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CASINO-5

BASIC DATA REPORT

PREPARED BY:

J. Pitman

(Consultant)

July 2005

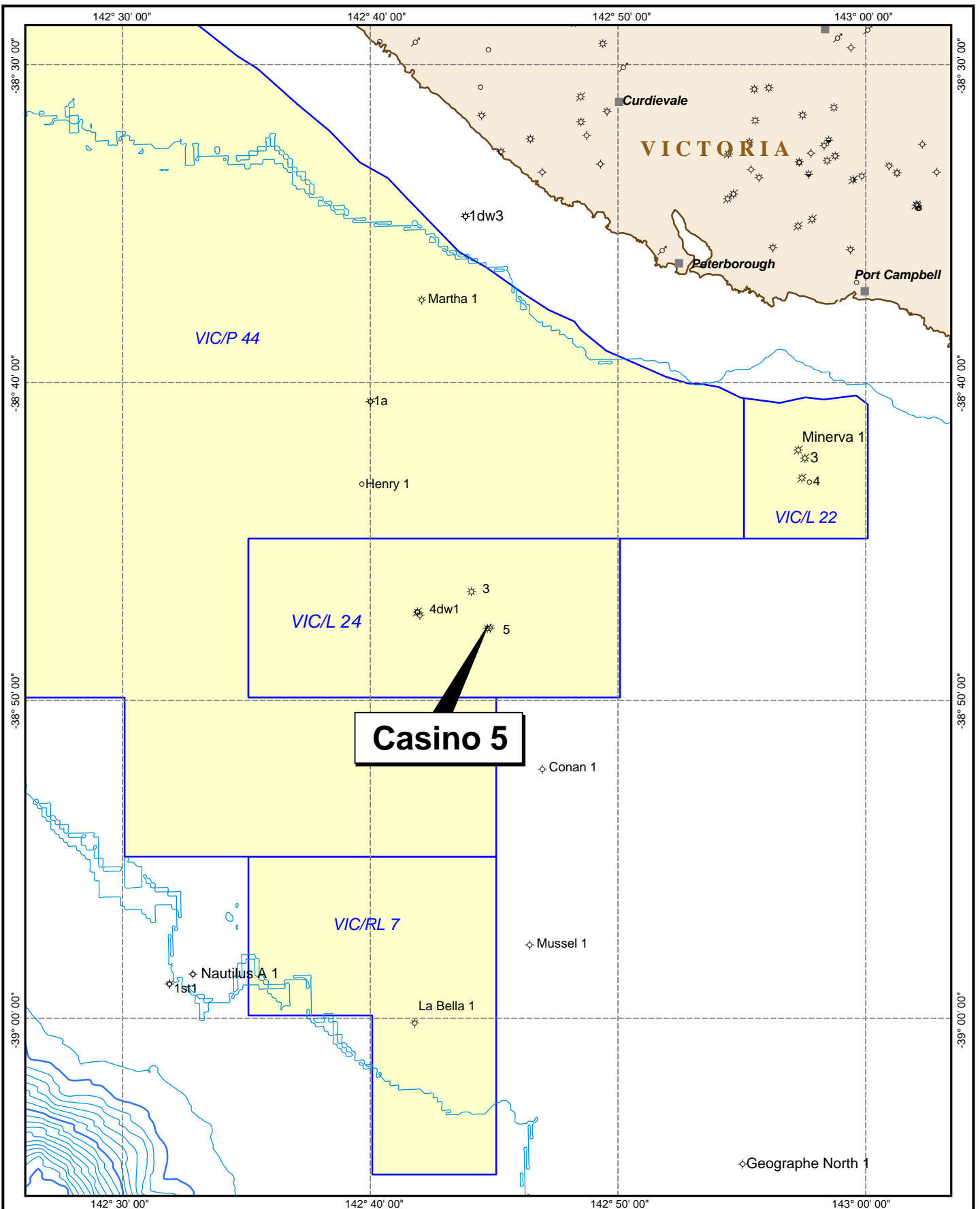
CASINO-5 BASIC DATA REPORT

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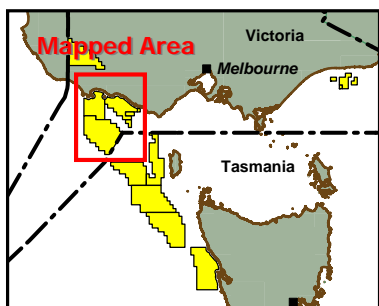
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LOCATION MAP



Casino 5



Legend
 Santos Permit

Santos

VIC/L24 - Victoria
 Otway Basin

**Casino 5
 Location Map**



Date: Sept 2005, File No. OTWAY 659

GENERAL DATA CARD

WELL: CASINO-5	WELL CATEGORY: OFFSHORE	SPUD: 19:00hr on 16/6/05		
	WELL INTENT: GAS	TD REACHED: 19:00hr on 28/6/05		
GAS DEV		RIG RELEASED: 22:00hr on 08/07/05 CMPLT:		
SURFACE LOCATION:		RIG: OCEAN PATRIOT		
LAT: 38° 47' 43.68" S LONG: 142° 44' 44.60" E (GDA94)		STATUS: Single Completion Gas Well (SCG)		
NORTHING: 5704473.1m EASTING: 651604.4m		REMARKS:		
SEISMIC STATION: 2001 Casino-3D, 150m West of Casino 2		Single 7" completion with expandable sand screens		
ELEVATION SEA FLOOR: -68.2m LAT RT +21.5m LAT		over reservoir.		
BLOCK/LICENCE: Otway Basin - VIC P- 44		HOLE SIZE	CASING SIZE	SHOE DEPTH
TD 1806 m (Logr Extrap) 1806 m (Drlr)				TYPE
PBTD m (Logr) m (Drlr)		914mm	762mm	132m
TYPE STRUCTURE: Tilted Fault Block Closure		445mm	340mm	655m
TYPE COMPLETION: Single Completion		311mm	244mm	1719.8m
ZONE(S): WAARRE CB		216mm	194mm	1800m
				44.3 kg/m 13Cr80

LOG	SUITE/ RUN	INTERVAL (m)	BHT/TIME COMMENTS
Wireline logs were not run during Casino 5			

LOG (MWD)	SUITE/ RUN	INTERVAL (m)	COMMENTS
GR-RES-SURVEYS	1 / 1	665m – 1160m	Real time failure at 940m
GR-RES-SURVEYS	1 / 2	1160m – 1392m	
GR-RES-SURVEYS	1 / 3	1392m – 1730m	
GR-RES-SURVEYS	2 / 1	1730m – 1806m	

SECTION 1 : WELL HISTORY

1.1 INTRODUCTION

The Casino gas field is located in the southeast corner of the offshore Otway exploration block VIC/P44 (Figure 2.1-a). The field lies in 70m of water and is 29km southwest of Port Campbell and 250km southwest of Melbourne.

Casino 5 was drilled as a Waarre C producer and is effectively a twin well to Casino-2 located 150m to the west and at virtually the same structural elevation. The well has been placed high on the structure to maximise from standoff from the gas-water contact and hence maximise gas recovery prior to water arrival at the well

The Casino structure is a tilted fault block with three way dip closure and up dip fault closure. Casino-1 and Casino-2 were drilled crestally on this fault block, Casino-3 was drilled in a down-dip location near the structural closure limit. Casino-1 and Casino-2 established the presence of gas in the "Younger" and "Older" sands of the Waarre Sandstone.

Casino 5 was drilled by the semi-submersible drilling rig "Diamond Offshore Ocean Patriot".

1.2 GENERAL DATA

Well Name:	CASINO 5	
Well Classification:	Offshore Gas Development	
Interest Holders:	Santos Ltd	50%
	AWE Ltd	25%
	Mitsui & Co Ltd	25%
Participating Interests:	Santos Ltd	50%
	AWE Ltd	25%
	Mitsui & Co Ltd	25%
Operator:	Santos Ltd.	
Location:	Offshore Victoria – Otway Basin VIC P-44.	
Surveyed Location (GDA94)	Latitude: 38° 47' 43.68" South	
	Longitude: 142° 44' 44.60" East	
	Northing: 5704473.1m	
	Easting: 651604.4m	
Seismic Location:	150m West of Casino	
Seismic Survey:	2001 Casino 3D	
Elevations:	Water Depth	68.2m LAT
	Rotary Table	21.5m LAT

Total Depth: Driller : 1806m RT
Logger : 1806m RT (LWD)
Logger Extrapolated : 1806m RT

Status: Single Completion Gas Well (SCG)

License: VIC P-44 Offshore Victoria

Date Drilling Commenced: 19:00 hours on 16th June 2005.

Date Drilling Completed: 19:00 hours on 28th June 2005.

Date Rig Released: 22:00 hours on 8th July 2005.

Total Well Time: 22 days 3 hours.

Contractor: Diamond Offshore

Rig: Ocean Patriot (Semi-submersible)

1.3 **DRILLING SUMMARY**

(a) **Drilling Summary** (All Depths Driller's RT)

Casino 5 was spudded at 19:00 hrs on 16th June 2005 utilising the semi-submersible drilling facility "Ocean Patriot".

Bit 1, a 660mm (26") Smith DSJ was run in with a 914mm (36") hole opener. The 914mm (36") hole section was drilled in one bit run from seafloor at 89.7m to section total depth at 133m. All returns were to the seafloor. The hole was swept and displaced to PHG mud. A string of 762mm (30") (461 kg/m X52) casing was run and set at 132m.

Bit 2, a Smith XR+CRS was run in hole tagging the top of cement at 128.67m. The cement and shoe track were drilled and the rat hole cleaned to 133m. Guide post 3 had released and was re-established with the ROV. The 445mm (17.5") hole section was drilled in one bit run from 133m to section total depth at 665m. The hole was swept and circulated clean prior to displacing the well to PHG mud. The drill string was pulled out of the hole to 132m working through tight spots. The string was run back into the hole for a wiper trip washing down through 3m of fill on bottom. The hole was circulated clean and displaced to PHG mud and the string pulled from the hole with no tight hole observed. 47 joints of 340mm (13.375") (107 kg/m L80) casing were run with the shoe set at 655m. Following running and cementing casing the production tree was skidded to the moon pool and run in hole. The tree was successfully landed. The blow out preventer and marine riser were then moved to the moonpool, lines attached and the BOP run on the marine riser. The blow out preventer was landed however prior to scoping out the slip joint a riser tensioner line parted. The failed line was isolated and operations were resumed. The blow out preventer and equipment were pressure tested as per program.

Bit 3, a Smith GS04BDV tricone 311mm (12¼") was made up with the Sperry LWD tools (Gamma-ray, Resistivity and directional) and was run in hole tagging the top of cement at 633m. The cement, shoe track and casing shoe at 655m were drilled, the rat hole cleaned out to 665m and 3m of new formation drilled to 668m. A Leak-off Test was conducted yielding an Equivalent Mud Weight (EMW) of 2.08 SG. The 311mm (12.25") hole was then drilled from 668m to 1160m with the LWD failing at 940m. At 1160m, after penetrating the Massacre Shale the bit was pulled from the hole to pick up MWD tools and a new bit. Bit 3 was graded 4-5-WT-A-E-I-NO-P.Rate.

Bit 4, a Smith MA89PX PDC was made up with new LWD tools and run into the hole. Surveys were taken from 891m while running into the hole to establish hole deviation. Drilling 311mm (12¼") hole continued from 1160m to 1392m. Bit 4 was pulled from the hole due to slow penetration rate and was graded 1-1-BT-S-X-I-BU-PR.

Bit 5, a Hycalog DSX104, was run into the hole drilling the remainder of the 311mm (12¼") hole to section total depth at 1730m. At section TD the hole was circulated clean however upon pulling out of hole tight hole was encountered. The hole was backreamed to 1300m. The string was then run to bottom for a wiper trip. The hole was circulated clean and the string pulled from the hole with the hole found to be in good condition while pulling out. 137 joints of 244mm (9 5/8") 70 kg/m (47 lb/ft) mixed L80/13Cr80 were run with the shoe set at 1719.8m.

After running the 9 5/8" casing, Bit 6, a 216mm (8½") Hycalog DSX104 was made up with the LWD tools and run into the hole tagging the top of cement at 1693m. The cement and shoe track were drilled and the rat hole cleaned out to 1730m. The mud system was displaced to a "Flo-pro" mud system prior to drilling ahead. The 216mm (8½") hole section was drilled in one bit run from 1730m to 1806m. Total depth was reached at 19:00 hours on 28/06/2005. The hole was circulated clean and a wiper trip conducted prior to pulling out of the hole.

Following the drilling of the 216mm (8½") production hole expandable sand screens were run on 194mm (7 5/8") production liner. The well was then production tested and suspended for future production. The rig was released at 22:00 hours on 8th July, 2005.

(b) Mudlogging Services

Mudlogging services were provided by Geoservices Unit 170 with the following parameters monitored:

1. Total Gas
2. Chromatographic Gas Breakdown
3. Hydrogen Sulphide Levels
4. Depth/Rate of Penetration.
5. Pipe Speed/Block Position
6. Top drive RPM
7. Top drive Torque
8. Hook Load/Weight On Bit
9. Standpipe Pressure
10. Casing Shut-in Pressure
11. Mud Pump Rate (3 pumps)

12. Mud Flow Out
13. Mud Pit Levels (8 pits)
14. Mud Weight In and Out
15. Mud Temperature In and Out
16. Resistivity In and Out
17. Carbon Dioxide Detectors

Ditch cuttings were collected at 6m intervals in the 311mm (12-1/4") section from 665m to 1644m and 3m intervals from 1644m to section total depth at 1730m. In addition to microscopic examination of all drilled cuttings, samples were examined under the fluoroscope for hydrocarbon indications. Further information is presented in Geoservices' report in SECTION 12: MUDLOGGING WELL REPORT. Details of all wellsite samples is found in Section 2.2: CATALOGUE OF WELLSITE SAMPLES

c) LWD Data

Logging While Drilling (LWD) was acquired by Sperry-Sun in Casino 5. LWD services consisted of Dual Gamma Ray (DGR), Electromagnetic Wave Resistivity (EWR-P4) and Directional Module (DM) for deviation control. LWD data was acquired in the 311mm (12 1/4") hole from 665m to 1730m in three runs. During run 1 from 665m to 1160m realtime data failed at 940m. During runs 2 and 3 from 1160m to 1392m and 1392m to 1730m realtime data was acquired without event. Recorded mode data was collected during all three runs. Sperry Sun's detailed report is attached in Section 3.1: LWD END OF WELL REPORT.

d) Testing

At the completion of drilling Casino 5 the well was completed with 7 5/8" casing and expandable sand screens. The well was then flow tested over the primary reservoir zone to confirm reservoir flow characteristics. The test was conducted over the interval 1720m to 1806m and flowed at the maximum choke-constrained measured flow rate of 43 MMscf/d through a 23.8 mm (60/64") choke at a well head tubing pressure of 163534 kpa (2372 psig). Expro's detailed report of the production test is attached in Section 4: PRODUCTION TEST REPORT.

(e) Coring

No full hole cores were cut at the Casino 5 location.

(f) Biostratigraphy

Micro-palaeontology studies are included in section 16.

(g) Electric Logging

No wireline logs were conducted at the Casino 5 location.

h) RCI Pressure Data

A pressure survey was not conducted at the Casino 5 location.

(i) Hole Deviation

Casino-5 was drilled as a vertical hole. Deviation Surveys were recorded utilising the LWD/MWD tools in the 311mm (12.25") and 216mm (8½") hole sections. An EMS survey was conducted in the 445mm (17½") hole section. Survey Data are presented in Section 15: DEVIATION SUMMARY.

At Total Depth, the estimated displacement from the wellhead was approximately 85m to 245°(T). At total measured depth, 1806m, the TVD was calculated at 1802m.

(j) Velocity Surveys

No velocity survey was conducted at the Casino-5 location.

(k) Casing & Cementing Summary

The following Table-3 summarises casing sizes, depths and cementing details for Casino-5. Casing and Cementing Reports for each casing run are detailed in Section 11: CASING & CEMENTING SUMMARY.

TABLE 3

HOLE SIZE	DEPTH	CASING SIZE	CASING DEPTH	JOINTS	CASING TYPE	CEMENT
914mm (36")	133m	762mm (30")	132m	4	461 kg/m X52	Mix and pump 7.3m ³ (46 bbl) class "G" cement with 0.01 gal/sk D047, 1.5% S001 BWOC, mixed to a slurry weight of 1.19sg.
445mm (17.5")	665m	340 mm (13.375")	655m	49	107kg/m L80 BTC	Mixed and pumped 31.6m ³ (199bbl) class "G" cement to a slurry weight of 15.5-15.9 ppg. Displaced with 2.2 m ³ (1.5bbl) of seawater.
311mm (12.25")	1730m	244 mm (9.625")	1719.8m	137	70kg/m 13Cr80 / L80	<u>Lead</u> : 9.1 m ³ (57bbl) class "G" cement, mixed to a slurry weight of 1.5sg (12.5ppg). <u>Tail</u> : 7.3 m ³ (46bbl) class "G" cement, mixed to a slurry weight of 1.9sg (15.8ppg).
216mm (8.5")	1806m	178mm (7")	1800m		43.4 13Cr80	Run with expandable sand screens.

SECTION 2 : LITHOLOGICAL DESCRIPTIONS

SECTION 2.1: CUTTINGS DESCRIPTIONS

2.1 CASINO-5 - LITHOLOGICAL DESCRIPTIONS

Depth From (m)	Depth To (m)	%	Lithology and Shows
CASINO 5 was spudded on 16 th June 2005 utilising the semi submersible drilling facility "Ocean Patriot". Note: all returns were to the seafloor prior to running the 340mm (13 3/8") casing, blow out preventer and marine riser at 665m.			
665	666	20	CALCAREOUS SILTSTONE: medium brownish grey-medium brown, argillaceous grading to CALCAREOUS CLAYSTONE, common forams, firm, sub blocky.
		80	CEMENT
666	672	100	CALCAREOUS SILTSTONE: medium brownish grey-medium brown, argillaceous grading to CALCAREOUS CLAYSTONE, common forams, firm, sub blocky.
672	678	100	CALCAREOUS SILTSTONE: medium brownish grey-medium brown, argillaceous grading to CALCAREOUS CLAYSTONE, common forams, firm, sub blocky.
678	684	100	CALCAREOUS SILTSTONE: medium brownish grey-medium brown, argillaceous grading to CALCAREOUS CLAYSTONE, common forams, firm, sub blocky.
684	690	100	CALCAREOUS SILTSTONE: medium brownish grey-medium brown, argillaceous grading to CALCAREOUS CLAYSTONE, common glauconite, common forams, firm, sub blocky.
690	696	90	SANDSTONE: yellow orange-brown Fe stain, translucent, clear in part, fine to coarse predominantly medium, sub angular to predominantly sub round, trace very coarse fractured quartz grains, trace lithics, fine to poor sorting, trace forams, predominantly loose, good inferred porosity, no fluorescence.
		10	SILTSTONE: medium brownish grey-medium brown, argillaceous grading to CALCAREOUS CLAYSTONE, common forams, firm, sub blocky.
696	702	100	SANDSTONE: yellow orange brown Fe stain, translucent, clear in part, fine to coarse predominantly medium, sub angular to predominantly sub round, trace very coarse fractured quartz grains, trace lithics, fine to poor sorting, trace forams, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.

Depth From (m)	Depth To (m)	%	Lithology and Shows
702	708	100	SANDSTONE: yellow orange brown Fe stain, translucent, clear in part, fine to coarse predominantly medium, sub angular to predominantly sub round, trace very coarse fractured quartz grains, trace lithics, fine to poor sorting, trace forams, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.
708	714	100	SANDSTONE: yellow orange brown Fe stain, translucent, clear in part, fine to coarse predominantly medium, sub angular to predominantly sub round, trace very coarse fractured quartz grains, trace lithics, poor sorting, trace forams, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.
714	720	100	SANDSTONE: yellow orange brown Fe stain, translucent, clear in part, fine to coarse predominantly medium, sub angular to predominantly sub round, trace very coarse fractured quartz grains, trace lithics, poor sorting, trace forams, predominantly loose quartz grains, good inferred porosity, no fluorescence.
720	726	100	SANDSTONE: yellow orange brown Fe stain, translucent, clear in part, fine to coarse predominantly medium, sub angular to predominantly sub round, trace very coarse fractured quartz grains, trace lithic, poor sorting, trace forams, predominantly loose quartz grains, good inferred porosity, no fluorescence.
726	732	100	SANDSTONE: yellow orange brown Fe stain, translucent, clear in part, fine to coarse predominantly medium, sub angular to predominantly sub round, trace very coarse fractured quartz grains, trace lithic, poor sorting, trace forams, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.
732	738	100	SANDSTONE: yellow brown Fe stain, translucent, clear in part, fine to coarse predominantly medium, sub angular to predominantly sub round, trace very coarse fractured quartz grains, trace lithic, poor sorting, trace forams, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.
738	744	100	SANDSTONE: yellow orange brown Fe stain, translucent, clear in part, fine to coarse predominantly medium, sub angular to predominantly sub round, trace very coarse fractured quartz grains, trace lithic, poor sorting, trace forams, predominantly loose quartz grains, good inferred porosity, no fluorescence.

Depth From (m)	Depth To (m)	%	Lithology and Shows
744	750	100	SANDSTONE: orange yellow- moderate brown Fe stain, occasionally clear - translucent medium-coarse, occasional very coarse fractured quartz grains, moderate sorted, sub angular, weak sideritic cement in part, trace lithics, loose clean quartz grains, good inferred porosity, no fluorescence.
750	756	100	SANDSTONE: predominantly orange yellow- moderate brown, Fe stain, occasionally clear-transparent medium-coarse, occasional very coarse fractured quartz grains, moderate sorted, sub angular, trace lithics, loose clean quartz grains, good inferred porosity, no fluorescence.
756	762	100	SANDSTONE: predominantly orange yellow- moderate brown, Fe stain, occasionally clear-transparent medium-coarse, occasional very coarse fractured quartz grains, moderate sorted, sub angular, weak sideritic cement in part, trace lithics, loose clean quartz grains, good inferred porosity, no fluorescence.
762	768	100	SANDSTONE: orange yellow- moderate brown Fe stain, occasionally clear-transparent medium-coarse, occasional very coarse fractured quartz grains, moderate sorted, sub rounded, weak sideritic cement in part, trace lithics, loose clean quartz grains, good inferred porosity, no fluorescence.
768	774	100	SANDSTONE: orange yellow- moderate brown Fe stain, occasionally clear-transparent medium-coarse, occasional very coarse fractured quartz grains, moderate sorted, sub angular, weak sideritic cement in part, trace lithics, loose clean quartz grains, good inferred porosity, no fluorescence.
774	780	100	SANDSTONE: orange yellow- moderate brown Fe stain, occasionally clear-transparent medium-coarse, occasional very coarse fractured quartz grains, moderate sorted, sub angular, weak sideritic cement in part, minor lithics, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.
780	786	100	SANDSTONE: orange yellow- moderate brown, Fe stain, occasionally clear-transparent coarse grains, occasional very coarse fractured quartz grains, moderate sorted, sub angular, weak sideritic cement in part, minor lithics, loose clean quartz grains, good inferred porosity, no fluorescence.

Depth From (m)	Depth To (m)	%	Lithology and Shows
786	792	100	SANDSTONE: orange yellow to moderate brown Fe stained, common clear to translucent medium-coarse, occasional very coarse, moderate sorting, sub rounded, trace lithics, loose clean quartz grains, good inferred porosity, no fluorescence.
792	798	100	SANDSTONE: translucent quartz, occasional orange yellow to moderate brown Fe stain, fine-medium trace coarse grains, sub rounded, loose clean quartz grains, good inferred porosity, no fluorescence.
798	804	100	SANDSTONE: clear, translucent, common orange yellow to moderate brown Fe stain, predominantly medium, trace coarse grains, moderately well sorted, sub rounded, trace sideritic cement, rare to trace siliceous cement, rare nodular pyrite, loose clean quartz grains, good inferred porosity, no fluorescence.
804	810	100	SANDSTONE: clear to translucent, common orange yellow to moderate brown Fe stain, predominantly medium, trace coarse grains, moderately well sorted, angular to sub angular occasional sub rounded, trace sideritic cement, rare to trace siliceous cement, rare pyrite, loose clean quartz grains, good inferred porosity, no fluorescence.
810	816	100	SANDSTONE: clear, translucent, common orange yellow to moderate brown Fe stain, fine to coarse, predominantly fine to medium grains, fair sorting, sub rounded, loose clean quartz grains, good inferred porosity, no fluorescence.
816	822	100	SANDSTONE: clear, translucent, common orange yellow to moderate brown Fe stain, fine coarse predominantly fine to medium grains, trace lithics, well sorted, sub rounded, loose clean quartz grains, good inferred porosity, no fluorescence.
822	828	100	SANDSTONE: clear, translucent, trace orange yellow to moderate brown Fe stain, fine to medium, trace coarse grains, moderately sorted, sub round, trace very fine lithics, trace nodular pyrite, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.
828	834	100	SANDSTONE: clear, translucent, trace orange yellow to moderate brown Fe stain, fine to medium, trace coarse grains, moderately sorted, sub round, trace very fine lithics, trace nodular pyrite, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.

Depth From (m)	Depth To (m)	%	Lithology and Shows
834	840	100	SANDSTONE: clear, translucent, orange yellow, Fe stains, medium to coarse, occasionally very coarse grains, poor sorting, sub angular to sub rounded, trace nodular pyrite, loose clean quartz grain, good inferred porosity, no fluorescence.
840	846	100	SANDSTONE: clear, translucent, orange yellow, fine to medium grain, moderately sorted, sub rounded, rare lithics, loose clean quartz grain, good inferred porosity, no fluorescence.
846	852	100	SANDSTONE: clear, translucent, orange yellow, fine to medium grain, moderately sorted, sub rounded, rare lithics, loose clean quartz grain, good inferred porosity, no fluorescence.
852	858	100	SANDSTONE: clear, translucent, orange yellow, fine to medium grain, moderately sorted, sub rounded, rare lithics, loose clean quartz grain, good inferred porosity, no fluorescence.
858	864	100 trace	SANDSTONE: clear, translucent, rare orange yellow, fine to medium grain, moderately sorted, sub rounded, trace pyrite, loose clean quartz grain, good inferred porosity, no fluorescence. CLAYSTONE: greyish black, calcareous, soft to firm, sub blocky.
864	870	100	SANDSTONE: clear, translucent, fine to medium, moderately well to well sorted, sub rounded to sub angular in part, weak locally siliceous cement, rare nodular pyrite, loose and clean, good inferred porosity, no fluorescence.
870	876	90 10	SANDSTONE: clear, translucent, fine to medium, moderately well to well sorted, sub rounded to sub angular in part, weak locally siliceous cement, rare nodular pyrite, loose and clean, good inferred porosity, no fluorescence. CLAYSTONE: brownish black to dusky brown, slightly arenaceous, common carbonaceous, common disseminated pyrite, moderately hard, sub blocky to blocky.
876	882	90 10	SANDSTONE: clear, translucent, fine to medium, moderately well to well sorted, sub rounded to sub angular in part, weak locally siliceous cement, rare nodular pyrite, loose and clean, good inferred porosity, no fluorescence. CLAYSTONE: brownish black to dusky brown, slightly arenaceous, common carbonaceous, rare disseminated pyrite, moderately hard, sub blocky to blocky.

Depth From (m)	Depth To (m)	%	Lithology and Shows
882	888	100	SANDSTONE: orange yellow to moderate brown Fe stained, clear, translucent, medium-coarse, occasional very coarse, moderate sorting, sub rounded, loose clean quartz grains, good inferred porosity, no fluorescence.
888	894	100	SANDSTONE: clear, translucent, orange yellow to moderate brown Fe stained, medium-coarse, occasional very coarse, moderate sorting, sub rounded, trace pyrite, loose clean quartz grains, good inferred porosity, no fluorescence.
894	900	90	SANDSTONE: clear, translucent, orange yellow to moderate brown Fe stained, medium-coarse, occasional very coarse, moderate sorting, sub rounded, trace pyrite, loose clean quartz grains, good inferred porosity, no fluorescence.
		10	CLAYSTONE: brownish black, brownish grey, slightly calcareous, trace carbonaceous specks, rare disseminated pyrite, soft to firm, sub-blocky.
900	906	90	SANDSTONE: clear, translucent, occasional yellow orange, fine to coarse, poor sorting, sub rounded, siliceous cement, common micro carbonaceous specks, rare pyrite, loose clean quartz, good inferred porosity, no fluorescence.
		10	CLAYSTONE: brownish black, brownish grey, slightly calcareous, rare carbonaceous specks, soft to firm, sub-blocky.
906	912	100	SANDSTONE: clear, transparent, fine, moderately to well sorted, sub rounded, rare carbonaceous specks, loose clean quartz, good inferred porosity, no fluorescence.
912	918	100	SANDSTONE: clear, transparent, fine, moderately to well sorted, sub rounded, trace carbonaceous specks, predominantly loose clean quartz, good inferred porosity, no fluorescence.
918	924	100	SANDSTONE: clear, transparent, fine, moderately to well sorted, sub rounded, rare carbonaceous specks, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.
924	930	100	SANDSTONE: clear, transparent, fine to medium grained, moderately sorted, sub rounded, trace to common carbonaceous specks, rare pyrite, predominantly loose clean quartz, good inferred porosity, no fluorescence.

Depth From (m)	Depth To (m)	%	Lithology and Shows
930	936	100	SANDSTONE: clear, transparent, fine to medium, moderately sorted, sub rounded, trace to common carbonaceous specks, rare pyrite, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.
936	942	100	SANDSTONE: clear, transparent, fine to medium grained, moderately sorted, sub rounded, trace to minor carbonaceous specks, rare pyrite, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.
942	948	100	SANDSTONE: clear, transparent, fine to medium, moderately sorted, sub rounded, trace carbonaceous specks, rare pyrite, loose clean quartz, good inferred porosity, no fluorescence.
948	954	100	SANDSTONE: clear-translucent, fine to very fine, well sorted, weak siliceous cement, trace lithics, trace fossil fragments, loose, good inferred porosity, no fluorescence.
954	960	100	SANDSTONE: clear, transparent, fine to medium, moderately sorted, sub rounded, trace to minor carbonaceous specks, rare pyrite, predominantly loose clean quartz, good inferred porosity, no fluorescence.
960	966	100	SANDSTONE: clear, translucent medium to coarse, sub-rounded to angular, occasionally very coarse rounded grains, poorly sorted, weak siliceous cement, rare glauconite, trace nodular pyrite, loose, clean, good inferred porosity, no fluorescence.
966	972	100	SANDSTONE: clear, translucent, medium to coarse, sub-rounded to angular, occasionally very coarse rounded grains, poorly sorted, weak siliceous cement, rare glauconite, trace nodular pyrite, loose, clean, good inferred porosity, no fluorescence.
972	978	100	SANDSTONE: clear, translucent, medium to coarse, sub-rounded to angular, occasionally very coarse rounded grains, poorly sorted, weak siliceous cement, rare glauconite inclusions, trace nodular pyrite, loose, clean, good inferred porosity, no fluorescence.
978	984	100	SANDSTONE: clear, translucent, fine to medium, sub-rounded to sub angular, moderately well sorted, weak siliceous cement, trace carbonaceous detritus, trace nodular pyrite, loose, clean, good inferred porosity, no fluorescence.

Depth From (m)	Depth To (m)	%	Lithology and Shows
984	990	100	SANDSTONE: clear-translucent, fine to medium, sub-rounded to sub-angular, moderately well sorted, weak siliceous cement, trace carbonaceous detritus, trace nodular pyrite, loose, clean, good inferred porosity, no fluorescence.
990	996	100	SANDSTONE: clear, translucent, fine to medium, sub-rounded to sub-angular, moderately well sorted, weak siliceous cement, trace carbonaceous detritus, trace nodular pyrite, loose, clean, good inferred porosity, no fluorescence.
996	1002	100	SANDSTONE: clear, translucent, fine to medium, sub-rounded to sub-angular, moderately well sorted, weak siliceous cement, trace carbonaceous detritus, trace nodular pyrite, loose, clean, good inferred porosity, no fluorescence.
1002	1008	100	SANDSTONE: clear, translucent, pale grey, fine to coarse occasionally very coarse, sub rounded to angular, poorly sorted, weak siliceous cement, trace nodular pyrite, loose, clean, good inferred porosity, no fluorescence.
1008	1014	20	SANDSTONE: clear, translucent, light pale grey, fine to coarse occasionally very coarse, sub-rounded to angular, poorly sorted, weak siliceous cement, trace nodular pyrite, loose, clean, good inferred porosity, no fluorescence.
		80	CLAYSTONE: medium to dark brown, common carbonaceous specks and laminations, silty in part, firm to hard, sub-blocky to amorphous.
1014	1020	30	SANDSTONE: clear, translucent, pale grey, fine to coarse occasionally very coarse, sub rounded to angular, poorly sorted, weak siliceous cement, trace nodular pyrite, loose, clean, good inferred porosity, no fluorescence.
		70	CLAYSTONE: medium to dark brown, common carbonaceous specks and laminations, silty in part, sub-blocky to amorphous, firm to hard.
1020	1026	10	SANDSTONE: clear, translucent, light grey, fine to coarse occasionally very coarse, sub rounded to angular, poorly sorted, weak siliceous cement, trace nodular pyrite, loose, clean, good inferred porosity, no fluorescence.
		90	CLAYSTONE: brownish black to dusky brown, trace carbonaceous specks and laminations, trace disseminated pyrite, silty in part, sub blocky to amorphous, sticky and dispersive.

Depth From (m)	Depth To (m)	%	Lithology and Shows
1026	1032	10	SANDSTONE: clear, translucent, light grey, fine to coarse occasionally very coarse, sub rounded to angular, poorly sorted, weak siliceous cement, trace nodular pyrite, loose, clean, good inferred porosity, no fluorescence.
		90	CLAYSTONE: brownish black to dusky brown, trace carbonaceous specks and laminations, trace disseminated pyrite, silty in part, sub-blocky to amorphous, sticky and dispersive.
1032	1038	10	SANDSTONE: clear, translucent, light grey, fine- coarse occasionally very coarse, sub-rounded-angular, poorly sorted, weak siliceous cement, trace nodular pyrite, loose, clean, good inferred porosity, no fluorescence.
		90	CLAYSTONE: brownish black to dusky brown, trace carbonaceous specks and laminations, trace disseminated pyrite, silty in part, sub-blocky to amorphous, sticky and dispersive.
1038	1044	100	CLAYSTONE: brownish black to dusky brown, trace carbonaceous specks and laminations, trace disseminated pyrite, silty in part, sub blocky to amorphous, sticky and dispersive.
1044	1050	100	CLAYSTONE: brownish black to dusky brown, trace carbonaceous specks and laminations, trace disseminated pyrite, silty in part, sub blocky to amorphous, sticky and dispersive.
1050	1056	100	CLAYSTONE: brownish black to dusky brown, trace carbonaceous specks and laminations, trace disseminated pyrite, silty in part, sub blocky to amorphous, sticky, dispersive.
1056	1062	10	SANDSTONE: clear, translucent with rare Fe stain, fine to medium occasionally coarse, moderately sorted, sub rounded to sub angular, weak siliceous cement, trace nodular pyrite, rare glauconite, loose, clean, good inferred porosity, no fluorescence.
		90	CLAYSTONE: brownish black to dusky brown, trace carbonaceous specks and laminations, trace disseminated pyrite, silty in part, sub-blocky to amorphous, sticky and dispersive.
1062	1068	100 trace	CLAYSTONE: brownish black to dusky brown, trace carbonaceous specks and laminations, trace disseminated pyrite, silty in part, sub blocky to amorphous, sticky and dispersive. SANDSTONE: clear, translucent, fine to medium occasionally coarse, moderately sorted, sub rounded to sub angular, weak siliceous cement, trace nodular pyrite, rare glauconite, loose, clean, good inferred porosity, no fluorescence.

Depth From (m)	Depth To (m)	%	Lithology and Shows
1068	1074	100	CLAYSTONE: brownish black to dusky brown, trace carbonaceous specks and laminations, trace disseminated pyrite, silty in part, sub blocky to amorphous, sticky and dispersive.
		trace	SANDSTONE: clear, translucent, fine to medium occasionally coarse, moderately sorted, sub rounded to sub angular, weak siliceous cement, trace nodular pyrite, rare glauconite, loose, clean, good inferred porosity, no fluorescence.
1074	1080	100	CLAYSTONE: brownish black to dusky brown, trace carbonaceous specks and laminations, trace nodular and disseminated pyrite, silty in part, sub blocky to amorphous, sticky and dispersive.
1080	1086	100	CLAYSTONE: brownish black to dusky brown, trace carbonaceous specks and laminations, rare nodular and disseminated pyrite, silty in part, sub blocky to amorphous, sticky and dispersive.
1086	1092	80	CLAYSTONE: brownish black to dusky brown, trace laminations, trace nodular and disseminated pyrite, silty in part, sub blocky to amorphous, sticky and dispersive.
		20	SANDSTONE: clear, translucent, fine to medium, sub rounded to sub angular, moderately sorted, weak siliceous cement, loose quartz grains, fair inferred porosity, no fluorescence.
1092	1098	85	CLAYSTONE: brownish black to dusky brown, silty in part grading to argillaceous siltstone, trace carbonaceous specks, minor nodular and disseminated pyrite, trace glauconite, sub-blocky to amorphous, soft to dispersive.
		15	SANDSTONE: clear, translucent, white, fine to coarse predominantly medium grained, poor to fair sorting, sub rounded to sub angular, trace weak siliceous cement, trace silty matrix, trace nodular pyrite, predominantly loose quartz grains, fair inferred porosity, no fluorescence.
1098	1104	80	SANDSTONE: clear, translucent, white, fine to coarse predominantly medium, poor to moderate sorting, sub rounded to sub angular, trace weak siliceous cement, trace silty matrix, trace nodular pyrite, predominantly loose quartz grains, fair inferred porosity, no fluorescence.
		20	CLAYSTONE: brownish black to dusky brown, silty in part grading to argillaceous siltstone, trace carbonaceous specks, minor nodular and disseminated pyrite, trace glauconite, sub-blocky to amorphous, soft to dispersive.

Depth From (m)	Depth To (m)	%	Lithology and Shows
1104	1110	90	SANDSTONE: clear, translucent, white, fine to coarse predominantly medium to coarse, poor to fair sorting, sub rounded to sub angular, trace weak siliceous cement, trace silty matrix, trace glauconite, trace nodular pyrite, predominantly loose quartz grains, fair inferred porosity, no fluorescence.
		10	SILTSTONE: brownish black to dusky brown, silty in part grading to argillaceous siltstone, trace carbonaceous specks, trace glauconite, sub blocky to amorphous, soft to dispersive.
1110	1116	100	SANDSTONE: clear, translucent, white, medium to very coarse, predominantly medium to coarse, poor to fair sorting, sub rounded to sub angular, rare siliceous cement, rare glauconite, rare pyrite, predominantly loose clean quartz grains, no fluorescence.
		trace	SILTSTONE: as above
1116	1122	100	SANDSTONE: clear, translucent, white, predominantly medium to occasionally coarse, poor to fair sorting, sub rounded to sub angular, rare siliceous cement, rare pyrite, predominantly loose clean quartz grains, no fluorescence.
1128	1128	100	SANDSTONE: clear, translucent, white, fine to medium occasionally coarse grained, poor to fair sorting, sub rounded to sub angular, rare siliceous cement, rare pyrite, predominantly loose clean quartz grains, no fluorescence.
1128	1134	90	SANDSTONE: clear, translucent, white, fine to coarse grains, predominantly fine to medium, fair sorting, sub rounded to sub angular, rare siliceous cement, rare pyrite, predominantly loose clean quartz grains, no fluorescence.
		10	SILTSTONE: dark grey to olive black, argillaceous, grading to silty claystone, trace nodular and disseminated pyrite, trace glauconite, trace lithics, soft to dispersive, sub blocky.
1134	1140	100	SANDSTONE: clear, translucent, white, fine to coarse predominantly medium, moderate sorting, sub rounded to sub angular, rare siliceous cement, trace to rare glauconite, rare pyrite, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.
		trace	SILTSTONE: dark greenish grey, olive brown, argillaceous, grading to silty CLAYSTONE in part, trace nodular pyrite, trace very fine glauconite, trace fine grained lithics, soft to firm, dispersive in part, sub blocky.

Depth From (m)	Depth To (m)	%	Lithology and Shows
1140	1146	100	SANDSTONE: as above, fine to coarse predominantly medium grained.
		trace	SILTSTONE: as above
1146	1152	100	SANDSTONE: clear, translucent, white, very fine to predominantly medium to coarse, fair sorting, sub-angular to sub-rounded, trace siliceous cement, rare pyrite, minor glauconite, predominantly loose clean quartz grains, fair to good inferred porosity, no fluorescence.
		trace	SILTSTONE: as above
1152	1158	60	SANDSTONE: clear, translucent, white, very fine to coarse, predominantly medium, fair to moderate sorting, sub angular to sub rounded, trace siliceous cement, rare pyrite, trace glauconite, predominantly loose clean quartz grains, fair to good inferred porosity, no fluorescence.
		40	SILTSTONE: medium to dark greenish grey, argillaceous grading to silty claystone, trace fine grained glauconite trace, nodular pyrite, firm, dispersive in part, sub blocky.
1158	1160	60	SANDSTONE: as above
		40	SILTSTONE: as above
1158	1164	60	SANDSTONE: clear, translucent, yellow grey in part, fine to coarse, poor sorting, sub rounded, weak siliceous cement, trace argillaceous matrix, trace nodular pyrite, predominantly loose, trace hard aggregates, poor to fair inferred porosity, no fluorescence.
		40	SILTSTONE: olive grey to olive brown, argillaceous, trace disseminated pyrite, rare micro carbonaceous specks, soft to predominantly firm, amorphous to sub blocky.
1164	1170	60	SANDSTONE: clear, translucent, yellow grey in part, fine to coarse, poor sorting, sub angular to angular, trace moderately strong siliceous cement, trace argillaceous matrix, rare nodular pyrite, predominantly loose, trace hard aggregates, poor inferred & visual porosity, no fluorescence.
		40	SILTSTONE: olive grey to olive brown, argillaceous, trace fine grained pyrite, rare micro carbonaceous specks, firm to occasionally soft, amorphous to sub blocky.

Depth From (m)	Depth To (m)	%	Lithology and Shows
1170	1176	60	SANDSTONE: clear, translucent, rare yellow grey in part, fine to coarse, poor sorting, sub round, weak siliceous cement, trace argillaceous matrix, trace nodular pyrite, predominantly loose, trace hard aggregates, poor inferred & visual porosity, no fluorescence.
		40	SILTSTONE: olive grey to olive brown, argillaceous, trace to common disseminated pyrite, rare carbonaceous micro specks, firm to soft in part, amorphous to sub blocky.
1176	1182	40	SANDSTONE: clear, translucent, grey brown, fine to coarse, predominantly fine to medium, moderately sorted, sub round to sub angular, minor sub rounded, weak siliceous cement, minor brown grey argillaceous matrix, trace pyrite, trace lithics, loose, poor to fair inferred porosity, no fluorescence.
		60	SILTSTONE: olive grey to olive brown, argillaceous, trace to common disseminated pyrite, rare carbonaceous micro specks, firm to soft in part, amorphous to sub blocky.
1182	1188	70	SANDSTONE: clear, translucent, white, fine to medium trace coarse grains, moderately sorted, subangular to sub rounded, weak siliceous cement, trace pyrite, trace glauconite, trace lithics, trace moderately friable aggregates, predominantly loose, poor to fair inferred porosity, no fluorescence.
		30	SILTSTONE: olive grey, olive brown, argillaceous, trace disseminated pyrite, rare micro carbonaceous specks, firm to soft, amorphous to sub blocky.
1188	1194	60	SANDSTONE: clear, translucent, white, fine to coarse, predominantly fine to medium, moderately sorted, sub angular to sub rounded, weak siliceous cement, rare brown grey argillaceous matrix, rare nodular pyrite, trace lithics, loose, trace friable aggregates, fair inferred porosity, no fluorescence.
		40	SILTSTONE: olive grey to olive brown, predominantly arenaceous, occasionally argillaceous, minor glauconite, trace carbonaceous specks, soft, amorphous to sub blocky.
1194	1200	40	SANDSTONE: clear, translucent, white to light grey, fine to medium, trace coarse, fair sorting, sub angular to sub rounded, weak siliceous cement, trace to rare nodular pyrite, trace lithics, trace fine grained glauconite, predominantly loose, poor to fair inferred porosity, no fluorescence.
		60	SILTSTONE: olive black, olive brown, argillaceous, trace disseminated pyrite, soft, dispersive, sub blocky to amorphous.

Depth From (m)	Depth To (m)	%	Lithology and Shows
1200	1206	30	SANDSTONE: clear, translucent, white to light grey, fine to medium, occasionally coarse, fair sorting, sub angular to sub rounded, weak siliceous cement, trace argillaceous matrix, trace to rare nodular pyrite, rare carbonaceous specks, trace lithics, trace fine grained glauconite, predominantly loose, poor to fair inferred porosity, no fluorescence.
		70	SILTSTONE: olive black, olive brown, argillaceous, trace disseminated pyrite, soft, dispersive, sub blocky to amorphous.
1206	1212	60	SANDSTONE: as above, fine to medium grained.
		40	SILTSTONE: as above
1212	1218	70	SANDSTONE: as above
		30	SILTSTONE: olive black, olive brown, argillaceous, soft to firm, dispersive, sub-blocky to amorphous.
1218	1224	10	SANDSTONE: clear, translucent, white to light grey, fine to medium, fair sorting, sub angular to sub rounded, weak siliceous cement, trace argillaceous matrix, trace nodular pyrite, trace lithics, trace fine grained glauconite, predominantly loose, poor to fair inferred porosity, no fluorescence.
		90	SILTSTONE: olive black, olive brown, trace nodular pyrite, rare glauconite, very soft to firm, sub-blocky to amorphous.
1224	1230	20	SANDSTONE: as above with rare coarse grained quartz.
		80	SILTSTONE: olive black, olive brown, arenaceous, trace nodular pyrite, trace very fine glauconite, very soft to firm, friable in part, sub-blocky to amorphous.
1230	1236	90	SILTSTONE: olive black, olive brown, trace olive green, arenaceous, trace disseminated pyrite, very soft to firm, friable in part, sub blocky to amorphous.
		10	SANDSTONE: clear, translucent, white to light grey, fine to medium, fair sorting, sub angular to sub rounded, weak siliceous cement, trace argillaceous matrix, predominantly loose quartz grains, poor to fair inferred porosity, no fluorescence.
1236	1242	90	SILTSTONE: greyish black to dark greenish brown, argillaceous, minor modular pyrite, dispersive, soft to firm, amorphous.
		10	SANDSTONE: clear, translucent, white to light grey, very fine to medium, poor sorting, sub angular to sub rounded, trace siliceous cement, rare argillaceous matrix, trace lithics, predominantly loose quartz grains, poor to fair inferred porosity, no fluorescence.

Depth From (m)	Depth To (m)	%	Lithology and Shows
1242	1248	70	SILTSTONE: greyish black to dark greenish brown, argillaceous, trace nodular pyrite, dispersive, soft to firm, amorphous.
		30	SANDSTONE: clear, translucent, white to light grey, very fine to medium, poor sorting, sub angular to sub rounded, trace siliceous cement, rare argillaceous matrix, trace lithics, predominantly loose quartz grains, poor to fair inferred porosity, no fluorescence.
1248	1254	60	SILTSTONE: as above
		40	SANDSTONE: as above
1254	1260	60	SILTSTONE: as above
		40	SANDSTONE: as above
1260	1266	70	SANDSTONE: clear, translucent, white to light grey, very fine to medium, poor to fair sorting, sub-angular to sub-rounded, rare argillaceous matrix, trace lithics, trace nodular pyrite, predominantly loose quartz grains, fair inferred porosity, no fluorescence.
		30	SILTSTONE: greyish black to dark greenish brown, argillaceous, trace nodular pyrite, dispersive, soft to firm, amorphous.
1266	1272	10	SANDSTONE: as above, poor to fair inferred porosity.
		90	SILTSTONE: dark grey to dark green, mottled in part, trace nodular pyrite, trace carbon specks, trace lithics, soft to dispersive, amorphous.
1272	1278	20	SANDSTONE: clear, translucent, white to light grey, very fine to medium, poor to fair sorting, sub angular to sub rounded, rare argillaceous matrix, trace kaolinite, trace lithics, trace nodular pyrite, predominantly loose quartz grain, fair inferred porosity, no fluorescence.
		80	SILTSTONE: dark grey to dark green, mottled in part, trace nodular pyrite, trace carbon specks, trace lithics, soft to dispersive, amorphous.
1278	1284	30	SANDSTONE: as above
		70	SILTSTONE: as above
1284	1290	80	SILTSTONE: as above
		20	SANDSTONE: as above, rare angular / shardy quartz fragments.

Depth From (m)	Depth To (m)	%	Lithology and Shows
1290	1296	70	SILTSTONE: dark grey to dark green, mottled in part, arenaceous, trace nodular pyrite, trace carbon specks, trace lithics, soft to dispersive, amorphous.
		30	SANDSTONE: as above
1296	1302	70	SILTSTONE: as above
		30	SANDSTONE: as above
1302	1308	90	SILTSTONE: brownish grey to dark grey, arenaceous, rare to minor disseminated pyrite, soft to dispersive, amorphous.
		10	SANDSTONE: clear, translucent, white to light grey, very fine to medium quartz grains, fair sorting, sub angular to sub rounded, rare angular, weak siliceous cement, trace argillaceous matrix, rare kaolinitic matrix, rare nodular pyrite, predominantly loose quartz grains, poor to fair inferred porosity, no fluorescence.
1308	1314	100 trace	SILTSTONE: as above, rare disseminated pyrite. SANDSTONE: as above
1314	1320	100 trace	SILTSTONE: as above SANDSTONE: as above
1320	1326	90	SILTSTONE: brownish grey to dark grey, arenaceous, rare disseminated pyrite, soft to dispersive, amorphous.
		10	SANDSTONE: clear, translucent, white to light grey, very fine to medium grained, fair sorting, sub angular to sub rounded, weak siliceous cement, trace argillaceous matrix, rare nodular pyrite, predominantly loose quartz grains, poor to fair inferred porosity, no fluorescence.
1326	1332	90	SILTSTONE: dark olive grey to medium greenish grey, arenaceous, minor glauconite specks, trace carbonaceous specks, trace nodular pyrite, firm to moderately hard, sub blocky.
		10	SANDSTONE: clear, translucent, white to light grey, very fine to medium grained, fair sorting, sub-angular to sub-rounded, weak siliceous cement, trace argillaceous matrix, rare nodular pyrite, predominantly loose quartz grains, poor to fair inferred porosity, no fluorescence.
1332	1338	90	SILTSTONE: dark olive grey to medium greenish grey, arenaceous, minor glauconite, trace carbonaceous specks, trace nodular pyrite, firm to moderately hard, sub blocky.

Depth From (m)	Depth To (m)	%	Lithology and Shows
		10	SANDSTONE: clear, translucent, white to light grey, very fine to medium, fair sorting, sub-angular to sub-rounded, weak siliceous cement, trace argillaceous matrix, rare kaolinitic matrix, rare nodular pyrite, loose quartz grains, poor to fair inferred porosity, no fluorescence.
1338	1344	90	SILTSTONE: dark olive grey to medium greenish grey, arenaceous, minor glauconite, trace carbonaceous specks, trace nodular pyrite, firm to moderately hard, sub blocky.
		10	SANDSTONE: clear, translucent, white to light grey, very fine to medium quartz grains, fair sorting, sub-angular to sub-rounded, weak siliceous cement, argillaceous matrix, rare nodular pyrite, predominantly loose quartz grains, poor to fair inferred porosity, no fluorescence.
1344	1350	90	SILTSTONE: dark olive grey to medium greenish grey, arenaceous, minor glauconite specks, trace carbonaceous specks, trace nodular pyrite, firm to moderately hard, sub blocky.
		10	SANDSTONE: clear, translucent, white to light grey, very fine to medium quartz grains, fair sorting, sub-angular to sub-rounded, weak siliceous cement, trace argillaceous matrix, rare nodular pyrite, predominantly loose quartz grains, poor to fair inferred porosity, no fluorescence.
1350	1356	90	SILTSTONE: dark olive grey to medium greenish grey, arenaceous, minor to common glauconite specks, trace carbonaceous specks, trace nodular pyrite, firm to moderately hard, sub blocky.
		10	SANDSTONE: clear, translucent, white to light grey, very fine to medium, fair sorting, sub angular to sub rounded, rare angular, weak siliceous cement, trace argillaceous matrix, rare nodular pyrite, predominantly loose quartz grains, poor to fair inferred porosity, no fluorescence.
1356	1362	90	SILTSTONE: dark olive grey to medium greenish grey, arenaceous, minor glauconite, trace carbonaceous specks, trace nodular pyrite, firm to moderately hard, sub blocky.
		10	SANDSTONE: clear, translucent, white to light grey, very fine to medium quartz grains, fair sorting, sub-angular to sub-rounded, rare angular, weak siliceous cement, argillaceous matrix, rare kaolinitic matrix, rare nodular pyrite, loose quartz grains, poor to fair inferred porosity, no fluorescence.

Depth From (m)	Depth To (m)	%	Lithology and Shows
1362	1368	90	SILTSTONE: dark olive grey to medium greenish grey, arenaceous, minor glauconite, trace carbonaceous specks, trace nodular pyrite, firm to moderately hard, sub blocky.
		10	SANDSTONE: clear, translucent, white to light grey, very fine to medium, fair sorting, sub angular to sub rounded, rare angular, weak siliceous cement, trace argillaceous matrix, rare nodular pyrite, predominantly loose quartz grains, poor to fair inferred porosity, no fluorescence.
1368	1374	90	SILTSTONE: dark olive grey to medium greenish grey, arenaceous, minor to common glauconite specks, trace carbonaceous specks, trace nodular pyrite, firm to moderately hard, sub blocky.
		10	SANDSTONE: clear, translucent to light grey, very fine to medium quartz grains, fair sorting, sub angular to sub rounded, rare weak siliceous cement, rare argillaceous matrix, rare nodular pyrite, predominantly loose quartz grains, poor to fair inferred porosity, no fluorescence.
1374	1380	90	SILTSTONE: dark olive grey to medium greenish grey, arenaceous, minor glauconite, trace carbonaceous specks, trace nodular pyrite, firm to moderately hard, sub blocky.
1380	1386	10	SANDSTONE: clear, translucent, white to light grey, very fine to medium, fair sorting, sub angular to sub rounded, rare weak siliceous cement, trace argillaceous matrix, rare nodular pyrite, predominantly loose quartz grains, poor inferred porosity, no fluorescence.
1386	1392	90	SILTSTONE: moderately brown to light brown, argillaceous, trace carbonaceous specks, trace lithics, trace glauconite specks, trace nodular & disseminated pyrite, rare coarse quartz grains, soft to firm, sub blocky to amorphous.
		10	SANDSTONE: clear, translucent, very fine to medium occasionally very coarse, sub rounded to sub angular, poorly sorted, weak siliceous cement, rare silty matrix, minor glauconite, loose in part, poor inferred porosity, no fluorescence.
1392	1398	100	SILTSTONE: moderately brown to light brown, predominantly argillaceous, trace carbonaceous specks, trace lithics, trace glauconite specks & inclusions, trace nodular & disseminated pyrite, rare coarse quartz grains, soft to firm, sub blocky to amorphous.
1398	1404	100	SILTSTONE: as above

Depth From (m)	Depth To (m)	%	Lithology and Shows
1404	1410		SILTSTONE: moderately brown to light brown, argillaceous, very finely arenaceous in part, trace micro carbonaceous specks, rare glauconite, trace nodular and disseminated pyrite, soft to firm, rare moderately hard, sub blocky to amorphous.
1410	1416	100	SILTSTONE: as above, olive brown.
1416	1422	100	SILTSTONE: as above, finely arenaceous with thin sandstone laminae.
1422	1428	100	SILTSTONE: as above, trace forams / micro corals (?).
1428	1434	100	SILTSTONE: as above, medium olive brown, argillaceous grading to silty claystone, trace micro carbonaceous specks, rare fine grained glauconite, trace nodular pyrite, firm, rare moderately hard, sub blocky to dispersive.
1434	1440	100	SILTSTONE: as above, olive brown.
1440	1446	20	SANDSTONE: clear, translucent, white, fine to medium, fair to moderate sorting, sub angular to predominantly sub-rounded, minor fine grain glauconite, trace nodular pyrite, predominantly loose, fair to good inferred porosity, no fluorescence.
		80	SILTSTONE: moderately brown to light brown, argillaceous, very fine arenaceous in part, trace micro carbonaceous specks, trace disseminated pyrite, soft to firm, rare moderately hard, sub blocky to amorphous.
1446	1452	10	SANDSTONE: clear, translucent, white, fine to medium quartz grains, fair to moderate sorting, sub angular to predominantly sub-rounded, trace fine grained glauconite, trace nodular pyrite, loose, fair to good inferred porosity, no fluorescence.
		90	SILTSTONE: moderately brown to light brown, predominantly argillaceous, very fine arenaceous in part, trace micro carbonaceous specks, trace disseminated pyrite, soft to firm, rare moderately hard, sub blocky to amorphous.
1452	1458	90	SILTSTONE: as above
		10	SANDSTONE: clear, translucent, white, fine to medium, fair to moderate sorting, sub-angular to predominantly sub-rounded, trace to rare fine grained glauconite, trace nodular pyrite, trace siliceous cement, predominantly loose, fair to good inferred porosity, no fluorescence.

Depth From (m)	Depth To (m)	%	Lithology and Shows
1458	1464	80 20	SILTSTONE: as above SANDSTONE: as above
1464	1470	80 20	SILTSTONE: as above SANDSTONE: as above
1470	1476	70 30	SILTSTONE: light brown to medium grey, argillaceous, very fine arenaceous in part, trace micro carbonaceous specks, trace disseminated pyrite, soft to firm, rare moderately hard, sub-blocky to amorphous. SANDSTONE: as above.
1476	1482	70 30	SILTSTONE: as above, light brown to medium grey, argillaceous, very fine arenaceous in part, trace micro carbonaceous specks, trace disseminated pyrite, soft to firm, rare moderately hard, sub-blocky to amorphous. SANDSTONE: as above.
1482	1488	90 10	SILTSTONE: moderately brown to light brown, argillaceous, very fine arenaceous in part, trace micro carbonaceous specks, trace disseminated pyrite, soft to firm, rare moderately hard, sub-blocky to amorphous. SANDSTONE: as above.
1488	1494	100 trace	SILTSTONE: as above. SANDSTONE: as above.
1494	1500	90 10	SILTSTONE: as above. SANDSTONE: as above, clear, translucent, white, fine to medium, fair to moderate sorting, sub-angular to predominantly sub-rounded, trace to rare fine grained glauconite, trace nodular pyrite, trace siliceous cement, predominantly loose, fair to good inferred porosity, no fluorescence.
1500	1506	90 10	SILTSTONE: as above. SANDSTONE: as above.

Depth From (m)	Depth To (m)	%	Lithology and Shows
1506	1512	100	SILTSTONE: moderately brown to light brown, minor dark olive green, argillaceous, very fine arenaceous in part, trace micro carbonaceous specks, trace disseminated pyrite, very soft to firm, rare moderately hard, sub blocky to amorphous
		trace	SANDSTONE: as above
1512	1518	80	SILTSTONE: brown to light brown, minor dark olive green, argillaceous, trace micro mica, soft to firm trace moderately hard, sub blocky to dispersive, trace sub fissile.
		20	SANDSTONE: clear, translucent, white light grey, fine to medium grain, moderate sorting, sub-angular to sub-rounded, moderately strong siliceous cement, trace nodular pyrite, rare fine grain glauconite, predominantly loose quartz, fair to good inferred porosity, no fluorescence.
1518	1524	70	SILTSTONE: as above.
		30	SANDSTONE: as above.
1524	1530	80	SILTSTONE: medium brown to light brown, minor dark olive green, finely arenaceous in part, trace micro mica, soft to firm trace moderately hard, sub-blocky to dispersive, trace sub fissile.
		20	SANDSTONE: clear, translucent, white light grey, very fine to medium grain, rare very coarse, moderate sorting, sub-angular to sub-rounded, weak to moderately strong siliceous cement, trace light-grey silty matrix, trace nodular pyrite, rare fine grain glauconite, predominantly loose quartz, fair inferred porosity, no fluorescence.
1530	1536	80	SILTSTONE: as above.
		20	SANDSTONE: as above.
1536	1542	90	SILTSTONE: as above.
		10	SANDSTONE: clear, translucent, white light grey, very fine to medium grain, moderate to fair sorting, sub-angular to sub-rounded, moderately strong siliceous cement, trace nodular pyrite, rare fine grain glauconite, predominantly loose quartz, fair inferred porosity, no fluorescence.
1542	1548	90	SILTSTONE: as above.
		10	SANDSTONE: as above.
1548	1554	100	SILTSTONE: as above, olive brown, medium brownish grey, argillaceous grading silty CLAYSTONE, minor fine grained glauconite, firm to occasionally moderately hard, sub blocky

Depth From (m)	Depth To (m)	%	Lithology and Shows
		trace	SANDSTONE: as above.
1554	1560	100	SILTSTONE: as above.
1560	1566	100	SILTSTONE: olive brown, medium brownish grey, argillaceous grading silty CLAYSTONE, minor fine grained glauconite, firm to occasionally moderately hard, sub blocky.
		trace	SANDSTONE: as above.
1566	1572	90 10	SILTSTONE: as above. SANDSTONE: clear, translucent, white light grey, very fine to fine, moderately well sorted, sub-angular to sub-rounded, moderate strong siliceous cement, trace nodular pyrite, minor fine-grained glauconite, predominantly loose quartz grains, fair inferred porosity, no fluorescence.
1572	1578	100 trace	SILTSTONE: as above. SANDSTONE: as above.
1578	1584	100	SILTSTONE: as above, olive brown, medium brownish grey, argillaceous grading silty CLAYSTONE, minor fine grained glauconite, firm to occasionally moderately hard, sub blocky.
1584	1590	100	SILTSTONE: as above, olive brown, medium brownish grey, argillaceous grading silty CLAYSTONE, minor fine grained glauconite, firm to occasionally moderately hard, sub blocky.
1590	1596	100	SILTSTONE: as above.
1596	1602	100	SILTSTONE: as above, olive brown, medium brownish grey, argillaceous grading silty CLAYSTONE, minor fine grained glauconite, firm to occasionally moderately hard, sub blocky.
		trace	SANDSTONE: generally as above.
1602	1608	100 trace	SILTSTONE: as above. SANDSTONE: as above.
1608	1614	90	SILTSTONE: olive brown, medium brownish grey, occasionally greenish grey, argillaceous grading to silty CLAYSTONE in part, minor fine-grained glauconite, firm to occasionally moderately hard, sub blocky.

Depth From (m)	Depth To (m)	%	Lithology and Shows
		10	SANDSTONE: light brownish grey, light brown, translucent to clear in part, fine grained trace medium to coarse grained, moderately well sorted, sub angular to sub rounded, moderately strong siliceous cement, minor light grey silty matrix, rare fine grained glauconite, moderately hard fine grained aggregates, very poor inferred porosity, no fluorescence.
1614	1620	90	SILTSTONE: olive brown, medium brownish grey, occasionally greenish grey, argillaceous grading to silty CLAYSTONE, minor fine grained glauconite, firm to occasionally moderately hard, sub blocky.
		10	SANDSTONE: light brownish grey, light brown, translucent, clear in part, fine grained, trace medium to coarse grained, moderately well sorted, sub angular to sub rounded, moderately strong siliceous cement, minor light grey silty matrix, rare fine grained glauconite, moderately hard fine grained aggregates, very poor inferred porosity, no fluorescence.
1620	1626	50	SANDSTONE: translucent, clear, white, fine to medium grained, trace coarse, sub angular to predominantly sub rounded, weak siliceous cement in part, predominantly loose quartz grains, good inferred porosity, no fluorescence.
		50	SILTSTONE: as above.
1626	1632	60	SILTSTONE: as above.
		40	SANDSTONE: as above, rare nodular pyrite.
1632	1638	70	SILTSTONE: olive brown, medium brownish grey, occasionally greenish grey, argillaceous grading to silty CLAYSTONE in part, minor fine grained glauconite, firm to occasionally moderately hard, sub blocky.
		30	SANDSTONE: translucent, clear, white, fine to medium grained, trace coarse, sub-angular to predominantly sub-rounded, moderately strong siliceous cement, predominantly loose quartz grains, good inferred porosity, no fluorescence.
1638	1644	90	SILTSTONE: as above.
		10	SANDSTONE: as above.
1644	1647	90	SILTSTONE: greyish brown, medium grey, argillaceous grading to silty CLAYSTONE in part, minor fine grained glauconite, firm to occasionally moderately hard, sub blocky.

Depth From (m)	Depth To (m)	%	Lithology and Shows
		10	SANDSTONE: translucent, clear, white, fine to medium grained, sub-angular to predominantly sub-rounded, moderately strong siliceous cement, predominantly loose quartz grains, good inferred porosity, no fluorescence.
1647	1650	90	SILTSTONE: greyish brown, medium grey, argillaceous grading to silty CLAYSTONE in part, minor fine-grained glauconite, firm to occasionally moderately hard, sub blocky.
		10	SANDSTONE: translucent, clear, white, fine to medium grained, sub-angular to predominantly sub-rounded, moderately strong siliceous cement in part, predominantly loose quartz grains, good inferred porosity, no fluorescence.
1650	1653	100	SILTSTONE: dark olive grey, argillaceous, trace glauconite grains, trace carbonaceous inclusions, trace disseminated pyrite, firm, sub blocky to blocky.
1653	1656	100	SILTSTONE: olive grey as above.
1659	1662	100	SILTSTONE: as above.
1662	1665	100	SILTSTONE: as above.
1665	1668	100	SILTSTONE: dark olive grey, argillaceous, occasionally arenaceous grading to very fine sandstone, trace carbonaceous specks, trace lithics, minor glauconite, trace coarse quartz grains, firm, occasionally moderately hard, sub blocky.
1668	1671	100	SILTSTONE: olive brown, generally as above.
1671	1674	100	SILTSTONE: as above.
1674	1677	100	SILTSTONE: as above.
1677	1680	100	SILTSTONE: dark olive grey, argillaceous, occasionally arenaceous grading to very fine sandstone, trace carbonaceous specks, trace lithics, minor glauconite, trace coarse quartz grains, firm, occasionally moderately hard, sub blocky.
1680	1683	100	SILTSTONE: dark olive grey, argillaceous, occasionally arenaceous grading to very fine sandstone, trace carbonaceous specks, trace lithics, minor glauconite, trace coarse quartz grains, firm, occasionally moderately hard, sub blocky.

Depth From (m)	Depth To (m)	%	Lithology and Shows
1683	1686	100	SILTSTONE: as above.
1686	1689	100	SILTSTONE: dark olive grey, argillaceous, occasionally arenaceous grading to very fine sandstone, trace carbonaceous specks, trace lithics, minor glauconite, trace coarse quartz grains, firm, occasionally moderately hard, sub blocky.
		trace	SANDSTONE: light grey, very fine to fine, angular to sub round, moderately strong siliceous cement, common aggregates, trace glauconite, moderately hard, poor visual and inferred porosity, no fluorescence.
1689	1692	100	SILTSTONE: dark olive grey, argillaceous, occasionally arenaceous grading to very fine sandstone in part, trace carbonaceous specks, trace lithics, minor glauconite, rare loose coarse quartz grains, firm, occasionally moderately hard, sub blocky.
		trace	SANDSTONE: light grey, very fine to fine, angular to sub round, moderately strong siliceous cement, common aggregates, trace glauconite, moderately hard, poor visual and inferred porosity, no fluorescence.
1692	1695	100	SILTSTONE: dark olive grey, argillaceous, occasionally arenaceous grading to very fine sandstone in part, trace carbonaceous specks, trace lithics, minor glauconite, rare loose coarse quartz grains, firm, occasionally moderately hard, sub blocky.
		trace	SANDSTONE: light grey, very fine to fine, angular to sub round, moderately strong siliceous cement, common aggregates, trace glauconite, moderately hard, poor visual and inferred porosity, no fluorescence.
1695	1698	90	SILTSTONE: dark olive grey, argillaceous, occasionally arenaceous grading to very fine sandstone in part, trace carbonaceous specks, trace lithics, minor glauconite, rare loose coarse quartz grains, firm, occasionally moderately hard, sub blocky.
		10	SANDSTONE: light grey, very fine to fine, angular to sub round, moderately strong siliceous cement, common aggregates, trace glauconite, moderately hard, poor visual and inferred porosity, no fluorescence.

Depth From (m)	Depth To (m)	%	Lithology and Shows
1698	1701	100	SILTSTONE: dark olive grey, argillaceous, occasionally arenaceous grading to very fine sandstone in part, trace carbonaceous specks, trace lithics, minor glauconite, firm, occasionally moderately hard, sub blocky.
1701	1704	100	SILTSTONE: dark olive grey, argillaceous, occasionally arenaceous grading to very fine sandstone in part, trace carbonaceous specks, trace lithics, minor glauconite, firm, occasionally moderately hard, sub blocky.
1704	1707	100	SILTSTONE: dark olive grey, argillaceous, occasionally arenaceous grading to very fine sandstone in part, trace carbonaceous specks, trace lithics, minor glauconite, firm, occasionally moderately hard, sub blocky.
1707	1710	100	SILTSTONE: as above
1710	1713	100	SILTSTONE: as above
1713	1716	100	SILTSTONE: as above, olive grey to olive brown, argillaceous, rare micro carbonaceous specks, trace very fine lithics, trace fine grained glauconite, firm to rarely moderately hard, sub blocky.
1716	1719	100	SILTSTONE: as above.
1719	1722	100	SILTSTONE: dark olive grey to medium grey, argillaceous, trace carbonaceous specks, trace lithics, trace glauconite, firm occasionally moderately hard, sub blocky.
1722	1725	100	SILTSTONE: as above.
1725	1728	100	SILTSTONE: as above, dark olive grey to medium grey, olive brown, argillaceous grading to claystone in part, trace fine carbonaceous specks, trace lithics, trace glauconite, firm occasionally moderately hard, sub blocky.
1728	1730	100	SILTSTONE: medium to dark olive grey to medium grey, olive brown, argillaceous, trace carbonaceous specks, trace lithics, trace glauconite, firm occasionally moderately hard, sub blocky.
NOTE: Run 244mm (9 5/8") casing. Change mud system to Flo-Pro.			

Depth From (m)	Depth To (m)	%	Lithology and Shows
1730	1734	100	SILTSTONE: medium to dark brown, olive brown, argillaceous, rare nodular pyrite, trace fine grained glauconite, trace micro carbonaceous specks, trace forams, firm to moderately hard, sub blocky.
1734	1737	100	SILTSTONE: medium to dark brown, olive brown, as above.
1737	1740	100	SILTSTONE: olive brown, medium to dark brown as above.
1740	1743	100	SILTSTONE: as above, trace shell fragments (?), trace nodular pyrite, trace loose coarse sub rounded quartz grains.
1743	1746	100	SILTSTONE: medium to dark brown, olive brown, argillaceous, trace nodular pyrite, trace fine grained glauconite, trace micro carbonaceous specks, firm to occasionally moderately hard, sub blocky.
1746	1749	100	SILTSTONE: as above, rare nodular pyrite.
1749	1752	90	SILTSTONE: medium to dark brown, olive brown, argillaceous, trace nodular pyrite, trace fine grained glauconite, trace micro carbonaceous specks, firm to occasionally moderately hard, sub blocky.
		10	SANDSTONE: light grey, very light brownish grey, very fine grained, well sorting, grading to arenaceous SILTSTONE, sub angular to sub round, moderately strong calcareous cement, common light brownish grey argillaceous matrix, trace pyrite, trace glauconite, moderately hard, very poor visual porosity, no fluorescence.
1752	1755	90	SILTSTONE: medium to dark brown, olive brown, argillaceous, trace nodular pyrite, trace fine grained glauconite, trace micro carbonaceous specks, firm to occasionally moderately hard, sub blocky.
		10	SANDSTONE: light grey, very light brownish grey, very fine grained, well sorting, grading to arenaceous SILTSTONE, sub angular to sub round, moderately strong calcareous cement, common light brownish grey argillaceous matrix, trace pyrite, trace glauconite, moderately hard, very poor visual porosity, no fluorescence.
1755	1758	50	SILTSTONE: as above.
		50	SANDSTONE: light brownish grey, very fine grained as above.

Depth From (m)	Depth To (m)	%	Lithology and Shows
1758	1761	20	SILTSTONE: as above.
		80	SANDSTONE: translucent, clear, white, light grey in part, very fine to very coarse, sub angular to sub round, poor sorting, trace calcareous cement, rare siliceous cement, minor light grey silty matrix, trace nodular pyrite, trace fine glauconite grains, predominantly loose quartz grains, fair to good inferred porosity, no fluorescence.
1761	1764	10	SILTSTONE: medium brownish grey, light to medium grey, very finely arenaceous in part, trace very fine glauconite, firm, sub blocky.
		90	SANDSTONE: translucent, clear, white, light grey in part, trace yellow stain, fine to predominantly medium to very coarse, poor sorting, sub angular to sub round, trace weak siliceous cement, trace nodular pyrite, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.
1764	1767	100	SANDSTONE: translucent, clear, white, very fine to very coarse predominantly medium to coarse, poor to fair sorting sub angular to sub round, trace white argillaceous matrix, trace nodular pyrite, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.
1767	1770	100	SANDSTONE: translucent, clear, white, very fine to very coarse predominantly medium to coarse, poor to fair sorting sub angular to sub round, trace white argillaceous matrix, trace nodular pyrite, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.
1770	1773	90	SANDSTONE: translucent, clear, white, fine to medium occasionally coarse – very coarse, fair sorting, sub angular to sub round, rare weak calcareous cement, minor off white argillaceous matrix, trace lithics, trace nodular pyrite, friable to predominantly loose, poor visual porosity in fine grained aggregates, no fluorescence.
		10	SILTSTONE: light to medium brownish grey, very fine arenaceous, firm to friable, sub blocky.

Depth From (m)	Depth To (m)	%	Lithology and Shows
1773	1776	20	SILTSTONE: light to medium grey, light to medium brownish grey, arenaceous grading to very fine SANDSTONE, rare carbonaceous flecks, friable to firm, sub blocky.
		80	SANDSTONE: white, translucent, clear, very fine to medium, occasionally coarse, poor to fair sorting, sub angular to sub round, common calcareous cement, common off white argillaceous matrix, trace lithics, trace nodular pyrite, friable aggregates, loose in part, poor to fair visual porosity, no fluorescence.
1776	1779	30	SILTSTONE: light to medium grey, light to medium brownish grey, arenaceous grading to very fine SANDSTONE, rare carbonaceous flecks, friable to firm, sub blocky.
		70	SANDSTONE: white, translucent, clear, very fine to medium, occasionally coarse, poor to fair sorting, sub angular to sub round, common calcareous cement, common off white argillaceous matrix, trace lithics, trace nodular pyrite, trace orange-brown dolomite fragments, friable aggregates, loose in part, poor to fair visual porosity, no fluorescence.
1779	1782	20	SILTSTONE: as above.
		80	SANDSTONE: as above, trace orange-brown dolomite fragments, increasing coarse quartz grains.
1782	1785	20	SILTSTONE: light to medium grey, light to medium brownish grey, arenaceous grading to very fine SANDSTONE, rare carbonaceous flecks, friable to firm, sub blocky.
		80	SANDSTONE: translucent, clear, white, fine to coarse, angular to sub round, poor sorting, moderately strong calcareous cement, common white argillaceous matrix, trace nodular pyrite, trace dolomite fragments, friable to moderately hard aggregates, loose in part, fair visual porosity, no fluorescence.
1785	1788	60	SILTSTONE: light to medium grey, light to medium brownish grey, arenaceous grading to and interbedded with fine grained sandstone, trace fine grained lithics, trace carbonaceous specks / flecks, trace very fine glauconite, friable to firm, sub blocky.
		40	SANDSTONE: white, very light grey, translucent, very fine to fine grained, trace medium, moderately strong calcareous cement, common off white very light brown argillaceous / silty matrix, trace nodular pyrite, trace carbonaceous flecks, friable to occasionally moderately hard, poor visual porosity, no fluorescence.

Depth From (m)	Depth To (m)	%	Lithology and Shows
1788	1791	20	SILTSTONE: as above.
		80	SANDSTONE: off white, very fine to fine grained, as above.
1791	1794	40	SILTSTONE: as above, common glauconite.
		60	SANDSTONE: white, very light grey, translucent, very fine to fine grained, trace medium, moderately strong calcareous cement, common off white very light brown argillaceous / silty matrix, common fine grained glauconite, trace nodular pyrite, trace carbonaceous flecks, friable to occasionally moderately hard, poor visual porosity, no fluorescence.
1794	1797	30	SILTSTONE: light to medium grey, light to medium brownish grey, arenaceous grading to and interbedded with fine grained sandstone, trace fine grained lithics, trace carbonaceous specks / flecks, common glauconite, friable to firm, sub blocky.
		70	SANDSTONE: white, very light grey, translucent, very fine to fine grained, moderately strong calcareous cement, common off white- very light brown argillaceous / silty matrix, common fine grained glauconite, trace carbonaceous flecks, friable to occasionally moderately hard, poor visual porosity, no fluorescence.
1797	1800	40	SILTSTONE: as above, light to medium grey, light to medium brownish grey, arenaceous grading to and interbedded with fine grained sandstone, trace fine grained lithics, minor carbonaceous specks / flecks, common glauconite, friable to firm, sub blocky.
		60	SANDSTONE: as above, white, very light grey, translucent, very fine to fine grained, moderately strong calcareous cement, common off white- very light brown argillaceous / silty matrix, common fine grained glauconite, rare carbonaceous flecks, friable to occasionally moderately hard, poor visual porosity, no fluorescence.
1800	1803	80	SILTSTONE: as above, arenaceous.
		20	SANDSTONE: as above, grading to arenaceous siltstone.
1803	1806	60	SILTSTONE: as above, arenaceous.
		40	SANDSTONE: as above, grading to arenaceous siltstone.

SECTION 2.2 : CATALOGUE OF WELLSITE SAMPLES

SAMPLE MANIFEST

CLIENT: SANTOS
 WELL: CASINO-5
 TD: 1806m MD
 CONTAINER: 296

WASHED & DRIED CUTTINGS – 6 SETS IN PLASTIC BAGS

2 SETS : SANTOS (100 grams)
 1 SET : A.W.E (100grams)
 1 SET : MITSUI (100grams)
 1 SET : DNRE (200grams)
 1 SET : GEOSCIENCE (200 grams)

FREQUENCY 6m SAMPLES 660m – 1644m
 3m SAMPLES 1644m – 1806m

SANTOS (2 SETS)----- 2 boxes

Box	#	From (m)	To (m)
1	1	660	1038
	2	1038	1368
	3	1368	1650
	4	1650	1806

A.W.E.----- 1 box

Box	#	From (m)	To (m)
1	1	660	1038
	2	1038	1368
	3	1368	1650
	4	1650	1806

MITSUI-----1 box

Box	#	From (m)	To (m)
1	1	660	1038
	2	1038	1368
	3	1368	1650
	4	1650	1806

DNRE-----2 boxes

Box	#	From (m)	To (m)
1	1	660	882
	2	882	1092
	3	1092	1296
	4	1296	1494

Box	#	From (m)	To (m)
2	5	1494	1659
	6	1659	1752
	7	1752	1806

GEOSCIENCE-----2 boxes

Box	#	From (m)	To (m)
1	1	660	882
	2	882	1092
	3	1092	1296
	4	1296	1494

Box	#	From (m)	To (m)
2	5	1494	1659
	6	1659	1752
	7	1752	1806

SAMPLEX TRAYS - 3 SETS FOR SANTOS

2 Boxes : 660m to 1806m TD

MUD SAMPLES FOR SANTOS

1Box: Contains 2 x 1L Samples taken at 1730m (KCl/Polymer) & 1806m (Flo-Pro)

SUMMARY:

NUMBER OF BOXES: WASHED & DRIED:	8
SAMPLEX TRAYS :	2
MUD SAMPLES:	1
TOTAL NUMBER OF BOXES :	11

SECTION 3: WIRELINE LOGGING REPORTS

Wireline logs were not conducted at the Casino 5 location.

**SECTION 3.1: LWD END OF WELL REPORT
(Sperry Sun)**



HALLIBURTON
Sperry Drilling Services

LWD End of Well Report
for
Santos Ltd

Casino - 5

Rig: Ocean Patriot
Field: Casino
Country: Australia
Job No: AU -FE -0003530537
Date: 16th June 2005

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2. Operational Overview
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6. Service Interrupt Report

General Information

Company:	Santos Ltd	
Rig:	Ocean Patriot	
Well:	Casino-5	
Field:	Casino	
Country:	Australia	
API Number:		
Sperry-Sun Job Number:	AU-FE-0003530537	
Job start date:	16-Jun-05	
Job end date:	28-Jun-05	
North reference:	Grid	
Declination:	10.897	deg
Dip angle:	-69.993	deg
Total magnetic field:	60893	nT
Date of magnetic data:	17-Jun-05	
Wellhead coordinates N:	38 deg. 47 min 43.680 sec South	
Wellhead coordinates E:	142 deg. 44 min 44.600 sec East	
Vertical section direction:	Closure	deg
MWD Engineers:	A.Rule	J.Nicolson
	B.Cooper	
Company Representatives:	R.Buitenhuis	C.Wise
	R.King	
Company Geologist:	J.Pitman	
Lease Name:	Vic P-44	
Unit Number:	197	
State:	Victoria	
County:		

Operational Overview

Sperry Drilling Services, a division of Halliburton, were contracted by Santos Ltd to provide Surveying and Logging While Drilling (LWD) services on the well, Casino-5, located in the Bass Strait, offshore Victoria.

914mm (36") Open Hole Section

Sperry tools were not run in the 36" hole section.

445mm (17½") Open Hole Section

An Electronic Multishot (EMS) was dropped at section TD - 665.0 mMDRT.

311mm (12¼") Open Hole Section

The hole section was drilled with a rotary assembly and logging while drilling (LWD) tools to provide realtime and recorded drilling and formation evaluation data. The tools incorporated a positive pulser, Position Module (PM), Dual Gamma Ray (DGR), Electromagnetic Wave Resistivity (EWR) and Drillstring Dynamics Sensor (DDS) to monitor downhole vibration.

The section was drilled in three bit runs to 1730.0 mMDRT.

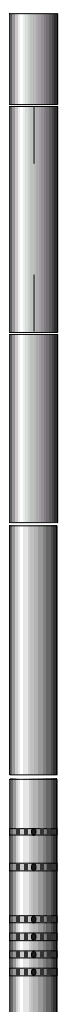

216mm (8½") Open Hole Section

The section was drilled in one bit run through the reservoir. The hole was logged with a LWD tool that incorporated a positive pulser, DGR, EWR, Directional Module (DM) and Pressure While Drilling (PWD).

The well was drilled to a total depth of 1806.0 mMDRT.

Bitrun Summary



Run Time Data		Drilling Data		Mud Data			
MWD Run :	0200	Start Depth :	665.00 m	Mud Type :	KCl / Polymer		
Rig Bit No:	3	End Depth :	1160.00 m	Weight / Visc :	1.22 sg /	55.00 spqt	
Hole Size :	311.00 mm	Footage :	495.00 m	Chlorides :	42000 ppm		
Run Start :	22-Jun-05 05:41	Avg. Flow Rate :	990 gpm	PV / YP :	15.00 cp /	26.00 lhf2	
Run End :	23-Jun-05 21:25	Avg. RPM :	121 rpm	Solids/Sand :	9 % /	1 %	
BRT Hrs :	39.73	Avg. WOB :	15.90 klb	%Oil / O:W :	0 % /	N/A	
Circ. Hrs :	32.13	Avg. ROP :	24.90 m/hr	pH/Fluid Loss:	9.00 pH /	4.80 mptm	
Oper. Hrs :	39.73	Avg. SPP :	1865 psig	Max. Temp. :	49.40 degC		

MWD Schematics		BHA Schematics				
		Component	Length (m)	O.D. (mm)	I.D. (mm)	
(5)	 <p>5. Mk8 Positive Pulsar SN: 8189</p> <p>4. PM SN: 134019 16.13 m From Bit</p> <p>3. HCIM SN: 91232</p> <p>2. DGR & DDS SN: 132474 12.75 m From Bit</p> <p>1. EWR-P4 SN: 144719 9.72 m From Bit</p>	(11)				
(4)		(10)				
(3)		(9)				
(2)		(8)				
(1)		(7)		11. HWDP	138.37	203.000
	(6)	10. Cross Over Sub		1.09	203.000	75.000
	(5)	09. Drill Collar		17.90	202.000	76.000
	(4)	08. Drilling Jars		9.20	203.000	76.000
	(3)	07. Drill Collar		88.99	200.000	73.000
	(2)	06. NM Pony Collar		2.93	206.000	68.000
	(1)	05. MWD		13.16	203.000	76.000
		04. Integral Blade Stabilizer	2.08	203.000	75.000	
		03. Drill Collar	3.04	203.000	71.000	
		02. Integral Blade Stabilizer	2.11	203.000	76.000	
		01. Smith GS04BDV CPS	0.33	311.000	76.000	

Comments	MWD Performance
High vibration, tool stopped pulsing at 952.0 mMDRT (see Service Interrupt Report). Drilled to planned bit trip depth at 1170mMDRT. Recorded data recovered at surface.	Tool OD / Type : 203.00 mm / P4M MWD Real-time%: 55.00 % MWD Recorded%: 97.00 % Min. Inc. : 0.56 deg / 712.41 m Max. Inc. : 5.74 deg / 1067.61 m Final Az. : 243.64 deg Max Op. Press. : 2010 psig

Bitrun Summary

Run Time Data		Drilling Data		Mud Data			
MWD Run :	0300	Start Depth :	1160.00 m	Mud Type :	KCl / Polymer		
Rig Bit No:	4	End Depth :	1392.00 m	Weight / Visc :	1.22	sg /	49.00 spqt
Hole Size :	311.00 mm	Footage :	232.00 m	Chlorides :	45000	ppm	
Run Start :	24-Jun-05 04:44	Avg. Flow Rate :	988 gpm	PV / YP :	11.00	cp /	26.00 lhf2
Run End :	25-Jun-05 09:27	Avg. RPM :	146. rpm	Solids/Sand :	10	% /	0.5 %
BRT Hrs :	28.72	Avg. WOB :	9.50 klb	%Oil / O:W :	0	% /	N/A
Circ. Hrs :	19.14	Avg. ROP :	15.50 m/hr	pH/Fluid Loss:	8.40	pH /	5.00 mptm
Oper. Hrs :	28.72	Avg. SPP :	2956 psig	Max. Temp. :	68.00	degC	

MWD Schematics		BHA Schematics			
		Component	Length (m)	O.D. (mm)	I.D. (mm)
(5)		(11)			
(4)		(10)			
(3)		(9)			
(2)	5. Mk8 Positive Pulser SN : 8298	(8)			
(1)	4. PM SN : 143272 16.26 m From Bit	(7)	11. HWDP	138.37	203.000 76.000
	3. HCIM SN : 161828	(6)	10. Cross Over Sub	1.09	203.000 75.000
	2. EWR-P4 SN : 205859 11.27 m From Bit	(5)	09. Drill Collar	17.90	202.000 76.000
	1. DGR SN : 10505500 8.97 m From Bit	(4)	08. Drilling Jars	9.20	203.000 76.000
		(3)	07. Drill Collar	62.27	200.000 73.000
		(2)	06. NM Pony Collar	2.93	206.000 68.000
		(1)	05. MWD	12.90	203.000 76.000
			04. Integral Blade Stabilizer	2.08	203.000 75.000
			03. Drill Collar	3.04	203.000 71.000
			02. Integral Blade Stabilizer	2.11	203.000 76.000
			01. Smith MA89PX	0.52	311.000 76.000

Comments	MWD Performance
Drilled to 1392.0 mMDRT. Pulled out to change the bit.	Tool OD / Type : 203.00 mm / P4M
	MWD Real-time%: 99.00 %
	MWD Recorded%: 100.00 %
	Min. Inc. : 3.06 deg / 1006.82 m
	Max. Inc. : 5.74 deg / 1067.61 m
	Final Az. : 252.31 deg
	Max Op. Press. : 2410 psig

Bitrun Summary

Run Time Data		Drilling Data		Mud Data			
MWD Run :	0400	Start Depth :	1392.00 m	Mud Type :	KCl / Polymer		
Rig Bit No:	5	End Depth :	1730.00 m	Weight / Visc :	1.22	sg /	49.00 spqt
Hole Size :	311.00 mm	Footage :	338.00 m	Chlorides :	46000	ppm	
Run Start :	25-Jun-05 09:51	Avg. Flow Rate :	940 gpm	PV / YP :	14.00	cp /	36.00 lhf2
Run End :	26-Jun-05 16:39	Avg. RPM :	162 rpm	Solids/Sand :	10	% /	0.5 %
BRT Hrs :	30.79	Avg. WOB :	11.60 klb	%Oil / O:W :	0	% /	N/A
Circ. Hrs :	15.18	Avg. ROP :	46.30 m/hr	pH/Fluid Loss:	7.90	pH /	4.50 mptm
Oper. Hrs :	30.79	Avg. SPP :	3204 psig	Max. Temp. :	71.00	degC	

MWD Schematics		BHA Schematics			
		Component	Length (m)	O.D. (mm)	I.D. (mm)
(5)		(11)			
(4)		(10)			
(3)		(9)			
(2)	5. Mk8 Positive Pulsar SN : 8298	(8)			
(1)	4. PM SN : 143272 16.06 m From Bit	(7)	11. HWDP	138.37	203.000 76.000
	3. HCIM SN : 161828	(6)	10. Cross Over Sub	1.09	203.000 75.000
	2. EWR-P4 SN : 205859 11.07 m From Bit	(5)	09. Drill Collar	17.90	202.000 76.000
	1. DGR SN : 10505500 8.77 m From Bit	(4)	08. Drilling Jars	9.20	203.000 76.000
		(3)	07. Drill Collar	62.27	200.000 73.000
		(2)	06. Drill Collar	2.93	206.000 68.000
		(1)	05. MWD	12.90	203.000 76.000
			04. Integral Blade Stabilizer	2.08	203.000 75.000
			03. Drill Collar	3.04	203.000 71.000
			02. Integral Blade Stabilizer	2.11	203.000 76.000
			01. Hycalog DSX104HGWA5 (PDC)	0.32	311.000 75.000

Comments	MWD Performance		
Drilled 311mm (12¼") hole to section TD at 1730.0 mMDRT.	Tool OD / Type :	203.00	mm / P4M
	MWD Real-time%:	99.00	%
	MWD Recorded%:	100.00	%
	Min. Inc. :	5.17	deg / 1377.53 m
	Max. Inc. :	6.37	deg / 1693.36 m
	Final Az. :	251.82	deg
	Max Op. Press. :	2993	psig

Bitrun Summary

Run Time Data		Drilling Data		Mud Data			
MWD Run :	0500	Start Depth :	1730.00 m	Mud Type :	Flo Pro		
Rig Bit No:	6	End Depth :	1806.00 m	Weight / Visc :	1.24	sg /	50.00 spqt
Hole Size :	216.00 mm	Footage :	76.00 m	Chlorides :	148000	ppm	
Run Start :	28-Jun-05 05:50	Avg. Flow Rate :	662 gpm	PV / YP :	14.00	cp /	32.00 lhf2
Run End :	29-Jun-05 11:02	Avg. RPM :	112 rpm	Solids/Sand :	14	% /	0.25 %
BRT Hrs :	29.19	Avg. WOB :	4.50 klb	%Oil / O:W :	0	% /	N/A
Circ. Hrs :	11.57	Avg. ROP :	20.50 m/hr	pH/Fluid Loss:	9.70	pH /	5.00 mptm
Oper. Hrs :	29.19	Avg. SPP :	2253 psig	Max. Temp. :	73.00	degC	

MWD Schematics		BHA Schematics			
		Component	Length (m)	O.D. (mm)	I.D. (mm)
(7)		(9)			
(6)	7. Mk8 Positive Pulser SN: 8298	(8)			
(5)	6. DM SN: 180031 18.90 m From Bit	(7)			
(4)	5. HCIM SN: 093281	(6)			
(3)	4. PWD SN: 159816 14.90 m From Bit	(5)	09. HWDP	138.37	162.000 78.000
(2)	3. EWR-P4 SN: 138389 12.37 m From Bit	(4)	08. Drill Collar	18.56	171.000 71.000
(1)	2. DGR SN: 126021 10.03 m From Bit	(3)	07. Drilling Jars	9.24	165.000 70.000
	1. Contingency Sub SN: CS002	(2)	06. Drill Collar	74.44	171.000 71.000
		(1)	05. Integral Blade Stabilizer	1.78	170.000 71.000
			04. MWD	15.60	171.000 73.000
			03. Pony collar	5.04	170.000 70.000
			02. Integral Blade Stabilizer	2.40	167.000 90.000
			01. Hycalog DSX104 (PDC)	0.23	216.000 50.000

Comments	MWD Performance		
Drilled to hole TD at 1806.0 mMDRT.	Tool OD / Type :	171.00	mm / P4M
	MWD Real-time%:	100.00	%
	MWD Recorded%:	100.00	%
	Min. Inc. :	5.66	deg / 1783.40 m
	Max. Inc. :	6.14	deg / 1734.43 m
	Final Az. :	250.49	deg
	Max Op. Press. :	3190	psig

Directional Survey Data

Measured Depth (metres)	Inclination (degrees)	Direction (degrees)	Vertical Depth (metres)	Latitude (metres)	Departure (metres)	Vertical Section (metres)	Dogleg (deg/30m)
89.70	0.00	0.00	89.70	0.00 N	0.00 E	0.00	TIE-IN
153.32	0.87	155.19	153.32	0.44 S	0.20 E	-0.44	0.41
180.77	0.73	150.88	180.76	0.78 S	0.38 E	-0.78	0.17
236.21	1.06	149.10	236.20	1.53 S	0.81 E	-1.53	0.18
263.92	1.31	159.82	263.90	2.05 S	1.05 E	-2.05	0.36
292.77	1.22	161.34	292.75	2.65 S	1.26 E	-2.65	0.10
321.46	1.16	161.70	321.43	3.21 S	1.45 E	-3.21	0.06
350.14	1.12	162.94	350.10	3.76 S	1.63 E	-3.76	0.05
378.70	1.03	165.33	378.66	4.27 S	1.77 E	-4.27	0.11
407.39	0.99	169.70	407.34	4.76 S	1.88 E	-4.76	0.09
436.08	0.89	162.06	436.03	5.22 S	2.00 E	-5.22	0.17
464.75	0.86	161.47	464.70	5.64 S	2.13 E	-5.64	0.03
493.60	0.87	164.24	493.54	6.05 S	2.26 E	-6.05	0.04
522.35	0.23	169.75	522.29	6.32 S	2.33 E	-6.32	0.67
551.14	0.52	129.89	551.08	6.46 S	2.44 E	-6.46	0.39
579.90	0.54	127.68	579.84	6.63 S	2.65 E	-6.63	0.03
608.62	0.51	119.52	608.56	6.77 S	2.87 E	-6.77	0.08
636.96	0.54	120.09	636.90	6.90 S	3.09 E	-6.90	0.03
652.27	0.52	118.09	652.21	6.97 S	3.22 E	-6.97	0.05
712.41	0.56	146.86	712.34	7.34 S	3.62 E	-7.34	0.13
741.29	1.28	173.83	741.22	7.78 S	3.73 E	-7.78	0.85
800.77	1.61	179.35	800.68	9.27 S	3.81 E	-9.27	0.18
858.08	1.58	236.40	857.97	10.51 S	3.16 E	-10.51	0.80
915.48	4.81	243.64	915.31	11.91 S	0.93 E	-11.91	0.01
891.65	3.06	238.12	891.51	11.24 S	2.01 E	-11.24	1.33
1006.82	3.06	237.46	1006.52	14.52 S	3.19 W	-14.52	0.01
1067.61	5.74	249.44	1067.13	16.46 S	7.41 W	-16.46	1.39
1150.27	5.53	253.03	1149.39	19.08 S	15.08 W	-19.08	0.15
1178.55	5.52	254.47	1177.54	19.84 S	17.70 W	-19.84	0.15
1207.09	5.50	252.55	1205.94	20.61 S	20.33 W	-20.61	0.20
1294.00	5.38	250.68	1292.46	23.21 S	28.15 W	-23.21	0.07
1322.59	5.29	252.03	1320.93	24.06 S	30.67 W	-24.06	0.16
1351.22	5.31	252.31	1349.44	24.87 S	33.19 W	-24.87	0.03
1377.53	5.17	251.91	1375.64	25.61 S	35.47 W	-25.61	0.16
1406.19	5.23	251.21	1404.18	26.43 S	37.94 W	-26.43	0.09
1434.97	5.43	251.49	1432.83	27.29 S	40.47 W	-27.29	0.21
1463.79	5.42	253.43	1461.52	28.11 S	43.07 W	-28.11	0.19
1492.55	5.42	251.34	1490.16	28.93 S	45.66 W	-28.93	0.21
1521.49	5.55	253.59	1518.96	29.76 S	48.29 W	-29.76	0.26
1550.14	5.55	251.90	1547.48	30.58 S	50.94 W	-30.58	0.17

Directional Survey Data

Measured Depth (metres)	Inclination (degrees)	Direction (degrees)	Vertical Depth (metres)	Latitude (metres)	Departure (metres)	Vertical Section (metres)	Dogleg (deg/30m)
1607.59	5.88	251.40	1604.64	32.39 S	56.37 W	-32.39	0.17
1636.21	5.89	252.97	1633.11	33.28 S	59.16 W	-33.28	0.17
1664.65	6.20	254.05	1661.39	34.13 S	62.03 W	-34.13	0.35
1693.36	6.37	251.89	1689.93	35.05 S	65.04 W	-35.05	0.30
1712.40	6.06	251.82	1708.86	35.70 S	67.00 W	-35.70	0.48
1734.43	6.14	252.76	1730.77	36.41 S	69.23 W	-36.41	0.17
1763.18	5.90	251.71	1759.36	37.33 S	72.10 W	-37.33	0.28
1783.40	5.66	250.49	1779.47	37.99 S	74.03 W	-37.99	0.40
1806.00	5.66	250.49	1801.96	38.73 S	76.13 W	-38.73	0.00

Directional Survey Data

CALCULATION BASED ON Minimum Curvature METHOD

SURVEY COORDINATES RELATIVE TO WELL SYSTEM REFERENCE POINT

TVD VALUES GIVEN RELATIVE TO DRILLING MEASUREMENT POINT

VERTICAL SECTION RELATIVE TO WELL HEAD

VERTICAL SECTION IS COMPUTED ALONG CLOSURE OF 243.15 DEGREES (GRID)

A TOTAL CORRECTION OF 11.99 DEG FROM MAGNETIC NORTH TO GRID NORTH HAS BEEN APPLIED

HORIZONTAL DISPLACEMENT IS RELATIVE TO THE WELL HEAD.

HORIZONTAL DISPLACEMENT(CLOSURE) AT 1820.00 METRES

IS 86.78 METRES ALONG 243.15 DEGREES (GRID)

RT to LAT = 21.5 m.

Final survey projected to TD

Service Interrupt Report

MWD run number :	0200	Time/Date of Failure :	25-Jun-05 03:31
Rig Bit Number :	3	Depth at time of Failure :	952.00 m
MWD Run start time/date :	22-Jun-05 05:41	Lost Rig Hours :	4.00
MWD Run end time/date :	23-Jun-05 21:25		

Rig Activity

Drilling 311mm (12¼") hole.

Description of Failure

Tool stopped pulsing.

Action Taken

Toggled tool and adjusted flowrates in an attempt to re-establish detection.

Operation Impact

Drilled to planned bit trip depth with no surveys and FE data. Recorded FE data was recovered at surface.

Reason for Failure

High Vibration recorded by DDS. CIM hanger and hard connect failed insulation test on surface. Pulser failed the running rig test.

SECTION 4 : PRODUCTION TEST REPORT (Expro)

A clean up production data report only is presented. A well test was not conducted.



Well Site Test Report

Client	Santos Ltd
Well No.	Casino 5
Test No.	Completion
Location	Ocean Patriot
Dates From/To	03/07/05 - 05/07/05
Country	Australia
Field	Casino
Formation	Waarre C Sands
Exal Engineer	J. Morrison / B. Tupman
Expro Supervisor	F. Beaton
Client Engineer	R. King / M. Andronov / P. Nardone
Perforations	Expandable Sand Screens

Report Approved By (CHS) :

Date :

Report Approved By (Welltest) :

Date :



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2	Sequence of Events
	<u>EDGE Data</u>
3	Clean Up Data Listing
4	Cartesian Plots
5	Gas Calculation Listing
	<u>Additional Information</u>
6	Data Disk / Information Sheets



Introduction

Expro Cased Hole Services (Electrical) provided the surface data acquisition package for the completion cleanup of well Casino 5 on the Ocean Patriot from the 3rd July to 5th July 2005.

The operational objectives for Well Casino 5 were:

- 1) Install lower completion comprising packer, tubing & sand screens in 8 1/2" horizontal hole.
- 2) Install upper completion and tubing hanger using landing string.
- 3) Flow Well to Cleanup
- 4) Suspend well for tie-in and commissioning.

The well test objectives were:

- 1) To establish the following clean-up criteria:
 - a) BS&W <3% - not measurable.
 - b) Stable THP - <10 psi/5 min change over 2 hours.
 - c) Stable gas rate.
 - d) WGR <0.5 bbl/MMscf - LGR <0.5 bbl/MMscf.

All operations were conducted safely and in accordance with Santos and Expro safe operating procedures and guidelines.

Gas specific gravity of 0.59 used for rate calculations based on PVT analysis performed on gas samples. This overrides the estimate gas specific gravity reported during the test.



Sequence of Events

Client	Santos Ltd
Well No.	Casino 5
Test No.	Completion
Location	Ocean Patriot
Dates From/To	03/07/05 - 05/07/05
Country	Australia
Field	Casino
Formation	Waarre C Sands
Exal Engineer	J. Morrison / B. Tupman
Expro Supervisor	F. Beaton
Client Engineer	R. King / M. Andronov / P. Nardone
Perforations	Expandable Sand Screens

Client	Santos Ltd	Exal Engineer	J. Morrison / B. Tupman
Well No.	Casino 5	Location	Ocean Patriot
Test No.	Completion	Dates From/To	03/07/05 - 05/07/05

Time Comment

03/07/05

06:10:00 Picked up and installed Expro 7" flowhead onto test string.
08:30:00 Installed coflexip hose to Flow Wing Valve (FWV) and kill hose to Kill Wing Valve (KWV) on flowhead.
09:00:00 Held JSA on rig floor prior to rigging up wireline.
09:00:00 Closed Swab Valve (SV) on flowhead.
09:40:00 Expro wireline commenced rigging up.
11:50:00 Expro wireline completed rigging up.
12:00:00 Closed Master Valve (MV) and opened SV on flowhead.
12:43:00 Opened choke manifold.
12:44:00 Flushed across flowhead through surface lines with seawater to choke manifold.
12:46:00 Closed choke manifold.
12:48:00 Commenced pressure testing flowhead, wireline PCE, coflexip and surface lines to ±500/5000 psi.
12:53:00 No test, leak observed from needle valve on lubricator.
13:03:00 Increased test pressure to ±500/5000 psi.
13:21:00 Good test, bled off test pressure via choke manifold.
13:26:00 Opened Sub Sea Production Master Valve (SSPMV).
13:27:00 Opened Sub Sea Crossover Valve (SSXOV).
13:28:00 Opened Sub Sea Annulus Master Valve (SSAMV).
13:29:00 Opened Sub Sea Annulus Access Valve (SSAAV).
13:30:00 Closed SV and opened MV on flowhead.
13:45:00 Commenced operations to land out tubing hanger as per completion programme.
18:00:00 Completed operations to land out tubing hanger as per completion programme.
18:34:00 Closed Choke manifold.
18:34:00 Closed SSAAV.
19:05:00 FWV on flowhead put into ESD mode.
19:05:00 Commenced pressure testing between lower 10 3/4" rams and SSAMV to ±200/3000 psi.
19:05:00 No test, leak observed in manifold to annular pressure sensor on drill floor.
19:05:00 Commenced pressure testing between lower 10 3/4" rams and SSAMV to ±200/3000 psi.
20:38:00 No test, commenced troubleshooting to locate leak.
20:45:00 Closed SSAMV.
20:46:00 Closed SSPMV.
21:18:00 Closed SSAAV.
21:18:00 Commenced pressure testing between lower 10 3/4" rams and SSAMV to ±200/3000 psi.
21:32:00 Bled off test pressure to zero.
21:40:00 Commenced pressure testing between lower 10 3/4" rams and SSAMV to ±200/3000 psi.
21:56:00 Bled off test pressure to zero.
22:05:00 Opened SSAAV.
22:11:00 Commenced pressure testing isolation sleeve to ±200/4000 psi.
22:25:00 No test, leak detected.
22:27:00 Closed SSPMV.
22:57:00 Opened SSPMV.
23:55:00 Opened SV on flowhead.
23:55:00 Expro wireline commenced running in hole (RIH) with GS to pull Tubing Hanger isolation sleeve.

04/07/05

00:15:00 Expro wireline at surface with isolation sleeve, closed SV on flowhead.
01:30:00 Opened SV on flowhead.
01:30:00 Expro wireline commenced RIH with GS to set back up Tubing Hanger isolation sleeve.
01:45:00 Expro wireline at surface (isolation sleeve set).
01:50:00 Commenced pressure testing isolation sleeve to ±200/4000 psi.
01:52:00 No test, indication of pressure upstream of choke manifold.
02:03:00 Bled off pressure via choke manifold.

Client	Santos Ltd	Exal Engineer	J. Morrison / B. Tupman
Well No.	Casino 5	Location	Ocean Patriot
Test No.	Completion	Dates From/To	03/07/05 - 05/07/05

Time Comment

04/07/05

02:53:00 Opened SV on flowhead.
02:55:00 Expro wireline commenced RIH with GS to pull Tubing Hanger isolation sleeve.
03:10:00 Expro wireline at surface with isolation sleeve, closed SV on flowhead.
03:27:00 Broke out lubricator and inspected sleeve, pin not sheared.
03:35:00 Stabbed on with lubricator.
03:37:00 Opened SV on flowhead.
03:37:00 Expro wireline commenced RIH with GS to reset Tubing Hanger isolation sleeve, wireline remained in hole.
03:49:00 Commenced pressure testing Tubing Hanger isolation sleeve to $\pm 200/4000$ psi.
03:53:00 No test, Tubing Hanger isolation sleeve not set properly.
03:55:00 Expro wireline commenced jarring on sleeve in attempt to set.
04:00:00 Commenced pressure testing Tubing Hanger isolation sleeve to $\pm 200/4000$ psi.
04:02:00 No test, Tubing Hanger isolation sleeve not set properly.
04:07:00 Expro wireline commenced jarring on sleeve in attempt to set.
04:11:00 Commenced pressure testing Tubing Hanger isolation sleeve to $\pm 200/4000$ psi.
04:12:00 No test, Tubing Hanger isolation sleeve not set properly.
04:19:00 Expro wireline commenced pulling out of hole (POOH) with Tubing Hanger isolation sleeve.
04:27:00 Expro wireline at surface, closed SV on flowhead.
04:34:00 Broke out lubricator and inspected isolation sleeve rings, tool not landed properly.
05:00:00 Stabbed on with lubricator.
05:03:00 Opened SV on flowhead.
05:03:00 Expro wireline commenced RIH with GS to set Tubing Hanger isolation sleeve, wireline remained in hole.
05:19:00 Commenced pressure testing Tubing Hanger isolation sleeve to $\pm 200/4000$ psi.
05:21:00 No test, leak detected.
05:30:00 Expro wireline commenced POOH without isolation sleeve.
05:36:00 Expro wireline at surface, closed SV on flowhead (Isolation Sleeve left in hole).
05:40:00 Prepare GS tool to RIH and pull Tubing Hanger isolation Sleeve.
06:15:00 Opened SV on flowhead.
06:20:00 Expro wireline commenced RIH with GS to pull Tubing Hanger isolation sleeve.
06:40:00 Expro wireline at surface with tubing hanger isolation sleeve, closed SV on flowhead.
06:50:00 Prepared isolation sleeve to be run with lockring removed.
06:55:00 Opened SV on flowhead.
07:00:00 Expro wireline commenced RIH with GS to set Tubing Hanger isolation sleeve, wireline remained in hole.
07:11:00 Commenced pressure testing Tubing Hanger isolation sleeve to $\pm 200/4000$ psi.
07:36:00 Good test, bled off test pressure to zero.
07:42:00 Expro wireline at surface without isolation sleeve, closed SV on flowhead.
07:45:00 Closed MV on flowhead.
07:46:00 Opened choke manifold.
07:48:00 Opened KVV on flowhead.
07:55:00 SSSV line pressurised to ± 6500 psi.
08:09:00 Opened MV on flowhead.
08:10:00 Expro wireline commenced RIH with GS to pull Tubing Hanger isolation sleeve.
08:18:00 Expro wireline at surface with tubing hanger isolation sleeve, closed SV on flowhead.
08:30:00 Installed protection sleeve onto toolstring.
08:35:00 Stabbed on with lubricator.
08:36:00 Opened SV on flowhead.
08:37:00 Expro wireline commenced RIH with GS to set Tubing Hanger protection sleeve.
08:48:00 Expro wireline set protection sleeve and commenced POOH.
08:50:00 Opened SSAMV.
08:51:00 Closed SSPMV.

Client	Santos Ltd	Exal Engineer	J. Morrison / B. Tupman
Well No.	Casino 5	Location	Ocean Patriot
Test No.	Completion	Dates From/To	03/07/05 - 05/07/05

Time Comment

04/07/05

08:52:00 Expro wireline at surface, closed MV on flowhead.
09:20:00 Flushed across flowhead through surface lines with seawater to choke manifold.
09:22:00 Closed choke manifold.
09:23:00 Commenced pressure testing flowhead, wireline PCE, coflexip and surface lines to $\pm 500/5000$ psi.
09:38:00 Cementer increased test pressure to ± 5000 psi.
09:41:00 Good test, bled off test pressure to zero via choke manifold. Closed choke manifold.
09:47:00 Closed SV and opened MV on flowhead.
11:12:00 Commenced pumping forward circulating diesel down tubing taking returns up annulus.
11:34:00 Total amount of diesel circulated = 28 bbls (Tubing head pressure = 125 psi).
12:03:00 Total amount of diesel circulated = 73 bbls (Tubing head pressure = 350 psi).
12:34:00 Total amount of diesel circulated = 124 bbls (Tubing head pressure = 567 psi).
13:02:00 Total amount of diesel circulated = 169 bbls (Tubing head pressure = 753 psi).
13:11:00 Total amount of diesel circulated = 185 bbls (Tubing head pressure = 812 psi). Stopped pumping diesel.
13:21:00 Closed MV on flowhead.
13:22:00 Bled off surface pressure via choke manifold. Closed choke manifold.
13:26:00 Opened SV on flowhead.
13:30:00 Equalised across MV on flowhead and opened (Tubing head pressure = ± 790 psi) . Closed KVV on flowhead.
13:35:00 Expro wireline commenced RIH with standing valve.
14:15:00 Expro wireline on depth at 5416ft RKB, commenced jarring to set standing valve in 4.625" QN nipple.
14:20:00 Expro wireline unable to shear off standing valve, remained latched.
14:21:00 Opened KVV on flowhead.
14:40:00 Unable to pressure test against standing valve. Closed KVV on flowhead.
14:45:00 Expro wireline shear off standing valve, commenced POOH.
14:56:00 Expro wireline at surface, closed MV on flowhead.
14:57:00 Bled off surface pressure to zero via choke manifold.
15:02:00 Closed SV on flowhead.
15:05:00 Broke out lubricator and tied new rope socket.
15:45:00 Stabbed on with lubricator.
15:49:00 Closed choke manifold.
15:51:00 Opened KVV on flowhead.
15:54:00 Opened SV on flowhead.
16:00:00 Equalised across MV on flowhead and opened (Tubing head pressure = ± 785 psi) . Closed KVV on flowhead.
16:05:00 Expro wireline commenced RIH with GS to pull standing valve.
16:19:00 Expro wireline on depth at 5416ft RKB and latched standing valve.
16:21:00 Opened KVV on flowhead.
16:22:00 Pressured up tubing to ± 1200 psi to test against standing valve.
16:31:00 No test, leak observed (Tubing head pressure = ± 790 psi). Wireline jarred doen on Standing Valve.
16:33:00 Increased tubing pressure to ± 1300 psi.
16:39:00 Increased tubing pressure to ± 2000 psi.
16:47:00 Increased tubing pressure to ± 4000 psi to set Halliburton HHT packer.
17:02:00 Packer set.
17:03:00 Bled off surface pressure via choke manifold to ± 1000 psi. Closed choke manifold.
17:15:00 Closed KVV on flowhead.
17:23:00 Closed SSXOV.
17:24:00 Opened SSPMV.
17:36:00 Commenced pressure testing annulus between packer and tubing hanger to $\pm 500/3000$ psi.
17:58:00 Closed SSAAV.
17:59:00 Good test, bled off surface pressure above SSAAV to ± 168 psi, held for 10 min leak of test.

Client	Santos Ltd	Exal Engineer	J. Morrison / B. Tupman
Well No.	Casino 5	Location	Ocean Patriot
Test No.	Completion	Dates From/To	03/07/05 - 05/07/05

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04/07/05

18:00:00 Functioned emergency shutdown system (ESD), witnessed by Expro welltest supervisor and Santos completions engineer.

18:00:00 Expro wireline commenced POOH.

18:11:00 Good test, equalized pressure across SSAAV.

18:14:00 Opened SSAAV.

18:14:00 Closed SSAMV.

18:16:00 Bled down pressure above SSAMV to ± 250 psi held for 10 min leak off test.

18:30:00 Good test, equalized pressure across SSAMV.

18:32:00 Opened SSAMV.

18:35:00 Expro wireline tools at surface, closed SV on flowhead.

18:36:00 Bled off surface pressure to ± 100 psi.

18:40:00 Closed SSPMV.

18:44:00 Opened KVV on flowhead.

18:47:00 Commenced pressure testing tubing between well test choke and QN nipple to ± 4000 psi.

18:55:00 Closed SSSV.

18:57:00 Bled off surface pressure via choke manifold to ± 1500 psi. Closed choke manifold.

19:07:00 Commenced leak off test of SSSV for 10 min.

19:20:00 Good test, equalized pressure above SSSV to ± 3750 psi.

19:26:00 Opened SSSV.

19:28:00 Bled off surface pressure via choke manifold to ± 1200 psi. Closed choke manifold.

19:33:00 Reduced SSSV control line pressure to ± 5000 psi.

19:46:00 Shut MV on flowhead.

19:46:00 Opened SV on flow head.

19:48:00 Bled off surface pressure to zero via choke manifold.

20:00:00 Functioned emergency shutdown system (ESD) on drillfloor, witnessed by Expro welltest supervisor and Santos completions engineer.

20:19:00 Closed choke manifold.

20:38:00 Equalised across MV on flowhead and opened (Tubing head pressure = ± 1250 psi) . Closed KVV on flowhead.

20:47:00 Conducted JSA prior to flowing well.

20:48:00 Opened MV on flowhead.

20:48:00 Expro wireline commenced RIH with GS to pull standing valve.

21:08:00 Expro wireline on depth at 5416ft RKB and latched/pulled standing valve.

21:13:00 Prepared flarebooms for testing operations.

21:32:00 Expro Wireline at surface with standing valve, closed SV on Flowhead.

21:34:00 Bled off surface pressure via choke manifold to zero.

21:40:00 Total cumulative returns to surge tank - 2.5 bbls.

21:41:00 Closed choke manifold.

22:06:00 Commenced pressure testing wireline lubricator to ± 4000 psi.

22:30:00 Total cumulative returns to surge tank - 3.5 bbls.

22:31:00 Bled off surface pressure to zero via choke manifold.

22:37:00 Equalised across MV on flowhead and opened (Tubing head pressure = ± 1250 psi) . Closed KVV on flowhead.

22:40:00 Opened MV on flowhead.

22:43:00 Opened well on 16/64" adjustable choke to surge tank.

22:45:00 Increased to 24/64" adjustable choke.

22:46:00 Total cumulative returns to surge tank - 4.5 bbls.

22:47:00 Total cumulative returns to surge tank - 8 bbls.

22:48:00 Total cumulative returns to surge tank - 10.5 bbls.

22:49:00 Total cumulative returns to surge tank - 12.5 bbls.

22:50:00 Total cumulative returns to surge tank - 13.5 bbls.

22:51:00 Total cumulative returns to surge tank - 15.5 bbls.

Client	Santos Ltd	Exal Engineer	J. Morrison / B. Tupman
Well No.	Casino 5	Location	Ocean Patriot
Test No.	Completion	Dates From/To	03/07/05 - 05/07/05

Time Comment

04/07/05

22:52:00 Total cumulative returns to surge tank - 16.5 bbls.
 22:52:00 Increased to 28/64" adjustable choke.
 22:53:00 Total cumulative returns to surge tank - 18.5 bbls.
 22:54:00 Total cumulative returns to surge tank - 20.5 bbls.
 22:55:00 Total cumulative returns to surge tank - 23 bbls.
 22:56:00 Total cumulative returns to surge tank - 26 bbls.
 22:57:00 Total cumulative returns to surge tank - 28 bbls.
 22:58:00 Total cumulative returns to surge tank - 30.5 bbls.
 22:59:00 Total cumulative returns to surge tank - 37.5 bbls.
 23:00:00 Total cumulative returns to surge tank - 39.5 bbls.
 23:00:00 Diverted flow from surge tank to port flareboom.
 23:01:00 Total cumulative returns to surge tank - 43.5 bbls.
 23:01:00 Increased to 32/64" adjustable choke.
 23:02:00 Increased to 36/64" adjustable choke.
 23:03:00 Increased to 40/64" adjustable choke.
 23:06:00 Increased to 48/64" adjustable choke.
 23:11:00 Bled down annulus pressure.
 23:16:00 Port flareboom flame extinguished due to water/mud to surface.
 23:18:00 Diverted flow through gas line to port flareboom.
 23:18:00 Brine at surface.
 23:25:00 Increased to 52/64" adjustable choke.
 23:29:00 Increased to 56/64" adjustable choke.
 23:30:00 Activated low pilot upstream of SSV.
 23:33:00 Gas to surface.
 23:33:00 Bled down annulus pressure.
 23:36:00 Gas flare lit.
 23:39:00 Increased to 64/64" adjustable choke.
 23:50:00 Diverted flow through a 64/64" fixed choke.
 23:58:00 Bled down annulus pressure.

05/07/05

00:00:00 Draeger indicated 0.6% CO2, and 0ppm H2S.
 00:10:00 Diverted flow through a 64/64" adjustable choke.
 00:15:00 Decreased to 48/64" adjustable choke.
 00:27:00 Commenced methanol injection upstream of Surface Safety Valve.
 00:30:00 Increased to 54/64" adjustable choke.
 00:30:00 Draeger indicated 0.5% CO2, and 0ppm H2S.
 00:31:00 Stopped methanol injection upstream of Surface Safety Valve.
 00:35:00 Increased to 56/64" adjustable choke.
 00:44:00 Increased to 58/64" adjustable choke.
 00:47:00 Leak in ESD line caused by line contacting compressor exhaust.
 00:48:00 Closed choke manifold.
 00:58:00 FWV on flowhead opened.
 01:33:00 Opened well on 16/64" adjustable choke to port flareboom.
 01:34:00 Gradually increased to 60/64" adjustable.
 01:37:00 Diverted through a 60/64" fixed choke.
 01:38:00 Diverted flow through test separator.
 01:39:00 Commenced methanol injection upstream of Surface Safety Valve.
 01:45:00 Gas SG - 0.708.
 01:45:00 Draeger indicated 0.5% CO2, and 0ppm H2S.
 01:51:00 Installed 4.75" orifice plate in test separator gas meter run.
 02:00:00 Draeger indicated 0.8% CO2, and 0ppm H2S.

Client	Santos Ltd	Exal Engineer	J. Morrison / B. Tupman
Well No.	Casino 5	Location	Ocean Patriot
Test No.	Completion	Dates From/To	03/07/05 - 05/07/05

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02:15:00 Gas SG - 0.692.
02:15:00 Radon - 116 Bq/m3.
02:24:00 Bled down annulus pressure.
02:30:00 Draeger indicated 0.7% CO2, and 0ppm H2S.
03:00:00 Gas SG - 0.678.
03:00:00 Draeger indicated 0.7% CO2, and 0ppm H2S.
03:15:00 Water SG - 1.116, water PH 7.
03:15:00 Radon - 82 Bq/m3.
03:24:00 Obtained PVT gas sample No: 1.01 (20L bottle no: A-1971).
03:35:00 Chlorides - 70000 mg/L.
03:35:00 Alkalinity - 892 mg/L CaCo3eqv.
03:35:00 pH - 6.14 @ 11.3 °C.
03:35:00 Conductivity - 44.6 mS/cm @ 11.3 °C.
03:35:00 Resistivity - 0.022 Ohm-m @ 11.3 °C.
03:35:00 Water SG - 1.088 @ 12.5 °C.
03:44:00 Radon - 112 Bq/m3.
03:54:00 Obtained PVT gas sample No: 1.02 (20L bottle no: A-0168).
04:14:00 Lifted 4.75" orifice plate from test separator gas meter run.
04:15:00 Closed in well at choke manifold. Stopped methanol injection upstream of Surface Safety Valve.
04:15:00 Average water rate through separator on 60/64" Choke - 24 bbls/d.
04:15:00 Clean-up criteria established: 1: BS&W <3% - not measurable, 2: Stable THP - <10 psi/5 min change over 2 hours, 3: Stable gas rate - 45 MMscf/d 4: WGR <0.5 bbl/MMscf - estimated LGR <0.5 bbl/MMscf.
04:15:00 Obtained gas sample No: 1.03 (150cc bottle no: W-015).
04:18:00 Obtained gas sample No: 1.04 (150cc bottle no: W-019).
04:20:00 Condensate SG - 0.794 @ 15 °C. API - 46.7.
04:20:00 Obtained 4 x 1L water/condensate sample No's: 1.05, 1.06, 1.07 & 1.08 (1L container).
04:20:00 Isolated low pilots in well test area.
04:20:00 Closed SSSV.
04:28:00 Bled off surface pressure via choke manifold to ±100 psi. Closed choke manifold.
04:38:00 Commenced leak off test on SSSV.
04:57:00 Good test, bled off surface pressure to zero via choke manifold, closed choke manifold.
05:00:00 Bullheaded 26 bbls of water/glycol mix on top of SSSV.
05:35:00 Expro wireline installed GS into lubricator.
05:45:00 Stabbed on with lubricator.
05:50:00 Expro wireline commenced RIH with GS to pull protection sleeve.
06:04:00 Closed SSAMV.
06:05:00 Opened SSXOV.
06:06:00 Opened SSPMV.
06:10:00 Expro wireline at surface with protection sleeve, closed MV on flowhead.
06:12:00 Broke out lubricator, changed out to set Tubing hanger plug
06:17:00 Flushed across flowhead to choke manifold.
06:21:00 Returns observed at choke manifold. Closed choke manifold.
06:22:00 Commenced pressure testing lubricator to ±500/5000 psi.
06:37:00 Good test, bled off surface pressure to zero via choke manifold.
06:38:00 Opened MV on flowhead.
06:39:00 Expro wireline commenced RIH to set 6.7" Tubing Hanger plug.
06:45:00 Expro wireline on depth with 6.7" Tubing Hanger plug.
06:50:00 Cementer applied ±3000 psi to tubing to assist setting of Tubing Hanger plug.
07:00:00 Expro wireline commenced POOH.
07:07:00 Expro wireline at surface, closed SV on flowhead.
07:08:00 Increased tubing pressure to ±5000 psi to pressure test Tubing Hanger plug.

Client	Santos Ltd	Exal Engineer	J. Morrison / B. Tupman
Well No.	Casino 5	Location	Ocean Patriot
Test No.	Completion	Dates From/To	03/07/05 - 05/07/05

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05/07/05

07:31:00 Good test, bled off surface pressure to ±3000 psi via choke manifold. Opened SV on flowhead.
07:36:00 Bled off surface pressure to zero via choke manifold.
07:40:00 Commenced pressure testing below 6.7" Tubing Hanger plug to ±1000 psi.
07:51:00 Bled down pressure to ±540 psi via rig floor.
08:07:00 Good test, bled off pressure to ±50 psi.
08:17:00 Commenced flushing flowhead and surface lines.
08:27:00 Closed SSPMV.
08:28:00 Closed SSXOV.
08:30:00 Opened SSAMV.
08:31:00 Closed SSAMV.
08:32:00 Completed flushing flowhead and surface lines.
08:32:00 End of test.



Clean Up Flow Period - Data Listing

Client	Santos Ltd
Well No.	Casino 5
Test No.	Completion
Location	Ocean Patriot
Dates From/To	03/07/05 - 05/07/05
Country	Australia
Field	Casino
Formation	Waarre C Sands
Exal Engineer	J. Morrison / B. Tupman
Expro Supervisor	F. Beaton
Client Engineer	R. King / M. Andronov / P. Nardone
Perforations	Expandable Sand Screens

Gas specific gravity of 0.59 used for rate calculations based on PVT analysis performed on gas samples. This over rides the estimate gas specific gravity reported during the test.

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	Choke 64th	UcP PSIG	UcT °F	DcP PSIG	DcT °F	AnnP PSIG	GasP PSIG	GasT °F	GasD INWG	Orif Size ins	QGas1av MMscf/d	Gas1Cum MMscf	GasSG Factor	Co2 mol%	H2S ppm
<u>04/07/05</u>															
22:43:00	Opened well on 16/64" adjustable choke to surge tank.														
22:43:00	16	1114.9	53.8	4.6	53.5	120.1	0.00	54.5	0.0	0.0	0.000	0.000	0.590	0.00	0.00
22:44:00	16	997.8	53.8	9.1	53.5	107.0	0.00	54.5	0.0	0.0	0.000	0.000	0.590	0.00	0.00
22:45:00	Increased to 24/64" adjustable choke.														
22:45:00	24	577.4	53.8	8.1	53.7	68.8	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
22:46:00	Total cumulative returns to surge tank - 4.5 bbls.														
22:46:00	24	566.8	53.9	51.9	53.9	68.6	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
22:47:00	Total cumulative returns to surge tank - 8 bbls.														
22:47:00	24	577.9	54.0	47.8	54.3	68.8	0.00	54.5	0.0	0.0	0.000	0.000	0.590	0.00	0.00
22:48:00	Total cumulative returns to surge tank - 10.5 bbls.														
22:48:00	24	587.9	54.5	48.0	55.0	72.7	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
22:49:00	Total cumulative returns to surge tank - 12.5 bbls.														
22:49:00	24	600.3	55.0	48.4	55.6	79.0	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
22:50:00	Total cumulative returns to surge tank - 13.5 bbls.														
22:50:00	24	615.7	55.1	50.2	55.9	83.1	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
22:51:00	Total cumulative returns to surge tank - 15.5 bbls.														
22:51:00	24	631.0	55.3	51.4	56.2	90.1	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
22:52:00	Total cumulative returns to surge tank - 16.5 bbls.														
22:52:00	Increased to 28/64" adjustable choke.														
22:52:00	28	645.3	55.5	53.1	56.5	100.1	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
22:53:00	Total cumulative returns to surge tank - 18.5 bbls.														
22:53:00	28	653.7	55.6	98.3	56.7	107.5	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
22:54:00	Total cumulative returns to surge tank - 20.5 bbls.														
22:54:00	28	675.4	55.8	100.9	56.8	117.7	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
22:55:00	Total cumulative returns to surge tank - 23 bbls.														
22:55:00	28	696.2	55.9	102.8	57.0	128.5	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
22:56:00	Total cumulative returns to surge tank - 26 bbls.														
22:56:00	28	716.5	56.1	105.4	57.2	144.1	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
22:57:00	Total cumulative returns to surge tank - 28 bbls.														
22:57:00	28	737.3	56.4	108.9	57.5	155.1	0.00	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
22:58:00	Total cumulative returns to surge tank - 30.5 bbls.														

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	Choke 64th	UcP PSIG	UcT °F	DcP PSIG	DcT °F	AnnP PSIG	GasP PSIG	GasT °F	GasD INWG	Orif Size ins	QGas1av MMscf/d	Gas1Cum MMscf	GasSG Factor	Co2 mol%	H2S ppm
<u>04/07/05</u>															
22:58:00	28	759.4	57.2	112.4	58.0	169.8	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
22:59:00	Total cumulative returns to surge tank - 37.5 bbls.														
22:59:00	28	781.7	58.0	115.8	58.7	185.6	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:00:00	Total cumulative returns to surge tank - 39.5 bbls.														
23:00:00	Diverted flow from surge tank to port flareboom.														
23:00:00	28	804.0	59.0	119.7	59.5	201.3	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:01:00	Total cumulative returns to surge tank - 43.5 bbls.														
23:01:00	Increased to 32/64" adjustable choke.														
23:01:00	32	825.6	59.9	19.6	60.2	217.0	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:02:00	Increased to 36/64" adjustable choke.														
23:02:00	36	846.9	60.7	73.9	61.1	232.2	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:03:00	Increased to 40/64" adjustable choke.														
23:03:00	40	869.6	61.6	101.5	62.1	253.4	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:04:00	40	901.1	62.5	136.9	62.9	261.0	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:05:00	40	947.0	63.6	141.4	63.7	287.1	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:06:00	Increased to 48/64" adjustable choke.														
23:06:00	48	999.4	64.8	146.3	64.7	322.1	0.00	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:07:00	48	1039.0	66.0	202.5	65.6	354.4	0.00	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:08:00	48	1098.5	67.1	272.2	66.5	396.7	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:09:00	48	1179.7	68.4	288.4	67.4	444.6	0.00	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:10:00	48	1263.3	69.9	303.5	68.6	489.7	0.00	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:11:00	Bled down annulus pressure.														
23:11:00	48	1351.2	71.5	319.4	69.9	538.4	0.00	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:12:00	48	1442.0	73.2	336.2	71.3	221.3	0.00	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:13:00	48	1536.6	74.9	354.6	72.7	136.1	0.00	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:14:00	48	1633.5	76.4	377.1	74.0	169.4	0.00	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:15:00	48	1737.4	78.0	396.1	75.3	201.9	0.00	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:16:00	Port flareboom flame extinguished due to water/mud to surface.														
23:16:00	48	1841.2	79.5	416.1	76.5	228.9	0.00	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:17:00	48	1944.7	81.2	663.5	77.8	249.9	0.00	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:18:00	Diverted flow through gas line to port flareboom.														

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	Choke 64th	UcP PSIG	UcT °F	DcP PSIG	DcT °F	AnnP PSIG	GasP PSIG	GasT °F	GasD INWG	Orif Size ins	QGas1av MMscf/d	Gas1Cum MMscf	GasSG Factor	Co2 mol%	H2S ppm
04/07/05															
23:18:00	Brine at surface.														
23:18:00	48	2018.7	82.3	742.2	77.8	266.7	0.00	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:19:00	48	2047.5	83.2	588.9	77.1	277.1	5.99	57.1	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:20:00	48	2071.6	83.5	749.0	76.4	287.1	13.10	64.1	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:21:00	48	2084.1	83.3	688.5	74.5	297.6	31.13	67.0	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:22:00	48	2080.4	82.6	731.4	71.8	313.1	57.87	65.2	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:23:00	48	2089.6	81.8	726.1	68.7	329.1	90.25	60.7	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:24:00	48	2099.6	81.2	727.5	65.8	349.7	125.89	56.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:25:00	Increased to 52/64" adjustable choke.														
23:25:00	52	2123.8	80.7	743.0	63.7	370.6	159.19	53.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:26:00	52	2134.4	80.6	852.8	62.4	387.3	192.31	53.0	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:27:00	52	2161.4	81.0	880.4	62.8	406.7	222.42	56.1	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:28:00	56	2180.4	81.7	902.7	63.4	423.1	252.10	59.5	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:29:00	Increased to 56/64" adjustable choke.														
23:29:00	56	2193.3	82.3	896.1	63.5	437.4	280.43	60.9	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:30:00	Activated low pilot upstream of SSV.														
23:30:00	56	2170.8	82.4	1037.0	62.9	449.5	328.64	59.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:31:00	56	2177.7	82.4	1028.4	62.1	470.3	380.77	56.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:32:00	56	2187.7	82.6	1018.0	61.1	493.6	431.12	53.7	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:33:00	Gas to surface.														
23:33:00	Bled down annulus pressure.														
23:33:00	56	2192.0	82.9	1027.0	60.1	515.9	480.92	51.5	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:34:00	56	2207.0	83.3	1036.0	59.6	226.8	525.81	50.9	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:35:00	56	2229.9	83.8	1061.3	59.5	124.4	564.82	51.9	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:36:00	Gas flare lit.														
23:36:00	56	2244.4	84.5	1075.0	59.9	139.1	598.67	54.2	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:37:00	56	2253.6	85.1	1079.5	60.1	150.4	630.38	55.1	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:38:00	56	2258.5	85.5	1077.1	60.1	164.9	656.93	55.0	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:39:00	Increased to 64/64" adjustable choke.														
23:39:00	64	2263.4	85.9	1073.2	59.7	179.4	678.77	53.8	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:40:00	64	2246.4	86.0	1186.8	59.3	190.4	707.71	52.7	0.0	0.0	0.000	0.000	0.590	0.00	0.00

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	Choke 64th	UcP PSIG	UcT °F	DcP PSIG	DcT °F	AnnP PSIG	GasP PSIG	GasT °F	GasD INWG	Orif Size ins	QGas1av MMscf/d	Gas1Cum MMscf	GasSG Factor	Co2 mol%	H2S ppm
<u>04/07/05</u>															
23:41:00	64	2218.4	86.3	1314.0	59.9	205.6	754.87	53.7	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:42:00	64	2224.1	86.7	1305.0	60.4	227.5	798.05	54.5	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:43:00	64	2228.4	87.3	1297.2	60.7	252.6	830.43	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:44:00	64	2237.4	87.8	1304.8	60.9	277.9	850.98	54.0	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:45:00	64	2248.7	88.4	1318.3	61.1	299.8	865.33	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:46:00	64	2263.0	88.8	1293.4	61.4	321.3	869.93	54.6	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:47:00	64	2265.6	89.3	1303.8	61.4	340.7	868.82	54.5	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:48:00	64	2267.9	89.7	1300.3	61.5	357.7	872.26	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:49:00	64	2269.1	90.2	1291.1	61.4	376.5	868.15	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:50:00	Diverted flow through a 64/64" fixed choke.														
23:50:00	64	2313.9	90.6	1067.9	61.2	393.9	861.59	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:51:00	64	2291.4	90.9	1222.8	60.4	412.3	849.20	54.1	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:52:00	64	2292.8	91.2	1214.0	59.8	427.8	837.30	54.0	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:53:00	64	2294.1	91.4	1206.3	59.3	444.4	817.86	54.0	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:54:00	64	2295.5	91.7	1200.3	58.9	459.3	805.23	54.1	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:55:00	64	2297.1	92.1	1199.3	58.6	474.0	801.91	54.2	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:56:00	64	2299.0	92.3	1197.9	58.4	488.7	800.32	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:57:00	64	2300.6	92.6	1196.0	58.2	504.7	799.77	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:58:00	Bled down annulus pressure.														
23:58:00	64	2302.2	92.9	1195.0	58.0	518.6	798.60	54.4	0.0	0.0	0.000	0.000	0.590	0.00	0.00
23:59:00	64	2303.4	93.2	1195.2	58.0	207.6	797.44	54.3	0.0	0.0	0.000	0.000	0.590	0.00	0.00
<u>05/07/05</u>															
00:00:00	Draeger indicated 0.6% CO2, and 0ppm H2S.														
00:00:00	64	2304.9	93.6	1192.2	58.0	121.2	795.72	54.4	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:01:00	64	2305.9	94.0	1190.5	58.0	132.8	794.00	54.4	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:02:00	64	2306.9	94.4	1188.7	58.1	142.2	792.90	54.4	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:03:00	64	2307.9	94.7	1183.4	58.2	153.3	790.32	54.3	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:04:00	64	2308.6	95.0	1183.0	58.2	163.3	789.10	54.2	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:05:00	64	2309.0	95.2	1177.7	58.2	174.3	783.64	54.3	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:06:00	64	2309.6	95.5	1174.4	58.2	185.3	780.20	54.1	0.0	0.0	0.000	0.000	0.590	0.60	0.00

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	Choke 64th	UcP PSIG	UcT °F	DcP PSIG	DcT °F	AnnP PSIG	GasP PSIG	GasT °F	GasD INWG	Orif Size ins	QGas1av MMscf/d	Gas1Cum MMscf	GasSG Factor	Co2 mol%	H2S ppm
<u>05/07/05</u>															
00:07:00	64	2309.6	95.9	1168.9	58.2	195.4	776.09	54.0	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:08:00	64	2310.6	96.2	1167.2	58.3	206.4	771.49	54.0	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:09:00	64	2311.0	96.4	1159.0	58.3	213.8	768.61	54.0	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:10:00	Diverted flow through a 64/64" adjustable choke.														
00:10:00	64	2311.4	96.7	1160.5	58.3	225.2	767.57	54.0	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:11:00	64	2295.9	97.0	1238.2	58.4	233.2	782.23	53.9	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:12:00	64	2293.6	97.3	1243.9	59.0	243.0	816.57	52.5	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:13:00	64	2294.3	97.7	1247.4	59.6	253.6	826.57	52.5	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:14:00	64	2295.5	98.0	1249.0	60.1	263.8	829.33	52.9	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:15:00	Decreased to 48/64" adjustable choke.														
00:15:00	64	2295.7	98.4	1246.5	60.5	272.2	830.55	53.1	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:16:00	48	2304.3	98.7	1216.9	60.9	282.6	828.35	53.4	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:17:00	48	2426.7	99.1	727.3	58.9	304.1	728.32	53.3	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:18:00	48	2429.2	98.9	696.6	55.3	307.8	626.39	52.0	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:19:00	48	2429.2	98.3	725.5	52.6	307.8	550.83	50.5	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:20:00	48	2428.8	97.8	769.6	50.8	307.8	498.70	49.6	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:21:00	48	2429.0	97.3	812.3	49.5	307.8	478.16	49.5	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:22:00	48	2428.8	96.9	866.3	48.6	307.4	489.57	49.9	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:23:00	48	2428.8	96.6	908.4	48.0	307.2	504.65	50.5	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:24:00	48	2428.8	96.4	934.4	47.6	307.0	518.08	51.1	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:25:00	48	2428.6	96.2	946.9	47.4	306.8	529.55	51.5	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:26:00	48	2428.4	96.0	938.7	47.3	307.2	539.49	51.6	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:27:00	Commenced methanol injection upstream of Surface Safety Valve.														
00:27:00	48	2427.8	95.9	907.2	47.2	307.0	538.87	51.6	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:28:00	48	2427.9	95.8	879.2	47.1	310.9	538.87	51.6	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:29:00	48	2428.2	95.7	918.4	46.9	310.9	537.83	51.8	0.0	0.0	0.000	0.000	0.590	0.60	0.00
00:30:00	Increased to 54/64" adjustable choke.														
00:30:00	Draeger indicated 0.5% CO2, and 0ppm H2S.														
00:30:00	54	2428.2	95.6	951.8	46.9	313.9	543.35	51.7	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:31:00	Stopped methanol injection upstream of Surface Safety Valve.														
00:31:00	54	2390.7	95.6	1210.6	47.0	313.9	561.81	52.0	0.0	0.0	0.000	0.000	0.590	0.50	0.00

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	Choke 64th	UcP PSIG	UcT °F	DcP PSIG	DcT °F	AnnP PSIG	GasP PSIG	GasT °F	GasD INWG	Orif Size ins	QGas1av MMscf/d	Gas1Cum MMscf	GasSG Factor	Co2 mol%	H2S ppm
<u>05/07/05</u>															
00:32:00	54	2373.0	96.0	1108.3	48.2	311.3	651.04	43.3	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:33:00	54	2368.5	96.7	1062.3	49.6	317.8	684.29	42.1	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:34:00	56	2368.7	97.3	1053.0	50.5	325.0	681.71	44.3	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:35:00	Increased to 56/64" adjustable choke.														
00:35:00	56	2368.9	97.8	1038.2	51.2	332.3	681.03	46.0	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:36:00	56	2357.4	98.2	1084.8	51.6	339.1	696.18	46.8	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:37:00	56	2354.8	98.7	1082.2	52.4	345.6	714.40	46.4	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:38:00	56	2354.4	99.2	1070.9	53.1	351.6	715.50	47.5	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:39:00	56	2354.4	99.6	1055.4	53.5	359.3	710.60	48.3	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:40:00	56	2353.5	100.0	1048.2	53.9	366.5	705.50	48.8	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:41:00	56	2353.7	100.2	1046.6	54.2	372.6	700.23	49.2	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:42:00	56	2354.2	100.4	1042.1	54.4	379.4	699.19	49.5	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:43:00	56	2353.7	100.7	1038.0	54.7	385.5	695.69	49.8	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:44:00	Increased to 58/64" adjustable choke.														
00:44:00	58	2353.7	100.8	1023.3	54.9	392.4	692.93	50.0	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:45:00	58	2349.4	100.9	1055.6	55.0	398.8	700.29	50.0	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:46:00	58	2349.4	101.2	1058.1	55.3	402.4	704.83	50.4	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:47:00	Leak in ESD line caused by line contacting compressor exhaust.														
00:47:00	58	2349.4	101.4	1055.8	55.6	409.2	706.61	50.6	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:48:00	Closed choke manifold.														
00:48:00	0	3.4	93.9	5.4	54.4	427.4	567.94	49.9	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:49:00	0	3.2	89.8	4.6	53.5	415.9	460.86	47.4	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:50:00	0	2.8	88.2	2.8	53.0	402.4	377.27	45.6	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:51:00	0	2.8	87.3	2.2	52.6	387.3	307.85	44.1	0.0	0.0	0.000	0.000	0.590	0.50	0.00
00:52:00	0	2.8	86.8	1.4	52.3	372.8	250.38	43.0	1.5	0.0	0.000	0.000	0.590	0.50	0.00
00:53:00	0	3.0	86.3	0.9	52.1	356.9	202.98	42.3	4.7	0.0	0.000	0.000	0.590	0.50	0.00
00:54:00	0	3.0	85.9	0.9	52.0	342.4	163.17	42.1	5.8	0.0	0.000	0.000	0.590	0.50	0.00
00:55:00	0	3.0	85.5	0.3	51.8	330.7	130.18	41.8	7.3	0.0	0.000	0.000	0.590	0.50	0.00
00:56:00	0	3.0	85.0	0.3	51.8	316.6	103.32	41.8	8.8	0.0	0.000	0.000	0.590	0.50	0.00
00:57:00	0	3.0	84.5	0.1	51.7	304.7	81.36	42.0	9.0	0.0	0.000	0.000	0.590	0.50	0.00
00:58:00	FWV on flowhead opened.														

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	Choke 64th	UcP PSIG	UcT °F	DcP PSIG	DcT °F	AnnP PSIG	GasP PSIG	GasT °F	GasD INWG	Orif Size ins	QGas1av MMscf/d	Gas1Cum MMscf	GasSG Factor	Co2 mol%	H2S ppm
<u>05/07/05</u>															
00:58:00	0	2.4	84.1	0.0	51.6	293.7	63.51	42.2	9.0	0.0	0.000	0.000	0.590	0.50	0.00
00:59:00	0	41.2	83.6	0.0	51.6	283.3	48.67	42.5	0.1	0.0	0.000	0.000	0.590	0.50	0.00
01:00:00	0	2494.0	86.5	0.0	51.5	273.3	35.67	42.8	0.0	0.0	0.000	0.000	0.590	0.50	0.00
01:01:00	0	2494.2	89.3	0.0	51.5	261.0	26.72	43.2	0.0	0.0	0.000	0.000	0.590	0.50	0.00
01:02:00	0	2494.2	89.9	0.0	51.5	253.8	19.36	43.6	0.4	0.0	0.000	0.000	0.590	0.50	0.00
01:03:00	0	2494.0	89.8	0.0	51.5	243.6	13.16	44.0	0.2	0.0	0.000	0.000	0.590	0.50	0.00
01:04:00	0	2494.0	89.3	0.1	51.5	233.6	8.01	44.5	0.1	0.0	0.000	0.000	0.590	0.50	0.00
01:05:00	0	2493.2	88.8	0.0	51.5	223.0	4.76	45.0	0.1	0.0	0.000	0.000	0.590	0.50	0.00
01:06:00	0	2493.2	88.1	0.1	51.5	216.2	1.88	45.5	0.1	0.0	0.000	0.000	0.590	0.50	0.00
01:07:00	0	2493.4	87.4	0.0	51.5	207.2	0.22	46.0	0.1	0.0	0.000	0.000	0.590	0.50	0.00
01:08:00	0	2493.2	86.6	0.0	51.6	199.7	0.00	46.5	0.1	0.0	0.000	0.000	0.590	0.50	0.00
01:09:00	0	2492.8	85.9	0.0	51.6	189.2	0.00	46.9	0.1	0.0	0.000	0.000	0.590	0.50	0.00
01:10:00	0	2493.0	85.2	0.0	51.6	182.5	0.00	47.3	0.1	0.0	0.000	0.000	0.590	0.50	0.00
01:11:00	0	2492.8	84.4	0.0	51.6	175.3	0.00	47.7	0.1	0.0	0.000	0.000	0.590	0.50	0.00
01:12:00	0	2492.6	83.7	0.0	51.6	166.5	0.00	47.9	0.2	0.0	0.000	0.000	0.590	0.50	0.00
01:13:00	0	2493.0	83.0	0.0	51.6	160.6	0.00	48.3	0.2	0.0	0.000	0.000	0.590	0.50	0.00
01:14:00	0	2487.8	82.2	0.0	51.6	153.4	0.00	48.6	0.2	0.0	0.000	0.000	0.590	0.50	0.00
01:15:00	0	2478.4	81.5	0.0	51.6	147.5	0.00	48.9	0.2	0.0	0.000	0.000	0.590	0.50	0.00
01:16:00	0	2471.1	80.8	0.0	51.6	140.8	0.00	49.1	0.2	0.0	0.000	0.000	0.590	0.50	0.00
01:17:00	0	2492.6	80.1	0.0	51.6	134.4	0.00	49.3	0.2	0.0	0.000	0.000	0.590	0.50	0.00
01:18:00	0	2492.6	79.4	0.0	51.6	129.7	0.00	49.5	0.2	0.0	0.000	0.000	0.590	0.50	0.00
01:19:00	0	2492.6	78.8	0.0	51.7	123.0	0.00	49.7	0.2	0.0	0.000	0.000	0.590	0.50	0.00
01:20:00	0	2492.6	78.1	0.0	51.7	116.9	0.00	49.8	0.2	0.0	0.000	0.000	0.590	0.50	0.00
01:21:00	0	2492.1	77.5	0.0	51.7	113.4	0.00	50.0	0.2	0.0	0.000	0.000	0.590	0.50	0.00
01:22:00	0	2492.1	76.8	0.0	51.7	106.2	0.00	50.2	0.3	0.0	0.000	0.000	0.590	0.50	0.00
01:23:00	0	2492.3	76.2	0.0	51.7	103.4	0.00	50.3	0.3	0.0	0.000	0.000	0.590	0.50	0.00
01:24:00	0	2492.1	75.6	0.1	51.7	97.6	0.00	50.4	0.3	0.0	0.000	0.000	0.590	0.50	0.00
01:25:00	0	2492.1	75.0	0.0	51.7	94.0	0.00	50.5	0.3	0.0	0.000	0.000	0.590	0.50	0.00
01:26:00	0	2492.1	74.4	0.0	51.7	90.5	0.00	50.6	0.3	0.0	0.000	0.000	0.590	0.50	0.00
01:27:00	0	2491.9	73.8	0.0	51.7	87.0	0.00	50.6	0.3	0.0	0.000	0.000	0.590	0.50	0.00
01:28:00	0	2492.1	73.3	0.0	51.7	79.9	0.00	50.8	0.3	0.0	0.000	0.000	0.590	0.50	0.00

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	Choke 64th	UcP PSIG	UcT °F	DcP PSIG	DcT °F	AnnP PSIG	GasP PSIG	GasT °F	GasD INWG	Orif Size ins	QGas1av MMscf/d	Gas1Cum MMscf	GasSG Factor	Co2 mol%	H2S ppm
<u>05/07/05</u>															
01:29:00	0	2492.3	72.7	0.0	51.8	77.0	0.00	50.9	0.3	0.0	0.000	0.000	0.590	0.50	0.00
01:30:00	0	2492.3	72.2	0.0	51.8	73.5	0.00	51.0	0.3	0.0	0.000	0.000	0.590	0.50	0.00
01:31:00	0	2492.1	71.7	0.0	51.8	70.0	0.00	51.1	0.3	0.0	0.000	0.000	0.590	0.50	0.00
01:32:00	0	2492.3	71.2	0.0	51.8	70.0	0.00	51.1	0.3	0.0	0.000	0.000	0.590	0.50	0.00
01:33:00	Opened well on 16/64" adjustable choke to port flareboom.														
01:33:00	16	2491.9	70.7	0.0	51.8	66.4	0.00	51.2	0.3	0.0	0.000	0.000	0.590	0.50	0.00
01:34:00	Gradually increased to 60/64" adjustable.														
01:34:00	60	2486.2	70.3	181.1	51.6	62.9	3.53	51.2	0.0	0.0	0.000	0.000	0.590	0.50	0.00
01:35:00	60	2388.1	70.1	929.9	45.1	55.3	77.93	34.8	0.0	0.0	0.000	0.000	0.590	0.50	0.00
01:36:00	60	2318.8	70.9	1158.6	41.5	55.1	221.99	4.1	0.0	0.0	0.000	0.000	0.590	0.50	0.00
01:37:00	Diverted through a 60/64" fixed choke.														
01:37:00	60	2323.5	75.2	1147.0	42.7	67.0	357.34	2.7	0.0	0.0	0.000	0.000	0.590	0.50	0.00
01:38:00	Diverted flow through test separator.														
01:38:00	60	2346.0	79.2	1048.7	44.5	82.5	466.63	9.1	0.0	0.0	0.000	0.000	0.590	0.50	0.00
01:39:00	Commenced methanol injection upstream of Surface Safety Valve.														
01:39:00	60	2347.8	82.0	1074.8	45.6	98.3	557.58	15.2	0.0	0.0	0.000	0.000	0.590	0.50	0.00
01:40:00	60	2348.0	84.0	1085.5	46.5	113.4	622.89	20.0	0.0	0.0	0.000	0.000	0.590	0.50	0.00
01:41:00	60	2347.8	85.7	1088.5	47.3	128.9	665.76	23.9	0.0	0.0	0.000	0.000	0.590	0.50	0.00
01:42:00	60	2347.6	87.2	1097.9	48.0	146.9	692.93	26.9	0.2	0.0	0.000	0.000	0.590	0.50	0.00
01:43:00	60	2347.6	88.3	1106.9	48.6	162.4	710.10	29.3	0.7	0.0	0.000	0.000	0.590	0.50	0.00
01:44:00	60	2347.4	89.5	1103.0	49.2	177.0	719.43	31.7	0.0	0.0	0.000	0.000	0.590	0.50	0.00
01:45:00	Gas SG - 0.708.														
01:45:00	Draeger indicated 0.5% CO2, and 0ppm H2S.														
01:45:00	60	2347.0	90.5	1111.6	49.7	189.4	725.07	34.1	0.0	0.0	0.000	0.000	0.590	0.50	0.00
01:46:00	60	2347.0	91.3	1131.5	50.2	205.2	729.06	36.6	0.0	0.0	0.000	0.000	0.590	0.50	0.00
01:47:00	60	2346.6	92.1	1120.8	50.7	219.7	731.82	38.3	0.0	0.0	0.000	0.000	0.590	0.50	0.00
01:48:00	60	2345.8	92.7	1097.5	51.4	232.6	748.37	51.4	0.0	0.0	0.000	0.000	0.590	0.50	0.00
01:49:00	60	2347.0	93.3	1105.3	51.8	246.1	734.64	45.6	0.0	0.0	0.000	0.000	0.590	0.50	0.00
01:50:00	60	2347.4	94.0	1090.6	52.3	258.3	714.40	42.0	2.2	0.0	0.000	0.000	0.590	0.50	0.00
01:51:00	Installed 4.75" orifice plate in test separator gas meter run.														
01:51:00	60	2348.0	94.8	1085.9	52.8	269.2	718.38	41.9	63.1	4.8	0.000	0.031	0.590	0.50	0.00

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	Choke 64th	UcP PSIG	UcT °F	DcP PSIG	DcT °F	AnnP PSIG	GasP PSIG	GasT °F	GasD INWG	Orif Size ins	QGas1av MMscf/d	Gas1Cum MMscf	GasSG Factor	Co2 mol%	H2S ppm
<u>05/07/05</u>															
01:52:00	60	2348.6	95.3	1084.8	53.1	280.6	726.91	41.9	62.1	4.8	0.000	0.062	0.590	0.50	0.00
01:53:00	60	2349.4	95.9	1083.8	53.5	291.6	734.02	42.5	62.1	4.8	0.000	0.093	0.590	0.50	0.00
01:54:00	60	2349.7	96.5	1077.5	53.9	303.1	737.46	43.3	61.9	4.8	0.000	0.125	0.590	0.50	0.00
01:55:00	60	2350.5	96.9	1073.4	54.1	313.9	738.56	43.2	60.3	4.8	44.806	0.156	0.590	0.50	0.00
01:56:00	60	2350.5	97.2	1078.7	54.3	324.1	746.17	43.3	61.1	4.8	44.806	0.187	0.590	0.50	0.00
01:57:00	60	2351.1	97.6	1086.5	54.5	334.4	752.18	43.7	60.0	4.8	44.806	0.218	0.590	0.50	0.00
01:58:00	60	2350.9	97.9	1082.4	54.7	344.0	750.46	44.0	61.4	4.8	44.806	0.249	0.590	0.50	0.00
01:59:00	60	2351.9	98.3	1084.0	54.9	351.1	756.16	44.4	60.5	4.8	44.806	0.281	0.590	0.50	0.00
02:00:00	Draeger indicated 0.8% CO2, and 0ppm H2S.														
02:00:00	60	2351.9	98.6	1086.3	55.1	361.1	758.98	44.8	59.4	4.8	44.920	0.312	0.590	0.50	0.00
02:01:00	60	2353.3	99.0	1089.1	55.3	372.0	760.76	45.1	60.2	4.8	44.920	0.343	0.590	0.50	0.00
02:02:00	60	2353.5	99.4	1095.9	55.6	381.8	763.21	45.9	59.9	4.8	44.920	0.374	0.590	0.50	0.00
02:03:00	60	2353.5	99.8	1090.6	55.9	388.8	763.15	46.1	60.4	4.8	44.920	0.405	0.590	0.50	0.00
02:04:00	60	2353.9	100.1	1094.5	56.1	395.9	764.20	46.4	58.5	4.8	44.920	0.436	0.590	0.50	0.00
02:05:00	60	2353.7	100.3	1095.9	56.2	405.9	763.71	46.5	59.6	4.8	44.841	0.467	0.590	0.50	0.00
02:06:00	60	2354.4	100.7	1100.2	56.5	413.7	766.96	47.1	59.2	4.8	44.841	0.498	0.590	0.50	0.00
02:07:00	60	2354.4	101.0	1104.9	56.7	420.9	771.49	47.5	58.0	4.8	44.841	0.529	0.590	0.50	0.00
02:08:00	60	2354.6	101.2	1107.7	57.0	428.0	776.77	47.9	59.2	4.8	44.841	0.560	0.590	0.50	0.00
02:09:00	60	2354.8	101.5	1110.8	57.2	437.0	779.96	48.4	57.8	4.8	44.841	0.591	0.590	0.50	0.00
02:10:00	60	2355.2	101.7	1110.0	57.4	444.1	777.26	48.6	57.8	4.8	44.596	0.622	0.590	0.50	0.00
02:11:00	60	2355.6	102.0	1110.2	57.6	450.5	777.26	48.9	57.9	4.8	44.596	0.653	0.590	0.50	0.00
02:12:00	60	2355.6	102.3	1108.1	57.8	457.6	773.27	49.2	63.0	4.8	44.596	0.685	0.590	0.50	0.00
02:13:00	60	2355.8	102.6	1104.7	58.0	463.2	769.66	49.2	65.8	4.8	44.596	0.718	0.590	0.50	0.00
02:14:00	60	2356.6	102.8	1104.0	58.2	469.5	768.67	49.2	65.3	4.8	44.596	0.750	0.590	0.50	0.00
02:15:00	Gas SG - 0.692.														
02:15:00	Radon - 116 Bq/m3.														
02:15:00	60	2356.6	103.0	1104.5	58.4	476.7	769.78	49.6	66.7	4.8	46.370	0.783	0.590	0.50	0.00
02:16:00	60	2357.0	103.3	1101.4	58.5	483.0	764.20	49.8	69.4	4.8	46.370	0.817	0.590	0.50	0.00
02:17:00	60	2356.8	103.5	1101.6	58.6	489.9	764.69	49.7	69.0	4.8	46.370	0.850	0.590	0.50	0.00
02:18:00	60	2357.6	103.5	1102.4	58.7	496.7	765.85	49.5	67.3	4.8	46.370	0.883	0.590	0.50	0.00
02:19:00	60	2358.2	103.7	1104.9	58.8	500.0	767.57	49.9	65.2	4.8	46.370	0.915	0.590	0.50	0.00

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	Choke 64th	UcP PSIG	UcT °F	DcP PSIG	DcT °F	AnnP PSIG	GasP PSIG	GasT °F	GasD INWG	Orif Size ins	QGAs1av MMscf/d	Gas1Cum MMscf	GasSG Factor	Co2 mol%	H2S ppm
<u>05/07/05</u>															
02:20:00	60	2358.2	104.0	1105.7	58.9	507.1	768.12	50.4	64.6	4.8	47.347	0.948	0.590	0.50	0.00
02:21:00	60	2358.7	104.2	1100.6	59.1	513.3	761.87	50.4	68.9	4.8	47.347	0.981	0.590	0.50	0.00
02:22:00	60	2358.8	104.3	1098.7	59.1	519.6	757.88	50.3	67.2	4.8	47.347	1.013	0.590	0.50	0.00
02:23:00	60	2359.1	104.5	1098.1	59.2	522.6	758.98	50.2	67.3	4.8	47.347	1.046	0.590	0.50	0.00
02:24:00	Bled down annulus pressure.														
02:24:00	60	2359.5	104.5	1101.4	59.3	517.3	762.60	50.5	62.3	4.8	47.347	1.078	0.590	0.50	0.00
02:25:00	60	2359.5	104.8	1102.0	59.5	290.4	764.01	51.0	60.3	4.8	46.450	1.109	0.590	0.50	0.00
02:26:00	60	2360.1	105.1	1105.1	59.6	152.0	768.37	51.9	63.5	4.8	46.450	1.141	0.590	0.50	0.00
02:27:00	60	2360.1	105.2	1095.3	59.7	157.9	752.79	51.0	64.1	4.8	46.450	1.173	0.590	0.50	0.00
02:28:00	60	2360.3	105.3	1091.8	59.7	161.4	749.48	50.9	64.3	4.8	46.450	1.204	0.590	0.50	0.00
02:29:00	60	2360.7	105.4	1091.0	59.7	164.5	748.86	50.5	63.8	4.8	46.450	1.236	0.590	0.50	0.00
02:30:00	Draeger indicated 0.7% CO2, and 0ppm H2S.														
02:30:00	60	2360.9	105.6	1095.5	59.8	168.2	753.40	51.1	62.6	4.8	45.643	1.267	0.590	0.75	0.00
02:31:00	60	2361.3	105.8	1096.9	59.9	173.9	757.27	51.5	63.0	4.8	45.643	1.299	0.590	0.75	0.00
02:32:00	60	2361.5	106.0	1102.0	60.1	177.0	765.30	52.1	62.0	4.8	45.643	1.330	0.590	0.75	0.00
02:33:00	60	2362.3	106.1	1096.1	60.1	180.8	757.64	52.0	64.7	4.8	45.643	1.362	0.590	0.75	0.00
02:34:00	60	2362.5	106.2	1094.5	60.2	183.9	755.55	51.9	64.3	4.8	45.643	1.394	0.590	0.75	0.00
02:35:00	60	2362.5	106.3	1097.9	60.2	187.0	757.82	52.0	62.3	4.8	45.554	1.425	0.590	0.75	0.00
02:36:00	60	2362.9	106.5	1099.6	60.3	190.1	759.54	52.5	62.5	4.8	45.554	1.457	0.590	0.75	0.00
02:37:00	60	2363.2	106.7	1100.6	60.4	193.5	765.85	52.6	59.9	4.8	45.554	1.488	0.590	0.75	0.00
02:38:00	60	2363.2	106.9	1099.0	60.6	197.0	763.15	53.3	64.8	4.8	45.554	1.520	0.590	0.75	0.00
02:39:00	60	2363.6	107.0	1091.2	60.7	200.3	754.51	53.0	64.0	4.8	45.554	1.552	0.590	0.75	0.00
02:40:00	60	2363.8	107.1	1088.7	60.7	203.5	752.79	52.6	64.8	4.8	45.489	1.583	0.590	0.75	0.00
02:41:00	60	2364.0	107.2	1092.0	60.7	206.6	755.06	52.8	63.8	4.8	45.489	1.615	0.590	0.75	0.00
02:42:00	60	2364.4	107.3	1092.8	60.8	210.1	760.70	53.1	61.5	4.8	45.489	1.646	0.590	0.75	0.00
02:43:00	60	2364.4	107.5	1093.2	60.9	212.9	760.70	53.5	62.3	4.8	45.489	1.678	0.590	0.75	0.00
02:44:00	60	2364.6	107.7	1090.2	61.0	216.6	759.54	53.7	63.1	4.8	45.489	1.709	0.590	0.75	0.00
02:45:00	60	2364.8	107.8	1092.0	61.0	219.5	762.54	53.8	62.8	4.8	45.301	1.741	0.590	0.75	0.00
02:46:00	60	2365.0	107.9	1091.4	61.1	222.6	761.31	54.0	62.5	4.8	45.301	1.772	0.590	0.75	0.00
02:47:00	60	2364.8	108.1	1093.4	61.1	226.2	763.21	54.5	62.5	4.8	45.301	1.804	0.590	0.75	0.00
02:48:00	60	2364.6	108.2	1087.7	61.2	228.7	757.82	54.3	63.9	4.8	45.301	1.835	0.590	0.75	0.00

Client Santos Ltd

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Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	Choke 64th	UcP PSIG	UcT °F	DcP PSIG	DcT °F	AnnP PSIG	GasP PSIG	GasT °F	GasD INWG	Orif Size ins	QGas1av MMscf/d	Gas1Cum MMscf	GasSG Factor	Co2 mol%	H2S ppm
05/07/05															
02:49:00	60	2364.8	108.1	1092.4	61.2	231.8	765.30	54.0	60.5	4.8	45.301	1.866	0.590	0.75	0.00
02:50:00	60	2365.6	108.2	1096.1	61.3	234.8	768.61	54.5	62.0	4.8	45.200	1.898	0.590	0.75	0.00
02:51:00	60	2365.4	108.4	1096.1	61.4	237.7	764.75	54.8	63.3	4.8	45.200	1.929	0.590	0.75	0.00
02:52:00	60	2365.6	108.6	1093.2	61.5	240.5	764.75	55.1	63.5	4.8	45.200	1.961	0.590	0.75	0.00
02:53:00	60	2366.0	108.6	1091.6	61.6	241.2	766.34	55.0	62.9	4.8	45.200	1.993	0.590	0.75	0.00
02:54:00	60	2365.8	108.8	1092.0	61.6	244.6	766.40	55.3	62.3	4.8	45.200	2.024	0.590	0.75	0.00
02:55:00	60	2366.2	108.8	1088.9	61.7	247.7	763.71	55.1	63.8	4.8	45.537	2.056	0.590	0.75	0.00
02:56:00	60	2366.8	108.9	1093.2	61.7	251.2	765.24	55.4	63.6	4.8	45.537	2.087	0.590	0.75	0.00
02:57:00	60	2366.6	109.1	1091.0	61.9	251.2	766.96	55.6	63.1	4.8	45.537	2.119	0.590	0.75	0.00
02:58:00	60	2366.8	109.2	1091.2	62.0	254.2	768.37	55.8	62.2	4.8	45.537	2.151	0.590	0.75	0.00
02:59:00	60	2366.8	109.3	1092.4	62.0	257.7	770.33	55.8	62.6	4.8	45.537	2.182	0.590	0.75	0.00
03:00:00	Gas SG - 0.678.														
03:00:00	Draeger indicated 0.7% CO2, and 0ppm H2S.														
03:00:00	60	2367.2	109.3	1094.0	62.1	260.8	773.83	56.0	61.5	4.8	45.410	2.213	0.590	0.75	0.00
03:01:00	60	2367.2	109.3	1095.7	62.1	260.8	776.77	56.0	61.4	4.8	45.410	2.245	0.590	0.70	0.00
03:02:00	60	2367.2	109.3	1095.7	62.1	264.1	776.09	56.1	61.9	4.8	45.410	2.276	0.590	0.70	0.00
03:03:00	60	2367.6	109.4	1096.1	62.2	267.3	778.42	56.3	61.1	4.8	45.410	2.308	0.590	0.70	0.00
03:04:00	60	2367.2	109.5	1097.5	62.3	267.9	780.88	56.6	61.0	4.8	45.410	2.339	0.590	0.70	0.00
03:05:00	60	2367.4	109.6	1096.5	62.4	270.8	780.82	56.7	61.7	4.8	45.254	2.371	0.590	0.70	0.00
03:06:00	60	2367.8	109.7	1100.2	62.4	271.2	782.60	56.7	60.5	4.8	45.254	2.402	0.590	0.70	0.00
03:07:00	60	2367.8	109.8	1098.7	62.4	274.7	783.09	57.0	60.7	4.8	45.254	2.433	0.590	0.70	0.00
03:08:00	60	2367.8	109.9	1100.0	62.6	277.9	783.15	57.1	61.6	4.8	45.254	2.465	0.590	0.70	0.00
03:09:00	60	2367.8	110.0	1097.7	62.7	277.9	782.60	57.5	60.8	4.8	45.254	2.496	0.590	0.70	0.00
03:10:00	60	2367.8	110.2	1097.5	62.8	280.6	782.10	57.6	60.9	4.8	45.146	2.527	0.590	0.70	0.00
03:11:00	60	2368.5	110.2	1096.7	62.7	284.1	780.88	57.6	61.9	4.8	45.146	2.559	0.590	0.70	0.00
03:12:00	60	2368.5	110.3	1087.5	62.8	284.5	768.00	57.4	64.7	4.8	45.146	2.591	0.590	0.70	0.00
03:13:00	60	2368.9	110.4	1087.1	62.9	287.8	767.57	57.3	62.8	4.8	45.146	2.622	0.590	0.70	0.00
03:14:00	60	2369.1	110.5	1089.7	62.8	287.6	769.72	57.4	62.7	4.8	45.146	2.654	0.590	0.70	0.00
03:15:00	Water SG - 1.116, water PH 7.														
03:15:00	Radon - 82 Bq/m3.														
03:15:00	60	2369.3	110.5	1091.8	62.9	291.6	773.21	57.4	62.6	4.8	45.517	2.685	0.590	0.70	0.00

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	Choke 64th	UcP PSIG	UcT °F	DcP PSIG	DcT °F	AnnP PSIG	GasP PSIG	GasT °F	GasD INWG	Orif Size ins	QGas1av MMscf/d	Gas1Cum MMscf	GasSG Factor	Co2 mol%	H2S ppm
<u>05/07/05</u>															
03:16:00	60	2368.9	110.6	1094.9	62.8	291.6	774.38	57.6	62.0	4.8	45.517	2.717	0.590	0.70	0.00
03:17:00	60	2369.1	110.7	1092.4	62.9	294.7	773.27	57.6	62.3	4.8	45.517	2.748	0.590	0.70	0.00
03:18:00	60	2369.1	110.8	1094.0	62.9	295.3	774.93	57.9	62.0	4.8	45.517	2.780	0.590	0.70	0.00
03:19:00	60	2369.3	110.9	1094.9	63.0	298.4	776.09	58.0	61.1	4.8	45.517	2.811	0.590	0.70	0.00
03:20:00	60	2368.9	110.9	1094.5	63.0	298.4	776.09	58.0	62.0	4.8	45.213	2.842	0.590	0.70	0.00
03:21:00	60	2369.3	111.0	1092.8	63.0	301.9	773.27	58.0	62.1	4.8	45.213	2.874	0.590	0.70	0.00
03:22:00	60	2369.3	111.0	1092.0	63.0	302.3	770.94	58.0	62.5	4.8	45.213	2.905	0.590	0.70	0.00
03:23:00	60	2369.1	111.2	1090.4	63.1	305.3	769.17	58.2	63.6	4.8	45.213	2.937	0.590	0.70	0.00
03:24:00	Obtained PVT gas sample No: 1.01 (20L bottle no: A-1971).														
03:24:00	60	2369.5	111.2	1090.8	63.2	305.8	770.33	58.0	63.1	4.8	45.213	2.968	0.590	0.70	0.00
03:25:00	60	2369.5	111.2	1091.8	63.2	309.0	771.56	58.1	62.3	4.8	45.372	3.000	0.590	0.70	0.00
03:26:00	60	2369.5	111.2	1093.6	63.3	309.2	774.93	58.2	61.6	4.8	45.372	3.031	0.590	0.70	0.00
03:27:00	60	2369.5	111.3	1093.8	63.4	309.4	773.76	58.5	62.4	4.8	45.372	3.063	0.590	0.70	0.00
03:28:00	60	2369.5	111.3	1093.6	63.5	312.7	773.76	58.3	61.7	4.8	45.372	3.094	0.590	0.70	0.00
03:29:00	60	2369.5	111.3	1093.2	63.5	313.5	774.44	58.3	61.5	4.8	45.372	3.125	0.590	0.70	0.00
03:30:00	60	2369.7	111.3	1094.9	63.4	313.7	776.71	58.2	61.6	4.8	45.120	3.157	0.590	0.70	0.00
03:31:00	60	2369.9	111.3	1095.3	63.4	316.8	778.42	58.4	62.3	4.8	45.120	3.188	0.590	0.70	0.00
03:32:00	60	2369.7	111.4	1091.4	63.4	316.6	772.23	58.4	63.4	4.8	45.120	3.220	0.590	0.70	0.00
03:33:00	60	2369.7	111.4	1091.6	63.4	320.5	772.23	58.3	62.7	4.8	45.120	3.251	0.590	0.70	0.00
03:34:00	60	2369.7	111.5	1091.2	63.5	320.5	773.83	58.4	61.7	4.8	45.120	3.283	0.590	0.70	0.00
03:35:00	Chlorides - 70000 mg/L.														
03:35:00	Alkalinity - 892 mg/L CaCo3eqv.														
03:35:00	pH - 6.14 @ 11.3 °C.														
03:35:00	Conductivity - 44.6 mS/cm @ 11.3 °C.														
03:35:00	Resistivity - 0.022 Ohm-m @ 11.3 °C.														
03:35:00	Water SG - 1.088 @ 12.5 °C.														
03:35:00	60	2370.1	111.5	1090.6	63.5	320.7	771.56	58.6	63.3	4.8	45.419	3.314	0.590	0.70	0.00
03:36:00	60	2370.3	111.7	1088.1	63.5	323.8	769.17	58.7	62.6	4.8	45.419	3.346	0.590	0.70	0.00
03:37:00	60	2370.7	111.8	1085.0	63.6	324.4	764.75	58.9	62.9	4.8	45.419	3.377	0.590	0.70	0.00
03:38:00	60	2370.9	112.0	1085.3	63.6	327.6	764.75	58.8	62.7	4.8	45.419	3.408	0.590	0.70	0.00
03:39:00	60	2370.7	112.1	1086.5	63.7	327.4	765.85	59.0	62.8	4.8	45.419	3.440	0.590	0.70	0.00

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	Choke 64th	UcP PSIG	UcT °F	DcP PSIG	DcT °F	AnnP PSIG	GasP PSIG	GasT °F	GasD INWG	Orif Size ins	QGas1av MMscf/d	Gas1Cum MMscf	GasSG Factor	Co2 mol%	H2S ppm
<u>05/07/05</u>															
03:40:00	60	2370.9	112.2	1081.2	63.8	327.8	759.54	59.2	63.5	4.8	45.173	3.471	0.590	0.70	0.00
03:41:00	60	2370.9	112.3	1078.3	63.8	330.9	756.71	58.8	63.1	4.8	45.173	3.502	0.590	0.70	0.00
03:42:00	60	2370.9	112.2	1080.5	63.8	331.3	760.15	58.7	62.5	4.8	45.173	3.534	0.590	0.70	0.00
03:43:00	60	2370.9	112.3	1083.2	63.8	333.8	763.65	58.8	62.7	4.8	45.173	3.565	0.590	0.70	0.00
03:44:00	Radon - 112 Bq/m3.														
03:44:00	60	2370.7	112.4	1083.6	63.9	334.4	764.75	59.2	62.6	4.8	45.173	3.596	0.590	0.70	0.00
03:45:00	60	2370.7	112.4	1085.9	63.9	334.4	766.34	59.3	62.4	4.8	45.003	3.627	0.590	0.70	0.00
03:46:00	60	2370.7	112.5	1082.6	64.0	337.6	763.15	59.4	62.8	4.8	45.003	3.659	0.590	0.70	0.00
03:47:00	60	2371.1	112.5	1083.2	64.0	337.4	764.75	59.3	62.3	4.8	45.003	3.690	0.590	0.70	0.00
03:48:00	60	2370.9	112.5	1083.0	64.0	337.6	763.21	59.2	63.2	4.8	45.003	3.721	0.590	0.70	0.00
03:49:00	60	2370.9	112.7	1081.8	64.1	340.3	762.30	59.5	63.5	4.8	45.003	3.753	0.590	0.70	0.00
03:50:00	60	2370.9	112.6	1083.8	64.2	340.3	765.30	59.4	64.4	4.8	45.221	3.784	0.590	0.70	0.00
03:51:00	60	2370.9	112.6	1084.2	64.1	343.4	766.34	59.3	63.0	4.8	45.221	3.816	0.590	0.70	0.00
03:52:00	60	2371.3	112.6	1084.8	64.0	343.8	767.63	59.4	62.8	4.8	45.221	3.847	0.590	0.70	0.00
03:53:00	60	2370.9	112.8	1084.0	64.2	344.0	766.40	59.9	63.6	4.8	45.221	3.879	0.590	0.70	0.00
03:54:00	Obtained PVT gas sample No: 1.02 (20L bottle no: A-0168).														
03:54:00	60	2371.1	112.9	1082.2	64.2	346.4	762.54	59.7	62.3	4.8	45.221	3.910	0.590	0.70	0.00
03:55:00	60	2371.3	112.8	1080.3	64.2	347.1	761.31	59.4	63.6	4.8	45.192	3.941	0.590	0.70	0.00
03:56:00	60	2371.3	112.8	1082.4	64.2	347.3	764.20	59.5	62.4	4.8	45.192	3.973	0.590	0.70	0.00
03:57:00	60	2371.1	112.9	1083.8	64.2	350.9	766.22	59.7	62.5	4.8	45.192	4.004	0.590	0.70	0.00
03:58:00	60	2371.3	112.8	1084.6	64.2	350.9	766.96	59.5	62.6	4.8	45.192	4.035	0.590	0.70	0.00
03:59:00	60	2371.7	112.8	1085.9	64.2	350.9	768.67	59.5	62.1	4.8	45.192	4.066	0.590	0.70	0.00
04:00:00	60	2372.1	112.9	1085.7	64.3	351.3	768.12	59.8	62.4	4.8	45.024	4.098	0.590	0.70	0.00
04:01:00	60	2371.7	113.1	1084.4	64.4	351.1	766.16	60.2	63.1	4.8	45.024	4.129	0.590	0.70	0.00
04:02:00	60	2371.7	113.1	1083.0	64.5	354.8	764.20	60.0	63.4	4.8	45.024	4.160	0.590	0.70	0.00
04:03:00	60	2371.5	113.0	1080.8	64.4	354.8	763.15	59.6	63.2	4.8	45.024	4.192	0.590	0.70	0.00
04:04:00	60	2372.1	113.0	1083.6	64.4	355.6	766.40	59.7	61.8	4.8	45.024	4.223	0.590	0.70	0.00
04:05:00	60	2371.9	113.1	1086.1	64.4	358.1	769.17	60.0	62.3	4.8	45.090	4.254	0.590	0.70	0.00
04:06:00	60	2371.7	113.1	1086.7	64.5	358.1	770.33	60.0	61.5	4.8	45.090	4.285	0.590	0.70	0.00
04:07:00	60	2372.3	113.1	1088.3	64.5	358.3	771.62	60.2	62.4	4.8	45.090	4.317	0.590	0.70	0.00
04:08:00	60	2371.9	113.3	1086.7	64.6	358.9	769.84	60.5	63.2	4.8	45.090	4.348	0.590	0.70	0.00

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

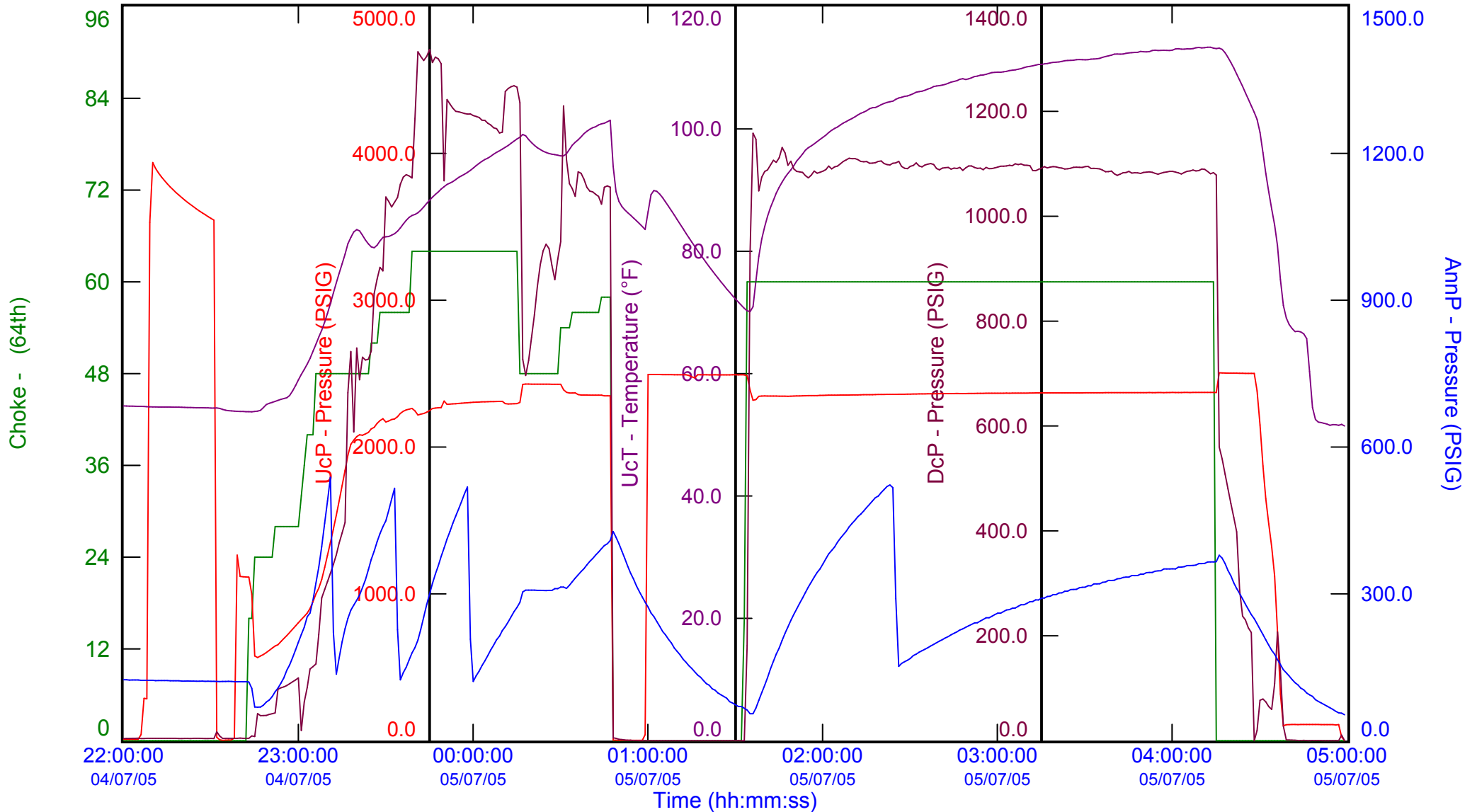
Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	Choke 64th	UcP PSIG	UcT °F	DcP PSIG	DcT °F	AnnP PSIG	GasP PSIG	GasT °F	GasD INWG	Orif Size ins	QGas1av MMscf/d	Gas1Cum MMscf	GasSG Factor	Co2 mol%	H2S ppm
<u>05/07/05</u>															
04:09:00	60	2371.9	113.3	1087.3	64.6	362.0	770.94	60.5	62.4	4.8	45.090	4.379	0.590	0.70	0.00
04:10:00	60	2372.3	113.3	1090.4	64.6	362.0	773.76	60.3	61.6	4.8	45.055	4.411	0.590	0.70	0.00
04:11:00	60	2372.3	113.3	1089.7	64.6	362.4	774.38	60.6	62.3	4.8	45.055	4.442	0.590	0.70	0.00
04:12:00	60	2372.3	113.4	1085.9	64.7	365.2	768.61	60.7	62.9	4.8	45.055	4.473	0.590	0.70	0.00
04:13:00	60	2371.9	113.4	1081.2	64.6	365.4	763.21	60.3	64.0	4.8	45.055	4.505	0.590	0.70	0.00
04:14:00	Lifted 4.75" orifice plate from test separator gas meter run.														
04:14:00	60	2372.3	113.2	1083.4	64.5	365.4	764.75	59.7	62.6	0.0	45.055	4.505	0.590	0.70	0.00
04:15:00	Closed in well at choke manifold. Stopped methanol injection upstream of Surface Safety Valve.														
04:15:00	Average water rate through separator on 60/64" Choke - 24 bbls/d.														
04:15:00	Clean-up criteria established: 1: BS&W <3% - not measurable, 2: Stable THP - <10 psi/5 min change over 2 hours, 3: Stable gas rate - 45 MMscf/d 4: WGR <0.5 bbl/MMscf - estimated LGR <0.5 bbl/MMscf.														
04:15:00	Obtained gas sample No: 1.03 (150cc bottle no: W-015).														



Client Santos Ltd
Well No. Casino 5
Test No. Completion
Location Ocean Patriot

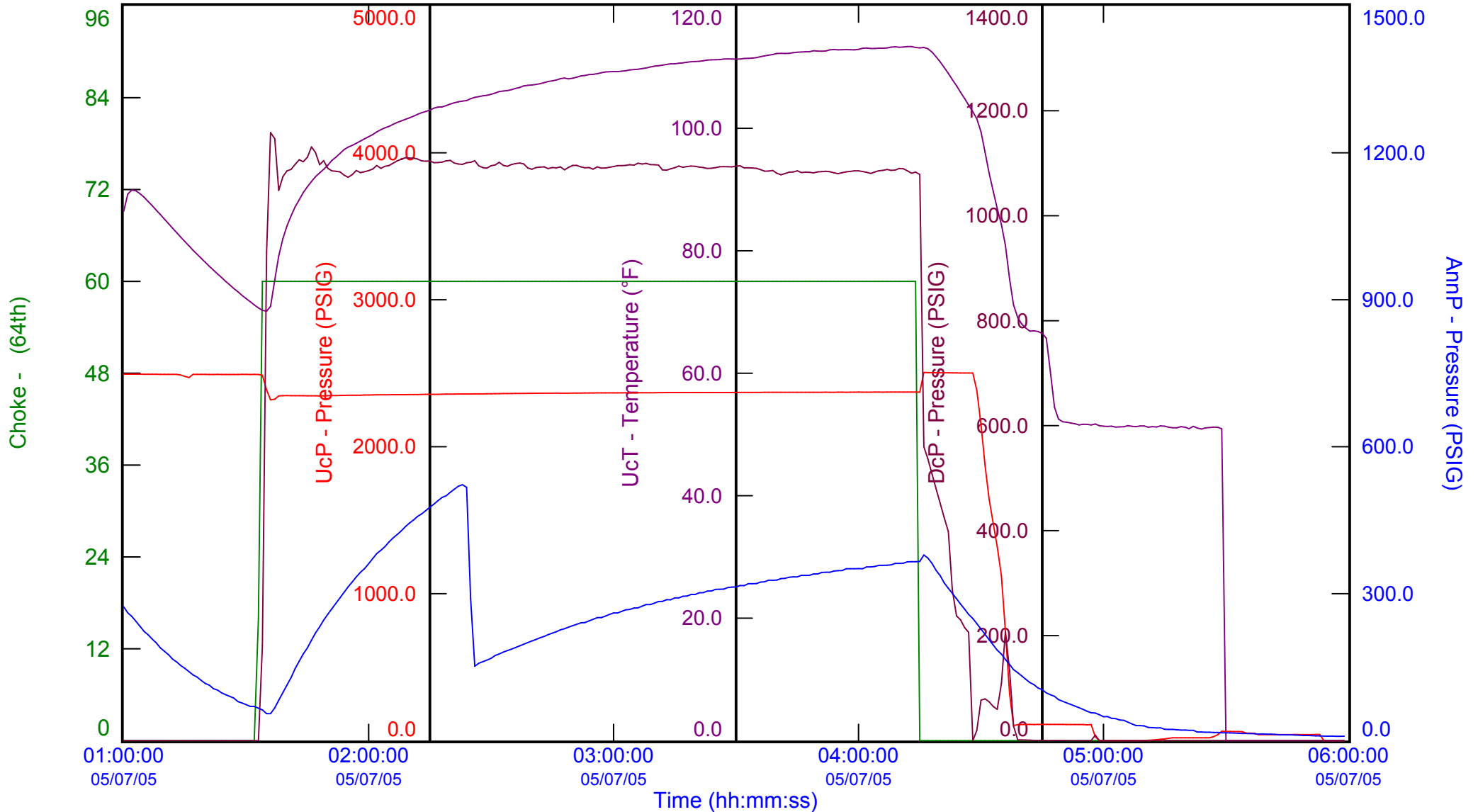
Data Type EDGE Data
Comments Choke Parameters
Clean Up Flow Period
(complete test)





Client Santos Ltd
Well No. Casino 5
Test No. Completion
Location Ocean Patriot

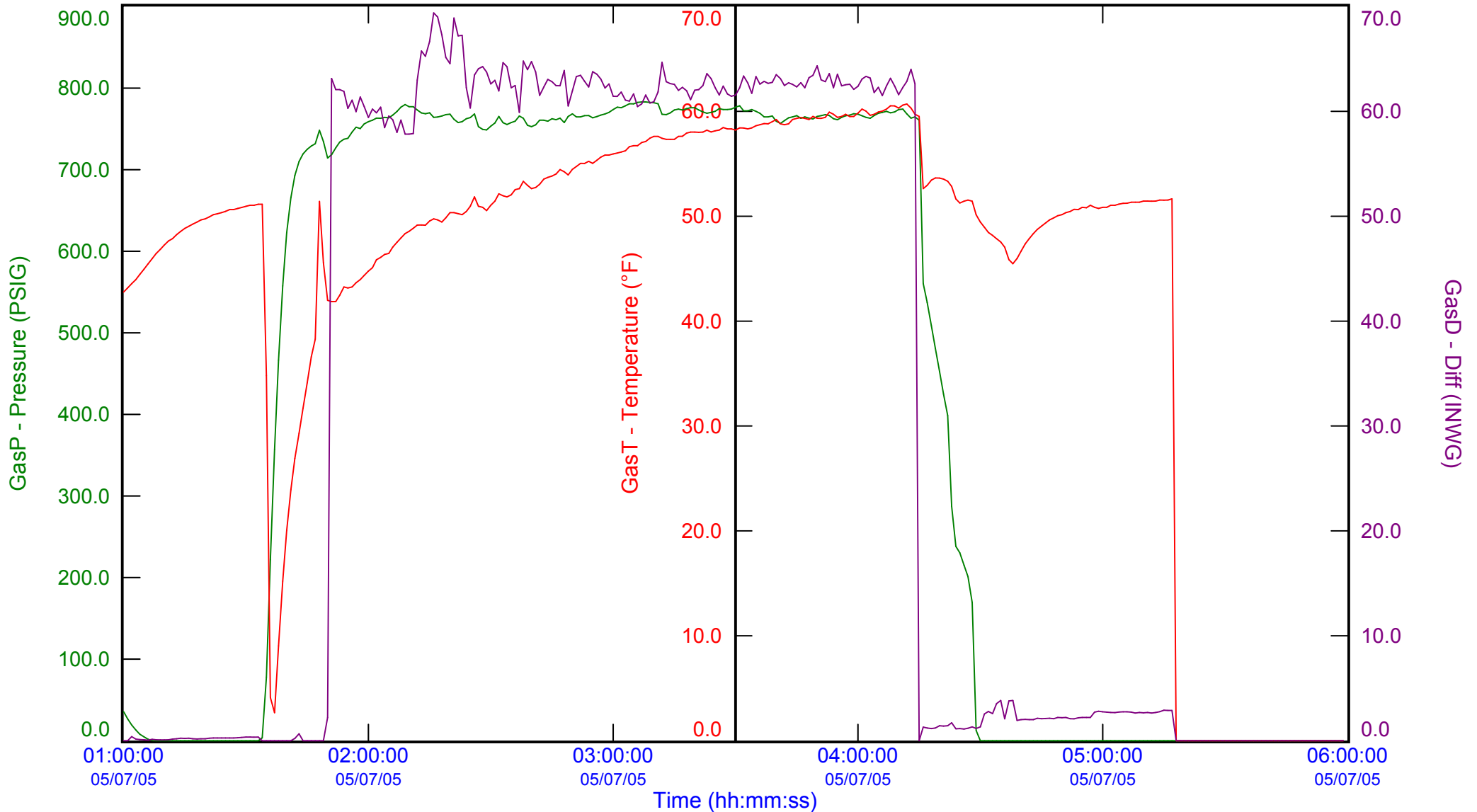
Data Type EDGE Data
Comments Choke Parameters
Clean Up Flow Period
(through separator)





Client Santos Ltd
Well No. Casino 5
Test No. Completion
Location Ocean Patriot

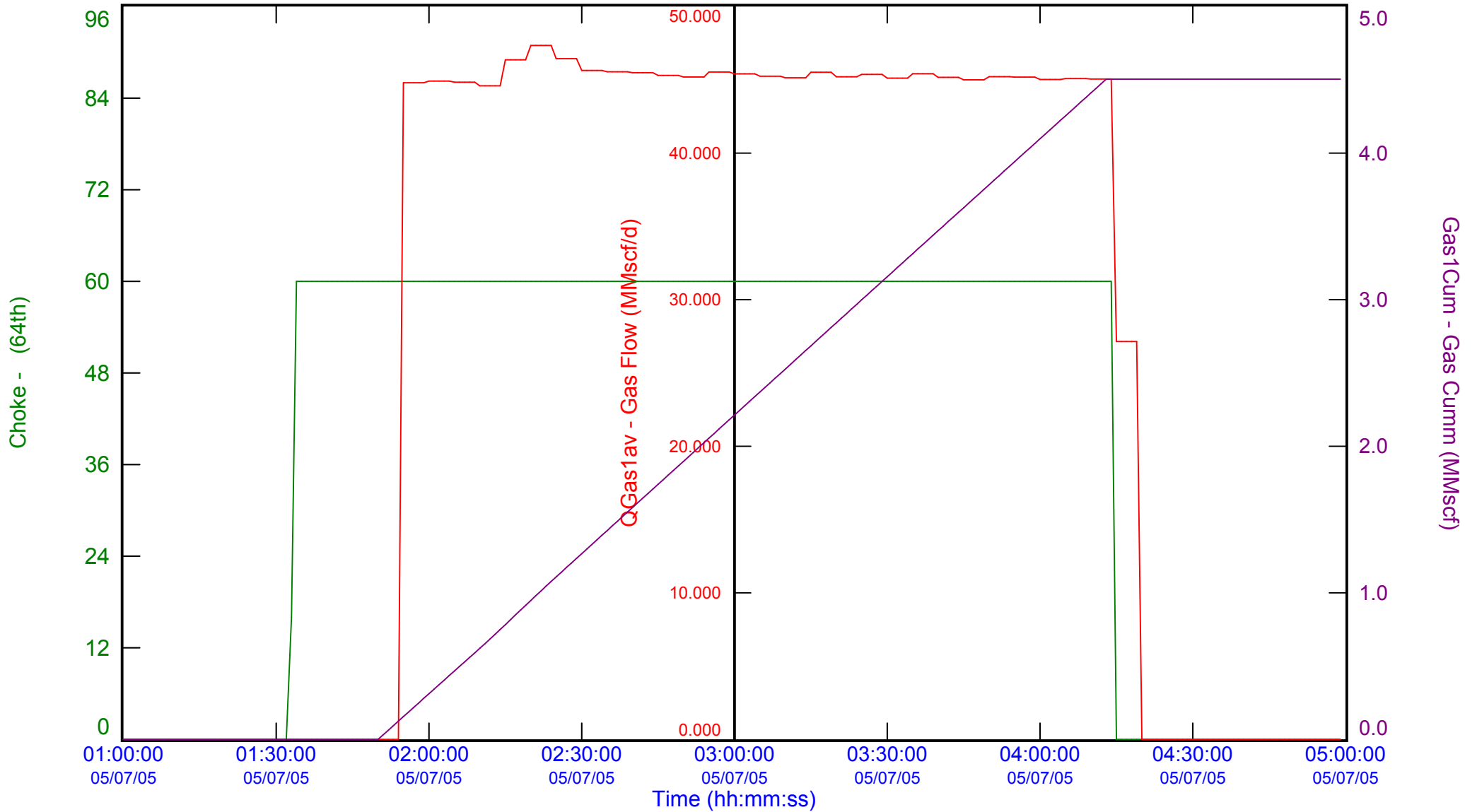
Data Type EDGE Data
Comments Separator Parameters
Clean Up Flow Period





Client Santos Ltd
Well No. Casino 5
Test No. Completion
Location Ocean Patriot

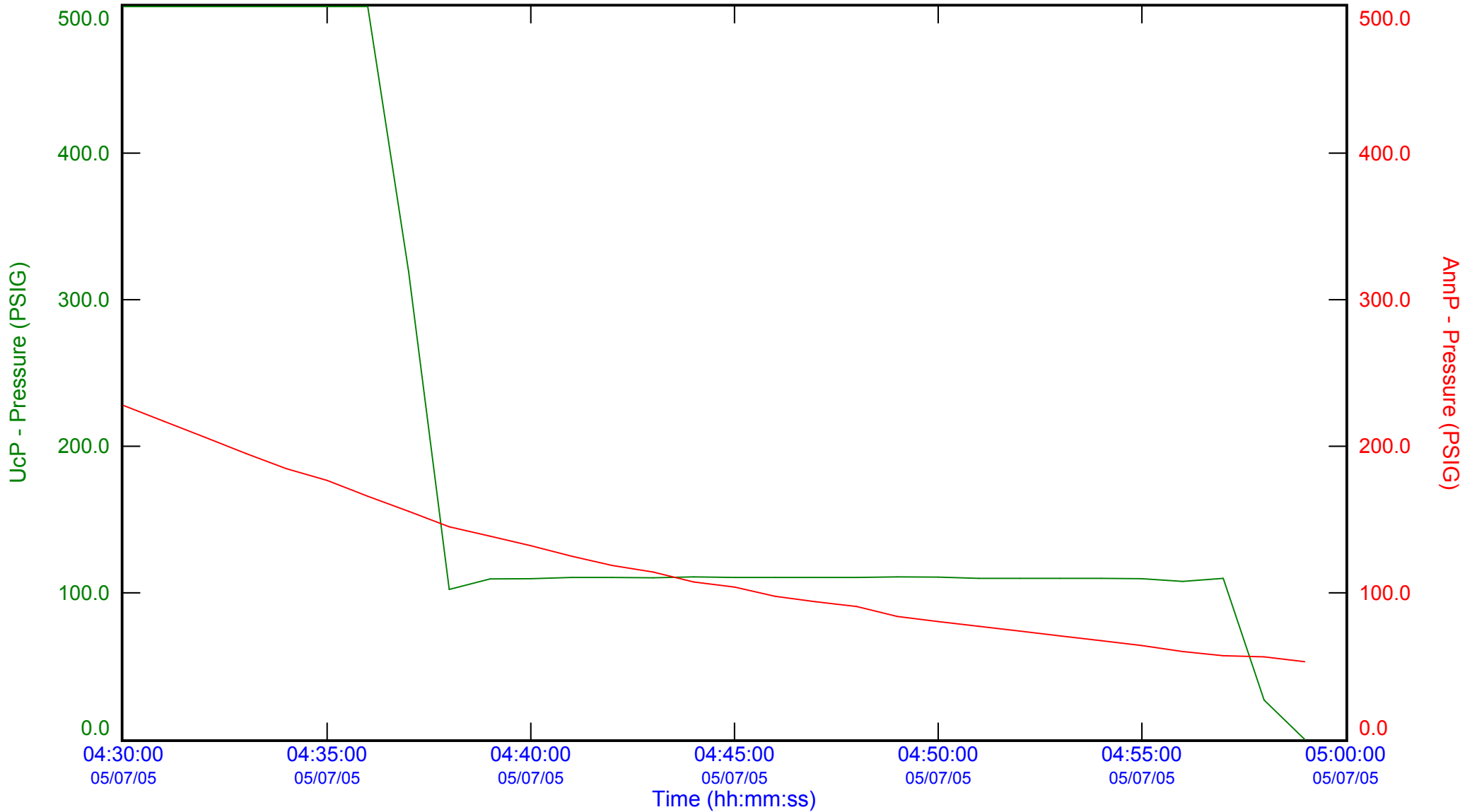
Data Type EDGE Data
Comments Separator Rates
Clean Up Flow Period





Client Santos Ltd
Well No. Casino 5
Test No. Completion
Location Ocean Patriot

Data Type EDGE Data
Comments Inflow Test on SSSV





Gas Calculations Data Listing

Client	Santos Ltd
Well No.	Casino 5
Test No.	Completion
Location	Ocean Patriot
Dates From/To	03/07/05 - 05/07/05
Country	Australia
Field	Casino
Formation	Waarre C Sands
Exal Engineer	J. Morrison / B. Tupman
Expro Supervisor	F. Beaton
Client Engineer	R. King / M. Andronov / P. Nardone
Perforations	Expandable Sand Screens

Gas specific gravity of 0.59 used for rate calculations based on PVT analysis performed on gas samples. This over rides the estimate gas specific gravity reported during the test.

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	UcP PSIG	Orif Size ins	GasP PSIG	GasT °F	GasD INWG	GasSG Factor	Co2 mol%	H2S ppm	GasFb Factor	GasFr Factor	GasY Factor	GasFpb Factor	GasFtb Factor	GasFtf Factor	GasFgr Factor	GasFpv Factor	GasC Factor	QGas1av MMscf/d	Gas1Cum MMscf
<u>04/07/05</u>																			
22:43:00																			
22:43:00	1114.89	0.000	0.00	54.54	0.00	0.590	0.0	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
22:45:00																			
22:45:00	577.44	0.000	0.00	54.44	0.00	0.590	0.0	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
22:46:00																			
22:46:00																			
22:47:00																			
22:47:00																			
22:48:00																			
22:48:00																			
22:49:00																			
22:49:00																			
22:50:00																			
22:50:00	615.67	0.000	0.00	54.44	0.00	0.590	0.0	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
22:51:00																			
22:51:00																			
22:52:00																			
22:52:00																			
22:52:00																			
22:53:00																			
22:53:00																			
22:54:00																			
22:54:00																			
22:55:00																			
22:55:00	696.22	0.000	0.00	54.35	0.00	0.590	0.0	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
22:56:00																			
22:56:00																			
22:57:00																			
22:57:00																			
22:58:00																			
22:58:00																			
22:59:00																			
22:59:00																			
23:00:00																			
23:00:00																			
23:00:00	803.95	0.000	0.00	54.35	0.00	0.590	0.0	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
23:01:00																			
23:01:00																			
23:01:00																			
23:02:00																			
23:02:00																			
23:03:00																			
23:03:00																			
23:05:00	947.05	0.000	0.00	54.36	0.00	0.590	0.0	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
23:06:00																			
23:06:00																			
23:10:00	1263.31	0.000	0.00	54.35	0.00	0.590	0.0	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	UcP PSIG	Orif Size ins	GasP PSIG	GasT °F	GasD INWG	GasSG Factor	Co2 mol%	H2S ppm	GasFb Factor	GasFr Factor	GasY Factor	GasFpb Factor	GasFtb Factor	GasFtf Factor	GasFgr Factor	GasFpv Factor	GasC Factor	QGas1av MMscf/d	Gas1Cum MMscf
<u>04/07/05</u>																			
23:11:00	Bled down annulus pressure.																		
23:15:00	1737.38	0.000	0.00	54.27	0.00	0.590	0.0	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
23:16:00	Port flareboom flame extinguished due to water/mud to surface.																		
23:18:00	Diverted flow through gas line to port flareboom.																		
23:18:00	Brine at surface.																		
23:20:00	2071.63	0.000	13.10	64.08	0.00	0.590	0.0	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
23:25:00	Increased to 52/64" adjustable choke.																		
23:25:00	2123.76	0.000	159.19	53.35	0.00	0.590	0.0	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
23:29:00	Increased to 56/64" adjustable choke.																		
23:30:00	Activated low pilot upstream of SSV.																		
23:30:00	2170.78	0.000	328.64	59.34	0.00	0.590	0.0	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
23:33:00	Gas to surface.																		
23:33:00	Bled down annulus pressure.																		
23:35:00	2229.86	0.000	564.82	51.86	0.00	0.590	0.0	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
23:36:00	Gas flare lit.																		
23:39:00	Increased to 64/64" adjustable choke.																		
23:40:00	2246.41	0.000	707.71	52.73	0.00	0.590	0.0	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
23:45:00	2248.66	0.000	865.33	54.25	0.00	0.590	0.0	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
23:50:00	Diverted flow through a 64/64" fixed choke.																		
23:50:00	2313.88	0.000	861.59	54.25	0.00	0.590	0.0	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
23:55:00	2297.11	0.000	801.91	54.23	0.00	0.590	0.0	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
23:58:00	Bled down annulus pressure.																		
<u>05/07/05</u>																			
00:00:00	Draeger indicated 0.6% CO2, and 0ppm H2S.																		
00:00:00	2304.88	0.000	795.72	54.35	0.00	0.590	0.6	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
00:05:00	2308.97	0.000	783.64	54.25	0.00	0.590	0.6	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
00:10:00	Diverted flow through a 64/64" adjustable choke.																		
00:10:00	2311.42	0.000	767.57	54.04	0.00	0.590	0.6	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
00:15:00	Decreased to 48/64" adjustable choke.																		
00:15:00	2295.68	0.000	830.55	53.14	0.00	0.590	0.6	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	UcP PSIG	Orif Size ins	GasP PSIG	GasT °F	GasD INWG	GasSG Factor	Co2 mol%	H2S ppm	GasFb Factor	GasFr Factor	GasY Factor	GasFpb Factor	GasFtb Factor	GasFtf Factor	GasFgr Factor	GasFpv Factor	GasC Factor	QGas1av MMscf/d	Gas1Cum MMscf
<u>05/07/05</u>																			
00:20:00	2428.77	0.000	498.70	49.56	0.00	0.590	0.6	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
00:25:00	2428.56	0.000	529.55	51.45	0.00	0.590	0.6	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
00:27:00	Commenced methanol injection upstream of Surface Safety Valve.																		
00:30:00	Increased to 54/64" adjustable choke.																		
00:30:00	Dräger indicated 0.5% CO2, and 0ppm H2S.																		
00:30:00	2428.16	0.000	543.35	51.66	0.00	0.590	0.5	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
00:31:00	Stopped methanol injection upstream of Surface Safety Valve.																		
00:35:00	Increased to 56/64" adjustable choke.																		
00:35:00	2368.87	0.000	681.03	45.97	0.00	0.590	0.5	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
00:40:00	2353.54	0.000	705.50	48.76	0.00	0.590	0.5	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
00:44:00	Increased to 58/64" adjustable choke.																		
00:45:00	2349.45	0.000	700.29	49.95	0.00	0.590	0.5	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
00:47:00	Leak in ESD line caused by line contacting compressor exhaust.																		
00:48:00	Closed choke manifold.																		
00:50:00	2.79	0.000	377.27	45.56	0.00	0.590	0.5	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
00:55:00	2.99	0.000	130.18	41.78	7.30	0.590	0.5	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
00:58:00	FWV on flowhead opened.																		
01:00:00	2493.98	0.000	35.67	42.78	0.00	0.590	0.5	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
01:05:00	2493.16	0.000	4.76	44.96	0.09	0.590	0.5	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
01:10:00	2492.96	0.000	0.00	47.27	0.08	0.590	0.5	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
01:15:00	2478.45	0.000	0.00	48.85	0.22	0.590	0.5	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
01:20:00	2492.55	0.000	0.00	49.76	0.19	0.590	0.5	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
01:25:00	2492.14	0.000	0.00	50.47	0.26	0.590	0.5	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
01:30:00	2492.35	0.000	0.00	50.96	0.35	0.590	0.5	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
01:33:00	Opened well on 16/64" adjustable choke to port flareboom.																		
01:34:00	Gradually increased to 60/64" adjustable.																		
01:35:00	2388.09	0.000	77.93	34.82	0.00	0.590	0.5	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
01:37:00	Diverted through a 60/64" fixed choke.																		
01:38:00	Diverted flow through test separator.																		
01:39:00	Commenced methanol injection upstream of Surface Safety Valve.																		
01:40:00	2348.02	0.000	622.89	20.04	0.01	0.590	0.5	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	UcP PSIG	Orif Size ins	GasP PSIG	GasT °F	GasD INWG	GasSG Factor	Co2 mol%	H2S ppm	GasFb Factor	GasFr Factor	GasY Factor	GasFpb Factor	GasFtb Factor	GasFtf Factor	GasFgr Factor	GasFpv Factor	GasC Factor	QGas1av MMscf/d	Gas1Cum MMscf
05/07/05																			
01:45:00	Gas SG - 0.708.																		
01:45:00	Draeger indicated 0.5% CO2, and 0ppm H2S.																		
01:45:00	2346.99	0.000	725.07	34.13	0.00	0.590	0.5	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
01:50:00	2347.40	0.000	714.40	41.99	2.22	0.590	0.5	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	0.000
01:51:00	Installed 4.75" orifice plate in test separator gas meter run.																		
01:55:00	2350.47	4.750	738.56	43.17	60.29	0.590	0.5	0.00	6120.62	1.000	0.999	1.000	1.000	1.017	1.302	1.073	8687.4	44.806	0.156
02:00:00	Draeger indicated 0.8% CO2, and 0ppm H2S.																		
02:00:00	2351.90	4.750	758.98	44.78	59.43	0.590	0.5	0.00	6120.62	1.000	0.999	1.000	1.000	1.015	1.302	1.075	8683.4	44.920	0.312
02:05:00	2353.74	4.750	763.71	46.47	59.57	0.590	0.5	0.00	6120.62	1.000	0.999	1.000	1.000	1.013	1.302	1.074	8664.5	44.841	0.467
02:10:00	2355.17	4.750	777.26	48.57	57.84	0.590	0.5	0.00	6120.62	1.000	0.999	1.000	1.000	1.011	1.302	1.074	8648.0	44.596	0.622
02:15:00	Gas SG - 0.692.																		
02:15:00	Radon - 116 Bq/m3.																		
02:15:00	2356.60	4.750	769.78	49.56	66.67	0.590	0.5	0.00	6120.62	1.000	0.999	1.000	1.000	1.010	1.302	1.073	8627.0	46.370	0.783
02:20:00	2358.24	4.750	768.12	50.36	64.56	0.590	0.5	0.00	6120.62	1.000	0.999	1.000	1.000	1.009	1.302	1.072	8615.6	47.347	0.948
02:24:00	Bled down annulus pressure.																		
02:25:00	2359.47	4.750	764.01	50.96	60.33	0.590	0.5	0.00	6120.62	1.000	0.999	1.000	1.000	1.009	1.302	1.071	8605.3	46.450	1.109
02:30:00	Draeger indicated 0.7% CO2, and 0ppm H2S.																		
02:30:00	2360.89	4.750	753.40	51.06	62.63	0.590	0.8	0.00	6120.62	1.000	0.999	1.000	1.000	1.009	1.302	1.070	8590.6	45.643	1.267
02:35:00	2362.53	4.750	757.82	52.05	62.26	0.590	0.8	0.00	6120.62	1.000	0.999	1.000	1.000	1.008	1.302	1.070	8581.4	45.554	1.425
02:40:00	2363.76	4.750	752.79	52.65	64.76	0.590	0.8	0.00	6120.62	1.000	0.999	1.000	1.000	1.007	1.302	1.069	8569.3	45.489	1.583
02:45:00	2364.78	4.750	762.54	53.84	62.84	0.590	0.8	0.00	6120.62	1.000	0.999	1.000	1.000	1.006	1.302	1.069	8562.0	45.301	1.741
02:50:00	2365.60	4.750	768.61	54.48	61.96	0.590	0.8	0.00	6120.62	1.000	0.999	1.000	1.000	1.005	1.302	1.069	8558.7	45.200	1.898
02:55:00	2366.21	4.750	763.71	55.06	63.79	0.590	0.8	0.00	6120.62	1.000	0.999	1.000	1.000	1.005	1.302	1.069	8547.3	45.537	2.056
03:00:00	Gas SG - 0.678.																		
03:00:00	Draeger indicated 0.7% CO2, and 0ppm H2S.																		
03:00:00	2367.23	4.750	773.83	55.95	61.45	0.590	0.8	0.00	6120.62	1.000	0.999	1.000	1.000	1.004	1.302	1.069	8544.0	45.410	2.213
03:05:00	2367.44	4.750	780.82	56.74	61.68	0.590	0.7	0.00	6120.62	1.000	0.999	1.000	1.000	1.003	1.302	1.069	8540.1	45.254	2.371
03:10:00	2367.85	4.750	782.10	57.63	60.93	0.590	0.7	0.00	6120.62	1.000	0.999	1.000	1.000	1.002	1.302	1.069	8529.9	45.146	2.527
03:15:00	Water SG - 1.116, water PH 7.																		
03:15:00	Radon - 82 Bq/m3.																		
03:15:00	2369.28	4.750	773.21	57.35	62.58	0.590	0.7	0.00	6120.62	1.000	0.999	1.000	1.000	1.003	1.302	1.068	8526.6	45.517	2.685

Client Santos Ltd

Exal Engineer J. Morrison / B. Tupman

Well No. Casino 5

Location Ocean Patriot

Test No. Completion

Dates From/To 03/07/05 - 05/07/05

Time hh:mm:ss	UcP PSIG	Orif Size ins	GasP PSIG	GasT °F	GasD INWG	GasSG Factor	Co2 mol%	H2S ppm	GasFb Factor	GasFr Factor	GasY Factor	GasFpb Factor	GasFtb Factor	GasFtf Factor	GasFgr Factor	GasFpv Factor	GasC Factor	QGas1av MMscf/d	Gas1Cum MMscf
05/07/05																			
03:20:00	2368.87	4.750	776.09	58.04	62.03	0.590	0.7	0.00	6120.62	1.000	0.999	1.000	1.000	1.002	1.302	1.068	8520.2	45.213	2.842
03:24:00	Obtained PVT gas sample No: 1.01 (20L bottle no: A-1971).																		
03:25:00	2369.48	4.750	771.56	58.15	62.29	0.590	0.7	0.00	6120.62	1.000	0.999	1.000	1.000	1.002	1.302	1.068	8515.5	45.372	3.000
03:30:00	2369.69	4.750	776.71	58.23	61.57	0.590	0.7	0.00	6120.62	1.000	0.999	1.000	1.000	1.002	1.302	1.068	8518.3	45.120	3.157
03:35:00	Chlorides - 70000 mg/L.																		
03:35:00	Alkalinity - 892 mg/L CaCo3eqv.																		
03:35:00	pH - 6.14 @ 11.3 °C.																		
03:35:00	Conductivity - 44.6 mS/cm @ 11.3 °C.																		
03:35:00	Resistivity - 0.022 Ohm-m @ 11.3 °C.																		
03:35:00	Water SG - 1.088 @ 12.5 °C.																		
03:35:00	2370.10	4.750	771.56	58.64	63.33	0.590	0.7	0.00	6120.62	1.000	0.999	1.000	1.000	1.001	1.302	1.068	8509.2	45.419	3.314
03:40:00	2370.91	4.750	759.54	59.24	63.51	0.590	0.7	0.00	6120.62	1.000	0.999	1.000	1.000	1.001	1.302	1.066	8493.0	45.173	3.471
03:44:00	Radon - 112 Bq/m3.																		
03:45:00	2370.71	4.750	766.34	59.34	62.35	0.590	0.7	0.00	6120.62	1.000	0.999	1.000	1.000	1.001	1.302	1.067	8497.0	45.003	3.627
03:50:00	2370.91	4.750	765.30	59.35	64.36	0.590	0.7	0.00	6120.62	1.000	0.999	1.000	1.000	1.001	1.302	1.067	8495.7	45.221	3.784
03:54:00	Obtained PVT gas sample No: 1.02 (20L bottle no: A-0168).																		
03:55:00	2371.32	4.750	761.31	59.44	63.56	0.590	0.7	0.00	6120.62	1.000	0.999	1.000	1.000	1.001	1.302	1.066	8491.9	45.192	3.941
04:00:00	2372.14	4.750	768.12	59.84	62.40	0.590	0.7	0.00	6120.62	1.000	0.999	1.000	1.000	1.000	1.302	1.067	8492.0	45.024	4.098
04:05:00	2371.94	4.750	769.17	59.95	62.30	0.590	0.7	0.00	6120.62	1.000	0.999	1.000	1.000	1.000	1.302	1.067	8491.4	45.090	4.254
04:10:00	2372.34	4.750	773.76	60.33	61.60	0.590	0.7	0.00	6120.62	1.000	0.999	1.000	1.000	1.000	1.302	1.067	8490.2	45.055	4.411
04:14:00	Lifted 4.75" orifice plate from test separator gas meter run.																		
04:15:00	Closed in well at choke manifold. Stopped methanol injection upstream of Surface Safety Valve.																		
04:15:00	Average water rate through separator on 60/64" Choke - 24 bbls/d.																		
04:15:00	Clean-up criteria established: 1: BS&W <3% - not measurable, 2: Stable THP - <10 psi/5 min change over 2 hours, 3: Stable gas rate - 45 MMscf/d 4: WGR <0.5 bbl/MMscf - estimated LGR <0.5 bbl/MMscf.																		
04:15:00	Obtained gas sample No: 1.03 (150cc bottle no: W-015).																		

Gas Calculation

$$Q_g = C' \sqrt{h_w \times P_f}$$

(Equation 3-D-1 AGA 3)

Where,

Q_g = Gas Rate (scf/hr)
C' = Orifice Flow Constant
h_w = Differential flow in inches of water
P_f = Flowing pressure in psia.

C' (Orifice Flow Constant) is further broken down to: -

$$C' = F_b \cdot F_r \cdot Y \cdot F_{pb} \cdot F_{tb} \cdot F_{tf} \cdot F_{gr} \cdot F_{pv} \quad (3-D-2)$$

Where,

F_b = Basic Orifice Factor
F_r = Reynolds Number Factor
Y = Expansion Factor
F_{pb} = Pressure Base Factor
F_{tb} = Temperature Base Factor
F_{tf} = Flowing Temperature Factor
F_{gr} = Specific Gravity Factor
F_{pv} = Supercompressibility Factor

Comments/References

The gas calculations quoted within this standard have been taken from the AGA report No3, which is the accepted standard for natural gas fluid measurement through an orifice meter. The compressibility factor used is based upon the Dranchuk et al calculation.

SECTION 5 : DAILY GEOLOGICAL REPORTS

Santos

A.C.N. 007 550 923

WELL PROGRESS REPORT

CASINO 5

DATE: 16/06/05

REPORT NO: 1

(As at 2400 hours 15/06/05)

DEPTH : 0 mMD
0 mTVD

PROGRESS: 0 mMD

DAYS FROM SPUD : 0

DAYS ON WELL: 0

OPERATION: SETTING ANCHORS AT NEW LOCATION.

(As at 0600 hours 16/06/05)

DEPTH : 0 mMD
0 mTVD

PROGRESS (0600-0600 hrs): 0m

OPERATION : SETTING ANCHORS AT NEW LOCATION.

AFE COST

CUMULATIVE COST

340mm (13.375") CASING DEPTH:

RIG: OCEAN PATRIOT

244mm (9.625") CASING DEPTH :

RT – MUDLINE: 92.8 m

PROGRAMMED TD: 1788m

ROTARY TABLE: 22m LAT

WATER DEPTH: 70.8 m

MUD DATA	Mud Type:	Wt: (SG/PPG)	Vis:	FL:	Ph:	KCl%	Cl:	PV/YP:	Rmf:
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BIT DATA	No.	Make	Type	Size (mm)	Hours	Drilled	Condition
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SURVEYS:	<u>MD</u> (m)	<u>INC</u> (°)	<u>AZIM</u> (°T)	<u>CLOSURE</u> (m)	<u>DIRECTION</u> (°)
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PREVIOUS 24 HOURS OPERATIONS SUMMARY:

CONTINUED SETTING ANCHORS AT NEW LOCATION / MADE UP 36" BHA / MAKING UP DP

00:00 – 06:00 HOURS 14/06/05 :

CONTINUED SETTING ANCHOR / MADE UP DP / RAN 36" BHA TO SEAFLOOR

ANTICIPATED OPERATIONS:

FINISH SETTING AND TENSIONING ANCHORS / SPUD CASINO 5

Santos

A.C.N. 007 550 923

WELL PROGRESS REPORT

CASINO 5

DATE: 17/06/05

REPORT NO: 2

(As at 2400 hours 16/06/05)

DEPTH: 133mMD
133mTVD

PROGRESS: 43mMD

DAYS FROM SPUD: 1
DAYS ON WELL: 2

OPERATION: CIRCULATING AT 36" SECTION TD.

(As at 0600 hours 17/06/05)

DEPTH: 133mMD
133mTVD

PROGRESS: (0600-0600 hrs): 43m

OPERATION: RUNNING 30" / 20" CONDUCTOR.

NOPE COST (P&A)\$
(C&S)\$

FINAL FORECAST COST (P&A)\$
(C&S)\$

COST TO DATE: \$

CASING DEPTH: 340mm (13.375")
244mm (9.625")

RIG: OCEAN PATRIOT

PROGRAMMED TD: 1788m

ROTARY TABLE: 22m LAT

RT – MUDLINE: 21.5m
WATER DEPTH: 68.2m

MUD DATA	Mud Type:	Wt: (SG/PPG)	Vis:	FL:	Ph:	KCl %	Cl:	PV/YP:	Rmf:
	seawater	1.04	200	13	9.5		1050	11/50	

BIT DATA	No.	Make	Type	Size (mm)	Hours	Drilled	Condition
	1	SMITH	HOLE OPENER	914	3.1	43	

SURVEYS:	MD (m)	INC (°)	AZIM (°T)	CLOSURE (m)	DIRECTION (°)

PREVIOUS 24 HOURS OPERATIONS SUMMARY:

SET AND TENSIONED ANCHORS. DRILLED 36" HOLE TO 133M. **CASINO 5 SPUDDED AT 1900HRS ON 16/6/05.**

00:00 – 06:00 HOURS 14/06/05:

PUMPED HOLE CLEAN. DISPLACED WELL TO GEL. PULL OUT OF HOLE. START RUN IN HOLE WITH 30" CONDUCTOR.

ANTICIPATED OPERATIONS:

RUN AND CEMENT 30" CONDUCTOR. MAKE UP 17½" BOTTOM HOLE ASSEMBLY. RUN IN HOLE AND DRILL 17½" HOLE TO APPROX 660 M.

Santos

A.C.N. 007 550 923

WELL PROGRESS REPORT

CASINO 5

DATE: 18/06/05

REPORT NO: 3

(As at 2400 hours 17/06/05)

DEPTH : 133 mMD
133 mTVD

PROGRESS: 0 mMD

DAYS FROM SPUD : 2

DAYS ON WELL: 3

OPERATION: MAKING UP 17.5" BIT & BHA

(As at 0600 hours 18/06/05)

DEPTH : 137 mMD
137 mTVD

PROGRESS (0600-0600 hrs): 4m

OPERATION: DRILLING AHEAD 17.5" HOLE AT 137m.

A FE COST
CUMULATIVE COST

762mm (30") CASING DEPTH: 133m

RIG: OCEAN PATRIOT

244mm (9.625") CASING DEPTH:

RT – MUDLINE: 89.7 m

PROGRAMMED TD: 1788m

ROTARY TABLE: 21.5 m LAT

WATER DEPTH: 68.2 m

MUD DATA	Mud Type:	Wt: (SG/PPG)	Vis:	FL:	Ph:	KCl%	Cl:	PV/YP:	Rmf:
	seawater	1.04	200	13	9.5		1050	11/50	

BIT DATA	No.	Make	Type	Size (mm)	Hours	Drilled	Condition
	2	HUGHES	MX-1	444	0.3	4	

SURVEYS:	<u>MD</u> (m)	<u>INC</u> (°)	<u>AZIM</u> (°T)	<u>CLOSURE</u> (m)	<u>DIRECTION</u> (°)
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PREVIOUS 24 HOURS OPERATIONS SUMMARY:

PUMPED HOLE CLEAN, DISPLACED WELL TO GEL, PULL OUT OF HOLE. RUN IN HOLE WITH 30" CONDUCTOR & 20" SHOE. DISCOVERED LEAK AT THE CAMERON RUNNING TOOL. PULL OUT WITH THE RUNNING TOOL TO THE MOON POOL & REPAIR LEAK. RE-RUN 30" CONDUCTOR AND LAND OUT. SET 20" CONDUCTOR SHOE ON BOTTOM AT 133m. CEMENT CONDUCTOR AS PER PROGRAM. WAIT ON CEMENT. PERFORM CEMENT TOP-UP JOB. MAKE UP 17.5" BIT & BHA.

00:00 – 06:00 HOURS 18/06/05:

CONTINUE MAKING UP 17.5" BIT & BHA. RUN IN HOLE TAG FLOAT AT 128m. DRILL OUT CASING FLOAT AND SHOE. DRILL AHEAD FROM 133m TO 137m.

ANTICIPATED OPERATIONS:

DRILL 17½" HOLE TO APPROX 660m.

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A.C.N. 007 550 923

WELL PROGRESS REPORT

CASINO 5

DATE: 19/06/05

REPORT NO: 4

(As at 2400 hours 18/06/05)

DEPTH: 665 mMD
665 mTVD

PROGRESS: 532 mMD

DAYS FROM SPUD: 3

DAYS ON WELL: 4

OPERATION: PULLING OUT OF HOLE AT 430m.

(As at 0600 hours 19/06/05)

DEPTH: 665 mMD
665 mTVD

PROGRESS (0600-0600 hrs): 0m

OPERATION: PULLING OUT OF HOLE AT 132m.

AFE COST

CUMULATIVE COST

762mm (30") CASING DEPTH: 132m

RIG: OCEAN PATRIOT

244mm (9.625") CASING DEPTH:

RT – MUDLINE: 89.7 m

PROGRAMMED TD: 1788m

ROTARY TABLE: 21.5 m LAT

WATER DEPTH: 68.2 m

MUD DATA	Mud Type:	Wt: (SG/PPG)	Vis:	FL:	Ph:	KCl%	Cl:	PV/YP:	Rmf:
	Seawater	1.04	200	14	9.5		1000	10/50	

BIT DATA	No.	Make	Type	Size (mm)	Hours	Drilled	Condition
	2	HUGHES	MX-1	444	11.4	532	

SURVEYS:	<u>MD</u> (m)	<u>INC</u> (°)	<u>AZIM</u> (°T)	<u>CLOSURE</u> (m)	<u>DIRECTION</u> (°)

PREVIOUS 24 HOURS OPERATIONS SUMMARY:

CONTINUE MAKING UP 17.5" BIT & BHA. RUN IN HOLE TAG FLOAT AT 128m. DRILL OUT CASING FLOAT AND SHOE. DRILL AHEAD FROM 133m TO 665m. CIRCULATE HOLE CLEAN AND DISPLACE TO PHG MUD. DROP EMS SURVEY TOOL. PULL OUT OF HOLE WORKING TIGHT HOLE AS REQUIRED.

00:00 – 06:00 HOURS 19/06/05:

CONTINUE PULLING OUT OF HOLE WORKING TIGHT HOLE AS REQUIRED. PULL BACK TO 132m RUN BACK IN HOLE FOR WIPER TRIP. CIRCULATE AND DISPLACE TO PHG MUD. PULL OUT OF HOLE.

ANTICIPATED OPERATIONS:

RUN 13.375" CASING AND PERFORM CEMENT JOB. RUN BOP STACK AND PRESSURE TEST.

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WELL PROGRESS REPORT

CASINO 5

DATE: 20/06/05

REPORT NO: 5

(As at 2400 hours 19/06/05)

DEPTH: 665 mMD
665 mTVD

PROGRESS: 0 mMD

DAYS FROM SPUD: 4
DAYS ON WELL: 5

OPERATION: RIGGING UP TO RUN SUB-SEA XMAS TREE.

(As at 0600 hours 20/06/05)

DEPTH: 665 mMD
665 mTVD

PROGRESS (0600-0600 hrs): 0m

OPERATION: RECOVERING XMAS TREE RUNNING TOOL.

AFE COST

CUMULATIVE COST

762mm (30") CASING DEPTH: 132m
340mm (13.375") CASING DEPTH: 654.8m

RIG: OCEAN PATRIOT

PROGRAMMED TD: 1788m

ROTARY TABLE: 21.5 m LAT

RT – MUDLINE: 89.7 m
WATER DEPTH: 68.2 m

MUD DATA	Mud Type:	Wt: (SG/PPG)	Vis:	FL:	Ph:	KCl%	Cl:	PV/YP:	Rmf:
	Seawater	1.04	100	13	10.0		850	12/48	

BIT DATA	No.	Make	Type	Size (mm)	Hours	Drilled	Condition
	2	HUGHES	MX-1	444	11.4	532	-

SURVEYS:	MD (m)	INC (°)	AZIM (°T)	CLOSURE (m)	DIRECTION (°)
	636.96	0.54	120.09		
	652.27	0.52	118.09	8.4	155.24

PREVIOUS 24 HOURS OPERATIONS SUMMARY:

CONTINUE PULLING OUT OF HOLE WORKING TIGHT HOLE AS REQUIRED. PULL BACK TO 132m. RUN BACK IN HOLE FOR WIPER TRIP. CIRCULATE AND DISPLACE TO PHG MUD. PULL OUT OF HOLE. RIG UP AND RUN 49 JOINTS OF 13.375" CASING. LAND OUT CASING WITH SHOE SET AT 654.8m. PERFORM CEMENT JOB AS PER PROGRAM. RELEASE AND RECOVER CASING RUNNING TOOL. RIG UP TO RUN SUB SEA XMAS TREE.

00:00 – 06:00 HOURS 20/06/05:

RUN SUB SEA XMAS TREE AND SET ON GUIDE BASE. LATCH TREE AND RELEASE RUNNING TOOL. RECOVER XMAS TREE RUNNING TOOL.

ANTICIPATED OPERATIONS:

RUN BOP STACK AND PRESSURE TEST. DRILL AHEAD 12.25" HOLE.

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WELL PROGRESS REPORT

CASINO 5

DATE: 21/06/05

REPORT NO: 6

(As at 2400 hours 20/06/05)

DEPTH: 665 mMD
665 mTVD

PROGRESS: 0 mMD

DAYS FROM SPUD: 5

DAYS ON WELL: 6

OPERATION: PREPARING TO LAND OUT BOP STACK.

(As at 0600 hours 21/06/05)

DEPTH: 665 mMD
665 mTVD

PROGRESS (0600-0600 hrs): 0m

OPERATION: RELEASING SLIP JOINT ON RISER.

AFE COST

CUMULATIVE COST

762mm (30") CASING DEPTH: 132m
340mm (13.375") CASING DEPTH: 655m

RIG: OCEAN PATRIOT

RT – MUDLINE: 89.7 m
WATER DEPTH: 68.2 m

PROGRAMMED TD: 1788m

ROTARY TABLE: 21.5 m LAT

MUD DATA	Mud Type:	Wt: (SG/PPG)	Vis:	FL:	Ph:	KCl%	Cl:	PV/YP:	Rmf:
	Seawater	1.04	100	13	10.0		850	12/48	

BIT DATA	No.	Make	Type	Size (mm)	Hours	Drilled	Condition
	2	HUGHES	MX-1	444	11.4	532	1-1-NO-A-E-I-NO-TD

SURVEYS:	<u>MD (m)</u>	<u>INC (°)</u>	<u>AZIM (°T)</u>	<u>CLOSURE (m)</u>	<u>DIRECTION (°)</u>
	636.96	0.54	120.09		
	652.27	0.52	118.09	8.4	155.24

PREVIOUS 24 HOURS OPERATIONS SUMMARY:

RUN SUB SEA XMAS TREE AND SET ON GUIDE BASE. LATCH TREE AND RELEASE RUNNING TOOL. RECOVER XMAS TREE RUNNING TOOL. RIG UP AND RUN BOP STACK ON MARINE RISER.

00:00 – 06:00 HOURS 21/06/05:

LAND OUT AND LATCH BOP STACK. RELEASE SLIP JOINT.

ANTICIPATED OPERATIONS:

PRESSURE TEST BOP STACK. DRILL AHEAD 12.25" HOLE.

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WELL PROGRESS REPORT

DATE: 22/06/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 1
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(As at 2400 hours EST, 21/06/05) **DEPTH :** 665 mMD **PROG:** 0m **DAYS FROM SPUD :** 6
(00:00-24:00)

OPERATION: RUN AND LAND WEAR BUSHING.

(As at 06:00 hours EST, 22/06/05) **DEPTH :** 665 mMD **PROGRESS:** 0m
(06:00-06:00 EST)

OPERATION : RUNNING IN HOLE WITH THE 311mm (12¼") BOTTOM HOLE ASSEMBLY.

AFE COST \$	CUMULATIVE COST	\$
CASING SHOE : 340mm (13 3/8") SET AT 655m		RIG: OCEAN PATRIOT
PROGRAMMED TD : 1788 mMD	ROTARY TABLE: 21.5 m LAT	RT – SEAFLOOR: 89.7 LAT
		WATER DEPTH: 68.2m LAT

MUD DATA	Type:	Wt:	Vis:	FL:	PH:	KCl	Cl :	PV / YP:	Rmf:
(2400 Hours)	PHG	1.04	100	14	10	-	47k	10/55	-

		No.	Make	Type	Size (mm/in.)	Hours	Drilled (m)	Condition
BIT DATA	PRESENT	3	STC	GS04BDV	311mm (12¼")	-	-	IN HOLE
(2400 Hours)	LAST							

SURVEYS: MD (m) INCLINATION AZIMUTH (T) CLOSURE (m) DIRECTION (T)

PREVIOUS 24 HOURS OPERATIONS SUMMARY: (21/06/05)

LAND AND LATCH BLOW OUT PREVENTER, FUNCTION AND PRESSURE TEST BLOW OUT PREVENTER AND SURFACE EQUIPMENT. RUN AND LAND WEAR BUSHING.

00:00 – 06:00 HOURS WST (22/06/05):

MAKE UP AND RACK BACK CASING HANGER ASSEMBLY. MAKE UP CEMENTING HEAD. MAKE UP 311mm (12¼") BOTTOM HOLE ASSEMBLY AND LWD TOOLS AND RUN IN HOLE.

ANTICIPATED OPERATIONS:

RUN IN HOLE WITH THE 311mm (12¼") BOTTOM HOLE ASSEMBLY. DRILL CEMENT AND SHOE TRACK. CONDUCT LEAK-OFF TEST. DRILL AHEAD WITH 311mm (12¼") HOLE.

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WELL PROGRESS REPORT

DATE: 22/06/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 1
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FORMATION TOPS:	MDRT (m)	Subsea (m)	High/Low to Prognosis (m)	High /Low to Casino 2 (m)

HYDROCARBON SHOW SUMMARY		
INTERVAL	LITHOLOGY	GAS

GEOLOGICAL SUMMARY		
INTERVAL (m/hr)	LITHOLOGY	GAS

Santos

A.B.N. 80 007 550 923

WELL PROGRESS REPORT

DATE: 23/06/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 2
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(As at 2400 hours EST, 22/06/05) **DEPTH :** 951 mMD **PROG:** 286m **DAYS FROM SPUD : 7**
(00:00-24:00)

OPERATION: DRILLING 311mm (12 ¼") HOLE.

(As at 06:00 hours EST, 23/06/05) **DEPTH :** 1017 mMD **PROGRESS:** 352m
(06:00-06:00 EST)

OPERATION : DRILLING 311mm (12 ¼") HOLE.

AFE COST \$	CUMULATIVE COST	\$
CASING SHOE : 340mm (13 3/8") SET AT 655m		RIG: OCEAN PATRIOT
PROGRAMMED TD : 1788 mMD	ROTARY TABLE: 21.5 m LAT	RT – SEAFLOOR: 89.7 LAT
		WATER DEPTH: 68.2m LAT

MUD DATA	Type:	Wt:	Vis:	FL:	PH:	KCl	Cl :	PV / YP:	Rmf:
(2400 Hours)	KCL-IDCAP	1.22	54	7	7.0	9.0%	47k	11/14	-

		No.	Make	Type	Size (mm/in.)	Hours	Drilled (m)	Condition
BIT DATA	PRESENT	3	STC	GS04BDV	311mm (12¼")	7.6	286	DRILLING
(2400 Hours)	LAST							

SURVEYS:	MD (m)	INCLINATION	AZIMUTH (T)	CLOSURE (m)	DIRECTION (T)
	800.8	1.6	179.3	10.7	157.5
	858.1	1.6	236.4	11.7	162.8
	915.5	4.8	243.6	12.7	177.1

PREVIOUS 24 HOURS OPERATIONS SUMMARY: (22/06/05)

MAKE UP AND RACK BACK CASING HANGER ASSEMBLY. MAKE UP CEMENTING HEAD. MAKE UP 311mm (12¼") BOTTOM HOLE ASSEMBLY AND LWD TOOLS, RUN IN HOLE. TAG CEMENT AT 633m. DRILL CEMENT, SHOE TRACK AND 3m OF NEW HOLE TO 668m. CONDUCT LEAK-OFF TEST. EQUIVALENT MUD WEIGHT = 2.08 SG (17.4PPG). DRILL 311mm (12 ¼") HOLE FROM 668m TO 951m. LWD TOOL FAILURE AT 940m.

00:00 – 06:00 HOURS EST (23/06/05):

CONTINUE TO DRILL 311mm (12 ¼") HOLE FROM 951m TO 1017m.

ANTICIPATED OPERATIONS:

DRILL AHEAD WITH 311mm (12¼") HOLE TO APPROXIMATELY 1160m. PULL OUT OH HOLE AND CHANGE BIT FOR A PDC.

LWD SENSOR OFFSETS

GR: 12.75m, RES: 9.72m, DIR: 16.13.

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A.B.N. 80 007 550 923

WELL PROGRESS REPORT

DATE: 23/06/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 2
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FORMATION TOPS:	MDRT (m)	Subsea (m)	High/Low to Prognosis (m)	High /Low to Casino 2 (m)

HYDROCARBON SHOW SUMMARY		
INTERVAL	LITHOLOGY	GAS

GEOLOGICAL SUMMARY		
INTERVAL (m/hr)	LITHOLOGY	GAS
665 – 681m 9 – 38 m/hr Av: 20 m/hr	<u>CALCAREOUS SILTSTONE</u> : medium brownish grey, medium brown, argillaceous grading to <u>CALCAREOUS CLAYSTONE</u> , common forams, trace nodular pyrite, firm, sub blocky.	0.5 U 100/-
681 – 775.5m 9 – 150 m/hr Av: 52 m/hr	<u>SANDSTONE</u> : yellow orange brown Fe stain, translucent, clear in part, fine to coarse predominantly medium grained, sub angular to predominantly sub round, trace very coarse fracture quartz grains, poor to fair sorting, trace forams, predominantly loose quartz grains, good inferred porosity, no fluorescence.	trace 100/-
775.5 – 1008m 3 – 166 m/hr Av: 31 m/hr	<u>SANDSTONE</u> : clear, translucent, white in part, locally slight yellow brown FE stain in part, fine to medium grained, occasionally coarse, moderately sorted, sub round to occasionally sub angular, trace weak siliceous cement, trace to minor nodular pyrite, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.	1 U 100/-
1008 – 1014m 5 – 9 m/hr Av: 7 m/hr	<u>CLAYSTONE</u> with interbedded <u>SANDSTONE</u> . <u>SANDSTONE</u> : translucent, clear, white in part, light grey, medium to very coarse predominantly medium to coarse, sub angular to sub round, poor sorting, trace weak siliceous cement, predominantly loose, trace nodular pyrite, fair inferred porosity, no show. <u>CLAYSTONE</u> : medium to dark brown, silty in part, minor carbonaceous specks and thin laminae, trace nodular pyrite, soft to firm, sub blocky.	0.2 U 100/-

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A.B.N. 80 007 550 923

WELL PROGRESS REPORT

DATE: 24/06/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 3
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(As at 2400 hours EST, 23/06/05) **DEPTH :** 1160 mMD **PROG:** 209m **DAYS FROM SPUD :** 8
(00:00-24:00)

OPERATION: CHANGING OUT SPERRY LWD TOOLS.

(As at 06:00 hours EST, 24/06/05) **DEPTH :** 1160 mMD **PROGRESS:** 143m
(06:00-06:00 EST)

OPERATION : RUNNING IN HOLE WITH THE 311mm (12¼") BOTTOM HOLE ASSEMBLY.

AFE COST \$	CUMULATIVE COST	\$
CASING SHOE : 340mm (13 3/8") SET AT 655m		RIG: OCEAN PATRIOT
PROGRAMMED TD : 1788 mMD	ROTARY TABLE: 21.5 m LAT	RT – SEAFLOOR: 89.7 LAT
		WATER DEPTH: 68.2m LAT

MUD DATA	Type:	Wt:	Vis:	FL:	PH:	KCl	Cl :	PV / YP:	Rmf:
(2400 Hours)	KCL-IDCAP	1.21	50	5.6	7.2	8.0%	44k	12/19	-

		No.	Make	Type	Size (mm/in.)	Hours	Drilled (m)	Condition
BIT DATA	PRESENT	4	STC	MA89PX	311mm (12¼")	-	-	-
(2400 Hours)	LAST	3	STC	GS04BDV	311mm (12¼")	18.9	495	4-5-WT-A-E-I-NO-PR

SURVEYS: MD (m) INCLINATION AZIMUTH (T) CLOSURE (m) DIRECTION (T)

PREVIOUS 24 HOURS OPERATIONS SUMMARY: (23/06/05)

DRILL 311mm (12¼") HOLE FROM 951m TO 1160m. CIRCULATE BOTTOMS UP. PULL OUT OF HOLE. WORK THROUGH TIGHT SPOT 1080m-1050m. MAKE UP CASING HANGER, SEAL ASSEMBLY AND CEMENT PLUG LAUNCHER.

00:00 – 06:00 HOURS EST (24/06/05):

LAY OUT SPERRY LWD TOOLS. PICK UP NEW TOOLS AND SURFACE TEST. REPAIR DAMAGED ADAPTOR PIN, SURFACE TEST TOOLS. RUN IN HOLE WITH THE 311mm (12¼") DRILLING ASSEMBLY.

ANTICIPATED OPERATIONS:

RUN IN HOLE. DRILL AHEAD WITH 311mm (12¼") HOLE TO 1730m.

Santos

A.B.N. 80 007 550 923

WELL PROGRESS REPORT

DATE: 24/06/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 3
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FORMATION TOPS:	MDRT (m)	Subsea (m)	High/Low to Prognosis (m)	High /Low to Casino 2 (m)

HYDROCARBON SHOW SUMMARY		
INTERVAL	LITHOLOGY	GAS

GEOLOGICAL SUMMARY		
INTERVAL (m/hr)	LITHOLOGY	GAS
1014 – 1083m 5 – 31 m/hr Av: 12 m/hr	<p>CLAYSTONE with interbedded SANDSTONE.</p> <p><u>SANDSTONE</u>: translucent, clear, white in part, light grey, fine to medium, sub angular to sub round, fair sorting, trace weak siliceous cement, predominantly loose, trace nodular pyrite, fair inferred porosity, no show.</p> <p><u>CLAYSTONE</u>: medium to dark brown, yellowish brown, silty in part, rag argillaceous SILTSTONE, minor carbonaceous specks, trace fine grained glauconite, trace nodular pyrite, soft to firm, dispersive in part, sub blocky.</p>	trace 100/-
1083 – 1104m 16 – 112 m/hr Av: 44 m/hr	<p>CLAYSTONE with interbedded SANDSTONE.</p> <p><u>CLAYSTONE</u>: brownish black, medium to dark brownish grey, silty in part grading to argillaceous siltstone, trace carbonaceous specks, minor nodular pyrite, rare fine grained glauconite, soft to dispersive, firm in part, sub blocky.</p> <p><u>SANDSTONE</u>: translucent, clear, white, very light grey, fine to coarse predominantly medium grained, poor to fair sorting, sub round, trace weak siliceous cement, trace silty matrix, rare nodular pyrite, predominantly loose, fair inferred porosity, no fluorescence.</p>	2 U 100/-
1104 – 1151m 6 – 100 m/hr Av: 30 m/hr	<p>SANDSTONE with minor interbedded SILTSTONE.</p> <p><u>SANDSTONE</u>: translucent, clear, white, fine to very coarse predominantly medium to coarse grained, poor to fair sorting, sub round, trace weak siliceous cement, rare nodular pyrite, trace lithics, predominantly loose, fair to good inferred porosity, no fluorescence.</p> <p><u>SILTSTONE</u>: medium to dark grey, olive grey, argillaceous grading to silty CLAYSTONE, trace nodular pyrite, trace very fine lithics, trace very fine glauconite grains, soft to dispersive, sub blocky.</p>	1 – 2 U 100/-

GEOLOGICAL SUMMARY		
INTERVAL (m/hr)	LITHOLOGY	GAS
1151 – 1160m 18 – 100 m/hr Av: 40 m/hr	<p>Interbedded SILTSTONE and SANDSTONE.</p> <p><u>SILTSTONE</u>: medium to dark greenish grey, olive brown, argillaceous grading to silty CLAYSTONE, trace fine grained glauconite, trace nodular pyrite, soft to firm, dispersive, sub blocky.</p> <p><u>SANDSTONE</u>: clear, translucent, white, occasionally yellow brown, very fine to predominantly medium – coarse, poor to fair sorting, sub angular to sub round, weak siliceous cement, trace light grey silty matrix, trace pyrite, trace fine grained glauconite, predominantly clean quartz grains, fair to good inferred porosity, no fluorescence.</p>	1 – 2.5 U 100/-

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A.B.N. 80 007 550 923

WELL PROGRESS REPORT

DATE: 25/06/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 4
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(As at 2400 hours EST, 24/06/05) **DEPTH :** 1343 mMD **PROG:** 183m **DAYS FROM SPUD :** 9
(00:00-24:00)

OPERATION: DRILLING 311mm (12¼") HOLE.

(As at 06:00 hours EST, 25/06/05) **DEPTH :** 1392 mMD **PROGRESS:** 232m
(06:00-06:00 EST)

OPERATION : PULLING OUT OF HOLE FOR A BIT CHANGE.

AFE COST \$	CUMULATIVE COST	\$
CASING SHOE : 340mm (13 3/8") SET AT 655m		RIG: OCEAN PATRIOT
PROGRAMMED TD : 1788 mMD	ROTARY TABLE: 21.5 m LAT	RT – SEAFLOOR: 89.7 LAT
		WATER DEPTH: 68.2m LAT

MUD DATA	Type:	Wt:	Vis:	FL:	PH:	KCl	Cl :	PV / YP:	Rmf:
(2400 Hours)	KCL-IDCAP	1.22	49	5.0	8.4	6.0%	45k	11/26	-

		No.	Make	Type	Size (mm/in.)	Hours	Drilled (m)	Condition
BIT DATA	PRESENT	4	STC	MA89PX	311mm (12¼")	11.2	183	IN HOLE
(2400 Hours)	LAST							

SURVEYS:	MD (m)	INCLINATION	AZIMUTH (T)	CLOSURE (m)	DIRECTION (T)
	1294.0	5.4	250.7	36.7	229.4
	1322.6	5.2	252.0	39.1	230.9
	1351.2	5.3	252.3	41.6	232.2

PREVIOUS 24 HOURS OPERATIONS SUMMARY: (24/06/05)

LAY OUT SPERRY LWD TOOLS. PICK UP NEW TOOLS AND SURFACE TEST. REPAIR DAMAGED ADAPTOR PIN, SURFACE TEST TOOLS. RUN IN HOLE WITH THE 311mm (12¼") DRILLING ASSEMBLY. DRILL AHEAD WITH 311mm (12¼") HOLE FROM 1160m TO 1343m.

00:00 – 06:00 HOURS EST (25/06/05):

CONTINUE TO DRILL 311mm (12 ¼") HOLE FROM 1343m TO 1392m. PULL OUT OF HOLE.

ANTICIPATED OPERATIONS:

PULL OUT OF HOLE. CHANGE BIT. RUN IN HOLE. DRILL AHEAD WITH 311mm (12¼") HOLE TO 1740m.

LWD SENSOR OFFSETS

GR: 8.9m, Res: 11.2m, Directional: 16.2m.

Santos

A.B.N. 80 007 550 923

WELL PROGRESS REPORT

DATE: 25/06/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 4
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FORMATION TOPS:	MDRT (m)	Subsea (m)	High/Low to Prognosis (m)	High /Low to Casino 2 (m)

HYDROCARBON SHOW SUMMARY		
INTERVAL	LITHOLOGY	GAS

GEOLOGICAL SUMMARY		
INTERVAL (m/hr)	LITHOLOGY	GAS
1160 – 1162m 25 – 25 m/hr Av: 25 m/hr	<p>Interbedded SILTSTONE and SANDSTONE.</p> <p><u>SILTSTONE</u>: medium to dark greenish grey, olive brown, argillaceous grading to silty CLAYSTONE, trace fine grained glauconite, trace nodular pyrite, soft to firm, dispersive, sub blocky.</p> <p><u>SANDSTONE</u>: clear, translucent, white, occasionally yellow brown, very fine to predominantly medium – coarse, poor to fair sorting, sub angular to sub round, weak siliceous cement, trace light grey silty matrix, trace pyrite, trace fine grained glauconite, predominantly clean quartz grains, fair to good inferred porosity, no fluorescence.</p>	1 U 100/-
1162 – 1218m 7 – 79 m/hr Av: 26 m/hr	<p>SANDSTONE with minor interbedded SILTSTONE.</p> <p><u>SANDSTONE</u>: clear, translucent, white, light grey, occasional light yellow brown Fe stain, fine to medium grained, trace coarse, poor to fair sorting, weak siliceous cement, trace light grey silty / argillaceous matrix, trace fine grained glauconite, trace nodular pyrite, fair to good inferred porosity, no fluorescence.</p> <p><u>SILTSTONE</u>: olive brown, olive black, medium to dark brownish grey, argillaceous, arenaceous in part with thin very fine sandstone laminae, trace very fine glauconite, trace nodular pyrite, trace black lithics, dispersive to soft, sub blocky to amorphous.</p>	0.5 – 1 U 100/-

GEOLOGICAL SUMMARY		
INTERVAL (m/hr)	LITHOLOGY	GAS
1218 – 1355m 4 – 46 m/hr Av: 16 m/hr	<p>SILTSTONE with interbedded SANDSTONE.</p> <p><u>SILTSTONE</u>: dark brownish grey, olive brown, argillaceous, occasionally arenaceous, trace nodular pyrite, trace very fine glauconite, trace fine lithics, soft to firm, friable in part, sub blocky.</p> <p><u>SANDSTONE</u>: translucent, clear, white to very light grey, very fine to medium grained, fair sorting, sub angular to sub round, minor light grey argillaceous matrix, trace pyrite, trace very fine glauconite, trace fine lithics, predominantly loose, poor to fair inferred porosity, no fluorescence.</p>	0.5 – 2 U 99/1
1355 – 1392m 2 – 68 m/hr Av: 10 m/hr	<p><u>SILTSTONE</u>: dark greenish grey, olive brown, rare to minor glauconite, trace nodular pyrite, trace micro mica, trace micro carbonaceous specks, soft to firm, trace moderately hard, dispersive to sub blocky, trace sub fissile.</p>	2 – 3 U 99/1

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WELL PROGRESS REPORT

DATE: 26/06/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 5
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(As at 2400 hours EST, 25/06/05) **DEPTH :** 1690 mMD **PROG:** 347m **DAYS FROM SPUD :** 10
(00:00-24:00)

OPERATION: DRILLING 311mm (12¼") HOLE.

(As at 06:00 hours EST, 26/06/05) **DEPTH :** 1730 mMD **PROGRESS:** 338m
(06:00-06:00 EST)

OPERATION : PULLING OUT OF HOLE TO RUN 244mm (9 5/8").

AFE COST \$ **CUMULATIVE COST** \$

CASING SHOE : 340mm (13 3/8") SET AT 655m **RIG:** OCEAN PATRIOT
PROGRAMMED TD : 1788 mMD **ROTARY TABLE:** 21.5 m LAT **RT – SEAFLOOR:** 89.7 LAT
WATER DEPTH: 68.2m LAT

MUD DATA	Type:	Wt:	Vis:	FL:	PH:	KCl	Cl :	PV / YP:	Rmf:
(2400 Hours)	KCL-IDCAP	1.25	54	3.8	8.0	6.0%	45k	17/39	0.08 ohm.m

		No.	Make	Type	Size (mm/in.)	Hours	Drilled (m)	Condition
BIT DATA	PRESENT	5	HYC	DSX104	311mm (12¼")	6.3	298	IN HOLE
(2400 Hours)	LAST	4	STC	MA89PX	311mm (12¼")	15.2	232	1-1-BT-S-X-I-BU-PR

SURVEYS:	<u>MD (m)</u>	<u>INCLINATION</u>	<u>AZIMUTH (T)</u>	<u>CLOSURE (m)</u>	<u>DIRECTION (T)</u>
	1636.2	5.9	253	67.9	240
	1664.6	6.2	254	70.8	241
	1693.4	6.4	252	73.9	241
	1712.4	6.1	252	75.9	241

PREVIOUS 24 HOURS OPERATIONS SUMMARY: (25/06/05)

DRILL 311mm (12 ¼") HOLE FROM 1343m TO 1392m. PULL OUT OF HOLE. CHANGE BIT. DOWNLOAD LWD TOOL. RUN IN HOLE. DRILL 311mm (12 ¼") HOLE FROM 1392m TO 1690m.

00:00 – 06:00 HOURS EST (26/06/05):

CONTINUE TO DRILL 311mm (12¼") HOLE FROM 1690m TO 1730m. CIRCULATE HOLE CLEAN. PULL OUT OF HOLE.

ANTICIPATED OPERATIONS:

PULL OUT OF HOLE. RUN 244mm (9 5/8") CASING.

LWD SENSOR OFFSETS

GR: 8.77m, Res: 11.07m, Directional: 16.06m.

Santos

A.B.N. 80 007 550 923

WELL PROGRESS REPORT

DATE: 26/06/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 5
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FORMATION TOPS:	MDRT (m)	Subsea (m)	High/Low to Prognosis (m)	High /Low to Casino 2 (m)

HYDROCARBON SHOW SUMMARY		
INTERVAL	LITHOLOGY	GAS

GEOLOGICAL SUMMARY		
INTERVAL (m/hr)	LITHOLOGY	GAS
1392 – 1440m 10 – 100 m/hr Av: 47 m/hr	<u>SILTSTONE</u> : dark greenish grey, olive brown, rare to minor glauconite, trace nodular pyrite, trace micro mica, trace micro carbonaceous specks, soft to firm, trace moderately hard, dispersive to sub blocky, trace sub fissile.	100/-
1440 – 1498m 33 – 123 m/hr Av: 58 m/hr	<u>SILTSTONE</u> with minor interbedded <u>SANDSTONE</u> . <u>SANDSTONE</u> : clear, translucent, white, fine to medium grained, sub angular to sub round, fair to moderately sorted, minor fine grained glauconite, trace nodular pyrite, loose quartz grains, fair to good inferred porosity, no fluorescence. <u>SILTSTONE</u> : dark greenish grey, olive brown as above.	2 – 10 U 99/1
1498 – 1596m 18 – 86 m/hr Av: 41 m/hr	<u>SILTSTONE</u> with minor interbedded <u>SANDSTONE</u> . <u>SANDSTONE</u> : clear, translucent, light grey, occasional yellow Fe stain, fine to medium occasionally coarse grained, poor sorting, fair sorting, sub angular to sub round, occasional moderately strong siliceous cement, trace light grey silty matrix, rare fine grained glauconite, trace nodular pyrite, predominantly loose, moderately hard fine grained aggregates in part, poor to fair visual porosity, no fluorescence. <u>SILTSTONE</u> : olive brown, brownish grey, argillaceous, rare glauconite, finely arenaceous in part, firm to occasionally moderately hard, sub blocky.	6-20 U 99/1

GEOLOGICAL SUMMARY		
INTERVAL (m/hr)	LITHOLOGY	GAS
1596 – 1620m 44 – 130 m/hr Av: 71 m/hr	<p>SILTSTONE with minor interbedded SANDSTONE.</p> <p><u>SANDSTONE</u>: light brownish grey, light brown, translucent & clear in part, fine grained, trace medium to coarse grained, moderately well sorted, sub angular to sub round, moderately strong siliceous cement, minor light grey silty matrix, rare fine grained glauconite, moderately hard fine grained aggregates, very poor inferred porosity, no fluorescence.</p> <p><u>SILTSTONE</u>: as above, olive brown, brownish grey, argillaceous, rare glauconite, finely arenaceous in part, firm to occasionally moderately hard, sub blocky.</p>	13-32 98/2/trace
1620 – 1638m 37 – 72 m/hr Av: 46 m/hr	<p>SILTSTONE with interbedded SANDSTONE.</p> <p><u>SILTSTONE</u>: as above.</p> <p><u>SANDSTONE</u>: translucent, clear, white, fine to medium grained, trace coarse, sub angular to predominantly sub round, weak siliceous cement in part, predominantly loose quartz grains, good inferred porosity, no fluorescence.</p>	20-30 U 98/2/trace
1638 – 1730m 16– 95 m/hr Av: 40 m/hr	<p>SILTSTONE with minor interbedded SANDSTONE.</p> <p><u>SANDSTONE</u>: light brownish grey, light brown, translucent & clear in part, fine grained, trace medium to coarse grained, moderately well sorted, sub angular to sub round, moderately strong siliceous cement, minor light grey silty matrix, rare fine grained glauconite, moderately hard fine grained aggregates, loose medium to coarse grains, very poor inferred porosity, no fluorescence.</p> <p><u>SILTSTONE</u>: as above.</p>	15-30 U 98/2/trace

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WELL PROGRESS REPORT

DATE: 27/06/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 6
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(As at 2400 hours EST, 26/06/05) **DEPTH :** 1730 mMD **PROG:** 0m **DAYS FROM SPUD :** 11
(00:00-24:00)

OPERATION: RUNNING 244mm (9 5/8") CASING.

(As at 06:00 hours EST, 27/06/05) **DEPTH :** 1730 mMD **PROGRESS:** 0m
(06:00-06:00 EST)

OPERATION : RUNNING 244mm (9 5/8") CASING.

AFE COST \$	CUMULATIVE COST	\$
CASING SHOE : 340mm (13 3/8") SET AT 655m		RIG: OCEAN PATRIOT
PROGRAMMED TD : 1788 mMD	ROTARY TABLE: 21.5 m LAT	RT – SEAFLOOR: 89.7 LAT
		WATER DEPTH: 68.2m LAT

MUD DATA	Type:	Wt:	Vis:	FL:	PH:	KCl	Cl :	PV / YP:	Rmf:
(2400 Hours)	KCL-IDCAP	1.25	54	3.8	8.0	6.0%	45k	17/39	0.08 ohm.m

	No.	Make	Type	Size (mm/in.)	Hours	Drilled (m)	Condition
BIT DATA	PRESENT						
(2400 Hours)	LAST	5	HYC	DSX104	311mm (12¼")	7.4	338
							1-1-BT-T-X-I-N-TD

SURVEYS: MD (m) INCLINATION AZIMUTH (T) CLOSURE (m) DIRECTION (T)

PREVIOUS 24 HOURS OPERATIONS SUMMARY: (26/06/05)

DRILL 311mm (12¼") HOLE FROM 1690m TO 1730m. CIRCULATE HOLE CLEAN. PULL OUT OF HOLE, 1730-1649m. PUMP AND BACK REAM OUT OF HOLE 1649m TO 1140m. RUN IN HOLE. CIRCULATE HOLE CLEAN. PULL OUT OF HOLE. DOWNLOAD LWD. PULL WEAR BUSHING. RIG TO RUN AND RUN 244mm (9 5/8") CASING.

00:00 – 06:00 HOURS EST (27/06/05):
CONTINUE TO RUN 244mm (9 5/8") CASING.

ANTICIPATED OPERATIONS:
RUN AND CEMENT 244mm (9 5/8") CASING.

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WELL PROGRESS REPORT

DATE: 27/06/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 6
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FORMATION TOPS:	MDRT (m)	Subsea (m)	High/Low to Prognosis (m)	High /Low to Casino 2 (m)

HYDROCARBON SHOW SUMMARY		
INTERVAL	LITHOLOGY	GAS

GEOLOGICAL SUMMARY		
INTERVAL (m/hr)	LITHOLOGY	GAS

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A.B.N. 80 007 550 923

WELL PROGRESS REPORT

DATE: 28/07/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 7
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(As at 2400 hours EST, 27/06/05) **DEPTH :** 1730 mMD **PROG:** 0m **DAYS FROM SPUD :** 12
(00:00-24:00)

OPERATION: PRESSURE TESTING SEAL ASSEMBLY.

(As at 06:00 hours EST, 28/06/05) **DEPTH :** 1730 mMD **PROGRESS:** 0m
(06:00-06:00 EST)

OPERATION : RUNNING IN HOLE WITH THE 216mm (8½") BOTTOM HOLE ASSEMBLY.

AFE COST \$	CUMULATIVE COST	\$
CASING SHOE : 244mm (9 5/8") SET AT 1719.8m		RIG: OCEAN PATRIOT
PROGRAMMED TD : 1788 mMD	ROTARY TABLE: 21.5 m LAT	RT – SEAFLOOR: 89.7 LAT
		WATER DEPTH: 68.2m LAT

MUD DATA	Type:	Wt:	Vis:	FL:	PH:	KCl	Cl :	PV / YP:	Rmf:
(2400 Hours)	KCL-IDCAP	1.25	53	4.3	7.8	6.5%	45k	17/48	0.09 ohm.m

		No.	Make	Type	Size (mm/in.)	Hours	Drilled (m)	Condition
BIT DATA	PRESENT	6	HYC	DSX104	216mm (8½")	-	-	IN HOLE
(2400 Hours)	LAST							

SURVEYS: MD (m) INCLINATION AZIMUTH (T) CLOSURE (m) DIRECTION (T)

PREVIOUS 24 HOURS OPERATIONS SUMMARY: (27/06/05)

RUN 244mm (9 5/8") CASING. WASH CASING DOWN FROM 1706m TO 1719m. LAND CASING, SHOE SET AT 1719.8m. CEMENT CASING AS PER PROGRAM. SET SEAL ASSEMBLY AND PRESSURE TEST.

00:00 – 06:00 HOURS EST (28/06/05):

PULL OUT OF HOLE WITH RUNNING TOOL. LAY OUT 311mm (12 ¼") LWD TOOLS, COLLARS AND STABILISERS. MAKE UP 216mm (8½") BOTTOM HOLE ASSEMBLY AND RUN IN HOLE.

ANTICIPATED OPERATIONS:

RUN IN HOLE WITH THE 216mm (8½") BOTTOM HOLE ASSEMBLY. DRILL SHOE TRACK. DRILL AHEAD WITH THE 216mm (8½") HOLE TO TOTAL DEPTH.

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WELL PROGRESS REPORT

DATE: 28/06/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 7
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FORMATION TOPS:	MDRT (m)	Subsea (m)	High/Low to Prognosis (m)	High /Low to Casino 2 (m)

HYDROCARBON SHOW SUMMARY		
INTERVAL	LITHOLOGY	GAS

GEOLOGICAL SUMMARY		
INTERVAL (m/hr)	LITHOLOGY	GAS

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A.B.N. 80 007 550 923

WELL PROGRESS REPORT

DATE: 29/06/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 8
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(As at 2400 hours EST, 28/06/05) **DEPTH :** 1806 mMD **PROG:** 76m **DAYS FROM SPUD :** 13
(00:00-24:00)

OPERATION: PULLING OUT OF HOLE.

(As at 06:00 hours EST, 29/06/05) **DEPTH :** 1806 mMD **PROGRESS:** 76m
(06:00-06:00 EST)

OPERATION : DISPLACING HOLE TO PRODUCTION BRINE.

AFE COST \$	CUMULATIVE COST	\$
CASING SHOE : 244mm (9 5/8") SET AT 1719.8m		RIG: OCEAN PATRIOT
PROGRAMMED TD : 1788 mMD	ROTARY TABLE: 21.5 m LAT	RT – SEAFLOOR: 89.7 LAT
		WATER DEPTH: 68.2m LAT

MUD DATA	Type:	Wt:	Vis:	FL:	PH:	KCl	Cl :	PV / YP:	Rmf:
(2400 Hours)	FLO-PRO 28/06	1.24	65	5.0	9.9	6.0%	144K	14/33	-

	No.	Make	Type	Size (mm/in.)	Hours	Drilled (m)	Condition	
BIT DATA	PRESENT							
(2400 Hours)	LAST	6	HYC	DSX104	216mm (8½")	3.7	76	IN HOLE

SURVEYS:	<u>MD (m)</u>	<u>INCLINATION</u>	<u>AZIMUTH (T)</u>	<u>CLOSURE (m)</u>	<u>DIRECTION (T)</u>
	1734.4	6.1	252.8	78.2	241.7
	1763.2	5.9	251.7	81.2	242.1
	1783.4	5.7	250.5	83.2	242.4

PREVIOUS 24 HOURS OPERATIONS SUMMARY: (28/06/05)

PULL OUT OF HOLE WITH THE SEAL ASSEMBLY RUNNING TOOL. LAY OUT 311mm (12¼") LWD TOOLS, COLLARS, STABILISERS. MAKE UP 216mm (8½") BOTTOM HOLE ASSEMBLY, RUN IN HOLE. TAG CEMENT AT 1693m. DRILL CEMENT, SHOE TRACK. CLEAN RAT HOLE TO 1730m. DISPLACE HOLE TO FLO-PRO MUD SYSTEM. DRILL AHEAD WITH 216mm (8½") HOLE FROM 1730m TO 1806m, **TOTAL DEPTH, REACHED AT 19:00 HRS ON 28/06/05.** CIRCULATE HOLE CLEAN. WIPER TRIP TO 1719m, RUN IN, NO FILL. CIRCULATE HOLE CLEAN. PULL OUT OF HOLE.

00:00 – 06:00 HOURS EST (29/06/05):

PULL OUT OF HOLE TO 500m. RUN IN HOLE. DISPLACE HOLE TO FLO-PRO MUD SYSTEM 1806m-1650m. PULL OUT TO 1650m. DISPLACE HOLE TO CaCl BRINE.

ANTICIPATED OPERATIONS:

DISPLACE WELL TO BRINE. PULL OUT OF HOLE. RUN SAND SCREENS AND PRODUCTION LINER.

LWD SENSOR OFF SETS

GR: 10.0m, RES: 12.3m, DIR: 18.9m

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A.B.N. 80 007 550 923

WELL PROGRESS REPORT

DATE: 29/06/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 8
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FORMATION TOPS:	MDRT (m)	Subsea (m)	High/Low to Prognosis (m)	High /Low to Casino 2 (m)

HYDROCARBON SHOW SUMMARY

INTERVAL	LITHOLOGY	GAS
1757-1770.5m 11 – 50 m/hr Av: 24 m/hr	<u>SANDSTONE</u> : translucent, clear, white, light grey in part, trace yellow stain, fine to predominantly medium to very coarse, poor sorting, sub angular to sub round, trace weak siliceous cement, trace nodular pyrite, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.	585 / 20 U 97/2/1/trace
1770.5-1786m 16 – 57 m/hr Av: 23 m/hr	<u>SANDSTONE</u> : white, translucent, clear, very fine to medium, occasionally coarse, poor to fair sorting, sub angular to sub round, common calcareous cement, common off white argillaceous matrix, trace lithics, trace nodular pyrite, friable aggregates, loose in part, poor to fair visual porosity, no fluorescence.	730 / 20 U 97/2/1/trace

GEOLOGICAL SUMMARY

INTERVAL (m/hr)	LITHOLOGY	GAS
1730 – 1746m 11 – 32 m/hr Av: 16 m/hr	<u>SILTSTONE</u> : medium to dark brown, olive brown, argillaceous, trace nodular pyrite, trace fine grained glauconite, trace micro carbonaceous specks, firm to occasionally moderately hard, sub blocky.	7 – 12 U 97/2/1/trace
1746 -1757m 16 – 30 m/hr Av: 21 m/hr	Interbedded <u>SILTSTONE</u> and very fine grained <u>SANDSTONE</u> . <u>SANDSTONE</u> : light grey, very light brownish grey, very fine grained, well sorting, grading to arenaceous <u>SILTSTONE</u> , sub angular to sub round, moderately strong calcareous cement, common light brownish grey argillaceous matrix, trace pyrite, trace glauconite, moderately hard, very poor visual porosity, no fluorescence. <u>SILTSTONE</u> : medium to dark brown, olive brown, argillaceous, trace nodular pyrite, trace fine grained glauconite, trace micro carbonaceous specks, firm to occasionally moderately hard, sub blocky.	10 – 20 U 98/2/trace

GEOLOGICAL SUMMARY		
INTERVAL (m/hr)	LITHOLOGY	GAS
1757-1770.5m 11 – 50 m/hr Av: 24 m/hr	<u>SANDSTONE</u> : translucent, clear, white, light grey in part, trace yellow stain, fine to predominantly medium to very coarse, poor sorting, sub angular to sub round, trace weak siliceous cement, trace nodular pyrite, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.	230 – 585 U 97/2/1/trace
1770.5-1786m 16 – 57 m/hr Av: 23 m/hr	SANDSTONE with minor interbedded SILTSTONE. <u>SILTSTONE</u> : light to medium grey, light to medium brownish grey, arenaceous grading to very fine SANDSTONE, rare carbonaceous flecks, friable to firm, sub blocky. <u>SANDSTONE</u> : white, translucent, clear, very fine to medium, occasionally coarse, poor to fair sorting, sub angular to sub round, common calcareous cement, common off white argillaceous matrix, trace lithics, trace nodular pyrite, friable aggregates, loose in part, poor to fair visual porosity, no fluorescence.	230 – 730 U 97/2/1/trace
1786 – 1806m 15 – 36 m/hr Av: 21 m/hr	Interbedded SANDSTONE and SILTSTONE. <u>SILTSTONE</u> : light to medium grey, light to medium brownish grey, arenaceous grading to and interbedded with fine grained sandstone, trace fine grained lithics, trace carbonaceous specks / flecks, trace very fine glauconite, friable to firm, sub blocky. <u>SANDSTONE</u> : white, very light grey, translucent, very fine to fine grained, trace medium, moderately strong calcareous cement, common off white very light brown argillaceous / silty matrix, common fine grained glauconite, trace nodular pyrite, trace carbonaceous flecks, friable to occasionally moderately hard, poor visual porosity, no fluorescence.	360 decreasing to 18 U 98/2/trace

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WELL PROGRESS REPORT

DATE: 30/06/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 9
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(As at 2400 hours EST, 29/06/05) **DEPTH :** 1806 mMD **PROG:** 0m **DAYS FROM SPUD :** 14
(00:00-24:00)

OPERATION: RUN SAND SCREENS AND LOWER COMPLETION STRING TO 1700m.

(As at 06:00 hours EST, 29/06/05) **DEPTH :** 1806 mMD **PROGRESS:** 0m
(06:00-06:00 EST)

OPERATION : POOH ESS RUNNING TOOLS AND LANDING STRING.

AFE COST \$	CUMULATIVE COST	\$
CASING SHOE : 244mm (9 5/8") SET AT 1719.8m		RIG: OCEAN PATRIOT
PROGRAMMED TD : 1788 mMD	ROTARY TABLE: 21.5 m LAT	RT – SEAFLOOR: 89.7 LAT
		WATER DEPTH: 68.2m LAT

MUD DATA	Type:	Wt:	Vis:	FL:	PH:	KCl	Cl :	PV / YP:	Rmf:
(2400 Hours)	FLO-PRO 29/06	1.24	50	5.0	9.7	6.5%	148K	14/30	-
	CaCl2 BRINE 29/06	1.22	-	-	9.1	-	146K	-	-

BIT DATA	PRESENT	No.	Make	Type	Size (mm/in.)	Hours	Drilled (m)	Condition
(2400 Hours)	LAST	6	HYC	DSX104	216mm (8½")	3.7	76	1-1-NO-A-E-I-ER-TD

SURVEYS:	<u>MD (m)</u>	<u>INCLINATION</u>	<u>AZIMUTH (T)</u>	<u>CLOSURE (m)</u>	<u>DIRECTION (T)</u>
	1734.4	6.1	252.8	78.2	241.7
	1763.2	5.9	251.7	81.2	242.1
	1783.4	5.7	250.5	83.2	242.4

PREVIOUS 24 HOURS OPERATIONS SUMMARY: (29/06/05)

PULL OUT OF HOLE TO 500m. RUN IN HOLE. DISPLACE HOLE TO FLO-PRO MUD SYSTEM 1806m-1650m. PULL OUT TO 1650m. DISPLACE HOLE TO CaCl2 BRINE. PULL OUT OF HOLE. RUN SAND SCREENS AND LOWER COMPLETION STRING TO 1700m.

00:00 – 06:00 HOURS EST (30/06/05): CONTINUE RUNNING SAND SCREENS AND LOWER COMPLETION STRING - SET PACKER AT 1800m. TEST PACKER, UNLATCH RUNNING TOOLS AND POOH.

ANTICIPATED OPERATIONS:

POOH TO SURFACE. MAKE UP EXPANDABLE SAND SCREEN (ESS) EXPANSION TOOL AND RIH ON DRILL PIPE TO TOP OFF ESS AND EXPAND SCREENS (SEE STEPS 3 & 4 IN OUTLINE BELOW). EXPECT TO BEGIN TESTING IN ABOUT 80 HOURS.

4.0 COMPLETION OUTLINE AND TIME ESTIMATE

All depths approximate, to be confirmed after TD of the well.

Step	Operation Description	Time (Hrs)
1	Function blind & 10 3/4"rams. Make up Expandable Sand Screens (ESS), 7 5/8" tubing & Lower Completion Packer Assembly.	3
2	RIH ESS on Drill pipe to 1785m & set/test packer and unlatch running tools. POOH running Tools	14
3	Make up ESS Expansion tool to SABS circulation tool. Make up DC's and HWDP. RIH the Expansion Tool / HWDP / DC's to top of the ESS on drill pipe.	8
4	Expand ESS (2 passes). POOH Expansion tool above the ESS, cycle open SABS and displace 9 5/8" casing to inhibited calcium chloride brine at 1685m. POOH expansion tools. Laydown HWDP & DC's	10
5	Scrape 9 5/8" casing and riser & jet BOP's	14
6	Retrieve bore protector & jet the XT / BOP's in brine.	1
7	Run upper completion tailpipe and packer and chemical cut sub.	2
8	RIH upper completion 7" 13Cr80 KSBear tubing to 1500m	9
9	Make up SSSV and test	2
10	RIH upper completion 7" 13Cr80 KSBear tubing to 1550m	0.5
11	Make up TH and terminate SSSV.	4
12	Install THRT/SSTT onto TH and function test.	4.5
13	RIH Completion on 9 5/8" New Vam landing string. Install LV. Install flowhead and rig up / test welltest lines and slickline PCE.	12
14	Land off completion and lock and test TH. Retrieve Isolation sleeve and run TH wireline short protection sleeve on slickline.	6
15	Displace approx. 200bbl diesel cushion for underbalance.	2
16	Run standing valve on slickline and set packer. Pressure test completion, retrieve standing valve	6
17	Perform pre flow checks. Clean up the well.	12
18	Retrieve TH wireline short protection sleeve from THRT.	2
19	Inflow test SSSV. Run and set lower plug on slickline in TH.	2
20	Unlatch THRT from TH. Rig down surface lines, slickline PCE and flowhead.	6
21	POOH THRT/SSTT laying down 9 5/8" land string and LV.	2
22	RIH and jet TH / XT. Run and set / test ITC (c/w upper plug) on THRT/SSTT. POOH.	6
23	Pull BOP's.	16
24	Run XT debris cap.	1
25	Pull anchors & move to next well	20

Total (Hrs)	165
Total (Days)	6.9

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WELL PROGRESS REPORT

DATE: 01/07/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 10
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(As at 2400 hours EST, 30/06/05) DEPTH : 1806 mMD PROG: 0m DAYS FROM SPUD : 15
(00:00-24:00)

OPERATION: CONTINUE RIH TO EXPAND SCREENS.

(As at 06:00 hours EST, 01/07/05) DEPTH : 1806 mMD PROGRESS: 0m
(06:00-06:00 EST)

OPERATION : POOH AFTER EXPANDING SAND SCREENS.

AFE COST	\$	CUMULATIVE COST	\$
CASING SHOE : 244mm (9 5/8") SET AT 1719.8m		RIG: OCEAN PATRIOT	
PROGRAMMED TD : 1788 mMD		RT – SEAFLOOR: 89.7 LAT	
ROTARY TABLE: 21.5 m LAT		WATER DEPTH: 68.2m LAT	

MUD DATA	Type:	Wt:	Vis:	FL:	PH:	KCl	Cl:	PV / YP:	Rmf:
(2400 Hours)	FLO-PRO 30/06	1.24	50	5.0	9.7	6.5%	148K	14/30	-
	CaCl2 BRINE 30/06	1.22	-	-	9.1	-	146K	-	-

BIT DATA	PRESENT	No.	Make	Type	Size (mm/in.)	Hours	Drilled (m)	Condition
(2400 Hours)	LAST	6	HYC	DSX104	216mm (8½")	3.7	76	1-1-NO-A-E-I-ER-TD

SURVEYS:	MD (m)	INCLINATION	AZIMUTH (T)	CLOSURE (m)	DIRECTION (T)
	1734.4	6.1	252.8	78.2	241.7
	1763.2	5.9	251.7	81.2	242.1
	1783.4	5.7	250.5	83.2	242.4

PREVIOUS 24 HOURS OPERATIONS SUMMARY: (30/06/05)

CONTINUE RUNNING SAND SCREENS AND LOWER COMPLETION STRING - SET PACKER AT 1800m. TEST PACKER, UNLATCH RUNNING TOOLS AND POOH TO SURFACE. MAKE UP EXPANDABLE SAND SCREEN (ESS) EXPANSION TOOL AND RIH ON DRILL PIPE AND BHA TO TOP OF ESS TO EXPAND SCREENS. ENCOUNTER PROBLEM WHEN DRILL COLLARS ARE TOO LARGE TO ENTER ESS – POOH AND CHANGE BHA SO THAT EXPANDER TOOL SITS BELOW HWDP WITH DCs ABOVE THEM. RIH AGAIN TO EXPAND SCREENS.

00:00 – 06:00 HOURS EST (01/07/05): CONTINUE RIH TO EXPAND SCREENS. EXPAND SAND SCREENS (2 PASSES) ONE BY ONE, THEN POOH TO SURFACE.

ANTICIPATED OPERATIONS:

CONTINUE PULL OUT OF HOLE WITH EXPANSION TOOL. RUN CASING SCRAPER AND BOP JETTING TOOL. RUN UPPER COMPLETION STRING. (SEE STEPS 5-7 IN OUTLINE BELOW). EXPECT TO BEGIN TESTING IN ABOUT 70 HOURS.

4.0 COMPLETION OUTLINE AND TIME ESTIMATE

All depths approximate, to be confirmed after TD of the well.

Step	Operation Description	Time (Hrs)
1	Function blind & 10 3/4"rams. Make up Expandable Sand Screens (ESS), 7 5/8" tubing & Lower Completion Packer Assembly.	3
2	RIH ESS on Drill pipe to 1785m & set/test packer and unlatch running tools. POOH running Tools	14
3	Make up ESS Expansion tool to SABS circulation tool. Make up DC's and HWDP. RIH the Expansion Tool / HWDP / DC's to top of the ESS on drill pipe.	8
4	Expand ESS (2 passes). POOH Expansion tool above the ESS, cycle open SABS and displace 9 5/8" casing to inhibited calcium chloride brine at 1685m. POOH expansion tools. Laydown HWDP & DC's	10
5	Scrape 9 5/8" casing and riser & jet BOP's	14
6	Retrieve bore protector & jet the XT / BOP's in brine.	1
7	Run upper completion tailpipe and packer and chemical cut sub.	2
8	RIH upper completion 7" 13Cr80 KSBear tubing to 1500m	9
9	Make up SSSV and test	2
10	RIH upper completion 7" 13Cr80 KSBear tubing to 1550m	0.5
11	Make up TH and terminate SSSV.	4
12	Install THRT/SSTT onto TH and function test.	4.5
13	RIH Completion on 9 5/8" New Vam landing string. Install LV. Install flowhead and rig up / test welltest lines and slickline PCE.	12
14	Land off completion and lock and test TH. Retrieve Isolation sleeve and run TH wireline short protection sleeve on slickline.	6
15	Displace approx. 200bbl diesel cushion for underbalance.	2
16	Run standing valve on slickline and set packer. Pressure test completion, retrieve standing valve	6
17	Perform pre flow checks. Clean up the well.	12
18	Retrieve TH wireline short protection sleeve from THRT.	2
19	Inflow test SSSV. Run and set lower plug on slickline in TH.	2
20	Unlatch THRT from TH. Rig down surface lines, slickline PCE and flowhead.	6
21	POOH THRT/SSTT laying down 9 5/8" land string and LV.	2
22	RIH and jet TH / XT. Run and set / test ITC (c/w upper plug) on THRT/SSTT. POOH.	6
23	Pull BOP's.	16
24	Run XT debris cap.	1
25	Pull anchors & move to next well	20

Total (Hrs)	165
Total (Days)	6.9

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WELL PROGRESS REPORT

DATE: 02/07/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 11
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(As at 2400 hours EST, 01/07/05) DEPTH : 1806 mMD PROG: 0m DAYS FROM SPUD : 16
(00:00-24:00)

OPERATION: POOH SCRAPER ASSEMBLY

(As at 06:00 hours EST, 02/07/05) DEPTH : 1806 mMD PROGRESS: 0m
(06:00-06:00 EST)

OPERATION : PREPARING TO RUN UPPER COMPLETION STRING

AFE COST	\$	CUMULATIVE COST	\$
CASING SHOE : 244mm (9 5/8") SET AT 1719.8m		RIG: OCEAN PATRIOT	
PROGRAMMED TD : 1788 mMD		RT – SEAFLOOR: 89.7 LAT	
ROTARY TABLE: 21.5 m LAT		WATER DEPTH: 68.2m LAT	

MUD DATA	Type:	Wt:	Vis:	FL:	PH:	KCl	Cl:	PV / YP:	Rmf:
(2400 Hours)	FLO-PRO 30/06	1.24	50	5.0	9.7	6.5%	148K	14/30	-
	CaCl2 BRINE 30/06	1.22	-	-	9.1	-	146K	-	-

BIT DATA	PRESENT	No.	Make	Type	Size (mm/in.)	Hours	Drilled (m)	Condition
(2400 Hours)	LAST	6	HYC	DSX104	216mm (8½")	3.7	76	1-1-NO-A-E-I-ER-TD

SURVEYS:	MD (m)	INCLINATION	AZIMUTH (T)	CLOSURE (m)	DIRECTION (T)
	1734.4	6.1	252.8	78.2	241.7
	1763.2	5.9	251.7	81.2	242.1
	1783.4	5.7	250.5	83.2	242.4

PREVIOUS 24 HOURS OPERATIONS SUMMARY: (01/07/05)

RAN CASING SCRAPER AND BOP JETTING TOOL, SCRAPED 9-5/8" CASING, DISPLACED WELL TO BRINE, POOH SCRAPER ASSEMBLY.

00:00 – 06:00 HOURS EST (01/07/05): RIH AND RETRIEVED BORE PROTECTOR, RIGGED UP TO RUN UPPER COMPLETION STRING

ANTICIPATED OPERATIONS:

RUN UPPER COMPLETION STRING, MAKE UP SSSV AND TEST, CONTINUE RUNNING COMPLETION STRING, MAKE UP TH, TERMINATE SSSV. (SEE POINTS 7-11 BELOW)

4.0 COMPLETION OUTLINE AND TIME ESTIMATE

All depths approximate, to be confirmed after TD of the well.

Step	Operation Description	Time (Hrs)
1	Function blind & 10 3/4"rams. Make up Expandable Sand Screens (ESS), 7 5/8" tubing & Lower Completion Packer Assembly.	3
2	RIH ESS on Drill pipe to 1785m & set/test packer and unlatch running tools. POOH running Tools	14
3	Make up ESS Expansion tool to SABS circulation tool. Make up DC's and HWDP. RIH the Expansion Tool / HWDP / DC's to top of the ESS on drill pipe.	8
4	Expand ESS (2 passes). POOH Expansion tool above the ESS, cycle open SABS and displace 9 5/8" casing to inhibited calcium chloride brine at 1685m. POOH expansion tools. Laydown HWDP & DC's	10
5	Scrape 9 5/8" casing and riser & jet BOP's	14
6	Retrieve bore protector & jet the XT / BOP's in brine.	1
7	Run upper completion tailpipe and packer and chemical cut sub.	2
8	RIH upper completion 7" 13Cr80 KSBear tubing to 1500m	9
9	Make up SSSV and test	2
10	RIH upper completion 7" 13Cr80 KSBear tubing to 1550m	0.5
11	Make up TH and terminate SSSV.	4
12	Install THRT/SSTT onto TH and function test.	4.5
13	RIH Completion on 9 5/8" New Vam landing string. Install LV. Install flowhead and rig up / test welltest lines and slickline PCE.	12
14	Land off completion and lock and test TH. Retrieve Isolation sleeve and run TH wireline short protection sleeve on slickline.	6
15	Displace approx. 200bbl diesel cushion for underbalance.	2
16	Run standing valve on slickline and set packer. Pressure test completion, retrieve standing valve	6
17	Perform pre flow checks. Clean up the well.	12
18	Retrieve TH wireline short protection sleeve from THRT.	2
19	Inflow test SSSV. Run and set lower plug on slickline in TH.	2
20	Unlatch THRT from TH. Rig down surface lines, slickline PCE and flowhead.	6
21	POOH THRT/SSTT laying down 9 5/8" land string and LV.	2
22	RIH and jet TH / XT. Run and set / test ITC (c/w upper plug) on THRT/SSTT. POOH.	6
23	Pull BOP's.	16
24	Run XT debris cap.	1
25	Pull anchors & move to next well	20

Total (Hrs)	165
Total (Days)	6.9

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WELL PROGRESS REPORT

DATE: 03/07/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 12
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(As at 2400 hours EST, 02/07/05) **DEPTH :** 1806 mMD **PROG:** 0m **DAYS FROM SPUD :** 17
(00:00-24:00)

OPERATION: MAKE UP TUBING HANGER

(As at 06:00 hours EST, 03/07/05) **DEPTH :** 1806 mMD **PROGRESS:** 0m
(06:00-06:00 EST)

OPERATION : INSTALLING FLOWHEAD

AFE COST \$	CUMULATIVE COST	\$
CASING SHOE : 244mm (9 5/8") SET AT 1719.8m		RIG: OCEAN PATRIOT
PROGRAMMED TD : 1788 mMD	ROTARY TABLE: 21.5 m LAT	RT – SEAFLOOR: 89.7 LAT
		WATER DEPTH: 68.2m LAT

MUD DATA	Type:	Wt:	Vis:	FL:	PH:	KCl	Cl:	PV / YP:	Rmf:
(2400 Hours)	FLO-PRO 30/06	1.24	50	5.0	9.7	6.5%	148K	14/30	-
	CaCl2 BRINE 30/06	1.22	-	-	9.1	-	146K	-	-

BIT DATA	PRESENT	No.	Make	Type	Size (mm/in.)	Hours	Drilled (m)	Condition
(2400 Hours)	LAST	6	HYC	DSX104	216mm (8½")	3.7	76	1-1-NO-A-E-I-ER-TD

SURVEYS:	<u>MD (m)</u>	<u>INCLINATION</u>	<u>AZIMUTH (T)</u>	<u>CLOSURE (m)</u>	<u>DIRECTION (T)</u>
	1734.4	6.1	252.8	78.2	241.7
	1763.2	5.9	251.7	81.2	242.1
	1783.4	5.7	250.5	83.2	242.4

PREVIOUS 24 HOURS OPERATIONS SUMMARY: (02/07/05)

RUN UPPER COMPLETION STRING, MAKE UP SSSV AND TEST, CONTINUE RUNNING COMPLETION STRING,

00:00 – 06:00 HOURS EST (03/07/05): MADE UP TH AND TERMINATED SSSV, INSTALLED THRT/SSTT ONTO TH AND FUNCTION TESTED, RIH COMPLETIONS ON 9-5/8" LANDING STRING, INSTALL LV, INSTALL FLOWHEAD

ANTICIPATED OPERATIONS:

RIGUP WELLTEST LINES AND SLICKLINE PCE. (POINT 13), LANDOFF COMPLETION, LOCK AND TEST TH (POINT 14)

4.0 COMPLETION OUTLINE AND TIME ESTIMATE

All depths approximate, to be confirmed after TD of the well.

Step	Operation Description	Time (Hrs)
1	Function blind & 10 3/4"rams. Make up Expandable Sand Screens (ESS), 7 5/8" tubing & Lower Completion Packer Assembly.	3
2	RIH ESS on Drill pipe to 1785m & set/test packer and unlatch running tools. POOH running Tools	14
3	Make up ESS Expansion tool to SABS circulation tool. Make up DC's and HWDP. RIH the Expansion Tool / HWDP / DC's to top of the ESS on drill pipe.	8
4	Expand ESS (2 passes). POOH Expansion tool above the ESS, cycle open SABS and displace 9 5/8" casing to inhibited calcium chloride brine at 1685m. POOH expansion tools. Laydown HWDP & DC's	10
5	Scrape 9 5/8" casing and riser & jet BOP's	14
6	Retrieve bore protector & jet the XT / BOP's in brine.	1
7	Run upper completion tailpipe and packer and chemical cut sub.	2
8	RIH upper completion 7" 13Cr80 KSBear tubing to 1500m	9
9	Make up SSSV and test	2
10	RIH upper completion 7" 13Cr80 KSBear tubing to 1550m	0.5
11	Make up TH and terminate SSSV.	4
12	Install THRT/SSTT onto TH and function test.	4.5
13	RIH Completion on 9 5/8" New Vam landing string. Install LV. Install flowhead and rig up / test welltest lines and slickline PCE.	12
14	Land off completion and lock and test TH. Retrieve Isolation sleeve and run TH wireline short protection sleeve on slickline.	6
15	Displace approx. 200bbl diesel cushion for underbalance.	2
16	Run standing valve on slickline and set packer. Pressure test completion, retrieve standing valve	6
17	Perform pre flow checks. Clean up the well.	12
18	Retrieve TH wireline short protection sleeve from THRT.	2
19	Inflow test SSSV. Run and set lower plug on slickline in TH.	2
20	Unlatch THRT from TH. Rig down surface lines, slickline PCE and flowhead.	6
21	POOH THRT/SSTT laying down 9 5/8" land string and LV.	2
22	RIH and jet TH / XT. Run and set / test ITC (c/w upper plug) on THRT/SSTT. POOH.	6
23	Pull BOP's.	16
24	Run XT debris cap.	1
25	Pull anchors & move to next well	20

Total (Hrs)	165
Total (Days)	6.9

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WELL PROGRESS REPORT

DATE: 04/07/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 13
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(As at 2400 hours EST, 03/07/05) **DEPTH :** 1806 mMD **PROG:** 0m **DAYS FROM SPUD :** 18
(00:00-24:00)

OPERATION: RE-RUN ISOLATION SLEEVE

(As at 06:00 hours EST, 04/07/05) **DEPTH :** 1806 mMD **PROGRESS:** 0m
(06:00-06:00 EST)

OPERATION : ATTEMPTING TEST ON TH

AFE COST \$	CUMULATIVE COST	\$
CASING SHOE : 244mm (9 5/8") SET AT 1719.8m		RIG: OCEAN PATRIOT
PROGRAMMED TD : 1788 mMD	ROTARY TABLE: 21.5 m LAT	RT – SEAFLOOR: 89.7 LAT
		WATER DEPTH: 68.2m LAT

MUD DATA	Type:	Wt:	Vis:	FL:	PH:	KCl	Cl:	PV / YP:	Rmf:
(2400 Hours)	FLO-PRO 30/06	1.24	50	5.0	9.7	6.5%	148K	14/30	-
	CaCl2 BRINE 30/06	1.22	-	-	9.1	-	146K	-	-

BIT DATA	PRESENT	No.	Make	Type	Size (mm/in.)	Hours	Drilled (m)	Condition
(2400 Hours)	LAST	6	HYC	DSX104	216mm (8½")	3.7	76	1-1-NO-A-E-I-ER-TD

SURVEYS:	<u>MD (m)</u>	<u>INCLINATION</u>	<u>AZIMUTH (T)</u>	<u>CLOSURE (m)</u>	<u>DIRECTION (T)</u>
	1734.4	6.1	252.8	78.2	241.7
	1763.2	5.9	251.7	81.2	242.1
	1783.4	5.7	250.5	83.2	242.4

PREVIOUS 24 HOURS OPERATIONS SUMMARY: (03/07/05)

RIGUP WELLTEST LINES AND SLICKLINE PCE. (POINT 13), LANDOFF COMPLETION, LOCK AND TEST TH (POINT 14)

00:00 – 06:00 HOURS EST (03/07/05): TEST ON TH FAILED, RETRIEVED SUSPECT ISOLATION SLEEVE, AND RUN NEW ISOLATION SLEEVE WITH SLICKLINE WIRELINE.

ANTICIPATED OPERATIONS:

LANDOFF COMPLETION, LOCK AND TEST TH (POINT 14), DISPLACE 200BBL DIESEL CUSHION, RUN STANDING VALVE ON SLICKLINE AND SET PACKER, PRESSURE TEST COMPLETION (POINTS 15,16)

4.0 COMPLETION OUTLINE AND TIME ESTIMATE

All depths approximate, to be confirmed after TD of the well.

Step	Operation Description	Time (Hrs)
1	Function blind & 10 3/4"rams. Make up Expandable Sand Screens (ESS), 7 5/8" tubing & Lower Completion Packer Assembly.	3
2	RIH ESS on Drill pipe to 1785m & set/test packer and unlatch running tools. POOH running Tools	14
3	Make up ESS Expansion tool to SABS circulation tool. Make up DC's and HWDP. RIH the Expansion Tool / HWDP / DC's to top of the ESS on drill pipe.	8
4	Expand ESS (2 passes). POOH Expansion tool above the ESS, cycle open SABS and displace 9 5/8" casing to inhibited calcium chloride brine at 1685m. POOH expansion tools. Laydown HWDP & DC's	10
5	Scrape 9 5/8" casing and riser & jet BOP's	14
6	Retrieve bore protector & jet the XT / BOP's in brine.	1
7	Run upper completion tailpipe and packer and chemical cut sub.	2
8	RIH upper completion 7" 13Cr80 KSBear tubing to 1500m	9
9	Make up SSSV and test	2
10	RIH upper completion 7" 13Cr80 KSBear tubing to 1550m	0.5
11	Make up TH and terminate SSSV.	4
12	Install THRT/SSTT onto TH and function test.	4.5
13	RIH Completion on 9 5/8" New Vam landing string. Install LV. Install flowhead and rig up / test welltest lines and slickline PCE.	12
14	Land off completion and lock and test TH. Retrieve Isolation sleeve and run TH wireline short protection sleeve on slickline.	6
15	Displace approx. 200bbl diesel cushion for underbalance.	2
16	Run standing valve on slickline and set packer. Pressure test completion, retrieve standing valve	6
17	Perform pre flow checks. Clean up the well.	12
18	Retrieve TH wireline short protection sleeve from THRT.	2
19	Inflow test SSSV. Run and set lower plug on slickline in TH.	2
20	Unlatch THRT from TH. Rig down surface lines, slickline PCE and flowhead.	6
21	POOH THRT/SSTT laying down 9 5/8" land string and LV.	2
22	RIH and jet TH / XT. Run and set / test ITC (c/w upper plug) on THRT/SSTT. POOH.	6
23	Pull BOP's.	16
24	Run XT debris cap.	1
25	Pull anchors & move to next well	20

Total (Hrs)	165
Total (Days)	6.9

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WELL PROGRESS REPORT

DATE: 05/07/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 14
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(As at 2400 hours EST, 04/07/05) DEPTH : 1806 mMD PROG: 0m DAYS FROM SPUD : 19
(00:00-24:00)

OPERATION: FLOW WELL TO CLEAN UP

(As at 06:00 hours EST, 05/07/05) DEPTH : 1806 mMD PROGRESS: 0m
(06:00-06:00 EST)

OPERATION : INSTALLING LOWER TH PLUG

AFE COST \$	CUMULATIVE COST	\$
CASING SHOE : 244mm (9 5/8") SET AT 1719.8m		RIG: OCEAN PATRIOT
PROGRAMMED TD : 1788 mMD	ROTARY TABLE: 21.5 m LAT	RT – SEAFLOOR: 89.7 LAT
		WATER DEPTH: 68.2m LAT

MUD DATA	Type:	Wt:	Vis:	FL:	PH:	KCl	Cl:	PV / YP:	Rmf:
(2400 Hours)	FLO-PRO 30/06	1.24	50	5.0	9.7	6.5%	148K	14/30	-
	CaCl2 BRINE 30/06	1.22	-	-	9.1	-	146K	-	-

BIT DATA	PRESENT	No.	Make	Type	Size (mm/in.)	Hours	Drilled (m)	Condition
(2400 Hours)	LAST	6	HYC	DSX104	216mm (8½")	3.7	76	1-1-NO-A-E-I-ER-TD

SURVEYS:	MD (m)	INCLINATION	AZIMUTH (T)	CLOSURE (m)	DIRECTION (T)
	1734.4	6.1	252.8	78.2	241.7
	1763.2	5.9	251.7	81.2	242.1
	1783.4	5.7	250.5	83.2	242.4

PREVIOUS 24 HOURS OPERATIONS SUMMARY: (04/07/05)

LOCKED AND TESTED ISOLATION SLEEVE, RUN TH WIRELINE SHORT PROTECTION SLEEVE, DISPLACED 200BBL DIESEL CUSHION, RUN STANDING VALVE AND SET PACKER, PRESSURE TESTED COMPLETION, RETRIEVED STANDING VALVE, PERFORMED PRE-FLOW CHECKS (POINTS 14,15,16)

00:00 – 06:00 HOURS EST (06/07/05): FLOWED TO CLEAN UP WELL (POINT 17)

ANTICIPATED OPERATIONS:

RETRIEVE TH WIRLEINE SHORT PROTECTION SLEEVE, INFLOW TEST SSSV, SET LOWER PACKER IN TH, UNLATCH THRT, RIGDOWN SURFACE LINES, SLICKLINE PCE AND FLOWHEAD, POOH THRT/SSTT. (POINTS 18,19,20)

4.0 COMPLETION OUTLINE AND TIME ESTIMATE

All depths approximate, to be confirmed after TD of the well.

Step	Operation Description	Time (Hrs)
1	Function blind & 10 3/4"rams. Make up Expandable Sand Screens (ESS), 7 5/8" tubing & Lower Completion Packer Assembly.	3
2	RIH ESS on Drill pipe to 1785m & set/test packer and unlatch running tools. POOH running Tools	14
3	Make up ESS Expansion tool to SABS circulation tool. Make up DC's and HWDP. RIH the Expansion Tool / HWDP / DC's to top of the ESS on drill pipe.	8
4	Expand ESS (2 passes). POOH Expansion tool above the ESS, cycle open SABS and displace 9 5/8" casing to inhibited calcium chloride brine at 1685m. POOH expansion tools. Laydown HWDP & DC's	10
5	Scrape 9 5/8" casing and riser & jet BOP's	14
6	Retrieve bore protector & jet the XT / BOP's in brine.	1
7	Run upper completion tailpipe and packer and chemical cut sub.	2
8	RIH upper completion 7" 13Cr80 KSBear tubing to 1500m	9
9	Make up SSSV and test	2
10	RIH upper completion 7" 13Cr80 KSBear tubing to 1550m	0.5
11	Make up TH and terminate SSSV.	4
12	Install THRT/SSTT onto TH and function test.	4.5
13	RIH Completion on 9 5/8" New Vam landing string. Install LV. Install flowhead and rig up / test welltest lines and slickline PCE.	12
14	Land off completion and lock and test TH. Retrieve Isolation sleeve and run TH wireline short protection sleeve on slickline.	6
15	Displace approx. 200bbl diesel cushion for underbalance.	2
16	Run standing valve on slickline and set packer. Pressure test completion, retrieve standing valve	6
17	Perform pre flow checks. Clean up the well.	12
18	Retrieve TH wireline short protection sleeve from THRT.	2
19	Inflow test SSSV. Run and set lower plug on slickline in TH.	2
20	Unlatch THRT from TH. Rig down surface lines, slickline PCE and flowhead.	6
21	POOH THRT/SSTT laying down 9 5/8" land string and LV.	2
22	RIH and jet TH / XT. Run and set / test ITC (c/w upper plug) on THRT/SSTT. POOH.	6
23	Pull BOP's.	16
24	Run XT debris cap.	1
25	Pull anchors & move to next well	20

Total (Hrs)	165
Total (Days)	6.9

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A.B.N. 80 007 550 923

WELL PROGRESS REPORT

DATE: 06/07/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 15
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(As at 2400 hours EST, 05/07/05) DEPTH : 1806 mMD PROG: 0m DAYS FROM SPUD : 20
(00:00-24:00)

OPERATION: RUN AND SET ITC ON THRT / SSTT

(As at 06:00 hours EST, 06/07/05) DEPTH : 1806 mMD PROGRESS: 0m
(06:00-06:00 EST)

OPERATION : PULL BOP'S

AFE COST	\$	CUMULATIVE COST	\$
CASING SHOE : 244mm (9 5/8") SET AT 1719.8m		RIG: OCEAN PATRIOT	
PROGRAMMED TD : 1788 mMD		RT – SEAFLOOR: 89.7 LAT	
ROTARY TABLE: 21.5 m LAT		WATER DEPTH: 68.2m LAT	

MUD DATA	Type:	Wt:	Vis:	FL:	PH:	KCl	Cl :	PV / YP:	Rmf:
(2400 Hours)	FLO-PRO 30/06	1.24	50	5.0	9.7	6.5%	148K	14/30	-
	CaCl2 BRINE 30/06	1.22	-	-	9.1	-	146K	-	-

BIT DATA	PRESENT	No.	Make	Type	Size (mm/in.)	Hours	Drilled (m)	Condition
(2400 Hours)	LAST	6	HYC	DSX104	216mm (8½")	3.7	76	1-1-NO-A-E-I-ER-TD

SURVEYS:	MD (m)	INCLINATION	AZIMUTH (T)	CLOSURE (m)	DIRECTION (T)
	1734.4	6.1	252.8	78.2	241.7
	1763.2	5.9	251.7	81.2	242.1
	1783.4	5.7	250.5	83.2	242.4

PREVIOUS 24 HOURS OPERATIONS SUMMARY: (04/07/05)

RETRIEVE TH WIRLEINE SHORT PROTECTION SLEEVE, INFLOW TEST SSSV, SET LOWER PACKER IN TH, UNLATCH THRT, RIGDOWN SURFACE LINES, SLICKLINE PCE AND FLOWHEAD, POOH THRT/SSTT, POOH THRT/SSTT, LAY DOWN 9-5/8" LANDING STRING

00:00 – 06:00 HOURS EST (06/07/05): JET TH/XT, SET / TEST ITC ON THRT/SSTT, POOH

ANTICIPATED OPERATIONS:

PULL BOP'S. RUN DEBRIS CAP, PULL ANCHORS.

4.0 COMPLETION OUTLINE AND TIME ESTIMATE

All depths approximate, to be confirmed after TD of the well.

Step	Operation Description	Time (Hrs)
1	Function blind & 10 3/4"rams. Make up Expandable Sand Screens (ESS), 7 5/8" tubing & Lower Completion Packer Assembly.	3
2	RIH ESS on Drill pipe to 1785m & set/test packer and unlatch running tools. POOH running Tools	14
3	Make up ESS Expansion tool to SABS circulation tool. Make up DC's and HWDP. RIH the Expansion Tool / HWDP / DC's to top of the ESS on drill pipe.	8
4	Expand ESS (2 passes). POOH Expansion tool above the ESS, cycle open SABS and displace 9 5/8" casing to inhibited calcium chloride brine at 1685m. POOH expansion tools. Laydown HWDP & DC's	10
5	Scrape 9 5/8" casing and riser & jet BOP's	14
6	Retrieve bore protector & jet the XT / BOP's in brine.	1
7	Run upper completion tailpipe and packer and chemical cut sub.	2
8	RIH upper completion 7" 13Cr80 KSBear tubing to 1500m	9
9	Make up SSSV and test	2
10	RIH upper completion 7" 13Cr80 KSBear tubing to 1550m	0.5
11	Make up TH and terminate SSSV.	4
12	Install THRT/SSTT onto TH and function test.	4.5
13	RIH Completion on 9 5/8" New Vam landing string. Install LV. Install flowhead and rig up / test welltest lines and slickline PCE.	12
14	Land off completion and lock and test TH. Retrieve Isolation sleeve and run TH wireline short protection sleeve on slickline.	6
15	Displace approx. 200bbl diesel cushion for underbalance.	2
16	Run standing valve on slickline and set packer. Pressure test completion, retrieve standing valve	6
17	Perform pre flow checks. Clean up the well.	12
18	Retrieve TH wireline short protection sleeve from THRT.	2
19	Inflow test SSSV. Run and set lower plug on slickline in TH.	2
20	Unlatch THRT from TH. Rig down surface lines, slickline PCE and flowhead.	6
21	POOH THRT/SSTT laying down 9 5/8" land string and LV.	2
22	RIH and jet TH / XT. Run and set / test ITC (c/w upper plug) on THRT/SSTT. POOH.	6
23	Pull BOP's.	16
24	Run XT debris cap.	1
25	Pull anchors & move to next well	20

Total (Hrs)	165
Total (Days)	6.9

Santos

A.B.N. 80 007 550 923

WELL PROGRESS REPORT

DATE: 07/07/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 16
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(As at 2400 hours EST, 06/07/05) DEPTH : 1806 mMD PROG: 0m DAYS FROM SPUD : 21
(00:00-24:00)

OPERATION: WAITING ON WEATHER

(As at 06:00 hours EST, 07/07/05) DEPTH : 1806 mMD PROGRESS: 0m
(06:00-06:00 EST)

OPERATION : WAITING ON WEATHER

AFE COST \$	CUMULATIVE COST	\$
CASING SHOE : 244mm (9 5/8") SET AT 1719.8m		RIG: OCEAN PATRIOT
PROGRAMMED TD : 1788 mMD	ROTARY TABLE: 21.5 m LAT	RT – SEAFLOOR: 89.7 LAT
		WATER DEPTH: 68.2m LAT

MUD DATA	Type:	Wt:	Vis:	FL:	PH:	KCl	Cl :	PV / YP:	Rmf:
(2400 Hours)	FLO-PRO 30/06	1.24	50	5.0	9.7	6.5%	148K	14/30	-
	CaCl2 BRINE 30/06	1.22	-	-	9.1	-	146K	-	-

BIT DATA	PRESENT	No.	Make	Type	Size (mm/in.)	Hours	Drilled (m)	Condition
(2400 Hours)	LAST	6	HYC	DSX104	216mm (8½")	3.7	76	1-1-NO-A-E-I-ER-TD

SURVEYS:	MD (m)	INCLINATION	AZIMUTH (T)	CLOSURE (m)	DIRECTION (T)
	1734.4	6.1	252.8	78.2	241.7
	1763.2	5.9	251.7	81.2	242.1
	1783.4	5.7	250.5	83.2	242.4

PREVIOUS 24 HOURS OPERATIONS SUMMARY: (04/07/05)

PREPARE TO PULL RISER AND BOPS. RIG DOWN RISER TENSIONERS AND ASSOCIATED LINES. WAIT ON WEATHER.

00:00 – 06:00 HOURS EST (06/07/05): WAIT ON WEATHER

ANTICIPATED OPERATIONS:

PULL BOP'S. RUN DEBRIS CAP, PULL ANCHORS.

4.0 COMPLETION OUTLINE AND TIME ESTIMATE

All depths approximate, to be confirmed after TD of the well.

Step	Operation Description	Time (Hrs)
1	Function blind & 10 3/4"rams. Make up Expandable Sand Screens (ESS), 7 5/8" tubing & Lower Completion Packer Assembly.	3
2	RIH ESS on Drill pipe to 1785m & set/test packer and unlatch running tools. POOH running Tools	14
3	Make up ESS Expansion tool to SABS circulation tool. Make up DC's and HWDP. RIH the Expansion Tool / HWDP / DC's to top of the ESS on drill pipe.	8
4	Expand ESS (2 passes). POOH Expansion tool above the ESS, cycle open SABS and displace 9 5/8" casing to inhibited calcium chloride brine at 1685m. POOH expansion tools. Laydown HWDP & DC's	10
5	Scrape 9 5/8" casing and riser & jet BOP's	14
6	Retrieve bore protector & jet the XT / BOP's in brine.	1
7	Run upper completion tailpipe and packer and chemical cut sub.	2
8	RIH upper completion 7" 13Cr80 KSBear tubing to 1500m	9
9	Make up SSSV and test	2
10	RIH upper completion 7" 13Cr80 KSBear tubing to 1550m	0.5
11	Make up TH and terminate SSSV.	4
12	Install THRT/SSTT onto TH and function test.	4.5
13	RIH Completion on 9 5/8" New Vam landing string. Install LV. Install flowhead and rig up / test welltest lines and slickline PCE.	12
14	Land off completion and lock and test TH. Retrieve Isolation sleeve and run TH wireline short protection sleeve on slickline.	6
15	Displace approx. 200bbl diesel cushion for underbalance.	2
16	Run standing valve on slickline and set packer. Pressure test completion, retrieve standing valve	6
17	Perform pre flow checks. Clean up the well.	12
18	Retrieve TH wireline short protection sleeve from THRT.	2
19	Inflow test SSSV. Run and set lower plug on slickline in TH.	2
20	Unlatch THRT from TH. Rig down surface lines, slickline PCE and flowhead.	6
21	POOH THRT/SSTT laying down 9 5/8" land string and LV.	2
22	RIH and jet TH / XT. Run and set / test ITC (c/w upper plug) on THRT/SSTT. POOH.	6
23	Pull BOP's.	16
24	Run XT debris cap.	1
25	Pull anchors & move to next well	20

Total (Hrs)	165
Total (Days)	6.9

Santos

A.B.N. 80 007 550 923

WELL PROGRESS REPORT

DATE: 08/07/05 - 06:00 HRS EST	CASINO 5	REPORT NO: 17
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(As at 2400 hours EST, 07/07/05) DEPTH : 1806 mMD PROG: 0m DAYS FROM SPUD : 22
(00:00-24:00)

OPERATION: WAITING ON WEATHER

(As at 06:00 hours EST, 08/07/05) DEPTH : 1806 mMD PROGRESS: 0m
(06:00-06:00 EST)

OPERATION : PREPARING TO RUN CORROSION CAP

AFE COST	\$	CUMULATIVE COST	\$
CASING SHOE : 244mm (9 5/8") SET AT 1719.8m		RIG: OCEAN PATRIOT	
PROGRAMMED TD : 1788 mMD		RT – SEAFLOOR: 89.7 LAT	
		WATER DEPTH: 68.2m LAT	

MUD DATA	Type:	Wt:	Vis:	FL:	PH:	KCl	Cl :	PV / YP:	Rmf:
(2400 Hours)	FLO-PRO 30/06	1.24	50	5.0	9.7	6.5%	148K	14/30	-
	CaCl2 BRINE 30/06	1.22	-	-	9.1	-	146K	-	-

BIT DATA	PRESENT	No.	Make	Type	Size (mm/in.)	Hours	Drilled (m)	Condition
(2400 Hours)	LAST	6	HYC	DSX104	216mm (8½")	3.7	76	1-1-NO-A-E-I-ER-TD

SURVEYS:	MD (m)	INCLINATION	AZIMUTH (T)	CLOSURE (m)	DIRECTION (T)
	1734.4	6.1	252.8	78.2	241.7
	1763.2	5.9	251.7	81.2	242.1
	1783.4	5.7	250.5	83.2	242.4

PREVIOUS 24 HOURS OPERATIONS SUMMARY:
WAIT ON WEATHER.

00:00 – 06:00 HOURS EST (06/07/05):
PULLED BOP'S, LAYED OUT REMAINING RISER

ANTICIPATED OPERATIONS:
RUN XT DEBRIS CAP, PULL ANCHORS.

4.0 COMPLETION OUTLINE AND TIME ESTIMATE

All depths approximate, to be confirmed after TD of the well.

Step	Operation Description	Time (Hrs)
1	Function blind & 10 3/4"rams. Make up Expandable Sand Screens (ESS), 7 5/8" tubing & Lower Completion Packer Assembly.	3
2	RIH ESS on Drill pipe to 1785m & set/test packer and unlatch running tools. POOH running Tools	14
3	Make up ESS Expansion tool to SABS circulation tool. Make up DC's and HWDP. RIH the Expansion Tool / HWDP / DC's to top of the ESS on drill pipe.	8
4	Expand ESS (2 passes). POOH Expansion tool above the ESS, cycle open SABS and displace 9 5/8" casing to inhibited calcium chloride brine at 1685m. POOH expansion tools. Laydown HWDP & DC's	10
5	Scrape 9 5/8" casing and riser & jet BOP's	14
6	Retrieve bore protector & jet the XT / BOP's in brine.	1
7	Run upper completion tailpipe and packer and chemical cut sub.	2
8	RIH upper completion 7" 13Cr80 KSBear tubing to 1500m	9
9	Make up SSSV and test	2
10	RIH upper completion 7" 13Cr80 KSBear tubing to 1550m	0.5
11	Make up TH and terminate SSSV.	4
12	Install THRT/SSTT onto TH and function test.	4.5
13	RIH Completion on 9 5/8" New Vam landing string. Install LV. Install flowhead and rig up / test welltest lines and slickline PCE.	12
14	Land off completion and lock and test TH. Retrieve Isolation sleeve and run TH wireline short protection sleeve on slickline.	6
15	Displace approx. 200bbl diesel cushion for underbalance.	2
16	Run standing valve on slickline and set packer. Pressure test completion, retrieve standing valve	6
17	Perform pre flow checks. Clean up the well.	12
18	Retrieve TH wireline short protection sleeve from THRT.	2
19	Inflow test SSSV. Run and set lower plug on slickline in TH.	2
20	Unlatch THRT from TH. Rig down surface lines, slickline PCE and flowhead.	6
21	POOH THRT/SSTT laying down 9 5/8" land string and LV.	2
22	RIH and jet TH / XT. Run and set / test ITC (c/w upper plug) on THRT/SSTT. POOH.	6
23	Pull BOP's.	16
24	Run XT debris cap.	1
25	Pull anchors & move to next well	20

Total (Hrs)	165
Total (Days)	6.9

SECTION 6 : DAILY DRILLING REPORTS

From : Chris Wise / Pat King							
OIM : Barry Scott							
Well Data							
Country	Australia	M. Depth	0m	Cur. Hole Size	0mm	AFE Cost	
Field	Casino	TVD	0m	Casing OD	0mm	AFE No.	5746022
Drill Co.	DOGC	Progress	0m	Shoe TVD	0m	Daily Cost	
Rig	Ocean Patriot	Days from spud		F.I.T. / L.O.T.	0sg / 0sg	Cum Cost	
Wtr Dpth(LAT)	70.0m	Days on well	0.17			Planned TD	1788.0m
RT-ASL(LAT)	22.0m	Current Op @ 0600	Running anchors.				
RT-ML	92m	Planned Op	Complete running and pre-tensioning anchors. Mix mud. Make up BHA and spud well.				

Summary of Period 0000 to 2400 Hrs
Moved rig from Casino-4 location.

Operations For Period 0000 Hrs to 2400 Hrs on 14 Jun 2005							
Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PS	P	RM	2000	2400	4.00	0m	Last anchor off bottom at Casino-4DW2 and rig on ticket for Casino-5 at 20:00. Commenced tow to location with Pacific Wrangler on tow bridle. 24:00 Rig Position: 38 deg 44' 56" S 142 deg 46' 42" E

Operations For Period 0000 Hrs to 0600 Hrs on 15 Jun 2005							
Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PS	P	RM	0000	0200	2.00	0m	Continued rig move from Casino-4DW2 to Casino-5. Pacific Wrangler on tow bridle. Anchor #4 on Far Grip stern roller. (Avg. tow speed 1.3 kn)
PS	P	AH	0200	0600	4.00	0m	Commenced positioning vessels for anchor handling. (Rig approx. 1 km off location, speed 0.5 kn) Positioned Anchor #4 with Far Grip 02:49 - Far Grip released Anchor #4 at anchor point (1.2 km from location @ 040 deg) whilst Pacific Wrangler continued to tow rig towards location 02:50 - Anchor #4 on bottom (Rig approx. 1 km off location, moving at 0.5 kn) 03:37 - Rig on location. Far Grip commenced chasing in chain. 04:19 - PCC back to rig. Commenced running Anchor #8 with Far Grip. 04:43 - PCC passed to Far Grip 05:02 - Re-orient anchor

Bulk Stocks						Personnel On Board	
Name	Unit	In	Used	Adjust	Balance	Company	Pax
Fuel	m3	0	13.8	8.6	369.9	Santos	3
Drill Water	m3	0	12	11.1	414.7	DOGC	51
Potable Water	m3	31	31	-1.9	249.8	ESS	8
Gel	sx	0	0	0	1,685.0	Dowell	2
Cement	sx	0	0	0	778.0	Geoservices	2
Barite	sx	0	0	0	1,555.0	Fugro	6
KCl Brine	bbl	0	0	0	0.0	Cameron	1
						Fugro - Surveyor	3
						MO47	3
						Other	1
						MI	2
						Total	82

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	12 Jun 2005	2 Days	Abandon Drill
BOP Test	05 Jun 2005	9 Days	BOP Test
Environmental Incident	02 May 2005	43 Days	None reported since commencement of campaign.
Fire Drill	12 Jun 2005	2 Days	Fire Drill
First Aid	04 May 2005	41 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	43 Days	None reported since commencement of campaign.
Man Overboard Drill	02 May 2005	43 Days	None undertaken since commencement of campaign.
Near Miss	02 May 2005	43 Days	None reported since commencement of campaign.
Safety Meeting	12 Jun 2005	2 Days	Weekly Safety Meeting
Stop Cards	14 Jun 2005	0 Days	6 Stop Cards

Marine									
Weather check on 14 Jun 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	46km/h	290deg	1009.00bar	12.0C°	2.0m	290deg	0m/sec	1	0
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments			
0.6deg	0.6deg	0m	2.0m	270deg	2m/sec	Clear			
Rig Dir.	Ris. Tension	VDL	Comments				5	0	
0deg	0mt	185.07mt					6	0	
							7	0	
							8	0	

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
Pacific Wrangler			Ocean Patriot	Item	Unit	Quantity

From : Chris Wise / Pat King
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	0m	Cur. Hole Size	0mm	AFE Cost	
Field	Casino	TVD	0m	Casing OD	0mm	AFE No.	5746022
Drill Co.	DOGC	Progress	0m	Shoe TVD	0m	Daily Cost	
Rig	Ocean Patriot	Days from spud		F.I.T. / L.O.T.	0sg / 0sg	Cum Cost	
Wtr Dpth(LAT)	70.0m	Days on well	1.17			Planned TD	1788.0m
RT-ASL(LAT)	22.0m	Current Op @ 0600	Attempting to tension anchor #1.				
RT-ML	92m	Planned Op	Tension anchor #1. Attach and run anchor #2. Pretension anchors #2, #6, #1 & #5. Spud well. Run & cement conductor casing.				

Summary of Period 0000 to 2400 Hrs

Moved to Casino-5 location. Commenced running anchors and pre-tensioning.

Operations For Period 0000 Hrs to 2400 Hrs on 15 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PS	P	RM	0000	0200	2.00	0m	Continued rig move from Casino-4DW2 to Casino-5. Pacific Wrangler on tow bridle. Anchor #4 on Far Grip stern roller. (Avg. tow speed 1.3 kn)
PS	P	AH	0200	1100	9.00	0m	Commenced positioning vessels for anchor handling. (Rig approx. 1 km off location, speed 0.5 kn) Positioned Anchor #4 with Far Grip 02:49 - Far Grip released Anchor #4 at anchor point (1.2 km from location @ 040 deg) whilst Pacific Wrangler continued to tow rig towards location 02:50 - Anchor #4 on bottom (Rig approx. 1 km off location, moving at 0.5 kn) 03:37 - Rig on location. Far Grip commenced chasing in chain. 04:19 - PCC back to rig. Ran Anchor #8 with Far Grip. 04:43 - PCC passed to Far Grip 05:02 - Attempt top re-orient anchor. No go. 05:25 - Far grip unable to re-orient. Rig hauled in chain to 50m. 06:06 - Anchor orientation good 06:39 - Anchor on bottom 07:28 - PCC back to rig Ran Anchor #5 with Far Grip 07:38 - PCC passed to Far Grip 08:14 - Anchor on bottom 08:54 - PCC back to rig Ran Anchor #1 with Far Grip 09:08 - PCC passed to Far Grip 09:42 - Anchor on bottom 10:56 - PCC back to rig. Far Grip to Portland. 10:39 - Tow bridle released from Pacific Wrangler.
PS	P	AH	1100	1630	5.50	0m	Ran secondary anchors. Ran Anchor #3 with Pacific Wrangler 12:32 - PCC passed to Pacific Wrangler 13:22 - Anchor on bottom 13:55 - PCC back to rig Ran Anchor #7 with Pacific Wrangler 14:06 - PCC passed to Pacific Wrangler 14:51 - Anchor on bottom 15:19 - PCC back to rig Ran Anchor #6 with Pacific Wrangler 15:28 - PCC passed to Pacific Wrangler 16:04 - Anchor on bottom 16:34 - PCC back to rig
PS	P	AH	1630	2000	3.50	0m	Commenced pre-tensioning anchors 16:36 - Attempted to cross tension Anchors #4 and #8. Anchor #4 not holding. 20:00 - Anchor #7 tensioned to 200 t. Anchor #3 tensioned to 180 t.
PS	P	AH	2000	2115	1.25	0m	Re-ran Anchor #4 with Pacific Wrangler 20:32 - PCC passed to Pacific Wrangler 21:04 - Anchor off bottom 21:14 - Anchor on bottom (anchor winch power failure)
PS	TP	AH	2115	2245	1.50	0m	Restored power to anchor winch.

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PS	(RE) P	AH	2245	2400	1.25	0m	Continued pre-tensioning anchors. 23:50 - Anchor #4 tensioned to 200 t. Anchor #8 tensioned to 180 t. [Daily Offline Operations: Completed changing out Elmago Brake, prepared PGB trolley and placed PGB onto same, slipped & cut drilling line, made up 914 mm (36") / 660 mm (26") BHA, commenced picking up and racking back 1600 m of 127 mm (5") drill pipe, commenced mixing spud mud]

Operations For Period 0000 Hrs to 0600 Hrs on 16 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PS	P	AH	0000	0600	6.00	0m	Re-ran Anchor #1 with Pacific Wrangler. 00:23 - PCC passed to Pacific Wrangler 00:42 - Anchor off bottom 01:17 - Anchor on bottom 01:40 - PCC back to rig Attempted to cross-tension Anchors #1 and #5. 03:23 Anchor #1 slipped approx. 106 m. 06:00 Rig approx. 20 m off location. Anchors #1 & #2 not providing any positioning support against prevailing seas / weather. Anchor #2 on location - awaiting installation. [Daily Offline Operations: Completed picking up and racking back ~1600 m of 127 mm (5") drill pipe, continued mixing spud mud, serviced TDS block & dolly rollers, commenced RIH spud BHA to hang off in blocks until spud]

Bulk Stocks							Personnel On Board		
Name	Unit	In	Used	Adjust	Balance	Company	Pax		
Fuel	m3	0	13.5	0	356.4	Santos	3		
Drill Water	m3	0	198.6	0	216.1	DOGC	50		
Potable Water	m3	30	21.7	0	258.1	ESS	8		
Gel	sx	0	0	0	1,685.0	Dowell	2		
Cement	sx	927	0	0	1,705.0	Geoservices	2		
Barite	sx	0	0	0	1,555.0	Fugro	6		
KCl Brine	bbl	0	0	0	0.0	Cameron	1		
						Fugro - Surveyor	3		
						Other	1		
						MI	2		
							Total	78	

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	12 Jun 2005	3 Days	Abandon Drill
BOP Test	05 Jun 2005	10 Days	BOP Test
Environmental Incident	02 May 2005	44 Days	None reported since commencement of campaign.
Fire Drill	12 Jun 2005	3 Days	Fire Drill
First Aid	04 May 2005	42 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	44 Days	None reported since commencement of campaign.
Man Overboard Drill	02 May 2005	44 Days	None undertaken since commencement of campaign.
Near Miss	02 May 2005	44 Days	None reported since commencement of campaign.
Safety Meeting	12 Jun 2005	3 Days	Weekly Safety Meeting
Stop Cards	15 Jun 2005	0 Days	10 Stop Cards

Marine								Rig Support	
Weather check on 15 Jun 2005 at 2400									
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	43km/h	247deg	1005.00bar	11.0C°	0.5m	247deg	0m/sec	1	0
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments			
0.6deg	0.6deg	0m	3.0m	225deg	2m/sec	Clear			
Rig Dir.	Ris. Tension	VDL		Comments				2	0
0deg	0mt	209.74mt					3	0	
								4	0
								5	0
								6	0
								7	0
								8	0

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Portland	Item	Unit	Quantity
				Fuel	m3	336
				Drill Water	m3	730
				Potable Water	m3	382
				Gel	t	43
				Cement	t	0
				Barite	t	81
KCl Brine	bbbl	0				
Pacific Wrangler			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	460
				Drill Water	m3	287
				Potable Water	m3	208
				Gel	t	37
				Cement	t	42
				Barite	t	121
KCl Brine	bbbl	950				

Helicopter Movement				
Flight #	Time	Destination	Comment	Pax
1	11:23	Ocean Patriot		0
1	11:32	Essendon		4

From : Chris Wise / Pat King
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	133.0m	Cur. Hole Size	914mm	AFE Cost	
Field	Casino	TVD	133.0m	Casing OD	0mm	AFE No.	5746022
Drill Co.	DOGC	Progress	43.3m	Shoe TVD	0m	Daily Cost	
Rig	Ocean Patriot	Days from spud		F.I.T. / L.O.T.	Osg / Osg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	2.17			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	Running 762 mm (30") conductor casing into PGB on 127 mm (5") drill pipe.				
RT-ML	89.7m	Planned Op	RIH 762 mm (30") conductor casing and cement. Top up job if required. Make up Deep Sea Express cement head, 476 mm (18-3/4") wellhead running tool and 445 mm (17-1/2") BHA. RIH and commence drilling 445 mm (17-1/2") hole.				

Summary of Period 0000 to 2400 Hrs

Completed running and tensioning anchors. Spudded well. Drilled to 133 m (section TD)

Operations For Period 0000 Hrs to 2400 Hrs on 16 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PS	P	AH	0000	1815	18.25	0m	<p>Re-ran Anchor #1 with Pacific Wrangler. 00:23 - PCC passed to Pacific Wrangler 00:42 - Anchor off bottom 01:17 - Anchor on bottom 01:40 - PCC back to rig</p> <p>Attempted to cross-tension Anchors #1 and #5. 03:23 - Anchor #1 slipped approx. 106 m 05:50 - Anchor #1 slipped approx. 304m</p> <p>06:00 - Rig approx. 20 m off location. Anchors #1 & #2 not providing any positioning support against prevailing seas / weather. Anchor #2 on location - awaiting installation.</p> <p>Attached and ran anchor #2 07:19 - Anchor #2 passed to Pacific Wrangler, commenced preparing to attach and run 07:47 - New PCC and jewellery passed to Pacific Wrangler 10:52 - Chain attached to anchor 12:35 - Anchor #2 on bottom 13:10 - PCC back to rig</p> <p>Re-ran anchor #1 with Pacific Wrangler 13:58 - Anchor re-positioned 14:20 - PCC back to rig</p> <p>Attempted to tension anchor #1 15:55 - Anchor #1 to 180 t (slipping);</p> <p>Tensioned anchors #2, #5 and #6 16:25 - Anchor #2 to 185 t 16:50 - Anchor #5 to 183 t 17:15 - Anchor #6 to 185 t</p> <p>Repositioned rig 17:20 - Commenced repositioning rig 18:10 - Rig in position for spud Preliminary rig position: 38 deg 47' 43.70" S 142 deg 44' 44.55" E (1.4 m @ 11.2 deg from design location) Rig Heading - 250.67 deg.</p> <p>[Offline Operations: Completed picking up and racking back ~1600 m of 127 mm (5") drill pipe, continued mixing spud mud, serviced TDS block & dolly rollers, RIH spud BHA and hung off in blocks, cleaned sand traps and services shakers]</p>
PS	P	TI	1815	1900	0.75	0m	Ran in hole with 914 mm (36") BHA. Tagged seabed. De-ballasted 0.3 m to drilling draft. Re-tagged seabed at 89.7 mRT. (Water depth 68.2 m. RT 21.5 m). ROV positioned sonar buoys and marked hole location.
CH	P	DA	1900	1945	0.75	100.0m	Spudded well. Unable to jet in bit due to hard seabed. Drilled ahead 914 mm (36") hole from 89.7 m to 100 m, pumping 15.9 m3 (100 bbl) PHG sweep @ 94 m and 100 m and backreaming first single. Survey @ 100m - 1 deg. [Avg. parameters - 800 gal/min, 50 rpm, 0-2 klb WOB]
CH	P	DA	1945	2330	3.75	133.0m	Drilled ahead 100 m to 110m. Survey @ 110 m - 1.5 deg. Drilled and reamed 110 m to 133 m, with increased RPM and reduced WOB. Pumped 8 m3 (50 bbl) PHG sweeps each single, spotted 12 m3 (75 bbl) PHG sweep around BHA and reamed stand prior to connection. [Avg Parameters - 1200 gal/min, 70 rpm, 0-5 klb WOB]

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CH	P	CMD	2330	2400	0.50	133.0m	Pumped 15.9 m3 (100 bbl) PHG sweep at TD. Reamed last stand twice prior to survey. Allowed gel to settle at seafloor prior to confirming depth of BHA with ROV. Survey @ 133m - 1 deg.

Operations For Period 0000 Hrs to 0600 Hrs on 17 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CH	P	CMD	0000	0045	0.75	133.0m	Confirmed BHA on depth with ROV once seabed settled. Worked pipe whilst displacing hole to PHG.
CH	P	TO	0045	0200	1.25	133.0m	POH with 914 mm (36") BHA from 133m to surface and racked back same.
CH	P	RRC	0200	0300	1.00	133.0m	Held pre-job safety meeting - Running casing. Rigged up to run 762 mm (30") conductor casing. Skidded PGB into moonpool.
CH	P	CRN	0300	0400	1.00	133.0m	Picked up 762 mm (30") conductor casing and made up same and RIH. 508 mm (20") x 762 mm (30") shoe joint 762 mm (30") Intermediate Joint 762 mm (30") X/O Joint
CH	P	CRN	0400	0445	0.75	133.0m	Stripped o-ring from 762 mm (30") X/O joint Lynx HT pin due to rig movement. Replaced o-ring and filled casing with seawater to stabilise. Made up 762 mm (30") wellhead housing c/w extension joint to X/O joint.
CH	P	CRN	0445	0500	0.25	133.0m	Continued to RIH with 762 mm (30") conductor casing and hung off in rotary table.
CH	P	CRN	0500	0600	1.00	133.0m	Ran cement stinger (4 joints 127 mm/5" drill pipe) inside 762 mm (30") casing on 127 mm (5") drill pipe. Made up running tool to 762 mm (30") wellhead.

WBM Data									
Mud Type:	PHG	API FL:	13cm³/30m	Cl:	1050	Solids:	2.4	Viscosity:	0sec/L
Sample-From:	Pit 3	Filter-Cake:	1mm	K+C*1000:	0%	H2O:	98%	PV:	0.011Pa/s
Time:	21:15	HTHP-FL:	0cm³/30m	Hard/Ca:	40	Oil:	0%	YP:	0.240MPa
Weight:	1.04sg	HTHP-Cake:	0mm	MBT:	28	Sand:		Gels 10s:	0.254
Temp:	13.0C°			PM:	0.55	pH:	9.5	Gels 10m:	0.259
				PF:	0.35	PHPA:	Oppb	Fann 003:	49
								Fann 006:	49
								Fann 100:	53
								Fann 200:	58
								Fann 300:	61
								Fann 600:	72

Bit # 1RR				Wear	I	O1	D	L	B	G	O2	R
Size ("):	660mm	IADC#	115	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	SMITH	WOB(avg)	0.09mt	No.	Size	Progress		43.3m	Cum. Progress		43.3m	
Type:	Rock	RPM(avg)	70	2	22/32nd"	On Bottom Hrs		3.10h	Cum. On Btm Hrs		3.10h	
Serial No.:	MR4109	F.Rate	3785lpm	2	20/32nd"	IADC Drill Hrs		4.80h	Cum IADC Drill Hrs		4.80h	
Bit Model	DSJC	SPP	6895kPa			Total Revs		0	Cum Total Revs		0	
Depth In	89.7m	TFA	1.356			ROP(avg)		13.97 m/hr	ROP(avg)		13.97 m/hr	
Depth Out	133.0m											

Run Comment Used Bit. 36" hole opener above bit

BHA # 1									
Weight(Wet)	0mt	Length	133.0m	Torque(max)	0Nm	D.C. (1) Ann Velocity			
Wt Below Jar(Wet)	0mt	String	0mt	Torque(Off.Btm)	0Nm	D.C. (2) Ann Velocity			
		Pick-Up	0mt	Torque(On.Btm)	0Nm	H.W.D.P. Ann Velocity			
		Slack-Off	0mt	D.P. Ann Velocity					
BHA Run Description	660 mm (26") Bit, 914 mm (36") hole opener, Bit sub c/w float, 241 mm (9-1/2") Anderdrift, 445 mm (17-1/2") stabiliser, 241 mm (9-1/2") NMDC, 445 mm (17-1/2") stabiliser, 2 x 241 mm (9-1/2") DC, X/O, 5 x 203 mm (8") DC, X/O, 127 mm (5") HWDP								

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.64m	660mm	0mm	MR4109	Smith DSJC c/w 2 x 20, 2 x 22 Nozzles
Hole Opener	2.43m	914mm	0mm	46450	4 x 24 Nozzles
Float Sub	1.02m	241mm	0mm	186-0028	Ported Float
9.5in Anderdrift	3.11m	243mm	0mm	ADB993	
Stab	2.10m	445mm	0mm	A229	
NMDC	9.04m	241mm	0mm	6613	
Stab	2.18m	445mm	0mm	47618	
Drill Collar	18.34m	241mm	0mm	Various	
X/O	1.09m	240mm	0mm	SANTOS	
Drill Collar	45.33m	203mm	0mm	Various	
X/O	1.09m	203mm	0mm	SANTOS	
HWDP	46.63m	162mm	0mm	Various	

Bulk Stocks						Personnel On Board	
Name	Unit	In	Used	Adjust	Balance	Company	Pax
Fuel	m3	0	9.2	4	351.2	Santos	3
Drill Water	m3	10	54.3	0	171.8	DOGC	50
Potable Water	m3	9.2	8.3	0	259.0	ESS	8
Gel	sx	0	449	0	1,236.0	Dowell	2
Cement	sx	0	0	0	1,705.0	Geoservices	2
Barite	sx	0	0	0	1,555.0	Fugro	6
KCl Brine	bbl	0	0	0	0.0	Cameron	1
						Fugro - Surveyor	1
						MI	2
						Weatherford	4
						Sperry-Sun	2
Total							81

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	12 Jun 2005	4 Days	Abandon Drill
BOP Test	05 Jun 2005	11 Days	BOP Test
Environmental Incident	02 May 2005	45 Days	None reported since commencement of campaign.
Fire Drill	12 Jun 2005	4 Days	Fire Drill
First Aid	04 May 2005	43 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	45 Days	None reported since commencement of campaign.
Man Overboard Drill	02 May 2005	45 Days	None undertaken since commencement of campaign.
Near Miss	02 May 2005	45 Days	None reported since commencement of campaign.
Safety Meeting	12 Jun 2005	4 Days	Weekly Safety Meeting
Stop Cards	16 Jun 2005	0 Days	9 Stop Cards

Marine									
Weather check on 16 Jun 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	46km/h	270deg	1014.00bar	12.0C°	1.5m	270deg	0m/sec	1	10.61
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		2	13.20
1.0deg	0.8deg	0m	3.5m	270deg	2m/sec	Clear		3	7.12
Rig Dir.	Ris. Tension	VDL	Comments					4	8.89
251.0deg	0mt	210.92mt						5	9.21
								6	9.62
								7	13.02
								8	12.20

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	318
				Drill Water	m3	655
				Potable Water	m3	370
				Gel	t	43
				Cement	t	40
				Barite	t	81
				KCl Brine	bbbl	0
Pacific Wrangler			Portland	Item	Unit	Quantity
				Fuel	m3	449
				Drill Water	m3	287
				Potable Water	m3	205
				Gel	t	37
				Cement	t	42
				Barite	t	121
				KCl Brine	bbbl	950
Helicopter Movement						
Flight #	Time	Destination	Comment			Pax
1	10:42	Ocean Patriot				8
1	10:50	Essendon				5

From : Chris Wise / Pat King
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	133.0m	Cur. Hole Size	914mm	AFE Cost	
Field	Casino	TVD	133.0m	Casing OD	762mm	AFE No.	5746022
Drill Co.	DOGC	Progress	0m	Shoe TVD	132.0m	Daily Cost	
Rig	Ocean Patriot	Days from spud		F.I.T. / L.O.T.	Osg / Osg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	3.17			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	Drilling ahead 445 mm (17-1/2") hole at 137 m.				
RT-ML	89.7m	Planned Op	Drill ahead 445 mm (17-1/2") hole to 660 m (Section TD)				

Summary of Period 0000 to 2400 Hrs

POH with 914 mm (36") BHA. Ran 762 mm (30") conductor casing. Cement conductor casing. POH running tool and cement stinger. Performed top up cement job. Made up DSE cement head and 476 mm (18-3/4") wellhead housing. Commenced laying out 914 mm (36") BHA.

Operations For Period 0000 Hrs to 2400 Hrs on 17 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CH	P	CMD	0000	0045	0.75	133.0m	Confirmed BHA on depth with ROV once seabed settled. Worked pipe whilst displacing hole to PHG.
CH	P	TO	0045	0200	1.25	133.0m	POH with 914 mm (36") BHA from 133m to surface and racked back same.
CH	P	RRC	0200	0300	1.00	133.0m	Held pre-job safety meeting - Running casing. Rigged up to run 762 mm (30") conductor casing. Skidded PGB into moonpool.
CH	P	CRN	0300	0400	1.00	133.0m	Picked up 762 mm (30") conductor casing and made up same and RIH. 508 mm (20") x 762 mm (30") shoe joint 762 mm (30") Intermediate Joint 762 mm (30") X/O Joint
CH	TP (CWR)	CRN	0400	0445	0.75	133.0m	Stripped o-ring from 762 mm (30") X/O joint Lynx HT pin due to rig movement. Replaced o-ring and filled casing with seawater to stabilise. Made up 762 mm (30") wellhead housing c/w extension joint to X/O joint.
CH	P	CRN	0445	0500	0.25	133.0m	Continued to RIH with 762 mm (30") conductor casing and hung off in rotary table.
CH	P	CRN	0500	0630	1.50	133.0m	Ran cement stinger (4 joints 127 mm/5" drill pipe) inside 762 mm (30") casing on 127 mm (5") drill pipe. Made up running tool to 762 mm (30") wellhead.
CH	P	CRN	0630	0730	1.00	133.0m	Latched 762 mm (30") housing into PGB. Installed guideline tuggers to guide posts. Continued RIH with 762 mm (30") conductor casing.
CH	P	CRN	0730	0830	1.00	133.0m	Tagged bottom at 132 m. Attempted to wash down casing to 133 m. No go.
CH	TP (CWR)	CRN	0830	0900	0.50	133.0m	Investigated ball valves on Cameron 762 mm (30") running tool wth ROV. Valves passing.
CH	TP (CWR)	CRN	0900	1000	1.00	133.0m	POH with 762 mm (30") casing to moonpool. Replaced ball valves on running tool with bull plugs.
CH	TP (CWR)	CRN	1000	1030	0.50	133.0m	RIH with 762 mm (30") casing to 132 m.
CH	P	CRN	1030	1200	1.50	133.0m	Circulated and reciprocated casing whilst repositioning rig to obtain correct PGB bullseye. Unable to wash deeper than initial tag. Final Bullseye Reading - 0.5 deg. PGB heading - 242 deg.
CH	P	CMC	1200	1330	1.50	133.0m	Cemented 762 mm (30") x 508 mm (20") conductor casing. (31.6 m3/199 bbl, 1.9 sg/15.8 ppg, Class G, 1.5% CaCl2) 12:00 Rigged up cement lines 12:13 Pumped 1.6 m3 (10 bbl) seawater with dye. 12:20 Pressure tested lines to 6,900 kPa (1000 psi) 12:28 Pumped 1.6 m3 (10 bbl) seawater with dye 12:35 Mixed and pumped 31.6 m3 (199 bbl) slurry (15.5 - 15.9 ppg) 13:22 Displaced with 2.2 m3 (13.5 bbl) seawater 13:27 Bled back 0.2 m3 (1.5 bbl) PGB 0.5 deg Stbd Fwd
CH	P	WOC	1330	1530	2.00	133.0m	WOC. Prepared 445 mm (17-1/2") BHA. Rig Service. PGB bullseye 0.5 deg Stbd Fwd.
CH	P	TO	1530	1600	0.50	133.0m	Backed out of conductor housing running tool. POH with landing string.
CH	P	HT	1600	1700	1.00	133.0m	Serviced conductor housing running tool and laid out same.
CH	P		1700	1900	2.00	133.0m	Made up 73 mm (2-7/8") top-up cement stinger. Installed guide ropes and RIH stinger on 127 mm (5") DP to PGB. ROV assisted stab into PGB funnel. RIH to 3 m below wellhead. Cementing stinger bent whilst RIH. Confirmed stinger not kinked with ROV prior to pumping top-up cement job.
CH	P	CMC	1900	2100	2.00	133.0m	Rigged up cementing hose to cement stand. Pumped top up job. 19:56 Pumped 5 bbl seawater 20:03 Pressure tested surface lines to 6900 kPa (1000 psi) 20:12 Pumped 5 bbl seawater

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CH	P	CMC	2100	2130	0.50	133.0m	20:22 Mixed & pumped 46 bbl cement slurry 20:47 Displaced with 8 bbl seawater
CH	TP (CJ)	PLD	2130	2200	0.50	133.0m	Rigged down cementing hose and racked back cement stand. POH with 127 mm (5") drillpipe and 73 mm (2-7/8") cementing stinger, removing guide ropes from cementing stinger in moonpool. [Anchor #1 test tensioned to 200 t]
CH	P	HT	2200	2330	1.50	133.0m	Cut off bent single of 73 mm (2-7/8") cementing stinger and lay out.
CH	P	HBHA	2330	2400	0.50	133.0m	Cleared rig floor of excess equipment. Picked up Cameron 476 mm (18-3/4") housing running tool, made up and racked back. Picked up Dowell Deep Sea Express cement head, made up and racked back. Made up Dowell plug launcher adaptor and laid out. Commenced breaking out and laying down 914 mm (36") BHA.

Operations For Period 0000 Hrs to 0600 Hrs on 18 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CH	P	HBHA	0000	0100	1.00	133.0m	Continued to lay down and break out 914 mm (36") BHA.
CH	P	TI	0100	0300	2.00	133.0m	Made up 445 mm (17-1/2") BHA and RIH. Installed guide ropes in moonpool.
CH	P	TI	0300	0345	0.75	133.0m	Stabbed 445 mm (17-1/2") BHA into wellhead. Top of wellhead tagged at 86.35 mRT. Continued to RIH. Tagged top of cement at 128.67 m.
CH	P	DFS	0345	0415	0.50	133.0m	Drilled out cement and casing shoe (Shoe Depth 132 m). Pumped 8 m3 (50 bbl) PHG sweep at 130 m. [Avg parameters: 800 gal/min, 60 rpm, 2-5 WOB]
CH	TP (OTH)	DFS	0445	0530	0.75	133.0m	Stopped drilling to investigate guidepost release. Informed by ROV that guidepost #3 had released. ROV re-stabbed guidepost and re-installed pin. ROV confirmed guidewire free of BHA prior to retensioning. Checked PGB bullseye - 0.5 deg.
PH	P	DA	0530	0600	0.50	137.0m	Drilled ahead 445 mm (17-1/2") hole from 133 m to 137 m. Pumped 8 m3 (50 bbl) sweep and worked BHA through casing shoe.

WBM Data

Mud Type:	PHG	API FL:	14cm ³ /30m	Cl:	1000	Solids:	3.1	Viscosity:	0sec/L
Sample-From:	Pit 3	Filter-Cake:	1mm	K+C*1000:	0%	H2O:	98%	PV:	0.010Pa/s
Time:	20:00	HTHP-FL:	0cm ³ /30m	Hard/Ca:	40	Oil:	0%	YP:	0.240MPa
Weight:	1.04sg	HTHP-Cake:	0mm	MBT:	28	Sand:		Gels 10s:	0.244
Temp:	15.0C°			PM:	0.5	pH:	9.5	Gels 10m:	0.254
				PF:	0.35	PHPA:	Oppb	Fann 003:	47
								Fann 006:	48
								Fann 100:	51
								Fann 200:	56
								Fann 300:	60
								Fann 600:	70

Bit # 1RR				Wear	I	O1	D	L	B	G	O2	R		
Size ("):	660mm	IADC#	115	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run					
Mfr:	SMITH	WOB(avg)	0.09mt	No.	Size	Progress			0m					
Type:	Rock	RPM(avg)	70	2	20/32nd"	On Bottom Hrs			0h					
Serial No.:	MR4109	F.Rate	3785lpm	2	22/32nd"	IADC Drill Hrs			0h					
Bit Model	DSJC	SPP	6895kPa				Total Revs			0				
Depth In	89.7m	TFA	1.356				ROP(avg)			N/A				
Depth Out	133.0m							ROP(avg)			13.97 m/hr			
Run Comment	Used Bit. 36" hole opener above bit													

BHA # 1		Weight(Wet)	0mt	Length	133.0m	Torque(max)	0Nm	D.C. (1) Ann Velocity
Wt Below Jar(Wet)	0mt	String	0mt	Torque(Off.Btm)	0Nm	D.C. (2) Ann Velocity		
		Pick-Up	0mt	Torque(On.Btm)	0Nm	H.W.D.P. Ann Velocity		
		Slack-Off	0mt			D.P. Ann Velocity		
BHA Run Description	660 mm (26") Bit, 914 mm (36") hole opener, Bit sub c/w float, 241 mm (9-1/2") Anderdrift, 445 mm (17-1/2") stabiliser, 241 mm (9-1/2") NMDC, 445 mm (17-1/2") stabiliser, 2 x 241 mm (9-1/2") DC, X/O, 5 x 203 mm (8") DC, X/O, 127 mm (5") HWDP							

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.64m	660mm	0mm	MR4109	Smith DSJC c/w 2 x 20, 2 x 22 Nozzles
Hole Opener	2.43m	914mm	0mm	46450	4 x 24 Nozzles
Float Sub	1.02m	241mm	0mm	186-0028	Ported Float
9.5in Anderdrift	3.11m	243mm	0mm	ADB993	
Stab	2.10m	241mm	0mm	A229	
NMDC	9.04m	241mm	0mm	6613	
Stab	2.18m	241mm	0mm	47618	
Drill Collar	18.34m	241mm	0mm	Various	
X/O	1.09m	240mm	0mm	SANTOS	
Drill Collar	45.33m	203mm	0mm	Various	
X/O	1.09m	203mm	0mm	SANTOS	
HWDP	46.63m	162mm	0mm	Various	

Bulk Stocks						Personnel On Board	
Name	Unit	In	Used	Adjust	Balance	Company	Pax
Fuel	m3	0	16.2	0	335.0	Santos	3
Drill Water	m3	720	272.6	0	619.2	DOGC	51
Potable Water	m3	23.3	22.2	0	260.1	ESS	8
Gel	sx	720	136	0	1,820.0	Dowell	2
Cement	sx	0	1164	0	541.0	Geoservices	2
Barite	sx	0	0	0	1,555.0	Fugro	6
KCl Brine	bbl	0	0	0	0.0	Cameron	1
						Fugro - Surveyor	1
						MI	2
						Weatherford	4
						Sperry-Sun	3
Total							83

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	12 Jun 2005	5 Days	Abandon Drill
BOP Test	05 Jun 2005	12 Days	BOP Test
Environmental Incident	02 May 2005	46 Days	None reported since commencement of campaign.
Fire Drill	12 Jun 2005	5 Days	Fire Drill
First Aid	04 May 2005	44 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	46 Days	None reported since commencement of campaign.
Man Overboard Drill	02 May 2005	46 Days	None undertaken since commencement of campaign.
Near Miss	02 May 2005	46 Days	None reported since commencement of campaign.
Safety Meeting	12 Jun 2005	5 Days	Weekly Safety Meeting
Stop Cards	17 Jun 2005	0 Days	6 Stop Cards

Marine									
Weather check on 17 Jun 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
14.8km	28km/h	270deg	1014.00bar	12.0C°	0.5m	270deg	0m/sec	1	12.11
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments			
0.5deg	0.5deg	0m	2.0m	225deg	2m/sec	Clear			
Rig Dir.	Ris. Tension	VDL	Comments						
251.0deg	0mt	206.84mt							
								2	13.20
								3	7.80
								4	11.61
								5	11.52
								6	11.52
								7	14.29
								8	11.70

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	303
				Drill Water	m3	0
				Potable Water	m3	362
				Gel	t	0
				Cement	t	40
				Barite	t	81
				KCl Brine	bbbl	1000
Pacific Wrangler			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	533.8
				Drill Water	m3	323
				Potable Water	m3	358
				Gel	t	37
				Cement	t	42
				Barite	t	121
				KCl Brine	bbbl	950
Helicopter Movement						
Flight #	Time	Destination	Comment			Pax
1	10:04	Ocean Patriot				12
1	10:15	Essendon				10

From : Chris Wise / Pat King
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	665.0m	Cur. Hole Size	445mm	AFE Cost	
Field	Casino	TVD	665.0m	Casing OD	762mm	AFE No.	5746022
Drill Co.	DOGC	Progress	532.0m	Shoe TVD	132.0m	Daily Cost	
Rig	Ocean Patriot	Days from spud		F.I.T. / L.O.T.	Osg / Osg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	4.15			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	POH with 445 mm (17-1/2") BHA after wiper trip.				
RT-ML	89.7m	Planned Op	POH to surface. Run 340 mm (13-3/8") casing and cement. Lay out 445 mm (17-1/2") BHA. Run Wear Bushing. Rig to run XT.				

Summary of Period 0000 to 2400 Hrs

RIH with 445 mm (17-1/2") BHA and drilled out cement and shoe track. Drilled 445 mm (17-1/2") hole from 133 m to 665 m (TD). Commenced POH.

Operations For Period 0000 Hrs to 2400 Hrs on 18 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CH	P	HBHA	0000	0100	1.00	133.0m	Continued to lay down and break out 914 mm (36") BHA.
CH	P	TI	0100	0300	2.00	133.0m	Made up 445 mm (17-1/2") BHA and RIH. Installed guide ropes in moonpool.
CH	P	TI	0300	0345	0.75	133.0m	Stabbed 445 mm (17-1/2") BHA into wellhead. Top of wellhead tagged at 86.35 mRT. Continued to RIH. Tagged top of cement at 128.67 m.
CH	P	DFS	0345	0415	0.50	133.0m	Drilled out cement and casing shoe (Shoe Depth 132 m). Pumped 8 m3 (50 bbl) PHG sweep at 130 m. [Avg parameters: 800 gal/min, 60 rpm, 2-5 WOB]
CH	TP (OTH)	DFS	0445	0530	0.75	133.0m	Stopped drilling to investigate guidepost release. Informed by ROV that guidepost #3 had released. ROV re-stabbed guidepost and re-installed pin. ROV confirmed guidewire free of BHA prior to retensioning. Checked PGB bullseye - 0.5 deg.
PH	P	DA	0530	0600	0.50	137.0m	Drilled ahead 445 mm (17-1/2") hole from 133 m to 137 m. Pumped 8 m3 (50 bbl) sweep and worked BHA through casing shoe.
PH	P	DA	0600	2130	15.50	665.0m	Drilled ahead 445 mm (17-1/2") hole from 137 m to 665m (TD), pumping 8 m3 (50 bbl) PHG sweeps mid-stand and spotting 12 m3 (75 bbl) PHG around BHA on connections. [Avg parameters: 1100 gal/min, 10-45 WOB, 100-130 rpm, ROP 34 m/hr]
PH	P	CMD	2130	2230	1.00	665.0m	Backreamed last stand twice. Pumped 32 m3 (200 bbl) PHG followed by 23 m3 (200 bbl) seawater. Displaced hole to PHG (127 m3 / 800 bbl). Dropped EMS.
PC	P	TO	2230	2400	1.50	665.0m	POH with 445 mm (17-1/2") BHA on 127 mm (5") drill pipe from 665 m to 455m, working through tight spots. (520-530m: 30-35 klb overpull) [Daily offline activities: Stump tested BOP]

Operations For Period 0000 Hrs to 0600 Hrs on 19 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PC	P	TOT	0000	0130	1.50	665.0m	POH with 445 mm (17-1/2") BHA on 127 mm (5") drill pipe from 455 m to 508 mm (20") casing shoe at 132m, working through tight spots. (450-300 m: 20 to 30 klb overpull; 300-220 m: 35-50 klb overpull)
PC	P	WT	0130	0330	2.00	665.0m	RIH with 445 mm (17-1/2") BHA on 127 mm (5") drill pipe to 665 m (TD) for wiper trip, working through tight spots. Washed down through 3 m fill. (372m: 40 klb wt down; 391m: 40 klb wt down; 452 m: 40 klb wt down - worked through approx. 30 min)
PC	P	CHC	0330	0400	0.50	665.0m	Circulated bottoms up with PHG at 4160lpm (1100 gpm), whilst slowly working pipe.
PC	P	TO	0400	0600	2.00	665.0m	(IN PROGRESS) Commenced POH with 445 mm (17-1/2") BHA on 127 mm (5") drill pipe from 665 m to surface. Hole good. No drag. Jetted wellhead on trip out.

WBM Data

Mud Type:	PHG	API FL:	13cm ³ /30m	Cl:	850	Solids:	3	Viscosity:	0sec/L
Sample-From:	Pit 3	Filter-Cake:	1mm	K+C*1000:	0%	H2O:	98%	PV:	0.017Pa/s
Time:	16:30	HTHP-FL:	0cm ³ /30m	Hard/Ca:	40	Oil:	0%	YP:	0.148MPa
Weight:	1.04sg	HTHP-Cake:	0mm	MBT:	27	Sand:		Gels 10s:	0.182
Temp:	15.0C°			PM:	0.65	pH:	10	Gels 10m:	0.259
				PF:	0.4	PHPA:	Oppb	Fann 003:	28
								Fann 006:	28
								Fann 100:	35
								Fann 200:	43
								Fann 300:	48
								Fann 600:	65

Bit # 2				Wear	I	O1	D	L	B	G	O2	R
Size ("):	445mm	IADC#	115	Nozzles			Drilled over last 24 hrs			Calculated over Bit Run		
Mfr:	SMITH	WOB(avg)	1.36mt	No.	Size	Progress	532.0m	Cum. Progress		532.0m		
Type:	Rock	RPM(avg)	110	1	18/32nd"	On Bottom Hrs	11.39h	Cum. On Btm Hrs		11.39h		
Serial No.:	MR9725	F.Rate	4278lpm	3	20/32nd"	IADC Drill Hrs	14.50h	Cum IADC Drill Hrs		14.50h		
Bit Model	XR+CRS	SPP	17926kPa				Total Revs	0	Cum Total Revs		0	
Depth In	133.0m	TFA	1.169				ROP(avg)	46.71 m/hr	ROP(avg)		46.71 m/hr	
Depth Out												

BHA # 2						
Weight(Wet)	0mt	Length	275.9m	Torque(max)	0Nm	D.C. (1) Ann Velocity
Wt Below Jar(Wet)	2.27mt	String	0mt	Torque(Off.Btm)	0Nm	D.C. (2) Ann Velocity
		Pick-Up	0mt	Torque(On.Btm)	0Nm	H.W.D.P. Ann Velocity
		Slack-Off	0mt			D.P. Ann Velocity
BHA Run Description		445 mm (17-1/2") Bit, 445 mm (17-1/2") NB Stab, 241 mm (9-1/2") Pony DC, 445 mm (17-1/2") Stab, 241 mm (9-1/2") NMDC, 445 mm (17-1/2") stabiliser, 2 x 241 mm (9-1/2") DC, X/O, 8 x 203 mm (8") DC, 203 mm (8") Jars, 2 x 203 mm (8") DC, X/O, 15 x 127 mm (5") HWDP				

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.44m	445mm	0mm	MR9725	Smith XR+CRS c/w 1 x 18, 3 x 20 Nozzles
Near Bit Stabiliser	1.62m	445mm	0mm	3135	C/W Float
Pony Drill Collar	3.01m	241mm	0mm	SBD2369	
Stab	2.10m	241mm	0mm	A229	c/w Totco Ring
NMDC	9.04m	241mm	0mm	6613	
Stab	2.18m	241mm	0mm	47618	
Drill Collar	18.34m	241mm	0mm	Various	
X/O	1.09m	240mm	0mm	SANTOS	
Drill Collar	71.57m	203mm	0mm	Various	
Jar	9.20m	210mm	0mm	DAH02220	
Drill Collar	17.90m	202mm	0mm	Various	
X/O	1.09m	203mm	0mm	SANTOS	
HWDP	138.37m	162mm	0mm	Various	

Bulk Stocks						Personnel On Board		
Name	Unit	In	Used	Adjust	Balance	Company		Pax
Fuel	m3	0	16.2	0	318.8	Santos		5
Drill Water	m3	371.3	389.4	0	601.1	DOGC		51
Potable Water	m3	31.3	28.3	0	263.1	ESS		8
Gel	sx	0	884	0	936.0	Dowell		2
Cement	sx	2713	0	50	3,304.0	Geoservices		2
Barite	sx	0	0	0	1,555.0	Fugro		6
KCl Brine	bbl	0	0	0	0.0	Cameron		4
						MI		2
						Weatherford		4
						Sperry-Sun		3
							Total	87

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	18 Jun 2005	0 Days	Abandon Drill
BOP Test	18 Jun 2005	0 Days	BOP Test
Environmental Incident	02 May 2005	47 Days	None reported since commencement of campaign.
Fire Drill	18 Jun 2005	0 Days	Fire Drill
First Aid	04 May 2005	45 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	47 Days	None reported since commencement of campaign.
Man Overboard Drill	02 May 2005	47 Days	None undertaken since commencement of campaign.
Near Miss	02 May 2005	47 Days	None reported since commencement of campaign.
Safety Meeting	12 Jun 2005	6 Days	Weekly Safety Meeting
Stop Cards	18 Jun 2005	0 Days	6 Stop Cards

Marine									
Weather check on 18 Jun 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
22.2km	28km/h	045deg	1012.00bar	12.0C°	0.3m	225deg	0m/sec	1	12.02
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments			
0.3deg	0.5deg	0m	1.5m	225deg	2m/sec	Clear			
Rig Dir.	Ris. Tension	VDL	Comments						
251.0deg	0mt	227.16mt							
								2	13.38
								3	8.30
								4	12.11
								5	11.61
								6	11.52
								7	14.38
								8	11.61

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	292
				Drill Water	m3	0
				Potable Water	m3	354
				Gel	t	0
				Cement	t	0
				Barite	t	81
KCl Brine	bbf	1000				
Pacific Wrangler			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	522
				Drill Water	m3	0
				Potable Water	m3	211
				Gel	t	42
				Cement	t	0
				Barite	t	37
KCl Brine	bbf	950				

Helicopter Movement					
Flight #	Time	Destination	Comment	Pax	
1	10:01	Ocean Patriot		5	
1	10:09	Essendon		1	

From : Chris Wise / Pat King
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	665.0m	Cur. Hole Size	311mm	AFE Cost	
Field	Casino	TVD	665.0m	Casing OD	340mm	AFE No.	5746022
Drill Co.	DOGC	Progress	0m	Shoe TVD	654.8m	Daily Cost	
Rig	Ocean Patriot	Days from spud		F.I.T. / L.O.T.	Osg / Osg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	5.15			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	POH with XT running tool.				
RT-ML	89.7m	Planned Op	Run Riser and BOPs. Pressure test BOPs. Make up 311 mm (12-1/4") BHA and RIH.				

Summary of Period 0000 to 2400 Hrs

POH with 445 mm (17-1/2") BHA to casing shoe. RIH to bottom for wiper trip. POH to surface. Ran 340 mm (13-3/8") casing & cemented. Commenced running XT.

Operations For Period 0000 Hrs to 2400 Hrs on 19 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PC	P	TOT	0000	0130	1.50	665.0m	POH with 445 mm (17-1/2") BHA on 127 mm (5") drill pipe from 455 m to 508 mm (20") casing shoe at 132m, working through tight spots. (450-300 m: 20 to 30 klb overpull; 300-220 m: 35-50 klb overpull)
PC	P	WT	0130	0330	2.00	665.0m	RIH with 445 mm (17-1/2") BHA on 127 mm (5") drill pipe to 665 m (TD) for wiper trip, working through tight spots. Washed down through 3 m fill. (372m: 40 klb wt down; 391m: 40 klb wt down; 452 m: 40 klb wt down - worked through approx. 30 min)
PC	P	CHC	0330	0400	0.50	665.0m	Circulated bottoms up with PHG at 4160lpm (1100 gpm), whilst slowly working pipe.
PC	P	TO	0400	0630	2.50	665.0m	Commenced POH with 445 mm (17-1/2") BHA on 127 mm (5") drill pipe from 665 m to surface. Hole good. No drag. Jetted wellhead on trip out.
PC	P	HBHA	0630	0730	1.00	665.0m	Retrieved EMS (0.5 deg, Az 118 deg) Broke off bit and racked back BHA.
PC	P	RRC	0730	0830	1.00	665.0m	Held pre-job safety meeting - running casing. Rigged up to run 340 mm (13-3/8") casing.
PC	P	CRN	0830	0930	1.00	665.0m	Picked up shoe. Pumped through float to confirmed float drains clear. Picked up float collar joint and made up same. (Baker-locked first 2 connections). Attached guide ropes in moon pool.
PC	P	CRN	0930	1000	0.50	665.0m	Rigged up TAM packer, stabbed into casing and inflated same. Pumped 1.5 m3 (10 bbl) seawater.
PC	P	CRN	1000	1330	3.50	665.0m	Ran 45 joints 340 mm (13-3/8") 107 kg/m (72 lb/ft) L80 BTC casing to 560 m, filling every 5 joints. (ROV observed stab through wellhead at 86.35 m)
PC	P	CRN	1330	1400	0.50	665.0m	Rigged down 340 mm (13-3/8") casing handling equipment.
PC	P	WH	1400	1530	1.50	665.0m	Picked up 406 mm (16") HD90 Quick Stab x 340 mm (13-3/8") BTC X/O and made up to 340 mm (13-3/8") casing. Picked up 476 mm (18-3/4") wellhead housing and made up to 406 mm (16") HD 90 connection on X/O. Picked up cement plug basket and made up same to 476 mm (18-3/4") wellhead housing running tool. Made up running tool to 476 mm (18-3/4") wellhead housing.
PC	P	WH	1530	1700	1.50	665.0m	RIH with 476 mm (18-3/4") running tool, wellhead housing and 340 mm (13-3/8") casing on 127 mm (5") drill pipe and spaced out. Made up Dowell Deep Sea Express cement head.
PC	P	WH	1700	1730	0.50	665.0m	Landed out 476 mm (18-3/4") wellhead housing in 762 mm (30") wellhead. Confirmed latched with 22.7 t (50,000 lb) overpull. Circulated seawater. (Top of HP Wellhead housing = 85.5mRT)
PC	P	CMC	1730	2000	2.50	665.0m	Cemented 340 mm (13-3/8") casing. (Lead: 41 m3 / 258 bbl, 648 sx Class G, 1.5 sg / 12.5 ppg, surface) (Tail: 14.5 m3 / 91 bbl, 433 sx Class G, 1.9 sg / 15.8 ppg, 505 m) 17:35 Pumped 1.6 m3 (10 bbl) seawater w/dye 17:44 Pressure tested lines to 24100 kPa (3500 psi) 18:00 Released bottom dart. Pumped 1.6 m3 (10 bbl) seawater 18:10 Bottom plug released (1.1 m3 / 6.8 bbl pumped) 18:11 Mixed and pumped 41 m3 (258 bbl) Lead slurry 18:50 Mixed and pumped 14.5 m3 (91 bbl) Tail slurry 19:12 Released top dart. Pumped 3 m3 (20 bbl) seawater. 19:15 Top plug released (1 m3 / 6.5 bbl pumped). 19:20 Displaced cement with 41 m3 (256 bbl) seawater using rig pumps. (Dye & cement returns noted) 19:45 Bumped plug with 4100 kPa (600 psi). Pressure tested casing to 3000 psi. 19:55 Bled back 0.8 m3 (5 bbl).
PC	P	WH	2000	2100	1.00	665.0m	Rigged down cement lines. Released 476 mm (18-3/4") wellhead running tool. Racked back Dowell Deep Sea Express cement head.

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PC	P	WH	2100	2215	1.25	665.0m	[Offline XT activities to 21:00 - Fitted tie rod connectors between cart and NOMAR carrier. Changed out and inspected XT gasket and Metal End Cap. Picked up XT and TRT assembly and landed onto cart. Chained down XT onto cart.] POH with 476 mm (18-3/4") wellhead running tool and laid out same. Picked up back-up 476 mm (18-3/4") wellhead running tool, broke out pup joint and laid out. Laid out Dowell Deep Sea Express cement head.
PC	P	XT	2215	2400	1.75	665.0m	[Offline Activities: Skidded rig off location. ROV installed lightweight debris cap on wellhead.] Picked up Tree Running Tool (TRT) and made up to stand of 127 mm (5") drill pipe. Held JSA - running Xmas Tree (XT). Slacked off guidelines. Skidded cart & XT under rotary table. Ran Cameron TRT through rotary table and made up to XT.

Operations For Period 0000 Hrs to 0600 Hrs on 20 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PC	P	XT	0000	0200	2.00	665.0m	Installed guidewires into XT and TRT guide funnels. Picked up XT and skidded cart. RIH with XT on 127 mm (5") drill pipe landing string to 22 m above wellhead, clamping XT Installation & Workover Control System (IWOCSS) umbilical to the landing string.
PC	P	XT	0200	0300	1.00	665.0m	Re-positioned rig over location and re-tensioned guidewires. Removed lightweight debris cap with ROV. Flushed through AX Test (AXT) line.
PC	P	XT	0300	0445	1.75	665.0m	RIH XT on 127 mm (5") landing string, landed and latched on 762 mm (30") wellhead (indicator showed fully locked at 29400 kPa / 4270 psi lock pressure). Pulled 22.7 t (50,000 lb) overpull to confirm latched. [Daily Offline Activities: Commenced pressure testing choke manifold to 1380 kPa (200 psi) / 27600 kPa (4000 psi)]
PC	P	XT	0445	0515	0.50	665.0m	Pressure tested wellhead connector through AXT line to 34500 kPa (5000 psi). Removed hot stab from AXT receptacle with ROV.
PC	P	XT	0515	0600	0.75	665.0m	Unlatched running tool from XT and commenced POH. ROV installed lightweight debris cap on XT. ROV closed AXT needle valve (4.5 turns, 70 Nm/52 ft.lb)

General Comments

Comments	Rig Requirements	Lessons Learnt
18 Jun 05: BOP stump Test Pipe & Blind Rams: 34500 kPa / 5000 psi Annular & LMRP Connector: 27600 kPa / 4000 psi		

WBM Data

Mud Type:	PHG	API FL:	13cm³/30m	Cl:	850	Solids:	3.1	Viscosity:	0sec/L
Sample-From:	Pit 2	Filter-Cake:	1mm	K+C*1000:	0%	H2O:	98%	PV:	0.012Pa/s
Time:	19:00	HTHP-FL:	0cm³/30m	Hard/Ca:	40	Oil:	0%	YP:	0.230MPa
Weight:	1.04sg	HTHP-Cake:	0mm	MBT:	28	Sand:		Gels 10s:	0.172
Temp:	15.0C°			PM:	0.6	pH:	10	Gels 10m:	0.263
				PF:	0.4	PHPA:	Oppb	Fann 003:	48
								Fann 006:	48
								Fann 100:	54
								Fann 200:	58
								Fann 300:	60
								Fann 600:	72

Bit # 2

				Wear	I	O1	D	L	B	G	O2	R
Size ("):	445mm	IADC#	115	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	SMITH	WOB(avg)	1.36mt	No.	Size	Progress		0m	Cum. Progress		532.0m	
Type:	Rock	RPM(avg)	110	1	18/32nd"	On Bottom Hrs		0h	Cum. On Btm Hrs		11.39h	
Serial No.:	MR9725	F.Rate	4278lpm	3	20/32nd"	IADC Drill Hrs		0h	Cum IADC Drill Hrs		14.50h	
Bit Model	XR+CRS	SPP	17926kPa			Total Revs		0	Cum Total Revs		0	
Depth In	133.0m	TFA	1.169			ROP(avg)		N/A	ROP(avg)		46.71 m/hr	
Depth Out	665.0m											

BHA # 2						
Weight(Wet)	0mt	Length	275.9m	Torque(max)	0Nm	D.C. (1) Ann Velocity
Wt Below Jar(Wet)	2.27mt	String	0mt	Torque(Off.Btm)	0Nm	D.C. (2) Ann Velocity
		Pick-Up	0mt	Torque(On.Btm)	0Nm	H.W.D.P. Ann Velocity
		Slack-Off	0mt			D.P. Ann Velocity

BHA Run Description 445 mm (17-1/2") Bit, 445 mm (17-1/2") NB Stab, 241 mm (9-1/2") Pony DC, 445 mm (17-1/2") Stab, 241 mm (9-1/2") NMDC, 445 mm (17-1/2") stabiliser, 2 x 241 mm (9-1/2") DC, X/O, 8 x 203 mm (8") DC, 203 mm (8") Jars, 2 x 203 mm (8") DC, X/O, 15 x 127 mm (5") HWDP

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.44m	445mm	0mm	MR9725	Smith XR+CRS c/w 1 x 18, 3 x 20 Nozzles
Near Bit Stabiliser	1.62m	445mm	0mm	3135	C/W Float
Pony Drill Collar	3.01m	241mm	0mm	SBD2369	
Stab	2.10m	241mm	0mm	A229	c/w Totco Ring
NMDC	9.04m	241mm	0mm	6613	
Stab	2.18m	241mm	0mm	47618	
Drill Collar	18.34m	241mm	0mm	Various	
X/O	1.09m	240mm	0mm	SANTOS	
Drill Collar	71.57m	203mm	0mm	Various	
Jar	9.20m	210mm	0mm	DAH02220	
Drill Collar	17.90m	202mm	0mm	Various	
X/O	1.09m	203mm	0mm	SANTOS	
HWDP	138.37m	162mm	0mm	Various	

Survey								
MD (m)	Incl Deg (deg)	Corr. Az (deg)	TVD (m)	'V' Sect (m)	Dogleg (deg/30m)	N/S (m)	E/W (m)	Tool Type
522.35	0.2	169.8	0	0	0	0	0	EMS
551.14	0.5	129.9	0	0	0	0	0	EMS
579.90	0.5	127.7	0	0	0	0	0	EMS
608.62	0.5	119.5	0	0	0	0	0	EMS
636.96	0.5	120.1	0	0	0	0	0	EMS
652.27	0.5	118.1	0	0	0	0	0	EMS

Bulk Stocks						Personnel On Board		
Name	Unit	In	Used	Adjust	Balance	Company		Pax
Fuel	m3	0	16.2	0	302.6	Santos		5
Drill Water	m3	0	140.8	0	460.3	DOGC		51
Potable Water	m3	34.1	31.3	0	265.9	ESS		8
Gel	sx	1002	239	0	1,699.0	Dowell		2
Cement	sx	0	1000	-32	2,272.0	Geoservices		2
Barite	sx	0	0	0	1,555.0	Fugro		6
KCl Brine	bbl	0	0	0	0.0	Cameron		4
						MI		2
						Weatherford		4
						Sperry-Sun		3
							Total	87

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	0sg / 0sg	654.8m / 654.8m	

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	12 Jun 2005	7 Days	Abandon Drill
BOP Test	18 Jun 2005	1 Day	BOP Test
Environmental Incident	02 May 2005	48 Days	None reported since commencement of campaign.
Fire Drill	12 Jun 2005	7 Days	Fire Drill
First Aid	04 May 2005	46 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	48 Days	None reported since commencement of campaign.
Man Overboard Drill	02 May 2005	48 Days	None undertaken since commencement of campaign.
Near Miss	02 May 2005	48 Days	None reported since commencement of campaign.
Safety Meeting	19 Jun 2005	0 Days	Weekly Safety Meeting
Stop Cards	19 Jun 2005	0 Days	13 Stop Cards

Marine									
Weather check on 19 Jun 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	37km/h	045deg	993.00bar	11.0C°	0.5m	045deg	0m/sec	1	11.88
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		2	13.52
0.4deg	0.3deg	0m	1.5m	225deg	2m/sec	Clear		3	8.21
Rig Dir.	Ris. Tension	VDL	Comments				4	12.20	
251.0deg	0mt	190.01mt					5	11.70	
							6	11.52	
							7	14.20	
							8	11.61	

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Portland	Item	Unit	Quantity
				Fuel	m3	280
				Drill Water	m3	0
				Potable Water	m3	346
				Gel	t	0
				Cement	t	0
				Barite	t	81
KCl Brine	bbf	0				
Pacific Wrangler			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	510.9
				Drill Water	m3	0
				Potable Water	m3	206
				Gel	t	0
				Cement	t	0
				Barite	t	37
KCl Brine	bbf	950				

From : Chris Wise / Pat King
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	665.0m	Cur. Hole Size	311mm	AFE Cost	
Field	Casino	TVD	665.0m	Casing OD	340mm	AFE No.	5746022
Drill Co.	DOGC	Progress	0m	Shoe TVD	654.8m	Daily Cost	
Rig	Ocean Patriot	Days from spud		F.I.T. / L.O.T.	Osg / Osg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	6.15			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	Attempting to unlock riser slip joint.				
RT-ML	89.7m	Planned Op	Unlock & scope out riser slip joint. Lay out landing string. Run diverter. Run 476 mm (18-3/4") wear bushing. Make up Cameron CHSART, 273 mm (10-3/4") seal assembly, Dowell plug launcher and 273 mm (10-3/4") hanger assembly. Make up Deep Sea Express cement head. Pressure test BOP. Make up 311 mm (12-1/4") BHA and RIH.				

Summary of Period 0000 to 2400 Hrs

Ran XT. Pressure tested choke & kill manifold to 1720 kPa (250 psi) / 5 min & 27500 kPa (4000 psi) / 10 min. Ran BOP and riser. Landed BOP on XT.

Operations For Period 0000 Hrs to 2400 Hrs on 20 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PC	P	XT	0000	0200	2.00	665.0m	Installed guidewires into XT and TRT guide funnels. Picked up XT and skidded cart. RIH with XT on 127 mm (5") drill pipe landing string to 22 m above wellhead, clamping XT Installation & Workover Control System (IWOCS) umbilical to the landing string.
PC	P	XT	0200	0300	1.00	665.0m	Re-positioned rig over location and re-tensioned guidewires. Removed lightweight debris cap with ROV. Flushed through AX Test (AXT) line.
PC	P	XT	0300	0445	1.75	665.0m	RIH XT on 127 mm (5") landing string, landed and latched on 762 mm (30") wellhead (indicator showed fully locked at 29400 kPa / 4270 psi lock pressure). Pulled 22.7 t (50,000 lb) overpull to confirm latched. [Offline: Pressure tested choke manifold to 1720 kPa (250 psi) / 27600 kPa (4000 psi)]
PC	P	XT	0445	0515	0.50	665.0m	Pressure tested wellhead connector through AXT line to 34500 kPa (5000 psi). Removed hot stab from AXT receptacle with ROV.
PC	P	XT	0515	0700	1.75	665.0m	Unlatched running tool from XT and commenced POH. ROV installed lightweight debris cap on XT. ROV closed AXT needle valve (4.5 turns, 70 Nm/52 ft.lb)
PC	P	RR1	0700	0800	1.00	665.0m	Rigged up to run riser and BOP. Skidded rig 15 m port.
PC	P	RR1	0800	1230	4.50	665.0m	Held JSA - running riser & BOP. Picked up two riser joints, made up and racked back same. Installed new ring gasket in BOP. Removed cart from NOMAR carrier and lowered BOP onto same. Skidded NOMAR carrier with BOP into moonpool.
PC	P	RR1	1230	1400	1.50	665.0m	Installed guidewires and pod hoses / clamps.
PC	P	RR1	1400	1630	2.50	665.0m	Made up riser double to BOP. Disconnected control line from pod reel. Ran riser and BOP. Pressure tested choke & kill lines to 1380 kPa (200 psi) / 5 min & 34500 kPa (5000 psi) / 10 min.
PC	P	RR1	1630	1730	1.00	665.0m	Picked up riser slip joint. Installed pod hose clamps.
PC	P	RR1	1730	2130	4.00	665.0m	Picked up riser landing joint. Installed SDL ring to slip joint whilst moving rig back over location. Nipped up choke, kill and booster lines.
PC	P	RR1	2130	2230	1.00	665.0m	Attached pod hose saddles to guide wires. Pressure tested choke and kill lines to 1400 kPa (200 psi) / 5 min and 34500 kPa (5000 psi) / 10 min.
PC	P	RR1	2230	2345	1.25	665.0m	Repositioned rig to align BOP with guideposts. Landed out BOP on XT @ 23:40. Bullseye readings: Flex Jt 0.5 deg Port/Fwd; BOP stack 1 deg Stbd.
PC	TP (RE)	RR1	2345	2400	0.25	665.0m	Inspected slip joint position in moonpool prior to locking wellhead. (23:50) Riser tensioner cable parted, releasing cylinder fluid (contained). Shut down operation to investigate failure and clean work area.

Operations For Period 0000 Hrs to 0600 Hrs on 21 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PC	TP (RE)	RR1	0000	0030	0.50	665.0m	Isolated failed riser tensioner. Continued cleaning work area and confirmed capability to resume operations.
PC	P	BOP	0030	0100	0.50	665.0m	Latched BOP to XT connector. Confirmed latched with 22.7 t (50,000 lb) overpull.
PC	P	RR1	0100	0330	2.50	665.0m	Installed storm saddles and secured pod hoses to same.
PC	TP (RE)	RR1	0330	0600	2.50	665.0m	Attempted to unlock slip joint (lock-in bolts seized)

General Comments		
Comments	Rig Requirements	Lessons Learnt
Problems encountered whilst running BOP stack: - damaged hydraulic lifting ram - guidewire jumped shieve - riser tensioner cable parted, releasing cylinder fluid (Near Miss) - seized slip joint lock-in bolts - Subsea engineer new to rig and out of hours - New subsea trainee had inadequate experience to work without subsea supervision		

WBM Data									
Mud Type:	PHG	API FL:	13cm ³ /30m	Cl:	850	Solids:	3.1	Viscosity:	0sec/L
Sample-From:	Pit 2	Filter-Cake:	1mm	K+C*1000:	0%	H2O:	98%	PV:	0.012Pa/s
Time:	19:00	HTHP-FL:	0cm ³ /30m	Hard/Ca:	40	Oil:	0%	YP:	0.230MPa
Weight:	1.04sg	HTHP-Cake:	0mm	MBT:	28	Sand:		Gels 10s:	0.172
Temp:	15.0C°			PM:	0.6	pH:	10	Gels 10m:	0.263
				PF:	0.4	PHPA:	Oppb	Fann 003:	48
								Fann 006:	48
								Fann 100:	54
								Fann 200:	58
								Fann 300:	60
								Fann 600:	72

Bulk Stocks						Personnel On Board	
Name	Unit	In	Used	Adjust	Balance	Company	Pax
Fuel	m3	0	13	0	289.6	Santos	4
Drill Water	m3	0	67.4	0	392.9	DOGC	51
Potable Water	m3	27.7	28.6	0	265.0	ESS	8
Gel	sx	0	0	0	1,699.0	Dowell	2
Cement	sx	0	0	0	2,272.0	Geoservices	6
Barite	sx	0	859	0	696.0	Fugro	6
KCl Brine	bbl	0	0	0	0.0	Cameron	2
						MI	2
						Weatherford	3
						Sperry-Sun	3
						Total	87

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVDD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	0sg / 0sg	654.8m / 654.8m	

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	18 Jun 2005	2 Days	Abandon Drill
BOP Test	18 Jun 2005	2 Days	BOP Test
Environmental Incident	02 May 2005	49 Days	None reported since commencement of campaign.
Fire Drill	18 Jun 2005	2 Days	Fire Drill
First Aid	04 May 2005	47 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	49 Days	None reported since commencement of campaign.
Man Overboard Drill	02 May 2005	49 Days	None undertaken since commencement of campaign.
Near Miss	20 Jun 2005	0 Days	Failed riser tensioner cable, release of fluid from cylinder (all contained).
Safety Meeting	19 Jun 2005	1 Day	Weekly Safety Meeting
Stop Cards	20 Jun 2005	0 Days	3 Stop Cards

Marine								Rig Support		
Weather check on 20 Jun 2005 at 2400										
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)	
18.5km	41km/h	225deg	993.00bar	12.0C°	1.0m	225deg	0m/sec	1	12.11	
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments				
0.4deg	0.3deg	0m	2.0m	225deg	2m/sec	Clear				
Rig Dir.	Ris. Tension	VDL	Comments							
251.0deg	0mt	218.50mt								
								8	12.52	

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Portland	Item	Unit	Quantity
				Fuel	m3	280
				Drill Water	m3	0
				Potable Water	m3	346
				Gel	t	0
				Cement	t	0
				Barite	t	81
KCl Brine	bbbl	0				
Pacific Wrangler			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	499.3
				Drill Water	m3	0
				Potable Water	m3	201
				Gel	t	0
				Cement	t	0
				Barite	t	37
KCl Brine	bbbl	950				

Helicopter Movement				
Flight #	Time	Destination	Comment	Pax
1	10:06	Ocean Patriot		4
1	10:15	Ocean Patriot		4

From : Richard Buitenhuis / Pat King
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	665.0m	Cur. Hole Size	445mm	AFE Cost	
Field	Casino	TVD	665.0m	Casing OD	340mm	AFE No.	5746022
Drill Co.	DOGC	Progress	0m	Shoe TVD	654.8m	Daily Cost	
Rig	Ocean Patriot	Days from spud		F.I.T. / L.O.T.	Osg / Osg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	7.15			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	RIH with 311 mm (12-1/4") BHA.				
RT-ML	89.7m	Planned Op	RIH 311 mm (12-1/4") BHA. Drill out cement, shoe track, floats and rathole. LOT. Drill ahead 311 mm (12-1/4") hole.				

Summary of Period 0000 to 2400 Hrs

Landed BOP stack. Installed storm saddles. Stroked out riser slip joint. Installed diverter. Ran test tool. Pressure tested BOPs. Ran wear bushing.

Operations For Period 0000 Hrs to 2400 Hrs on 21 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PC	TP (RE)	RR1	0000	0030	0.50	665.0m	Isolated failed riser tensioner. Continued cleaning work area and confirmed capability to resume operations.
PC	P	BOP	0030	0100	0.50	665.0m	Latched BOP to XT connector. Confirmed latched with 22.7 t (50,000 lb) overpull.
PC	P	RR1	0100	0330	2.50	665.0m	Installed storm saddles and secured pod hoses to same.
PC	TP (RE)	RR1	0330	0800	4.50	665.0m	Unlocked slip joint. (One lock-in bolt would not release. Welder cut off bolt head to release.)
PC	P	RR1	0800	0900	1.00	665.0m	Stroked out riser slip joint to rig floor. Broke down and laid out riser landing joint.
PC	P	RR1	0900	1100	2.00	665.0m	Picked up diverter and made up same to slip joint. Landed and locked down diverter. Rugged down riser running equipment and cleared rig floor.
PC	P	BOP	1100	1230	1.50	665.0m	Made up jetting sub and 3 stands of 127 mm (5") HWDP below Cameron weight set test plug. RIH on 127 mm (5") drill pipe.
PC	P	BOP	1230	1730	5.00	665.0m	Pressure tested (on blue pod) pipe rams, choke manifold, fail safe valves, choke & kill lines, wellhead connector to 1400 kPa (200 psi) / 5 min & 27500 kPa (4000 psi) / 10 min. Annulars tested to 1400 kPa (200 psi) / 20700 kPa (3000 psi). Function tested BOPs from yellow pod.
PC	P	BOP	1730	1900	1.50	665.0m	POH and laid out test plug. Racked back HWDP.
PC	P	PT	1900	2200	3.00	665.0m	Pressure tested Top Drive valves (upper & lower) and kelly hose to 1400 kPa (200 psi) / 5 min & 27500 kPa (4000 psi) / 10 min. Rugged down test lines. Lined up to test standpipe manifold to 1400 kPa (200 psi) / 5 min & 27500 kPa (400 psi) / 10 min offline.
PC	P	WH	2200	2400	2.00	665.0m	Picked up wear bushing running tool and 476 mm (18-3/4") x 330 mm (13") wear bushing. Made up jetting sub and 3 stands of 127 mm (5") HWDP below running tool. Made up wear bushing to running tool. Made up stand of 127 mm (5") drill pipe and 476 mm (18-3/4") tool stabiliser to running tool and RIH assembly on 127 mm (5") drill pipe. Set wear bushing in 476 mm (18-3/4") wellhead.

Operations For Period 0000 Hrs to 0600 Hrs on 22 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PC	P	WH	0000	0100	1.00	665.0m	POH with wear bushing running tool. (Trimmed rig and worked running tool through hang up in XT wear sleeve)
PC	P	HT	0100	0230	1.50	665.0m	Picked up Cameron Casing Hanger & Seal Assembly Running Tool (CHSART). Made up 273 mm (10-3/4") seal assembly, casing hanger and Dowell cement plug launcher & basket to CHSART and laid out.
PC	P	HT	0230	0330	1.00	665.0m	Picked up Dowell Deep Sea Express cement head. Made up to 2 joints of 127 mm (5") HWDP and racked back.
PC	P	HBHA	0330	0600	2.50	665.0m	Commenced picking up 311 mm (12-1/4") BHA and making up same. Confidence tested and initialised Sperry FEWD tools.

WBM Data

Mud Type:	PHG	API FL:	14cm ³ /30m	Cl:	800	Solids:	3	Viscosity:	0sec/L
Sample-From:	Pit 2	Filter-Cake:	1mm	K+C*1000:	0%	H2O:	98%	PV:	0.010Pa/s
Time:	20:00	HTHP-FL:	0cm ³ /30m	Hard/Ca:	80	Oil:	0%	YP:	0.263MPa
Weight:	1.04sg	HTHP-Cake:	0mm	MBT:	27	Sand:		Gels 10s:	0.192
Temp:	15.0C°			PM:	0.4	pH:	10	Gels 10m:	0.263
				PF:	0.3	PHPA:	Oppb	Fann 003:	49
								Fann 006:	50
								Fann 100:	57
								Fann 200:	60
								Fann 300:	65
								Fann 600:	75

Bulk Stocks						Personnel On Board	
Name	Unit	In	Used	Adjust	Balance	Company	Pax
Fuel	m3	0	8.7	0	280.9	Santos	5
Drill Water	m3	0	26.5	0	366.4	DOGC	50
Potable Water	m3	30.5	33.8	0	261.7	ESS	8
Gel	sx	0	0	0	1,699.0	Dowell	2
Cement	sx	0	0	0	2,272.0	Geoservices	6
Barite	sx	633	106	0	1,223.0	Fugro	6
KCl Brine	bbl	0	0	0	0.0	Cameron	2
						MI	2
						Weatherford	3
						Sperry-Sun	3
						Total	87

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	0sg / 0sg	654.8m / 654.8m	

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	18 Jun 2005	3 Days	Abandon Drill
BOP Test	18 Jun 2005	3 Days	BOP Test
Environmental Incident	02 May 2005	50 Days	None reported since commencement of campaign.
Fire Drill	18 Jun 2005	3 Days	Fire Drill
First Aid	04 May 2005	48 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	50 Days	None reported since commencement of campaign.
Man Overboard Drill	02 May 2005	50 Days	None undertaken since commencement of campaign.
Near Miss	20 Jun 2005	1 Day	Failed compensator tensioner cable, release of compensator fluid.
Safety Meeting	19 Jun 2005	2 Days	Weekly Safety Meeting
Stop Cards	21 Jun 2005	0 Days	17 Stop Cards

Marine									
Weather check on 21 Jun 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	37km/h	315deg	998.00bar	12.0C°	0.5m	315deg	0m/sec	1	12.11
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		2	12.61
0.6deg	0.5deg	2.00m	2.0m	225deg	2m/sec	Clear		3	8.71
Rig Dir.	Ris. Tension	VDL	Comments				4	8.39	
251.0deg	0mt	213.55mt					5	10.89	
								6	11.88
								7	13.52
								8	12.52

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Portland	Item	Unit	Quantity
				Fuel	m3	280
				Drill Water	m3	0
				Potable Water	m3	346
				Gel	t	0
				Cement	t	0
				Barite	t	81
				KCl Brine	bbl	0
Pacific Wrangler			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	588.4
				Drill Water	m3	0
				Potable Water	m3	196
				Gel	t	0
				Cement	t	0
				Barite	t	0
				KCl Brine	bbl	950

Helicopter Movement				
Flight #	Time	Destination	Comment	Pax
1	10:04	Ocean Patriot		11
1	10:16	Ocean Patriot		11

From : Richard Buitenhuis / Pat King
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	951.0m	Cur. Hole Size	311mm	AFE Cost	
Field	Casino	TVD	951.0m	Casing OD	340mm	AFE No.	5746022
Drill Co.	DOGC	Progress	286.0m	Shoe TVD	654.8m	Daily Cost	
Rig	Ocean Patriot	Days from spud		F.I.T. / L.O.T.	0sg / 2.08sg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	8.15			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	Drilling ahead 311 mm (12-1/4") hole at 1017 m.				
RT-ML	89.7m	Planned Op	Drill ahead 311 mm (12-1/4") hole to ~1200 m. POH for bit change. Drill ahead 311 mm (12-1/4") hole to TD (1730m).				

Summary of Period 0000 to 2400 Hrs

Made up CHSART, casing hanger, seal assmby & Dowell plug launcher. Made up Deep Sea Express cement head. Made up 311 mm (12-1/4") BHA and RIH. Drilled out hard cement, shoe & 3 m new formation. LOT. Drilled 311 mm (12-1/4") hole to 952 m.

Operations For Period 0000 Hrs to 2400 Hrs on 22 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
SC	P	WH	0000	0100	1.00	665.0m	POH with wear bushing running tool. (Trimmed rig and worked running tool through hang up in XT wear sleeve)
SC	P	HT	0100	0230	1.50	665.0m	Picked up Cameron Casing Hanger & Seal Assembly Running Tool (CHSART). Made up 273 mm (10-3/4") seal assembly, casing hanger and Dowell cement plug launcher & basket to CHSART and laid out.
SC	P	HT	0230	0330	1.00	665.0m	Picked up Dowell Deep Sea Express cement head. Made up to 2 joints of 127 mm (5") HWDP and racked back.
SC	P	HBHA	0330	0500	1.50	665.0m	Commenced picking up 311 mm (12-1/4") BHA and making up same.
IH	P	DA	0500	0530	0.50	665.0m	Confidence tested and initialised Sperry FEWD tools.
SC	P	HBHA	0530	0630	1.00	665.0m	Continued picking up 311 mm (12-1/4") BHA and making up same.
SC	P	TI	0630	0915	2.75	665.0m	RIH with 311 mm (12-1/4") BHA on 127 mm (5") drill pipe. Shallow tested MWD. RIH and tagged cement at 633 m.
SC	P	DC	0915	0930	0.25	665.0m	Drilled out cement from 633 m - 640.5 m.
SC	P	DFS	0930	1015	0.75	665.0m	Drilled out float. [Avg parameters: 3066 l/min (810 gal/min), WOB 4.5 - 7 t (10-15 klb), 60 rpm]
IH	P	DFS	1015	1230	2.25	668.0m	Drilled hard cement and float shoe, cleaned out rat hole and drilled 3 metres of new hole to 668 m. Pumped 10 m3 (60 bbl) hi vis sweep and displaced to surface with seawater.
IH	P	LOT	1230	1330	1.00	668.0m	Lined up Dowell unit to drill string, pumped 1.6 m3 (20 bbl) seawater and observed returns, closed annular preventers and conducted full leak-off test: Volume pumped - 0.47 m3 (2.95 bbl) Maximum pressure 6850 kPa (994 psi) 2.08 sg (17.36 ppg) EMW. Bled back 0.39 m3 (2.45 bbl) bled back
IH	P	DA	1330	2200	8.50	908.0m	Drilled 311 mm (12-1/4") hole from 668 m - 908 m, pumping 8 m3 (50 bbl) PHG sweep mid stand, spotting 8 m3 (50 bbl) PHG around BHA prior to connections. [Avg Parameters: 3785 l/min (1000 gal/min), 4.5 - 9 t (10-35 k) WOB, 100 rpm]
IH	P	DA	2200	2300	1.00	940.0m	Drilled 311 mm (12-1/4") hole from 908 m - 940 m, pumping 8 m3 (50 bbl) PHG sweep mid stand, spotting 8 m3 (50 bbl) PHG around BHA and backreaming prior to connections. [Avg Parameters: 3785 l/min (1000 gal/min), 4.5 - 9 t (10-20 k) WOB, 100 rpm] Survey @ 858.08 m - 1.5 deg Az 236 deg Survey @ 915.48 m - 4.8 deg Az 243 deg
IH	P	DA	2300	2400	1.00	951.0m	Drilled 311 mm (12-1/4") hole from 940 m - 951 m, pumping 8 m3 (50 bbl) PHG sweep mid stand. Changed parameters to control deviation. [Avg Parameters: 3975 l/min (1050 gal/min), 2 - 5 t (5-10 k) WOB, 130 rpm]

Operations For Period 0000 Hrs to 0600 Hrs on 23 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
IH	TP (RE)	DA	0000	0030	0.50	951.0m	Lost pressure from seawater line. Opened bleed lines on each pump and pumped through to prime.
IH	P	DA	0030	0100	0.50	956.0m	Drilled 311 mm (12-1/4") hole from 951 m to 956 m. [Avg parameters: 3975 l/min (1050 gal/min), 2 - 5 t (5-10 klb) WOB, 135 rpm]
IH	TP (VE)	DA	0100	0115	0.25	956.0m	Cycled pumps to switch modes on Sperry FEWD tools. (Tools not pulsing)
IH	P	DA	0115	0215	1.00	966.0m	Drilled 311 mm (12-1/4") hole from 956 m to 966 m. Pumped 50 bbl PHG sweep and backreamed stand whilst troubleshooting Sperry FEWD tools. Tools not pulsing - no FEWD or directional surveys. Prepared to change out to KCI Mud. [Avg parameters: 3975 l/min (1050 gal/min), 2 - 5 t (5-10 klb) WOB, 125 rpm]

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
IH	P	DA	0215	0230	0.25	966.0m	Pumped 32 m3 (200 bbl) PHG sweep (cleared pit for mixing KCl Mud) whilst backreaming stand to reduce deviation.
IH	P	DA	0230	0345	1.25	994.0m	Drilled ahead 311 mm (12-1/4") hole from 966 m to 994 m, pumping 8 m3 (50 bbl) PHG sweep mid-stand, spotting 8 m3 (50 bbl) PHG and backreaming full stand prior to connection. [Avg parameters: 3785 l/min (1000 gal/min), 2 - 5 t (5-10 klb) WOB, 130 rpm]
IH	P	DA	0345	0500	1.25	1009.0m	Drilled ahead 311 mm (12-1/4") hole from 994 m to 1009 m. Pumped 24 m3 (150 bbl) PHG (total left in pit) prior to switching to KCl mud. Reduced pump rate to kerb shaker losses. [Avg parameters: 3030 l/min (800 gal/min), 2 - 7 t (5-15 klb) WOB, 120 rpm]
IH	P	DA	0500	0600	1.00	1017.0m	Drilled ahead 311 mm (12-1/4") hole from 1009 m to 1017 m. [Avg parameters: 3600 l/min (950 gal/min), 7 - 11 t (15 - 25 klb) WOB, 100 rpm]

WBM Data

Mud Type:	PHG	API FL:	13cm ³ /30m	Cl:	750	Solids:	3	Viscosity:	0sec/L
Sample-From:	Pit 2	Filter-Cake:	1mm	K+C*1000:	0%	H2O:	98%	PV:	0.010Pa/s
Time:	21:00	HTHP-FL:	0cm ³ /30m	Hard/Ca:	80	Oil:	0%	YP:	0.259MPa
Weight:	1.04sg	HTHP-Cake:	0mm	MBT:	28	Sand:		Gels 10s:	0.182
Temp:	15.0C°			PM:	0.45	pH:	9.5	Gels 10m:	0.263
				PF:	0.25	PHPA:	Oppb	Fann 003:	50
								Fann 006:	50
								Fann 100:	55
								Fann 200:	59
								Fann 300:	64
								Fann 600:	74

Bit # 3

				Wear	I	O1	D	L	B	G	O2	R
Size ("):	311mm	IADC#	415	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	SMITH	WOB(avg)	0.68mt	No.	Size	Progress	286.0m	Cum. Progress	286.0m			
Type:	Rock	RPM(avg)	100			On Bottom Hrs	7.60h	Cum. On Btm Hrs	7.60h			
Serial No.:	MR0049	F.Rate	3785lpm			IADC Drill Hrs	12.80h	Cum IADC Drill Hrs	12.80h			
Bit Model	GS04BDV	SPP	19305kPa			Total Revs	0	Cum Total Revs	0			
Depth In	665.0m	TFA	0.000			ROP(avg)	37.63 m/hr	ROP(avg)	37.63 m/hr			
Depth Out	0m											

BHA # 3

Weight(Wet)	3.18mt	Length	279.2m	Torque(max)	0Nm	D.C. (1) Ann Velocity
Wt Below Jar(Wet)	2.45mt	String	9.53mt	Torque(Off.Btm)	0Nm	D.C. (2) Ann Velocity
		Pick-Up	0mt	Torque(On.Btm)	0Nm	H.W.D.P. Ann Velocity
		Slack-Off	0mt			D.P. Ann Velocity

BHA Run Description 311 mm (12-1/4") TCI Bit, 311 mm (12-1/4") NB Stab, 203 mm (8") Pony DC, 311 mm (12-1/4") Stab, Sperry FEWD, Pulsar, Directional, 203 mm (8") NMDC, 10 x 203 mm (8") DC, 203 mm (8") Jars, 2 x 203 mm (8") DC, X/O, 15 x 127 mm (5") HWDP

Equipment	Length	OD	ID	Serial #	Comment
HWDP	138.37m	162mm	0mm	Various	
Bit	0.33m	311mm	0mm	MR0049	Smith GS04BDV 3 x 18, 1 x 20 nozzles
Near Bit Stabiliser	2.11m	311mm	0mm	47602	c/w Ported Float
Pony Drill Collar	3.04m	210mm	0mm	49059	
Stab	2.08m	311mm	0mm	AIB1134	
FEWD Tools	13.16m	203mm	0mm	Various	FEWD - 90072859/XH1GVR Pulsar - 10599305 Directional - 90074559
NM Pony Drill Collar	2.93m	207mm	0mm	47637	
Drill Collar	88.99m	200mm	0mm	Various	
Jar	9.20m	210mm	0mm	DAH02220	
Drill Collar	17.90m	202mm	0mm	Various	
X/O	1.09m	203mm	0mm	SANTOS	

Survey								
MD (m)	Incl Deg (deg)	Corr. Az (deg)	TVD (m)	'V' Sect (m)	Dogleg (deg/30m)	N/S (m)	E/W (m)	Tool Type
712.41	0.6	146.9	712.34	-7.34	0.13	-7.34	3.62	MWD
741.29	1.3	173.8	741.22	-7.78	0.85	-7.78	3.73	MWD
800.77	1.6	179.3	800.68	-9.27	0.18	-9.27	3.81	MWD
858.08	1.6	236.4	857.97	-10.51	0.80	-10.51	3.16	MWD
915.48	4.8	243.6	915.28	-12.02	1.70	-12.02	0.34	MWD

Bulk Stocks						Personnel On Board		
Name	Unit	In	Used	Adjust	Balance	Company		Pax
Fuel	m3	0	14.8	0	266.1	Santos		5
Drill Water	m3	0	48.1	0	318.3	DOGC		49
Potable Water	m3	32	37	0	256.7	ESS		8
Gel	sx	0	0	0	1,699.0	Dowell		2
Cement	sx	0	0	0	2,272.0	Geoservices		6
Barite	sx	0	0	0	1,223.0	Fugro		6
KCl Brine	bbl	0	0	0	0.0	Cameron		2
						MI		2
						Weatherford		4
						Sperry-Sun		3
						Expro		3
							Total	90

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	0sg / 0sg	654.8m / 654.8m	

HSE Summary				
Events	Date of Last	Days Since	Remarks	
Abandon Drill	18 Jun 2005	4 Days	Abandon Drill	
BOP Test	21 Jun 2005	1 Day	BOP Test	
Environmental Incident	02 May 2005	51 Days	None reported since commencement of campaign.	
Fire Drill	18 Jun 2005	4 Days	Fire Drill	
First Aid	04 May 2005	49 Days	Person struck on nose with metal bar	
Lost Time Incident	02 May 2005	51 Days	None reported since commencement of campaign.	
Man Overboard Drill	18 Jun 2005	4 Days	None undertaken since commencement of campaign.	
Near Miss	20 Jun 2005	2 Days	Failed compensator tensioner cable, release of compensator fluid.	
Safety Meeting	19 Jun 2005	3 Days	Weekly Safety Meeting	
Stop Cards	22 Jun 2005	0 Days	16 Stop Cards	

Marine									
Weather check on 22 Jun 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	15km/h	247deg	1012.00bar	12.0C°	0.5m	247deg	0m/sec	1	11.70
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments			
0.5deg	0.5deg	1.50m	2.5m	225deg	2m/sec	Clear			
Rig Dir.	Ris. Tension	VDL	Comments				2	12.79	
251.0deg	0mt	214.05mt					3	9.30	
							4	9.21	
							5	10.89	
							6	11.79	
							7	13.02	
							8	11.88	

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	454
				Drill Water	m3	500
				Potable Water	m3	327
				Gel	t	42
				Cement	t	38
				Barite	t	81
				KCl Brine	bbbl	0
Pacific Wrangler			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	478.7
				Drill Water	m3	0
				Potable Water	m3	191
				Gel	t	0
				Cement	t	0
				Barite	t	0
				KCl Brine	bbbl	950
Helicopter Movement						
Flight #	Time	Destination	Comment			Pax
1	09:56	Ocean Patriot				4
1	10:05	Essendon				1

From : Richard Buitenhuis / Pat King
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	1160.0m	Cur. Hole Size	311mm	AFE Cost	
Field	Casino	TVD	1160.0m	Casing OD	340mm	AFE No.	5746022
Drill Co.	DOGC	Progress	209.0m	Shoe TVD	654.8m	Daily Cost	
Rig	Ocean Patriot	Days from spud		F.I.T. / L.O.T.	0sg / 2.08sg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	9.15			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	RIH with 311 mm (12-1/4") BHA.				
RT-ML	89.7m	Planned Op	RIH with 311 mm (12-1/4") BHA. Drill ahead 311 mm (12-1/4") hole from 1160 m to ~1730 m (Section TD).				

Summary of Period 0000 to 2400 Hrs

Drilled 311 mm (12-1/4") hole from 951 m to 1160 m. Circulated hole clean. POH to surface to change bit and replace FEWD tools.

Formations

Name	Top (MD)	Top (TVD)	Comment

Operations For Period 0000 Hrs to 2400 Hrs on 23 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
IH	TP (RE)	DA	0000	0030	0.50	951.0m	Lost pressure from seawater line. Opened bleed lines on each pump and pumped through to prime.
IH	P	DA	0030	0100	0.50	956.0m	Drilled 311 mm (12-1/4") hole from 951 m to 956 m. [Avg parameters: 3975 l/min (1050 gal/min), 2 - 5 t (5-10 klb) WOB, 135 rpm, ROP 10 m/hr]
IH	TP (VE)	DA	0100	0115	0.25	956.0m	Cycled pumps to switch modes on Sperry FEWD tools. (Tools not pulsing)
IH	P	DA	0115	0215	1.00	966.0m	Drilled 311 mm (12-1/4") hole from 956 m to 966 m. Pumped 50 bbl PHG sweep and backreamed stand whilst troubleshooting Sperry FEWD tools. Tools not pulsing - no FEWD or directional surveys. Prepared to change out to KCl Mud. [Avg parameters: 3975 l/min (1050 gal/min), 2 - 5 t (5-10 klb) WOB, 125 rpm, ROP 10 m/hr]
IH	P	DA	0215	0230	0.25	966.0m	Pumped 32 m3 (200 bbl) PHG sweep (cleared pit for mixing KCl Mud) whilst backreaming stand to reduce deviation.
IH	P	DA	0230	0345	1.25	994.0m	Drilled ahead 311 mm (12-1/4") hole from 966 m to 994 m, pumping 8 m3 (50 bbl) PHG sweep mid-stand, spotting 8 m3 (50 bbl) PHG and backreaming full stand prior to connection. [Avg parameters: 3785 l/min (1000 gal/min), 2 - 5 t (5-10 klb) WOB, 130 rpm, ROP 22 m/hr]
IH	P	DA	0345	0500	1.25	1009.0m	Drilled ahead 311 mm (12-1/4") hole from 994 m to 1009 m. Pumped 24 m3 (150 bbl) PHG (total left in pit) prior to switching to KCl mud. Reduced pump rate to kerb shaker losses. [Avg parameters: 3030 l/min (800 gal/min), 2 - 7 t (5-15 klb) WOB, 120 rpm, ROP 12 m/hr]
IH	P	DA	0500	1200	7.00	1083.0m	Drilled ahead 311 mm (12-1/4") hole from 1009 m to 1083m, [Avg parameters: 3710 l/min (980 gal/min), 9 - 14 t (20 - 30 klb) WOB, 140 rpm, ROP 10.5 m/hr] Displaced choke and kill lines to mud and conducted SCRs @ 1023mRT.
IH	P	DA	1200	1500	3.00	1155.0m	Drilled ahead 311 mm (12-1/4") hole from 1083 m to 1155 m, [Avg parameters: 3785 l/min (1000 gal/min), 7 - 11 t (15 - 25 klb) WOB, 150 rpm, ROP 24 m/hr]
IH	P	DA	1500	1515	0.25	1160.0m	Drilled ahead 311 mm (12-1/4") hole from 1155 m to 1160m, [Avg parameters: 3785 l/min (1000 gal/min), 7 - 10 t (15 - 25 klb) WOB, 150 rpm, ROP 20 m/hr]
IH	P	CHC	1515	1600	0.75	1160.0m	Circulated 2 x bottoms up @ 3800 l/min (1000 gal/min) whilst rotating (100 rpm) and reciprocating pipe.
IH	P	TO	1600	1700	1.00	1160.0m	POH with 311 mm (12-1/4") BHA on 127 mm (5") drill pipe without pumps from 1140 m to 1050 m. Worked through tight section from 1080 m to 1050 m. Maximum overpull 27 t (60,000 lb).
IH	P	TO	1700	1730	0.50	1160.0m	Pumped out tight stand from 1050 m to 1020 m. Maximum overpull 27 t (60,000 lb).
IH	P	TO	1730	2130	4.00	1160.0m	POH with 311 mm (12-1/4") BHA from 1020 m to surface, racking back same and plugging into Sperry tools for download. (Unable to download FEWD tools).
IH	TP (VE)	HT	2130	2400	2.50	1160.0m	Broke out Cameron CHSART from 273 mm (10-3/4") casing hanger, seal assembly and Dowell cement plug launcher and laid out (CHSART ball valve not opening fully).

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
							Picked up replacement Cameron CHSART and made up to 273 mm (10-3/4") casing hanger, seal assembly and Dowell cement plug launch. Laid out assembly.

Operations For Period 0000 Hrs to 0600 Hrs on 24 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
IH	P	HT	0000	0200	2.00	1160.0m	Laid out Sperry FEWD tools from 311 mm (12-1/4") BHA. Picked up new Sperry FEWD tools. [Download of FEWD data from 665 m - 1160 m successful]
IH	TP (VE)	HT	0200	0430	2.50	1160.0m	Attempted to confidence test and initialise Sperry FEWD tools. Directional tool not responding (damaged adaptor pin on directional sub). Laid out directional tool for repair on deck. Tested directional tool from previous run on deck (test failed). Made up repaired tool to FEWD & pulser.
IH	TP (VE)	HT	0430	0500	0.50	1160.0m	Confidence tested and initialised Sperry FEWD tools.
IH	P	HT	0500	0600	1.00	1160.0m	Continued to RIH with 311 mm (12-1/4") BHA on 127 mm (5") drill pipe.

WBM Data									
Mud Type:	KCL/IDCAP	API FL:	5cm ³ /30m	Cl:	42000	Solids:	9	Viscosity:	0sec/L
Sample-From:	Pit 3	Filter-Cake:	1mm	K+C*1000:	8%	H2O:	91%	PV:	0.015Pa/s
Time:	15:30	HTHP-FL:	0cm ³ /30m	Hard/Ca:	560	Oil:	0%	YP:	0.125MPa
Weight:	1.22sg	HTHP-Cake:	0mm	MBT:	2.5	Sand:		Gels 10s:	0.048
Temp:	37.0C°			PM:	0.4	pH:	9	Gels 10m:	0.072
				PF:	0.1	PHPA:	Oppb	Fann 003:	8
								Fann 006:	10
								Fann 100:	25
								Fann 200:	34
								Fann 300:	41
								Fann 600:	56

Bit # 3				Wear	I	O1	D	L	B	G	O2	R
					4	5	WT	A	E	I	ER	FM
Size ("):	311mm	IADC#	415	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	SMITH	WOB(avg)	0.68mt	No.	Size	Progress	209.0m	Cum. Progress	495.0m			
Type:	Rock	RPM(avg)	120	1	20/32nd"	On Bottom Hrs	11.30h	Cum. On Btm Hrs	18.90h			
Serial No.:	MR0049	F.Rate	3785lpm	3	18/32nd"	IADC Drill Hrs	15.56h	Cum IADC Drill Hrs	28.36h			
Bit Model	GS04BDV	SPP	20684kPa			Total Revs	0	Cum Total Revs	0			
Depth In	665.0m	TFA	1.052			ROP(avg)	18.50 m/hr	ROP(avg)	26.19 m/hr			
Depth Out	1160.0m											

BHA # 3						
Weight(Wet)	3.18mt	Length	279.2m	Torque(max)	0Nm	D.C. (1) Ann Velocity
Wt Below Jar(Wet)	2.45mt	String	9.53mt	Torque(Off.Btm)	0Nm	D.C. (2) Ann Velocity
		Pick-Up	0mt	Torque(On.Btm)	0Nm	H.W.D.P. Ann Velocity
		Slack-Off	0mt			D.P. Ann Velocity

BHA Run Description 311 mm (12-1/4") TCI Bit, 311 mm (12-1/4") NB Stab, 203 mm (8") Pony DC, 311 mm (12-1/4") Stab, Sperry FEWD, Pulser, Directional, 203 mm (8") NMDC, 10 x 203 mm (8") DC, 203 mm (8") Jars, 2 x 203 mm (8") DC, X/O, 15 x 127 mm (5") HWDP

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.33m	311mm	0mm	MR0049	Smith GS04BDV 3 x 18, 1 x 20 nozzles
Near Bit Stabiliser	2.11m	311mm	0mm	47602	c/w Ported Float
Pony Drill Collar	3.04m	210mm	0mm	49059	
Stab	2.08m	311mm	0mm	AIB1134	
FEWD Tools	13.16m	203mm	0mm	Various	FEWD - 90072859/XH1GVR Pulser - 10599305 Directional - 90074559
NM Pony Drill Collar	2.93m	207mm	0mm	47637	
Drill Collar	88.99m	200mm	0mm	Various	
Jar	9.20m	210mm	0mm	DAH02220	
Drill Collar	17.90m	202mm	0mm	Various	
X/O	1.09m	203mm	0mm	SANTOS	
HWDP	138.37m	162mm	0mm	Various	

Bulk Stocks						Personnel On Board	
Name	Unit	In	Used	Adjust	Balance	Company	Pax
Fuel	m3	0	26.3	0	239.8	Santos	5
Drill Water	m3	454.5	235.4	0	537.4	DOGC	47
Potable Water	m3	30	32.8	0	253.9	ESS	8
Gel	sx	0	577	0	1,122.0	Dowell	2
Cement	sx	0	0	0	2,272.0	Geoservices	6
Barite	sx	1044	335	0	1,932.0	Fugro	6
KCl Brine	bbl	0	0	0	0.0	Cameron	2
						MI	2
						Weatherford	4
						Sperry-Sun	3
						Expro	3
						Total	88

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	2.08sg / 0sg	654.8m / 654.8m	Lead: 258 bbl, 12.5 ppg, Class G Tail: 91 bbl, 15.8 ppg, Class G

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	18 Jun 2005	5 Days	Abandon Drill
BOP Test	21 Jun 2005	2 Days	BOP Test
Environmental Incident	02 May 2005	52 Days	None reported since commencement of campaign.
Fire Drill	18 Jun 2005	5 Days	Fire Drill
First Aid	04 May 2005	50 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	52 Days	None reported since commencement of campaign.
Man Overboard Drill	18 Jun 2005	5 Days	Man Overboard Drill
Near Miss	20 Jun 2005	3 Days	Failed compensator tensioner cable, release of compensator fluid.
Safety Meeting	19 Jun 2005	4 Days	Weekly Safety Meeting
Stop Cards	23 Jun 2005	0 Days	7 Stop Cards

Marine									
Weather check on 23 Jun 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	11km/h	090deg	1025.00bar	15.0C°	1.5m	090deg	0m/sec	1	11.61
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		2	12.52
0.7deg	0.5deg	1.50m	3.5m	225deg	2m/sec	Clear		3	8.80
Rig Dir.	Ris. Tension	VDL	Comments				4	8.30	
251.0deg	12.25mt	207.56mt					5	11.20	
							6	11.88	
							7	13.02	
							8	11.20	

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	454
				Drill Water	m3	500
				Potable Water	m3	327
				Gel	t	42
				Cement	t	38
				Barite	t	81
				KCl Brine	bbl	0
Pacific Wrangler			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	478.7
				Drill Water	m3	0
				Potable Water	m3	191
				Gel	t	0
				Cement	t	0
				Barite	t	0
				KCl Brine	bbl	950

Helicopter Movement				
Flight #	Time	Destination	Comment	Pax
1	10:23	Ocean Patriot		11
1	10:38	Essendon		13

From : Richard Buitenhuis / Pat King
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	1343.0m	Cur. Hole Size	311mm	AFE Cost	
Field	Casino	TVD	1342.0m	Casing OD	340mm	AFE No.	5746022
Drill Co.	DOGC	Progress	183.0m	Shoe TVD	654.8m	Daily Cost	
Rig	Ocean Patriot	Days from spud		F.I.T. / L.O.T.	0sg / 2.08sg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	10.13			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	POH with 311 mm (12-1/4") BHA for bit change.				
RT-ML	89.7m	Planned Op	POH to surface. RIH with new bit on 311 mm (12-1/4") BHA. Drill ahead to 1740 m (Section TD)				

Summary of Period 0000 to 2400 Hrs

Changed out Sperry FEWD tools. RIH with 311 mm (12-1/4") BHA after bit trip. Drilled 311 mm (12-1/4") hole from 1160 m to 1343 m.

Formations

Name	Top (MD)	Top (TVD)	Comment

Operations For Period 0000 Hrs to 2400 Hrs on 24 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
IH	P	HT	0000	0200	2.00	1160.0m	Laid out Sperry FEWD tools from 311 mm (12-1/4") BHA. Picked up new Sperry FEWD tools. [Download of FEWD data from 665 m - 1160 m successful]
IH	TP (VE)	HT	0200	0400	2.00	1160.0m	Attempted to confidence test and initialise Sperry FEWD tools. Directional tool not responding (damaged adaptor pin on directional sub). Laid out directional tool for repair on deck. Tested directional tool from previous run on deck (test failed). Made up repaired tool to FEWD & pulser.
IH	TP (VE)	HT	0430	0500	0.50	1160.0m	Confidence tested and initialised Sperry FEWD tools.
IH	P	TI	0500	0930	4.50	1160.0m	Continued to RIH with 311 mm (12-1/4") BHA on 127 mm (5") drill pipe to 1160 m. Washed in stands to obtain surveys @ 891.65 m, 1006.82 m & 1067.61 m. Maximum inclination 5.74 deg @ 1067.61 m. Washed last stand to bottom.
IH	P	DA	0930	0945	0.25	1162.0m	Drilled 311mm (12-1/4") hole from 1160 m to 1162 m [Avg parameters: 3710 l/min (980 gal/min), 120 rpm, 3 t (7 klb) WOB]
IH	P	DA	0945	2400	14.25	1342.0m	Drilled 311mm (12-1/4") hole from 1162 m to 1343 m [Avg parameters: 3710 l/min (980 gal/min), 1.5 - 7 t (3 - 15 klb) WOB, 120 - 180 rpm, ROP 12.5 m/hr]. Bit stalled out frequently - restricted ROP, varied RPM.

Operations For Period 0000 Hrs to 0600 Hrs on 25 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
IH	P	DA	0000	0030	0.50	1355.0m	Drilled ahead 311 mm (12-1/4") hole from 1343 m to 1355 m [Avg parameters: 3785 l/min (1000 gal/min), 7 - 9 t (15 - 20 klb) WOB, 140 rpm, ROP 24 m/hr]
IH	P	DA	0030	0100	0.50	1371.0m	Drilled ahead 311 mm (12-1/4") hole from 1355 m to 1371 m [Avg. parameters: 3785 l/min (1000 gal/min), 7 - 9 t (15 - 20 klb) WOB, 140 rpm, ROP 32 m/hr]
IH	P	DA	0100	0230	1.50	1385.0m	Drilled ahead 311 mm (12-1/4") hole from 1371 m to 1385 m ROP down to 4 m/hr. [Avg. parameters: 3785 l/min (1000 gal/min), 7 - 15 t (15 - 25 klb) WOB, 100 - 140 rpm, ROP 9.3 m/hr]
IH	P	DA	0230	0300	0.50	1387.0m	Drilled ahead 311 mm (12-1/4") hole from 1385 m to 1387 m ROP down to 2 m/hr. Possible bit balling - no change in ROP or torque with WOB or RPM. [Avg. parameters: 3785 l/min (1000 gal/min), 4.5 - 15 t (10 - 25 klb) WOB, 80 - 150 rpm, ROP 4 m/hr]
IH	P	OA	0300	0315	0.25	1387.0m	Took weight off bit. Pumped 7 m3 (45 bbl) 8% KCl Brine lo-vis sweep to clear bit. Rotated string (140 rpm)
IH	P	DA	0315	0430	1.25	1392.0m	Drilled ahead 311 mm (12-1/4") hole from 1387 m to 1392 m No change in ROP or torque with WOB or RPM. [Avg. parameters: 3785 l/min (1000 gal/min), 0 - 15 t (0 - 25 klb) WOB, 80 - 160 rpm, ROP 4 m/hr]
IH	P	TO	0430	0600	1.50	1392.0m	(IN PROGRESS) POH for bit change from 1392 m to surface, working tight hole from

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
							1313 m to 1284 m (Max 18 t / 40,000 lb overpull) and pumping slug at 1140 m. Broke out Bit #4RR, downloaded FEWD.

WBM Data

Mud Type:	KCL/Polymer	API FL:	15cm³/30m	Cl:	45000	Solids:	10	Viscosity:	0sec/L
Sample-From:	Pit 3	Filter-Cake:	1mm	K+C*1000:	6%	H2O:	90%	PV:	0.011Pa/s
Time:	19:00	HTHP-FL:	0cm³/30m	Hard/Ca:	1040	Oil:	0%	YP:	0.125MPa
Weight:	1.22sg	HTHP-Cake:	0mm	MBT:	5	Sand:		Gels 10s:	0.038
Temp:	39.0C°			PM:	0.1	pH:	8.4	Gels 10m:	0.057
				PF:	0.9	PHPA:	Oppb	Fann 003:	7
								Fann 006:	10
								Fann 100:	24
								Fann 200:	32
								Fann 300:	37
								Fann 600:	48

Bit # 4RR

				Wear	I	O1	D	L	B	G	O2	R
Size ("):	311mm	IADC#	M223	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	SMITH	WOB(avg)	0.54mt	No.	Size	Progress	183.0m	Cum. Progress	183.0m			
Type:	PDC	RPM(avg)	150	7	14/32nd"	On Bottom Hrs	11.20h	Cum. On Btm Hrs	11.20h			
Serial No.:	JT6901	F.Rate	3785lpm			IADC Drill Hrs	13.80h	Cum IADC Drill Hrs	13.80h			
Bit Model	MA89PX	SPP	20684kPa			Total Revs	0	Cum Total Revs	0			
Depth In	1160.0m	TFA	1.052			ROP(avg)	16.34 m/hr	ROP(avg)	16.34 m/hr			
Depth Out												
Run Comment	Ran into Casino 4 but POH due to hang up inside casing.											

BHA # 4

Weight(Wet)	2.27mt	Length	252.4m	Torque(max)	0Nm	D.C. (1) Ann Velocity
Wt Below Jar(Wet)	1.72mt	String	9.53mt	Torque(Off.Btm)	0Nm	D.C. (2) Ann Velocity
		Pick-Up	0mt	Torque(On.Btm)	0Nm	H.W.D.P. Ann Velocity
		Slack-Off	0mt			D.P. Ann Velocity
BHA Run Description	311 mm (12-1/4") PDC Bit, 311 mm (12-1/4") NB Stab, 203 mm (8") Pony DC, 311 mm (12-1/4") Stab, Sperry FEWD, Pulser, Directional, 203 mm (8") NMDC, 7 x 203 mm (8") DC, 203 mm (8") Jars, 2 x 203 mm (8") DC, X/O, 15 x 127 mm (5") HWDP					

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.52m	311mm	0mm	JT6901	Smith MA89PX 7 x 14 nozzles
Near Bit Stabiliser	2.11m	311mm	0mm	47602	c/w Ported Float
Pony Drill Collar	3.04m	210mm	0mm	49059	
Stab	2.08m	311mm	0mm	AIB1134	
FEWD Tools	12.90m	203mm	0mm	Various	FEWD - DA90077824/XH1GR8 Pulser - 1056014 Directional - DM90061480MB
NM Pony Drill Collar	2.93m	207mm	0mm	47637	
Drill Collar	62.27m	200mm	0mm	Various	
Jar	9.20m	210mm	0mm	DAH02220	
Drill Collar	17.90m	202mm	0mm	Various	
X/O	1.09m	203mm	0mm	SANTOS	
HWDP	138.37m	162mm	0mm	Various	

Survey

MD (m)	Incl Deg (deg)	Corr. Az (deg)	TVD (m)	'V' Sect (m)	Dogleg (deg/30m)	N/S (m)	E/W (m)	Tool Type
1067.61	5.7	249.4	1067.13	-16.46	1.39	-16.46	-7.41	MWD
1150.27	5.5	253.0	1149.39	-19.07	0.15	-19.07	-15.08	MWD
1178.55	5.5	254.5	1177.54	-19.84	0.15	-19.84	-17.70	MWD
1207.09	5.5	252.6	1205.94	-20.61	0.20	-20.61	-20.33	MWD
1294.00	5.4	250.7	1292.46	-23.21	0.07	-23.21	-28.15	MWD
1322.59	5.3	252.0	1320.93	-24.06	0.16	-24.06	-30.67	MWD

Bulk Stocks						Personnel On Board	
Name	Unit	In	Used	Adjust	Balance	Company	Pax
Fuel	m3	0	11.6	0	228.2	Santos	5
Drill Water	m3	120	22.5	0	634.9	DOGC	46
Potable Water	m3	26	34.3	0	245.6	ESS	8
Gel	sx	0	0	0	1,122.0	Dowell	2
Cement	sx	0	0	0	2,272.0	Geoservices	6
Barite	sx	0	126	0	1,806.0	Fugro	6
KCl Brine	bbl	0	0	0	0.0	Cameron	2
						MI	2
						Weatherford	4
						Sperry-Sun	3
						Expro	3
						Total	87

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	2.08sg / 0sg	654.8m / 654.8m	Lead: 258 bbl, 12.5 ppg, Class G Tail: 91 bbl, 15.8 ppg, Class G

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	18 Jun 2005	6 Days	Abandon Drill
BOP Test	21 Jun 2005	3 Days	BOP Test
Environmental Incident	02 May 2005	53 Days	None reported since commencement of campaign.
Fire Drill	18 Jun 2005	6 Days	Fire Drill
First Aid	04 May 2005	51 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	53 Days	None reported since commencement of campaign.
Man Overboard Drill	18 Jun 2005	6 Days	Man Overboard Drill
Near Miss	20 Jun 2005	4 Days	Failed compensator tensioner cable, release of compensator fluid.
Safety Meeting	19 Jun 2005	5 Days	Weekly Safety Meeting
Stop Cards	24 Jun 2005	0 Days	7 Stop Cards

Marine									
Weather check on 24 Jun 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	15km/h	090deg	1028.00bar	15.0C°	0.2m	090deg	0m/sec	1	11.39
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		2	12.52
0.6deg	0.5deg	0.50m	1.5m	225deg	2m/sec	Clear		3	8.89
Rig Dir.	Ris. Tension	VDL	Comments				4	8.48	
251.0deg	12.25mt	209.47mt					5	11.11	
							6	11.79	
							7	12.88	
							8	11.11	

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	444
				Drill Water	m3	0
				Potable Water	m3	324
				Gel	t	42
				Cement	t	38
				Barite	t	0
				KCl Brine	bbl	0
Pacific Wrangler			Portland	Item	Unit	Quantity
				Fuel	m3	456.8
				Drill Water	m3	0
				Potable Water	m3	84
				Gel	t	0
				Cement	t	0
				Barite	t	0
				KCl Brine	bbl	0

Helicopter Movement				
Flight #	Time	Destination	Comment	Pax
1	10:04	Ocean Patriot		8
1	10:15	Essendon		9

From : Richard Buitenhuis / Pat King
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	1690.0m	Cur. Hole Size	311mm	AFE Cost	
Field	Casino	TVD	1687.0m	Casing OD	340mm	AFE No.	5746022
Drill Co.	DOGC	Progress	347.0m	Shoe TVD	654.8m	Daily Cost	
Rig	Ocean Patriot	Days from spud		F.I.T. / L.O.T.	0sg / 2.08sg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	11.13			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	Back reaming out of tight hole at 1500 m.				
RT-ML	89.7m	Planned Op	Back ream out of hole to 1392 m. RIH for wiper trip. POH. Run & cement 273 mm (10-3/4") x 244 mm (9-5/8") casing.				

Summary of Period 0000 to 2400 Hrs

Drilled 311 mm (12-1/4") hole from 1343 m to 1392 m. POH for bit change. RIH with new bit. Drilled 311 mm (12-1/4") hole from 1392 m to 1690 m.

Formations

Name	Top (MD)	Top (TVD)	Comment

Operations For Period 0000 Hrs to 2400 Hrs on 25 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
IH	P	DA	0000	0030	0.50	1355.0m	Drilled ahead 311 mm (12-1/4") hole from 1343 m to 1355 m. [Avg parameters: 3785 l/min (1000 gal/min), 7 - 9 t (15 - 20 klb) WOB, 140 rpm, ROP 24 m/hr]
IH	P	DA	0030	0100	0.50	1371.0m	Drilled ahead 311 mm (12-1/4") hole from 1355 m to 1371 m [Avg. parameters: 3785 l/min (1000 gal/min), 7 - 9 t (15 - 20 klb) WOB, 140 rpm, ROP 32 m/hr]
IH	P	DA	0100	0230	1.50	1385.0m	Drilled ahead 311 mm (12-1/4") hole from 1371 m to 1385 m ROP down to 4 m/hr. [Avg. parameters: 3785 l/min (1000 gal/min), 7 - 15 t (15 - 25 klb) WOB, 100 - 140 rpm, ROP 9.3 m/hr]
IH	P	DA	0230	0300	0.50	1387.0m	Drilled ahead 311 mm (12-1/4") hole from 1385 m to 1387 m ROP down to 2 m/hr. Possible bit balling - no change in ROP or torque with WOB or RPM. [Avg. parameters: 3785 l/min (1000 gal/min), 4.5 - 15 t (10 - 25 klb) WOB, 80 - 150 rpm, ROP 4 m/hr]
IH	P	OA	0300	0315	0.25	1387.0m	Took weight off bit. Pumped 7 m3 (45 bbl) 8% KCl Brine lo-vis sweep to clear bit. Rotated string (140 rpm)
IH	P	DA	0315	0430	1.25	1392.0m	Drilled ahead 311 mm (12-1/4") hole from 1387 m to 1392 m No change in ROP or torque with WOB or RPM. [Avg. parameters: 3785 l/min (1000 gal/min), 0 - 15 t (0 - 25 klb) WOB, 80 - 160 rpm, ROP 4 m/hr]
IH	P	TO	0430	1000	5.50	1392.0m	POH for bit change from 1392 m to surface, working tight hole from 1313 m to 1284 m (Max 18 t / 40,000 lb overpull) and pumping slug at 1140 m. Broke out Bit #4RR, downloaded FEWD.
IH	P	TI	1000	1400	4.00	1392.0m	Made up Bit #5 Reed Hycalog DSX104. RIH with 311 mm (12-1/4") BHA. Washed and reamed last stand to bottom.
IH	P	DA	1400	2400	10.00	1690.0m	Drilled ahead 311 mm (12-1/4") hole from 1392 m - 1690 m [Avg. parameters: 3700 l/min (980 gal/min), 2 - 9 t (5 - 20 klb) WOB, 150-180 rpm, ROP 30 m/hr]

Operations For Period 0000 Hrs to 0600 Hrs on 26 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
IH	P	DA	0000	0130	1.50	1730.0m	Drilled ahead 311 mm (12-1/4") hole from 1690 m to 1730 m (Section TD - Tide Corrected) Survey: 6.06 deg Az 251.82 deg @ 1712.4 m. [Avg. parameters: 3700 l/min (980 gal/min), 2 - 9 t (5 - 20 klb) WOB, 160 rpm, ROP 26.7 m/hr]
IH	P	CHC	0130	0300	1.50	1730.0m	Pumped 16 m3 (100 bbl) hi-vis sweep. Circulated 2 x bottoms up whilst boosting riser, reciprocating and rotating pipe. (Shakers Clean)
PC	P	WIN	0300	0600	3.00	1730.0m	(IN PROGRESS) Flow checked. Well static. POH with 311 mm (12-1/4") BHA from 1730 m to 1685 m. (Worked through tight hole from 1714 m to 1685 m (18 t / 40,000 lb overpull)). Attempted to POH from 1685 m. Pulling tight (18 t / 40,000 lb overpull). Backreamed out of hole from 1714 m to 1140. Attempted POH a@ 1390m - 18t (40

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description				
							klb overpull)				
WBM Data											
Mud Type:	KCL/Polymer	API FL:	4cm ³ /30m	Cl:	45000	Solids:	12	Viscosity:	0sec/L		
Sample-From:	Pit 3	Filter-Cake:	1mm	K+C*1000:	6%	H2O:	88%	PV:	0.017Pa/s		
Time:	21:00	HTHP-FL:	0cm ³ /30m	Hard/Ca:	1040	Oil:	0%	YP:	0.187MPa		
Weight:	1.25sg	HTHP-Cake:	0mm	MBT:	6	Sand:		Gels 10s:	0.062		
Temp:	48.0C°			PM:	0.4	pH:	8	Gels 10m:	0.072		
				PF:	0.1	PHPA:	Oppb	Fann 003:	11		
								Fann 006:	14		
								Fann 100:	37		
								Fann 200:	47		
								Fann 300:	56		
								Fann 600:	73		
Bit # 4RR											
Size ("):	311mm	IADC#	M223	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run		
Mfr:	SMITH	WOB(avg)	0.54mt	No.	Size	Progress			49.0m		
Type:	PDC	RPM(avg)	150	7	14/32nd"	On Bottom Hrs			4.00h		
Serial No.:	JT6901	F.Rate	3785lpm			IADC Drill Hrs			5.20h		
Bit Model	MA89PX	SPP	20684kPa			Total Revs			0		
Depth In	1160.0m	TFA	1.052			ROP(avg)			12.25 m/hr		
Depth Out	1392.0m					ROP(avg)			15.26 m/hr		
Run Comment Ran into Casino 4 but POH due to hang up inside casing.											
Bit # 5											
Size ("):	311mm	IADC#		Nozzles		Drilled over last 24 hrs			Calculated over Bit Run		
Mfr:	HYCALOG	WOB(avg)	0.68mt	No.	Size	Progress			298.0m		
Type:	PDC	RPM(avg)	165	2	18/32nd"	On Bottom Hrs			6.30h		
Serial No.:	110402	F.Rate	3596lpm	3	16/32nd"	IADC Drill Hrs			8.70h		
Bit Model	DSX104	SPP	22063kPa			Total Revs			0		
Depth In	1392.0m	TFA	1.086			ROP(avg)			47.30 m/hr		
Depth Out						ROP(avg)			47.30 m/hr		
BHA # 4											
Weight(Wet)	2.27mt	Length	252.4m	Torque(max)		0Nm		D.C. (1) Ann Velocity			
Wt Below Jar(Wet)	1.72mt	String	9.53mt	Torque(Off.Btm)		0Nm		D.C. (2) Ann Velocity			
		Pick-Up	0mt	Torque(On.Btm)		0Nm		H.W.D.P. Ann Velocity			
		Slack-Off	0mt					D.P. Ann Velocity			
BHA Run Description 311 mm (12-1/4") PDC Bit, 311 mm (12-1/4") NB Stab, 203 mm (8") Pony DC, 311 mm (12-1/4") Stab, Sperry FEWD, Pulser, Directional, 203 mm (8") NMDC, 7 x 203 mm (8") DC, 203 mm (8") Jars, 2 x 203 mm (8") DC, X/O, 15 x 127 mm (5") HWDP											
Equipment			Length	OD	ID	Serial #	Comment				
Bit			0.52m	311mm	0mm	JT6901	Smith MA89PX 7 x 14 nozzles				
Near Bit Stabiliser			2.11m	311mm	0mm	47602	c/w Ported Float				
Pony Drill Collar			3.04m	210mm	0mm	49059					
Stab			2.08m	311mm	0mm	AIB1134					
FEWD Tools			12.90m	203mm	0mm	Various	FEWD - DA90077824/XH1GR8 Pulser - 1056014 Directional - DM90061480MB				
NM Pony Drill Collar			2.93m	207mm	0mm	47637					
Drill Collar			62.27m	200mm	0mm	Various					
Jar			9.20m	210mm	0mm	DAH02220					
Drill Collar			17.90m	202mm	0mm	Various					
X/O			1.09m	203mm	0mm	SANTOS					
HWDP			138.37m	162mm	0mm	Various					

BHA # 5						
Weight(Wet)	2.27mt	Length	252.2m	Torque(max)	0Nm	D.C. (1) Ann Velocity
Wt Below Jar(Wet)	1.72mt	String	9.53mt	Torque(Off.Btm)	0Nm	D.C. (2) Ann Velocity
		Pick-Up	0mt	Torque(On.Btm)	0Nm	H.W.D.P. Ann Velocity
		Slack-Off	0mt			D.P. Ann Velocity

BHA Run Description 311 mm (12-1/4") PDC Bit, 311 mm (12-1/4") NB Stab, 203 mm (8") Pony DC, 311 mm (12-1/4") Stab, Sperry FEWD, Pulser, Directional, 203 mm (8") NMDC, 7 x 203 mm (8") DC, 203 mm (8") Jars, 2 x 203 mm (8") DC, X/O, 15 x 127 mm (5") HWDP

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.32m	311mm	0mm	110402	Reed Hycalog DSX104 3 x 16, 2 x 18 nozzles
Near Bit Stabiliser	2.11m	311mm	0mm	47602	c/w Ported Float
Pony Drill Collar	3.04m	210mm	0mm	49059	
Stab	2.08m	311mm	0mm	AIB1134	
FEWD Tools	12.90m	203mm	0mm	Various	FEWD - DA90077824/XH1GR8 Pulser - 1056014 Directional - DM900614800B
NM Pony Drill Collar	2.93m	207mm	0mm	47637	
Drill Collar	62.27m	200mm	0mm	Various	
Jar	9.20m	210mm	0mm	DAH02220	
Drill Collar	17.90m	202mm	0mm	Various	
X/O	1.09m	203mm	0mm	SANTOS	
HWDP	138.37m	162mm	0mm	Various	

Survey								
MD (m)	Incl Deg (deg)	Corr. Az (deg)	TVD (m)	'V' Sect (m)	Dogleg (deg/30m)	N/S (m)	E/W (m)	Tool Type
1492.55	5.4	251.3	1490.16	-28.93	0.21	-28.93	-45.66	MWD
1521.49	5.5	253.6	1518.96	-29.76	0.26	-29.76	-48.29	MWD
1550.14	5.6	251.9	1547.48	-30.58	0.17	-30.58	-50.94	MWD
1607.59	5.9	251.4	1604.64	-32.39	0.17	-32.39	-56.37	MWD
1636.21	5.9	253.0	1633.11	-33.28	0.17	-33.28	-59.16	MWD
1664.65	6.2	254.1	1661.39	-34.13	0.35	-34.13	-62.03	MWD

Bulk Stocks						Personnel On Board			
Name	Unit	In	Used	Adjust	Balance	Company	Pax		
Fuel	m3	200	12.7	0	415.5	Santos	7		
Drill Water	m3	0	35	0	599.9	DOGC	46		
Potable Water	m3	28	28.8	0	244.8	ESS	8		
Gel	sx	0	0	0	1,122.0	Dowell	2		
Cement	sx	0	0	0	2,272.0	Geoservices	6		
Barite	sx	0	0	0	1,806.0	Fugro	6		
KCl Brine	bbl	0	0	0	0.0	Cameron	2		
						MI	2		
						Weatherford	7		
						Sperry-Sun	3		
						Expro	3		
							Total	92	

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	2.08sg / 0sg	654.8m / 654.8m	Lead: 258 bbl, 12.5 ppg, Class G Tail: 91 bbl, 15.8 ppg, Class G

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	18 Jun 2005	7 Days	Abandon Drill
BOP Test	21 Jun 2005	4 Days	BOP Test
Environmental Incident	02 May 2005	54 Days	None reported since commencement of campaign.
Fire Drill	18 Jun 2005	7 Days	Fire Drill
First Aid	04 May 2005	52 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	54 Days	None reported since commencement of campaign.
Man Overboard Drill	18 Jun 2005	7 Days	Man Overboard Drill
Near Miss	20 Jun 2005	5 Days	Failed compensator tensioner cable, release of compensator fluid.
Safety Meeting	19 Jun 2005	6 Days	Weekly Safety Meeting
Stop Cards	25 Jun 2005	0 Days	12 Stop Cards

Marine										
Weather check on 25 Jun 2005 at 2400							Rig Support			
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)	
18.5km	22km/h	090deg	1031.00bar	15.0C°	0.2m	090deg	0m/sec	1	11.61	
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments				
0.6deg	0.5deg	0.50m	1.5m	203deg	2m/sec	Clear				
Rig Dir.	Ris. Tension	VDL	Comments							
251.0deg	12.25mt	209.47mt								
								2	12.70	
								3	8.98	
								4	8.80	
								5	11.02	
								6	11.79	
								7	12.79	
								8	11.02	

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	225
				Drill Water	m3	0
				Potable Water	m3	318
				Gel	t	42
				Cement	t	38
				Barite	t	0
				NaCl Brine	bbf	1500
Pacific Wrangler			Portland	Item	Unit	Quantity
				Fuel	m3	456.8
				Drill Water	m3	0
				Potable Water	m3	84
				Gel	t	0
				Cement	t	0
				Barite	t	0
				KCl Brine	bbf	0

Helicopter Movement				
Flight #	Time	Destination	Comment	Pax
1	09:56	Ocean Patriot		5
1	10:08	Essendon		0

From : Richard Buitenhuis / Pat King
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	1730.0m	Cur. Hole Size	311mm	AFE Cost	
Field	Casino	TVD	1726.0m	Casing OD	340mm	AFE No.	5746022
Drill Co.	DOGC	Progress	40.0m	Shoe TVD	654.8m	Daily Cost	
Rig	Ocean Patriot	Days from spud		F.I.T. / L.O.T.	0sg / 2.08sg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	12.13			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	Running 244 mm (9-5/8") casing at 1100 m.				
RT-ML	89.7m	Planned Op	Complete running 244 mm (9-5/8") x 273 mm (10-3/4") casing. Cement in place. Run wear bushing. Make up 216 mm (8-1/2") BHA and RIH.				

Summary of Period 0000 to 2400 Hrs

Drilled 311 mm (12-1/4") hole from 1690 to 1730 m. Circulated clean. Backreamed out of hole to 1140 m. RIH for wiper trip. POH to surface. Retrieved wear bushing. Commenced running 244 mm (9-5/8") casing.

Formations

Name	Top (MD)	Top (TVD)	Comment

Operations For Period 0000 Hrs to 2400 Hrs on 26 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
IH	P	DA	0000	0130	1.50	1730.0m	Drilled ahead 311 mm (12-1/4") hole from 1690 m to 1730 m (Section TD - Tide Corrected). Survey: 6.06 deg Az 251.82 deg @ 1712.4 m. [Avg. parameters: 3700 l/min (980 gal/min), 2 - 9 t (5 - 20 klb) WOB, 160 rpm, ROP 26.7 m/hr]
IH	P	CHC	0130	0300	1.50	1730.0m	Pumped 16 m3 (100 bbl) hi-vis sweep. Circulated 2 x bottoms up whilst boosting riser, reciprocating and rotating pipe. (Shakers Clean)
PC	P	WIN	0300	0900	6.00	1730.0m	Flow checked. Well static. POH with 311 mm (12-1/4") BHA from 1730 m to 1685 m. (Worked through tight hole from 1714 m to 1685 m (18 t / 40,000 lb overpull)). Attempted to POH from 1685 m. Pulling tight (18 t / 40,000 lb overpull). Backreamed out of hole from 1714 m to 1140. Attempted POH a@ 1390m - 18t (40 klb overpull)
PC	P	TI	0900	1015	1.25	1730.0m	RIH to section TD. No drag noted.
PC	P	CHC	1015	1100	0.75	1730.0m	Circulated hole clean.
PC	P	TO	1100	1700	6.00	1730.0m	POH (no overpull), racked back BHA, downloaded Sperry FEWD tools and broke out bit.
PC	P	WH	1700	2000	3.00	1730.0m	Picked up wear bushing retrieval tool. Made up jetting sub and 1 stand of 127 mm (5") drill pipe below tool. Made up 1 stand of 127 mm (5") drill pipe and 476 mm (18-3/4") tool stabiliser to retrieval tool and RIH. Retrieved 476 mm (18-3/4") x 330 mm (13") wear bushing from wellhead. (32 t / 70,000 lb overpull) POH with wear bushing.
PC	P	RRC	2000	2100	1.00	1730.0m	Held JSA - running casing. Rigged up to run 244 mm (9-5/8") casing.
PC	P	OA	2100	2130	0.50	1730.0m	Picked up 244 mm (9-5/8") flow head landing joint and saver sub. Broke out saver sub. Laid out same.
PC	P	CRN	2130	2215	0.75	1730.0m	Picked up 244 mm (9-5/8") 70 kg/m (47 lb/ft) L80 BTC casing shoe joint. Filled with seawater to confirm floats clear. Picked up 244 mm (9-5/8") 70 kg/m (47 lb/ft) L80 BTC intermediate joint and made up same to casing shoe joint. Picked up 244 mm (9-5/8") 70 kg/m (47 lb/ft) L80 13Cr80 BTC x KS Bear float joint, confirmed floats clear and made up same to intermediate joint.
PC	P	CRN	2215	2245	0.50	1730.0m	Rigged up TAM packer and single joint elevators.
PC	P	CRN	2245	2400	1.25	1730.0m	RIH 6 joints 244 mm (9-5/8") 70 kg/m (47 lb/ft) 13Cr80 KS Bear casing from 38 m to 110 m. (Casing hung up at 94 m & 106 m. Worked through for approx. 30 mins)

Operations For Period 0000 Hrs to 0600 Hrs on 27 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PC	P	CRN	0000	0130	1.50	1730.0m	RIH 10 joints 244 mm (9-5/8") 70 kg/m (47 lb/ft) 13Cr80 KS Bear casing from 110 m to 230 m, filling every 5 joints. Made up 244 mm (9-5/8") BS Bear x Vam Top X-Over and RIH to 241 m.
PC	P	CRN	0130	0600	4.50	1730.0m	RIH 72 joints 244 mm (9-5/8") 70 kg/m (47 lb/ft) L80 Vam Top casing from 241 m to 1100 m, filling every 5 joints. Broke circulation at 340 mm (13-3/8") casing shoe and every 400 m thereafter.

WBM Data									
Mud Type:	KCL/Polymer	API FL:	5cm³/30m	Cl:	46000	Solids:	10	Viscosity:	0sec/L
Sample-From:	Pit 3	Filter-Cake:	1mm	K+C*1000:	6.5%	H2O:	90%	PV:	0.014Pa/s
Time:	04:30	HTHP-FL:	0cm³/30m	Hard/Ca:	1160	Oil:	0%	YP:	0.172MPa
Weight:	1.25sg	HTHP-Cake:	0mm	MBT:	5	Sand:		Gels 10s:	0.048
Temp:	30.0C°			PM:	0	pH:	7.9	Gels 10m:	0.072
				PF:	0.05	PHPA:	Oppb	Fann 003:	9
								Fann 006:	12
								Fann 100:	33
								Fann 200:	42
								Fann 300:	50
								Fann 600:	64
Comment IDCAP-D 2.5 ppb									

Bit # 5				Wear	I	O1	D	L	B	G	O2	R
					1	1	BT	T	X	I	NO	TD
Size ("):	311mm	IADC#		Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	HYCALOG	WOB(avg)	0.54mt	No.	Size	Progress	40.0m	Cum. Progress	338.0m			
Type:	PDC	RPM(avg)	170	2	18/32nd"	On Bottom Hrs	1.10h	Cum. On Btm Hrs	7.40h			
Serial No.:	110402	F.Rate	3331lpm	3	16/32nd"	IADC Drill Hrs	1.30h	Cum IADC Drill Hrs	10.00h			
Bit Model	DSX104	SPP	22408kPa			Total Revs	0	Cum Total Revs	0			
Depth In	1392.0m	TFA	1.086			ROP(avg)	36.36 m/hr	ROP(avg)	45.68 m/hr			
Depth Out	1730.0m											

BHA # 5						
Weight(Wet)	2.27mt	Length	252.2m	Torque(max)	0Nm	D.C. (1) Ann Velocity
Wt Below Jar(Wet)	1.72mt	String	9.53mt	Torque(Off.Btm)	0Nm	D.C. (2) Ann Velocity
		Pick-Up	0mt	Torque(On.Btm)	0Nm	H.W.D.P. Ann Velocity
		Slack-Off	0mt			D.P. Ann Velocity
BHA Run Description 311 mm (12-1/4") PDC Bit, 311 mm (12-1/4") NB Stab, 203 mm (8") Pony DC, 311 mm (12-1/4") Stab, Sperry FEWD, Pulser, Directional, 203 mm (8") NMDC, 7 x 203 mm (8") DC, 203 mm (8") Jars, 2 x 203 mm (8") DC, X/O, 15 x 127 mm (5") HWDP						

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.32m	311mm	0mm	110402	Reed Hycalog DSX104 3 x 16, 2 x 18 nozzles
Near Bit Stabiliser	2.11m	311mm	0mm	47602	c/w Ported Float
Pony Drill Collar	3.04m	210mm	0mm	49059	
Stab	2.08m	311mm	0mm	AIB1134	
FEWD Tools	12.90m	203mm	0mm	Various	FEWD - DA90077824/XH1GR8 Pulser - 1056014 Directional - DM900614800B
NM Pony Drill Collar	2.93m	207mm	0mm	47637	
Drill Collar	62.27m	200mm	0mm	Various	
Jar	9.20m	210mm	0mm	DAH02220	
Drill Collar	17.90m	202mm	0mm	Various	
X/O	1.09m	203mm	0mm	SANTOS	
HWDP	138.37m	162mm	0mm	Various	

Bulk Stocks						Personnel On Board	
Name	Unit	In	Used	Adjust	Balance	Company	Pax
Fuel	m3	0	19.5	0	396.0	Santos	7
Drill Water	m3	0	62.5	0	537.4	DOGC	46
Potable Water	m3	30	25.9	0	248.9	ESS	8
Gel	sx	0	0	0	1,122.0	Dowell	2
Cement	sx	0	0	0	2,272.0	Geoservices	6
Barite	sx	0	399	0	1,407.0	Fugro	6
KCl Brine	bbl	0	0	0	0.0	Cameron	2
						MI	2
						Weatherford	7
						Sperry-Sun	3
						Expro	3
Total							92

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	2.08sg / 0sg	654.8m / 654.8m	Lead: 258 bbl, 12.5 ppg, Class G Tail: 91 bbl, 15.8 ppg, Class G

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	26 Jun 2005	0 Days	Abandon Drill
BOP Test	21 Jun 2005	5 Days	BOP Test
Environmental Incident	02 May 2005	55 Days	None reported since commencement of campaign.
Fire Drill	26 Jun 2005	0 Days	Fire Drill
First Aid	04 May 2005	53 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	55 Days	None reported since commencement of campaign.
Man Overboard Drill	18 Jun 2005	8 Days	Man Overboard Drill
Near Miss	20 Jun 2005	6 Days	Failed compensator tensioner cable, release of compensator fluid.
Safety Meeting	26 Jun 2005	0 Days	Weekly Safety Meeting
Stop Cards	26 Jun 2005	0 Days	7 Stop Cards

Marine									
Weather check on 26 Jun 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	15km/h	090deg	1029.00bar	18.0C°	0.1m	090deg	0m/sec	1	11.61
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		2	12.61
0.5deg	0.3deg	0.50m	1.5m	225deg	2m/sec	Clear		3	8.80
Rig Dir.	Ris. Tension	VDL	Comments				4	8.39	
251.0deg	12.25mt	205.02mt					5	11.02	
							6	11.79	
							7	13.02	
							8	11.20	

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	215
				Drill Water	m3	0
				Potable Water	m3	315
				Gel	t	42
				Cement	t	38
				Barite	t	0
				NaCl Brine	bbl	1500
Pacific Wrangler			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	443.6
				Drill Water	m3	433
				Potable Water	m3	333
				Gel	t	43
				Cement	t	38
				Barite	t	43
				KCl Brine	bbl	0

From : Richard Buitenhuis / Pat King
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	1730.0m	Cur. Hole Size	311mm	AFE Cost	
Field	Casino	TVD	1727.0m	Casing OD	244mm	AFE No.	5746022
Drill Co.	DOGC	Progress	0m	Shoe TVD	1716.0m	Daily Cost	
Rig	Ocean Patriot	Days from spud		F.I.T. / L.O.T.	Osg / Osg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	13.13			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	RIH with 216 mm (8-1/2") BHA.				
RT-ML	89.7m	Planned Op	RIH with 216 mm (8-1/2") BHA. Drill out cement and shoe track. Drill ahead 216 mm (8-1/2") hole to TD.				

Summary of Period 0000 to 2400 Hrs

Continued to run 273 mm (10-3/4") x 244 mm (9-5/8") casing to TD. Cemented casing. Set seal assembly.

Formations

Name	Top (MD)	Top (TVD)	Comment

Operations For Period 0000 Hrs to 2400 Hrs on 27 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PC	P	CRN	0000	0130	1.50	1730.0m	RIH 10 joints 244 mm (9-5/8") 70 kg/m (47 lb/ft) 13Cr80 KS Bear casing from 110 m to 230 m, filling every 5 joints. Made up 244 mm (9-5/8") BS Bear x Vam Top X-Over and RIH to 241 m.
PC	P	CRN	0130	0830	7.00	1730.0m	RIH 109 joints 244 mm (9-5/8") 70 kg/m (47 lb/ft) L80 Vam Top casing from 241 m to 1535 m, filling every 5 joints. Broke circulation at 340 mm (13-3/8") casing shoe and every 400 m thereafter.
PC	P	CRN	0830	0900	0.50	1730.0m	Laid out Tam Packer. Made up 273 mm (10-3/4") x 244 mm (9-5/8") L80 Vam Top X-Over joint. Rigged up 273 mm (10-3/4") elevators. Made up Tam Packer.
PC	P	CRN	0900	1000	1.00	1730.0m	Changed out FMS, RIH 7 joints 273 mm (10-3/4") 83 kg/m (55-1/2 lb/ft) L80 Vam Top casing to 1631 m.
PC	P	CRN	1000	1100	1.00	1730.0m	Broke circulation, laid out Tam Packer, picked up Cameron Casing Hanger & Seal Assembly Running Tool (CHSART) c/w 273 mm (10-3/4") seal assembly, casing hanger and Dowell Deep Sea Express plug basket. P/U Hookload 140.6 t (310 klb), S/O Hookload 139.2 t (307 klb).
PC	P	CRN	1100	1130	0.50	1730.0m	RIH 273 mm (10-3/4") x 244 mm (9-5/8") casing and CHSART assembly on 127 mm (5") drill pipe to 1706 m.
PC	P	CRN	1130	1345	2.25	1730.0m	Worked and washed casing from 1706 m to 1719 m. Made several attempts to land out casing. Closed annular and bled-off same gradually to centralise casing hanger. Successfully landed out casing hanger (Casing hanger land off at 86.4 m. Casing Shoe at 1719.8 m). Opened annular.
PC	P	CMC	1345	1415	0.50	1730.0m	Rigged down casing running equipment. Rigged up cementing lines. Held JSA for cement job whilst circulating @ 1520 l/min (400 gal/min).
PC	P	CMC	1415	1700	2.75	1730.0m	Cemented 273 mm (10-3/4") x 244 mm (9-5/8") casing. (Lead: 9.1 m3 / 57 bbl, 144 sx Class G, 1.5 sg / 12.5 ppg, TOC 1320 m) (Tail: 7.3 m3 / 46 bbl, 225 sx Class G, 1.9 sg / 15.8 ppg, TOC 1570 m) Pumped 0.8 m3 (5 bbl) drill water. Pressure tested lines to 34500 kPa (5000 psi) Bottom plug release pressure: 20700 kPa (3000 psi) Pumped 0.8 m3 (5 bbl) drill water. Mixed and pumped Lead: 9.1 m3 (57 bbl) 1.5 sg (12.5 ppg) Class G Mixed and pumped Tail: 7.3 m3 (46 bbl) 1.9 sg (15.8 ppg) Class G Top plug release pressure: 20700 kPa (3000 psi) Displaced: 0.3 m3 (2 bbl) tail slurry, 3.2 m3 (20 bbl) mud with Dowell unit, 60 m3 (377 bbl) mud with rig pumps. Bumped plug to 7580 kPa (1100 psi) over final circulating pressure. Pressure tested casing to 27580 kPa (4000 psi) for 10 minutes. Floats held. Bled back 0.9 m3 (5.5 bbl).
PC	TP (VE)	CMC	1700	1800	1.00	1730.0m	Set down 9 t (20,000 lb) weight on CHSART to close internal ball valve and latched seal assembly (6 turns). Pressured up to 31000 kPa (4500 psi) down landing string using Dowell cement unit to set 273 mm (10-3/4") seal assembly (Volume pumped indicated pressuring up against casing). Attempted to pressure test seal assembly down kill line. No test. Suspect ball valve not closed.
PC	TP (VE)	CMC	1800	1830	0.50	1730.0m	Rigged down cementing lines and unlatched CHSART c/w seal assembly.
PC	TP	CMC	1830	1900	0.50	1730.0m	POH with CHSART c/w seal assembly and inspected same. Drill cuttings / plug debris

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PC	(VE)						noted on assembly.
PC	P	CMC	1900	1930	0.50	1730.0m	Broke out Dowell Deep Sea Express plug basket / launcher and laid out same.
PC	TP (VE)	CMC	1930	2030	1.00	1730.0m	Serviced Cameron CHSART tool. Cycled tool on surface - OK.
PC	TP (VE)	CMC	2030	2200	1.50	1730.0m	Made up jetting sub below Cameron CHSART c/w seal assembly. RIH on 1 x 127 mm (5") drill pipe, 3 x 165 mm (6.5") drill collars and 2 x 127 mm (5") HWDP.
PC	TP (VE)	CMC	2200	2230	0.50	1730.0m	Landed out CHSART c/w seal assembly and latched (6 turns). Picked up 18 t (40,000 lb) overpull to open internal ball valve. Broke circulation to confirm ball valve open (Volume pumped indicated pressuring up against casing - OK) Unlatched CHSART c/w seal assembly and picked up out of wellhead. Jetted casing hanger and seal bore.
PC	P	CMC	2230	2400	1.50	1730.0m	Landed out and latched seal assembly (6 turns). Set down 2.3 t (5000 lb) to close ball valve. Pressured up to 31000 kPa (4500 psi) down landing string using Dowell cement unit to set 273 mm (10-3/4") seal assembly (Volume pumped indicated pressuring up against ball valve). Pressure tested seal assembly to 34500 kPa (5000 psi) down kill line - good test.

Operations For Period 0000 Hrs to 0600 Hrs on 28 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PC	P	WH	0000	0100	1.00	1730.0m	POH with Cameron CHSART after setting 273 mm (10-3/4") seal assembly. Lay out CHSART.
PC	P	HT	0100	0300	2.00	1730.0m	Laid out Sperry FEWD tools / collars / stabilisers.
PC	P	RS	0300	0330	0.50	1730.0m	Serviced TDS, block and dolly rollers.
PC	P	HBHA	0330	0400	0.50	1730.0m	Rigged up to run 216 mm (8-1/2") BHA. Picked up Sperry FEWD, directional and pulser tools, stabilisers and pony drill collars.
PC	P	HBHA	0400	0530	1.50	1730.0m	Commenced making up 216 mm (8-1/2") BHA.
PC	P	HT	0530	0600	0.50	1730.0m	Confidence tested and initialised Sperry FEWD tools.

WBM Data

Mud Type:	Flo Pro	API FL:	5cm³/30m	Cl:	144000	Solids:	13	Viscosity:	0sec/L
Sample-From:	Pit	Filter-Cake:	1mm	K+C*1000:	6%	H2O:	87%	PV:	0.014Pa/s
Time:	16:00	HTHP-FL:	0cm³/30m	Hard/Ca:	80	Oil:	0%	YP:	0.158MPa
Weight:	1.25sg	HTHP-Cake:	0mm	MBT:	0	Sand:		Gels 10s:	0.067
Temp:	24.0C°			PM:	0	pH:	9.9	Gels 10m:	0.081
				PF:	0.2	PHPA:	Oppb	Fann 003:	14
								Fann 006:	17
								Fann 100:	32
								Fann 200:	40
								Fann 300:	47
								Fann 600:	61

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Fuel	m3	0	22.4	0	373.6
Drill Water	m3	0	14.5	0	522.9
Potable Water	m3	28	25.8	0	251.1
Gel	sx	0	0	0	1,122.0
Cement	sx	0	587	0	1,685.0
Barite	sx	0	0	0	1,407.0
KCl Brine	bbl	0	0	0	0.0

Personnel On Board

Company	Pax
Santos	7
DOGC	46
ESS	8
Dowell	2
Geoservices	6
Fugro	6
Cameron	2
MI	2
Weatherford	7
Sperry-Sun	3
Expro	3
Total	92

Casing

OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	2.08sg / 0sg	654.8m / 654.8m	Lead: 258 bbl, 12.5 ppg, Class G Tail: 91 bbl, 15.8 ppg, Class G
244	0sg / 0sg	1719.8m / 1716.0m	Lead: 9 m3 (57 bbl) 1.5 sg (12.5 ppg) Class G Tail: 7.5 m3 (47 bbl) 1.9 sg (15.8 ppg) Class G

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	26 Jun 2005	1 Day	Abandon Drill
BOP Test	21 Jun 2005	6 Days	BOP Test
Environmental Incident	02 May 2005	56 Days	None reported since commencement of campaign.
Fire Drill	26 Jun 2005	1 Day	Fire Drill
First Aid	04 May 2005	54 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	56 Days	None reported since commencement of campaign.
Man Overboard Drill	18 Jun 2005	9 Days	Man Overboard Drill
Near Miss	20 Jun 2005	7 Days	Failed compensator tensioner cable, release of compensator fluid.
Safety Meeting	26 Jun 2005	1 Day	Weekly Safety Meeting
Stop Cards	26 Jun 2005	1 Day	6 Stop Cards

Marine										
Weather check on 27 Jun 2005 at 2400							Rig Support			
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)	
18.5km	0km/h	000deg	1031.00bar	14.0C°	0.1m	000deg	0m/sec	1	11.61	
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments				
0.5deg	0.3deg	0.50m	1.0m	225deg	2m/sec	Clear				
Rig Dir.	Ris. Tension	VDL	Comments							
251.0deg	12.25mt	184.43mt								
								8	11.20	

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Portland	Item	Unit	Quantity
				Fuel	m3	207
				Drill Water	m3	0
				Potable Water	m3	312
				Gel	t	42
				Cement	t	38
				Barite	t	0
NaCl Brine	bbf	700				
Pacific Wrangler			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	433.6
				Drill Water	m3	433
				Potable Water	m3	328
				Gel	t	43
				Cement	t	38
				Barite	t	43
KCl Brine	bbf	0				

From : Ron King / Jeff Thomson
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	1806.0m	Cur. Hole Size	216mm	AFE Cost	
Field	Casino	TVD	1802.0m	Casing OD	244mm	AFE No.	5746022
Drill Co.	DOGC	Progress	76.0m	Shoe TVD	1716.0m	Daily Cost	
Rig	Ocean Patriot	Days from spud	12.21	F.I.T. / L.O.T.	Osg / Osg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	14.13			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	Displacing the hole to CaCl2 brine at 1650mRT				
RT-ML	89.7m	Planned Op	Complete displacing the hole to CaCl2 brine at 1650mRT, POH, run lower completion				

Summary of Period 0000 to 2400 Hrs

Laid out seal assembly, laid out 311mm (12 1/4") BHA, serviced top drive, picked up 216mm (8 1/2") BHA, loaded MWD, RIH to 1643mRT, washed to TOC @ 1694mRT, Drilled plugs, float, cement and shoe, cleaned out rathole to 1730mRT, Displaced hole to Flo Pro, displaced lines to Flo Pro, Conducted SCRs, drilled to 1806mRT, circ B/U, wiper tripped to shoe, circulated hole clean, POH to 947mRT.

Operations For Period 0000 Hrs to 2400 Hrs on 28 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PC	P	WH	0000	0100	1.00	1730.0m	POH with Cameron CHSART after setting 273 mm (10-3/4") seal assembly. Laid out CHSART.
PC	P	HT	0100	0300	2.00	1730.0m	Laid out Sperry FEWD tools / collars / stabilisers.
PC	P	RS	0300	0330	0.50	1730.0m	Serviced TDS, block and dolly rollers.
PC	P	HBHA	0330	0400	0.50	1730.0m	Rigged up to run 216 mm (8-1/2") BHA. Picked up Sperry FEWD, directional and pulser tools, stabilisers and pony drill collars.
PC	P	HBHA	0400	0530	1.50	1730.0m	Commenced making up 216 mm (8-1/2") BHA.
PC	P	HT	0530	0600	0.50	1730.0m	Confidence tested and initialised Sperry FEWD tools.
PH	P	TI	0600	1000	4.00	1730.0m	RIH with BHA, tested MWD, RIH to 1643mRT
PH	P	TI	1000	1030	0.50	1730.0m	Washed in hole from 1643mRt at 1500 l/min (400 gpm) circulating with old mud. Tagged TOC at 1694mRT.
PH	P	DFS	1030	1145	1.25	1730.0m	Drilled cement plugs and float collar, varying drilling parameters. WOB 1-2 t (2-5 klb), RPM 50-90, 2300 l/min 600 gpm, 16mPa (2350 psi).
PH	P	DFS	1145	1400	2.25	1730.0m	Drilled shoetrack cement and float shoe and cleaned out rathole to 1730mRT with old mud. WOB 1-4 t (2-8 klb), RPM 90, 2500 l/min (650 gpm), 17 mPa (2500 psi). Displaced the hole with 1.24 sg (10.3ppg) Flo-Pro mud. Displaced booster, choke and kill lines with Flo-Pro mud. Conducted SCRs: #1 30spm / 360psi , 40 spm / 450 psi, 50 spm / 550 psi
PH	P	DA	1400	1900	5.00	1806.0m	Drilled 216mm (8 1/2") production hole from 1730mRT - 1806mRT (Total Depth).
PH	P	CHC	1900	1945	0.75	1806.0m	Circulated bottoms-up, flow checked well.
PH	P	TO	1945	2015	0.50	1806.0m	POH to 1700mRT. Drag 0-9 t (0 - 20 klb)
PH	P	TI	2015	2030	0.25	1806.0m	RIH to 1806mRT, observed no fill.
PH	P	CHC	2030	2200	1.50	1806.0m	Circulated the hole until shakers were clean while boosting the riser. Rounded cement fragments observed over the shakers.
PH	P	TO	2200	2400	2.00	1806.0m	Conducted a flow check at TD for 15 minutes. POH from 1806mRT to 947mRT.

Operations For Period 0000 Hrs to 0600 Hrs on 29 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PH	P	TO	0000	0100	1.00	1806.0m	POH to 500mRT
PH	P	TO	0100	0330	2.50	1806.0m	RIH to TD at 1806mRT after discussions with town.
PH	P	OA	0330	0430	1.00	1806.0m	Spotted 50 bbls of new Flo Pro 10.3 ppg mud on bottom. Pumped: 8 m3 (50 bbls) new Flo Pro mud 8 m3 (50 bbls) CaCl2 high vis pill Displaced with 6.2 m2 (39 bbls) CaCl2 Brine
PH	P	TO	0430	0530	1.00	1806.0m	POH to 1650mRT, waited to finish mixing completion brine
PH	P	OA	0530	0600	0.50	1806.0m	Displaced hole with 67.6 m3 (425 bbls) of CaCL2 brine.

WBM Data									
Mud Type:	Flo Pro	API FL:	5cm³/30m	Cl:	148000	Solids:	14	Viscosity:	0sec/L
Sample-From:	Pit 3	Filter-Cake:	1mm	K+C*1000:	6.5%	H2O:	86%	PV:	0.014Pa/s
Time:	19:30	HTHP-FL:	0cm³/30m	Hard/Ca:	120	Oil:	0%	YP:	0.153MPa
Weight:	1.23sg	HTHP-Cake:	0mm	MBT:	2.5	Sand:		Gels 10s:	0.057
Temp:	43.0C°			PM:	0.8	pH:	9.7	Gels 10m:	0.067
				PF:	0.1	PHPA:	Oppb	Fann 003:	12
								Fann 006:	14
								Fann 100:	31
								Fann 200:	39
								Fann 300:	46
								Fann 600:	60

Bit # 6				Wear	I	O1	D	L	B	G	O2	R
Size ("):	216mm	IADC#		Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	REED	WOB(avg)	0.23mt	No.	Size	Progress	76.0m	Cum. Progress	76.0m			
Type:	PDC	RPM(avg)	120	2	16/32nd"	On Bottom Hrs	3.70h	Cum. On Btm Hrs	3.70h			
Serial No.:	110996	F.Rate	2650lpm	3	15/32nd"	IADC Drill Hrs	5.90h	Cum IADC Drill Hrs	5.90h			
Bit Model	DSX104	SPP	0kPa			Total Revs	0	Cum Total Revs	0			
Depth In	1730.0m	TFA	0.910			ROP(avg)	20.54 m/hr	ROP(avg)	20.54 m/hr			
Depth Out	0m											

BHA # 6						
Weight(Wet)	1.13mt	Length	265.6m	Torque(max)	16.3Nm	D.C. (1) Ann Velocity
Wt Below Jar(Wet)	2.04mt	String	11.11mt	Torque(Off.Btm)	5.4Nm	D.C. (2) Ann Velocity
		Pick-Up	11.11mt	Torque(On.Btm)	10.9Nm	H.W.D.P. Ann Velocity
		Slack-Off	11.11mt			D.P. Ann Velocity
Equipment	Length	OD	ID	Serial #	Comment	
Bit	0.23m	216mm	0mm	110960		
Near Bit Stabiliser	2.40m	167mm	89mm	DA6028		
Pony Drill Collar	5.04m	170mm	70mm	DA6024		
MWD Tools	9.76m	171mm	76mm	DM4007	DGR EWR DDR SLB	
MWD Tools	2.79m	171mm	76mm	152535	Directional sensor	
MWD Tools	3.05m	171mm	76mm	10599301	Pulser	
8.5in String Stab	1.78m	170mm	71mm	92566	8.5"	
6.5in DC	74.44m	165mm	73mm			
6.5in Jars	9.24m	165mm	70mm	WDAH02928		
6.5in DC	18.56m	165mm	73mm			
5in HWDP	138.37m	127mm	76mm			

Bulk Stocks						Personnel On Board		
Name	Unit	In	Used	Adjust	Balance	Company	Pax	
Fuel	m3	0	29	0	344.6	Santos	7	
Drill Water	m3	150	43	0	629.9	DOGC	46	
Potable Water	m3	32	32	0	251.1	ESS	8	
Gel	sx	0	0	0	1,122.0	Dowell	2	
Cement	sx	0	0	0	1,685.0	Geoservices	6	
Barite	sx	0	0	0	1,407.0	Fugro	6	
KCl Brine	bbf	0	0	0	0.0	Cameron	3	
						MI	2	
						Weatherford	7	
						Sperry-Sun	3	
						Expro	5	
						Baker Oil Tools	1	
Total							96	

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	2.08sg / 0sg	654.8m / 654.8m	Lead: 258 bbl, 12.5 ppg, Class G Tail: 91 bbl, 15.8 ppg, Class G
244	0sg / 0sg	1719.8m / 1716.0m	Lead: 9 m3 (57 bbl) 1.5 sg (12.5 ppg) Class G Tail: 7.5 m3 (47 bbl) 1.9 sg (15.8 ppg) Class G

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	26 Jun 2005	2 Days	Abandon Drill
BOP Test	21 Jun 2005	7 Days	BOP Test
Environmental Incident	02 May 2005	57 Days	None reported since commencement of campaign.
Fire Drill	26 Jun 2005	2 Days	Fire Drill
First Aid	04 May 2005	55 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	57 Days	None reported since commencement of campaign.
Man Overboard Drill	18 Jun 2005	10 Days	Man Overboard Drill
Near Miss	20 Jun 2005	8 Days	Failed compensator tensioner cable, release of compensator fluid.
Safety Meeting	26 Jun 2005	2 Days	Weekly Safety Meeting
Stop Cards	28 Jun 2005	0 Days	2 Stop Cards

Marine									
Weather check on 28 Jun 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	15km/h	225deg	1031.00bar	13.0C°	0.3m	225deg	1m/sec	1	11.39
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		2	12.29
0.5deg	0.3deg	0.50m	1.5m	225deg	2m/sec	Clear		3	12.20
Rig Dir.	Ris. Tension	VDL	Comments			4	8.30	5	11.02
251.0deg	12.25mt	171.91mt				6	12.11	7	13.38
								8	11.70

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	394
				Drill Water	m3	527
				Potable Water	m3	420
				Gel	t	84
				Cement	t	76
				Barite	t	0
NaCl Brine	bbl	700				
Pacific Wrangler			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	423.5
				Drill Water	m3	333
				Potable Water	m3	263
				Gel	t	43
				Cement	t	38
				Barite	t	43
KCl Brine	bbl	0				

Helicopter Movement				
Flight #	Time	Destination	Comment	Pax
1	10:55	Ocean Patriot		8
1	11:09	Essendon		4

From : Ron King, Mike Andronov
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	1806.0m	Cur. Hole Size	216mm	AFE Cost	
Field	Casino	TVD	1802.0m	Casing OD	244mm	AFE No.	5746022
Drill Co.	DOGC	Progress	0m	Shoe TVD	1716.0m	Daily Cost	
Rig	Ocean Patriot	Days from spud	13.21	F.I.T. / L.O.T.	Osg / Osg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	15.13			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	POOH with running tools after setting packer.				
RT-ML	89.7m	Planned Op	RIH to expand ESS and POOH. RIH with Casing Scraper and Riser cleaning assembly.				

Summary of Period 0000 to 2400 Hrs

RIH to TD to spot 7.9m3 (50 bbls) new mud to bottom and displace well with CaCl2. POOH and layed down BHA. RIH lower completion, set packer and POOH running tools.

Formations

Name	Top (MD)	Top (TVD)	Comment

Operations For Period 0000 Hrs to 2400 Hrs on 29 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
PH	P	TO	0000	0100	1.00	1806.0m	POH to 500mRT
PH	P	TI	0100	0130	0.50	1806.0m	Discussed forward plan with town.
PH	P	TO	0130	0330	2.00	1806.0m	RIH to TD at 1806mRT.
PH	P	OA	0330	0430	1.00	1806.0m	Spotted 50 bbls of new Flo Pro 10.3 ppg mud on bottom. Pumped: 8 m3 (50 bbls) new Flo Pro mud 8 m3 (50 bbls) CaCl2 high vis pill Displaced with 6.2 m2 (39 bbls) CaCl2 Brine
PH	P	TO	0430	0530	1.00	1806.0m	POH to 1650mRT, waited to finish mixing completion brine
PH	P	OA	0530	0600	0.50	1806.0m	Displaced hole with 67.6 m3 (425 bbls) of CaCl2 brine.
PH	P	OA	0600	1400	8.00	1806.0m	Flow Checked and POH from 1650mRT to BOP's. Flow checked for 15 mins. POH with BHA and laid down same.
PH	P	OA	1400	1500	1.00	1806.0m	Functioned BOP shear rams and 273mm (10-3/4") rams. Held JHA for RU and Running of 140mm (5-1/2") Expandable Sand Screens.
CTB	P	RIC	1500	1700	2.00	1806.0m	PU Expandable Bottom Connector (LC01-01). MU 6x11.58m 140mm (5-1/2") Mk-II ESS joints (150 micron weave).
CTB	P	RCM	1700	1730	0.50	1806.0m	RU handling gear for 194 mm (7-5/8"), 13Cr80 FOX tubing. MU 140mm (5.5") Expandable Top Connector (LC02-02) and 1xjoint of 194 mm (7-5/8"), 44.2 kg/m (29.7 lbs/ft) 13Cr80 Fox Tubing. Performed flow check prior to 140mm (5.5") ESS entering BOP.
CTB	P	RIC	1730	1830	1.00	1806.0m	Continued to RIH with additional 2xjoints of 194 mm (7-5/8"), 44.2 kg/m (29.7 lbs/ft) 13Cr80 Fox Tubing as per lower completion tally. RU 127 mm (5") drill pipe elevators. Held JSA for MU and running lower completion EXP packer.
CTB	P	RIC	1830	2400	5.50	1806.0m	PU and RIH EXP packer sub assembly (LC03-01). RIH lower completion assembly on 127 mm (5") HWDP and DP. Drifted DP to 51 mm (2") while RIH.

Operations For Period 0000 Hrs to 0600 Hrs on 30 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	P	RIC	0000	0145	1.75	1806.0m	Continued to RIH with lower completion at max rate of 10 m/min. PU weight 95MT (210 klbs), Slack off weight 99.8MT (220 klbs) as 140mm (5.5") ESS entering 244mm (9-5/8") casing shoe. Reduce running speed of lower completion to 6m/min in open hole. PU weight 102MT (225 klbs), Slack off weight 102MT (225 klbs). Tagged TD (1806mRT) with 2.3MT (5 klbs). Pull back to setting depth.
CTB	P	RPK	0145	0315	1.50	1806.0m	Held JSA on setting the EXP Packer. Broke out 127mm (5") DP and dropped 44mm (1-3/4") brass ball, MU and chased with mud at 0.3m3/min (2bpm). Pumped 7.1m3 (45 bbls) without catching pressure - stopped pumping. Pumped at higher rates and immediately caught pressure - increased pressure to 20,685kPa (3,000 psi) with 0.2m3 (1 bbl) and held for 15 minutes. Performed 6.8MT (15 klbs) overpull above neutral weight and set down 6.8MT (15 klbs) below neutral weight.

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	P	PT	0315	0415	1.00	1806.0m	Closed BOP pipe rams and pressure tested packer elements with 6895kPa (1000 psi) for 10 minutes. Opened BOP pipe rams and released running tools from packer. POOH with running tools. EXP Packer set at 1686.35 mRT. ESS at 1728.07mRT-1797.07mRT.
CTB	P	RIC	0415	0600	1.75	1806.0m	Brine U-tubing on drill floor. Lined up to trip tank and flow checked. MU and pumped 4.8m3 (30bbl) 1.44sg (12 ppg) mud slug. Continue to POOH - current depth 1200mRT.

WBM Data									
Mud Type: CaCl2 Completion Bri	API FL:	0cm ³ /30m	Cl:	146000	Solids:	0	Viscosity:	0sec/L	
Sample-From: Pit 4	Filter-Cake:	0mm	K+C*1000:	0%	H2O:	0%	PV:	0Pa/s	
Time: 05:00	HTHP-FL:	0cm ³ /30m	Hard/Ca:	0	Oil:	0%	YP:	0MPa	
Weight: 1.22sg	HTHP-Cake:	0mm	MBT:	0	Sand:		Gels 10s:	0	
Temp: 0C°			PM:	0	pH:	9.7	Gels 10m:	0	
			PF:	0	PHPA:	Oppb	Fann 003:	0	
							Fann 006:	0	
							Fann 100:	0	
							Fann 200:	0	
							Fann 300:	0	
							Fann 600:	0	

Bit # 6				Wear	I	O1	D	L	B	G	O2	R
					1	1	NO	A	E	I	ER	TD
Size ("):	216mm	IADC#		Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	REED	WOB(avg)	0mt	No.	Size	Progress	0m	Cum. Progress	76.0m			
Type:	PDC	RPM(avg)	0	2	16/32nd"	On Bottom Hrs	0h	Cum. On Btm Hrs	3.70h			
Serial No.:	110996	F.Rate	0lpm	3	15/32nd"	IADC Drill Hrs	0h	Cum IADC Drill Hrs	5.90h			
Bit Model	DSX104	SPP	0kPa			Total Revs	0	Cum Total Revs	0			
Depth In	1730.0m	TFA	0.910			ROP(avg)	N/A	ROP(avg)	20.54 m/hr			
Depth Out	1806.0m											

BHA # 6						
Weight(Wet)	1.13mt	Length	265.6m	Torque(max)	16.3Nm	D.C. (1) Ann Velocity
Wt Below Jar(Wet)	2.04mt	String	11.11mt	Torque(Off.Btm)	5.4Nm	D.C. (2) Ann Velocity
		Pick-Up	11.11mt	Torque(On.Btm)	10.9Nm	H.W.D.P. Ann Velocity
		Slack-Off	11.11mt			D.P. Ann Velocity

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.23m	216mm	0mm	110960	
Near Bit Stabiliser	2.40m	167mm	89mm	DA6028	
Pony Drill Collar	5.04m	170mm	70mm	DA6024	
MWD Tools	9.76m	171mm	76mm	DM4007	DGR EWR DDR SLB
MWD Tools	2.79m	171mm	76mm	152535	Directional sensor
MWD Tools	3.05m	171mm	76mm	10599301	Pulser
8.5in String Stab	1.78m	170mm	71mm	92566	8.5"
6.5in DC	74.44m	165mm	73mm		
6.5in Jars	9.24m	165mm	70mm	WDAH02928	
6.5in DC	18.56m	165mm	73mm		
5in HWDP	138.37m	127mm	76mm		

Bulk Stocks						Personnel On Board	
Name	Unit	In	Used	Adjust	Balance	Company	Pax
Fuel	m3	0	15.8	-0.1	328.7	Santos	7
Drill Water	m3	0	34.8	0.1	595.2	DOGC	46
Potable Water	m3	26	28.7	0	248.4	ESS	8
Gel	sx	0	0	0	1,122.0	Dowell	2
Cement	sx	766	0	-1	2,450.0	Geoservices	2
Barite	sx	667	0	-1	2,073.0	Fugro	6
KCl Brine	bbl	0	0	0	0.0	Cameron	3
						MI	2
						Weatherford	7
						Sperry-Sun	2
						Expro	7
						Baker Oil Tools	1
						Halliburton	1
						Total	94

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	2.08sg / 0sg	654.8m / 654.8m	Lead: 258 bbl, 12.5 ppg, Class G Tail: 91 bbl, 15.8 ppg, Class G
244	0sg / 0sg	1719.8m / 1716.0m	Lead: 9 m3 (57 bbl) 1.5 sg (12.5 ppg) Class G Tail: 7.5 m3 (47 bbl) 1.9 sg (15.8 ppg) Class G

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	26 Jun 2005	3 Days	Abandon Drill
BOP Test	21 Jun 2005	8 Days	BOP Test
Environmental Incident	02 May 2005	58 Days	None reported since commencement of campaign.
Fire Drill	26 Jun 2005	3 Days	Fire Drill
First Aid	04 May 2005	56 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	58 Days	None reported since commencement of campaign.
Man Overboard Drill	18 Jun 2005	11 Days	Man Overboard Drill
Near Miss	20 Jun 2005	9 Days	Failed compensator tensioner cable, release of compensator fluid.
Safety Meeting	26 Jun 2005	3 Days	Weekly Safety Meeting
Stop Cards	29 Jun 2005	0 Days	8 Stop Cards

Marine									
Weather check on 29 Jun 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	30km/h	225deg	1032.00bar	16.0C°	1.0m	225deg	1m/sec	1	11.61
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		2	12.02
0.8deg	0.6deg	2.00m	2.5m	225deg	2m/sec	Part Cloud		3	12.20
Rig Dir.	Ris. Tension	VDL	Comments					4	8.21
251.0deg	12.25mt	188.51mt						5	10.80
								6	12.11
								7	13.52
								8	11.61

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	384
				Drill Water	m3	527
				Potable Water	m3	417
				Gel	t	84
				Cement	t	76
				Barite	t	0
NaCl Brine	bbl	700				
Pacific Wrangler			Sailing to Portland	Item	Unit	Quantity
				Fuel	m3	411.8
				Drill Water	m3	333
				Potable Water	m3	258
				Gel	t	43
				Cement	t	0
				Barite	t	0
NaCl Brine	bbl	0				

Helicopter Movement

Flight #	Time	Destination	Comment	Pax
1	11:39	Ocean Patriot		4
1	11:50	Essendon		6

Lessons Learned

Categories		Event Descr.	Post Event Descr.	Lesson
Short Descr.	Casing scraper prior to lower completion	For sand screen completions review option to conduct casing scraper and completion fluid displacement prior to running lower completion.		
Phase	Completion			
Category				
Resp. Party				
Closed/Open	Open			
Short Descr.	No shear release on running tools	Section 6.3.4 indicates that a pressure of 3,600 psi will shear release the running tools.		There is no shear release on running tools.
Phase	Completion			
Category				
Resp. Party				
Closed/Open	Open			

From : Ron King, Mike Andronov
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	1806.0m	Cur. Hole Size	216mm	AFE Cost	
Field	Casino	TVD	1802.0m	Casing OD	244mm	AFE No.	5746022
Drill Co.	DOGC	Progress	0m	Shoe TVD	1716.0m	Daily Cost	
Rig	Ocean Patriot	Days from spud	14.21	F.I.T. / L.O.T.	Osg / Osg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	16.13			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	POOH with screen expansion tool.				
RT-ML	89.7m	Planned Op	POOH with screen expansion tool. MU and RIH casing scraper and riser cleaning assembly. Retrieve XT bore protector.				

Summary of Period 0000 to 2400 Hrs

RIH with lower completion and set ESS hanger and lower completion packer. POOH with running tools. MU and RIH expandable sand screen expansion tool on DP. Unable to pass PBR on lower completion packer. POOH and changed BHA. RIH with expandable sand screen expansion tool assembly and expanded screens. POOH.

Operations For Period 0000 Hrs to 2400 Hrs on 30 Jun 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	P	RIC	0000	0145	1.75	1806.0m	Continued to RIH with lower completion at max rate of 10 m/min. PU weight 95MT (210 klbs), Slack off weight 99.8MT (220 klbs) as 140mm (5.5") ESS entering 244mm (9-5/8") casing shoe. Reduced running speed of lower completion to 6m/min in open hole. PU weight 102MT (225 klbs), Slack off weight 102MT (225 klbs). Tagged TD (1806mRT) with 2.3MT (5 klbs). Pulled back to setting depth.
CTB	P	RPK	0145	0315	1.50	1806.0m	Held JSA on setting the lower completion Packer. Broke out 127mm (5") DP and dropped 44mm (1-3/4") brass ball, MU and chased with brine at 0.3m3/min (2bpm). Pumped 7.1m3 (45 bbls) without pressure increasing - stopped pumping. Pumped at higher rates and increase pressure to 20685kPa (3,000 psi) with 0.2m3 (1 bbl) and set lower completion packer. Held for 15 minutes. Performed 6.8MT (15 klbs) overpull above neutral weight and set down 6.8MT (15 klbs) below neutral weight.
CTB	P	PT	0315	0415	1.00	1806.0m	Closed BOP pipe rams and pressure tested packer elements with 6895kPa (1000 psi) for 10 minutes. Opened BOP pipe rams and released running tools from lower completion packer with right hand rotation. POOH with running tools. Lower Completion Packer set at 1686.35 mRT. ESS at 1728.07mRT-1797.07mRT. Shoe at 1800.5mRT.
CTB	P	RIC	0415	0815	4.00	1806.0m	While POOH, brine U-tubing through drill pipe. Lined up to trip tank and flow checked. MU and pumped 4.8m3 (30bbl) 1.44sg (12 ppg) mud slug. Continued to POOH .
CTB	P	RIC	0815	0930	1.25	1806.0m	Lower Completion packer setting tools at surface, o-ring missing - tools in good condition. Broke out tools. MU 140 mm (5-1/2") Axial Compliant Expansion Tool (ACE Tool) c/w 114 mm (4.5") IF xover and stand of 127 mm (5") DP. Connected top drive to BHA and functioned test ACE Tool. Roller cones functioned ok. No Leaks observed. 0.4 m3/min (105 gal/min) - 10340 kPa (1500 psi) 0.42 m3/min (110 gal/min) - 11030 kPa (1600 psi) 0.45 m3/min (120 gal/min) - 11720 kPa (1700 psi) POOH ACE tool and manually retracted compliant rollers using wooden hammer.
CTB	P	RIC	0930	1530	6.00	1806.0m	MU expansion BHA - 140 mm (5-1/2") Axial Compliant Expansion Tool (ACE Tool) c/w 114 mm (4.5") IF xover, 9x165mm (6.5") DC's, 15x127mm (5") HWDP, and 127mm (5") DP. RIH to just above packer, engaged compensator, weight 106.6MT (235 k lbs). Continued RIH unable to pass 1690 m - set down 9.1MT (20 klbs). PU 3m and turned pipe 1/2 turn. RIH - unable to pass 1690mRT. Set down in stages to 9.1MT (20 klbs). Rotate string and setdown to 1691mRT - unable to pass. PU 15.9MT (35 klbs) overpull to release tools. POOH.
CTB	TP (OTH)	RIC	1530	2000	4.50	1806.0m	POOH with 127 mm (5") HWDP and ACE tool checking OD's and serial numbers. Scour marks noted on bottom of 165mm (6.5") DC. Checked ACE BHA for damage - ok. Callipered bottom Drill Collar OD at 170 mm (6.687"). Drift of 194 mm (7-5/8") 44.2 kg/m3 (29.7 lb/ft) 13Cr80 is 171mm (6.75"). 165mm (6.5") DC getting hang up at 7-5/8" xover at 1690mRT.
CTB	TP (OTH)	RIC	2000	2045	0.75	1806.0m	Held JSA - MU and running ACE BHA. PU 140 mm (5-1/2") Axial Compliant Expansion Tool (ACE Tool) c/w 114 mm (4.5") IF xover and stand of 127 mm (5") DP. Connected top drive to BHA and functioned test ACE Tool. Roller cones functioned ok. No Leaks observed. 0.38 m3/min (100 gal/min) - 8275 kPa (1200 psi) 0.40 m3/min (105 gal/min) - 8965 kPa (1300 psi) 0.42 m3/min (110 gal/min) - 9635 kPa (1400 psi) 0.43 m3/min (115 gal/min) - 10340 kPa (1500 psi) POOH ACE tool and manually retracted compliant rollers using wooden hammer.

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	TP (OTH)	RIC	2045	2400	3.25	1806.0m	MU expansion BHA. RIH with 140 mm (5-1/2") Axial Compliant Expansion Tool (ACE Tool) c/w 114 mm (4.5") IF xover, 15x127mm (5") HWDP, 9x165mm (6.5") DC and 127mm (5") DP to 1085mRT.

Operations For Period 0000 Hrs to 0600 Hrs on 01 Jul 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	TP (OTH)	RIC	0000	0215	2.25	1806.0m	Continued RIH ACE tool on 127 mm (5") DP. Engaged compensators. PU weight 106MT (235 klbs), Slack-off weight 106MT (235 klbs). Tagged ETC with 2.3MT (5 klbs) @ 1727mRT.
CTB	P	RIC	0215	0300	0.75	1806.0m	Held JSA on Expanding of ESS. Expanded the ESS with the fixed cone pre-expansion tool section of the ACE assembly by RIH at 3m/min, sitting down between 11.3MT-15.9MT (25-35 klbs) through connectors. Third connection of ESS saw 27.2MT (60 klbs) set down weight before compensator pistons bottomed out dropping string 2.5 metres. Continued expanding screens to 1791mRT with compensators locked.
CTB	P	TO	0300	0330	0.50	1806.0m	POOH to 1726mRT - no hangup observed.
CTB	P	RIC	0330	0430	1.00	1806.0m	Commenced pumping at 0.42m3/m (110 gpm), surface pressure 7585kPa (1100 psi). Increased pump rate to 0.43m3/m (115 gpm), surface pressure 8690kPa (1260 psi) - RIH at max rate of 3m/min, setting down 37.8MT-56.8MT (10-15 klbs) at the ACE tool to fully expand screens from 1728mRT to 1791mRT.
CTB	P	TO	0430	0600	1.50	1806.0m	POOH with drill pipe, DC's, HWDP and ACE tools to 1220mRT.

WBM Data									
Mud Type:	Flo Pro	API FL:	5cm ³ /30m	Cl:	148000	Solids:	14	Viscosity:	0sec/L
Sample-From:	Pit 3	Filter-Cake:	1mm	K+C*1000:	6.5%	H2O:	86%	PV:	0.014Pa/s
Time:	20:00	HTHP-FL:	0cm ³ /30m	Hard/Ca:	120	Oil:	0%	YP:	0.144MPa
Weight:	1.24sg	HTHP-Cake:	0mm	MBT:	0.25	Sand:		Gels 10s:	0.048
Temp:	30.0C°			PM:	0.8	pH:	9.7	Gels 10m:	0.057
				PF:	0.1	PHPA:	Oppb	Fann 003:	10
								Fann 006:	12
								Fann 100:	30
								Fann 200:	38
								Fann 300:	44
								Fann 600:	58

WBM Data Cost Today \$ 0									
Mud Type:	CaCl2 Completion Bri	API FL:	0cm ³ /30m	Cl:	146000	Solids:	0	Viscosity:	0sec/L
Sample-From:		Filter-Cake:	0mm	K+C*1000:	0%	H2O:	0%	PV:	0Pa/s
Time:	20:00	HTHP-FL:	0cm ³ /30m	Hard/Ca:	0	Oil:	0%	YP:	0MPa
Weight:	1.22sg	HTHP-Cake:	0mm	MBT:	0	Sand:		Gels 10s:	0
Temp:	0C°			PM:	0	pH:	9.1	Gels 10m:	0
				PF:	0	PHPA:	Oppb	Fann 003:	0
								Fann 006:	0
								Fann 100:	0
								Fann 200:	0
								Fann 300:	0
								Fann 600:	0

Bulk Stocks						Personnel On Board	
Name	Unit	In	Used	Adjust	Balance	Company	Pax
Fuel	m3	0	16.1	0.1	312.7	Santos	8
Drill Water	m3	0	33.7	0	561.5	DOGC	46
Potable Water	m3	30	27.8	0	250.6	ESS	8
Gel	sx	0	0	0	1,122.0	Dowell	2
Cement	sx	0	0	0	2,450.0	Geoservices	2
Barite	sx	0	0	0	2,073.0	Fugro	6
KCl Brine	bbl	0	0	0	0.0	Cameron	4
						MI	1
						Weatherford	7
						Expro	9
						Baker Oil Tools	1
						Halliburton	1
Total							95

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	2.08sg / 0sg	654.8m / 654.8m	Lead: 258 bbl, 12.5 ppg, Class G Tail: 91 bbl, 15.8 ppg, Class G
244	0sg / 0sg	1719.8m / 1716.0m	Lead: 9 m3 (57 bbl) 1.5 sg (12.5 ppg) Class G Tail: 7.5 m3 (47 bbl) 1.9 sg (15.8 ppg) Class G

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	26 Jun 2005	4 Days	Abandon Drill
BOP Test	21 Jun 2005	9 Days	BOP Test
Environmental Incident	02 May 2005	59 Days	None reported since commencement of campaign.
Fire Drill	26 Jun 2005	4 Days	Fire Drill
First Aid	04 May 2005	57 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	59 Days	None reported since commencement of campaign.
Man Overboard Drill	18 Jun 2005	12 Days	Man Overboard Drill
Near Miss	20 Jun 2005	10 Days	Failed compensator tensioner cable, release of compensator fluid.
Safety Meeting	26 Jun 2005	4 Days	Weekly Safety Meeting
Stop Cards	30 Jun 2005	0 Days	5 Stop Cards

Marine									
Weather check on 30 Jun 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	0km/h	000deg	1024.00bar	16.0C°	0m	000deg	0m/sec	1	11.52
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		2	12.11
0.5deg	0.5deg	0.30m	1.5m	225deg	2m/sec	Drizzle. Variable wind and wave direction		3	12.02
Rig Dir.	Ris. Tension	VDL	Comments		4			7.89	
251.0deg	12.25mt	203.28mt					5	10.89	
								6	12.20
								7	13.61
								8	11.70

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	374
				Drill Water	m3	527
				Potable Water	m3	414
				Gel	t	84
				Cement	t	76
				Barite	t	0
NaCl Brine	bbl	433				
Pacific Wrangler			Portland	Item	Unit	Quantity
				Fuel	m3	411.8
				Drill Water	m3	333
				Potable Water	m3	258
				Gel	t	43
				Cement	t	0
				Barite	t	0
KCl Brine	bbl	0				

Helicopter Movement				
Flight #	Time	Destination	Comment	Pax
1	10:10	Ocean Patriot		6
1	10:19	Essendon		5

Lessons Learned				
Categories		Event Descr.	Post Event Descr.	Lesson
Short Descr.	Use of compensators for ESS screen expansion	Uneven slack off weight when passing screen connectors resulted in entire string dropping ~2.5 m after reaching freepoint. Difficulty in managing slips and stand make up at surface while compensated.	Considered operation to be unsafe with compensators. Disengaged compensated and continued operation.	Consider dropping of string and compensators "bottoming" out during expansion process.
Phase	Completion			
Category				
Resp. Party	Santos			
Closed/Open	Open			
Short Descr.	Drift analysis of running strings	BHA for running ACE expansion tool comprised 6 1/2" drill collars just above the tool. Drill collar did not pass through the 7 5/8" tubing.	Moved drill collars higher up in string and ran heavy weight drill pipe directly above ACE tool.	Drift analysis (ID's & OD's) considered for completion components but also should be thoroughly reviewed for running strings as well.
Phase	Completion			
Category				
Resp. Party	Santos			
Closed/Open	Open			

From : Ron King, Mike Andronov
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	1806.0m	Cur. Hole Size	216mm	AFE Cost	
Field	Casino	TVD	1802.0m	Casing OD	244mm	AFE No.	5746022
Drill Co.	DOGC	Progress	0m	Shoe TVD	1716.0m	Daily Cost	
Rig	Ocean Patriot	Days from spud	15.21	F.I.T. / L.O.T.	Osg / Osg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	17.13			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	RIH Upper Completion.				
RT-ML	89.7m	Planned Op	RIH with Upper Completion.				

Summary of Period 0000 to 2400 Hrs

POOH with screen expansion tool. MU and RIH casing scraper BHA and riser brush. Scrape casing over packer setting depth and brush riser, circulate hole to CaCl2 brine. POOH. RU to run upper completion.

Formations

Name	Top (MD)	Top (TVD)	Comment

Operations For Period 0000 Hrs to 2400 Hrs on 01 Jul 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	TP (OTH)	RIC	0000	0215	2.25	1806.0m	Continued RIH ACE tool on 127 mm (5") DP. Engaged compensators. PU weight 106MT (235 klbs), Slack-off weight 106MT (235 klbs). Tagged ETC with 2.3MT (5 klbs) @ 1727mRT.
CTB	P	RIC	0215	0300	0.75	1806.0m	Held JSA on Expanding of ESS. Expanded the ESS with the fixed cone pre-expansion tool section of the ACE assembly by RIH at 3m/min, sitting down between 11.3MT-15.9MT (25-35 klbs) through connectors. Third connection of ESS saw 27.2MT (60 klbs) set down weight before compensator pistons bottomed out dropping string 2.5 metres. Continued expanding screens to 1791mRT with compensators locked (disengaged).
CTB	P	TO	0300	0330	0.50	1806.0m	POOH to 1726mRT - no hangup observed.
CTB	P	RIC	0330	0430	1.00	1806.0m	Commenced pumping at 0.42m3/m (110 gpm), surface pressure 7585kPa (1100 psi). Increased pump rate to 0.43m3/m (115 gpm), surface pressure 8690kPa (1260 psi) - RIH at max rate of 3m/min, setting down 37.8MT-56.8MT (10-15 klbs) at the ACE tool to fully expand screens from 1728mRT to 1791mRT.
CTB	P	TO	0430	1100	6.50	1806.0m	POOH with drill pipe, DC's, HWDP and ACE tools. Cleaned and Inspected ACE tool -laydown same.
CTB	P	TI	1100	1200	1.00	1806.0m	PU Casing Scraper BHA, 216 mm (8.5") Bit with nozzles removed, bit sub and xover to 114 mm (4.5") IF connection, 1 x 127 mm (5") joint of DP, 244 mm (9-5/8") Razor Back scraping tool. RIH 5 x stands of 127 mm (5") DP.
CTB	U	SC	1200	1430	2.50	1806.0m	Hung off block, slipped and cut drill line. Unhung block. Repaired shear pin on racking arm.
CTB	P	TI	1430	1800	3.50	1806.0m	Continued RIH casing scraper assembly.
CTB	P	CHC	1800	1930	1.50	1806.0m	MU riser brush tool and continue to RIH casing scraper and riser cleaning assembly. Scraped 244 mm (9-5/8") 13Cr80 casing from 1552 mRT - 1658 mRT (3 passes) while brushing riser to 3 m above flex joint. While scraping casing and riser cleaned and circulated 1.24 sg (10.3 ppg) mud at 3.82m3/m (24 bpm) and rotated pipe at maximum of 60 rpm.
CTB	P	CHC	1930	2015	0.75	1806.0m	Functioned upper and lower annulars and upper and lower pipe rams. Circulated 75.5 m3 (475 bbls) mud at 3.82m3/m (24 bpm) until shakers clean with bit @ 1667 mRT.
CTB	P	CHC	2015	2115	1.00	1806.0m	Briefed all personnel on displacement procedure. Flushed choke, kill and boost lines with CaCl2 brine. Pumped 6.8 m3 (43 bbl) high viscous brine pill at 1.3 m3/m (8.4 bpm), chased with 24.1 m3 (152 bbl) 1.2 sg (10 ppg) NaCl brine at 3.2 m3/m (20.5 bpm) followed by 73.4 m3 (462 bbl) at 3.8 m3/m (24 bpm) 1.22 sg (10.17) inhibited CaCl2 brine with bit at @ 1667 mRT. Shakers clean. Rotated and reciprocated string while circulating.
CTB	P	TO	2115	2400	2.75	1806.0m	Transferred CaCl2 tank bottoms into single tank and into trip tank. Prepared tanks to receive NaCl from boat. POOH to the riser brush tool. Inspected riser brush - good condition. Junk basket contained ~ 750 mL debris of metal shavings, shale and rubber pieces. Continued to POOH - current depth 1045 mRT.

Operations For Period 0000 Hrs to 0600 Hrs on 02 Jul 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	P	TO	0000	0215	2.25	1806.0m	9-5/8" casing scraper at surface. Casing scraper in good condition with no evidence of

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	P	RCM	0215	0500	2.75	1806.0m	damage or metal loss. Laid down 9-5/8" casing scraper and 8.5" bit with nozzles removed.
CTB	P	RIC	0500	0600	1.00	1806.0m	PU Bore Protector running and retrieving tool. Opened TCT and SIV needle valves on XT [CSM valve already open]. RIH Bore Protector Running and Retrieval Tool / rubber nosed jet sub assembly on drill pipe. Jetted BOP ram and annular cavities with NaCl brine and closed TCT, CSM and SIV. Latched bore protector and unseated from XT with 140 klbs overpull. POOH. Bore Protector assembly recovered and laid down same. Inspected XT Bore Protector - internally in good condition. 3 external scoured marks above XT Bore Protector dogs. [Flushed though TCT, CSM and SIV on tree and closed] (IN PROGRESS) Held JSA on Running Upper Completion. Rig up handling equipment and tongs dressed for 7" 29 lb/ft 13Cr80 KSB tubing, PU Muleshoe (UC01-02) and MU 1xjoint 7" 29 lb/ft 13Cr80 KSB tubing, 4.625" 29 lb/ft QN Nipple (UC02-02), 1xjoint 7" 29 lb/ft 13Cr80 KSB tubing, 47 lb/ft Production Packer (UC03-02), 5.5" chemical cut sub (UC04-02).

WBM Data

Mud Type:	NaCl Completion Brin	API FL:	0cm³/30m	Cl:	158000	Solids:	0	Viscosity:	0sec/L
Sample-From:	Pit 5	Filter-Cake:	0mm	K+C*1000:	0%	H2O:	0%	PV:	0Pa/s
Time:	22:00	HTHP-FL:	0cm³/30m	Hard/Ca:	0	Oil:	0%	YP:	0MPa
Weight:	1.20sg	HTHP-Cake:	0mm	MBT:	0	Sand:		Gels 10s:	0
Temp:	0C°			PM:	0	pH:	8.9	Gels 10m:	0
				PF:	0	PHPA:	Oppb	Fann 003:	0
								Fann 006:	0
								Fann 100:	0
								Fann 200:	0
								Fann 300:	0
								Fann 600:	0

WBM Data

Mud Type:	CaCl2 Completion Bri	API FL:	0cm³/30m	Cl:	146000	Solids:	0	Viscosity:	0sec/L
Sample-From:		Filter-Cake:	0mm	K+C*1000:	0%	H2O:	0%	PV:	0Pa/s
Time:	20:00	HTHP-FL:	0cm³/30m	Hard/Ca:	0	Oil:	0%	YP:	0MPa
Weight:	1.22sg	HTHP-Cake:	0mm	MBT:	0	Sand:		Gels 10s:	0
Temp:	0C°			PM:	0	pH:	9.1	Gels 10m:	0
				PF:	0	PHPA:	Oppb	Fann 003:	0
								Fann 006:	0
								Fann 100:	0
								Fann 200:	0
								Fann 300:	0
								Fann 600:	0

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Fuel	m3	0	21.9	0	290.8
Drill Water	m3	0	16.8	0	544.7
Potable Water	m3	27	18.7	0	258.9
Gel	sx	0	0	0	1,122.0
Cement	sx	0	0	0	2,450.0
Barite	sx	0	0	0	2,073.0
KCl Brine	bbl	0	0	0	0.0

Personnel On Board

Company	Pax
Santos	8
DOGC	44
ESS	8
Dowell	2
Geoservices	2
Fugro	6
Cameron	4
MI	1
Weatherford	4
Expro	12
Baker Oil Tools	1
Halliburton	1
Expro	1
Total	94

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	2.08sg / 0sg	654.8m / 654.8m	Lead: 258 bbl, 12.5 ppg, Class G Tail: 91 bbl, 15.8 ppg, Class G
244	0sg / 0sg	1719.8m / 1716.0m	Lead: 9 m3 (57 bbl) 1.5 sg (12.5 ppg) Class G Tail: 7.5 m3 (47 bbl) 1.9 sg (15.8 ppg) Class G

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	26 Jun 2005	5 Days	Abandon Drill
BOP Test	21 Jun 2005	10 Days	BOP Test
Environmental Incident	02 May 2005	60 Days	None reported since commencement of campaign.
Fire Drill	26 Jun 2005	5 Days	Fire Drill
First Aid	04 May 2005	58 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	60 Days	None reported since commencement of campaign.
Man Overboard Drill	18 Jun 2005	13 Days	Man Overboard Drill
Near Miss	20 Jun 2005	11 Days	Failed compensator tensioner cable, release of compensator fluid.
Safety Meeting	26 Jun 2005	5 Days	Weekly Safety Meeting
Stop Cards	01 Jul 2005	0 Days	3 Stop Cards

Marine									
Weather check on 01 Jul 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	22km/h	292deg	1012.00bar	14.0C°	0.4m	292deg	1m/sec	1	11.70
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		2	12.38
0.5deg	0.5deg	0.40m	1.5m	225deg	2m/sec	Rain		3	12.11
Rig Dir.	Ris. Tension	VDL	Comments		4			8.21	
251.0deg	12.25mt	200.35mt			5			10.61	
								6	12.11
								7	13.70
								8	11.70

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	366
				Drill Water	m3	527
				Potable Water	m3	411
				Gel	t	84
				Cement	t	76
				Barite	t	0
NaCl Brine	bbl	433				
Pacific Wrangler	16:45		Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	505.3
				Drill Water	m3	433
				Potable Water	m3	269
				Gel	t	43
				Cement	t	42
				Barite	t	37
				KCl Brine	bbl	0

Helicopter Movement				
Flight #	Time	Destination	Comment	Pax
1	10:10	Ocean Patriot		6
1	10:19	Essendon		5

Lessons Learned				
Categories		Event Descr.	Post Event Descr.	Lesson
Short Descr.	Well Control xover on drill floor	Noticed the upper completion well control xover on drill floor.		Add to section 9.1 to ensure well control xover to always be on drill floor.
Phase	Completion			
Category				
Resp. Party	Santos			
Closed/Open	Open			
Short Descr.	Mud Circulation during Casing Scraper RUn	Programme called for 1.2 x cased hole and riser volumes		
Phase	Completion			
Category				
Resp. Party				
Closed/Open	Open			
Short Descr.	Flush booster line with CaCl2.	Section 7.3.9. Program does not include the flushing of the booster line with CaCl2.	Circulated booster line with CaCl2.	If booster line is not displaced with CaCl2 prior to circulating hole clean with brine, mud will be displaced when boosting riser. Add learning to Section 7.3.9.
Phase	Completion			
Category				
Resp. Party				
Closed/Open	Open			

From : Ron King, Mike Andronov
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	1806.0m	Cur. Hole Size	216mm	AFE Cost	
Field	Casino	TVD	1802.0m	Casing OD	244mm	AFE No.	5746022
Drill Co.	DOGC	Progress	0m	Shoe TVD	1716.0m	Daily Cost	
Rig	Ocean Patriot	Days from spud	16.21	F.I.T. / L.O.T.	Osg / Osg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	18.13			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	PU flowhead.				
RT-ML	89.7m	Planned Op	Land off TH in XT. Pressure test completion and XT. Circulate diesel underbalance. Set production packer.				

Summary of Period 0000 to 2400 Hrs

POOH scraper assembly. RIH and retrieved bore protector. RIH upper completion string. MU SSSV and TH. RIH landing string.

Formations

Name	Top (MD)	Top (TVD)	Comment

Operations For Period 0000 Hrs to 2400 Hrs on 02 Jul 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	P	TO	0000	0215	2.25	1806.0m	9-5/8" casing scraper at surface. Casing scraper in good condition with no evidence of damage or metal loss. Laid down 9-5/8" casing scraper and 8.5" bit with nozzles removed.
CTB	P	RCM	0215	0500	2.75	1806.0m	PU Bore Protector running and retrieving tool. Opened TCT and SIV needle valves on XT [CSM valve already open]. RIH Bore Protector Running and Retrieval Tool / rubber nosed jet sub assembly on drill pipe. Jetted BOP ram and annular cavities with NaCl brine and closed TCT, CSM and SIV. Latched bore protector and unseated from XT with 140 klbs overpull. POOH. Bore Protector assembly recovered and laid down same. Inspected XT Bore Protector - internally in good condition. 3 external scoured marks above XT Bore Protector dogs. [Flushed though TCT, CSM and SIV on tree and closed]
CTB	P	RIC	0500	0700	2.00	1806.0m	Held JSA on Running Upper Completion. Rig up handling equipment and tongs dressed for 7" 29 lb/ft 13Cr80 KSB tubing. PU Muleshoe (UC01-02) and MU 1xjoint 7" 29 lb/ft 13Cr80 KSB tubing, 4.625" 29 lb/ft QN Nipple (UC02-02), 1xjoint 7" 29 lb/ft 13Cr80 KSB tubing, 47 lb/ft Production Packer (UC03-02), 5.5" chemical cut sub (UC04-02).
CTB	P	RIC	0700	1800	11.00	1806.0m	RIH 7" 29 lb/ft 13Cr80 KSB tubing to 1525mRT.
CTB	P	RCM	1800	2200	4.00	1806.0m	PU and MU SSSV sub assembly (UC05-02) and 1xjoint 7" 29 lb/ft 13Cr80 KSB tubing. Held JSA MU and running of SSSV. Pulled back SSSV above RT and MU control line. Performed 15 min pressure test on SSSV through control line to 7,500 psi. Cycled SSSV three times to determine opening pressures and volumes. Pressured control line to 5,000 psi and locked at hub mounted manifold [3 x SSSV Function tests constant - Opening Pressure 1500 psi, Closing Pressure 1100psi and 104 mL returned]
CTB	P	RCM	2200	2300	1.00	1806.0m	RIH 4xjoints 7" 29 lb/ft 13Cr80 KSB tubing, installing control line clamps at each tubing connection. PU TH (UC06-02). Held JSA on MU/RIH tubing hanger. Turned string to align TH production bore 45 degrees port of forward. Removed Helix securing pins and lowered Helix to RT. Attached SSSV test line and flushed through until returns observed below the TH. Terminated SSSV control line to TH and pressure tested to 7,500 psi / 15 mins. [3 x SSSV Function tests constant SSSV Opening Pressure 1500psi, Closing Pressure 1050psi and 99 mL returned].
CTB	P	RCM	2300	2400	1.00	1806.0m	Re-attached helix to TH. Landed TH / split landing bowl onto RT. Noted total weight of 240 klbs (upper completion weight 135 klbs). Unlatched THHT and Layed down same. Rigged up Expro IWOCs sheave and 9-5/8" handling gear.

Operations For Period 0000 Hrs to 0600 Hrs on 03 Jul 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	P	RCM	0000	0200	2.00	1806.0m	Continued to RU 9-5/8" handling gear. PU THRT/SSTT assembly with LS IWOCs and latched in THRT/SSTT elevators. Set TH into locked position setting using THRT/SSTT assembly. Performed THRT/SSTT function tests. Stabbed THRT into TH. Performed TH/THRT interface connection test - 5000 psi / 5 mins. SSSV confidence test - 5000 psi / 5 mins. Functioned TH lock and confirmed returns from TH lock. Unlocked TH and installed 2x shear pins into actuator ring. Checked control line pressures ready for running. Locked in pressure and removed jumpers. PU and removed split landing bowls. Removed protection from TH seals. Installed shear pins

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	P	RIC	0200	0430	2.50	1806.0m	into TH circuit ring. RU 20" split bowls and slips. RIH on 9-5/8" L80 New Vam landing string. [Jumped ROV and checked LMRP bulls eye - reading 1 deg starboard, inline with wellhead).
CTB	P	RCM	0430	0515	0.75	1806.0m	Removed the 15 ft bails. Installed top drive sub and slickline tugger onto top drive. Installed 22ft bails and shackled 45ft bails to 22 ft bails.
CTB	P	RCM	0515	0600	0.75	1806.0m	(IN PROGRESS) JSA on PU of flowhead from deck. PU and installed no cross coupling on last joint of 9-5/8" L80 New Vam landing string. MU flowhead to tubing.

Bulk Stocks							Personnel On Board		
Name	Unit	In	Used	Adjust	Balance	Company	Pax		
Fuel	m3	0	9.3	0	281.5	Santos	8		
Drill Water	m3	0	9.6	0	535.1	DOGC	44		
Potable Water	m3	30	35	0	253.9	ESS	8		
Gel	sx	793	0	0	1,915.0	Dowell	2		
Cement	sx	0	0	0	2,450.0	Geoservices	2		
Barite	sx	0	0	0	2,073.0	Fugro	6		
KCl Brine	bbl	0	0	0	0.0	Cameron	4		
						MI	1		
						Weatherford	4		
						Expro	12		
						Baker Oil Tools	1		
						Halliburton	1		
						Expro	1		
							Total	94	

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOc CaCl2
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOc CaCl2
340	2.08sg / 0sg	654.8m / 654.8m	Lead: 258 bbl, 12.5 ppg, Class G Tail: 91 bbl, 15.8 ppg, Class G
244	0sg / 0sg	1719.8m / 1716.0m	Lead: 9 m3 (57 bbl) 1.5 sg (12.5 ppg) Class G Tail: 7.5 m3 (47 bbl) 1.9 sg (15.8 ppg) Class G

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	26 Jun 2005	6 Days	Abandon Drill
BOP Test	21 Jun 2005	11 Days	BOP Test
Environmental Incident	02 May 2005	61 Days	None reported since commencement of campaign.
Fire Drill	26 Jun 2005	6 Days	Fire Drill
First Aid	04 May 2005	59 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	61 Days	None reported since commencement of campaign.
Man Overboard Drill	18 Jun 2005	14 Days	Man Overboard Drill
Near Miss	20 Jun 2005	12 Days	Failed compensator tensioner cable, release of compensator fluid.
Safety Meeting	26 Jun 2005	6 Days	Weekly Safety Meeting
Stop Cards	02 Jul 2005	0 Days	6 Stop Cards

Marine									
Weather check on 02 Jul 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	30km/h	270deg	1024.00bar	15.0C°	0.4m	270deg	1m/sec	1	11.88
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		2	12.52
0.5deg	0.5deg	0.80m	2.0m	225deg	2m/sec	Overcast		3	12.02
Rig Dir.	Ris. Tension	VDL	Comments					4	7.89
251.0deg	12.25mt	204.52mt						5	10.70
								6	12.02
								7	13.38
								8	11.79

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	357
				Drill Water	m3	527
				Potable Water	m3	408
				Gel	t	42
				Cement	t	76
				Barite	t	0
NaCl Brine	bbbl	0				
Pacific Wrangler	16:45		Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	495.6
				Drill Water	m3	433
				Potable Water	m3	264
				Gel	t	43
				Cement	t	42
				Barite	t	37
KCl Brine	bbbl	0				

Lessons Learned

Categories		Event Descr.	Post Event Descr.	Lesson
Short Descr.	Pressure test SSSV prior to function test	Section 10.2.10 (Function test SSSV) and Section 10.2.11 (Pressure test SSSV) should be swapped around to prove pressure integrity of SSSV prior to function test.		
Phase	Completion			
Category				
Resp. Party				
Closed/Open	Open			
Short Descr.	Replaced LV with 9-5/8" pup joints for landing string	As BH gauges are not being run on Casino-5 there is no requirement for running the lubricator valve in the landing string. All slickline tools can be broken out above flowhead with MV and SV closed.		
Phase	Completion			
Category				
Resp. Party				
Closed/Open	Open			
Short Descr.	Remove diverter bag prior to RIH completion.	Section 9.2.10 - Remove diverter bag from RT should be moved to Section 9.1. I.e, Remove diverter bag from RT before running upper completion.		
Phase	Completion			
Category				
Resp. Party				
Closed/Open	Open			
Short Descr.	Removed SABS tool during clean-up run.	Removed SABS tool during clean-up run (Section 7.2), as jetting run done on XT bore protector retrieval (Section 8.2.5).		
Phase	Completion			
Category				
Resp. Party				
Closed/Open	Open			
Short Descr.	Investigate required overpull to retrieve XT.	Need to investigate required overpull to retrieve XT Bore Protector (Exceeds secondary shear pin rating).		
Phase	Completion			
Category				
Resp. Party				
Closed/Open	Open			

Lessons Learned				
Categories		Event Descr.	Post Event Descr.	Lesson
Short Descr.	Requirement for upper junk seal on XT Bore Protector.	Review requirement for upper junk seal on XT Bore Protector.		
Phase	Completion			
Category				
Resp. Party				
Closed/Open	Open			

From : Ron King, Mike Andronov
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	1806.0m	Cur. Hole Size	216mm	AFE Cost	
Field	Casino	TVD	1802.0m	Casing OD	244mm	AFE No.	5746022
Drill Co.	DOGC	Progress	0m	Shoe TVD	1716.0m	Daily Cost	
Rig	Ocean Patriot	Days from spud	17.21	F.I.T. / L.O.T.	Osg / Osg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	19.13			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	RIH to retrieve TH isolation sleeve.				
RT-ML	89.7m	Planned Op	Continue to test TH and XT. Displace to diesel and set production packer.				

Summary of Period 0000 to 2400 Hrs

RU Flowhead and slickline pressure control equipment. Landed off tubing hanger and testing tubing hanger and XT.

Formations

Name	Top (MD)	Top (TVD)	Comment

Operations For Period 0000 Hrs to 2400 Hrs on 03 Jul 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	P	RCM	0000	0200	2.00	1806.0m	Continued to RU 9-5/8" handling gear. PU THRT/SSTT assembly with LS IWOCs and latched in THRT/SSTT elevators. Set TH into locked position setting using THRT/SSTT assembly. Performed THRT/SSTT function tests. Stabbed THRT into TH. Performed TH/THRT interface connection test - 5000 psi / 5 mins. SSSV confidence test - 5000 psi / 5 mins. Functioned TH lock and confirmed returns from TH lock. Unlocked TH and installed 2x shear pins into actuator ring. Checked control line pressures ready for running. Locked in pressure and removed jumpers. PU and removed split landing bowls. Removed protection from TH seals. Installed shear pins into TH circuit ring.
CTB	P	RIC	0200	0430	2.50	1806.0m	RU 20" split bowls and slips. RIH on 9-5/8" L80 New Vam landing string. [Jumped ROV and checked LMRP bulls eye - reading 1 deg starboard, inline with wellhead).
CTB	P	RCM	0430	0515	0.75	1806.0m	Removed the 15 ft bails. Installed top drive sub and slickline tugger onto top drive. Installed 22ft bails and shackled 45ft bails to 22 ft bails.
CTB	P	RCM	0515	0700	1.75	1806.0m	JSA on PU of flowhead from deck. PU and installed no cross coupling on last joint of 9-5/8" L80 New Vam landing string. MU flowhead to tubing.
CTB	P	RCM	0700	0900	2.00	1806.0m	RU co-flexip and kill hose.
CTB	P	RCM	0900	1330	4.50	1806.0m	Held JSA on RU slickline. RU slickline and pressure control equipment. Closed MV and pressure tested surface well test lines / Slickline PCE to 5000 psi / 10 mins. Bleed off pressure. [offline; Open CSM and SIV and flush]
CTB	P	RCM	1330	1430	1.00	1806.0m	Spooled out umbilical. Removed 20" split bowl and slips. 280 klbs total weight - 270 klbs down weight. Landed off TH and set down 30 klbs onto soft land shoulder. Observed landing string rotation. Flush SIV. Vent TH soft land until no returns. Increase set down to 140 klbs.
CTB	P	RCM	1430	1500	0.50	1806.0m	Closed AAV and AMV. Closed lower annular and pressure below to 1500psi. Leak off observed - bled down pressure. Opened annular and tested rig lines to BOP - ok.
CTB	P	RCM	1500	1530	0.50	1806.0m	Increase slack-off to 150 klbs. Close lower annular and pressure to 1500 psi - more returns seen from CSM. Bled off pressure and attempted TH lock. No returns from lock verify.
CTB	TP (OTH)	RCM	1530	1600	0.50	1806.0m	Opened lower annular and closed 10-3/4" middle rams. Pressured up to 3000 psi and bled off, attempted TH lock. No returns from lock verify. Opened AMV.
CTB	TP (OTH)	RCM	1600	1800	2.00	1806.0m	Increased pressure below 10-3/4" middle rams to 1500 psi to 2500 psi in 500 psi increments. Increased to 5000 psi. Locked TH. No returns from lock verify. Bled off pressure. Bled off TH lock - no returns. Opened 10-3/4" middle rams. Applied 50 klbs overpull - good. Set down completion weight. Locked TH lock - no returns. Closed 10-3/4" rams and increased pressure below to 5000 psi. Bled off pressure. Locked TH lock - no returns. Opened rams.
CTB	TP (OTH)	RCM	1800	1830	0.50	1806.0m	Applied 50 klbs overpull (330 klbs on weight indicator) and increased pressure on soft land to 2000 psi (equivalent to additional 94 klbs overpull) - good indication that TH locked. Bleed down soft land pressure. Slacked off to 170 klbs (25 klbs on TH).
CTB	P	RCM	1830	1930	1.00	1806.0m	Opened CSM needle valve using XT IQOCS, and confirmed operation of SSSV by opening with control line and closed again by bleeding off to 0 psi. Re-opened SSSV and pressure tested for 15 mins.
CTB	P	RCM	1930	2200	2.50	1806.0m	Closed lower annular around slick joint and pressure tested to 3000 psi - leak on surface lines - bled down pressure. Tested surface lines to choke valve 3000 psi / 10

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	TP (PT)	RCM	2200	2400	2.00	1806.0m	mins. Pressure held. Pressure tested lower annular to AAV via choke cline - held 3000 psi / 10 mins. Opened lower annular. Opened AAV and PMV. Closed 10-3/4" pipe rams. Increase pressure to test against TH isolation sleeve - not holding. No change in CSM. Closed PMV and successfully pressure tested to 3000 psi / 10 minutes. Discussed go forward - RIH to retrieve TH isolation sleeve and replace with back-up isolation sleeve.

Operations For Period 0000 Hrs to 0600 Hrs on 04 Jul 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	P	RCM	0000	0100	1.00	1806.0m	Recovered TH isolation sleeve. Laid down isolation sleeve and inspected. No damage evident - seals in good condition.
CTB	P	RCM	0100	0315	2.25	1806.0m	PU and RIH back-up TH isolation sleeve, POOH slickline. Pressure tested against TH Isolation Sleeve to 200 psi - pressure observed at choke manifold (TH isolation sleeve leaking). Broke out lubricator and inspected sleeve Running Tool. Fully sheared out - confident sleeve down. Repaired tool and RIH to retrieve TH isolation sleeve - POOH and broke out lubricator. Inspected TH isolation sleeve - pins not sheared, indicating not set in profile.
CTB	P	RCM	0315	0500	1.75	1806.0m	MU toolstring, RIH and set TH isolation sleeve in profile - (left TH isolation sleeve attached to slickline). Attempted to pressure test against TH Isolation Sleeve to 200 psi, drain line left open and fluid returns observed - TH isolation sleeve not sealing. PU and re-set TH isolation sleeve. Attempted to pressure test against TH Isolation sleeve to 200 psi, fluid returns via drain line - sleeve not set. POOH and Inspected isolation sleeve - pins not sheared.
CTB	P	RCM	0500	0600	1.00	1806.0m	MU toolstring with bow spring centraliser, RIH and set TH isolation sleeve in profile. Attempted to pressure test against TH Isolation Sleeve to 200 psi, drain line left open and fluid returns observed - TH isolation sleeve not sealing. POOH and recovered tool string. Sheared GS pins - replaced pins to RIH to retrieve TH isolation sleeve.

Bulk Stocks						Personnel On Board	
Name	Unit	In	Used	Adjust	Balance	Company	Pax
Fuel	m3	0	9.3	-0.1	272.1	Santos	7
Drill Water	m3	0	12.1	0	523.0	DOGC	42
Potable Water	m3	29	29	0	253.9	ESS	8
Gel	sx	0	0	0	1,915.0	Dowell	2
Cement	sx	0	0	0	2,450.0	Geoservices	2
Barite	sx	0	0	0	2,073.0	Fugro	6
KCl Brine	bbl	0	0	0	0.0	Cameron	4
						Weatherford	4
						Expro	16
						Baker Oil Tools	1
						Halliburton	1
						Expro	1
Total							94

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	2.08sg / 0sg	654.8m / 654.8m	Lead: 258 bbl, 12.5 ppg, Class G Tail: 91 bbl, 15.8 ppg, Class G
244	0sg / 0sg	1719.8m / 1716.0m	Lead: 9 m3 (57 bbl) 1.5 sg (12.5 ppg) Class G Tail: 7.5 m3 (47 bbl) 1.9 sg (15.8 ppg) Class G

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	03 Jul 2005	0 Days	Abandon Drill
BOP Test	21 Jun 2005	12 Days	BOP Test
Environmental Incident	02 May 2005	62 Days	None reported since commencement of campaign.
Fire Drill	03 Jul 2005	0 Days	Fire Drill
First Aid	04 May 2005	60 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	62 Days	None reported since commencement of campaign.
Man Overboard Drill	18 Jun 2005	15 Days	Man Overboard Drill
Near Miss	20 Jun 2005	13 Days	Failed compensator tensioner cable, release of compensator fluid.
Safety Meeting	03 Jul 2005	0 Days	Weekly Safety Meeting
Stop Cards	03 Jul 2005	0 Days	6 Stop Cards

Marine									
Weather check on 03 Jul 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	17km/h	270deg	1027.00bar	13.0C°	0.3m	270deg	1m/sec	1	11.61
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments			
0.5deg	0.5deg	0.50m	2.5m	225deg	2m/sec	Part Cloud			
Rig Dir.	Ris. Tension	VDL	Comments						
251.0deg	12.25mt	202.07mt							
								2	12.52
								3	12.29
								4	8.12
								5	10.70
								6	12.02
								7	13.61
								8	12.11

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip		18:20	Portland	Item	Unit	Quantity
				Fuel	m3	357
				Drill Water	m3	527
				Potable Water	m3	408
				Gel	t	42
				Cement	t	76
				Barite	t	0
NaCl Brine	bbl	0				
Pacific Wrangler	16:45		Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	485.5
				Drill Water	m3	433
				Potable Water	m3	259
				Gel	t	42
				Cement	t	42
				Barite	t	37
KCl Brine	bbl	0				

Helicopter Movement				
Flight #	Time	Destination	Comment	Pax
1	09:24	Ocean Patriot		4
1	09:35	Essendon		4

Lessons Learned				
Categories	Event Descr.	Post Event Descr.	Lesson	
Short Descr.	Test SSSV control line after locking TH		Section 13.3 confirming SSSV operation via control line - should be inserted after section 13.2.16, after the TH has been locked.	
Phase	Completion			
Category				
Resp. Party				
Closed/Open	Open			

From : Ron King, Mike Andronov
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	1806.0m	Cur. Hole Size	216mm	AFE Cost	
Field	Casino	TVD	1802.0m	Casing OD	244mm	AFE No.	5746022
Drill Co.	DOGC	Progress	0m	Shoe TVD	1716.0m	Daily Cost	
Rig	Ocean Patriot	Days from spud	18.21	F.I.T. / L.O.T.	Osg / Osg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	20.13			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	Retrieving TH wireline short protection sleeve.				
RT-ML	89.7m	Planned Op	Install tubing hanger plug. Rig down pressure control equipment and recover landing string. Install ITC.				

Summary of Period 0000 to 2400 Hrs

RIH and set TH Isolation sleeve. Displaced tubing to diesel. Set upper completion packer. Commenced clean up flow.

Formations

Name	Top (MD)	Top (TVD)	Comment

Operations For Period 0000 Hrs to 2400 Hrs on 04 Jul 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	TP (PT)	RIC	0000	0100	1.00	1806.0m	Recovered TH isolation sleeve. Laid down isolation sleeve and inspected. No damage evident - seals in good condition.
CTB	TP (PT)	RIC	0100	0315	2.25	1806.0m	PU and RIH back-up TH isolation sleeve, POOH slickline. Pressure tested against TH Isolation Sleeve to 200 psi - pressure observed at choke manifold (TH isolation sleeve leaking). Broke out lubricator and inspected sleeve Running Tool. Fully sheared out - confident sleeve down. Repaired tool and RIH to retrieve TH isolation sleeve - POOH and broke out lubricator. Inspected TH isolation sleeve - pins not sheared, indicating not set in profile.
CTB	TP (PT)	RIC	0315	0500	1.75	1806.0m	MU toolstring, RIH and set TH isolation sleeve in profile - (left TH isolation sleeve attached to slickline). Attempted to pressure test against TH Isolation Sleeve to 200 psi, drain line left open and fluid returns observed - TH isolation sleeve not sealing. PU and re-set TH isolation sleeve. Attempted to pressure test against TH Isolation sleeve to 200 psi, fluid returns via drain line - sleeve not set. POOH and inspected isolation sleeve - pins not sheared.
CTB	TP (PT)	RIC	0500	0700	2.00	1806.0m	MU toolstring with bow spring centraliser, RIH and set TH isolation sleeve in profile. Attempted to pressure test against TH Isolation Sleeve to 200 psi, drain line left open and fluid returns observed - TH isolation sleeve not sealing. POOH and recovered tool string. Sheared GS pins - replaced pins and RIH and retrieved TH isolation sleeve. Rigged up TH isolation sleeve with no snap ring installed.
CTB	P	RCM	0700	0830	1.50	1806.0m	RIH and set TH isolation sleeve in TH with no snap ring installed. POOH. Pressure tested using rig choke line below the closed 10 3/4" rams to 4000psi / 10 minutes. Monitored CSM and pressure sensor downstream of PWV. Made up TH isolation sleeve retrieval tool assembly and retrieved TH isolation sleeve. [Opened SSSV with 6500psi control line pressure. Pressure test tested: 10 3/4" rams, TH production bore seals from production sie, AMV from above, Upper TH seals from above, the PWV from the production side].
CTB	P	RCM	0830	1000	1.50	1806.0m	Made up RIH and set TH protection sleeve toolstring in THRT. POOH running tools. Made up 4.625" RNQN standing valve toolstring. Pressure tested surface welltest lines and slickline PCE to 5000psi / 10 minutes against MV. Lined up rig lines for diesel displacement. [offline - conducted JSA for displacement of diesel. Closed PMV and CSM. Opened AMV.]
CTB	TP (RE)	RCM	1000	1115	1.25	1806.0m	Troubleshoot rig diesel feed pump failure.
CTB	P	RCM	1115	1315	2.00	1806.0m	Displaced 185bbl diesel at 1.6BPM from cement unit down tubing string. Chased with 3bbl seawater. Shut in THP after pumping diesel cushion 810psi.
CTB	P	RCM	1315	1500	1.75	1806.0m	Equalised across SV and RIH and attempted to installed 4.625" RNQN standing valve in QN nipple profile at 1650m. Unable to shear running tools from standing valve. Attempted to pressure test above standing valve to 1300psi with no success. Retrieved running tools to surface and inspected - 3" SB running tool damaged. Pins sheared.
CTB	P	RCM	1500	1700	2.00	1806.0m	Made up UPT slickline toolstring. RIH and and latched onto 4.625" RNQN standing valve. Attempted to pressure above standing valve with no success. Jarred down on standing valve. Pressured above standing valve to 1300psi to confirm set. Pressured tubing 2000psi / 10 minutes. Pressured to 4000psi / 10 minutes to set Production Packer and test production tubing.

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	P	RCM	1700	1800	1.00	1806.0m	[Shut in THP = 790psi] Bled tubing pressure to 1100psi and attempted to release from UPT from standing valve. Slickline winch drive chain failed. Closed XOV and opened PMV. Pressure tested annulus down rig choke line below closed 10 3/4" rams to 3000psi / 10 minutes. [THP increased to 1300psi during annulus test. Offline - repaired slickline winch and commenced POOH with UPT toolstring]
CTB	P	RIC	1800	1845	0.75	1806.0m	Performed leak off test on AMV to 3,000 psi. Equalised pressure from cement unit, opened AMV and bled annulus pressure to 100 psi. Closed PMV on XT, closed SV and opened KVV on flowhead.
CTB	P	RIC	1845	1915	0.50	1806.0m	Pressured tubing to 4,000 psi from cement unit, closed SSSV and bled pressure above to 1,500 psi for leak off test on SSSV.
CTB	P	RIC	1915	1945	0.50	1806.0m	Equalised above SSSV from cement unit to 3,750 psi. Applied opening pressure to SSSV and observed tubing pressure increase to 4,000 psi indicating SSSV opened.
CTB	P	RIC	1945	2045	1.00	1806.0m	Made up GS tool to retrieve standing valve. Opened MV on flowhead and RIH to retrieve standing valve.
CTB	P	RIC	2045	2130	0.75	1806.0m	Retrieved standing valve to surface, closed MV on flowhead and bled pressure from well test choke manifold. (Offline- Conducted Pre Flow JSA).
CTB	P	RIC	2130	2200	0.50	1806.0m	Closed SV and MV on flowhead, retrieved standing valve and installed GS tool to retrieve bore protector.
CTB	P	PT	2200	2245	0.75	1806.0m	Opened SV on flowhead and pressure tested to 4000 psi. Bled off at well test choke manifold. Closed SV on flowhead, equalised above MV to 1100 psi with cement unit, opened MV and closed KVV on flowhead.
CTB	P	OA	2245	2400	1.25	1806.0m	Opened well at choke manifold, taking 50 bbl of diesel returns to surge tank, then directing flow to burners for clean up flow.

Operations For Period 0000 Hrs to 0600 Hrs on 05 Jul 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	P	OA	0000	0045	0.75	1806.0m	Continued cleaning up well on 56/64" fixed choke to flare.
CTB	P	OA	0045	0130	0.75	1806.0m	ESD tripped shutting in well. (Leak in pilot air hose). Repaired leak and opened well at choke manifold. Increased choke to 60/64" fixed choke.
CTB	P	OA	0130	0415	2.75	1806.0m	Passed flow through separator, acquired samples as per programme & shut in well at choke manifold.
CTB	P	OA	0415	0500	0.75	1806.0m	Held JSA prior to well suspension operations. Closed SSSV and bled off above to 100 psi using the Well Test choke manifold. Bled pressure to 0 psi at end of test.
CTB	P	OA	0500	0530	0.50	1806.0m	Pumped 26 bbls of Water / Glycol 50/50 mix above SSSV.
CTB	P	OA	0530	0600	0.50	1806.0m	Opened SV on flowhead and retrieved TH wireline short protection sleeve. Pulled back to surface closed, MV and SV on flowhead.

Bulk Stocks							Personnel On Board	
Name	Unit	In	Used	Adjust	Balance	Company	Pax	
Fuel	m3	0	19.8	0	252.3	Santos	8	
Drill Water	m3	0	12	0	511.0	DOGC	43	
Potable Water	m3	28	31.3	0	250.6	ESS	8	
Gel	sx	0	0	0	1,915.0	Dowell	2	
Cement	sx	0	0	0	2,450.0	Geoservices	2	
Barite	sx	0	0	0	2,073.0	Fugro	6	
KCl Brine	bbl	0	0	0	0.0	Cameron	3	
						Weatherford	4	
						Expro	16	
						Baker Oil Tools	1	
						Halliburton	1	
						Expro	1	
Total							95	

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	2.08sg / 0sg	654.8m / 654.8m	Lead: 258 bbl, 12.5 ppg, Class G Tail: 91 bbl, 15.8 ppg, Class G
244	0sg / 0sg	1719.8m / 1716.0m	Lead: 9 m3 (57 bbl) 1.5 sg (12.5 ppg) Class G Tail: 7.5 m3 (47 bbl) 1.9 sg (15.8 ppg) Class G

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	03 Jul 2005	1 Day	Abandon Drill
BOP Test	03 Jul 2005	1 Day	BOP Test
Environmental Incident	02 May 2005	63 Days	None reported since commencement of campaign.
Fire Drill	03 Jul 2005	1 Day	Fire Drill
First Aid	03 Jul 2005	1 Day	Person injured knee walking down stairs
Lost Time Incident	02 May 2005	63 Days	None reported since commencement of campaign.
Man Overboard Drill	18 Jun 2005	16 Days	Man Overboard Drill
Near Miss	20 Jun 2005	14 Days	Failed compensator tensioner cable, release of compensator fluid.
Safety Meeting	03 Jul 2005	1 Day	Weekly Safety Meeting
Stop Cards	04 Jul 2005	0 Days	6 Stop Cards

Marine									
Weather check on 04 Jul 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	43km/h	000deg	1023.00bar	14.0C°	1.0m	000deg	1m/sec	1	11.39
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		2	12.52
0.5deg	0.6deg	1.00m	2.5m	225deg	2m/sec			3	12.70
Rig Dir.	Ris. Tension	VDL	Comments				4	8.48	
251.0deg	12.25mt	204.57mt					5	10.61	
							6	11.88	
							7	13.20	
							8	11.52	

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	438
				Drill Water	m3	527
				Potable Water	m3	584
				Gel	t	42
				Cement	t	76
				Barite	t	37
				NaCl Brine	bbl	0
Pacific Wrangler			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	475.9
				Drill Water	m3	433
				Potable Water	m3	254
				Gel	t	43
				Cement	t	42
				Barite	t	37
				KCl Brine	bbl	0

Helicopter Movement				
Flight #	Time	Destination	Comment	Pax
1	09:57	Ocean Patriot		4
1	10:01	Essendon		3

Lessons Learned				
Categories	Event Descr.		Post Event Descr.	Lesson
Short Descr.	XT Isolation sleeve	Isolation sleeve failed external test, pulled sleeve to inspect, several attempts failed to reset sleeve, finally removed lock ring to simplify setting. Suspect problem was incomplete setting of sleeve.	Removed lock ring to facilitate easy setting.	Review installation and testing procedure for isolation sleeve inside TH during FAT/SIT
Phase	Completion			
Category				
Resp. Party	Santos			
Closed/Open	Open			

Lessons Learned				
Categories		Event Descr.	Post Event Descr.	Lesson
Short Descr.	Pressure testing lubricator step 14.3.26	Step 14.3.26 of the Casino 5 Completion programme calls for lubricator to be split at cromar sub, this is not possible with the 7" GS tool.	Disconnected lubricator below BOP to install GS pulling tool. Pressure tested lubricator with cement unit	Confirm lubricator connection to be broken for each tool string
Phase	Completion			
Category				
Resp. Party	Santos			
Closed/Open	Open			
Short Descr.	Contingency plug for SSSV	When problems were experienced with the Isolation sleeve a plug to set in the SSSV may have been a useful option for trouble shooting	Isolation sleeve retrieved and rerun without lock ring.	Review supply of blanking plug to fit SSSV profile to provide an additional means of testing the string above.
Phase	Completion			
Category				
Resp. Party	Santos			
Closed/Open	Open			
Short Descr.	Standing valve premature release from running tool	Whilst RIH with the standing valve on the SB running tool, valve release from the running tool on encountering the hold up around the restriction at the chemical cutter 5" tubing. difficulty re-latching hte tool inside the 7" tubing bore. SB tool tended to run between fishing neck and tubing wall	Several attempts made before successfully re-latching tool.	Review need for 5" chemical cut tubing restriction. Review running procedure, in particular check pulling running weights prior to encountering restrictions such as chemical cutter. Review running centraliser above SB running tool when retrieveing Standing valve.
Phase	Completion			
Category				
Resp. Party	Santos			
Closed/Open	Open			

From : Ron King, Pat King
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	1806.0m	Cur. Hole Size	216mm	AFE Cost	
Field	Casino	TVD	1802.0m	Casing OD	244mm	AFE No.	5746022
Drill Co.	DOGC	Progress	0m	Shoe TVD	1716.0m	Daily Cost	
Rig	Ocean Patriot	Days from spud	19.21	F.I.T. / L.O.T.	Osg / Osg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	21.25			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	Laying out SSTT / THRT assembly.				
RT-ML	89.7m	Planned Op	Complete laying out SSTT / THRT. Retrieve BOPs & Riser.				

Summary of Period 0000 to 2400 Hrs

Completed well clean up flow. Retrieved TH short protection sleeve. Ran TH plug and tested. Layed out flowhead. Jetted wellhead. Commenced running ITC.

Operations For Period 0000 Hrs to 2400 Hrs on 05 Jul 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	P	OA	0000	0045	0.75	1806.0m	Continued cleaning up well on 56/64" fixed choke to flare.
CTB	P	OA	0045	0130	0.75	1806.0m	ESD tripped shutting in well. (Leak in pilot air hose). Repaired leak and opened well at choke manifold. Increased choke to 60/64" fixed choke.
CTB	P	OA	0130	0415	2.75	1806.0m	Passed flow through separator, acquired samples as per programme & shut in well at choke manifold.
CTB	P	OA	0415	0500	0.75	1806.0m	Held JSA prior to well suspension operations. Closed SSSV and bled off above to 100 psi using the Well Test choke manifold. Bled pressure to 0 psi at end of test.
CTB	P	OA	0500	0530	0.50	1806.0m	Pumped 26 bbl of Water / Glycol 50/50 mix above SSSV.
CTB	P	SLK	0530	0730	2.00	1806.0m	Opened SV on flowhead and retrieved TH wireline short protection sleeve. Closed AMV and opened XOV and PMV. Made up 6.70" TH plug toolstring and pressure tested slickline luricator to 5000 psi. RIH and seated TH plug in TH. Pressured up to 3000 psi and jarred with slickline to set plug/release running tools. POOH slickline and pressure tested above the TH plug to 5000 psi for 10 minutes.
CTB	P	OA	0730	1000	2.50	1806.0m	Pressure below closed 10 3/4" rams to 1000psi using the rig choke line to test the 6.70" TH plug from below. Pressure increased to 1300psi due to thermal expansion. Bled off pressure to 30psi using rig choke and monitor offline. Pumped across flowhead to welltest choke with drill water at 3BPM to flush welltest equipment. Rigged down slickline lubricator. [Offline - Annulus pressure built up by 10 psi build up in 20 minutes. Bled off pressure to 0psi. Closed PMV. Closed XOV. Opened AMV and monitored for pressure - no pressure. Closed AMV]
CTB	P	OA	1000	1300	3.00	1806.0m	Set down 10k at THRT/TH interface and opened 10 3/4" rams. Vented TH LOCK and performed TH UNLATCH. Overpulled 25k above landing string weight to release THRT from TH. Pull 8m above wellhead and set slips. Rigged down lubricator drain valves and slickline BOP's. Rigged down co-flexip and kill hose from flowhead. Clear rig floor. Rigged up 9 5/8" casing tong.
CTB	P	OA	1000	1300	3.00	1806.0m	Set down 10,000 lb at THRT/TH interface and opened 10-3/4" rams. Vented TH LOCK and performed TH UNLATCH. Overpulled 25,000 lb above landing string weight to release THRT from TH. Pull 8 m above wellhead and set slips. Rigged down lubricator drain valves and slickline BOP's. Rigged down co-flexip and kill hose from flowhead. Clear rig floor. Rigged up 9-5/8" casing tong.
CTB	P	HT	1300	1730	4.50	1806.0m	Broke out flowhead saver pup and landing joint. Laid down flowhead. Displaced choke, kill and booster lines. Laid down 15 m (50 ft) bails and 500 ton elevators.
CTB	P	HT	1730	2100	3.50	1806.0m	POH and laid down 9-5/8" landing string. Racked back Sub sea test tree (SSTT) / Tubing hanger running tool (THRT) assembly. Opened Tree Cap Test (TCT) line on XT with ROV and flushed through to confirm no blockages.
CTB	P	XT	2100	2200	1.00	1806.0m	RIH with 5" DP open ended to 81 m. Jetted wellhead / XT. POH and racked back jetting string.
CTB	P	XT	2200	2400	2.00	1806.0m	Picked up Internal Tree Cap (ITC) and made up to SSTT / THRT assembly. RIH on 9-5/8" landing string.

Operations For Period 0000 Hrs to 0600 Hrs on 06 Jul 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	P	XT	0000	0145	1.75	1806.0m	Continued to RIH with SSTT / THRT assembly c/w ITC on 9-5/8" landing string to hang off point.
CTB	P	XT	0145	0245	1.00	1806.0m	Set down 10,000 lb. Checked index line. Set down 20,000 lb Closed lower annular. Confirmed choke closed and opened Annulus Master Valve (AMV). Confirmed 0 psi in annulus. Pressured up below annular to 3,000 psi for 10 min. Locked ITC with 3,000 psi lock pressure whilst holding annulus pressure. Bled off annulus pressure and re-locked with 3,000 psi lock pressure - positive indication on lock monitor. Confirmed with 60,000 lb overpull.

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	P	XT	0245	0345	1.00	1806.0m	Flushed TCT line to confirm clear. Closed AMV and AAV. Pressure tested ITC to 5000 psi. Closed TCT valve with ROV.
CTB	P	XT	0345	0600	2.25	1806.0m	Released SSTT / THRT assembly from ITC (25,000 lb overpull). POH with SSTT / THRT assembly, laying out 9-5/8" landing string.

Bulk Stocks						Personnel On Board	
Name	Unit	In	Used	Adjust	Balance	Company	Pax
Fuel	m3	0	18.6	0	233.7	Santos	5
Drill Water	m3	0	24.1	0	486.9	DOGC	43
Potable Water	m3	29	31.2	0	248.4	ESS	8
Gel	sx	0	0	0	1,915.0	Dowell	1
Cement	sx	0	0	0	2,450.0	Geoservices	2
Barite	sx	0	0	0	2,073.0	Fugro	6
KCl Brine	bbl	0	0	0	0.0	Cameron	3
						Weatherford	2
						Expro	10
						Fugro - Surveyor	2
Total							82

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	2.08sg / 0sg	654.8m / 654.8m	Lead: 258 bbl, 12.5 ppg, Class G Tail: 91 bbl, 15.8 ppg, Class G
244	0sg / 0sg	1719.8m / 1716.0m	Lead: 9 m3 (57 bbl) 1.5 sg (12.5 ppg) Class G Tail: 7.5 m3 (47 bbl) 1.9 sg (15.8 ppg) Class G

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	03 Jul 2005	2 Days	Abandon Drill
BOP Test	03 Jul 2005	2 Days	BOP Test
Environmental Incident	02 May 2005	64 Days	None reported since commencement of campaign.
Fire Drill	03 Jul 2005	2 Days	Fire Drill
First Aid	04 May 2005	62 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	64 Days	None reported since commencement of campaign.
Man Overboard Drill	18 Jun 2005	17 Days	Man Overboard Drill
Near Miss	20 Jun 2005	15 Days	Failed compensator tensioner cable, release of compensator fluid.
Safety Meeting	03 Jul 2005	2 Days	Weekly Safety Meeting
Stop Cards	05 Jul 2005	0 Days	3 Stop Cards

Marine									
Weather check on 05 Jul 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	46km/h	000deg	1022.00bar	13.0C°	1.0m	000deg	1m/sec	1	11.39
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments			
0.6deg	0.5deg	1.00m	3.0m	225deg	2m/sec				
Rig Dir.	Ris. Tension	VDL	Comments						
251.0deg	12.25mt	193.73mt							
							8	11.79	

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	426
				Drill Water	m3	527
				Potable Water	m3	581
				Gel	t	42
				Cement	t	76
				Barite	t	37
				NaCl Brine	bbbl	0
Pacific Wrangler			Portland	Item	Unit	Quantity
				Fuel	m3	465.6
				Drill Water	m3	433
				Potable Water	m3	254
				Gel	t	43
				Cement	t	42
				Barite	t	37
				KCl Brine	bbbl	0

Helicopter Movement

Flight #	Time	Destination	Comment	Pax
1	10:02	Ocean Patriot		13
1	10:15	Essendon		14
2	15:53	Ocean Patriot		2
2	16:08	Essendon		9

From : Ron King, Pat King
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	1806.0m	Cur. Hole Size	216mm	AFE Cost	
Field	Casino	TVD	1802.0m	Casing OD	244mm	AFE No.	5746022
Drill Co.	DOGC	Progress	0m	Shoe TVD	1716.0m	Daily Cost	
Rig	Ocean Patriot	Days from spud	20.21	F.I.T. / L.O.T.	Osg / Osg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	22.13			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	Waiting on weather to pull BOP through splash zone.				
RT-ML	89.7m	Planned Op	Retrieve BOP. Install corrosion cap on XT. Lay out drill pipe. Pull anchors.				

Summary of Period 0000 to 2400 Hrs

Ran ITC. Commenced retrieval of BOP and riser. Waited on weather to pull BOP through splash zone.

Operations For Period 0000 Hrs to 2400 Hrs on 06 Jul 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	P	XT	0000	0145	1.75	1806.0m	Continued to RIH with SSTT / THRT assembly c/w ITC on 244 mm (9-5/8") landing string to hang off point.
CTB	P	XT	0145	0245	1.00	1806.0m	Set down 4.5 t (10,000 lb). Checked index line. Set down 9 t (20,000 lb). Closed lower annular. Confirmed choke closed and opened Annulus Master Valve (AMV). Confirmed 0 psi in annulus. Pressured up below annular to 20,700 kPa (3,000 psi) for 10 min. Locked ITC with 20,700 kPa (3,000 psi) lock pressure whilst holding annulus pressure. Bled off annulus pressure and re-locked with 20,700 kPa (3,000 psi) lock pressure - positive indication on lock monitor. Confirmed with 27 t (60,000 lb) overpull.
CTB	P	XT	0245	0345	1.00	1806.0m	Flushed TCT line to confirm clear. Closed AMV and AAV. Pressure tested ITC to 34,500 kPa (5000 psi). Closed TCT valve with ROV.
CTB	P	XT	0345	0700	3.25	1806.0m	Released SSTT / THRT assembly from ITC (11 t / 25,000 lb overpull). POH with SSTT / THRT assembly, laying out 244 mm (9-5/8") landing string.
CTB	P	RR2	0700	0800	1.00	1806.0m	Rigged down umbilical hose and sheave from derrick and rigged up riser handling equipment.
CTB	P	RR2	0800	0930	1.50	1806.0m	Held JSA - retrieving riser & BOP. Picked up diverter running tool and made up into diverter. Retrieved diverter and laid out same.
CTB	P	RR2	0930	1100	1.50	1806.0m	Picked up riser landing joint and made up same. Collapsed slip joint and locked. [Offline: Removed IWOCS free plate from XT and installed on deployment plate. Recovered IWOCS umbilical and deployment plate to moonpool]
CTB	P	RR2	1100	1200	1.00	1806.0m	Removed IWOCS tooling from ROV.
CTB	P	RR2	1200	1230	0.50	1806.0m	Unlatched BOP and pulled clear of guidebase to nipple down choke, kill and booster lines.
CTB	TP (RE)	RR2	1230	1430	2.00	1806.0m	Moved rig 23 m (75 ft) off location whilst attempting to lock compensator lock bar. [Offline: ROV installed bridge plate onto XT. Recovered parking plate to surface.]
CTB	P	RR2	1430	1530	1.00	1806.0m	Lifted BOP stack and latched SDL ring.
CTB	P	RR2	1530	1800	2.50	1806.0m	Nippled down choke, kill and booster lines from slip joint. Rigged down storm saddles, goose necks and pod hose saddle.
CTB	P	RR2	1800	2000	2.00	1806.0m	Laid out riser landing joint and slip joint. [Offline: Commenced ROV video survey. Installed long term marine growth covers on XT]
CTB	P	RR2	2000	2130	1.50	1806.0m	Pulled BOP through splash zone and attempted to land on carrier. Bent aft guidepost on stack due to swell.
CTB	TP (WOW)	RR2	2130	2400	2.50	1806.0m	Wait on weather to retrieve BOP. Ran BOP back through splash zone. 21:00 Swell - 3 m, Roll - 0.5 deg, Pitch - 0.6 deg 22:00 Swell - 3 m, Roll - 0.5 deg, Pitch - 0.5 deg 23:00 Swell - 3 m, Roll - 0.5 deg, Pitch - 0.75 deg 24:00 Swell - 3 m, Roll - 1 deg, Pitch 1 deg

Operations For Period 0000 Hrs to 0600 Hrs on 07 Jul 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	TP (WOW)	RR2	0000	0600	6.00	1806.0m	Waited on weather, prior to pulling BOP through splash zone. 01:00 Swell - 4 m, Pitch - 1 deg, Roll - 1 deg 02:00 Swell - 4 m, Pitch - 0.8 deg, Roll - 0.8 deg 04:00 Swell - 4 m, Pitch - 0.8 deg, Roll - 0.8 deg 06:00 Swell - 4 m, Pitch - 0.8 deg, Roll - 0.8 deg

Bulk Stocks						Personnel On Board	
Name	Unit	In	Used	Adjust	Balance	Company	Pax
Fuel	m3	0	9.3	0	224.4	Santos	6
Drill Water	m3	0	18.1	0	468.8	DOGC	48
Potable Water	m3	27	28.4	0	247.0	ESS	8
Gel	sx	0	0	0	1,915.0	Dowell	1
Cement	sx	0	0	0	2,450.0	Geoservices	2
Barite	sx	0	0	0	2,073.0	Fugro	6
KCl Brine	bbl	0	0	0	0.0	Cameron	1
						Fugro - Surveyor	2
						MO47	4
						MI	1
						Dril-Quip	1
						Other	2
						Total	82

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	2.08sg / 0sg	654.8m / 654.8m	Lead: 258 bbl, 12.5 ppg, Class G Tail: 91 bbl, 15.8 ppg, Class G
244	0sg / 0sg	1719.8m / 1716.0m	Lead: 9 m3 (57 bbl) 1.5 sg (12.5 ppg) Class G Tail: 7.5 m3 (47 bbl) 1.9 sg (15.8 ppg) Class G

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	03 Jul 2005	3 Days	Abandon Drill
BOP Test	03 Jul 2005	3 Days	BOP Test
Environmental Incident	02 May 2005	65 Days	None reported since commencement of campaign.
Fire Drill	03 Jul 2005	3 Days	Fire Drill
First Aid	04 May 2005	63 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	65 Days	None reported since commencement of campaign.
Man Overboard Drill	18 Jun 2005	18 Days	Man Overboard Drill
Near Miss	20 Jun 2005	16 Days	Failed compensator tensioner cable, release of compensator fluid.
Safety Meeting	03 Jul 2005	3 Days	Weekly Safety Meeting
Stop Cards	06 Jul 2005	0 Days	3 Stop Cards

Marine									
Weather check on 06 Jul 2005 at 2400							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (mt)
18.5km	37km/h	293deg	1023.00bar	12.0C°	2.0m	293deg	1m/sec	1	10.89
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments		2	10.48
0.5deg	1.0deg	1.00m	3.0m	225deg	2m/sec			3	10.30
Rig Dir.	Ris. Tension	VDL	Comments					4	4.81
251.0deg	12.25mt	172.82mt						5	12.20
								6	11.20
								7	12.29
								8	11.79

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	415
				Drill Water	m3	527
				Potable Water	m3	577
				Gel	t	42
				Cement	t	76
				Barite	t	37
				NaCl Brine	bbbl	0
Pacific Wrangler			Portland	Item	Unit	Quantity
				Fuel	m3	542.3
				Drill Water	m3	438
				Potable Water	m3	311
				Gel	t	43
				Cement	t	42
				Barite	t	37
				KCl Brine	bbbl	0

Helicopter Movement

Flight #	Time	Destination	Comment	Pax
1	12:07	Ocean Patriot		10
1	12:23	Essendon		15

From : Ron King, Pat King
OIM : Barry Scott

Well Data

Country	Australia	M. Depth	1806.0m	Cur. Hole Size	216mm	AFE Cost	
Field	Casino	TVD	1802.0m	Casing OD	244mm	AFE No.	5746022
Drill Co.	DOGC	Progress	0m	Shoe TVD	1716.0m	Daily Cost	
Rig	Ocean Patriot	Days from spud	21.21	F.I.T. / L.O.T.	Osg / Osg	Cum Cost	
Wtr Dpth(LAT)	68.2m	Days on well	23.13			Planned TD	1788.0m
RT-ASL(LAT)	21.5m	Current Op @ 0600	Rigging up handling equipment for 127 mm (5") drill pipe.				
RT-ML	89.7m	Planned Op	Install corrosion cap on XT. Lay out drill pipe. Pull anchors.				

Summary of Period 0000 to 2400 Hrs

Waited on weather to pull BOP through splash zone.

Operations For Period 0000 Hrs to 2400 Hrs on 07 Jul 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	TP (WOW)	RR2	0000	2400	24.00	1806.0m	Waited on weather, prior to pulling BOP through splash zone. 01:00 Swell - 4 m, Pitch - 1 deg, Roll - 1 deg 02:00 Swell - 4 m, Pitch - 0.8 deg, Roll - 0.8 deg 04:00 Swell - 4 m, Pitch - 0.8 deg, Roll - 0.8 deg 06:00 Swell - 4 m, Pitch - 0.8 deg, Roll - 0.8 deg 09:00 Swell - 3 m, Sea - 1.5 m, Pitch - 1.0 deg, Roll - 0.5 deg 10:00 Swell - 3 m, Sea - 1.5 m, Pitch - 0.5 deg, Roll - 0.8 deg 11:00 Swell - 3 m, Sea - 1.5 m, Pitch - 0.5 deg, Roll - 0.8 deg 12:00 Swell - 3 m, Sea - 1.0 m, Pitch - 1.0 deg, Roll - 1.0 deg 14:00 Swell - 2.5 m, Sea - 1.5 m, Pitch - 0.8 deg, Roll - 0.8 deg 16:00 Swell - 4 m, Sea - 1.0 m, Pitch - 1.0 deg, Roll - 1.0 deg 18:00 Swell - 4 m, Sea - 1.0 m, Pitch - 1.0 deg, Roll - 1.0 deg 20:00 Swell - 2.5 m, Sea - 0.5 m, Pitch - 0.75 deg, Roll - 0.5 deg 22:00 Swell - 3 m, Sea - 0.5 m, Pitch - 0.75 deg, Roll - 0.5 deg 24:00 Swell - 3 m, Sea - 0.5 m, Pitch - 0.75 deg, Roll - 0.5 deg

Operations For Period 0000 Hrs to 0600 Hrs on 08 Jul 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
CTB	TP (WOW)	RR2	0000	0145	1.75	1806.0m	Waited on weather prior to pulling BOP through splash zone. [Offline: Replaced right discharge module on mud pump #3]
CTB	P	RR2	0145	0230	0.75	1806.0m	Held pre-job safety meeting. Pulled BOP through splash zone into moonpool. Installed moonpool tuggers to stabilise BOP. Moved in carrier and landed out BOP on stump.
CTB	P	RR2	0230	0430	2.00	1806.0m	Removed moonpool tuggers. Removed guide wire pod line and hose clamps. Unlatched riser from BOP and skidded carrier out of moonpool.
CTB	P	RR2	0430	0600	1.50	1806.0m	Laid out riser double and rigged down riser handling equipment. Commenced rigging up handling equipment for 127 mm (5") drill pipe. Skidded rig back over location.

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Fuel	m3	0	0	0	224.4
Drill Water	m3	0	0	0	468.8
Potable Water	m3	0	0	0	247.0
Gel	sx	0	0	0	1,915.0
Cement	sx	0	0	0	2,450.0
Barite	sx	0	0	0	2,073.0
KCl Brine	bbl	0	0	0	0.0

Personnel On Board

Company	Pax
Santos	3
DOGC	47
ESS	8
Dowell	1
Geoservices	2
Fugro	6
Cameron	1
Fugro - Surveyor	2
MO47	4
MI	1
Dril-Quip	1
Other	2
Total	78

Casing			
OD	L.O.T. / F.I.T.	Csg Shoe (MD/TVD)	Cementing
762	0sg / 0sg	132.0m / 132.0m	199 bbl, 15.8 ppg, Class G with 1.5% BWOC CaCl2
340	2.08sg / 0sg	654.8m / 654.8m	Lead: 258 bbl, 12.5 ppg, Class G Tail: 91 bbl, 15.8 ppg, Class G
244	0sg / 0sg	1719.8m / 1716.0m	Lead: 9 m3 (57 bbl) 1.5 sg (12.5 ppg) Class G Tail: 7.5 m3 (47 bbl) 1.9 sg (15.8 ppg) Class G

HSE Summary			
Events	Date of Last	Days Since	Remarks
Abandon Drill	03 Jul 2005	4 Days	Abandon Drill
BOP Test	03 Jul 2005	4 Days	BOP Test
Environmental Incident	02 May 2005	66 Days	None reported since commencement of campaign.
Fire Drill	03 Jul 2005	4 Days	Fire Drill
First Aid	04 May 2005	64 Days	Person struck on nose with metal bar
Lost Time Incident	02 May 2005	66 Days	None reported since commencement of campaign.
Man Overboard Drill	18 Jun 2005	19 Days	Man Overboard Drill
Near Miss	20 Jun 2005	17 Days	Failed compensator tensioner cable, release of compensator fluid.
Safety Meeting	03 Jul 2005	4 Days	Weekly Safety Meeting
Stop Cards	07 Jul 2005	0 Days	1 Stop Card

Marine							
Weather check on 07 Jul 2005 at 2400							
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period
18.5km	35km/h	225deg	1026.00bar	12.0C°	0.5m	225deg	1m/sec
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments	
0.5deg	0.8deg	2.00m	3.0m	225deg	2m/sec		
Rig Dir.	Ris. Tension	VDL	Comments				
251.0deg	0mt	172.82mt					
Rig Support							
Anchors				Tension (mt)			
1				10.61			
2				10.21			
3				10.21			
4				4.81			
5				12.11			
6				11.20			
7				12.38			
8				11.88			

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip			Ocean Patriot	Item	Unit	Quantity
				Fuel	m3	404
				Drill Water	m3	527
				Potable Water	m3	574
				Gel	t	42
				Cement	t	76
				Barite	t	37
NaCl Brine	bbl	0				
Pacific Wrangler			Portland	Item	Unit	Quantity
				Fuel	m3	531.8
				Drill Water	m3	438
				Potable Water	m3	306
				Gel	t	43
				Cement	t	42
				Barite	t	37
KCl Brine	bbl	0				

Helicopter Movement				
Flight #	Time	Destination	Comment	Pax
1	09:59	Ocean Patriot		10
1	10:14	Essendon		14

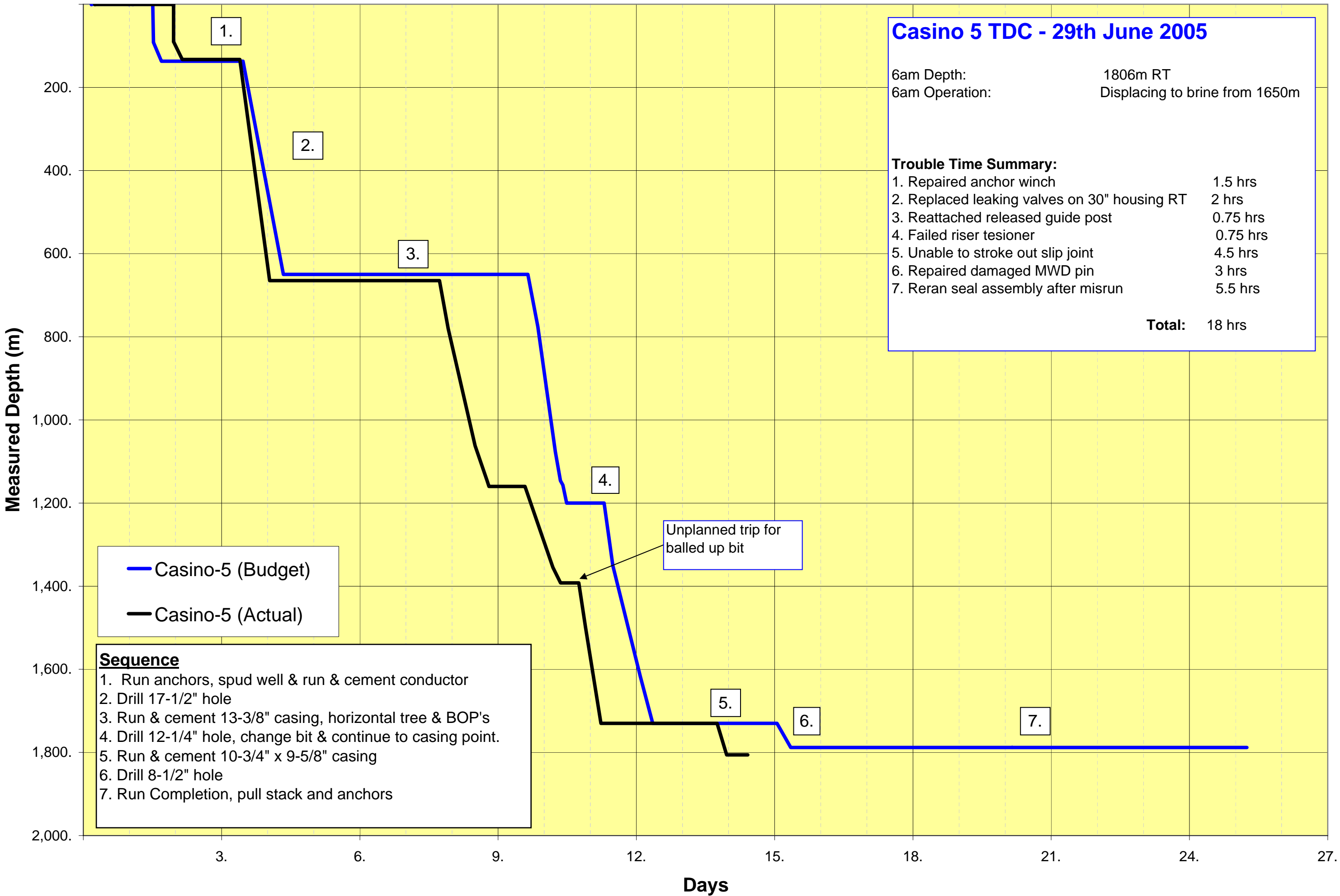
SECTION 7 : TIME / DEPTH CURVE

Casino 5 TDC - 29th June 2005

6am Depth: 1806m RT
 6am Operation: Displacing to brine from 1650m

Trouble Time Summary:

1. Repaired anchor winch	1.5 hrs
2. Replaced leaking valves on 30" housing RT	2 hrs
3. Reattached released guide post	0.75 hrs
4. Failed riser tesioner	0.75 hrs
5. Unable to stroke out slip joint	4.5 hrs
6. Repaired damaged MWD pin	3 hrs
7. Reran seal assembly after misrun	5.5 hrs
Total:	18 hrs



— Casino-5 (Budget)
 — Casino-5 (Actual)

- Sequence**
1. Run anchors, spud well & run & cement conductor
 2. Drill 17-1/2" hole
 3. Run & cement 13-3/8" casing, horizontal tree & BOP's
 4. Drill 12-1/4" hole, change bit & continue to casing point.
 5. Run & cement 10-3/4" x 9-5/8" casing
 6. Drill 8-1/2" hole
 7. Run Completion, pull stack and anchors

Unplanned trip for balled up bit

SECTION 8 : BHA SUMMARY

Rig : Ocean Patriot

Spud : 16 Jun 2005 / 19:00

Rig Release : 08 Jul 2005 / 22:00

BHA No.: 1

Parameters		BHA Detail						
Date In/ Date Out	16 Jun 2005 / 17 Jun 2005	Equipment	Length (m)	Total Joints	OD (in)	ID (in)	Serial #	Comment
Depth In/ Depth Out (m)	89.7/133.0	Bit	0.64	1	26.00	0.00	MR4109	Smith DSJC c/w 2 x 20, 2 x 22 Nozzles
Length (m)	133.0	Hole Opener	2.43	1	36.00	0.00	46450	4 x 24 Nozzles
Weight (Dry/ Wet) (klb)	0.0 / 0.0	Float Sub	1.02	1	9.50	0.00	186-0028	Ported Float
Weight Blw/Jar (Dry/Wet) (klb)	0.0 / 0.0	9.5in Anderdrift	3.11	1	9.56	0.00	ADB993	
String Weight (Avg) (klb)	0	Stab	2.10	1	9.50	0.00	A229	
Pick-Up Weight (Avg) (klb)	0	NMDC	9.04	1	9.50	0.00	6613	
Slack-Off Weight (Avg) (klb)	0	Stab	2.18	1	9.50	0.00	47618	
Torque Max (Avg) (ft-lbs)	0	Drill Collar	18.34	2	9.50	0.00	Various	
Torque on Bottom (Avg) (ft-lbs)	0	X/O	1.09	1	9.44	0.00	SANTOS	
Torque off Bottom (Avg) (ft-lbs)	0	Drill Collar	45.33	5	8.00	0.00	Various	
BHA Description: 660 mm (26") Bit, 914 mm (36") hole opener, Bit sub c/w float, 241 mm (9-1/2") Anderdrift, 445 mm (17-1/2") stabiliser, 241 mm (9-1/2") NMDC, 445 mm (17-1/2") stabiliser, 2 x 241 mm (9-1/2") DC, X/O, 5 x 203 mm (8") DC, X/O, 127 mm (5") HWDP		X/O	1.09	1	8.00	0.00	SANTOS	
BHA Run Comment:		HWDP	46.63	5	6.38	0.00	Various	

BHA No.: 2

Parameters		BHA Detail						
Date In/ Date Out	18 Jun 2005 / 19 Jun 2005	Equipment	Length (m)	Total Joints	OD (in)	ID (in)	Serial #	Comment
Depth In/ Depth Out (m)	133.0/665.0	Bit	0.44	1	17.50	0.00	MR9725	Smith XR+CRS c/w 1 x 18, 3 x 20 Nozzles
Length (m)	275.9	Near Bit Stabiliser	1.62	1	17.50	0.00	3135	C/W Float
Weight (Dry/ Wet) (klb)	0.0 / 0.0	Pony Drill Collar	3.01	1	9.50	0.00	SBD2369	
Weight Blw/Jar (Dry/Wet) (klb)	0.0 / 50.0	Stab	2.10	1	9.50	0.00	A229	c/w Totco Ring
String Weight (Avg) (klb)	0	NMDC	9.04	1	9.50	0.00	6613	
Pick-Up Weight (Avg) (klb)	0	Stab	2.18	1	9.50	0.00	47618	
Slack-Off Weight (Avg) (klb)	0	Drill Collar	18.34	2	9.50	0.00	Various	
Torque Max (Avg) (ft-lbs)	0	X/O	1.09	1	9.44	0.00	SANTOS	
Torque on Bottom (Avg) (ft-lbs)	0	Drill Collar	71.57	8	8.00	0.00	Various	
Torque off Bottom (Avg) (ft-lbs)	0	Jar	9.20	1	8.25	0.00	DAH02220	
BHA Description: 445 mm (17-1/2") Bit, 445 mm (17-1/2") NB Stab, 241 mm (9-1/2") Pony DC, 445 mm (17-1/2") Stab, 241 mm (9-1/2") NMDC, 445 mm (17-1/2") stabiliser, 2 x 241 mm (9-1/2") DC, X/O, 8 x 203 mm (8") DC, 203 mm (8") Jars, 2 x 203 mm (8") DC, X/O, 15 x 127 mm (5") HWDP		Drill Collar	17.90	2	7.94	0.00	Various	
BHA Run Comment:		X/O	1.09	1	8.00	0.00	SANTOS	
		HWDP	138.37	15	6.38	0.00	Various	

Rig : Ocean Patriot

Spud : 16 Jun 2005 / 19:00

Rig Release : 08 Jul 2005 / 22:00

BHA No.: 3

Parameters		BHA Detail						
Date In/ Date Out	23 Jun 2005 / 24 Jun 2005	Equipment	Length (m)	Total Joints	OD (in)	ID (in)	Serial #	Comment
Depth In/ Depth Out (m)	665.0/1160.0	Bit	0.33	1	12.25	0.00	MR0049	Smith GS04BDV 3 x 18, 1 x 20 nozzles
Length (m)	279.2	Near Bit Stabiliser	2.11	1	12.25	0.00	47602	c/w Ported Float
Weight (Dry/ Wet) (klb)	0.0 / 70.0	Pony Drill Collar	3.04	1	8.25	0.00	49059	
Weight Blw/Jar (Dry/Wet) (klb)	0.0 / 54.0	Stab	2.08	1	12.25	0.00	AIB1134	
String Weight (Avg) (klb)	210	FEWD Tools	13.16	3	8.00	0.00	Various	FEWD - 90072859/XH1GVR Pulser - 10599305 Directional - 90074559
Pick-Up Weight (Avg) (klb)	0	NM Pony Drill Collar	2.93	1	8.13	0.00	47637	
Slack-Off Weight (Avg) (klb)	0	Drill Collar	88.99	10	7.88	0.00	Various	
Torque Max (Avg) (ft-lbs)	0	Jar	9.20	1	8.25	0.00	DAH02220	
Torque on Bottom (Avg) (ft-lbs)	0	Drill Collar	17.90	2	7.94	0.00	Various	
Torque off Bottom (Avg) (ft-lbs)	0	X/O	1.09	1	8.00	0.00	SANTOS	
BHA Description: 311 mm (12-1/4") TCI Bit, 311 mm (12-1/4") NB Stab, 203 mm (8") Pony DC, 311 mm (12-1/4") Stab, Sperry FEWD, Pulser, Directional, 203 mm (8") NMDC, 10 x 203 mm (8") DC, 203 mm (8") Jars, 2 x 203 mm (8") DC, X/O, 15 x 127 mm (5") HWDP		HWDP	138.37	15	6.38	0.00	Various	
BHA Run Comment:								

BHA No.: 4

Parameters		BHA Detail						
Date In/ Date Out	24 Jun 2005 / 25 Jun 2005	Equipment	Length (m)	Total Joints	OD (in)	ID (in)	Serial #	Comment
Depth In/ Depth Out (m)	1160.0/1392.0	Bit	0.52	1	12.25	0.00	JT6901	Smith MA89PX 7 x 14 nozzles
Length (m)	252.4	Near Bit Stabiliser	2.11	1	12.25	0.00	47602	c/w Ported Float
Weight (Dry/ Wet) (klb)	0.0 / 50.0	Pony Drill Collar	3.04	1	8.25	0.00	49059	
Weight Blw/Jar (Dry/Wet) (klb)	0.0 / 38.0	Stab	2.08	1	12.25	0.00	AIB1134	
String Weight (Avg) (klb)	210	FEWD Tools	12.90	3	8.00	0.00	Various	FEWD - DA90077824/XH1GR8 Pulser - 1056014 Directional - DM90061480MB
Pick-Up Weight (Avg) (klb)	0	NM Pony Drill Collar	2.93	1	8.13	0.00	47637	
Slack-Off Weight (Avg) (klb)	0	Drill Collar	62.27	7	7.88	0.00	Various	
Torque Max (Avg) (ft-lbs)	0	Jar	9.20	1	8.25	0.00	DAH02220	
Torque on Bottom (Avg) (ft-lbs)	0	Drill Collar	17.90	2	7.94	0.00	Various	
Torque off Bottom (Avg) (ft-lbs)	0	X/O	1.09	1	8.00	0.00	SANTOS	
BHA Description: 311 mm (12-1/4") PDC Bit, 311 mm (12-1/4") NB Stab, 203 mm (8") Pony DC, 311 mm (12-1/4") Stab, Sperry FEWD, Pulser, Directional, 203 mm (8") NMDC, 7 x 203 mm (8") DC, 203 mm (8") Jars, 2 x 203 mm (8") DC, X/O, 15 x 127 mm (5") HWDP		HWDP	138.37	15	6.38	0.00	Various	
BHA Run Comment:								

Rig : Ocean Patriot

Spud : 16 Jun 2005 / 19:00

Rig Release : 08 Jul 2005 / 22:00

BHA No.: 5

Parameters		BHA Detail						
Date In/ Date Out	25 Jun 2005 / 26 Jun 2005	Equipment	Length (m)	Total Joints	OD (in)	ID (in)	Serial #	Comment
Depth In/ Depth Out (m)	1392.0/1730.0	Bit	0.32	1	12.25	0.00	110402	Reed Hycalog DSX104 3 x 16, 2 x 18 nozzles
Length (m)	252.2	Near Bit Stabiliser	2.11	1	12.25	0.00	47602	c/w Ported Float
Weight (Dry/ Wet) (klb)	0.0 / 50.0	Pony Drill Collar	3.04	1	8.25	0.00	49059	
Weight Blw/Jar (Dry/Wet) (klb)	0.0 / 38.0	Stab	2.08	1	12.25	0.00	AIB1134	
String Weight (Avg) (klb)	210	FEWD Tools	12.90	3	8.00	0.00	Various	FEWD - DA90077824/XH1GR8 Pulser - 1056014 Directional - DM900614800B
Pick-Up Weight (Avg) (klb)	0	NM Pony Drill Collar	2.93	1	8.13	0.00	47637	
Slack-Off Weight (Avg) (klb)	0	Drill Collar	62.27	7	7.88	0.00	Various	
Torque Max (Avg) (ft-lbs)	0	Jar	9.20	1	8.25	0.00	DAH02220	
Torque on Bottom (Avg) (ft-lbs)	0	Drill Collar	17.90	2	7.94	0.00	Various	
Torque off Bottom (Avg) (ft-lbs)	0	X/O	1.09	1	8.00	0.00	SANTOS	
BHA Description: 311 mm (12-1/4") PDC Bit, 311 mm (12-1/4") NB Stab, 203 mm (8") Pony DC, 311 mm (12-1/4") Stab, Sperry FEWD, Pulser, Directional, 203 mm (8") NMDC, 7 x 203 mm (8") DC, 203 mm (8") Jars, 2 x 203 mm (8") DC, X/O, 15 x 127 mm (5") HWDP		HWDP	138.37	15	6.38	0.00	Various	
BHA Run Comment:								

BHA No.: 6

Parameters		BHA Detail						
Date In/ Date Out	27 Jun 2005 / 29 Jun 2005	Equipment	Length (m)	Total Joints	OD (in)	ID (in)	Serial #	Comment
Depth In/ Depth Out (m)	1730.0/1806.0	Bit	0.23	1	8.50	0.00	110960	DSX104; 2x16 & 3x15 nozzles Serial #: 110996
Length (m)	265.6	Near Bit Stabiliser	2.40	1	6.56	3.50	DA6028	
Weight (Dry/ Wet) (klb)	0.0 / 25.0	Pony Drill Collar	5.04	1	6.69	2.75	DA6024	
Weight Blw/Jar (Dry/Wet) (klb)	0.0 / 45.0	MWD Tools	9.76	1	6.75	3.00	DM4007	DGR EWR DDR SLB
String Weight (Avg) (klb)	245	MWD Tools	2.79	1	6.75	3.00	152535	Directional sensor
Pick-Up Weight (Avg) (klb)	245	MWD Tools	3.05	1	6.75	3.00	10599301	Pulser
Slack-Off Weight (Avg) (klb)	245	8.5in String Stab	1.78	1	6.69	2.81	92566	8.5"
Torque Max (Avg) (ft-lbs)	12	6.5in DC	74.44	8	6.50	2.88		
Torque on Bottom (Avg) (ft-lbs)	8	6.5in Jars	9.24	1	6.50	2.75	WDAH02928	
Torque off Bottom (Avg) (ft-lbs)	4	6.5in DC	18.56	2	6.50	2.88		
BHA Description:		5in HWDP	138.37	15	5.00	3.00		
BHA Run Comment:								

SECTION 9 : BIT RECORD & PERFORMANCE SUMMARY

DFE above MSL : 21.5m

Lat : 38 Deg 47 Min 43.75 Sec

Spud Date : 16 Jun 2005

Release Date : 08 Jul 2005

Water Depth : 68.2m

Long : 142 Deg 44 Min 44.54 Sec

Spud Time : 19:00

Release Time : 22:00

Bit Record

Well: Casino-5																											
Date In	IADC	Bit#	Size in	Ser #	Mfr	Type	Jets # x /32nd"	D.In m	D.Out m	Prog m	Hrs o/b	SPP psi	Flow gpm	WOB klb	RPM	MW	TFA	ROP m/hr	I	O1	D	L	B	G	O2	R	
16 Jun 2005	115	1RR	26.00	MR4109	SMITH	DSJC	2 x 20 2 x 22	89.7	133.0	43.3	3.10	1000	1000	2.0	70	8.68	1.356	13.97									
18 Jun 2005	115	2	17.50	MR9725	SMITH	XR+CRS	3 x 20 1 x 18	133.0	665.0	532	11.39	2600	1130	30.0	110	8.68	1.169	46.71	1	1	NO	A	E	I	NO	TD	
22 Jun 2005	415	3	12.25	MR0049	SMITH	GS04BDV	3 x 18 1 x 20	665.0	1160.0	495	18.90	3000	1000	15.0	120	8.93	1.052	26.19	4	5	WT	A	E	I	ER	FM	
24 Jun 2005	M223	4RR	12.25	JT6901	SMITH	MA89PX	7 x 14	1160.0	1392.0	232	15.20	3000	1000	12.0	150	9.27	1.052	15.26	1	1	BT	S	X	I	BU	PR	
25 Jun 2005	M323	5	12.25	110402	HYCALOG	DSX104	3 x 16 2 x 18	1392.0	1730.0	338	7.40	3250	950	15.0	170	9.39	1.086	45.68	1	1	BT	T	X	I	NO	TD	
27 Jun 2005	M323	6	8.50	110996	HYCALOG	DSX104	2 x 16 3 x 15	1730.0	1806.0	76	3.70	0	700	5.0	120	9.55	0.91	20.54	1	1	NO	A	E	I	ER	TD	

SECTION 10 : DRILLING FLUIDS REPORT

Fluids Recap

Santos Ltd
Casino 5
VIC P-44
Gas Development
Otway Basin



Prepared by: Steve Jones



M-I L.L.C.
ONE-TRAX
DRILLING FLUID DATA MANAGEMENT SYSTEM

<p>Operator: Santos Ltd Well Name: Casino 5 Field/Area: VIC P-44 Description: Gas Development Location: Otway Basin Warehouse: Portland Contractor: Diamond Offshore</p>	<p>Spud Date: 16/06/2005 TD Date: 28/06/2005 Location Code: 7001 Project Engineer: Steve Jones Sales Engineer: J. Singh / G.Howie Sales Engineer: G. Sharpe / K Leong M-I Well No.</p>
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Comments:

Type	Size in	Depth m	TVD m	Hole in	Max MW sp.gr.	Fluid 1	Fluid2	Drilling Problem	Days	Cost \$
Casing	30	133	133	36	1.04	Spud Mud	N/A	None	1	5742.52
Casing	13.625	655	655	17.5	1.04	Spud Mud	N/A	None	3	14754.45
Open Hole	.	1009	1009	12.25	1.04	Spud Mud	N/A	None	3	2304.78
Casing	9.625	1720	1718	12.25	1.25	KCL/Polymer	N/A	BHA/Bit Balling	5	121030.28
Casing	7	1806	1802	8.5	1.24	FLO-PRO/Completion		None	5	112947.32

Total Depth: 1806 m	TVD: 1802 m	Water Depth: 69 m	Drilling Days: 17	Total Cost: 256,779.35
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**DRILLING FLUIDS RECAP FOR SANTOS LTD
CASINO 5**

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- **DAILY DISCUSSION REPORT**
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**DRILLING FLUIDS RECAP FOR SANTOS LTD
CASINO 5**

**DISCUSSION
BY
INTERVAL**

DRILLING FLUIDS RECAP FOR SANTOS CASINO 5

SUMMARY:

Santos Ltd was the operator of vertical gas producer well, Casino – 5, Vic/P44, Victoria, Australia using the Ocean Patriot semi submersible rig owned by Diamond Offshore. Casino – 5 is located in the Casino gas field, approximately 25 km SW of Peterborough, Latitude 38.47'54 E and Longitude 142.47'12 S. The well was programmed for 17 days' drilling operations and 8 days' completion operations.

The rig was moved to location on 15 June 2005 after finishing Casino 4 DW2 well.

The primary objective was gas in Warre C Sandstone (1743 m RT TVD) with bottom hole pressure of 2830 psi and temperature of 79C.

Casino-5 was spudded on the 16 June 2005 at 19:00 hrs.

The 26" x 36" hole was drilled to 133 m using sea water and Gel sweeps. The 30 x 20" conductor casing was run and cemented in place at 133 m. A top up cement job was also performed.

The 17½" hole was drilled to 665 m with sea water and PRE HYDRATED GEL sweeps. The 13 3/8" casing was run after a wiper trip and cemented as per the program at 655 m.

The Sub Sea Xmas tree was lowered onto wellhead and BOP was rigged up.

The cement and casing shoe were drilled out and a LOT performed to an equivalent mud weight of 17.4 ppg. Continued drilling 12¼" hole to 994m with sea water/Gel sweeps and then the hole was displaced to KCl/Idcap/PAC mud.

400 bbls of mud was lost down hole during the displacement. A further 40 bbls were lost downhole at 1100m. This healed naturally and no further downhole losses were noted.

A bit trip was made at 1160 m due to poor rate of penetration. The bit and MWD tool were changed out, RIH and drilling continued at 12 – 20 meters per hour through the Timboon sandstone. The ROP slowed to less than 10m/hr. A 45 bbl KCl brine pill was pumped in an attempt to clear the bit at 1388m. POOH to change the bit at 1392m. The bit was balled. RIH and drilled ahead to 1730 m where a weighted hi vis pill was pumped and the hole circulated clean A wiper trip was made back to the shoe, reaming tight spots as required. Then POOH, retrieve the wear bushing, and rig up to run 9½" casing. The casing was run without problems and cemented with the shoe at 1720m.

DRILLING FLUIDS RECAP FOR SANTOS CASINO 5

1100 bbls of FloPro Drill in mud system was mixed to drill the 8½" interval. An 8½" BHA with PDC bit was run in the hole to drill out cement and the casing shoe. Then a heavy viscous spacer with a Fluoresceine dye was pumped ahead of the FloPro system when displacing the hole. The displacement was precise with no mud losses down hole or over the shakers. Shaker screens were quickly changed out to finer mesh, from 84 – 140 mesh to 200 and 230 mesh. The 8½" hole was drilled without any hole or mud problems to TD at 1806 m.(1802 m. TVD), at ROP's 10 – 30 meters per hour.

The interval was drilled in less than 8 hours. The desander and desilter were not run as mud density and LGS were not increasing, and volume had to be conserved.

A flow check was done, (hole static), then circulated bottoms up. A short trip back through the open hole, then run back to bottom. There was no fill, the hole was circulated clean then POOH to 488 m. At this point, instructions were given to RIH to bottom to displace the open hole section with 50 bbls of freshly mixed FloPro mud which had not been used to drill, and which had no sand or solids in it which could possibly block flow through the production screens.

POOH from 1806m to 1650m. The hole was then displaced to CaCl₂ brine. Then continued to POOH to run expandable sand screens of the lower completion assembly.

The ESS Expandable screens and Packer were run with the expandable Packer set at 1800m RIH with ACE expansion tool. The attempt to work through the packer assembly was not successful. POOH checking on OD of HWDP and 6" drill collar tool joints. One found to be over size. TIH with ACE expansion tool on 5" DP and successfully expanded screens from 1731 to 1793 meters. POOH to run casing scraper and worked from 1552 to 1658 meters.

At this time the well was displaced to brine 43 bbls viscous pill, followed by 152bbls NaCl brine then 462 bbls CaCl₂ brine at 10.3 ppg. POOH to run production tubing.

The total mud chemical cost for the well was: \$256,779.35.

DRILLING FLUIDS RECAP FOR SANTOS CASINO 5

FORMATION TOPS:

Formation Tops RKB Casino - 5		Formation	Lithology
Programmed	Actual		
776	775	WANGERRIP GROUPS	Sandstone/Calcarinite
1077	1083	PEBBLE POINT FM	Sandstone/Calcarinite
1146	1151	MASSACRE SHALE	Siltstone
1157	1162	TIMBOON SST	Sandstone
1350	1355	PAARATTE FM	Sandstone
1515	1498	SKULL CREEK MUDSTONE	Sandstone/Siltstone
1743	1746	TOP WAARRE	Sandstone/Siltstone
1780		BASE WAARRE C	
1788	1806	TD	

Mepunga Formation 680 +/- 5m

**DRILLING FLUIDS RECAP FOR SANTOS
CASINO 5**

Interval I	90- 133 meters	36 x 26 Hole	30 x 20" casing
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MUDTYPE : SEAWATER / PRE HYDRATED GEL

MUD RELATED
HOLE PROBLEMS : None

MUD PROPERTIES:

Mud Weight : 8.7 ppg
YP : 50 lb/100ft²
API FL : 13 cc/30 min
Funnel Vis : > 200 se/qt
Hardness : 40 mg/l
MBT : 28 ppb

OPERATIONS:

Casino-5 was spudded on 16th June 2005 at 19:00 hrs after experiencing problems tensioning anchors due to hard sea bed surface. The 26" hole with 36" hole opener was drilled to 133m in 5 hrs. The drilling was controlled using low weight on bit and frequent reaming to keep hole deviation at 1 degrees. The 30" casing was run and cemented in place at 133 meters with permanent guide base.

MUD

1680 bbl of 26 ppb Gel was mixed in the pits in preparation for spudding. The mixing created heavy foaming and required use of defoamer and flushing the pits with sea water. The hopper mix pumps were losing prime and charge pumps were used to assist the mix pumps. No kill mud was prepared as the offset wells did not indicate any shallow gas. The drilling was initiated using 200 bbl Pre Hydrated Gel and hole was swept with 100 bbl mud every 10 m of drilling. At TD a 100 bbl sweep was pumped and hole displaced with 300 bbl of unflocculated PRE HYDRATED GEL mud.

A total of 1178 bbl of Pre Hydrated Gel was used for this section. The remaining 502 bbl of left over Pre Hydrated Gel was carried over for the next section. 185 bbl of CaCl₂ cement mix was prepared in separate tank.

SOLIDS CONTROL:

None used as returns were directed to seabed.

OBSERVATIONS AND RECOMMENDATIONS:

No changes are proposed.

**DRILLING FLUIDS RECAP FOR SANTOS
CASINO 5**

Interval II	133 m – 665 m	17½" Hole section	13⅜" casing at 655 m
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MUDTYPE : Seawater / Pre Hydrated Gel

MUD RELATED
HOLE PROBLEMS : None

MUD PROPERTIES:

Mud Weight : 8.7 ppg
YP : 50 lb/100ft²
API FL : 13cc/30 min
Funnel Vis : > 100 se/qt
Hardness : 40 mg/l
MBT : 27-28 ppb

OPERATIONS:

The 17½" drilling assembly was made up and run in hole. The hole was drilled to 665 meters using sea water pumped at 1100 gpm with Gel sweeps. A wiper trip was performed as tight hole was encountered from 450 to 300m. The 13⅜" casing was run and cemented in place as per program with no troubles with the shoe at 655 m.

MUD:

502 bbl of Pre Hydrated Gel mud from the previous section was carried over to this section. A 50 bbl Pre Hydrated Gel sweep was pumped after drilling cement and further drilling continued using sea water and PHG sweeps. A sweep regime of 50 bbl Pre Hydrated Gel mid stand and 75 bbl Pre Hydrated Gel on connections was followed. A 200 bbl Pre Hydrated Gel sweep was pumped and was circulated out with seawater at TD of 665 m. The hole was then displaced with 800 bbl Pre Hydrated Gel. The hole was again displaced with Pre Hydrated Gel after wiper trip.

A total of 3760 bbl of Gel was used for this section.

SOLIDS CONTROL:

No solids control was used as returns were to seabed.

DRILLING FLUIDS RECAP FOR SANTOS CASINO 5

OBSERVATIONS AND RECOMMENDATIONS:

No changes are recommended as the Pre Hydrated Gel sweep system is the most cost effective way to drill this interval.

**DRILLING FLUIDS RECAP FOR SANTOS
CASINO 5**

Interval III	665 m – 994 m	12¼" Hole section	
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MUDTYPE : Seawater/Pre Hydrated Gel

MUD RELATED
HOLE PROBLEMS : None

MUD PROPERTIES:

Mud Weight : 8.7 ppg
YP : 50 lb/100ft²
API FL : 13cc/30 min
Funnel Vis : >100 sec/qt
Hardness : 40 mg/lit
MBT : 27-28 ppb

OPERATIONS:

12¼" drilling assembly was made up and run in hole after landing the BOP stack. Drilled through casing shoe and cement and 3 meters of new formation. A LOT was performed to an equivalent 17.4 ppg. The hole was drilled with sea water pumped at 1100 gpm with 50 bbl Gel sweeps midstand and 50 bbl on connections, to 994m. At this depth the hole was displaced to KCl/IDCAP D polymer mud.

MUD:

502 bbl of Pre Hydrated Gel mud from the previous section was carried over to this section. A 60 bbl Pre Hydrated Gel sweep was pumped after drilling cement and shoe track. Drilling continued using sea water, and a sweep regime of 50 bbl Pre Hydrated Gel mid stand and 50 bbl Pre Hydrated Gel on connections was followed. A 200 bbl Pre Hydrated Gel sweep was pumped at 966 m to make pit space for dilution of KCl-Polymer mud and was circulated out with seawater. The hole was again swept with 150 bbl Pre Hydrated Gel prior to displacement to KCl/Polymer mud at 994 m. A total of 1540 bbl of Pre Hydrated Gel was used for this section.

SOLIDS CONTROL:

While drilling with seawater/PHG sweeps, the returns were dumped overboard with some flow taken over one shale shaker for collecting cutting samples. Sand blinding

DRILLING FLUIDS RECAP FOR SANTOS CASINO 5

of this shaker was noticed as and when riser was boosted, due to overwhelming amount of sands.

OBSERVATIONS AND RECOMMENDATIONS:

No changes are recommended as the Pre Hydrated Gel sweep system is the most cost effective way to drill this interval avoiding the potential KCl-Polymer mud losses caused by sand blinding screens, if used instead of Sea Water.

**DRILLING FLUIDS RECAP FOR SANTOS
CASINO 5**

Interval IV	994 - 1730 meters	12 ¼ Section	9 ⁵ / ₈ " casing at 1720 m
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MUD TYPE : KCl/Idcap D

MUD RELATED
HOLE PROBLEMS : Balled Bit.

MUD PROPERTIES:

Mud Weight : 10.1 – 10.4 ppg
YP : 26-48
PV : 11-17
API FL : 3.8-5 cc
KCl : 6.5-8 %
IDCAP : 2.5-3.0 ppb
Funnel Vis : 49 – 55 sec/qt
Hardness : 640 mg/l
LGS : 0.5-3%
Drill Solids : 9-12 %
PH : 8.0 - 9.0
6 RPM : 10 – 15

OPERATIONS:

Prior to displacement the MWD tool progressively failed to communicate. The hole was displaced with 10.1 ppg KCl/Idcap mud while drilling from 994 m to 1009 m. A total of 400 bbl of KCl-Idcap mud was lost downhole during displacement. This loss was attributed to the coarse sandy zones drilled earlier. The losses healed naturally and no LCM was pumped.

Drilling continued to 1160 m, circulated bottoms up then POOH, to change the bit and failed MWD tool. Picked up new directional assembly and RIH. No hole problems or tight spots. Continued drilling through the Timboon Sandstone with ROP,s in the 12 – 20 meters per hour range, to 1388m where ROP dropped back to around 6 m/hr. Pumped a 45 bbl 8% KCl brine pill attempting to clear bit. Not successful. At 1392 m POOH to find bit balled. RIH and continued drilling to interval TD, 1730 meters. Wiper trip back to shoe, back reaming through tight spots. Then POOH to run 9⁵/₈" casing.

DRILLING FLUIDS RECAP FOR SANTOS CASINO 5

MUD:

While running the BOP stack three pits were dumped and cleaned to take 1000 bbl 16% Brine from Far Grip. Due to limitation of pit space, 906 bbls were mixed with 9% KCl concentration and weighed to 10.1 ppg along with 462 bbl of 16% KCl concentration with double strength of polymers. This double dose mix was diluted with drill water just before displacement as pit space became available.

The hole was displaced with 10.1 ppg KCl/Idcap mud while drilling from 994m to 1009m. A total of 400 bbl of KCl-Idcap mud was lost downhole during displacement. This loss was attributed to the coarse sandy zones drilled earlier. The losses healed naturally and no LCM was pumped.

The system was treated with 1.5 ppb of Duovis to enhance the 6 rpm reading of 5 to 10 and the Idcap concentration was increased to 2 ppb while drilling from 1009m to 1160m. The system was also treated with Potassium Hydroxide and Soda Ash for hardness and pH. OS-1 sacks were added to keep dissolved oxygen to minimum. Active pit volume was maintained by the addition of concentrated premix, which assisted in keeping product concentrations as required in the mud program.

The system was weighted to 10.3 – 10.4 ppg (1.24 – 1.24 sg) on Santos instructions by ~1530 meters. This density was used to drill to the interval TD, 1730 meters.

At TD 1730m, the hole was circulated clean and a wiper trip to 1140m was made which required some back reaming. 9⁵/₈" casing was run in hole and cemented at 1720m.

SOLIDS CONTROL:

The shakers were dressed initially with a mixture of 84,110,120,165 mesh used screens with 10 mesh scalping screens. These were upgraded to 165 and 180 mesh at 1160m after 8 hrs of drilling. At 1252 meters replaced 3 damaged 180 mesh screens with new screens from Santos stock. This setup worked well as the mud weight remained at 10.1 – 10.2ppg, with small assistance from the addition of 9.8 ppg premix to the active system. Additions of premix were stopped when the weight dropped to 10.0+ ppg. Sacked chemicals were then added to the mud to maintain program properties.

DRILLING FLUIDS RECAP FOR SANTOS CASINO 5

DOWNHOLE LOSSES:

400 bbl of downhole losses were observed on initial displacement and further 40 bbl were lost downhole at 1100 m. No LCM pills were pumped and the losses healed naturally.

OBSERVATIONS AND RECOMMENDATIONS:

It is recommended that the initial displacement be done with unweighted KCl-Polymer mud to reduce downhole losses as observed in this well.

DRILLING FLUIDS RECAP FOR SANTOS CASINO 5

Interval V	1730-1806 meters	8½" Section	Production Screens 1731 – 1793m
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MUD TYPE : FloPro NT

MUD RELATED
HOLE PROBLEMS : None.

MUD PROPERTIES:

Mud Weight	:	10.4
YP	:	23-48
PV	:	11-14
API FL	:	4.8-5.0 cc
KCl	:	6.5%
LSRV0.3rpm	:	36 – 45 k
Funnel Vis	:	50 – 65 sec/qt
Hardness	:	80 - 120 mg/l
LGS	:	2-4 %
Drill Solids	:	.5-5.2%
PH	:	9.7 – 10
6 RPM	:	10 - 17

OPERATIONS:

The 8½" hole was drilled at ROPs between 5 – 50 meters per hour. TD at 1806 meters was reached without any hole problems. Here a wiper trip back to the shoe was made, then the string was run to bottom, bottoms up circulated, flow check was done which showed the hole was static. There was no fill, the hole was circulated clean then POOH to 488 m. At this point, instructions were given to RIH to bottom to displace the open hole section with 50 bbls of freshly mixed FloPro mud which had not been used to drill, and which had no sand or solids in it which could possibly block flow through the production screens, and the casing was displaced to inhibited CaCl₂ brine. After pumping a viscous pill using Safe Vis E for viscosity and incorporating 5% Safe Surf WN for the removal of any water based mud residue, the hole above the FloPro was displaced to CaCl₂ brine weighing 10.2 ppg. The brine had been treated with Dirt Magnet to flocculate out any impurities, and Safe-Cide and Safe-Cor were added prior to the displacement.

Tests run by Weatherford to ensure the mud would pass through their screens, showed the "new" mud would pass through the screens, but mud used for drilling

DRILLING FLUIDS RECAP FOR SANTOS CASINO 5

plugged the filter. This was caused by the small amount of sand and other colloidal sized solids which had passed through the shaker screens during the drilling. The percentage of solids as shown by the results of the retort, were the same in both the "new" mud and the mud used for drilling. The sand content in the mud was less than 0.25% and appeared to be very fine. Shaker screens sizes used during the drilling were 200 and 230 mesh after the initial displacement and the FloPro mud had warmed up.

The screens were run to bottom without any problems and the completion operations were begun.

MUD:

Initially 1100 bbls of FloPro Drill in mud system was mixed to drill the 8½" interval. An 8½" BHA with PDC bit was run in the hole to drill out cement and the casing shoe using KCl mud from the previous section. Then a heavy viscous spacer with a Fluoresceine dye was pumped ahead of the FloPro system when displacing the hole. All the old mud was dumped at the shakers as soon as the displacement began. The header box and sand traps were dumped and cleaned during the displacement procedure. As soon as returns were FloPro, all mud was directed back to the active pit.

FloVis Plus was added at 1 ppb to the initial mix, to ensure the mud would go through the shaker screens on the displacement.

The displacement was precise with no mud losses down hole or over the shakers.

Flo Vis Plus was added to the system during drilling to increase the LSRV rheology reading to above 50,000 cps and ensure good hole cleaning. The fluid loss was less than the programmed 5 ml, and all other properties were well within specifications. The mud remained stable and in good condition for the short drilling interval.

Shaker screens were quickly changed out to finer mesh, from 84 – 140 mesh to 200 and 230 mesh. The 8½" hole was drilled without any hole or mud problems to TD at 1806m (1802 m TVD), at ROP's 10 – 30 meters per hour.

DOWNHOLE LOSSES:

None observed

DRILLING FLUIDS RECAP FOR SANTOS CASINO 5

OBSERVATIONS AND RECOMMENDATIONS:

This Flo Pro Drill In Fluid performed as programmed having no mud or hole problems drilling through the production zones. It remains stable and exhibits good hole cleaning abilities if properties are maintained within programs specifications.

In future operations using FloPro mud, in which similar production screens are to be used, it is recommended the open hole section be displaced to freshly mixed mud which has not been used for drilling.

**DRILLING FLUIDS RECAP FOR SANTOS
CASINO 5**

Interval V	1788-1788 meters	Completions	Screens
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MUD TYPE : Calcium Chloride Brine

MUD PROPERTIES :

Mud Weight: : 10.1 – 10.2 ppg

pH: : 9.1

Cl: : 146 000 mg/l

OPERATIONS:


1227 bbls of brine weighing 1.2 sg (10.0 ppg) was received from the Portland mixing plant. Dirt Magnet was used to clean the brine. Safe-Cor corrosion inhibitor and Safe-Cide biocide were then added to the brine to meet the programmed properties. This was pumped into the hole from 1650m above the Flo Pro mud in the open hole section.

The ESS Expandable screens and Packer were run with the expandable Packer set at 1800m. RIH with ACE expansion tool. The attempt to work through the packer assembly was not successful. POOH checking on OD of HWDP and 6" drill collar tool joints. One found to be over size. TIH with ACE expansion tool on 5" DP and successfully expanded screens from 1731 to 1793 meters. POOH to run casing scraper.

The casing was scraped from 1552 to 1658 meters. This was done using FloPro mud remaining in the pits. When the casing scraping was finished, the well was displaced to fresh clean brine as follows. First pumped were 43 bbls viscous pill, followed by 152 bbls NaCl brine, then 462 bbls CaCl₂ brine at 10.3 ppg. POOH to run production tubing.

**DRILLING FLUIDS RECAP FOR SANTOS LTD
CASINO 5**

**DAILY DISCUSSION
REPORT**

	Operator : Santos Ltd	Field/Area : VIC P-44	Daily Discussion M-I Well :
	Well Name : Casino 5	Description : Gas Development	
	Contractor : Diamond Offshore	Location : Otway Basin	

15/06/2005	TD = 0 m	Day 0
Cleansed tanks with sea water. Started taking DW in tanks @ 17:00 Hrs. Further flushed pits with SW as pits started to foam. Used Defoam A to control foaming. Mixed xxx bbl of PHG.		

16/06/2005	TD = 133 m	Day 1
Run anchors. Spud Casino 5 @ 19:00 Hrs. Drilled to 133m. Used 800 bbl as sweeps and 375 bbl to fill hole at section TD. Mixed 1680 bbls of 26 ppb PHG. Used Defoamer to overcome severe foaming problems. Flushed pits 3 times with sea water. Used extra pumps to get enough prime on mix pumps. Mixed 185 bbl of CaCl2 cement mix.		


17/06/2005	TD = 133 m	Day 2
Run casing and cemented as per plan. Performed top up job. WOC. Lay down 36" BHA. Mixed 75 bbl of CaCl2 cement mix water for top up job. Took DW & Gel on board. Mixing more Gel volumes in surface pits.		

18/06/2005	TD = 665 m	Day 3
Made up 17.5" BHA. RIH to tag cement at 128 m. Drilled ahead with 50 bbl PGH sweep midstand and 75 bbl PHG spot on connections to 665 M. Swept the hole clean with 200 bbl PHG at TD and displaced hole with 800 bbl PHG. POOH. Mixed PHG to fill all available surface pit volume. Continued mixing PHG to replace volume used in sweep/spot programme. Total Gel volume used=3150 bbl.		

19/06/2005	TD = 665 m	Day 4
Completed P/O to shoe with tight spots from 450-300 m. Run back in. 3m fill. Circulated hole and displaced with PHG. POOH. Ran 13-3/8" casing. Cemented as per plan. WOC Filled Pits 1 and 2 before dumping residual PHG mud and rinsing Pits 3, 4 and 5. Later mixed 870 bbl PHG to provide volume for the trip/sweep. Received 1000 bbl of 16% KCl brine from FarGrip. Backloaded 4 drums of Pipelax W.		

20/06/2005	TD = 655 m	Day 5
Rig up tree and BOP. Run riser. Pressure test to 5000 psi. Mixed 980 bbl 10.1 ppg KCl/IDCAP mud in Pi 3 & 4 AND 500 bbl of 11.5 ppg KCl/Idcap mud of double concentration in Pit 5 (to be diluted before displacement) in preparation for 12-1/4" section (to be costed in appropriate section). Pit 1 & Pit 2 full of PHG.		

21/06/2005	TD = 655 m	Day 6
Rig up and latch BOPs. Function and pressure test BOP components. Run wear bushings. Added Soda Ash to KCl/Polymer mud.		

	Operator : Santos Ltd	Field/Area : VIC P-44	Daily Discussion M-I Well :
	Well Name : Casino 5	Description : Gas Development	
	Contractor : Diamond Offshore	Location : Otway Basin	

22/06/2005	TD = 951 m	Day 7
<p>Make up 12-1/4" BHA. RIH to tag cement at 633 m. Drilled through cement and 3 m of new formation. Pulled back to the shoe and performed LOT to 17.4 ppg. Drilled ahead with seawater and 50 bbl sweeps/spots at midstand and connections. Mixed an additional 1080 bbl PHG for sweeps.</p>		

23/06/2005	TD = 1160 m	Day 8
<p>Pumped Gel spacer and displaced to KCl/IDCAP mud while drilling from 994 m to 1009 m. Continued drilling to 1160 m. Circulate hole clean/boosted riser. Pump slug. POOH for bit change. Used 1100 bbls KCl/IDCAP mud to displace the hole and lost 400 bbl downhole. Treated system with 1.5 ppb Duovis and 1 ppb IDCAP-D. Lost downhole 40 bbl at 1100 m and healed naturally. Received 1000 16% KCl Brine from Pacific Wrangler. Changed screens to 165/180 mesh (old screens) at 1160 m. Gel stock adjusted as per BCRO.</p>		

24/06/2005	TD = 1343 m	Day 9
<p>Changed bit and MWD assembly. RIH. Drilled ahead to 1343 m. ROP in 12 - 20 m/hr range through the Timboon sandstone. Duovis used to increase 6 rpm reading up from minimum program range for good hole cleaning. Added KOH and Duovis to the active system to maintain the programmed pH range, and rheology. Slowly transferred premix into active to maintain volume.</p>		

25/06/2005	TD = 1690 m	Day 10
<p>Drilling slowed down to <10 m/hr. Made up and pumped a 45 bbl KCl 8% brine pill to attempt to clear the bit at 1388m. POOH to change bit at 1392m. Bit balled. RIH continue drilling to 1688m at ROP 20-70 m/hr. Changed 4 x 180XR Santos screens. Added KOH, OS-1L, IDCAP-D and Polupac UL to the active system to maintain programmed properties. Transfer concentrated premix into active to maintain active volume and required properties. Weighting up to be at 10.3-10.4 ppg by 1530 m.</p>		

26/06/2005	TD = 1730 m	Day 11
<p>Drilled ahead to TD at 1730m. Pumped hi-vis sweep and circulated until cuttings on shakers tapered off. POOH. Back reamed tight spots to casing shoe. RIH for wiper trip. POOH. Retrieve wear bushing from wellhead. Rig up to run 9 5/8" casing. Built 180 bbl premix to replace volume in active as required. Made up and pumped hi-vis sweep at TD.</p>		

27/06/2005	TD = 1720 m	Day 12
<p>Run & cement 9-5/8" casing. Shoe at 1719.79m. Latch seal assembly and pressure test to 5000 psi. Used 7 new Santos screens preparing shakers for displacement to FloPro system. 2 x 84, 2 x 105, 1 x 140, 2 x 145 mesh. Mixing Flo Pro mud, 300 bbl in Pit 2 and 410 bbls in Pit 5. Received 830 bbl NaCl/KCl brine, 9.7ppg, from Far Grip.</p>		



Operator : Santos Ltd
Well Name : Casino 5
Contractor : Diamond Offshore

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin

Daily Discussion
M-I Well :

Date	TD =	Day	Discussion
28/06/2005	1806 m	Day 13	Laid down 12-1/4" BHA and made up 8-1/2" BHA. RIH. Drilled cement and shoe and cleaned out rat hole with KCl mud from previous section. Displaced to Flo-pro mud. Dumped all KCl mud from previous section. Cleaned out MT pits to take on CaCl2 brine (1227 bbls @ 10.0 ppg). Drilled 8 1/2" interval to 1806m.(TVD 1802m) Completed mixing 1100 bbl (250 bbl dead volume in pits) Flo-Pro mud. Made up a hi-vis spacer in the slug pit. After displacement to FloPro system, added Flo -Vis Plus to increase LSRV reading and for good hole cleaning.
29/06/2005	1806 m	Day 14	RIH to bottom and displaced open hole with 56 bbl new Flo-Pro mud. Pulled out to 1650 m and displaced casing with 464 bbl CaCl2 brine. POOH. Running production screens(6 x 38ft) Mixed CaCl2 brine as per programme with Safe-Cor, Safe-Cide and Dirt Magnet. A 50 bbl high vis wash spacer was used to separate the Flo-Pro mud and the CaCl2 brine.
30/06/2005	1806 m	Day 15	RIH with expandable screened completion liner. Set packer and POOH. Pick up liner expansion tool. RIH. Unable to complete expansion due to oversized BHA. POOH to change BHA. Received 260bbls NaCl/KCl brine 9.7ppg from Far Grip. Weighted to 10ppg and added inhibitors. No treatments made to CaCl2 brine. Made up and pumped 30 bbl Flo-Pro + Barite slug as instructed by Santos.
1/07/2005	1806 m	Day 16	RIH to expand production screens. POOH. RIH for scraper run. Displace to CaCl2 brine. Pumped 43 bbl hi vis pill, 152 bbls NaCl brine followed by 462 bbls CaCl2 brine. Taking last 330 bbls NaCl brine off the Far Grip. Transferring all brine remnants from pits into Pit #5. Dumped all muddy brine from hole during displacement. Mixed viscous pill in slug pit for displacement to separate muddy brine in casing from new clean inhibited brine.
2/07/2005	1806 m	Day 17	RIH to jet clean BOP stack. Rig up to run production tubing. Received total 677 bbls NaCl brine from Far Grip and 35.97 mt Gel. No mud or brine treatment.

**DRILLING FLUIDS RECAP FOR SANTOS LTD
CASINO 5**

**COST
BY
INTERVAL**



PRODUCT SUMMARY

Operator : Santos Ltd
Well Name : Casino 5
Contractor : Diamond Offshore

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin

SUMMARY OF PRODUCT USAGE FOR 36" INTERVAL 16/06/2005 - 16/06/2005, 69 - 133 m

WATER-BASED MUD	SIZE	AMOUNT	UNIT COST	PROD COST
			(\$)	(\$)
1 - CALCIUM CHLORIDE Sacks	25 KG BG	17	0.00	0.00
2 - CAUSTIC SODA	25 KG DM	3	20.46	61.38
3 - DEFOAM A	5 GA CN	6	73.39	440.34
4 - MI Gel (Bulk)	1 MT BG	20	251.54	5030.80
5 - CALCIUM CHLORIDE (BB)	500 KG BG	1	210.00	210.00
SUB TOTAL:				5742.52
TAX:				0.00
WATER-BASED MUD TOTAL COST:				5742.52
TOTAL MUD COST FOR INTERVAL:				5742.52



PRODUCT SUMMARY

Operator : Santos Ltd
Well Name : Casino 5
Contractor : Diamond Offshore

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin

SUMMARY OF PRODUCT USAGE FOR 17.5" INTERVAL 17/06/2005 - 19/06/2005, 133 - 665 m

WATER-BASED MUD	SIZE	AMOUNT	UNIT COST	PROD COST
			(\$)	(\$)
1 - CALCIUM CHLORIDE Sacks	25 KG BG	18	0.00	0.00
2 - CAUSTIC SODA	25 KG DM	11	20.46	225.06
3 - DEFOAM A	5 GA CN	1	73.39	73.39
4 - MI Gel (Bulk)	1 MT BG	57	251.54	14456.00
SUB TOTAL:				14754.45
TAX:				0.00
WATER-BASED MUD TOTAL COST:				14754.45
TOTAL MUD COST FOR INTERVAL:				14754.45



PRODUCT SUMMARY

Operator : Santos Ltd
Well Name : Casino 5
Contractor : Diamond Offshore

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin

SUMMARY OF PRODUCT USAGE FOR 12.25" INTERVAL 20/06/2005 - 22/06/2005, 655 - 994 m

WATER-BASED MUD	SIZE	AMOUNT	UNIT COST	PROD COST
			(\$)	(\$)
1 - CAUSTIC SODA	25 KG DM	2	20.46	40.92
2 - MI Gel (Bulk)	1 MT BG	9	251.54	2263.86
SUB TOTAL:				2304.78
TAX:				0.00
WATER-BASED MUD TOTAL COST:				2304.78
TOTAL MUD COST FOR INTERVAL:				2304.78



PRODUCT SUMMARY

Operator : Santos Ltd
Well Name : Casino 5
Contractor : Diamond Offshore

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin

SUMMARY OF PRODUCT USAGE FOR 12.25" INTERVAL 23/06/2005 - 27/06/2005, 994 - 1730 m

WATER-BASED MUD	SIZE	AMOUNT	UNIT COST (\$)	PROD COST (\$)
1 - CAUSTIC SODA	25 KG DM	4	20.46	81.84
2 - DEFOAM A	5 GA CN	5	73.39	366.95
3 - DUO-VIS	25 KG BG	101	227.00	22927.00
4 - GLUTE 25	25 LT CN	8	93.68	749.44
5 - OS-1	25 KG BG	26	33.54	872.04
6 - POLYPAC UL	25 KG BG	107	96.30	10304.10
7 - SODA ASH	25 KG BG	22	13.04	286.88
8 - IDCAP D	25 KG BG	114	240.73	27443.22
9 - POTASSIUM HYDROXIDE	25 KG CN	29	31.28	907.12
10 - MI BAR (Bulk)	1 MT BG	84	231.20	19517.90
11 - MI Gel (Bulk)	1 MT BG	17	251.54	4293.79
12 - BRINE KCl 16%	1 BL BL	2000	13.00	26000.00
13 - BRINE NaCl 18%+KCl 5%	1 BL BL	520	14.00	7280.00
SUB TOTAL:				121030.28
TAX:				0.00
WATER-BASED MUD TOTAL COST:				121030.28
TOTAL MUD COST FOR INTERVAL:				121030.28



PRODUCT SUMMARY

Operator : Santos Ltd
Well Name : Casino 5
Contractor : Diamond Offshore

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin

SUMMARY OF PRODUCT USAGE FOR 8.5" INTERVAL 28/06/2005 - 2/07/2005, 1730 - 1806 m

WATER-BASED MUD	SIZE	AMOUNT	UNIT COST (\$)	PROD COST (\$)
1 - GLUTE 25	25 LT CN	5	93.68	468.40
2 - FLO-VIS PLUS	25 KG BG	36	407.58	14672.88
3 - POTASSIUM HYDROXIDE	25 KG CN	6	31.28	187.68
4 - OMYACARB 20	25 KG BG	1104	8.27	9130.08
5 - DUAL-FLO HT	50 LB BG	74	103.08	7627.92
6 - BRINE NaCl 18%+KCl 5%	1 BL BL	618	14.00	8652.00
7 - SALT - FINE	1.2 MT BG	2	248.41	496.82
SUB TOTAL:				41235.78
TAX:				0.00
WATER-BASED MUD TOTAL COST:				41235.78

COMPLETION FLUID	SIZE	AMOUNT	UNIT COST (\$)	PROD COST (\$)
1 - DUO-VIS	25 KG BG	1	227.00	227.00
2 - OS-1	25 KG BG	2	33.54	67.08
3 - MI BAR (Bulk)	1 MT BG	2	231.20	462.40
4 - BRINE NaCl 18%+KCl 5%	1 BL BL	937	14.00	13118.00
5 - SALT - FINE	1.2 MT BG	8	248.41	1987.28
6 - DIRT MAGNET	55 GA DM	8	1449.55	11596.40
7 - SAFE-CIDE	25 KG CN	5	91.77	458.85
8 - SAFE-COR	55 GA DM	13	316.31	4112.03
9 - SAFE-VIS E	5 GA CN	15	195.00	2925.00
10 - SAFE-SURF WN	200 KG DM	1	898.50	898.50
11 - BRINE CALCIUM CHLORIDE	1 BL BL	1227	27.00	33129.00
12 - CALCIUM CHLORIDE (BB)	500 KG BG	13	210.00	2730.00



PRODUCT SUMMARY

Operator : Santos Ltd
Well Name : Casino 5
Contractor : Diamond Offshore

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin

SUMMARY OF PRODUCT USAGE FOR 8.5" INTERVAL 28/06/2005 - 2/07/2005, 1730 - 1806 m

SUB TOTAL: 71711.54

TAX: 0.00

CALDRIL TOTAL COST: 71711.54

TOTAL MUD COST FOR INTERVAL: 112947.32

**DRILLING FLUIDS RECAP FOR SANTOS LTD
CASINO 5**

**DAILY VOLUME
SUMMARY SHEET**

Santos Ltd
Casino-5 Volume Summaries

36" Interval Seawater/Gel Sweeps

Date	Mud Volume (bbl)						Volume Built bbl								Volume Lost bbl								
	Depth	Hole	Surf	Premix	Reserve	Total	Water	Mud	Synthetic	Brine	Chemical	Barite	Daily	Cum	Shakers	Centri-	Desilter	Dump	Hole	Sweeps	Daily	Cummul	
		Active	Active			Vol		Received	Added	Added			Built	Built		fuge					Total	Lost	
16-Jun-05	133	0	0	502	0	502	1630.68				49.32		1680	1680							1178	1178	1178

17.5" Interval Seawater/Gel Sweeps

Date	Mud Volume (bbl)						Volume Built bbl								Volume Lost bbl							
	Depth	Hole	Surface	Premix	Reserve	Total	Water	Mud	Synthetic	Brine	Chemical	Barite	Daily	Cum	Shakers	Centri-	Desilter	Dump	Hole	Sweeps	Daily	Cummul
		Active	Active			Vol		Received	Added	Added			Built	Built		fuge					Total	Lost
17-Jun-05	133			1349		1349	832	502		15		1349	1349								0	0
18-Jun-05	665			650		650	2351			100		2451	3800							3150	3150	3150
19-Jun-05	665			520		520	845			26		871	4671				391			610	1001	4151

12.25" Interval Seawater / Hi Vis Sweeps

Date	Mud Volume (bbl)						Volume Built bbl								Volume Lost bbl							
	Depth	Hole	Surf	Premix	Reserve	Total	Drill	Mud	Synthetic	Brine	Chemical	Barite	Daily	Cum	Shaker	Centri-	Desander	Dump	Hole	Sweeps	Daily	Cummul
		Active	Active			Vol	Water	Received	Added	Added	Volume	Volume	Total	Built	Losses	fuge	/ Desilter		downhole		Total	Lost
20-Jun-05	665			520		520		520				520	520								0	0
21-Jun-05	665			520		520						0	520								0	0
22-Jun-05	951			0		0	1078			22		1100	1620				80			1540	1620	1620

12.25" Interval KCl-Polymer

Date	Mud Volume (bbl)						Volume Built bbl								Volume Lost bbl							
	Depth	Hole	Surf	Premix	Reserve	Total	Water	Mud	Brine	Base Oil	Chemical	Barite	Daily	Cum	Shakers	Centri-	Desilter	Dump	Downhole	Left in	Daily	Cummul
		Active	Active			Vol		Received	Added	Volume	Volume	Volume	Total	Built		fuge			Losses	Hole	Total	Lost
20-Jun-05	665				1480	1480	393.5		1000		22	64.5	1480	1480							0	0
23-Jun-05	1160	642	413	583	500	2138	206.5		1000		16.5	23	1246	2726	148				440		588	588
24-Jun-05	1343	714	477	301	1020	2512	30		520		2	8	560	3286	142			44			186	774
25-Jun-05	1690	827	493	180	1000	2500	20				3	11	34	3320	46						46	820
26-Jun-05	1730	903	421	207	520	2051					5	16	21	3341	178			292			470	1290
27-Jun-05	1720	503	475	207	520	1705							0	3341	95					251	346	1636
28-Jun-05	1730				520	520							0	3341				1185			1185	2821

8.5" Casino 5 - Flo Pro

Date	Mud Volume (bbl)						Volume Built bbl								Volume Lost bbl							
	Depth	Hole	Surf	Premix	Reserve	Total	Water	Mud	Brine	Base Oil	Chemical	Barite	Daily	Cum	Shakers	Centri-	Desilter	Dump	Hole	Other	Daily	Cummul
		Active	Active			Vol		Received	Added	Volume			Total	Built		fuge					Total	Lost
28-Jun-05	1806	478	537	91		1106		520	618		168		1306	1306	80			120			200	200
29-Jun-05	1806	0	630	329		959						0	0				147				147	347

8.5" Casino 5 - CaCl2 Brine

Date	Mud Volume (bbl)						Volume Built bbl								Volume Lost bbl							
	Depth	Hole	Surf	Premix	Reserve	Total	Water	Mud	Brine	Mud	Chemical	Barite	Daily	Cum	Shakers	Centri-	Desilter	Dump	Hole	Other	Daily	Cummul
		Active	Active			Vol		Received	Added	Built			Total	Built		fuge					Total	Lost
29-Jun-05	1806	494	647	15		1156			1227		20		1247	1247				91			91	91
30-Jun-05	1806	523	658			1181						0	0				37				37	128
1-Jul-05	1806	484	303	35		822				14		14	14				699				699	827
2-Jul-05	1806	454				454						0	0				424				424	1251
						0						0	0								0	1251

**DRILLING FLUIDS RECAP FOR SANTOS LTD
CASINO 5**

**TOTAL
MATERIAL
COST**



PRODUCT SUMMARY

Operator : Santos Ltd
Well Name : Casino 5
Contractor : Diamond Offshore

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin

SUMMARY OF PRODUCT USAGE FOR WELL

15/06/2005 - 2/07/2005, 69- 1806 m

WATER-BASED MUD	SIZE	AMOUNT	UNIT COST	PROD COST
			(\$)	(\$)
1 - CALCIUM CHLORIDE Sacks	25 KG BG	35	0.00	0.00
2 - CAUSTIC SODA	25 KG DM	20	20.46	409.20
3 - DEFOAM A	5 GA CN	12	73.39	880.68
4 - DUO-VIS	25 KG BG	101	227.00	22927.00
5 - GLUTE 25	25 LT CN	13	93.68	1217.84
6 - OS-1	25 KG BG	26	33.54	872.04
7 - POLYPAC UL	25 KG BG	107	96.30	10304.10
8 - SODA ASH	25 KG BG	22	13.04	286.88
9 - FLO-VIS PLUS	25 KG BG	36	407.58	14672.88
10 - IDCAP D	25 KG BG	114	240.73	27443.22
11 - POTASSIUM HYDROXIDE	25 KG CN	35	31.28	1094.80
12 - OMYACARB 20	25 KG BG	1104	8.27	9130.08
13 - MI BAR (Bulk)	1 MT BG	84	231.20	19517.90
14 - MI Gel (Bulk)	1 MT BG	104	251.54	26044.45
15 - BRINE KCl 16%	1 BL BL	2000	13.00	26000.00
16 - DUAL-FLO HT	50 LB BG	74	103.08	7627.92
17 - BRINE NaCl 18%+KCl 5%	1 BL BL	1138	14.00	15932.00
18 - SALT - FINE	1.2 MT BG	2	248.41	496.82
19 - CALCIUM CHLORIDE (BB)	500 KG BG	1	210.00	210.00
SUB TOTAL:				185067.82
TAX:				0.00
WATER-BASED MUD TOTAL COST:				185067.82



PRODUCT SUMMARY

Operator : Santos Ltd
Well Name : Casino 5
Contractor : Diamond Offshore

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin

SUMMARY OF PRODUCT USAGE FOR WELL

15/06/2005 - 2/07/2005, 69 - 1806 m

CALDRIL	SIZE	AMOUNT	UNIT COST	PROD COST
			(\$)	(\$)
1 - DUO-VIS	25 KG BG	1	227.00	227.00
2 - OS-1	25 KG BG	2	33.54	67.08
3 - MI BAR (Bulk)	1 MT BG	2	231.20	462.40
4 - BRINE NaCl 18%+KCl 5%	1 BL BL	937	14.00	13118.00
5 - SALT - FINE	1.2 MT BG	8	248.41	1987.28
6 - DIRT MAGNET	55 GA DM	8	1449.55	11596.40
7 - SAFE-CIDE	25 KG CN	5	91.77	458.85
8 - SAFE-COR	55 GA DM	13	316.31	4112.03
9 - SAFE-VIS E	5 GA CN	15	195.00	2925.00
10 - SAFE-SURF WN	200 KG DM	1	898.50	898.50
11 - BRINE CALCIUM CHLORIDE	1 BL BL	1227	27.00	33129.00
12 - CALCIUM CHLORIDE (BB)	500 KG BG	13	210.00	2730.00
SUB TOTAL:				71711.54
TAX:				0.00
CALDRIL TOTAL COST:				71711.54
TOTAL MUD COST FOR INTERVAL:				256779.36

**DRILLING FLUIDS RECAP FOR SANTOS LTD
CASINO 5**

**HYDRAULICS
REPORT**



HYDRAULICS SUMMARY

Operator : Santos Ltd

Field/Area : VIC P-44

Well Name : Casino 5

Description : Gas Development

Contractor : Diamond Offshore

Location : Otway Basin

Date		16/06/2005	17/06/2005	18/06/2005	19/06/2005	20/06/2005	21/06/2005	22/06/2005	23/06/2005
Depth	m	112	133	504	665	665	665	879	1160
Days Since Spud		1	2	3	4	5	6	7	8
*RHEOLOGICAL PROPERTIES									
Mud Wt	sp.gr.	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.22
Plastic Visc	cP	11	10	17	12	10	10	10	15
Yield Point	lb/100ft ²	50	50	31	48	50	55	54	26
3-rpm Rdg	Fann deg	49	47	28	48	48	49	50	8
np Value		.2392	.2224	.4374	.263	.2224	.2065	.2095	.4498
Kp Value	lb*s ⁿ /100ft ²	14.6445	15.995	3.3476	12.4139	15.995	19.1391	18.4951	2.6466
na Value		.0224	.0233	.0636	.0336	.0388	.0431	.0272	.3249
Ka Value	lb*s ⁿ /100ft ²	50.4089	48.2793	26.9303	48.4853	48.0732	48.7313	51.0363	5.0241
*FLOW DATA									
Flow Rate	gal/min	1073	1073	1204	1204	0	0	1003	973
Pump Pressure	psi	1100	1100	2800	2800	0	0	3000	3000
Pump	hhp	689	*	*	1967	*	*	1756	*
*PRESSURE LOSSES									
Drill String	psi	227	*	*	67	*	*	629	*
Bit	psi	524	*	*	934	*	*	589	*
Annulus	psi	1	*	*	101	*	*	99	*
Total System	psi	752	*	*	1102	*	*	1316	*
*BIT HYDRAULICS									
Nozzles	1/32"	3x24		3x22	3x22	3x20	3x20	3x20	3x20
Nozzles	1/32"					18	18	18	18
Bit Pressure	%	48	*	*	33	*	*	20	*
Bit	hhp	328	*	*	656	*	*	344	*
Bit HSI	(index)	.32	*	*	2.73	*	*	2.92	*
Jet Velocity	ft/s	79	*	*	106	*	*	84	*
Impact Force	Newton	1252	*	*	1876	*	*	1240	*
DRILL COLLARS ANNULUS									
Velocity	m/s		*	*	1	*	*	1	*
Critical Vel	m/s	3	*	*	3	*	*	3	*
Reynolds Number		6	*	*	599	*	*	815	*
Crit Re (Lam - Tran)		3142	*	*	3110	*	*	3183	*
*DRILL PIPE ANNULUS									
Velocity	m/s		*	*	1	*	*	1	*
Critical Vel	m/s	3	*	*	3	*	*	3	*
Reynolds Number		5	*	*	599	*	*	396	*
Crit Re (Lam - Tran)		3142	*	*	3110	*	*	3183	*
*HOLE CLEANING									
Slip Velocity	m/s		*	*		*	*		*
Rising Velocity	m/s		*	*	1	*	*	1	*
Lifting Capacity	%	4	*	*	93	*	*	91	*
Cutting Conc	%	0.0	*	*	0.0	*	*	1.47	*
Penetration Rate	m/h	0	0	0	0	0	0	40	40
CASING SHOE PRESSURES									
ECD	sp.gr.	1.04	*	*	1.05	*	*	1.1	*
ECD+Cuttings	sp.gr.	1.04	*	*	1.05	*	*	1.12	*
TOTAL DEPTH PRESSURES									
ECD	sp.gr.	1.05	*	*	1.15	*	*	1.11	*
ECD+Cuttings	sp.gr.	1.05	*	*	1.15	*	*	1.13	*



HYDRAULICS SUMMARY

Operator : Santos Ltd

Field/Area : VIC P-44

Well Name : Casino 5

Description : Gas Development

Contractor : Diamond Offshore

Location : Otway Basin

Date		24/06/2005	25/06/2005	26/06/2005	27/06/2005	28/06/2005	29/06/2005	30/06/2005	1/07/2005
Depth	m	1284	1598	1730	1730	1806		1806	
Days Since Spud		9	10	11	12	13	14	15	16
*RHEOLOGICAL PROPERTIES									
Mud Wt	sp.gr.	1.22	1.25	1.25	1.24	1.24	1.22	1.22	1.2
Plastic Visc	cP	11	17	14	14	14			
Yield Point	lb/100ft ²	26	39	36	33	32			
3-rpm Rdg	Fann deg	7	11	9	14	12			
np Value		.3755	.3825	.3561	.3761	.3833	.3833	.3833	.3833
Kp Value	lb*s ⁿ /100ft ²	3.796	5.5013	5.7882	4.8028	4.4948	4.4948	4.4948	4.4948
na Value		.3514	.3459	.3705	.2358	.2707	.2707	.2707	.2707
Ka Value	lb*s ⁿ /100ft ²	4.2105	6.6756	5.2471	10.1691	8.2339	8.2339	8.2339	8.2339
*FLOW DATA									
Flow Rate	gal/min	1023	918	0	0	682	0	0	0
Pump Pressure	psi	3129	3200	0	0	2373	0	0	0
Pump	hhp	1868	1714	*	*	944	*	*	*
*PRESSURE LOSSES									
Drill String	psi	1169	1295	*	*	553	*	*	*
Bit	psi	718	840	*	*	535	*	*	*
Annulus	psi	48	102	*	*	275	*	*	*
Total System	psi	1935	2237	*	*	1363	*	*	*
*BIT HYDRAULICS									
Nozzles	1/32"	3x20	5x16			2x16			
Nozzles	1/32"	18				3x15			
Bit Pressure	%	23	26	*	*	23	*	*	*
Bit	hhp	429	450	*	*	213	*	*	*
Bit HSI	(index)	3.64	3.82	*	*	3.75	*	*	*
Jet Velocity	ft/s	86	91	*	*	73	*	*	*
Impact Force	Newton	1513	1487	*	*	878	*	*	*
DRILL COLLARS ANNULUS									
Velocity	m/s	1	1	*	*	3	*	*	*
Critical Vel	m/s	2	2	*	*	2	*	*	*
Reynolds Number		1376	1049	*	*	3980	*	*	*
Crit Re (Lam - Tran)		2956	2946	*	*	2945	*	*	*
*DRILL PIPE ANNULUS									
Velocity	m/s	1	1	*	*	3	*	*	*
Critical Vel	m/s	2	2	*	*	2	*	*	*
Reynolds Number		975	680	*	*	3980	*	*	*
Crit Re (Lam - Tran)		2956	2946	*	*	2945	*	*	*
*HOLE CLEANING									
Slip Velocity	m/s			*	*		*	*	*
Rising Velocity	m/s	1	1	*	*	3	*	*	*
Lifting Capacity	%	91	93	*	*	98	*	*	*
Cutting Conc	%	0.47	0.86	*	*	0.87	*	*	*
Penetration Rate	m/h	13	22	0	0	36	0	0	0
CASING SHOE PRESSURES									
ECD	sp.gr.	1.24	1.29	*	*	1.34	*	*	*
ECD+Cuttings	sp.gr.	1.25	1.3	*	*	1.35	*	*	*
TOTAL DEPTH PRESSURES									
ECD	sp.gr.	1.25	1.29	*	*	1.35	*	*	*
ECD+Cuttings	sp.gr.	1.25	1.3	*	*	1.36	*	*	*

M-I L.L.C.

DRILLING FLUIDS DATA MANAGEMENT SYSTEM



HYDRAULICS SUMMARY

Operator : Santos Ltd

Field/Area : VIC P-44

Well Name : Casino 5

Description : Gas Development

Contractor : Diamond Offshore

Location : Otway Basin

Date		2/07/2005							
Depth	m								
Days Since Spud		17							
*RHEOLOGICAL PROPERTIES									
Mud Wt	sp.gr.	1.2							
Plastic Visc	cP								
Yield Point	lb/100ft ²								
3-rpm Rdg	Fann deg								
np Value		.3833							
Kp Value	lb*s ⁿ /100ft ²	4.4948							
na Value		.2707							
Ka Value	lb*s ⁿ /100ft ²	8.2339							
*FLOW DATA									
Flow Rate	gal/min	0							
Pump Pressure	psi	0							
Pump	hhp	*							
*PRESSURE LOSSES									
Drill String	psi	*							
Bit	psi	*							
Annulus	psi	*							
Total System	psi	*							
*BIT HYDRAULICS									
Nozzles	1/32"								
Nozzles	1/32"								
Bit Pressure	%	*							
Bit	hhp	*							
Bit HSI	(index)	*							
Jet Velocity	ft/s	*							
Impact Force	Newton	*							
DRILL COLLARS ANNULUS									
Velocity	m/s	*							
Critical Vel	m/s	*							
Reynolds Number		*							
Crit Re (Lam - Tran)		*							
*DRILL PIPE ANNULUS									
Velocity	m/s	*							
Critical Vel	m/s	*							
Reynolds Number		*							
Crit Re (Lam - Tran)		*							
*HOLE CLEANING									
Slip Velocity	m/s	*							
Rising Velocity	m/s	*							
Lifting Capacity	%	*							
Cutting Conc	%	*							
Penetration Rate	m/h	0							
CASING SHOE PRESSURES									
ECD	sp.gr.	*							
ECD+Cuttings	sp.gr.	*							
TOTAL DEPTH PRESSURES									
ECD	sp.gr.	*							
ECD+Cuttings	sp.gr.	*							

**DRILLING FLUIDS RECAP FOR SANTOS LTD
CASINO 5**

**DRILLING
FLUIDS
SUMMARY**

Operator : Santos Ltd

Field/Area : VIC P-44

Well Name : Casino 5

Description : Gas Development

Contractor : Diamond Offshore

Location : Otway Basin

Date	15/06/2005	16/06/2005	17/06/2005	18/06/2005	19/06/2005	20/06/2005
Depth/TVD	m /	112/112	133/133	504/504	665/665	665/665
Activity		Drilling	WOC	Tripping	WOC	Run BOP
Mud Type	Spud Mud	Spud Mud	Spud Mud	Spud Mud	Spud Mud	Spud Mud
Hole Size	in 36	36	17.5	17.5	17.5	12.25
Circ Volume	bbl					
Flow Rate	gal/min 0	1073	1073	1204	1204	0
Circ Pressure	psi 0	1100	1100	2800	2800	0
Avg ROP	m/hr 0	0	0	0	0	0
Sample From		Pit 3	Pit 3	Pit 3	Pit 2	Pit 2
Flow Line Temp	°C					
Mud Weight	sp.gr. @ °C	1.04@ 13 °C	1.04@15 °C	1.04@15 °C	1.04@15 °C	1.04@15 °C
Funnel Viscosity	s/qt	> 200	>200	>100	> 100	> 100
PV	cP	11	10	17	12	10
YP	lb/100ft²	50	50	31	48	50
R600/R300/R200	//	72/61/58	70/60/56	65/48/43	72/60/58	70/60/58
R100/R6/R3	//	53/49/49	51/48/47	35/28/28	54/48/48	55/49/48
10s/10m/30m Gel	lb/100ft² //	53/54/	51/53/	38/54/54	36/55/55	38/52/53
API Fluid Loss	cc/30 min	13	14	13	13	13
HTHP Fluid Loss	cc/30 min					
Cake API/HT	1/32"	/	1/	1/	1/	1/
Solids	%Vol	2	2	2	2	2
Oil/Water	%Vol	/	/98	/98	/98	/98
Sand	%Vol					
MBT	lb/bbl	28	28	27	28	27
pH		9.5	9.5	10	10	10
Alkal Mud (Pm)		0.55	0.5	0.65	0.6	0.5
Pf/Mf	/	0.35/0.6	0.35/0.6	0.4/0.7	0.4/0.7	0.35/0.7
Chlorides	mg/l	1050	1000	850	850	850
Hardness Ca		40	40	40	40	40
KCl	% wt					
Sulphite Excess	ppm					
Iscap	ppb					
LSRV	0.3rpm					
Daily Mud Cost	\$ 0.00	5742.52	1570.62	10435.90	2747.93	0.00
Cuml Mud Cost	\$ 0.00	5742.52	7509.32	17945.22	20693.15	20693.15
Sales Engineer	Glen Sh/Jasdeep	Glen Sh/Jasdeep	Kelvin /Jasdeep	Kelvin /Jasdeep	Kelvin /Jasdeep	Kelvin /Jasdeep
Products Used		CaCl2 / 17 NaOH / 3 DFOAM / 6 BulkGel / 20 CaCIBB / 1	CaCl2 / 18 NaOH / 3 BulkGel / 6	NaOH / 6 BulkGel / 41	NaOH / 2 DFOAM / 1 BulkGel / 10.47	

REMARKS

15/06/2005:
 16/06/2005:
 17/06/2005:
 18/06/2005:
 19/06/2005:
 20/06/2005:



DRILLING FLUIDS SUMMARY

Operator : Santos Ltd

Field/Area : VIC P-44

Well Name : Casino 5

Description : Gas Development

Contractor : Diamond Offshore

Location : Otway Basin

Date	20/06/2005	21/06/2005	21/06/2005	22/06/2005	22/06/2005	23/06/2005	
Depth/TVD	m	665/665	665/ 665	665/ 665	879/879	655/ 655	1160/1160
Activity		Run BOP	Pressure Test	Pressure Test	Drill 12.25" Hole	Drill 12.25" Hole	Tripping
Mud Type		Spud Mud	Spud Mud	Spud Mud	Spud Mud	Spud Mud	KCl / IDCAP
Hole Size	in	12.25	12.25	12.25	12.25	12.25	12.25
Circ Volume	bbl						1055
Flow Rate	gal/min	0	0	0	1003	1003	973
Circ Pressure	psi	0	0	0	3000	3000	3000
Avg ROP	m/hr	0	0	0	40	40	40
Sample From		Pit 4	Gel Mud	KCl-Polyme	PHG	KCl-IDCAP	Pit 3
Flow Line Temp	°C						38
Mud Weight	sp.gr.	1.22@15 °C	1.04@15 °C	1.22@ 15 °C	1.04@15 °C	1.21@15 °C	1.22@37 °C
Funnel Viscosity	s/qt	58	> 100	54	>100	49	55
PV	cP	12	10	11	10	10	15
YP	lb/100ft ²	14	55	14	54	13	26
R600/R300/R200		38/26/20	75/65/60	36/25/20	74/64/59	33/23/19	56/41/34
R100/R6/R3		14/5/4	57/50/49	14/5/4	55/50/50	14/5/4	25/10/8
10s/10m/30m Gel	lb/100ft ²	4/7/7	40/55/55	5/6/7	38/55/57	4/5/6	10/15/18
API Fluid Loss	cc/30 min	8.8	14	7	13	7.3	4.8
HTHP Fluid Loss	cc/30 min						
Cake API/HT	1/32"	1/	1/	1/	1/	1/	1/
Solids	%Vol	9	2	8	2	8	9
Oil/Water	%Vol	/91	/98	/92	/98	/92	/91
Sand	%Vol						1
MBT	lb/bbl	5	27	5	28	5	2.5
pH		6.5	10	7.0	9.5	7.2	9
Alkal Mud (Pm)		0	0.4	0	0.45	0	0.4
Pf/Mf		0/1.7	0.3/0.5	0/1.8	0.25/0.5	0/1.7	0.1/0.5
Chlorides	mg/l	46000	800	47000	750	45000	42000
Hardness Ca		1600	80	1600	80	1400	560
KCl	% wt	9		9		7.5	8
Sulphite Excess	ppm						25
Idcap	ppb	1.2		1.5		1.5	2.4
LSRV	0.3rpm						
Daily Mud Cost	\$		0.00		2304.78		95023.08
Cuml Mud Cost	\$		20693.15		22997.93		118021.01
Sales Engineer		Kelvin /Jasdeep	Kelvin /Jasdeep	Kelvin /Jasdeep	Kelvin /Jasdeep	Kelvin /Jasdeep	Kelvin /Jasdeep
Products Used					NaOH / 2 BulkGel / 9		NaOH / 4 DFOAM / 4 Duovis / 80 Glut / 8 OS-1 / 20 PacUL / 90 Soda / 22 Idcap / 91 KOH / 13 BulkBar / 58.42 BulkGel / 17.07 16%brin / 2000

REMARKS

21/06/2005:

22/06/2005:

23/06/2005:

M-I L.L.C.

DRILLING FLUIDS DATA MANAGEMENT SYSTEM



DRILLING FLUIDS SUMMARY

Operator : Santos Ltd

Field/Area : VIC P-44

Well Name : Casino 5

Description : Gas Development

Contractor : Diamond Offshore

Location : Otway Basin

Date	23/06/2005	24/06/2005	24/06/2005	25/06/2005	25/06/2005	25/06/2005	
Depth/TVD	m	1026/1026	1284/1283	1160/1159	1598/1596	1404/1402	1392/1390
Activity		Tripping	Drilling 12.25"	Drilling 12.25"	Drilling 12 1/4"	Drilling 12 1/4"	Drilling 12 1/4"
Mud Type		KCl / IDCAP	KCl / IDCAP	KCl / IDCAP	KCl / IDCAP	KCl / IDCAP	KCl / IDCAP
Hole Size	in	12.25	12.25	12.25	12.25	12.25	12.25
Circ Volume	bbl	1055	1191	1191	1320	1320	1320
Flow Rate	gal/min	973	1023	1023	918	918	918
Circ Pressure	psi	3000	3129	3129	3200	3200	3200
Avg ROP	m/hr	40	13	13	22	22	22
Sample From		Pit 3	Pit 3	Pit 3	Pit 3	Pit 3	Pit 3
Flow Line Temp	°C	32	48	32	48	43	58
Mud Weight	sp.gr.	1.21@25 °C	1.22@39 °C	1.22@30 °C	1.25@46 °C	1.23@36 °C	1.22@30 °C
Funnel Viscosity	s/qt	50	49	60	54	47	49
PV	cP	12	11	15	17	14	14
YP	lb/100ft²	19	26	28	39	34	36
R600/R300/R200		43/31/25	48/37/32	58/43/36	73/56/47	62/48/41	64/50/42
R100/R6/R3		17/6/5	24/10/7	26/10/8	37/14/11	32/13/9	33/12/9
10s/10m/30m Gel	lb/100ft²	6/6/7	8/12/14	9/13/14	13/15/18	11/13/17	10/15/17
API Fluid Loss	cc/30 min	5.6	5.0	5.0	3.8	4.8	4.5
HTHP Fluid Loss	cc/30 min						
Cake API/HT	1/32"	1/	1/	1/	1/	1/	1/
Solids	%Vol	8	10	9	12	10	10
Oil/Water	%Vol	/92	/90	/91	/88	/90	/90
Sand	%Vol	tr	0.5	0.5	0.5	0.5	0.5
MBT	lb/bbl	5	5	5	6	6	5
pH		7.2	8.4	8.3	8	7.9	7.9
Alkal Mud (Pm)		0	0.1	0	0.4	0.4	0
Pf/Mf		0/1.4	0.9/0.8	0.05/1.4	0.1/1.4	0.1/1.4	0.05/1.5
Chlorides	mg/l	44000	45000	43000	45000	45000	46000
Hardness Ca		1600	1040	1280	1040	1000	1160
KCl	% wt	8	6	6.5	6	6	6.5
Sulphite Excess	ppm	25	250	250	200	200	250
Idcap	ppb	1.5	2.44	2.4		2.5	2.5
LSRV	0.3rpm						
Daily Mud Cost	\$		11704.00		5941.65		
Cuml Mud Cost	\$		129725.01		135666.66		
Sales Engineer		Kelvin /Jasdeep	Kelvin /Gordon	Kelvin /Gordon	Kelvin /Gordon	Kelvin /Gordon	Kelvin /Gordon
Products Used			Duovis / 12		Duovis / 1		
			KOH / 10		OS-1 / 6		
			BulkBar / 6		PacUL / 11		
			K/NaCl / 520		Idcap / 11		
					KOH / 6		
					BulkBar / 7		

REMARKS

24/06/2005:

25/06/2005:



DRILLING FLUIDS SUMMARY

Operator : Santos Ltd

Field/Area : VIC P-44

Well Name : Casino 5

Description : Gas Development

Contractor : Diamond Offshore

Location : Otway Basin

Date	26/06/2005	27/06/2005	27/06/2005	28/06/2005	28/06/2005
Depth/TVD	m 1730/1726	1730/1726	1730/1726	1806/1802	1720/ 1718
Activity	Run 9 5/8" Casings	Running wear bush	Running wear bush	Run 8 1/2" POO	Run 8 1/2" POC
Mud Type	KCl / IDCAP	KCl / IDCAP	KCl / IDCAP	FloPro	FloPro
Hole Size	in 0	0	0	8.5	8.5
Circ Volume	bbbl 1325	979	979	1015	1015
Flow Rate	gal/min 0	0	0	682	682
Circ Pressure	psi 0	0	0	2373	2373
Avg ROP	m/hr 0	0	0	36	36
Sample From	Pit 3	FloPro	Pit 3	Pit 3	Pit 4
Flow Line Temp	°C 58			43	
Mud Weight	sp.gr. 1.25@30 °C	1.24@24 °C	1.25@25 °C	1.24 @40 °C	1.24@15 °C
Funnel Viscosity	s/qt 49	65	53	50	55
PV	cP 14	14	17	14	11
YP	lb/100ft² 36	33	48	32	23
R600/R300/R200	64/50/42	61/47/40	82/65/55	60/46/39	45/34/29
R100/R6/R3	33/12/9	32/17/14	43/15/13	31/14/12	22/10/8
10s/10m/30m Gel	lb/100ft² 10/15/17	14/17/21	13/19/24	12/14/17	9/11/12
API Fluid Loss	cc/30 min 4.5	5	4.3	5	4.8
HTHP Fluid Loss	cc/30 min				
Cake API/HT	1/32" 1/	1/	1/	1/	1/
Solids	%Vol 10	13	10	14	14
Oil/Water	%Vol /90	/87	/90	/86	/86
Sand	%Vol 0.5	0	0.5	0.25	tr
MBT	lb/bbl 5	0	7.5	<2.5	<2.5
pH	7.9	9.9	7.8	9.7	9.7
Alkal Mud (Pm)	0		0	0.8	0.8
Pf/Mf	0.05/1.5	0.2/0.8	0.05/1.5	0.1/0.5	0.1/0.5
Chlorides	mg/l 46000	144000	45000	148000	148000
Hardness Ca	1160	80	1200	120	120
KCl	% wt 6.5	6	6.5	6.5	6.5
Sulphite Excess	ppm 250		250		
Idcap	ppb 2.5		2.9		
LSRV	0.3rpm	44791		39794	22795
Daily Mud Cost	\$ 8361.55	0.00		41235.78	
Cuml Mud Cost	\$ 144028.21	144028.21		185263.99	
Sales Engineer	Kelvin /Gordon	Kelvin /Gordon	Kelvin /Gordon	Kelvin /Gordon	Kelvin /Gordon
Products Used	DFOAM / 1			Glut / 5	
	Duovis / 8			Flo-Vis / 36	
	PacUL / 6			KOH / 6	
	Idcap / 12			Omya20 / 1104	
	BulkBar / 13			DualHT / 74	
				K/NaCl / 618	
				Salt F / 2	

REMARKS

26/06/2005:

27/06/2005:

28/06/2005:

Operator : Santos Ltd

Field/Area : VIC P-44

Well Name : Casino 5

Description : Gas Development

Contractor : Diamond Offshore

Location : Otway Basin

Date	29/06/2005	29/06/2005	30/06/2005	30/06/2005	1/07/2005	1/07/2005
Depth/TVD	m /	1806/1802	1806/1802	1806/1802	/	1806/1802
Activity	Running Screens	Running Screens	Tripping	Tripping	Displace to brine	Displace to brine
Mud Type	CaCl2 Brine	CaCl2 Brine	CaCl2 Brine	CaCl2 Brine	CaCl2 Brine	CaCl2 Brine
Hole Size	in	0	8.5	8.5	8.5	8.5
Circ Volume	bbl	1786	1786	1768	1988	1988
Flow Rate	gal/min	0	0	0	0	0
Circ Pressure	psi	0	0	0	0	0
Avg ROP	m/hr	0	0	0	0	0
Sample From	CaCl2	FloPro	CaCl2	FloPro	NaCl pit 5	FloPro
Flow Line Temp	°C					
Mud Weight	sp.gr.	1.22@ °C	1.24@30 °C	1.22@ °C	1.24@30 °C	1.2@28 °C
Funnel Viscosity	s/qt		50		50	
PV	cP		14		14	
YP	lb/100ft²		30		30	
R600/R300/R200		//	58/44/38	//	58/44/38	//
R100/R6/R3		//	30/12/10	//	30/12/10	//
10s/10m/30m Gel	lb/100ft²	//	10/12/15	//	10/12/15	//
API Fluid Loss	cc/30 min		5		5	
HTHP Fluid Loss	cc/30 min					
Cake API/HT	1/32"	/	1/	/	1/	1/
Solids	%Vol		14		14	
Oil/Water	%Vol	/	/86	/	/86	/
Sand	%Vol		.25		.25	<.25
MBT	lb/bbl		<.25		<.25	<.25
pH		9.1	9.7	9.1	9.7	8.9
Alkal Mud (Pm)			0.8		0.8	
Pf/Mf		/	0.1/0.5	/	0.1/0.5	/
Chlorides	mg/l	146000	148000	146000	148000	158000
Hardness Ca			120		120	
KCl	% wt		6.5		6.5	
Sulphite Excess	ppm					
Iscap	ppb					
LSRV	0.3rpm		36423		36423	
Daily Mud Cost	\$	55031.42		5006.48		11673.64
Cuml Mud Cost	\$	240295.41		245301.89		256975.53
Sales Engineer		Kelvin /Gordon	Kelvin /Gordon	Gordon Howie	Gordon Howie	Gordon Howie
Products Used		Salt F / 1		OS-1 / 2		Duovis / 1
		DirtM / 8		BulkBar / 2		K/NaCl / 677
		S-Cide / 4		K/NaCl / 260		Salt F / 4
		S-COR / 13		Salt F / 3		S-Vis E / 5
		S-Vis E / 10		S-Cide / 1		
		S-SURF / 1				
		CaCl2Br / 1227				
		CaCIBB / 13				

REMARKS

29/06/2005:

30/06/2005:

1/07/2005:



DRILLING FLUIDS SUMMARY

Operator : Santos Ltd
Well Name : Casino 5
Contractor : Diamond Offshore

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin

Date	2/07/2005	2/07/2005				
Depth/TVD	m	/	1806/1802			
Activity	Production tubing	Production tubing				
Mud Type	CaCl2 Brine	CaCl2 Brine				
Hole Size	in	8.5	8.5			
Circ Volume	bbl	1564	1564			
Flow Rate	gal/min	0	0			
Circ Pressure	psi	0	0			
Avg ROP	m/hr	0	0			
Sample From	NaCl Pit 5	FloPro				
Flow Line Temp	°C					
Mud Weight	sp.gr.	1.2@28 °C	1.24@30 °C			
Funnel Viscosity	s/qt		50			
PV	cP		14			
YP	lb/100ft ²		30			
R600/R300/R200		/ /	58/44/38			
R100/R6/R3		/ /	30/12/10			
10s/10m/30m Gel	lb/100ft ²	/ /	-1/12/15			
API Fluid Loss	cc/30 min		5			
HTHP Fluid Loss	cc/30 min					
Cake API/HT	1/32"	/	1/			
Solids	%Vol		14			
Oil/Water	%Vol	/	/86			
Sand	%Vol		<.25			
MBT	lb/bbl		<.25			
pH		8.9	9.7			
Alkal Mud (Pm)						
Pf/Mf		/	/			
Chlorides	mg/l	158000	148000			
Hardness Ca						
KCl	% wt		6.5			
Sulphite Excess	ppm					
Idcap	ppb					
LSRV	0.3rpm					
Daily Mud Cost	\$	0.00				
Cumil Mud Cost	\$	256975.53				
Sales Engineer		Gordon Howie	Gordon Howie			
Products Used						

REMARKS

2/07/2005:

**DRILLING FLUIDS RECAP FOR SANTOS LTD
CASINO 5**

**PRODUCT
CONSUMPTION**



Product Consumption

Operator : Santos Ltd
Well Name : Casino 5
Location : Otway Basin
Field/Area: VIC P-44

Contractor: Diamond Offshore
M-I Engineer: J. Singh / G.Howie
Rig Name: Ocean Patriot
Stock Point: Portland

Product Name	DATES											
	Product Price	Jun 15, 2005		Jun 16, 2005		Jun 17, 2005		Jun 18, 2005		Jun 19, 2005		Page
		Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Totals
CALCIUM CHLORIDE Sacks	0.00		0.00	17	0.00	18	0.00		0.00		0.00	0.00
CAUSTIC SODA	20.46		0.00	3	61.38	3	61.38	6	122.76	2	40.92	286.44
CITRIC ACID	36.79		0.00		0.00		0.00		0.00		0.00	0.00
DEFOAM A	73.39		0.00	6	440.34		0.00		0.00	1	73.39	513.73
DUO-VIS	227.00		0.00		0.00		0.00		0.00		0.00	0.00
GLUTE 25	93.68		0.00		0.00		0.00		0.00		0.00	0.00
GUAR GUM	60.00		0.00		0.00		0.00		0.00		0.00	0.00
KWIK SEAL FINE	28.00		0.00		0.00		0.00		0.00		0.00	0.00
LIME	7.44		0.00		0.00		0.00		0.00		0.00	0.00
OS-1	33.54		0.00		0.00		0.00		0.00		0.00	0.00
PIPE-LAX W	379.80		0.00		0.00		0.00		0.00		0.00	0.00
POLYPAC UL	96.30		0.00		0.00		0.00		0.00		0.00	0.00
SODA ASH	13.04		0.00		0.00		0.00		0.00		0.00	0.00
SODIUM BICARBONATE	10.64		0.00		0.00		0.00		0.00		0.00	0.00
KWIKSEAL MEDIUM	28.00		0.00		0.00		0.00		0.00		0.00	0.00
FLO-VIS PLUS	407.58		0.00		0.00		0.00		0.00		0.00	0.00
IDCAP D	240.73		0.00		0.00		0.00		0.00		0.00	0.00
MIX II FINE	25.68		0.00		0.00		0.00		0.00		0.00	0.00
MIX II MEDIUM	26.72		0.00		0.00		0.00		0.00		0.00	0.00
POTASSIUM HYDROXIDE	31.28		0.00		0.00		0.00		0.00		0.00	0.00
OMYACARB 20	8.27		0.00		0.00		0.00		0.00		0.00	0.00
KCl BB	430.06		0.00		0.00		0.00		0.00		0.00	0.00
MI BAR (Bulk)	231.20		0.00		0.00		0.00		0.00		0.00	0.00
MI Gel (Bulk)	251.54		0.00	20	5030.80	6	1509.24	41	10313.14	10	2633.62	19486.80
BRINE KCl 16%	13.00		0.00		0.00		0.00		0.00		0.00	0.00
DUAL-FLO HT	103.08		0.00		0.00		0.00		0.00		0.00	0.00
OMYA CARB 8	11.70		0.00		0.00		0.00		0.00		0.00	0.00
BRINE NaCl 18%+KCl 5%	14.00		0.00		0.00		0.00		0.00		0.00	0.00
SALT - FINE	248.41		0.00		0.00		0.00		0.00		0.00	0.00
DIRT MAGNET	1449.55		0.00		0.00		0.00		0.00		0.00	0.00
SAFE-CIDE	91.77		0.00		0.00		0.00		0.00		0.00	0.00
SAFE-COR	316.31		0.00		0.00		0.00		0.00		0.00	0.00
SAFE-VIS E	195.00		0.00		0.00		0.00		0.00		0.00	0.00
SAFE-SURF WN	898.50		0.00		0.00		0.00		0.00		0.00	0.00
BRINE CALCIUM CHLORIDE	27.00		0.00		0.00		0.00		0.00		0.00	0.00
CALCIUM CHLORIDE (BB)	210.00		0.00	1	210.00		0.00		0.00		0.00	210.00
Cumulative Engineering			0.00		0.00		0.00		0.00		0.00	0.00
Daily Product			0.00		5742.52		1570.62		10435.90		2747.93	20496.97
Daily Sales Tax			0		0		0		0		0	0.00
Cumulative Product			0.00		5742.52		7313.14		17749.04		20496.97	20496.97
Cumulative Cost			0.00		5742.52		7313.14		17749.04		20496.97	20496.97



Product Consumption

Operator : Santos Ltd
Well Name : Casino 5
Location : Otway Basin
Field/Area : VIC P-44

Contractor: Diamond Offshore
M-I Engineer: J. Singh / G.Howie
Rig Name: Ocean Patriot
Stock Point: Portland

Product Name	DATES										Page Totals	
	Previous Page	Jun 30, 2005		Jul 1, 2005		Jul 2, 2005		Qty	Cost	Qty		Cost
CALCIUM CHLORIDE Sacks	0.00		0.00		0.00		0.00					0.00
CAUSTIC SODA	409.20		0.00		0.00		0.00					409.20
CITRIC ACID	0.00		0.00		0.00		0.00					0.00
DEFOAM A	880.68		0.00		0.00		0.00					880.68
DUO-VIS	22927.0		0.00	1	227.00		0.00					23154.00
GLUTE 25	1217.84		0.00		0.00		0.00					1217.84
GUAR GUM	0.00		0.00		0.00		0.00					0.00
KWIK SEAL FINE	0.00		0.00		0.00		0.00					0.00
LIME	0.00		0.00		0.00		0.00					0.00
OS-1	872.04	2	67.08		0.00		0.00					939.12
PIPE-LAX W	0.00		0.00		0.00		0.00					0.00
POLYPAC UL	10304.1		0.00		0.00		0.00					10304.10
SODA ASH	286.88		0.00		0.00		0.00					286.88
SODIUM BICARBONATE	0.00		0.00		0.00		0.00					0.00
KWIKSEAL MEDIUM	0.00		0.00		0.00		0.00					0.00
FLO-VIS PLUS	14672.8		0.00		0.00		0.00					14672.88
IDCAP D	27443.2		0.00		0.00		0.00					27443.22
MIX II FINE	0.00		0.00		0.00		0.00					0.00
MIX II MEDIUM	0.00		0.00		0.00		0.00					0.00
POTASSIUM HYDROXIDE	1094.80		0.00		0.00		0.00					1094.80
OMYACARB 20	9130.08		0.00		0.00		0.00					9130.08
KCl BB	0.00		0.00		0.00		0.00					0.00
MI BAR (Bulk)	19517.9	2	462.40		0.00		0.00					19980.30
MI Gel (Bulk)	26044.4		0.00		0.00		0.00					26044.45
BRINE KCl 16%	26000.0		0.00		0.00		0.00					26000.00
DUAL-FLO HT	7627.92		0.00		0.00		0.00					7627.92
OMYA CARB 8	0.00		0.00		0.00		0.00					0.00
BRINE NaCl 18%+KCl 5%	15932.0	260	3640.00	677	9478.00		0.00					29050.00
SALT - FINE	745.23	3	745.23	4	993.64		0.00					2484.10
DIRT MAGNET	11596.4		0.00		0.00		0.00					11596.40
SAFE-CIDE	367.08	1	91.77		0.00		0.00					458.85
SAFE-COR	4112.03		0.00		0.00		0.00					4112.03
SAFE-VIS E	1950.00		0.00	5	975.00		0.00					2925.00
SAFE-SURF WN	898.50		0.00		0.00		0.00					898.50
BRINE CALCIUM CHLORIDE	33129.0		0.00		0.00		0.00					33129.00
CALCIUM CHLORIDE (BB)	2940.00		0.00		0.00		0.00					2940.00
Cumulative Engineering			0.00		0.00		0.00					0.00
Daily Product			5006.48		11673.64		0.00					256779.35
Daily Sales Tax			0		0		0					0.00
Cumulative Product			245105.71		256779.35		256779.35					256779.35
Cumulative Cost			245105.71		256779.35		256779.35					256779.35

**DRILLING FLUIDS RECAP FOR SANTOS LTD
CASINO 5**

**DAILY
MUD
REPORTS**



WATER-BASED MUD REPORT No. 1

Date	16/06/2005	Depth/TVD	133 m / 133 m
Spud Date	16/06/2005	Mud Type	Spud Mud
Water Depth	69	Activity	Drilling

Operator : Santos Ltd Report For : Chris Wise/Pat King Well Name : Casino 5 Contractor : Diamond Offshore Report For : Ray Breaud/Troy Williams	Field/Area : VIC P-44 Description : Gas Development Location : Otway Basin M-I Well No. :
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DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	36 in Smith	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x24 / 1/32"	30in @133m (133TVD)	170.1	Pump Size	6 X 12.in 6.5 X 12.in
Drill Pipe Size	Length 13 m	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 5.016 gal/stk
5 in			-1	Pump stk/min	75@97% 75@97%
Drill Pipe Size	Length 90 m	Intermediate	Total Circulating Vol	Flow Rate	1073 gal/min
8 in			170	Bottoms Up	6.5 min 1465 stk
Drill Collar Size	Length 30 m	Production or Liner	In Storage	Total Circ Time	6.7 min 1497 stk
9.5 in			687	Circulating Pressure	1100 psi

MUD PROPERTIES			PRODUCTS USED LAST 24 HRS		
Sample From		Pit 3@21:15	Products	Size	Amt
Flow Line Temp	°C		CALCIUM CHLORIDE	Sacks 25 KG BG	17
Depth/TVD	m	112/112	CAUSTIC SODA	25 KG DM	3
Mud Weight	sp.gr.	1.04@13°C	DEFOAM A	5 GA CN	6
Funnel Viscosity	s/qt	> 200	MI Gel (Bulk)	1 MT BG	20
Rheology Temp	°C	49	CALCIUM CHLORIDE (BB)	500 KG BG	1
R600/R300		72/61			
R200/R100		58/53			
R6/R3		49/49			
PV	cP	11			
YP	lb/100ft ²	50			
10s/10m/30m Gel	lb/100ft ²	53/54/			
API Fluid Loss	cc/30 min	13			
HTHP FL Temp	cc/30 min				
Cake API/HTHP	1/32"	1/			
Solids	%Vol	2			
Oil/Water	%Vol	/98			
Sand	%Vol				
MBT	lb/bbl	28			
pH		9.5			
Alkal Mud (Pm)		0.55			
Pf/Mf		0.35/0.6			
Chlorides	mg/l	1050			
Hardness Ca	mg/l	40			
KCl	% wt				
Sulphite Excess	ppm				
Idcap	ppb				
LSRV	0.3rpm				

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	2x120,2x105	0
VSM Shaker 2	2x120,2x110	0
VSM Shaker 3	165,140,2x84	0
VSM Shaker 4	2x165,2x84	0
Centrifuge		0
D-Silter		0

MUD PROPERTY SPECIFICATIONS	
Weight	1.04
Viscosity	>100 s/qt
Filtrate	n/a

REMARKS AND TREATMENT Mixed 1680 bbls of 26 ppb PHG. Used Defoamer to overcome severe foaming problems. Flushed pits 3 times with sea water. Used extra pumps to get enough prime on mix pumps. Mixed 185 bbl of CaCl2 cement mix.	REMARKS Run anchors. Spud Casino 5 @ 19:00 Hrs. Drilled to 133m. Used 800 bbl as sweeps and 375 bbl to fill hole at section TD.
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TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service	19	Oil Added 0	NaCl .6	np/na Values 0.239/0.022
Drilling	5	Water Added 1816	KCl .	kp/ka (lb*s^n/100ft ²) 14.644/50.409
Tripping		Mud Received 0	Low Gravity 2.4/ 22.	Bit Loss (psi / %) 524 / 47.6
Non-Productive Tim		Dumped 0	Bentonite 3.2/ 28.7	Bit HHP (hhp / HSI) 328 / .3
		Shakers 0	Drill Solids -.7/ -6.7	Bit Jet Vel (m/s) 79
		Evaporation 0	Weight Material NA/ NA	Ann. Vel DP (m/s)
		Centrifuge 0	Chemical Conc - / .	Ann. Vel DC (m/s) .11
		Formation 0	Inert/React -.2127	Crit Vel DP (m/s)
		Left in Hole 0	Average SG 2.6	Crit Vel DC (m/s) 3
		Sweeps 1178	Carb/BiCarb (m mole/L) 7/ 11.	ECD @ 133 (sp.gr.) 1.05

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Jasdeep Singh Glen Sharpe 08-9302 3790			\$ 5,742.52	\$ 5,742.52



WATER-BASED MUD REPORT No. 2

Date	17/06/2005	Depth/TVD	133 m / 133 m
Spud Date	16/06/2005	Mud Type	Spud Mud
Water Depth	69	Activity	WOC

Operator : Santos Ltd
Report For : Chris Wise/Pat King
Well Name : Casino 5
Contractor : Diamond Offshore
Report For : Ray Breaud/Troy Williams

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin
M-I Well No. :

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	17.5 in	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	1/32"	30in @133m (133TVD)	107.4	Pump Size	6 X 12.in 6.5 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	4.274 gal/stk 5.016 gal/stk
in	m	13.625in @655m (655TVD)	-4	Pump stk/min	75@97% 75@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	1073 gal/min
in	m		-4	Bottoms Up	min 0 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	min -4 stk
in	m		1349	Circulating Pressure	1100 psi

MUD PROPERTIES			PRODUCTS USED LAST 24 HRS		
Sample From		Pit 3@20:00	Products	Size	Amt
Flow Line Temp	°C		CALCIUM CHLORIDE Sacks	25 KG BG	18
Depth/TVD	m	133/133	CAUSTIC SODA	25 KG DM	3
Mud Weight	sp.gr.	1.04@15°C	MI Gel (Bulk)	1 MT BG	6
Funnel Viscosity	s/qt	>200			
Rheology Temp	°C	49			
R600/R300		70/60			
R200/R100		56/51			
R6/R3		48/47			
PV	cP	10			
YP	lb/100ft ²	50			
10s/10m/30m Gel	lb/100ft ²	51/53/			
API Fluid Loss	cc/30 min	14			
HTHP FL Temp	cc/30 min				
Cake API/HTHP	1/32"	1/			
Solids	%Vol	2			
Oil/Water	%Vol	/98			
Sand	%Vol				
MBT	lb/bbl	28			
pH		9.5			
Alkal Mud (Pm)		0.5			
Pf/Mf		0.35/0.6			
Chlorides	mg/l	1000			
Hardness Ca	mg/l	40			
KCl	% wt				
Sulphite Excess	ppm				
Idcap	ppb				
LSRV	0.3rpm				

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	2x120,2x105	0
VSM Shaker 2	2x120,2x110	0
VSM Shaker 3	165,140,2x84	0
VSM Shaker 4	2x165,2x84	0
Centrifuge		0
D-Silter		0

MUD PROPERTY SPECIFICATIONS

Weight	1.04
Viscosity	>100 s/qt
Filtrate	n/a

REMARKS AND TREATMENT

Mixed 75 bbl of CaCl₂ cement mix water for top up job. Took DW & Gel on board. Mixing more Gel volumes in surface pits.

REMARKS

Run casing and cemented as per plan. Performed top up job. WOC. Lay down 36" BHA.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)		MUD RHEOLOGY & HYDRAULICS	
Rig Up/Service	3	Oil Added	0	NaCl	.6	np/na Values
Drilling		Water Added	907	KCl	.	kp/ka (lb*s^n/100ft ²)
Tripping	5	Mud Received	0	Low Gravity	3.1/28.3	Bit Loss (psi / %)
Non-Productive Tim		Dumped	260	Bentonite	3.1/28.	Bit HHP (hhp / HSI)
Running Casing	11.5	Shakers	0	Drill Solids	.3	Bit Jet Vel (m/s)
Cementing	4	Evaporation	0	Weight Material	NA/NA	Ann. Vel DP (m/s)
Condition Hole	0.5	Centrifuge	0	Chemical Conc	- / .	Ann. Vel DC (m/s)
		Formation	0	Inert/React	.0095	Crit Vel DP (m/s)
		Left in Hole	0	Average SG	2.25	Crit Vel DC (m/s)
		Sweeps	0	Carb/BiCarb (m mole/L)	7/ 11.	

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Jasdeep Singh Kelvin Leong	08-9302 3790		\$ 1,570.62	\$ 7,313.14



WATER-BASED MUD REPORT No. 3

Date	18/06/2005	Depth/TVD	665 m / 665 m
Spud Date	16/06/2005	Mud Type	Spud Mud
Water Depth	69	Activity	Tripping

Operator : Santos Ltd
Report For : Chris Wise/Pat King
Well Name : Casino 5
Contractor : Diamond Offshore
Report For : Ray Breaud/Troy Williams

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin
M-I Well No. :

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	17.5 in Smith	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x22 / 1/32"	30in @133m (133TVD)	626.7	Pump Size	6.5 X 12.in 6.5 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	5.016 gal/stk 5.016 gal/stk
5 in	m	13.625in @655m (655TVD)	.3	Pump stk/min	80@97% 80@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	1204 gal/min
5 in	139 m		.3	Bottoms Up	min 0 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	min 2 stk
9.5 in	38 m		650	Circulating Pressure	2800 psi

MUD PROPERTIES		
Sample From		Pit 3@16:30
Flow Line Temp	°C	
Depth/TVD	m	504/504
Mud Weight	sp.gr.	1.04@15°C
Funnel Viscosity	s/qt	>100
Rheology Temp	°C	15
R600/R300		65/48
R200/R100		43/35
R6/R3		28/28
PV	cP	17
YP	lb/100ft²	31
10s/10m/30m Gel	lb/100ft²	38/54/54
API Fluid Loss	cc/30 min	13
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32"	1/
Solids	%Vol	2
Oil/Water	%Vol	/98
Sand	%Vol	
MBT	lb/bbl	27
pH		10
Alkal Mud (Pm)		0.65
Pf/Mf		0.4/0.7
Chlorides	mg/l	850
Hardness Ca	mg/l	40
KCl	% wt	
Sulphite Excess	ppm	
Idcap	ppb	
LSRV	0.3rpm	

PRODUCTS USED LAST 24 HRS		
Products	Size	Amt
CAUSTIC SODA	25 KG DM	6
MI Gel (Bulk)	1 MT BG	41

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	2x120,2x105	0
VSM Shaker 2	2x120,2x110	0
VSM Shaker 3	165,140,2x84	0
VSM Shaker 4	2x165,2x84	0
Centrifuge		0
D-Silter		0

MUD PROPERTY SPECIFICATIONS		
Weight		1.04
Viscosity		>100 s/qt
Filtrate		n/a

REMARKS AND TREATMENT	REMARKS
Mixed PHG to fill all available surface pit volume. Continued mixing PHG to replace volume used in sweep/spot programme. Total Gel volume used=3150 bbl.	Made up 17.5" BHA. RIH to tag cement at 128 m. Drilled ahead with 50 bbl PGH sweep midstand and 75 bbl PHG spot on connections to 665 M. Swept the hole clean with 200 bbl PHG at TD and displaced hole with 800 bbl PHG. POOH.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service	0.5	Oil Added	0	np/na Values
Drilling	17	Water Added	2351	kp/ka (lb*s^n/100ft²)
Tripping	5.5	Mud Received	0	Bit Loss (psi / %)
Non-Productive Tim		Dumped	0	Bit HHP (hhp / HSI)
Running Casing		Shakers	0	Bit Jet Vel (m/s)
Cementing		Evaporation	0	Ann. Vel DP (m/s)
Condition Hole	1	Centrifuge	0	Ann. Vel DC (m/s)
		Formation	0	Crit Vel DP (m/s)
		Left in Hole	0	Crit Vel DC (m/s)
		Sweeps	3150	

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Jasdeep Singh Kelvin Leong 08-9302 3790			\$ 10,435.90	\$ 17,749.04



WATER-BASED MUD REPORT No. 5

Date	20/06/2005	Depth/TVD	655 m / 655 m
Spud Date	16/06/2005	Mud Type	Spud Mud
Water Depth	69	Activity	Run BOP

Operator : Santos Ltd
Report For : Chris Wise/Pat King
Well Name : Casino 5
Contractor : Diamond Offshore
Report For : Ray Breaud/Troy Williams

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin
M-I Well No. :

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	12.25 in Smith GS04BDV	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x20 /18 / 1/32"	30in @133m (133TVD)	389.4	Pump Size	6.5 X 12.in 6.5 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	gal/stk gal/stk
5 in	m	13.625in @655m (655TVD)	84.6	Pump stk/min	
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	gal/min
in	m	in @1009m (1009TVD)	84.6	Bottoms Up	
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	
in	m		520	Circulating Pressure	

MUD PROPERTIES			
Sample From	Pit 2@19:00	Pit 4@07:00	
Flow Line Temp	°C		
Depth/TVD	m	665/665	665/665
Mud Weight	sp.gr.	1.04@15°C	1.22@15°C
Funnel Viscosity	s/qt	> 100	58
Rheology Temp	°C	15	49
R600/R300		70/60	38/26
R200/R100		58/55	20/14
R6/R3		49/48	5/4
PV	cP	10	12
YP	lb/100ft ²	50	14
10s/10m/30m Gel	lb/100ft ²	38/52/53	4/7/7
API Fluid Loss	cc/30 min	13	8.8
HTHP FL Temp	cc/30 min		
Cake API/HTHP	1/32"	1/	1/
Solids	%Vol	2	9
Oil/Water	%Vol	/98	/91
Sand	%Vol		
MBT	lb/bbl	27	5
pH		10	6.5
Alkal Mud (Pm)		0.5	0
Pf/Mf		0.35/0.7	0/1.7
Chlorides	mg/l	850	46000
Hardness Ca	mg/l	40	1600
KCl	% wt		9
Sulphite Excess	ppm		
Icdap	ppb		1.2
LSRV	0.3rpm		

PRODUCTS USED LAST 24 HRS		
Products	Size	Amt

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	2x120,2x105	0
VSM Shaker 2	2x120,2x110	0
VSM Shaker 3	165,140,2x84	0
VSM Shaker 4	2x165,2x84	0
Centrifuge		0
D-Silter		0

MUD PROPERTY SPECIFICATIONS		
Weight		1.04
Viscosity		>100 s/qt
Filtrate		n/a

REMARKS AND TREATMENT	REMARKS
Mixed 980 bbl 10.1 ppg KCl/IDCAP mud in Pi 3 & 4 AND 500 bbl of 11.5 ppg KCl/Icdap mud of double concentration in Pit 5 (to be diluted before displacement) in preparation for 12-1/4" section (to be costed in appropriate section). Pit 1 & Pit 2 full of PHG.	Rig up tree and BOP. Run riser. Pressure test to 5000 psi.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service	8	Oil Added 0	NaCl ./.5	np/na Values
Drilling		Water Added 0	KCl ./. .	kp/ka (lb*s^n/100ft^2)
Tripping		Mud Received 0	Low Gravity 3.1/28.1	Bit Loss (psi / %)
Non-Productive Tim		Dumped 0	Bentonite 3./26.9	Bit HHP (hhp / HSI)
BOP NU	14	Shakers 0	Drill Solids .1/1.2	Bit Jet Vel (m/s)
BOP Testing	2	Evaporation 0	Weight Material NA/NA	Ann. Vel DP (m/s)
Condition Hole		Centrifuge 0	Chemical Conc - / .	Ann. Vel DC (m/s)
		Formation 0	Inert/React .0389	Crit Vel DP (m/s)
		Left in Hole 0	Average SG 2.27	Crit Vel DC (m/s)
		Sweeps 0	Carb/BiCarb (m mole/L) 6.9/3.5	

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Jasdeep Singh Kelvin Leong 08-9302 3790			\$ 0.00	\$ 20,496.97



WATER-BASED MUD REPORT No. 7

Date	22/06/2005	Depth/TVD	951 m / 951 m
Spud Date	16/06/2005	Mud Type	Spud Mud
Water Depth	69	Activity	Drill 12.25" Hole

Operator : Santos Ltd
Report For : Richard Buitenhuis/Pat King
Well Name : Casino 5
Contractor : Diamond Offshore
Report For : Ray Breaud/Troy Williams

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin
M-I Well No. :

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	12.25 in Smith GS04BDV	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x20 /18 / 1/32"	30in @133m (133TVD)	484.9	Pump Size	6.5 X 12.in 6.5 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	5.016 gal/stk 5.016 gal/stk
5 in	671 m	13.625in @655m (655TVD)	6.1	Pump stk/min	100@97% 100@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	1003 gal/min
5 in	140 m	in @1009m (1009TVD)	491	Bottoms Up	18.3 min 3666 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	20.6 min 4112 stk
8 in	140 m			Circulating Pressure	3000 psi

MUD PROPERTIES

Sample From	PHG@21:00	CI-IDCAP@03	
Flow Line Temp	°C		
Depth/TVD	m	879/879 655/655	
Mud Weight	sp.gr.	1.04@15°C 1.21@15°C	
Funnel Viscosity	s/qt	>100 49	
Rheology Temp	°C	15 49	
R600/R300		74/64 33/23	
R200/R100		59/55 19/14	
R6/R3		50/50 5/4	
PV	cP	10 10	
YP	lb/100ft ²	54 13	
10s/10m/30m Gel	lb/100ft ²	38/55/57 4/5/6	
API Fluid Loss	cc/30 min	13 7.3	
HTHP FL Temp	cc/30 min		
Cake API/HTHP	1/32"	1/ 1/	
Solids	%Vol	2 8	
Oil/Water	%Vol	/98 /92	
Sand	%Vol		
MBT	lb/bbl	28 5	
pH		9.5 7.2	
Alkal Mud (Pm)		0.45 0	
Pf/Mf		0.25/0.5 0/1.7	
Chlorides	mg/l	750 45000	
Hardness Ca	mg/l	80 1400	
KCl	% wt		7.5
Sulphite Excess	ppm		
Idcap	ppb		1.5
LSRV	0.3rpm		

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
CAUSTIC SODA	25 KG DM	2
MI Gel (Bulk)	1 MT BG	9

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	2x120,2x105	0
VSM Shaker 2	2x120,2x110	0
VSM Shaker 3	165,140,2x84	0
VSM Shaker 4	2x165,2x84	0
Centrifuge		0
D-Filter		0

MUD PROPERTY SPECIFICATIONS

Weight	1.04
Viscosity	>100 s/qt
Filtrate	n/a

REMARKS AND TREATMENT

Mixed an additional 1080 bbl PHG for sweeps.

REMARKS

Make up 12-1/4" BHA. RIH to tag cement at 633 m. Drilled through cement and 3 m of new formation. Pulled back to the shoe and performed LOT to 17.4 ppg. Drilled ahead with seawater and 50 bbl sweeps/spots at midstand and connections.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)		MUD RHEOLOGY & HYDRAULICS		
Rig Up/Service	0.5	Oil Added	0	NaCl	.4	np/na Values	0.209/0.027
Drilling	13.5	Water Added	1078	KCl	.7	kp/ka (lb*s^n/100ft ²)	18.495/51.036
Tripping	8.5	Mud Received	0	Low Gravity	3.1/28.	Bit Loss (psi / %)	589 / 19.6
Non-Productive Tim		Dumped	80	Bentonite	3.1/28.	Bit HHP (hhp / HSI)	344 / 2.9
Testing	1	Shakers	0	Drill Solids	.7	Bit Jet Vel (m/s)	84
Condition Hole	0.5	Evaporation	0	Weight Material	NA/NA	Ann. Vel DP (m/s)	1
		Centrifuge	0	Chemical Conc	- / .	Ann. Vel DC (m/s)	1.45
		Formation	0	Inert/React	.0008	Crit Vel DP (m/s)	3
		Left in Hole	0	Average SG	2.27	Crit Vel DC (m/s)	3
		Sweeps	1540	Carb/BiCarb (m mole/L)	5 / 7.9	ECD @ 951 (sp.gr.)	1.11

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Jasdeep Singh Kelvin Leong	08-9302 3790		\$ 2,304.78	\$ 22,801.75



WATER-BASED MUD REPORT No. 8

Date	23/06/2005	Depth/TVD	1160 m / 1159 m
Spud Date	16/06/2005	Mud Type	KCI / IDCAP
Water Depth	69	Activity	Tripping

Operator : Santos Ltd Report For : Richard Buitenhuis/Pat King Well Name : Casino 5 Contractor : Diamond Offshore Report For : Ray Breaud/Troy Williams	Field/Area : VIC P-44 Description : Gas Development Location : Otway Basin M-I Well No. :
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DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	12.25 in Smith GS04BDV	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x20 /18 / 1/32"	30in @133m (133TVD)	641.8	Pump Size	6.5 X 12.in 6.5 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	5.016 gal/stk 5.016 gal/stk
5 in	m	13.625in @655m (655TVD)	413.2	Pump stk/min	97@97% 97@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	973 gal/min
5 in	140 m	in @1009m (1009TVD)	413.2	Bottoms Up	min 0 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	17.8 min 3460 stk
8 in	140 m	9.625in @1720m (1718TVD)	1083	Circulating Pressure	3000 psi

MUD PROPERTIES

	Pit 3@15:30	Pit 3@08:00
Sample From		
Flow Line Temp	°C 38	32
Depth/TVD	m 1160/1160	1026/1026
Mud Weight	sp.gr. 1.22@37°C	1.21@25°C
Funnel Viscosity	s/qt 55	50
Rheology Temp	°C 49	49
R600/R300	56/41	43/31
R200/R100	34/25	25/17
R6/R3	10/8	6/5
PV	cP 15	12
YP	lb/100ft² 26	19
10s/10m/30m Gel	lb/100ft² 10/15/18	6/6/7
API Fluid Loss	cc/30 min 4.8	5.6
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32" 1/	1/
Solids	%Vol 9	8
Oil/Water	%Vol /91	/92
Sand	%Vol 1	tr
MBT	lb/bbl 2.5	5
pH	9	7.2
Alkal Mud (Pm)	0.4	0
Pf/Mf	0.1/0.5	0/1.4
Chlorides	mg/l 42000	44000
Hardness Ca	mg/l 560	1600
KCl	% wt 8	8
Sulphite Excess	ppm 25	25
Idcap	ppb 2.4	1.5
LSRV	0.3rpm	

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
CAUSTIC SODA	25 KG DM	4
DEFOAM A	5 GA CN	4
DUO-VIS	25 KG BG	80
GLUTE 25	25 LT CN	8
OS-1	25 KG BG	20
POLYPAC UL	25 KG BG	90
SODA ASH	25 KG BG	22
IDCAP D	25 KG BG	91
POTASSIUM HYDROXIDE	25 KG CN	13
MI BAR (Bulk)	1 MT BG	58
MI Gel (Bulk)	1 MT BG	17
BRINE KCl 16%	1 BL BL	2000

SOLIDS EQUIP

	Size	Hr
VSM Shaker 1	4 x 180	10
VSM Shaker 2	4 x 180	10
VSM Shaker 3	4 x 165	10
VSM Shaker 4	4 x 165	10
Centrifuge		0
D-Silter		0

MUD PROPERTY SPECIFICATIONS

Weight	1.04
Viscosity	>100 s/qt
Filtrate	n/a

REMARKS AND TREATMENT

Used 1100 bbls KCl/IDCAP mud to displace the hole and lost 400 bbl downhole. Treated system with 1.5 ppb Duovis and 1 ppb IDCAP-D. Lost downhole 40 bbl at 1100 m and healed naturally. Received 1000 16% KCl Brine from Pacific Wrangler. Changed screens to 165/180 mesh (old screens) at 1160 m. Gel stock adjusted as per BCRO.

REMARKS

Pumped Gel spacer and displaced to KCl/IDCAP mud while drilling from 994 m to 1009 m. Continued drilling to 1160 m. Circulate hole clean/boosted riser. Pump slug. POOH for bit change.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service	2.5	Oil Added	0	np/na Values
Drilling	14.5	Water Added	600	kp/ka (lb*s^n/100ft²)
Tripping	5.5	Mud Received	0	Bit Loss (psi / %)
Non-Productive Tim		Dumped	0	Bit HHP (hhp / HSI)
Condition Hole	1.5	Shakers	148	Bit Jet Vel (m/s)
		Evaporation	0	Ann. Vel DP (m/s)
		Centrifuge	0	Ann. Vel DC (m/s)
		Formation	440	Crit Vel DP (m/s)
		Left in Hole	0	Crit Vel DC (m/s)
		Sweeps	0	

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Jasdeep Singh Kelvin Leong	08-9302 3790		\$ 95,023.08	\$ 117,824.83



WATER-BASED MUD REPORT No. 9

Date	24/06/2005	Depth/TVD	1343 m / 1342 m
Spud Date	16/06/2005	Mud Type	KCI / IDCAP
Water Depth	69	Activity	Drilling 12.25"

Operator : Santos Ltd
Report For : Richard Buitenhuis/Pat King
Well Name : Casino 5
Contractor : Diamond Offshore
Report For : Paul Baker/Troy Williams

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin
M-I Well No. :

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	12.25 in Smith GS04BDV	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	3x20 /18 / 1/32"	30in @133m (133TVD)	713.6	Pump Size	6.5 X 12.in 6.5 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	5.016 gal/stk 5.016 gal/stk
5 in	1063 m	13.625in @655m (655TVD)	477.4	Pump stk/min	102@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	1023 gal/min
5 in	140 m	in @1009m (1009TVD)	1191	Bottoms Up	26.4 min 5390 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	48.9 min 9975 stk
8 in	140 m	9.625in @1720m (1718TVD)	1321	Circulating Pressure	3129 psi

MUD PROPERTIES			
Sample From		Pit 3@19.00	Pit 3@08:30
Flow Line Temp	°C	48	32
Depth/TVD	m	1284/1283	1160/1159
Mud Weight	sp.gr.	1.22@39°C	1.22@30°C
Funnel Viscosity	s/qt	49	60
Rheology Temp	°C	49	49
R600/R300		48/37	58/43
R200/R100		32/24	36/26
R6/R3		10/7	10/8
PV	cP	11	15
YP	lb/100ft²	26	28
10s/10m/30m Gel	lb/100ft²	8/12/14	9/13/14
API Fluid Loss	cc/30 min	5.0	5.0
HTHP FL Temp	cc/30 min		
Cake API/HTHP	1/32"	1/	1/
Solids	%Vol	10	9
Oil/Water	%Vol	/90	/91
Sand	%Vol	0.5	0.5
MBT	lb/bbl	5	5
pH		8.4	8.3
Alkal Mud (Pm)		0.1	0
Pf/Mf		0.9/0.8	0.05/1.4
Chlorides	mg/l	45000	43000
Hardness Ca	mg/l	1040	1280
KCl	% wt	6	6.5
Sulphite Excess	ppm	250	250
Idcap	ppb	2.44	2.4
LSRV	0.3rpm		

PRODUCTS USED LAST 24 HRS		
Products	Size	Amt
DUO-VIS	25 KG BG	12
POTASSIUM HYDROXIDE	25 KG CN	10
MI BAR (Bulk)	1 MT BG	6
BRINE NaCl 18%+KCl 5%	1 BL BL	520

SOLIDS EQUIP		
	Size	Hr
VSM Shaker 1	4 x 180	18
VSM Shaker 2	4 x 180	18
VSM Shaker 3	4 x 165	18
VSM Shaker 4	4 x 165	18
Centrifuge		0
D-Silter		0

MUD PROPERTY SPECIFICATIONS		
Weight		1.24
Viscosity		6rpm 10-14
Filtrate		<5

REMARKS AND TREATMENT
Added KOH and Duovis to the active system to maintain the programmed pH range, and rheology. Slowly transferred premix into active to maintain volume.

REMARKS
Changed bit and MWD assembly. RIH. Drilled ahead to 1343 m. ROP in 12 - 20 m/hr range through the Timboon sandstone. Duovis used to increase 6 rpm reading up from minimum program range for good hole cleaning.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS			
Rig Up/Service	4.5	Oil Added	0	np/na Values	0.376/0.351		
Drilling	14.5	Water Added	30	KCl	3.7/ 27.3	kp/ka (lb*s^n/100ft²)	3.796/4.211
Tripping	5	Mud Received	520	Low Gravity	3.1/ 28.3	Bit Loss (psi / %)	718 / 23
Non-Productive Tim		Dumped	44	Bentonite	.3/ 2.7	Bit HHP (hbp / HSI)	429 / 3.6
Condition Hole		Shakers	142	Drill Solids	2.3/ 20.6	Bit Jet Vel (m/s)	86
		Evaporation	0	Weight Material	3.7/ 53.7	Ann. Vel DP (m/s)	86
		Centrifuge	0	Chemical Conc	- / 5.	Ann. Vel DC (m/s)	1.17
		Formation	0	Inert/React	3.6691	Crit Vel DP (m/s)	2
		Left in Hole	0	Average SG	3.46	Crit Vel DC (m/s)	2
		Sweeps	0	Carb/BiCarb (m mole/L)	18./ 359.1	ECD @ 1343 (sp.gr.)	1.25

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Gordon Howie Kelvin Leong 08-9302 3790			\$ 11,704.00	\$ 129,528.83



WATER-BASED MUD REPORT No. 10

Date	25/06/2005	Depth/TVD	1690 m / 1687 m
Spud Date	16/06/2005	Mud Type	KCI / IDCAP
Water Depth	69	Activity	Drilling 12 1/4"

Operator : Santos Ltd **Field/Area :** VIC P-44
Report For : Richard Buitenhuis/Pat King **Description :** Gas Development
Well Name : Casino 5 **Location :** Otway Basin
Contractor : Diamond Offshore **M-I Well No. :**
Report For : Paul Baker/Troy Williams

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	12.25 in Hycalog DSX	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	5x16 / 1/32"	30in @133m (133TVD)	826.8	Pump Size	6.5 X 12.in 6.5 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	5.016 gal/stk 5.016 gal/stk
5 in	1439 m	13.625in @655m (655TVD)	493.2	Pump stk/min	92@97%
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	918 gal/min
5 in	138 m	in @1009m (1009TVD)	1320	Bottoms Up	33.7 min 6160 stk
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	60.4 min 11052 stk
8 in	113 m	9.625in @1720m (1718TVD)	1180	Circulating Pressure	3200 psi

MUD PROPERTIES

	Pit 3@2100	Pit 3@15.00
Sample From		
Flow Line Temp	°C 48	43
Depth/TVD	m 1598/1596	1404/1402
Mud Weight	sp.gr. 1.25@46°C	1.23@36°C
Funnel Viscosity	s/qt 54	47
Rheology Temp	°C 49	49
R600/R300	73/56	62/48
R200/R100	47/37	41/32
R6/R3	14/11	13/9
PV	cP 17	14
YP	lb/100ft² 39	34
10s/10m/30m Gel	lb/100ft² 13/15/18	11/13/17
API Fluid Loss	cc/30 min 3.8	4.8
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32" 1/	1/
Solids	%Vol 12	10
Oil/Water	%Vol /88	/90
Sand	%Vol 0.5	0.5
MBT	lb/bbl 6	6
pH	8	7.9
Alkal Mud (Pm)	0.4	0.4
Pf/Mf	0.1/1.4	0.1/1.4
Chlorides	mg/l 45000	45000
Hardness Ca	mg/l 1040	1000
KCl	% wt 6	6
Sulphite Excess	ppm 200	200
Idcap	ppb	2.5
LSRV	0.3rpm	

PRODUCTS USED LAST 24 HRS

Products	Size	Amt
DUO-VIS	25 KG BG	1
OS-1	25 KG BG	6
POLYPAC UL	25 KG BG	11
IDCAP D	25 KG BG	11
POTASSIUM HYDROXIDE	25 KG CN	6
MI BAR (Bulk)	1 MT BG	7

SOLIDS EQUIP

	Size	Hr
VSM Shaker 1	4 x 180	15
VSM Shaker 2	4 x 180	15
VSM Shaker 3	4 x 180	15
VSM Shaker 4	3 x 180 1 x 165	15
Centrifuge		0
D-Silter		0

MUD PROPERTY SPECIFICATIONS

Weight	1.24
Viscosity	6rpm 10-14
Filtrate	<5

REMARKS AND TREATMENT

Added KOH, OS-1L, IDCAP-D and Polupac UL to the active system to maintain programmed properties. Transfer concentrated premix into active to maintain active volume and required properties. Weighting up to be at 10.3-10.4 ppg by 1530 m.

REMARKS

Drilling slowed down to <10 m/hr. Made up and pumped a 45 bbl KCl 8% brine pill to attempt to clear the bit at 1388m. POOH to change bit at 1392m. Bit balled. RIH continue drilling to 1688m at ROP 20-70 m/hr. Changed 4 x 180XR Santos screens.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added	0	np/na Values
Drilling	14.5	Water Added	20	kp/ka (lb*s^2/n/100ft²)
Tripping	9.5	Mud Received	0	Bit Loss (psi / %)
Non-Productive Tim		Dumped	0	Bit HHP (hbp / HSI)
Condition Hole		Shakers	46	Bit Jet Vel (m/s)
		Evaporation	0	Ann. Vel DP (m/s)
		Centrifuge	0	Ann. Vel DC (m/s)
		Formation	0	Crit Vel DP (m/s)
		Left in Hole	0	Crit Vel DC (m/s)
		Sweeps	0	ECD @ 1690 (sp.gr.)

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Gordon Howie Kelvin Leong			\$ 5,941.65	\$ 135,470.48



WATER-BASED MUD REPORT No. 11

Date	26/06/2005	Depth/TVD	1730 m / 1726 m
Spud Date	16/06/2005	Mud Type	KCI / IDCAP
Water Depth	69	Activity	Run 9 5/8" Casing

Operator : Santos Ltd
Report For : Richard Buitenhuis/Pat King
Well Name : Casino 5
Contractor : Diamond Offshore
Report For : Paul Baker/Troy Williams

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin
M-I Well No. :

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size in		Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles 1/32"		30in @133m (133TVD)	903.5	Pump Size	6.5 X 12.in 6.5 X 12.in
Drill Pipe Size in	Length m	Intermediate	Active Pits	Pump Cap	gal/stk gal/stk
		13.625in @655m (655TVD)	421.5	Pump stk/min	
Drill Pipe Size in	Length m	Intermediate	Total Circulating Vol	Flow Rate	gal/min
		in @1009m (1009TVD)	421.5	Bottoms Up	
Drill Collar Size in	Length m	Production or Liner	In Storage	Total Circ Time	
		9.625in @1720m (1718TVD)	727	Circulating Pressure	

MUD PROPERTIES		
Sample From		Pit 3@04:30
Flow Line Temp	°C	58
Depth/TVD	m	1730/1726
Mud Weight	sp.gr.	1.25@30°C
Funnel Viscosity	s/qt	49
Rheology Temp	°C	49
R600/R300		64/50
R200/R100		42/33
R6/R3		12/9
PV	cP	14
YP	lb/100ft²	36
10s/10m/30m Gel	lb/100ft²	10/15/17
API Fluid Loss	cc/30 min	4.5
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32"	1/
Solids	%Vol	10
Oil/Water	%Vol	/90
Sand	%Vol	0.5
MBT	lb/bbl	5
pH		7.9
Alkal Mud (Pm)		0
Pf/Mf		0.05/1.5
Chlorides	mg/l	46000
Hardness Ca	mg/l	1160
KCl	% wt	6.5
Sulphite Excess	ppm	250
Idcap	ppb	2.5
LSRV	0.3rpm	

PRODUCTS USED LAST 24 HRS		
Products	Size	Amt
DEFOAM A	5 GA CN	1
DUO-VIS	25 KG BG	8
POLYPAC UL	25 KG BG	6
IDCAP D	25 KG BG	12
MI BAR (Bulk)	1 MT BG	13

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	4 x 180	7
VSM Shaker 2	4 x 180	7
VSM Shaker 3	4 x 180	7
VSM Shaker 4	3 x 180 1 x 165	7
Centrifuge		0
D-Silter		0

REMARKS AND TREATMENT
 Built 180 bbl premix to replace volume in active as required. Made up and pumped hi-vis sweep at TD.

REMARKS
 Drilled ahead to TD at 1730m. Pumped hi-vis sweep and circulated until cuttings on shakers tapered off. POOH. Back reamed tight spots to casing shoe. RIH for wiper trip. POOH. Retrieve wear bushing from wellhead. Rig up to run 9 5/8" casing

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added	0	np/ka Values
Drilling	1.5	Water Added	0	kp/ka (lb*s^n/100ft²)
Tripping	10.5	Mud Received	0	Bit Loss (psi / %)
Non-Productive Tim		Dumped	292	Bit HHP (hhp / HSI)
Condition Hole	2	Shakers	178	Bit Jet Vel (m/s)
Reaming	6	Evaporation	0	Ann. Vel DP (m/s)
Running Casing	4	Centrifuge	0	Ann. Vel DC (m/s)
		Formation	0	Crit Vel DP (m/s)
		Left in Hole	0	Crit Vel DC (m/s)
		Sweeps	0	
			Average SG	3.91
			Carb/BiCarb (m mole/L)	1/ 63.

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Gordon Howie Kelvin Leong 08-9302 3790			\$ 8,361.55	\$ 143,832.03



No. 14

Date	29/06/2005	Depth/TVD	1806 m / 1802 m
Spud Date	16/06/2005	Mud Type	CaCl2 Brine
Water Depth	69	Activity	Running Screens

Operator : Santos Ltd
Report For : Ron King / Jeff Thomson
Well Name : Casino 5
Contractor : Diamond Offshore
Report For : Paul Baker/Troy Williams

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin
M-I Well No. :

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size in		Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles 1/32"		30in @133m (133TVD)	494.2(Tot)/372(Bit)	Pump Size	6.5 X 12.in 6.5 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	gal/stk gal/stk
5 in	1223 m	13.625in @655m (655TVD)	1291.8	Pump stk/min	
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	gal/min
5.5 in	71 m	9.625in @1720m (1718TVD)	1663.9	Bottoms Up	
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	
in	m	7in @1806m (1802TVD)	329	Circulating Pressure	

MUD PROPERTIES		
Sample From	CaCl2@05:00	FloPro@21:00
Flow Line Temp	°C	
Depth/TVD	m	1806/1802
Mud Weight	sp.gr.	1.22 1.24@30°C
Funnel Viscosity	s/qt	50
Rheology Temp	°C	49
R600/R300		58/44
R200/R100		38/30
R6/R3		12/10
PV	cP	14
YP	lb/100ft²	30
10s/10m/30m Gel	lb/100ft²	10/12/15
API Fluid Loss	cc/30 min	5
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32"	1/
Solids	%Vol	14
Oil/Water	%Vol	/86
Sand	%Vol	.25
MBT	lb/bbl	<.25
pH		9.1 9.7
Alkal Mud (Pm)		0.8
Pf/Mf		0.1/0.5
Chlorides	mg/l	146000 148000
Hardness Ca	mg/l	120
KCl	% wt	6.5
Sulphite Excess	ppm	
Idcap	ppb	
LSRV	0.3rpm	36423

PRODUCTS USED LAST 24 HRS		
Products	Size	Amt
SALT - FINE	1 MT BG	1
DIRT MAGNET	55 GA DM	8
SAFE-CIDE	25 KG CN	4
SAFE-COR	55 GA DM	13
SAFE-VIS E	5 GA CN	10
SAFE-SURF WN	200 KG DM	1
BRINE CALCIUM CHLORIDE	1 BL BL	1227
CALCIUM CHLORIDE (BB)	500 KG BG	13

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	2 x 180, 2 x 14	0
VSM Shaker 2	4 x 200	0
VSM Shaker 3	2 x 180, 140, 1	0
VSM Shaker 4	3 x 200, 1 x 23	0
Centrifuge		0
D-Silter		0

MUD PROPERTY SPECIFICATIONS		
Weight	1.24	
Viscosity	6rpm 10-14	
Filtrate	<5	

REMARKS AND TREATMENT
 Mixed CaCl2 brine as per programme with Safe-Cor, Safe-Cide and Dirt Magnet. A 50 bbl high vis wash spacer was used to separate the Flo-Po mud and the CaCl2 brine.

REMARKS
 RIH to bottom and displaced open hole with 56 bbl new Flo-Pro mud. Pulled out to 1650 m and displaced casing with 464 bbl CaCl2 brine. POOH. Running production screens(6 x 38ft)

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added 0	CaCl2 / 6.1	np/na Values 0.383/0.271
Drilling		Water Added 0	Low Gravity /	kp/ka (lb*s^n/100ft²) 4.495/8.234
Tripping	21.5	Mud Received 0	High Gravity /	Bit Loss (psi / %) / 1
Non-Productive Tim	0.5	Dumped 267	Average SG	Bit HHP (hhp / HSI) / 1
Condition Hole	2	Shakers 0	Brine SG	Bit Jet Vel (m/s)
Cementing		Evaporation 0	Solids Corr/CaCl2	Ann. Vel DP (m/s)
Running Casing		Centrifuge 0		Ann. Vel DC (m/s)
		Formation 0		Crit Vel DP (m/s)
		Left in Hole 0		Crit Vel DC (m/s)
		Sweeps 0		ECD @ 1679 (sp.gr.) 1.34

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Gordon Howie Kelvin Leong	08-9302 3790		\$ 55,031.42	\$ 240,099.23



Date	1/07/2005	Depth/TVD	1806 m / 1802 m
Spud Date	16/06/2005	Mud Type	CaCl2 Brine
Water Depth	69	Activity	Displace to brine

Operator : Santos Ltd
Report For : Ron King / Paul Nardone
Well Name : Casino 5
Contractor : Diamond Offshore
Report For : Paul Baker/Troy Williams

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin
M-I Well No. :

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	1/32"	30in @133m (133TVD)	484.3(Tot)/482.9(Bit)	Pump Size	6.5 X 12.in 6.5 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	gal/stk gal/stk
5 in	1729 m	13.625in @655m (655TVD)	1503.7	Pump stk/min	
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	gal/min
5.5 in	71 m	9.625in @1720m (1718TVD)	1986.6	Bottoms Up	
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	
in	m	7in @1806m (1802TVD)	329	Circulating Pressure	

MUD PROPERTIES		
Sample From	NaCl pit 5@22	FloPro@22.00
Flow Line Temp	°C	
Depth/TVD	m	1806/1802
Mud Weight	sp.gr.	1.24@30°C
Funnel Viscosity	s/qt	50
Rheology Temp	°C	49
R600/R300		58/44
R200/R100		38/30
R6/R3		12/10
PV	cP	14
YP	lb/100ft²	30
10s/10m/30m Gel	lb/100ft²	10/12/15
API Fluid Loss	cc/30 min	5
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32"	1/
Solids	%Vol	14
Oil/Water	%Vol	/86
Sand	%Vol	</25
MBT	lb/bbl	<2.5
pH		8.9 9.7
Alkal Mud (Pm)		
Pf/Mf		
Chlorides	mg/l	158000 148000
Hardness Ca	mg/l	
KCl	% wt	6.5
Sulphite Excess	ppm	
Idcap	ppb	
LSRV	0.3rpm	

PRODUCTS USED LAST 24 HRS		
Products	Size	Amt
DUO-VIS	25 KG BG	1
BRINE NaCl 18%+KCl 5%	1 BL BL	677
SALT - FINE	1 MT BG	4
SAFE-VIS E	5 GA CN	5

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	2 x 180, 2 x 14	0
VSM Shaker 2	4 x 200	0
VSM Shaker 3	2 x 180, 140, 1	0
VSM Shaker 4	3 x 200, 1 x 23	0
Centrifuge		0
D-Silter		0

REMARKS AND TREATMENT
 Mixed viscous pill in slug pit for displacement to separate muddy brine in casing from new clean inhibited brine.

REMARKS
 RIH to expand production screens. POOH. RIH for scraper run. Displace to CaCl2 brine. Pumped 43 bbl hi vis pill, 152 bbls NaCl brine followed by 462 bbls CaCl2 brine. Taking last 330 bbls NaCl brine off the Far Grip. Transferring all brine remnants from pits into Pit #5. Dumped all muddy brine from hole during displacement.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added	0	np/na Values
Drilling		Water Added	0	kp/ka (lb*s^n/100ft²)
Tripping		Mud Received	0	Bit Loss (psi / %)
Non-Productive Tim		Dumped	685	Bit HHP (hhp / HSI)
Condition Hole		Shakers	14	Bit Jet Vel (m/s)
Cementing		Evaporation	0	Ann. Vel DP (m/s)
Running Casing		Centrifuge	0	Ann. Vel DC (m/s)
		Formation	0	Crit Vel DP (m/s)
		Left in Hole	0	Crit Vel DC (m/s)
		Sweeps	0	ECD @ 1720 (sp.gr.)
				1.34

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Gordon Howie	08-9302 3790		\$ 11,673.64	\$ 256,779.35



Date	2/07/2005	Depth/TVD	1806 m / 1802 m
Spud Date	16/06/2005	Mud Type	CaCl2 Brine
Water Depth	69	Activity	Production tubing

Operator : Santos Ltd
Report For : Ron King / Paul Nardone
Well Name : Casino 5
Contractor : Diamond Offshore
Report For : Paul Baker/Troy Williams

Field/Area : VIC P-44
Description : Gas Development
Location : Otway Basin
M-I Well No. :

DRILLING ASSEMBLY		CASING	MUD VOLUME (bbl)	CIRCULATION DATA	
Bit Size	8.5 in	Surface	Hole	Pump Make	OILWELL 1700PT NATIONAL 12P-16C
Nozzles	1/32"	30in @133m (133TVD)	453.6(Tot)/452.2(Bit)	Pump Size	6.5 X 12.in 6.5 X 12.in
Drill Pipe Size	Length	Intermediate	Active Pits	Pump Cap	gal/stk gal/stk
7 in	1729 m	13.625in @655m (655TVD)	1110.4	Pump stk/min	
Drill Pipe Size	Length	Intermediate	Total Circulating Vol	Flow Rate	gal/min
5.5 in	71 m	9.625in @1720m (1718TVD)	1562.6	Bottoms Up	
Drill Collar Size	Length	Production or Liner	In Storage	Total Circ Time	
in	m	7in @1806m (1802TVD)	329	Circulating Pressure	

MUD PROPERTIES		
Sample From	NaCl Pit 5	FloPro@20.00
Flow Line Temp	°C	
Depth/TVD	m	1806/1802
Mud Weight	sp.gr.	1.2@28°C 1.24@30°C
Funnel Viscosity	s/qt	50
Rheology Temp	°C	49
R600/R300		58/44
R200/R100		38/30
R6/R3		12/10
PV	cP	14
YP	lb/100ft²	30
10s/10m/30m Gel	lb/100ft²	1-/12/15
API Fluid Loss	cc/30 min	5
HTHP FL Temp	cc/30 min	
Cake API/HTHP	1/32"	1/
Solids	%Vol	14
Oil/Water	%Vol	/86
Sand	%Vol	<.25
MBT	lb/bbl	<2.5
pH		8.9 9.7
Alkal Mud (Pm)		
Pf/Mf		
Chlorides	mg/l	158000 148000
Hardness Ca	mg/l	
KCl	% wt	6.5
Sulphite Excess	ppm	
Idcap	ppb	
LSRV	0.3rpm	

PRODUCTS USED LAST 24 HRS		
Products	Size	Amt

SOLIDS EQUIP	Size	Hr
VSM Shaker 1	2 x 180, 2 x 14	0
VSM Shaker 2	4 x 200	0
VSM Shaker 3	2 x 180, 140, 1	0
VSM Shaker 4	3 x 200, 1 x 23	0
Centrifuge		0
D-Silter		0

REMARKS AND TREATMENT
 No mud or brine treatment.

REMARKS
 RIH to jet clean BOP stack. Rig up to run production tubing. Received total 677 bbls NaCl brine from Far Grip and 35.97 mt Gel.

TIME DISTR	Last 24 Hrs	MUD VOL ACCTG (bbl)	SOLIDS ANALYSIS (%/lb/bbl)	MUD RHEOLOGY & HYDRAULICS
Rig Up/Service		Oil Added	0	np/na Values
Drilling		Water Added	0	kp/ka (lb*s^n/100ft²)
Tripping		Mud Received	0	Bit Loss (psi / %)
Non-Productive Tim		Centrifuge	0	Bit HHP (hhp / HSI)
Condition Hole		Formation	0	Bit Jet Vel (m/s)
Cementing		Left in Hole	0	Ann. Vel DP (m/s)
Running Casing		Sweeps	0	Ann. Vel DC (m/s)
		Dumped	424	Crit Vel DP (m/s)
		Shakers	0	Crit Vel DC (m/s)
		Evaporation	0	ECD @ 1720 (sp.gr.)
				1.34

M-I ENGR / PHONE	RIG PHONE	WAREHOUSE PHONE	DAILY COST	CUMULATIVE COST
Gordon Howie 08-9302 3790			\$ 0.00	\$ 256,779.35

SECTION 11 : CASING & CEMENTING SUMMARY

Well Name: **Casino-5**

Casing Type:	Surface Casing	Originated By:	Pat King	Checked By:		Date:	19 Jun 2005	
Hole Size:	17.50in	Total Depth:	665.0m	GL-RT:	0.00m	Contractor:	Dowell Schlumberger	
PRE-FLUSH	20.0bbl @ 8.40ppg	SPACER		0.0bbl @ 0.00ppg				
Additives:	Green Fluorescent Dye	Additives:						
CEMENT		ADDITIVES		%	Amount	Units		
LEAD SLURRY:	648.00sx							
Brand / Class:	ABC / G			D047 antifoam	0.010	gal/sx		
Slurry Yield:	2.23ft³/sx			D075 Extender	0.420	gal/sx		
Mixwater Req't:	13.15gal/sx							
Actual Slurry Pumped:	258.0bbl							
Density:	12.50ppg							
Cement Top (MD):	90.0m							
TAIL SLURRY:	433.00sx							
Brand / Class:	ABC / G			D047 antifoam	0.010	gal/sx		
Slurry Yield:	1.18ft³/sx							
Mixwater Req't:	5.33gal/sx							
Actual Slurry Pumped:	91.0bbl							
Density:	15.80ppg							
Cement Top (MD):	505.0m							
DISPLACEMENT		Fluid: Seawater @ 8.40ppg						
Theoretical Displ.:	273.0bbl	Bumped Plug with:		600.00psi				
Actual Displ.:	276.0bbl @ 620.00gpm	Pressure Tested To:		3000.00psi				
Displaced via:	Rig pumps	Bleed Back:		5.0bbl				
ACTIVITY	Time/Date	Returns to Surface: 0.0bbl mud, 0.0bbl cmt						
Start Running csg.		Casing Action During Preflush : No Action Taken Cement : No Action Taken Displacement : No Action Taken						
Casing On Bottom		Top Up Job run: No 0.00sx of class						
Start Circulation	17:10 19 Jun 05	Wiper Plug Top: Yes						
Start Pressure Test	17:44	Wiper Plug Bottom: Yes						
Pump Preflush	18:00	Plug Set: Manufacturer: Dowell Type: Deep Sea Express						
Start Mixing	18:11	Centralizer Type: Weatherford Centralizer Placement Depth: Middle of float shoe and float collar joints						
Finish Mixing	19:12							
Start Displacing	19:20							
Stop Displ./Bump	19:45							
Pressure Test	19:55							
CASING AND EQUIPMENT DETAILS								
Stick Up							85.50m	
No. Joints	OD	Wt	Grade	Comment	Thread	Length	From	To
1	18.750in	0.0lbs/ft		18.75" WH c/w 16" DQ HD90 Quick Stab Box	HD90 Quick Stab	8.2m	85.5m	93.7m
1	16.000in	0.0lbs/ft		16" HD90 Quick Stab x 13.375" BTC X/Over	HD90 Quick Stab x 13.375 BTC	1.9m	93.7m	95.6m
45	13.380in	0.0lbs/ft	L80		BTC	533.5m	95.6m	629.1m
1	13.380in	0.0lbs/ft	L80	Float Collar Joint	BTC	12.8m	629.1m	641.9m
1	13.380in	0.0lbs/ft	L80	Float Shoe Joint	BTC	12.9m	641.9m	654.8m
0	0.000in	0.0lbs/ft				0.0m	654.8m	654.8m
0	0.000in	0.0lbs/ft				0.0m	654.8m	654.8m
0	0.000in	0.0lbs/ft				0.0m	654.8m	654.8m
0	0.000in	0.0lbs/ft				0.0m	654.8m	654.8m
0	0.000in	0.0lbs/ft				0.0m	654.8m	654.8m
Theoretical Bouyed wt. of casing:				0.0klb	Bradenhead Height above GL:		0.00m	
Casing wt. prior to landing csg:				0.0klb	Bradenhead Description / Length:		/ 0.00m	
Actual wt. of casing (last joint run-block wt):				0.0klb	Tubing Spool Size:			
Landing wt. (after cementing and pressure bleed off):				0.0klb	Setting Slips:		0.0klb	
Cementing Job Remarks:		Dye returns to seabed @ 180 bbl displacement Cement returns to seabed @ 238 bbl displacement. Floats held.						

Well Name: **Casino-5**

Casing Type: Production Casing	Originated By: Pat King	Checked By: Jeff Thomson	Date: 27 Jun 2005
Hole Size: 12.25in	Total Depth: 1730.0m	GL-RT:	Contractor: Dowell Schlumberger
PRE-FLUSH 10.0bbl @ 8.30ppg	SPACER 0bbl @ 0ppg		
Additives: Fluorescent dye	Additives:		

CEMENT	ADDITIVES	%	Amount	Units
LEAD SLURRY: 144sx				
Brand / Class: / G	D047		2	gallons
Slurry Yield: 2.23ft³/sx	D075		60	gallons
Mixwater Req't: 13.18gal/sx	D110		25	gallons
Actual Slurry Pumped: 57.0bbl				
Density: 12.50ppg				
Cement Top (MD): 1320.0m				
TAIL SLURRY: 225sx				
Brand / Class: / G	D193		56	gallons
Slurry Yield: 1.16ft³/sx	D145A		18	gallons
Mixwater Req't: 5.15gal/sx	D047		2	gallons
Actual Slurry Pumped: 47.0bbl				
Density: 15.80ppg				
Cement Top (MD): 1570.0m				

DISPLACEMENT Fluid: drilling fluid @ 10.40ppg			
Theoretical Displ.:	408.0bbl	Bumped Plug with:	1000psi
Actual Displ.:	406.0bbl @ 400gpm	Pressure Tested To:	4000psi
Displaced via:	Dowell (20 bbls) rig pumps (remainder)	Bleed Back:	5.5bbl

ACTIVITY	Time/Date	Returns to Surface: 100.0bbl mud, 0bbl cmt
Start Running csg.		Casing Action During Preflush : No Action Taken Cement : No Action Taken Displacement :
Casing On Bottom	09:55 hrs	Top Up Job run: 0 0sx of class
Start Circulation	10:00 hrs	Wiper Plug Top: Yes
Start Pressure Test	14:33	Wiper Plug Bottom: Yes
Pump Preflush	14:25	Plug Set: Manufacturer: Dowell Type: Deep Sea Express
Start Mixing	15:03 hrs	Centralizer Type: Centralizer Placement Depth:
Finish Mixing	15:27 hrs	
Start Displacing	15:40 hrs	
Stop Displ./Bump	16:30 hrs	
Pressure Test	16:37 hrs	

CASING AND EQUIPMENT DETAILS									
Stick Up							86.36m		
No. Joints	OD	Wt	Grade	Comment	Thread	Length	From	To	
2	10.75in	0lbs/ft	L80	Casing Hanger & 10-3/4" Pup Joint	Vam Top	2.04m	86.36m	88.4m	
7	10.75in	55.5lbs/ft	L80		Vam Top	83.19m	88.4m	171.59m	
1	10.75in	55.5lbs/ft	L80	10-3/4" x 9-5/8" X-Over	Vam Top	12.76m	171.59m	184.35m	
109	9.63in	47lbs/ft	L80		Vam Top	1294.11m	184.35m	1478.46m	
1	9.63in	47lbs/ft	L80	9-5/8" Vam Top x KS Bear X-Over	Vam Top x KS Bear	11.81m	1478.46m	1490.27m	
16	9.63in	47lbs/ft	13Cr80		KS Bear	191.78m	1490.27m	1682.05m	
1	9.63in	47lbs/ft	13 Cr80	9-5/8" Float Collar X/O Joint	KS Bear x BTC	12.39m	1682.05m	1694.44m	
1	9.63in	47lbs/ft	L80	9-5/8" Intermediate Joint		12.24m	1694.44m	1706.68m	
1	9.63in	47lbs/ft	L80	9-5/8" Shoe Joint		13.11m	1706.68m	1719.79m	
0	0in	0lbs/ft				0m	1719.79m	1719.79m	

Theoretical Bouyed wt. of casing:	0klb	Bradenhead Height above GL:	0m
Casing wt. prior to landing csg:	0klb	Bradenhead Description / Length:	/ 0m
Actual wt. of casing (last joint run-block wt):	0klb	Tubing Spool Size:	
Landing wt. (after cementing and pressure bleed off):	0klb	Setting Slips:	0klb
Cementing Job Remarks:			

SECTION 12 : MUDLOGGING WELL REPORT

Santos

A.B.N 80. 007 550 923

Casino 5

FINAL WELL REPORT

Prepared by



Geoservices Overseas S.A.

Geoservices Overseas S.A.
Unit 1, 6 Somerset Circuit
Lonsdale, S.A. 5160
Tel: 08-81863611
Fax: 08-81862611
E-mail: geosrv.adl@bigpond.com.au

Santos Ltd.
Santos House
91 King William Street
Adelaide, S.A. 5000

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Revision	Date	Issued by	Approved by	Remarks
1	07-Jul-05	Geoservices Unit 170	Base Mudlogging Coordinator	

1.0 WELL DATA SUMMARY

(All depths are measured depths from rotary table (MDRT) unless otherwise specified.)

Well Name	: Casino 5
Basin	: Otway
Permit	: VIC P-44
Operator	: Santos Limited
Drilling Rig	: Ocean Patriot
Well Classification	: Vertical Gas Producer
Surface Location	
Latitude	: 38° 47' 43.68" S
Longitude	: 142° 44' 44.60" E
Easting	: 651 604.4 m E
Northing	: 5 704 473.1 m N
Depth Reference	: L.A.T. (lowest astronomical tide)
Water Depth	: 68.2 m
Rotary Table	: 21.5 m
Rotary Table to Seabed	: 89.7 m
Casing Data	: (1) 762/508 mm (30"/20") casing shoe at 132 m : (2) 340 mm (13.375") casing shoe at 655 m. : (3) 244 mm (9.625") casing shoe at 1719.8 m
Hole Size	: (1) 660 mm (26") + 914 mm (36") hole opener from 89.7 m to 133.0 m : (2) 445 mm (17½") hole from 133 m to 665 m : (3) 311 mm (12¼") hole from 665 m to 1730 m : (4) 216 mm (8½") hole from 1730 m to 1806 m
Mud Type	: (1) Seawater / Pre-Hydrated Gel Sweeps : (2) Seawater / Pre-Hydrated Gel Sweeps : (3) Seawater & KCL / Polymer : (4) Flo-Pro
Offset Wells	: Casino 2 (150m)
Proposed Total Depth	: 1788 mRT MD (1788 m TVD RT)
Actual Total Depth	: 1806 mRT MD (1802 m TVD RT)
Subsea Vertical Depth	: 1780.5 m TVDSS
Date arrived on Location	: 14 th June 2005
Date Rig Released	: 8 th July 2005
Date Spudded	: 19:00 hours, 16 th June 2005
Date TD Reached	: 19:00 hours, 28 th June 2005
Well Status	: Cased & Suspended

Revision	Date	Issued by	Approved by	Remarks
1	07-Jul-05	Geoservices Unit 170	Base Mudlogging Coordinator	

2.0 GENERAL INFORMATION

2.1 **Executive Summary**

Casino 5 was drilled to develop the gas reserves of the Waarre C reservoir via a vertical well located near the crest of the reservoir. This field is located in the Otway Basin, licence VIC P-44. The closest well to Casino 5 is Casino 2 (150 m). The Diamond Offshore semi-submersible rig 'Ocean Patriot' was used to drill this well.

Casino 5 was spudded at 19:00 hours, on 16th June 2005, with a 660mm (26") bit attached to a 914mm (36") hole opener. The 914mm hole was drilled to a depth of 133 m and the 762/508mm (30"/20") conductor was cemented in place at a depth of 132 m.

A 445mm (17.5") bit and BHA was made up and RIH, the conductor shoe track was drilled out, and 444mm hole was drilled to a depth of 665 m. A wiper trip was done back up to the conductor shoe at 132 m, due to tight hole while pulling out. The 340mm (13.375") casing was run in hole and cemented with the shoe depth set at 654m.

A 311mm (12.25") bit (#3) and BHA was run in hole, and after tagging cement at 633 m, the cement was drilled out, plus the shoe-track and 3 m of new hole to 668 m. An LOT was then performed at 668 m: EMW 2.08sg (17.36 ppg) before drilling continued. A vertical hole was then drilled with a 311mm bit from 665 m to 994 m using seawater with PHG sweeps during each stand and at connections. The hole was then displaced to KCl mud on the fly from 994 m to 1009 m and drilling continued down to 1160 m. Shortly after entering the Massacre Shale, this bit was then pulled out of hole and replaced with a PDC bit (#4RR). This bit was then run in hole and drilling of the 311mm hole continued with periodic surveys until 1392 m, when the bit was pulled due to low ROP – bit balling. This bit was then replaced with bit #5, and drilling of the 311mm hole continued at a faster rate from 1392 m to 1730 m. The section was terminated at this point and the bit was pulled from the hole with some resistance. A wiper trip was performed to the shoe before the bit was pulled to surface. The 244mm (9.625") casing was then run in hole and cemented with the shoe at 1719.8 m.

An 216mm (8.5") bit (#6) and was then made up and used to drill out the shoe track before the well was displaced with the new Flo-Pro mud system. The well was then drilled vertically through the Waarre C Sandstone where a significant gas show was encountered. Casino 5 was then terminated at 1806 mMD on the 28th June 2005.

The well was then wiped clean without problem and was displaced to CaCl₂ brine. The lower completion assembly was run into the hole and set with the shoe at 1800.45 m. The upper casing was then scraped clean and the well was displaced with brine. The upper completion assembly was then landed in place, and the well was displaced to diesel prior to well testing. The riser and BOPs were then removed, the well was capped, and anchors were pulled prior to moving off location.

No electric logs were run at the end of this well.

Geoservices provided a full mudlogging service from spud to TD during this well. This service included 'Reserval' gas monitoring and real-time online data transmission.

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2.2 Geoservices Personnel

ALS Engineers : Adderley, David
 : Dunn, Alan
 : Prosser, Scott

Mudloggers : Elliott, Noel
 : Foreman, Brent

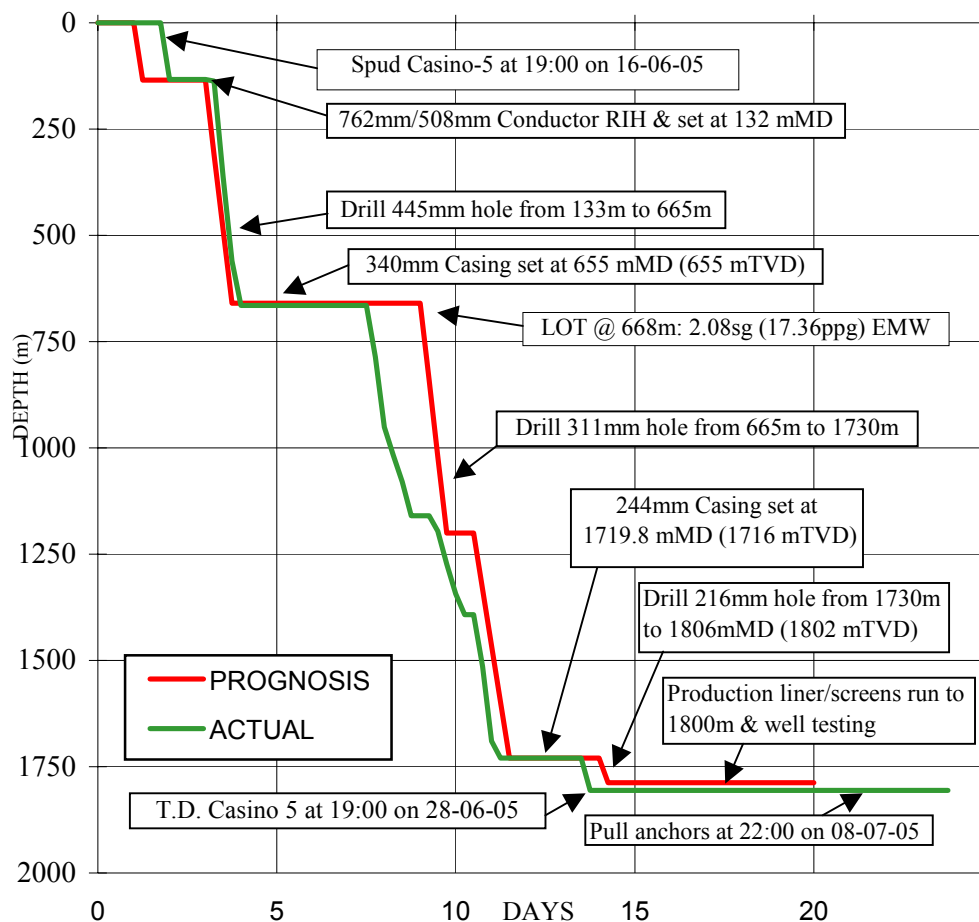
Sample Catchers : Dower, Leigh
 : Djukanovic, Alex

2.3 Contractor Information

Drilling : Diamond Offshore
 Rig name : Ocean Patriot
 Rig type : Semi-Submersible
 Mudlogging : Geoservices Overseas S.A.
 Mud engineering : M.I. Swaco
 MWD : Sperry Sun
 Wireline logging : Baker Atlas
 Cementing : Dowel Schlumberger
 Well head completion : Cameron
 ROV : Fugro
 Casing : Weatherford
 Work boats : Far Grip, Wrangler
 Helicopters : Bristows
 Catering : E.S.S.

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2.4 Days versus Depth Progress Chart



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2.5 Sample Collection Summary

Six sets of washed and dried samples and three sets of samplex trays were collected during Casino 5, from 665 m to TD at 1806 m.

From 665m to 1644m, the Sampling interval was 6m and
 From 1647 m to the TD at 1806 m, the sampling interval was 3m

Sample distribution was as follows:

Recipient	Washed and Dried		Samplex Trays
	100 g	200 g	
Santos	2		1
Geoscience Australia		1	
D.N.R.E.		1	
A.W.E.	1		1
Mitsui	1		1

Mud samples were also collected at 1730m (12.25" section) and at 1806m (8.5" section).

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3.0 GEOLOGICAL INFORMATION

3.1 **Lithology and Show Summary**

From spud to 665 m returns were to the sea floor.

665-681 m					Drilling Parameters: WOB: 8-18 klbs MF : 820-990 gpm RPM: 70-30 SPP: 1800-2560 psi TRQ: 2.9-3.5 klb*ft							
Lithology	Lithology description	ROP m/hr			Depth m	Total Gas U	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	C5 ppm
		ave.	max.	min.								
CALCAREOUS SILTSTONE	Medium brownish grey-medium brown, argillaceous grading to CALCAREOUS CLAYSTONE, common forams, firm, sub blocky.	20.5	45.9	8.9	665-68	0	0	0	0	0	0	0

681-775.5 m					Drilling Parameters: WOB: 8-18 klbs MF: 960-1020 gpm RPM: 110-130 SPP: 2330-2800 psi TRQ: 3.5-6.2 klb*ft							
Lithology	Lithology description	ROP m/hr			Depth m	Total Gas U	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	C5 ppm
		ave.	max.	min.								
SANDSTONE	Yellow orange brown Fe stain, translucent, clear in part fine to coarse predominantly medium, sub angular predominantly sub round, trace very coarse fracture quartz grains, trace lithics, poor sorting, trace forams predominantly loose quartz grains, good inferred porosity, no fluorescence.	52.5	150.2	8.9	681-775	0-0.6	0-104	0	0	0	0	0
SILTSTONE	Medium brownish grey-medium brown, argillaceous grading to CALCAREOUS CLAYSTONE, common forams, firm, sub blocky.											

	Drilling Parameters:
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775.5-1007 m					WOB: 3-20 klbs RPM: 90-135 TRQ: 4.0-6.2 klb*ft		MF : 980-1050 gpm SPP: 2570-3200 psi					
Lithology	Lithology description	ROP m/hr			Depth m	Total Gas U	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	C5 ppm
		ave.	max.	min.								
SANDSTONE	Clear to translucent, common orange yellow to moderate brown Fe stain, predominantly medium, trace coarse grains, moderately well sorted, angular to sub angular occasional sub rounded, trace sideritic cement, rare trace siliceous cement, rare pyrite, loose clean quartz grains, good inferred porosity, no fluorescence.	30.8	166.5	2.7	775.5-1007	0-1.0	0-186	0	0	0	0	0
CLAYSTONE	Brownish black to dusky brown, slightly arenaceous common carbonaceous, common disseminated pyrite moderately hard, sub blocky to blocky.											

1007-1083 m					Drilling Parameters: WOB: 19-27 klbs RPM: 100-150 TRQ: 3.7-4.7 klb*ft		MF: 900-1005 gpm SPP: 2200-2900 psi					
Lithology	Lithology description	ROP m/hr			Depth m	Total Gas U	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	C5 ppm
		ave.	max.	min.								
SANDSTONE	Clear-translucent to pale grey, fine-coarse, occasional very coarse, sub-rounded-angular, poorly sorted, weak siliceous cement, common disseminated pyrite inclusions, trace nodular pyrite, loose, clean, good inferred porosity, no fluorescence.	11.7	31.4	4.7	1007-1083	0-0.2	0-39	0	0	0	0	0
CLAYSTONE	Brownish black to dusky brown, trace carbonaceous specks & laminations, trace disseminated pyrite, silty part, sub-blocky to amorphous, sticky & dispersive.											

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1083-1151 m					Drilling Parameters: WOB: 14-24 klbs MF : 960-1005 gpm RPM: 130-155 SPP: 2570-2830 psi TRQ: 4.0-7.4 klb*ft							
Lithology	Lithology description	ROP m/hr			Depth m	Total Gas U	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	C5 ppm
		ave.	max.	min.								
SANDSTONE	Clear, translucent, white medium to very coarse grain predominantly medium to coarse, fair to poor sorting, sub rounded to sub angular, siliceous cement, rare glauconite rare pyrite, predominantly loose clean quartz grain good inferred porosity, no fluorescence.	33.3	112.5	6.2	1083-1151	0-2.8	4-377	0-2	0	0	0	0
SILTSTONE	Greyish dark grey to olive black, argillaceous, grading Silty CLAYSTONE, trace nodular and disseminated pyrite, trace glauconite, trace lithics, soft to dispersive sub blocky.											
CLAYSTONE	Brownish black to dusky brown, silty in part grading argillaceous siltstone, trace carbonaceous specks, minor nodular and disseminated pyrite, trace glauconite, sub blocky to amorphous, soft to dispersive.											

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1151-1162 m					Drilling Parameters: WOB: 8-21 klbs MF: 970-1005 gpm RPM: 130-155 SPP: 2600-2860 psi TRQ: 4.3-5.3 klb*ft							
Lithology	Lithology description	ROP m/hr			Depth m	Total Gas U	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	C5 ppm
		ave.	max.	min.								
SANDSTONE	Clear, translucent, yellow grey in parts, fine to coarse, poor sorting, sub rounded, weak siliceous cement, trace argillaceous matrix, trace nodular pyrite, predominant loose, trace hard aggregates, poor to fair inferred porosity, no fluorescence.	37.9	100.1	18.2	1151-1162	1.0-2.5	126-40	0-1	0	0	0	0
SILTSTONE	Olive grey to olive brown, argillaceous, trace to common disseminated pyrite, rare carbonaceous micro speck firm to soft in parts, amorphous to sub blocky.											

1162-1355 m					Drilling Parameters: WOB: 2-18 klbs MF : 975-1020 gpm RPM: 100-180 SPP: 2800-3150 psi TRQ: 4.0-6.6 klb*ft							
Lithology	Lithology description	ROP m/hr			Depth m	Total Gas U	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	C5 ppm
		ave.	max.	min.								
SANDSTONE	Clear, translucent, white to light grey, fine to medium trace coarse, fair sorting, sub angular to sub rounded weak siliceous cement, trace to rare nodular pyrite, trace lithics, trace fine grained glauconite, predominant loose, poor to fair inferred porosity, no fluorescence.	16.5	78.6	3.6	1162-1355	0.5-2.0	64-398	0-5	0-2	0	0	0
SILTSTONE	Olive grey to olive brown, predominantly arenaceous occasionally argillaceous, minor glauconite, trace carbonaceous specks, soft, amorphous to sub blocky.											

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1355-1498 m					WOB: 6-28 klbs RPM: 110-160 TRQ: 3.7-8.0 klb*ft		MF : 965-990 gpm SPP: 3050-3300 psi					
Lithology	Lithology description	ROP m/hr			Depth m	Total Gas U	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	C5 ppm
		ave.	max.	min.								
SILTSTONE	Moderately brown to light brown, predominant argillaceous, very fine arenaceous in parts, trace mic carbonaceous specks, trace disseminated pyrite, soft firm, rare moderately hard, sub-blocky to amorphous.	25.9	123.5	2.5	1355-1498	1.5-13.	139-239	0-19	0-7	0-5	0-3	0-2
SANDSTONE	Clear, translucent, white, fine to medium quartz grain fair to moderate sorting, sub-angular to predominant sub-rounded, trace fine grain glauconite, trace nodul pyrite, loose, fair to good inferred porosity, r fluorescence.											

1498-1746 m					Drilling Parameters: WOB: 6-15 klbs RPM: 150-175 TRQ: 4.7-7.8 klb*ft		MF: 870-970 gpm SPP: 3080-3320 psi					
Lithology	Lithology description	ROP m/hr			Depth m	Total Gas U	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	C5 ppm
		ave.	max.	min.								
SILTSTONE	Olive brown, medium brownish grey, occasional greenish grey, argillaceous grading to Sil CLAYSTONE in parts, minor fine-grained glauconi firm to occasionally moderately hard, sub blocky.	43.4	129.5	15.8	1498-1746	8.3-35.	1109-6439	11-99	3-11	2-6	0-4	0-4
SANDSTONE	Translucent, clear, white, fine to medium grained, su angular to predominantly subrounded, moderately stron siliceous cement in parts, predominantly loose quar grains, good inferred porosity, no fluorescence.											

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1746-1806 m (T.D.)					Drilling Parameters: WOB: 1-10 klbs MF : 640-700 gpm RPM: 95-155 SPP: 2110-2465 psi TRQ: 4.1-9.7 klb*ft							
Lithology	Lithology description	ROP m/hr			Depth m	Total Gas U	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	C5 ppm
		ave.	max.	min.								
SANDSTONE	Clear, translucent, light grey in parts, predominantly fine to coarse, occasionally very coarse, poor to fair sorting sub-rounded to sub-angular, trace white argillaceous matrix, trace nodular pyrite, predominantly loose clean quartz grains, good inferred porosity, no fluorescence.	27.1	56.7	11.1	1746-1806	12.4-729.7	2259-107544	41-228	10-585	2-90	3-91	1-21
SILTSTONE	Medium dark brown, olive brown, argillaceous, rare nodular pyrite, trace fine grained glauconite, trace micaceous carbonaceous specks, trace forams, firm to moderate hard, sub-blocky.											

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3.2 Gas Ratio Interpretation – Introduction

Gas composition and total gas in mud were measured using the Geoservices Reserval (A combined total gas detector and chromatograph coupled with a GZG degasser). As a backup gas detection system a Geoservices FID Chromatograph Panel (FCP) and FID Gas Panel (FGP) were in place. Both use the FID technique of measuring ions released when hydrocarbons are burnt in a pure hydrogen flame.

Gas is extracted from the mud at the shale shakers by a degasser that is essentially an agitator inside a chamber through which the mud continually passes. The GZG degasser is specially designed to degas a constant volume of mud regardless of pump rates and has the advantage of being placed as close to the flowline as possible. The gas is then drawn back to the unit through tubing to the gas analysis equipment. Independent sensors in the unit also measure H₂S and CO₂.

The composition of the gas in mud from the formation is significant in determining the geochemical origin and value of a show. There are several methods that can be used to determine whether the hydrocarbon gas in mud comes from a potential gas or oil zone. Amongst these methods are the Triangle Diagram (also known as the gas composition diagram), Pixler Diagram (also known as the gas ratios method) and the gas Wetness/Balance/Character plots.

3.3 Explanation of Gas Composition Diagrams

The Triangle or Gas Composition Diagram is used to graphically represent the hydrocarbon distribution in the gas and to determine whether it corresponds to a gas or oil reservoir. The triangular diagram is obtained by tracing lines on three scales at 120° to each other, corresponding respectively to the ratios of ethane, propane and normal butane to the total gas. The scales are arranged in such a way that if the apex of the triangle is upward, the diagram represents the analysis of gas from a gas zone, while if the apex points downwards, the diagram represents the analysis of gas from an oil zone. A large triangle diagram represents dry gas or low GOR oil, while small triangles represent wet gases or high GOR oils. The centre of the triangle should fall inside the area delineated by the dotted line, which encircles compositions that are regarded as 'normal'. If the triangle area is outside this area the gas indicates that the reservoir is not exploitable and that the heavier hydrocarbon composition is 'abnormal' i.e. hydrocarbons that are chemically altered or gases with special compositions which are not associated with oil.

The Gas Ratio Analysis Diagram is a plot of the ratio of C₁ to the other gas elements. The magnitude of the methane to ethane ratio determines if the reservoir contains gas or oil or if it is non-productive. The following conclusions are possible:

Ratio C ₁ /C ₂ :	< 2	non-productive zone
	2 - 15	oil present
	15 - 65	gas present
	> 65	non-productive zone

The slope of the line of the ratio plot of C₁/C₂, C₁/C₃, C₁/C₄ and C₁/C₅ indicates whether the reservoir will produce hydrocarbons or hydrocarbons and water. Positive line slopes indicate production; negative line slopes indicate water-bearing formations. When using the Gas Ratio Diagram, the following points should be borne in mind:

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1. Productive dry gas zones may show only C1, but abnormally high shows of C1 are usually indicative of saltwater zones.
2. If the ratio C1/C2 is low in the oil section and the ratio C1/C4 is high in the gas section, the zone is probably non-productive.
3. If any ratio (C1/C5 excepted in an oil based mud) is lower than the preceding ratio then the zone is probably non-productive.
4. The ratios may not be definitive for zones of low permeability.
5. Steep gas ratio plots may be indicative of tight zones.

3.4 Explanation of Wetness/Balance/Character Curves

Another method for evaluating gas zones plots against depth three ratios: hydrocarbon Wetness (W_h), hydrocarbon Balance (B_h) and hydrocarbon Character (C_h), where:

$$W_h = \frac{(C2 + C3 + C4 + C5)}{(C1+C2+C3+C4+C5)} \times 100 (\%)$$

$$B_h = \frac{(C1 + C2)}{(C3 + C4 + C5)}$$

$$C_h = \frac{(C4 + C5)}{C3}$$

Wetness (W_h) is the primary zone indicator and provides a measure of the relative proportion of heavier gases in the overall gas show as follows:

$W_h < 0.5$	Light non-associated gas with low productivity potential or only geo-pressured methane.
$0.5 < W_h < 17.5$	Potentially productive gas with gas density increasing with W_h .
$17.5 < W_h < 40.0$	Potentially productive oil with gravity decreasing as W_h increases.
$W_h > 40.0$	Heavy or residual oil with low productivity potential.

As reservoir hydrocarbons become denser in the transition from gas to oil, Balance (B_h) and Wetness (W_h) values move closer together and eventually intersect. The zone guidelines for B_h combine with those for W_h to improve reliability of show evaluation as follows:

$W_h < 0.5$ and $B_h > 100$	Very light, dry gas that is almost certainly non-productive.
$0.5 < W_h < 17.5$ and $W_h < B_h < 100$	Productive gas with gas increasing in wetness and density as the two curves converge.
$0.5 < W_h < 17.5$ and $B_h < W_h$	Productive gas condensate or a high gravity gas/oil ratio.
$17.5 < W_h < 40$ and $B_h < W_h$	Productive oil with oil gravity decreasing - density increasing as the curves diverge.
$17.5 < W_h < 40$ and $B_h > W_h$	Non-productive residual oil.

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Character (C_h) values serve to resolve ambiguities between oil or gas indications by defining the following:

$0.5 < W_h < 17.5$ Productive wet gas or condensate.
and $B_h < W_h$
and $C_h < 0.5$

$0.5 < W_h < 17.5$ Productive high gravity and/or high GOR oil.
and $B_h < W_h$
and $C_h > 0.5$

It is important to note that in the conclusion to each of the interpretive tools, the terms 'productive' and 'non-productive' are used in a geochemical sense. Ultimate production of a zone is dependent upon reservoir thickness and extent as well as other physical and economic factors that are not taken into account when analysing gas compositions. The methods discussed here are intended to assist the interpretive skills of the geologist or log analyst. Please refer to the Gas Ratio Log enclosure.

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3.5 Gas Composition Discussion

Gas monitoring commenced using the Geoservices Reserval from the beginning of the 311mm (12¼”) phase at 665 m, through to well TD of 1806 m.

From 665m to 994m, drilling proceeded using seawater and PHG sweeps. These formations consist of predominantly sandstone with minor claystone lenses, and gas levels during drilling were negligible at 0 to 1 units, consisting entirely of methane.

At 994 m, the KCl mud system was introduced and the remainder of the 311mm section was drilled with mud weights gradually increasing from 1.21 to 1.25 SG. Drilling continued, encountering only traces of C1, then through the sandstones to 1151 m (1128.5 m TVDSS) producing a maximum gas level of 8 units at a ratio of 100% C1 with traces of C2. The Massacre Shale and Timboon Sandstone were then drilled with the maximum gas level reaching only 2 units at a 99/1/Tr ratio.

Soon after drilling into the predominant siltstones at 1355 m (1331.5 m TVDSS), a minor technical fault with the Reserval gas panel caused its temporary replacement by the FCP/FGP gas detection system as the primary gas detector during drilling from 1391 m to 1439 m. Due to the continuing low levels of gas encountered in this section, this temporary substitution in gas equipment did not result in any marked change in gas interpretation, with the maximum gas reading encountered during the drilling of the Parratte and Skull Creek formations being 35 units in a 98/2/Tr/Tr/Tr C1 to C5 ratio at 1628 m. Background levels in the interval from 1355 m to 1730 m rose slightly from 2 to 8 units, and this was largely due to an increase in the rate of penetration.

The short 216mm (8½”) hole section was drilled from 1730 m to T.D. at 1806 m, with the only formation change being the change from the Skull Creek Mudstone to the Waarre Formation at 1746 m. Gas levels in the Skull Creek were low, which is to be expected in a mudstone, with total gas levels ranging from 9 to 12 units. As the Flo-Pro mud was new at this time there was also no gas being re-circulated through the system.

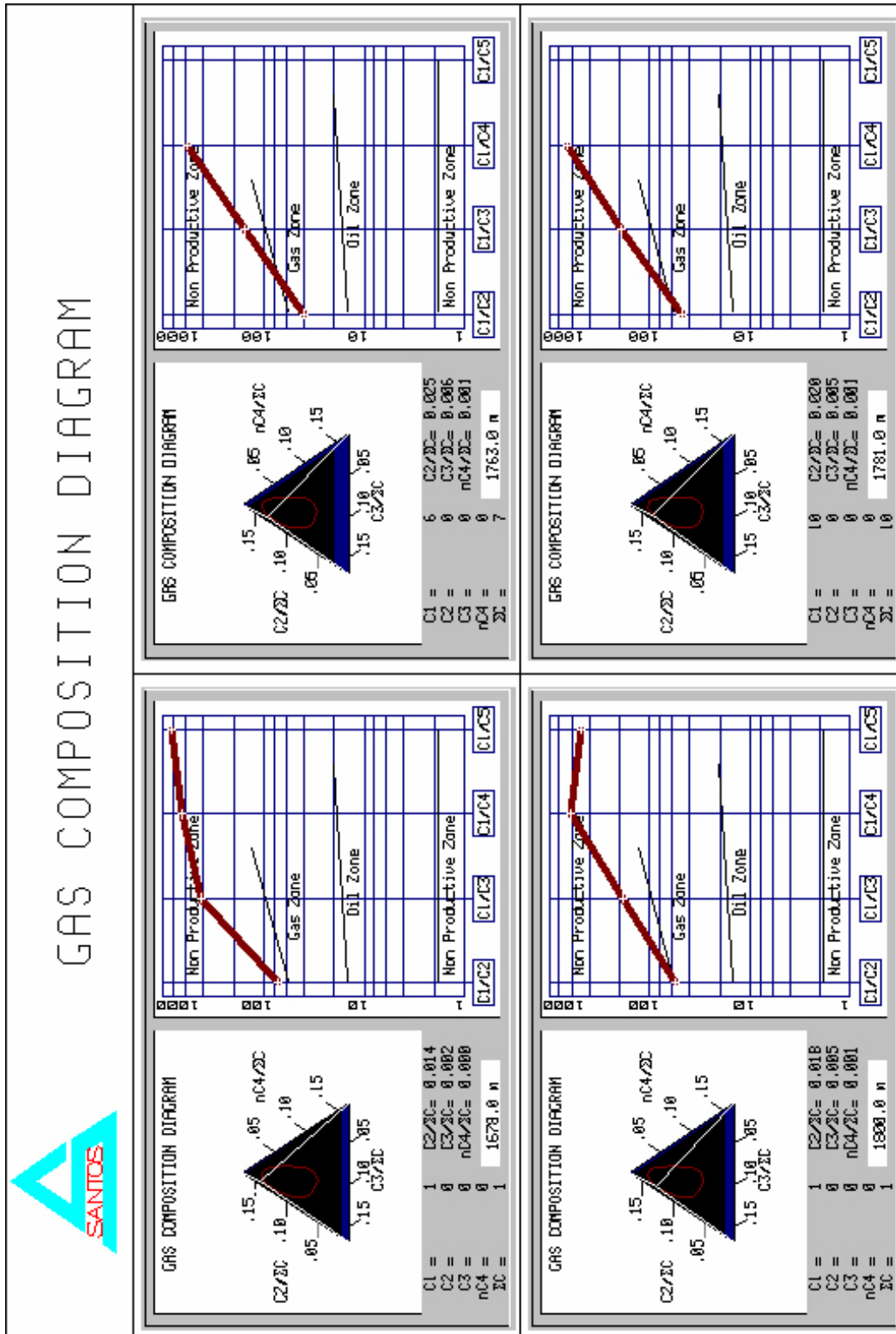
Within the pay zone, significant gas levels were recorded with the maximum gas being 729.7 units from the sandstone at 1777 m. The breakdown of this gas was a ratio of 97/2/1/Tr/Tr, which was typical of the ratios throughout the well, and was also to be expected given that the Casino field is a gas field.

By T.D. at 1806 m the gas levels had dropped back to 18 units and this was in a predominately Siltstone zone. Through the pay zone and the latter parts of the well there were small amounts of C4’s and C5’s present but they were only recorded in trace amounts. The mud weight throughout this section was maintained at close to 1.24sg and there was no connection gas or trip gas recorded at all in the well.

The gas diagrams on the next page, while indicating a gas from a “Non Productive Zone”, they do show the dry composition of this predominantly methane rich zone. No H2S or CO2 gas of any significance were recorded while drilling Casino 5.

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3.6 Gas Ratio Diagrams



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4.0 PRESSURE ANALYSIS

4.1 Pressure Summary

Formation pressures were monitored throughout this well by recording a range of indicators, which vary from direct observations of background gas and cuttings, to drilling characteristics such as torque, drag when coming off bottom, incorrect hole fill when tripping, as well as mud properties such as flowline temperature. The Geoservices D'Exponent package is also used as a tool in the determination of abnormal formation pressures.

D'Exponent: The D'exponent trend was set in the Parratte and Skull Creek formations and the D'exponent values appeared to follow this trend right down to TD, with the occasional shift to the left being due to the sands encountered. A notable shift to the right can be seen from about 1250m to 1392m (1227m to 1369m TVDSS) towards the end of the bit run for Bit #4RR, and, rather than indicating increased compaction, this is due to bit-balling. The D'exponent does not indicate any undercompacted / overpressured claystones in this well.

The coefficients used in this well were:

$$a = 0.001369, b = -0.3370551, \text{ Sand Line } b \text{ offset} = -0.0360000$$

Gas: This well was drilled with an overbalanced mud system (1.21-1.27 SG), as a result of which no connection or trip gases were recorded. The minor increase in background gas in the Siltstone was ROP related, with other significant increases in gas relating to the pay sands. One can conclude from the gas data, that the background gas was liberated gas and in no way produced gas (which would be the result of negative differential pressure).

Torque & Drag: No unusually high Torque was noticed while drilling and neither was any abnormal drag noticed while pulling up prior to connections

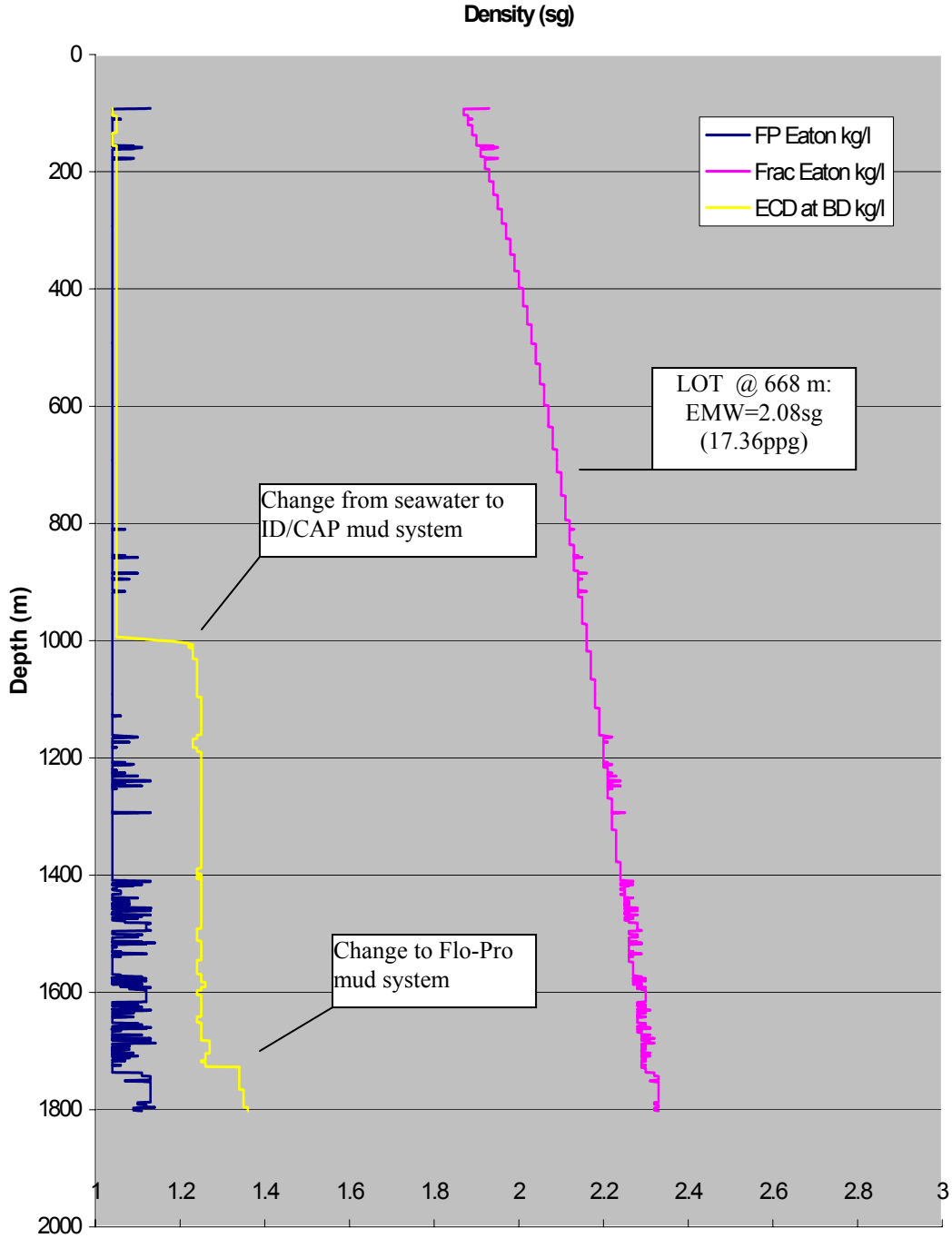
Flowline Temperature: The flowline temperature showed a steady increase from 31°C at 1034m to 55°C at 1730m. The temperature dropped prior to TD due to the change of mud system in the last hole section. Considering the presence of a riser, analysis of the flowline temperature has its shortcomings. However, there were no sudden increases in the flowline temperature to indicate an undercompacted claystone.

Cuttings: There were no unusually sharp splintery cavings or large cuttings with concave cross section observed at the shakers that may have indicated an abnormally pressured zone in this well.

The majority of indicators pointed to a normally pressured environment from surface to TD while drilling Casino-5.

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4.2 Formation Pressure Plot



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5.0 DRILLING INFORMATION

5.1 **Mud Record Casino 5**

From spud down to 994 m the well was drilled with seawater and PHG sweeps, down to 665 m returns were to the sea floor. From 665 m to 994 m returns were to surface but they were then dumped. Between 994 m and 1009 m the well was displaced over to KCL / IDCAP mud on the fly. The KCL / IDCAP mud was used down to the T.D. of the 311mm (12¼”) section at 1730 m. The MW in this section was maintained between 1.21 and 1.25 sg. The 216mm (8½”) section was drilled with Flo-Pro, Drill-in Fluid, with a mud weight of 1.24 sg. Properties of this mud are also listed below.

Depth m	MW sg	FV sec/qt	PV cps	YP lb/100'	Gels lb/100'	WL cm/ 30"	Solids %	Sand %	Chlorides mg/L	Cake /32"
879	1.04	>100	10	54	38	13	2	-	750	1
1026	1.21	50	12	19	6	5.6	8	Tr	44k	1
1160	1.22	55	15	26	10	4.8	9	1	42k	1
1284	1.22	49	11	26	8	5.0	10	0.5	45k	1
1392	1.22	49	14	36	10	4.5	10	0.5	46k	1
1404	1.23	47	14	34	11	4.8	10	0.5	45k	1
1598	1.25	54	17	39	13	3.8	12	0.5	45k	1
1720	1.24	55	11	23	9	4.8	14	Tr	148k	1
1806	1.24	50	14	32	12	5.0	14	0.25	148k	1

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5.2 Bit Record – Casino 5

Bit #	Size (in)	Make	Type	Jets	TFA In ²	In (m)	Out (m)	Run (m)	Hrs	WOB klbs	RPM	TORQ kft*lbs	SPP psi	Flow gpm	Grading
1	26 ⁷ /36	Smith	DSJC	2x20, 2x22	1.356	89	133	44	3.1	0-4	60-85	3.4-6.8	800-1180	750-1150	Ungraded
2	17.5 ⁷	Smith	XR+CRS	3x20, 1x18	1.169	133	665	532	11.4	10-45	100-136	2.8-5.8	2400-2900	1120-1150	1-1-NO-A-E-I-NO-TD
3	12.25 ⁷	Smith	GS04BDV	3x18, 1x20	1.052	665	1160	495	18.9	3-36	65-155	2.9-7.4	1760-3220	820-1110	4-5-WT-A-E-I-NO-PR
4RR	12.25 ⁷	Smith	MA89PX	7x14	1.052	1160	1392	232	15.2	7-28	110-140	3.7-8.0	3000-3100	980-990	1-1-BT-S-X-I-BU-PR
5	12.25 ⁷	Hycalog	DSX104	3x16, 2x18	0.982	1392	1730	338	7.4	6.4-19.1	130-175	4.2-7.8	3080-3320	870-980	1-1-BT-T-X-I-NO-TD
6	8.5 ⁷	Hycalog	DSX104	3x15, 2x16	0.91	1730	1806	76	3.7	1-7	95-155	3.6-9.7	2070-2460	640-695	1-1-NO-A-E-I-ER-TD

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Drilling Information

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5.3 Hydraulic Listing

Casino 5

Depth (m)	Mud Weight (s.g)	ECD (s.g.)	Flow Rate (gpm)	Total Pressure Loss (psi)	Pressure Loss Across Bit (psi)	Mud Velocity Through bit (m/sec)	Bit Hydraulic Power (hp)	Mud Impact at Bit (lbf)	Total Hydraulic Power (hp)	Ratio (Bit Pwr/Total Pwr) (%)
879	1.04	1.08	1000	2022	730	93	431	1377	1195	36.1
1026	1.21	1.22	972	2562	803	90	461	1515	1471	31.4
1160	1.22	1.23	972	2663	810	90	465	1528	1529	30.4
1022	1.22	1.23	1022	2965	896	95	541	1689	1791	30.2
1392	1.22	1.23	920	2583	725	86	394	1368	394	28.1
1404	1.23	1.24	922	2724	844	92	459	1485	1484	31.0
1598	1.25	1.26	922	2872	858	92	467	1509	1564	29.9
1730	1.24	1.33	680	1846	538	73	216	878	216	29.1
1806	1.24	1.33	670	1850	522	72	206	852	732	28.2

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5.4 Drilling Phase Summary

5.4.1 914mm (36") Hole Section

Date	: 16 th June 2005
Measured depth	: 89 m – 133 m
TVDSS LAT	: 89 m – 133 m
Number of bits used	: 1
Mud type	: Seawater, with gel sweeps

Casino 5 was spudded at 19:00 hours, on the 16th June 2005. A 914mm (36") BHA was made up; consisting of a 660mm (26") Smith DSJC bit, and a 914mm (36") hole opener. Sea floor sediments were tagged at 89 m and 914mm hole was drilled without incident to a depth of 133 m. Gel sweeps were then pumped around the well, and the well then displaced to gel prior to rigging up for the running of 762mm (30") conductor. The bit drilled 44 m of new formation in 3.1 hours, at an average ROP of 14.2 m/hr. The bit was ungraded.

The 762mm conductor was run in hole, and cemented in place at a depth of 132 m. Hole fill was encountered below this depth and the conductor was unable to be set at the drilled TD of 133 m.

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5.4.2 445mm (17.5”) Hole Section

Dates	: 18 th June 2005
Measured depth	: 133 - 665 m
TVDSS LAT	: 133 – 664.9 m
Number of bits used	: 1
Mud type	: Seawater with gel sweeps

A new 445mm (17.5”) Smith XR-CRS was made up with FEWD tools and BHA and run in hole down to the top of cement at 128 m. The shoe and cement were drilled out and new hole was drilled ahead from 133 m down to 665 m. At this point the hole was circulated clean and displaced to PHG mud, then the EMS survey tool was dropped prior to pulling out. While pulling out of hole numerous points of tight hole were encountered so the string was only pulled out to the conductor shoe at 132 m. The string was then run back to bottom at which point the hole was again circulated to PHG mud, prior to pulling out of hole. This bit drilled a total of 532 m in 11.4 on bottom hours at an average of 46.7 m/hr. This bit was graded as 1-1-NO-A-E-I-NO-TD.

At this point 49 joints of 340mm (13.375”) casing was run in and set at 655 m. This was followed by the running of the Sub-Sea Xmas Tree. The BOP stack was then run and landed prior to being pressure tested.

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5.4.3 311mm (12.25") Hole Section

Dates	: 22 nd – 26 th June 2005
Measured depth	: 665 - 1730 m
TVDSS LAT	: 664.9 – 1726.4 m
Number of bits used	: 3
Mud type	: SW / gel sweeps & KCL / IDCAP

A 311mm (12.25") Smith GS04BDV bit and associated BHA including FEWD tools was made up and run in hole down to 633 m. At this point the cement was tagged and subsequently drilled out, along with the shoe, shoe track and 3 m of new hole down to 668 m. A LOT was then performed resulting in an EMW of 2.08sg (17.36 ppg) before drilling continued. From 668 m down to 994 m the well was drilled using seawater with PHG sweeps during each stand and at connections all returns were dumped to the sea floor. At 994 m the hole was displaced to KCl / IDCAP mud on the fly down to 1009 m. Drilling then continued down to 1160 m, which was past the hard stringers of the Timboon Sandstone, at which point the bit was changed in favour of a PDC bit. This bit drilled 495 m in 18.9 on bottom hours at an average ROP of 26.2 m/hr and was graded 4-5-WT-A-E-I-NO-PR.

The next 311mm PDC bit was a Smith MA89PX and was run in with a similar BHA as previously run. This bit drilled ahead from 1160 m down to 1392 m. It was decided to pull the bit at this point due to poor rate of penetration. When the bit was at surface it was found to be balled up. This bit drilled 232 m in 15.2 on bottom hours at an average ROP of 15.3 m/hr, and was graded 1-1-BT-S-X-I-BU-PR.

The final 311mm bit was a Hycalog DSX104 bit, which was made up and run in hole to bottom. Drilling resumed from 1392 m down to the end of the 311mm section at 1730 m, which was just above the Waarre Formation target. While pulling out of the hole with this bit numerous points of tight hole were encountered. This resulted in a wiper trip being performed back to the casing shoe at 655 m. While pulling out the second time the bit came out freely. This bit drilled a total of 338 m in 7.4 on bottom hours at an average ROP of 45.7 m/hr. The grading on this bit was 1-1-BT-T-X-I-NO-TD.

This 311mm vertical section was cased off with a total of 137 joints of 273mm (10.75") and 244mm (9.625") casing. The casing required washing down to the setting depth of 1719.8 m due to excessive hole fill. The casing was then cemented as per programme.

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5.4.4 216mm (8½") Hole Section

Dates	: 28 th Jun 2005
Measured depth	: 1730 - 1806 m
TVDSS LAT	: 1726.4 – 1802.0 m
Number of bits used	: 1
Mud type	: Flo-Pro

The new 216mm (8½") Hycalog DSX104 PDC bit was made up with the FEWD tools and BHA. This was run in hole and tagged the top of cement at 1693 m. The cement and 244mm (9.625") casing shoe were drilled out, at which point the well was displaced to the new Flo-Pro mud system. New hole was then drilled vertically from 1730 m to T.D. at 1806 m. During this section, minor tight hole was encountered at about 1746 m, but this was the only hole problem encountered in this section. The Waarre Sandstone main pay was encountered at 1757 m, with significant gas levels being recorded as expected.

At T.D. the well was circulated clean and this was followed by a short wiper trip back inside the casing shoe at 1720 m. This wiper trip encountered several points of tight hole before running back to bottom. After circulating the hole clean again, the string was pulled back to 500 m, at which point it was decided to run back to bottom and displace the well to CaCl brine, before pulling all the way out of the hole.

This 216mm bit drilled a total of 76 m in 3.7 on bottom hours at an average rate of penetration of 20.5 m/hr. The bit was graded 1-1-NO-A-E-I-ER-TD. Total depth for this well was reached at 19:00 hours on the 28th of June 2005, and no electric logging was run.

The well was prepared for production by running a completion string which included expandable sandscreens on a 194mm (7-5/8") production liner to 1800 mMD, and well testing took place on 4th to 5th July. The rig was officially released on 8th July 2005.

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SECTION 13 : RIG POSITIONING REPORT

RIG POSITION FIELD REPORT



Casino-5

Client :	Santos	Job Number :	P0300
Rig :	Ocean Patriot	Date:	17-Jun-05
Project :	Rig Move to Casino-5, Bass Strait		
Attention :	Chris Wise	Santos Representative	

The surface location of the drill stem on the Ocean Patriot was derived from 60 minutes of observations of Primary Differential GPS Data, between 13:38hrs and 14:38hrs on completion of anchor pre-tensioning and cementing of the 30" casing.

The results of the observations are as follows:

Geographical Coordinates		Grid Coordinates	
Latitude (φ)	-038° 47' 43.68" South	Easting	651604.4
Longitude (λ)	142° 44' 44.60" East	Northing	5704473.1

The drill stem position is **2.6 m** at a bearing of **32.8°** Grid from the design location.

The Client supplied design location for : **Casino-5** .

Geographical Coordinates		Grid Coordinates	
Latitude (φ)	-038° 47' 43.75" South	Easting	651603.0
Longitude (λ)	142° 44' 44.54" East	Northing	5704471.0

The Ocean Patriot's rig heading, derived from the mean of 60 minutes of gyro heading data is:

250.48° TRUE 251.58° Grid

All coordinates in this field report are quoted in the following coordinate system:

Datum :	GDA94_Australia_ICSM-ITRF2005.50	Projection :	Transverse Mercator (UTM)
Spheroid :	GRS80	Zone (Central Meridian) :	54 141° East

The approximate positions of the rig anchors corrected for catenary are as follows:

Anchor	Easting	Northing	Azimuth(°) - True
1	650170	5704836	284.0°
2	650506	5705444	312.2°
3	651945	5705927	13.1°
4	652631	5705591	43.2°
5	652829	5704244	99.8°
6	652791	5703497	129.5°
7	651345	5702979	189.1°
8	650859	5703407	215.0°

Party Chief/Surveyor: _____
Ian Walker

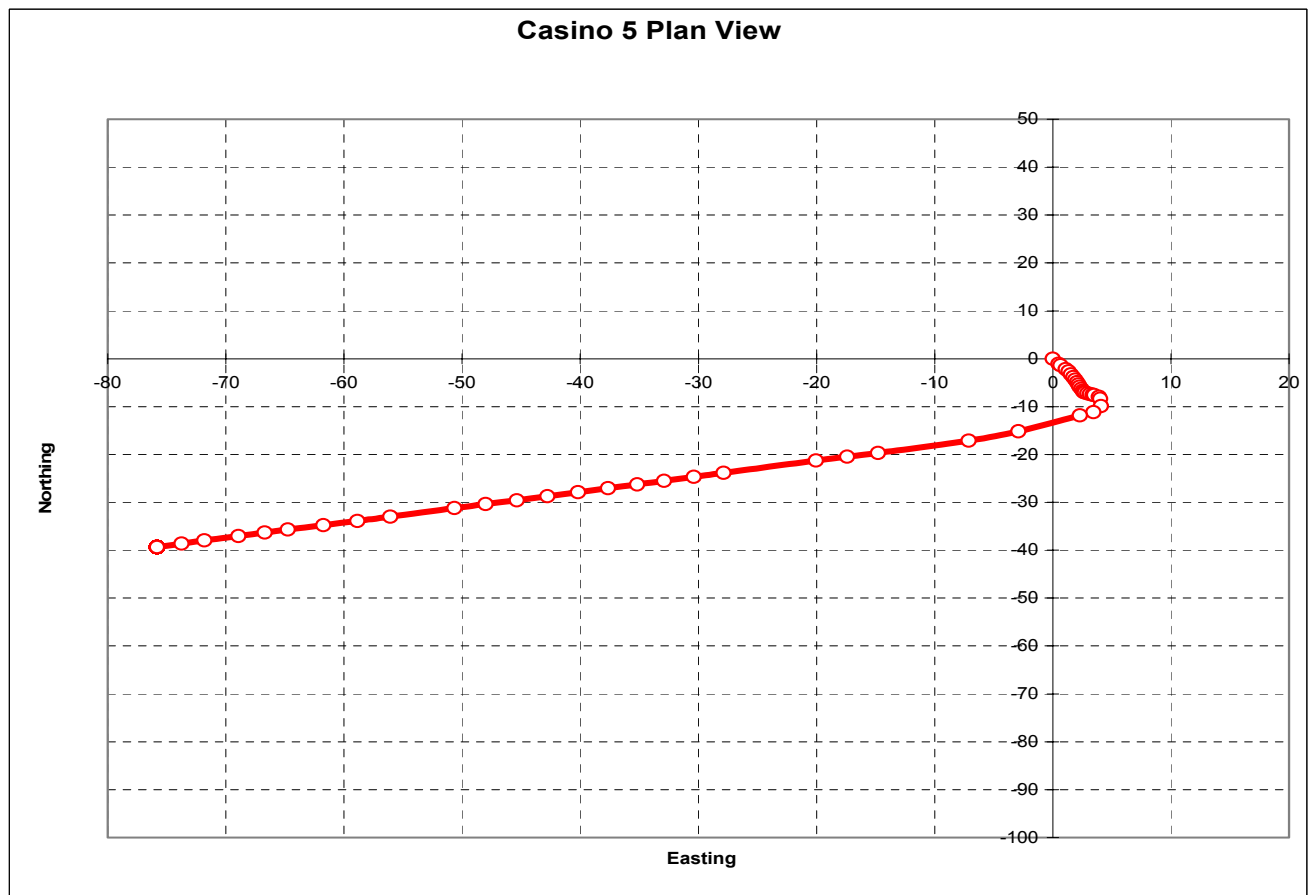
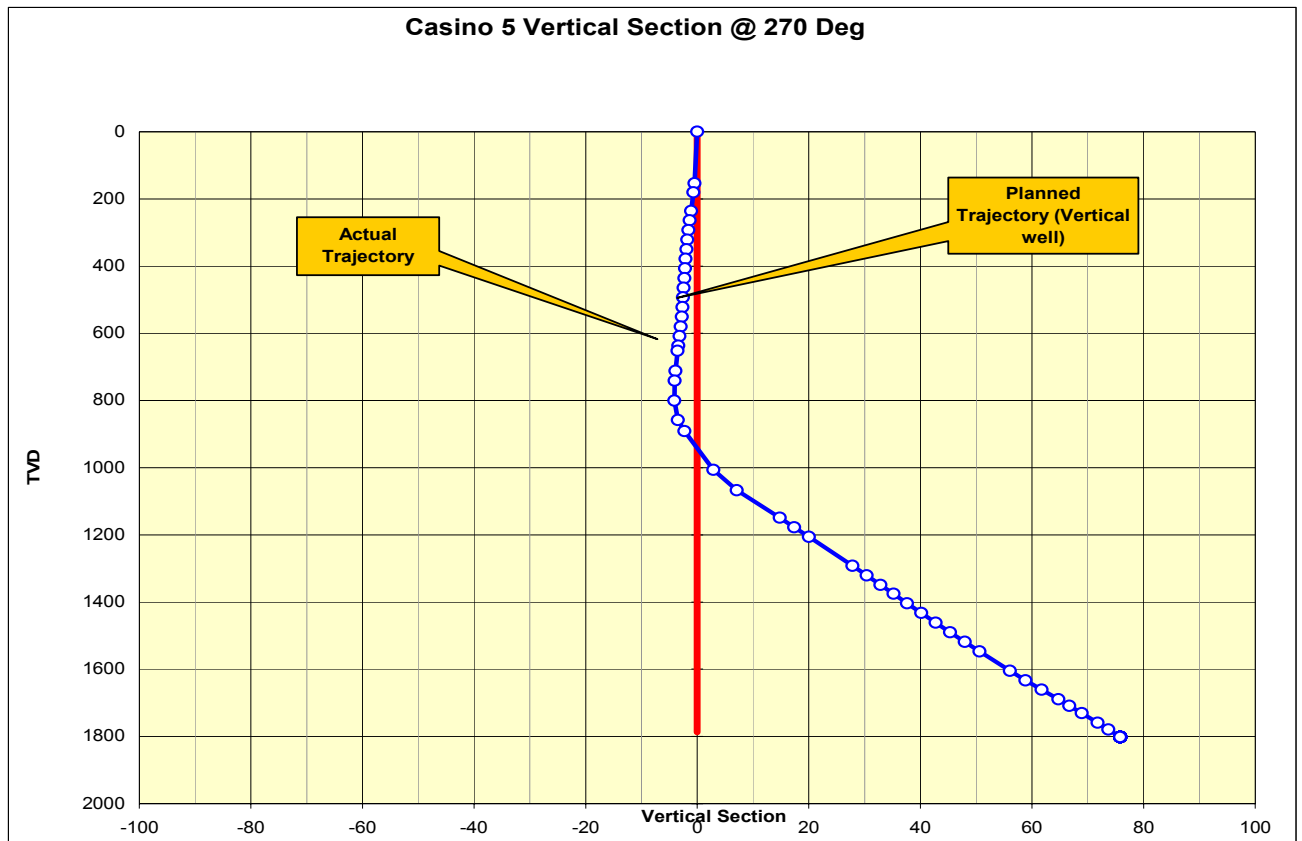
Santos Representative : _____
Chris Wise

SECTION 14: DEVIATION SUMMARY

Surveys and schematics are presented overleaf.

DEVATION DATA

DEPTH	INCLINATION	AZIMUTH	DEPTH	INCLINATION	AZIMUTH
(m)	(DEG)	(DEG. T.)	(m)	(DEG)	(DEG. T.)
153.32	0.87	155.19	1067.61	5.74	249.44
180.77	0.73	150.88	1150.27	5.53	253.03
236.21	1.06	149.10	1178.55	5.52	254.47
263.92	1.31	159.82	1207.09	5.50	252.55
292.77	1.22	161.34	1294.00	5.38	250.68
321.46	1.16	161.70	1322.59	5.29	252.03
350.14	1.12	162.94	1351.22	5.31	252.31
378.70	1.03	165.33	1377.53	5.17	251.91
407.39	0.99	169.70	1406.19	5.23	251.21
436.08	0.89	162.06	1434.97	5.43	251.49
464.75	0.86	161.47	1463.79	5.42	253.43
493.60	0.87	164.24	1492.55	5.42	251.34
522.35	0.23	169.75	1521.49	5.55	253.59
551.14	0.52	129.89	1550.14	5.55	251.90
579.90	0.54	127.68	1607.59	5.88	251.40
608.62	0.51	119.52	1636.21	5.89	252.97
636.96	0.54	120.09	1664.65	6.20	254.05
652.27	0.52	118.09	1693.36	6.37	251.89
712.41	0.56	146.86	1712.40	6.06	251.82
741.29	1.28	173.83	1734.43	6.14	252.76
800.77	1.61	179.35	1763.18	5.90	251.71
858.08	1.58	236.40	1783.40	5.66	250.49
891.65	3.06	238.12	1806.00	5.66	250.49
1006.82	3.06	237.46			



SECTION 15: PALYNOLOGY REPORT

No Palynology work was done on Casino 5 samples.