

Corporate Presentation – September 2022

## COPPER Invest in Sustainability



ARIZONA SONORAN

COPPER COMPANY

### **Cautionary Information**

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This presentation ("Presentation") is being furnished on a confidential basis in order to provide readers certain information with respect to the business and operations of Arizona Sonoran Copper Company Inc. (the "Company" or "ASCU").

This presentation contains forward-looking information within the meaning of applicable Canadian and United States securities legislation. All information contained in this presentation, other than statements of current and historical fact, is forward-looking information. Often, but not always, forward-looking information can be identified by the use of words such as "plans", "expects", "budget", "guidance", "scheduled", "estimates", "forecasts", "strategy", "target", "intends", "objective", "goal", "understands", "anticipates" and "believes" (and variations of these or similar words) and statements that certain actions, events or results "may", "could", "would", "might" "occur" or "be achieved" or "will be taken" (and variations of these or similar expressions). All of the forward-looking information in this presentation is qualified by this cautionary note.

Forward-looking information is not, and cannot be, a guarantee of future results or events. Forward-looking information is based on, among other things, opinions, assumptions, estimates and analyses that, while considered reasonable by the company at the date the forward-looking information is provided, inherently are subject to significant risks, uncertainties, contingencies and other factors that may cause actual results and events to be materially different from those expressed or implied by the forward-looking information. The risks, uncertainties, contingencies and other factors that may cause actual results to differ materially from those expressed or implied by the forward-looking information are described under the heading "Risk Factors" in the ASCU Final prospectus dated November 9, 2021 and filed on SEDAR, and recent financial disclosures. Should one or more risk, uncertainty, contingency or other factor materialize or should any factor or assumption prove incorrect, actual results could vary materially from those expressed or implied in the forward-looking information. Accordingly, you should not place undue reliance on forward-looking information. ASCU does not assume any obligation to update or revise any forward-looking information after the date of this presentation or to explain any material difference between subsequent actual events and any forward-looking information, except as required by applicable law. This presentation contains certain financial measures which are not recognized under IFRS, such as cash cost, sustaining and all-in sustaining cash cost per pound of copper. For a detailed description of each of the non-IFRS financial performance measures used in this presentation, please refer to ASCU's management's discussion and analysis for the nine months ended September 30, 2021 available on SEDAR at www.sedar.com. All amounts in this presentation are in U.S. dollars unless otherwise noted.

#### **Technical Information**

The scientific and technical information in this Presentation, other than in respect of metallurgy, was prepared under the supervision of Mr. Allan Schappert, Stantec. The scientific and technical information in this Presentation in respect of metallurgy was prepared under the supervision of Dr. Martin Kuhn, MAG. Each of Mr. Allan Schappert and Dr. Martin Kuhn is a Qualified Person as defined by National Instrument 43-101– Standards of Disclosure for Mineral Projects.

The potential quantity and grade presented in the Exploration Target ranges are conceptual and have insufficient exploration and drill density to define a Mineral Resource. At this stage, it is uncertain if further exploration will result in the targets being delineated as a Mineral Resource. Estimates of exploration targets are not Mineral Resources and are too speculative to meet the NI 43-101 reporting standards.

ASCU has conducted extensive exploration work to delineate the exploration target contained in this presentation. This work includes analysis and interpretations from four historical and the two recently drilled core holes into the project, similarities of mineralization intercepted to that of the adjacent Cactus project (for mineralization and alteration characteristics, and grade architecture), and review of geophysical and surface ionic leach programs to support realistic target ranges for extent, thickness, and grade. The Exploration Target ranges assume an underground target for exploration purposes.

#### Peers

The comparable information about other issuers was obtained from public sources and has not been verified by the Company. Comparable means information that compares an issuer to other issuers. The information is a summary of certain relevant operational and valuation attributes of certain mining and resource companies and has been included to provide the prospective investor an overview of the performance of what are expected to be comparable issuers. The comparables are considered to be an appropriate basis for comparison with the Company based on their industry, size, operating scale, commodity mix, jurisdiction, capital structure and additional criteria. The comparable issuers face different risks from those applicable to the Company. Investors are cautioned that there are risks inherent in making an investment decision based on the comparables, that past performance is not indicative of future performance and that the performance of the Company may be materially different from the comparable issuers. If the comparables contain a misrepresentation, investors do not have a remedy under securities legislation in any province in Canada. Accordingly, investors are cautioned not to put undue reliance on the comparables in making an investment decision.

### Management Team with Proven Track Record



George Ogilvie, P.Eng. President, CEO & Director

+30 years of management, operating and technical experience in the mining industry. Previously President & CEO of **Battle North (sold to Evolution** Mining), CEO of Kirkland Lake, and CEO of Rambler Metals



Ian McMullan, P.Eng., MBA COO

+25 years of mining experience in operational and management roles. 20 year tenure with Newmont including responsibility for ramp-up and expansion of Leeville and Carlin Portal (Newmont/Barrick). **Previously VP of Mining at Klondex** 



#### Nick Nikolakakis, BASc, MBA VP Finance and CFO

+27 years of North American executive mining finance experience. Former VP Finance and CFO of Battle North, **Rainy River and Placer Dome, VP Corporate Finance at Barrick and** other positions at North American Palladium and BMO Nesbitt Burns.



Rita Adiani. LLB Hons SVP Strategy & Corporate Development

+16 years of mining experience across strategy & business development, investment banking and corporate law. Previously EVP and Head of Business Development at Xiana Mining, MD at **NRG Capital Partners, VP at Societe Generale and Senior Corporate Finance** Manager at La Mancha



#### STRONG SPONSOR SUPPORT

### TEMBO CAPITAL

- · Private equity fund investing in junior and mid-tier mining companies, with low cost, quality assets managed by high caliber teams
- Shareholder since 2020



Doug Bowden, MSc. Vice President, Exploration

+40 years mining experience throughout North America and Mexico. Responsible for managing exploration programs for Amselco, BP Minerals, Kennecott and Wester Uranium. Senior executive positions held at Gold Summit Corporation, Western Uranium and Concordia



Travis Snider, B.Sc, Env Chem, SME Vice President, Sustainability & External Relations

+20 years experience in the mining industry in Arizona. Previously Mining Project Manager at **Engineering & Environmental Consultants.** SVP of Operations for Sierra Resource Group and VP of Mining & Oil operations for Wilcox



Alison Dwoskin, CPIR Director, Investor Relations







Toronto Corporate Office

Arizona Corporate Office/Site RioTinto

- Global leading diversified metals and mining company with operations in 35 countries.
- Innovating technologies to advance the mining industry
- Shareholder since 2022

### **Experienced Board of Directors**





David Laing, B.Sc. Eng Chair of the Board of Directors

+40 years experience in the mining industry with roles across operations, project development, mining finance & M&A. **Previously EVP and Senior VP of Operations for Endeavour Mining, COO of Equinox Gold, True Gold and Quitana Resources. Currently Chair of Fortuna Silver and Director of Northern Dynasty Mineral, Blackrock Silver Corp and Amarillo Gold Corp** 



Thomas Boehlert, ICD.D Director

+30 years in the agribusiness, mining & energy. Experienced finance executive at 6 international public & private resource companies. 14 years' experience in infrastructure and energy project finance banking at Credit Suisse. Previously EVP, CFO of Bunge Limited, President, CEO of First Nickel Inc., EVP, CFO for Kinross Gold Corporation & CFO of Texas Genco. Previously also non-executive director of Harry Winston and TMAC Resources



Mark Palmer, B.Sc Director

+30 years in the mining industry with roles in finance and industry. Currently Partner at **Tembo. Previously at Rothschild and responsible for EMEA Mining Investment Banking at UBS. Also served as Vice Chair of Canaccord Genuity. Currently also serves on the board of Orion Minerals** 



George Ogilvie, P.Eng. President, CEO & Director

+30 years of management, operating and technical experience in the mining industry. Previously **President & CEO of Battle North (sold to Evolution Mining), CEO of Kirkland Lake, and CEO of Rambler Metals.** Began his career with AngloGold in South Africa, also held roles at Hudbay and served as Area Manager for Dynatek



Sarah Strunk Director

+37 years in the mining law, with commercial, legal and transactional experience. Currently Chair at Fennemore Craig. Previously at Cyprus Amax Minerals Corporation. Also served on the Board of Arizona Mining Association, as Trustee of the Foundation for Natural Resource and Energy Law, and as Chairman of Brio Gold



Alan Edwards, B.Sc. Eng, MBA Director

+35 years of operational and executive experience in the mining sector. Previously CEO of Oracle Mining, President & CEO of Copper One and Frontera Copper, COO of Apex Corporation. Currently also director of Americas Gold and Silver, Entrée Resources & Orvana Minerals

### Capital Structure & Ownership



#### CAPITAL STRUCTURE

(1) RSUs may not be issued in shares or cash

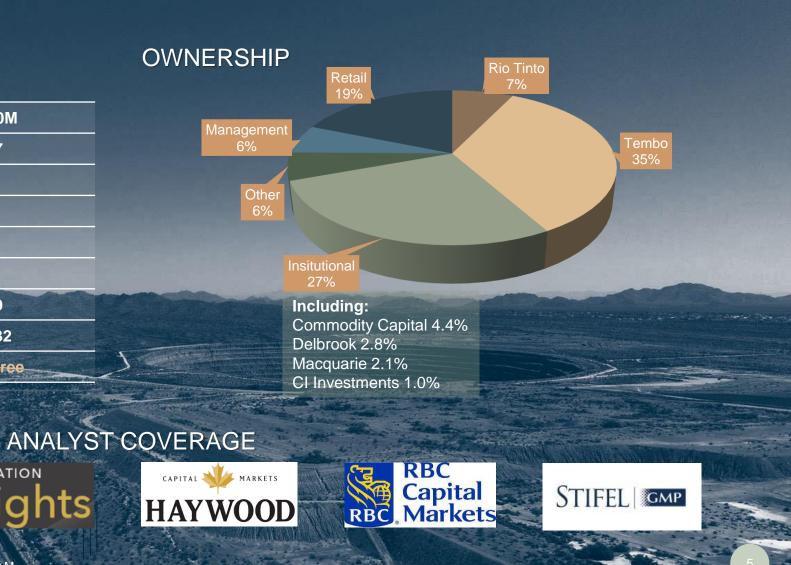
Notes:

Cg/Canaccord Genuity

Market Capitalization (M)	C\$150M
Shares Outstanding (M)	88.7
Warrants (M)	6.6
Options (M)	2.9
RSU's (M) <sup>(1)</sup>	0.3
DSU's (M)	0.4
Fully Diluted Share Capital (M)	98.9
Cash as at June 30, 2022	US\$32
Debt	Debt Free

EXPLORATION

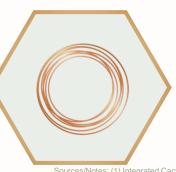
insights



ASCUF: OTCQX ARIZONASONORAN.COM ASCU:TSX

### ASCU – Well-financed Development Asset with Low Capital Intensity



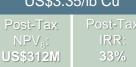


#### Brownfield Exploration and Development Project in Tier 1 Jurisdiction

- 100% ownership, Arizona-based past producing mine (1974-1984) with in place infrastructure
- Multi-billion-pound starter mineral resource<sup>(1)</sup>:
  - 1.6Blbs of Indicated Resource
  - 1.9Blbs of Inferred Resource

#### Proposed Copper Heap Leach, SXEW Operation<sup>(1)(4)</sup>

- Cactus Mine PEA with robust economics
- 1<sup>st</sup> quartile Capital Intensity of \$2.20/lb Cu produced
- 18-year Life of Mine (LOM), 1B lbs of Cu produced ~56Mlbs per year (28 kstpa)
   US\$3.35/lb Cu
- PEA completed demonstrating robust post-tax project economics



#### Experienced Leadership Team; Strong Supportive Sponsors

#### Private Landownership = Lower risk permitting process

- Streamlined State-and-County led permitting framework
- ✓ Water permits received
- Only construction-related permits remaining

#### **Building Scale and Growth**

- Exploration Targets on 4km Strike:
  - Parks/Salyer (significant exploration target)
  - NE Extension (historic drilling)
- Cactus FS Drilling underway
- Primary sulfide processing optimization<sup>(3)</sup>:
  - Rio Tinto's Nuton<sup>™</sup> Technology
  - Primary sulfides are not included in the PEA mine plan

#### Supportive Copper Market Fundamentals ESG Framework in Place; Path to Net Zero



Sources/Notes: (1) Integrated Cactus PEA (2) The Arizona Department of Environmental Quality (ADEQ) AP Permit has been obtained by the Company for the stockpile project and becomes effective upon demonstration of financial capability submitted along with an amendment application for full project coverage. The relevant amendments for full project coverage will be filed by the Company and assessed by the ADEQ in due course (3) Primary resource refers to the primary sulfide material contained within the resource pit-shell (4) ) The Integrated Cactus PEA is preliminary in nature, it includes inferred mineral resource that are considered too speculative geologically to have economic considerations applied to the them that would enable them to be categorised as mineral reserves and there is no certainty that the preliminary economic assessment will be realised

### The Cactus Project: A Low-Risk Growth Opportunity



#### RECENTLY COMPLETED

### **DE-RISKING**

- Strategic Investor (Rio Tinto)
- No debt
- Permitting
- Infill drilling

#### LIQUIDITY

- \$32 million cash (June 30, 22)
- Access to the US markets through OTCQX listing (ASCUF)

#### SCALE

- Parks/Salyer (1-2.3B lbs leachable potential)
- Rio Tinto and Nuton
   Testing Leachability of Primary Material

#### UPCOMING

#### Drilling

Cactus drilling (FS) Parks/Salyer drilling (Expl.)

- Technical Studies
   Cactus PFS
   Parks/Salyer Mineral Resource
   FS following completion of PFS
- ESG / Net Zero Path
- Permitting

Further permitting will be informed by the PFS inputs

Nuton<sup>™</sup> Metallurgical Testing

- Project Financing Subject to PFS and FS outcomes
- Construction subject to Project Financing 18-month construction period
- Production

upon positive construction decision

### Our ESG Framework – Setting the Pace for Net Zero Carbon Emissions





Ability to also reduce carbon footprint by Arizona Public Service's transition to renewable resources (65% by 2030 and 100% by 2050)

### Journey Towards Net Zero - Partnership with Minviro

#### PFS/FS

- · Design parameters used to scope impact
- GHG inventory assessment (Scope 1, 2 and 3)
- Consideration of impact of diesel fuel, sulfuric acid, carbonate minerals, electricity, cement in operations across Scopes 1 and 2
- 100% renewable energy solutions
- Careful water use and management
- Waste and pollution management air quality, dust management and tailings management
- Establishing carbon trading and offset policies/trading to the extent required

#### **Production and Reporting**

- Establishing reporting KPIs
- Reporting to international standards (e.g. SASB, TCFD)

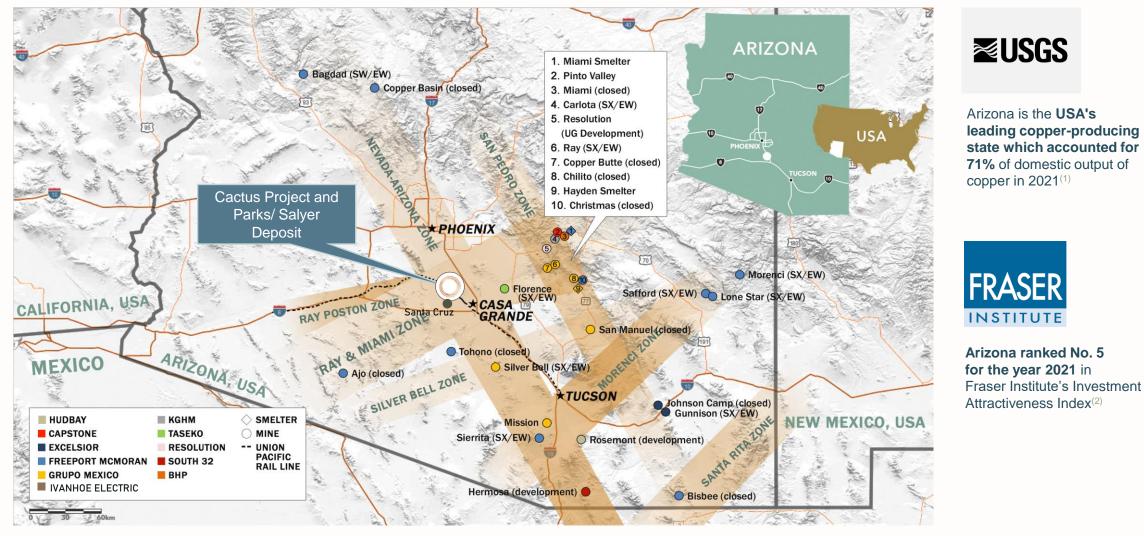


#### Construction

- Investment in low carbon technologies and minimizing direct impacts (Scope 1 & 2)
- Supply chain management to minimize Scope 3 emissions
- Local procurement and workforce hiring generating positive social impact
- Compliance with global standards (e.g., Equator Principles) to align with debt financing

### Located At The Intersection Of Arizona's Three Copper Porphyry Belts





Sources/Notes: Integrated Cactus PEA (1) USGS Copper Data Sheet- Mineral Commodity Summaries 2022 (2) Fraser Institute Annual Survey of Mining Companies 2021, available at www.fraserinstitute.org

### Local Support for the Cactus Mine

Overwhelming support for the Cactus Mine in Casa Grande – economic survey shows \$8.5 Billion of indirect and direct revenues to the local community.

Probably Support
Don't Know, Refused
Definitely Oppose
Probably Oppose
Definitely Support

82.6% Support 10.6%

**Oppose** 

GOP: 93.0% Support Dem: 66.7% Support PND: 84.4% Support IND: 91.1% Support Casa Grande: 81.5% Support Maricopa: 84.8% Support

Polling completed by Highground Public Affairs Consultants in December 2021

### Key Permits in Place – Streamlined Process with Definitive Timelines



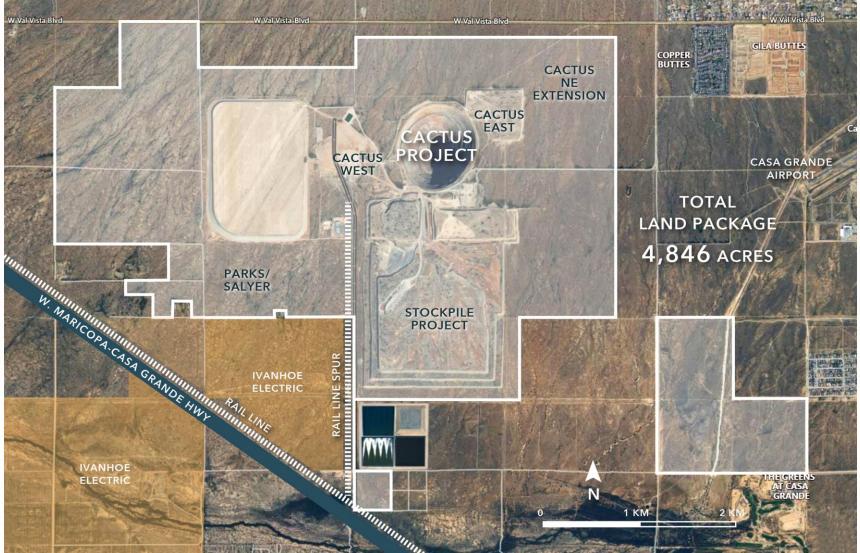
#### Permitting complete for now; key PFS inputs will inform remaining permits

Permit	Permit Office	Status
Air Quality Permit	Pinal County	Complete (annual renewal)
Arizona Pollution Discharge Elimination System (402) – Cactus	ADEQ	Complete
Arizona Pollution Discharge Elimination System (402) – TruStone	ADEQ	Complete
Water Rights	ADWR	Complete (50 year permit)
Aquifer Protection Permit (for Stockpile Project)	ADEQ	Complete
General Plan Amendment (including development agreement and city zoning change from residential to industrial)	Casa Grande	Complete
Aquifer Protection Permit (Major Amendment)	ADEQ	Complete
Construction and Industrial Permits	Pinal County/Casa Grande	Application post-PFS
Mined Lands Reclamation Permit (MLRP)	AZ State Mine Inspector	Application post-PFS
Reclamation Bond	AZ State Mine Inspector	Application post-PFS
Radio Station License, Wireless Communication	FCC	Application post-PFS
Notice of Intent to Clear Land	AZ Department of Agriculture	Required pursuant to a construction decision
Mining Construction Permits	Pinal County	Required pursuant to a construction decision
Above-Ground Tank Storage	ADEQ	Required pursuant to a construction decision
State Notice of Startup/Miner Registration Number	AZ State Mine Inspector/MSHA	Required when starting production

### Cactus Site Overview – Infrastructure, permits and a significant resource







### Cactus Site – Brownfield Advantage with Ready Access to Infrastructure





Historic data, core shack, maps etc. Vent raise and u/g development to historic orebody Shaft to 1,800 ft. level (20 ft. diameter, cement-lined) worthy of further investigation for UG mining Open pit access to near surface remnant ore

#### Power substation

Rail spur (to ship concentrate to refinery) Stockpile (part of Integrated Cactus PEA) Water wells (to supply water to the mine)

### Part of a World Class District - Multi-Billion Pound Starter Mineral Resource





#### MINERAL RESOURCES

- Leachable Resource: Makes up the PEA and upcoming PFS mine plan
- Primary Resource: Partnership with Rio Tinto's Nuton Technology testing leachability of primary material



#### **District-scale opportunity**

- Mine Trend open to NW and SW
  - Parks/Salyer Exploration Target
  - NE Extension



**Copper porphyry system:** oxide cap, enriched below and primary at the base

#### Simple metallurgy at Cactus:

- Recoveries of 90% Oxides and 72% Enriched
- Supported by bottle roll and column leach testing

CACTUS & STOCKPILE – TOTAL CONTAINED COPPER:

Indicated Resource– 1,610,700k lbs

Inferred Resource– 1,978,800k lbs

Mineral Resource Category and Type <sup>(2)</sup>	Tons (kt)	CuT (%)	Tsol (%)	Tsol_lb (klbs)			
Indicated Resource							
Total Leachable (Oxide and Enriched)	73,900	-	0.723	1,065,200			
Primary	77,900	0.350	0.350 –				
Inferred Resource							
<b>Total Leachable</b> (Oxide and Enriched)	117,600	-	0.417	979,300			
Stockpile (Leachable)	77,400	0.169	0.144	223,500			
Primary	111,300	0.349	-	776,000			

Sources/Notes: (1) Includes Stockpile Project (2) Integrated Cactus PEA Tables 14-18 and 14-19

#### **GLOBAL RESOURCE GROWTH POTENTIAL**

PARKS/SALYER EXPLORATION TARGET						
Leachable	40-90M st	-	1.05%-1.30%	1.0-2.3B lbs Cu		
Primary	8-35M st	0.85%-1.05%	-	0.15-0.75B lbs Cu		

See PR dated Feb 10, 2022 for disclosures related to the Exploration Target

### Current Drilling Programs

Parks/Salyer Drilling at 250 ft centres (indicated category)105,000 ft (24,384 m)

• Program to be complete by year-end

Cactus Drilling at 125 ft centres (measured category)

1181.8

- 60,000 ft (18,288 m) infill drilling
- 12,000 ft (3,650 m) planned expansion
- Drilling to resume later in the year

## Detailed Leachable-Only Mineral Resource Estimate

Grades Significantly Increase Underground

LEACHABLE MINERAL RESOURCE									
Indicated Resource: 1,065,900 Klbs Inferred Resource: 1,211,300 Klbs									
Open Pit & Stockpile				Underground					
Material Type	Tons (kt)	CuT (%)	Tsol (%)	Tsol_lb (klbs)	MaterialTonsCuTTsolTsol_lbType(kt)(%)(%)(klbs)				
	Ind	licated Reso	ource		Indicated Resource				
Oxide	27,000	-	0.512	275,900	Oxide	4,400	-	0.844	74,200
Enriched	39,200	_	0.822	643,800	Enriched	3,300	_	1.101	72,000
Total Leachable	66,200	-	0.696	919,700	Total Leachable	7,700	-	0.954	146,200
	Inf	erred Reso	urce			In	ferred Reso	ource	
Oxide	51,600	_	0.268	282,000	Oxide	10,900	_	0.718	157,200
Enriched	48,100	-	0.405	390,100	Enriched	7,000	-	1.136	158,500
Total Leachable	99,700	-	0.334	672,100	Total Leachable	17,900	-	0.881	315,700
Stockpile – Total Inferred	77,400	0.169	0.144	223,500	Sources/Notes: Integrated Cactus PEA, Tables 14-16 and 14-17				



• UG high-grade contributing to economics

 Maiden Reserves expected with PFS -70-80% conversion expected

 Almost 50% of current Resources comprise of Indicated Resources

 72,000 ft Feasibility level drilling program to resume late 2022

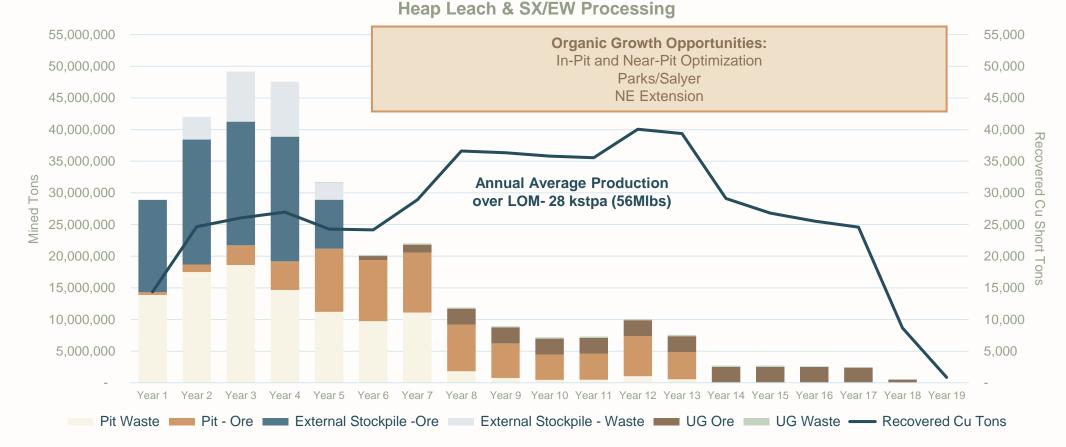
 Organic upside potential exists in-pit and along mine trend

Resource

### Cactus PEA Production Schedule – Opportunity beyond 40 kstpa (80 Mlbs)







# The mining schedule reflects a layered mining plan targeted at early production with low capex, maximising project returns. Initial plant capacity is designed at 22 kstpa with expansion to 35 kstpa concurrent with underground mining in full ramp up by year 7 of the project start-up. Significant organic expansion opportunities exist

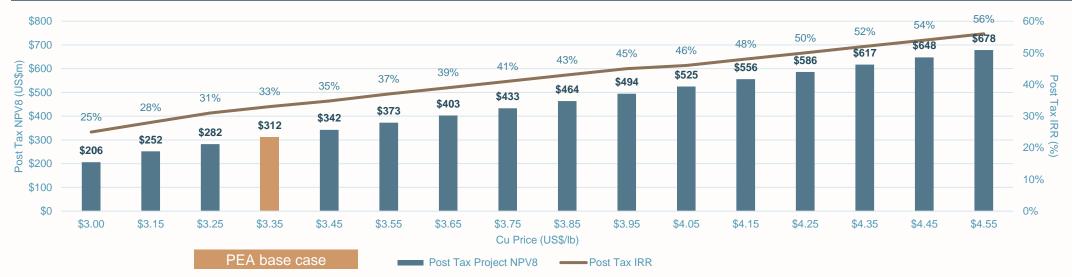
Sources/Notes: (1) Integrated Cactus PEA, Table 16-8 and figure 16-23 (2) The Integrated Cactus PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have economic considerations applied to the them that would enable them to be categorised as mineral reserves and there is no certainty that the preliminary economic assessment will be realized

### Robust PEA Base Case Project Economics

#### KEY PROJECT METRICS<sup>(1)(2)</sup>

	Over LOM
Mine Life	~1B lbs of Cu over 18 years
Average Production	28 ktpa (56Mlbs); Peaks at 40 ktpa (80Mlbs)
Operating Costs <ul> <li>Avg OPEX over LOM (US\$/t milled)</li> <li>Avg C1 Cost over LOM (US\$/lb)</li> <li>Avg AISC over LOM (US\$/lb)</li> </ul>	<ul> <li>US\$9.06/ton</li> <li>US\$1.55/lb</li> <li>US\$1.88/lb (incl. royalty)</li> </ul>
Сарех	Initial Construction Capex: US\$124M Sustaining Capex over LOM: US\$340M
Free Cash Flow (Post tax Undiscounted)(US\$3.35/Ib Cu)	• US\$960M

#### NPV AND IRR SENSITIVITIES<sup>(1)(2)</sup>

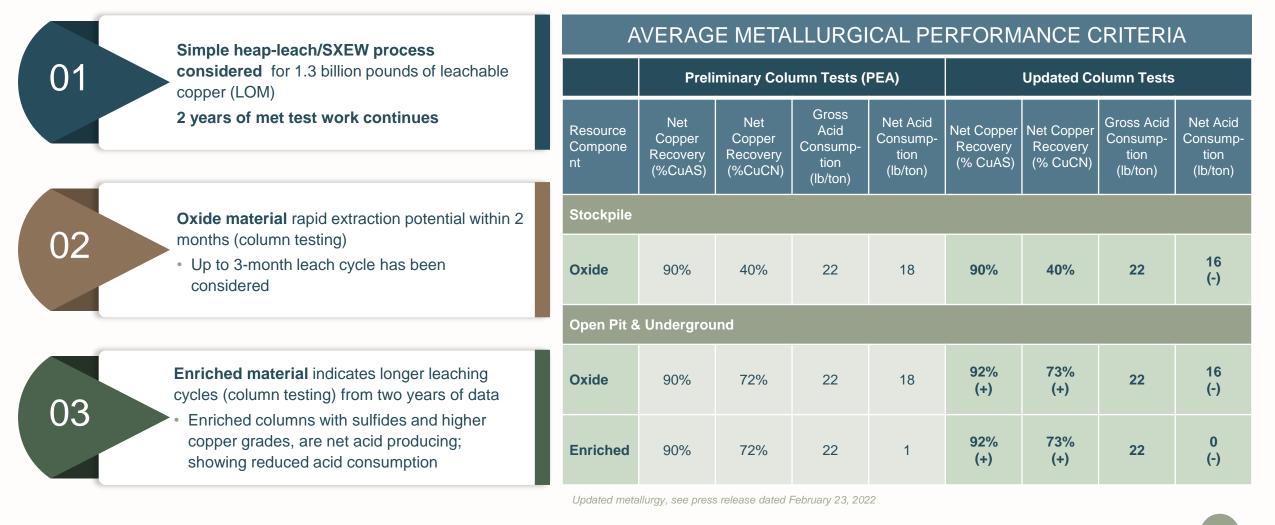


ASCU:TSX | ASCUF:OTCQX ARIZONASONORAN.COM

Sources/Notes: (1) Integrated Cactus PEA, Table 1-6, 1-7 (2) ) The Integrated Cactus PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have economic considerations applied to the them that would enable them to be categorised as mineral reserves and there is no certainty that the preliminary economic assessment will be realised

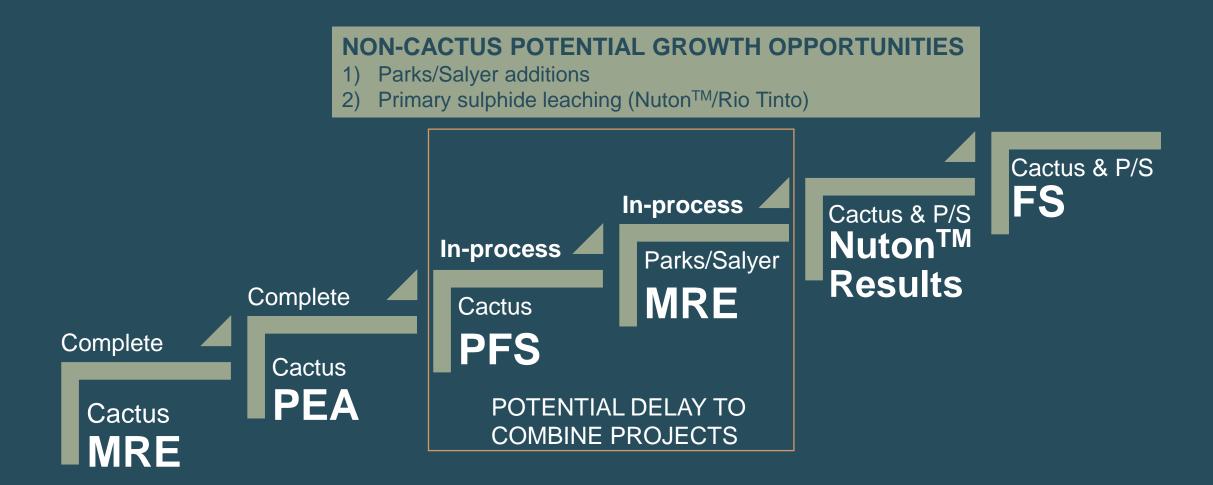
### LEACHABLE MATERIAL: Positive Ongoing Metallurgical (Bottle Roll / Column Leach)





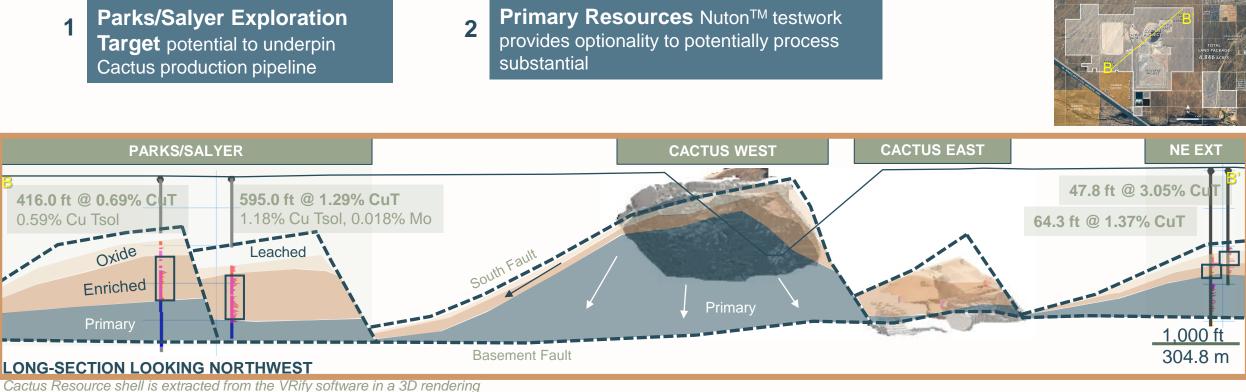
### Potential to Rescope Cactus PFS to include P/S and Build Scale





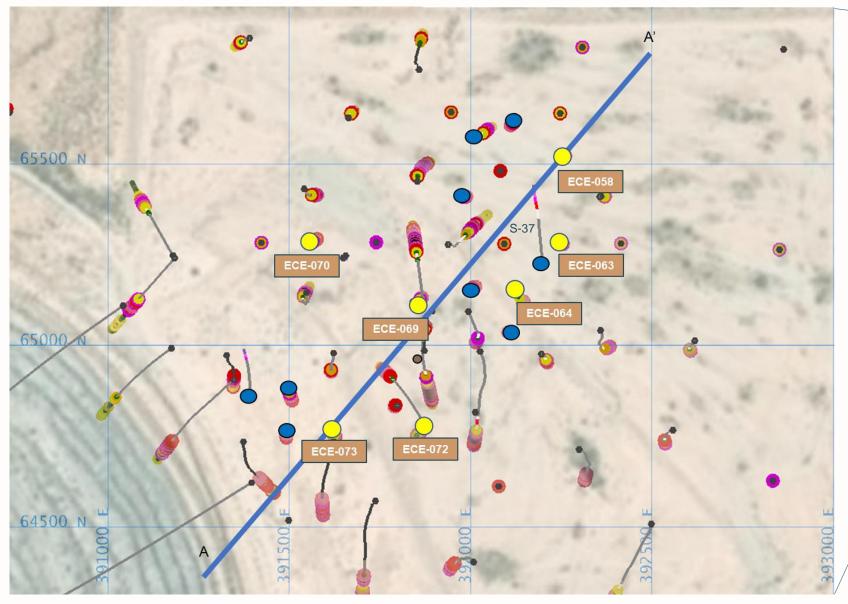
### **Opportunities to Build Scale and Potential Pipeline for Future Operations**





PARKS/SALYER EXPLORATION TARGET (Potential)		(Potential)		CACTUS MINERAL RESOURCE ESTIMATE		
Leachable	40-90M st @ 1.05%-1.30% Cu Tsol	1.0-2.3B lbs Cu		Leachable	Ind - 74M st @ 0.723% Cu Tsol Inf - 117M st @ 0.417% Cu Tsol	1.07B lbs Cu 0.98B lbs Cu
Primary	8-35M st @ 0.85%-1.05% CuT	0.15-0.75B lbs Cu	Nuton <sup>™</sup> Test Work Targeting Primary Sulfides and Chalcopyrite	Primary	Ind -78M st @ 0.35% CuT. Inf - 111M st @0.35% CuT	0.55B lbs Cu 0.78B lbs Cu
See PR dated Feb 10, 2022 for disclosures related to the Exploration Target			Frinary Sundes and Chalcopyrite	Cactus Mine PE	A with an effective date of August 31, 2021	

### Cactus East FS Level Infill Drilling Supporting Current Model



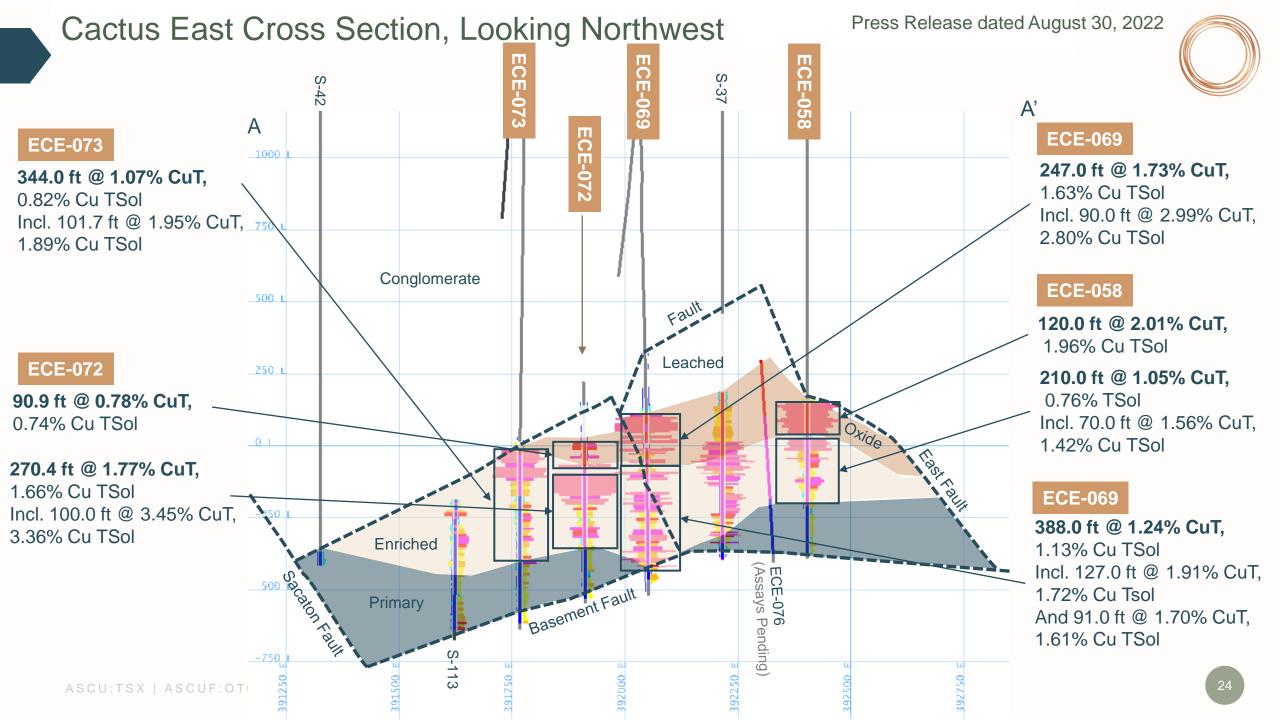
CACTUS NEWS PROJECT PROJECT TOTAL LAND PACKAGE 4, 84 6 A CRES

• August 30 Press Release

Assays Pending

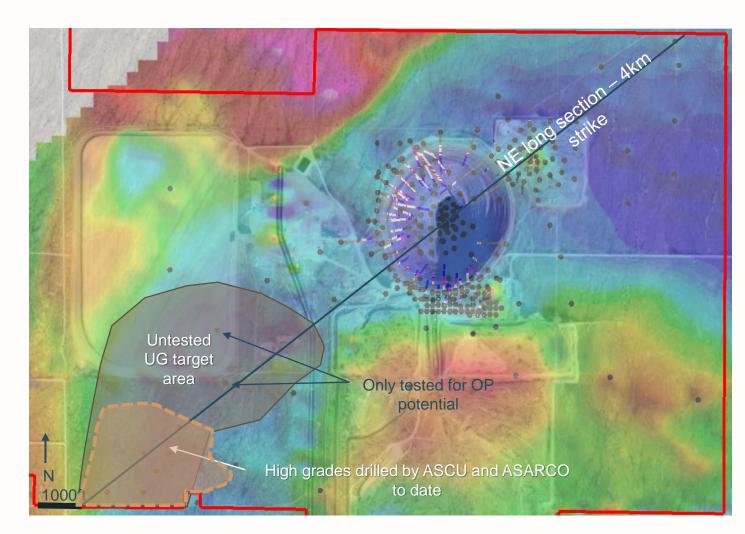
250 ft (76 m)

500 ft (152.4 m)



### Parks/Salyer Potential for Scalable UG Deposit for Cactus Expansion



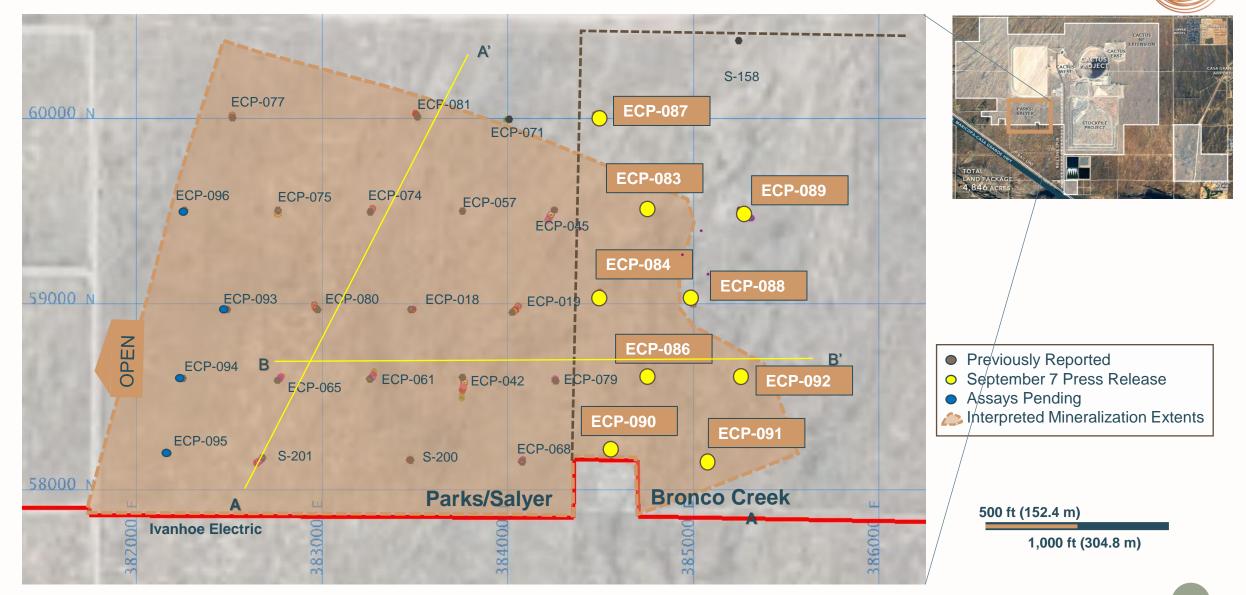


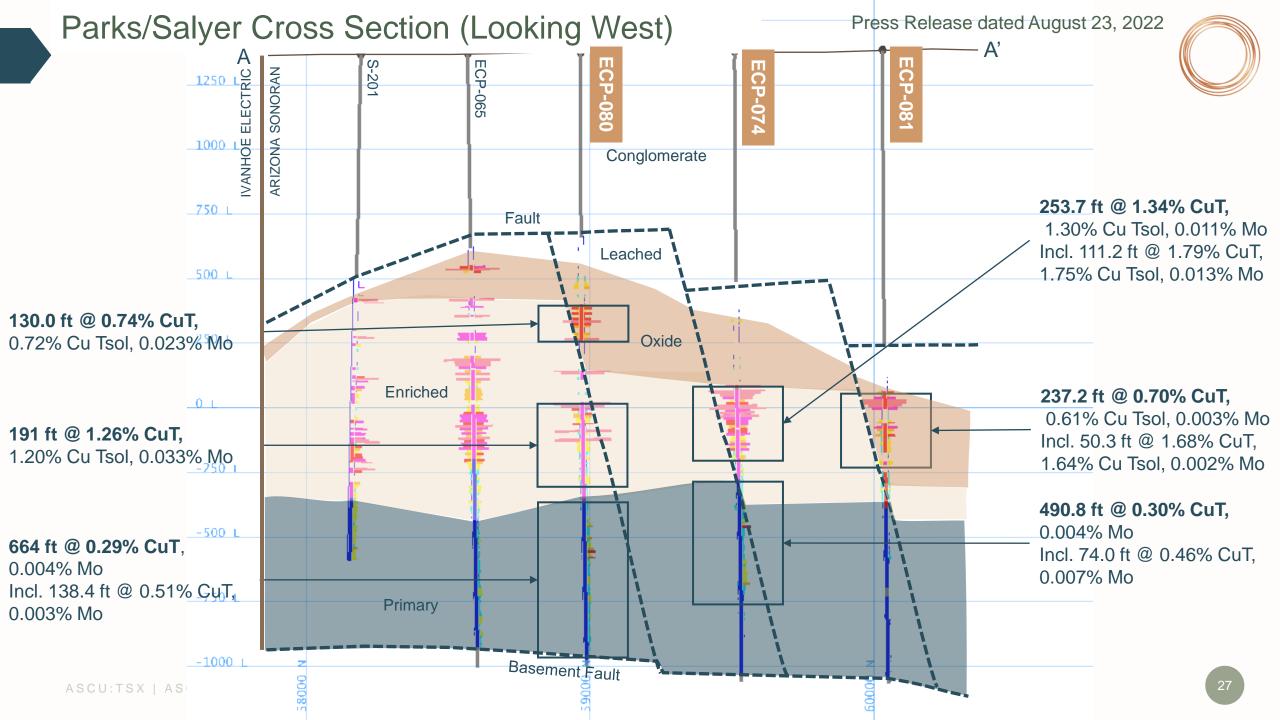
- 24 hole exploration drill program completed 500 ft centres may be used to calculate an inferred copper resource
- New 105,000 ft (32,000 m) infill drilling program underway
   250 ft centres may be used to update potential resources
   to the indicated category
- Target area represents an area much greater than Cactus East
- Target area supported by magnetics, regional drilling results, and ionic leach sampling limited to ASCU owned property
- Expanded Ionic Leach survey ongoing

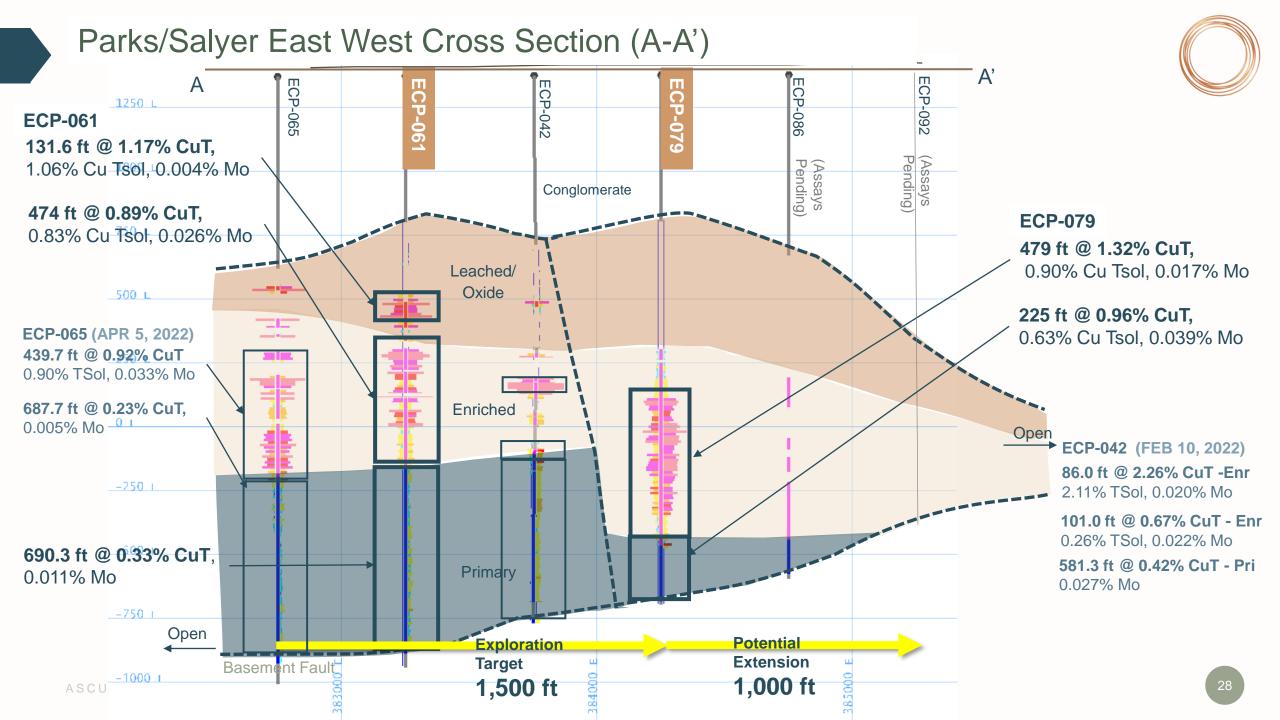
\*See press release dated February 10, 2022 for cautionary language related to the target area

Press Release dated September 7, 2022

### Parks/Salyer Plan View







### Rediscovering the World-Class Santa Cruz Copper Porphyry System



Drilling the same porphyry copper system, starting at Santa Cruz and extending northeast to Sacaton Northeast

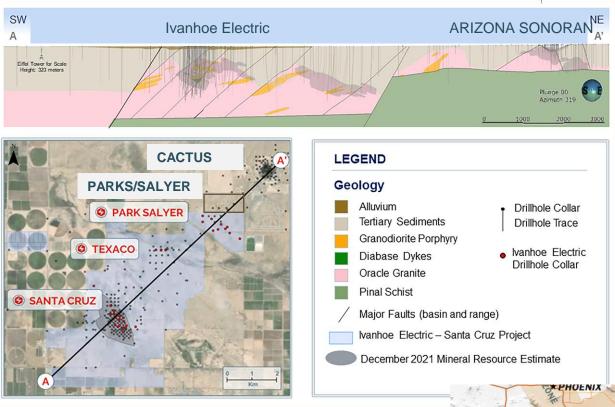
IE and ASCU land position connected at Parks/Salyer

ASCU - 2 drills active (1 pending)

IE - 6 drills active

Ivanhoe Electric Mineral Resource Estimate (Santa Cruz/Texaco)

- Indic 274 Mt of 0.93%
- Inf 248 Mt of 0.91%
- (0.39% cut-off \$3.70/lb Cu)

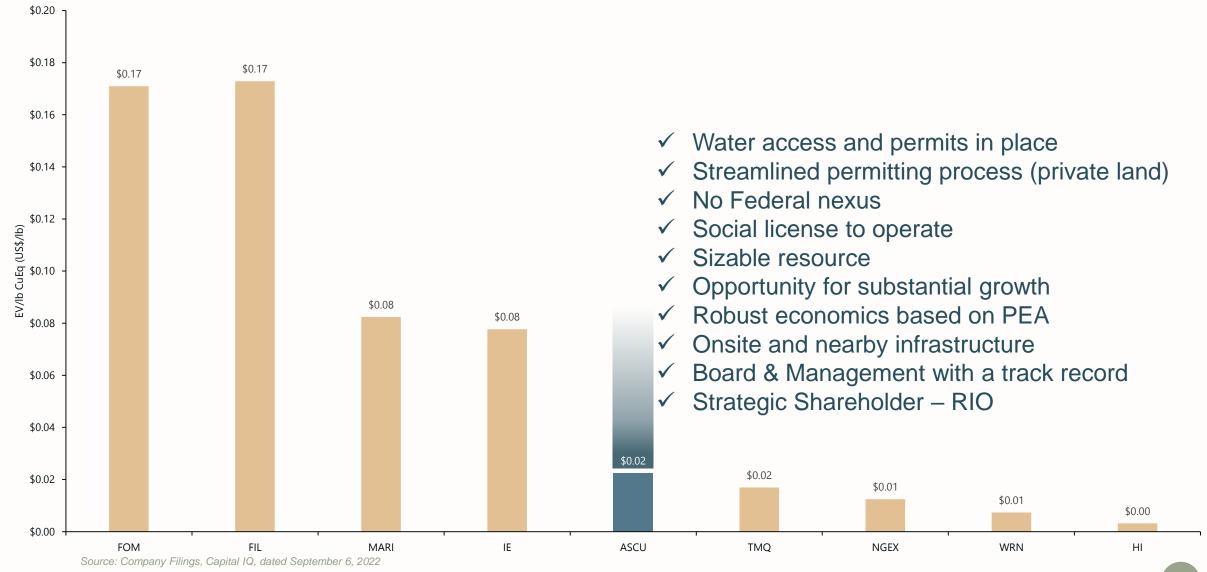


B-B': Slide 27 Long Section Source : Ivanhoe Electric Technical Report



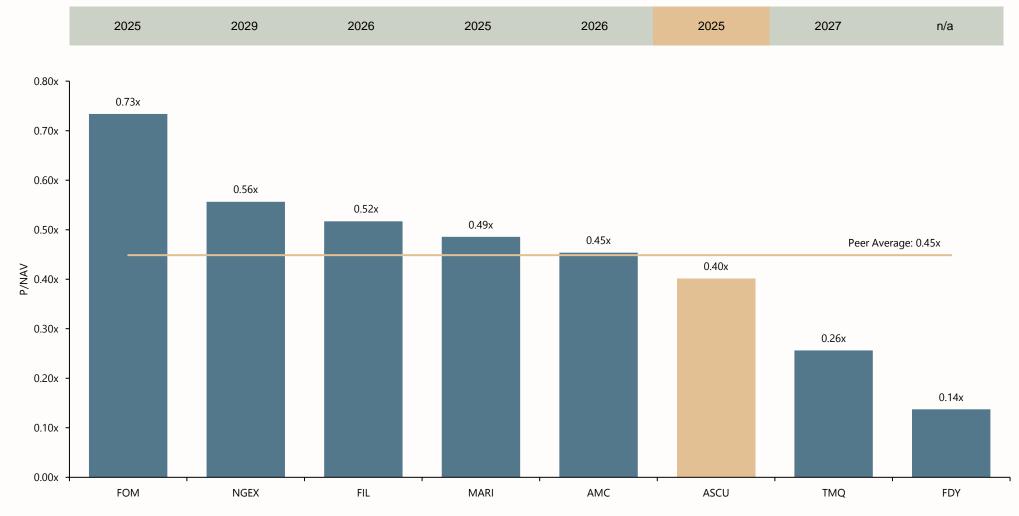
### Value Proposition: Low-Risk Copper Developer in Top Tier Jurisdiction





### Copper Development Peers (P/NAV)





Source: Company Filings, Capital IQ, September 6, 2022

### Key Investment Highlights

- Our Core Values Are Supported by an ESG Framework
- Long-term Copper Market Fundamentals are Strong
- Mature Capital Structure
- Experienced Leadership Team and Board with a Proven Track Record
- Brownfield, Scalable Development Project in Tier 1 Jurisdiction
- Robust Project Economics
- Low Risk Development with State-and-County Led Permitting Framework
- Significant Upside Potential from In-pit and Near Pit Opportunities
- Mergers and Acquisitions Potential Longer Term Within Arizona

Notes: The Integrated Cactus PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have economic considerations applied to the them that would enable them to be categorised as mineral reserves and there is no certainty that the preliminary economic assessment will be realised





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# Appendix

### Robust Returns from Lowest Capital Intensity vs Peer Group



Between the PEA and the upcoming Prefeasibility study, ASCU has been conducting updates and trade-off studies related to:

- assessing sulfuric acid costs and opportunities
- copper prices and the statement of initial probable reserves
- mine plan and methods and optimized operations.

FEA CONSTRUCTION CAFEA DREARDOWN (US\$W)							
Direct & Indirect Cost Components	Leach Pads, Ponds & Pipelines	SXEW Facility	Total Capital Cost				
Directs Subtotal	\$18.4	\$45.9	\$64.3				
Indirects Subtotal	\$3.1	\$19.1	\$22.2				
Contingency	\$3.0	\$9.0	\$12.0				
Total Process Construction Cost (22 ktpa)(Initial)	\$24.5	\$74.1	\$98.5				
Land Acquisitions			\$22.9				
Project Other Costs			\$2.6				
Total Initial Construction Cost			\$123.9				

PEA CONSTRUCTION CAPEX BREAKDOWN (US\$M)

Assumes contractor mining

• A contingency of 15% has been included in the capital cost for ancillary mine equipment, leach pad infrastructure and the SXEW facility



Sources: (1) Integrated Cactus PEA 2021 for ASCU – Table 21-2, Mollvenna Bay Project, Fran Mining (Pre-feasibility Study for the Mollvenna Bay Project, Report Date: 27 April 2020); Marimaca Project, Marimaca Pr

# $\bigcirc$

#### PARTNERSHIP

The aim of the partnership is to unlock the value of primary, chalcopyrite-dominated, sulphide material via deployment of Rio Tinto's Nuton<sup>™</sup> technologies and further add to the long-term, large-scale future profile of the Project.

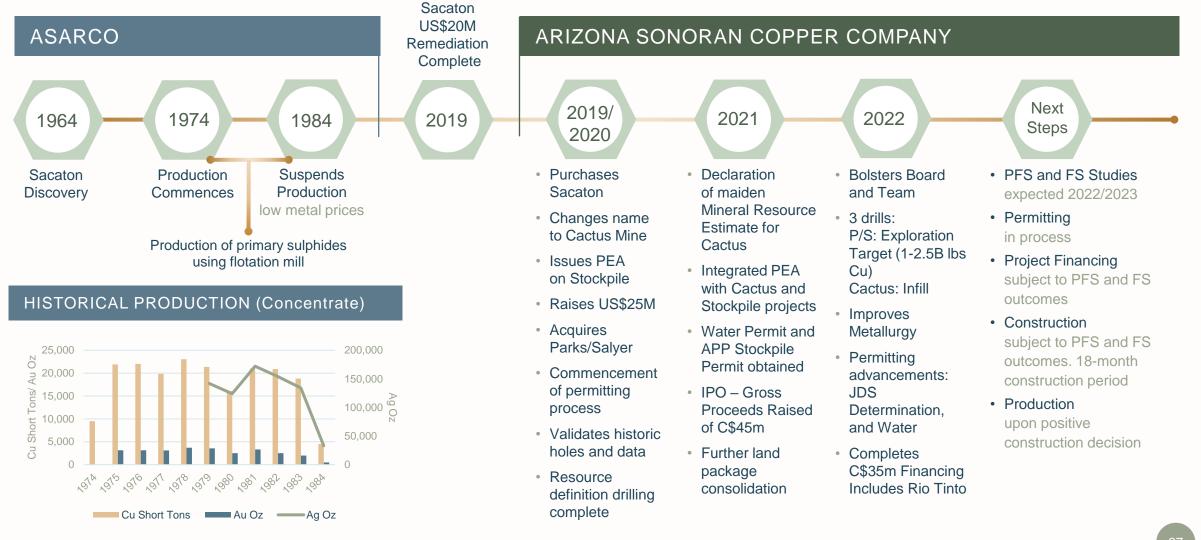
Rio Tinto and ASCU will work collaboratively to continue ongoing viability testing and studies of the technologies, including the evaluation of deployment at the Cactus Mine Project.

#### ABOUT NUTON<sup>™</sup>

Nuton<sup>™</sup> is an innovative new venture that aims to help grow Rio Tinto's copper business. At the core of Nuton<sup>™</sup> is a portfolio of proprietary copper leach related technologies and capability – a product of almost 30 years of research and development. The Nuton<sup>™</sup> technology offers the potential to economically unlock known low-grade copper sulphide resources, copper bearing waste and tailings, and achieve higher copper recoveries on oxide and transitional material, allowing for a significantly increased copper production outcome. One of the key differentiators of Nuton<sup>™</sup> is the potential to deliver leading environmental performance, including more efficient water usage, lower carbon emissions, and the ability to reclaim mine sites by reprocessing mine waste.

## The Cactus Mine Project's Path to Restarting Operations





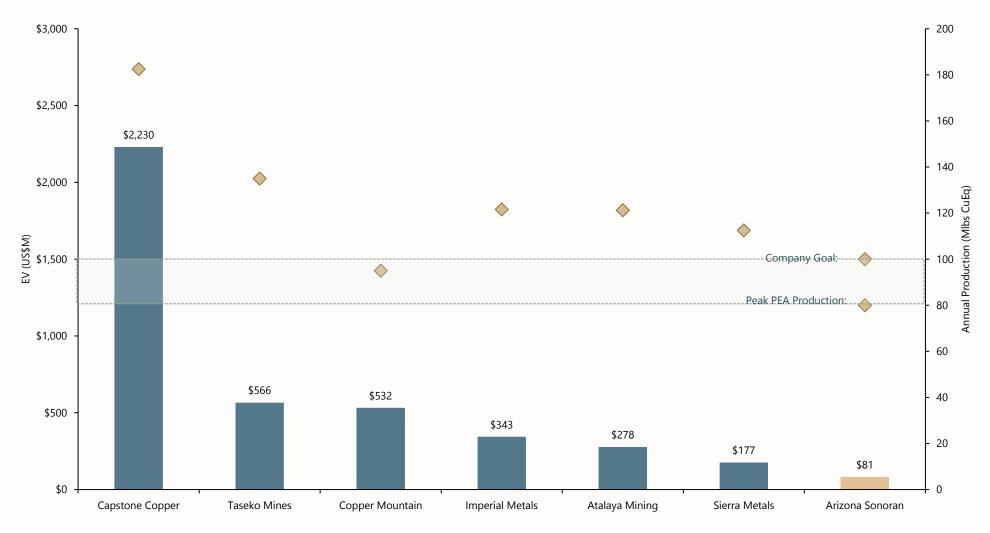
### Benchmarking ASCU to Copper Developers

	ARIZONA SONORAN	FILO					marimaca	Septern and gold		HIGHLAND Copper Company Inc.	FARADAY COPPER
Market Capitalization (US\$M)	\$112M	\$1.5B	\$1.0B	\$452M	\$393M	\$245M	\$201M	\$187 <b>M</b>	\$96M	\$42M	\$42M
Asset Name	Cactus	Filo del Sol	Santa Cruz / Tintic	McIlvenna Bay	Kay	Los Helados	Marimaca	Casino	Arctic	Copperwood	Cu Creek / Contact Cu
Economic Study Level	PEA	PFS	Resource	FS	Historic	Resource	PEA	FS	FS	FS	Historic
Development Type (Greenfields or Brownfields)	Brownfields	Greenfields	Greenfields	Brownfields	Brownfields	Greenfields	Greenfields	Greenfields	Greenfields	Greenfields	Greenfields
Jurisdiction	Arizona	Argentina	Arizona / Utah	Saskatchewan	Arizona	Chile	Chile	Yukon	Alaska	Michigan	Arizona
Fraser Institute Policy Perception Index (Rating Out of 100)	85	77	85 / 91	91	85	69	69	80	85	72	85
Measured & Indicated Attributable Resource (Mlbs CuEq)	1,611	6,019	5,618	2,096	-	14,609	1,536	14,830	2,629	5,259	4,126
Inferred Attributable Resource (Mlbs CuEq)	1,979	2,116	4,991	337	-	4,658	787	6,605	2,792	3,723	673
Mine Life (Years)	18	13	-	18	-	-	12	27	12	10	-
Annual Attributable LOM Production (Mlbs CuEq Payable)	56	274	-	65	-	-	79	329	135	74	-
LOM C1 Cash Cost (US\$/lb CuEq)	\$1.55	\$1.23	-	\$1.79	-	-	\$1.22	\$1.00	\$1.46	\$1.74	-
Capital Intensity (US\$/Ib CuEq)	\$2.20	\$4.62		\$4.47	-	-	\$3.61	\$10.45	\$6.69	\$3.69	-
Headline After-Tax IRR (%)	33%	23%	-	22%	-	-	34%	18%	27%	18%	-
Headline After-Tax NPV (US\$M)	\$312	\$1,280	-	\$370	-	-	\$524	\$2,334	\$1,135	\$117	-
Economic Study Long-Term Copper Price (US\$/Ib Cu)	\$3.35	\$3.00	\$3.70	\$3.50	-	\$3.00	\$3.15	\$3.60	\$3.00	\$3.10	\$3.80

Source: S&P Capital IQ. Company Filings. The Integrated Cactus PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have economic considerations applied to the them that would enable them to be categorized as mineral reserves and there is no certainty that the preliminary economic assessment will be realized. Data as of September 6, 2022.

# Junior Copper Producer Benchmarking (Enterprise Value and Production)

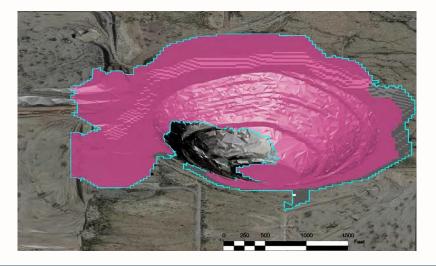




Source: Company Filings, Capital IQ - September 6, 2022

(1) Arizona Sonoran production shown as peak production of ~80 Mlbs, an additional data point is shown as the Company's goal of +100 Mlbs of annual copper production

# **Open Pit and Underground Mining**



### OPEN PIT LAYBACK

#### Pre-stripping and waste removal

Open-pit stripping from years 1-4 with some material reporting to leach pads (concurrent with production from Stockpile)

#### Steady state production achieved

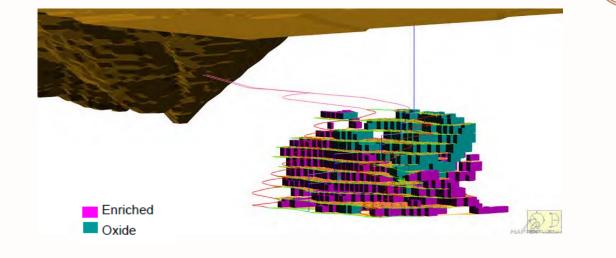
Reduction in waste volumes leading to peak mineralised material delivery to leach pads. Vertical mining capped at nine benches

#### Sources/Notes: Integrated Cactus PEA Figures 16-12 and 16-20

Year

Year

5



### UG PORTAL FROM OPEN PIT

- In-pit UG development starts (assumes 24 pit benches mined)
- Year 6 Twin Decline, 10,000 ft (3,048 m)

Year

6

Year

8

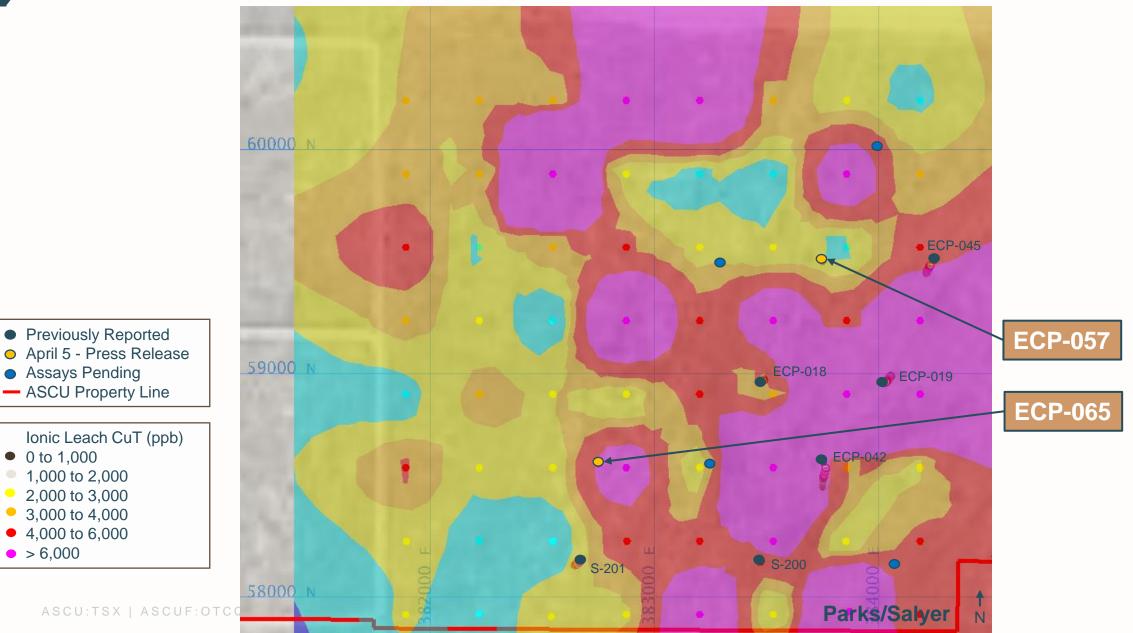
- **Year 7** Twin Spiral from top of ore to bottom, mid-level access developed, first ore: 1,750 tpd
- Year 8 Two mining horizons completing development, ore ramps to 3,500 tpd
- Two horizons in full production, ultimate mining rate of 7,000 tpd. UG mine plan currently only includes oxides & enriched material (no primary material)

### Parks/Salyer – Ionic Leach Survey (2019) April 5, 2022

• 0 to 1,000

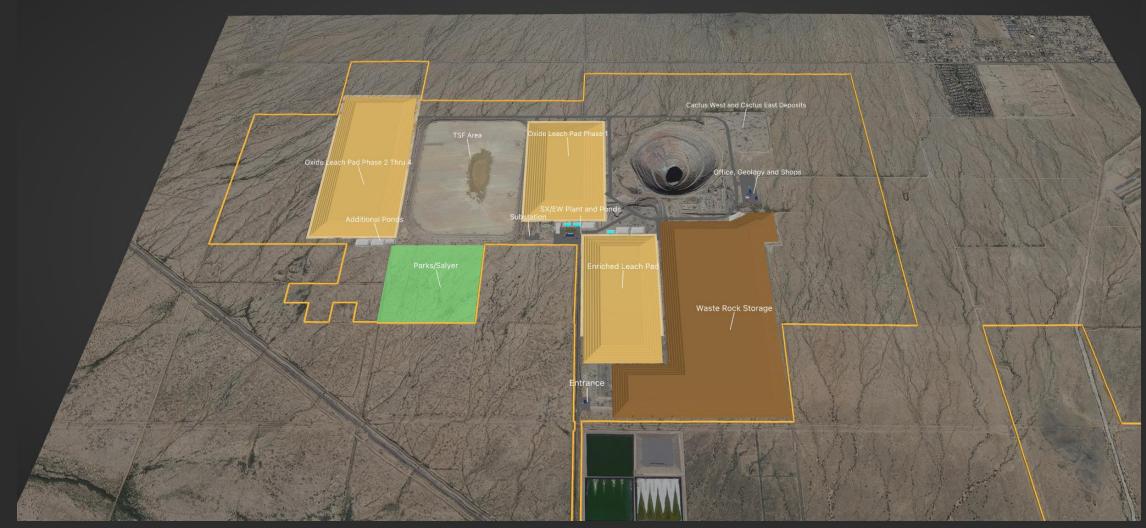
• > 6,000





### General Site Arrangement





Sources/Notes: 3D rendering of Figure 16-10 of Integrated Cactus PEA



Cornerstone Strategic Investments by Rio Tinto and Nuton<sup>™</sup> and Tembo Capital (non-brokered)

Intensify Exploration at Cactus and Parks/Salyer Increasing Drilling at Parks/Salyer, with target of a maiden mineral resource in Q4 22 Metallurgical De-risking for Cactus

Strengthening Balance Sheet going into feasibility phase, delivering on announced milestones

Item	Amount (US\$m)*
Parks/Salyer Drilling	7
Parks/Salyer Metallurgy	1
BCE Milestone Payment upon Resource Declaration	3
Additional Cactus Metallurgical De-risking Program	1
Cactus – Land Payments	8
Cactus Development, Working Capital, G&A	7
Total (US\$)	27
Total (C\$)	35

\* Based on indicative allocations, does not include legal expenses incurred with financing

### PARTNERSHIP

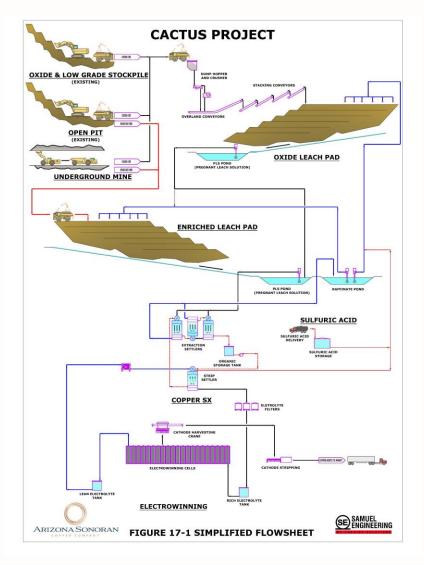
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### Simple Heap Leach & SXEW Flowsheet



- Leach material mined from the Stockpile Project and new mining operations will be placed in 20 ft (6 m) lifts on lined heap leach pads
- The initial oxide materials pad is 8.5 million ft<sup>2</sup> (790 thousand m<sup>2</sup>) to hold approximately 40 Mt of leach material (2-3 years of mined material)
- An additional leach pad to accommodate enriched material is planned in Year 2 to hold approximately 6 Mt sufficient for 5-6 years of material feed
- Placement of materials on the leach pads will be by truck dump and push methods, pending PFS tradeoff
- Surfaces will be ripped, cross ripped to a depth of 6 ft (2 m) to minimize surface compaction and surface permeability degradation
- The height of the leach material on the pad will eventually reach 200 ft (61 m) in overall height
- The planned leaching sequence is as below

Leach Cycle Component	Oxide Leach Pads (days)	Enriched Leach Pads (days)		
Pad Loading	14	14		
Surface Preparation/Piping	7	7		
Active Solution Application	90	180		
Drain Down & Decommissioning	9	9		
Minimum Total Cycle Time	120	210		

#### AVERAGE LEACH CYCLE TIMES BY MATERIAL TYPE

Sources/Notes: Integrated Cactus PEA, Table 17-2 and Figure 17-1

### Integrated Cactus PEA Summary



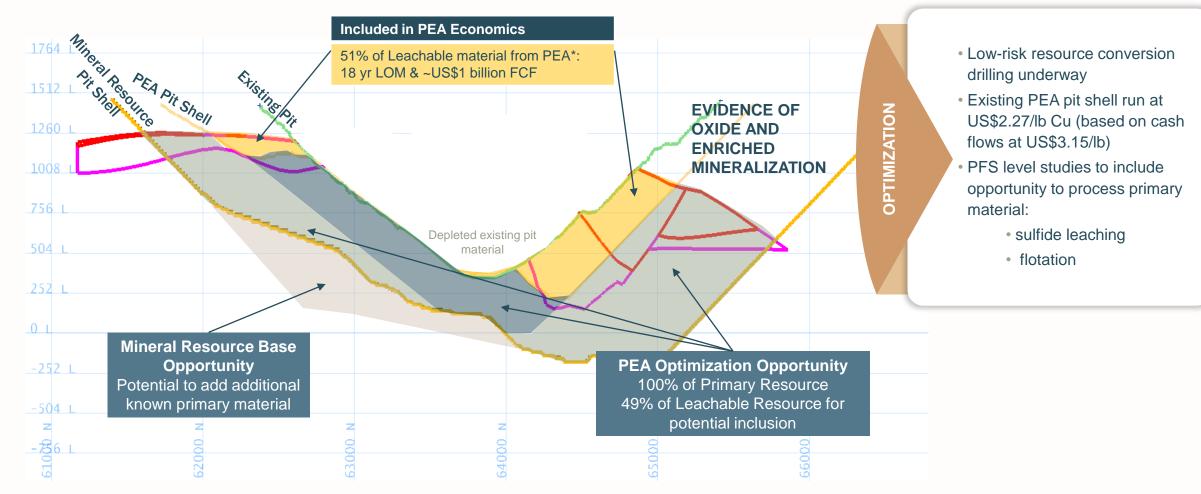
Assumption / Outcome	Value / Results <sup>(1)</sup>			
Copper Price	US\$3.35/lb			
Total Mineralized Material Moved	179 Mt			
Annual Average Processing Rate Over LOM	10 Mtpa			
Average Resources Refer Over LOM	Stockpile Project: CuAS: 90%, CuCN: 40%			
Average Recovery Rates Over LOM	<b>OP / UG:</b> CuAS: 90%, CuCN: 72%			
Average Production Over LOM	28 kpta <sup>(2)</sup> / 56Mlbs			
Operating Costs (Per Ton Processed)	US\$9.06/t			
Average Cash Cost (C1)	US\$1.55/lb			
Average All-In Sustaining Cost (C1 Cost + Sustaining CAPEX)	US\$1.88/lb			
Initial Construction CAPEX	US\$124M			
Sustaining CAPEX Over LOM (Including OP and UG, SXEW and Leach Pad Expansion)	US\$340M			
LOM Free Cash Flow (FCF) (Post Tax Undiscounted)	US\$960M			
Post Tax NPV <sub>8%</sub>	US\$312M			
Post Tax IRR	33%			

Source/Notes : Integrated Cactus PEA (1) The Integrated Cactus PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have economic considerations applied to the them that would enable them to be categorised as mineral resources and there is no certainty that the preliminary economic assessment will be realised (2) Tonnage is denoted in short tons

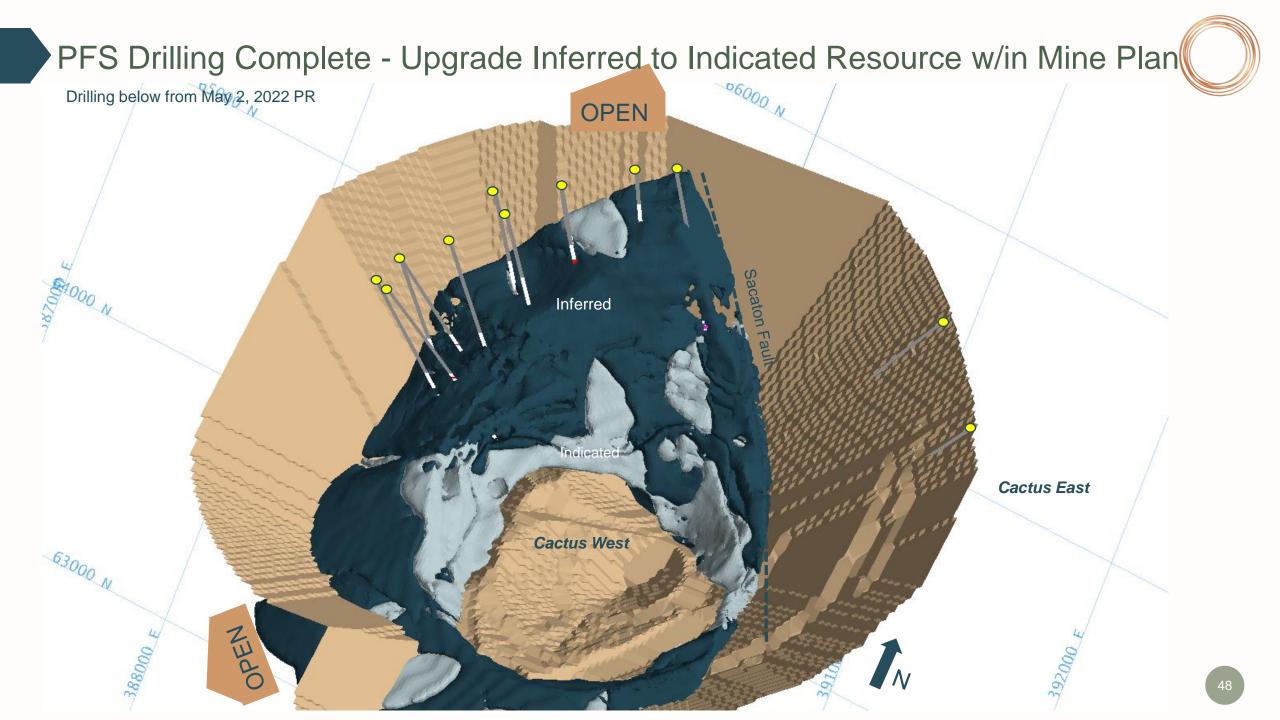
### Significant In-Pit Upside Potential

Mineral Resource Expansion and Process Optimization



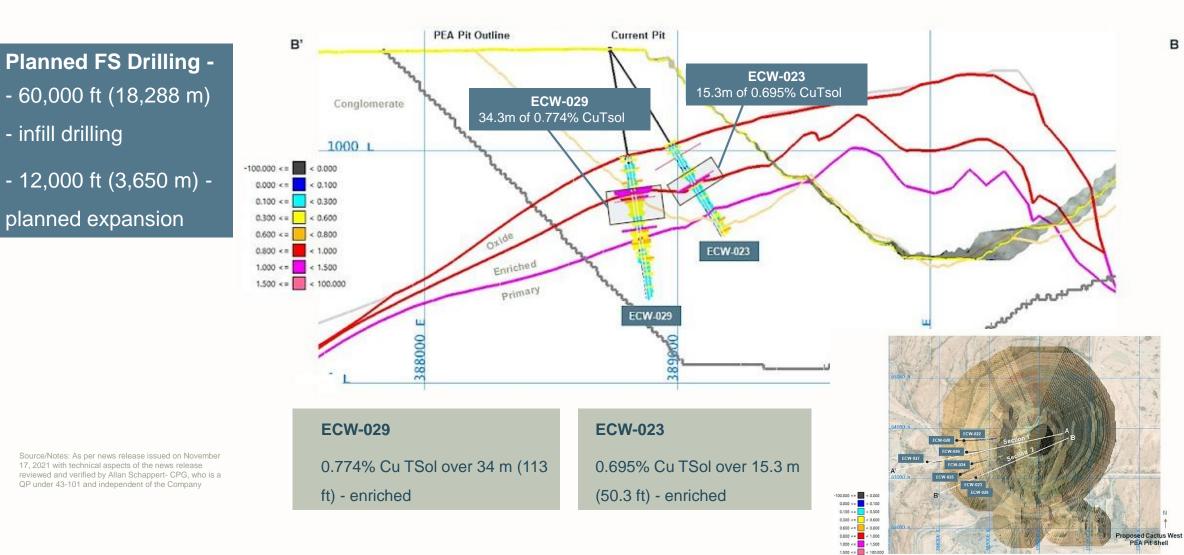


Sources/Notes: Integrated Cactus PEA, Figure 1-2. The Integrated Cactus PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have economic considerations applied to the them that would enable them to be categorised as mineral reserves and there is no certainty that the preliminary economic assessment will be realized. \* Also includes the Underground



# Extending Mineralization Beyond the PEA Pit Outline -



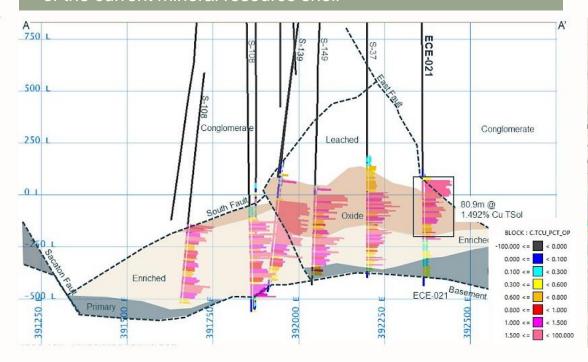


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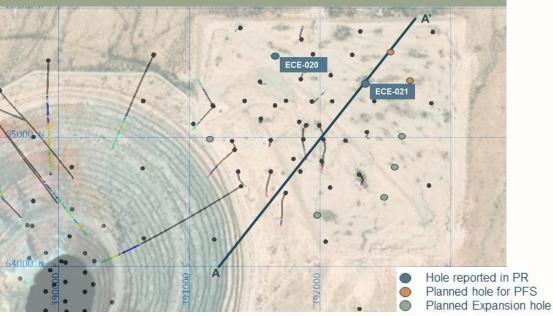
### Expanding Underground Leachable Mineralization Planned 2022 drilling



Hole ECE-021, **extended mineralization** 61 m (200 ft) east of the current mineral resource shell



**Follow up** will be conducted to confirm the continuity of the high-grade zone to the north and east adjacent to the East fault.



Leachable material is considerably thicker and higher grade than predicted in the area at 99.1 m (325 ft) @ 1.28% Cu TSol (total soluble) vs 48.8 m (160 ft) @ 0.54% Cu TSol. Mineralization is open 122 m (400 ft) north, towards the NW trending East Fault

Source/Notes: As per news release issued on December 7, 2021 with technical aspects of the news release reviewed and verified by Allan Schappert- CPG, who is a QP under 43-101 and independent of the Company

### Potential to Expand Existing Mineral Resource Base



Mineral Resource Category and Type <sup>(2)</sup>	Tons (kt)	CuT (%)	Tsol (%)	Tsol_lb (klbs)	
		Indicated Resource	e		
Total Leachable (Oxide and Enriched)	73,900	-	0.723	1,065,200	
Primary	77,900	0.350	-	545,500	
Inferred Resource			•		
Total Leachable (Oxide and Enriched)	117,600	-	0.417	979,300	Oxide
Stockpile (Leachable)	77,400	0.169	0.144	223,500	Enriched
Primary	111,300	0.349	-	776,000	Primary

Sources/Notes: 3D Rendering of Table 1-2 of Integrated Cactus PEA. The Integrated Cactus PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have economic considerations applied to the them that would enable them to be categorised as mineral reserves and there is no certainty that the preliminary economic assessment will be realized.

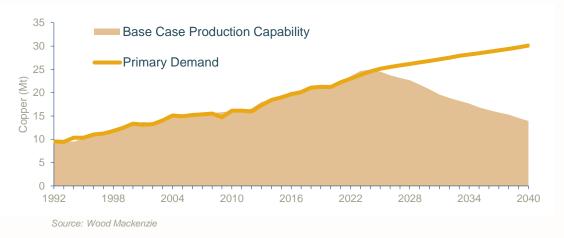
# Strong Copper Market Fundamentals

**Consistent Rising Demand from Key Sectors** 



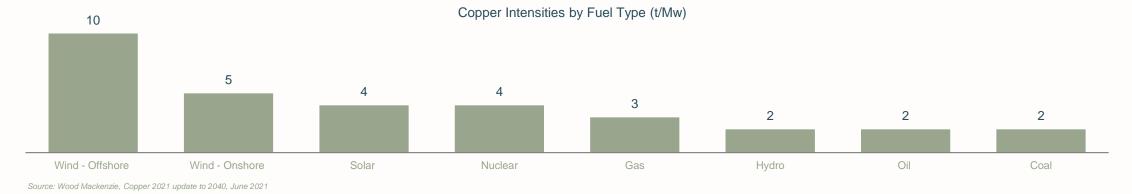
#### Total Copper Consumption Forecast by Industry, 2000-2040 50 45 40 35 (Mt) 30 25 20 15 10 5 0 2040 2010 2015 2020 2025 2030 2035 ■ Construction ■ Electrical Network ■ Industrial Machinery ■ Transport ■ Consumer & General Source: Wood Mackenzie

### Supply Constraints To Meeting Primary Demand in Medium Term



#### **Renewable Energy Future**

### Transition to a renewable energy future provides stable support for long term copper demand



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