

AC/P70: Resource Upgrade

Highlights

- Prospective resource* estimates updated for the undeveloped Vesta Deep (Plover) gas and Hadrosaurus (Jurassic) prospects located within AC/P70 (Melbana 100%), offshore northwestern Australia.
- Advanced geophysical analyses resulted in:
 - 37% increase in Prospective Gas Resource from **2,754** to **2,857 Bcf** (unrisked gross best estimate*)
 - 81% increase in Prospective Oil Resource from **43 MMbbl** to **78 MMbbl** (unrisked gross best estimate*)
 - Maturation of Hadrosaurus lead to Prospect status
- Contingent Resource unchanged at **276 Bcf** and **34 MMbbl** (unrisked gross best estimate) associated with the undeveloped Vesta and Swan oil and gas fields.
- Advisor led farmout process aimed at finding a suitably qualified partner to fund the forward work program planned to close Q4 2025.
- Interest in farmout process is heightened due to scale of Prospective and Contingent Resources and increasing recognition of the importance of gas as a transition fuel combined with the limited number of new offshore exploration opportunities released in recent years and proximity to existing infrastructure.

Exploration Manager Dr. Duncan Lockhart commented:

"We have continued to deploy high-end geophysical analyses on this exciting exploration permit. Our original exploration thesis for AC/P70 was to follow up on the historical oil discoveries at the Vesta and Swan fields and explore for oil. Our proprietary reprocessing of the publicly available 3D seismic resulted in a significant improvement in data quality, which allowed us to increase the volumetric estimates of the Plover Formation at the Vesta location. This same technology was used to upgrade the Hadrosaurus lead to Prospect status and significantly increase our estimate of the volume of oil that may be present in the licence area. This work reinforces our licence area as being highly prospective for LNG scale accumulations of gas with multiple oil prospects, all located relatively close to existing infrastructure."

*** 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 are required to determine the existence of a significant quantity of potentially moveable hydrocarbons. All Prospective Resource volumes presented have been calculated in accordance with Guidelines issued by the Society of Petroleum Engineers in the Petroleum Resource Management System (2018) using probabilistic methods, except totals which are arithmetic.

SYDNEY, AUSTRALIA (10 October 2025)

Melbana Energy Limited (ASX: MAY) (**Melbana**) is pleased to announce an update to prospective resources estimates for Australia exploration permit AC/P70 (Melbana 100%).

About AC/P70

Melbana, via a wholly owned subsidiary, is the operator and 100% holder of AC/P70 - located in the Timor Sea offshore northwestern Australia. The permit, currently in its Primary Term, was awarded to Melbana in 2022¹. It contains multiple prospects and leads hosted within play fairways known to be prospective for gas and oil and is close to infrastructure that provides a clear path to commercialisation.

The permit is adjacent to multiple oil discoveries and production including the Challis, Jabiru, Skua, Puffin and Cassini oilfields (Figure 1). The Darwin LNG Plant and export facility is directly accessible via proximate pipeline infrastructure and exploration well is not required until 2027, allowing ample time to select a high potential drilling target. The average water depth is 105 metres.

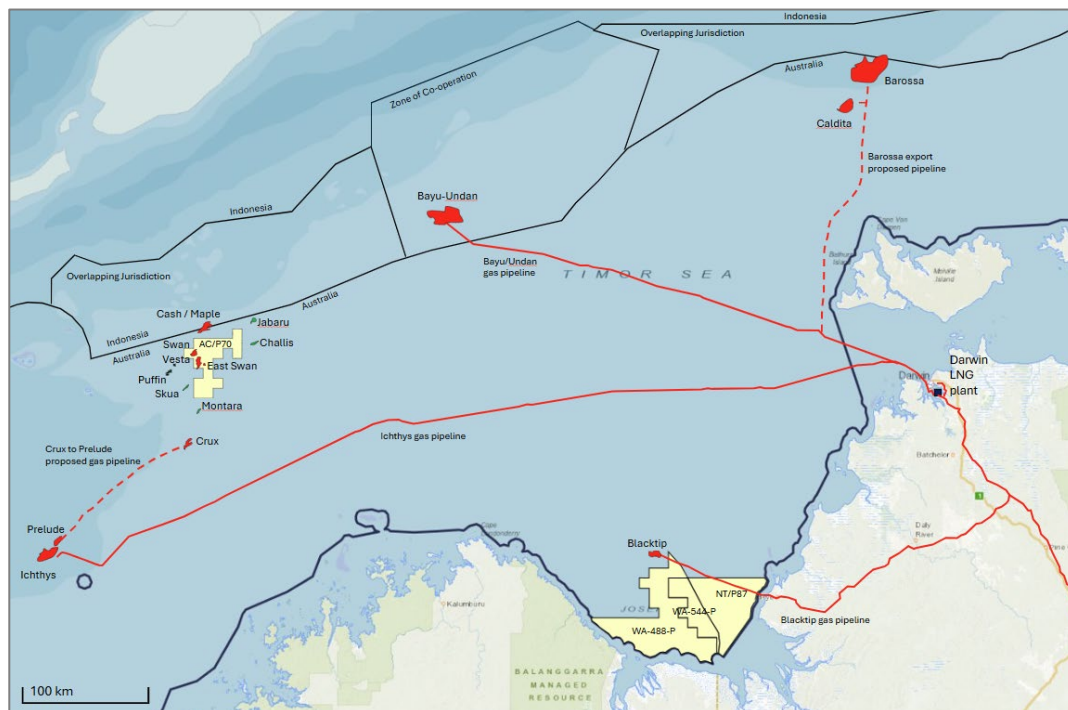


Figure 1 - AC/P70 permit located in offshore northwestern Australia

The permit contains the undeveloped Swan gas field, discovered by Arco in 1973 while exploring for oil and which was further appraised by an additional two wells by BHP in 1991. Wireline pressure data and recovered gas samples from several sands of the Cretaceous Puffin sandstone confirmed a common pressure regime and the presence of mobile dry gas.

The Vesta oil and gas field was discovered by ENI in 2005, also whilst exploring for oil, and was appraised by a second well. Three drill stem tests (DST) confirmed the presence of producible oil and gas from the Jurassic reservoir but the field has not been developed. Significant and relatively high probability of geologic success prospective resources are interpreted within un-tested compartments up-dip of the discovery wells.

¹ See ASX announcement dated 16 February 2022

During 2024, in fulfilment of its work commitments, 500km² of the publicly available Pantheon 3D seismic survey data was reprocessed. Interpretation of the reprocessed data indicated a larger than previously interpreted closure at Swan in the deeper Jurassic and Plover sections. The permit also holds the potential for large, un-tested, Triassic and Permian structural closures.

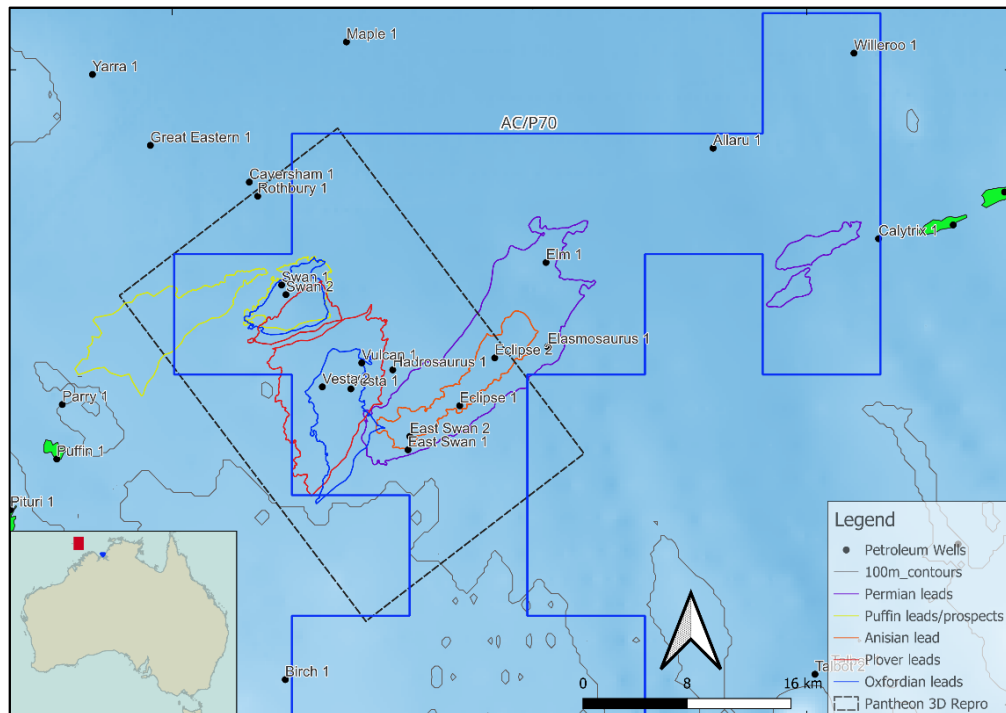


Figure 2 - AC/P70 permit prospect and lead location

Updated Prospective Resources

Melbana's updated Prospective Resource* for AC/P70 has been identified in and estimated for a combination of deeper and adjacent structures to the Swan and Vesta fields (greater Swan-Vesta structure), as summarised in Table 1:

Table 1 - Updated AC/P70 Prospective Resource Estimates (unrisked gross volumes²)*

Prospect	Hydrocarbon	Pg	Mean	Low 1U	Best 2U	High 3U
Vesta Deep (Plover)	Gas (Bcf)	16%	428	90	334	883
Vesta North (Spec Di) (Gas Cap on Oil rim)	Gas (Bcf)	42%	200	116	195	287
	Oil (MMbbl)	42%	45	22	43	71
Swan Deep (Spec Di)	Gas (Bcf)	23%	222	112	206	352
Swan Deep (Plover)	Gas (Bcf)	16%	143	55	126	253
Swan North-West	Gas (Bcf)	44%	198	155	196	243
East Swan Deep (Triassic)	Gas (Bcf)	18%	702	200	569	1397

² All volumes are gross unrisked estimates and represent 100% of the permit as of 1 October 2025. Totals are arithmetic sums of probabilistic estimates and may not be arithmetically additive due to rounding.

Pg = Geological chance of success. Mean values are arithmetic averages derived from probabilistic distributions.

Prospect	Hydrocarbon	Pg	Mean	Low 1U	Best 2U	High 3U
East Swan Deep (Permian)	Gas (Bcf)	24%	1402	337	1231	2695
Hadrosaurus Oil (Jurassic)	Oil (MMbbl)	24%	41	16	35	73
Rec Gas Arithmetic Totals	Gas (Bcf)		3295	1065	2857	6110
Rec Oil Arithmetic Totals	Oil (MMbbl)		86	38	78	144

Prospective Resources

The identified Prospective Resources are contained within four greater structures:

1. Swan:

- Strong gas shows were observed in the same reservoir sands as the Vesta discovery during the drilling of Swan-2 in 1980, but were not tested.
- A large closure is mapped beneath the Swan discovery in the Plover Formation.

2. Vesta:

- A large closure is mapped up-dip of the Vesta discovery wells in the “High Case” P10 volume.
- A large closure is mapped below the Vesta discovery in the interval equivalent to the Plover Formation. This was a target of the 2005 drilling program, but the operator was unable to reach this depth due to the high pressures encountered. Improvements in drilling practices over the last 20 years mean that this interval can now be safely drilled.
- Vesta North is in a discrete fault compartment, to the north of the Vesta discovery and volumes have been estimated for the reservoir. However, the structure may also be prospective in the Plover Formation but volumes for this lead are yet to be estimated.

3. East Swan:

- Comprised of two large untested plays in AC/P70 (Triassic and Permian) within one structure. These prospects have a combined potential Prospective Resource of 1.8 Tcf (Best Estimate*) and could be drilled with a single well.

4. Hadrosaurus

- During drilling Hadrosaurus-1 there was an influx from the formation at 3535 measured depth that resulted in free oil being recovered to surface.
- Advanced geophysical studies, based on the Pantheon 3D seismic, have allowed Melbana to mature the Hadrosaurus Lead to Prospect status identifying a well-developed combined structural/stratigraphic trap
- The geophysical analyses indicate a series of anomalies that may represent reservoir sands trapped along the eastern flank of the Vesta structure.

- The feature would be sealed up-dip by Lower Vulcan claystones, as indicated by wells Vulcan-1B and Vesta-1.
- Along with the Contingent Oil Resource at Vesta (30 MMbbl) and the 43 MMbbl (Best estimate) at Vesta North, this feature further confirms AC/P70's oil potential.
- Hadrosaurus is only ~3.5 km from the Vesta-1 discovery making it an ideal candidate for a subsea completion and tieback in the event of discovery.

Contingent Resources

On 26 February 2025, Melbana announced a maiden AC/P70 Contingent Resource** within the Swan and Vesta gas and oil fields (Table 2):

- The undeveloped Swan gas field was discovered in 1973 and defined by three wells (Swan-1, Swan-2, Swan-3 and Swan-3ST1), from which wireline pressure data defined a common pressure regime and recovered mostly dry gas samples to surface.
- The undeveloped Vesta oilfield was discovered in 2005 with the Vesta-1 well, in which three DSTs were conducted and produced gas and oil.

*Table 2 - AC/P70 Contingent Resource Estimates (unrisked gross volumes)***

Field	Hydrocarbon	1C	2C	3C
Vesta – (Spec Di)	Gas (Bcf)	39	105	199
	Oil (MMbbl)	10	30	47
Swan – (Puffin)	Gas (Bcf)	132	171	211
	Oil (MMbbl)	3	4	5
Rec Gas Arithmetic Totals	Gas (Bcf)	171	276	410
Rec Oil Arithmetic Totals	Oil (MMbbl)	13	34	53

****Contingent Resource** - The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) related to discovered accumulations. These estimates have an associated risk of development. Future appraisal and evaluation are required to determine the existence of a commercial quantity of potentially economically recoverable hydrocarbons. All Contingent Resource volumes presented have been calculated in accordance with guidelines issued by the Society of Petroleum Engineers in the Petroleum Resource Management System (2018) using probabilistic methods, except permit totals which are arithmetic.

Key contingencies that prevent classification of the Contingent Resource as Reserve include:

- Confirmation of a commercial quantity of recoverable hydrocarbons.
- Financial appropriations sufficient to develop the recoverable hydrocarbon volume.
- Regulatory approval to proceed with a proposed development.

The Contingent Resources were evaluated as at 1 January 2025 using 3D seismic interpretation and regional analogues.

Commercialisation Pathway

The permit is adjacent to existing production and facilities offering a clear pathway to commercialisation of any significant discovery.

Melbana has engaged an advisor to assist it with farming out some of its 100% interest in the permit to a suitably qualified partner in return for an upfront cash contribution to back costs and funding the forward technical work programme, which includes one exploration well.

The farmout progress is progressing and the goal is to conclude a deal in Q4 2025.

Competent Persons Statement

Unless otherwise specified, the information that relates to Contingent Resources and Prospective Resources for Melbana is based on, and fairly represents, information and supporting documentation compiled by Mr. Peter Stickland, who is a Director of the company and has more than 30 years of relevant experience. Mr. Stickland is a member of the European Association of Geoscientists & Engineers and the Petroleum and Exploration Society of Australia. Mr. Stickland has given his written consent to the inclusion of the information in the form and context in which it appears. The Contingent Resource and Prospective Resource estimates are consistent with the definitions of hydrocarbon resources that appear in the ASX Listing Rules. Volumes have been calculated using probabilistic methods, except totals which are arithmetic, in accordance with guidelines of the Petroleum Resources Management System published by the Society of Petroleum Engineers (revised 2018).

ENDS

**For and on Behalf of the Board of
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Table 3 – Glossary of Key Terms

Term	Meaning
Barrel	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.
BBL	Barrel
BCF	Billion cubic feet
BOE	Barrels of oil equivalent
Carbonate	Class of sedimentary rocks which mainly contains calcite, aragonite and dolomite.
Contingent Resource	Those volumes of hydrocarbons that are estimated, as of a given date, to be potentially recoverable from a discovered accumulation, but which have one or more contingencies to commercial development of the resource.
GIIP	Gas initially in place
Jurassic	Geologic period lasting from 201 to 145 million years ago.
M	Thousands
MM	Millions
P10	The term used to describe the high estimate of prospective resource defined as having a better than 10% chance of being technically discovered and recoverable hydrocarbons.
P50	The term used to describe the best estimate of prospective resource defined as having a better than 50% chance of being technically discovered and recoverable hydrocarbons.
P90	The term used to describe the low estimate of prospective resource defined as having a better than 90% chance of being technically discovered and recoverable hydrocarbons.
Palaeozoic	Geological era lasting from 538 to 252 million years ago.
Permian	Geologic period lasting from 299 to 252 million years ago.
Pg	Geological chance of success
Prospect	A project associated with a potential accumulation that is sufficiently well defined to represent a viable drilling target.
Prospective Resources	Those quantities of hydrocarbons that are estimated, as of a given date, to be potentially recoverable from undiscovered accumulations.
Stock Tank Oil	Volume of oil at nominal atmospheric storage pressure and temperature (as opposed to reservoir conditions).
STOOIP	Stock tank oil originally in place.
Triassic	Geologic period lasting from 252 to 201 million years ago.
Unrisked	Prior to taking into account the chance of discovery.
1C	The low estimate of discovered and technically recoverable hydrocarbons of a contingent resource.
2C	The best estimate of discovered and technically recoverable hydrocarbons of a contingent resource.
3C	The high estimate of discovered and technically recoverable hydrocarbons of a contingent resource.