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# **3D Oil Limited**

ASX Release

26 February 2018

# **Completion of WA/527-P Prospectivity Review**

### **Key Points**

- A thorough prospectivity review has revealed strong potential for a rich petroleum system to be operating within WA/527-P
- Permit located in the offshore Roebuck Basin, adjacent to Roc and Phoenix South discoveries
- Multiple leads have been generated; all are considered prospective for oil
- The generation of oil-rich leads and detailed analysis provides the platform for 3D Oil to launch a targeted farm-out campaign for WA/527-P

3D Oil Limited (ASX: TDO, "3D Oil" or the "Company") is pleased to provide an update of the prospectivity of exploration permit WA/527-P of the Roebuck Basin situated along the northwest shelf of Australia. 3D Oil acquired 100% of WA/527-P in March 2017 through an offshore gazettal round.

WA/527-P is a large permit covering approximately 6,500 km<sup>2</sup> in the Roebuck Basin. The permit remains under-explored with a sparse grid of open-file 2D seismic data of varying vintage and no wells. WA/527-P offers a rare opportunity for exploration within a new frontier, while adjacent to some of Australia's most existing recent oil and gas discoveries including Roc and Phoenix South (JV between Quadrant Energy, Carnarvon Petroleum and Finder Exploration).

3D Oil has identified over fifteen leads across the permit using a combination of open-file 2D seismic data and the Searcher Seismic Multi-client Bilby 2D seismic survey.

The leads are all considered to be prospective for oil and will underpin our upcoming farm-out campaign, to commence this quarter.

#### WA/527-P Volumetrics

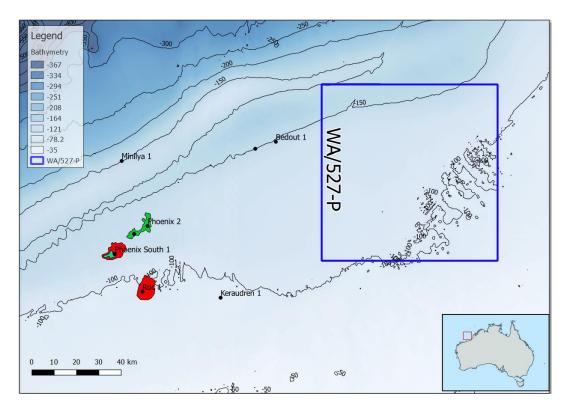
Volumetric estimates detailing the Prospective Resources for WA/527-P area are shown in the table below. These estimates, while conservative indicate that the permit contains significant potential value to 3D Oil. It should be noted that the estimations are conducted based on TDO's current dataset, and has not been able to take into account various other proprietary geophysical data that the company does not have access to.

## Table 1: WA/527-P Prospective Resource Estimate (MMbbls) Recoverable Oil

Prospect	Status	Low	Best	High
Salamander	Lead	57	191	713
Jaubert	Lead	17	72	205
Whaleback	Lead	16	87	219
WA/527-P Arithmetic Total		90	349	1,138

#### **Roebuck Basin Overview**

The Roebuck Basin is located between the Northern Carnarvon and Browse basins along the prolific Northwest Shelf of Australia. A recent exploration campaign by the Quadrant Energy, Carnarvon Petroleum (ASX: CVN) and Finder Exploration Joint Venture has resulted in the discovery of an exciting new petroleum system located in permits adjacent to 3D Oil's 100%-owned WA/527-P.



#### Figure 1: Roebuck Basin Location

The joint venture's exploration campaign included the drilling of the Phoenix South and Roc wells between 2014 and 2016. Phoenix South-1 discovered a series of light oil zones, while the Roc wells

and Phoenix South-2 all discovered significant gas-condensate within sands of the Triassic, Caley reservoir interval.

Most recently Carnarvon Petroleum announced that that the drilling rig Development Driller-1 had reached port in South Africa where it was scheduled to undergo maintenance, after which it would proceed to the Phoenix South-3 drilling location. Phoenix South-3 is designed to further evaluate a gas-condensate accumulation discovered by Phoenix South-2 which is estimated to contain a Best Estimate Prospective Resource of 489Bcf of gas and 57 MMbbls of condensate *(refer ASX Announcement from Carnarvon Petroleum dated 1 February 2018).* 

3D Oil will also closely follow the drilling of Dorado-1, planned by the Quadrant led joint venture for later in 2018. Dorado-1 may have implications for TDO's prospectivity concept as the Dorado target is considered to be within an analogous geological setting to some of the leads within WA/527-P.

#### WA/527-P Prospectivity

3D Oil has conducted a comprehensive prospectivity review which has revealed the potential for a highly productive Paleozoic source rocks that could contribute significant hydrocarbons to a series of Paleozoic reef/carbonate features, and a combination of conventional traps identifiable within the Mesozoic.

There are over fifteen leads that can be identified on a combination of open-file 2D seismic data and the Searcher Seismic Multi-client Bilby 2D seismic survey, a subset of which 3D Oil has licensed. Two of these leads, Salamander and Jaubert, were identified by previous operators. However, new insight derived from modern multi-client seismic data has resulted in upgrading the prospectivity of these leads.

#### Paleozoic Reefs

3D Oil has identified the presence of at least six reef-like features, on the data currently available that could form viable oil targets. These reef-like features range in size from 3-30km<sup>2</sup>.

3D Oil's proposed play concept involves thermally mature marine source rocks of either Devonian or Early Carboniferous age. Such source rocks are proven in the onshore Canning Basin where they have contributed strongly paraffinic, light oil to successful oil fields such as Blina and Ungani. These source rocks are likely to be mature for oil expulsion within the WA/527-P acreage and if so, would contribute hydrocarbons to a series of apparent carbonate build-ups present within the eastern side of the acreage. Some of these features can be observed on open-file seismic data; however, this data is generally of poor quality. By far the most clear of these features is a potential carbonate atoll, only observable of the Bilby 2D survey, however, far more modern broadband seismic data is required to provide an accurate image of this feature.

#### Mesozoic Leads

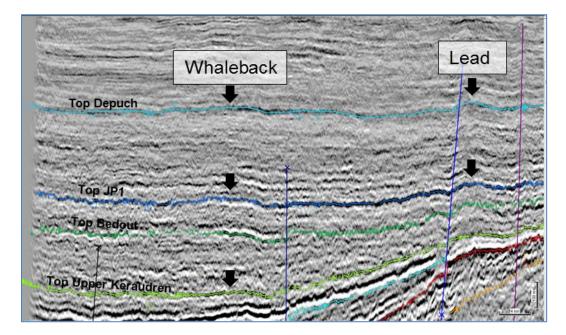
The Paleozoic source rocks may also provide hydrocarbons to a series of inversion and fault-bound targets within both the Triassic and Jurassic sections. Many of these features have been identified on the Bilby 2D seismic data. As such, these are new features, not identified by previous operators. Of particular note is the identification of a Jurassic Lead named Whaleback, with a Best Estimate Prospective Resource of 86 MMbbls.

Based on existing well data in the area, the Jurassic could host at least two reservoir-seal pairs. One is within the Early Jurassic and another within the Late Jurassic. The latter of these comprises the deltaic sediments of the Depuch Formation which exhibit excellent reservoir properties in nearby wells.

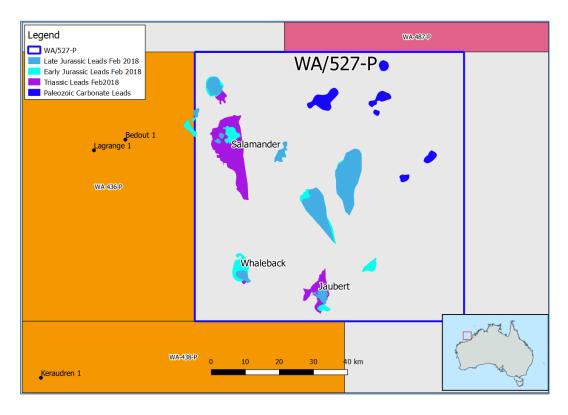
The Salamander and Jaubert leads have been recognized by previous operators in the block however, interpretation of a subset of the Bilby 2D survey indicates that Salamander may extend further to the south than previously thought, while Jaubert may have independent dip closure within the Jurassic.

There are at least twelve other leads within the permit, however, these are generally identified on single seismic lines and therefore cannot yet be fully evaluated.

3D Oil looks forward to the opportunity to develop these exciting new leads with modern 3D seismic data that could result in the identification of multiple drillable prospects.







#### Figure 3: WA/527-P Leads

#### WA/527-P Forward Plan

3D Oil will plan the acquisition of a 3D seismic survey, scheduled for 2020. This survey will be optimally located to provide high quality and modern seismic imagery of those leads determined to have the best chance of success. This will allow for more robust estimates of oil and gas volumes, with the aspiration of upgrading one or more of the leads to Prospect status. This will ultimately provide robust drilling targets. It is likely that by this time, a successful oil discovery will be well placed to take advantage of a recovering oil price.

3D Oil now intends to make WA/527-P available to the farm-out market. The permit offers a unique opportunity for a potential partner to become involved with exploration in a frontier area, adjacent to recent oil and gas discoveries and with a low-cost minimum work programme, specifically designed to mature the industry's understanding of this new and exciting frontier.

### For further information please contact:

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#### **Qualified Petroleum Reserves and Resources Evaluator Statement**

The Prospective Resources estimates in this release are based on, and fairly represent, information and supporting documents prepared by, or under the supervision of Dr David Briguglio, who is employed full-time by 3D Oil Limited as Exploration Manager. He holds a BSc.Hons and PhD in Petroleum Geoscience and has been practicing as a Petroleum Geoscientist for 8 years. Dr Briguglio is qualified in accordance with ASX listing rule 5.41 and has consented in writing to the inclusion of the information in the form and context in which it appears.

#### **Prospective Resources**

The estimates have been prepared by the company in accordance with the definitions and guidelines set forth in the Petroleum Resources Management System, 2011 approved by the Society of Petroleum Engineer. Prospective Resource estimates are for recoverable volumes and unless otherwise stated this report quotes Best Estimates and gross volumes. The estimates are unrisked and have not been adjusted for both an associated chance of discovery and a chance of development.