

## PEL182 Geomechanical Study Results

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Bass Oil Limited (ASX:BAS) is an Australian-listed oil producer that holds a majority interest in eight permits in the Cooper Basin including the 100% owned Worrior and Padulla oil fields and a 55% interest in a KSO in South Sumatra. The Company is debt free and committed to creating value by leveraging the competitive strengths of its team, operating capability, reputation, and relationships in Australia & Indonesia.

### Highlights:

- **Phase 1 of the PEL182 Geomechanical Study by SLB (formerly Schlumberger) has now concluded, with results highlighting favourable geological conditions in line with initial expectations.**
- **As a result of the successful phase 1 study, Bass will now progress to the next phase of studies including economic assessment, conducted by SLB.**
- **SLB developed a high fidelity Mechanical Earth Model (MEM) of the Permian sedimentary layers in the Patchawarra Trough to support optimal well and fracture stimulation design**
- **The MEM results were calibrated utilising proprietary data provided by Santos' from adjacent wells**

Bass Oil Limited (ASX:BAS) ("**Bass**" or the "**Company**") is pleased to announce that phase 1 of SLB's technical study of PEL182 has now concluded. The results highlight favourable geological conditions providing Bass confidence to progress to the next stage of the commercialisation study.

Earlier this year Bass engaged SLB – a global technology company – to perform a technical study that sought to identify the potential for commercialisation of gas from deep coal resources in the 100% owned PEL 182 in the Cooper Basin. The technical study deliverables include a geomechanical model to assist in both well and fracture stimulation design, two key elements for successful commercialisation. The second phase was envisaged to include a Rapid Resource Assessment (RRA) that focused on sweet spot identification and assessment of economic exploitation scenarios.

The first phase, the development of a geomechanical model, has now concluded with a Mechanical Earth Model (MEM) constructed for the PEL182 area. The model has been successfully calibrated with the available data collected from adjacent wells recently drilled by Santos at Beanbush, Washington and Casimir. The proprietary data was provided by Santos under a Data Sharing Agreement signed with Bass for the purpose of more accurately calibrating the model in return for Santos accessing the completed model and results of the study.

The study confirmed a number of key well and frac design parameters, including:

- The safe mud weight window to be used while drilling to avoid excessive hole ovalisation and possible wellbore collapse in the coal and/or sandstone sequences.
- The direction and magnitude of the principal horizontal stresses ( $SH_{max}$  and  $Sh_{min}$ ) which are key inputs into wellbore and frac design. For example, the preferred orientation of a deviated

or horizontal wellbore for fracture stimulation is in the direction of  $S_{h_{min}}$ .

- Possible solutions to challenges common in horizontal drilling of coal seams, with the MEM indicating that the wellbore be landed in the layers adjacent to the coal sequences to maximise the probability of a successful outcome.
- Significant areal stress variations across the Patchawarra Trough, with the PEL182 area in a favourable stress regime.
- The variation in stresses vertically in the Permian section, a key input into detailed fracture stimulation design, for the optimisation of the number of frac stages placed. The number of stages places is a key parameter influencing the chance of achieving an economic outcome from a frac program.

The results of the MEM in this phase of the study has influenced the scope of the next phase of the commercialisation study. Bass and SLB are working together to finalise the scope of phase 2 of the study which will be led by SLB.

The primary objective for the next phase of the study is to utilise the MEM to determine a number of preliminary well designs, such as high angle and / or horizontal trajectories in a variety of directions to contact the volume of coal that delivers the number of frac stages required to achieve an economic flow rate and gas recovery per well to achieve an economic threshold.

The frac modelling outputs such as estimated well costs and production forecasts will be used to confirm the economics required to determine the commercial feasibility of exploiting this resource.

The Rapid Resource Assessment is no longer seen to be a critical element to the success of this endeavour but can be undertaken at a future date if required.

#### **Managing Director, Tino Guglielmo commented:**

*"We are pleased to announce the completion of the PEL182 geomechanical study. The results are positive and the study has provided a tremendous body of information that will prove invaluable to the ongoing commercialisation efforts of this significant resource. Deep coal gas seams are an underutilised and vast resource in Australia and Bass is uniquely positioned to capitalise on this opportunity. We keenly advancing to the next phase of the study with the assistance of global technology leader, SLB incorporating the findings of the phase 1 study."*

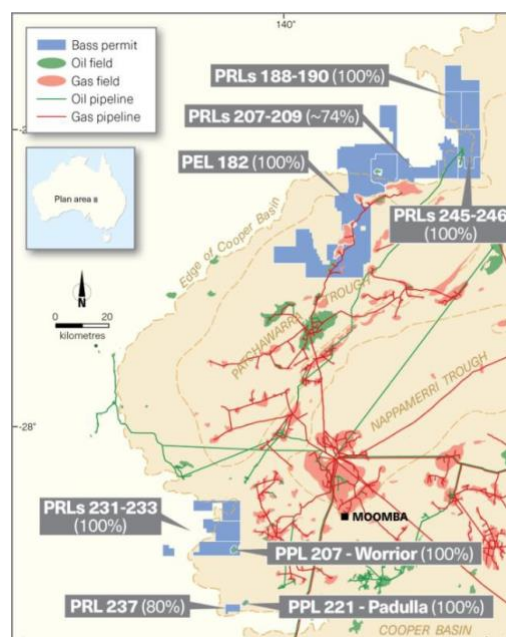


Figure 1: Cooper Basin Location Map

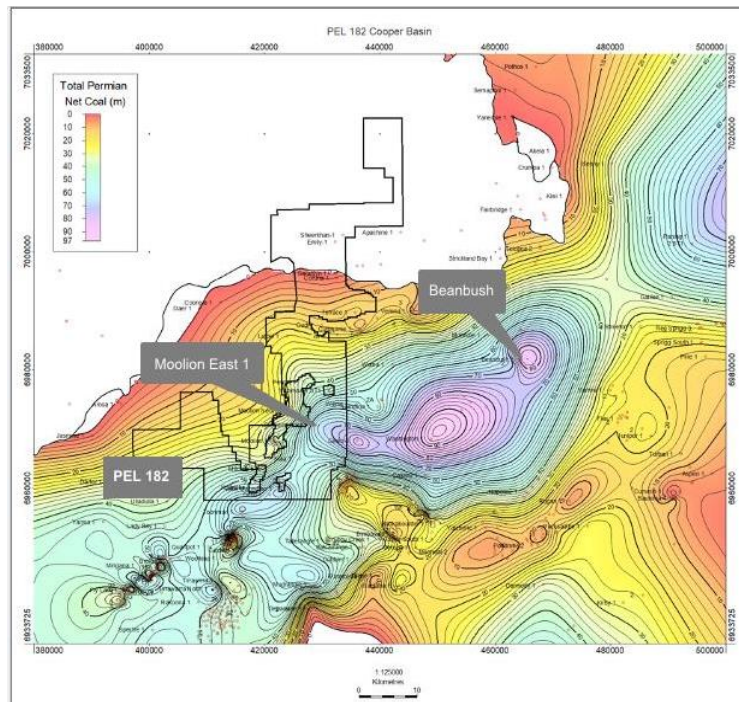


Figure 2: Total net Permian coal thickness in the Patchawarra Trough

## PEL182 Background and Economic Opportunity

This important milestone follows the previously announced Deep Coal Gas Prospective Resource study which quantified the gas potential contained in PEL 182 at a “best estimate” of 21 TCF of gas in place, along with and accompanying 845 million barrels of condensate in place. Bass identified a prospective area, named the Moolion East deep coal prospect in PEL 182. The assessed prospective resource at Moolion East is 568 BCF of gas and 22.7 million barrels of condensate<sup>1</sup>.

For further information please see the ASX Announcement “Deep Coal Commercialisation Study Underway”, released 18 April 2024.

<sup>1</sup> Bass Announcement 16 November 2022

*This announcement has been authorised for release by the Board of Directors of Bass Oil Limited.*

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