



MELBANA ENERGY LIMITED
ACN 066 447 952

Notice of Extraordinary General Meeting

Explanatory Statement and Proxy Form

Date of Meeting:
Monday, 14 October 2019

Time of Meeting:
10.00am (AEDT)

Place of Meeting
**Grant Thornton
Collins Square, Tower 5
727 Collins Street
Melbourne VIC 3008
Australia**

This Notice of Extraordinary General Meeting and Explanatory Statement should be read in its entirety. If shareholders are in doubt as to how they should vote, they should seek advice from their accountant, solicitor or other professional advisor without delay.

MELBANA ENERGY LIMITED

ACN 066 447 952

Registered office: Level 3, 350 Collins Street, Melbourne, VIC, 3000

NOTICE OF EXTRAORDINARY GENERAL MEETING

Notice is hereby given that the an Extraordinary General Meeting of shareholders of Melbana Energy Limited (“Melbana Energy” or the “Company”) will be held at the offices of Grant Thornton, Collins Square, Tower 5, 727 Collins Street, Melbourne, VIC 3008 at 10.00am (AEDT) on Monday, 14 October 2019.

AGENDA

The Explanatory Statement and proxy form which accompany and form part of this Notice, include defined terms and describe in more detail the matters to be considered. Please consider this Notice, the Explanatory Statement and the proxy form in their entirety.

SPECIAL BUSINESS

Resolution – Approval of acquisition of Metgasco Shares from, and issue of Melbana Energy Shares to, M&A Advisory

To consider and, if thought fit, pass the following Resolution as a special resolution:

“That, for the purposes of Listing Rule 10.1 and for all other purposes, approval is given by the Shareholders for:

(a) the acquisition of ordinary shares in Metgasco from; and

(b) the issue of ordinary shares by the Company to,

M&A Advisory under the Takeover Bid, on the terms and conditions set out in the Explanatory Memorandum.”

By the order of the Board



Melanie Leydin

Company Secretary

Dated: 10 September 2019

Notes

1. **Entire Notice:** The details of the resolution contained in the Explanatory Notes accompanying this Notice of Meeting should be read together with, and form part of, this Notice of Meeting.
2. **Record Date:** The Company has determined that for the purposes of the Extraordinary General Meeting, shares will be taken to be held by the persons who are registered as holding the shares at 7.00 pm on the date 48 hours before the date of the Extraordinary General Meeting. Only those persons will be entitled to vote at the Extraordinary General Meeting and transfers registered after that time will be disregarded in determining entitlements to attend and vote at the Extraordinary General Meeting.
3. **Proxies**
 - (a) Votes at the Extraordinary General Meeting may be given personally or by proxy, attorney or representative.
 - (b) Each shareholder has a right to appoint one or two proxies.
 - (c) A proxy need not be a Shareholder.
 - (d) If a Shareholder is a company it must execute under its common seal or otherwise in accordance with its constitution or the Corporations Act.
 - (e) Where a Shareholder is entitled to cast two or more votes, the Shareholder may appoint two proxies and may specify the proportion of number of votes each proxy is appointed to exercise.
 - (f) If a Shareholder appoints two proxies, and the appointment does not specify the proportion or number of the Shareholder's votes, each proxy may exercise half of the votes. If a Shareholder appoints two proxies, neither proxy may vote on a show of hands.
 - (g) A proxy must be signed by the Shareholder or his or her attorney who has not received any notice of revocation of the authority. Proxies given by corporations must be signed in accordance with corporation's constitution and Corporations Act.
 - (h) To be effective, proxy forms must be received by the Company's share registry (Link Market Services) no later than 48 hours before the commencement of the Extraordinary General Meeting, this is no later than 10.00 am (AEDT) on Saturday, 12 October 2019. Any proxy received after that time will not be valid for the scheduled meeting.

4. Corporate Representative

Any Shareholder that is a company and that has appointed a person to act as its corporate representative at the Meeting should provide that person with a certificate or letter executed in accordance with the Corporations Act authorising him or her to act as that company's representative. The authority may be sent to the Company and/or registry in advance of the Meeting or handed in at the Meeting when registering as a corporate representative.

5. Voting Exclusion Statement:

The Company will disregard any votes cast in favour of the Resolution, by or on behalf of M&A Advisory, the Company or any associate of M&A Advisory.

However, the Company need not disregard a vote if it is cast by:

- (a) a person as proxy for a person who is entitled to vote, in accordance with the directions on the proxy form; or
- (b) the person chairing the Meeting as proxy for a person who is entitled to vote, in accordance with a direction on the proxy form to vote as the proxy decides.

6. Forward looking statements

This Notice of Meeting, including the Explanatory Memorandum, contains certain forward looking statements. Such forward looking statements are based on the Company's current expectations about future events. Any forward looking statements are subject to known and unknown risks, uncertainties and assumptions, some of which may be outside the control of Melbana Energy and the Directors, which may cause actual results, performance or achievements to differ from future results, performance or achievements expressed or implied by the use of forward looking statements.

Forward looking statements can be identified by use of words including, but not limited to, 'anticipates', 'intends', 'will', 'should', 'expects', 'plans', or other similar expressions.

7. Enquiries

Shareholders are invited to contact the Company Secretary, Melanie Leydin on (03) 9692 7222 if they have any queries in respect of the matters set out in these documents.

EXPLANATORY MEMORANDUM

Melbana Energy Limited

This Explanatory Memorandum accompanies the notice of Extraordinary General Meeting of the Company to be held at the offices of Grant Thornton, Collins Square, Tower 5, 727 Collins Street, Melbourne, VIC 3008 at 10.00am (AEDT) on Monday, 14 October 2019.

The Explanatory Memorandum has been prepared to assist Shareholders of the Company in determining how to vote on the Resolution and is intended to be read in conjunction with the Notice of Meeting.

Background

1. As announced to ASX on 15 July 2019, the Company is proposing to acquire 100% of the ordinary shares in Metgasco Limited by way of an off-market takeover bid under Chapter 6 of the Corporations Act (**Takeover Bid**).
2. The consideration payable under the Takeover Bid is 4 ordinary Melbana Energy Shares for each Metgasco Share.
3. On 12 July 2019, M&A Advisory entered into a pre-bid acceptance agreement with Melbana Energy under which it agreed to accept the offer for its Metgasco Shares under the Takeover Bid (**Offer**) subject to the receipt of Shareholder approval for the purposes of Listing Rule 10.1.
4. Shareholder approval for the purposes of Listing Rule 10.1 is required on account of the fact that M&A Advisory is an entity controlled by Mr Andrew Purcell, a director of Melbana Energy, and is therefore a related party of Melbana Energy. Accordingly, receipt of Melbana Energy Shareholder approval for the M&A Advisory Transaction, as further detailed below, is a condition of the Takeover Bid.
5. Melbana has in place an independent board committee (**IBC**), comprising the Melbana directors other than Andrew Purcell, for the purposes of considering potential transactions involving Metgasco. Andrew Purcell has not participated in any deliberations nor had access to any information regarding any potential transaction involving Metgasco, in accordance with the IBC's protocol. Andrew Purcell has not and will not participate in any decision regarding the structure, terms, conditions, price or duration of the Offer.

Terms and conditions of the M&A Advisory Transaction

6. In the event M&A Advisory is entitled to accept the Offer, M&A Advisory will receive 4 Melbana Energy Shares for every Metgasco Share held (**M&A Advisory Transaction**).
7. The Takeover Bid is subject to a number of defeating conditions, including:
 - (a) the receipt by Melbana Energy of acceptances of Offers in respect of at least 50.1% of the Metgasco Shares; and
 - (b) Shareholder approval for the M&A Advisory Transaction, which approval is the subject of the Resolution,together with certain other conditions, each of which are set out in detail in Annexure 1.
8. Further details regarding the terms of the Offer are set out in full in the Bidder's Statement, a copy of which will be released to ASX on or around 10 September 2019.

Rationale for the Takeover Bid

9. Melbana Energy has identified a number of key strategic and financial benefits arising from the successful acquisition of Metgasco, including:
 - (a) the creation of a more diverse and robust portfolio of opportunities to increase the value of the Merged Group's assets, which will principally comprise:
 - (1) Metgasco's 100% interest in Queensland exploration permits, ATP 2020 and ATP 2021; the latter being the subject of an announced farm-out with ASX-listed Vintage Energy Limited and with Bridgeport (Cooper Basin) Pty Ltd;

- (2) Metgasco's 50,333,383 fully paid ordinary shares issued in Byron Energy (including 10,000,000 shares issued following the exercise of options by Metgasco, as announced on 18 July 2019), which have a current market value of \$18.4 million;
 - (3) Melbana Energy's interest in the Beehive prospect in northern Australia;
 - (4) Melbana's 100% interest in Block 9, in Cuba; and,
 - (5) Melbana's proposed Santa Cruz project in Cuba.
- (b) In the current environment, in which access to capital for junior oil and gas companies is difficult, the Merged Group would benefit from the combination of the respective asset portfolios of Melbana Energy and Metgasco to create a larger Australian oil and gas company, with a broader and more diverse shareholder base, better positioned to:
- (1) access capital markets for fundraising purposes;
 - (2) attract major oil and gas companies as potential project development partners in respect of current or future development opportunities; and
 - (3) withstand delays and unforeseen risks.
- (c) Leveraging the experience of Melbana Energy's board and management team to further explore and appraise Metgasco's assets.
- (d) Taking advantage of the synergies and cost saving resulting from the Merged Group which would primarily be sourced from the increase in operational efficiencies and the elimination of duplicated corporate, administrative and technical costs.

Indicative timetable

10. Subject to the requirements of the Listing Rules and the Corporations Act, the Company anticipates that the Takeover Bid will take place in accordance with following timetable:

Event	Date
Announcement of intention to make the Offer	15 July 2019
Bidder's Statement lodged and released	On or around 10 September 2019
Offer period opens	On or around 24 September 2019
Extraordinary General Meeting held	14 October 2019
Offer period closes	Late October 2019 ¹
Melbana Energy Shares issued and allotted to Metgasco Shareholders	No later than 21 days after the Offer period closes (assuming all conditions of the Offer are satisfied or waived)

11. The dates set out in the above timetable are indicative only and are subject to change.

Relationship between Melbana Energy and M&A Advisory

12. M&A Advisory is an entity controlled by Andrew Purcell, who is a Director. M&A Advisory is a substantial holder in Metgasco, with voting power of approximately 19.59%.

Why Melbana Energy Shareholder approval is required

13. Listing Rule 10.1 has the effect that Melbana Energy cannot acquire a substantial asset from, or dispose of a substantial asset to, a related party without the approval of Shareholders. As M&A Advisory is a related party of Melbana, it is an entity to which Listing Rule 10.1 applies.

¹ Subject to any extension of the Offer period by Melbana.

14. Under Listing Rule 10.2, an asset is 'substantial' if its value is 5% or more of the equity interests of Melbana in the latest accounts provided to ASX under the Listing Rules.
15. The equity interests of Melbana Energy as set out in its latest financial accounts (being those provided to ASX in respect of the financial year ended 30 June 2019) are equal to \$7,852,718. Accordingly, the applicable 5% substantial asset threshold is \$392,636.
16. As Listing Rule 10.2 refers to both:
 - (a) the value of the asset acquired (in this case, the Metgasco Shares held by M&A Advisory); or
 - (b) the consideration provided for the asset acquired (in this case, the Melbana Energy Shares issued to M&A Advisory as consideration under the Offer),
 the price of Melbana Energy Shares and Metgasco Shares at the time are relevant.
17. Notwithstanding the potential for the value of the Melbana Energy Shares and Metgasco Shares to fluctuate, the Board has determined that the acquisition of Metgasco Shares from, and the issue of Melbana Energy Shares to, M&A Advisory will likely involve a transaction in relation to a substantial asset for the purposes of Listing Rule 10.2. Consequently, the Board has resolved to seek Shareholder approval for the purposes of Listing Rule 10.1.

Independent Expert's Report

18. The Board has appointed PKF Corporate (**Independent Expert**) as an independent expert to prepare the Independent Expert's Report in respect of the Takeover Bid. The Independent Expert's Report is included in Annexure 2 and forms part of this Notice of Meeting.
19. The Independent Expert's Report includes a detailed consideration and assessment of the M&A Advisory Transaction in the context of the Takeover Bid. The Independent Expert has concluded that the Takeover Bid is fair and reasonable to non-associated Shareholders.
20. The Independent Expert's Report is summarised below. The Board recommends shareholders read the Independent Expert's Report in full.

Fairness

21. In considering whether the M&A Advisory Transaction is fair, the Independent Expert considered how the value of 4 Melbana Energy Shares (on a combined and control basis) given as consideration compares to the value of a Metgasco Share received (on a control basis), and how the value of the shareholding in the Merged Group received by Metgasco Shareholders (in the net assets of the Merged Group) compares to the value of net assets of Metgasco acquired as a result of the Offer.
22. The Independent Expert has assessed:
 - (a) the value of the Metgasco Shares to be acquired from Mr Purcell to be in a range of \$3.37 million to \$4.21 million; and
 - (b) the value of the Melbana Energy Shares to be issued to Mr Purcell to be in a range of \$2.76 million to \$3.37 million.
23. On the basis of that analysis, the Independent Expert concluded that the M&A Advisory Transaction is fair for non-associated Shareholders.

Reasonableness

24. In considering whether the M&A Advisory Transaction is reasonable, the Independent Expert considered the key advantages and disadvantages of the M&A Advisory Transaction.
25. As set out in greater detail in the Independent Expert's Report, if the Resolution is approved, a key defeating condition of the Takeover Bid will be satisfied, and if the Takeover Bid is successful, then Shareholders may benefit from:
 - (a) in the current environment in which access to capital for junior oil and gas companies is difficult, the Merged Group would benefit from combining their projects and financial resources to create a

larger Australian oil and gas company that can accelerate unlocking the potential of each company's projects;

- (b) the Merged Group would be able to share the fixed costs of running a listed public company across a larger asset base, therefore freeing up resources that could then be better applied towards making discoveries;
 - (c) the increased number of projects available to the Merged Group increases the probability of a successful outcome; and
 - (d) the pipeline of drilling opportunities is expected to keep interest in the company high, and may lead to a well-supported share price, better trading volumes and a stronger position from which to attract and negotiate the best possible terms with potential partners.
26. If the Resolution is approved and the Takeover Bid is consequently successful, the key disadvantage of the Takeover Bid, as identified by the Independent Expert, is that existing Shareholders' interests in Melbana will be diluted.
27. On the basis of the above advantages and disadvantages, the Independent Expert has concluded that the M&A Advisory Transaction is reasonable because the advantages of the Offer are greater than the disadvantages. The Directors (excluding Mr Purcell) agree with the key advantages and disadvantages of the Takeover Bid that were identified by the Independent Expert.

Voting Exclusions

28. The Company will disregard any votes cast in favour of the Resolution, by or on behalf of M&A Advisory, the Company or any other party to the transaction, or any associate of those persons.

Directors' recommendation

29. The Directors (with Mr Purcell abstaining) recommend that you vote in favour of the Resolution.

GLOSSARY

The following terms have the following meanings in this Explanatory Statement:

“\$” means Australian Dollars;

“**ASX**” means ASX Limited ABN 98 008 624 691 or the Australian Securities Exchange, as the context requires;

“**AEST**” means Australian Eastern Daylight Standard Time.

“**Bidder’s Statement**” means the bidder’s statement in respect of the Takeover Bid, prepared by Melbana Energy in accordance with Chapter 6 of the Corporations Act.

“**Board**” means the Directors acting as the board of Directors of the Company or a committee appointed by such board of Directors;

“**Chairman**” means the person appointed to chair the Meeting of the Company convened by the Notice;

“**Company**” or “**Melbana Energy**” means Melbana Energy Limited ACN 066 447 952;

“**Constitution**” means the constitution of the Company as at the date of the Meeting;

“**Corporations Act**” means the Corporations Act 2001 (Cth);

“**Director**” means a Director of the Company;

“**Explanatory Memorandum**” means the explanatory memorandum which forms part of the Notice;

“**Independent Expert**” means PKF Melbourne Corporate Pty Ltd ACN 063 564 045.

“**Independent Expert’s Report**” means the independent expert’s report prepared in relation to the Takeover Bid by the Independent Expert.

“**Listing Rules**” means the Listing Rules of the ASX;

“**M&A Advisory**” means M&A Advisory Pty Ltd ACN 605 252 506;

“**M&A Advisory Transaction**” has the meaning given to that term in paragraph 3 of the Explanatory Memorandum.

“**Extraordinary General Meeting**” or “**Meeting**” has the meaning given in the introductory paragraph of the Notice;

“**Melbana Energy Shares**” means fully paid ordinary shares in the capital of Melbana Energy.

“**Merged Group**” means Melbana Energy and its subsidiaries following the acquisition by Melbana Energy of all, or a portion, of the issued fully paid ordinary shares in Metgasco.

“**Metgasco Shareholder**” means a person who is a registered holder of Melbana Energy Shares.

“**Metgasco Shares**” means fully paid ordinary shares in the capital of Melbana Energy.

“**Offer**” means the offer of Melbana Energy Shares in exchange for fully paid ordinary shares in Metgasco Resources, made to all Metgasco Shareholders under the Takeover Bid;

“**Notice**” means this Notice of Meeting including the Explanatory Statement;

“**Proxy Form**” means the proxy form attached to the Notice;

“**Resolution**” means a resolution referred to in the Notice;

“**Share**” means a fully paid ordinary share in the capital of the Company;

“**Shareholder**” means shareholder of the Company;

“**Takeover Bid**” has the meaning given to that term in paragraph 1 of the Explanatory Memorandum;

Annexure 1

Takeover bid defeating conditions

1. Minimum acceptance

At or before the end of the Offer Period, Melbana Energy has a Relevant Interest in the number of Metgasco Shares that represents at least 50.1% of the aggregate of all Metgasco Shares on issue.

2. M&A Advisory participation

Before the end of the Offer Period, Melbana Energy having received:

- (a) the approval of Melbana Energy Shareholders for the purposes of Listing Rule 10.1 for the acquisition of the Metgasco Shares held by M&A Advisory and the issue of Melbana Energy Shares to M&A Advisory under the Offer (**Listing Rule 10.1 Approval**);
- (b) a waiver from ASX to permit the issue of Melbana Energy Shares to M&A Advisory under the Offer without the Listing Rule 10.1 Approval; or
- (c) a notice or confirmation from ASX that Melbana Energy is not required to obtain the Listing Rule 10.1 Approval.

3. No material adverse change

Between the Announcement Date and the end of the Offer Period, no event or change in circumstances occurs, and no event or change in circumstances that occurred before the Announcement Date but was not apparent from publicly available information before that time becomes publicly known, that individually or when aggregated with all other such events or changes has had, or could reasonably be expected to have any of the following effects:

- (a) a diminution of the consolidated net assets of Metgasco Group by \$1,000,000 or more;
- (b) any material rights under any contract in respect of a Key Metgasco Project being suspended, revoked, invalidated, varied, terminated, released or otherwise coming to an end;
- (c) a material restraint on or hindrance to the development, timely completion, feasibility, operation, or profitability of the Key Metgasco Projects;
- (d) the incurring of any obligations, liabilities, accounting impairment, costs or expenses (whether contingent or otherwise) where the quantum (whether individually or when aggregated) exceeds \$500,000;
- (e) any person announcing, commencing or threatening any proceedings against any member of the Metgasco Group (whether in aggregate or for any single proceeding) which may result in a judgment against the member of Metgasco Group of \$500,000 or more (individually or in aggregate); or
- (f) a material adverse effect on the business, assets, liabilities, financial or trading position, profitability or prospects of Metgasco Group taken as a whole.

4. No regulatory action

Between the Announcement Date and the end of the Offer Period (each inclusive):

- (a) there is not in effect any preliminary or final decision, order or ruling issued by any Government Agency,
- (b) no application is made to any Government Agency (other than by Melbana Energy or any associate of the Melbana Energy); and
- (c) no action or investigation is announced, commenced or threatened by any Government Agency in connection with the Offer,

which could reasonably be expected to:

- (i) restrain, impede or prohibit or otherwise have a material adverse effect on the making of the acquisition by Melbana Energy of Metgasco Shares or any other transaction contemplated by the Bidder's statement (including implementation of Melbana Energy's intentions expressed in the Bidder's statement); or
- (ii) require Melbana Energy to divest any Metgasco Shares or any member of the Melbana Energy Group or Metgasco Group to divest any material asset,

other than an application to or a determination by ASIC, ASX or the Takeovers Panel in the exercise of the powers and discretions conferred by the Corporations Act.

5. No prescribed occurrences during the Offer Period

Between the Announcement Date and the end of the Offer Period (each inclusive) none of the following events occurs:

- (a) Metgasco converts all or any of its shares into a larger or smaller number of shares;
- (b) Metgasco or a subsidiary of Metgasco resolves to reduce its share capital in any way;
- (c) Metgasco or a subsidiary of Metgasco enters into a buy-back agreement or resolves to approve the terms of a buy-back agreement under section 257C(1) or 257D(1) of the Corporations Act;
- (d) Metgasco or a subsidiary of Metgasco issues shares or grants an option over its shares, or agrees to make such an issue or grant such an option;
- (e) Metgasco or a subsidiary of Metgasco issues or agrees to issue, convertible notes;
- (f) Metgasco or a subsidiary of Metgasco disposes, or agrees to dispose, of the whole, or a substantial part, of its business or property;
- (g) Metgasco or a subsidiary of Metgasco charges or agrees to grant a security interest (as defined in section 51A of the Corporations Act) in the whole, or a substantial part, of its business or property;
- (h) Metgasco or a subsidiary of Metgasco resolves to be wound up;
- (i) a liquidator or provisional liquidator of Metgasco or a subsidiary of Metgasco is appointed;
- (j) a court makes an order for the winding up of Metgasco or of a subsidiary of Metgasco;
- (k) an administrator of Metgasco or a subsidiary of Metgasco is appointed under section 436A, 436B or 436C of the Corporations Act;
- (l) Metgasco or a subsidiary of Metgasco executes a deed of company arrangement; or

- (m) a receiver, or a receiver and manager is appointed in relation to the whole, or a substantial part, of the property of Metgasco or of a subsidiary of Metgasco.

6. No prescribed occurrences prior to the lodgement of the Bidder's Statement

Between the Announcement Date and the day immediately preceding the date of the Bidder's Statement (each inclusive), none of the events listed in paragraphs 1(a) to (m) occurs.

7. No exercise of rights under certain agreements or arrangements

If between the Announcement Date and the end of the Offer Period any person:

- (a) is entitled to exercise, or will as a result of the Offer, the acquisition of Metgasco Shares by Melbana Energy or the removal of Metgasco from the official list of ASX if the Offer is successful become entitled to exercise; or
- (b) purports to exercise, states an intention to exercise (whether or not that intention is stated to be a final decision), or asserts the ability to exercise,

any right under any provision of any agreement or other arrangement to which any member of the Metgasco Group is a party or to which any member of the Metgasco Group or any of its assets or businesses may be subject, which results in, or could result in:

- (i) any moneys borrowed by any member of the Metgasco Group being or becoming repayable or being capable of being declared repayable immediately or earlier than the repayment date provided for in such agreement or arrangement;
- (ii) any such agreement or arrangement that imposes or may impose obligations or liabilities on any party of more than \$500,000 per annum or more than \$500,000 in total or that is otherwise material to the business of the Metgasco Group being terminated or modified or not renewed or the performance of any obligations under any such agreement or arrangement being accelerated; or
- (iii) any assets of any member of the Metgasco Group, including any interest of any member of the Metgasco Group in any body corporate, trust, joint venture or other entity, being sold, transferred or offered for sale or transfer, including under any pre-emptive rights or similar provisions, or any contractual arrangements relating to any such asset or interest, being terminated or modified,

that person gives the relevant member of the Metgasco Group and Melbana Energy in writing a binding, irrevocable and unconditional release or waiver of that right.

8. Conduct of business

Between the Announcement Date and the end of the Offer Period, no member of Metgasco Group:

- (a) announces, declares, determines to pay, makes or pays any dividend or other distribution (whether in cash or in specie);
- (b) incurs capital expenditure exceeding \$500,000 or, except in the ordinary course of trading, transfers or otherwise disposes of or creates any Encumbrance in respect of, assets having a value exceeding \$500,000;
- (c) acquires or disposes of any shares or other securities in any body corporate or any units in any trust, or substantially all of the assets of any business except where the aggregate consideration paid or received by all members of Metgasco Group for all such acquisitions or

disposals does not exceed \$500,000 or enters into, or terminates any participation in, any partnership, joint venture or similar commitment;

- (d) borrows an amount which when combined with all other amounts borrowed since the Announcement Date exceeds \$500,000 or enters into any swap, option, futures contract, forward commitment or other derivative transaction;
- (e) enters into, waives any material rights under, varies or terminates any contract, commitment or arrangement which may require annual expenditure by the relevant member of Metgasco Group in excess of \$500,000 or is otherwise of material importance to the business of Metgasco Group;
- (f) any entity within the Metgasco Group enters into, amends, or agrees to enter into or amend any contract, commitment or other arrangement with a related party (as defined in section 228 of the Corporations Act), or an associate of that related party, of Metgasco;
- (g) pays or agrees to pay the costs and expenses of all advisers to Metgasco Group in connection with the Offer where such costs and expenses exceed \$500,000;
- (h) increases the remuneration of, makes any bonus payment, retention payment or termination payment to, or otherwise changes the terms and conditions of employment of:
 - (i) any Metgasco Director; or
 - (ii) any employee of any member of Metgasco Group whose total annual employment cost exceeds \$100,000;
- (i) issues any performance rights convertible into Metgasco Shares;
- (j) changes its constitution or passes any resolution of shareholders or any class of shareholders;
- (k) commences, compromises or settles any litigation or similar proceedings for an amount exceeding \$500,000; or
- (l) agrees, conditionally or otherwise, to do any of the things referred to in paragraphs (a) to (k) above, or announces or represents to any person that any of those things will be done,

unless the doing of that thing was specifically disclosed in any ASX announcement made by Metgasco before the Announcement Date.

9. No inaccurate public information

Melbana Energy does not become aware, during the period between the Announcement Date and the end of the Offer Period (each inclusive), that:

- (a) any announcement made by Metgasco to ASX;
- (b) any document lodged by or on behalf of Metgasco with ASIC; or
- (c) any other public statement made by or on behalf of Metgasco,

is inaccurate or misleading in any material way, including by omission.

Additional definitions

In this Annexure A, unless the context requires otherwise:

Announcement Date means 15 July 2019;

ASIC means the Australian Securities and Investments Commission;

ASX mean the Australian Securities Exchange or ASX Limited ACN 008 624 691 (or its lawful successor), as the context requires;

Bidder's Statement means the bidder's statement prepared by Melbana Energy in respect of the Offer;

Control has the meaning given in section 50AA of the Corporations Act;

Corporations Act means the *Corporations Act 2001* (Cth);

Encumbrance means any security interest (within the meaning of section 51A of the Corporations Act) and any option, right to acquire, right of pre-emption, assignment by way of security, trust arrangement for the purpose of providing security, retention arrangement or other security interest of any kind, and any agreement to create any of the foregoing;

Government Agency means any government, any department, officer or minister of any government and any governmental, semi-governmental, administrative, fiscal, judicial or quasi judicial agency, authority, board, commission, tribunal or entity,

Key Metgasco Projects means the explorations projects in respect of the South Marsh Island Block 74 and the ATP 2020 and ATP 2021 permits;

Listing Rule means a listing rule of the ASX;

M&A Advisory means M&A Advisory Pty Ltd ACN 605 252 506;

Metgasco Group means Metgasco and any entity under the Control of Metgasco;

Melbana Energy Shareholder means a holder of one or more Melbana Energy Shares;

Offer means either:

- (a) the offer for Metgasco Shares contained in the Bidder's Statement; or
- (b) the off-market takeover bid constituted by that offer and each other offer by Melbana Energy for Metgasco Shares in the form of that offer, in each case as varied in accordance with the Corporations Act,

as the context requires;

Offer Period means the period during which the Offer is open for acceptance as set out in the Bidder's Statement;

Relevant Interest has the meaning given in the Corporations Act; and

Takeovers Panel means the Takeovers Panel referred to in Division 2, Part 6.10 of the Corporations Act.

Annexure 2

Independent Expert's Report



9 September 2019

The Independent Directors
Melbana Energy Limited
Level 3
350 Collins Street
Melbourne VIC 3000

Dear Independent Directors

Re: Independent Expert Report

1. Introduction

On 25 July 2019, Melbana Energy Limited (Melbana or the Company) announced its unconditional intention to make a takeover offer (the Offer) for 100% of the ordinary shares in Metgasco Limited (Metgasco). The offer to Metgasco shareholders is an all share offer under which Melbana will offer Metgasco shareholders four fully paid ordinary shares in the capital of Melbana for every one fully paid ordinary share in Metgasco.

Melbana entered into a pre-bid acceptance agreement with M&A Advisory Pty Ltd (M&A Advisory) in respect of its 19.59% of the issued capital in Metgasco. Mr Andrew Purcell, Chairman and director of Melbana, is a significant shareholder of Metgasco, via his interest in M&A Advisory.

Under the agreement, M&A Advisory has undertaken to accept the Offer in the absence of a superior proposal and subject to:

- the approval of Melbana shareholders not associated with M&A Advisory or Mr Purcell;
- a waiver of that requirement; or
- confirmation that shareholder approval is not required.

The offer is to be conditional upon:

- A 50.1% minimum acceptance condition; and
- The receipt of Melbana shareholder approval for the purposes of ASX Listing Rule 10.1 to permit M&A Advisory to participate under the offer, or a waiver of that requirement, or, confirmation shareholder approval was not required.

Melbana will seek approval at an extraordinary general meeting for:

- the acquisition of ordinary shares in Metgasco from; and
- the issue of ordinary shares by the Company to,

M&A Advisory under the Offer, on the terms and conditions set out in the Explanatory Memorandum (the Proposed Transaction).

The Independent Directors of Melbana have requested PKF Melbourne Corporate Pty Ltd (PKF Corporate) to prepare an Independent Expert Report (IER) advising whether, in our opinion, the Proposed Transaction is fair and reasonable to the non-associated shareholders of Melbana.

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PKF Melbourne Corporate Pty Ltd is a member firm of the PKF International Limited family of legally independent firms and does not accept any responsibility or liability for the actions or inactions of any individual member of correspondent firm or firms.

For office locations visit www.pkf.com.au

2. Purpose of Report

Listing Rules 10.1 and 10.2 require a company to obtain shareholder approval at a general meeting when the disposal or acquisition of a substantial asset, which has a value in excess of 5% of the shareholders' funds, as set out in the latest financial statements given to the ASX, is to be made to or from:

- (i) a related party;
- (ii) a subsidiary;
- (iii) a substantial shareholder who is entitled to at least 10% of the voting securities, or a person who was a substantial shareholder entitled to at least 10% of the voting securities at any time in the 6 months before the transaction;
- (iv) an associate of a person referred to in paragraphs (i), (ii) or (iii) above; or
- (v) a person whose relationship to the entity or a person referred to above is such that, in the ASX's opinion, the transaction should be approved by security holders.

Mr Purcell is a significant shareholder of Metgasco via his interest in M&A Advisory. Mr Purcell is also a director and Chairman of Melbana. Consequently, Mr Purcell is considered to be a related party for the purpose of the Proposed Transaction. Further, the value of the Proposed Transaction exceeds 5% of the equity of Melbana of \$7.853 million as set out in the annual report for the year ended 30 June 2019. Accordingly Listing Rule 10.1 will apply to the Proposed Transaction and, in accordance with Listing Rule 10.10.2, will require an IER.

The IER is to be included in the Notice of Meeting to be sent to Shareholders and has been prepared by PKF Corporate for the exclusive purpose of assisting the non-associated shareholders in their consideration of the Proposed Transaction. This report should not be quoted or referred to or utilized for any other purpose unless written consent has been provided by PKF Corporate.

3. Basis of Evaluation

There is no legal definition for the expression 'fair and reasonable'. ASIC has issued Regulatory Guide 111 (RG111) which establishes guidelines in respect of independent expert reports.

In respect of related party transactions, ASIC generally expects an expert who is asked to analyse a related party transaction to express an opinion on whether the transaction is 'fair and reasonable' from the perspective of non-associated members, as in a control transaction.

A related party transaction is 'fair' if the value of the financial benefit to be provided by the entity to the related party is equal to or less than the value of the consideration being provided to the entity. This comparison should be made:

- assuming a knowledgeable and willing, but not anxious, buyer and a knowledgeable and willing, but not anxious, seller acting at arm's length; and
- for control transactions, assuming 100% ownership of the company and irrespective of whether the consideration is cash or scrip.

Where the financial benefit given by the entity is securities in the entity and the consideration is securities in another entity held by a related party, the value of the entity's securities should be compared to the value of the securities it is purchasing. In valuing the financial benefit given and the consideration received by the entity, an expert should take into account all material terms of the proposed transaction.

A proposed related party transaction is 'reasonable' if it is 'fair'. It might also be 'reasonable' if, despite being 'not fair', the expert believes there are sufficient reasons for members to vote for the proposal. If an expert concludes that a related party transaction is not fair but is reasonable, it should clearly explain the meaning of this opinion, why the expert has reached this conclusion, and the significance of the conclusion to the decision to be made by security holders.

When deciding whether a proposed transaction is 'reasonable', factors that an expert might consider include:

- opportunity costs;
- the alternative options available to the entity and the likelihood of those options occurring;
- the entity's bargaining position;
- whether there is selective treatment of any security holder, particularly the related party;
- any special value of the transaction to the purchaser; and
- the liquidity of the market in the entity's securities.

Having regard to the above, PKF Corporate has undertaken a valuation of the ordinary shares in Metgasco held by Mr Purcell and compared this to the value of the shares to be received in Melbana (after its acquisition of Metgasco).

In considering whether the Proposed Transaction is reasonable, we have considered the advantages and disadvantages of proceeding with the Proposed Transaction together with the impact on Melbana should the Proposed transaction not proceed.

4. Summary opinion

In our opinion, the Proposed Transaction is fair and reasonable to the Non-Associated Shareholders. Our principal reasons for reaching this opinion are set out below.

In Section 11.2 we assessed the value of the Metgasco shares to be acquired from Mr Purcell to be in a range of \$3.367 million to \$4.208 million and in Section 11.11 we assessed the value of the Melbana shares to be issued to Mr Purcell to be in a range of \$2.755 million to \$3.367 million. As the value of the consideration is below the value range of the Metgasco shares being acquired from Mr Purcell, we are of the opinion that the Proposed Transaction is fair to the non-associated shareholders.

In accordance with RG 111, a Proposed Transaction is reasonable if it is fair. As the Proposed Transaction is fair it is also reasonable. Nevertheless, we have also considered other advantages and disadvantages in assessing the reasonableness of the Proposed Transaction.

In particular, the Offer will only proceed if the Proposed Transaction is accepted. Therefore, if the Proposed Transaction is accepted and the Offer proceeds, then in our opinion the non-associated shareholders will have the benefit of the advantages associated with the Offer. These include the following:

- In the current environment in which access to capital for junior oil and gas companies is difficult, the combined entities (the Merged Group) would benefit from combining their projects and financial resources to create a larger Australian oil and gas company that can accelerate unlocking the potential of each company's projects;
- The Merged Group would be able to share the fixed costs of running a listed public company across a larger asset base, therefore freeing up resources that could then be better applied towards making discoveries;
- The increased number of projects available to the Merged Group increases the probability of a successful outcome;
- The pipeline of drilling opportunities is expected to keep interest in the company high, and may lead to a well supported stock price, better trading volumes and a stronger position from which to attract and negotiate the best possible terms with potential partners;

Melbana will gain access to Metgasco's Queensland exploration permits and may potentially participate in the East Coast Gas market in the event those assets are commercially developed; and

- The Merged Group will have a broader and more diverse shareholder base, with the attendant benefits of greater access to capital and potentially greater liquidity in shares.

The non-associated shareholders would however also be exposed to the disadvantages of the Offer. This is considered to comprise primarily a dilution of the non-associated shareholders' interests in Melbana.

Based on the above, we consider that the advantages of the Proposed Transaction outweigh the disadvantages of the Proposed Transaction, and for this reason, we consider that the Proposed Transaction is reasonable for the Non-Associated Shareholders of Melbana.

5. Structure of this report

The remainder of this report is divided into the following sections:

<u>Section</u>	<u>Page</u>
6 Profile of Melbana	5
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10 Valuation of Metgasco	25
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A Sources of Information	34
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 <u>Attachment</u>	
1 Fluid Energy Consultants Independent Technical Valuation Report of Melbana's Exploration Assets	
2 Fluid Energy Consultants Independent Technical Valuation Report of Metgasco's Exploration Assets	

6. Profile of Melbana

6.1 Brief History

6.1.1 Melbana Energy is an Australian ASX listed, independent oil and gas company that has a portfolio of exploration, appraisal and development stage opportunities in Cuba and Australia. Melbana is headquartered in Melbourne with a representative office in Havana, Cuba.

6.1.2 Melbana's oil and gas exploration tenements comprise:

Table 1

Permit	Location	Current Interest	After Farm-in
WA-488-P (Beehive)	Australia	100%	20%
Block 9 Production Sharing Contract (PSC)	Cuba	100%	n/a
Santa Cruz IOR PSC	Cuba	100% ¹	n/a

Source: Melbana Website

Note 1: We are advised by Melbana that they are still awaiting final regulatory approvals in respect of this tenement. For the purposes of our report we have included this asset to form part of the assets of Melbana.

6.1.3 Melbana previously held a 55% interest in permit AC/P50 and permit AC/P51 which it sold on 22 August 2018 to Rouge Rock Pty Ltd (Rouge Rock). The divestment agreements with Rouge Rock are structured such that if Rouge Rock enters into an arrangement in the future for cash, Melbana earns 10% of the cash benefit received by Rouge Rock. If Rouge Rock enters into an agreement 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 and risks associated with the drilling process. Melbana is not responsible for any costs of the permit from the date of divestment.

6.1.4 In addition to the above, Melbana has a plan, via its Tassie Shoal Methanol Project, to use the high CO₂ gas fields in the northern Bonaparte Basin as feedstock to manufacture methanol, which requires carbon dioxide in the gas stream. There are a number of discovered high CO₂ gas fields in the area, including Evans Shoal, Barossa, Caldita, Blackwood and Heron. Melbana also has plans for an LNG project on Tassie Shoal. This concept offers a commercialisation path to LNG for any of the remote gas resources in the region and is a direct low-cost alternative to Floating LNG (FLNG) or onshore facilities. Tassie Shoal is an area of shallow water near these stranded resources on which Melbana has suggested up to two methanol plants and one LNG plant could be constructed. MEO Australia Limited, a precursor company to Melbana, received environmental approval for the Tassie Shoal Projects in 2002. This approval is valid until 2052. The project has been granted Major Project Facilitation status and this was renewed in 2012. However, Melbana has no interests in any of the gas fields in question. There are no immediate plans to seek investment for or construct the plant as forward plans are subject to gas supply negotiations.

6.1.5 Further information in relation to each of the above is contained in the Fluid Energy Consultants (FEC) Independent Technical Valuation Report in Attachment 1 to this report. We have provided a summary below of the current exploration permits.

6.1.6 WA-488-P

WA-488-P is located in the Bonaparte Gulf between the producing Blacktip gas field and the undeveloped Turtle and Barnett oil discoveries and has an area of 4,074 km².

Melbana has identified the Beehive prospect, located in ~40m water depth and defined by a tight grid of high quality 2D seismic data, as one of the largest undrilled hydrocarbon prospects in Australia. The Beehive prospect is a 180km² isolated carbonate build-up of Carboniferous age with 400m of mapped vertical relief and a crest at 4,100m.

Total S.A. (Total) from France and Australia's Santos Limited (Santos) have fully funded a 3D seismic survey over the Beehive prospect (completed August 2018), in return for a further option to fully fund the Beehive-1 exploration well. If Total and/or Santos exercises its option, Melbana would retain a 20% participating interest and be fully carried for the first well drilled in WA-488-P.

The processed data from the 3D seismic survey was received and accepted on 3 April 2019, giving Santos and Total until 2 October 2019 to elect to drill the Beehive-1 well. Santos recently advised they had completed an initial well-concept-select workshop in which they identified a provisional well design and progressed the drafting of an Environmental Plan, which is targeted for completion in the third quarter of 2019. Rig selection activity is being considered by Santos as part of a broader rig contracting strategy.

6.1.7 **Block 9 PSC**

The Block 9 PSC covers 2,344km² onshore on the north coast of Cuba, 140 km east of Havana in a proven hydrocarbon system and along trend with the multi-billion barrel Varadero oil field.

Melbana is prequalified as an onshore and shallow water operator in Cuba and was awarded a 100% participating interest in the Block 9 PSC on 3 September 2015.

Block 9 PSC has an 8.5 year exploration period divided into four sub periods. The work program for sub period 1 has been completed and comprised studies and seismic reprocessing. Sub-period 2, being the period November 2017 to November 2019, includes the drilling of one well. At the end of each period the Company has an option to withdraw. Shortly after entering each sub-period a bank guarantee is required for 50% of the approved firm budget for that sub period. The bank guarantee for the second sub period is not currently in place. The Company has applied to have the current sub-period extended by one year to November 2020 and for the requirement to post a bank guarantee be waived for this extended sub-period. The applications need to be approved by the Council of Ministers who are scheduled to meet in September 2019.

In late 2018, the Company entered into a farmout agreement with a Chinese company, Anhui Modestinner Energy Co., Ltd. (AMEC), a wholly owned and guaranteed subsidiary of Anhui Guangda Mining Investment Co. Ltd., that required them to (amongst other things) fully fund the drilling of the first three exploration wells in Block 9, provide any required bank guarantees and entirely fund all future activities and costs associated with Block 9 for the remainder of its 25 year term. The Company was to be left with a 12.5% interest in the profit oil and the right to recoup through the PSC approximately US\$3.5M in back costs in the event of development. The Company terminated this agreement in late April 2019 due to lack of progress by AMEC. Discussions with new potential farminees have commenced.

6.1.8 **Santa Cruz IOR PSC**

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, which is responsible for the vast majority of Cuba's oil and gas production.

In December 2018 Melbana finalised a long-term binding incremental oil recovery contract with Cuba's national oil company, Cupet. The work commitments are split into multiple phases, with an initial study period of desk-based technical work followed by an implementation phase. The initial study period phase of maximum of eight months is complete.

Melbana may elect to proceed to the next implementation phase, which includes a minimum program of two side-track wells from existing well bores to new geological targets, once the PSC is formally ratified.

Whilst awaiting formal ratification, Melbana and Cupet have identified some commercial issues with the previous agreement that need amending. Proposals for addressing these issues have been discussed and amendments to the previous binding agreement may be necessary, which, therefore, may impact the scope, timing and nature of the work commitments in the IOR PSC. Thus, the agreement is not yet signed or ratified.

6.1.9 Detailed information in relation to Melbana's exploration assets is contained in the FEC Independent Technical Valuation Report in Attachment 1 to this report.

6.2 Directors

6.2.1 Melbana's Board of Directors and other key executives at the date of this report are presented in the table below.

Table 2

Board of Directors	Other
Andrew Purcell, Chairman	Melanie Leydin, Company Secretary
Michael Sandy, Independent Non-Executive Director and Interim CEO	Errol Johnstone, Chief Geoscientist
Peter Stickland, Non-Executive Director	Dean Johnstone, Senior Geoscientist
	Dr Rafael Tenreyro, Cuba Representative

Source: Melbana Website

6.3 Share capital

6.3.1 As at the date of this report, Melbana had on issue 1,878,090,864 fully paid ordinary shares. Melbana also had the following outstanding options:

Table 3

Options	Expiry Date	Amount
Unlisted options exercisable at 6.5 cents per share	3 November 2019	4,000,000
Unlisted options exercisable at 3 cents per share	27 March 2020	65,814,823
Unlisted options exercisable at 3.2 cents per share	27 September 2020	11,250,000
Unlisted options exercisable at 1.8 cents per share	23 November 2020	20,000,000
Unquoted exercisable performance rights	30 April 2021	4,178,208
Unlisted options exercisable at 2.2 cents	4 August 2020	80,000,000
Total options		185,243,031

Source: Melbana share register as at 23 August 2019, Melbana Appendix 3B and Melbana management

6.3.2 The major shareholders of Melbana on 23 August 2019 are presented in the table below. As at that date, the top 10 shareholders, as recorded on the share register, held 19.5% of the issued ordinary capital of Melbana on an undiluted basis as illustrated below:

Table 4

Shareholder name	Number of Shares Held	Percentage Interest ¹	Number of Options
HSBC Custody Nominees (Australia) Limited	113,917,478	6.1%	-
M&A Advisory Pty Ltd (Purcell Family)	62,666,307	3.3%	81,875,621 ²
Mr John Oldani	26,111,111	1.4%	-
Ms Hong Nhung Nguyen	25,623,183	1.4%	-
Mr Matthew Dean Marshall	25,288,889	1.3%	-
Tets Pty Ltd	22,000,000	1.3%	-
Five Elements Design Pty Ltd	24,200,000	1.3%	-
Mr Jason Meinhardt	23,150,431	1.2%	-
Mrs Danielle Gordon	21,005,000	1.1%	-
Mrs Cathy Ann Bender	20,622,531	1.1%	-
Top 10 Shareholders	367,584,930	19.5%	-

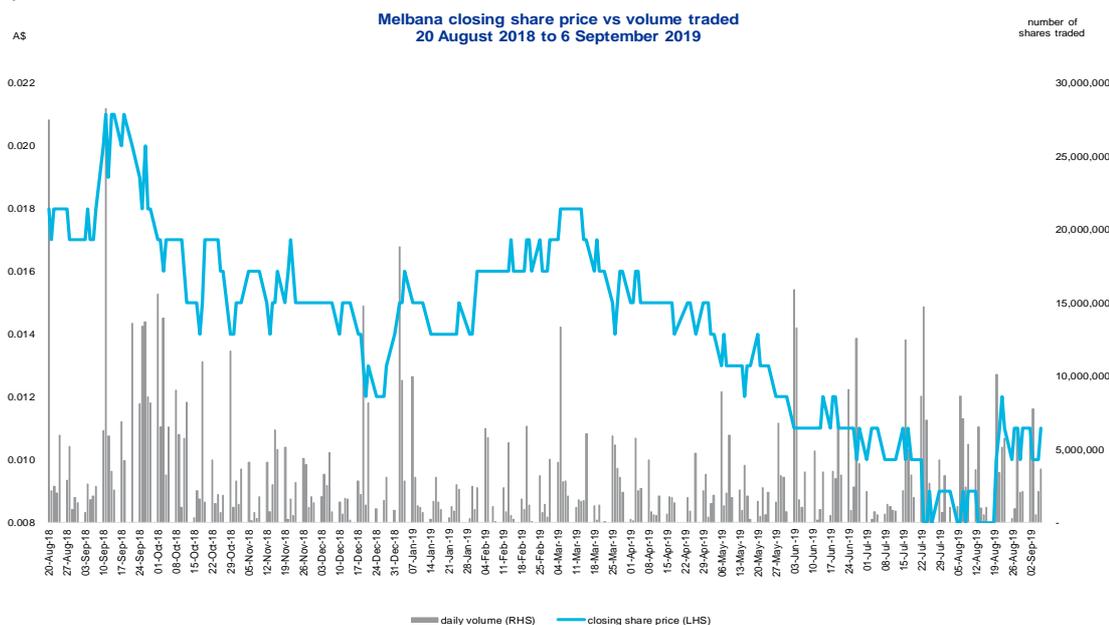
Source: Melbana's Share Register – 23 August 2019

6.3.3 Melbana's share register demonstrates a spread of shareholders, with the largest shareholder holding only 6.1% of the ordinary shares. Mr Purcell holds 3.3% of the ordinary shares on issue and is the second largest shareholder.

6.4 Share Trading History

6.4.1 Melbana's historical share price together with historical volumes of shares traded are presented in the graph below:

Graph 1



¹ Undiluted basis

² 80 million unlisted options exercisable at 2.2 cents expiring 4 August 2020 and 1,875,621 unlisted options exercisable at 3 cents per share expiring on 27 March 2020

- 6.4.2 Further, during FY19 the Company undertook a placement to raise \$3.5 million before costs. The placement was at a price of 1.8 cents per share plus one accompanying unlisted option at an exercise price of 3 cents per option per three shares placed, expiring 18 months from grant. The placement price was at a discount of 14% to Melbana's last traded price on 24 September 2018 and the 10-day VWAP of 2.1 cents per share up to and including 24 September 2018. The number of shares issued have been summarised below:

Table 5

Details	Date	Shares	Issue Price
Share placement	27 Sep18	188,817,582	1.8 cents
Share placement	21 Nov 18	5,626,863	1.8 cents

Source: Melbana Half Yearly Report 31 December 2018

- 6.4.3 The trading in Melbana's shares up to the initial announcement date of the Proposed Transaction of 12 July 2019 is summarised in the following table:

Table 6

Recent Trading	Low	High	VWAP	Volume	Proportion of shares traded
5 days to 12 July 2019	\$0.010	\$0.011	\$0.010	5,000,968	0.32%
30 days to 12 July 2019	\$0.010	\$0.012	\$0.011	102,362,133	6.59%
90 days to 12 July 2019	\$0.010	\$0.019	\$0.013	252,144,410	16.23%
6 months to 12 July 2019	\$0.010	\$0.019	\$0.014	484,051,861	31.16%
9 months to 12 July 2019	\$0.010	\$0.024	\$0.016	785,574,763	50.57%

- 6.4.4 The price of Melbana's shares declined over the last 12 months, from a high of 2.4 cents in September 2018 to a low of 1 cent prior to the announcement date. Following the initial announcement date, the share price continued to fall to a low of 0.8 cents as at 20 August 2019 but has since been trading between 1 cent to 1.3 cents with a VWAP of approximately 1.1 cents.
- 6.4.5 In the nine month period to the initial announcement date approximately half the shares on issue were traded. This equates to an average weekly trading volume of approximately 20 million shares or approximately 1% of issued shares.

6.5 Statements of financial position

6.5.1 Summarised below are the statements of financial position of Melbana as at 30 June 2017 to 30 June 2019.

Table 7

Financial Position	Audited 30 June 2017 \$'000	Audited 30 June 2018 \$'000	Audited 30 June 2019 \$'000
Current Assets			
Cash and cash equivalents	2,605	3,047	3,363
Other receivables	23	63	107
Other current assets	11	3,073	72
Total Current Assets	2,639	6,183	3,542
Non-Current Assets			
Plant and equipment	73	102	41
Exploration and evaluation			
- Block 9 Cuba at cost	3,096	4,370	4,842
- PEP51153 at cost	88	100	-
- AC/P50 & AC/P51 at cost	633	-	-
Total Exploration and Evaluation	3,817	4,470	4,842
Total Non-Current Assets	3,890	4,572	4,883
Total Assets	6,529	10,755	8,425
Current Liabilities			
Trade and other payables	312	454	387
Borrowings	-	3,099	-
Provisions	312	453	185
Total Current Liabilities	624	4,006	572
Provisions	126	54	-
Total Non-Current Liabilities	126	54	-
Total Liabilities	750	4,060	572
Net Assets	5,779	6,695	7,853
Issued capital	265,935	272,790	276,331
Reserves	334	495	1,459
Accumulated Losses	(260,490)	(266,590)	(269,937)
Total Equity	5,779	6,695	7,853

Source: Melbana Annual Report 2018 and 2019

6.5.2 In relation to Melbana's financial position we note the following:

- The Company's main asset comprises its exploration tenements, which are recorded in the balance sheet at cost.
- The exploration expenditure has been funded through a combination of debt and capital raisings.
- The debt funding comprised borrowings from TransAsia Private Capital Limited in its capacity as Manager, for and on behalf of Asian Trade Finance Fund 2, a sub-fund of TA Asian Multi-Finance Fund. Mr Purcell provided a personal guarantee in favour of the lender. As consideration for the provision of the personal guarantee, Melbana issued 80 million options to Mr Purcell on 13 August 2018. The loan was repaid in the second half of FY2019 from the Company's cash reserves.
- The Company also had deposits held as security against bank guarantees as at 30 June 2018. The bank guarantees were released in FY19.
- At the date of this report there are no contingent liabilities.

6.6 Operating performance

6.6.1 Summarised below are Melbana's income statements for the financial years ended 30 June 2017 to 30 June 2019.

Table 8

Income Statement	Audited 30 June 2017 \$'000	Audited 30 June 2018 \$'000	Audited 30 June 2019 \$'000
Interest Income	71	20	49
Other Income	-	392	324
Expenses:			
- Settlement costs	-	(300)	-
- Exploration expenditure written off/down	(455)	(3,691)	-
- Administration	(1,672)	(2,363)	(2,485)
- Net foreign exchange gain/(loss)	(33)	-	-
- Finance costs	-	(96)	(1,246)
Loss before income tax expense	(2,089)	(6,028)	(3,358)
Income tax expense	(32)	(72)	-
Loss after income tax	(2,121)	(6,100)	(3,358)

Source: Melbana Annual Report 2018 and 2019

6.6.2 Melbana's profit and loss is consistent with an oil and gas exploration company, not yet in production.

6.7 Cash flow statements

6.7.1 Summarised below are the statements of cash flows for the financial years ended 30 June 2017 to 30 June 2019.

Table 9

Cash Flows	Audited 30 June 2017 \$'000	Audited 30 June 2018 \$'000	Audited 30 June 2019 \$'000
Cash flows from operating activities			
Payments to suppliers and employees inclusive of GST	(1,360)	(2,708)	(2,534)
Interest received	74	24	49
Interest paid	-	-	(273)
Research and development tax incentive received	-	357	-
Net cash used in operating activities	(1,286)	(2,327)	(2,758)
Cash flows from investing activities			
Payments for property, plant and equipment	(16)	(50)	(2)
Payments for exploration and evaluation	(2,290)	(3,716)	(472)
Payments for security deposits for bank guarantee	-	(2,937)	(72)
Proceeds from sale of exploration interest			100
Proceeds from disposal of property, plant and equipment	13	-	3
Proceeds from security deposits for bank guarantee	-	-	3,271
Net cash from/(used) in investing activities	(2,293)	(6,703)	2,828
Cash flows from financing activities			
Proceeds from issue of shares	2,233	7,307	3,700
Proceeds/(repayments) of borrowings	-	2,848	(3,584)
Share issue transaction costs	(152)	(737)	(239)
Net cash from/(used) in financing activities	2,081	9,418	(123)
Net increase/(decrease) in cash and cash equivalents	(1,498)	388	(53)
Cash and cash equivalents at the beginning of the financial year	4,136	2,605	3,047
Effects of exchange rate changes on cash and cash equivalents	(33)	54	369
Cash and cash equivalents at the end of the financial year	2,605	3,047	3,363

Source: Melbana Annual Report 2018 and 2019

6.7.2 Melbana's cash flows indicate that the Company has funded its exploration expenditure through borrowings and issue of shares, as discussed earlier.

7. Profile of Metgasco

7.1 Brief History

7.1.1 Metgasco's principal activities comprise oil and gas exploration, appraisal, development and investment in and development of associated energy infrastructure.

7.1.2 In the past it has explored for gas in three exploration licences in the Northern Rivers Region of NSW. However, in December 2015, Metgasco's shareholders voted to accept a \$25 million offer from the NSW Government to withdraw from its exploration licences in NSW and from litigation against the NSW Government.

7.1.3 Since then, key events include the following in the respective calendar years:

- 2016:
 - Executed an agreement with Byron Energy Limited (Byron) in relation to the provision of a secured \$8 million development funding facility and the acquisition of staged investment rights.
 - In consideration, Byron issued 10 million unlisted options to Metgasco with an exercise price of 25 cents per share and a term of three years.
 - Metgasco notified Byron of its election to exercise its option to farm-in to Byron's Bivouac Peak project.
 - Board recommended a return of capital of 2.5 cents per share to Metgasco's shareholders.
- 2017:
 - Awarded two exploration blocks in the Cooper Basin, PRL 2015-5-16 and PRL 2015-5-19.
 - Subscribed to an \$8 million Convertible Note with Byron, repayable over the term to 21 July 2019, in line with the agreement executed in 2016.
 - Took up a 10% participation in Byron's \$26 million 7c capital raising, becoming a 5.77% shareholder.
- 2018:
 - Announced its farm-in to Byron's South Marsh Island 74 (SM74) project, for a 30% interest.
 - Exploration blocks ATP2020 and ATP2021 in the Cooper Basin were awarded and sub-surface technical and commercial evaluation of the permits was carried out.
 - \$4 million of the \$8 million loan was repaid by Byron.
 - Weiss Adler et al-1 well in the USA was deemed uncommercial after log evaluation, was plugged and abandoned.
 - A further two \$1 million principal repayments, with interest, were received from Byron.
- 2019:
 - An additional \$1 million principal repayment, with interest, of convertible notes from Byron occurred in line with the note schedule.
 - Metgasco elected to convert the remaining \$1 million of its convertible notes in Byron into shares, finalizing its secured funding facility loan in Byron.
 - Metgasco's share of budgeted drilling costs of US\$4.4 million for SM74 was remitted.
 - Executed a Farm-Out Agreement with Vintage Energy Ltd (Vintage) to farm-out 50% and operatorship of its Cooper-Eromanga Basin asset ATP2021. The Farm-Out Agreement terms provide for Vintage to fund 65% of the first exploration well drilled, reimburse 65% of past licence costs and 100% carry a 2D/3D seismic reprocessing project.
 - Decision was made to plug and abandon the SM74 D14 BP1 exploration well due to difficult hole conditions. Metgasco finalized its exposure to the drilling program costs by reaching a commercial agreement with Byron to pay Byron \$1.75 million, with payment by 30 September 2019, and Metgasco exercising its options in Byron shares.
 - Exercised its 10 million options over Byron shares at 25 cents per share increasing its shareholding to 7.14%.

- Signed a binding farm-out agreement with Bridgeport (Cooper Basin) Pty Ltd (Bridgeport) to farm-out 25% of Cooper/Eromanga Basin asset ATP2021. Bridgeport will fund 32.5% of the first exploration well drilled up to a maximum cost of \$1.72 million and will also pay 32.5% of Metgasco's share of future exploration costs in ATP2021 up to a maximum cap of \$263,900. The combination of Vintage and Bridgeport farm-out deals will result in Metgasco being free carried through the first exploration well on ATP2021 planned for the fourth quarter of 2019 and retaining a 25% non-operated interest.

7.1.4 As at the date of this report, Metgasco's key investments and exploration assets, excluding cash, comprise the following:

- 50,333,383 shares in Byron, representing a 7.14% interest;
- 30% owner of the SM74 Licence;
- 100% interest in ATP-2020 Cooper Basin
- 25% free carried interest in ATP-2021 Cooper Basin, (farmed out to Vintage and Bridgeport); and
- 20% interest in PRL 237.

7.1.5 Detailed information in relation to Metgasco's exploration assets is contained in the FEC Independent Technical Valuation Report in Attachment 2 to this report.

7.2 Directors

7.2.1 Metgasco's Board of Directors and other key executives at the date of this report are presented in the table below.

Table 10

Board of Directors	Other
Philip Amery, Chairman	Mark Langan, Company Secretary
John Patton, Non-Executive Director	Ken Aitken, Chief Executive Officer
Robbert Willink, Non -Executive Director	

Source: Metgasco Website

7.3 Share capital

7.3.1 As at the date of this report, Metgasco had on issue 390,601,434 fully paid ordinary shares, with no outstanding options.

7.3.2 We have been unable to obtain a current list of the top 20 shareholders in Metgasco. However, our review of the ASX announcements indicates that the major shareholders of Metgasco are as follows:

Table 11

Shareholder name	Number of Shares Held	Percentage Interest
Keybridge Capital Limited	78,661,138	20.14%
M&A Advisory	76,516,908	19.59%
Top 2 Shareholders	155,178,046	39.73%

Source: Form 604 Corporations Act, Notice of change in interests of substantial holder

7.3.3 Mr Purcell holds 19.59% of the shares in Metgasco. Assuming the Proposed Transaction proceeds, Mr Purcell will hold approximately 10.7% of the issued shares in Melbana on an undiluted basis, as illustrated below:

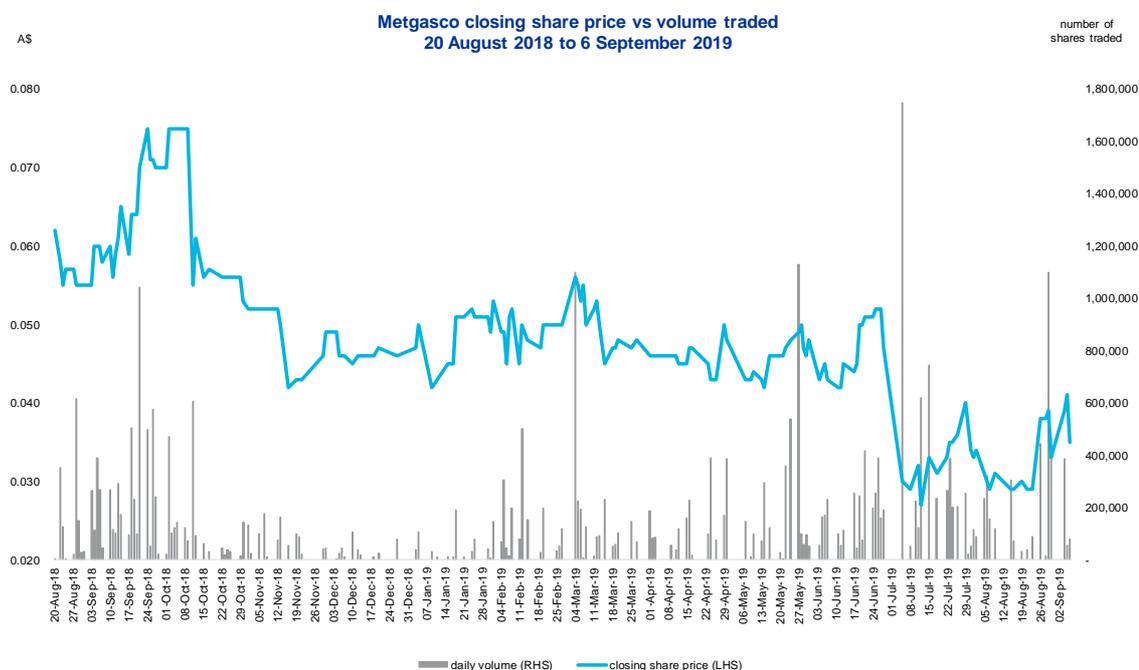
Table 12

Mr Purcell's Interest in Melbana Post Proposed Transaction	Number of Shares Held	Number of Options Held	Fully Diluted Holding
Mr Purcell's current interest in Melbana	62,666,307	81,875,621	144,541,928
Proposed issue	306,067,632 ³	-	306,067,632
Total interest post Proposed Transaction	368,733,939	81,875,621	450,609,560
Current issued capital in Melbana	1,878,090,864	184,243,031	2,062,333,895
Proposed issue to Metgasco shareholders	1,562,405,736 ⁴	-	1,562,405,736
Total proposed shares in Melbana	3,440,496,600	184,243,031	3,624,739,631
Mr Purcell's interest post Proposed Transaction	10.7%		12.4%

7.4 Share Trading History

7.4.1 Metgasco's historical share price together with historical volumes of shares traded are presented in the graph below:

Graph 2



³ 4 Melbana shares for each of the 76,516,908 shares in Metgasco

⁴ 4 Melbana shares for each of the 390,601,434 Metgasco shares

7.4.2 A summary of trading in Metgasco's shares up to the initial announcement date is contained in the following table:

Table 13

Recent Trading	Low	High	VWAP	Volume	Proportion of shares traded
5 days to 12 July 2019	\$0.027	\$0.045	\$0.029	2,763,620	1.11%
30 days to 12 July 2019	\$0.027	\$0.053	\$0.039	5,923,508	2.39%
90 days to 12 July 2019	\$0.027	\$0.055	\$0.043	12,048,828	4.85%
6 months to 12 July 2019	\$0.027	\$0.056	\$0.046	17,344,074	6.99%
9 months to 12 July 2019	\$0.027	\$0.075	\$0.052	26,674,075	10.75%

7.4.3 The price of Metgasco shares declined over the last 12 months, from a high of 7.5 cents in September/October 2018 to a low of 2.7 cents prior to the announcement date. Since the initial announcement date, the VWAP has increased to approximately 3.6 cents.

7.4.4 In the nine-month period to the initial announcement date, approximately 27 million shares were traded, representing only 10.75% of the total issued capital indicating that the shares in Metgasco lack liquidity.

7.4.5 In addition to the above, Metgasco undertook an on-market share buyback during the 12 months to May 2019. The price paid for the shares ranged between 5.4 cents and 6 cents per share with a total of 7,863,389 shares bought back as of September 2018. No shares were bought back after September 2018.

7.5 Statements of financial position

7.5.1 Summarised below are the statements of financial position as at 30 June 2017, 30 June 2018 and as at 30 June 2019

Table 14

Financial Position	Audited 30 June 2017 \$'000	Audited 30 June 2018 \$'000	Audited June 2019 \$'000
Current Assets			
Cash and cash equivalents	10,198	6,778	1,803
Investment in traded bonds	-	2,117	1,394
Investment in listed securities	-	-	4,500
Trade and other receivables	97	144	122
Secured convertible note – amortised cost	2,757	3,936	-
Total Current Assets	13,052	12,975	7,819
Non Current Assets			
Exploration and evaluation expenditure			
- Australia	13	386	1,298
- USA	109	149	-
Total Exploration and Evaluation	122	535	1,298
Plant and equipment	2	9	6
Other receivables	24	24	24
Secured convertible note – amortised cost	4,433	976	-
Investment in listed securities	-	13,453	7,197
Financial derivative assets	267	1,549	422
Total Non Current Assets	4,848	16,546	8,947
Total Assets	17,900	29,521	16,766
Current Liabilities			
Trade and other payables	167	292	1,883
Total Current Liabilities	167	292	1,883
Provisions	10	14	22
Total Non Current Liabilities	10	14	22
Total Liabilities	177	306	1,905
Net Assets	17,723	29,215	14,861
Issued capital	111,563	111,233	111,100
Available for sale reserve	-	10,801	-
Financial assets at FVOCI reserve	-	-	(60)
Accumulated Losses	(93,840)	(92,819)	(96,179)
Total Equity	17,723	29,215	14,861

Source: Metgasco Annual Report 2018 and 2019

7.5.2 In relation to Metgasco's financial position we note the following:

- The company's main assets comprise its investment in Byron, traded bonds and exploration tenements. Further discussion on these assets is contained in section 10 of this report.
- The investments and exploration expenditure were funded through cash reserves.
- The increase in trade and other payables is likely to reflect the obligation to pay Byron \$1.75 million to settle its exposure to additional costs associated with SM74. Metgasco has advised shareholders that it has several options to meet this obligation including the sale of shares in Byron, a further farm-down of one or more of its ATP assets, raising capital or a combination thereof⁵.
- The reduction in issued capital reflects the share buyback and return of capital undertaken.

7.5.3 Further, in July 2019 Metgasco exercised its options in Byron resulting in Metgasco's interest in Byron increasing to 50,333,383 ordinary shares or a 7.14% interest. The options were exercised at 25 cents per share at a cost of \$2.5 million. Metgasco funded this through its cash reserves and realization of yield investments which we have assumed comprises the bonds⁵.

7.5.4 Having regard to the above, we estimate the material assets and liabilities of Metgasco at 31 July 2019 to comprise primarily:

- cash of \$0.7 million⁶;
- exploration tenements;
- 7.14% interest in Byron; and
- obligation to pay Byron \$1.75 million.

⁵ Metgasco Annual Report 2019

⁶ Cash \$1.8m plus bonds estimated to be sold at \$1.4m less \$2.5m for exercise of options

7.6 Operating performance

7.6.1 Summarised below are Metgasco's income statements for the financial years ended 30 June 2017 to 30 June 2019.

Table 15

Income Statement	Audited 30 June 2017 \$'000	Audited 30 June 2018 \$'000	Audited 30 June 2019 \$'000
Interest Income	831	1,017	378
Other Income			
- Gain on disposal of assets	15	21	-
- Unwinding and other finance income on convertible note	170	936	-
- Other miscellaneous income	226	43	244
- Gain on fair value movement of derivative asset	-	1,281	-
Total Income	1,242	3,298	622
Expenses:			
- Administration costs	(1,290)	(1,114)	(1,046)
- Investor relations	(140)	(216)	(131)
- Consulting fees	(255)	(199)	(221)
- Depreciation	-	(2)	(4)
- Impairment of capitalised exploration	-	(684)	(10,240)
- Loss on fair value movement of exchange traded bonds	-	(62)	-
- Unrealised loss on fair value movement of long term investments	-	-	(1,627)
- Realised loss on sale of long-term investments	-	-	(450)
- Loss on fair value movement of derivative asset	(612)	-	(1,126)
Profit/(Loss) before income tax expense	(1,055)	1,021	(14,223)
Income tax expense	-	-	-
Profit/(Loss) after income tax	(1,055)	1,021	(14,223)
Gain on fair value of movement of investments	-	10,801	2
Total comprehensive profit/(loss) for the period	(1,055)	11,822	(14,221)

Source: Metgasco Annual Report 2018 and 2019

7.6.2 Metgasco's profit and loss is consistent with an oil and gas exploration company, not yet in production. The main movements reflect the changes in fair value of its investments and the impairment of exploration expenditure.

7.7 Cash flow statements

7.7.1 Summarised below are the statements of cash flows for the financial years ended 30 June 2017 to 30 June 2019.

Table 16

Cash Flows	Audited 30 June 2017 \$'000	Audited 30 June 2018 \$'000	Audited 30 June 2019 \$'000
Cash flows from operating activities			
Payments to suppliers and employees inclusive of GST	(1,797)	(1,412)	(1,558)
Interest and other income received	1,452	1,262	553
Finance costs paid	(12)	(2)	-
Net cash used in operating activities	(357)	(152)	(1,005)
Cash flows from investing activities			
Expenditure on exploration, evaluation and decommissioning	(121)	(1,098)	(9,253)
(Purchase)/Sale of investments	10,907	(4,831)	2,405
Security bond (advanced)/received	(24)	-	11
(Issue)/Repayment secured convertible note facility	(8,000)	3,000	3,000
Proceeds on disposal of property, plant and equipment	15	-	-
Purchase of property, plant and equipment	(3)	(8)	(1)
Net cash from/(used) in investing activities	2,774	(2,937)	(3,838)
Cash flows from financing activities			
Share buyback	-	(330)	(132)
Return of capital	(9,962)	-	-
Net cash from/(used) in financing activities	(9,962)	(330)	(132)
Net increase/(decrease) in cash and cash equivalents	(7,545)	(3,419)	(4,975)
Cash and cash equivalents at the beginning of the financial year	17,742	10,197	6,778
Cash and cash equivalents at the end of the financial year	10,197	6,778	1,803

Source: Metgasco Annual Report 2018 and 2019.

7.7.2 Metgasco's cash flows indicate that the company has utilized its significant cash holdings to primarily fund its investment in Byron, its exploration expenditure and to fund the return of capital and share buybacks.

7.7.3 As at 30 June 2019 the company's cash holdings had reduced to approximately \$1.8 million. Since then it is estimated that the holdings have reduced to \$0.7 million following the exercise of the Byron options.

8. Valuation Methodology

8.1 Value definition

8.1.1 PKF Corporate's valuation of the equity in Melbana and in Metgasco is on the basis of 'fair market value', defined as:

'the price that could be realized in an open market over a reasonable period of time given the current market conditions and currently available information, assuming that potential buyers have full information, in a transaction between a willing but not anxious seller and a willing but not anxious buyer acting at arm's length'.

8.2 Valuation methodologies

8.2.1 In selecting appropriate valuation methodologies, RG111.69 states that it is generally appropriate for an expert to consider using the following methodologies:

- the quoted price for listed securities, when there is a liquid and active market and allowing for the fact that the quoted price may not reflect their value, should 100% of the securities be available for sale;
- capitalisation of future maintainable earnings;
- net present value of future cash flows;
- asset based methods; and
- any recent genuine offers received by the company.

8.3 Share price history

8.3.1 The share price history valuation methodology values a company based on the past trading in its shares. We normally analyse the share prices up to a date immediately prior to the date when a takeover, merger or other significant transaction is announced to remove any price speculation or price escalations that may have occurred subsequent to the announcement of the Proposed Transaction. There is no premium for control incorporated within such pricing and the pricing may also be impacted by the level of liquidity in the particular stock. Where the shares are illiquid, this is not considered an appropriate valuation methodology.

8.3.2 As illustrated in Section 6.4 the Melbana shares are relatively liquid and accordingly we have considered the share price as one of the valuation methodologies. As illustrated in Section 7.4, the Metgasco shares are less liquid. Although we have still considered the share price as one of the valuation methodologies in respect of Metgasco, the limited market for their shares means that this methodology may be less reliable as a primary basis of valuation upon which to form our conclusion.

8.4 Capitalisation of future maintainable earnings

8.4.1 Capitalisation of earnings method involves capitalising the earnings of a business at a multiple which reflects the risks of the business and its ability to earn future profits. There are different definitions of earnings to which a multiple can be applied. The traditional method is to use net profit after tax. Another common method is to use Earnings Before Interest and Tax, or EBIT. One advantage of using EBIT is that it enables a valuation to be determined which is independent of the financing and tax structure of the business. Different owners of the same business may have different funding strategies and these strategies should not alter the fundamental value of the business.

8.4.2 As both companies are in the exploration stage and have not generated any earnings from operations historically, we do not consider this an appropriate methodology to value the equity in either entity.

8.5 Net present value of future cash flows

- 8.5.1 An analysis of the net present value of the projected cash flows of a business and/or asset (or discounted cash flow technique) is based on the premise that the value of the business and/or asset is the net present value of its future cash flows. This methodology requires an analysis of future cash flows, the capital structure and costs of capital and an assessment of the residual value of the business and/or asset remaining at the end of the forecast period.
- 8.5.2 As the Proposed Transaction relates to exploration permits that are at an exploration stage, and, as neither company has prepared any long-term cash flow projections, we do not consider this an appropriate methodology to value the equity in either entity.

8.6 Asset based methods

- 8.6.1 This methodology is based on the realisable value of a company's identifiable net assets. Asset based valuation methodologies include:

(a) Net assets on a going concern basis

This valuation methodology involves deriving the value of a company by reference to the value of its assets on a going concern basis. This methodology is likely to be appropriate for a company whose value derives mainly from the underlying value of its assets rather than its earnings, such as property holding companies and investment businesses that periodically revalue their assets to market. The net assets on a going concern basis method estimates the market values of the net assets of a company but does not take account of realization costs.

We consider this methodology to be applicable to a valuation of the equity in both Melbana and Metgasco.

(b) Orderly realisation of assets

The orderly realisation of assets method estimates the fair market value by determining the amount that would be distributed to shareholders, after payment of all liabilities including realisation costs and taxation charges that arise, assuming the company is wound up in an orderly manner.

As it is not the intention of Melbana or Metgasco to realise their assets, we do not consider that an orderly realisation of these assets is an appropriate valuation methodology to use to value the equity.

(c) Liquidation of assets

The liquidation method is similar to the orderly realisation of assets method except the liquidation method assumes that the assets are sold in a short time frame.

We consider that this methodology is an inappropriate valuation methodology to use as Melbana and Metgasco have existing cash resources or liquid investments, support from shareholders and farmout agreements to advance exploration activities.

8.7 Genuine Offers

- 8.7.1 We have been advised by Melbana that it has not received any genuine offers to acquire the assets or shares nor are we aware of any reason why an offer would be initiated at this time.

8.8 Conclusion

8.8.1 Having regard to the above, we have considered both the net assets on a going concern basis and the share price methodology in our consideration of value. As noted above and in Section 6.4 and 7.4 of our report we have determined that the Melbana shares are liquid whilst the Metgasco shares are not. Nevertheless, as both Melbana and Metgasco are listed we have considered the share price in our assessment of value in respect of both. Accordingly, as outlined below in our report we have adopted the net assets on a going concern basis as the primary methodology to value the equity in Metgasco and have adopted the share price as a test of reasonableness. Conversely in respect of Melbana given there is a liquid market in the shares, we have adopted the share price as the primary valuation methodology.

9. Valuation of Melbana

9.1 Net Assets on a Going Concern Basis

9.1.1 In adopting this approach, we have had regard to the balance sheet of Melbana as at 30 June 2019 and adjusted the book values of the assets as follows:

- Exploration assets – as discussed previously, we engaged FEC to assess the value of Melbana's exploration assets. A full copy of FEC's report is set out as Attachment 1 to this report. FEC have valued the assets as follows:

Table 17

Permit	Location	Interest	Low \$'000	High \$'000
WA-488-P (Beehive)	Australia	100%	825	2,060
Block 9 PSC	Cuba	100%	2,600	6,492
Santa Cruz IOR PSC	Cuba	100%	127	316
Total			3,552	8,868

Source: FEC independent technical valuation report

We have adjusted the balance sheet to incorporate the above value range.

- Other assets and liabilities – we have adopted the book value of all other assets and liabilities as being reflective of market value.

9.1.2 Adopting the above values, we estimate the value of the equity in Melbana on a net asset basis to be as follows:

Table 18

Valuation of Equity	Low	High
Net assets at book value \$'000	7,853	7,853
Book value of exploration assets \$'000	(4,842)	(4,842)
Independent valuation of exploration assets \$'000	3,552	8,868
Value of equity \$'000	6,563	11,879
Number of ordinary shares on issue	1,878,090,864	1,878,090,864
Value of ordinary shares \$	0.0035	0.0063

Source: PKF Corporate

9.1.3 Based on our analysis above, we estimate the value of the equity in Melbana on a net asset basis to be within the range of \$0.0035 to \$0.0063 (or 0.35 cents to 0.63 cents) on a control basis.

9.2 Share Price

9.2.1 Based on our analysis of Melbana shares at Section 6.4 we note that in the nine month period to the initial announcement date approximately half the shares on issue were traded. We have determined that a liquid market in Melbana shares exists. We further note that in the 30 days prior to the announcement of the transaction 6.59% of Melbana's shares were traded. These trades have occurred within a range of 1 cent to 1.2 cents with a VWAP of 1.1 cents. Based on this we have estimated the value of a Melbana share to be within the range of 1 cent to 1.1 cents on a minority basis.

9.3 Conclusion

9.3.1 Based on our analysis above we note that there is a significant variance between the assessment of value between the two methodologies considered. We note that two of the major exploration assets of Melbana are located in Cuba. As limited local trading and valuation information and evidence regarding the value of these assets is available we have considered the net assets on a going concern basis as a less reliable method upon which to determine the value of Melbana. As there is a liquid market in the Melbana shares, we have adopted the share price as the primary valuation methodology and estimated the value of a Melbana share to be within the range of 1 cent to 1.1 cents on a minority basis.

10. Valuation of Metgasco

10.1 Net Assets on a Going Concern Basis

10.1.1 In adopting this approach, we have had regard to the balance sheet of Metgasco as at 30 June 2019 and made adjustments to reflect the disclosures in the annual report as to subsequent events. as follows:

Table 19

Value of Net Assets on a Going Concern Basis	Book Value 30 June 2019 \$'000	Current Low Value \$'000	Current High Value \$'000
Assets			
Cash and cash equivalents	1,803	700	700
Investment in traded bonds	1,394	-	-
Trade and other receivables	122	122	122
Exploration and evaluation expenditure			
- Australia	1,298	1,332	3,391
- USA	-	418	1,043
Plant and equipment	6	6	6
Other receivables	24	24	24
Investment in listed securities	11,697	16,610	18,120
Financial derivative assets	422	-	-
Total Assets	16,766	19,212	23,406
Current Liabilities			
Trade and other payables	1,883	1,883	1,883
Provisions	22	22	22
Total Liabilities	1,905	1,905	1,905
Net Assets	14,861	17,307	21,501

10.1.2 In arriving at the above values, we assumed the following:

- Cash – post 30 June 2019, the traded bonds were sold and together with the cash were used to pay for the exercise of the options in Byron at a cost of \$2.5 million. We have assumed that the bonds were sold for \$1.4 million and that the cash balance post exercise of the options is \$0.7 million.
- Investment in traded bonds – we have assumed that these were all sold to fund the exercise of the options.
- Exploration assets – as discussed previously, we engaged FEC to assess the value of Metgasco's exploration assets. A full copy of FEC's report is set out as Attachment 2 to this report. FEC have valued the assets as follows:

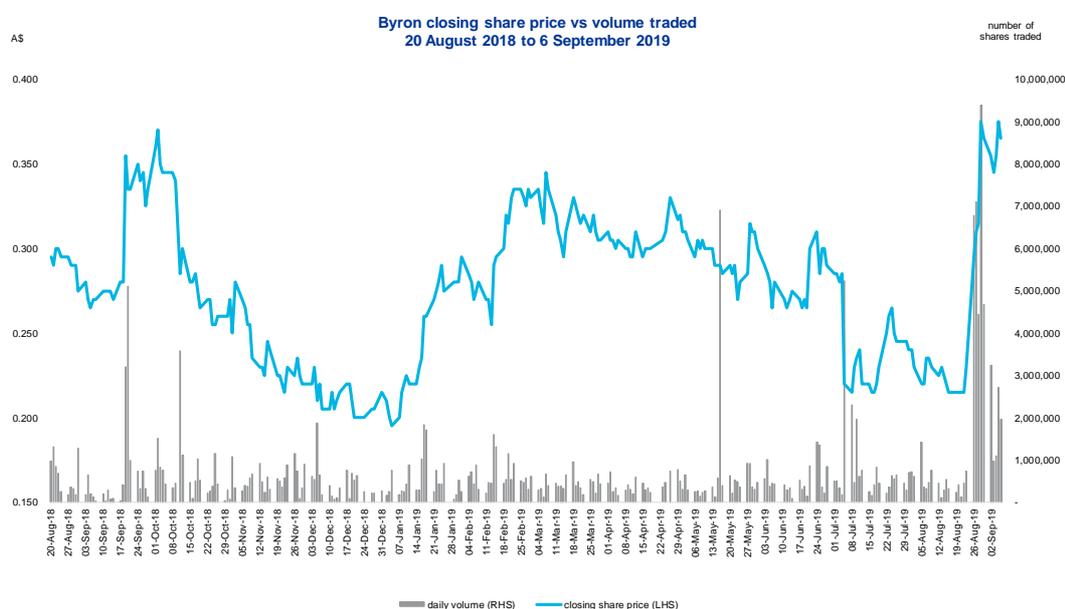
Table 20

Permit	Location	Interest	Low \$'000	High \$'000
ATP2020	Cooper – Eromanga Basin	100%	936	2,337
ATP2021	Cooper – Eromanga Basin	25%	269	738
PL237	Cooper – Eromanga Basin	20%	127	316
SM74	Gulf of Mexico	30%	418	1,043
Total			1,750	4,434

Source: FEC independent technical valuation report

- Investment in Byron – Metgasco currently has 50,333,383 shares in Byron, representing a 7.14% interest. The diagram below shows the share price and volume of shares sold in Byron over the period to 6 September 2019:

Graph 3



The trading in Byron's shares up to 6 September 2019 is summarised in the following table:

Table 21

Recent Trading	Low	High	VWAP	Volume	Proportion of shares traded
5 days to 6 September 2019	\$0.340	\$0.380	\$0.361	9,990,427	2.62%
30 days to 6 September 2019	\$0.210	\$0.390	\$0.328	47,611,522	12.47%
90 days to 6 September 2019	\$0.210	\$0.390	\$0.297	77,486,521	20.29%
6 months to 6 September 2019	\$0.210	\$0.390	\$0.298	111,557,538	29.22%
9 months to 6 September 2019	\$0.195	\$0.390	\$0.292	142,370,956	37.29%

In considering the value of this investment, we have had regard to the following:

- Metgasco exercised its options in Byron in July 2019 at a price of 25 cents per share.
- Metgasco sold 6 million Byron shares at a price of 28 cents per share in May 2019.
- Over the 30 days to 5 September 2019 the shares traded at a VWAP of 32.8 cents and in the last five days the shares traded at a VWAP of 36.1 cents. The recent increase in price reflects the announcement on 26 August 2019 of hydrocarbons having been encountered in the Byron operated SM58 011 (SM58) well which the company expects will lead to the commercial development of SM58.
- The last broker report prepared in April 2019 indicated a target price of 42 cents.
- Metgasco is the largest shareholder in Byron and the shares in Byron are moderately liquid.

Having regard to the above, and particularly the volume of shares traded more recently, we have adopted a range of 33 cents to 36 cents. This ascribes a value to Metgasco's interest in the range of \$16.6 million to \$18.1 million.

- Other assets and liabilities – we have adopted the book value of all other assets and liabilities as being reflective of market value. We have not included any tax on the net uplift in value of assets given that the company has sufficient tax losses.

10.1.3 Adopting the above values, we estimate the value of the equity in Metgasco on an asset basis to be as follows:

Table 22

Valuation of Equity	Low	High
Value of equity \$'000	17,307	21,501
Number of ordinary shares on issue	390,601,434	390,601,434
Value of ordinary shares \$	0.044	0.055

Source: PKF Corporate

10.1.4 Based on our analysis above, we estimate the value of the equity in Metgasco on a net asset basis to be within the range of 4.4 cents to 5.5 cents on a control basis.

10.2 Share Price

10.2.1 Based on our analysis of Metgasco shares at Section 7.4 we note that in the nine month period to the initial announcement date approximately 27 million shares were traded, representing only 10.75% of the total issued capital indicating that the shares in Metgasco lack liquidity. We further note that in the 30 days prior to the announcement of the transaction only 2.39% of Metgasco shares were traded. These trades have occurred within a range of 2.7 cents to 5.3 cents with a VWAP of 3.9 cents. Based on this analysis we have estimated the value of a Metgasco share to be within the range of 3.9 cents to 5.3 cents on a minority basis. However due to the lack of liquidity in the shares of Metgasco we consider the share price to be a less reliable method upon which to base our valuation of Metgasco.

10.3 Conclusion

10.3.1 Our analysis shows that the share price is broadly consistent with the net asset value however due to the lack of liquidity in the trading of Metgasco shares we have elected to rely on the net asset value. Accordingly, we have estimated the value of a Metgasco share to be within the range of 4.4 cents to 5.5 cents on a control basis.

11. Assessment as to Fairness

11.1 The Proposed Transaction is considered 'fair' if the value of the Metgasco shares to be acquired from Mr Purcell is equal to or greater than the value of the Melbana shares to be issued to Mr Purcell.

11.2 At Section 10.3 we have assessed the value of a Metgasco share to be within the range of 4.4 cents to 5.5 cents on a control basis. We have adopted a control value on the basis that the Proposed Transaction will only proceed if at least 50.1% of the shareholders accept the Offer and the Offer will only proceed if the Proposed Transaction is approved by the non-associated shareholders. In such circumstances, we consider that the interest being acquired from Mr Purcell is part of a controlling interest and therefore the interest should be valued as such. As Mr Purcell holds 76,516,908 Metgasco shares, the value of the shares to be acquired from Mr Purcell can be estimated as follows:

Table 23

Assessment of the Metgasco Shares to be Acquired	Low	High
Number of shares in Metgasco held by Mr Purcell	76,516,908	76,516,908
Value of an ordinary share in Metgasco \$	0.044	0.055
Value of Mr Purcell's interest in Metgasco \$'000	3,367	4,208

Source: PKF Corporate

11.3 As the Melbana shares to be issued to Mr Purcell in exchange for his Metgasco shares will be issued after the acquisition of Metgasco, we have considered the value of the merged entity shares on a minority basis in assessing the value of the consideration that Mr Purcell is to receive.

11.4 At Section 9.3 we assessed the value of a Melbana share on a minority basis to be within the range of 1 cent to 1.1 cent. As Melbana has 1,878,090,864 shares on issue, the minority value of Melbana can be determined as follows:

Table 24

Valuation of Melbana Equity on Minority Basis	Low	High
Market value of Melbana shares \$	0.010	0.011
Number of ordinary shares on issue	1,878,090,864	1,878,090,864
Minority value of Melbana \$'000	18,781	20,659

Source: PKF Corporate

11.5 At Section 10.1 we assessed the value the equity in Metgasco on a control basis to be within the range of \$17.307 million to \$21.501 million. In order to determine the value of Metgasco on a minority basis we need to apply an appropriate minority discount. A minority discount is the reciprocal of a control premium. Whilst there are no ready statistics of minority discounts, there is research around control premia derived from past transactions. In assessing a typical control premium, we have relied on the relevant matrix from the 'RSM Control Premium Study – 2017':

Table 25

Analysis by	Criteria	Control Premium 20 days pre-announcement	
		Average	Median
All transactions		34.50%	27.00%
Industry	Energy	37.60%	41.10%
Consideration type	Cash	36.90%	29.60%
Toehold prior to the announcement		29.85%	22.81%
Size	<=25m	46.80%	34.20%

11.6 We note that the above research sets out statistical information about control premia paid and, as such, includes an unknown uplift on account of potential acquisition synergy benefits. We are of the opinion that the control premium for a transaction that did not include significant synergistic benefits and involved scrip consideration would be lower than those in the table above. Accordingly we have assumed that the control premium that would be applicable to Metgasco would be in the range of 23% to 28%, which derives a minority discount in the range of 18.75% to 21.75%.

11.7 This derives a value for the equity in Metgasco on a minority basis as follows:

Table 26

Valuation of Metgasco Equity on Minority Basis	Low	High
Market value of Metgasco equity on control basis \$'000	17,307	21,501
Minority Discount	21.75%	18.75%
Value of Metgasco equity on a minority basis \$'000	13,543	17,469

Source: PKF Corporate

11.8 The theoretical value of the merged entity on a minority basis (without factoring in any increase in value as a result of the increased size of the merged entity or any cost benefits of the merger), can be determined as follows:

Table 27

Valuation of Equity of Merged Entity on Minority Basis	Low	High
Minority value of Melbana (Table 24) \$'000	18,781	20,659
Minority value of Metgasco (Table 26) \$'000	13,543	17,469
Minority value of Merged Entity \$'000	32,324	38,128

Source: PKF Corporate

11.9 Melbana is offering the Metgasco shareholders 4 shares in Melbana for every 1 Metgasco share held. The number of Melbana shares on issue following the acquisition of Metgasco can therefore be determined as follows:

Table 28

Merged Entity Share Structure	Number
Metgasco shares currently on issue	390,601,434
Number of Melbana shares to be issued for each Metgasco share	4
Melbana shares to be issued to Metgasco shareholders	1,562,405,736
Melbana shares currently on issue	1,878,090,864
Melbana shares post acquisition of Metgasco	3,440,496,600

Source: PKF Corporate

11.10 In Table 27 we assessed the minority value of the merged entity and in Table 28 we calculated the number of shares that the merged entity will have on issue. Using this information the value of the Melbana shares on a minority basis after the acquisition of Metgasco can be estimated as follows:

Table 29

Value per Share of Merged Entity	Low	High
Minority value of Merged Entity \$'000 (Table 27)	32,324	38,128
Number of Melbana shares on issue post acquisition of Metgasco (Table 28)	3,440,496,600	3,440,496,600
Minority value per share \$	0.009	0.011

Source: PKF Corporate

11.11 The value of the Melbana shares to be issued to Mr Purcell can therefore be assessed as follows:

Table 30

Assessment of the Value of the Consideration	Low	High
Number of shares in Metgasco held by Mr Purcell	76,516,908	76,516,908
Number of Melbana shares to be issued to Mr Purcell (4 for 1)	306,067,632	306,067,632
Minority value per share (Table 29) \$	0.009	0.011
Value of Melbana shares to be issued to Mr Purcell \$'000	2,755	3,367

Source: PKF Corporate

11.12 In Table 23 we assessed the value of the Metgasco shares to be acquired from Mr Purcell to be in a range of \$3.367 million to \$4.208 million and in Table 30 we assessed the value of the Melbana shares to be issued to Mr Purcell to be in a range of \$2.755 million to \$3.367 million. As the value of the consideration is below the value range of the Metgasco shares being acquired from Mr Purcell, we are of the opinion that the Proposed Transaction is fair to the non-associated shareholders.

12. Assessment as to Reasonableness

12.1 In accordance with RG 111, a Proposed Transaction is reasonable if it is fair. As the Proposed Transaction is fair it is also reasonable.

12.2 We have also considered other advantages and disadvantages in assessing the reasonableness of the Proposed Transaction.

12.3 In particular, the Offer will only proceed if the Proposed Transaction is accepted. Therefore, if the Proposed Transaction is accepted and the Offer proceeds, then in our opinion the non-associated shareholders will have the benefit of the advantages associated with the Offer. These include the following:

- In the current environment in which access to capital for junior oil and gas companies is difficult, the Merged Group would benefit from combining their projects and financial resources to create a larger Australian oil and gas company that can accelerate unlocking the potential of each company's projects;
- The Merged Group would be able to share the fixed costs of running a listed public company across a larger asset base, therefore freeing up resources that could then be better applied towards making discoveries;
- The increased number of projects available to the Merged Group increases the probability of a successful outcome;
- The pipeline of drilling opportunities is expected to keep interest in the company high, and may lead to a well supported stock price, better trading volumes and a stronger position from which to attract and negotiate the best possible terms with potential partners;
- Melbana will gain access to Metgasco's Queensland exploration permits and may potentially participate in the East Coast Gas market in the event those assets are commercially developed; and
- The Merged Group will have a broader and more diverse shareholder base, with the attendant benefits of greater access to capital and potentially greater liquidity in shares.

12.4 The non-associated shareholders would however also be exposed to the disadvantages of the Offer. This is considered to comprise primarily a dilution of the non-associated shareholders' interests in Melbana.

12.5 Based on the above, we consider that the advantages of the Proposed Transaction outweigh the disadvantages of the Proposed Transaction, and for this reason, we consider that the Proposed Transaction is **reasonable** for the Non-Associated Shareholders of Melbana.

13. Conclusion

- 13.1 After considering the above matters, we have concluded that the Proposed Transaction is **fair** and **reasonable**.

14. Financial Services Guide

This Financial Services Guide provides information to assist retail and wholesale investors in making a decision as to their use of the general financial product advice included in the above report.

14.1 PKF Corporate

PKF Corporate holds Australian Financial Services Licence No. 222050, authorizing it to provide general financial product advice in respect of securities to retail and wholesale investors.

14.2 Financial Services Offered by PKF Corporate

PKF Corporate prepares reports commissioned by a company or other entity ("Entity"). The reports prepared by PKF Corporate are provided by the Entity to its members.

All reports prepared by PKF Corporate include a description of the circumstances of the engagement and of PKF Corporate's independence of the Entity commissioning the report and other parties to the transactions.

PKF Corporate does not accept instructions from retail investors. PKF Corporate provides no financial services directly to retail investors and receives no remuneration from retail investors for financial services. PKF Corporate does not provide any personal retail financial product advice directly to retail investors nor does it provide market-related advice to retail investors.

14.3 General Financial Product Advice

In the report, PKF Corporate provides general financial product advice. This advice does not take into account the personal objectives, financial situation or needs of individual retail investors.

Investors should consider the appropriateness of a report having regard to their own objectives, financial situation and needs before acting on the advice in a report. Where the advice relates to the acquisition or possible acquisition of a financial product, an investor should also obtain a product disclosure statement relating to the financial product and consider that statement before making any decision about whether to acquire the financial product.

14.4 Independence

At the date of this report, none of PKF Corporate, Mr Paul Lom or Mr Steven Perri have any interest in the outcome of the Proposed Transaction, nor any relationship with Melbana, Metgasco, M&A Advisory or any of their directors.

Drafts of this report were provided to and discussed with the management of Melbana and its advisers. Certain changes were made to factual statements in this report as a result of the reviews of the draft reports. There were no alterations to the methodology, valuations or conclusions that have been formed by PKF Corporate.

PKF Corporate and its related entities do not have any shareholding in or other relationship with Melbana that could reasonably be regarded as capable of affecting its ability to provide an unbiased opinion in relation to the Proposed Transaction.

PKF Corporate had no part in the formulation of the Proposed Transaction. Its only role has been the preparation of this report.

PKF Corporate considers itself to be independent in terms of Regulatory Guide 112 issued by ASIC on 30 March 2011.

14.5 Remuneration

PKF Corporate is entitled to receive a fee of approximately \$45,000 for the preparation of this report. With the exception of the above, PKF Corporate will not receive any other benefits, whether directly or indirectly, for or in connection with the making of this report.

14.6 Complaints Process

As the holder of an Australian Financial Complaints Authority, PKF Corporate is required to have suitable compensation arrangements in place. In order to satisfy this requirement PKF Corporate holds a professional indemnity insurance policy that is compliant with the requirements of Section 912B of the Act.

PKF Corporate is also required to have a system for handling complaints from persons to whom PKF Corporate provides financial services. All complaints must be in writing and sent to PKF Corporate at the above address.

PKF Corporate will make every effort to resolve a complaint within 30 days of receiving the complaint. If the complaint has not been satisfactorily dealt with, the complaint can be referred to the Financial Ombudsman Service Limited – GPO Box 3, Melbourne Vic 3000.

Yours faithfully

PKF Melbourne Corporate Pty Ltd



Paul Lom
Director



Steven Perri
Director

Sources of Information

The key documents we have relied upon in preparing this report are:

- Melbana 2018 Annual Report and 2019 Annual Report;
- Melbana draft resolution relating to the Proposed Transaction for the purpose of the Notice of Extraordinary General Meeting and Explanatory Memorandum;
- Melbana share register as at 23 August 2019;
- Melbana Appendix 3B;
- FEC Independent Technical Valuation Report dated 23 August 2019 in respect of Melbana's exploration interests;
- FEC Independent Technical Valuation Report dated 6 September 2019 in respect of Metgasco's exploration interests;
- Metgasco 2018 Annual Report and 2019 Annual Report;
- Metgasco Form 604 Corporations Act, Notice of change in interests of substantial holder;
- Research data from publicly accessible web sites in particular Melbana's and Metgasco's ASX announcements;
- Share price data for Melbana, Metgasco and Byron from CommSec; and
- Discussions with the management of Melbana.

Declarations, Qualifications and Consents

1. Declarations

This report has been prepared at the request of the Directors of Melbana pursuant to Chapter 10 of the ASX listing rules to accompany the notice of meeting of shareholders to approve the Proposed Transaction. It is not intended that this report should serve any purpose other than as an expression of our opinion as to whether or not the Proposed Transaction is fair and reasonable.

This report has also been prepared in accordance with the Accounting Professional and Ethical Standards Board professional standard APES 225 – Valuation Services.

The procedures that we performed and the enquiries that we made in the course of the preparation of this report do not include verification work nor constitute an audit in accordance with Australian Auditing Standards.

2. Qualifications

Mr Paul Lom, director of PKF Corporate, prepared this report. Mr Lom has been responsible for the preparation of expert reports and is involved in the provision of advice in respect of valuations, takeovers, capital reconstructions and reporting on all aspects thereof.

Mr Lom is a Fellow of Chartered Accountants Australia and New Zealand (CAANZ) and an Accredited Business Valuation Specialist (CA BV Specialist) with more than 40 years experience in the accounting profession. He was a partner of KPMG and Touche Ross between 1989 and 1996, specialising in audit. He has extensive experience in business acquisitions, business valuations and privatisations in Australia and Europe.

Mr Steven Perri, a director of PKF Corporate reviewed this report. Mr Perri is a Member of Chartered Accountants Australia and New Zealand (CAANZ) and an Accredited Business Valuation Specialist (CA BV Specialist).

3. Consent

PKF Corporate consents to the inclusion of this report in the form and context in which it is included in the Explanatory Memorandum.



23 August 2019

PKF Melbourne Corporate
L12, 440 Collins Street
Melbourne, Vic 3000

Attn: Mr Paul Lom

Dear Paul,

RE: Valuation of the Oil and Gas Assets of Melbana Energy

1.0. INTRODUCTION

In correspondence dated 6 August 2019, and after further discussions, PKF Melbourne Corporate (PKF) and Melbana Energy Limited (Melbana) requested that Fluid Energy Consultants (Fluid) prepare a Valuation Report of Melbana's petroleum exploration assets in Australia and Cuba. Melbana has made an offer to Metgasco Limited (Metgasco) to purchase Metgasco.

PKF has requested that Fluid determine a value for the exploration and production permits for Melbana's assets being WA-488-P, ACP50, ACP51 and Tassie Shoals Project in Australia and Block 9 and Santa Cruz oilfield project in Cuba.

Melbana is an energy company listed on the Australian Stock Exchange (ASX). Metgasco is also an energy company listed on the ASX.

2.0. SUMMARY

Fluid's fair market valuation of Melbana's exploration acreage is between **A\$3.552 million** and **A\$8.868 million**, with the middle or preferred value being **A\$5.613 million** as determined on 22 August 2019 (Table 1). The valuation does not include any other assets or liabilities that Melbana may or may not have. Valuation methodologies are outlined in Section 4.0.



Table 1: Estimated Exploration Acreage Valuation of Melbana’s Interests

Permit	Basin	Current Total Interests	Permit Surface Area (km ²)	Valuation Method	Exploration Value (A\$m)*	
					Low	High
WA-488-P	Petrel Sub-basin	100%	4,074	Farmin to permit	0.825	2.060
Cuba Block 9	North Cuba	100%	2,344	Back Costs	2.600	6.492
Cuba Santa Cruz	North Cuba	100% (once executed)	~20	Back Costs	0.127	0.316
AC/P50& AC/P51	Vulcan Sub-basin	Contingent cash payment OR 5% back-in right	N/A		0.000	0.000
Tassie Shoals	NWS	100%	N/A		0.000	0.000
TOTAL					3.552	8.868

Figures are subject to rounding

* \$Am = millions of Australian dollars.

Fluid has applied an exchange rate of A\$1 to US\$0.67.

Fair Market Value: Refer to Definition 1 in section 4.0 and the Valuation of Mineral and Petroleum Assets and Securities (VALMIN) Code, 2015. A number of valuation methods were investigated. Fluid prefers to use farm-in deals and sales to gauge value in exploration permits and only departs from this method on occasions where a better value can be determined by another method, or in the absence of relevant and recent farm-ins and sales.



3.0. ACREAGE ASSET REVIEW AND VALUATION

3.1. The Bonaparte Basin and Petrel Sub-basin

The Petrel Sub-Basin in the southern Bonaparte Basin was formed during Paleozoic northeast–southwest extension and contains a thick succession of Paleozoic and Mesozoic sediments. The Permian petroleum systems have charged numerous gas accumulations. There is an oil and gas-prone early Carboniferous petroleum system, with Bonaparte Formation (Langfield Group) source rocks, in the inboard part of the sub-basin. Gas fields include Petrel, Tern, Blacktip and Frigate. Oil fields include Turtle and Barnett.

3.1.1. WA-488

3.1.1.1. WA-488 Interests

WA-488-P was granted to Melbana in May 2013. Melbana currently has a 100% interest in the permit (Table 2) (Figure 1).

Table 2: WA-488 Interests

Company	Current Interest	After Farm-in
Melbana	100%	20%
Santos Limited and/or Total S.A.		80%
Total	100%	100%

3.1.1.2. WA-488 Government Work Program

The current commitment is for one exploration well in WA-488-P in the permit year ending 21 December 2020. A well in WA-488-P (not specifically to test Beehive) was indicatively costed at the time of permit award at A\$20 million. All prior period commitments have been completed in full.

3.1.1.3. WA-488 Farm-in Deal

In December 2017, Melbana announced that it had executed a seismic funding and farm-in option agreement with Total and Santos which provided 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 were 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 would fully fund the costs of all activities until completion of the first well in the WA-488-P permit. In the event of a commercial discovery, Melbana would repay carried funding from its share of cash flow from the Beehive field. Melbana would 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 safely and without incident, having been extended by approximately 100km² (about 16%) to provide coverage over a 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 cost of the seismic survey was around A\$6.08 million.

In December 2018 Melbana reached an agreement with Total and Santos to modify the commercial agreement between the parties to provide for Total and Santos to undertake preliminary well planning activities, to ensure the viability of drilling the Beehive-1 exploration well during the third Quarter of 2020, in case of option exercise. This included the drafting of an environment plan, well concept identification and commencement of rig selection activity.

The processed data from the Beehive 3D Seismic Survey was received and accepted on 3 April 2019, giving Santos and Total until 2 October 2019 to elect to drill the Beehive-1 well.

Santos recently advised they had completed an initial well-concept-select workshop in which they identified a provisional well design and progressed the drafting of an Environmental Plan, which is targeted for completion in Q3 2019. Rig selection activity is being considered by Santos as part of a broader rig contracting strategy.

In the absence of an actual well cost, Fluid has determined the value of the premium on this deal to be A\$0.065m/%, based upon A\$6.08 million for the 3D seismic and A\$20.00million indicative cost for the future well. This values a 100% interest in the permit at A\$6.5 million.

3.1.1.4. WA-488 Exploration History

The main activity has been the acquisition and later reprocessing of the Beehive 3D Seismic Survey at around A\$6.08 million.

3.1.1.5. WA-488 Prospectivity

The Beehive prospect is an interpreted Carboniferous aged reefal build-up located on top of a large Ordovician structure.

3.1.1.6. WA-488 Joint Venture Forward Program and Budget

The Forward Program is yet to be determined, though it is expected that the Beehive prospect will be drilled. Santos is currently reviewing its drilling schedule and will determine a cost for the drilling of the well if either or both Santos and Total take up the option to drill.

If neither Santos nor Total take up their option to drill the well, Melbana would own the recently acquired and processed 3D seismic data and seek a new farmin partner.

3.1.1.7. Estimated Value of Melbana's interest in WA-488

Fluid may consider an evaluation based upon expenditure for permit application and ongoing maintenance. The minimum value of a permit can be estimated to be A\$0.5m to A\$1.0 million for the application, grant and 4-year maintenance period carrying out only minimal work such as desktop studies and farmout.



Fluid has valued WA-488-P using the farmin deal in the permit, on the assumption that it will go through to completion. In the case that Santos and Total do not proceed it is felt that the valuation range calculated here would still be fair for a 100% holding, requiring restart of the farmout process.

A fair market exploration value of Melbana’s 20% (or 100% if not farmed out) interest in WA-488, using the minimum premium value estimates for the deal with Santos and Total (A\$0.065m/%) as the middle value, is assessed to be **A\$0.825 million to A\$2.060million**.

3.2. North Cuba Basin, Cuba

Sediments in Cuba were deposited from the Middle Jurassic to Cretaceous in stages corresponding to the development of a stable continental margin. Continental and lagoonal facies of Lower to Middle Jurassic age are present, containing large volumes of organic matter, mainly humic, deposited in a confined environment. The sediments include evaporites. The total organic carbon (TOC) measurements of these rocks can be greater than 3%, which is quite a high organic content. These rocks are overlain by Callovian to Turonian carbonates, deposited in a deep water, pelagic environment. TOCs average around 1.57% in these rocks. The organic matter tends to be sapropelic.

North-northeast movement of the Caribbean Plate commencing in the Campanian and continuing sporadically until the Eocene resulted in over-thrusting of the existing sedimentary sequences and the cessation of deposition.

Oil is sourced mainly from the Upper Jurassic to Aptian, with the sapropelic organic matter being dominant. Hydrocarbon traps are associated with asymmetric folded structures. Reservoir/seal pairs are found at several levels within the depositional sequence. The reservoir/seal pairs have been demonstrated by the production of oil and gas at a number of levels in the basin. Reservoirs appear to be a combination of primary and fracture porosity.

3.2.1. Block 9 - Cuba

3.2.1.1. Block 9 Interests

The Company has a 100% interest in the Block 9 PSC, covering an area of 2,344km² onshore in Cuba. Block 9 was awarded to the Company in 2015 for a 25-year term (Table 3, Figure 2).

Table 3: Block 9 Interests

Company	Current Interest	After Farm-in
Melbana	100%	
Total	100%	



3.2.1.2. Block 9 Government Work Program

Block 9 PSC has an 8.5-year exploration period divided into 4 sub periods. The minimum work program for:

- 1). sub-period 1 (Sept 2015 to March 2017 initially, but Melbana successfully sought an extension to Nov 2017) comprised studies and seismic reprocessing, which has been completed; and
- 2). sub-period 2 (Nov 2017 to Nov 2019) includes the drilling of one well.

The Company has an option to withdraw at the end of each sub-period. Shortly after entering each sub-period a bank guarantee is required for 50% of the approved firm budget for that sub-period. For the second sub-period, the amount of the bank guarantee is US\$2.275m. The bank guarantee is released once the minimum work program has been satisfied. The bank guarantee for sub-period 2 is not currently in place.

The Company has applied to Union Cuba-Petroleo (CUPET) to:

- 1). have the current sub-period 2 extended by one year to November 2020; and
- 2). for the requirement to post a bank guarantee waived for this (requested extended) sub-period.

The directors of Melbana have explained to Fluid that CUPET and the Minister for Mines and Energy have advised that the applications need to be approved by the Council of Ministers who are scheduled to next meet in early September 2019.

Fluid has not sought clarification from CUPET on either the likelihood of any grant of extension of the sub-period and of the grant of a waiver of the requirement to post a bank guarantee.

3.2.1.3. Previous Block 9 Farm-in Deal

In late 2018, the Company entered into a farmout agreement with a Chinese company, Anhui Modestinner Energy Co., Ltd. (AMEC), a wholly owned and guaranteed subsidiary of Anhui Guangda Mining Investment Co. Ltd., that required them to (amongst other things) fully fund the drilling of the first three (3) exploration wells in Block 9, provide any required bank guarantees and entirely fund all future activities and costs associated with Block 9 for the remainder of its 25 year term. The Company was to be left with a 12.5% interest in the profit oil and the right to recoup through the PSC its approximately US\$3.5M in back costs in the event of development. When successful, the company is permitted to use the money from produced oil to recover capital and operational expenditures, known as 'cost oil'. The remaining money is known as 'profit oil', and is split between the government and the company.

Melbana terminated this agreement in late April 2019 due to lack of progress by AMEC. Discussions with new potential farminees have commenced.

The Company's preferred two-well exploration programme has been costed at approximately US\$30million based on an international tender for rigs and services that was completed in 2018.

Since the AMEC deal was signed off and failed later, Fluid has determined the value of the premium on this deal, based upon three deep wells in the previous farmout, to be A\$0.096m/%. Based on this, 100% of the permit value would have been A\$9.600 million.



3.2.1.4. Block 9 Exploration History

No new surveys or wells have been undertaken at this time. Melbana has undertaken reprocessing of existing seismic, gravity and magnetic data sets as well as re-sampling of palaeontology in existing wells in Block 9, and has incorporated this into new prospect mapping.

3.2.1.5. Block 9 Prospectivity

Leads and prospects are shown on Figure 2.

3.2.1.6. Block 9 Joint Venture Forward Program and Budget

The Forward Program will include drilling of one or more wells if Melbana can attract a new farmin partner.

3.2.1.7. Block 9 Past Costs

Melbana has past exploration costs of approximately A\$4.109 million. These costs have been accepted by CUPET to be part of the cost recovery pool in the PSC.

3.2.1.8. Estimated Value of Melbana's Interest in Block 9

The farmin deal, which later was terminated by Melbana, if set as the middle value would have valued Melbana's 12.5% interest at A\$0.757m to A\$1.895m and 100% interest at A\$9.6million.

We note that if a farminee does not eventuate and no further extension proves possible then the Company will, at that time, need to re-consider whether to proceed to drill one well. Therefore, Melbana cannot fully commit to the well at this time. If a shallow well was to be drilled by Melbana, this would cost around A\$7.1 million.

As noted before, the minimum value of a permit can be estimated to be A\$0.5m to A\$1.0 million.

Material past costs amount to A\$4.109 million. This is based on the exploration cost recovery amount agreed by CUPET.

A fair market exploration value of Melbana's 100% interest in Block 9 is assessed, using the past costs as middle value to be **A\$2.600 million to A\$6.492 million.**

3.2.2. Cuba - Santa Cruz IOR

3.2.2.1. Santa Cruz IOR Interest

In March 2018, the Company was granted an exclusive right to assess potential for the enhancement of oil production from the Santa Cruz oil field (Table 4, Figure 3). The Incremental Oil Recovery (IOR) Production Sharing Contract (PSC) is not yet in existence and is awaiting formal ratification by the Cuban Council of Ministers.



Table 4: Santa Cruz IOR Future Interests

Company	Future Interest	Profit Oil Share
Melbana	100%	50%
CUPET		50%
Total	100%	

3.2.2.2. Santa Cruz IOR PSC Government Work Program

In December 2018, the Company entered into a binding agreement for an IOR PSC with CUPET. The work commitments are split into multiple phases, with an initial study period of desk-based technical work followed by an implementation phase. The initial study period phase of maximum of 8 months is complete.

Melbana may elect to proceed to the next implementation phase, which includes a minimum program of two side-track wells from existing well bores to new geological targets, once the PSC is formally ratified.

Whilst awaiting formal ratification, the Company and CUPET have identified some commercial issues with the previous agreement that need amending. Proposals for addressing these issues have been discussed and amendments to the previous binding agreement may be necessary, which, therefore, may impact the scope, timing and nature of the work commitments in the IOR PSC. Thus, the agreement is not yet signed or ratified.

Fluid has not sought clarification from CUPET of the current situation or the likelihood of ratification.

3.2.2.3. Santa Cruz Farm-in Deal

There are no farmin deals at this time.

3.2.2.4. Santa Cruz Exploration History

The PSC has not yet been granted.

3.2.2.5. Santa Cruz Prospectivity

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 Energy’s existing Block 9.

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 20km² 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 per day (approximately 580,000 barrels of oil per year) and the field had produced 7.4 million barrels from 18 wells. The field is operated by CUPET.

3.2.2.6. Santa Cruz Joint Venture Forward Program and Budget

The forward program and budget has not been determined at this time. It will involve the two side track wells in the government program.

3.2.2.7. Santa Cruz Past Costs

The Company acquired data sets and engaged Canadian consultants familiar with IOR operations in Cuba to assist its internal technical team in assessing the opportunity. Approximately A\$200,000 was expended on this exercise, not including any internal cost allocation.

3.2.2.8. Estimated Value of Melbana's Interest in Santa Cruz

The value of Melbana's the proposed PSC is based upon the past costs and the likely positive outcome.

A fair market value of Melbana's 100% interest in the future Santa Cruz PSC is assessed, using the past costs as the mid value, to be **A\$0.127 million to A\$0.316 million.**

Fluid believes that any future valuation once the PSC is granted should review the incremental oil potential in this discovered oil field that is in production. Decline curve analysis, prediction and economic modelling will be required.



3.3. Vulcan Sub-basin North West Shelf

The permits AC/P50 and P51 are located off the North West coast of Western Australia and within the Vulcan Sub-Basin (Figure 4). In this area, the Late Jurassic oil prone source rock presence is demonstrated and oil discoveries have been made nearby at the Montara and Talbot oil fields.

The Vulcan Sub-Basin is a northeast oriented Mesozoic extensional depocenter in the northern part of the Browse Basin and is comprised of a complex series of horsts, grabens and terraces. It is a proven Jurassic hydrocarbon province containing depleted oil fields, a producing oil field, and oil and gas discoveries that are being considered for development. Upper Jurassic delta/submarine fan and Upper Cretaceous submarine fan sandstones are proven exploration targets. Structural traps are sealed by Upper Jurassic to Lower Cretaceous claystones.

Source rocks in the Vulcan Sub-Basin include the oil-prone, transgressive marine shales of the Jurassic Oxfordian Lower Vulcan formation and the more gas-prone, non-marine shales of the Early-Mid Jurassic Plover formation.

3.3.1. AC/P50 and AC/P51 Combined

3.3.1.1. AC/P50 and AC/P51 Interests

Melbana sold its 55% interest in the permits to joint venture partner Rouge Rock Pty Ltd on 22 August 2018. It no longer holds an interest in the permits.

3.3.1.2. Ongoing Exposure to Exploration in AC/P50 and AC/P51

The company retains exposure to further activity in the permits.

The divestment agreements with Rouge Rock are structured such that if Rouge Rock enters into an arrangement in the future for cash, Melbana earns 10% of the cash benefit received by Rouge Rock. If Rouge Rock enters into an agreement 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 and risks associated with the drilling process.

Melbana is not responsible for any costs of the permit from the date of divestment.

3.3.1.3. Estimated Value of Melbana's Deal in AC/P50 and AC/P51

The permits have been sold and any future potential to realise additional value is considered to be very unlikely and only in the distant future.

Fluid estimates that the value of Melbana's deal in AC/P50 and AC/P51 has no fair market value at this time.



3.3.2. Tassie Shoal Projects

Melbana's Tassie Shoal Methanol Project is a plan to use the high CO₂ gas fields in the northern Bonaparte Basin as feedstock to manufacture methanol, which requires carbon dioxide in the gas stream. There are a number of discovered high CO₂ gas fields in the area, including Evans Shoal, Barossa, Caldita, Blackwood and Heron.

In addition, Melbana has plans for an LNG project on Tassie Shoal. This concept offers a commercialisation path to LNG for any of the remote gas resources in the region and is a direct low-cost alternative to Floating LNG (FLNG) or onshore facilities.

Tassie Shoal is an area of shallow water near these stranded resources on which Melbana has suggested up to two methanol plants and one LNG plant could be constructed.

MEO Australia Limited, a precursor company to Melbana, received environmental approval for the Tassie Shoal Projects in 2002. This approval is valid until 2052. The project has been granted Major Project Facilitation status and this was renewed in 2012.

However, Melbana holds no interests in any of the gas fields in question. There are no immediate plans to seek investment for or construct the plant as forward plans are subject to gas supply negotiations.

Fluid considers it likely that, if the owners of the major gas resources in the area decided to build a methanol plant, they would consider whether do their own research and permitting either alone or as a consortium of potential major producers and not use the Melbana concepts or approvals.

Any attempt by regional producers to build a similar concept methanol plant offshore in the region will require a suitable shallow water location to be identified, environmental studies to be completed and an environmental permit obtained. The benefit of such an approach when there is an approval in place would have to be considered by the producers at the time.

3.3.1. Estimated Value of Melbana's Deal in Tassie Shoal

Any move towards developing these fields would be unlikely to occur for many years. In the absence of any asset ownership, Fluid considers that the Tassie Shoals project has no fair market value at this time.



4.0. VALUATION METHODS

The principles conveyed in the VALMIN Code 2015 and in the Australian Securities and Investment Commission (ASIC) Regulatory Guide 111 and 112 have been applied by Fluid. Reserve and Resource concepts follow the definitions as laid down by the Society of Petroleum Engineers (SPE) Inc. Petroleum Resources Management System Project Resource Management System (SPE PRMS, 2011).

There are several methods that can be used to estimate the fair market value of exploration and production assets. These include and are not limited to the methods described below, which are:

- Production and reserve information leading to cash flow analysis – present value (NPV);
- Production estimates and cash flow analysis (NPV) based on current prospects (undrilled) and incorporating expected chances of success (COS) – expected monetary value (EMV); and
- Recent farm-in Actual Costs (value of work to be undertaken) and premiums or promotes (amounts above the Actual Cost of the work) paid in the permit or similar nearby permits; and Estimated Actual Cost of committed work programs (deal between permit holder and the governing authority) and operator budgets.

EMV valuation is not applied by Fluid to exploration assets as it is unreliable and unlikely to be accepted by stock exchanges. A market analysis is required for exploration assets.

Fluid restricts its valuation range to a maximum of 2.5 times Low to High value in most cases. Wider ranges can sometimes be of little assistance to a client that is requesting a valuation.

a. NPV

For an oil or gas field a value can be determined from the proven (1P), proven plus probable (2P) and proven plus probable plus possible (3P) reserve. Calculation of the net present value (NPV) can be made on the reserve. Various combinations of reserve categories may be made to obtain the best valuation outcome, such as:

2P by itself; OR

1P plus 50% of the 2P; OR

$(0.9 \times \text{proved } (P1 \text{ or } 1P) + 0.5 \times \text{probable } (P2) + 0.1 \times \text{possible } (P3))$; OR

others.

The NPV is equivalent to the value of the producing asset. An NPV calculation based on only the P90 Resource Estimate can constitute a low-side value.

b. EMV

It is possible to value an exploration permit by firstly selecting the prospect (not a lead) most likely to be drilled in the near future. By calculating the NPV on the mean potential Resource case (Best estimate), and the chance of success (COS) for discovery on a Reserve (economic resource), the expected monetary value (EMV) can be determined. The mean potential Resource is often estimated as $0.3 \times P90 + 0.4 \times P50 + 0.3 \times P10$ (Swanson's Mean), or more accurately calculated using a Monte-Carlo simulator.



- EMV is calculated as:
(NPV x COS) – [exploration Actual Cost (eg: dry well) x (1 – COS)]

The EMV is equivalent to the value of the prospect.

However, EMV valuation is not applied by Fluid to exploration assets as it is unreliable and unlikely to be accepted by stock exchanges. A market analysis is required for exploration assets.

c. Purchase/Farm-in/Work Program

A reliable value of an exploration permit may be estimated based on farm-in/farm-out or purchase transactions within the permit or in adjacent permits with comparable geological prospectivity and operating constraints. This is achieved by comparing the acreage with similar acreage and the farm-in/farm-out deals that have been consummated, or are in progress in various permits. Also, the immediate, committed expenditure and/or the estimated Actual Cost of committed forward work programs on the permits provide additional information.

Fluid finds that reducing values to a common denominator, expressly value per percentage point of interest in an asset (A\$/1%), is a very helpful way to compare assets values.

Some methods are described in more detail below.

i. Purchase of Asset

An asset or part of it may be purchased by a company or Joint Venture (JV). Valuation is not difficult where cash transactions are involved. Where shares are involved either as the total payment or partial, the share component may be ignored or it may be necessary to make a separate value of the shares as a first step.

ii. Full Value and Premium within Farm-in Deals

The farminee (purchaser) agrees to fund a significant exploration program, which is often agreed to be a particular dollar value or, sometimes, capped at a particular dollar value. This work usually takes the form of either drilling and/or seismic, in return for the farmor (seller) transferring a significant equity to the farminee. Where the farminee pays the normal exploration Actual Costs of the work being done for the interest being acquired and then also covers some or all of the Actual Costs of the farmor. This extra Actual Cost is called a premium (or promote).

A value for the permit can be considered based on:

- 1) the total Actual Cost of the farm-in, that is the agreed Actual Cost of exploration plus the premium; or, more conservatively,
- 2) based on just the Actual Cost of the premium.

Both methods are valid.

In estimating the worth of a permit using the farm-in method, Fluid usually calculates the premium and sets that as the middle value with a range being determined as a 20-25% increase for the high value and a 20-25% decrease for a low value. At other times the premium value may be set as high or low depending on market conditions and other circumstances.

The full Actual Cost of the farm-in is not often applied by Fluid. Any combinations may be employed.



Fluid nearly always applies the premium value of a deal when determining exploration asset values.

iii. Committed Work Programs

In cases where a permit has a committed work program, one that cannot usually be varied, a third method can be considered where the value of the permit is the Actual Cost required to retain it and explore for hydrocarbons. This is similar to the total Actual Cost of a farm-in. The government can be considered to have farmed out the permit, so this is treated in a similar way to method ii(1), above.

d. Company Expenditure

A company or Joint Venture (JV) has often expended money on exploration of a permit. These back costs, as they are often called, can be viewed as an investment in the asset, which can then form part of a valuation.

e. Company Forward Budgets

A company or JV will often have a budget for the expenditure in any particular year. This would usually have Board approval. The forward approved budget that applies to the asset being valued may be used to assist with the valuation.

5.0. STATEMENTS

5.1. Limitations

Fluid has primarily relied on data supplied by Melbana and on company websites. Other references were compiled and written by various industry and government bodies, as well as consultants. The material was reviewed for its quality, accuracy and validity and was considered to be acceptable. In addition, Farm-in Agreements and other material pertinent to the permits was sourced from ASX releases, either in full or in part.

It is believed that the information received is reliable and there is no reason to believe that any material facts have been withheld. However, the level of review of the information provided to us does not amount to an audit, verification or due diligence, save to the extent necessary to satisfy ourselves that it is reasonable for us to rely on that information, and no warranty can be given that this review has analysed all of the matters which a more extensive examination might reveal. Fluid has not been required to check the status of Melbana's interests in the permits.

No warranty can be given that this review has analysed all of the matters, which an extensive examination might reveal.

This report or any reference thereto, may not be included in any other document or distributed for any other purpose without the prior written consent of Fluid to the purpose of such distribution and to the form and context in which the report or reference appears.

The opinions and statements in this report are made in good faith and in the belief that such opinions and statements are not misleading.



5.2. Declaration

5.2.1. Independence

This report is our genuine opinion and the product of our professional judgment. Fluid has not had and, at the date of this report, does not have any relationship with Melbana and Metgasco or their related bodies corporate that could be regarded as capable of affecting Fluid's ability to provide an unbiased opinion in relation to this report. In particular, neither the authors of this report, or any director or senior employee of Fluid involved in preparing the report has a substantial interest in, or is a substantial creditor of, or has any material financial interest in the transaction.

5.2.2. Fees and other benefits

A fee will be received for the preparation of this report. Payment of the fee is not contingent on any matter. Fluid will receive no other benefit for the preparation of the report. The author of this report has no pecuniary or other interest which could be regarded as capable of affecting his ability to provide an unbiased opinion in relation to this report.

5.2.3. Changes in facts or circumstances

Advance copies of this report were provided to the Melbana and minor changes were made as a consequence. There have been no material changes made to the report. The author confirms that there has been no material change of circumstances, or of available information that Fluid is aware of since this report was compiled, and Fluid is not aware of any significant matters arising from this evaluation that are not covered by this report, which might be of a material nature.

5.2.4. Currency of Report

This report has been prepared based on information available up to and including 23 August 2019. It has been prepared in accordance with the VALMIN Code applicable to the Valuation of Mineral and Petroleum Assets and Securities.

5.2.5. Consent for use

Fluid has given and not withdrawn its written consent to the inclusion of this report in the Independent Expert's Report as requested by PKF in the form and context in which this report appears.



6.0. Qualifications of the Authors

6.1. Wal Muir (Principal Geophysicist)

Wal Muir has a B.Sc. (Hons) degree from the University of New South Wales (1978) with a double major in Geology, a major in Pure Mathematics and Honours in Geophysics. He has a Master of Business Administration (1989) from the University of Queensland. Mr Muir has more than 40 years of experience in the petroleum exploration and production industry, both within Australia and overseas. Wal is a Distinguished Member of the Petroleum Exploration Society of Australia (PESA). He has filled all the executive positions at PESA Queensland, and was Federal President of PESA from 1997 until 1999. Mr Muir was an Adjunct Professor in Biogeosciences at the Queensland University of Technology from 2009 to 2013. An experienced and motivated petroleum professional, Mr Muir specialises in the accurate evaluation of the value and risks associated with exploration acreage. He has specific skills in seismic interpretation, risk analysis, play and prospect evaluation and team leadership. Prior to founding his own consulting group in 2001, Wal was the New Ventures and Exploration Manager for Petroz NL. He was CEO of Aleator Energy from 2012 to 2014.

6.2. Doug Barrenger (Director of Fluid and Principal Geologist)

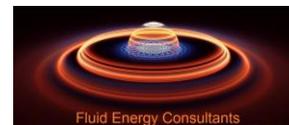
Doug Barrenger received a BSc degree (geology) from the Australian National University and a Graduate Diploma in computing Science from the Queensland University of Technology. He has more than 35 years of experience in the petroleum industry and has undertaken all facets of geological work, from wellsite and operations geology to prospect evaluation, risk analysis, reserve assessment, basin analysis, portfolio valuation and project management for both operated permits and new-venture roles and for development and exploration projects. He has worked on all Australian petroleum basins, including coal seam gas (CSG, CBM) and Shale Gas, and has overseas experience in SE Asia and Europe as an employee and as a consultant. He has written numerous Independent Expert Reports, Resource Reports and Acreage and Resource Valuations, for IPO on several stock exchanges. Doug is a founding partner of MBA Petroleum Consultants (2001), which merged with AWT in 2009 and which was later sold to Nautic in 2013. He was the General Manager Subsurface at Exoma Energy Pty Ltd through 2012, and is a founding partner of Fluid Energy Consultants (2013). He is a member of the Petroleum Exploration Society of Australia (PESA), the Society of Petroleum Engineers (SPE) and a thirty five-year, Active Member of the American Association of Petroleum Geologists (number 330431).

Doug Barrenger

(Director of Fluid and Principal Geologist)

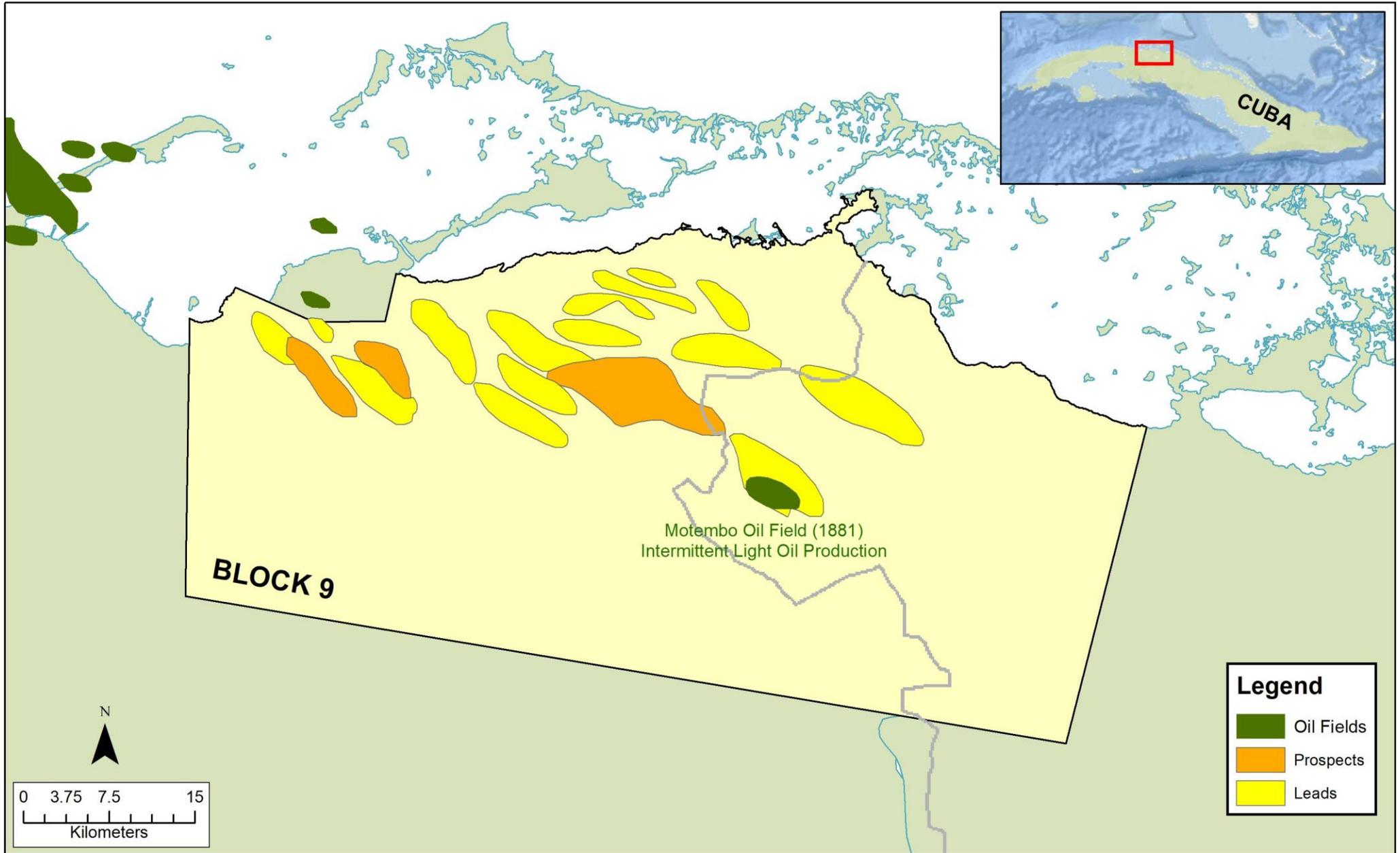
Wal Muir

(Principal Geophysicist)



7.0. ABBREVIATIONS

A\$	Australian dollars
BCFG	Billion Cubic Feet of Gas
BO	Barrels of oil.
BOPD	Barrels of oil per day
C1 or 1C	Equivalent to Proven (P90) category of a recoverable hydrocarbon volume
C2	Equivalent to Probable (P90 to P50) category of a hydrocarbon volume
2C	P90 plus (P90-P50)
C3	Equivalent to Possible (P50-P10) category of a hydrocarbon volume
3C	P90 plus (P90-P50) plus (P50-P10)
COSg	Geological Chance of Success
COSe	Economic Chance of Success
°C	degrees Celsius
EMV	Expected monetary value
Ft, OR, ‘	Foot / feet
GIP	Gas in Place
JV	Joint Venture
km	Kilometre
km ²	Square kilometre
Lead	Potential hydrocarbon trap that requires further work to become a prospect
m	Metre
ma	million ago (years)
\$m	millions of dollars
m ³ /t	cubic meters of gas per tonne of coal
mmCFD	million cubic feet a day
mmBO	million barrels of oil
MW	mega-watt
NPV	Net Present Value
OOIP	Original oil in place
Prospect	Potential hydrocarbon trap that is ready to drill
P1 or 1P	Proven category of a hydrocarbon reserve volume
P2	Probable category of a hydrocarbon reserve volume
2P	Proven plus Probable
P3	Possible category of a hydrocarbon reserve volume
3P	Proven plus Probable plus Possible
P90	90% of the potential recoverable hydrocarbon volume is greater than this volume on a probabilistic distribution (prospective resource).
P50	50% of the potential recoverable hydrocarbon volume is greater than this volume on a probabilistic distribution (prospective resource).
P10	10% of the potential hydrocarbon volume is greater than this volume on a probabilistic distribution (prospective resource)
TOC	Total Organic Carbon (%)
£	English pounds
USD	United States dollars



Notes: Service Layer Credits: Sources: Esri, GEBCO, NOAA, National Geographic, Garmin, HERE, Geonames.org, and other contributors
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Project: Metgasco / Melbana Valuation
Title: Cuba - Block 9

Drawn: JW Date: 21-08-2019 Author: DB Date: 21-08-2019

Figure 2

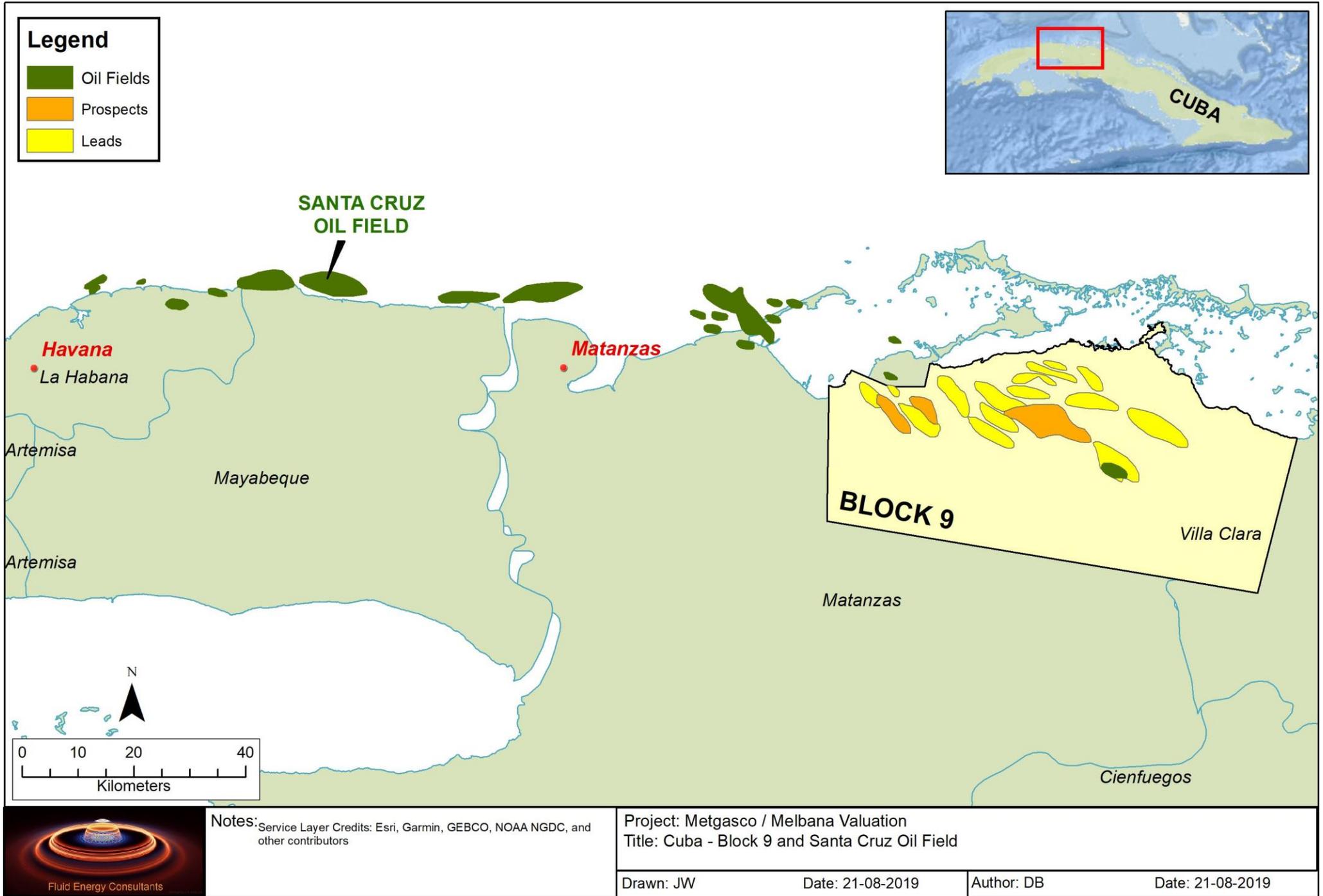


Figure 3

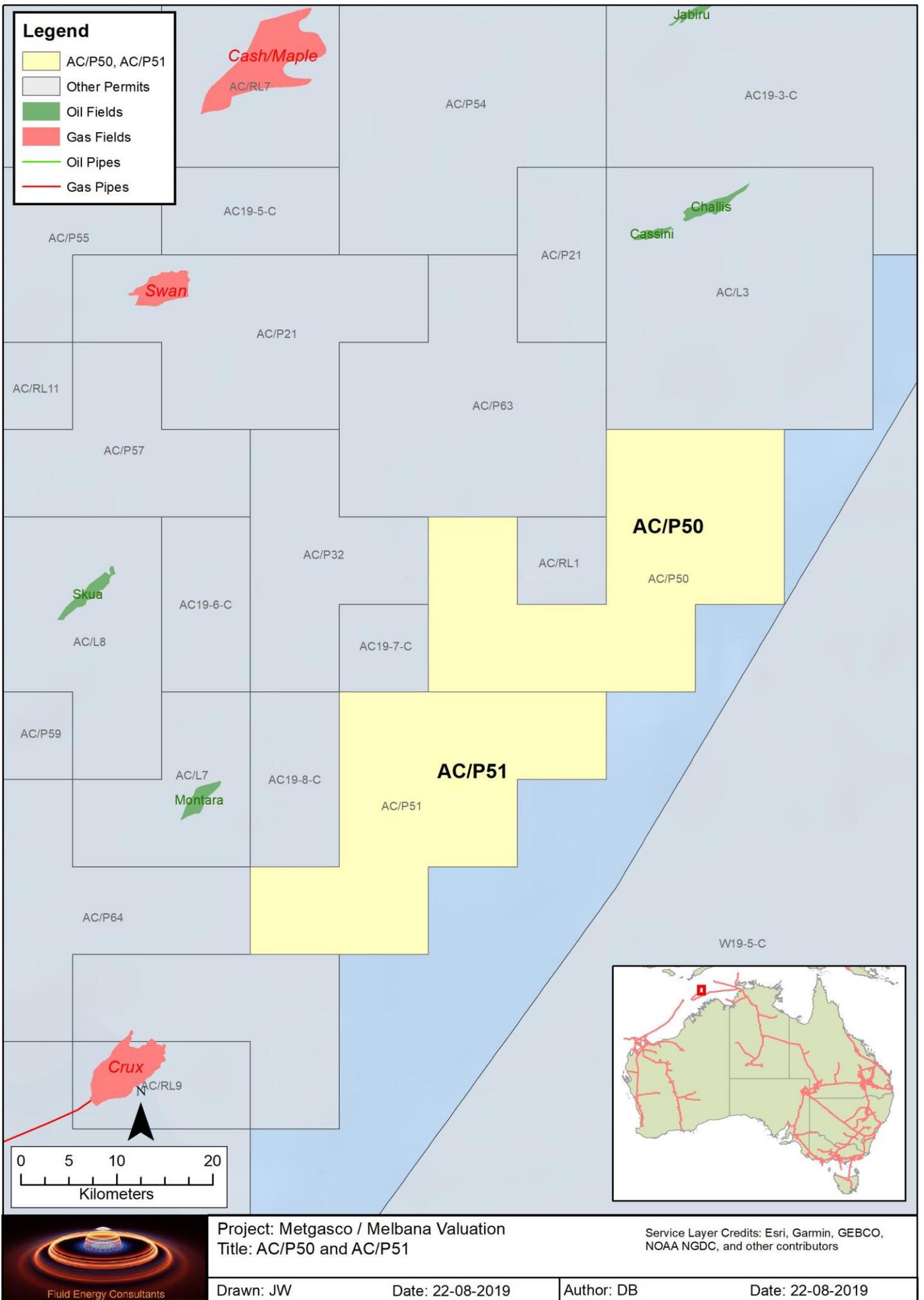


Figure 4



6 September 2019

PKF Melbourne Corporate
Level 12
440 Collins Street
Melbourne, Victoria 3000

Attn: Paul Lom,
Director

Dear Sirs,

RE: Valuation of Oil and Gas Permit Interests Held by Metgasco

1.0. INTRODUCTION

In correspondence dated 6 August 2019, and after further discussions, PKF Melbourne Corporate (PKF) and Melbana Energy Limited (Melbana) requested that Fluid Energy Consultants (Fluid) prepare a Valuation Report of Metgasco Limited's (Metgasco) petroleum exploration assets in Australia and the USA. Melbana has made an offer to Metgasco to purchase Metgasco.

PKF has requested that Fluid determine a value for the exploration and production permits for Metgasco's assets being ATP2020 and ATP2021 in Queensland, PRL237 in South Australia and the South Marsh Island 74 (SM 74) permit in the Federal waters off Louisiana in the Gulf of Mexico (GoM).

Metgasco is an energy company listed on the Australian Stock Exchange (ASX). Melbana is also an energy company listed on the ASX.

2.0. SUMMARY

Fluid's fair market valuation of Metgasco's exploration acreage is between **A\$1.750 million** and **A\$4.434 million**, with the middle or preferred value being **A\$3.092 million** as determined on 6 September 2019 (Table 1). The valuation does not include any other assets or liabilities that Metgasco may or may not have. Valuation methodologies are outlined in Section 4.0.



Table 1: Estimated Exploration Acreage Valuation of Metgasco’s Interests

Permit	Basin	Current Total Interests	Permit Surface Area (km ²)	Valuation Method	Exploration Value (A\$m)*	
					Low	High
ATP 2020P	Cooper-Eromanga Basin	100%	535.0	Farmin in to other permits	0.936	2.337
ATP 2021	Cooper-Eromanga Basin	25%	369.0	Farmin to permit	0.269	0.738
PRL 237	Eromanga Basin	20%	17.6	Farmin to permit	0.127	0.316
SM74	Gulf of Mexico	30%	20.2	Farmin in to other permits	0.418	1.043
TOTAL					1.750	4.434

Figures are subject to rounding

* \$Am = millions of Australian dollars.

Fluid has applied an exchange rate of A\$1 to US\$0.67.

Fair Market Value: The fair market value of a mineral or petroleum asset or security is the amount of money (or cash equivalent of some other consideration) determined by the Expert in accordance with the provisions of the Valuation of Mineral and Petroleum Assets and Securities (VALMIN) Code, 2015 for which the mineral or petroleum asset or security should change hands on the Valuation Date in an open and unrestricted market between a willing buyer and a willing seller in an “arms-length” transaction, prudently and without compulsion. A number of valuation methods were investigated (Section 4.0). Fluid prefers to use farm-in deals and sales to gauge value in exploration permits and only departs from this method on occasions where a better value can be determined by another method, or in the absence of relevant and recent farm-ins and sales.

3.0. ACREAGE ASSET REVIEW AND VALUATION

3.1.1.1. The Cooper Basin and Eromanga Basin

The Permian to Triassic Cooper Basin and Jurassic to Cretaceous Eromanga Basin of south-west Queensland and South Australia form Australia’s premier onshore petroleum province. Exploration within these basins has occurred over a 50-year period.

The Cooper Basin covers approximately 95,000 km² in Queensland. It is subdivided into several troughs and depressions bounded by anticlines. It conformably overlies the Warburton Basin and is disconformably overlain by the Cretaceous-Jurassic Eromanga Basin. Sediment thickness for the Cooper Basin is up to 2,250 m in the central part of the basin in Queensland.

The Eromanga Basin covers approximately 567,000km² of western Queensland, and extends into the Northern Territory, South Australia and New South Wales. Sequences comprise Jurassic non-marine and Cretaceous non-marine and marine sediments which are up to 2,600m thick. In the



Early Jurassic to Early Cretaceous lower non-marine succession, large sand-dominated, braided fluvial systems drained into lowland lakes and swamps. The Early Cretaceous marine succession is dominated by thick transgressive shales, with thin sandstone units reflecting regressive cycles.

The Cooper Basin is gas-dominant with a considerable light liquid component, while the Eromanga Basin is predominantly oil bearing with minor gas. It is generally believed that the Cooper Basin sequence has been the dominant source for both the Eromanga and Cooper Basin hydrocarbons.

The exploration effort in the Eromanga Basin has, until recent years, been directed mainly towards drilling conventional anticlinal traps with four-way dip and three-way dip closures coupled with fault control.

3.1.2. ATP 2020P

3.1.2.1. ATP 2020P Interests

ATP 2020P in the onshore Cooper-Eromanga Basin, QLD, was first awarded on about 28th May 2018 (Figure 1). Metgasco is Operator and 100% licence holder. The current joint venture (JV) interests are listed in Table 2.

Table 2: ATP 2020P Interests

Company	Current Interest	After Farm-in
Metgasco (Operator)	100%	
Total	100%	

3.1.2.2. ATP 2020P Government Work Program

The Work Program was not available to Fluid. The permit is very likely to be in good standing.

3.1.2.3. ATP 2020P Farm-in Deal

There are no farm-in deals that have been consummated in the permit at the current date. Metgasco is actively seeking a farm out of the permit.

3.1.2.4. Recent and Relevant Sale and Farm-in Deals in Cooper/Galilee/Eromanga

Fluid notes there are relatively few recent market transactions in the Cooper and Eromanga Basins since the oil price crisis in 2014 significantly curtailed exploration and appraisal drilling activity in the petroleum sector.

Cooper-Eromanga Basin

1) Vintage Energy Ltd (Vintage)/Metgasco

On 22nd May 2019, Vintage entered into a Heads of Agreement (HOA) with Metgasco in ATP 2021. Vintage can earn 50% interest and operatorship by funding 65% of the first exploration well, up to a maximum gross cost of A\$5.300 million (with Vintage's share being up to A\$3.445 million). In addition, Vintage will contribute a further A\$527,800 which reflects 65% of the past licence back-



costs/farm-out costs incurred by Metgasco to date. Vintage will also fund a full carry of A\$70,000 of 2D/3D seismic reprocessing. Final farm-out documentation was executed in June, 2019.

The premium value is calculated to be A\$0.019m per percentage point.

2) Bridgeport (Cooper Basin) Pty Ltd (Bridgeport)/Metgasco

On 29th August 2019, Bridgeport entered into a Farm-in Agreement with Metgasco in ATP 2021. Bridgeport can earn a 25% interest by funding 32.5% of the first exploration well, up to a maximum gross cost of A\$5.300 million (with Bridgeport's share being up to A\$1.72 million). In addition, Bridgeport will contribute up to a further A\$0.263 million, which reflects 32.5% of the total permit future expenditure (capped at A\$0.812 million) to be incurred by Metgasco.

The premium value is calculated to be A\$0.018m per percentage point.

3) Bengal Energy Ltd

On 23rd January 2018, Bengal Energy Limited (Bengal) announced the acquisition of an additional 28.57% working interest in its operated natural gas permit, ATP 934P. The purchase consideration was A\$311,221 cash and potential future cash payments of up to A\$1,000,000 subject to certain conditions and commercial benchmarks being achieved.

The low-side premium value is calculated to be A\$0.011m per percentage point and the unrealised and contingent high-side premium value is calculated to be \$0.046m per percentage point.

Galilee-Eromanga Basin

1) Vintage/Comet Ridge Pty Ltd (Comet)

On 1st November 2017, Comet Ridge Pty Ltd announced that an agreement to farm-out the sandstone reservoir sequence of ATP 744, ATP 743 and ATP 1015 (3 permits) was executed with Vintage Energy Limited.

The farm-out relates only to the 'Deeps Area' (Deeps) within each of the Petroleum blocks, which is defined as including all strata commencing underneath the Permian coals (Betts Creek Beds or Aramac coals) with the main target being the Galilee Sandstone sequence, which has previously flowed gas to surface during formation testing at the Lake Galilee 1 (1964) and Carmichael 1 (1995) wells.

Stage 1 of the agreement to farm-in is divided into steps.

- Stage 1a requires the drilling and post well production testing of one conventional gas appraisal well on the Albany sandstone structure, close to where the Carmichael 1 well flowed gas in 1995. Drilling is complete.
- Vintage will fund the first A\$3.35 million of the Stage 1a expenditure to earn a 15% interest in the Deeps across the three Galilee Permits.
- The total cost of Albany 1 and the associated production testing has been estimated to be approximately A\$3.5 to A\$3.8 million and each party will pay its proportional share (15%/85%) of the difference between the A\$3.35 million cap and the actual well drilling and testing costs.



- Stage 1b is the provision for well stimulation and subsequent production testing of the Albany 1 well. The decision to proceed with this stage will be determined by the gas flow rate of the Albany well once completed. The cost of this stage has been estimated at A\$1.2 million. If Vintage Energy and Comet Ridge both agree to proceed with Stage 1b the cost will be shared on a 25% (Vintage) and 75% (Comet) basis.
- If Comet elects not to participate in this stage, but Vintage decides to do so, it may carry out the stage at its sole cost which will entitle it to a further 3.5% interest in the Deeps bringing its total interest to 18.5%.

Stage 2 of the agreement to farm-in requires both parties will spend up to A\$5 million each (for a A\$10 million total programme) for Vintage Energy to earn a further 15% equity to go to 30%.

The Stage 1 low-side premium value is calculated to be \$0.063m per percentage point per permit (3 permits) and the contingent high-side premium value is calculated to be A\$0.066m per percentage point per permit.

The contingent Stage 2 premium value is calculated to be A\$0.111m per percentage point per permit.

3.1.2.5. ATP 2020P Exploration History

The permit has been in existence for 14 months and Metgasco has undertaken desk top studies.

3.1.2.6. ATP 2020P Prospectivity

The permit includes the prominent Mt Howitt Anticline and there is a gas pipeline passing through the southern end of the permit (Figure 2). Ongoing technical studies and potential seismic acquisition could high grade existing leads identified on sparse seismic and delineate new leads and prospects.

Existing 2D seismic data is currently being reprocessed to determine if the leads can be upgraded to drillable status.

A data room was opened in late 2018 and a targeted group of respected potential partners have been contacted.

3.1.2.7. ATP 2020P Joint Venture Forward Program and Budget

The Forward Program was not available to Fluid.

3.1.2.8. Estimated Value of Metgasco's Interest in ATP 2020P

Fluid may consider an evaluation based upon expenditure for permit application and ongoing maintenance. The minimum value of a permit can be estimated to be A\$0.5m to A\$1.0 million for the application, grant and 4-year maintenance period carrying out only minimal work such as desktop studies and farmout.



Fluid restricts its valuation range to a maximum of 2.5 times Low to High value in most cases. Wider ranges can sometimes be of little assistance to a client that is requesting a valuation.

Fluid’s preferred valuation approach is to utilise premium value estimates for recent market transactions to define low and high-side ranges in permit value.

Applying an average across the transactions in ATP2021P and ATP934P it is possible to define an estimated value for ATP 2020P as A\$0.015m/1%. The maximum range that Fluid applies is 2.5 times the low-side to high-side.

A fair market exploration value of Metgasco’s 100% interest in ATP 2020P is assessed, using the minimum premium value estimates for market transactions in ATP2021P and ATP934P (A\$0.015m/%) as the middle value, to be **A\$0.936 million to A\$2.337 million**.

3.1.3. ATP 2021P

3.1.3.1. ATP 2021P Interests

ATP 2021P in the onshore Cooper-Eromanga Basin, QLD, was first awarded on about 28th May 2018 (Figure 1). Metgasco is farming out a 50% interest to Vintage, which will be operator. The current joint venture (JV) interests are listed in Table 3.

Table 3: ATP 2021P Interests

Company	Current Interest	After Farm-in
Metgasco	100%	25%
Vintage (operator)		50%
Bridgeport		25%
Total		100%

3.1.3.2. ATP 2021P Government Work Program

The Work Program was not available to Fluid. The permit is very likely to be in good standing.

3.1.3.3. ATP 2021P Farm-in Deal

1) Vintage Energy Ltd (Vintage)/Metgasco

On 22nd May 2019, Vintage entered into a Heads of Agreement (HOA) with Metgasco in ATP 2021. Vintage can earn 50% interest and operatorship by funding 65% of the first exploration well, up to a maximum gross cost of A\$5.300 million (with Vintage’s share being up to A\$3.445 million). In addition, Vintage will contribute a further A\$527,800 which reflects 65% of the past licence back-costs/farm-out costs incurred by Metgasco to date. Vintage will also fund a full carry of A\$70,000 of 2D/3D seismic reprocessing. Final farm-out documentation was executed in June, 2019.

The premium value is calculated to be A\$0.019m per percentage point.



2) Bridgeport (Cooper Basin) Pty Ltd (Bridgeport)/Metgasco

On 29th August 2019, Bridgeport entered into a Farming Agreement with Metgasco in ATP 2021. Bridgeport can earn a 25% interest by funding 32.5% of the first exploration well, up to a maximum gross cost of A\$5.300 million (with Bridgeport's share being up to A\$1.72 million). In addition, Bridgeport will contribute up to a further A\$0.263 million, which reflects 32.5% of the total permit future expenditure (capped at A\$0.812 million) to be incurred by Metgasco.

The premium value is calculated to be A\$0.018m per percentage point.

3.1.3.4. ATP 2021P Exploration History

The permit has been in existence for 14 months and has undergone desk top studies.

3.1.3.5. ATP 2021P Prospectivity

Kinta-1 in the permit intersected gas bearing sandstones and there is a gas pipeline 3km to the west (Figure 3). This well is being re-evaluated.

There are numerous mapped leads and these are comparable to discoveries in adjacent permits. Permian-aged gas fields and Jurassic trapped oil fields lie to the east, west and south. Ongoing technical studies and potential seismic acquisition could improve delineation of these structures and potentially high grade a drill-ready target, which will be required to fulfil the Vintage farming. Further sub-surface work is being completed on the shallow oil prospectivity of the permit

3.1.3.6. ATP 2021P Joint Venture Forward Program and Budget

The Forward Program was not available to Fluid. The farmout deal with Vintage suggests that following desk top studies and possible acquisition of new seismic, at least one well will be drilled in the next year or two.

3.1.3.7. Estimated Value of Metgasco's Interest in ATP 2021P

Fluid's preferred valuation approach utilises premium value estimates for recent market transactions to define low and high-side ranges in permit value.

A fair market exploration value of Metgasco's 25% interest in ATP2021P, using the average of the premium values estimate for the Vintage and Bridgeport deals (A\$0.019m/%) in the permit as the middle value, is assessed to be **A\$0.269 million to A\$0.738 million**.



3.1.4. PRL 237

3.1.4.1. PRL 237 interests

PRL 237 in the onshore Eromanga Basin, SA, was awarded on 19th January 2018 (Figure 1). The current joint venture (JV) interests are listed in Table 4.

Table 4: PLR 237 Interests

Company	Current Interest	After Farm-in
Metgasco	20%	
Senex Energy Limited (Operator)	60%	
Cooper Energy Limited	20%	
Total	100%	

3.1.4.2. PRL 237 Government Work Program

The Work Program was not available to Fluid. The permit is very likely to be in good standing.

3.1.4.3. PRL 237 Farm-in Deal

On 25th September 2017, Metgasco announced that it has entered into agreement with Senex Energy and Cooper Energy Limited by which, depending on the outcome of drilling and testing, Metgasco will farm-in to the Frey-1 Well Area within PEL93 in the South Australian Cooper Basin. Metgasco has elected to continue its working interest, alongside Cooper Energy Limited and Senex Energy, in PRL 237, following the finalisation of the Frey-1 well in the Cooper Basin.

If Metgasco elects, on success, to proceed with the acquisition of the Farmin Interest, the JV Parties will take steps to complete the registration of a PRL over the Frey-1 Area and Metgasco will be registered as the holder of a 20% participating interest in that PRL.

Metgasco will be responsible for paying 30% of the aggregate costs associated with the drilling of the Frey-1 well, up to a maximum aggregate (100%) cost of A\$2m.

The Frey-1 has been plugged and abandoned.

The premium value is calculated to be A\$0.010m per percentage point.

3.1.4.4. PRL 237 Exploration History

Since Metgasco farmed in, the Frey-1 has been drilled and plugged and abandoned.

3.1.4.5. PRL 237 Prospectivity

PRL 237 is adjacent to the producing Padulla field and infrastructure (Figure 4). The block contains leads that would potentially access the same hydrocarbon source rocks as the Padulla oil field. The most prospective area is part of the greater Padulla structure.



3.1.4.6. PRL 237 Joint Venture Forward Program and Budget

To Fluid's knowledge, a modest budget has been approved and no field work is currently planned.

3.1.4.7. Estimated Value of Metgasco's Interest in PRL 237

Fluid's preferred valuation approach utilises premium value estimates for recent market transactions to define low and high-side ranges in permit value. It is believed that the small permit could potentially be farmed out again on a similar basis, though at some unknown future time.

A fair market exploration value of Metgasco's 20% interest in PRL 237 using premium value estimates for its past farmin (A\$0.010m/%) with as the middle value, is assessed to be **A\$0.127 million to A\$0.316 million.**



3.2. GULF OF MEXICO, UNITED STATES OFFSHORE ACREAGE

The Gulf of Mexico (GoM) is a region of high exploration drilling success rates. The western and central GoM, which includes offshore Texas, Louisiana, Mississippi, and Alabama, is one of the major petroleum-producing areas of the United States.

The area is gridded into 5,000 acre leases that are available to be acquired through bidding at the annual federal lease sales. Acquired leases are held for a five year primary term. At the end of the five year term, the lease either is returned to the US federal government or is retained through annual lease fees for up to another 3 years, or held by production following the discovery and development of commercial gas and/or oil reserves.

The GoM offshore region accounts for about 5% of America’s domestic gas production and about 17% of America’s domestic oil production. Total oil production from the GoM Outer Continental Shelf (OCS) leases for 2018 was 647 mmBO and total gas production was 992 BCFG. The offshore areas of the United States are estimated to contain significant quantities of resources in yet-to-be-discovered fields.

It has significant proved and unproved reserves of oil and gas as well as significant potential for further hydrocarbon discoveries, and has extensive established and accessible oil and gas exploration, development and production infrastructure.

There is re-produced (available for licence) regional 2D and 3D seismic coverage over fields and prospects, available for purchase from third party providers, a well-established and stable administration with one landowner, Bureau of Ocean Energy Management (BOEM) and regular lease sales are conducted by BOEM with 5,000 acre (20.2 km²) blocks available, generally to the highest bidder, to lease for five years at US\$7 per acre (4,046.86m²) per annum.

As of 1st May 2019 there were 2,491 active executed leases in the Gulf of Mexico over 13,170,956 acres (53,300 km²). Of these leases 747 were producing leases and 1,744 were non-producing leases.

3.2.1. South Marsh 74 (SM 74)

3.2.1.1. SM 74 interests

SM 74 in the offshore GoM, SA, was renewed for 5 years on 1st July 2017 (Figure 5). The current joint venture (JV) interests are listed in Table 5.

Table 5: SM 74 Interests

Company	Current Interest	After Farm-in
Metgasco	30%	
Byron Energy Limited (Operator)	70%	
Total	100%	

3.2.1.2. SM 74 Government Work Program

There is no government work program requirement under the terms of the leases.



3.2.1.3. SM 74 Farm-in Deal

In July 2018, Metgasco farmed-in for a 30% working interest (WI) in SM74 block (a 24.37% net revenue interest) by funding 40% of the dry hole cost of the Initial Test Well (SM74 D-14) to casing point. The estimated cost was approximately US\$11 million. Byron Energy Limited paid the remaining 60%.

Both companies were then to bear their respective working interest costs after the SM74 D-14 was drilled to total depth.

The SM74 D-14 well has been drilled and plugged and abandoned.

The premium value is calculated to be US\$0.037m (A\$0.055m) per percentage point.

3.2.1.4. SM 74 Estimated Past Costs

Fluid has estimated the past costs expended in the SM74 permit to be as follows:

US\$	A\$	Acquired
USD to AUD	0.67	
35,000	52,239	Initial rental payment upon successful Bid
110,222	164,510	Initial Bonus Payment paid
70,000	104,478	2 x Annual Lease payments
90,000	134,328	3D seismic licence at US\$9/acre to lease. Approximately 3,000 acres of SM74 includes "Sledge 3D (1991)" seismic coverage. More would have been required to map the prospect for "full fold" coverage, so assume 10,000 acres was leased for prospect generation (10,000 acres x US\$9/acre)
150,000	223,881	Geology and Geophysics to develop the prospect
	679,436	Total
650,000	970,149	Bonds paid to the Bureau of Ocean Management (BOEM) for general exploration and decommissioning are not included in the valuation as they are reimbursable at the conclusion of the lease if no liabilities remain at that time.

3.2.1.5. Recent and Relevant Sale and Farm-in Deals in Offshore GoM

Fluid notes there are a number of farmin deals that have been undertaken over the last few years.

GoM Offshore

- 1) VR-232 (Vermilion)

Otto Energy Limited (Otto) is earning a 50.00% working interest (WI) (40.625% net revenue interest (NRI) via a staged farm-in with Byron Energy Inc. (Operator).

Pursuant to the terms of a Participation Agreement, Otto must pay an amount equal to a gross one hundred thirty-three percent (133% - US\$5.3million) of Otto's fifty percent (50%) interest share of



lease acquisition costs and the initial test well (dry hole costs, US\$8.0million) plus a gross fifty percent (50%) of other past costs paid by Byron.

The premium value is calculated to be US\$0.026m (A\$0.039m) per percentage point.

2) SM 71 (South Marsh)

Otto earned a 50% Working Interest (WI) and a 40.625% Net Revenue Interest (NRI) in the South Marsh Island block 71 (SM 71), with Byron (Operator). Production commenced from two wells (F1 and F2) in March 2018 and the F3 well on 6 April 2018.

Pursuant to the terms of a Participation Agreement, Otto must pay an amount equal to a gross one hundred thirty-three percent (133% - US\$3.0million) of Otto's fifty percent (50%) interest share of lease acquisition costs and the initial test well (dry hole costs, US\$4.5million) plus a gross fifty percent (50%) of other past costs paid by Byron.

The premium value is calculated to be US\$0.015m (A\$0.022m) per percentage point.

3) GC 21 (Green Canyon)

Otto signed final documents confirming the entry into a joint venture with Talos Energy, which will see it earn a 16.67% working interest in the Green Canyon 21 (GC-21) lease in the Gulf Mexico through paying 22.22% of the cost of the drilling of the Bulleit appraisal well. This transaction was first announced on 29 March 2019. All subsequent costs of completion and development, including any further wells, shall be at Otto's working interest of 16.67%. The well cost was US\$33m.

The premium value is calculated to be US\$0.110m (A\$0.164m) per percentage point.

The Bulleit well has recently been declared successful having intersected significant hydrocarbon columns in several reservoir intervals.

4) ST 244(South Timbalie)

Otto Energy Limited (Otto) farmed into the South Timbalie 224 (ST 224) lease in the GoM shelf for a 25% working interest. Under the terms of the participation agreement, Otto funded 25% of the initial test well in the ST 224 lease (up to casing point) to earn a 25% working interest in the ST 224 lease. The financial commitment was estimated at US\$2.7 MM (Otto's share of dry hole costs), including funds to evaluate the well using wireline techniques and in a failure case to plug and abandon (P&A) the well. Otto also paid US\$81,250 in back costs.

There is no promote on the exploration well payable by Otto. The well was drilled and plugged and abandoned.



3.2.1.6. SM 74 Exploration History

Since Metgasco farmed in, the SM74 D-14 has been drilled from the SM73 D platform and plugged and abandoned. The well was designed to test multiple amplitude supported target sands, prognosed to be intersected at a depth below 13,800 feet (4,206m).

3.2.2. SM 74 Prospectivity

Review of the Byron and Metgasco websites and the material presented or available did not identify any new leads or prospects. However, the annual lease rental has been paid and we expect that the companies will attempt to map and farmout or drill another prospect at some near future time.

3.2.2.1. SM 74 Joint Venture Forward Program and Budget

To Fluid's knowledge, no field work is currently planned.

3.2.2.2. Estimated Value of Metgasco's Interest in SM 74

Fluid's preferred valuation approach utilises premium value estimates for recent market transactions to define low and high-side ranges in permit value. It is believed that the small permit could potentially be farmed out again on a similar basis, though at some unknown future time.

Fluid has estimated the possible past costs spent in the first two years of the current period of SM 74 to be about A\$679,436 excluding the reimbursable component (section 3.2.1.4. of this report). This could be applied in a valuation as the minimum value of the permit.

As noted before, the minimum value of a permit can be estimated to be A\$0.5m to A\$1.0 million.

Given the uncertainty with the prospectivity of the permit going forward, Fluid has applied the lowest positive farmin metrics of the deals described in section 8.5. That farmin value is A\$0.022m.

A fair market exploration value of Metgasco's 30% interest in SM 74 using the premium value estimate of A\$0.022m/%of the farmin with between Otto and Byron as the high-side value, is assessed to be **A\$0.418 million to A\$1.043 million.**



4.0. VALUATION METHODS

The principles conveyed in the VALMIN Code 2015 and in the Australian Securities and Investment Commission (ASIC) Regulatory Guide 111 and 112 have been applied by Fluid. Reserve and Resource concepts follow the definitions as laid down by the Society of Petroleum Engineers (SPE) Inc. Petroleum Resources Management System Project Resource Management System (SPE PRMS, 2011).

There are several methods that can be used to estimate the fair market value of exploration and production assets. These include and are not limited to the methods described below, which are:

- Production and reserve information leading to cash flow analysis – present value (NPV);
- Production estimates and cash flow analysis (NPV) based on current prospects (undrilled) and incorporating expected chances of success (COS) – expected monetary value (EMV); and
- Recent farm-in Actual Costs (value of work to be undertaken) and premiums or promotes (amounts above the Actual Cost of the work) paid in the permit or similar nearby permits; and Estimated Actual Cost of committed work programs (deal between permit holder and the governing authority) and operator budgets.

EMV valuation is not applied by Fluid to exploration assets as it is unreliable and unlikely to be accepted by stock exchanges. A market analysis is required for exploration assets.

Fluid restricts its valuation range to a maximum of 2.5 times Low to High value in most cases. Wider ranges can sometimes be of little assistance to a client that is requesting a valuation.

a. NPV

For an oil or gas field a value can be determined from the proven (1P), proven plus probable (2P) and proven plus probable plus possible (3P) reserve. Calculation of the net present value (NPV) can be made on the reserve. Various combinations of reserve categories may be made to obtain the best valuation outcome, such as:

2P by itself; OR

1P plus 50% of the 2P; OR

$(0.9 \times \text{proved } (P1 \text{ or } 1P) + 0.5 \times \text{probable } (P2) + 0.1 \times \text{possible } (P3))$; OR

others.

The NPV is equivalent to the value of the producing asset. An NPV calculation based on only the P90 Resource Estimate can constitute a low-side value.

b. EMV

It is possible to value an exploration permit by firstly selecting the prospect (not a lead) most likely to be drilled in the near future. By calculating the NPV on the mean potential Resource case (Best estimate), and the chance of success (COS) for discovery on a Reserve (economic resource), the expected monetary value (EMV) can be determined. The mean potential Resource is often estimated as $0.3 \times P90 + 0.4 \times P50 + 0.3 \times P10$ (Swanson's Mean), or more accurately calculated using a Monte-Carlo simulator.

- EMV is calculated as:



$(NPV \times COS) - [\text{exploration Actual Cost (eg: dry well)} \times (1 - COS)]$

The EMV is equivalent to the value of the prospect.

However, EMV valuation is not applied by Fluid to exploration assets as it is unreliable and unlikely to be accepted by stock exchanges. A market analysis is required for exploration assets.

c. Purchase/Farm-in/Work Program

A reliable value of an exploration permit may be estimated based on farm-in/farm-out or purchase transactions within the permit or in adjacent permits with comparable geological prospectivity and operating constraints. This is achieved by comparing the acreage with similar acreage and the farm-in/farm-out deals that have been consummated, or are in progress in various permits. Also, the immediate, committed expenditure and/or the estimated Actual Cost of committed forward work programs on the permits provide additional information.

Fluid finds that reducing values to a common denominator, expressly value per percentage point of interest in an asset (A\$/1%), is a very helpful way to compare assets values.

Some methods are described in more detail below.

i. Purchase of Asset

An asset or part of it may be purchased by a company or Joint Venture (JV). Valuation is not difficult where cash transactions are involved. Where shares are involved either as the total payment or partial, the share component may be ignored or it may be necessary to make a separate value of the shares as a first step.

ii. Full Value and Premium within Farm-in Deals

The farminee (purchaser) agrees to fund a significant exploration program, which is often agreed to be a particular dollar value or, sometimes, capped at a particular dollar value. This work usually takes the form of either drilling and/or seismic, in return for the farmor (seller) transferring a significant equity to the farminee. Where the farminee pays the normal exploration Actual Costs of the work being done for the interest being acquired and then also covers some or all of the Actual Costs of the farmor. This extra Actual Cost is called a premium (or promote).

A value for the permit can be considered based on:

- 1) the total Actual Cost of the farm-in, that is the agreed Actual Cost of exploration plus the premium; or, more conservatively,
- 2) based on just the Actual Cost of the premium.

Both methods are valid.

In estimating the worth of a permit using the farm-in method, Fluid usually calculates the premium and sets that as the middle value with a range being determined as a 20-25% increase for the high value and a 20-25% decrease for a low value. At other times the premium value may be set as high or low depending on market conditions and other circumstances.

The full Actual Cost of the farm-in is not often applied by Fluid. Any combinations may be employed.

Fluid nearly always applies the premium value of a deal when determining exploration asset values.



iii. Committed Work Programs

In cases where a permit has a committed work program, one that cannot usually be varied, a third method can be considered where the value of the permit is the Actual Cost required to retain it and explore for hydrocarbons. This is similar to the total Actual Cost of a farm-in. The government can be considered to have farmed out the permit, so this is treated in a similar way to method ii(1), above.

d. Company Expenditure

A company or Joint Venture (JV) has often expended money on exploration of a permit. These back costs, as they are often called, can be viewed as an investment in the asset, which can then form part of a valuation.

e. Company Forward Budgets

A company or JV will often have a budget for the expenditure in any particular year. This would usually have Board approval. The forward approved budget that applies to the asset being valued may be used to assist with the valuation.

5.0. STATEMENTS

5.1. Limitations

Fluidhas primarily relied on data supplied by Metgasco and on company websites. Other references were compiled and written by various industry and government bodies, as well as consultants. The material was reviewed for its quality, accuracy and validity and was considered to be acceptable. In addition, Farm-in Agreements and other material pertinent to the permits was sourced from ASX releases, either in full or in part.

It is believed that the information received is reliable and there is no reason to believe that any material facts have been withheld. However, the level of review of the information provided to us does not amount to an audit, verification or due diligence, save to the extent necessary to satisfy ourselves that it is reasonable for us to rely on that information, and no warranty can be given that this review has analysed all of the matters which a more extensive examination might reveal. Fluid has not been required to check the status of Metgasco's interests in the permits.

No warranty can be given that this review has analysed all of the matters, which an extensive examination might reveal.

This report or any reference thereto, may not be included in any other document or distributed for any other purpose without the prior written consent of Fluid to the purpose of such distribution and to the form and context in which the report or reference appears.

The opinions and statements in this report are made in good faith and in the belief that such opinions and statements are not misleading.



5.2. Declaration

5.2.1. Independence

This report is our genuine opinion and the product of our professional judgment. Fluid has not had and, at the date of this report, does not have any relationship with Melbana and Metgasco or their related bodies corporate that could be regarded as capable of affecting Fluid's ability to provide an unbiased opinion in relation to this report. In particular, neither the author of this report, or any director or senior employee of Fluid involved in preparing the report has a substantial interest in, or is a substantial creditor of, or has any material financial interest in the transaction.

5.2.2. Fees and other benefits

A fee will be received for the preparation of this report. Payment of the fee is not contingent on any matter. Fluid will receive no other benefit for the preparation of the report. The author of this report has no pecuniary or other interest which could be regarded as capable of affecting his ability to provide an unbiased opinion in relation to this report.

5.2.3. Changes in facts or circumstances

Advance copies of this report were provided to Melbana and minor changes were made as a consequence. There have been no material changes made to the report. The author confirms that there has been no material change of circumstances, or of available information that Fluid is aware of since this report was compiled, and Fluid is not aware of any significant matters arising from this evaluation that are not covered by this report, which might be of a material nature.

5.2.4. Currency of Report

This report has been prepared based on information available up to and including 6 September 2019. It has been prepared in accordance with the VALMIN Code applicable to the Valuation of Mineral and Petroleum Assets and Securities.

5.2.5. Consent for use

Fluid has given and not withdrawn its written consent to the inclusion of this report in the Independent Expert's Report as requested by PFK in the form and context in which this report appears.



6.0. Qualifications of the Authors

6.1.1.1. Doug Barrenger (Director of Fluid and Principal Geologist)

Doug Barrenger received a BSc degree (geology) from the Australian National University and a Graduate Diploma in computing Science from the Queensland University of Technology. He has more than 35 years of experience in the petroleum industry and has undertaken all facets of geological work, from wellsite and operations geology to prospect evaluation, risk analysis, reserve assessment, basin analysis, portfolio valuation and project management for both operated permits and new-venture roles and for development and exploration projects. He has worked on all Australian petroleum basins, including coal seam gas (CSG, CBM) and Shale Gas, and has overseas experience in SE Asia and Europe as an employee and as a consultant. He has written numerous Independent Expert Reports, Resource Reports and Acreage and Resource Valuations, for IPO on several stock exchanges. Doug is a founding partner of MBA Petroleum Consultants (2001), which merged with AWT in 2009 and which was later sold to Nautic in 2013. He was the General Manager Subsurface at Exoma Energy Pty Ltd through 2012, and is a founding partner of Fluid Energy Consultants (2013). He is a member of the Petroleum Exploration Society of Australia (PESA), the Society of Petroleum Engineers (SPE) and a thirty five-year, Active Member of the American Association of Petroleum Geologists (number 330431).

6.1.1.2. Wal Muir (Principal Geophysicist)

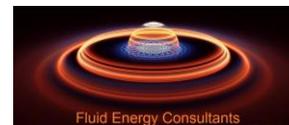
Wal Muir has a B.Sc. (Hons) degree from the University of New South Wales (1978) with a double major in Geology, a major in Pure Mathematics and Honours in Geophysics. He has a Master of Business Administration (1989) from the University of Queensland. Mr Muir has more than 40 years of experience in the petroleum exploration and production industry, both within Australia and overseas. Wal is a Distinguished Member of the Petroleum Exploration Society of Australia (PESA). He has filled all the executive positions at PESA Queensland, and was Federal President of PESA from 1997 until 1999. Mr Muir was an Adjunct Professor in Biogeosciences at the Queensland University of Technology from 2009 to 2013. An experienced and motivated petroleum professional, Mr Muir specialises in the accurate evaluation of the value and risks associated with exploration acreage. He has specific skills in seismic interpretation, risk analysis, play and prospect evaluation and team leadership. Prior to founding his own consulting group in 2001, Wal was the New Ventures and Exploration Manager for Petroz NL. He was CEO of Aleator Energy from 2012 to 2014.

Doug Barrenger

(Director of Fluid and Principal Geologist)

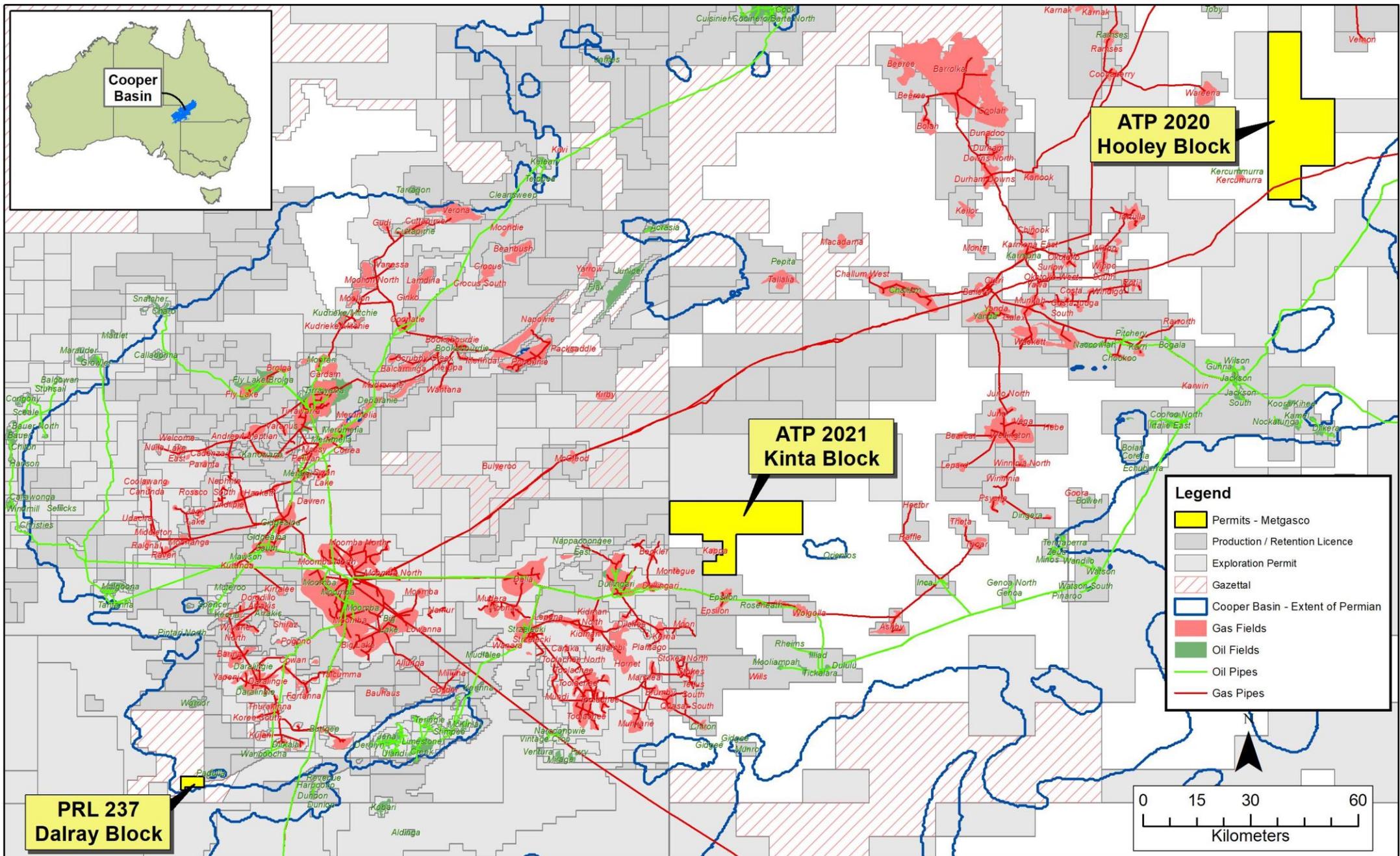
Wal Muir

(Principal Geophysicist)



7.0. ABBREVIATIONS

A\$	Australian dollars
BCFG	Billion Cubic Feet of Gas
BO	Barrels of oil.
BOPD	Barrels of oil per day
CAD\$	Canadian Dollars
C1 or 1C	Equivalent to Proven (P90) category of a recoverable hydrocarbon volume
C2	Equivalent to Probable (P90 to P50) category of a hydrocarbon volume
2C	P90 plus (P90-P50)
C3	Equivalent to Possible (P50-P10) category of a hydrocarbon volume
3C	P90 plus (P90-P50) plus (P50-P10)
COSg	Geological Chance of Success
COSe	Economic Chance of Success
°C	degrees Celsius
EMV	Expected monetary value
Ft, OR, ‘	Foot / feet
GIP	Gas in Place
JV	Joint Venture
km	Kilometre
km ²	Square kilometre
Lead	Potential hydrocarbon trap that requires further work to become a prospect
m	Metre
ma	million ago (years)
\$m	millions of dollars
m ³ /t	cubic meters of gas per tonne of coal
mmCFD	million cubic feet a day
mmBO	million barrels of oil
MW	mega-watt
NPV	Net Present Value
OOIP	Original oil in place
Prospect	Potential hydrocarbon trap that is ready to drill
P1 or 1P	Proven category of a hydrocarbon reserve volume
P2	Probable category of a hydrocarbon reserve volume
2P	Proven plus Probable
P3	Possible category of a hydrocarbon reserve volume
3P	Proven plus Probable plus Possible
P90	90% of the potential recoverable hydrocarbon volume is greater than this volume on a probabilistic distribution (prospective resource).
P50	50% of the potential recoverable hydrocarbon volume is greater than this volume on a probabilistic distribution (prospective resource).
P10	10% of the potential hydrocarbon volume is greater than this volume on a probabilistic distribution (prospective resource).
£	English pounds
US\$	United States dollars

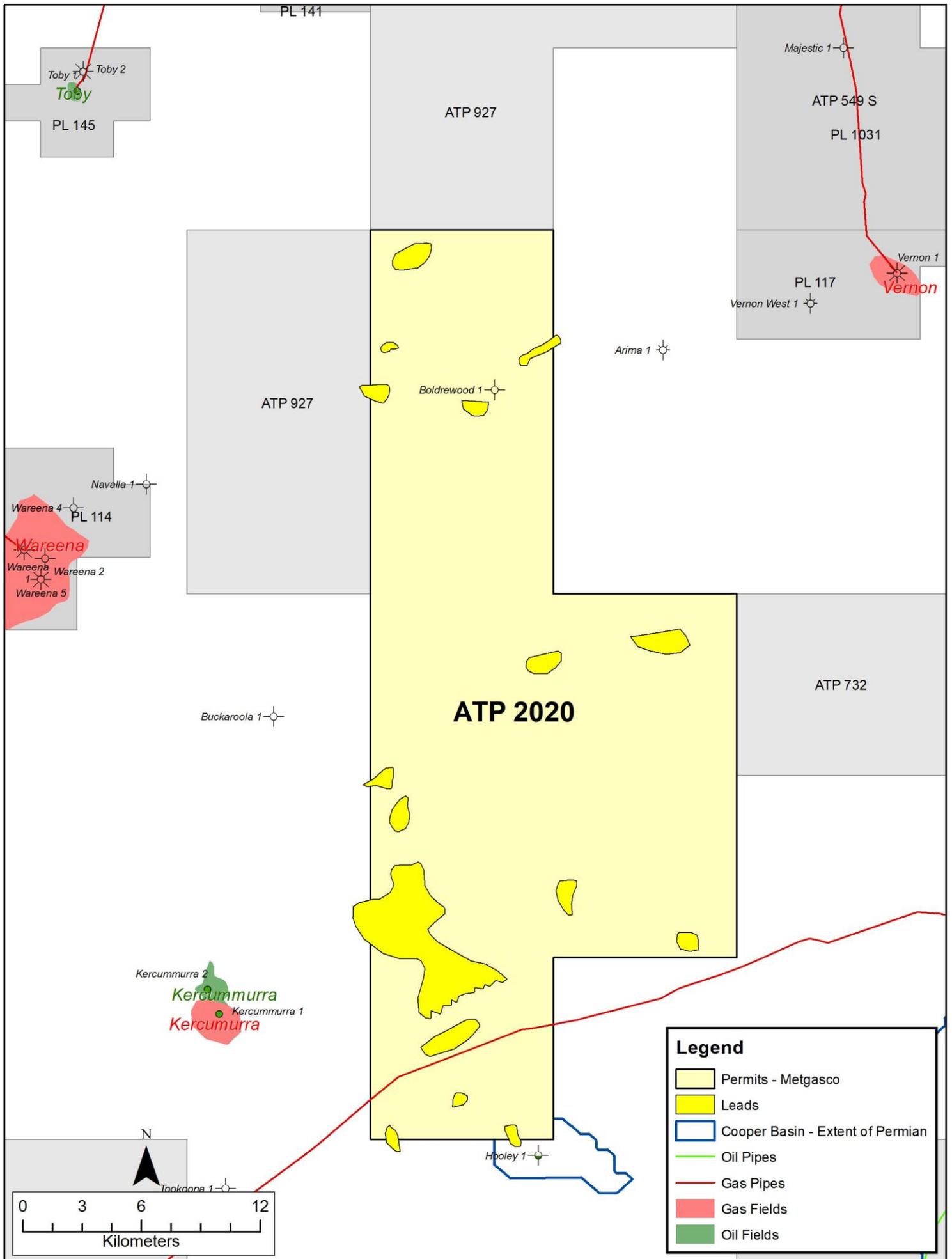


Notes:

Project: Metgasco / Melbana Valuation
 Title: Cooper Basin - ATP 2020, ATP 2021 and PRL 237

Drawn: JW	Date: 20/08/2019	Author: DB	Date: 20/08/2019
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Figure 1



Project: Metgasco / Melbana Valuation
 Title: ATP 2020P - Leads

Drawn: JW

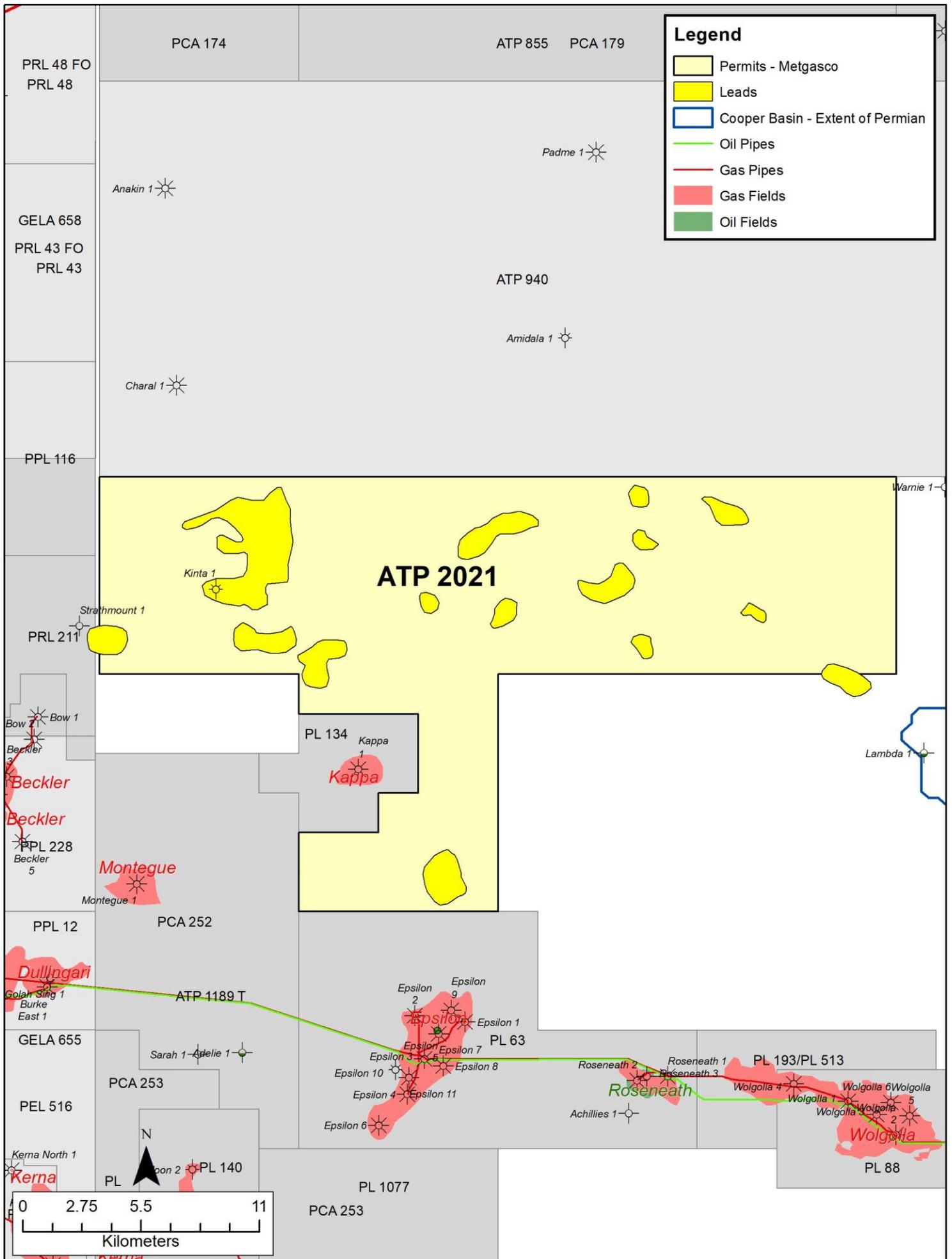
Date: 20/08/2019

Author: DB

Date: 20/08/2019



Figure 2



Project: Metgasco / Melbana Valuation
 Title: ATP 2021P - Leads

Drawn: JW

Date: 20/08/2019

Author: DB

Date: 20/08/2019

Figure 3

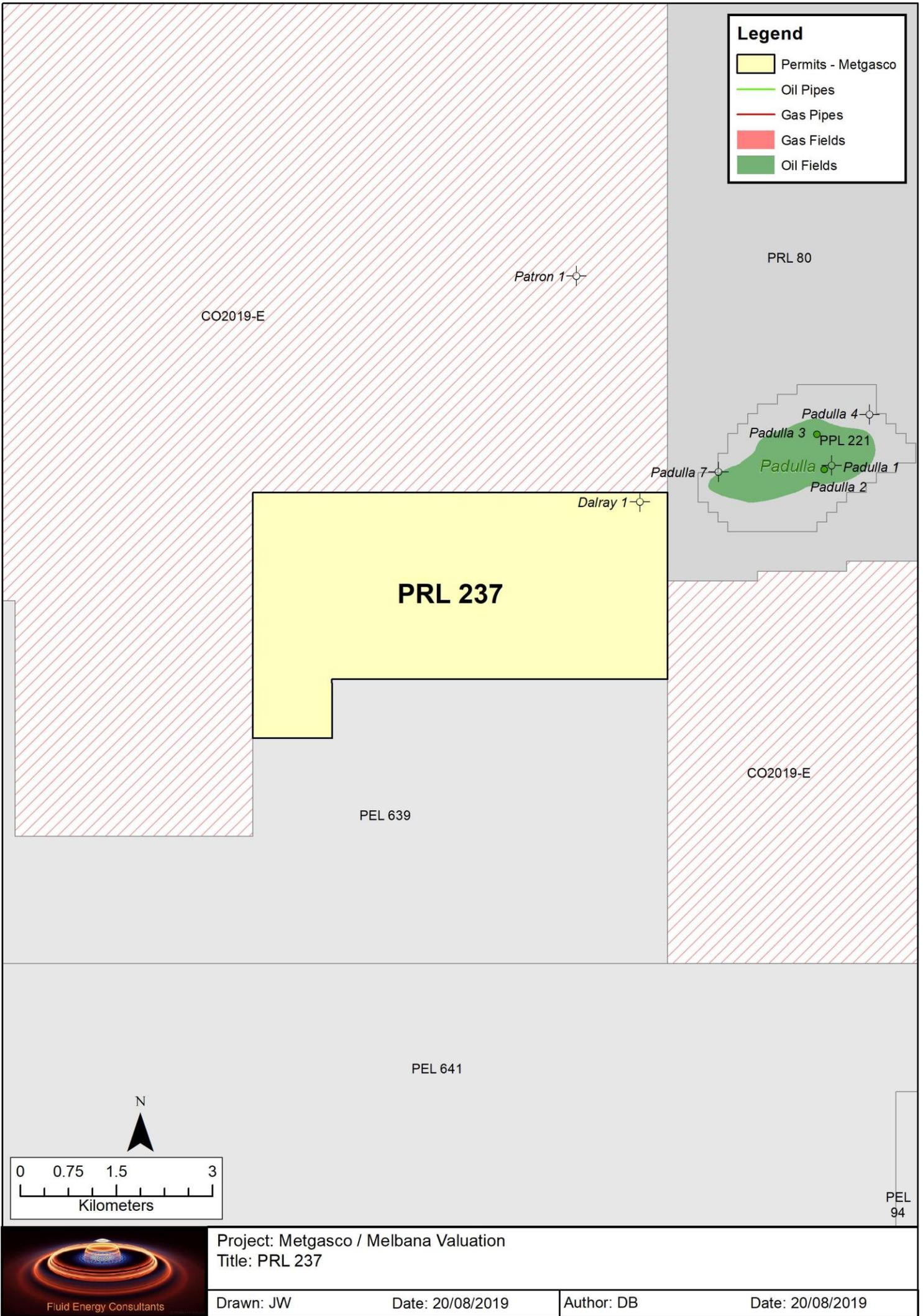


Figure 4

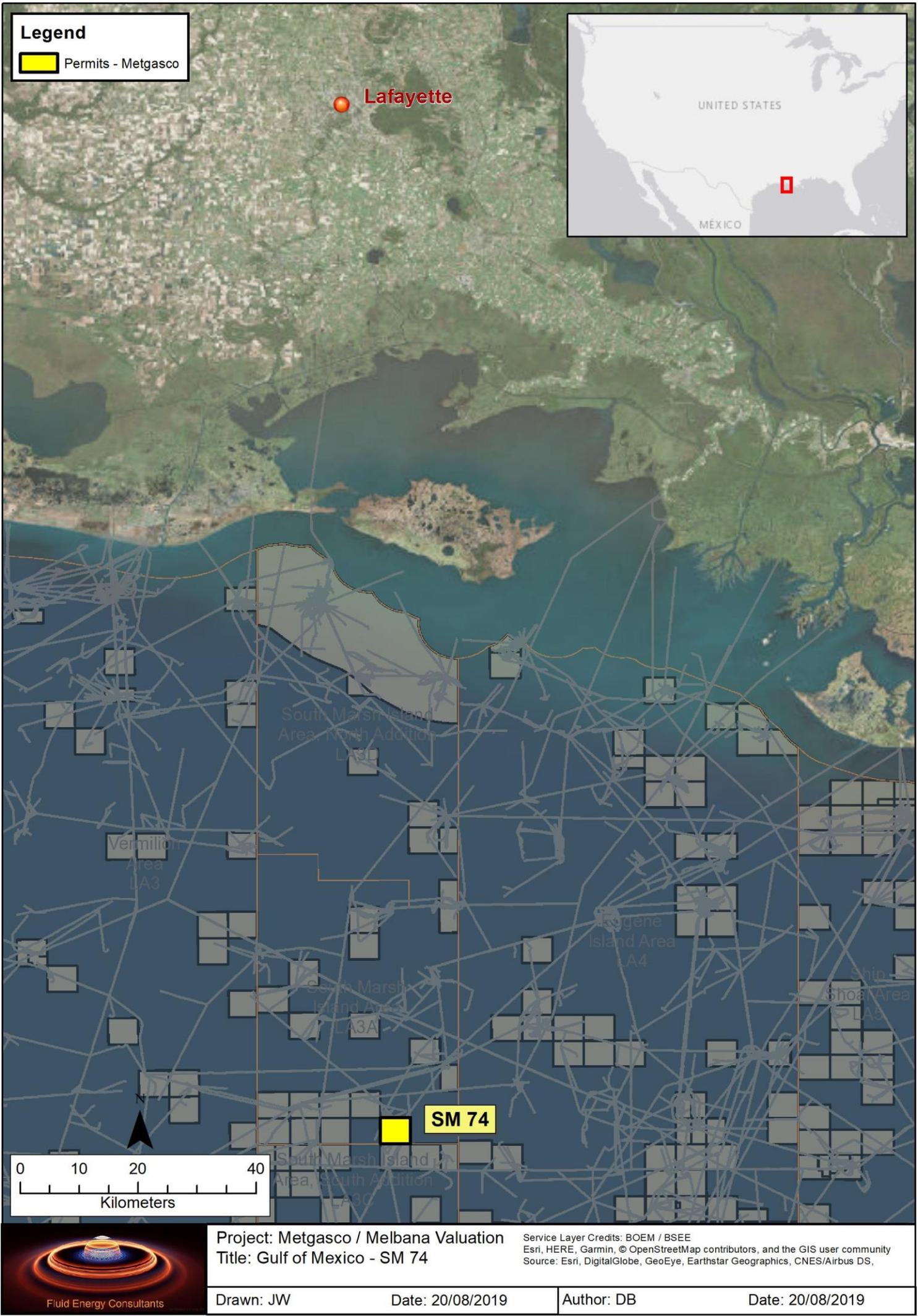


Figure 5

LODGE YOUR VOTE

 **ONLINE**
www.linkmarketservices.com.au

 **BY MAIL**
Melbana Energy Limited
C/- Link Market Services Limited
Locked Bag A14
Sydney South NSW 1235 Australia

 **BY FAX**
+61 2 9287 0309

 **BY HAND**
Link Market Services Limited
1A Homebush Bay Drive, Rhodes NSW 2138; or
Level 12, 680 George Street, Sydney NSW 2000

 **ALL ENQUIRIES TO**
Telephone: +61 1300 306 413



X99999999999

PROXY FORM

I/We being a member(s) of Melbana Energy Limited and entitled to attend and vote hereby appoint:

APPOINT A PROXY

the Chairman of the Meeting (mark box)

OR if you are **NOT** appointing the Chairman of the Meeting as your proxy, please write the name of the person or body corporate you are appointing as your proxy

STEP 1

or failing the person or body corporate named, or if no person or body corporate is named, the Chairman of the Meeting, as my/our proxy to act on my/our behalf (including to vote in accordance with the following directions or, if no directions have been given and to the extent permitted by the law, as the proxy sees fit) at the Extraordinary General Meeting of the Company to be held at **10:00am (AEDT) on Monday, 14 October 2019 at the offices of Grant Thornton, Collins Square, Tower 5, 727 Collins Street, Melbourne VIC 3008 (the Meeting)** and at any postponement or adjournment of the Meeting.

The Chairman of the Meeting intends to vote undirected proxies in favour of each item of business.

VOTING DIRECTIONS

Proxies will only be valid and accepted by the Company if they are signed and received no later than 48 hours before the Meeting. Please read the voting instructions overleaf before marking any boxes with an

Resolutions

For Against Abstain*

- 1 That, for the purposes of Listing Rule 10.1 and for all other purposes, approval is given by the Shareholders for:
- (a) the acquisition of ordinary shares in Metgasco from; and
 - (b) the issue of ordinary shares by the Company to,
- M&A Advisory under the Takeover Bid, on the terms and conditions set out in the Explanatory Memorandum.



* If you mark the Abstain box for a particular Item, you are directing your proxy not to vote on your behalf on a show of hands or on a poll and your votes will not be counted in computing the required majority on a poll.

SIGNATURE OF SHAREHOLDERS – THIS MUST BE COMPLETED

Shareholder 1 (Individual)

Joint Shareholder 2 (Individual)

Joint Shareholder 3 (Individual)

Sole Director and Sole Company Secretary

Director/Company Secretary (Delete one)

Director

This form should be signed by the shareholder. If a joint holding, either shareholder may sign. If signed by the shareholder's attorney, the power of attorney must have been previously noted by the registry or a certified copy attached to this form. If executed by a company, the form must be executed in accordance with the company's constitution and the *Corporations Act 2001* (Cth).

STEP 3



HOW TO COMPLETE THIS SHAREHOLDER PROXY FORM

YOUR NAME AND ADDRESS

This is your name and address as it appears on the Company's share register. If this information is incorrect, please make the correction on the form. Shareholders sponsored by a broker should advise their broker of any changes. **Please note: you cannot change ownership of your shares using this form.**

APPOINTMENT OF PROXY

If you wish to appoint the Chairman of the Meeting as your proxy, mark the box in Step 1. If you wish to appoint someone other than the Chairman of the Meeting as your proxy, please write the name of that individual or body corporate in Step 1. A proxy need not be a shareholder of the Company.

DEFAULT TO CHAIRMAN OF THE MEETING

Any directed proxies that are not voted on a poll at the Meeting will default to the Chairman of the Meeting, who is required to vote those proxies as directed. Any undirected proxies that default to the Chairman of the Meeting will be voted according to the instructions set out in this Proxy Form.

VOTES ON ITEMS OF BUSINESS – PROXY APPOINTMENT

You may direct your proxy how to vote by placing a mark in one of the boxes opposite each item of business. All your shares will be voted in accordance with such a direction unless you indicate only a portion of voting rights are to be voted on any item by inserting the percentage or number of shares you wish to vote in the appropriate box or boxes. If you do not mark any of the boxes on the items of business, your proxy may vote as he or she chooses. If you mark more than one box on an item your vote on that item will be invalid.

APPOINTMENT OF A SECOND PROXY

You are entitled to appoint up to two persons as proxies to attend the Meeting and vote on a poll. If you wish to appoint a second proxy, an additional Proxy Form may be obtained by telephoning the Company's share registry or you may copy this form and return them both together.

To appoint a second proxy you must:

- on each of the first Proxy Form and the second Proxy Form state the percentage of your voting rights or number of shares applicable to that form. If the appointments do not specify the percentage or number of votes that each proxy may exercise, each proxy may exercise half your votes. Fractions of votes will be disregarded; and
- return both forms together.

SIGNING INSTRUCTIONS

You must sign this form as follows in the spaces provided:

Individual: where the holding is in one name, the holder must sign.

Joint Holding: where the holding is in more than one name, either shareholder may sign.

Power of Attorney: to sign under Power of Attorney, you must lodge the Power of Attorney with the registry. If you have not previously lodged this document for notation, please attach a certified photocopy of the Power of Attorney to this form when you return it.

Companies: where the company has a Sole Director who is also the Sole Company Secretary, this form must be signed by that person. If the company (pursuant to section 204A of the *Corporations Act 2001*) does not have a Company Secretary, a Sole Director can also sign alone. Otherwise this form must be signed by a Director jointly with either another Director or a Company Secretary. Please indicate the office held by signing in the appropriate place.

CORPORATE REPRESENTATIVES

If a representative of the corporation is to attend the Meeting the appropriate "Certificate of Appointment of Corporate Representative" must be produced prior to admission in accordance with the Notice of Meeting. A form of the certificate may be obtained from the Company's share registry or online at www.linkmarketservices.com.au.

LODGEMENT OF A PROXY FORM

This Proxy Form (and any Power of Attorney under which it is signed) must be received at an address given below by **10:00am (AEDT) on Saturday, 12 October 2019**, being not later than 48 hours before the commencement of the Meeting. Any Proxy Form received after that time will not be valid for the scheduled Meeting.

Proxy Forms may be lodged using the reply paid envelope or:



ONLINE

www.linkmarketservices.com.au

Login to the Link website using the holding details as shown on the Proxy Form. Select 'Voting' and follow the prompts to lodge your vote. To use the online lodgement facility, shareholders will need their "Holder Identifier" - Securityholder Reference Number (SRN) or Holder Identification Number (HIN).



BY MOBILE DEVICE

Our voting website is designed specifically for voting online. You can now lodge your proxy by scanning the QR code adjacent or enter the voting link www.linkmarketservices.com.au into your mobile device. Log in using the Holder Identifier and postcode for your shareholding.

QR Code



To scan the code you will need a QR code reader application which can be downloaded for free on your mobile device.



BY MAIL

Melbana Energy Limited
C/- Link Market Services Limited
Locked Bag A14
Sydney South NSW 1235
Australia



BY FAX

+61 2 9287 0309



BY HAND

delivering it to Link Market Services Limited*
1A Homebush Bay Drive
Rhodes NSW 2138
or
Level 12
680 George Street
Sydney NSW 2000

* During business hours (Monday to Friday, 9:00am–5:00pm)

**IF YOU WOULD LIKE TO ATTEND AND VOTE AT THE EXTRAORDINARY GENERAL MEETING, PLEASE BRING THIS FORM WITH YOU.
THIS WILL ASSIST IN REGISTERING YOUR ATTENDANCE.**