

# Thick High-Grade Gold and Copper Intersections Highlight Potential to Expand Bluebird Discovery

- New copper and gold zones identified in latest drilling program expand resource potential to the east, west and at depth within the Bluebird ironstone corridor
- Further thick, high-grade copper and gold zones including silver, intersected in the latest RC drilling program at the Bluebird discovery within Tennant Minerals' 100%-owned Barkly Project in the Northern Territory.
- Latest results include new high-grade intersections to the west and down-plunge of previous drilling, confirming and extending the potential for the high-grade mineralisation to continue to the west within the regional ironstone gravity corridor. Results include:
  - A 5m high-grade gold zone grading 8.3 g/t Au, 2.0% Cu, 9.8 g/t Ag, 0.27% Bi in BBRC0040 incl. grades of up to 22.7 g/t Au, 1.6% Cu, 41.4 g/t Ag, 0.51% Bi from 233m, in an overall zone of 14m @ 4.0% CuEq\* (0.8% Cu, 3.0 g/t Au, 3.6 g/t Ag, 0.1% Bi)
  - 18m @ 1.3% CuEq\* (1.1% Cu, 0.22 g/t Au) from 260m in BBRC0044
     incl. 8m @ 2.7% CuEq\* (2.1% Cu, 0.48 g/t Au) from 260m
  - 3m @ 4.0% CuEq\* (3.7% Cu, 0.19 g/t Au, 3.4 g/t Ag) from 342m in BBRC0041
  - A new well-mineralised zone of copper-gold mineralisation identified at Bluebird East, which is thickening with depth and demonstrates significant expansion potential. Results include:
    - 28m @ 2.1% CuEq\* (1.6% Cu, 0.5 g/t Au, 2.4 g/t Ag) from 146m downhole in BBRC0034 incl. 16m @ 3.2% CuEq\* (2.5% Cu, 0.62 g/t Au, 2.7 g/t Ag) from 158m incl. 2m @ 7.9% Cu, 0.85 g/t Au, 7.8 g/t Ag from 158m
    - 15m @ 1.0% CuEq\* (0.74% Cu, 0.09 g/t Au, 0.1% Bi) from 166m in BBRC0047
    - 41m @ 0.57% CuEq\* (0.44% Cu, 0.08 g/t Au) from 156m in BBRC0046
  - ➤ Up to four large, high-grade, copper-gold lenses each up to 300m in length and 200m deep identified from updated interpretation of the mineralisation at Bluebird. Lenses occur within the east-west trending ironstone host corridor which remains completely open to the east and west down-plunge of the previously-defined mineralisation (see Figures 1 and 2).
  - ➤ Results pending from a series of step-out RC holes within the 2.5km strike-length Bluebird-Perseverance trend, which forms part of a 5km gravity (ironstone) corridor across the entire Barkly project. Results from these holes will be integrated with detailed gravity, auger geochemistry and air-core drilling programs, in progress, to define new priority targets for Bluebird repeats within this zone.

<sup>\*</sup>Refer Appendix 2 for copper equivalent (CuEq) calculations.



### **Tennant Minerals CEO Vincent Algar commented:**

"The latest assay results we have received from Bluebird have not only confirmed the high gold and copper grades from previous drilling programs but have also extended the mineralised zones to the east and down-plunge to the west of previous drilling.

One of the most exciting outcomes of the program has been the identification that Bluebird is made up of up to four, large, high-grade copper/gold mineralised lenses within the east-west trending ironstone-host at Bluebird – which remain completely open to the east and west, as shown on Figures 1 and 2.

New intersections associated with the host ironstone lithology, have extended the mineralisation at depth and westwards down-plunge, with gold grades of up to 22.7 g/t in BBRC0040 and good widths of copper-with-gold such as the 8m at 2.1% copper, 0.5 g/t gold intersected in BBRC0044.

The new drilling has also identified a new hanging-wall zone of thick, strong mineralisation which continues eastwards and to depth in the intersections in BBRC0034 and BBRC0047. This new zone is completely untested further eastwards and at depth within the host ironstone corridor.

The high-intensity of the Bluebird copper-gold-bismuth-hematite mineralisation has always suggested it is part of a much larger system. The greater then 5km strike-length gravity corridor within the Barkly tenement includes multiple repeats of the Bluebird geophysical signature, and further work is underway to define and test targets for new discoveries.

The latest results reinforce our confidence in defining economic copper-gold resources within the Barkly project, in line with our goal to become a major player in the rejuvenated Tennant Creek Mineral Field, which has already produced 5.5Moz of gold and 700kt of copper."



Image 1: Topdrill RC drilling rig testing at Bluebird (BBRC0029)



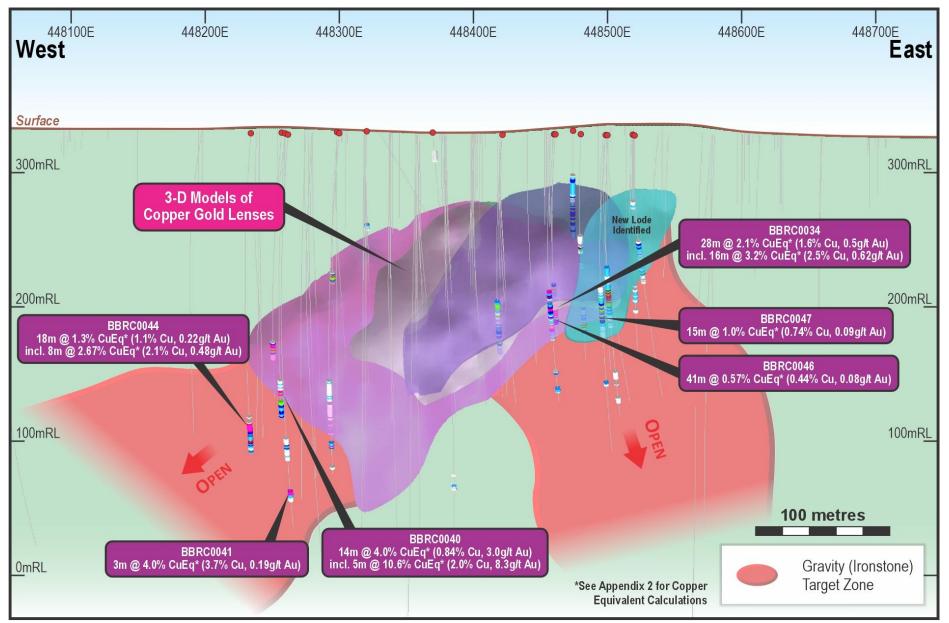


Figure 1: Longitudinal view of Bluebird Cu-Au mineralisation 3-D models with latest significant intersections extending the zone to the east, west and down-plunge



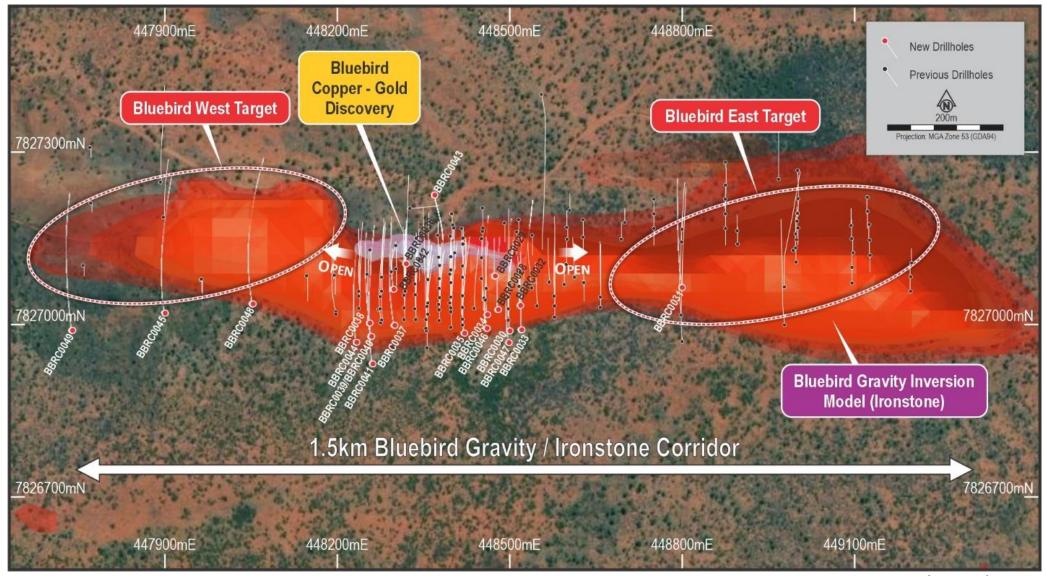


Figure 2: Plan view showing drillhole locations with the current Bluebird mineralisation model within the 2.5km Bluebird-Perseverance Corridor and gravity (ironstone) model



**Tennant Minerals Ltd (ASX: TMS)** is pleased to announce new assay results and interpretations from the ongoing reverse circulation (RC) drilling program at the Bluebird copper-gold discovery on the 100%-owned Barkly Project in the Northern Territory.

Bluebird is located, at the eastern edge of the Tennant Creek Mineral Field, which produced more than 5.5Moz of gold and 700,000 tonnes of copper from 1934 to 2005<sup>1</sup>.

The latest drilling program was designed to build on the Company's previous success at Bluebird in delineating zones of significant copper and gold mineralisation over a 500m strike length and to a depth of more than 300m. Critically, the Bluebird mineralisation remains open to the east, west and at depth (see longitudinal view, Figure 1, plan of drilling locations on gravity model, Figure 2 and cross section, Figure 3).

The recent drilling phase comprised 22 RC drillholes for 6,241m and tested the eastern and western extents of the known high-grade copper-gold mineralisation (Figure 1). The drilling also included the first stage of new step-out drilling within the 2.5km strike-length Bluebird-Perseverance ironstone corridor (see gravity inversion & drilling locations, Figure 4).

Results included further high-grade, copper, gold with bismuth and silver intersections west and down-plunge of previous drilling, confirming and extending the potential for further zones of mineralisation extending west within the gravity defined ironstone corridor (Figures 1 and 2). Results included:

- 14m @ 4.0% CuEq\* (0.8% Cu, 3.0 g/t Au, 3.6 g/t Ag, 0.1% Bi) from 233m in BBRC0040 incl. 5m @ 10.6% CuEq\* (2.0% Cu, 8.3 g/t Au, 9.8 g/t Ag, 0.27% Bi) from 233m incl. 1m @ 1.6% Cu, 22.7 g/t Au, 41.4 g/t Ag, 0.51% Bi from 233m
- 18m @ 1.3% CuEq\* (1.1% Cu, 0.22 g/t Au) from 260m in BBRC0044
   incl. 8m @ 2.7% CuEq\* (2.1% Cu, 0.48 g/t Au) from 260m
- 3m @ 4.0% CuEq\* (3.7% Cu, 0.19 g/t Au, 3.4 g/t Ag) from 342m in BBRC0041

The drilling results also identified a new, shallow, zone of copper and gold mineralisation emerging to the east and below the previously identified mineralised zone, opening-up significant expansion potential for the Bluebird deposit (Figure 1 and Figure 3). New intersections from this zone include:

- 28m @ 2.1% CuEq\* (1.6% Cu, 0.5 g/t Au, 2.4 g/t Ag) from 146m downhole in BBRC0034 incl. 16m @ 3.2% CuEq\* (2.5% Cu, 0.62 g/t Au, 2.7 g/t Ag) from 158m incl. 2m @ 7.9% Cu, 0.85 g/t Au, 7.8 g/t Ag from 158m
- 15m @ 1.0% CuEq\* (0.74% Cu, 0.09 g/t Au, 0.1% Bi) from 166m in BBRC0047
- 41m @ 0.57% CuEq\* (0.44% Cu, 0.08 g/t Au) from 156m in BBRC0046

Drilling tested immediate extensions of the high-grade copper and bonanza gold zones, which are open in all directions, with the results building on the numerous previous exceptional copper and gold intersections produced by the Company at Bluebird, including:

- 14.1m @ 7.6% Cu, 2.4 g/t Au from 90.64m incl. 2.6m @ 18.8% Cu, 12.3 g/t Au<sup>2</sup> in BBDD0042,
- 17.95m @ 11.1 g/t Au, 2.7% Cu from 131m incl. 5.1m @ 38.6 g/t Au, 6.1% Cu<sup>3</sup> in BBDD0026,
- 61.8m @ 2.3% Cu, 0.4 g/t Au from 149.2m incl. 6.8m @ 17% Cu, 0.5 g/t Au<sup>4</sup> in BBDD0045,
- 30.5m @ 6.2% Cu, 6.8 g/t Au from 153.6m incl. 17.8m @ 5.2% Cu, 11.5 g/t Au<sup>5</sup> in BBDD0018,
- 63m @ 2.1% Cu, 4.6 g/t Au from 153m incl. 27.55m @ 3.6% Cu, 10.0 g/t Au<sup>6</sup> in BBDD0012, and,
- 24m @ 0.66% Cu, 11.8 g/t Au from 161m incl. 5.7m @ 0.74% Cu, 49.3 g/t Au<sup>7</sup> in BBDD0021.



New interpretations of the mineralisation at Bluebird show up to four large discrete high-grade copper-gold mineralised lenses (150-300m in length and 100-200m in depth) occurring within the east-west trending, ironstone host corridor that extends across the entire, 2.5km strike-length Bluebird-Perseverance corridor (Figure 1 and 4). The **high-grade copper and gold mineralisation remains completely open to the east and to the west down-plunge** within this corridor (see Figure 1, and gravity model, Figure 2).

The 2.5km Bluebird-Perseverance corridor (Figure 4) is part of a >5km zone of gravity highs that extend across the entire Barkly tenement. Further detailed gravity surveying, infill auger geochemistry and aircore drilling is in progress to better define the multiple targets for Bluebird repeats within this 5km zone.

When received, the results from a series of step-out RC holes outside the known Bluebird mineralisation but within the Bluebird-Perseverance corridor will be integrated with the results of the regional detailed gravity and auger and air-core programs, currently underway, to refine drill-targets for the discovery of the next high-grade Bluebird look-alike deposit.

Summary of significant drilling intersections to date from the recent drilling are shown in the Table 1 below.

Hole ID	From (m)	To (m)	Interval (m)	Cu.EQ %	Cu (%)	Au (g/t)	Ag (g/t)	Bi (%)	Co (g/t)	Fe (%)	Cut-off Cu (%)
BBRC0028	105	108	3	1.1	0.52	0.27	0.4	0.18	110	19	0.3% Cu
BBRC0028	159	162	3	1.54	0.93	0.35	1.3	0.15	96	30	0.3% Cu
BBRC0028	174	182	8	0.68	0.58	0.06	0.7	0.01	86	17	0.3% Cu
BBRC0029	68	82	14	0.45	0.25	0.12	0.2	0.02	230	16	0.3% Cu
BBRC0030	144	161	17	0.91	0.64	0.09	0.5	0.12	14	25	0.3% Cu
BBRC0033	108	110	2	1.6	0.06	1.55	0.3	0.01	207	34	0.5g/t Au
BBRC0033	138	141	3	0.86	0.31	0.03	0.1	0.33	69	14	0.3% Cu
BBRC0034	146	174	28	2.1	1.56	0.50	2.4	0.02	165	24	0.3% Cu
Incl.	146	150	4	1.6	0.66	0.87	4.5	0.02	71	15	0.3% Cu
& incl.	158	174	16	3.2	2.48	0.62	2.7	0.02	151	27	1.0% Cu
Incl.	158	160	2	9.0	7.89	0.85	7.8	0.05	369	24	0.3% Cu
BBRC0035	160	168	8	0.73	0.36	0.31	0.2	0.02	112	13	0.5 g/t Au
BBRC0035	202	208	6	1.0	0.14	0.67	12.7	0.02	92	15	0.3% Cu
BBRC0037	272	275	3	3.2	2.90	0.22	0.9	0.01	100	11	0.3% Cu
BBRC0038	199	207	8	0.85	0.77	0.01	0.5	0.03	16	28	0.3% Cu
BBRC0040	233	247	14	4.0	0.84	3.0	3.6	0.10	94	13	0.3% Cu
Incl.	233	238	5	10.6	2.0	8.3	9.8	0.27	179	23	1.0% Cu
Incl.	233	234	1	-	1.57	22.72	41.4	0.51	180	20	N/A
BBRC0041	342	345	3	4.0	3.71	0.19	3.4	0.03	85	9	0.3% Cu
BBRC0042	133	138	5	0.52	0.47	0.03	0.2	0.01	33	31	0.3% Cu
BBRC0044	260	278	18	1.3	1.06	0.22	0.6	0.01	126	22	0.3% Cu
Incl.	260	268	8	2.7	2.12	0.48	1.1	0.02	176	26	0.3% Cu
BBRC0046	156	197	41	0.57	0.44	0.08	1.0	0.02	107	11	0.3% Cu
Incl.	156	161	5	1.0	0.70	0.14	0.4	0.09	111	14	0.3% Cu
& incl.	173	176	3	1.5	1.11	0.25	2.5	0.03	131	13	0.3% Cu
& incl.	182	184	2	2.1	1.65	0.34	5.5	0.01	106	13	0.3% Cu
& incl.	192	197	5	1.3	1.18	0.08	0.9	0.02	193	17	0.3% Cu
BBRC0047	166	181	15	1.0	0.74	0.09	0.6	0.10	12	22	0.3% Cu

Table 1 – Significant drill intersections June-July 2024 Drilling Program.

Drillhole details are shown in Appendix 1. Copper Equivalent calculations are shown in Appendix 2.

JORC Disclosures for the drilling program and the Project are attached in Appendix 3- JORC 2012 Table 1.



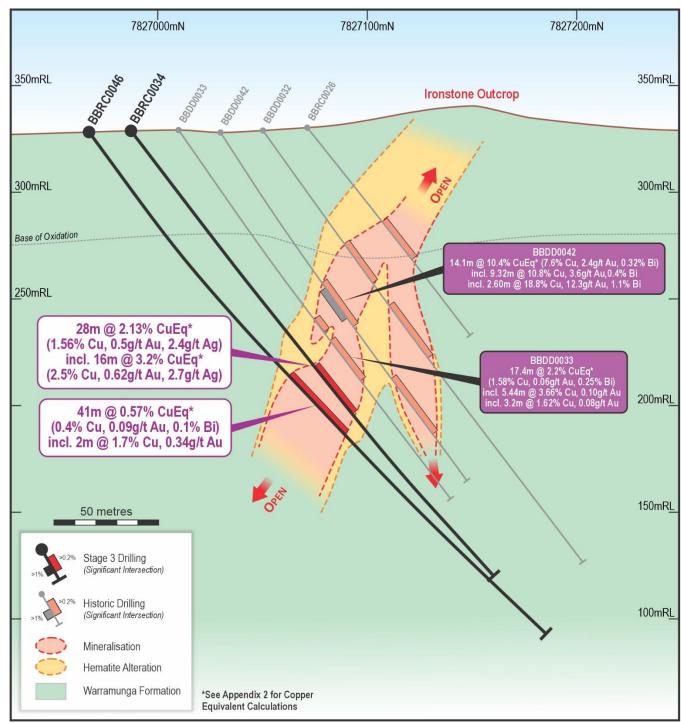


Figure 3: Cross section 448,500mE, showing thick hanging-wall copper-gold zone, open at depth



#### **Perseverance Drill Target**

The Company has been successful in obtaining a Resourcing the Territory grant from the Northern Territory Government for up to 50% of the cost of a deep diamond drillhole testing the large geophysical target down-plunge and to the west of the historical Perseverance gold mine, 1.5km west of Bluebird. Previous drilling at Perseverance produced high-grade gold results which included **3m at 50 g/t Au**<sup>8</sup> from 42m in PERC015 and **3m @ 43.2 g/t Au**<sup>8</sup> from 72m in PERC001 (see location, Figure 4, below).

The highest intensity (ironstone) gravity anomaly, and coincident reversed magnetic anomaly, occurs to the west of Perseverance. The co-funded drilling will target the intersection of the mineralised Perseverance fault zone with the ironstone (see Figure 4).

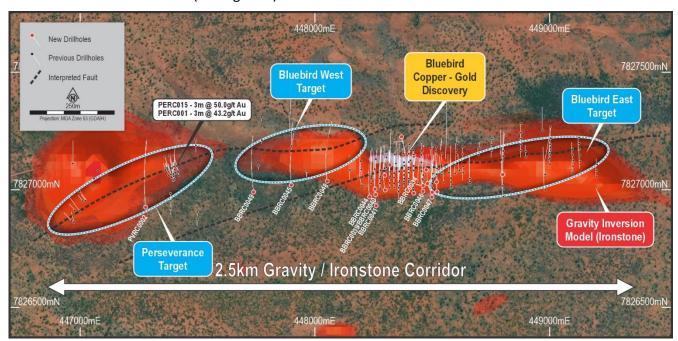


Figure 4: Plan view showing all drilling on gravity / ironstone inversion model in Bluebird Perseverance Corridor

## New Gravity Survey and Geophysical Data interpretation underway

The Company believes the combination of detailed gravity, magnetics and Induced Polarisation (IP) resistivity, which has been successful to date at Bluebird, is a key element of the model for further discovery of Bluebird look-alikes with the greater Barkly Project. A program of further detailed gravity surveying and magnetics and IP re-processing and modelling is in progress to generate high-resolution data and models for drill-target identification within the more than 5km strike-length gravity corridor on the Barkly Project.

## ABOUT THE BLUEBIRD COPPER-GOLD DISCOVERY

The mineralisation intersected at Bluebird is typical of the high-grade copper-gold orebodies in the Tennant Creek Mineral Field (see Figure 5, below), such as the Peko copper-gold deposit which produced **3.7Mt @ 4% Cu, 3.5 g/t Au** historically<sup>1</sup>. The high-grade mineralisation, developed from approximately 80m below surface, 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 mineralised zones include secondary malachite (copper-carbonate) as well as native copper, which transitions to primary sulphide mineralisation at depth including chalcocite, bornite and chalcopyrite (e.g. the massive chalcopyrite zone in BBDD0018<sup>5</sup>).

Metallurgical testing has been completed and proves the amenability of the Bluebird mineralisation to standard copper flotation, producing copper and gold concentrates comparable with commercially available products<sup>9</sup>. Further work is in progress to enhance gold recovery, which will include gravity concentration test-work and cyanide leaching of the flotation tail. The Company will also examine options for recovering other critical elements in the Bluebird mineralisation including cobalt, bismuth and silver.



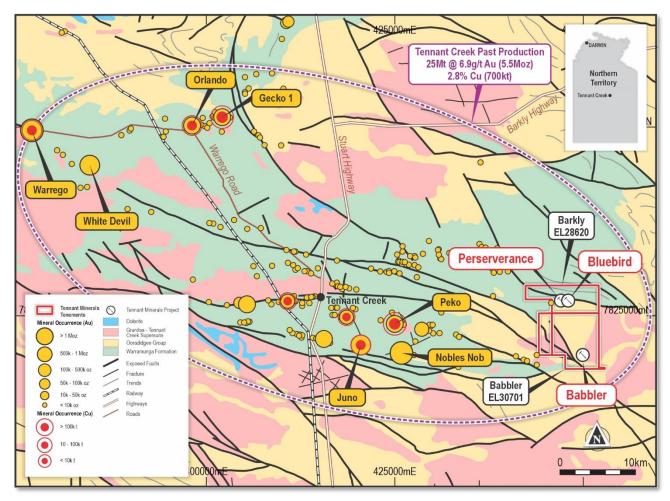


Figure 5: Location of the Barkly Project and Major Historical Mines in the Tennant Creek Mineral Field

#### **REFERENCES**

Authorised for release by the board of directors.

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

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<sup>&</sup>lt;sup>1</sup> Portergeo.com.au. Tennant Creek - Gecko, Warrego, White Devil, Nobles Nob, Juno, Peko, Argo.

<sup>&</sup>lt;sup>2</sup>04/12/2023. Tennant Minerals (ASX.TMS): "Exceptional Copper and Gold Results from Bluebird Eastern Extension".

<sup>&</sup>lt;sup>3</sup> 19/07/2023. Tennant Minerals (ASX.TMS): "Drilling Doubles Strike Length of Bluebird Cu-Au Discovery".

<sup>&</sup>lt;sup>4</sup> 12/02/2024. Tennant Minerals (ASX.TMS): "Exceptional 61.8m @ 2.3% Copper Intersection at Bluebird".

<sup>&</sup>lt;sup>5</sup>08/02/2023. Tennant Minerals (ASX.TMS): "Spectacular Bluebird Drill-Hit 30.5m @ 6.2% Cu, 6.8 g/t Au".

<sup>&</sup>lt;sup>6</sup>17/08/2022.Tennant Minerals (ASX.TMS): "Bonanza 63m@ 2.1% Copper and 4.6 g/t Gold Intersection at Bluebird".

<sup>&</sup>lt;sup>7</sup> 07/03/2023. Tennant Minerals (ASX.TMS): "Bonanza Bluebird Gold Results Including 5.7m @ 49.3 g/t Au".

<sup>&</sup>lt;sup>8</sup> NTGS Report ID 1532559938 - Meteoric Resources, MLC57-MLC217-224\_2015\_GA

<sup>&</sup>lt;sup>9</sup> 26/03/2024. Tennant Minerals (ASX.TMS): "Bluebird Metallurgy Delivers 23% Cu, 1.5g/t Au Concentrate".



#### CAUTIONARY STATEMENT REGARDING FORWARD LOOKING INFORMATION

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

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

#### **COMPETENT PERSONS DECLARATION**

The information in this report that relates to exploration results is based on information compiled and/or reviewed by Mr Chris Ramsay. Mr Ramsay is the General Manager of Geology at Tennant Minerals Ltd and a Member of the Australian Institute of Mining and Metallurgy ('MAusIMM'). Mr Ramsay has sufficient experience, including over 25 years' experience in exploration, resource evaluation, mine geology, and development studies, relevant to the style of mineralisation and type of deposits under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee ('JORC') Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Ramsay consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

#### **ASX LISTING RULES COMPLIANCE**

In preparing this announcement the Company has relied on the announcements previously made by the Company as listed under "References". The Company confirms that it is not aware of any new information or data that materially affects those announcements previously made, or that would materially affect the Company from relying on those announcements for the purpose of this announcement.



# Appendix 1 – RC Drillhole details

	D:	A C : 10	GRID	GRID_N	RL	Depth
Hole #	Dip°	Az Grid°	(m)	(m)	(m)	(m)
BBRC0028	-54	356	448,480.3	7,827,026.2	328.6	212
BBRC0029	-55	358	448,474.6	7,827,084.5	331.2	115
BBRC0030	-53	356	448,500.3	7,826,989.2	327.8	270
BBRC0031	-50	354	448,800.1	7,827,065.2	325.2	270
BBRC0032	-57	357	448,519.2	7,827,033.4	328.2	210
BBRC0033	-50	355	448,520.4	7,826,991.0	327.6	300
BBRC0034	-57	357	448,461.5	7,827,017.2	328.6	198
BBRC0035	-55	355	448,421.8	7,826,985.3	328.2	264
BBRC0036	-55	358	448,320.4	7,827,105.8	330.8	126
BBRC0037	-61	356	448,300.1	7,826,999.0	329.3	300
BBRC0038	-54	356	448,257.1	7,827,002.7	329.7	252
BBRC0039	-	-	448,259.6	7,826,978.9	329.2	66 (abnd).
BBRC0040	-56	352	448,259.9	7,826,980.0	329.2	258
BBRC0041	-56	353	448,261.9	7,826,932.2	328.4	380
BBRC0042	-55	356	448,298.5	7,827,061.5	330.3	200
BBRC0043	-70	165	448,369.8	7,827,225.1	331.2	330
BBRC0044	-61	353	448,234.1	7,826,969.5	329.3	288
BBRC0045	-59	352	447,901.0	7,827,020.3	332.8	400
BBRC0046	-54	354	448,460.5	7,826,993.6	328.5	280
BBRC0047	-55	354	448,498.9	7,826,969.1	327.8	320
BBRC0048	-57	352	448,053.4	7,827,036.1	331.3	402
BBRC0049	-60	353	447,739.6	7,826,989.8	332.9	400
PVRC0002	-58	353	447,278.7	7,826,925.8	330.4	400
						6,241



## **Appendix 2 – Copper Equivalent Calculation**

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

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

The prices used in the calculation are based on current (15/09/24) market for Cu, Au, Ag sourced from the website kitcometals.com whilst estimates for Bi and Co are from other sources for current Bi and Co price.

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

Metal	Average grade (g/t)	Average grade (%)	Metal Prices		Recovery x payability (%)	Factor	Factored Grade (CuEq%)	
			\$/oz	\$/lb	\$/t			
Cu	-	0.52	\$0.26	\$4.21	\$9,308	0.8	1.00	0.524
Au	0.27	-	2,579	\$41,264	\$90,945,856	0.8	0.98	0.263
Ag	0.40	-	30.8	\$493	\$1,086,131	0.8	0.012	0.000
Bi	-	0.18	\$0.41	\$6.50	\$14,326	0.8	1.54	0.280
Co	110	0	\$0.69	\$11.03	\$24,300	0.8	0.0003	0.029
							CuEq%	1.10



# Appendix 3 - JORC 2012 Table 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> <li>Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Exploration results are based on industry best practices, including sampling, assay methods, and appropriate quality assurance quality control (QAQC) measures.</li> <li>Reverse Circulation (RC), 2024 program: RC drill chips were collected at 1m intervals via a cone splitter in pre-numbered calico bags. The quantity of sample was monitored by the geologist during drilling.</li> <li>RC samples of between 3-4kg were sent to the laboratory where they were pulverised to at least 85% passing 75 microns. The pulp sample is then split to produce a sample for analysis.</li> <li>Composite samples (4m) were taken outside expected ore zones while 1 metre samples were taken.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	<ul> <li>Holes were drilled from -53 to -75 degrees.</li> <li>RC drilling (2024) was conducted using a 5¹/₄" face sampling hammer.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias</li> </ul>	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.



Criteria	JORC Code explanation	Commentary
	may have occurred due to preferential loss/gain of fine/coarse material.	
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All logging is completed according to industry best practice.</li> <li>RC chips are logged at 1m intervals using a representative sample of the drill chips.         Logging records include lithology, alteration, mineralisation, colour and structure.     </li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique is considered adequate as per industry best practice.</li> <li>RC samples of 3-4kg are collected at 1m through expected mineralised intervals and by composite sampling over 4 meter intervals otherwise, using a cone splitter. The sample size is appropriate for the style of mineralisation and the grain size of the material being sampled.</li> <li>RC samples are dried at the laboratory and then pulverised to at least 85% passing 75 microns.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of</li> </ul>	<ul> <li>All samples were submitted to the Intertek Laboratories sample preparation facility in Perth Australia for analysis.</li> <li>Pulp sample(s) were digested with a mixture of four Acids including Hydrofluoric, Nitric, Hydrochloric and Perchloric Acids for a total digest.</li> <li>Analysis of 2024 RC drilling; Cu, Pb, Ag, Bi, Co Ni, Sb have been determined by Inductively Coupled Plasma (ICP) Mass Spectrometry (MS-OES).</li> <li>Gold was analysed by Fire Assay with a 25g charge and an ICP-MS finish with a 5ppb Au detection limit.</li> <li>A Field Standard, Duplicate or Blank is inserted every 25 samples. The Laboratory inserts its own standards and blanks at</li> </ul>



Criteria	JORC Code explanation	Commentary
	accuracy (i.e., lack of bias) and	random intervals, but several are inserted per
Verification of sampling and assaying	<ul> <li>precision have been established.</li> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>batch regardless of the size of the batch.</li> <li>All significant intercepts are reviewed and confirmed by at least two senior personnel before release to the market.</li> <li>No adjustments are made to the raw assay data. Data is imported directly to Datashed in raw original format.</li> <li>All data are validated using the QAQCR validation tool with Datashed. Visual validations are then carried out by senior staff members.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All drill hole collars were located with a handheld GPS with an accuracy of +/-5m. At the completion of the drilling program all holes were surveyed by DGPS.</li> <li>Downhole surveys were taken at minimum 30m intervals using a solid state gyro to maintain strong control of drill direction.</li> <li>Survey co-ordinates: GDA94 MGA Zone 53.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Data spacing and distribution used to determine geological continuity is dependent on the deposit type and style under consideration. Where a mineral resource is estimated, the appropriate data spacing, and density is decided and reported by the competent person.</li> <li>For mineral resource estimations, grades are estimated on composited assay data. The composite length is chosen based on the statistical average, usually 1m. Sample compositing is never applied to drilling interval calculations reported to market. A sample length weighted interval is calculated as per industry best practice.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Orientation of sampling is as unbiased as possible based on the dominating mineralised structures and interpretation of the deposit geometry.</li> <li>If structure and geometry is not well understood, sampling is orientated to be perpendicular to the general strike of stratigraphy and/or regional structure.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>All samples remain in the custody of company geologists and are fully supervised from point of field collection to laboratory drop-off.</li> </ul>
Audits or reviews	The results of any audits/review of sampling techniques or 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	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	The Company holds 100% of two contiguous Exploration Licences, EL 28620 and EL30701 located east of Tennant Creek. All tenure is in good standing at the time of reporting. There are no known impediments with respect to obtaining a licence to operate in the area.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	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	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	Drill hole details are provided in this report.
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.	<ul> <li>All exploration results are reported by a length weighted average. This ensures that short lengths of high-grade material receive less weighting than longer lengths of lowgrade material.</li> <li>No high-grade cut-offs are applied.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').</li> </ul>	<ul> <li>Mineralisation at Bluebird is interpreted to be striking east-west true azimuth with a dip of 70-80 degrees towards 180 degrees true azimuth.</li> <li>All holes are drilled as perpendicular as practical to the orientation of the mineralised unit and structure. Intersection lengths are interpreted to be close to true thickness.</li> </ul>
Diagrams	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> <li>Refer to Figures in this report for planprojection of Bluebird with drillhole locations.         Figure 1 is a 3-d perspective longitudinal view showing a mineralisation model, key intersections and potential projections.         Figure 2 is a plan projection of the gravity/ironstone model and drillhole locations.         Figure 3 is an appropriate cross section though the Bluebird mineralisation. Figure 4 is an expanded plan view with all drillhole locations on gravity inversion model. Figure 5 is a regional location plan of the Barkly and Babbler Project tenements and the Bluebird prospect.</li> </ul>
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.	<ul> <li>All background information is discussed in the announcement.</li> <li>Full drill results for copper and gold assays for drilling previous to 2021 are shown in Appendix 1 of the ASX announcement of 18 March 2020, "High-Grade Copper and Gold Intersected in Drilling program at Bluebird".</li> </ul>
Other substantive exploration data	Other exploration data, if    meaningful and material, should    be reported including (but not    limited to): geological    observations; geophysical survey    results; geochemical survey    results; bulk samples – size and    method of treatment;    metallurgical test results; bulk    density, groundwater,    geotechnical and rock	<ul> <li>No other new material exploration in this report.</li> <li>Refer to Tennant Minerals (ASX. TMS) release of 25/08/2022: "Standout Geophysical Targets to Replicate Bluebird Cu-Au Discovery" for details of the IP/resistivity survey specifications.</li> </ul>



Criteria	JORC Code explanation	Commentary
	characteristics; potential deleterious or contaminating substances.	
Further work	<ul> <li>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the</li> </ul>	<ul> <li>Additional drilling is planned to define and extend the mineralisation. Resource definition drilling will then be planned.</li> <li>Regional targets identified using modelling of</li> </ul>
	areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	gravity and a drone magnetic survey data as well as detailed IP resistivity survey data will also be drill tested during the up-coming drilling program.