



**NORFOLK**  
METALS LTD.

**ASX:NFL**

**ORROROO URANIUM PROJECT**

**MINERALISATION TARGETING  
& MAIDEN DRILL PROGRAM UPDATE**



# IMPORTANT NOTICES AND DISCLAIMERS



**Presentation:** This presentation has been prepared and issued by Norfolk Metals Limited (ASX: **NFL, Norfolk or the Company**) to provide general information about the Company. The information in this document is in summary form and should not be relied upon as a complete and accurate representation of any matters that a reader should consider in evaluating the Company. While management has taken every effort to ensure the accuracy of the material in this presentation, the Company and its advisers have not verified the accuracy or completeness of the material contained in this presentation.

**Forward-looking statements:** This presentation contains forward looking information about the Company and its operations. In certain cases, forward looking information may be identified by such terms as "anticipates", "believes", "should", "could", "estimates", "target", "likely", "plan", "expects", "may", "intend", "shall", "will", or "would". These statements are based on information currently available to the Company and the Company provides no assurance that actual results will meet management's expectations. Forward looking statements are subject to risk factors associated with the Company's business, many of which are beyond the control of the Company. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially from those expressed or implied in such statements. There can be no assurance that actual outcomes will not differ materially from these statements.

**Disclaimer:** No representation or warranty, express or implied, is made by the Company that the material contained in this presentation will be achieved or proved correct. Except for statutory liability which cannot be excluded, each of the Company, its directors, officers, employees, advisors and agents expressly disclaims any responsibility for the accuracy, fairness, sufficiency or completeness of the material contained in this presentation and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this presentation or any effort or omission therefrom. The Company will not update or keep current the information contained in this presentation or to correct any inaccuracy or omission which may become apparent, or to furnish any person with any further information. Any opinions expressed in the presentation are subject to change without notice.

**Not financial product advice:** This presentation is not financial product nor investment advice or a recommendation to acquire securities in the Company. It has been prepared without taking into account the objectives, financial situation or needs of individuals. Before making any investment decision, prospective investors should consider the appropriateness of the information having regard to their own objectives, financial situation and needs and seek legal and taxation advice.

**No offer:** This presentation and its contents are not an invitation, offer, solicitation or recommendation with respect to the purchase or sale of any securities in the Company in any jurisdiction and must not be distributed, transmitted, or viewed by any person in any jurisdiction where the distribution, transmission or viewing of this document would be unlawful under the securities or other laws of that or any other jurisdiction. This presentation is not a prospectus or any other offering document under Australian law (and will not be lodged with the Australian Securities and Investments Commission) or any other law.

**Competent Persons Statement:** The geological information in this presentation regarding the Orroroo Project update was prepared by Mark Couzens of Indepth Geological Services who is an independent consultant. Mr Couzens is a member of the AusIMM and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration (over 10 years uranium exploration and ISR experience) and to the activity he is undertaking to qualify as competent person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC 2012). Mr Couzens approves of and consents to the inclusion of the information in this announcement and context in which it appears.

The information in this presentation that relates to Exploration Results which have been previously reported are extracted from ASX announcements made by NFL on 7 February 2023 and 6 July 2023 are available to view of the Company's website: [www.norfolkmetals.com.au](http://www.norfolkmetals.com.au). NFL confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. NFL confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

1

## **Uranium Spot Price.**

Uranium spot prices continuing to rise with 12 weeks of consecutive gains as of October 2023

[www.livewiremarkets.com/wires/does-the-uranium-bull-market-have-more-legs-to-run](http://www.livewiremarkets.com/wires/does-the-uranium-bull-market-have-more-legs-to-run)

2

## **Future Energy Crisis.**

Global electric-power generating capacity by 2050 is expected to increase by a range of 50% to 100%.

[www.reuters.com/business/energy/global-energy-consumption-increase-through-2050-outpace-efficiency-gains-eia-2023-10-11/](http://www.reuters.com/business/energy/global-energy-consumption-increase-through-2050-outpace-efficiency-gains-eia-2023-10-11/)

3

## **Government supported Uranium Jurisdiction.**

South Australia is recognised for high uranium prospectivity and proven track record for uranium mining with strong government support

[www.energymining.sa.gov.au/industry/minerals-and-mining/mineral-commodities/uranium](http://www.energymining.sa.gov.au/industry/minerals-and-mining/mineral-commodities/uranium)

4

## **Greenfields Discovery Potential**

Unique opportunity for exposure to maiden drilling and potential discovery of an entirely new uranium district in South Australia

# INVESTMENT HIGHLIGHTS

1

**Imminent Drilling including targets with proven uranium mineralisation.**

3 of 3 historical wells tested confirm uranium including peak reading of 650ppm pU308

*\*See Norfolk's ASX announcement 2 February 2023*

2

**Geological similarities to well-endowed South Australian uranium producers.**

Same age sediments as Frome Embayment hosting Honeymoon (ASX:BOE) and Four Mile (Heathgate Resources) with potential for in-situ recovery (ISR) mining methods on any discovered permeable uranium deposits

[www.sciencedirect.com/science/article/abs/pii/S0169136815300937?via%3Dihub](http://www.sciencedirect.com/science/article/abs/pii/S0169136815300937?via%3Dihub)

3

**Over 20km of prospective uranium mineralised palaeochannel targets.**

Maiden drill program will target the 3 proven uranium occurrences and their associated palaeochannel structures

4

**100% ownership of Walloway Basin with no previous exploration for uranium.**

659km<sup>2</sup> land holding only 3 hours drive from Adelaide with all primary facilities located within Orroroo township

5

**Exceptional community engagement.**

Over 12 months of diligent engagement completed to secure approvals from key stakeholders and landowners within Orroroo community

6

**Tight capital structure with strong support from brokers and clients following the IPO.**

Renewed interest from anticipated drilling commencement and results

# CAPITAL STRUCTURE

SHARES ON ISSUE	33,000,000
OPTIONS	20,489,808
PERFORMANCE SHARES	1,400,000
CASH	\$3,029,000 (September Quarterly 2023)
DEBT	Nil
SHARE PRICE	\$0.215 (8 <sup>th</sup> November 2023)
MARKET CAPITALISATION	\$7,095,000
ENTERPRISE VALUE	\$4,066,000

\*Options exercise pricing from 25c to 30c with varied expiry dates



# BOARD AND KMP



## Ben Phillips

### Executive Chair

Mr Phillips has over 15 years' experience in commercial negotiations with a broad spectrum of industries including Oil and Gas, Resources, Medical technology, SaaS and Defence.

Mr Phillips previously held a Non-Executive Director position at Bronson Group BGR:ASX and subsequently Mandrake Resources MAN:ASX.

Position as a Corporate Executive at Ironside Capital Mr Phillips is focused on sourcing, structuring, funding and management requirements for small-cap companies both private and public.

## Leo Pilapil

### Non-Executive, Technical Director

Mr Pilapil has over 30 years' experience as a Geoscientist and three years as a Financial Planner.

As a geoscientist, he has held director positions for several junior companies in Australia, Africa and Turkey, mainly responsible for technical project evaluations, project acquisitions, project management and business development.

Mr Pilapil has established drilling companies in Turkey and Lao PDR servicing several major exploration and mining companies to complement the acquisition of his own personal projects.

## Patrick Holywell

### Independent, Non-Executive Director

Mr Holywell has over 15 years of experience in accounting, finance and corporate governance, including employment at Deloitte and Patersons (now Canaccord Genuity).

Mr Holywell is a Chartered Accountant and a Fellow of the Governance Institute of Australia with the last ten years focused on Director and Company Secretarial roles in the resources and technology space.

Mr Holywell's most recent involvements include roles with De Grey Mining Limited, Si6 Metals Limited and Pentanet Limited.

Mr Holywell has completed a Bachelor of Commerce at UWA, a Graduate Diploma of Chartered Accounting with the Institute of Chartered Accountants and the Company Directors Course with the Australian Institute of Company Directors.

## Mark Couzens

### Operations Manager and Technical Advisor

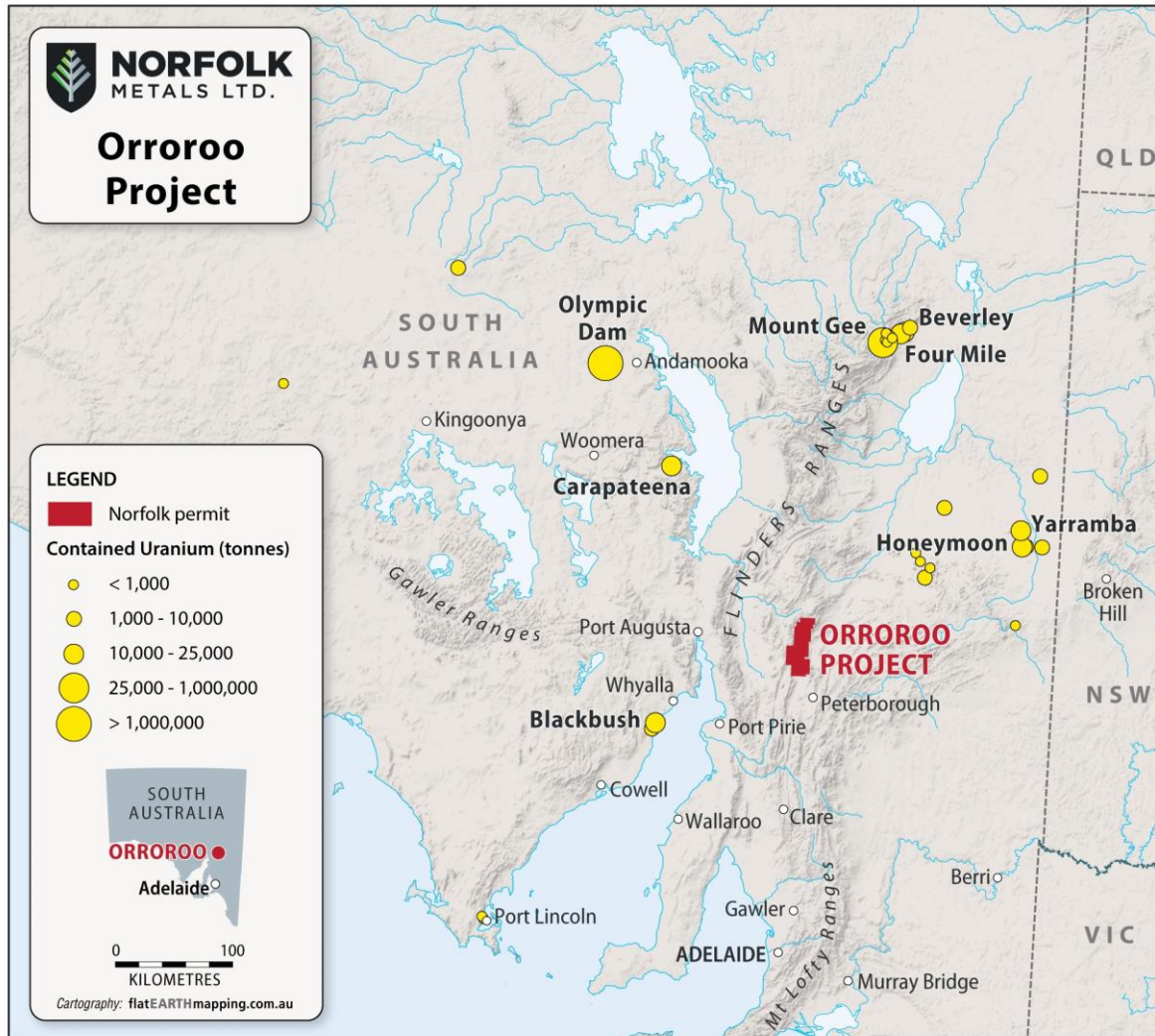
Mark has over 10 years' experience in sandstone and palaeochannel uranium exploration including exploration roles with **Cameco Australia, Heathgate Resources and Mega Hindmarsh.**

Most recently, Mark was the Exploration Manager for Cauldron Energy and played a key role in the **delineation of the Bennett Well deposit from 4.8Mlbs to 30.9Mlbs** and was in charge of uranium exploration in Argentina. Mark was also a member of the **exploration team that discovered the world-class Four Mile deposits** in a geological setting analogous to Orroroo 280km to the north.

Mark has extensive experience in both uranium exploration and ISR production where **Mark has overseen more than 1,000 holes drilled throughout Australian and Argentinean sandstone hosted uranium prospects** adding invaluable expertise to Norfolk's maiden drill program

# ORROROO PROJECT

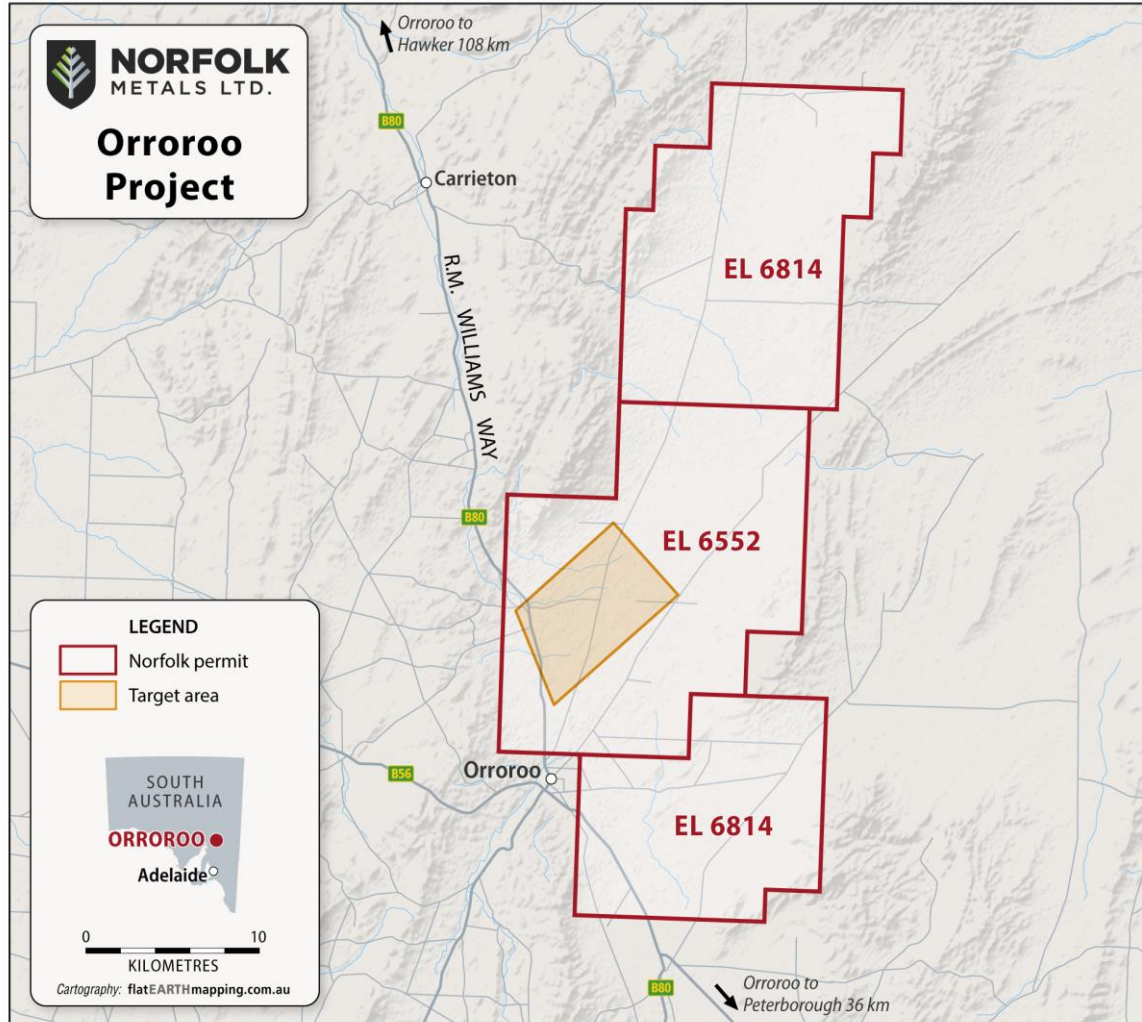
Favoured jurisdiction surrounded by world class resources



- ▶ First-mover targeting uranium in the Walloway Basin
- ▶ **Walloway Basin is analogous to adjacent Frome Embayment hosting both Honeymoon (ASX:BOE) and Four Mile (Heathgate Resources)**
- ▶ Early work by Norfolk has confirmed the presence of sediment-hosted uranium mineralisation
- ▶ Maiden drill program imminent

# ORROROO PROJECT

Walloway Basin prospective for uranium

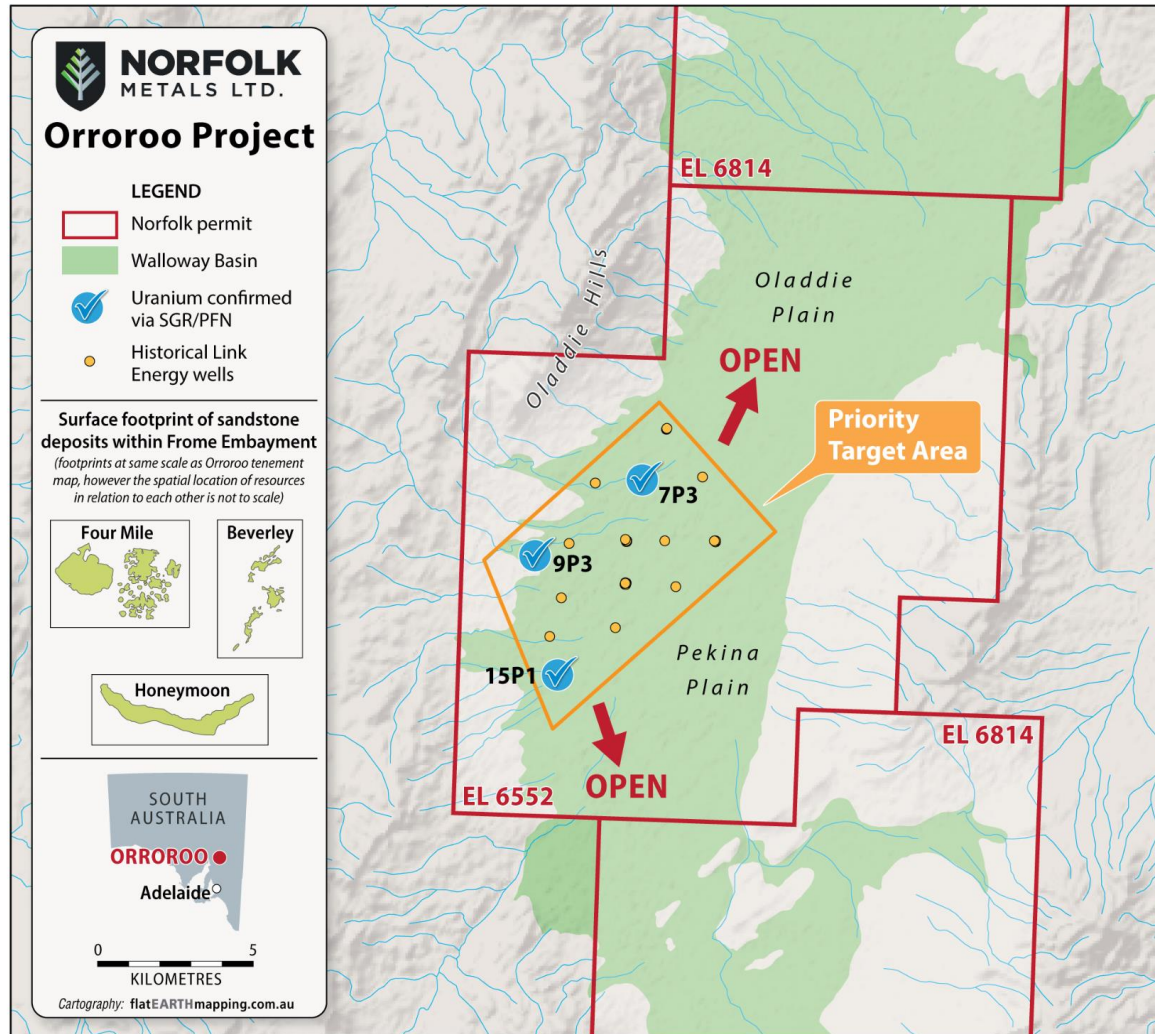


- ▶ 100% owned exploration licences (EL6552 and EL6814) totalling 659km<sup>2</sup>
- ▶ Close to infrastructure, 274km northwest of Port Adelaide (uranium export facility)
- ▶ Excellent community relationships with landowners, council and community groups



# PROJECT HISTORY

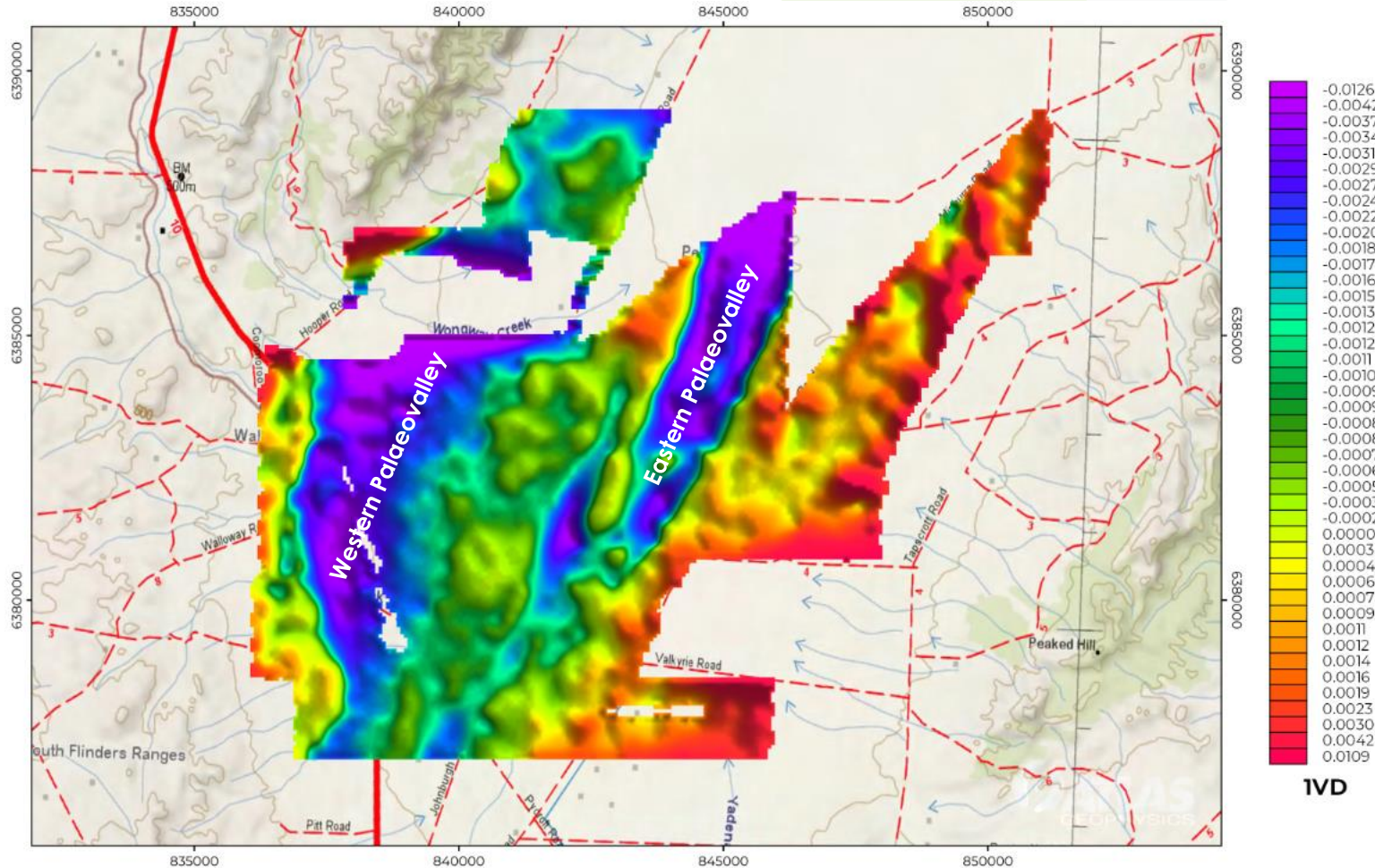
Uranium confirmed via downhole Geophysics of historical wells



- ▶ Focus on historical coal exploration with water wells re-entered and tested for uranium mineralisation
- ▶ 3 of 3 wells tested returned uranium mineralisation with peak reading of 650ppm pU308  
*\*See Norfolk's ASX announcement 2 February 2023*
- ▶ Uranium at depths from 100-150m, potential for in-situ recovery (ISR) mining methods on any discovered permeable deposits  
[www.sciencedirect.com/science/article/abs/pii/S0169136815300937?via%3Dihub](https://www.sciencedirect.com/science/article/abs/pii/S0169136815300937?via%3Dihub)
- ▶ The distance between the known uranium occurrences at Orroroo helps portray the potential scale of the project

# PROJECT HISTORY

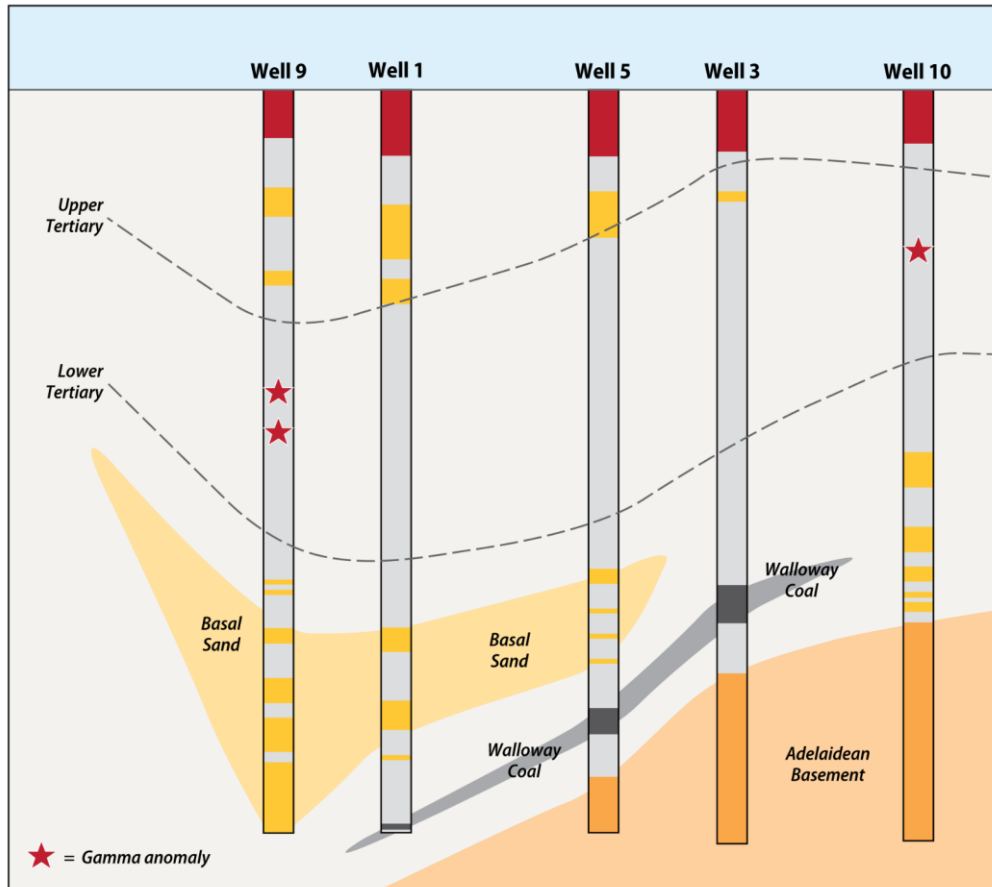
## Gravity Survey defines palaeovalleys



- ▶ Gravity survey delineated two distinct palaeovalleys
- ▶ Current focus is the Western Palaeovalley (host to all 3 uranium occurrences)
- ▶ **Geophysical gravity interpretation corroborates with historical drilling and stratigraphic logs**  
(see next page)

# PROJECT HISTORY

Regional stratigraphic cross-section indicates shallow channels



Schematic East West section of Western Palaeovalley of the Walloway Basin  
(refer to image on right hand side of next slide for section reference)

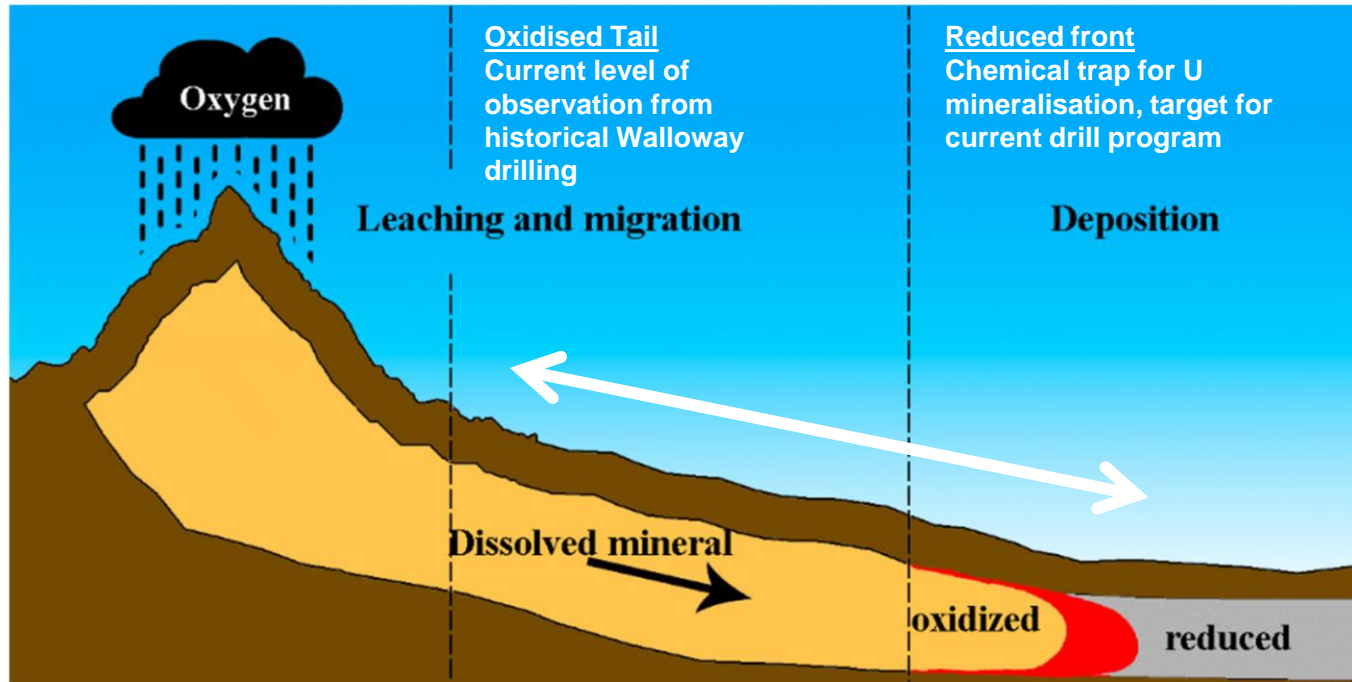
- ▶ First-order sedimentary basin filled with thick sequences of siltstones and intercalated sands
- ▶ Well defined target horizon and regional prospectively model
- ▶ Gamma anomalies are at the contact between Upper Tertiary sands and reduced siltstones geologically analogous to the Namba Formation (**hosts the Beverley Uranium Deposit** (Heathgate Resources))
- ▶ Further potential for deeper uranium mineralisation within the Lower Tertiary basal sands



# PROJECT HISTORY

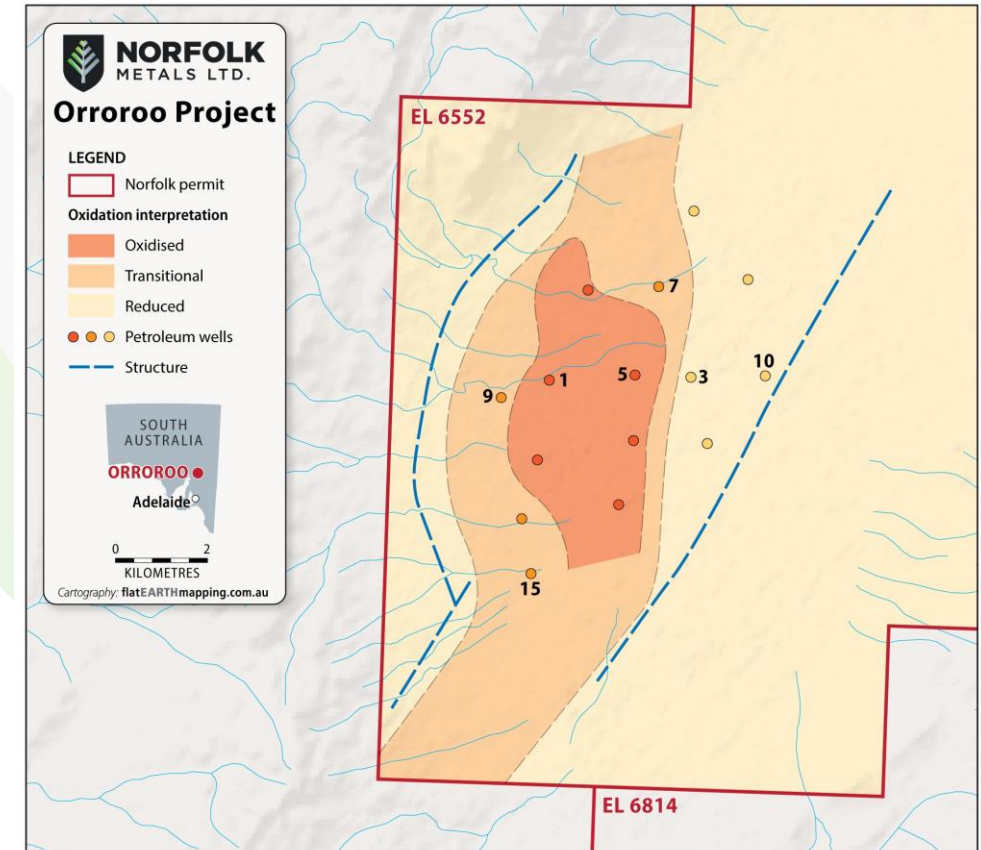
REDOX model defines possible sites for Uranium mineralisation

- ▶ Regional-scale REDOX model defined from historic Linc Energy logs, important vector for Phase 1 drilling



Cross-section model of a roll front uranium deposit

Streamlines Based Stochastic Methods and Reactive Transport Simulation Applied to Resource Estimation of Roll-Front Uranium Deposits Exploited by In-Situ Leaching - <https://www.mdpi.com/2075-163X/12/10/1209>

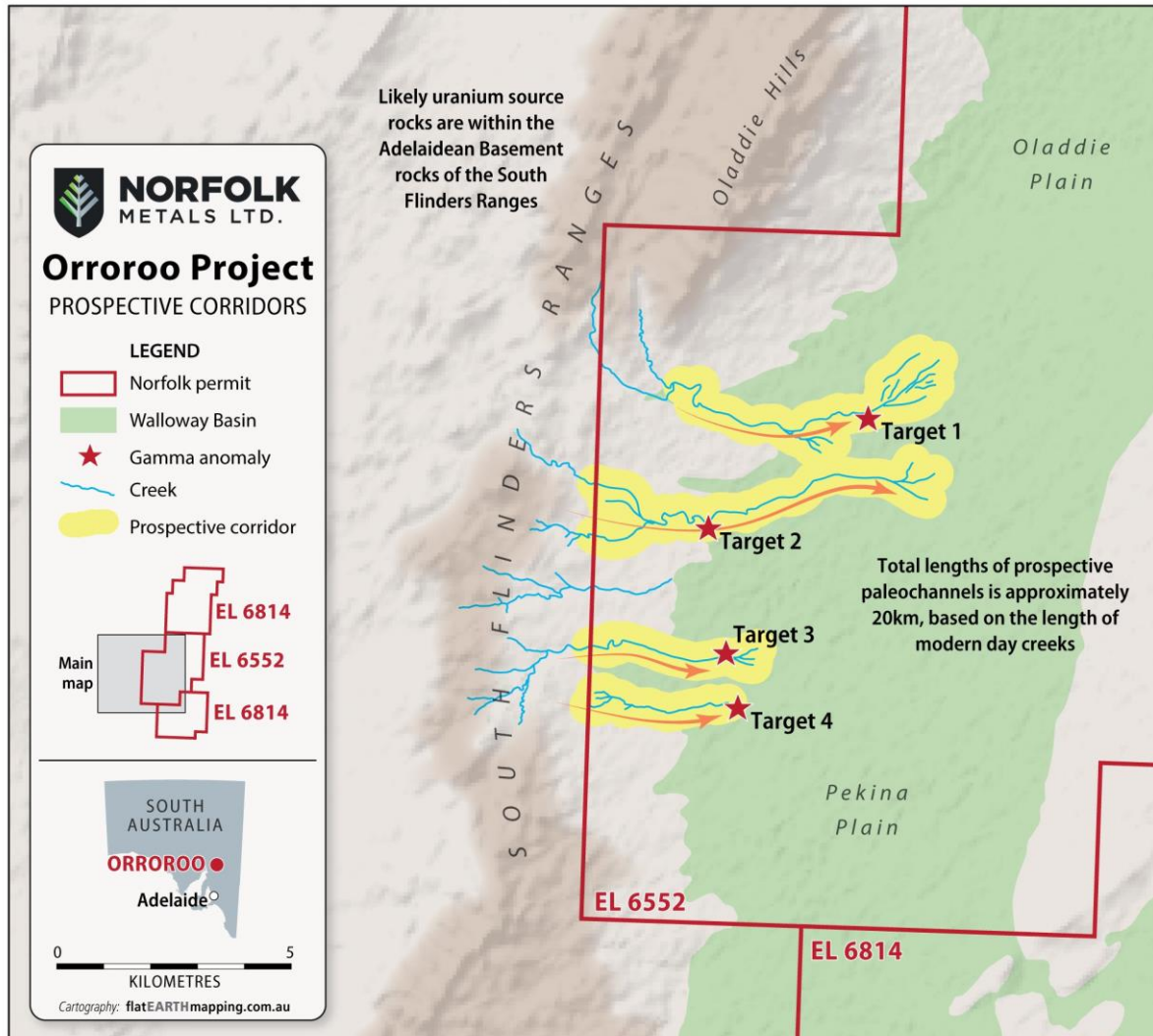


Planar view of REDOX model overlay onto Western Palaeovalley in the Walloway Basin



# PROSPECTIVITY MODEL

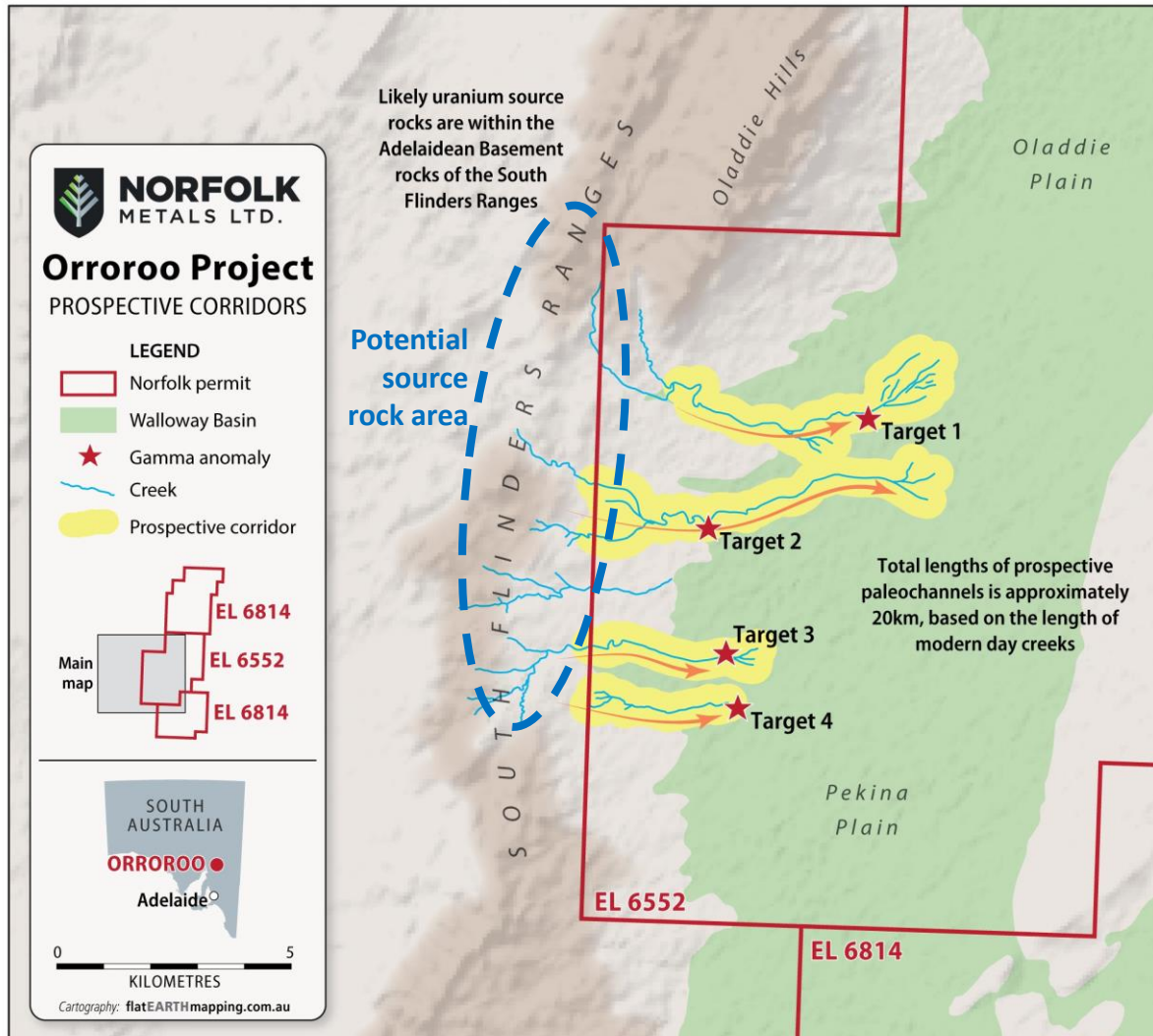
Palaeochannels potentially running adjacent to modern day creeks



- ▶ The maiden drill program will prioritize the **known uranium mineralisation occurrences** (Targets 1,2 & 4) plus the associated prospective traverses adjacent to modern day creeks
- ▶ The location of the uranium intercepts from the historical wells are all located between 50m and 150m south of modern-day creeks
- ▶ This suggests that both modern-day creeks and subsurface palaeochannels could both track a west to east path that likely originate from faulting in the Adelaidean Basement
- ▶ Based on this evidence the location of the palaeochannels can be further explained by a small increase in slope to the south of the basin that would result in a 50-150m shift relative to the modern-day creeks

# PROSPECTIVITY MODEL

Potential source rocks of uranium mineralisation



- ▶ The uranium source rocks appear to be part of the Adelaidean Basement on the western edge of the modern-day creeks
- ▶ Possible uranium source rocks could be granites or units such as the **Brighton Limestone known to contain levels of uranium**
- ▶ If palaeochannels are proven to have similar geometries and length to the modern-day creeks, then there could be up to 20km of prospective uranium bearing exploration ground depending on the REDOX conditions within the palaeochannels

# CONCLUSION

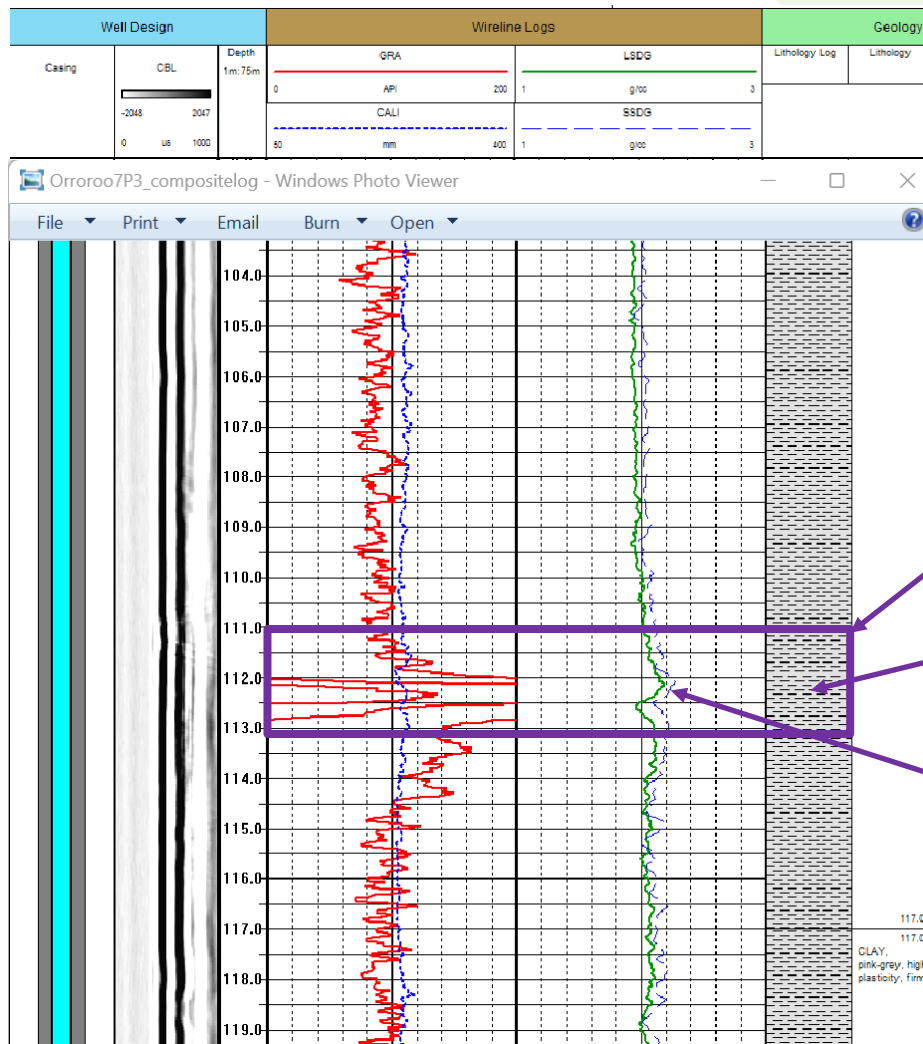
## Orroroo Project



- ▶ Maiden drill program to target known uranium mineralisation areas
- ▶ Potential for ISR mining methods on any discovered permeable uranium deposits
- ▶ Geologically analogous to Frome Embayment host to the Honeymoon (ASX:BOE) and Four Mile (Heathgate Resources) uranium deposits
- ▶ 100% tenure of the Walloway Basin with current target(s) of over 20km of prospective palaeochannels
- ▶ Company well funded with tight capital structure
- ▶ Excellent community engagement in Orroroo positions company well for a successful maiden drill program

# APPENDIX - TARGET AREA 1

## Linc Energy Historical Well Log - 7P3



This section of the drill log interpreted to be a flood plain on the edge of a uranium bearing palaeochannel

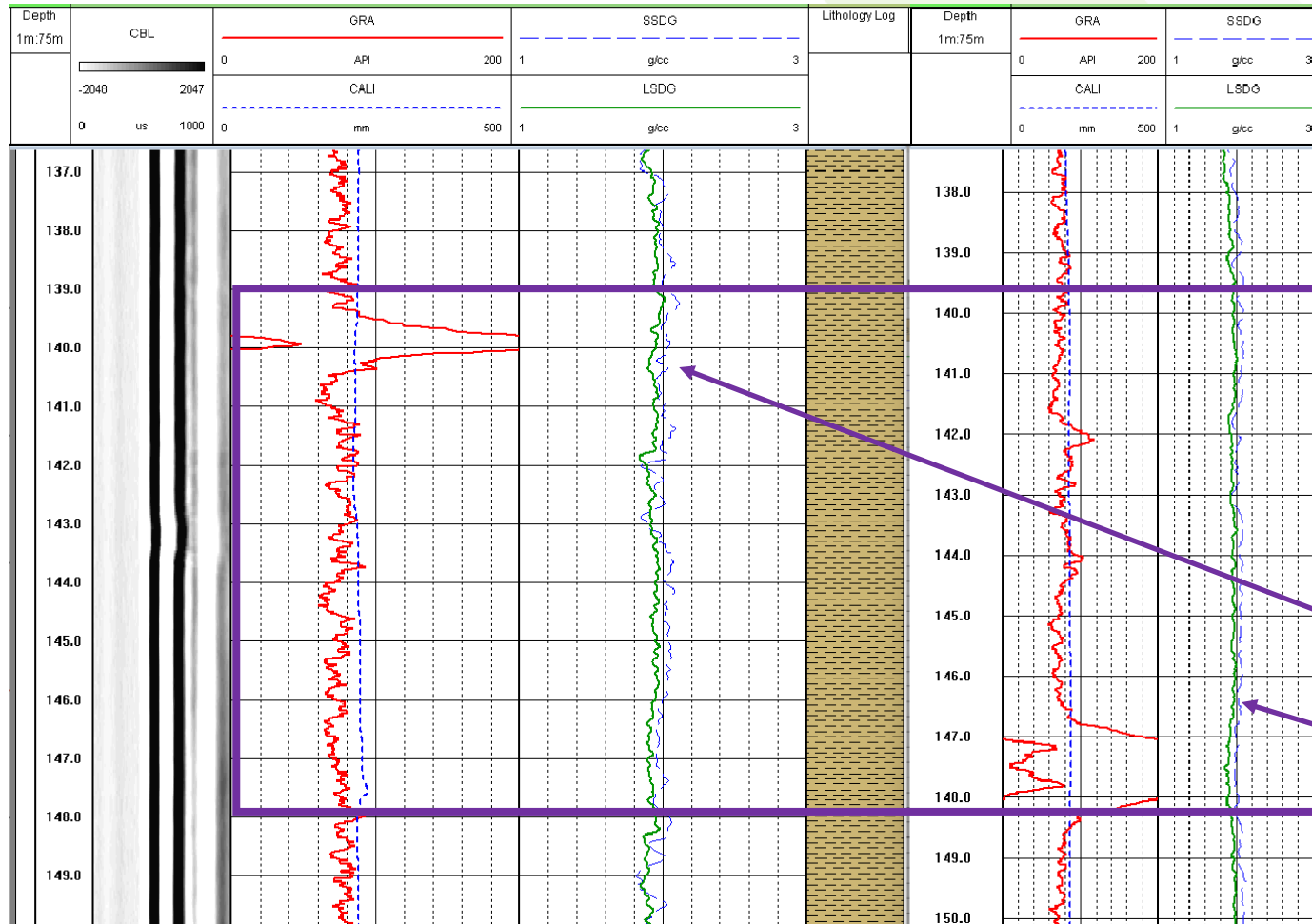
This interval was logged as clay from the historical drilling lithology log by Linc Energy

The long and short spaced density logs indicate a sand signature in comparison to the thick zones of clay 50m above and 50m below this zone



# APPENDIX - TARGET AREA 2

## Linc Energy Historical Well Log - 9P2 & 9P3



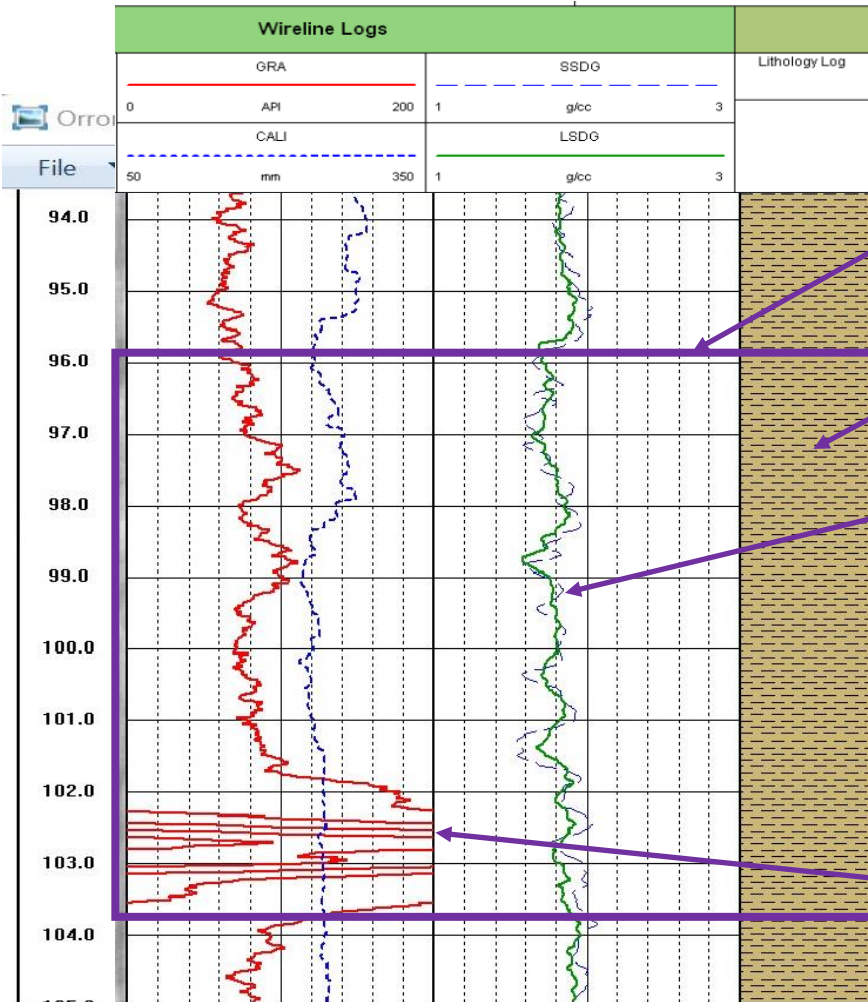
**These two drillholes are interpreted to be located approximately 5m south from a deep incising palaeochannel**

**The presence of an upper and lower uranium spike suggests that this could be the upper and lower limbs of a 9m roll-front within a palaeochannel**

**The long and short spaced density logs indicate impermeable clay with minor sand suggesting the uranium source must be close**

# APPENDIX - TARGET AREA 4

Linc Energy Historical Well Log - 15P1



This section of the drill log is interpreted to be an actual palaeochannel with a vertical height of 8m

This interval was logged as clay from the historical drilling lithology log

The long and short spaced density logs indicate a sand signature in comparison to the thick zones of clay 50m above and 50m below this zone

The interpreted palaeochannel height of 8m is comparable to the 9m height of the palaeochannel interpreted in Target 2 giving further confidence to the palaeochannel interpretation of both targets

Uranium at the base of a palaeochannel is a common feature in most palaeochannel style uranium deposits

# THANK YOU



## Contact:

**Norfolk Metals Limited.**  
Suite 10, 85-87 Forrest Street  
Cottesloe WA 6011

[info@norfolkmetals.com.au](mailto:info@norfolkmetals.com.au)

[www.norfolkmetals.com.au](http://www.norfolkmetals.com.au)