Cuba Block 9 Production Sharing Contract

Melbana Energy (Operator) 30%
Sonangol 70%

Overview of Block 9 PSC, Onshore Cuba

World class exploration block with large footprint in proven hydrocarbon system, on trend with the giant Varadero oil field

The Block 9 Production Sharing Contract ("**Block 9**"), is a large onshore area of 2,344km^2 located on the north coast of Cuba, 140 km east of Havana, in a proven hydrocarbon system and along trend with the multi-billion barrel Varadero oil field.

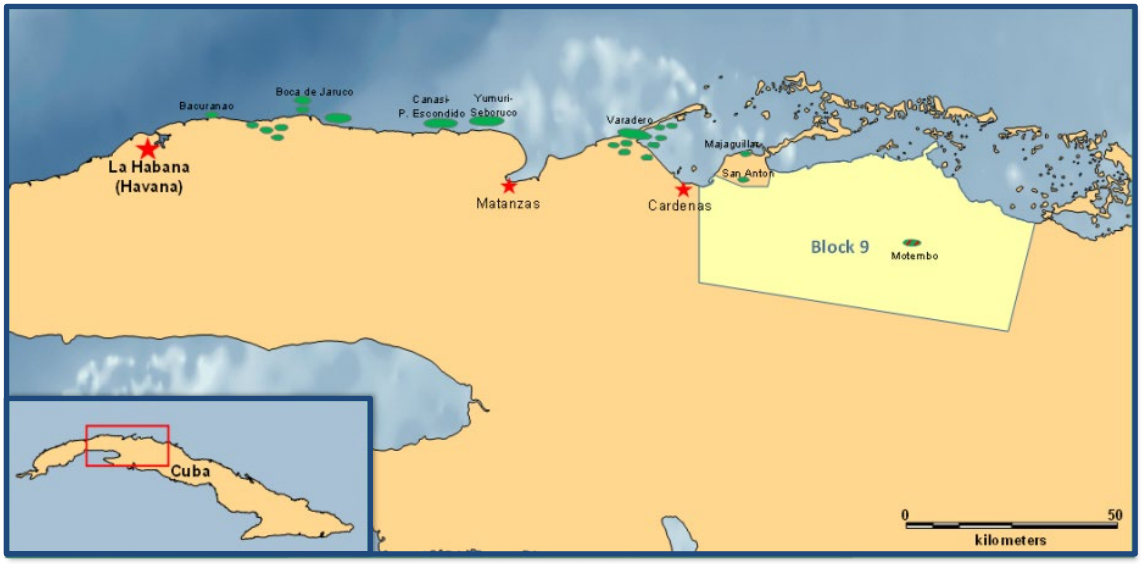

Figure 1 - Block 9 location map showing adjacent fields

A number of prior oil discoveries reducing exploration risk

Block 9 has multiple other producing fields within close proximity and the Motembo field, a working oil system that has produced a high-quality light crude (up to 64.5° API oil) within Block 9. Melbana Energy is prequalified as an onshore and shallow water operator in Cuba and was awarded a 100% interest in Block 9 in September 2015. Melbana's established position in Cuba provides it a strong early mover advantage.

Joint Venture with Sonangol – National Oil Company of Angola

In December 2019, Melbana entered into a binding Heads of Agreement ("**HOA**") with Sonangol – Africa's second largest oil producer – for that entity to acquire a 70% interest in Block 9 in return it for funding 85% of the cost of two exploration wells and repaying Melbana's past costs. The HOA was replaced with a more detailed Farm-in Agreement in May 2020.

Drilling Program

Melbana, as Operator, is advanced in its planning and procurement for a two well exploration program. Well pad construction is complete for the first well and the required inventory has been ordered and is en route to Cuba. The program will test four separate targets with a total prospective resource of 236 million barrels of oil (best estimate),[1] with the best target estimated to have a 32% chance of success.[1] The first well will twin a previous well that flowed hydrocarbons to the surface and the second well will test a structure that may be the source of the Motembo oil field.

Prospective volumes assessed by McDaniel & Associates, an independent expert with over 20 years' experience in Cuba

Block 9 is estimated to contain 14.8 billion barrels of Oil-in-Place with Prospective Resources of 676 million barrels (best estimate)[1].

A discovery would be able to be developed quickly and cheaply due to the proximity of Block 9 to existing oil field infrastructure.

Cuba – Open for business

In 2014 the Cuban Government passed the Foreign Investment Act to encourage new investment in Cuba, including setting a corporate tax rate between 15% and 22.5% with a corporate tax holiday for the first eight years. There are multiple modern land drilling rigs currently operating in Cuba. Block 9 consists largely of low-lying farm land and there are sealed roads that connect Block 9 to Havana. A deep water port with an oil terminal is within 75km and international airport within 40km.


Modern drilling rig in Cuba

Cuba currently produces approximately 45,000 barrels of oil per day and 3 million cubic metres of gas. Oil production meets 50% of the domestic consumption, with the balance satisfied by imports. The majority of the oil industry is currently operated by the national oil company, CUPET. The Canadian company, Sherritt International, has been producing oil in Cuba for over 25 years.

Prospectivity Assessment of Block 9

Melbana's technical personnel have significant global experience in analogous geology and petroleum systems to Cuba. Their technical assessment has identified the following three play types in Block 9:

1. Lower Sheet Play (approximately 2,000 – 3,500 metres depth);
2. Upper Sheet Play (approximately 800 - 3,000 metres depth); and
3. Shallow Tertiary Play (approximately 400 - 1,200 metres depth).

A key aspect of Melbana's technical review of Block 9 is the development of Melbana's new integrated seismic interpretation methodology. This methodology is a new predictive structural/stratigraphic geoscientific approach resulting in a subsurface model that can be applied broadly across a wide range of complex settings, including Block 9. New knowledge acquired through the Block 9 research has been instrumental in Melbana building a more comprehensive integrated seismic interpretation methodology. Technical development includes, but is not limited to, preparation of relevant data sets and integration of seismic interpretation based on a) stress and driving forces on plate tectonic and kinematic models, b) outcrop and well data, c) biostratigraphy, d) gravity and e) velocity data.


Nearby Oil Terminal

The Lower Sheet Play, which is a conventional fractured carbonate reservoir, similar to existing producing fields in Cuba, is located at depths typically between 2,000 and 3,500 metres. In offsetting Cuban fields, these reservoirs can be highly productive, with reported initial well rates of up to 4,000 barrels of oil per day.

Oil recoveries to date suggest that the Lower Sheet Play has potential for higher quality crude oil than that produced from adjacent fields. It has demonstrated prospectivity in the western and central areas of Block 9 and is likely to be prospective in the east of Block 9, where an absence of seismic data limits the assessment.

Melbana's technical assessment has identified a total of 19 structural prospects and leads which have been prioritized to arrive at the two locations that have been selected for the current drilling program (Alameda and Zapato, as shown in Figure 2).

The recoverable volumes have been conservatively estimated using the historical recovery factor for nearby Cuban fields.

Due to the large volume of potential Oil-In-Place, the use of modern enhanced oil recovery techniques combined with the potential for lighter crude in the targeted structures offers the further potential for a substantial increase in oil recovery.

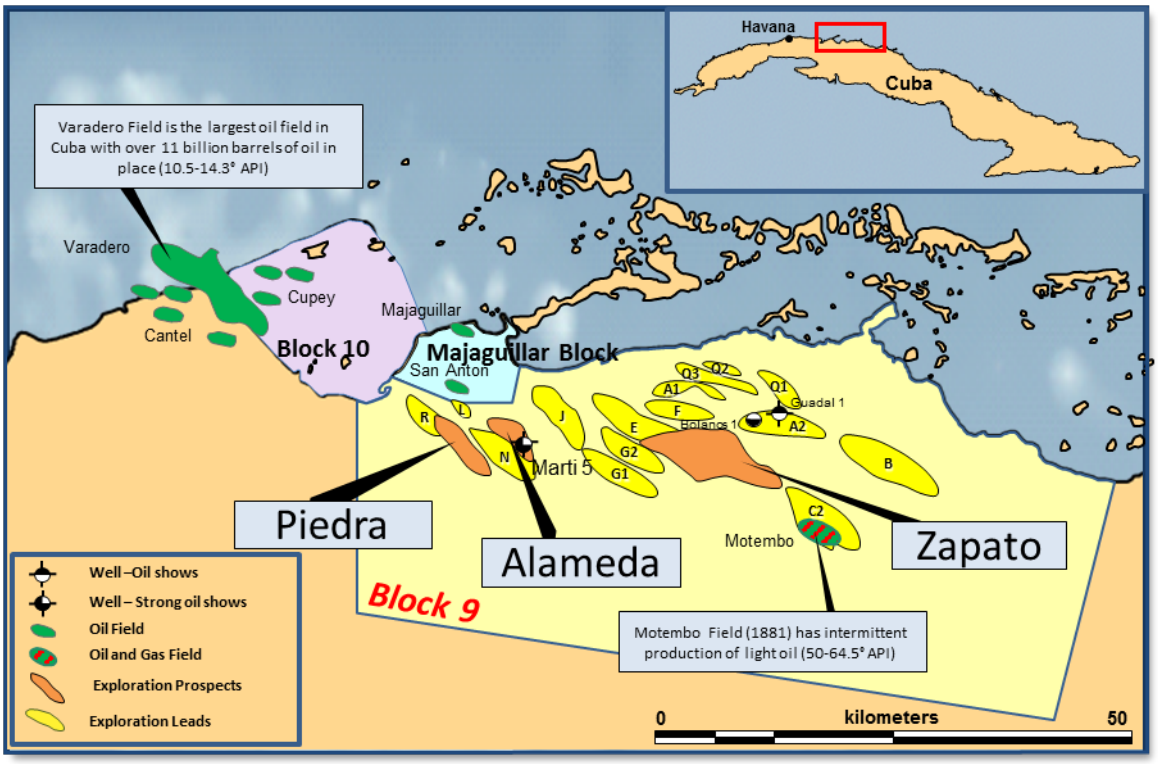

Figure 2 - Block 9 PSC with high graded drilling targets

Use of modern enhanced oil recovery techniques offers substantial potential for further increases in oil recovery

Additional potential is anticipated in the Upper Sheet and Tertiary plays; however, these have not been quantified at this stage. There are numerous oil recoveries from old wells in the Upper Sheet in Block 9 and production from this play in nearby fields. The Tertiary play is likely to contain heavier oil and more data is needed to establish its level of productivity before it can be adequately characterised.

Melbana has optimised the potential drilling program to enable the acquisition of valuable information about both plays during the drilling of wells to the Lower Sheet objectives.

Alameda Prospect - highest ranked prospect in Block 9

The Alameda Prospect is currently the highest ranked exploration target in Block 9 PSC.

Alameda Prospect is the highest ranked prospect, supported by recoveries from two old wells

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 will test a combined exploration potential of over 3 billion barrels Oil-in-Place and 141 million barrels of oil aggregate (best estimate)[1] , as shown in Table 1).

The primary objective at Alameda ranges in depth from approximately 3,000 to 3,700 metres (see Figure 3).

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.

Independent Expert McDaniel & Associates estimates Alameda prospective resource potential as up to 280 million barrels of oil[1]

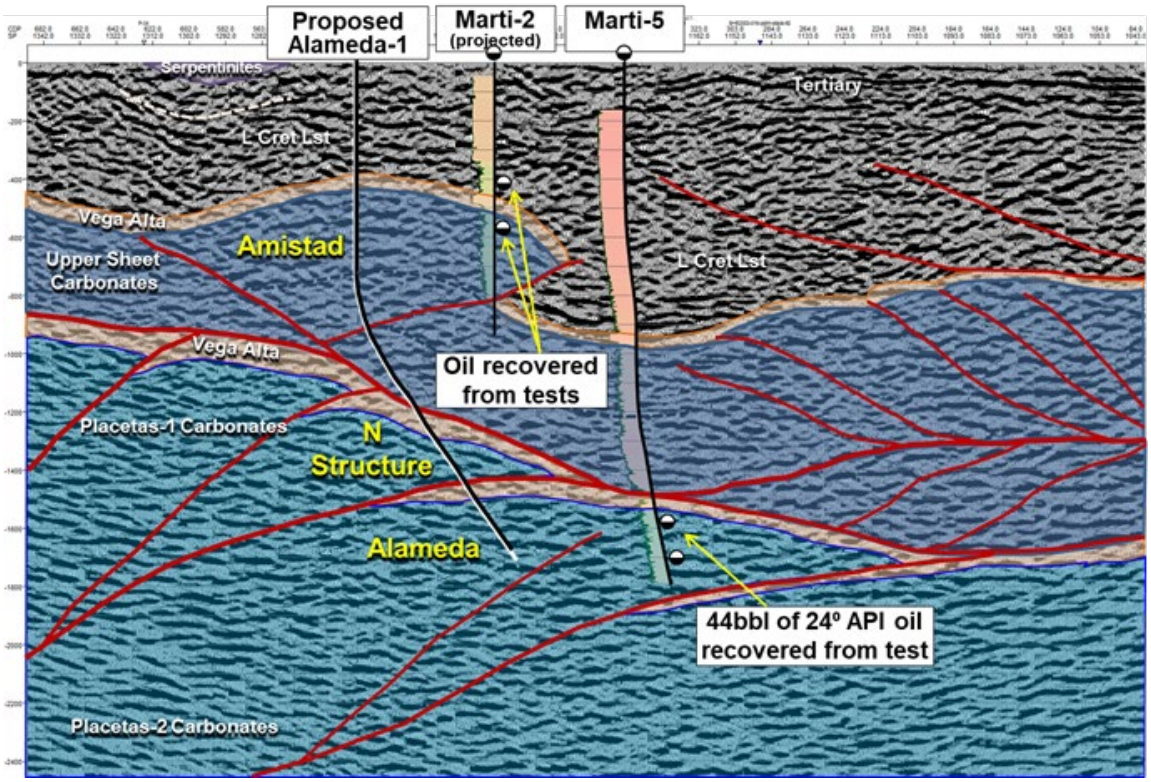

Figure 3 - Schematic cross section for proposed Alameda-1 well

The Alameda 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/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 prospects and leads in close proximity.

Table 1 - Exploration Prospective Resource estimates for objectives of Alameda-1 well

Objective	Chance of Success	Prospective Resource (million barrels)[1]			
		Low	Best	High	Mean
Amistad/U1	15%	24	60	132	71
N	23%	4	9	20	11
Alameda	32%	39	72	128	79

The Alameda-1 well will test three independent exploration objectives with a total prospect resource of 141 million barrels of oil (best estimate)[1].

Zapato Prospects – High Priority Exploration Drill Opportunities

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.

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. Melbana commissioned a gravity and magnetic study over the Zapato prospect from Cuba's specialist technical laboratory, CEINPET. The study 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 a light oil (50 – 64.5° API).

Independent Expert McDaniel & Associates estimates Zapato prospective resource potential as up to 214 million barrels of oil[1]

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.

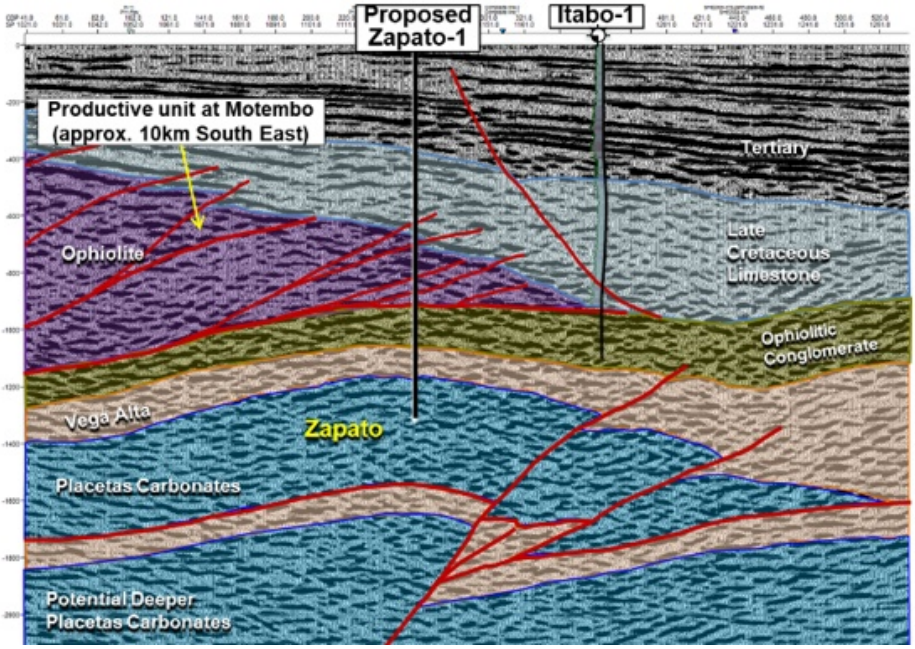

Figure 4 - Schematic cross section through Zapato Prospect

Table 2 - Exploration Prospective Resource estimates for objectives of Zapato-1 well

Objective	Chance of Success	Prospective Resource (million barrels)[1]			
		Low	Best	High	Mean
Zapato	23%	38	95	214	114

Cuba Drilling Program

Melbana is proceeding with detailed planning for a two well drilling campaign in Block 9 expected to commence in mid-2021. A drilling contractor established in Cuba has been appointed and orders for inventory items have been placed. All material permits to commence the drilling of the first well, Alameda-1, have been received. This two well drilling campaign is estimated to cost in excess of US$30 million which is being funded 85% by Sonangol and 15% by Melbana.

Contact Details

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Notes

[1] **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. All quoted volumes have been taken from Independent Expert McDaniel & Associates Competent Persons Report June 30, 2018, as adjusted by Melbana for areas released.

Contingent and Prospective Resources: 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 29 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 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; “MMstb” means million stock tank barrels of oil.

Forward Looking Statements - This document may include forward looking statements. Forward looking statements include, are not necessarily limited to, statements concerning Melbana’s planned operation program and other statements that are not historic facts. When used in this document, the words such as “could”, “plan”, “estimate”, “expect”, “intend”, “may”, “potential”, “should” and similar expressions are forward looking statements. Although Melbana believes its expectations reflected in these are reasonable, such statements involve risks and uncertainties, and no assurance can be given that actual results will be consistent with these forward-looking statements. Melbana confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning this announcement continue to apply and have not materially changed.