

Phoenix Area Update

8 June 2015



Highlights

- **Macquarie / Brookfield led consortium complete the acquisition of Apache's Western Australian business and reaffirm intentions to drill the Roc-1 well in 2015**
- **2016 plans include testing a successful Roc-1 well and drilling two contingent wells**
- **2017 plans receive important support from Government with the granting of a two year extension to August 2017 to complete the extensive work programs currently underway**
- **Work program comfortably funded through farm out carry US\$70 million (gross) and significant Carnarvon cash of approximately \$100 million**

Carnarvon Petroleum Limited ("Carnarvon") (ASX:CVN) is pleased to provide the following update on work being undertaken and planned in the WA-435-P, WA-436-P, WA-437-P and WA-438-P exploration permits, collectively referred to as "the Phoenix Blocks", located in the North West Shelf of Western Australia.

Macquarie / Brookfield led Consortium

On 5 June 2015 the Macquarie / Brookfield led Consortium successfully completed the acquisition of Apache's Western Australian business. This business includes all of Apache's Australian production assets, exploration permits and the management team and staff. They also announced that they would rename the business and it will now be called Quadrant Energy ("Quadrant"). Carnarvon has been in ongoing communication with the Quadrant team and is looking forward to continuing its business relationship with them at Phoenix and potentially other projects in the future.

Drilling

Since completing the Apache asset acquisition, the Quadrant team have confirmed the intention to drill the Roc-1 well in the fourth quarter of calendar 2015.

The Roc-1 well is situated in around 80 metres of water depth and the plan is to drill the well with a jack-up drilling rig.

Quadrant and JX Nippon will fund drilling and testing costs within WA-437-P to US\$70 million (gross cost). The current estimate to drill the Roc-1 well is around US\$45 million (gross). Any shortfall can be carried over into subsequent testing or drilling activities within the permit.

It is anticipated a successful Roc-1 well will be suspended to allow for re-entry within six to twelve months to complete more extensive well sampling and to flow test the well. This decision is based on factors pertaining to government approvals, cost and drilling processes.

Given the probability of success estimated for the Roc prospect, planning is also underway for the drilling of additional exploration and appraisal wells in late 2016. These will likely be subject to a successful Roc-1 result, joint venture and government approvals and rig availability.

Seismic plans

As previously reported (ASX: 13 January 2015), two new multi-client seismic programs are being acquired over the four exploration permits that make up the Phoenix Blocks.

The multi client (MC) 3D seismic project (referred to as the Capreolus MC3D) is one of the largest single site surveys ever undertaken in Australian waters, and reflects the exploration interest within and around the Bedout Sub basin.

The joint venture will license approximately 5,100 km² of the Capreolus MC3D and approximately 60% of this has now been acquired. The 3D data is expected to be processed and ready for interpretation early in 2016.

The new 3D will complement the 1,100km² Phoenix MC3D acquired in 2010/2011 and the 3,854 km² Zeester MC3D acquired in 2011/2012.

Reprocessing of the Phoenix MC3D is also nearing completion.

New 2D seismic data is being acquired over the majority of the remaining approximately 12,000 km² of the Phoenix area. Acquisition of this data, Bilby MC2D, is approximately 45% complete.

Prospect generation is the key activity following seismic acquisition, processing (including reprocessing) and interpretation. Given the timing of the different 2D and 3D surveys, it is anticipated that further prospect maps will become available at different times over the next 18 months.

Prospect mapping within the Zeester MC3D area is expected to be complete before the end of this year. Prospect generation within the Phoenix MC3D area is anticipated to be complete by early 2016. Prospect mapping for the Bilby MC2D and Capreolus MC3D areas are not expected to be complete until mid to late 2016 or possibly early 2017.

Technical work

The Quadrant led joint venture continues to work through post-well analysis of the Phoenix South-1 well and the surrounding wells in the permit. This work addresses many geological aspects including reservoir development and quality, the type and potential source of the oils discovered and where it may occur further in the permit. The amount of technical work being undertaken to evaluate a newly discovered hydrocarbon province necessitates a more thorough evaluation than for more established basins such as the Carnarvon and Dampier sub basins within the North West Shelf.

Two broad areas of study are currently being undertaken – those related to regional work around understanding this new hydrocarbon province and secondly those related to the reservoir characteristics with a view to understanding the potential development of the Phoenix South oil discovery and other prospective oil reservoirs in the province.

For the former, fluid inclusion studies are complete on all the previously drilled wells in the region which, when finalised around the middle of this year, will be incorporated into regional interpretation.

Along with petroleum system modelling and newly acquired seismic data, this will generate regional mapping and ultimately a portfolio of prospects across the Phoenix Blocks.

For the Phoenix South discovery, “special core analysis” (SCAL) is ongoing and expected to be complete by the end of calendar 2015. This allows for better delineation of the flow characteristics and recovery from the reservoir rock.

This work will be integrated into static and dynamic computer models with a view to having a better handle on the range of possible recoverable oil by the end of this year.

Forward planning summary

The joint venture has sufficient time to fully evaluate the recent Phoenix South-1 oil discovery, drill and assess the upcoming Roc-1 well and complete the regional petroleum review within the exploration permits. Given the extent of the work being undertaken the government recently agreed to extend the licence term until August 2017. This is beneficial to the joint venture because no portion of the acreage has to be relinquished before this newly extended date.



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

Background

The discovery of oil in the Phoenix South-1 well in the WA-435-P exploration permit is the first step in unlocking a new hydrocarbon province on the North West Shelf of Western Australia; the first new oil play in the region for 20 years.

The Phoenix South-1 discovery is located approximately 180 km north of Port Hedland WA in 133m of water. At the time of the discovery the area was very lightly explored, with a total of 7 wells drilled on poor data and sparse seismic coverage over four permits covering more than 22,000 km².

The acreage was acquired in a gazettal round in 2009 by Carnarvon Petroleum and Finder Exploration, and both Apache Energy (the current operator now called Quadrant Energy) and JX Nippon farmed into the project in 2012, prior to drilling of the discovery well.

Phoenix South-1 was drilled from May to August 2014 and reached a total depth of 4,595 metres.

The sands within the entire objective reservoir section showed elevated gas readings and fluorescence, indicative of hydrocarbon presence, however initial data acquired while drilling was inconclusive regarding the fluid and rock properties. Wireline formation testing indicated better than expected inferred permeability, but the critical breakthrough was recovering crude oil samples to surface. A total of six light oil samples were recovered from three zones along with a significant number of sidewall rock samples from up to six different sand and shale intervals.

Contingent and Prospective Resources

As previously announced (ASX: April 7 2015), DeGolyer and MacNaughton conducted an independent study of the discovery and follow-up potential of the Phoenix 3D area, which has an estimated gross 2C contingent resource of 31 million barrels* resulting from the drilling of the Phoenix South-1 and Phoenix-1 wells.

DeGolyer and MacNaughton also reviewed the potential from the undrilled prospects within the Phoenix 3D area and estimated the Roc prospect to be drilled in 2015 could contain 42 million barrels (gross, P50 contingent resource)*.

Within the Phoenix 3D area, being some 5% of the total Phoenix area held by the joint venture, DeGolyer and MacNaughton assessed recoverable resources of 104 million barrels (gross, aggregated P50 contingent and prospective resources)*.

Carnarvon also sees significant potential within the total acreage holding in a number of potential reservoir intervals that are expected to be refined as the new seismic data becomes available. In total, over 100 structures have been mapped across the permits, with a significant portion having an area larger than 10km².

Significant oil resources have been estimated to exist within the Phoenix 3D area with a high estimated the chance of success at over 40%*, validated by oil recovered to surface in the Phoenix South-1 well.

Equity interest holders:

WA-435-P, WA-437-P

| | |
|----------------------------|------------|
| Carnarvon Petroleum | 20% |
| Quadrant Energy (Operator) | 40% |
| JX Nippon | 20% |
| Finder Exploration | 20% |

WA-436-P, WA-438-P

| | |
|----------------------------|------------|
| Carnarvon Petroleum | 30% |
| Quadrant Energy (Operator) | 40% |
| Finder Exploration | 30% |

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. 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 continent and prospective resources presented in this report are prepared as at 7 April 2015 per the DeGolyer and MacNaughton reports released to the ASX on 7 April 2015. 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.

Competent Person Statement Information

DeGolyer and MacNaughton is an independent international energy advisory group whose expertise is in petroleum reservoir evaluation and economic analysis. The continent and prospective resources presented in this report are based on information compiled by professional staff members who are full time employees of DeGolyer and MacNaughton.

The Resource estimates outlined in this report were reviewed 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 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.