

## Alameda-3: Drilling Update

### Highlights

- Alameda reservoir section Total Depth (TD) called at 3645 metres MD.
- Sections of elevated formation gas have been encountered indicative of hydrocarbons in the reservoir, consistent with the exploration well Alameda-1.
- Two cores successfully obtained. Now preparing to run wireline logs.
- Primary objectives of the Alameda-3 well are to appraise the previously discovered Alameda and Marti reservoirs independently estimated to contain a combined 179 million barrels of Prospective (recoverable) Resource\* (Unrisked Gross Best Estimate)<sup>1</sup>.

**Melbana Energy's Executive Chairman, Andrew Purcell, commented:** "Congratulations to our very capable and experienced project management team for delivering us successfully to this point, some of whom can now take a short break whilst logs are being run before coming back to put this formation behind casing. We're behind schedule due to the need for careful management of some familiar/some new drilling challenges, but the main thing is to have successfully and safely reached the bottom of this first reservoir. We're looking forward to completing a successful logging run, an important milestone in this appraisal well."

\* **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 (18 April 2024)

Melbana Energy Limited (ASX: MAY) (**Melbana** or **Company**), a 30% interest holder in and Operator of Block 9 PSC onshore Cuba, is pleased to provide this operational update for Alameda-3.

Total Depth for the 8.5" hole section through the Alameda (N-Sheet) reservoir has been reached at 3645 metres MD.

The Alameda-3 appraisal well is a proximate to and with a similar trajectory to the Company's Alameda-1 exploration well that previously discovered moveable hydrocarbons in this reservoir in 2022. Lessons learned from drilling the Alameda-1 well informed the enhancements that were made to the Alameda-3 well design to safely improve drilling performance whilst also preserving reservoir conditions so that data on its characteristics can be obtained.

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<sup>1</sup> See ASX announcement 1 August 2022

The primary goal of Alameda-3 is to test the oil quality and flow rates of both the Alameda (N-sheet) reservoir and the deeper Marti (I-sheet) reservoir that Alameda-1 was unable to properly determine due to the stronger than expected hydrocarbon influxes into the wellbore that occurred during the drilling of that well. The elevated pressures that were encountered have been better managed this time due to prior experience of the subsurface conditions and careful management of mud weight, resulting in only one significant pressure kick being taken this time in drilling the current hole section. Elevated gas readings were once again observed across the reservoir, indicating the presence of hydrocarbons.

Drilling of this section was slower than forecast, primarily due to technical challenges managing the heavily fractured rock in the 8-1/2" hole section which at one point resulted in the bottom hole assembly becoming stuck when the hole packed off. Drilling continued without further incident within a sidetracked well bore after an increase in mud weight (see Figure 1).

Two reservoir cores were successfully obtained at 3210 metres MD and 3310 metres MD (see Figure 2). The cores will be analysed in conjunction with well logs and test results to better define petrophysical properties, reservoir characteristics, fracture density and nature, intergranular porosity, permeability, deliverability and reservoir fluid composition.



*Figure 1 - Drilling operations in progress*



*Figure 2 - Successful core retrieval*

### **Forward program**

The next stage in Alameda-3 is to acquire open hole wireline logs in the 8-1/2" section. The hole will then be conditioned for the running and cementing of the 7" liner (see Figure 3), including external casing packers to isolate up to three zones within the Alameda reservoir for later Drill Stem Tests (DST). Log results from the upcoming acquisition program will help determine the optimum positioning of the packers to maximise any oil recovery.

Once cased, the program is to drill ahead in 6" hole to take cores in the Marti reservoir at approximately ~3655 metres MD and ~3743 metres MD. Total depth for the Marti reservoir

(and the Alameda-3 well) is projected to be at ~3835 metres MD. After the acquisition of wireline logs in the 6" open hole, a 4-1/2" slotted liner will be run in the Marti reservoir before commencing the testing phase.

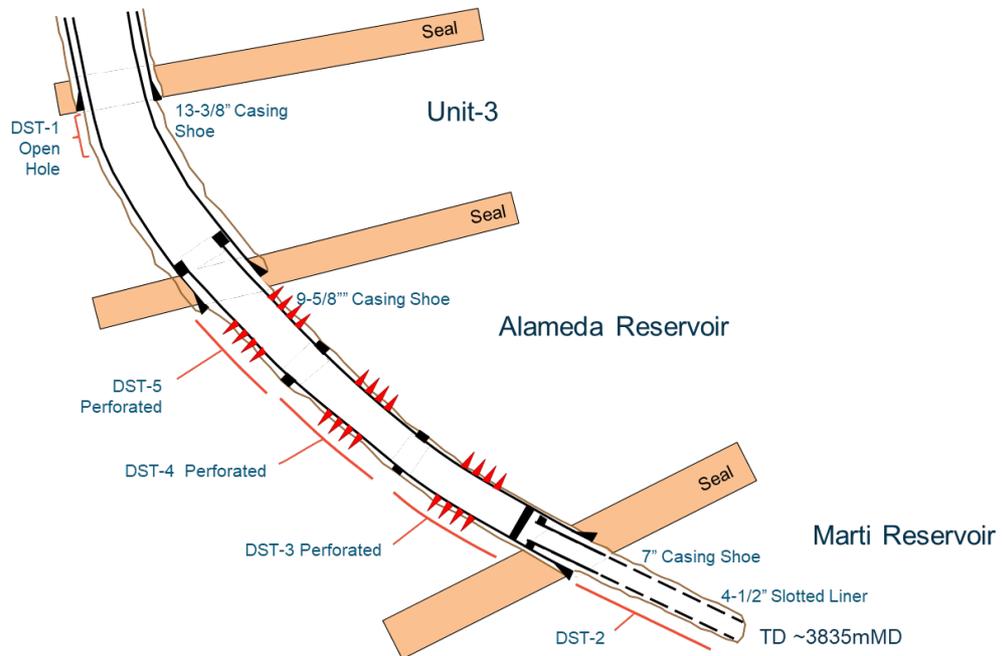


Figure 3 - Forward programme

ENDS.

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