

Arizona Sonoran Launches Metallurgical Program and Strengthens Cactus Project Team

Casa Grande, AZ and Toronto, ON, December 13, 2022 – Arizona Sonoran Copper Company Inc. (TSX:ASCU | OTCQX:ASCUF) (“ASCU” or the “Company”) provides an update on metallurgical programs and project management appointments.

Highlights:

- **Metallurgy**
 - o Installation of onsite metallurgical and sample preparation lab
 - o Parks/Salyer and Cactus Metallurgical Testing Program (**FIGURE 1**)
 - Eight of the initial 12 constructed 20-foot (ft) (a combination of 6 & 8 inch in diameter) columns are underway testing the leachability of the Parks/Salyer and Cactus enriched (secondary sulphide) and oxide ore types; the remaining 20-ft columns are scheduled to be online later this month.
 - An additional five columns will be constructed to a height of 20 and 30 ft (9 m) to test both oxide and enriched materials from Parks/Salyer and Cactus
- **Appointments:**
 - o Greg Phillips as Project Process Superintendent
 - o Graeme Hendricks as Senior Mine Engineer

George Ogilvie, Arizona Sonoran Copper Company CEO commented, “Our company has advanced the company over the past year at a careful, yet rapid rate. After building out the resource base to 1.6B lbs indicated and 4.9B lbs inferred from 1.6B lbs indicated and 1.9B lbs inferred, our teams are now able to focus on the next step of developing the asset for the feasibility level studies. We are strengthening the project level team and enhancing our metallurgical studies for the upcoming PFS at the end of 2023.”

Metallurgical Facility and Metallurgical Program

The TruStone Facility, formerly a block manufacturing plant, is now operating as ASCU’s sample preparation lab and metallurgical facility. The preparation lab allows the ASCU team to expedite the assaying process at the third-party lab, Skyline Assayers and Laboratories, by removing the crushing and preparation required at the receiving lab.

The refurbishment conducted by ASCU included new flooring, ventilation, and equipment installation, including a three-stage crushing process. The three-stage crushing equipment is used to enable pulps preparation for assays, while the first two stages will allow preparation of pulps in addition to material used for column testing. In addition, permanent water supply from our onsite wells and power supply from Arizona Public Service (APS) is scheduled for completion in early 2023.

The Company will be operating a 12-column testing program for both Cactus, the Stockpile and Parks/Salyer at the Cactus Mine site under the guidance and assistance of Dr. Martin Kuhn, ASCU's metallurgical Qualified Person, Minerals Advisory Group LLC (Tucson, AZ) and HydroGeoSense, Inc.

The twelve columns are 20 ft in height to closely simulate an entire bench on a heap leach pad. Currently, eight columns are running, with the remaining four to be scheduled in the near future. Each column consists of different rock types, mineralogy and copper grades that are distinctively prepared (screened or crushed and sometimes agglomerated), thus collecting critical leaching information for both oxidized and enriched mineralized material. Concurrent with the ASCU-led metallurgical testing program, Rio Tinto's Nuton Technology is running a similar program on similar composites in order to ensure comprehensive metallurgy data is available.

At Parks/Salyer, three metallurgical drill holes are now complete. A series of Parks/Salyer metallurgical holes will be applied to the 20 and 30 ft columns. Material will differentiate between grade and preparation methods.

Appointments

Greg Phillips joins the Company as Project Process Superintendent and is a 40-year veteran with significant experience in building, operating and maintaining SXEW plants. He was responsible for the construction, start-up and operation of the SXEW plant at Carlotta, 2007 – 2012, and most recently at building Taseko's Florence Project from the PFS level. Greg's experience and knowledge will be key as ASCU completes its own technical studies, construction decision and pending a positive decision, into commercial production in the ensuing years.

Graeme Hendricks joins the Company as Senior Mine Engineer on a part-time basis. He was most recently Project Superintendent for Thyssen at the New Afton Mine. Graeme also brings significant,

prior engineering experience, having been Chief Engineer at Nyrstar's Myra Falls operation, and Chief Engineer at Fire Creek for Klondex Mines. Graeme also worked for Newmont, UG Carlin Portal Mines, in charge of underground mine planning and sequencing. He will join to review the Parks/Salyer internal model to determine the underground potential of the project, with the added view of also optimizing the Cactus East underground model.

Quality Assurance / Quality Control

Drilling completed on the project from 2020 onwards, was supervised by on-site ASCU personnel who prepared core samples for assay and implemented a full QA/QC program using blanks, standards, and duplicates to monitor analytical accuracy and precision. The samples were sealed on site and shipped to Skyline Laboratories in Tucson AZ for analysis. Skyline's quality control system complies with global certifications for Quality ISO9001:2008.

Technical aspects related to the drilling programs of this news release have been reviewed and verified by Allan Schappert – CPG #11758, who is a qualified person as defined by National Instrument 43-101– Standards of Disclosure for Mineral Projects.

Metallurgical aspects of this news release have been reviewed and verified by Dr. Martin Kuhn, who is a qualified person as defined by National Instrument 43-101 – Standards of Disclosure for Mineral Projects.

Links from the Press Release

FIGURE 1: <https://arizonasonoran.com/projects/Cactus/maps-and-figures/>

Neither the TSX 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's objective is to become a mid-tier copper producer with low operating costs, develop the Cactus Project that could generate robust returns for investors, and provide a long term sustainable and responsible operation for the community and all stakeholders. The Company's principal asset is a 100% interest in the Cactus Project (former ASARCO, Sacaton mine) which is situated on private land in an infrastructure-rich area of Arizona. Contiguous to the Cactus Project the Company is also exploring on its 100% owned Park Salyer property that could allow for a phased expansion of the Cactus Mine once it becomes a producing asset. 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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Forward-Looking Statements

Forward-looking statements involve known and unknown risks, uncertainties 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. Factors that could affect the outcome include, among others: future prices and the supply of metals; the results of drilling; inability to raise the money necessary to incur the expenditures required to retain and advance the properties; environmental liabilities (known and unknown); general business, economic, competitive, political and social uncertainties; results of exploration programs; accidents, labour disputes and other risks of the mining industry; political instability, terrorism, insurrection or war; or delays in obtaining governmental approvals, projected cash operating costs, failure to obtain regulatory or shareholder approvals.

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 news release and ASCU disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events, or results or otherwise, except as required by applicable securities laws.