



ASX RELEASE (6 SEPTEMBER 2024)

## Corporate Presentation & Webinar

Tartana Minerals Limited (ASX: **TAT**) (the **Company**) is pleased to provide the following corporate presentation to update the market on Tartana's operations and outlook.

Tartana Minerals will also be hosting a live webinar in partnership with Sharewise today at 3 pm AEST, presented by Managing Director Dr Stephen Bartrop.

This event will feature a detailed presentation followed by a live Q&A session, providing insights into Tartana's latest projects and developments.

Registration link: <https://bit.ly/4db6XqN>

ENDS

This announcement has been approved by the Disclosure Committee of Tartana Minerals Limited.

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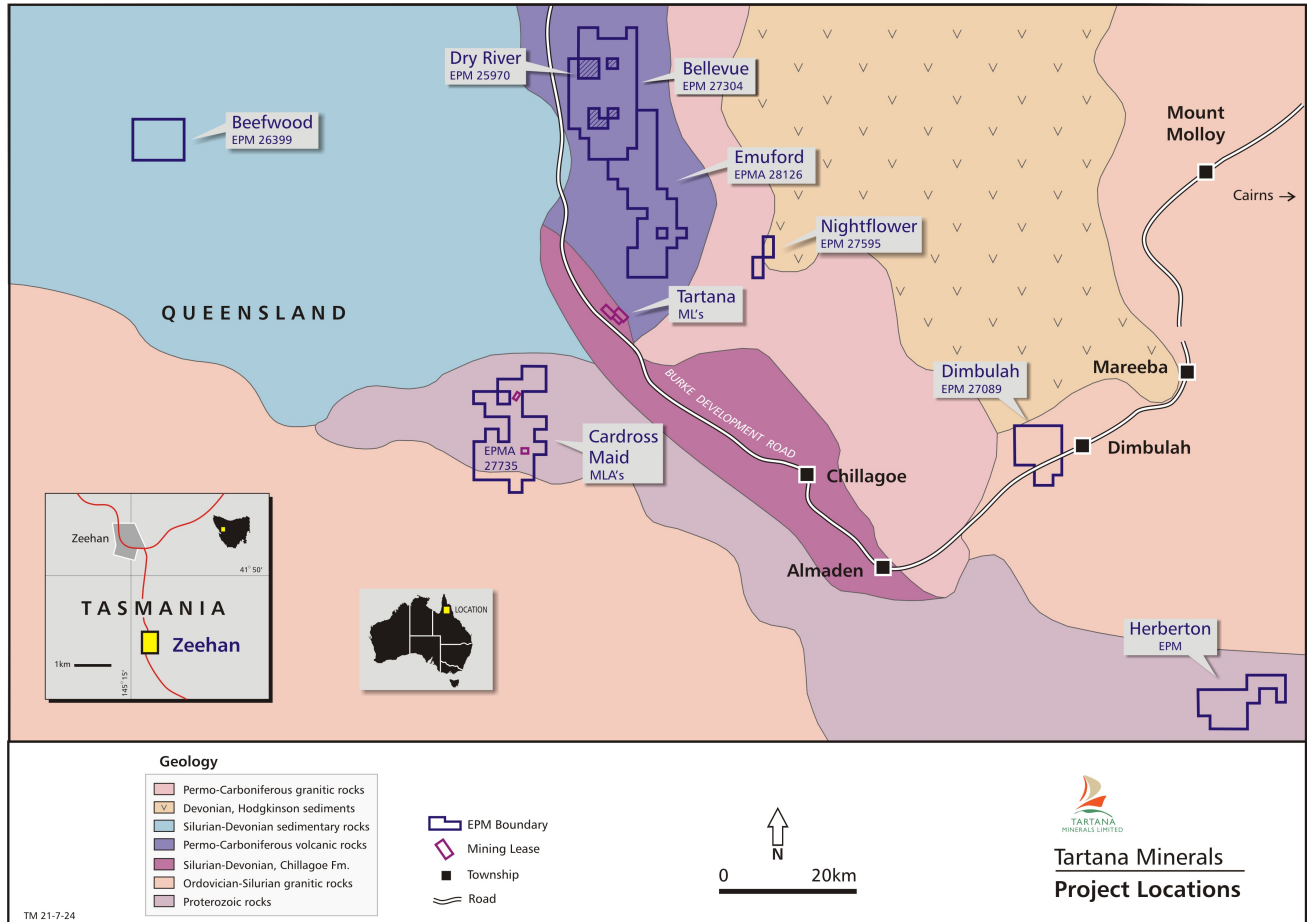
Tartana Minerals Limited (ASX: TAT)

ACN: 111 398 040

[tartanaminerals.com.au](http://tartanaminerals.com.au)

**About Tartana Minerals Limited (ASX:TAT)**

Tartana Minerals Limited (ASX:TAT) is a significant copper producer and a copper, gold, silver and zinc explorer and developer in the Chillagoe Region of Far North Queensland. TAT has the Tartana mining leases, which contain an existing heap leach – solvent extraction – crystallisation plant which has now been refurbished and is producing copper sulphate pentahydrate for sale into the North Queensland mining industry. The Tartana mining lease has copper and zinc resources and elsewhere we have a significant gold resource at the Mountain Maid project. We also has a number of early stage exploration projects.



TM 21-7-24

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# Copper Sulphate. Growth & Stability

Tartana Project – in production, producing strong cashflows  
A path to long-term sustainability to fund exploration.

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Statements contained in this Material, particularly those regarding possible or assumed future performance, costs, dividends, production levels or rates, prices, resources, reserves or potential growth of TAT, industry growth or other trend projections are, or may be, forward looking statements.

Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual events and results may differ materially from those expressed or forecasted in forward-looking statements due to a number of factors. The principal important risk factors that could cause TAT's actual performance and future events and actions to differ materially from such forward-looking statements, include, but are not limited to, continuing volatility in the capital or credit markets and other changes in the securities and capital markets, changes in market prices of TAT's investments, the occurrence of one or more catastrophic events, such as an earthquake, cyclone, or act of terrorism, changes in laws or regulations, changes in income tax laws, and changes in general economic and market factors that affect the prices of securities or the industries in which it does business.

This Material includes certain statements, estimates and projections that rely upon various assumptions. Those assumptions may or may not prove to be correct. The Material does not purport to contain all the information that a prospective investor may require. The information may not be appropriate for all persons, and it is not possible for TAT to have any regard to the investment objectives, financial situation and particular needs of each recipient who reads or uses this information.

## QUALIFYING STATEMENT

The information in this Presentation that relates to Exploration Information is based on information compiled by Dr Stephen Bartrop who is a fellow of the Australian Institute of Geoscientists. Dr Stephen Bartrop, Managing Director of TAT, has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Dr Stephen Bartrop is full-time personnel of TAT and consents to the inclusion in this announcement of the Exploration Information in the form and context in which it appears.

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# Tartana Copper

Chillagoe Region, Far North Queensland

Continuing near-term production to fund long term expansion

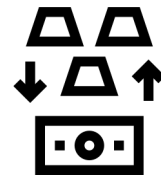


# Revenue Generation

## Tartana Copper



- JORC 2012 combined Indicated and Inferred Resource at 45,000 tonnes of contained Cu at 0.45% Cu using a 0.2% Cu cut-off grade.<sup>1</sup>



- Copper sulphate production with 100% offtake partner
- Sales of the copper sulphate pentahydrate “captures” the full value of the contained copper and is priced on the LME copper price plus a premium



- Current operating costs are around **US\$1.29/lb** reflecting the ready availability of copper in the ponds.
- This provides a 70% margin against the current US\$4.32/lb\* copper price

<sup>1</sup>. See ASX announcement dated 9 February 2023

\* As at 28 August 2024

# Resource

45,000 Tonnes of Copper

## Tartana Copper



- Tartana open pit mineralisation has been extensively drilled (+68 drillholes)
- Combined indicated and inferred resources are 45,000 tonnes of contained copper at 0.45% Cu using a 0.2% Cu cut-off grade<sup>1</sup>
- Broad zones of mineralisation indicate potential for low strip ratio while preliminary ore sorting testwork indicates potential for approximate 100% upgrade to copper grade<sup>1</sup>
- The Company has now completed a 300 m PQ/HQ drill hole to provide samples for further metallurgical testwork including confirmation of the initial ore sorting results and additional copper flotation testwork.
- Mineralisation remains open at depth with previous drilling indicating copper mineralisation at 450 m depth<sup>1</sup>
- Drilling is also planned to target a resource increase to +100 kt contained Cu by increasing the drill density between 100 m and 250 m depth

1. ASX announcement & MRE report dated 9 February 2023

TARTANA MINERALS LIMITED (ASX:TAT)

Cutoff Grade (% Cu)	TRANSITIONAL & OXIDE RESOURCES			TOTAL PRIMARY AND TRANSITIONAL		
	Tonnage (t)	Cu (%)	Contained Cu (t)	Tonnage (t)	Cu (%)	Contained Cu (t)
0	4,082,062	0.38	15,577	13,214,997	0.37	48,935
0.1	3,676,819	0.42	15,351	12,299,127	0.39	48,026
<b>0.2</b>	<b>2,971,516</b>	<b>0.48</b>	<b>14,371</b>	<b>10,037,553</b>	<b>0.45</b>	<b>45,008</b>
0.3	2,090,093	0.58	12,183	7,086,167	0.53	37,515
0.4	1,503,603	0.67	10,090	4,623,416	0.63	29,080
0.5	1,044,386	0.78	8,102	3,044,249	0.72	21,996
0.6	707,985	0.88	6,225	1,981,924	0.81	16,137
0.7	456,542	1.01	4,601	1,176,296	0.93	10,894

Resource Category	Zone	Tonnes (Kt)	Cu Grade (%)	Density (t/m <sup>3</sup> )	Contained Cu (t)
Indicated	Transitional	1,563	0.51	2.63	7,972
Inferred	Oxide	152	0.34	2.63	518
Inferred	Transitional	1,252	0.47	2.63	5,884
Inferred	Fresh	7,072	0.43	2.63	30,407
<b>Total</b>		<b>10,039</b>	<b>0.45</b>	<b>2.63</b>	<b>44,781</b>

From MRE report dated 9 February 2023 (ASX)

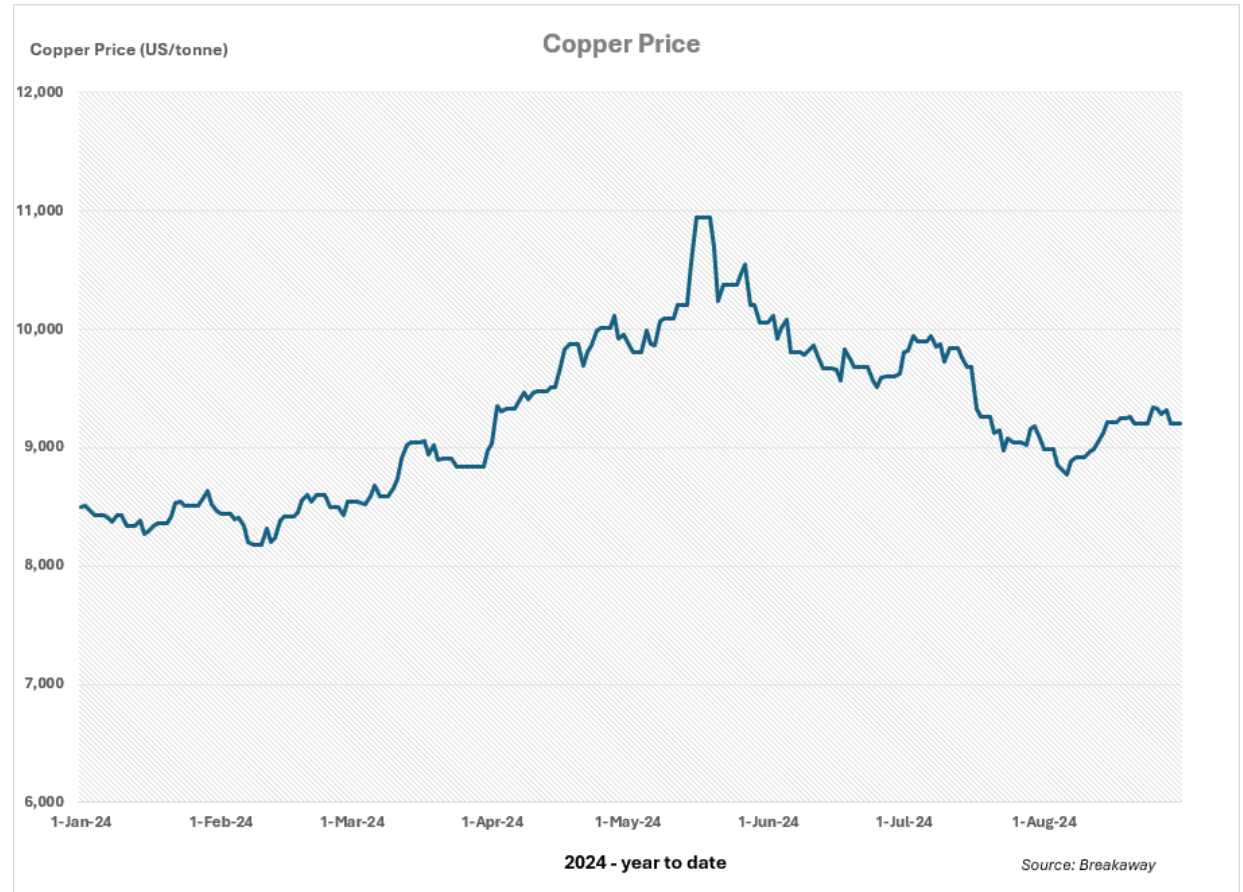
# Outlook

Supply Fails to Meet Surging Demand

## Copper



- Outlook for the copper price is bullish e.g. a UN Trade and Development (UNTAD) report says critical energy transition mineral supplies are not keeping pace with escalating demand and in the case of copper, this accounts for 36% of the total gap between 2022 and 2030. (Source: SP Angel MorningView 7/5/24)





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# Other Projects

Portfolio of Future Targets for Continued Growth



# Other Projects & Future Exploration

A Portfolio of Targets for Future exploration

## Mountain Maid Gold

- Inferred resource of 415 koz at 0.34 g/t Au using 0.2g/t Au cut-off grade including oxide zone of 27.3 Koz at 0.35 g/t Au at or near surface.<sup>1</sup>
- Mineralisation remains open in several directions including south where intersections such as 19m @ 1.30 g/t Au from 34 m (MMRC050) and 16 m @ 1.28 g/t Au from 50 m (MMRC041) have not been followed up.<sup>1</sup>
- Potential by-product credits from Ag, Cu, Mo, Bi, Te and Sb in primary ore and which facilitate Tomra ore sorting (heavy minerals).
- Mining lease application well advanced.

1. See ASX announcement dated 20th February 2023
2. See R3D Prospectus Lodged 26 May 2021
3. See ASX announcement dated 14 February 2023 for information on Ag Eq calculations

## Copper Targets Near Tartana

- Cardross - advanced Mining Lease Application
- Bellevue – 15 copper gold targets to be tested
- Dimbulah Copper Porphyry – copper oxide targets
- Beefwood – large scale buried porphyry target requires drilling

## Queen Grade Zinc

- Initial open pit resource estimation of 39,000 tonnes of contained zinc at 5.29% Zn using a 0.5% Zn cut-off grade with potential Ag and Pb credits not included in the resource estimation.<sup>2</sup>
- Resource estimated to 130 m depth and is open at depth. Nearby King Vol could indicate mineralisation may extend several hundred metres in depth.
- Flotation test work indicates high zinc recoveries (>98%) to a zinc concentrate.<sup>2</sup>

## Nightflower Silver

- Exploration Target estimating at ranging from 2.75 Mt @ 134 Ag Eq for 17.0 million oz Ag Eq to 5.36Mt @ 193 Ag Eq for 23.0 million oz Eq.<sup>3</sup>

The Exploration Target is conceptual in nature only and there is no guarantee that further exploration will define a resource.

# Corporate Overview

## Capital Structure (ASX:TAT)\*

Shares on issue	182.6 M
Share Price	\$ 0.029
Market Capitalisation	\$ 5.30 M

## Convertible Notes

Due November 2024 – Conversion at 10 cents per share	\$ 0.50 M
Due March 2025 – Conversion at 10 cents per share	\$ 0.50 M
Due April 2025 – Conversion at 5 cents per share	\$ 0.30 M

## Enterprise Value \$ 7.59 M

Unlisted Options Exercisable at 10 Cents, Expiring 31 December 2025	37.3 M
Unlisted Options Exercisable at 40 Cents, Expiring 14 July 2026	14.6 M

## Directors

Mr Jihad Malaeb – Non-Executive Chairman

Dr Stephen Bartrop – Managing Director

Mr Bruce Hills – Executive Director

Mr Michael Thirnbeck – Non-Executive Director

Dr Alistair Lewis – Non-Executive Director

Ms Kiara Wang – Non-Executive Director

Mr Sonny Didugu – Company Secretary

Top 20 Holders Ownership	57%
Management Ownership	15%

\* As at 05 September 2024

TARTANA MINERALS LIMITED (ASX: TAT)

# Contact Details

## Contact

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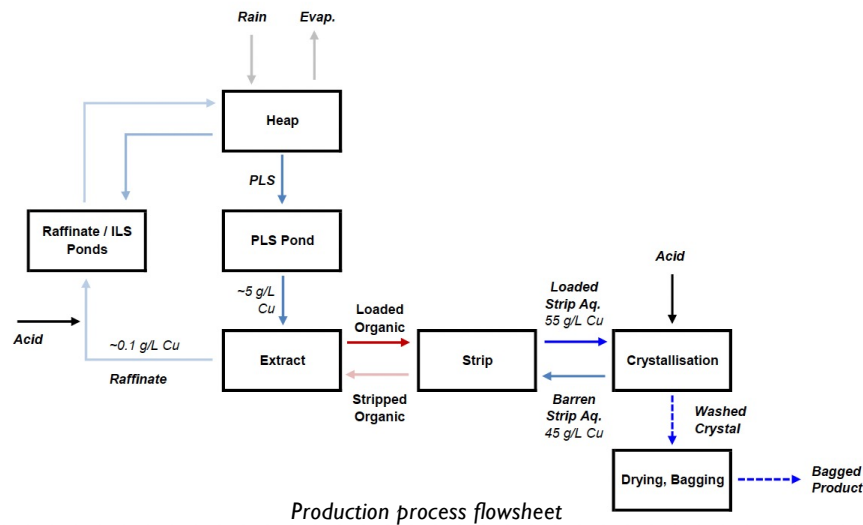
# Appendix



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# Plant Operations

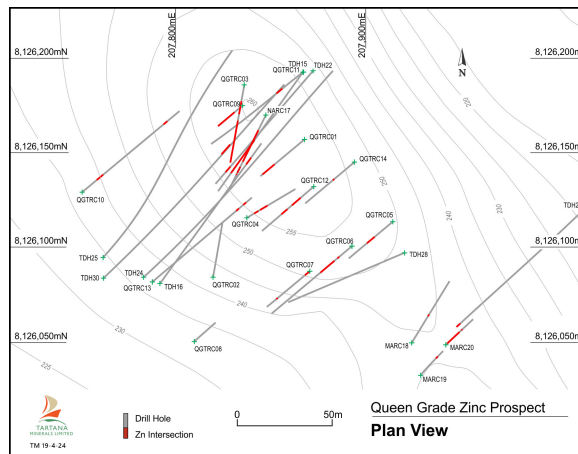
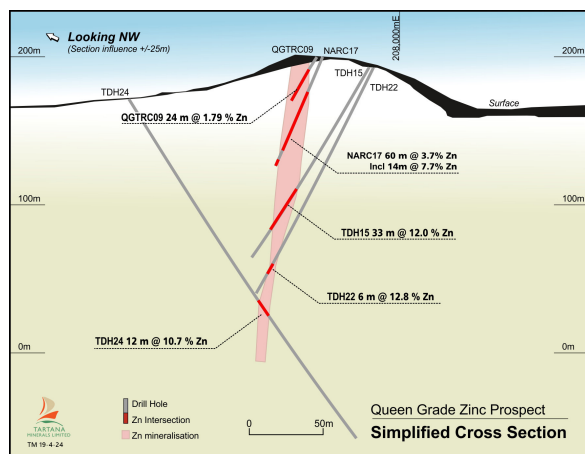
## Heap Leach–Solvent Extraction–Crystallisation Tartana Copper



Copper Sulphate in production

- Initial copper is being sourced from copper dissolved in the ponds. The mild acid in the return solution (raffinate) is being placed on the heaps and triggering the release of copper which is replenishing the ponds.
- As the copper inventory in the heap diminishes, mining is planned to replenish the existing heaps with copper ore from the open pit and northern oxide zone.

# Queen Grade Zinc



Grade Cut off (%)	Tonnes (kt)	Zn Grade (%)	Density (t/m <sup>3</sup> )	Zn (kt)
0.5	734	5.29	3.14	38.9
1.5	563	6.62	3.14	37.3
2.5	495	7.25	3.14	35.9
5	355	8.63	3.14	30.6

Maiden Inferred Zinc Resource reported to ASX on 14 February 2023

- Maiden resource estimated for the Queen Grade Zinc deposit within the Tartana mining leases
- Total Inferred Resources of 39,000 tonnes of contained zinc at 5.29% Zn using a 0.5% Zn cut-off grade with potential Ag and Pb credits not included in the resource estimation.
- Resources estimated to 160 m depth with the mineralisation outcropping on a ridge line. Mineralisation remains open at depth.
- Mineralisation style is similar to nearby KingVol orebody indicating scope for continuity to significant depths e.g. > 500 m
- Flotation testwork indicates high zinc recoveries of >98% to a concentrate grading 42% zinc with initial rougher flotation testwork
- Next steps include drilling to extend and upgrade resource as well as initial open pit mine design.

# Maid Gold

- Maid is interpreted as an Intrusion Related Gold System (IRGS) with gold mineralisation occurring in quartz vein stockworks
- Inferred resource of 415 koz at 0.34 g/t Au using 0.2 g/t Au cut-off grade including oxidised zone of 37.3 koz at 0.35 g/t Au at or near surface (see Mountain Maid Resource Upgrade dated 20 February 2023).
- Mining Lease Application in advanced stages.

## Two potential projects:

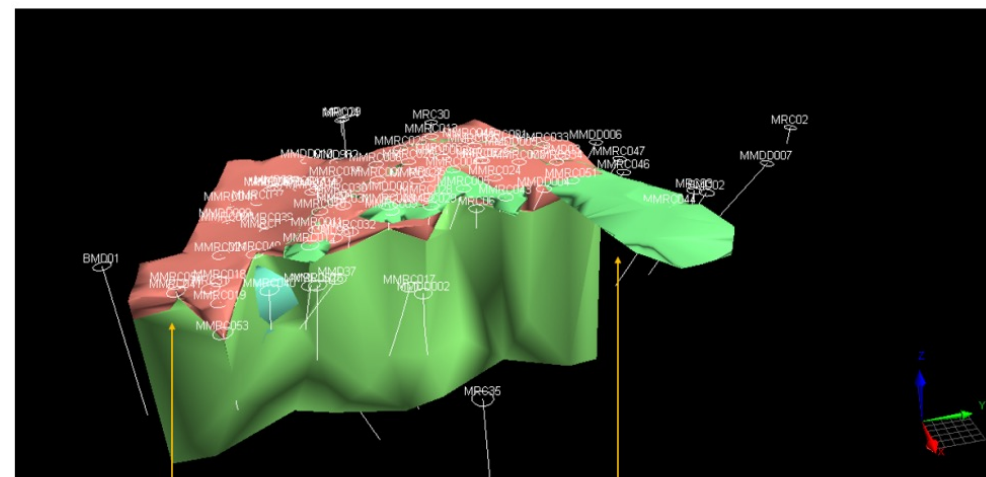
- Heap leach Project
  - Historical leach tests indicate 80% recovery in oxide zone reducing to ~40% in primary zone.
- CIL/CIP Gold Project
  - Higher grade zones
  - Potential by-product credits from Ag, Cu, Mo, Bi, Te and Sb.
  - Ore sorting potential.

## Exploration

- Mineralisation open in several directions.
- Intersections such as 19 m @ 1.30 g/t Au from 34 m (MMRC050) and 16 m @ 1.28 g/t Au from 50 m (MMRC041) are open to south.

Grade Cut off (Au g/t)	Tonnes (Mt)	Au Grade (g/t)	Density (t/m <sup>3</sup> )	Contained Au (koz)	Grade Cut off (Au g/t)	Tonnes (Mt)	Au Grade (g/t)	Density (t/m <sup>3</sup> )	Contained Au (koz)
0.1	73.6	0.25	2.6	591.5	0.1	6.3	0.25	2.6	51.0
0.2	38.0	0.34	2.6	415.5	0.2	3.3	0.35	2.6	37.3
0.3	16.7	0.46	2.6	247.0	0.3	1.5	0.47	2.6	23.0
0.5	5.3	0.66	2.6	112.2	0.5	0.6	0.63	2.6	11.5

(a) Global inferred mineral resource including oxide resource (b) Oxide resource only

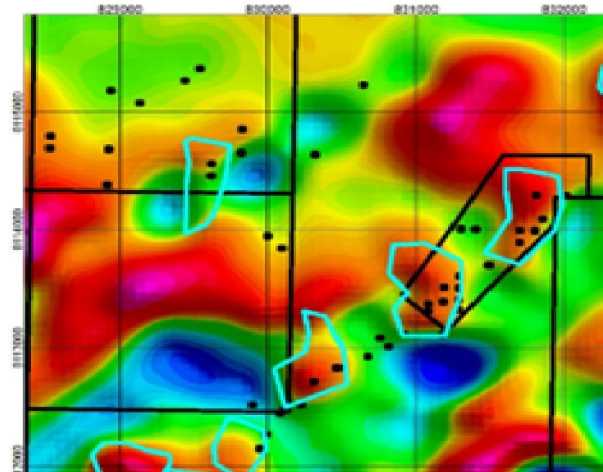
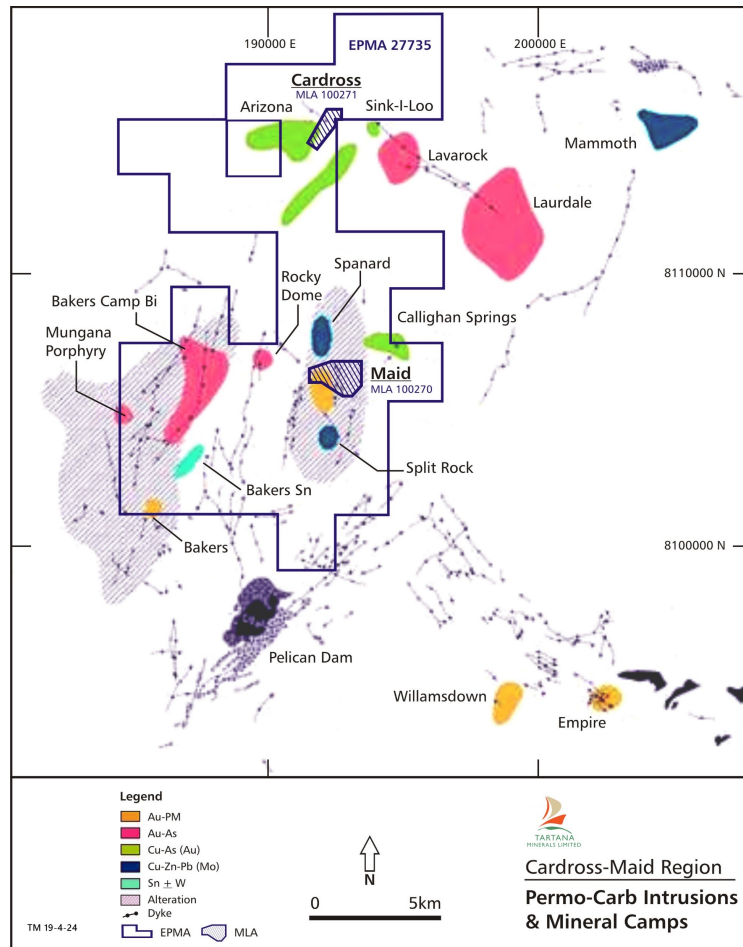


Drilling on the most southerly section recorded 19m @ 1.30 g/t Au in MMRC050 from 34m and 16m @ 1.28g/t Au from 50 m (within 44 m @ 0.64g/t Au) in MMRC041. Limited drilling south of this section, particularly if the mineralised body is arcuate shaped.

Untested below surface mineralisation on the historical assumption that the mineralisation strikes north – south and is not arcuate.



# Cardross Copper/Gold



Recent geophysical interpretation has identified discrete magnetic highs associated with mineralisation (black dots represent individual prospects, red areas represent high mag intensity) (see AGM presentation dated 28 November 2022).

Historical drilling<sup>1</sup> indicate encouraging copper and gold intersections.

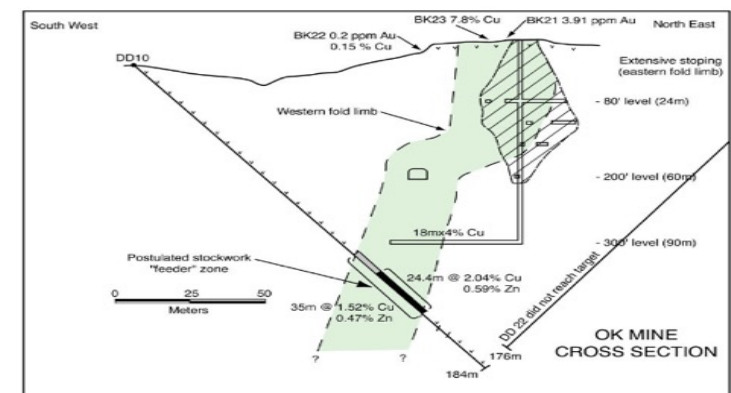
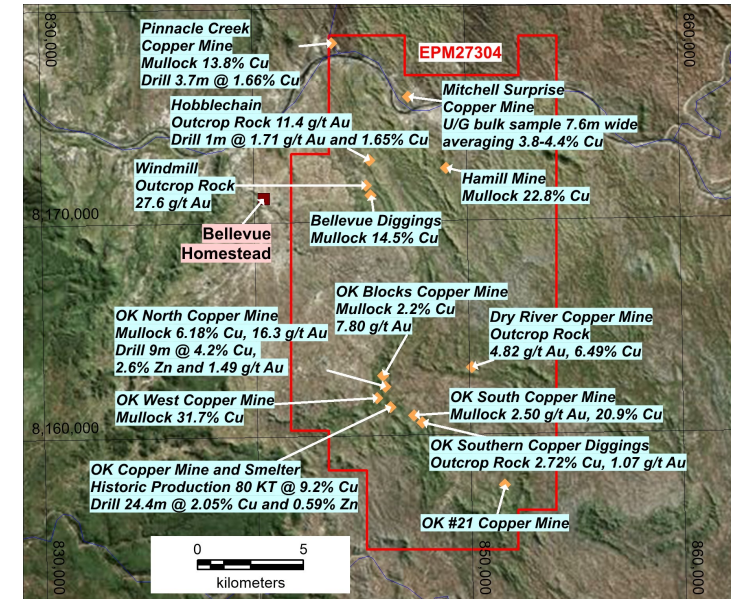
- 19 m of 1.17 % Cu from 3.00 m CA12AT012
- 18 m of 0.74 % Cu from 6.50 m CA12AT011
- 11 m of 1.21 % Cu from 4.75 m CA12AT013
- 7 m of 1.67 g/t Au from 6.50 m CA12AT011
- 2 m of 4.81 g/t Au from 3.00 m CA12AT070

Next step is follow-up drilling.

<sup>1</sup> See Axiom 2009 Annual Report

# Bellevue Copper/Gold

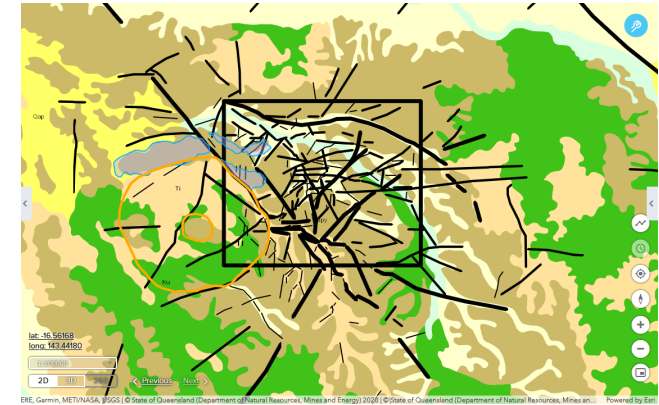
- Bellevue/Dry River has more than 15 separate copper/gold prospects following a prospective stratigraphy
- The OK Mines group have been interpreted as a VHMS mineralisation style based on the presence of nearby volcanic units
- Haemetic iron-stone breccias are also nearby with an unclear relationship to copper mineralisation
- Tartana Minerals has flown a Falcon Gravity/Mag survey across the tenements which has identified three priority targets including the OK Mines Group
- These priority targets have gravity anomalies which may represent untested mineralisation that has 'leaked' to the surface and expressed in the mines and prospects.
- Bellevue/Dry River tenements have now been extended to cover the same stratigraphy with the OK South tenement application.
- Future exploration will involve wild cat drilling to test depth extensions to the various prospects.



# Beefwood Copper/Gold

- Geophysical and geochemical targeting of potential large scale mineralised targets under cover sediments.
- Falcon Gravity/Magnetic survey completed identifying large copper/gold and REE targets associated with igneous intrusions (e.g. IRGS).
- Geochemical support for some targets including by anomalous gold and indicator metals at surface (up to 282 g/t Au)<sup>1</sup>.
- Reconnaissance exploration drilling planned.

<sup>1</sup>See ASX announcement dated 3 August 2021



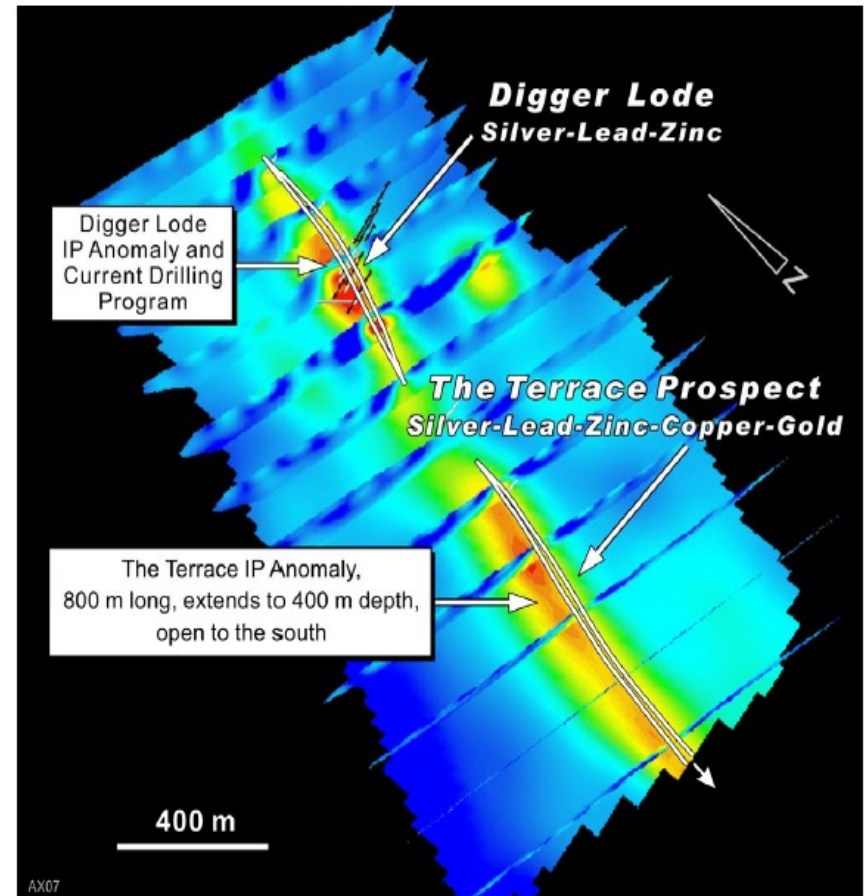
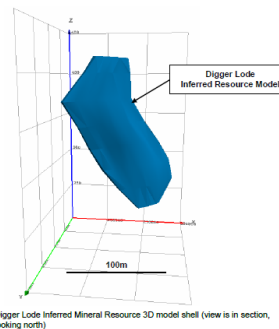
(a) Surface float samples with sulphides, (b) outcropping bedrock, (c) gold specks from surface sampling, (above) – interpreted structures

TARTANA MINERALS LIMITED (ASX: TAT)

# Nightflower Silver

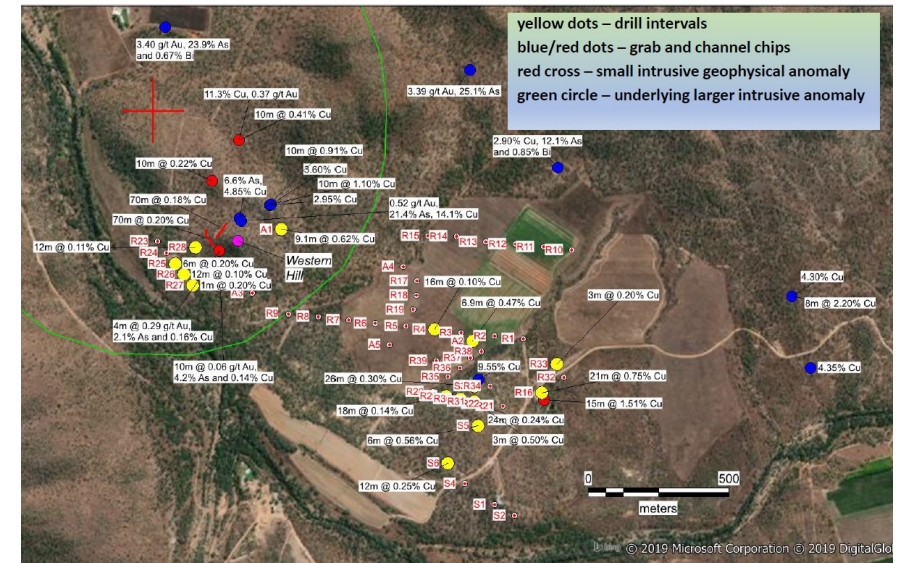
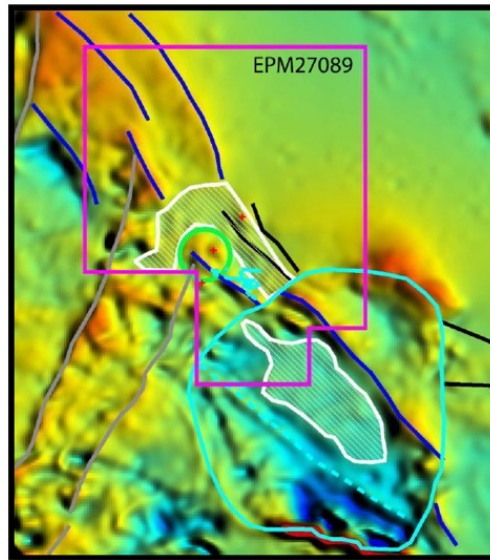
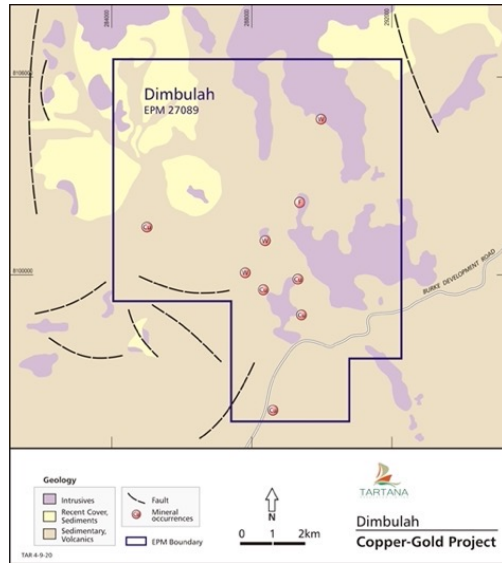
- High grade silver-lead-zinc lode outcropping at surface
- IP anomalies indicate target zones with historical small-scale mining along the Digger Lode and Terrace Prospect
- Exploration target estimated at 2.75 Mt @ 134 Ag Eq for 17.0 million oz Ag Eq to 5.36 Mt @ 193 Ag Eq for 23.0 million oz Eq. For the Digger Lode only. Note: *The Exploration Target is conceptual in nature only and there is no guarantee that further exploration will define a resource.* (See ASX announcement dated 2 June 2022)
- Next steps involves down dip drilling to test mineralisation continuity of both the Digger Lode and the Terrace Prospect

Hole No.	From (m)	To (m)	Interval (m)	Silver (g/t)	Gold (g/t)	Lead (%)	Zinc (%)	Copper (%)
NF08DD17	152.3	154.2	1.9	164.4	0.18	3.32	0.86	0.30
	154.2	154.9	0.7	24.8	1.41	0.56	0.23	
NF08DD18 including	144	153	9	62.2	0.21	1.25	0.8	
	151	153	2	158.7	0.34	2.79	1.15	0.33
NF08DD19 including	70	109	39	181	0.32	4.4	1.16	
	93	102	9	506	0.3	12.6	1.46	0.41
	98	102	4	769	0.61	22.4	2.23	0.5
	105	107	2		2.5			
NF08DD20 including	142	147	5	59.3		1.54	0.8	
	142	144	2	121	0.21	3.35	1.1	
NF08DD21	213	215	2	110.7	1.39	1.03	2.59	0.79
	218	219	1	58.8	12.8			
NF08DD22	275	277	2	329.5	0.08	10.5	3.99	0.2
NF08DD23	433.8	436.6	2.8	60.1	0.69	1.76	0.35	0.14
	438.8	442.8	4	49.7	1.24	1.12	0.35	
NF08DD24	76	79	3	51.8		1.28	1.6	



See Axiom Sept Quarterly 2008 dated 31 October 2008

# Dimbulah Porphyry Copper



(a) General Geology; (b) EPM 27089 Airborne Geophysics - Interpretation with sunshaded TMI backdrop<sup>1</sup>; (c) Historical sampling and drilling by past explorers<sup>2</sup>

- Covers a copper-mineralised, multi-phase porphyry intrusive identified from historical drill intersections, mapping and geophysics.
- Numerous historical workings and in the drilling by past explorers, particularly on Porphyry Hill.
- A geophysical interpretation is that the project covers the site of intersecting ring faults from four separate caldera collapse events and that the faults may have been fluid pathways for mineralising fluids and melts.
- Geophysical review and site inspections have identified drill targets

<sup>1</sup> Company, Vidanovich 2019

<sup>2</sup> Note results may not meet JORC 2012 standards. For further detail see R3D Resources Prospectus dated 26 May 2021