

## Major New Two-Phase Drilling Program Commences at Bluebird

- *First phase, 4,500m of RC drilling targeting extensions of the high-grade copper-gold mineralisation, which is open in all directions*
- *Second phase to include recently awarded co-funded diamond drilling of the Perseverance target as well as other tests for repeats of Bluebird*

- 
- The first phase of a major two-stage drilling program has commenced at the Bluebird copper-gold discovery, on Tennant Minerals Barkly Project in the Northern Territory (see Figure 1).
  - This initial drilling phase will include up to 4,500m of Reverse Circulation (RC) drilling and is designed to extend the high-grade mineralisation at Bluebird, which is open in all directions (see longitudinal projection, Figure 2).
  - The drilling program aims to build on recent exceptional intersections at Bluebird including, from east to west (see Figure 2):
    - **14.1m @ 7.6% Cu, 2.4 g/t Au** incl. **2.6m @ 18.8% Cu, 12.3 g/t Au**<sup>1</sup> in BBDD0042.
    - **17.95m @ 11.1 g/t Au, 2.7% Cu** incl. **5.1m @ 38.6 g/t Au, 6.1% Cu**<sup>2</sup> in BBDD0026,
    - **61.8m @ 2.3% Cu, 0.4 g/t Au** incl. **6.8m @ 17% Cu, 0.5 g/t Au**<sup>3</sup> in BBDD0045,
  - A second phase of up to 7,500m of RC and diamond drilling will expand on the RC drilling program and test other identified targets for repeats of Bluebird within the 2.5km strike-length Bluebird-Perseverance corridor (see gravity inversion and prospect locations, Figure 3).
  - These targets include Perseverance for which the Company has been successful in obtaining a NT government co-funded grant for up to 50% of the cost of a deep drillhole testing the large coincident gravity and inverted magnetic model down-plunge to the west of previous high-grade gold results of up to **3m at 50 g/t Au**<sup>4</sup>.
  - The overall objective of this major new drilling program is to grow Bluebird and identify repeats of the discovery, prior to defining a maiden Mineral Resource Estimate which would support a stand-alone copper-gold development project.

Tennant Minerals CEO, Vince Algar, said:

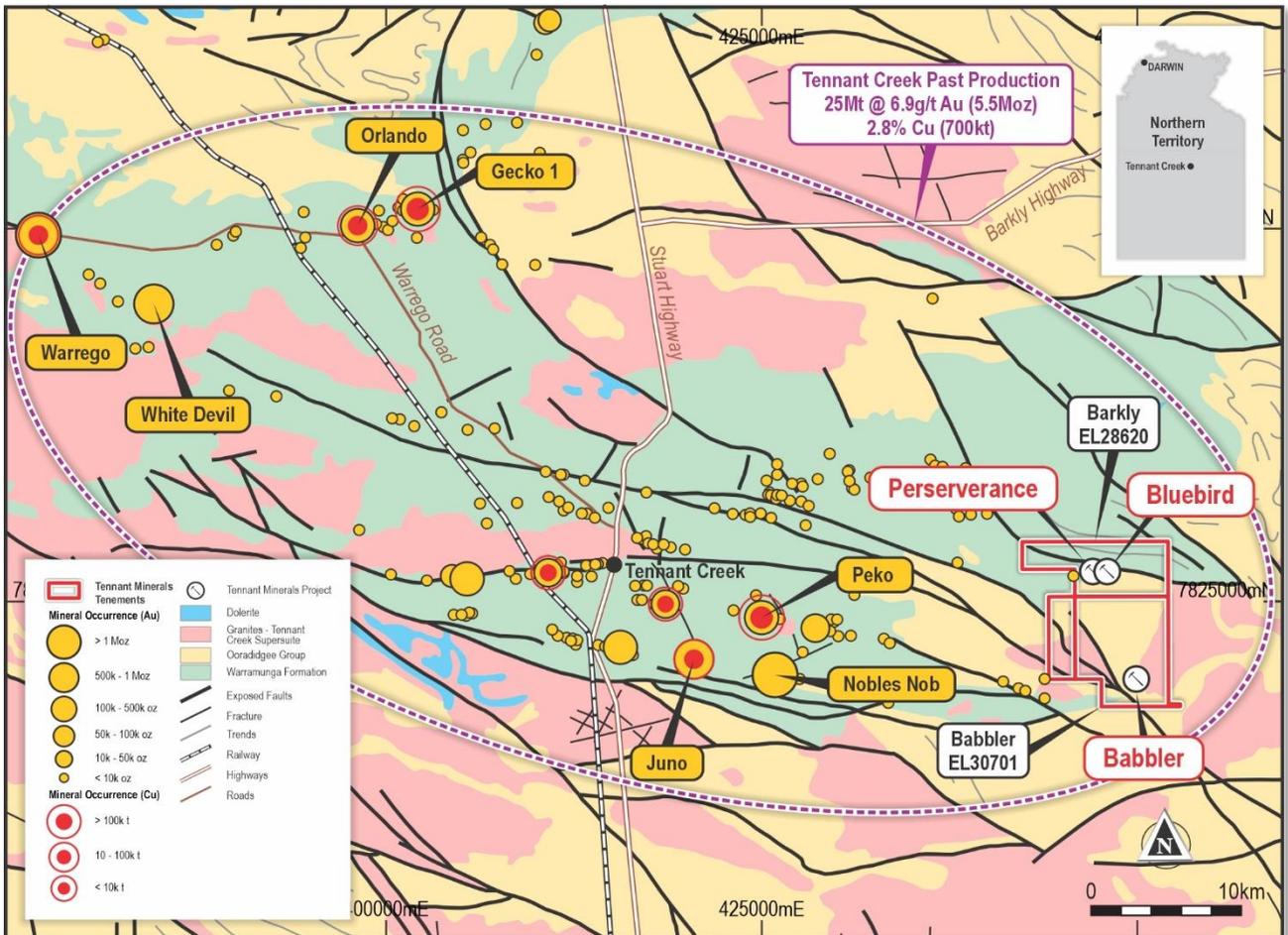
*“Commencing this major new drilling program provides us with the opportunity to grow Bluebird in all directions as well as test for repeats of this exciting copper-gold discovery within the 2.5km strike-length Bluebird-Perseverance corridor, of which only 500m has been tested to date.*

*“We see this program as the stepping stone to defining a maiden Mineral Resource. We will then commence development studies into what will hopefully be an exciting new copper-gold development for Tennant Creek – which has already produced 5.5Moz of gold and 700kt of copper.*

*“This drilling, designed to expand Bluebird, is occurring at a time of globally rising demand for copper, and strong pricing for gold, and we hope to deliver positive results into this environment.”*



**Image 1: Topdrill RC drilling rig testing for eastern extensions of the Bluebird discovery (BBRC0029)**



**Figure 1: Location of the Barkly Project and Major Historical Mines in the Tennant Creek Mineral Field**

**Tennant Minerals Limited** (“Tennant” or “the Company”) is pleased to announce commencement of a major new, two phase, drilling program at the **Bluebird copper-gold discovery**.

Bluebird is located within the Company’s 100% owned Barkly Project, at the eastern edge of the Tennant Creek (copper-gold) Mineral Field, which **produced more than 5.5Moz of gold and 700,000 tonnes of copper** from 1934 to 2005<sup>5</sup> (see location, Figure 1).

The new program will build on Tennant’s previous success at Bluebird, which has led to the delineation of significant high-grade copper and gold mineralisation over a 500m strike length and to a depth of more than 400m. The Bluebird mineralisation remains open in all directions (see Figure 2).

The first phase of the drilling program will include around 4,500m of RC drilling which will test the shallow plunging, thick and high-grade gold and copper zone extending west and east of Bluebird, as well as targeting projected extensions at depth (see Figure 2).

Drilling will target immediate extensions of the high-grade copper and bonanza gold zones, which are open in all directions, and will aim to build on the large number of exceptional intersections at Bluebird, including:

- **14.1m @ 7.6% Cu, 2.4 g/t Au** from 90.64m incl. **2.6m @ 18.8% Cu, 12.3 g/t Au**<sup>1</sup> in BBDD0042,
- **17.95m @ 11.1 g/t Au, 2.7% Cu** from 131m incl. **5.1m @ 38.6 g/t Au, 6.1% Cu**<sup>2</sup> in BBDD0026,
- **61.8m @ 2.3% Cu, 0.4 g/t Au** from 149.2m incl. **6.8m @ 17% Cu, 0.5 g/t Au**<sup>3</sup> in BBDD0045,
- **30.5m @ 6.2% Cu, 6.8 g/t Au** from 153.6m incl. **17.8m @ 5.2% Cu, 11.5 g/t Au**<sup>6</sup> in BBDD0018,
- **63m @ 2.1% Cu, 4.6 g/t Au** from 153m incl. **27.55m @ 3.6% Cu, 10.0 g/t Au**<sup>7</sup> in BBDD0012, and,
- **24m @ 0.66% Cu, 11.8 g/t Au** from 161m incl. **5.7m @ 0.74% Cu, 49.3 g/t Au**<sup>8</sup> in BBDD0021.

Following this program, a second phase of up to 7,500m of RC and diamond drilling will expand on the current RC drilling program and test other identified targets for repeats of Bluebird within the 2.5km strike-length Bluebird-Perseverance corridor (see gravity inversion and prospect locations, Figure 3).

This second phase drilling will include testing of the **Perseverance target**, located 1.5km west of Bluebird. The Company has been successful in obtaining a NT government “Resourcing the Territory” grant for up to 50% of the cost of a deep diamond drillhole testing the large geophysical target down-plunge and to the west of the historical Perseverance gold mine where previous high-grade gold results included up to **3m at 50 g/t Au**<sup>4</sup> from 42m in PERC015 and **3m @ 43.2 g/t Au**<sup>4</sup> from 72m in PERC001. The highest intensity gravity anomaly, and coincident reversed magnetic anomaly will be tested – targeting the intersection of the mineralised Perseverance fault zone with the ironstone (see Figure 3).

#### **About Bluebird:**

The mineralisation intersected at Bluebird is typical of the high-grade copper-gold orebodies in the Tennant Creek Mineral Field (Figure 1), such as the Peko copper-gold deposit which produced **3.7Mt @ 4% Cu, 3.5 g/t Au** historically<sup>5</sup>. The high-grade mineralisation, developed from approximately 80m below surface, is associated with intense hematite alteration and brecciation with quartz veining inside a halo of chlorite alteration and variable hematite development.

The upper parts of the mineralised zones include secondary malachite (copper-carbonate) as well as native copper, which transitions to primary sulphide mineralisation at depth including chalcocite, bornite and chalcopyrite (e.g. the massive chalcopyrite zone in BBDD0018<sup>6</sup>).

Metallurgical testing has been completed and indicates the amenability of the Bluebird materials to standard copper flotation, producing copper and gold concentrates comparable with commercially available products<sup>9</sup>. Further work is in progress to enhance gold recovery, which will include gravity concentration test-work and cyanide leaching of the flotation tail. The Company will also examine options for recovering other critical elements in the Bluebird mineralisation including cobalt, bismuth and silver.

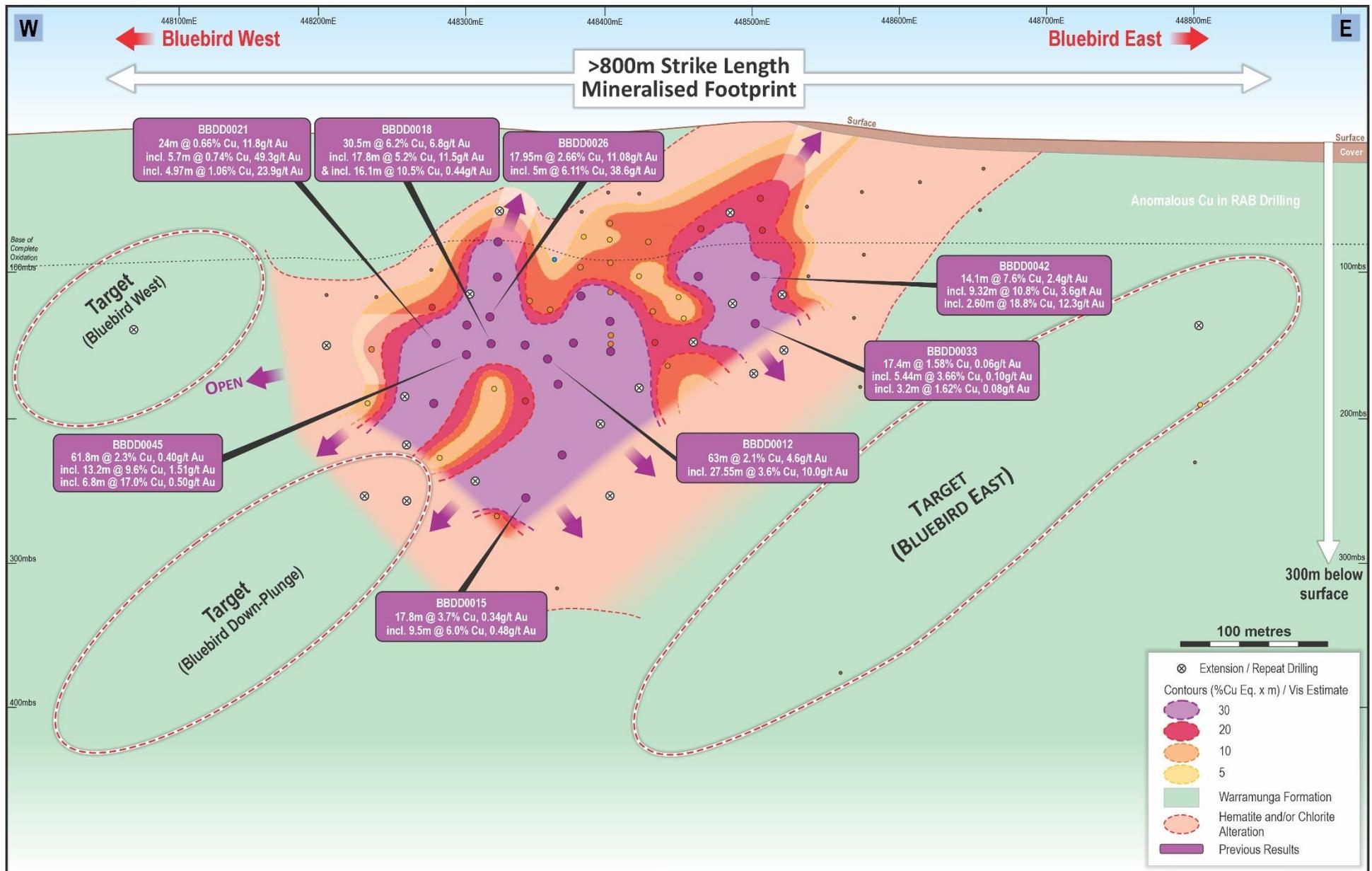
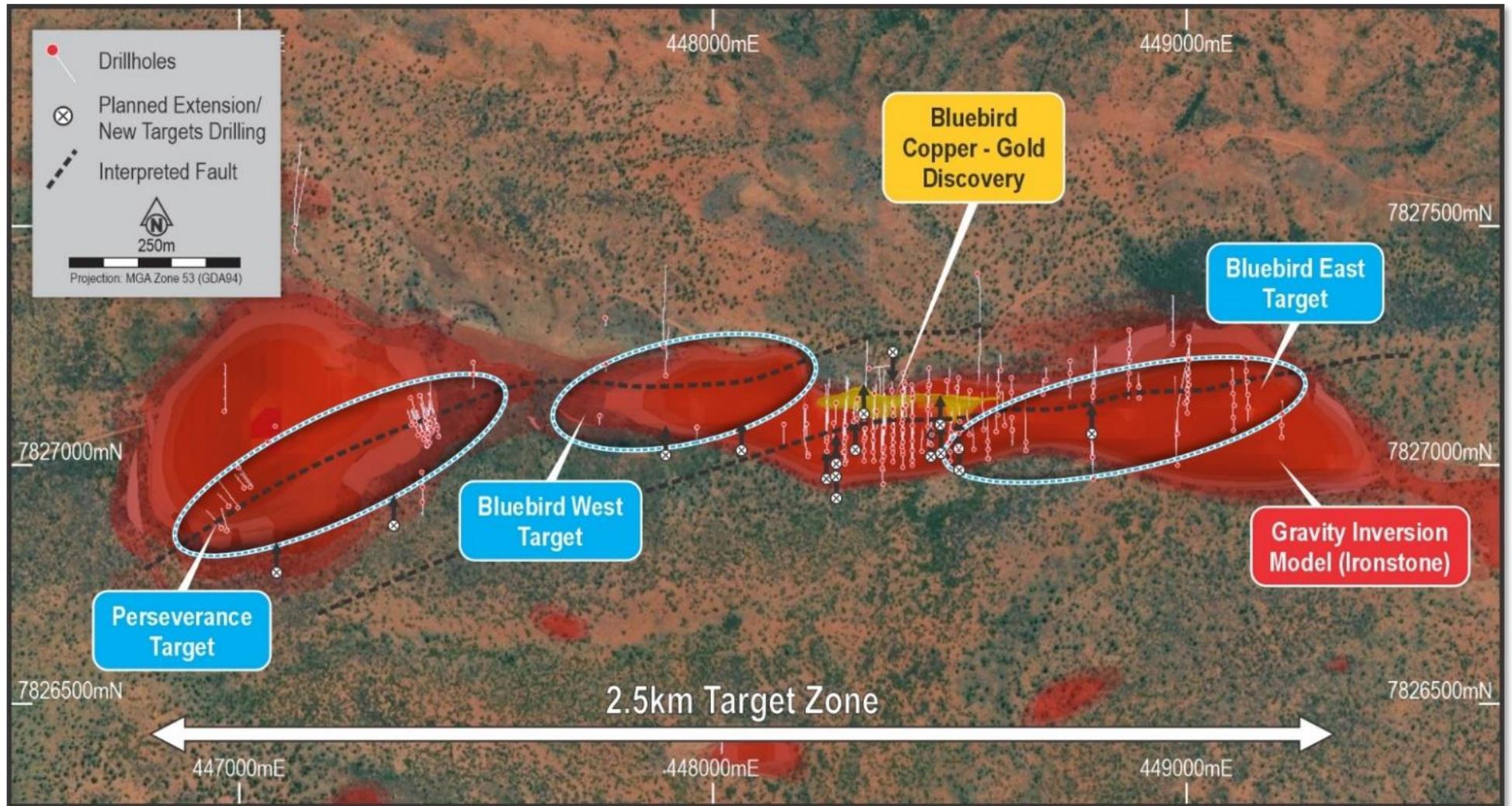


Figure 2: Longitudinal Projection of Bluebird Copper-Gold Discovery Highlighting Key Extension Target Zones and Proposed Drilling



**Figure 3: Plan View Showing Planned Drilling Locations in the Bluebird-Perseverance Corridor During the Ongoing Drill Program at Bluebird & Perseverance**

## REFERENCES

- <sup>1</sup> 04/12/2023. Tennant Minerals (ASX.TMS): “Exceptional Copper and Gold Results from Bluebird Eastern Extension”.
- <sup>2</sup> 19/07/2023. Tennant Minerals (ASX.TMS): “Drilling Doubles Strike Length of Bluebird Cu-Au Discovery”.
- <sup>3</sup> 12/02/2024. Tennant Minerals (ASX.TMS): “Exceptional 61.8m @ 2.3% Copper Intersection at Bluebird”.
- <sup>4</sup> NTGS Report ID 1532559938 - Meteoric Resources, MLC57-MLC217-224\_2015\_GA
- <sup>5</sup> Portergeo.com.au. Tennant Creek - Gecko, Warrego, White Devil, Nobles Nob, Juno, Peko, Argo.
- <sup>6</sup> 08/02/2023. Tennant Minerals (ASX.TMS): “Spectacular Bluebird Drill-Hit 30.5m @ 6.2% Cu, 6.8 g/t Au”.
- <sup>7</sup> 17/08/2022. Tennant Minerals (ASX.TMS): “Bonanza 63m@ 2.1% Copper and 4.6 g/t Gold Intersection at Bluebird”.
- <sup>8</sup> 07/03/2023. Tennant Minerals (ASX.TMS): “Bonanza Bluebird Gold Results Including 5.7m @ 49.3 g/t Au”.
- <sup>9</sup> 26/03/2024. Tennant Minerals (ASX.TMS): “Bluebird Metallurgy Delivers 23% Cu, 1.5g/t Au Concentrate”.

Authorised for release by the board of directors.

**\*\*\*ENDS\*\*\***

## For enquiries please contact:

**Vincent Algar**  
CEO  
+61 8 9481 7833

**Stuart Usher**  
*Company Secretary*  
+61 8 9481 7833

## CAUTIONARY STATEMENT REGARDING FORWARD LOOKING INFORMATION

This release contains forward-looking statements concerning Tennant Minerals Ltd. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties, and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company’s actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes.

Forward looking statements in this release are based on the company’s beliefs, opinions and estimates of Tennant Minerals Ltd as of the dates the forward-looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

## COMPETENT PERSONS DECLARATION

The information in this report that relates to exploration results is based on information compiled and/or reviewed by Mr Chris Ramsay. Mr Ramsay is the General Manager of Geology at Tennant Minerals Ltd and a Member of the Australian Institute of Mining and Metallurgy (‘MAusIMM’). Mr Ramsay has sufficient experience, including over 25 years’ experience in exploration, resource evaluation, mine geology, and development studies, relevant to the style of mineralisation and type of deposits under consideration 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, Minerals Resources and Ore Reserves. Mr Ramsay consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

## JORC COMPLIANCE

There are no new exploration results in this report. As such statutory supplementary disclosure information, such as in the form of a JORC statement, is not required here. For the relevant disclosure information relating to exploration results that are noted here, which have been reported previously – please refer to preceding announcements which are referenced throughout this report.

## ASX LISTING RULES COMPLIANCE

In preparing this announcement the Company has relied on the announcements previously made by the Company as listed under “References”. The Company confirms that it is not aware of any new information or data that materially affects those announcements previously made, or that would materially affect the Company from relying on those announcements for the purpose of this announcement.