

ASX Announcement

29 February 2024



Drilling to Commence Next Month at Fairbairn Copper Project

Contract Signed with Drilling Contractor DDH1

Summary

- **Great Western is undertaking final preparations for drilling at the Fairbairn Copper Project, with an agreement signed with highly regarded drilling contractor DDH1.**
- **The drill program will test three compelling targets which geophysics and sampling indicate have potential to host volcanic hosted sulphide mineralisation.**
- **Geological mapping, sampling, and modelling suggest the conductors represent potential for DeGrussa Style copper-gold targets.**
- **Drilling is anticipated to commence in late March 2024.**

Fairbairn Project

GTE 100% (E69/3443)

Great Western Exploration Limited (ASX: GTE) is pleased to announce that final preparations are underway for drilling at its highly prospective Fairbairn Copper Project, with a drilling contract now signed with highly regarded contractor DDH1. Drilling is anticipated to commence in late-March 2024.

The Fairbairn Copper Project is located 900km north-east of Perth (Figure 1) and 120km from Sandfire Resources' (ASX: SFR) DeGrussa copper-gold project.

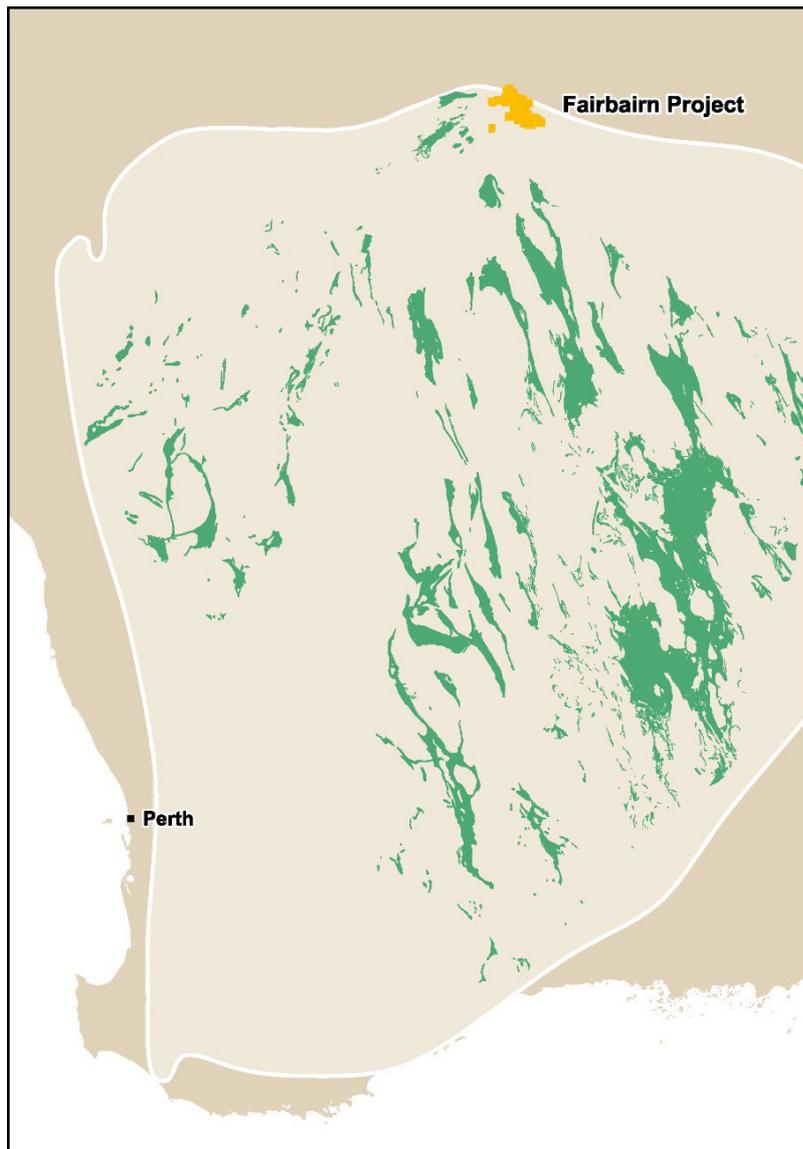


Figure 1: Fairbairn Project Location.

The upcoming drilling programme will test three compelling DeGrussa-style targets which have been identified by both a fixed-loop electromagnetic (FLEM) ground survey and a heliborne EM survey (GTE ASX Announcement 26 September 2023).

The FLEM survey identified three isolated bedrock conductors which are interpreted to be related to sulphide mineralisation. The conductors were modelled between only 80 – 190m below surface, positioned along a government mapped contact between a siltstone-shale and boulder conglomerate-sandstone units of the Yelma Formation within the Earraheedy Basin (Figure 2).

Their prospectivity has been significantly enhanced by geological mapping and modelling which suggests the conductors have potential to be blind DeGrussa-style volcanic-

hosted massive sulphide targets (VMS).

Great Western Managing Director Shane Pike said: “These targets have been identified and refined using cutting-edge geophysics and assessed by leading people in this field.”

“Geological mapping completed by our team found the targets are located in a geological setting expected for a DeGrussa style copper-gold deposit and share many other key geological characteristics.

“The targets are modelled as sitting between 80m and 190m below surface and their highly compelling prospectivity is supported by anomalous surface sampling results with assays grading up to 0.19 per cent copper and 0.15gpt gold, indicative of a fertile mineral system”.

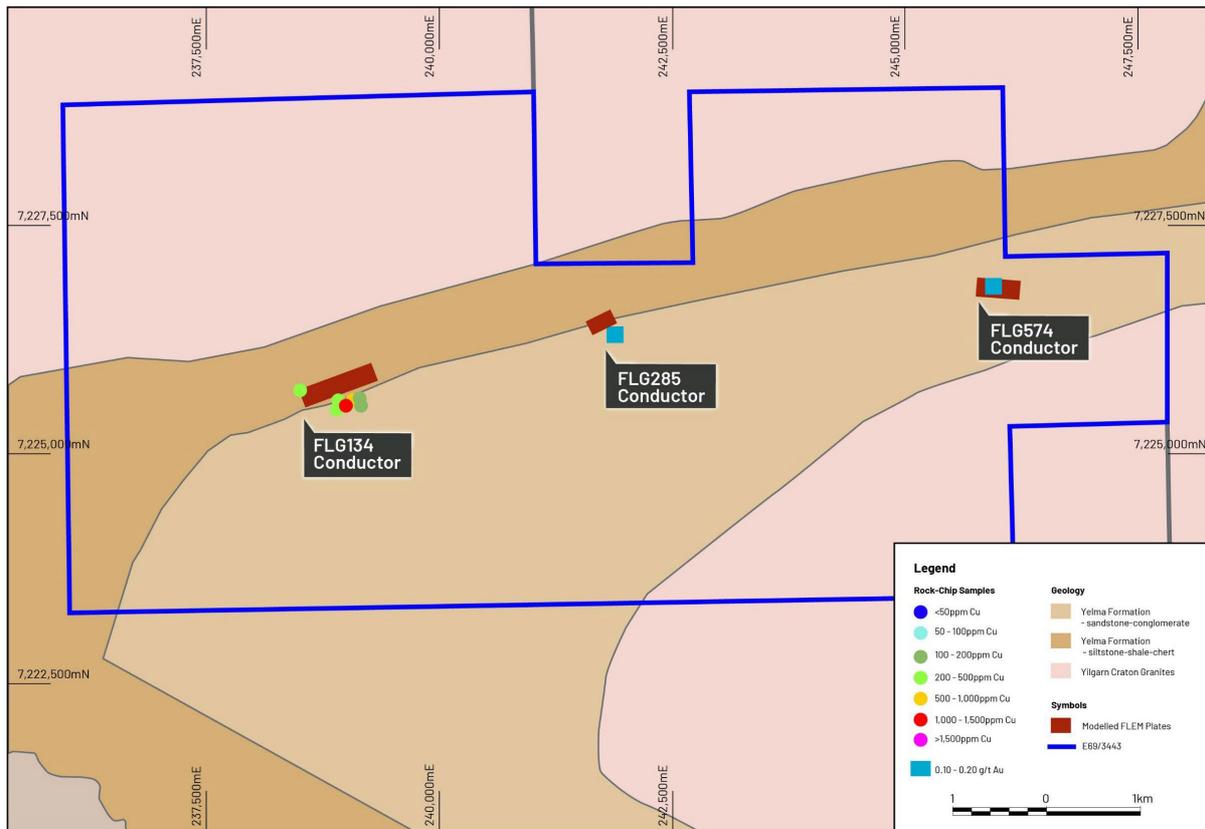


Figure 2: Plan location of modelled FLEM conductors FLG134, FLG285, and FLG574 (GTE ASX Announcement 26 September 2023).

A heritage clearance has been completed and report received for work to commence. Government Programme of Works (POW) has been approved, with a native vegetation clearing permit currently being assessed. Great Western anticipates the drilling programme at Fairbairn that will test each of the three targets will commence late-March 2024.

Drilling at the Giant Oval and Oval South to Follow

Following drilling at the Fairbairn Copper Project, Great Western plans to commence drilling at the Company's giant Oval and Oval South Targets, the geophysical signatures of which are interpreted as sharing similarities with Rio Tinto's colossal Winu intrusive related copper-gold deposit.

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 and terminating the hole within interbedded siltstone and shale with disseminated pyrite, considered at the time to be the source of the conductor (GTE ASX Announcement 4 October 2023). 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 such as shales at this location than the Tempest technique utilised by Rio Tinto. The VTEM data defined the conductor at a depth of 300m, below the shale surface where OVR001 was terminated (Figure 3); hole OVR001 did not intersect the conductor.

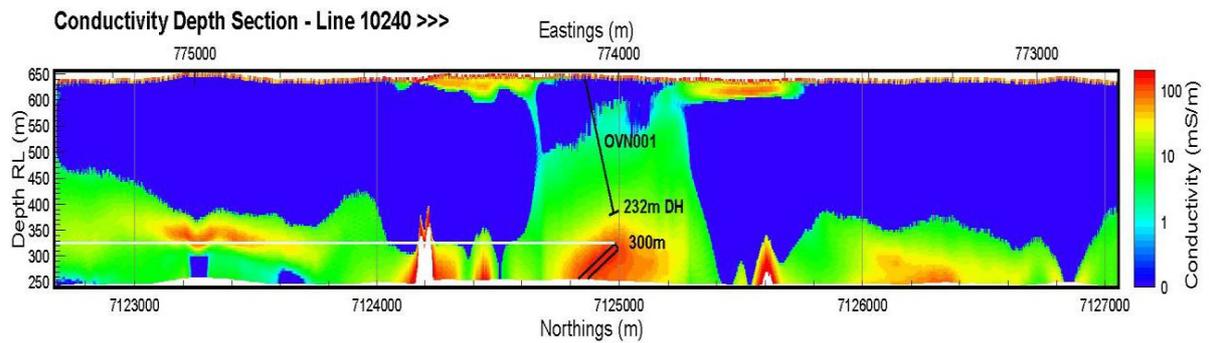


Figure 3: Position of Rio Tinto drilled hole at Oval overlaid on VTEM data. Note position of conductor below termination of OVN001.

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, that overlaid near perfectly with the VTEM anomalies (Figure 4). The coincident gravity and EM anomalies were interpreted as potential buried bodies of metal rich sulphide mineralisation (GTE ASX Announcement 4 October 2023).

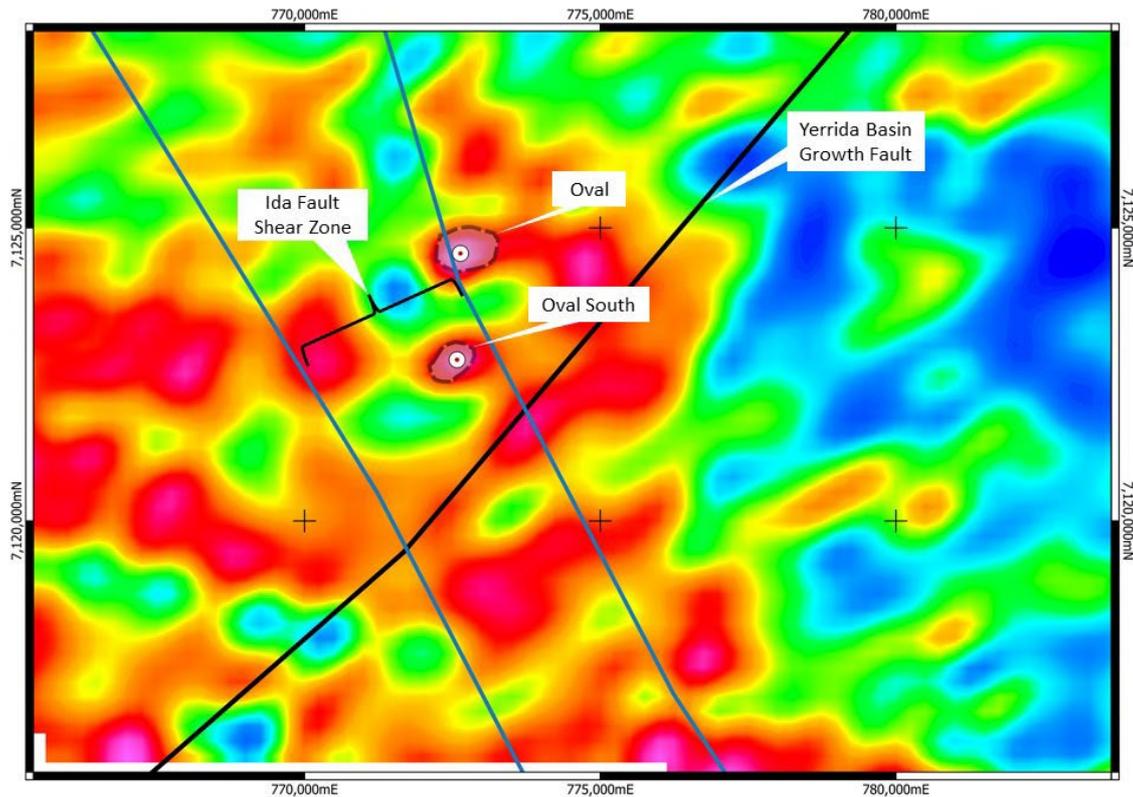


Figure 4: Oval and Oval EM anomalies, overlaid on gravity gradiometry data. Note the location of the Ida Fault Shear Zone and Yerrida Basin Growth Fault, focusing potential metal rich fluids GTE ASX Announcement 4 October 2023).

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 5).

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



Figure 5: Location of Great Western's Exploration Tenure.

Authorised for release by the board of directors of Great Western Exploration Limited.

Shane Pike

Managing Director

Great Western Exploration Limited

Tel: 08 6311 2852

Email: enquiries@greatwestex.com.au

Previous ASX Releases – GTE.ASX

1. 26 September 2023 Large DeGrussa-Style Copper Targets Defined from Fairbairn EM Survey
2. 4 October 2023 Nickel Copper Targets Defined at the Fairbairn Project
3. 17 August 2023 Great Western Assumes 100% of Yerrida North

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, 26/09/2023, and 4/10/2023) 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.