ASX ANNOUNCEMENT

08 March 2022

TENNANT MINERALS

ASX : TMS

Spectacular 50m at 2.70% copper intersection at Bluebird

Close to true-width intersection includes 24m at over 5% Cu, 1 g/t Au with results to come from down plunge holes with native copper

- **Thick, high-grade, copper with gold intersections in diamond drilling at the 100% owned Bluebird copper-gold prospect in the richly-endowed Tennant Creek Mineral Field, including:**
  - **<u>50.0m @ 2.70% Cu and 0.52 g/t Au</u> from 158m (down hole) in BBDD0009,**
    - **including <u>24.0m @ 5.01% Cu and 1.01 g/t Au</u> from 159m,**
    - **including <u>5.0m @ 7.28% Cu and 1.29 g/t Au, 291 g/t silver (Ag)</u> from 165m, and,**
    - **including <u>4.3m @ 14.7% Cu and 3.10 g/t Au</u> from 176.6m.**
- **In addition, drilling confirmed and extended high-grade copper-gold (bismuth) mineralisation previously intersected in the upper part of the Bluebird mineralised zone, including:**
  - **16.0m @ 1.24% Cu and 1.50 g/t Au, 0.19% Bi from 157m in BBDD0008,**
    - **including 8.0m @ 2.07% Cu and 1.33 g/t Au, 0.27% bismuth (Bi) from 164m,**
    - **including 3.0m @ 2.98% Cu and 3.02 g/t Au, 0.45% Bi from 167m down hole.**
- **The thick and high-grade Cu-Au intersections in BBDD0009 and BBDD0008 are close to true-width and open down plunge, where assay results are imminent from the last two holes of current drilling program - BBDD010 and BBDD011 - which also intersected thick zones of up to 33m of intense hematite alteration with visible copper mineralisation (see Appendix 1).**
- **Priority follow-up diamond drilling is set to commence in late March at Bluebird, to scope the potential for a high-grade copper-gold resource which may ultimately rival other the high-grade deposits at Tennant Creek such as the Peko deposit, 20km west of Bluebird, which produced 147,000 tonnes of copper grading 4% Cu and 414,000oz of gold grading 10 g/t Au[7].**

Tennant Minerals Chairman, Mr Matthew Driscoll, commented:

"BBDD0009 is the first hole drilled to test the Bluebird copper-gold zone below previous drilling, and to return a 50 metre intersection of high-grade copper with gold, that approximates true-width, is a spectacular result."

"Adding to the excitement is that like BBDD0009, the remaining two holes of the current diamond drilling program also intersected thick widths of visible copper mineralisation, including native copper."

"The results suggest we could be on top of a very exciting copper-gold discovery improving with depth, and we will be accelerating our drilling and exploration programs as a matter of priority to test that potential."

"We are further encouraged by the fact that historically, the Tennant Creek Mineral Field is richly endowed with high-grade copper and gold deposits, including the Peko deposit, just 20km west of Bluebird, which historically produced 147,000 tonnes of copper grading 4% and 414,000 ounces of gold grading 10 g/t." [7]

Tennant Minerals Limited (**ASX: TMS**) ("**Tennant**", or the "**Company**") is very pleased to announce the results from the first three, of five, diamond drillholes completed at the Bluebird Prospect ("Bluebird"), located on the 100% owned Barkly Project, 45km east of Tennant Creek township in the Northern Territory (location, Figure 4).

The Company recently completed a five diamond drillhole program for 1,048m at the Barkly Project[1], that tested for extensions of the Bluebird copper-gold mineralisation – including below previous holes that had stopped in high-grade copper and gold.

All five drillholes intersected intense hematite alteration with visible copper mineralisation including malachite and/or chalcocite (copper sulphide), as well as native copper in two deeper step-out holes BBDD0010 and 0011[1].

Diamond drillhole **BBDD009** tested the mineralised zone on section 44,380mE, aiming to test the entire thickness of the mineralised zone. This hole **intersected a 50m zone from 165.6m of intense haematite-silica breccia with minor to abundant malachite (copper carbonate) and/or chalcocite (copper sulphide) in the main zone, continuing into a newly discovered footwall zone to 216m**[2] (see cross section 448,380mE, Figure 1).

This is the first time the footwall of the main zone has been tested on this section, a previous hole, BBRC019, having been abandoned in 4.8% Cu, 3.9 g/t Au[1] at end of hole after intersecting "only" 15m of mineralisation.

The results from BBDD009 confirm that the entire 50m mineralised zone carries significant copper and gold mineralisation, producing the outstanding, close to true width, copper-gold, and silver intersections below:

- **50.0m @ 2.70% Cu and 0.52 g/t Au (0.4% Cu cut-off) from 158m (down hole),**
  - **including 24.0m @ 5.01% Cu and 1.01 g/t Au (0.8% Cu cut-off) from 159m,**
  - **including 5.0m @ 7.28% Cu and 1.29 g/t Au, 291 g/t Ag (5.0% Cu cut-off) from 165m, and,**
  - **including 4.3m @ 14.7% Cu and 3.10 g/t Au (5.0% Cu cut-off) from 176.6m.**

Diamond drillholes **BBDD0007**[3] and **BBDD0008**[3] tested the mineralisation on previously drilled section, 44,400mE, where previous high-grade intersections from the main copper-gold zone included: **BBDD0002: 20m at 8.17 g/t Au, 0.61% Cu from 157m incl. 4m at 37.9 g/t Au, 0.66% Cu** [5] (see longitudinal projection, Figure 2).

BBDD0008 intersected 21m of chlorite/haematite alteration in the main zone from 149m, then intersected a second, footwall, zone of hematite with copper mineralisation (malachite) over 17m from 191m.

The results from BBDD008 have confirmed the high-grade copper with gold as well as bismuth mineralisation associated with the main zone at Bluebird, including the following intersections (see cross section, Figure 3):

- **16.0m @ 1.24% Cu and 1.50 g/t Au, 0.19% Bi (0.2% Cu cut-off) from 157m,**
  - **including 8.0m @ 2.07% Cu and 1.33 g/t Au, 0.27% Bi (1.0% Cu cut-off) from 164m,**
  - **including 3.0m @ 2.98% Cu and 3.02 g/t Au, 0.45% Bi (2.0% Cu cut-off) from 167m.**

Anomalous copper and gold was also intersected in the newly discovered footwall zone in **BBDD0008**, including **14.8m at 0.16% Cu from 195.2m.** This zone is open up-dip where a further drillhole is recommended to test for the centre of this zone, as intersected by **BBDD0009** on the next section to the west, 44,380mE (Figure 1).

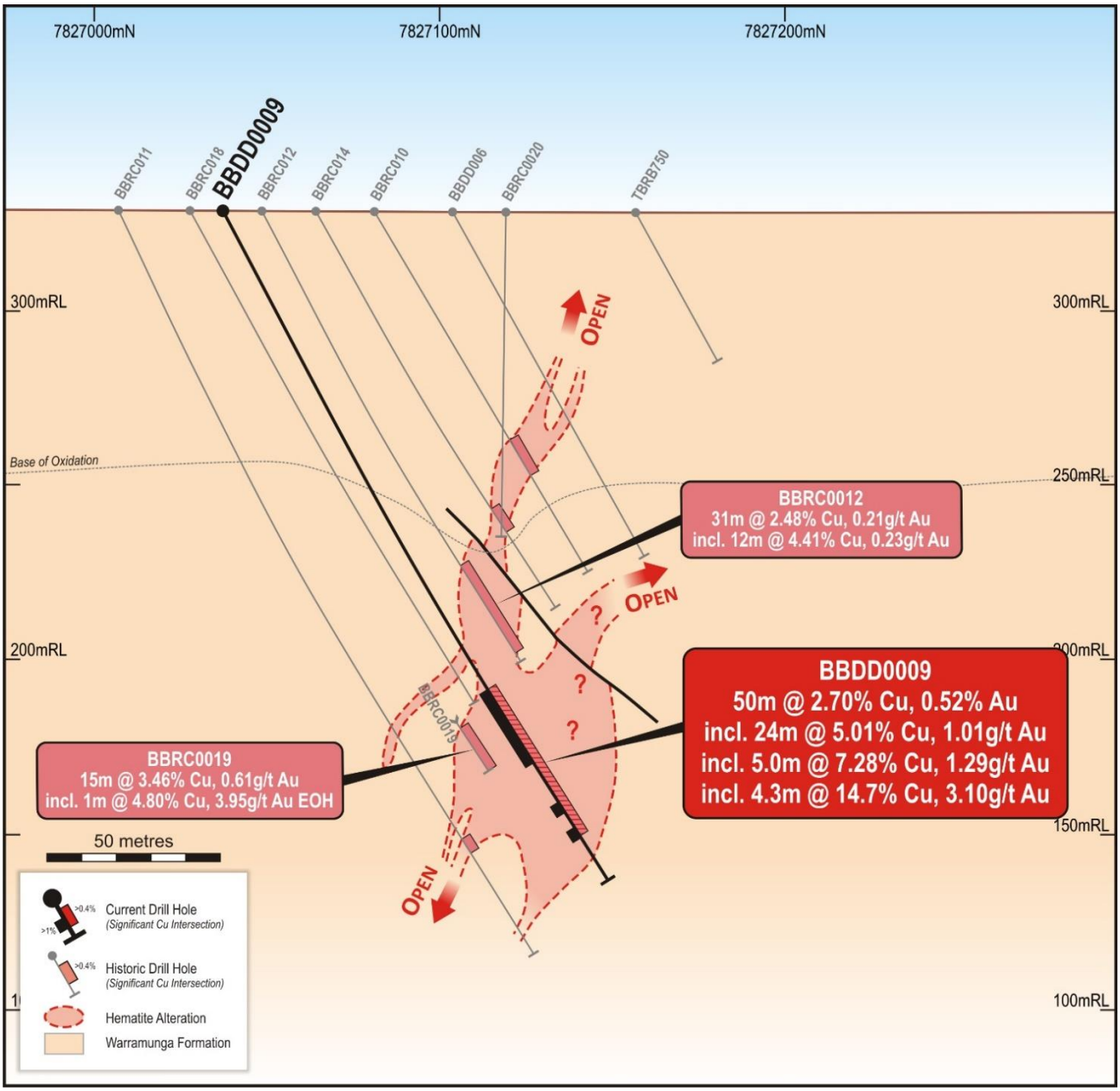

Figure 1: Bluebird cross-section 448,380mE with the 50m intersection of copper-gold mineralisation in BBDD0009

The last two "step-out" holes of the current program, **BBDD0010** and **BBDD0011**, tested the down plunge projection of the mineralisation to the west of BBDD0009 (Figure 2), both **intersecting intense hematite alteration with visible copper mineralisation** as summarised below and described in Appendix 1 of this release.

- **BBDD0010, tested 20m down plunge from BBDD0009, intersecting 32.7m of mineralisation including:**
    - 10m from 192.8m of 5-20% quartz veining, up to 30% hematite and 1-3% chalcocite disseminated within veinlets & in qtz veins and up to 1% native copper as coarse up to 4mm blebs and 1mm thick veinlets.
    - 22.7m from 203.4m red hematite alteration with blebby to patchy scattered malachite, in part associated with cavities with infilling black crystalline specular hematite.
- **BBDD0011, a step out of over 30m down plunge of BBDD0010, intersected 33m of mineralisation, including:**

- 17m from 189.4m trace very fine chalcocite in weak hematite alteration grading to dark brown to black earthy to corroded massive ironstone - hematite with malachite, chalcocite and up to 2% native copper as blebs and broken veinlets.
- 16m from 216.9m with veins and blebs of malachite as vugh infill 0.1 to 5%. Specular hematite alteration as small patches and vein infill with trace disseminated sulphides (chalcocite).

Cautionary note: visual estimates of mineralisation content/intensity should not be considered a proxy or substitute for laboratory analyses, which are required to determine the widths and grade of the mineralisation.

The results of BBDD0010 and BBDD0011 are expected to be received within a week of this release. However, **it is already evident that the intensity of copper mineralisation is increasing down plunge and to the west**.

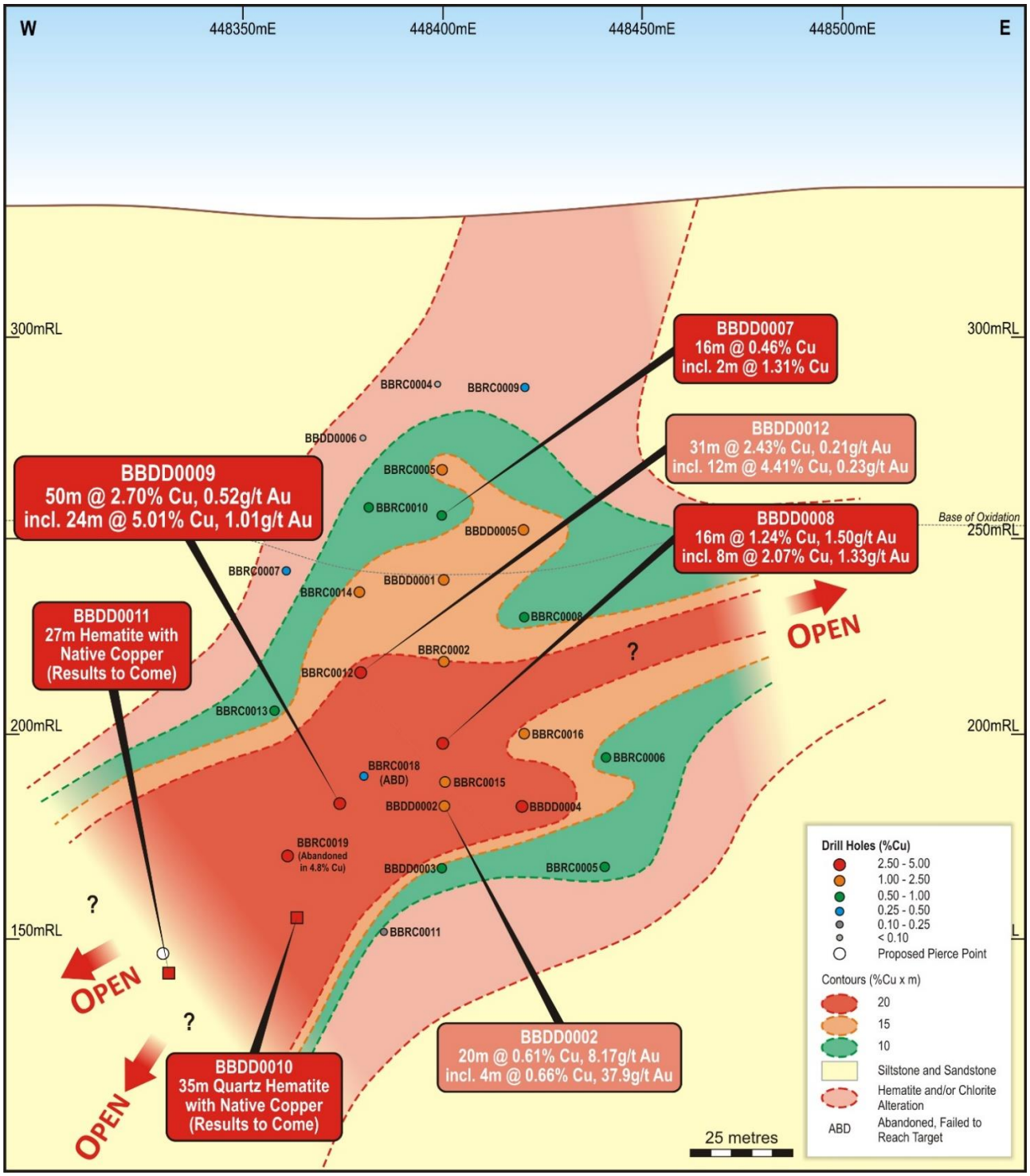

Figure 2: Bluebird longitudinal projection with key intersections and the BBDD0010 and BBDD0011 pierce points

The mineralisation intersected at Bluebird is typical of the high-grade copper-gold ore-bodies in the Tennant Creek Mineral Field of the Iron-Oxide-Copper-Gold (IOCG) type. The high-grade mineralisation is associated with intense hematite alteration and brecciation with quartz veining inside a halo of chlorite alteration and variable hematite development. The upper parts of the shoots include secondary malachite (copper-carbonate) minerals as well as native copper, which transitions to primary sulphide mineralisation at depth e.g. chalcocite, bornite, chalcopyrite or tennantite.

The drilling to date has only just penetrated the transition to primary sulphide zone at Bluebird. Orebodies such as the nearby Peko copper-gold deposit (see Figure 5), that historically produced **147,000 tonnes of copper at 4% Cu and 414Koz gold of 10 g/t Au**[7], occur as multiple shoots within a plunging alteration zone of similar dimensions to Bluebird. **The shoot currently being drilled at Bluebird may represent only the upper part of a much larger deposit and deeper drilling is planned to test for extensions to the west and at depth.**

Further drilling is planned to test up and down dip as well as step-out down the projected plunge of the Bluebird copper-gold deposit, to determine the scope of this high-grade zone in terms of tonnage and grade. The specialist diamond drilling contractors that successfully completed this program, Titeline Drilling Pty Ltd (Photo 1), are scheduled to return after the Northern Territory wet season, targeting late March – early April to re-commence. The scope of this further drilling program will be determined following receipt of all results.

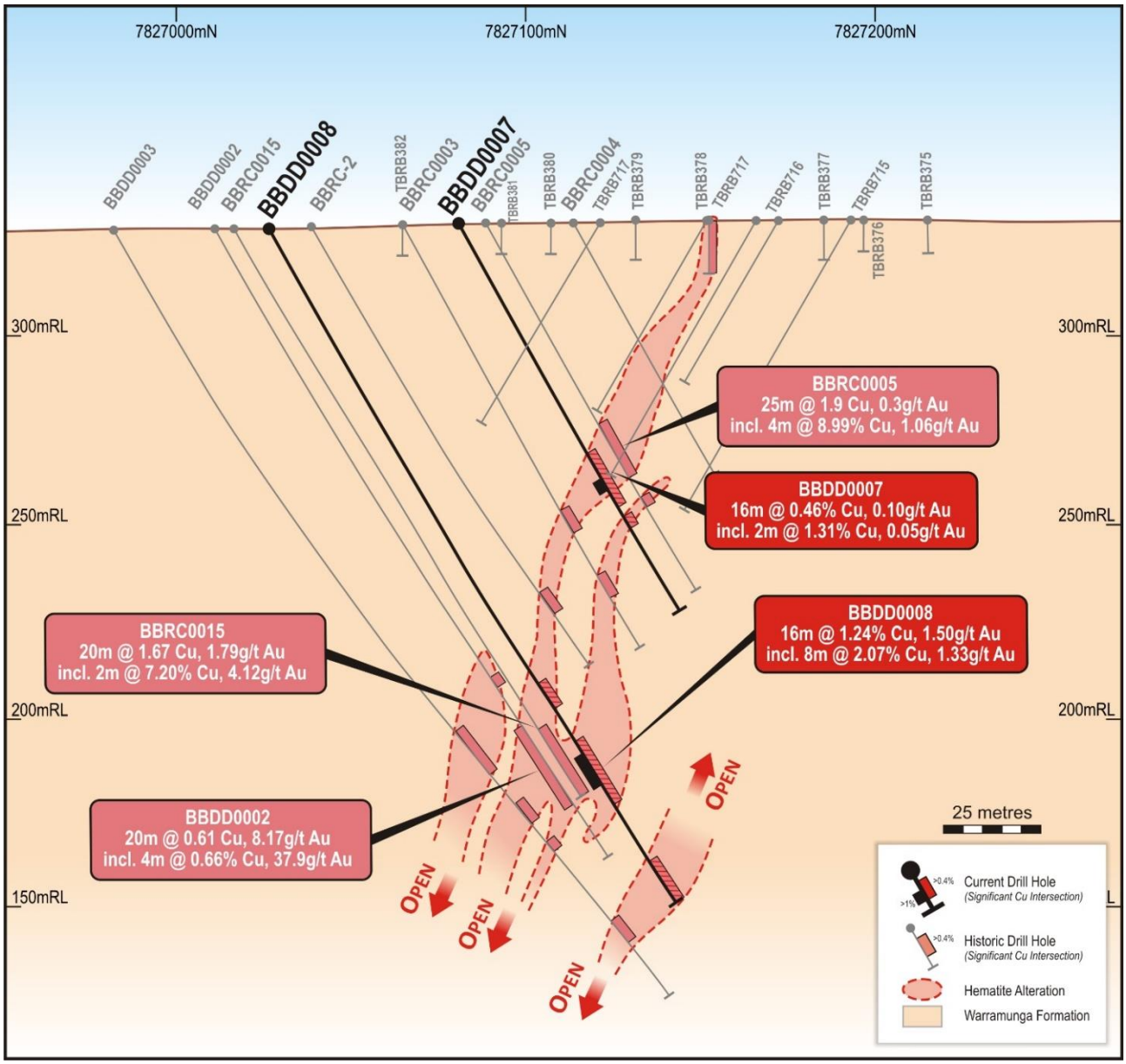

Figure 3: Bluebird cross-section 448,400mE with the BBDD0008 and BBDD0007 copper-gold intersections

In addition to Bluebird, there is excellent potential to discover multiple high-grade copper-gold shoots within the 5km strike length gravity-ridge corridor with coincident magnetic highs, that includes the Bluebird copper-gold deposit and the historical Perseverance gold mine (Figure 4).

Gravity highs with the Tennant Creek Mineral Field are interpreted to be associated with iron enrichment and the magnetic highs potentially associated with secondary or primary magnetite. Iron enrichment is commonly broadly associated with IOCG mineralisation. Iron enrichment of >20% Fe is associated with the Bluebird copper-gold mineralisation (see Table 1).

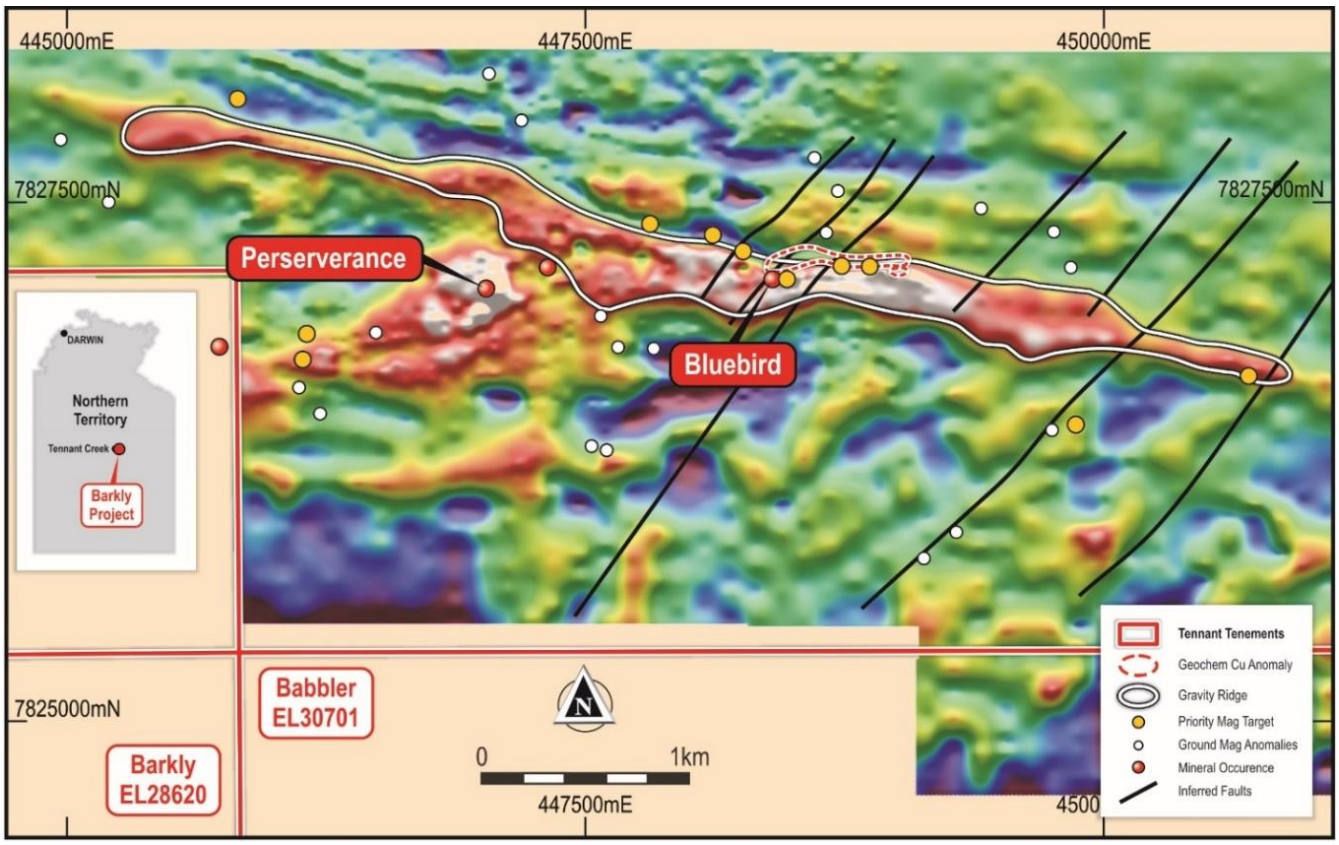

Figure 4: Gravity ridge on the Barkly E28620, with Bluebird Prospect and magnetic targets in the Bluebird Corridor

The Bluebird mineralisation is essentially "blind", with only weak geochemical expression at surface. There are multiple other gravity – magnetic targets within the Bluebird gravity corridor that have had only minimal testing below the leached zone that continues to >50m below surface.

Further modelling of the magnetic and gravity data is in progress to model the size and depth of the coincident gravity and magnetic features. This will enable drill targeting and planning of a further, reverse circulation (RC) drilling program to run in parallel with diamond drilling of the Bluebird deposit.

Table 1 is a summary of all intersections from **BBDD0007**, **BBDD0008** and **BBDD0009** discussed in this release.

Table 2 lists drillhole details e.g. location, orientation, for the recent program.

Appendix 1 includes a description of the mineralised Intervals from BBDD0010 and BBDD0011.

Appendix 2, JORC Table 1, includes drilling details and sampling procedures in current and previous drill holes.

Table 1: Bluebird copper-gold deposit, summary of significant intersections from drillholes in this release:

Drillhole	From	To	Interval	Cu %	Au g/t	Ag g/t	Bi %	Co g/t	Fe %	Cut-off Cu%
BBDD0007	69.0	85.0	**16.0**	**0.46**	**0.10**	<0.5	0.018	**102**	**12.3**	0.1%
including	78.0	83.0	**5.0**	**0.83**	**0.05**	<0.5	0.006	179	**18.3**	0.4%
including	79.0	81.0	**2.0**	**1.31**	**0.05**	<0.5	0.006	**166**	**20.7**	1.0%
BBDD0008	154.0	176.0	**22.0**	**0.94**	**1.00**	1.0	**0.141**	**314**	**17.2**	0.1%
including	156.0	172.0	**16.0**	**1.24**	**1.50**	1.38	**0.191**	**367**	**19.5**	0.2%
including	159.0	172.0	**13.0**	**1.48**	**1.79**	1.69	**0.233**	**420**	**21.2**	0.4%
including	164.0	172.0	**8.0**	**2.07**	**1.33**	2.75	**0.266**	**566**	**25.5**	1.0%
including	167.0	170.0	**3.0**	**2.98**	**3.02**	4.00	**0.452**	**726**	**28.1**	2.0%
& including	195.2	210.0	**14.8**	0.16	0.02	0.0	0.002	94	**20.0**	0.1%
BBDD0009	151.0	216.3	**65.3**	**2.11**	**0.43**	22.8	0.056	**163**	**16.7**	0.1%
including	158.0	208.0	**50.0**	**2.70**	**0.52**	29.8	0.060	**178**	**18.4**	0.4%
including	159.0	183.0	**24.0**	**5.01**	**1.01**	**61.7**	0.086	**302**	**18.2**	0.8%
including	162.8	170.0	**7.2**	**6.12**	**1.07**	**202.2**	**0.126**	**19**	**19.3**	3.0%
including	165.0	170.0	**5.0**	**7.28**	**1.29**	**290.7**	0.038	**228**	**19.1**	5.0%
& including	176.6	180.9	**4.3**	**14.68**	**3.10**	3.4	0.098	**344**	**19.2**	5.0%
& including	195.0	208.0	**13.0**	**0.85**	**0.08**	0.9	0.061	17	**21.0**	0.4%
including	198.0	200.0	**2.0**	**3.01**	**0.07**	2.5	**0.190**	66	**20.7**	1.0%
including	206.0	208.0	**2.0**	**1.11**	**0.40**	<0.5	0.067	14	**20.7**	1.0%

Table 2, Drillholes details, current program to date:

Hole #	Dip°	Azi_Grid°	GRID_E	GRID_N	RL	Mud-rotary (m)	DDC (m)	Total (m)
BBDD0007	-62	0	448,400	7,827,090	332	40	80	120
BBDD0008	-62	0	448,400	7,827,040	332	92	118	210
BBDD0009	-62	0	448,380	7,827,038	332	71.5	151.1	222.6
BBDD0010	-60	0	448,360	7,827,010	332	89.6	156.8	246.4
BBDD0011	-65	0	448,340	7,827,030	332	83.6	165.7	249.3
Total						**376.7**	**671.6**	**1048.3**

Photo 1: Titeline Drilling diamond-drilling rig on site at the Bluebird Prospect, December 2021

ABOUT THE BARKLY PROJECT AND THE BLUEBIRD COPPER-GOLD DEPOSIT DRILLING PROGRAM

The Barkly Copper-Gold Project ("**Barkly**" or "**the Project**") is located approximately 45km east of the town of Tennant Creek and comprises two Exploration Licences, EL 28620 (**Barkly Project**) and EL 30701 (**Babbler Project**) (Figure 5).

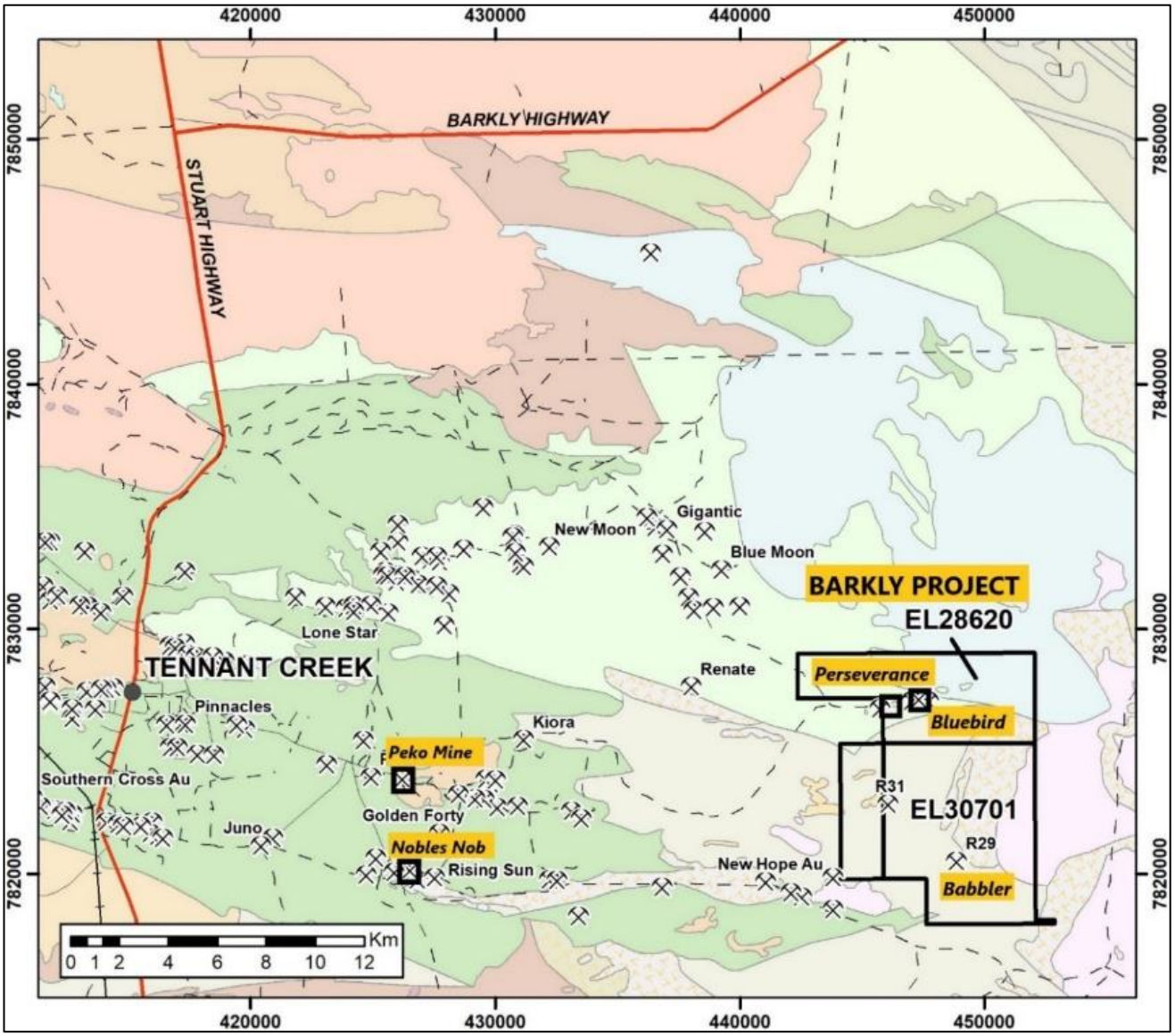

Figure 5: Location of the Barkly (EL 28620) and Babbler (EL 30701) Barkly Projects showing Peko and Nobles Nob mines

The Barkly and Babbler Projects are 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 5), 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 1981[7].

The Company's initial focus is the **Bluebird Prospect**, where previous drilling intersected high-grade copper-gold mineralisation, at relatively shallow depth.

The recently completed diamond drilling program at the Bluebird Prospect included five diamond drillholes for a total of 1,048m of drilling. The program has successfully tested the entire, up to 50m, thickness of the 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 follows-up previous high-grade drilling intersections from the November 2020 RC drilling program[4], when the Company undertook an initial exploration drilling campaign at the Barkly Copper Gold 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, including 10m @ 2.32% Cu, 2.87 g/t Au[4]**
BBRC0019	**15m @ 3.46% Cu, 0.61g/t Au from 172m, including 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 1)[4]**

The 2020 RC holes were drilled to in-fill and extend previous RC and diamond drilling completed in 2014[6], 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 Au[6]**
BBRC0012:	**31m at 2.48% Cu, 0.21g/t Au from 116m incl. 12m at 4.41% Cu, 0.23g/t Au[6]**
BBDD-2:	**20m at 0.61% Cu, 8.17g/t Au, from 157m incl. 0.66% Cu, 4m at 37.9g/t Au[5]**
BBRC-5:	**25m at 1.90% Cu, 0.28 g/t Au from 62m incl. 4m at 8.99% Cu, 1.06g/t Au[5]**
BBRC0013:	**14m at 1.31% Cu, 0.54g/t Au from 162m incl. 1m at 3.91% Cu, 0.78g/t Au[5]**

Significantly, drill hole **BBRC0019[4]**, drilled below BBRC013, which was previously the deepest and most westerly hole drilled at Bluebird[3], intersected strongly hematite altered siltstone and ironstone from 172m to 187m but was abandoned at that depth due to in-hole caving.

This hole ended in high-grade copper-gold mineralisation, with the last metre assaying 4.81% Cu and 3.9 g/t Au[4].

The recently completed diamond drilling program at Bluebird **has now tested the entire thickness of the mineralised zone at Bluebird, with BBDD0009 intersecting 50m of high-grade copper with gold mineralisation and the fourth hole of the program, BBDD0010, intersecting 35m of copper mineralisation, including native copper (assays to come) below/down dip of BBRC019.**

REFERENCES

[1] 21 December 2021. Tennant Minerals (ASX. TMS): "Bluebird Native-Copper Intersected and Extended Down Plunge"
[2] 13 December 2021. Tennant Minerals (ASX. TMS): "Capital Raising Completed, Exploration Update at Barkly Cu-Au Project"
[3] 06 December 2021. Tennant Minerals (ASX. TMS): "New Intensely Mineralised Cu Zone Intersected at Bluebird"
[4] 18 March 2020. Blina Minerals (ASX: BDI): "High-Grade Copper and Gold Intersected in Drilling program at Bluebird"
[5] 24 September 2019. Blina Minerals (ASX: BDI): "Strategic Acquisition of High-Grade Gold-Copper Project"
[6] 09 December 2014. Blaze International Ltd (ASX: BLZ): "High Grade Copper Sulphide Intersection at Bluebird"
[7] Portergeo.com.au/database/mineinfo. Tennant Creek - Gecko, Warrego, White Devil, Nobles Nob, Juno, Peko, Argo

*****ENDS*****

CONTACT AND AUTHORISATION

This release was authorised by the Board of Tennant Minerals Ltd (ASX:TMS).

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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 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 and 21 December 2021. 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.

TENNANT MINERALS

APPENDIX 1: Description of Mineralised Intervals, BBDD0010 and BBDD0011

Hole_ID	From M	To M	Min1 Code	Min1 Pct	Min1 Text.	Min1 Grn size	Min2 Code	Min2 Pct	Min2 Text.	Min2 Grn size	Description of Mineralisation
BBDD0010	192.8	195.7	cc	1	vn	fg					Silvery to slightly golden (could be some native copper) chalcocite scattered along veinlets & in qtz veinlets; in relatively unaltered sl greenish metasiltstone with 5-20% qtz veining
BBDD0010	197	200.25	cc	3	diss	vfg					Silver chalcocite disseminated in brown hematite matrix (30% of rock) in fracture zones in grey metasiltstone
BBDD0010	200.23	202.3	Cu	1	bby	cg	Cu	1	vn	mg	Native copper as coarse blebs to 4mm blebs & 1mm thick veinlets
BBDD0010	203.4	208.8	mal	0.5	vn	fg					Scattered fine malachite veinlets; abrupt change to red oxidised hematite alteration of metasiltstone ==> Cu oxides
BBDD0010	208.8	209.1	mal	5	vn	fg					Abundant very fine irregular crosscutting malachite veinlets
BBDD0010	209.1	216.2	mal	0.5	bby	fg					Blebby to patchy scattered malachite; in part associated with cavities with infilling black crystalline specularite
BBDD0010	216.2	225.5	mal	0.1	bby	fg	mal	0.1	fra	fg	Scattered blebby malachite & on fractures
BBDD0011	165.7	165.95	cc	10	ma	cg					Massive chalcocite, soft silvery grey, on irregular fractures up to 1mm thick
BBDD0011	165.95	168.5	cc	0.5	bby	fg					Scattered flecks of chalcocite
BBDD0011	168.5	168.7	cc	5	ma	cg					Massive chalcocite, soft silvery grey, on irreg fractures up to 1mm thick, generally in the darker more fracture sections of rock
BBDD0011	189.4	190	cc	trace	bby	fg					Trace very fine chalcocite in zone of weak hematite alteration
BBDD0011	205.6	206.6	Cu	2	bby	mg					Up to 2% native copper as blebs and broken veinlets from 205.6 to 206.6 in dark brown to black earthy to corroded ironstone
BBDD0011	211	213.85	mal	0.1	vn	mg	mal	0.1	fra	mg	Some veins of malachite to 2mm; & in irregular fractures
BBDD0011	216.9	221.7	mal	0.1	bby	fg	mal	0.1	vn	mg	Veins & blebs malachite; some coarser malachite vugh infill; 217.1-218.4 specularite (grey crystalline, sparkly) as blebs, small patches, vein infill: with some sulphides?
BBDD0011	217.85	217.95	mal	5	vg	fg					10cm vugh, corroded, malachite & minor specularite infill
BBDD0011	222	222.45	mal	0.1	bby	fg					Scattered blebby fine grained malachite

Hole_ID	From M	To M	Min1 Code	Min1 Pct	Min1 Text.	Min1 Grn size	Min2 Code	Min2 Pct	Min2 Text.	Min2 Grn size	Description of Mineralisation
BBDD0011	224.4	226.7	mal	0.5	vn	fg					Chlorite Footwall: dark greenish grey metasiltstone, some thin vein qtz & qtz stockwork in part, pervasive greenish chl alteration, sl irreg wavy banding (bedding) alpha 30; malachite on fin fractures along bedding; some diffuse 1cm red hem alt oblique to bedding alpha zero

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) 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	• *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) was conducted using a $5^1/_4$" face sampling hammer, with holes drilled -60 degrees. • Rotary mud (RM) drilling (2021) was completed with 126mm PCD hammer with holes drilled between -60 and -65 degrees. • 2021 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. 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

Criteria	JORC Code explanation	Commentary
		analysis of rotary mud collars was undertaken. • The quality of diamond core samples is monitored by the logging of various 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 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
		have been determined by Inductively Coupled Plasma (ICP) Mass Spectrometry (MS-OES). • 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 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*	• 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

Criteria	JORC Code explanation	Commentary
	introduced a sampling bias, this should be assessed and reported if material.	perpendicular to the general strike of stratigraphy and/or regional structure.
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 usually Material and should be stated.*	• All exploration results are reported by a length weighted average. This ensures that short lengths of high-grade material receive less weighting than longer lengths of low-grade material.

Criteria	JORC Code explanation	Commentary
	• *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No high-grade cut-offs are applied
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').*	• Mineralisation at Bluebird is interpreted to be striking east-west true azimuth with a dip of 70-80 degrees towards 180 degrees true azimuth. • All holes are drilled as perpendicular as practical to the orientation of the mineralised unit and structure. Intersection lengths are interpreted to be close to true thickness.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Refer to Figures 1, 2, and 3 for appropriate sections though the Bluebird mineralisation including pierce point locations, and Figures 4 and 5, plan views of the Bluebird prospect.
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 2 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 from BBDD011. • Regional targeting including modelling of gravity and magnetics will be carried out to drill target repeats of the high-grade Bluebird copper gold shoot within the 5km Bluebird Corridor.