



(“Tertiary” or “the Company”)

AIM Announcement

8 November 2022

Exploration Update - Jacks Copper Project, Zambia

Further to its announcement of 27 September 2022, Tertiary Minerals plc (LON: TYM), the AIM traded mineral exploration and development company, is pleased to announce provisional results from its detailed soil sampling programme at the Jacks Copper Project (“Jacks”) in Zambia and the definition of multiple copper soil anomalies in different areas of the Exploration Licence.

Highlights:

- Soil sampling programme completed on schedule and on budget.
- 1,807 samples collected on a 200m x 40m spacing over 4 separate grids.
- pXRF elemental analysis of samples in the field gave real time data, defined soil anomalies and allowed for immediate follow up sampling.
- Follow up sampling was carried out on three of the four grids at 100m x 40m spacing.
- Multiple soil anomalies were defined with a peak value of 535ppm copper and with sufficient ground control to allow for drill testing.
- Results compare favourably with soil anomalies in the vicinity of various ore zones at current and past producing mines on the Copperbelt.
- Results from pXRF analysis are regarded as provisional and check samples are now being sent to South African laboratory for traditional wet chemical analysis.

Commenting today, Executive Chairman Patrick Cheetham said:

“The soil sampling programme went smoothly, thanks to our contractor GeoQuest Ltd and our local partner Mwashia Resources. We are delighted with the results obtained to date, which, although provisional, have defined multiple soil anomalies in favourable Lower Roan stratigraphy that are of the same order of magnitude as those reported to occur in the vicinity of ore-zones at past and currently operating mines elsewhere in the Copperbelt.”

“Jacks is one of five projects in Zambia where we currently have an interest and we expect to issue an update shortly regarding our wider Zambia portfolio.”

For more information please contact:

Tertiary Minerals plc

Patrick Cheetham, Executive Chairman

Tel: +44 (0)1625 838 679

S P Angel Corporate Finance LLP

Nominated Adviser & Broker

Richard Morrison/Caroline Rowe

Tel: +44 (0)203 470 0470

Peterhouse Capital Limited

Joint Broker

Lucy Williams/Duncan Vasey

Tel: +44 (0)207 469 0930

Note to Editors

Tertiary Minerals plc (LON: TYM) is an AIM traded mineral exploration and development company whose strategic focus is on energy transition metals. The Company's projects are located in stable and democratic, geologically prospective, mining-friendly jurisdictions. Tertiary's current principal activities are the discovery and development of mineral resources in Nevada, USA, and in Zambia.

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

Background Information

The Jacks Copper Prospect lies within Exploration Licence 27069-HQ-LEL which covers 141.4 km² and is located 85 km south of Luanshya in Zambia. Tertiary has earned a 90% interest in the licence from local company Mwashia Resources Limited ("Mwashia") and recently signed a joint venture and shareholder agreement with Mwashia, details of which are given in the Company's announcement of 4 November 2022.

The geological setting of the exploration licence area is a synclinal embayment of Lower Roan Group sedimentary rocks which unconformably overlies basement rocks of the Muva Formation. The Lower Roan Group is highly prospective and hosts the majority of significant copper deposits in the Zambian portion of the Central African Copperbelt.

In May 2022, Tertiary completed four diamond drill holes as an initial test of the Jacks Copper Prospect. All holes intersected copper mineralisation including 6.0m grading 1.8% copper from 105.0m in hole 22JKDD03. Historic drilling results included 24.0m grading 1.3% copper in drillhole KJD10.

Copper mineralisation has now been intersected in drilling at the Jacks Prospect over a strike length of 350m and remains open along strike and at depth.

For more information on Tertiary's Phase 1 Drill Programme see the news release dated 29 June 2022.

Soil Sampling Programme

The soil sampling programme for which provisional results are now being reported was designed to follow up unresolved copper-in-soil anomalies defined during wide spaced soil sampling by previous operators including Cyprus-Amax and First Quantum Minerals, as well as to guide follow-up drilling on the Jacks main prospect.

The Company's soil sampling programme was contracted to GeoQuest Limited and a total of 1,807 B horizon soil samples were initially collected over four separate areas covering 11.5 sq.km. Samples were collected at 40m intervals on lines spaced 200m apart and preliminary elemental analysis of the samples was carried out in the field using a portable x-ray fluorescence (pXRF) analyser. Sampling and pXRF analytical protocols are described in Note 1 below.

Field pXRF results were received on a real-time basis, allowing daily definition of soil anomalies which were then sampled in more detail on infill 100m spaced lines. A total of 196 additional soil samples were collected by infill sampling.

Results

Field pXRF analysis is considered to be a less accurate and less precise method of analysis compared to traditional wet-chemical laboratory analysis and so the following results should be considered as provisional. A range of samples are now being prepared for laboratory check analysis.

As a guide to the significance of soil sampling results, the Company notes² that B horizon soil anomalies for freely drained soils in the vicinity of various ore zones at current and past producing mines on the Copperbelt have thresholds in the range 50 to 150ppm copper, averaging 80ppm copper and peak values in the range 100-450ppm copper and averaging 210ppm copper. In addition, published data³ for the giant Sentinel copper deposit (>1 billion tonnes grading 0.51% copper, located close the Company's Mukai Project in northwest Zambia) shows that the median copper value for soil samples collected over the sub-cropping expression of the orebody was 120ppm and only one soil sample exceeded 500ppm copper.

The Area A soil grid at Jacks is located in prospective Lower Roan sediments on the southern limb of the syncline southwest of the Jacks drill area. A total of 271 samples were collected with a peak copper-in-soil value of 132ppm. No infill sampling was carried out in Area A during this programme but it may be targeted for infill sampling in future.

Areas B & C were selected to test areas where wide-spaced sampling by FQM defined areas containing anomalous concentrations of copper as well as samples containing high copper: scandium ratios which can indicate the presence of copper sulphide minerals.

The Area B soil grid was located in the northwest part of the licence in Upper Roan Group and younger rocks. A total of 290 samples were collected of which 89 were infill samples. A 600m long x 600m wide copper-in-soil anomaly was defined with a peak of 325ppm copper and 197ppm nickel in different samples. The trace element signature of the anomaly is atypical for Copperbelt style mineralisation and further evaluation of this is required to determine its significance.

The Area C grid, in prospective Lower Roan Group sediments, was targeted to follow up a Cu-Sc anomaly defined by FQM. A total of 464 soil samples were collected of which 89 were infill samples. A north-northeast striking copper anomaly approx. 1,100m long and 400m wide was identified with a peak value of 257ppm copper.

Area D covers an approx. 4 km strike length centred on the area of the Company's recently reported drilling at the original Jack's Prospect and aimed to find extensions to the mineralisation intersected by this drilling. A total of 782 soil samples were collected in Area D with 66 being infill soil samples. A peak value of 525ppm copper was observed in the area of the drilling within an 600m x 400m anomaly. Further to the southwest a second anomaly was defined with dimensions 600m x 500m and a peak value of 173ppm copper.

Further information on the anomalies and the company's priorities for further drill testing on the Jacks Licence will be given once the results of laboratory analysis are available.

A plan showing the location for the soil grids and provisional soil anomalies is available on the Company website at:

https://www.tertiaryminerals.com/filemanager/Jacks_Project/Soil_Sampling_Copper_Anomalies.jpg

Notes:

- 1. Soil samples were collected from the B horizon at an approximate depth of 25-30cm at each sample site. Samples were dry sieved to minus 180 micron with approx. 100 grammes retained and placed in a plastic sample bag for analysis. Samples were then analysed through the sample bag using a Delta Classis pXRF machine with DCC6000 tube. The pXRF was calibrated at the start of each day using a Certified reference Material tablet and again intermittently throughout the sampling runs. Repeat pXRF analysis was performed on a subset of samples to check the repeatability of the pXRF analysis. Additionally, two CRMs were placed in plastic sample bags and analysed throughout the*

repeat analysis to test the performance of the pXRF using the same conditions. The Company is currently undertaking further interpretation of the geochemical results to select samples for conventional wet chemical analysis.

2. Mwamba, J., 2018. *Exploration Potential for Copperbelt - Style Mineralisation in NW Province, Zambia; Soil Geochemistry as a targeting tool.* M.Sc. Dissertation Rhodes University (Data presented for 20 deposits, 2 deposits excluded as high outliers).
3. Halley, S.W. et.al; 2016. *Using Multielement Geochemistry to Map Multiple Components of a Mineral System: Case Study from a Sediment-Hosted Cu-Ni Camp, NW Province, Zambia, SEG Newsletter January 2016.*
4. *The information in this release has been reviewed by Mr. Patrick Cheetham (MIMMM, M.Aus.IMM), Executive Chairman of Tertiary Minerals plc, 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.*
5. *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.*