

55m Intensely Copper Mineralised Intersection at Bluebird

Latest drilling confirms width and intensity of copper mineralisation increasing to the west

-
- The first hole in the new diamond drilling program at the Bluebird copper-gold discovery near Tennant Creek (BBDD0012) has produced a **55m intersection of strong to intense hematite and copper mineralisation** (see Table 2 for description) from 155m downhole.
 - The intersection in **BBDD0012** is located **20m to the west and deeper than the previous thick and high-grade intersection returned from BBDD0009¹** of:
 - **50m @ 2.70% Cu, 0.52 g/t Au, 29.8 g/t Ag** from 158m (down hole) in BBDD0009¹,
 - including **24m @ 5.01% Cu, 1.01 g/t Au, 61.7 g/t Ag** from 159m,
 - including **5m @ 7.28% Cu, 1.29 g/t Au, 291 g/t Ag** from 165m, and,
 - including **4.3m @ 14.7% Cu, 3.10 g/t Au** from 176.6m.
 - The BBDD0012 intersection also confirms **the intense hematite and copper mineralisation is increasing in thickness with depth to the west at the Bluebird discovery**, and that the hole previously drilled on the same section (BBDD0010, see below) tested beneath the thickest part of the plunging high-grade copper-gold zone:
 - **35.5m @ 2.58% Cu and 0.27 g/t Au** from 194m (down hole) in BBDD0010²,
 - including **18m @ 4.74% Cu and 0.50 g/t Au** from 197m,
 - including **5m @ 6.53% Cu and 0.67 g/t Au** from 197m, and
 - including **5.6m @ 8.06% Cu and 0.84 g/t Au** from 205m.
 - Drill core is being logged and processed for submission to Intertek Laboratories in Alice Springs for sample preparation ahead of assaying in Townsville.
 - Drilling of the next diamond hole, BBDD0013, a further 20m to the west and deeper, down-plunge of BBDD0012, is in progress.
 - The latest results provide further confidence that Bluebird is a significant, high-grade copper-gold discovery within the highly-endowed Tennant Creek Mineral Field.
-

Tennant Minerals Chairman, Mr Matthew Driscoll, commented:

“Our latest follow-up diamond drilling program at the Bluebird copper-gold discovery is off to a tremendous start, with the first hole intersecting a 55 metre zone of intense hematite and copper mineralisation – a result which confirms our geological concept that the Bluebird mineralisation is getting thicker and more intense with greater depth to the west.”

“We look forward to completing the remaining holes in our latest, up to 4,500m diamond drilling program and turning around the assay results as quickly as we can.

“The Company is also eagerly anticipating the modelled results from the recently-completed drone magnetic survey flown over the entire 5km Bluebird corridor, which we will overlay with our gravity modelling to highlight the outstanding potential for additional copper-gold discoveries within our project boundaries.”

Tennant Minerals Limited (ASX: TMS) (“Tennant” or “the Company”) is pleased to announce that the first hole drilled in the follow-up, up to 4,500m diamond drilling program at the high-grade Bluebird copper-gold discovery has returned a **55m intersection of strong to intense hematite and copper mineralisation.**

Bluebird is located within the Company’s 100% owned Barkly Project, 45km east of Tennant Creek township in the Northern Territory, and at the eastern edge of the Tennant Creek Copper-Gold Mineral Field (see location, Figure 3).

This 55m intensely copper mineralised intersection was returned from diamond hole BBDD0012, which was drilled to test the targeted shallow westerly-plunging mineralised zone at Bluebird approximately 20m to the west and deeper (down plunge) than the previous thick and high-grade drill hit in BBDD0009¹, which intersected:

- **50m @ 2.70% Cu, 0.52 g/t Au, 29.8 g/t Ag** from 158m (down hole)
 - including **24m @ 5.01% Cu, 1.01 g/t Au, 61.7 g/t Ag** from 159m,
 - including **5m @ 7.28% Cu, 1.29 g/t Au, 291 g/t Ag** from 165m and
 - including **4.3m @ 14.7% Cu, 3.10 g/t Au** from 176.6m.

BBDD0012, intersected the hanging wall alteration zone of chlorite and patchy-to-pervasive hematite alteration from 135m down hole. It then **intersected the zone of intense hematite alteration with malachite (copper-carbonate), blebs of native copper and chalcocite from 155m and continued in this zone of intense mineralisation for 55m to 210m down hole** (see cross section 448,360mE, Figure 1). Further hematite-jasper (quartz) alteration continues to approximately 219m down hole (84m of hematite alteration), and the drillhole was terminated at 229m (see Table 2 for visual description of mineralisation).

The intersection of 84m of alteration in BBDD0012, including the 55m zone of intense hematite and copper mineralisation, **indicates the Bluebird mineralisation is thickening and becoming more intense with depth, down-plunge to the west** (see longitudinal projection, Figure 2). The previous intersection on this section in BBDD0010 (**35.5m @ 2.58% Cu and 0.27 g/t Au** from 194m, including **18m @ 4.74% Cu and 0.50 g/t Au** from 197m²), tested beneath the thickest part of the plunging shoot intersected by BBDD0012.

Significantly, a previous reverse circulation hole drilled on this section (BBRC019) was abandoned in 3.9 g/t Au, 4.8% Cu at end of hole after intersecting **15m @ 3.46% Cu, 0.61g/t Au** from 172m³.

Drilling of the next diamond hole in the current program, BBDD0013, is in progress, testing a further 20m to the west and down plunge from BBDD0012. This hole is also targeting the centre of the intensely-mineralised Bluebird zone (see Figure 2).

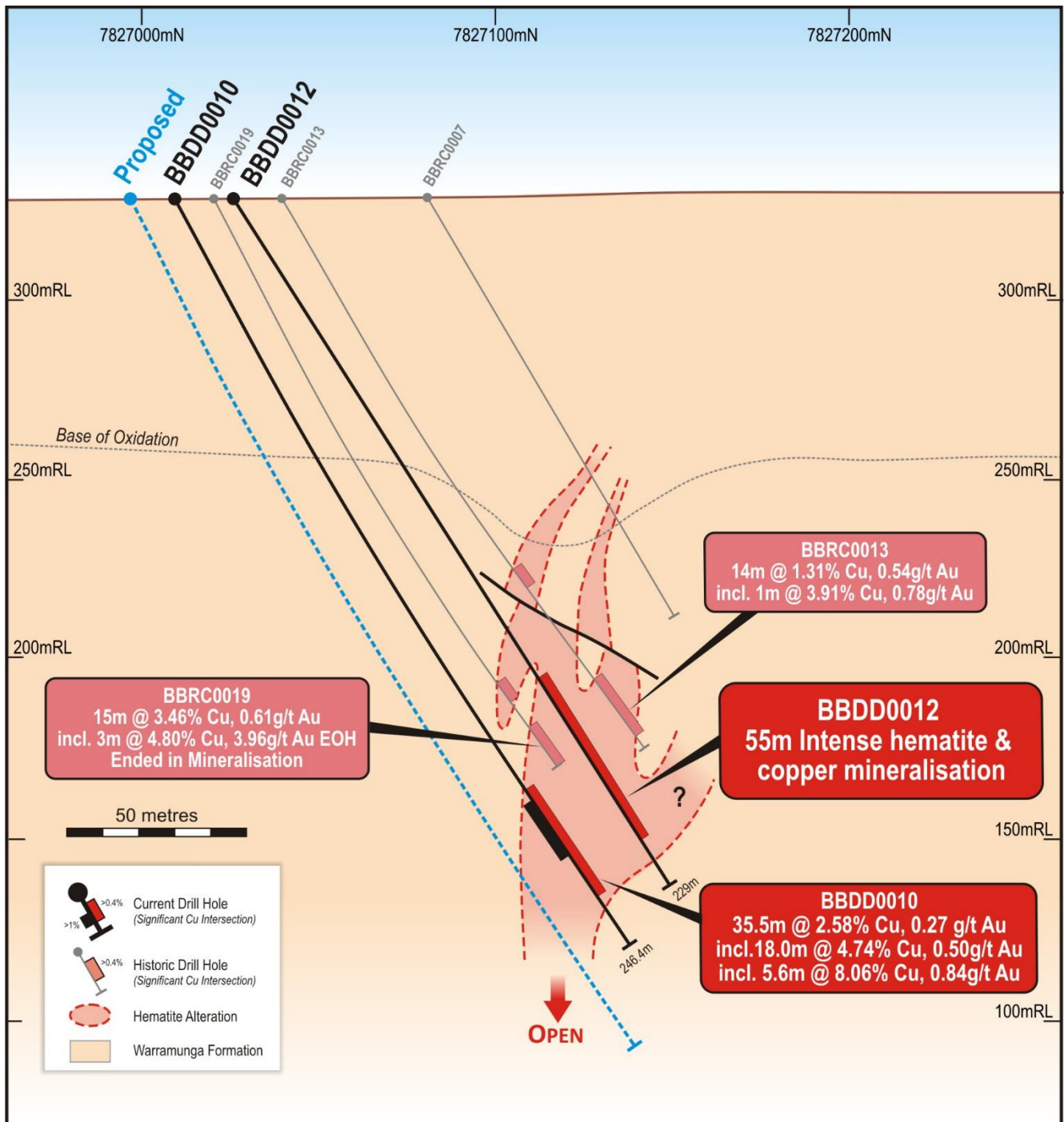


Figure 1: Cross-section 448,360mE with new BBDD0012 intersection and previous BBDD0010 drill-hit

The New Diamond Drilling Program:

Drilling to date at Bluebird has only tested the mineralisation from 100m to just over 200m vertical depth, and over a 150m strike length (see Figure 2). The deposit remains open to the west, as well as both up and down dip.

The previous late 2021 drilling program, consisting of five diamond drillholes, was the first program to test the entire thickness of the mineralised zone and included the **50.0m @ 2.70% Cu, 0.52 g/t Au, 29.8 g/t Ag** from 158m intersected by BBDD0009¹. A further two diamond drillholes, BBDD0010 and BBDD0011, were drilled to the west and down plunge of BBDD0009 and produced significant but slightly narrower copper-gold intersections, interpreted to be beneath the thickest part of the plunging copper-gold zone (see longitudinal projection, Figure 2 and cross sections, Figures 5 and 6).

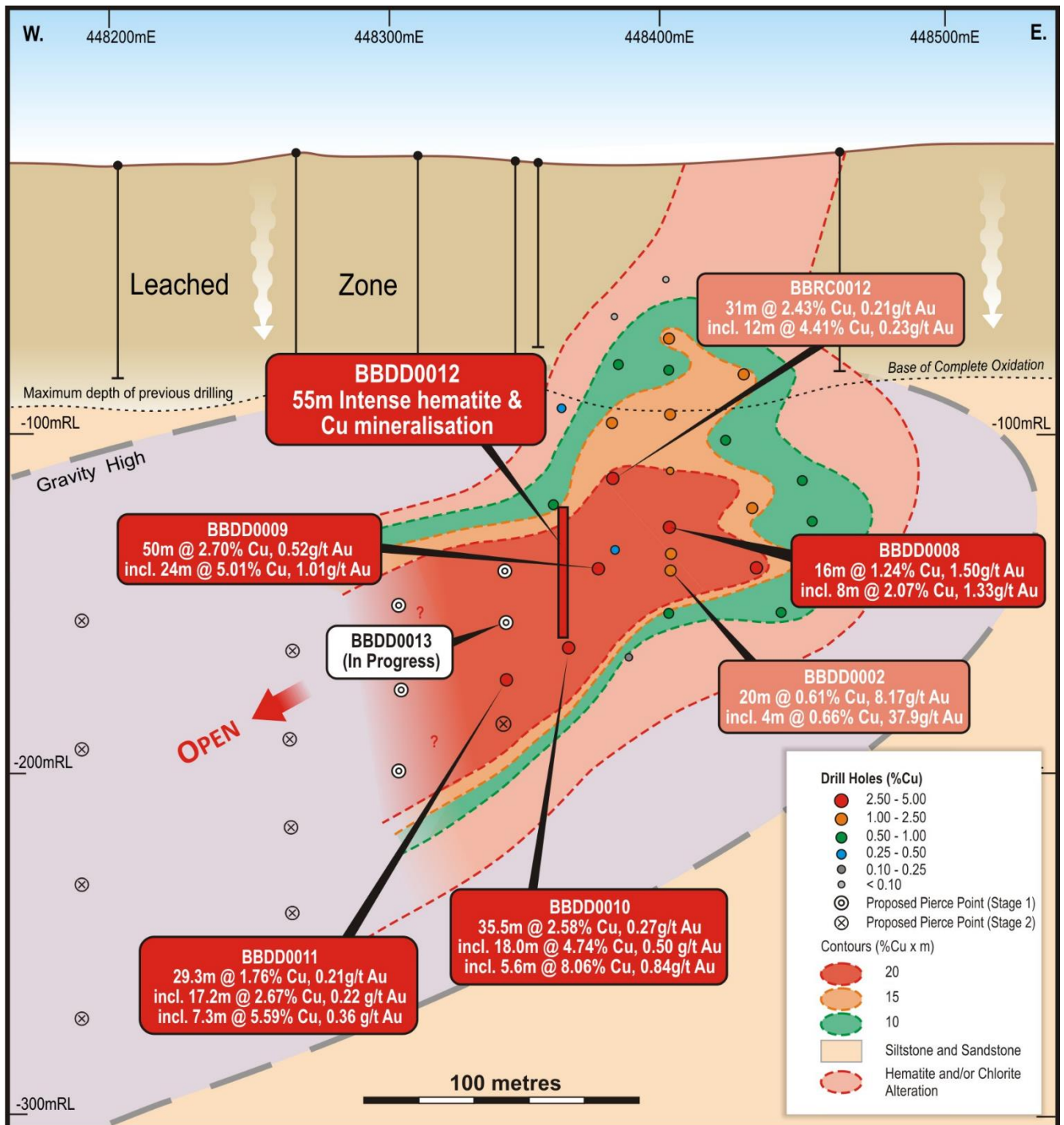


Figure 2: Bluebird longitudinal projection with previous high-grade copper-gold hits and BBDD0012 intersection

The current program at Bluebird (see drilling rig in action, Photo 1 below), is designed to scope out and expand the footprint of the high-grade copper-gold mineralisation in two stages, totalling up to 4,500m of diamond drilling (see proposed pierce points on longitudinal projection, Figure 2) comprising:

- The **Stage 1 diamond drilling program of 6 holes for up to 1,500m⁴** targeting the central thickest part of the shallow, westerly plunging copper-gold shoot - immediately down plunge from the previously reported thick and high-grade intersections^{1,2}, and,
- a **Stage 2 diamond drilling program of 10 step-out holes for up to 3,000m⁴** designed to significantly expand the footprint of the Bluebird discovery to over 300m strike length and 300m vertical depth (see longitudinal projection, Figure 2).

The current drilling program is designed to expand the scoped dimensions of the deposit to a scale that is similar to other major copper-gold deposits in the Tennant Creek Mineral Field. These include the **Peko** deposit, located 20km to the west of Bluebird, which produced **147,000 tonnes of copper grading 4% Cu** and **414,000oz of gold at 10 g/t Au** between 1934 and 1981⁵ (see Figure 3).



Photo 1: Titeline Drilling diamond drilling rig on the BBDD0012 site at the Bluebird Copper-Gold discovery

ABOUT THE BARKLY PROJECT AND THE BLUEBIRD COPPER-GOLD DISCOVERY

The Bluebird discovery is within the Company's 100%-owned Barkly Copper-Gold Project, located approximately 45km east of Tennant Creek, and comprising two Exploration Licences: EL 28620 (**Barkly Prospect**) and EL 30701 (**Babbler Prospect**) (Figure 3).

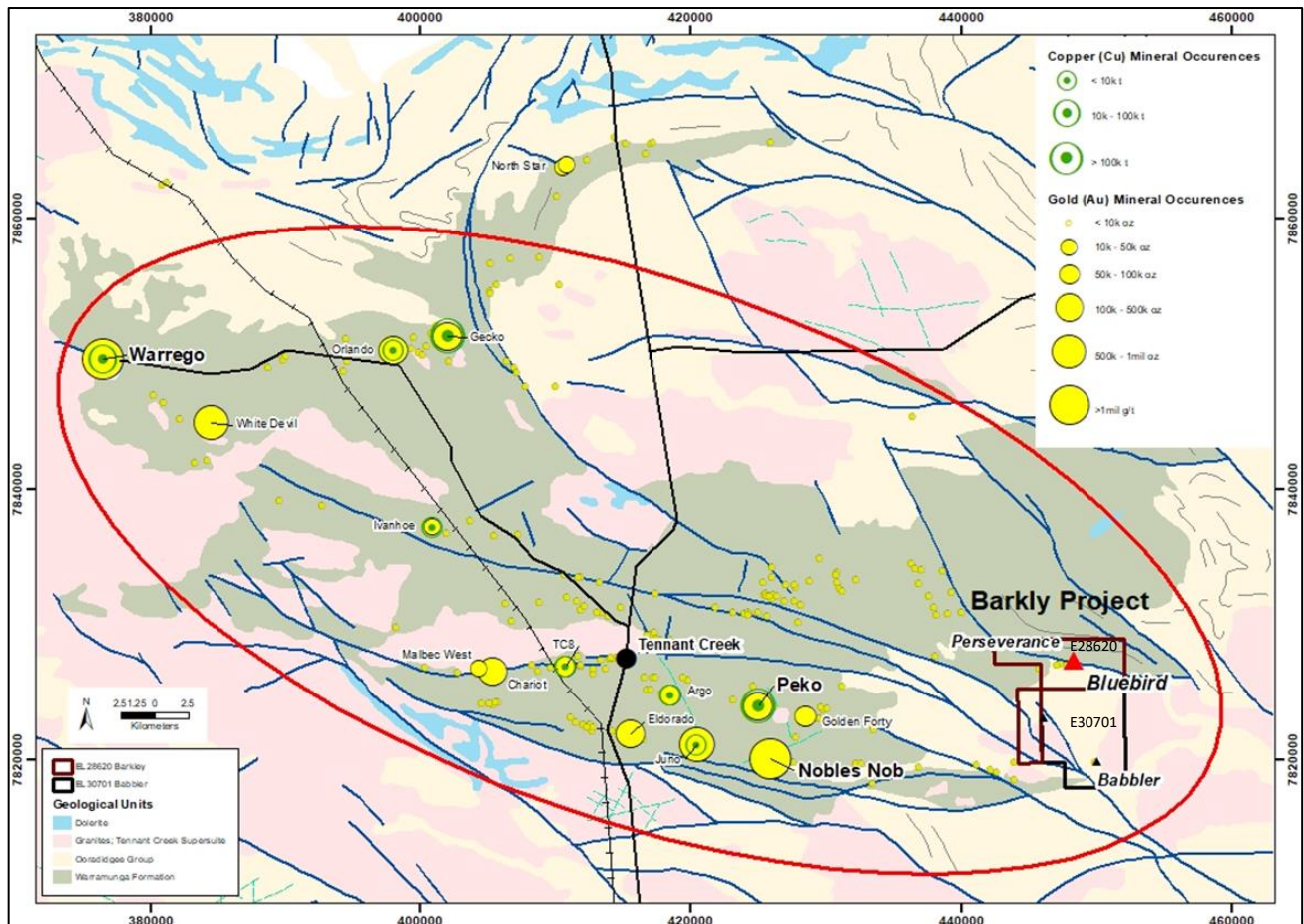


Figure 3: Location of the Barkly Project and major historical mines in the Tennant Creek Mineral Field

Regional Setting:

The Barkly and Babbler tenements are both considered highly prospective for magnetite-hematite hosted copper-gold mineralisation, similar to other major deposits found elsewhere in the Tennant Creek Mineral Field such as the **Peko deposit** (Figure 3), only 20km to the west of the Barkly Project, that produced **147,000 tonnes of 4% Cu and 414Koz at 10 g/t Au** between 1934 and 1981⁴.

The high-grade Bluebird copper-gold discovery is associated with a gravity high, that is part of a 5km long gravity anomaly or “ridge” (see Figure 4 below). The gravity anomaly reflects high-density, indicating widespread iron enrichment in the primary zone below the near surface leaching that penetrates to >80m depth at Bluebird.

Detailed gravity modelling indicates that the high-density zone associated with iron enrichment extends strongly to the west of Bluebird, potentially linking with the Perseverance historical gold workings, 1.5km to the west, (Figures 3 and 4), where previous drilling produced shallow high-grade gold intersections such as **3m @ 50.0 g/t Au from 42m in PERC015²** and **3m @ 43.2 g/t Au from 72m in PERC001⁶**.

Previous ground magnetics indicate that Bluebird is associated with a bullseye magnetic anomaly. The Company has identified another 12 magnetic features along the 5km gravity trend (see gravity image, Figure 4) that have not been effectively tested. In order to better define these magnetic anomalies, the Company completed a high-resolution drone magnetics survey over the entire 5km Bluebird gravity corridor in April/May 2022.

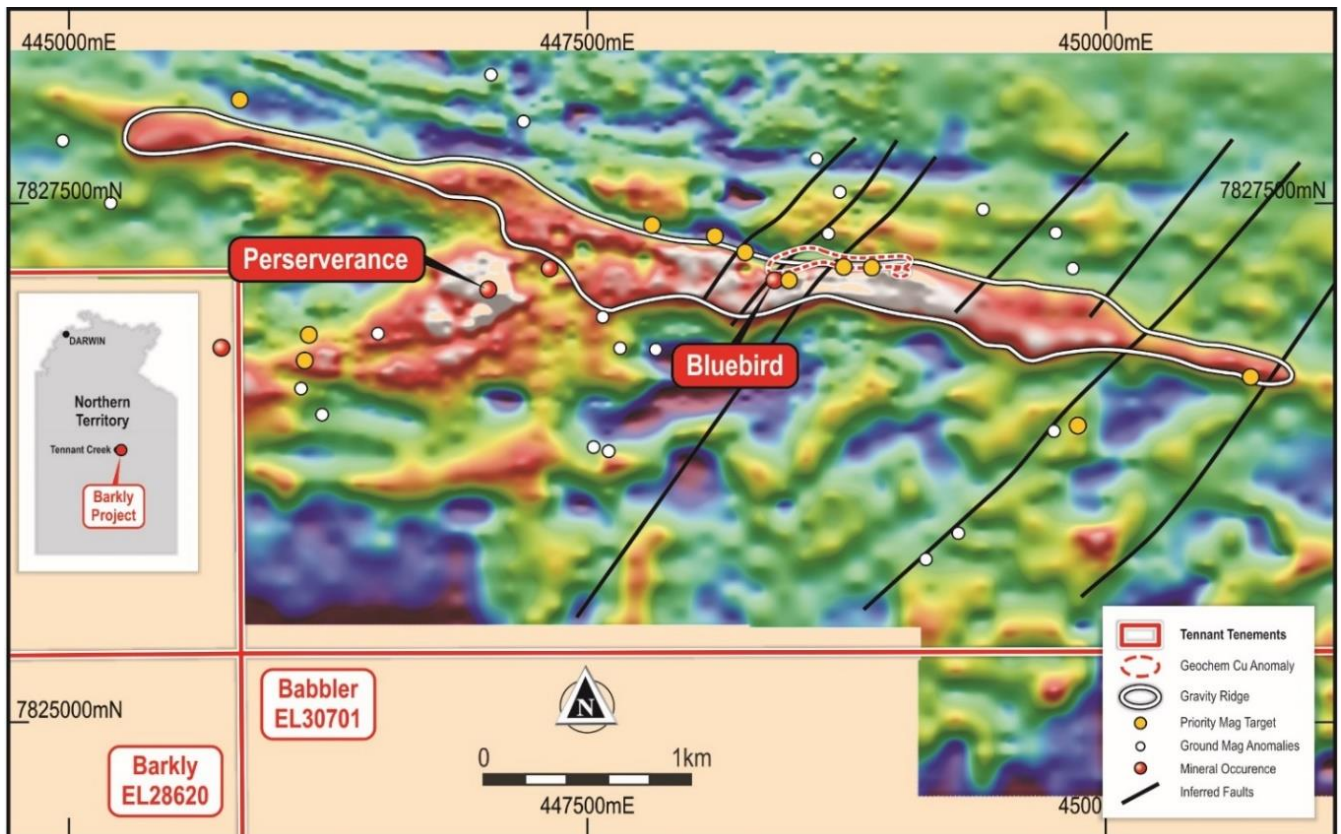


Figure 4: Bouguer 1VD gravity image with Bluebird Prospect and magnetic targets along the 5km Bluebird Corridor

This drone magnetics survey was completed in April 2022 and processing of data has been finalised by the operators, Drone Geoscience. Modelling and imaging by Southern Geoscience (SGC), in progress, is expected to better define key drilling targets for the discovery of additional copper-gold deposits within this highly prospective corridor.

Previous Drilling Programs:

The recently completed diamond drilling program at the **Bluebird** prospect^{1,2} included five diamond drillholes for a total of 1,048m of drilling. The program successfully tested the entire, greater than 50m, thickness of high-grade copper-gold mineralisation, as well as intersecting down-dip/plunge extensions of the zone that remains open at depth and to the west (see longitudinal projection, Figure 2).

The drilling followed-up previous high-grade intersections from the November 2020 RC drilling program⁷, when the Company undertook an initial exploration drilling campaign at the Barkly Project of seven drill holes for a total of approximately 1,170m.

Significant intersections from the 2020 program included:

BBRC0015	20m @ 1.67% Cu, 1.79g/t Au from 156m, incl. 10m @ 2.32% Cu, 2.87 g/t Au⁷
BBRC0019	15m @ 3.46% Cu, 0.61g/t Au from 172m, incl. 4m @ 6.28% Cu, 0.24g/t Au from 175m and 1m @ 4.80% Cu, 3.95g/t Au from 186 (finishing in mineralisation, Figure 5)⁷

The 2020 RC holes were drilled to in-fill and extend previous RC and diamond drilling completed in 2014⁶, that intersected high-grade copper-gold mineralisation within an ironstone unit on a west-northwest trending, steeply south dipping, fault zone and produced several very high-grade intersections, including:

BBDD0004:	16m at 3.02% Cu, 0.65g/t Au from 139m, incl. 4m at 6.49% Cu, 0.74g/t Au⁷
BBRC0012:	31m at 2.48% Cu, 0.21g/t Au from 116m incl. 12m at 4.41% Cu, 0.23g/t Au⁷
BBDD-2:	20m at 0.61% Cu, 8.17g/t Au, from 157m incl. 0.66% Cu, 4m at 37.9g/t Au⁸

Significantly, drill hole BBRC0019⁷, drilled below BBRC013, which was previously the deepest and most westerly hole drilled at Bluebird⁷, intersected strongly hematite altered siltstone and ironstone from 172m to 187m but was abandoned at that depth due to in-hole caving and ended in high-grade copper-gold mineralisation, with **the last metre assaying 4.81% Cu and 3.9 g/t Au⁷**.

The recently completed diamond drilling program at Bluebird tested the entire thickness of the mineralised zone at Bluebird, with BBDD0009 intersecting **50.0m @ 2.70% Cu, 0.52 g/t Au, 29.8 g/t Ag** from 158m¹ (see Figure 5 below) and BBDD0010, intersecting **35.5m @ 2.58% Cu, 0.27 g/t Au** from 194m² below BBRC0019 (Figure 1).

The deepest hole of the recent program, BBDD0011, a step-out of 30m down plunge, intersected **29.3m @ 1.76% Cu and 0.21 g/t Au** from 195.7m, which is open, up and down dip (see cross section, Figure 6, below) as well as down plunge to the west² (Figure 2).

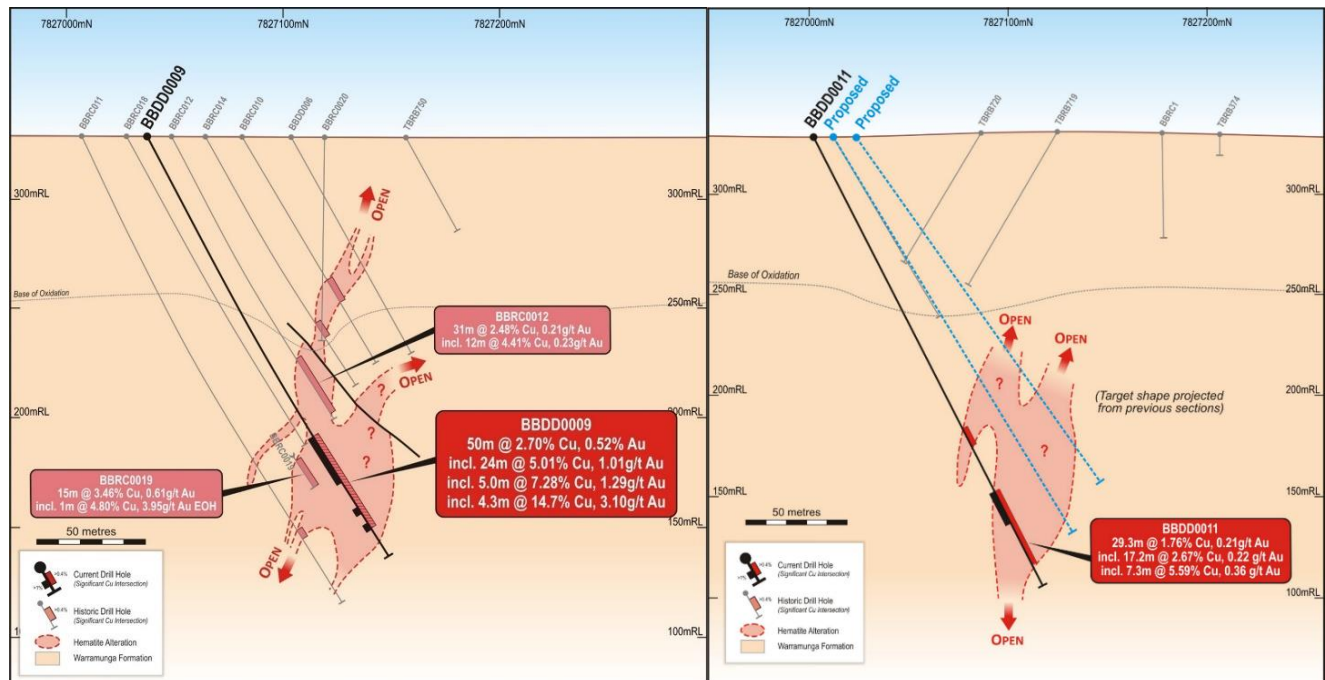


Figure 5: Cross-section 448,380mE with BBDD0009

Figure 6: Cross-section 448,340mE with BBDD0011

Table 1 includes drillhole details to date.

Table 2 includes descriptions of the mineralisation intersected in BBDD0012.

Appendix 1 is JORC Table 1, Sections 1 and 2.

REFERENCES

- ¹ 08 March 2022. Tennant Minerals (ASX. TMS): "Spectacular 50m @ 2.70% copper intersection at Bluebird".
- ² 15 March 2022. Tennant Minerals (ASX. TMS): "More Exceptional Copper Intersections from Bluebird".
- ³ 24 September 2019. Blina Minerals (ASX: BDI): "Strategic Acquisition of High-Grade Gold-Copper Project".
- ⁴ 24 March 2022. Tennant Minerals (ASX. TMS): "Exploration Fast-Tracker at Bluebird Copper-Gold Discovery".
- ⁵ Portergeo.com.au/database/mineinfo. Tennant Creek - Gecko, Warrego, White Devil, Nobles Nob, Juno, Peko, Argo.
- ⁶ Feb 1995, Posgold. Final Report for Exploration Licence 7693 for the Period 2/6/92 to 25/11/94. NTGS Report CR19950192.
- ⁷ 18 March 2020. Blina Minerals (ASX: BDI): "High-Grade Copper and Gold Intersected in Drilling program at Bluebird".
- ⁸ 09 December 2014. Blaze International Ltd (ASX: BLZ): "High Grade Copper Sulphide Intersection at Bluebird".

*****ENDS*****

This release was authorised by the Board of Tennant Minerals Ltd.

For enquiries please contact:

Matthew Driscoll
Non-Executive Chairman
M: +61 417 041 725

Stuart Usher
Company Secretary
M: +61 499 900 044

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 or reviewed by Mr Nick Burn who is Exploration Manager for Tennant Minerals Ltd and a member of the Australian Institute of Geoscientists. Mr Burn has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Burn consents to the inclusion in the report of the matters based on his 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 and specifically dated 09 December 2014, 24 September 2019, 18 March 2020, 06 December 2021, 13 December 2021, 21 December 2021, 8 March 2022, 15 March 2022, 24 March 2022, 4 April 2022 and 13 May 2022. 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.

Table 1: Drilling details, current program to date:

Hole #	Dip°	Azi_Grid°	GRID_E	GRID_N	RL	Mud-rotary (m)	DDC (m)	Total Depth (m)
BBDD012	-60	0	448,360	7,827,032	332	86.7	142	228.7
BBDD013	-65	0	448,340	7,827,052	332			In progress
Total						86.7	142	228.7

Table 2. Descriptions and visual estimates of abundances of mineralisation intersected:

0	86.7	Rotary PCD precollar	
HQ diamond core			
From	to	Alteration	Mineralisation
86.7	133.6m	Purple metasiltstone, steep layering sub-parallel to core, irregular steep qtz veining; slightly disrupted in part; patchy weak chloritic alteration towards base.	No significant mineralisation
133.6	135.2	Chloritic alteration, weak, pervasive, some brecciation.	Hanging wall alteration zone, no significant mineralisation.
135.2	137.4	Stronger patchy to pervasive hematite alteration.	Moderate Chlorite alteration, 25% Hematite. Minor malachite on fracture coatings up to 1%.
137.4	150.8	Stronger chloritic alteration, brecciated, minor brecciated qtz stockwork.	
150.8	155	Moderate chloritic alteration, weak brecciation in part, some weak-moderate hematite alteration, some silicification & strong brecciated qtz stockwork.	
155	161	Moderate chloritic alteration, weak brecciation in part, some weak-moderate hematite alteration, some silicification & strong brecciated qtz stockwork.	Fracture coating malachite 2 to 5% and blebs of native copper in parts 0 to 5%.
161	164.4	Strong pervasive bleaching/silicification, brecciation & hematite infilled stockwork.	
164.4	192	Thick intersection of strong to intense hematite alteration together with (secondary?) magnetite.	Main zone of hematite up to 50% and copper mineralisation. Scattered green malachite on fracture coatings 5% - 10%, blebs of native copper 0 to 10% and/or fine-grained chalcocite 0 to 10%.
192	210	Quartz (jasper) breccia predominant together with minor hematite-altered siltstone.	Minor malachite on fractures coatings, ~2 to 5%
210	219	Weak to moderate chloritic alteration	Minor fine grained pyrite, tr chalcocite.
219	228.7	Purple metasiltstone	No mineralisation

Cautionary note regarding visual estimates:

In relation to the disclosure of visual mineralisation in the table above, 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.

APPENDIX 1

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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Exploration results are based on industry best practices, including sampling, assay methods, and appropriate quality assurance quality control (QAQC) measures. Core samples (2021) 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 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. 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	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> RC drilling (2020) was conducted using a 5¹/₄" face sampling hammer, with holes drilled -60 degrees. Rotary mud (RM) drilling (2021-22) was completed with 126mm PCD hammer with holes drilled between -60 and -65 degrees. 2021-22 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 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.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> The quality of diamond core samples is monitored by the logging of various geotechnical parameters, and logging of core recovery and competency.
Logging	<ul style="list-style-type: none"> <i>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.</i> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> 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 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 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

Criteria	JORC Code explanation	Commentary
		<p>have been determined by Inductively Coupled Plasma (ICP) Mass Spectrometry (MS-OES).</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>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.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> 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 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	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> <i>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.</i> <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>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</i> 	<ul style="list-style-type: none"> 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
	<i>material.</i>	
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> 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.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are 	<ul style="list-style-type: none"> All exploration results are reported by a length weighted average. This ensures that short lengths of high-grade material receive

Criteria	JORC Code explanation	Commentary
	<p><i>usually Material and should be stated.</i></p> <ul style="list-style-type: none"> 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. 	<p>less weighting than longer lengths of low-grade material.</p> <ul style="list-style-type: none"> No high-grade cut-offs are applied
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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'). 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to Figures 1, 5 and 6 for appropriate sections though the Bluebird mineralisation including pierce point locations, and Figures 2 and 3, plan views showing location of the Bluebird prospect and Barkly Project respectively.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No other data is material to this report.
Further work	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Additional drilling is planned to extend mineralisation along strike and in particular to the west of BBDD011. Regional targeting including modelling of gravity and a drone magnetic survey will be carried out to drill target repeats of the high-grade Bluebird copper gold shoot within the 5km Bluebird Corridor.