

Arizona Sonoran Achieves Average of 87% Extraction Rates of Soluble Copper in the Enriched Material

Casa Grande, AZ and Toronto, ON - December 10, 2024 – Arizona Sonoran Copper Company Inc. (TSX:ASCU | OTCQX:ASCUF) (“ASCU” or the “Company”) an emerging US-based copper developer, announces results from 12 leach columns completed from its column leach metallurgical testing program at the Cactus Project, Arizona. An average soluble copper extraction rate of 87% over 180 days of leaching was achieved from 6 oxide and enriched composite columns from the Parks/Salyer deposit, inclusive of MainSpring. The other 6 columns represent the final Stockpile columns with an average soluble copper extraction rate of 86% over 100 days.

These updated Parks/Salyer extraction results compare well to the soluble copper rates of 92% oxide and 85% enriched, in support of the single pad leach plan as outlined in the 2024 Preliminary Economic Assessment (“2024 PEA”) (see technical report filed on [August 27](#)).

Following the recommendation from the 2024 PEA, ASCU has begun to implement the \$3 million metallurgical program ahead of the H2 2025 Prefeasibility Study (“2025 PFS”), utilizing both Base Met and McClelland Labs. This next program focuses on upgrading the Parks/Salyer deposit metallurgical information. A total of 5 enriched columns, 2 enriched and oxide composites, and 4 primary sulphide (chalcopyrite) columns are planned, all related to conventional heap leaching, as per the 2024 PEA mine plan.

Samples from Cactus, Parks/Salyer and the Stockpile were prepped and composited for the 2025 PFS metallurgical test program using both Base Met and McClelland laboratories, overseen by Steve Dixon, ASCU Chief Engineer with Laurie Tahija of M3 Engineering acting as qualified person.

Steve Dixon, ASCU Chief Metallurgist commented, “Across the Parks/Salyer, Cactus West and Cactus East deposits, we benefit from similar mineralogies and no deleterious materials as evidenced from four years of metallurgical testing on the three deposits. Test work using standard best practice conditions is ongoing and will continue until we hand off testing to operations, assuming a positive construction decision post-Definitive Feasibility Study. To date, we are encouraged to see the first two columns from the new MainSpring property behaving similarly to Parks/Salyer, as expected. Overall, the Cactus Project oxide and enriched recoveries and leach times perform in line- with other operating mines within Arizona’s copper belt.”

Metallurgical Testing Program – Oxide, Enriched, Stockpile Material Type

The 12 completed columns were 20 feet (6 metres) in height and consisted of 6 columns from the Parks/Salyer deposit, including 2 focused on the new shallow MainSpring Property and 6 from the Stockpile. The Parks/Salyer oxide and enriched composites averaged 87% of soluble copper extracted over 180 days. The 6 Stockpile columns tested the impact of calcium content on the recoveries. Stockpile recoveries at 86% of soluble copper (Cu TSol) over 100 days was comparable to past reporting, at 93% and makes up approximately 1% of the total 2024 PEA mine plan. While the Stockpile provides valuable information on material already extracted from the former Sacaton Mine, all testing going forward will be focused on fresh material from the Company's recent drilling at Parks/Salyer.

To date, completed Parks/Salyer composite columns total of 6 with grade ranges of 0.17%, to in excess of 2.00% total copper. The average mineral resource grade at Parks/Salyer is 0.56% Soluble Copper ("Cu TSol") in the Measured and Indicated open pit category (see press release dated [July 16, 2024](#)). Columns are modeling Parks/Salyer's heap soluble copper extraction after being in operation for 180 days. The individual column results were used to calculate the rate of soluble copper extraction for the enriched material. The time frame used for the modeling was 150 to 180 days. The average percent soluble copper extraction at 180 days of leaching was 87.1%. The copper content in the pregnant leach solution ("PLS") at 180 days was significant for all column tests. The copper content in the PLS (4.2 to 0.2 grams per litre Cu) was justification to predict the extraction of soluble copper from an additional 30 days of leaching. The rate of soluble copper extraction was extended by 30 days using a regression based on the logarithm of leach time. The average percent soluble copper extraction is estimated at 93.7% at 210 days of leaching. The assumption of 210 days of column leaching in the lab is assumed to be the equivalent of three 180-day cycles, in operation. Each leach cycle is assumed to be completed within a year.

The term "heap efficiency factor" is the relationship of column test results to operational results. A world class operation would have a factor close to 100%. An operation that uses best practice would have a 95% factor. The use of a heap efficiency factor of 95% will reduce the extractable soluble copper from 93.7% for 210 days of leaching to 89%.

There will be additional copper extracted from material in the heap after the three leach cycles if the use of best practice in the loading and operation is done. This additional copper extraction after three leach cycles is not part of the model.

Planned Program

As part of the ongoing metallurgical program, and in advance of the 2025 PFS expected to be issued in H2 2025, the next planned columns are dedicated to 5 enriched columns, 2 enriched/oxide composite columns and 4 primary columns, all from the Parks/Salyer deposit, with the exception of two primary sulphide columns filled by material from Cactus West. Primary material columns will test the impact of heat application versus ambient conditions at McClelland Lab, while Base Met will also test at ambient temperature.

Qualified Persons Statement

Technical aspects related to the metallurgical program of this press release have been reviewed and verified by Laurie Tahija of M3 Engineering, who is a qualified person as defined by National Instrument 43-101 – Standards of Disclosure for Mineral Projects. The indicative metallurgical information presented describes preliminary results from testing that is currently in progress and subject to confirmation. Final metallurgical performance estimates will require decommissioning of the columns and analysis of the column residues.

Neither the Toronto Stock Exchange nor the regulating authority has approved or disapproved the information contained in this press release.

About Arizona Sonoran Copper Company (www.arizonasonoran.com | www.cactusmine.com)

ASCU is a copper exploration and development company with a 100% interest in the brownfield Cactus Project. The Project, on privately held land, contains a large-scale porphyry copper resource and a recent 2024 PEA proposes a generational open pit copper mine with robust economic returns. Cactus is a lower risk copper developer benefitting from a State-led permitting process, in place infrastructure, highways and rail lines at its doorstep and onsite permitted water access. The Company objective is to develop Cactus and become a mid-tier copper producer with low operating costs, that could generate robust returns and provide a long-term sustainable and responsible operation for the community, investors and all stakeholders. The Company is led by an executive management team and Board which have a long-standing track record of successful project delivery in North America complemented by global capital markets expertise.

For more information

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Cautionary Statements regarding Forward-Looking Statements and Other Matters
Forward-Looking Statements

All statements, other than statements of historical fact, contained or incorporated by reference in this press release constitute “forward-looking statements” and “forward-looking information” (collectively, “forward-looking statements”) within the meaning of applicable Canadian and United States securities legislation. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as “advance”, “assuming”, “become”, “begun”, “conceptual”, “continue”, “decision”, “developer”, “emerging”, “estimates”, “expected”, “exploration”, “feasibility”, “focuses”, “forward”, “generational”, “going”, “implement”, “indicative”, “long-term”, “looking”, “modeling”, “next”, “objective”, “ongoing”, “PEA”, “PFS”, “plan”, “potential”, “pre”, “preliminary”, “process”, “program”, “progress”, “project”, “proposes”, “resource”, “risk”, “study”, “subject to”, “testing”, “upgrading” and “will”, or variations of such words, and similar such words, expressions or statements that certain actions, events or results can, could, may, should, would, will (or not) be achieved, occur, provide, result or support in the future, or which, by their nature, refer to future events. In some cases, forward-looking information may be stated in the present tense, such as in respect of current matters that may be continuing, or that may have a future impact or effect. Forward-looking statements include statements regarding metallurgical testing (including related assumptions) and results thereof (including extraction rates and upgrade of metallurgical information); the Preliminary Economic Assessment (or 2024 PEA) on the Cactus Project (including returns, risk, production, mine plan, operations, sustainability or other details of the Project, conclusions or results, implications and implementation thereof); permitting and any future such applications and resulting permits; mineral resources (which include copper resources); Company objectives and operations; and the future plans or prospects of the Company (including the 2025 Pre-Feasibility Study (or 2025 PFS) and any Definitive Feasibility Study (or DFS) on the Project, and any project financing, construction and development decision and/or, and related assumptions or resulting decisions and the timing and returns, other economics or other conclusions and outcomes thereof). Although the Company believes that such statements are reasonable, there can be no assurance that those forward-looking statements will prove to be correct, and any forward-looking statements by the Company are not guarantees of future actions, results or performance. Forward-looking statements are based on assumptions, estimates, expectations and opinions, which are considered reasonable and represent best judgment based on available facts, as of the date such statements are made. If such assumptions, estimates, expectations and opinions prove to be incorrect, actual and future results may be materially different than expressed or implied in the forward-looking statements. The assumptions, estimates, expectations and opinions referenced, contained or incorporated by

reference in this press release which may prove to be incorrect include those set forth or referenced in this press release, as well as those stated in the Company's press release dated August 7, 2024, the technical report for the Project filed on August 27, 2024 (the "2024 PEA Technical Report"), the Company's Annual Information Form dated April 1, 2024 (the "AIF", Management's Discussion and Analysis (together with the accompanying financial statements) for the year ended December 31, 2023 and the quarters already ended in 2024 (collectively, the "2023-24 Financial Disclosure") and the Company's other applicable public disclosure (collectively, "Company Disclosure"), all available on the Company's website at www.arizonasonoran.com and under its issuer profile at www.sedarplus.ca. Forward-looking statements are inherently subject to known and unknown risks, uncertainties, contingencies and other factors which may cause the actual results, performance or achievements of ASCU to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such risks, uncertainties, contingencies and other factors include, among others, the "Risk Factors" in the AIF, and the risks, uncertainties, contingencies and other factors identified in the 2024 PEA Technical Report and the 2023-24 Financial Disclosure, as well as market conditions, future prices and the supply of metals; the results of drilling; inability to secure the funding required for necessary or planned expenditures (including to acquire and retain required land and/or mineral title); general business, economic, competitive, political and social uncertainties; results of exploration programs; accidents; delays in obtaining, or failure to receive and maintain, necessary permits and other regulatory approvals. The foregoing list of risks, uncertainties, contingencies and other factors is not exhaustive; readers should consult the more complete discussion of the Company's business, financial condition and prospects that is provided in the AIF, the 2023-24 Financial Disclosure and other Company Disclosure. Although ASCU has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. Forward-looking statements contained herein are made as of the date of this press release (or as otherwise expressly specified) and ASCU disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or results or otherwise, except as required by applicable securities laws. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from forward-looking statements. Accordingly, readers should not place undue reliance on forward-looking statements. The forward-looking statements referenced or contained in this press release are expressly qualified by these Cautionary Statements as well as the Cautionary Statements in the AIF, the 2024 PEA Technical Report, the 2023-24 Financial Disclosure and other Company Disclosure.

Preliminary Economic Assessments

The 2024 Preliminary Economic Assessment (or 2024 PEA) referenced in this press release and summarized in the 2024 PEA Technical Report is only a conceptual study of the potential viability of the Cactus Copper Project and the economic and technical viability of the Project has not been

demonstrated. The 2024 PEA is preliminary in nature and provides only an initial, high-level review of the Project's potential and design options; there is no certainty that the 2024 PEA will be realized. For further detail on the Project and the 2024 PEA, including applicable technical notes and cautionary statements, please refer to the Company's press release dated August 7, 2024 and the 2024 PEA Technical Report, both available on the Company's website at www.arizonasonoran.com and under its issuer profile at www.sedarplus.ca.

Mineral Resource Estimates

Until mineral deposits are actually mined and processed, copper and other mineral resources (which include copper resources) must be considered as estimates only. Mineral resource estimates that are not classified as mineral reserves do not have demonstrated economic viability. The estimation of mineral resources is inherently uncertain, involves subjective judgement about many relevant factors and may be materially affected by, among other things, environmental, permitting, legal, title, taxation, socio-political, marketing, or other known and unknown risks, uncertainties, contingencies and other factors described in the foregoing Cautionary Statements on Forward-Looking Statements. The quantity and grade of reported "inferred" mineral resource estimates are uncertain in nature and there has been insufficient exploration to define "inferred" mineral resource estimates as an "indicated" or "measured" mineral resource and it is uncertain if further exploration will result in upgrading "inferred" mineral resource estimates to an "indicated" or "measured" mineral resource category. Inferred mineral resource estimates may not form the basis of feasibility or pre-feasibility studies or economic studies except for preliminary economic assessments. The accuracy of any mineral resource estimate is a function of the quantity and quality of available data, and of the assumptions made and judgments used in engineering and geological interpretation, which may prove to be unreliable and depend, to a certain extent, upon the analysis of drilling results and statistical inferences that may ultimately prove to be inaccurate. It cannot be assumed that all or any part of a "inferred", "indicated" or "measured" mineral resource estimate will ever be upgraded to a higher category including a mineral reserve. The mineral resource estimates declared by the Company were estimated, categorized and reported using standards and definitions in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum Definition Standards for Mineral Resources and Mineral Reserves (the "CIM Standards") in accordance with National Instrument 43-101 of the Canadian Securities Administrators ("NI 43-101"), which governs the public disclosure of scientific and technical information concerning mineral projects.

U.S. Readers

The terms "mineral resource", "measured mineral resource", "indicated mineral resource" and "inferred mineral resource" as disclosed by the Company are Canadian mining terms defined in the CIM Standards (collectively, the "CIM Definitions") in accordance with NI 43-101. NI 43-101 establishes standards for all public disclosure that a Canadian issuer makes of scientific and technical information concerning mineral projects. These Canadian standards differ from the requirements of the United States Securities and Exchange Commission (the "SEC") applicable to United States domestic and certain foreign reporting companies under Subpart 1300 of Regulation S-K ("S-K 1300"). Accordingly, information describing mineral resource estimates for the Cactus Copper Project may not be comparable to similar information publicly reported in accordance with the applicable requirements of the SEC, and so there can be no assurance that any mineral resource estimate for the Project would be the same had the estimates been prepared per the SEC's reporting and disclosure requirements under applicable United States federal securities laws, and the rules and regulations thereunder, including but



not limited to S-K 1300. Further, there is no assurance that any mineral resource or mineral reserve estimate that the Company may report under NI 43-101 would be the same had the Company prepared such estimates under S-K 1300.