

# Beehive 3D Seismic Survey Receives Environmental Approval

## Highlights:

- Regulator approves environmental plan for WA-488-P Beehive 3D Seismic Survey
- Appointment of seismic contractor imminent – survey acquisition expected to be commenced in July and completed before the end of August 2018
- Beehive 3D Seismic Survey is fully funded by Total and Santos
- Giant Beehive Prospect is one of the largest undrilled hydrocarbon structures in Australia
- If Total and/or Santos exercises options to drill, Melbana retains 20% and is fully carried for the first exploration well drilled in WA-488-P

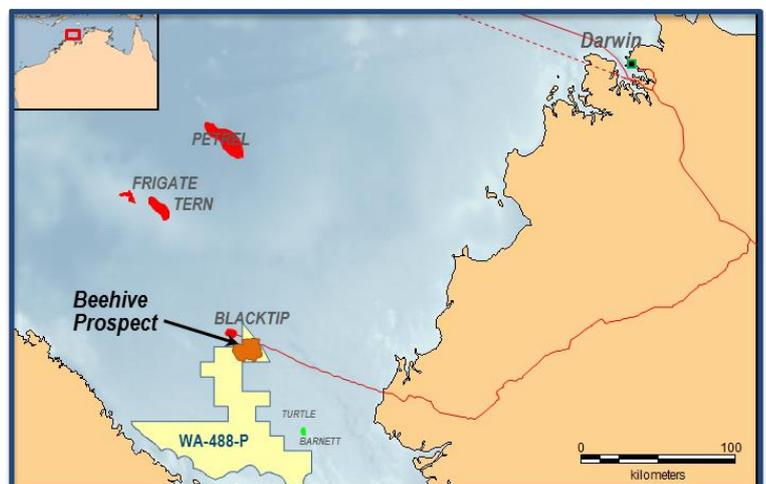
MELBOURNE, AUSTRALIA (23 May 2018)

Melbana Energy Limited ('Melbana' or the 'Company') (ASX: **MAY**) is pleased to advise that it has received environmental approval from the regulator, NOPSEMA, to undertake the Beehive 3D Seismic Survey over the Beehive Prospect which is one of the largest undrilled hydrocarbon structures in Australia.

The Beehive 3D Seismic Survey is being operated by Australian energy company Santos pursuant to an Operations Services Agreement and is fully funded by French major Total and Santos.

The Beehive 3D survey contractor will be appointed imminently and the survey itself is expected to be commenced in July and completed before the end of August 2018. The survey is a typical 3D survey using methods and procedures similar to others conducted in Australian waters.

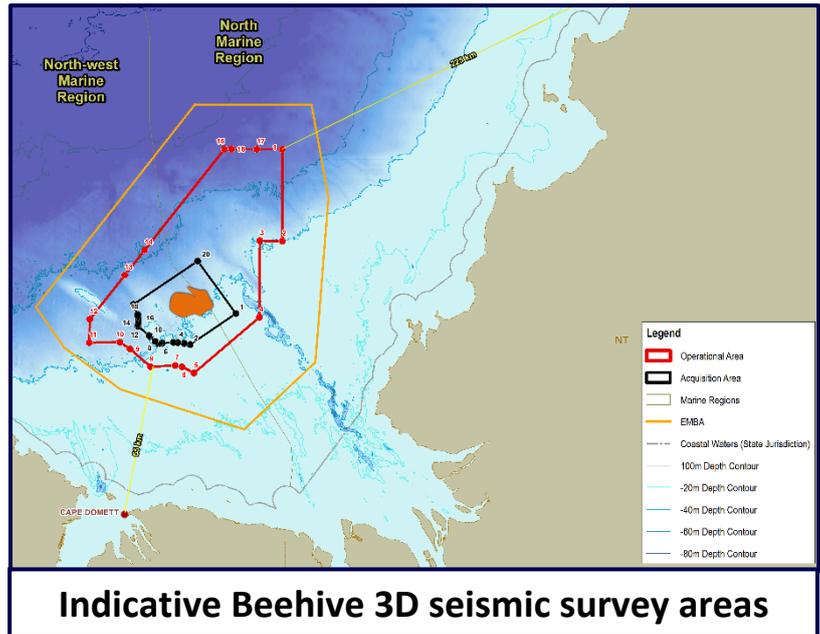
The survey acquisition area is approximately 600 km<sup>2</sup> with a larger operational area around it to allow for vessel turns and testing of equipment. The operational area is located in the Joseph Bonaparte Gulf, approximately 225 km west-southwest from Darwin.



**Beehive Prospect is adjacent to the Blacktip gas field and pipeline**

Total and Santos have an option (exercisable together or individually) to acquire a direct 80% participating interest in the permit in return for fully funding the costs of all activities until completion of the first well in the WA-488-P permit. In the event of a commercial discovery, Melbana will repay carried funding from its share of cash flow from the Beehive field. Melbana will have no re-payment obligations for such carried funding in the event there is no commercial discovery and development in WA-488-P.

The acquisition of a new 3D seismic survey over Beehive will provide potential for further de-risking of the prospect and will facilitate consideration of a preferred location for the Beehive-1 exploration well.

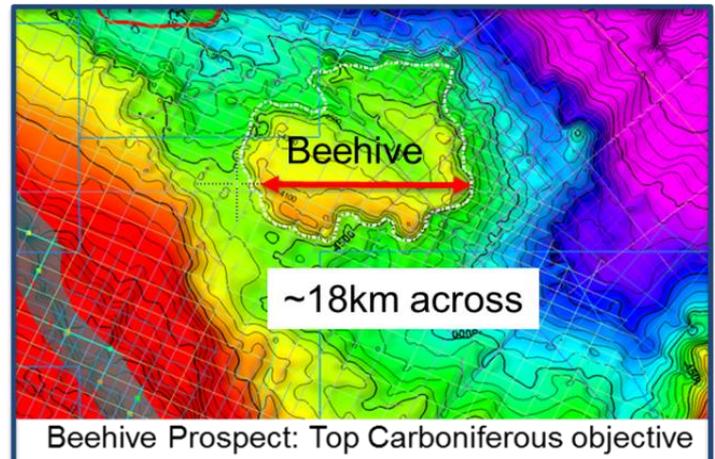


**Melbana’s CEO, Robert Zammit, commented on the announcement:**

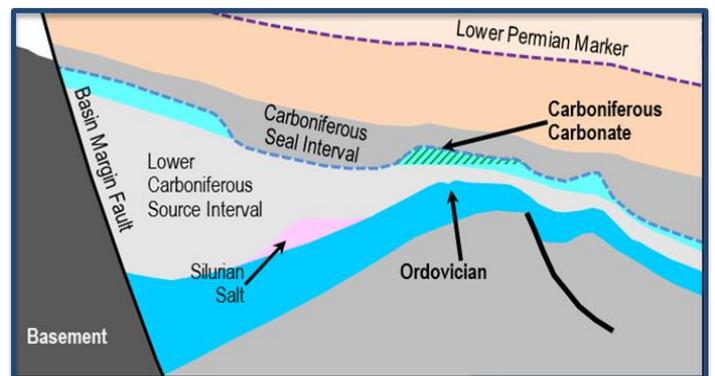
*“We are pleased that we have been able to secure the environmental permit in sufficient time to enable the prompt acquisition of the Beehive 3D Seismic Survey. Our existing commercial arrangement with Total and Santos provides Melbana with the opportunity to explore this enormous prospect at no further cost to Melbana through to the completion of the first exploration well, which if successful, would be a game changer for our company, the region and its shareholders.”*

## WA-488-P Background

The Beehive prospect is potentially the largest undrilled hydrocarbon prospect in Australia. It is a Carboniferous age 180km<sup>2</sup> isolated carbonate build up with 400m of mapped vertical relief, analogous to the giant Tengiz field in the Caspian Basin. It is located in 40m water depth suitable for a jack up rig, within ~75km of shore and developable by either FPSO or pipeline to existing infrastructure. This play type is new and undrilled in the Bonaparte Basin with no wells having been drilled to this depth in the basin.



The carbonate reservoir is also interpreted to be the same age as the 2011 Ungani-1 oil discovery in the Canning basin, which tested at 1,600 bopd demonstrating a high quality reservoir. Beehive is a much larger build up than Ungani and has excellent access to the Lower Carboniferous source rock in adjacent depocentres.



Beehive is currently defined by a tight grid of 2D seismic data. Melbana has recently undertaken a reprocessing and inversion study of selected 2D seismic lines across Beehive with very encouraging results. The seismic inversion results combined with the results of the reprocessing have enhanced the understanding of the Beehive reservoir and seal units. The acquisition of a new 3D seismic survey over Beehive will provide potential for further de-risking of the prospect and facilitate consideration of a preferred location for the Beehive-1 exploration well.

Beehive is located close to several existing facilities including Ichthys project and Blacktip field and pipeline offering several options for future gas monetization. Potentially the largest undrilled hydrocarbon prospect in Australia, the Beehive prospect is characterised as having significant prospective resources as outlined in the following table:

Prospective Resources (Mmboe, 100%)*					
Beehive	CoS	Low	Best	Mean	High
Carboniferous objective	16%	97	558	940	2033

\* **Prospective Resources Cautionary Statement:** The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Future exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

**Contingent and Prospective Resources:** The information that relates to Contingent Resources and Prospective Resources for Melbana is based on, and fairly represents, information and supporting documentation prepared by Mr. Dean Johnstone, who is an employee of the company and has more than 34 years of relevant experience. Mr. Johnstone is a member of the American Association of Petroleum Geologists. Mr. Johnstone consents to the publication of the resource assessments contained herein. The Contingent Resource and Prospective Resource estimates are consistent with the definitions of hydrocarbon resources that appear in the Listing Rules. Conversion factors: 6 Bscf gas equals 1 MMboe; 1 bbl condensate equals 1 boe