Schlumberger

Company: **Lamont Doherty**

Well: **NGHP−01−14A**
Field:
RIG **Joides Resolution** Ocean **Bengal Bay**

RIG Joides Resolution
Field:
Location:
Well: NGHP−01−14A
Company: Lamont Doherty

Dual Induction Tool

Gamma Ray

LOCATION

	Elev.:	K.B.	11.3 m
		G.L.	−974 m
		D.F.	11.3 m

Permanent Datum: Mean Sea Level
Elev.: 0 m
Log Measured From: Drill Floor
11.3 m above Perm. Datum
Drilling Measured From: Drill FLoor

API Serial No.	Latitude	Longitude
	16* 03.5577’ N	82* 05.6218’ E

Logging Date	12−Jul−2006			
Run Number	One			
Depth Driller	1086 m			
Schlumberger Depth	1087 m			
Bottom Log Interval	1087 m			
Top Log Interval	909 m			
Casing Driller Size @ Depth	0.000 in	@ 974 m		@
Casing Schlumberger	976 m			
Bit Size	11.438 in			
Type Fluid In Hole	Sepiolite			
MUD Density / Viscosity	1.06645 g/cm3			
MUD Fluid Loss / PH				
MUD 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	11−Jul−2006	21:00		
Logger On Bottom / Time	12−Jul−2006	6:08		
Unit Number / Location	2082	Webster, TX		
Recorded By	Javier Espinosa			
Witnessed By	Gilles Guerin, Golam Sarker			

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 1
@			Run 2
@	@ @ @	@	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: HLDS	OS1:
OS2: APS	OS2:
OS3: HNGS	OS3:
OS4:	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
All parameters and presentations as per client request	
Tool ran as per tool sketch below	
HLDS caliper closed at 1002 mbrf to avoid tool damage	

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

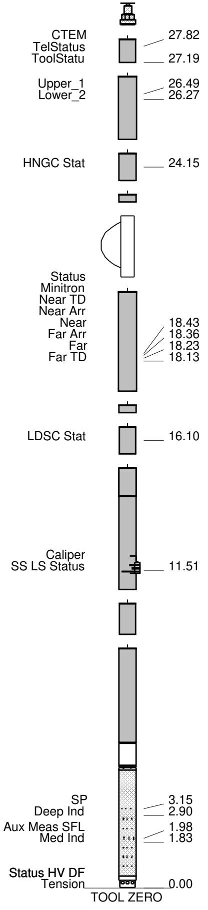
RUN 2

SURFACE EQUIPMENT

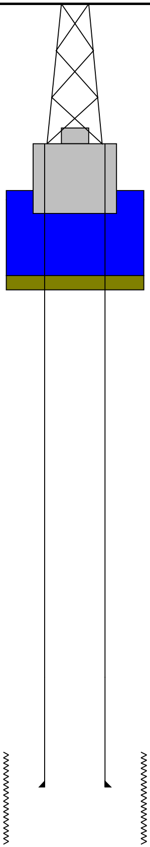
SFT−281 6250
SFT−178 6250
GSR−U 135
WITM (DTS)−A

DOWNHOLE EQUIPMENT

LEH−QT	LEH−QT	28.99
DTC−H	ECH−KC	28.10
HNGS−BA	HNGS−BA 194 HNSH−BA 204	27.19
HNGC−B	HNGH−A 115	24.69
AH−191		23.62
ILE−D	ILE−D	23.32
APS−C	APH−AC 22 APS−C 22 MNTR−F 4185	20.88
AH−190		16.93
LDSC−B	LDSH−A 333	16.63
HLDS	GSR−Z 2326 HLDV−D 35 HLDS−D 45 HEH−H 35 HLDP−C 45	15.56
DTA−A	ECH−KE DTA−A	10.74
DIT−E	DIC−EB 335 MIH−ZA 342 DIS−HB 129	9.52



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



Production String	(in)		(m)	Well Schematic	(m)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
Kelly Bushing Elevation			11.0					
Derrick Floor Elevation			11.0					
					11.0	5.000		Casing String
Mean Sea Level			0.0					
					906.0	11.438		Sea Floor
					974.0	5.000		Drill Pipe

Schlumberger

MAIN PASS

MAXIS Field Log

Company: Lamont Doherty	**Well: NGHP–01–14A**

Output DLIS Files

DEFAULT	**PI_LDL_APS_NGS_006LUP**	**FN:6**	**PRODUCER**	**12–Jul–2006 06:03**	**1088.1 M**	**862.4 M**
REDUCED	**PI_LDL_APS_NGS_006LUP**	**FN:7**	**PRODUCER**	**12–Jul–2006 06:03**	**1088.1 M**	**862.4 M**

OP System Version: 12C0–301

MCM

DIT–E	**12C0–301**	**DTA–A**	**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**

PIP SUMMARY

Time Mark Every 60 S

Tension (TENS)
11000 (LBF) 1000

SFL Unaveraged (SFLU)
0.2 (OHMM) 2000

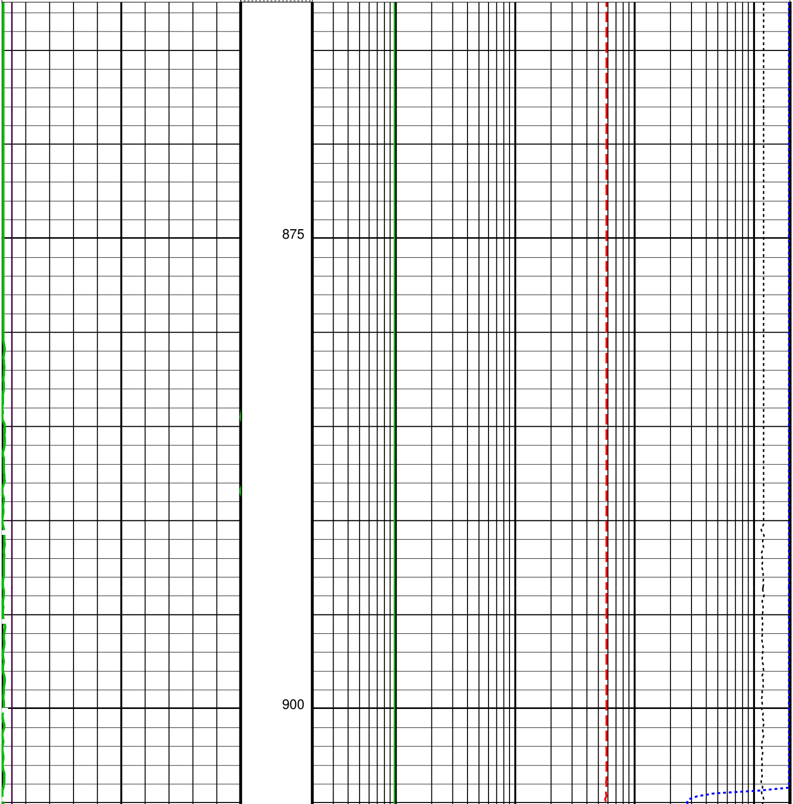
HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 100

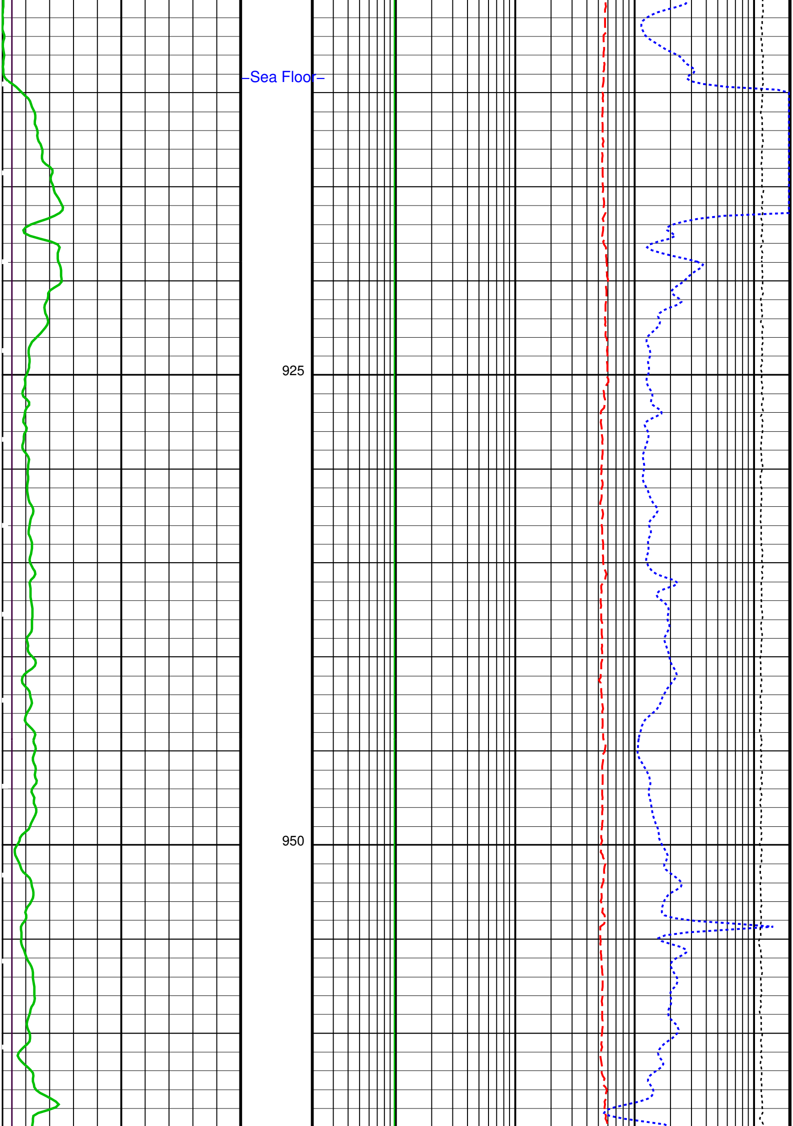
Medium Induction Phasor–processed Resistivity (IMPH)
0.2 (OHMM) 2000

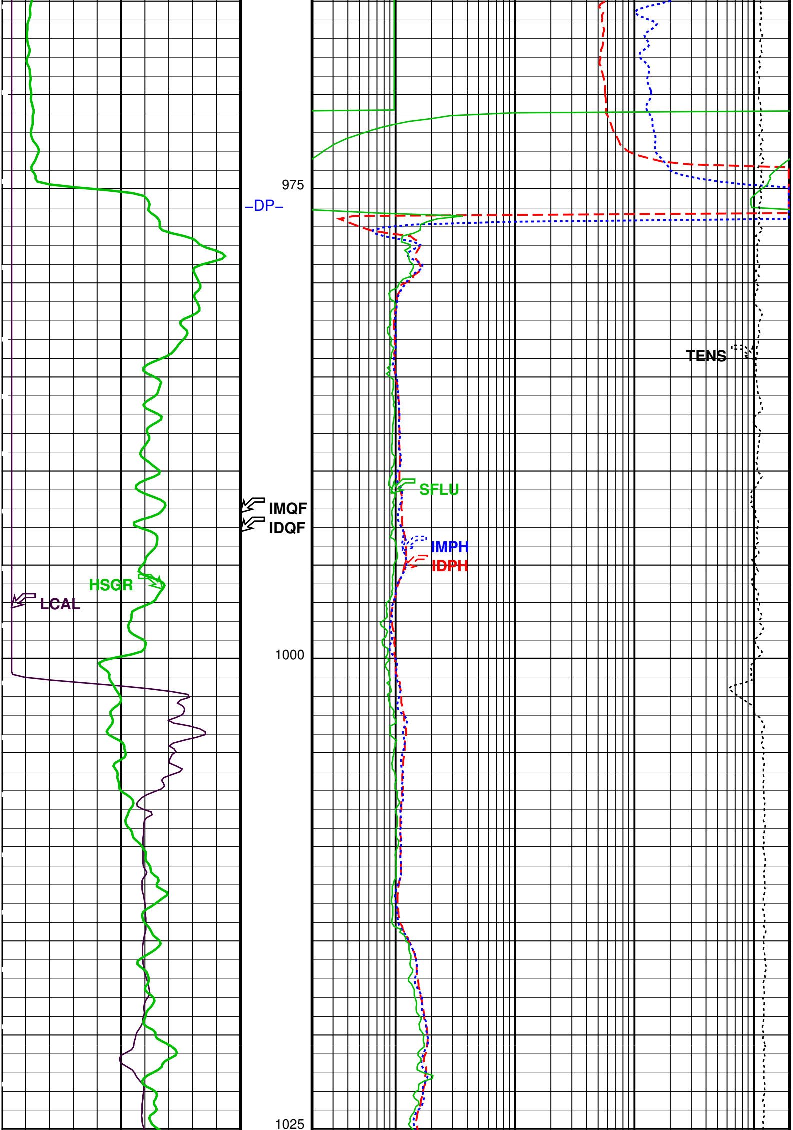
HLDS Caliper (LCAL)
0 (IN) 20

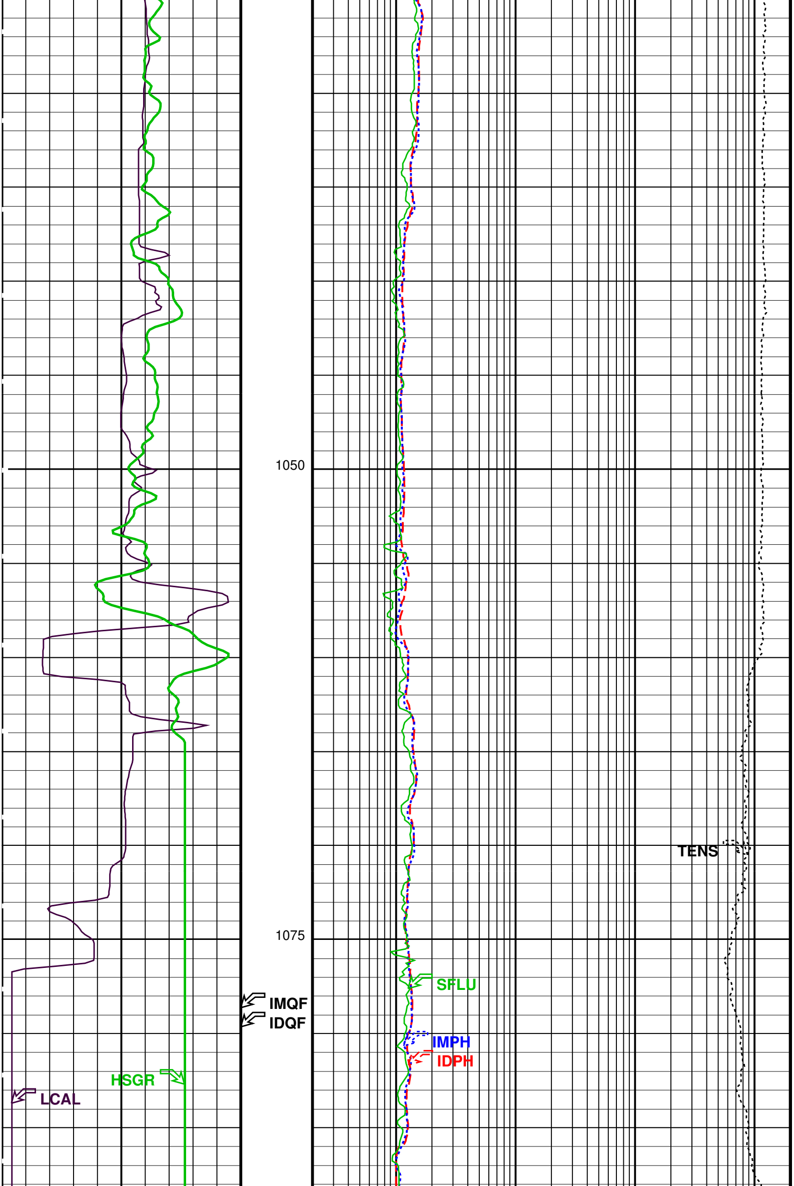
ID_QUAL From IMQF to IDQF

Deep Induction Phasor–processed Resistivity (IDPH)
0.2 (OHMM) 2000









HLDS Caliper (LCAL)
0 (IN) 20

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

ID_QUAL From IMQF to IDQF

Deep Induction Phasor–processed Resistivity (IDPH)
0.2 (OHMM) 2000

Medium Induction Phasor–processed Resistivity (IMPH)
0.2 (OHMM) 2000

SFL Unaveraged (SFLU)
0.2 (OHMM) 2000

Tension (TENS)
11000 (LBF) 1000

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	DIT–E: Dual Induction – E		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	45	DEGC
DGF2	Deep 20 kHz Gain Factor	0.979701	
DPH2	Deep 20 kHz Phase Shift	0.0149425	DEG
DRE2	Deep Real 20 kHz Sonde Error Correction	16.9484	MM/M
DSR2	Deep Sigma Reference (20 kHz)	1843	MM/M
DXE2	Deep Quad 20 kHz Sonde Error Correction	134.665	MM/M
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
IFRS	DIT–E Induction Frequency Selector	20	
IPHA	DIT–E Phasor Processing Mode	ALL	
IPRO	DIT–E Induction Processing Selector	PHASOR	
ITEN	DIT–E Temperature Enable	ENABLE	
MGF2	Medium 20 kHz Gain Factor	0.991455	
MPH2	Medium 20 kHz Phase Shift	–0.877902	DEG
MRE2	Medium Real 20 kHz Sonde Error Correction	10.4851	MM/M
MSR2	Medium Sigma Reference (20 kHz)	3250	MM/M
MXE2	Medium Quad 20 kHz Sonde Error Correction	175.191	MM/M
SFCR	SFL Channel Ratio	1000	
SHT	Surface Hole Temperature	20	DEGC
	APS–C: Accelerator–Porosity Tool		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	45	DEGC
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
	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)	45	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
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	–0.00240838	
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	
SHT	Surface Hole Temperature	20	DEGC
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.883382	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.918483	
	System and Miscellaneous		
BS	Bit Size	11.438	IN
DFD	Drilling Fluid Density	1.07	G/C3
TD	Total Depth	1086	M

Format: DITE_LogPhasor Vertical Scale: 1:200 Graphics File Created: 12–Jul–2006 06:03

OP System Version: 12C0−301

MCM

DIT−E	12C0−301	DTA−A	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_LDL_APS_NGS_006LUP	FN:6	PRODUCER	12−Jul−2006 06:03
REDUCED	PI_LDL_APS_NGS_006LUP	FN:7	PRODUCER	12−Jul−2006 06:03

Company: **Lamont Doherty**

Schlumberger

Well: **NGHP−01−14A**
Field:
RIG **Joides Resolution**
Ocean **Bengal Bay**

Dual Induction Tool

Gamma Ray