

### **AIM Announcement**

20 January 2025

## **New Silver Discovery**

## Mushima North - Analytical Results

Further to its announcement of 28 October 2024, and as a result of laboratory check analysis of drill samples, the Company is pleased to announce the discovery of economically significant silver and cobalt mineralisation associated with previously announced copper-zinc mineralisation at its Mushima North Project in Zambia.

#### Highlights:

- Four drill holes submitted for laboratory multi-element check analysis, three drill holes checked from Target A1 including:
- Hole 24TMN004 (Drill Line 1)
  - 59m grading 25 grammes/tonne ("g/t") silver, 0.2% copper and 0.16% zinc from 10m to end of hole at 72m including:
  - > 26m grading 36g/t silver, 0.20% copper and 0.20% zinc from 45-72m.
  - Hole ended in mineralisation grading 49g/t silver, 0.24% copper and 0.15% zinc.
  - Previously reported copper and zinc values confirmed by laboratory check analysis.
- Hole 24TMN024 (Drill Line 1)
  - Significant cobalt associated with previously reported higher grade copper interval: 6m grading 0.08% cobalt, 0.58% copper from 47-53m.
  - Entire hole, where check analyses are available, is anomalous in copper and cobalt: 74m grading 0.14% copper, 0.03% cobalt and 3g/t silver from 20m to 96m at end of hole.
  - Hole also anomalous in nickel with best intersection of 4m grading 0.12% nickel, 0.09% cobalt, 0.18% copper and 5g/t silver from 42-46m.
- Hole 24TMN016 from Target C1 shows narrow intervals of low-grade gold mineralisation.
- Silver-in-soil geochemical anomaly associated with Hole 24TMN004 evident in check soil analytical data 1.3km long and open ended to the northeast and southwest.
- Repeat silver analysis on 14 check samples using a stronger acid digest method returned silver values 12% higher than those now being reported.

A plan and drill section illustrating the above highlights can be found at the end of this release.

# Commenting today. Patrick Cheetham, Executive Chairman of Tertiary Minerals plc said:

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"This is an exciting grass roots discovery. So far, we have checked only one of a number of adjacent 50m spaced drill holes on Line 1 that contain wide intervals of copper and zinc and which were drilled within the newly defined silver soil anomaly. We anticipate that these holes may also have significant silver contents. With so many of these holes ending in mineralisation and the open-ended silver anomaly being at least 1.3km long, it's clear we have only just scratched the surface at Mushima North.

"The wide interval of silver mineralisation now being reported suggests a target of potential economic interest. For comparison, the Reserve grade at the Rochester heap leach bulk silver mine in Nevada, USA is only 13g/t silver\*. All existing holes considered prospective for silver will now be submitted for further analysis."

\* Converted from reported reserves grade of 0.39 ounces per short ton.

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#### Market Abuse Regulation

The information contained within this announcement is deemed by the Company to constitute inside information as stipulated under the Market Abuse Regulations (EU) No. 596/2014 as it forms part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018 ('MAR'). Upon the publication of this announcement via Regulatory Information Service ('RIS'), this inside information is now considered to be in the public domain.

#### **Detailed information**

To be read in conjunction with the Company's News Release of 28 October 2024.

#### Background

The Mushima North Copper Project (Licence 27068-HQ-LEL) is held through Group company Copernicus Minerals Limited ("Copernicus") which is 90% owned by Tertiary Minerals (Zambia) Limited and 10% by local partner, Mwashia Resources Limited.

The project lies 20km to the east of the Kalengwa copper mine in northwest Zambia, one of the highest-grade copper deposits ever to be mined in Zambia. In the 1970s, high-grade ore, in excess of 26% copper, was trucked for direct smelting at other mines in the Copperbelt. The Kalengwa mine is now being reopened and is expected to produce 15,000 tonnes of copper annually.

At the end of the summer 2024, Tertiary completed 25 aircore drill holes to test geochemical anomalies at Targets A1 and C1. Drill samples were analysed in the field using a portable X-Ray Fluorescence ("pXRF") instrument and wide intervals of copper-zinc mineralisation were

found in several 50m spaced drill holes on drill line 1 at Target A1, as reported in the Company's news release dated 28 October 2024.

The pXRF instrument used by the Company is considered reliable for copper and zinc analysis when used with rigorous QA/QC procedures, but not sufficiently reliable for other elements of economic interest and it cannot detect silver at the levels now being reported. It is the Company's policy to always carry out check multi-element analyses using conventional laboratory based methods.

#### Check Analysis of Drill Samples – New Results

Results are now available for five drill holes that were selected for check analysis. This included four holes from Target A1 (Hole Numbers 24TMN004, 6P, 11 and 24) and Hole TM24TMN16 from Target C1 (see accompanying map and drill section). Drill hole 24TMN006P was only analysed for gold.

Check analysis for copper and zinc confirmed the previously reported results except for one interval for zinc in Hole 24TMN011 which requires further investigation (see accompanying table).

Significant silver values were found throughout Hole 24TMN004 in broad association with copper and zinc whilst significantly anomalous cobalt and nickel and silver was found in hole 24TMN024 with the highest cobalt grades accompanying the highest copper grades.

Target A1 was first defined by pXRF analysis of soil which defined a large copper-in-soil anomaly which was subsequently confirmed by laboratory check analysis of samples taken along three sample lines within the anomaly (see accompanying map). A review of the silver values in these check soil analyses has now revealed a silver-in-soil anomaly within the copper-in-soil anomaly that extends northeast-southwest for at least 1.3km across all of the three check lines. This silver anomaly is open-ended in both of these directions.

The accompanying map and drill section illustrates that, of the drill holes selected for check analysis, only hole 24TMN004 was drilled within the silver-in-soil anomaly. However, we anticipate that additional laboratory analysis of other drill holes on Line 1 that fall within the silver-in-soil anomaly may also reveal significant silver mineralisation. The map also illustrates that drill hole 24TMN024, whilst hitting a thick interval of lower grade silver, was likely drilled too far east, on the edge of the silver-in-soil anomaly and the current belief is that the two southerly drill lines (including Hole 24TMN011) were both drilled too far to the west to hit the main copper-zinc and silver targets.

Check analysis of drill hole 24TMN016 at Target C1 area intersected two narrow intervals of anomalous gold in granite: 0.47g/t gold from 5-6m downhole and 0.25g/t gold from 22-23m and confirmed the previously reported narrow interval of copper mineralisation.

As a further check on the silver values now being reported, fourteen samples were submitted for repeat analysis by a different laboratory method using a stronger acid digest for more complete dissolution of contained metals. The repeat analyses confirmed the silver discovery and returned 12% higher silver values on average.

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Check analysis - New elements (Ag, Co) & comparison of field pXRF analysis with laboratory analysis									
			Drill Hole	Lab	Lab	pXRF	Lab	pXRF	Lab
Hole Number	From (m)	To (m)	Interval (m)	Silver(g/t)	Cobalt %	Copper %	Copper %	Zinc %	Zinc %
Anomaly A1									
24TMN004	10	72	59	25g/t	0.02%	0.17%	0.20%	0.19%	0.16%
inc.	45	72	26	36g/t	0.02%	0.20%	0.20%	0.27%	0.20%
inc.	53	64	11m	42g/t	0.02%	0.19%	0.17%	0.29%	0.22%
End of Hole	71	72	1m	49g/t	NSV	0.18%	0.24%	0.21%	0.15%
24TMN011	8	17	9m	NSV	NSV	0.06%	0.06%	0.20%	64ppm
24TMN024	22	57	33m	6g/t	0.05%	0.21%	0.22%	0.05%	0.06%
inc.	47	53	6m	7g/t	0.08%	0.58%	0.58%	0.07%	0.06%
inc.	49	50	1m	7g/t	0.07%	1.04%	0.80%	0.06%	0.04%

#### Notes:

1. The information in this release has been compiled and reviewed by Mr. Patrick Cheetham (MIMMM, MAusIMM) who is a qualified person for the purposes of the AIM Note for Mining and Oil & Gas Companies. Mr. Cheetham is a Member of the Institute of Materials, Minerals & Mining and also a member of the Australasian Institute of Mining & Metallurgy.

2. The news release may contain certain statements and expressions of belief, expectation or opinion which are forward looking statements, and which relate, inter alia, to the Company's proposed strategy, plans and objectives or to the expectations or intentions of the Company's directors. Such forward-looking statements involve known and unknown risks, uncertainties, and other important factors beyond the control of the Company that could cause the actual performance or achievements of the Company to be materially different from such forward-looking statements. Accordingly, you should not rely on any forward-looking statements and, save as required by the AIM Rules for Companies or by law, the Company does not accept any obligation to disseminate any updates or revisions to such forward-looking statements.

3. Reporting cut-offs:

NSV : No significant values, means less than 100ppm for nickel and cobalt.

Where voids occur within continuous sampled lengths, the average grade reported is the average grade of the samples actually collected and the reported sample interval excludes the extent of the voids which are likely due to washing out of clay or other soft materials, possibly in fault zones. The following voids were noted: Hole 24TMN004 drilled through a 2m void from 43-45m, and the results from the interval 64-65m was assigned nil values on QA/QC grounds.

Hole 24TMN024 drilled through voids from 46-47m and 54-55m downhole.

Samples being reported as laboratory analysis were analysed at ALS Global in South Africa for a range of elements using an aqua regia digest, method code ME-MS41 and for gold by fire assay method Au-AA25. The 14 repeat silver analyses were carried out using a four-acid digest, method code ME-ICP6.

## REPORTED THICKNESSES ARE DOWNHOLE THICKNESSES AND TRUE THICKNESS ARE UNKNOWN.

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