

COMPANY: Lamont Doherty

WELL: ODP Leg 193, Site 1189C (PCM-3A)

FIELD: Manus Basin, Roman Ruins

COUNTY: Offshore STATE: Bismarck Sea

HNGS
Schlumberger Natural Gamma Ray

COUNTY: Offshore
Field: Manus Basin, Roman Ruins
Location: ODP Leg 193, Site 1189C (PCM-3A)
Company: Lamont Doherty

LOCATION		Elev.:	
Permanent Datum:	MSL	K. B.	11.3 m
Log Measured From:	Drill Floor	G. L.	-1700 m
Drilling Measured From:	Drill Floor	D. F.	11 m
		Elev.:	0 m
			11.0 m above Perm. Datum
API Serial No.	LATITUDE: 03° 43.2415' S	LONGITUDE: 151° 40.5240' E	RIG: JOIDES Resolution

Logging Date	29-DEC-2000
Run Number	1
Depth Driller	1866 m
Schlumberger Depth	1766 m
Bottom Log Interval	1746 m
Top Log Interval	1700 m
Casing Driller Size @ Depth	0.000 in @ 1710 m
Casing Schlumberger	1708 m
Bit Size	7.250 in
Type Fluid In Hole	Seawater
Density	1.1 g/cm3
Fluid Loss	PH
Source Of Sample	Seawater
RM @ Measured Temperature	0.180 ohm.m @ 30 degC
RMF @ Measured Temperature	0.235 ohm.m @
RMC @ Measured Temperature	@
Source RMF	RMC
RM @ MRT	0.151 @ 40 @ 40
Maximum Recorded Temperatures	40 degC
Circulation Stopped	29-DEC-2000 1:00
Logger On Bottom	29-DEC-2000 10:00
Unit Number	99 Location Houston ODP
Recorded By	Kerry M. Swain
Witnessed By	Gerardo Iturrino, Anne Bartetzko

	Run 1	Run 2	Run
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			
Density			
Fluid Loss			
Source Of Sample			
RM @ Measured Temperature		@	
RMF @ Measured Temperature		@	
RMC @ Measured Temperature		@	
Source RMF		RMC	
RM @ MRT		@ @ 40	
Maximum Recorded Temperatures			
Circulation Stopped			
Logger On Bottom			
Unit Number			
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
 OS1: FMS
 OS2:
 OS3: DITE/HLDS
 OS4:
 OS5:

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

REMARKS: RUN NUMBER 1

REMARKS: RUN NUMBER 2

Log presented in meters below rig floor. Sea floor at 1700 mbrf.
 Wireline heave compensator used on all descents.
 Sea water used as mud in hole.
 Log TD at 1766 mbrf.
 Maximum temperature recorded from DITE ITEM.
 Toolstring-DITE/DTA/HLDS/NPLC/HNGS/LEHQ
 Original log files are log60.dlis and log62.dlis, they are replaced with play83.dlis and play 84.dlis. Reprocessing was done for the HNGS to compensate for the correct mud density of 1.1 g/cc.
 No after calibrations were performed to speed rigging down.
 Calibrations listed on HLDS print.

RUN 1

SERVICE ORDER #:
 PROGRAM VERSION: 9C1-303
 FLUID LEVEL: 0 m

RUN 2

SERVICE ORDER #:
 PROGRAM VERSION:
 FLUID LEVEL:

LOGGED INTERVAL	START	STOP

LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1


SURFACE EQUIPMENT

GSR-U 135
 WITM (DTS)-A


RUN 2

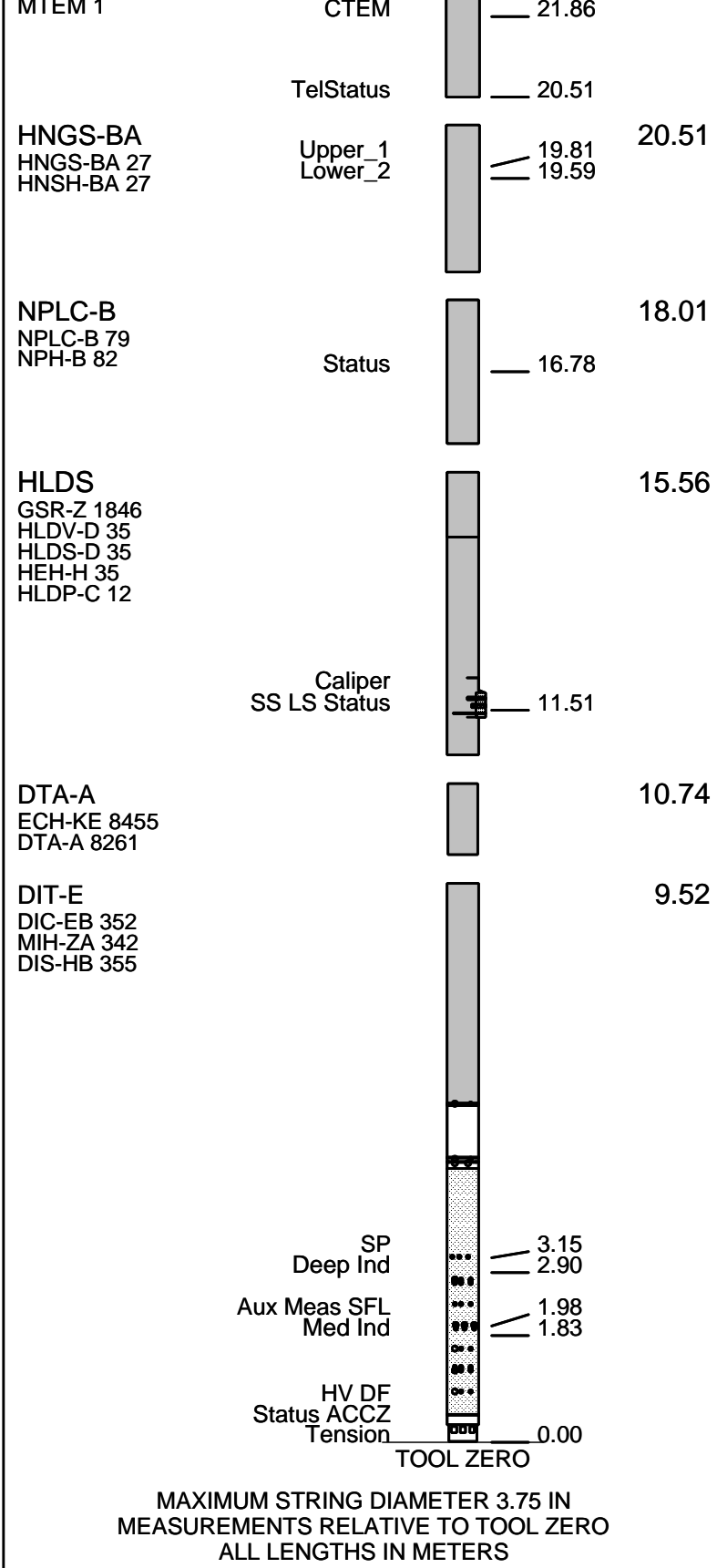
DOWNHOLE EQUIPMENT

LEH-MT 24.72
 LEH-MT 1

Mud Tempe  23.76

HTGC-B 23.76
 UDFH-KL 1062
 STGC0-A 8038
 STGC1-BH 8038

Gamma Ray  22.73



Input DLIS Files

DEFAULT	DITE .060	FN:5 PRODUCER	29-Dec-2000 09:56	1767.1 M	1697.7 M
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Output DLIS Files

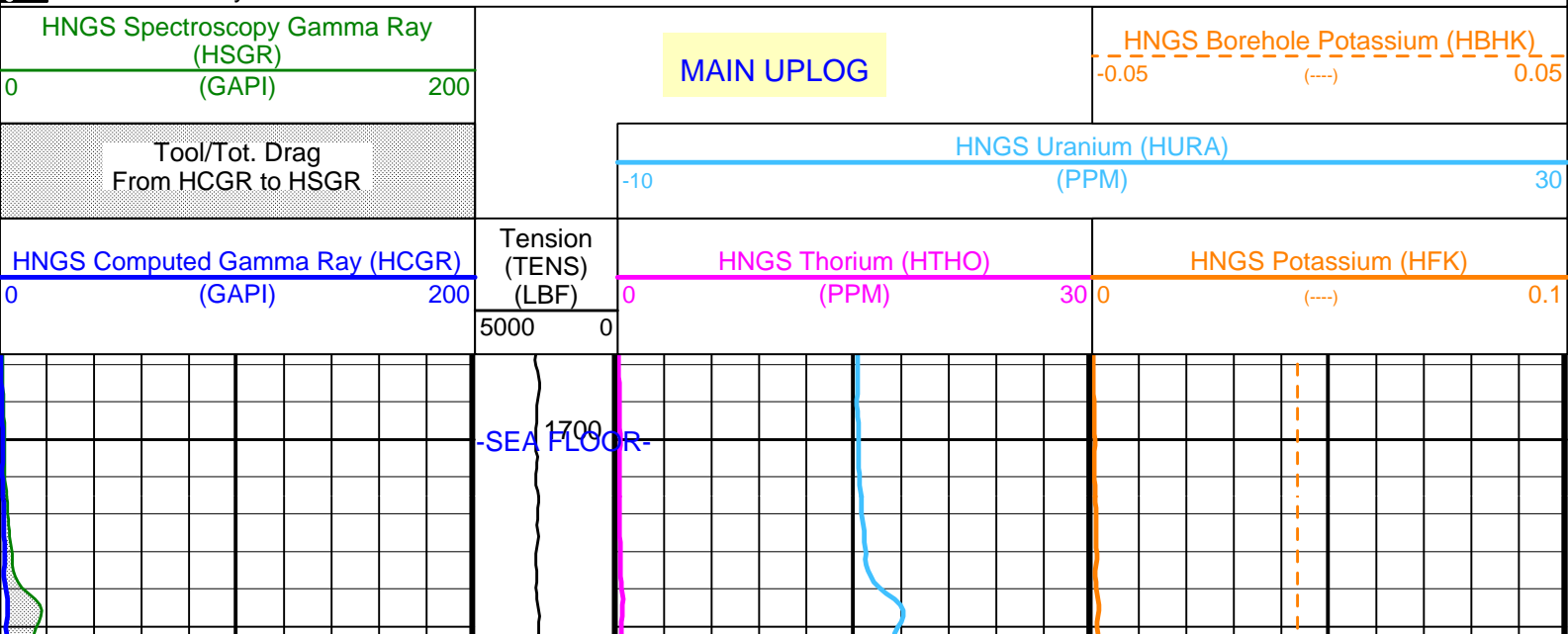
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LAMONT	DITE .083	FN:27 PRODUCER	31-Dec-2000 19:45	1767.1 M	1697.8 M

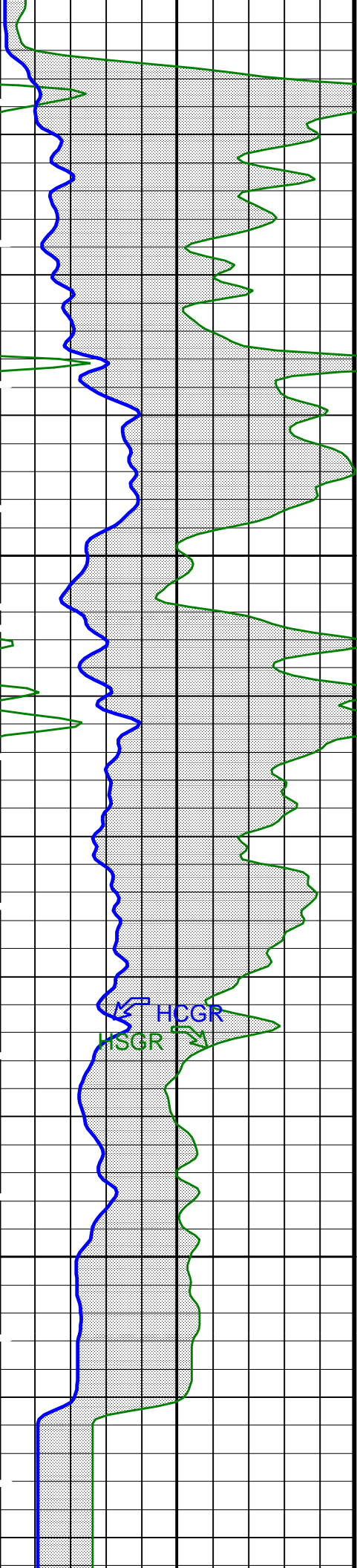
OP System Version: 9C1-303 MCM

DIT-E	OP91-kp2	DTA-A	OP91-kp2
HLDS	OP91-kp2	NPLC-B	OP91-kp2
HNGS-BA	OP91-kp2	DTC-H	OP91-kp2

PIP SUMMARY

Time Mark Every 60 S





-DRILL PIPE-

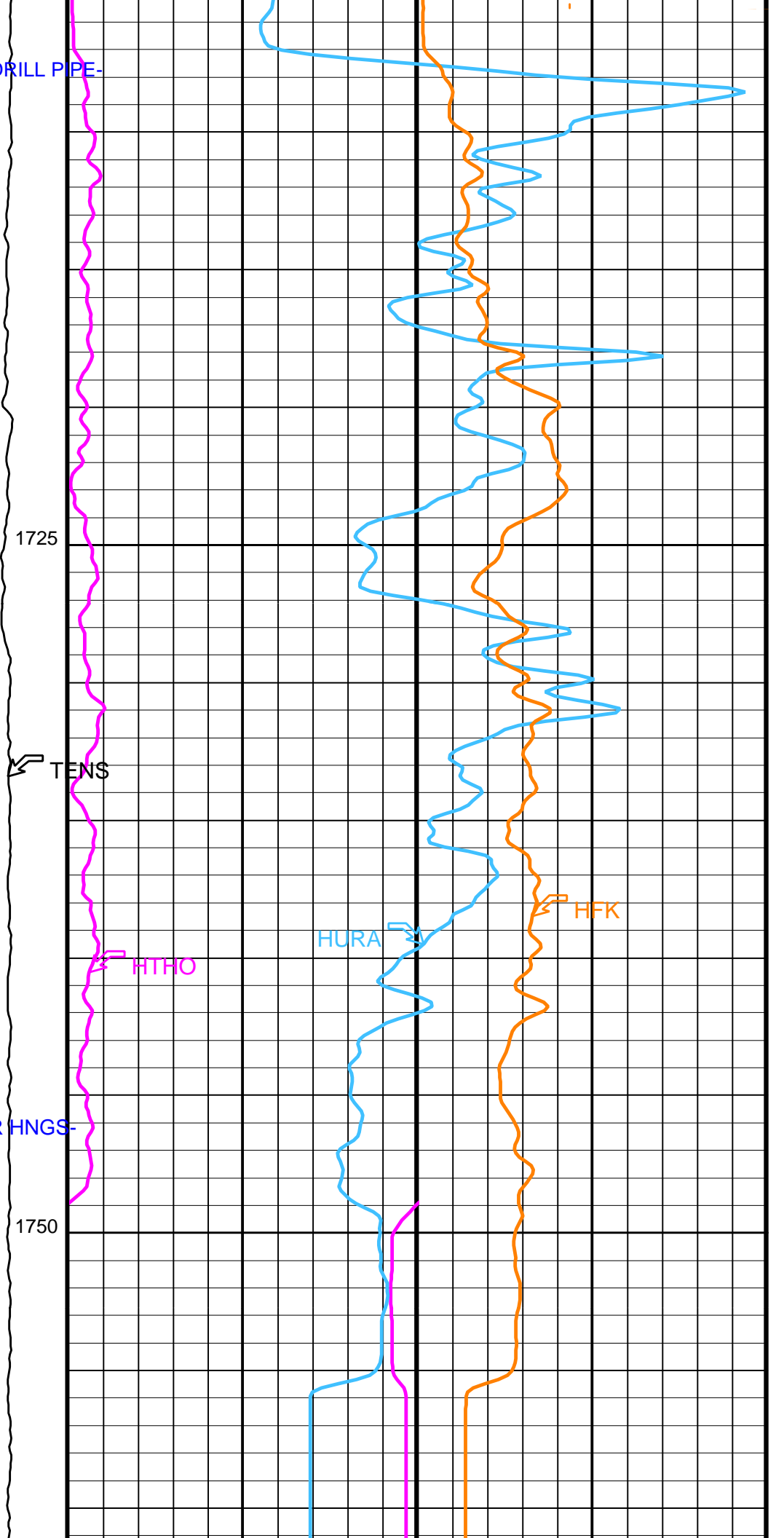
1725

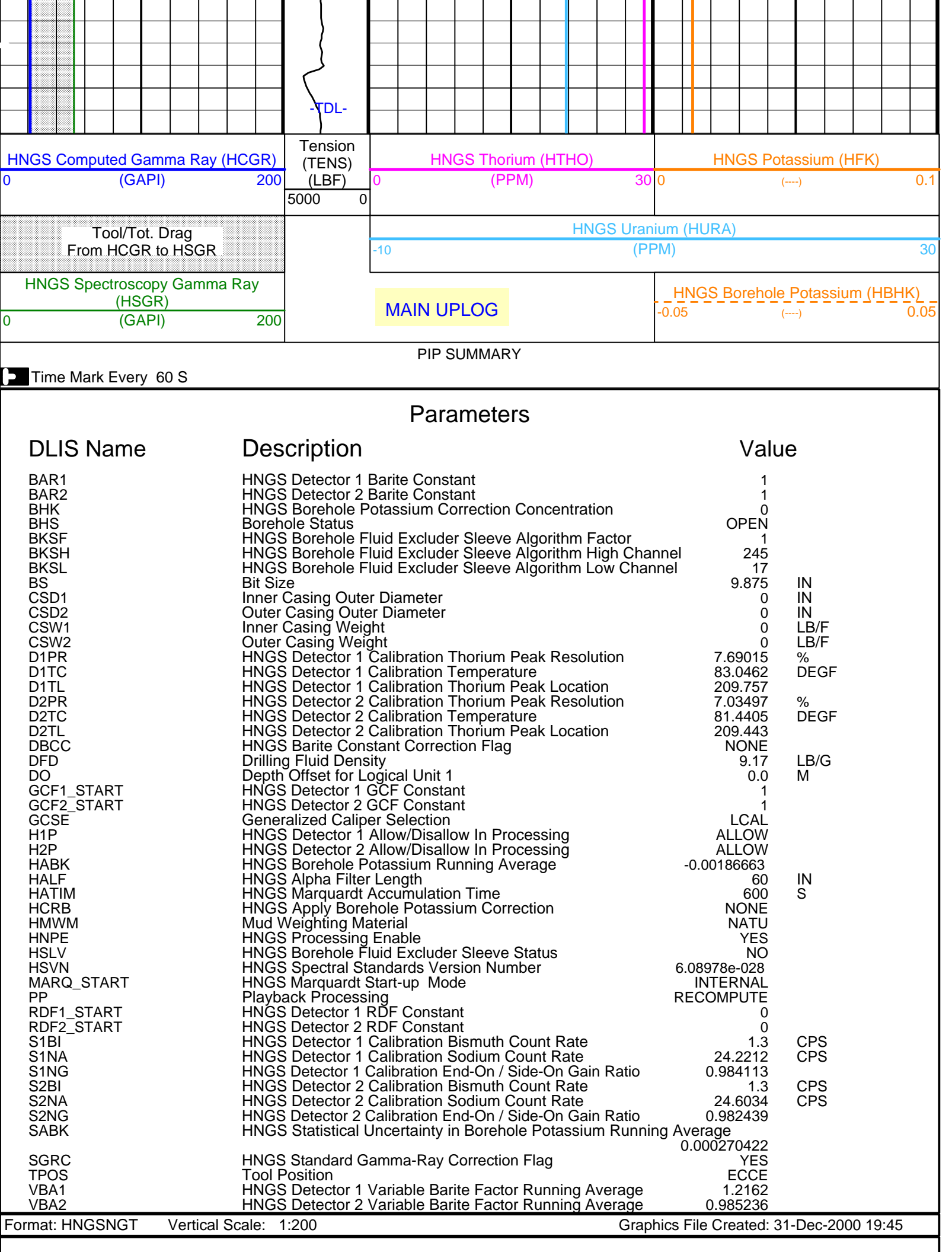
TENS

HTHO

FR HNGS-

1750





-TDL-

HNGS Computed Gamma Ray (HCGR) 0 (GAPI) 200		Tension (TENS) (LBF) 5000 0	HNGS Thorium (HTHO) 0 (PPM) 30	HNGS Potassium (HFK) 0 (----) 0.1
Tool/Tot. Drag From HCGR to HSGR			HNGS Uranium (HURA) -10 (PPM) 30	
HNGS Spectroscopy Gamma Ray (HSGR) 0 (GAPI) 200			HNGS Borehole Potassium (HBHK) -0.05 (----) 0.05	

MAIN UPLOG

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
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
BKSF	HNGS Borehole Fluid Excluder Sleeve Algorithm Factor	1
BKSH	HNGS Borehole Fluid Excluder Sleeve Algorithm High Channel	245
BKSL	HNGS Borehole Fluid Excluder Sleeve Algorithm Low Channel	17
BS	Bit Size	9.875 IN
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
D1PR	HNGS Detector 1 Calibration Thorium Peak Resolution	7.69015 %
D1TC	HNGS Detector 1 Calibration Temperature	83.0462 DEGF
D1TL	HNGS Detector 1 Calibration Thorium Peak Location	209.757
D2PR	HNGS Detector 2 Calibration Thorium Peak Resolution	7.03497 %
D2TC	HNGS Detector 2 Calibration Temperature	81.4405 DEGF
D2TL	HNGS Detector 2 Calibration Thorium Peak Location	209.443
DBCC	HNGS Barite Constant Correction Flag	NONE
DFD	Drilling Fluid Density	9.17 LB/G
DO	Depth Offset for Logical Unit 1	0.0 M
GCF1_START	HNGS Detector 1 GCF Constant	1
GCF2_START	HNGS Detector 2 GCF Constant	1
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	-0.00186663
HALF	HNGS Alpha Filter Length	60 IN
HATIM	HNGS Marquardt Accumulation Time	600 S
HCRB	HNGS Apply Borehole Potassium Correction	NONE
HMWM	Mud Weighting Material	NATU
HNPE	HNGS Processing Enable	YES
HSLV	HNGS Borehole Fluid Excluder Sleeve Status	NO
HSVN	HNGS Spectral Standards Version Number	6.08978e-028
MARQ_START	HNGS Marquardt Start-up Mode	INTERNAL
PP	Playback Processing	RECOMPUTE
RDF1_START	HNGS Detector 1 RDF Constant	0
RDF2_START	HNGS Detector 2 RDF Constant	0
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3 CPS
S1NA	HNGS Detector 1 Calibration Sodium Count Rate	24.2212 CPS
S1NG	HNGS Detector 1 Calibration End-On / Side-On Gain Ratio	0.984113
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3 CPS
S2NA	HNGS Detector 2 Calibration Sodium Count Rate	24.6034 CPS
S2NG	HNGS Detector 2 Calibration End-On / Side-On Gain Ratio	0.982439
SABK	HNGS Statistical Uncertainty in Borehole Potassium Running Average	0.000270422
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES
TPOS	Tool Position	ECCE
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.2162
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.985236

OP System Version: 9C1-303

MCM

DIT-E	OP91-kp2	DTA-A	OP91-kp2
HLDS	OP91-kp2	NPLC-B	OP91-kp2
HNGS-BA	OP91-kp2	DTC-H	OP91-kp2

Input DLIS Files

DEFAULT	DITE .060	FN:5	PRODUCER	29-Dec-2000 09:56	1767.1 M	1697.7 M
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Output DLIS Files

DEFAULT	DITE .083	FN:26	PRODUCER	31-Dec-2000 19:45		
LAMONT	DITE .083	FN:27	PRODUCER	31-Dec-2000 19:45		

Input DLIS Files

DEFAULT	DITE .062	FN:9	PRODUCER	29-Dec-2000 10:17	1767.1 M	1696.1 M
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Output DLIS Files

DEFAULT	DITE .084	FN:28	PRODUCER	31-Dec-2000 19:50	1767.1 M	1696.1 M
LAMONT	DITE .084	FN:29	PRODUCER	31-Dec-2000 19:50	1767.1 M	1696.1 M

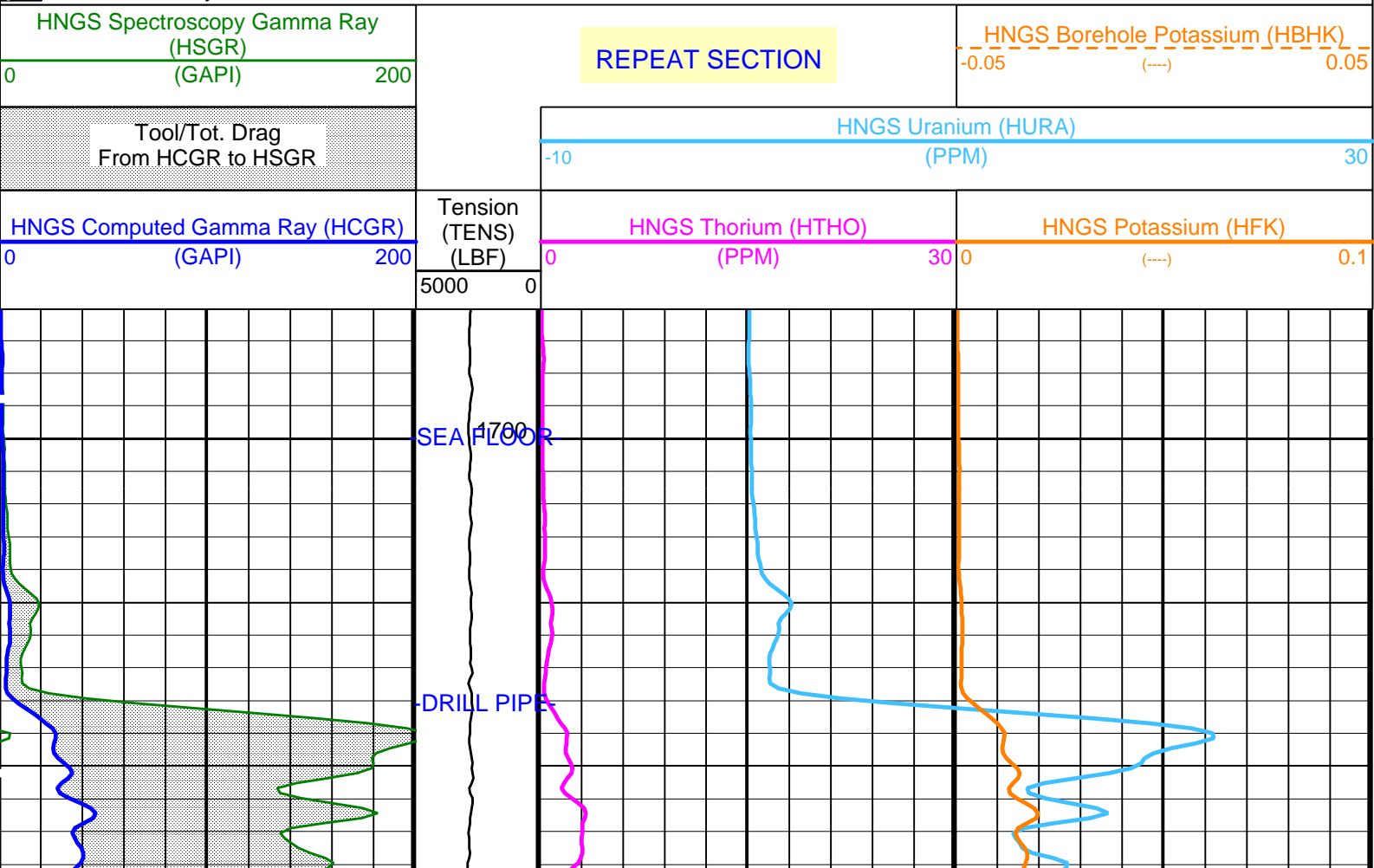
OP System Version: 9C1-303

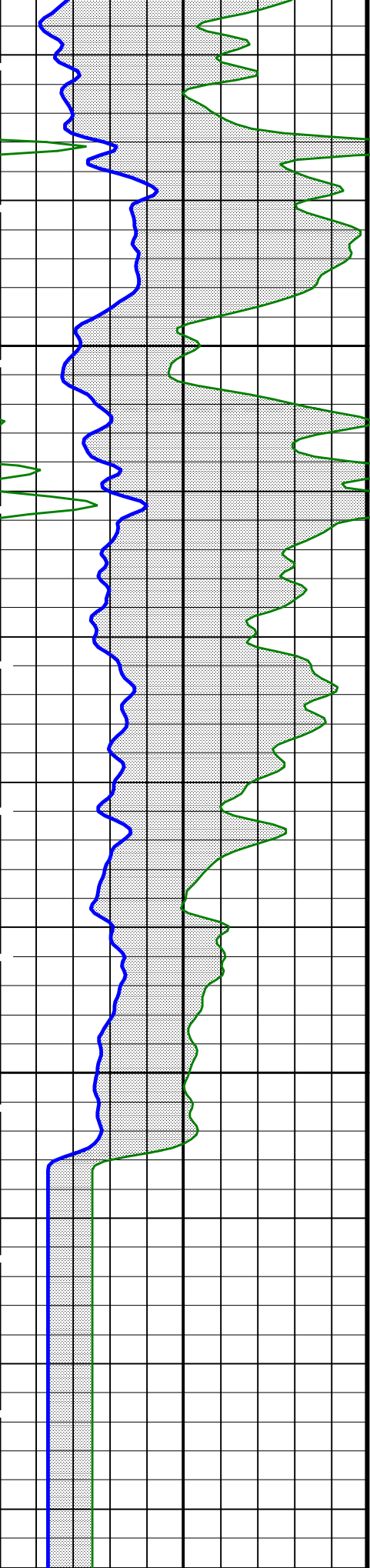
MCM

DIT-E	OP91-kp2	DTA-A	OP91-kp2
HLDS	OP91-kp2	NPLC-B	OP91-kp2
HNGS-BA	OP91-kp2	DTC-H	OP91-kp2

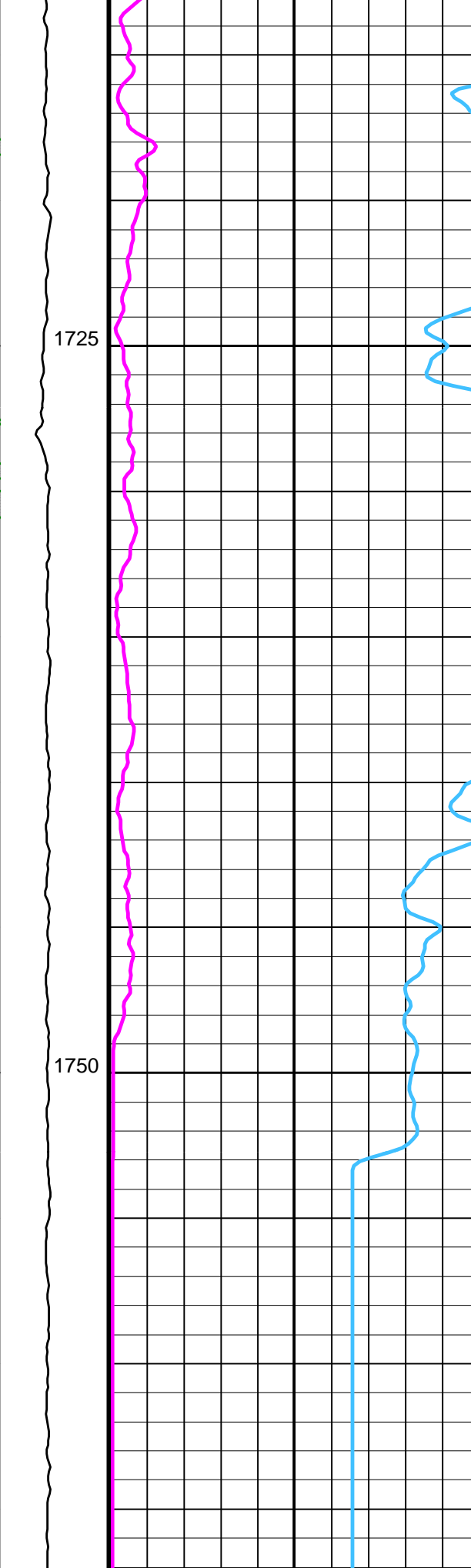
PIP SUMMARY

Time Mark Every 60 S

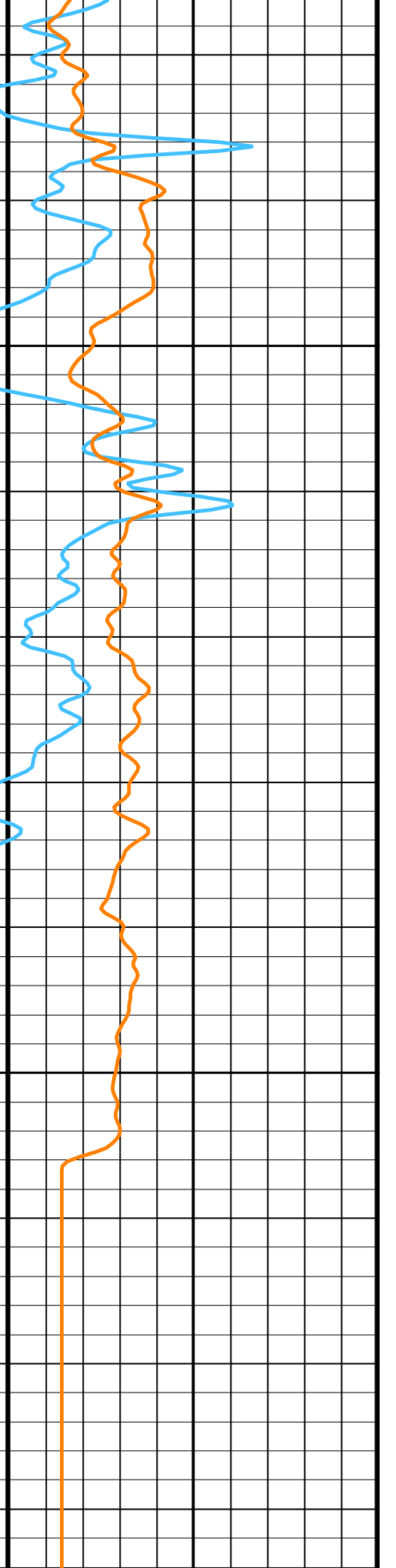




HNGS Computed Gamma Ray (HCGR)
(GADP)



Tension (TENS)
HNGS Thorium (HTHO)



HNGS Potassium (HFK)

(GAPI)	200	(LBF)	0	30	0	(PPM)	0.1
Tool/Tot. Drag From HCGR to HSGR		HNGS Uranium (HURA)					
		-10 (PPM) 30					
HNGS Spectroscopy Gamma Ray (HSGR)		REPEAT SECTION				HNGS Borehole Potassium (HBHK)	
(GAPI) 200						-0.05 (---) 0.05	

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
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	
BKSF	HNGS Borehole Fluid Excluder Sleeve Algorithm Factor	1	
BKSH	HNGS Borehole Fluid Excluder Sleeve Algorithm High Channel	245	
BKSL	HNGS Borehole Fluid Excluder Sleeve Algorithm Low Channel	17	
BS	Bit Size	9.875	IN
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
D1PR	HNGS Detector 1 Calibration Thorium Peak Resolution	7.69015	%
D1TC	HNGS Detector 1 Calibration Temperature	83.0462	DEGF
D1TL	HNGS Detector 1 Calibration Thorium Peak Location	209.757	
D2PR	HNGS Detector 2 Calibration Thorium Peak Resolution	7.03497	%
D2TC	HNGS Detector 2 Calibration Temperature	81.4405	DEGF
D2TL	HNGS Detector 2 Calibration Thorium Peak Location	209.443	
DBCC	HNGS Barite Constant Correction Flag	NONE	
DFD	Drilling Fluid Density	9.17	LB/G
DO	Depth Offset for Logical Unit 1	0.0	M
GCF1_START	HNGS Detector 1 GCF Constant	1	
GCF2_START	HNGS Detector 2 GCF Constant	1	
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	-0.00706549	
HALF	HNGS Alpha Filter Length	60	IN
HATIM	HNGS Marquardt Accumulation Time	600	S
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
HSLV	HNGS Borehole Fluid Excluder Sleeve Status	NO	
HSVN	HNGS Spectral Standards Version Number	6.56295e-027	
MARQ_START	HNGS Marquardt Start-up Mode	INTERNAL	
PP	Playback Processing	RECOMPUTE	
RDF1_START	HNGS Detector 1 RDF Constant	0	
RDF2_START	HNGS Detector 2 RDF Constant	0	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S1NA	HNGS Detector 1 Calibration Sodium Count Rate	24.2212	CPS
S1NG	HNGS Detector 1 Calibration End-On / Side-On Gain Ratio	0.984113	
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
S2NA	HNGS Detector 2 Calibration Sodium Count Rate	24.6034	CPS
S2NG	HNGS Detector 2 Calibration End-On / Side-On Gain Ratio	0.982439	
SABK	HNGS Statistical Uncertainty in Borehole Potassium Running Average	0.000818593	
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.992159	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.980345	

Format: HNGSNGT Vertical Scale: 1:200 Graphics File Created: 31-Dec-2000 19:50

OP System Version: 9C1-303

MCM

DIT-E	OP91-kp2	DTA-A	OP91-kp2
HLDS	OP91-kp2	NPLC-B	OP91-kp2
HNGS-BA	OP91-kp2	DTC-H	OP91-kp2

Input DLIS Files

DEFAULT	DITE .062	FN:9 PRODUCER	29-Dec-2000 10:17	1767.1 M	1696.1 M
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Output DLIS Files

DEFAULT DITE .084 FN:28 PRODUCER 31-Dec-2000 19:50
LAMONT DITE .084 FN:29 PRODUCER 31-Dec-2000 19:50

COMPANY: Lamont Doherty
WELL: ODP Leg 193, Site 1189C (PCM-3A)
FIELD: Manus Basin, Roman Ruins
COUNTY: Offshore
STATE: Bismarck Sea

BOTTOM LOG INTERVAL	1746 m
SCHLUMBERGER DEPTH	1766 m
DEPTH DRILLER	1866 m
KELLY BUSHING	11.3 m
DRILL FLOOR	11 m
GROUND LEVEL	-1700 m

Schlumberger

HNGS
Natural Gamma Ray