

Overview

Beehive – largest undrilled prospect in Australia

French major Total and Santos have an option to acquire an 80% interest by fully funding the Beehive-1 well

Independent Expert McDaniel & Associates estimates Prospective Resource of up to1.6 billion barrels of oil WA-488-P is located in the Petrel Subbasin between the producing Blacktip gas field and the undeveloped Turtle and Barnett oil discoveries and has an area of 4,074 km².

Melbana has identified the potentially giant Beehive prospect, located in 40m water depth and defined by a tight grid of high quality 2D seismic data, as one of the largest hydrocarbon prospects remaining in Australia. A 3D Seismic Survey, fully funded by French supermajor Total and Australia's Santos was completed in August 2018. Total and/or Santos have an option to fund



100% of the first exploration well in the. Option to drill is exercisable by Total and/or Santos within 6 months of receipt of processed seismic data. If either of Total, Santos or both exercise their option, Melbana will have a fully carried 20% participating interest until completion of the first exploration well in WA-488-P.

Potentially the largest undrilled hydrocarbon prospect in Australia, the Beehive prospect is characterized by Independent Expert McDaniel & Associates as having significant prospective resources as outlined in the following table:

Prospective Resources^{1,2} – Recoverable

Beehive Prospect	COS	Low	Best	Mean	High
(MMboe)	20%	91	388	704	1,645

¹The 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. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons. COS – Geological Chance of Success. MMboe – Conversion factor 6000scf/boe ²per Independent Expert McDaniel & Associates Competent Persons Report June 30, 2018

Beehive Technical Overview

Beehive is an enormous 180km² isolated carbonate build up of Carboniferous age with 400m of mapped vertical relief and a crest at 4,100m.

The Carboniferous carbonate objective has been penetrated previously in the area only attached shelf/basin margin settings.





Beehive Prospect: Top Carboniferous objective

Australia – Bonaparte Gulf: WA-488-P

Multi-billion barrel Tengiz analog



Beehive is analogous to the giant Tengiz field in the Caspian basin, which is also a Carboniferous isolated carbonate build up. 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. This play setting is undrilled in the Petrel Basin.

In 2017, Melbana undertook a reprocessing and inversion study of selected seismic lines across the Beehive Prospect 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.

Beehive 3D Seismic Survey

The Beehive 3D Seismic Survey, which commenced on 24 July 2018 and was completed on 14 August 2018, will provide modern 3D imaging of the Beehive Prospect which will provide potential for further de-risking of the prospect and will facilitate consideration of a preferred location for the Beehive-1 exploration well.

During the planning of the Beehive 3D Seismic Survey, a new lead was identified and the survey area was extended by $\sim 100 \text{km}^2$ ($\sim 16\%$) to



provide coverage over the newly identified lead (Egret) that is partially within the boundary of WA-488-P. The extension of the survey area is within the approved scope and operational envelope of the Beehive 3D Seismic Survey. The Beehive 3D Seismic Survey, including the extension over the Egret lead, was fully funded by Santos and Total.

Permit Year	End Date	Minimum Work Requirements	Estimated Expenditure (indicative only)	
2	21 Sep 2018	Geological and Geophysical Studies	A\$200,000	
		Survey Data Proprietary Processing	A\$300,000	
		150km 2D Broadband Reprocessing	A\$150,000	
		and Seismic Inversion		
		330km 2D Broadband Seismic	A\$250,000	
		Reprocessing, Seismic Stratigraphic		
		Interpretation and Analogue Field Study		
3	21 Dec 2020	One Exploration Well	A\$20,000,000	
4	21 Sep 2020	400km ² New 3D Seismic Survey (2018	A\$5,000,000	
		3D Survey credited against this)		
5	21 Sep 2021	Geological and Geophysical Studies	A\$200,000	
6	21 Sep 2022	One Exploration Well	A\$20,000,000	

Permit Work Obligations

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