



**WORLD COPPER LTD.**

TSXV: WCU OTCQB: WCUFF

**Investor  
Presentation**  
Fall 2021



## Forward Looking &

# Cautionary Statements

This presentation contains forward-looking statements and forward-looking information (collectively, “forward-looking statements”) within the meaning of applicable Canadian and US securities legislation. All statements, other than statements of historical fact, included herein including, without limitation, statements regarding any potential increase in shareholder value through the acquisition of undervalued precious metal deposits for development, joint venture or later disposition, the potential to partner with mine developers to achieve production at any of the Company’s properties (existing or future); the potential for the capital costs associated with any of the Company’s existing or future properties to be low; the potential for the Company to outline resources at any of its existing or future properties, or to be able to increase any such resources in the future; concerning the economic outlook for the mining industry and the Company’s expectations regarding metal prices and production and the appropriate time to acquire precious metal projects, the liquidity and capital resources and planned expenditures by the Company, the anticipated content, commencement, timing and cost of exploration programs, anticipated exploration program results and the anticipated business plans and timing of future activities of the Company, are forward-looking statements. Forward-looking statements are based on a number of assumptions which may prove incorrect, including, but not limited to, assumptions about the level and volatility of the price of gold; the timing of the receipt of regulatory and governmental approvals; permits and authorizations necessary to implement and carry on the Company’s planned exploration programs at its properties; future economic and market conditions; the Company’s ability to attract and retain key staff; and the ongoing relations of the Company with its underlying lessors, local communities and applicable regulatory agencies.

Accordingly, the Company cautions that any forward-looking statements are not guarantees of future results or performance, and that actual results may differ, and such differences may be material, from those set out in the forward-looking statements as a result of, among other factors, variations in the nature, quality and quantity of any mineral deposits that may be located, the Company’s inability to obtain any necessary permits, consents or authorizations required for its activities, material adverse changes in economic and market conditions, changes in the regulatory environment and other government actions, fluctuations in commodity prices and exchange rates, the inability of the Company to raise the necessary capital for its ongoing operations, and business and operational risks normal in the mineral exploration, development and mining industries, as well as the risks and uncertainties disclosed in the Company’s most recent management discussion and analysis filed with various provincial securities commissions in Canada, available at [www.sedar.com](http://www.sedar.com). The Company undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after the date of this presentation or to reflect the occurrence of unanticipated events except as required by law. All subsequent written or oral forward-looking statements attributable to the Company or any person acting on its behalf are qualified by the cautionary statements herein.

John Drobe, P.Geo., a Qualified Person as defined by National Instrument 43-101, has reviewed and approved the technical information contained in this presentation and has approved the disclosure herein. John Drobe is not independent of the Company, as he holds common shares of the Company.

# World Copper

Fall 2021

## AGENDA

### 1. World Copper Introduction

2. Copper Outlook: Supply Crunch And Growing Demand

3. World Copper Chile: Escalones and Cristal projects

4. World Copper Arizona: Zonia project

## Introduction to

# World Copper

Combining two **exciting** copper projects in Chile and an **advanced project** in Arizona.

## 🛠️ Chile

- The **Escalones porphyry-skarn** project southeast of Santiago has **inferred copper oxide resources**.
- Tremendous **upside exploration potential** in supergene and skarn extension targets.
- The **Cristal property** in northern Chile is **in a prospective porphyry copper belt** and with high potential for additional large porphyry discoveries.

## 🛠️ Arizona

- The **advanced Zonia copper-oxide porphyry project** in central Arizona is 100% owned, in a favourable mining jurisdiction, with good **access & infrastructure**
- **Fast-track to production**: the PEA-level mine plan is entirely **on private land** and with minimal required permitting

## 🛠️ The Company

- The World Copper team has a **unique skill** to navigate the mining sector **in Chile and the US**.
- World Copper has substantial **capital market experience** and broad-based **shareholder and investor support**.
- Both Arizona and Chile are amongst the world's **most mining friendly and stable jurisdictions**.



A network of contacts and an

# Experienced Chilean Team

The WCU team has created a vast network of contacts in Chile thanks to the accumulated Chilean Copper mining operations experience of Mr. Awad, Mr. Frérait and Mr. Burns.



- **Marcello Awad** has unparalleled access to Chilean and South American deal-flow, as there are M&A opportunities where the present owners of certain copper projects do not have the wherewithal to advance the projects either financially or managerially.
- **Roberto Frérait** has been prominent in the Chilean mining industry for over 3 decades, and has taken early retirement from his post as Exploration Manager for CODELCO Chile. His experience and knowledge of the Chilean industry is an incredibly valuable resource.
- **Patrick Burns** has been an active part of the flourishing Chilean Copper industry and was monumental to the discovery and exploration of the Escondida copper mine, which is currently the largest copper mine in the world.

# Management



## Marcelo Awad | Executive Director, Chile

- Mr. Awad has a long and distinguished career in the mining industry
- 18 years with Codelco, most recently as Executive Vice President
- 16 years with Antofagasta Minerals S.A., the Mining Division of Antofagasta Plc, including 8 years as CEO from 2004 to 2012, a period of significant growth for Antofagasta
- In the 2011 Harvard Business Review, Mr. Awad was ranked as the number one CEO in Chile, 18th in Latin America and 87th in the world



## Nolan Peterson | CEO

- Mr. Peterson is an engineer and finance executive experienced with project development, corporate finance and project management in the mining industry.
- He recently served in senior management at TMAC Resources Inc., working to develop the Hope Bay project; prior to its acquisition by Agnico Eagle Mines.
- He holds an MBA, a BAsC in Metallurgical Engineering, is a CFA® Charterholder, and a Professional Engineer in BC & Ontario.



## Patrick Burns | President

- A Canadian geologist with over 40 years experience throughout the Caribbean, Central and South America
- Patrick was directly involved in the discovery of the Escondida porphyry copper deposit in Chile, as well as the Escondida Norte and Zaldivar deposits and was the first Project Manager of all three
- He has been involved in publicly traded mining companies predominantly in Chile for 35 years



## John Drobe | Head Geologist

- Mr. Drobe is a geologist with over 30 years' experience specializing in porphyry copper-gold, epithermal and skarn deposits throughout the Americas.
- Mr. Drobe has a deep experience with organizing and managing exploration campaigns, particularly in South America, which he has participated in the exploration and development of projects in Peru, Argentina, Ecuador and Chile.



## Krzysztof Napierala | GM, Chile

- Mr. Napierala is a professional with 12 years of experience in mining and manufacturing industries, with a strong background in business development, exploration, and the management and restructuring of mining operations.
- He spent over 10 years with the KGHM Group, one of the world's largest copper and silver miners, where he started as an associate in the exploration and development team, supporting the company's business development activities.



## Cesar Jil | Operations Manager, Chile

- Mr. Jil most recently served as Manager of Lithium Extraction Technologies of Albemarle's Lithium and Advanced Materials global business
- He is an expert in the latest technologies and methodologies regarding lithium beneficiation from natural brines
- Has worked in the Atacama, Antofalla and Silver Peak salt lake beds and increased lithium recovery yields by approximately 30%.



## Marla Ritchie | Corporate Secretary

- Ms. Ritchie brings over 25 years' experience in public markets working as an Administrator and Corporate Secretary specializing in resource based exploration companies
- Currently, she is also the corporate secretary for several companies, including International Tower Hill Mines Ltd. and Trevali Mining Corporation.

# Directors & Advisory



## Henk van Alphen | Chairman

- Mr. van Alphen founded Wealth Minerals in 2005
- More than 30 years of experience in the mining industry. He has been a key player in companies such as Corriente Resources, Cardero Resources, Trevali Mining, Balmoral Resources, and International Tower Hill
- Over \$1 B raised in various financial transactions via Mr. van Alphen's involvement



## Roberto Frérait | Director

- Mr. Frérait is a seasoned mining geologist with over 30 years of experience in the Chilean mining industry
- Has previously served as the Exploration Manager for CODELCO
- Professor of "Fundamentals of Mining Business", module for the Mining Industry Version MBA at University of Chile.



## Patrick Burns | Director

- A Canadian geologist with over 40 years experience throughout the Caribbean, Central and South America
- Patrick was directly involved in the discovery of the Escondida porphyry copper deposit in Chile, as well as the Escondida Norte and Zaldívar deposits and was the first Project Manager of all three
- He has been involved in publicly traded mining companies predominantly in Chile for 35 years



## Tim McCutcheon | Director

- Mr. McCutcheon is a capital markets professional and corporate manager with over 20 years' business experience
- In 2006 he was a founder of DBM Capital Partners, a boutique mining resource merchant bank with AUM of \$130M and \$100M completed M&A transactions
- Mr. McCutcheon has been a director/CEO of several public Emerging Market natural resource companies with assets in Russia, Kyrgyzstan, Slovakia, Mali and Ghana.



## Daniel MacNeil | Technical Advisor

- Mr. MacNeil is an Economic Geologist specializing in the Precious & Base Metals sectors, with over 20 years of experience from continental-scale project generation to in-mine resource expansion in the Americas, Europe, Eastern Europe and the Near East.
- His expertise includes project evaluation, target and opportunity identification, exploration strategy, district entry strategy, business development, strategic evaluation of geologic terranes and execution of target testing.

# World Copper

Fall 2021

## AGENDA

1. World Copper Introduction

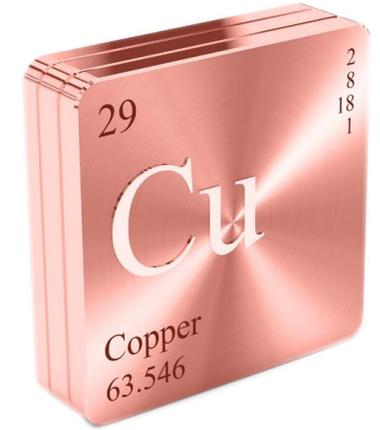
**2. Copper Outlook: Supply Crunch And Growing Demand**

3. World Copper Chile: Escalones and Cristal

4. World Copper Arizona: Zonia

Why

# Copper



1

**75%** of copper demand is for conducting electricity.

2

**50%** of final energy will be delivered using copper by 2040, leading to a **doubling** of global copper demand.

3

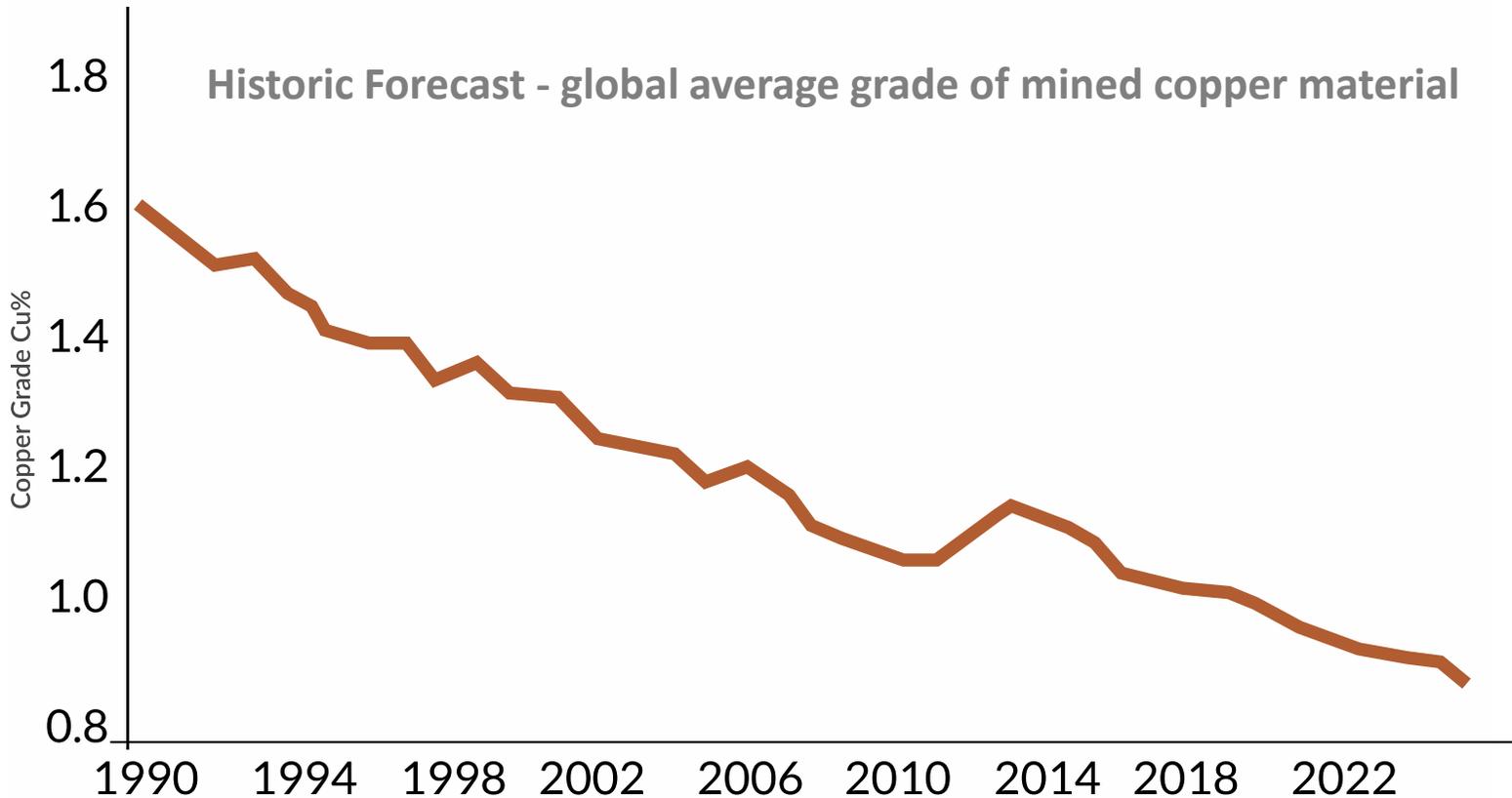
Over **20 Blbs** of additional copper supply will be required in 2040 just to meet the copper demand for electric vehicles.

4

Although **\$17 B** was spent on **exploration** 1990-2017, there have been **few new discoveries**.

Difficult to Maintain

# Production



Source: Brook Hunt

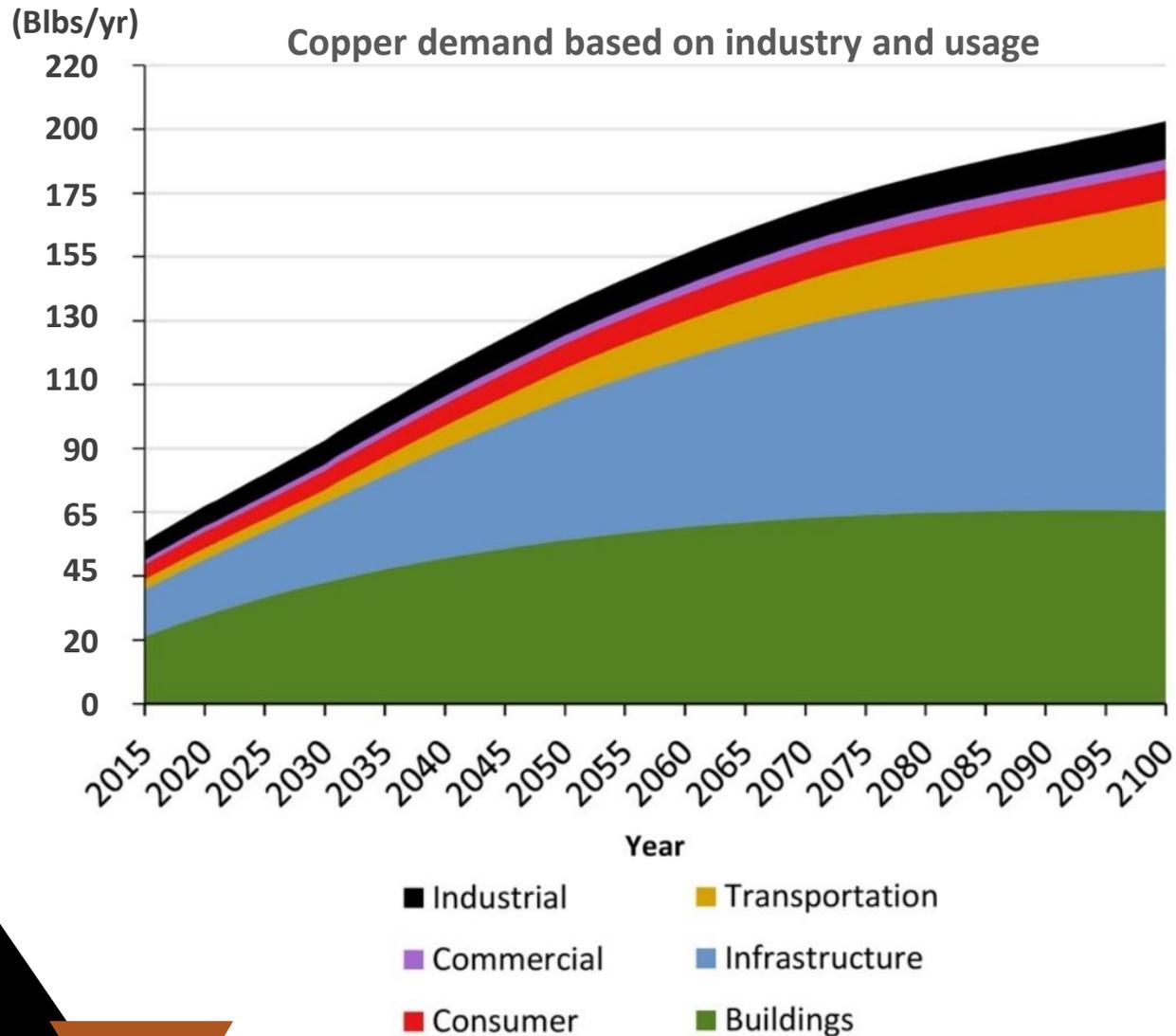
- The average **grade mined** by the top 15 producers has decreased **from 1.20% to 0.72%** Cu in this decade.
- In 2007 Escondida's (world largest copper mine) copper grade was **1.72%**, and now its remaining grade is a mere **0.52%**.
- Worldwide average **reserve grades** have fallen to **0.40% Cu**, and what was once considered low-grade is now considered average.
- The copper **industry needs to spend** upwards of **\$100 B to close** what could be an annual supply **deficit of 12.5 Blbs** by 2030.
- Over **200** copper mines are expected to **run out of ore** before 2035.
- In **Chile, copper grades** have **declined** about **25%** in the past 10 years to 0.67% CuT in 2019

Source: *The World Will Need 10 Million Tons More Copper to Meet Demand, Bloomberg (March 2021)*  
*Copper, the most critical metal, mining.com (December 2020)*

*Copper is 'the new oil' and could reach \$15,000 by 2025 as the world transitions to clean energy, Goldman Sachs says (April 2021).*  
*Prepare to Profit from the Coming Copper Crunch by Jay Martin (June 2020).*

Unparalleled

# Future Demand

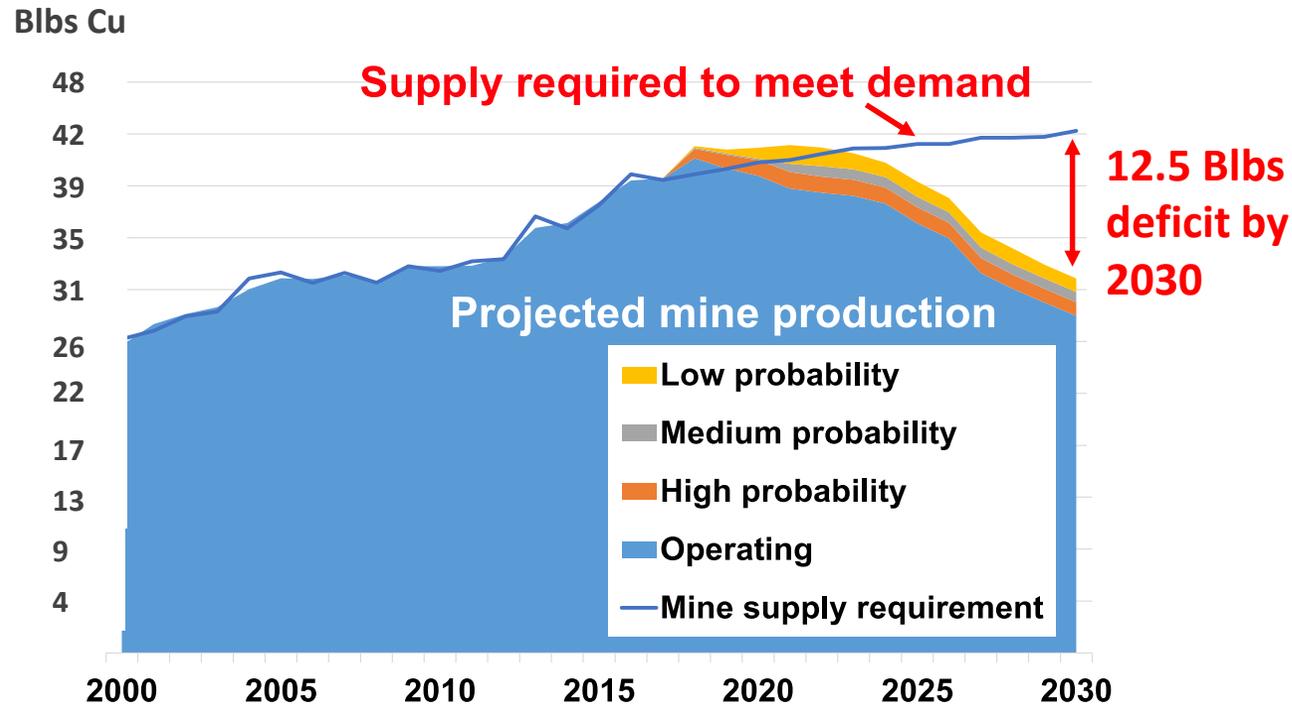


- Accelerated demand for copper is fuelled predominantly by **urbanization**, world **population** growth and **electrification**.
- By **2050**, the demand for copper could reach 130 Blbs per year, which is **2x the current demand**.
- As older producing copper mines continue to deplete their resources, there are **few new copper discoveries**.
- It is **difficult** to see how the world will **replace** the **current production** - let alone meet anticipated demand.
- Goldman Sachs argues that this new era could herald a **structural bull market** comparable to the 2000s and that commodities are the **best inflation hedge**.

## The Coming

# Copper Crunch

Not enough copper is being discovered to *meet future projected demand*



&P Global Market Intelligence

- According to Goldman Sachs, **Copper is the “new oil”** and will be essential in order to create new clean infrastructure.
- As demand continues to increase copper could be priced at **\$6.80 per lb by 2025** – a rise of **66%** from current prices.
- New discoveries are scarce: **only 4 major discoveries** in the last 10 years and just 1 in the last 5.
- In the last decade **\$ 50 B was spent on exploration & development**, and **only 225 Blbs of copper** in new discoveries was found in that period (more copper was found in 1991 alone)
- **45% of global supply** comes from **politically unstable** and mining unfriendly jurisdictions

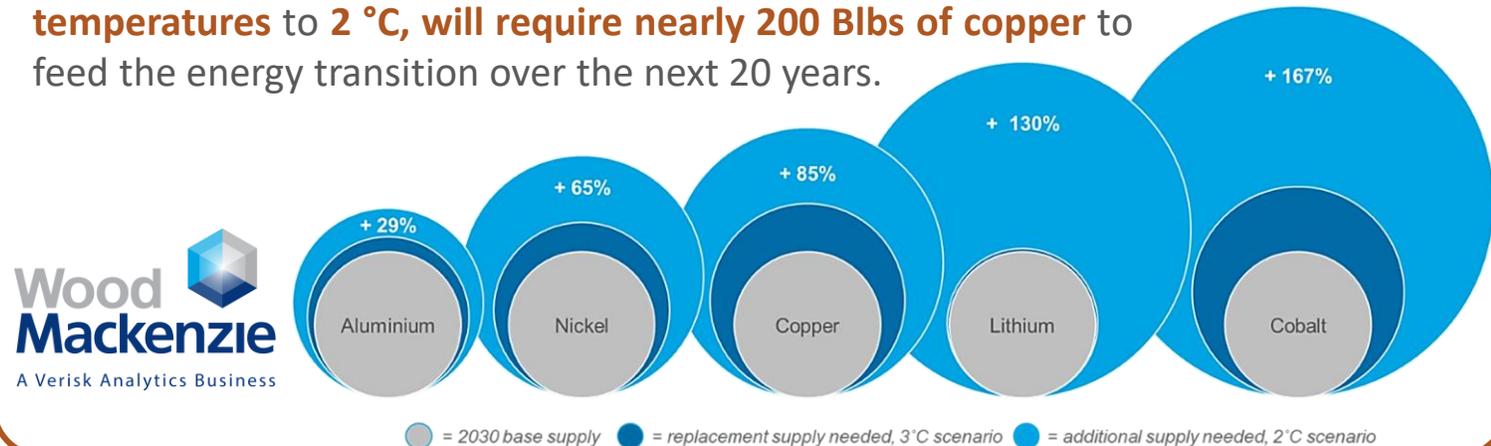
## Copper's Critical Role in the Future of Clean Energy

- The shift to a clean energy system is set to drive a huge increase in the requirements for copper. **Clean energy technologies are becoming the fastest-growing segment of demand – directly affecting copper.**
- Climate scientists have made it clear that **greenhouse gas emissions must be reduced drastically by 2050** to stave off catastrophic levels of global warming. To do so, **the rate of transition to carbon-free technology alternatives is increasing exponentially.**
- Technology that will need to be deployed for this transition includes wind turbines, solar panels, EV batteries and large-scale energy storage, of which **copper is a critical component.**

Keeping pace with the 2050 emissions reduction goal could increase demand for critical minerals, **by as much as six-fold by 2040.**



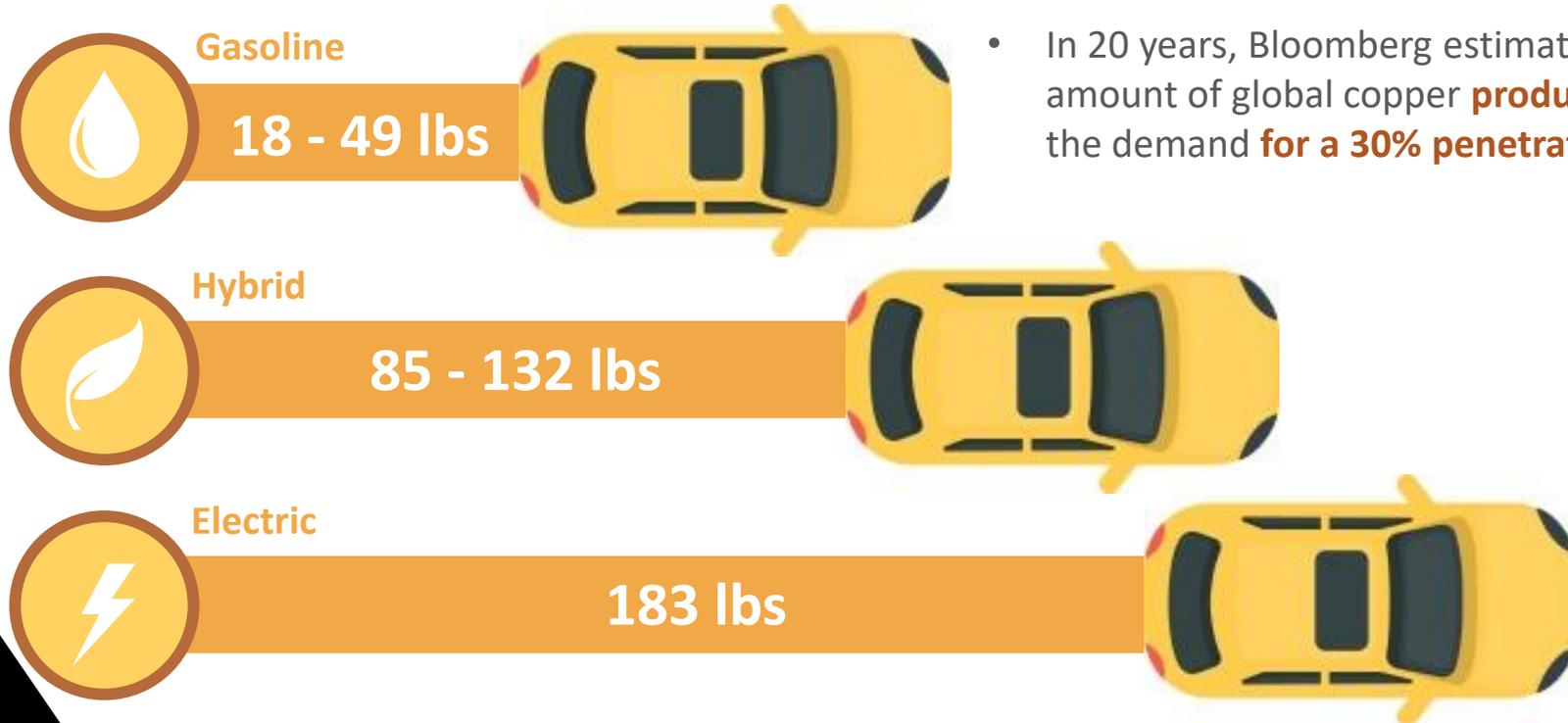
Wood Mackenzie's reports that **limiting** the rise in global temperatures to **2 °C, will require nearly 200 Blbs of copper** to feed the energy transition over the next 20 years.



# Increasing Demand Not Only From Emerging Economies

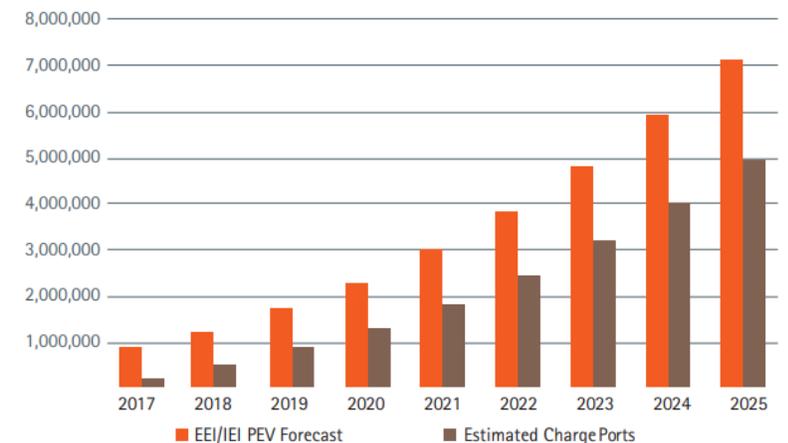
Each generation of car *needs more copper wiring.*

Copper is essential for green energy and a sustainable future.



- By **2027** copper demand for Electric Vehicles **will rise by 900%** - ICA
- Each generation of car needs more copper wiring.
- Significant new **copper-based infrastructure will be needed** to support electric cars (such as charging station)
- In 20 years, Bloomberg estimates that **copper miners need to double** the amount of global copper **production** (adding additional 44 Blbs), just to meet the demand **for a 30% penetration rate of electric vehicles.**

PEV Stock and Charging Infrastructure Needed



Source: *Copper, the most critical metal, mining.com (December 2020)*  
*Copper Drives Electric Cars, Copper Development Association*  
*The Edison Electric Institute and the Institute for Electric Innovation*

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## Why Chile

- 1** **23%** of global copper reserves are located in Chile.
- 2** **28%** of global production comes from Chile.
- 3** Chile is a **stable and mining-friendly** jurisdiction, where mining makes-up **15%** of the national GDP and **60%** of exports.
- 4** **8 out of the 10** largest copper companies operate mines in Chile.



# The Company's Projects in Chile

Chile: *the Premier Copper Country* - Ranked #1 globally for total copper reserves / resources with a *pro-business & pro-mining culture*.



## Cristal

- Potential large-scale copper porphyry
- Staged option schedule over several years to earn 100%
- Previous BHP work has set drill targets
- Recent discovery at adjacent property



## Escalones

- Copper- gold porphyry-skarn project
- 426 Mt of copper oxide inferred resources (NI 43-101)
- Large expansion potential
- Excellent infrastructure, near Santiago
- 100% ownership

## Highlights

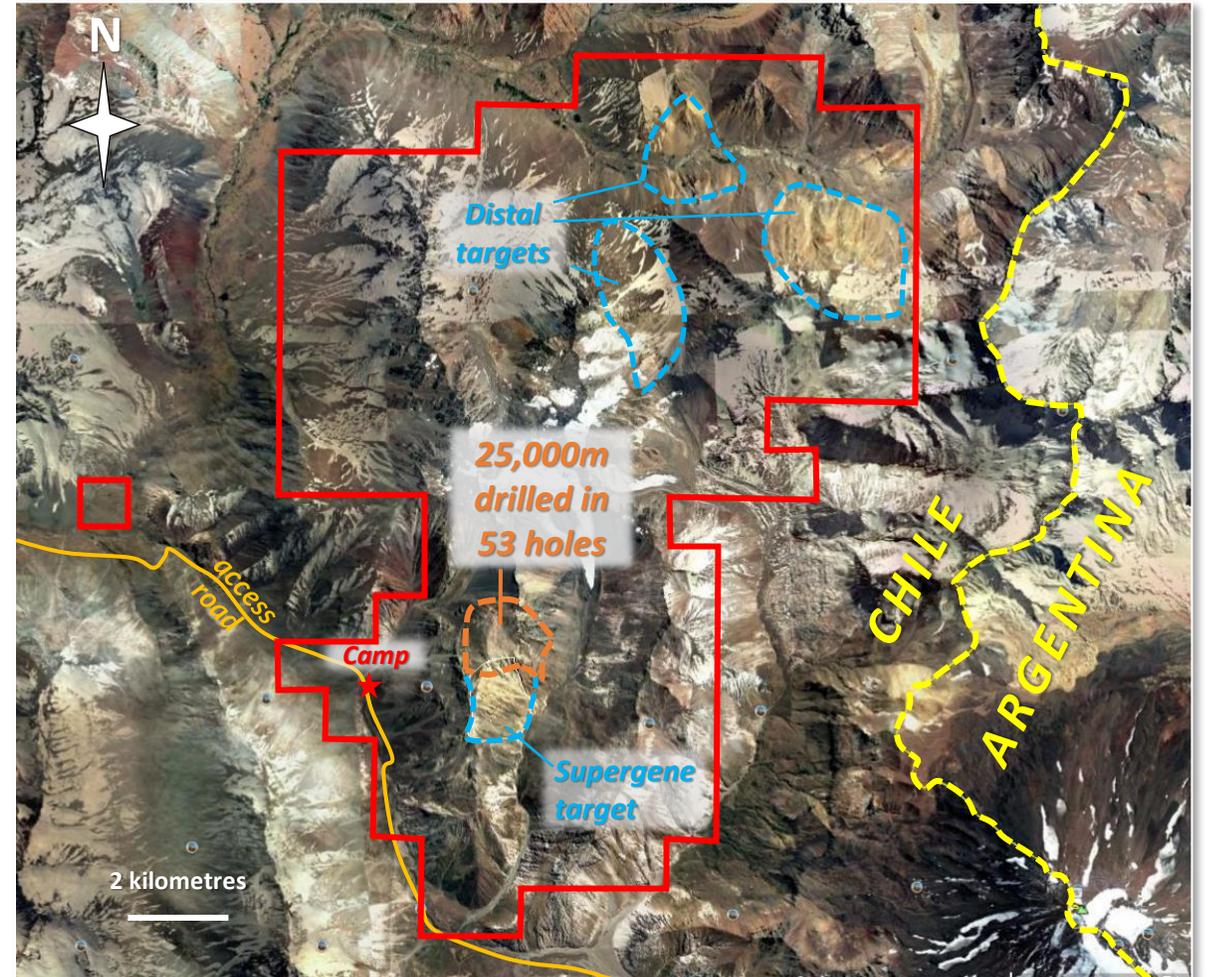
# Escalones

- Located **100 km southeast of Santiago** and near Chile's West Fissure, a continental-scale structure along which most of the country's Cu-Mo porphyries occur.
- **35 km east of El Teniente**, the world's **largest underground copper mine**, and is same age (Miocene) as Teniente, Los Bronces and other deposits in the belt.
- **Infrastructure** in place including road access, power nearby, proximity to major seaports and a gas pipeline crossing the property.
- Established **exploration camp facilities** at 2,400 m elevation; majority of drilling has occurred at 3,200 m to 4,000 m elevation.
- Main porphyry has **24,939m drilled in 53 core holes**, most recently in 2012-2013 (9070m).
- **Copper porphyry mineralization** primarily occurs as an **oxidized** supergene blanket with flanking skarn.
- In an area of **historical copper mining**.



# Claims & Exploration

- ✚ Total land Package: 16,189 hectares, 100% owned (4,689 Ha **exploitation** concessions through a lease with option to purchase).
- ✚ In February 2017, 6,800 Ha of **exploration** concessions were added to the north of the existing (pre-drilling) Escalones Porphyry-Skarn property.
- ✚ Potential exists to discover new copper-gold porphyries and associated skarns in the northern part of the trend.



# Escalones – 426 Mt of Copper Oxide Inferred Resources

- In 2020, World Copper recognized that the enriched **mineralization** is significantly oxidized, rendering it mostly acid-soluble and potentially **amenable to cost-effective heap-leach copper production**
- In mid-2021 the resource estimate was redone, with more appropriate modeling and estimation techniques **constrained to the oxidized supergene mineralization within a pit shell**
- Whittle **\$3.50 Cu** Optimized Pit Parameters:

Internal cut-off @	\$/lb Cu	\$ 3.50
Processing	\$/ore tonne	\$5.00
G&A + Taxes	\$/ore tonne	\$1.50
Cu Recoveries	Acid+ CN Sol.	71%
Royalties	gross	2.0%
Refining & Shipping cost	per/lb	\$0.25
Total cost	\$/ore tonne	\$6.50
Cu Selling Price	\$US/lbs	\$2.45
CuT Cutoff Grade		0.13%

## Resource Estimate Statement

Hard Rock Consulting LLC. August 2021

CLASS	Density	Tonnes	Grade	Metal Content
	tonne/m <sup>3</sup>	(X1000)	Total Cu %	x1000 lb Cu
Inferred	2.69	426,198	0.367	3,446,982

## Resource Sensitivity Within 2021 Resource Pit

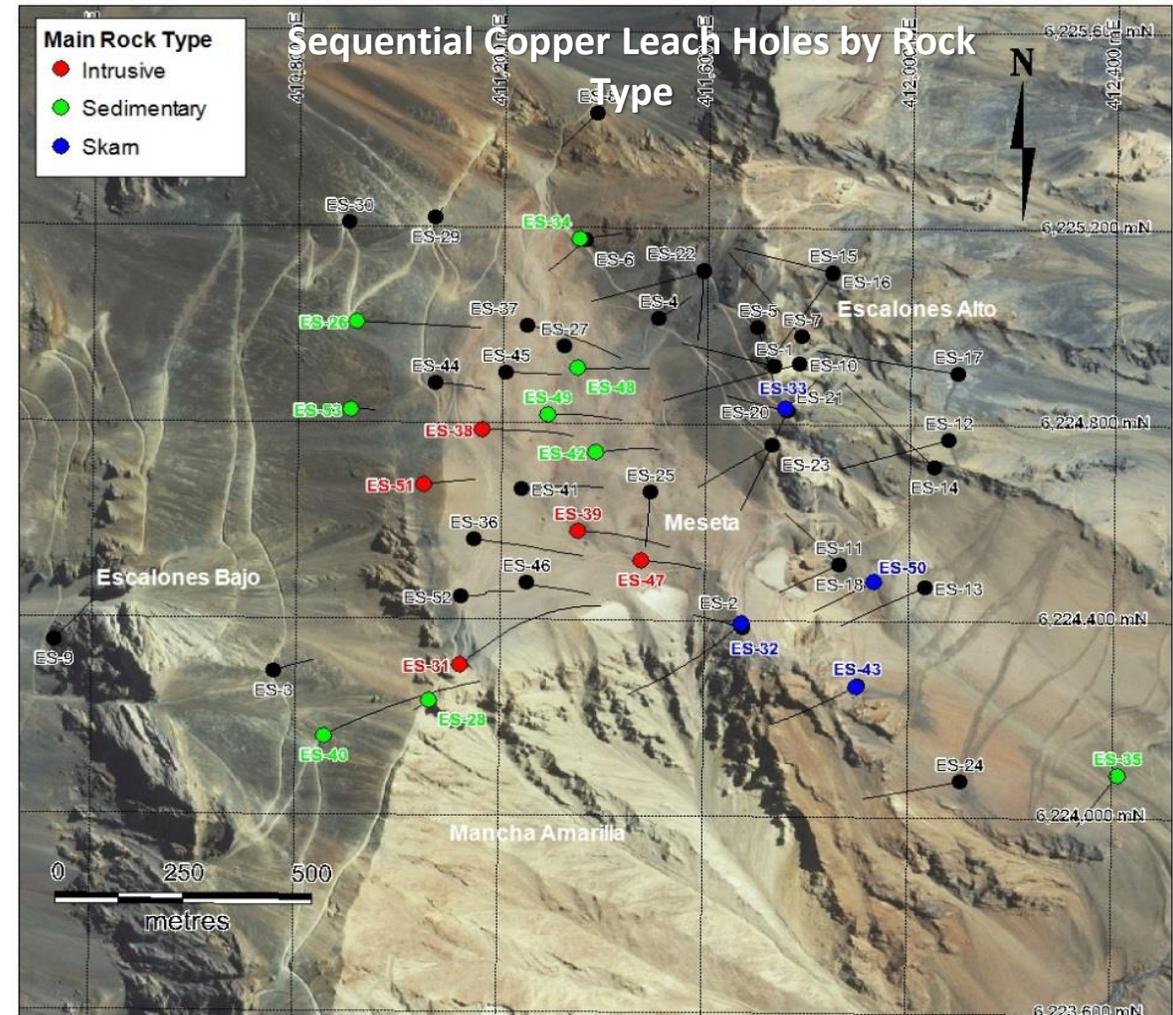
Cut-Off Grade (% Cu)	Strip Ratio	Inferred		
		Tonnes (x '000)	Copper (%)	Contained Copper (M lbs)
0.10	0.77	463,472	0.347	3,541
<b>0.13</b>	<b>0.93</b>	<b>426,198</b>	<b>0.367</b>	<b>3,447</b>
0.15	0.99	412,643	0.374	3,405
0.20	1.21	371,385	0.396	3,245
0.25	1.63	312,692	0.428	2,952

*Mineral resources that are not mineral reserves do not have demonstrated economic viability. Inferred mineral resources are that part of the mineral resource for which quantity and grade or quality are estimated on the basis of limited geologic evidence and sampling, which is sufficient to imply but not verify grade or quality continuity. Inferred mineral resources may not be converted to mineral reserves. It is reasonably expected, though not guaranteed, that the majority of Inferred mineral resources could be upgraded to Indicated mineral resources with continued exploration. Mineral resources are captured within an optimized pit shell and meet the test of reasonable prospects for economic extraction*

# Soluble Copper: New Test Work

To better define soluble copper zones for future metallurgical test work, World Copper selected 1180 drill core sample pulps for sequential copper leach tests at ALS Laboratories, Santiago.

- ✚ The **samples** were selected **from 18 drill holes** and comprise all major rock types and mineral zones across the deposit, **representing 2037 metres of core**, or roughly 16% of all supergene intervals.
- ✚ The results indicate **favourable soluble copper recoveries** for the supergene mineralization (oxide, mixed and enriched zones) that comprise the upper 300m of drill-defined mineralization.
- ✚ Oxide zone soluble copper **recoveries average 71%** of total copper, with interval maximums of 98%.

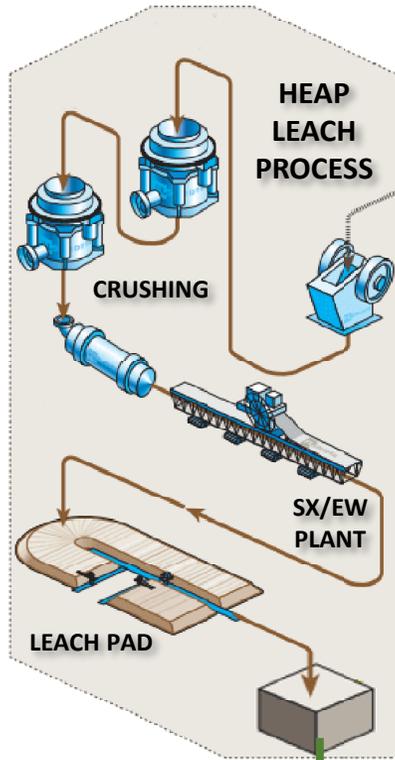


# Heap Leach Copper Oxide vs. Sulphide Flotation

What's the *difference*?

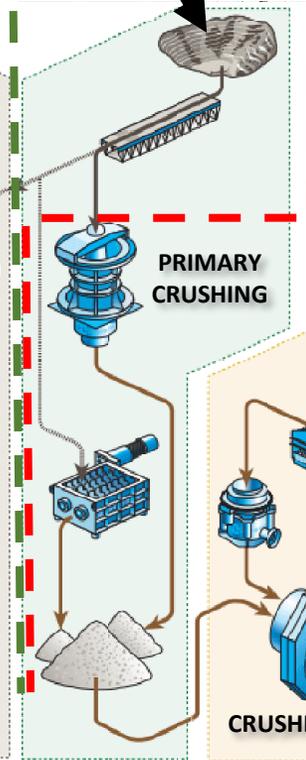
## OXIDE HEAP LEACH

- ✓ ECONOMIC
- ✓ SIMPLE
- ✓ CLEAN



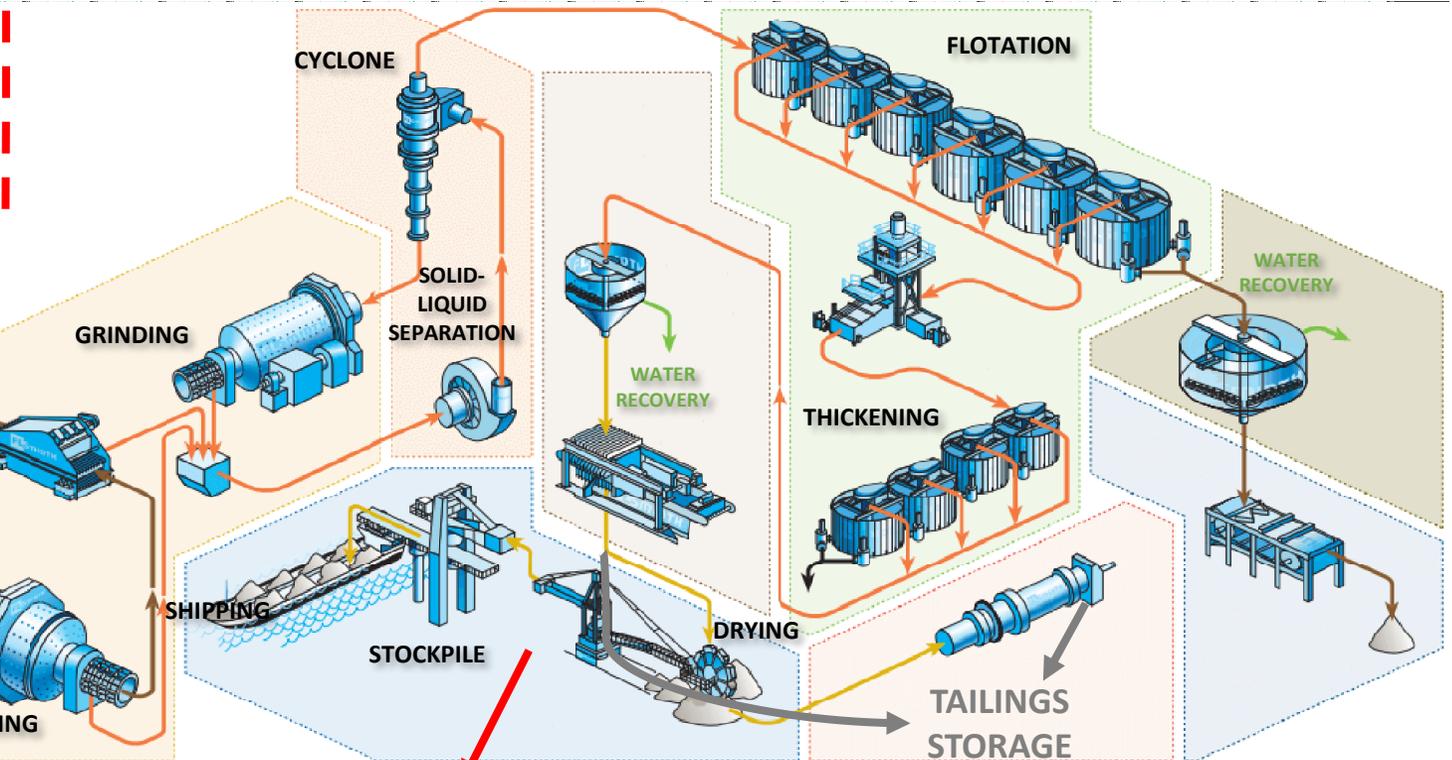
## OPEN PIT

if within oxidized rock, little to no acid rock drainage



## SULPHIDE FLOTATION

- COMPLICATED PROCESSING
- END PRODUCT REQUIRES FURTHER PROCESSING
- PRODUCES MINE TAILINGS



**CATHODE:**  
99.9% copper: clean, compact,  
economic transport

**COPPER CONCENTRATE:**  
30% copper, is high volume, tricky to transport,  
requires smelting (cuts into profits, polluting)

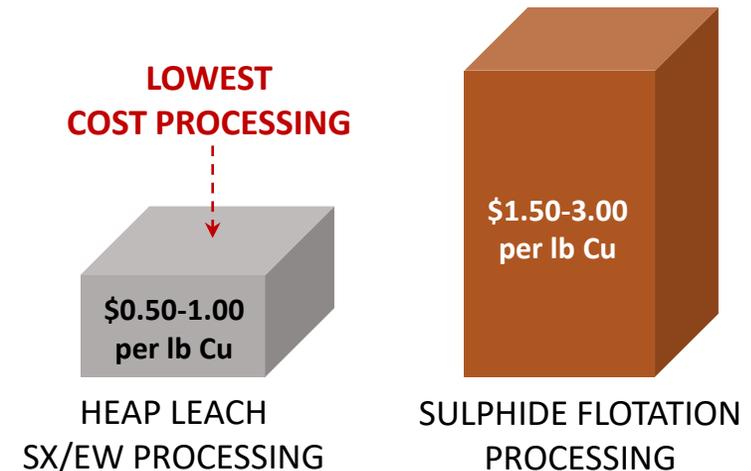
Source:  
<https://www.911metallurgist.com>

# Heap Leach Copper Oxide vs. Sulphide Flotation

What's the *difference*?

- ⚡ **Lower costs** support **lower copper-cutoff grades** and enhance economics
- ⚡ Ability to be **operated economically on smaller scales** and therefore **less capex** necessary
- ⚡ **Smaller physical footprint** of the site (smaller size of the plant and no tailings pond)
- ⚡ **Lesser environmental risk** of spills during production and transport
- ⚡ **No smelting process** is required to produce copper cathodes with overall lesser energy consumption in the process

Less Processing Complexity = Lower Production Costs



**OXIDE COPPER COSTS ARE 1/3 THAT OF SULPHIDE**



## Escalones Development

# Heap Leach Copper Oxide vs. Sulphide Flotation

### Examples of Comparable Heap Leach Mines in Chile:

**Gabriela Mistral (Gaby)<sup>1</sup>** Codelco  
 \*Reserves: 285Mt @ 0.35% Copper  
 \*Resources: 375Mt @ 0.35% Copper

**Lomas Bayas<sup>2</sup>** Glencore  
 Meas. & Ind: 379.1 Mt @ 0.27% Copper  
 Inferred: 28 Mt @ 0.21% Copper

**Zaldivar<sup>3</sup>** 50/50 Barrick-Antofagasta  
 Reserves: 578 Mt @ 0.518% Copper  
 Meas. & Ind: 125 Mt @ 0.44% Copper  
 Inferred: 37 Mt @ 0.54% Copper

**Los Bronces Oxide<sup>2</sup>** Anglo American  
 Reserves: 388Mt @ 0.33% Copper  
 Inferred: 46.1Mt @ 0.28% Copper



Los Bronces, [angloamerican.com](http://angloamerican.com)



Gaby, [chilemineria.cl](http://chilemineria.cl)

\*Reserves = Proven & Probable, exclusive of Resources ( Measured, Indicated & Inferred )

Sources:

- 1) <https://miningdataonline.com/property/161/Gabriela-Mistral-Mine.aspx>
- 2) <http://www.porterqeo.com.au/database/mineinfo>
- 3) <https://www.sec.gov/Archives/edgar/data/756894/000119312512137650/d325229dex991.htm>

# Escalones Benchmarking

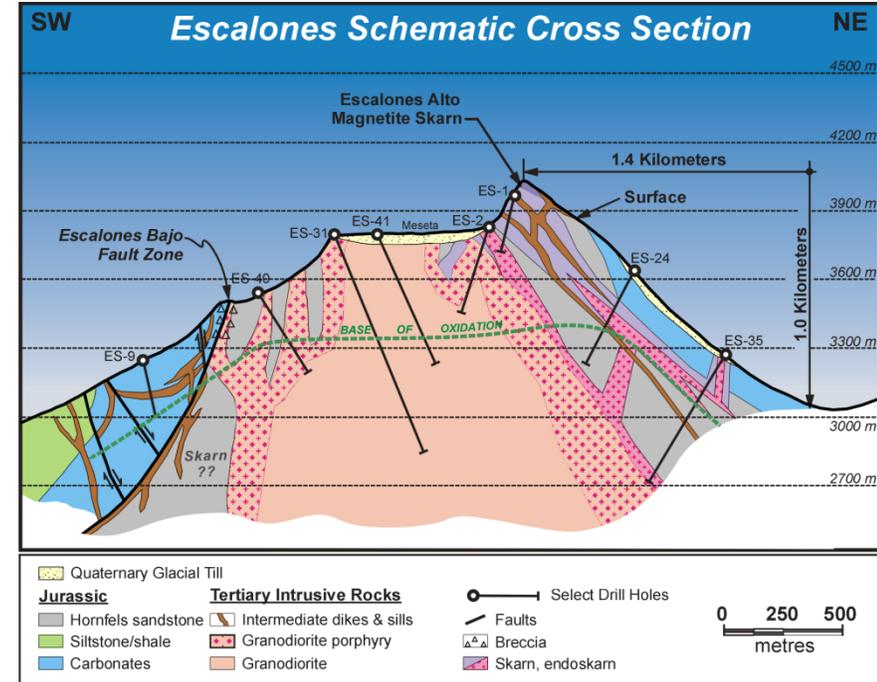
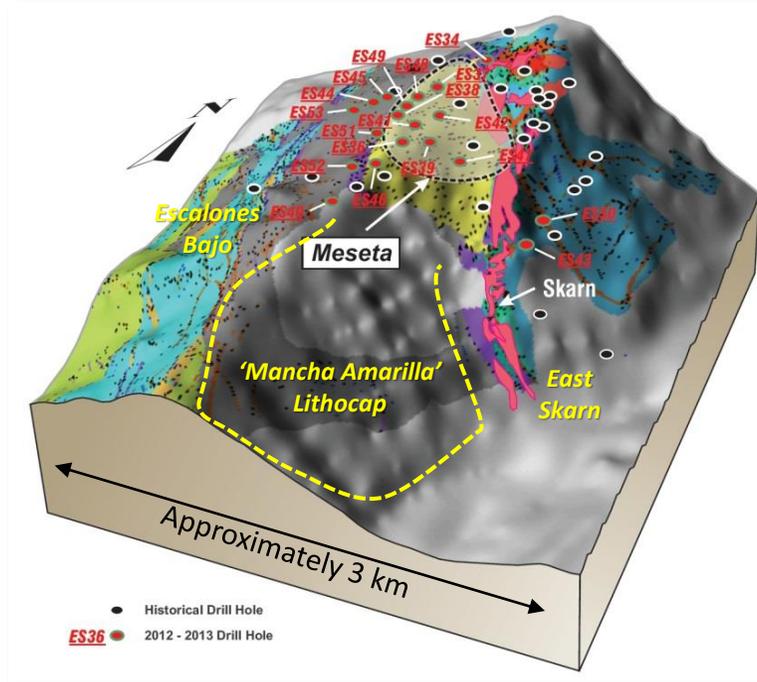
	Marimaca <sup>1</sup>	Escalones <sup>2</sup>	Variance
Tonnes (t)	131,000,000	426,000,000	325%
Resources category	M+I+Inf	Inferred	
Grade (% CuTotal)	0.47%	0.37%	79%
Recovery (%)	70%	71%	101%
Copper Contained (t)	644,408	1,563,420	243%
Copper Contained (lbs)	1,420	3,446	243%
Pre -Tax NPV, 8% \$3.15/lb, \$M USD	\$757	In-Progress	
Market Cap \$M (CAD) <sup>4</sup>	\$365	\$37	10%

- Management believes there is significant **potential** for **value creation** as an oxide project, based on resource size.
- Escalones is now the **largest primary oxide** project in Chile.
- Intention is to fast track a PEA to start to understand the magnitude of the value of the project.
- Significant room for further **expansion of the Escalones resource** exists as we drill the Mancha Amarilla and nearby targets.
- A study by Wood Mackenzie, a leading mining consulting firm, confirmed that **SX-EW process is approx. 38% less carbon intensive** per tonne of refined copper than conventional flotation and smelting<sup>3</sup>.

Sources:

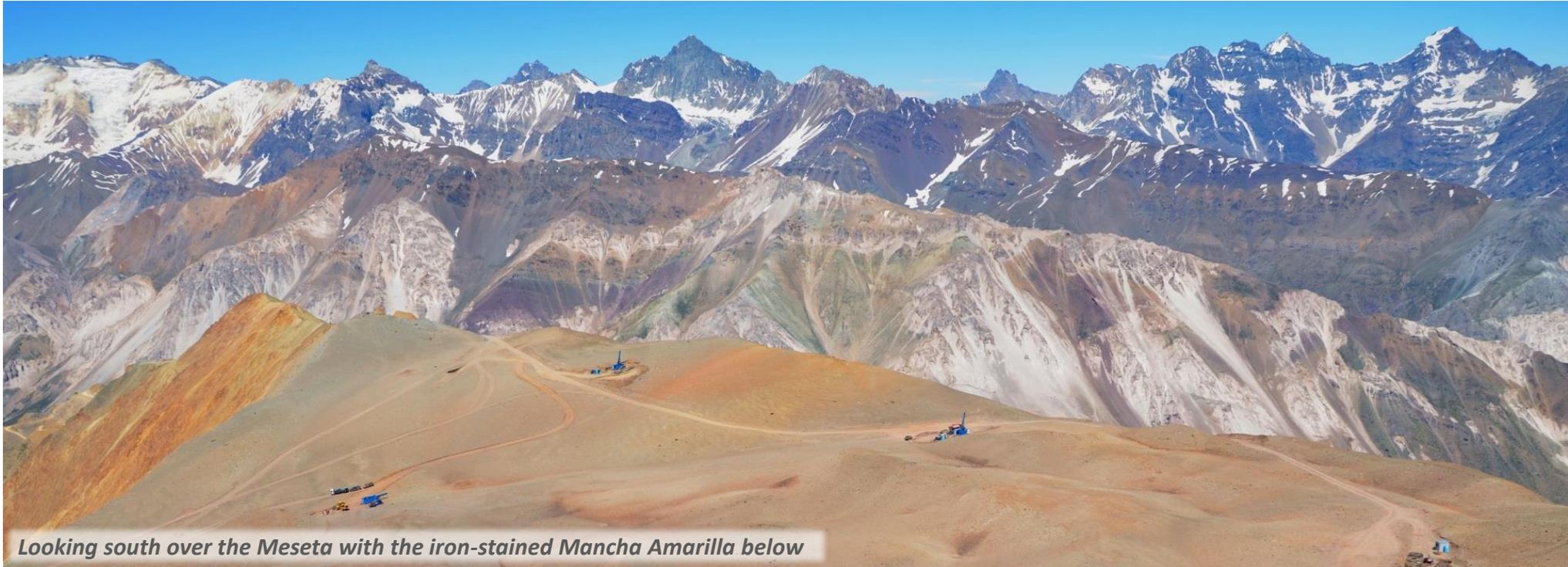
- 1) Marimaca Mine Plan, PEA, September 18<sup>th</sup>, 2020
- 2) Escalones Resource Statement, August 23<sup>rd</sup>, 2021
- 3) Marimaca press release, November 4<sup>th</sup>, 2021
- 4) Approximate as of November 10<sup>th</sup>, 2021

# Geology & Mineralization



- 2 km x 1.6 km porphyry copper system with flanking high-grade copper skarn, associated gold and silver.
- Mineralization is centered under a high-standing ridge: ideal for low strip ratio.
- Higher-grade mineralization is deeply oxidized and at or near surface: ideal for open-pit mining.
- Half of the lithocap remains untested by drilling: the “Mancha Amarilla”.

# Exploration Potential: Two Objectives



Looking south over the Meseta with the iron-stained Mancha Amarilla below

## Increase Grade and Tonnage of Resource Estimate

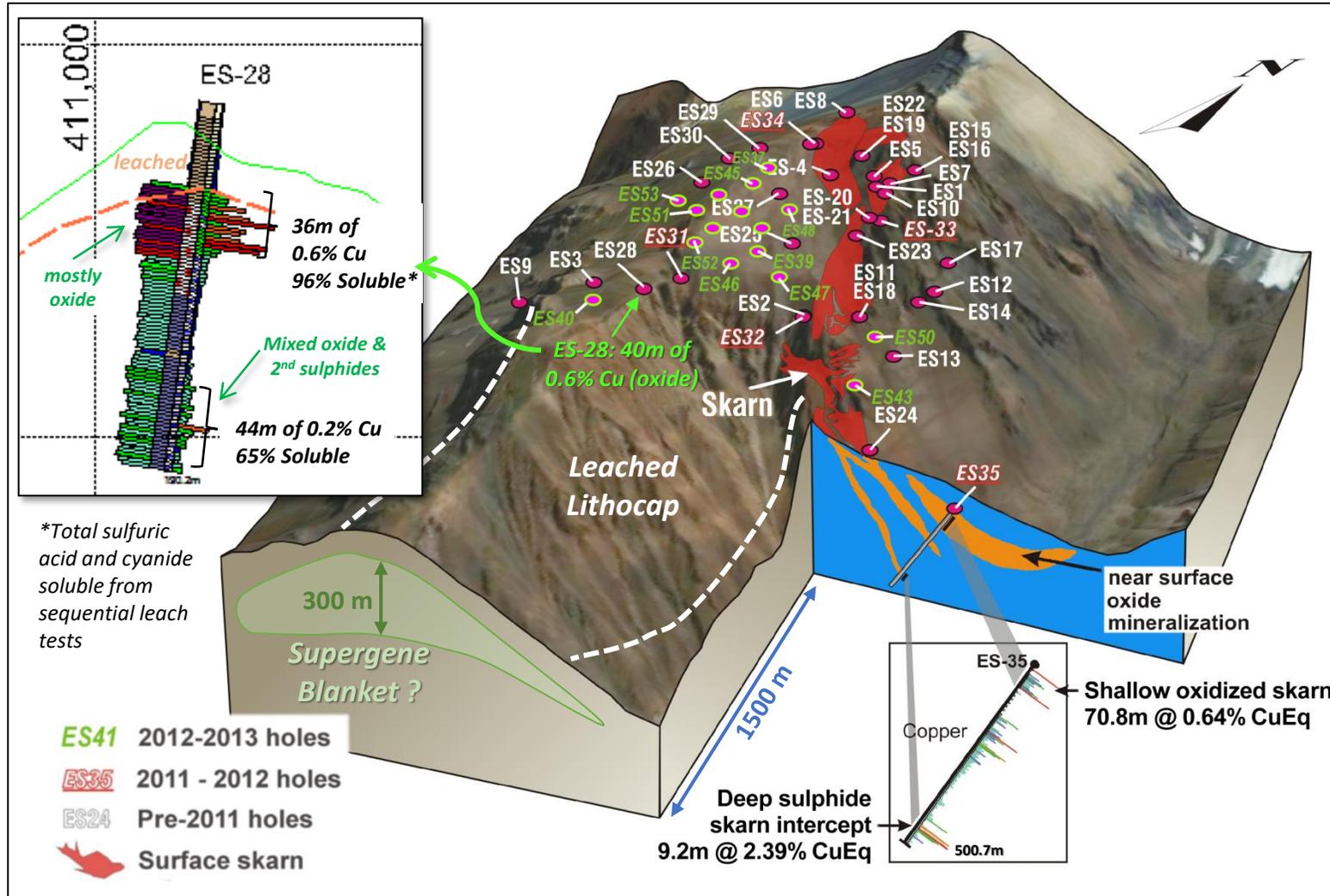
- Only about half of the main Escalones colour anomaly (lithocap) has been drilled.
- Excellent potential for significant supergene acid-soluble mineralization south of current resource estimate.
- Potential for high-grade skarn extensions along flanks on west and east sides.

## Test Distal Porphyry & Skarn Targets

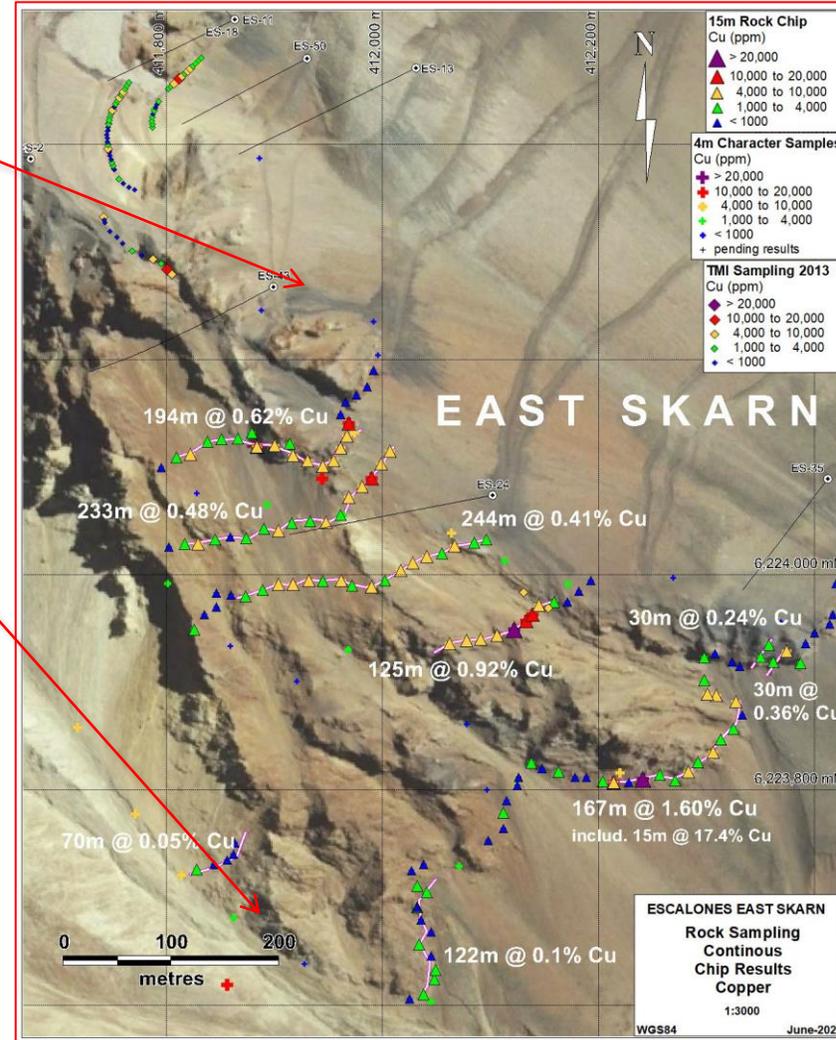
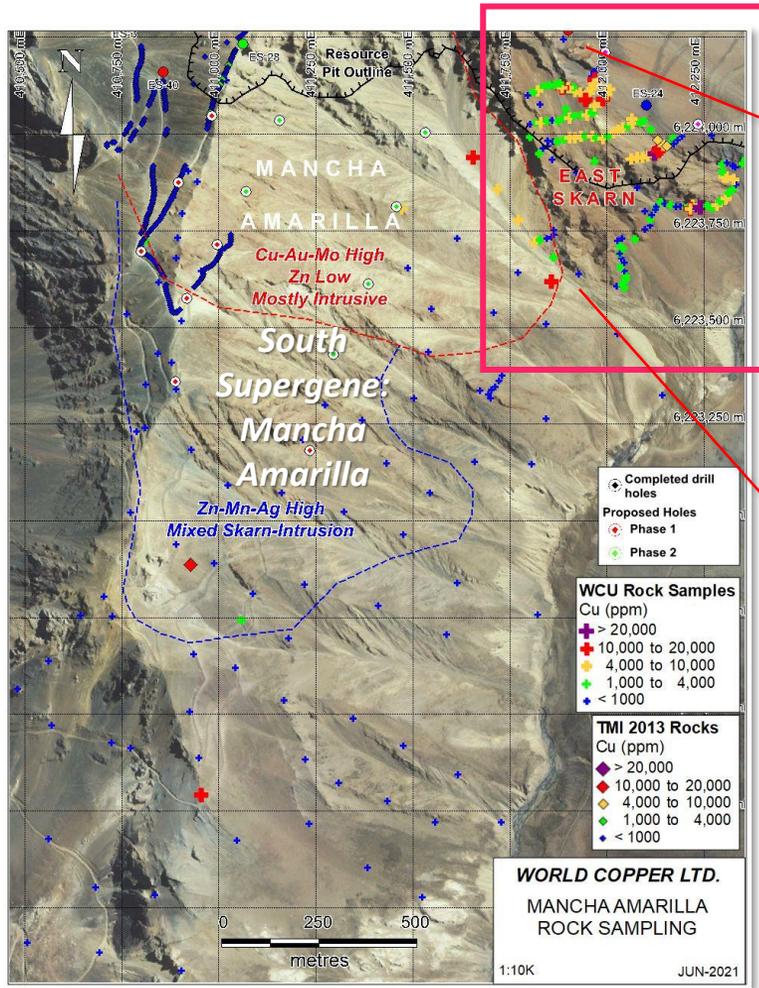
- Three large outlying targets to the north with ASTER\* gossan and sericite anomalies and only sparse historical surface sampling: porphyry and/or skarn mineralization targets.

\* ASTER: Advanced Spaceborne Thermal Emission and Reflection Radiometer

# Expansion Targets: South Supergene & Skarns

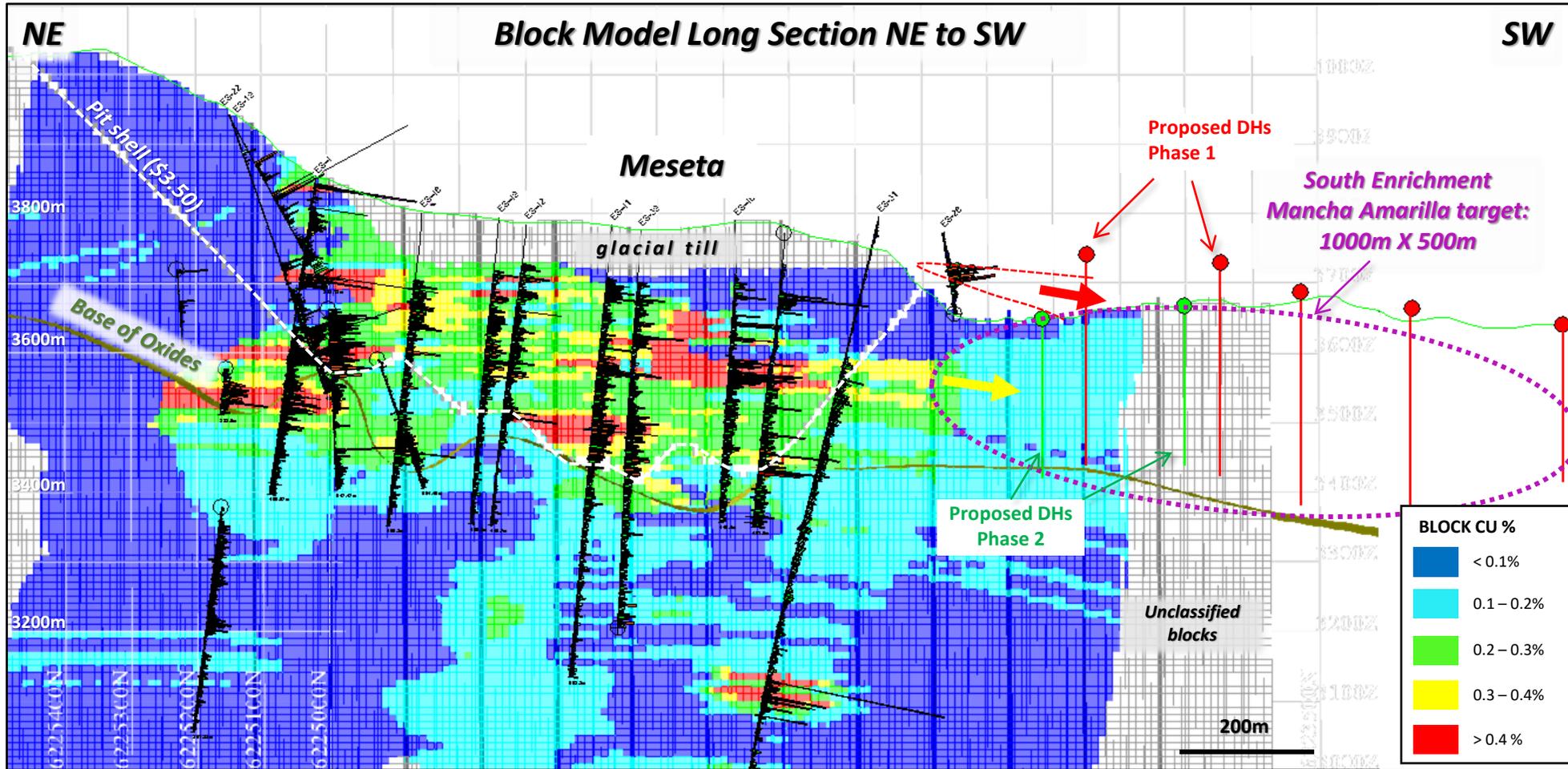


# Expansion Targets: South Supergene & Skarns



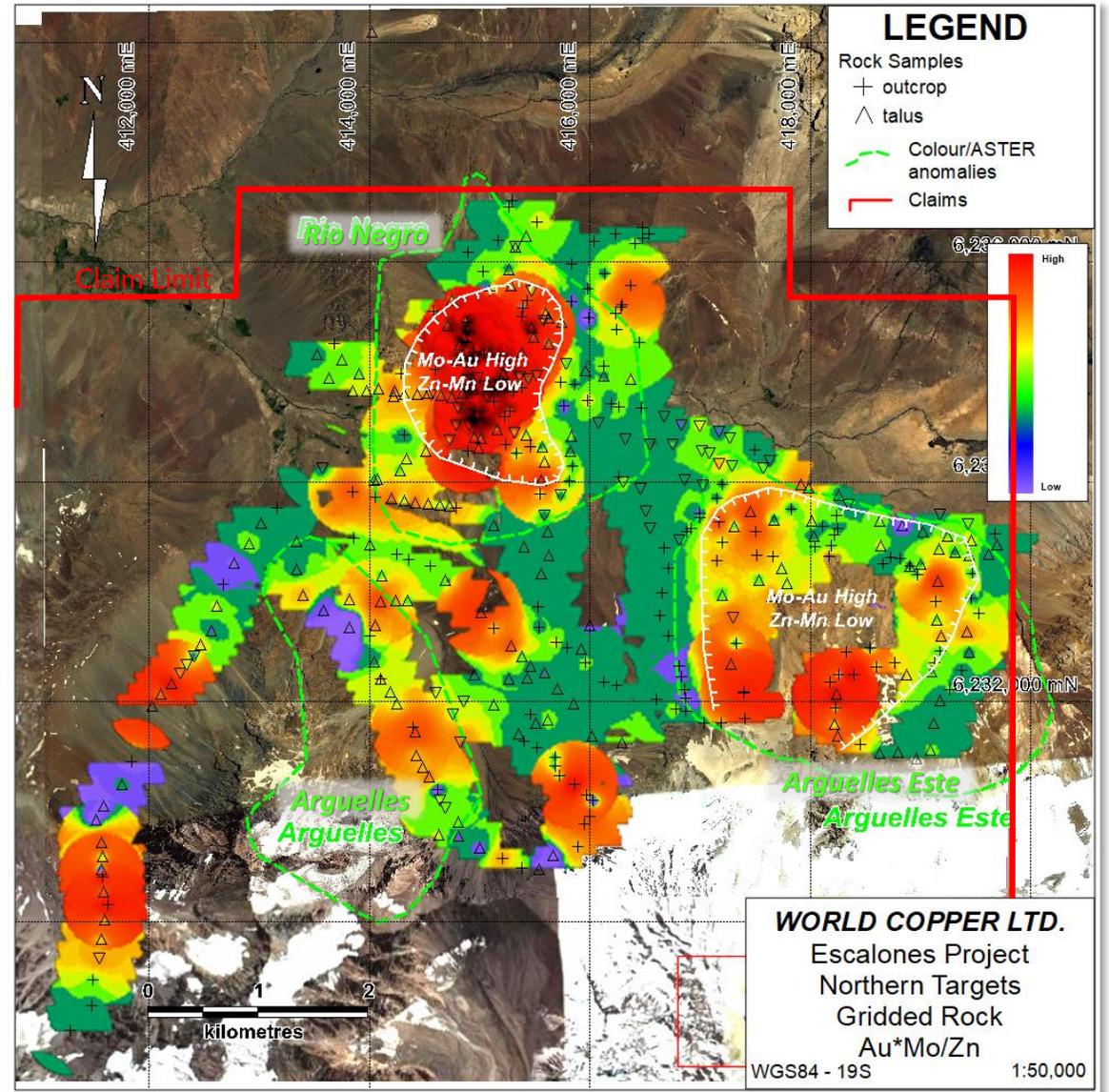
# Supergene Horizon South Extension

The Mancha Amarilla Target



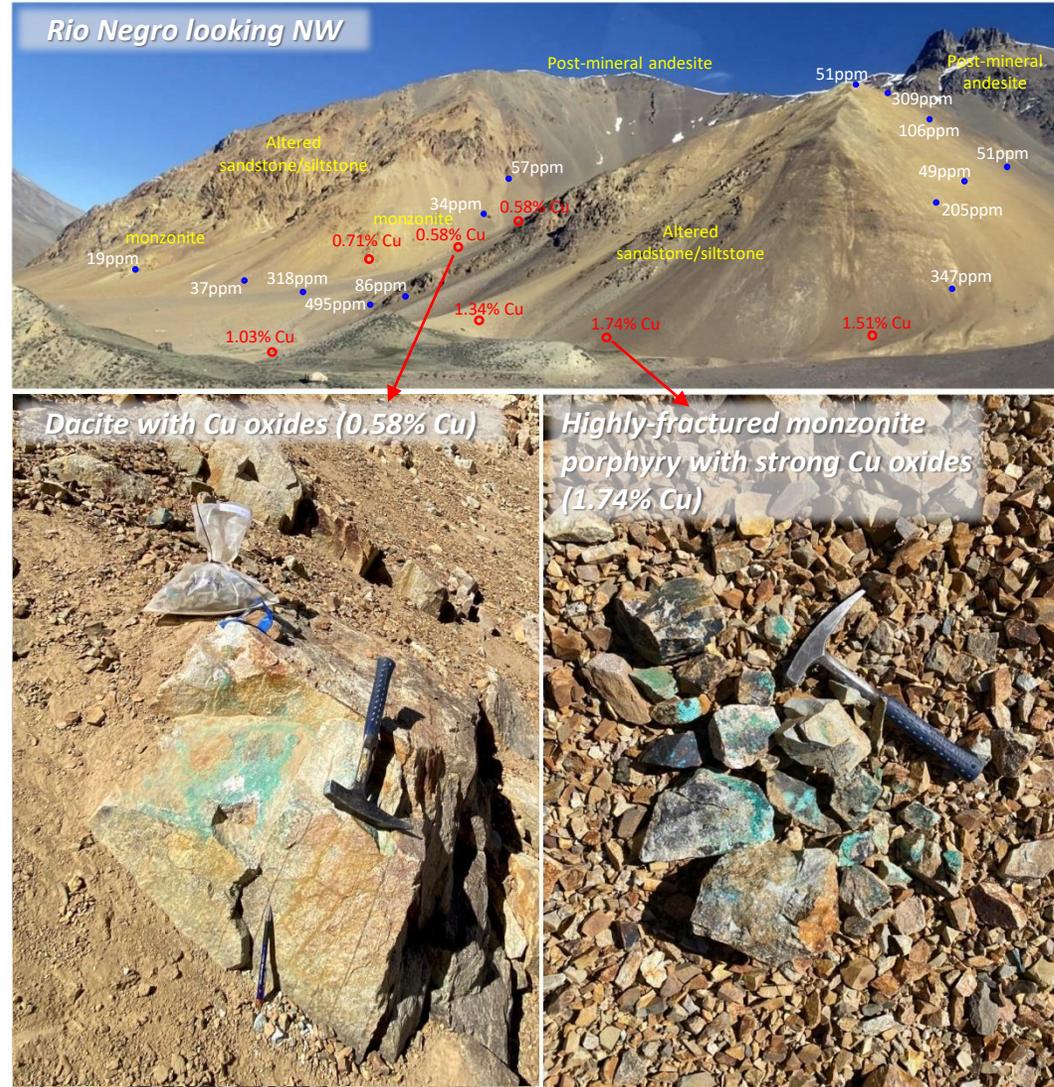
# Northern Targets

- ✚ Ridges and spurs were covered with roughly 200m spaced character samples: rock chips collected over 4m diameter area
- ✚ Even coverage with unbiased samples allows for fingerprinting of porphyry-style mineralization
- ✚ Porphyry centres have elevated Mo-Au±Cu and depressed Zn-Mn: a ratio of the two metal groups distinguishes porphyry centres from other spurious mineralization (e.g. vein sets)
- ✚ Rio Negro and Arguelles Este confirmed as porphyry centres, Arguelles is an extensive skarn system



# Rio Negro Target: Confirmed Cu Porphyry Mineralization

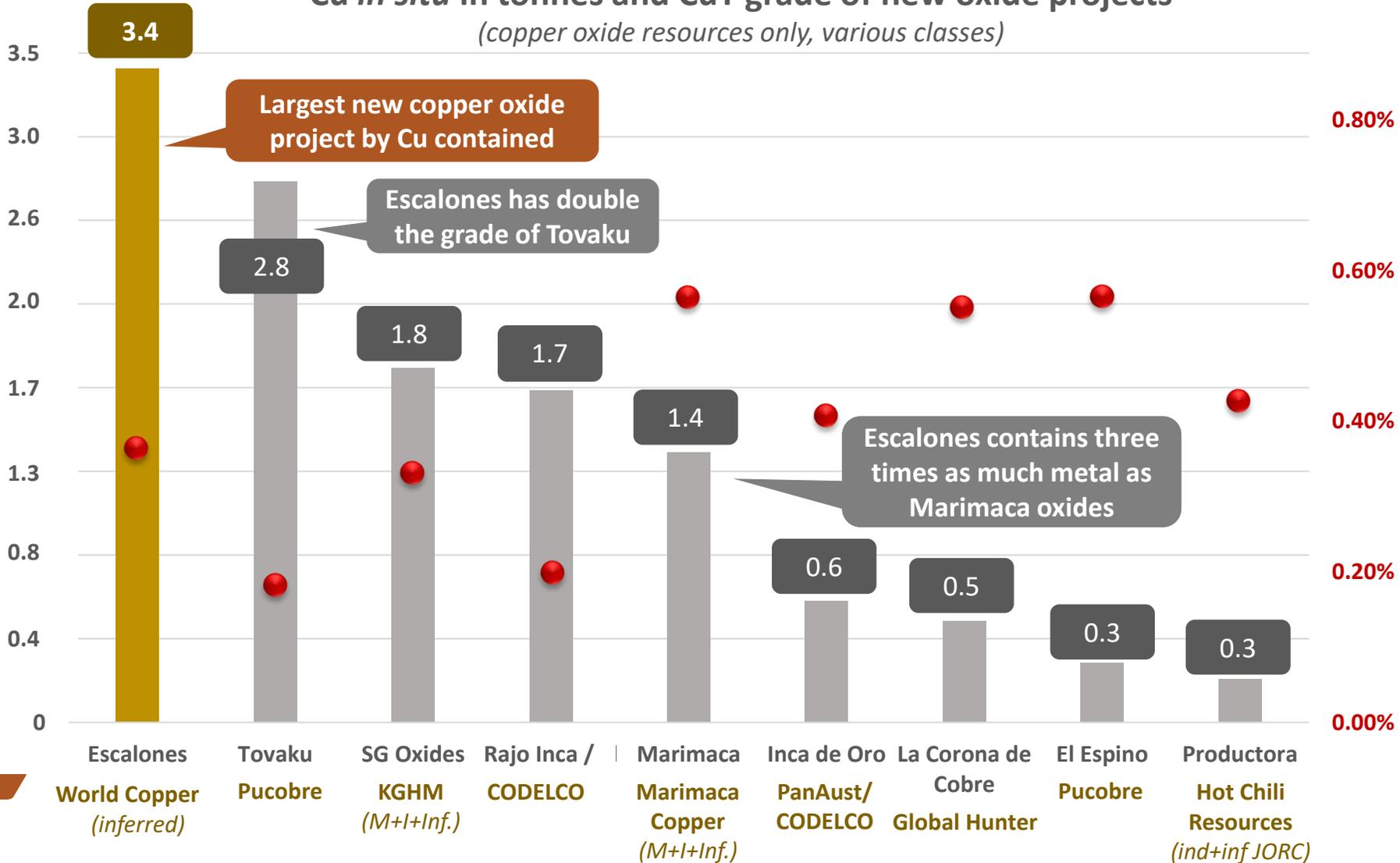
- 🛠️ Quartz-sericite-clay alteration zone is >1km across east-west, and the same north-south, extending south to the Rio Negro
- 🛠️ Highly fractured sediments & monzonite forms rubbly outcrop, with younger dacite dikes forming ridges and blocky outcrops with copper oxides on fractures
- 🛠️ South margin is covered with alluvium and young volcanic rocks in Rio Negro valley



# Escalones Stands Out Among new Chilean Copper Oxide Projects

Blbs Cu 4.0 1.00% CuT%

**Cu *in situ* in tonnes and CuT grade of new oxide projects**  
*(copper oxide resources only, various classes)*



Largest new copper oxide project by Cu contained

Escalones has double the grade of Tovaku

Escalones contains three times as much metal as Marimaca oxides

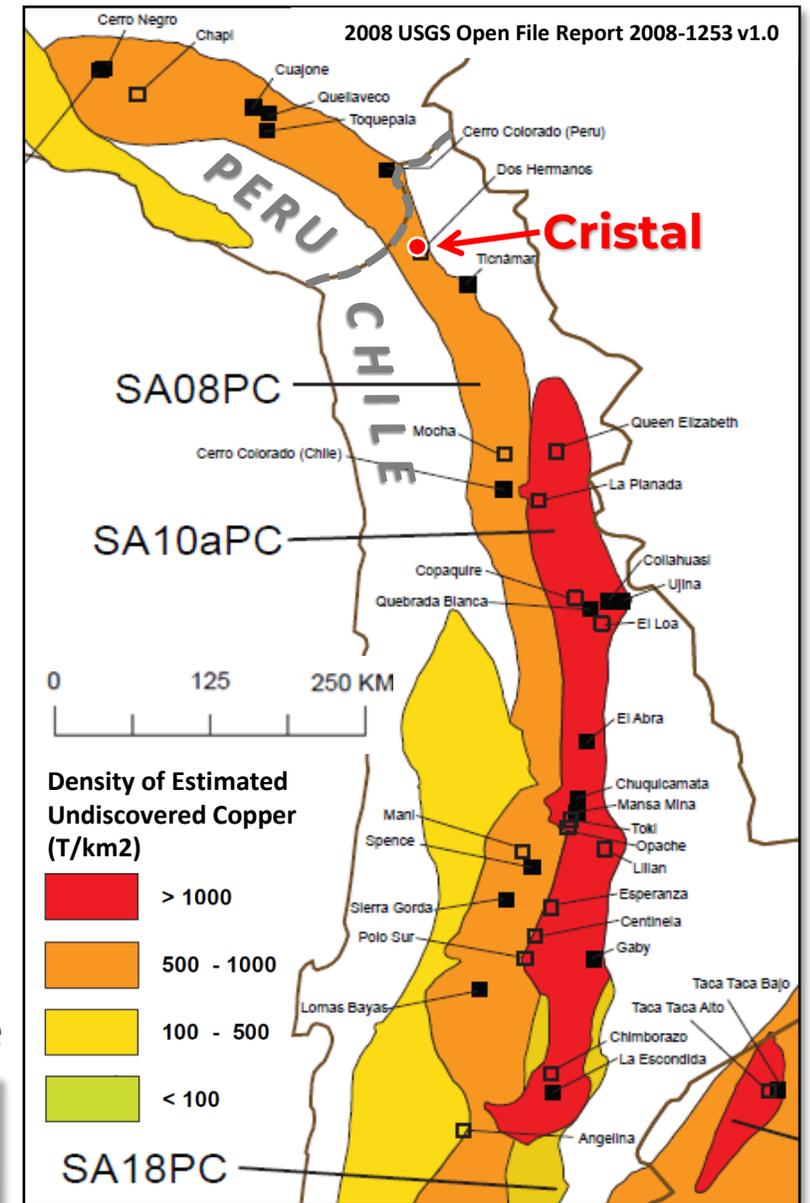
Escalones is the only new oxide project containing more than 3 Blbs Cu contained in resources

*Escalones has an NI 43-101 inferred resources estimate. Some other projects listed on this graph do not follow the NI 43-101 or CIM rules, and report resources and reserve to other standards. This graph is for illustration purposes only.*

## Porphyry Target

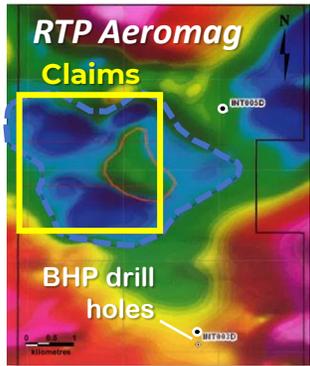
# Cristal

- ✚ The **9 km<sup>2</sup>** of concessions are located close to the port city of **Arica** in northern Chile, adjacent to the Peruvian border, on public land with excellent **infrastructure access**
- ✚ Prior exploration work was carried out in the area during the 1990s by various companies **targeting a large porphyry copper deposit**.
- ✚ **Airborne magnetics, gravity and EM studies**, along with limited drilling are suggestive of a buried porphyry copper deposit.
- ✚ World Copper plans to follow up on this initial exploration work, focusing on a large **geophysical anomaly**
- ✚ The Project is currently **surrounded** by large land positions held by several **senior copper producers**.
- ✚ World Copper proposes an **initial drill program of 4-6 holes**, each 500-1000 metres long, to test the target. Total budget for this program is estimated to be between U\$1 to 1.5 M.

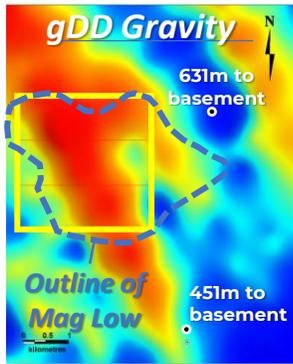


# Porphyry Target Cristal

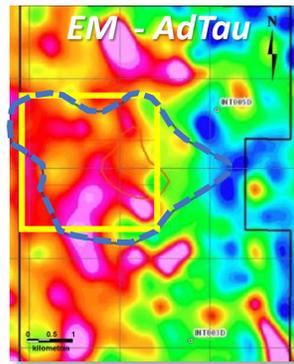
BHP conducted airborne magnetics, gravity, and EM studies, followed by limited drilling **between 2012 and 2014**.



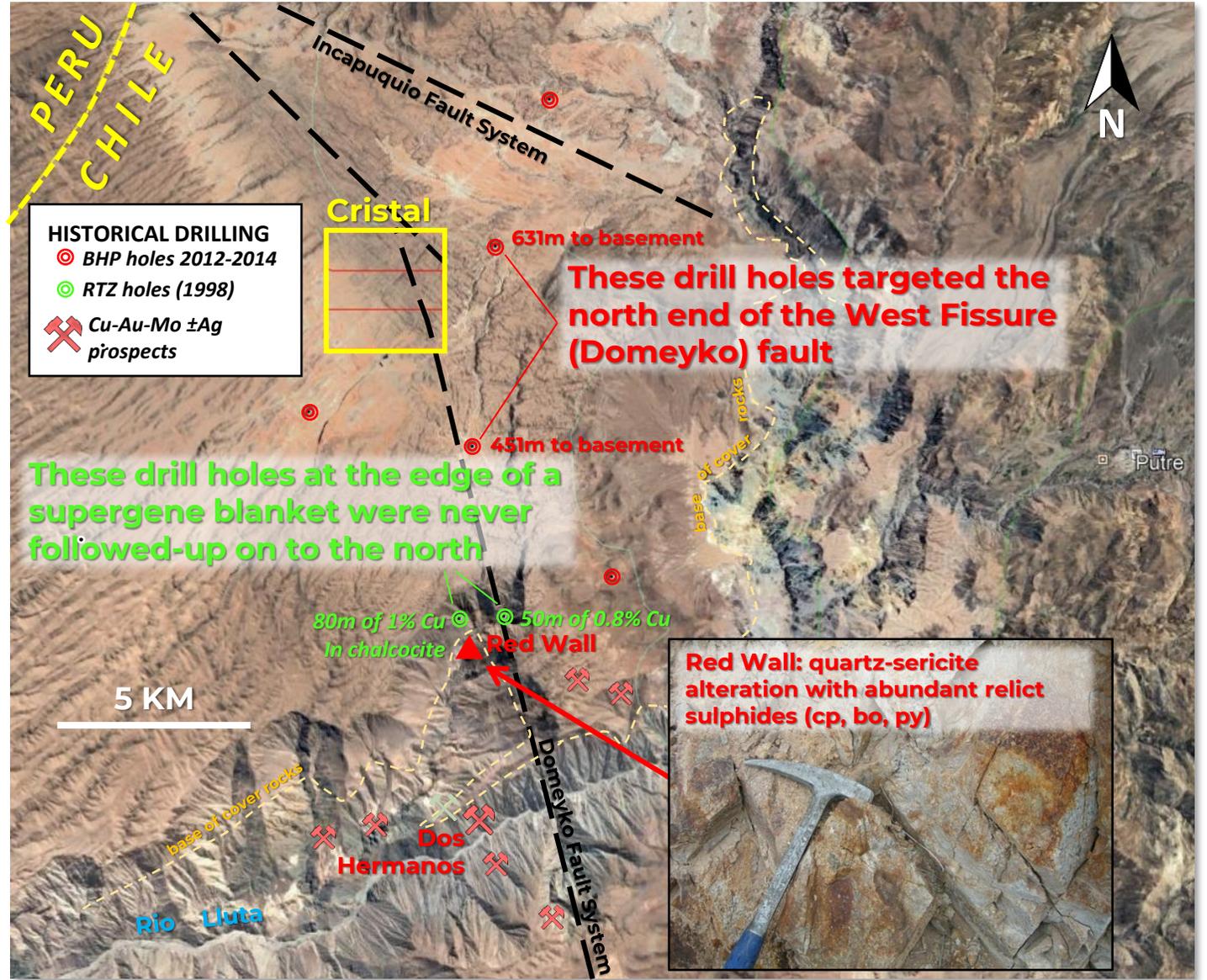
BHP aeromag identified a 2-3km diameter circular doughnut feature: a typical signature of porphyry copper deposits.



A coincident northwest trending gravity high could represent a buried ridge within a potential porphyry copper system. A ridge would mean shallower cover and therefore shorter drill holes.



Within the buried ridge, the high EM signature could indicate clay alteration with possible related sulphides: ideally, a supergene blanket with high Cu grades.



Past exploration was focused to the south in the Rio Lluta valley, eroded through the post-mineral volcanic cover.

# World Copper

Fall 2021

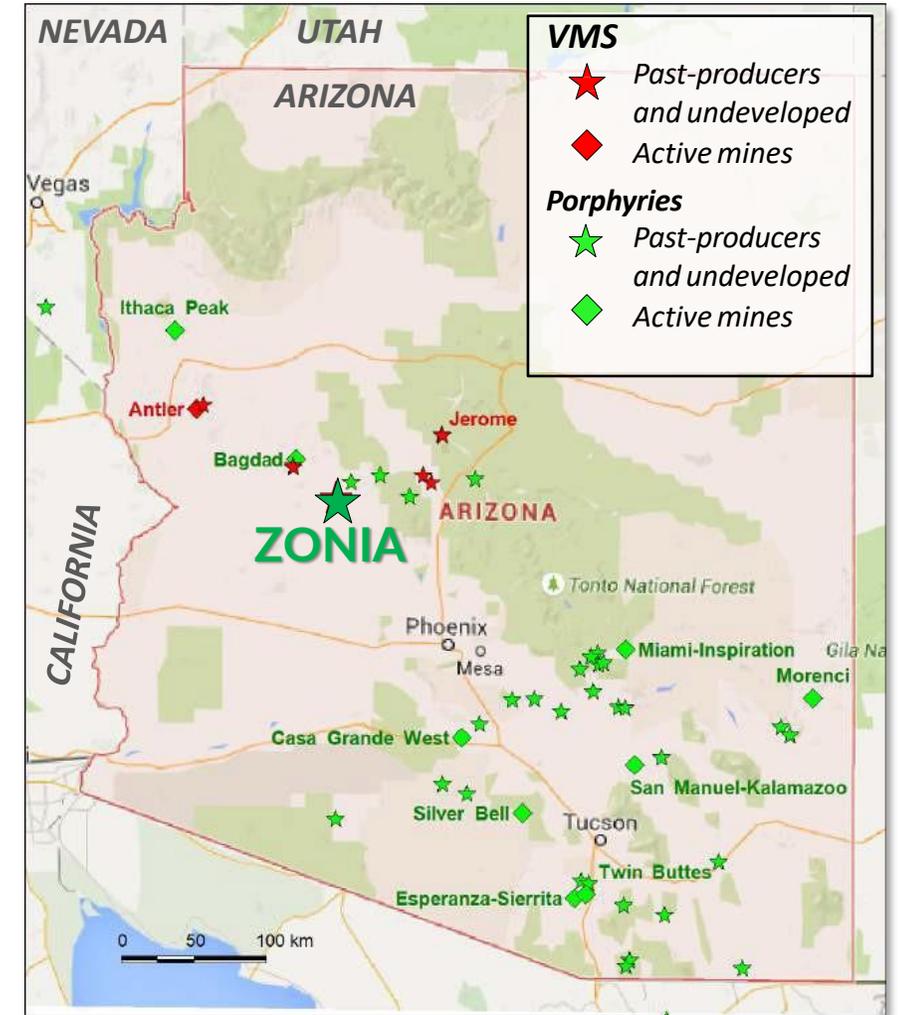
## AGENDA

1. World Copper Introduction
2. Copper Outlook: Supply Crunch And Growing Demand
3. World Copper Chile: Escalones and Cristal

**4. World Copper Arizona: Zonia**

# Zonia Copper-Oxide Deposit

- 🛠️ **Advanced and undervalued project** located in Yavapai County, central **Arizona**, 100 miles NW of Phoenix.
- 🛠️ Over **50,000 meters of drilling** in almost 600 drill holes, plus 800m of underground sampling, define a near-surface copper-oxide resource
- 🛠️ **Large 4,280-acre property** with excellent **potential for more discoveries**: a drill-ready, additional copper-porphyry target has been defined adjacent to the known deposit
- 🛠️ **Easy access**, good **infrastructure** including a 67kV line starting at a recently upgraded substation 7.5km from the mine entrance; sufficient **groundwater available** on site to support operations
- 🛠️ **Permitting Advantage**: resource and Phase I 2018 PEA production are contained within 100%-owned private land.

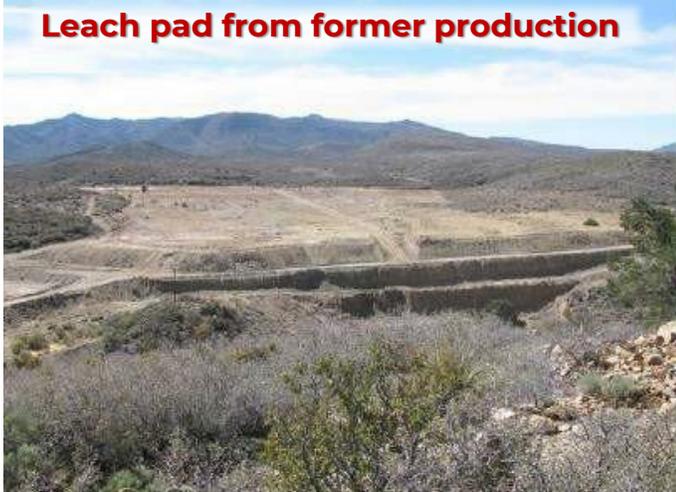


Zonia Project Location

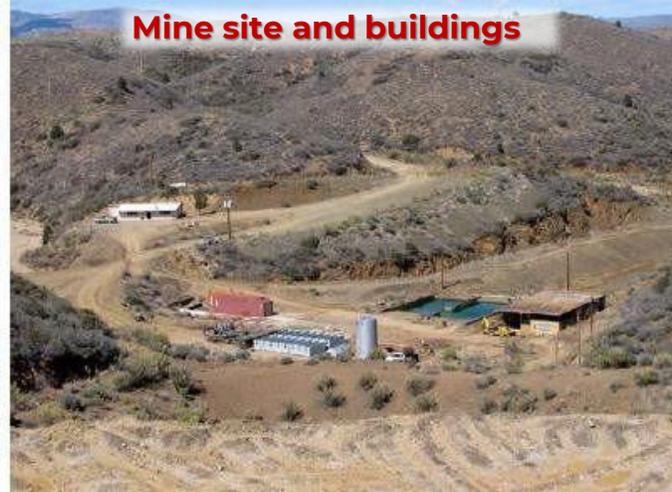
Ready for Development

# Zonia Mine Site – Porphyry Target

**Leach pad from former production**



**Mine site and buildings**



**Pit panorama: Zonia mine site was pre-stripped in 1967, with limited production (7 Mt on leach pads)**

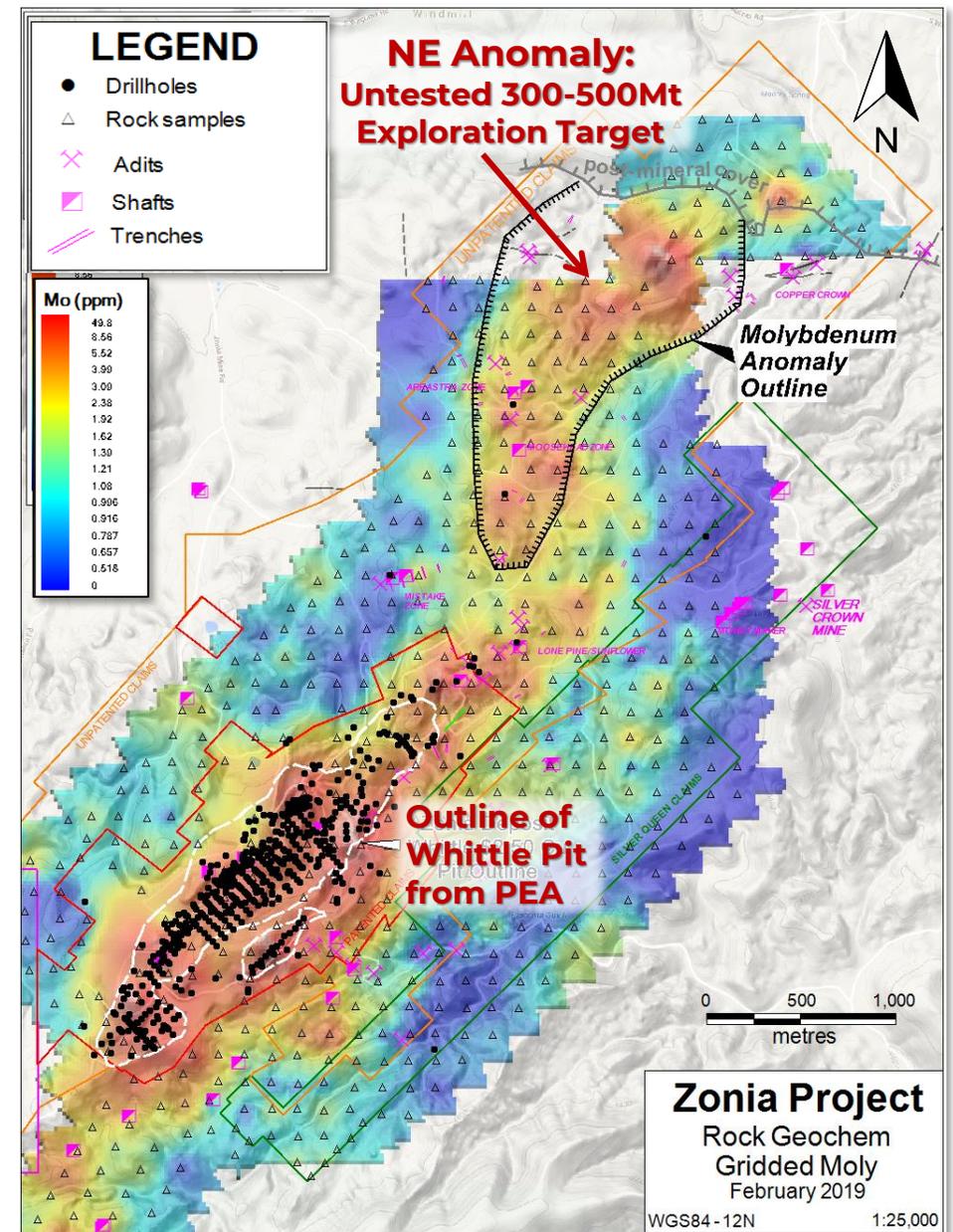


Ready for Development

# Zonia's Strengths

Phase 1 2018 PEA Resource & New Porphyry Target

- ✚ Extensive 150-metre spaced rock sample grid generated a large, coherent anomaly northeast of drill-defined mineralization
- ✚ Defined by coincident elevated Mo, Cu & Au, with depressed Mn and Zn: 'textbook' porphyry Cu footprint
- ✚ Untested drill target measures 1500 X 2000 metres and probably continues under cover to the north
- ✚ Same host rock as main deposit (quartz monzonite porphyry), but less foliated
- ✚ Permit applications filed for a 5000- metre programme on both BLM and Arizona state land



## Ready for Development

# Zonia

Preliminary Economic Assessment – **March 2018**

Base case \$2.00/lb Cu designed pit shell; \$3.00/lb Cu price

- After-tax **NPV 8% of \$192 M**, 29% IRR with a 2.9-year payback of initial capital
- Cumulative Net Cash Flow After Taxes of \$331 million
- Measured and Indicated Resources of **77 M short tons grading 0.33% copper** containing 510 M pounds of copper (0.2% copper cut-off grade).
- Inferred Resources of **27 M short tons grading 0.28% copper** containing 154.6 M pounds of copper (0.2% copper cut-off grade).
- **Low strip ratio of 1:1** waste to mineralized material in base case.

*Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources will be converted into Mineral Reserves. Inferred resources are that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.*

### Production Profile/Economics

Total Tons Leached	93 M
Head Grade	0.30% Cu
Mine Life	8.6 years
Payback Period	2.9 years
Mill throughput	30,000 tpd
Copper Recovery (oxide)	73%
Copper Recovery (transition)	70%
Total Copper Recovered	422 M lbs
Average Annual Production (LOM)	49 M lbs
After-Tax NPV 8%, \$3.00 Cu (base case)	\$192 M
After-Tax 1 <sup>st</sup> Year FCF, \$3.00 Cu	\$100 M
After-Tax NPV 8%, \$4.00 Cu (spot)	\$447 M
After-Tax 1 <sup>st</sup> Year FCF, \$4.00 Cu	\$149 M

### Operating Costs

Mining / Processing / G&A	\$1.46/lb of copper
---------------------------	---------------------

### Capital Requirements

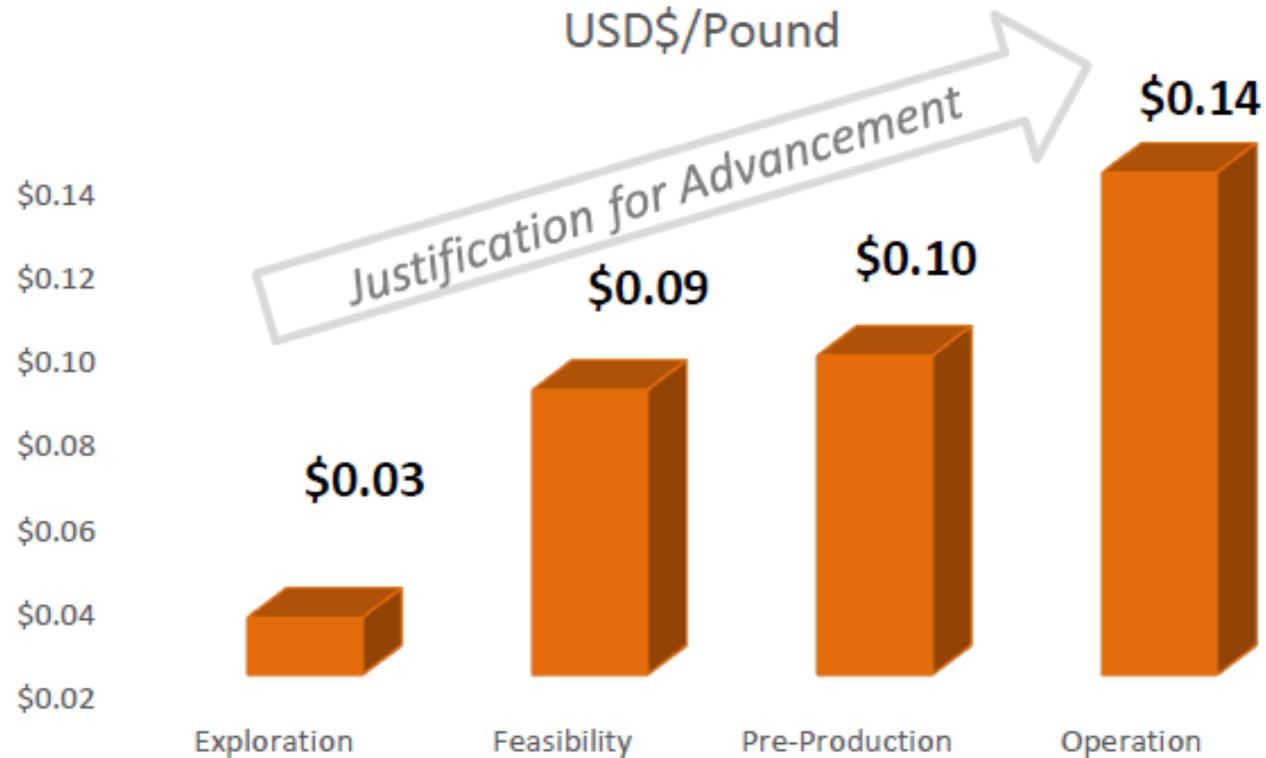
Initial Capital	\$198 M
Sustaining Capital	\$40.8 M

*The PEA is preliminary in nature and includes inferred mineral resources that are too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that PEA results will be realized. Mineral resources are not mineral reserves and do not have demonstrated economic viability.*

**Spot Price economics are based off sensitivities provided in the PEA**

# Zonia

Prices Paid M&A Over Time (2008-2018)<sup>4</sup>



World Copper intends to advance Zonia with a PFS/FS to further **unlock its value and de-risk the project as a whole within the near-term.**

# A Bright Future

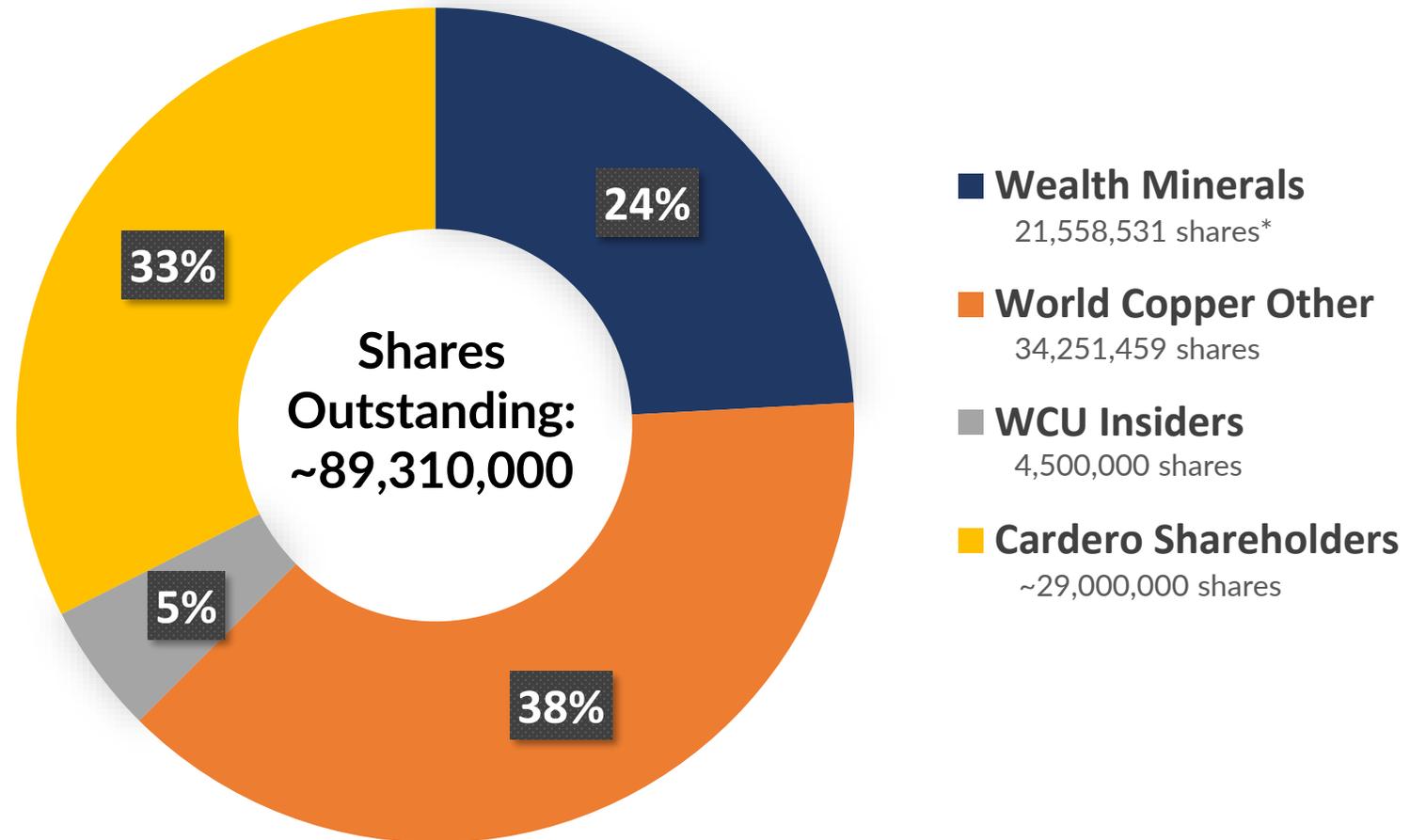
## The Next Base Metals Supercycle is Dawning

- A Supercycle is a “**decades-long, above-trend movements in a wide range of base material prices**” that is usually derived from a structural change in demand.
- The warning signs for this new Supercycle boom are all around us, with the effects of COVID-19, the green industrial revolution, USA’s Paris Agreement return and China committing to carbon neutrality by 2060 – there is a synchronized decarbonization push that “**has the potential to create a capex cycle on par with the emerging markets-driven cycle of the 2000s**”.

## World Copper

# Share Structure

Share structure of World Copper after the closing of the World Copper and Cardero Resources plan of arrangement transaction signed September 15<sup>th</sup>, 2021.



\* Subject to regulatory hold; periods available on SEDAR



**WORLD COPPER LTD.**

TSXV: WCU OTCQB: WCUFF

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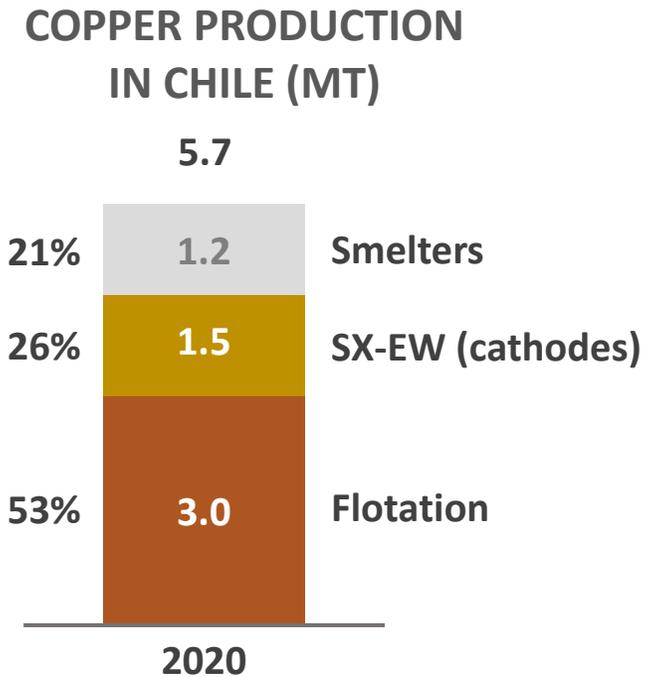
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# APPENDIX

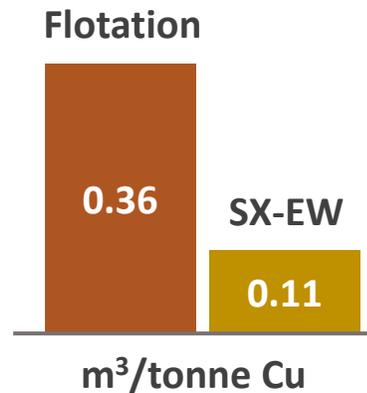
# Copper Production from Chilean Copper Oxide Deposits



- ⚡ Copper production from oxides in Chile has been in a steady decline for the last 20 years.
- ⚡ More copper is being discovered at depth as copper-oxide reserves closer to the surface are depleted.
- ⚡ Copper-oxide discoveries will become rare in the future and by 2029 copper production from this source in Chile is expected to fall from 26% to 11.6%.
- ⚡ Currently in Chile there are 34 SX-EW plants operating, but only 20 produce more than 10 kt Cu per year.
- ⚡ Only 10 new projects contemplate production from copper oxides.

# Benefits of Production from Copper Oxide

WATER USE FOR  
COPPER PRODUCTION  
IN CHILE



- ⚡ Copper production from oxides in Chile **uses 3 times less water** than conventional flotation.
- ⚡ The SX-EW process allows for copper cathode production **without the smelting process**
- ⚡ The **environmental footprint of SX-EW plants is much smaller than conventional flotation**
- ⚡ Transportation of the finished product (cathodes) is easier and poses much lower environmental risk than concentrates
- ⚡ In Chile the SX-EW plants consume only 13% of energy consumed by the mining industry (fuel and electricity)
- ⚡ **Tailing Storage Facilities are not required**

# Two Tales of SX-EW Plants in Chile

## High-tonnage, low-grade

- Large scale SX-EW plants in Chile **operate on copper porphyry mega-deposits**
- **High tonnage (250 Mt+)** allows for long life of mine and **low operating costs**
- Major mining companies operate such plants in Chile: **CODELCO, BHP, Anglo American and Antofagasta Minerals**
- The **biggest SX-EW plant** in Chile (Escondida Oxides) **produces over 280 kt** of copper cathodes per year
- Escalones has potential to join this group

## Low-tonnage, high-grade

- Low-tonnage deposits **require high copper grades** to become economic
- They rely on **clusters of small high-grade deposits**
- Easy and **cheap to find and develop**, but operating costs are high and margins slim
- **Susceptible to copper price** fluctuations
- **Short life of mines**
- Often requires **third-party material purchases** to fill design capacities

# Copper Oxide Operations & Chilean Projects

● Projects (resources, various classes) and ● Operations (reserves) in Chile

