

Arizona Sonoran Continues to Define Near Surface Mineralization at MainSpring

Casa Grande, AZ and Toronto, ON, May 21, 2024 – Arizona Sonoran Copper Company Inc. (TSX:ASCU | OTCQX:ASCUF) ("ASCU" or the "Company") today reports the first 16 drill holes (19,219 ft | 5,858 m) from an infill drilling program at MainSpring, within the 100%-owned Cactus Project in Arizona (see FIGURES 1-14). Drilling is infilling the shallow mineralization to the southern end of the area, in support of a potential open pit design. An open pit design using the inferred category resources is being evaluated for inclusion within the pending Preliminary Economic Assessment ("PEA"), expected in Q3 2024.

The MainSpring infill drill program is reducing drill spacings from 500 ft (152 m) to 250 ft (76 m) to upgrade the pending MainSpring mineral resource classification from inferred to an indicated category, funded by the Company. Additionally, the Geology team is concurrently conducting an inferred drill program at Cactus West. The Cactus West program is focused on expanding the known primary sulphide mineral resource and funded by Nuton Technologies, as part of the Option to Joint Venture agreement announced **December 14, 2023**.

Highlights:

- Near surface mineralization within 100 m of surface in southern MainSpring; infill drilling at 250 ft (76 m) drill spacings
- ECM-230*: 827 ft (252 m) @ 0.30% CuT of continuous mineralization
 - o 461 ft (141 m) @ 0.45% CuT, 0.36% Cu TSol, 0.001% Mo (enriched)
 - o Incl. 60 ft (18 m) @ 1.68% CuT, 1.60% Cu TSol, 0.001% Mo
- ECM-236: 383 ft (117 m) @ 0.39 % CuT of continuous mineralization
 - o 41 ft (13 m) @ 0.23% CuT, 0.20% Cu TSol, 0.002% Mo (ox) 65 m from surface
 - o 275 ft (84 m) @ 0.46% CuT, 0.41% Cu TSol, 0.002% Mo (enriched)
- ECM- 231: 498 ft (152 m) @ 0.28% CuT, 0.24% Cu TSol (enriched)
 - o Incl. 56 ft (17 m) @ 0.43% CuT, 0.40% Cu TSol, 0.001% Mo
 - o And 49 ft (15 m) @ 0.71% CuT, 0.66% Cu TSol, 0.001% Mo

NOTE: True widths are not known; * Interval includes 0.1 ft (0.03 m) of missing core

George Ogilvie, Arizona Sonoran President and CEO commented, "ASCU continues to demonstrate itself as a lower-risk copper developer, with a short timeframe to construction





decision and the potential to benefit from this copper cycle. Our Pre-Feasibility Study issued in February of this year set a solid foundation, from which our team is building opportunities and optimizations, while assuming current and realistic economic assumptions. Specifically, MainSpring's shallow low-grade mineralization is supportive of a potential open-pit immediately south of Parks/Salyer. Our pending PEA will explore this potential, as well as a first look at the potential impacts of heap leaching the Cactus Mine primary sulphides using the Nuton leaching technologies.

We are a unique emerging brownfields developer working towards a construction decision in the near term. While the team integrates the several new opportunities presented to us through the continued expansion of our porphyry system, we remain focused on the goal of advancing Cactus to a construction decision and presenting a solid mine plan with low execution risk."

Integrated Preliminary Economic Study

The Integrated Preliminary Economic Study is on track and on budget for completion in 3Q 2024. The study will explore two mining scenarios which will assume the same inputs utilized within the February 2024 Pre-Feasibility Study ("PFS") (see PR dated February 21, 2024 or the Company's SEDAR+ profile). The purpose is to demonstrate the economic potential of MainSpring, and a first look at the potential economic uplift from Nuton Technologies. The two scenarios will be outlined as:

- Scenario 1: Oxides and Enriched Material from Cactus West, Cactus East, Parks/Salyer, MainSpring and the Stockpile,
- Scenario 2: Scenario 1, and the inclusion of primary sulphides from all sources of material, using the Nuton leaching technologies.

Drilling and Geology Recap

The indicated drilling at MainSpring began immediately following the completion of the inferred drilling program and is in-filling the 500 ft (152 m) spaced holes to 250 ft (76 m). Drilling began where mineralization is closest to surface (as shallow as 140 ft | 43 m) to define an indicated shallow starter pit. The inferred drilling shows that copper grades increase, and mineralization thickens to the north and northwest into the gap between MainSpring and Parks/Salyer, additionally depth to bedrock also increases to the north and northwest. Infill drilling is expected to continue to the north and northwest to push the potential starter pit in those directions. The lower copper grades at MainSpring are expected and coincide with remnant enriched, oxide and primary



mineralization within predominantly leach cap. Copper grades, mineralization thickness and mineralization continuity are all expected to increase north and west from MainSpring into the gap zone.

TABLE 1: Significant Drilling Intercepts

Hole	Zone	Feet			Meters			CuT	Cu	Мо
id		from	to	length	from	to	length	(%)	Tsol (%)	(%)
ECM-	oxide	137.0	162.1	25.1	41.8	49.4	7.7	1.12	0.94	0.001
223	enriched	685.5	725.0	39.5	208.9	221.0	12.0	0.83	0.81	0.001
	enriched	797.0	940.6	143.6	242.9	286.7	43.8	0.19	0.14	0.001
	primary	940.6	1,148.0	207.4	286.7	349.9	63.2	0.14	0.02	0.001
ECM-	oxide	177.0	232.5	55.5	53.9	70.9	16.9	0.20	0.20	0.005
224	enriched	297.2	414.4	117.2	90.6	126.3	35.7	0.42	0.41	0.002
	enriched	520.0	611.3	91.3	158.5	186.3	27.8	0.38	0.36	0.001
	including	520.0	556.0	36.0	158.5	169.5	11.0	0.69	0.69	0.001
	primary	611.3	997.0	385.7	186.3	303.9	117.6	0.18	0.03	0.001
ECM-	enriched	406.4	655.0	248.6	123.9	199.6	75.8	0.36	0.35	0.003
225	including	406.4	447.0	40.6	123.9	136.2	12.4	0.94	0.92	0.002
	enriched	1014.0	1,054.0	40.0	309.1	321.3	12.2	0.12	0.11	0.007
	enriched	1157.8	1,299.0	141.2	352.9	395.9	43.0	0.11	0.10	0.004
	primary	1299.0	1,343.0	44.0	395.9	409.3	13.4	0.13	0.06	0.005
	primary	1475.8	1,541.8	66.0	449.8	469.9	20.1	0.13	0.02	0.004
	primary	1612.0	1,662.0	50.0	491.3	506.6	15.2	0.12	0.02	0.001
ECM- 226	oxide	385	512	127	117.3	156.1	38.7	0.23	0.185	0.001
	including	385.0	421.0	36.0	117.3	128.3	11.0	0.41	0.39	0.001
	enriched	569.2	677.0	107.8	173.5	206.3	32.9	0.33	0.29	0.001
	primary	702.0	854.8	152.8	214.0	260.5	46.6	0.13	0.03	0.001
ECM-	enriched	467.0	575.0	108.0	142.3	175.3	32.9	0.37	0.36	0.002
227	including	467.0	490.2	23.2	142.3	149.4	7.1	0.76	0.74	0.002
	enriched	615.0	645.0	30.0	187.5	196.6	9.1	0.11	0.11	0.002
	primary	745.0	1,143.0	398.0	227.1	348.4	121.3	0.14	0.02	0.001
ECM-	enriched	538.0	569.0	31.0	164.0	173.4	9.4	0.31	0.29	0.001
228	primary	702.0	792.0	90.0	214.0	241.4	27.4	0.66	0.04	0.001
	including	720.0	740.0	20.0	219.5	225.6	6.1	2.16	0.09	0.001
ECM-	enriched	428.6	531.5	102.9	130.6	162.0	31.4	0.22	0.21	0.002
229	primary	574.0	1,134.2	560.2*	175.0	345.7	170.7*	0.12	0.02	0.001
	including	633.0	673.0	40.0	192.9	205.1	12.2	0.24	0.02	0.001
	enriched	453.0	543.1	90.1	138.1	165.5	27.5	0.17	0.16	0.001





Hole id	Zone	Feet			Meters			CuT	Cu	Мо
		from	to	length	from	to	length	(%)	Tsol (%)	(%)
ECM-	including	505.0	543.1	38.1	153.9	165.5	11.6	0.29	0.28	0.001
230	enriched	621.8	1,082.8	461.0	189.5	330.0	140.5	0.45	0.36	0.001
	including	1011.0	1,071.0	60.0	308.2	326.4	18.3	1.68	1.60	0.001
	primary	1082.8	1,280.0	197.2*	330.0	390.1	60.1*	0.13	0.03	0.001
ECM-	enriched	588.8	1,087.0	498.2	179.5	331.3	151.9	0.28	0.24	0.002
231	including	588.8	644.3	55.5	179.5	196.4	16.9	0.43	0.40	0.001
	and	673.5	722.8	49.3	205.3	220.3	15.0	0.71	0.66	0.001
ECM-	oxide	323.0	359.0	36.0	98.5	109.4	11.0	0.30	0.29	0.003
232	enriched	440.0	539.0	99.0	134.1	164.3	30.2	0.21	0.19	0.001
	primary	539.0	616.0	77.0	164.3	187.8	23.5	0.17	0.02	0.001
	primary	775.5	820.0	44.5	236.4	249.9	13.6	0.24	0.03	0.001
ECM-	oxide	188.0	228.0	40.0	57.3	69.5	12.2	0.15	0.15	0.001
233	oxide	349.0	381.0	32.0	106.4	116.1	9.8	0.18	0.07	0.001
	enriched	624.2	822.4	198.2	190.3	250.7	60.4	0.20	0.13	0.001
	primary	822.4	1,090.2	267.8	250.7	332.3	81.6	0.15	0.03	0.001
ECM-	oxide	362.8	415.4	52.6	110.6	126.6	16.0	0.15	0.11	0.001
234	enriched	598.0	617.6	19.6	182.3	188.2	6.0	0.53	0.48	0.001
	primary	617.6	967.0	349.4	188.2	294.7	106.5	0.18	0.02	0.001
	including	850.0	892.0	42.0	259.1	271.9	12.8	0.28	0.05	0.001
ECM-	enriched	363.9	426.1	62.2	110.9	129.9	19.0	0.16	0.16	0.001
235	enriched	456.7	517.9	61.2	139.2	157.9	18.7	0.23	0.23	0.002
	enriched	567.1	601.5	34.4	172.9	183.3	10.5	0.12	0.12	0.002
	primary	799.2	1,204.0	404.8	243.6	367.0	123.4	0.13	0.02	0.001
ECM-	ox/enr	213.0	254.3	41.3	64.9	77.5	12.6	0.23	0.20	0.003
236	primary	375.0	455.0	80.0	114.3	138.7	24.4	0.15	0.05	0.001
	enriched	515.0	543.3	28.3	157.0	165.6	8.6	0.57	0.54	0.001
	enriched	623.0	898.0	275.0	189.9	273.7	83.8	0.46	0.41	0.002
	including	685.1	715.0	29.9	208.8	217.9	9.1	1.46	1.43	0.002
	and	824.0	888.3	64.3	251.2	270.8	19.6	0.62	0.57	0.002
ECM-	oxide	264.0	494.0	230.0	80.5	150.6	70.1	0.21	0.12	0.001
237	including	416.9	483.8	66.9	127.1	147.5	20.4	0.37	0.24	0.001
	oxide	580.0	589.3	9.3	176.8	179.6	2.8	1.83	1.77	0.001
	enriched	624.1	691.8	67.7	190.2	210.9	20.6	0.51	0.49	0.001
	including	624.1	654.0	29.9	190.2	199.3	9.1	0.99	0.96	0.001
	primary	726.0	938.0	212.0	221.3	285.9	64.6	0.15	0.03	0.001
ECM-	enriched	595.0	715.8	120.8	181.4	218.2	36.8	0.46	0.45	0.002
238	including	607.3	647.0	39.7	185.1	197.2	12.1	1.08	1.07	0.001



Hole	Zone	Feet			Meters			CuT	Cu	Мо
id		from	to	length	from	to	length	(%)	Tsol (%)	(%)
	enriched	756.0	802.0	46.0	230.4	244.4	14.0	0.18	0.15	0.001
	primary	1009.0	1,056.0	47.0	307.5	321.9	14.3	0.12	0.01	0.003

- 1. Intervals are presented in core length and are drilled with vertical, or steep dip angles.
- 2. Drill assays assume a mineralized cut-off grade of 0.1% CuT reflecting the potential for heap leaching of open pit material in the case of Oxide and Enriched and 0.1% CuT, in the case of Primary material, to provide typical average grades. Holes were terminated below the basement fault.
- 3. Assay results are not capped. Intercepts are aggregated within geological confines of major mineral zones.
- 4. True widths are not known.
- 5. * Indicates interval includes missing core. Missing core intervals ranged in length from 0.1 ft (0.03 m) to 1.0 ft (0.30 m).

Table 2: Drilling details

Table 2. Drining details										
Hole	Easting (m)	Northing (m)	Elevation (ft)	TD (ft)	Azimuth	Dip				
ECM-223	421769.0	3644272.5	1360.0	1357.0	0.0	-90.0				
ECM-224	421921.6	3644271.1	1360.0	1141.0	0.0	-90.0				
ECM-225	421618.4	3644426.2	1360.0	1702.7	0.0	-90.0				
ECM-226	422073.6	3644270.0	1360.0	1027.0	0.0	-90.0				
ECM-227	421922.4	3644423.7	1363.0	1233.5	0.0	-90.0				
ECM-228	422226.4	3644268.1	1363.0	961.0	0.0	-90.0				
ECM-229	422074.3	3644422.6	1360.0	1165.1	0.0	-90.0				
ECM-230	421615.6	3644120.1	1360.0	1379.0	0.0	-90.0				
ECM-231	421614.0	3643968.8	1360.0	1221.3	0.0	-90.0				
ECM-232	422150.1	3644268.9	1360.0	989.5	0.0	-90.0				
ECM-233	421767.8	3644119.9	1360.0	1183.2	0.0	-90.0				
ECM-234	422075.1	3644346.5	1360.0	1164.4	0.0	-90.0				
ECM-235	421846.2	3644424.5	1360.0	1387.3	0.0	-90.0				
ECM-236	421766.5	3643967.4	1360.0	1092.9	0.0	-90.0				
ECM-237	421919.4	3644119.8	1360.0	1008.0	0.0	-90.0				
ECM-238	421999.3	3644423.1	1360.0	1205.6	0.0	-90.0				
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Note: All final collar coordinates are surveyed using high precision GPS by Harvey Land Surveying Inc. The collar coordinates reported are estimated.

Quality Assurance / Quality Control

Drilling completed on the project between 2020 and 2024 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 sample prep, analytical methodologies, and 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 1-14: https://arizonasonoran.com/projects/exploration/maps-and-figures/ February 21, 2024: https://arizonasonoran.com/news-releases/arizona-sonoran-announces-apositive-pre-feasibility-study-for-the-cactus-mine-project-with-a-us-509m-post-tax-npv-and-55kstpa/

December 14, 2023: https://arizonasonoran.com/news-releases/arizona-sonoran-and-nuton-llcannounce-option-to-joint-venture-on-cactus-project-in-arizona/

Neither the TSX nor the regulating authority has approved or disproved the information contained in this press release.

About Arizona Sonoran Copper Company (<u>www.arizonasonoran.com</u> | <u>www.cactusmine.com</u>) 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. 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





This news release contains "forward-looking statements" and/or "forward-looking information" (collectively, "forward-looking statements") within the meaning of applicable securities legislation. All statements, other than statements of historical fact, are forward-looking statements. Generally, forward-looking statements can be identified by the use of forward-looking terminology such as "plans", "expect", "is expected", "in order to", "is focused on" (a future event), "estimates", "intends", "anticipates", "believes" or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", or the negative connotation thereof. In particular, statements regarding ASCU's future operations, future exploration and development activities or other development plans constitute forward-looking statements. By their nature, statements referring to mineral reserves or mineral resources constitute forward-looking statements. Forward-looking statements in this news release include, but are not limited to statements with respect to the results (if any) of further exploration work; the mineral resources and mineral reserves estimates of the Cactus Project (and the assumptions underlying such estimates); the ability of exploration work (including drilling) to accurately predict mineralization; the timing and ability of ASCU to produce a preliminary economic assessment (including the MainSpring property) (if at all); the timing and ability of ASCU to produce the Nuton Case PFS (if at all); the scope of any future technical reports and studies conducted by ASCU; and any other information herein that is not a historical fact. 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 and the additional risks described in ASCU's most recently filed Annual Information Form, annual and interim management's discussion and analysis, copies of which are available on SEDAR+ (www.sedarplus.ca) under ASCU's issuer profile.

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.