

ASX ANNOUNCEMENT

20 February 2023

Appointment of Contractor for ATP 1069 2D Seismic Acquisition

Top End Energy Limited (**Top End** or the **Company**) (ASX:TEE) is pleased to provide an update on its Queensland activities, including the appointment of Terrex Pty Ltd (**Terrex**) to undertake the acquisition of approximately 120 line kilometres of new 2D seismic on ATP 1069 (the **Permit**).

HIGHLIGHTS

- Terrex contracted to execute new 120km 2D seismic acquisition over the large Coolibah Prospect (PMean prospective resource of 715 bcf) in Q1/Q2 2023
- Program designed to improve chance of success ahead of drilling decision in H2 2023
- ATP 1069 is 100% owned by the Company and located near to existing infrastructure and the gas-starved East Coast market
- Strategic location and scale of Coolibah Prospect likely to attract farm-in interest

COOLIBAH PROSPECT

The Coolibah conventional gas prospect was identified following completion of the Company's prospectivity review of its 100% owned Authority to Prospect (**ATP**) 1069.

The Coolibah prospect is a large anticlinal feature (~278km²) identified from geological and geophysical studies focussed on assessing the conventional gas potential of Devonian aged formations including the Buri Limestone. The Buri Limestone is of equivalent age to the producing Lissoy Sandstone formation of the nearby Gilmore Gas Field.

The following Prospective Resources at the Coolibah Prospect have been independently assessed by Discover Geoscience:

Coolibah Prospect (100%) ¹	PMean	P10	P50	P90
Gas in Place (bcf)	1,951	4,140	1,288	400
Prospective Resources (bcf) ^{2 3}	715	1,573	491	150

Table 1: Coolibah Prospective Resources independently assessed by Discover

A proven working petroleum system exists in the Adavale Basin as evidenced by the Gilmore Gas Field which is situated approximately 50km west of ATP 1069. Any discovered gas volumes at Coolibah would have the potential to be monetised through nearby infrastructure with access to the East Coast gas market.

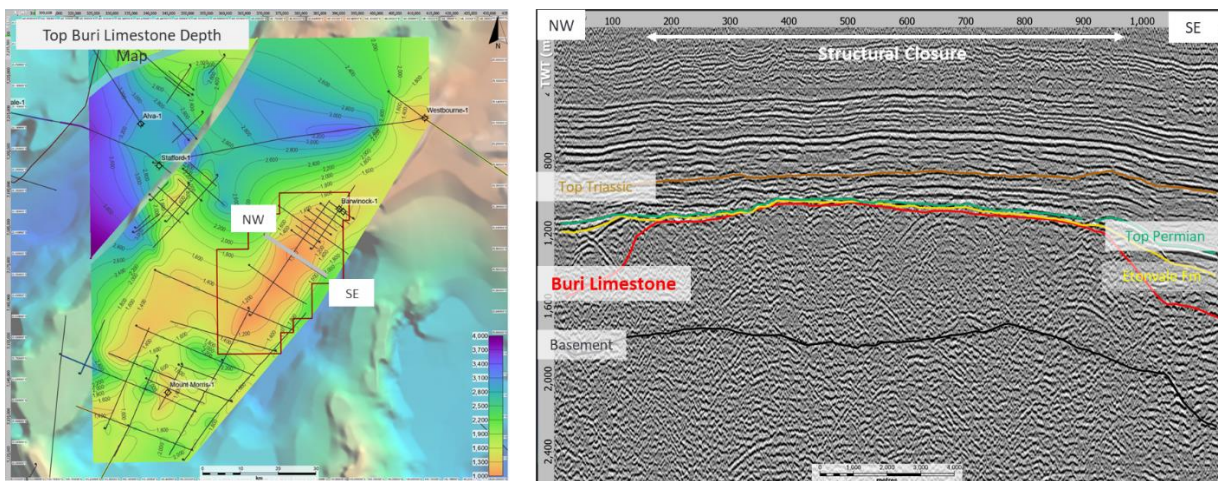


Figure 1: The Coolibah prospect on ATP 1069⁴

NEW 2D SEISMIC SURVEY

On the back of the geological and geophysical work completed since the Company acquired the Permit in April 2022, the Company has refined the scope of the intended seismic acquisition of approximately 120km of new 2D lines. All vintage seismic data in the area is from the 1980s and lacks modern acquisition technology and quality. The new

¹ Please see ASX announcement "Certified Prospective Resource & Operational Update" (29 November 2022); the Company is not aware of any new information or data that materially affects the information included in the ASX announcement and all material assumptions and technical parameters underpinning the estimates in the ASX announcement continue to apply and have not materially changed.

² The estimated quantities of hydrocarbons that may potentially be recovered by the application of a future development project relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration, appraisal and evaluation is required to determine the existence of a significant quantity of potentially recoverable hydrocarbons.

³ The Prospective Resource estimates have been prepared using the probabilistic method and are presented on an unrisks basis. In a probabilistic resource distribution, P90 (Low), P50 (Best), P10 (High) estimates represent the 90%, 50% and 10% probability respectively that the quantity recovered will equal or exceed the estimate assuming a success case in the prospect.

⁴ The Permit perimeter shown in Figure 1 reflects the recent relinquishment of 1,012 sub-blocks in accordance with the Company's obligations under the Petroleum and Gas (Production and Safety) Act 2004.

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program will infill this vintage data over the Coolibah prospect with the objective of better defining a potential drilling target on the structure.

The acquisition will involve the use of a state-of-the-art receiver array and vibroseis source trucks. The strike line of the seismic program is planned to extend beyond the southern boundary of the Permit to tie-in the seismic data with data from the Mount Morris 1 well, drilled in 1984. The Company is in the process of submitting a Data Acquisition Authority to permit the acquisition of the seismic data outside the Permit boundary.

The objective of the infill seismic campaign is to reduce subsurface geological risk by assessing the likely distribution and quality of hydrocarbon reservoirs and confirmation of a structural closure with sealing capacity. The ultimate intention is to mature the Coolibah Prospect towards a drilling decision later in 2023.

The acquisition is expected to be undertaken late Q1 / Q2 2023 subject to the finalisation of land access agreements with the owners of the land on which the seismic survey is to be undertaken. The Company initiated engagement with relevant landowners in Q3 2022 and is targeting completion of this workstream by the end of Q1 2023.

Subject to the outcome of the seismic acquisition, the Company plans to farm down a portion of its 100% interest ahead of drilling a potential exploration well to test the Coolibah Prospect.

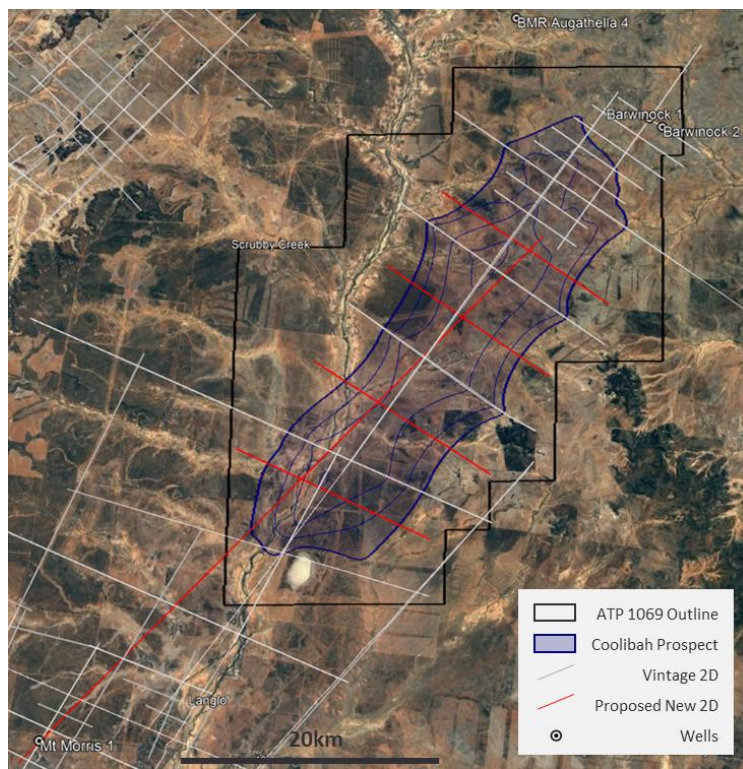


Figure 2: Planned 2D seismic scope to be undertaken in Q1/Q2 2023 ⁵

⁵ The Permit perimeter shown in Figure 1 reflects the recent relinquishment of 1,012 sub-blocks in accordance with the Company's obligations under the Petroleum and Gas (Production and Safety) Act 2004.

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REGULATORY COMPLIANCE

In accordance with the Company's obligations under the Petroleum and Gas (Production and Safety) Act 2004, 1,012 sub-blocks of the Permit have been relinquished. The retained sub-blocks were specifically selected by the Company to include the broader Coolibah prospect and surrounding area, as well as the two wells previously drilled on the Permit (Barwinock 1 and Barwinock 2). Consequently, the relinquishment should not impact the Company's primary intended work activities for the Permit, which are focused on progressing the Coolibah prospect to drill-ready status.

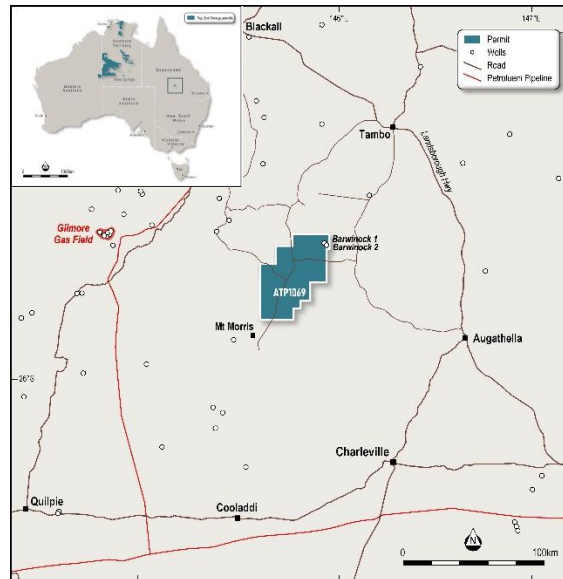


Figure 3: ATP 1069 post-relinquishment

In response to the engagement with Terrex, the Company's Managing Director Oliver Oxenbridge commented: "We are excited to be taking this significant next step in progressing the Coolibah prospect to a potential drilling event. Terrex are a very experienced operator in the seismic acquisition space – we are looking forward to working with them on the ATP 1069 campaign and building a partnership that should further serve the company as we mature opportunities across the portfolio."

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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 across Australia, 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 Terrex

Terrex Seismic is a seismic acquisition company focused on onshore Australia. Terrex Seismic is one of Australia's most experienced seismic contractors, having worked for the last 38 years in every major Australian onshore sedimentary basin as well as in numerous other locations around the world. They have acquired over 1,000 seismic surveys to date and pride themselves on consistently supporting and serving the industry, bringing equipment and technical innovation to the forefront of seismic exploration regardless of the unpredictability of the cyclical nature of the resource industry.

For further information on Terrex Pty Ltd please visit www.terrexseismic.com/