

MELBANA ENERGY LIMITED Annual General Meeting

22 November 2022



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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. 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 ASX Listing Rules. Conversion factors: 6 Bscf gas equals 1 MMboe; 1 bbl condensate equals 1 boe

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.

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Jenny, Armando, William and Emilio - Melbana Energy, Cuba

The Year in Review

Reached target depth on both of the first two exploration wells in Cuba, despite challenging international operating environment due to COVID-19

Alameda - 1

- Achieved target total depth in April 2022
- Intersected moveable oil in three independent reservoirs for total net pay of 278 mTVD
- Formation pressures encountered were very high in each reservoir
- Strong oil shows (oil flowed to surface)

Zapato - 1

- Achieved target total depth in November 2022
- Slow drilling due to thicker than expected volcanic sequence
- Suspended well, leaving possibility of re-entry at a later date



Chairman and Ricardo - Drilling Manager, Cuba



Oil on the shakers at Alameda - 1

What We Have Found

Alameda-1 intercepted three geologically independent reservoirs, each with moveable oil under high pressure, that were subsequently independently assessed¹ to contain:

- Oil in place - 5.0 billion barrels
- Prospective Resource - 267 million barrels (gross unrisks best estimate)*

Amistad

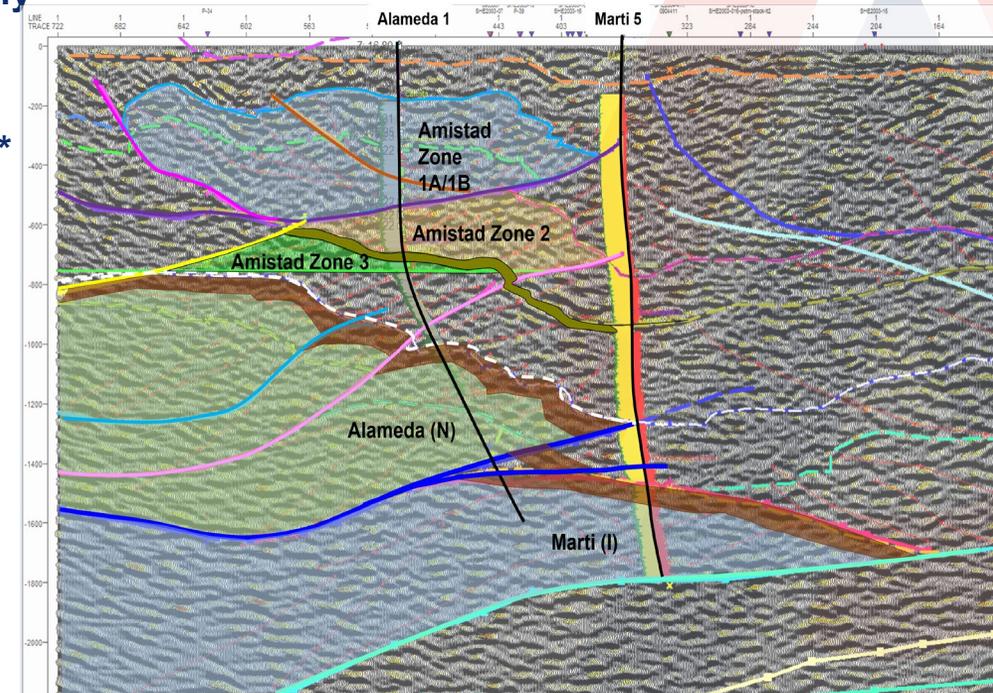
- 1.94 billion barrels of oil in place, 88 million barrels of Prospective Resource*

Alameda

- 1.87 billion barrels of oil in place, 109 million barrels of Prospective Resource*

Marti

- 1.23 billion barrels of oil in place, 70 million barrels of Prospective Resource*



This has the potential to rank amongst the world's greatest onshore oil discoveries

Alameda – independently assessed ¹ resources (gross unrisks, million of barrels – Melbana 30%)				
	Low	Best	Mean	High
Oil-in-Place	2,145	5,041	6,355	12,047
Prospective Resources*	85	267	362	734

¹ McDaniel & Associates, Competent Persons Report August 2022

* See Prospective Resources Cautionary Statement on page 2

What We Have Found (Melbana 30%)

The results from the Alameda-1 exploration well increased the pre drill prognosed Prospective Resources (gross unrisks best estimate)* by 89%

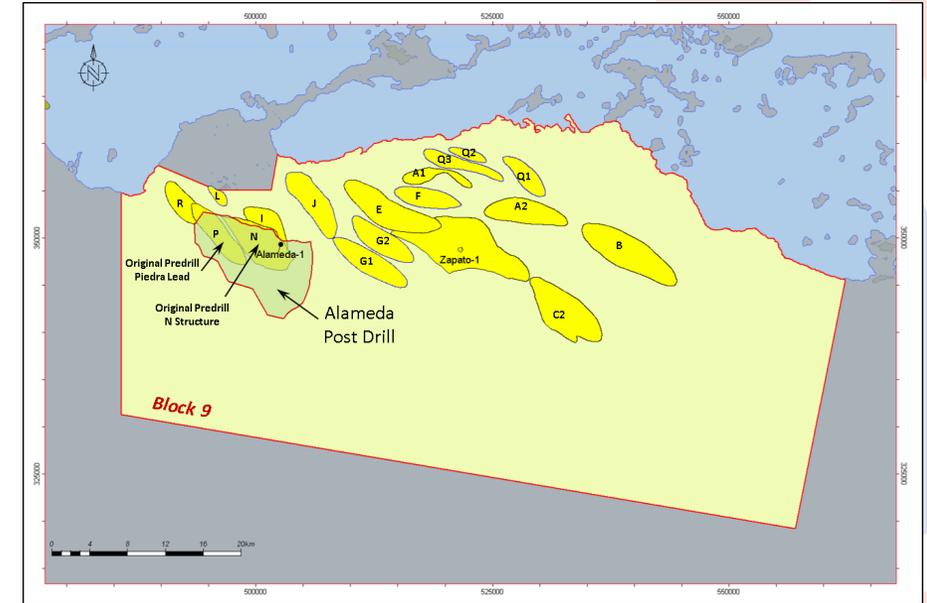
- Pre drill, prognosed volumes independently estimated to be 141 million barrels of Prospective Resource (gross unrisks best estimate)*
- Post drill, prognosed volumes independently estimated to be 267 million barrels of Prospective Resource (gross unrisks best estimate)*

Alameda – Prospective Resources* (gross unrisks, millions of barrels)
as at 1 July 2021 (pre drill)¹

Objective	Low	Best	Mean	High
Amistad 1, 2 & 3 (U1)	24	60	71	132
Alameda (N)	4	9	11	20
Marti (Alameda / I)	39	72	79	128
Total	67	141	161	280

Alameda – Prospective Resources* (gross unrisks, millions of barrels)
as at 1 August 2022 (post drill)¹

Objective	Low	Best	Mean	High
Amistad 1, 2 & 3	30	88	119	240
Alameda	34	109	148	297
Marti	21	70	95	197
Total	85	267	362	734

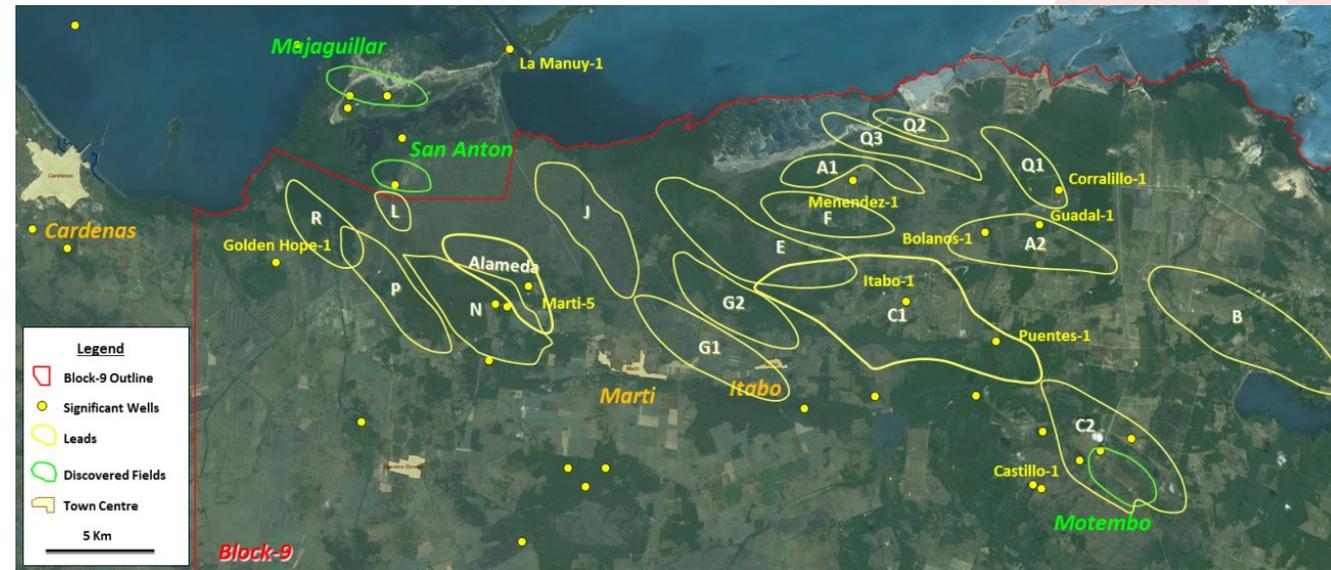


About one third of the pre drill independent estimate for the oil in place in Block 9 was found by this first exploration well

* See Prospective Resources Cautionary Statement on page 2
¹ McDaniel & Associates

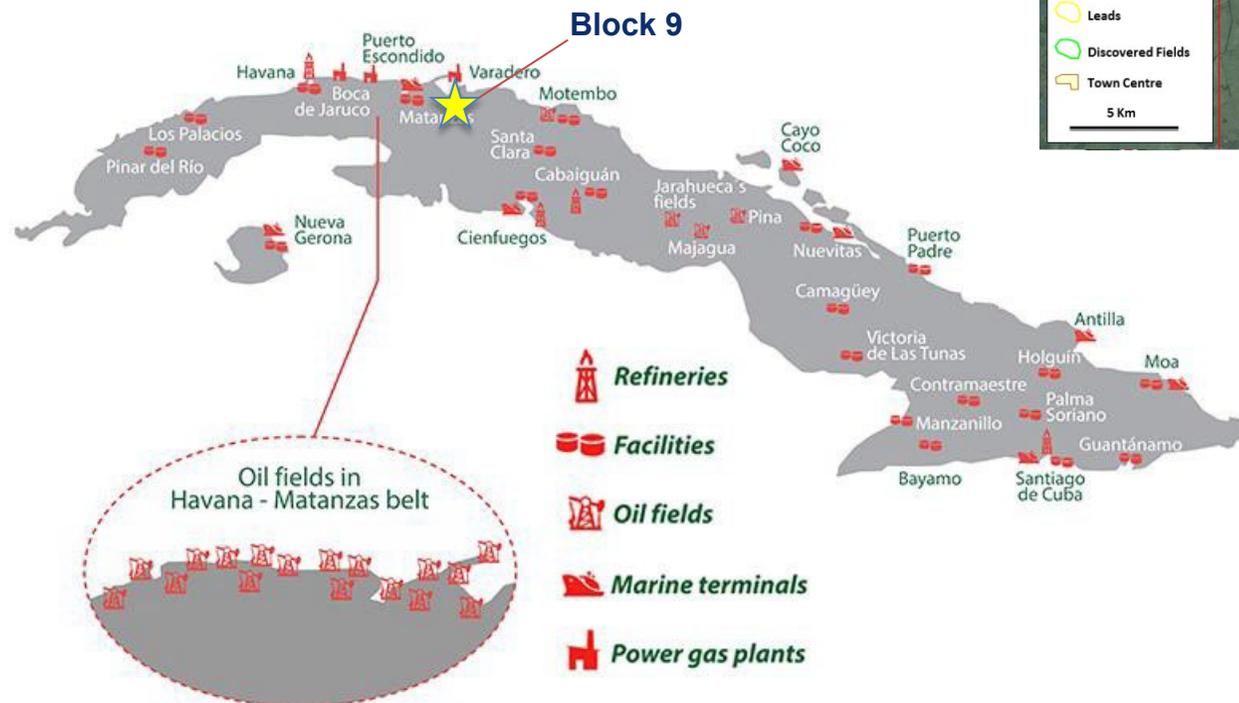
Cuba, Block 9 – Operating Environment and Exploration Runway

- Close to oil terminal at Matanzas (~85km)
- Close to significant discovered fields (Varadero > 11 billion barrels of oil in place)
- Access to workforce: Cardenas approximately 5km west of Block 9 (population ~100,000)
- More than 19 leads identified for future exploration



Block 9 exploration running room

Block 9 is proximate to established and active oil field infrastructure and has a lot of running room for further exploration



What Next for Cuba?

First Appraisal Well: Alameda-2

- Drilling to commence Q1 2023
- Test all three units of the Amistad formation
- 88 million barrels of Prospective Resource* (gross unrisked best estimate – Melbana 30%)

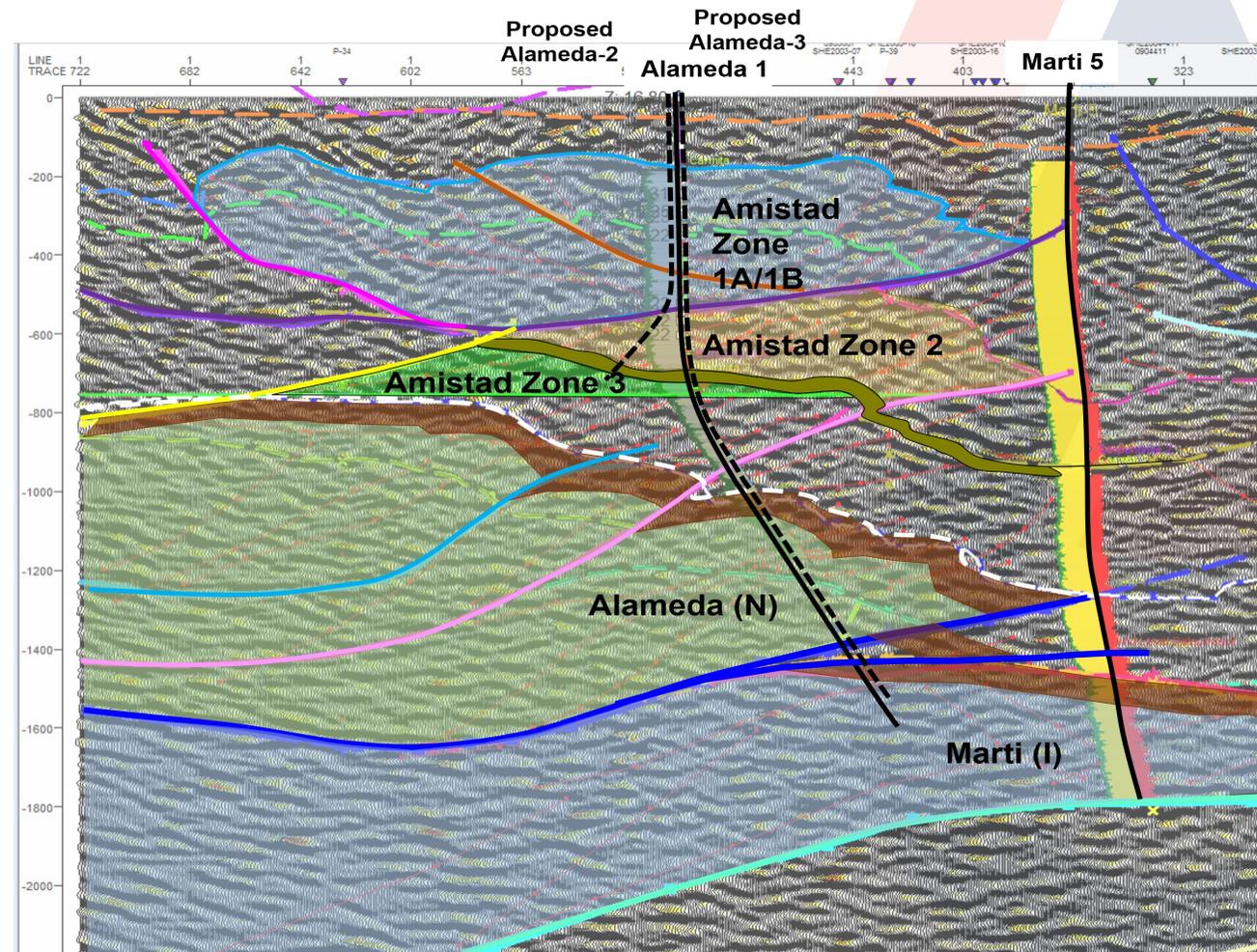
Second Appraisal Well: Alameda-3

- Drilling to commence following Alameda-2
- Test the Alameda and Marti formations
- 179 million barrels of Prospective Resource* (gross unrisked best estimate – Melbana 30%)

Same project management team and same contractors, thus leveraging the hard earned experience they gained drilling Melbana's first two exploration wells in Cuba

* See Prospective Resources Cautionary Statement on page 2

Two wells to be drilled in 2023 to appraise the three oil reservoirs encountered by Alameda-1, any of which can be immediately put on production if successful



...and Australia?

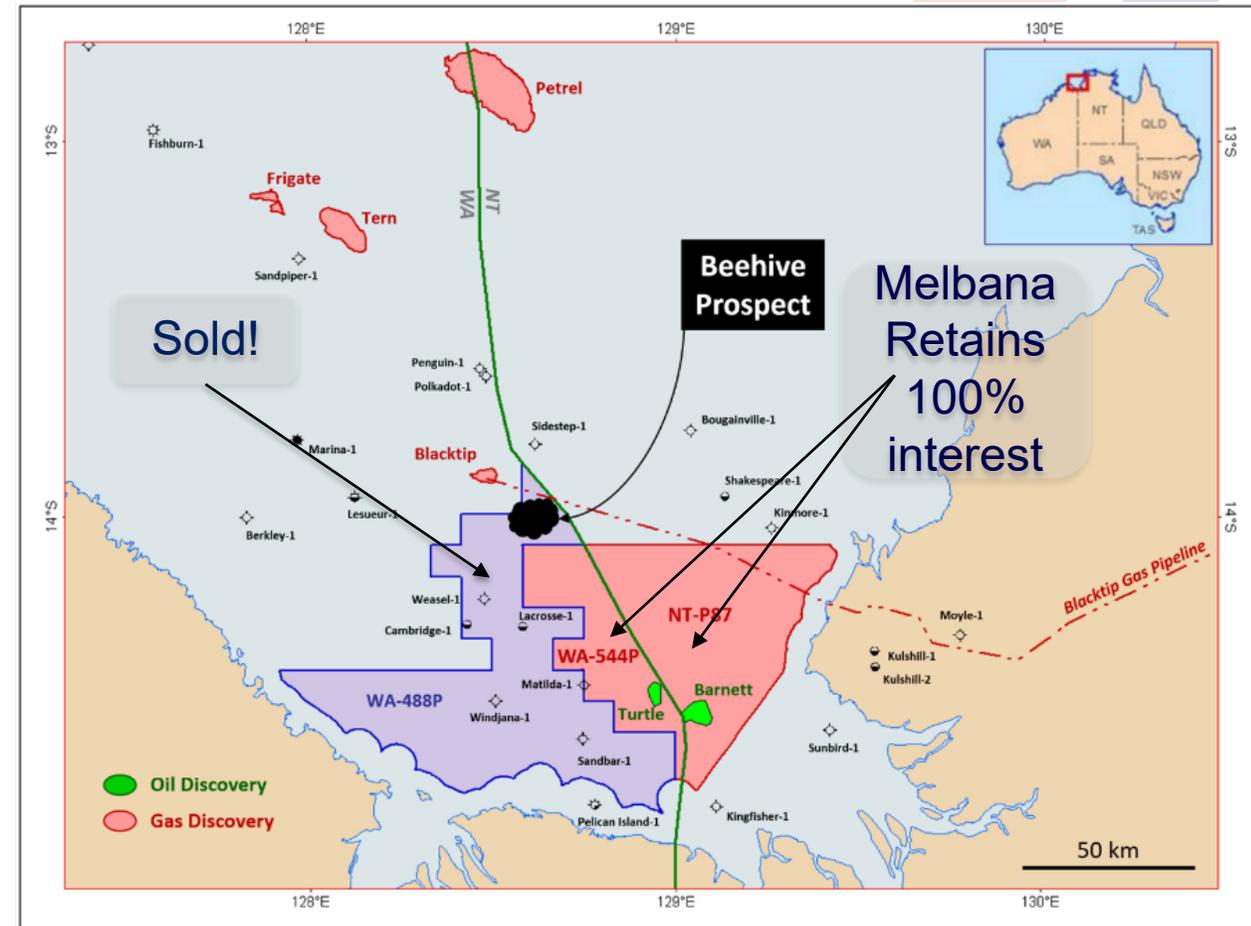
Exploration well to be drilled by Q3 2023

- Melbana sold its permit WA-488-P in late 2021 to a US\$80 billion market cap Houston based Fortune 500 oil and gas company that is making a country entry to drill this well
- Consideration received was an upfront payment of US\$7.5 million and an entitlement to future contingent cash payments of US\$5.0 million and production related payments of US\$10 million per each 25 million barrels of oil/equivalent produced (in the exploration success case)
- Melbana has no funding commitments to this well
- Melbana retains 100% of the adjacent WA-544-P & NT-P87 containing the discovered but undeveloped Turtle and Barnett discoveries

Prospective Resources* (millions of barrels of oil/equivalent) ¹					
Objective	CoS ³	Low	Best	Mean	High
Beehive	20%	37	416	599	1,424

* See Prospective Resources Cautionary Statement on page 2

Melbana has no liability to the drilling of this exploration well and would receive significant cash payments should it be successful



* See Prospective Resources Cautionary Statement on page 2

¹ McDaniel & Associates

Funding Position and Corporate Initiatives

- Melbana has a 30% interest in Block 9 and is the operator for the 2023 appraisal program
- As at 30 September 2022 Melbana had available cash of \$46 million
- It is therefore more than adequately funded for its share of the 2023 appraisal drilling program in Cuba
- Appointed new Exploration Manager in Q3 2022 to help leverage the abilities of Melbana's first class geoscience team
- Appointed new General Counsel in Q4 2022 to manage contractor relations, regulatory compliance and partner communications
- Melbana has over 10,000 shareholders. The company may undertake an unmarketable parcel buyback to reduce registry costs, the cost of which would be immaterial if executed.
- Melbana has no plans to undertake a share consolidation

Melbana is fully funded for its share of its 2023 work program



Flaring operations whilst drilling Alameda-1 - Block 9, Cuba

Corporate Overview

Company Information	
Name	Melbana Energy Limited
Listed	1998
Exchange	ASX ("MAY")
Shares on issue	3,193 million
Market Cap (15 Nov 22)	\$170 million
Cash (30 Sept 22)	\$46 million

Shareholders	
Board & Management	8.23%
Top 20	27.50%



Andrew Purcell BEng (Elec), MBA Executive Chairman	Investment banking (Credit Suisse, Macquarie Bank), Australia and Hong Kong. Experienced in resources banking, cross border financing, commodity hedging and corporate turnarounds. 20 years as a public company director in Australia and abroad. Also serves as Chairman of AJ Lucas Group Limited (ASX: AJL).
Peter Stickland BSc (Hons) (Geology) GDipAppFin Technical Director	25 years global experience in oil and gas exploration commencing with BHP Billiton. CEO of Melbana Energy (2014–2018) and Tap Oil (ASX: TAP, 2008–2010). APPEA Board member (2009-2017).
Michael Sandy BSc (Hons) (Geology) Non-Executive Director	40 years oil and gas exploration experience, managing assets in PNG, Asia the Middle East and the USA. 20 years as a public company director involved in numerous acquisitions and divestments.
Errol Johnstone BSc (Hons) (Geology/Geophysics) Chief Geoscientist	29 year career with ExxonMobil in a variety of exploration and appraisal roles. Recognised industry expert in several key geoscientific disciplines. Responsible for generating many new exploration initiatives internationally resulting in several significant discoveries.
Dean Johnstone B.Sc. (Geology/Geophysics) Senior Geoscientist	30 years experience in oil and gas exploration, development and production with ExxonMobil and Delhi Petroleum. Mature field opportunity generation a specialty. International experience in Canada, PNG and SE Asia.
Dr. Duncan Lockhart B.App.Sc (App.Geol) B.Sc (Hons) Ph.D Exploration Manager	Extensive O&G experience spanning over 32 years in Australia including with BHP, Woodside, OMV, Central Petroleum, Senex and Drillsearch. His strength lies in identifying high value opportunities, providing technical assessments and implementing strategic initiatives.
Ken Hendrick BEng (Civil), MEngSc, MBA Implementation Manager	Decades of experience in senior project management roles safely executing complex multi-discipline developments for the resources sector, particularly in the offshore oil and gas industry.
Dr. Rafael Tenreiro B.Sc (Mining Eng.), M.Sc (Geophysics), M.Sc (Petroleum Geo.), Ph.D. (Expl Geophysics) Country Manager, Cuba	40 years experience in Cuban Oil industry working in exploration projects including the discovery, evaluation and development of 14 oil fields. Before joining Melbana, he was the Exploration Director for CUPET (National Oil Company of Cuba).

Summary

- Melbana has significant interests in two appraisal wells and one exploration well in 2023, for which it is either fully funded or has no financial commitments to.
- Of the 5.0 billion barrels of oil in place encountered by Alameda-1, the combined Prospective Resource* of 267 million barrels of oil (100%, best estimate – Melbana 30%) assumes typical Cuban recovery rates. If the oil Alameda-1 encountered proves to be lighter and/or more greatly charged then this number could be higher.
- Melbana also has a material interest in the outcome of the Beehive exploration well, expected to be drilled before Q3 2023, and it has no funding commitments towards its execution. When they work, these play types tend to work big and Beehive is independently assessed¹ to have up to 1.4 billion barrels of Prospective Resource* (100%, high estimate)
- Melbana has a first class geoscience team that has a track record of advancing new ideas that have been taken up by some of the world's largest oil and gas companies. It also has a management team that has formalised agreements and funding arrangements to allow these ideas to be pursued and a project management team that has repeatedly proven it can successfully execute drilling programs in new countries (this time during an international pandemic).
- Melbana is well placed for a transformative 2023



Yorlany, Laura, Osvaldo and Reynaldo
Melbana Energy - Cuba

¹ McDaniel & Associates

* See Prospective Resources Cautionary Statement on page 2



Melbana Energy Limited
ABN 43 066 447 952

Mezzanine Floor, 388 George Street
Sydney NSW 2000
AUSTRALIA

Contact

Telephone:

+61 (2) 8323 6600

Email:

admin@melbana.com