

# Phoenix South-1 Oil Discovery

18 August 2014



## Highlights

- **Four discrete oil columns confirmed**
- **Six oil samples recovered with API gravity of 46 to 48 degrees (light oil)**
- **Preliminary permeability estimates indicate potential productive reservoir**
- **New oil province discovered where Carnarvon holds an interest in surrounding 20,000 km<sup>2</sup>**

Carnarvon Petroleum Limited ("Carnarvon") (ASX:CVN) is pleased to advise a significant oil discovery in the Phoenix South-1 well in the North West Shelf in Western Australia. The discovery represents one of the most significant developments in Australian oil and gas in recent times. At this preliminary stage it is too early to quantify the recoverable volumes of oil. Further technical evaluation of log and core data will enable Carnarvon and its partners to be in a position to make that information public by the end of 2014.

Managing Director, Adrian Cook said; "*Carnarvon is excited to be part of this major new oil discovery at Phoenix South-1. This is the most significant new oil play in the North West Shelf since the Enfield discovery opened up the Exmouth Basin almost 20 years ago. The implications on the rest of our acreage are still being assessed, but the potential is extraordinary.*"

*I'm very proud to be involved with the Carnarvon team in taking a very early position in this area with our initial partner, Finder Exploration. A great deal of credit for this discovery also rests with Apache Energy who is the operator of the Phoenix South-1 well. Despite some initial challenges and setbacks, this well has delivered a significantly better outcome than any of us could have imagined."*

The cost estimate for the well to completion, including additional drilling, is within the guidance previously articulated to the market, and Carnarvon's net cost for this well is expected to be around A\$6 million. Carnarvon reported cash holdings of \$50 million as at 30 June 2014 and accordingly is in a strong position to fund these costs.

A technical evaluation of the results to date is provided at the end of this report.

The discovery of oil in the Phoenix South-1 well in WA-435-P has significant implications for the rest of the permit and the surrounding 20,000 km<sup>2</sup>, of which Carnarvon is holding a material equity interest. Work is currently underway to re-evaluate the previous Phoenix-1 discovery, and also the implications for the prospects at Roc-1 well in WA-437-P (Carnarvon 20%) and other prospects in the adjoining acreage. The technical work on this well and the basin wide work will take some time to evaluate to discover the full potential in this new oil play fairway.

The equity interest holders are:

<b>Carnarvon Petroleum</b>	<b>20%</b>
Apache Energy (Operator)	40%
JX Nippon	20%
Finder Exploration	20%

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**Yours faithfully**



**Adrian Cook**  
**Managing Director**  
**Carnarvon Petroleum**

*This news release contains 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 news release 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.*

## **Annexure to Phoenix South-1 Well Update – Carnarvon Technical Summary**

The well has now completed wireline formation evaluation operations. As at 06:00 hours on 17 August 2014 the well was preparing to drill ahead to investigate whether any further oil bearing sands are present below 4,540 metres Measured Depth (“MD”).

Wireline and formation pressure tools have confirmed the presence of at least four discrete oil columns within the Triassic Lower Keraudren Formation. These columns occur within an overall, sand-rich section between 4160 and 4540 metres MD.

Wireline formation evaluation indicated a range of relatively clean sands with porosities averaging around 6-8% across a net pay interval of 66 metres over a maximum closure of 46 km<sup>2</sup>.

Six oil samples were recovered from the well using a wireline formation evaluation tool. The oils are estimated to be light oils with 46 to 48 degree API. The estimate of permeabilities measured from the sampled zones ranged from tens to hundreds of millidarcies. The permeability measurements, along with the ability to extract fluid for testing purposes, are indicative of a productive oil reservoir.

The estimates for recoverable oil will require analysis of the core samples acquired at the completion of the formation evaluation program. These core samples will be analysed in the laboratory for reservoir properties. The results of the core analysis could take several months.

The commerciality assessment, including reserves estimates, require estimates for recoverable oil as well as consideration of development scenarios and cost, which has not yet been undertaken.

The estimated quantities of petroleum that may potentially be recovered from these discovered accumulations require the application of a future development project.

These estimates have a number of associated risks including risks related to further testing and risks related to development. Further testing results, including appraisal and evaluation, are required to determine the quantity of potentially moveable hydrocarbons.

The information on this announcement that relates to discovered accumulations is based on information compiled by Mr Philip Huizenga, the Company’s Chief Operating Officer. Mr Huizenga is a Qualified Petroleum Engineer and a Member of the Society of Petroleum Engineers with more than 25 years relevant experience. Mr Huizenga is a full-time employee of the Company. Mr Huizenga consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.