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

Hostile Litho-Density Tool
Accelerator Porosity Tool
Gamma Ray

LOCATION

Elev.: K.B. 11.3 m
G.L. -906 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	

	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		
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		
Logger On Bottom Time		
Unit Number Location		
Recorded By		
Witnessed By		

@

@ @ @ @

@

Run 3

Run 4

DISCLAIMER
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OTHER SERVICES1	OTHER SERVICES2
OS1: DITE	OS1:
OS2:	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

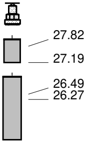
RUN 1

SURFACE EQUIPMENT

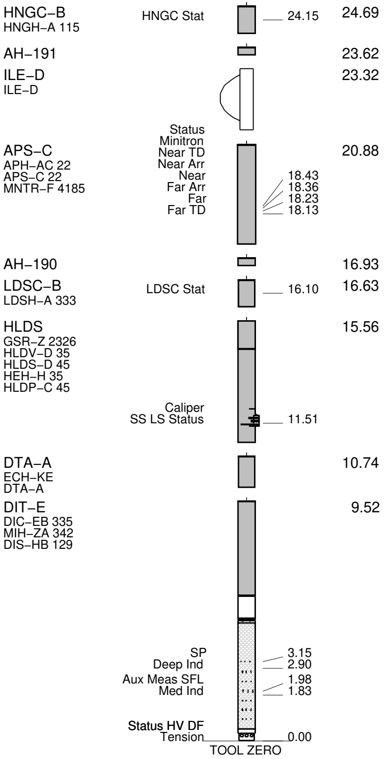
SFT−281 6250
SFT−178 6250
GSR−U 135
WITM (DTS)−A

DOWNHOLE EQUIPMENT

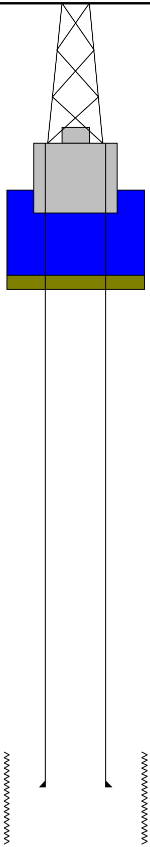
LEH−QT LEH−QT		28.99
DTC−H ECH−KC	CTEM TelStatus ToolStatu	28.10
HNGS−BA HNGS−BA 194 HNSH−BA 204	Upper_1 Lower_2	27.19



RUN 2



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

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

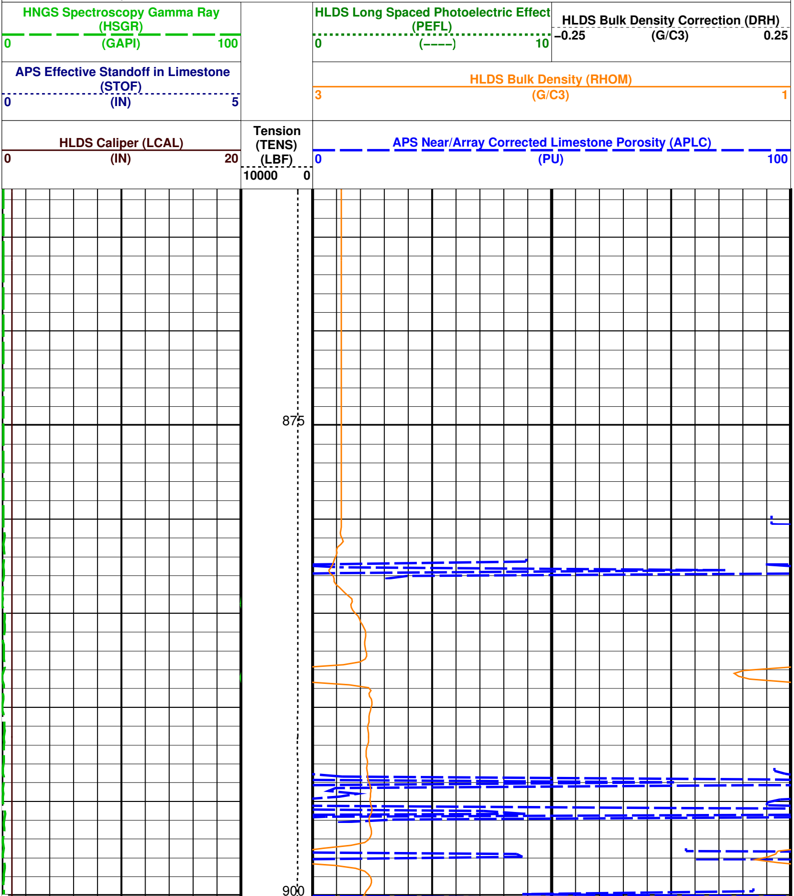
DIT–E	12C0–301	DTA–A	12C0–301
HLDS	SPC–2602–NUCL	LDSC–B	SPC–2602–NUCL
APS–C	SPC–2602–NUCL	HNGC–B	SPC–2602–NUCL
HNGS–BA	SPC–2602–NUCL	DTC–H	12C0–301

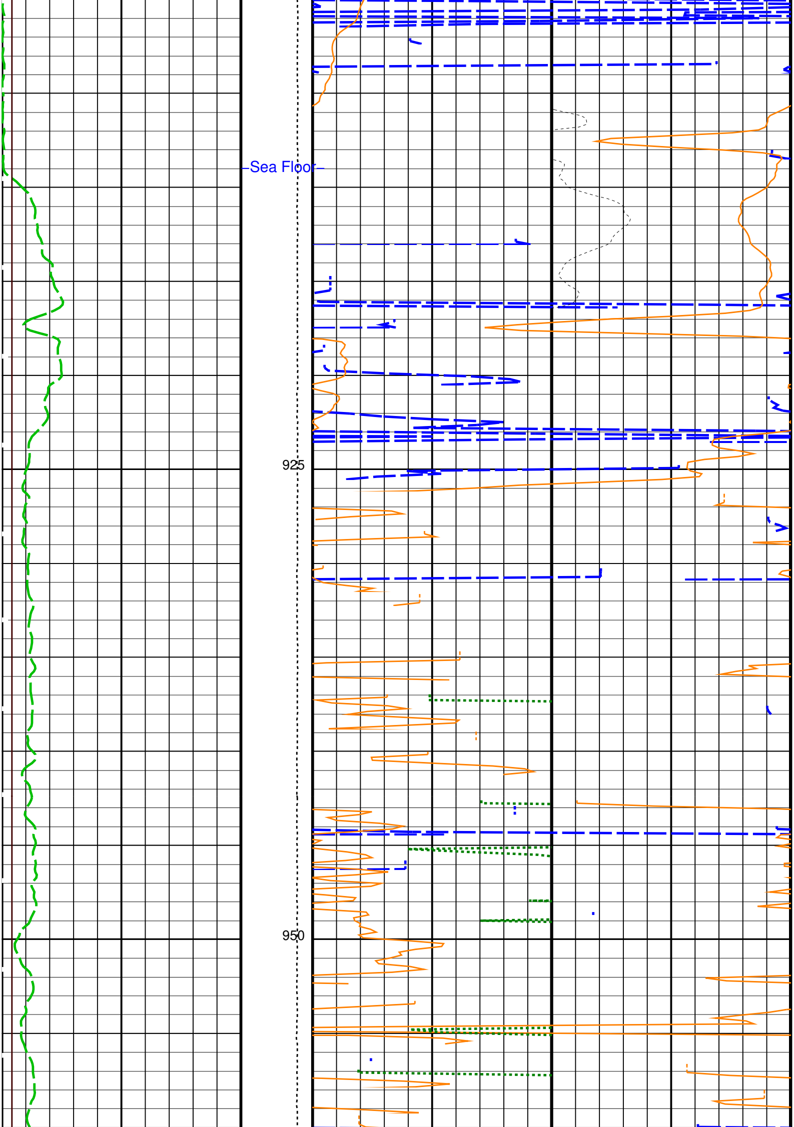
Changed Parameter Summary

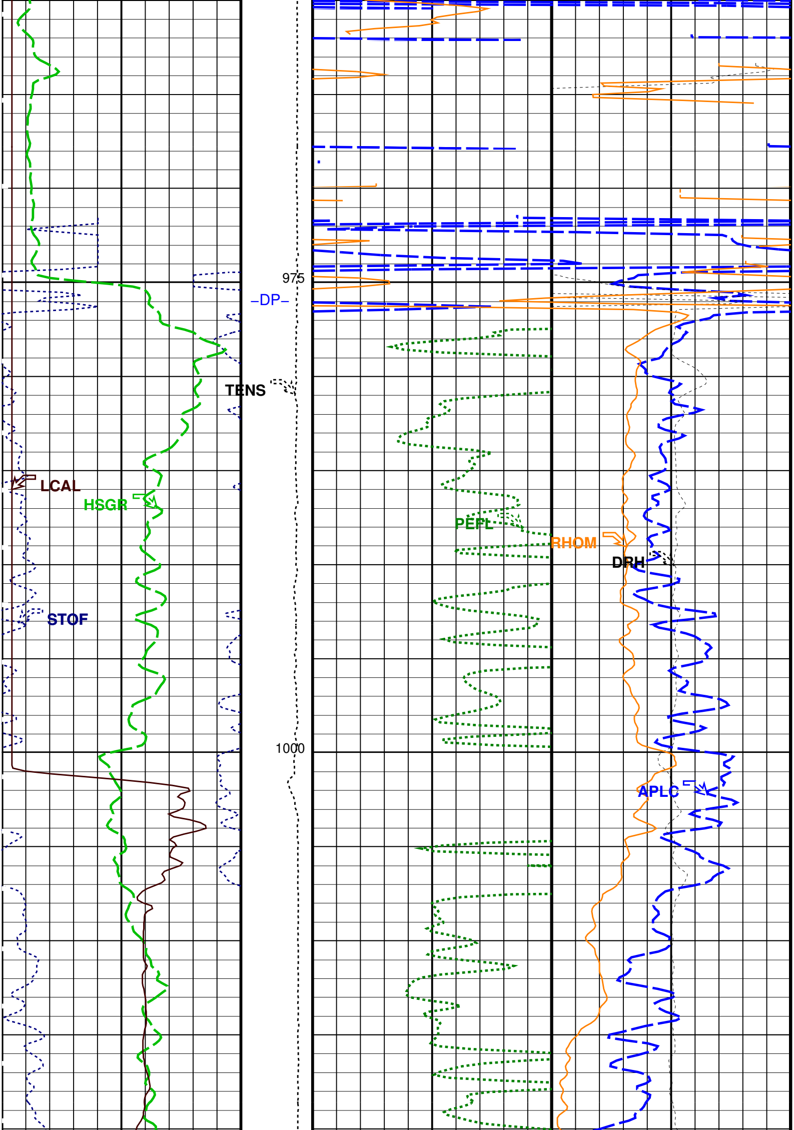
DLIS Name	New Value	Previous Value	Depth & Time
TDL	1087.00 M	–50000.00 M	976.0 06:34:47

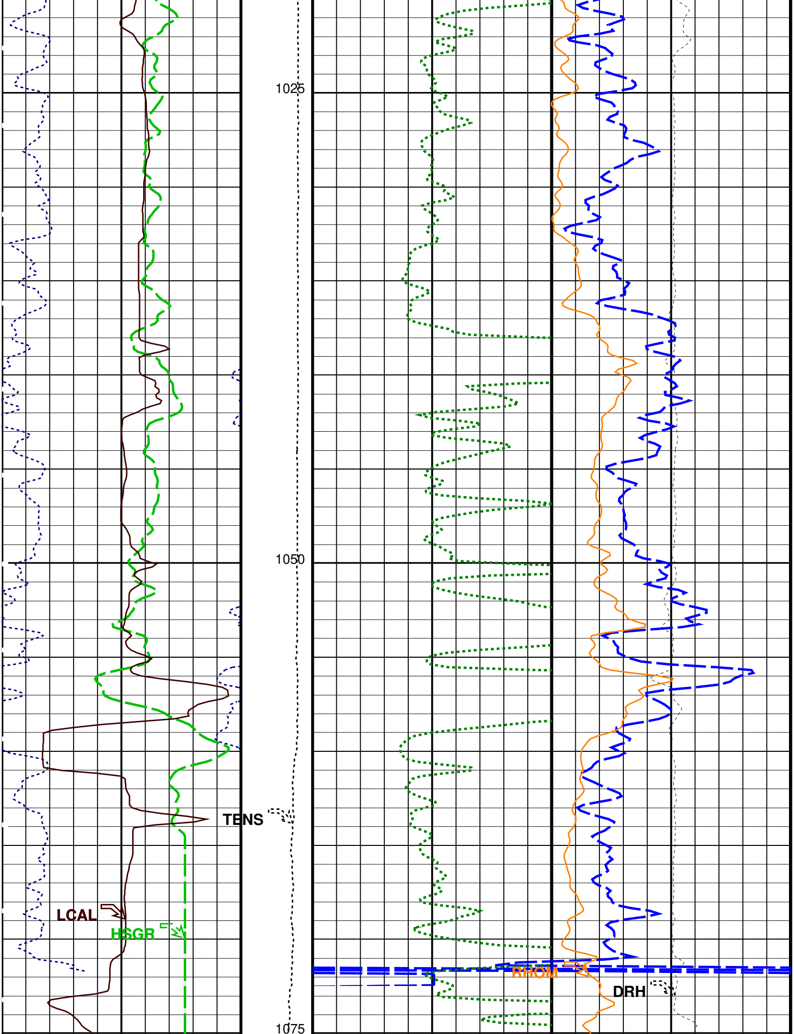
PIP SUMMARY

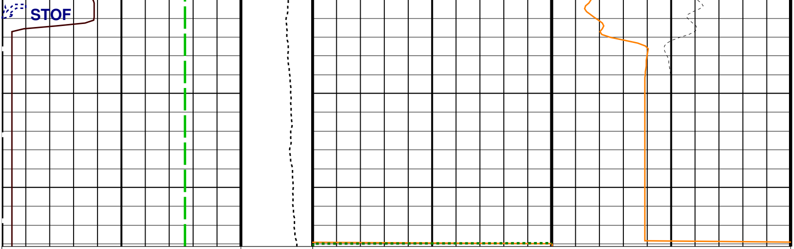
Time Mark Every 60 S











HLDS Caliper (LCAL)
0 (IN) 20

Tension (TENS) (LBF)
10000 0

APS Near/Array Corrected Limestone Porosity (APLC)
0 (PU) 100

APS Effective Standoff in Limestone (STOF)
0 (IN) 5

HLDS Bulk Density (RHOM)
3 (G/C3) 1

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

HLDS Long Spaced Photoelectric Effect (PEFL)
0 (----) 10

HLDS Bulk Density Correction (DRH)
–0.25 (G/C3) 0.25

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
DGF1	Deep 10 kHz Gain Factor	0.969512	
DGF2	Deep 20 kHz Gain Factor	0.979701	
DGF4	Deep 40 kHz Gain Factor	0.993509	
DPH1	Deep 10 kHz Phase Shift	0.143315	DEG
DPH2	Deep 20 kHz Phase Shift	0.0149425	DEG
DPH4	Deep 40 kHz Phase Shift	–1.03954	DEG
DRE1	Deep Real 10 kHz Sonde Error Correction	41.1762	MM/M
DRE2	Deep Real 20 kHz Sonde Error Correction	16.9484	MM/M
DRE4	Deep Real 40 kHz Sonde Error Correction	5.10313	MM/M
DRIM	DIT–E Radial Invasion Mode	Rxo>Rt	
DSR1	Deep Sigma Reference (10 kHz)	7637	MM/M
DSR2	Deep Sigma Reference (20 kHz)	1843	MM/M
DSR4	Deep Sigma Reference (40 kHz)	405	MM/M
DSTA	DIT–E Transversal Standoff	0	IN
DXE1	Deep Quad 10 kHz Sonde Error Correction	242.923	MM/M
DXE2	Deep Quad 20 kHz Sonde Error Correction	134.665	MM/M
DXE4	Deep Quad 40 kHz Sonde Error Correction	77.5057	MM/M
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	
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	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
MGF1	Medium 10 kHz Gain Factor	0.987193	
MGF2	Medium 20 kHz Gain Factor	0.991455	
MGF4	Medium 40 kHz Gain Factor	1.01379	
MPH1	Medium 10 kHz Phase Shift	–0.254464	DEG
MPH2	Medium 20 kHz Phase Shift	–0.877902	DEG
MPH4	Medium 40 kHz Phase Shift	–2.21599	DEG
MRE1	Medium Real 10 kHz Sonde Error Correction	30.6311	MM/M
MRE2	Medium Real 20 kHz Sonde Error Correction	10.4851	MM/M
MRE4	Medium Real 40 kHz Sonde Error Correction	1.32469	MM/M
MSR1	Medium Sigma Reference (10 kHz)	13520	MM/M
MSR2	Medium Sigma Reference (20 kHz)	3250	MM/M
MSR4	Medium Sigma Reference (40 kHz)	685	MM/M
MXE1	Medium Quad 10 kHz Sonde Error Correction	333.634	MM/M
MXE2	Medium Quad 20 kHz Sonde Error Correction	175.191	MM/M
MXE4	Medium Quad 40 kHz Sonde Error Correction	114.217	MM/M
SBR	Shoulder Bed Resistivity Factor	1	OHMM
SFCR	SFL Channel Ratio	1000	
SFLE	SFL Enable	ENABLE	

SHT	Surface Hole Temperature	20	DEGC
SPAE	DIT−E SPARC Processing Enable	ENABLE	
SPNV	SP Next Value	0	MV
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	2.65	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	
APS−C: Accelerator−Porosity Tool			
	APS Software Version	5	
AASD	APS Thermal and Array Detectors High Voltage Setting	1966.03	V
ADSO	APS Array Detectors Data Source Switch	Both	
AFSD	APS Far Detector High Voltage Setting	2098.58	V
AHCS	APS Holesize Correction Source	BS	
AHSS	APS Holesize Correction Switch	ON	
AMTY	APS Environmental Corrections Mud Type	WaterBaseBarite	
ANSD	APS Near Detector High Voltage Setting	1731.81	V
ASOS	APS Standoff Correction Switch	ON	
ATSS	APS Temperature−Pressure−Salinity Correction Switch	ON	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	45	DEGC
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	−50000	PPM
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	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
NARC	APS Near/Array Calibration Ratio	1.05617	
NFRC	APS Near/Far Calibration Ratio	0.88491	
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
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	−0.00240838	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
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			
ALTDPCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	11.438	IN
BSAL	Borehole Salinity	−50000.00	PPM
CSIZ	Current Casing Size	0.000	IN
CWEI	Casing Weight	0.00	LB/F
DFD	Drilling Fluid Density	1.07	G/C3
MST	Mud Sample Temperature	−50000.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
RMFS	Resistivity of Mud Filtrate Sample	−50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	1086	M
TDD	Total Depth − Driller	1086.00	M
TDL	Total Depth − Logger	−50000.00	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

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**

Hostile Litho−Density Tool
Accelerator Porosity Tool
Gamma Ray