

Beetaloo Operations Update

- **Extended production testing operations at Carpentaria-1 in EP187 to recommence this week**
- **Empire Board has approved the next phase of capital investment which includes the drilling of the Carpentaria-2H vertical pilot and horizontal appraisal well and the Charlotte 2D Seismic Survey in EP187 with operations expected to be carried out in Q4 2021**
- **Empire has received a Refundable Research and Development Tax Offset of \$5.37 million in cash**
- **Current cash at bank is ~\$31.1 million and next phase of capital expenditure is fully funded**

Recommencement of Carpentaria-1 EPT Operations

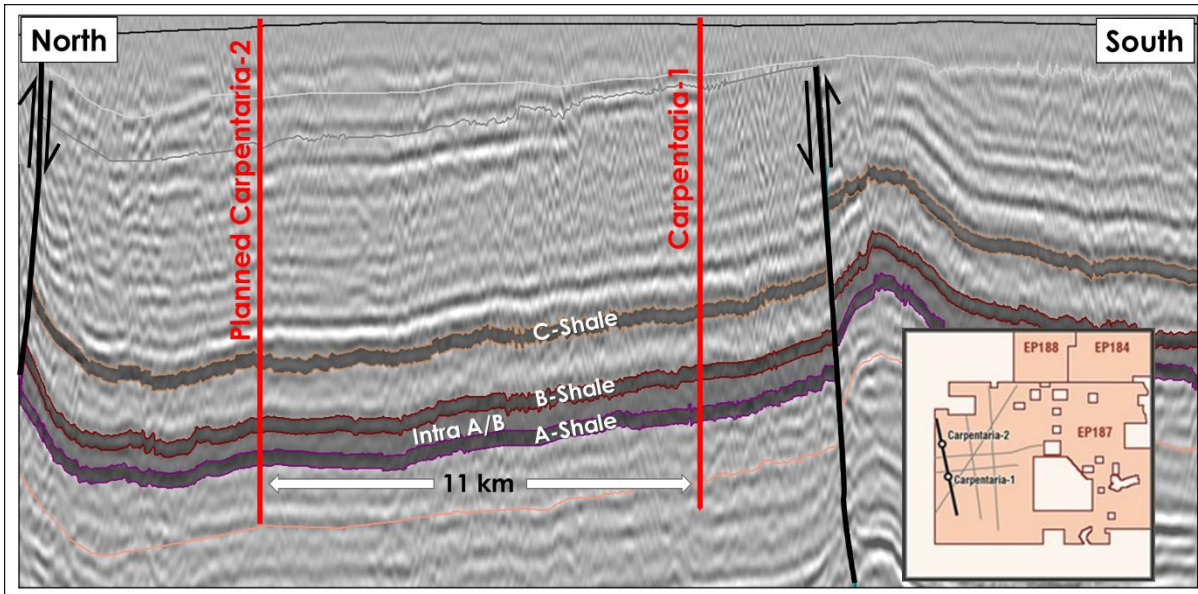
On 16th July 2021, EPT operations at the Carpentaria-1 well were suspended and the vertical well was shut-in due to COVID-related travel restrictions. Empire will reopen the well and restart Extended Production Test ("EPT") operations on or around 28th September 2021.

The EPT operations are expected to further enhance Empire's understanding of the relative productivity of each of the Velkerri Formation shale targets (A, B, Intra A/B and C) and the gas composition of produced hydrocarbons. The data collected will inform technical decisions and the optimum placement of the Carpentaria-2H horizontal well, and future horizontal appraisal drilling across EP187. Empire also intends to enhance the artificial lift system at Carpentaria-1 to better determine the productivity of the Velkerri Formation shales.

The initial Carpentaria-1 vertical well EPT flowed at an instantaneous peak rate of >1.6 mmcf / day and at an averaged flow rate of 0.25 mmcf / day over a 17-day test period, during which time the well was dewatering. The final production rate recorded was 0.25 mmcf / day prior to the shut-in of the well.

Carpentaria-2H Horizontal Appraisal Well Field Work Underway

The Carpentaria-2H well pad is located ~4.5 kilometres to the north of the Carpentaria Highway and McArthur River Pipeline on an existing 2D seismic line approximately 11km North of Carpentaria-1. The target Velkerri Formation shales are shown by mapping to be more than 200 metres deeper at the Carpentaria-2 location than the same sequence in Carpentaria-1.



Civil works for the Carpentaria-2 well pad and access roads are advancing well. Water bore drilling has been completed.

The drilling of the Carpentaria-2H well is expected to commence in late October once final Northern Territory approvals are received. The Carpentaria-2 vertical hole section will be drilled through the Velkerri Formation shale sequence followed by an extensive formation evaluation program. The vertical hole section will be immediately plugged back and the horizontal Carpentaria-2H hole section drilled into the Velkerri Formation shale to be high-graded by the pilot hole and Carpentaria-1 formation evaluation and production testing. Hydraulic fracture stimulation and EPT of the Carpentaria-2H horizontal well, which will be designed to test the commercial production potential of the well, is planned to start early in the 2022 dry season once technical data has been collected and analysed.

Following drilling operations, Empire will commission an updated independent resource assessment which, in the success case, would materially upgrade contingent resources in EP187 by derisking hydrocarbon resources in the area between Carpentaria-1 and Carpentaria-2H.

Empire has commenced long-lead item acquisition for the well and expects to announce the selected drilling contractor shortly.

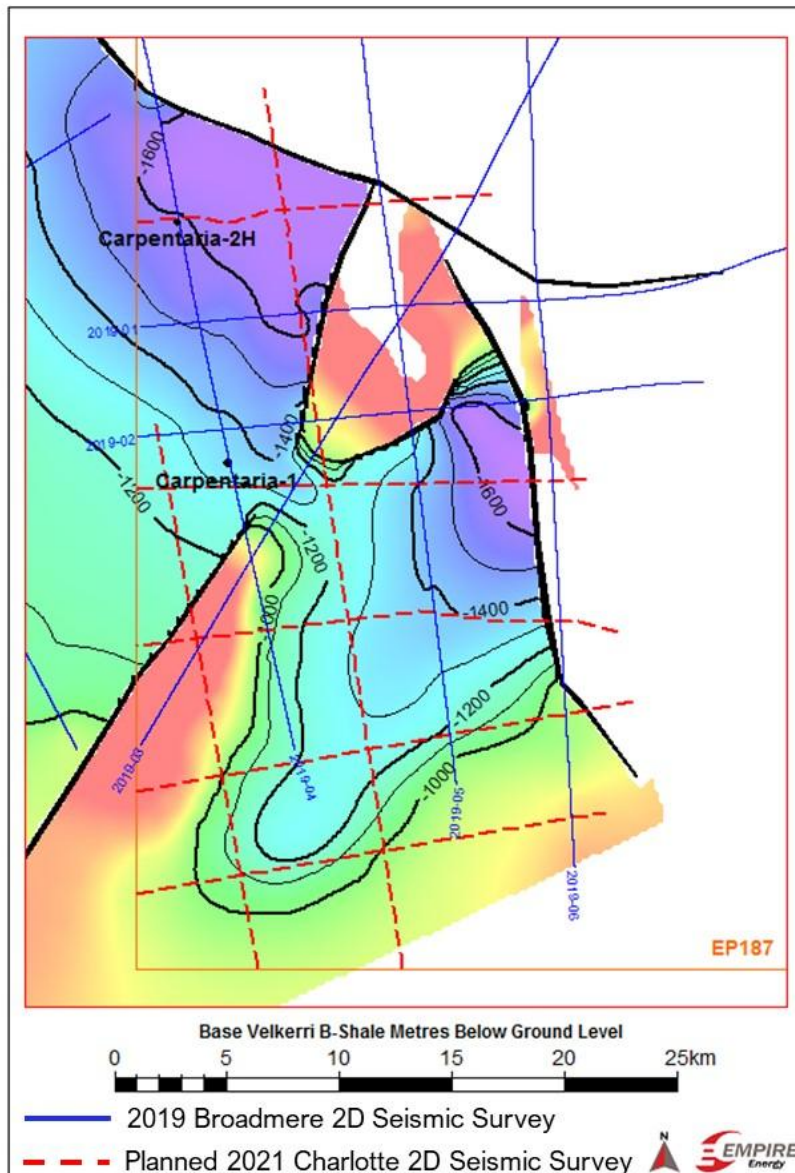
The drilling and civil construction portion of the program is expected to cost ~\$11.5 million (before reimbursement of 25% of relevant funds under the *Beetaloo Co-operative Drilling Program* grants estimated to be ~\$2.5 million - \$3 million).

Charlotte 2D Seismic Survey

The EP187 Charlotte 2D Seismic Survey is scheduled for Q4 2021. On-ground activity will commence shortly with line clearing followed by seismic line acquisition. The seismic acquisition program is expected to take a total of seven weeks. Seismic acquisition will run simultaneously with the drilling of the Carpentaria-2H well, which is being drilled on an existing seismic line.

The seismic program will be a seven-line survey with a total line length of approximately 165 kilometres. The purpose of the survey is to better define the continuity and structure of Velkerri Formation shales by providing further data to enhance Empire's 2019 Broadmere 2D Seismic Survey and to map the areal extent of the shale basin in the southern area of EP187. The survey will also aid future appraisal drilling activity.

The seismic program is expected to cost \$1.3 million (before reimbursement of 25% of relevant funds under the *Beetaloo Co-operative Drilling Program* grants estimated to be ~\$0.3 million).



Empire receives Refundable Research and Development Tax Offset

The R&D Tax Incentive scheme is designed to encourage companies to undertake R&D activities and pioneer technical innovation in Australia. The scheme entitles companies with an aggregated turnover of less than \$20 million to access a refundable tax offset of 43.5% of eligible expenditure on eligible R&D activities.

Empire's eligible R&D activities relate to technical innovation in respect of the Carpentaria-1 vertical well, including the development of new fracture stimulation techniques to extract hydrocarbons from a Mesoproterozoic source.

Empire has received a refundable tax offset in the amount of \$5.37 million cash under the Federal Government's Research and Development ("R&D") Tax Incentive Scheme in relation to eligible R&D activities undertaken during the financial year ended 31 December 2020. This is a separate scheme to the *Beetaloo Cooperative Drilling Program* grants Imperial recently entered into.

Deloitte Tax Services advised Empire in relation to the preparation of the Research & Development Tax Incentive application.

Empire's current cash balance is approximately \$31.1 million. Empire has already spent approximately \$0.5 million on long-lead items for its upcoming drilling program.

Commonwealth *Beetaloo Cooperative Drilling Program* Update

On 7th July 2021 the Commonwealth Minister for Resources and Water announced approval of up to \$21 million in grant funding to Empire under the *Beetaloo Cooperative Drilling Program* ("Grant Decision").

On 28th July 2021, an activist organisation called Environment Centre NT Inc ("ENT") commenced proceedings in the Federal Court against the Minister and Commonwealth seeking judicial review of various government decisions relating to the *Beetaloo Cooperative Drilling Program*, including the Grant Decision ("Proceeding").

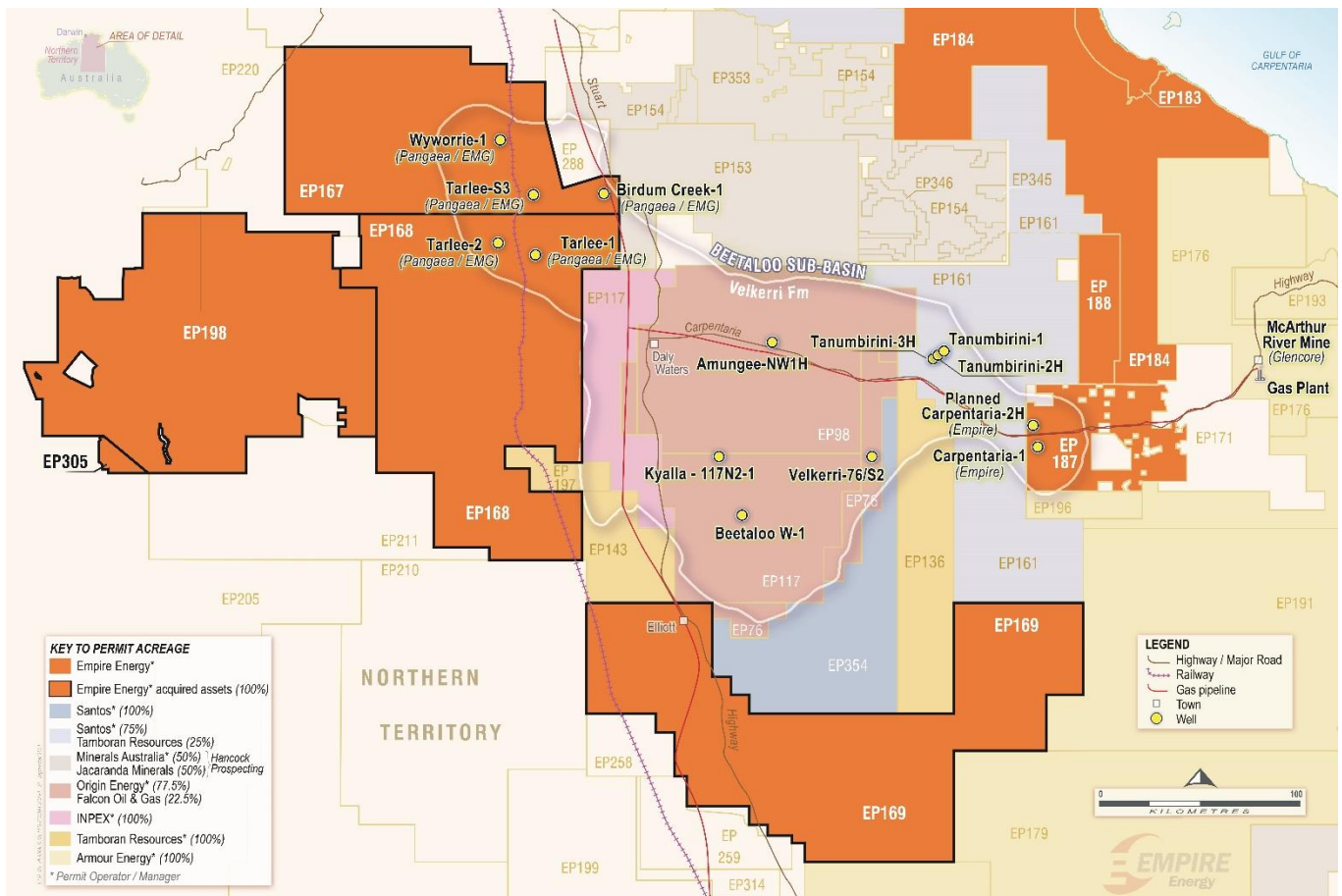
On 10th September 2021 Empire's wholly owned subsidiary, Imperial, entered into three grant agreements with the Commonwealth ("Grant Contracts").

On 23rd September 2021, the Federal Court granted leave to ENT to join Imperial to the Proceeding. An Amended Originating Application, naming Imperial as the third respondent, was served on 24th September 2021. The relief sought by ENT, if upheld, would include a declaration that the Grant Contracts are void.

The Proceedings are being defended by the Minister and the Commonwealth, and will now also be defended by Imperial, to the extent the Proceedings relate to the Grant Contracts.

The Amended Originating Application does not allege any wrongdoing by Empire or Imperial (or any of its officers).

APPENDIX A – BEETALOO SUB-BASIN REGIONAL WELLS



This ASX release has been authorised by the Managing Director.

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