

# Arizona Sonoran Drills 1,209.7 ft (368.7 m) at 0.70 % CuT of continuous mineralization, including 477 ft (145.4 m) of 1.25% CuT in Enriched

Casa Grande, AZ and Toronto, ON, April 20, 2023 – Arizona Sonoran Copper Company Inc. (TSX:ASCU | OTCQX:ASCUF) ("ASCU" or the "Company"), an emerging copper developer and near-term producer, today announces 6 infill holes from the Parks/Salyer Pre-Feasibility Study ("PFS") level drilling program. The infill to Indicated drilling program was completed on time and within the budget, with the remaining assays from 10 drill holes expected by the middle of May. This program will be used to generate an updated resource model and mine plan to support the declaration of first reserves in the pending PFS by Q1 2024. As announced March 6, 2023, the PFS is exploring an integrated operation for Parks/Salyer and Cactus targeting 50 ktpa production (see FIGURES 1-11).

PFS-level drilling at Parks/Salyer included geotechnical (HQ), hydrological (HQ) and metallurgical (PQ) holes, in addition to the infill drilling (HQ). Having completed the programs, the three drill rigs are now focused on the following drilling programs:

- 1) Feasibility Study (expected in late 2024)-level drilling to include:
  - a. Measured-level infill drilling, at 38 m (125 ft) drilling centres at Parks/Salyer and Cactus West for 90,000 ft (27,430 m)
  - b. Additional geotechnical, metallurgical and hydrological holes as identified by Ausenco and consultants at Cactus East and Cactus West
- Exploration drilling to begin after completion of the Cactus West geotechnical drilling. Currently budgeted for 3,000 m (10,000 ft)

## **Drilling Highlights:**

- ECP-131: 1,209.7 ft (368.7 m) @ 0.70% CuT of continuous mineralization
  - Incl. 477 ft (145.4 m) @ 1.25% CuT, 1.15% Cu TSol, 0.018% Mo (enriched)
  - o And 732.7 ft (223.3 m) @ 0.34% CuT, 0.009% Mo (primary)
- ECP-127: 1,074.2 ft (327.4 m) @ 0.56% CuT of continuous mineralization
  - Including 555.8 ft (169.5m) @ 0.80% CuT, 0.76% Cu TSol, 0.008% Mo (enriched)
- ECP-126: 1,454 ft (443.2 m) @ 0.68% CuT of continuous mineralization
  - Incl. 239.4 ft (73.0 m) @ 1.38% CuT, 1.03% Cu TSol, 0.031% Mo (enriched)
    - Incl. 80.0 ft (24.4 m) @ 2.60% CuT, 2.39% Cu TSol, 0.017% Mo





- o 719.0 ft (219.2 m) @ 0.52% CuT, 0.017% Mo (primary)
- ECP-133: 1,243 ft (378.9 m) @ 0.43% CuT of continuous mineralization
  - Incl. 710.5 ft (216.6 m) @ 0.55% CuT, 0.47% Cu TSol, 0.006% Mo (enriched)
    - Incl. 159.5 ft (48.6 m) @ 1.19% CuT, 1.01% Cu TSol, 0.007% Mo

NOTE: True widths are not known

Doug Bowden, Arizona Sonoran VP Exploration commented, "As we complete drill programs to finalize an indicated resource estimate (PFS), support engineering and mine planning, we note the drilling is performing as planned, and in instances, with better than expected grade thicknesses. Parks/Salyer intercepts indicate a continuous deposit with typically 100-300 meter enrichment thicknesses that could potentially support a bulk mining scenario. Infill drilling has continued to expand the high-grade core at Parks/Salyer within the inferred resource area defined by the original 500 ft (152 m) drill pattern."

### **Drilling Recap**

A total of three metallurgical holes (PQ – 3.345 inch diameter) were completed to provide material for the column leach testing taking place onsite at the TruStone Facility. The columns are now 90 and 120 days complete, and preliminary results are expected shortly. Two metallurgical holes, along with one HQ (2.5 inch diameter) drill hole, were converted to hydrology monitoring holes. A total of five oriented core and geotechnical holes are being surveyed for fracture and directional analysis ahead of mine planning; via Acoustic Tele-viewer survey.

The infill to indicated drilling program was planned to infill to 250 ft (76 m) drill centers, extending through the leachable oxides and enriched mineralization, or secondary sulphides, for inclusion as our base case mine plan. To ensure a complete view of the deposit, for ASCU records and as it relates to the Nuton sulphide leaching technologies, ASCU also drilled through the primary sulphides to the basement fault at Parks/Salyer defining a deposit that extends 2,900 ft (884 m) by 2,200 ft (670 m), at the south-western end of the 4 km mine trend.

Infill drilling on the west side of the Parks/Salyer deposit (FIGURE 1) continues to define the westward continuation of thick, higher-grade, enriched and primary mineralization (ECP-126 and ECP-131). Drill holes ECP-134, ECP-133 and ECP-127 demonstrate continuation of the enrichment blanket to the west, albeit with thinner, stacked layers of copper mineralization that have suffered leaching near the faults that define the edge of the orebody. Drill holes ECP-127, ECP-130 and ECP-133 show a similar definition of the enrichment blanket. A NS cross section through the area



demonstrates the continuity of the enrichment zone on the western edge of Parks/Salyer and the effect of late oxidation on the enrichment blanket in the area of ECP-130.

The dacite dyke shown in the cross section is similar in width and continuity to dacite dykes seen in Cactus West on the southern edge of that orebody. These dykes are very late stage relative to the mineralizing event and acted as dams to the enrichment process, with very good enrichment and oxide grades ponding above them, as shown in ECP-131.

There are many occurrences of native copper around the deposit. While native copper does not represent a significant contribution to the oxide resource, it does indicate directional flow of the secondary copper fluids, sometimes pointing toward ponded enrichment areas as shown in ECP-131. The team is currently mapping instances of both native copper and cuprite as they typically exist within close proximity of each other.

ASCU drilling has defined the edge of a potassic zone associated with lower grades in the primary mineralization in the northwest quadrant of the orebody. Higher primary grades are commonly associated with zones of phyllic alteration (commonly as an overprint), which at Parks/Salyer follows the general mine trend NE orientation. This phyllic zone represents the larger area of thicker, higher grades shown in **FIGURE 2**.

**TABLE 1: Parks/Salyer Drilling Highlights** 

Hole Id	Zone	Feet		Metres			CuT	TSol	Мо	
		From	То	Length	From	То	Length	%	%	%
ECP-126	oxide	683.0	729.4	46.4	208.2	222.3	14.1	0.72	0.62	0.002
	enriched	782.2	1076.5	294.3	238.4	328.1	89.7	0.85	0.82	0.006
	including	792.0	852.2	60.2	241.4	259.8	18.3	1.27	1.23	0.004
	and	1015.0	1076.5	61.5	309.4	328.1	18.7	1.52	1.46	800.0
	enriched	1178.6	1418.0	239.4	359.2	432.2	73.0	1.38	1.03	0.031
	including	1188.0	1268.0	80.0	362.1	386.5	24.4	2.60	2.39	0.017
	primary	1418.0	2137.0	719.0	432.2	651.4	219.2	0.52	0.04	0.017
	including	1500.0	1550.0	50.0	457.2	472.4	15.2	0.74	0.06	0.048
	and	2020.7	2069.0	48.3	615.9	630.6	14.7	0.73	0.05	0.011
ECP-127	oxide	1044.0	1064.0	20.0	318.2	324.3	6.1	3.11	3.08	0.009
	oxide	1103.3	1133.2	29.9	336.3	345.4	9.1	0.82	0.81	0.012
	enriched	1246.2	1802.0	555.8	379.8	549.2	169.4	0.80	0.76	0.008
	including	1246.2	1266.0	19.8	379.8	385.9	6.0	2.49	2.48	0.011





Hole Id	Zone	Feet			Metres			CuT	TSol	Мо
		From	То	Length	From	То	Length	%	%	%
	and	1351.3	1404.0	52.7	411.9	427.9	16.1	1.28	1.25	0.005
	and	1434.0	1484.0	50.0	437.1	452.3	15.2	1.22	1.19	0.018
	and	1554.0	1584.0	30.0	473.7	482.8	9.1	1.74	1.73	0.012
	primary	1802.0	2320.4	518.4	549.2	707.3	158.0	0.29	0.03	0.010
	including	1865.0	2040.0	175.0	568.5	621.8	53.3	0.59	0.06	0.013
ECP-130	oxide	976.3	1089.0	112.7	297.6	331.9	34.4	0.63	0.62	0.020
	oxide	1143.6	1307.0	163.4	348.6	398.4	49.8	0.68	0.67	0.022
	including	1143.6	1173.3	29.7	348.6	357.6	9.1	1.18	1.17	0.042
	and	1275.6	1307.0	31.4	388.8	398.4	9.6	1.11	1.11	0.030
	enriched	1332.5	1495.0	162.5	406.1	455.7	49.5	1.06	0.98	0.034
	including	1337.0	1353.0	16.0	407.5	412.4	4.9	3.76	3.72	0.031
	enriched	1640.0	1700.0	60.0	499.9	518.2	18.3	0.88	0.86	0.025
	primary	1778.0	2327.0	549.0	541.9	709.3	167.3	0.17	0.02	0.006
	enriched	1011.0	1488.0	477.0	308.2	453.5	145.4	1.25	1.15	0.018
ECP-131	including	1011.0	1078.0	67.0	308.2	328.6	20.4	2.24	2.19	0.009
	and	1128.0	1158.0	30.0	343.8	353.0	9.1	1.95	1.88	0.018
	and	1394.6	1428.0	33.4	425.1	435.3	10.2	2.20	2.09	0.027
	primary	1488.0	2220.7	732.7	453.5	676.9	223.3	0.34	0.04	0.009
	including	1508.0	1588.0	80.0	459.6	484.0	24.4	0.49	0.07	0.023
	and	1879.1	2050.4	171.3	572.7	625.0	52.2	0.51	0.03	0.011
	and	2170.0	2220.7	50.7	661.4	676.9	15.5	0.51	0.03	0.004
ECP-133	oxide	1057.8	1127.6	69.8	322.4	343.7	21.3	0.92	0.91	0.004
	enriched	1194.5	1905.0	710.5	364.1	580.6	216.6	0.55	0.47	0.006
	including	1194.5	1354.0	159.5	364.1	412.7	48.6	1.19	1.01	0.007
	and	1577.0	1617.0	40.0	480.7	492.9	12.2	0.62	0.44	0.010
	and	1793.0	1855.0	62.0	546.5	565.4	18.9	0.66	0.63	0.007
	primary	1905.0	2227.0	322.0	580.6	678.8	98.1	0.15	0.02	0.011
ECP-134	enriched	902.4	952.0	49.6	275.1	290.2	15.1	1.14	1.09	0.018
	enriched	1066.0	1136.0	70.0	324.9	346.3	21.3	0.56	0.52	0.022
	enriched	1428.0	1568.0	140.0	435.3	477.9	42.7	1.48	1.45	0.012
	including	1428.0	1498.0	70.0	435.3	456.6	21.3	1.83	1.79	0.010

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

<sup>2.</sup> 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.

<sup>3.</sup> Assay results are not capped. Intercepts are aggregated within geological confines of major mineral zones.

True widths are not known.

**Table 2: Drilling details** 

Hole	Easting (m)	Northing (m)	Elevation (ft)	TD (ft)	Azimuth	Dip
ECP-126	421605.7	3644813.5	1365.0	2151.6	0.0	-90.0
ECP-127	421531.7	3645200.7	1377.7	2427.0	0.0	-90.0
ECP-130	421601.0	3645160.2	1377.9	2367.7	0.0	-90.0
ECP-131	421609.8	3644893.6	1370.8	2268.2	0.0	-90.0
ECP-133	421465.0	3645139.8	1375.8	2417.0	0.0	-90.0
ECP-134	421529.5	3644850.9	1368.2	2248.0	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: https://arizonasonoran.com/projects/exploration/maps-and-figures/ March 6, 2023: <a href="https://arizonasonoran.com/news-releases/arizona-sonoran-engages-ausenco-to-">https://arizonasonoran.com/news-releases/arizona-sonoran-engages-ausenco-to-</a> lead-the-cactus-and-parks-salyer-pre-feasibility-study-and-appoints-victor-moraila-as-chief/

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.