



4 February 2019

Australian Securities Exchange  
10th Floor, 20 Bridge Street  
SYDNEY NSW 2000

via e-lodgement

Dear Sir/Madam

### **AMENDED: EXPLORATION ACTIVITY UPDATE**

- **RESULTS OF 2D HR SEISMIC SURVEY IN PEP11**
- **RL ENERGY FARMIN – 3D SEISMIC PROGRESS UPDATE**
- **SALE OF ONSHORE ENERGY PROGRESS UPDATE**

#### **RESULTS OF 2D HR SEISMIC SURVEY IN PEP11**

The Board of MEC Resources Ltd (ASX: MMR) (the “Company” or “MEC”) is pleased to advise that the analysis and interpretation of the results of the 2D seismic survey in PEP11 undertaken earlier in 2018 has been completed.

The PEP11 Baleen 2D HR Seismic Survey successfully acquired 206 kilometres of modern 2D seismic data in April 2018. The survey was acquired largely over the Baleen Prospect and the Newcastle Syncline, with a tie line to the New Seaclem-1 exploration well (2010). That data set has been processed and recently integrated with other legacy seismic data to improve the geological understanding of both the shallow Tertiary sequence and the Permo-Triassic sequence below the main unconformity.

The Baleen 2D seismic survey was designed to specifically investigate a number of technical objectives:

- acquire high quality, multi-fold 2D seismic data using a constrained acoustic energy source;
- compare and contrast improved seismic data acquisition parameters against previous survey designs;
- obtain a modern seismic tie from the New Seaclem-1 exploration well (2010) to the Baleen Prospect;
- obtain a detailed grid of seismic over a possible exploration well location on the Baleen Prospect;
- acquire multi-fold seismic data in the shallow Tertiary section (<0.5 seconds Two Way Time (TWT)) to assist in evaluating ‘amplitude-versus-offset’ (AVO) anomalies previously mapped,
- Use these AVO anomalies as a test for presence or not of gas hazards around the Baleen Prospect and potential well locations.

The survey data was able to investigate the potential for presence of shallow gas within the proximity of a provisional exploration well location on the Baleen prospect. The survey data was also able to image intra-Permian seismic reflectors that were visible on the legacy seismic data. The survey was acquired on time and without incident. This survey has endorsed PEP11 Operator Asset Energy Pty Ltd’s confidence that there are no ‘seismically-defined’ shallow gas hazards at a potential test well location on the Baleen Prospect.

#### **MEC Resources Ltd**

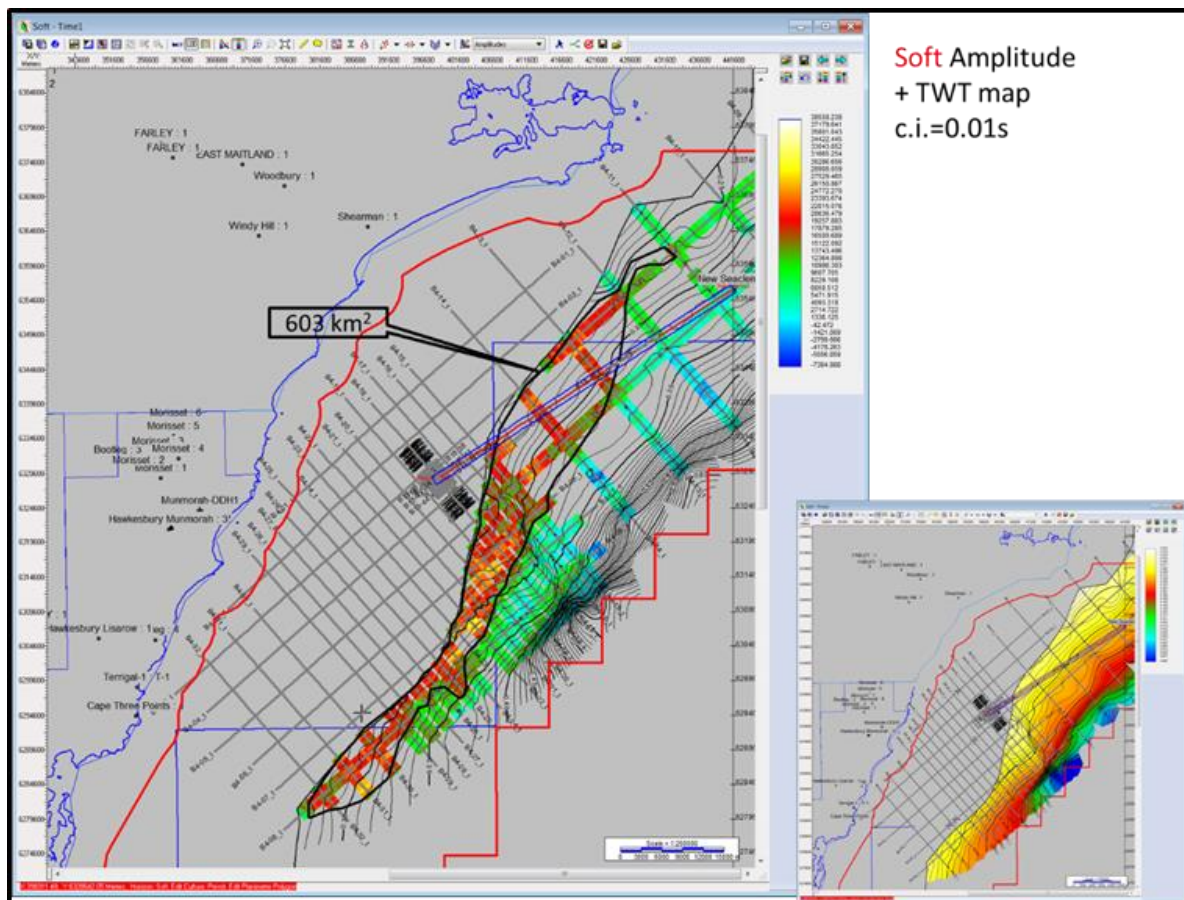
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This new data also has highlighted some interesting amplitude anomalies within the Tertiary sedimentary section. These leads have been mapped previously and, if gas charged, would add further gas resources to the portfolio and potentially confirm a Permo-Triassic source of gas that has migrated into shallower traps (see figure below). This potential trap is mapped on conventional legacy and new 2D seismic data and is a map of two seismic horizons that converge in an updip attitude. Furthermore, there is a coincidence of anomalous and changing seismic amplitudes that conforms with the shape of the potential stratigraphic trap. Additional detailed seismic modelling of potential rock properties will be needed before any firm conclusions can be drawn regarding the possibility of gas charge in this lead.



***Seismic TWT map with amplitudes superimposed, identifying a potential 603 square kilometre stratigraphic trap that may be gas charged.***

Imaging within the Permo-Triassic sequence was mostly consistent with legacy seismic data. AVO analysis of the raw seismic gathers was attempted however the results were inconclusive. Further investigation to improve the quality of the imaging with the Permo Triassic sequence is being considered in association with planning for the acquisition of 3D seismic data.

The Company believes that the Baleen 2D HR Seismic Survey was beneficial in meeting the PEP11 Year 2 work commitment and addressing geotechnical uncertainty. Further, the inconclusive nature of aspects of the interpretation have supported the Company's strategy of acquiring 3D seismic to reduce geological target risk ahead of further exploration drilling. The PEP11 project remains highly prospective for the potential discovery of natural gas as previously reported.

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As expected, the 2D seismic data acquired earlier in 2018, whilst encouraging the prospectivity of PEP11, has not sufficiently de-risked PEP11 to justify the drilling of a new exploration well therein. Acquisition of new 3D data at the earliest opportunity will be undertaken to support the premise that new gas discoveries can materially improve the energy security of the east coast gas market.

### **PEP 11 FARMIN**

The farm-in by RL Energy Pty Ltd to PEP11 is progressing, with development of the Environment Plan (EP) for acceptance by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) underway. RL Energy continue to work closely with Asset Energy who have been engaged to provide assistance and knowledge during the stakeholder engagement process.

While adjustments to the approval process and transparency requirements of activity proponents has impacted on the anticipated time to achieve EP acceptance and subsequently the likely date of the commencement of the 3D seismic survey RL Energy and Asset Energy expect to lodge the EP during the first quarter of 2019. Further information will be provided in due course as the EP progresses.

### **VARIATION TO TERM SHEET FOR SALE OF ONSHORE ENERGY**

Further to the binding term sheet entered into between Advent Energy Ltd, Onshore Energy Pty Ltd and Bonaparte Petroleum Pty Ltd, as disclosed to the ASX on 28 September 2018, the parties have agreed to extend the timeframe of a condition precedent to now enable Bonaparte Petroleum Pty Ltd to finalise funding arrangements capable of satisfying the exploration objectives in EP386. Bonaparte Petroleum Pty Ltd has advised it is advanced stages of due diligence with parties considering providing the necessary funding for its planned works.

To date, Onshore Energy has, pursuant to the agreement, submitted revised operational documents to the Western Australian Department of Mines, Industry Regulation and Safety (DMIRS) for the purposes of undertaking:

- routine care & maintenance activities on Waggon Creek-1 and Vienta-1 wells, currently cased and suspended as potential future producers;
- decommissioning activities on the above wells;
- the drilling of Waggon Creek-1B, for the purposes of exploring for bypassed zone(s) of oil; and
- an accelerated weight drop seismic survey covering an oil lead to the west of the Ningbing-1 and 2 wells, plus new seismic acquisition in the Waggon Creek area.

Furthermore, DMIRS has granted approval of a portion of the plans related to the above operational activities, including safety management systems for the undertaking of care & maintenance activities and well management plans for the potential decommissioning works. It is Onshore Energy's intention, upon achieving the necessary exploration works in EP386, to apply to the Minister to revoke the requirement to decommission Waggon Creek-1 and Vienta-1. Onshore Energy believes these wells may provide material benefit to potential future commercialisation activities within the EP386 and onshore Bonaparte Basin region.

Onshore Energy continues to progress the renewal of Retention Licence 1 (RL1), in the onshore Bonaparte Basin in western Northern Territory. RL1 comprises the undeveloped Weaber Gas Field.

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Yours faithfully

A handwritten signature in blue ink, appearing to read 'D Ambrosini', enclosed within a faint rectangular border.

Deborah Ambrosini  
Managing Director

#### **About MEC Resources Ltd (ASX:MMR)**

MEC is registered as a Pooled Development Fund under the *Pooled Development Fund Act (1992)*. It has been formed to invest into a variety of industries including companies that are targeting potentially large energy and mineral resources.

MEC will provide carefully selected companies with development and exploration funding. MEC intends to identify investment opportunities with a number of specific characteristics including: near to medium term revenue opportunities, large targets; a stage of development that permits a strategic investor or IPO within several years; strong and experienced management team and a definitive competitive advantage.

MEC's major investment lies in unlisted Australian oil and gas exploration company, Advent Energy Ltd who owns 100% interest in Asset Energy Pty Ltd and Onshore Pty Ltd.

#### **Asset Energy Pty Ltd – PEP 11**

- Multi-TCF prospective resources have previously been independently assessed. PEP 11 lies adjacent to the most populous region of Australia and the major industrial hub and port of Newcastle.
- Signed Farmin agreement with RL Energy Pty Ltd on 4 May 2018
- Under the agreement RL Energy will acquire 3D seismic data to meet the future 500km<sup>2</sup> PEP11 permit work commitment (inclusive of acquisition, processing and interpretation), by carrying Asset Energy's participating interest share of these costs up to a capped amount of \$4 million.

#### **Onshore Energy Pty Ltd – EP386/RL1**

- EP386 and RL1 lie in the highly prospective onshore Bonaparte Basin, northern Western Australia and Northern Territory. RL1 comprises the undeveloped Weaber Gas Field, and considerable prospective resources have been estimated in EP386. EP386 comprises numerous gas discoveries, with Waggon Creek-1 and Vienta-1 cased and suspended potential future producing wells.
- Signed a binding and exclusive term sheet for the majority (90%) sale of Onshore Energy to Bonaparte Petroleum on 28 September 2018

#### **Pooled Development Status – Benefits to Shareholders**

Pooled Development Funds raise capital and make equity investments in small and medium-sized (SMEs) enterprises after complying with a structure established under the Australian Government's PDF Act, enacted in 1992.

Companies with PDF status are taxed at 15% on their income and capital gains received from their investments.

Resident shareholders are exempt from capital gains tax after selling shares. Investors will not be entitled to deductions or capital loss on the sale of their shares.

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Shareholders receiving franked and unfranked dividends are also exempt from tax with shareholders including an option to use the imputation credits attached to the franked dividends to offset other tax obligations.

Investors are not entitled to deductions or capital loss on the sale of their shares.

Shareholders should seek professional advice from their tax advisor regarding pool developments funds and the benefits specifically available to their situation.

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