



## ASX Announcement

December 15, 2004

# AWE's Trefoil-1 gas discovery takes major step towards commercial viability

Australian Worldwide Exploration Limited, on behalf of its wholly owned subsidiary AWE Petroleum Pty Limited ("AWE"), is pleased to advise that **after the completion of production testing operations, the Trefoil-1 well in the Bass Basin offshore Tasmania has been confirmed as a new gas field discovery and taken a major step towards commercial viability. The well will now be cased and suspended as a potential future gas and liquids production well.**

## The New Results

After setting a plug above DST 1 zone, the second production test over the zone 3040.5-3046.5 metres flowed at 9.9 million cubic feet per day (mmscfd) on a 56/64 inch choke with a flowing wellhead pressure of 645 pounds per square inch (psi). This zone was perforated with a small gun due to limited clearance through the DST string and is expected to be capable of higher production rates if completed for production. The gas contained only 2.8% carbon dioxide, no hydrogen sulphide, and was accompanied by approximately 253 barrels of separator condensate per day and 14 barrels per day of condensed water.

The latest flow rates follow those announced recently where the production test over the perforated interval 3141–3150 metres, flowed gas at a final rate of 16.3 mmscfd at a tubing pressure of 1,329 psi through a 48/64 inch choke. The gas flow was accompanied by approximately 145 barrels of condensate per day and 43 barrels of water per day, believed to be water of condensation.

Encouragingly, these intervals are from the lowest quality gas-bearing reservoir zones in the well.

## Positive Aspects for a Commercial Development

1. A significant volume of gas has now been proven in the Trefoil field. Whilst considerable geotechnical work is required to provide an accurate indication of recoverable reserves, the most likely "in-place" resource for the field is now estimated to lie in the range of 200 to 300 billion cubic feet of gas and 14 to 21 million barrels of associated liquids.
2. Wireline logging operations (including formation testing and sampling) has confirmed 50 metres of net gas pay over 8 zones in good quality sandstone reservoirs within the Eastern View Coal Measures (EVCM). This is the same geological formation that contains the gas-bearing sands being developed at the nearby Yolla gas and condensate field as part of the BassGas Project.
3. Production testing has now proven that even the poorest quality gas-bearing reservoir zones flow at commercial rates.
4. The gas is of high quality. Liquids content of the gas ranges from 50 to 100 barrels of liquids per million cubic feet of gas, which is comparable to the very rich Yolla field. The gas is also low in carbon dioxide, with all gas zones containing 3% or less. These are, on average, less than one sixth of the levels encountered in the Yolla field.
5. The existing offshore facilities at the nearby Yolla field have been designed and constructed to allow the easy tie-in of the Trefoil field. The capacity of the onshore and offshore pipelines have also been designed to produce at rates up to 50% greater than currently planned from the Yolla field.

6. Because of the presence of existing infrastructure, relatively modest capital expenditure is anticipated for the tie-in of the Trefoil field.

7. If the Trefoil field is developed, the nearby White Ibis gas and condensate field will also become a serious candidate for an "add-on" commercial development as part of the overall BassGas Project.

8. AWE's gas customer, Origin Energy, has a strong commercial incentive to take additional volumes of Trefoil gas.

## The Way Forward

AWE will now be working with its co-venturers to commence the requisite work to reach a decision on the commercial viability of a development of the Trefoil field as an integral part of the overall BassGas project. This forward programme will include:

1. Suspending Trefoil-1 as a potential future gas and liquids production well;
2. After all the laboratory analyses of well data are received and incorporated with the seismic information, commencing reservoir simulation modelling to more accurately determine the ultimate recoverable reserves;
3. Engineering studies and more detailed capital expenditure estimates for the connection of the Trefoil field (and potentially White Ibis) to the Yolla platform; and
4. Undertaking discussions with potential gas customers for the sale of additional gas from Trefoil (and potentially White Ibis).

In addition to the forgoing, some of the aspects of the Trefoil-1 well results have significantly upgraded the exploration potential of AWE's surrounding acreage holding. As a consequence, a more concerted future exploration effort in the greater Bass Basin area, including 3D seismic and drilling, is now being considered.

## Commenting on the well results, AWE's managing director Mr Bruce Phillips said:

*"The Trefoil-1 well result is a good outcome for AWE shareholders and very encouraging for the future of the Bass Basin as an emerging petroleum province.*

*"The un-drilled compartments of the Yolla field (AWE 30%) and several exploration prospects in T/18P have also been upgraded by the recently completed Yolla development drilling programme and the Trefoil-1 well results. These recent results have reinforced the cornerstone nature of the BassGas Project for AWE and demonstrated a positive outcome for our near-term strategy of organic growth from our existing acreage holdings.*

*"It is now conceivable that we will be ultimately producing from three fields in the Bass Basin (ie Yolla, Trefoil and White Ibis). In addition to this, our large exploration portfolio in surrounding areas has been significantly upgraded.*

*"In this light, we look forward to a long and rewarding association with our co-venturers to establish the Bass Basin as one of AWE's key asset areas for the decades to come.*

*"In the meantime, we will continue our strategy to emulate this outcome in our other cornerstone asset areas in the Otway, Perth and Taranaki Basins."*

### Participants in T/18P are:

<b>AWE Petroleum Pty Ltd ("AWE")</b>	<b>22.6%</b>
Origin Energy Resources Limited (operator) ("Origin")	41.4%
CalEnergy Gas (Aust) Limited	23.5%
Wandoo Petroleum Pty Ltd	12.5%

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145° 00

146° 00

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Yolla to  
Melbourne  
Gas  
Pipeline

Yolla Field  
323 PJ  
31 mmb liquids





Trefoil Field

White Ibis Field  
50 PJ  
5 mmb liquids

Yolla-3,4

40° 00

**LEGEND**

-  AWE PERMIT
-  GAS FIELD
-  LEAD / PROSPECT
-  PIPELINE



**Bass Basin  
PROSPECTS AND LEADS**

