

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

Rig: Field: Location: Well: Company:	JOIDES Resolution Baffin Bay Latitude: N 75° 42' 58.35" Expedition 344S, U0060A (USC60) Lamont Doherty Earth Observatory	HNGS Spectral GR			
		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			162 m					
Top Log Interval			0 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]

[illegible]

## DISCLAIMER

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## OTHER SERVICES1

OS1: HRLA

OS2: DSI

OS3: MSS

## REMARKS: RUN NUMBER 1

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 chasis 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.

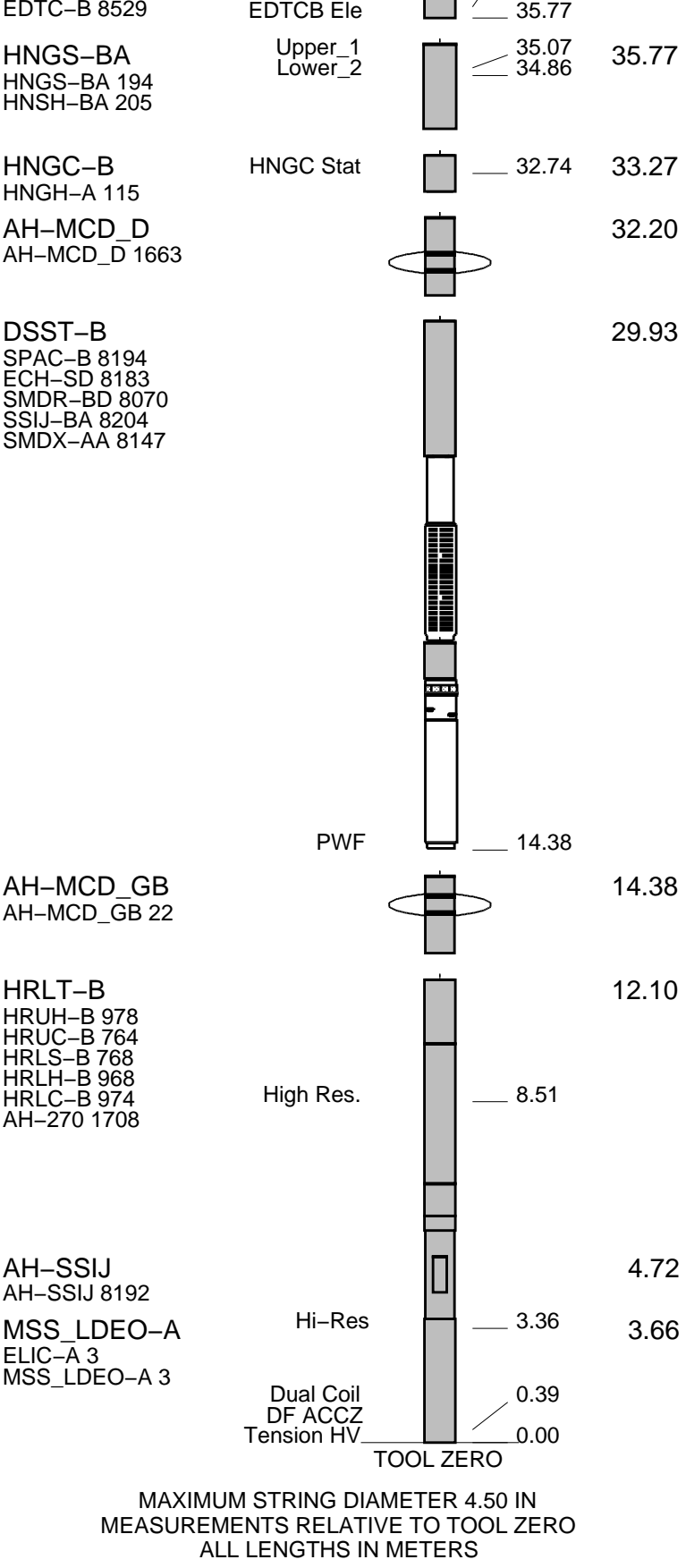
Original sea bed, as measured from drill floor, was 594.0m uncorrected measured depth below drill floor.

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

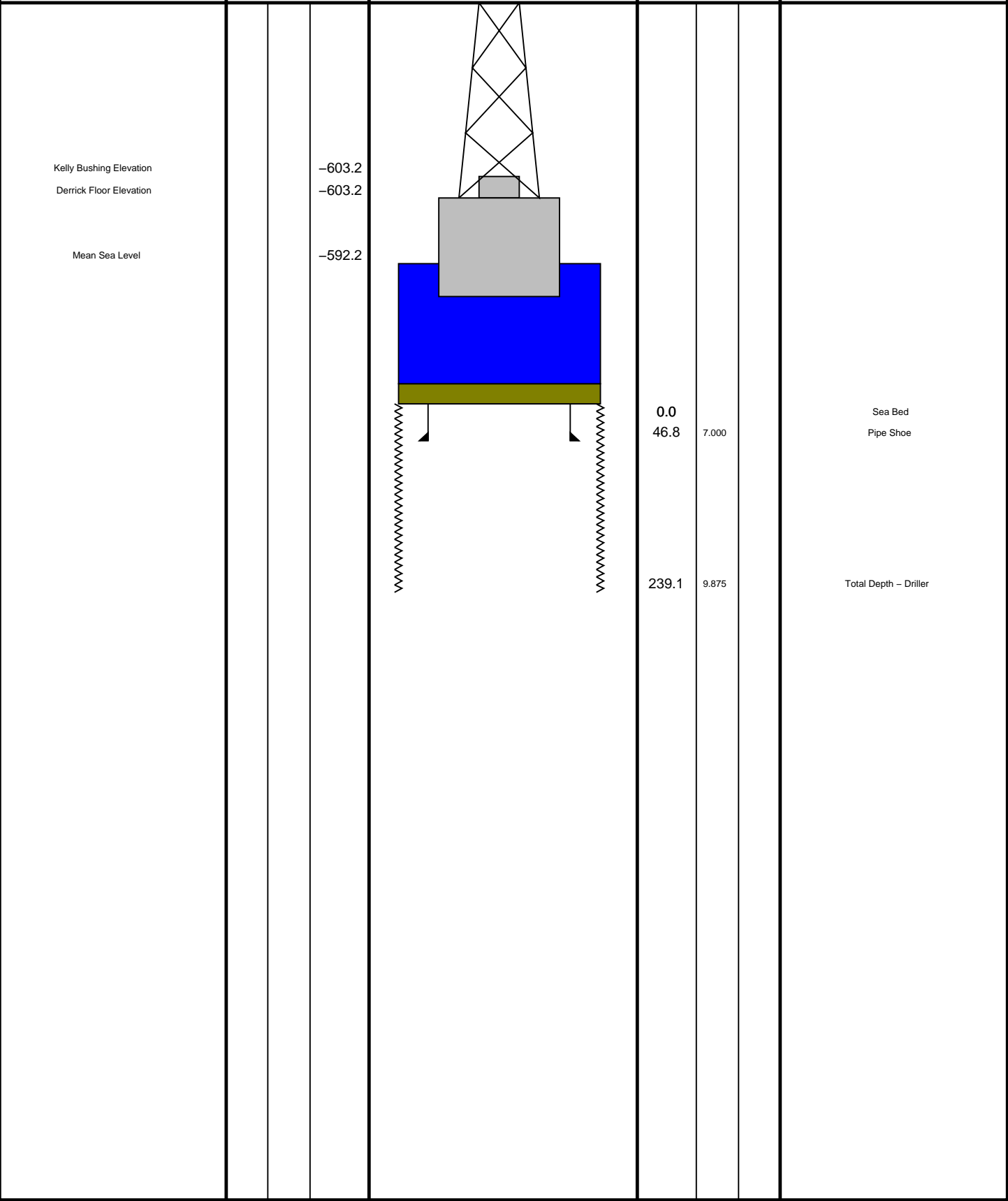
RUN 1 SERVICE ORDER #: PROGRAM VERSION: 19C0-187 FLUID LEVEL:			RUN 2 SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

[illegible]

RUN 1		RUN 2	
SURFACE EQUIPMENT			
GSR-U 616008 WITM (EDTS)-A			
DOWNHOLE EQUIPMENT			
LEH-MT			
LEH-MT 101	MDSB_EDTC		39.15
AH-369	Mud Tempe		
	CTEM		37.75
	Gamma Ray		36.69
EDTC-B	EFTB DIAG		36.12
EDTH-B 8528	TelStatus		37.75



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

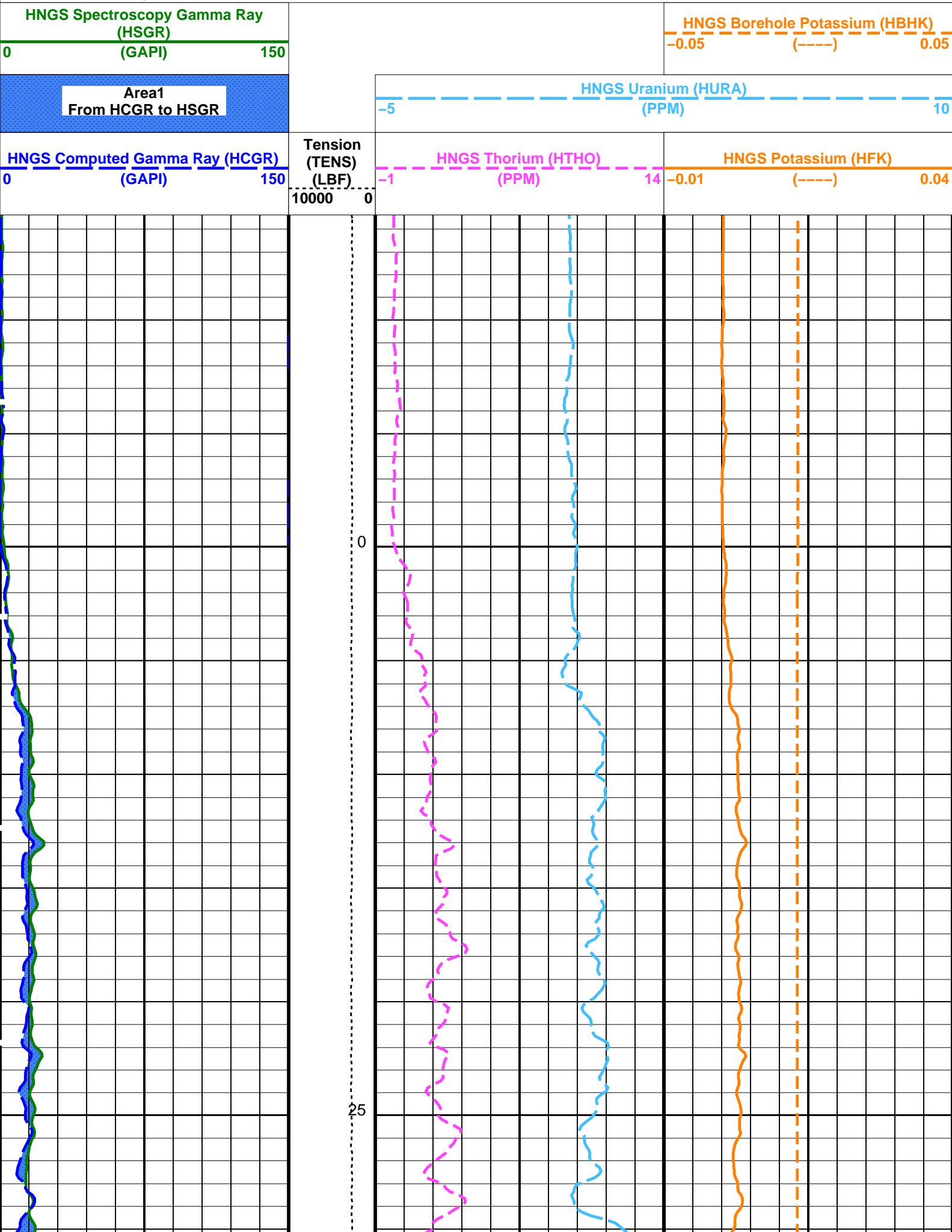
DEFAULT	MSS_LDEO_HRLA_DSI_011PUP	FN:10	PRODUCER	28-Sep-2012 20:08	194.3 M	-14.6 M
CLIENT	MSS_LDEO_HRLA_DSI_011PUC	FN:11	CUSTOMER	28-Sep-2012 20:08	194.3 M	-14.6 M

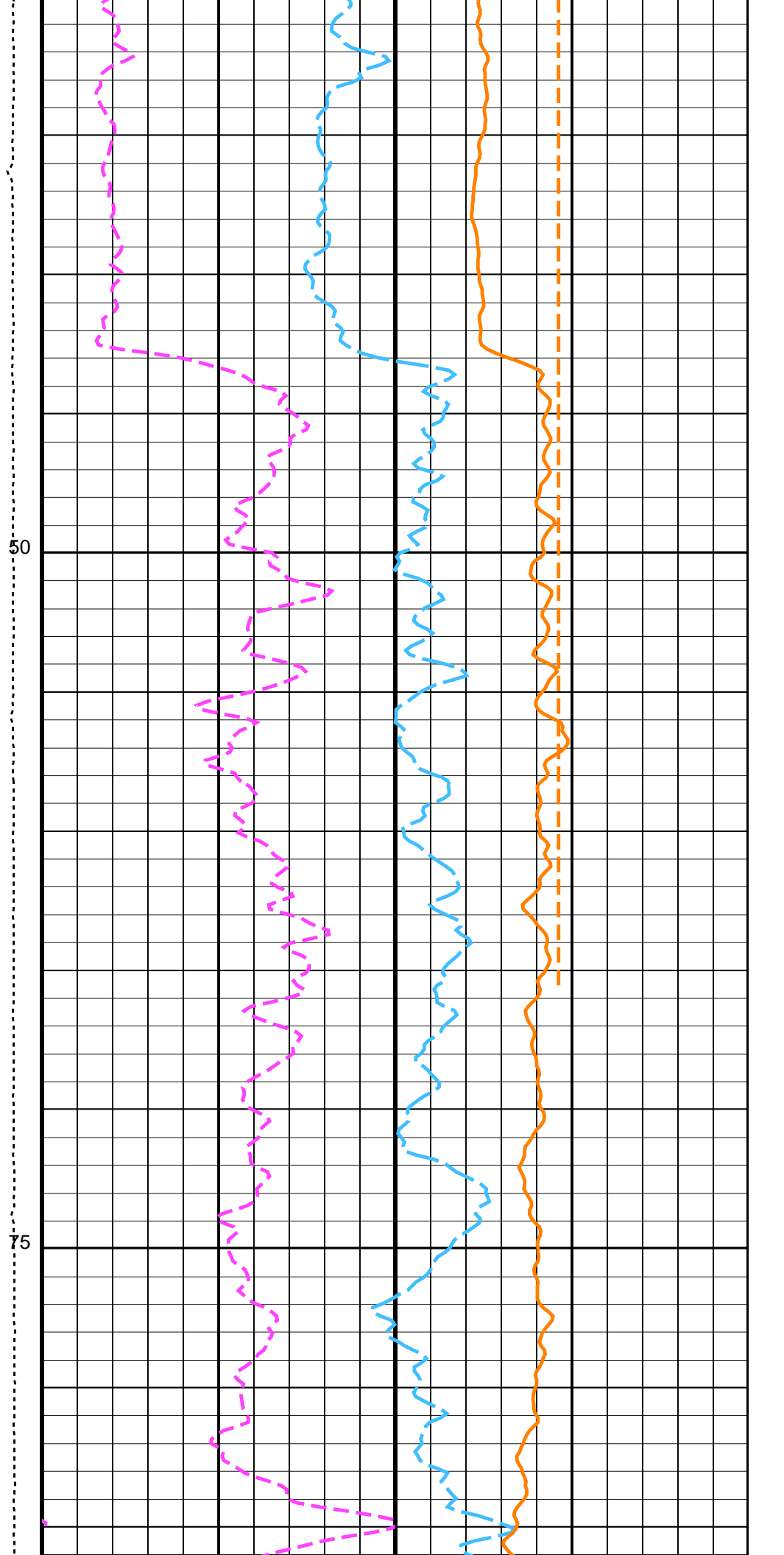
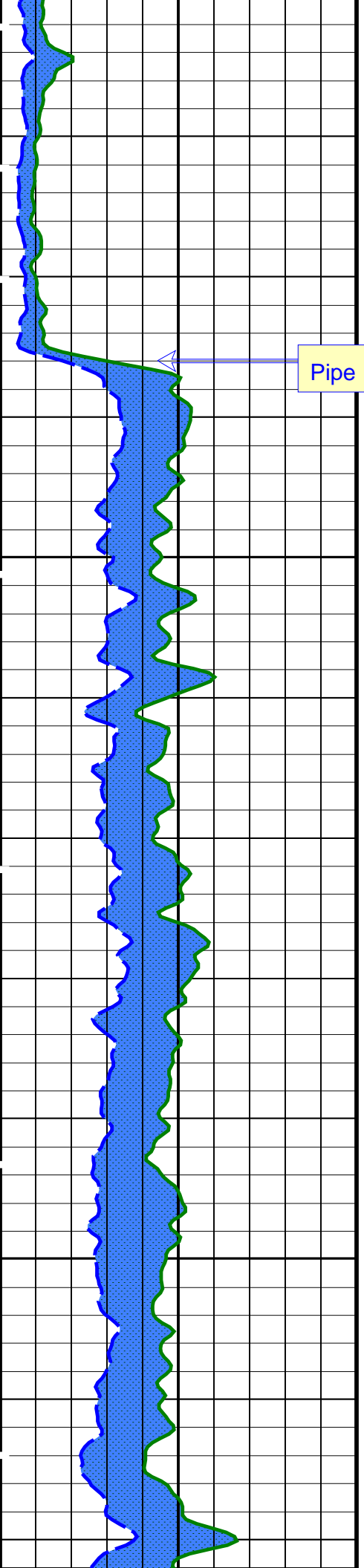
OP System Version: 19C0-187

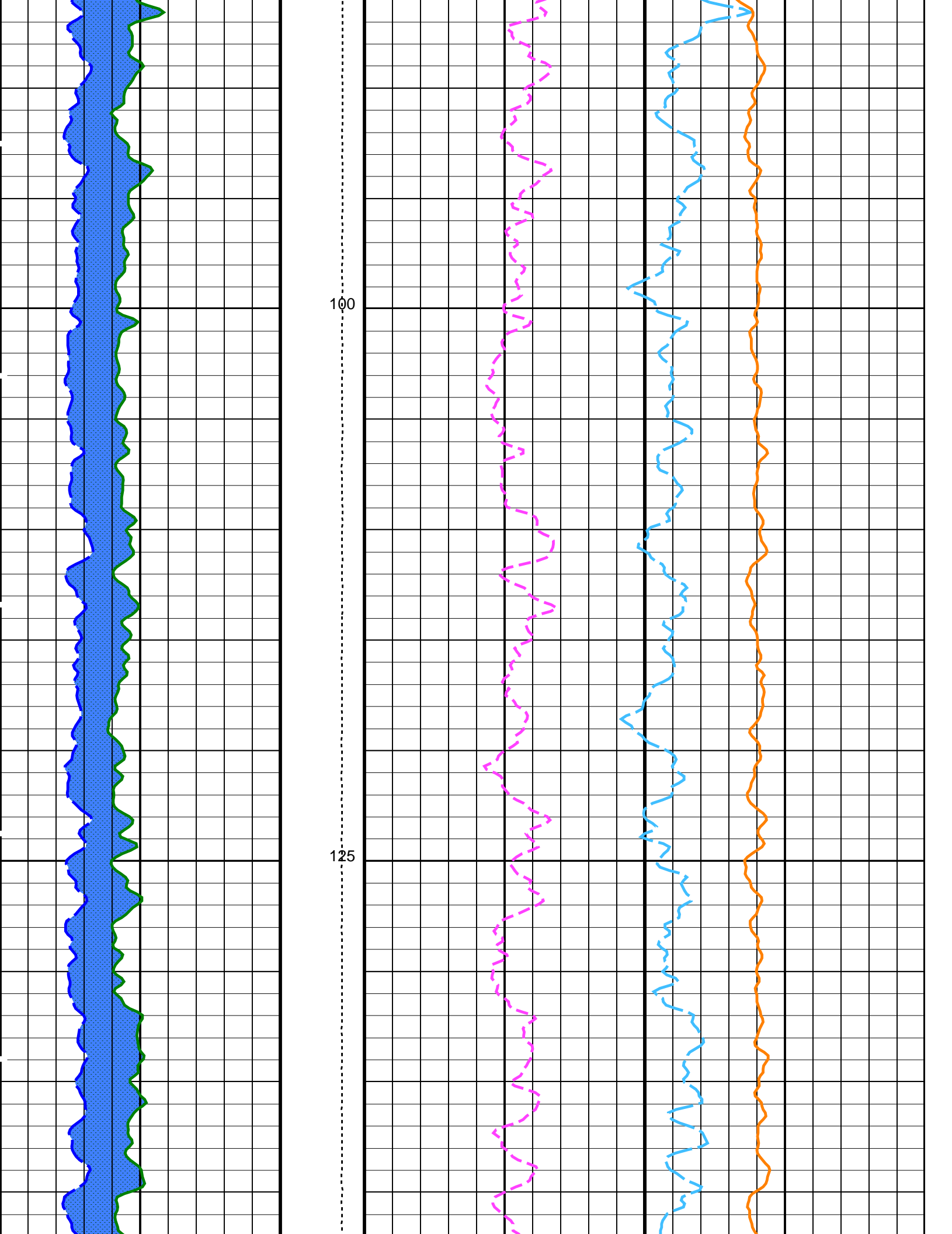
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

PIP SUMMARY

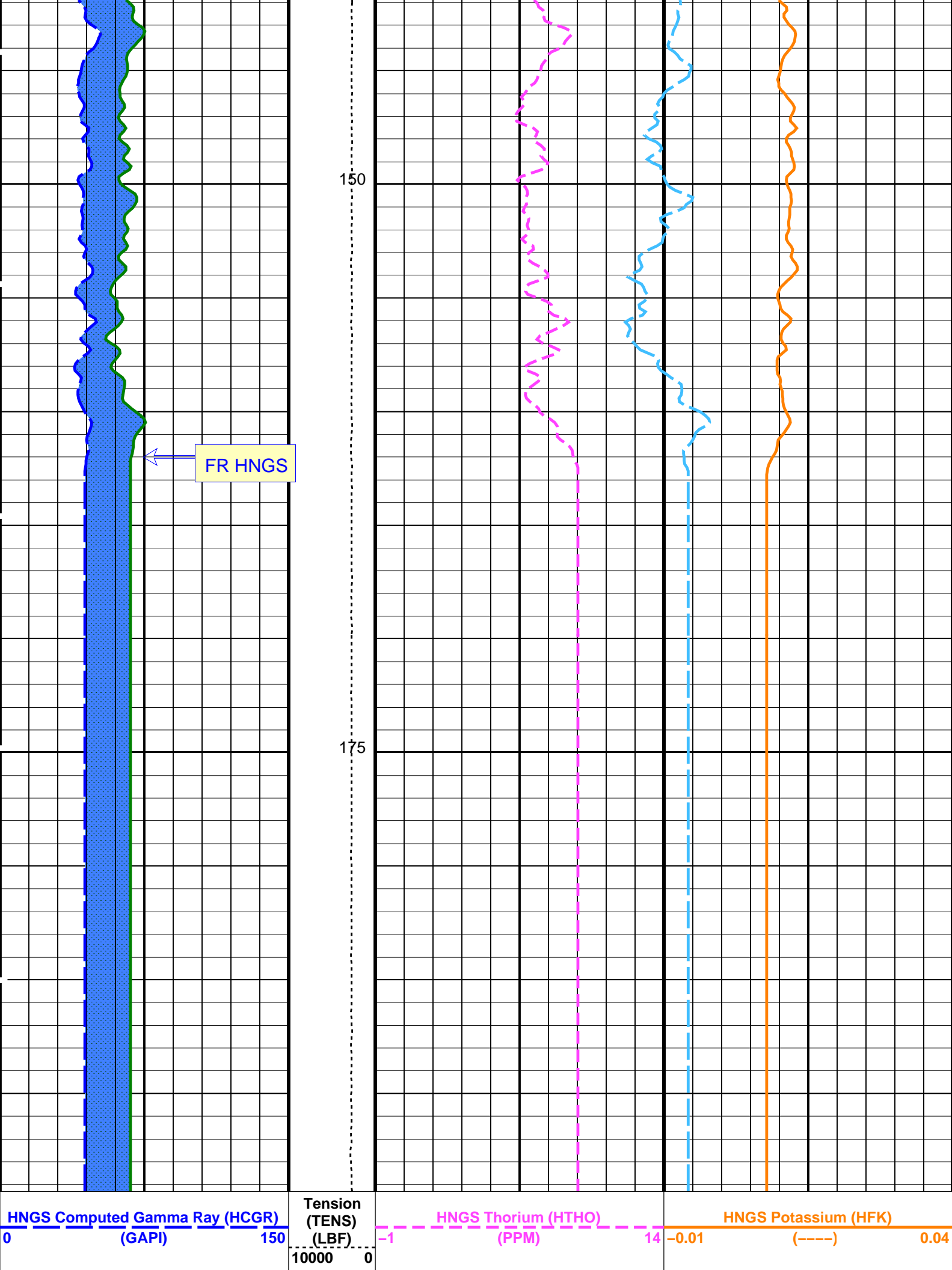
Time Mark Every 60 S











Area1 From HCGR to HSGR		HNGS Uranium (HURA) (PPM)		10	
HNGS Spectroscopy Gamma Ray (HSGR)				HNGS Borehole Potassium (HBHK)	
0	(GAPI)	150	-0.05		0.05
PIP SUMMARY					
Time Mark Every 60 S					
Parameters					
DLIS Name		Description		Value	
HRLT-B: High Resolution Laterolog Array - B					
BHS	Borehole Status		OPEN		
GCSE	Generalized Caliper Selection		BS		
DSST-B: Dipole Shear Imager - B					
BHS	Borehole Status		OPEN		
GCSE	Generalized Caliper Selection		BS		
HNGS-BA: Hostile Natural Gamma Ray Sonde					
BAR1	HNGS Detector 1 Barite Constant		1		
BAR2	HNGS Detector 2 Barite Constant		1		
BHK	HNGS Borehole Potassium Correction Concentration		0		
BHS	Borehole Status		OPEN		
CSD1	Inner Casing Outer Diameter		0	IN	
CSD2	Outer Casing Outer Diameter		0	IN	
CSW1	Inner Casing Weight		0	LB/F	
CSW2	Outer Casing Weight		0	LB/F	
DBCC	HNGS Barite Constant Correction Flag		NONE		
GCSE	Generalized Caliper Selection		BS		
H1P	HNGS Detector 1 Allow/Disallow In Processing		ALLOW		
H2P	HNGS Detector 2 Allow/Disallow In Processing		ALLOW		
HABK	HNGS Borehole Potassium Running Average		-0.00388996		
HALF	HNGS Alpha Filter Length		60	IN	
HCRB	HNGS Apply Borehole Potassium Correction		NONE		
HMWM	Mud Weighting Material		NATU		
HNPE	HNGS Processing Enable		YES		
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate		-999.25	CPS	
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate		-999.25	CPS	
SGRC	HNGS Standard Gamma-Ray Correction Flag		YES		
TPOS	Tool Position		ECCE		
VBA1	HNGS Detector 1 Variable Barite Factor Running Average		0.998728		
VBA2	HNGS Detector 2 Variable Barite Factor Running Average		0.98696		
EDTC-B: Enhanced DTS Cartridge					
BHS	Borehole Status		OPEN		
GCSE	Generalized Caliper Selection		BS		
System and Miscellaneous					
BS	Bit Size		9.875	IN	
DFD	Drilling Fluid Density		1.05	G/C3	
DO	Depth Offset for Playback		-594.0	M	
PP	Playback Processing		NORMAL		
Format: HNGSYields		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	
Schlumberger					
Down Log					

MAXIS Field Log

Input DLIS Files

DEFAULT      Flip\_MSS\_LDEO\_HRLA\_020PUP      PRODUCER    28-Sep-2012 20:28    153.0 M      -10.1 M

Output DLIS Files

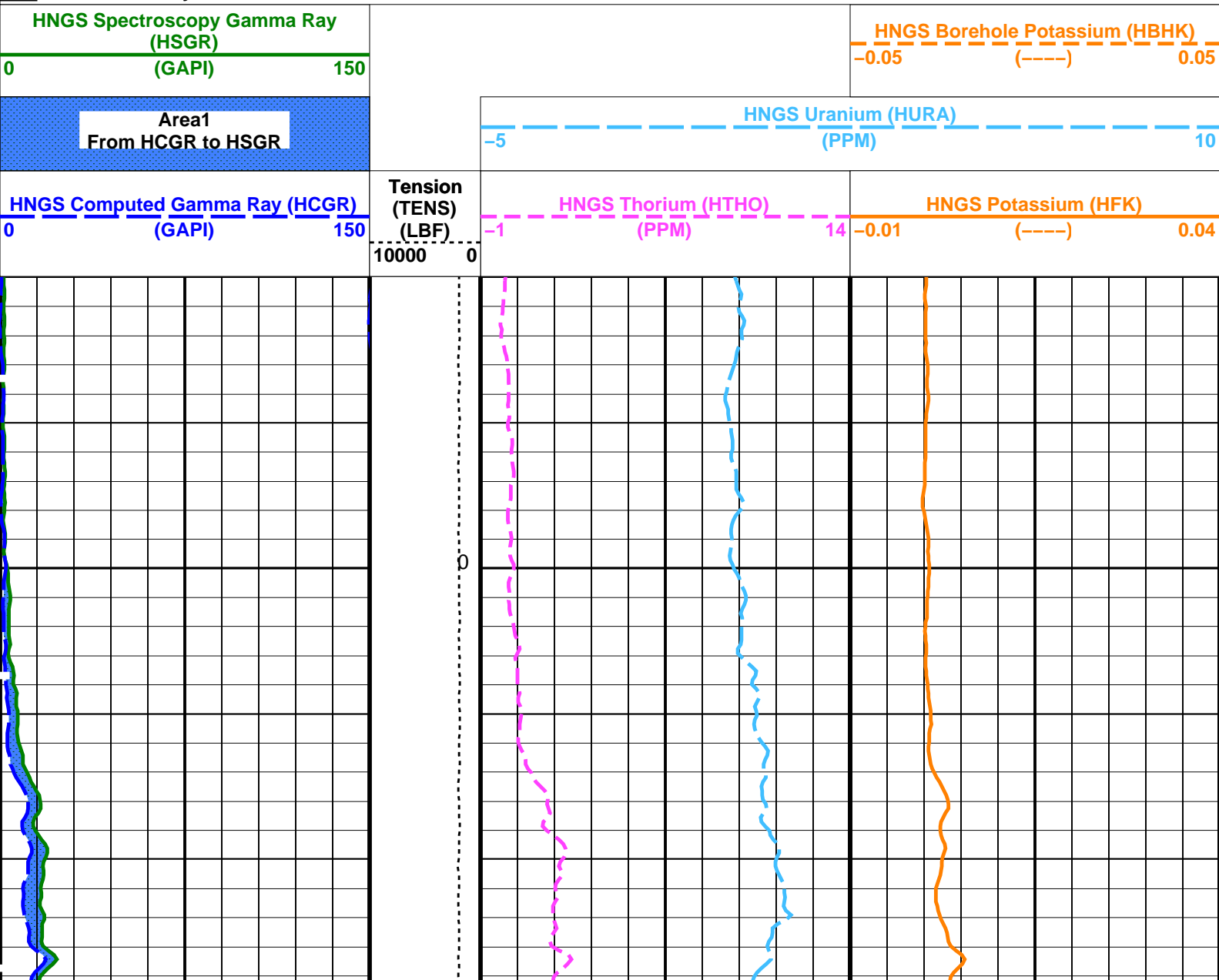
DEFAULT      MSS\_LDEO\_HRLA\_DSI\_021PUP    FN:26    PRODUCER    28-Sep-2012 20:29    153.0 M      -10.1 M  
CLIENT      MSS\_LDEO\_HRLA\_DSI\_021PUC    FN:27    CUSTOMER    28-Sep-2012 20:29    153.0 M      -10.1 M

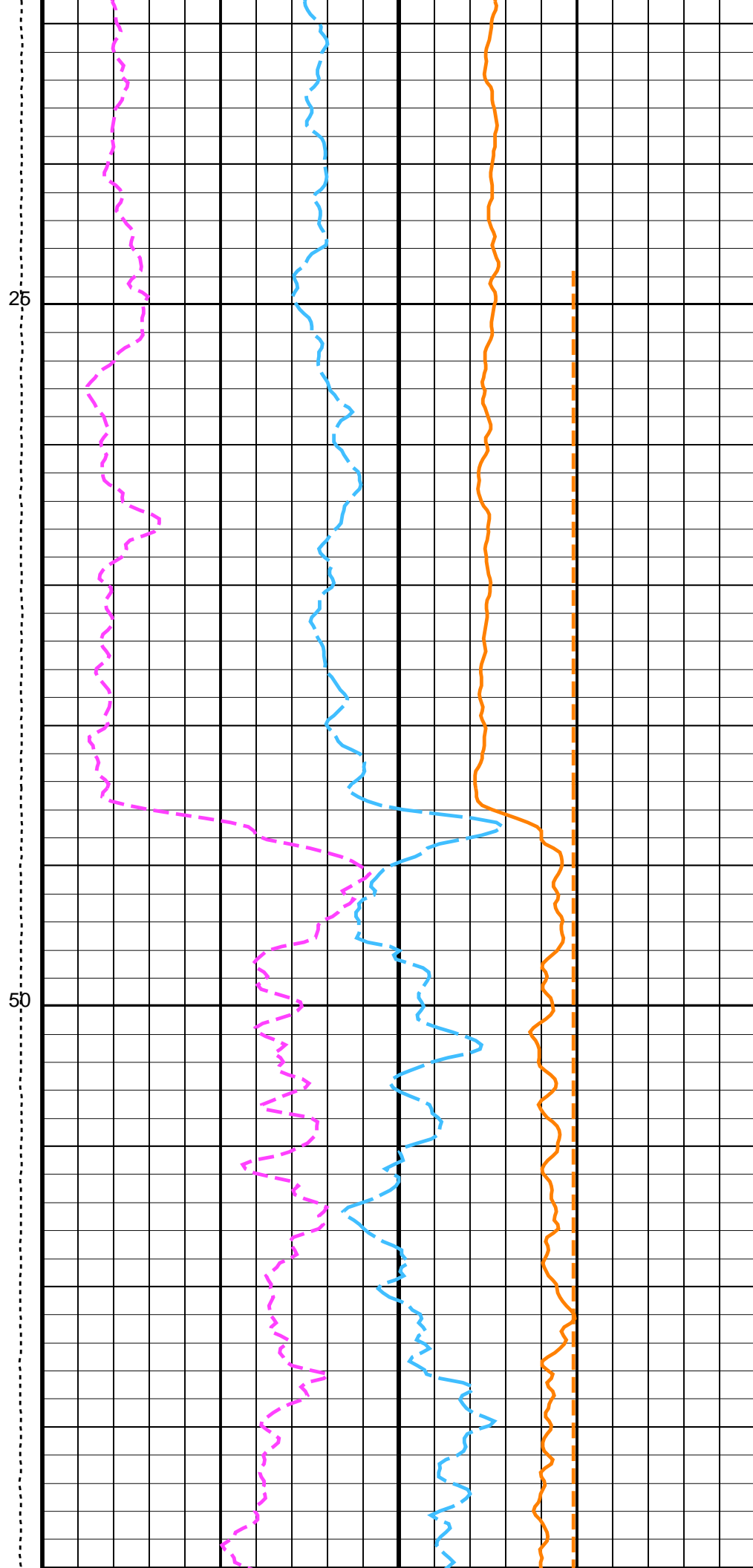
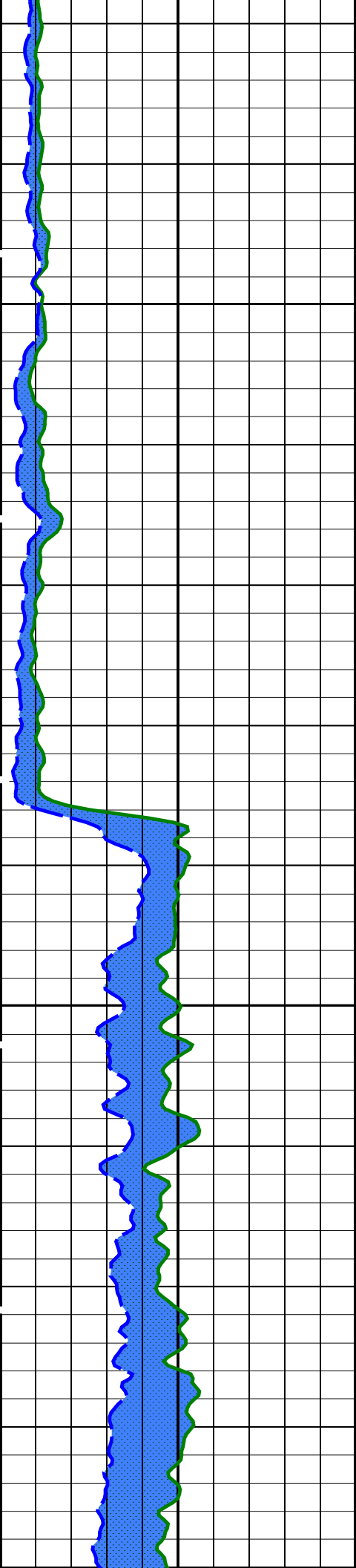
OP System Version: 19C0-187

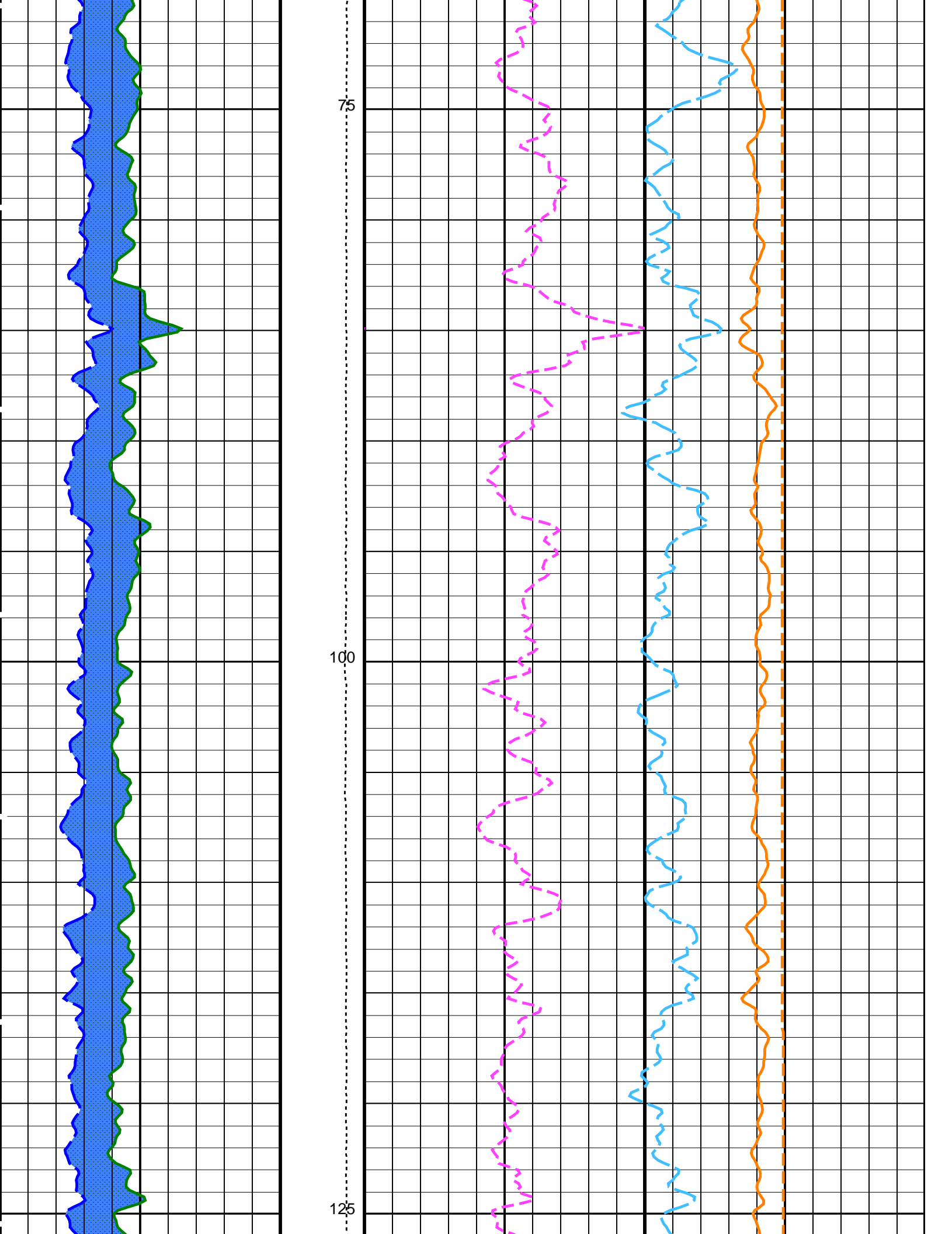
MSS\_LDEO-A      19C0-187      HRLT-B      19C0-187  
DSST-B          19C0-187      HNGC-B      19C0-187  
HNGS-BA        19C0-187      EDTC-B      SKK-5169-EDTCB

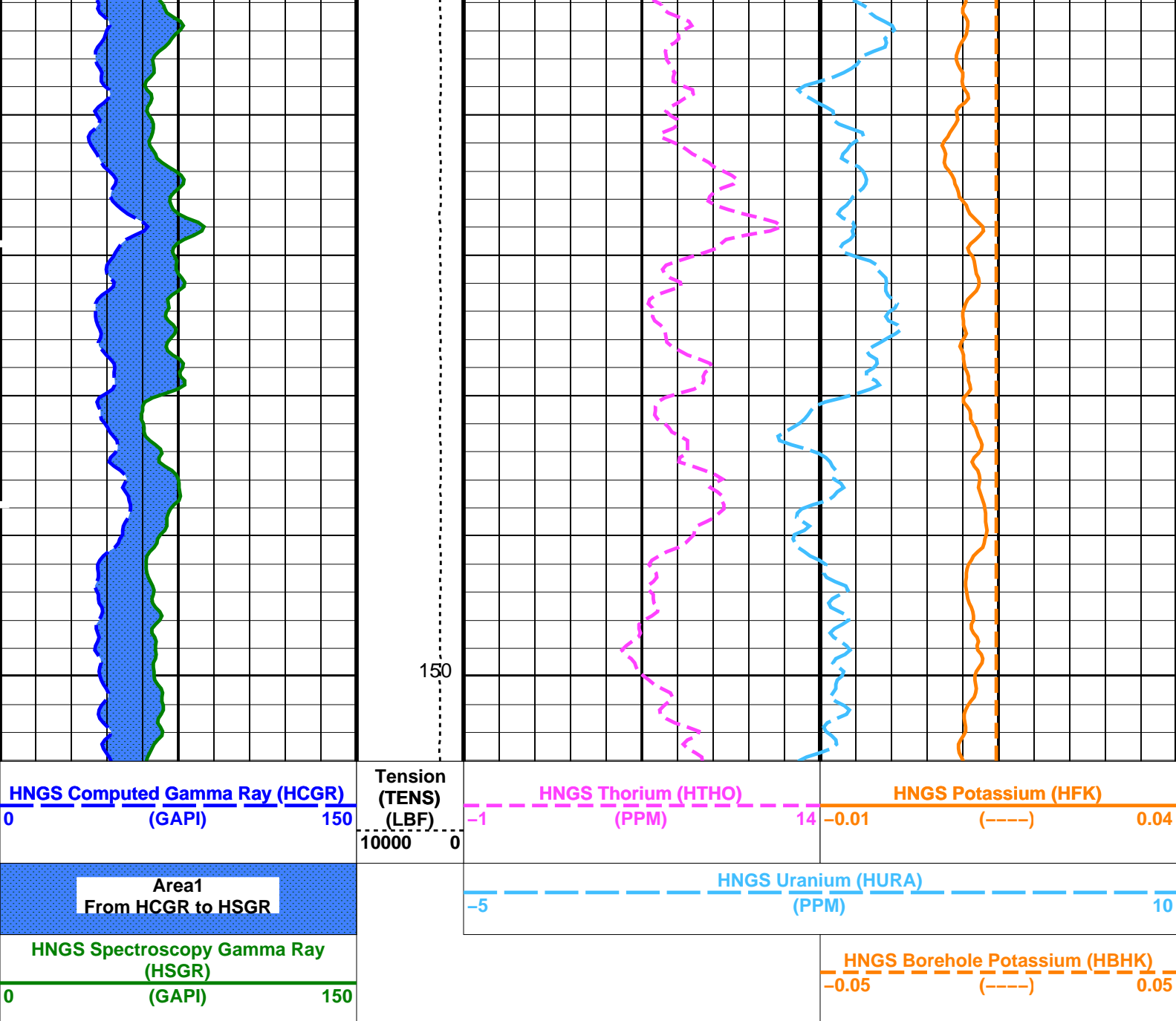
PIP SUMMARY

Time Mark Every 60 S









#### PIP SUMMARY

Time Mark Every 60 S

### Parameters

DLIS Name	Description	Value	
BHS	HRLT-B: High Resolution Laterolog Array - B		
GCSE	Borehole Status	OPEN	
	Generalized Caliper Selection	BS	
BHS	DSST-B: Dipole Shear Imager - B		
GCSE	Borehole Status	OPEN	
	Generalized Caliper Selection	BS	
BHS	HNGS-BA: Hostile Natural Gamma Ray Sonde		
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	BS	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.00388996	
HALE	HNGS Alpha Filter Length	60	IN

HAEI	HNGS Alpha Filter Length	0.0	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	-999.25	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	-999.25	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.998728	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.98696	
	EDTC-B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.05	G/C3
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: HNGSYields      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 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



Before: 20-Sep-2012 18:03    After: 20-Sep-2012 20:43								
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		
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	
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			
3	Before		–342.4	–322.7	–280.7	–379.7
	After		–340.5			
4	Before		–328.1	–322.7	–280.7	–379.7
	After		–327.0			

5	Before		-323.6	-322.7	-280.7	-379.7
6	Before		332.2	322.7	379.7	280.7
	After		329.8			
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						



High Resolution Laterolog Array – B Wellsite Calibration						
HRLT M12						
Idx	Phase	HRLT M1–M2 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1758	1781	2095	1549
	After		1755			
1	Before		1876	1781	2095	1549
	After		1860			
2	Before		1860	1781	2095	1549
	After		1848			
3	Before		1876	1781	2095	1549
	After		1866			
4	Before		1799	1781	2095	1549
	After		1794			
5	Before		1776	1781	2095	1549
	After		1772			
6	Before		-1832	-1781	-1549	-2095
	After		-1820			
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 M23						
Idx	Phase	HRLT M2–M3 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1745	1781	2095	1549
	After		1741			
1	Before		1875	1781	2095	1549
	After		1857			
2	Before		1860	1781	2095	1549
	After		1847			
3	Before		1879	1781	2095	1549
	After		1868			
4	Before		1796	1781	2095	1549
	After		1789			
5	Before		1773	1781	2095	1549
	After		1769			
(Minimum) (Nominal) (Maximum)						

















6	Before		-1819	-1781	-1549	-2095
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	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 (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		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

Enhanced DTS Cartridge Wellsite Calibration		
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**

HNGS Spectral GR