

# BLUEBIRD COPPER-GOLD DISCOVERY

The Barkly Project
Tennant Creek, Northern Territory, Australia

ASX:TMS | Webinar | 14 February 2024, 10:30am AWST





# **Cautionary Statements and Competent Persons Declaration**

#### CAUTIONARY STATEMENT REGARDING FORWARD LOOKING INFORMATION

This presentation 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 presentation that relates to exploration results is based on information compiled and/or reviewed by Mr Jonathon Dugdale. Mr Dugdale is the Technical Advisor to Tennant Minerals Ltd and a Fellow of the Australian Institute of Mining and Metallurgy ('FAusIMM'). Mr Dugdale has sufficient experience, including over 35 years' in exploration (discovery), resource evaluation, mine geology, development studies and finance, 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 Dugdale consents to the inclusion in this presentation of the matters based on this information in the form and context in which it appears.

#### **ASX LISTING RULES COMPLIANCE**

In preparing this presentation the Company has relied on the announcements previously made by the Company that are referenced below the first mention of the information. 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.

# **Corporate Overview**



**TMS** 

**ASX Code** 

\$23.7M

Market Cap (at \$0.031 05/02/2024)

## **Options:**

- TMSO (L): 383.7m, \$0.03, Ex 23/4/24
- TMS (UL), 26.0m, \$0.08, Ex 8/4/25
- TMSO\*, 85.4m, \$0.06, Ex 15/7/25

\$2.3M

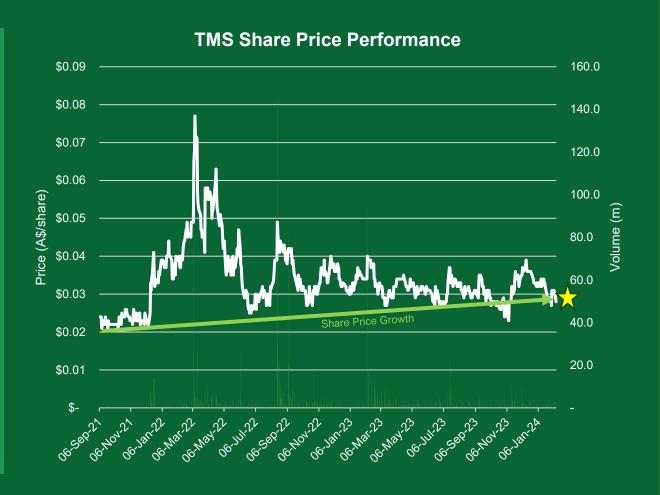
Cash (31 December 2023)

764.3m

**Shares on Issue** 

\$21.4m

**Enterprise Value** 



# **Copper and Gold Outlook**



### **Safe Havens in the Metals Industry**



Copper is an essential metal for the global energy transition.



Gold is trading at an all-time high, reaching a peak price of US\$2,135.39/oz in December 2023.



New copper discoveries such as Bluebird are rare - high-grade, mining friendly jurisdiction, standard beneficiation.



Recoverable gold, accessible as part of Cu-Au mineral systems offers high value opportunity to shareholders.



Copper in global supply deficit - demand increasing and inventories falling.



Cu-Au are large commodity markets with limited exposure to short term pricing changes.

# Barkly Project and the Bluebird Cu-Au Discovery



#### **World-Class Location**

The Barkly Project and the **Bluebird discovery** are located 40km east of Tennant Creek at the eastern end of this major copper-gold field, which **has produced 5.5Moz** of gold and 700kt of copper<sup>1</sup>.



Bluebird is a greenfields, high-grade copper-gold discovery in an area of shallow cover.



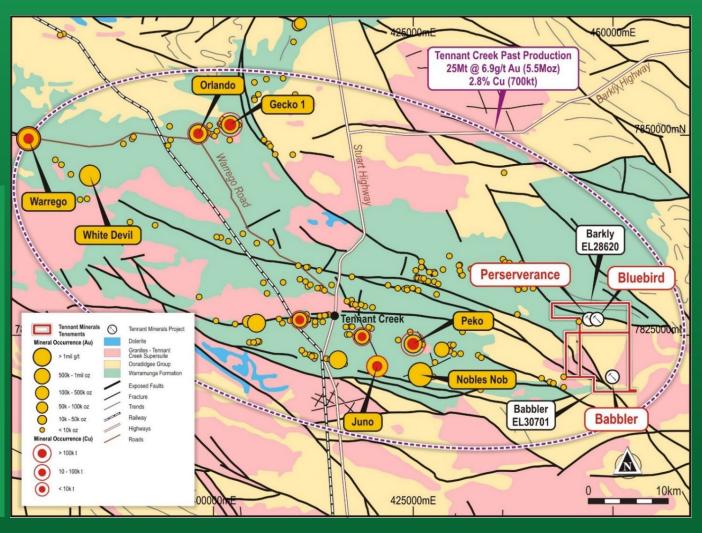
Potential to rival major high-grade deposits at Tennant Creek e.g. Warrego (6.75Mt @ 6.6 g/t Au, 1.9% Cu)<sup>1</sup> and Peko (3.7Mt @ 4% Cu, 3.5 g/t Au)<sup>1</sup>.



Bluebird geology similar to these previously mined major deposits - being hosted by altered and mineralised ironstone with intense hematite alteration in the Warramunga Formation.



Intensive exploration and development activity in the region.



<sup>&</sup>lt;sup>1</sup> Portergeo.com.au/database/mineinfo. Tennant Creek - Gecko, Warrego, White Devil, Nobles Nob, Juno, Peko, Argo.

### 7827000mN 7827200mN Surface 300mRI Base of Complete Oxidation (1.80% Cu, 0.04q/t Au) ncl. 10m @ 2.85% Cu, 0.05g/t Au incl. 5m @ 4.65% Cu. 0.07g/t Au & incl. 3.5m @ 1.63% Cu, 0.52g/t Au, 0.24% Bi 17.95m @ 2.66% Cu, 11.08g/t Au, 1.30% Bi ncl. 15.9m @ 2.91% Cu, 12.45g/t Au, 1.47% Bi 30.5m @ 6.2% Cu, 6.8g/t Au, incl. 17.8m @ 5.2% Cu, 11.5g/t Au & incl. 16.1m @ 10.5% Cu, 0.44g/t Au (115 a/t Au. 0.6% Cu) 100mRL BBDD0018, Massive chalcopyrite (19.5% Cu; 0.26 g/t Au) Existing Drill Hole Significant Cu Intersection) Cu Mineralisation ronstone / Hematite Alteration Warramunga Formation **Bluebird** Cross section 448,320mE

### The Bluebird Copper-Gold Discovery



- Blind discovery under shallow soil cover and weathered Warramunga Formation sedimentary rocks hosted in mineralised ironstones.
- The main discovery was made through follow-up of shallow drilling and drill-testing the entire ironstone (e.g. BBDD0012: 63m @ 2.1% Cu, 4.6 g/t Au<sup>2</sup>, BBDD0018: 30.5m @ 6.2% Cu, 6.8 g/t Au<sup>3</sup>).
- High-grade copper and gold intersections deformed and hematite altered ironstone localised in fold axes<sup>4</sup> e.g. BBDD0012: 63m @ 2.1% Cu, 4.6 g/t Au<sup>2</sup>, BBDD0018: 30.5m @ 6.2% Cu, 6.8 g/t Au<sup>3</sup>.
- Thick, high-grade, hydrothermal copper-gold mineralisation introduced along overprinting D2 fault structures<sup>3</sup> into dilational zones<sup>5</sup>.
- Mineralisation includes free gold with intense hematite and/or chlorite alteration and copper and bismuth sulphides (including chalcocite, chalcopyrite, wittichenite - Cu<sub>3</sub>BiS<sub>3</sub>, native copper).

<sup>2 17/08/2022.</sup> Tennant Minerals (ASX. TMS): "Bonanza 63m @ 2.1% Copper and 4.6 g/t Gold Intersection at Bluebird".

<sup>&</sup>lt;sup>3</sup> 08/02/2023. "Spectacular Drill Hit 30.5m 2 6.2% Cu, 6.8 g/t Au".

<sup>&</sup>lt;sup>4</sup> Huston DL, Bolger C and Cozens G, 1993. A comparison of mineral deposits at the Geko and White Devil deposits: implications for ore genesis in the Tennant Creek District, Northern Territory, Australia. Economic Geology 88, 1198–1225.

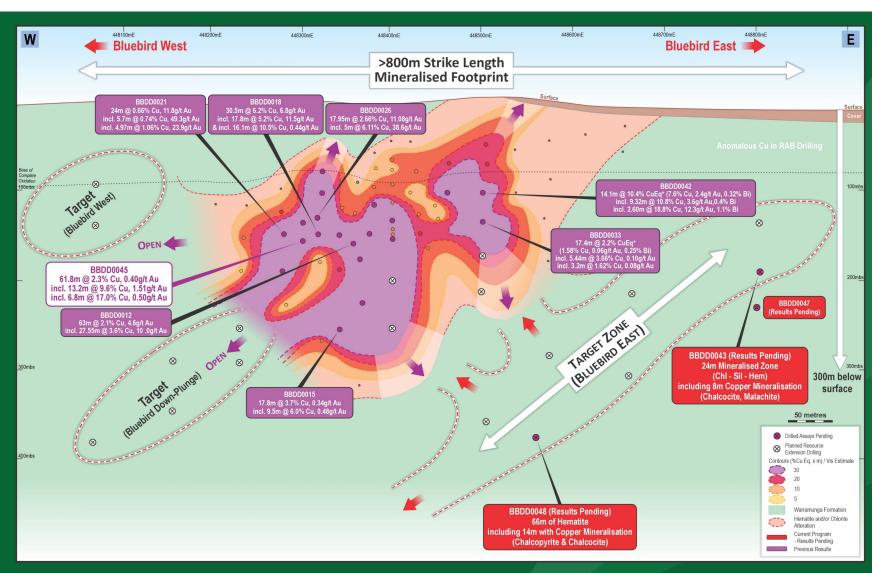
Donnellan N, 2013. Chapter 9 - Warramunga Province: in Ahmad M. and Munson T.J. (compilers). 'Geology and mineral resources of the Northern Territory.' Northern Territory Geological Survey, Special Publication 5.

ASX:TMS

# Bluebird Longitudinal View 800m footprint, open all directions



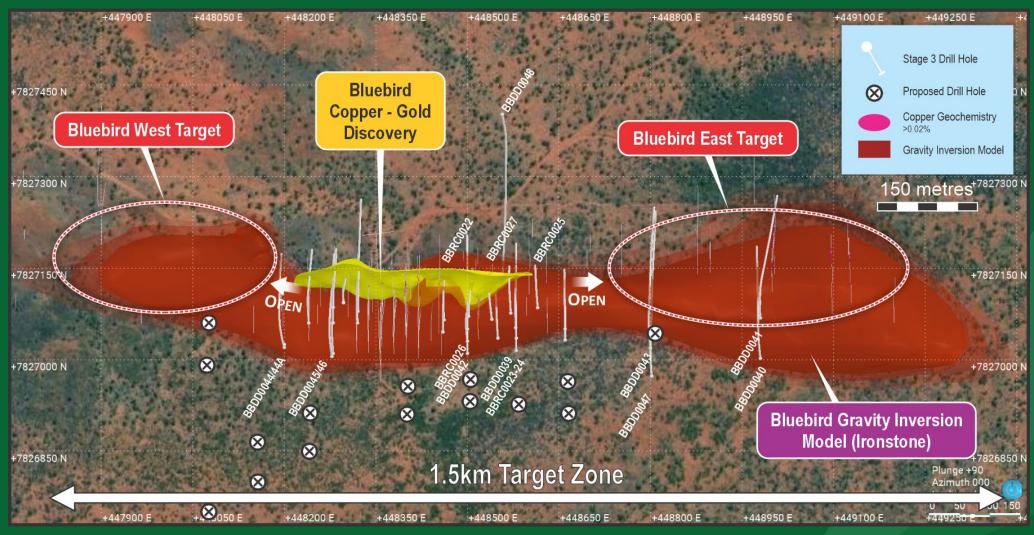
- Drilling to date has defined high-grade copper-gold mineralisation from 60m to over 400m depth, over 800m strike length – open in all directions<sup>6</sup>.
- Most recent intersections confirm high-grade, coppergold intersections to date include:
  - BBDD0045: 61.8m @ 2.3%
     Cu, 0.4 g/t Au incl. 6.8m @ 17% Cu, 0.5 g/t Au<sup>7</sup>
- New extension drilling in final planning focused on depth and easterly extension.
- Objective to define a substantial high-grade copper-gold Mineral Resource suitable to support standalone operation.



 <sup>&</sup>lt;sup>6</sup> 22/01/2024. "New Copper Intersection Extends Bluebird Over 400m Depth"
 <sup>7</sup> 12/02/2024. "Exceptional 61.8m @ 2.3% Copper Intersection at Bluebird".

# Bluebird Gravity Model - Potential to triple the strike length





Bluebird 3D model in plan projection with gravity inversion model, recent drilling and current drilling planned

# Barkly Project (Bluebird Discovery) Major gravity target corridor

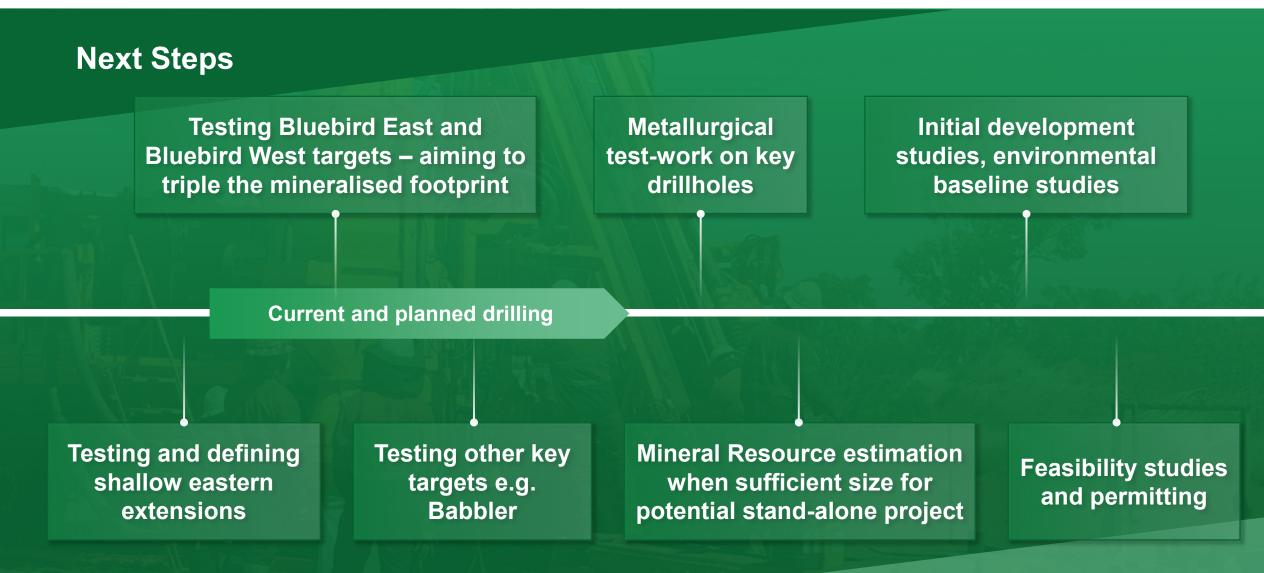


- Covers a 5km strike-length, east-west trending gravity-high indicating a major ironstone corridor.
- Ironstone corridor intersected by ENE-WSW trending fault structures - associated with mineralisation (also shown by magnetics).
- Bluebird Cu-Au discovery associated with ENE-WSW structure which has intersected the gravity high/ironstone corridor and introduced Cu-Au mineralisation.
- Multiple geophysical (gravity and magnetic) targets remain untested.



# **Barkly Project and the Bluebird Discovery**







# Contact

Vincent Algar CEO

E: valgar@tennantminerals.com

**T:** +61 8 9481 7833

**ASX:TMS** 

# **Key Technical Team**





VINCENT ALGAR

BSc (Hons) Geology MAusIMM

Chief Executive Officer

JON DUGDALE
BSc (Hons), FAusIMM, MAICD
Technical Advisor



CHRIS RAMSAY
BSc, MAPM, MAUSIMM
General Manager Geology

Mr Algar is a mining and resources geologist with over 33 years in the industry, Vincent brings to Tennant a strong track record of building shareholder value, most recently during his nine-year tenure as Managing Director of Australian Vanadium Ltd (ASX:AVL).

Vincent has been involved in all aspects of mining operations, exploration, and project feasibility and has held corporate roles in ASX listed junior mineral resource companies, serving both as Managing Director/CEO and in non-executive Director roles.

Mr Dugdale is a geologist with over 35 years discovery, development and corporate experience, including direct involvement with significant gold, nickel and copper-gold discoveries.

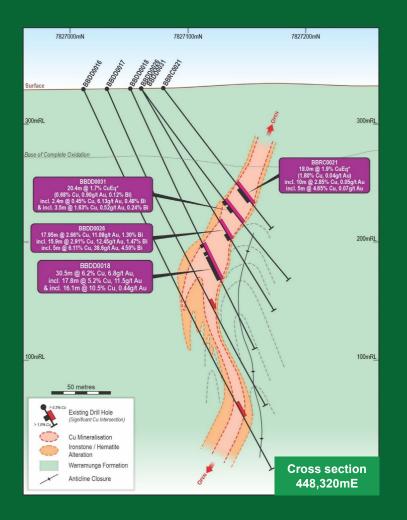
Jon's corporate experience includes as a director/CEO of several junior resource companies focused on nickel-cobalt, graphite and copper-gold projects as well as funds management experience with Lion Selection Group.

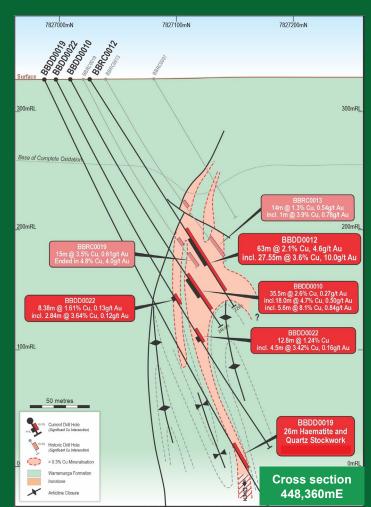
Mr Ramsay is a geologist and project manager with over 25 years' experience in the global mining industry.

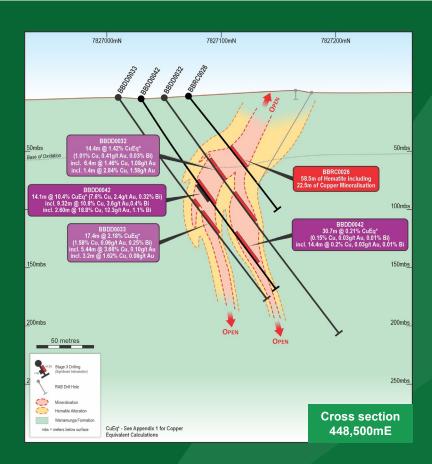
Chris' depth of experience includes operational & managerial roles in exploration, mine development and operations in underground & open-cut Gold, Nickel, Base Metal, Bauxite & Coal mines and development projects globally. Chris spent 18 years with Oceana Gold, Sons of Gwalia and Straits Resources before working as a consultant and advisor.

# Bluebird Discovery Sections through thick, high-grade, Cu-Au zone



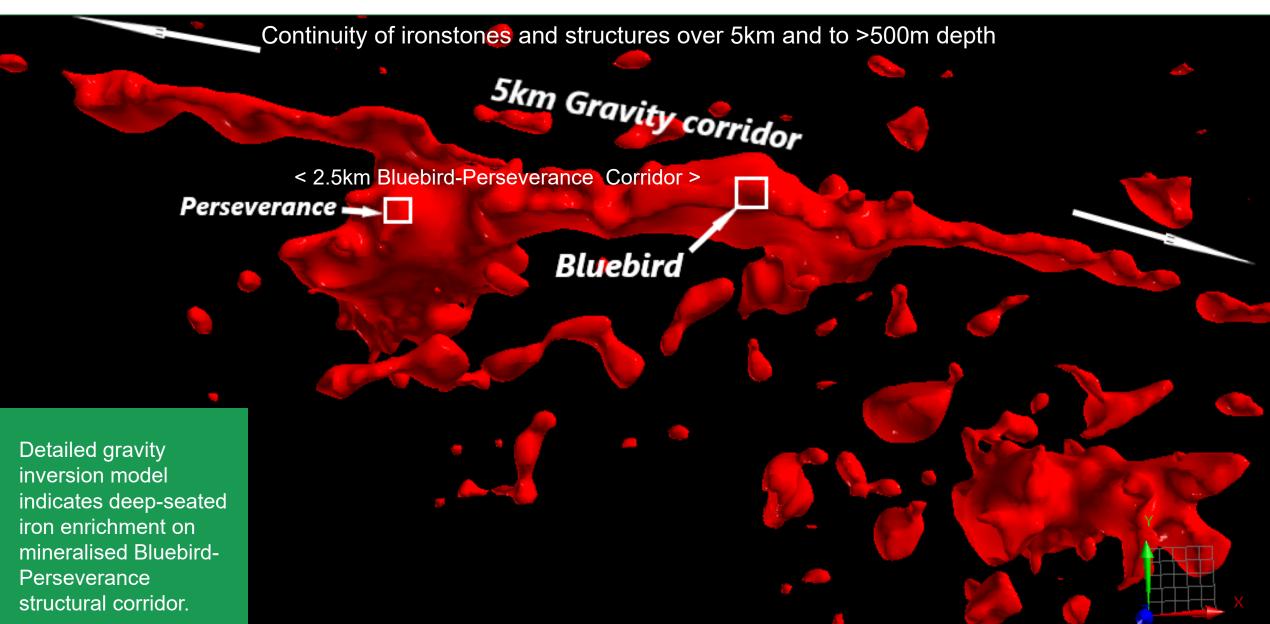






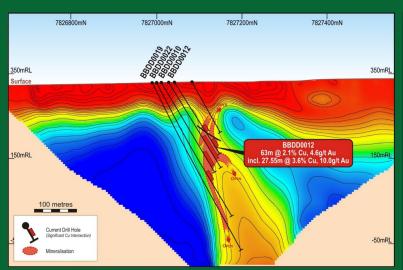
# Barkly Project Gravity Model Potential for major Cu-Au system



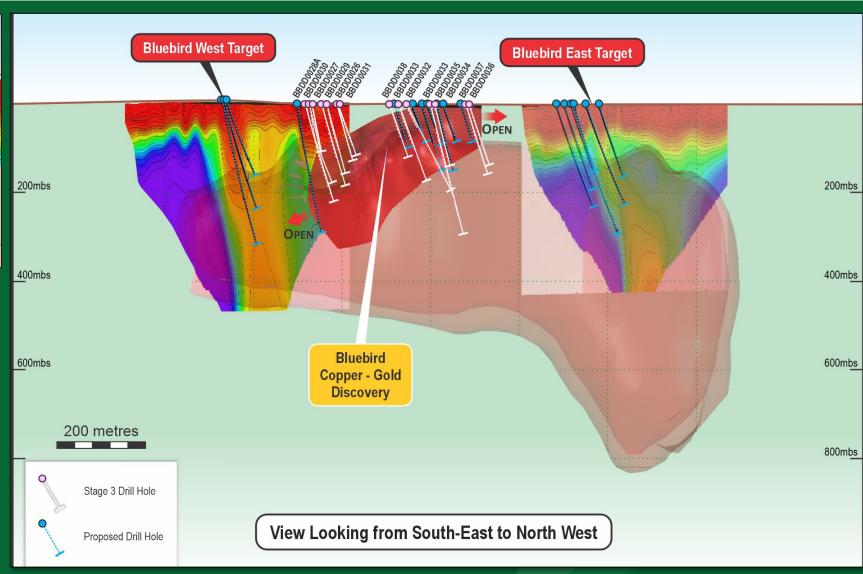


# IP Resistivity Drill-targeting Potential to directly detect mineralisation





- Bluebird discovery section (448,320mE) on Induced Polarisation (IP) resistivity<sup>8</sup> - shows correlation with mineralisation.
- Step-out IP resistivity<sup>9</sup> highlighted targets at Bluebird East and Bluebird West with potential to triple the strike-length<sup>7</sup>.
- New drilling, in progress, testing these key target areas.



# **Other Key Targets** Babbler Project

Bluebird



 Previous drilling includes 3m @
 2.6 g/t Au, 0.3m @ 310 g/t Au in structures overlying basement targets?

