TENNANT MINERALS

Diamond Drilling Intersects New, Intensely Mineralised, Footwall Copper Zone at Bluebird

Three holes completed, all intersected intense haematite with copper

TENNANT MINERALS LIMITED

ASX ANNOUNCEMENT

06 December 2021

- **The Barkly Project drilling program at the Bluebird Prospect has made great progress to date:**
  - **Three diamond drillholes of a seven-hole program completed for 552.6m**
  - **All three holes have intersected intense haematite alteration with visible copper mineralisation (malachite and/or chalcocite) in the main target**
  - **Last two holes continued into the footwall to intersect a new zone of intense haematite with copper mineralisation, a new discovery zone**
- **The first new diamond drillhole, BBDD0007 intersected a 10.3m zone of haematite alteration with copper mineralisation (malachite) from 72.1m**
- **The second hole, BBDD0008, on the same section, intersected a 21m zone of chlorite/haematite in the main zone from 149m, then intersected a second, footwall, zone of intense haematite with copper mineralisation (malachite) over 17m from 191m downhole, representing a new discovery zone**
- **BBDD0009, to the west of BBDD0008, intersected 50m from 166m of intense haematite, brecciation and minor to abundant malachite/chalcocite in the main zone and continued into the footwall zone, not previously intersected (previous hole BBRC019 ended in the main target zone at 3.9g/t Au, 4.8% Cu[1])**
- **The next three diamond drillholes will test down plunge of the high-grade copper-gold zone where the mineralisation remains open to the west**
- **Drillcore is currently being logged and sampled at Tennant Creek, before despatch to Alice Springs for sample prep. then Intertek Perth for analyses**

Photo 1: BBDD0008, 196.5m – 196.7m, new footwall zone discovery - intense haematite breccia with malachite (copper-carbonate mineralisation)

Capital Structure:

465.38 million Shares

307.5 million Options
@ $0.03 exp 23/04/24

ASX Code: TMS

Tennant Minerals Limited (ASX:TMS) is very pleased to advise that the diamond drilling program at the Bluebird high-grade copper-gold prospect, at the Company's 100%-owned Barkly Project in the Northern Territory (see location, Figure 3), is progressing extremely well.

The first three (3) diamond drillholes have already been completed, for 552.6m, of a total planned seven (7) holes for 1,500m and **all three holes have intersected intense haematite alteration with visible copper mineralisation (malachite and/or chalcocite) in the main target zone**.

In addition, drillhole **BBDD0008** and **BBDD009**, were continued into the footwall of the main target and both **intersected an intense haematite altered breccia with copper mineralisation (malachite) (see Photo 1 from BBDD0008). This zone represents a new discovery of mineralisation parallel to and in the footwall of the main zone.**

The first two holes tested the eastern part of the identified Bluebird, high-grade copper-gold target, on section 448,400mE (see Figure 1):

- **BBDD0007** intersected a 10.3m zone from 72.1m to 82.4m of haematite and/or chlorite alteration with blebs of malachite (copper-carbonate) mineralisation, **XRF spot readings on drillcore of up to 5.8% Cu** (*XRF readings on drillcore every 30cm, range of readings 0.02% to 5.8% Cu, averaging ~1.25% Cu, Appendix 1b).*
- **BBDD008** intersected a 21m zone from 149m of chloritic breccia with haematite alteration in the main target zone, then **intersected a second, footwall, zone of intense haematite breccia with copper mineralisation (malachite) over 17m from 191m downhole (see Photo 1). Hand held XRF spot readings on drillcore of up to 15.7% Cu have been recorded from the main zone** (*spot XRF readings on drillcore every 30cm, range of copper readings 0.01% to 15.7% Cu, averaging ~1.1% Cu in main zone, Appendix 1b).*

The third hole of the program tested the centre of the currently identified high-grade shoot on section 448,380mE (see longitudinal projection Figure 2):

- **BBDD009** intersected **a 50m zone from 165.6m of intense haematite-silica breccia with minor to abundant malachite with chalcocite (copper sulphide) in the main target zone, continuing into the newly discovered footwall zone to 216m. 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 3.9 g/t Au, 4.8% Cu[1] at end of hole after intersecting only 17m of mineralisation.

Tennant Minerals Chairman, Mr Matthew Driscoll, commented:

"This is a great start to the Bluebird diamond drilling program. Three holes have been completed already and all of the holes have successfully tested the main target and intersected significant thicknesses of mineralisation with visible copper mineralisation.

"The discovery of a new, footwall, zone with intense haematite alteration with visible copper mineralisation is very exciting and it is also very pleasing that we have now successfully tested the entire mineralised zone below previously abandoned RC holes that ended in high-grade copper-gold mineralisation.

"We look forward to seeing the results of this new drilling as well as the outcome of step out holes designed to expand the footprint of this very high-grade copper-gold deposit."

The next three holes in the program will step-out to the west, down plunge, of the currently identified mineralised zone at Bluebird (see longitudinal projection, Figure 2). This drilling has the potential to expand the footprint of the Bluebird shoot and determine if the scale, as well as the grade, can replicate other major high-grade copper-gold deposits in the Tennant Creek mineral field such as the **Peko deposit**, that produced **147,000 tonnes of 4% Cu and 414Koz at 10 g/t Au** and lies only 20km to the west of Bluebird (see location, Figure 3).

Drillcore from these first three holes is currently being logged prior to sampling for despatch to the Intertek laboratory in Alice Springs for sample preparation then pulps to be sent for a full ICP suite of analyses at Intertek, Perth.

Appendix 1a includes drillhole details to date. Appendix 1b includes hand-held XRF spot readings (Cu, Bi) on drill core, BBDD0007 and 0008. Appendix 2 includes JORC table 1, including details and sampling procedures in previous holes.

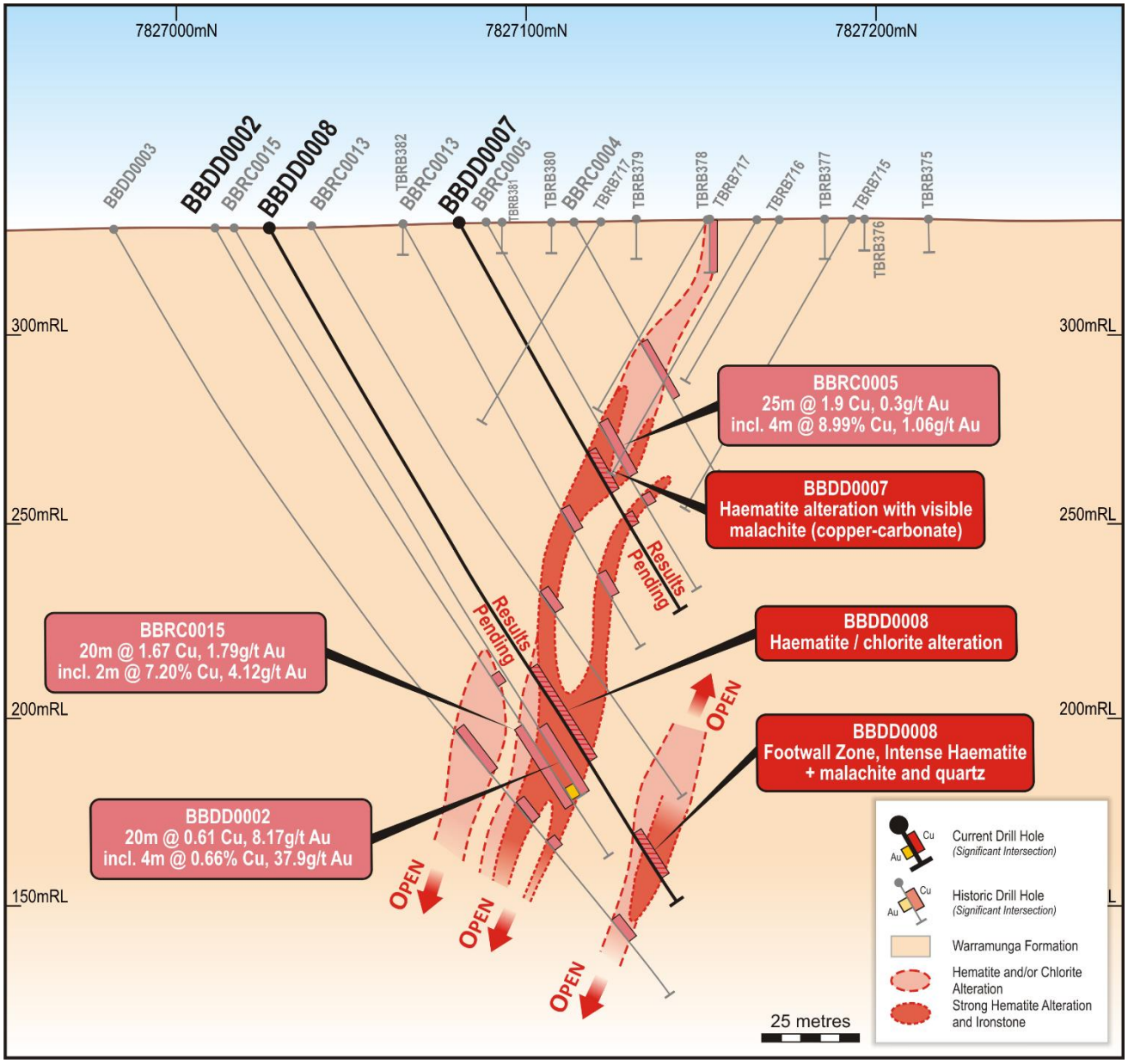

Figure 1: Bluebird cross-section 448,400mE with the BBDD0007 and BBDD0008 mineralised intersection and previous intersections as well as the new footwall zone discovery

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 haematite alteration and brecciation (Photo's 1 and 2) with quartz veining inside a halo of chlorite alteration and variable haematite. The upper parts of the shoots include secondary malachite (copper-carbonate) minerals which transitions to primary sulphide mineralisation at depth e.g. chalcocite, bornite, chalcopyrite or tennantite.

The drilling to date at Bluebird has only just penetrated the transition to primary sulphide mineralisation in association with the IOCG mineralisation. Orebodies such as Peko occur as multiple shoots within a plunging alteration zone of similar dimensions to Bluebird. The shoot currently being drilled may represent only the upper zone of a much larger deposit and deeper drilling would be required to test for repeats/extensions at depth.

In addition to Bluebird, there is excellent potential to discover multiple high-grade copper-gold shoots within the 5km strike length corridor of coincident magnetic and gravity highs that includes Bluebird and the Perseverance mine (Figure 4). This corridor has had minimal testing below the leached zone that continues to >50m below surface. Further modelling of the magnetic and gravity data will help determine depths to target to assist further drill targeting.

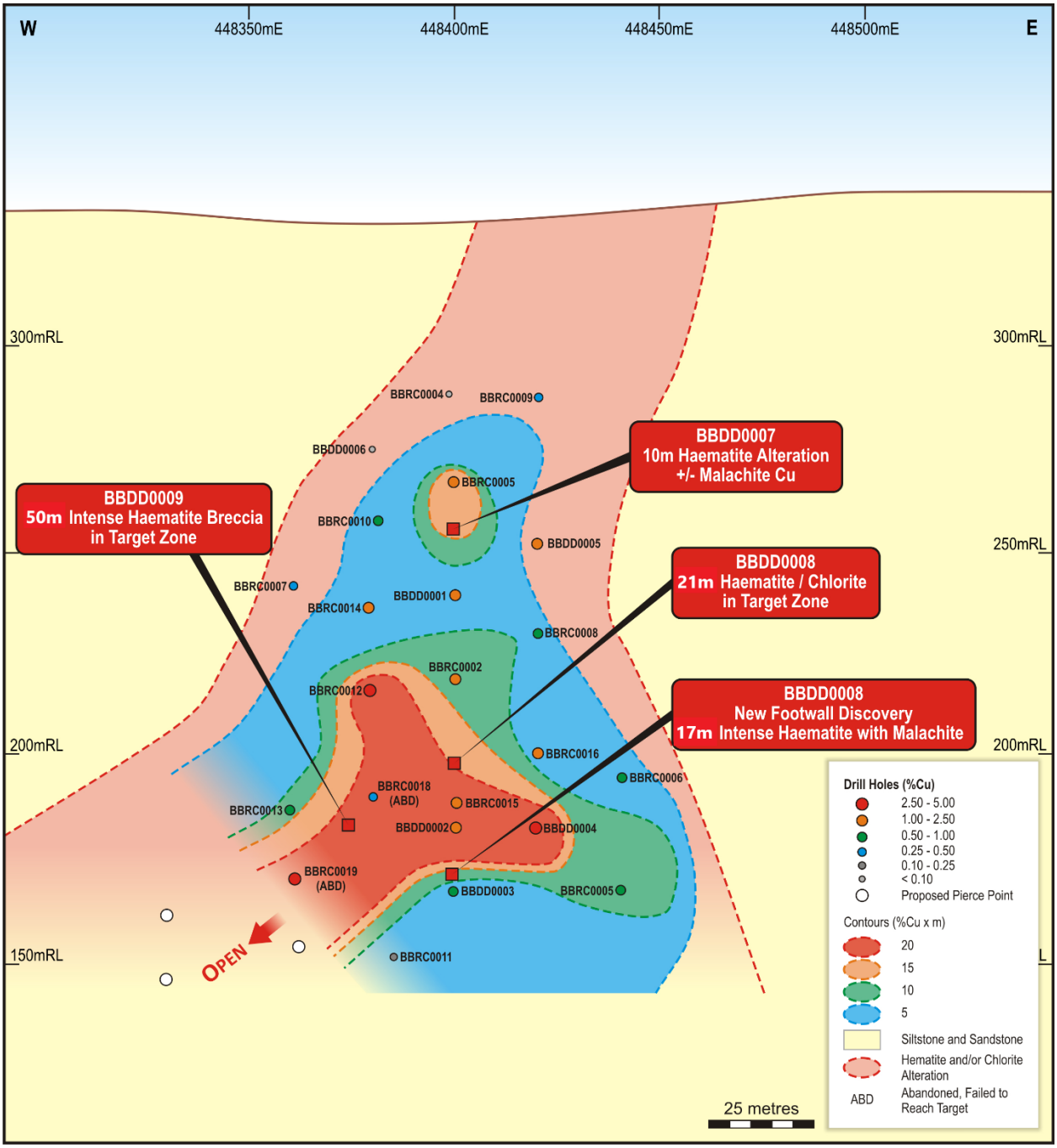

Figure 2: Bluebird longitudinal projection showing BBDD0007, BBDD0008 and BBDD009 pierce points

Photo 2: BBDD0008, 200.6– 200.75m, footwall zone, intense haematite breccia with malachite (copper-carbonate)

ABOUT THE BARKLY PROJECT, BLUEBIRD PROSPECT, 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 3).

The Barkly-Babbler Project is considered highly prospective for magnetite hosted copper-gold mineralisation, similar to other major deposits found elsewhere in the Tennant Creek Mineral Field, such as the **Peko deposit** (Figure 3), only 20km to the west of the Barkly project, that produced **147,000 tonnes of 4% Cu and 414Koz at 10 g/t Au** between 1934 and 1981.

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

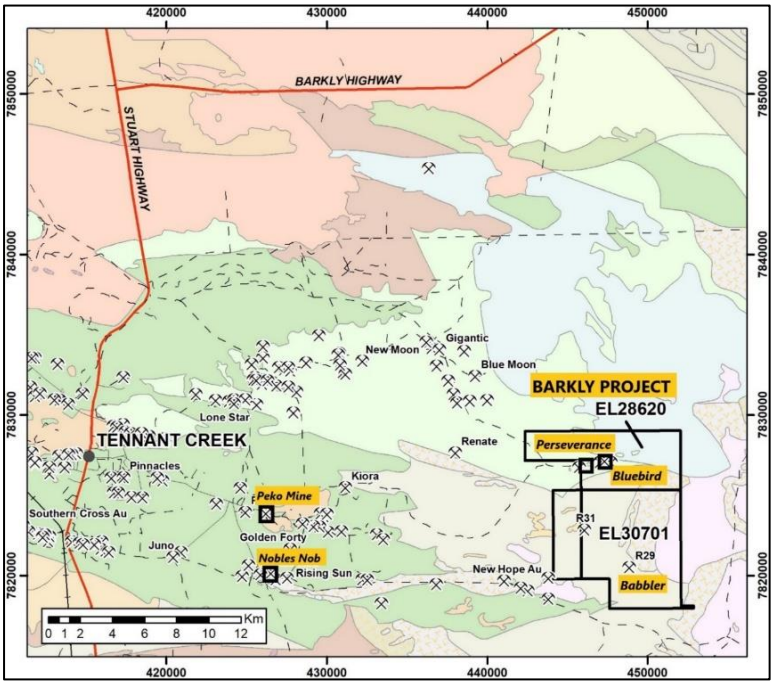

Figure 3: Barkly Project location plan

The diamond drilling program at the Bluebird Prospect (see plan, Figure 4) comprises seven (7) diamond drillholes for a total of up to 1,500m of drilling. The program is designed to test the entire thickness of the high-grade copper-gold mineralisation, as well as test the down-dip / plunge extensions of the zone.

The drilling follows-up previous high-grade drilling intersections from the November 2020 RC drilling program[1], when the Company undertook an initial exploration drilling campaign at the Barkly Copper Gold Project of seven (7) 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[1]**

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 3)[1]**

The 2020 RC holes were drilled to in-fill and extend previous RC and diamond drilling completed in 2014[3], 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[3]**

BBRC0012: **31m at 2.48% Cu, 0.21g/t Au from 116m incl. 12m at 4.41% Cu, 0.23g/t Au[3]**

BBDD-2: **20m at 8.17g/t Au, 0.61% Cu from 157m incl. 4m at 37.9g/t Au, 0.66% Cu[2]**

BBRC-5: **25m at 1.90% Cu, 0.28 g/t Au from 62m incl. 4m at 8.99% Cu, 1.06g/t Au[2]**

BBRC0013: **14m at 1.31% Cu, 0.54g/t Au from 162m incl. 1m at 3.91% Cu, 0.78g/t Au[3]**

Significantly, drill hole **BBRC0019**[1], drilled below BBRC013, which was previously the deepest and most westerly hole drilled at Bluebird[3], intersected strongly haematite altered siltstone and ironstone from 172m to 187m but was abandoned at that depth due to in-hole caving. **The hole ended in high-grade copper-gold mineralisation, with the last metre assaying 3.9 g/t Au and 4.81% Cu**.

The third hole of the current program (BBDD0009) has already tested the footwall in the vicinity of this intersection and intersected 50m of intense haematite alteration and brecciation, with minor to abundant copper mineralisation (malachite/chalcocite).

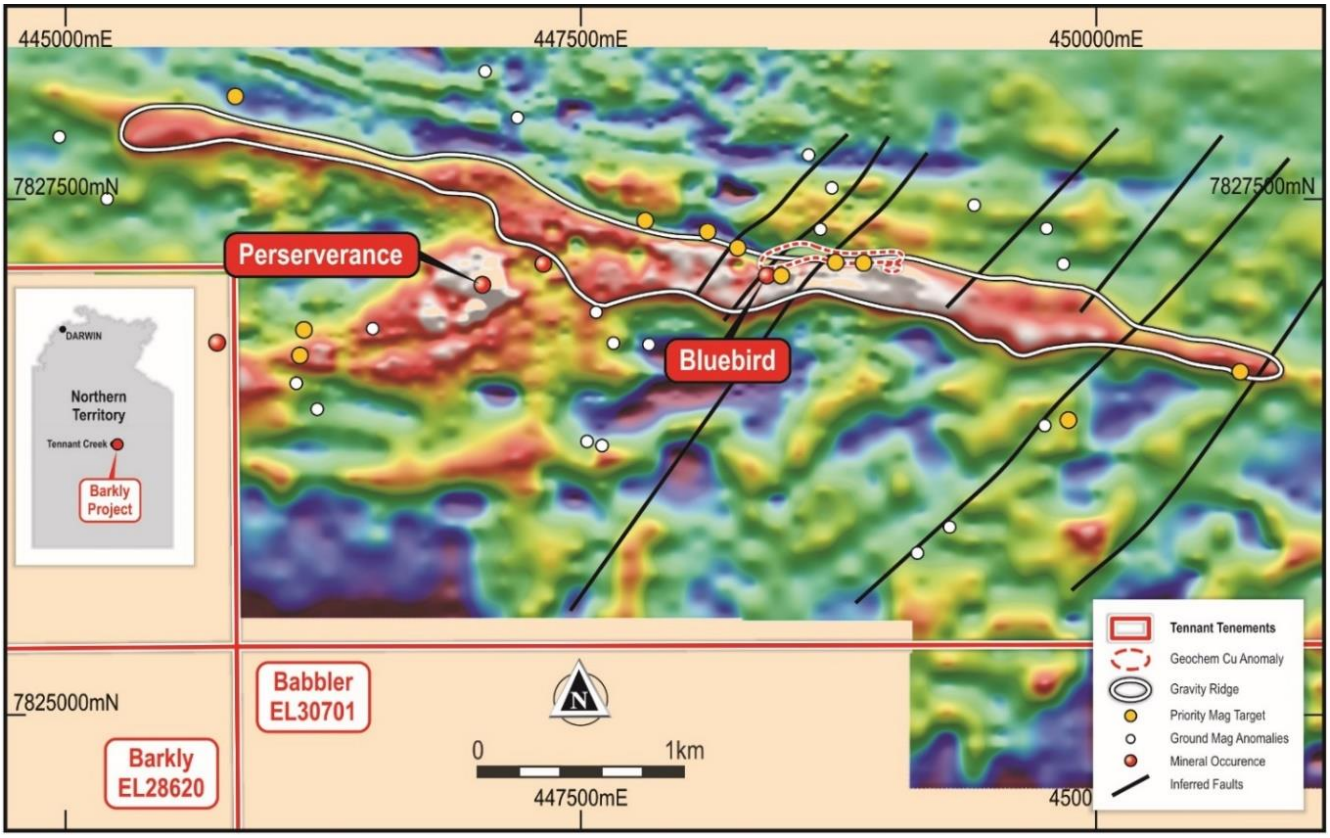

Figure 4: Gravity ridge with Bluebird Prospect and magnetic targets

BARKLY PROJECT REGIONAL SETTING AND PROSPECTIVITY

The **Bluebird Prospect** is located at the centre of a prominent gravity trend and coincident aeromagnetic anomaly along an interpreted west-north-west trending fault corridor (see Figure 4). The "Bluebird Corridor" has been mapped for over 5km strike length and Bluebird is one of several coincident magnetic and gravity anomalies within this corridor. Previous drilling along strike from Bluebird has been limited to only shallow reconnaissance style and is unlikely to have penetrated a strongly leached zone that lies above the mineralisation identified at Bluebird. The historical Perseverance Mine is offset from the corridor but is associated with a discrete gravity - magnetic feature, that also remains un-tested at depth.

At the surface the Bluebird prospect is marked by an ironstone unit, that forms a low hill with several shallow workings. The ironstone has only low levels of gold and copper due to strong leaching that extends to a depth of over 100m. Previous drilling in 2014[3] and 2020[1] intersected high copper and gold values associated with a supergene enriched zone at approximately 120-150m vertical depth. Based on the drilling results to date, mineralisation has been identified from 50m to at least 150m vertical depth from surface and over a strike length of more than 150m, remaining open at depth and along strike to the west.

The Barkly Project is located at the eastern end of the **Tennant Creek Copper-Gold Field** within the Central Tennant Creek Block, where the oldest rocks are the Proterozoic metasedimentary rocks of the **Warramunga Formation**. The Warramunga Formation hosts the major iron oxide-copper- gold deposits (IOCG) and historically Tennant Creek IOCG-style mineralised systems have produced extremely high grades and supported highly profitable mines (Figure 5).

The copper-gold mineralisation at the Bluebird Prospect is hosted by an east west striking, steeply south dipping, ironstone body. The ironstone body is interpreted to be controlled by a major east-west structure associated with a regional scale gravity anomaly and a discrete magnetic feature (Figure 4).

Copper, gold and bismuth mineralisation at Tennant Creek is often associated with east-west striking ironstone bodies within west-northwest striking fault corridors, where they are intersected by north-east trending structures.

Major, high-grade, copper-gold deposits are located within 20km to the west of the Barkly Project and include the **Peko deposit**, that produced **147,000 tonnes of 4% Cu and 414Koz at 10 g/t Au** between 1934 and 1981 and the **Nobles Nob** deposit that produced **1.1Moz of gold** historically (see Figure 5 below).

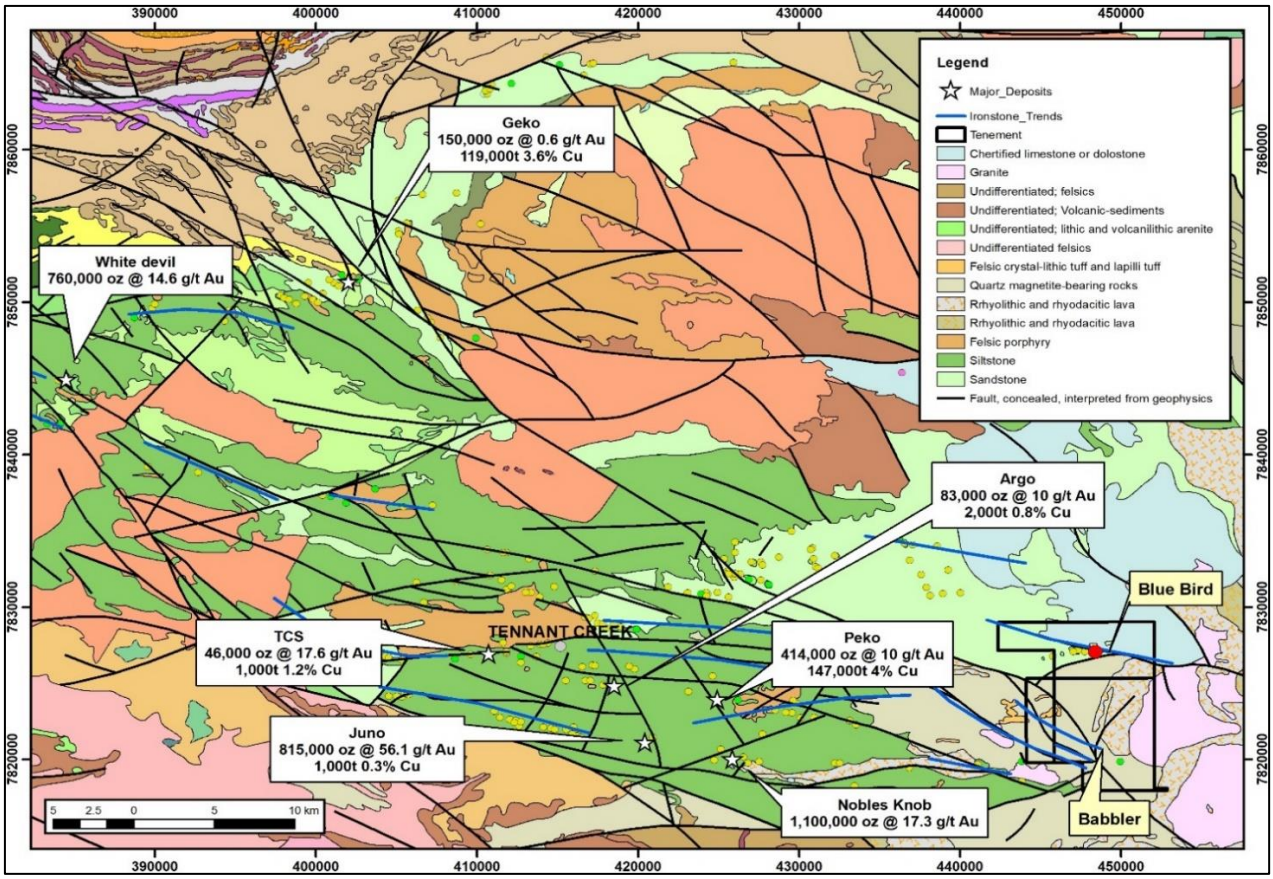

Figure 5: Geology of the Tennant Creek region showing major copper-gold deposits, occurrences and the Barkly Project

EXPLORATION AND DEVELOPMENT STRATEGY FOR BLUEBIRD

The Company's primary objective is to complete further drilling to extend and define the high-grade copper-gold mineralisation identified at the Bluebird Prospect. Bluebird is currently the highest priority and most advanced prospect within the Barkly Project area. However, further exploration is also planned along the 5km Bluebird Corridor to test other highly prospective magnetic-gravity anomalies that have not been drilled at depth.

The ultimate objective of the Company is to build a high-grade copper-gold resource base at the Barkly Project and advance the Barkly Project towards mine development.

REFERENCES

[1] 18 March 2020. Blina Minerals (ASX: BDI) "High-Grade Copper and Gold Intersected in Drilling program at Bluebird"

[2] 24 September 2019. Blina Minerals (ASX: BDI) "Strategic Acquisition of High-Grade Gold-Copper Project"

[3] 09 December 2014. Blaze International Ltd (ASX: BLZ) "High Grade Copper Sulphide Intersection at Bluebird"

ENDS

CONTACT AND AUTHORISATION

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

For further information please contact:

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

CAUTIONARY STATEMENT REGARDING FORWARD LOOKING INFORMATION

This release contains forward-looking statements concerning Tennant Minerals. 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 PERSON'S 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 dated 06 December 2021, the Company has relied on the announcements previously made by the Company and specifically dated 24 September 2019 and 18 March 2020. 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 1a

Drillholes details, current program to date:

Hole #	Dip°	Azi_Grid°	GRID_E	GRID_N	RL	Mud-rotary (m)	DDC (m)	Total Depth (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
Total						**203.5**	**349.1**	**552.6**

APPENDIX 1b

Hand held XRF readings on drillcore, BBDD0007 and BBDD0008:

Reading No	SAMPLE	Cu %	Bi ppm
128	BBDD0007 69m	0.05	< LOD
129	BBDD0007 70m	0.10	47.27
130	BBDD0007 71m	0.29	< LOD
131	BBDD0007 71.1m	0.11	< LOD
132	BBDD0007 71.5m	0.16	< LOD
133	BBDD0007 72m	0.07	97.85
134	BBDD0007 72.5m	0.11	28.42
135	BBDD0007 73m	0.37	53.71
136	BBDD0007 74m	5.01	44.35
137	BBDD0007 75m	0.02	24.84
138	BBDD0007 76m	0.02	10.46
139	BBDD0007 77m	0.04	< LOD
140	BBDD0007 77.3m	0.01	< LOD
141	BBDD0007 78.2m	0.98	< LOD
142	BBDD0007 78.5m	0.52	< LOD
143	BBDD0007 78.7m	0.59	49.76
144	BBDD0007 78.8m	0.29	< LOD
145	BBDD0007 79.6m	1.13	32.81
146	BBDD0007 79.8m	5.79	70.99
147	BBDD0007 80m	0.37	66.77
148	BBDD0007 80.5m	0.41	42.23
149	BBDD0007 81m	0.04	10.9
150	BBDD0007 81.5m	0.67	475.57
151	BBDD0007 82m	5.39	< LOD
152	BBDD0007 82.5m	0.15	31.67
153	BBDD0007 83m	0.09	24.31
154	BBDD0007 84m	0.08	< LOD
155	BBDD0007 85m	0.11	< LOD
157	BBDD0007 86m	0.07	32.34
158	BBDD0007 87m	0.05	35.39
159	BBDD0007 88m	0.08	< LOD
160	BBDD0007 89m	0.01	13.18
161	BBDD0007 90m	0.01	< LOD

Reading No	SAMPLE	Cu %	Bi ppm
369	BBDD0008 129m	0.01	31.84
370	BBDD0008 130m	1.13	35.97
371	BBDD0008 131m	0.02	35.25
372	BBDD0008 132m	0.02	19.31
373	BBDD0008 132.5m	< LOD	< LOD
374	BBDD0008 133m	0.01	< LOD
375	BBDD0008 134m	0.04	< LOD
376	BBDD0008 135m	< LOD	< LOD
377	BBDD0008 136m	0.03	< LOD
378	BBDD0008 137m	0.01	< LOD
379	BBDD0008 138m	0.01	< LOD
380	BBDD0008 139m	0.04	< LOD
381	BBDD0008 140m	0.07	< LOD
382	BBDD0008 141m	0.05	< LOD
383	BBDD0008 142m	0.19	< LOD
384	BBDD0008 143m	0.24	< LOD
385	BBDD0008 144m	0.02	< LOD
386	BBDD0008 145m	0.13	< LOD
387	BBDD0008 146m	0.02	< LOD
388	BBDD0008 147m	0.10	< LOD
389	BBDD0008 148m	0.04	16.29
390	BBDD0008 149m	0.12	< LOD
391	BBDD0008 150m	0.89	135.73
392	BBDD0008 151m	0.02	< LOD
393	BBDD0008 152m	0.12	< LOD
394	BBDD0008 153m	0.08	< LOD
395	BBDD0008 154m	0.01	< LOD
396	BBDD0008 155m	0.02	< LOD
397	BBDD0008 156m	0.03	< LOD
398	BBDD0008 157m	0.05	22.53
399	BBDD0008 158m	0.09	60.03
400	BBDD0008 159m	0.70	24.2
401	BBDD0008 160m	0.13	< LOD
402	BBDD0008 161m	0.03	< LOD
403	BBDD0008 162m	0.04	14.54
404	BBDD0008 163m	0.27	1201
405	BBDD0008 162.8m	0.79	955.33
406	BBDD0008 164m	3.23	371.07
407	BBDD0008 164.5m	15.78	864.13
408	BBDD0008 165m	0.24	49.2
409	BBDD0008 166m	0.04	54.02
410	BBDD0008 167m	0.93	1000.5
411	BBDD0009 168.3m	1.01	2221.8
412	BBDD0009 169m	1.67	666.42

Reading No	SAMPLE	Cu %	Bi ppm
413	BBDD0009 170m	0.64	223.44
414	BBDD0008 172m	0.01	< LOD
463	BBDD0008 173m	0.01	28.28
464	BBDD0008 174m	0.00	32.56
465	BBDD0008 175m	0.03	19.24
466	BBDD0008 176m	0.01	25.92
467	BBDD0008 177m	0.03	20.13
468	BBDD0008 178m	0.02	26.82
469	BBDD0008 179.2m	0.02	27.67
470	BBDD0008 180m	0.06	29.96
471	BBDD0008 180.9m	0.04	< LOD
472	BBDD0008 182m	0.00	21.86
473	BBDD0008 183m	0.02	29.23
474	BBDD0008 184m	< LOD	25.15
475	BBDD0008 185m	0.01	18.63
476	BBDD0008 186m	0.01	15.32
477	BBDD0008 187m	0.06	20.58
478	BBDD0008 188.3m	0.07	< LOD
479	BBDD0008 189m	< LOD	< LOD
480	BBDD0008 190m	0.01	< LOD
481	BBDD0008 190.5m	< LOD	< LOD
482	BBDD0008 191m	0.53	55.12
483	BBDD0008 191.6m	0.07	< LOD
484	BBDD0008 192.8m	< LOD	< LOD
485	BBDD0008 193.5m	< LOD	< LOD
486	BBDD0008 193.7m	0.01	18.65
487	BBDD0008 194.5m	< LOD	< LOD
488	BBDD0008 194.8m	0.01	< LOD
489	BBDD0008 195m	< LOD	< LOD
490	BBDD0008 196m	0.16	< LOD
491	BBDD0008 197m	0.15	< LOD
492	BBDD0008 198m	< LOD	< LOD
493	BBDD0008 198.5m	0.02	< LOD
494	BBDD0008 199m	< LOD	< LOD
495	BBDD0008 199.2m	< LOD	< LOD
496	BBDD0008 199.5m	< LOD	< LOD
498	BBDD0008 200m	0.03	< LOD
499	BBDD0008 201m	0.20	< LOD
502	BBDD0008 202m	0.02	< LOD
503	BBDD0008 203m	0.17	< LOD
504	BBDD0008 204m	0.16	< LOD
505	BBDD0008 205m	0.15	< LOD
506	BBDD0008 206m	0.17	< LOD
507	BBDD0008 207m	0.25	< LOD
509	BBDD0008 208m	0.23	< LOD
510	BBDD0008 209m	0.04	< LOD

Note: Handheld pXRF readings: pXRF readings taken on whole (HQ) core at 0.3cm to 1.0m intervals prior to cutting. Niton 3L Series with 30 second reading time. Instrument calibrated daily.

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 (eg 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 (eg '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 (eg 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 are taken as half NQ 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 40g fire assay collection with inductively coupled plasma optical emission spectrometry (ICP-OES) finish.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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 was conducted using a $5^1/_4$" face sampling hammer, with holes drilled -60 degrees. • Diamond drillholes were collared using RC and switched to NQ2 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. • The quality of diamond core samples is monitored by the logging of various geotechnical parameters, and logging of core recovery and competency.

Criteria	JORC Code explanation	Commentary
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. • 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. • 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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie 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 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. • Cu, Pb, Ag, Bi, Co Ni, Sb have been determined by Inductively Coupled Plasma (ICP) Mass Spectrometry (MS-OES). • Gold was analysed by Fire Assay with a 25g charge and a ICP-MS finish with a 1ppb Au detection limit. • A Field Standard, Duplicate or Blank is inserted every 20 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*	• All significant intercepts are reviewed and confirmed by at least two senior personnel before release to the market.

Criteria	JORC Code explanation	Commentary
	procedures, data verification, data storage (physical and electronic) protocols. • *Discuss any adjustment to assay data.*	• 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 will be surveyed by DGPS. • Downhole surveys were taken at 30m intervals using a Reflex single shot camera. The camera records the azimuth and dip of the hole. • The survey co-ordinates are 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.
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.)

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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 north west 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 (eg cutting of high grades) and cut-off grades are 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.*	• 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. • No high-grade cut-offs are applied. A nominal low-grade cut-off of 0.25g/t Au and 0.3% Cu is used with a maximum of 1m of internal dilution.

Criteria	JORC Code explanation	Commentary
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 (eg '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 4 of the ASX announcement.
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 to avoid misleading reporting of Exploration Results.*	• All background information is discussed in the announcement. Full drill results for copper and gold assays 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 (eg 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/in progress to test below holes abandoned because of cavings and to extend mineralisation along strike and in particular to the west from BBRC019.