

BUILDING ON DORADO SUCCESS

ASX:CVN



Photo of the Caley reservoir well test in Dorado-3.

Managing Director's Comments

QUARTER HIGHLIGHTS

- **Dorado-3 appraisal well further confirms Dorado resource.**
- **Exceptional Caley and Baxter flow test in Dorado-3 well.**
- **Buffalo PSC signed and Maritime Boundary Treaty ratified between Australia and Timor-Leste.**
- **Strong cash balance of A\$133M following an institutional placement.**

Another incredible quarter has been highlighted by the successful Dorado appraisal program.

The Dorado-3 appraisal well provided further confirmation of the very large Dorado resource which was discovered in 2018.

Before the end of the quarter, Carnarvon and its Joint Venture Partner, Santos, completed a successful flow test of the Baxter reservoir which exceeded pre-test expectations. The well test confirmed that the Baxter reservoir contains a condensate-rich gas capable of flowing at commercial rates.

Following the completion of the Baxter flow test, the Joint Venture conducted a flow test on the Caley reservoir, being the primary reservoir in the Dorado field. The results were again fantastic and demonstrated the capacity of the high-quality reservoir and its potential for very significant production rates.

The highly successful appraisal program has provided further confirmation of the exceptional nature of the Dorado project which the Joint Venture will now shift focus towards developing.

Moving to the Buffalo project, Carnarvon also achieved an important milestone by signing a Production Sharing Contract ("PSC") with the Government of Timor-Leste. The signing coincides with the ratification of the Maritime Boundary Treaty between Australia and Timor-Leste which has resulted in the Buffalo oil field project moving into Timor-Leste jurisdiction.

The finalisation of the PSC signing is an important step which gives Carnarvon clarity to progress its plans to re-develop the Buffalo oil field.

In corporate matters, Carnarvon raised \$82.5 million (before costs) through an institutional placement and share purchase plan to fund the Company's ongoing appraisal activities and initial phases of the Dorado development.

Following the capital raising, Carnarvon held a strong cash balance of A\$133 million at the end of the quarter.

Carnarvon is now in a great position to progress its major projects, particularly as the Dorado Project moves into the Front-End Engineering Design ("FEED") phase before the Final Investment Decision ("FID").

Dorado Appraisal

(Carnarvon 20%; Santos is the Operator)

The Dorado-3 appraisal well commenced during the quarter, following the completion of the Dorado-2 and Roc-South-1 wells in the previous quarter.

With the Dorado-3 drilling primarily completed, the outstanding wireline logging results supported the Joint Venture's plans to conduct flow tests across the Caley and Baxter reservoirs.

In the Caley reservoir, being the primary target, the Dorado-3 well intersected predominately oil-bearing hydrocarbons in high-quality reservoir with no water contact.

In the Baxter reservoir, a secondary target, the wireline logging confirmed that a hydrocarbon column was encountered with no water contact. The pressure data also indicated the column was in communication with the equivalent reservoirs encountered in the Dorado-1 and Dorado-2 wells.

The Crespín reservoir appeared to encounter hydrocarbons in an area that was expected to be water wet. The Milne, being the deepest interval, sought to test a section of the reservoir that provided encouraging indications on seismic data, however the Milne proved to be water wet.

The results in the Crespín and Milne intervals will provide further minor refinement to the resource estimates, however it is not expected to be material.

Following the completion of the primary drilling and wireline logging, the Joint Venture completed a successful flow test of the Baxter reservoir. The flow test achieved a maximum possible



Noble Tom Prosser Drilling Rig during the Caley well test

measured rate of approximately 48 million standard cubic feet per day of gas and 4,500 barrels per day of associated condensate through a 60/40" choke.

These rates exceeded pre-test expectations whilst being limited to surface equipment capacity.

The well test was conducted over an approximate 7.4 metre interval of net Baxter reservoir and was notably achieved with only a 150-psi drawdown.

With the Baxter well test completed, the Joint Venture completed an exceptional flow test in the Caley reservoir after the end of the quarter.

The well test was conducted over an approximate 11 metre section of the reservoir and achieved a flow rate of approximately 11,100 barrels of oil per day plus 21 MM scf per day.

Importantly, the Caley test indicates the potential for very high flow rates of around 30,000 barrels per day from each production well in the Caley reservoir.

The successful appraisal and accompanying flow tests have

confirmed the phenomenal Dorado discovery. The Joint Venture will now complete the Dorado-3 well which will end the 2019 well campaign. The focus will now move onto FEED work as the Dorado project progresses towards development planning.

Phoenix Project Exploration

(Carnarvon 20%-30%; Santos is the Operator)

The Joint Venture was granted an extension of the primary work term in the Phoenix project permits (WA-435-P, WA436-P, WA-437-P and WA-438-P), by the regulator for an additional 24 months, during the quarter.

This will enable further exploration of the significant Bedout acreage before converting the discovery areas into a retention leases and partial permit relinquishments. With Carnarvon and Santos holding the majority of the Bedout acreage, there is great potential for additional exploration.

The two standout oil prospects near Dorado, which have been de-risked following the Dorado discovery, are Pavo and Apus. These prospects are estimated by Carnarvon to contain

82 million barrels and 612 million barrels respectively of oil recoverable (Gross Pmean) (refer to ASX announcement on 15 October 2018).

Additional 3D seismic was recently acquired over the Dorado discovery and nearby exploration prospects. Carnarvon expects to provide further information on these prospects as the data is interpreted and the technical work progresses.

Buffalo Project – Timor-Leste

(Carnarvon 100% and operator)

Following extensive negotiations with the governments of Timor-Leste and Australia, Carnarvon has successfully signed a Production Sharing Contract (“PSC”) confirming ongoing title to the Buffalo oil field and the surrounding exploration acreage.

The signing of the PSC provides greater clarity to Carnarvon on the way forward for this project.

This process coincides with the Governments of Australia and Timor-Leste ratifying the Maritime Boundary Treaty (“MBT”) which has finalised the maritime boundary change and resulted in the Buffalo oil field project falling under the jurisdiction of Timor-Leste.

The WA-523-P permit has now been split with a portion (including the Buffalo oil field) changing from its Australian jurisdiction to being exclusively within Timor-Leste jurisdiction.

One of the key conditions of the MBT was that the affected parties, such as Carnarvon, would be granted security of title in Timor-Leste with conditions equivalent to those previously in place under Australian domestic law.

Importantly, Carnarvon’s PSC has a similar net back after government taxes and duties when compared to Australia’s offshore PRRT regime.

The transition from Australia to Timor-Leste also included recognition for previous work undertaken while WA-523-P was under the Australian regulatory regime. In particular, the approval of the Environmental Plan to drill three wells into the Buffalo field by NOPSEMA will be accepted by the regulator in Timor-Leste and continue to be utilised in the project.

Carnarvon is currently in the process of seeking expressions of interest from potential partners to the Buffalo project which will be integral towards Carnarvon’s funding strategy as the Company moves towards the development of both the Dorado and Buffalo fields.

Taurus Project – WA-523-P

(Carnarvon 100% and operator)

Following the MBT, the largest portion of the original WA-523-P permit acreage will continue to remain under Australian jurisdiction.

Carnarvon’s technical work to date has identified significant exploration potential which will continued to be pursued under the WA-523-P Australian permit.

The early technical work has been very promising with mapping of existing seismic identifying a number of exciting prospects. These include mid-Jurassic plays in the same interval as the Buffalo oil field.

Carnarvon has also identified a number of significant prospects in the Triassic interval which is relatively untested in this area. With increased industry focus on the

Triassic interval following Carnarvon’s Dorado discovery, the exploration prospectively within the area provides significant opportunities.

Labyrinth Project – WA-521-P

(Carnarvon 100% and operator)

The Labyrinth project is located in the Bedout Sub-basin in close proximity to Carnarvon’s Dorado, Roc and Phoenix South discoveries.

The standout target is the Ivory prospect which targets dual reservoirs and can be tested with one well. The first target is the Mid-Jurassic Lower Depuch Formation which is proven to be an excellent quality reservoir. The secondary target is in the early Jurassic Upper Bedout Formation which also has the potential to have excellent reservoir quality as encountered in the sands in the Roc-2 well at this depth.

The Ivory prospect is estimated to contain 420 million barrels of mean recoverable oil (refer to ASX announcement on 7 February 2018). Including Ivory, Carnarvon’s geological analysis has identified 1.5 billion barrels of recoverable prospective resource in the permit (refer to ASX announcement on 7 February 2018).

There is now a higher level of confidence for hydrocarbon charge for reservoirs above the Cossigny Limestone, due to the Phoenix South-3 well intersecting hydrocarbons at this level.

Carnarvon is currently seeking expressions of interest from potential partners into the Labyrinth project (WA-521-P) for seismic acquisition and the drilling of the Ivory prospect.

Condor & Eagle Projects – AC/P62 & AC/P63

(Carnarvon 100% and operator)

During the quarter, Carnarvon continued its technical work on the Condor and Eagle projects which are located in the proven Vulcan Sub-basin. This has led to further prospectivity being identified within the projects.

Within the Condor project, Carnarvon has identified a late Permian carbonate reef oil prospect of significant size.

The structure of the prospect, named Moa, is approximately 160km² and is a similar play to the Petrel / Tern discoveries also within the Bonaparte Basin. Carnarvon will continue its evaluation of the petroleum system in the coming quarter to identify any additional follow-up potential.

Within the Eagle project, the standout target is the Toucan prospect in the Jurassic Plover formation. The Jurassic reservoir is well tested along the North West Shelf of Australia and typically features very good porosities and permeabilities within the Vulcan Sub-basin where the Eagle project is located.

The Toucan structure is analogous to or bigger than existing oil fields along the same trend and in close proximity which provides an exciting exploration opportunity, de-risked by existing discoveries.

Carnarvon has also identified additional Jurassic oil plays within the Eagle Project permit which are similar to the nearby Audacious and Tenacious oil fields. With seismic interpretation possibly identifying petroleum indicators, Carnarvon will continue to work to refine the potential of these Jurassic plays.

The Condor and Eagle projects cover an area of 2,100 km² in the world class oil and gas Vulcan Sub-basin featuring the Montara, Jabiru, Skua and Challis oil fields. The basin is currently experiencing a renaissance which is being driven by new 3D seismic data. Carnarvon is utilising the high-quality Cygnus 3D survey which was completed by Polarcus in 2018.

Carnarvon is currently completing its technical work before seeking expressions of interest from potential partners to further these exciting projects.

Corporate / Financial

The Company's cash holdings at the end of the quarter were A\$133.4 million, compared to A\$73.8 million at the end of the previous quarter.

During the quarter, Carnarvon successfully raised A\$78.4 million (after costs) through an institutional placement and a corresponding share purchase plan. The proceeds will be used to fund ongoing appraisal activities and initial phases of the Dorado development including front end engineering design.

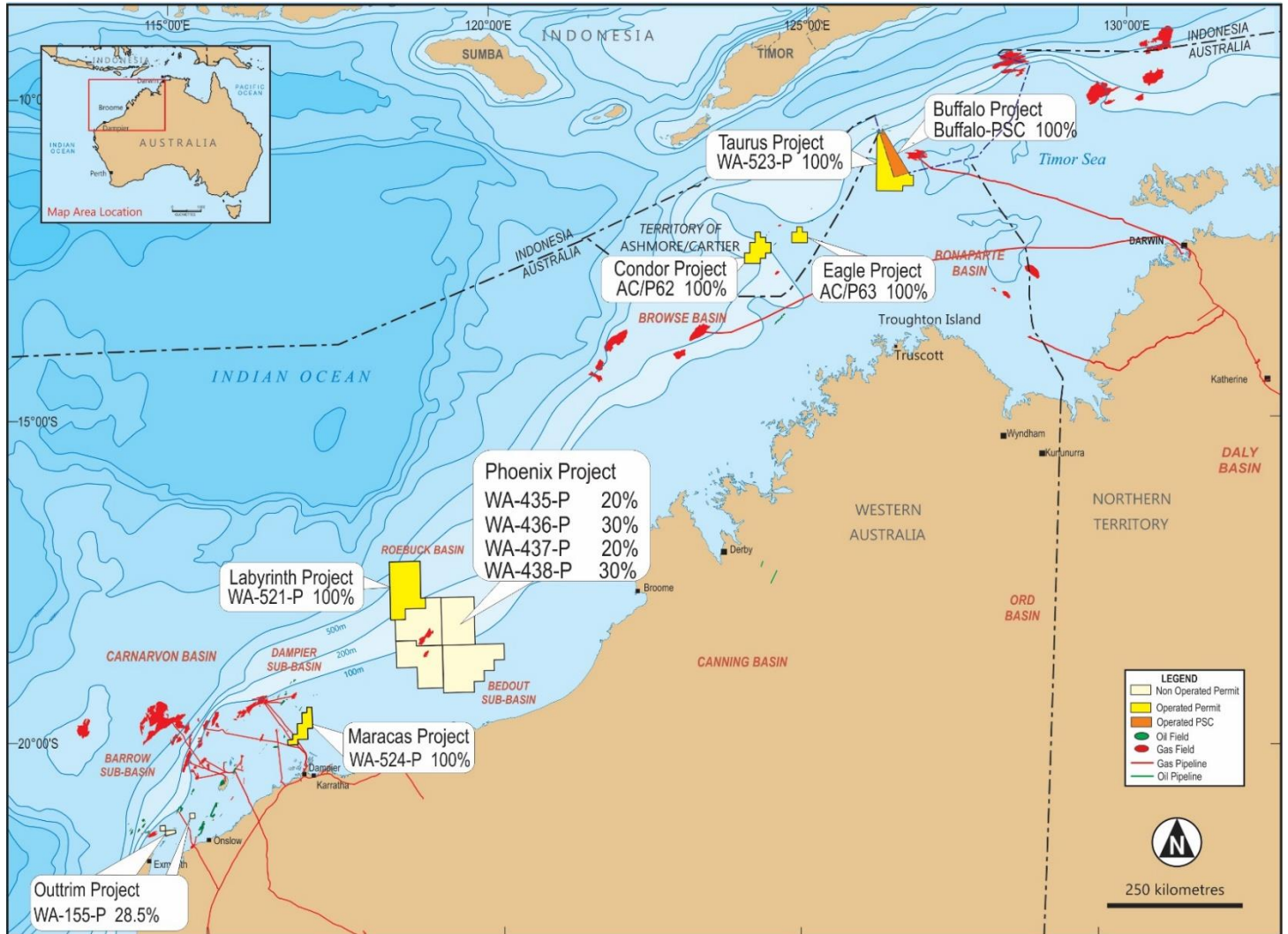
As Carnarvon continued its Dorado and Roc South drilling campaign, A\$17.7 million was spent on exploration activities during the quarter. The expenditure primarily included Dorado-3 and Roc South-1 drilling costs and technical work on Carnarvon's other exploration activities. The Company also spent A\$2.5 million on business development and corporate costs and received A\$0.3 million in interest during the quarter.

The Company's United States Dollar ("USD") holdings at the end of the quarter were US\$15.5 million and its Australian Dollar ("AUD") holdings

were A\$110.5 million. Carnarvon holds a balance between USD and AUD as a natural hedge to expected future expenditures denominated in both USD and AUD. The retention of 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\$1.1 million.

Project Map



Project Table

Project	Permit(s)	Operator	Interest held	Interest acquired Q/Q
Phoenix	WA-435-P	Santos	20%	-
Phoenix	WA-436-P	Santos	30%	-
Phoenix	WA-437-P	Santos	20%	-
Phoenix	WA-438-P	Santos	30%	-
Buffalo	TL-SO-T 19-14	Carnarvon Petroleum	100%	-
Angus	WA-523-P	Carnarvon Petroleum	100%	-
Labyrinth	WA-521-P	Carnarvon Petroleum	100%	-
Maracas	WA-524-P	Carnarvon Petroleum	100%	-
Condor	AC/P62	Carnarvon Petroleum	100%	-
Eagle	AC/P63	Carnarvon Petroleum	100%	-
Outtrim	WA-155-P	Santos	28.5%	-

Acronym	Definition
Bopd	Barrels of oil per day
Bbls	Barrels of oil
CVN	Carnarvon Petroleum Limited
JV	Joint Venture
Km	Kilometres
Km ²	Square kilometres
m	Millions
Qtr	Quarter
Q/Q	Quarter on Quarter
Tcf	Trillion cubic feet (gas)
2D	Two dimension seismic data
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 7 February 2018, 23 April 2018, 15 October 2018 and 30 June 2019 (Reference: CVN ASX releases of at 7 February 2018, 23 April 2018, 15 October 2018, 15 July 2019 and 27 August 2019). 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, a Masters Degree in Petroleum Engineering and is a member of the Society of Petroleum Engineers. 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.