

Block 9: Early Production and Spud of Alameda-3

Highlights

- Alameda-3 Appraisal Well to commence November 2023.
- Drilling rig is on site and being prepared to commence drilling operations.
- Prior to spud of Alameda-3, early production to commence from Unit 1B of the Amistad reservoir in the Alameda-2 appraisal well.
- Stabilised flow rates achieved from Unit 1B in Alameda-2 were ~1,235 barrels of oil per day - significantly above average for vertical wells in Cuba¹. Horizontal drilling in these reservoirs typically triples the flow rate.
- Oil produced had 19° API gravity and 30 cP viscosity, significantly better than average for Cuba¹. The produced oil also had none of the usual sulphur, responsible for price discounts.
- Units 1A and 3 of the Amistad reservoir are also productive and have been suspended for future development and production.

Melbana Energy's Executive Chairman, Andrew Purcell, commented: "Following the success of Alameda-2, we are delighted to confirm plans to spud Alameda-3 in the near term to appraise the oil we previously encountered in the deeper Alameda and Marti Formations. As we have consistently stated, these remain our most prospective targets within Block 9.

Prior to spudding Alameda-3 in November, we are working on our plans to commence early production from Unit 1B to better understand the reservoir's characteristics given the good flow rates and oil quality observed there. This early production will allow us to review our logistics and transaction procedures ahead of the finalisation of our field development plans for 2024, which we are presenting to our partners this week.

It is important to reinforce that Units 1A and 3 from this reservoir are also productive and will form part of our development plan for the Amistad Formation."

SYDNEY, AUSTRALIA (20 SEPTEMBER 2023)

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.

¹ Internal Melbana technical review of regional well results and independent oil analyses

After analysing all options for re-entering the Alameda-1 well and undertaking a risk / reward assessment, the decision was made to plug and abandon Alameda-1 as per the original plan. This was completed earlier this week.

The drilling rig will remain on site on standby to enable essential maintenance and equipment upgrades to be undertaken in preparation for drilling the deeper Alameda-3 well.

During this standby period deliveries of all necessary inventory and equipment will be made to site to enable spud of Alameda-3 in November (see Figure 1).

Alameda-3 will test the lower two geologically independent oil-bearing Formations intercepted by Alameda-1 – designated Alameda and Marti, respectively. The Alameda-1 exploration well encountered movable hydrocarbons accompanied by significant formation pressure in both.

Ahead of the commencement of drilling of Alameda-3, the Company is working on plans to take advantage of the opportunity to obtain early production from the Amistad Formation Unit 1B reservoir given the excellent results obtained in Alameda-2. The Unit 1B section was completed for future production (see Figure 2), whilst Units 1A and 3 (also productive) were suspended for potential future development and production.



Figure 1 - Casing delivery for Alameda-3



Figure 2 - Alameda-2 Completion

As reported on 28 August 2023, a stabilised average flow rate of 1,235 barrels of oil per day was achieved from Unit 1B in Alameda-2². The oil produced had an API gravity of 19° and viscosity of 30 cP, which is a higher API (thus lighter) and considerably lower viscosity than oil commonly produced in Cuba³. Such an improvement in oil quality is an important factor for

² See [announcement](#) on 28 August 2023

³ Internal Melbana technical review of regional well results and independent oil analyses

the value of this oil, as is the lack of sulphur normally present in Cuban production but absent here.

Analyses of performance of hundreds of wells in the region indicate that the flow rates observed in Unit 1B are around the high case rates experienced for shallow vertical wells in Cuba and are closer to the average rates of shallow horizontal wells through this Formation³, which typically flow at three times the rate of vertical wells in these upper formations if they intersect the dominant fracture systems at an optimal angle. Melbana has received high quality well logs from the appraisal program which will inform the orientation of potential future horizontal wells aimed at producing from this reservoir.

Obtaining early oil production data will also provide the Company with important information on reservoir management, transport, and sales processes for finalisation of next year's field development work plan and budget. To date 1,500 barrels of initial test production has been trucked to a nearby oil storage facility which also acts as the custody transfer sales point.

ENDS.

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