Schlumberger

Company: **Lamont Doherty**

Well: **KGGH02–A Site 5 Hole E**
Field: **Krishna Godavairi Basin**
Rig: **Joides Resolution** Ocean: **Indian Ocean**

Formation Micro Scanner

Rig:	Joides Resolution
Field:	Krishna Godavairi Basin
Location:	Rig– Joides Resolution
Well:	KGGH02–A Site 5 Hole E
Company:	Lamont Doherty

LOCATION
Rig– Joides Resolution

Elev.: K.B. 11.3 m
G.L. –955.1 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 82 02.6773 E | Latitude 16 01.721 N

Logging Date	15–June–2006			
Run Number	One			
Depth Driller	1155.1 m			
Schlumberger Depth	1152 m			
Bottom Log Interval	1150 m			
Top Log Interval	979 m			
Casing Driller Size @ Depth	0.000 in	@ 1013 m		@
Casing Schlumberger	1011 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	0.281 @ 7	@ 7	@	@
Maximum Recorded Temperatures	7 degC			
Circulation Stopped / Time	15–June–2006	16:00		
Logger On Bottom / Time		see log		
Unit Number / Location	2082	Webster, TX		
Recorded By	Steve Kittredge			
Witnessed By	Gilles Guerin			

	Run 1	Run 2	Run 3	Run 4
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				

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	OS2:
OS3: DSI	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.	
Caliper was difficult to close after 1st pass.	
Caliper would not close after 2nd pass.	
All depth in Meters Below Rig Floor (MBRF).	
10.5 ppg mud with Barite used to fill hole.	

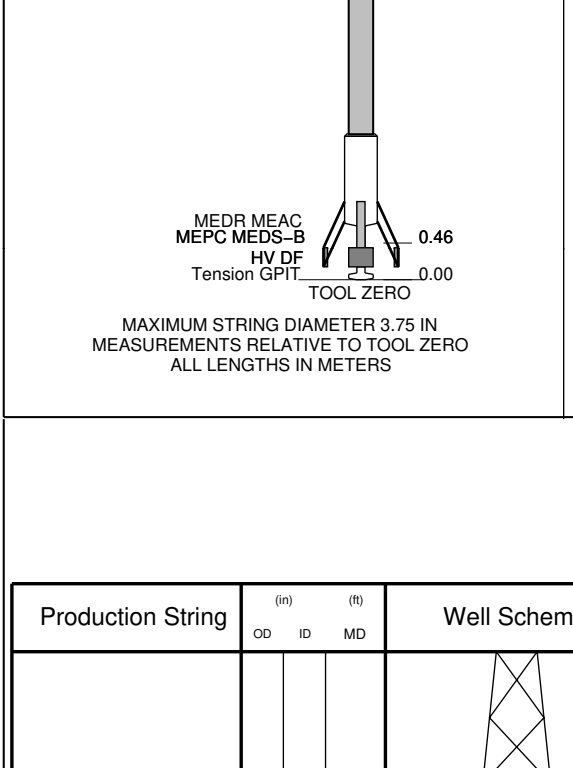
RUN 1			RUN 2		
SERVICE ORDER #:			SERVICE ORDER #:		
PROGRAM VERSION: 12C0–301			PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

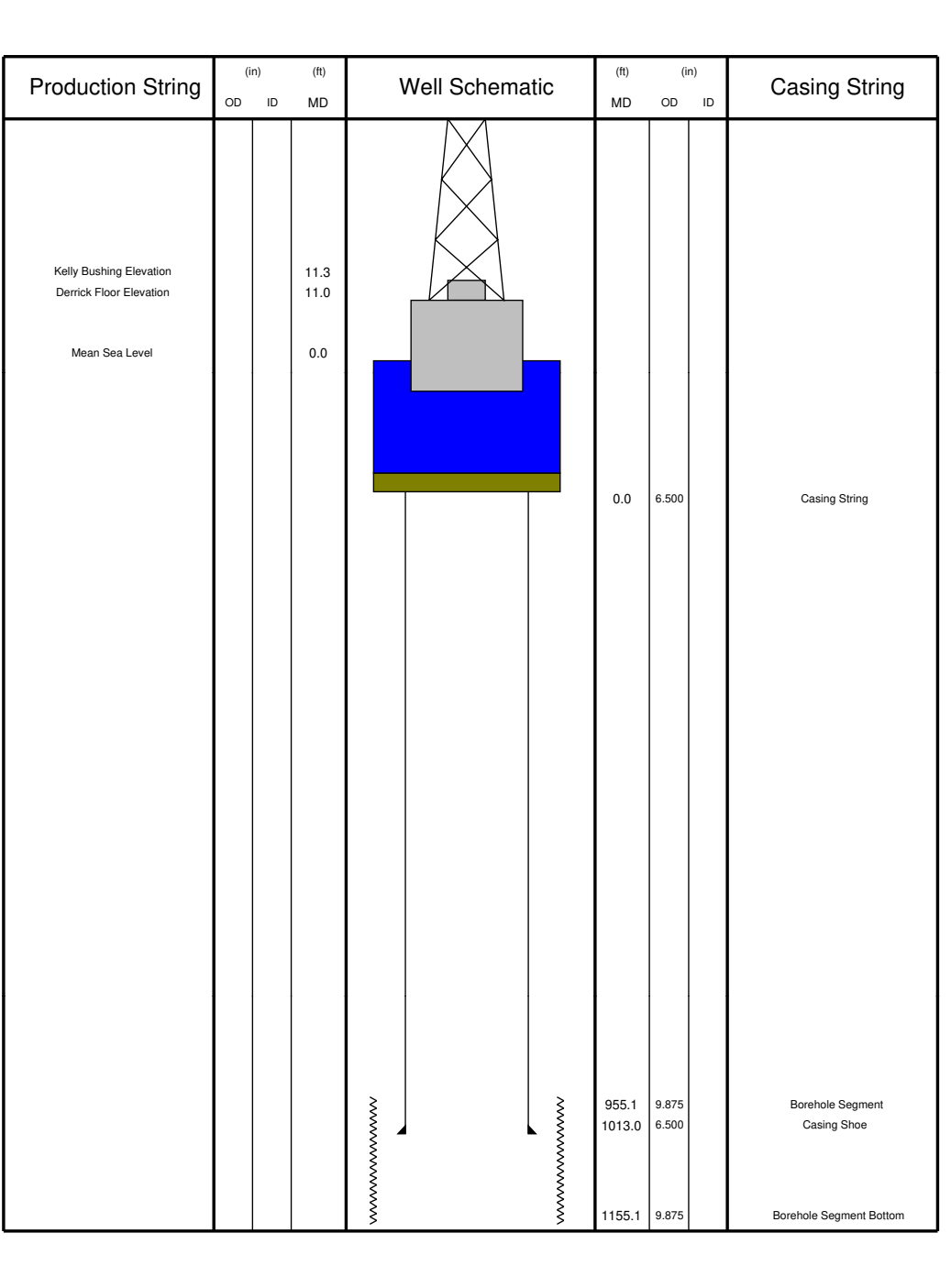
RUN 1 | RUN 2

SURFACE EQUIPMENT
GSR–U 135
WITM (DTS)–A

DOWNHOLE EQUIPMENT



MAXIMUM STRING DIAMETER 3.75 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS



Schlumberger **Calibrations**

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Micro Electrical Scanner – B (Slim) Wellsite Calibration – Caliper Calibration							
Before: 11–Jun–2006 17:00							
Caliper 1 Zero Measurement	8.000	N/A	8.537	N/A	N/A	N/A	IN
Caliper 2 Zero Measurement	8.000	N/A	8.562	N/A	N/A	N/A	IN
Caliper 1 Plus Measurement	12.00	N/A	12.49	N/A	N/A	N/A	IN
Caliper 2 Plus Measurement	12.00	N/A	12.55	N/A	N/A	N/A	IN
Micro Electrical Scanner – B (Slim) Wellsite Calibration – CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY							
Before: 15–Jun–2006 5:35							
TEMPERATURE REFERENCE :	N/A	N/A	20	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	92	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	10	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	448	N/A	N/A	N/A	
Micro Electrical Scanner – B (Slim) Wellsite Calibration – CROUZET MAGNETOMETER PROM HAS BEEN READ CORRECTLY							
Before: 15–Jun–2006 5:35							
TEMPERATURE REFERENCE :	N/A	N/A	19	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	99	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	12	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	428	N/A	N/A	N/A	
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 1 Check							
Master: 2–May–2006 2:30 Before: 2–May–2006 2:38							
Na 511 Peak Loc	40.00	39.56	39.54	N/A	N/A	1.000	
Na 511 Peak Res	15.50	16.25	16.58	N/A	N/A	2.000	%
High Voltage	1150	1127	1127	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	142.0	142.2	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	8.216	8.344	N/A	N/A	2.000	%
Temperature	15.50	38.29	38.31	N/A	N/A	N/A	DEGC
Na Count Rate	**45.00**	**38.65**	**39.35**	**N/A**	**N/A**	**8.000**	**CPS**
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check							
Master: 2–May–2006 2:30 Before: 2–May–2006 2:38							
Na 511 Peak Loc	40.00	39.68	39.61	N/A	N/A	1.000	
Na 511 Peak Res	15.50	15.77	16.64	N/A	N/A	2.000	%
High Voltage	1150	1208	1209	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	142.4	142.0	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	8.851	8.650	N/A	N/A	2.000	%
Temperature	15.50	37.09	37.07	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	38.15	38.97	N/A	N/A	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Ratio Of Detector 1 To Detector 2							
Master: 2–May–2006 2:30 Before: 2–May–2006 2:38							
Coincidence Count Rate Ratio	1.000	1.012	1.010	N/A	N/A	0.05000	

Micro Electrical Scanner – B (Slim) / Equipment Identification

Primary Equipment:		
MEST Sonde – B	MEDS – B	771
MEST Preamplifier Cartridge – AB	MEPC – AB	807
GPIT Cartridge – A	GPIC – A	840
MEST Acquisition Cartridge – A	MEAC – A	804
Auxiliary Equipment:		
MEST–B Preamplifier Cartridge Housing	MEPH – A	702
MEST Acquisition Cartridge Housing (Slim	MEAH – B	701

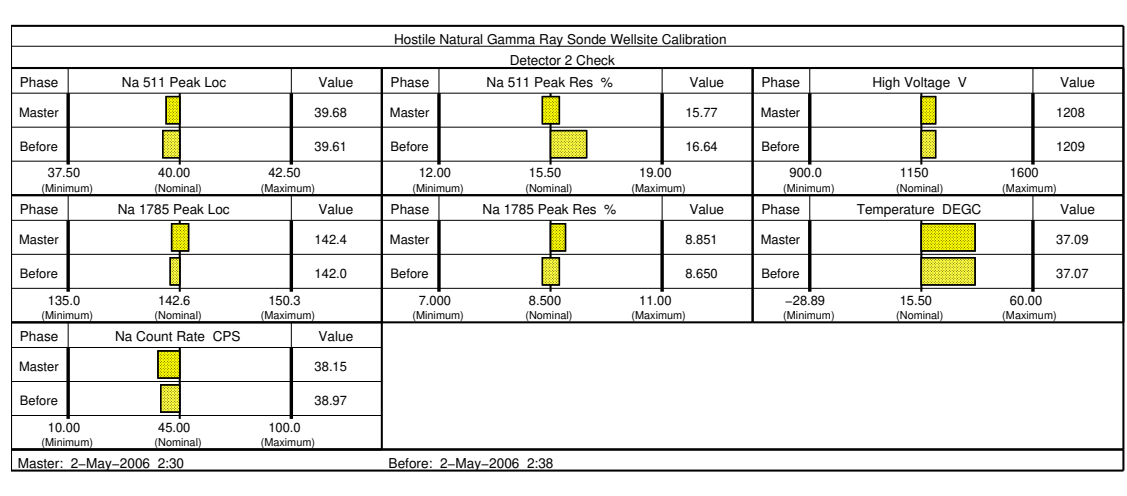
Hostile Natural Gamma Ray Cartridge – B / Equipment Identification

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	135

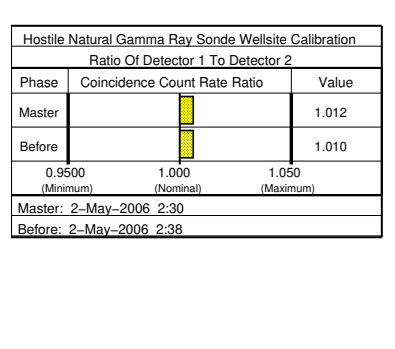
Hostile Natural Gamma Ray Sonde Wellsite Calibration
Detector 1 Check



Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Master		39.56	Master		16.25	Master		1127
Before		39.54	Before		16.58	Before		1127
	37.50 (Minimum) 40.00 (Nominal) 42.50 (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		142.0	Master		8.216	Master		38.29
Before		142.2	Before		8.344	Before		38.31
	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		38.65						
Before		39.35						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							

Master: 2–May–2006 2:30 Before: 2–May–2006 2:38

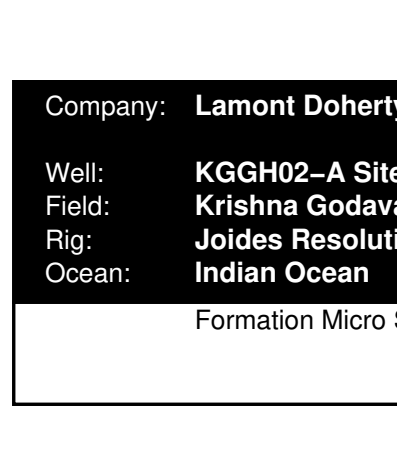
Hostile Natural Gamma Ray Sonde Wellsite Calibration
Detector 2 Check



Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Master		39.68	Master		15.77	Master		1208
Before		39.61	Before		16.64	Before		1209
	37.50 (Minimum) 40.00 (Nominal) 42.50 (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		142.4	Master		8.851	Master		37.09
Before		142.0	Before		8.650	Before		37.07
	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		38.15						
Before		38.97						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							

Master: 2–May–2006 2:30 Before: 2–May–2006 2:38

Hostile Natural Gamma Ray Sonde Wellsite Calibration
Ratio Of Detector 1 To Detector 2



Phase	Coincidence Count Rate Ratio	Value
Master		1.012
Before		1.010
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)	

Master: 2–May–2006 2:30
Before: 2–May–2006 2:38

Company: **Lamont Doherty**

Schlumberger

Well: **KGGH02–A Site 5 Hole E**
Field: **Krishna Godavairi Basin**
Rig: **Joides Resolution**
Ocean: **Indian Ocean**

Formation Micro Scanner