

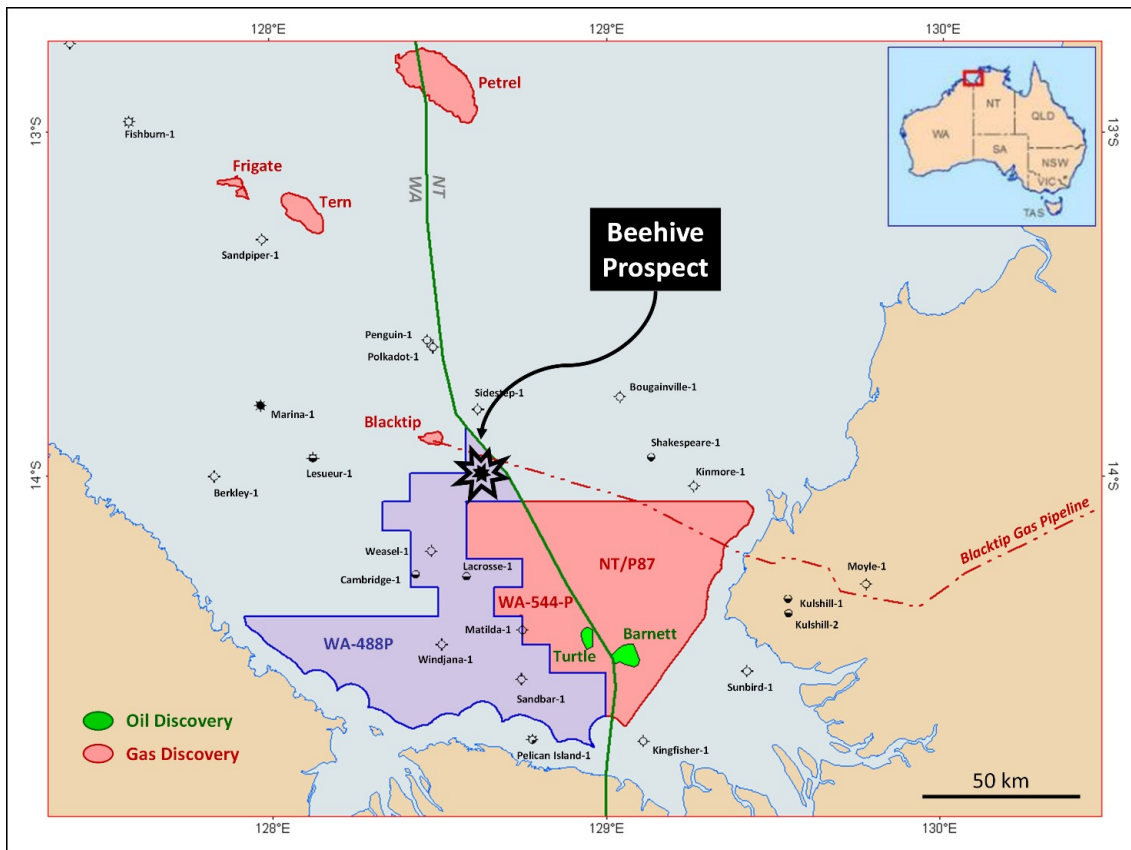
Australia – Joseph Bonaparte Gulf

NT/P87 WA-544-P WA-488-P



Melbana’s interests in the Joseph Bonaparte Gulf, a shallow water area offshore northern Australia about 300 km southwest of Darwin, consist of a 100% interest in two contiguous permits (NT/P87 and WA-544-P) and contingent cash and royalty interests in the adjacent permit WA-488-P.

WA-488-P contains the giant Beehive prospect with its Prospective Resource of up to 1.4 billion barrels of oil equivalent, as estimated by independent expert McDaniel & Associates. Beehive is located near to ENI’s producing Blacktip gas field and is covered by a high-quality 3D seismic survey acquired in 2018. In November 2021, Melbana completed the sale of WA-488-P to a subsidiary of EOG Resources, Inc. for an upfront consideration of US\$7.5 million. EOG Resources is planning to drill an exploration well in the Beehive prospect in either late 2022 or early 2023. Melbana is entitled to receive additional cash payments of US\$5.0 million, subject to EOG Resources making certain future elections with regards to this permit area, and royalty payments of US\$10.0 million for each 25 million barrels of oil equivalent that may be discovered and produced from this permit area.



WA-544-P and NT/P87, permits adjacent to WA-488-P, were awarded to Melbana in November 2020 and contain the undeveloped Turtle and Barnett oil discoveries. The initial three-year term will look to leverage learnings from the Beehive project by reprocessing available 2D and 3D seismic data to determine whether the above discoveries can be upgraded and if the potential for deeper carbonate plays exist.

Table 1 - Prospective Resources¹ (Beehive)

Prospect	Scenario	COS ²	Unrisked Prospective Resource			
			Low (1U)	Best (2U)	High (3U)	Mean
	<u>Gas-only</u>					
	Gas (BCF)		198	2,186	7,184	3,054
	Condensate (MMbbl)		2	38	185	70
	<u>Oil-only</u>					
	Oil (MMbbl)		37	419	1,435	604
Beehive	Most likely (MMboe)	20%	37	416	1,424	599

² Chance of Success

History of the Beehive Prospect

Melbana originally defined the potentially giant Beehive prospect from a tight grid of high quality 2D seismic data. A 3D seismic survey was completed in 2018, fully funded by French supermajor Total and Australia's Santos. In consideration for funding the seismic survey, Total and Santos were granted an option to acquire an 80% participating interest in the permit by fully funding the drilling of the first exploration well in WA-488-P.

Total's option expired and Santos sought an extension, which was granted until March 2020. This gave them the right to the full 80%.



Figure 1 - Polarcus, Beehive 3D Survey

In December 2019, Santos exercised its option conditional on their being able to introduce a partner. Santos' option expired without having satisfied this condition, resulting in Melbana once again having a 100% unencumbered interest in WA-488-P. Melbana subsequently applied for, and received, a one-year extension to its current permit year.

In November 2021, Melbana completed the divestment of its subsidiary Finnis Offshore Exploration's 100% interest contingent interest in any future operations and production in the permit area.

Beehive Technical Overview

The Beehive prospect is a Carboniferous age 180km² 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, is suitable for a jack up rig and lies within ~75km of shore. It would be 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 there.

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 productive reservoir. Beehive is a much larger build up than Ungani and has excellent access to the Lower Carboniferous source rock in adjacent depocentres.

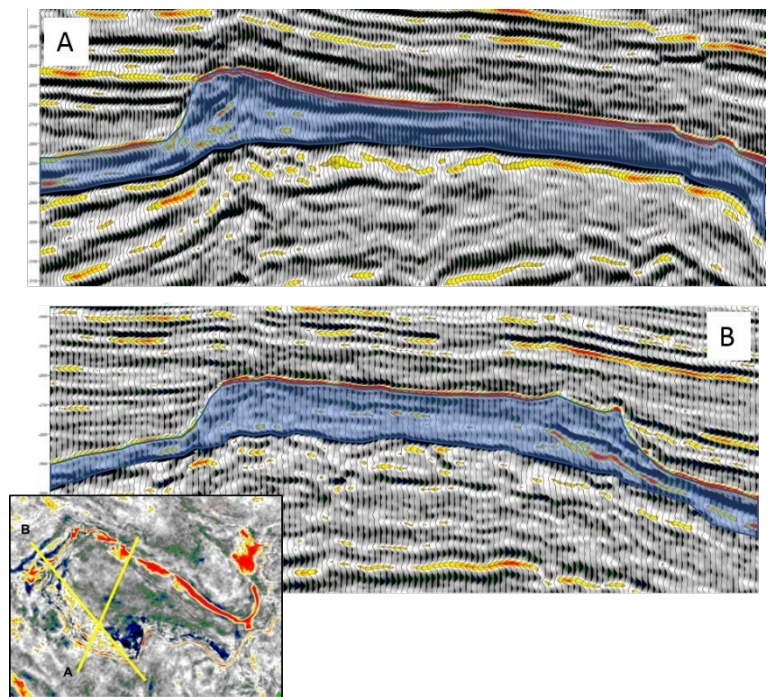


Figure 2 - Beehive Prospect on new 3D Top Carboniferous Objective

The new Beehive 3D seismic data resolves the carbonate build up unequivocally as shown by the examples displayed in Figure 2 in profiles and time slice.

Melbana also completed reprocessing and an inversion study of selected 2D seismic lines in 2017 across the Beehive Prospect with very encouraging results. When taken with the results of the recent 3D survey the understanding of the Beehive reservoir and seal units were enhanced as well as tightening up the resolution of the mapped closure (as displayed in Figure 3 and Figure 4). There was very little change in the volumetrics between the 2D data and the new 3D.

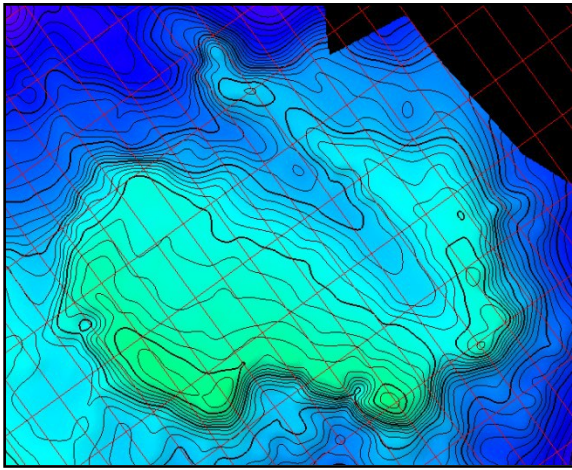


Figure 3 – Beehive on reprocessed 2D

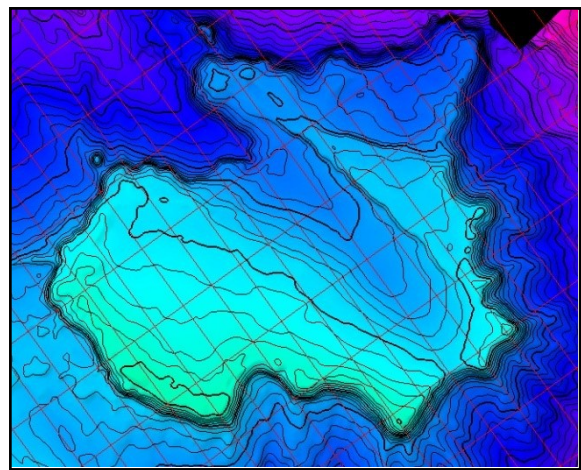


Figure 4 – Beehive on 3D seismic seismic

WA-544-P and NT/P87

The newly awarded WA-544-P and NT/P87 permits contain discovered oil within the Carboniferous Kuriyippi Formation sands. In addition, Melbana has identified significant deeper prospectivity below these reservoirs on existing seismic data.

Several large undrilled isolated carbonate platforms of probably Devonian age have been mapped at two stratigraphic levels under the Turtle and Barnett features (see Figure 5 and Figure 6). Similar earlier carbonate platforms are also visible below the Carboniferous carbonates which are the primary objective of the Beehive prospect in adjacent WA-488-P.

The initial work programme in the primary 3-year term for both permits includes seismic reprocessing of existing vintage 2D and 3D seismic datasets and subsequent interpretation to characterise the potential of these leads.

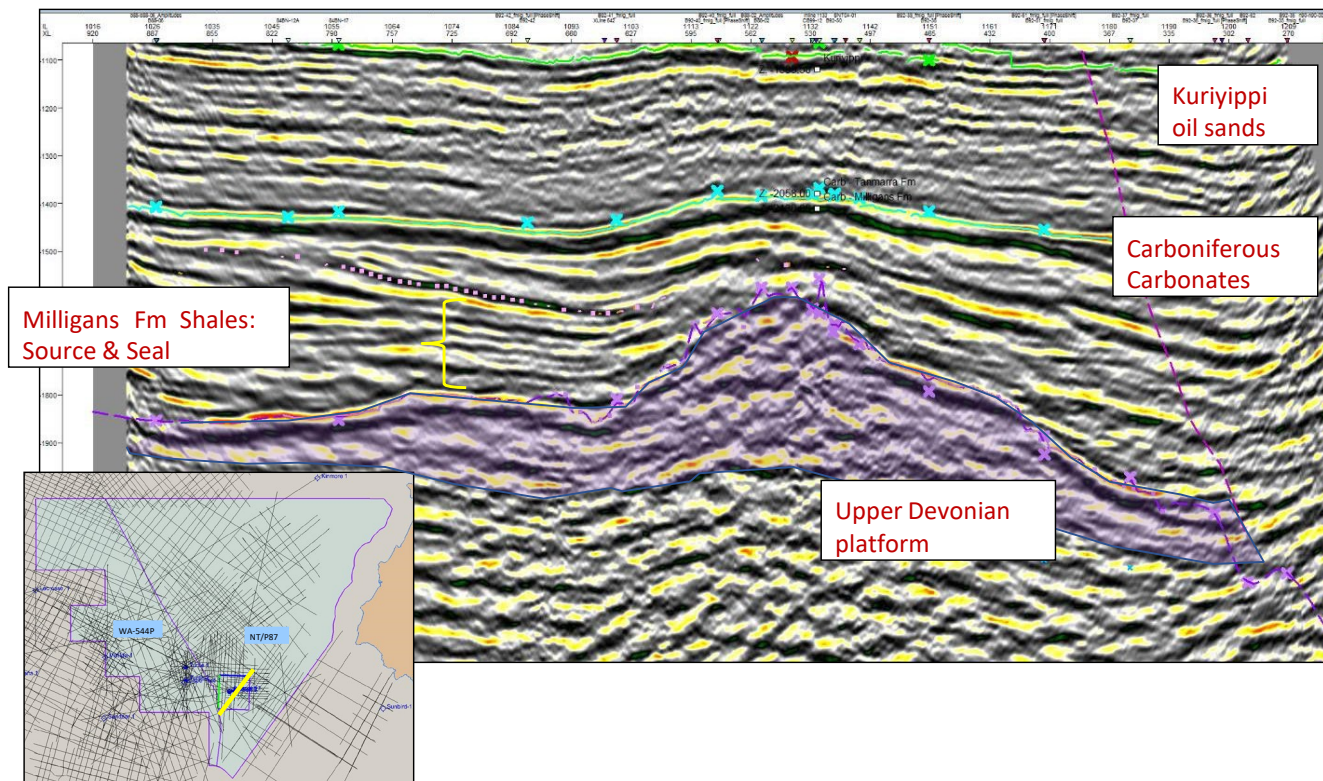


Figure 5 - Upper Devonian carbonate build up under the Barnett discovery

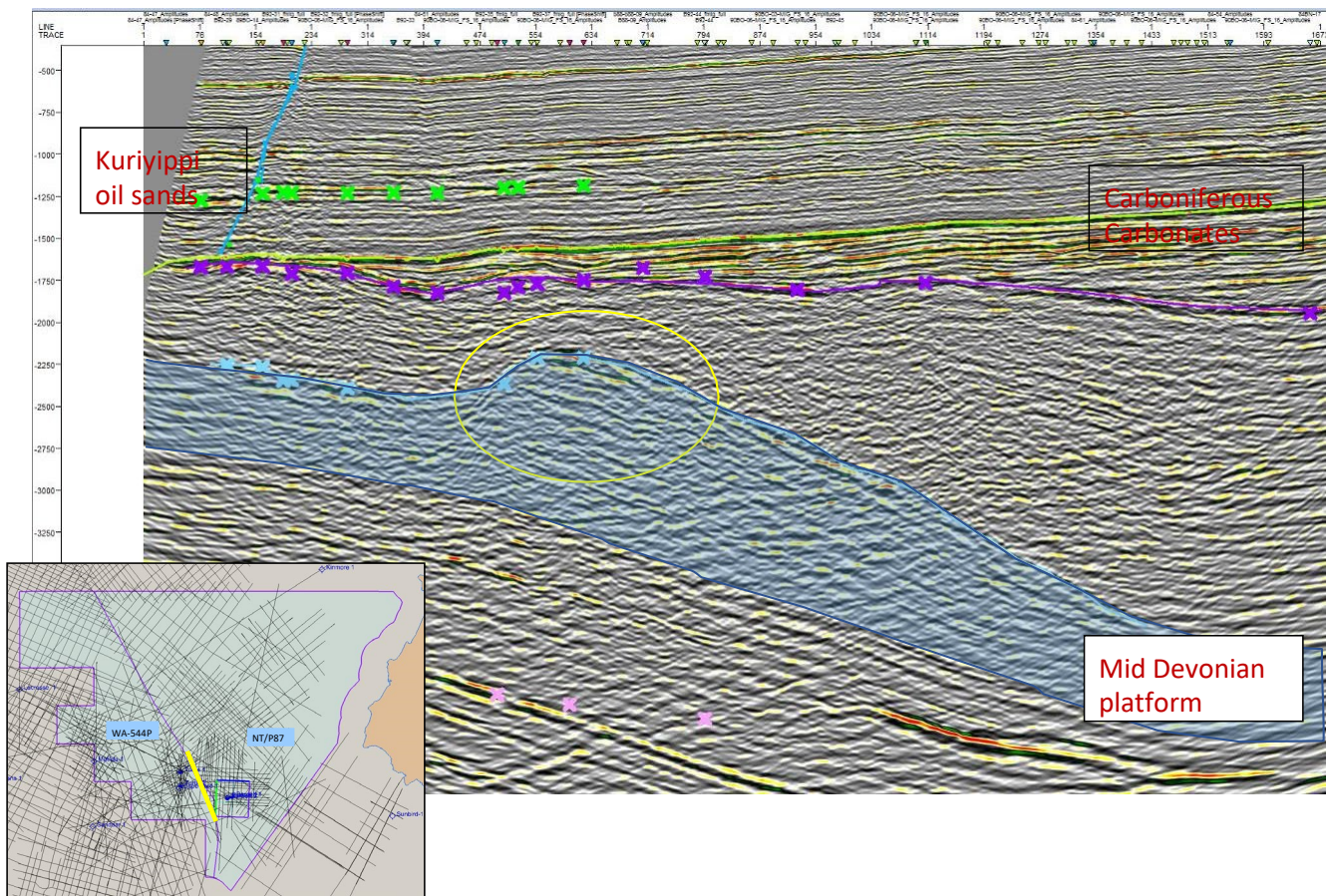


Figure 6 - Middle Devonian Carbonate platform under the Turtle/Barnett discovery

¹ 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. Prospective resources have been estimated using the Probabilistic Method. Gas to Oil Factor: based on Mcf to BOE energy equivalence conversion of 6 to 1.

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