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 Deep Button Image
Measured Depth
Scale 1:200

Location

Total depth:	1866 m
Spud date:	27 Dec 00
Runs:	1 To 1

Elevation

K.B.	10.9 m
G.L.	−1689.1 m
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:	Longitude	Latitude
	RAB	E 151 40.5240'	S 03 43.2415'

Depth logged:	1700 m To 1866 m	Mag decl:	6.56 deg
Date logged:	27 Dec 00 To 28 Dec 00	Mag dip:	−21.78 deg

Other services:

Bore hole record

Hole size	from	to
9.875 in	1700 m	1866 m

Casing record

Size	Density	from	to

Mud record

Type	from	to
Sea Water	1700 m	1866 m

Borehole deviation record

Min	Max	from	to

Surface equipment		Software record	
Unit	TWIS	IDEAL Wis	6.1c_03
Depth system	PDA	SPM	6.1c_03
		LWD	5.0b_12
		MWD	

IDEAL
services from
Anadrill

Bit Run Summary

Run number	1		
Bit size	in	9.875	
Bit start depth	m	1700	
Bit end depth	m	1866	
Top interval logged	m	1700	
Bottom interval logged	m	1860	
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	m	1700	
Type		Sea Water	

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									

OTHER SERVICES FOR RUN1	OTHER SERVICES FOR RUN	OTHER SERVICES FOR RUN
REMARKS: RUN NUMBER 1 RAB data acquired in memory mode while drilling from 1700−1866 m Drilled in rotary mode Depth filtered for heave No surveys available − borehole assumed to be vertical Environmental Corrections Applied: GR − borehole size, mud weight Resistivity − borehole size, mud resistivity borehole temperature Rbit measurement is affected by a large vertical resolution (5.12 m) 27 Dec 00 13:11 Program RAB 13:20 BHA below rotary table 17:00 On bottom drilling at 1700 m 28 Dec 00 13:40 TD at 1866 m 22:20 BHA above rotary table − retrieve RAB memory data	REMARKS: RUN NUMBER	REMARKS: RUN NUMBER

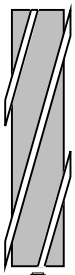
22:20 BHA above rotary table − retrieve
RAB memory data

EQUIPMENT DESCRIPTION

RUN1	RUN	RUN

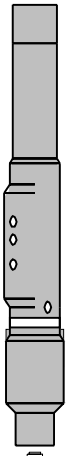
DOWNHOLE E

8 1/2" IB String 10.0



Monel 8.2

RAB6−BA 7.9

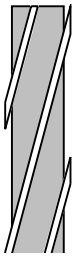


Shallc 6.4
Mediu 6.3
Deep 6.1
Ring R 5.9
R−O p 5.8
GR 5.6

Pin x Pir 4.8

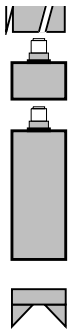
Monel 4.1

Monel 3.8



8 1/2" IB NB 3.3

Bit Re 2.5



Pin x Pin Bottle 1.4

Bit Su 1.1

Mill Toot 0.0(0.2(

MAXIMUM STRING DI

ALL LENGTHS I

Output DLIS Files

DLIS RAB .007 FN:6 PRODUCER 29−Dec−2000 03:07

IDEAL Version: ID6_1C_03

IDEAL

RAB6−BA id6_1c_03

Format: RABIMAGELOG Vertical Scale: 1:200 Graphics File Created: 29−Dec−2000 03:07

Parameters

DLIS Name	Description	Value	
	RAB: Button Sleeve Diameter	RAB6: 8 1/8 IN	
	LWD RM: Log direction	DOWN	
	LWD RM: Default directory	D:\users\ideal\fm\Clients\ODP\PCM−3a\LWD002\	
	LWD RM: Default file extension	BIN_DB	
	RAB: Stabilizer Diameter	RAB6: 8.25−8.5 IN	
	LWD RM: Generate techlog only?	0	
	LWD RM: Flush depth streams?	YES	
	LWD RM: Depth file name	Depth_Run2_Filtered	
BDBHCA	RAB: Button Deep Borehole A Factor	0.0732254	
BDBHCB	RAB: Button Deep Borehole B Factor	−0.0922599	
BHA_COEF_VER	RAB: BHA Coef Generator Version	2	
BITBHCA	RAB: Bit A Borehole Factor	0.0941899	
BITBHCB	RAB: Bit B Borehole Factor	−0.0627806	
BIT_K_FACTOR	RAB: Bit K Factor	8.12816	
BMBHCA	RAB: Button Medium Borehole A Factor	0.107207	
BMBHCB	RAB: Button Medium Borehole B Factor	−0.105328	
BSBHCA	RAB: Button Shallow Borehole A Factor	0.310186	
BSBHCB	RAB: Button Shallow Borehole B Factor	−0.0666146	
BS_RM	Bit Size (RM)	9.875	IN
BUT_KIMP_A	RAB: Button Impedance Coeff A	0.00149	
BUT_KIMP_B	RAB: Button Impedance Coeff B	3.6e−005	
DBUTTON_K_FACTOR	RAB: Button Deep K factor	0.00270707	
DHS_VERSION	RAB: DownHole Software Version	5.0012	
DIPR	magnetic dip	−21.78	DEG
IMAGE_MAX_RES	RAB: Image Maximum Resistivity Value	100	OHMM
IMAGE_MIN_RES	RAB: Image Minimum Resistivity Value	1	OHMM
MBUTTON_K_FACTOR	RAB: Button Medium K Factor	0.00301584	
MDCP	magnetic declination	6.56002	DEG
MST_RM	Mud Sample temperature (RM)	24.4445	DEGC
MW_RM	Mud Weight (RM)	8.9	LB/G
OBM	RAB: Oil base Mud	NO	
ORIENTATION_RM	Rab Image Orientation	NORTH	
RABEC	RAB: Resistivity Env−Cor	YES	
RAB_TEMP_SELECT	RAB Temperature Selection	MEASURED	
READOUT_PORT_MP	RAB: ROP to Bit Face Distance	5.85	M
RINGBHCA	RAB: Ring Borehole A Factor	0.162277	

READOUT_PORT_MP	RAB: ROP to Bit Face Distance	5.85	M
RINGBHCA	RAB: Ring Borehole A Factor	0.162277	
RINGBHCB	RAB: Ring Borehole B Factor	−0.0883462	
RING_KIMP_A	RAB: Ring Impedance Coeff A	0	
RING_KIMP_B	RAB: Ring Impedance Coeff B	0	
RING_K_FACTOR	RAB: Ring K Factor	0.106596	
RMS_RM	Resistivity of Mud Sample (RM)	0.222	OHMM
SBUTTON_K_FACTOR	RAB: Button Shallow K Factor	0.00415075	
STAB	RAB: Run with Stabilizer	YES	
TOOLTYPE	RAB: Azimuthal Tool	YES	
TS_VERSION	RAB: ToolScope Software Version	6.1013	
VRAB6	Rab Tool type (ENP/PILOT)	RAB6_PILOT	
WIN_SIZE_DYN_IMAGE	RAB: Window Size for Scaling Dynamic Image	0.9144	M

PIP SUMMARY

RAB Deep Button Samples

Gamma Ray Samples

BHC Ring Resistivity (RES_RING)
0.2 (OHMM) 2000

BHC Bit resistivity (RES_BIT)
0.2 (OHMM) 2000

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

BHC Deep Button Resistivity (RES_BD)
0.2 (OHMM) 2000

Deep Button Resistivity Time After Bit (TAB_RAB_BD)
0 (HR) 10

BHC Medium Button Resistivity (RES_BM)
0.2 (OHMM) 2000

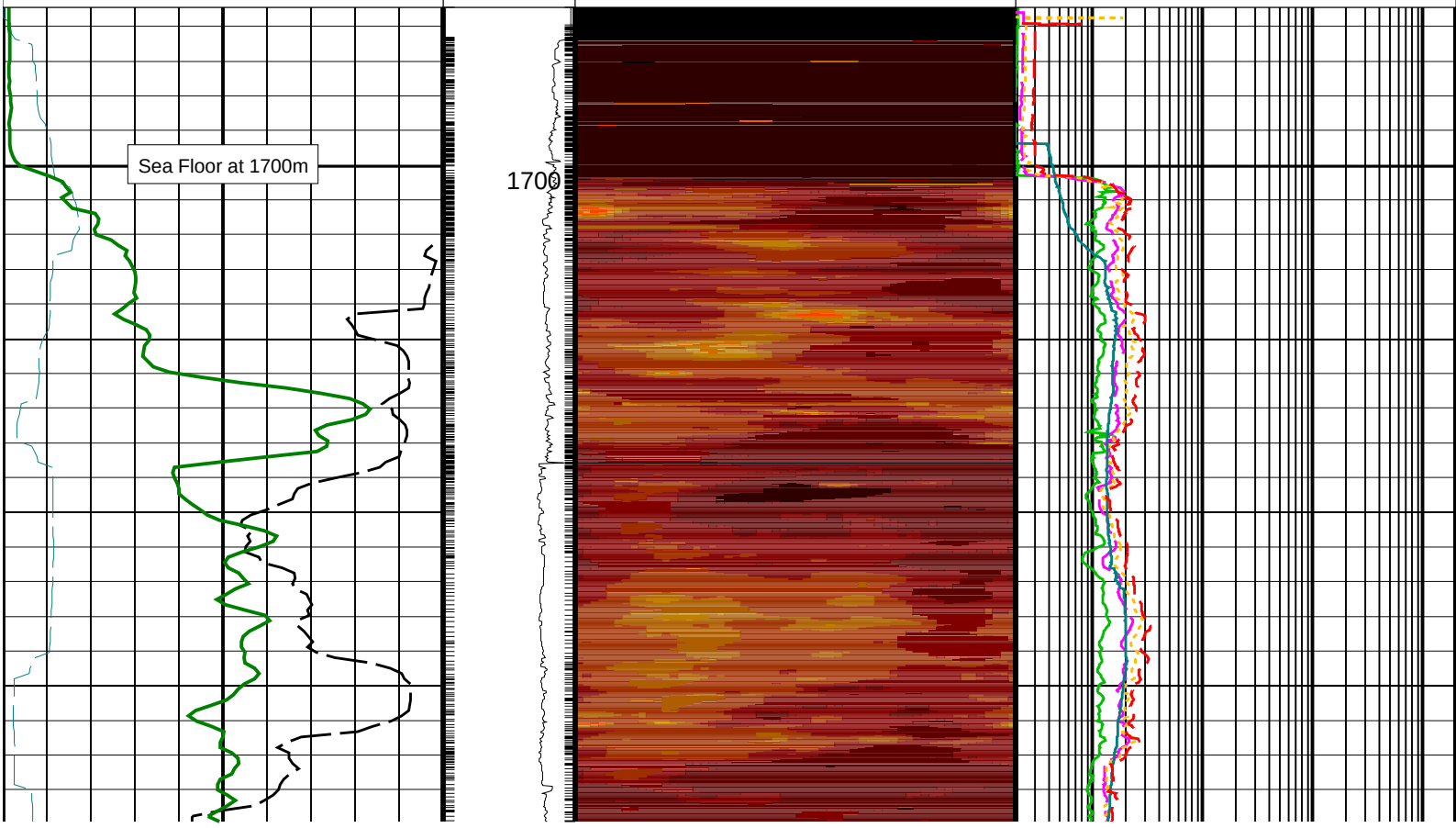
RAB Gamma Ray (GR_RAB)
0 (GAPI) 200

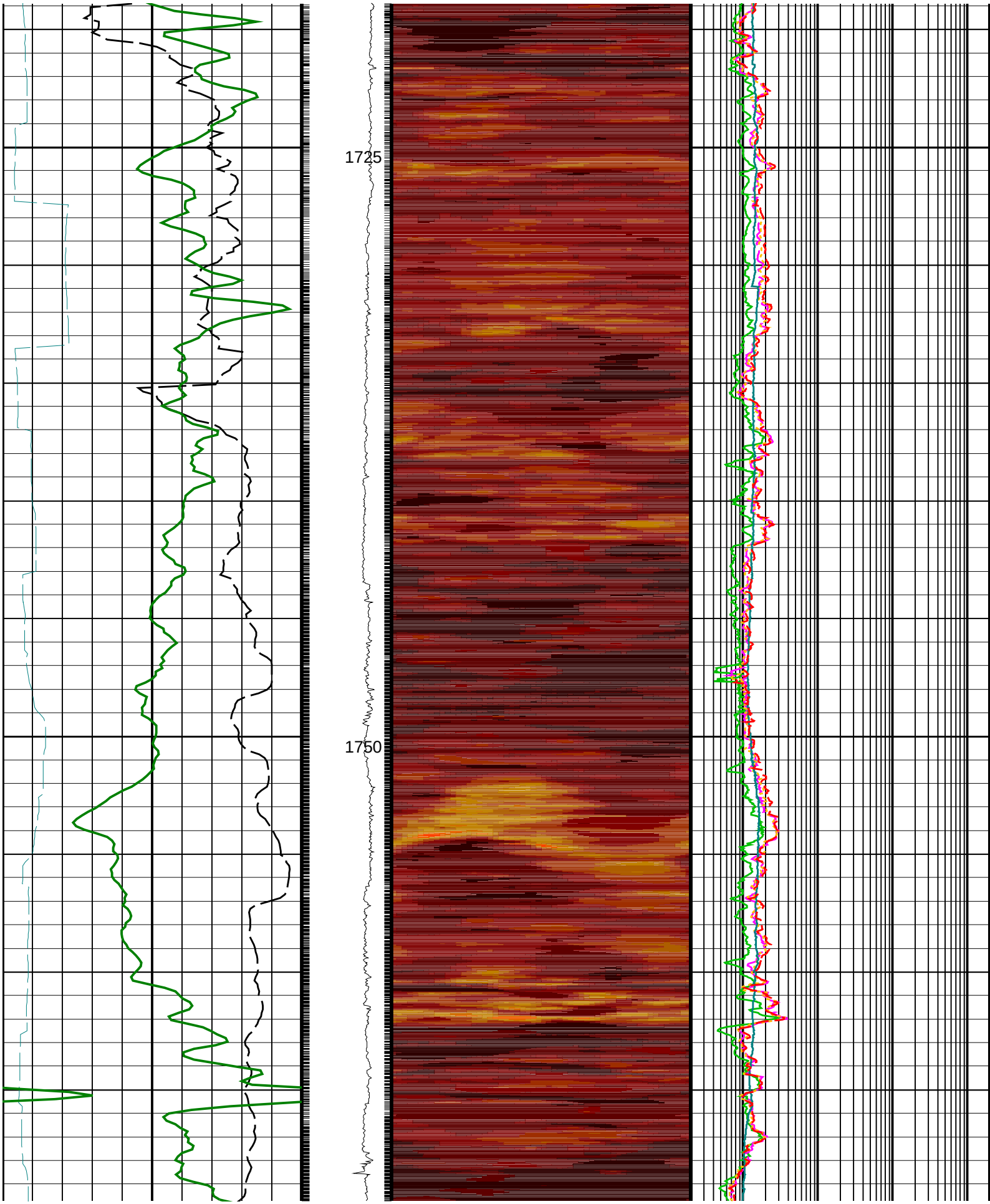
RAB Rotational Speed (RPM_RAB) (RPM)
250 −10

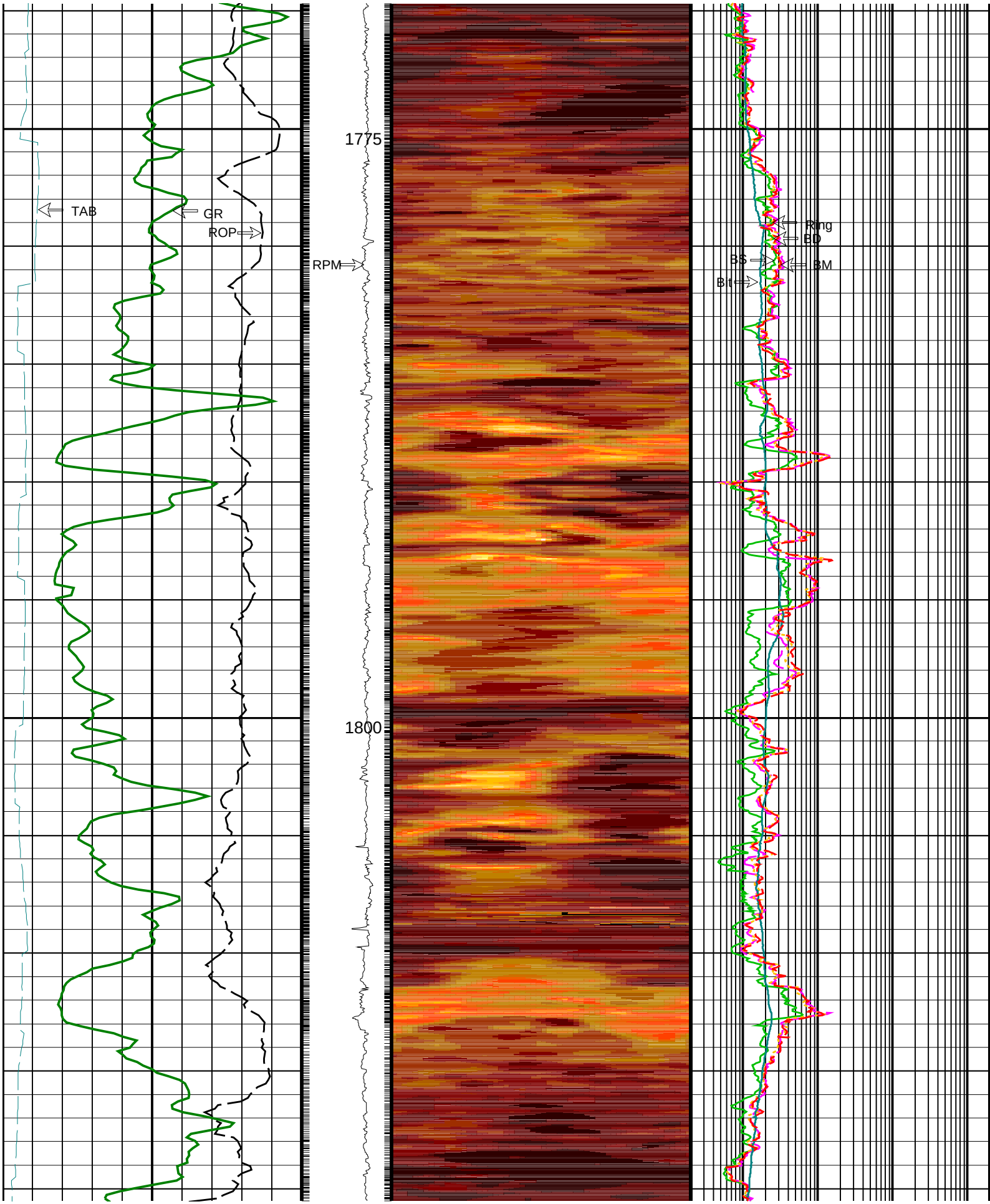
0.000 1.000 1.500 2.000 3.000 4.000 6.000 7.500 10.000 15.000 20.000 30.000 40.000 60.000 75.000 100.000

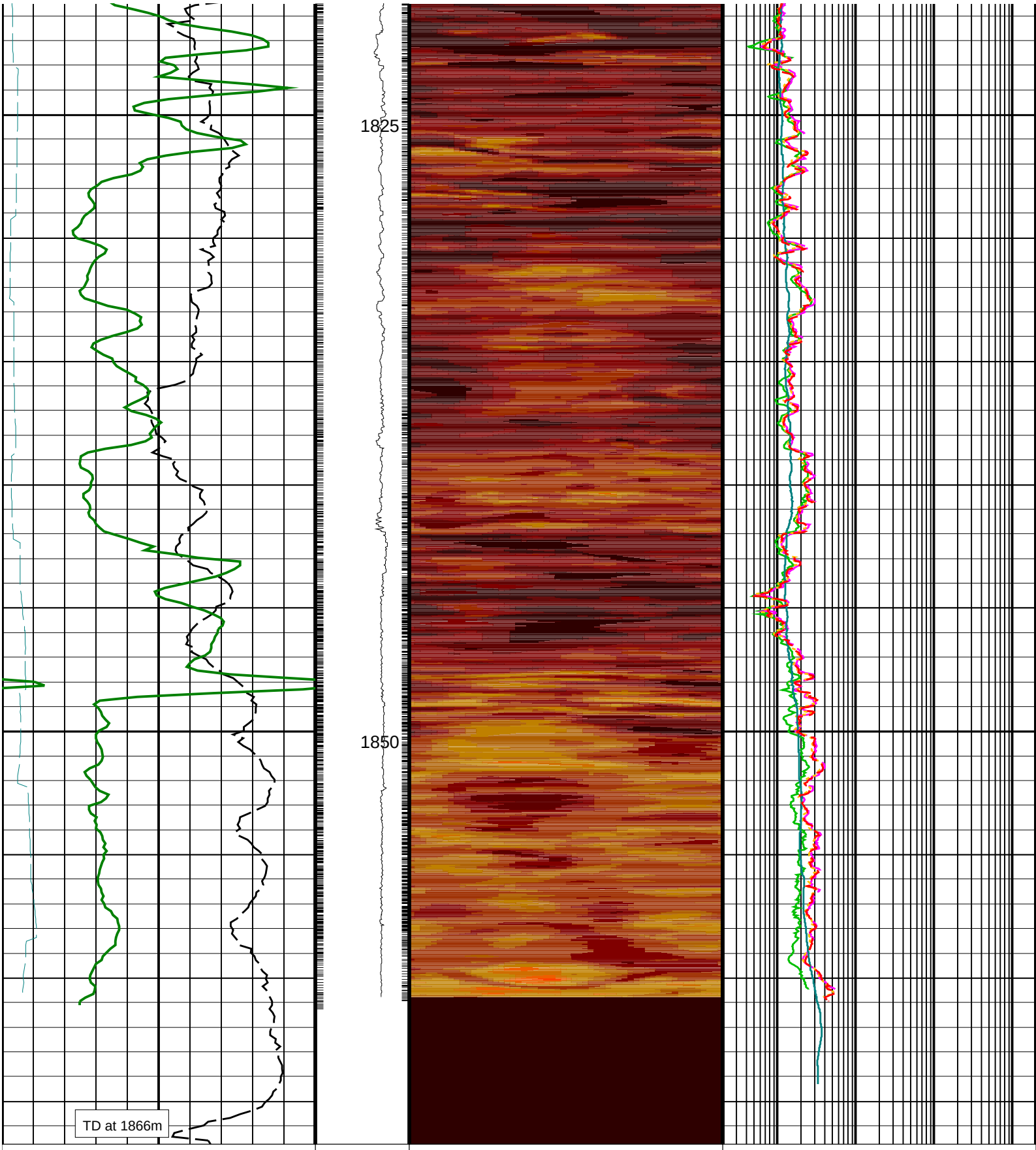
RAB Deep button Image (R3IM) (----

BHC Shallow Button Resistivity (RES_BS)
0.2 (OHMM) 2000




1725
1750


TAB
GR
ROP
RPM
1775
1800
Ring
BD
BS
BM
Bit


1825
1850
TD at 1866m
RAB Gamma Ray (GR_RAB)
0
(GAPI)
200
RAB Rotational Speed (RPM_RAB)
(RPM)
250
−10
0.000
1.000
1.500
2.000
3.000
4.000
6.000
7.500
10.000
15.000
20.000
30.000
40.000
60.000
75.000
100.000
RAB Deep button Image (R3IM)
(----
BHC Shallow Button Resistivity (RES_BS)
0.2
(OHMM)
2000

250 −10 (−−−−

Deep Button Resistivity Time After Bit (TAB_RAB_BD)		
0	(HR)	10

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

BHC Medium Button Resistivity (RES_BM)		
0.2	(OHMM)	2000

BHC Deep Button Resistivity (RES_BD)		
0.2	(OHMM)	2000

BHC Bit resistivity (RES_BIT)		
0.2	(OHMM)	2000

BHC Ring Resistivity (RES_RING)		
0.2	(OHMM)	2000

PIP SUMMARY

RAB Deep Button Samples

Gamma Ray Samples

IDEAL Version: ID6_1C_03

IDEAL

RAB6−BA **id6_1c_03**

Output DLIS Files

DLIS	RAB .007	FN:6	PRODUCER	29−Dec−2000 03:07	1695.4 M	1866.7 M

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

Primary Equipment:

Tool Name and Serial Number	RAB6 − BA	48
Calibration Status	−	

Master: 24−NOV−2000 23:22

6.75−in. Resistivity At−the−Bit Calibration

Resistivity: Fixture

Phase	Ring/T1 factor	Value	Minimum	Nominal	Maximum
Master		0.01081	0.009500	0.01100	0.01250

Phase	Ring/T2 factor	Value	Minimum	Nominal	Maximum
Master		0.01079	0.009500	0.01100	0.01250

Phase	M0/T1 factor	Value	Minimum	Nominal	Maximum
Master		1.105	0.9000	1.050	1.200

Phase	M0/T2 factor	Value	Minimum	Nominal	Maximum
Master		1.137	0.9000	1.050	1.200

Phase	M2/T1 factor	Value	Minimum	Nominal	Maximum
Master		0.9956	0.8500	1.000	1.150

Phase	M2/T2 factor	Value	Minimum	Nominal	Maximum
Master		1.024	0.8500	1.000	1.150

Phase	BTN shallow/T1 factor	Value	Minimum	Nominal	Maximum
Master		0.0006530	0.0005700	0.0006700	0.0007700

Phase	BTN shallow/T2 factor	Value	Minimum	Nominal	Maximum
Master		0.0006840	0.0005700	0.0006700	0.0007700

Phase	BTN medium/T1 factor	Value	Minimum	Nominal	Maximum
Master		0.0006630	0.0005700	0.0006700	0.0007700

Phase	BTN medium/T2 factor	Value	Minimum	Nominal	Maximum
Master		0.0006550	0.0005700	0.0006700	0.0007700

Phase	BTN deep/T1 factor	Value	Minimum	Nominal	Maximum
Master		0.0006740	0.0005700	0.0006700	0.0007700

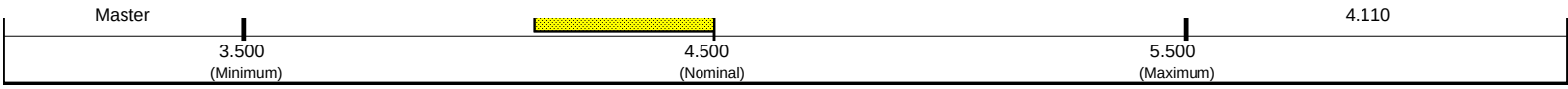
Phase	BTN deep/T2 factor	Value	Minimum	Nominal	Maximum
Master		0.0006630	0.0005700	0.0006700	0.0007700

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



Company: LDEO Borehole Research Group

Well: 1189C PCM−3A

Field: Eastern Manus Back Arc Basin

Rig: JOIDES Resolution

IDEAL services from **Anadrill**

RAB Deep Button Image
Measured Depth
Scale 1:200

Schlumberger