Highly-Prospective Mineralised Structures Intersected in Bluebird-Perseverance Corridor

Further Drilling to Target Ironstone Hosted Copper-Gold Mineralisation at Depth

- **Initial drill testing of three key targets, outside Bluebird, within the highly prospective 2.5km Bluebird-Perseverance Target Zone has intersected mineralised and brecciated fault structures in all three target areas. These are interpreted to lie above iron-stone hosted copper-gold targets previously identified by gravity, magnetic and Induced Polarisation (IP) low resistivity geophysics.**

- **At the Perseverance North target, drilling has intersected major fault zones with haematite-breccia (see Image 1 below) and mineralisation above a strong IP low-resistivity (high-conductivity) anomaly. This target is analogous to the IP low-resistivity zone associated with the Bluebird discovery, which has produced spectacular copper-gold results including 50m @ 2.7% Cu[1] and 63m @ 2.1% Cu and 4.6 g/t Au[2], with results to come from the recent drilling campaign.**

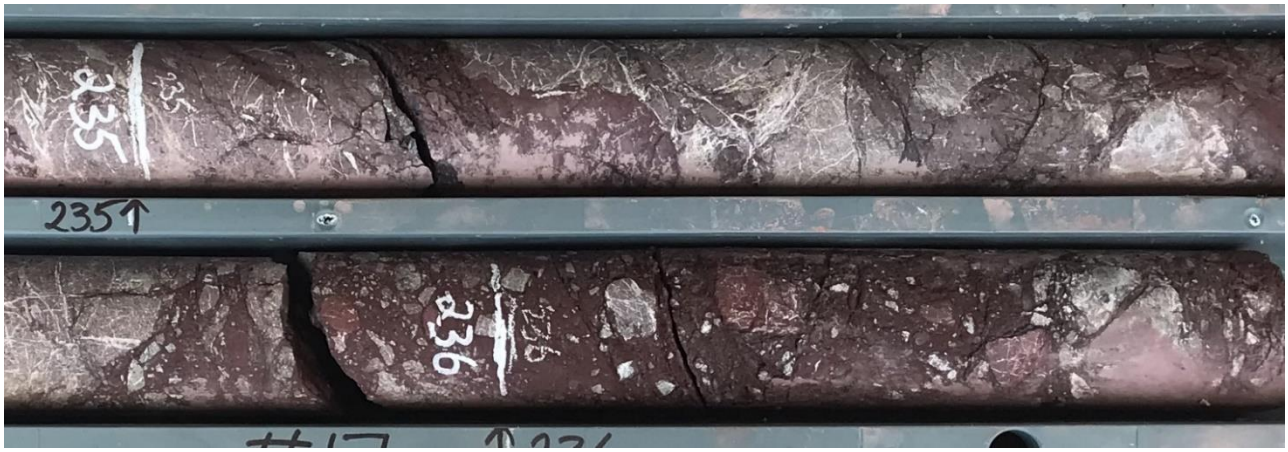

Image 1: Mineralised haematite-breccia in fault zone at Perseverance North, PNDD002, 235 - 236m downhole

- **At the Perseverance target, two drillholes testing below the historic high-grade gold mine workings (where previous results include 3m @ 50.0 g/t Au in PERC015[3] and 3m @ 43.2 g/t Au in PERC001[3]) intersected the hanging wall structure associated with the gold mineralisation before passing into a 20-40m zone with haematite alteration and potentially copper mineralisation.**

- **At the Bluebird West target, haematite altered mineralised structures have also been intersected, associated with an IP low-resistivity (high-conductivity) anomaly analogous to the IP low resistivity zone associated with the Bluebird discovery.**

- **New IP surveys will focus on extensions of these key targets within the Bluebird-Perseverance Target Zone as well as extensions of the Bluebird mineralisation to the east and west.**

- **A fresh drilling program will commence as soon as possible to test for high-grade copper-gold mineralisation within these three new highly prospective target zones, in addition to further drill testing of the Bluebird discovery which remains completely open to the east, west and at depth.**

Tennant Minerals Chairman Matt Driscoll commented:

"We are delighted that the latest drilling into key target zones outside Bluebird within the Bluebird-Perseverance Corridor has intersected multiple, mineralised, haematite breccia structures.

"These results reinforce our belief that the Bluebird discovery – which has produced spectacular results including 50m @ 2.7% copper and 63m @ 2.1% copper and 4.6 g/t gold – is just one of several high-grade copper-gold deposits within the Bluebird-Perseverance Target Zone.

"Our further IP programs and follow-up drilling will also help determine whether we are dealing with a major copper-gold project with potential to become a stand-alone mining and processing operation."

Tennant Minerals Ltd (**ASX:TMS**) is pleased to announce that drill-testing of priority geophysical targets west of Bluebird in the **"Bluebird-Perseverance Target Zone"[4]** (see Figure 1) **has intersected multiple new zones of mineralised and haematite-altered breccias, interpreted to lie above ironstone-hosted copper-gold deposits.**

Three, priority, coincident magnetic, gravity and induced polarisation (IP) low-resistivity targets were selected for initial drill-testing, including **Perseverance North**, **Perseverance** and **Bluebird West** (see Figure 1 below). A multi-purpose (DDH1) rig was utilised to complete eight reverse-circulation (RC) holes with six diamond tails completed, for a total of 1981.1m.

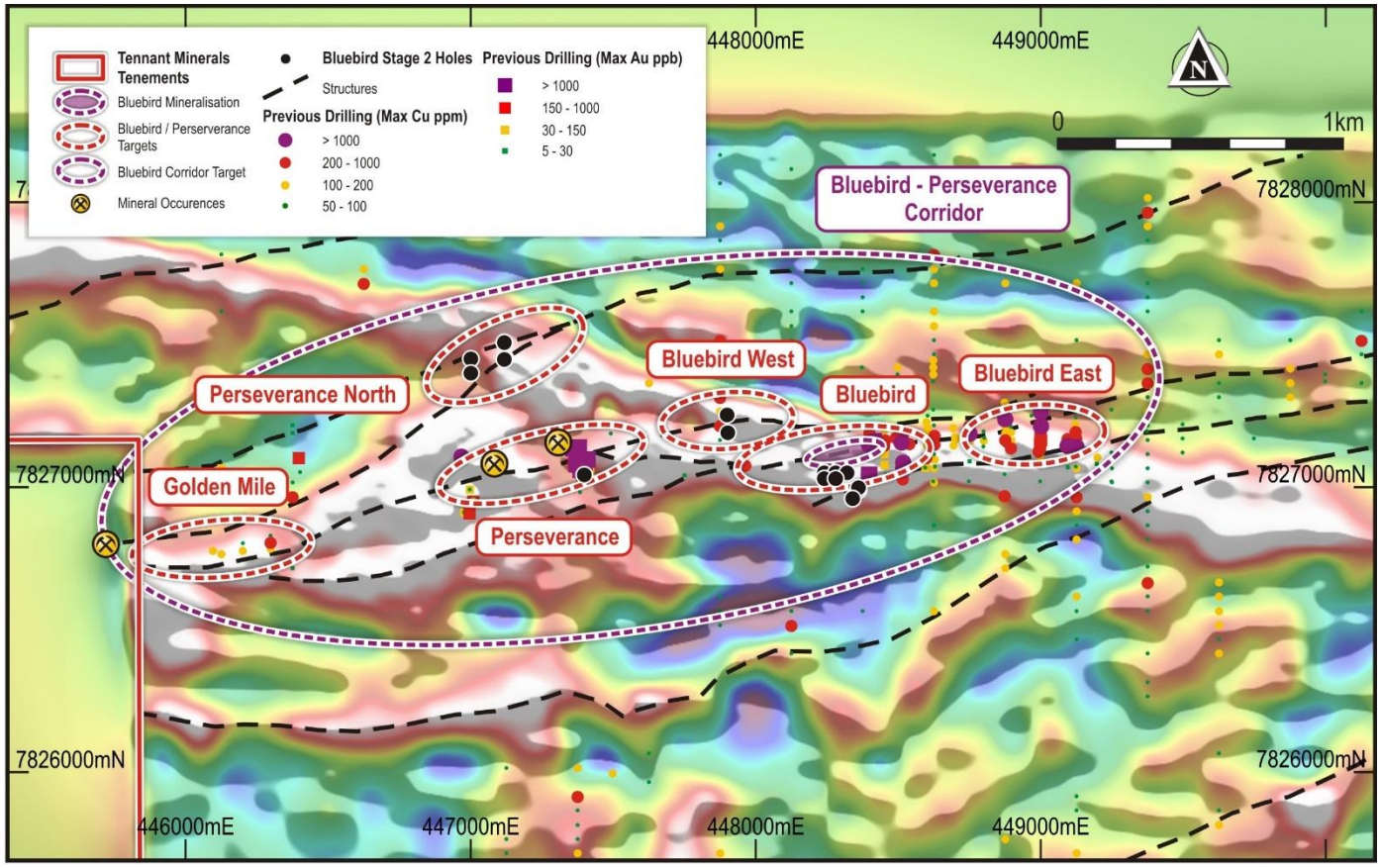

Figure 1: Bluebird-Perseverance zone bouguer gravity image with structures & gravity-magnetic-IP resistivity targets.

Perseverance North Target, strongly brecciated, haematite-altered structures intersected:

The first new target tested was **Perseverance North** (Figure 1), where drilling tested a coincident gravity and reversely polarised magnetic zone associated with a low resistivity/high-conductivity IP anomaly (see cross section 447,700mE, Figure 2, below). This is indicative of a mineralised structure by analogy with the low-resistivity anomaly associated with the high-grade Bluebird copper-gold discovery (see Bluebird cross section 448,360mE, Figure 3, also below).

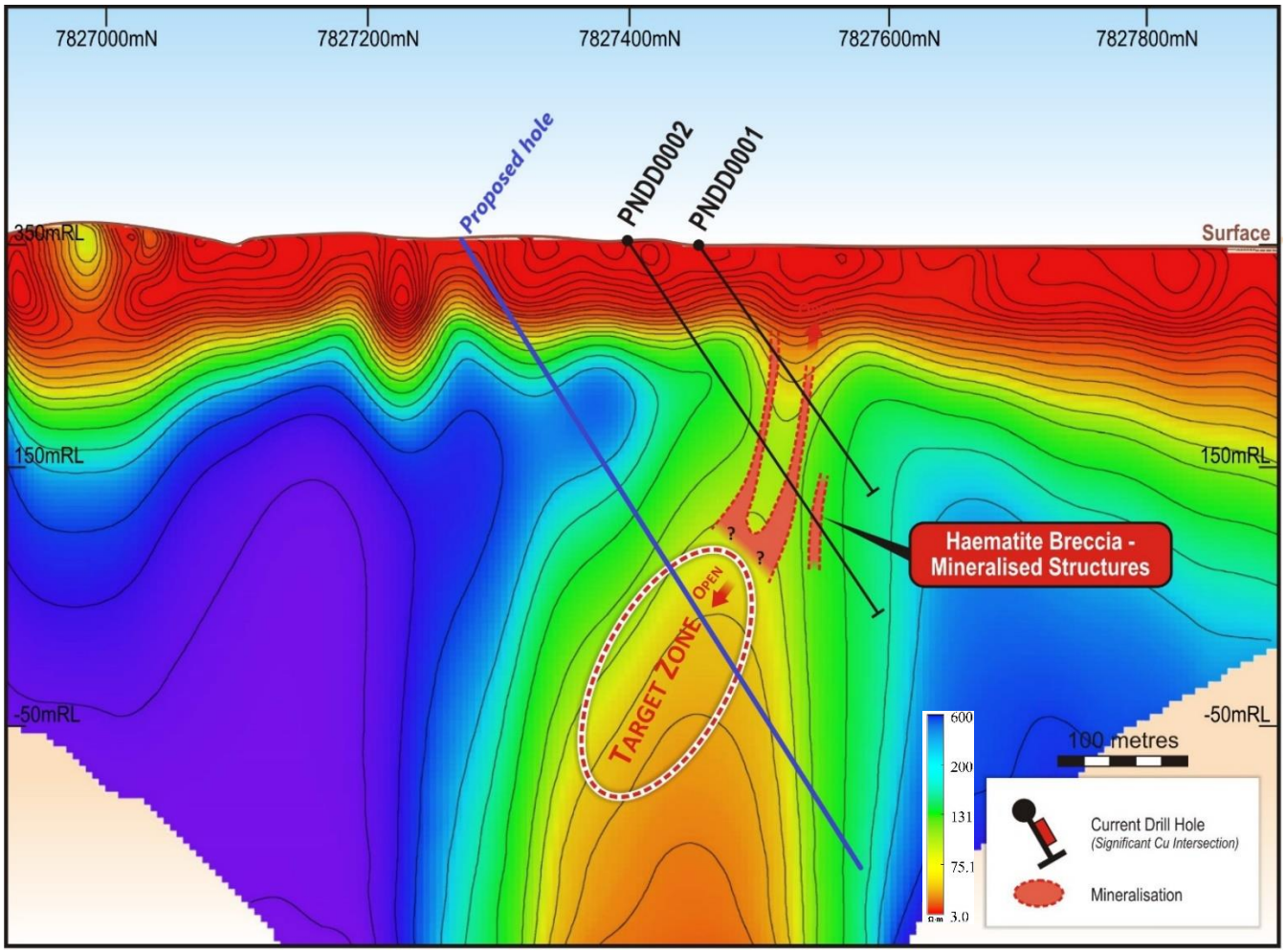

Figure 2: Perseverance North IP reversed colour resistivity image (high-conductivity) and new drilling, 447,700mE

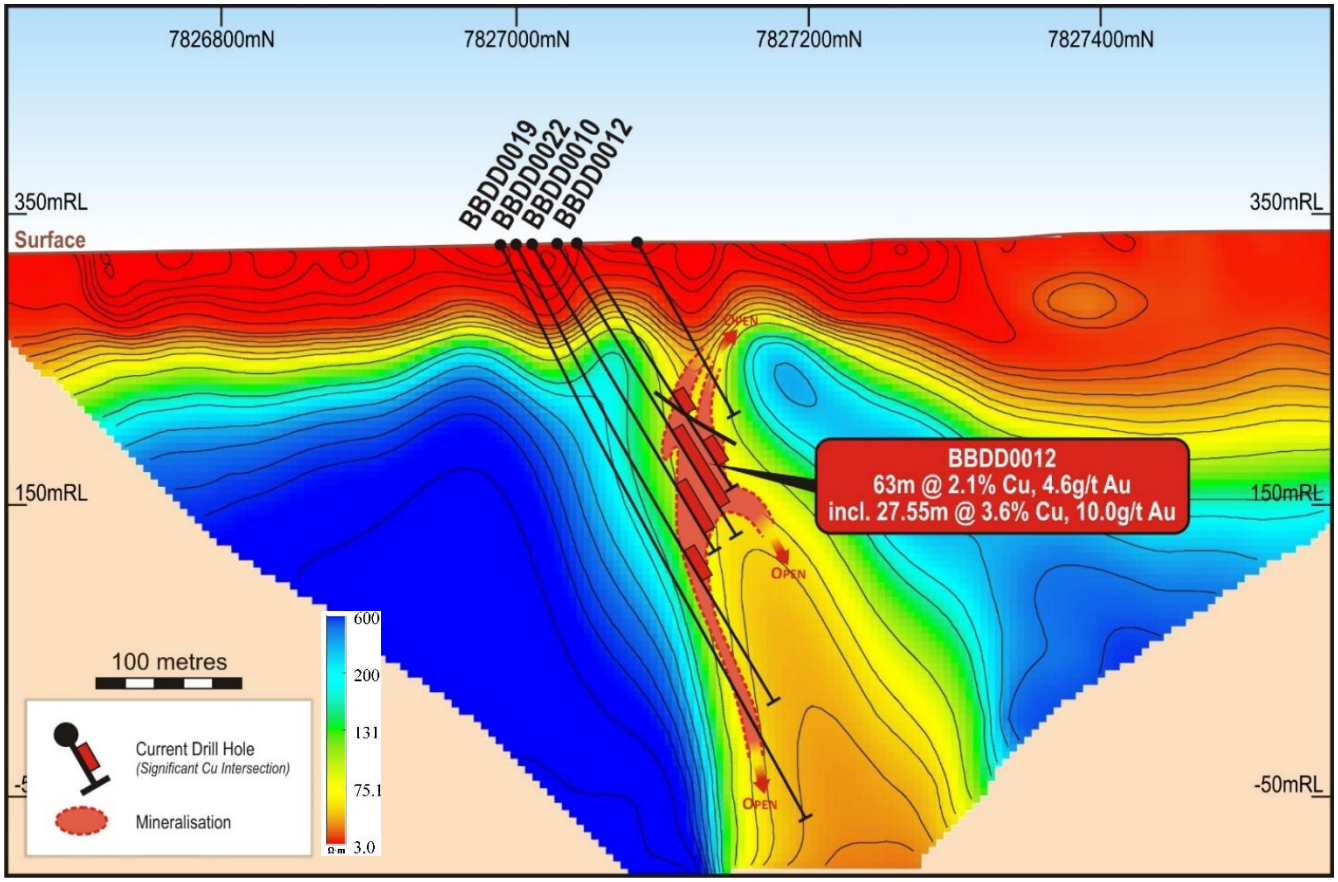

Figure 3: Bluebird IP reversed colour resistivity image (high-conductivity) and drilling section 448,360mE

Two pre-collared diamond drillholes tested across the IP anomaly, **intersecting strongly brecciated, haematite-altered breccia lodes/structures** from 225m to 240m (15m) downhole (see Image 1) and from 261m to 268m downhole. The haematite breccia structures correlate with the upper part of the low-resistivity zone detected by the IP survey (Figure 2).

The geophysical pattern observed at Perseverance North is very similar to the Bluebird discovery (Figure 3). The **haematite breccia lodes intersected by PNDD0002 are interpreted to lie above potentially copper-gold mineralised ironstone**, as indicated by the gravity anomaly and the thickening low-resistivity zone at depth (Figure 2).

Further IP geophysics will be carried out along strike to the east and west of the central section tested at Perseverance North to map out the low resistivity mineralised structure. **Modelling of the IP results, as well as inversion depth modelling of the gravity and magnetic data, will allow the Company to refine targets for further drilling to locate the potential copper-gold mineralised "core" of this highly prospective zone** (see proposed drillhole, Figure 2).

Perseverance Target:

At **Perseverance**, two drillholes tested below the historical gold mine workings (where previous drilling results include **3m @ 50.0 g/t Au** from 42m in PERC015[3] and **3m @ 43.2 g/t Au** from 72m in PERC0012[3]).

RC drillhole PVRC0001 **intersected the hangingwall structure associated with the high-grade gold mineralisation before passing into a 23m zone with haematite alteration and potentially copper mineralisation** from 60m to 83m downhole. The deeper diamond drillhole, PVDD0001 intersected a similar zone including haematite alteration from 90m to 130m downhole (see Appendix 1 for mineralisation descriptions).

The high gold values in previous drilling at Perseverance indicate **potential for a similar discovery to the nearby Nobles Nob deposit**, 20km to the west (see Figure 4), which **produced 2 million tonnes of ore grading 17.3 g/t Au** from 1947 to 1986[5].

Additional IP geophysics will be carried out along strike to the east of Perseverance to map out the low-resistivity structure. Modelling of the IP results, as well as inversion depth modelling of the gravity and magnetic data, will allow the Company to determine the depth at which the mineralised structure at Perseverance intersects the ironstone – the targeted location of a repeat of the Bluebird discovery.

Further drilling is planned to test the Perseverance structure at depth and along strike to the east, where gravity imagery and modelling indicates a link with the Bluebird discovery located 1.6km to the east of Perseverance (Figure 1).

Bluebird West Target:

At **Bluebird West, haematite-altered mineralised structures have also been intersected, associated with an IP low-resistivity (high-conductivity) anomaly analogous to the IP low resistivity zone associated with the Bluebird discovery** (Figure 3). Breccia filled fault zones at 234m, 254m and 276-277m downhole in BWDD0001 correlate with the upper part of the low-resistivity zone detected by the IP survey.

Further IP geophysics will be carried out along strike to the east and west of the section tested at Bluebird West to map out the low-resistivity structure. Modelling of the IP results, as well as inversion depth modelling of the gravity and magnetic anomalies, will allow the Company to refine targets for further drilling to locate a potential repeat of the Bluebird copper-gold deposit along strike and at depth within this highly prospective zone.

Other Targets within the Bluebird-Perseverance Corridor

Further IP geophysics will be carried out east of the Bluebird discovery, where **previous shallow drilling produced highly anomalous copper and gold results associated with extensions of the east-south-east** (see Figure 1 and location, Figure 4).

Step-out IP sections will also be carried out west of Bluebird to target drilling to extend the mineralisation, which remains completely open to the west and at depth (see longitudinal projection, Figure 5).

The gravity high associated with the Bluebird discovery continues east and west of Bluebird, linking with the Perseverance Target zone, which **indicates potential for multiple high-grade copper-gold deposits within a major, more than 2km strike-length, mineralised corridor** (Figure 1).

ABOUT THE BARKLY PROJECT AND THE BLUEBIRD COPPER-GOLD DISCOVERY

The high-grade Bluebird copper-gold discovery is located within the Company's 100% owned Barkly Project, at the eastern edge of the Tennant Creek (copper-gold) Mineral Field (TCMF), which **produced over 5Moz of gold and over 500kt of copper** from 1934 to 2005[5] (see Figure 4 below).

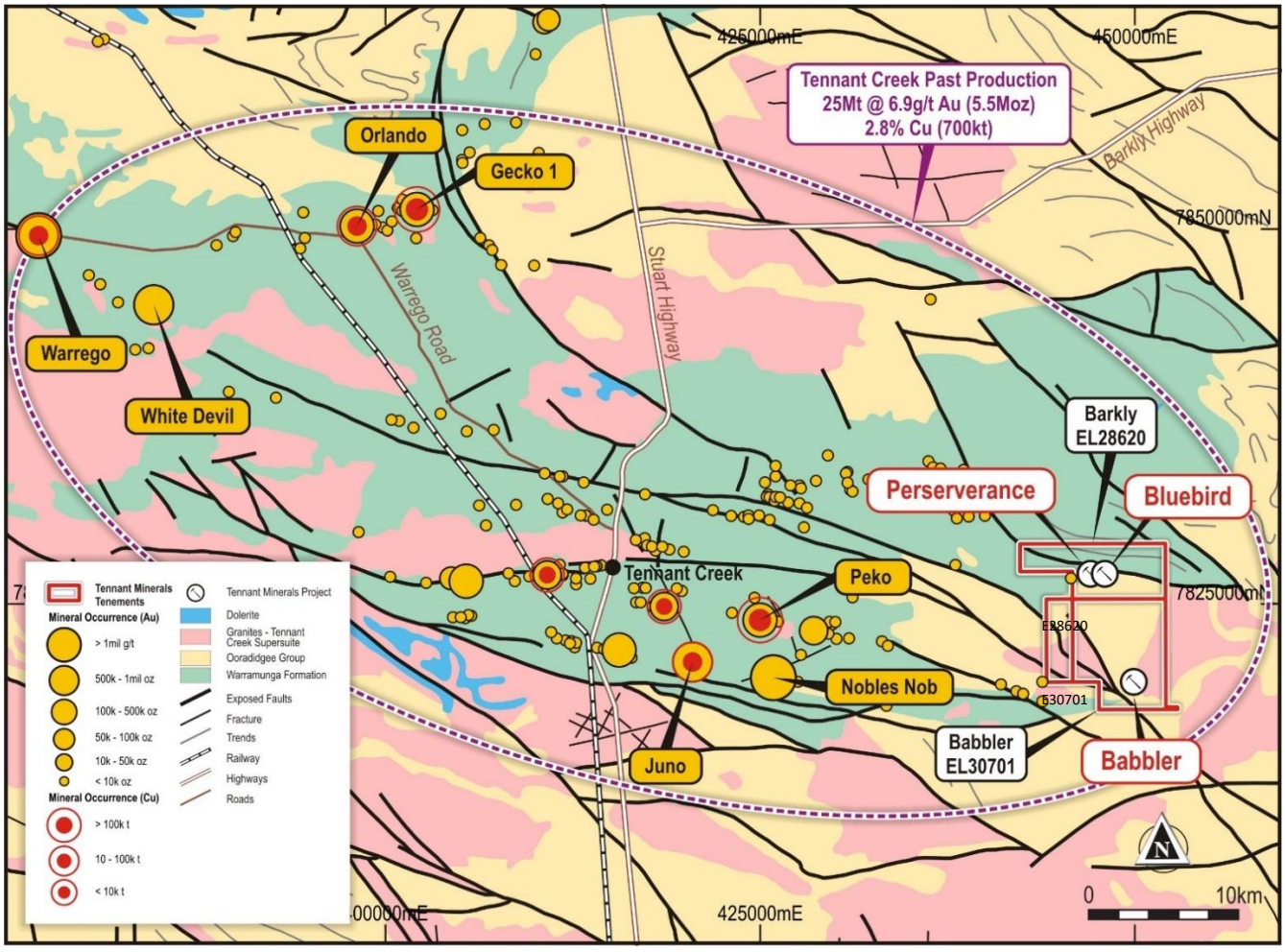

Figure 4: Location of the Barkly Project and major historical mines in the Tennant Creek Mineral Field

The latest diamond drilling intersections in the Stage 2 drilling program (see longitudinal projection of Bluebird discovery, Figure 5) have extended the thick high-grade dilational zone of mineralisation at Bluebird 120m to the west of the Stage 1 high-grade copper-gold intersections (total now 240m strike-length and open in all directions) previously announced by the Company[1,2], which include:

- **63.0m @ 2.1% Cu** and **4.6g/t Au** from 153m (down hole) in BBDD0012[2] (448,360mE)
  - including **40.0m @ 3.0% Cu** and **7.3g/t Au** from 155.0m,
  - including **27.55m @ 3.6% Cu** and **10.0g/t Au** from 160.45m.

- **40m @ 2.6% Cu** and **1.34g/t Au** from 131m (down hole) in BDD0013[6] (448,340mE)
  - including **24.5m @ 3.9% Cu** and 0.45g/t Au from 146.5m,
  - including **4.75m @ 15.2% Cu** and 0.36g/t Au from 164m.
- **50.0m @ 2.7% Cu** and **0.52 g/t Au** from 158m (down hole) in BBDD0007[1] (448,380mE)
  - including **24.0m @ 5.01% Cu** and **1.01 g/t Au** from 159m,
  - including **4.3m @ 14.7% Cu and 3.10 g/t Au** from 176.6m.

The most recent drilling which targeted depth extensions of the Bluebird deposit produced results including **17.8m @ 3.7% Cu,** 0.34g/t Au from 277m (including **9.5m @ 6.0% Cu**) in BBDD0015[6], which indicates proximity to a second dilational (thickened) zone target at depth (see cross section 448,360mE, Figure 6).

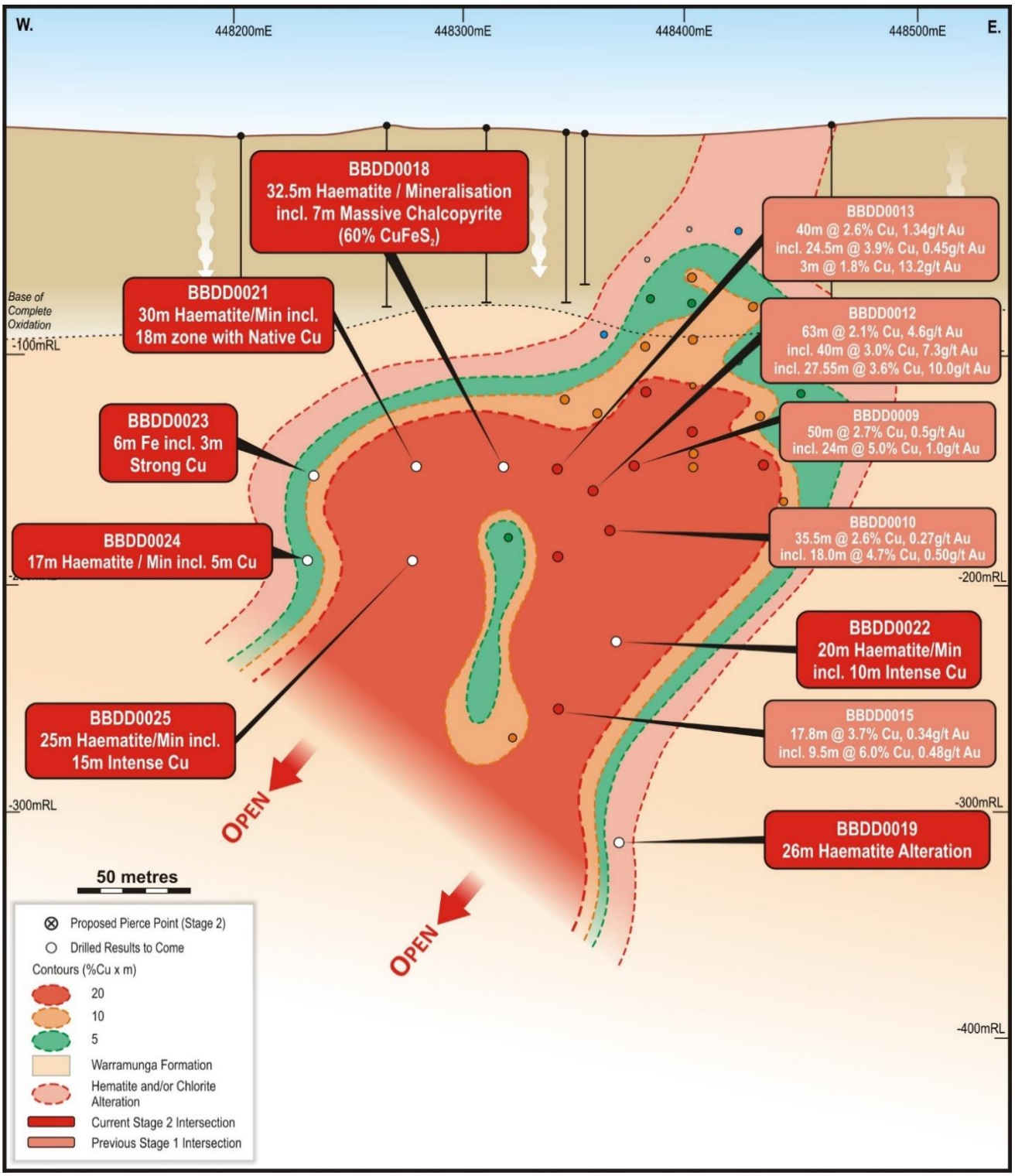

Figure 5: Bluebird longitudinal projection with high-grade copper-gold results to date and latest intersections.

The results of the IP program carried out at Bluebird revealed a distinct low-resistivity (high conductivity) and coincident chargeability response corresponding with the Bluebird mineralisation on the central section 448,360mE (see cross section, Figure 2 and Figure 6 below), thus confirming that Bluebird can be detected with IP. This section includes the BBDD0012 intersection of **63m @ 2.1% Cu, 4.6g/t Au**[2] and the IP low-resistivity zone indicates continuity below 400m depth (see Figure's 5 and 6).

Interpretation of the key drilling intersections, utilising structural data from logging of drill core, indicates that the thick and high-grade copper and gold intersections in BBDD0012[2] and BBDD0013[6], as well as the massive copper sulphide mineralisation in BBDD0018[7] (results pending) and the recent intersections in BBDD0021[8] and BBDD0025[9] (results pending), are associated with structures that have intersected the axis of a shallow-plunging anticline, generating a thick dilational mineralised zone (Figure 6).

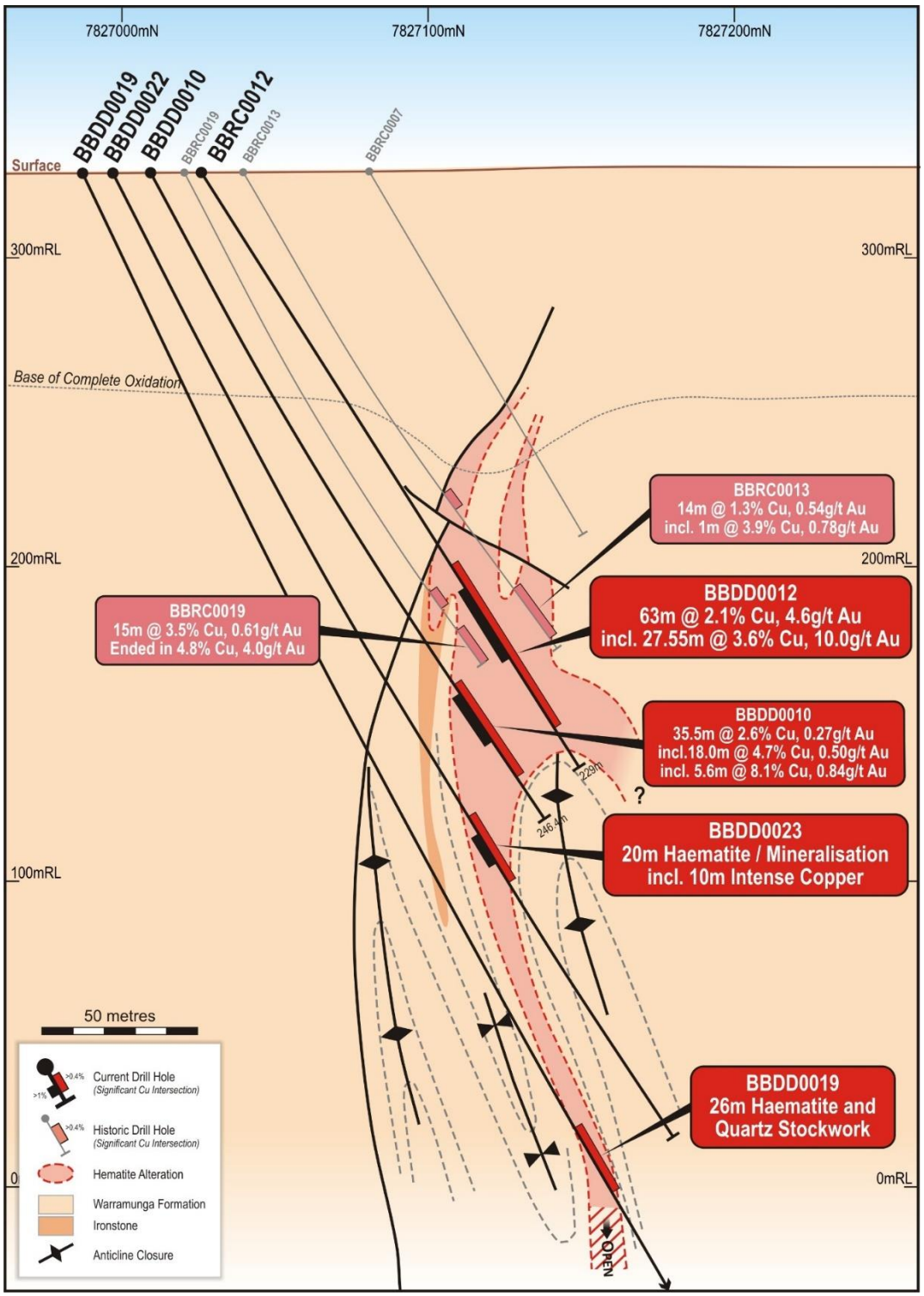

Figure 6: Bluebird cross section 448,360mE showing key intersections and anticlinal dilational "roll-over" zone.

The Stage 2 drilling program built on the successful Stage 1 diamond drilling program. A total of 16 holes for more than 4,321m were drilled in Stage 2 (see Tables 1 and 2 below), which **extended the Bluebird discovery along strike and at depth, where it remains completely open.** Drilling also tested priority targets for extensions/repeats of the high-grade copper-gold zone along strike to the west within the Bluebird-Perseverance Target Zone, as described in this release (Figure 1).

The Company's strategy is to identify multiple, multi-million tonne, high-grade copper-gold deposits within the Barkly Project, sufficient to establish a standalone copper-gold mining and processing project.

Following receipt of results from the successful Stage 2 drilling program, including from the **massive chalcopyrite zone intersected in BBDD0018** (32.5m intensely haematite-copper mineralised zone including 7m of 60% massive chalcopyrite)[7], a third stage of drilling will be carried out - focussed in two key areas:

i) Bluebird Copper-Gold Discovery:

Extension and deeper drilling is planned to extend and define the Bluebird high-grade copper-gold discovery to the east and west as well as to greater than 400m depth, targeting a Mineral Resource of several million tonnes of high-grade copper-gold mineralisation (>3% copper equivalent).

ii) Priority Targets in Bluebird Perseverance Corridor:

Testing of additional targets generated by the extension and infill IP program as well as deeper drilling on key sections drilled during the Stage 2 program (e.g. Perseverance North and Perseverance), targeting further high-grade copper-gold discoveries.

Drilling will commence as soon as possible following the northern wet season.

Table 1 below includes Bluebird – Perseverance Priority Targets Stage 2 drillhole details :

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

Table 2 below includes Bluebird Stage 2 drillhole details :

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

Appendix 1 includes descriptions of the geology and mineralisation intersected during the regional targets diamond drilling program and Appendix 2 includes 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] 17/08/2022. Tennant Minerals (ASX. TMS): "Bonanza 63m@ 2.1% Copper and 4.6 g/t Gold Intersection at Bluebird".
[3] 25/02/1995, Posgold. Final Report for Exploration Licence 7693, 2/6/92 to 25/11/94. NTGS Report CR19950192.
[4] 25/08/2022. Tennant Minerals (ASX. TMS): "Standout Geophysical Targets to Replicate Bluebird Cu-Au Discovery".
[5] Portergeo.com.au/database/mineinfo. Tennant Creek - Gecko, Warrego, White Devil, Nobles Nob, Juno, Peko, Argo.
[6] 07/09/2022. Tennant Minerals (ASX. TMS): "Up to 54.5% Cu in Massive Sulphides at Bluebird".
[7] 28/10/2022. Tennant Minerals (ASX.TMS): "Massive Chalcopyrite Intersected at Bluebird".
[8] 21/11/2022. Tennant Minerals (ASX.TMS): "Drilling Doubles Strike-Length of Bluebird Copper-Gold"
[7] 14/12/2022. Tennant Minerals (ASX.TMS): "Intensely Copper-Mineralised Drill-Hits Extend Bluebird"

*****ENDS*****

For enquiries please contact:

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

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

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

CAUTIONARY STATEMENT REGARDING FORWARD LOOKING INFORMATION

This release contains forward-looking statements concerning Tennant Minerals Ltd. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes.

Forward looking statements in this release are based on the company's beliefs, opinions and estimates of Tennant Minerals Ltd as of the dates the forward-looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

COMPETENT PERSONS DECLARATION

The information in this report that relates to exploration results is based on information compiled and/or reviewed by Mr Jonathon Dugdale. Mr Dugdale is the Technical Advisor to Tennant Minerals Ltd and a Fellow of the Australian Institute of Mining and Metallurgy ('FAusIMM'). Mr Dugdale has sufficient experience, including over 35 years' experience in exploration, resource evaluation, mine geology, development studies and finance, relevant to the style of mineralisation and type of deposits under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee ('JORC') Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Dugdale consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

ASX LISTING RULES COMPLIANCE

In preparing this announcement the Company has relied on the announcements previously made by the Company 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 13 May 2022, 6 June 2022, 6 July 2022, 17 August 2022, 25 August 2022, 7 September 2022, 13 October 2022 and 28 October 2022 31 October 2022, 21 November 2022 and 14 December 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.

Appendix 1. Visual estimates of mineralisation intersected in regional priority targets:

Cautionary note regarding visual estimates:

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

PNDD0001 Summary log		
From	**To**	**Lithology & alteration/mineralisation**
0	91.1	RC precollar, yet to be logged
91.1	97.8	Fine grained siltstones, interbedded, silica alteration
97.8	99.1	V fine grained siltstones, interbedded with qtz wash
99.1	102	Banded siltstones, patchy alteration, fine qtz veining
102	111.5	Brecciated sandstones/siltstones, zones of crackle veining and breccia, haematite staining
111.5	113.6	Rd brown siltstones
113.6	122.1	Massive siltstone/sandstones, with fine qtz veining decreasing downhole
122.1	129.4	Massive siltstone/sandstones, intense quartz and quartz carbonate veining, minor brecciation and expansion gashes
129.4	131.8	Fine grained massive/siltstones with rare qtz veining
131.8	132.5	Fault zone
132.5	140.1	Interbedded siltstones and sandstones, thin fault/breccia zones with qtz veining
140.1	141.5	Siltstone, haematite and chlorite alteration
141.5	146.7	Massive interbedded sandstones and red-brown mudstones, haematite alteration
146.7	149.5	Fault zone
149.5	166.5	Irregular interbedded siltstones/ sandstones and minor mudstone. Massive in part
166.5	205.7	Fine grained sandstones with occasional qtz veins and haematite alteration
205.7	206.2	Fault/breccia zone
206.2	216.2	Fine to medium grained siltstone, banded, rd-bw to grey
216.2	219	Massive siltstone, with qtz, qtz carbonate veining
219	232.8	Fine-medium grained red brown siltstone, weakly brecciated
232.8	234.1	Breccia zone
234.1	240.6	Fine to medium grained siltstone, banded, rd-bw to grey

PNDD0002 Summary log		
From	**To**	**Lithology & alteration/mineralisation**
0	179.9	RC precollar, yet to be logged
179.9	189.04	Mauve interbedded siltstone/sandstone with chlorite alteration and irregular qtz veins
189.04	197.23	Interlayered siltstone/sandstone
197.23	213.12	Mauve siltstone, crackle quartz, brecciated and mod chlorite alteration
213.12	222.8	Interlayered siltstone/sandstone, brecciated and mod chlorite alteration
222.8	234.9	Red brown siltstone/sandstone, with qtz veining and mod chlorite alteration
234.9	237.2	Dark brown silts, haematite alteration and intense qtz carb veining
237.2	245.1	Sandstones with chloritic alteration
245.1	257.95	Interbedded massive sandstones with chloritic altered siltstones, with occasional qtz veins
257.95	268.3	Intensely altered haematite and chloritic altered siltstones, amorphous in part
268.3	282.6	Banded siltstones, sandstones, weak chloritic alteration
282.6	293.8	Grey unaltered siltstone, rare haem and crackle veining
293.8	326	Banded brown-red and cream siltstones
326	328	Red-brown siltstones/mudstones

PNDD0003 Summary log		
From	**To**	**Lithology & alteration/mineralisation**
0	119.8	RC precollar, yet to be logged
119.8	126.4	Purple to l.grey mauve siltstones, graded bedding cycles, v mr quartz veining
126.4	131.5	Vfg mauve shale/siltstones, rare quartz crackle veining
131.5	134.9	Massive grey siltstones, bx lower contact
134.9	145	Fine grained massive purple mudstone, with crackled veining and alteration halos
145	145.2	Shear /fracture zone
145.2	150.8	Interbedded red brown siltstones with moderate to strong veining, brecciated, with some haematite/jasper alteration
150.8	150.9	Shear /fracture zone
150.9	152	Medium grained siltstone with crackle veining
152	159.8	V fine grained red brown siltstone, cracked quartz veining and alteration haloes, brecciated throughout
159.8	161	Shear /fracture zone
161	161.7	Brecciated fine grained siltstone
161.7	164.7	Shear /fracture zone, interbedded fine grained siltstone and mudstones with crackle quartz veining
164.7	193.3	Interbedded red brown siltstones, lesser alteration with crackle veining. Fractures at 173.6-173.7, 181.1,185 and 189.2m
193.3	218	Fine grained mudstone/siltstone, re brown -yellow brown, interbedded/banded. Weakly brecciated.
218	232.3	Massive siltstone with rare qtz carbonate veining, minor alteration, weak crackle veining and alteration
232.3	240.4	Fine grained mudstone/siltstone, re brown -yellow brown, interbedded/banded. Weakly brecciated.

PNDD0004 Summary log		
From	**To**	**Lithology & alteration/mineralisation**
0	179.8	RC precollar, yet to be logged
179.8	190.10	Massive siltstone, haematite alteration
190.1	195	Massive siltstone, brecciated, with weak chlorite alteration
195	198.45	Massive sandstone, wk haematite alteration and chlorite alteration, brecciated with qtz veining
198.45	205.35	Interbedded siltstone and sandstone, banded, wk haematite alteration and chlorite alteration
203.35	207.8	Massive sandstone, brecciated with strong qtz veining
207.8	216.75	Interbedded siltstone, banded, wk haematite alteration and chlorite alteration
216.75	219.90	Interbedded siltstone and sandstone, banded, wk haematite alteration and chlorite alteration, strong quartz veining
219.90	221	Banded siltstone, brecciated, with weak chlorite alteration
221	224.3	Massive sandstone, str pervasive haematite alteration and chlorite alteration, brecciated toward base with qtz stockwork
224.3	281.6	Interbedded siltstones and mudstones, bx in part
281.6	283	Massive sandstone, some stringer quartz
283	296.8	Interbedded siltstone and sandstone
296.8	309.5	Massive sandstone

BWDD0001 Summary log		
From	**To**	**Lithology & alteration/mineralisation**
0	120	RC precollar, yet to be logged
120	153	Vfg weathered grey siltstone
153	194.2	Purple to red brown siltstone, with qtz-carb veining and patchy chlorite alteration
194.2	195.3	Brecciated siltstone
195.3	197.2	Mauve/grey siltstone and mudstone, weak chlorite and silica alteration
197.2	218	Mauve/grey siltstone with crackle veining
218	233.7	Interbedded grey siltstones and red brown vfg sandstone, quartz veins, crackle veining, with mod chlorite/silica alteration
233.7	234.1	Breccia
234.1	253.6	Red brown siltstone and mudstone, with minor qtz carb veining
253.6	254.1	Breccia, weak chlorite and silica alteration
254.1	276.1	Red brown siltstone and mudstone, with intense qtz carb veining
276.1	277.25	Breccia, with qtz, chlorite alteration
277	297	Red brown siltstone/mudstone
297	315.5	Grey green interbedded mudstone and siltstone, minor sandstone, weak network qtz veining, increasing to base

PVDD0001 Summary log		
From	**To**	**Lithology & alteration/mineralisation**
60.5	82.3	Red brown finely banded siltstone, hem altered, rare grey unaltered patches
82.3	90	grey-brown finely banded vfg sandstone, irreg fine scale soft sediment deformation,
90	92.3	Sandstone, hematite stained planar & irreg fractures, minor breccia Grading down into banded silicified yellow pink banded sandstone,
92.3	92.5	Grey vfg sandstone, fractured silicified& vuggy
92.5	98	Dark grey to dark reddish grey sandstone, moderate irreg orange Fe stained fractures
98	119	Dark purplish grey to grey sandstone, weak to moderate planar bedding
119	130	Reddish brown hem stained vfg sandstone, Wavy to sl irregular banding down core axis, some crosscutting planar joints
150	166.8	Sl purplish brown vfg sandstone, massive to v weak bedding down core axis, minor patchy chl alteration, some fine planar qtz-chl veins
166.8	168.3	Red brown siltstone, fine very irreg banding down core axis
168.3	168.8	Red brown siltstone, fractured, abundant crosscutting fine qtz veins
168.8	171	Siltstone, brecciated sheared, pervasive strong green chlorite alteration And patchy purplish hematite altered siltstone, numerous irrg to disrupted fine qtz veins
171	171.4	Siltstone, fractured, disrupted, numerous irreg 1-15mm qtz-chl veins
171.4	174.5	Slightly purplish brown massive sandstone, minor planar crosscutting chl(-qtz) fractures/veins
174.5	176.3	Patchy greenish to purplish grey massive sandstone
176.3	178.3	Bluish grey (chlorite) to purplish sandstone, massive to disrupted, some 5-10mm disrupted chl-qtz veins
178.3	179.3	As above but fractured to brecciated: fault
179.3	181.6	Reddish brown weakly banded hem stained / altered vfg sandstone, with irreg disrupted fine chl-qtz veins
181.6	183.9	Bluish green (chlorite) massive vfg sandstone, minor fracturing
183.9	187.5	Reddish grey to bluish green hem or chl altered sandstone, weakly contorted to disrupted, some disrupted chl-qtz veins
187.5	199.8	Mixed greenish (chlorite) grey to purplish grey vfg sandstone, disrupted 1-5mm qtz & qtz-chl veins
199.8	205	Mixed green siltstone, red brown siltstone, moderately brecciated, thin shear zones. Chloritic alteration.
205	216.5	Red brown siltstone. Strongly brecciated, quartz veining and 5cm shear zones
216.5	239.1	Red brown siltstone, rare crackle quartz veining
239.1	240.5	Red brown siltstone, mod haematite alteration, brecciated in part

APPENDIX 2

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

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

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

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

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

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• For drilling details of the 2020 RC drilling program refer to Appendix 1 of the ASX announcement of 18 March 2020 by Blina Minerals (ASX: BDI): "High-Grade Copper and Gold Intersected in Drilling program at Bluebird".
		• For drilling details of the 2014 Diamond and RC programs refer to Appendix 1 of the ASX announcement of 24 September 2019 by Blina Minerals (ASX: BDI): "Strategic Acquisition of High-Grade Gold-Copper Project".

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are*	• 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
	usually Material and should be stated. • *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.*	less weighting than longer lengths of low-grade material. • No high-grade cut-offs are applied
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').*	• Mineralisation at Bluebird is interpreted to be striking east-west true azimuth with a dip of 70-80 degrees towards 180 degrees true azimuth. • All holes are drilled as perpendicular as practical to the orientation of the mineralised unit and structure. Intersection lengths are interpreted to be close to true thickness.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Refer to Figure 5, a longitudinal projection though the Bluebird mineralisation including pierce point locations, and Figure 6, a representative cross section through the recent drilling. Figures 3 and 4 are plan views showing the location of the Bluebird prospect and Barkly Project respectively.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.*	• All background information is discussed in the announcement. • Full drill results for copper and gold assays for previous drilling are shown in Appendix 1 of the ASX announcement of 18 March 2020, "High-Grade Copper and Gold Intersected in Drilling program at Bluebird".
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• No other data is material to this report.
Further work	• *The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Additional drilling is planned to extend mineralisation along strike and in particular to the west and at depth. • Further drilling of modelled gravity, drone magnetic and IP data will be carried out to drill target repeats of the high-grade Bluebird copper gold discovery within the 5km Bluebird Corridor.