ASX: ORP

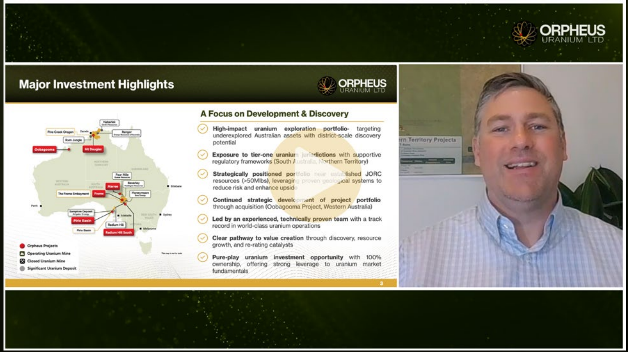
ORPHEUS URANIUM LTD

QUARTERLY UPDATE

UNLOCKING TOMORROW'S ENERGY TODAY

APRIL 2026

orpheusuranium.com



Watch Managing Director Clinton Dubieniecki discuss the highlights of the Quarterly Update (8min)

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Past performance

Past performance is not indicative of future performance, and no guarantee of future returns is implied or given.

Financial data

All references to dollars ($) and cents are to Australian currency, unless otherwise stated.

Market and industry data

This Presentation contains third party data relating to the industries, segments and markets in which the Company operates or aims to operate (Industry Data). This information has been prepared using publicly available data. The Industry Data includes third party market data, estimates and projections. There is no assurance regarding the accuracy of the Industry Date, and the Industry Data has not been independently verified by the Company.

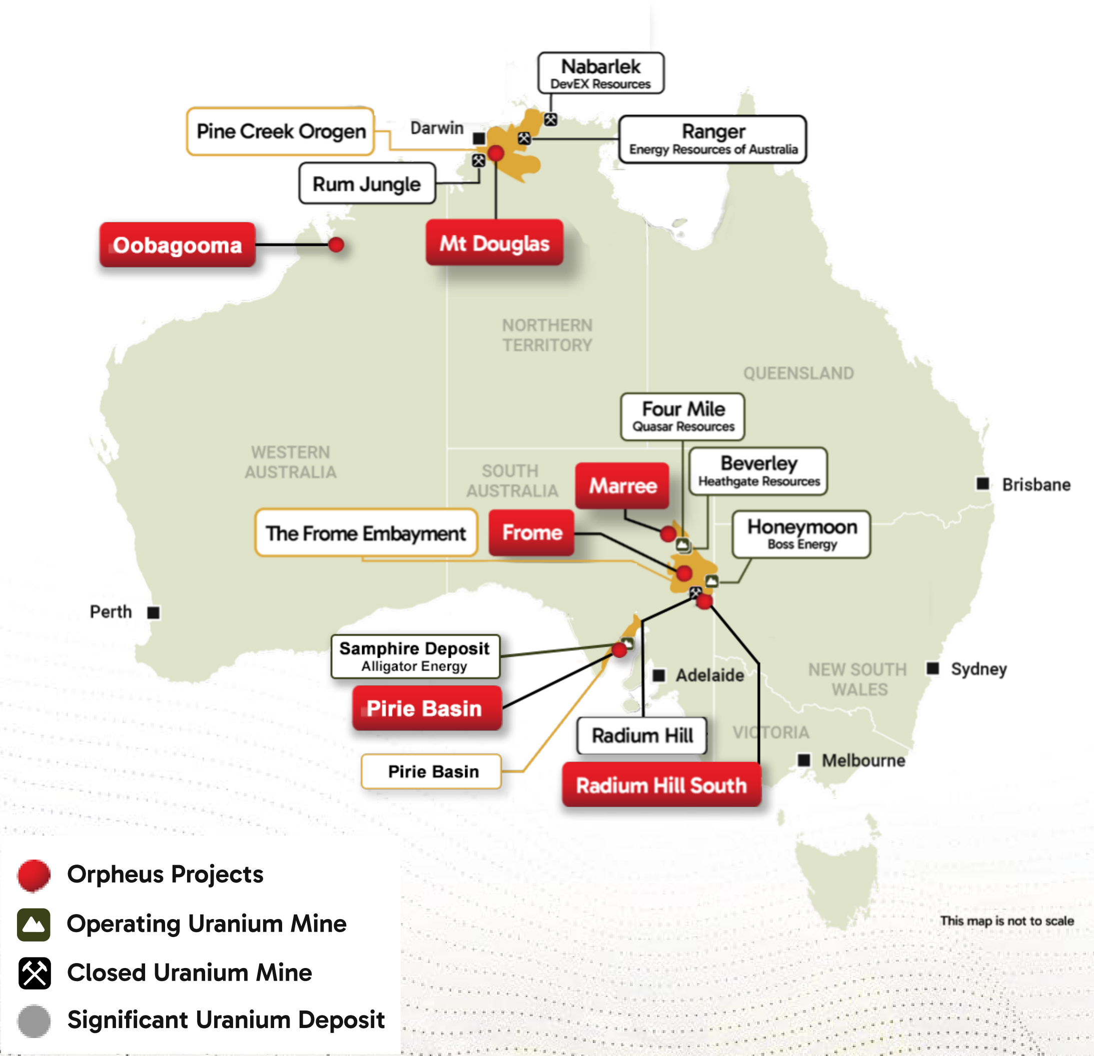
Competent Person Statement

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, Member of Australian Institute of Mining and Metallurgy, 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.

No New Material Updates

This presentation does not contain material updates outside off those already presented to the market. The baseline structure of this presentation reflects the announcement 'Exploration Update' released 12 December 2025 and has been modified to reflect updated business activities associated with the announcement 'Quarterly Activities Report – March 2026' released 14 March 2026. The presentation is being used to provide a succinct company overview as opposed release of market sensitive information.

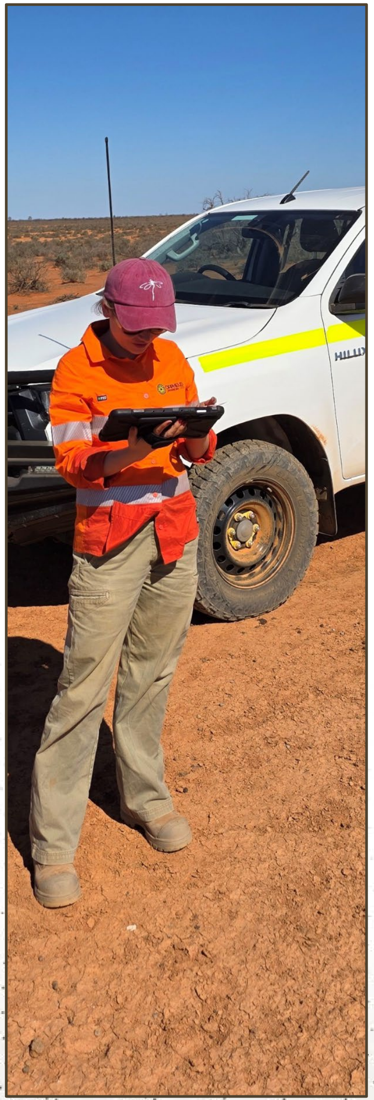
Major Investment Highlights



A Focus on Development & Discovery

- **High-impact uranium exploration portfolio-** targeting underexplored Australian assets with district-scale discovery potential
- **Exposure to tier-one uranium jurisdictions** with supportive regulatory frameworks (South Australia, Northern Territory)
- **Strategically positioned portfolio** near established JORC resources (>50Mlbs), leveraging proven geological systems to reduce risk and enhance upside
- **Continued strategic development of project portfolio** through acquisition (Oobagooma Project, Western Australia)
- **Led by an experienced, technically proven team** with a track record in world-class uranium operations
- **Clear pathway to value creation** through discovery, resource growth, and re-rating catalysts
- **Pure-play uranium investment opportunity** with 100% ownership, offering strong leverage to uranium market fundamentals

Major Investment Highlights

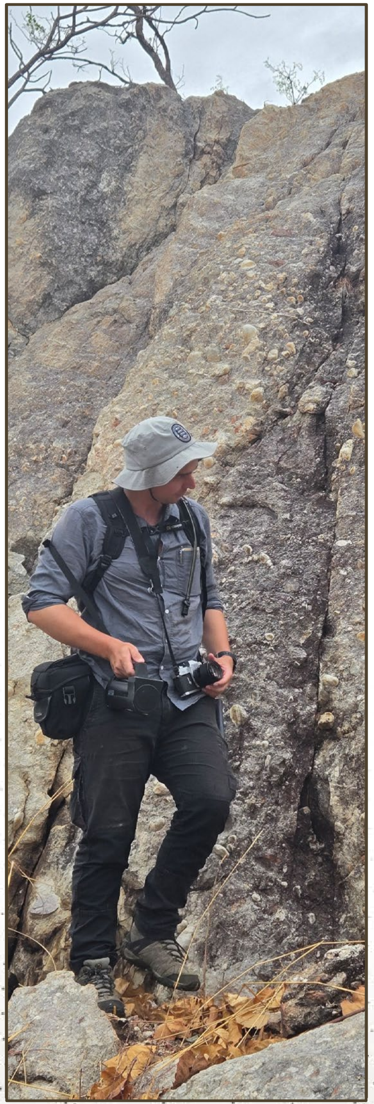


2026: Advancing The Portfolio

- **Progress highly prospective South Australian projects** through regulatory approvals process and **enable decision to drill** - ***targeting sedimentary-style mineralisation***
- **Complete Oobagooma sale agreement,** continue development of geological and resource modelling alongside land access agreements
- **Advance Northern Territory's Mt Douglas project** to decision to drill stage - *targeting* ***high-grade unconformity-style mineralisation***
- **Continued refinement of portfolio** including project generative assessments of geologically relevant tenure, projects and rationalisation to maintain a balanced portfolio
- **Position the Company for success through drill discovery and/or growth in the Uranium market with a high-quality, advanced portfolio**

Major Investment Highlights

ORPHEUS URANIUM LTD



March Quarter 2026: Highlights

- **Completed placement for ~$4.4M** (before costs), anchored by **cornerstone investment** by **IsoEnergy Ltd.**, a globally diversified uranium company
- **Secured government endorsement** for **transfer** of two **Pirie Basin** exploration licences; commenced **stakeholder engagement** with **positive early feedback**
- **Advanced Frome Project** through **regulatory processes** as to **acquire approval** for **advanced stage exploration** (PEPR) – Project is at 'decision to drill' stage
- Enhanced geological interpretation at **Radium Hill South** using historical datasets; now at 'decision to drill' stage
- **Initiated processing** of co-funded **high-resolution gravity data** at **Mt Douglas**, now driving prioritisation of unconformity-style uranium drill targets
- **Extended deadline** for **Oobagooma acquisition** while progressing third-party agreements

Orpheus Uranium Project Pipeline

ORPHEUS URANIUM LTD

**AS AN INDUSTRY,
WHEN WE EXPLORE FOR URANIUM,
WE DISCOVER URANIUM!**

Business Development (incoming Assets) →

Greenfield Exploration

- Mt Douglas (NT)
- Marree (SA)
- Mundaerno (SA)
- McArthur (NT)

Advanced Exploration

- Frome (SA)
- Pirie Basin (SA)
- Oobagooma* (WA)
- Radium Hill South (SA)

Exploration Target

JORC Resource

Producing Assets →

Project rationalisation routinely occurring to minimise unnecessary outgoings, and maximise portfolio value

DUAL STRATEGIC APPROACH: LEVERAGING DISTINCT URANIUM-SPECIFIC EXPERIENCE

* Sale agreement executed, working to completion of sale

Key South Australian Projects

Sedimentary-Style Mineralisation

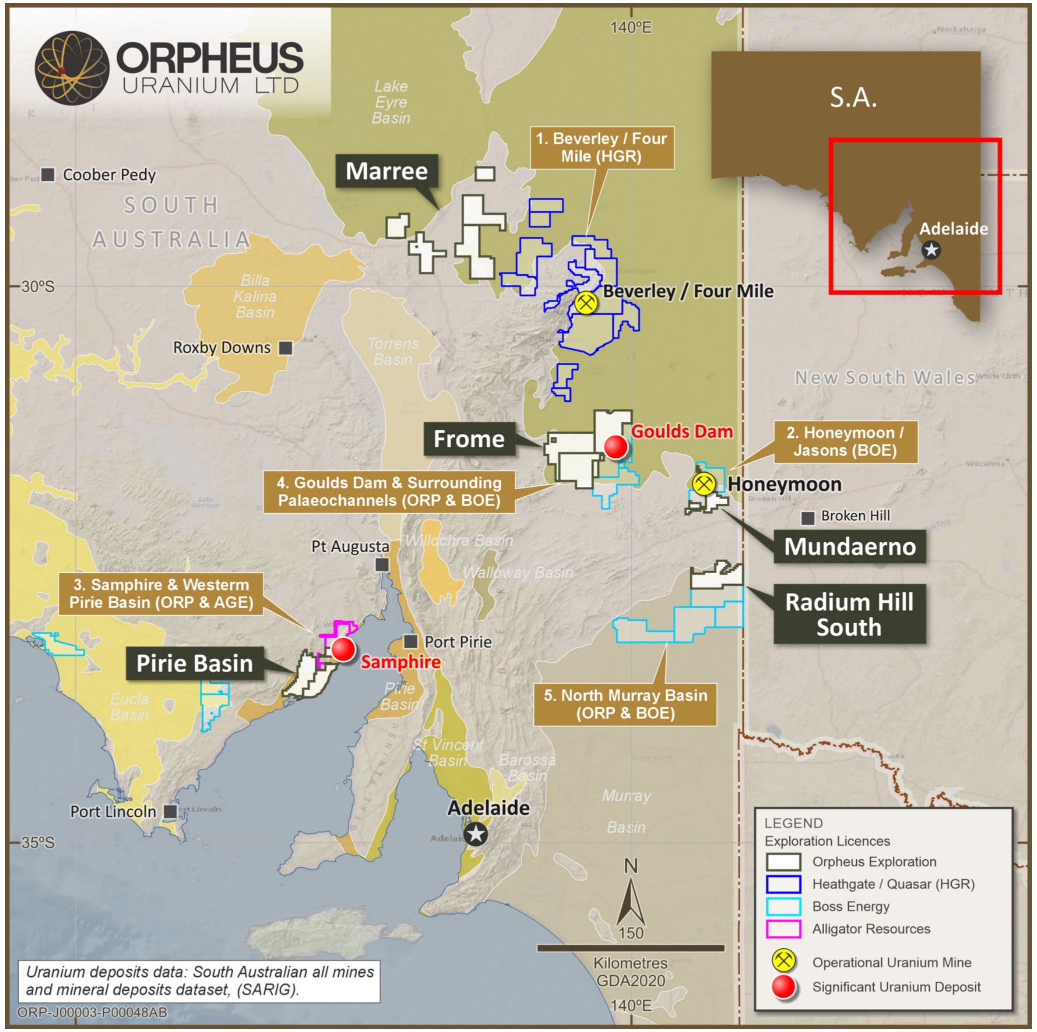
- **Pirie Basin Uranium Project**
  Over 40km strike of highly prospective Pirie Basin - adjacent to Alligator Energy's 18 Mlb. Samphire Uranium Project[1]

- **Frome Uranium Project**
  Located in a globally significant Callabonna Sub-Basin ~12km west of Boss Energy's 33 Mlb. Gould's Dam Uranium Deposit[2]

- **Radium Hill South Uranium Project**
  ~20 km south of Radium Hill Uranium Field and hosts five uranium known occurrences

- **Leveraging results of previous explorers' activities who halted due to changing market conditions**

- **Proximal to Existing and Developing Operations**
  Proximal to operations and developing **assets recently approved** for uranium mining or advanced-stage development activities **in a jurisdiction that allows uranium mining**



1. Samphire Uranium Project – Alligator Energy Limited ASX: AGE - Increased Mineral Resource Estimate and Upgrade of Indicated Resource for the Blackbush Deposit, Samphire U Project. (18.0 Mlbs. at an average grade of 676ppm U3O8). Refer to ASX: AGE announcement dated 06 May 2025

2. Goulds Dam Uranium Deposit – Resource - Boss Energy Limited ASX: BOE - Combined Indicated (23%) and Inferred Resource (77%) – Average Grade 388 ppm U3O8 with Contained 33.1 Mlbs. U3O8. Refer to ASX: BOE announcement dated 19 March 2026.

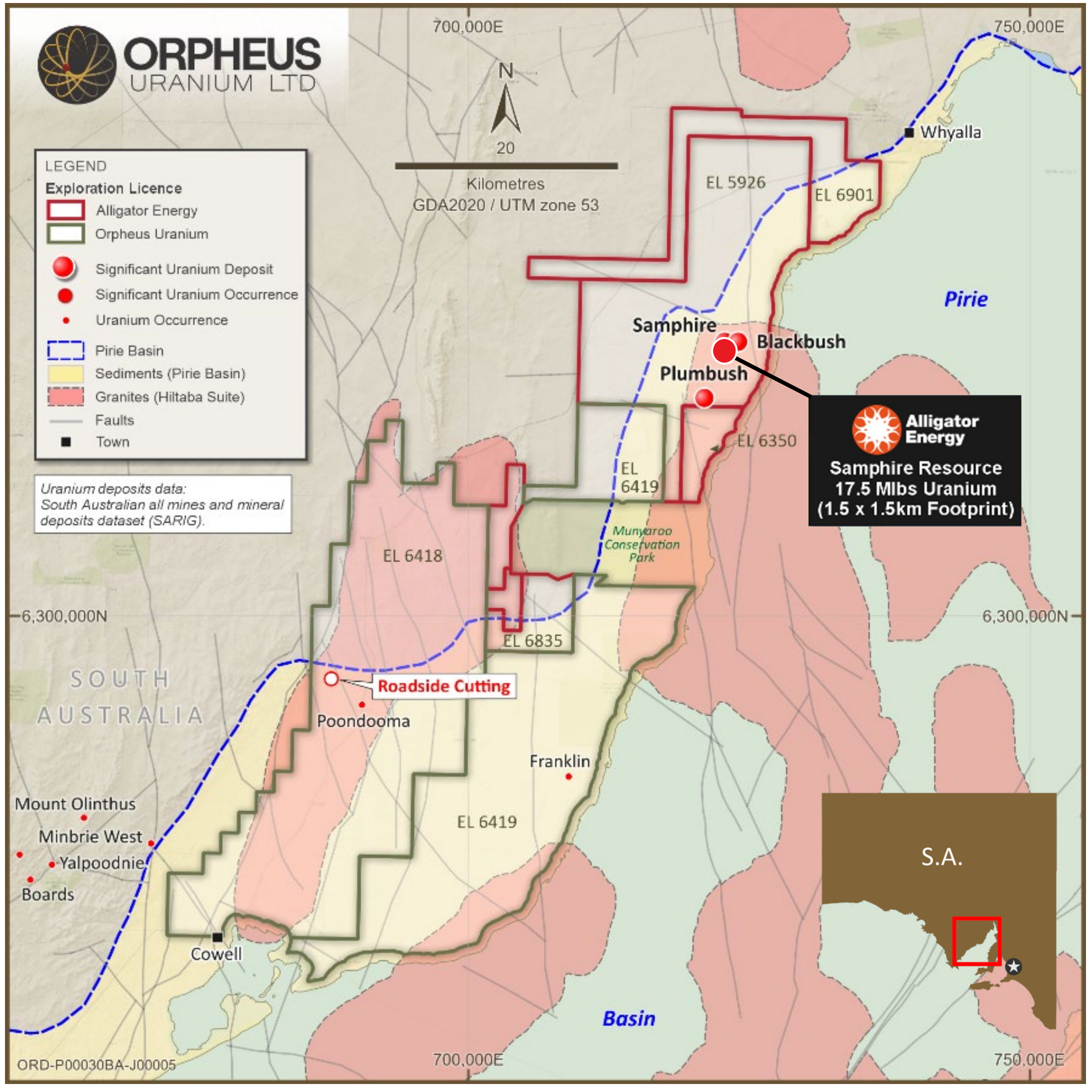
Pirie Basin Project

Advanced Exploration

FIRST TIME EXPOSURE TO URANIUM FOCUSED JUNIOR EXPLORER

- Over **40km strike of highly prospective Pirie Basin sediments** which are host to the 18 Mlb. (U) Samphire Project & underlain by fertile granites
- **Pirie Basin one of only two basins** in **South Australia** to host **sedimentary-style uranium deposits** that have active **advanced staged feasibility** or **producing in-situ recovery uranium projects**
- **Proximal, along strike and geological synergy with known and developing uranium deposits** → target area underexplored due to market conditions not geological setting
- **Progressing regulatory approvals** → positive preliminary engagement with landholders/other key stakeholders

Roadside Cutting: exposed sediments on weathered basement



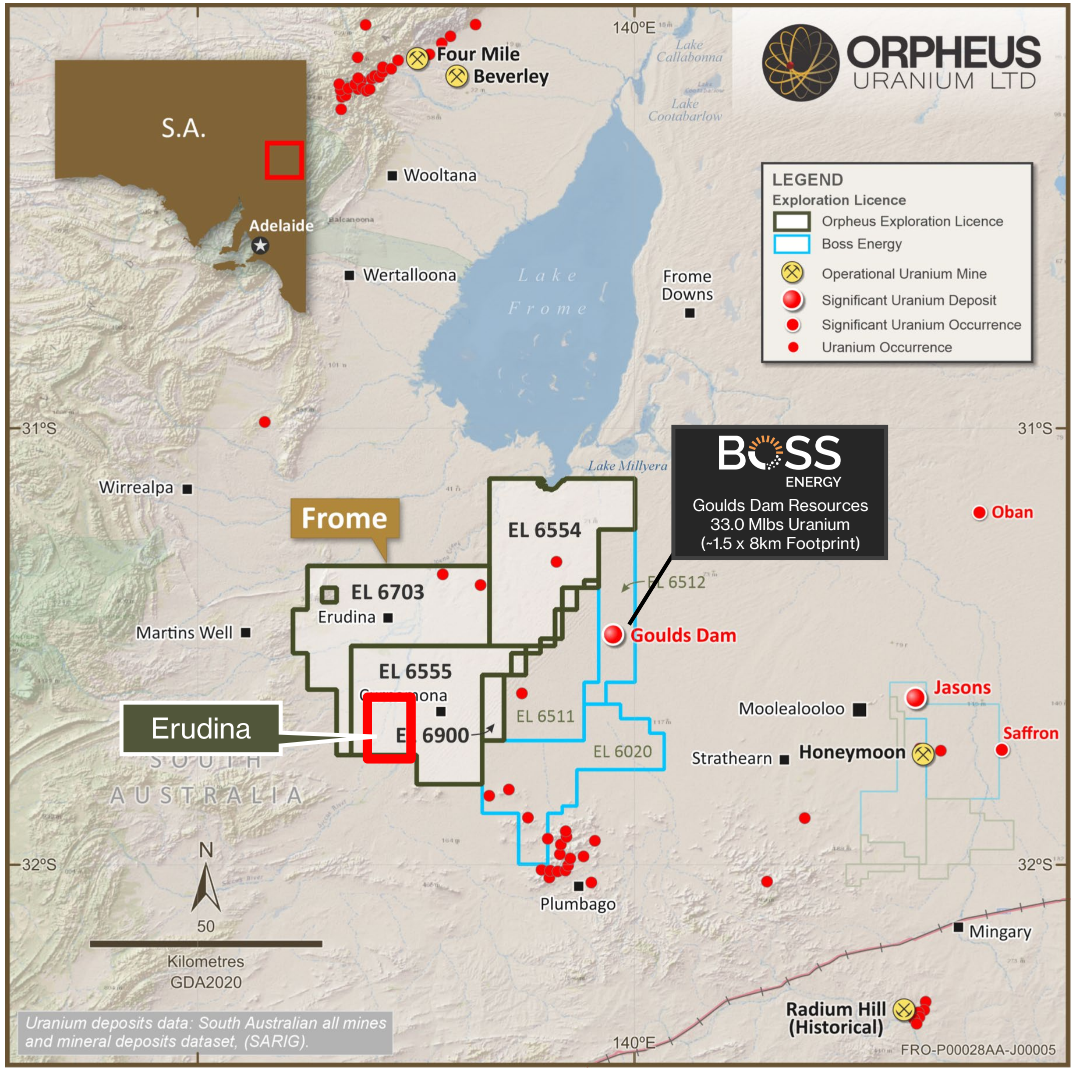
Frome Project

Advanced Exploration

MULTIPLE TARGETS IN MULTIPLE PALAEOCHANNEL SYSTEMS

- Over **50km strike of highly prospective and producing Callabonna Sub-Basin** - proximal to/sharing geological synergy with 25 Mlb. Goulds Dam
- Mechanisms (**source, transport & trap**) for Uranium mineralising systems similar to regional deposit: **Peak uranium grades** in **fertile** Namba and Eyre Formation **sediments** of **>1,500ppm EqU**.
- **Government endorsed** 'Program for Environment and Rehabilitation' **(PEPR)** received – **enables advanced-stage activities including drilling**
- **Project is positioned at 'Decision to Drill' stage → Ongoing geological interpretation and engagement with all stakeholders**, including landholders and traditional owners (landmark NTMA established in 2025)

Erudina Prospect: looking south towards Crocker Well



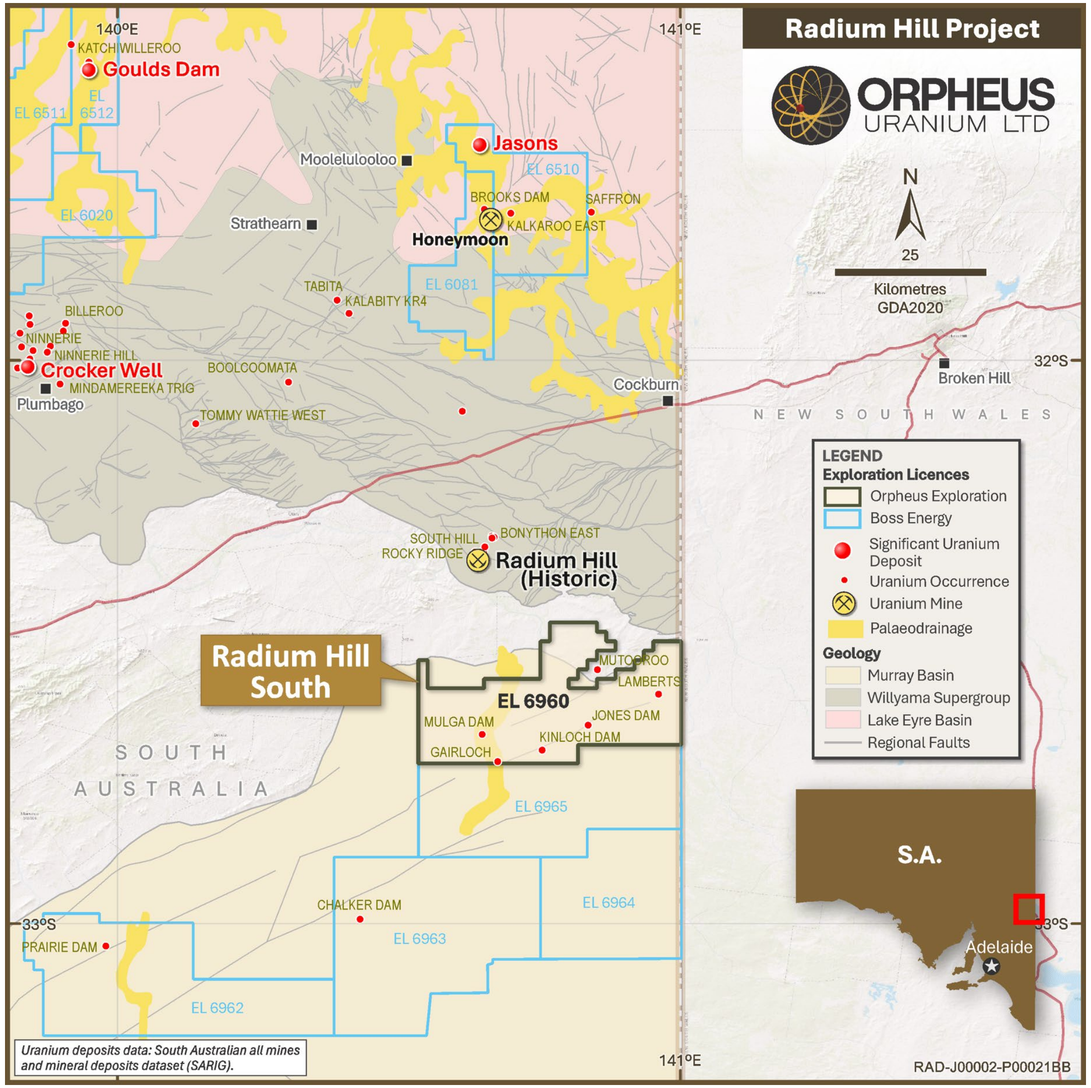
Radium Hill South Project

Advanced Exploration

FIVE EXISTING PROSPECTS READY FOR IMMEDIATE FOLLOW-UP

- Located ~20km south of the highly radiogenic region of the historic **Radium Hill Uranium Field 2.6 Mlbs. @ 1,310ppm U_3O_8**
- Mechanisms (**source, transport & trap**) for **uranium mineralising systems**, with **evidence of uranium mineralisation** at shallow depths of ~80 to 110m
- **Project at 'Decision to Drill' stage** – Heritage survey completed, regulatory approvals acquired (PEPR), positive and commercial relationship with other key stakeholders
- Continued assessment of exploration activities and associated timing

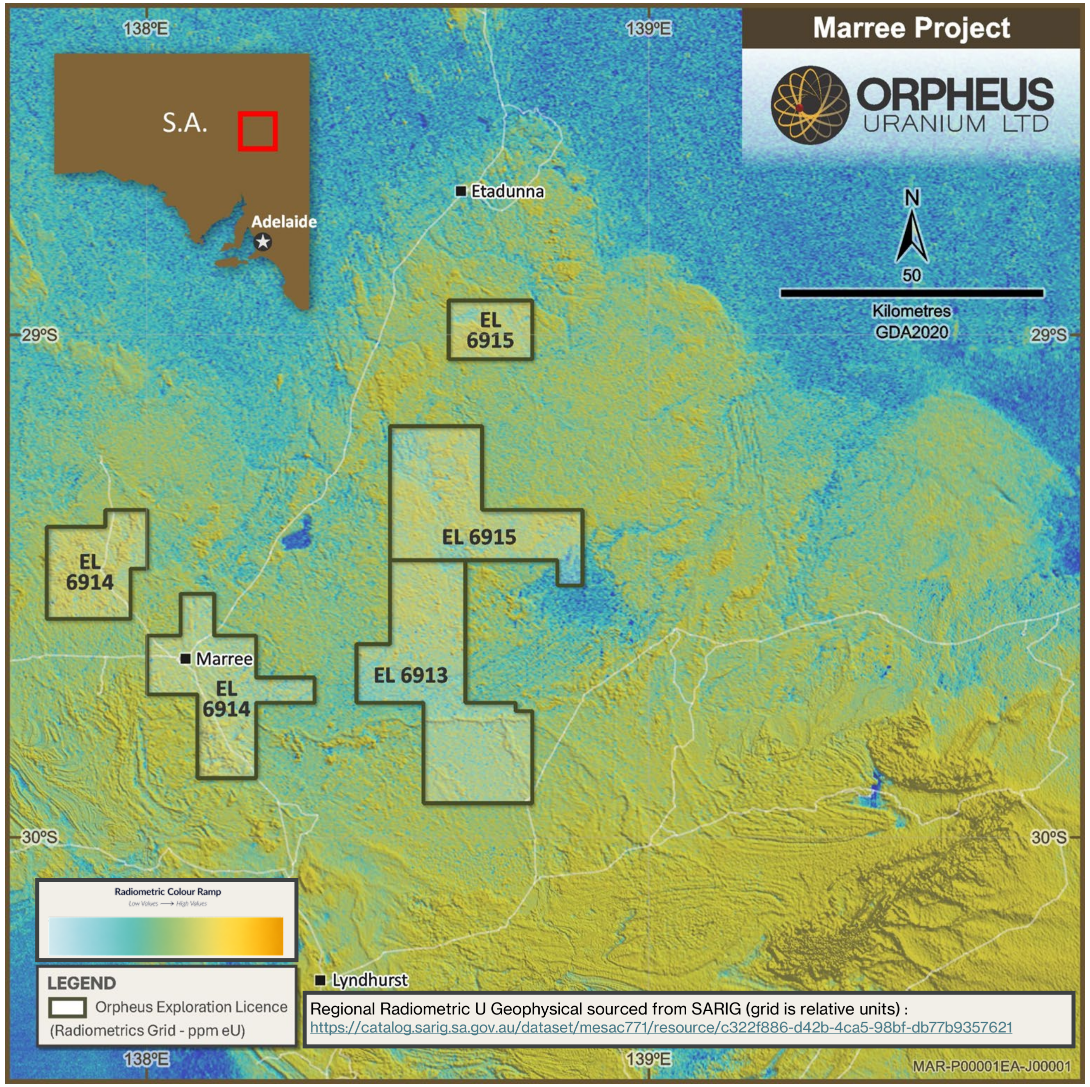
Radium Hill South Project: conducting the heritage survey



Marree Project
Greenfield Exploration

REGIONAL EXPLORATION APPLYING KNOWN MINERALISING MODEL

- **Early-stage exploration** located to northwest of the Northern Flinders Ranges **Mount Painter Block**, which hosts some of **the most uraniferous surface** and **potential uranium source** rocks within Australia, if not globally
- **NTMA Established (x2)** with **Adnyamathanha** (blue) and **Dieri** (green) which **allows ongoing exploration activities** including drilling
- **Continued geological modelling** in comparison with regional known mineralising settings to **refine target areas for future exploration activities**
- Ongoing **engagement with all stakeholders**, including landholders, traditional owners and the government – preparation for nominated activities



Key West Australian Project

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Oobagooma Uranium Project [3]

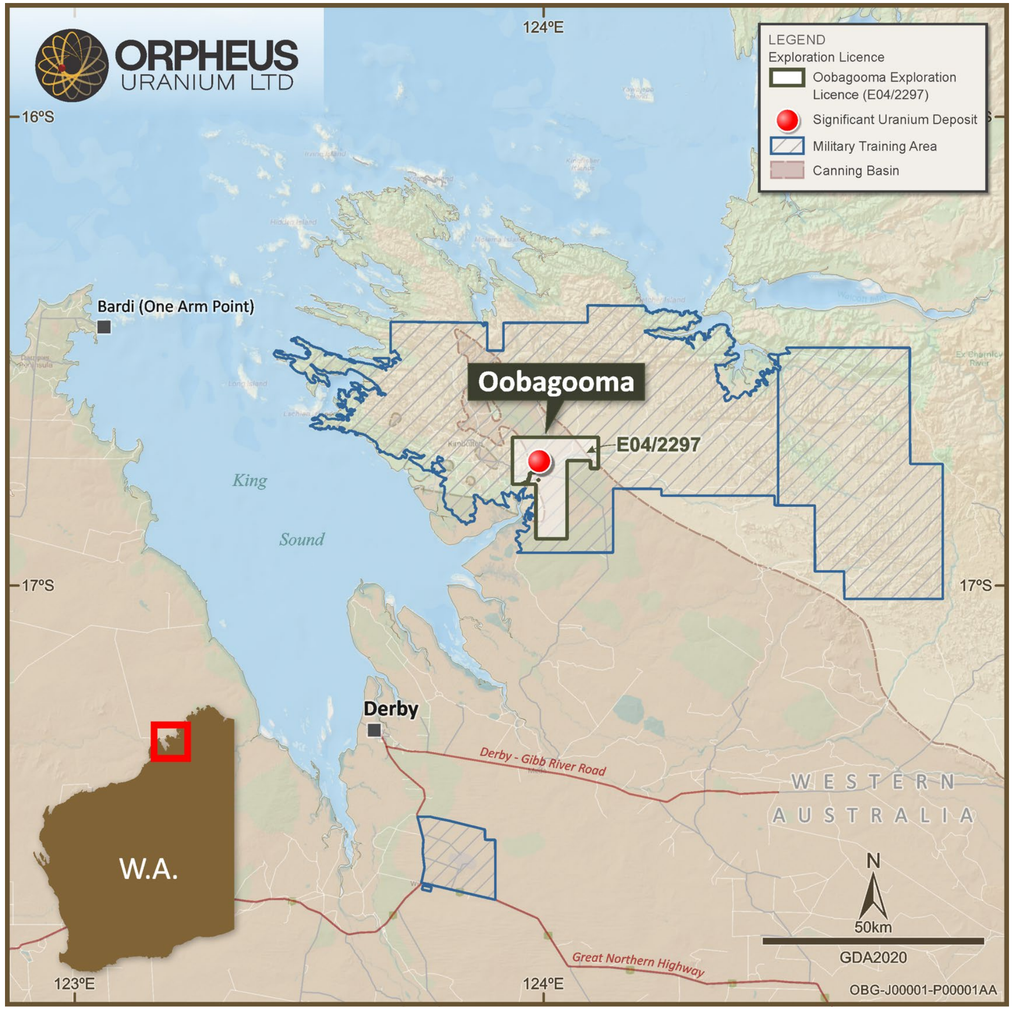
- **Targeting "Sedimentary" redox-style mineralisation**
  Hosted within Yampi Sandstone of the Carboniferous Canning Basin

- **Limited Contemporary On-ground Exploration**
  Discovered in 1981 by Australian French Mining & Exploration Company (Afmeco), most recent drilling in 1983

- **Geological setting conducive to uranium mineralisation**
  Evidence of mineralising source rocks, transport mechanism and geochemical trap sites

- **Elevated uranium grades – multiple holes with GT* > 1,000 (m x ppm)**
  Known uranium mineralisation extends over approximately 4 km of strike and 1.5 km width

- **Awaiting completion of sale agreement**
  Progressing conditions precedent considered standard for a transaction of this nature (completion timeline extended during quarter)



3: Oobagooma Uranium Project – Orpheus Uranium Limited ASX: ORP - Acquisition of Oobagooma Uranium Project. Refer to ASX: ORP announcement dated 14 October 2025

* GT = Grade Thickness - calculated as uranium grade (eU_3O_8) x Thickness (m)

Key Northern Territory Project

Unconformity and Vein style Mineralisation

Targeting the Pine Creek Orogen

"Australia's economic Unconformity-Style mineral systems" - Significant region of historical production where Australia's large, high-grade deposits are discovered

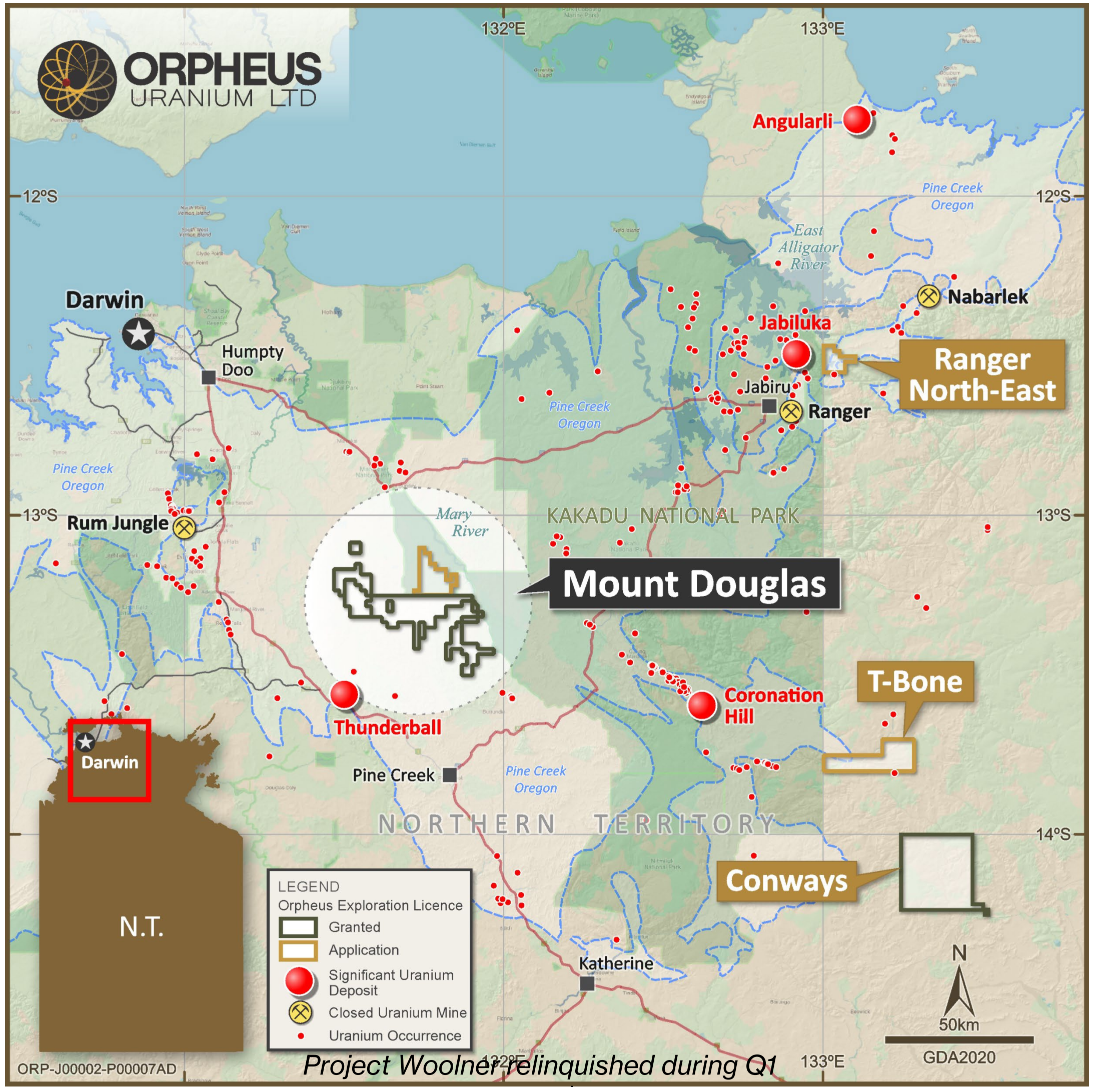
Mount Douglas – Key Project

Exposure of Kombolgie Sandstone and geological synergy with nearby Thunderball Uranium Deposit

Project rationalisation

Ongoing assessment of regional NT projects within broader portfolio

Mt Douglas: Kombolgie Sandstone outcrop



Project Woolner relinquished during Q1 2026)

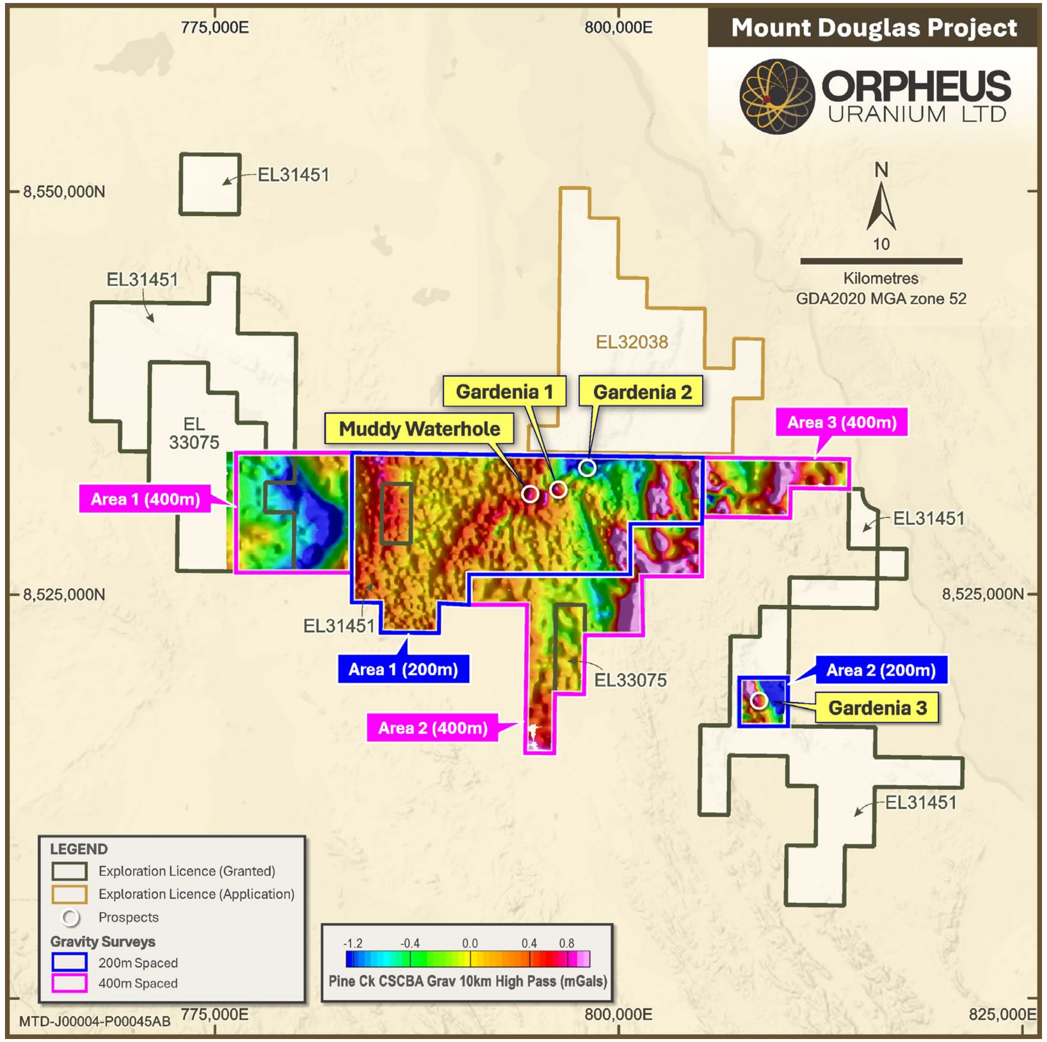
Mt Douglas Project

Early Exploration

PROSPECTIVE FOR HIGH-GRADE UNCONFORMITY AND VEIN-STYLE URANIUM MINERALISATION

- Evidence of **surficial radiometric anomalies** of up to **750ppm U** mapped throughout tenure and proximal to the overlying Kombolgie Sandstone
- **Geological synergy** with nearby **Thunderball Unconformity-Style Uranium Deposit** held by Patronus Resources (ASX: PTN)
- **Acquisition of high-resolution** NTGS co-funded **gravity data**, completed – survey results to **define and prioritise drill-ready unconformity-style uranium targets**, processing of dataset commenced
- **Heritage survey completed** over area(s) of interest, ongoing engagement with Traditional Owners over target areas continuing
- **NT Government approved Mining Management Plan** (MMP) in place, **enabling advanced-stage activities** (delayed due to cyclone/wet season)

Mt Douglas Project: Consultant Geologist Geoff Eupene preparing for field work



Ground Gravity - Filtered 10km High Pass (preliminary dataset and processing)

Board and Management

Orpheus is led by a Board with decades of experience and current connections with all aspects of today's uranium industry.

Clinton Dubieniecki
Managing Director

Clinton is a trained geologist with over 18 years of experience and extensive exposure to the uranium sector. He has worked across the full value chain of uranium projects – from exploration through to resource development and production – with multinational companies including Orano, Uranium One, and most recently Heathgate Resources, where he spent nearly a decade contributing to the operation of the Beverly and Four Mile projects. Clinton joined Orpheus in May 2024.

Simon Mitchell
Chairman

Simon is a trained geologist with more than 35 years of experience spanning technical, financial, and corporate roles, including significant exposure to exploration and mine development. He spent over six years with uranium development company Toro Energy, and more recently has provided consulting services to several Canadian uranium companies, including NexGen Energy Ltd, developer of the world-class Rook I uranium project in the Athabasca Basin, Canada. Simon joined Orpheus in October 2023.

Todd Williams
Non-Executive Director

Todd is a trained geologist with more than a decade of experience across all aspects of mineral exploration. He is currently the Managing Director of Unico Silver and brings extensive uranium sector experience through his time with Power Minerals (formerly PepinNini). Notably, he was instrumental in vending the 'Big Lake' uranium project – recently recognised as Discovery of the Year – into Alligator Energy. Todd joined Orpheus in December 2023.

Exploration Team

The Orpheus exploration team has extensive uranium-specific expertise. Each geologist has experience across all stages of sedimentary-style uranium exploration and production at Australia's Beverley/Four Mile operation.

Isaac Lord
Senior Geologist

Isaac is a geologist with five years of experience at Heathgate Resources, Australia's premier sedimentary-style (ISR) uranium producer. He has gained exposure across the full uranium value chain, from exploration through to production, with the past two years spent in the company's Resource Development department focusing on the Four Mile deposits. Isaac joined Orpheus in October 2026.

Jack Maughan
Lead Geodata Scientist

Jack is a geologist with 10 years of international experience across multiple sectors of the mining and exploration industry. He began his career with Heathgate Resources, contributing to successful exploration programs and production activities. Jack later gained experience in North America, including as a data scientist with BHP, before returning to Australia to consult to Heathgate and subsequently joining Data Rock as a data scientist. Jack joined Orpheus in May 2026.

Chloe Reddaway
Project Geologist

Chloe is a geologist with two years of experience at Heathgate Resources, Australia's longest continuously operating sedimentary-style (ISR) uranium producer. She has worked across multiple geological departments, including uranium exploration and production, before contributing to regional exploration programs. Chloe joined Orpheus in June 2025

Corporate Summary

ORPHEUS URANIUM LTD

CAPITALISATION DATA

Shares on issue

352.1M

Share Price (24 April 2026)

$0.066

Market Capitalisation (24 April 2026)

$23.2M

Cash (31 March 2026)

$5.09M

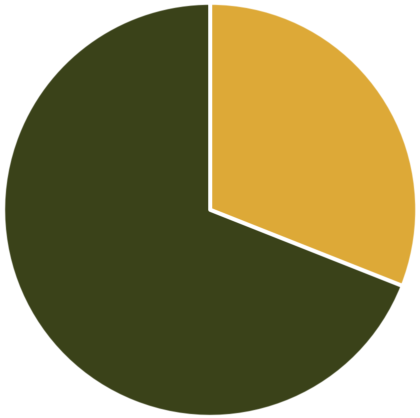
Liquid Investments (31 March 2026) *

$1.88M

+ 20M shares to be issues upon completion of Oobagooma Sale Agreement

** ORP holds 6.25M shares in Prospect Resources (ASX: PSC)*

ASX: ORP Shareholder Spread



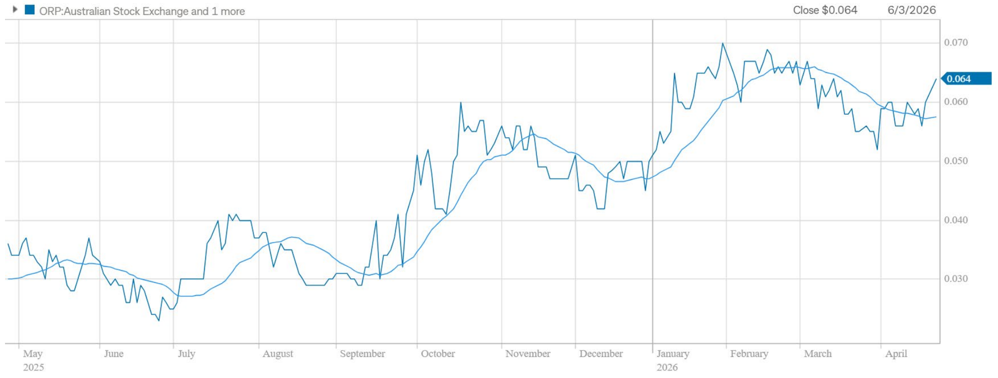
69% Top 20 Shareholders

31% Outside Top 20 Shareholders

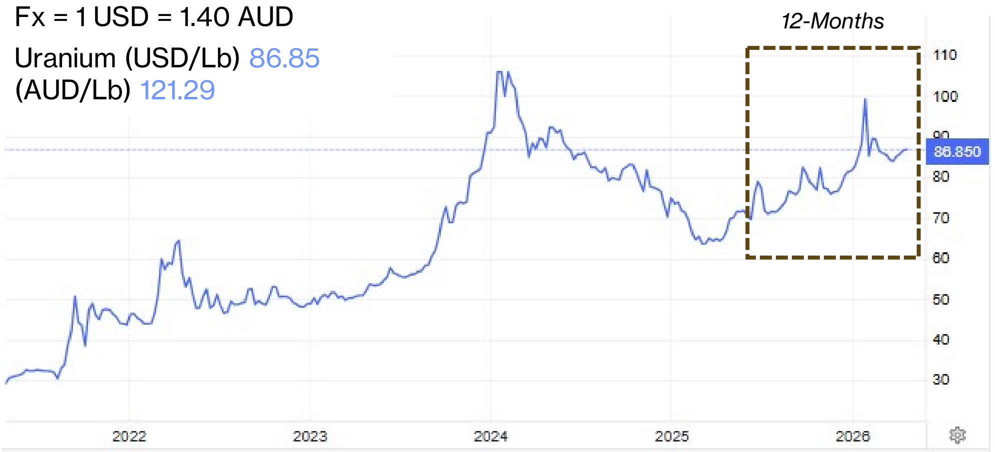
BOARD & MANAGEMENT

Clint Dubieniecki – Managing Director & CEO
Simon Mitchell – Non-Exec Chairman
Todd Williams – Non-Exec Director
Richard Willson – Company Secretary

12 Month Share Price



5 Year Uranium Spot Price (USD/Lbs)



ORPHEUS URANIUM LTD

ASX: ORP

Contact Us

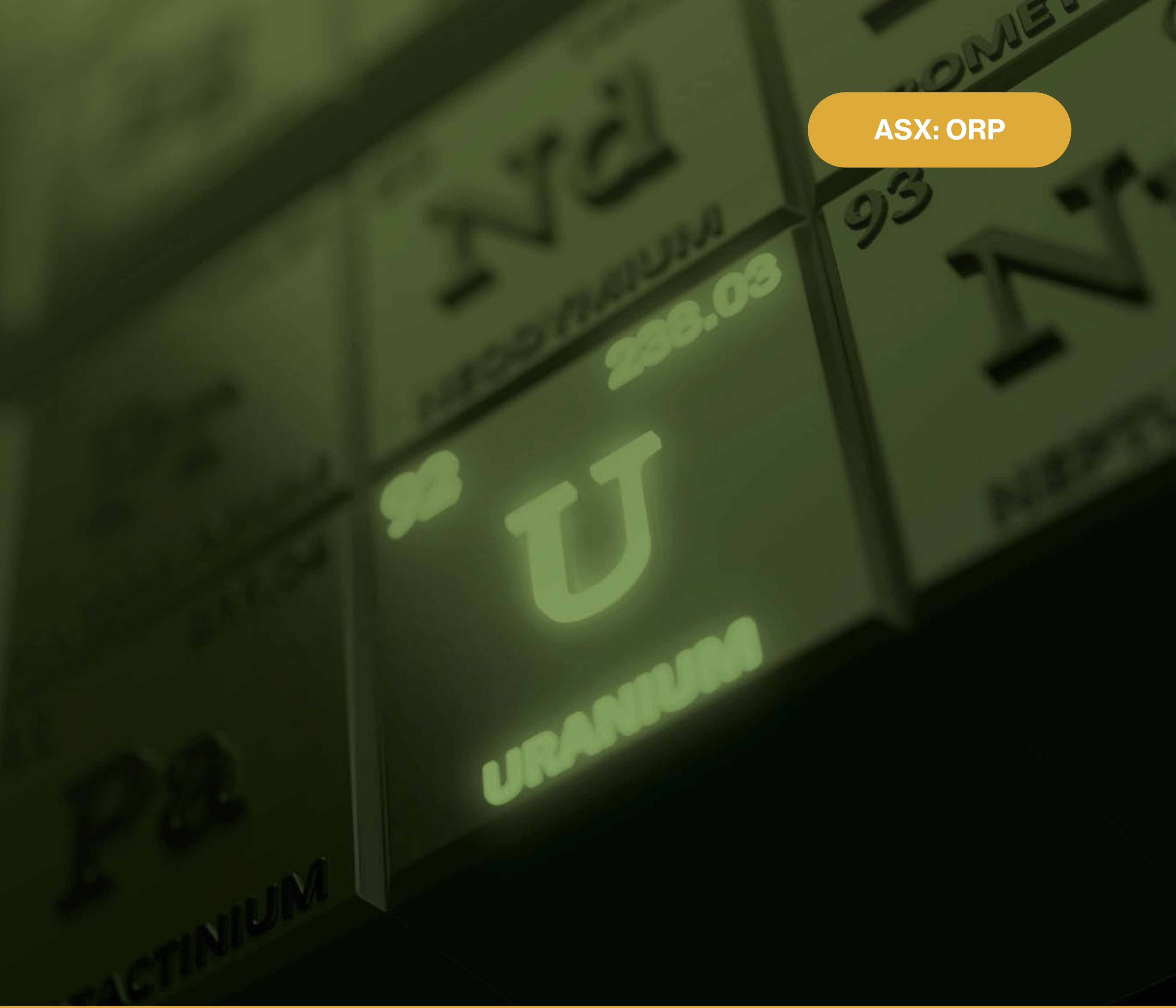
Registered Office:

79 King William Road
Unley, South Australia 5061

P. +61 8 8231 0381
E. info@orpheusuranium.com
W. www.orpheusuranium.com

Clinton Dubieniecki
Managing Director

E. clinton@orpheusuranium.com



Comparable Projects

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Orpheus reports Mineral Resources of uranium mines, deposits or past production that it considers comparable to the style and location of uranium mineralisation in which it explores, as presented within this presentation, and listed in the table herein.

Project	Development Phase	Location	Company / Operator	Resource Classification	Average Grade (ppm U_3O_8)	Contained Metal (Mlbs, U_3O_8)	Source
Honeymoon Uranium Mine	Mine	Frome Embayment/Callabonna Sub-basin South Australia	Boss Energy Limited ASX: BOE	Mineral Resource	660	36	*Refer to ASX: BOE announcement dated 23 January 2024* *Note: 2021 Enhanced feasibility study (EFS) withdrawn in 2025 - Refer to ASX: BOE announcement dated 18 December 2025*
Jasons Uranium Deposit	Resource			Combined Indicated and Inferred Resource	410	12	Refer to ASX: BOE announcement dated 19 March 2026
Goulds Dam Uranium Deposit	Resource			Combined Indicated and Inferred Resource	388	33.1	Refer to ASX: BOE announcement dated 19 March 2026
Saffron Deposit	Resource		Marmota Limited ASX: MEU	Inferred Resource	557	5.4	Refer to ASX: MEU announcement 26 October 2023
Radium Hill Historic Mine	Historic Mine	Curnamona Province South Australia	Areas reserved from the Mining Act, 1971 and Opal Act, 1995	Past production	1,310	2.6	Refer to https://minerals.sarig.sa.gov.au/MineralDepositDetails.aspx?DEPOSIT_NO=962
Samphire Uranium project (Black bush)	Resource	Pirie Basin	Alligator Energy Limited ASX: AGE	Combined Indicated and Inferred Resource	676	18.0	Refer to ASX: AGE announcement dated 06 May 2025