

## Hudson Prospect: Maiden Prospective Resource Estimate

### Highlights

- Maiden estimate of Prospective Resources completed for the Hudson prospect
- The Hudson prospect is a carbonate build up located in licence areas WA-544-P and NT/P87 (Melbana 100%)<sup>1</sup> along with the undeveloped Turtle and Barnett oil discoveries
- These offshore licence areas are in the Bonaparte Gulf in northern Australia immediately adjacent to WA-488-P containing the giant Beehive prospect - also a carbonate buildup – expected to be drilled by a US oil major<sup>2</sup> in 2024
- Melbana's estimate of Prospective Resources (unrisked mean recoverable estimates)\*:
  - Oil Only Scenario: 395 million barrels of oil
  - Gas Only Scenario: 2,034 billion cubic feet<sup>3</sup>

\* **Prospective Resources Cautionary Statement** - The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) related 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.

### SYDNEY, AUSTRALIA (4 July 2023)

Melbana Energy Limited (ASX: MAY) (**Melbana** or **Company**) is pleased to announce the completion of an extensive review of its licence areas WA-544-P and NT/P87 (Melbana 100%) and advises that it has identified a carbonate buildup within the licence areas. The Company is calling the prospect Hudson and has produced a maiden resource estimate for it using the probabilistic method.

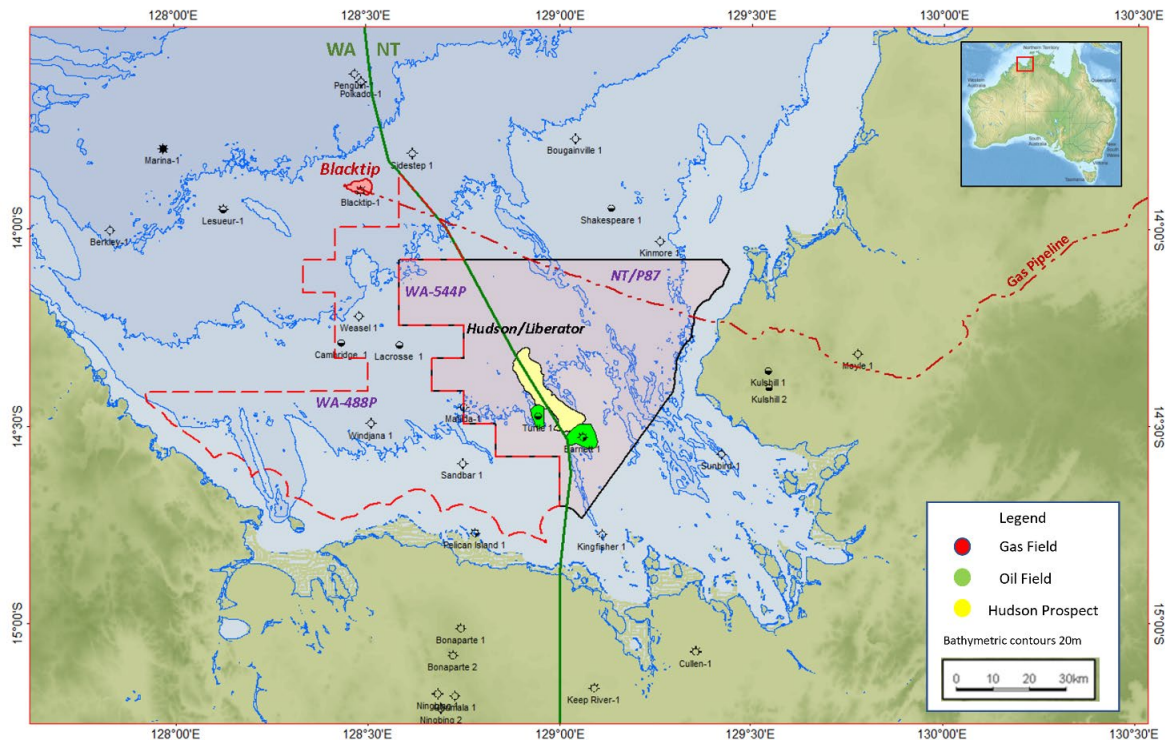
Isolated carbonate build ups host some of the world's largest oil reservoirs, but it is an untested play type in Australia. The first exploration well to do so, designated Beehive-1, will drill the Beehive prospect in the adjacent licence area WA-488-P as early as 2024.

Melbana identified the Beehive prospect and subsequently sold WA-488-P to a US oil major in 2021. That company is making a country entry to drill the Beehive prospect. Melbana has no exposure to the cost of that exploration well but has contingent cash and royalty interests, respectively subject to future elections made by the purchaser and production following a successful exploration well.

<sup>1</sup> See ASX announcement dated 26 November 2020

<sup>2</sup> See ASX announcement dated 24 November 2021

<sup>3</sup> Conversion factor: 6 BCF = 1 MMBOE



The licence areas, containing the undeveloped Turtle and Barnett oil discoveries, were granted to Melbana in 2020 under the Australian Government’s 2019 Offshore Petroleum Exploration Acreage Release. They are in shallow water (20 to 40 metres deep) and located about 300 kilometres southwest of Darwin in Australia’s Northern Territory. The Blacktip gas field lies to the northwest and its pipeline transects the northern boundary of NT/P87, allowing potential access to the Darwin LNG facility and/or the east coast gas market.

For the past two years Melbana’s technical team have reprocessed and reinterpreted the legacy 2D seismic data, which has allowed it to identify a new conceptual target within the Hudson Platform. It is believed that the licence areas are host to an early Paleozoic Carbonate platform sealed by evaporites. Analogous formations in other parts of the globe are host to some of the largest oil provinces in the world, including the Tengiz oil field in Kazakhstan, the world’s sixth largest oil field. Other analogues within Australia are seen within the Amadeus and Canning Basins - for example, the Ungani oil and Raphael gas fields.

The Company is pleased to announce its initial estimate of the Prospective Resources for the Hudson prospect based on a probabilistic assessment with a 12% estimate for the chance of hydrocarbons:

		<b>GROSS PROSPECTIVE RESOURCES*</b>			
	<b>COS</b>	<b>P90</b>	<b>P50</b>	<b>Mean</b>	<b>P10</b>
<b>Oil Only (mmbbl)</b>					
STOOIP		9	371	1,573	4,845
Recoverable	12%	2	90	395	1,184
<b>Gas Only (BCF)</b>					
GIIF		16	700	3,070	10,097
Recoverable	12%	11	466	2,034	6,741

Melbana intends to farmout some of its 100% interest in the licence areas to fund the acquisition of a 3D seismic survey to further derisk the prospect. A copy of the technical presentation Melbana will use during the farmout process is available on the Company's website.

ENDS.

**For and on Behalf of the Board of Directors:**

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**Competent Person Statement:**

The information contained in this announcement relates to Contingent Resources and Prospective Resources for Melbana Energy. This information is based on, and fairly represents, information and supporting documentation compiled by Peter Stickland, one of Melbana's non-executive directors. Mr Stickland B.Sc. (Hons) has over 30 years of relevant experience, is a member of the European Association of Geoscientists & Engineers and the Petroleum and Exploration Society of Australia, and consents to the publication of the resource assessments contained herein. The estimates of Prospective Resources included in the announcement have been prepared in accordance with the definitions and guidelines set forth in the Petroleum Resources Management System ("PRMS") as revised in June 2018 by the Society of Petroleum Engineers. The PRMS defines prospective resources as those quantities of petroleum which are estimated, as of a given date, to be potentially recoverable from undiscovered accumulations.

The evaluation date for the Prospective Resources stated within this document is 4 July 2023.

*Table 1 – Glossary of Key Terms*

<b>Term</b>	<b>Meaning</b>
<b>Barrel</b>	One barrel of oil; 1 barrel = 35 imperial gallons (approx.) or 159 litres (approx.); 7.5 barrels = 1 tonne (approximately, depending on the oil density); 6.29 barrels = 1 cubic metre.
<b>BBL</b>	Barrels
<b>BCF</b>	Billion cubic feet
<b>BOE</b>	Barrels of oil equivalent
<b>Carbonate</b>	Class of sedimentary rocks which mainly contains calcite, aragonite and dolomite.
<b>COS</b>	Geological chance of success
<b>GIIF</b>	Gas initially in place
<b>M</b>	Thousands
<b>MM</b>	Millions
<b>P10</b>	the term used to describe the volume of reserves defined as having a better than 10% chance of being technically and economically viable.
<b>P50</b>	the term used to describe the volume of reserves defined as having a better than 50% chance of being technically and economically viable.

Term	Meaning
<b>P90</b>	the term used to describe the volume of reserves defined as having a better than 90% chance of being technically and economically viable.
<b>Palaeozoic</b>	Geological era lasting from 538 to 252 million years ago.
<b>Prospect</b>	A project associated with a potential accumulation that is sufficiently well defined to represent a viable drilling target.
<b>Prospective Resources</b>	Those quantities of petroleum that are estimated, as of a given date, to be potentially recoverable from undiscovered accumulations.
<b>Stock Tank Oil</b>	Volume of oil at nominal atmospheric storage pressure and temperature (as opposed to reservoir conditions).
<b>STOIP</b>	Stock tank oil originally in place.
<b>Unrisked</b>	Prior to taking into account the chance of discovery.