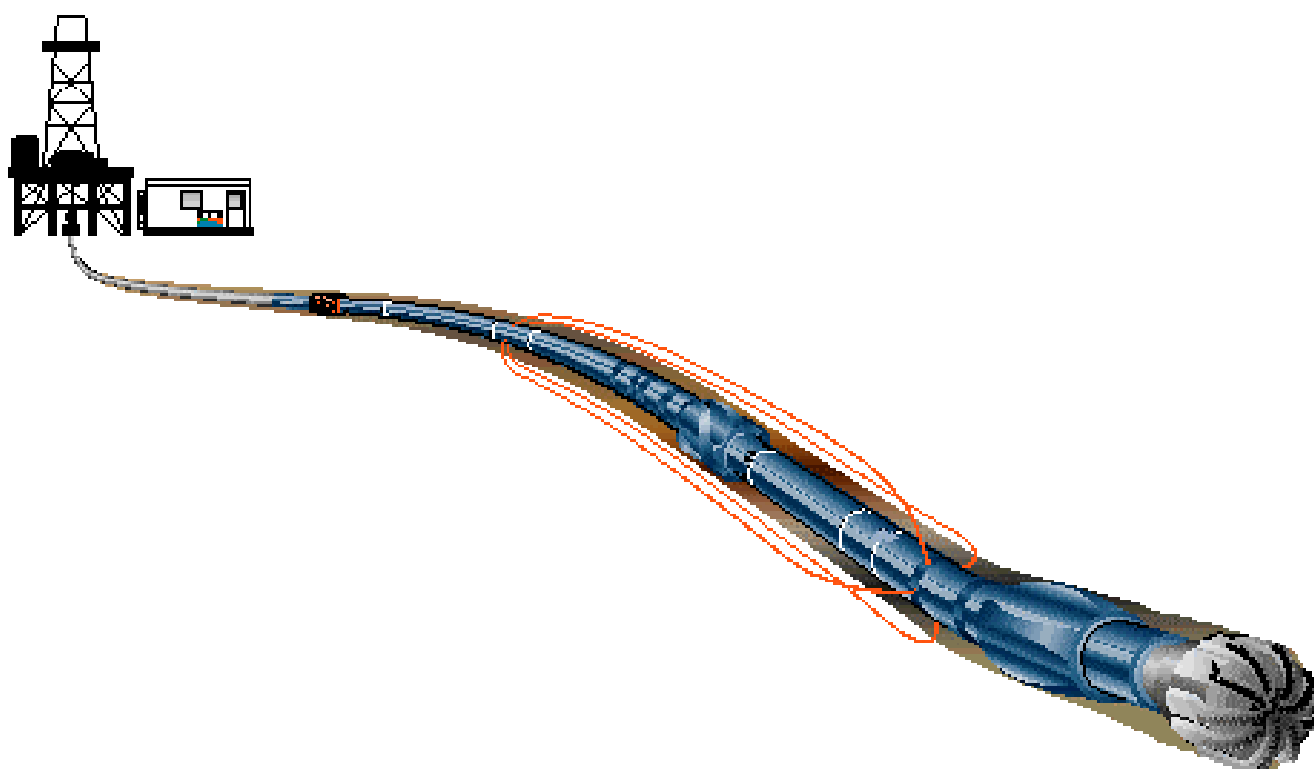


Santos

Casino - 1

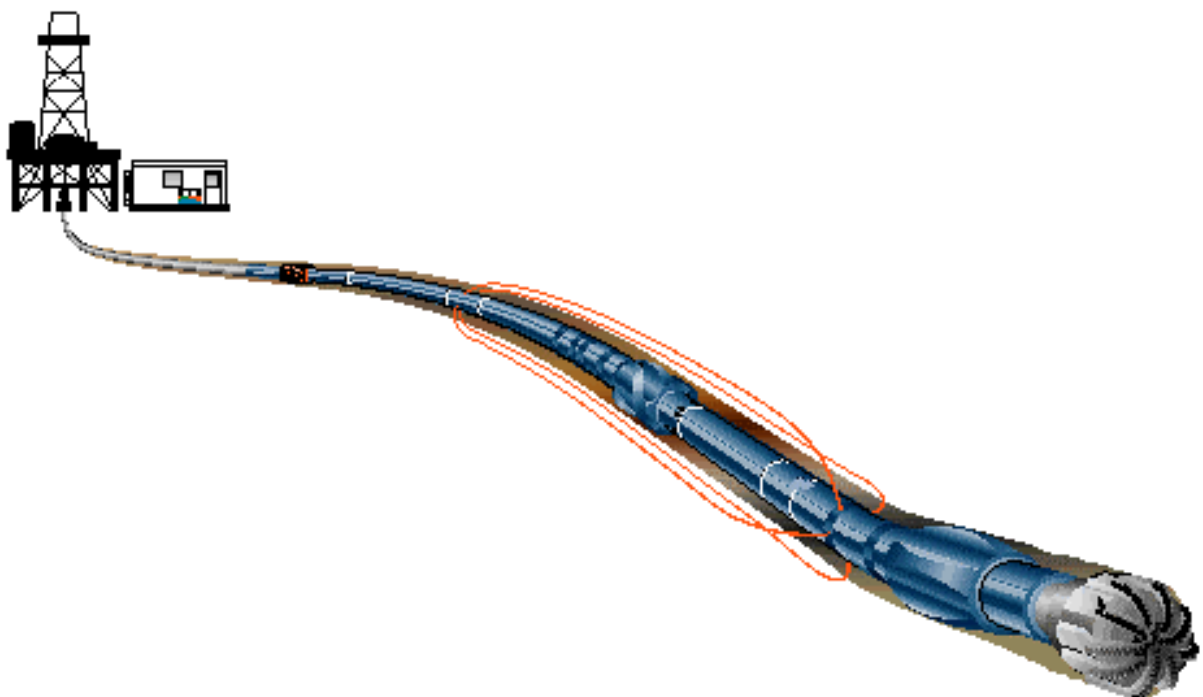
MWD – LWD End of Well Report



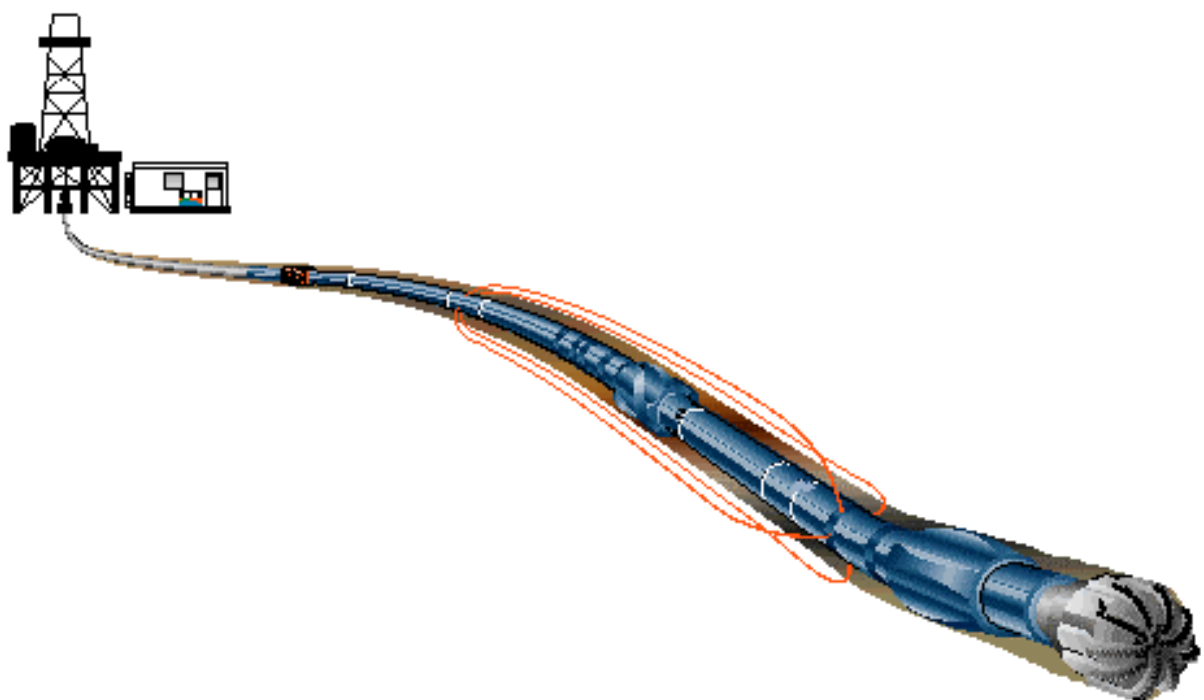
End of Well Report for Casino - 1

Contents

- * Logging Overview
 - General Information
 - Geomagnetic and Survey Reference Criteria
 - Survey Report
 - Bit Run Summary



Logging Overview



Logging Overview Casino - 1

Schlumberger Drilling and Measurements provided LWD and MWD services in the 12 ¼ in. section of the Casino- 1 well.

In the 12 ¼ in. section, the following formation evaluation measurements were delivered in real time and memory modes:

- Phase Shift Resistivity (CDR)
- Attenuation Resistivity (CDR)
- Formation Gamma Ray (CDR)
- Compressional Delta-T (ISONIC)

Furthermore survey data were transmitted in real time by the PowerPulse tool for both hole sizes. This information is not recorded in the tool memory.

Run	Hole Size (in.)	Service	Start Depth (m)	Stop Depth (m)
1	12 ¼	PowerPulse / CDR / ISONIC	752	1056
2	12 ¼	PowerPulse / CDR / ISONIC	1056	1400
3	12 ¼	PowerPulse / CDR / ISONIC	1400	1797
4	12 ¼	PowerPulse / CDR / ISONIC	1797	1797

12 ¼ in. Section (Runs 1 to 4, 752 to 1797 mMD):

The CDR / PowerPulse / ISONIC combination was used for correlation purposes and to evaluate a seismic data. The MWD tool was programmed to transmit real time information at 6.4 bits per second and this allowed obtaining a good quality log in real time.

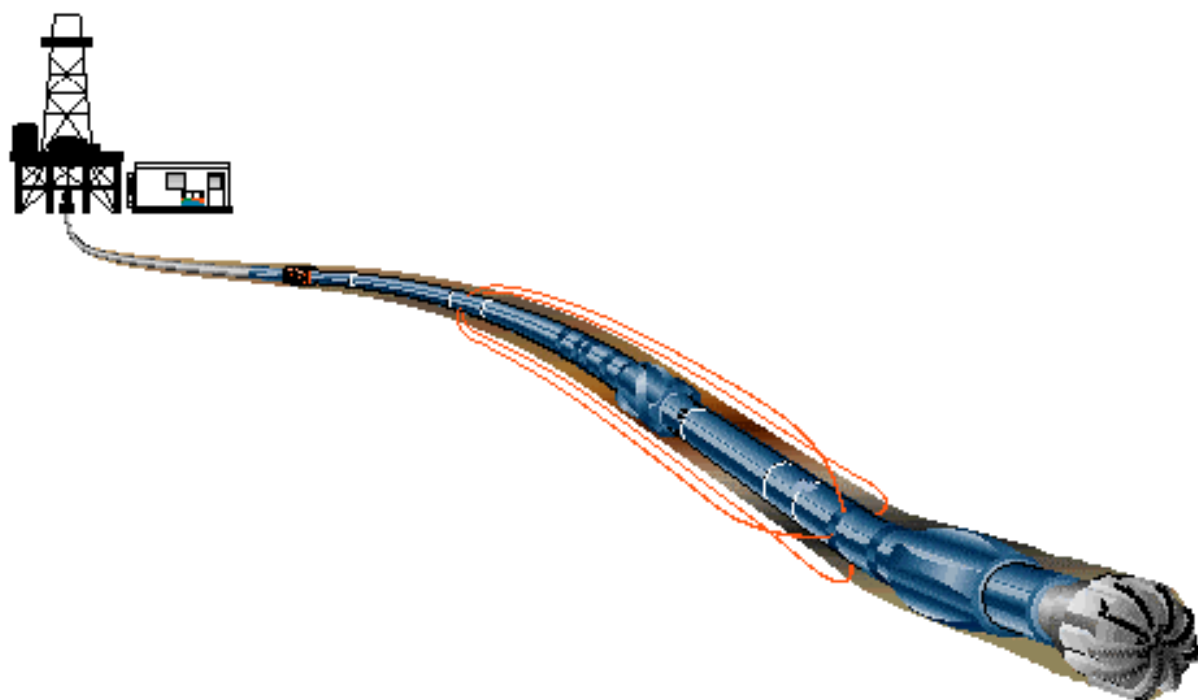
The ISONIC had been programmed to pick compressional Delta-T. Top interval of the ISONIC log, from 752 m to 950 m MD, was spiky due to high level of shocks in this section and due to high rate of penetration. Client was informed of high shock but no action was taken.

After run 3 the ISONIC recorded data for all the runs was reprocessed without receiver 4. Receiver 4 of the ISONIC was found to get a very weak signal back. The reprocessed memory logs without receiver 4 showed a much higher Delta-T coherence and were therefore presented on the final logs.

While running in the hole with next BHA gale force wind and high swells forced rig to hang off BHA in BOP' s and disconnect the riser. That led to well being suspended for a week. When riser was reconnected drillstring was pulled out of the hole and one without Schlumberger LWD/MWD tools was run in to assess hole condition. Hole was found to be in good condition and decision was made to drill ahead without trip to pick up Schlumberger tools.

Hole TD, at 2118 m, was reached and wireline logging commenced.

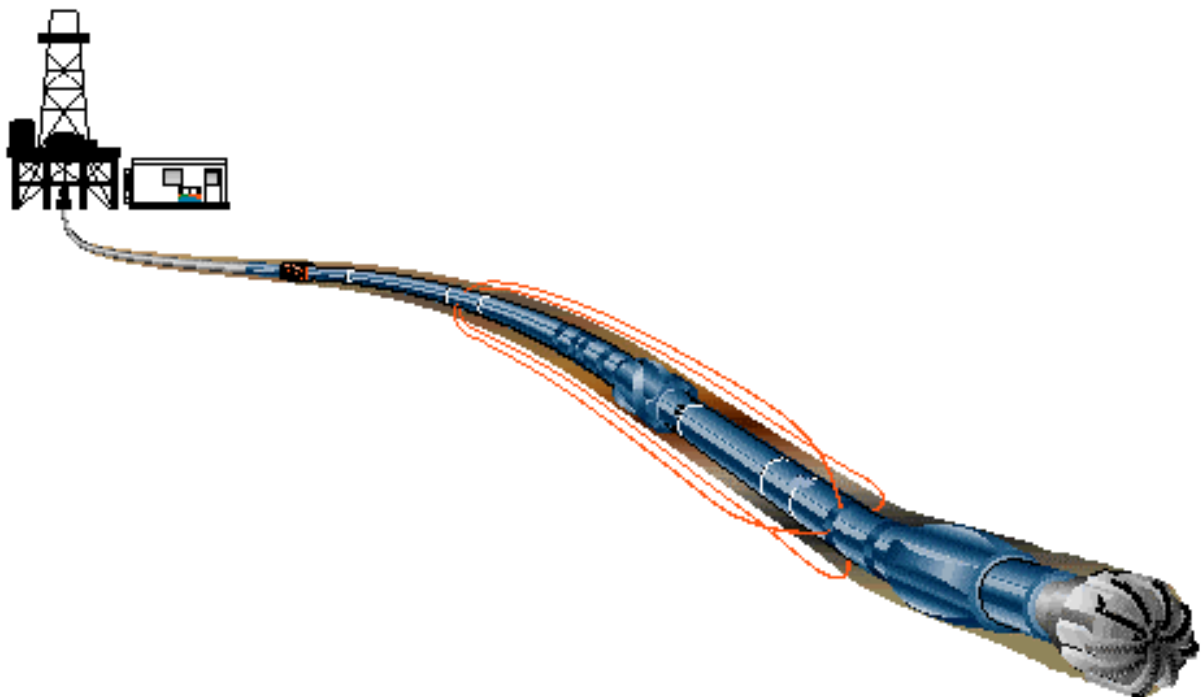
General Information



General Information

Well Name:	Casino - 1	
Rig:	DOGC Ocean Bounty	
Field:	VIC – P – 44	
Location:	Otway Basin	
Country:	Australia	
Cell Members:	Willem Bertheux Chu Mihn Tue Ozren Radicevic	LWD Engineer LWD Engineer LWD Engineer
Town Contacts:	Raymond Nanan Go Ching Lian Hrvoje Spoljaric	Location Manager Engineer In Charge – WA District Technical and SQR manager
Company Representatives:	Henry Flink Steve Hodgetts R. Subramanian	

Geomagnetic and Survey Reference Criteria



Geomagnetic and Survey Reference Criteria

Geomagnetic Data

Magnetic Model:	BGGM version 2002
Magnetic Date:	29 September 2002
Magnetic Field Strength:	1220.31 HCNT
Magnetic Declination:	10.87 degrees
Magnetic Dip:	-70.06 degrees

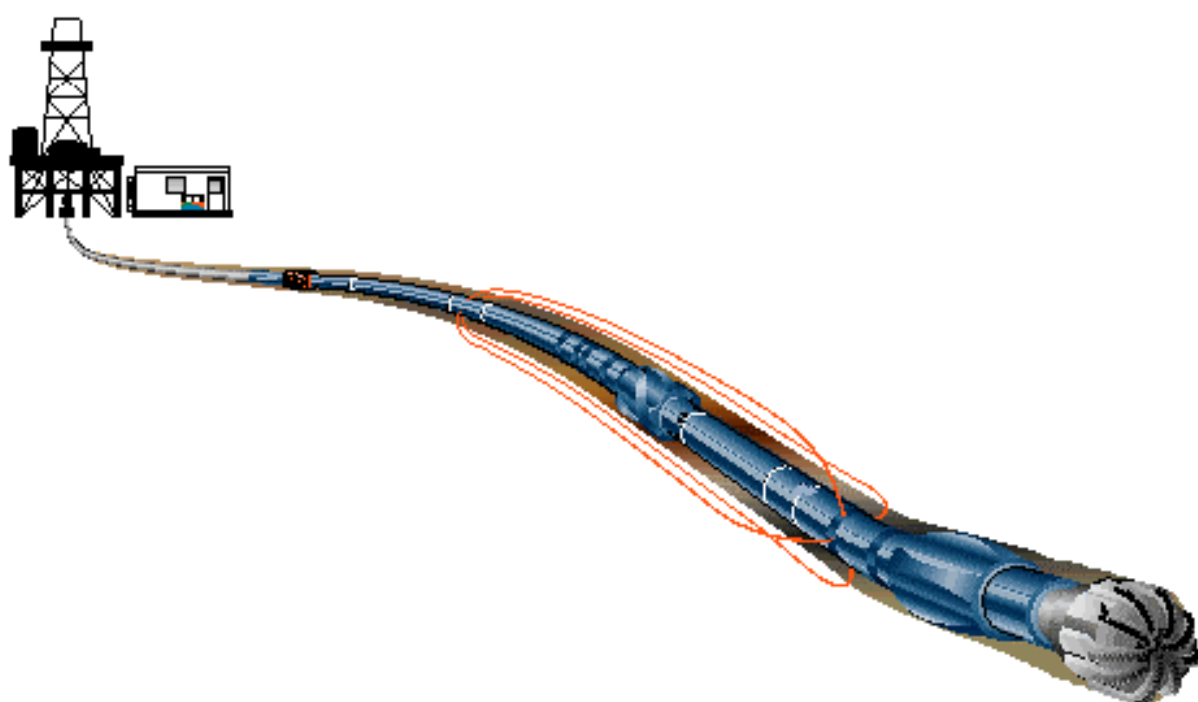
Survey Reference Criteria

Reference G:	1000.08 mgal
Reference H:	1220.31 HCNT
Reference Dip:	-70.06 degrees
G value Tolerance:	2.50 mgal
H value Tolerance:	6.00 HCNT
Dip Tolerance:	0.45 degrees

Survey Corrections Applied

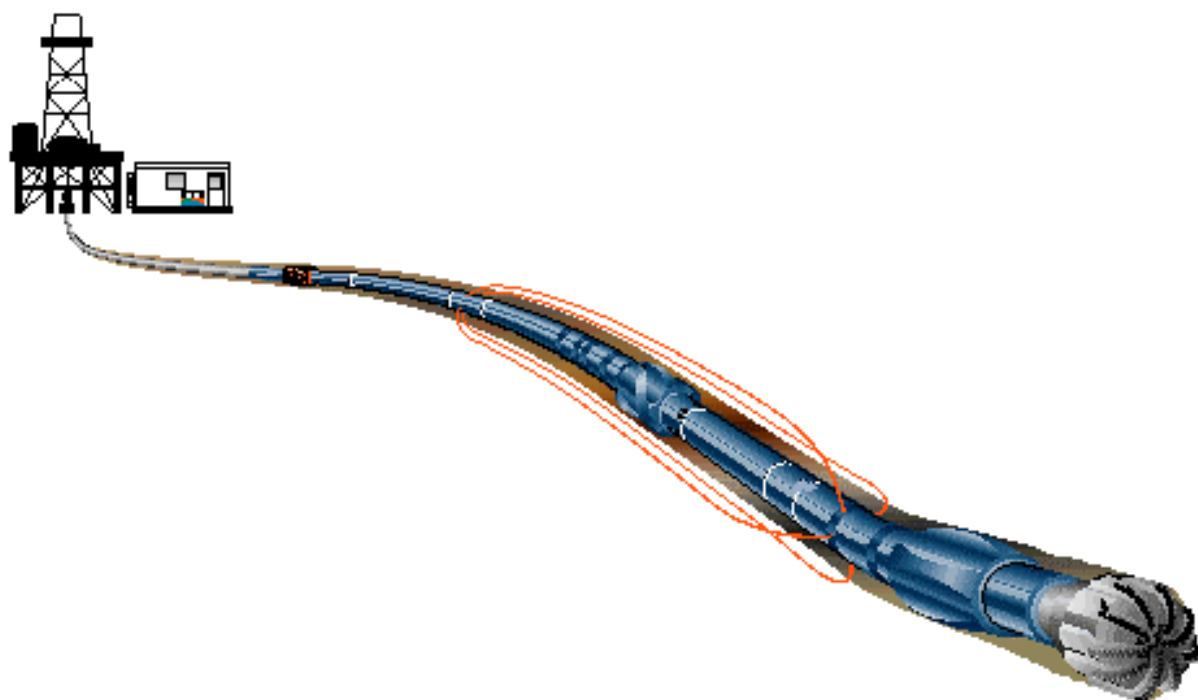
Reference North:	Grid North
Magnetic Declination:	10.87 degrees
Grid Convergence:	-1.07 degrees
Total Azimuth Correction:	11.94 degrees
Vertical Section Azimuth:	0.00 degrees

Survey Report



Seq	Measured	Incl	Azimuth	Course	TVD	Vertical	Displ	Displ	Total	At	DLS	Srvy	Tool
#	depth	angle	angle	length	depth	section	+N/S-	+E/W-	displ	Azim	(deg/ 10m)	tool	qual
-	(m)	(deg)	(deg)	(m)	(m)	(m)	(m)	(m)	(m)	(deg)		type	type
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	TIP	-
2	766.75	0.60	342.17	766.75	766.74	3.82	3.82	-1.23	4.01	342.17	0.01	MWD	6-axis
3	855.00	0.26	216.64	88.25	854.98	4.10	4.10	-1.49	4.36	340.03	0.09	MWD	6-axis
4	912.40	0.54	155.43	57.40	912.38	3.75	3.75	-1.46	4.02	338.79	0.08	MWD	6-axis
5	969.94	0.83	135.97	57.54	969.92	3.20	3.20	-1.05	3.37	341.81	0.06	MWD	6-axis
6	1041.08	1.20	191.94	71.14	1041.05	2.11	2.11	-0.85	2.27	338.03	0.14	MWD	6-axis
7	1084.57	1.29	209.06	43.49	1084.53	1.23	1.23	-1.18	1.71	316.20	0.09	MWD	6-axis
8	1170.44	0.93	192.51	85.87	1170.38	-0.29	-0.29	-1.80	1.83	260.74	0.06	MWD	6-axis
9	1256.72	1.44	181.17	86.28	1256.64	-2.06	-2.06	-1.98	2.85	223.78	0.06	MWD	6-axis
10	1382.12	1.87	182.17	125.40	1381.99	-5.68	-5.68	-2.08	6.05	200.15	0.03	MWD	6-axis
11	1458.48	2.13	183.87	76.36	1458.31	-8.34	-8.34	-2.23	8.63	194.95	0.03	MWD	6-axis
12	1546.07	2.74	185.63	87.59	1545.82	-12.05	-12.05	-2.54	12.31	191.92	0.07	MWD	6-axis
13	1605.53	3.09	184.83	59.46	1605.20	-15.06	-15.06	-2.82	15.32	190.60	0.06	MWD	6-axis
14	1690.72	3.44	188.91	85.19	1690.25	-19.87	-19.87	-3.41	20.16	189.73	0.05	MWD	6-axis
15	1775.86	4.38	192.34	85.14	1775.19	-25.57	-25.57	-4.50	25.97	189.97	0.11	MWD	6-axis

Bit Run Summary



Printed: 9/16/2002 7:03 AM

DRILLING & MEASUREMENTS - BHA DATA

Job Number

AWA-02-15

Run Number

1

BHA Number

Item	Description	Vendor	Material	Serial Number	Fishing Neck		Stab OD	OD	ID	Bot Connection		Top Connection		Len	Cum Len	TIME/DEPTH DETAILS								
					OD	Length				Size	Type	Size	Type			1	2	3	4	5				
UNITS					in	m	in	in	in	in		in		m	m	Date/Time	8/31/2002							
1	12 1/4" PDC Bit					0.1		12 1/4				6 5/8	Reg	0.32	0.32	Field Engineer	Chu/Willem							
2	12 1/4" NB R/R			C1U2151		0.59	12 1/4	8	3	6 5/8	Reg	6 5/8	Reg	2.44	2.76	Depth	1055							
3	CDR			9556		4.01		9 7/16		6 5/8	Reg	7 5/8	H90	7.54	10.3	Average ROP	1.94							
4	PowerPulse			231		7.92		8 3/8		7 5/8	H90	6 5/8	FH	8.38	18.68	Avg. Std. Pres.	2900							
5	ILS			313272-2		0.88	12 1/4	8 1/2		6 5/8	FH	6 5/8	FH	1.71	20.39	Desurger 1	1800							
6	Isonic			857		1.65		8 3/8		6 5/8	FH	6 5/8	Reg	7.2	27.59	Desurger 2	1800							
7	12 1/4" Stabiliser R/R			C1U2143		0.95	12 1/4	8	2 15/16	6 5/8	Reg	6 5/8	Reg	2.44	30.03	Tur. RPM @ FR	2773							
8	8" DC			144-22		0.56		8	2 3/4	6 5/8	Reg	6 5/8	Reg	9.24	39.27	FR @ Tur. RPM	666							
9	12 1/4" Stabiliser R/R			C1U2144		0.96	12 1/4	8	2 15/16	6 5/8	Reg	6 5/8	Reg	2.44	41.71	Avg. RPM	82							
10	9 x 8" DC			144		0.5		8	2 15/16	6 5/8	Reg	6 5/8	Reg	83.29	125	Max RPM	100							
11	Jar			48907C		0.61		8	3	6 5/8	Reg	6 5/8	Reg	9.71	134.71	Total Shocks	832.448							
12	2 x 8" DC			144		0.59		8	2 3/4	6 5/8	Reg	6 5/8	Reg	18.75	153.46	Max Shock	60							
13	X/O			144-025		0.66		8 1/4	2 7/8	6 5/8	Reg	4 1/2	IF	1.17	154.63	Avg. Surf. WOB	20							
14	HWDP									4 1/2	IF	4 1/2	IF	110.72	265.35	Max Surf. WOB	30							
15																Avg. DH WOB								
16																Max DH WOB								
17																Avg. Surf. Torq.	2.5							
18																Max Surf. Torq.	6							
19																Avg. DH Torq.								
20																Max DH Torq.								
21																Formation Type	Coarse SS							
22																Friction								
23																Drag Up								
24																Drag Down								
PREDICTED BHA TENDENCY									Hookload			lbs	Wt. Below Jars		60000	lbs	Mud Weight	8.8						
									Pickup Wt.			lbs	Wt. Above Jars			lbs	Funnel Vis.	40						
									Slack Wt.			lbs	Total Air Wt.			lbs	Plastic Vis.	7						
																			Circ. Temp	45				
																			Signal Strength	40				
																			Bit Deviation	0.83				
																			Differential Pres.					
Stabilizer Description		Mid Pt To Bit	BLADE				GAUGE			Bit To Read Out Port		Bit To Measurement Port		BATTERY		Unloaded (V)		Loaded (V)		Run Hrs		Cum Hrs		
			Type	Length	Width	Length	In	Out	PPL	12.16 m	D&I PPL	14.55 m	Tool	Before	After	Before	After	BOT	AMP	BOT	AMP			
UNITS		m		in	in	in	in	in	in	in	in	in	in	in	in	in								

Printed: 9/16/2002 7:06 AM

v2.5.010

(c) 2001 Schlumberger

Job Number: AWA-02-15

Run Number: 1

[illegible]

Printed: 9/16/2002 6:59 AM

Schlumberger																Job Number		AWA-02-15						
DRILLING & MEASUREMENTS - BHA DATA																Run Number				2				
																BHA Number								
Item	Description	Vendor	Material	Serial Number	Fishing Neck		Stab OD	OD	ID	Bot Connection		Top Connection		Len	Cum Len	TIME/DEPTH DETAILS								
					OD	Length				Size	Type	Size	Type				1	2	3	4	5			
UNITS					in	m	in	in	in	in		in		m	m	Date/Time	9/1/2002	9/1/2002						
1	12 1/4" PDC Bit					0.1		12 1/4				6 5/8	Reg	0.32	0.32	Field Engineer	Chu	C.Borbas						
2	12 1/4" NB R/R			C1U2151		0.59	12 1/4	8	3	6 5/8	Reg	6 5/8	Reg	2.44	2.76	Depth	1125	1340						
3	CDR			9556		4.01		9 7/16		6 5/8	Reg	7 5/8	H90	7.54	10.3	Average ROP	16	20						
4	PowerPulse			231		7.92		8 3/8		7 5/8	H90	6 5/8	FH	8.38	18.68	Avg. Std. Pres.	2861	3200						
5	ILS			313272-2		0.88	12 1/4	8 1/2		6 5/8	FH	6 5/8	FH	1.71	20.39	Desurger 1	1800	1800						
6	Isonic			857		1.65		8 3/8		6 5/8	FH	6 5/8	Reg	7.2	27.59	Desurger 2	1800	1800						
7	12 1/4" Stabiliser R/R			C1U2143		0.95	12 1/4	8	2 15/16	6 5/8	Reg	6 5/8	Reg	2.44	30.03	Tur. RPM @ FR	2812	2929						
8	8" DC			144-22		0.56		8	2 3/4	6 5/8	Reg	6 5/8	Reg	9.24	39.27	FR @ Tur. RPM	846	860						
9	12 1/4" Stabiliser R/R			C1U2144		0.96	12 1/4	8	2 15/16	6 5/8	Reg	6 5/8	Reg	2.44	41.71	Avg. RPM	95	90						
10	9 x 8" DC			144		0.5		8	2 15/16	6 5/8	Reg	6 5/8	Reg	83.29	125	Max RPM	110	110						
11	Jar			48907C		0.61		8	3	6 5/8	Reg	6 5/8	Reg	9.71	134.71	Total Shocks	0	0						
12	2 x 8" DC			144		0.59		8	2 3/4	6 5/8	Reg	6 5/8	Reg	18.75	153.46	Max Shock	0	0						
13	X/O			144-025		0.66		8 1/4	2 7/8	6 5/8	Reg	4 1/2	IF	1.17	154.63	Avg. Surf. WOB	15	32						
14	HWDP									4 1/2	IF	4 1/2	IF	110.72	265.35	Max Surf. WOB	32	45						
15																Avg. DH WOB								
16																Max DH WOB								
17																Avg. Surf. Torq.	2.8	3						
18																Max Surf. Torq.	5.1	5.5						
19																Avg. DH Torq.								
20																Max DH Torq.								
21																Formation Type								
22																Friction								
23																Drag Up								
24																Drag Down								
PREDICTED BHA TENDENCY								Hookload			lbs	Wt. Below Jars		70000	lbs	Mud Weight		8.8	8.8					
								Pickup Wt.			lbs	Wt. Above Jars			lbs	Funnel Vis.		48	48					
								Slack Wt.			lbs	Total Air Wt.			lbs	Plastic Vis.		12	12					
																Circ. Temp		44	55					
																Signal Strength		37	25					
																Bit Deviation		1.29	1.29					
																Differential Pres.								
Stabilizer Description		Mid Pt To Bit	BLADE		GAUGE		Bit To Read Out Port		Bit To Measurement Port		BATTERY		Unloaded (V)		Loaded (V)		Run Hrs		Cum Hrs					
											Tool	Before	After	Before	After	BOT	AMP	BOT	AMP					
UNITS		m		in	in	in	in	in	CDR	6.21 m	GR PPL	13.81 m												
									ISONIC	25.21 m	GR LWD	8.52 m												
										m	RES LWD	5.04 m												
										m	SON LWD	25.6 m												
										m		m												
										m		m												

Job Number: AWA-02-15

Run Number: 2

[illegible]

Printed: 9/16/2002 6:57 AM

Schlumberger																Job Number					AWA-02-15				
DRILLING & MEASUREMENTS - BHA DATA																Run Number					3				
																BHA Number									
Item	Description	Vendor	Material	Serial Number	Fishing Neck		Stab OD	OD	ID	Bot Connection		Top Connection		Len	Cum Len	TIME/DEPTH DETAILS									
					OD	Length				Size	Type	Size	Type				1	2	3	4	5				
UNITS					in	m	in	in	in	in		in		m	m	Date/Time	9/2/2002	9/2/2002	3-Sep						
1	12 1/4" PDC Bit					0.1		12 1/4				6 5/8	Reg	0.37	0.37	Field Engineer	Chu/WB	C.Borbas	Chu						
2	12 1/4" NB R/R			C1U2151		0.59	12 1/4	8	3	6 5/8	Reg	6 5/8	Reg	2.44	2.81	Depth	1408	1707	1770						
3	CDR			9556		4.01		9 7/16		6 5/8	Reg	7 5/8	H90	7.54	10.35	Average ROP	13	30	26						
4	PowerPulse			231		7.92		8 3/8		7 5/8	H90	6 5/8	FH	8.38	18.73	Avg. Std. Pres.	2997	3400	3261						
5	ILS			313272-2		0.88	12 1/4	8 1/2		6 5/8	FH	6 5/8	FH	1.71	20.44	Desurger 1	1800	1800	2200						
6	Isonic			857		1.65		8 3/8		6 5/8	FH	6 5/8	Reg	7.2	27.64	Desurger 2	1800	1800	2200						
7	12 1/4" Stabiliser R/R			C1U2143		0.95	12 1/4	8	2 15/16	6 5/8	Reg	6 5/8	Reg	2.44	30.08	Tur. RPM @ FR	2812	2695	2695						
8	8" DC			144-22		0.56		8	2 3/4	6 5/8	Reg	6 5/8	Reg	9.24	39.32	FR @ Tur. RPM		808	828						
9	12 1/4" Stabiliser R/R			C1U2144		0.96	12 1/4	8	2 15/16	6 5/8	Reg	6 5/8	Reg	2.44	41.76	Avg. RPM	154	135	155						
10	9 x 8" DC			144		0.5		8	2 15/16	6 5/8	Reg	6 5/8	Reg	83.29	125.05	Max RPM	160	150	177						
11	Jar			48907C		0.61		8	3	6 5/8	Reg	6 5/8	Reg	9.71	134.76	Total Shocks	0	0	0						
12	2 x 8" DC			144		0.59		8	2 3/4	6 5/8	Reg	6 5/8	Reg	18.75	153.51	Max Shock	0	0	0						
13	X/O			144-025		0.66		8 1/4	2 7/8	6 5/8	Reg	4 1/2	IF	1.17	154.68	Avg. Surf. WOB	7	21	12.8						
14	HWDP									4 1/2	IF	4 1/2	IF	110.72	265.4	Max Surf. WOB	8.1	26	18.3						
15																Avg. DH WOB									
16																Max DH WOB									
17																Avg. Surf. Torq.	5	12.2	6.4						
18																Max Surf. Torq.	7.19	14	11.7						
19																Avg. DH Torq.									
20																Max DH Torq.									
21																Formation Type									
22																Friction									
23																Drag Up									
24																Drag Down									
PREDICTED BHA TENDENCY								Hookload				Wt. Below Jars				Mud Weight									
								Pickup Wt.				Wt. Above Jars				Funnel Vis.									
								Slack Wt.				Total Air Wt.				Plastic Vis.									
																		Circ. Temp							
																		Signal Strength							
																		Bit Deviation							
																		Differential Pres.							
Stabilizer Description		Mid Pt To Bit	BLADE				GAUGE			Bit To Read Out Port			Bit To Measurement Port			BATTERY		Unloaded (V)		Loaded (V)		Run Hrs		Cum Hrs	
			Type	Length	Width	Length	In	Out	PPL	11.2 m	D&I PPL	13.47 m	Tool	Before	After	Before	After	BOT	AMP	BOT	AMP				
UNITS		m		in	in	in	in	in	CDR	6.06 m	GR PPL	13.86 m													
										ISONIC	25.26 m	GR LWD	8.2 m												
											m	RES LWD	4.72 m												
											m	SON LWD	25.28 m												
											m		m												
											m		m												

[illegible]

Job Number AWA-02-15		Company Rep. Henry Flink, S.Hodgetts		Date In 3-Sep-02		Date Out 12-Sep-02		D&M Run Number 4		Rig Run Number 6		
Company SANTOS Ltd			Grid Corr -1.07		Brief Run Summary Bad weather (see comments)				Bit Run Number 4		Cell Manager Willem Bertheux	
Rig Name Ocean Bounty			Well Name Casino-1		Tot Corr 11.94				Hole Depth From 1797 m To 1797 m			
Location Otway Basin			Mapfile		Mag Dec 10.86		PP Slot ID		D&M Crew W.Bertheux, C.Tue			
Inclination (Drift) From 4.38 deg To 4.38 deg			Pumping Hours 6.2 hrs.		Below Rotary Tbl Hrs 192.50 hrs.							
BPS 6.4		Frequency 16		Mod Type QPSK		Azimuth From deg To deg		Rotary Hours 0 hrs.		Rotary Distance 0 m		
Pump Type 12-P-160		Pump Output 603		Pump Strk Len. 12		True Vertical Depth From 1796.27 m To m		Slide Hours 0 hrs.		Slide Distance 0 m		
Pump Liner ID 6		Min DLS		Max DLS		Hole Size 12.25 in		Water Depth 70.5 m		Air Gap 25 m		
Bent Sub Angle deg		Bent HSG Ang deg		Depth Max DLS m		RKB Height 0 m		Ground Elev. m		Mod Gap 0.12 in		
Pulse Ht Thresh		Min Pulse Wdt		Max Pulse Wdt		Digit Time		T/F Arc in		T/F Angle deg		
Conn Phase Ang deg		Rise Const		Fall Const		H2S In Well <input type="checkbox"/>		Damp Press psi		Signal Streng.		
Directional Driller(s)		Turbine RPM @ Min Flow Rate RPM		FR		gpm		RPM		FR		
Run Objective TD		Turbine RPM @ Max Flow Rate RPM		FR		gpm		RPM		FR		
Equipment Code		Pump Hrs Start Cum		SW Vers		Tool Size		Sensors Code		Real Time Hrs Fail Drilled		
MDC-DC-231		66.6 72.8		6.1C00		8.25		MDC-DC-231		6.2 0 0		
RGS9-AA-9556		66.6 72.8		5.0B05		9.50		RGS9-AA-9556		6.2 0 0		
SWD8-BA-829		0 6.2		5.0B10		8.25		SWD8-BA-829		6.2 0 0		
Surface Sys Version		IDEAL/SPM ID7_OC_02										
Manufacturer		Stage Length		m		Bit to Bend Dist.		m		Bearing Gap In		
Type		Rubber				RSS Mfr				Bearing Gap Out		
Size		Sleeve Position				RSS Type				Radial Bearing Play		
Serial Number		Sleeve Size		in		RSS Size				Thrust Bearing Play		
Lobe Config.		Motor Fail		<input type="checkbox"/>		RSS SN						
Max Circ Temp		43.00 C		Avg ROP		m/hr		Min Actl FlowRt		gpm		
Min Circ Temp		37.00 C		Max ROP		m/hr		Avg PmpPres		psi		
End Mud Wt		10.30 lb/gal		Avg Surf RPM				PmpPres On Bot		psi		
End Funnel Vis		64.00 CPS		Min RPM				PmpPres Off Bot		psi		
End Plastic Vis		23.00 CPS		Max RPM				Avg Surf WOB		lbs		
End Yield Point		32.00 CPS		Avg FlowRate		600.00 gpm		Avg Surf Torq		ft-lbs		
End Mud Resist				Max Actl FlowRt		650.00 gpm		Max Shock Lev		0		
Company		IDFS		PH		9.50		Percent Sand		1.00 %		
Brand				Chlorides		30000		Percent Solids		7.28 %		
Type		KCl		Other				Percent Oil		%		
LCM Type				LCM Size				LCM Concentration				
BHA Type		Rotary		Tur Rotor Prt #				Turbine Config		Surface Screen		
Int TF Offset				Stator Prt #				Pulser Config		DFS Used		
Low Oil Flag		<input type="checkbox"/>		Hrs @ Low Oil		hrs.		Stab Spacing		Formation		
DD Objectives Achieved		<input type="checkbox"/>		If not, why?								
Bit Type				Other								
Manufacturer		Model		IADC Code		No. of Jets		Size of Jets		Bit TFA		
Smith		MJ3163				3		16				
Inner Row		Outer Row		Dull Char		Location		Brng/Seals		Gauge (1/16")		
1		8		LT		S		X		Gauge (1/16")		
Trans Fail		<input type="checkbox"/>		Jamming		<input type="checkbox"/>		Client Inconv.		<input type="checkbox"/>		
Pres Incr @ Fail		<input type="checkbox"/>		Jamming Time		hrs.		Lost Time		hrs.		
Trip Due to D&M		<input type="checkbox"/>		Sync Hours		hrs.		Surface Vib		<input type="checkbox"/>		
Surface Noise		<input type="checkbox"/>		Down Hole Noise		<input type="checkbox"/>		Surface Sys Failure		<input type="checkbox"/>		
Gale force wind and high swell forced rig to stop running in hole and hang off BHA in BOP and disconnect from riser. After weather get better, POOH due to blockage of the bit.												

Schlumberger																DRILLING & MEASUREMENTS - BHA DATA					Job Number		AWA-02-15	
																Run Number		4						
																BHA Number								
Item	Description	Vendor	Material	Serial Number	Fishing Neck		Stab OD	OD	ID	Bot Connection		Top Connection		Len	Cum Len	TIME/DEPTH DETAILS								
					OD	Length				Size	Type	Size	Type			1	2	3	4	5				
UNITS					in	m	in	in	in	in		in		m	m	Date/Time								
1	12 1/4" PDC Bit					0.1		12 1/4				6 5/8	Reg	0.34	0.34	Field Engineer								
2	12 1/4" NB R/R			C1U2151		0.59	12 1/4	8	3	6 5/8	Reg	6 5/8	Reg	2.44	2.78	Depth								
3	CDR			9556		4.01		9 7/16		6 5/8	Reg	7 5/8	H90	7.54	10.32	Average ROP								
4	PowerPulse			231		7.92		8 3/8		7 5/8	H90	6 5/8	FH	8.38	18.7	Avg. Std. Pres.								
5	ILS			313272-2		0.88	12 1/4	8 1/2		6 5/8	FH	6 5/8	FH	1.71	20.41	Desurger 1								
6	Isonic			857		1.65		8 3/8		6 5/8	FH	6 5/8	Reg	7.28	27.69	Desurger 2								
7	12 1/4" Stabiliser R/R			C1U2143		0.95	12 1/4	8	2 15/16	6 5/8	Reg	6 5/8	Reg	2.44	30.13	Tur. RPM @ FR								
8	8" DC			144-22		0.56		8	2 3/4	6 5/8	Reg	6 5/8	Reg	9.24	39.37	FR @ Tur. RPM								
9	12 1/4" Stabiliser R/R			C1U2144		0.96	12 1/4	8	2 15/16	6 5/8	Reg	6 5/8	Reg	2.44	41.81	Avg. RPM								
10	9 x 8" DC			144		0.5		8	2 15/16	6 5/8	Reg	6 5/8	Reg	83.29	125.1	Max RPM								
11	Jar			48907C		0.61		8	3	6 5/8	Reg	6 5/8	Reg	9.71	134.81	Total Shocks								
12	2 x 8" DC			144		0.59		8	2 3/4	6 5/8	Reg	6 5/8	Reg	18.75	153.56	Max Shock								
13	X/O			144-025		0.66		8 1/4	2 7/8	6 5/8	Reg	4 1/2	IF	1.17	154.73	Avg. Surf. WOB								
14	HWDP									4 1/2	IF	4 1/2	IF	110.72	265.45	Max Surf. WOB								
15																Avg. DH WOB								
16																Max DH WOB								
17																Avg. Surf. Torq.								
18																Max Surf. Torq.								
19																Avg. DH Torq.								
20																Max DH Torq.								
21																Formation Type								
22																Friction								
23																Drag Up								
24																Drag Down								
PREDICTED BHA TENDENCY									Hookload				Wt. Below Jars		70000		Mud Weight							
									Pickup Wt.				Wt. Above Jars				Funnel Vis.							
									Slack Wt.				Total Air Wt.				Plastic Vis.							
																			Circ. Temp					
																			Signal Strength					
																			Bit Deviation					
																			Differential Pres.					
Stabilizer Description		Mid Pt To Bit	BLADE				GAUGE			Bit To Read Out Port		Bit To Measurement Port		BATTERY		Unloaded (V)		Loaded (V)		Run Hrs		Cum Hrs		
			Type	Length	Width	Length	In	Out	PPL	12.05 m	D&I PPL	14.44 m	Tool	Before	After	Before	After	BOT	AMP	BOT	AMP			
UNITS		m		in	in	in	in	in	in	CDR	6.23 m	GR PPL	13.83 m											
										ISONIC	25.19 m	GR LWD	8.54 m											
											m	RES LWD	5.06 m											
											m	SON LWD	25.58 m											
											m		m											
											m		m											

Job Number: AWA-02-15

Run Number: 4

[illegible]