



31 July, 2024

# Great Western completes drilling plan for giant Oval and Oval South copper-gold targets

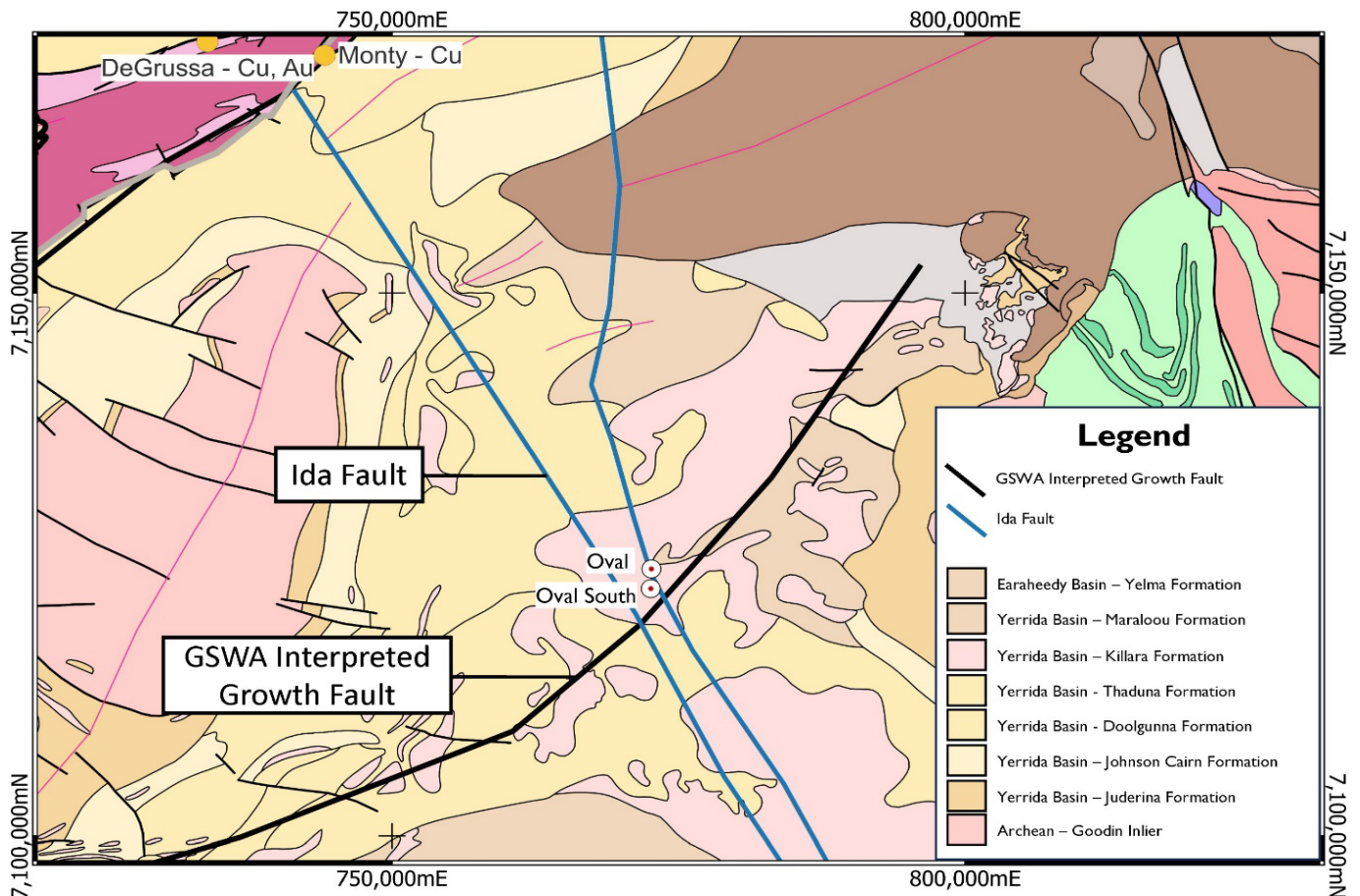
## Key Points

- The diamond drilling plan has been designed for the Oval and Oval South copper-gold targets near Meekatharra in WA
- The drill plan comprises four holes to test both targets
- Great Western recently secured WA Government co-funding under the Exploration Incentive Scheme. The Company believes this government co-funding represents a strong endorsement of the prospectivity of the two targets
- Access approvals now being finalised, with drilling to commence with the giant Oval target in September 2024
- The Oval and Oval South Targets were originally defined by a Rio Tinto EM Survey in the late-1990s. They are coincident EM conductivity and gravity highs, located on the intersection of a crustal scale and basin defining fault, and within favourable stratigraphy of the Yerrida Basin for copper-gold mineralisation formation
- Modern modelling of a VTEM survey completed in 2012 found drilling completed by Rio Tinto failed to intersect the EM conductor, with the Rio hole terminated 70m above the conductor
- Great Western believes the multiple coincident geological and geophysical attributes of Oval and Oval South represent Winu and Haverion-style intrusive-related copper-gold mineralisation and highlights the potential for very large copper-gold discovery

Great Western Exploration (ASX: GTE) is pleased to announce details of the diamond drilling programme to test the giant Oval and Oval South Copper-Gold Targets in WA.

The Oval and Oval South Copper-Gold Targets are within the Company's Yerrida North Project, located on the northern and western portions of the Yerrida Basin, approximately 800km north-east of Perth and adjacent to the DeGrussa and Monty Cu-Au Volcanic Hosted Massive Sulphide deposits (VHMS), shown in Figure 1.





*Figure 1: Location of the Oval and Oval South Targets and Great Western Tenements within the Yerrida Basin, with the location of the Ida and GSWA Growth Faults that potentially focused fluids at these two targets.*

The Oval and Oval South Targets were originally defined by Rio Tinto Tempest airborne EM survey in the late 1990s. Rio Tinto drill-tested the Oval Target, drilling a hole to a depth of 232m. In 2010 a VTEM survey was completed by Great Western over an area that encompassed both Oval and Oval South. This geophysical method can penetrate deeper into highly conductive terrains than the Tempest technique utilised by Rio Tinto. The VTEM data defined the conductor at a depth of 300m, below the where OVR001 was terminated (Figure 2); hole OVR001 did not intersect the conductor.

Further definition of the Oval and Oval South Targets was completed by a joint venture between Great Western and Sandfire (ASX: SFR), where Sandfire spent \$4.5M on exploration on the project from 2017 before withdrawing (GTE ASX Announcement 17 August 2023). Great Western assumed 100% ownership of the Yerrida North Project, with all associated exploration data compiled and completed by Sandfire during the joint venture.

Sandfire completed an Airborne Gravity Gradiometry (AGG) in 2022, with the AGG survey defining discrete gravity highs at Oval and Oval South which overlayed near perfectly with the VTEM anomalies (Figure 2). The coincident gravity and EM anomalies were interpreted as potential buried bodies of metal rich sulphide mineralisation (See ASX Announcement dated 4 October 2023).



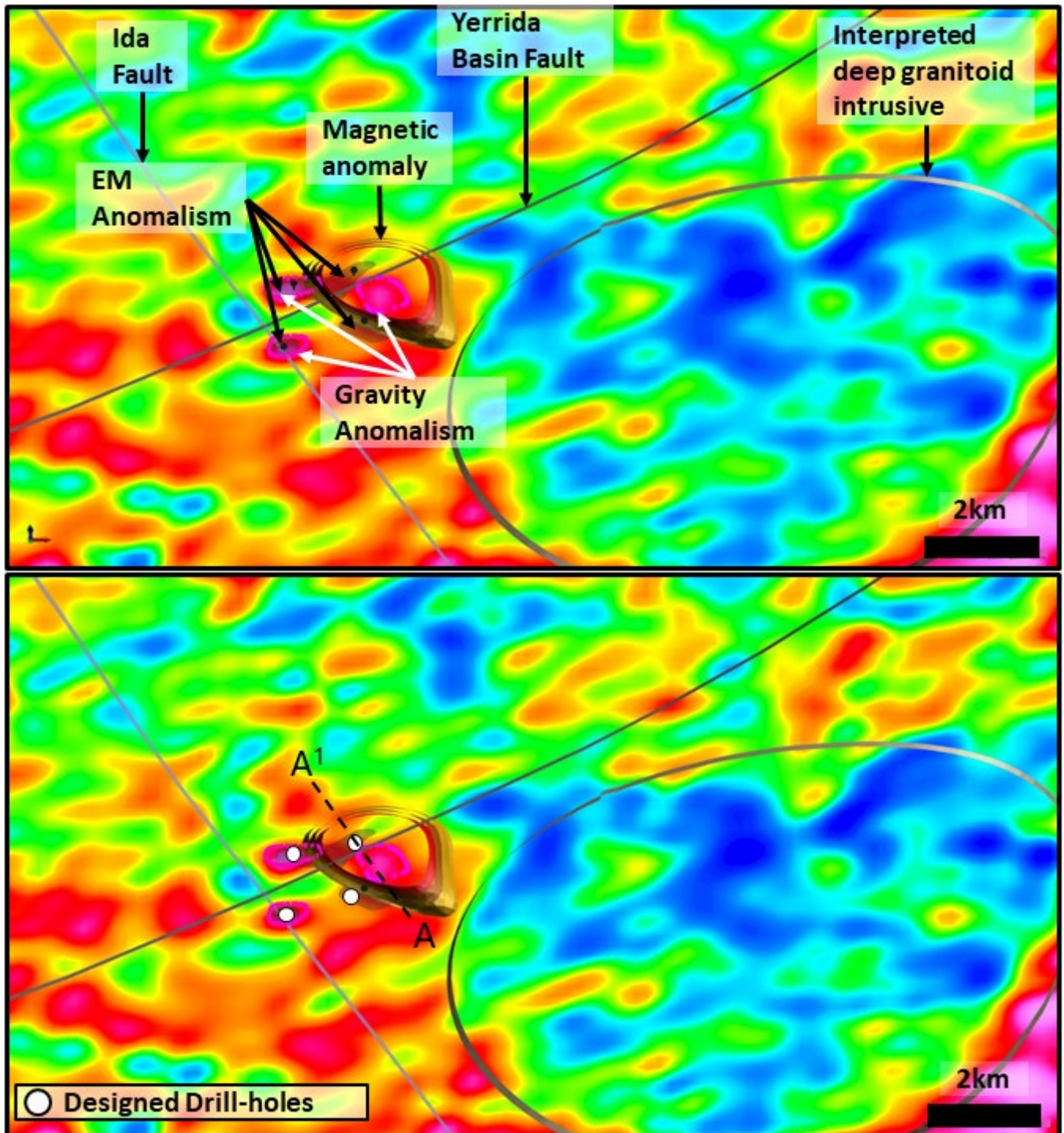


Figure 2: Top image displays airborne gravity gradiometry data, overlain with electromagnetic anomalies (transparent grey) and magnetic inversion anomaly (concentric rings). The deep magnetic anomaly is interpreted as a buried intrusive that potentially supplied mineralised fluids and heat, abutting a large intrusive granitoid, sharing similarities with the Winu intrusive related copper-gold deposit. Bottom figure displays planned drilled holes with the top images dataset to test the coincident gravity and electromagnetic anomalism.

Great Western has designed four diamond drilled holes to test these targets (two holes into each target), with designed depths ranging from 600 to 800m (Figure 2 and 3). Oval and Oval South share multiple coincident geological and geophysical features to the giant Winu and Haverion intrusive related copper-gold deposit.

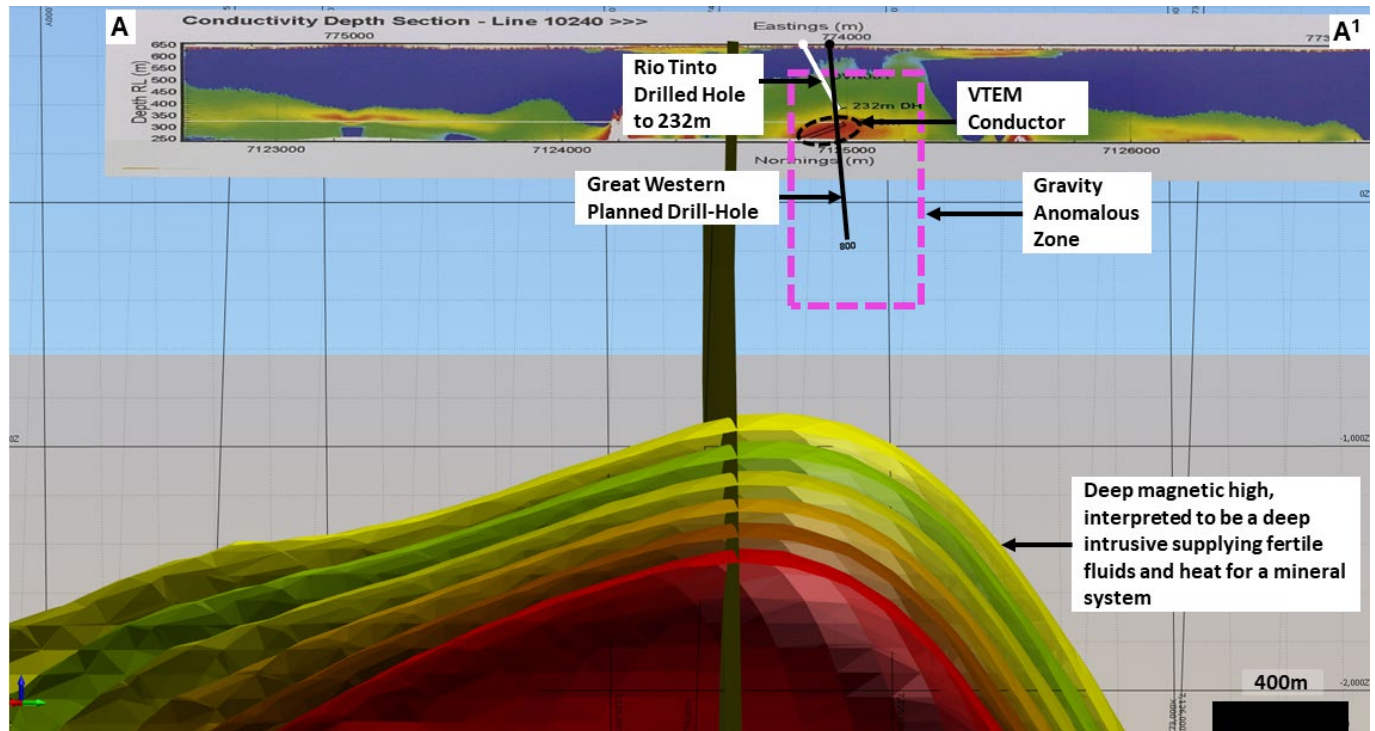


Figure 3: Cross section looking west, displaying Rio Tinto completed hole drilled in the early-2000s, and one of the planned Great Western drill-holes. Note depth of VTEM conductor at 300m which is 70m below Rio Tinto drilled hole, that failed to intersect the anomaly and position of the gravity anomalism. Rio Tinto had neither of these datasets to guide drilling in the early 2000s.

Drilling will focus on the co-incident gravity and electromagnetic anomalism at Oval and Oval South (Figure 2), which the Company interprets as representing potential metal-rich sulphide mineralisation.

## Oval & Oval South's Impressive Co-Incident Key Ingredients

Discovery of giant deposits often involve the identification of at least three key ingredients that may define a potential major mineralisation system. Multiple significant key ingredients have been identified at Oval and Oval South, which greatly enhances the discovery of a giant Winu Style intrusive related copper-gold system, which now include:

- ✓ Co-incident gravity and EM anomalies – zones of dense rocks that are conductive interpreted to represent obscured metal rich sulphide mineralisation;
- ✓ Magnetic anomalism at depth below the conductive high, potentially representing a deep intrusive providing mineralised fluids and heat to drive a mineralised system, possibly similar to the magnetic granite found at Winu.

- ✓ Proximity to the crustal scale Ida Fault, a crustal scale feature stretching greater than 500km long, with proven fertility conduit for metal rich mantle fluids. The Mt Keith and Perseverance Deposits (nickel), DeGrussa (Copper) and Davyhurst (gold) are some of the deposits found along its length;
- ✓ Intersection of the Ida Fault by a basin defining “growth structure”, allow mineralised fluids to ascend and focus within suitable trap site/stratigraphy;
- ✓ Favourable Yerrida Basin stratigraphy of the Johnson Cairn Formation for mineralised fluids to deposit copper-gold (shales, dolomites, siltstones), similar to the sedimentary rocks found at Winu; and
- ✓ Position of both Oval and Oval South within an east-west intrusive corridor, a potential zone of weakened crust which in conjunction with the Ida Fault and GSWA growth Fault makes an ideal trap site for metal accumulation.

Great Western interprets that Oval and Oval South’s coincident geophysics anomalism, location on a major crustal mantle tapping fault intersected with a basin defining growth fault, and within favourable stratigraphy creates the potential for a colossal discovery to be made.

The Company recently received approval for Co-Funding by the Western Australian Government under the Exploration Incentive Scheme (ASX Announcement 2 May 2024). The Company believes the government co-funding represents significant endorsement of the prospectivity of the Oval and Oval South Targets.

## Access Agreements Finalisation

Great Western is in the process of finalising access agreements, with a heritage survey at Oval and Oval South recently completed and now approved for drilling, with drilling planned to commence in September 2024.

## Oval and Oval South Video

A video further detailing the significant potential and technical attributes of Oval and Oval South can be found here:

<https://vimeo.com/977144847/fb810fe113?share=copy>

**Authorised for release by the Board of Directors of Great Western Exploration Limited.**

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#### Competent Person Statement

*The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr. Shane Pike who is a member of the Australian Institute of Mining and Metallurgy. Mr. Pike is an employee of Great Western Exploration Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit 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 Exploration Results, Mineral Resources and Ore Reserves'. Mr. Pike consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

*The information in this report that relates to the Company's Exploration Results is a compilation of Results previously released to ASX by Great Western Exploration (17/08/2023, 21/07/2023, 4/10/2023, 18/12/2023, and 2/05/2024) Mr. Shane Pike consents to the inclusion of these Results in this report. Mr. Pike has advised that this consent remains in place for subsequent releases by the Company of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters in the market announcements continue to apply and have not materially changed. The Company 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.*

## About Great Western Exploration

Great Western Exploration (GTE.ASX) is a copper, gold and nickel explorer with a world class, large land position in prolific regions of Western Australia. Great Western's tenements have been under or virtually unexplored (Figure 4).

Numerous work programmes across multiple projects are underway and the Company is well-funded with a tight capital structure, providing leverage to exploration success.

