

ASX ANNOUNCEMENT

3 August 2022

Operational Update and Appointment of Exploration Manager

Top End Energy Limited (**Top End** or the **Company**) (ASX:TEE) is pleased to provide an operational update and announce the appointment of Marshall Hood as Exploration Manager.

HIGHLIGHTS

- Reprocessing and interpretation of existing 2D seismic data underway on ATP 1069 ahead of a planned seismic acquisition campaign later in the year
- Upcoming On Country Meetings with native title holders in the Northern Territory focused on reaching proposed exploration agreement and work program approvals
- Further strengthening of executive team with the addition of Marshall Hood as Exploration Manager bringing extensive technical and operational experience
- Nearby operators in the Northern Territory remain active with upcoming drilling programs targeting commercially viable flow rates and near-term pilot production projects

ATP 1069

The Company has engaged Howman Seismic Services (**Howman**) to undertake the reprocessing of existing 2D seismic data over the key target area of ATP 1069, the Company's 100% owned permit in Queensland (the **Permit**). The Company has identified multiple plays across the Permit and intends primarily to pursue potential conventional natural gas prospectivity in the deeper Adavale Basin towards the southern part of the Permit. The Gilmore gas field, situated 50 km west of the Permit, has demonstrated commercial conventional gas production from the Lissoy Sandstone and Log Creek Formation of the Adavale Basin. Initial seismic interpretation suggests these formations may be present within ATP 1069, but no wells have been drilled to these depths on the Permit. The Company's ongoing and intended 2022 work program is targeted to better understand this potential conventional gas prospectivity and ultimately high-grade drillable prospects.

Howman have been engaged to digitise analogue seismic data and undertake pre-stack time migration processing of up to 220 km of vintage seismic lines. The purpose of the reprocessing and subsequent interpretation is the following:

- consolidate and optimise available seismic and offset well data;
- establish a better understanding of subsurface, charge and migration modelling;

- better define prospectivity potential and indicative drilling targets; and
- refine the location for a planned acquisition of up to 120 km of additional 2D seismic survey, intended to be undertaken later in the year subject to the outcome of the current reprocessing and interpretation activities.

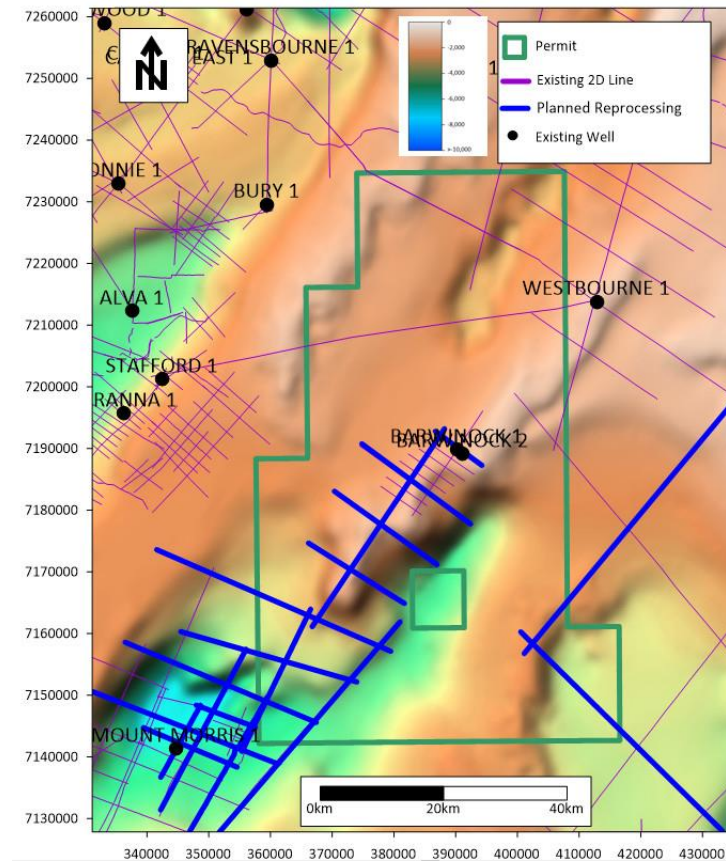


Figure 1: Existing 2D seismic lines currently being reprocessed

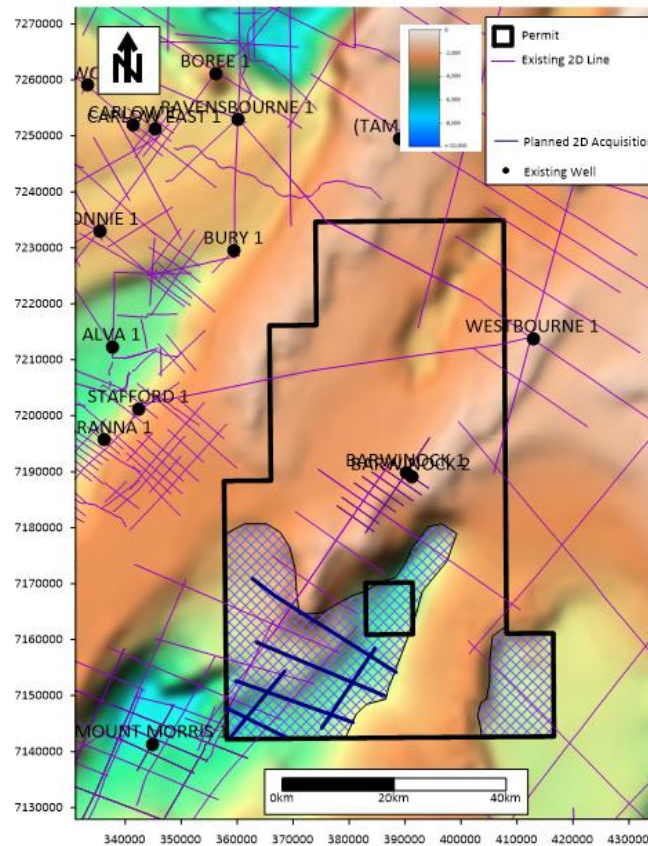


Figure 2: Proposed lines for new 2D seismic acquisition

NORTHERN TERRITORY

The Company continues to prepare for its upcoming On Country Meetings (**OCM**) with native title holders on the EP 258 application located in the Greater McArthur Basin. OCMs are scheduled for August and September, during which it is intended by the Company that an exploration agreement ancillary to an agreement under section 31(1)(b) of the Native Title Act be reached for the grant of the permit and approval of the proposed 2023 work program.

The Company is also in discussions with the Northern Land Council regarding a potential OCM with the traditional owners of the EP 259 permit application. Subject to the outcome of the OCM for EP 258, an OCM for EP 259 is provisionally intended for mid-September.

Conditional on the success of the OCMs and satisfaction of necessary approvals and land access agreements, the Company intends to acquire up to ~150 km of seismic survey in H1 2023 with the objective of confirming the presence of the conventional Bessie Sandstone and unconventional Velkerri Shale formations.

Meanwhile, existing operators remain very active in the Beetaloo Basin, a sub-basin of the Greater McArthur Basin, with the following announced near-term activities intended to progress proving commercial viability of unconventional resources:

- As announced on 13 July 2022, Empire Energy has commenced the fracture stimulation of its Carpentaria-2H well, successfully pumping the first of 25 planned stages within the Velkerri B Shale. Empire is also planning to drill the Carpentaria-4V vertical well and drill, hydraulically stimulate and flow test the Carpentaria-3H horizontal well later this year. Subject to the results of current activity, Empire hopes to achieve first production in 2024 / 25¹;
- As announced in its quarterly activities report on 29 July 2022, Tamboran Resources is preparing to spud its Maverick 1H well in Q3 2022, consisting of a planned 1,000m horizontal section and up to 20 fracture stimulation stages. Tamboran is also planning the 100 mmscf/d Maverick Pilot Development Project which, subject to the Maverick 1H drilling results, is targeted for the end of 2023; and
- Falcon Oil & Gas announced on 4 May that it is planning, with its joint venture partner Origin Energy, to drill a circa 1,000m horizontal well on the Amungee NW-1H pad, targeting the Amungee Member (formerly known as the Middle Velkerri) B Shale and a vertical pilot and circa 1,000m horizontal well, also targeting the Amungee Member B Shale, at a step out location circa 10km from the Amungee NW-1H pad. 15 fracture stimulation stages are planned on each well, with the primary objective of the two wells to obtain a production rate of between 2-3 mmscf/d over 30 days to support a multi-well pilot programme in 2023 / 24.

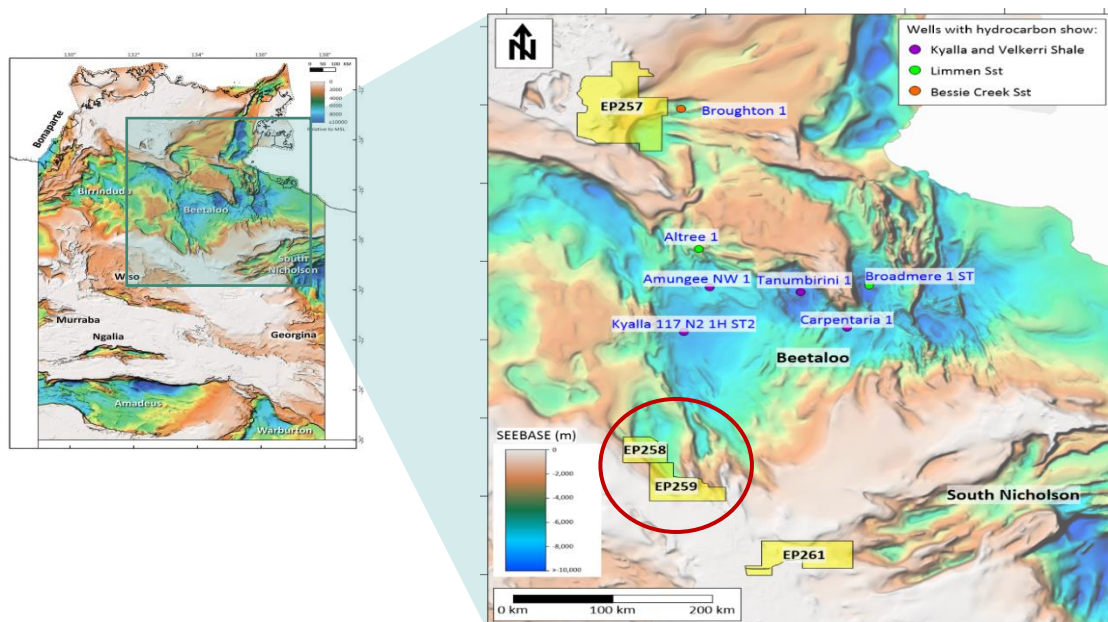


Figure 3: Top End's key permits in the Greater McArthur Basin

MARSHALL HOOD

Mr Hood has 18 years of technical, operational and commercial experience across the energy sector including upstream oil and gas, hydrogen and small-scale LNG.

¹ Camden Smith, "Empire building: Project on track with production timetable", NT News, 28 July 2022.

Mr Hood brings subsurface and operational experience covering the full E&P cycle including prospect generation and maturation, drilling operations, appraisal and development, M&A, joint venture and asset management. Mr Hood has a successful exploration track record with more than 15TCF of gas discovered across multiple operated assets.

Most recently, Mr Hood was Chief Operating Officer for BCPR, a wholly owned subsidiary of Bangchak Corporation. Previous roles include Vice President of Subsurface and Operations for Nido Petroleum Ltd and Senior Geophysicist for Ophir Energy Plc.

Mr Hood holds a B.Sc. (Hons) in Exploration Geophysics from Curtin University of Technology.

Mr Hood's engagement follows the recent appointment of Mike Fischer as a Non-Executive Director.

Commenting on the recent appointment, Managing Director Oliver Oxenbridge said, "We are very pleased to have Marshall join the team – he brings a wealth of technical, operational and commercial experience. His support and skillsets are essential as we advance our work programs in both Queensland and the Northern Territories and focus on hitting near-term value catalysts."

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This announcement was authorised for release by the Board of Directors of Top End Energy Limited.

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About Top End Energy Limited

Top End aims to be a leading Australian diversified energy provider at the forefront of the energy transition. Combining an attractive portfolio of granted and in-application petroleum permits in Queensland and the Northern Territory, with intentions to pursue complementary clean energy solutions and achieve a target of net zero (Scope 1 & 2) emissions.

For further information on Top End Energy Limited please visit www.topendenergy.com.au

About Howman Seismic Services

Howman Seismic Services is an emerging seismic processing business based in Perth, with a focus on flexibility and customer satisfaction. The business was formed in 2016 with the intention of filling a void in the Western Australian seismic processing market left by the recent exodus of several processing houses.

Howman have positioned themselves as a developing provider of all digital services to the seismic industry. The core of their business is processing seismic data from raw field data through to final migrated images of the subsurface.

For further information on Howman Seismic Services please visit www.howmanseismic.com