Schlumberger

Company: **Lamont Doherty**

Well: **NGHP–1–10D**
Field: **Krishna Godavari Basin**
Rig: **Joides Resolution** Ocean: **Indian Ocean**

Natural Gamma Ray Log

Rig: Joides Resolution
Field: Krishna Godavari Basin
Location: Rig: Joides Resolution
Well: NGHP–1–10D
Company: Lamont Doherty

LOCATION

Rig: Joides Resolution

Elev.:	K.B.	11.3 m
	G.L.	−1050.4 m
	D.F.	11 m

Permanent Datum:	Mean Sea Level	Elev.:	0 m
Log Measured From:	Rig Floor	11.0 m	above Perm. Datum
Drilling Measured From:	Rig Floor		

API Serial No.	Max. Hole Devi.	Longitude	Latitude
		81* 50.0709E	15* 51.8647 N

Logging Date		20–Jun–2006			
Run Number		One			
Depth Driller		1254.2 m			
Schlumberger Depth		1202.5 m			
Bottom Log Interval		1201 m			
Top Log Interval		997 m			
Casing Driller Size @ Depth		0.000 in	@ 1108 m	@	
Casing Schlumberger		1105 m			
Bit Size		9.875 in			
Type Fluid In Hole		SepioLite/Barite			
MUD Density	Viscosity	1.26 g/cm3			
Fluid Loss	PH	0 cm3			
Source Of Sample		Pit			
RM @ Measured Temperature		0.177 ohm.m	@ 23 degC	@	
RMF @ Measured Temperature		0.000 ohm.m	@	@	
RMC @ Measured Temperature		0.000 ohm.m	@	@	
Source RMF	RMC				
RM @ MRT	RMF @ MRT	0.199 @ 18	@ 18	@	@
Maximum Recorded Temperatures		18 degC			
Circulation Stopped	Time	20–Jun–2006	1300		
Logger On Bottom	Time	20–Jun–2006	see log		
Unit Number	Location	2082	Webster, TX		
Recorded By		Steve Kittredge			
Witnessed By		Gilles Guerin			

	Run 1	Run 2

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			

Run 3

Run 4

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	OTHER SERVICES2
OS1: VSI	OS1:
OS2: FMS,DSI	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
All parameters and presentations as per IODP standards	
Tool ran as per tool sketch below.	
Tool pumped out of drill pipe.	
Tool stopped at 1202.5 MBRF.	
All logs in Meters Belwo Rig Floor (MBRF).	
Caliper closed before logging head entered drill pipe.	
Hole filled with 105 ppg barite mud.	

RUN 1		RUN 2	
SERVICE ORDER #:		SERVICE ORDER #:	
PROGRAM VERSION:	12C0−301	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

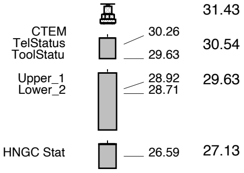
DOWNHOLE EQUIPMENT

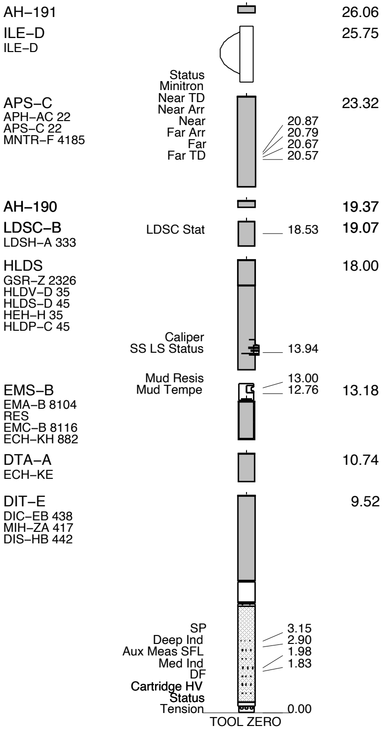
LEH−QT
LEH−QT 1726

DTC−H
ECH−KC 9841

HNGS−BA
HNGS−BA 194
HNSH−BA 205

HNGC−B
HNGH−A 115

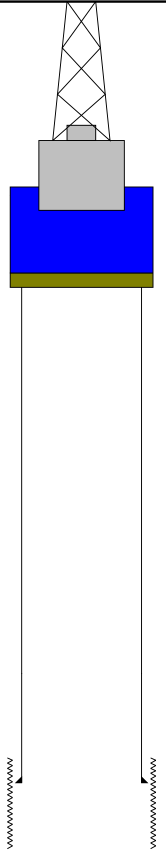




MAXIMUM STRING DIAMETER 3.88 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

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

Kelly Bushing Elevation	11.3
Derrick Floor Elevation	11.0
Mean Sea Level	0.0



−11.0	8.250	Casing String
1050.4	9.875	Borehole Segment
1108.0	8.250	Casing Shoe
1254.2	9.875	Borehole Segment Bottom

Schlumberger

Main Up Log

MAXIS Field Log

Company: Lamont Doherty **Well: NGHP–1–10D**

Output DLIS Files

DEFAULT	PI_EMS_LDL_APS_NGS_014LUP	FN:7	PRODUCER	20–Jun–2006 19:01	1202.4 M	997.3 M

OP System Version: 12C0–301

MCM

DIT–E	12C0–301	DTA–A	12C0–301
EMS–B	12C0–301	HLDS	SPC–2602–NUCL
LDSC–B	SPC–2602–NUCL	APS–C	SPC–2602–NUCL
HNGC–B	SPC–2602–NUCL	HNGS–BA	SPC–2602–NUCL
DTC–H	12C0–301		

Changed Parameter Summary

DLIS Name	New Value	Previous Value	Depth & Time
GCSE	BS	LCAL	1143.7 19:20:42

PIP SUMMARY

▶ Time Mark Every 60 S

Area2
From HTHO to HFK

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 100

HNGS Thorium (HTHO)
−20 (PPM) 20

Area1
From HCGR to HSGR

HNGS Thorium / Potassium Ratio (HTPR)
0.1 (-----) 1000

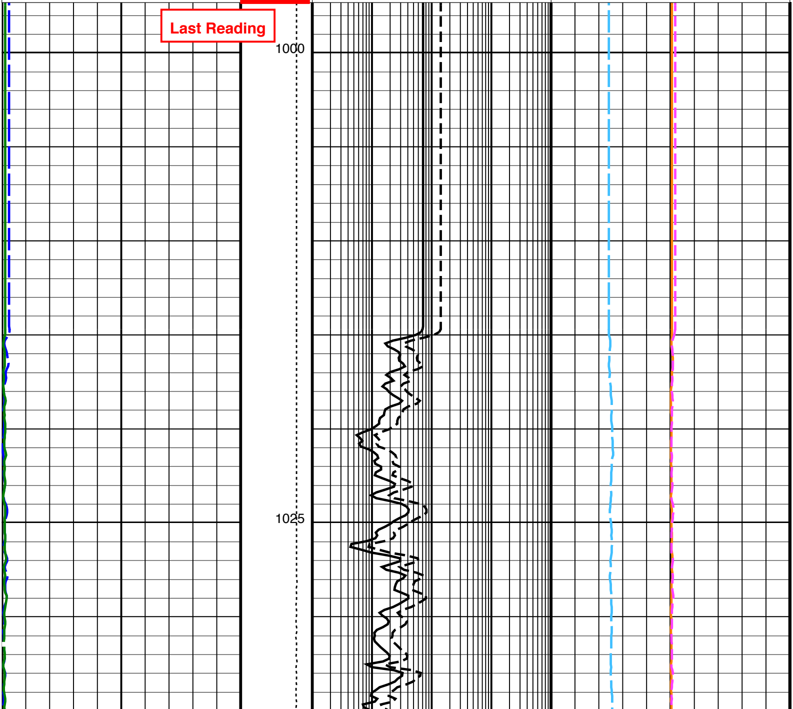
HNGS Uranium (HURA)
−5 (PPM) 15

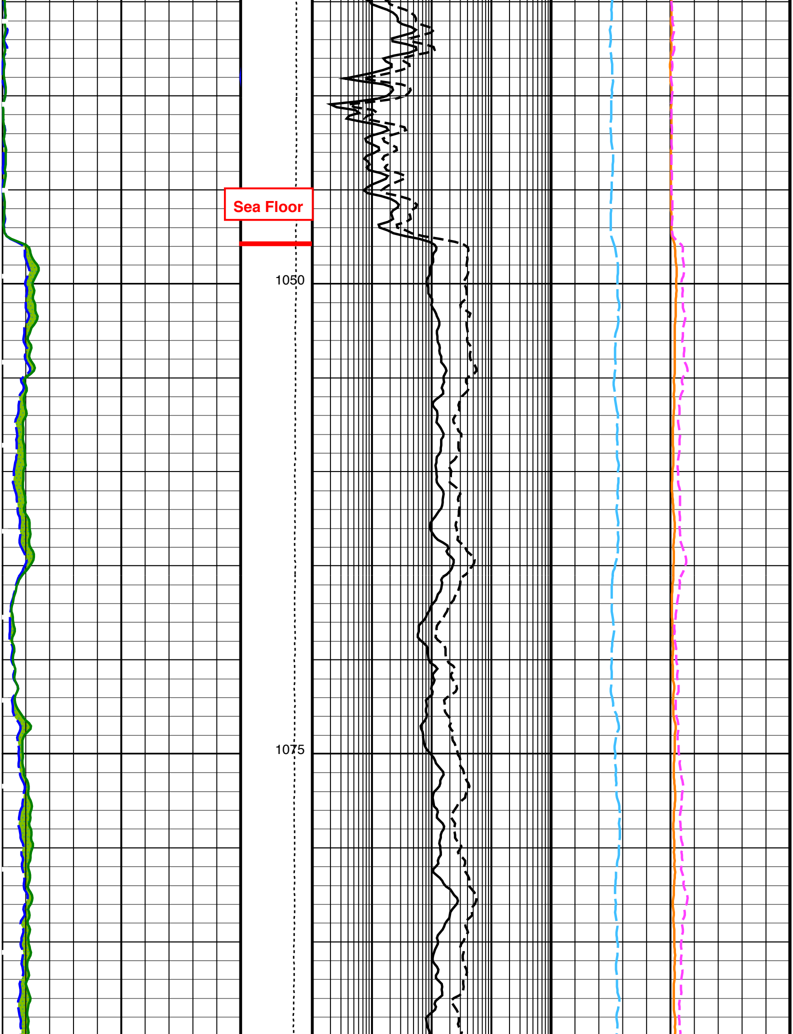
HNGS Computed Gamma Ray (HCGR)
0 (GAPI) 100

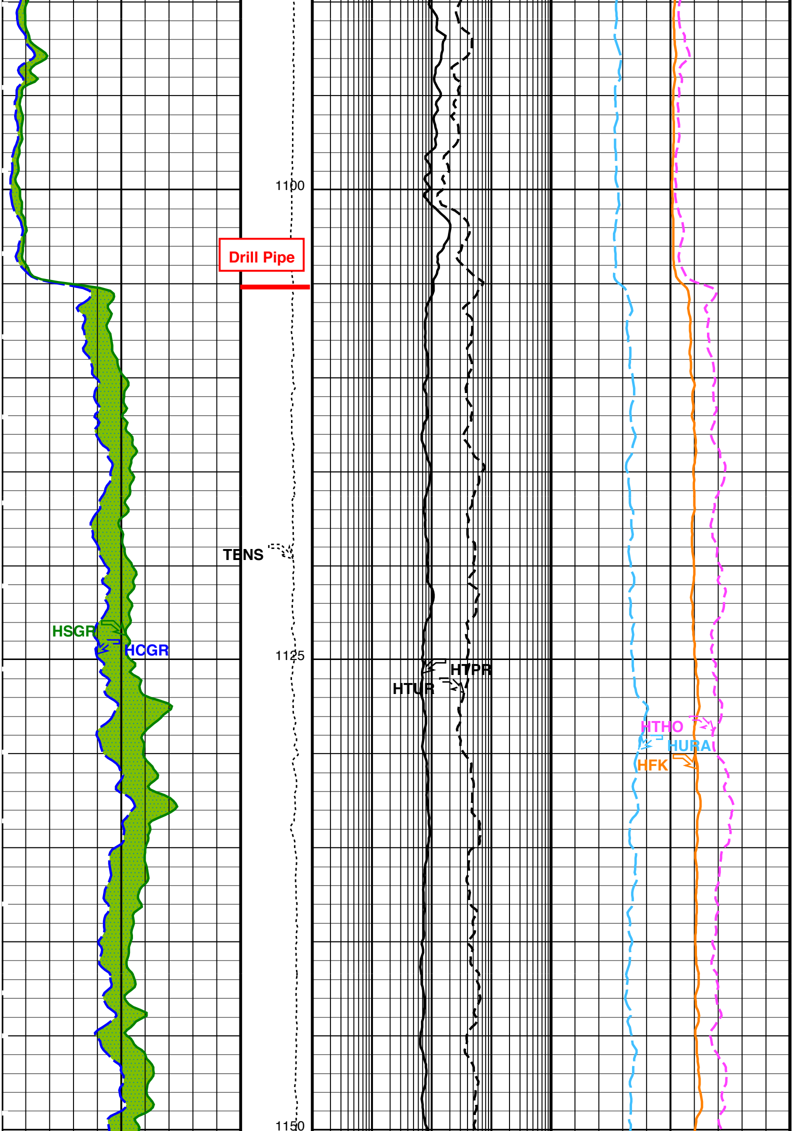
Tension (TENS) (LBF)
10000 0

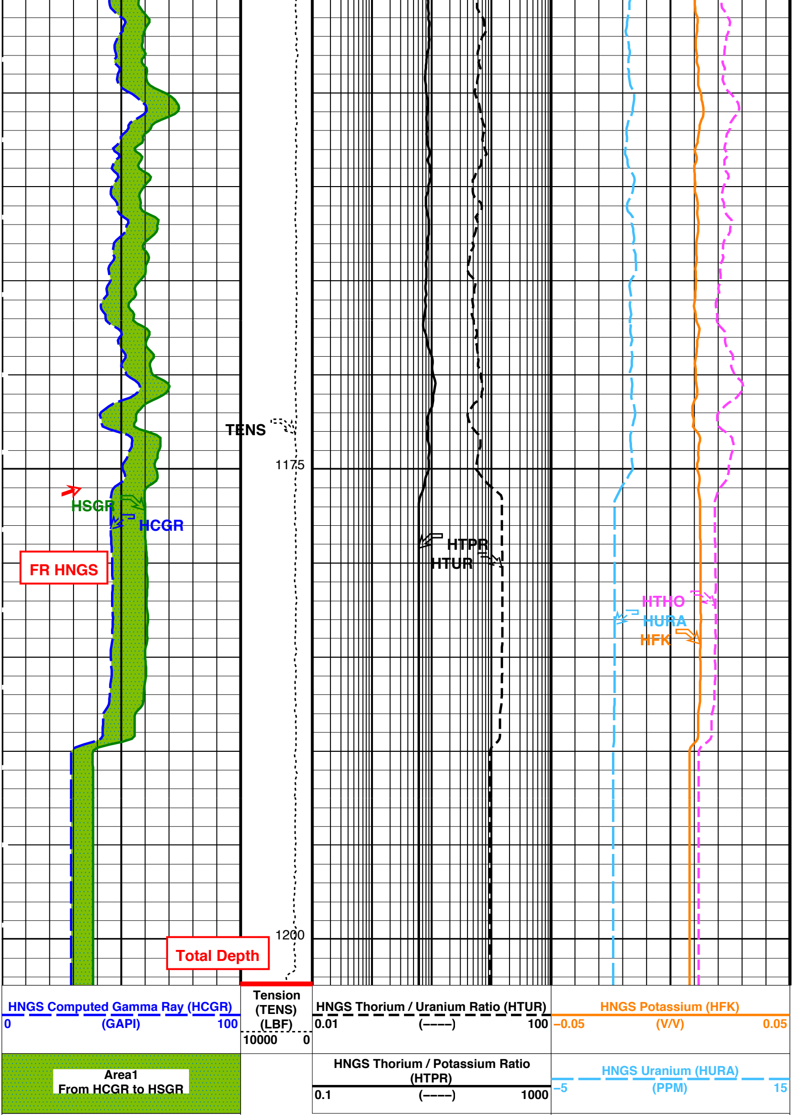
HNGS Thorium / Uranium Ratio (HTUR)
0.01 (-----) 100

HNGS Potassium (HFK)
−0.05 (V/V) 0.05









HNGS Spectroscopy Gamma Ray
(HSGR)
0 (GAPI) 100

HNGS Thorium (HTHO)
−20 (PPM) 20

Area2
From HTHO to HFK

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	LCAL	
EMS−B: Environment Measurement Sonde			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
APS−C: Accelerator−Porosity Tool			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
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	LCAL	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	−0.00761078	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
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	0.301984	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.944982	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.26	G/C3

Format: HNGSRatios Vertical Scale: 1:200 Graphics File Created: 20−Jun−2006 19:01

OP System Version: 12C0−301

MCM

DIT−E	12C0−301	DTA−A	12C0−301
EMS−B	12C0−301	HLDS	SPC−2602−NUCL
LDSC−B	SPC−2602−NUCL	APS−C	SPC−2602−NUCL
HNGC−B	SPC−2602−NUCL	HNGS−BA	SPC−2602−NUCL
DTC−H	12C0−301		

Output DLIS Files

DEFAULT	PI_EMS_LDL_APS_NGS_014LUP	FN:7	PRODUCER	20−Jun−2006 19:01

Company: **Lamont Doherty**

Schlumberger

Well: **NGHP−1−10D**
Field: **Krishna Godavari Basin**
Rig: **Joides Resolution**
Ocean: **Indian Ocean**

Natural Gamma Ray Log