

# Phoenix project – Phoenix South well update

1 February 2018

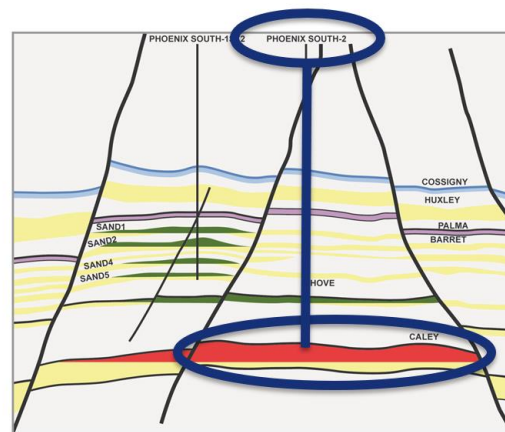


## Highlights

- Development Driller-1 (“DD-1”) drilling rig has reached port in South Africa for its planned maintenance
- Once maintenance work is complete the DD-1 rig will head to the Phoenix South-3 well location
- The Phoenix South-3 objective is to evaluate the Phoenix South-2 gas condensate discovery

Carnarvon Petroleum Limited (“Carnarvon”) (ASX:CVN) is pleased to provide the following update on its upcoming Phoenix South-3 drilling program.

Quadrant Energy (operator) contracted the Transocean Limited sixth generation GSF Development Driller-1 semi-submersible drilling rig (pictured below left) in 2017 to drill the Phoenix South-3 well. The rig commenced its tow to the well location from the northern hemisphere and has now reached South Africa where it will undertake scheduled maintenance. Once maintenance work is complete, the rig will then be towed to the Phoenix South-3 location.



 Existence of gas & condensate confirmed

The Phoenix South-3 well has been designed to evaluate the gas and condensate discovered at the top of the Caley interval in the Phoenix South-2 well (refer CVN ASX announcements on 19 December 2016 and 28 March 2017 and picture above right).

The Phoenix South-3 well will be located some 560 metres north northeast of the Phoenix South-2 well and has been designed to evaluate the Caley interval. This interval contained gas and condensate in the Phoenix South-2 well but couldn't be fully evaluated due to Caley interval pressures being greater than those planned for in the well design.

The Phoenix South Caley structure is estimated to contain a gross mean recoverable prospective resource of **489 Bscf of gas** and **57 million barrels of associated condensate** (being the equivalent of 143 million barrels of oil (“boe”), gross, Pmean) – Refer to ASX Announcement on 28 March 2017.

The Joint Ventures partners have a number of options under consideration for potential development of the Phoenix project resources. In this regard, the Phoenix South and Roc resources could be combined into a single gas condensate development. Currently the Roc structure volume is estimated to be at the minimum economic field threshold. The Roc structure has an estimated **332 Bscf of gas** and **20 million barrels of associated condensate** (being the equivalent of 74 million barrels of oil (“boe”), gross, 2C basis) – Refer to ASX Announcement on 14 November 2016. In 2016 the Roc-2 well performed a flow test and achieved a rate of 53 mmscf/d and 2,943 barrels of condensate per day which was the maximum flow rates possible using the test equipment.



**Carnarvon Petroleum**  
Quadrant Energy (*Operator*)

**20%**  
**80%**

Yours faithfully

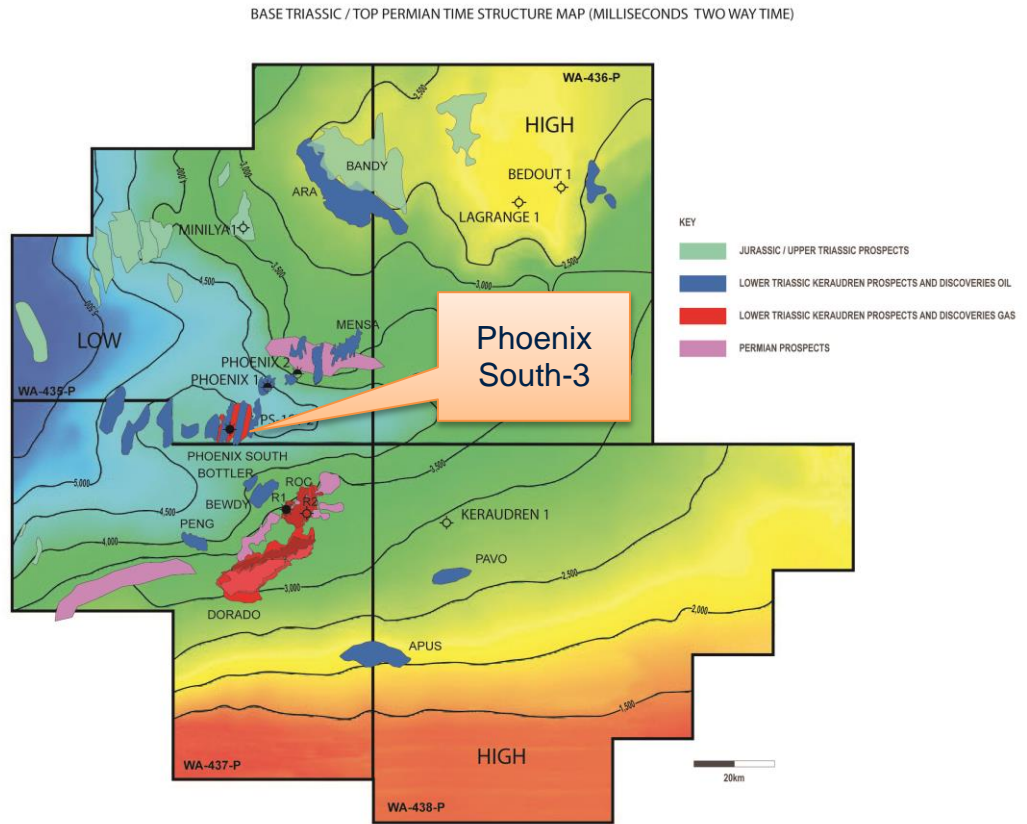


**Adrian Cook**  
Managing Director  
Carnarvon Petroleum

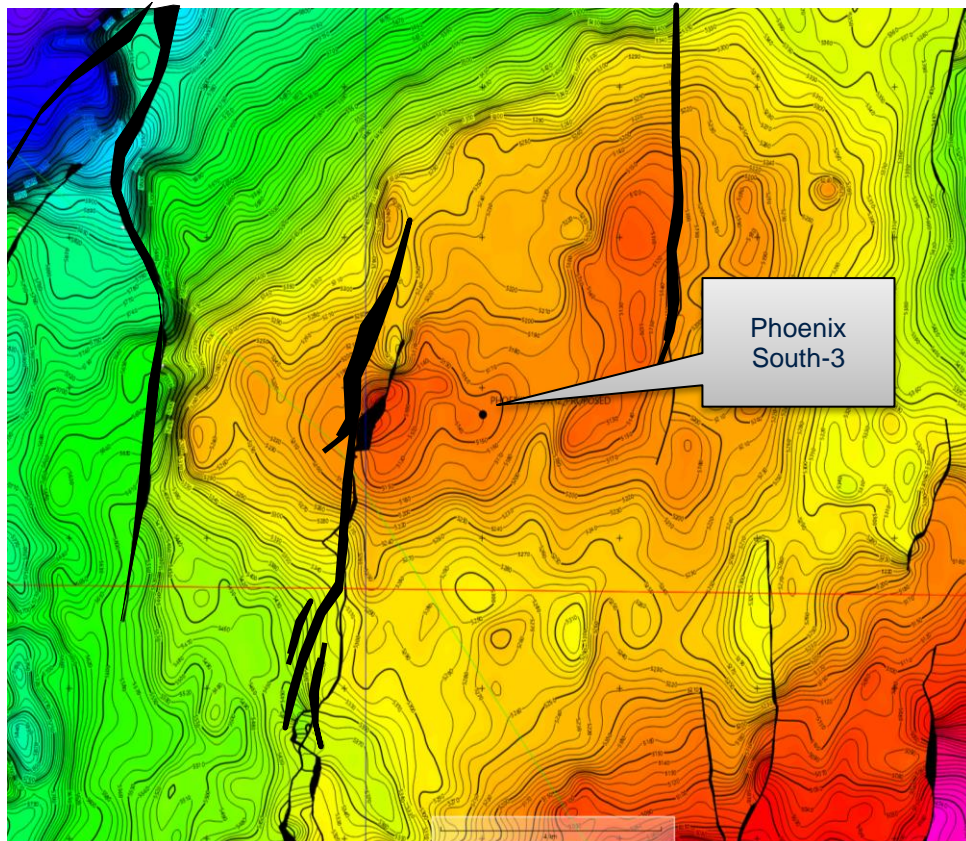
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**Figure 2 - Location of the Phoenix South-3 well**



**Figure 3: Caley depth map**



## **Cautionary Statement**

There are numerous uncertainties inherent in estimating reserves and resources, and in projecting future production, development expenditures, operating expenses and cash flows. Oil and gas reserve engineering and resource assessment must be recognised as a subjective process of estimating subsurface accumulations of oil and gas that cannot be measured in an exact way.

Prospective Resources are the estimated quantities of petroleum that may potentially be recovered by the application of a future development project and may relate to undiscovered accumulations. These prospective resource estimates have an associated risk of discovery and risk of development. Further exploration and appraisal is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

## **Resources**

All contingent and prospective resources presented in this report are prepared as at 14 November 2016 and 28 March 2017 (Reference: CVN ASX releases of 14 November 2016 and 28 March 2017). The estimates of contingent and prospective resources included in this announcement have been prepared in accordance with the definitions and guidelines set forth in the SPE-PRMS and have been prepared using probabilistic methods.

Carnarvon is not aware of any new information or data that materially affects the information included in this report and that all material assumptions and technical parameters underpinning the estimates in this presentation continue to apply and have not materially changed.

## **Competent Person Statement Information**

The Resource estimates outlined in this report were compiled by the Company's Chief Operating Officer, Mr Philip Huizenga, who is a full-time employee of the Company. Mr Huizenga has over 20 years' experience in petroleum exploration and engineering. Mr Huizenga holds a Bachelor Degree in Engineering and a Masters Degree in Petroleum Engineering. Mr Huizenga is qualified in accordance with ASX Listing Rules and has consented to the form and context in which this statement appears.

## **Forward Looking Statements**

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.