Great Western Exploration Limited: Drilling Completed at Fairbairn Copper Targets

10.06.2024 | ABN Newswire

Perth, Australia - Great Western Exploration Ltd. (ASX:GTE) advises that it has completed drilling at the Fairbairn Copper Project, located 900km north-east of Perth in Western Australia (Figure 1*).

Key Points

- Great Western has completed a drilling programme that tested three fixed-loop electromagnetic (FLEM) conductor targets, spaced between two to four kilometres apart, at the Fairbairn Copper Project in Western Australia

- Drilling of the EM conductors at the modelled depths intersected graphitic shales and disseminated pyrite. The Company interprets these units to be responsible for the FLEM conductor response. While samples have been submitted for assaying, it is anticipated that significant copper results will not be received from the trace chalcopyrite intercepts recorded

- Deep-sea turbidite sedimentary rocks and mafic and bimodal volcanic rocks similar to the host geology of the DeGrussa Copper VHMS Deposit were intersected, validating the geological environment targeted

- The alteration style of sections of the turbidite sequence and presence of trace chalcopyrite (<0.1%) in one of the drilled holes are indicative of proximity to a possible VHMS System, warranting down-hole EM surveying.

- The Company's focus now moves to our giant, 100% owned, highly prospective Oval and Oval South copper targets expected to be drilled early in the coming financial year.

The drill programme tested three Fixed Loop Electromagnetic (FLEM) targets spaced between two and four kilometres apart (Figure 2*), which were interpreted to represent DeGrussa Style Copper-Gold mineralisation. The three isolated and discrete targets were identified by both FLEM ground and a heliborne EM surveys (GTE ASX Announcement 26 September 2023).

Three RC pre-collared diamond drill holes (totalling 854m) were completed, one at each FLEM target. Drilling intersected turbidite stratigraphy (conglomerates fining upwards to siltstones and shales) in all three holes. Mafic volcanic rocks (dolerites) were intersected in drill-hole 24FNDD001 (Figure 3*), and phyillic altered bimodal volcanic rocks (andesites and dacites) were noted in drillhole 24FNDD003 (Figure 4*). Potassic-silica-pyrite altered siltstones with minor quartz veining was logged below the turbidite-volcanic sequences in drill-hole 24FNDD003 (310.1- 383.25m).

At the modelled position of all three FLEM conductors, interbedded shale and siltstone sequences were intersected, with the former units containing graphite on sheared surfaces (up to 1%) and disseminated pyrite.

The Company interprets that the graphitic shale generated the conductive FLEM response.

The turbidite rocks are indicative of a deep-sea environment, and combined with mafic and bimodal rocks intersected, are interpreted by the Company to be a prospective geological environment for volcanic hosted massive sulphide deposits formation, validating the targeted geological model. These turbidite units share similarities with the host stratigraphy of the DeGrussa Copper-Gold Deposit, with VHMS mineralisation hosted by turbidite and volcanic rock types.

Selective hematite alteration of individual bedding within the turbidite sequence within holes 24FNDD001 and 003, and trace chalcopyrite (<0.1%) noted in drillhole 24FNDD001 (196.8 - 202.21m) suggests a position proximal to a potential VHMS system.

Geophysical modelling found off-hole VHMS mineralisation would be defined as discrete conductors, despite the presence of the graphitic shales. The Company plans to complete down-hole electromagnetic surveying for all three holes, targeting the prospective turbidite and volcanic stratigraphy. While samples have been submitted for assaying it is anticipated that significant copper results will not be received from the trace

chalcopyrite (<0.1%) intercepts recorded.

Oval and Oval South

Great Western's focus now moves to drilling the Company's 100% owned highly prospective giant Oval and Oval South targets within its Yerrida North Project early in the coming financial year.

Yerrida North is located on the northern and western portions of the Yerrida Basin (Figure 6*), approximately 800km north-east of Perth. The two highly prospective Oval and Oval South targets both have several coincident geological attributes, which Great Western believes represent giant Winu-style intrusive related copper-gold mineralisation.

The Oval and Oval South Targets were originally defined by a 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 black 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 7*); 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, that overlayed near perfectly with the VTEM anomalies (Figure 8*). The coincident gravity and EM anomalies were interpreted as potential buried bodies of metal rich sulphide mineralisation (GTE ASX Announcement 4 October 2023).

The EM and gravity anomalies are both located on the intersection of the crustal scale Ida Fault, and the basin forming Yerrida Growth Fault. Great Western interprets this intersection of two major structures focused metal rich fluids from the Ida Fault into favourable stratigraphy of the Yerrida Basin, potentially accumulating significant copper-gold mineralisation at Oval and Oval South.

*To view tables and figures, please visit:
https://abnnewswire.net/lnk/9191079N

About Great Western Exploration Limited:

Great Western Exploration (ASX:GTE) is a copper, gold and nickel explorer with a world class, large land position in prolific mining regions of Western Australia. Great Western's tenements have been underexplored or virtually unexplored. We have numerous field work programs across multiple projects currently underway and are well-funded with a tight capital structure, providing leverage upon exploration success.

Source:
Great Western Exploration Ltd.

Contact:

Shane Pike Managing Director Great Western Exploration Ltd. Tel: 08 6311 2852 Email: enquiries@greatwestex.com.au Paul Armstrong Investor and Media Relations Read Corporate Email: paul@readcorporate.com.au