

# Labyrinth Project: Prospective Resource Update

7<sup>th</sup> February 2018



## Highlights

- Ivory prospect estimated to contain 420 million barrels of mean recoverable oil over 2 levels
- Total of over 1.5 billion barrels of recoverable prospective resource identified in the permit to date
- Carnarvon uniquely positioned to draw on proprietary data from the successful Roc and Phoenix discoveries on trend in the neighbouring permits

Carnarvon Petroleum Limited (“Carnarvon”) (ASX:CVN) is pleased to provide an update on the prospective resources in the Labyrinth project (WA-521-P exploration permit) based on the completion of detailed petrophysical analysis leveraging the learnings from the successful Roc and Phoenix South wells in the adjacent permits.

The Labyrinth project is located in the Rowley Sub-basin, offshore Western Australian on the North West Shelf, north of Carnarvon’s Roc and Phoenix South hydrocarbon discoveries, with water depths between 200 and 500m (refer to Figure 1 for the permit map).

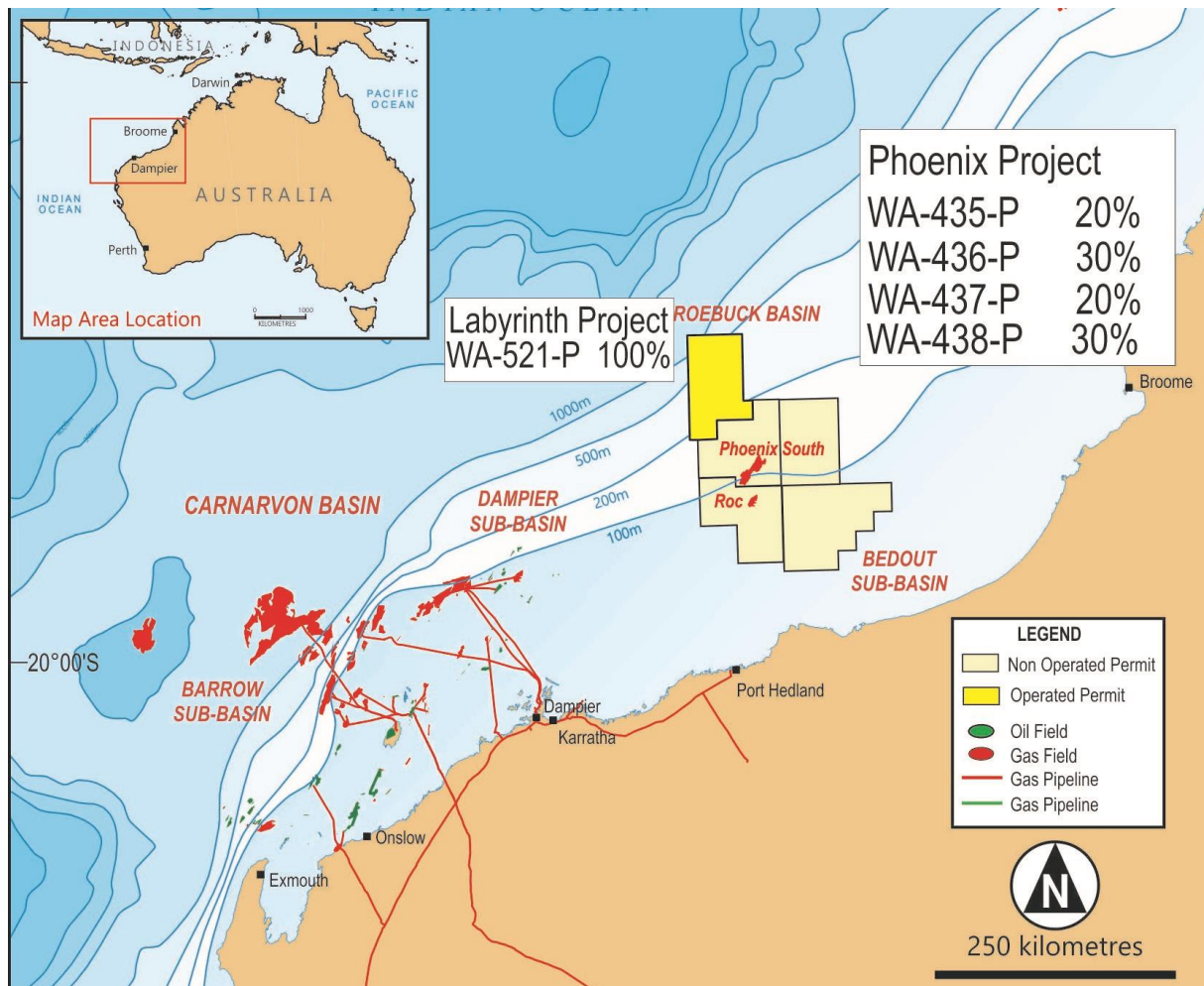


Figure 1. Permit map - Labyrinth is located to the North West of the play opening Roc and Phoenix South discoveries

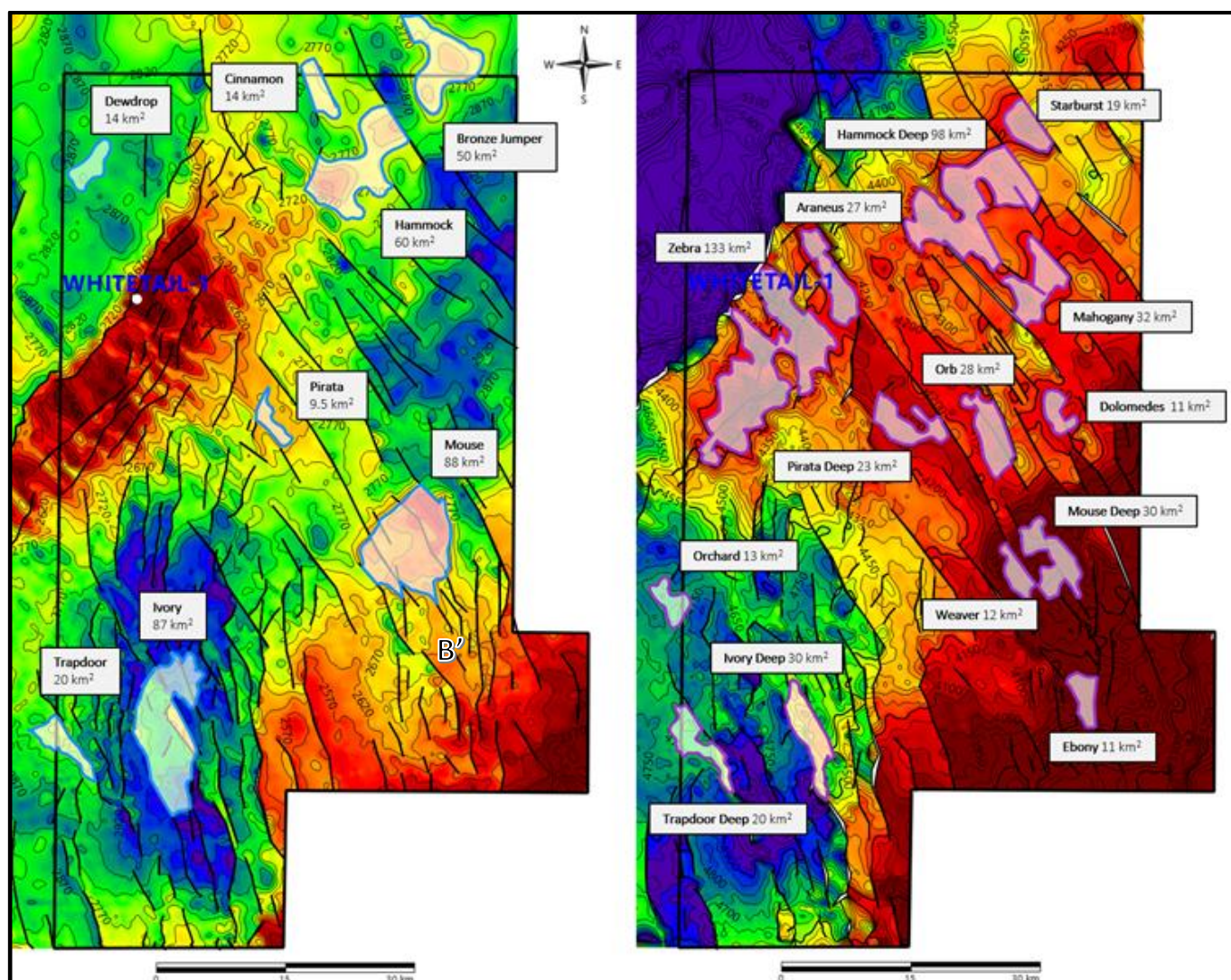


Figure 2. Prospect and lead inventory for Labyrinth project

### Prospects- Multiple stratigraphic levels

Using knowledge gained from the hydrocarbon discoveries at Roc and Phoenix South extensive technical work has been recently completed in order to refine the understanding of the hydrocarbon potential of the Labyrinth project. In particular, revised petrophysical analysis has resulted in updated prospective resource estimates of the most significant prospects and leads. (Refer to Figure 2 for the prospect and leads maps).

The total unrisks prospective resource of the eight most highly ranked prospects is over 1.5 billion barrels recoverable at the Pmean confidence level (Refer table 1). A number of other leads have also been identified.

The Ivory prospect in particular is the standout target within the Labyrinth project with significant oil prospectively over two levels with a total mean prospective resource of over 420 million barrels.

Play level risks have also been evaluated for these prospects and leads based on the current 2D seismic data with a resultant 1 in 5 chance of success for the shallower prospects. 3D seismic, expected to be acquired as part of the ongoing work program, will refine potential drilling locations and is also expected to enhance the chance of success of this play.

**Carnarvon's Managing Director, Mr Adrian Cook said:**

*"The results of the thorough technical work on this project has upgraded the prospective identified to date, making the Labyrinth project a very attractive asset in the Carnarvon portfolio."*

Prospective Recoverable Resources								
Prospect	Target Reservoir	Pmean (mm bbls)	P90 (mm bbls)	P50 (mm bbls)	P10 (mm bbls)	Carnarvon Equity	Chance of Discovery	Risked Pmean (mm bbls)
Ivory*	Lower Depuch	322	20	170	828	100%	18%	58
Ivory deep*	Bedout	99	6	48	243	100%	13%	13
Zebra	Bedout	382	20	179	924	100%	13%	50
Mouse	Lower Depuch	278	40	202	618	100%	18%	50
Mouse deep	Bedout	62	3	33	152	100%	13%	8
Hammock deep	Bedout	249	8	112	630	100%	13%	32
Mahogany	Bedout	148	22	94	332	100%	13%	19
Weaver	Bedout	44	3	25	106	100%	13%	6
		<b>1,584</b>						

\* Note the Labyrinth prospect has been renamed Ivory

Table 1. Prospective resources of high-graded prospects in the Labyrinth project

The estimates of prospective resources included in this announcement have been prepared in accordance with the definitions and guidelines set forth in the SPE-PRMS.

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.

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.

The prospective resources have been calculated using probabilistic methodology.

### **About the Labyrinth Project (WA-521-P Exploration Permit)**

Carnarvon acquired the exploration permit in March 2016 by committing to undertake a work program that included the reprocessing of existing 2D seismic data and geological / geophysical studies.

The permit is located in the Roebuck Basin in the North West Shelf of Western Australia and covers an area of approximately 5,000 km<sup>2</sup>.

Carnarvon holds the permit 100% and is the operator.

### **For all enquiries please contact:**

#### **Shareholder Enquiries**

Mr Thomson Naude  
Company Secretary  
Phone: (08) 9321 2665  
Email: [investor.relations@cvn.com.au](mailto:investor.relations@cvn.com.au)

Yours faithfully



**Adrian Cook**  
Managing Director  
Carnarvon Petroleum