

# Quarterly Activities Summary for Period Ended 30 September 2018

## Highlights:

### *Australia – WA-488-P (Beehive) – 100%*<sup>5</sup>

- Beehive 3D Seismic Survey completed safely and without incident
- Independently assessed Prospective Resources (best estimate) of 388 million barrels of oil equivalent<sup>1,2,3</sup> - 25% improvement in Chance of Success

### *Cuba - Block 9 PSC – 100%*<sup>4</sup>

- Independently assessed Oil In Place (best estimate) increased by 24% to more than 15.7 billion barrels of oil - recoverable Prospective Resources increased by 13% to 718 million barrels of oil<sup>1,2,3</sup>
- All key regulatory approvals received for Alameda-1 exploration well testing 141 million barrels of recoverable oil (best estimate basis)<sup>1,2,3</sup>
- Farmout Letter of Intent signed which includes a full carry for three firm exploration wells testing combined best estimate prospective resources of 270 million barrels of oil and a full carry for all other activities in the Block. Rig slot available for first well in April 2019 being considered
- Farmout will result in 3 highest priority targets being drilled at zero cost to Melbana while retaining a 12.5% interest in the profit oil from any discoveries. Melbana will be carried for all future exploration and development costs. Additionally circa US\$2.275 million of cash currently tied up with bank guarantees will be released to the Company as the bank guarantees are replaced by December 31, 2018

### **Corporate**

- Placement of 194 million shares to raise \$3.5 million (before costs) with demand in excess of funds sought

MELBOURNE, AUSTRALIA (15 October 2018)

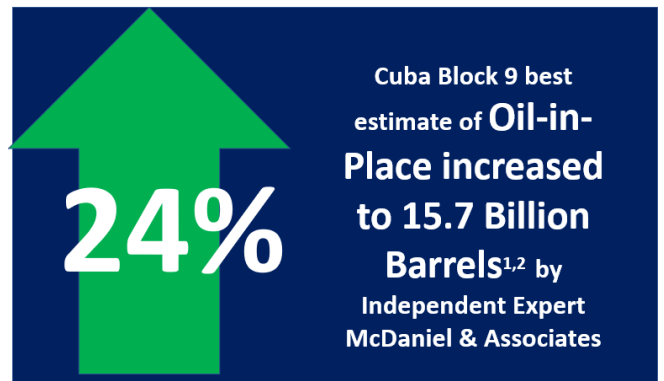
Melbana Energy Limited (ASX: **MAY**) (“**Melbana**” or the “**Company**”) provides the following summary in relation to its activities during the quarter ended 30 September 2018.

## Overview

### McDaniel & Associates Independent Prospective Resource Assessment

During the quarter Melbana announced the results of a highly anticipated independent assessment of prospective resources by technical expert McDaniel & Associates, who have significant Cuban experience certifying reserves for TSX listed Sherritt International. The report was commissioned by Melbana to assist primarily as a complying Competent Persons Report for a potential AIM listing but also to assist with farmout marketing efforts.

For Block 9, the assessment identified an increase in best estimate Oil in Place of 24% to more than 15.7 billion barrels and an increase of recoverable Prospective Resources of 13% to 718 million barrels of oil equivalent<sup>1,2,3</sup> from three prospects and 16 leads. The assessment included a 17% increase in the aggregate of best estimate prospective resources to 236 million barrels of oil<sup>1,2,3</sup> from the four targeted objectives contained within Melbana's preferred initial two well program of Alameda and Zapato. The assessment also confirmed the giant potential of the Beehive Prospect, with best estimate Prospective Resources of 388 million barrels of oil equivalent<sup>1,2,3</sup> with a significant improvement in Chance of Success to 20% (from 16%).



## Cuba

### Santa Cruz Incremental Oil Recovery Project - (Melbana 100%)

The Company is currently negotiating a long term binding agreement with Cuba's national oil company Cubapetroleo for the Santa Cruz incremental oil recovery project. During the quarter, Melbana 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. Long term documentation was exchanged and discussions commenced on key commercial terms including the work program and operational envelope with a view to finalizing a binding agreement late in 2018.



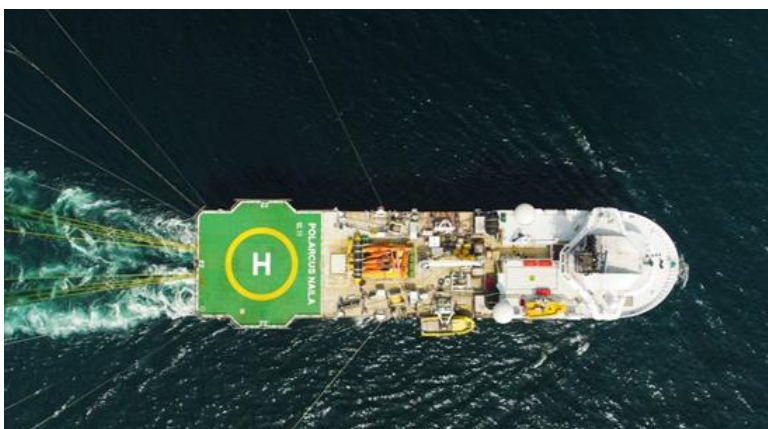
Cuba - Santa Cruz Production facilities

## Block 9 (Melbana 100%<sup>4</sup>)

**Farmout** – A Letter of Intent with Anhui Guangda Mining Investment Co Ltd (“**AGMI**”) was executed subsequent to the quarter. AGMI is a private company that reports its assets as in excess of US\$1 billion, operating through its subsidiaries over 13 exploration and exploitation blocks globally. The terms of the farmout are that AGMI will replace the existing bank guarantees releasing US\$2.275 million of cash to Melbana and, at zero cost to Melbana, drill the Company’s 3 best targets (testing a best estimate of 270 million barrels of oil <sup>1,2,3</sup>) and provide the Company with 12.5% of the profit oil in the event of success. AGMI will also fully carry Melbana for all the appraisal and development costs in the Block. The Company will also be entitled to cost recover its back costs of circa US\$3.5M from any future oil production.

The Company also 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 confirmed drilling timing window. The Drilling Operations Permit is the final administrative permit required for drilling to proceed. Drilling rig commercial negotiations continued with the contractor selected from the international tender Melbana ran earlier in the year. A drilling rig was 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 completion of a farmin agreement.

## WA-488-P Beehive Prospect (Melbana 100%<sup>5</sup>)



Polarcus Naila which completed the Beehive 3D Survey

During the quarter the Beehive 3D Seismic Survey was completed by the Polarcus Naila safely and without incident having been extended by ~100km<sup>2</sup> (~16%) to provide coverage over the newly identified lead (Egret) that is partially within the boundary of WA-488-P. The Beehive 3D Seismic Survey, including the extension over the Egret lead, was fully funded by Santos and Total. The 3D Seismic Survey data is currently being processed and a final dataset is expected to be received no later than early 2019. Total and Santos have an option (exercisable together or individually) to

acquire a direct 80% participating interest in the permit in return for continuing to fully fund the costs of all activities until completion of the first well in the WA-488-P permit. The option is exercisable by either Total or Santos at any time but no later than 6 months from the receipt of processed seismic survey data.

During the quarter the National Offshore Petroleum Titles Administrator (NOPTA) approved two changes to the WA-488-P work program, granting a credit for the early completion of the 3D Seismic Survey and a suspension of the deadline for completion of the current WA-488-P permit year work obligations by 15 months to 21 December 2020 to align with a potential drilling program. It was also recently noted that Santos advised the market that it saw Beehive as a multi TCF / large light oil prospect in a new play and indicated that it was maturing the Beehive 3D to build on 2020 drill options<sup>6</sup>.

## Portfolio Optimisation

During the quarter Melbana executed binding agreements with Rouge Rock Pty Ltd (“**Rouge Rock**”) for the sale of its wholly owned subsidiary that holds the AC/P50 and AC/P51 Permits, Vulcan Exploration Pty Ltd. The agreements provide for Melbana retaining exposure to the upside outcomes of a subsequent sale or

farmout of either of the Permits by Rouge Rock. The agreements are structured such that if Rouge Rock enters into an arrangement in future for cash, Melbana earns 10% of the cash benefit received by Rouge Rock. If Rouge Rock enters into an arrangement in future that provides for a full or partial carry on a well, Melbana has the right to back-in for a 5% interest after the well is drilled, effectively providing a carried interest during the drilling process and avoiding costs associated with the drilling process.

During the quarter Melbana executed a conditional non-binding Letter of Intent for the divestment of its 30% interest in PEP51153 to its Joint Venture partner for A\$100K cash. The conditions included an extension of current permit or revised permit to be issued by New Zealand Government, which may or may not occur. If the transaction completes, Melbana will be relieved of future permit expenditure and any rehabilitation requirements. Divestment options for the AC Blocks and non-core assets were sought to allow for Melbana to focus its resources on its core Cuban and Australian assets.

## Corporate

From a corporate perspective Melbana raised \$3.5 million (before costs) through a placement to qualified institutional and sophisticated investors of 194 million fully paid ordinary shares at \$0.018 per share plus an accompanying one unlisted share option per three shares placed exercisable at \$0.03 per option expiring 18 months from grant date. As part of the placement, Melbana's Chairman Andrew Purcell agreed to purchase 5,626,863 shares and 1,875,621 unlisted options, subject to shareholder approval which will be sought at the upcoming Annual General Meeting. The demand for the placement was in excess of the funds sought by the Company and scale back was applied to limit the funds raised to \$3.5 million (before costs). Proceeds from the placement will be used primarily to continue preparations for Block 9 drilling and advance the Company's technical and geological evaluation of the Santa Cruz Incremental Oil Recovery opportunity. The net proceeds will also be used for corporate costs and for general working capital purposes. The Company ended the quarter with a cash balance of A\$8.4 million.

## Commenting on the Quarter's activities Melbana Energy's CEO Robert Zammit said:

*"The quarter was another busy one with continued progress in key focus areas. The Beehive 3D seismic survey was completed and we selected a partner for Block 9 in Cuba who will provide Melbana with a full carry for all costs in the Block and a minimum commitment to drill three exploration wells testing a combined best estimate prospective resources of 270 million barrels of oil<sup>1,2,3</sup>. The independent expert report by McDaniel & Associates verified the enormous potential of both Block 9 and Beehive.*

*Locking in binding definitive agreements for Block 9 farmout and the Santa Cruz opportunity will be a key focus area for management in the fourth quarter while we retain an ongoing commitment to reviewing corporate and asset based new business opportunities."*

## Attachments: Activity Summaries by Project Area

<sup>1</sup>Independent Expert McDaniel & Associates Competent Persons Report June 30, 2018

**<sup>2</sup>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.

<sup>3</sup>**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 compiled by Dean Johnstone, Senior Geologist at Melbana. Mr Johnstone B.Sc has over 34 years of relevant experience, is a member of the American Association of Petroleum Geologists, and 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.

<sup>4</sup>*Nb: Farmout Letter of Intent (non-binding) signed with Anhui Guangda Mining Investment Co.*

<sup>5</sup>*Total and Santos hold a cumulative 80% option to acquire a Participating Interest in WA-488-P*

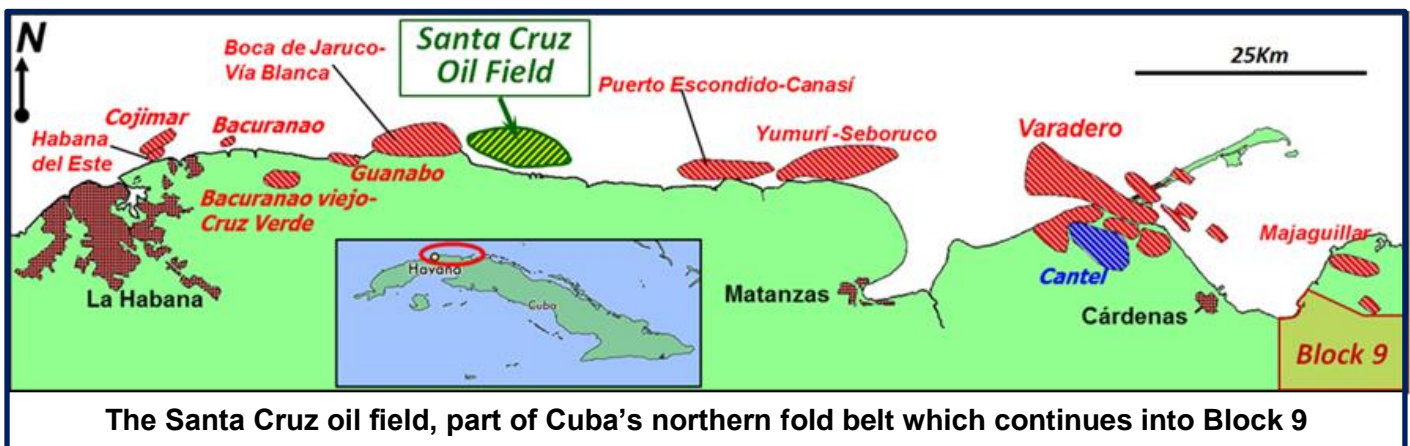
<sup>6</sup>*See Santos Investor Day Presentation September 28, 2018 Slide 79*

## Cuba

As an early mover into Cuba, Melbana is now one of the few western companies (and the only ASX listed company) with an established footprint in the high potential Cuban hydrocarbon sector. The geology of Cuba has analogies to petroleum systems in which Melbana's technical personnel have significant experience. Melbana sees substantial hydrocarbon potential in Cuba overall and Block 9 in particular, which is on-trend with Cuba's northern fold belt.

### Santa Cruz Incremental Oil Opportunity

The Santa Cruz oil field is located approximately 45km from Havana between Boca de Jaruco and Canasí oil fields and approximately 150 km west of Melbana's existing Block 9. Santa Cruz is in the northern foldbelt of Cuba – the trend that is responsible for the vast majority of Cuba's oil and gas production.



The Santa Cruz oil field was discovered in 2004 when drilled via a land based rig with a deviated well out to the offshore structure. It initially tested at 1,250 barrels per day, with oil quality varying from 10°API to 22°API, typical of most Cuban oil production. Initial estimates reported that Santa Cruz had up to 100 million barrels of recoverable oil with appraisal drilling confirming a field area of greater than 20km<sup>2</sup> and a significant oil column of 250 metres. Santa Cruz was declared commercial in 2006 and produced in excess of 1 million barrels in the first year. By 2012 production was approximately 1,600 barrels/day and the field had produced 7.4 million barrels from 18 wells.



On 8 March 2018, Melbana announced it had executed an exclusive agreement with Cuba's national oil company, Cubapetroleo, for the assessment of opportunities to enhance current oil production from the Santa

Cruz oil field. The agreement grants Melbana an exclusive right to assess potential for the enhancement of oil production from the Santa Cruz oil field and negotiate a long term incremental oil recovery agreement.

### Block 9

A short video on Cuba Block 9 is available on the Melbana website ([melbana.com](http://melbana.com)) under News and Broadcasts / Broadcasts and Videos.

### Overview of Block 9 PSC, Onshore Cuba

Block 9 PSC (Block 9) covers 2,380km<sup>2</sup> 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.

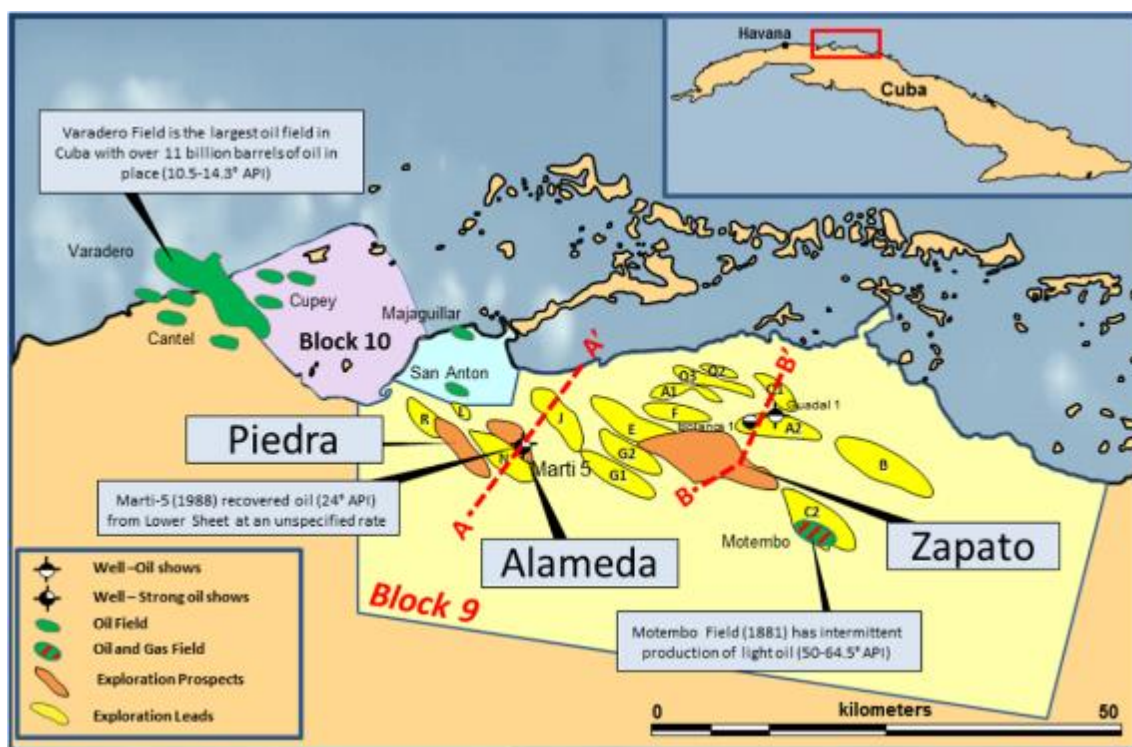


Figure 1 – Block 9 map showing location of key drilling targets

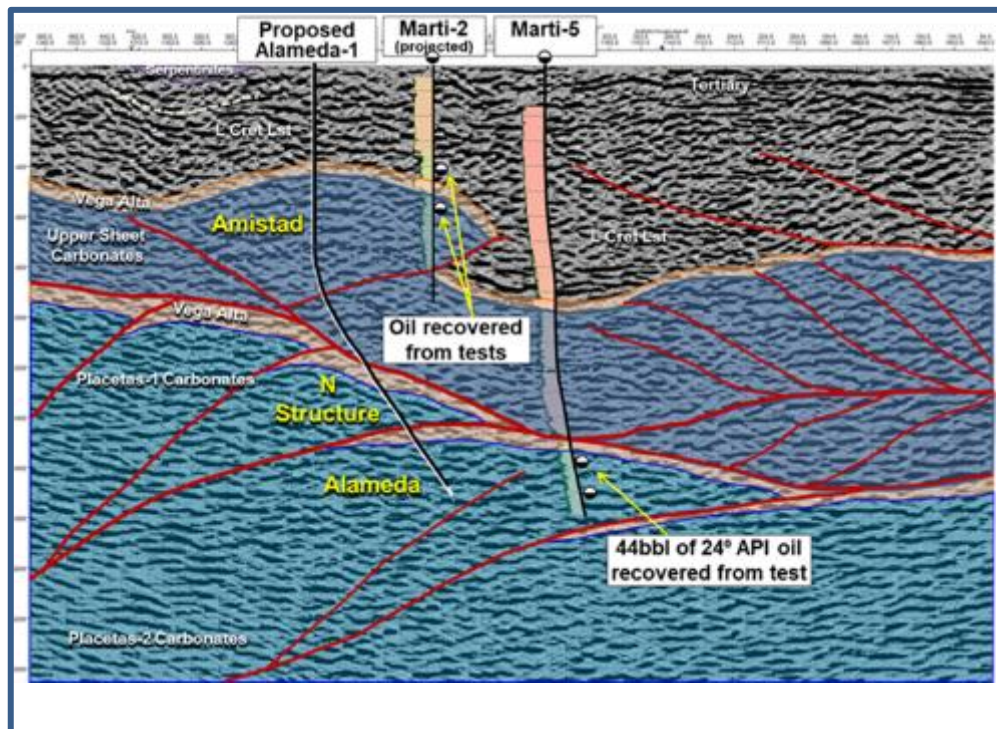
## Background

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

The Alameda Prospect is currently the highest ranked exploration target in Block 9 PSC. 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 2.5 billion barrels Oil-in-Place and 140 million barrels of recoverable oil on a 100% unrisks, best estimate basis<sup>1,2,3</sup> and 279 million recoverable barrels aggregate high side potential<sup>1,2,3</sup> (Table 1).

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 1).



**Figure 1: 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) <sup>1,2</sup> |      |      |      |
|-------------------|-------------------|---|------|------|------|
|                   | %                 | Low   | Best | High | Mean |
| <b>Amistad/U1</b> | 15%               | 24  | 60   | 132  | 71   |
| <b>N</b>          | 23%               | 4   | 9    | 19   | 10   |
| <b>Alameda</b>    | 32%               | 39  | 72   | 128  | 79   |

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

<sup>1</sup>Independent Expert McDaniel & Associates Competent Persons Report June 30, 2018

<sup>2</sup>**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.

## 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.

A 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.

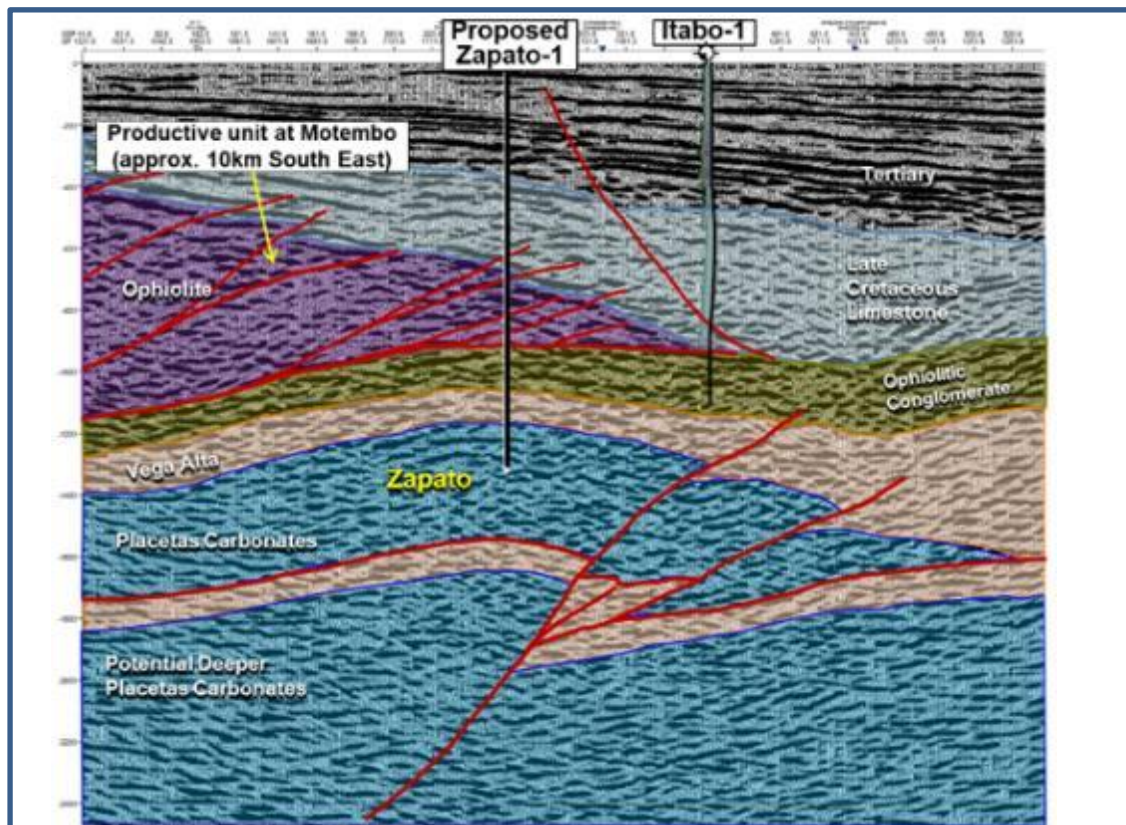


Figure 2 – Zapato Prospect Seismic Profile and Well Path

|               | Chance of Success | Recoverable Prospective Resource (MMstb) <sup>1,2</sup> |      |      |      |
|---------------|-------------------|---|------|------|------|
|               | %                 | Low   | Best | High | Mean |
| <b>Zapato</b> | 23%               | 38  | 95   | 214  | 114  |

Table 2: Exploration Prospective Recoverable Resource estimates for Zapato

<sup>1</sup>Independent Expert McDaniel & Associates Competent Persons Report June 30, 2018

<sup>2</sup>**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.

## Piedra Prospect

The Piedra prospect is a large robust structure targeting fractured carbonate objective, adjacent to the San Anton oil discovery. It is a seismically mapped structure that coincides with a large closed gravity high, which have been successfully drilled in the past (eg Varadero). The San Anton oil field recovered 19.5° API oil from the shallow section and at Piedra a lighter more mature oil can be expected at its depth. The crest of Piedra is at approximately 1,700 metres with nearly 1,400 metres vertical relief.

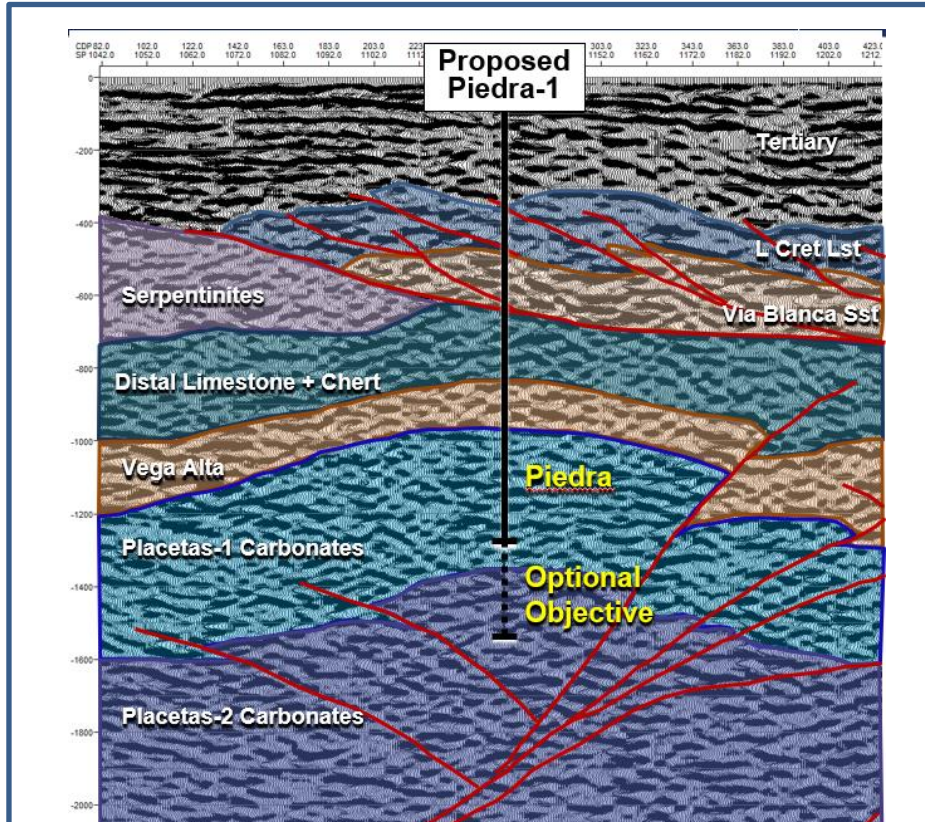


Figure 3 – Piedra Prospect Seismic Profile and Well Path

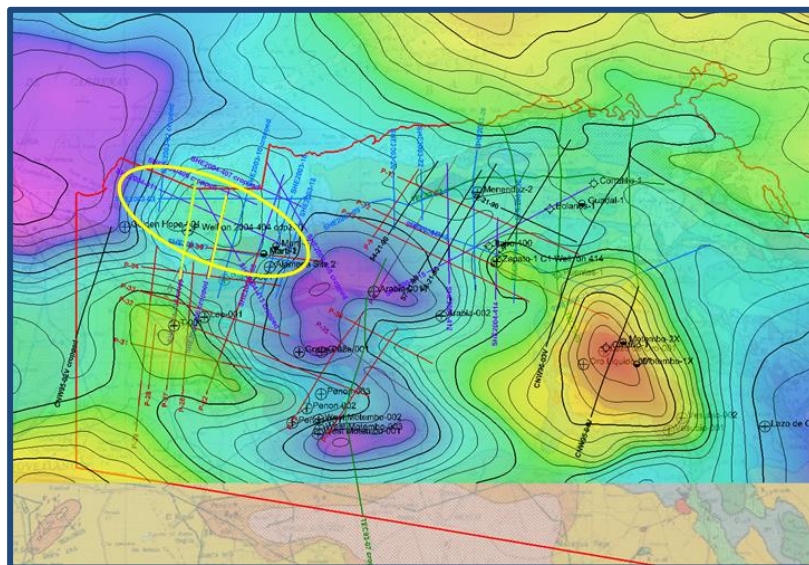


Figure 4 – Gravity high over Piedra Prospect

|               | Chance of Success | Recoverable Prospective Resource (MMstb) <sup>1,2</sup> |      |      |      |
|---------------|-------------------|---|------|------|------|
|               | %                 | Low   | Best | High | Mean |
| <b>Piedra</b> | 23%               | 14  | 34   | 76   | 40   |

**Table 3: Exploration Prospective Recoverable Resource estimates for Piedra**

<sup>1</sup>Independent Expert McDaniel & Associates Competent Persons Report June 30, 2018

<sup>2</sup>**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.

## Australia

### Bonaparte Gulf: Petrel sub-Basin: WA-488-P (Melbana 100%<sup>5</sup>)

*A short video on Beehive is available on the Melbana website (melbana.com) under News and Broadcasts / Broadcasts and Videos.*

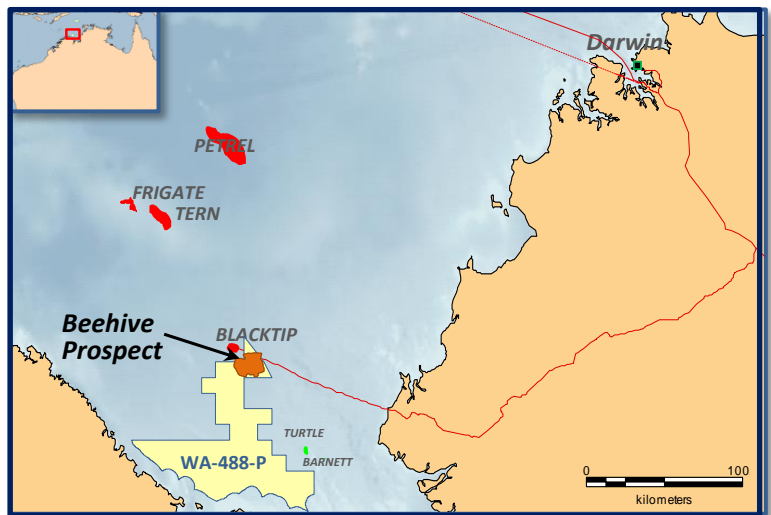
WA-488-P is located in the southern Bonaparte Gulf and covers an area of 4,105km<sup>2</sup>. The permit was awarded to Melbana in May 2012 as part of the acreage Gazettal Round.

Leveraging the 2011 Ungani-1 oil discovery in Carboniferous aged reservoirs in the nearby Canning Basin, Melbana has identified the giant Beehive prospect, analogous to the giant Tengiz field in the Caspian Sea but a new play type within the Bonaparte Basin.

On 12 December 2017, a Seismic Funding and Farmin Option Agreement was signed with Total and Santos. The agreement provides for

Total and Santos to fully fund 100% of the cost of a 3D seismic survey over the Beehive prospect in consideration for which, they are granted an option (exercisable together or individually) to acquire a direct 80% participating interest in the permit. If the option is exercised, Total and/or Santos will fully fund the costs of all activities until completion of the first well in the WA-488-P permit. The option is exercisable by either Total or Santos at any time but no later than 6 months from the receipt of processed seismic survey data. In the event of a commercial discovery, Melbana will repay carried funding from its share of cash flow from the Beehive field. Melbana will have no re-payment obligations for such carried funding in the event there is no commercial discovery and development in WA-488-P.

The Beehive 3D Seismic Survey was completed in August 2018 by the Polarcus Niala safely and without incident having been extended by ~100km<sup>2</sup> (~16%) to provide coverage over the newly identified lead (Egret) that is partially within the boundary of WA-488-P. The Beehive 3D Seismic Survey, including the extension over the Egret lead, was fully funded by Santos and Total. The 3D Seismic Survey data is currently being processed and a final dataset is expected to be received no later than early 2019.



Polarcus Niala which undertook the Beehive 3D Seismic Survey

During the quarter the National Offshore Petroleum Titles Administrator (NOPTA) approved two changes to the WA-488-P work program, granting a credit for the early completion of the 3D Seismic Survey and a

suspension of the deadline for completion of the current WA-488-P permit year work obligations by 15 months to 21 December 2020 to align with a potential drilling program.

Santos noted that it sees Beehive as a multi TCF / large light oil prospect in a new play and indicated that it was maturing the Beehive 3D to build on 2020 drill options<sup>6</sup>

<sup>5</sup> Total and Santos hold a cumulative 80% option to acquire a Participating Interest in WA-488-P

<sup>6</sup> See Santos Investor Day Presentation September 28, 2018 Slide 79

## Tassie Shoal Gas Processing Projects (Melbana 100%)

Melbana has Federal & State Government Environmental approvals valid to 2052 to build two world scale methanol plants and one LNG plant offshore in Commonwealth waters on a shallow water area ("Tassie Shoal") surrounded by discovered and undeveloped gas.

Tassie Shoal was selected as the site for the processing plants after an exhaustive assessment of the lowest cost environmentally acceptable locations close to stranded gas resources.

Development costs are reduced as proximity to gas fields allows the minimization of the length of any required pipelines to transport raw gas from the field to the processing facilities and the shallow water site allows facilities to be fixed to the sea bed, avoiding any complexities associated with floating facilities and facilitating construction in modules in a low cost location and transport to the final site.

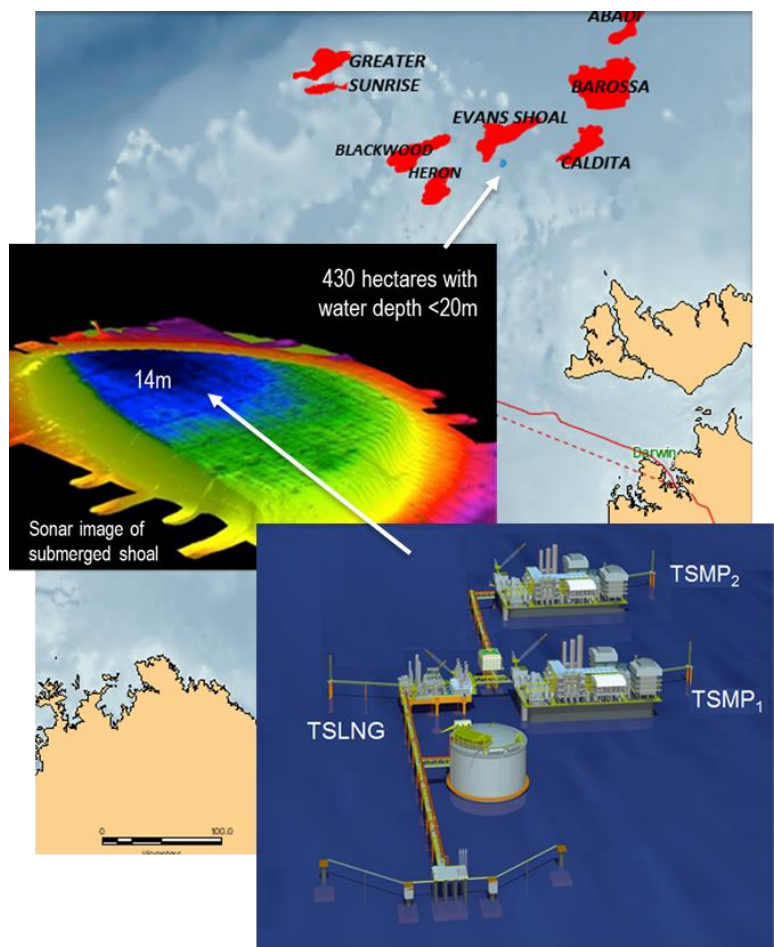
Methanol is a globally traded liquid with a deep international market and many industrial and energy uses. Approximately 45 per cent of the world's methanol is used in energy-related applications. Methanol can be used on its own as a vehicle fuel or blended directly into gasoline to produce a high-octane, efficient fuel with lower emissions than conventional gasoline. Methanol gasoline blends have widespread use in China and have been introduced in several countries outside of China. As an industrial chemical, methanol is used as a feedstock to produce chemicals such as acetic acid and formaldehyde, which in turn are used in products like adhesives, foams, plywood subfloors, solvents and windshield washer fluid. With Melbana's choice of methanol production process, methanol production is optimised with high CO<sub>2</sub> gas (up to 30%) as feedstock which is consistent with the CO<sub>2</sub> content of Evans Shoal raw gas.

The Tassie Shoal LNG Plant is an alternative to onshore LNG or FLNG.

In July 2017 it was reported by ConocoPhillips that the Barossa gas field is proposed to be developed as feedstock to the Darwin LNG facility from 2023<sup>7</sup>. According to Santos, the Barossa FEED decision consolidates its position as the leading candidate for Darwin LNG backfill when Bayu-Undan production ceases in the early 2020s<sup>8</sup>. Similarly Evans Shoal Gas field (~28% CO<sub>2</sub>) has reported it is also seeking to backfill Darwin LNG.

The Tassie Shoal LNG Project, with its shallow water platform fixed to seabed design, remains a low cost development option for LNG production should a means of disposing of the high CO<sub>2</sub> content in Evans Shoal or Barossa gas be economically achieved. Alternatively the Tassie Shoal Methanol Project, with its ability to receive and process raw gas with a 30% CO<sub>2</sub> content, remains an alternative development path should the titleholders prefer to proceed with a known achievable low cost development plan with existing environmental approval.

There is potential for value creation for Melbana via a carried interest and/or tolling income in a methanol or LNG development on Tassie Shoal utilizing its concept and environmental approvals.



<sup>7</sup>ConocoPhillips announcement 13 July 2017

<sup>8</sup>Santos announcement 23 April 2018

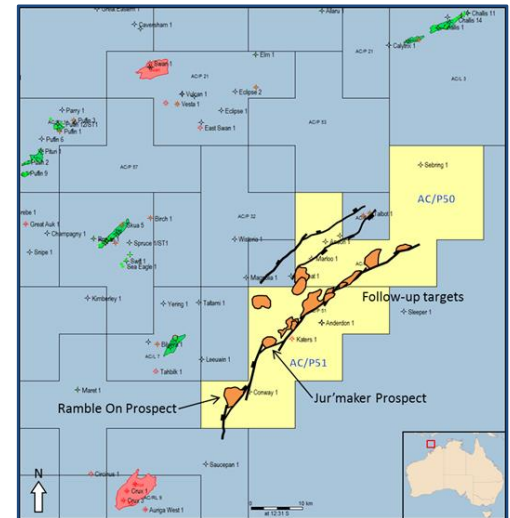
## Ashmore Cartier Region, Timor Sea: Vulcan Sub-Basin

### AC/P50 and AC/P51 (Melbana interest in event of sale or farmout by Rouge Rock)

In August 2018 Melbana executed binding agreements with Rouge Rock Pty Ltd (“Rouge Rock”) for the sale of its wholly owned subsidiary that holds the AC/P50 and AC/P51 Permits, Vulcan Exploration Pty Ltd. The agreements provide for Melbana retaining exposure to the upside outcomes of a subsequent sale or farmout of either of the Permits by Rouge Rock.

The agreements are structured such that if Rouge Rock enters into an arrangement in future for cash, Melbana earns 10% of the cash benefit received by Rouge Rock. If Rouge Rock enters into an arrangement in future that provides for a full or partial carry on a well, Melbana has the right to back-in for a 5% interest after the well is drilled, effectively providing a carried interest during the drilling process and avoiding costs associated with the drilling process.

AC/P51 contains the Ramble On prospect, a new play type that has proven analogues in other Basins.



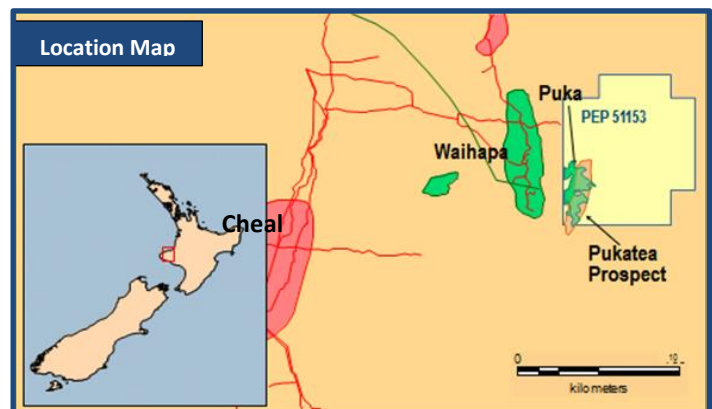
## New Zealand: Taranaki Basin

### PEP51153 (Melbana 30%, TAG 70% & Operator)

Melbana holds a 30% interest in PEP51153 operated by TAG Oil (“TAG”, 70%), which covers an area of approximately 85 square km located in the onshore Taranaki Basin of New Zealand.

TAG operates the nearby Cheal production complex, less than 10km from the Pukatea location.

PEP51153 contains the suspended Puka oil field. Recently, the Pukatea-1 well which was primarily targeting a deeper objective successfully intersected oil in the Mt Messenger formation.



On 26 March, 2018, TAG Oil (70% and Operator) announced that the Pukatea-1 well was completed at the Mt. Messenger formation, where 12.9m of oil-and-gas bearing sands were perforated. The Operator has reported that over a 12-hour test period using a 24/64" choke setting, the well flowed at a stabilized rate of approximately 276 boe/d (74% oil) without the need for artificial lift.

Melbana has executed a conditional non-binding Letter of Intent for the divestment of its 30% interest in PEP51153 to its Joint Venture partner for A\$100K cash. The conditions included an extension of current permit or revised permit to be issued by New Zealand Government, which may or may not occur. If the transaction completes, Melbana will be relieved of future permit expenditure and any rehabilitation requirements. Divestment options for the AC Blocks and non-core assets were sought to allow for Melbana to focus its resources on its core Cuban and Australian assets.



## Appendix 5B

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

### Name of entity

MELBANA ENERGY LIMITED

### ABN

43 066 447 952

### Quarter ended ("current quarter")

30 September 2018

| Consolidated statement of cash flows                       | Current quarter<br>\$A'000 | Year to date (3<br>months)<br>\$A'000 |
|--|----------------------------|---------------------------------------|
| <b>1. Cash flows from operating activities</b>             |                            |                                       |
| 1.1 Receipts from customers                                | -                          | -                                     |
| 1.2 Payments for   |                            |                                       |
| (a) exploration & evaluation                               | (313)                      | (313)                                 |
| (b) development  | -                          | -                                     |
| (c) production   | -                          | -                                     |
| (d) staff costs*   | (140)                      | (140)                                 |
| (e) administration and corporate costs                     | (310)                      | (310)                                 |
| 1.3 Dividends received (see note 3)                        | -                          | -                                     |
| 1.4 Interest received                                      | -                          | -                                     |
| 1.5 Interest and other costs of finance paid               | (1)                        | (1)                                   |
| 1.6 Income taxes paid                                      | -                          | -                                     |
| 1.7 Research and development refunds                       | -                          | -                                     |
| 1.8 Other (one-off redundancy payment)                     | (334)                      | (334)                                 |
| 1.9 Other (one-off R&D commission)                         | (129)                      | (129)                                 |
| <b>1.10 Net cash from / (used in) operating activities</b> | <b>(1,227)</b>             | <b>(1,227)</b>                        |

\* Some staff costs are reallocated in exploration & evaluation

|  |   |   |
|--|---|---|
| <b>2. Cash flows from investing activities</b> |   |   |
| 2.1 Payments to acquire:                       |   |   |
| (a) property, plant and equipment              | - | - |
| (b) tenements (see item 10)                    | - | - |
| (c) investments                                | - | - |

## Mining exploration entity and oil and gas exploration entity quarterly report

| <b>Consolidated statement of cash flows</b> |   | <b>Current quarter<br/>\$A'000</b> | <b>Year to date (3<br/>months)<br/>\$A'000</b> |
|---|---|------------------------------------|--|
|   | (d) other non-current assets                          | -                                  | -  |
| 2.2   | Proceeds from the disposal of:                        |                                    |  |
|   | (a) property, plant and equipment                     | -                                  | -  |
|   | (b) tenements (see item 10)                           | -                                  | -  |
|   | (c) investments                                       | -                                  | -  |
|   | (d) other non-current assets                          | -                                  | -  |
| 2.3   | Cash flows from loans to other entities               | -                                  | -  |
| 2.4   | Dividends received (see note 3)                       | -                                  | -  |
| 2.5   | Other (deposits paid net of refunds)                  | -                                  | -  |
| <b>2.6</b>                                  | <b>Net cash from / (used in) investing activities</b> | <b>-</b>                           | <b>-</b>                                       |

|             |   |              |              |
|-------------|---|--------------|--------------|
| <b>3.</b>   | <b>Cash flows from financing activities</b>                                 |              |              |
| 3.1         | Proceeds from issues of shares  | 3,399        | 3,399        |
| 3.2         | Proceeds from issue of convertible notes                                    | -            | -            |
| 3.3         | Proceeds from exercise of share options                                     | 200          | 200          |
| 3.4         | Transaction costs related to issues of shares, convertible notes or options | (224)        | (224)        |
| 3.5         | Proceeds from borrowings  | -            | -            |
| 3.6         | Repayment of borrowings   | -            | -            |
| 3.7         | Transaction costs related to loans and borrowings                           | -            | -            |
| 3.8         | Dividends paid  | -            | -            |
| 3.9         | Other (provide details if material)   | -            | -            |
| <b>3.10</b> | <b>Net cash from / (used in) financing activities</b>                       | <b>3,375</b> | <b>3,375</b> |

|           |  |         |         |
|-----------|--|---------|---------|
| <b>4.</b> | <b>Net increase / (decrease) in cash and cash equivalents for the period</b> |         |         |
| 4.1       | Cash and cash equivalents at beginning of period                             | 6,120   | 6,120   |
| 4.2       | Net cash from / (used in) operating activities (item 1.10 above)             | (1,227) | (1,227) |
| 4.3       | Net cash from / (used in) investing activities (item 2.6 above)              | -       | -       |
| 4.4       | Net cash from / (used in) financing activities (item 3.10 above)             | 3,375   | 3,375   |

| <b>Consolidated statement of cash flows</b> |   | <b>Current quarter<br/>\$A'000</b> | <b>Year to date (3<br/>months)<br/>\$A'000</b> |
|---|---|------------------------------------|--|
| 4.5   | Effect of movement in exchange rates on cash held | 98                                 | 98   |
| <b>4.6</b>                                  | <b>Cash and cash equivalents at end of period</b> | <b>8,366</b>                       | <b>8,366</b>                                   |

| <b>5.</b>  | <b>Reconciliation of cash and cash equivalents</b><br>at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts | <b>Current quarter<br/>\$A'000</b> | <b>Previous quarter<br/>\$A'000</b> |
|------------|---|------------------------------------|-------------------------------------|
| 5.1        | Bank balances   | 5,165                              | 2,995                               |
| 5.2        | Call deposits   | 44                                 | 44                                  |
| 5.3        | Bank overdrafts   | -                                  | -                                   |
| 5.4        | USD cash term deposit   | 3,149                              | 3,073                               |
| 5.5        | Other   | 8                                  | 8                                   |
| <b>5.6</b> | <b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>  | <b>8,366</b>                       | <b>6,120</b>                        |

| <b>6.</b> | <b>Payments to directors of the entity and their associates</b>                                      | <b>Current quarter<br/>\$A'000</b> |
|-----------|--|------------------------------------|
| 6.1       | Aggregate amount of payments to these parties included in item 1.2                                   | 69                                 |
| 6.2       | Aggregate amount of cash flow from loans to these parties included in item 2.3                       | -                                  |
| 6.3       | Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2 |                                    |

Director's fees and salaries paid to directors during the September 2018 quarter.

| <b>7.</b> | <b>Payments to related entities of the entity and their associates</b>                               | <b>Current quarter<br/>\$A'000</b> |
|-----------|--|------------------------------------|
| 7.1       | Aggregate amount of payments to these parties included in item 1.2                                   | -                                  |
| 7.2       | Aggregate amount of cash flow from loans to these parties included in item 2.3                       | -                                  |
| 7.3       | Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2 |                                    |

-

| 8. <b>Financing facilities available</b><br><i>Add notes as necessary for an understanding of the position</i>   | Total facility amount<br>at quarter end<br>\$A'000 | Amount drawn at<br>quarter end<br>\$A'000 |
|--|--|---|
| 8.1 Loan facilities  | 3,098  | 3,098                                     |
| 8.2 Credit standby arrangements  | -  | -   |
| 8.3 Other (please specify)   | -  | -   |
| 8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well. |  |   |

On 19 April 2018, Melbana announced it had executed a loan facility agreement for US\$2.5 million. The key terms of the loan are:

1. Annualised interest rate of 15%;
2. Maturity Date of the loan is January 10, 2019;
3. Granting of first ranking security;
4. A personal guarantee from Melbana's Chairman, Mr Purcell, in favour of the lender; and

| 9. <b>Estimated cash outflows for next quarter</b> | \$A'000    |
|--|------------|
| 9.1 Exploration and evaluation                     | 256        |
| 9.2 Development                                    | -          |
| 9.3 Production                                     | -          |
| 9.4 Staff costs                                    | 98         |
| 9.5 Administration and corporate costs             | 531        |
| 9.6 Other (provide details if material)            | -          |
| <b>9.7 Total estimated cash outflows</b>           | <b>885</b> |

| 10. <b>Changes in tenements (items 2.1(b) and 2.2(b) above)</b>                            | Tenement reference and location | Location                  | Nature of interest  | Interest at beginning of quarter | Interest at end of quarter |
|--|---------------------------------|---------------------------|---|----------------------------------|----------------------------|
| 10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced | - AC/P50<br>- AC/P51            | Vulcan Sub-Basin Offshore | As per ASX announcement dated 22 August 2018, the consolidated entity executed binding agreements with Rouge Rock Pty Ltd for the sale of its wholly owned subsidiary that holds the tenements. | 55%<br>55%                       | 0%<br>0%                   |
| 10.2 Interests in mining tenements and petroleum tenements acquired or increased           | -                               |                           | -   | -                                | -                          |

**Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.



Sign here:

Date: 15 October 2018

Company Secretary

Print name: Melanie Leydin

**Notes**

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

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**LIST OF PETROLEUM TENEMENTS**

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| PERMIT                | LOCATION                 | MELBANA INTEREST (%) |
|-----------------------|--------------------------|----------------------|
| <b>Australia</b>      |                          |                      |
| WA-488-P <sup>1</sup> | Bonaparte Basin Offshore | 100                  |
| <b>New Zealand</b>    |                          |                      |
| PEP51153 <sup>2</sup> | Taranaki Basin Onshore   | 30                   |
| <b>Cuba</b>           |                          |                      |
| Block 9               | Onshore Cuba             | 100                  |

<sup>1</sup>Total and Santos hold a cumulative 80% option to acquire a Participating Interest in WA-488-P

<sup>2</sup>The consolidated entity has executed a conditional non-binding Letter of Intent for the divestment of PEP51153 to its Joint Venture partner for AUD\$100K cash.

#### LIST OF ENVIROMENTAL APPROVALS

| PERMIT                         | LOCATION              | MELBANA INTEREST (%) |
|--------------------------------|-----------------------|----------------------|
| <b>Australia</b>               |                       |                      |
| Tassie Shoal Methanol Project* | Tassie Shoal Offshore | 100                  |
| Tassie Shoal LNG Project*      | Tassie Shoal Offshore | 100                  |

\*Environmental Approvals are valid until 2052.