

Taranga-1 Technical Abstract:

The exploration wildcat Taranga-1 well was drilled by Shell Todd Oil Services Ltd as a farm-in commitment. The well is located in offshore Taranaki within PPL38444 which was previously operated by Sun Oil New Zealand Ltd, and was designed to test Prospect Gamma. This is a large faulted four-way dip closure seismically mapped at top Cretaceous level. Spudded on May 6, 1992 Taranga-1 was drilled to 4250m bkb. No testing was performed and the well was plugged and abandoned as a dry hole on 24 June, 1992. The location of Taranga-1 is on seismic line 80NM-107 at shot point 1950 and New Zealand Map Grid 6247935.2m N 2533762.0m E.

Pohokura-2 Technical Abstract:

Pohokura-2 was spudded at 06:00 hours on May 3, 2000 using the jack-up drilling rig Ensco 50, The well was a vertical, exploration well with the major objectives to determine the top reservoir elevation, determine sand distribution and thickness to the north of the Pohokura anticline, and to confirm and acquire hydrocarbon samples to compare with the previously drilled Pohokura-I .

Pohokura-2 was drilled five kilometres NNW of Pohokura-I and reached a total depth of 3831 metres on May 28, 2000. The well targeted the Kapuni Group Maui Sands, intersected at 3533m AH. Wireline logging indicated a net 62.2 metres of pay in the Maui Sands. Two DSrs were performed, DST 1 between 3614 – 3632 metres flowed a maximum of 18.4 MMscfd of gas and 1637 bopd condensate. DST 2 achieved a flow rate of 30.7 MMscf per day of gas and 2670 bopd condensate. Draw down was 228psi, with the reservoir pressure of 6253psi. Pohokura-2 confirmed the presence of the high quality Maui sands in the north of the anticline. Two conventional 6" cores were cut in the Maui Sands at 3575-3600, and 3600-3630metres. The core contained six sand-dominated lithofacies, and two mud prone lithofacies. Porosity and permeability of the sandstones is highly variable, in general 6.8 12.7%, 0.13-58mD. Pohokura-2 was plugged and abandoned after testing, with the Ensco 50 released on the June 28, 2000.

Wainui-1 Technical Abstract:

The objective of Wainui-1 (PPL 38049) was to evaluate the reservoir properties and hydrocarbon potential of the coal measure sequence of the Pakawau Formation or its equivalent. The exploration well Wainui-1 was abandoned as a dry hole.

Tane-1 Technical Abstract:

Well Resume Tane-1 Located 38 deg 56'20" S 172 deg 38'20" E. T.O. 4542m Bdf. The objective of the well was to evaluate the reservoir properties and hydrocarbon potential of the Pakawau group (Kapuni and the Pakawau Formations or their equivalents). The well was abandoned at 4542m bdf after penetrating some 1256m of alternating sandstones, coals and shales representing the Kapuni Formation equivalent and the Pakawau Formation. Apart from minute Quantities of background gas, no hydrocarbons were encountered.

Kora-1 Technical Abstract:

The Kora-1 exploratory well was drilled to test the Eocene Tangaroa Sandstone Member within a large dome structure associated with a Miocene age volcano. Kora-1 was drilled to a TD of 3428 m and encountered significant indications of hydrocarbons in the top of the Miocene volcanics section and in the upper and lower Tangaroa Sandstone. Results of the 3 drill stem tests evaluating the Tangaroa shows indicated that the Tangaroa Sandstone Member was a tight formation. However, the Miocene volcanic section tested 1168 BOPD and the well was subsequently plugged back and sidetracked as Kora-1A. A long term production test was conducted and an average flow rate of 668 BOPD was sustained. The well was plugged and abandoned.

Witiora-1 Technical Abstract:

Witiora-1 is located offshore in 128.5m of water, 30km west of New Plymouth in PPL 38113. Drilling of the well fulfils the work programme for the third year of the Licence. Interpretation of seismic data on a 2.5km grid indicated the presence of a structural high covering some 80 sq km in the NE corner of the Licence. This north to south elongate dome (Prospect Alpha) with approximately 250m vertical closure at basement level is situated on the eastern margin of the Western Platform. Witiora-1 was positioned to test potential reservoirs from the Miocene Mokau formation through the basal Tertiary/Upper Cretaceous Pakawau on the southern of the two Prospect Alpha culminations. Witiora-1 was plugged and abandoned as a dry hole on 21 March, 1984.

Pateke-2 Technical Abstract:

The Pateke-2 well was spudded on 1 August 2004. The well, a replacement for the Pateke-1 well, was designed to test the Paleocene Kapuni F reservoir in the structural closure nearest to proven oil pools in the same reservoir as the Tui-1 and Amokura-1 wells and also to test all of the lower Kapuni F sandstone members (F2 through F7). The primary objective of the well was to establish incremental oil reserves in an effort to surpass economic thresholds for development in the Tui 3D area. The Pateke-2 well penetrated 12 meters of high quality crude oil on 13 meters of brine at the top of the Kapuni F. Pateke-2 reach a total depth of 3862 m and was plugged and abandoned as a Kapuni F oil discovery. Plugged and abandoned 18 August 2004.

Ariki-1 Technical Abstract:

Ariki-1 was drilled in PPL 38048 offshore Taranaki, NZ. It was spudded on Dec 9, 1983 with a TD of 4831m.bdf reached on Feb 14, 1984. Apart from minor amounts of gas no hydrocarbons were encountered and following final logging the well was plugged and abandoned as a dry hole on Feb 26, 1984. Ariki-1 was the first well in the Taranaki Basin to test a prospect with a geological setting associated with major Cretaceous taphrogenesis.

Tui-1 Technical Abstract:

Tui-1 was spudded on the 24th January 2003 to test three potential reservoir intervals with a primary objective in shallow marine sandstones of the Eocene Kapuni O, a second objective in deep water turbidite sandstone of the Miocene Moki A and a tertiary objective in paralic sandstones of the Palaeocene Kapuni F. The tui-1 well found a purported paleo oil column in the primary objective Eocene Kapuni O sandstones. The failure of the primary objective is lack of 4-way dip closure. Tui-1 well found brine in the second objective Miocene Moki A sandstone. The Tui-1 well penetrated 10 metres of high quality crude on 26 metres of brine in the Tertiary objective Kapuni F sandstones. Tui-1 reached a total depth of 3902 metres in Basement on the 9th of February 2003 and a plug and abandonment date of 15 February as a Kapuni F discovery.