

Schlumberger

Company: **Lamont Doherty**

Well: **KGGH02-A Site 5 Hole D**

Field: **Krishna Godavairi Basin**

Rig: **Joides Resolution** Ocean: **Indian Ocean**

APS/HLDS Porosity

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

LOCATION		Elev.:	K.B. 11.3 m
Rig- Joides Resolution		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	Latitude
		82 02.6773 E	16 01.721 N

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			
RM @ MRT			
RMF @ MRT			
Maximum Recorded Temperatures			
Circulation Stopped			
Logger On Bottom			
Unit Number			
Recorded By			
Witnessed By			

Logging Date	13-Jun-2006
Run Number	One
Depth Driller	1155.1 m
Schlumberger Depth	1117 m
Bottom Log Interval	1115 m
Top Log Interval	912 m
Casing Driller Size @ Depth	0.000 in @ 1013 m
Casing Schlumberger	1021 m
Bit Size	9.875 in
Type Fluid In Hole	Sepiolite/Barite
Density	1.26 g/cm3
Fluid Loss	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	0.281 @ 7
RMF @ MRT	@ 7
Maximum Recorded Temperatures	7 degC
Circulation Stopped	13-Jun-2006 16:00
Logger On Bottom	13-Jun-2006 see log
Unit Number	2082 Webster, TX
Recorded By	Steve Kittredge
Witnessed By	Gilles Guerin

DISCLAIMER
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OTHER SERVICES1
 OS1: VSI
 OS2: FMS
 OS3: DSI
 OS4:
 OS5:

OTHER SERVICES2
 OS1:
 OS2:
 OS3:
 OS4:
 OS5:

REMARKS: RUN NUMBER 1
 All parameters and presentations as per IODP standards
 Tool ran as per tool sketch below.
 Tool sat down at 1083.5 MBRF.
 Tool worked to 1117 MBRF before have overpul and bring tool back uphole.
 .Unable to go back down past 1083.5 MBRF.
 .Tool Logged from 1083.5 MBRF.
 10.5 ppg mud with Barite used to fill hole.
 HNGS was high in interval where density had been while trying to work past 1083.5 MBRF.

REMARKS: RUN NUMBER 2

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

RUN 2		
SERVICE ORDER #:		
PROGRAM VERSION:		
FLUID LEVEL:		
LOGGED INTERVAL	START	STOP




EQUIPMENT DESCRIPTION

RUN 1

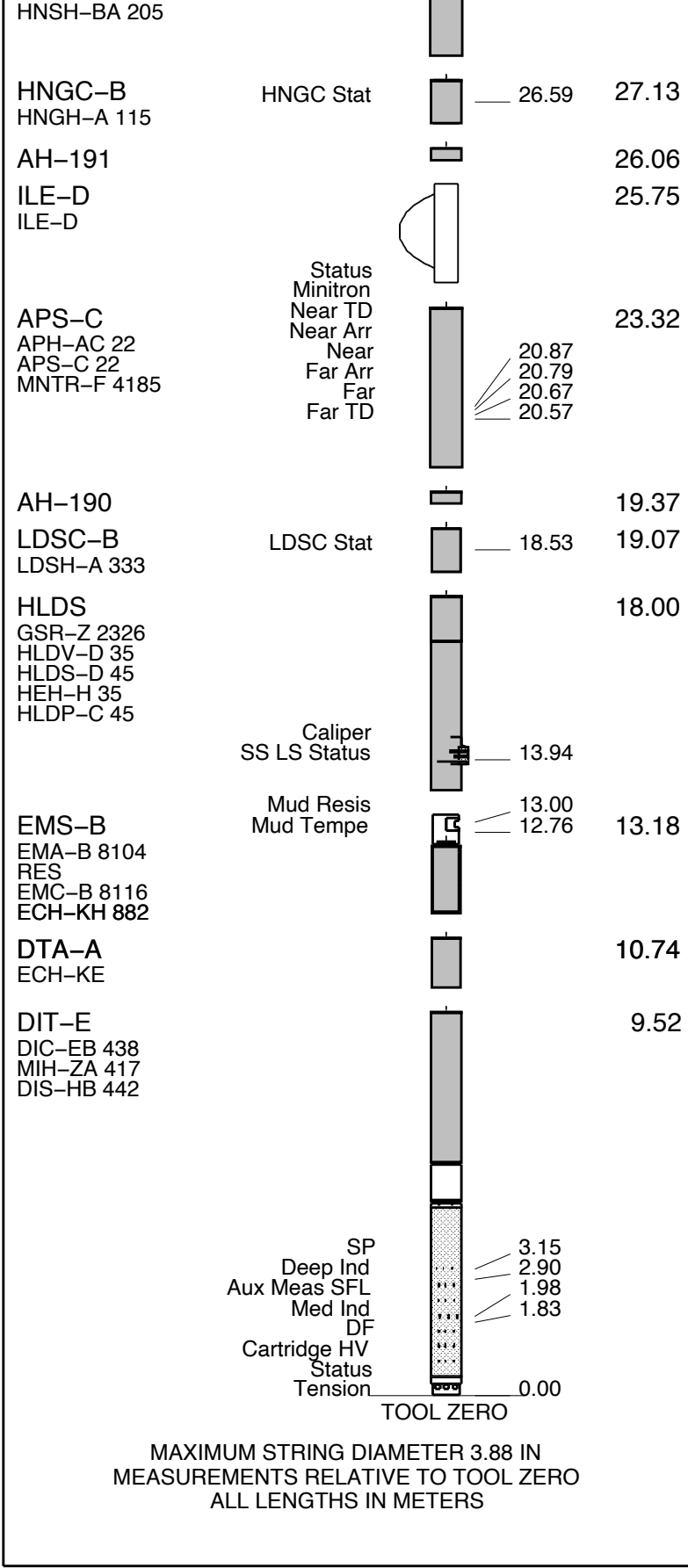
SURFACE EQUIPMENT

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

DOWNHOLE EQUIPMENT

LEH-QT			31.43
LEH-QT 1726			
DTC-H	CTEM		30.26
ECH-KC 9841	TelStatus ToolStatu	—	29.63
HNGS-BA	Upper_1		28.92
HNGS-BA 194	Lower_2	—	28.71

RUN 2



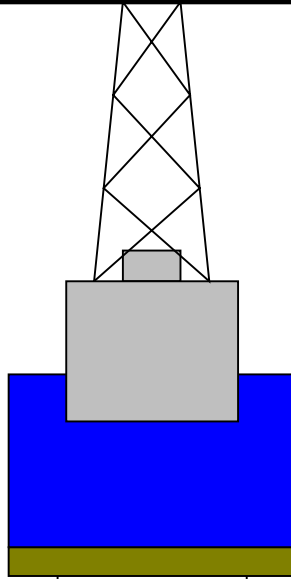
Production String	(in)	(ft)	Well Schematic	(ft)	(in)	Casing String
	OD	ID		MD	MD	

Kelly Bushing Elevation
Derrick Floor Elevation

11.3
11.0

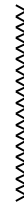
Mean Sea Level

0.0



0.0 6.500

Casing String



955.1 9.875
1013.0 6.500

Borehole Segment
Casing Shoe

1155.1 9.875

Borehole Segment Bottom

Schlumberger

Main Up Log

MAXIS Field Log

Output DLIS Files

DEFAULT	PI_EMS_LDL_APS_NGS_015LUP	FN:9	PRODUCER	13-Jun-2006 23:15	1081.3 M	912.3 M
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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
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CCSE

PS

LCAI

1046 0 23:20:20

Time Mark Every 60 S

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

APS Effective Standoff in Limestone (STOF)
 (IN) -1 4

From HCGR to HSGR

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

HLDS Long Spaced Photoelectric Effect (PEFL)
 (----) 0 20

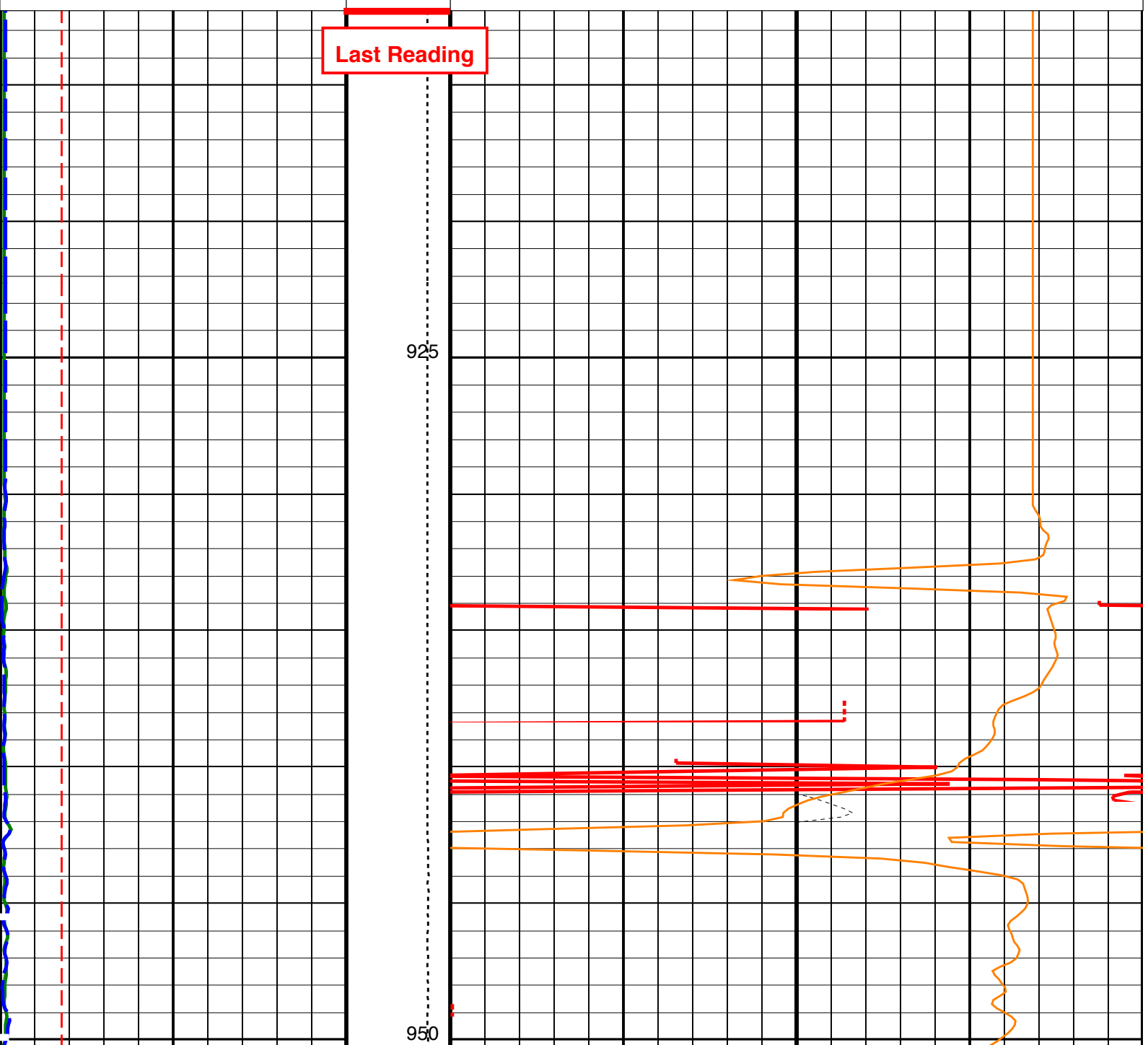
HLDS Bulk Density Correction (DRH)
 (G/C3) -0.25 0.25

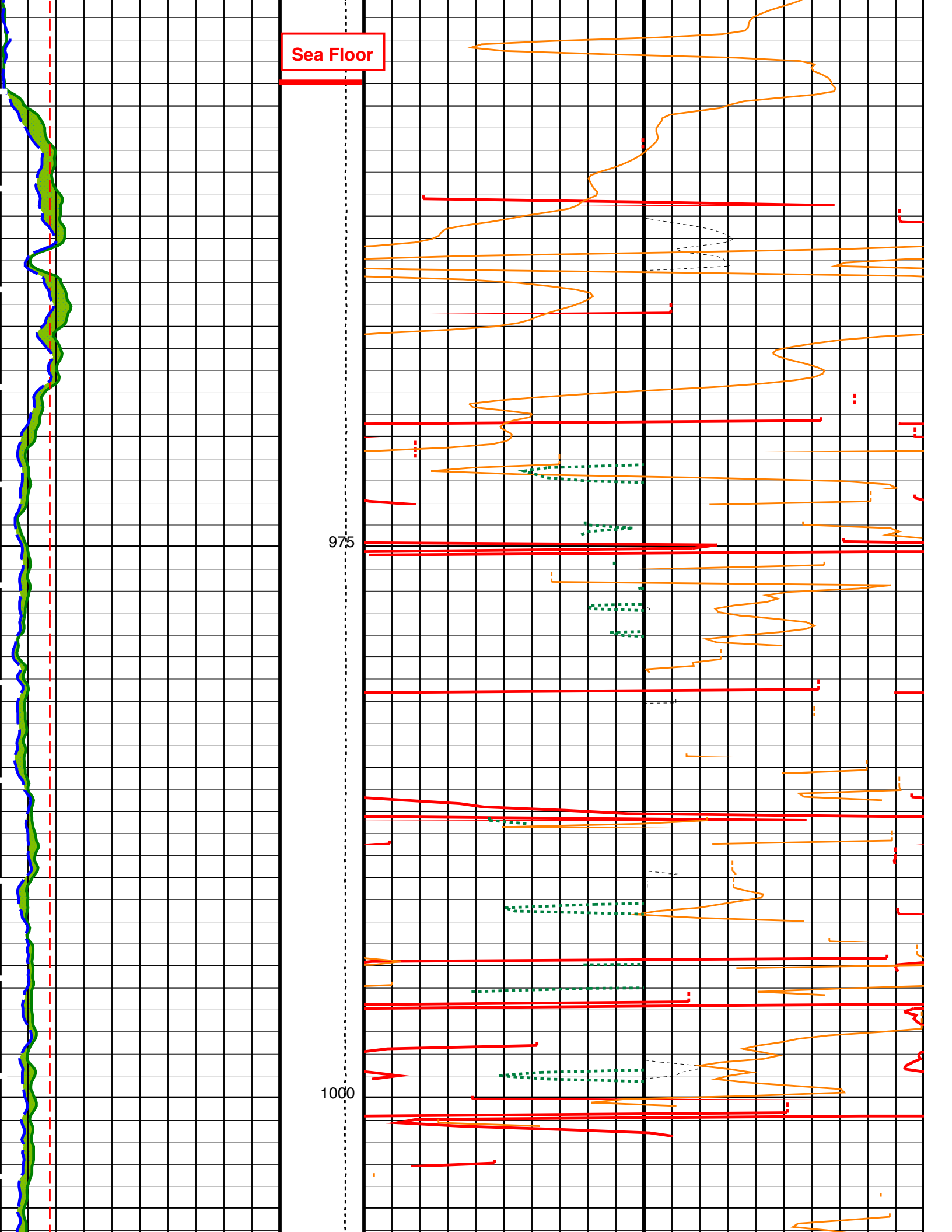
HLDS Bulk Density (RHOM)
 (G/C3) 2.65 1.65

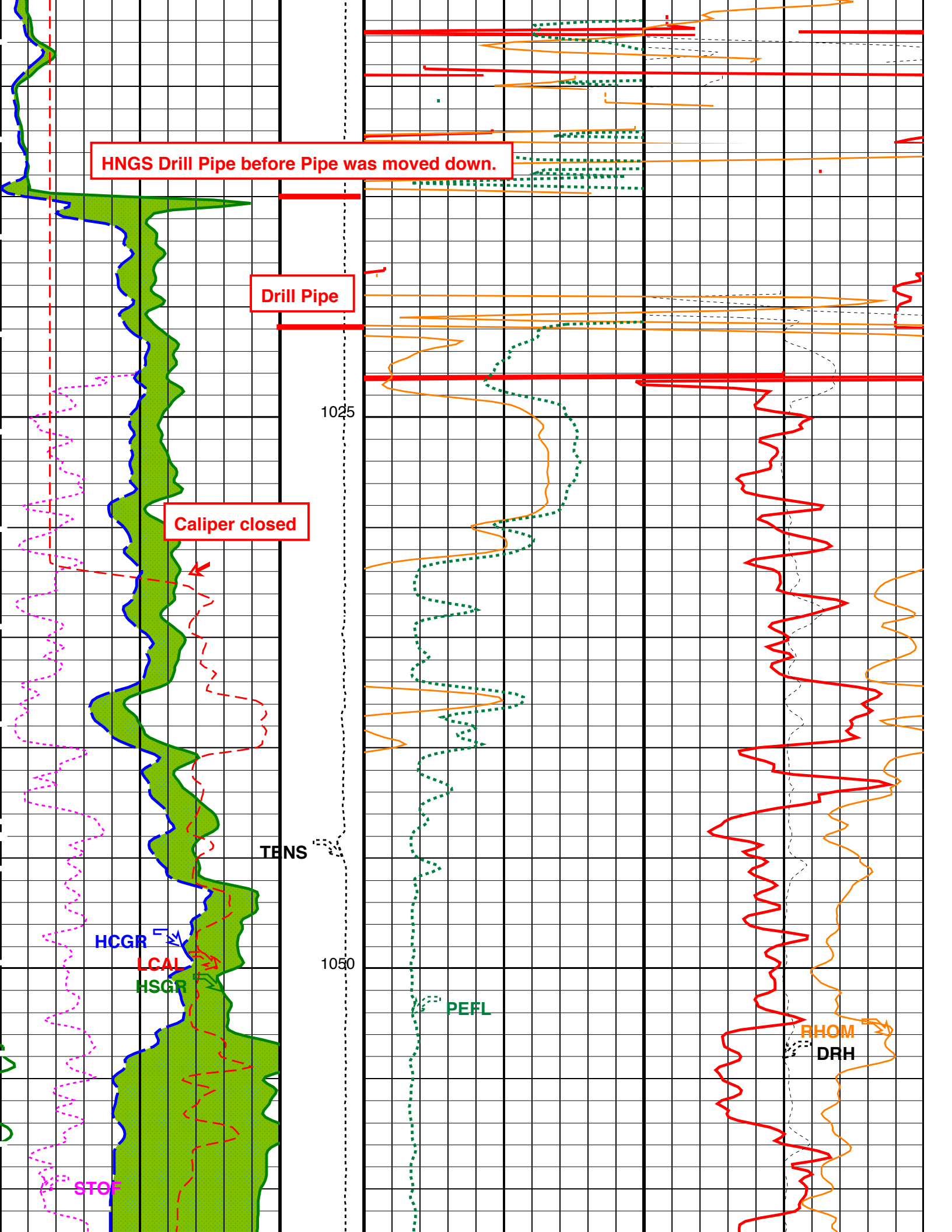
HLDS Caliper (LCAL)
 (IN) 0 20

Tension (TENS)
 (LBF) 10000 0

APS Near/Array Corrected Sandstone Porosity (APSC)
 (PU) 0 100







HNGS Drill Pipe before Pipe was moved down.

Drill Pipe

Caliper closed

TENS

HCGR

LCAL

HSGR

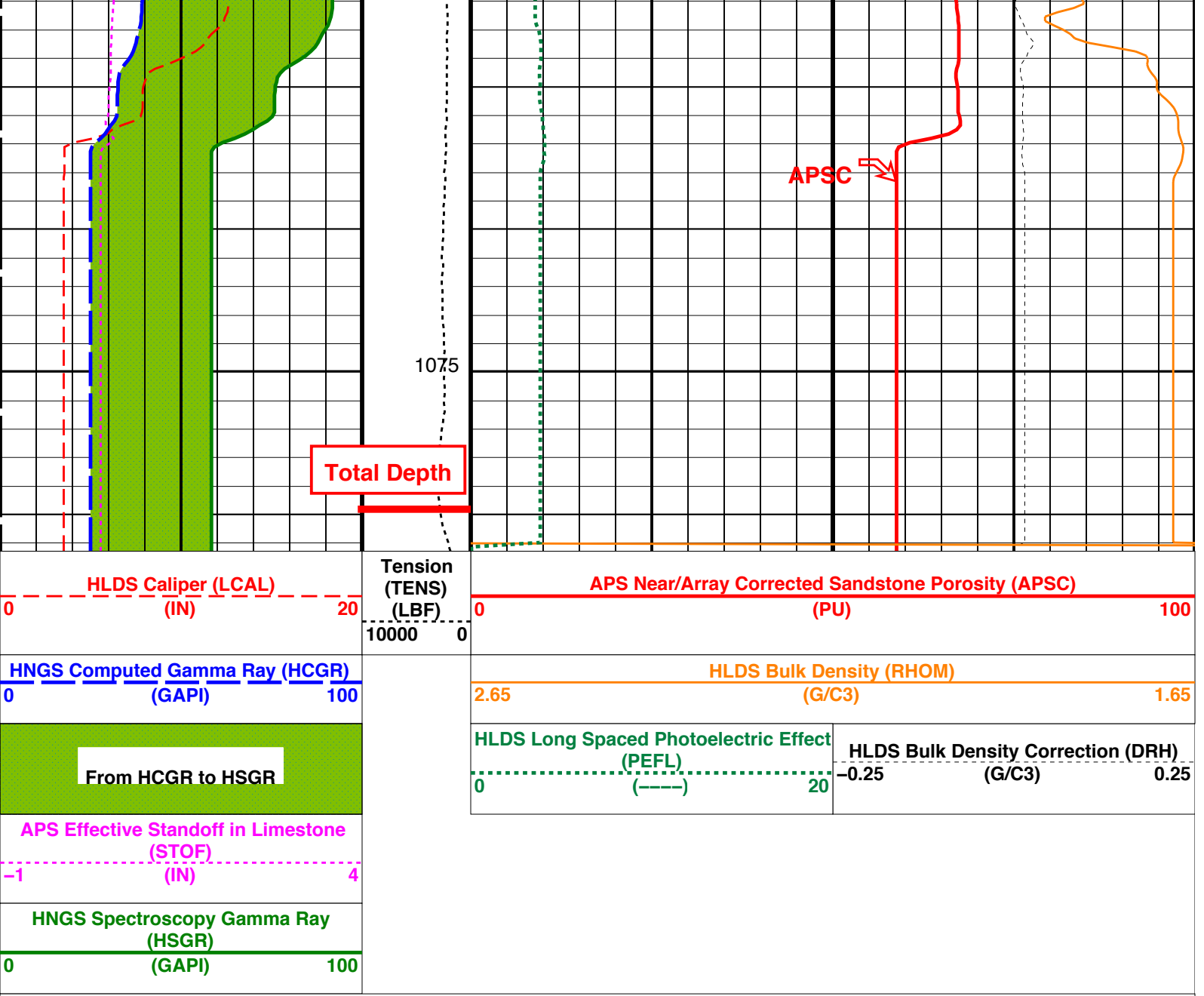
STOP

1025

1050

PEFL

RHOM
DRH



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)	20 DEGF
GCSE	Generalized Caliper Selection	LCAL
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.01 DF/F
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	68 DEGF
EMS-B: Environment Measurement Sonde		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	20 DEGF
GCSE	Generalized Caliper Selection	LCAL
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.01 DF/F
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	68 DEGF
HLDS: Hostile Litho-Density Sonde		
DHC	Density Hole Correction	BS
DPPM	Density Porosity Processing Mode	HIRS
FD	Fluid Density	1.26 G/C3
LATC	HLDS Activation Correction	ON
MDEN	Matrix Density	2.65 G/C3
APS-C: Accelerator-Porosity Tool		

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	GCSE	
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	OFF	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGF
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	30000	PPM
GCSE	Generalized Caliper Selection	LCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
NARC	APS Near/Array Calibration Ratio	1.05617	
NFRC	APS Near/Far Calibration Ratio	0.88491	
SHT	Surface Hole Temperature	68	DEGF
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)	20	DEGF
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	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
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	0.000471719	
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	
SHT	Surface Hole Temperature	68	DEGF
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.984795	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.985025	
System and Miscellaneous			
BS	Bit Size	9.875	IN
BSAL	Borehole Salinity	32000.00	PPM
CSIZ	Current Casing Size	0.000	IN
CWEI	Casing Weight	0.00	LB/F
DFD	Drilling Fluid Density	1.26	G/C3
TD	Total Depth	1155.1	M

Format: APSLiquidPorosity_1 Vertical Scale: 1:200 Graphics File Created: 13-Jun-2006 23:15

OP System Version: 12C0-301

MCM

DIT-E	12C0-301	DTA-A	12C0-301
EMS-B	12C0-301	HLDS	SPC-2602-NUCL
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HNGC-B	SPC-2602-NUCL	HNGS-BA	SPC-2602-NUCL
DTC-H	12C0-301		

Output DLIS Files

DEFAULT PI_EMS_LDL_APS_NGS_015LUP FN:9 PRODUCER 13-Jun-2006 23:15

Company: **Lamont Doherty**

Schlumberger

Well: **KGGH02-A Site 5 Hole D**

Field: **Krishna Godavairi Basin**

Rig: **Joides Resolution**

Ocean: **Indian Ocean**

APS/HLDS Porosity