

## **New copper mineralisation model at Brandy Hill South, WA to drive exploration**

### **Highlights**

- As part of Recharge's ongoing review of its projects, highly regarded geologist Dr Steve Beresford assessed the Brandy Hill South Project's development potential
- The review proposed a new model for copper mineralisation
- Previous drilling at Brandy Hill South intersected:
  - 33m @ 0.97% Cu from 59m
  - 77m @ 0.33% Cu from 209m
  - 52m @ 0.45% Cu from 54m incl. 1m @ 1.11% Cu, 1m @ 1.81% Cu & 1m @ 1.72% Cu
  - 22.5m @ 1.02% Cu from 375.5m incl. 7.5m @ 1.65% Cu
- Exploration data supports evidence of a porphyry copper system at Brandy Hill South, which is well preserved compared to similar deposits in WA
- Copper mineralisation defined over a strike length of 500m, mineralisation remains open along strike and at depth
- Dr Beresford's review highlighted several key features in historical data as well as the next steps to advance Brandy Hill South
- Recharge has engaged a contractor to carry out a small, low-cost orientation IP survey to trial its effectiveness at Brandy Hill South
- Recharge will also relog previous drilling and complete multispectral core imagery as part of a recommended work program at Brandy Hill South
- If successful, these low cost exploration activities will strongly position Brandy Hill South's development opportunity as global demand for copper continues to grow
- Recharge continues to advance its Canadian lithium and uranium portfolio, with field work ongoing
- Recharge is assessing other opportunities to expand its growing portfolio of technology and energy metal projects

Recharge Metals Limited (ASX: **REC, Recharge** or **the Company**) is pleased to provide findings of a recent technical review of its 100%-owned **Brandy Hill South Project** (the **Project**) in the Murchison region of Western Australia.

**Recharge's Managing Director Felicity Repacholi** commented:

*"Dr Steve Beresford's technical review arose from our desire to put new eyes on Brandy Hill South while our recent focus was on critical and strategic minerals in North America. We are encouraged by Steve's observations and findings, which has provided a relatively simple low-cost work program to advance the project.*

*Copper is one of the key commodities in the global energy transition yet there are relatively few new projects which have emerged in recent times. Should exploration be successful, we anticipate substantial interest in Brandy Hill South going forward."*

### **Technical Review Summary**

A technical review of Brandy Hill South by highly regarded geologist Dr Steve Beresford incorporated visual logging, pXRF data, laboratory assay results from Recharge's previous drilling programs and Tornado micro XRF imagery of drill core.

Key data supporting the proposed porphyry model included geochemical data as well as geological relationships observed in drill core and the Tornado imagery.

Both drill core and Tornado imagery showed Cu-Mo-W sulfide veins crosscutting a suite of mafic and ultramafic host rocks (examples shown in Figures 1-4). The copper anomalism is interpreted to be epigenetic, being emplaced much later than the formation of the host rocks, and accordingly is believed to be related to the granitic porphyry stocks and dykes also found within the project area.

Porphyry systems are well studied and understood, with diagnostic alteration haloes and associated lithogeochemical signatures. Inspection of drill core and assay data from Brandy Hill South supports the presence of the characteristic potassic and propylitic alteration haloes which are associated with porphyry systems.

Based on the available data Dr Beresford believes that there is potential for higher grade porphyry style copper mineralisation at Brandy Hill South based on the presence of multiple porphyries of different timings and geochemical characteristics, intense veining and varying vein density, thick potassic alteration zones, and preferred host rock (mafic-ultramafic). This mineralisation is likely to be found below the mineralisation already identified in drilling.



*Figure 1: Photograph of core from BHRC030, 123m showing quartz-pyrite veins  $\pm$  chalcopyrite-molybdenum*



*Figure 2: Photograph of core from BHRC030, 244-253m showing numerous plagioclase-phyric dacitic porphyries with sulphide minerals (pyrite-chalcopyrite) hosted in cross-cutting veins*





Figure 3: Photographs of core from BHRCD018 showing sulphide minerals hosted in cross-cutting veins

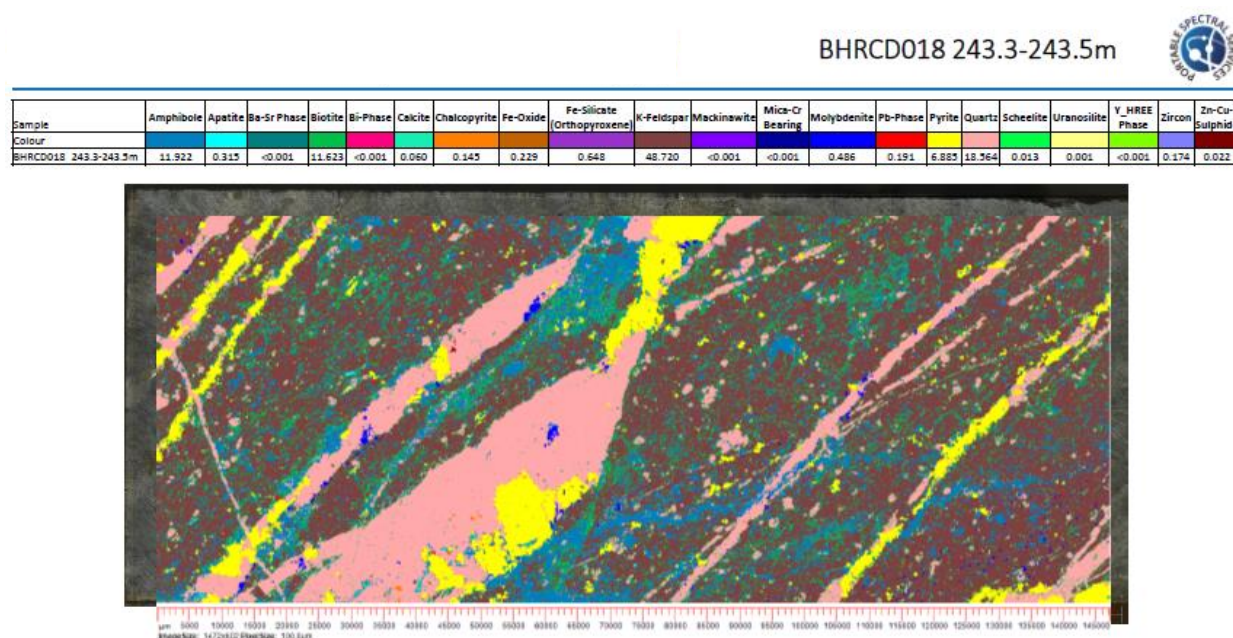


Figure 4: Tornado microXRF imagery of interval from BHRCD018 (243.3 – 243.5m) showing Cu-Mo-W veins cross-cutting potassic altered mafic host rock

## Background

The Brandy Hill South Project is located within the Archaean Gullewa Greenstone Belt in Western Australia, approximately 50km northeast of Morawa (Figure 7).

The Project is located close to the Deflector Deposit (currently owned by RED 5 Ltd, ASX: RED) which has been interpreted to be formed by an orogenic gold system overprinting a porphyry copper system.

Recharge acquired the project from Revolution Mining Pty Ltd (Revolution) during 2021. Prior to this, drilling within the project had been restricted to reconnaissance RAB and aircore drilling and only five (5) shallow reconnaissance RC drillholes.

Independence Group NL (IGO) completed two (2) RC drillholes in 2007, focusing on nickel-copper sulphide exploration. Drillholes were designed to test an interpreted conductor of interest and an area of strong copper anomalism (up to 6970 ppm Cu) along a granite/ultramafic contact. The copper anomalism was evident in the historic drilling and did not appear to have been tested in fresh rock.

The drillhole targeting the copper anomalism intersected a zone of strong Au-Cu-Ag-Pt-Pd mineralisation including 1m @ 2.15g/t Au, 112g/t Ag and 2.10% Cu, within a broader interval of 12m @ 1.10% Cu and 14.9 g/t Ag, 0.22 g.t Au<sup>1</sup>. Due to IGO's focus on nickel, no further work was completed.

During 2019, Revolution drilled three shallow reconnaissance RC holes aimed at 'proof of concept' testing of the inferred strike of the Salt Creek Shear and subsidiary structures beneath the cover. All three drillholes intersected significant copper mineralisation over a substantial strike length with all holes finishing in copper mineralisation. The drilling program encountered copper sulphide mineralisation in sheared and strongly silica-carbonate altered gabbro.<sup>2</sup>

Recharge completed an extensive drilling program during 2021 and 2022, completing twenty (20) RC drillholes, one (1) diamond drillhole and eight (8) diamond drillholes with RC precollars. A total of 6,710m were completed.

Significant copper results returned by Recharge in drilling included:

- BHD026
  - 77m @ 0.35% Cu from 209m
  - 7.1m @ 0.34% Cu from 80.9m
  - 14.5m @ 0.28% Cu from 186m
- BHRC004
  - 33m @ 0.97% Cu from 59m, incl. 4m @ 2.42% Cu from 66m and 6m @ 2.09% Cu from 77m
- BHRC006
  - 14m @ 1.09% Cu from 74m
- BHRC007
  - 36m @ 0.47% Cu from 64m
- BHRC010
  - 24m @ 0.55% Cu from 48m
- BHRC012
  - 24m @ 0.52% Cu from 59m
- BHRC013
  - 29m @ 0.47% Cu from 64m
- BHRC015
  - 52m @ 0.45% Cu from 54m
- BHRC027
  - 22.5m @ 1.02% Cu from 375.5m

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<sup>1</sup> Refer REC ASX Announcement dated 7 October 2021

<sup>2</sup> Refer REC ASX Announcement dated 15 September 2022

- incl. 7.5m @ 1.65% Cu from 375.5m
- BHRCD030
  - 42m @ 0.46% Cu from 90m,  
incl. 5m @ 1.56% Cu from 91m
  - 35m @ 0.32% Cu from 278m.

The strike length of copper mineralisation intersected to date exceeds 500 metres. Mineralisation remains open in all directions. See previous announcements for complete significant intercepts<sup>3</sup>.

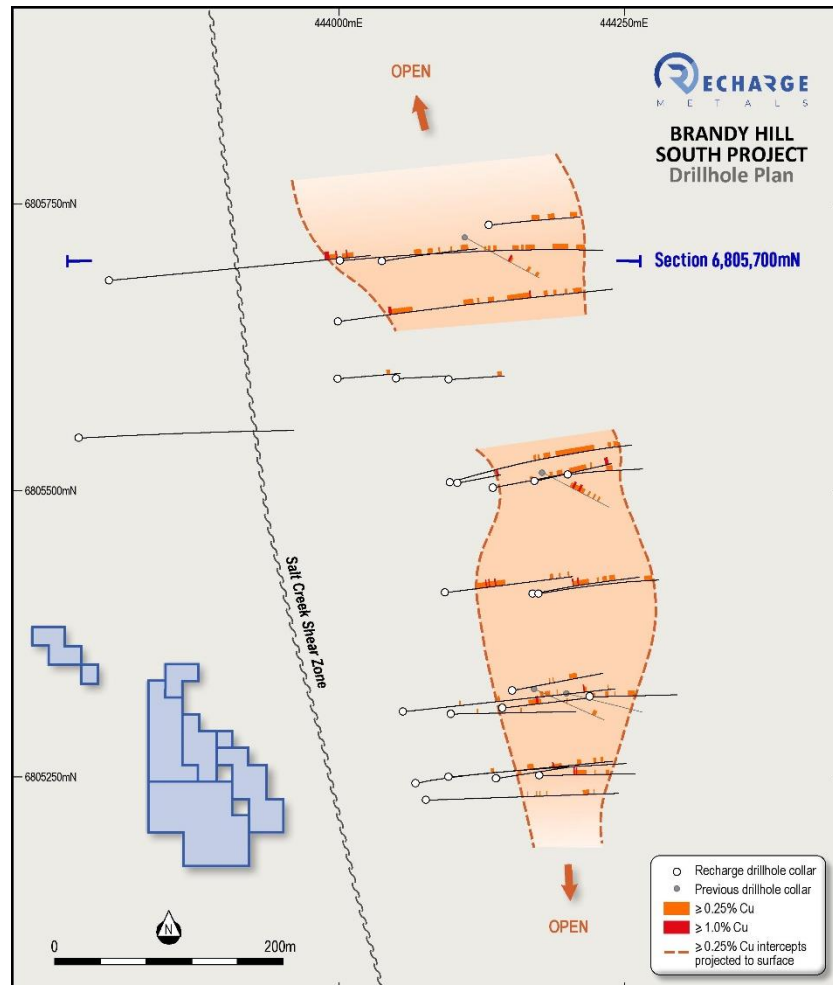


Figure 5: Drillhole Plan showing copper mineralisation defined to date at the Brandy Hill South Project

<sup>3</sup> Refer REC ASX Announcements dated 29 March 2022, 13 April 2022, 9 June 2022, 8 August 2022, 15 September 2022, 22 November 2022 and 30 January 2023

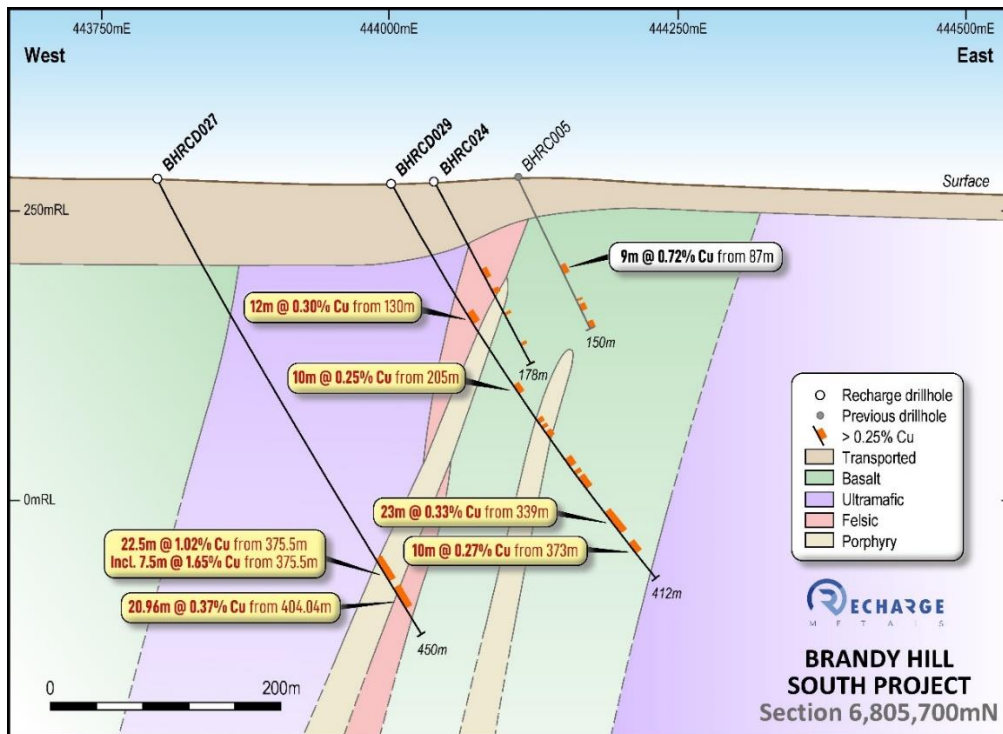


Figure 6: Cross section (refer to Figure 5) showing significant intercepts and geology at the Brandy Hill South Prospect

## 2024 Forward Plan

Exploration for porphyry copper mineralisation follows a well-established targeting framework to vector in on the most prospective parts of the mineralised system. Due to the amount of work already completed at Brandy Hill South, Recharge is able to rapidly advance exploration for a relatively minimal cost.

Dr Beresford has proposed the next steps to develop targets at Brandy Hill South:

- Trial the use of induced polarisation (IP) to detect disseminated sulphides associated with copper mineralisation
- A detailed paragenetic study (including relogging of existing drillcore) of a cross section including BHRC018 to ascertain number of porphyries and vein paragenesis.
- Short Wave IR (SWIR) scanning of a single hole (or alternatively the use of a portable infra-red mineral analyser (PIMA) / ASD mineral spectrometer) to quantify alteration styles and expand the lithogeochemical interpretation.

Recharge aims to implement work as “proof of concept” to confirm Dr Beresford’s model and has engaged a contractor to complete a small, orientation IP survey over the areas previously drilled to see if mineralisation intersected in drilling provides a response.

It should be noted that the response in the IP survey will only be indicative of the effectiveness of this technique, rather than any confirmation of the porphyry copper model or evidence of the prospectivity of the project.

The Company already had allocated funds to its ongoing exploration of the Brandy Hill South Project. Recharge can fund next steps / proof of concept activities from

existing cash reserves, and is confident this work will result in a third opportunity for the Company's shareholders to participate in high impact exploration.

Should activities be successful in confirming the porphyry copper model, it is anticipated that the Brandy Hill South Project could be a high value asset for the Company given its location in a Tier-1 mining jurisdiction and the prevailing outlook for copper.

-ENDS-

This announcement has been authorised for release by the Board of Recharge Metals Limited.

For more information, please contact:

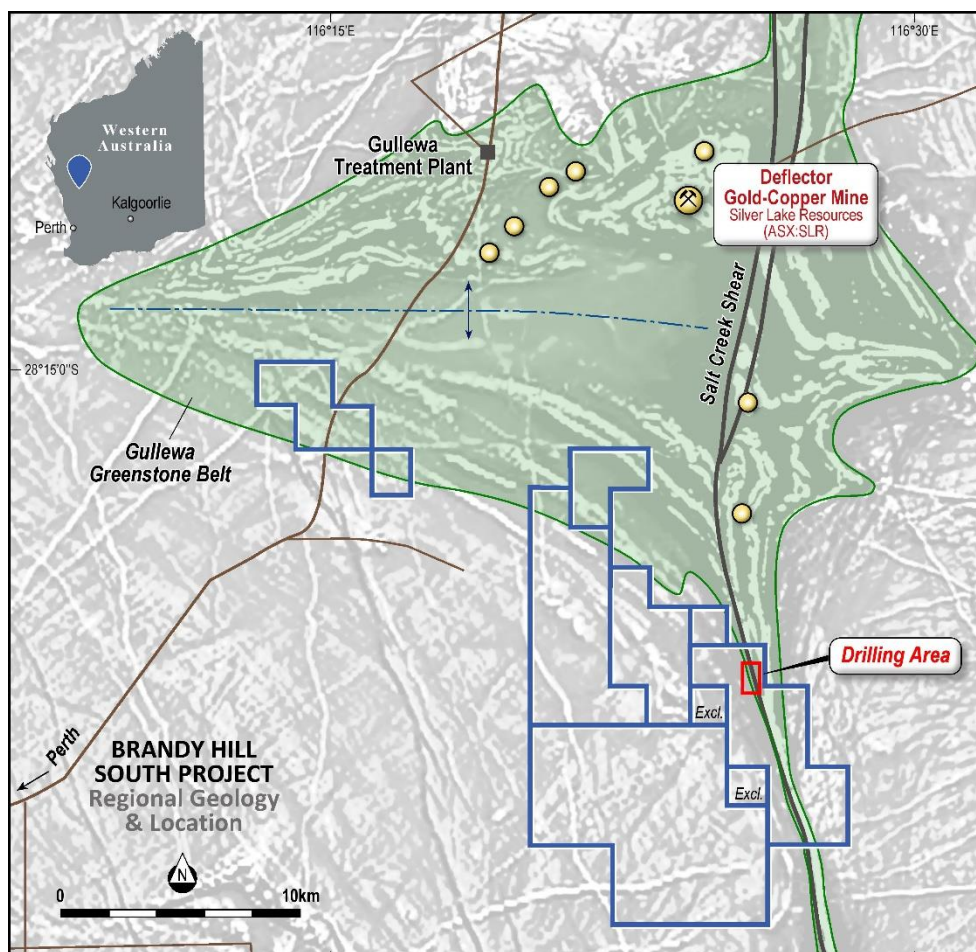
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## About Recharge Metals

Recharge Metals Limited (ASX: REC) is a well-structured exploration company, with the recently acquired Newnham Lake Uranium Project located in the northeastern Athabasca Basin, two lithium projects in the world class James Bay lithium district in Canada, namely the Express Lithium Project and the Wapistan Lithium Project as well as progressing the copper-focused Brandy Hill South Project in Western Australia.



*Figure 7: Location of the Brandy Hill South Project*

## Competent Person Statement

The information in this announcement that relates to Exploration Results is based on information compiled or reviewed by Ms Felicity Repacholi, a Competent Person who is a Director of the Company. Ms Repacholi is a Member of the Australian Institute of Geoscientists and has sufficient experience relevant to the style of mineralisation and type of deposit 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. Ms Repacholi consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

## Previously Announced Exploration Results

Recharge confirms it is not aware of any new information or data which materially affects the information included in the original market announcements referred to in this announcement. Recharge confirms the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.