

# 1. Executive Summary

The Ocean Bounty MODU was towed from Eagle Bay's Northright-1 location to Thylacine-1, the first well to be drilled in the Origin/Woodside Otway basin campaign. The rig was towed with the Pacific Sentinel and Pacific Conqueror. Thylacine-1 officially started at first anchor on bottom at 00:00hrs on the 4<sup>th</sup> May 2001. 4 primary anchors were run, the rig ballasted down to drilling draft and then the final 4 secondary anchors run and pretensioned. The anchor running operation took longer than planned with problems experienced during chasing the penant chain chaser cable back to the rig and when running the anchors from the rig.

The well was spudded on the 5<sup>th</sup> May with a 36" hole section drilled from seabed (confirmed at 126.4mRT) to 182.2mRT. A totco survey was dropped at TD prior to pulling out of hole. The 30" x 20" casing was run and cemented at 181mRT.

The 20" shoe was drilled out and a 17 1/2" section was drilled to 752mRT. The section took longer to drill than expected. The hole was displaced to an unweighted gel and an inhibitive KCl pill spotted across the Gellibrand Marl and an EMS dropped prior to pulling out hole. The 13-3/8" casing was run and cemented to seabed without problems.

The Dowell deep sea express cement plugs, float collar and shoetrack were drilled without problems. 3m of new formation was drilled and an FIT performed to 2.10sg EMW. The 12 1/4" section was drilled from 752 – 1855mRT from the base of the Gelibrand Marl through to the Belfast Mudstone. The string was pulled out of hole without overpulls and Schlumberger wireline logs run across the open hole section. The logging string tagged bottom 20m high indicating cuttings had settled while the 12 1/4" BHA was pulled out of hole. It was decided to conduct a wiper trip prior to running casing. Large volumes of cuttings and cavings were circulated out of the hole indicating borehole instability. The mud weight was increased from 1.18sg to 1.24sg in an attempt to control the problem.

A 10-3/4" x 9-5/8" casing string was run to 1835mRT and required washing down to a shoe depth of 1849.85mRT. The casing hanger was run with both internal and external lock rings. The 10-3/4" casing was run to allow installation of a subsea safety valve in the event of a later completion. The casing was cemented with a lead and tail cement design. Good returns were observed at surface throughout the job. Difficulties were experienced in setting the wearbushing and a jetting sub run was required to set the wearbushing.

The 9.625" shoe track was drilled out with a HC408 PDC bit on a rotary assembly. During the drilling of the shoe track the string jacked off several times around the BHA and hydrauliced out of the hole. This was probably due to the use of the dog sub which considerably reduces clearance around the bit. The 8.5 " hole was drilled to a depth of 2165m without incident. Gas peaks of up to 19% were observed and due to the concern that the peaks may be occurring during connections the Mud weight was raised to 1.30sg. The instantaneous ROP was controlled to 30m/hr to allow the geologists to pick the core point. At 2165m a sample was circulated up and the decision made to pull the BHA for a core barrel. A CD93 corehead was made up on a 36m barrel and RIH./ It was necessary to wash and ream from 2126 to bottom at 2165m. After circulating the ball was dropped and a 36m core was cut from 2165m to 2201m at an average ROP of +/- 12 m/hr. The core was recovered and laid out. A total of 35.7m was recovered (99.2%). A second HC408 bit was made up and RIH. Whilst reaming the cored section the Anadrill depth logging system malfunctioned resulting in spurious depth readings over this interval of MWD log. The interval from 2201m to 2513m was required to be drilled using doubles due to excessive rig heave arising as a consequence of the heavy seas. The 8.5 " hole was continued to a final depth of 2710m without further incident. Heavy back reaming was required to pull out of the hole back to the cored section at 2165m. Due to the heavy nature of the reaming, it was decided to wipe the lower section of the hole. Having been wiped once the trip out was uneventful.

Schlumberger was rigged up and the first log was run. An extensive MDT program was then run consisting of 84 pretests and 14 samples. Whilst attempting the last MDT sample the tool became stuck in the hole and was fished using an overshot using the cut and thread technique. Once retrieved a wiper tip was performed. It was again necessary to ream down to bottom once below the cored interval (2201m) however the hole cleaned up well and the trip out was uneventful. The remainder of the logging program was then completed without incident.

On completion of the logs a 7 " liner was run and cemented from 2708.2m to 1654.9m. A pip tag was run at a depth of 1998.6m for future correlation. A BBL reamer shoe was run in the event that reaming would be required however hole conditions for running the liner were good. After cementing the liner the top packer was set and the liner and packer tested to 4000psi.

An EZSV was made up and run in on 3.5"/5" drill pipe to a depth of 1680m. After setting the EZSV a balanced cement plug was set from 1680m to 1610m. A 1.5sg hi vis pill was then set from 1550m to 1300m. A second suspension plug was then set from 1300m to 1245m. The well was then displaced to inhibited mud and the riser displaced to sea water. After pulling the wear bushing the second cement plug was confirmed to be in place at 145m with a 10klbs tag. After POOH the weather conditions became unsuitable for pulling the BOPs and it became necessary to wait on weather for 8 hrs prior to recommencing the operation. The BOPs were then retrieved. An attempt was made to retrieve the PGB however in spite of the retaining pins and the retrieval tool functioning as designed, the PGB was not able to be released due to an excessive cement accumulation around the base of the guidebase and gimble. After abandoning the guidebase retrieval operation the corrosion cap was run and filled with soluble oil. An attempt was made to shear out the guidelines however #3 guideline parted when the C rings used to run the 30" fouled underneath the post top. The remaining guidelines were cut with the ROV whilst the anchors were being pulled. The Ocean Bounty left the Thylacine-1 location at 2000hrs on the 28<sup>th</sup> of May 20001 en route to the Geographe-1 location.

## 2. Summary Data

Well:	Thylacine 1	
Designation:	Vertical Exploration Well	
Permit:	T/30P	
Operator:	Woodside Energy Ltd.	
Commencement Date:	00:00hrs	4 <sup>th</sup> May 2001
Spud Date:	03:30hrs	5 <sup>th</sup> May 2001
TD Date:	19:30hrs	18 <sup>th</sup> May 2001
Release Date:	20:00hrs	28 <sup>th</sup> May 2001
Total Elapsed Dry Hole Days:	13.19 days	
Spud to TD Days:	10.02 days	
Total days on Well	24.83 days	
Drilling Rig/Contractor:	Ocean Bounty / Diamond Offshore General Company	
Water depth:	101.4 m (LAT)	
Rotary Table above MSL:	25.0 m	
Geographic Location:	39° 14 ' 27.592" South	142° 54' 44.169" East
UTM Co-ordinates:	5 654 721.5 m North	665 030.3 m East
Total Depth: (Planned)	2710 mRT (2695 mRT)	
Well Status:	Suspended	
Budget Well Cost:	A\$13.7M	
Actual Well Cost:	A\$14.4M	

Note : All depths given in metres below rotary table, unless otherwise specified