

Company: Lamont Doherty

Well: Expedition 307 Site U1316C

Field: Porcupine Basin Carbonate Mounds

Rig: Joides Resolution Country: Ireland

Hostile Natural Gamma Ray

<p>Rig: Joides Resolution</p> <p>Field: Porcupine Basin Carbonate Mounds</p> <p>Location:</p> <p>Well: Expedition 307 Site U1306C</p> <p>Company: Lamont Doherty</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center;">LOCATION</th> </tr> <tr> <td style="width: 50%; vertical-align: top;"> <p>Permanent Datum: _____</p> <p>Log Measured From: _____</p> <p>Drilling Measured From: _____</p> </td> <td style="width: 50%; vertical-align: top;"> <p>Mean Sea Level _____</p> <p>Drill Floor _____</p> <p>Drill Floor _____</p> </td> </tr> <tr> <td style="vertical-align: top;"> <p>Ocean Atlantic</p> </td> <td style="vertical-align: top;"> <p>Max. Well Deviation</p> </td> </tr> <tr> <td style="vertical-align: top;"> <p>Elev.: K.B. 11.3 m G.L. -959 m D.F. 11 m</p> </td> <td style="vertical-align: top;"> <p>Elev.: 0 m</p> </td> </tr> <tr> <td style="vertical-align: top;"> <p>11.0 m above Perm. Datum</p> </td> <td style="vertical-align: top;"> <p>Longitude 14° 43.09W</p> </td> </tr> <tr> <td style="vertical-align: top;"> <p>Latitude 51° 22.83N</p> </td> <td></td> </tr> </table>	LOCATION		<p>Permanent Datum: _____</p> <p>Log Measured From: _____</p> <p>Drilling Measured From: _____</p>	<p>Mean Sea Level _____</p> <p>Drill Floor _____</p> <p>Drill Floor _____</p>	<p>Ocean Atlantic</p>	<p>Max. Well Deviation</p>	<p>Elev.: K.B. 11.3 m G.L. -959 m D.F. 11 m</p>	<p>Elev.: 0 m</p>	<p>11.0 m above Perm. Datum</p>	<p>Longitude 14° 43.09W</p>	<p>Latitude 51° 22.83N</p>	
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<p>11.0 m above Perm. Datum</p>	<p>Longitude 14° 43.09W</p>												
<p>Latitude 51° 22.83N</p>													

Logging Date	8-May-2005	Max. Well Deviation	
Run Number	Two	Longitude	14° 43.09W
Depth Driller	1102 m	Latitude	51° 22.83N
Schlumberger Depth	1105 m		
Bottom Log Interval	1105 m		
Top Log Interval	959 m		
Casing Driller Size @ Depth	0.000 in @ 1017 m		
Casing Schlumberger	1018 m		
Bit Size	9.875 in		
Type Fluid In Hole	Sepiolite		
Density	1.07 g/cm3		
Fluid Loss			
Source Of Sample			
RM @ Measured Temperature	0.322 ohm.m @ 22 degC		
RMF @ Measured Temperature	@ @		
RMC @ Measured Temperature	@ @		
Source RMF	RMC		
RM @ MRT	@ @ @ @		
Maximum Recorded Temperatures			
Circulation Stopped	8-May-2005 Time 4:00		
Logger On Bottom	8-May-2005 Time 6:45		
Unit Number	2082	Location	Webster, TX
Recorded By	Javier Espinosa		
Witnessed By	Philippe Gaillot		

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

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

DISCLAIMER

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.




OTHER SERVICES1 OS1: HLDS, DIT, APS OS2: DSI OS3: FMS OS4: OS5:	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:
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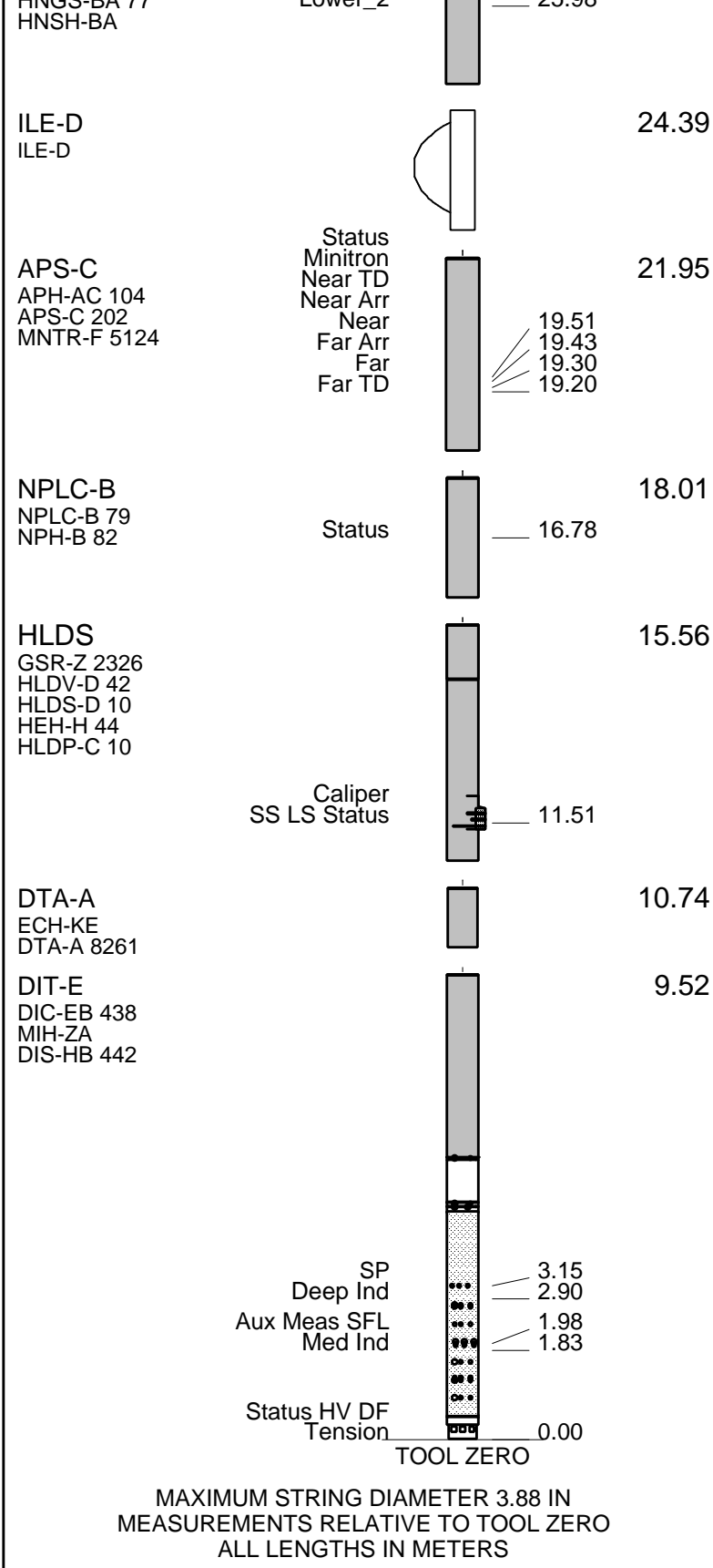
REMARKS: RUN NUMBER 1 Hole drilled with RCB Parameters and presentations as per IODP standars Tool ran as per tool sketch below Hole flushed with sepiolite	REMARKS: RUN NUMBER 2
--	--

RUN 1			RUN 2		
SERVICE ORDER #:	12C0-301		SERVICE ORDER #:		
PROGRAM VERSION:			PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1	RUN 2
SURFACE EQUIPMENT SFT-281 6250 SFT-178 6250 GSR-U 135 WITM (DTS)-A	

DOWNHOLE EQUIPMENT			
LEH-QT			28.69
LEH-QT			
DTC-H	CTEM		27.52
ECH-KC	TelStatus		27.80
	ToolStatu		26.89
HNGS-BA	Upper_1		26.19
HNGS BA 77	Lower_2		25.98



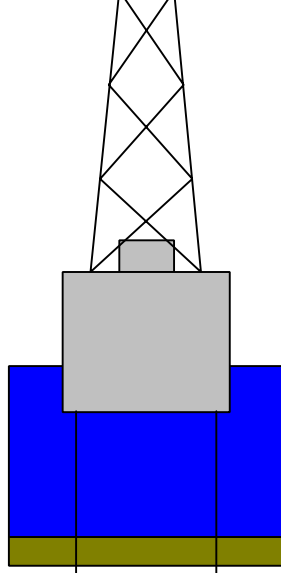
Production String	(in)	(m)	Well Schematic	(m)	(in)	Casing String
	OD	ID		MD	MD	

Kelly Bushing Elevation
Derrick Floor Elevation

Mean Sea Level

11.3
11.0

0.0



11.0 5.000

Casing String



959.0 9.875
1017.0 5.000

Borehole Segment
Casing Shoe

Schlumberger

MAIN PASS

MAXIS Field Log

Company: Lamont Doherty

Well: Expedition 307 Site U1306C

Output DLIS Files

DEFAULT	PI_LDL_APS_NGS_003LUP	FN:3	PRODUCER	08-May-2005 06:25	1106.4 M	915.8 M
REDUCED	PI_LDL_APS_NGS_003LUP	FN:4	PRODUCER	08-May-2005 06:25	1106.4 M	915.8 M

OP System Version: 12C0-301

MCM

DIT-E	12C0-301	DTA-A	12C0-301
HLDS	12C0-301	NPLC-B	12C0-301
APS-C	12C0-301	HNGS-BA	12C0-301
DTC-H	12C0-301		

PIP SUMMARY

Time Mark Every 60 S

HNGS Spectroscopy Gamma Ray

(HSGR)
0 (GAPI) 100

HNGS Det.2 Resolution Degradation
Factor (RDF2)
0 (----) 10

HNGS Det.1 Resolution Degradation
Factor (RDF1)
0 (----) 10

HNGS Det.2 Gain Correction Factor
(GCF2)
0.9 (----) 1.1

HNGS Det.1 Gain Correction Factor
(GCF1)
0.9 (----) 1.1

Area1
From HCGR to HSGR

HNGS Computed Gamma Ray (HCGR)
0 (GAPI) 100

Caliper (LCAL)
6 (IN) 16

HLDS Caliper (LCAL)
0 (IN) 20

HNGS Borehole Potassium (HBHK)
-0.05 (V/V) 0.05

HNGS Det.2 Chi Squared (CHI2)
10 (----) 0

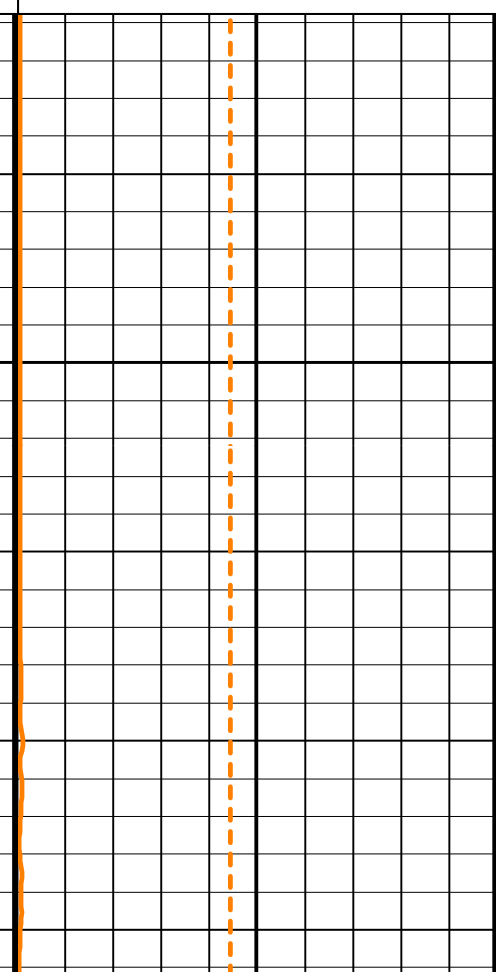
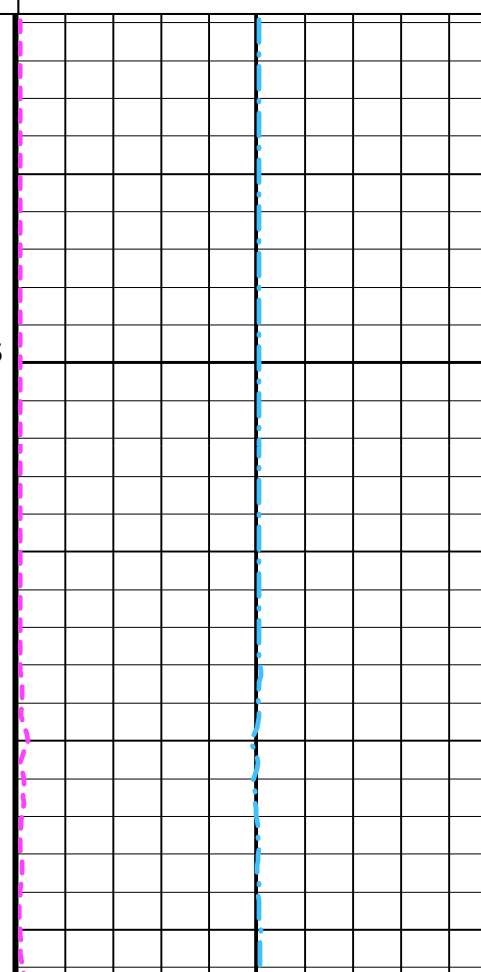
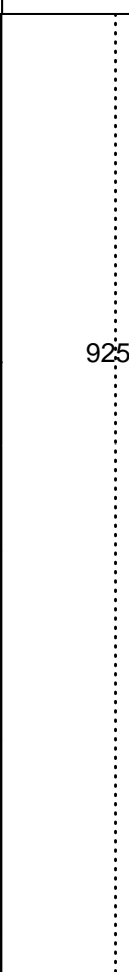
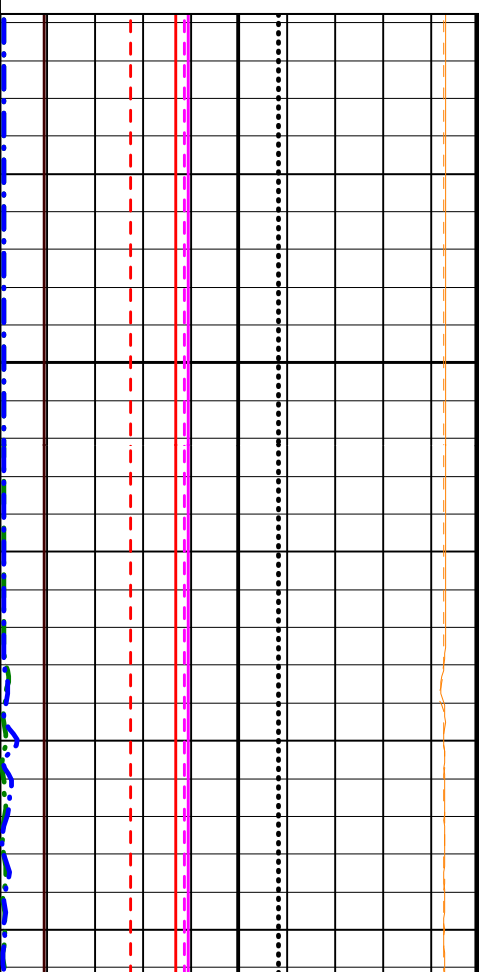
HNGS Uranium (HURA)
-10 (PPM) 30

HNGS Det.1 Chi Squared (CHI1)
10 (----) 0

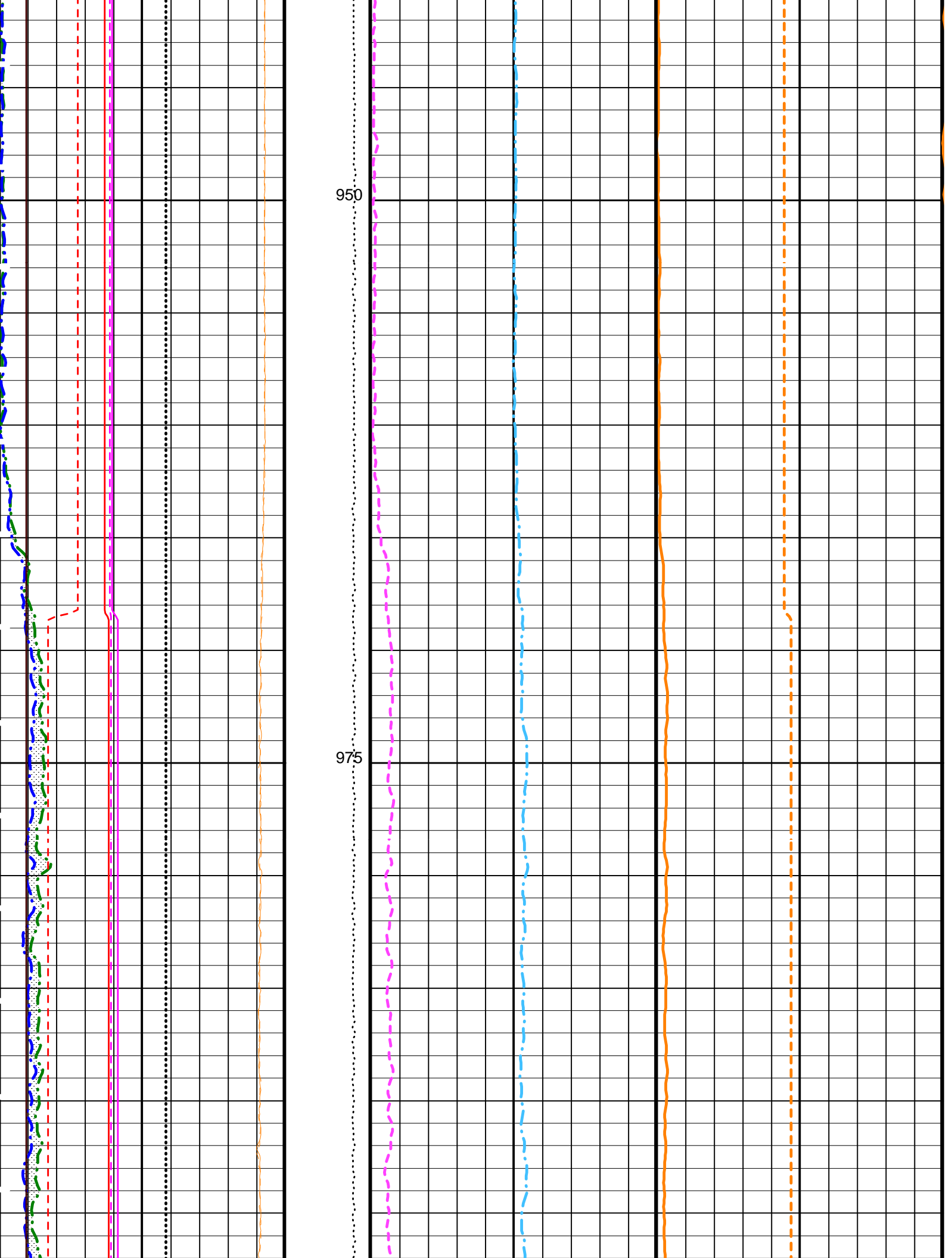
Tension
(TENS)
(LBF)
10000 0

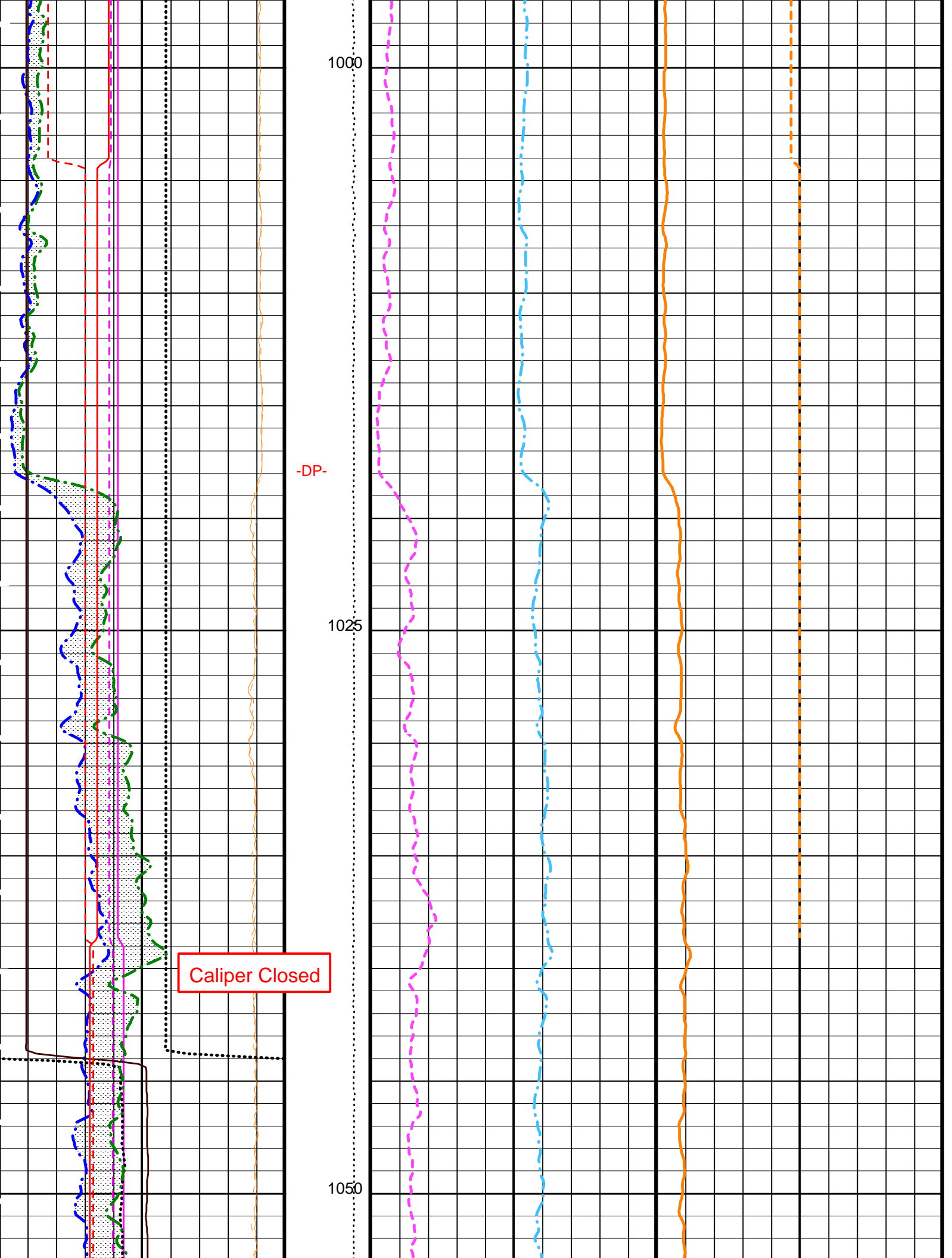
HNGS Thorium (HTHO)
0 (PPM) 30

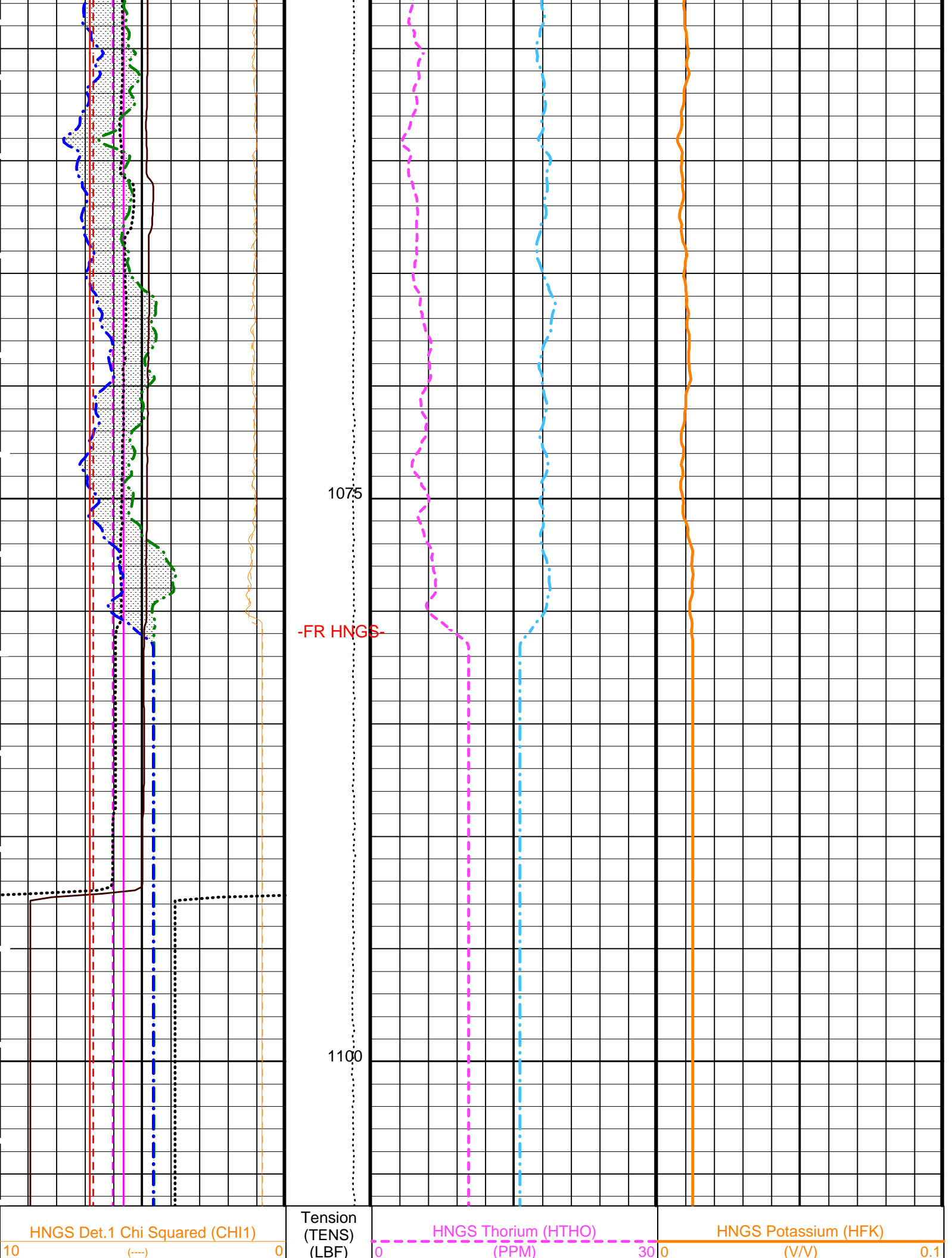
HNGS Potassium (HFK)
0 (V/V) 0.1



925







	10000	0		
HNGS Det.2 Chi Squared (CHI2)	(---)	0	HNGS Uranium (HURA)	(PPM)
10			-10	30
HLDS Caliper (LCAL)	(IN)	20	HNGS Borehole Potassium (HBHK)	(V/V)
0			-0.05	0.05
Caliper (LCAL)	(IN)	16		
6				
HNGS Computed Gamma Ray (HCGR)	(GAPI)	100		
0				
Area1 From HCGR to HSGR				
HNGS Det.1 Gain Correction Factor (GCF1)	(---)	1.1		
0.9				
HNGS Det.2 Gain Correction Factor (GCF2)	(---)	1.1		
0.9				
HNGS Det.1 Resolution Degradation Factor (RDF1)	(---)	10		
0				
HNGS Det.2 Resolution Degradation Factor (RDF2)	(---)	10		
0				
HNGS Spectroscopy Gamma Ray (HSGR)	(GAPI)	100		
0				

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	DIT-E: Dual Induction - E		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
	APS-C: Accelerator-Porosity Tool		
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	-0.00268983	
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	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.940817	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.917494	
	System and Miscellaneous		
BS	Bit Size	9 875	IN

OP System Version: 12C0-301
 MCM

DIT-E	12C0-301	DTA-A	12C0-301
HLDS	12C0-301	NPLC-B	12C0-301
APS-C	12C0-301	HNGS-BA	12C0-301
DTC-H	12C0-301		

Output DLIS Files

DEFAULT	PI_LDL_APS_NGS_003LUP	FN:3	PRODUCER	08-May-2005 06:25
REDUCED	PI_LDL_APS_NGS_003LUP	FN:4	PRODUCER	08-May-2005 06:25



CALIBRATIONS

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Hostile Litho-Density Sonde Wellsite Calibration - Background Measurement							
Master: 13-Apr-2005 14:57 Before: 4-May-2005 10:16							
SS Cs Resolution Bkg	9.000	8.327	8.278	N/A	N/A	1.800	%
LS Cs Resolution Bkg	9.000	8.844	8.838	N/A	N/A	1.800	%
LSW1 Background	100.0	85.93	84.50	N/A	N/A	3.000	CPS
LSW2 Background	100.0	79.37	78.34	N/A	N/A	3.000	CPS
LSW3 Background	200.0	173.9	172.4	N/A	N/A	6.000	CPS
LSW4 Background	250.0	212.7	211.2	N/A	N/A	7.500	CPS
LSW5 Background	600.0	496.4	493.5	N/A	N/A	18.00	CPS
SSW1 Background	100.0	84.01	84.96	N/A	N/A	3.000	CPS
SSW2 Background	200.0	151.0	153.7	N/A	N/A	6.000	CPS
SSW3 Background	500.0	416.8	414.9	N/A	N/A	15.00	CPS
SSW4 Background	270.0	219.0	219.7	N/A	N/A	8.100	CPS
SSW5 Background	200.0	159.0	158.9	N/A	N/A	6.000	CPS
Hostile Litho-Density Sonde Wellsite Calibration - Aluminum Measurement							
Master: 13-Apr-2005 15:41							
LSW1 Aluminum	600.0	631.9	N/A	N/A	N/A	N/A	CPS
LSW2 Aluminum	900.0	923.0	N/A	N/A	N/A	N/A	CPS
LSW3 Aluminum	1100	1128	N/A	N/A	N/A	N/A	CPS
LSW4 Aluminum	580.0	571.2	N/A	N/A	N/A	N/A	CPS
LSW5 Aluminum	570.0	531.9	N/A	N/A	N/A	N/A	CPS
SSW1 Aluminum	2800	3024	N/A	N/A	N/A	N/A	CPS
SSW2 Aluminum	8000	8390	N/A	N/A	N/A	N/A	CPS
SSW3 Aluminum	11600	11660	N/A	N/A	N/A	N/A	CPS
SSW4 Aluminum	5000	4884	N/A	N/A	N/A	N/A	CPS
SSW5 Aluminum	660.0	644.8	N/A	N/A	N/A	N/A	CPS
Hostile Litho-Density Sonde Wellsite Calibration - Lithology Measurement							
Master: 13-Apr-2005 15:35							
LSW1 Iron	400.0	430.0	N/A	N/A	N/A	N/A	CPS
LSW2 Iron	730.0	733.6	N/A	N/A	N/A	N/A	CPS
LSW3 Iron	1000	986.9	N/A	N/A	N/A	N/A	CPS
LSW4 Iron	520.0	515.9	N/A	N/A	N/A	N/A	CPS
LSW5 Iron	470.0	489.1	N/A	N/A	N/A	N/A	CPS
SSW1 Iron	2100	2212	N/A	N/A	N/A	N/A	CPS
SSW2 Iron	6800	6952	N/A	N/A	N/A	N/A	CPS
SSW3 Iron	10800	10570	N/A	N/A	N/A	N/A	CPS
SSW4 Iron	4600	4424	N/A	N/A	N/A	N/A	CPS

SSW5 Iron	580.0	563.2	N/A	N/A	N/A	N/A	N/A	CPS
Hostile Litho-Density Sonde Wellsite Calibration - Caliper Calibration								
Before: 4-May-2005 10:20								
HLDS Caliper Small Ring	8.000	N/A	10.61	N/A	N/A	N/A	N/A	IN
HLDS Caliper Large Ring	12.00	N/A	14.67	N/A	N/A	N/A	N/A	IN
Accelerator-Porosity Tool Wellsite Calibration - Detector Background								
Master: 22-Mar-2005 20:56 Before: 4-May-2005 10:17								
Near Det Bkg Cntrate	30.00	25.38	25.71	N/A	N/A	N/A	N/A	CPS
Far Det Bkg Cntrate	30.00	25.40	26.37	N/A	N/A	N/A	N/A	CPS
Array-1 Det Bkg Cntrate	30.00	28.70	26.09	N/A	N/A	N/A	N/A	CPS
Array-2 Det Bkg Cntrate	30.00	25.69	27.22	N/A	N/A	N/A	N/A	CPS
Array Therm Det Bkg Cntrate	30.00	25.67	24.20	N/A	N/A	N/A	N/A	CPS
Accelerator-Porosity Tool Wellsite Calibration - Calibration Ratios								
Master: 22-Mar-2005 20:56								
Near/Far Calibration Ratio	0.9250	0.9625	N/A	N/A	N/A	N/A	N/A	
Near/Array Calibration Ratio	1.030	0.9914	N/A	N/A	N/A	N/A	N/A	
Near/Array Cal Ratio Up/Down	1.000	0.9985	N/A	N/A	N/A	N/A	N/A	
Accelerator-Porosity Tool Wellsite Calibration - Tank Check								
Master: 22-Mar-2005 20:56								
Array-1 Standoff Porosity	11.75	11.97	N/A	N/A	N/A	N/A	N/A	PU
Array-2 Standoff Porosity	11.75	11.85	N/A	N/A	N/A	N/A	N/A	PU
Average Slowing Down Time	6.000	5.825	N/A	N/A	N/A	N/A	N/A	US
Array-1 SDT Ratio Up/Down	1.000	0.9952	N/A	N/A	N/A	N/A	N/A	
Array-2 SDT Ratio Up/Down	1.000	1.006	N/A	N/A	N/A	N/A	N/A	
Sigma Formation	27.50	27.53	N/A	N/A	N/A	N/A	N/A	CU
Accelerator-Porosity Tool Wellsite Calibration - CCR7 signal boxes								
Master: 22-Mar-2005 20:56								
Near Detector Plateau Setting	1650	1741	N/A	N/A	N/A	N/A	N/A	V
Far Detector Plateau Setting	2000	2082	N/A	N/A	N/A	N/A	N/A	V
Array Detector Plateau Setting	2000	1973	N/A	N/A	N/A	N/A	N/A	V
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 1 Check								
Master: 4-May-2005 10:11 Before: 4-May-2005 10:17								
Na 511 Peak Loc	40.00	40.62	40.84	N/A	N/A	1.000		
Na 511 Peak Res	15.50	16.96	15.95	N/A	N/A	2.000		%
High Voltage	1150	1255	1255	N/A	N/A	N/A		V
Na 1785 Peak Loc	142.6	144.8	144.7	N/A	N/A	7.000		
Na 1785 Peak Res	8.500	9.982	9.411	N/A	N/A	2.000		%
Temperature	15.50	18.00	18.01	N/A	N/A	N/A		DEGC
Na Count Rate	45.00	42.26	42.82	N/A	N/A	8.000		CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 2 Check								
Master: 4-May-2005 10:11 Before: 4-May-2005 10:17								
Na 511 Peak Loc	40.00	40.54	40.56	N/A	N/A	1.000		
Na 511 Peak Res	15.50	16.66	16.93	N/A	N/A	2.000		%
High Voltage	1150	1274	1275	N/A	N/A	N/A		V
Na 1785 Peak Loc	142.6	144.2	144.8	N/A	N/A	7.000		
Na 1785 Peak Res	8.500	9.777	9.984	N/A	N/A	2.000		%
Temperature	15.50	17.18	17.20	N/A	N/A	N/A		DEGC
Na Count Rate	45.00	42.45	43.34	N/A	N/A	8.000		CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Ratio Of Detector 1 To Detector 2								
Master: 4-May-2005 10:11 Before: 4-May-2005 10:17								
Coincidence Count Rate Ratio	1.000	0.9936	0.9895	N/A	N/A	0.05000		
Hostile Natural Gamma Ray Sonde Master Calibration - Detector 1 Calibration								
Master: 4-May-2005 10:06								
Na 511 Peak Set Point	40.00	41.00	--	--	--	--		
Th Peak Loc	209.6	208.9	--	--	--	--		
Th Peak Res	7.000	8.099	--	--	--	--		%
Background Count Rate	142.5	21.35	--	--	--	--		CPS
Gain Ratio	1.000	0.9786	--	--	--	--		
Hostile Natural Gamma Ray Sonde Master Calibration - Detector 2 Calibration								
Master: 4-May-2005 10:06								
Na 511 Peak Set Point	40.00	41.00	--	--	--	--		
Th Peak Loc	209.6	207.3	--	--	--	--		
Th Peak Res	7.000	8.237	--	--	--	--		%
Background Count Rate	142.5	22.15	--	--	--	--		CPS
Gain Ratio	1.000	0.9731	--	--	--	--		

Accelerator-Porosity Tool - Detector Plateau Settings :

Near Detector Plateau Setting 1741 V

Far Detector Plateau Setting 2082 V

Before		26.63	Before		1.026	
	-103.8 (Minimum)	26.23 (Nominal)	156.2 (Maximum)	0.8659 (Minimum)	1.016 (Nominal)	1.222 (Maximum)
Phase	IM Elect Quad Offset 40 kHz	MM/M	Value	Phase	IM Elect Quad Gain 40 kHz	Value
Before		26.34	Before		1.023	
	-104.1 (Minimum)	25.93 (Nominal)	155.9 (Maximum)	0.8629 (Minimum)	1.013 (Nominal)	1.218 (Maximum)

Before: 4-May-2005 10:16

Dual Induction - E Wellsite Calibration						
SFL Electronics						
Phase	SFL Voltage Offset MV	Value	Phase	SFL Voltage Gain	Value	
Before		1.275	Before		1.018	
	-15.00 (Minimum)	0 (Nominal)	15.00 (Maximum)	0.8500 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
Phase	SFL Current Offset MA	Value	Phase	SFL Current Gain	Value	
Before		0.007354	Before		0.9952	
	-0.6000 (Minimum)	0 (Nominal)	0.6000 (Maximum)	0.8500 (Minimum)	1.000 (Nominal)	1.200 (Maximum)

Before: 4-May-2005 10:16

Dual Induction - E Master Calibration									
Test Loop Calibration: Calibration of Internal Reference to Test Loop Standard									
Phase	Deep 10 kHz Gain Factor	Value	Phase	Deep 20 kHz Gain Factor	Value	Phase	Deep 40 kHz Gain Factor	Value	
Master		1.009	Master		1.021	Master		1.038	
	0.9000 (Minimum)	1.000 (Nominal)	1.100 (Maximum)	0.9000 (Minimum)	1.000 (Nominal)	1.100 (Maximum)	0.9000 (Minimum)	1.000 (Nominal)	1.100 (Maximum)
Phase	Medium 10 kHz Gain Factor	Value	Phase	Medium 20 kHz Gain Factor	Value	Phase	Medium 40 kHz Gain Factor	Value	
Master		1.000	Master		1.000	Master		1.000	
	0.9000 (Minimum)	1.000 (Nominal)	1.100 (Maximum)	0.9000 (Minimum)	1.000 (Nominal)	1.100 (Maximum)	0.9000 (Minimum)	1.000 (Nominal)	1.100 (Maximum)
Phase	Deep 10 kHz Phase Shift	Value	Phase	Deep 20 kHz Phase Shift	Value	Phase	Deep 40 kHz Phase Shift	Value	
Master		0.01267	Master		-0.2437	Master		-1.527	
	-1.500 (Minimum)	0 (Nominal)	1.500 (Maximum)	-2.000 (Minimum)	0 (Nominal)	2.000 (Maximum)	-4.000 (Minimum)	-1.000 (Nominal)	2.000 (Maximum)
Phase	Medium 10 kHz Phase Shift	Value	Phase	Medium 20 kHz Phase Shift	Value	Phase	Medium 40 kHz Phase Shift	Value	
Master		0	Master		0	Master		0	
	-1.500 (Minimum)	0 (Nominal)	1.500 (Maximum)	-3.000 (Minimum)	-1.000 (Nominal)	1.000 (Maximum)	-5.000 (Minimum)	-2.000 (Nominal)	1.000 (Maximum)

Master: Calibration out of date 8-Apr-2004 10:16

Dual Induction - E Master Calibration									
Sonde Error Corrections: Correction for sonde response in zero conductivity environment. (Normalized to 25C).									
Phase	Real Deep 10 kHz S.E. Corr.	Value	Phase	Real Deep 20 kHz S.E. Corr.	Value	Phase	Real Deep 40 kHz S.E. Corr.	Value	
Master		48.25	Master		16.62	Master		4.700	
	-50.00 (Minimum)	0 (Nominal)	125.0 (Maximum)	-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)	-15.00 (Minimum)	0 (Nominal)	15.00 (Maximum)
Phase	Quad Deep 10 kHz S.E. Corr.	Value	Phase	Quad Deep 20 kHz S.E. Corr.	Value	Phase	Quad Deep 40 kHz S.E. Corr.	Value	
Master		105.0	Master		64.81	Master		46.33	
	-250.0 (Minimum)	0 (Nominal)	350.0 (Maximum)	-125.0 (Minimum)	0 (Nominal)	200.0 (Maximum)	-75.00 (Minimum)	0 (Nominal)	125.0 (Maximum)
Phase	Real Medium 10 kHz S.E. Corr.	Value	Phase	Real Medium 20 kHz S.E. Corr.	Value	Phase	Real Medium 40 kHz S.E. Corr.	Value	
Master		17.07	Master		-2.319	Master		-9.445	
	-50.00 (Minimum)	0 (Nominal)	140.0 (Maximum)	-50.00 (Minimum)	0 (Nominal)	50.00 (Maximum)	-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)
Phase	Quad Medium 10 kHz S.E. Corr.	Value	Phase	Quad Medium 20 kHz S.E. Corr.	Value	Phase	Quad Medium 40 kHz S.E. Corr.	Value	
Master		-95.46	Master		-31.90	Master		11.62	
	-1300 (Minimum)	0 (Nominal)	1300 (Maximum)	-650.0 (Minimum)	0 (Nominal)	650.0 (Maximum)	-350.0 (Minimum)	0 (Nominal)	350.0 (Maximum)

Master: Calibration out of date 8-Apr-2004 10:25

Hostile Litho-Density Sonde / Equipment Identification

Primary Equipment:

Hostile Litho Density Sonde
 Hostile Litho Density High Voltage
 Gamma Source Radioactive

HLDS - D 10
 HLDV - D 42
 GSR - Z 2326

Auxiliary Equipment:

Hostile Litho Density Pad
 Hostile Litho Density High Voltage Housi

HLDP - C 10
 HEH - H 44

Hostile Litho-Density Sonde Wellsite Calibration									
Background Measurement									
Phase	SS Cs Resolution Bkg %	Value	Phase	LS Cs Resolution Bkg %	Value	Phase	LSW1 Background CPS	Value	
Master		8.327	Master		8.844	Master		85.93	
Before		8.278	Before		8.838	Before		84.50	
	7.000 (Minimum) 9.000 (Nominal) 11.00 (Maximum)			7.000 (Minimum) 9.000 (Nominal) 11.00 (Maximum)			55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)		
Phase	LSW2 Background CPS	Value	Phase	LSW3 Background CPS	Value	Phase	LSW4 Background CPS	Value	
Master		79.37	Master		173.9	Master		212.7	
Before		78.34	Before		172.4	Before		211.2	
	50.00 (Minimum) 100.0 (Nominal) 140.0 (Maximum)			110.0 (Minimum) 200.0 (Nominal) 290.0 (Maximum)			140.0 (Minimum) 250.0 (Nominal) 360.0 (Maximum)		
Phase	LSW5 Background CPS	Value	Phase	SSW1 Background CPS	Value	Phase	SSW2 Background CPS	Value	
Master		496.4	Master		84.01	Master		151.0	
Before		493.5	Before		84.96	Before		153.7	
	330.0 (Minimum) 600.0 (Nominal) 830.0 (Maximum)			55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)			100.0 (Minimum) 200.0 (Nominal) 260.0 (Maximum)		
Phase	SSW3 Background CPS	Value	Phase	SSW4 Background CPS	Value	Phase	SSW5 Background CPS	Value	
Master		416.8	Master		219.0	Master		159.0	
Before		414.9	Before		219.7	Before		158.9	
	280.0 (Minimum) 500.0 (Nominal) 700.0 (Maximum)			150.0 (Minimum) 270.0 (Nominal) 380.0 (Maximum)			110.0 (Minimum) 200.0 (Nominal) 270.0 (Maximum)		
Master: 13-Apr-2005 14:57					Before: 4-May-2005 10:16				

Hostile Litho-Density Sonde Master Calibration									
Detector Background Measurement									
Phase	LSW1 Background CPS	Value	Phase	LSW2 Background CPS	Value	Phase	LSW3 Background CPS	Value	
Master		85.93	Master		79.37	Master		173.9	
	55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)			50.00 (Minimum) 100.0 (Nominal) 140.0 (Maximum)			110.0 (Minimum) 200.0 (Nominal) 290.0 (Maximum)		
Phase	LSW4 Background CPS	Value	Phase	LSW5 Background CPS	Value	Phase	LS Cs Resolution Bkg %	Value	
Master		212.7	Master		496.4	Master		8.844	
	140.0 (Minimum) 250.0 (Nominal) 360.0 (Maximum)			330.0 (Minimum) 600.0 (Nominal) 830.0 (Maximum)			7.000 (Minimum) 9.000 (Nominal) 11.00 (Maximum)		
Phase	SSW1 Background CPS	Value	Phase	SSW2 Background CPS	Value	Phase	SSW3 Background CPS	Value	
Master		84.01	Master		151.0	Master		416.8	
	55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)			100.0 (Minimum) 200.0 (Nominal) 260.0 (Maximum)			280.0 (Minimum) 500.0 (Nominal) 700.0 (Maximum)		
Phase	SSW4 Background CPS	Value	Phase	SSW5 Background CPS	Value	Phase	SS Cs Resolution Bkg %	Value	
Master		219.0	Master		159.0	Master		8.327	
	150.0 (Minimum) 270.0 (Nominal) 380.0 (Maximum)			110.0 (Minimum) 200.0 (Nominal) 270.0 (Maximum)			7.000 (Minimum) 9.000 (Nominal) 11.00 (Maximum)		
Master: 13-Apr-2005 14:57									

Hostile Litho-Density Sonde Master Calibration									
Detector Aluminum Measurement (bkgd-subtracted)									
Phase	LSW1 Aluminum CPS	Value	Phase	LSW2 Aluminum CPS	Value	Phase	LSW3 Aluminum CPS	Value	
Master		631.9	Master		923.0	Master		1128	
	420.0 (Minimum) 600.0 (Nominal) 700.0 (Maximum)			650.0 (Minimum) 900.0 (Nominal) 1050 (Maximum)			800.0 (Minimum) 1100 (Nominal) 1300 (Maximum)		
Phase	LSW4 Aluminum CPS	Value	Phase	LSW5 Aluminum CPS	Value	Phase	SSW1 Aluminum CPS	Value	
Master		571.2	Master		531.9	Master		3024	
	410.0 (Minimum) 580.0 (Nominal) 670.0 (Maximum)			410.0 (Minimum) 570.0 (Nominal) 660.0 (Maximum)			2000 (Minimum) 2800 (Nominal) 3200 (Maximum)		
Phase	SSW2 Aluminum CPS	Value	Phase	SSW3 Aluminum CPS	Value	Phase	SSW4 Aluminum CPS	Value	
Master		3024	Master		3024	Master		3024	
	2000 (Minimum) 2800 (Nominal) 3200 (Maximum)			2000 (Minimum) 2800 (Nominal) 3200 (Maximum)			2000 (Minimum) 2800 (Nominal) 3200 (Maximum)		

Master	5800 (Minimum)	8000 (Nominal)	9300 (Maximum)	8390	Master	11660	Master	4884
Phase	SSW5 Aluminum CPS			Value				
Master				644.8				
	470.0 (Minimum)	660.0 (Nominal)	770.0 (Maximum)					

Master: 13-Apr-2005 15:41

Hostile Litho-Density Sonde Master Calibration														
Detector Litholog Measurement (bkqg-subtracted)														
Phase	LSW1 Iron CPS			Value	Phase	LSW2 Iron CPS			Value	Phase	LSW3 Iron CPS			Value
Master				430.0	Master				733.6	Master				986.9
	290.0 (Minimum)	400.0 (Nominal)	470.0 (Maximum)		520.0 (Minimum)	730.0 (Nominal)	850.0 (Maximum)		720.0 (Minimum)	1000 (Nominal)	1160 (Maximum)			
Phase	LSW4 Iron CPS			Value	Phase	LSW5 Iron CPS			Value	Phase	SSW1 Iron CPS			Value
Master				515.9	Master				489.1	Master				2212
	370.0 (Minimum)	520.0 (Nominal)	600.0 (Maximum)		340.0 (Minimum)	470.0 (Nominal)	550.0 (Maximum)		1500 (Minimum)	2100 (Nominal)	2400 (Maximum)			
Phase	SSW2 Iron CPS			Value	Phase	SSW3 Iron CPS			Value	Phase	SSW4 Iron CPS			Value
Master				6952	Master				10570	Master				4424
	4900 (Minimum)	6800 (Nominal)	7900 (Maximum)		7800 (Minimum)	10800 (Nominal)	12600 (Maximum)		3300 (Minimum)	4600 (Nominal)	5400 (Maximum)			
Phase	SSW5 Iron CPS			Value										
Master				563.2										
	420.0 (Minimum)	580.0 (Nominal)	680.0 (Maximum)											

Master: 13-Apr-2005 15:35

Hostile Litho-Density Sonde Master Calibration														
Quality Ratios														
Phase	AL CALIBRATION RATIO 1			Value	Phase	AL CALIBRATION RATIO 2			Value	Phase	AL CALIBRATION RATIO 3			Value
Master				1.023	Master				2.109	Master				0.5728
	0.9000 (Minimum)	1.000 (Nominal)	1.100 (Maximum)		1.900 (Minimum)	2.100 (Nominal)	2.300 (Maximum)		0.4500 (Minimum)	0.5500 (Nominal)	0.6500 (Maximum)			
Phase	AL CALIBRATION RATIO 4			Value	Phase	Pad-Wear SS Ratio			Value	Phase	Pad-Wear LS Ratio			Value
Master				0.5470	Master				0.9845	Master				0.9807
	0.4500 (Minimum)	0.5500 (Nominal)	0.6500 (Maximum)		0.9800 (Minimum)	0.9880 (Nominal)	0.9960 (Maximum)		0.9800 (Minimum)	0.9880 (Nominal)	0.9960 (Maximum)			
Phase	Pad-Position SS Ratio			Value	Phase	Pad-Position LS Ratio			Value					
Master				1.006	Master				0.9882					
	0.9900 (Minimum)	0.9940 (Nominal)	1.015 (Maximum)		0.9850 (Minimum)	0.9940 (Nominal)	1.010 (Maximum)							

Master: 13-Apr-2005 15:22

Nuclear Porosity Lithology Cartridge - B / Equipment Identification

Primary Equipment:	NPLC Cartridge	NPLC - B	79
Auxiliary Equipment:	NPLC Housing	NPH - B	82

Accelerator-Porosity Tool / Equipment Identification

Primary Equipment:	Accelerator-Porosity Sonde	APS - C	202
	APS Minitron	MNTR - F	5124
Auxiliary Equipment:	Accelerator-Porosity Housing	APH - AC	104
	APS Calibration Water Tank	SFT - 178	6250
	APS Aluminum Calibrator Sleeve	SFT - 281	6250

Accelerator-Porosity Tool Wellsite Calibration

Detector Background

Phase	Near Det Bkg Cntrate CPS	Value	Phase	Far Det Bkg Cntrate CPS	Value	Phase	Array-1 Det Bkg Cntrate CPS	Value
Master		25.38	Master		25.40	Master		28.70
Before		25.71	Before		26.37	Before		26.09
	1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)			1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)			1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)	
Phase	Array-2 Det Bkg Cntrate CPS	Value	Phase	Array Therm Det Bkg Cntrate CPS	Value			
Master		25.69	Master		25.67			
Before		27.22	Before		24.20			
	1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)			1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)				
Master: 22-Mar-2005 20:56			Before: 4-May-2005 10:17					

Accelerator-Porosity Tool Wellsite Calibration

Calibration Ratios

Phase	Near/Far Calibration Ratio	Value	Phase	Near/Array Calibration Ratio	Value	Phase	Near/Array Cal Ratio Up/Down	Value
Master		0.9625	Master		0.9914	Master		0.9985
	0.8000 (Minimum) 0.9250 (Nominal) 1.050 (Maximum)			0.9000 (Minimum) 1.030 (Nominal) 1.170 (Maximum)			0.9700 (Minimum) 1.000 (Nominal) 1.030 (Maximum)	
Master: 22-Mar-2005 20:56								

Accelerator-Porosity Tool Wellsite Calibration

Tank Check

Phase	Array-1 Standoff Porosity PU	Value	Phase	Array-2 Standoff Porosity PU	Value	Phase	Average Slowing Down Time US	Value
Master		11.97	Master		11.85	Master		5.825
	9.900 (Minimum) 11.75 (Nominal) 13.60 (Maximum)			9.900 (Minimum) 11.75 (Nominal) 13.60 (Maximum)			5.500 (Minimum) 6.000 (Nominal) 6.250 (Maximum)	
Phase	Array-1 SDT Ratio Up/Down	Value	Phase	Array-2 SDT Ratio Up/Down	Value	Phase	Sigma Formation CU	Value
Master		0.9952	Master		1.006	Master		27.53
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			20.00 (Minimum) 27.50 (Nominal) 35.00 (Maximum)	
Master: 22-Mar-2005 20:56								

Accelerator-Porosity Tool Master Calibration

Detector Calibration

Phase	Near/Far Calibration Ratio	Value	Phase	Near/Array Calibration Ratio	Value	Phase	Near/Array Cal Ratio Up/Down	Value
Master		0.9625	Master		0.9914	Master		0.9985
	0.8000 (Minimum) 0.9250 (Nominal) 1.050 (Maximum)			0.9000 (Minimum) 1.030 (Nominal) 1.170 (Maximum)			0.9700 (Minimum) 1.000 (Nominal) 1.030 (Maximum)	
Master: 22-Mar-2005 20:56								

Accelerator-Porosity Tool Master Calibration

Tank Check

Phase	Array-1 Standoff Porosity PU	Value	Phase	Array-2 Standoff Porosity PU	Value	Phase	Average Slowing Down Time US	Value
Master		11.97	Master		11.85	Master		5.825
	9.900 (Minimum) 11.75 (Nominal) 13.60 (Maximum)			9.900 (Minimum) 11.75 (Nominal) 13.60 (Maximum)			5.500 (Minimum) 6.000 (Nominal) 6.250 (Maximum)	
Phase	Array-1 SDT Ratio Up/Down	Value	Phase	Array-2 SDT Ratio Up/Down	Value	Phase	Sigma Formation CU	Value
Master		0.9952	Master		1.006	Master		27.53
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			20.00 (Minimum) 27.50 (Nominal) 35.00 (Maximum)	
Master: 22-Mar-2005 20:56								

Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment:
HNGS Sonde

HNGS - BA 77

Auxiliary Equipment:
HNGS Sonde Housing
Gamma Source RadioactiveHNSH - BA
GSR - U 135

Phase	Na 511 Peak Set Point	Value	Phase	In Peak Loc	Value	Phase	In Peak Res %	Value	
Master		41.00	Master		207.3	Master		8.237	
	38.00 (Minimum)	40.00 (Nominal)	42.00 (Maximum)	201.0 (Minimum)	209.6 (Nominal)	218.3 (Maximum)	5.000 (Minimum)	7.000 (Nominal)	9.000 (Maximum)
Phase	Background Count Rate CPS	Value	Phase	Gain Ratio	Value				
Master		22.15	Master		0.9731				
	20.00 (Minimum)	142.5 (Nominal)	265.0 (Maximum)	0.9400 (Minimum)	1.000 (Nominal)	1.060 (Maximum)			
Master: 4-May-2005 10:06									

Company: Lamont Doherty

Schlumberger

Well: Expedition 307 Site U1316C

Field: Porcupine Basin Carbonate Mounds

Rig: Joides Resolution

Country: Ireland

Hostile Natural Gamma Ray