

# Thick Intersections of Strong to Intense Copper Mineralisation at Bluebird

Significant copper mineralisation intersected at Bluebird East, a potential repeat of the high-grade Bluebird copper-gold discovery, with more drilling to come.

Strongly mineralised intersections produced in latest drilling phase at the high-grade Bluebird copper-gold discovery, including immediate extensions and new targets across an expanded 1.5km strike-length (see Appendix 1 for mineralisation descriptions):

- Drilling of the <u>exceptionally high-grade gold-copper zone on the western side of Bluebird</u> has intersected 63m of hematite alteration with <u>48m of strong to intense copper</u> mineralisation in BBDD0045, including zones of massive chalcopyrite (see Figures 1,2,3).
- Drilling of the <u>shallow eastern extensions of Bluebird</u> has intersected thick zones of copper mineralisation including 111m of hematite alteration with <u>47m of strong copper and</u> bismuth (indicator of gold) mineralisation in BBDD0042 (see Figures 1,2,4).
- Drilling of the <u>Bluebird East target</u> has intersected a <u>24m zone of chlorite-silica-hematite</u> <u>alteration and sulphide mineralisation including 8m of copper mineralisation</u> (chalcocite, malachite) in BBDD0043. This intersection is highly significant, as it could represent the upper part of a repeat of the Bluebird high-grade copper-gold mineralised zone. Further drilling will now test down dip and to the west of this drill hole (see Figures 1,2,5).

The new western intersections are on a previously un-drilled section (448,300mE) to the west of recent bonanza gold with copper results (see longitudinal projection, Figure 2) which included:

17.95m @ 11.08 g/t Au, 2.66% Cu from 131m downhole in BBDD0026<sup>1</sup>,

incl. 15.9m @ 12.45 g/t Au, 2.91% Cu from 131.8m,

incl. 5m @ 38.6 g/t Au, 6.11% Cu from 142.7m incl. 2.25m @ 64 g/t Au, 9.57% Cu.

Over 3,000m of RC and diamond drilling now completed in this latest phase of the Stage 3 program, with assay results from strong to intensely mineralised holes expected in December-January.

**Tennant Minerals acting Chairman Neville Basset commented:** 

"We are very encouraged by the visual indications from the latest phase of drilling at our high-grade Bluebird copper gold discovery in the Northern Territory.

Not only have we intersected thick intersections of strong to intense copper, and possibly gold mineralisation, in the western high-grade gold-copper zone at Bluebird, but we may also have discovered a repeat of the high-grade Bluebird discovery associated with geophysical targets at Bluebird East.

Identifying a repeat of this exceptional discovery could significantly enhance the economic potential for Bluebird to be developed as a high-grade, stand-alone copper-gold mine."



**Tennant Minerals Ltd** ("Tennant" or "the Company") (ASX:TMS) is pleased to announce strongly mineralised intersections in multiple targets from the latest phase of drilling at the high-grade Bluebird copper-gold discovery, located within the Company's 100%-owned Barkly Project, 40km east of Tennant Creek in the Northern Territory (see Appendix 1 for descriptions of mineralisation).

#### Cautionary note regarding visual estimates:

In relation to the disclosure of visual mineralisation above, within the text below and as detailed in Appendix 1, 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. Assay results for the majority of this program are expected to be available within the next 2-6 weeks. Target mineral abundances are estimated along with general geological descriptions.

A further 15 reverse circulation (RC) and diamond drill-holes, for just over 3,000m, have been completed during September and October during the second phase of the Stage 3 drilling program at Bluebird. Assay results are pending with the majority of results expected to be available within the next 2-6 weeks.

The current drilling is testing three key target areas across a 1.5km expanded footprint at Bluebird, including shallow eastern extensions of the copper-gold mineralisation; a new section in the exceptionally high-grade gold-copper zone on the western side of Bluebird, and initial holes into the Bluebird East target. Drilling completed to date, and planned holes, are shown with gravity inversion on **Figure 1** below:

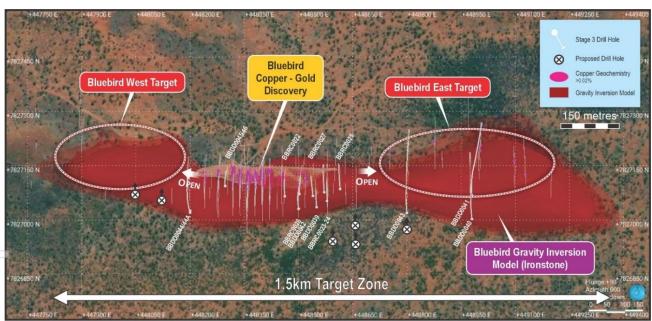


Figure 1: Bluebird in plan projection with 3D gravity inversion model, current progam and planned drilling Strongly mineralised intersections have been produced in the latest phase of drilling from:

#### i) The Bluebird Western High-Grade Gold-Copper Zone:

The recent drilling included two drillholes in the western high-grade gold-copper zone at Bluebird, on a previously un-drilled section, 448,300mE (see Figure 2 and cross section, Figure 3). Both holes intersected thick zones of strong to intense copper mineralisation (see Appendix 1 for descriptions of mineralisation):

- 63m of hematite altered ironstone with 48m of strong to intense copper mineralisation, including massive chalcopyrite intervals in **BBDD0045**, and, above this hole.
- 47.5m of hematite altered ironstone with 36m of strong to intense copper mineralisation, including chalcopyrite, chalcocite and native copper in **BBDD0046**.



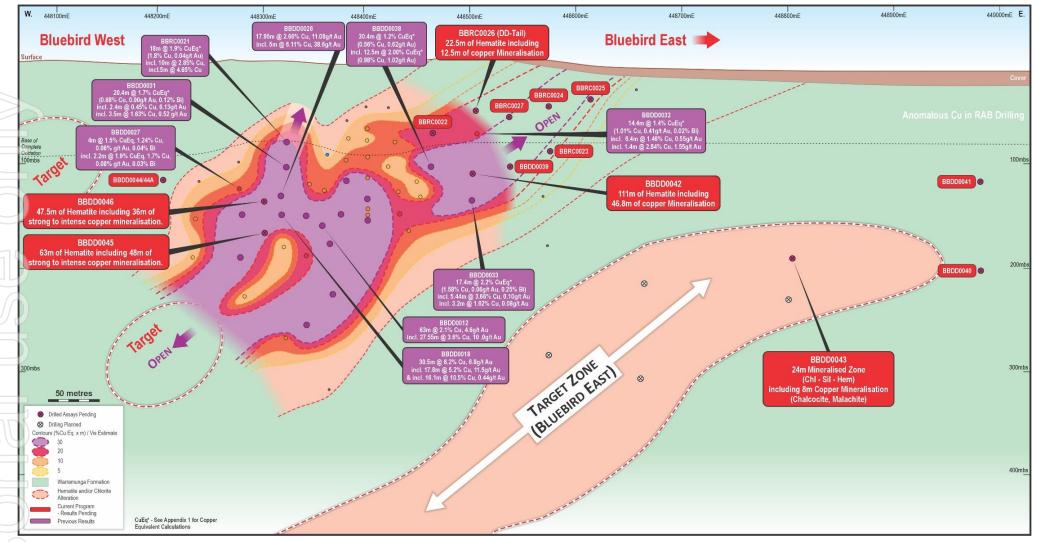


Figure 2: Bluebird longitudinal projection showing key copper-gold intersections and new strongly mineralised intersections at Bluebird Extension, East and Western Zone



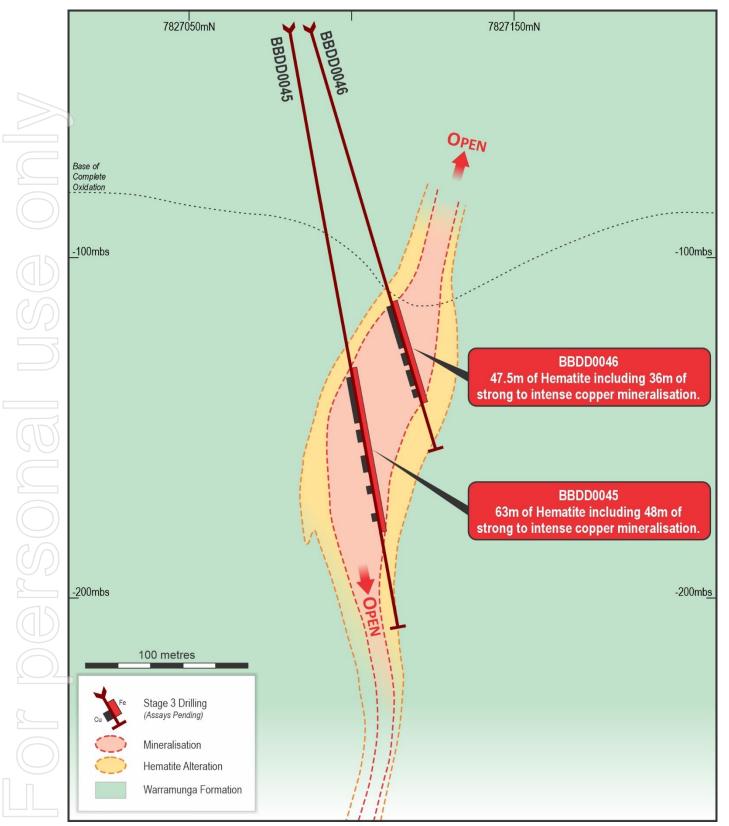


Figure 3: Cross-section 448,300mE with new drillholes BBDD0045-46 showing hematite and copper intersections

These new intersections are down-plunge to the west of the recent exceptional gold and copper intersection in BBDD0026<sup>1</sup> of 17.95m @ 11.08 g/t Au, 2.66% Cu from 131m downhole, including 5m @ 38.6 g/t Au, 6.11% Cu. The new holes have also extended the zone of massive chalcopyrite sulphide mineralisation to the west of previous drillhole BBDD0018<sup>5</sup>, which intersected 30.5m @ 6.2% Cu, 6.8 g/t Au from 153.6m including 17.8m @ 5.2% Cu, 11.5 g/t Au from 153.6m and 16.1m @ 10.5% Cu and 0.44 g/t Au from 164.9m (see longitudinal projection, Figure 2).



#### ii) The Bluebird Shallow Eastern Extensions Zone:

New drilling to extend the shallow up-plunge eastern extension of Bluebird has confirmed continuity and extended the mineralisation to shallower depths. Key mineralised intersections (see Appendix 1 for descriptions of mineralisation) on section 448,500mE (see Figure 2 and cross section, Figure 3) include:

- BBDD0042 which intercepted 111m of hematite-silica alteration of the host ironstone formation and includes 46.8m of strong copper mineralisation (5% to 30% chalcocite, bismuth sulphides, minor bornite, chalcopyrite and native copper), and,
- **BBRC0026** which intersected 22.5m of hematite alteration including 12.5m of copper mineralisation (chalcocite, bornite, native copper).

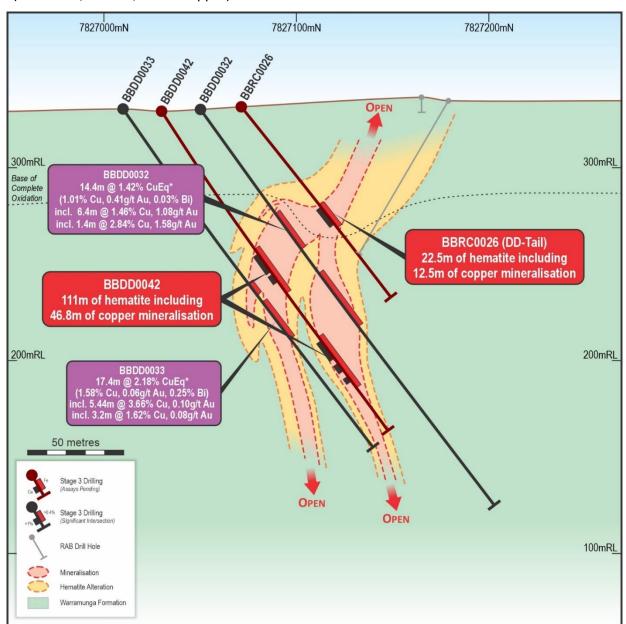


Figure 4. Cross-section 448,500mE, with new strongly mineralised intersections in BBDD0042 & BBRC0026

Previous significant intersections in the eastern extension remain open at depth and include 17.4m @ 2.18% CuEq\* (1.58% Cu, 0.06 g/t Au, 0.25% Bi) in BBDD0033<sup>2</sup> (see Figures 2 and 4) including 5.44m @ 3.66% Cu, 0.1 g/t Au including 3.2m @ 1.62% Cu, 0.08 g/t Au) (\*refer Appendix 2 for copper equivalent (CuEq) calculations).

The new drilling has defined the Bluebird east extension mineralisation and extended the zone to within 60m of the surface (see Figure 4), which may allow open pit mining to access the Bluebird Cu-Au zone.



#### iii) The Bluebird East Target

Drilling which targeted coincident gravity highs (ironstone) and IP-resistivity lows, 250 to 500m east of the main Bluebird discovery<sup>2,3</sup>, has **intersected thick ironstone and hematite alteration, including significant copper mineralisation** (see Appendix 1 for descriptions of mineralisation).

New diamond drillhole **BBDD0043** intersected thick ironstone in the modelled position then passed into a 24m zone of hematite-chlorite-silica alteration from 252.8m downhole, with **significant copper mineralisation** (visible chalcocite and malachite on fracture surfaces) over 8 metres (see Figure 5).

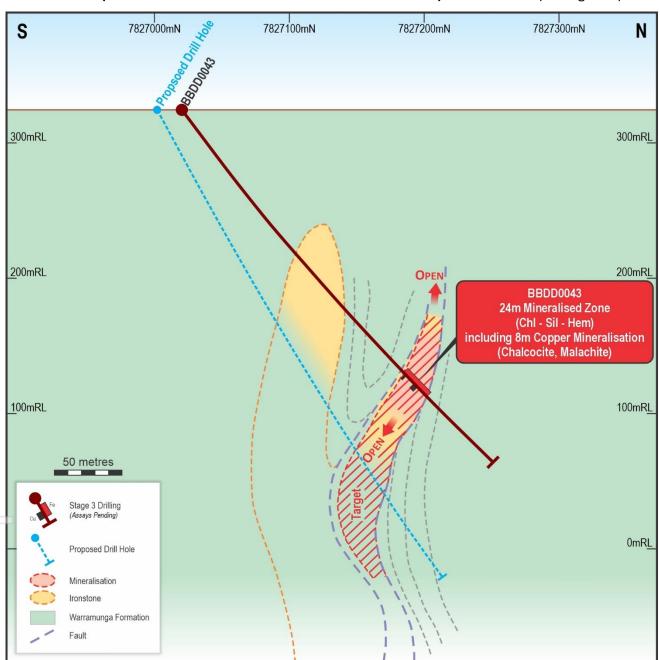


Figure 5. Cross-section 448,800mE, Bluebird East, with significant hematite and copper intersection in BBDD0042

The intersection of copper mineralisation in the footwall of the Bluebird ironstone at Bluebird East is highly significant, as it may indicate the discovery of a repeat of the Bluebird high-grade copper-gold zone. Further drilling will now test down-plunge extensions of this zone extending west, where the ironstone and mineralisation are indicated to extend by gravity and IP resistivity modelling (see Figures 1 and 2).

The potential discovery of a repeat of Bluebird at Bluebird East offers the potential to double the footprint of the copper-gold mineralised zone (see Figure 2).



#### **NEXT STEPS**

Assay results are pending for all 15 holes drilled as part of this drilling phase to date. It is anticipated that the majority of these results will be available within the next 2-6 weeks.

Further drilling will now test the down-plunge extensions of the Bluebird East target (see Figure 2) before the drilling is completed prior to the northern wet season.

Other targets remaining to be tested include down-plunge extensions of the main copper-gold zone and geophysical targets at Bluebird West. Northern Territory government co-funding will be sought to test the deeper targets and other regional targets such as Perseverance North and at Babbler (see Figure 6).

Bulk metallurgical samples will be generated from the strongly mineralised holes, BBDD0045 and 0046, which tested the high-grade western part of the Bluebird deposit. This work will include flotation tests for sulphide mineralisation as well as gravity tests for native copper and gold.

Mineral Resource modelling will be carried out after receipt of results from the current phase.

#### 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, on 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<sup>6</sup> (see Figure 6 below).

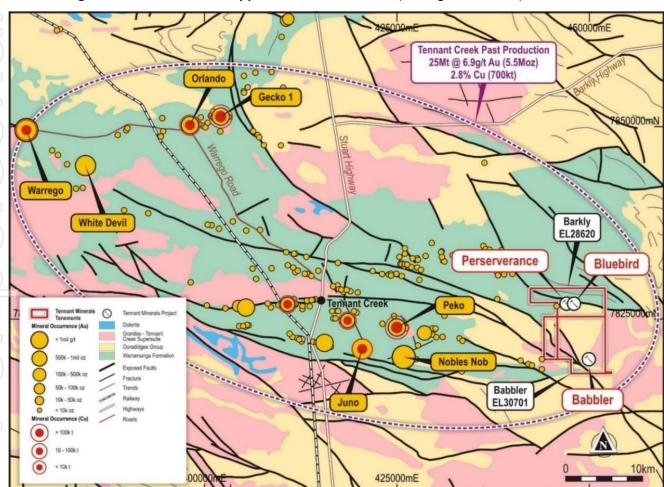


Figure 6: Location of the Barkly Project and major historical mines in the Tennant Creek Mineral Field

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 secondary malachite (copper-carbonate) in the upper parts as well as native copper, which transitions to primary sulphide mineralisation at depth e.g. chalcocite, bornite and chalcopyrite.



Drilling to date has identified copper-gold mineralisation at Bluebird over a 500m strike length and to over 250m depth. The mineralisation remains completely open in all directions (Figure 2).

The Company has the dual approach of defining the Mineral Resource potential of the Bluebird discovery while also testing other key targets in the Bluebird-Perseverance corridor based on gravity, magnetics and IP resistivity survey modelling<sup>7</sup>.

Table 1: Bluebird Stage 3 drillhole details

	Hole#	Dip°	Az Grid°	GRID	GRID_N	RL	Pre-Collar/RC	DDC	Depth	Hole Type
	BBDD0026	-60	0	448322	7827056	332	122.7	96.7	219.4	DD
Γ	BBDD0027	-60	0	448280	7827060	332	101.5	115.9	217.4	DD
) [	BBDD0028	-65	0	448280	7827010	330	122.0	-	122.0	DD
΄ [	BBDD0028A	-67	352	448278	7827005	332	147.2	213.2	360.4	DD
	BBDD0029	-60	0	448280	7827085	332	71.8	108.7	180.5	DD
Γ	BBDD0030	-60	357	448240	7827060	332	96.2	122.8	219.0	DD
) [	BBDD0031	-53	358	448320	7827060	332	-	204.3	204.3	DD
	BBDD0032	-53	0	448500	7827050	330	78.1	178.9	257.0	DD
) [	BBDD0033	-53	358	448500	7827010	332	71.6	147.1	218.7	DD
ſ	BBDD0034	-53	357	448580	7827015	331	72.0	269.1	341.1	DD
	BBDD0035	-55.5	353	448580	7827035	332	29.5	136.7	166.2	DD
	BBDD0036	-54	359.5	448660	7827050	333	-	163.5	163.5	DD
ſ	BBDD0037	-55	356.6	448660	7827032	331	51.1	138.7	189.8	DD
	BBDD0038	-55	0	448460	7827045	332	74.8	82.0	156.8	DD
Γ	BBDD0039	-55.5	356.	448547	7827028	330	59.9	70.8	130.7	DD
١	BBDD0040	-54.9	356	448980	7827002	330	80.7	272.8	353.5	DD
	BBDD0041	-51.5	356	448980	7827068	330	119.8	159.3	279.1	DD
	BBDD0042	-56.6	355	448500	7827030	330	66.0	137.9	203.9	DD
	BBDD0043	-51.2	355	448800	7827019	330	98.3	248.9	347.2	DD
	BBDD0044	-52.7	354	448200	7827025	330	144.0	-	144.0	DD
	BBDD0044A	-57.3	345	448200	7827020	330	143.6	129.0	272.6	DD
	BBDD0045	-79.5	357	448297	7827093	330	78.0	153.9	231.9	DD
	BBDD0046	-79.5	357	448297	7827033	330	78.0	102.6	180.6	DD
	BBRC0021	-52	359	448,321	7,827,079	331	150	-	150	RC
	BBRC0022	-54	356	448462	7827065	332	106.2	28.4	134.6	RCD
	BBRC0023	-56.2	357	448579	7827052	332	174.0	-	174.0	RC
) [	BBRC0024	-50	357	448571	7827076	332	126.0	-	126.0	RC
	BBRC0025	-55	358	448615	7827085	332	126.0	-	126.0	RC
	BBRC0026	-50.5	0	448502	7827071	332	54.0	71.6	125.6	RCD
	BBRC0027	-50.3	353	448540	7827066	332	126.0	-	126.0	RC

Authorised for release by the board of directors.

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

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#### **REFERENCES**

- <sup>1</sup>19/07/2023. Tennant Minerals (ASX.TMS): "Drilling Doubles Strike Length of Bluebird copper-Gold discovery"
- <sup>2</sup> 15/08/2023 Tennant Minerals (ASX.TMS): "New Results Confirm Eastern Bluebird Extension Discovery"
- <sup>3</sup> 15/05/2023. Tennant Minerals (ASX.TMS): "Drilling Resumes at high-Grade Bluebird Cu-Au Discovery"
- 4 01/9/2023 Tennant Minerals (ASX.TMS): "New Bluebird Drilling to Target Triple the Strike Length"
- ₹08/02/2023. Tennant Minerals (ASX.TMS): "Spectacular Bluebird Drill-Hit 30.5m @ 6.2% Cu, 6.8 g/t Au".
- <sup>6</sup> Portergeo.com.au/database/mineinfo. Tennant Creek Gecko, Warrego, White Devil, Nobles Nob, Juno, Peko, Argo.
- <sup>7</sup> 25/08/2022. Tennant Minerals (ASX. TMS): "Standout Geophysical Targets to Replicate Bluebird Cu-Au Discovery".

#### 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.

#### **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 drillholes described in this release:

#### Cautionary note regarding visual estimates:

In relation to the disclosure of visual mineralisation above, within the text below and as detailed in Appendix 1, 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. Assay results for the majority of this program are expected to be available within the next 2-6 weeks. Target mineral abundances are estimated along with general geological descriptions.

BBDD00	45 Summai	ry Log				
From	То	Lith Zone	Lithology			
0	78.2		RC pre-collar			
78.2	93.2	HW siltstone - sandstone	Grey to grey green to purple-brown massive to alpha 25	weakly banded siltstone & lesser sandstone,		
93.2	94.3	Fault Zone	Fault breccia: grey siltstone fragments in brown clayey matrix			
94.3	102.9	HW siltstone - sandstone	Grey to slightly greenish grey siltstone & sandstone, fractured in part. 98.6-98.9m: fault breccia 101.3-101.4m fault breccia			
102.9	127.3	Chloritic HW siltstone	Dark grey green slightly chloritic siltstone, weak bedding alpha 30 Several 15cm quartz-chlorite-silicified siltstone shear zones alpha 30 More chloritic with depth & chlorite infilled network fractures, & irregular 1-2mm chlorite fractures s			
127.3	129.4	Fault Zone	Fine to coarse breccia, milled clayey matrix; top	contact alpha 65		
129.4	131.4	Chloritic HW siltstone	Grey green slightly chloritic pervasive siltstone,			
131.4	137.1	Fault Zone	Fine to coarse breccia, top contact alpha 40, so	-		
137.1	150	Mafic Intrusive?	Fine grained green mafic rock, no visible beddir zones, minor thin possible felsic extrusive; alph 144.5 to 144.7m: fault zone 149.2 to 149.65m: fault zone 153.4 to 154m: Red brown brecciated hem alt s	a ~30 where visible		
150	155.6	Mixed Ironstone	Dark green/grey mafic, fractured, some large cl	asts of brecciated ironstone 1-5% chalcopyrite		
155.6	156	Massive sulphide		60% chalcopyrite, weakly smeared s		
156	159.6	Mafic / siltstone + sulphides	Brecciated purple siltstone & green mafic?	2-20% chalcopyrite as matrix infill, on in veins/shears, or dissem.		
159.6	160	Massive sulphide		60% chalcopyrite, weakly smeared		
160	161	Mafic / siltstone + sulphides	Brecciated purple siltstone & green mafic?	1-5% chalcopyrite as matrix infill, on in veins/shears, or dissem.		
161	161.8	Massive sulphide		80% chalcopyrite, weakly smeared		
161.8	162.1	FW_HW siltstone	Brecciated grey to brown siltstone			
162.1	172.5	FW-HW dissem sulphide zone	Dark green-grey siltstone, pervasive mod chlorite alteration, & 30% grey very fine sandstone with some 206mm slightly irregular quartz veins; scattered 10cm zones quartz-hem-siltstone breccia	Scattered chalcocite +/- pyrite in quartz- hem-siltstone breccia, & in slightly irregular quartz-hem veinlets; minor very irregular bornite veins <5mm: estimate 0.5% sulphides overall		
172.5	174.8	FW-HW siltstone	Grey very fine sandstone, massive to weak irreg	gular bedded alpha zero; lesser dk grey siltstone		
174.8	177.1	Chlorite Zone	Chloritised siltstone, patchy strongly broken to brecciated quartz veining	brecciated, with brown hem fractures,		
177.1	182.5	Chlorite Zon	Chloritised siltstone, abundant fine network quartz veining, & planar to irregular quartz-hem veining,	Some fine scattered sulphides/bornite blebs; (<2%). 80.95-181.05m: sheared siltstone-quartz alpha 24 with some bornite		
182.5	183.8	Mixed Ironstone	Faulted alpha 80 into massive grey to dark grey irregular black to dark brown ironstone & spec	· · · · · · · · · · · · · · · · · · ·		
183.8	184.3	Chlorite Zon	Siltstone with intense patchy chlorite alteration chlorite-carbonate? breccia	& disseminated spec hem, & some siltstone-		
184.3	191.3	Chlorite Zon	Dark grey moderately chloritised siltstone, & light grey very fine sandstone, weak network quartz veining, some brown chlorite-hem slightly slicken-sided; more chloritic to base			
191.3	195.3	Chlorite Zon	Grey very fine sandstone, patchy strong network quartz veining, & lesser dark grey chloritic siltstone	Scattered fine chalcocite or bornite, or along sandstone-siltstone contacts, or in quartz veinlets.		
195.3	196.65	FW-HW siltstone	Fractured to brecciated green to purple-brown	siltstone, disrupted brecciated quartz veining		
196.65	198.8	Ironstone	Grading into brecciated sheared hem ironstone, abundant spec hem,	Patches of chalcocite 1%.		



198.8	199.5	Chlorite FW	Transitional into intensely chlorite altered black rock, some dissem spec hem			
199.5	200.25	Ironstone	Fracture alpha 45 into dark brown hem ironstone, fractured to brecciated, some spec hem &			
			quartz veining			
200.25	200.65	Massive sulphide	40% chalcopyrite, weakly smeared.			
200.65	213	Mixed Ironstone	intense dark black chlorite alteration with brown hem slickensides, scattered disseminated			
			spec hem, & some 10cm hem/spec hem ironstone zones, sheared alpha 10			
213	214	FW siltstone-sandstone	Irregular transition over 5mm into silicified light grey-brown very fine sandstone, with			
			abundant white & grey network vein quartz, lesser sheared dark grey siltstone			
214	231.9	FW siltstone-sandstone	Grey massive very fine sandstone (70%) with patchy strong network quartz veining; 30% dark			
	EOH		grey siltstone, weak network quartz veining & some fracture zones			

		abundant white & grey network vein quartz, lesser sheared dark grey siltstone					
214	231.9 EOH	FW siltstone-sa	indstone	Grey massive very fine sandstone (70%) with patchy strong i	•		
	LOU			grey siltstone, weak network quartz veining & some fracture	201165		
BBDD	0042 Sumn	nary Log					
From	То	Lith Zone	Lithology	& alteration / mineralisation			
0.0	66m	HW	RC pre-co	RC pre-collar, occasional Iron stone veins			
66.0	78.7	Hematitic HW	Ferrugino	Ferruginous sandstone & siltstone, widespread weathered shearing			
78.7	88.4	Chloritic HW	Chloritic	sandstone & siltstone, common quartz veining & shearing			
88.4	90.8	Cu Bearing Breccia	Quartz &	hematite matrix breccia with chloritic clasts	1% chalcocite.		
90.8	105.4	Cu bearing ironstone breccias	Hematite clasts	Hematite & chalcocite matrix breccia with hematite & hematised clasts  Around 5% country but some secommon bist common que bornite & ch			
105.4	114.0	FW breccia	Hematise	ed & chloritised weakly brecciated siltstone & sandstone	Up to 1% chalcocite.		
114.0	143.0	Chloritised FW	Chloritise	tised sandstone & siltstone, common short shear zones.			
143.0	159.4	Chloritised FW	Weakly c	hloritised silicified sandstones with interbedded siltstones + co	opper mineralisation		
159.4	162.2	FW breccias, leached	polymict	ed sandstone & siltstone, some large shear zones, short ic breccia zones with some hematite in matrix, hematisation hears & veins	Up to 2% chalcocite, trace native Cu (<1%).		
162.2	173.0	Chloritic FW	Weakly s	heared chloritised sandstone & siltstone, quartz veining & sho	rt quartz breccia zones		
173.0	177.2	Breccia	Chloritise	ed siltstone with short hematised & quartz matrix breccia	Some azurite & malachite, Cuox on shear & joint surfaces (<2%).		
177.2	181.4	Sheared ferruginous FW	Strongly	sheared ferruginous fine sandstones & siltstones partially heal	ed with quartz carbonate		
181.4	181.9	FW breccia		chloritised& hematised polymictic breccia with sandstone, silts	stone & very chloritised clasts in a		
181.9	203.9 EOH	Sheared ferruginous FW	Strongly sheared ferruginous fine sandstones & siltstones some shears healed with quar common colourful dolomitic zones, few thin mylonites, weathered appearance on some & in crush zones				
BBDD	0043 Sumn	nary Log					
From	То	Lith Zone	Lithology	& alteration	Mineralisation		
0	98.0		RC pre-co	nllar			

BBDD00	BBDD0043 Summary Log									
From	То	Lith Zone	Lithology & alteration Mineralisation							
0	98.0		RC pre-collar.							
98.0	187.6	Hematitic HW	Ferruginous sandstone & siltstone, shearing, quartz veining.							
187.6	197.0	Chloritic HW	Sandstone & siltstone, moderately chloritised; shearing & some quartz-carb-chlorite mylonites.							
197.0	244.9	Chloritic - Hematite HW	Sandstone siltstone, some sedimentary breccia; alternating hematisation / chloritisation , more chlorite down hole; quartz veining, thin shears, thin mylonites.	Trace copper mineralisation at 233 m (<1%).						
244.9	249.2	Shear Zone Shear zone/breccia including hematite & very hematised siltston		Trace sulphides on fracture surfaces						
249.2	252.8	Chloritic HW	Sandstone & siltstone, common thin shears Chloritised							
252.8	253.2	Hematite Breccia	Hematite-quartz breccia with chloritised& ferruginous siltstone clasts	Trace chalcocite (<1%)						



25	3.2	263.9	Chloritic zone	Chloritised sandstone & siltstone, numerous thin shears					
26	53.9	269.4	FG intrusive	Strongly sheared siltstone or fine grained intrusive	Very strongly chloritised; sulphide laminae on shear surfaces				
26	59.4	276.9	Jasper breccia	Intensely silicified, moderately hematised jasper / polymictic breccia, some specular hematite veining in part	269/271m trace malachite 275.6-276m: common (<1%). malachite on shear surfaces 276-276.9m: trace malachite visible in healed fractures (<1%).				
27	76.9	277.0	FW	Moderately hematised mudstone - siltstone with large oxide coated	jasper clasts				
27	77.0	278.6	Sheared FW siltstone	Sheared moderately hematised siltstone; mylonites along bedding alpha=25°					
27	78.6	282.9	Chloritic FW	Chloritised sandstone siltstone, some shearing & thin breccia					
28	32.9	331.7	(Sheared) FW siltstone	Sheared to fractured purple to grey to reddish moderately hematised but probably oblique, minor very fine sandstone	d siltstone, minimal visible bedding				
33	31.7	331.85	Lower sheared ironstone	Strongly sheared / banded black hematite-quartz ironstone, some sp hematite alteration	ecular hematite; later spotty red				
33	31.85	343.0		Purplish grey siltstone					
34	13.0	344.5	FW siltstone	5-10cm weakly banded intense quartz-hem shear/breccia down core axis					
34	14.5	347.2 EOH	FW siltstone Red Shale	Sharp contact into bland massive reddish siltstone					

, [	BBDD0046 Summary Log								
1 [	From	То	Lith Zone	Lithology	Mineralisation				
۱ ا	0	78.3		Rec pre-collar					
	78.3	82.31	HW siltstone –	Finely bedded chloritised sandstone & siltstone, common quartz carb veins					
	82.31	85.55	sandstone, variably	Quartz matrix chloritised shear breccia					
1	85.55	91.46	hematised, some	Chloritised siltstone, sandstone, common quartz veining, so	me hem veining				
	91.46	95.3	silicified or chloritised	Shear zone weathered & clays on shear surfaces					
-	95.3	99.11		Silicified chloritised sandstone & siltstone, shearing mainly a	along the bedding plane				
	99.11	102.2		Shear zone, clay-weathered shear surfaces, common quartz	Ü				
	102.2	109.68		Medium grained sandstone, widespread shearing & weathe	red shear surfaces				
	109.68	123.1	Chloritic HW	Shear zone in chloritised sandstone-siltstone, thin mylonite					
$\setminus$	123.1	128.61	Mylonitised mafics	Shear zone with common mylonitised mafics, short polymic	tic breccia zones with hematite in				
Л				the matrix, common quartz veins					
	128.62	129.42	HW shear breccia	Leached shear zone	Common native Cu &				
					chalcopyrite laminae				
	129.42	129.76		Breccia with mylonite clasts & silica plus hematite matrix	el				
	129.76	139	Hematite – jasper	Hematite matrix with primarily quartz & jasper, heavily	Clasts chalcopyrite 3%&				
/	420	1117	ironstone	sheared recemented in parts with red hematite & quartz	chalcocite ~3%				
	139	141.7		Hematite matrix with primarily quartz & jasper clasts sheared & recemented	Thin native Cu veins & blebs				
)	141.7	144		Major Void?					
$\perp$	141.7	163.28		Quartz & jasper clasts in hematite matrix, minor shearing,	Up to chalcocite 5% + trace				
	144	103.20		2% quartz & spec hem veining; common siderite veining	chalcopyrite (several % Cu				
				& vugs	mineralisation overall).				
- 1	163.28	163.5		Hematite matrix & brown, grey & black hematite clasts,	Fine hematite vein with ~30%				
				some magnetite	chalcocite.				
\	163.5	168.4		Jasper rich hematite matrix breccia, short shear zones	Some shears healed with				
Л					siderite & quartz-chalcocite 2%				
	168.4	173.4		Sheared jasper & polymictic breccia of quartz & red	Chalcopyrite 0.5%, chalcocite				
				jasper clasts with brown & black hem clasts, quartz	0.5%, Cu-ox on surfaces.				
_				matrix with common spec hem veining, drusy quartz					
-				shears.					
	173.4	177.25	Chloritic sheared FW	Chloritic shear zone with common mylonites & crush	Common fine chalcocite, native				
	477.05	100.6	2	zones,	Cu veins & laminae , (<3%).				
	177.25	180.6	Purple grey	Sheared purple grey (Fe) sandstone & siltstone, frequent th					
Į		EOH		shears with chlorite selvage, frequent short quartz stockwo	rks				

BBRC002	6 Summar	y Log			
From	То	Drill	Lith Zone	Lithology	
0	1	RC		Surface alluvial gravel	



1	9	RC	Saprolite	clayey mottled upper saprolite			
9	10	RC	HW	Quartz vein			
10	46	RC		Weathered red ferruginous siltstone & sandstone, common hematite veining, strong quartz veining at 9-10m, common kaolinite clay & quartz			
46	54	RC	Strongly hematised sandstone- siltstone	Slightly weathered clayey sandstone siltstone with large veins of matrix supported hematite breccia	51m: 50 counts at surface, up to 900 at 54m Increased radiation risk ==> cease dry RC drilling; change to diamond		
54.00	55.25	DD	Hematite ironstone	Ironstone breccia, black & specular hematite	Common manganese & copper oxides in fractures		
55.25	55.60	DD	Hematite ironstone	Sheared ironstone, specular & black hematite	e Trace copper mineralisation. (<1%).		
55.60	58.40	DD	Jasper	Silicified hematised brecciated siltstone	Trace copper mineralisation. (<1%).		
58.40	68.50	DD	Hematite ironstone	Ironstone hematite breccia	Trace copper mineralisation. (<1%).		
68.50	69.50	DD	FW breccia	Polymictic quartz - hematite breccia, copper	mineralisation.		
69.50	87.33	DD	hem-chlorite FW siltstone- sandstone	Slightly to mod hematised &/or chloritised siltstone & lesser sandstone, patchy breccia/shear zones; some quartz veins below 76m			
87.33	125.30	DD	(Hematised) FW siltstone- sandstone	Patchy weak hematite alteration, minor quartz veins with chlorite selvedges, shear breccia at 104-105.5m			

BBRC002	2 (With dia	mond Ta	il) Summary Log				
From	То	Drill	Zone	Lithology & alteration	Mineralisation		
0	2	RC		Loose red brown aeolian sand	,		
2	24	RC	Saprolite/Saprock	Strongly weathered hematitic saprolite			
24	75		HW	Partially weathered red & grey clayey fractured sandstone, siltstone, common hematite fragments & hematite on surfaces			
75	84	RC	HW: hematite - jasper altered siltstone/sandstone	Mod weathered hematite matrix breccia	-		
84	95			Slightly weathered siltstone & sandstone with thick jasper breccia bands	Common malachite, some visible chalcocite (<2%).		
95	106.2	RC	Intense ironstone alteration	Hematite ironstone & hematite breccia, some magnetite	-		
106.2	116.2	DD	Intense vuggy ironstone	Hematite ironstone & hematite breccia	0.5-1.5% Cu as chalcocite & disseminated. Cu-ox & Cu-ox on walls of vugs.		
116.2	124.4	DD	FW siltstone	Sheared, brecciated in part, oxidised in part			
124.4	134.6 EOH	DD	FW siltstone / sandstone	Ferruginous sandstone siltstone, chloritic in part, common quartz veining, common shearing			



### APPENDIX 2: Equivalent Copper (CuEq) Calculation

The conversion to equivalent copper (CuEq) grade must take into account the expected plant recovery/payability and sales price of each commodity in the calculation.

Approximate recoveries/payabilities are based on comparable deposits previously mined in the Tennant Creek mineral field, which are similar to the Bluebird discovery in terms of mineralogy.

The prices used in the calculation are based on spot market pricing for Cu, Au, Ag at the time of release sourced from the website kitcometals.com, whilst price estimates for Bi and Co are from other sources.

The table below shows the grades, process recoveries and factors used in the conversion of the poly metallic assay information into an equivalent Copper Equivalent (CuEq) grade percent.

Metal	Average grade	Average grade	Metal Prices			Recovery x payability	Factor	Factored Grade
-	(g/t)	(%)	\$/oz	\$/lb	\$/t	(%)	-	(CuEq%)
Cu	-	1.80	61	\$3.80	\$8,375	0.8	1.0000	1.797
Au	0.042	-	1,932	\$30,912	\$68,130,048	0.8	0.8135	0.0340
Ag	0.7	0.00	23	\$368	\$811,072	0.8	0.0097	0.006
Bi	=	201	\$12.57	\$27.70	\$27,700	0.8	3.3074	0.035
Со	47	0.00	240	\$15.00	\$33,060	0.8	0.0004	0.019
							CuEq	1.9

Using the factors calculated above the equation for calculating the Copper Equivalent (CuEq)% grade of the intersection of 20.4m @ 1.80% Cu, 0.04 g/t Au, 0.7 g/t Ag, 0.01% Bi, 47 g/t Co is:

 $CuEq\% = 1 \times Cu\% + 0.81 \times 0.04g/t \text{ Au} + 0.0097 \times 0.7g/t \text{ Ag} + 3.31 \times 0.01\% \text{ Bi} + 0.0004 \times 47g/t \text{ Co} = 1.9\% \text{ CuEq}$ 



# APPENDIX 3 JORC 2012 Edition - Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques  Drilling	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> <li>Drill type (e.g., core, reverse</li> </ul>	<ul> <li>Exploration results are based on industry best practices, including sampling, assay methods, and appropriate quality assurance quality control (QAQC) measures.</li> <li>In this report – only visual estimates from new drilling are new information. All assays results noted have been previously disclosed with reference to the relevant report noted in this report.</li> <li>Core samples (2023) are taken as half HQ3 core and sampled on nominal 1m intervals, with sampling breaks adjusted to geological boundaries where appropriate.</li> <li>Reverse Circulation (RC), 2023 program: RC drill chips were collected at 1m intervals via a cone splitter in pre-numbered calico bags. The quantity of sample was monitored by the geologist during drilling.</li> <li>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.</li> <li>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.</li> </ul>
techniques	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).	<ul> <li>sampling hammer, with holes drilled -60 degrees.</li> <li>Rotary mud (RM) drilling (2023) was completed with 126mm PCD hammer with holes drilled between -60 and -65 degrees.</li> <li>2023 Diamond drillholes were collared using RM or RC drilling and switched to HQ3 approximately 30m before the target position is intersected. All coordinates are quoted in GDA94 datum unless otherwise stated.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>RC sample recovery is monitored by the field geologist. Low sample recoveries are recorded on the drill log. The geologist is present during drilling to monitor the sample recovery process. There were no significant sample recovery issues encountered during the drilling program.</li> <li>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.</li> <li>The quality of diamond core samples is monitored by the logging of various geotechnical parameters, and logging of core recovery and competency.</li> </ul>
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	<ul> <li>All logging is completed according to industry best practice.</li> <li>RC chips are logged at 1m intervals using a representative sample of the drill chips. Logging records include lithology, alteration, mineralisation,</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>colour and structure.</li> <li>RM chips are logged at 2m intervals using a representative sample of the drill chips. Logging records include lithology, alteration, mineralisation and colour</li> <li>Detailed diamond drill-core information on lithology, sample quality, structure, geotechnical information, alteration and mineralisation are collected in a series of detailed self-validating logging templates.</li> </ul>
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique is considered adequate as per industry best practice.</li> <li>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.</li> <li>RC samples are dried at the laboratory and then pulverised to at least 85% passing 75 microns.</li> <li>RM samples were not analysed. A sample was retained for future interpretation.</li> <li>Core is cut using an Almonte automated core cutting saw. Half core is taken for sampling.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>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.</li> <li>Pulp sample(s) were digested with a mixture of four         Acids including Hydrofluoric, Nitric, Hydrochloric and         Perchloric Acids for a total digest.</li> <li>Analysis of 2023 RC drilling; Cu, Pb, Ag, Bi, Co Ni, Sb         have been determined by Inductively Coupled         Plasma (ICP) Mass Spectrometry (MS-OES).</li> <li>Analysis of 2023 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).</li> <li>Gold was analysed by Fire Assay with a 25g charge         and an ICP-MS finish with a 5ppb Au detection limit.</li> <li>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.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>All significant intercepts are reviewed and confirmed by at least two senior personnel before release to the market.</li> <li>No adjustments are made to the raw assay data.         Data is imported directly to DataShed in raw original format.     </li> <li>All data are validated using the QAQCR validation tool with DataShed. Visual validations are then carried out by senior staff members.</li> </ul>



Crit	teria	JORC Code explanation	Commentary
	ation of ta points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All drill hole collars were located initially with a hand-held GPS with an accuracy of +/-3m. At the completion of the drilling program all holes were surveyed by DGPS.</li> <li>Downhole surveys (2023 RC) were taken at 30m intervals using a Reflex single shot camera. The camera records azimuth and dip of hole.</li> <li>Downhole surveys for the 2023 diamond drilling were taken at 6-12m intervals by solid state gyro to maintain strong control of drill direction.</li> <li>Survey co-ordinates: GDA94 MGA Zone 53.</li> </ul>
	ta ucing and tribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Data spacing and distribution used to determine geological continuity is dependent on the deposit type and style under consideration. Where a minera resource is estimated, the appropriate data spacing, and density is decided and reported by the competent person.</li> <li>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.</li> </ul>
of a rela geo	entation data in ation to ological ucture	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>Orientation of sampling is as unbiased as possible based on the dominating mineralised structures and interpretation of the deposit geometry.</li> <li>If structure and geometry is not well understood, sampling is orientated to be perpendicular to the general strike of stratigraphy and/or regional structure.</li> </ul>
sec	mple curity	The measures taken to ensure sample security.	<ul> <li>All samples remain in the custody of company geologists and are fully supervised from point of field collection to laboratory drop-off.</li> </ul>
/	dits or iews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	None yet undertaken for this dataset



## JORC 2012 Edition - Section 2 Reporting of Exploration Results

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

Mineral tenement and land tenure status	JORC Code explanation	Commentary	
	<ul> <li>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.</li> <li>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.</li> </ul>	The Company holds 100% of 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.	<ul> <li>Several other parties have undertaken exploration in the area between the 1930s through to the present day including Posgold, Meteoric Resources and Blaze Resources.</li> </ul>	
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-north-west striking fault. The ironstone cross- cuts the sedimentary sequence that mostly comprises of siltstone.	
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul> <li>For drilling details of programs completed prior to Tennent Minerals control, such as the 2020 RC drilling program or earlier 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".</li> <li>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".</li> </ul>	
Data aggregatio n methods	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>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.</li> <li>No high-grade cut-offs are applied.</li> <li>A high gold 'nugget effect' may exist in some samples at the Bluebird deposit. In this report, a single sample has returned repeat analytical results with some variation. The mean of the test results for this interval has been chosen and reported here. The repeat tests for this sample are as follows:</li> </ul>	



Criteria	JORC Code explanation	Commentary
	reporting of metal equivalent values should be clearly stated.	
Relationshi p between mineralisati on widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>Mineralisation at Bluebird is interpreted to be striking east-west true azimuth with a dip of 70-80 degrees towards 180 degrees true azimuth.</li> <li>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.</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>Refer to Figures 2-3-4-5 for appropriate sections though the Bluebird mineralisation including pierce point locations. Figure 1 is a plan view location of the Bluebird prospect and Barkly Project. Figure 6 is a regional location plan.</li> </ul>
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 mislightlyeading reporting of Exploration Results.	<ul> <li>All background information is discussed in the announcement.</li> <li>Full drill results for copper and gold assays for drilling previous to 2021 are shown in Appendix 1 of the ASX announcement of 18 March 2020, "High-Grade Copper and Gold Intersected in Drilling program at Bluebird".</li> </ul>
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	<ul> <li>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Additional drilling is planned to define and extend the mineralisation locally and at targets near to Bluebird. Resource definition drilling will then be planned.</li> <li>Regional targeting will utilise modelling of gravity and a drone magnetic survey data as well as detailed IP resistivity survey data to drill target repeats of the high-grade Bluebird copper gold shoot within the 5km Bluebird Corridor.</li> </ul>