

3D OIL LIMITED

WEST SEAHORSE 3

VIC/P57

WELL COMPLETION REPORT

BASIC DATA

1 December 2008

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1. WELL SUMMARY & OVERVIEW

Well Summary

West Seahorse-3 was a deviated, appraisal/development well, located in Commonwealth waters within the Petroleum Permit Vic/P57, approximately 350 km east of Melbourne, 20km offshore and 5 km west of the producing Seahorse oil field (Figures 1, 2).

West Seahorse 3 was drilled from 23 April to 9 May 2008 using the Seadrill Jack-Up rig, *West Triton*. The objectives of the well were to appraise/develop the hydrocarbon-bearing target sandstones (N1, N2.6 and P1) of the Latrobe Group in the West Seahorse field, originally discovered by West Seahorse-1 (1981).

The well intersected the primary N1 sandstone at 1561 mRT (1400 mss) close to the prognosed depth and confirmed the presence of an oil column down to 1570 mRT (1409 mss) in high quality reservoir. Oil is also interpreted within an overlying interbedded interval of sandstones, coals and siltstones from 1552mRT to 1561mRT (1392 – 1400 mss). Deeper targets (N2.6 and P1) were intersected deep to prognosis and below the oil-water contacts. The West Seahorse-3 well was suspended as a future oil producer.

Australian Drilling Associates (ADA) managed the drilling operation and Baker Hughes INTEQ SLS provided sampling, formation evaluation and drill monitoring services. Schlumberger provided the LWD and Wireline services. Expro Group Australia Pty Ltd provided validation checks and analyses of MDT samples. ACS Laboratory Pty Ltd. undertook a petrological study of the sidewall core samples.

Note: All depths are measured depth below Rotary Table (mMDRT) referenced to Australian Height Datum (AHD) unless otherwise stated.

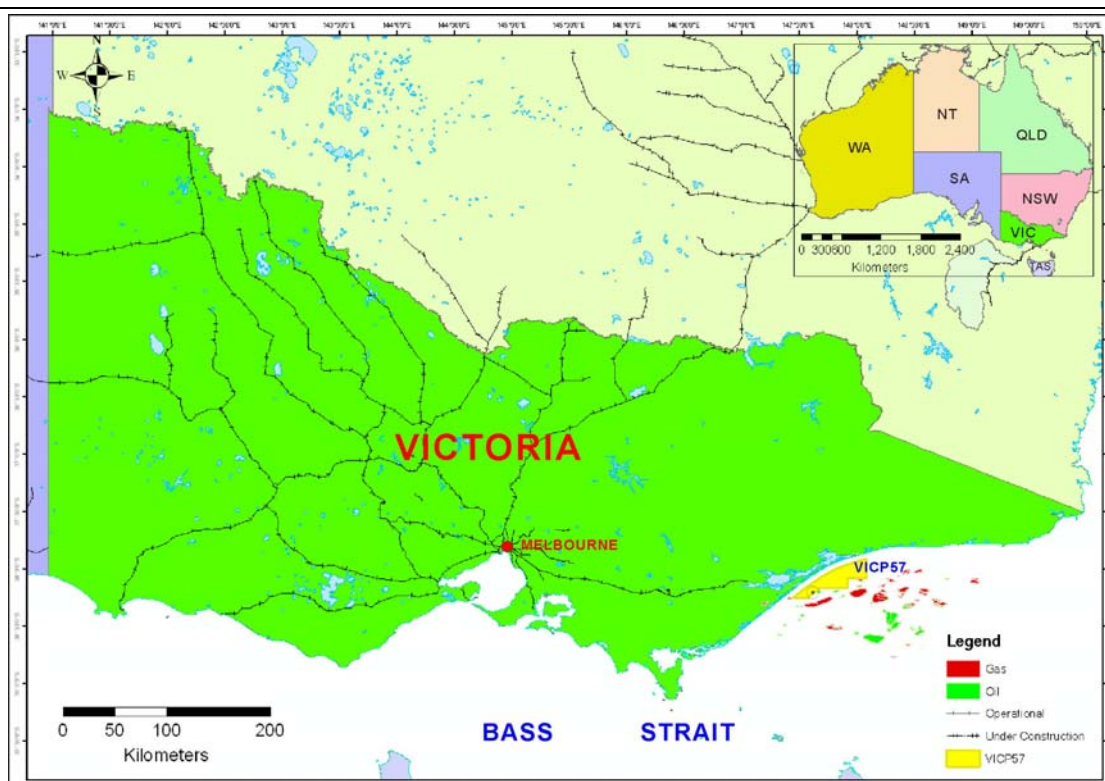


Figure 1. Location of VIC/P57.

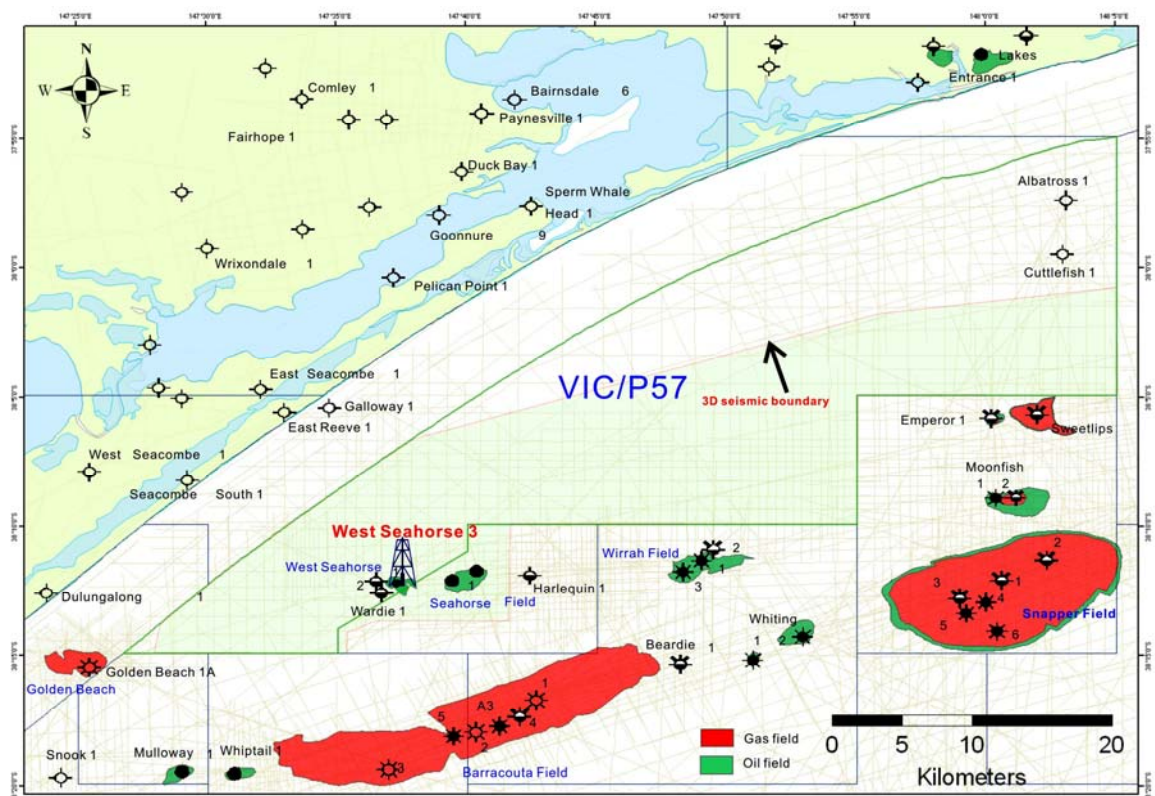


Figure 2. Location of West Seahorse 3.

Well data summary

Well Name	West Seahorse-3
Country	Australia
Designation	Appraisal / Development
Field Name	West Seahorse
License/Permit	VIC / P57
Rig Name/Type	West Triton / Jack Up MODU
Field Operator	3D Oil Ltd
Participants	3D Oil Ltd: 100%
Rig on Contract	22 nd April, 2008, 10:30hrs
Rig Arrived Location	22 nd April, 2008, 17:58hrs
Spud Date	24 th April, 2008, 04:15hrs
Reached TD	4 th May, 2008, 19:00hrs
Well Abandoned	9 th May, 2008, 01:00hrs
Rig Off Location	9 th May, 2008, 16:30hrs
Rig Off Contract	22 nd May, 2008, 17:00hrs
Total Days on Operations	17.25 days
Total Days AFE (excluding Completions and Testing Phase)	17.25 days
Total Depth	1646.4mTVDSS / 1684.1mTVDRT / 1810.0mMDRT
Well Type	Directional 'S' profile
Maximum Deviation Angle	28.28°
Water Depth	39.5m MSL
RT above MSL	37.7m
Well Slot	1
Zone	55 GDA94
Surface Latitude	38° 12' 24.9422" S
Surface Longitude	147° 37' 09.8650" E
Surface Easting	554 229.358 E
Surface Northing	5 771 044.135 N
Bottom Hole Location: Latitude	38° 12' 16.166" S
Bottom Hole Location: Longitude	147° 37' 31.276" E
Bottom Hole Location: Easting	554 751.90 E
Bottom Hole Location: Northing	5771 311.15 N
36in Hole / 30in x 20in Conductor	125.0mMDRT/122.0mMDRT
17.5in Hole / 13.375in Surface Casing	1123.0mMDRT/1117.0mMDRT
12.25in Hole	1810.0mMDRT/1684.1mTVDRT

Casing and cementing summary

Casing data

Type	Size (inches)	Weight(ppf)	Grade	Thread	Depth (mMDRT)
Conductor (30in x 20in tapered shoe joint)	30	309.7 (1" wall)	X-52	D60/MT	110.6
	20	169 (0.625" wall)	X-56	E.R.W	122
Surface Casing	13.375	68	N-80	BTC	1117

Cementing Data

String Cemented	Cement Type	Dry Cmt Vol (sks)	Cement Additives	Mix Water (gal/sk)	Slurry Vol (bbls)	Slurry Density (ppg)	Cement to /from(mM DRT)	Csg Test Pressure (psi)
30in X 20in	Class G	1660	1% CaCl	5.16	343	15.9	seafloor (77.5m) - 122m	NA
			NF-6 : as required					
13.375in Lead	Class G	510	Econolite: 15gal/10bbl	11.8	210	12.5	600m-1000m	500
			NF-6: as req					
13.375in Tail	Class G	290	CFR-3L: 3gal/10bbl	5.16	68	15.9	1000m-1117m	
			NF-6: as req					
			HR-6L: 2gal/10bbl					
Plug #1A	Class G	358	CFR-3L: 3.0gal/10bb	5.07	74	15.8	1633m-1770m	NA
			SCR-100L: 1.0gal/10bbl					
			NF-6: .25gal/10bbl					
Plug #1B	Class G	377	CFR-3L: 3.0gal/10bb	5.07	78	15.8	1490m-1633m	NA
			SCR-100L: 1.0gal/10bbl					
Plug #2	Class G	315	CFR-3L: 3.0gal/10bb	5.07	65	15.8	1030m-1149m	1500
			SCR-100L: 1.0gal/10bbl					
			NF-6: .25gal/10bbl					
Plug #3	Class G	183	CFR-3L: 3.0gal/10bb	5.20	38	15.8	130m-207m	NA
			SCR-100L: 1.0gal/10bbl					
			NF-6: .25gal/10bbl					

2. WELL OPERATIONS

West Seahorse-3 was drilled to appraise/develop the hydrocarbon-bearing sandstones of the Latrobe Group in the West Seahorse field using the Seadrill Jack-Up rig, *West Triton* (Figure 3).



Figure 3. Aerial photo-view of the *West Triton* during the drilling of West Seahorse 3.

Rig mobilisation

The *West Triton* was handed over to 3D Oil on April 22nd 2008 at 10:30hrs, 1NM off Apache's Speke South (VIC/P42) location. The *West Triton* arrived at the West Seahorse-3 location at 17.58hrs, with the total distance of the voyage being approximately 18.6NM. Once in position the rig was jacked up to 38m above MSL with a rig heading of 137.21 deg. The short distance between wells allowed for some drill pipe to remain racked back in the derrick. The MV's *Sirius Cove* & *Campbell Cove* tugs used for the tow were released at 19.45 hrs.

Note: These tugs were originally employed to temporarily replace the Pacific Valkyrie AHTS when the vessel was returned to shore-base for repairs. In hindsight it actually was found an advantage to utilise tugs for the rig move, as opposed to one of the supply vessels, as it freed up a vessel for spud gear and allowed for greater accuracy while positioning the rig.

The final fix for West Seahorse 3 was:

Surface Latitude 38° 12' 24.9422" S
Surface Longitude 147° 37' 09.8650" E
Surface Easting 554 229.358 E
Surface Northing 5 771 044.135 N
Zone 55, GDA94

Drilling 36in conductor hole/setting 30in x 20in casing

This phase commenced with the preparation of the wellhead. 13.375in cement plugs were made up to the wellhead and 20in x 13.375in crossover installed to 20in pup joint below the wellhead. The 36in BHA was picked up and run, including 26in bit and 36in hole-opener, Anderdrift tool, float sub and 36in stabiliser. The ROV observed the tagging of seabed at 77.5m. At this point a deviation survey was taken at the seabed with the Anderdrift tool (0deg). West Seahorse-3 was spudded on April 24th 2008 at 04:15hrs. The 36in x 26in conductor hole was drilled riser-less using seawater and unweighted hi-vis sweeps from 77.5m to a section TD of 125m.

The 30in x 20in conductor casing was run without problems to 122m. The conductor included a Quick-Jay connector at 2m above seabed and a butt-weld sub at 9.4m below the seabed. The conductor was successfully cemented with 277.0bbbls of 15.90ppg in single slurry, TOC @ mud line.

The butt-weld landing collar was tagged at 86.87m, this measurement was imperative for space out of landing string. Once the space out of the low pressure riser and diverter system was confirmed, the 30in conductor was cut at 19.2mRT (3.18m above CTU deck).

Note: Slower than expected rigging up of the Low Pressure riser was observed due to the rig having only one riser handling clamp.

Drilling 17.5in surface hole/setting 13.375in casing

The 17.5in mud motor assembly was made up with a Baker Hughes MXL-T1V roller cone rock bit and MWD directional tools and run in hole to tag the 20in shoe at 121m. The 20in shoe was drilled out to 125m and the well displaced to 15-20ppb flocculated gel mud. The 17.5in surface hole was directionally drilled in one run and without problems to a sectional TD of 1123m. The final TD of 17.5in hole was observed to be 2.5m to the right and 4.5m below the design line - 5.25m centre to centre. 450bbl of 1.15sg KCl polymer mud was spotted on bottom prior to POOH. The hole required back reaming through tight spots at 1082m, 1076m, 994m, 759m and 739m – 543m (up to 35k lbs over pull).

The 13.375in casing was RIH with a mud line hanger and wellhead to the setting depth of 1117m (the interval 1091m – 1117m required washing down). The mud line hanger was landed and the well circulated with 700bbbls mud at 525gpm. The cement lines were pressure tested to 4000psi and a 60bbl seawater spacer pumped.

Cementing operations commenced but the SSR plug set did not work as designed; no

pressure increase was observed to indicate the release of the bottom plug. The casing was cemented with 180bbls of 12.5ppg Class G lead cement followed by 64bbls of 15.8ppg Class G tail slurry. The top plug was released and cement displaced with 12bbls of sea water and 525bbls (calculated volume + 50% shoe track) of 11.0ppg mud. The plug bump was not observed.

An attempt was made to breakout the wellhead running tool. The Dril-Quip Wellhead Running tool failed to release. In attempting to disengage the running tool, torque was applied down the landing string consequently backing out the 13.375in BTC connection at the bottom of the wellhead crossover. The wellhead was retrieved attached to the running tool. In addition, the landing string was found to have backed off below the wellhead. The landing string remaining down hole was successfully fished in two stages. The first two joints below the wellhead were recovered by screwing in with a water bushing. The remainder of the 13.375in casing was backed off from the mud line hanger and retrieved using a spear and bumper sub. After casing and the MLS running tool were recovered, the landing string was re-run along with the wellhead (the total non-productive time for this event being 1.46 days = \$1,365,000USD).

The BOPs, overshot and diverter system were made up. The BOPs were tested to 250/5000psi. The 13.375in casing was also pressure tested at this stage to 750psi.

Drilling 12.25in hole

The 12.25in Power Drive rotary steerable BHA was made up with a Reed Hycalog RSX616M-A16 PDC bit and RIH to 285m. Resistance was encountered at this depth and the assembly had to be washed and reamed to 1103m due to the presence of a sheath of cement left inside the casing when the SSR system failed during casing cementation. A total of 7.5 hours (approximately 2 hours longer than normal) was taken to reach the top of the plug at 1103m.

The cement plugs were drilled from 1103 to 1104m whilst displacing the hole to 9.8ppg 6% KCl/Polymer/clayseal mud. Very slow progress was made while drilling out cement plugs and it was suspected that plugs were spinning on the float collar. The shoe track and float shoe were drilled out to 1117m. The rat-hole was cleaned out from 1117m to 1123m and 3m of new formation was then drilled. A FIT was performed to 13.65ppg EMW without leak off and drilling then continued from 1126m to 1392m. Directional drilling continued from 1392m to top Latrobe at 1507m at which point control drilling commenced to 1559m at 30m/hr for recording LWD logs. At this point a 6bbl gain and a 0.27% gas peak were observed simultaneously by the driller. The well was then shut in to investigate the gain; no indication of pressure on the drill pipe or casing side was observed. The well was opened and flow checked with no flow found. The well was then circulated bottoms up, with a maximum gas peak of 0.13%. Drilling recommenced from 1559m to the well TD of 1810m once again at a controlled drilling rate of 30m/hr. The hole was circulated clean and the drill string POOH, wiping tight spots at 1610m, 1582m, 1572m and 1533m. The BHA was then POOH from 1533m to 30m and racked back.

Logging 12.25in hole

The Schlumberger LWD and steerable tools were then laid out and the wire line logging tools rigged up for the following logs:

Log #1 PEX-HRLA-BHC

Log#2 MDT - GR (Pressure Sampling)

Log#3 MSCT - GR (Rotary Sidewall Cores)

The tools for Log #1 were picked up, Radio Active sources loaded and RIH. Logging tools were unable to pass 1775m. The tools were pulled back and a repeat section recorded over the interval 1690m-1540m. Another attempt to continue to RIH past 1775m was made but hung up once more with full tool string weight. This was repeated 4 times without success, logging back up from 1775m to casing shoe and continued logging GR to seabed. Log #1 tools were then POOH, the Radio Active sources removed and rigged down.

The MDT tools for Log #2 were then picked up and RIH to 1585m; depths were correlated and 27 pre-tests were conducted. Three pump-out stations were obtained from which 4 samples were taken at 1567m. Five further pre-test positions were then attempted and the logging tool then POOH taking 800 lb over-pulls at three places inside the casing and between the shoe and 980m.

The MSCT tools for Log #3 were then picked up, RIH and depths were correlated from 1720m – 1640m. The tools were RIH to 1694m and cores were attempted to be taken at 1694m and 1686m. Tool failure occurred at both of these depths due to mechanical failure and the tool was POOH for checking (2 hours NPT recorded). The coring extend mechanism was found to be blocked with sticky cuttings. The MSCT tools were cleaned out and RIH. 14 cores were cut, and 12 successfully recovered to surface.

Note: Static losses of approximately 2-3bbls/hr were incurred whilst wire line logging.

Well suspension and abandonment

This phase commenced with RIH of the mule shoe on drill pipe to tag fill at 1770m. The TDS was made up and then commenced washing down from 1770m to 1771m but was unable to work past this point. The side entry sub and TIW valve were rigged up on the drill pipe with the mule shoe at 1770m where 5bbl of drill water was pumped and lines were pressure tested to 1000psi without problems. 74bbl of 15.8ppg cement slurry was then mixed and pumped and cement was displaced with 102bbl of mud to spot balanced plug #1A from 1770m to 1630m. The side entry sub was then rigged down and string was POOH from 1770m to 1633m.

The TDS was made up and circulated bottoms up, dumping cement contaminated returns at the surface. The side entry sub and TIW valve were rigged up for the second stage of the bottom cement plug (plug#1B). 5 bbl of drill water was pumped and lines were pressure tested to 1000psi without problems. 78 bbl of 15.8ppg slurry was then mixed and pumped and the cement was displaced with 92 bbl of mud for balanced plug #1B from 1633m to 1500m. The side entry sub was then rigged down and the string POOH from 1500m to 1416m.

The well was then circulated bottoms up with no cement being observed in returns to surface. The string was POOH to 1237m. Concurrently the Quick Jay anti-rotation pin was pulled from the 30in Quick Jay connector located 2m above the mud line. The string was then RIH from 1237m to 1416m and the TDS made up while washing down and tagging the top of plug #1B at 1490m. The string was then POOH to 1249m and a 50 bbl pill of high vis mud spotted from 1249m to 1149m.

The side entry sub and TIW valve were then rigged up in preparation for plug #2. 5bbl of drill water was pumped and lines were pressure tested to 1000psi without problems. 65bbl of 15.8ppg of cement slurry was then mixed and pumped and the cement displaced with 60bbl of mud for balanced plug #2 from 1149m to 1030m. The side entry sub was then rigged down and the string POOH from 1030m to 942m. The well was then circulated bottoms up with no cement returns observed at surface and continued to POOH to 325m. The circulating head and surface lines were then rigged up and plug #2 was pressure tested to 1500psi.

The string was then POOH and a 50bbl pill of high vis mud spotted from 325m to 307m. The side entry sub and TIW valve were then rigged up in preparation for plug #3. 5bbl of drill water was pumped and lines were pressure tested to 1000psi without problems followed by pumping of 6bbl of drill water. 38bbl of 15.8ppg of cement slurry was then mixed and pumped followed by 2bbl of drill water for balanced plug #3 from 207m to 130m. The excess cement was then reverse-circulated and the hole displaced with seawater.

The string was then POOH from 130m to 30m. The BOP and wellhead were jetted with seawater. The diverter, overshot and overshot riser were then picked up and laid out followed by the nipping down of the bell nipple and lower riser joints which were also laid out. The BOPs were then nipped down and skidded back. The nominal bore protector was retrieved and the valves on the wellhead removed. The wellhead running tool was then picked up and made up to the wellhead. The wellhead was pulled and broken off at the 20in crossover and laid out. The 20in x 13.375in wellhead crossover was cut and laid out followed by the cutting and laying out of the 13.375in casing landing string and MLS running tool.

The 13.375in temporary abandonment cap was then picked up and RIH but was unable to pass through the connector of the 30in conductor at 29m. The cap was then POOH and 2.25cm were ground off of each centraliser blade in an attempt to pass through the hang up point. This failed however as the cap was re-run in hole and once again was unable to pass below 29m. The T/A cap was POOH once more, and a further 3mm ground off of each centraliser blade and re-RIH without problems. The cap was then engaged and set into the 13.375in MLS casing hanger; the abandonment cap running tool was POOH.

The 30in casing spear was then picked up, made up and RIH to latch onto the 30in conductor taking the weight of the 30in conductor casing while releasing the tension on the CTU and removing the icon clamp and CTU insert.

The Quick-Jay connection was then backed out at the seabed with 6k ft-lb and the 30in conductor was pulled to surface. The 30in bushing was then installed and an unsuccessful attempt made to remove the 30in spear; instead the first 30in joint was laid out with spear still in place – this was subsequently retrieved by cutting the conductor. A further four joints of 30in conductor, including the joint with Quick-Jay pin connection, were pulled and laid down. The 30in handling equipment was then rigged down

Rig demobilisation

The CTU was then nipped down and secured, the 30in trash cap made up onto the running tool and RIH to 71m. The ROV failed and the trash cap was POOH; the running tool racked back while the ROV problems were being rectified. The BOP slings were then rigged up, equipment cleared from CTU work platform and mousehole removed. The work platform was transferred to the main deck and the CTU moved to storage position and the choke line removed from the CTU deck.

At this point preparation began for skidding the rig into position (slot #2) for the next well. The slings were picked up for the lifting of the CTU deck extension from the boat. The service lines were then rigged down and the rig skidded out into position for lift off the boat.

The 30in trash cap was installed after the ROV had been repaired.

***** 16.30hrs, 9th May 2008: END OF WELL: WEST SEAHORSE - 3 *****

The total time spent on the well was 17.25 days, including mobilisation.

Mobilisation and drilling phases

Observations by Phase		Comments / Corrective Action Taken or Proposed
Mob & rig up	1. Slower than expected rigging up of the Low Pressure riser was observed due to the rig having only one riser handling clamp.	1. Back up clamp is being arranged.
Drill 36in conductor hole		
Set 30in conductor		1. More
Drill 17.5in hole		
Set 13.375in casing	<p>1. SSR plug set did not work as designed; no pressure increase was observed to indicate the release of bottom plug; Upon retrieval of the wellhead running tool the upper fin of the cement wiper plug release dart was found lodged in the crossover above.</p> <p>2. In attempting to disengage the wellhead running tool, torque was applied down the landing string consequently backing out at the 13.375in BTC connection at the bottom of the wellhead crossover resulting in fishing operations.</p>	<p>1. Following actions captured in cementing review-</p> <ul style="list-style-type: none"> • Omit bottom plug from future jobs • Calliper ball/dart IDs and all running string ID's prior to job to ensure no shoulders present • Limit ball/dart landing rate to 1bpm • Preset on board computer sampling rate to 5 per second to enable capturing full data for future analysis <p>2. Wellhead running procedures to be modified as below-</p> <ul style="list-style-type: none"> • Break connection between running tool and housing at rotary prior to running in hole • Clutch type running tool to be run with blocks unlocked • Modify drill pipe running adapter to include a 1in ball valve to allow any trapped pressure to be bled off
Drill 12.25in Hole		
Log 12.25in		
Suspend well		
Rig down & move out		

Health, safety & environmental summary

The West Seahorse-3 well was drilled with a satisfactory HSE performance having no lost-time or medical treatment incidents recorded and only one minor first aid incident. Two near-miss incidents occurred, the risks of which were minimised with the use of good planning and foresight, covering the hazards with the crew during Pre Tour meetings prior to commencing the jobs and heightening awareness of the correct procedures to follow.

The sound execution of this well is attributed to a combination of meticulous planning, the distribution of written procedures for each job highlighting possible HSE issues and covered in pre job safety meetings, teamed with the conscientious efforts of all management and crew.

The following is an overview of incidents, tests, and drills etc, which were evaluated and conducted during the time on West Seahorse-3:

Parameter	Units		Comment(s)
Man-hours	number	19332	
STOP Cards Generated	number	567	
Total MODU Proactive Safety Efforts	number	1006	Including Issued / Active Work Permits, JSA, Work Instructions, Pre Job safety Meetings, TOFS, Area Authority Audits & STOP
Audit			
Internal EP Compliance Audit	number	1	Done on MODU on 2nd – 5th May 08;
MODU Mini HSE Audits	number	3	By the Drilling HSE Advisors
Training			
ADA ERG Exercise	number	1	Emergency Response table top exercise Southern Stars for 3D Oil held on 2th May 08
Environmental Plan Training	number	1	Done for Pacific Battler on 30th May 08
MODU Emergency Drill	number	4	1) 2 Fire / Abandon / Muster (Weekly) Drills held on 27th Apr 08 and 4th May 08 2) 1 Medical Drill held on 3rd May 08 3) 1 Spill Drill held on 4th May 08
Reportable Incident			
Lost Time Injury (LTI)	number	0	
Alternate Duties Injury (ADI)	number	0	
Medical Treatment Injury (MTI)	number	0	
Non Reportable Incident			
First Aid Case	number	1	2/5/08 - Crew had laceration and bruise on nose when trying to catch a thrown lanyard.

Parameter	Units		Comment(s)
Near Miss	number	2	1) 1/5/08 - Dislodged shipping plugs due to trapped pressure in running tool; 2) 2/5/08 - Slipped out wire out of snake during changing out of wire on air hoist, on rig floor.
Recordable incidents			
Spills - occurrence	number	0	
Spills - quantity	Litre	0	
Wastes			
Hazardous wastes	m ³	1	All wastes are properly packed, stored and sent onshore to GML and disposed accordingly through Corio Waste Management, an EPA - approved permit holder to transport various wastes including waste from offshore
Non-hazardous wastes	m ³	57	
Marine User Interaction			
Cetacean sightings	number	0	
Errant vessel interaction	number	0	
Impacts from Fishing Operations (interaction)	number	0	
Water Based Mud (WBM)			
Volume water based drilling fluid dispose into the ocean (m ³)	m ³	734.8	
Volume of drill cuttings using WBM disposed to the seabed (m ³)	m ³	206.9	

Highlights

- No major HSE incident
- No spill or damage to environment
- Well completed within planned time and budget
- All geological drilling targets achieved
- Acquired almost all programmed LWD and wireline log data
- Deployed Powerdrive rotary steerable system successfully saving time and cost and improving wellbore quality. It is estimated half a day was saved by comparing the time taken to drill to a well drilled previously using a conventional mud motor.

Lowlights

- Fishing of 13.375in casing landing string resulting from inability to back-off wellhead running tool.
- Failure of SSR plug system leading to the presence of a cement sheath inside the 13.375in casing.
- Failure of the MSCT tool during log #3 caused 2 hours Non Productive Time (NPT).
- ROV failure caused 1 hour non productive time while running 13.375in TAC and 30in trash cap.
- There were delays delivering the Valkyrie vessel and so Apache sublet the Wrangler from Santos (ex Port Melbourne) to fill in the gap until the Valkyrie arrived. The Valkyrie failed after just one day after mobilisation from Singapore due to high vibration from pipework around the engines. Both the port and starboard engines gear box oil pump failed on the 28th of March and 10th April respectively causing further delays.

3. TIME ANALYSIS

Summary

The time from beginning to end of West Seahorse-3 well totalled 17.25 days, compared to the programmed total (normalised for the actual scope of work) of 17.25 days. The original AFE programmed total was 26.77days. The change from the original to the normalised AFE time breakdown is explained on the grounds of the following:

- Cancellation of the 9.625in casing phase (reduction of 1.92 days)
- Cancellation of well testing (reduction of 7.60 days)

Therefore the actual time on location equalled the normalised AFE planned time (i.e. ignoring the casing and testing phases).

Total Non-Productive Time (NPT) amounted to 2.06 days for West Seahorse-3

- 70.94% of all NPT occurred during the setting of the 13.375in casing. The Drill-Quip Wellhead Running tool failed to release and the wellhead was brought back to surface still attached to running tool. In attempting to disengage the running tool torque was applied down the landing string backing out at the 13.375in BTC connection at the bottom of the wellhead crossover, (costing 1.46 days). The landing string remaining down hole was successfully retrieved and re-run as per program.
- 17.15% of all NPT occurred during the drilling of the 12.25in hole. A 6bbl gain was observed by the driller at the same time as a 0.27% gas peak. Shut in well and checked flow – no flow (costing 0.042days)
- 3.89% of all NPT occurred whilst logging the 12.25in open hole. MSCT tool failure. (costing 0.08 days)
- 1.94% of all NPT was incurred during suspension, due to ROV problems. (costing 0.042days)
- Some time was lost in making up the wellhead assembly (to install an adjuster nut omitted initially) and nipping up of the diverter due to having only one riser handling clamp on the rig.

All of the non productive times incurred were offset by time savings elsewhere in the programme and overall the well was completed in time within the AFE. In total 11.93% of the time on well was incurred as non-productive time, which is in the order of the industry average.

Non-productive time analysis

Phase (in sequence)	NPT (days)	NPT by Cause							
		WOW	Hole Condition	Rig Equipment	Third Party	Down hole Equipment			
Mob & rig up	0.00								
Drill 36" conductor hole	0.00								
Set 30" conductor	.125							.125	3 hour was lost making up the wellhead assembly (to install an adjuster nut omitted initially)
Drill 17.5" hole	0.00								
Set 13.375" casing	1.46			0.04	Unable to break out TDS	0.17	Unable to break out wellhead running tool. Retrieved with wellhead still attached, backed out at the 13.375in BTC connection at the bottom of the wellhead crossover.	1.25	Fished out 13.375in landing string remaining down hole due to wellhead running tool malfunction Landing string re-run as per program.
Drill 12.25" hole	0.353		0.04	Well shut-in to investigate 6bbl gain at the same time as a 0.27% gas peak. Circulated bottoms up (Max gas 0.13%)				.313	It took longer than expected to wash and ream from 285m to 1103m MDRT.



Log 12.25" hole	0.08						0.08	Log#2: MSCT-mechanical tool failure when attempting to take cores. POOH hole, checked tool - coring mechanism blocked with sticky cuttings		
Suspend well	0.04						0.04	Troubleshoot ROV		
Rig down & move out	0.00									
TOTALS	2.058	0.00	0.04	0.04	0.04	0.29	1.688			
Percentage of NPT	100.0%	0.0%	1.94%	1.94%	1.94%	14.09%	82.02%			
Percentage of Total Well Time	11.93%	0.0%	0.23%	0.23%	0.23%	1.68%	9.79%			

Time reconciliation by well phase

OPERATION PHASE	Planned Time (days)	Actual Time (days)	Total NPT			Rig Repair			WOW			Delta
			days	% of Total Actual Time	% of Total NPT Time	days	% of Total Actual Time	% of Total Rig Repair Time	days	% of Total Actual Time	% of Total WOW Time	
Mob & rig up	2.50	1.46	0.00	0.00%	0.00%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	-1.04
Drill 36" conductor hole	0.67	0.50	0.00	0.00%	0.00%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	-0.17
Set 30" conductor	1.44	1.81	.125	0.00%	6.07%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	+0.37
Drill 17.5" hole	3.38	2.17	0.00	0.00%	0.00%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	-1.21
Set 13.375" casing	2.68	5.27	1.46	8.46%	70.94%	0.04	.23%	100.00%	0.00	0.00%	0.00%	+2.59
Drill 12.25" hole	2.57	1.60	0.353	0.23%	17.15%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	-0.97
Log 12.25" hole	1.75	1.60	0.08	0.46%	3.89%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	-0.15
Suspend well	2.13	2.71	0.04	0.23%	1.94%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	+0.58
Rig down & move out	0.13	0.13	0.00	0.00%	0.00%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	-0.01
TOTALS	17.25	17.25	2.058	11.93%	100.00%	0.04	.23%	100.00%	0.00	0.00%	0.00%	-0.00

Time breakdown

Operation Phase	Time (days)					
	Planned	Actual	Programmed	Unprogrammed	NPT Programmed	NPT Unprogrammed
Mob & rig up	2.50	1.46	1.46	0.00	0.00	0.00
Drill 36" conductor hole	0.67	0.50	0.50	0.00	0.00	0.00
Set 30" conductor	1.44	1.81	1.81	0.00	0.125	0.00
Drill 17.5" hole	3.38	2.17	2.17	0.00	0.00	0.00
Set 13.375" casing	2.68	5.27	5.27	0.00	1.46	0.00
Drill 12.25" hole	2.57	1.60	1.60	0.00	0.353	0.00
Log 12.25" hole	1.75	1.60	1.60	0.00	0.08	0.00
Suspend well	2.13	2.71	2.71	0.00	0.04	0.00
Rig down & move out	0.13	0.13	0.13	0.00	0.00	0.00
TOTALS	17.25	17.25	17.25	0	2.058	0

Key observations and corrective actions - mobilisation and drilling phases

Observations by Phase		Comments / Corrective Action Taken or Proposed
Mob & rig up	2. Slower than expected rigging up of the Low Pressure riser was observed due to the rig having only one riser handling clamp.	2. Back up clamp is being arranged.
Drill 36in conductor hole		
Set 30in conductor		2. More
Drill 17.5in hole		
Set 13.375in casing	<p>3. SSR plug set did not work as designed; no pressure increase was observed to indicate the release of bottom plug; Upon retrieval of the wellhead running tool the upper fin of the cement wiper plug release dart was found lodged in the crossover above.</p> <p>4. In attempting to disengage the wellhead running tool, torque was applied down the landing string consequently backing out at the 13.375in BTC connection at the bottom of the wellhead crossover resulting in fishing operations.</p>	<p>3. Following actions captured in cementing review-</p> <ul style="list-style-type: none"> • Omit bottom plug from future jobs • Calliper ball/dart IDs and all running string ID's prior to job to ensure no shoulders present • Limit ball/dart landing rate to 1bpm • Preset on board computer sampling rate to 5 per second to enable capturing full data for future analysis <p>4. Wellhead running procedures to be modified as below-</p> <ul style="list-style-type: none"> • Break connection between running tool and housing at rotary prior to running in hole • Clutch type running tool to be run with blocks unlocked • Modify drill pipe running adapter to include a 1in ball valve to allow any trapped pressure to be bled off
Drill 12.25in hole		

Observations by Phase		Comments / Corrective Action Taken or Proposed
Log 12.25in hole		
Suspend well		
Rig down & move out		

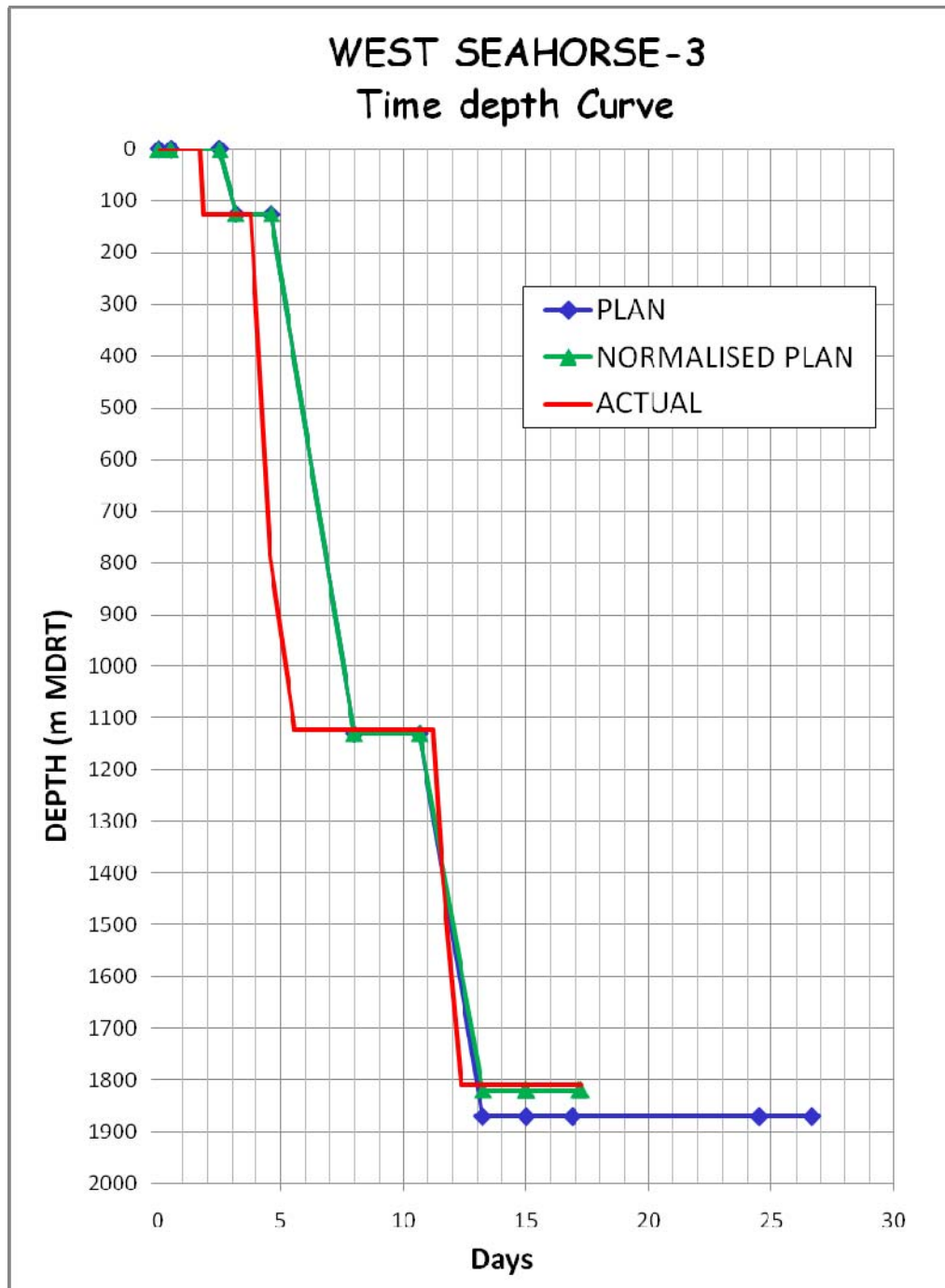


Figure 4. Time Depth Curve. Note: The normalized plan reflects the actual scope of work and excludes 9.625in casing and well testing operations.

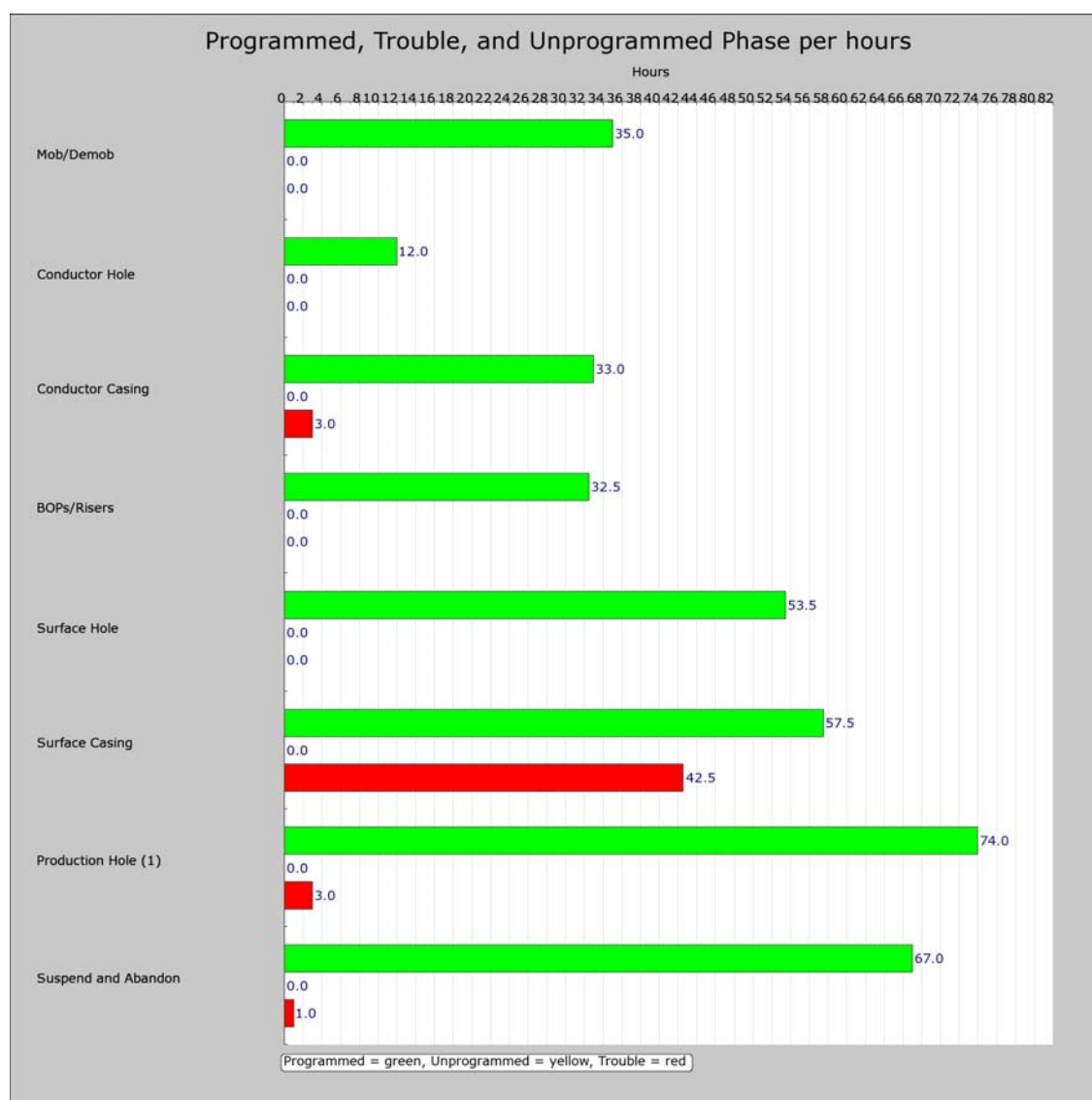


Figure 5. Programme, Trouble and Un-programmed by Phase.

Total Time on Operations : 414 hrs
 Total Productive Time : 364.5 hrs
 Total Lost Time : 49.5 hrs
 Total Unprogrammed Time : 0 hrs

Drilling : Lost Time Summary (% of 49.5 hrs)

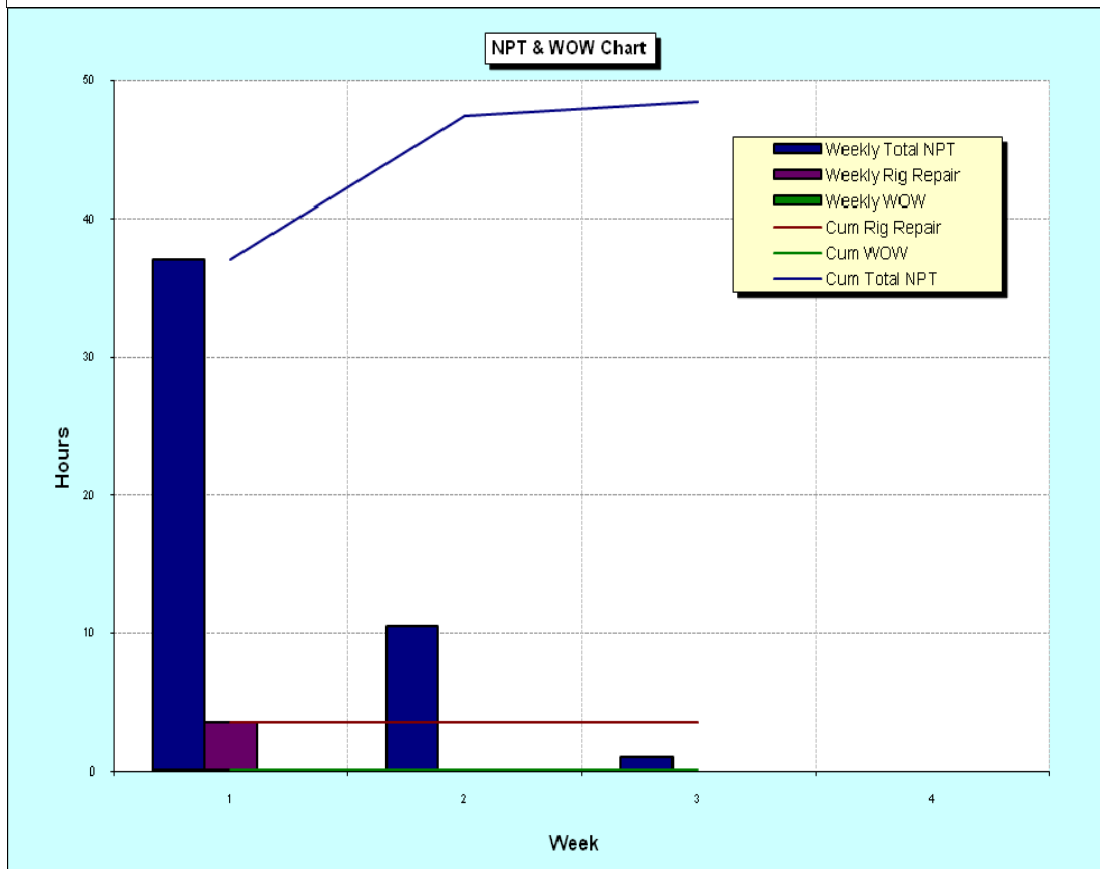
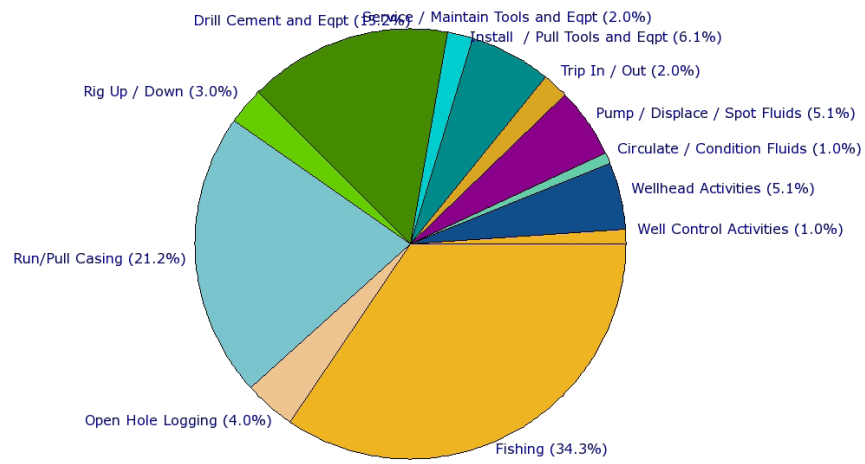


Figure 6. Lost time summary during drilling period.

4. DRILLING RECORDS AND ENGINEERING

Drilling summary report

West Seahorse-3 was designed as an 'S' profile deviated well. The surface location was selected approximately midway between the sub-surface locations of Wardie-1 and West Seahorse-3. The West Seahorse-3 well was spud in at 04:15 hrs on 24 April 2008, using a 660mm (26") Reed Rock Y1 1C bit with a 914mm (36") Hole Opener. The hole was drilled from the seabed at 77.5 m to 125.0 mMDRT. This section was drilled using seawater and hi-vis gel sweeps, with cuttings returns to the seabed. The 762 mm x 508 mm (30" x 20") conductor string was run and cemented with the 508 mm casing shoe set at 122.0 mMDRT.

After cementing the conductor, the BOPs and marine riser were run. The BOPs were pressure-tested and the diverter installed. The 445mm (17 1/2") hole section was drilled using one tricone rock bit. A Hughes MXL-T1V bit (NB2) was made up to a directional drilling BHA with motor and MWD tools. The hole was directionally drilled using PHG mud. The bit drilled out the 508 mm (20") casing shoe from 121.0 to 122.0 mMDRT and then the well was directionally drilled a further 998.0 meters to section TD at 1123.0 mMDRT. The well was kicked off at a depth of 172mMDRT and angle built to approximately 27.4° by 682mMDRT and this angle was maintained for the tangent section. The 340 mm casing was run and cemented with the shoe set at 1117.0 mMDRT.

The 311 mm (12 1/4") hole section was drilled with a new Reed RSX61 6-MA1 6 PDC bit. The bit was made up to a directional drilling BHA with Powerdrive and LWD tools. After tagging the cement high at 285.0 mMDRT, the bit washed and reamed down to the top of float collar at 1103.0 mMDRT. Then the cement plugs, float collar, shoe track, float shoe were drilled out before deepening the hole by three meters to 1126.0 mMDRT. The PHG mud in the well was displaced to KCI-Polymer water-based mud system initially weighted to 1.13 sg while drilling out the cement and float collar. Pulling back into the shoe, a Formation Integrity Test (FIT) was performed with 1.13 sg mud yielding an Equivalent Mud Weight (EMW) of 1.64 sg (no leak-off). This PDC bit drilled the entire section to well TD at 1810.0 mMDRT. The hole angle and azimuth was maintained until the second kick-off point at ~1 420 mMDRT where it was steered down to a second tangent angle of approximately 8.75° through the Latrobe target interval. Total depth was reached at 19:00 hrs on 04 May 2008 and the bit was pulled out for wireline logging.

After the wireline logging was successfully completed, the West Seahorse-3 well was suspended with four cement plugs that were set on 07 and 08 May 2008. Cement plug 1A was set from a hold-up depth of 1770m to 1630 mMDRT and was followed immediately by cement plug 1B from 1630m to 1500 mMDRT. After WOC, the top of plug 1 B was tagged by the drill string at 1490 MDRT with 8 klbs weight. Cement plug 2 was then set across the 340 mm casing shoe from 1147m to 1030 mMDRT. Plug 2 was pressure tested to 1500 psi after the cement had hardened. The final suspension cement plug was set from 270m to 130 mMDRT. A temporary abandonment cap (or "trash" cap) was then installed on top of the 762mm (30") Quick-Jay box connector, 2m above the seabed.

The CTU deck extension was installed on the MODU West Triton and the cantilever was then skidded forward approximately 2.5m to the Wardie-1 slot. The rig was released to the Wardie-1 well at 16:30 hrs on 09 May 2008.

Final drilling, casing and cementing schematics

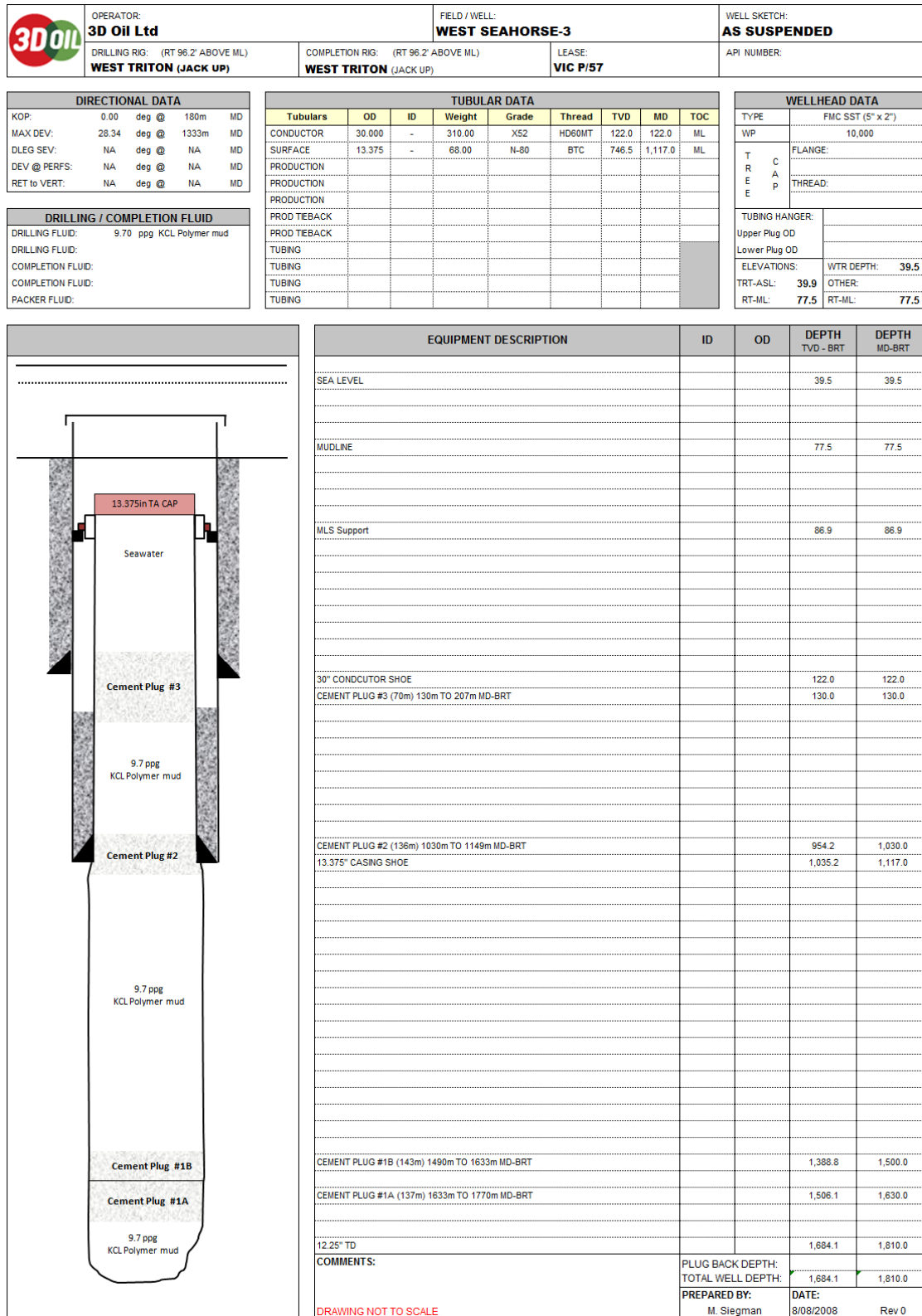


Figure 7. Summary of drilling schematics and engineering.

Drilling and engineering

914 mm (36") Hole Section

24 April 2008

Bit Run No. 1 Summary

Bit No.	NB1
Bit Size, mm	660 mm with 914 mm Hole
Bit Type	Opener
Serial Number	Rock / Reed Y1 1 C 34406
Jets	3x22, 1x16
Depth In, mMDRT	77.5
Depth Out, mMDRT	125.0
Bit Grading	0-0-RR-0-0-I-0-TD

Drilling Parameters

WOB, mt	0.2 – 5.2
RPM Surf	64
Pump Pressure, kPa	1613 – 6543
Flow In, lpm	2244 – 4481
Torque, kNm	0.05 – 6.95

Mud

Seawater	1.06 sg
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High viscosity gel sweeps

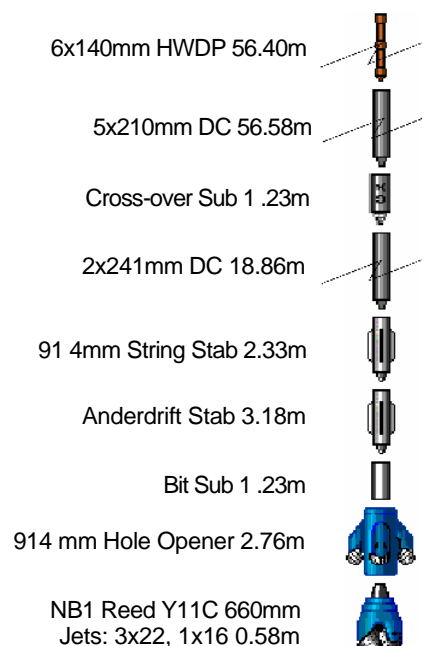
Lithology

Returns to seabed.

Drilling Summary

This spud assembly was made up, run in, tagging the seabed at 77.5 mMDRT. West Seahorse-3 was spudded at 0415hrs on 24 April 2008, drilling 914 mm hole from seabed to 125.0 mMDRT. At TD, a PHG mud pill was pumped around the hole before displacing the hole to PHG mud.

BHA No. 1 134.77m



445 mm (17.5") Hole Section

25 – 28 April 2008

Bit Run No. 2 Summary

Bit No.	NB2
Bit Size	445 mm
Bit Type	Rock / Hughes MXL-T1 V
Serial Number	60654689
Jets	3x20
Depth In, mMDRT	125.0
Depth Out, mMDRT	1123.0
Bit Grading	2-2-WT-A-E-I-BT-TD

Drilling Parameters

WOB, mt	0.5 – 26.3
RPM Surf	0 – 100
Pump Pressure, kPa	8446 – 24386
Flow In, lpm	3081 – 4678
Torque, kNm	0 – 20.25

Mud

PHG	1.10 – 1.14 sg
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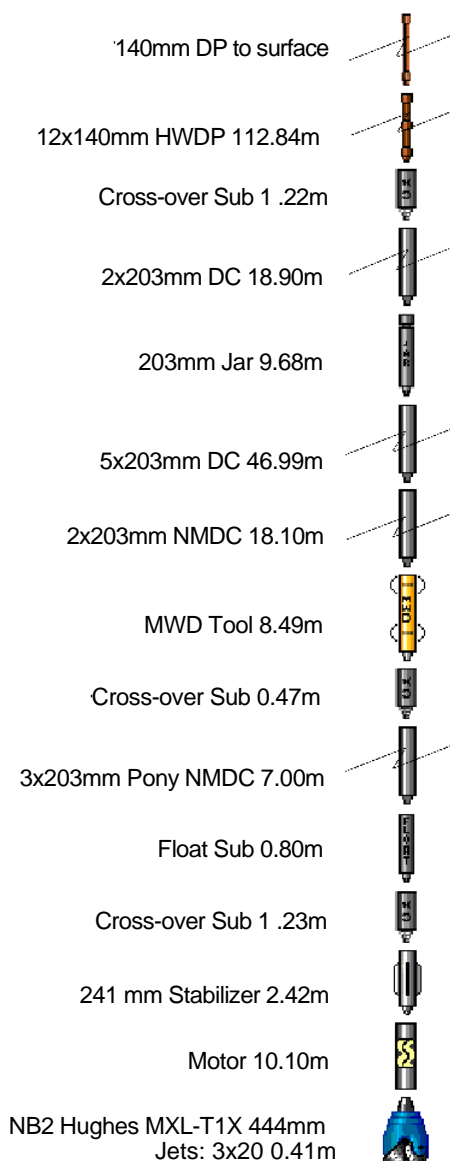
Lithology

Calcarenite, Calcilutite, Calcilutite, Sand, Marl & Claystone

Drilling Summary

A Hughes MXL-T1V bit was made up to a directional drilling BHA with MWD tools. After tagging the top of 508mm (20") shoe, the bit drilled out 508 mm shoe and rat hole to 125.0 mMDRT. The 445 mm hole section was directionally drilled with 1.10 – 1.14 sg PHG mud to TD of section at 1123.0 mMDRT.

BHA No. 2 238.65m



311 mm (12.25") Hole Section

2 - 5 May 2008

Bit Run No. 3 Summary

Bit No.	NB3
Bit Size	311 mm
Bit Type	PDC / Reed RSX61 6 MA1 6
Serial Number	218662
Jets	3x15, 3x16
Depth In, MDRT	1123.0
Depth Out, mMDRT	1810.0
Bit Grading	2-1 -CT-A-X-I-WT-TD

Drilling Parameters

WOB mt	0.5 – 17.3
RPM Surf	56 – 171
Pump Pressure kPa	8590 – 13520
Flow In lpm	3520 – 3993
Torque kNm	1.92 – 20.27

Mud

KCl-Polymer	1.13 – 1.16 sg
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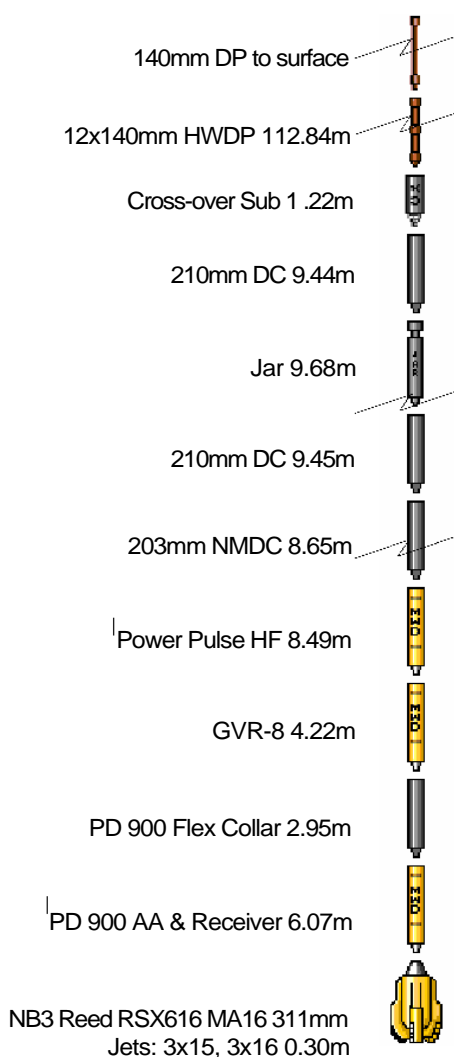
Lithology

Calcsiltite, Calcilutite, Calcareous Claystone, Siltstone, Coal, Sandstone

Drilling Summary

The bit was made up to a drilling BHA with MWD tools. After tagging the cement high at 285.0 mMDRT, the bit washed and reamed down to the top of float collar at 1103.0 mMDRT. Then the bit drilled out shoe track, float shoe and three meters of new formation to 1126.0 mMDRT. The hole was displaced to KCl-Polymer water-based mud system initially weighted to 1.13 sg when drilling out cement and float collar. Pulling back into the shoe, a Formation Integrity Test (FIT) was performed with 1.13 sg mud yielding an Equivalent Mud Weight (EMW) of 1.64 sg. This bit drilled to well TD at 1810.0 mMDRT.

BHA No.3 173.13m



Casing and cementing

762 x 508 mm (30" x 20") Casing

24 - 25 April 2008

Hole Size: 914 mm (36")
Depth: 125.0 mMDRT

Casing Details

OD: 762 mm (30")
Grade / Wt: X52 461 kg/m
Joints: 6 x 762 mm joint
1 x 508 mm shoe
Shoe: 122.0 mMDRT

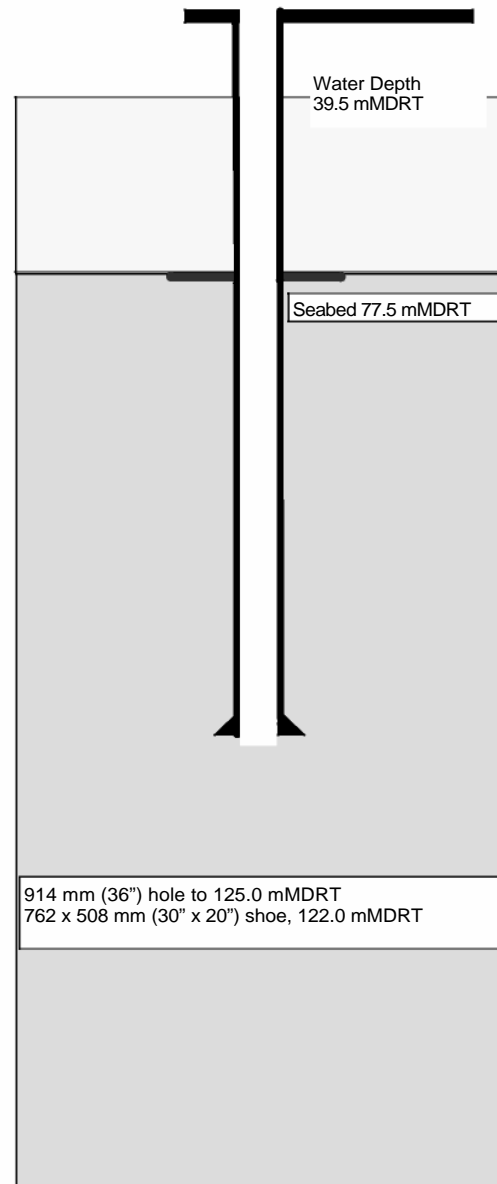
Cement Details SLURRY:

Type: Class G
Weight: 1.9 sg (15.8 ppg)
Slurry Volume: 54.5 m³ (343 bbls)

Summary

The 762 x 508 mm casing string was run on 24 April 2008. The 508 mm conductor shoe was set at 122.0 mMDRT (casing tally) and cemented as per the cementing program. The cement lines were pressure tested to 1200 psi. A pre-flush comprising 4.76 m³ (30 bbls) of seawater followed by a further 3.8 m³ (20 bbls) of seawater with fluorescein dye was pumped ahead. The cement job consisted of pumping of 54.5 m³ (343 bbls) of 1.9 sg (15.8 ppg) class "G" slurry. The cement was displaced with 1.27 m³ (8 bbls) of seawater. After the casing was hung off in the mudline suspension hanger, the cement stinger and the 140 mm drill pipe were pulled to surface.

West Seahorse-3
RT-AHD 38.0 mMDRT



340 mm (1 3.375") Casing

28 - 29 April 2008

Hole Size: 445 mm (17.5")
Depth: 1123.0 mMDRT

Casing Details

OD 340 mm (1 3.375")
Grade / Wt: N80: 101 kg/m
Joints: 1 Shoe joint
1 Float joint
Shoe: 1117.0 m 93 x Casing joints

Cement Details

LEAD SLURRY:

Type: Class G
Weight: 1.50 sg (12.5 ppg)
Slurry Volume: 28.6 m³ (200 bbls)

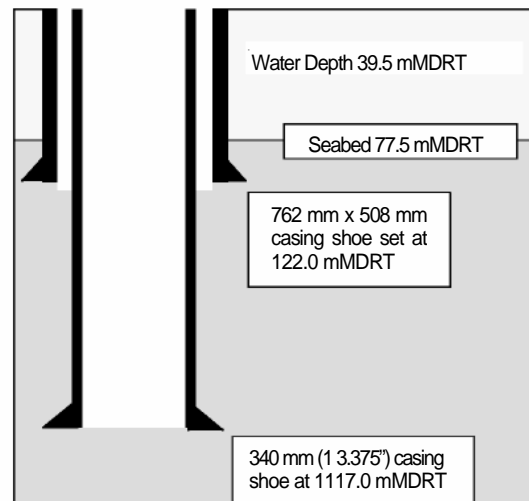
TAIL SLURRY:

Type: Class G
Weight: 1.90 sg (15.8 ppg)
Slurry Volume: 11.5 m³ (60 bbls)

Summary

The 340 mm casing was run in hole as per 3D Oil's casing program. Once landed, the casing was circulated at 525 gpm with 111 .3 m³ (700 bbls) of mud. After pressure testing the cement lines to 4000 psi, a 9.5 m³ (50 bbls) seawater spacer was pumped ahead before the lead and tail slurries were pumped down the casing. A problem was observed when shearing the wiper plug. The cement was displaced with the rig pumps, with 83.5 m³ (542 bbls) of mud. The plug was not bumped and so the cement was over-displaced by 50% of the shoetrack volume (3 bbls of over-displacement) before the pumps were stopped. The floats held. The casing shoe was set at 1117.0 mMDRT.

West Seahorse-3 RT-AHD 38.0 mMDRT



Cement plugs

7 - 8 May 2008

Hole Size: 311 mm (12.25")
Depth: 1810.0 mMDRT

Cement Plug Details CEMENT PLUG #1A:

Type: Class G
Weight: 1.89 sg (1 5.7 ppg)
Slurry Vol: 11.76 m³ (74 bbls)

CEMENT PLUG #1 B:

Type: Class G
Weight: 1.89 sg (1 5.7 ppg)
Slurry Vol: 12.40 m³ (78 bbls)

CEMENT PLUG #2:

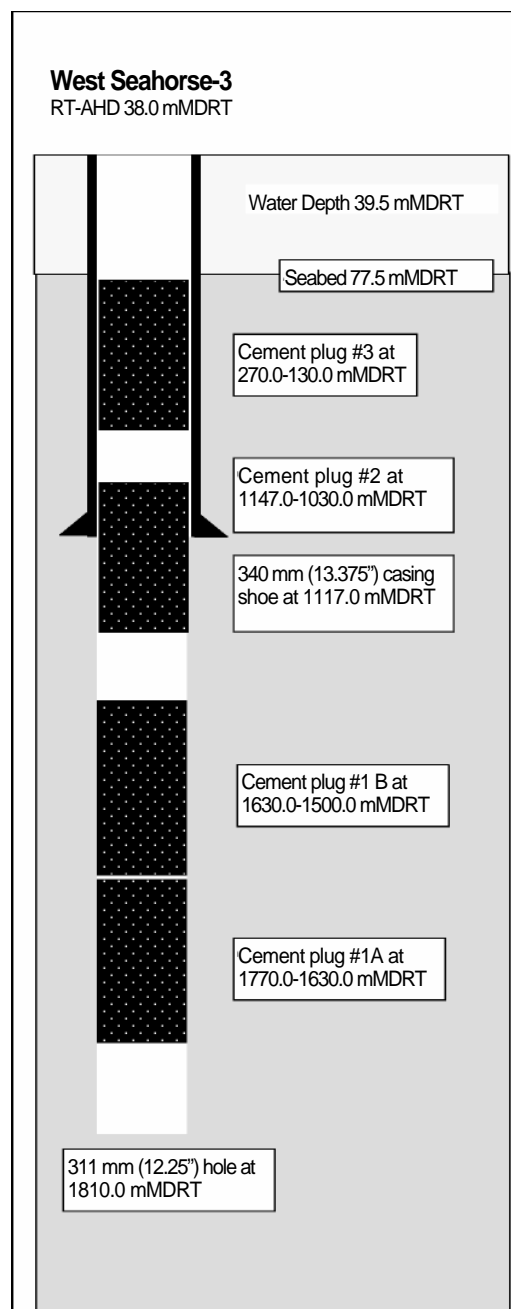
Type: Class G
Weight: 1.89 sg (1 5.7 ppg)
Slurry Vol: 10.33 m³ (65 bbls)

CEMENT PLUG #3:

Type: Class G
Weight: 1.90 sg (15.9 ppg)
Slurry Vol: 6.04 m³ (38 bbls)

Summary

Four cement plugs were pumped to suspend the West Seahorse-3 well. A cement stinger consisting of a mule shoe on 140 mm drill pipe was run in hole and tagged up on fill at 1770 mMDRT. It was not possible to wash down past 1771 mMDRT, so cement plug #1A was set from 1770m to 1630 mMDRT, followed immediately by cement plug #1 B from 1630m to 1500 mMDRT. Plug 1B was subsequently tagged with the cementing string at 1490 mMDRT and weight tested to 8 klbs after cement had hardened. Cement plug #2 was set across the 340 mm casing shoe from 11 47m to 1030 mMDRT. This plug was later successfully pressure tested to 1500 psi. The final cement plug was set from 270m to 130.0 mMDRT. The cement lines were tested to 1000 psi prior to pumping all four cement plugs. The hole was circulated clean and contaminated mud dumped after plugs 1A, 1B and 2 while a reverse circulation of the 140 mm drill pipe volume was done after cement plug 3.



Directional drilling summary

Performance drilling report

BHA 1 / Bit 2

17 1/2" (445 mm) Steerable Motor Assembly 125m –
1123m MD

BHA

17 1/2" Hughes MXL-T1V Tooth Bit (3 x 20 jets)
9 5/8 PowerPak Motor (5:6 lobe, 4.0 stage, 17 1/4 sleeve and 1.5° bend)
17" String Stab
Crossover Sub Float Sub
3 x 8" Pony NMDC
Crossover Sub
PowerPulse MWD (800-1200 gpm)
2 x 8" NMDC
8 1/4" Spiral Drill Collars (5 joints)
Hydraulic Jar
8 1/4" Spiral Drill Collar (2 joints)
Crossover Sub
5 1/2" HW Drill Pipe (12 joints)
5 1/2" Drill Pipe to Surface

Drilling Summary

Drilled cement and float equipment, cleaned out rat hole. Rotary drilled to kick off point at 1 72m. The kick off section was directionally drilled, mainly sliding (and rotating when required), building at 3°/30m to 27.4°.

At 386m, in the kick off section, a full stand was back reamed and reamed down once between 386m to 350m to smoothen and reduce a higher than expected dogleg severity. The dogleg severity was reduced from 5.3°/30m to 4.2°/30m and this process took about 1 hour of rig time which involved racking back a stand which was already made to drill ahead.

The tangent section was rotary drilled with minor slides (7-10m every 2-3 stands) to counter the general dropping tendency of 0.3° to 0.6°/30m and there was also a slight right hand walk.

From 0° - 8° the motor was able to build at 2.5 °/30m. From 8° - 27° the motor was able to build at 3.8 °/30m.

Reactive torque was about 30° with 25 klbs WOB

No hole problems were encountered or reported and all directional requirements were met. Trip out of the hole was uneventful. Hole was cased and cemented.

Drilling performance:

Interval	Distance (m)	Time (hrs)	ROP (m/hr)
Total Drilled	998	28.81	34.64
Total Drilled in rotary	668	20.88	31.99
Total Drilled in slide mode	330	7.93	41.61
Bit Graded	2 – 2 – WT – A – E – In – BT – TD		

Section Breakdown

Section	Rotary m (%)	Slide m (%)
Start of run to KOP (125-170m)	45 (100%)	-
KOP to EOC (170-465m)	48 (16%)	247 (84%)
EOC to section TD (465-1 123m)	575 (87%)	83 (13%)

BHA 2 / Bit 3

12 1/4" (311 mm) Rotary Steerable Assembly 1123m
– 1810 m MD (687m)

BHA

2 1/4" Reed Hycalog RSX616 MA 16 PDC Bit (3 x 15 & 3 x 16 jets)
PowerDrive 900 X5 (without flow restrictor)
PowerDrive 900 Receiver (with ported float) and Flex Collar
8 1/4" GVR
PowerPulse MWD (600-1200 gpm)
1 x 8" NMDC
8 1/4" Spiral Drill Collar
Hydraulic Jar
8 1/4" Spiral Drill Collar
Crossover Sub
5 1/2" HW Drill Pipe (12 joints)
5 1/2" Drill Pipe to Surface

Drilling Summary

The cement was tagged early at 285m and drilled out, drilling the float equipment was difficult and time consuming. Three meters of new formation was drill out and a formation integrity test was performed.

Once out of the shoe the PowerDrive assembly had a slight dropping tendency in neutral steering mode. The rate of penetration was held to about 30 m/hr until the BHA was clear of the shoe and rat hole and then the drilling parameters were increased. A 50% steering ratio was required to hold the assembly in the tangent section. A rate of penetration of about 60 m/hr was achieved for most of the tangent section and the start of the drop section.

At the start of the drop section the tool was initially placed in a 25% drop with a right bias to counteract a left turn tendency. The drop rate was much lower than expected so steering ratio was increased to eventually 100% low side. Drop rates of only low 2 %/30m was achieved in the Lakes Entrance formation. Once into the Latrobe Group formation drops rates increased to low 4 %/30m and the required drop angle could be achieved. The rate of penetration was held back to 30 m/hr for logging purposes and this may have helped to improve the drop rate.

Once the drop was achieved the PowerDrive was placed in Inclination Hold mode for the remainder of the tangent section to TD at 1810m MDRT. Both geological targets were successfully penetrated within the allowed tolerance.

A moderate stick-slip was observed for most of the run but it did not affect the steering ability. Stick-slip was considerably lower in the Latrobe Group formation.

The bit was graded as 3-1-CT-A-X-I-WT-TD.

Drilling performance:

Interval	Distance (m)	Time (hrs)	ROP (m/hr)
Rotary mode	687	19.62	35.0

Deviated well, 'S'-type profile. Details see attachment 7

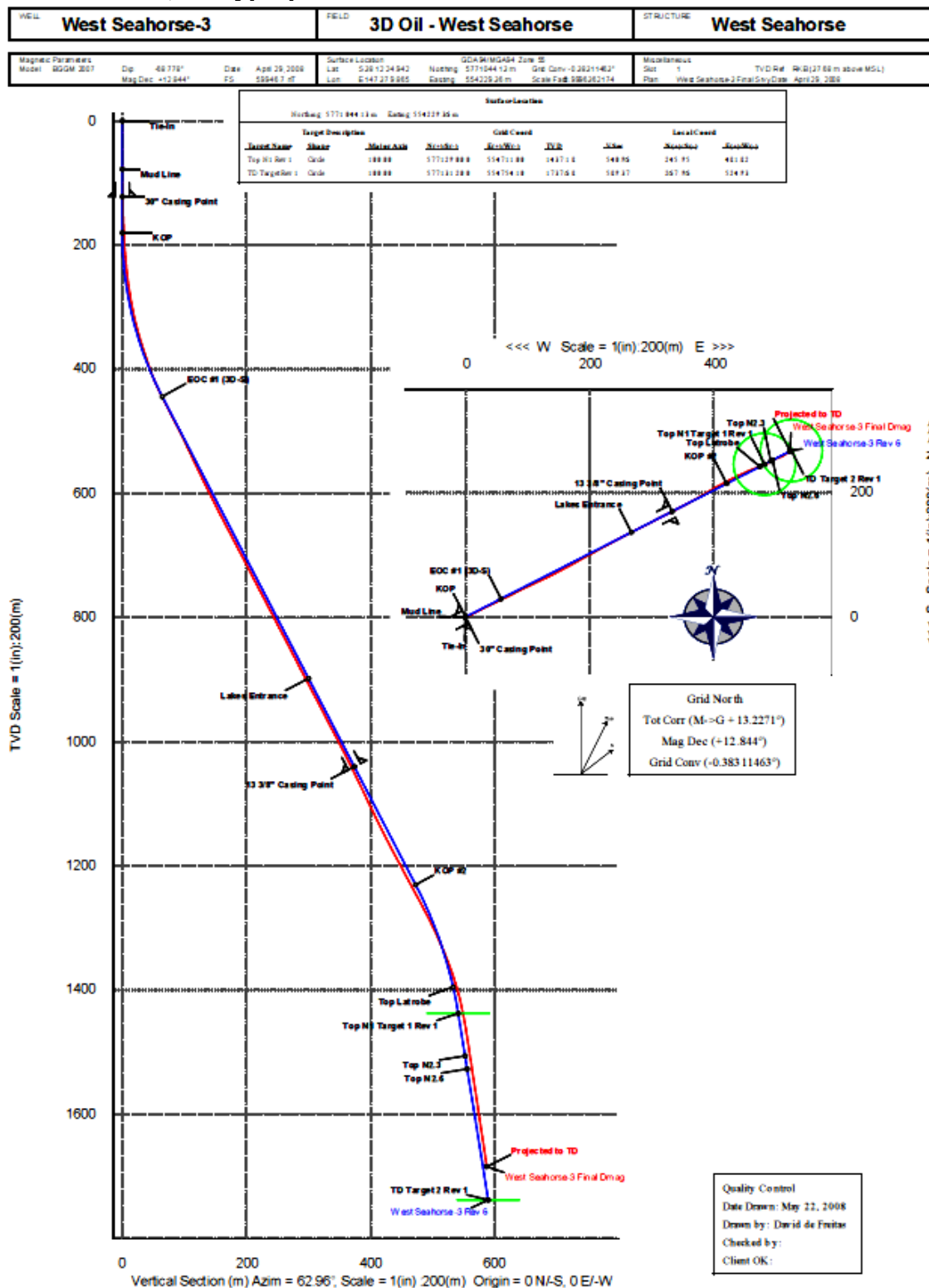


Figure 9. Sketch showing 'S'-type directional drilling profile.

Directional Dmag Geodetic Survey

Report Date: May 21, 2008 Client: 3D Oil Ltd Field: 3D Oil - West Seahorse Structure / Slot: West Seahorse-3 Well: West Seahorse-3 Borehole: West Seahorse-3 URI/API: Survey Name / Date: West Seahorse-3 Final Dmag / April 29, 2008 Tort / AHD / DDI / FPD ratio: 73.430' / 587.54 m / 5.182 / 0.349 Grid Coordinate System: GDA94/MGA94 Zone 55 Location Lat/Long: S 38 12 24.942, E 147 37 9.865 Location Grid NE YX: N5771044.135 m, E554229.358 m Grid Convergence Angle: -0.38311463° Grid Scale Factor: 0.99999922	Survey / DLS Computation Method: Minimum Curvature / Lubinski Vertical Section Azimuth: 62.960° Vertical Section Origin: N 0.000 m, E 0.000 m TVD Reference Datum: RKB TVD Reference Elevation: 37.7 m relative to MSL Sea Bed / Ground Level Elevation: -39.500 m relative to MSL Magnetic Declination: 12.844° Total Field Strength: 59946.745 nT Magnetic Dip: -68.778° Declination Date: April 29, 2008 Magnetic Declination Model: BGGM 2007 North Reference: Grid North Total Cor Mag North -> Grid North: +13.227° Local Coordinate Reference To: Well Head
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Comments	Measured Depth (m)	Inclination (deg)	Azimuth Grid (deg)	TVD (m)	Vertical Section (m)	NS Grid North (m)	EW Grid North (m)	DLS (deg/30 m)	Nothing (m)	Eastings (m)	Latitude	Longitude
Tie-In	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5771044.14	554229.36	S 38 12 24.942	E 147 37 9.865
Mud Line	77.50	0.00	0.00	77.50	0.00	0.00	0.00	0.00	5771044.14	554229.36	S 38 12 24.942	E 147 37 9.865
	182.42	2.71	71.37	182.38	2.45	0.79	2.35	0.77	5771044.93	554231.71	S 38 12 24.916	E 147 37 9.961
	210.69	4.37	68.61	210.60	4.19	1.40	3.99	1.77	5771045.53	554233.34	S 38 12 24.896	E 147 37 10.028
	240.38	6.29	65.93	240.16	6.94	2.47	6.53	1.96	5771046.61	554235.68	S 38 12 24.861	E 147 37 10.132
	269.55	8.46	63.88	269.08	10.66	4.07	9.91	2.25	5771048.20	554239.27	S 38 12 24.808	E 147 37 10.271
	299.18	10.91	63.41	298.29	15.66	6.29	14.38	2.46	5771050.42	554243.73	S 38 12 24.735	E 147 37 10.454
	328.69	13.72	61.49	327.31	22.00	9.23	19.99	2.67	5771053.36	554249.34	S 38 12 24.639	E 147 37 10.684
	358.27	17.82	63.61	355.58	29.96	12.89	27.08	4.23	5771057.02	554256.43	S 38 12 24.518	E 147 37 10.974
	388.46	17.83	64.35	384.32	39.22	16.94	35.38	0.23	5771061.07	554264.73	S 38 12 24.385	E 147 37 11.315
	417.21	21.75	64.50	411.37	46.95	21.14	44.16	4.09	5771065.27	554273.51	S 38 12 24.247	E 147 37 11.674
	446.30	26.47	63.34	437.91	60.63	26.38	54.83	4.89	5771070.50	554284.17	S 38 12 24.075	E 147 37 12.111
	476.28	27.58	63.58	464.62	74.45	32.46	67.01	1.12	5771076.59	554296.35	S 38 12 23.875	E 147 37 12.610
	505.67	26.63	62.50	490.78	87.64	38.53	78.95	1.09	5771082.65	554308.28	S 38 12 23.675	E 147 37 13.099
	534.94	25.97	64.51	517.02	100.80	44.32	90.55	1.14	5771088.44	554319.88	S 38 12 23.465	E 147 37 13.575
	564.20	25.07	64.48	543.43	113.41	49.75	101.93	0.92	5771093.86	554331.25	S 38 12 23.307	E 147 37 14.041
	622.88	26.33	65.24	596.30	136.84	60.55	124.97	0.67	5771104.67	554354.28	S 38 12 22.961	E 147 37 14.965
	653.06	26.86	63.15	623.29	152.34	66.44	137.13	1.07	5771110.55	554366.44	S 38 12 22.758	E 147 37 15.463
	682.20	27.68	61.89	649.19	165.69	72.60	146.97	1.03	5771116.71	554378.28	S 38 12 22.555	E 147 37 15.968
	711.65	27.35	62.23	675.31	179.30	78.97	160.99	0.37	5771123.08	554390.29	S 38 12 22.346	E 147 37 16.460
	740.89	27.59	61.54	701.25	192.78	85.33	172.89	0.41	5771129.43	554402.18	S 38 12 22.137	E 147 37 16.947
	771.14	27.55	61.08	728.07	206.78	92.05	185.17	0.21	5771136.15	554414.46	S 38 12 21.917	E 147 37 17.450
	800.56	27.43	60.89	754.17	220.35	98.64	197.05	0.15	5771142.74	554426.33	S 38 12 21.700	E 147 37 17.937
	829.48	27.85	61.35	779.78	233.76	105.12	208.79	0.49	5771149.21	554438.08	S 38 12 21.488	E 147 37 18.418
	858.79	27.32	61.21	805.76	247.32	111.64	220.70	0.55	5771155.73	554449.97	S 38 12 21.274	E 147 37 18.905
	888.16	27.56	61.54	831.83	260.85	118.12	232.58	0.29	5771162.21	554461.85	S 38 12 21.061	E 147 37 19.392
	917.34	27.23	62.29	857.74	274.28	124.44	244.42	0.49	5771168.53	554473.69	S 38 12 20.853	E 147 37 19.877
	947.31	27.18	62.67	884.39	287.98	130.77	256.57	0.18	5771174.86	554485.84	S 38 12 20.645	E 147 37 20.374
	975.78	26.05	62.94	909.62	301.18	136.81	268.31	0.93	5771180.89	554497.57	S 38 12 20.447	E 147 37 20.855
	1005.05	27.38	63.78	935.53	314.79	142.91	280.48	0.79	5771186.99	554509.73	S 38 12 20.246	E 147 37 21.354
	1034.76	27.21	62.92	961.93	328.41	149.02	292.85	0.43	5771193.10	554521.91	S 38 12 20.046	E 147 37 21.852
	1064.70	27.86	61.70	988.48	342.25	155.45	304.91	0.66	5771199.53	554534.16	S 38 12 19.834	E 147 37 22.354
	1094.42	27.04	62.76	1014.85	355.95	161.84	317.03	0.96	5771205.91	554546.27	S 38 12 19.625	E 147 37 22.851
	1143.32	25.87	63.39	1058.63	377.73	171.70	336.45	0.74	5771215.78	554558.69	S 38 12 19.300	E 147 37 23.646
	1155.24	25.60	63.14	1069.37	382.91	174.03	341.07	0.73	5771218.10	554570.31	S 38 12 19.224	E 147 37 23.836
	1184.65	25.36	62.55	1096.19	395.69	179.87	352.45	0.35	5771223.93	554581.68	S 38 12 19.032	E 147 37 24.301
	1214.47	26.04	61.37	1122.79	408.49	185.66	363.74	0.66	5771229.95	554592.97	S 38 12 18.835	E 147 37 24.764
	1244.37	26.98	60.10	1149.55	421.62	192.41	375.38	1.10	5771236.48	554604.61	S 38 12 18.620	E 147 37 25.241
	1273.71	27.90	59.30	1175.59	435.32	199.23	387.06	1.01	5771243.30	554616.27	S 38 12 18.397	E 147 37 25.719
	1303.22	28.28	59.93	1201.62	449.19	206.26	399.04	0.49	5771250.32	554628.26	S 38 12 18.166	E 147 37 26.209
	1333.07	28.34	61.42	1227.90	463.34	213.19	411.38	0.71	5771257.25	554640.59	S 38 12 17.938	E 147 37 26.715
	1362.30	28.22	62.76	1253.64	477.18	219.68	423.62	0.66	5771263.73	554652.83	S 38 12 17.726	E 147 37 27.216
	1392.46	27.26	63.75	1280.33	491.22	225.99	436.16	1.06	5771270.05	554665.36	S 38 12 17.518	E 147 37 27.729
	1421.70	25.28	65.76	1306.55	504.15	231.52	447.86	2.23	5771275.57	554677.05	S 38 12 17.336	E 147 37 28.209
	1451.62	22.71	67.51	1333.89	516.29	236.35	459.02	2.67	5771280.40	554688.21	S 38 12 17.177	E 147 37 28.666
	1481.39	20.37	68.53	1361.58	527.18	240.45	469.15	2.39	5771284.50	554699.34	S 38 12 17.042	E 147 37 29.081
	1511.23	17.28	67.57	1389.82	536.77	244.04	478.08	3.12	5771288.09	554707.27	S 38 12 16.823	E 147 37 29.447
	1540.81	13.06	64.38	1418.36	544.49	247.16	485.16	4.36	5771291.21	554714.34	S 38 12 16.621	E 147 37 29.737
	1570.48	10.61	59.84	1447.40	550.57	249.99	490.55	2.65	5771294.03	554719.73	S 38 12 16.728	E 147 37 29.958
	1600.19	8.73	58.08	1476.68	555.55	252.55	494.83	1.92	5771296.60	554724.00	S 38 12 16.644	E 147 37 30.133
	1629.88	8.74	67.66	1506.03	560.04	254.60	498.83	1.47	5771298.64	554728.00	S 38 12 16.576	E 147 37 30.297
	1658.96	8.56	72.15	1534.78	564.38	256.10	502.93	0.72	5771300.15	554732.10	S 38 12 16.527	E 147 37 30.465
	1688.35	8.90	69.06	1563.83	568.80	257.59	507.13	0.59	5771301.63	554736.31	S 38 12 16.478	E 147 37 30.638
	1717.96	8.56	61.83	1593.10	573.28	259.45	511.22	1.16	5771303.49	554740.39	S 38 12 16.417	E 147 37 30.805
	1747.50	8.58	55.23	1622.31	577.66	261.74	514.97	1.00	5771305.78	554744.14	S 38 12 16.341	E 147 37 30.958
	1777.39	8.69	54.55	1651.86	582.11	264.32	518.64	0.15	5771308.36	554747.81	S 38 12 16.257	E 147 37 31.109
	1789.31	8.74	56.02	1663.64	583.90	265.35	520.12	0.57	5771309.39	554749.29	S 38 12 16.223	E 147 37 31.169
Projected to TD	1810.00	8.74	56.02	1684.09	587.02	267.11	522.73	0.00	5771311.15	554751.90	S 38 12 16.166	E 147 37 31.276

Survey Type: Definitive Survey

Survey Error Model: SLB ISOWSA version 24 *** 3-D 95.00% Confidence 2.7955 sigma

Surveying Prog:

MD From (m)	MD To (m)	EQI Freq	Survey Tool Type
0.00	77.18	Act-Stns	SLB_ZERO-Depth Only
77.18	77.50	Act-Stns	SLB_ZERO
77.50	1094.42	Act-Stns	SLB_MVD+DMAG
1094.42	1789.31	Act-Stns	SLB_MVD-STD
1789.31	1810.00	Act-Stns	SLB_BLIND+TREND

Borehole -> Survey

West Seahorse-3 -> West Seahorse-3 Final Dmag
West Seahorse-3 -> West Seahorse-3 Final Dmag
West Seahorse-3 -> West Seahorse-3 Final Dmag
West Seahorse-3 -> West Seahorse-3 Final Dmag
West Seahorse-3 -> West Seahorse-3 Final Dmag
West Seahorse-3 -> West Seahorse-3 Final Dmag

5. GEOLOGICAL REPORT

Summary of formation sampling & drill monitoring

Geological formation sampling for West Seahorse-3 commenced from the 445 mm hole section at 125.0 mMDRT to the well's Total Depth at 1810.0 mMDRT. Cuttings, side wall cores and PVT samples were collected and analyzed. Baker Hughes INTEQ SLS provided formation evaluation, drill monitoring services for West Seahorse-3 between 22 April 2008 and 09 May 2008 from the spud depth at 77.5 mMDRT to total depth at 1810.0 mMDRT. Data was processed and stored using **Advantage version 2.10U2** software.

All gas monitoring equipment was calibrated before drilling and checked regularly. Ditch cuttings were continuously collected through the drilling and calcimetry analysis on cuttings samples was performed at the request of the Wellsite Geologists. Rotary Sidewall Cores and pressure samples were made with the Schlumberger MDT/MSCT coring tool. Four oil samples were collected from a depth of 1567mMDRT (1406.1m TDVSS).

Monitoring, logging and testings services

All gas monitoring equipment was calibrated before drilling each hole section and checked regularly. Calcimetry analysis on cuttings samples was performed at the request of the Wellsite Geologists.

Directional surveys

An Anderdrift inclination-only tool was run in the 914mm (36") section to ensure verticality prior to spudding the well. LWD surveys were then run towards the total depth. The resulting final definitive survey data report is included Attachment 7.

Mudlogging

Baker Hughes INTEQ provided mudlogging services for the drilling of West Seahorse 3 from spud to total depth at 1810.0mMD RT using a crew of two data engineers (Yeong Chen Wong, John Mancarella) and two mudloggers (Avadhut Gholap, Darshan Pingle). A fully pressurised and computerised Logging Unit was maintained throughout the drilling and wireline log evaluation phases. A fully computerised data acquisition service operated to total depth at 1810.0mMD RT).

The full mudlogging service included the continuous evaluation of pore pressure and drilling parameters as an aid to optimising drilling costs and ensuring that drilling continued with maximum safety to personnel, the well and equipment. The information obtained while drilling was visually displayed and stored both as hard copy printouts and on hard disc. Details of the services, together with printouts and plots of the results of these services, are contained in the Baker Hughes INTEQ Final Well Report (Enclosures 1-3). The Formation Evaluation Log (mudlog) displays the rate of penetration (ROP), total gas, chromatographic analyses and wellsite interpreted lithologies.

ROP and Gas readings

444 mm Section (125.0 – 1123.0 mMDRT)

Interval (m)	ROP range (m/hr)	ROP average (m/hr)	Total Gas range (%)	Total Gas average (%)
77.5 – 125	5.82 - 100	47.10		
125 – 960	7.1 – 163.6	62.4	0.0002 – 0.0019	0.0011
960 – 1123	7.0 – 69.3	10.2	0.0001 – 0.0076	0.0027

311 mm Section (1123.0 – 1810.0 mMDRT)

Interval (m)	ROP range (m/hr)	ROP average (m/hr)	Total Gas range (%)	Total Gas average (%)
1123 – 1510	12.3 – 91.9	50.2	0.0018 – 0.0150	0.0051
1510 – 1580	10.1– 33.4	26.9	0.0083 – 0.3001	0.0726
1580 – 1810	5.4 – 67.3	26.4	0.0083 – 0.1064	0.0237

Minimum – Maximum Chromatograph Readings

444 mm Section (125.0 – 1123.0 mMDRT)

Interval (m)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	iC5 (ppm)	nC5 (ppm)
125 – 960	0 – 8	0 – 4	0	0	0	0	0
960 – 1123	2 – 52	0 – 6	0 – 3	0 – 1	0	0	0

311 mm Section (1123.0 – 1810.0 mMDRT)

Interval (m)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	iC5 (ppm)	nC5 (ppm)
1123 – 1510	7 – 129	0 – 7	0 – 2	0	0	0	0
1510 – 1580	64 – 1193	2 – 80	1 – 95	0 – 48	0 – 52	0 – 35	0 – 30
1580 – 1810	9 – 976	0 – 40	0 – 28	0 – 12	0 – 14	0 – 12	0 – 10

Formation Evaluation Log, Drilling Log, Pressure Log and Gas Ratio Log are included herein as Enclosures 1-3 respectively

Shows

The following shows were noted in cuttings from the Latrobe Group:

(1554 - 1578m) Trace bright pale yellow fluorescence. Moderately fast streaming bright blue white cut. Moderately thick residual ring, becoming thin & spotty with depth.

(1596 – 1602m) Trace bright pale yellow fluorescence.

(1638 – 1644m) Trace bright pale yellow fluorescence.

(1656 – 1668) Trace bright pale yellow fluorescence. Very slow streaming bright bluish white cut. Thin residual ring.

(1674 – 1710m) Trace bright pale yellow fluorescence. Very slow streaming bright blue white cut. Thin patchy weak residual ring.

Gas Peak Table

Depth (mMDRT)	TG (%)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	iC5 (ppm)	nC5 (ppm)
1565.0	.3	1005	80	95	55	50	35	30
1578.5	.14	555	20	20	0	0	0	0
1590.5	.15	450	20	15	0	0	0	0
1623.0	.07	400	40	15	0	0	0	0
1651.0	.04	150	30	10	0	0	0	0
1671.0	.02	45	10	10	0	0	0	0
1749.0	.005	25	0	0	0	0	0	0

Normalised gas calculation

A “normalised” total gas curve has been plotted on the Gas Ratio Log (see Enclosure 1) for comparison with the regular total gas measurement. The normalised total gas is corrected for flow rate, drilling speed and hole size in an attempt to provide a consistent measure of “actual” mud gas per unit volume that can be compared across the various drilling intervals. The equation for normalised total gas is given below:

$$\text{Normalised Gas} = \text{Total gas} \times (\text{Total Flow} / (\text{ROP} \times \text{Bit Size}^2))$$

Sampling summary and record of distribution

Ditch cuttings were continuously collected through the drilling and Rotary Sidewall Cores were taken with the Schlumberger MSCT coring tool. Four segregated samples were also collected from a depth of 1567mMDRT (1406.1m TDVSS) using the Schlumberger MDT tool. No conventional and percussion sidewall cores were taken in West Seahorse 3.

Ditch cuttings

Cuttings samples were collected at the intervals tabulated below as advised by the Well site Geologists. Sampling Intervals:

125	– 140 m	15 m interval
140	– 1120 m	20 m interval
1120	– 1470 m	10 m interval
1470	– 1806 m	3 m interval
1806	– 1810 m	4 m interval

Samples (washed and unwashed) were missed from the following depths due to high ROP:

1473m, 1479m, 1485m, 1488m, 1494m, 1503m, 1509m, 1515m, 1521m, 1527m, 1533m, 1539m, 1548m, 1551m, 1557m, 1563m, 1566m, 1575m, 1581m, 1587m, 1593m, 1605m, 1611m, 1617m, 1623m, 1629m, 1635m, 1641m, 1647m, 1653m, 1659m, 1665m, 1671m, 1677m, 1683m, 1689m, 1695m, 1701m, 1707m, 1713m, 1719m, 1725m, 1731m, 1737m, 1743m, 1749m, 1755m, 1761m, 1767m, 1770m, 1776m, 1782m, 1788m, 1794m, 1800m, 1806m

Six sets of washed and air dried sample splits each of 100g or 200g were collected at 10m, 5m or 3m intervals depending upon the stratigraphic section and rate of penetration (ROP) and retained in plastic bags. One set was dispatched to GeoScience Australia (GA), Core and Cuttings Repository, Symonston, ACT, another set was dispatched to the Victorian DPI Core Library South Road, Werribee, Vic 3030. 3D Oil Limited holds four sets of the cuttings.

Sample Destination

Set A (250g Unwashed Cuttings in Hubco bags) to be forwarded to:

3D Oil Limited

Kensington Road Self Storage
180 Kensington Road
West Melbourne, Vic, 3003

Set B (250g Washed & Dried Drill Cuttings in polythene bags) to be forwarded to:

3D Oil Limited

Kensington Road Self Storage
180 Kensington Road
West Melbourne, Vic, 3003

Set C (Samplex Tray) to be forwarded to:

3D Oil Limited

Kensington Road Self Storage
180 Kensington Road
West Melbourne, Vic, 3003

Set D (250g Washed & Dried Drill Cuttings in polythene bags) to be forwarded to:

Victorian Dept of Primary Industries

DPI Core Sample Library
18 South Road
(250 m south of Sneydes Road)
WERRIBEE 3030 (Melway Reference: 206 E8)

Set E (250g Washed & Dried Drill Cuttings in polythene bags) to be forwarded to:

Geoscience Australia

Manager,
Geoscience Australia Data Repositories
Geoscience Australia
Cnr Jerrabomberra Avenue and Hindmarsh Drive,
Symonston, ACT, 2609

Set F (Mud Sample & Mud Filtrate) to be forwarded to:

3D Oil Limited

Kensington Road Self Storage
180 Kensington Road
WEST MELBOURNE, VIC, 3003

SAMPLE TYPE	Well	No. of Sets	INTERVAL			PACKING DETAILS
			Large Box No.	Small Box No.	Interval (m)	
DRILL CUTTINGS 250g: Washed & Air Dried (polythene bags) Set B,D & E	West Seahorse-3	3	1	1	125 – 340	Packed in 2 boxes marked as Set B,D & E.
				2	340 – 580	
				3	580 – 820	
				4	820 – 1040	
				5	1040 – 1190	
				6	1190 – 1300	
				7	1300 – 1410	
				8	1410 – 1500	
			2	9	1500 – 1560	
				10	1560 – 1608	
				11	1608 – 1671	
				12	1671 – 1731	
				13	1731 – 1785	
				14	1785 - 1810	
UNWASHED SAMPLES (Hubco): Set A	West Seahorse-3	1	1	1	125 – 240	Max. 8 small boxes per large box. Large boxes marked as Set A
				2	240 – 340	
				3	340 – 460	
				4	460 – 580	
				5	580 – 700	
				6	700 – 820	
				7	820 – 920	
				8	920 – 1020	
			2	9	1020 – 1130	
				10	1130 - 1180	
				11	1180 – 1240	
				12	1240 - 1290	
				13	1290 – 1340	
				14	1340 – 1390	
				15	1390 – 1440	
				16	1440 –1482	
			3	17	1482 – 1512	
				18	1512 – 1542	
				19	1542 – 1572	
				20	1572 – 1599	
				21	1599 – 1626	
				22	1626 – 1656	
				23	1656 – 1686	
				24	1686 – 1716	
			4	25	1716 – 1746	
				26	1746 – 1779	
				27	1779 – 1810 (
SAMPLEX TRAYS: Set C	West Seahorse-3	1	1	-	125 – 1810	Packed in one wooden box marked as Set C

MUD SAMPLES & MUD FILTRATE: Set F	West Seahorse-3	1	1	2 (1 L) 1 (50ml)	1810	Packed in one box marked as Set F
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Formation Loggings

The lithologies encountered at West Seahorse-3 are described below. For a graphical display of the lithology, see Enclosure 3: Formation Evaluation Log. Note that the lithological descriptions on the Formation Evaluation Log were provided by the 3D Oil Wellsite Geologists, with input from the BHI mudloggers.

Description of Cuttings

914 mm Section (77.5 – 125.0 mMDRT) Returns to seabed. No samples.

445 mm Section (125.0 – 1123.0 mMDRT)
125.0 to 960.0 mMDRT.

Interbedded SANDSTONE and CALCARENITE

SANDSTONE (10- 80%): Light olive grey to olive grey, abundant translucent to transparent grains, friable, abundant very fine to fine, sub-angular to sub-rounded in part, sub-angular quartz and fine shell fragments, minor black lithics, common orange, yellow, rose, minor fine muscovite and biotite flakes, siliceous cement, no to good visible porosity.

CALCARENITE (Trace-90%): Yellowish grey to light olive grey to white in part, moderately hard to hard to recrystallised, very fine to fine and medium in part, angular to sub-angular, translucent, pale yellow to occasional orange, minor black lithics, minor microforaminifera with glauconite replaced cement, trace fine shell fragments, highly calcareous, well cemented, inferred calcite cement in part, and recrystallised grain to grain contacts, poor visible porosity.

960.0 to 1123.0 mMDRT.

Interbedded CALCILUTITE, CALCARENITE, CLAYSTONE and SANDSTONE:

CALCILUTITE (10-80%): White to olive grey, soft, fine to medium, sub-angular quartz, common fine skeletal fragments, common foraminifera, trace medium green glauconite, highly calcareous, weak silty matrix.

CALCARENITE (10-60%): White to olive grey, moderately hard to recrystallized, very fine to fine and medium in part, angular to sub-angular, translucent, pale yellow to occasional orange, minor microforaminifera with glauconite replaced cement, trace black lithics, trace fine skeletal fragments, highly calcareous, well cemented, inferred calcite cement in part and recrystallised grain to grain contacts, poor visible porosity.

CLAYSTONE (Trace-5%): Medium grey, soft, amorphous to firm in part, homogenous, flakey in part, occasional locally with glauconite infilled cement, highly calcareous.

SANDSTONE (0-5%): Translucent to white, very hard recrystallized, fine to medium in part, sub-angular quartz, slightly to moderately calcareous, fine white inferred calcite cement in part, poor visible porosity.

**311 mm Section (1123.0 – 1810.0 mMDRT)
1123.0 to 1510.0 mMDRT.**

**Interbedded CALCI LUTITE, CALCARENITE, CALCISILTITE, CALCAREOUS
CLAYSTONE AND CLAYSTONE**

CALCILUTITE (0-100%): Greenish grey to olive grey in part, soft, trace loose fine skeletal fragments, trace very fine black biotite flecks, trace very loose coarse translucent angular calcite, trace argillaceous claystone, traces of carbonaceous material as streaks and specks, traces shell fragments, traces of micromicas, grading to Calcisiltite in part, grading locally silty.

CALCARENITE (Trace%): White to olive grey in part, moderately hard to hard, very fine to fine and occasionally medium, sub-angular, translucent calcite, trace black lithics, moderately to well cemented in part, inferred calcite cement, fair visible porosity.

CALCISILTITE (0-40%): Light olive grey to olive grey in part, soft to hard in part, common to very fine, dominantly silt sized, transparent to translucent, sub-angular quartz, trace black biotite flecks, trace silt sized mica specks, trace locally with argillaceous matrix.

CALCAREOUS CLAYSTONE (Trace-100%): Medium grey, medium dark grey, olive grey in part, soft to firm, sub-blocky, 20% calcareous clay, trace carbonaceous material, traces very fine pyrite, rare foraminifera.

CLAYSTONE (10-100%): Medium dark grey, dark greenish grey, medium grey in part, medium light grey, brownish grey, soft to firm, sub-blocky, 10% calcareous clay, 10% to 30% glauconite grains, traces micromicas, traces biotite flakes, traces foraminifera, trace very fine grained pyrite aggregates, rare coral fragments, grading to Siltstone in brownish grey fraction.

1510.0 to 1580.0 mMDRT.

Interbedded CLAYSTONE, SILTSTONE, COAL and SANDSTONE

CLAYSTONE (10-100%): Medium dark grey, dark greenish grey, medium grey in part, medium light grey, brownish grey, soft to firm, sub-blocky, 10% calcareous clay, 10% to 30% glauconite grains, traces micromicas, traces biotite flakes, traces foraminifera, trace very fine grained pyrite aggregates, rare coral fragments, grading to Siltstone in brownish grey fraction.

SANDSTONE (10-80%): Trace aggregate, pale yellow to yellowish grey, friable, very fine to fine, sub-angular to sub-rounded quartz, inferred silica cement, good visible porosity; **loose quartz grains**, clear and opaque, light grey, polished, fine to medium to coarse to very coarse grained, sub-angular to sub-rounded to rounded, poorly sorted, traces grey matrix on grain surfaces, poor visual and inferred porosity.

COAL (Trace-5%): Black, dark brownish black, blocky, predominantly bright, traces

very fine grained disseminated pyrite.

SILTSTONE (10-90%): Brownish grey, very soft to soft to moderately hard, sub-blocky, trace to 30% glauconite, trace to 10% calcareous clay, 5% very fine grained pyrite aggregates and trace locally with abundant cryptocrystalline pyrite.

1580.0 to 1810.0 mMDRT.

Interbedded SANDSTONE, SILTSTONE and COAL.

SANDSTONE (0-100%): Trace aggregate, pale yellow to yellowish grey, friable, very fine to fine, sub-angular to sub-rounded quartz, inferred silica cement, good visible porosity; loose quartz grains, clear and opaque, translucent to transparent, light grey, polished, fine to medium to coarse to very coarse grained, sub-angular to sub-rounded to rounded, poorly sorted, traces grey matrix on grain surfaces, poor visual and inferred porosity. From 1722 to 1810: light grey, dark yellowish brown, predominantly opaque, in part clear, predominantly loose quartz, in part hard when recrystallised, coarse to granular, predominantly very coarse to granular, angular (shattered) to sub-rounded, moderately sorted, trace very fine grained pyrite as aggregates and cement, 5% siliceous cement, white clay matrix adhering to grains s

COAL (0-80%): Black, greenish black, brittle to moderately hard, platy, earthy to bright, in part with conchoidal fracture.

SILTSTONE (0-95%): Olive grey to dark olive grey, soft to firm in part, blocky to sub-blocky, abundant black carbonaceous material, trace to minor fine micaceous flecks, trace locally with cryptocrystalline pyrite, trace locally with well rounded fine glauconite, trace loose medium pyrite nodules.

Detailed description sees Attachment 10.

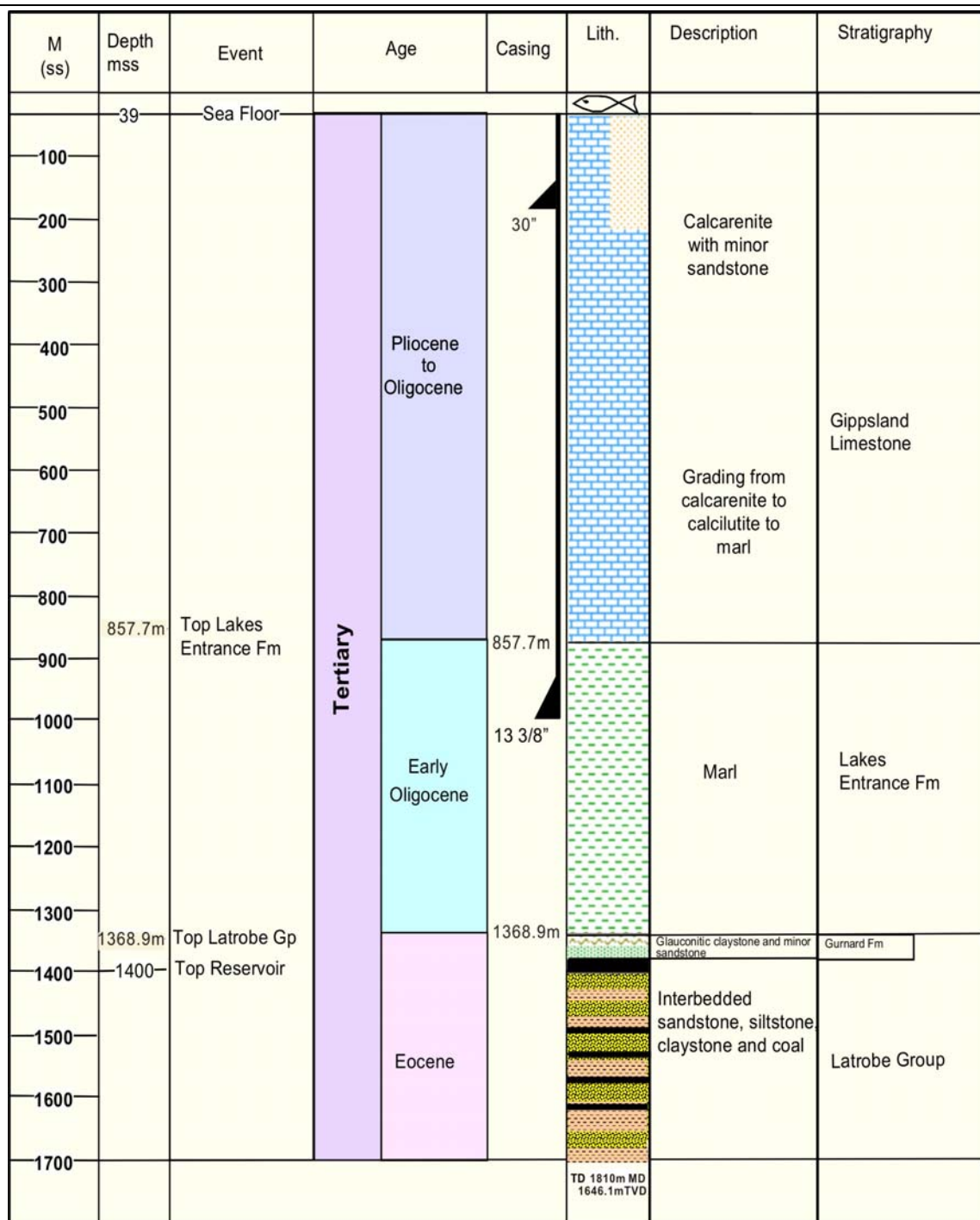


Figure 10. Stratigraphic column and casing of the West Seahorse 3 well.

Calcimetry measurements

Calcimetry Data

Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)	Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)
120	0.0	0.0	0.0	840	71.1	3.8	74.8
140	21.9	16.7	38.6	860	62.9	4.4	67.3
160	48.5	16.5	64.9	880	66.3	4.5	70.8
180	60.8	16.4	77.2	900	67.0	3.4	70.4
200	82.2	0.2	82.4	920	68.4	6.8	75.2
220	58.8	0.3	59.1	940	75.9	7.1	83.0
240	55.0	6.0	61.0	960	45.5	8.2	53.7
260	64.3	6.2	70.4	980	69.7	4.4	74.2
280	56.0	0.5	56.5	1000	70.1	10.0	80.1
300	57.4	0.5	58.0	1020	62.7	11.6	74.4
320	75.8	0.8	76.6	1040	53.1	10.0	63.2
340	71.7	7.3	79.0	1060	55.3	9.7	65.0
360	64.3	5.9	70.3	1080	59.1	11.5	70.6
380	84.9	12.8	97.7	1100	53.0	6.3	59.3
400	86.7	5.7	92.3	1120	53.0	8.4	61.4
420	78.8	9.8	88.7	1130	47.2	9.5	56.7
440	88.5	4.4	93.0	1140	46.5	12.3	58.8
460	85.2	5.8	91.0	1150	49.2	8.8	58.0
480	82.5	5.5	88.0	1160	46.5	12.3	58.8
500	87.3	7.7	94.9	1170	49.2	8.8	58.0
520	88.9	3.9	92.8	1180	49.2	8.8	58.0
540	92.3	0.6	93.0	1190	47.8	9.0	56.9
560	88.9	6.8	95.7	1200	32.5	12.3	44.8
580	88.9	6.9	95.8	1210	25.9	2.1	28.0
600	85.1	6.5	91.6	1220	19.8	3.3	23.0
620	75.3	5.5	80.7	1230	27.8	0.5	28.3
640	76.9	6.2	83.0	1240	23.4	6.6	30.1
660	82.5	7.5	90.0	1250	30.8	4.0	34.7
680	81.0	8.2	89.2	1260	30.3	7.6	37.9
700	81.3	9.6	90.9	1270	17.2	1.6	18.8
720	82.6	13.6	96.2	1280	23.2	8.2	31.4
740	64.1	9.9	74.0	1290	30.3	5.6	36.0
760	63.2	5.5	68.7	1300	32.2	1.3	33.5
780	67.3	6.2	73.5	1310	28.3	3.7	32.0
800	69.0	4.8	73.8	1320	23.1	4.5	27.6
820	68.4	5.8	74.2	1330	19.5	4.1	23.7

Calcimetry Data

Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)	Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)
1350	21.9	3.8	25.7	1584	2.9	0.7	3.6
1360	16.5	3.4	19.9	1587			0.0
1370	21.9	3.3	25.2	1590	2.1	1.0	3.0
1380	9.9	3.9	13.8	1593			0.0
1390	13.1	3.1	16.2	1596	0.7	0.5	1.2
1400	14.0	0.7	14.7	1599	0.7	0.5	1.2
1410	8.3	8.5	16.9	1602	0.7	0.5	1.2
1420	10.5	7.3	17.8	1605			0.0
1430	7.3	8.7	16.0	1608	0.7	0.5	1.2
1440	19.6	7.1	26.7	1611			0.0
1450	22.4	10.8	33.2	1614	0.7	0.6	1.3
1460	13.4	7.4	20.8	1617			0.0
1470	13.3	2.7	15.9	1620	0.7	0.6	1.3
1473			0.0	1623			0.0
1476	14.8	8.0	22.8	1626	0.7	0.6	1.3
1479			0.0	1629			0.0
1482	8.7	5.5	14.3	1632	0.7	0.6	1.3
1485			0.0	1635			0.0
1488			0.0	1638	0.7	0.6	1.3
1491	7.5	9.6	17.0	1641			0.0
1494	16.5	3.4	19.9	1644	0.7	0.1	0.8
1497			0.0	1647			0.0
1500	16.5	1.6	18.0	1650	0.7	0.1	0.8
1503			0.0	1653			0.0
1506	6.8	3.7	10.5	1656	0.7	0.1	0.8
1509			0.0	1659			0.0
1512	6.0	5.5	11.6	1662	0.7	0.1	0.8
1515			0.0	1665			0.0
1518	11.9	6.4	18.3	1668	0.7	0.1	0.8
1521			0.0	1671			0.0
1524	5.5	0.6	6.2	1674	0.7	0.1	0.8
1527			0.0	1677			0.0
1530	5.5	0.6	6.2	1680	0.7	0.1	0.8
1533			0.0	1683			0.0
1536	5.5	0.6	6.2	1686	0.7	0.1	0.8
1539			0.0	1689			0.0
1542	2.3	0.2	2.5	1692	0.7	0.1	0.8
1545	2.3	0.2	2.5	1695			0.0
1548			0.0	1698	0.7	0.1	0.8
1551	2.3	0.2	2.5	1701			0.0
1554	2.3	0.2	2.5	1704	0.7	0.1	0.8
1557			0.0	1707			0.0
1560	2.3	0.2	2.5	1710	0.7	0.1	0.8
1563			0.0	1713			0.0
1566			0.0	1716	0.7	0.1	0.8
1569	2.9	0.7	3.6	1719			0.0
1572	2.9	0.7	3.6	1722	0.7	0.1	0.8
1575			0.0	1725			0.0
1578	2.9	0.7	3.6	1728	0.7	0.1	0.8
1581			0.0	1731			0.0

Calcimetry Data

Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)	Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)
1734	0.7	0.1	0.8				
1737			0.0				
1740	0.7	0.1	0.8				
1743			0.0				
1746	0.7	0.1	0.8				
1749			0.0				
1752	0.3	0.1	0.4				
1755			0.0				
1758	0.3	0.1	0.4				
1761			0.0				
1764	0.3	0.1	0.4				
1767			0.0				
1770			0.0				
1773	0.3	0.1	0.4				
1776			0.0				
1779	0.3	0.1	0.4				
1782			0.0				
1785	0.3	0.1	0.4				
1788			0.0				
1791	0.3	0.1	0.4				
1794			0.0				
1797	0.3	0.1	0.4				
1800			0.0				
1803	0.3	0.1	0.4				
1806			0.0				
1810	0.3	0.1	0.4				

Conventional Cores

No conventional cores were cut in West Seahorse 3.

Rotary sidewall cores (MSCT)

One mechanical sidewall coring run was made with the Schlumberger MSCT coring tool as planned. The purpose of the sampling was to acquire cores for reservoir evaluation in the primary reservoir and for petrographic evaluation. A total of 12 cores were recovered from the 14 attempted. A summary of MSCT depths and recoveries is included below:

Mechanical Sidewall Core Depths (MSCT)

Sample No.	Depth (mRT)	Time Taken (including time to move to next station) Start Finish		Brief Lithology Description	Initial comments following coring	Actually Recovered? Y / N	Length (mm)	Condition of core
1	1561.5	12:43	12:47	No sample		N	-	Not recovered
2	1562.0	12:47	12:52	No sample		N	-	Not recovered
3	1564.0	12:52	12:58	SILTSTONE grading to a very fine SANDSTONE , trace dull yellow fluorescence		Y	50	Good
4	1566.5	12:58	13:05	SILTSTONE grading to a very fine SANDSTONE , trace dull yellow fluorescence		Y	50	Good
5	1568.0	13:05	13:12	SANDSTONE : very fine to fine 5% dull yellow fluorescence		Y	45	Good
6	1568.9	13:12	13:23	CLAYSTONE : trace dull yellow fluorescence		Y	55	Good
7	1570.0	13:23	13:30	Silty CLAYSTONE : nil fluorescence		Y	52	Good
8	1571.0	13:30	13:35	SILTSTONE : nil fluorescence	Temporarily ceased coring to run a correlation depth log	Y	70	Good
9	1634.0	13:44	13:50	COAL : black-brown, nil fluorescence		Y	2 x 15	Broken sample, 2 x 15 mm pieces and 2 x <10 mm fragments
10	1661.0	13:50	14:02	SANDSTONE : medium grained, nil fluorescence		Y	45	Good
11	1668.5	14:02	14:16	SANDSTONE , fine grained, argillaceous, nil fluorescence.	Call made to Ops Geo to confirm the next depth at 1665 m was correct	Y	50	Good
12	1665.0	14:16	14:27	SANDSTONE : coarse		Y	40	Fair
13	1686.0	14:27	14:39	CLAYSTONE , nil fluorescence		Y	50	Good
14	1694.0	14:39	14:53	SANDSTONE : fine grained, argillaceous, nil fluorescence		Y	48	Fair

The MSCT photographs are included herein as Attachment 12.

Petrology

Six MSCT samples were sent to ACS Laboratoryies Pty Ltd for petrological study. Their results, including descriptions and photographs of the thin sections are presented in the West Seahorse 3 Well Completion Report - Interpretative Data, issued separately.

Samples submitted for Petrology

<i>MSCT No.</i>	<i>Depth (mMD RT)</i>
<i>Sample 3</i>	<i>1564.0</i>
<i>Sample 5</i>	<i>1568.0</i>
<i>Sample 7</i>	<i>1570.0</i>
<i>Sample 10</i>	<i>1661.0</i>
<i>Sample 11</i>	<i>1668.5</i>
<i>Sample 13</i>	<i>1686.0</i>

MDT sampling (Pressure Sampling)

A total of four segregated samples were successfully recovered from a depth of 1567mMDRT (1406.1m TDVSS) using the Schlumberger MDT tool. Single-phase transfers were performed on three samples and the fourth sample was flashed for offshore analysis.

Reports on the Validity Checks and Analyses of MDT Samples are attached as Attachment 13 and the analyses performed by Petrotech PVT laboratory will be attached to Volume 1 (interpreted data).

MDT samples data

A. Sample Identification						
Run/seat number	Run 2 / Seat 31					
Sample depth	1567 mMDRT (1406.1m TVDSS)					
Pretest volume	10 cc					
Chamber size	450 cc	450 cc	450 cc	450 cc		
Chamber serial number	#3452	#3453	#3353	#3358		
Probe type	Xtra large	Xtra large	Xtra large	Xtra large		
Choke size	N/A					
B. Sampling History						
Date	6-May-08					
Initial hydrostatic	2439.19 psia					
Tool Set	01:23 hrs					
Pretest start	01:26 hrs					
Initial formation pressure (pre)	1968.07 psia					
Pretest end	1:28					
Pretest duration	1'40"					
Pumpout start	1:28					
Pumpout end	2:30					
Pumpout duration	1'02"					
Pumpout volume	51.971 litres					
OFA indication	Green					
Interpreted fluid at OFA	Oil					
Maximum resistivity at probe	ohm-m					
Chamber open	2:11	2:14	2:20	2:24		
Minimum sampling pressure	1912.7psia	1913.5psia	1924.3psia	1919.6psia		
Final formation pressure	N/A	N/A	N/A	1968.3psia		
Chamber sealing pressure						
Seal chamber	2:12	2:16	2:22	2:26		
Chamber fill time	1'40"	1'40"	1'40"	2'		
Tool retract	N/A	N/A	N/A	2:31		
Final hydrostatic				2431.28 psia		
Total time				2hrs08'		
C. Sample Downhole Temperature And Resistivity						
At sample depth (AMS)	66 degC					
Rm@sample depth (AMS)	0.057ohm-m					
D. Sample Recovery At Surface						
Surface opening pressure	1624 psig	Not opened	1088 psig	1595 psig		
Volume gas	cuft					
Volume oil/condensate	0.38 litres	-	0.375 litres	0.39 litres	(Total volume of all fluids combined)	
Volume water/filtrate	litres					
E. Sample Properties Measured On-Site						
Gas via cl	C1	Mole %				
	C2	Mole %				
	C3	Mole %				
	C4	Mole %				
	C5	Mole %				
	C6+	Mole %				
	CO2	Mole %				
	H2S	Mole %				
Oil/Conde	API @ degC	degrees				
	Colour					
	Fluorescence					
	GOR or CGR	cuft/bbl or mmscf/bbl				
	Pour point	degC				
Water/Filt	Rmud @ degC	ohm-m@degC				
	K+ ion calculated	ppm				
	Chlorides titrated	ppm				
	Tritium	DPM				
	pH					
	Type					
F. Mud Filtrate Properties						
Rmud @ degC	0.113ohm-m@22.6degC					
K+ ion calculated from KCl%	40,000 mg/l					
Chlorides titrated	36,000 mg/l					
pH	9					
Tritium	N/A DPM					
G. General Calibration						
Reported mud weight	9.67 ppg					
Calculated hydrostatic	2382.4psia					
H. Remarks and Comments						
General	Sample Specific	Sample Specific	Sample Specific	Sample Specific	Sample Specific	Sample Specific
Segregated samples x 4	240ppm H2S		280ppm H2S	280ppm H2S		
3 samples transferred, 1 left in MPSR. H2S measured by Draeger Tube during transf						

MDT pressure and sample data

West Seahorse-3 - MDT PRESSURE POINT & SAMPLING PROGRAMME													
		sampling points		SAMPLE POINT									
				LFA FLUID CONFIRMATION									
		pressure test point				CQG	CQG		CQG		FTA ?spherical method	Buildup	
Pressure Point #	Actual Depth mMDRT	Actual Depth mTVDR	Actual Depth mTVDS	Depth ftVDS	Time Pad Set	Initial Hydrostatic Pressure psia	Final Hydrostatic Pressure psia	Drawdown Volume cc	Final Buildup Pressure psia	Mobility md/cp	Time Secs	Temp. deg C	Remarks
1a	1553.5	1430.9	1392.9	4569.88	16:50			#REF!					Low perm
2	1562.5	1439.7	1401.7	4598.79	16:59			0.0					lost seal
3	1562.9	1439.8	1401.8	4599.08	17:04			0.0					lost seal
4	1564.0	1441.2	1403.2	4603.61	17:15	2427.44	2427.05	20.0	1966.06	184.3	170	59.6	Good Test
5	1566.0	1443.2	1405.2	4610.07	17:27	2430.87	2430.61	20.0	1967.90	94.7	160	59.8	Good test
6	1567.0	1444.1	1406.1	4613.29	17:40	2432.20	2432.10	20.2	1968.88	702.0	170	59.8	Good test
7	1568.5	1445.6	1407.6	4618.11	17:55	2434.43	2434.25	20.0	1970.11	692.0	200	60.0	Good test
8	1570.0	1447.1	1409.1	4622.97	18:05	2436.90	2436.78	20.1	1971.71	7.5	300	59.9	Good test, but mobility calc is incorrect
9	1573.5	1450.5	1412.5	4634.25	18:25	2442.71	2442.57	19.9	1976.50	366.4	310	60.1	Good test
10	1577.0	1454.0	1416.0	4645.54	18:40	2449.01	2448.82	20.2	1981.66	654.4	370	60.6	Good test
11	1575.0	1452.0	1414.0	4639.07	18:53	2445.45	2445.41	40.0	1978.87	336.1	920	60.5	Good test, but noisy until 3rd drawdown
12	1588.0	1464.8	1426.8	4681.10	19:15	2467.00	2466.90	20.0	1993.96	1.2	970	61.1	Test under SLB town control...asked for recal on
13	1600.5	1477.1	1439.1	4721.59	20:00	2407.90	2407.00	20.1	2009.23	1416.0	390	62.1	Good test
14	1603.0	1479.6	1441.6	4729.66	20:15	2491.84	2491.96	20.1	2012.56	259.9	1010	61.8	Lost seal on first attempt, retract, reset, good test.
15	1605.0	1481.6	1443.6	4736.19	20:41	2495.43	2495.38	20.2	2015.40	111.5	370	61.9	Good test
16	1619.0	1495.4	1457.4	4781.59	20:56	2519.13	2519.01	20.2	2041.27	13.9	380	62.3	Good test
17	1636.0	1512.2	1474.2	4836.71	21:09	2547.83	2547.79	10.9			1440	63.2	low perm, 3 drawdowns.
18	1638.0	1514.2	1476.2	4843.21	21:43	2551.27	2551.28	20.2	2068.95	1249.6	200	63.2	Good test
19	1639.0	1515.2	1477.2	4846.46	22:00	2552.82	2552.86	20.1	2070.20	1009.0	230	63.4	Good test
20	1640.0	1516.2	1478.2	4849.70	22:10	2554.23	2554.30	20.2	2071.35	453.5	200	63.5	Good test
21	1643.0	1519.2	1481.2	4859.42	22:20	2559.48	2559.51	20.2	2075.71	1998.6	220	63.6	Good test
22	1661.0	1537.0	1499.0	4917.81	22:45	2589.13	2589.15	20.3	2102.98	2280.6	180	64.0	Good test
23	1664.0	1539.9	1501.9	4927.56	22:55	2594.34	2594.38	20.5	2107.26	3786.4	310	64.4	Good test
24	1667.0	1542.9	1504.9	4937.27	23:08	2599.31	2599.37	20.4	2111.23	2552.1	270	64.8	Good test
25	1685.0	1560.7	1522.7	4995.70	23:30	2629.70	2629.72	20.2	2136.36	120.2	310	65.5	Good test
26	1686.0	1561.7	1523.7	4998.95	23:43	2631.53	2631.56	20.4	2137.60	400.8	250	66.1	Good test
27	1700.0	1575.5	1537.5	5044.26	23:55	2655.40	2655.43	20.1	2157.10	1625.5	210	66.5	Good test
1	1638.0	1514.2	1476.2	4843.21	0:12	2550.91		10.1			8'20"	66.4	Drawdown of 1000 psi...2425 cc. Pump out terminated.
2	1638.5	1514.6	1476.6	4844.49	0:40	2551.31	2551.4	10.3			20'40"	66.4	Pump out 20.17 litres.
3	1567.0	1444.1	1406.1	4613.29	1:23	2431.19	2431.28	10.0	1968.07	573.0	1hr2'	65.0	4 x 450 cc samples collected. Pump out volume 51.971 litres
28	1562.0	1439.0	1401.0	4596.46	2:39	2423.14	2423.29	10.0					lost seal, retract & reset, supercharged
29	1561.5	1438.5	1400.5	4594.82	2:55	2422.68	2422.65	10.1					lost seal
30	1561.0	1438.1	1400.1	4593.50	3:05	2421.53	2421.62	5.3					low permeability
31	1560.5	1437.6	1399.6	4591.86	3:20	2421.10	2421.17	1.0					low permeability
32	1556.5	1433.7	1395.7	4579.07	3:36	2414.29	2414.32	15.1					supercharged

Percussion sidewall cores

No percussion sidewall cores were acquired in West Seahorse 3.

Biostratigraphy

No palynology samples were collected.

Drill stem testing

No drill stem tests were run in West Seahorse 3.

Logging while drilling (LWD)

MWD/LWD services were provided by Schlumberger and full details of their operation are recorded in their End of Well Report included herein as Enclosure 4. LWD operations are briefly tabled below.

LWD Run summary 1, 122-1123mMDRT.

To be filled in at the end of each run by the LWD Engineer and verified by the Well Site Geologist

General Data							
Well Name	West Seahorse-3	MWD Run#	1	Date	25-Apr-2008	to	28-Apr-2008
Service Company	Schlumberger D&M	BHA#	2	Drilled Interval	125m MDRT	to	1123m MDRT
UWI				Wiped Interval	N/A	to	
Engineers	Jun Ikeda, San Thida Aung						

Hole Data									
Hole Size	17.5 in	Inc Start	0.83°	Inc End	27.05°	Azi Start	65.83°	Azi End	63.32°
Mud Data									
Mud type	WBM (PHG)	Mud Weight sg	1.13	PV / YP	5 / 15	CI mg/l	16,000		
% HG Solids	3.1	K+ mg/l	-	Rmf	-	Rm	-		
Drilling Data									
Metres Drilled	998	Avg ROP m/hr	60	Avg WOB klb	22	Avg Torque kftlb	4.83		
RPM	166	Flow Rate GPM	1060	SPP psi	2596	BHCT	-		
Bit Data									
Make	Baker Hughes	Type	Mill Tooth	Depth In	125m	Depth Out	1123m		
Number Jets	3	Sizes	20/32"	Condition Out	2-2-WT-A-E-In-BT-TD				

BHA Data														
BHA Item	Bit	Mud Motor	String Stab	Cross Over	Float Sub	NM Pony Collars	Cross Over	MWD	NM Drill Collars	Drill Collars	Jar	Drill Collars	Cross Over	HWDP
OD (in)	17.5	17.25	17	9.5	8	8	8.5	8.25	8	8.25	8.19	8.25	8.25	7.25
ID (in)	N/A	N/A	2.81	3	2.88	2.88	2.81	N/A	2.88	2.88	3	2.88	2.81	3.25
Length (m)	0.41	10.10	2.42	1.23	0.80	7.0	0.47	8.49	18.1	46.99	9.68	18.9	1.22	112.84
Total (m)	0.41	10.51	12.93	14.16	14.96	21.96	22.43	30.92	49.02	96.01	105.69	124.59	125.81	238.65

MWD / LWD Tool Data				
Tool Type	TeleSCOPE			
Sub Type	MWD			
Tool OD / ID (in)	OD=8.25, ID=N/A			
Mem Sample Rate (sec)	N/A			
Bit to Sensor Offset (m)	26.56			
First Reading (m)	154.20			
Flow Rate Range for Pulsar Configuration		600-1200 GPM		

Data Acquisition			
Interval Logged (m)	Pressure	Gamma	Resistivity
Meters Logged, %	N/A	N/A	N/A
Meters Bad Data / Interval, %			
Meters No Data / % Interval (m)			
Density Calibration			
(Calibration filename format = ADN, Size, S/N, Date mmddyy, Time hhmm)			
Pre Run Calibration file	N/A		
Post Run Calibration file	N/A		
Comments			

MWD/LWD Time Analysis					
Date & Time In	25/04/08 22:30 hrs	Drilling time	31.0 hrs	% Total	63.27
Date & Time Out	28/04/08 08:30 hrs	Wiping Time	N/A	% Total	0
Time In Hole (hrs)	58.0	Tripping Time	16.5 hrs	% Total	33.67
Pumping time (hrs)	37.3	Down Time	N/A	% Total	0
		Circ Time	1.5 hrs	% Total	3.06

Remarks: D&I run only. Objective was to kick the well off and stop in the tangent section to set protective casing above the target interval. No MWD GR or LWD tools run in the string. The run was successful. At the end of the run the actual well path was 2.50m to the right and 4.5m below the proposed line. Centre to centre was 5.25m at 1094.42 mMDRT (1014 mTVDRT).

LWD Run summary 2, 1123-1810mMDRT.

To be filled in at the end of each run by the LWD Engineer and verified by the Well Site Geologist

General Data							
Well Name	West SeaHorse-3	MWD Run#	2	Date	2-May-2008	to	5-May-2008
Service Company	Schlumberger D&M	BHA#	3	Drilled Interval	1123	to	1810
UWI				Wiped Interval	N/A	to	
Engineers	Jun Ikeda, San thida Aung						

Hole Data									
Hole Size	12.25 in	Inc Start	25.87°	Inc End	8.74°	Azi Start	63.39°	Azi End	56.02°
Mud Data									
Mud type	KCl Polymer WBM	Mud Weight ppg	9.4-9.6+	PV / YP	10 / 25	CI mg/l	36,000		
% HG Solids	2.2	K+ mg/l	40,000	Rmf	0.1086 ohmm @ 22°C	Rm	0.1203 ohmm @ 22°C		
Drilling Data									
Metres Drilled	687	Avg ROP m/hr	3.3-107.4 (36.1)	Avg WOB klb	1.8-38.2 (13.2)	Avg Torque kftlb	1.4-14.9 (8.0)		
RPM	56-171 (149)	Flow Rate GPM	930-1055 (1012)	SPP psi	1246-1910 (1728)	Maximum BHCT	58 °C		
Bit Data									
Make	Reed Hycalog	Type	PDC	Depth In	1123	Depth Out	1810		
Number Jets	6	Sizes	15 15 15 16 16 16	Condition Out	3-1-CT-A-X-I-WT-TD				

BHA Data												
BHA Item	Bit	Power Drive	PD Receiver	Flex Collar	Resistivity Tool	MWD	NM Drill Collar	Drill Collar	Jar	Drill Collar	Cross Over	HWDP
OD (in)	12.25	9.25	9.50	8.25	8.25	8.25	8.00	8.00	8.00	8.00	8.00	5.50
ID (in)	3.00	3.00	6.00	5.00	3.90	N/A	2.81	2.81	3.00	2.81	2.81	3.25
Length (m)	0.30	4.20	1.87	2.95	4.22	8.49	8.65	9.45	9.68	9.44	1.22	112.84
Total (m)	0.30	4.50	6.37	9.32	13.54	22.03	30.68	40.13	49.81	59.25	60.47	173.31

MWD / LWD Tool Data						
Tool Type	RAB 8	RAB 8	RAB 8	RAB 8	RAB 8	TeleSCOPE
Sub Type	Gamma	Resistivity	Resistivity	Resistivity	Resistivity	MWD
Tool OD / ID (in)	OD=12.13, ID=3.90					OD=8.25, ID=N/A
Mem Sample Rate (sec)	5 sec	5 sec	5 sec	5 sec	5 sec	N/A
Bit to Sensor Offset (m)	Gamma=10.49	Shallow=11.26	Medium=11.13	Deep=10.96	Ring=10.75	Survey=17.67
First Reading (m)	1117	1117	1117	1117	1117	1143.3
Flow Rate Range for Pulsar Configuration 600-1200 GPM						

Data Acquisition			
	Pressure	Gamma	Resistivity
Interval Logged (m)	N/A	1117 – 1799.5	1117 – 1799.3 (Ring)
Meters Logged / % Interval		682.5 / 98.5%	682.3 / 98.5%
Meters Bad Data / % Interval		0	0
Meters No Data / % Interval (m)		10.5 / 1.5%	10.7 / 1.5%
Density Calibration			
(Calibration filename format = ADN, Size, S/N, Date mmddyy, Time hhmm)			
Pre Run Calibration file	N/A		
Post Run Calibration file	N/A		
Comments	Density tool not run		

LWD Time Analysis					
Date & Time In	2 May 2008, 17:30hrs	Drilling time	26.5	% Total	42.7
Date & Time Out	5 May 2008, 06:00hrs	Wiping Time	0	% Total	0
Time In Hole (hrs)	60.5	Tripping Time	14.0	% Total	22.7
Pumping time (hrs)	41.48	Down Time / Other	0 / 18.0	% Total	0 / 29.0
		Circ Time	3.5	% Total	5.6

Remarks: The objective of this run was to continue the tangent section and drop angle through the target horizons to TD. At TD the actual well path was 6.2m left and 6.8m high to the planned trajectory. The quality of both real time and memory logs was good (ROP was controlled at 30m/hr maximum through the target to ensure good RT data was available). RT log quality was sufficient for well correlation and first indications of possible pay zones. No intervals of bad or missing data were present.

Wireline operations and summary

Wireline log services were provided by Schlumberger and the table below summarizes operation parameters. Full details of the operation are included in Enclosure 5.

Date	5/May/08					West Seahorse-3									
Log Run Number (Suite / Run):	1	/	1												
Surface Temperature	28°C														
Depth Driller:	1810	metres													
Depth Logger:	1775	metres				Logging tools tagged up early - could not reach TD									
Bottom Log Interval:	1775	metres													
Top Log Interval:	110	metres													
Casing Driller:	1117	metres				Size:	13 3/4"	Weight:	68 lbs/ft	ID:	12.415"				
Casing Logger:	1117	metres													
Bit Size	12.25"														
Type of Fluid in Hole	KCl/PHPA														
Density	9.7	ppg				x Barite		Hematite		x Other (Salt)					
Viscosity	44					Titrated Chlorides	36,000	Nitrates							
pH	9					Titrated Calcium	280	Potassium	40000 ppm						
Fluid Loss	8.3	HTHP				Barite	2.2	% Oil / VWater Ratio							
Source of Sample	Flowline					Use a circulated mud sample for each analysis.									
Rm	0.1127	@	22.6	°C											
Rmf	0.1014	@	22.2	°C		0.0976	@ 23.9°C (75°F)								
Rmc	0.166	@	23	°C											
Log	Track	Scale Range			Comments (units, line codes, etc.)										
GR	1	0		150											
SP					n/a										
Caliper	1	10		20	Appropriate 10" range										
Bit Size	1	6		16	Appropriate 10" range										
Resistivity	2	0.2		200											
Density	3	1.65		2.65											
Correction	3	-0.9		0.1											
Pe	3	0		20											
Neutron	3	60		0											
Sonic	3	240		40											
Tension	Depth	10,000		0											

ATTACHMENTS

Attachment 1: Well Montage

Attachment 2: Bit and BHA Record

Attachment 3: Mud Report

Attachment 4: Casing Report

Attachment 5: Cementing Report

Attachment 6: LOT/FIT Report

Attachment 7: Directional Drilling Report

Attachment 8: Activity Summary Reports

Attachment 9: Well Cost Summary

Attachment 10: Description of cuttings

Attachment 11: Daily geological reports

Attachment 12: MSCT photography

Attachment 13: Validity checks and analyses of MDT samples

Attachment 14: Organic Geochemistry Report

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Enclosure 2: Drilling Data Plot

Enclosure 3: Mud Log Plot

Enclosure 4: LWD Log Plot

Enclosure 5: Wireline Log Plot

Attachment 1

Well Montage

Attachment 2

Bit and BHA Record

Attachment 3

Mud Report

Attachment 4

Casing Report

Attachment 5

Cementing Report

Attachment 6

LOT/FIT Report

Attachment 7

Directional Drilling Report

Attachment 8

Activity Summary Reports

Attachment 9

Well Cost Summary

Attachment 10

Description of Cuttings

Attachment 11

Daily Geological Reports

Attachment 12

MSCT Photography

Attachment 13

Validity Checks and Analyses of MDT Samples

Attachment 14

Reservoir Fluid Study

Enclosure 1

Gas Log Plot

Enclosure 2

Drilling Data Plot

Enclosure 3

Mud Log Plot

Enclosure 4

LWD Log Plot 1:500

Enclosure 5

Wireline Log Plot 1:500