

# Phoenix South-2 gas & condensate discovery

19 December 2016



## Highlights

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- Gas and condensate in Phoenix South-2 well near top of the primary Caley target
  - Elevated formation pressures prevent further drilling and evaluation
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Carnarvon Petroleum Limited (“Carnarvon”) (ASX:CVN) is pleased to inform shareholders that the Phoenix South-2 well has penetrated a definitive hydrocarbon-bearing interval at or near the primary Caley target.

The well drilled an estimated 39 metre hydrocarbon-bearing zone between approximately 5,176 and 5,215 metres with significant gas influx and elevated reservoir pore pressures. The well was unable to assess as much as 185 metres of additional potential hydrocarbon bearing Caley reservoir beneath 5,215 metres due to the higher than anticipated pressures being encountered.

Encouragingly, higher formation pressures typically support both larger volumes and higher gas and condensate flows rates over a given reservoir. They also require a different well bore design from that used in this well. Accordingly, for safety reasons, no further drilling and formation evaluation can occur in the current well bore.

The operator and Carnarvon will now assess these results and consider the most appropriate forward plan for assessing the entire Caley zone of interest.

Carnarvon’s Managing Director and Chief Executive Officer, Adrian Cook said: *“We are very encouraged with the results of this gas and condensate discovery and feel confident there is a significant amount of potential still to be assessed in the Caley formation beneath the current wellbore.”*

*The extent of the increase in reservoir pore pressure observed while drilling into the Caley formation could indicate a hydrocarbon body larger than any that we have previously encountered in the basin and even larger than we were expecting pre-drill.*

*We’ve taken another very important step in unlocking this new basin and we certainly look forward to further clarifying its potential as our forward work programs are finalised.*

*In the near term, we will work with the operator on the next phase of drilling in this and the other target structures in our Phoenix and Roc permits. The Carnarvon team will also take the opportunity to update the resource estimates for the Caley sandstone with this new information.”*

The Phoenix South-2 well is located within the WA-435-P exploration permit in the North-West Shelf of Australia. The equity interest holders are:

<b>Carnarvon Petroleum</b>	<b>20%</b>
Quadrant Energy (Operator)	80%

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Yours faithfully



**Adrian Cook**  
Managing Director  
Carnarvon Petroleum

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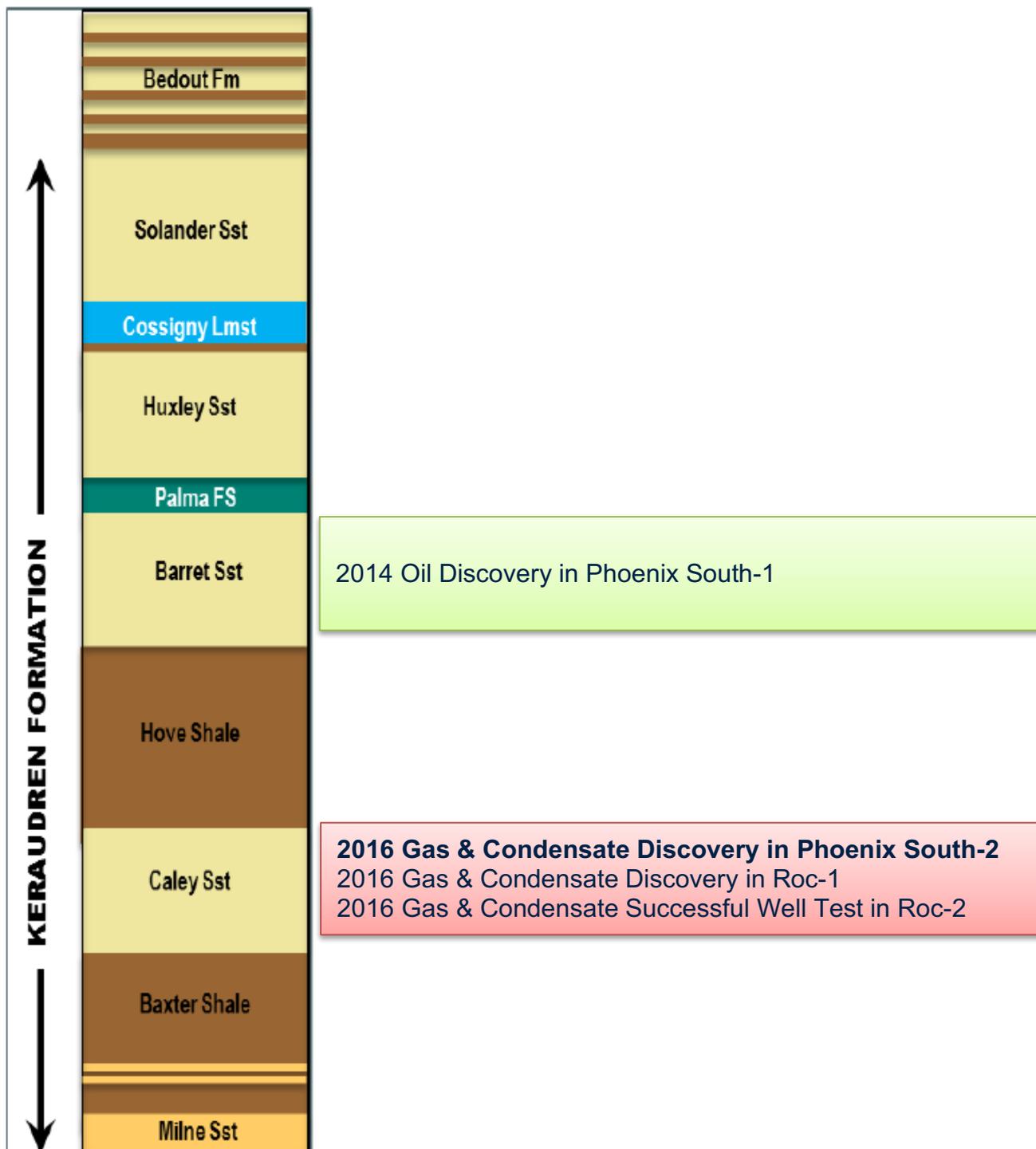
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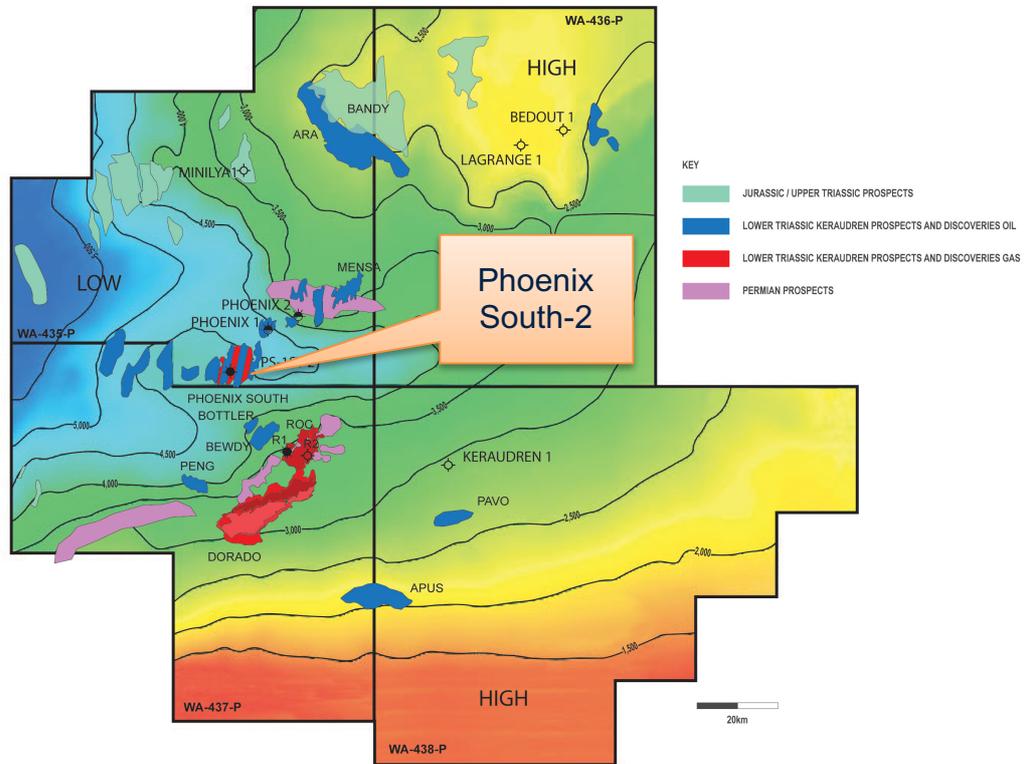
*This document may contain forward-looking information. Forward-looking information is generally identifiable by the terminology used, such as "expect", "believe", "estimate", "should", "anticipate" and "potential" or other similar wording. Forward-looking information in this document includes, but is not limited to, references to: well drilling programs and drilling plans, estimates of reserves and potentially recoverable resources, and information on future production and project start-ups. By their very nature, the forward-looking statements contained in this news release require Carnarvon and its management to make assumptions that may not materialize or that may not be accurate. The forward-looking information contained in this news release is subject to known and unknown risks and uncertainties and other factors, which could cause actual results, expectations, achievements or performance to differ materially, including without limitation: imprecision of reserve estimates and estimates of recoverable quantities of oil, changes in project schedules, operating and reservoir performance, the effects of weather and climate change, the results of exploration and development drilling and related activities, demand for oil and gas, commercial negotiations, other technical and economic factors or revisions and other factors, many of which are beyond the control of Carnarvon. Although Carnarvon believes that the expectations reflected in its forward-looking statements are reasonable, it can give no assurances that the expectations of any forward-looking statements will prove to be correct.*

Figure 1: Stratigraphic column encountered by the Phoenix South-2 well with major formations outlined.



**Figure 2 - Location of the Phoenix South-2 well**

BASE TRIASSIC / TOP PERMIAN TIME STRUCTURE MAP (MILLISECONDS TWO WAY TIME)



**Figure 3: Caley depth map**

