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# Cuba Update

## Highlights:

- All key regulatory approvals now received for Alameda-1 exploration well testing 141 million barrels of recoverable oil (best estimate basis)[1,2]
- Drilling rig identified, negotiations proceeding with established local operator, two available dates to commence drilling: December 2018 or April 2019
- Potential partners for Block 9 short listed; negotiations at an advanced stage
- Santa Cruz incremental oil recovery project technical assessment completed, commercial negotiations commenced with Cubapetroleo

MELBOURNE, AUSTRALIA (11 September 2018)

Melbana Energy Limited (ASX: **MAY**) ("**Melbana**" or "the **Company**") is pleased to provide the following update on its activities in Cuba.

Melbana has received all remaining key regulatory approvals for the Alameda-1 exploration well – the first of the two well programme it has planned for Block 9.

The Office of National Mineral Resources will issue the Drilling Operations Permit for the Alameda-1 exploration well once Melbana notifies it of the drilling rig to be contracted and the drilling timing window. The Drilling Operations Permit is the final administrative permit required for drilling to proceed.

Drilling rig commercial negotiations are proceeding with the contractor selected from the international tender Melbana ran earlier in the year. A drilling rig has been nominated by the contractor with two available starting dates in December 2018 or April 2019. A decision on starting dates and when to commence drilling pad civil work is dependent on selection of a preferred partner and completion of a farmin agreement.

With respect to the Santa Cruz incremental oil recovery project, Melbana has completed its initial technical assessment of the opportunity with sufficient encouragement to support Melbana proceeding to the next stage of negotiating a long term binding agreement with Cuba's national oil company Cubapetroleo.

**Melbana's CEO Robert Zammit commented:**

*"I am pleased that our Havana and Melbourne based drilling team has reached this important regulatory milestone for the drilling of the Alameda-1 exploration well, which is currently our highest ranked exploration target in Block 9. Civil works design to build the Alameda-1 drilling rig pad has been optimized and a decision on when to commence construction will be made once a partner has been selected. Our objective is to have a preliminary farmout agreement with our preferred partner this quarter. Regulatory and environmental approvals for the drilling of the Zapato-1 exploration well have also been advanced.*

*We are also making good progress on the Santa Cruz opportunity, tabling in recent meetings in Cuba our proposed operational footprint and work program, consistent with our target of completing a final long term agreement in the fourth quarter of this year."*

## Overview of Block 9 PSC, Onshore Cuba

Block 9 covers 2,380km$^2$ onshore of the north coast of Cuba. It is in a proven hydrocarbon system with multiple producing fields within close proximity, including the Majaguillar and San Anton fields immediately adjacent to it and the multi-billion barrel Varadero oil field further west (see Figure 1). Block 9 contains the Motembo field, the first oil field discovered in Cuba. Melbana is prequalified as an onshore and shallow water operator in Cuba and was awarded Block 9 on 3 September, 2015. Melbana's established position in Cuba provides it with a strong early mover advantage.

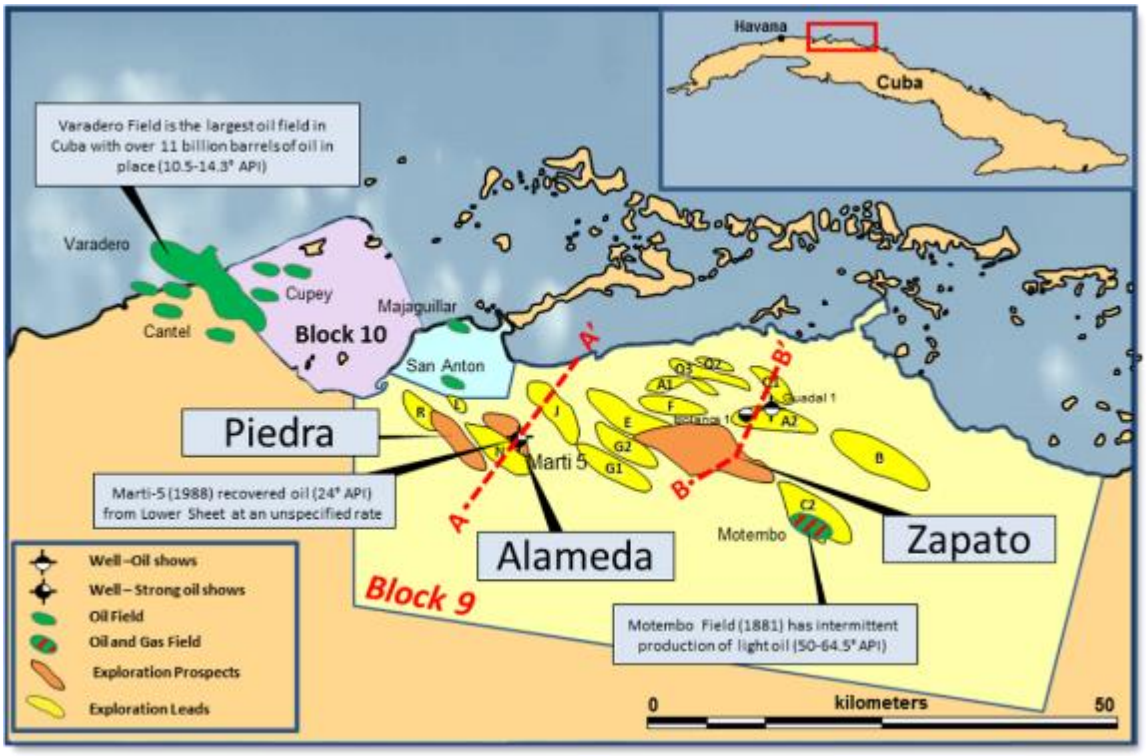


**Figure 1 - Block 9 map showing location of key drilling targets**

## Background

### Alameda Prospect - highest ranked prospect in Block 9

The Alameda Prospect is currently the highest ranked exploration target in Block 9. Alameda is a large structure located in the western part of Block 9 and is in a similar structural position to the Varadero field, the largest oil field in Cuba, approximately 35km away.

The proposed Alameda-1 well which will test a combined exploration potential of over 3 billion barrels Oil-in-Place and 140 million barrels of recoverable oil of recoverable oil on a best estimate basis and 279 million recoverable barrels aggregate high side potential (Table 1) [1,2].

The primary objective at Alameda ranges in depth from approximately 3,000 to 3,700 meters. The presence of oil in the Alameda structure is supported by the Marti-5 well drilled within the prospect closure in a down flank position nearly 30 years ago and which recovered 24° API oil and had numerous oil shows extending over a 850 metre gross interval from the Lower Sheet section (see Figure 2).

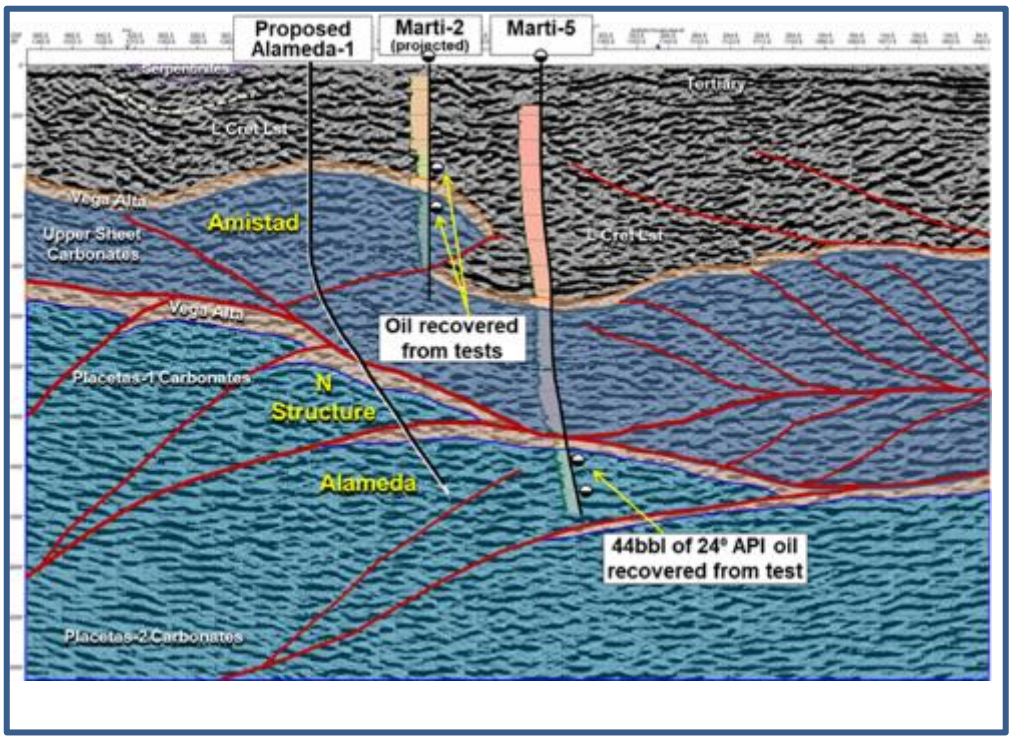


**Figure 2 - Alameda-1 trajectory tests three objectives**

This exploration well has been designed as a mildly deviated well, with a total measured depth of 4,000m to enable the well to penetrate three independent exploration objectives; the primary Alameda objective as well as the shallower N and Amistad (formerly U1) objectives.

While characterised as an exploration well, the chance of success at Alameda-1 benefits from two old wells, Marti-2 and Marti-5, both of which recovered oil from Amistad/U1 and Alameda objectives respectively. The Amistad/U1 objective is a structure indicated on seismic as being updip of the tested oil recoveries in the Marti-2 well. Alameda-1 is estimated to take approximately 80 days to drill. In the event of a discovery at Alameda there would be significant follow up potential, with a number of additional leads in close proximity.

| Objective | Chance of Success | Recoverable Prospective Resource (MMstb)[1,2] | | | |
|---|---|---|---|---|---|
| | % | Low | Best | High | Mean |
| **Amistad/U1** | 15% | 24 | 60 | 132 | 71 |
| **N** | 23% | 4 | 9 | 19 | 10 |
| **Alameda** | 32% | 39 | 72 | 128 | 79 |

**Table 1 - Exploration Prospective Recoverable Resource estimates for Alameda-1**

## Zapato Prospect

The proposed Zapato-1 well location is in the central portion of Block 9 and is designed to test a Lower Sheet closure in close proximity to the shallower Motembo oil field, which has historically produced a high quality light oil. The Zapato feature has a crest at approximately 2,000 metres and is a robust structure with nearly 1,000 metres of vertical relief.

Recently completed gravity and magnetic study commissioned by Melbana and undertaken by Cuba's specialist technical laboratory CEINPET over the Zapato prospect has indicated a strong gravity and magnetic alignment with the structural interpretation Melbana's technical team derived from seismic and surface data. This result is supportive of Melbana's assessment of the prospectivity of Zapato as a large carbonate duplex structure along strike from the Motembo discovery which produced light 56° API oil.

Block 9 has high quality detailed pre-existing gravity and magnetic data sets. In the type of geology present in Cuba it is common to use a combination of seismic, magnetic and gravity data sets to define prospectivity.

Carbonate duplex structures such as Zapato are being targeted by Melbana due to their potential to contain Varadero style oil accumulations and are able to be identified using this technique by their combined gravity and magnetic response which differentiates them from low prospectivity intervals.

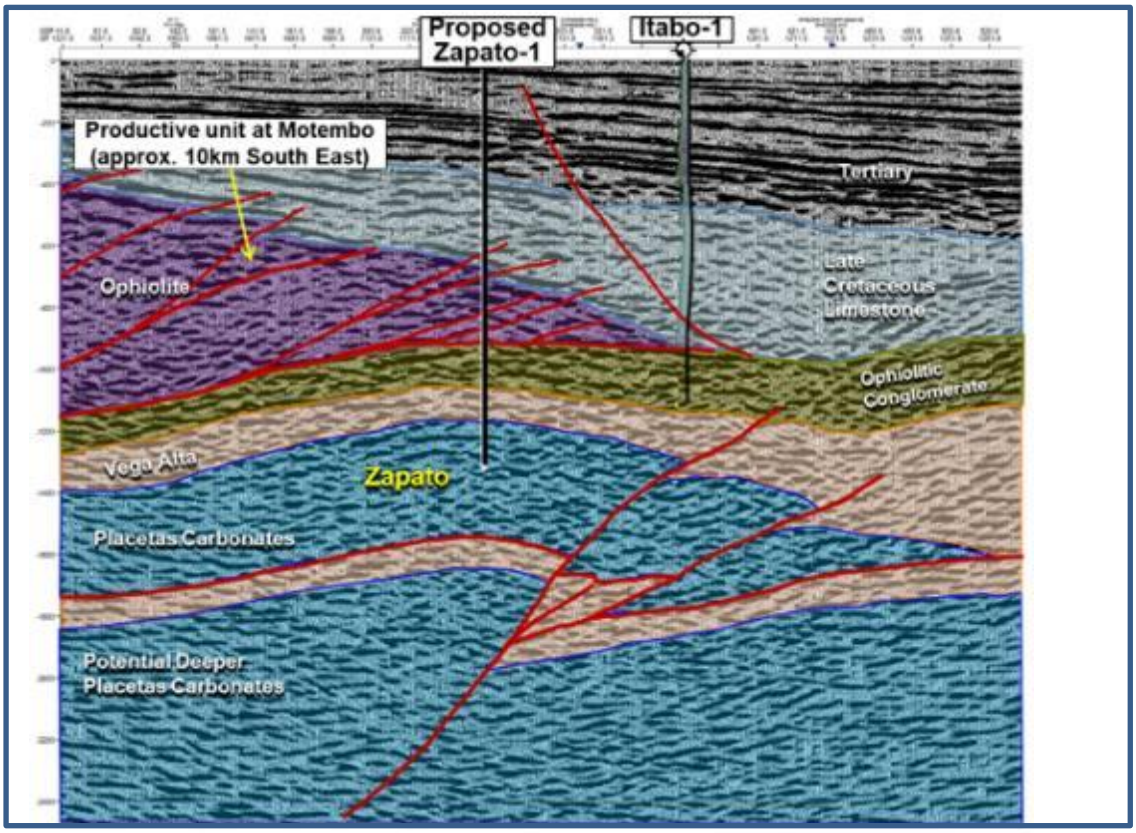


**Figure 3 - Zapato Prospect Seismic Profile and Well Path**

| | Chance of Success | Recoverable Prospective Resource (MMstb) [1,2] | | | |
|---|---|---|---|---|---|
| | % | Low | Best | High | Mean |
| **Zapato** | 23% | 38 | 95 | 214 | 114 |

**Table 2 - Exploration Prospective Recoverable Resource estimates for Zapato**

[1] Per Independent Expert McDaniel & Associates Competent Persons Report June 30, 2018

[2]**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.

**Contingent and Prospective Resources:** The information that relates to Contingent Resources and Prospective Resources for Melbana is based on, and fairly represents, information and supporting documentation prepared by Mr. Dean Johnstone, who is an employee of the company and has more than 34 years of relevant experience. Mr. Johnstone is a member of the American Association of Petroleum Geologists. Mr. Johnstone consents to the publication of the resource assessments contained herein. The Contingent Resource and Prospective Resource estimates are consistent with the definitions of hydrocarbon resources that appear in the Listing Rules. Conversion factors: 6 Bscf gas equals 1 MMboe; 1 bbl condensate equals 1 boe