

**COPPER** 

Invest in Sustainability



## **Cautionary Information**



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 our management's discussion and analysis for the nine months ended September 30, 2021. 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



lan 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



Alison Dwoskin, CPIR

Director, Investor Relations

+15 years in investor relations. Formerly Manager, Investor Relations of Klondex Mines and Eastmain Resources. Began her career at a Toronto-based IR firm, broadly specializing in mining







#### STRONG SPONSOR SUPPORT

## **TEMBO** CAPITAL

- Investment advisor to three private equity funds focused on junior and mid-tier mining investment opportunities
- · Invests in low cost, quality assets managed by high caliber teams
- · Work collaboratively with their investee companies through a long-term partnership-type approach
- 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



## **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 Chairman of Fortuna Silver and Director of Northern Dynasty Mineral, Blackrock Silver Corp and Amarillo Gold Corp



**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



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 Chairman 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 Chairman 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.

## Capital Structure & Current Ownership

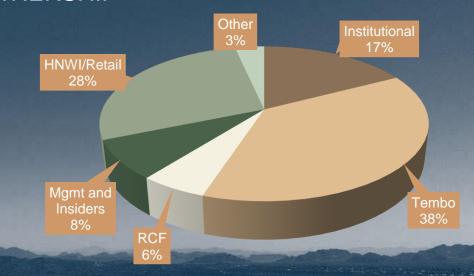


## **CAPITAL STRUCTURE**

Market Capitalization (M)	\$158
Shares Outstanding (M)	70.8
Warrants (M)	6.7
Options (M)	3.0
RSU's (M) <sup>(1)</sup>	0.2
DSU's (M)	0.1
Fully Diluted Share Capital (M)	80.9
Cash, as at November 29, 2021	US\$30m
Debt <sup>(2)</sup>	US\$1m

- (1) The RSUs can be cash settled and therefore may not be issued in stock
- (2) 2020 Loan has converted to 3.18% NSR as of January 2021

## **OWNERSHIP**



## ANALYST COVERAGE









## Why ASCU?



# **Brownfield, Scalable Development Project in Tier 1 Jurisdiction**

- 100% ownership of Arizona-based past producing mine with in place infrastructure
- Multi-billion-pound starter mineral resource base (1):
  - 1.6Blbs of Indicated Resource
  - 1.9Blbs of Inferred Resource
- · Exploration opportunity at Cactus and Parks/Salyer

### **Robust PEA: Low Capital Intensity**(1)(4)

- 1st quartile Capital Intensity of \$2.20/lb Cu produced (USD \$124M Capex)
- 18-year Life of Mine (LOM)
  - Aggregate of 1Blbs of copper produced or ~56Mlbs per year (28 ktpa)
- PEA completed demonstrating robust post-tax project economics:

US\$3.3	5/lb Cu	US\$4.0	5/lb Cu
Post-Tax	Post-Tax	Post-Tax	Post-Tax
NPV <sub>8</sub> :	IRR:	NPV <sub>8</sub> :	IRR:
<b>US\$312M</b>	33%	<b>US\$525M</b>	46%



## 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 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

# Private Landownership = Lower risk permitting process

- State-and-County Led Permitting Framework
  - √ Water Permit received (access to water)
  - Aquifer Protection Permit obtained for Stockpile project with amendments underway<sup>(2)</sup>

#### **Growth Opportunities/Milestones**

- Up to 38,252 m (125,500 ft) of drilling planned in 2022
- Exploration Upside Beyond Cactus:
  - Priority targets along 4 km strike length: Parks/Salyer and NE Extension
  - Currently drilling at 4,000 ft x 4,000 ft target at Parks/Salyer (Planned 22,000 ft (6,700 m) drill program in 2022)
- Cactus infill drilling underway:
  - 24,323 m (79,800 ft) drilling program
  - Resource conversion of large leachable resource base (only 1.3Blbs contained copper in LOM)
- Primary Sulfide Processing Optimization<sup>(3)</sup>:
  - Trade-off studies to determine processing technique for sizeable primary resource base

# The Cactus Project: Demonstrating Low Risk Growth Opportunity



POST-IPO			
COMPLETE	UPCOM	NG	
<ul> <li>Drilling (assays pending)         <ul> <li>Cactus drilling</li> <li>Parks/Salyer drilling</li> </ul> </li> <li>Permitting and Land Acquisition         <ul> <li>Land rezoning approval</li> <li>Land acquisition</li> </ul> </li> </ul>	2022	<ul> <li>OTCQX Listing in the US</li> <li>Technical Studies:     PFS in summer 2022     FS by end of year/early 2023     Parks/Salyer mineral resource</li> <li>Drilling     Cactus drilling     Parks/Salyer drilling</li> </ul>	<ul> <li>Permitting material permits expected prior to construction decision</li> <li>ESG / Net Zero Path</li> <li>Project Financing subject to PFS and FS outcomes</li> </ul>
<ul> <li>Strengthening team</li> <li>Nick Nikolakakis as VP</li> <li>Finance and CFO</li> <li>Sarah Strunk to BOD</li> </ul>	2023	Construction     subject to Project Financing     18-month construction period	
• ESG Focus Appoint Minviro to assess GHG emissions	2024	Production     upon positive construction     decision	

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



- Revitalizing a brownfield site
- Reduced carbon footprint
- Proactive air quality management
- Careful and efficient water stewardship
- Zero discharge operation
- Concurrent reclamation
- Habitat restoration
- Waste management
- Plan for responsible closure



#### **RESPONSIBLE OPERATIONS**

We operate in an environmentally responsible manner, investing in low carbon and water efficient technologies



## A JOURNEY OF RENEWAL

We are commited to mining sustainably:
revitalizing a previously abandoned
site, contributing to local
economic development,
and powering a renewable
energy future

## OUR CORE VALUES

**GOOD GOVERNANCE** 



#### **POSITIVE WORK CULTURE**

We provide meaningful work opportunities and prioritize worker wellbeing and safety

- Meaningful and engaging opportunities
- Positive health and safety culture
- Diverse, equitable and inclusive workplace
- Competitive pay and benefits
- Work-life balance
- Respect for human rights
- Ethical work environment

- Copper in renewable energy
- Copper in the electric vehicle sector
- Growing copper needs in the US

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#### RENEWABLE ENERGY FUTURE

We will produce LME grade copper, a critical component in powering the renewable energy and electric vehicle sectors in the US

#### PART OF THE COMMUNITY

We are commited to open dialog with all stakeholders and supporting local economic development

- Commitment to open dialog
- Respecting local culture and traditions
- · Supporting the local economy
- Leveraging local talent
- Building a talent pipeline
- Sourcing locally
- Supporting programs that improve quality of life in our host communities
- ASCU is actively exploring use of renewable energy for its operations with the goal of becoming a "Net Zero Carbon Emissions" copper producer
- 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
- 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)

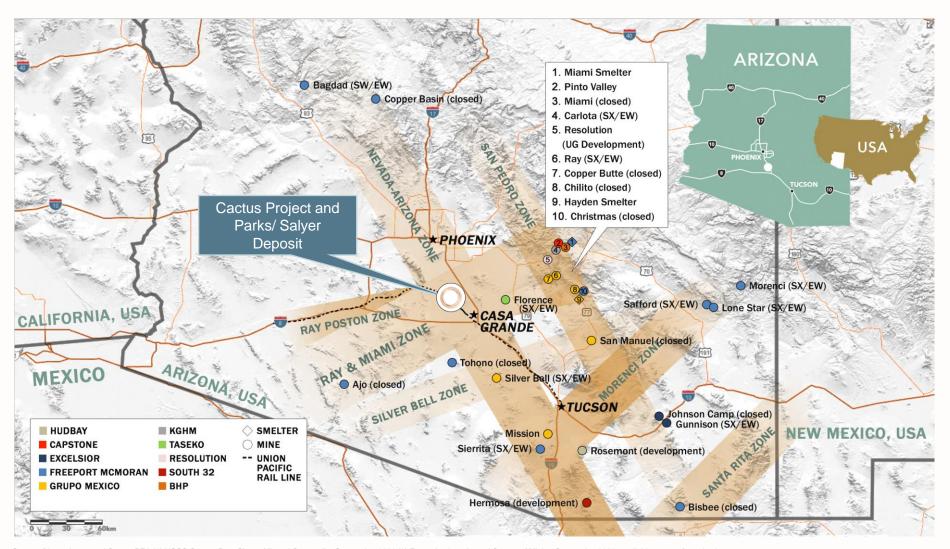
#### Construction

- 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







Arizona is the **USA's** leading copper-producing state which accounted for **74%** of domestic output of copper in 2020<sup>(1)</sup>

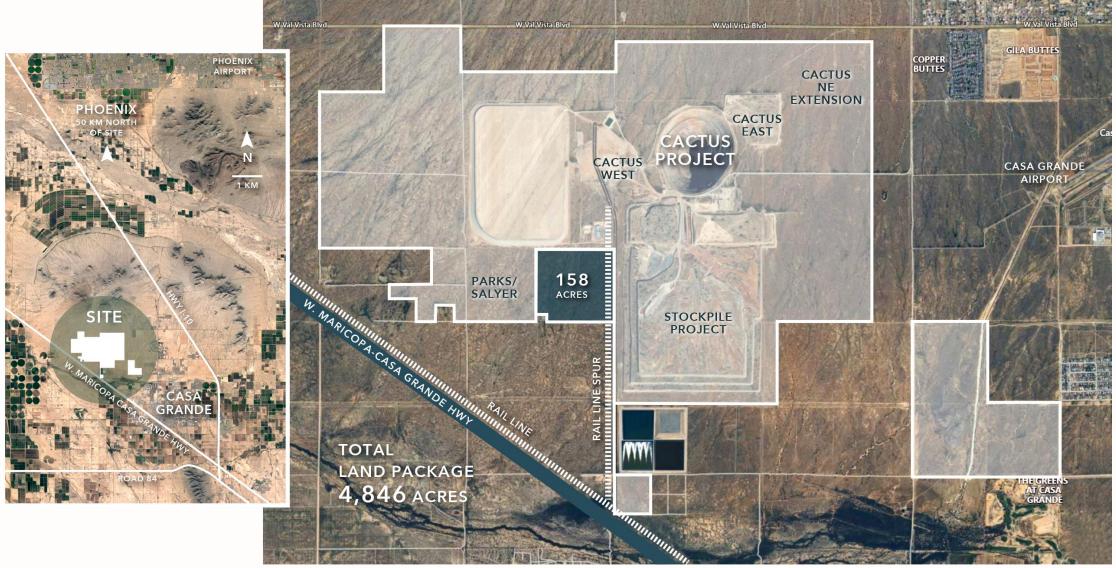


**Arizona ranked No. 2 for the year 2020** in Fraser Institute's Investment Attractiveness Index<sup>(2)</sup>

Sources/Notes: Integrated Cactus PEA (1) USGS Copper Data Sheet- Mineral Commodity Summaries 2021 (2) Fraser Institute Annual Survey of Mining Companies 2020, available at www.fraserinstitute.org

# Cactus Site Overview - 4,846 acres





## 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)

# Key Permits in Place – Streamlined Process with Definitive Timelines

Above-Ground Tank Storage

State Notice of Startup/Miner Registration Number



Required pursuant to a construction decision

Required when starting production

Permit	Permit Office	Status/Expected Completion
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	2022
Construction and Industrial Permits	Pinal County/Casa Grande	2022
Mined Lands Reclamation Permit (MLRP)	AZ State Mine Inspector	2022
Reclamation Bond	AZ State Mine Inspector	2022
Radio Station License, Wireless Communication	FCC	2022
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

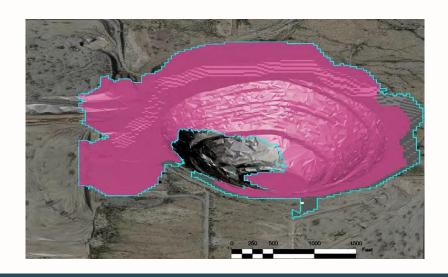
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**ADEQ** 

AZ State Mine Inspector/MSHA

## Open Pit and Underground Mining

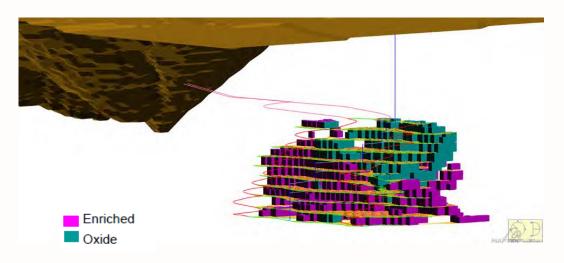








Sources/Notes: Integrated Cactus PEA Figures 16-12 and 16-20



### **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 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

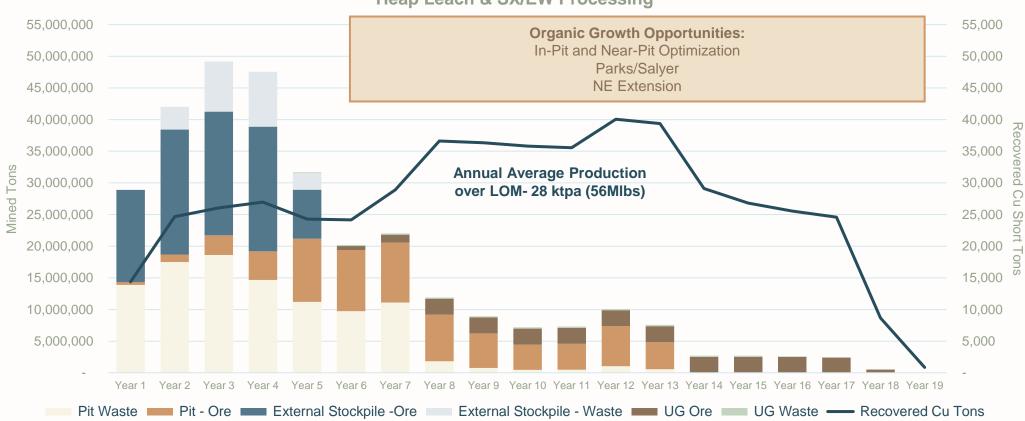
Two horizons in full production, ultimate mining rate of 7,000 tpd. UG mine plan currently only includes oxides & enriched material (no primary material)

## Cactus Production Schedule - Opportunity beyond 40 ktpa (80 Mlbs) Production



#### **CACTUS PRODUCTION SCHEDULE**(1)(2)





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 ktpa with expansion to 35 ktpa 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 Returns from Lowest Capital Intensity vs Peer Group

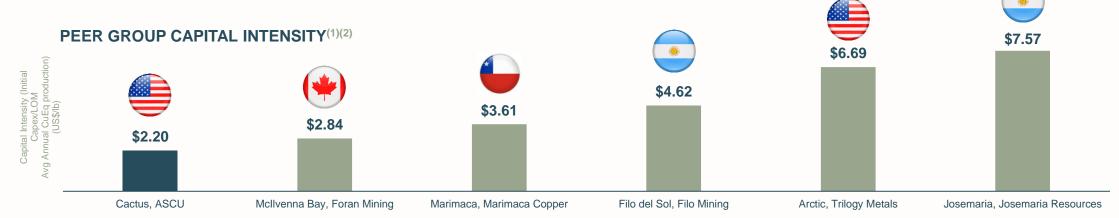






CONSTRUCTION CAPEX BREAKDOWN (US\$M)								
Direct & Indirect Leach Pads, SXEW Total Cost Components Ponds & Pipelines Facility Capital Cost								
Directs Subtotal	\$18.4	\$45.9	\$64.3					
Indirects Subtotal	\$3.1	\$19.1	\$22.2					
Contingency	\$3.0	\$9.0	\$12.0					
Total Process Construction Cost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

- 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, McIlwenna Bay Project, Foran Mining (Pre-feasibility Study for the McIlwenna Bay Project, Report Date: 27 April 2020); Marimaca Project, Marimaca Project, Assessment Marimaca Project Antofagasta, Itale, (Seport Date: Seport Date: Seport Date: Seport Date: Seport Date: Seport Date: Seport Date: Assessment Marimaca Project, Report Date: Seport D

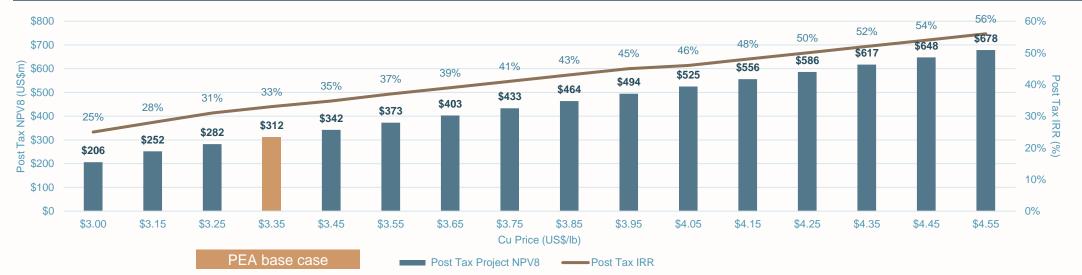
## **Robust Project Economics**



KEV	PRO	IFCT	METRI	$CS^{(1)(2)}$
$\Gamma$	$\Gamma$ $\Gamma$ $\cup$ $\cup$	ノロしょ		

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

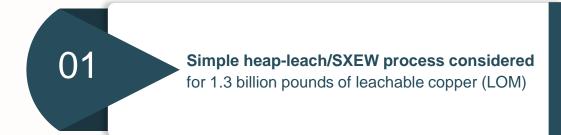
## NPV AND IRR SENSITIVITIES(1)(2)



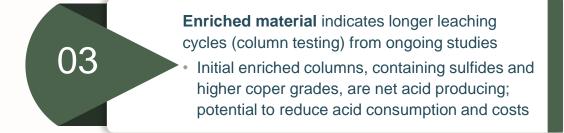
Sources/Notes: (1) Integrated Cactus PEA, Table 1-6, 1-7 (2) ) The Integrated Cactus PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have economic considerations applied to the them that would enable them to be categorised as mineral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

## Positive Initial Metallurgical (Bottle Roll / Column Leach) Testwork









AVERAGE METALLURGICAL PERFORMANCE CRITERIA							
Resource Component	Source Information	Land I aller I Bec		Gross Acid Consumption (lb/ton)	Net Acid Consumption (lb/ton)		
Stockpile							
Oxide	Preliminary Column Tests	90%	40%	22	18		
Open Pit and	Underground						
Oxide	Preliminary Column Tests	90%	72%	22	18		
Enriched	Preliminary Column Tests	90%	72%	22	1		

Sources/Notes: Integrated Cactus PEA Table 1-1

## Multi-Billion Pound Starter Mineral Resource Base





- Leachable resource:
  - 1.1Blbs Indicated
  - 1.2Blbs Inferred
- · Leachable Stockpile included at no mining cost,
  - 224Mlbs contained Cu



#### Mine plan uses material from three sources:

- Stockpile
- Cactus West
- Cactus East



#### Significant organic upside including:

- In-pit/near pit
- Parks/Salyer and NE Extension
- Low-risk resource upgrade/expansion drilling ongoing



- Copper porphyry system: oxide cap, enriched below and primary at the base
- Simple metallurgy:
  - 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)			Tsol_lb (klbs)					
Indicated Resource									
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					
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

# Cactus Leachable-Only Mineral Resource Estimate Grades Significantly Increase Underground



#### OPEN PIT - UNDERGROUND - STOCKPILE - LEACHABLE RESOURCE

Indicated Resource – 1,065,900 Klbs
Inferred Resource –1,211,300 Klbs

Inc	Open Pit & Stockpile Indicated & Inferred Leachable Resource				Underground Indicated & Inferred Leachable Resource				ce
Material Type	Tons (kt)	CuT (%)	Tsol (%)	Tsol_lb (klbs)	Material Tons CuT Tsol Type (kt) (%) (%)				Tsol_lb (klbs)
Indicated Resource				Ind	licated Reso	ource			
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		Inferred Resource				
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 Resource	77,400	0.169	0.144	223,500					

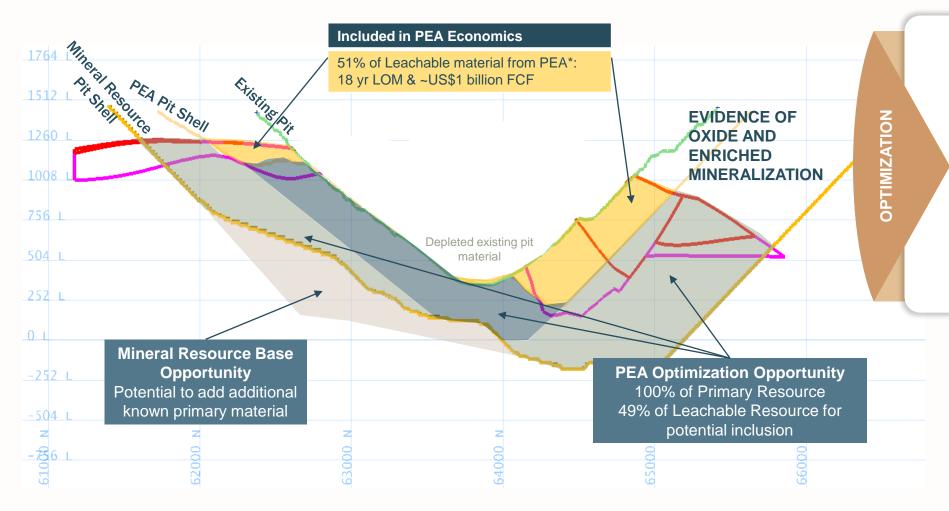
- Current LOM includes leachable material (oxide & enriched ore only, no primary material including 545 klbs Indicated Resources and 776 klbs Inferred Resources)
- UG high-grade contributing to economics
- Almost 50% of current resources comprise of Indicated Resources
- Ability to de-risk resource base in the shorter term through in-fill drilling and achieve robust conversion rates
- Significant in-pit and organic upside potential

Sources/Notes: Integrated Cactus PEA, Tables 14-16 and 14-17

## Significant In-Pit Upside Potential

## Mineral Resource Expansion and Process Optimization





 Low-risk resource conversion drilling underway

 Existing PEA pit shell run at US\$2.27/lb Cu (based on cash flows at US\$3.15/lb)

 PFS level studies to include opportunity to process primary material:

- sulfide leaching
- flotation

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.

<sup>\*</sup> Also includes the Underground

## Extending Mineralization Beyond the PEA Pit Outline -

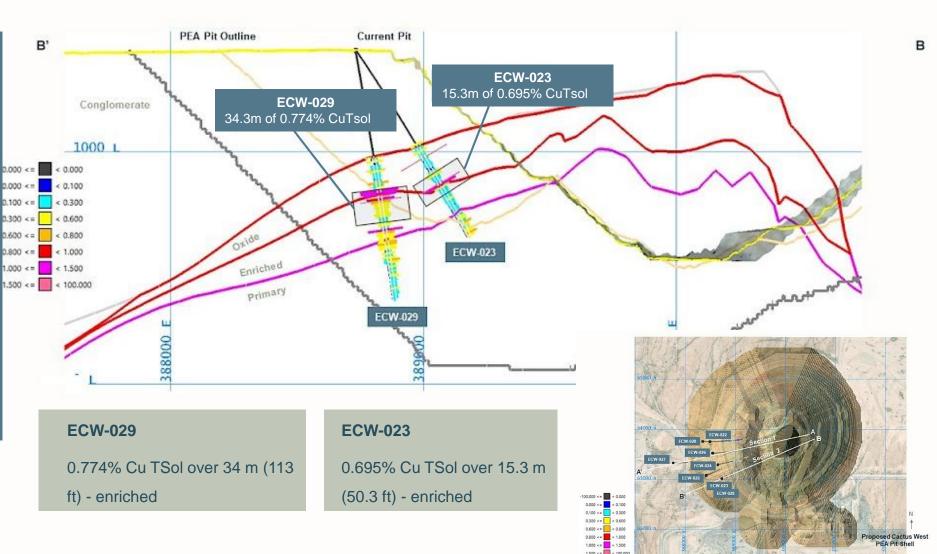


# Planned 2022 Drilling - 10,912m (35,800 ft)

- Initial drilling (~3,000 m) demonstrates continuous leachable mineralization including extensions outwards from the modelled pit shell

- Infill drilling converting historical waste to ore

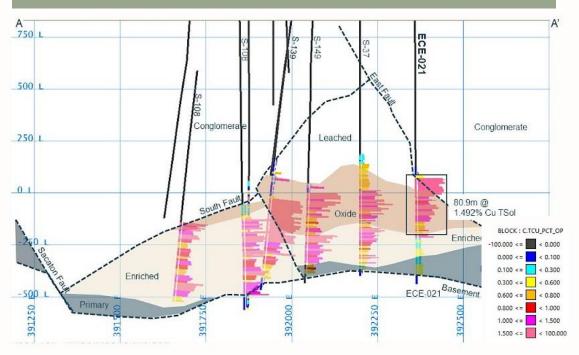
Source/Notes: As per news release issued on November 17, 2021 with technical aspects of the news release reviewed and verified by Allan Schappert- CPG, who is a QP under 43-101 and independent of the Company

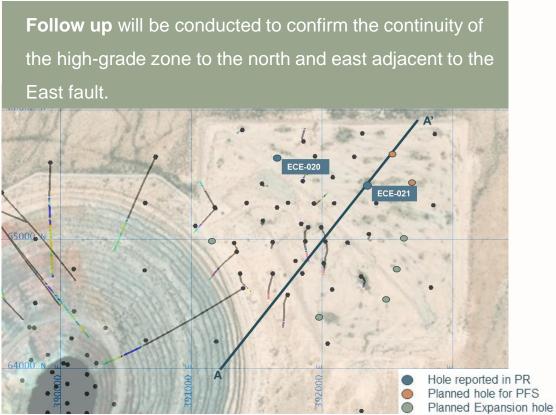


# Expanding Underground Leachable Mineralization Planned 2022 drilling (13,411 m | 44,000 ft)



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



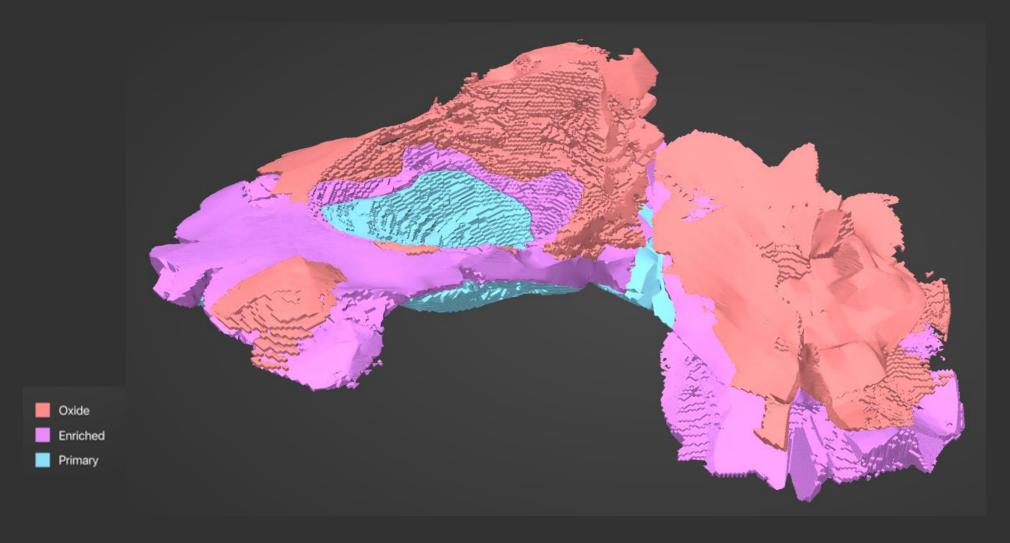


• Leachable material is considerably thicker and higher grade than predicted in the area at 99.1 m (325 ft) @ 1.28% Cu TSol (total soluble) vs 48.8 m (160 ft) @ 0.54% Cu TSol. Mineralization is open 122 m (400 ft) north, towards the NW trending East Fault

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

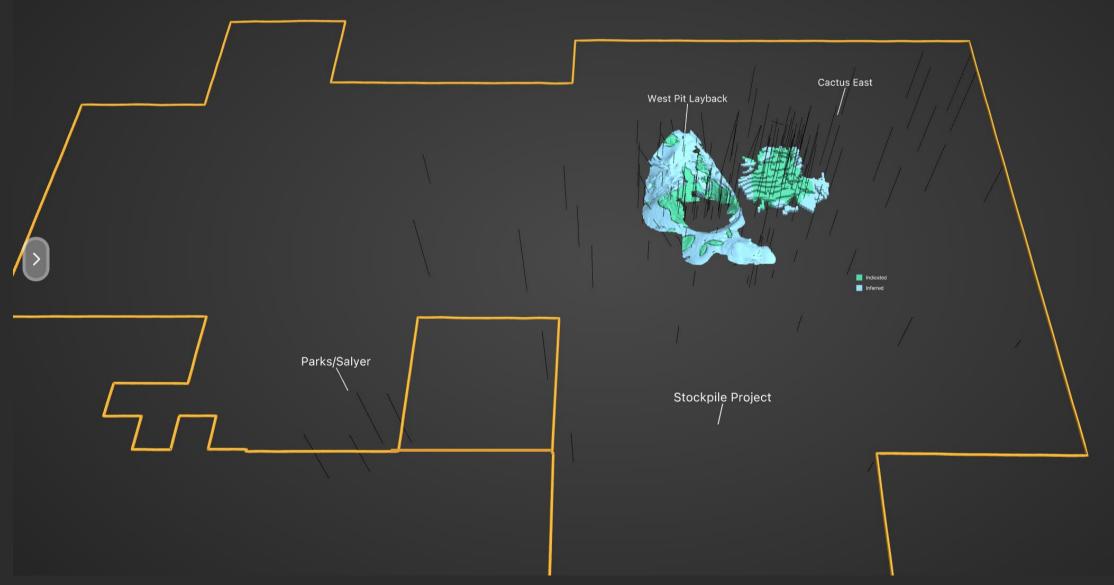




Sources/Notes: 3D Rendering of Table 1-2 of Integrated Cactus PEA. The Integrated Cactus PEA is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have economic considerations applied to the them that would enable them to be categorised as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

# Historic and Current Cactus Mine Project Drilling

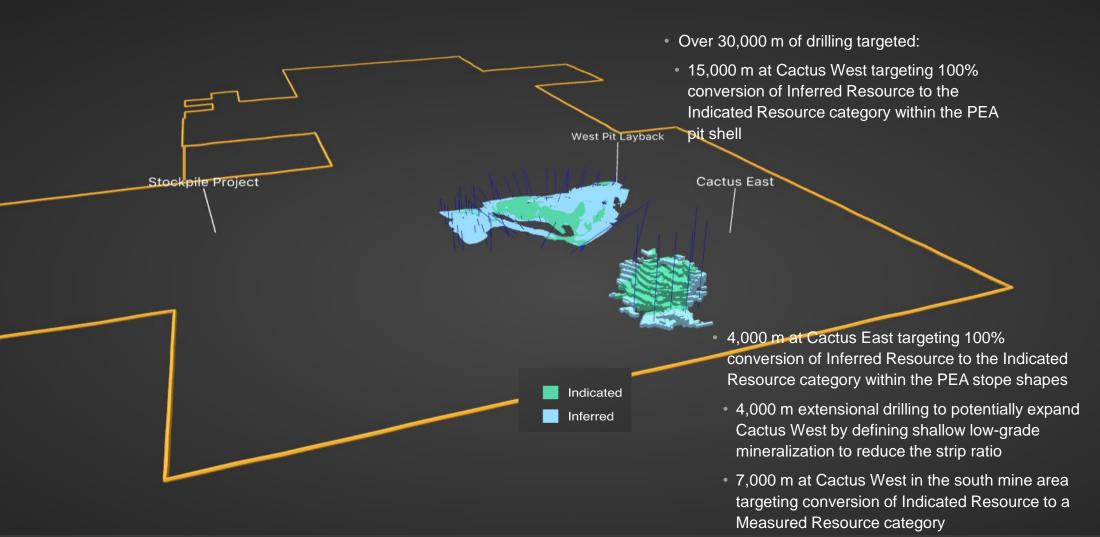




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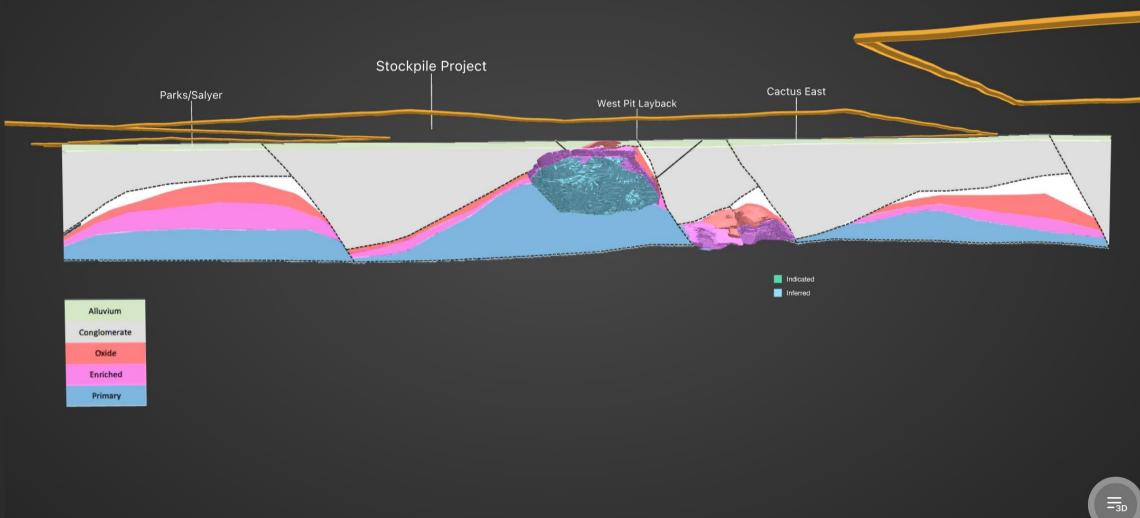
## PFS and DFS Drilling Program





Sources/Notes: 3D representation of drilling plan represented in Table 1-9 and 1-10 of the 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 realised

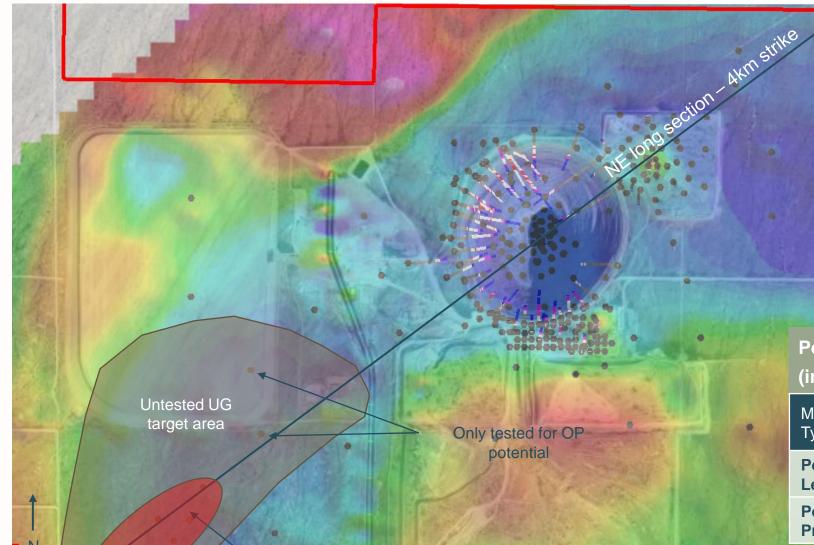
# Mineral Resource Growth Opportunities Beyond Cactus Mine





# Parks/Salyer Exploration Potential





High grades drilled by ASCU and ASARCO to date

- Potential for a scalable UG deposit for further expansion of Cactus
- Recent high grade continuous drill intercepts to date represent a small area of the total potential UG target area
- Target area represents an area the size of Cactus – approx. 1.2 km x 1.2 km (4,000 ft x 4,000 ft)\*
- Target area supported by magnetics, regional drilling results, and ionic leach sampling limited to ASCU owned property

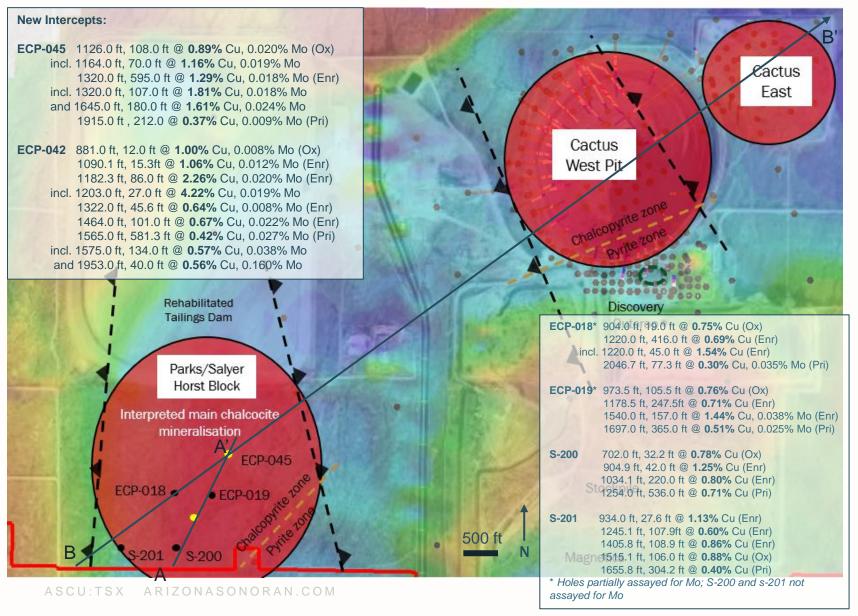
# Potential exploration target on Parks/Salyer (including Leased BCE Land)

Material	Tons	CuT	Tsol	Tsol_lb
Type	(kt)	(%)	(%)	(klbs)
Potential	40,000 -	-	1.05% -	1,000,000 -
Leachable	90,000		1.30%	2,350,000
Potential	8,000 -	0.85% -		150,000 -
Primary	35,000	1.05%		750,000

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

## Organic Expansion Potential – Parks/Salyer





## PARKS/SALYER HIGHLIGHTS



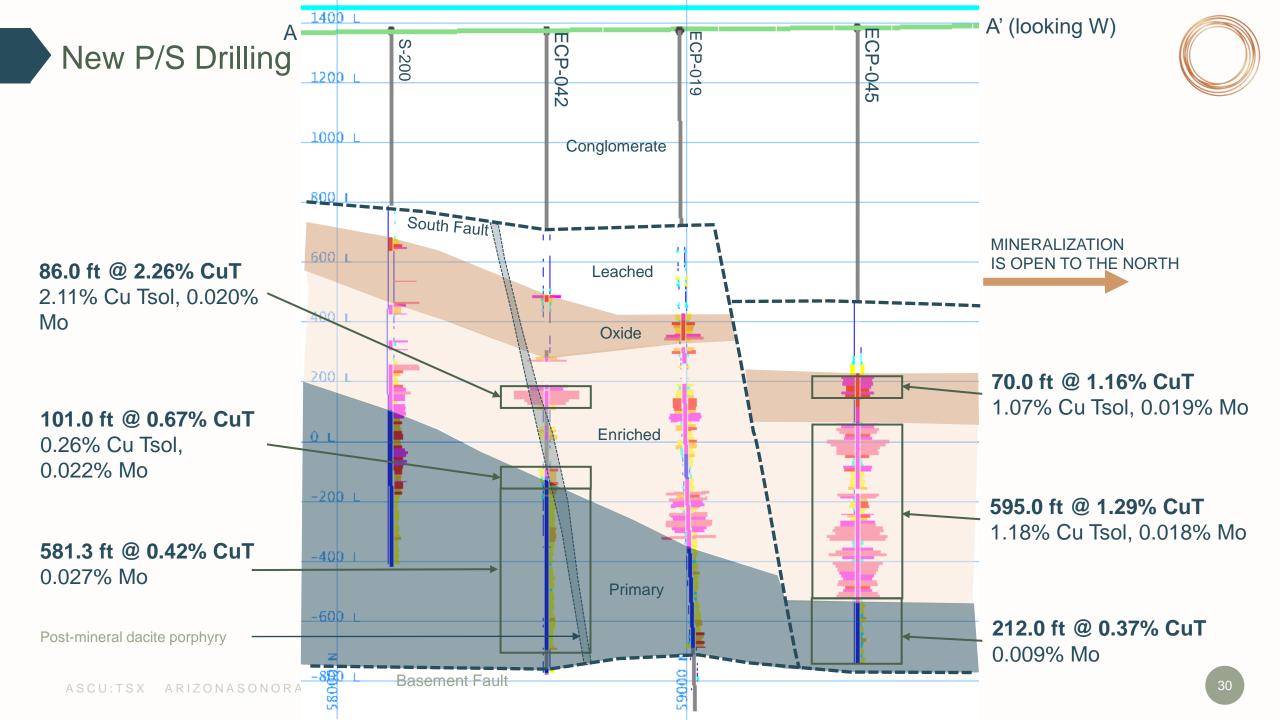
- ✓ Down trend from Cactus, Parks/Salyer exhibits the same geological characteristics
- ✓ Horst structure
- ✓ North of the chalcopyrite/ pyrite alteration boundary
- ✓ Coincident with historic IP anomalies



- Drilling indicates mineralization improves to the north
- ✓ Minimum of 6,706 m (22,000 ft) drill program planned in 2022
- Committed work program for BCE implies further 35,000 - 40,000 ft of drilling in the short term

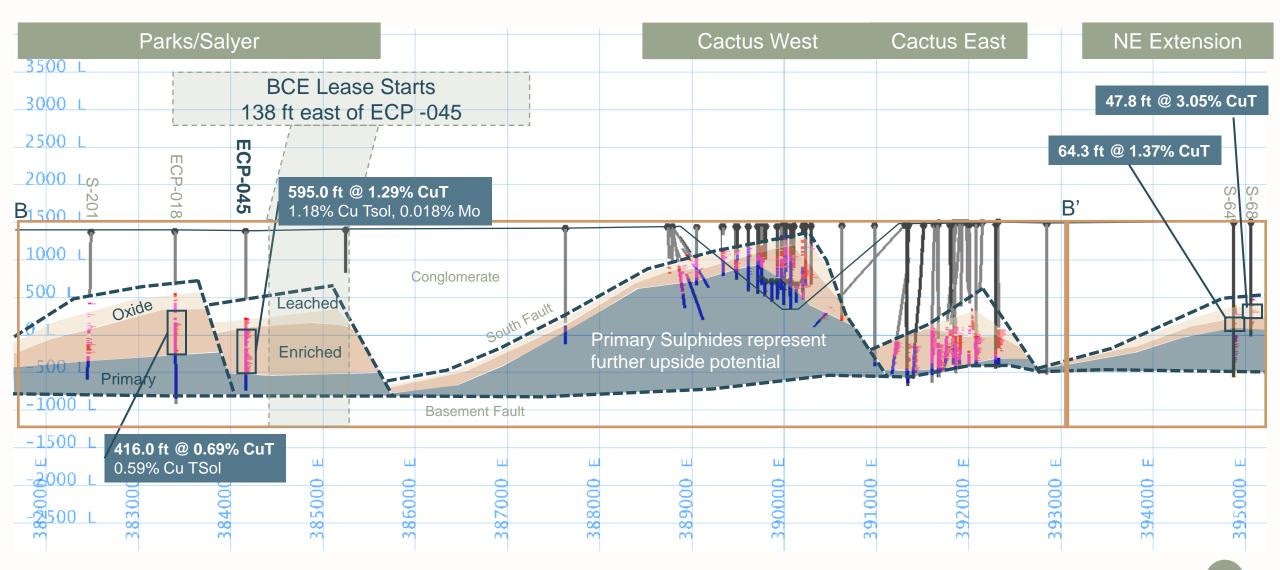


 Opportunity for major discovery within close proximity to Cactus



# Consolidating 4 km Strike Length Creating Opportunities for Scalable Leachable Production Base





# ECP-045



Zone	Metres			Feet			Grade (%)		
	from	to	length	from	to	length	CuT	Tsol	Мо
enriched	402.3	583.7	181.4	1,320.0	1,915.0	595.0	1.29	1.18	0.018



Core from: 1,342.0 ft – 1,350.8 ft





Zone	Metres			Feet			Grade (%)		
	from	to	length	from	to	length	CuT	Tsol	Мо
enriched	360.4	386.6	26.2	1,182.3	1,268.3	86.0	2.26	2.11	0.020
incl.	366.7	374.9	8.2	1,203.0	1,230.0	27.0	4.22	3.78	0.019





Core from: 1,194.8 ft - 1,203.8 ft

Core from: 1,203.8 ft - 1,212.5 ft

## Benchmarking ASCU to Copper Developers



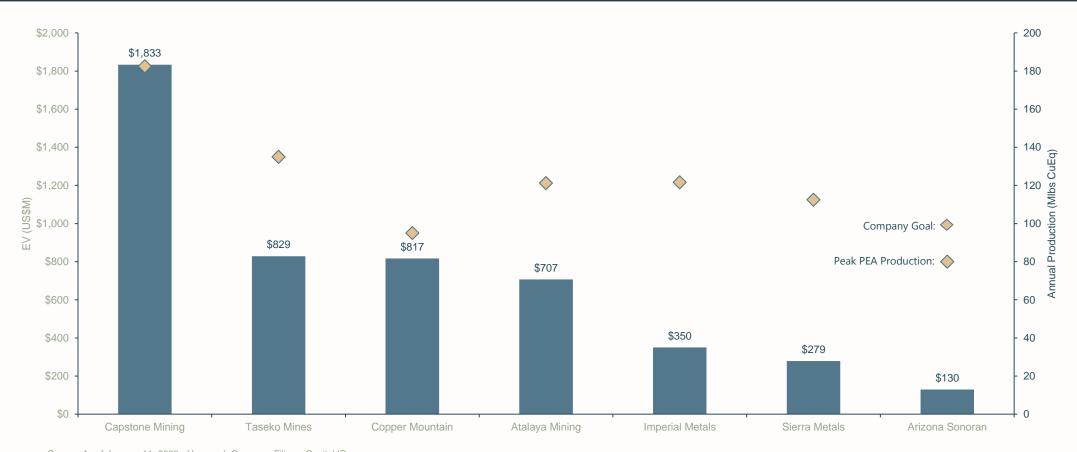
	ARIZONA SONORAN	FORAN MINING CORPORATION	NGEX MINERALS	MINING	marimaca	<del>u</del>	TRILOGY modul no
Market Capitalization	\$150	\$468	\$258	\$1,485	\$319	\$549	\$296
Asset Name	Cactus	McIlvenna Bay	Los Helados	Filo del Sol	Marimaca	Kay	Arctic
Economic Study Level	PEA	PFS	Resource	PFS	PEA	Historic	FS
Development Type (Greenfields or Brownfields)	Brownfields	Brownfields	Greenfields	Greenfields	Greenfields	Brownfields	Greenfields
Jurisdiction	Arizona	Saskatchewan	Chile	Argentina	Chile	Arizona	Alaska
Fraser Institute Policy Perception Index (Rating Out of 100)	96	95	83	75	83	96	93
Measured & Indicated Attributable Resource (Mlbs CuEq)	1,611	2,096	14,609	6,019	1,536	-	2,151
Inferred Attributable Resource (Mlbs CuEq)	1,979	337	4,658	2,116	787	-	124
Mine Life (Years)	18	9	-	13	12	-	12
Annual Attributable LOM Production (Mlbs CuEq Payable)	56	71	-	274	79	-	135
LOM C1 Cash Cost (US\$/lb CuEq)	\$1.55	\$1.92	-	\$1.23	\$1.22	-	\$1.46
Capital Intensity (US\$/lb CuEq)	\$2.20	\$2.84	-	\$4.62	\$3.61	-	\$6.69
Headline After-Tax IRR (%)	33%	19%	-	23%	34%	-	27%
Headline After-Tax NPV (US\$M)	\$312	\$113	-	\$1,280	\$524	-	\$1,135
Economic Study Long-Term Copper Price (US\$/lb Cu)	\$3.35	\$2.82	-	\$3.00	\$3.15	-	\$3.00

Source: S&P Capital IQ. Company Filings. Integrated Cactus PEA dated effective August 31, 2021. Fraser Institute Annual Survey of Mining Companies 2020, available at www.fraserinstitute.org. Pre-feasibility Study for the Filo del Sol Project; Report Date: April 27, 2020. Foran Mining news release dated October 14, 2021 "Foran Announces 70% Increase in Indicated Resources at McIlvenna Bay". 43-101 Technical Report Kay Mine Project Yavapai County Arizona, USA, Report Date: May 29, 2019. Arctic Feasibility Study Alaska, USA; Report Date: August 20, 2020. Preliminary Economic Assessment Marimaca Project Antofagasta, II Region, Chile; Report Date: August 4, 2020. Feasibility Study for the Josemaria Copper-Gold Project, San Juan Province, Argentina; Report Date: September 28, 2020. Technical Report on the Los Helados Porphyry Copper-Gold Deposit Chile; Report Date: 6 August 2019. 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

## ASCU Production in 2024 is Poised to Benefit from Current Copper Cycle



#### Global Junior Copper Producer Peers – Enterprise Value & Production



Source: As of January 11, 2022 - Haywood, Company Filings, Capital IQ

<sup>(1)</sup> 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

## Key Investment Highlights



- Our Core Values Are Supported by an ESG Framework
- 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



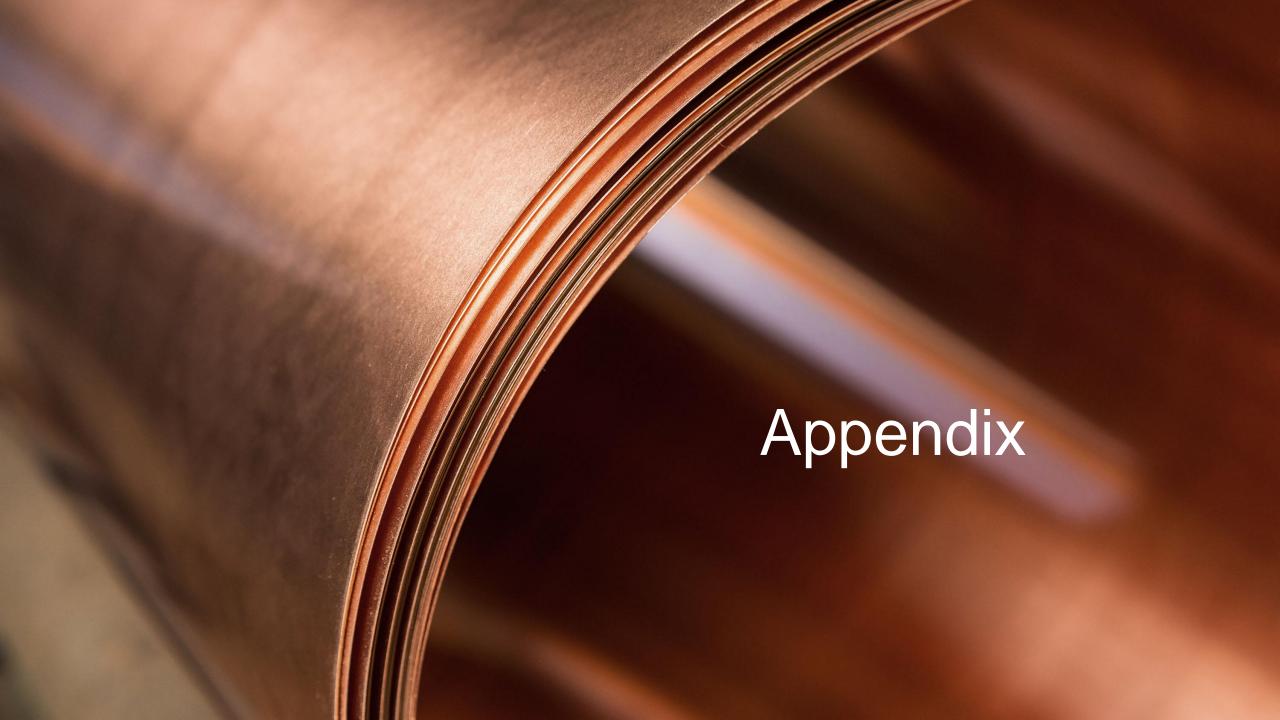
### Alison Dwoskin, CPIR

Director, Investor Relations adwoskin@arizonasonoran.com +1 (647) 233-4348 (cell)

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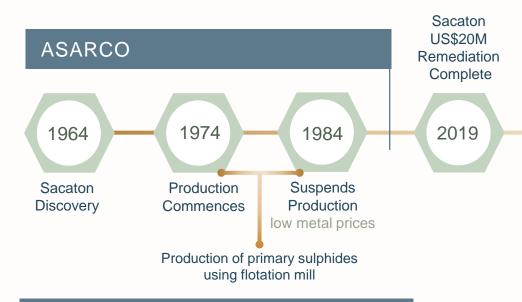
www.arizonasonoran.com | www.cactusmine.com





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





## ARIZONA SONORAN COPPER COMPANY

2020

on Stockpile

Purchases • Issues PEA •

- Changes name
   Raises US\$25M
   to Cactus Mine
  - Acquires Parks/Salyer
  - Commencement of permitting process
  - Validates historic holes and data
  - Resource definition drilling complete

 Declaration of maiden Mineral Resource Estimate for Cactus

2021

- Integrated PEA with Cactus and Stockpile projects
- Water Permit and APP Stockpile Permit obtained
- IPO Gross Proceeds Raised of C\$45m
- Further land package consolidation

 PFS and FS Studies expected 2022

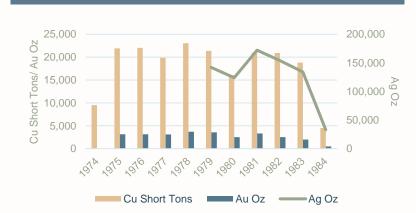
Next

Steps

- Permitting in process
- Project Financing subject to PFS and FS outcomes
- Construction subject to PFS and FS outcomes. 18-month construction period
- Production

   upon positive
   construction decision

#### **HISTORICAL PRODUCTION (Concentrate)**



ASCU:TSX ARIZONASONORAN.COM

2019

Sacaton

Begins drilling

# General Site Arrangement

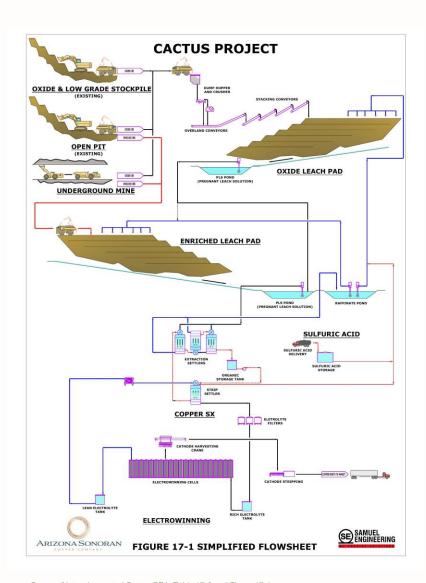




Sources/Notes: 3D rendering of Figure 16-10 of Integrated Cactus PE/

## 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

## AVERAGE LEACH CYCLE TIMES BY MATERIAL TYPE

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		

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

# Integrated Cactus PEA Summary

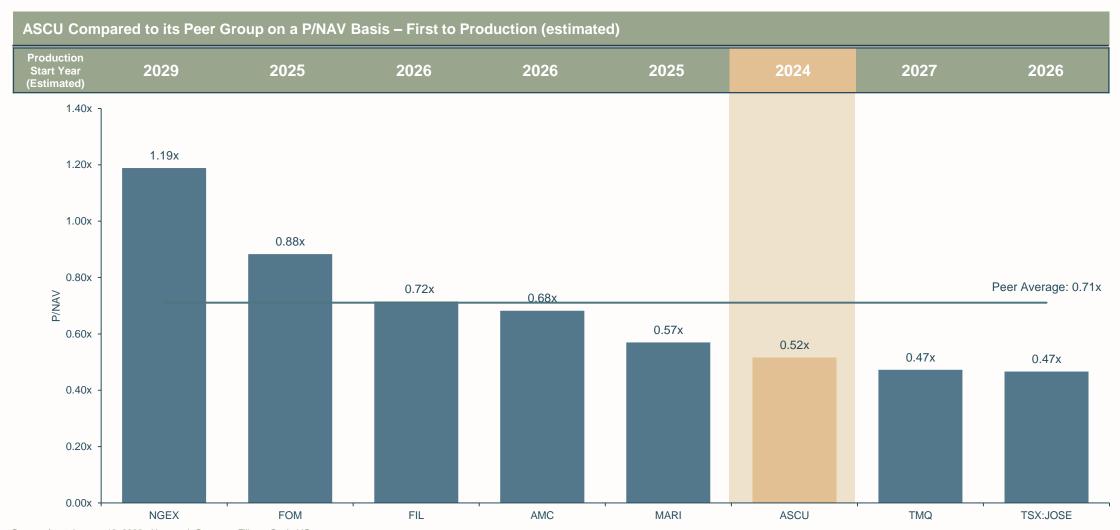


Assumption / Outcome	Value / Results <sup>(1)</sup>		
Copper Price	US\$3.35/lb		
Total Mineralized Material Moved	179 Mt		
Annual Average Processing Rate Over LOM	10 Mtpa		
Average December Detect Over LOM	Stockpile Project: CuAS: 90%, CuCN: 40%		
Average Recovery Rates Over LOM	<b>OP / UG:</b> CuAS: 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 reserves and there is no certainty that the preliminary economic assessment will be realised (2) Tonnage is denoted in short tons

# ASCU | Post IPO Summary: Peer Group Benchmarking





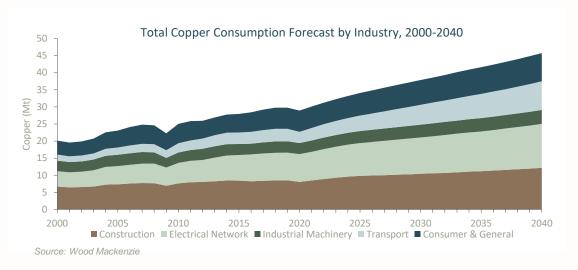
Source: As at January 12, 2022 - Haywood, Company Filings, Capital IQ

JOSE has been acquired by Lundin Mining with 29% to Josemaria's 10-day VWAP.

## **Strong Copper Market Fundamentals**





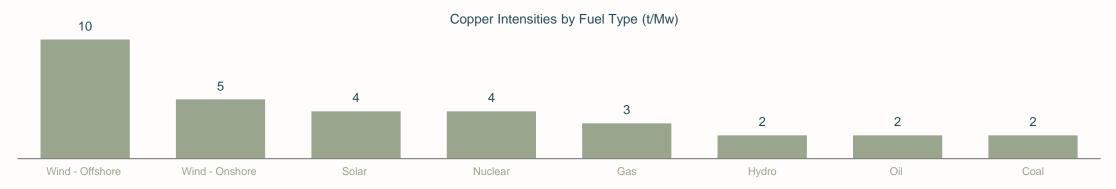


# **Supply Constraints To Meeting Primary Demand in Medium Term**



## **Renewable Energy Future**

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



Source: Wood Mackenzie, Copper 2021 update to 2040, June 2021