Bonanza Bluebird Gold Results Including 5.7m @ 49.3 g/t Au

- Latest results part of 24m @ 0.66% Cu, 11.8 g/t Au intersection, 40m west of previous spectacular drill hit - 30.5m @ 6.2% Cu, 6.8 g/t Au[1]

- **New results include bonanza gold drill-hits from diamond drill hole BBDD0021 at the Bluebird copper-gold discovery, 40km east of Tennant Creek in the Northern Territory:**
  - **24m @ 0.66% Cu and 11.8 g/t Au from 161m (downhole),**

    including 5.7m @ 0.74% Cu and 49.3 g/t Au and from 161m, and,

    including 4.97m @ 1.06% Cu and 23.9 g/t Au and from 165.66m.
- **Latest results have extended the thick, dilational, high-grade gold with copper zone at Bluebird a further 40m to the west of the previous spectacular intersection in BBDD0018 of 30.5m @ 6.2% Cu, 6.8 g/t Au including 17.8m @ 5.2% Cu, 11.5 g/t Au[1].**
- **The Bluebird discovery is now over 240m strike-length, extends to over 250m below surface and remains open in all directions.**
- **Two new, fully-funded, follow-up drilling programs are planned to commence immediately following receipt of final results from the latest drilling. These new programs will aim to:**
  - **Extend the recently identified, shallow-plunging high-grade gold-copper zone and test below 250m depth to expand the resource potential of the Bluebird discovery, and,**
  - **Following additional Induce Polarisation (IP) geophysical lines, refine and test other priority targets within the 2.5km Bluebird-Perseverance Corridor, where recent drilling intersected mineralised structures above ironstone hosted copper-gold targets.**

Tennant Minerals Chairman Matthew Driscoll commented:

"The bonanza gold grades in this latest drill intersection at Bluebird have demonstrated continuity of the high-grade gold zone, which is completely open at shallow depth to the west and east.

"With every new hole we drill, the Bluebird discovery is looking more and more like a repeat of some of the best known high-grade copper-gold orebodies in the Tennant Creek Mineral Field, including the Peko deposit, only 20km west of Bluebird, which produced 3.7 million tonnes[5] grading 4 percent copper and 3.5 grams per tonne gold from the 1930s to the 1970s.

"Our planning is already well advanced for follow-up drilling to test the immediate extensions of this bonanza gold zone, along with the multiple other exciting Bluebird look-alikes we have identified through our geophysical programs along the 2.5km Bluebird-Perseverance Corridor.

"These targets will be further refined by new IP programs as we look to define additional high-grade resources to underpin the development of this rich new copper-gold discovery."

Tennant Minerals Ltd (ASX:TMS) is very pleased to announce **bonanza gold results from the latest drilling at Bluebird copper-gold discovery**, on the Company's 100% owned Barkly Project, 40km east of Tennant Creek in the Northern Territory (see longitudinal projection Figure 1 and cross section Figure 2, below).

The new results include exceptionally high-grade gold with copper intersections in BBDD0021 (Table 1):

- **24m @ 0.66% Cu, 11.8 g/t Au from 161m (downhole),**

  incl. 5.7m @ 0.74% Cu, 49.3 g/t Au and from 161m, and,

  incl. 4.97m @ 1.06% Cu, 23.9 g/t Au from 165.66m and 3.94m @ 1.37% Cu from 179.3m.

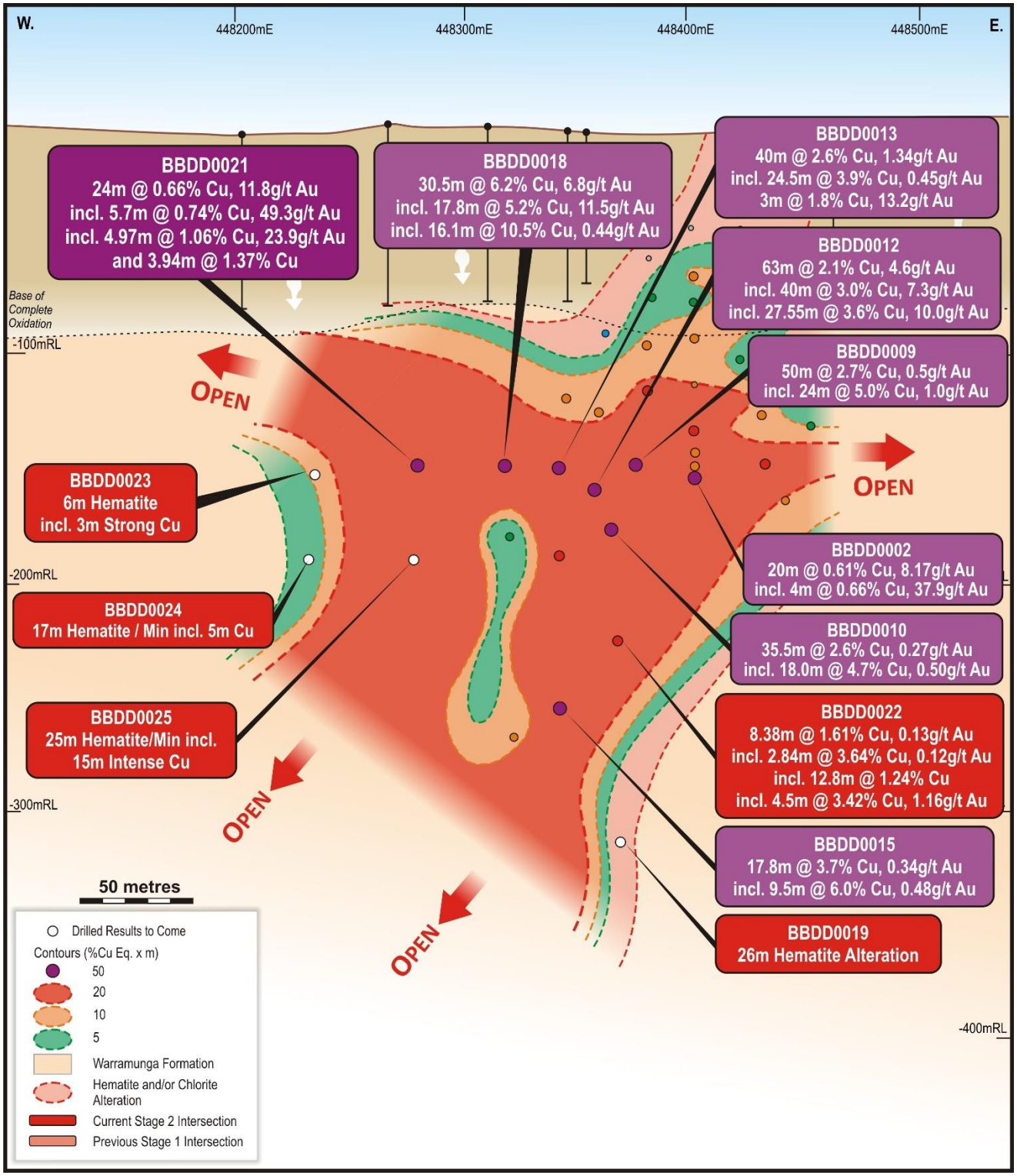

Figure 1: Bluebird discovery, longitudinal projection showing the latest bonanza gold intersection in BBDD0021

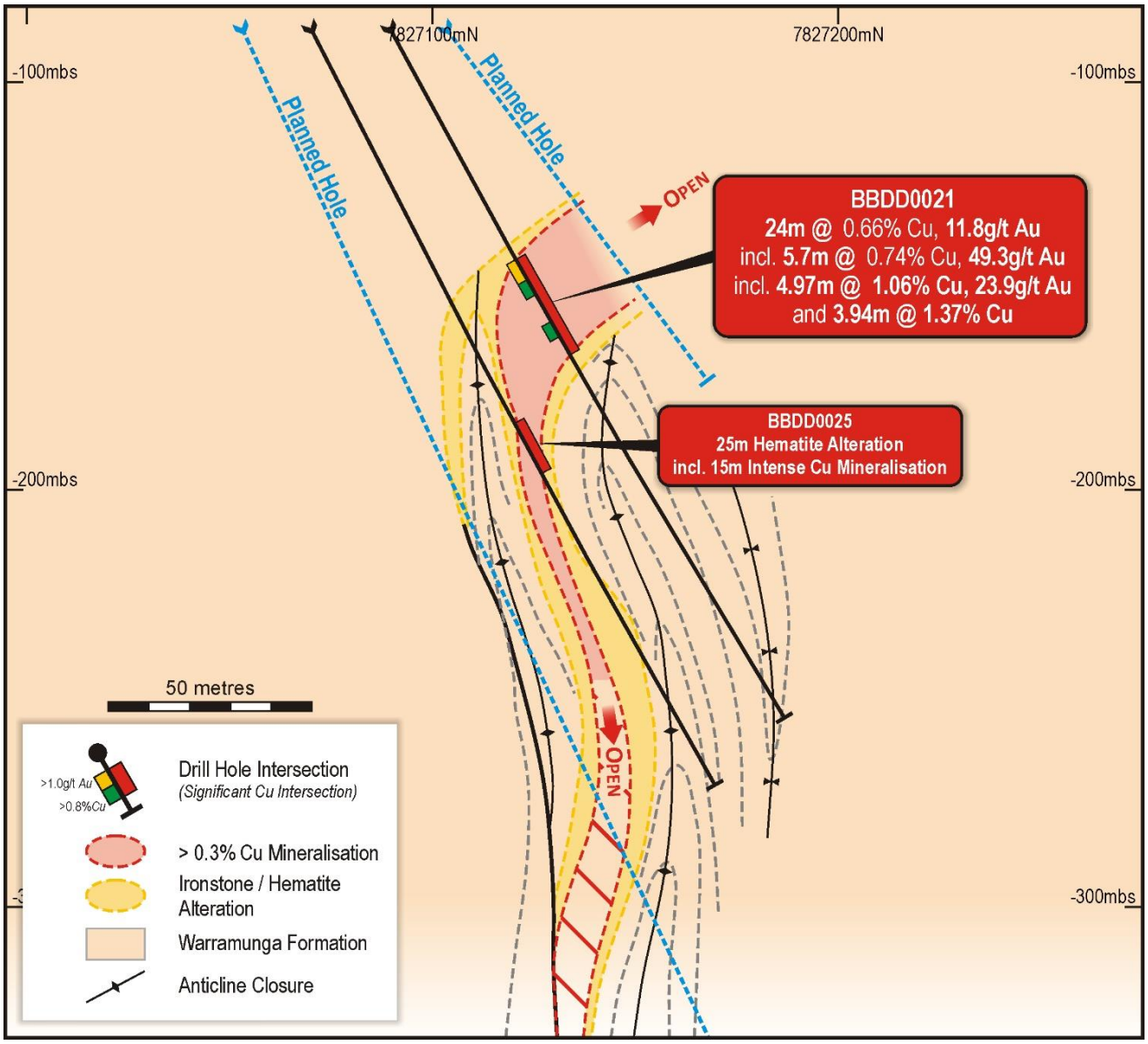

Figure 2: Bluebird cross section 448,280mE showing gold intersections in BBDD0021 and intense Cu in BBDD0025.

The new gold results in BBDD0021 occur at a similar depth to the spectacular intersections in BBDD0018 of **30.5m @ 6.2% Cu, 6.8 g/t Au** including **17.8m @ 5.2% Cu, 11.5 g/t Au**[1] from 153.6m and BBDD0012, which produced **63.0m @ 2.1% Cu, 4.6 g/t Au**[2] from 153.0m including **27.55m @ 3.6% Cu, 10.0 g/t Au**[2].

These thick and high-grade copper-gold intersections are associated with a shallow easterly-plunging dilational zone where the mineralised structure at Bluebird has intersected an anticlinal closure. The high-grade zone remains completely open to the east and west - where it projects to shallower depth (see Figure 1). The previous intersections within this more than 240m strike-length zone include, from west to east:

- BBDD0018: **30.5m @ 6.2% Cu, 6.8 g/t Au** from 153.6m incl. **17.8m @ 5.2% Cu, 11.5 g/t Au**[1]
- BBDD0012: **63m @ 2.1% Cu, 4.6 g/t Au** from 153m incl. **27.55m @ 3.6% Cu, 10.0 g/t Au**[2]
- BBDD0013: **40m @ 2.6% Cu, 1.3 g/t Au** from 131m incl. **3m @ 1.8% Cu, 13.2 g/t Au**[3]
- BBDD0007: **50m @ 2.7% Cu,** 0.52 g/t Au from 158m incl. **24m @ 5.0% Cu, 1.0 g/t Au**[4]
- BBDD-2: **20m @** 0.61% Cu **8.17 g/t Au** from 157m incl. **4m @** 0.66% Cu, **37.9 g/t Au**[4]

The discovery of this high-grade gold with copper zone opens-up potential for new drilling to continue delivering outstanding results at shallower depth to the west, and also to the east (Figure 1).

The intersection of high-grade gold in several holes at Bluebird underlines the potential of the Bluebird discovery to rival the Peko deposit, 20km west of Bluebird, which produced 3.7mt @ 4% Cu & 3.5 g/t Au[5].

Other new results include from two strongly copper mineralised zones in diamond hole BBDD0022, down-plunge from the main or eastern zone at Bluebird (see Figure 1), including the following intersections:

- **8.38m @ 1.61% Cu, 0.13 g/t Au from 210.21m (downhole),**

  incl. 2.84m @ 3.64% Cu, 0.12 g/t Au from 211.62m, and,
- **12.8m @ 1.24% Cu from 244.2m incl. 4.5m @ 3.42% Cu, 0.16 g/t Au.**

The results in BBDD0022 indicate continuity of the mineralisation at depth towards the previous intersection in BBDD0015 of **17.8m @ 3.7% Cu, 0.34g/t Au from 277m including 9.5m @ 6.0% Cu**[3] which is open below 250m depth from surface.

Results are pending from a further four completed holes which tested western extensions of Bluebird, as well as at depth (see Figure 1 for pierce-point locations and Appendix 1 for descriptions of mineralisation).

The results pending include from BBDD0025, drilled below BBDD0021 (see cross section, Figure 2), which intersected a 25m zone of hematite alteration and brecciation from 199m downhole, including **15m of intense copper mineralisation with visible sulphides** (predominantly chalcocite – see Appendix 1)[6].

Following receipt of final results, further drilling will test immediate extensions of the thick and high-grade gold and copper zone to both the east and projecting to shallower depth to the west. Drilling is also planned to test depth extensions and a repeat of the thick dilational copper-gold zone as the mineralised structure is projected to intersect the next anticlinal closure at depth (see Figure 1).

OTHER PRIORITY TARGETS TO BE TESTED IN BLUEBIRD-PERSEVERANCE CORRIDOR

The results of an induced polarisation (IP) program carried out at Bluebird revealed a distinct low-resistivity (high conductivity) response, corresponding with the Bluebird mineralisation on cross section 448,360mE (see Figure 3). This confirmed that the mineralised structure at Bluebird can be detected using IP geophysics. This section includes the BBDD0012 intersection of **63m @ 2.1% Cu, 4.6g/t Au**[2] and the IP low-resistivity zone shows potential continuity below 400m depth.

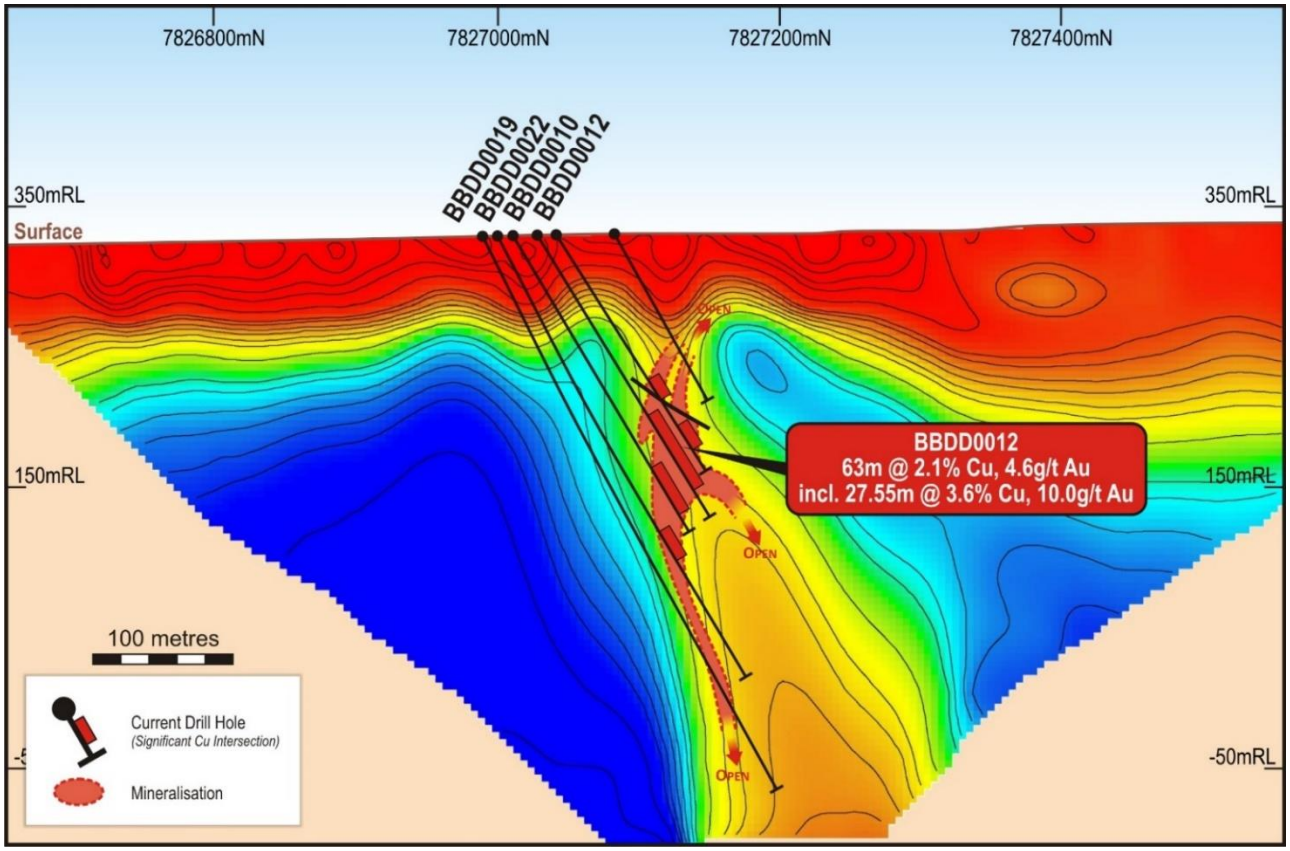

Figure 3: Bluebird cross section 448,360mE on IP resistivity (reverse colour stretch).

Further dipole-dipole IP traverses, in combination with detailed drone magnetics and detailed gravity modelling, has identified six priority targets for the discovery of buried high-grade copper-gold deposits within the 2.5km Bluebird-Perseverance Corridor[7] (see Figure 4).

Three priority, coincident magnetic, gravity and IP low-resistivity targets were selected for initial drill-testing, including **Perseverance North**, **Perseverance** and **Bluebird West**[8] (Figure 4). A multi-purpose (DDH1) rig was utilised to complete eight reverse-circulation (RC) holes with six diamond tails into these target zones, for a total of 1981.1m (see Table 3 for drilling details, results pending).

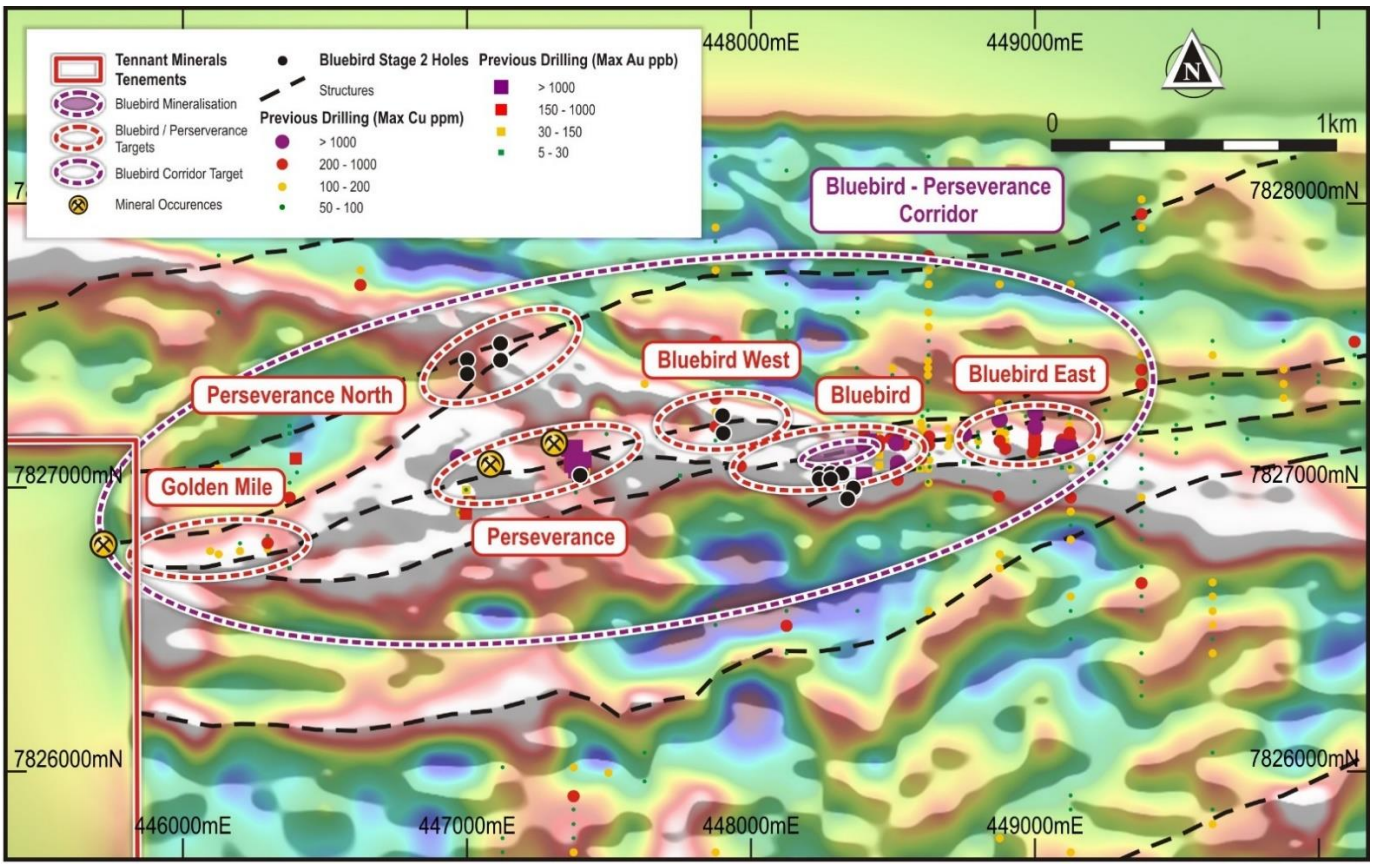

Figure 4: Bluebird-Perseverance zone bouguer gravity image with structures & gravity-magnetic-IP resistivity targets.

The initial drill testing of these priority targets intersected mineralised and brecciated fault structures in all three target areas[8]. The potentially mineralised structures are interpreted to lie above iron-stone hosted copper-gold targets previously identified by inversion modelling of gravity and magnetics, as well as associated with IP low resistivity geophysical anomalies. Results are pending for these recently completed RC and diamond drill holes.

Further dipole-dipole IP traverses will now be carried out both east and west of Bluebird and along strike from the other priority targets in the Bluebird-Perseverance Corridor (Figure 4).

Following receipt of results from the initial drill testing of the other priority targets, and the results of the follow-up IP program, further drilling will be carried out to test the ironstone hosted copper-gold targets.

The ability to detect ironstone hosted copper-gold deposits using a combination of detailed gravity, magnetics and dipole-dipole IP geophysics represents a breakthrough that offers potential to directly drill target new high-grade copper-gold discoveries within the Bluebird-Perseverance Corridor.

The drilling programs planned at both Bluebird and the other priority targets will target multiple, multi-million tonne, high-grade copper-gold deposits within the Barkly Project.

The ultimate objective is to discover and define substantial high-grade copper-gold mineral resources at Barkly, sufficient to support the development of a new, stand-alone, copper-gold project.

ABOUT THE BARKLY PROJECT AND THE BLUEBIRD COPPER-GOLD DISCOVERY

The high-grade Bluebird copper-gold discovery is located within the Company's 100% owned Barkly Project, at the eastern edge of the richly endowed Tennant Creek Mineral Field, which **produced over 5.5Moz of gold and over 700kt of copper** from 1934 to 2005[5] (see Figure 5 below).

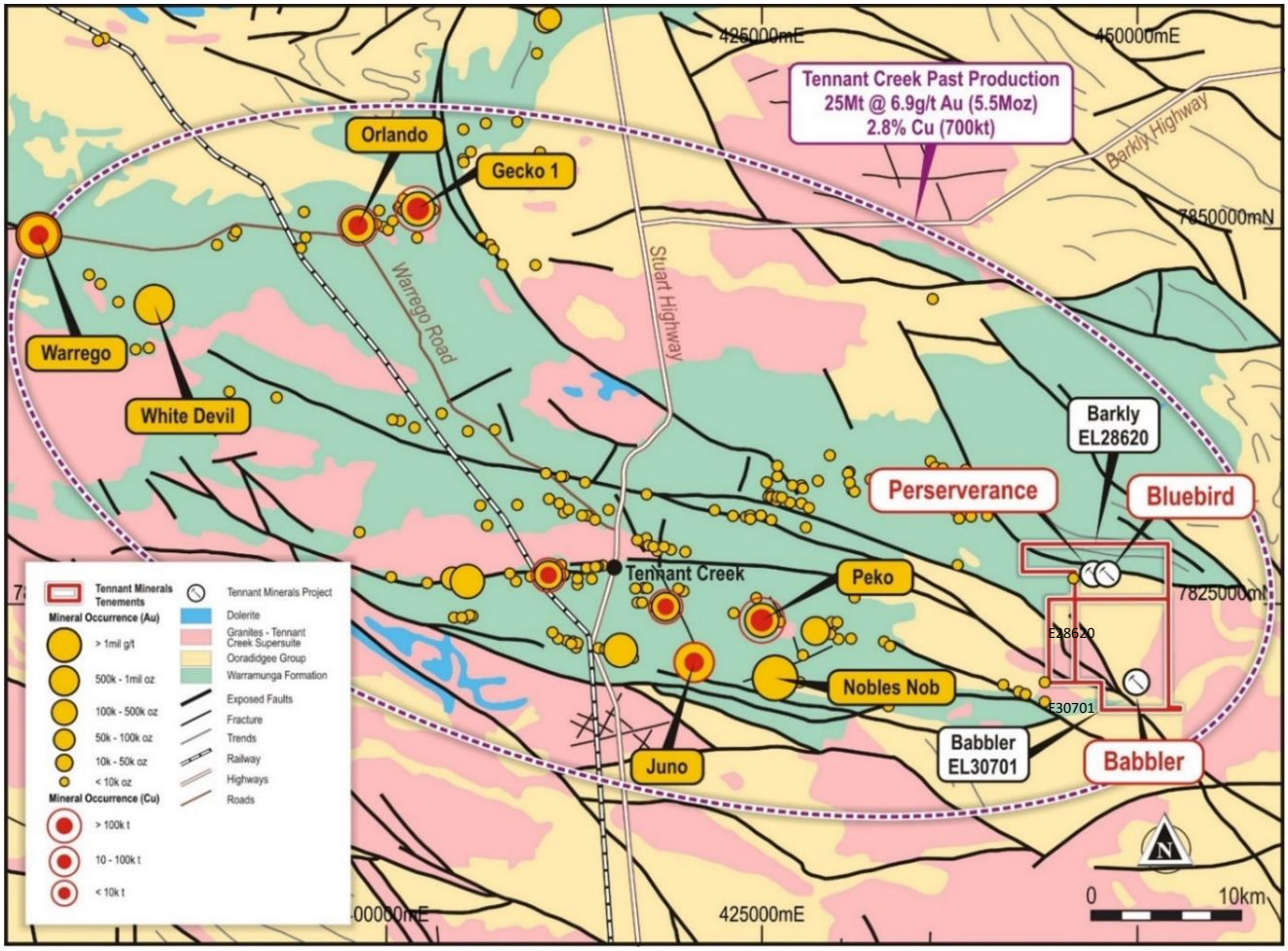

Figure 5: Location of the Barkly Project and major historical mines in the Tennant Creek Mineral Field

Bluebird is a greenfields discovery with no previous mining apart from the historical Perseverance Mine, located 1.5km west of Bluebird, which was a small high-grade gold producer mined to only shallow depth.

The mineralisation intersected at Bluebird is typical of the high-grade copper-gold orebodies in the Tennant Creek Mineral Field. The high-grade mineralisation 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 shoots include secondary malachite (copper-carbonate) as well as native copper, which transitions to primary sulphide mineralisation at depth e.g. chalcocite, bornite and chalcopyrite.

The latest diamond drilling intersections in the Stage 2 drilling program (see Figure 1) have extended the thick high-grade dilational zone of mineralisation at Bluebird to the west of the previous, Stage 1, high-grade copper-gold intersections announced by the Company[2,3,4].

The Stage 2 drilling program at Bluebird has built on the very successful Stage 1 program, with the addition of the recently announced high-gold grades to go along with the thick copper-gold intersections previously announced[2,3,4].

Drilling has also tested priority targets for repeats of the Bluebird discovery within the 2.5km Bluebird-Perseverance Corridor, based on gravity, magnetics and IP geophysics. This drilling intersected mineralised structures above ironstone-hosted copper-gold targets which will be further drill-tested during the next program[8] (see Figure 4).

A total of 16 holes for 4,321m were drilled in the latest Barkly Project drilling program at both Bluebird and the other priority targets in the Bluebird-Perseverance Corridor (see Tables 2 and 3). Results are pending from a further four completed holes at Bluebird and eight Bluebird-Perseverance Corridor holes.

Table 1 below includes all significant intersections in BBDD0021, BBDD0022 and BBDD0019 (Part 1):

Hole #	From	To	Interval	Cu%	Au g/t	Ag g/t	Bi %	Co ppm	Fe %	Cut-off
BBDD0021	161.00	185.00	24.00	**0.66**	**11.8**	**2.0**	**0.18**	78.2	**30.5**	0.5% Cu
incl.	160.00	169.00	9.00	**0.55**	**31.3**	**4.7**	**0.46**	**147.5**	**33.2**	0.1 g/t Au
incl.	161.00	166.70	5.70	**0.74**	**49.3**	**7.7**	**0.72**	**169.4**	**32.9**	2.0 g/t Au
incl.	163.40	166.70	3.30	**1.08**	**80.7**	**13.0**	**1.11**	**121.1**	**37.2**	10 g/t Au
& incl.	165.66	170.63	4.97	**1.06**	**23.9**	**2.3**	**0.45**	98.0	**36.5**	0.8% Cu
& incl.	179.30	183.24	3.94	**1.37**	0.02	**1.2**	0.01	51.9	**29.5**	0.8% Cu
BBDD0022	210.21	218.59	8.38	**1.61**	**0.13**	**0.61**	0.04	**142.2**	**13.9**	0.5% Cu
incl.	211.62	214.46	2.84	**3.64**	**0.12**	**1.8**	**0.08**	**215.6**	**20.8**	0.8% Cu
BBDD0022	244.20	257.00	12.80	**1.24**	0.06	0.00	0.00	51.6	**26.7**	0.5% Cu
incl.	251.20	255.70	4.50	**3.42**	**0.16**	0.00	0.01	**153.0**	**82.7**	0.5% Cu
BBDD0019	207.05	208.00	0.95	**3.15**	**1.43**	**1.2**	0.01	**224.1**	**21.0**	0.1% Cu
incl.	207.05	207.60	0.55	**5.31**	**2.45**	**2.0**	0.01	**286.0**	**26.4**	3.0% Cu

Table 2: Bluebird Stage 2 drillhole details

Hole #	Dip°	Az Grid°	GRID_E	GRID_N	RL	Mud (m)	DDC (m)	Depth (m)
BBDD0018	-65	0	448,320	7,827,050	332	62.7	184.1	246.8
BBDD0019	-65	0	448,360	7,826,990	332	41.4	406.3	447.7
BBDD0020	-65	0	448,340	7,826,960	332	54.9	77.8	132.7
BBDD0021	-65	0	448,280	7,827,050	332	80.0	211.5	291.5
BBDD0022	-60	0	448,360	7,826,998	332	40.1	336.4	376.5
BBDD0023	-65	0	448,240	7,827,050	332	81.0	174.0	255.0
BBDD0024	-65	0	448,240	7,827,030	332	47.8	204.7	252.7
BBDD0025	-65	0	448,280	7,827,030	332	50.8	256.1	306.9
Total						**458.7**	**1,881.1**	**2,339.8**

Table 3: Bluebird – Perseverance Priority Targets drillhole details

Hole #	Dip°	Az Grid°	GRID_E	GRID_N	RL	RC (m)	DDC (m)	Depth (m)
Perseverance North								
PNDD0001	-65	0	447,000	7,827,450	330	91.1	149.5	240.6
PNDD0002	-65	0	447,000	7,827,400	330	179.9	148.7	328.6
PNDD0003	-65	0	447,118	7,827,507	330	119.8	120.6	240.4
PNDD0004	-65	0	447,118	7,827,448	330	179.8	129.7	309.5
Bluebird West								
BWDD0001	-65	0	447,899	7,827,253	335	120.1	195.4	315.5
BWRC0001	-65	0	447,902	7,827,191	335	186.0	nil	186.0
Perseverance								
PVDD0001	-65	0	447,398	7,827,043	335	60.5	180	240.5
PVRC0001	-55	0	447,398	7,827,045	335	120.0	nil	120.0
Total						**1057.2**	**923.9**	**1981.1**

Appendix 1 includes descriptions of the geology and mineralisation intersected in selected holes from the bluebird diamond drilling program and Appendix 2 includes JORC Table 1, Sections 1 and 2.

REFERENCES

[1] 08/02/2023. Tennant Minerals (ASX.TMS): "Spectacular Bluebird Drill-Hit 30.5m @ 6.2% Cu, 6.8 g/t Au".
[2] 17/08/2022. Tennant Minerals (ASX. TMS): "Bonanza 63m@ 2.1% Copper and 4.6 g/t Gold Intersection at Bluebird".
[3] 07/09/2022. Tennant Minerals (ASX. TMS): "Up to 54.5% Cu in Massive Sulphides at Bluebird".
[4] 08 March 2022. Tennant Minerals (ASX. TMS): "Spectacular 50m @ 2.70% copper intersection at Bluebird".
[5] Portergeo.com.au/database/mineinfo. Tennant Creek - Gecko, Warrego, White Devil, Nobles Nob, Juno, Peko, Argo.
[6] 14/12/2022. Tennant Minerals (ASX.TMS): "Intensely Copper-Mineralised Drill-Hits Extend Bluebird".
[7] 25/08/2022. Tennant Minerals (ASX. TMS): "Standout Geophysical Targets to Replicate Bluebird Cu-Au Discovery".
[8] 24/01/2023. Tennant Minerals (ASX. TMS): "Mineralised Structures at Key Copper-Gold Targets".

*****ENDS*****

For enquiries please contact:

Matthew Driscoll
Non-Executive Chairman
***M**: +61 (0) 417 041 725*

Stuart Usher
Company Secretary
***M**: +61 (0) 499 900 044*

Andrew Rowell
White Noise Communications
M: +61 (0) 400 466 226

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 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' experience in exploration, 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 report of the matters based on this information in the form and context in which it appears.

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.

Appendix 1. Visual estimates of mineralisation intersected in BBDD0025:

Cautionary note regarding visual estimates:

In relation to the disclosure of visual mineralisation in the tables below, the Company cautions that visual estimates of oxide, carbonate and sulphide mineralisation material abundance should never be considered a proxy or substitute for laboratory analyses. Laboratory ICP-MS and ICP-OES analyses are required to determine widths and grade of the elements (e.g., copper, Cu) associated with the visible mineralisation reported from preliminary geological logging. The Company will update the market when laboratory analytical results are received and compiled.

BBDD0025 Summary Log			
From	**To**	**Zone**	**Lithology & alteration/mineralisation**
0	50	Hanging Wall, PCD Rotary Drilling, not yet logged	
50	85	Hanging Wall	Grey/light mauve fine-grained siltstones, massive, weathered in patches, some fine qtz veins.
85	161.7		Grey black interbedded siltstones and mudstones, strongly brecciated in part, mod qtz-carb vein fractures and stockwork.
161.7	199		Grey/light mauve fine-grained siltstones, weathered in patches, some fine qtz veins, massive, coarser grained downhole.
199	205	Hematite/mineralisation	Red siltstone/sandstone with, brecciated, haematite alteration zones, weak qtz veining.
205	220	Intensely Mineralised Zone	Ironstone, black, vuggy, coarse grained, with jasper/ hematite alteration. **Visible malachite 2%, disseminated chalcocite 5% - 15%.**
220	224	Hematite/Mineralisation	Red siltstone/sandstone with, brecciated, haematite alteration, weak qtz veining.
224	281.8	Footwall	Fine grained red-brown siltstones, interbedded.
281.8	287		Silicious, cherty, green/pink, very fine-grained siltstones.
287	376.5		Purple siltstone alternating intermittently with highly oxidised fine grained, thinly bedded siltstones. Three cycles of above.

APPENDIX 2: JORC 2012 Edition, Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.*	• Exploration results are based on industry best practices, including sampling, assay methods, and appropriate quality assurance quality control (QAQC) measures. • Core samples (2021 and 2022) are taken as half HQ3 core and sampled on nominal 1m intervals, with sampling breaks adjusted to geological boundaries where appropriate. • Reverse Circulation (RC), 2020 and 2022 program: • RC samples of between 3-4kg were sent to the laboratory where they were pulverised to at least 85% passing 75 microns. The pulp sample is then split to produce a sample for analysis. • Diamond drill samples submitted to the laboratory are crushed and pulverised followed by a four-acid total digest and multi-element analysis by inductively coupled plasma optical emission spectrometry (ICP-OES) and inductively coupled plasma mass spectrometry (ICP-MS). Gold and precious metal analysis are completed by a 50g fire assay collection with inductively coupled plasma optical emission spectrometry (ICP-OES) finish.
Drilling techniques	• *Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• RC drilling (2020-22) was conducted using a $5^1/_4$" face sampling hammer, with 2022 holes drilled between -55 and -65 degrees. • Rotary mud (RM) drilling (2021 and 2022) was completed with 126mm PCD hammer with holes drilled between -60 and -65 degrees. • 2021 and 2022 Diamond drillholes were collared using RM drilling and switched to HQ3 approximately 30m before the target position is intersected. All coordinates are quoted in GDA94 datum unless otherwise stated.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• RC sample recovery is monitored by the field geologist. Low sample recoveries are recorded on the drill log. There were no significant sample recovery issues encountered during the drilling program. • RM sample recovery was monitored by the site geologist, logged and a sample record was retained for future interpretation. No analysis of rotary mud collars was undertaken. • The quality of diamond core samples is monitored by the logging of various

Criteria	JORC Code explanation	Commentary
		geotechnical parameters, and logging of core recovery and competency.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• All logging is completed according to industry best practice. • RC chips are logged at 1m intervals using a representative sample of the drill chips. Logging records include lithology, alteration, mineralisation, colour and structure. • RM chips are logged at 2m intervals using a representative sample of the drill chips. Logging records include lithology, alteration, mineralisation and colour. • Detailed diamond drillcore information on lithology, sample quality, structure, geotechnical information, alteration and mineralisation are collected in a series of detailed self-validating logging templates.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• For all sample types, the nature, quality and appropriateness of the sample preparation technique is considered adequate as per industry best practice. • RC samples of 3-4kg are collected at 1m intervals using a cone splitter. The sample size is appropriate for the style of mineralisation and the grain size of the material being sampled. • RC samples are dried at the laboratory and then pulverised to at least 85% passing 75 microns. • RM samples were not analysed. A sample was retained for future interpretation. • Core is cut using an Almonte automated core cutting saw. Half core is taken for sampling.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.*	• All samples were submitted to the Intertek Laboratories sample preparation facility at Alice Springs in the Northern Territory where a pulp sample is prepared. The pulp samples are then transported to Intertek in Perth or Townsville Australia for analysis. • Pulp sample(s) were digested with a mixture of four Acids including Hydrofluoric, Nitric, Hydrochloric and Perchloric Acids for a total digest. • Analysis of 2020 RC drilling; Cu, Pb, Ag, Bi, Co Ni, Sb have been determined by Inductively Coupled Plasma (ICP) Mass Spectrometry (MS-OES). • Analysis of 2021 -22 core drilling; Ag, Al, As,Ba,Bi,Ca,Cd,Ce,Co,Cr,Cu,Fe,K,La,Li,Mg,Mn, Mo,Na,Ni,P,Pb,S,Sb,Sc,Sn,Sr,Te,Ti,Tl,V,W,Zn have been determined by Inductively Coupled Plasma (ICP) Mass Spectrometry (MS-OES).

Criteria	JORC Code explanation	Commentary
		• Gold was analysed by Fire Assay with a 25g charge and an ICP-MS finish with a 5ppb Au detection limit. • A Field Standard, Duplicate or Blank is inserted every 25 samples. The Laboratory inserts its own standards and blanks at random intervals, but several are inserted per batch regardless of the size of the batch.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• All significant intercepts are reviewed and confirmed by at least two senior personnel before release to the market. • No adjustments are made to the raw assay data. Data is imported directly to Datashed in raw original format. • All data are validated using the QAQCR validation tool with Datashed. Visual validations are then carried out by senior staff members.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All drill hole collars were located with a hand-held GPS with an accuracy of +/-5m. At the completion of the drilling program all holes were surveyed by DGPS. • Downhole surveys (2020 RC) were taken at 30m intervals using a Reflex single shot camera. The camera records azimuth and dip of hole. • Downhole surveys for the 2021 and 2022 diamond drilling were taken at 6-12m intervals by solid state gyro to maintain strong control of drill direction. • Survey co-ordinates: GDA94 MGA Zone 53.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Data spacing and distribution used to determine geological continuity is dependent on the deposit type and style under consideration. Where a mineral resource is estimated, the appropriate data spacing, and density is decided and reported by the competent person. • For mineral resource estimations, grades are estimated on composited assay data. The composite length is chosen based on the statistical average, usually 1m. Sample compositing is never applied to interval calculations reported to market. A sample length weighted interval is calculated as per industry best practice.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Orientation of sampling is as unbiased as possible based on the dominating mineralised structures and interpretation of the deposit geometry. • If structure and geometry is not well understood, sampling is orientated to be perpendicular to the general strike of stratigraphy and/or regional structure.

Criteria	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	• All samples remain in the custody of company geologists and are fully supervised from point of field collection to laboratory drop-off.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• None yet undertaken for this dataset

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(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Company controls two contiguous Exploration Licences, EL 28620 and EL30701 located east of Tennant Creek. All tenure is in good standing at the time of reporting. There are no known impediments with respect to obtaining a licence to operate in the area.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Several other parties have undertaken exploration in the area between the 1930s through to the present day including Posgold, Meteoric Resources and Blaze Resources.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Barkly Project covers sediments of the Lower Proterozoic Warramunga Group that hosts all of the copper-gold mines and prospects in the Tennant Creek region. At the Bluebird prospect copper-gold mineralisation is hosted by an ironstone unit within a west-northwest striking fault. The ironstone cross cuts the sedimentary sequence that mostly comprises of siltstone.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• Tables 2 and 3 include drillholes details from the recent Barkly drilling programs.
		• Previous releases by the Company including on 07/09/2022. “Up to 54.5% Cu in Massive Sulphides at Bluebird”. Include drilling details and previous, Stage 1, intersections.
		• For drilling details of the 2020 RC drilling program refer to Appendix 1 of the ASX announcement of 18 March 2020 by Blina Minerals (ASX: BDI): “High-Grade Copper and Gold Intersected in Drilling program at Bluebird”.
		• For drilling details of the 2014 Diamond and RC programs refer to Appendix 1 of the ASX announcement of 24 September 2019 by Blina Minerals (ASX: BDI): “Strategic Acquisition of High-Grade Gold-Copper Project”.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.*	• All exploration results are reported by a length weighted average. This ensures that short lengths of high-grade material receive less weighting than longer lengths of low-grade material.

Criteria	JORC Code explanation	Commentary
	• *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No high-grade cut-offs are applied
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').*	• Mineralisation at Bluebird is interpreted to be striking east-west true azimuth with a dip of 70-80 degrees towards 180 degrees true azimuth. • All holes are drilled as perpendicular as practical to the orientation of the mineralised unit and structure. Intersection lengths are interpreted to be close to true thickness.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Refer to Figure 1, a longitudinal projection though the Bluebird mineralisation including pierce point locations. Figures 2 and 3 are representative cross sections through the Bluebird deposit. Figures 4 and 5 are plan views showing the location of the Barkly Project and Bluebird and other prospects respectively.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.*	• All background information is discussed in the announcement. • Full drill results for copper and gold assays for previous drilling are shown in Appendix 1 of the ASX announcement of 18 March 2020, "High-Grade Copper and Gold Intersected in Drilling program at Bluebird".
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• No other data is material to this report.
Further work	• *The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Additional drilling is planned to extend mineralisation along strike to the west, east and at depth. • Further drilling of modelled gravity, drone magnetic and IP data will be carried out to drill target repeats of the high-grade Bluebird copper gold discovery within the 2.5km Bluebird-Perseverance Corridor.