

Quarterly Report
31 March 2018





Quarter Highlights:

- Drilling rig for Phoenix South-3 on location at the end of the quarter
- Buffalo redevelopment to take place under Timor-Leste jurisdiction after Maritime Boundary Treaty
- Awarded additional Vulcan Sub-basin permit AC/P63, multiple oil leads have already been identified
- A\$48.1 million held in cash after A\$2.1m exploration spend in the quarter

Managing Director's Comments

Firstly, I'd like to thank the investors who were able to attend our successful investor open day. We thoroughly enjoyed the opportunity to make our team available to our investors to provide an in-depth view on what has become an exciting portfolio of assets. We will hopefully hold another investor day in the future and I encourage all investors to join us if possible.

Carnarvon and its Joint Venture partner, Quadrant Energy, reached another major milestone for the Phoenix Project, with the Transocean Development Driller-1 rig reaching the Phoenix South-3 well location at the end of the quarter. Since arriving on location, the rig has been working through a series of pre-commencement checks and anchor setting and is expected to commence drilling shortly.

The Phoenix South-3 well will test the same interval that contained gas and condensate in the Phoenix South-2 well some 560 metres away. The cost to redrill to the top of the Caley interval will be mostly covered by an insurance claim associated with the Phoenix South-2 well operation, which had to cease drilling at this interval.

In addition to the Phoenix South-3 well, the upcoming Dorado-1 well is expected to commence drilling in May 2018. The primary zone in Dorado-1 is also the Caley interval although the well will also test slightly deeper secondary targets for additional oil and gas.

During the quarter, Carnarvon also continued to progress its redevelopment plans for the Buffalo oil field. Following the signing of a new Maritime Boundary Treaty between Australia and Timor-Leste, the redevelopment will now be undertaken in an area of exclusive Timor-Leste jurisdiction. Discussions held so far with officials from Timor-Leste make it clear that Carnarvon and Timor-Leste are in agreement on achieving first oil as soon as possible. Special legislation is to be enacted to ensure the Buffalo redevelopment will continue under equivalent fiscal terms previously in place with Australia.

Carnarvon completed a third iteration of the full wave form inversion seismic reprocessing on the Buffalo oil field during the quarter. This additional technical work continues to enhance Carnarvon's confidence in the project which is targeting unproduced oil in the field. Carnarvon has been working towards finalising its preferred option for developing the resource and entering into the required Production Sharing Contract with the Government of Timor-Leste.

The Company was also awarded a new permit (Eagle project) in the highly prospective Vulcan Sub-basin, located near Carnarvon's recently acquired Condor project. The Eagle project is in a hydrocarbon prone region within the North-West shelf and contains several Jurassic and Cretaceous oil leads over multiple reservoir levels. Once the recent Cygnus 3D seismic has been processed over the area, Carnarvon will progress its technical and prospect development work.

The Company had a cash balance of A\$48.1 million at the end of the quarter. With existing cash and the successful insurance claim, Carnarvon remains well funded for its upcoming Phoenix and Dorado drilling campaign.

Phoenix Project

(Carnarvon 20%-30%; Quadrant Energy is the Operator)

At the end of the quarter, the drilling rig for the Phoenix South-3 well arrived at location. The Joint Venture has contracted the Transocean Development Driller-1 semi-submersible drilling rig with the well expected to take around 90 days to drill to the target depth of around 5,156 metres.

The Phoenix South-3 well has been designed to evaluate the gas and condensate encountered at the top of the Caley interval in the Phoenix South-2 well. The Phoenix South-3 well will be located around 560 metres to the north northeast of the Phoenix South-2 well. The elevated well pressures experienced at Phoenix South-2 meant the well was unable to be completed. Following the successful control of the well, a significant portion of the drilling costs of the Phoenix South-3 well will be recovered through an already approved insurance claim.

The primary target of the Phoenix South-3 well, the Caley interval, is estimated to contain a gross mean recoverable prospective resource of 489 Bscf of gas and 57 million barrels of associated condensate, being 143 million barrels of oil equivalent ("boe"), gross, Pmean (refer to ASX Announcement on 28 March 2017).

In addition, the upcoming Dorado-1 well is expected to commence drilling in May 2018 and is estimated to take around 45 days to complete as it drills to a total depth of approximately 4,400 metres. The primary target of the Dorado-1 well is also the Caley interval at around 3,760 metres. There are also a number of secondary targets beneath the Caley which the Joint Venture intends to evaluate.

Buffalo Project – WA-523-P

(Carnarvon 100% and operator)

On 7 March 2018, the Australian and Timor-Leste Governments signed a new Maritime Boundary Treaty. The Buffalo project is affected by the boundary change and the Buffalo oil field redevelopment will now be undertaken within Timor-Leste's jurisdiction. A portion of WA-523-P will remain within Australia's jurisdiction, which contains untapped exploration prospects.

The Treaty provides that security of title and legal rights currently held by Carnarvon will be preserved through conditions equivalent to those already in place under Australian domestic law. Special legislation will also be enacted by Timor-Leste to confirm these arrangements.

The discussions that Carnarvon has had to date with the officials from Timor-Leste have made it clear that Carnarvon and Timor-Leste both wish to achieve first oil as soon as possible. The Company will enter into a Production Sharing Contract with the Timor-Leste government once the Treaty is ratified by Australia and Timor-Leste.

Carnarvon's technical work continued during the quarter, with the third iteration of the full waveform inversion seismic reprocessing being completed over the Buffalo oil field. Carnarvon now has greater confidence in the oil field redevelopment and is working towards finalising its options to redevelop the Contingent Resource of 31 million barrels (2C) (Refer to ASX announcement on 28 August 2017). At this best estimate (2C) of recoverable oil, the field has a revenue generating capacity of approximately US\$2 billion, at current Brent oil prices. Combined with development costs of \$US150 million, based on independent reports commissioned by the Company, the Buffalo redevelopment can deliver significant value to Carnarvon.



Labyrinth Project – WA-521-P

(Carnarvon 100% and operator)

Carnarvon provided an update of its prospective resources for the Labyrinth project during the quarter. The updated petrophysical analysis has identified 1.5 billion barrels of recoverable prospective resource in the permit to date (refer to ASX announcement on 7 February 2018). This includes the Ivory prospect, estimated to contain 420 million barrels of mean recoverable oil over two levels.

The technical work on the Labyrinth project has been completed using knowledge gained from the hydrocarbon discoveries at Roc and Phoenix South, with the Phoenix South permit sharing a border with the Labyrinth permit. Carnarvon has commenced a farm out process to find an appropriate partner to join the Labyrinth project and progress the significant prospects.

Condor Project – AC/P62

(Carnarvon 100% and operator)

Carnarvon continued its technical work on the Condor project during the quarter, having been awarded the permit in late 2017. Utilising the high-quality Cygnus 3D survey recently acquired by Polarcus, the Company has already identified several large Triassic leads over multiple reservoir levels with similar properties to the nearby Challis oil field and Crux gas field.

In addition, there is the potential for secondary plays in the shallower, Late Cretaceous stratigraphy in water depths of circa 100 metres which could enable utilising lower cost jack-up drilling to pursue prospects.

The Condor permit covers an area of 1,512km² within the Vulcan sub-basin in the Bonaparte basin on the North-West Shelf of Australia. The proven oil producing Bonaparte contains numerous fields such as the Skua and Montara oil fields which are adjacent to the Condor project. Carnarvon is continuing technical work on this project, in preparation for a farm-out process later in the year.

Eagle Project – AC/P63

(Carnarvon 100% and operator)

During the quarter, Carnarvon was awarded the AC/P63 in the same Vulcan Sub-basin as the Condor project on Western Australia's North-West Shelf. The 542km² permit is in shallow water and contains multiple leads within the Jurassic and Cretaceous intervals, over multiple reservoir levels.

The Cygnus 3D survey which was acquired by Polarcus is currently being processed for the area contained in the Permit and is expected to be available for interpretation later in 2018. Once processed, the seismic will provide high quality data for the area which has previously been hampered by poor quality vintage data. Carnarvon has already experienced the significant imaging improvement in the Condor Project as a result of the Cygnus data.

Carnarvon will work towards maturing the identified leads into prospects within the blocks. This will also include a number of geoscience work-flows to add to the string of prospects that Carnarvon has been building within the Vulcan Sub-basin and the North-West Shelf.



Outtrim Project – WA-155-P (1)

(Carnarvon 28.5%, Quadrant Energy is the Operator)

The Belgravia prospect lies within the north westerly graticular block of the Outtrim permit which contains an estimated prospective resource of 440 billion cubic feet of gas (Bcf) and 18 million barrels (Mmbbls) of condensate (gross Pmean) (refer to ASX announcement on 21 July 2017). The prospect is in the immediate proximity, and directly up dip, of the Swell prospect.

Woodside Petroleum Limited (“WPL”), in their fourth quarter report released on 18 January 2018, as operator of the Swell-1 well announced that the well had interpreted sands across a large gross interval of approximately 450 meters. The Swell-1 well was announced as a tight gas discovery, not currently commercially viable given the low gas mobility at the 5,006 meters measured depth.

The Belgravia prospect is 650 meters shallower than the Swell-1 structure. Typically, reservoir quality improves at shallower depths which could indicate between quality reservoir within the Belgravia prospect. With the Swell-1 well confirming the presence of a working petroleum system, Carnarvon will progress further work to consider the opportunities arising for the Belgravia prospect.

Maracas Project – WA-524-P

(Carnarvon 100% and operator)

The reprocessing of the existing 3D seismic data over the permit was completed during the quarter. The reprocessing includes the application of FWI technology that has demonstrated clear improvements in both the Phoenix and Buffalo projects. The reprocessed data is expected to assist with the mapping of existing leads, identifying new prospects and study the potential for hydrocarbon bearing sands in the permit. The technical team has now commenced its interpretation of the data and will analyse and build the prospects, in particular within in the Permian interval

Corporate / Financial

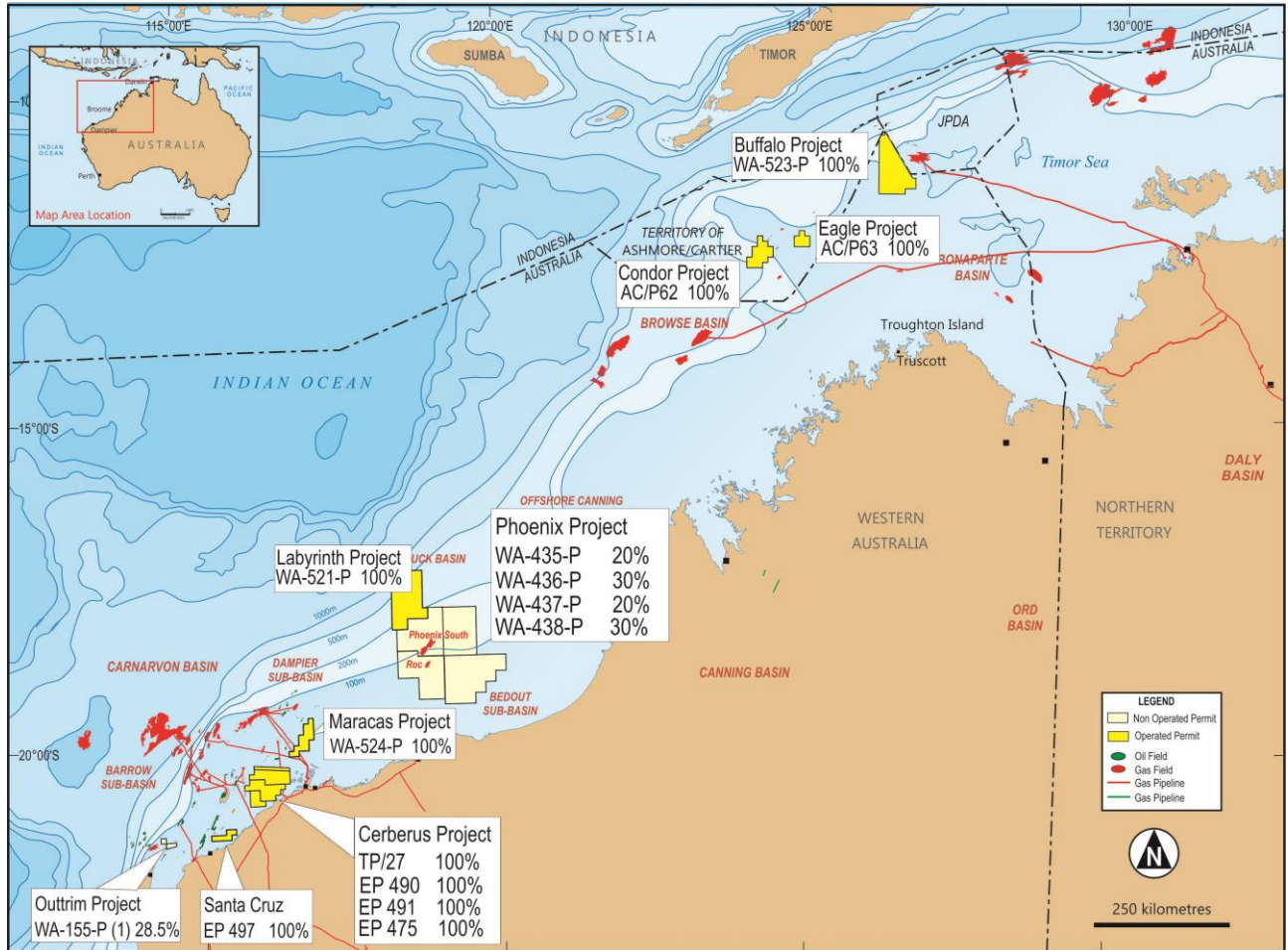
The Company’s cash at the end of the quarter was \$48.1 million, compared to \$48.5 million at the end of the previous quarter.

The Company’s United States Dollar (“USD”) holdings at the end of the quarter were US\$36.7 million with the balance being Australian Dollars. Carnarvon holds the majority of its cash in USD as a natural hedge to expected future USD denominated expenditures. The retention of predominantly US dollars influences Carnarvon’s reported cash holdings due to AUD / USD exchange rates at each reporting period end.

A weakening of the average Australian Dollar relative to the US dollar during the quarter resulted in a foreign exchange translation adjustment that increased the Company’s reportable cash holdings by A\$0.8 million.

During the quarter A\$2.1 million was spent on exploration activities in the North-West Shelf which includes the technical work on the Buffalo Project, pre-drilling expenses for the Phoenix South-3 and Dorado-1 wells and Carnarvon’s other exploration projects. In addition, \$0.7 million was spent on business development and corporate costs, and \$1.5 million was received for research and development activities.

Project Map



Project Table

Project	Permit(s)	Operator	Interest held	Interest acquired Q/Q
Phoenix	WA-435-P	Quadrant Energy	20%	-
Phoenix	WA-436-P	Quadrant Energy	30%	-
Phoenix	WA-437-P	Quadrant Energy	20%	-
Phoenix	WA-438-P	Quadrant Energy	30%	-
Labyrinth	WA-521-P	Carnarvon Petroleum	100%	-
Buffalo	WA-523-P	Carnarvon Petroleum	100%	-
Maracas	WA-524-P	Carnarvon Petroleum	100%	-
Condor	AC/P62	Carnarvon Petroleum	100%	-
Eagle	AC/P63	Carnarvon Petroleum	100%	100%
Outtrim	WA-155-P (1)	Quadrant Energy	28.5%	-
Cerberus	EP-490	Carnarvon Petroleum	100%	-
Cerberus	EP-491	Carnarvon Petroleum	100%	-
Cerberus	EP-475	Carnarvon Petroleum	100%	-
Cerberus	TP/27	Carnarvon Petroleum	100%	-
Santa Cruz	EP-497	Carnarvon Petroleum	100%	-

Abbreviations

Bopd	Barrels of oil per day
Bbls	Barrels of oil
OWC	Oil water contact
CVN	Carnarvon Petroleum Limited
JV	Joint Venture
Km	Kilometres
Km²	Square kilometres
m	Millions
Qtr	Quarter
Q/Q	Quarter on Quarter
Tcf	Trillion cubic feet (gas)
2D	Two dimension seismic data
MC2D	Multi-client 2D – seismic data acquired for multiple parties that require licensing
3D	Three dimensional seismic data
MC3D	Multi-client 3D – seismic data acquired for multiple parties that require licensing
USD	United States of America dollar

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, 28 March 2017, 28 August 2017 and 7 February 2018 (Reference: CVN ASX releases of 14 November 2016, 28 March 2017, 28 August 2017 and 7 February 2018). 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 25 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.