

Darwin

Noosa Mining Investment Conference July 19 - 21 2023

BLUEBIRD HIGH-GRADE COPPER-GOLD DISCOVERY

THE BARKLY PROJECT TENNANT CREEK NORTHERN TERRITORY, AUSTRALIA

 Tennant Creek

• Alice Springs



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.

Barkly Project and the Bluebird Cu-Au Discovery: World-Class Location



 The Barkly Project and the Bluebird discovery are located at the eastern end of Tennant Creek Mineral Field (TCMF), which produced 5.5Moz of gold and 700kt of copper from 1934 to 2005³.

• The Barkly Project is located 40km east of Tennant Creek on the eastern margin of the Paleo-Proterozoic Warramunga Province.

Largest deposits include Warrego (6.75Mt @ 6.6 g/t Au, 1.9% Cu)³ and Peko (3.7Mt @ 4% Cu, 3.5 g/t Au)^{3 -} 20km west of Bluebird, hosted by ironstone within Warramunga Fm.

 Bluebird is a greenfields copper-gold discovery in an area of deep weathering / shallow cover.

The geology of Bluebird is similar to the Warrego and Peko deposits, being associated with deformed and altered ironstone within the Warramunga Formation.



¹08/02/2023. Tennant Minerals (ASX. TMS): "Spectacular Drill Hit 30.5m 2 6.2% Cu, 6.8 g/t Au".
²17/08/2022. Tennant Minerals (ASX. TMS): "Bonanza 63m @ 2.1% Copper and 4.6 g/t Gold Intersection at Bluebird".
³Portergeo.com.au/database/mineinfo. Tennant Creek - Gecko, Warrego, White Devil, Nobles Nob, Juno, Peko, Argo.





- The Bluebird discovery lies under 60 m to 80 m of weathered (saprolitic) Warramunga Formation.
 - Host rocks interbedded siltstone, sandstone, and mudstone of the Warramunga Formation, locally overprinted by extensive hematite/magnetite/chlorite/silica alteration analogous with the first hydrothermal event of *Donnellan*, *2013*⁴.
 - Mineralisation associated with approx. east-west trending ironstones localised in the hinge zones of D_1 folds, which are interpreted to have formed during the *Tennant Event of Huston et al 1993*⁵.
 - Thick, high-grade, copper-gold mineralisation is associated with D₂ fault zones, brecciation and hematite/secondary magnetite alteration within the ironstone in shallow plunging D₁ folds.
 - Mineralisation at Bluebird secondary malachite and native copper transitioning to chalcocite and chalcopyrite plus free gold (and bismuthinite).

⁴ 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.

⁵ Huston DL, Bolger C and Cozens G, 1993. A comparison of mineral deposits at the Geko and White Devil deposits: implications for 4 ore genesis in the Tennant Creek District, Northern Territory, Australia. *Economic Geology* 88, 1198–1225.



Bluebird Discovery - Longitudinal

- Stage 2 drilling defined high-grade copper–gold mineralisation from 80m below surface over a 240m strike length and to over 250 m depth
- Thick, high-grade Cu-Au intersections in shallow plunging dilational zone, intersected by steep structural plunge, open at depth:

BBDD0025:

16.45m @ 3.05% Cu, 2.31g/t Au incl. **3.8m @** 0.87% Cu, **9.08g/t Au**⁶ BBDD0021:

24.0m @ 0.66% Cu, **11.8g/t Au** incl. **5.7m** @ 0.74% Cu, **49.3g/t Au**⁷ BBDD0018:

30.5m @ 6.2% Cu, 6.8g/t Au incl. **16m @ 10.5% Cu**, 0.44g/t Au¹ BBDD0012:

63m @ 2.1% Cu, 4.6 g/t Au incl. 27.55m @ 3.6% Cu, 10 g/t Au²

• New Stage 3 in progress designed to extend the Bluebird footprint to the west, east and at depth and ultimately define a substantial high-grade copper-gold Mineral Resource.

⁶ 20/3/23. "Exceptional Results to 28.3 g/t Au & 22.6% Cu at Bluebird".
⁷ 07/03/2023. "Bonanza Bluebird Gold Results Including 5.7m @ 49.3 g/t Au".

Key Drill-Targeting Breakthrough: Induced Polarisation Resistivity

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• Bluebird mineralisation associated with Induced Polarisation (IP) resistivity low⁶ extending to depth and along strike:



Strong IP low resistivity target to the east⁸ - potential for repeat





Current drilling – bonanza results and double the strike-length⁹





Bluebird/Barkly Project – 5km gravity corridor, multiple targets



Bluebird associated with a 5km strike-length D₁ gravity feature (ironstone) intersected by D₂ ENE-WSW trending structures^{10, 11}.

Bluebird Cu-Au mineralisation hosted by a ENE-WSW trending structure which has offset the gravity feature/ironstone.

 Multiple structural corridors associated with gravity highs, magnetic anomalies and IP resistivity lows represent untested targets for further Cu-Au discoveries.

ASX:TMS



¹⁰ 25/08/2022. Tennant Minerals (ASX. TMS): "Standout Geophysical Targets to Replicate Bluebird Cu-Au Discovery". 9 ¹¹ 24/01/2023. Tennant Minerals (ASX. TMS): "Mineralised Structures at Key Copper-Gold Targets"

Stage 3 drilling and news-flow started rolling...more to come



Bluebird Copper-Gold Discovery:

- New Stage 3 drilling has doubled the strike length of the greenfields Bluebird Copper-Gold Discovery and continued to produce exceptional results extending to shallow depths and open in all directions.
- The Company is targeting a multi-million tonne, high-grade copper-gold resource to rival previous highgrade producers in the Tennant Creek Mineral Field.
- Geophysics has highlighted priority targets for repeats of Bluebird within the 2.5km Bluebird-Perseverance Corridor:
- Modelling of the recent, extensive IP resistivity survey has generated multiple targets to be drill tested during the Stage 3 program *targeting further high-grade copper-gold discoveries.*



TMS - Corporate Overview





\$5.4M

Cash (30 March 2023)

\$28M Market Cap (at \$0.037 17/07/23)

759.4m

Shares on Issue

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



Enterprise Value







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