Orpheus Granted Exploration Licences to Further Extend Marree Project Area

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HIGHLIGHTS

- **Orpheus granted exploration licences EL 7144, EL 7145 and EL 7146, further extending Orpheus' developing Marree Uranium Project in South Australia.**
- **The new licences complement the Company's broader district-scale expansion strategy, including the strategic Marree tenure transaction first announced on 11 June 2026.**
- **Orpheus has an established Native Title Mining Agreement (NTMA) for exploration with The Dieri Aboriginal Corporation (TDAC), which provisions the efficient pathway to future exploration activities, subject to consultation, approvals and access requirements.**

Orpheus Uranium Limited (ASX: ORP) ("Orpheus" or "the Company") is pleased to advise that Exploration Licences EL 7144, EL 7145 and EL 7146 have been granted to Orpheus' wholly owned subsidiary, Trachre Pty Ltd. The grant of the licences further extends the Company's developing Marree Uranium Project and increases the scale and continuity of its licence holdings throughout the project area (see Figure 1).

The newly granted tenements are located within the broader, uranium rich Lake Eyre Basin and share geological synergy and potential for sedimentary-style uranium mineralisation with both the Company's existing tenure and tenements recently acquired (see ASX announcement dated 11 June 2026). The resulting combined project area, positioned along the western margin of the Northern Flinders Ranges and extending westward into the Lake Eyre Basin, provides Orpheus with a district-scale, geologically relevant landholding in a region where the Company has established relationships with key stakeholders, including the determined Traditional Owners represented by TDAC.

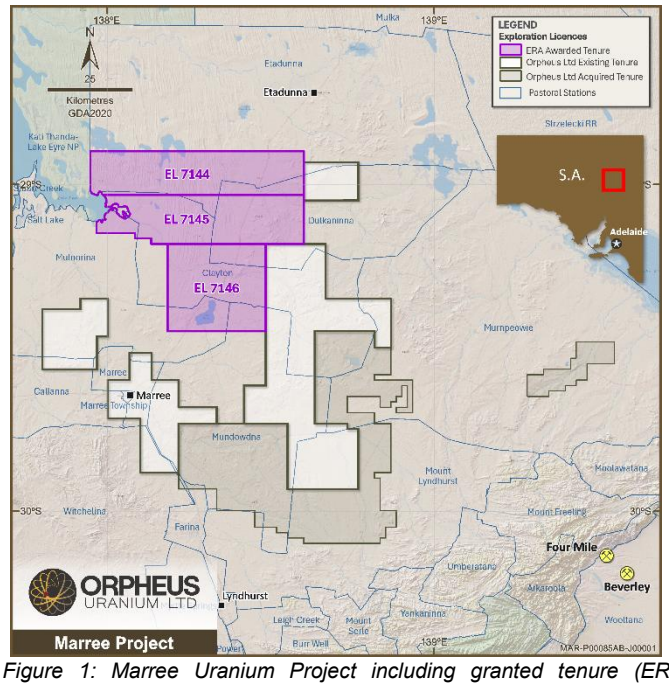


Figure 1: Marree Uranium Project including granted tenure (ERA awarded), existing and recently acquired tenure with pastoral properties.

Managing Director Mr Clinton Dubieniecki commented:

"Together with our existing and recently acquired tenure, the granting of these new exploration licences has really cemented Marree's place as a district-scale uranium exploration project, securing Orpheus' long-term pipeline of exploration targets in a very promising basin and providing a junior explorer with a unique opportunity to evaluate a known uranium-mineralising system as a whole.

Importantly, as we integrate regional datasets, field observations and geological learnings across the broader project, our team will be able to apply a consistent exploration model, progressively refine the most prospective parts of the system and pursue a meaningful uranium discovery."

Geological Setting

The broader Marree Project area contains the key geological components considered important for the development of sediment-hosted roll-front uranium mineralisation. Uranium-enriched granitic rocks of the Mount Babbage and Mount Painter Inliers represent potential regional source rocks. Weathering and groundwater circulation has proven to mobilise uranium from these rocks, with oxidised uranium-bearing fluids subsequently transported through permeable fluvial sediments of the Eyre and Namba Formations and, locally, through underlying Cretaceous sedimentary sequences.

EL 7144, EL 7145 and EL 7146 are located within the broader Lake Eyre Basin and contain mapped occurrences of prospective sediments of the Namba and Eyre Formation and various Cretaceous units (see Figure 2). Most notably the Eyre Formation is a recognised host to uranium mineralisation within the surrounding province, including at the near-by Four Mile, Pannikan and Pepegoona deposits, while related regional palaeochannel systems also host the Honeymoon and Goulds Dam deposits. Mineralisation at Four Mile West and Beverley further demonstrates the broader potential of underlying Cretaceous sedimentary units and the Namba Formation, respectively.

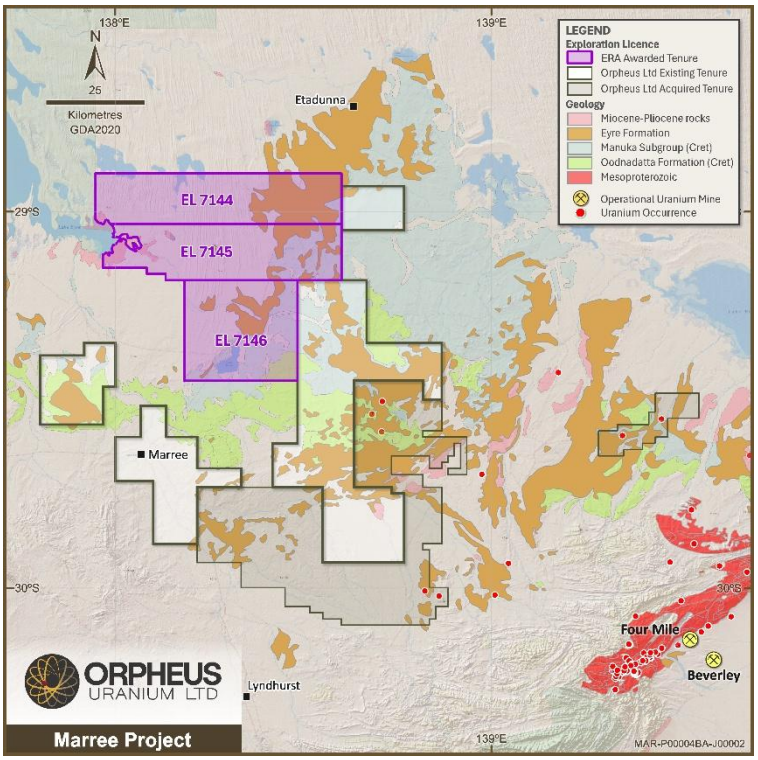


Figure 2: Marree Uranium Project including granted tenure (ERA awarded), existing and recently acquired tenure with select geology units of interest (sourced SARIG https://map.sarig.sa.gov.au/)

The mapped exposure and shallow sub-crop of the Eyre Formation across the eastern and southern portions of the granted tenements (see Figure 2), may provide an important exploration vector for identifying potential recharge zones and pathways through which oxidised uranium-bearing groundwater can enter and migrate through the sedimentary system. While the presence of exposed Eyre Formation does not, by itself, demonstrate a mineralised system, its relationship with buried palaeochannels, permeable sandstone units and basinward fluid pathways may assist in refining priority target areas.

Where these uranium-bearing fluids encounter reduced Eyre Formation sediments at depth, redox boundaries may develop and provide favourable sites for sediment-hosted uranium accumulation. Exploration across the granted tenure will therefore focus on defining the geometry and continuity of buried palaeochannels, identifying prospective permeable sandstone horizons and determining whether effective reductants coincide with interpreted uranium-bearing fluid pathways.

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Next Steps to Advance Exploration

Initial work will focus on applying the uranium mineralisation model being developed across Orpheus' existing and recently acquired tenure to the newly granted licences. This work will use contemporary in-house interpretation techniques, supported by on-ground field visits to further calibrate and refine the model. Priority target areas identified through these programs will be considered for advanced-stage exploration activities, including drilling, along with works to gain the required access, heritage and regulatory approvals.

To support the geological interpretation and enable on-ground access for advanced-stage activities, the Company will:

- Refine the geological and mineralising model to define target areas for follow up activities;
- Utilise Orpheus existing NTMA (for exploration) with TDAC to expedite access requirements over the granted tenure through the Additional Authorities Covenant provisions;
- Continue constructive engagement with all relevant stakeholders;
- Complete heritage surveys over defined areas of interest;
- Obtain the regulatory approvals required for advanced-stage exploration activities; and
- Ongoing review of project tenure including acquisition of prospective tenure and rationalisation of tenement package to refine focus on geologically relevant areas.

Tenement Overview

A summary of the granted tenements is presented below:

SOUTH AUSTRALIAN MINERAL EXPLORATION LICENCES					
Tenement	Area (km^2)	Name	Project Name	Licensee	Interest
EL 7144	939	Etadunna South	Marree Uranium Project	Trachre Pty Ltd	100%
EL 7145	935	Dulkaninna North		Trachre Pty Ltd	100%
EL 7146	861	Dulkaninna South		Trachre Pty Ltd	100%

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This announcement was approved for release by the Board of Orpheus Uranium Limited.

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About Orpheus Uranium

Orpheus Uranium Limited is an Australian Securities Exchange (ASX) listed exploration company exploring for uranium in South Australia and the Northern Territory, both jurisdictions which allow uranium exploration, mining and processing. More recently, Orpheus has extended tenure into Western Australia through the execution of the sale agreement for the acquisition of the Oobagooma Uranium Project (progressing to completion), a state that contains multiple known uranium deposits.

Competent Person Statement

Sections of information contained in this report that relate to Exploration Results were compiled or reviewed by Mr Clinton Dubieniecki BSc (Hons), who is a Member of the Australian Institute of Geoscientists and is a full-time employee of Orpheus Uranium Limited. Mr Dubieniecki has sufficient experience which is relevant to the style of mineral deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves". Mr Dubieniecki consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

Forward Looking Statements

The written presentation may contain forward-looking statement regarding the outlook for the Company's interpretation, work programs, and financial results. These forward-looking statements generally can be identified by phrases such as "anticipates", "potential", "plans", "intends", "believes", "likely", "appears", "expects", "likely", "appears" or other words or phrases of similar impact. There is inherent risk and uncertainty in any forward-looking statements. Variance will occur and some could be materially different from management's opinion. Developments that could impact the Company's expectations include a variety of known and unknown risks, uncertainties and other factors that could cause actual events or results to differ from those expressed or implied, including, without limitation, business integration risks; uncertainty of development plans and cost estimates, commodity price fluctuations; political or economic instability and regulatory changes; currency fluctuations, the state of the capital markets, Orpheus' ability to attract and retain qualified personnel and management, potential labour unrest, unpredictable risks and hazards related to the development and operation of exploration programs that are beyond the Company's control, the availability of capital to fund all of the Company's projects. These forward-looking statements are made as of the date of this presentation and the Company assumes no obligation to update these forward-looking statements, or to update the reasons why actual results differed from those projected in the forward-looking statements, except in accordance with applicable securities laws.