New oil prone acreage acquired on NWS
30 May 2016

HIGHLIGHTS

- **Highly prospective permit acquired with ~1.3 billion barrels of oil equivalent[1] nearby**
- **Development potential in permit with existing oil discoveries and Buffalo Oil Field**
- **Recent technological advances in seismic processing to crack open new and proven oil plays**

Carnarvon Petroleum Limited ("Carnarvon") (ASX: CVN) has acquired 100% of WA-523-P and added another high quality asset to its growing portfolio of oil and gas exploration projects on Australia's North West Shelf ("NWS").

Carnarvon's Managing Director and CEO, Adrian Cook said:

> *"This area of the North West Shelf has tremendous opportunity and is an important addition to our portfolio. The permit could clearly fulfil our strategic intent: 'to find and commercialize major oil and gas resources on the North West Shelf ("NWS")'. Without doubt, the mapped prospectivity in this proven oil province, and within the permit, has outstanding development potential.*
>
> *We believe we can generate significant shareholder value by applying cutting edge seismic imaging technologies which have recently proven successful in our Phoenix permits. These modern processes will provide a step-change improvement in the definition of prospects, determination of volumes and reduction of drilling risk.*
>
> *This is a quality acquisition secured at the right time in the cycle. Like our Phoenix project that we acquired in the GFC period of 2009, this rare opportunity has also been secured for a fraction of the cost of the commitments made by peers in bid rounds only a year or two ago.*
>
> *We are very excited to include this important new acreage in our portfolio for its very real potential to create material value for our shareholders."*

Carnarvon acquired WA-523-P through the Government gazettal process by successfully bidding a work program comprising reprocessing existing 3D seismic data and interpretation and analysis of the data within the initial firm three year term. Carnarvon has already initiated the reprocessing work which is expected to take around 12 months to complete. If the results prove successful, Carnarvon at its discretion may commit to acquire new 3D seismic data and drill a well over the course of the following three years.

Carnarvon's present acreage on the NWS now totals some 35,000 km^2 (~18,700 km^2 net to CVN). This new permit covers approximately 4,220 km^2 and is located in the northernmost extent of Western Australian waters, as illustrated in Figure 1 below.

Figure 2 outlines the local geography of WA-523-P including nearby oil and gas fields and pipelines. WA-523-P includes the Buffalo Oil Field and the undeveloped oil discoveries in the Bluff-1 and Buller-1 wells. The permit is also closely proximal to proven oilfields at Laminaria, Corallina, Kitan, Jahal, and Kuda Tasi that collectively contain approximately 280 mmbbl[1] initially recoverable all lying within 15 kilometres of

[1] Source: barrels of oil equivalent initially recoverable are derived from the sources contained in the References on page 5.

WA-523-P. Further south, the giant Bayu-Undan gas/condensate field, and the Kakatua and Elang oil fields lie just 25-40km to the east of WA-523-P. In total, within about 40km around WA-523-P, these discovered fields are estimated to collectively contain about 730 million[1] barrels of oil and 3.4 Tcf of gas[1].

Figure 3 contains a regional structure map of the area, illustrating the dominance of the east-west structural grain, and the prevalence of undrilled horsts that are expected to host numerous additional exploration targets. Significant opportunity is suggested by the number of wells that have intersected live oil or good oil shows, and by the distribution of undrilled structures.

WA-523-P includes the Buffalo Oil Field that produced around 20 million barrels of high quality oil and was flowing around 4,000 barrels of oil a day when operations ceased in 2004. The field was discovered with Buffalo-1 in 1996 in 27 metres of water. Buffalo-1 intersected a gross oil column of 45 metres of which there was interpreted 32 metres net reservoir in the Elang Formation. The reservoir was tested at 11,790 barrels per day of 52.7^{o} oil. The field was developed in 1999 and produced at initial rates of approximately 35,000 barrels of oil per day. Depending on oil price and remapping of the field, Buffalo may be a commercially attractive re-development opportunity in the future, perhaps for tie-back to nearby facilities.

Additionally, WA-523-P includes proven undeveloped oil pools at the Bluff-1 and Buller-1 exploration wells:

- Bluff-1 was drilled in 1998 in 109 metres of water. Bluff-1 discovered a 33 metre gross oil column within the Elang Formation; of which there was a 16 metre net oil sand reservoir from which a 15 litre sample of 56^{o} API oil was taken.

- Buller-1 was drilled in 1997 in 115 metres of water. Buller-1 discovered a 27 metre gross oil column within the Elang Formation; of which there was a 9 metre net oil sand reservoir from which a 16 litre sample of 52^{o} API oil was taken.

Either discovery may prove to be commercially significant if the new imaging reveals volumetric upside.

In looking at historical drilling across the area, Carnarvon Petroleum observes that the absence of accurate seismic depth imaging of the target reservoirs has resulted in a very poor track record for well depths 'coming in on prognosis', even when they are drilled close to existing well control. This problem in getting the depth mapping right has resulted in major difficulty defining field development locations and prospects, describing volumes, reducing risk and justifying drilling.

Carnarvon's proposed new seismic imaging processes are intended to address these historical depth imaging challenges by using modern processes that the company has been testing on other permits in its portfolio.

In the past three years, advances in computing technology now enable very significant geophysical capabilities that were previously only theoretically possible. Of particular relevance to the seismic data in WA-523-P is the recent emergence of Full Waveform Inversion (FWI) as a working tool to provide the required higher resolution velocity field measurement for input to Pre-Stack Depth Migration ("PSDM") and to provide the required improved depth imaging.

A key component of Carnarvon's work program for WA-523-P is therefore application of FWI, and other modern processing technologies to the reprocessing of the existing 3D data to deliver greatly improved depth imaging. The improved data will enable detailed remapping, and facilitate work towards a drilling program.

Yours faithfully

Adrian Cook
Managing Director
Carnarvon Petroleum

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

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.

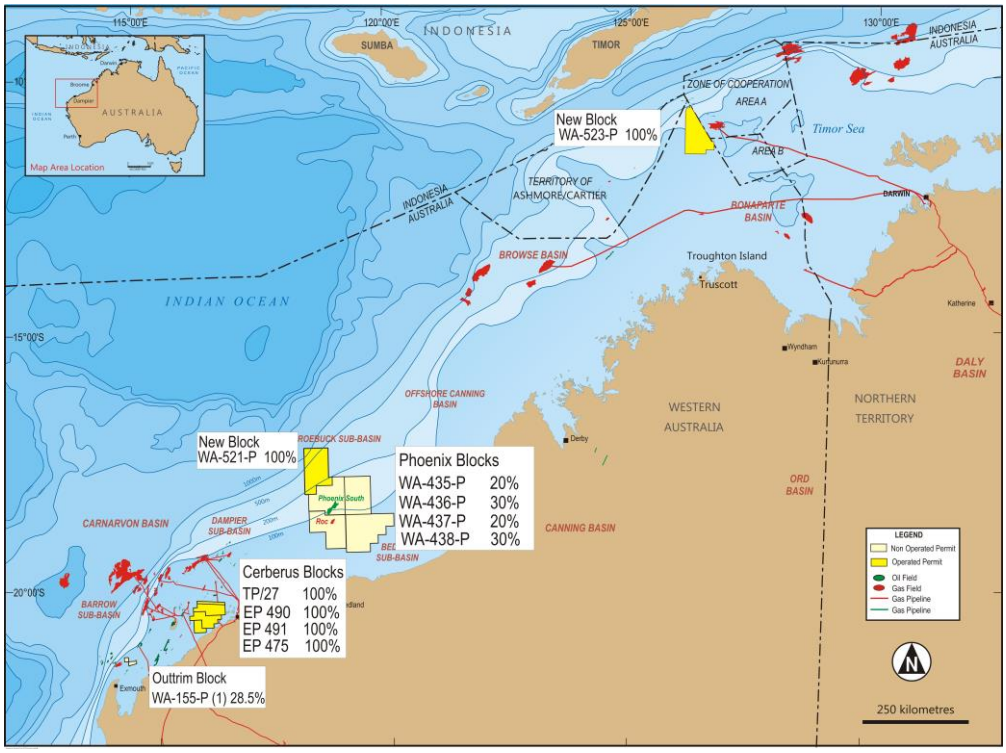

Figure 1: Carnarvon's petroleum exploration license holdings on the NWS.

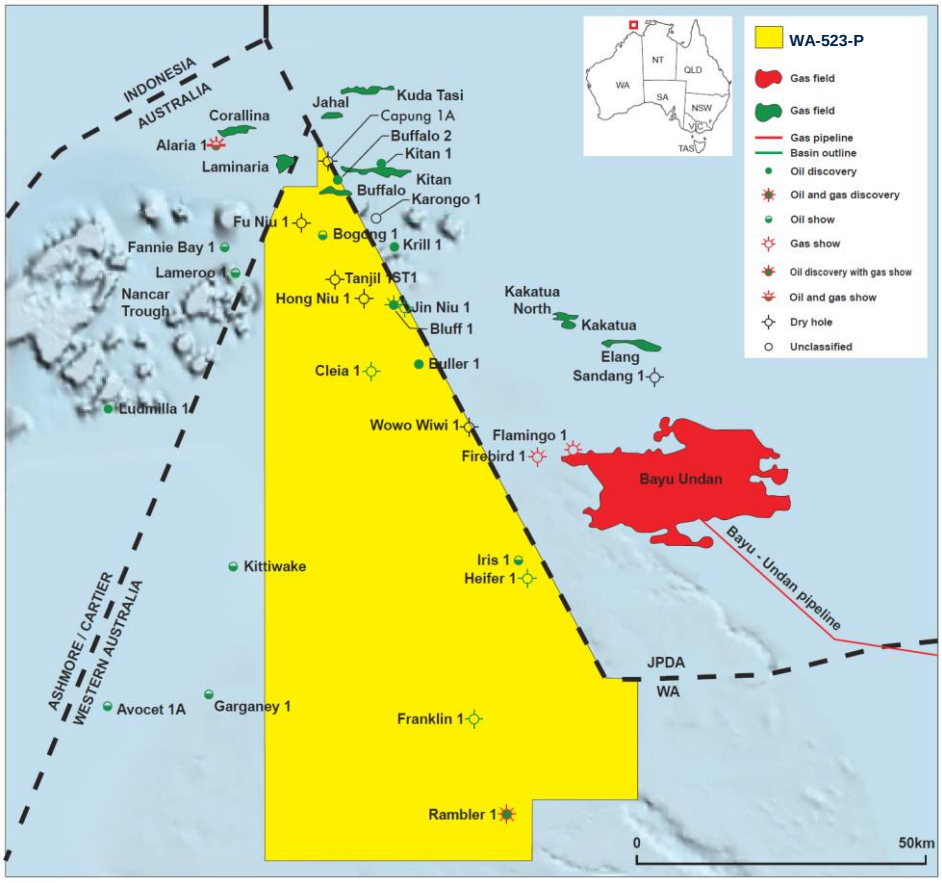

Figure 2: Map of wells, fields and administrative boundaries in the vicinity of WA-523-P

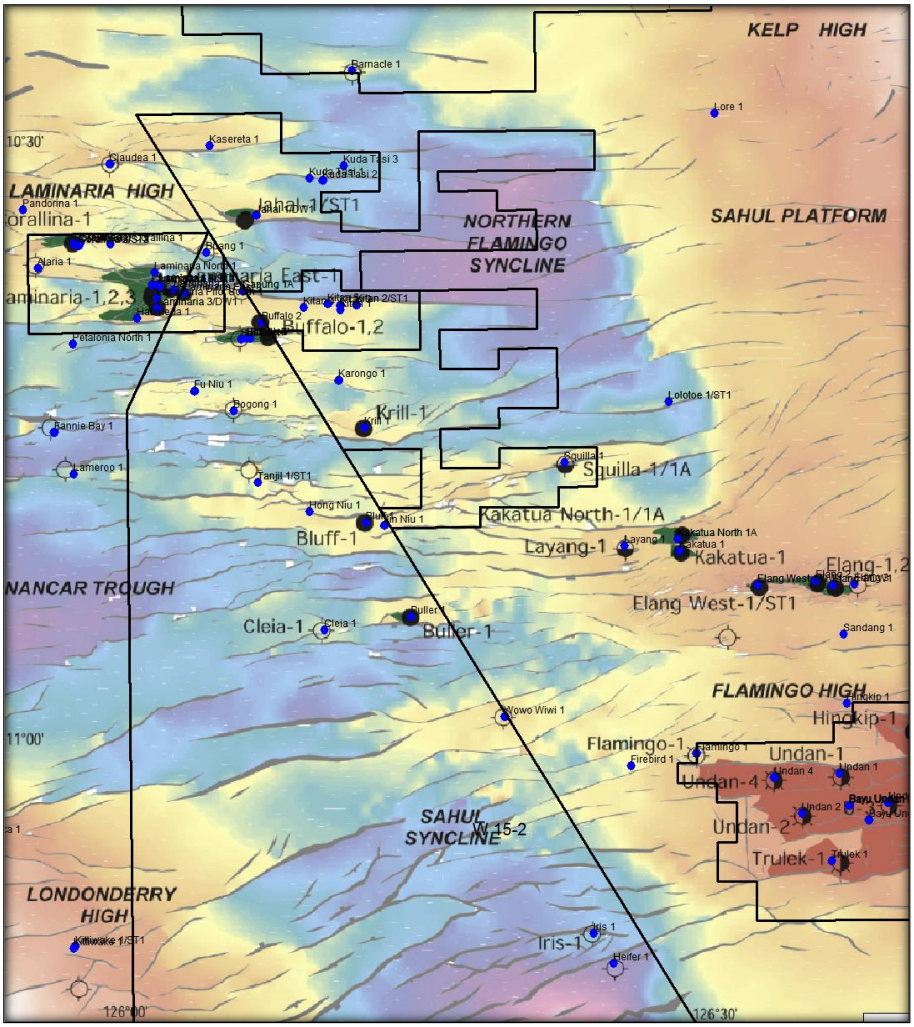

Figure 1 : Depth Structure Map of Main Reservoir Target adapted from Barrett, A.G., Hinde, A.L., & Kennard, J.M., 2004. 'Undiscovered resource assessment methodologies and application to the Bonaparte Basin'. (In Ellis G.K., Baillie P.W. and Munson T.J. (Eds) Timor Sea Petroleum Geoscience. Proceedings of the Timor Sea Symposium, Darwin, Northern Territory, 19-20 June 2003. Northern Territory Geological Survey, Special Publication 1.)

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