21 September 2021

# 3,000m RC Drilling Completed at Yarabrook Hill

## **HIGHLIGHTS**

- Large-scale mafic-ultramafic intrusive complex recognised at Yarabrook Hill Prospect much larger than previously thought
  - o Previous drilling tests only a small part of body
  - Prospective basal contact yet to be tested by any drilling
  - Favourable geological context for strong Northwest and Eastern PGE anomalies now identified as basal contact positions
- Approximately 3,000m of current RC drill program completed prior to ground access conditions pausing drilling – multiple zones of sulphide mineralisation intersected – assays awaited
- RC drilling expected to recommence in late October with strong new targets added to the program
  - Northwest and Eastern soil anomalies
  - o XC-22 Airborne EM anomaly

Caspin Resources Limited (ASX: CPN) ("Caspin" or "the Company") is pleased to provide an update on exploration activities at the Company's Yarawindah Brook PGE-Ni-Cu Project in Western Australia. The Company has completed further interpretation of recent gravity gradiometry survey, supported by geological observations from RC drilling completed thus far.

# **RC Drilling Program Status**

Eleven RC holes have been completed to date for approximately 3,000m. Drilling has been suspended due to very wet ground conditions reducing access to some areas of the project area and is expected to resume in late October (subject to ground conditions improving and rig availability).

Multiple zones of disseminated sulphide mineralisation have been expected in this drilling and assays from completed holes are expected to be returned from early October. RC drilling is currently expected to resume in late October. The upcoming diamond program, part funded by the WA Government Exploration Incentive Scheme, is now expected to commence towards the end of October due to rig availability.

The receipt of pending assay results from the initial holes drilled will allow the remainder of the program to be refined. In addition, the program is expected to include some new drill targets as discussed below.

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## **New Geological Interpretation Provides Greater Confidence for Targeting**

The results of a gravity gradiometer survey flown in June continue to be interrogated and when combined with observations from recent drilling, have provided a significant advance in the understanding of the geology of the Yarabrook Hill intrusion. This improved understanding has important positive implications for the exploration potential of the intrusion and further targeting.

The Company now recognises a much larger extent of intrusion than previously thought, with three broad rock units which are consistent with fractionation patterns found in magmatic systems. The rock units appear to be folded along the axis of a major thrust zone (Figures 1 and 2) which in the area around Yarabrook Hill, has thrust the more ultramafic, basal sequence of the intrusion to the surface. This thrust zone was previously described as the "Footwall Shear Zone" but is now recognised as the "Radio Tower Thrust" which is recognised in both magnetics and gravity data sets. The basal sections of mineralised magmatic systems are generally more prospective and the observations at Yarabrook Hill to date are consistent with this conceptual model.

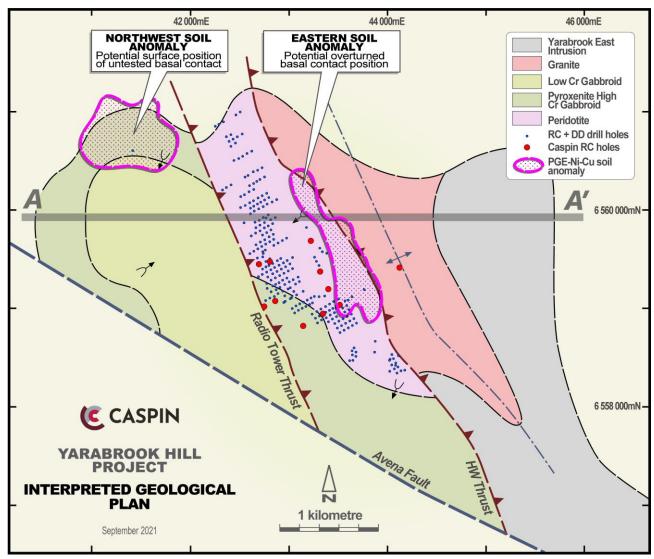


Figure 1. Interpreted geology of Yarabrook Hill with previous drilling and RC holes from current RC campaign. Note the absence of drill holes testing the Northwest and Eastern soil geochemical anomalies.

The gravity gradiometry survey has shown that the Yarabrook Hill intrusion is much larger than initially thought and is comparable in size to the Gonneville and Hartog intrusions and gravity anomalies that host Chalice Mining's Julimar discovery (Figure 3).



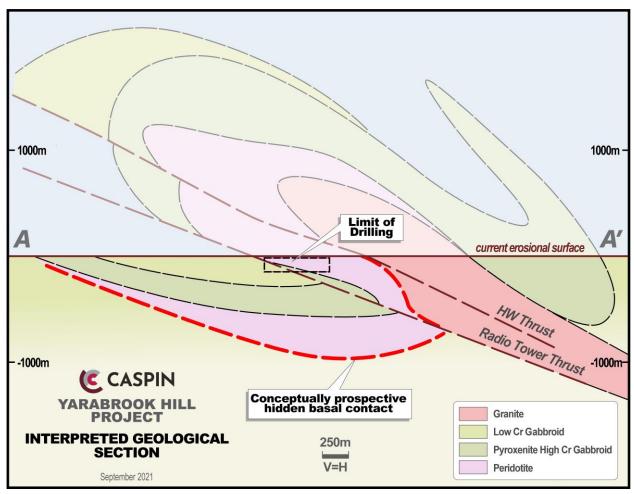


Figure 2. Conceptual geological section of Yarabrook Hill based on interpretation of geophysical datasets and recent RC drilling.

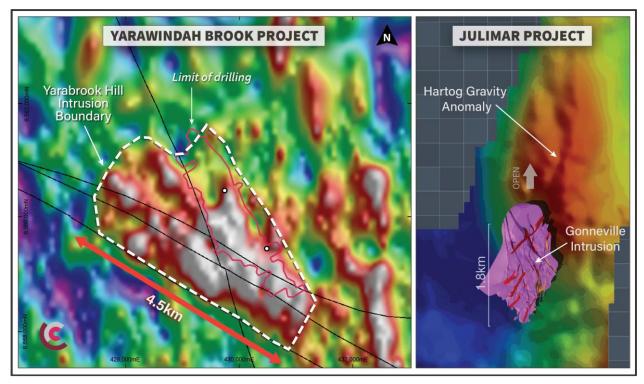


Figure 3. Yarabrook Hill gravity anomaly comparison with Gonneville Deposit and Hartog gravity anomaly at the same scale. Julimar Project source materials: https://inventum3d.com/c/chalicemining/julimar.



Only a small fraction of the entire intrusion has been drilled by Caspin or its predecessors. Most of the previous drilling has focussed only on where mineralisation comes to surface, but there remains a large portion of the prospective basal sequence that is either obscured by overlying sequences or unrecognised and remains to be tested.

A potential example may be the Eastern and Northwest PGE-Ni-Cu soil geochemical anomalies, which are strong, coherent anomalies and are now recognised to occur within the footprint on the intrusion. The new geological model suggests the Eastern Anomaly is coincident with the potential surface expression of the basal contact along the Hanging Wall Thrust. The Northwest Anomaly occurs in an embayment in the intrusion and is potentially also a near-surface expression of the basal contact (Figure 4).

Both geochemical anomalies were unable to be tested during the latest round of drilling due to ground conditions but should be accessible when drilling resumes and are a high priority target.

The Company will also be testing the XC-22 Airborne Electromagnetic (AEM) anomaly, which is coincident with a magnetic high and gravity low (Figure 5). This combination of anomalies is most likely to represent serpentinised ultramafic rocks which are commonly associated with PGE mineralisation (e.g. the Gonneville Intrusion at the Julimar Project). Importantly, the size of the gravity low anomaly suggests this area may be the most significant area of ultramafic within the Yarabrook Hill intrusion.

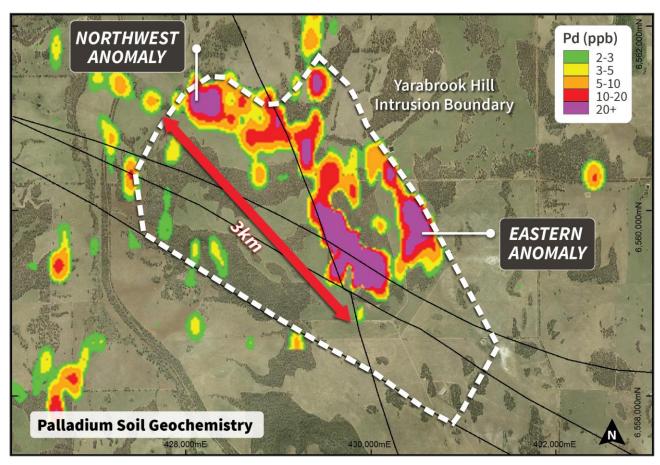


Figure 4. Palladium soil geochemistry highlighting the Northwest and Eastern Anomalies and their position within the Yarabrook Hill Intrusion.



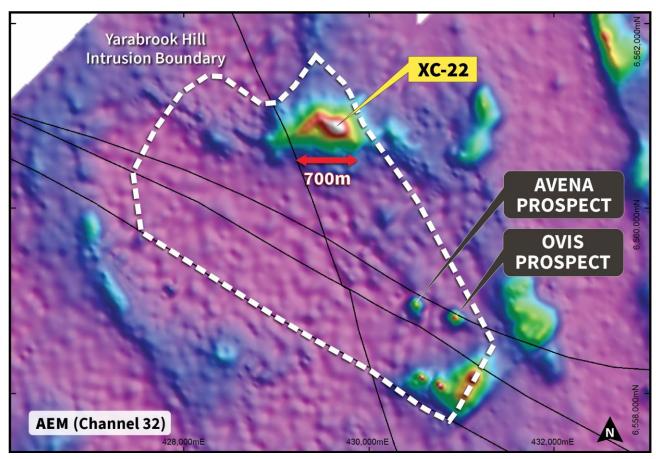


Figure 5. Airborne EM coverage at Yarabrook Hill highlighting XC-22. The Avena and Ovis Prospects are known to host semi-massive sulphide mineralisation.

The Company looks forward to providing further updates, including assay results as soon as possible.

This announcement is authorised for release by the Board of Caspin Resources Limited.

-ENDS-

For further details, please contact:

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#### **Competent Persons Statement**

The information in this report that relates to Exploration Results is based on information compiled or reviewed by Mr Greg Miles, a Competent Person who is an employee of the company. Mr Miles is a Member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Miles consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the Exploration Results information included in this report from previous Company announcements (including drill results extracted from the Company's Prospectus) announced to the ASX on 23 November 2020, 30 March 2021, 28 April 2021, 16 June 2021, 5 July 2021 and 19 August 2021.



#### **ABOUT CASPIN**

Caspin Resources Limited (ASX Code: **CPN**) is a new mineral exploration company based in Perth, Western Australia. Caspin's strategy is to explore and progress its mineral resource projects, and where appropriate, generate, earn into, or acquire new projects with the aim of creating value for Caspin shareholders.

At the Yarawindah Brook Project, Caspin is exploring Australia's newest PGE-Ni-Cu province, advancing exploration on multiple fronts using soil geochemistry and geophysics in search of new PGE-Ni-Cu sulphide deposits. Caspin has recently confirmed primary PGE mineralisation in its maiden drill program.

At the Mount Squires Project, Caspin has identified a 50km structural corridor with significant gold mineralisation. The Company will conduct further soil sampling and reconnaissance drilling to identify new targets along strike from the Handpump Prospect. Caspin will concurrently continue to evaluate the potential for Ni-Cu mineralisation along strike from the One Tree Hill Prospect and Nebo-Babel Deposits.

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