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Quarterly Activities Summary - Period Ended 31 March 2024

HIGHLIGHTS

Cuba

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

- Flow testing of Unit 3 of the Amistad reservoir was undertaken in late January and was completed satisfactorily with all objectives met, demonstrating the presence of moveable oil of similar quality/reservoir conditions as that observed while testing same unit in Alameda-2 confirmed.

- Independent evaluation by McDaniel and Associates of Alameda-2 appraisal well results from Unit 1B in the Amistad structure in Block 9, onshore Cuba (Melbana 30%) concluded. Maiden Contingent Resources confirmed along with upgrade to Prospective Resources.

OIL IN PLACE (100% share, best estimate)	
Contingent Resource Area	**331 million barrels**
Prospective Resource Area	**656 million barrels**

RESOURCES (100% share, best estimate)*	
Contingent Resources (Eastern Area)	**46 million barrels** • **sub classification Development Pending** • **100% Chance of Discovery** • **80% Chance of Development**
Prospective Resource (Western Area)	**90 million barrels** • **70% Chance of Discovery** • **80% Chance of Development**

Australia

- The primary term work conditions for WA-544-P and NT/P87 (Melbana 100%) have been suspended for 18 months and the terms of the Permits similarly extended by 18 months.

Corporate

- $16.4 million cash available at the end of the quarter.

* Contingent and 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 discovered and 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 20 March 2024. 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 (23 April 2024)

Melbana Energy Limited (ASX: MAY) (**Melbana** or the **Company**) provides the following summary in relation to its activities during the quarter ended 31 March 2024.

CUBA

Block 9 PSC (Melbana 30%, Operator)

Alameda-3 appraisal well operations

The Company commenced the drilling of the Alameda-3 Appraisal Well at 6:00 AM, 15 December 2023 (Cuba time). The primary objectives of the well are the appraisal of the two lower geologically independent oil-bearing reservoirs, named Alameda and Marti, intercepted by Alameda-1.

Alameda-3 has been designed for the subsurface conditions encountered by Alameda-1 and is being drilled from the same pad and twins the trajectory of the successful original exploration well.

The well is planned to reach total depth of 3835mMD, ~40mTVD above a higher-pressure zone seen in Alameda-1 (see Figure 1).

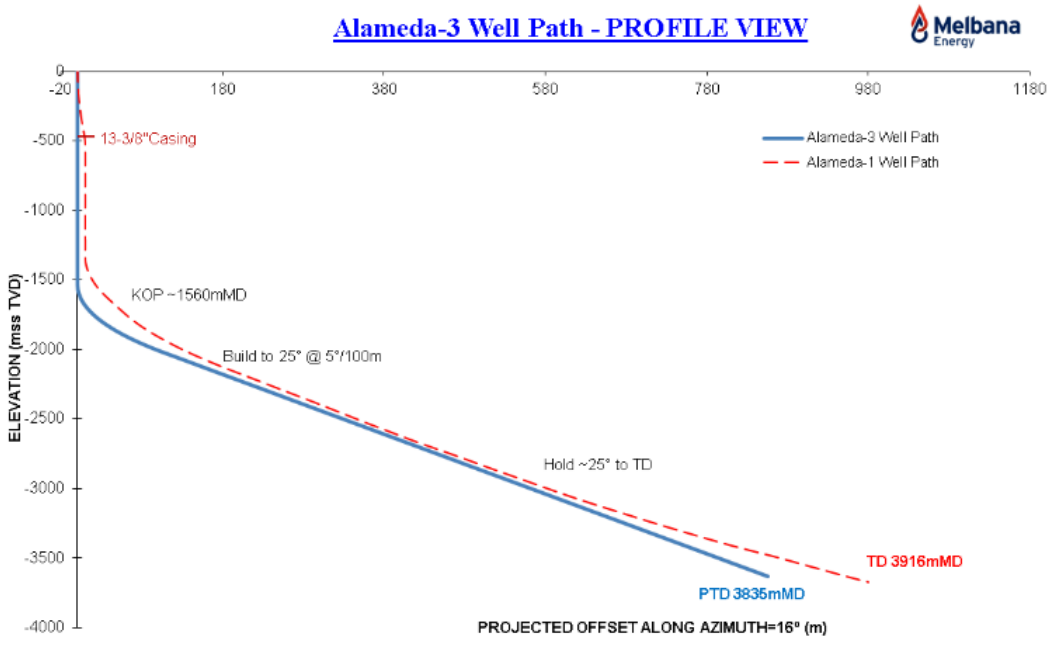

Figure 1 – Alameda-3 Well Path

A Drill Stem Test (DST) commenced at 06.30am on 26 January 2024 (Cuba time) over the Unit 3 interval in 12-1/4" hole. Prior to commencing the DST, elevated gas readings were encountered and mud weight was increased to 1.45sg.

The DST was run over an open hole interval of 114mMD between 1732mMD and 1846mMD. No formation water was observed during the test and the presence of moveable oil recoverable at surface confirmed.

The initial inflow of the DST displaced a 9-barrel water cushion over a 6-hour period, equating to an approximate flow rate of 37 BOPD. Oil was observed at the surface and samples taken for laboratory analysis.

As was the case in the previous Unit 3 DST conducted whilst drilling the Alameda-2 appraisal well, flow rates could not be measured due to the weight of the fluid in the column naturally killing the well.

A static gradient survey confirmed that 39 barrels of oil had flowed into the string with a gradient of 1.38 psi/metre, with the remainder of the fluid in the string predominantly comprised of viscous oil and undisplaced drilling mud.

The results of the static gradient survey and visual inspection of the samples obtained suggest an oil of similar (but slightly lighter) API to that recovered from Unit 3 DST during Alameda-2. The down holes pressures encountered were also similar.

The oil flow to surface was estimated to be at a lower rate than what was calculated during the Unit 3 DST from Alameda-2, which was to be expected given the larger diameter open hole bore (12-1/4" versus 6"), lesser interval open to flow (114 mMD versus 174 mMD) and a taller column (1709mTVDSS versus 1486mTVDSS) meaning significantly more volume had to be displaced.

On 25 March 2024 the Company reported that section total depth for the Alameda Structure was reached at ~2860 mMD and that the section had been successfully logged. The 9-5/8" casing was run and cemented in place in the top seal of the structure and the 13-5/8" 10k PSI BOP installed and tested.

Subsequent to the reporting period the Company reported on 18 April 2024 that the well had reached the base of the Alameda Structure had been reached and total section depth called at 3645 mMD with preparations underway to commence wireline logging.

Amistad reservoir resources update

Also during the quarter, McDaniel & Associates (McDaniel) provided their independent assessment of Unit 1B - one of four oil bearing units (collectively referred to as Amistad) encountered in the Upper Sheet whilst drilling the Alameda-2 appraisal well.

Melbana asked McDaniel to prioritise its assessment of Unit 1B given it had the highest quality oil that flowed unassisted to surface and is the target for the first stage of Melbana's field development plan for Block 9.The drilling of the Alameda-2 appraisal well in 2023 provided valuable data that has enhanced our understanding of the resource potential of Block 9.

Subsurface analysis of data obtained, including well logs, FMI logs, DST, extended production tests and core and fluid analyses have been integrated with the re-interpretation of existing data.

The work has focussed on Unit 1B of the Amistad structure, which is heavily fractured, porous and oil filled - as evidenced by core samples (see Figure 2 and Figure 3).

Figure 4 highlights the structural geometries of the Amistad structure that have been used to define the updated resource allocation and categories, which were differentiated into Unit 1A, Unit 1B, Unit 2 and Unit 3. The McDaniel resource update only concerns the Unit 1B reservoir containing the better quality and most easily exploited oil.

McDaniel differentiated the Unit 1B resource categories into Contingent and Prospective Resource categories for eastern and western portions of the Alameda structure. The resource category allocations have been derived from McDaniel's confidence level of the data close to the Alameda-2 well bore (the eastern portion close to the well bore has a higher confidence and has a categorisation of Contingent Resource (Development Pending) and an associated 80% Chance of Development).

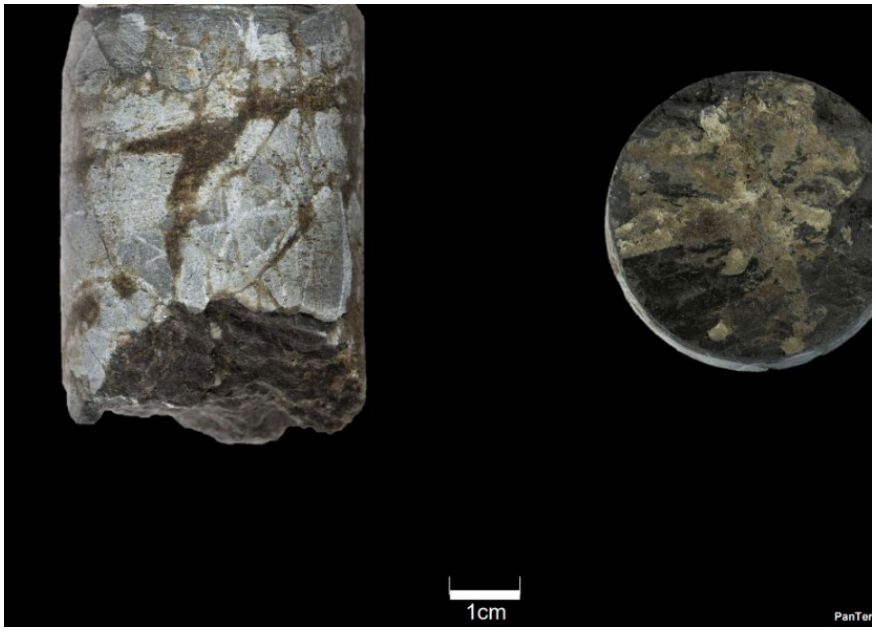

Figure 2 – Fractured & oil-stained limestone core plug from Unit 1B

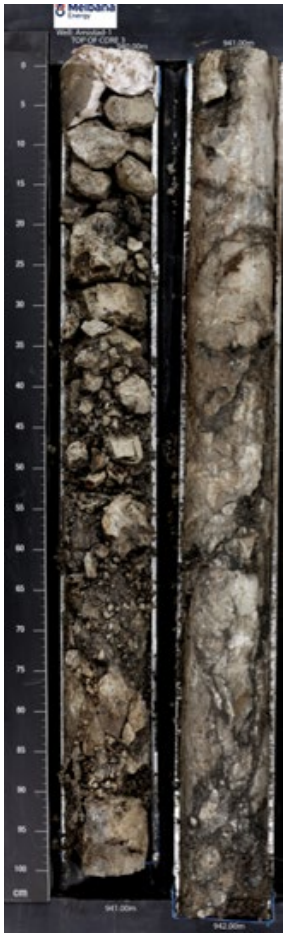

Figure 3 – Oil filled and heavily fractured limestone from Unit 1B

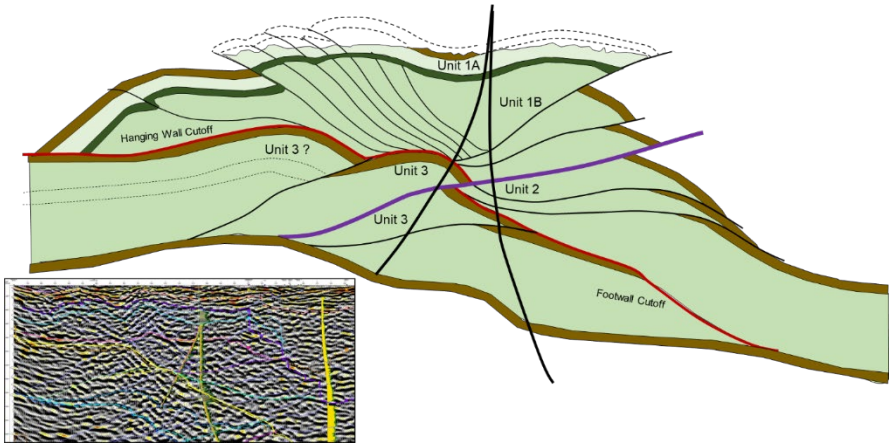

Figure 4 – Cross section illustrating geometry of Amistad sheet

The western portion remains a Prospective Resource (but with a Chance of Discovery of 70%) that could be similarly derisked by drilling an additional appraisal well in that area.

See Appendix A for summaries of McDaniel's assessment of Unit 1B.

McDaniel are now finalising their work on Unit 1A, the shallowest unit of the Amistad structure.

AUSTRALIA

Hudson Prospect in NT/P87 and WA-544-P (Melbana 100%)

During the quarter the National Offshore Petroleum Titles Administrator (**NOPTA**) approved an 18-month suspension of the primary term work program conditions and an extension of the permit terms of petroleum exploration permits WA-544-P and NT/P87 (**Permits**), located offshore northern

Australia in the Joseph Bonaparte Gulf (see Figure 5). The changes to the terms of the Permits are as follows:

1. Suspend the Permit Year 1 - 3 work program conditions of the Permits for a period of 18 months to 23 May 2025; and

2. Extend the term of the Permits for a period of 18 months to 23 May 2028.

Melbana now has until 23 May 2025 to complete geological and geotechnical studies, including seismic interpretation and operational planning, before deciding whether to progress to acquire 700 km^2 of new 3D seismic by 23 May 2026. Should it elect to do so, Melbana would then have a drill / drop decision to drill two exploration wells by 23 May 2028.

The Permits host the attractive Hudson prospect, which has been identified by the Company as an isolated carbonate build up. Isolated carbonate build ups host some of the world's largest oil reservoirs, but is an untested play type in Australia. The first exploration well to do so, designated Beehive-1, is expected to be drilled in the adjacent licence area WA-488-P by August 2024.

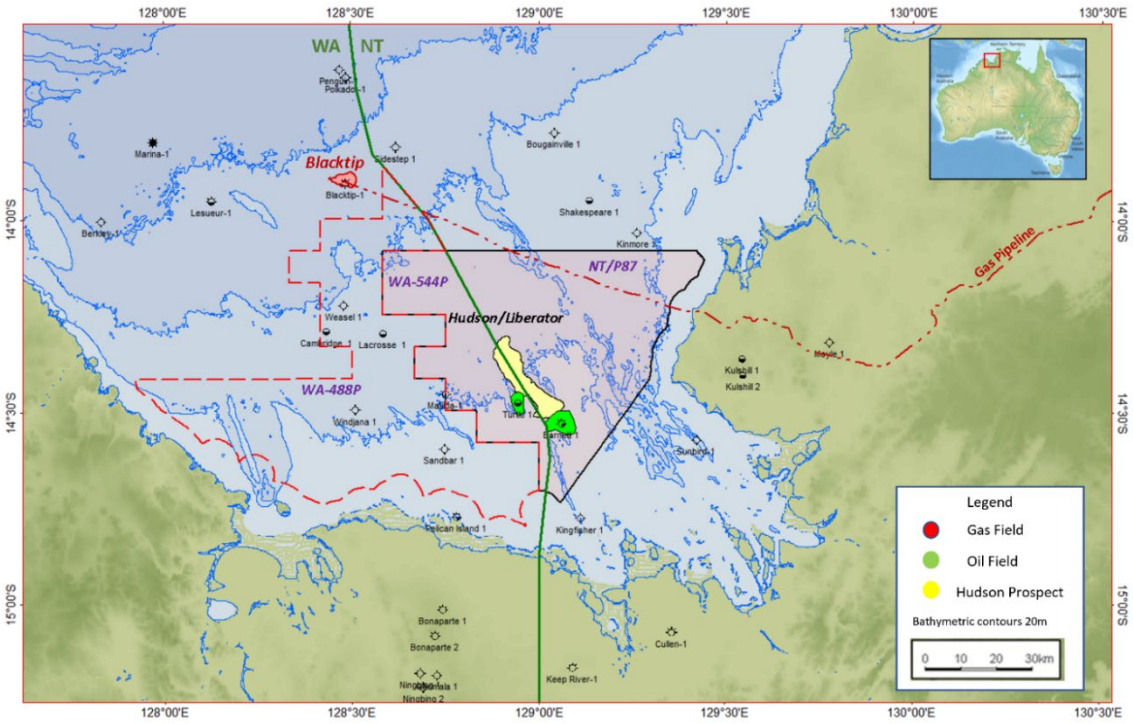

Figure 5 – Location of the Hudson Prospect in northern Australia

AC/P51

During the quarter an application by the Titleholder to surrender petroleum exploration permit AC/P51 was accepted by NOPTA. The Company had a small indirect financial interest in possible future outcomes involving this permit. The surrender of this permit has no financial or other consequences for the Company.

HEALTH AND SAFETY

No lost time incidents occurred during the reporting period.

CORPORATE

During the quarter the Company's Executive Chairman acquired 400,000 shares on market and the Chief Operating Officer was awarded 16,115,750 performance rights under Melbana's Long Term Incentive Plan. Performance rights entitle the recipient to receive the same number of ordinary shares in the Company should certain vesting conditions be satisfied (e.g., the Company's share price appreciating materially within a defined period and the recipient remaining employed by the Company).

Payments to related parties and their associates, totalling $133 thousand as outlined in Section 6 of the accompanying Appendix 5B, related to payment of directors' fees.

The Company had total cash on hand of $16.4 million as at 31 March 2024.

For and on Behalf of the Board of Directors:	**For further information please contact:**
Mr Andrew Purcell Executive Chairman	Dr. Chris McKeown Chief Commercial Officer +61 2 8323 6600

Ends -

APPENDIX A

TABLE 1 - SUMMARY OF OIIP ESTIMATES

		OIIP – Unrisked[1] Gross (100%)			
	Maturity	Low (P90) MMbbl	Best (P50) MMbbl	High (P10) MMbbl	Chance of Discovery[2]
Contingent Resources					
Amistad Unit 1B East	Development Pending	130	331	909	100%
Prospective Resources					
Amistad Unit 1B West	Prospect	229	656	1,831	70%

		OIIP – Unrisked[1] Melbana's Interest (30%)			
	Maturity	Low (P90) MMbbl	Best (P50) MMbbl	High (P10) MMbbl	Chance of Discovery[2]
Contingent Resources					
Amistad Unit 1B East	Development Pending	39	99	273	100%
Prospective Resources					
Amistad Unit 1B West	Prospect	69	197	549	70%

[1] Volumes listed are in-place estimates and the recoverable estimates are shown in a separate table.
[2] The Chance of Discovery (COD) does not include the chance of development, which McDaniel estimates to be 80%. Quantifying the COD requires consideration of both economic contingencies and other contingencies such as legal, market access, political, social licence, internal and external approvals and commitment to project finance and development timing. As many of these factors are as yet unknown, they must be used with caution.

APPENDIX A (continued)

TABLE 2 - SUMMARY OF RESOURCES ESTIMATES

		Resources – Unrisked[3] Gross (100%)			
	Maturity	Low (P90) MMbbl	Best (P50) MMbbl	High (P10) MMbbl	Chance of Discovery[2]
Contingent Resources[4]					
Amistad Unit 1B East	Development Pending	16	46	129	100%
Prospective Resources					
Amistad Unit 1B West	Prospect	29	90	264	70%

		Resources – Unrisked[3] Melbana's Interest (30%)			
	Maturity	Low (P90) MMbbl	Best (P50) MMbbl	High (P10) MMbbl	Chance of Discovery[2]
Contingent Resources[4]					
Amistad Unit 1B East	Development Pending	5	14	39	100%
Prospective Resources					
Amistad Unit 1B West	Prospect	9	27	79	70%

McDaniel' Methodology for Determining Contingent and Prospective Resources

McDaniel & Associates have estimated Contingent and Prospective Resources for Amistad Unit 1B for the Amistad structure using probabilistic methods and in accordance with the 2018 SPE Petroleum Resource Management System ("SPE-PRMS"). In preparing their report, McDaniel relied upon certain factual information including ownership, technical well data, test data and other relevant data supplied by Melbana. The extent and character of all factual information supplied were relied upon and accepted as represented without independent verification. McDaniel has relied upon representations made by Melbana as to the completeness and accuracy of the data provided and that no material changes in the performance of the properties has occurred, nor is expected to occur, from that which was projected in their report between the date the data was received for the evaluation and the date of the report.

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 30 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 ASX Listing Rules.

[3] Volumes listed are full life volumes, prior to any cutoffs due to economics.
[4] The key contingencies which prevent the Contingent Resources from being classified as Reserves include finalisation of the draft development plan and associated economics, internal and joint venture and regulatory approvals, contractual arrangements and commitment to project finance.

APPENDIX B – TENEMENTS

INTERESTS HELD AT THE END OF THE QUARTER

TYPE	LOCATION	TITLEHOLDERS	INTEREST
PSC Block 9	Cuba	Melbana Energy Limited	30%
PSC Santa Cruz	Cuba	Melbana Energy Limited	100%[6]
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[7]
PEL AC/P70	Australia	Melbana Energy AC/P70 Pty Limited	100%

INTERESTS DISPOSED OF DURING THE QUARTER

TYPE	LOCATION	TITLEHOLDERS	INTEREST
PEL AC/P51	Australia	Vulcan Exploration Pty Limited Rouge Rock Pty Limited	Permit surrendered by Titleholders

[6] Award subject to receiving all regulatory approvals, some of which are outstanding
[7] See ASX announcement dated 24 November 2021

APPENDIX C – APPENDIX 5B – DISCLOSURES UNDER ASX LISTING RULE 5.30 PREVIOUSLY RELEASED TO THE MARKET

ALAMEDA-3: UNIT 3	
LR 5.30 (a)	Alameda-3 appraisal well, conventional oil.
LR 5.30 (b)	Block 9 PSC, onshore Cuba about 140 km east of the capital, Havana.
LR 5.30 (c)	Melbana Energy holds a 30% interest and operatorship.
LR 5.30 (d)	N/A
LR 5.30 (e)	Fractured limestone.
LR 5.30 (f)	The open hole DST was run over a single interval of 114mMD between 1732 mMD and 1846 mMD.
LR 5.30 (g)	Drill stem testing over a total period of 86 hours which included multiple shut-in and flow periods and static gradient survey.
LR 5.30 (h)	Gas and heavy viscous oil were recovered from the test string after reverse circulation with some drilling mud. The oil will be tested for quality.
LR 5.30 (i)	No formation water was recovered.
LR 5.30 (j)	Oil flow to surface was not sufficient to calculate flow rate. Based on a displacement of a 9 barrel water cushion in a 6 hour period before the well killed itself, an approximate flow rate of 37 BOPD can be deduced. Choke sizes varied during the test. Initial choke size was 8/64”, increasing to 10/64”, 12/64”, 15/64”, 20/64”, 30/64”, 32/64”, 40/64”, 64/64”.
LR 5.30 (k)	N/A
LR 5.30 (l)	No non-hydrocarbon gasses were recorded during testing.
LR 5.30 (m)	The test interval was within a 12-1/4” well bore.

APPENDIX D – GLOSSARY OF KEY TERMS

Term	Meaning
Barrel	One barrel of oil; 1 barrel = 35 imperial gallons (approx.) or 159 litres (approx.); 7.5 barrels = 1 tonne (approximately, depending on the oil density); 6.29 barrels = 1 cubic metre.
BBL	Barrels
BOP	Blow out preventer
BOPD	Barrels of oil per day
BSW	Basic sediment and water
Carbonate	Class of sedimentary rocks which mainly contains calcite, aragonite and dolomite.
COS	Geological chance of success
cP	Centipoise
DST	Drill Stem Test – a procedure for testing the pressure and productive capacity of a geological formation.
M	Thousands
MM	Millions
Metres MD	Metres, Measured Depth
Metres TVD	Metres, Total Vertical Depth
Prospect	A project associated with a potential accumulation that is sufficiently well defined to represent a viable drilling target.
Prospective Resources	Those quantities of petroleum that are estimated, as of a given date, to be potentially recoverable from undiscovered accumulations.
Unrisked	Prior to taking into account the chance of discovery.

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")

31 March 2024

	Consolidated statement of cash flows	Current quarter $A'000	Year to date (12 months) $A'000
1.	**Cash flows from operating activities**		
1.1	Receipts from customers	-	-
	Payments for		
	(a) exploration & evaluation	-	-
	(b) development	-	-
1.2	(c) production	-	-
	(d) staff costs*	(754)	(2,360)
	(e) administration and corporate costs	(451)	(1,659)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	89	511
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	-
1.9	**Net cash from/(used in) operating activities**	(1,116)	(3,508)

**Some staff costs are reallocated in exploration & evaluation*

2.	**Cash flow from investing activities**		
	Payment to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
2.1	(c) property, plant and equipment	-	-
	(d) exploration & evaluation	(17,205)	(42,859)
	(e) investments	-	-
	(f) other non-current assets	-	-
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	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (Contributions from JV Partner)	13,852	27,362
2.6	**Net cash from/(used in) investing activities**	(3,353)	(15,497)

	Consolidated statement of cash flows	Current quarter $A'000	Year to date (12 months) $A'000
3.	**Cash flows from financing activities**		
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	-	-
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)	(7)	(7)
3.10	**Net cash from/(used in) financing activities**	(7)	(7)

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	20,068	35,124
4.2	Net cash from/(used in) operating activities (item 1.9 above)	(1,116)	(3,508)
4.3	Net cash from/(used in) investing activities (item 2.6 above)	(3,353)	(15,497)
4.4	Net cash from/(used in) financing activities (item 3.10 above)	(7)	(7)
4.5	Effect of movement in exchange rates on cash held	796	276
4.6	**Cash and cash equivalents at end of period**	16,388	16,388

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	16,388	20,068
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	16,388	20,068

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	133
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** *Note: the item 'facility' includes all forms of financing arrangements available to the entity.* *Add notes as necessary for an understanding of the sources of finance available to the entity*	Total facility amount at quarter end $A'000	Amount drawn at quarter end $A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other - Outstanding Cash Calls from JV Partner	31,044	-
7.4	**Total financing facilities**	31,044	-

7.5	**Unused financing facilities available at quarter end**	31,044

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

8.	**Estimated cash available for future operating activities**	**$A'000**
8.1	Net cash from/(used in) operating activities (Item 1.9)	(1,116)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1 (d))	(17,205)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(18,321)
8.4	Cash and cash equivalents at quarter end (item 4.6)	16,388
8.5	Unused finance facilities available at quarter end (item 7.5)	31,044
8.6	Total available funding (item 8.4 + item 8.5)	47,432
8.7	**Estimated quarters of funding available (Item 8.6 divided by Item 8.3)**	**2.59**

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

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:	

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

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 does give a true and fair view of the matters disclosed.

Date: 23 April 2024

Authorised by: The Board of Melbana Energy Limited

Notes

1. 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.
2. If this quarterly cash flow 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 cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies 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.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the *[name of board committee - e.g. Audit and Risk Committee]*". If it has been autopsied for release to the market by a disclosure committee, you can insert here :"By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors, you can wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations* , the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.