Phoenix South-1 Well Result Update

11 December 2014

Carnarvon Petroleum Limited (ASX: CVN) ("Carnarvon") is pleased to provide an update on the work being performed in assessing the results from the Phoenix South-1 well, and to provide some guidance on the likely timing of the drilling of the Roc well.

Apache on behalf of the Joint Venture (JX Nippon, Carnarvon and Finder Exploration) is undertaking a technically complex and thorough process of assessing the well results. To provide a sense for this, an outline of some of the work being undertaken has been included as an annexure to this update.

At a Joint Venture meeting on Tuesday 9 December 2014, Carnarvon was provided with a detailed update by Apache (the operator) of progress on their technical evaluation. Because this is such a unique discovery in terms of the type of oil discovered and the nature of the reservoir rocks, together with key data not yet being available from the laboratories, the data set is incomplete and it is not possible for Carnarvon to provide specific information about the size of the discovery at this time. Our concern is that such incomplete information has the potential to be misleading to investors without a significant amount of additional analyses and evaluation.

CEO Adrian Cook said, *"I promised shareholders at our AGM that I would provide them with an update on the progress of the work on the Phoenix South-1 well and I can report that a great deal of work is being done right now and that the results to date are encouraging.*

The discovery of oil at Phoenix South has caused the Joint Venture to re-evaluate everything it previously assumed about this basin and that has added extra time and complexity to the work schedule. Further there are no obvious analogous oil plays to provide guidance on how to evaluate this basin. Consequently, Apache require more time to receive, consider and integrate all of the data before Carnarvon is able to provide oil in place estimates, recoverability factors and recoverable volumes. I expect we will be in a better position to provide a more comprehensive update sometime toward the end of the first quarter of 2015.

I can confirm is that the oil sampled from the Phoenix South-1 well is exceptionally good quality light black oil (not condensate) with a high API gravity around 47^0 and highly favourable mobilities.

I can also report is that the Joint Venture has confirmed that the Roc Well (for which Carnarvon is fully funded) is expected to be drilled in the middle of 2015. The Roc well is considered to be one of the more prospective and commercially attractive wells to be identified so far within the Phoenix blocks."

For all enquiries please contact:

Shareholder Enquiries

Mr Thomson Naude
Company Secretary
Phone: (08) 9321 2665
Email: investor.relations@cvn.com.au

Media Enquires

Mr Tony Dawe
Professional Public Relations
(08) 9388 0944 / 0405 989 743
tony.dawe@ppr.com.au

Yours faithfully

Adrian Cook
Managing Director
Carnarvon Petroleum

About Carnarvon Petroleum (ASX: CVN)

Carnarvon Petroleum Limited (Carnarvon) is a Perth based company listed on the Australian Securities Exchange (ASX: CVN). The company's principal activity is oil and gas exploration and production.

Carnarvon's objective is to create material returns on its shareholder's investments, through delivering profitable and sustainable growth from the development, exploitation and commercialisation of oil and gas assets.

Carnarvon is focused on oil & gas exploration in the world-class province of the North West Shelf area off the coast of Western Australia.

Annexure – Technical Summary

There are two distinct outcomes associated with the Phoenix South-1 well, contributing to the length of the evaluation period. These are:

1. the discovery of a new oil bearing hydrocarbon province when gas was anticipated; and
2. low porosity rock interspersed with intervals of potential high flow characteristics.

Discovering a new oil bearing hydrocarbon province means that any previous work is either redundant or requires re-evaluated.

Dealing with hydrocarbon-saturated, low-porosity rock means that extra effort needs to be taken to determine which intervals of the reservoir contribute to deliverability or only add volume.

A number of key laboratory tests are required to determine net pay and potential productive deliverability from this new type of reservoir. These include:

Routine Core Analysis ("RCA")

The RCA on the core plugs was initially due to be completed late September 2014 but has only recently been completed. The tests carried out included measurements for porosity, grain density, horizontal permeability, fluid saturation and a lithologic description. These tests are useful for calibrating the well log results to determine gross and net pay, which in turn determines the volume of oil initially in place. While the RCA analyses have been completed, these do not definitively indicate which sections of reservoir contribute to volume and deliverability, and which sections of reservoir contribute only to volume. Special Core Analysis is required to determine this.

Special Core Analysis ("SCAL")

SCAL is a series of flow experiments on the core plugs. SCAL is distinguished from RCA by a number of additional measurements, in particular those investigating two-phase flow properties, determining relative permeability and capillary pressure. These tests have not yet commenced as they typically follow on from RCA. These tests will assist in determining the reservoir sections that contribute to flow and volume. Due to the nature of these measurements the results would typically not be available for a number of months.

Pressure, Volume & Temperature Analysis of fluid properties ("PVT")

PVT analysis of the reservoir fluids is critical to determine how fluid will flow through the reservoir and the behaviour of the fluid as it is being produced. The PVT analysis was recently completed and defined the fluid as "light black oil", significantly under-saturated in the reservoir with an API ranging around 47º. A highly under-saturated oil means a significant amount of energy is stored in the fluid and will aid in high initial flow rates. Additionally, these types of fluids are good candidates for water injection to maintain pressure and increase oil recovery. The analysis of the fluid also indicated a higher formation volume factor than initially anticipated, which would result in a lower estimate of oil initially in place.

Formation Micro-Imager ("FMI")

The FMI logging tool was run in the Phoenix South-1 well and analysis of these data continue. Results from the FMI interpretation will determine whether the reservoirs intersected in Phoenix South-1 are highly laminated reservoirs, which affects the determination of net pay and will also indicate (along with geomechanics) whether fractures will add to volumes and/or deliverability.

Geomechanics

During the drilling of the Phoenix South-1 well fractures were induced while drilling with relatively low mud weights. Studies are ongoing to determine whether fracturing can aid in increasing the recovery of fluids from the well, which in turn will lead to the determination of a range of recovery factors required for the estimation of recoverable resources. These studies are anticipated to be ongoing for several months and could have a significant impact on estimates of deliverability and ultimate recovery.