



Arizona Sonoran Exploration Drilling Confirms Mineralization 3,000 ft (915m) NE of Cactus East, at the NE Extension

- NE Extension exploration drill hole confirms 990 ft (302 m) of continuous mineralization and a tenor of primary copper grades that, with appropriate enrichment processes, could support copper grades suitable for underground mineral resources (consistent with Parks/Salyer and Cactus East)
- Ionic leach sampling identifies large target in the Gap Zone
- Cactus East infill to measured drilling shows high grade copper similar to Parks/Salyer

Casa Grande, AZ and Toronto, ON, March 20, 2023 – Arizona Sonoran Copper Company Inc. (**TSX:ASCU | OTCQX:ASCUF)** ("ASCU" or the "Company") exploration drilling at the NE Extension target confirms 990.7 ft (302 m) of 0.42% CuT of continuous copper mineralization, collared 3,000 ft (914 m) northeast of the Cactus East (CE) deposit. Both the NE Extension, as well as the Gap Zone, were highlighted as priority targets following a property wide ionic leach program and magnetic imaging program targeting exploration potential along the 4 km Cactus Mine Trend. During 2023, a total of \$0.9 million is budgeted for additional exploration in the Gap Zone and the NE Extension. Additionally, two infill to measured drill holes from Cactus East were returned from the laboratory, confirming continuous grade and thickness within the current mine plan (see FIGURES 1-11).

Highlights:

- ECE-076 (CE): 491.0 ft (149.7 m) @ 1.51% CuT, 1.34% Cu TSol, 0.023% Mo
 - Incl 211.7 ft (64.5 m) @ 1.75% CuT, 1.65% Cu TSol, 0.012% Mo (oxide)
 - $\circ~$ And 279.3 ft (85.1 m) @ 1.38% CuT, 1.11% Cu TSol, 0.031% Mo (enriched)
 - Incl 79.3 ft (24.2 m) @ 2.87% CuT, 2.61% Cu TSol, 0.028% Mo
- ECE-078 (CE): 377 ft (114.9 m) @ 1.25% CuT, 1.15% Cu TSol, 0.035% Mo (enriched)
 - Incl. 20 ft (6.1 m) @ 2.10% CuT, 1.98% Cu TSol, 0.035% Mo
- ECN-128: continuous mineralization of 990.7 ft (302.0 m) @ 0.42% CuT
 - o 118.1 ft (36.0 m) @ 0.97% CuT, 0.94% Cu TSol, 0.004% Mo (oxide)
 - o 653.4 ft (199.2 m) @ 0.40% CuT, 0.008% Mo (primary)

NOTE: True widths are not known



George Ogilvie, Arizona Sonoran President and CEO commented, "Exploration by ASARCO in the 60's and 70's was super-focused on discovering and developing open pit copper resources. As a result, ASARCO walked away from both the Cactus NE Extension and the Parks/Salyer project, both underground targets. Our team has had great success with Parks/Salyer last year, adding 2.9B lbs of Contained Copper in an inferred Maiden Resource and Cactus East drilling and we see tremendous blue-sky potential at both the Gap Zone and the NE Extension. We know the mineralization in these two zones has not been drilled to depth and both remain excellent exploration targets. To follow up, the team has allocated expenditures to ensure proper evaluation of the 4 km porphyry copper mine trend, while concurrently executing on the work plan to deliver our Cactus and Parks/Salyer PFS due later this year."

Exploration at NE Extension and Gap Zone

The combined results of the recent ionic leach survey, and the 2020 SkyTEM survey, identify the Gap Zone directly west of the Cactus West open pit and east of the Tailings Facility as a high potential target for future drilling. In addition, the success of ECN-128, in the far NE of the property, indicates that additional drilling should be conducted between the known Cactus East deposit, and hole ECN-128. The zone to be explored contains a strike length of 2,952 ft (900 m).

lonic leach samples were collected on a 328 ft (100 m) grid (with local infill to 164 ft (50m) along the entire length of the Cactus Project trend from Parks/Salyer, in the SW corner, through to the NE Extension zone, in the NE corner of the Project. As expected, copper values were elevated over the Parks/Salyer mineral resource area, and also at the GAP area between the Cactus West open pit and Parks/Salyer (FIGURE 3). Interpretation of the ionic leach results at Parks/Salyer (relative to underlying mineralization in drilling) suggests that stronger levels of metals are associated with thicker intervals of leached rock overlying the resource as opposed to areas where Primary or Enriched mineralization is exposed at the top of bedrock. The NE Extension area and ECN-128 demonstrate a similar relationship.

The NE Extension exploration hole was collared approximately 40.0 ft (12.2 m) from ASARCO's hole S-68 and intersected mostly continuous mineralization from 996.7 ft to 1987.4 ft (in vertical depth). The intersect includes 118.1 ft (36.0 m) of 0.94% Cu TSol oxide mineralization from 996.7 ft (303.8 m). ECN-128 was designed to verify the oxide/enriched mineralization relationships previously drilled by S-68 (included in the drill assay highlights table below) and to explore the



previously underexplored primary mineralization by drilling through the full bedrock profile to the Basement Fault.

Historic drilling by Asarco in the Gap Zone and NE Extension focused on near, or relatively near surface, enriched copper mineralization exploring for open pit resources. Rarely was deeper mineralization tested to its full extents or to the depth of the underlying Basement Fault. The success of ECN-128 in extending demonstrated oxide, enriched and primary copper mineralization from those known drill intercepts provides encouragement to take the same approach in the Gap Zone, where historical Asarco holes did not test copper mineralization to depth.

In 2020 the Company flew a 650-line kilometer SkyTEM EM/Magnetics survey over the Cactus Project area. FIGURE 3 is a color contour map of magnetic intensity within the current project area. Areas of low magnetic susceptibility (intensity) at Parks/Salyer, Gap and Cactus West are interpreted as being expressions of magnetite destruction in the rocks hosting copper mineralization. The Gap Zone is an extension of the magnetitic low associated with Parks/Salyer copper mineralization. This large area of identified and suspected alteration is bounded on the west and east by late faulting, similar to bounding faults observed at the Cactus West horst. Magnetics support the Company's interest in continued exploration of the Gap Zone and Northeast Extension target areas.

lonic sampling was successfully used at Parks/Salyer to guide ASCU drilling on blind targets, or deeply buried mineralization not detectable by traditional soil sampling. Ionic surveys are typically not impacted by physically transported contamination from past operations such as dust or runoff. Areas that were disturbed by construction works during the mining of the Sacaton (Cactus West) pit were not sampled for this survey. The technique has been successfully implemented by other copper explorers in Arizona at other mine locations.

Cactus East Infill Drilling

Chalcocite and covellite are the dominant copper species in the enriched mineralization, replacing primary pyrite and chalcopyrite in their original depositional habits, such as veins, breccia fillings, voids and disseminations. These replacements styles, shown in **FIGURES 1-11**, are representative of our enriched mineral zone. Chalcocite also tends to build on itself, resulting in zones of higher-grade mineralization where the enrichment fluids had time and opportunity to continue the secondary enrichment process.



TABLE 1: Cactus East and NE Extension Drilling Highlights

Hole Id	Zone	Feet		Metres			CuT	TSol	Мо	
		From	То	Length	From	То	Length	%	%	%
ECE-076	oxide	1204.0	1415.7	211.7	367.0	431.5	64.5	1.75	1.65	0.012
	including	1271.7	1412.0	140.3	387.6	430.4	42.8	2.37	2.25	0.013
	enriched	1415.7	1695.0	279.3	431.5	516.6	85.1	1.38	1.11	0.031
	including	1415.7	1495.0	79.3	431.5	455.7	24.2	2.87	2.61	0.028
	primary	1695.0	1899.6	204.6	516.6	579.0	62.4	0.43	0.04	0.030
	including	1845.0	1896.2	51.2	562.4	578.0	15.6	0.69	0.05	0.026
ECE-078	oxide	1293.0	1314.0	21.0	394.1	400.5	6.4	0.59	0.53	0.007
	enriched	1324.0	1701.0	377.0	403.6	518.5	114.9	1.25	1.15	0.035
	including	1354.0	1424.0	70.0	412.7	434.0	21.3	1.80	1.75	0.036
	and	1494.0	1534.0	40.0	455.4	467.6	12.2	1.72	1.63	0.061
	and	1594.0	1614.0	20.0	485.9	491.9	6.1	2.10	1.98	0.032
	primary	1701.0	2043.0	342.0	518.5	622.7	104.2	0.31	0.04	0.017
	including	1876.0	1975.1	99.1	571.8	602.0	30.2	0.45	0.03	0.019
ECN-128	oxide	996.7	1114.8	118.1	303.8	339.8	36.0	0.97	0.94	0.004
	enriched	1182.6	1334.0	151.4	360.5	406.6	46.1	0.46	0.38	0.006
	including	1182.6	1206.4	23.8	360.5	367.7	7.3	1.35	1.34	0.002
	primary	1334.0	1987.4	653.4	406.6	605.8	199.2	0.40	0.03	0.008
	including	1419.0	1469.0	50.0	432.5	447.8	15.2	0.55	0.04	0.021
	and	1510.0	1629.0	119.0	460.2	496.5	36.3	0.58	0.04	0.009
	and	1733.3	1752.3	19.0	528.3	534.1	5.8	1.60	0.10	0.007
S-68 (Historic ASARCO Drill	oxide	1,016.5	1,044.5	28.0	309.8	318.4	28.0	1.23		
	oxide	1,078.5	1,208.8	130.3	328.7	368.4	120.3	1.52		
	including	1,171.2	1,208.8	37.6	357.0	368.4	37.6	3.45		
	enriched	1,254.6	1,444.0	189.4	382.4	440.1	189.4	0.54	n/a	n/a
	including	1,254.6	1,290.1	35.5	382.4	393.2	35.5	1.05		
nole)	and	1,322.4	1,354.1	31.7	403.1	412.7	31.7	0.97		
	primary	1,444.0	1,526.0	82.0	440.1	465.1	82.0	0.45		

1. Intervals are presented in core length and are drilled with very near vertical dip angles.

2. Drill assays assume a mineralized cut-off grade of 0.5% CuT reflecting the potential for heap leaching of underground material in the case of Oxide and Enriched or in the case of Primary material, 0.1% CuT, to provide typical average grades. Holes were terminated below the basement fault.

3. The enriched intercept in the NE Extension exploration hole assumed a mineralized cut-off grade of 0.1% CuT to provide the average grade of the tenor of mineralization.

4. Assay results are not capped. Intercepts are aggregated within geological confines of major mineral zones.

5. True widths are not known.



 ASARCO did not assay for Soluble copper or for molybdenum content. Please see PR dated <u>November 20,</u> 2020 for disclosures on ASCU initiated relogging and re-assaying program.

Table 2: Drilling details

Hole	Easting (m)	Northing (m)	Elevation (ft)	TD (ft)	Azimuth	Dip
ECE-076	425200.0	3647680.0	1509.8	1930.0	358.0	-81.0
ECE-078	424096.5	3646888.0	1464.9	2093.0	359.0	-83.0
ECN-128	425200.0	3647680.0	1500.0	2013.6	0.0	-90.0

Quality Assurance / Quality Control

Drilling completed on the project between 2020 and 2022 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 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.

Links from the Press Release

Figures 1-11: <u>https://arizonasonoran.com/projects/exploration/maps-and-figures/</u> November 30, 2020: <u>https://arizonasonoran.com/news-releases/elim-mining-verifies-and-releases-historic-assays/</u>

Neither the TSX nor the regulating authority has approved or disproved 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 and to develop the Cactus and Parks/Salyer Projects 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 is the Company's 100%-owned Parks/Salyer deposit 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.

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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.