

## Quarterly Activities Summary - Period Ended 30 September 2022

### Cuba - Block 9 PSC (Melbana 30% participating interest and Operator)

- **Independent resource estimates for Alameda and Marti Reservoirs**

The Company received updated estimates for both the Alameda and Marti reservoirs during the quarter. The three reservoirs intersected by the Alameda-1 exploration well are estimated by the independent reserves and resources certifier to contain a gross unrisksed mean estimate of:

- 6.4 billion barrels of oil in place
- 362 million barrels of Prospective Resource<sup>1</sup>

- **Exploration Well Zapato-1ST**

- Drilling to test the Zapato structure, which may be the possible source of oil for the Motembo oil field (that historically produced a very light oil; 50 – 64.5° API), continues
- Oil seen on shakers while still in ophiolite overburden
- Sidetrack initiated at 1,698 metres after drill string became stuck in ophiolite overburden
- Drilling through thick ophiolite had reached a depth of 2,880 mMD and was drilling ahead as at 17 Oct 2022, subsequent to end of the reporting period
- Prospective Resource of Zapato prospect independently estimated to be 114 million barrels<sup>1</sup> on a gross unrisksed mean basis.

- **2023 Work Program**

- Melbana hosted Sonangol, its 70% partner in Block 9 PSC, in Melbourne during August where planning for the future appraisal and development of Block 9 generally was advanced
- Planning progressing for a return to Alameda to commence appraisal operations, subject to the results of Zapato-1ST

### Corporate

- Issued options expired 10 September 2022, delivering \$18.9 million the Company
- \$45.5 million cash available at the end of the quarter

<sup>1</sup> **Prospective Resources Cautionary Statement** – The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) related 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 dated 8 March 2022, 4 July 2022 and 28 July 2022. Melbana is not aware of any new information or data that materially affects the information included in that announcement and that all the material assumptions and technical parameters underpinning the estimates in the announcement continue to apply and have not materially changed.

**SYDNEY, AUSTRALIA (25 October 2022)**

Melbana Energy Limited (ASX: MAY) (**Melbana** or the **Company**) provides the following summary in relation to its activities during the quarter ended 30 September 2022.

## CUBA

### **Block 9 PSC (Melbana 30%, Operator)**

#### **Resource Upgrade for Marti and Alameda Reservoirs**

On 8 July 2022, the Company announced that it had received the independent resources and reserves certifier's (**McDaniel and Associates**) estimate for the Alameda reservoir<sup>2</sup> – the second encountered by the Alameda-1 exploration well.

The estimate for the Alameda reservoir on a gross unrisks mean estimate basis is:

- 2.3 billion barrels of oil in place; and
- 148 million barrels of oil Prospective Resource<sup>1</sup>

Before drilling, the Alameda structure was believed to be separated from the next structure to the west - the Piedra prospect - by a faulted saddle (see Figure 1 below). Encountering oil in Alameda over such a large interval allowed for a revised interpretation that combined these two features.

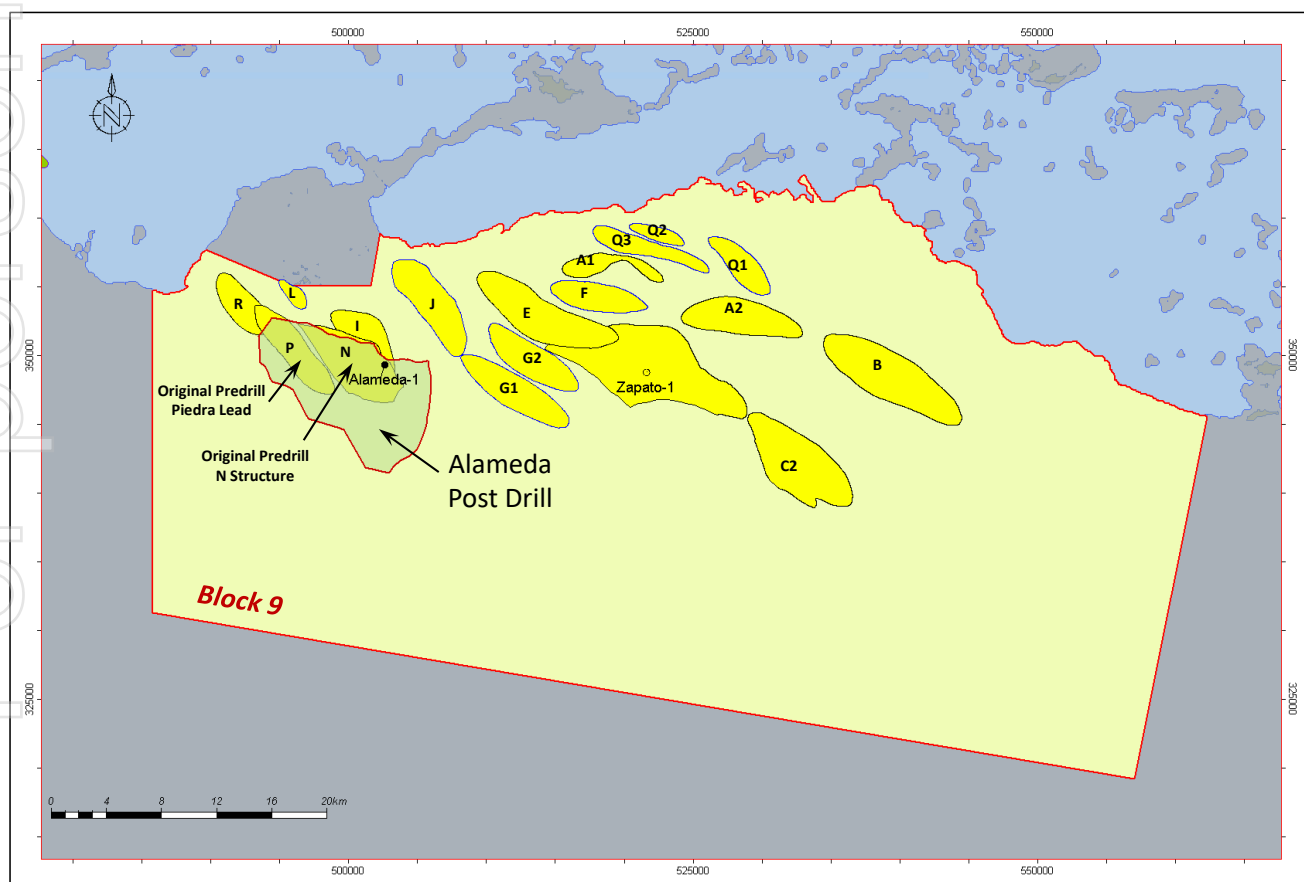


Figure 1 - Original and revised prospects maps for Block 9

<sup>2</sup> Previously referred to as the "N" structure

On 1 August 2022, the Company announced that it had received McDaniel’s estimate for the third and final reservoir encountered by the Alameda-1 exploration well, the Marti reservoir<sup>3</sup>.

McDaniel’s estimate for the Marti reservoir on a gross unrisked mean estimate basis is:

- 1.5 billion barrels of oil originally in place; and
- 95 million barrels of oil Prospective Resource<sup>1</sup>

The total of the three reservoirs encountered by Alameda-1 total were therefore estimated by McDaniel to total:

- 6.4 billion barrels of oil originally in place; and
- 362 million barrels of oil Prospective Resource<sup>1</sup> on a gross unrisked mean estimate basis.

The seismic profile shown below in Figure 2 describes the volumetrics and structural geometries of the relevant structures as well as defining the separate units encountered during the drilling of the Alameda-1 exploration well.

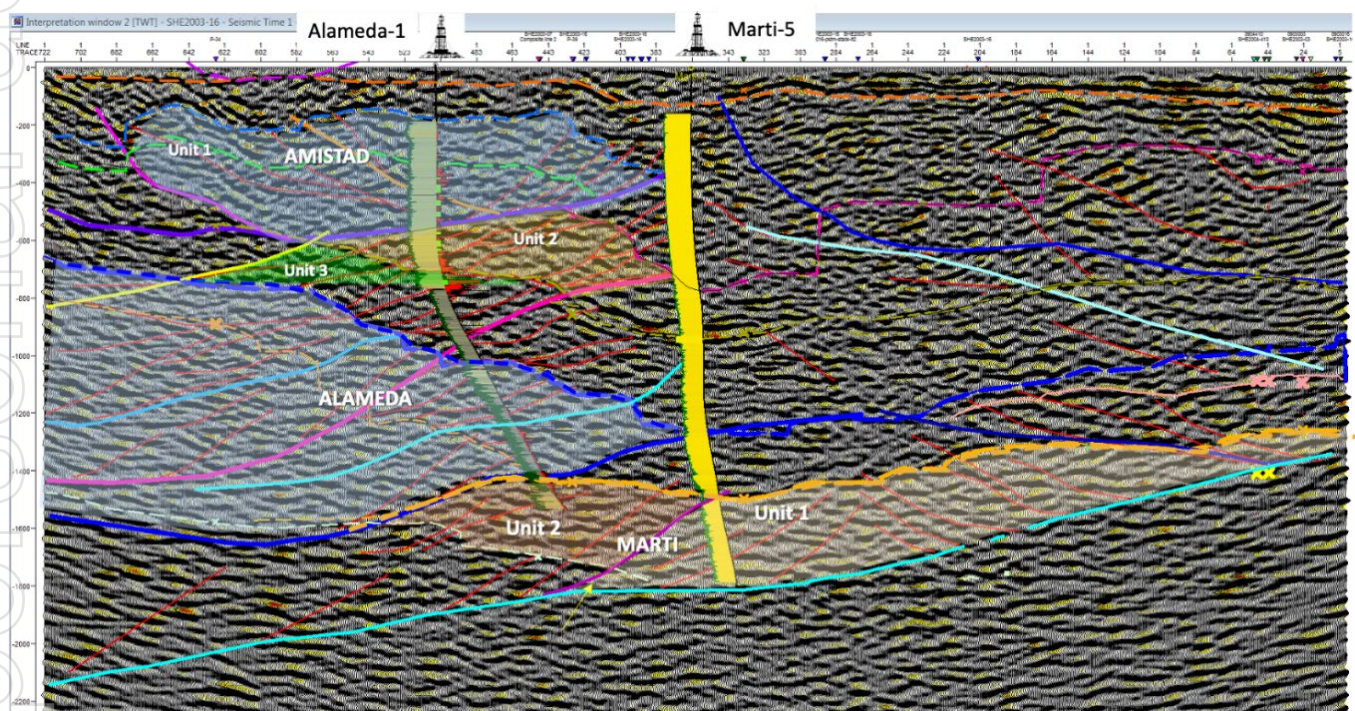


Figure 2 - Updated interpretation of the subsurface at Alameda-1

### Zapato-1 Exploration Well

Spudded on 21 May 2022, the Zapato-1 exploration well was originally prognosed to take about 55 days to reach its primary objective at 2,650 mMD, targeting a single formation near the shallower Motembo oil field (which historically produced a high-quality light oil). The planned total depth is 3,150 mMD.

Free oil was observed on the shakers while still drilling in the ophiolite overburden before the drill bit became stuck at around 1,698 mMD.

Once the drill string had been severed and recovered, a cement plug was set with the top at 1,252.5

<sup>3</sup> Previously referred to as the “I” structure

metres and a side-track well was commenced to drill ahead to the prognosed main carbonate target below the ophiolite. This resulted was a loss of approximately 40 drilling days.

Drilling was then further hampered by some minor mechanical issues, which was not surprising given the difficult drilling conditions. A few days were also lost due to precautions taken ahead of Hurricane Ian making landfall in Cuba and an electrical fault caused by a passing storm. The ophiolite overburden that was encountered some 300 metres higher than prognosed<sup>4</sup> has proven to be thicker than expected.

Following the end of the reporting period, drilling had reached 2,880 mMD<sup>5</sup> and was drilling ahead to the predrill planned total depth of 3,150 mMD.

The predrill independently estimated resource estimate for the Zapato structure is shown in Table 1.



Figure 3 - Free oil on shakers (Zapato-1)

Table 1 - Predrill Independent Prospective Resource Estimate for the Zapato Objective

Objective	Chance of Success	Prospective Resource <sup>1</sup> (unrisked gross, million barrels)			
		Low	Best	High	Mean
Zapato	23%	38	95	214	114

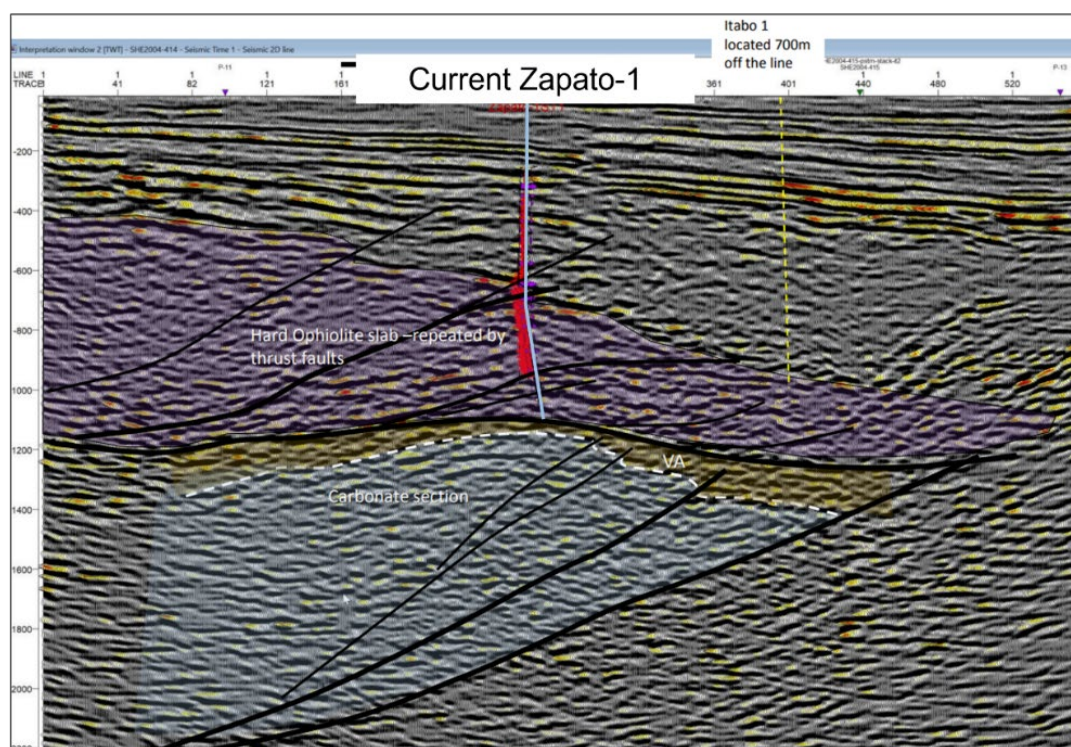


Figure 4 - Estimate position of Zapato-1 as at 17 October 2022

<sup>4</sup> ASX Announcement dated 4 Aug 2022

<sup>5</sup> ASX Announcement dated 17 Oct 2022

The revised estimate for the based of the ophiolites is currently about 3,000 mMD, however one seismic couplet represents approximately 150 metres of depth, giving a large margin of error for our predictions of when we might encounter the target formation.

### **Block 9 Forward Work Program**

In August, Melbana hosted staff from Sonangol, its partner in Block 9 PSC, in Melbourne to discuss the forward plan for the appraisal and development of Block 9 – subject to a final result being known at Zapato-1.

### **Health and Safety**

The Company's on-site COVID-19 management and safety protocols continue to be effective resulting in no significant interruption to operations.

### **AUSTRALIA**

Melbana's technical team continued work on the Company's Australian assets including:

- AC/P70; and
- WA 544-P and NT-P87

### **Corporate**

The Company's listed options, MAYO, expired on 10 September with approximately 99% of the options being exercised. The options delivered an additional \$18.9 million in funding to the Company.

Payments to related parties and their associates, totalling \$377,000 as outlined in Section 6 of the accompanying Appendix 5B, related to payment of directors' fees.

The Company had total cash on hand of \$45.5 million as at 30 Sept 2022.

**For and on Behalf of the Board of Directors:**

Mr Andrew Purcell  
Executive Chairman

Ends -

**For further information please contact**

Mr Theo Renard  
Company Secretary  
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## APPENDIX – TENEMENTS

### INTERESTS HELD AT THE END OF THE QUARTER

TYPE	LOCATION	OWNER	INTEREST
PSC Block 9	Cuba	Melbana Energy Limited	30%
PSC Santa Cruz	Cuba	Melbana Energy Limited	100% <sup>6</sup>
PEL WA-544-P	Australia	MEO International Pty Limited	100%
PEL NT/P87	Australia	MEO International Pty Limited	100%
PEL WA-488-P	Australia	EOG Resources Australia Block WA-488 Pty Limited	Cash, contingent on certain elections being made with respect to the PEL, and payments, contingent on exploration success <sup>7</sup>
PEL AC/P50	Australia	Santos Offshore Pty Limited, SapuraOMV Upstream (Western Australia) Pty Limited	Royalty, contingent on exploration success <sup>8</sup>
PEL AC/P51	Australia	Vulcan Exploration Pty Limited, Rouge Rock Pty Limited	Cash, contingent on option exercise, then Royalty, contingent on exploration success <sup>8</sup>
PEL AC/P70	Australia	Melbana Energy Limited	100%

<sup>6</sup> Award subject to receiving all regulator approvals, some of which are outstanding

<sup>7</sup> See ASX announcement dated 24 November 2021

<sup>8</sup> See ASX announcement dated 7 May 2021

## Appendix 5B

### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

MELBANA ENERGY LIMITED

ABN

43 066 447 952

Quarter ended ("current quarter")

30th September 2022

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	19	19
Payments for		
(a) exploration & evaluation	-	-
(b) development	-	-
1.2 (c) production	-	-
(d) staff costs*	(385)	(385)
(e) administration and corporate costs	(535)	(535)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	-	-
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	(129)	(129)
1.7 Government grants and tax incentives	-	-
1.8 Other (provide details if material)	-	-
<b>1.9 Net cash from/(used in) operating activities</b>	<b>(1,030)</b>	<b>(1,030)</b>
<i>*Some staff costs are reallocated in exploration &amp; evaluation</i>		
<b>2. Cash flow from investing activities</b>		
Payment to acquire or for:		
(a) entities	-	-
(b) tenements	-	-
2.1 (c) property, plant and equipment	-	-
(d) exploration & evaluation	(17,669)	(17,669)
(e) investments	-	-
(f) other non-current assets	-	-

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## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
2.2 Proceeds from disposal of:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	-	-
(d) investments	-	-
(e) other non-current assets	-	-
2.3 Cash flows from loans to other entities	(76)	(76)
2.4 Dividends received (see note 3)	-	-
2.5 Other (Contributions from JV Partner)	12,749	12,749
<b>2.6 Net cash from/(used in) investing activities</b>	<b>(4,996)</b>	<b>(4,996)</b>

<b>3. Cash flows from financing activities</b>		
3.1 Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2 Proceeds from issue of convertible debt securities	-	-
3.3 Proceeds from exercise of options	15,902	15,902
3.4 Transaction costs related to issues of equity securities or convertible debt securities	-	-
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)	(42)	(42)
<b>3.10 Net cash from/(used in) financing activities</b>	<b>15,860</b>	<b>15,860</b>

<b>4. Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1 Cash and cash equivalents at beginning of period	35,569	35,569
4.2 Net cash from/(used in) operating activities (item 1.9 above)	(1,030)	(1,030)
4.3 Net cash from/(used in) investing activities (item 2.6 above)	(4,996)	(4,996)
4.4 Net cash from/(used in) financing activities (item 3.10 above)	15,860	15,860



## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
4.5 Effect of movement in exchange rates on cash held	123	123
<b>4.6 Cash and cash equivalents at end of period</b>	<b>45,526</b>	<b>45,526</b>

5. Reconciliation of cash and cash equivalents at the end of the quarter ( as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1 Bank balances	45,526	35,569
5.2 Call deposits	-	-
5.3 Bank overdrafts	-	-
5.4 Other ( provide details)	-	-
<b>5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>45,526</b>	<b>35,569</b>

6. Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1 Aggregate amount of payments to related parties and their associates included in item 1	377
6.2 Aggregate amount of payments to related parties and their associates included in item 2	-

*Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments*

*Director fees, salaries & superannuation expenses.*

7. Financing facilities	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
<i>Note: the item 'facility' includes all forms of financing arrangements available to the entity.</i>		
<i>Add notes as necessary for an understanding of the sources of finance available to the entity</i>		
7.1 Loan facilities	-	-
7.2 Credit standby arrangements	-	-
7.3 Other ( please specify)	-	-
<b>7.4 Total financing facilities</b>	<b>-</b>	<b>-</b>
<b>7.5 Unused financing facilities available at quarter end</b>		<b>-</b>
7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		
N/A		

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from/(used in) operating activities (Item 1.9)	(1,030)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1 (d))	(17,669)
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(18,699)
8.4 Cash and cash equivalents at quarter end (item 4.6)	45,526
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	45,526
<b>8.7 Estimated quarters of funding available (Item 8.6 divided by Item 8.3)</b>	<b>2.43</b>
<i>Note: if the entity has reported positive relevant outgoings (i.e. a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7</i>	
8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
Answer:	
8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
Answer:	
8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?	
Answer:	
<i>Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered</i>	

**Compliance statement**

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

Date: 25-10-22

Authorised by: The Board of Melbana Energy Limited

**Notes**

- The quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.

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