

ASX ANNOUNCEMENT

1 March 2023

<u>Appointment of Contractor for Gravity Gradiometry on NT EP 258</u>

Top End Energy Limited (**Top End** or the **Company**) (ASX:TEE) is pleased to provide an update on its Northern Territory activities, including the appointment of Xcalibur Aviation (Australia) Pty Ltd (**Xcalibur**) to undertake the acquisition of approximately 2,500 line kilometres of Falcon airborne gravity gradiometry (**AGG**) data over the Company's Southern McArthur Basin EP 258, subject to receiving formal grant of the permit.

HIGHLIGHTS

- Mid-March 2023 on country meeting to target near-term grant of EP 258 Greater McArthur Basin permit proximate to the highly prospective and active Beetaloo Basin
- Contract awarded for the acquisition of 2,500 km lines of gravity graditometry data to commence post-permit grant
- Falcon AGG survey to provide high resolution gravity gradient datasets to aid structural interpretation and optimise acquisition parameters and location of planned 2D seismic survey
- Commencement of native title engagement for other prioritised blocks in the McArthur and Amadeus basins
- Nearby operators in the Beetaloo Basin remain very active with full ongoing and planned drilling campaigns targeting near-term pilot projects

EXPLORATION PERMIT 258

The Company held its last on country meeting (**OCM**) with the native title holders of Exploration Permit (**EP**) 258 in November 2022 in Tennant Creek. The purpose of this meeting was for native title holders to decide whether to agree to the terms of the proposed exploration agreement (the **Exploration Agreement**) ancillary to an agreement under section 31(1)(b) of the Native Title Act. Heading into the meeting, the Company had reached an agreed position with representatives of the Northern Land Council (**NLC**) on the in-principle terms of the Exploration Agreement subject to further instruction from native title holders.



All key decision makers from the native title holder group were in attendance at the November OCM and feedback from the NLC was positive. During the meeting, no further changes to the Exploration Agreement were proposed, and there were no further questions for the Company in relation to the intended exploration activities on EP 258. A number of key decision makers who were unable to attend the first OCM had, however, requested more time to consider the Exploration Agreement.

The Company has been working with the NLC to facilitate a final OCM with native title holders to resolve their decision to enter into the Exploration Agreement. This meeting is intended to be held in mid-March 2023. The Exploration Agreement remains in agreed form between the Company and the NLC, subject to instruction from the native title holders, following the implementation of changes to reflect recent legislative amendments to the Petroleum Act.

It is intended, subject to the final decision meeting, that the Exploration Agreement be executed concurrently with the Section 31 Deed (the **Deed**), to which both the Company and the Northern Territory Government (**NTG**) will also be a party. The Deed is a statutory document, which the NTG relies upon for the consent of the native title party to the grant of the EP under the Native Title Act. The Company has engaged with both the NLC and NTG on the form of the Deed in order to minimise any delay to formal grant once the Exploration Agreement with the native title holders has been finalised.

FORWARD WORK PROGRAM FOR EP 258

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The Company has executed a service contract with Xcalibur for the acquisition of approximately 2,500 line kilometres of AGG over the entire Southern McArthur Basin area of EP 258, subject to the formal grant of the EP. Subject to receiving grant, it is intended that the AGG survey be undertaken in Q2 / Q3 2023.

The objective of the AGG survey is to better understand the location and orientation of structural lineaments and basin architecture including basement highs, deep-seated faults and density contrasts between reservoirs and seals across EP 258. Interpretation of the AGG dataset in conjunction with regional magnetic surveys and play fairway mapping will help to optimise the location, orientation and specifications of a planned new shoot 2D seismic survey across the EP.



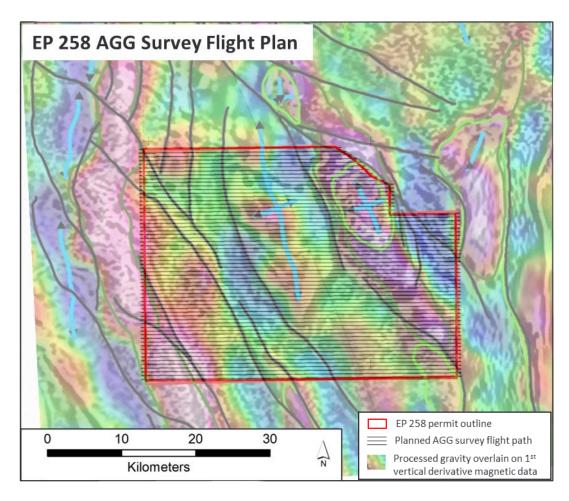


Figure 1: AGG Flight Survey Plan for EP 258 overlain with preliminary interpretation from existing regional gravity and magnetic datasets

The objective of the refined 2D seismic survey, targeted to be undertaken later in the year, will be to confirm the extension of the proven play system that hosts the significant discoveries which have been made in the Beetaloo Basin, including the conventional Bessie Sandstone and unconventional Velkerri Shale reservoirs, into the Company's application areas on the Southern McArthur Basin margin (Figure 2 & 3), and ultimately aid in the identification of drilling targets.

The Company continues to progress the key approvals and access agreements required for both the AGG survey and the proposed 2D seismic survey.

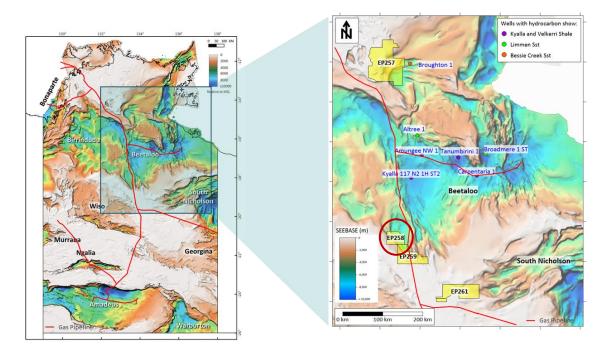


Figure 2: Top End's key permits in the Greater McArthur Basin

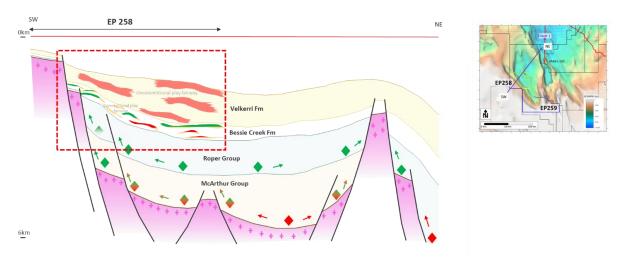


Figure 3: Regional schematic highlighting the potential of the untested southern margin of the Greater McArthur Basin and EP 258

ADDITIONAL KEY NT APPLICATIONS

In addition to EP 258, the Company is also engaging with the NLC regarding consultations with traditional owners for the intended grant of EP 259 and EP 257. The Company will pursue a similar McArthur Basin margin play for EP 259 and previously initiated the native title process for the permit application in mid-2022. That process was suspended to focus on achieving grant of EP 258 but has since recommenced. The Company views EP 257 as being prospective for Hydrocarbons, Helium and Natural Hydrogen.



The Company intends to initiate a similar process with the Central Land Council for the prioritised permit applications in the Amadeus Basin (EP 279 and EP 280).

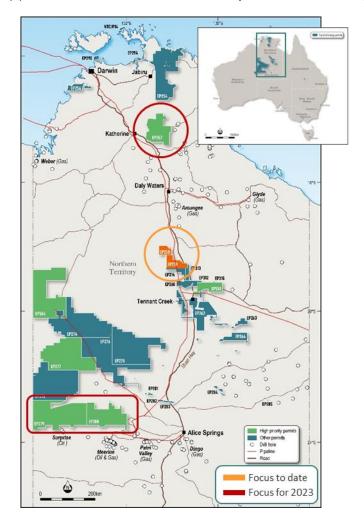


Figure 4: Additional priority NT applications to be pursued to grant in 2023

In response to the progress in the NT, the Company's Managing Director Oliver Oxenbridge commented: "We have an exciting year ahead of us in the Northern Territory. We've made great process on progressing EP 258 and are looking forward to getting back on country with the native title holders in the coming weeks and closing out this stage of the process. The AGG survey will provide valuable data for building-on our existing understanding of the regional geology and potential for the Southern McArthur Basin margin play. The data will help refine our prospectivity models, the acquisition parameters for the planned 2D seismic survey and ultimately potential drilling locations.

We're also pleased to be progressing the native title process towards grant of the Company's other prioritised permit applications in the NT, across which we see material prospectivity potential for Hydrocarbons, Helium and Gold Hydrogen."



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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 Xcalibur

Xcalibur acquire, process and interpret airborne geophysical data for exploration, development and production of oil and gas, minerals water, geothermal and other resources, and for mapping, environmental and engineering studies.

Xcalibur has established more than 50 million linear kilometres of collected data. It has executed more than 1,000 projects across 6 continents, with a fleet of 25 owned specialised aircraft, 85 geophysical systems, and a team of 250 highly qualified employees.

For further information on Xcalibur please visit www.xcaliburmp.com