

Orpheus Executes NTMA to Enable Advanced-Stage Exploration at Radium Hill South & Mundaerno

Highlights:

- **Native Title Mining Agreement (NTMA) executed with the Wilyakali Native Title Aboriginal Corporation (Wilyakali) Registered Native Title Body Corporate (RNTBC).**
- **Agreement provides foundation for Orpheus to extend Mineral Exploration Operations (MEO) beyond early-stage activities within the Radium Hill South and Mundaerno exploration licences which overlap Wilkyakali Determination area.**
- **Expert internal technical staff continue to review and refine target areas within the exploration licence.**
- **Regulatory, heritage and operational processes have commenced as to enable regulatory approval of advanced staged activities including drilling – expected approval Q4 2025.**

Orpheus Uranium Limited (ASX: ORP) (“Orpheus” or “the Company”) is pleased to announce it has executed a Native Title Mining Agreement (NTMA) with the Wilyakali Native Title Aboriginal Corporation (Wilyakali), the Registered Native Title Body Corporate (RNTBC) for the Wilyakali Determination Area.

The NTMA marks an important milestone for Orpheus, providing the basis to progress mineral exploration operations from early-stage through to advanced-stage activities within the Radium Hill South and Mundaerno tenements (Figure 1).

The agreement enables Orpheus to commence on-ground heritage clearance surveys in collaboration with Wilyakali representatives. These heritage clearances, alongside ongoing engagement with key stakeholders, will support the Company in obtaining the necessary government regulatory approvals to undertake drilling programs. It is anticipated that the approvals required for drilling will be obtained in early to mid Q4 of this year (2025).

Technical interpretation of the Radium Hill South and Mundaerno projects is ongoing in conjunction with Orpheus continued technical interpretation of projects within its developing portfolio.

Commenting on the exploration program, Orpheus Chief Executive Officer Clinton Dubieniecki commented:

“Executing this Native Title Mining Agreement demonstrates our commitment to respectful and constructive engagement with the Wilyakali people. This is a significant milestone for Orpheus, paving the way for advanced exploration activities at two highly prospective projects. We look forward to progressing these projects through the next stages and continuing to build a pipeline of geologically robust, drill-ready uranium targets for our shareholders.”

Next Steps

In parallel with heritage clearance preparation, Orpheus is advancing project development through:

- Submission of required documentation to commence process to gain regulatory approvals;
- Ongoing analysis and reinterpretation of historical drill data;
- Assessment of regional geophysical surveys to refine palaeochannel targeting;
- Continued liaison with landholders and other stakeholders.

The Radium Hill South and Mundaerno Projects are underpinned by a robust geological model, comparable to known sedimentary uranium deposits such as Four Mile, Beverley and the Samphire Project. These targets typically occur in Tertiary-aged palaeochannel sediments proximal to uranium sources and abundant reductants that enable uranium mineralisation to accumulate.

At Radium Hill, five known prospects have been identified within the northern Murray Basin margins and include historical intersects of **2m at 507ppm eU₃O₈** and **2m at 401ppm eU₃O₈**. Host rocks of the historic Radium Hill Uranium Fields are potential source rocks for uranium mineralisation, while the nearby Anabama or Cromwell Granite present an alternate uranium source. Sediments of the Murray Group provide a permeable host, which has evidence of reductants suitable for uranium accumulation. Updated interpretation techniques leverage of historical drilling, which refine target areas that remain open to host economic uranium mineralisation.

The Mundaerno Project lies within the headwaters of the Yarramba Palaeochannel, which hosts the Honeymoon and Jason uranium deposits. Potential source rocks are the proximal Honeymoon Granite or equivalent, whilst sediments of the Eyre Formation are proved to host economic uranium mineralisation and are the primary target formation within the project.

Preparation for upcoming exploration activities at Radium Hill South and Mundaerno will continue alongside Orpheus' development of a broader project pipeline.

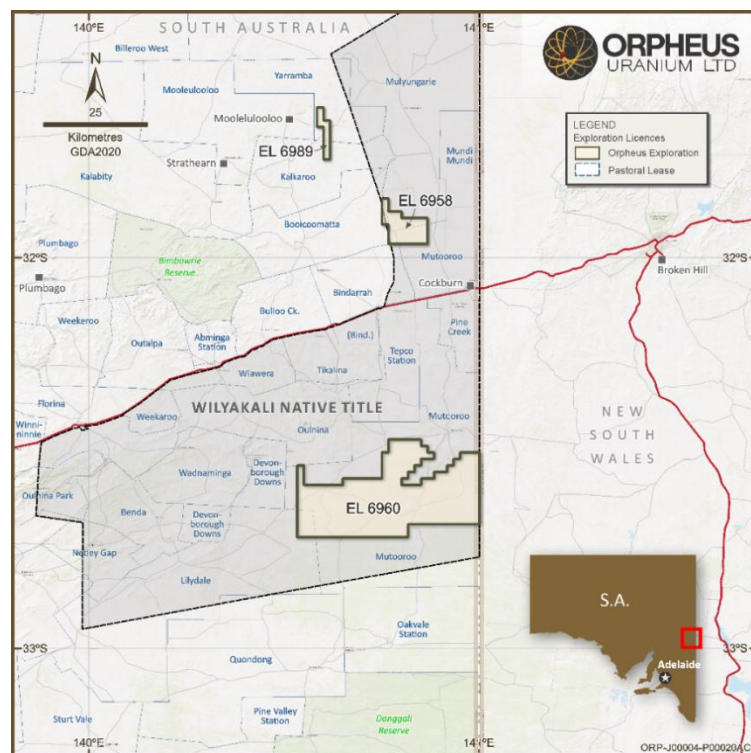


Figure 1: Location map of Orpheus' EL 6960 (Radium Hill) and EL 6958 (Mundaerno) tenements with Wilyakali determination are and pastoral properties. Note: EL 6958 is the tenement area post partial relinquishment, which has been submitted and is being processed by DEM.

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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 listed exploration company exploring for uranium in South Australia and the Northern Territory, both jurisdictions which allow uranium mining and processing.

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 (AIG), Member of Australasian Institute of Mining and Metallurgy (AusIMM), 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.