

Phoenix Copper Limited / Ticker: PXC / Sector: Mining

6 June 2023

**Phoenix Copper Limited**

('Phoenix' or the 'Company')

**Preliminary Results of Metallurgical Testing of ATS at the Empire Mine Project, Idaho**

Phoenix Copper Ltd (AIM: PXC, OTCQX: PXCLY), the AIM-quoted USA-focused base and precious metals emerging producer and exploration company is pleased to report that preliminary metallurgical testing of the Empire Mine open pit oxide material using ammonium thiosulfate ("ATS") as a reagent, has been completed by Resource Development Inc of Wheat Ridge, Colorado ("RDI"), and has resulted in robust metallurgical recoveries of copper, gold and silver.

ATS is considered an environmentally friendly reagent, intended to replace the use of sulphuric acid and cyanide in the recovery and processing of copper and precious metals respectively. ATS is produced and sold in bulk in Idaho, and is commonly used as a fertilizer for the agricultural sector.

*Ryan McDermott, Chief Executive Officer, said, "I am pleased to report that RDI's laboratories in Colorado have independently produced robust metal recoveries using representative bulk ore samples from metallurgical drilling at the Empire Mine open pit oxide deposit. These are similar to those earlier produced at AuRIC Laboratories in Salt Lake City, Utah ("AuRIC") using smaller samples taken from surface trenching. This increases the Company's confidence that not only does ATS technology work for material sourced on the surface, but more importantly ATS works with material representative of the Empire open pit resource as a whole. We will now focus on optimizing metal recovery balanced with reagent consumption, and applying appropriate capital and operating costs to the proposed process design. Assuming the process is commercially viable, we would then plan to formally incorporate it into our Plan of Operations for final submission to the regulatory authorities.*

*"In addition to positive environmental impacts, this technology would enable us to recover and process copper, gold and silver in one process, thus bringing forward the production of precious metals from the Empire Mine open pit.*

*"I would also like to confirm that Phoenix has purchased all of the assets from AuRIC following its closure, including the analytical equipment and supplies necessary for the onsite laboratory that will service the Empire Mine once it is in operation. The purchase of these laboratory assets will prove most cost effective, saving up to three times as much as the purchase of new equipment, which is significant in light of the current market.*

*"I look forward to reporting further on the results of the ATS metallurgical program as soon as possible."*

**Background**

In 2020, AuRIC was retained by the Company to evaluate alternative metallurgical processes, other than conventional sulphuric acid heap leach SX/EW to recover not only copper, but also the gold and silver that occurs at the Empire Mine open pit. Tests by AuRIC, utilising ATS technology, resulted in recoverable metals, including copper, gold, and silver from test material sourced through surface trenching at Empire.

Encouraged by these results, the Company's Idaho registered operating subsidiary, Konnex Resources, performed a metallurgical core drilling programme in 2022. The goal of this programme was to produce sufficient material meeting copper, gold, and silver grade ranges, as well as being 3-dimensionally representative of the resource, to continue metallurgical testing utilising ATS. The results of this metallurgical drilling programme were reported on 10 November 2022, 4 January 2023, 12 January 2023 and 16 March 2023, and confirmed the continuity of the open pit mineralisation, including intercepts of up to 12.8% copper, 269.10 grammes per tonne ("g/t") silver and 0.75 g/t gold.

In late 2022, the principals of AuRIC elected to retire and close their business. As a result of this RDI was chosen as a successor to continue metallurgical testing utilising ATS and to determine its commercial viability at Empire. Once the final

assays from the 2022 drilling programme were received in mid-March 2023, a representative bulk sample from the 2022 core was compiled and transported to the RDI facility for preparation and testing. The preliminary results of the first trial resulted in robust multi-metal recoveries, similar to the recoveries that were produced at AuRIC, and all of which were performed without using cyanide as a reagent.

The next phase of required testing is the finalisation of the preliminary results and assessment of metal recovery balanced with reagent usage. The results of this work will then be applied to a proposed process design, and the capital and operating costs of the design, which will ultimately determine the commercial viability of the process.

#### **Environmental, Social, and Corporate Governance**

Phoenix is committed to meeting and exceeding the environmental standards required by law as a core value of the Company. The baseline environmental data collected to date will be used to further the permitting process, but as importantly, will be used as the building blocks for the Company's ongoing Environmental, Social, and Corporate Governance (ESG) platform, overseen by the Company's ESG & Sustainability Committee. The Company has recently published its inaugural Sustainability Report, which can be viewed on the Company's website.

#### **Market Abuse Regulation (MAR) Disclosure**

The Company deems the information contained within this announcement to constitute inside information as stipulated under the Market Abuse Regulations (EU) No. 596/2014, which has been incorporated into UK law by the European Union (Withdrawal) Act 2018. Upon the publication of this announcement via the Regulatory Information Service, this inside information is now considered to be in the public domain.

#### **Contacts**

For further information please visit <https://phoenixcopperlimited.com> or contact:

Phoenix Copper Limited	Ryan McDermott  Brittany Lock  Richard Wilkins	Tel: +1 208 954 7039  Tel: +1 208 794 8033  Tel: +44 7590 216 657
SP Angel (Nominated Adviser)	David Hignell / Kasia Brzozowska	Tel: +44 20 3470 0470
Tavira Financial Limited (Joint Broker)	Jonathan Evans / Oliver Stansfield	Tel: +44 20 7100 5100
WH Ireland (Joint Broker)	Harry Ansell / Katy Mitchell	Tel: +44 20 7220 1666
Panmure Gordon (UK) Limited (Joint Broker)	John Prior / Hugh Rich / Ailsa Macmaster	Tel: +44 20 7886 2500
EAS Advisors (US Corporate Adviser)	Matt Bonner / Rogier de la Rambelje	Tel: +1 (646) 495-2225
BlytheRay (Financial PR)	Tim Blythe / Megan Ray	Tel: +44 20 7138 3204

#### **Notes**

Phoenix Copper Limited is a USA focused, base and precious metals emerging producer and exploration company, initially targeting copper and zinc production from an open pit mine.

Phoenix's primary operations are focused near Mackay, Idaho in the Alder Creek mining district, at the 80% owned Empire Mine property, which historically produced copper at grades of up to 8%, as well as gold, silver, zinc and tungsten, from an underground mine.

Since 2017, Phoenix has carried out extensive drill programmes which have defined a NI 43-101 completed PEA (preliminary economic assessment) for an open pit heap leach solvent extraction and electrowinning ("SX-EW") mine, which was updated in October 2020. From the 2020 PEA, the measured and indicated resource is: 22,909,059 tonnes at an average grade of 0.38% copper, 0.324 g/t gold, 10.3 g/t silver, and 0.19% zinc. The contained metal for the measured and indicated resource is 87,543 tonnes of copper, 238,406 ounces of gold, 7,595,198 ounces of silver and 43,871 tonnes of zinc. Phoenix updated its economic model in February 2021 to include the processing of all contained metals through a two phased approach.

In addition to Empire, the district includes the historic Horseshoe, White Knob and Blue Bird Mines, past producers of copper, gold, silver, zinc, lead and tungsten from underground mines. A new discovery at Red Star, 330 metres northwest of the Empire Mine proposed open pit, has revealed high grade silver / lead sulphide ore, and from three shallow exploration drill holes a maiden inferred resource of 103,000 tonnes containing 173.4 g/tonne silver, 0.85 g/tonne gold and 3.85% lead (1.6 million ounces silver equivalent) was reported in an NI 43-101 technical report published in May 2019. Additionally, the district includes Navarre Creek, a volcanic hosted precious metals target in a 14.48 sq km area. The Company's total land package at Empire comprises 8,034 acres (32.51 sq kms).

At Empire, it is estimated that less than 1% of the potential ore system has been explored to date and, accordingly, there is significant opportunity to increase the resource through phased exploration. The stated aim of the Company is to fund this phased exploration through free cashflow generated by its initial mine. A Plan of Operations in respect of the initial open pit mine was filed with the relevant regulatory authorities in June 2021.

Phoenix also has two wholly owned cobalt properties on the Idaho Cobalt Belt to the north of Empire. An Earn-In Agreement has been signed with Electra Battery Materials, Toronto, in respect of one of those properties.

Phoenix is listed on London's AIM (PXC), and trades on New York's OTCQX Market (PXCLF and PXCLY (ADRs)). More details on the Company, its assets and its objectives can be found on PXC's website at <https://phoenixcopperlimited.com/>

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