

Quarterly Activities Report

For the quarter ended 30 September 2022

Tennant Minerals Limited (**ASX: TMS/**) ("**Tennant**" or the "**Company**") is pleased to report its activities for the quarter ended 30 September 2022 ("the Quarter"), focussed on exploring the Barkly (Bluebird) Project in the Northern Territory.

HIGHLIGHTS

- During the Quarter the Company completed the Stage 1 diamond drilling program of 6 holes for 1,700m at the Bluebird copper-gold discovery and produced exceptional results which include:
 - i) **Definition and extension of the upper high-grade dilational zone at Bluebird**. This zone includes thick and high-grade copper-gold intersections such as:
 - o **63.0m @ 2.1% Cu and 4.6 g/t Au** from 153.0m (down hole) in BBDD0012¹ (448,360mE)
 - including 40.0m @ 3.0% Cu and 7.3 g/t Au from 155.0m
 - including 27.55m @ 3.6% Cu and 10.0 g/t Au from 160.45m, and,
 - o **40m @ 2.6% Cu and 1.34 g/t Au** from 131m (down hole) in BDD0013² (448,340mE)
 - including **24.5m @ 3.9% Cu** and 0.45 g/t Au from 146.5m
 - including 4.75m @ 15.2% Cu and 0.36 g/t Au from 164m
 - ii) **Extension of Bluebird to over 250m below surface,** based on recent results that show potential for a second high-grade dilational ("thickened") zone below recent intersections that include:
 - o **17.8m @ 3.7 % Cu** and 0.34 g/t Au from 277m (down hole) in BBDD0015²
 - Including 9.5m @ 6.0 % Cu and 0.48 g/t Au from 278m
 - including 2.3m @ 12.3 % Cu and 0.36 g/t Au from 285.2m,
- Data from the Drone magnetics survey completed last Quarter over the Bluebird Corridor was processed and modelled, resulting in the identification of 12 coincident magnetic-gravity copper-gold targets within a 2km "Bluebird-Perseverance Target Zone"³, extending west of the Bluebird prospect.
- Induced Polarisation (IP) geophysics completed post-quarter end on four sections over, and to the west of Bluebird, produced low resistivity / high-chargeability responses and detected potential extensions to the high-grade zone 100m to the west of the area tested to date. This zone will be drill-tested during the Stage 2 drilling program. Further IP geophysical traverses were completed over the other 11 (total 12) gravity-magnetic targets in the Bluebird-Perseverance Target Zone.



BARKLY PROJECT

Bluebird Prospect

During the Quarter, Tennant completed the Stage 1 diamond drilling program at the Bluebird copper-gold discovery, located within the Company's 100% owned Barkly Project, 45km east of Tennant Creek in the Northern Territory (Figure 1).



Figure 1: Location of the Barkly Project and major historical mines in the Tennant Creek Mineral Field

The drilling program at Bluebird was designed to scope out and expand the footprint of the high-grade coppergold mineralisation in two stages, totalling up to 4,700m of diamond drilling comprising the:

- Stage 1 diamond drilling program of six holes for 1,700m (1,299m diamond, 401m pre-collar) that targeted the central thickest part of the shallow, westerly plunging copper-gold shoot immediately down plunge from the previously reported thick and high-grade intersections.
- Stage 2 diamond drilling program, commenced post Quarter end, of up to 10 step-out holes for 3,000m designed to significantly expand the footprint of the Bluebird discovery to over 300m strike length and over 400m vertical depth.

Stage 1 Diamond Drilling Program at Bluebird:

The Stage 1 drillholes intersected thick zones of hematite alteration and copper mineralisation, extending the Bluebird discovery to the west and a further 100m deeper to more than 250m below surface (*Figure 3*).

The first hole from the Stage 1 drill program at the Bluebird Project, **BBDD0012**, returned a spectacular, thick and high-grade intersection of copper and gold (see cross section *Figure 2*, longitudinal projection, *Figure 3* and Appendix 1 for all significant intersections) which included:



- o 63.0m @ 2.1% Cu and 4.6 g/t Au from 153.0m (down hole) in BBDD0012¹ (448,360mE),
 - including 40.0m @ 3.0% Cu and 7.3 g/t Au from 155.0m,
 - including 27.55m @ 3.6% Cu and 10.0 g/t Au from 160.45m,
 - including **7.0m @ 1.4% Cu and 38.5 g/t Au** from 181.0m.



Figure 2: Cross-section 448,360mE with new BBDD0012 intersection and previous BBDD0010 drill-hit

Diamond drillhole **BBDD0013** tested extensions of the mineralisation to the west of the previous spectacular copper and gold intersection in **BBDD0012**, and produced the following intersections of high-grade copper and gold that include spectacular assays associated with **massive sulphides** (chalcocite - Cu₂S) **grading up to 54.5% Cu:**

- **40.0m @ 2.6% Cu and 1.34 g/t Au** from 131.0m (down hole) in BBDD0013² (448,340mE),
 - including 24.5m @ 3.9% Cu, 0.45 g/t Au from 146.5m
 - including 4.75m @ 15.2% Cu, 0.36 g/t Au from 164.0m incl. 0.8m @ 54.5% Cu



• & including 3.0m @ 1.8% Cu and 13.2 g/t Au from 181.0m incl. 1.0m @ 39 g/t Au

Diamond drillhole **BBDD0015** is a 100m step-out at depth (down-plunge) below previous drilling (see Figure 3) which produced the following thick and high-grade copper sulphide with gold intersections:

- o **17.8m @ 3.7 % Cu** and 0.34 g/t Au from 277m (down hole) in BBDD0015² (448,32mE),
 - Including 9.5m @ 6.0 % Cu and 0.48 g/t Au from 278.0m
 - including 2.3m @ 12.3 % Cu and 0.36 g/t Au from 285.2m

The intersection in **BBDD0015** has doubled the depth extent of the Bluebird discovery to more than 250m below surface, where it remains open (see Figure 3).



Figure 3: Bluebird longitudinal projection with Stage 1 intersections and Stage 2 targets⁵



Re-logging of cut and sampled core from these new intersections, as well as the previous spectacular intersection in **BBDD0012**, indicates that the majority of the copper mineralisation is the sulphide mineral chalcocite (Cu₂S), which has the highest proportion of copper of any sulphide mineral. The thick copper-gold intersection in **BBDD0013** is associated with a dilational ("thickened") zone, developed where a fault structure has intersected an anticlinal hinge position (Figure 2). Structural measurements suggest that **BBDD0015** is close to another anticlinal dilational thickened target zone at depth, which will be drill tested as part of the Stage 2 follow-up program currently underway.

Post the Quarter end, Tennant received the results from the final two step-out diamond drill holes of the Stage 1 program, which tested the Bluebird discovery to the west of all previous including:

- o BBDD0017: 7m @ 0.51% Cu from 200m (downhole) including 1m @ 1.54 Cu from 203m, and,
- o BBDD0016: 13m @ 0.75% Cu from 298m (downhole) including 2m @ 2.48% Cu, 0.13 g/t Au from 299m.

Stage 2 Diamond Drilling Underway at Bluebird:

Post the Quarter end, Tennant commenced the Stage 2 diamond drilling program at the Bluebird copper-gold discovery⁴.

A total of up to 10 Stage 2 holes for 3,000m will aim to extend the Bluebird discovery to over 400m depth and test for extensions/repeats of the high-grade copper-gold zone along strike to the west. This will define the potential for a high-grade copper-gold mineral resource of similar scale to the Peko deposit, 20km to the west of Bluebird, that produced **3.7Mt @ 4% Cu and 3.5 g/t Au** from 1934 and 1981 (see location, Figure 1).

Up to seven diamond holes will be drilled to test the steeply plunging zone at Bluebird to more than 400m below surface, and to test for the second thickened zone immediately below **BBDD0013**. In additional, three holes (total up to ten) will be drilled to follow up the results of the IP geophysics program (recently completed over the Bluebird mineralisation) and to step out 100m to the west.

The results of the IP program^{4,5} have shown a distinct low resistivity (high conductivity) and coincident chargeability response corresponding with the Bluebird mineralisation on the central section 448,360mE (see IP resistivity image, Figure 4, below), that confirms Bluebird can be detected with IP. This section includes the **BBDD0012** intersection of 63m @ 2.1% Cu, 4.6 g/t Au¹.



Figure 4: IP resistivity image 448,360mE showing Bluebird mineralisation associated with resistivity low



Geophysical Modelling Completed, 12 Copper-Gold Targets Identified:

Tennant Minerals also completed imaging and inversion modelling from new drone magnetic data during the Quarter. When combined with detailed gravity models, interpretation of the new magnetic data identified 12 coincident magnetic-gravity copper-gold targets within a 2km "Bluebird-Perseverance Target Zone" extending west of the Bluebird prospect³ (Figure 5).

This major target zone includes an exceptionally strong magnetic-gravity feature centred below the Perseverance gold workings, where previous shallow drilling produced high-grade gold intersections such as **3m @** 50.0 g/t Au from 42m in PERC015⁶ and **3m @** 43.2 g/t Au from 72m in PERC001⁶ (see Figure 5).

Modelling of the detailed gravity survey data indicates Bluebird is associated with a gravity high, which is part of a 5km strike-length gravity anomaly ("Bluebird Corridor"). The gravity high is interpreted to represent widespread iron enrichment, associated with the major copper-gold deposits in the Tennant Creek Mineral Field (Error! Reference source not found.).

Post quarter end, the Company completed an IP geophysical survey over Bluebird and successfully detected a low resistivity, high chargeability response over the Bluebird mineralisation (Figure 4) and extensions to this "fingerprint" 100m to the west (Figure 3). The Stage 2 diamond drilling program will test the IP response 100m to the west of Bluebird as well as test extensions of Bluebird to over 400m below surface.

Further IP traverses were carried out over the 12 gravity-magnetic targets identified within the Bluebird-Perseverance Target Zone. Modelling of the IP data is in progress and a second drilling rig was mobilised post Quarter end to **drill-test the priority copper-gold targets identified from the magnetics and gravity modelling as well as the IP survey** (see Figure 5, below).



Figure 5: Bluebird-Perseverance magnetic intensity (reversed) image, with structures & magnetic-gravity targets



CORPORATE

Appointment and Resignation of Director

During the quarter, the Company appointed Dr Allison Dugdale as a non-executive director of the Company⁷. Dr Dugdale's appointment as a director of Tennant Minerals adds a wealth of exploration and geological experience to the Board that will support the Company's strategy for growth through discovery and development.

During the reporting period, the Company accepted the resignation of Mr Gino D'Anna as a Director of the Company⁷.

Appendix 4C Cashflow Commentary

In Payments to related parties of the entity and their associates (refer to 6.1), the \$43,000 payment refers to the payment of non-executive fees and Director consulting fees.

Cash outflows from operating activities for the Quarter were \$1,239,000.

Cash and cash equivalents as of 30 September 2022 were \$3,467,000.

Schedule of tenements and status

Tenement ID	Туре	Status	Holder G	Grant Date Re	enewal Date Are	ea (km²)	TMS Interest
EL28620	Exploration	Active	Colour Minerals Pty Ltd	16 Dec 2011	15 Dec 2023	39.16	100%
EL30701	Exploration	Active	Colour Minerals Pty Ltd	20 Aug 2015	14 Jan 2023	42.6	100%

ENDS

For enquiries please contact:

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Non-Executive Chairman	Company Secretary
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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, 21 December 2021, 8 March 2022, 15 March 2022, 24 March 2022, 17 August 2022, 25 August 2022, 7 September 2022, 13 October 2022 and 28th October 2022. The Company confirms that it is not aware of any new information or data that materially affects those announcements previously made, or that would materially affect the Company from relying on those announcements for the purpose of this announcement.

REFERENCES

¹ 17/08/2022. Tennant Minerals (ASX. TMS): "Bonanza 63m@ 2.1% Copper and 4.6 g/t Gold Intersection at Bluebird". ² 07/09/2022. Tennant Minerals (ASX. TMS): "Up to 54.5% Cu in Massive Sulphides at Bluebird".

³ 25/08/2022. Tennant Minerals (ASX:TMS): "Standout Geophysical Targets to Replicate Bluebird Cu-Au Discovery".

⁴13/10/2022. Tennant Minerals (ASX:TMS): "Step-out Drilling Commenced at Bluebird Copper-Gold Discovery"

⁵28/10/2022. Tennant Minerals (ASX:TMS): "Massive Copper Sulphide Zone Intersected at Bluebird".

⁶ 25/02/1995, Posgold. Final Report for Exploration Licence 7693, 2/6/92 to 25/11/94. NTGS Report CR19950192.

⁷12/08/2022. Tennant Minerals (ASX:TMS): "Appointment and Resignation of Director".

Rule 5.5

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

TENNANT MINERALS LIMITED (FORMERLY TENNANT MINERALS NL)

ABN

25 086 471 007

Quarter ended (Current quarter)

30 September 2022

Consolidated statement of cash flows	Current	Year to date
	quarter	(3 Months)
	\$A'000	\$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	-	-
1.2 Payments for:	-	-
(a) exploration and evaluation (if expensed)	(1,135)	(1,135)
(b) development	-	-
(c) production	-	-
(d) staff costs	(43)	(43)
(e) administration and corporate costs	(65)	(65)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	4	4
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other: (provide details if material)	-	-
1.9 Net cash from / (used in) operating activities	(1,239)	(1,239)
2. Cash flows from investing activities		
2.1 Payments to acquire:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	-	-
(d) exploration & evaluation (if capitalised)	-	-
(e) investments	-	-
(f) other non-current assets	-	-
2.2 Proceeds from disposal of:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	-	-
(d) investments	-	-
(e) other non-current assets	-	-
2.3 Cash flows from loans to other entities	-	-
2.4 Dividends received (see note 3)	-	-
2.5 Other (provide details if material):	-	-
2.6 Net cash from / (used in) investing activities	-	-

Appendix 5B Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Cor	nsolidated statement of cash flows	Current quarter \$A'000	Year to date (3 Months) \$A'000
3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	-	-
1.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	4,706	4,706
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,239)	(1,239)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	3,467	3,467
5.	Reconciliation of cash and cash equivalents	Current	Previous
	at the end of the quarter (as shown in the consolidated statement of cash	quarter	quarter
	flows) to the related items in the accounts	\$A'000	\$A'000
5.1	Bank balances	3,467	4,706
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	3,467	4,706
-	Downents to related partice of the antity and their acceptates		Current
6. Payments to related parties of the entity and their associates		quarter	
			\$A'000
5.1	Aggregate amount of payments to related parties and their associates included in item 1		43
5.2	Aggregate amount of payments to related parties and their associates include	ed in item 2	-
lote	if any amounts are shown in items 6.1 and 6.2 your quarterly activity report must include a de	scription of, and an	explanation for, su

Directors' salary, fees, superannuation, consultancy, and reimbursements, related to the current and prior quarters.

Appendix 5B Mining exploration entity or oil and gas exploration entity quarterly cash flow report

7.	Financing facilities Note: the term "facility' includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-

7.5 Unused financing facilities available at quarter end

7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (Item 1.9)	(1,239)
8.2	Capitalised exploration & evaluation (Item 2.1(d))	-
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	(1,239)
8.4	Cash and cash equivalents at quarter end (Item 4.6)	3,467
8.5	Unused finance facilities available at quarter end (Item 7.5)	-
8.6	Total available funding (Item 8.4 + Item 8.5)	3,467
8.7	Estimated quarters of funding available (Item 8.6 divided by Item 8.3)	2.8

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

- 8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:
 - 1. Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer:

N/	Ά
2.	Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?
	Answer:

N/A

3. Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer:

N/A

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date:	Monday, 31 October 2022
Authorised by:	By the Board of Directors
	(Name of body or officer authorising release – see note 4)

Notes

- 1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee e.g. Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.