

# ASX Announcement

1 February 2023



## Completion of Fairbairn Nickel-Copper Project EM Survey

### Highlights

- **Helicopter-borne electromagnetic (EM) survey completed at the Fairbairn Nickel-Copper Project. Interpretation of this much anticipated EM survey data has already commenced.**
- **Fairbairn Project highly prospective for magmatic nickel-copper systems and located in a similar geological setting to the Julimar and Nova Deposits, on the northern margin of the Yilgarn Craton.**
- **The Fairbairn EM survey was completed over magnetic highs and anomalous drill-hole nickel results, within mafic-ultramafic units obscured by shallow cover.**
- **Little previous exploration completed over the project, with the work undertaken in the 1980s - 1990s focused on diamond exploration.**

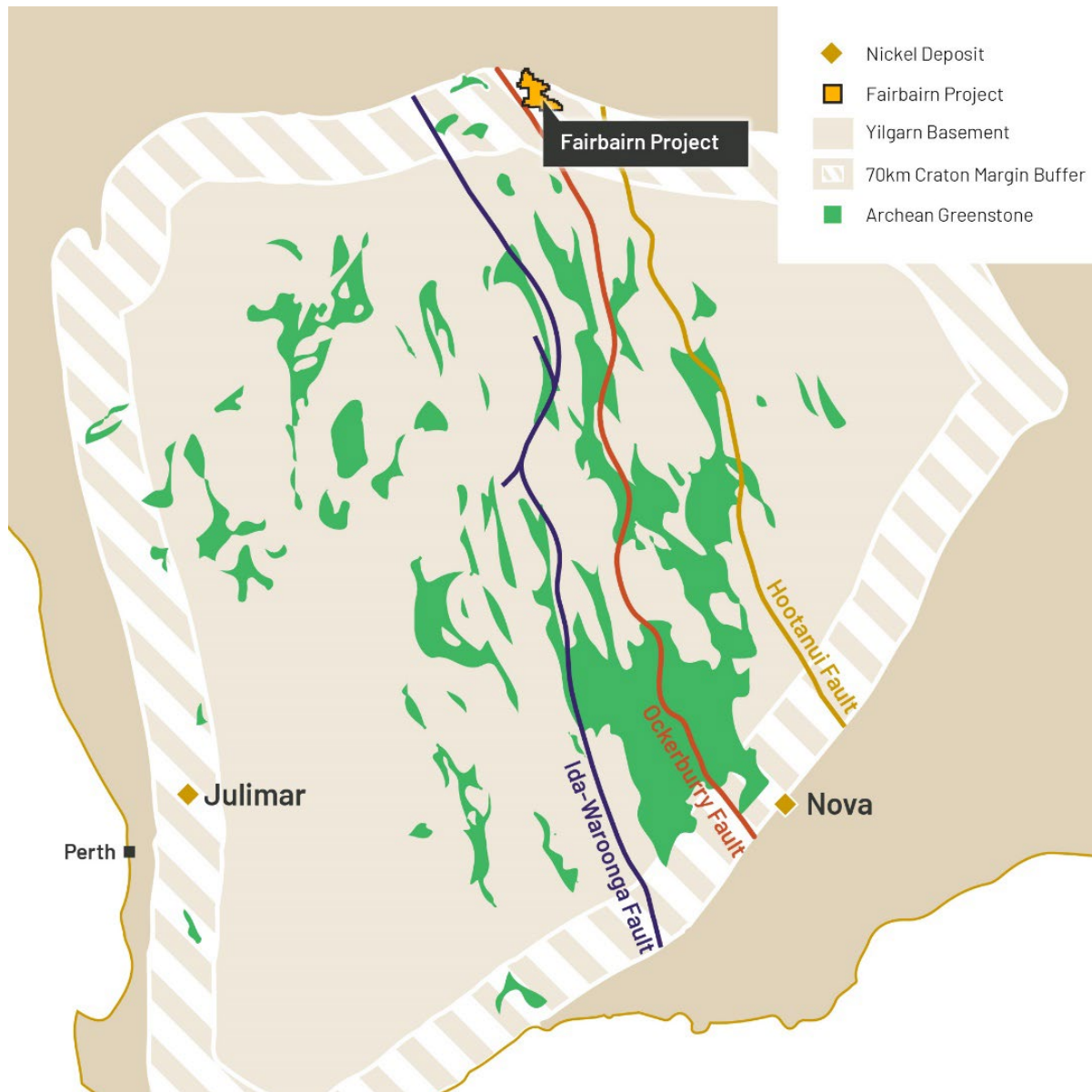
Great Western Exploration Limited (ASX: GTE) ("Great Western" or "the Company") is pleased to announce the completion of a helicopter-borne EM survey at the Company's Fairbairn Nickel-Copper Project.

### Fairbairn Nickel-Copper Project

GTE 100% (E69/3443)

The Fairbairn Nickel-Copper Project is located 900km north-east of Perth, on the northern margin of the Yilgarn Craton and within the Earraheedy Basin. The Yilgarn Craton margin is highly prospective for base metal deposits and host to both the Julimar and Nova Deposits (Figure 1). Little previous exploration has been completed at Fairbairn, with work completed during the 1980s and early-1990s focussed on diamond exploration and not magmatic nickel-copper style mineralisation.

Great Western has now completed a helicopter-borne electromagnetic (EM) survey over a highly prospective portion of the project, to define Julimar/Nova style magmatic Nickel-Copper targets.



**Figure 1:** Location of the Fairbairn Base Metal Project on the margin of the Yilgarn Craton, and the interpreted “mantle tapping” Ockerburry Fault, a potential conduit for metal deposit formation.

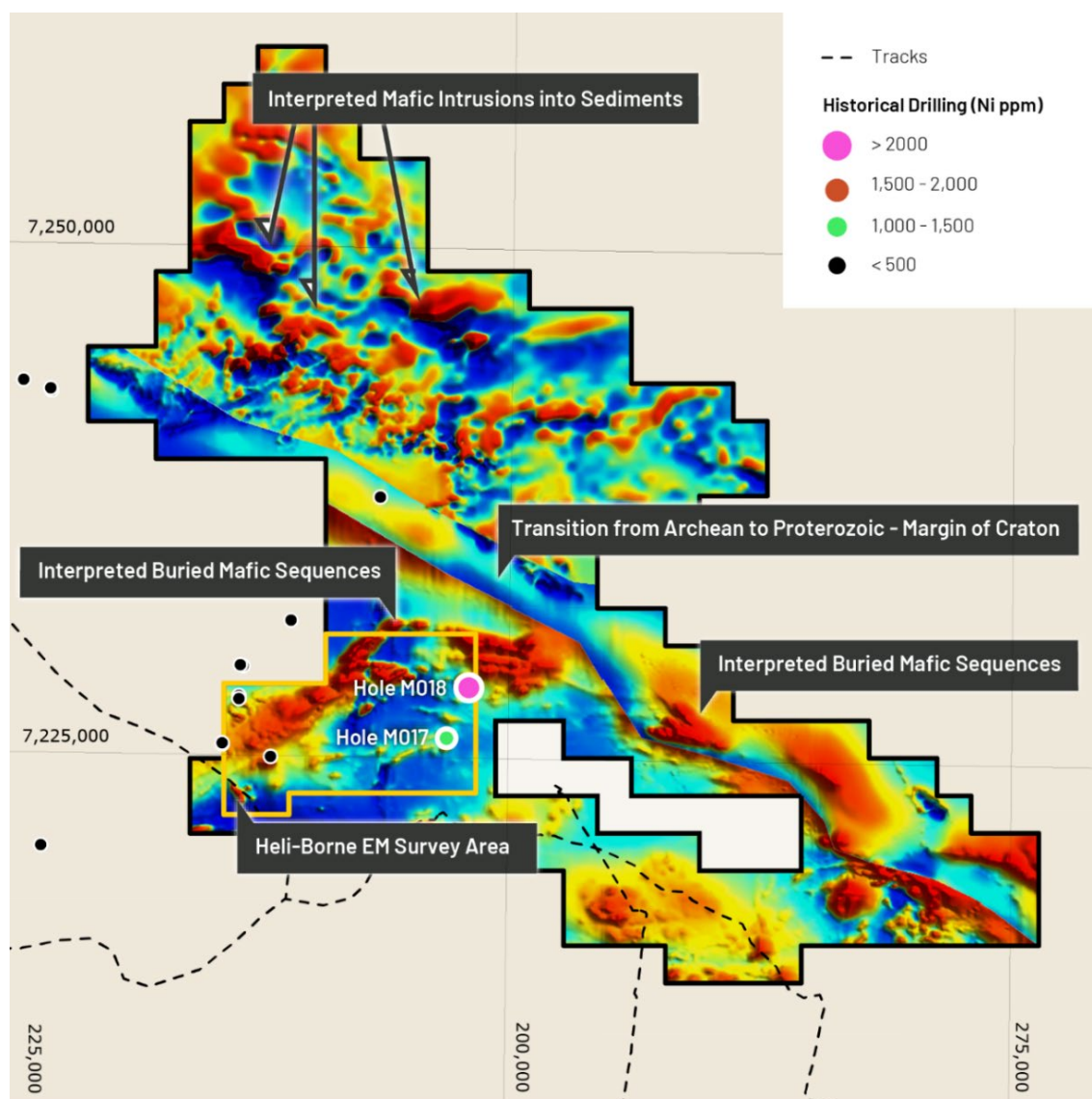
The EM survey focused on zones of magnetic highs (Figure 2), interpreted as obscured mafic/ultramafic units below shallow cover, and two early-1990s drill holes focussed on diamond exploration which recorded anomalous nickel results (GTE ASX Announcement 21 March 2022). These results included:

- 12m @ 1,835ppm Ni from 22m (M018), including a maximum assay of 2,130ppm Ni, and
- 20m @ 1,214ppm Ni from 28m (M017).

Geoscience Australia’s 2016 report ‘Potential for intrusion-hosted Ni-Cu-PGE sulphide deposits’, interpreted that where major crustal structures extend into the craton margin, the thinner margin crust

at these locations would allow these structures to more easily “tap” the mantle, resulting in metal rich fluids to ascend and potential form economic metal accumulations. Post the release of this report the Julimar deposit was discovered in this geological location.

The Company interprets that the Ockerburry Fault (Figure 1) that flanks the Fairbairn Nickel-Copper Project is an example of one of these structural features, with high potential for magmatic nickel-copper style mineralisation to have formed within the Fairbairn Project.



**Figure 2:** Previously drilled exploration holes exploring for diamonds assayed for nickel, overlayed on 40m State aeromagnetic data. Red magnetic highs are interpreted to be shallowly covered Archean mafic and ultramafic units, prospective for magmatic Ni-Cu-PGE deposits. Orange polygon is the recently completed EM survey covering anomalous drill-holes and coincident magnetic highs.

The EM survey aims to generate compelling targets within this prospective region of the craton margin for immediate follow-up. Analysis of the EM survey data has already commenced, with results anticipated late-February 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 underexplored or virtually unexplored (Figure 3).

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



Figure 3: Location of Great Western's Exploration Tenure.

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

Tony Walsh

Company Secretary

Great Western Exploration Limited

Tel: 08 6311 2852

Email: [enquiries@greatwestex.com.au](mailto:enquiries@greatwestex.com.au)

Previous ASX Releases – GTE.ASX

1. 21 March 2022                      Nickel Exploration Programme at Fairbairn
2. 28 September 2022            Upcoming Airborne EM Survey for the Fairbairn Nickel Project

### **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 (21 March 2022 and 28 September 2022) 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.*