

Company: **LDEO Borehole Research Group**

Well: **1189C** **PCM-3A**

Field: **Eastern Manus Back Arc Basin**

Rig: **JOIDES Resolution**

Rig: JOIDES Resolution Field: Eastern Manus Back Arc Basin Location: Bismarck Sea, PNG Well: 1189C Company: LDEO Borehole Research Group	Schlumberger				RAB Drilling Parameters Measured Depth Scale 1:200	
	Total depth: 1866 m		Elevation	K.B. 10.9 m		
Spud date: 27 Dec 00		G.L. -1689.1 m				
Runs: 1 To 1		D.F. 10.5 m				
Permanent datum: Mean Sea Level		Elev.: Kelly Bushing				
Log measured from: Top of kelly bushing		10.9 m above Perm. datum				
Depth reference: Driller's Pipe Tally						
API serial no.		Logging Services: RAB		Longitude Latitude		
				E 151 40.5240' S 03 43.2415'		
Depth logged: 1700 m To 1866 m		Mag decl: 6.56 deg		Other services:		
Date logged: 27 Dec 00 To 28 Dec 00		Mag dip: -21.78 deg				
Bore hole record			Casing record			
Hole size	from	to	Size	Density	from	to
9.875 in	1700 m	1866 m				
Mud record			Borehole deviation record			
Type	from	to	Min	Max	from	to
Sea Water	1700 m	1866 m				
Surface equipment		Software record		IDEAL services from Anadrill		
Unit	TWIS	IDEAL Wis	6.1c_03			
Depth system	PDA	SPM	6.1c_03			
		LWD	5.0b_12			
		MWD				

Bit Run Summary

Run number	1	Bit size	9.875 in	Bit start depth	1700 m	Bit end depth	1866 m	Top interval logged	1700 m	Bottom interval logged	1860 m	Begin log: time	17:00	Begin log: date	27 Dec 00	End log: time	13:40	End log: date	28 Dec 00	Mud data		Depth	1700 m	Type	Sea Water
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Type		Sea Water								
Mud weight	ppg	8.9								
Solids										
Chlorides										
Rm	ohm.m @ degC	0.222 @ 24								
Rmf										
Rmc										
Potassium										
Environmental data										
GR										
Mud weight	ppg	8.9								
Bit size	in	9.875								
Resistivity										
Neutron porosity										
Hole Size										
Mud weight										
Temperature										
Mud salinity										
Formation salinity										
Recording rate 1	SEC	10								
Recording rate 2	SEC	10								
Filtering GR		3 point av.								
Filtering density										
Filtering Neutron										
Company representative		G.Iturrino	A.Bartetzko	M.Storms						
Anadrill personnel		A.Strahan								

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 SERVICES FOR RUN 1	OTHER SERVICES FOR RUN	OTHER SERVICES FOR RUN
<p>REMARKS: RUN NUMBER 1</p> <p>RAB data acquired in memory mode while drilling from 1700-1866 m</p> <p>Drilled in rotary mode</p> <p>Depth filtered for heave</p> <p>No surveys available – borehole assumed to be vertical</p> <p>Environmental Corrections Applied:</p> <p>GR – borehole size, mud weight</p> <p>Resistivity – borehole size, mud resistivity</p> <p>borehole temperature</p> <p>Rbit measurement is affected by a large vertical resolution (5.12 m)</p> <p>27 Dec 00</p> <p>13:11 Program RAB</p> <p>13:20 BHA below rotary table</p> <p>17:00 On bottom drilling at 1700 m</p> <p>28 Dec 00</p> <p>13:40 TD at 1866 m</p> <p>22:20 BHA above rotary table – retrieve RAB memory data</p>	<p>REMARKS: RUN NUMBER</p>	<p>REMARKS: RUN NUMBER</p>

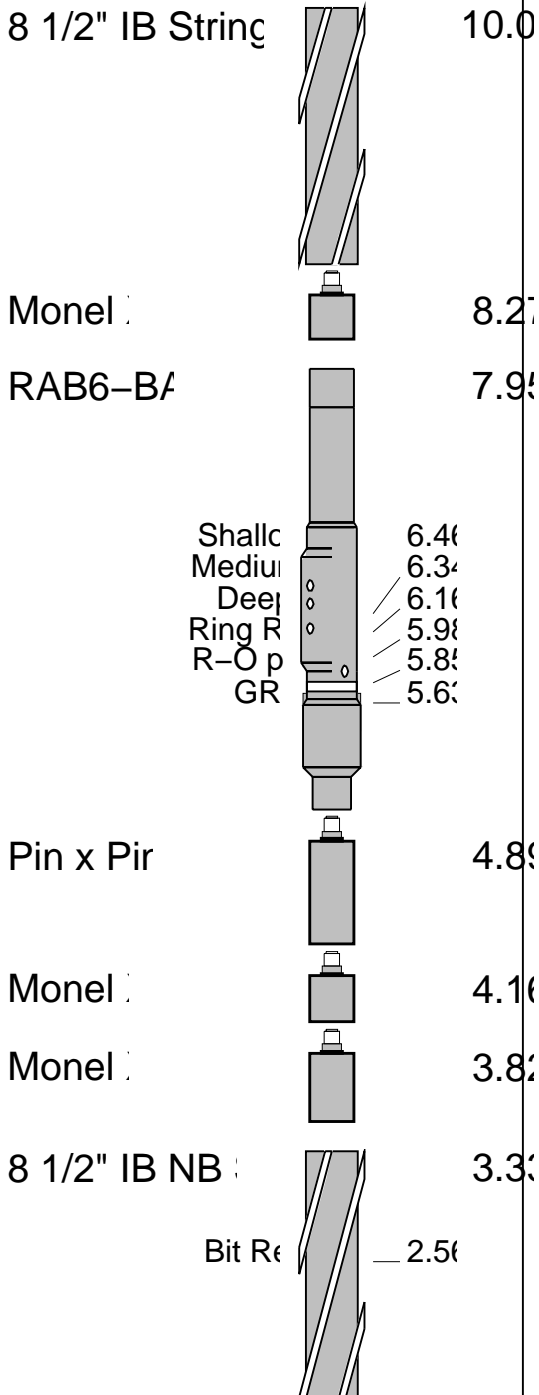
EQUIPMENT DESCRIPTION

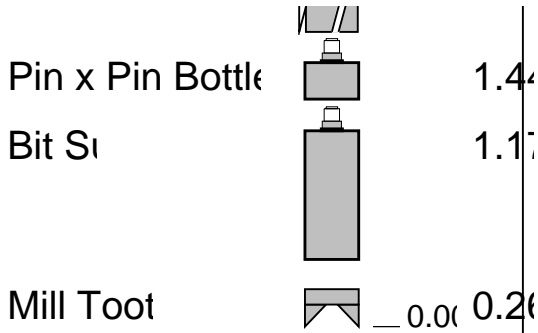
RUN1

RUN

RUN

DOWNHOLE E





MAXIMUM STRING DI
ALL LENGTHS I

IDEAL Version: ID6_1C_03
IDEAL

RAB6-BA id6_1c_03

Format: RABDepthLogQuads Vertical Scale: 1:200

Graphics File Created: 30-Dec-2000 02:54

PIP SUMMARY

Gamma Ray samples

Rate of penetration, 5ft filtered (ROP5_RM)
(M/HR) 0 60

Gamma-Ray (3 LVL AVG) (GR_RAB)
(GAPI) 0 200

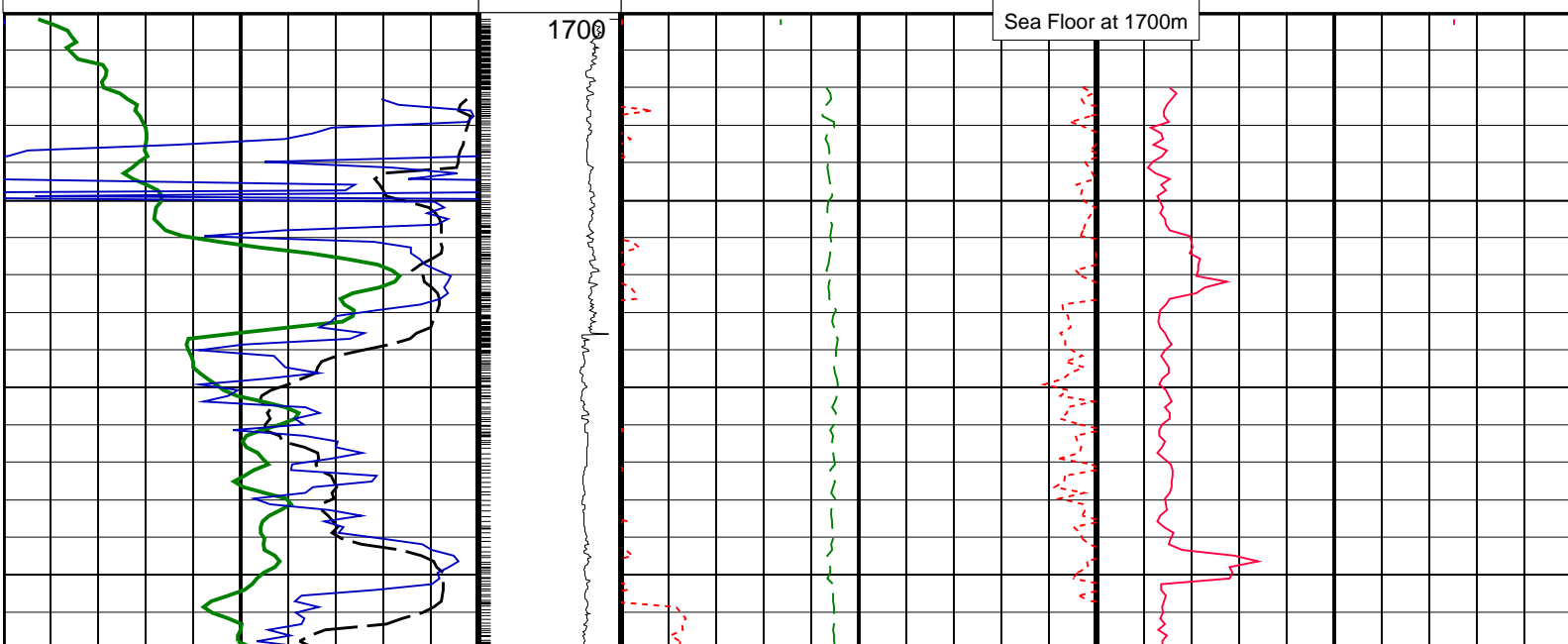
ROP (ROP)
(M/HR) 0 60

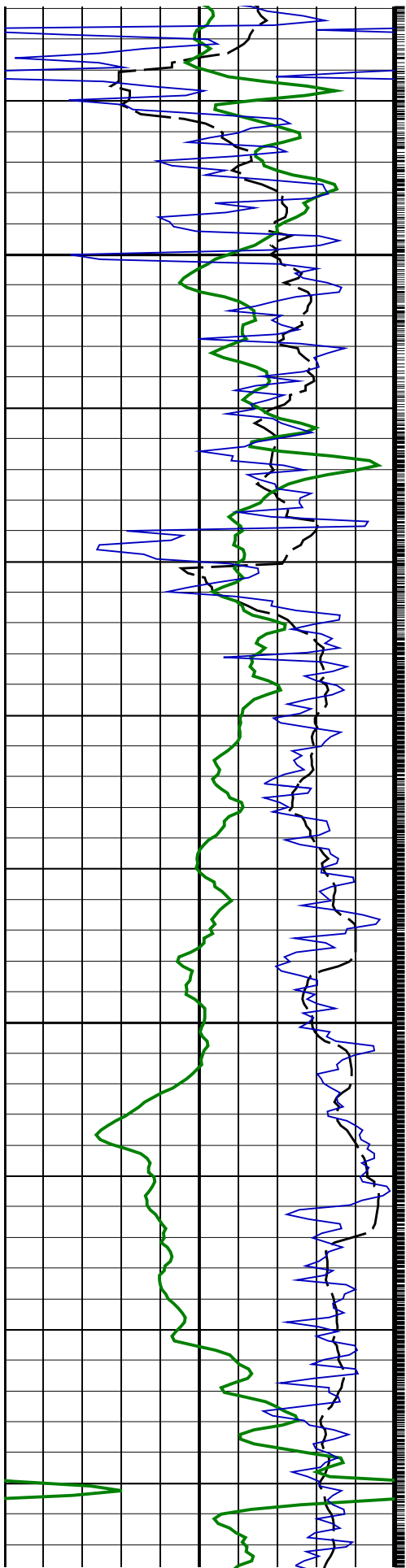
Rab rotation speed
(RPM_RAB) (RPM) 200 500 100 250 -10

SWOB (SWOB)
(KLBF) 0 60

HKLD (HKLD)
(KLBF) 200 500

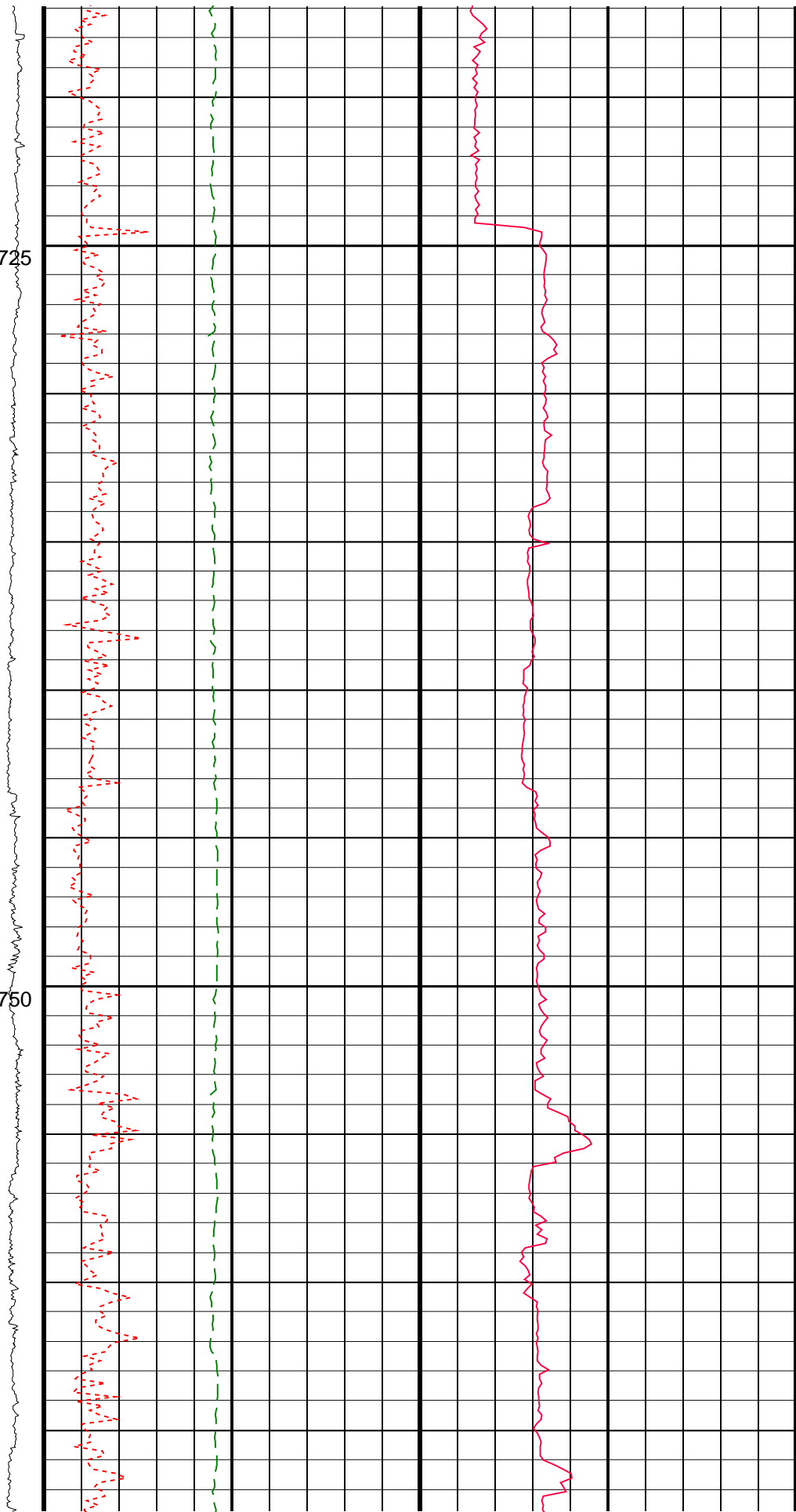
PUMPPRS (SPPA)
(PSI) 100 500

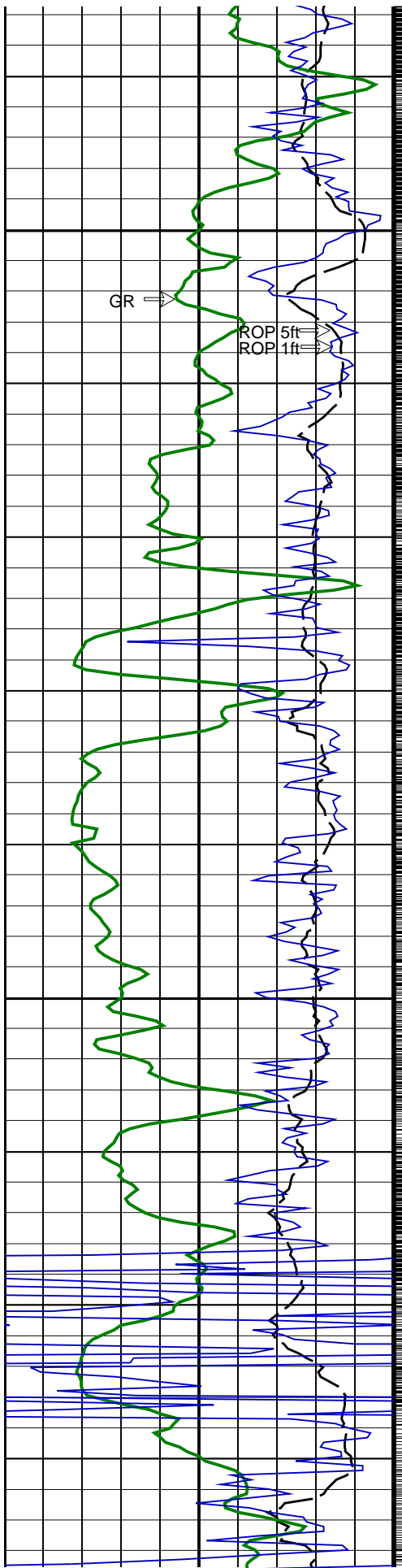




1725

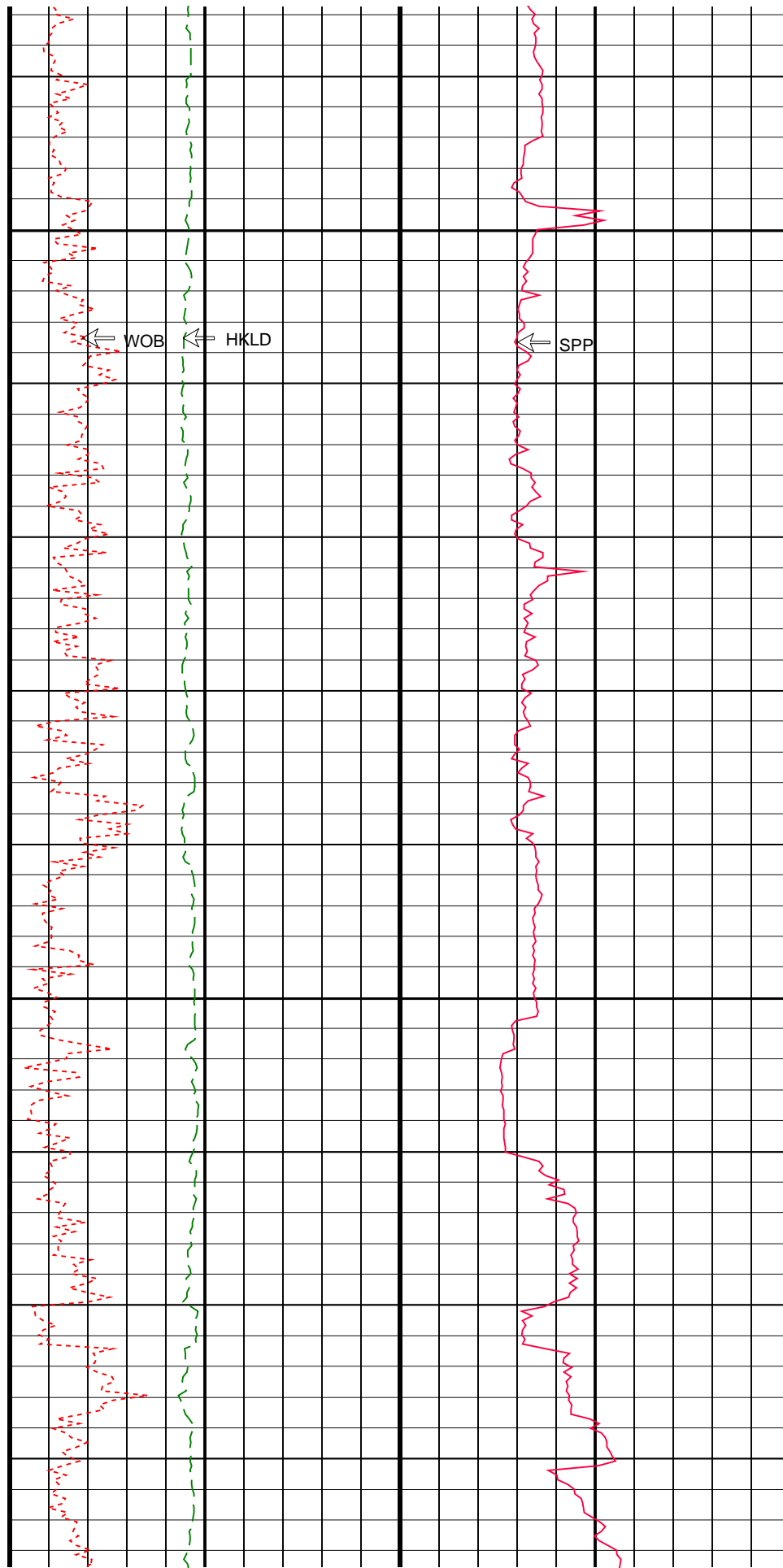
1750

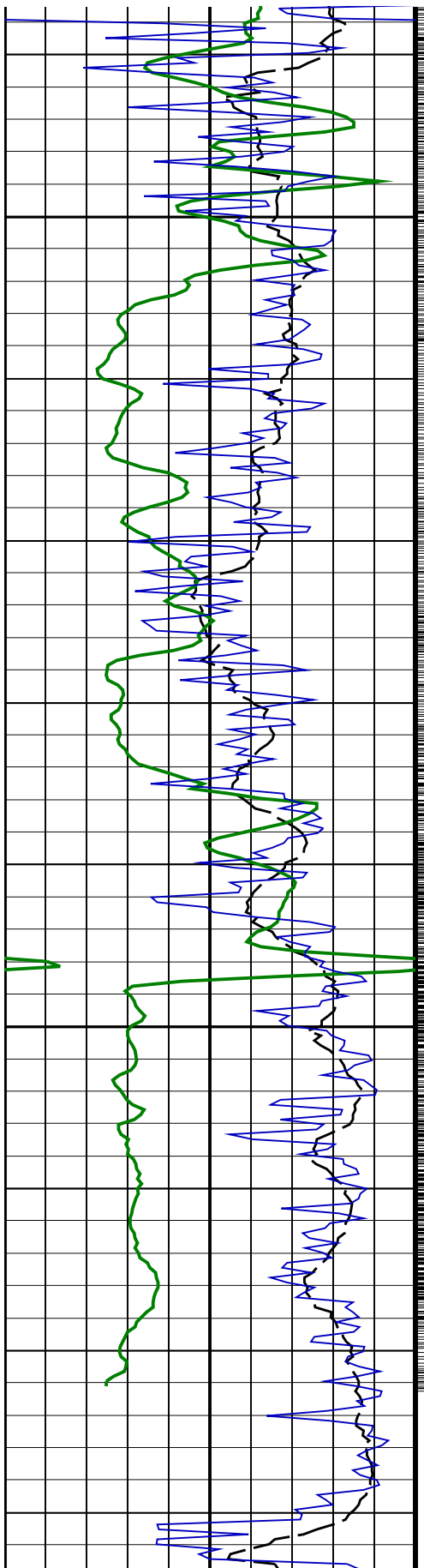




1775

1800

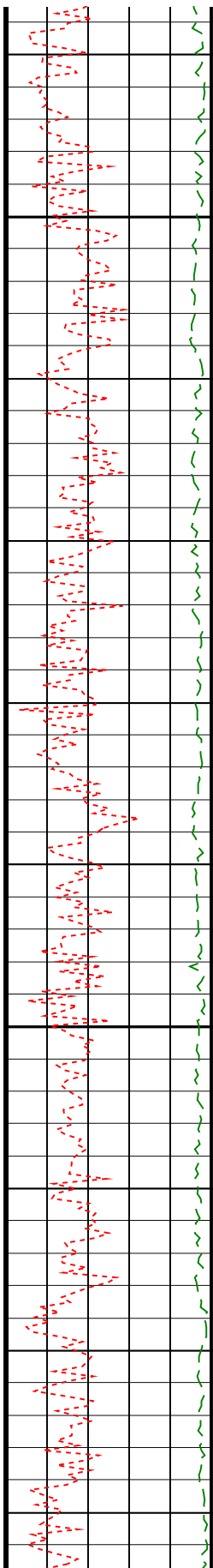




1825

1850

Rab rotation speed (RPM_RAB)



TD at 1866m

HKLD (HKLD) (KLBF)

PUMPPRS (SPPA) (PSI)

60

ROP (ROP) (M/HR)

0

200

500

100

500

60	(M/HR)	speed 0 (RPM_RAB) (RPM)	200	(KLBF)	500	100	(PSI)	500
Gamma-Ray (3 LVL AVG) (GR_RAB)		250 -10		SWOB (SWOB) (KLBF)		0 60		
0	(GAPI)							
Rate of penetration, 5ft filtered (ROP5_RM)								
60	(M/HR)					0		

PIP SUMMARY

Gamma Ray samples

IDEAL Version: ID6_1C_03
IDEAL

RAB6-BA id6_1c_03

6.75-in. Resistivity At-the-Bit / Equipment Identification

Primary Equipment:
Tool Name and Serial Number
Calibration Status

RAB6 - BA 48

Master: 24-NOV-2000 23:22

6.75-in. Resistivity At-the-Bit Calibration

Resistivity: Fixture

Phase	Ring/T1 factor	Value	Phase	Ring/T2 factor	Value	Phase	M0/T1 factor	Value
Master		0.01081	Master		0.01079	Master		1.105
	0.009500 (Minimum) 0.01100 (Nominal) 0.01250 (Maximum)			0.009500 (Minimum) 0.01100 (Nominal) 0.01250 (Maximum)			0.9000 (Minimum) 1.050 (Nominal) 1.200 (Maximum)	
Phase	M0/T2 factor	Value	Phase	M2/T1 factor	Value	Phase	M2/T2 factor	Value
Master		1.137	Master		0.9956	Master		1.024
	0.9000 (Minimum) 1.050 (Nominal) 1.200 (Maximum)			0.8500 (Minimum) 1.000 (Nominal) 1.150 (Maximum)			0.8500 (Minimum) 1.000 (Nominal) 1.150 (Maximum)	
Phase	BTN shallow/T1 factor	Value	Phase	BTN shallow/T2 factor	Value	Phase	BTN medium/T1 factor	Value
Master		0.0006530	Master		0.0006840	Master		0.0006630
	0.0005700 (Minimum) 0.0006700 (Nominal) 0.0007700 (Maximum)			0.0005700 (Minimum) 0.0006700 (Nominal) 0.0007700 (Maximum)			0.0005700 (Minimum) 0.0006700 (Nominal) 0.0007700 (Maximum)	
Phase	BTN medium/T2 factor	Value	Phase	BTN deep/T1 factor	Value	Phase	BTN deep/T2 factor	Value
Master		0.0006550	Master		0.0006740	Master		0.0006630
	0.0005700 (Minimum) 0.0006700 (Nominal) 0.0007700 (Maximum)			0.0005700 (Minimum) 0.0006700 (Nominal) 0.0007700 (Maximum)			0.0005700 (Minimum) 0.0006700 (Nominal) 0.0007700 (Maximum)	

Master: 24-NOV-2000 23:16

6.75-in. Resistivity At-the-Bit Calibration

Gamma Ray: Blanket

Phase	Gamma ray factor	Value
Master		4.110
	3.500 (Minimum) 4.500 (Nominal) 5.500 (Maximum)	

Company: LDEO Borehole Research Group

Well: 1189C PCM-3A
Field: Eastern Manus Back Arc Basin
Rig: JOIDES Resolution

IDEAL services from **Anadrill**

RAB Drilling Parameters
Measured Depth
Scale 1:200

Schlumberger