

# Q4



Quarterly Report

30 June 2014

Carnarvon Petroleum Limited



## Quarter Highlights:

- Three new exploration blocks granted in Carnarvon Basin, North West Shelf, Western Australia
- Commenced drilling Phoenix South-1 well in Western Australia
- Thailand oil production increased ~146% quarter on quarter (gross) with ~73,009 barrels produced net to Carnarvon (20%)
- Well funded with cash of \$50.5 million, US\$32 million receivable from oil receipts and zero debt

## Managing Director's Comments

As outlined in the June 2014 CEO Newsletter, Carnarvon has a sound balance sheet with \$50.5 million in cash, a US\$32 million receivable from Thailand oil sales, a 20% interest in cash generating oil production and no debt. The Company is well positioned for exploration success in the near term with the drilling of the Phoenix South-1 well and we recently announced the next platform for growth with Carnarvon being successfully granted new exploration blocks on the North West Shelf. We have a clear strategy to convert this success into value for our shareholders whilst endeavouring to minimise the financial, operational and exploration risks as much as possible.

Thailand production has remained steady during the quarter at around 4,000 bopd (gross). This is directly linked to a strategy to choke back new well flow rates in order to sustain production over the longer term by minimising water incursion. To date this has been successful and we remain cautiously optimistic that we are making progress in our management of these challenging reservoirs, namely the volcanic or igneous reservoirs.

During the quarter we commenced the second drilling program in Thailand in which we expect to drill between five and seven wells that will be a mix of exploration, appraisal and development wells. If we encounter high flow rates, as occurred with the WBEXT-3C and 3D wells, then we plan to similarly restrict the flow rates of the new wells and the WBEXT-3C and 3D wells in an effort to maintain steady flow rates and increase the overall recovery of oil.

The news this month that we needed to side-track the Phoenix South-1 well, to bypass casing equipment stuck in the well bore, was unfortunate but has been dealt with, with drilling recommencing on 5 July 2014. This event highlights why we need to be prudent in maintaining a robust balance sheet so that such events, which do occur in our industry, do not cause us undue financial stress.

During the quarter we also announced the award of three new contiguous exploration blocks in the Carnarvon Basin in Western Australia. Prospects in these blocks are ideally suited to drilling with a Jack-up drilling rig and we have identified a number of relatively shallow prospects on the existing 3D seismic. While still early days for this acreage, low cost drilling for primarily oil targets in a prospective region of the North West Shelf has the Carnarvon team working hard to present the opportunity to industry late this calendar year.

I look forward to providing shareholders with further progress reports in the coming months on drilling and other business activities via our ASX releases and in my CEO Newsletters. The later are available on our website and can be received in future by entering an email address in the "email subscription" section on the home page of our website.

**Adrian Cook**  
**Managing Director**

## Western Australia (North West Shelf)

### WA-435-P and WA-437-P permits

(Carnarvon 20%, Finder Exploration 20%, JX Nippon 20%, Apache 40% and Operator)

The Phoenix South-1 well commenced drilling in the WA-435-P permit on 25 May 2014 and was progressing ahead of schedule until casing equipment became stuck in the well bore while setting the 9 5/8<sup>th</sup> casing, at approximately 3,706 meters. On 5 July 2014 the operator, Apache Energy, commenced a side-track operation to drill around the problem area.

The Phoenix South-1 well is planned to drill to a depth of approximately 4,500 meters to explore for gas on trend with that discovered in the Phoenix-1 well some 13 kilometres away. The Phoenix South-1 well may be extended to approximately 5,000 meters if gas is being detected below 4,500 meters.

The well will be funded to US\$70 million (gross cost of well) by Apache and JX Nippon with this being the success case estimate for the Phoenix South-1 well, excluding side-track operations. Carnarvon is liable for 20% of any costs over this amount. The side-track operations are expected to cost Carnarvon around \$6 million if the US\$70 million limit is exceeded.

Success in the Phoenix South-1 well is likely to lead the Joint Venture to drill the Roc well in the adjoining WA-437-P permit. This is a similarly large structure identified on modern 3D seismic data and is the next structure up from Phoenix South. Funding for this well has been secured through an agreement with Apache and JX Nippon.

Carnarvon will retain a 20% interest in both permits if both wells are drilled.

### WA-436-P and WA-438-P permits

(Carnarvon 50%, Finder Exploration 50% and Operator)

Apache holds an option to acquire a 40% interest and operatorship in WA-436-P and WA-438-P, with 20% provided by Carnarvon and 20% by Finder. Upon Apache exercising the option, Carnarvon will hold a 30% interest in each of WA-436-P and WA-438-P. The option expires on 3 August 2014 unless otherwise extended.

The objective of the agreement was to draw forward value to the Phoenix South-1 well and Roc-1 well (contingent) and, on exercise of the option, secure a world class operator in Apache for these permits.

During the quarter the National Offshore Petroleum Titles Administrator approved a variation of the Permit Year 6 work program for WA-436-P enabling the operator to licence 400km<sup>2</sup> of the Zeester 3D seismic data and undertake further technical work and studies in lieu of drilling a well.

### WA-443-P and WA-399-P permit

(Carnarvon -%)

Carnarvon was granted approval to withdraw from the permits during the quarter.

**EP-490-P and TP/27 and EP-491-P permit**  
 (Carnarvon 100%)

During the Quarter, Carnarvon announced the award of three contiguous blocks on the eastern flank of the prolific oil producing Barrow Sub basin, namely Petroleum Exploration Permit EP-490, TP/27 and EP-491. Carnarvon is Operator and 100% working interest holder in these blocks that cover a total area of around 3,200 km<sup>2</sup>.

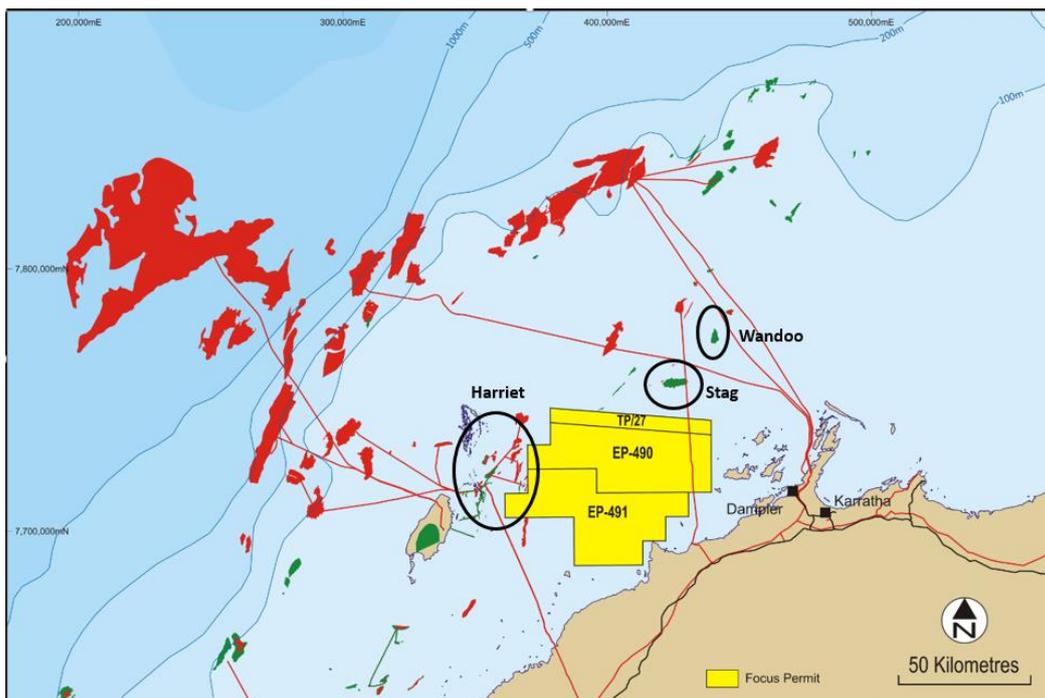
Two major hydrocarbon accumulations occur immediately to the north of these blocks. The Wandoo Oilfield is located approximately 46kms to the north of these blocks with its primary reservoir at a depth of approximately 600 metres in the Early Cretaceous M.australis Sandstone. Recoverable oil is estimated to be approximately 100 million barrels. The Stag Oilfield is located only 24 kms to the north of these blocks with its primary reservoir at a depth of approximately 700 metres. Recoverable oil is estimated to be around 50 million barrels. Both fields lie in approximately 50 metres of water.

These new blocks are substantially covered by existing modern 3D seismic data that will aid in identifying analogous traps to the Stag and Wandoo oilfields.

Numerous oil and gas fields have also been discovered throughout the area to the west of the blocks, including the significant hydrocarbon accumulations in the Harriet area that produces from the highly prolific Flag Sandstone.

Water depth over the blocks does not exceed 70m, which when combined with shallow target depths, allows for cost effective drilling using offshore jack-up rigs.

Work commitments for the primary 3 year period entail reprocessing the existing 3D seismic and geological studies and will not add any significant cost exposure to Carnarvon’s already low future commitments.



## Thailand

### Oil production

(Carnarvon 20%, Loyz Energy 20% and Towngas 60% and Operator)

During the Quarter, the sale of half of Carnarvon's 40% interest in L33/43, L44/43 and SW1A Concessions to Loyz Energy was completed with an effective date of 31 March 2014. As a result, Carnarvon's net interest in production entitlements is 20% from the effective date. Notwithstanding the decrease in net entitlement, due to a significant increase in production, the overall net production to Carnarvon has increased by approximately 23% over the previous quarter.

The overall success of the first drilling campaign in the 2014 calendar year resulted in an increase in gross oil production rates to approximately 4,000 bopd. No drilling was undertaken for the period from early April 2014 until mid-June 2014. As of mid-June 2014 drilling recommenced with the L33-5A exploration well.

For the remainder of the year a further 4-6 wells are planned to be drilled. These wells will be a mixture of exploration and development drilling, concentrating on the L33/43 Concession.

Operations remain unaffected by recent political activities in Thailand.

### L33/43 Concession

(Carnarvon 20%, Loyz Energy 20% and Towngas 60% and Operator)

#### ***L33-5A well***

The L33-5A well was an unsuccessful exploration well drilled to test the igneous reservoir in the area to the west and outside of the existing production license.

### L44/43 Concession

(Carnarvon 20%, Loyz Energy 20% and Towngas 60% and Operator)

#### ***WBEXT-5A well***

The WBEXT-5A well was a successful exploration well that intersected several sandstones to the east of the current WBEXT production area. The well was put on test with initial rates around 80-100 bopd with no water. Based on the success of this well, the Operator sought an extension to the WBEXT production license area during the Quarter. In the interim, the WBEXT-5A well will be shut-in having come to the end of the Government allowed 90 day production test period.

#### ***WBEXT-3D well***

The WBEXT-3D well was completed and placed on production during the Quarter. The well is a deviated development/appraisal well located in the WBEXT production area, to the north of the Wichian Buri Field. Initial testing was successful with the well capable of flowing at rates up to 3,500 bopd. To reduce the chance of early water incursion the oil flow rate has been deliberately reduced.

### Water injection project

At Quarter end the water injection well was shut-in to monitor the affect on the producing wells. It is anticipated that water injection will restart in late July 2014 at varying rates in order to observe well production behaviour.

After initial encouraging results where the water injection process arrested the previous natural field decline and improved production results, recent improvements have been minimal.

**L52/50 & L53/50 Concessions**

(Carnarvon 100% and Operator - subject to Government approval of recent 50% interest transfer)

During the previous quarter the Company advised the Thailand authorities of its intention to withdraw from the L52/50 and L53/50 Exploration Concessions in Southern Thailand.

**Corporate / Financial**

The Company's cash holdings at the end of the Quarter were A\$50.5 million, compared to A\$21.2 million at the end of the previous Quarter. These balances include cash held as security in relation to bank guarantees and minimum cash holding requirements by Thailand authorities.

Net revenue for the quarter was A\$7.2 million on 73,009 bbls of oil sold, generating a positive operating cash flow before tax of A\$5.4 million from the L44/43 and L33/43 Concessions in Thailand.

Separate from the above, A\$2 million was spent on drilling and site preparation activities in the concessions in Thailand and A\$1.8 million on technical work, new ventures and corporate costs. The company also received net proceeds of A\$28.9 million after deducting deposits received in the previous Quarter and after all costs and working capital adjustments in relation to the sale of half of its interest in the L44/43, L33/43 and SW1A Concessions in Thailand during the Quarter.

Key Statistics	Units	Current Quarter	Previous Quarter
<b>Capital</b>			
Share price (ASX code: CVN)	¢/share	7.5	8.8
Listed option price (ASX code: CVNO)	¢/share	3.5	4.2
Shares on Issue	m shares	987	987
Market capitalisation	A\$m	74	87
Cash	A\$m	50.5	21.2
Debt	A\$m	None	None
<b>Production</b>			
Oil produced (net to Carnarvon) (Current Qtr 20% CVN, Previous Qtr 40% CVN)	bbls	73,009	59,383
Average oil produced (gross field)	bopd	4,012	1,650
Average sale price	A\$/bbl	100.79	103.70
<b>Cash flows (Current Qtr 20% CVN, Previous Qtr 40% CVN)</b>			
Net sales revenue	A\$m	7.2	6.2
Production operating costs	A\$m	(1.6)	(2.2)
Taxes	A\$m	(0.2)	-
<b>Operating cash flow before tax</b>	A\$m	5.4	4.0
Technical, new ventures and corporate costs	A\$m	(1.8)	(1.2)
Exploration and development costs (including drilling)	A\$m	(2.0)	(4.4)
Foreign currency translation gain / (loss)	A\$m	(0.7)	0.3
Adjusted net sales revenue	A\$m	(0.5) <sup>1</sup>	(0.4) <sup>2</sup>
Thailand asset sale net of working capital and costs	A\$m	28.9	-
Research and development	A\$m	-	0.7
Corporate deposit	A\$m	-	1.1
<b>Net cash flow</b>	A\$m	29.3	0.2

#### Notes to Operating cash flows before tax

<sup>1</sup> \$1.9m of March 2014 sales revenues were received during the Quarter and was included in cash of \$50.5m. Additionally, \$2.4m of June 2014 sales revenue will be received in July 2014 which is not included in cash of \$50.5m resulting in a net revenue timing adjustment of \$0.5m for the June 2014 quarter.

<sup>2</sup> \$1.5m of November 2013 sales revenues were received during the quarter and was included in cash of \$21.2m. Additionally, \$1.9m of March 2014 sales revenue will be received in April 2014 which is not included in cash of \$21.2m resulting in a net revenue timing adjustment of \$0.4m for the March 2014 quarter.

### Abbreviations

<b>A\$</b>	Australian dollars
<b>Bopd</b>	Barrels of oil per day
<b>Bwpd</b>	Barrels of water per day
<b>Bbls</b>	Barrels of oil
<b>CVN</b>	Carnarvon Petroleum Limited
<b>JV</b>	Joint Venture
<b>Km</b>	Kilometres
<b>Km2</b>	Square kilometres
<b>m</b>	Millions
<b>Qtr</b>	Quarter
<b>Tcf</b>	Trillion cubic feet (gas)
<b>2D</b>	Two dimension seismic data
<b>3D</b>	Three dimensional seismic data
<b>WBEXT</b>	Wichian Buri field extension area
<b>WBV</b>	Wichian Buri igneous reservoir in which there is three key igneous zones
<b>L33</b>	L33/43 exploration Concession which is to the north of the L44/43 exploration Concession
<b>ST</b>	Sidetrack well
<b>SW1A</b>	This is a small exploration Concession within the larger L44/43 exploration Concession
<b>Tcf</b>	Trillion Cubic Feet
<b>US\$</b>	United States of America dollar

### About Carnarvon Petroleum

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, and is producing oil from onshore assets in Thailand.

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