Schlumberger

Company: **Lamont Doherty**

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

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

Natural Gamma Ray

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	Latitude
		82 02.6773 E	16 01.721 N

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								
MUD	Density	Viscosity	1.26 g/cm3								
MUD	Fluid Loss	PH	0 cm3								
MUD	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	13–June–2006			16:00					
Logger On Bottom		Time	13–June–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		
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: 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.	
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.	

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

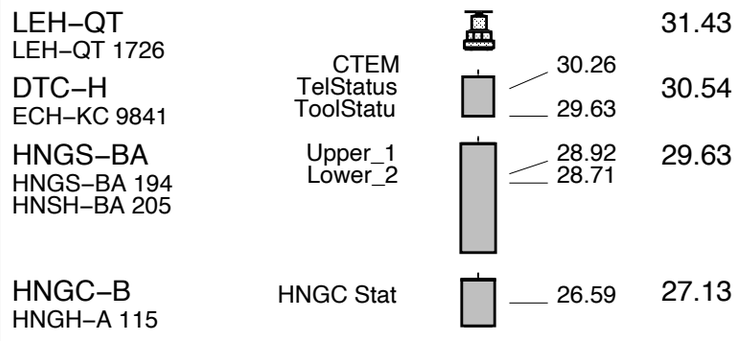
EQUIPMENT DESCRIPTION

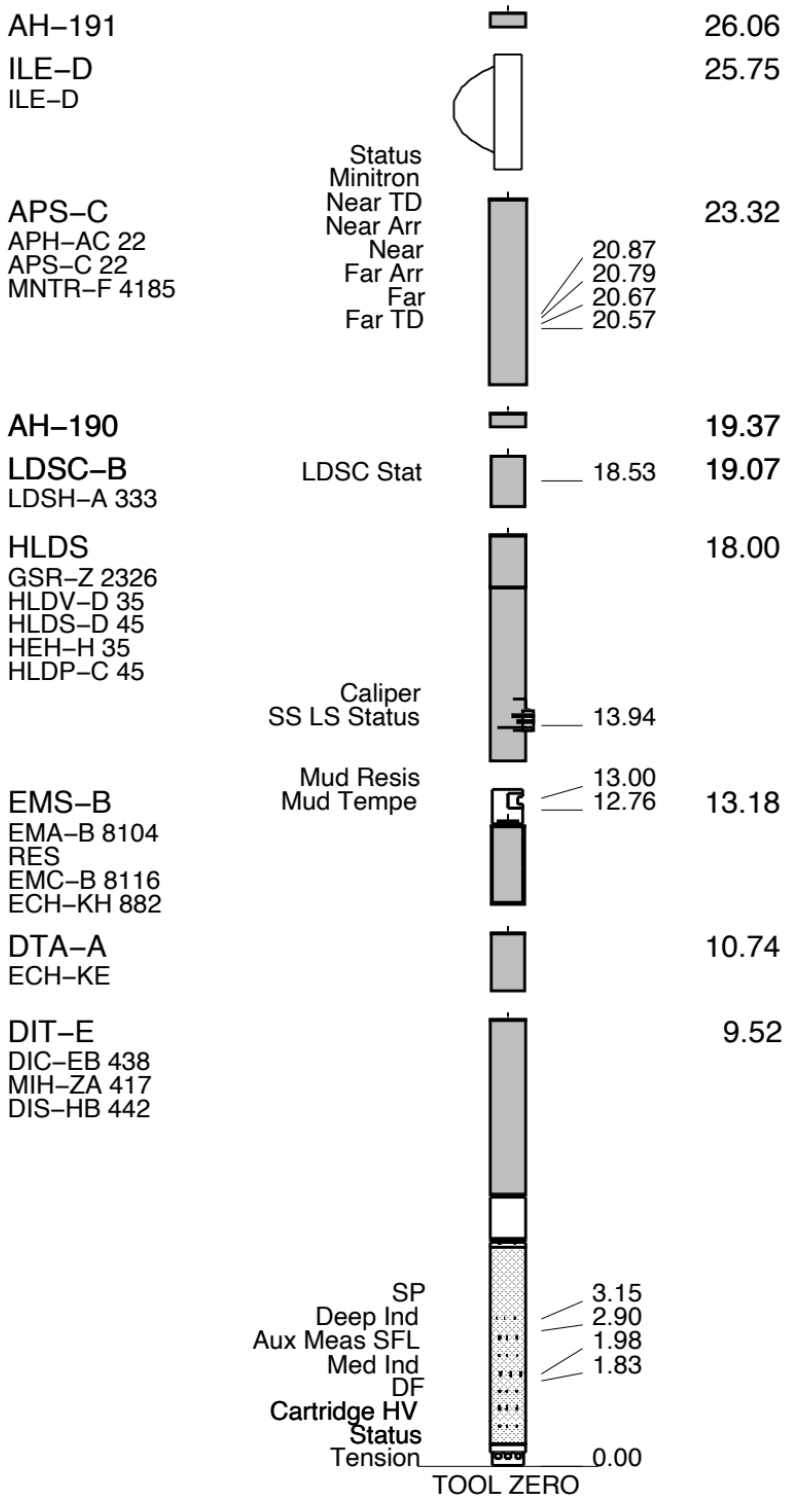
RUN 1 | RUN 2

SURFACE EQUIPMENT

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

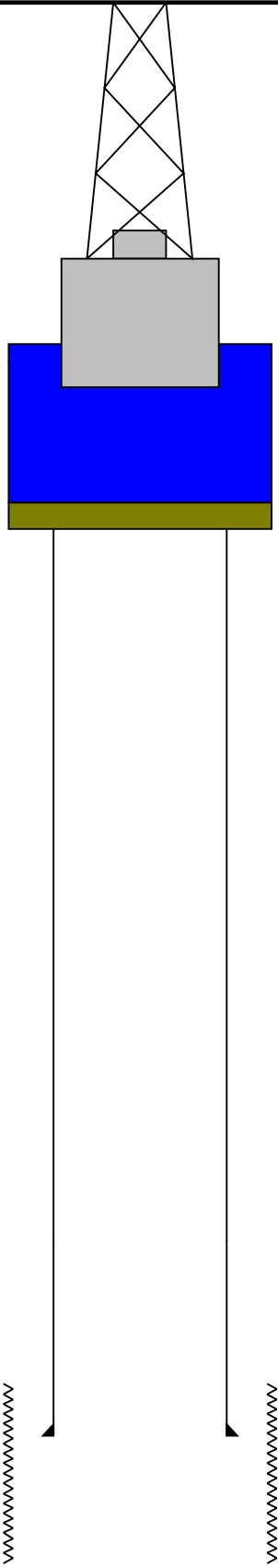
DOWNHOLE EQUIPMENT





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					
					0.0	6.500		Casing String
					955.1	9.875		Borehole Segment
					1013.0	6.500		Casing Shoe
					1155.1	9.875		Borehole Segment Bottom

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Main Up Log

MAXIS Field Log

Company: Lamont Doherty	Well: KGGH02–A Site 5 Hole B

Output DLIS Files

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

OP System Version: 12C0–301

MCM

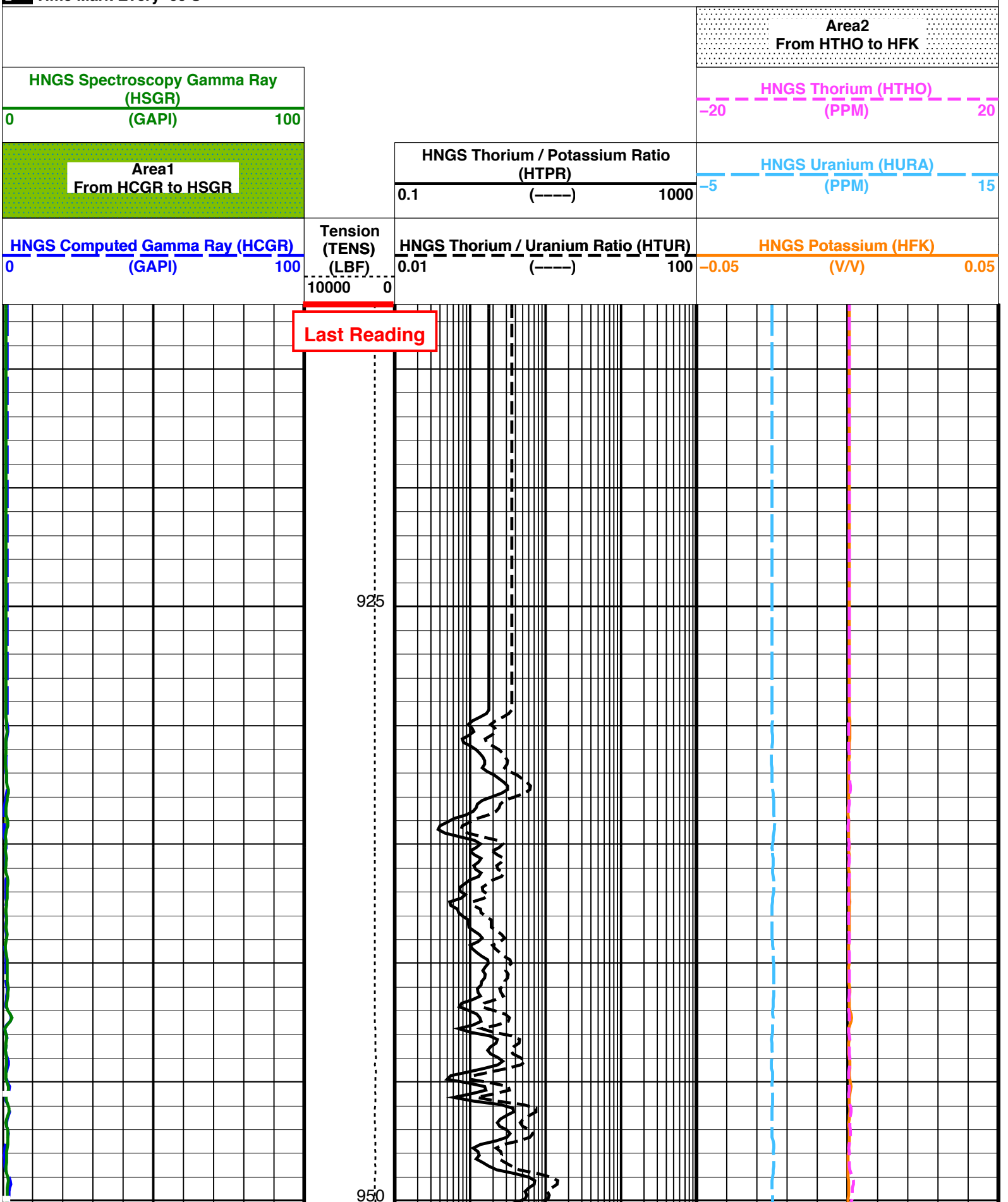
DIT–E	12C0–301	DTA–A	12C0–301
EMS–B	12C0–301	HLDS	SPC–2602–NUCL
LDSC–B	SPC–2602–NUCL	APS–C	SPC–2602–NUCL
HNGC–B	SPC–2602–NUCL	HNGS–BA	SPC–2602–NUCL
DTC–H	12C0–301		

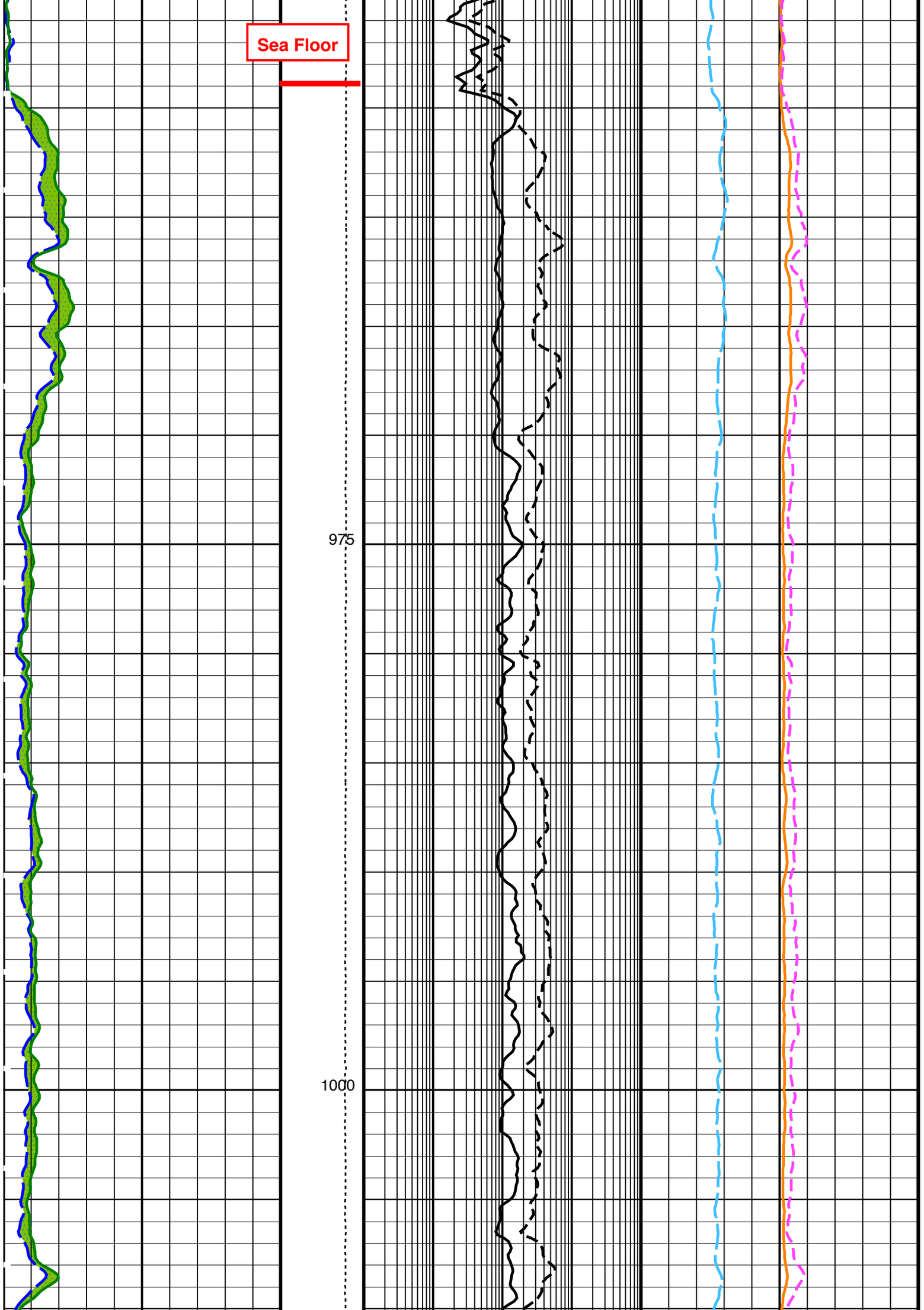
Changed Parameter Summary

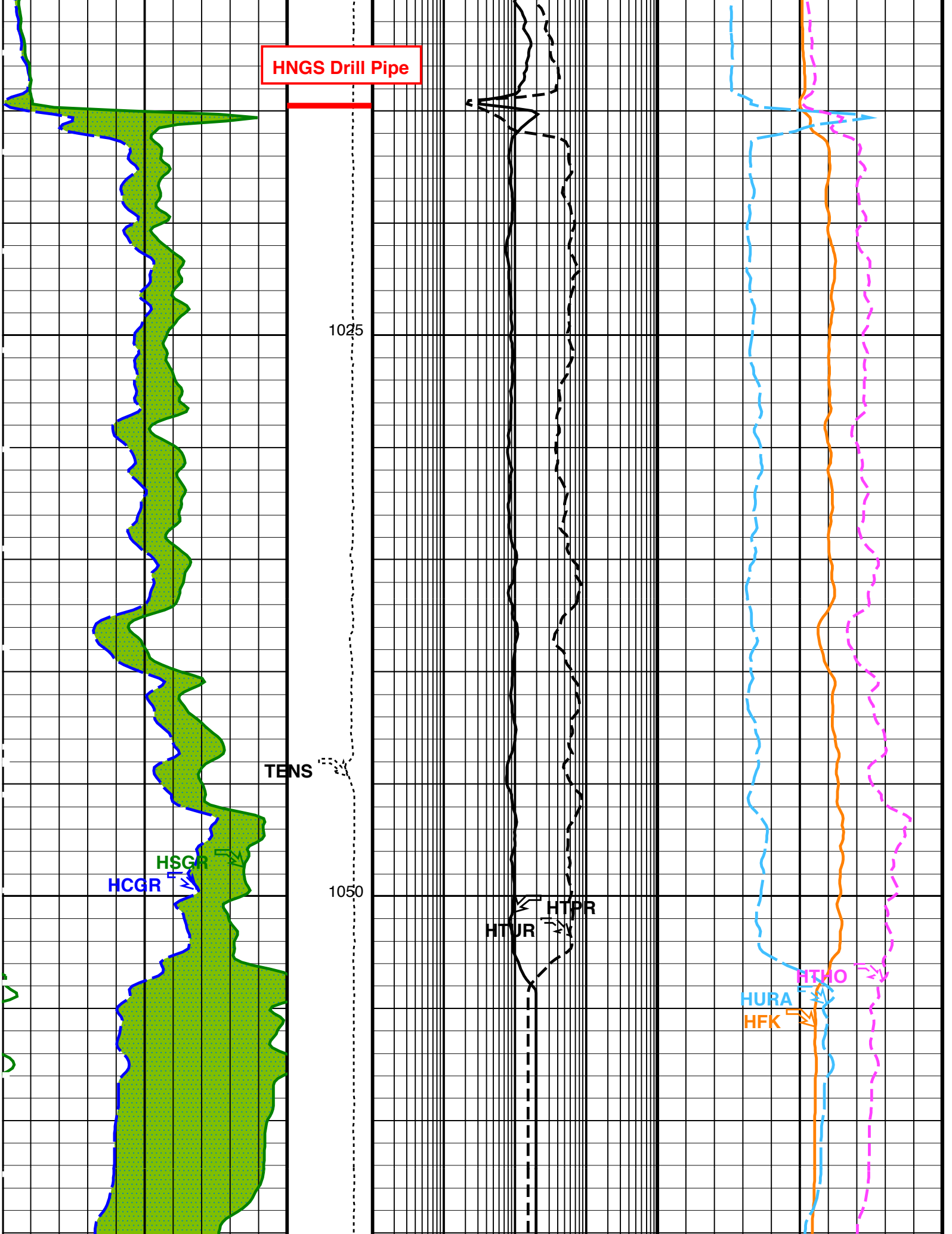
DLIS Name	New Value	Previous Value	Depth & Time
GCSE	BS	LCAL	1046.0 23:30:20

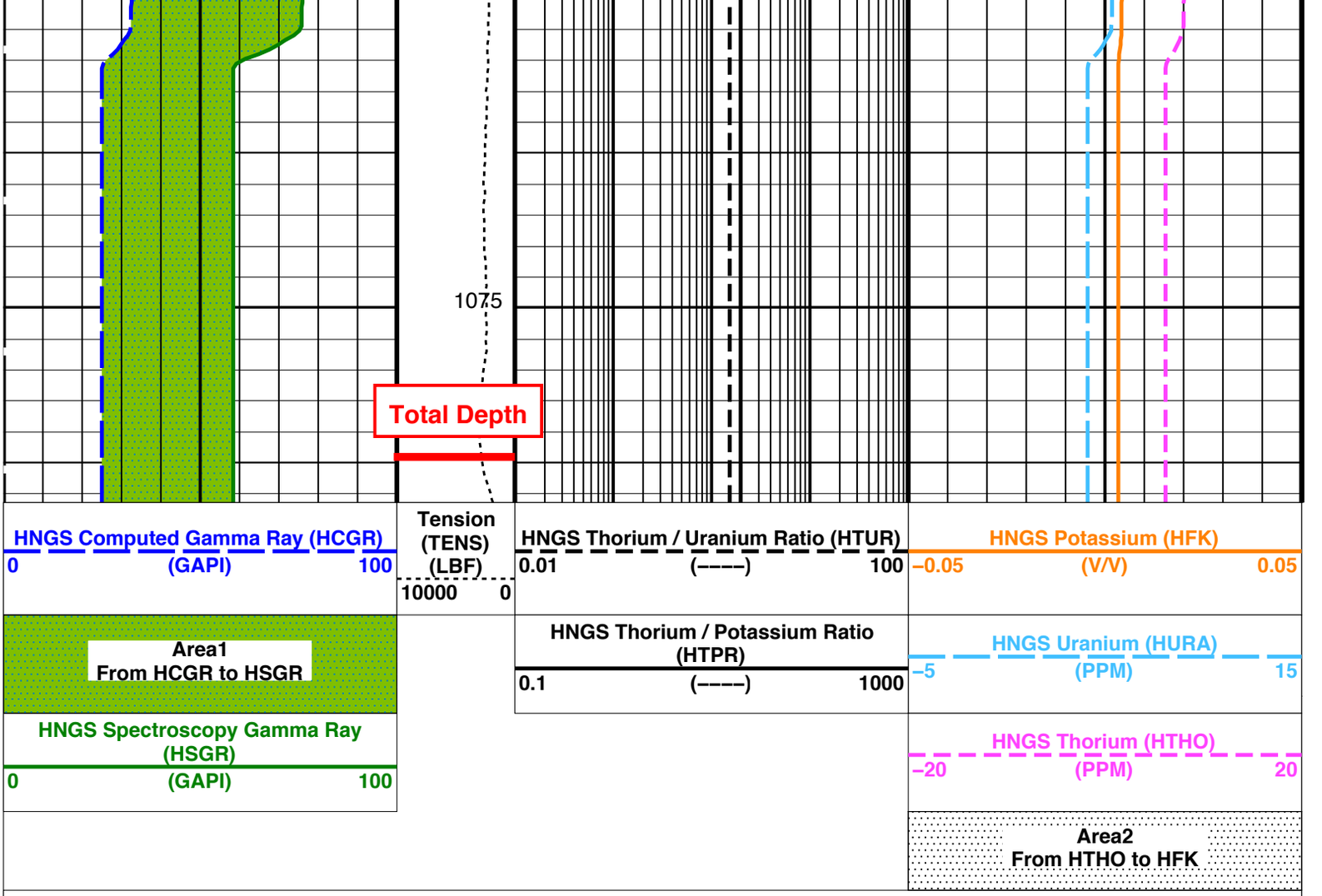
PIP SUMMARY

Time Mark Every 60 S




Sea Floor
975
1000


HNGS Drill Pipe
1025
TENS
HSGR
HCGR
1050
HTPR
HTUR
HTHO
HURA
HFK



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	0.000471719	
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	
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
DFD	Drilling Fluid Density	1.26	G/C3

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_015LUP	FN:9	PRODUCER	13–Jun–2006 23:15

Schlumberger

Down Log

MAXIS Field Log

Company: Lamont Doherty

Well: KGGH02–A Site 5 Hole E

Input DLIS Files

DEFAULT	FLIP_PI_EMS_LDL_APS_019L	PRODUCER	14–Jun–2006 15:22	1120.3 M	923.5 M

Output DLIS Files

DEFAULT	PI_EMS_LDL_APS_NGS_020PUP	FN:13	PRODUCER	14–Jun–2006 15:23	1120.3 M	897.9 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		

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

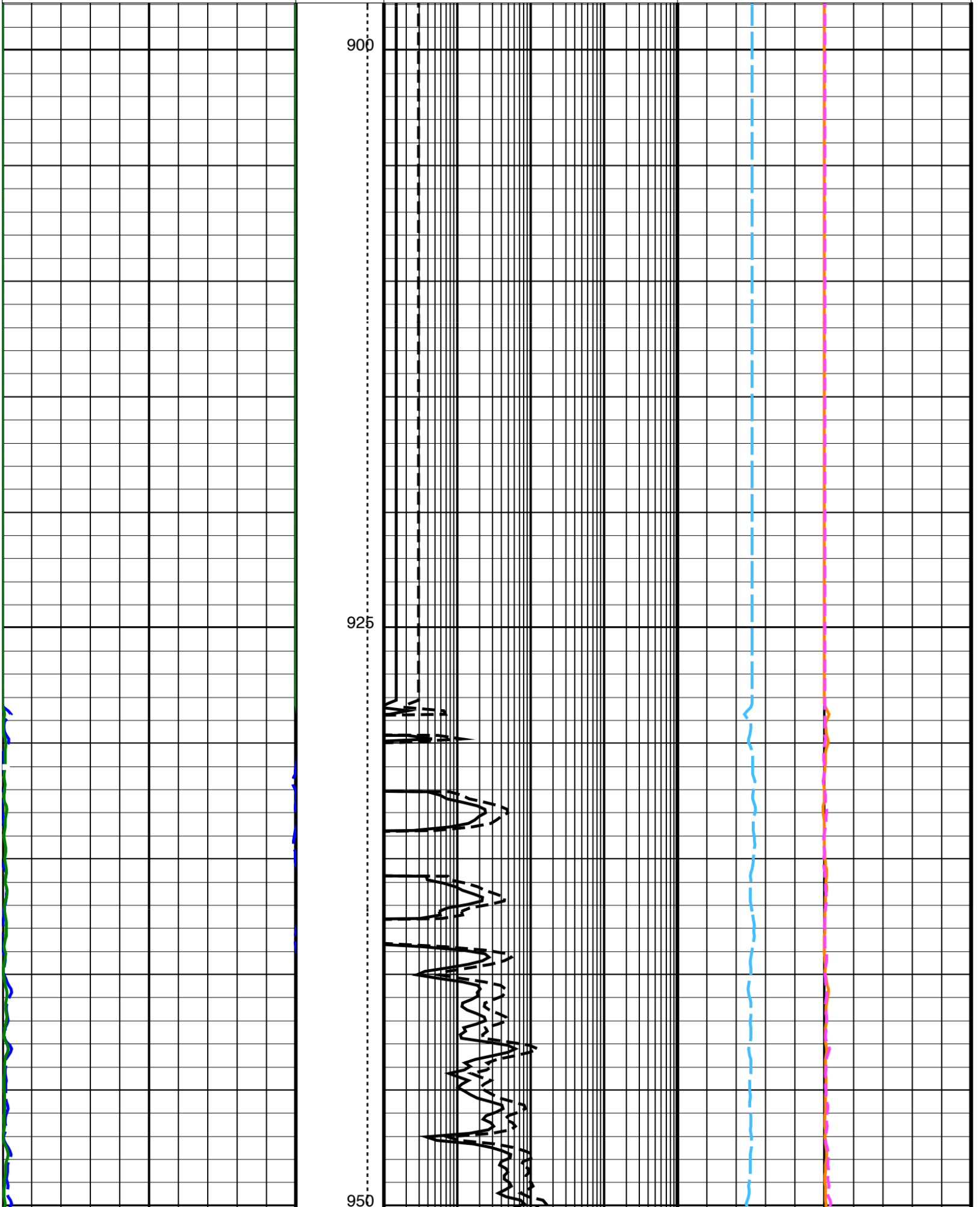
HNGS Uranium (HURA)
–5 (PPM) 15

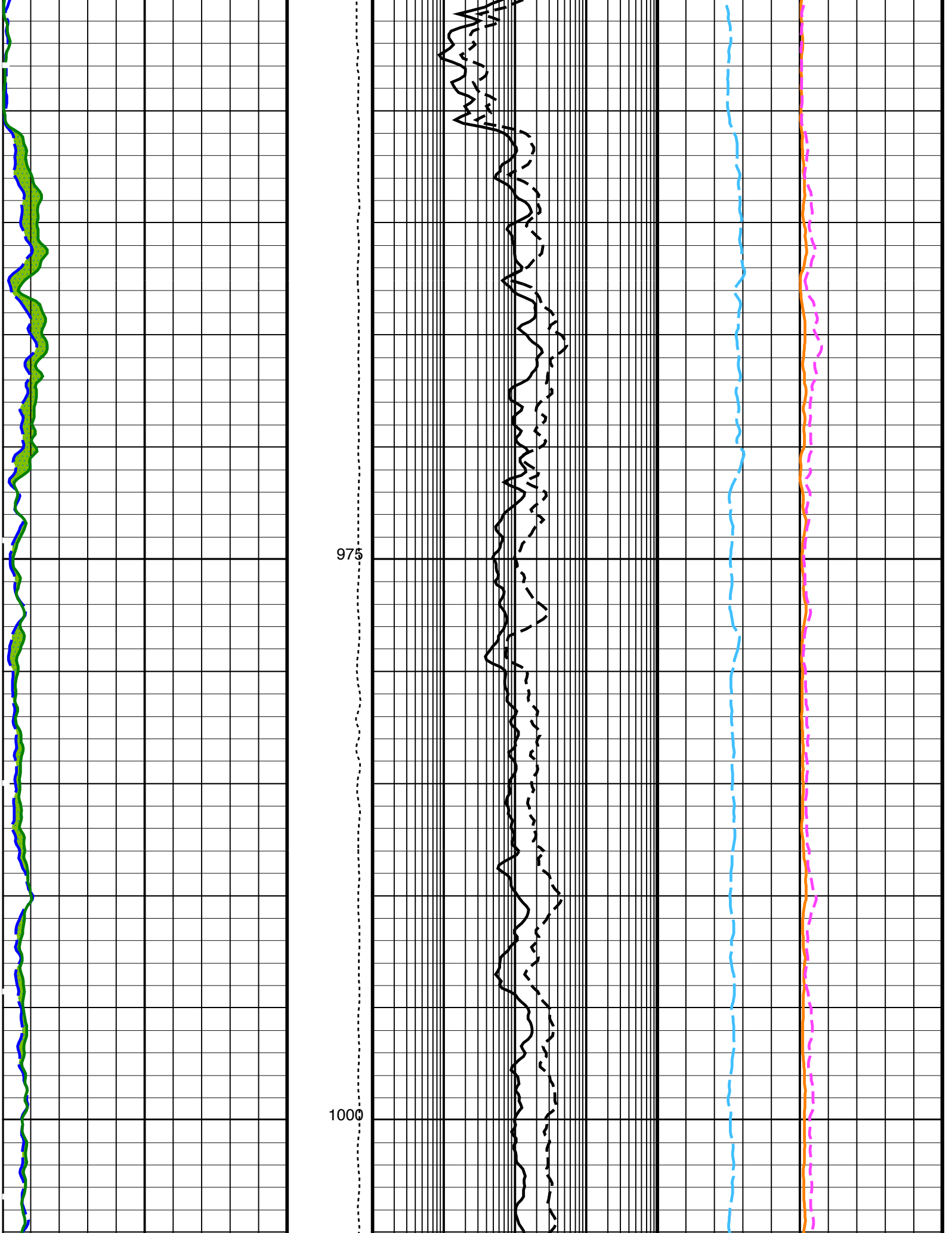
HNGS Computed Gamma Ray (HCGR)
0 (GAPI) 100

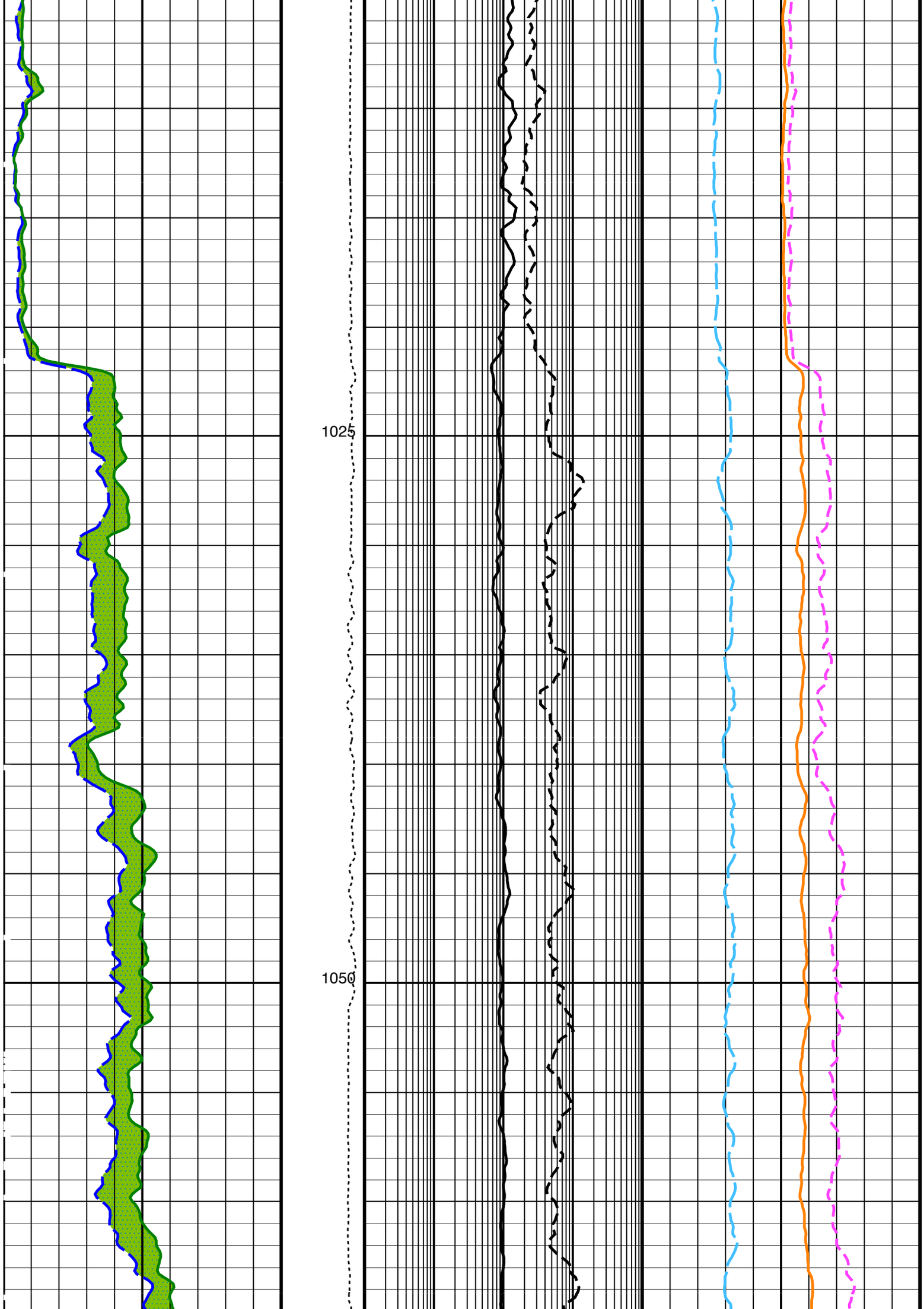
Tension (TENS) (LBF)
10000 0

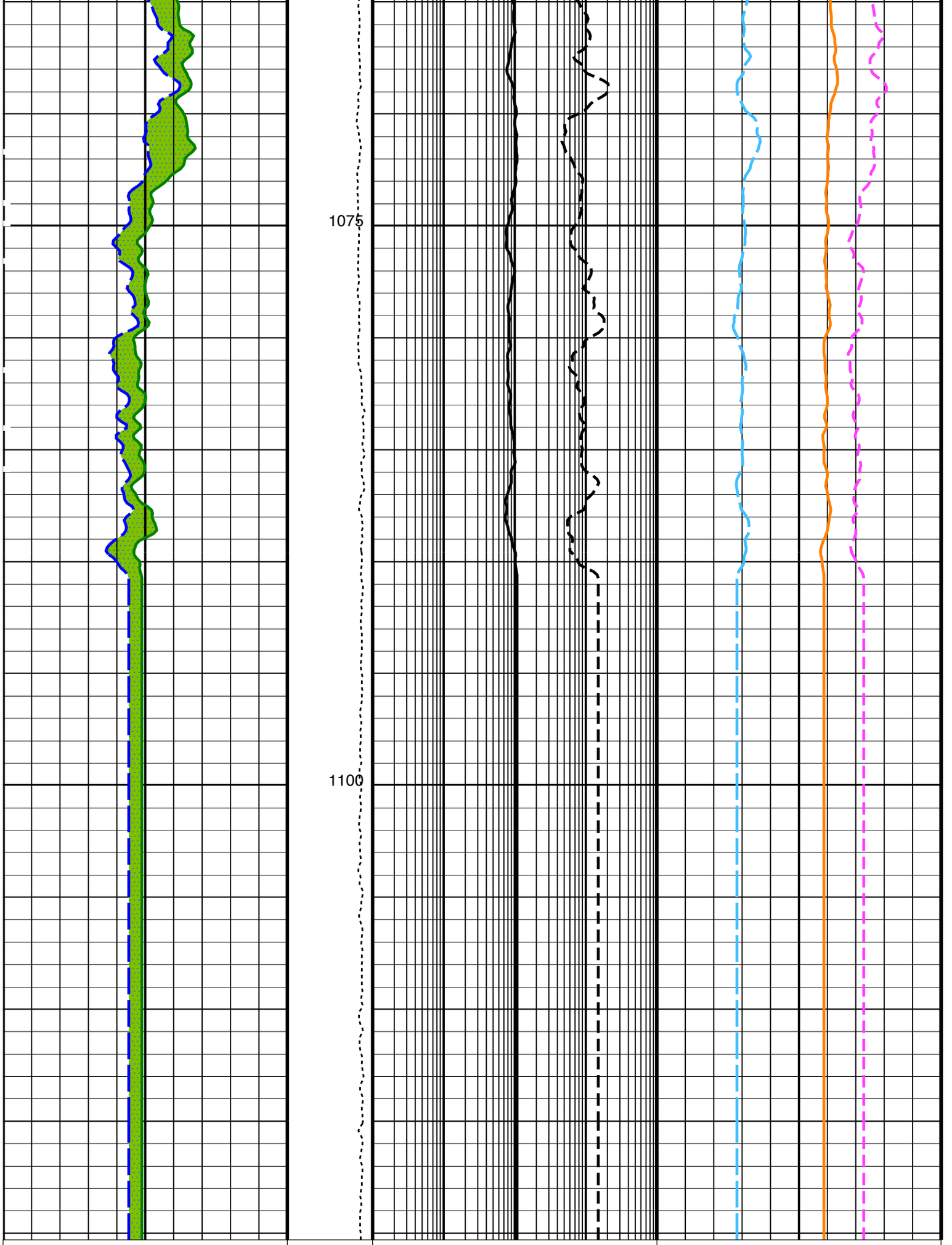
HNGS Thorium / Uranium Ratio (HTUR)
0.01 (----) 100

HNGS Potassium (HFK)
–0.05 (V/V) 0.05


900
925
950


975
1000


1025
1050



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

Area1
From HCGR to HSGR

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

HNGS Uranium (HURA)
−5 (PPM) 15

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	BS	
	EMS−B: Environment Measurement Sonde		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
	APS−C: Accelerator−Porosity Tool		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
	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	BS	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	0.0159876	
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	0.868874	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	−0.619268	
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.26	G/C3
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: HNGSRatios Vertical Scale: 1:200 Graphics File Created: 14−Jun−2006 15:23

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		

Input DLIS Files

DEFAULT	FLIP_PI_EMS_LDL_APS_019L	PRODUCER	14−Jun−2006 15:22	1120.3 M	923.5 M

Output DLIS Files

DEFAULT	PI_EMS_LDL_APS_NGS_020PUP	FN:13	PRODUCER	14−Jun−2006 15:23

Company: **Lamont Doherty**

Schlumberger

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

Natural Gamma Ray