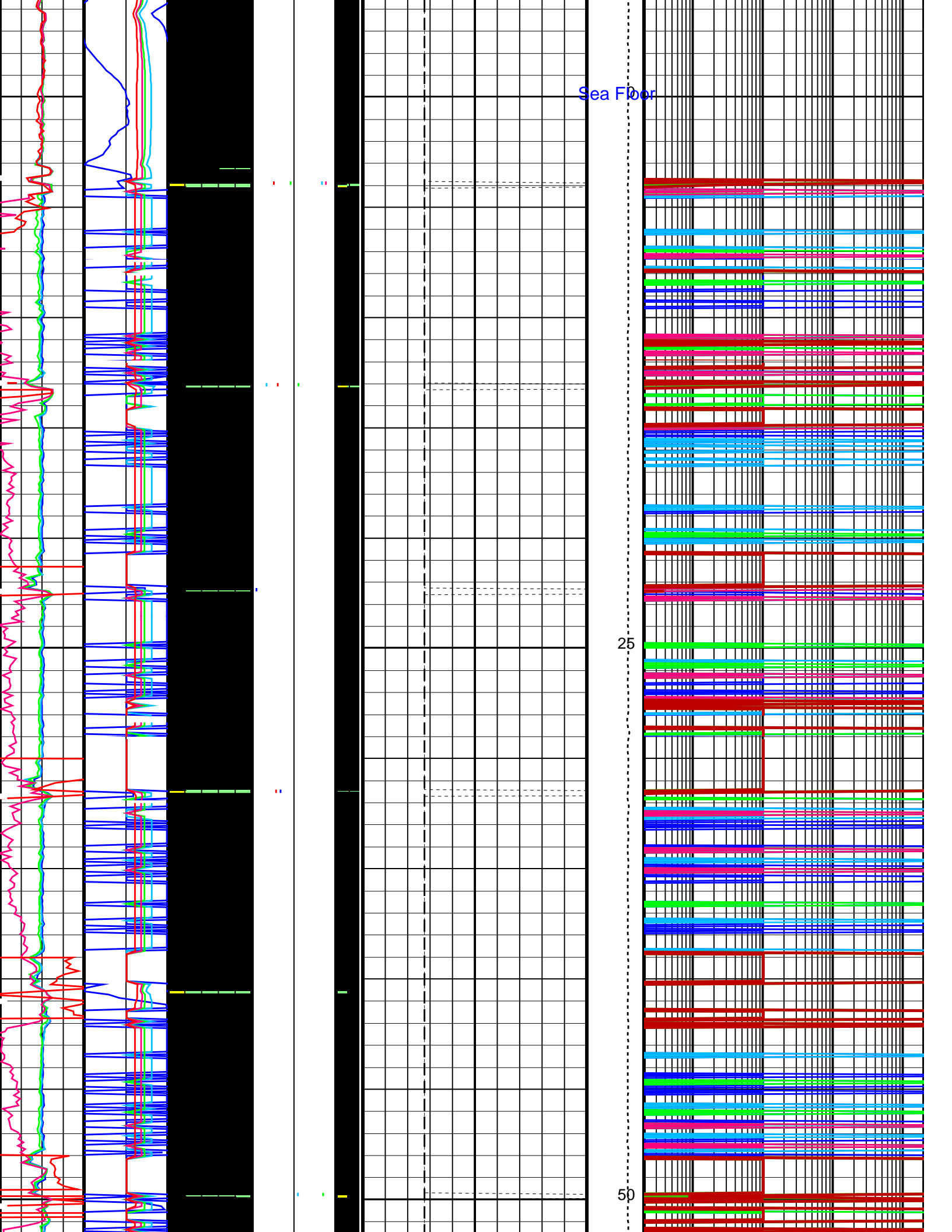
| RxoFlag | RTFlag |

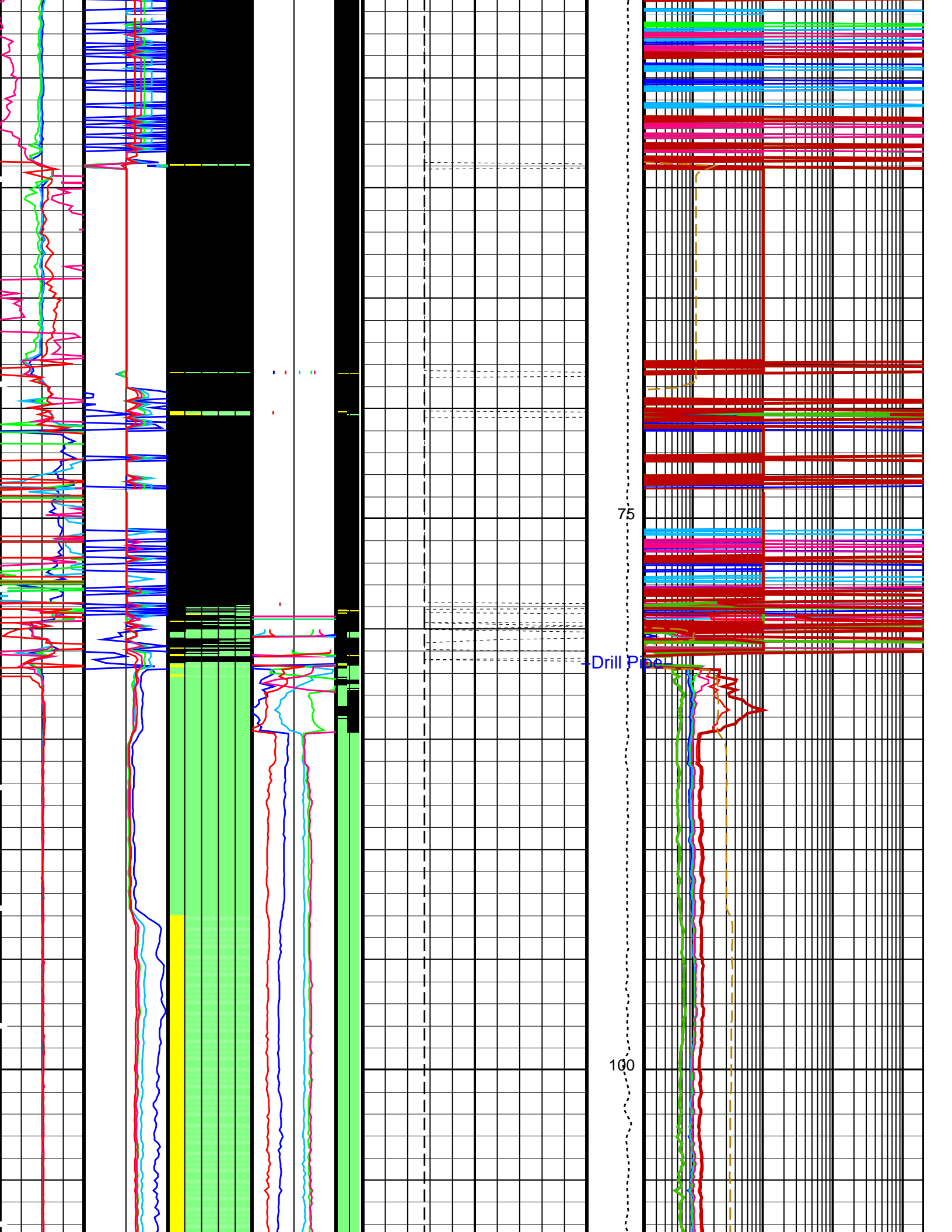
GREEN = OK

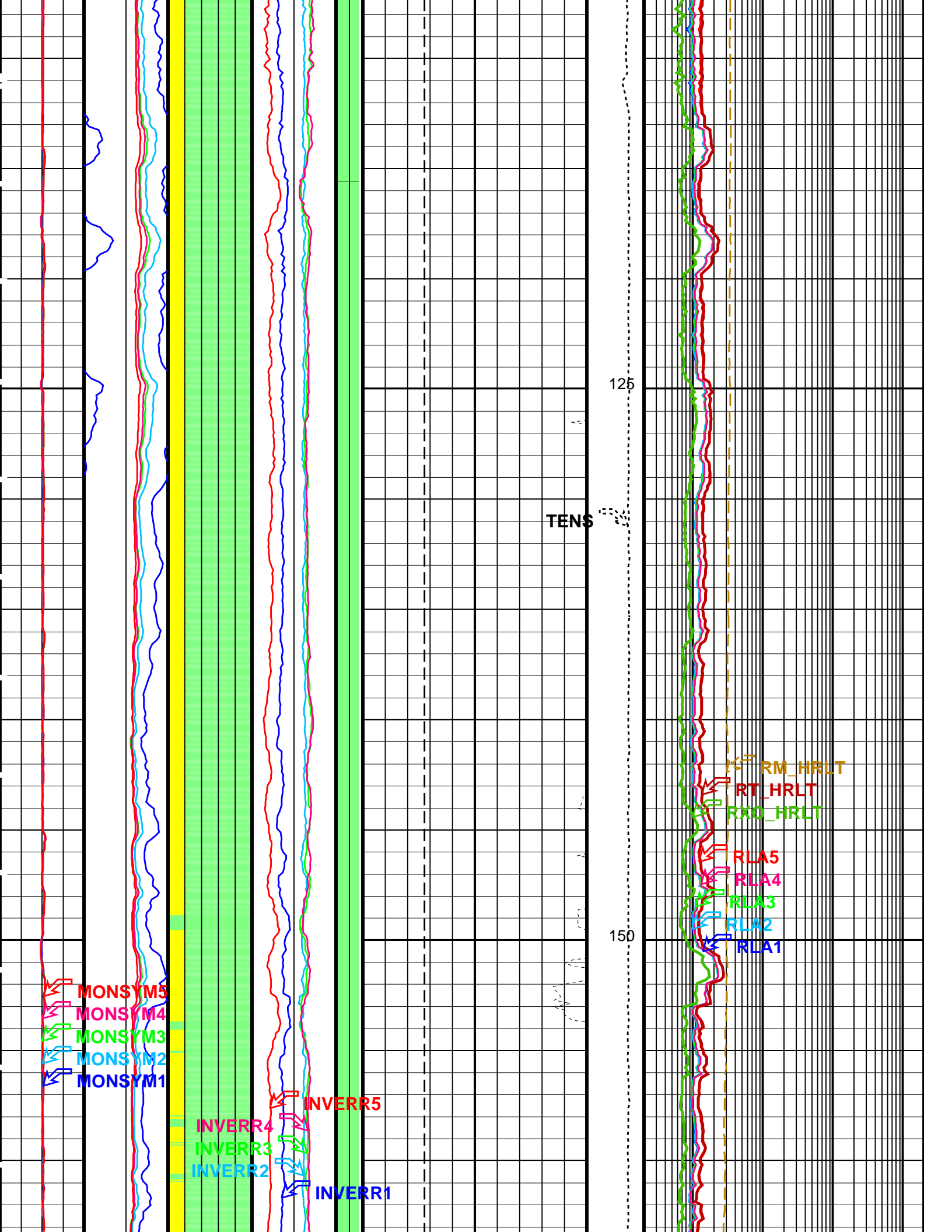
YELLOW = SHOULDER BED EFFECT

BLACK = NOK









TENS

125

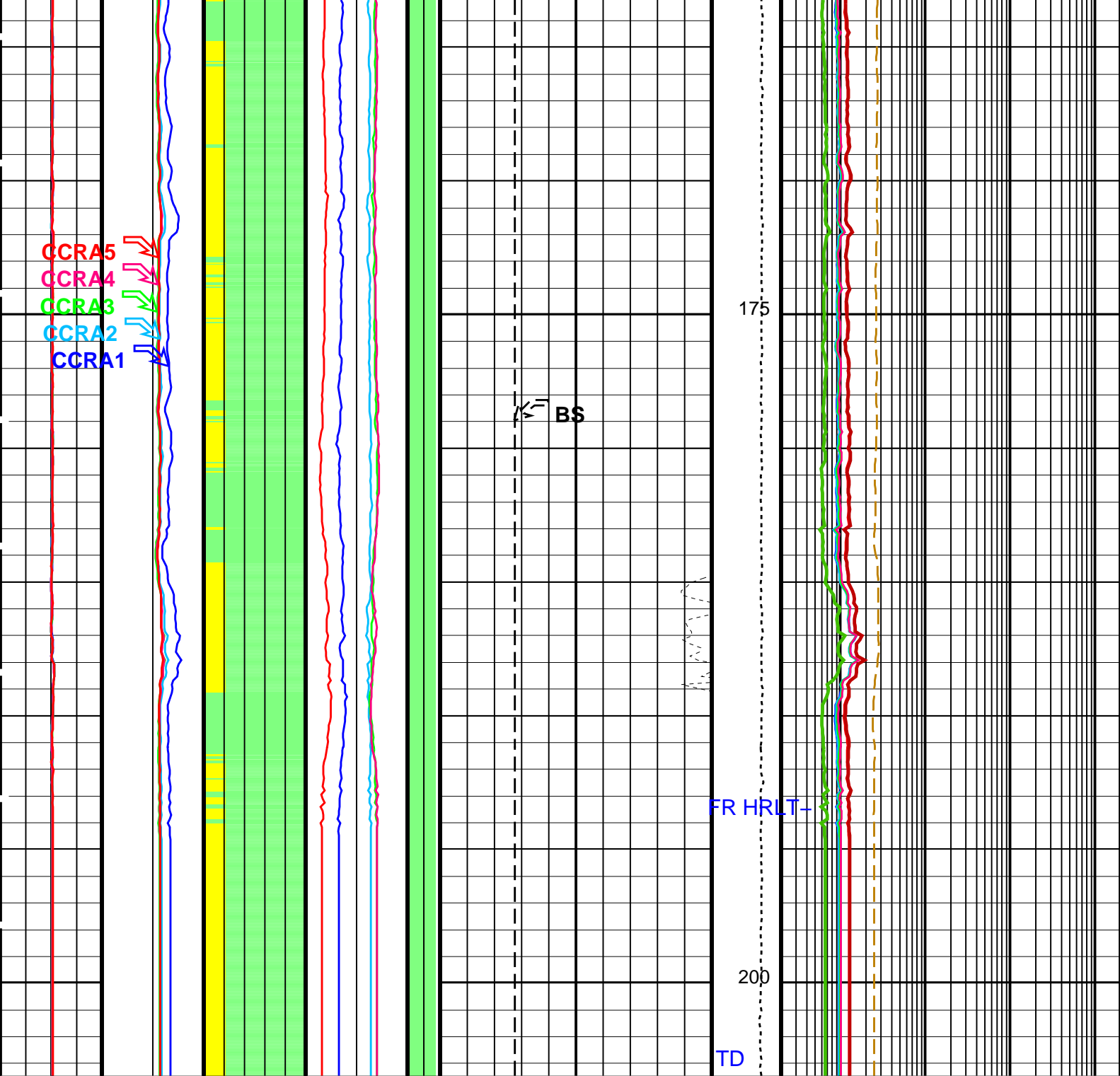
150

MONSYM5
MONSYM4
MONSYM3
MONSYM2
MONSYM1

INVERR4
INVERR3
INVERR2

INVERR5
INVERR1

RM_HRLT
RT_HRLT
RXD_HRLT
RLA5
RLA4
RLA3
RLA2
RLA1



*** HRLT FLAG TRACKS ***

BLACK areas show that the corresponding error flag is set.

2nd Pass, Sea Floor Depth Reference

TRACK R3_LQC

INVERSION WEIGHT

Contribution from each hrlt channel in Inversion algorithm, and from left to right :

| Wei1 | Wei2 | Wei3 | Wei4 | Wei5 |

GREEN = OK

YELLOW = Contribution QUESTIONABLE

BLACK = Contribution UNRELIABLE

TRACK R5_LQC

RESISTIVITY QUALITY INDICATOR

LQC flags on RXO_HRLT & RT_HRLT, and from left to right :

| RxoFlag | RTFlag |

GREEN = OK

YELLOW = SHOULDER BED EFFECT

BLACK = NOK

Hardware	Borehole Correction	(WEI_FLAGS) (----)	(INVERR1) (----)	(RE S FL AG S) (----)	(BS) (IN)	Tension (TENS) (LBF)	(RLA1) (OHMM)	2000
(MONSYM1)	(CCRA1)	Inversion Weight	(INVERR2)	(DI_HRLT)	(IN)	0.2	(RLA2) (OHMM)	2000
(MONSYM2)	(CCRA2)		(INVERR3)			0.2	(RLA3) (OHMM)	2000
(MONSYM3)	(CCRA3)		(INVERR4)			0.2	(RLA4) (OHMM)	2000
(MONSYM4)	(CCRA4)		(INVERR5)			0.2	(RLA5) (OHMM)	2000
(MONSYM5)	(CCRA5)	Inversion				0.2	(RXO_HRLT) (OHMM)	2000
						0.02	(RM_HRLT) (OHMM)	200
						0.2	(RT_HRLT) (OHMM)	2000

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HRLT-B: High Resolution Laterolog Array - B		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	21 DEGC
CALSTAT	HRLTB Calibration Status	SHALLOW_DONE
CALTEMP	HRLTB Calibration Temperature	27.2932 DEGC
FREQ0	HRLT Frequency Index for Mode 0	32
FREQ1	HRLT Frequency Index for Mode 1	128
FREQ2	HRLT Frequency Index for Mode 2	104
FREQ3	HRLT Frequency Index for Mode 3	86
FREQ4	HRLT Frequency Index for Mode 4	56
FREQ5	HRLT Frequency Index for Mode 5	44
FREQ6	HRLT Frequency Index for Mode 6	116
GCSE	Generalized Caliper Selection	BS
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
ISSBAR	Barite Mud Switch	BARITE
KFAC_HRLT	HRLT K Factor Option	SONDE
LOOPCOEF_S	HRLT Loop Coefficient for Shallow Modes	LOW
LOOPMOD0	HRLT Mode 0 Loop Mode	AUTO
LOOPMOD1	HRLT Mode 1 Loop Mode	AUTO
LOOPMOD2	HRLT Mode 2 Loop Mode	AUTO
LOOPMOD3	HRLT Mode 3 Loop Mode	AUTO
LOOPMOD4	HRLT Mode 4 Loop Mode	AUTO
LOOPMOD5	HRLT Mode 5 Loop Mode	AUTO
LOOPMOD6	HRLT Mode 6 Loop Mode	AUTO

MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
PROGINV	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
HLDS: Hostile Litho-Density Sonde			
CLCL	HLDS LS Control Loop Controller Mode	AUTO_DEFAULT	
CLCS	HLDS SS Control Loop Controller Mode	AUTO_DEFAULT	
CLLS	HLDS Mode Loop Long Spacing	AUTO	
CLSS	HLDS Mode Loop Short Spacing	AUTO	
DHC	Density Hole Correction	BS	
DPPM	Density Porosity Processing Mode	HIRS	
FD	Fluid Density	1	G/C3
LATC	HLDS Activation Correction	ON	
LLDL	HLDS LS Low Level Discriminator DAC	14000	
LLDS	HLDS SS Low Level Discriminator DAC	14000	
LLML	HLDS LS Low Level Discriminator Mode	AUTO	
LLMS	HLDS SS Low Level Discriminator Mode	AUTO	
MDEN	Matrix Density	2.71	G/C3
PHVL	HLDS Long Spacing High Voltage Setting	1000	V
PHVS	HLDS Short Spacing High Voltage Setting	1000	V
PSDL	HLDS LS Pulse Shape Compensation DAC	30000	
PSDS	HLDS SS Pulse Shape Compensation DAC	30000	
PSML	HLDS LS Pulse Shape Compensation Mode	AUTO	
PSMS	HLDS SS Pulse Shape Compensation Mode	AUTO	
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)	21	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	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
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	-0.000814831	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
HNPE	HNGS Processing Enable	YES	
ISSBAR	Barite Mud Switch	BARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
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	1.00364	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	-0.376766	
EDTC-B: Enhanced DTS Cartridge			
BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	21	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	-50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCO	Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	BARITE	
ISSBAR_EDTC	Nuclear Mud Type	BARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	BARI	
MWCO	Mud Weight Correction Option	NO	
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	20	DEGC
SOCN	Standoff Distance	0.5	IN
SOCO	Standoff Correction Option	NO	

SOCO	Standard Correction Option		NO
TPOS_EDTC	EDTC Tool Centered/Eccentered		
U-ETELM_EDTS	Telemetry Mode for eWAFE		Standard_EDTS
U-TELM_EDTS	Telemetry Mode for WAFE		Standard_EDTS
System and Miscellaneous			
ALTDPCCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	11.438	IN
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	13.375	IN
CWEI	Casing Weight	168.00	LB/F
DFD	Drilling Fluid Density	1.25	G/C3
DO	Depth Offset for Playback	-1209.0	M
FLEV	Fluid Level	-50000.00	M
MST	Mud Sample Temperature	-50000.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
PP	Playback Processing	OFF	
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	1430	M
TDD	Total Depth - Driller	1430.00	M
TDL	Total Depth - Logger	1430.00	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: HRLT_LQC Vertical Scale: 1:200 Graphics File Created: 18-Mar-2012 15:13

OP System Version: 19C0-187

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

Input DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_036PUP	FN:50	PRODUCER	18-Mar-2012 15:05	1412.7 M	1191.5 M
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Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_038PUP	FN:52	PRODUCER	18-Mar-2012 15:13		
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Input DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_035PUP	FN:49	PRODUCER	18-Mar-2012 15:04	1412.7 M	1329.8 M
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Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_037PUP	FN:51	PRODUCER	18-Mar-2012 15:12	203.5 M	120.9 M
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OP System Version: 19C0-187

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

Changed Parameter Summary

DLIS Name	New Value	Previous Value	Depth & Time
GCSE	BS	BS	203.5 15:12:40

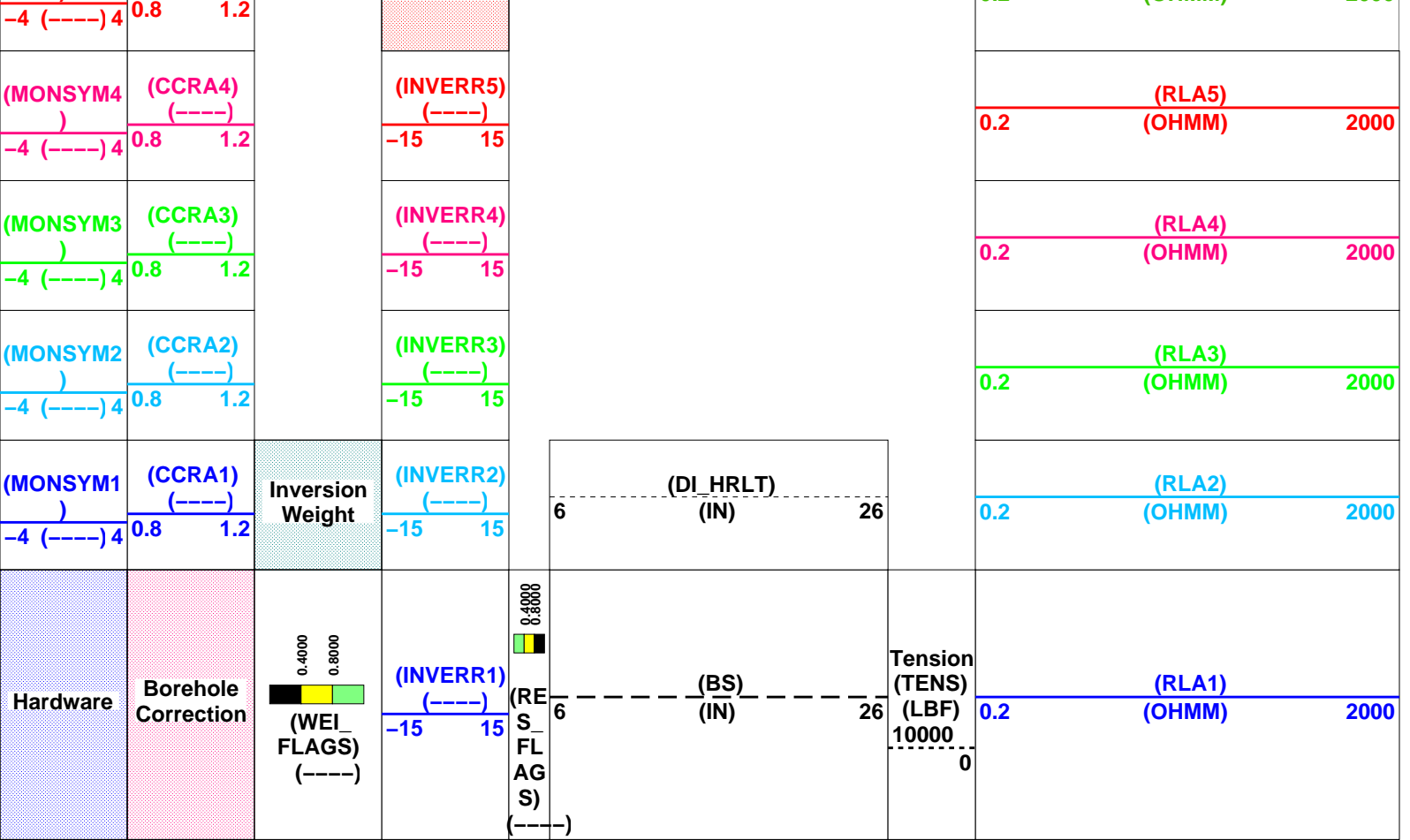
PIP SUMMARY

Time Mark Every 60 S

	(RT_HRLT)	
0.2	(OHMM)	2000
0.02	(RM_HRLT)	200
	(OHMM)	
	(RXO_HRLT)	
0.2	(OHMM)	2000

(MONSYM5) (CCRA5)

Inversion



*** HRLT FLAG TRACKS ***

BLACK areas show that the corresponding error flag is set.

TRACK R3_LQC

INVERSION WEIGHT

Contribution from each hrlt channel in Inversion algorithm, and from left to right :

| Wei1 | Wei2 | Wei3 | Wei4 | Wei5 |

GREEN = OK

YELLOW = Contribution QUESTIONABLE

BLACK = Contribution UNRELIABLE

TRACK R5_LQC

RESISTIVITY QUALITY INDICATOR

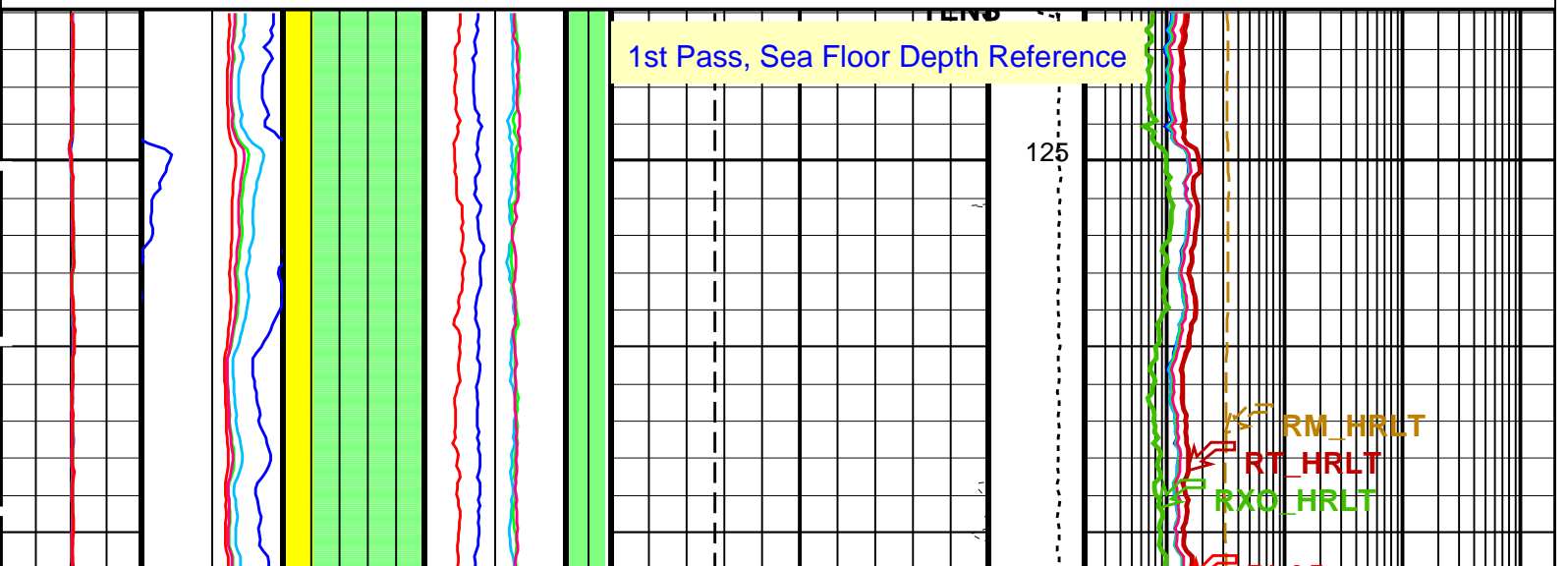
LQC flags on RXO_HRLT & RT_HRLT, and from left to right :

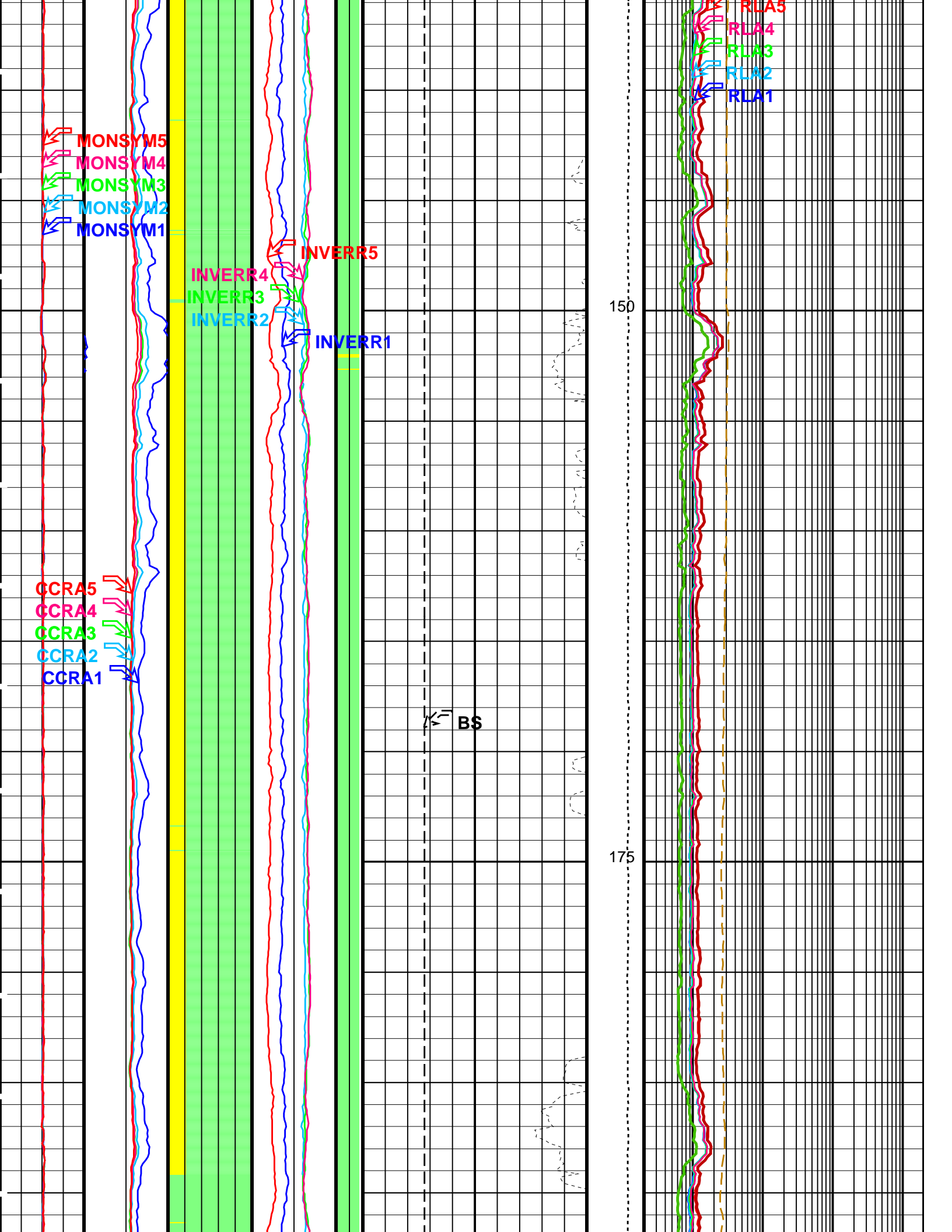
| RxoFlag | RTFlag |

GREEN = OK

YELLOW = SHOULDER BED EFFECT

BLACK = NOK





PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
HRLT-B: High Resolution Laterolog Array - B			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	21	DEGC
CALSTAT	HRLTB Calibration Status	SHALLOW_DONE	
CALTEMP	HRLTB Calibration Temperature	27.2932	DEGC
FREQ0	HRLT Frequency Index for Mode 0	32	
FREQ1	HRLT Frequency Index for Mode 1	128	
FREQ2	HRLT Frequency Index for Mode 2	104	
FREQ3	HRLT Frequency Index for Mode 3	86	
FREQ4	HRLT Frequency Index for Mode 4	56	
FREQ5	HRLT Frequency Index for Mode 5	44	
FREQ6	HRLT Frequency Index for Mode 6	116	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
ISSBAR	Barite Mud Switch	BARITE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
LOOPCOEF_S	HRLT Loop Coefficient for Shallow Modes	LOW	
LOOPMOD0	HRLT Mode 0 Loop Mode	AUTO	
LOOPMOD1	HRLT Mode 1 Loop Mode	AUTO	
LOOPMOD2	HRLT Mode 2 Loop Mode	AUTO	
LOOPMOD3	HRLT Mode 3 Loop Mode	AUTO	
LOOPMOD4	HRLT Mode 4 Loop Mode	AUTO	
LOOPMOD5	HRLT Mode 5 Loop Mode	AUTO	
LOOPMOD6	HRLT Mode 6 Loop Mode	AUTO	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
PROCINV	Inversion Selection	ON	
PROCMFL	Inversion Micro-Resistivity Selection	NO_EXTERNAL_RXO	
PROCMFO	Mechanical Standoff Fin Size	0	IN
PROCRM	Processing Mud Resistivity Select	HRLT_Compute	
PROCSPO	Sonde Position	Centered	
SHT	Surface Hole Temperature	20	DEGC
HLDS: Hostile Litho-Density Sonde			
CLCL	HLDS LS Control Loop Controller Mode	AUTO_DEFAULT	
CLCS	HLDS SS Control Loop Controller Mode	AUTO_DEFAULT	
CLLS	HLDS Mode Loop Long Spacing	AUTO	
CLSS	HLDS Mode Loop Short Spacing	AUTO	
DHC	Density Hole Correction	BS	
DPPM	Density Porosity Processing Mode	HIRS	
FD	Fluid Density	1	G/C3
LATC	HLDS Activation Correction	ON	
LLDL	HLDS LS Low Level Discriminator DAC	14000	
LLDS	HLDS SS Low Level Discriminator DAC	14000	
LLML	HLDS LS Low Level Discriminator Mode	AUTO	
LLMS	HLDS SS Low Level Discriminator Mode	AUTO	
MDEN	Matrix Density	2.71	G/C3
PHVL	HLDS Long Spacing High Voltage Setting	1000	V
PHVS	HLDS Short Spacing High Voltage Setting	1000	V
PSDL	HLDS LS Pulse Shape Compensation DAC	30000	
PSDS	HLDS SS Pulse Shape Compensation DAC	30000	
PSML	HLDS LS Pulse Shape Compensation Mode	AUTO	
PSMS	HLDS SS Pulse Shape Compensation Mode	AUTO	
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)	21	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	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
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	-0.000814831	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
HNPE	HNGS Processing Enable	YES	
ISSBAR	Barite Mud Switch	BARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
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	1.00364	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	-0.376766	
EDTC-B: Enhanced DTS Cartridge			
BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	21	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	-50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCO	Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	BARITE	
ISSBAR_EDTC	Nuclear Mud Type	BARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	BARI	
MWCO	Mud Weight Correction Option	NO	
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	20	DEGC
SOCN	Standoff Distance	0.5	IN
SOCO	Standoff Correction Option	NO	
TPOS_EDTC	EDTC Tool Centered/Eccentered	Eccentered	
U-ETELM_EDTS	Telemetry Mode for eWAFE	Standard_EDTS	
U-TELM_EDTS	Telemetry Mode for WAFE	Standard_EDTS	
System and Miscellaneous			
ALTDPCCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	11.438	IN
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	13.375	IN
CWEI	Casing Weight	168.00	LB/F
DFD	Drilling Fluid Density	1.25	G/C3
DO	Depth Offset for Playback	-1209.0	M
FLEV	Fluid Level	-50000.00	M
MST	Mud Sample Temperature	-50000.00	DEGC
PBVSDAP	Use alternate depth channel for playback	NO	
PP	Playback Processing	OFF	
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	1430	M
TDD	Total Depth - Driller	1430.00	M
TDL	Total Depth - Logger	1430.00	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: HRLT_LQC Vertical Scale: 1:200 Graphics File Created: 18-Mar-2012 15:12

OP System Version: 19C0-187

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

Input DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_035PUP	FN:49	PRODUCER	18-Mar-2012 15:04	1412.7 M	1329.8 M
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Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_037PUP	FN:51	PRODUCER	18-Mar-2012 15:12		
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Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
High Resolution Laterolog Array – B Wellsite Calibration – HRLT M01							
Before: 16–Mar–2012 5:06 After: 16–Mar–2012 9:52							
HRLT M0–M1 Voltage Plus – 0	0	N/A	-318.4	-318.4	0.005524	9.681	UV
HRLT M0–M1 Voltage Plus – 1	0	N/A	-325.5	-325.6	-0.08093	9.681	UV
HRLT M0–M1 Voltage Plus – 2	0	N/A	-328.4	-328.6	-0.1485	9.681	UV
HRLT M0–M1 Voltage Plus – 3	0	N/A	-333.7	-333.7	0	9.681	UV
HRLT M0–M1 Voltage Plus – 4	0	N/A	-324.3	-324.2	0.03174	9.681	UV
HRLT M0–M1 Voltage Plus – 5	0	N/A	-320.9	-320.8	0.08734	9.681	UV
HRLT M0–M1 Voltage Plus – 6	0	N/A	317.5	317.6	0.09869	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: 16–Mar–2012 5:06 After: 16–Mar–2012 9:52							
HRLT M1–M2 Voltage Plus – 0	0	N/A	1751	1751	0.3818	53.42	UV
HRLT M1–M2 Voltage Plus – 1	0	N/A	1788	1789	0.7792	53.42	UV
HRLT M1–M2 Voltage Plus – 2	0	N/A	1800	1801	1.259	53.42	UV
HRLT M1–M2 Voltage Plus – 3	0	N/A	1830	1830	0.5406	53.42	UV
HRLT M1–M2 Voltage Plus – 4	0	N/A	1779	1779	0.4772	53.42	UV
HRLT M1–M2 Voltage Plus – 5	0	N/A	1762	1762	0.2520	53.42	UV
HRLT M1–M2 Voltage Plus – 6	0	N/A	-1752	-1753	-0.7925	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: 16–Mar–2012 5:06 After: 16–Mar–2012 9:52							
HRLT M2–M3 Voltage Plus – 0	0	N/A	1737	1736	-0.5146	53.42	UV
HRLT M2–M3 Voltage Plus – 1	0	N/A	1787	1786	-0.7456	53.42	UV
HRLT M2–M3 Voltage Plus – 2	0	N/A	1800	1800	-0.06702	53.42	UV
HRLT M2–M3 Voltage Plus – 3	0	N/A	1833	1832	-0.4811	53.42	UV
HRLT M2–M3 Voltage Plus – 4	0	N/A	1776	1775	-0.9590	53.42	UV
HRLT M2–M3 Voltage Plus – 5	0	N/A	1760	1759	-0.7697	53.42	UV
HRLT M2–M3 Voltage Plus – 6	0	N/A	-1740	-1740	0.6014	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: 16–Mar–2012 5:06 After: 16–Mar–2012 9:52							
HRLT A3–A4 Voltage Plus – 0	0	N/A	68230	68240	8.789	2100	UV
HRLT A3–A4 Voltage Plus – 1	0	N/A	69990	70010	24.23	2100	UV
HRLT A3–A4 Voltage Plus – 2	0	N/A	70800	70830	37.80	2100	UV
HRLT A3–A4 Voltage Plus – 3	0	N/A	72350	72380	20.48	2100	UV
HRLT A3–A4 Voltage Plus – 4	0	N/A	70080	70090	9.359	2100	UV
HRLT A3–A4 Voltage Plus – 5	0	N/A	69460	69460	-0.6484	2100	UV
HRLT A3–A4 Voltage Plus – 6	0	N/A	-67200	-67220	-20.80	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: 16–Mar–2012 5:06 After: 16–Mar–2012 9:52							
HRLT A4–A5 Voltage Plus – 0	0	N/A	68510	68520	8.148	2100	UV
HRLT A4–A5 Voltage Plus – 1	0	N/A	70370	70420	50.27	2100	UV
HRLT A4–A5 Voltage Plus – 2	0	N/A	71140	71170	34.51	2100	UV
HRLT A4–A5 Voltage Plus – 3	0	N/A	72700	72720	18.21	2100	UV
HRLT A4–A5 Voltage Plus – 4	0	N/A	70380	70390	14.04	2100	UV
HRLT A4–A5 Voltage Plus – 5	0	N/A	69740	69740	3.234	2100	UV
HRLT A4–A5 Voltage Plus – 6	0	N/A	-67550	-67600	-46.80	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: 16–Mar–2012 5:06 After: 16–Mar–2012 9:52							
HRLT A5–A6 Voltage Plus – 0	0	N/A	68420	68420	7.523	2100	UV
HRLT A5–A6 Voltage Plus – 1	0	N/A	70100	70120	23.77	2100	UV
HRLT A5–A6 Voltage Plus – 2	0	N/A	70920	70950	36.16	2100	UV
HRLT A5–A6 Voltage Plus – 3	0	N/A	72500	72520	19.73	2100	UV
HRLT A5–A6 Voltage Plus – 4	0	N/A	70240	70250	8.016	2100	UV
HRLT A5–A6 Voltage Plus – 5	0	N/A	69620	69620	2.594	2100	UV
HRLT A5–A6 Voltage Plus – 6	0	N/A	-67290	-67320	-31.20	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: 16–Mar–2012 5:06 After: 16–Mar–2012 9:52							
HRLT Torpedo–M0 Voltage – 0	0	N/A	-68090	-68100	-7.188	2100	UV
HRLT Torpedo–M0 Voltage – 1	0	N/A	-70420	-70440	-20.00	2100	UV
HRLT Torpedo–M0 Voltage – 2	0	N/A	-71200	-71240	-40.66	2100	UV
HRLT Torpedo–M0 Voltage – 3	0	N/A	-72770	-72790	-22.43	2100	UV
HRLT Torpedo–M0 Voltage – 4	0	N/A	78148	78148	0.000	2100	UV

HRLT Torpedo-M0 Voltage - 4	0	N/A	-70430	-70440	-3.828	2100	UV
HRLT Torpedo-M0 Voltage - 5	0	N/A	-69780	-69770	6.797	2100	UV
HRLT Torpedo-M0 Voltage - 6	0	N/A	67550	67580	30.52	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: 16-Mar-2012 5:06 After: 16-Mar-2012 9:52

HRLT Bridle#9-M0 Voltage - 0	0	N/A	-68080	-68090	-6.594	2100	UV
HRLT Bridle#9-M0 Voltage - 1	0	N/A	-70400	-70430	-22.60	2100	UV
HRLT Bridle#9-M0 Voltage - 2	0	N/A	-71180	-71220	-35.19	2100	UV
HRLT Bridle#9-M0 Voltage - 3	0	N/A	-72760	-72780	-25.31	2100	UV
HRLT Bridle#9-M0 Voltage - 4	0	N/A	-70420	-70430	-10.22	2100	UV
HRLT Bridle#9-M0 Voltage - 5	0	N/A	-69770	-69770	0	2100	UV
HRLT Bridle#9-M0 Voltage - 6	0	N/A	67540	67560	27.21	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: 16-Mar-2012 5:06 After: 16-Mar-2012 9:52

HRLT Source Current Plus - 0	0	N/A	283.9	284.0	0.1208	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: 16-Mar-2012 5:06 After: 16-Mar-2012 9:52

HRLT Vertical Voltage PI - 0	0	N/A	-320.8	-320.6	0.1819	9.681	UV
HRLT Vertical Voltage PI - 1	0	N/A	-319.8	-319.7	0.1165	9.681	UV
HRLT Vertical Voltage PI - 2	0	N/A	-322.0	-322.0	0.08130	9.681	UV
HRLT Vertical Voltage PI - 3	0	N/A	-325.6	-325.4	0.1804	9.681	UV
HRLT Vertical Voltage PI - 4	0	N/A	-313.8	-313.5	0.3025	9.681	UV
HRLT Vertical Voltage PI - 5	0	N/A	-325.6	-325.3	0.2599	9.681	UV
HRLT Vertical Voltage PI - 6	0	N/A	324.6	324.5	-0.1247	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: 28-Feb-2012 2:19 Before: 28-Feb-2012 2:36 After: 16-Mar-2012 9:55

SS Cs Resolution Bkg	9.000	8.563	8.511	8.515	0.004113	1.800	%
LS Cs Resolution Bkg	9.000	8.637	8.632	8.614	-0.01812	1.800	%
LSW1 Background	100.0	71.69	71.37	70.54	-0.8282	0.03000	CPS
LSW2 Background	100.0	65.72	64.67	64.80	0.1281	0.03000	CPS
LSW3 Background	200.0	147.7	146.0	145.7	-0.3243	0.03000	CPS
LSW4 Background	250.0	178.3	178.0	176.6	-1.411	0.03000	CPS
LSW5 Background	600.0	402.3	401.7	405.1	3.367	0.03000	CPS
SSW1 Background	100.0	68.69	69.17	70.11	0.9393	0.03000	CPS
SSW2 Background	200.0	121.6	122.1	123.1	0.9534	0.03000	CPS
SSW3 Background	500.0	321.9	321.7	320.2	-1.431	0.03000	CPS
SSW4 Background	270.0	172.2	173.0	171.5	-1.533	0.03000	CPS
SSW5 Background	200.0	123.5	123.8	125.1	1.368	0.03000	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Aluminum Measurement

Master: 28-Feb-2012 2:19

LSW1 Aluminum	600.0	521.9	N/A	N/A	N/A	N/A	CPS
LSW2 Aluminum	900.0	758.2	N/A	N/A	N/A	N/A	CPS
LSW3 Aluminum	1100	921.8	N/A	N/A	N/A	N/A	CPS
LSW4 Aluminum	580.0	463.1	N/A	N/A	N/A	N/A	CPS
LSW5 Aluminum	570.0	428.2	N/A	N/A	N/A	N/A	CPS
SSW1 Aluminum	2800	2229	N/A	N/A	N/A	N/A	CPS
SSW2 Aluminum	8000	6354	N/A	N/A	N/A	N/A	CPS
SSW3 Aluminum	11600	9261	N/A	N/A	N/A	N/A	CPS
SSW4 Aluminum	5000	3871	N/A	N/A	N/A	N/A	CPS
SSW5 Aluminum	660.0	518.3	N/A	N/A	N/A	N/A	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Lithology Measurement

Master: 28-Feb-2012 2:19

LSW1 Iron	400.0	352.2	N/A	N/A	N/A	N/A	CPS
LSW2 Iron	730.0	613.7	N/A	N/A	N/A	N/A	CPS
LSW3 Iron	1000	811.4	N/A	N/A	N/A	N/A	CPS
LSW4 Iron	520.0	425.3	N/A	N/A	N/A	N/A	CPS
LSW5 Iron	470.0	389.1	N/A	N/A	N/A	N/A	CPS
SSW1 Iron	2100	1664	N/A	N/A	N/A	N/A	CPS
SSW2 Iron	6800	5327	N/A	N/A	N/A	N/A	CPS
SSW3 Iron	10800	8450	N/A	N/A	N/A	N/A	CPS
SSW4 Iron	4600	3532	N/A	N/A	N/A	N/A	CPS
SSW5 Iron	580.0	458.1	N/A	N/A	N/A	N/A	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Caliper Calibration

Before: 28-Feb-2012 2:41

HLDS Caliper Small Ring	12.00	N/A	13.84	N/A	N/A	N/A	IN
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HLDS Caliper Large Ring	15.19	N/A	17.47	N/A	N/A	N/A	IN
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 1 Check							
Master: 26–Feb–2012 20:15	Before: 6–Mar–2012 18:49	After: 16–Mar–2012 9:56					
Na 511 Peak Loc	40.00	39.64	39.54	39.62	0.07774	1.000	
Na 511 Peak Res	15.50	14.75	15.72	16.19	0.4740	2.000	%
High Voltage	1150	1169	1182	1177	-5.114	N/A	V
Na 1785 Peak Loc	142.6	141.6	141.5	141.9	0.4290	7.000	
Na 1785 Peak Res	8.500	8.869	8.671	9.301	0.6298	2.000	%
Temperature	15.50	26.03	31.35	29.11	-2.234	N/A	DEGC
Na Count Rate	45.00	19.34	19.64	19.01	-0.6245	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check							
Master: 26–Feb–2012 20:15	Before: 6–Mar–2012 18:49	After: 16–Mar–2012 9:56					
Na 511 Peak Loc	40.00	39.65	39.61	39.70	0.08602	1.000	
Na 511 Peak Res	15.50	16.96	15.84	15.58	-0.2573	2.000	%
High Voltage	1150	1100	1109	1109	-0.5347	N/A	V
Na 1785 Peak Loc	142.6	142.2	141.4	141.9	0.4977	7.000	
Na 1785 Peak Res	8.500	7.801	8.832	8.220	-0.6116	2.000	%
Temperature	15.50	26.16	31.73	30.66	-1.068	N/A	DEGC
Na Count Rate	45.00	19.53	20.28	19.14	-1.142	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Ratio Of Detector 1 To Detector 2							
Master: 26–Feb–2012 20:15	Before: 6–Mar–2012 18:49	After: 16–Mar–2012 9:56					
Coincidence Count Rate Ratio	1.000	0.9899	0.9701	0.9937	0.02364	0.05000	
Enhanced DTS Cartridge Wellsite Calibration – EDTC Accelerometer Calibration							
Before: 16–Mar–2012 5:05							
EDTC Z–Axis Acceleration	9.810	N/A	9.747	N/A	N/A	N/A	M/S2
Enhanced DTS Cartridge Wellsite Calibration – Detector Calibration							
Before: 4–Mar–2012 17:35	After: Calibration not done						
Gamma Ray (Jig – Bkg)	159.9	N/A	159.9	N/A	N/A	0.09091	GAPI
Gamma Ray (Calibrated)	164.0	N/A	164.0	N/A	N/A	15.00	GAPI

High Resolution Laterolog Array – B / Equipment Identification

Primary Equipment:

HRLT Sonde HRLS – B 969

Auxiliary Equipment:

HRLT lower Housing HRLH – B 759
HRLT Lower Cartridge HRLC – B 759
HRLT upper Housing HRUH – B 769
HRLT Upper Cartridge HRUC – B 769

High Resolution Laterolog Array – B Wellsite Calibration

HRLT M01

Idx	Phase	HRLT M0–M1 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-318.4	-322.7	-280.7	-379.7
	After		-318.4			
1	Before		-325.5	-322.7	-280.7	-379.7
	After		-325.6			
2	Before		-328.4	-322.7	-280.7	-379.7
	After		-328.6			
3	Before		-333.7	-322.7	-280.7	-379.7
	After		-333.7			
4	Before		-324.3	-322.7	-280.7	-379.7
	After		-324.2			
5	Before		-320.9	-322.7	-280.7	-379.7
	After		-320.8			
6	Before		317.5	322.7	379.7	280.7
	After		317.6			

7	Before		-322.7	-322.7	-280.7	-379.7
	After		-322.7	-322.7	-280.7	-379.7
		(Minimum) (Nominal) (Maximum)				

Before: 16-Mar-2012 5:06
 After: 16-Mar-2012 9:52

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT M12						
Idx	Phase	HRLT M1–M2 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1751	1781	2095	1549
	After		1751			
1	Before		1788	1781	2095	1549
	After		1789			
2	Before		1800	1781	2095	1549
	After		1801			
3	Before		1830	1781	2095	1549
	After		1830			
4	Before		1779	1781	2095	1549
	After		1779			
5	Before		1762	1781	2095	1549
	After		1762			
6	Before		-1752	-1781	-1549	-2095
	After		-1753			
7	Before		1781	1781	2095	1549
	After		1781			
		(Minimum) (Nominal) (Maximum)				

Before: 16-Mar-2012 5:06
 After: 16-Mar-2012 9:52

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT M23						
Idx	Phase	HRLT M2–M3 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1737	1781	2095	1549
	After		1736			
1	Before		1787	1781	2095	1549
	After		1786			
2	Before		1800	1781	2095	1549
	After		1800			
3	Before		1833	1781	2095	1549
	After		1832			
4	Before		1776	1781	2095	1549
	After		1775			
5	Before		1760	1781	2095	1549
	After		1759			
6	Before		-1740	-1781	-1549	-2095
	After		-1740			
7	Before		1781	1781	2095	1549
	After		1781			

(Minimum)	(Nominal)	(Maximum)
Before: 16-Mar-2012 5:06		
After: 16-Mar-2012 9:52		

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V34						
Idx	Phase	HRLT A3–A4 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68230	70000	82360	60900
	After		68240			
1	Before		69990	70000	82360	60900
	After		70010			
2	Before		70800	70000	82360	60900
	After		70830			
3	Before		72350	70000	82360	60900
	After		72380			
4	Before		70080	70000	82360	60900
	After		70090			
5	Before		69460	70000	82360	60900
	After		69460			
6	Before		-67200	-70000	-60900	-82360
	After		-67220			
7	Before		70000	70000	82360	60900
	After		70000			
		(Minimum) (Nominal) (Maximum)				

Before: 16-Mar-2012 5:06		
After: 16-Mar-2012 9:52		

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V45						
Idx	Phase	HRLT A4–A5 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68510	70000	82360	60900
	After		68520			
1	Before		70370	70000	82360	60900
	After		70420			
2	Before		71140	70000	82360	60900
	After		71170			
3	Before		72700	70000	82360	60900
	After		72720			
4	Before		70380	70000	82360	60900
	After		70390			
5	Before		69740	70000	82360	60900
	After		69740			
6	Before		-67550	-70000	-60900	-82360
	After		-67600			
7	Before		70000	70000	82360	60900
	After		70000			
		(Minimum) (Nominal) (Maximum)				

Before: 16-Mar-2012 5:06		
After: 16-Mar-2012 9:52		

High Resolution Laterolog Array – B Wellsite Calibration

HRLT V56

Idx	Phase	HRLT A5–A6 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68420	70000	82360	60900
	After		68420			
1	Before		70100	70000	82360	60900
	After		70120			
2	Before		70920	70000	82360	60900
	After		70950			
3	Before		72500	70000	82360	60900
	After		72520			
4	Before		70240	70000	82360	60900
	After		70250			
5	Before		69620	70000	82360	60900
	After		69620			
6	Before		-67290	-70000	-60900	-82360
	After		-67320			
7	Before		70000	70000	82360	60900
	After		70000			
		(Minimum) (Nominal) (Maximum)				

Before: 16–Mar–2012 5:06

After: 16–Mar–2012 9:52

High Resolution Laterolog Array – B Wellsite Calibration

HRLT VTP

Idx	Phase	HRLT Torpedo–M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68090	-70000	-60900	-82360
	After		-68100			
1	Before		-70420	-70000	-60900	-82360
	After		-70440			
2	Before		-71200	-70000	-60900	-82360
	After		-71240			
3	Before		-72770	-70000	-60900	-82360
	After		-72790			
4	Before		-70430	-70000	-60900	-82360
	After		-70440			
5	Before		-69780	-70000	-60900	-82360
	After		-69770			
6	Before		67550	70000	82360	60900
	After		67580			
7	Before		-70000	-70000	-60900	-82360
	After		-70000			
		(Minimum) (Nominal) (Maximum)				

Before: 16–Mar–2012 5:06

After: 16–Mar–2012 9:52

High Resolution Laterolog Array – B Wellsite Calibration

HRLT VBD

Idx	Phase	HRLT Bridle#9-M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68080	-70000	-60900	-82360
	After		-68090			
1	Before		-70400	-70000	-60900	-82360
	After		-70430			
2	Before		-71180	-70000	-60900	-82360
	After		-71220			
3	Before		-72760	-70000	-60900	-82360
	After		-72780			
4	Before		-70420	-70000	-60900	-82360
	After		-70430			
5	Before		-69770	-70000	-60900	-82360
	After		-69770			
6	Before		67540	70000	82360	60900
	After		67560			
7	Before		-70000	-70000	-60900	-82360
	After		-70000			
			(Minimum)	(Nominal)	(Maximum)	
Before: 16-Mar-2012 5:06						
After: 16-Mar-2012 9:52						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT ISO						
Idx	Phase	HRLT Source Current Plus UA	Value	Nominal	Maximum	Minimum
0	Before		283.9	284.0	334.1	247.0
	After		284.0			
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: 16-Mar-2012 5:06						
After: 16-Mar-2012 9:52						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT MV						
Idx	Phase	HRLT Vertical Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-320.8	-322.7	-280.7	-379.7
	After					

1	After		-320.6	-322.7	-280.7	-379.7
	Before		-319.8			
2	After		-322.0	-322.7	-280.7	-379.7
	Before		-322.0			
3	After		-325.6	-322.7	-280.7	-379.7
	Before		-325.4			
4	After		-313.8	-322.7	-280.7	-379.7
	Before		-313.5			
5	After		-325.6	-322.7	-280.7	-379.7
	Before		-325.3			
6	After		324.6	322.7	379.7	280.7
	Before		324.5			
7	After		-322.7	-322.7	-280.7	-379.7
	Before		-322.7			
			(Minimum)	(Nominal)	(Maximum)	
Before: 16-Mar-2012 5:06						
After: 16-Mar-2012 9:52						

Hostile Litho-Density Sonde / Equipment Identification

Primary Equipment:

Hostile Litho Density Sonde	HLDS - D	57
Hostile Litho Density High Voltage	HLDV - D	51
Gamma Source Radioactive	GSR - Z	2397

Auxiliary Equipment:

Hostile Litho Density Pad	HLDP - C	61
Hostile Litho Density High Voltage Housi	HEH - H	53

Litho-Density Spectroscopy Cartridge - B / Equipment Identification

Primary Equipment:

LDSC Cartridge	LDSC - B	366
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Auxiliary Equipment:

LDSC Housing	LDSH - A	126
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Hostile Natural Gamma Ray Cartridge - B / Equipment Identification

Primary Equipment:

HNGC Cartridge	HNGC - B	300
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Auxiliary Equipment:

HNGC Housing	HNGH - A	115
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Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment:

HNGS Sonde	HNGS - BA	194
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Auxiliary Equipment:

HNGS Sonde Housing	HNSH - BA	205
Gamma Source Radioactive	GSR - U	616008

Enhanced DTS Cartridge / Equipment Identification

Primary Equipment:

EDTC Gamma Ray Detector
Enhanced DTS Cartridge

EDTG - A/B
EDTC - B

8305
8317

Auxiliary Equipment:

EDTC Housing

EDTH - B

8303

Company: Lamont Doherty Earth Observatory

Schlumberger

Well: Expedition 340, Site U1395B

Field: Lesser Antilles Volcanism and Landslides

Rig: JOIDES Resolution

Ocean: Caribbean

High Resolution Laterolog Array
Log Quality Control