

## Thylacine Rekindles Otway Interest

Origin Energy has had interests in the Otway Basin since 1989 and its Otway portfolio has grown substantially, with the company becoming the region's key player in terms of gas exploration and production. In addition to extensive interests in onshore permits, Origin expanded its portfolio to include offshore permits in 1999. Exploration in these areas culminated in the discovery, in 2001, of the Thylacine and Geographe gas fields that have established the Otway as a significant gas province.

In their offshore permit areas, the company's short term focus is on assessing the feasibility of the Geographe and Thylacine fields for commercial development. These feasibility studies will be conducted by Woodside Energy on behalf of the joint ventures. It is expected that a period of at least 12 months will be required to complete feasibility studies and define the optimum development concept.

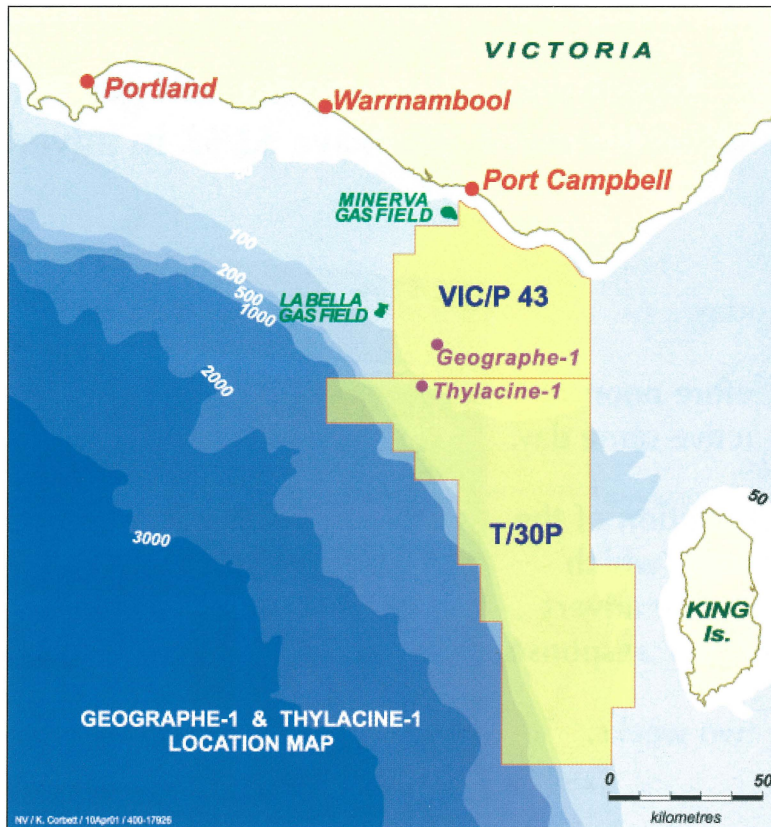
Thylacine-1, the Otway's largest gas discovery to date, is located in T/30P, approximately 70 km offshore from Port Campbell on the Victorian coast. The Thylacine field has been established as having an areal extent of approximately 30 km<sup>2</sup>.

Drilled in May 2001, Thylacine-1 recorded a gross gas column of approximately 280 m. The gas has an inerts content of approximately 11% and gas-in-place has been estimated as probably exceeding 600 Bcf, and possibly exceeding 1 Tcf.

As a follow up to the success of Thylacine-1, the Origin (30%), Woodside Energy (50%) and Benaris International (20%) joint venture drilled the Thylacine-2 appraisal well, located 5.7 km from the Thylacine-1 discovery well, in August/September 2001

Thylacine-2 was drilled to a total depth of 2530 mRT. Wireline logging and pressure testing indicated the presence of gas over a gross interval of around 230 m. The gas had a similar composition to that in Thylacine-1, with inerts content approximately 10%. Cased hole production testing produced a maximum flow rate of 28 MMcfpd, which was tubing constrained.

As with the earlier Thylacine and Geographe wells, drilling was conducted using the *Ocean Bounty* semi-submersible drilling rig.



Drilling operations for the wells were conducted by joint venture participant Woodside Energy under an agreement with Origin, who is the operator of the permits.

Geographe-1, the second sizeable Otway find, is situated in Victorian waters in VIC/P43, approximately 55 km from Port Campbell. The discovery well was drilled in June and has estimated gas-in-place in the order of 500 Bcf. Tests revealed the presence of a single gross gas column of approximately 240 m in interbedded sands and shales of the Flaxmans/Waarre Formation, between 1816 mRT and 2056 mRT, approximately. The gas has an inerts content ranging from 6 to 7%.

The Geographe North-1 exploration well, located 4 km north of Geographe-1, drilled a separate structure to the north of Geographe-1 in September/October 2001. Geographe North-1, drilled in a water depth of 82 m, proved unsuccessful, encountering only minor gas indications.

Origin has a 30% interest in the VIC/P43 permit, the remaining share belonging to Woodside Energy (55%) and CalEnergy Gas (15%).

The joint venture acquired extensive 3D seismic data over VIC/P43 and northern T/30P in 1999/00, and are likely to purchase about 1500 km<sup>2</sup> of 2D data over T/30P from Seismic Australia in late 2001. These data will enable assessment of the prospectivity of the

remainder of T/30P, which is largely unexplored.

Onshore, Origin holds exploration and production acreage across the South Australian and Victorian Otway Basin regions, operating 14 onshore exploration permits.

Following the Katnook and Haselgrove discoveries of 1994, much of Origin's activity has focussed on the adjacent permits, PEL 27, in which they have sole rights, and PEL 32, in which they hold 75% interest and operatorship.

Activity during 2001 included three exploration wells, Balnaves-1, Limestone Ridge-1 and McNamara Park 1, and four separate seismic surveys. Weather and access difficulties limited activity to the summer months.

The seismic surveys consisted of St George, a 65 km<sup>2</sup> 3D survey conducted by WesternGeco in PEL 83 with partner, Beach Petroleum, and three separate 2D surveys. The 60 km Nampara survey was acquired in PEL 27 in April, the 45 km Summer Hill survey in PEL 57 in May and a survey over Gipsy Creek in PEP 159.

A spokesperson for Origin commented, "The Otway Basin is generally highly faulted with the added complication of potentially high CO<sub>2</sub> content in any hydrocarbon discovery. 3D seismic acquired from 1995 has reinvigorated the basin exploration efforts with subsequent success in Haselgrove and Redman providing long term gas reserves for supply to residential, commercial and industrial users in the local region".

"The Ladbroke Grove field was discovered in 1989 but, with its high CO<sub>2</sub> content, remained uneconomic until Origin Energy developed a plan to use the high CO<sub>2</sub> gas for power generation with supply into the national electricity market".

Origin's plans for their Otway acreage in 2002 include interpretation of the recently acquired seismic, and review and consolidation of the drilling results from the 2001 program. Subject to that review and the satisfactory conclusion of Native Title related matters it is possible that field activity, involving acquisition of a seismic survey of about 50 km and up to four wells, may be undertaken in calendar year 2002.