# EXCEISIOF MINING CORP

#### We make Copper Green

TSX: MIN OTCQB: EXMGF Frankfurt: 3X3

May 21<sup>st</sup> 2024

#### **Disclaimers**

Special Note Regarding Forward-Looking Information: This presentation contains "forward-looking information" concerning anticipated developments and events that may occur in the future. Forward looking information contained in this presentation includes, but is not limited to, statements with respect to: (i) the estimation of mineral resources and mineral reserves; (ii) the robust economics, potential returns associated with the Gunnison Project, (iii) the technical viability of the Gunnison Project; (iv) the market and future price of copper; (v) expected infrastructure requirements; (vi) the updated economics on the Gunnison Project and JCM, (vii) the results of the Strong & Harris PEA including statements about future production, future operating and capital costs, the projected IRR, NPV, payback period, construction timelines, permit timelines and production fuerility the potential production from the Johnson Camp mine; (ix) future exploration potential; (x) the permitting process and permitting risk; (xii) the enefits of well stimulation; and (xii) the ability to mine the Gunnison Project using in-situ recovery mining techniques.

In certain cases, forward-looking information can be identified by the use of words such as "plans", "expects" or "does not expect", "is expected", "budget", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved" suggesting future outcomes, or other expectations, beliefs, plans, objectives, assumptions, intentions, intentions or statements about future events or performance. Forward-looking information contained in this presentation is based on certain factors and assumptions regarding, among other things, the estimation of initial and sustaining capital requirements, the estimation of labour and operating costs, the availability of necessary financing and materials to continue to explore and develop the Gunnison Project in the short and long-term, the progress of exploration and development activities, the receipt of necessary regulatory approvals, the completion of the permitting process, the estimation of insurance coverage, and assumptions with respect to currency fluctuations, environmental risks, title disputes or claims, and other similar matters. While the Company considers these assumptions to be reasonable based on information currently available to it, they may prove to be incorrect.

Forward looking information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such factors include risks inherent in the exploration and development of mineral deposits, including risks relating to changes in project parameters as plans continue to be redefined including the possibility that mining operations may not commence at the Gunnison Project, risks relating to variations in mineral resources and reserves, grade or recovery rates resulting from current exploration and development activities, risks relating to the ability to access infrastructure, risks relating to thanges in copper and other commodity prices and the worldwide demand for and supply of copper and related products, risks related to increased competition in the market for copper and related products and in the mining industry generally, risks relate to current global financial conditions, uncertainties inherent in the estimation of mineral resources, access and supply risks, reliance on key personnel, operational risks inherent in the conduct of mining activities, including the risk of acays or increased costs that might be encountered during the development process, regulatory risks, relating to the acquisition of the necessary licenses and permits, financing, capitalization and liquidity risks, including the risk that the financing necessary to fund the exploration and development activities at the Gunnison Project trans, or at all, risks related to disputes concerning property titles and interest, environmental risks and the additional risks identified in the "Risk Factors" section of the Company's reports and filings with applicable Canadian securities regulators.

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking information, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. Accordingly, readers should not place undue reliance on forward-looking information. The forward-looking information is made as of the date of this presentation. Except as required by applicable securities laws, the Company does not undertake any obligation to publicly update or revise any forward-looking information.

Additional information about the Gunnison Copper Project can be found in the technical report filed on SEDAR at <u>www.sedar.com</u> entitled "Gunnison Copper Project Prefeasibility Study Update and JCM Heap Leach Preliminary Economic Assessment", dated effective February 1, 2023. Additional information on Strong & Harris can be found in the technical report filed on SEDAR at <u>www.sedar.com</u> entitled "Estimated Minerals Resources and Preliminary Economic Analysis, Strong and Harris Copper-Silver-Zinc Project, Cochise County, Arizona", dated effective September 9, 2021.

Qualified Person: Excelsior's exploration work on the Gunnison Property and Johnson Camp properties is supervised by Stephen Twyerould, Fellow of AUSIMM, President and CEO of Excelsior and a Qualified Person as defined by National Instrument 43-101. Mr. Twyerould has reviewed and approved the technical information contained in this presentation. The technical information contained in this presentation with respect to Strong & Harris has been reviewed and approved by the following Independent Qualified Persons from MDA, a division of RESPEC: Mr. Jeff Bickel, C.P.G., of MDA, Reno, Nevada (geology and mineral resource); Mr. Michael Gustin, PhD., P.Geo, of MDA, Reno, Nevada (geology and mineral resource); C.Geol. Robert Bowell, PhD, C.Chem, C.Geol, SRK Consulting (UK) Limited, Cardiff, Wales, UK (mineral processing and metallurgical testing, recovery methods) and Mr. Thomas L. Dyer, P.E., of MDA, Reno, Nevada (mining methods, capital and operating costs, and economic analysis).





#### WHY COPPER?



- A vital metal to a number of <u>essential industries</u>:
  - Equipment
  - Building & Construction
  - Infrastructure
  - Industrial
  - Transport
- One of the most widely used minerals across the clean energy space
- Cu is on the Critical Minerals list for the USA and many countries
- Global decarbonization is expected to drive intensity of copper use

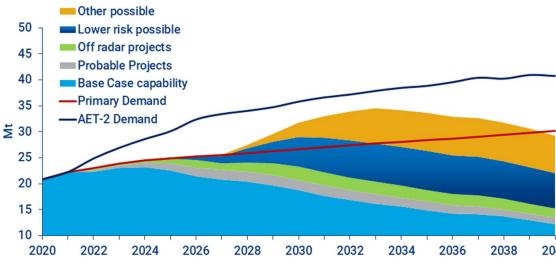


#### WHY NOW?

A key metal to have exposure to over the next decade and will be supported by cyclical tailwinds.

#### Copper demand growth puts supply elasticity under stress in an accelerated energy transition (AET-2) scenario

Primary copper demand scenarios vs mine supply potential



Global copper supply crunch is on the corner:

- Unclear long term supply solution leaves long-dated price risk skewed towards the upside
- Development of new mines is likely to fall behind growing global demand

#### Global energy transition demand:

- Copper's key role in the clean energy transition (in the race to Net-Zero) will support strong longterm demand
- ✓ EVs<sup>1</sup> and Renewable Energy to boost copper demand

2040 Increasingly investment and M&A activity in the Cu space

Sources: Wood Mackenzie and RFC Ambrian. Note: (1) Energy Vehicles.

### **Copper Price – At All Time Highs!!**



Excelsior's share price is even over the past 12-months despite the rapid rise in copper 1 38%, and receiving Gunnison wellstimulation approval and JCM/Nuton Stage 2 option agreement



### **Our Investment Thesis**

**Excelsior Mining Corp.** is a copper production company, with a low cost, environmentally-friendly "green" operation in **Arizona**.





## **Key Team Members**



#### Stephen Twyerould, Ph.D – CEO and President

Over 35 years' experience in the mining industry across numerous early-to-late stage companies worldwide, with extensive track record performing in both technical and management roles.



#### Roland Goodgame, Ph.D. – Senior VP of Business Development

Over 35 years' experience in the mining industry across numerous large companies worldwide, with strong technical and operating background.



#### Robert Winton, P.Eng – Senior VP/General Manager

Over 20 years' experience in the mining industry across numerous early and mid-stage companies in North America, with strong technical and operating background.



#### Fred DuVal – Chairman of the Board

Consultant to many American businesses, a member of Dentons Law (the largest law firm in the world), a senior advisor to Macquarie Infrastructure on public-private partnerships. Mr. DuVal was the Democratic nominee for Governor of Arizona in 2014 and served as Chairman of the Arizona Board of Regents and on the Arizona Commerce Commission.

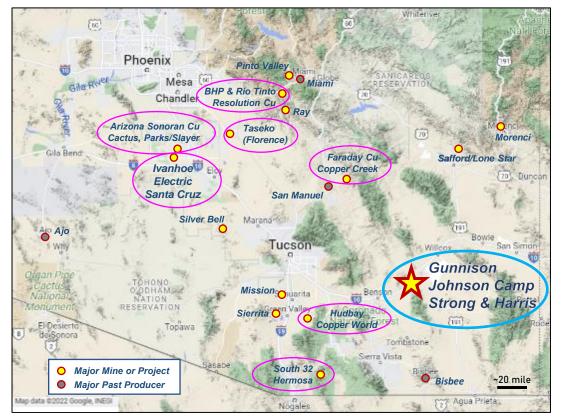


#### Colin Kinley – Director of the Board

Almost 40 years' experience in the mining industry across numerous early-to-late stage companies worldwide, with extensive track record in both technical and management roles in energy transition metals, oil and gas projects.



### Arizona is the premier state for mining development



Excelsion

- Tier-1 jurisdiction safe, mining friendly, local mining services available, proper infrastructure
- Surrounded by notable mining players
  - Excelsior projects are strategically located outside urban areas, what makes permitting favorable
    - Only 200 miles from Phoenix
- Arizona state ranked 5<sup>th</sup> for investment attractiveness (Fraser Institute, 2021)



## Peer Comparable | Surrounding peers<sup>1</sup> in Arizona, U.S.

			FARADAY COPPER	<b>Taseko</b>	ARIZONA SONORANY	Arizona Metals Corp.
Market Capitalization (US\$)	\$50M	\$1.43B	\$100M	>\$239M	\$133M	\$220M
Asset Name	Gunnison / JCM	Santa Cruz	Cu Creek / Contact Cu	Florence	Cactus / Parks Salyer	Kay
Stage	PFS/PEA	Resource	Resource	PFS	PFS	Resource
Measured & Indicated Resource (MIb Cu)	5,993	6,173	4,126	2,839	5,174	N/A
Inferred Resource (MIb Cu)	1,392	3,970	673	295	2,208	N/A
Mine Life (Years)	24	N/A	N/A	21	21	N/A
After-Tax IRR (%)	38%	N/A	N/A	47%	15%	N/A
After-Tax NPV (US\$)	\$1.17B	N/A	N/A	\$930M	\$509M	N/A

**General Assumptions** 

- \$3.75 Cu used for Excelsior
- Excelsior without Strong & Harris
- Market data as of May 21<sup>st</sup> 2024 at closing
- Estimated NAV of Florence inside Taseko
- NPV, IRR and Mine Life are Gunnison Only

## Excelsio

Notes:

(1) Junior development or Single-asset copper mining companies.

(2) This summary is for comparative purposes only and is not an indication that Excelsior's

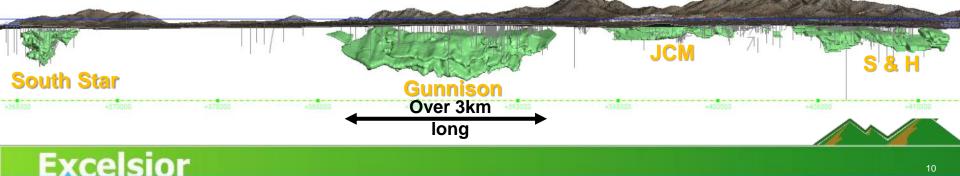
- projects or corporate performance will be the same as peer companies
- (3) Refer to slides 11 and 18 for mineral resource estimate details

## **Our Multi-Asset Copper Mining Camp in Arizona**

#### A major copper mining facility in the making.



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



**Excelsior's Flagship Assets** 

#### Gunnison Copper Project & Johnson Camp Mine ("JCM")

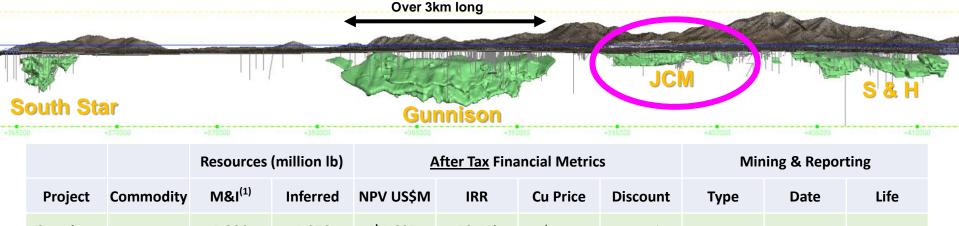
JCM Pits (Burro)



Process



## **Our Multi-Asset Copper Mining Camp in Arizona**

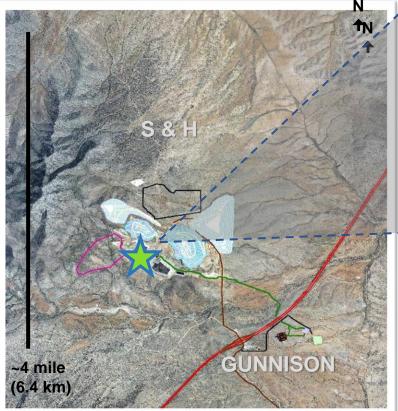


Gunnison	Cu	5,320	1,070	\$1,697	50.4%	\$4.50	7.50%	ISR	PFS 2023	24
JCM <sup>(1)</sup>	Cu	677	322	\$321	49.2%	\$4.50	7.50%	Open Pit	PEA 2023	21
Strong & Harris <sup>(1)</sup>	Cu, Zn, Ag *CuEquiv		1,000*	\$478	34%	\$4.50	8.00%	Open Pit	PEA 2021	7

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### **JCM Existing Plant and Infrastructure**



Excelsior

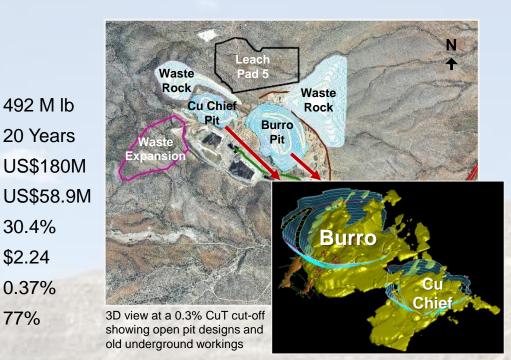


- ✓ 25+ million pound per year SXEW (~12kmt)
- Fully operational infrastructure/plant
- Leach Pad Permitted in January 2023
- Experience operators, > 3,400 days LTI free

#### **JCM 2023 PEA**

Nuton (Rio Tinto) Collaboration Agreement **Recent Study** 

- **Copper Produced**
- Mine Life
- After Tax NPV (@7.5%, \$3.75/lb Cu)
- Initial Mine Capital
- After Tax IRR
- Total Operating Cash Cost (\$/lb Cu)
- Total Copper Grade (CuT%)
- Average LOM Copper Recovery



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30.4%

\$2.24

0.37%

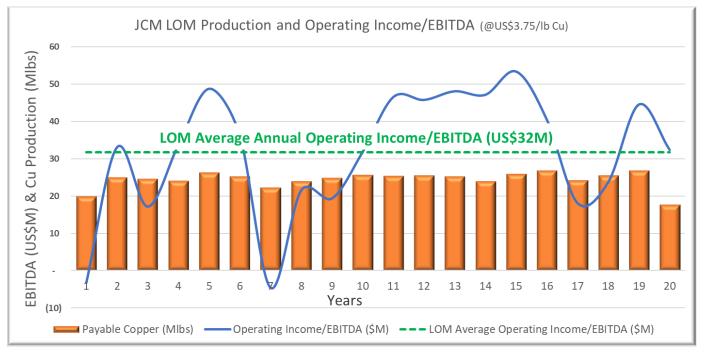
77%



## JCM existing crushers and agglomerator



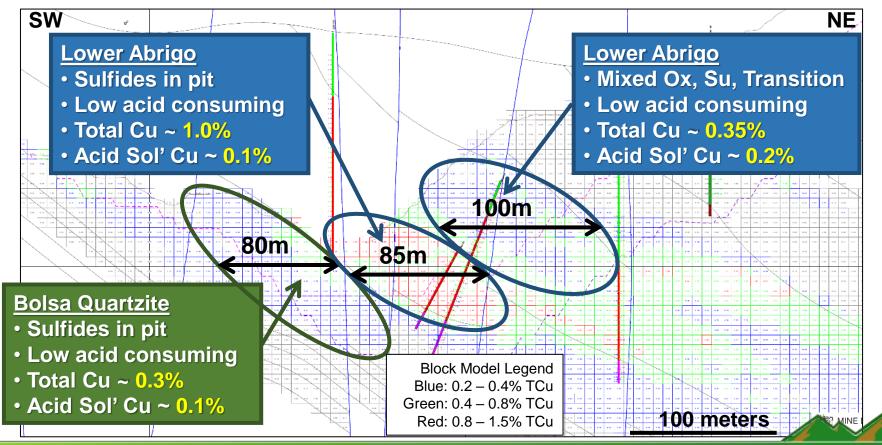
## JCM Production and Income (Before Tax) Profile



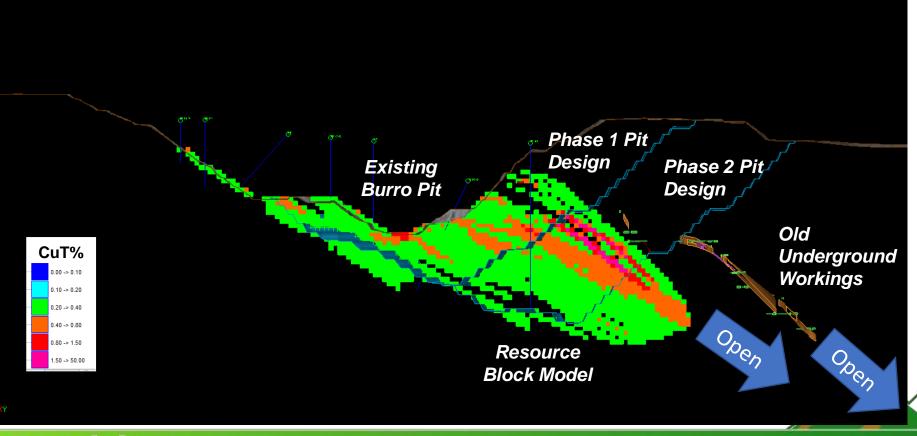
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### JCM: Example Section 1900 through the Burro Pit

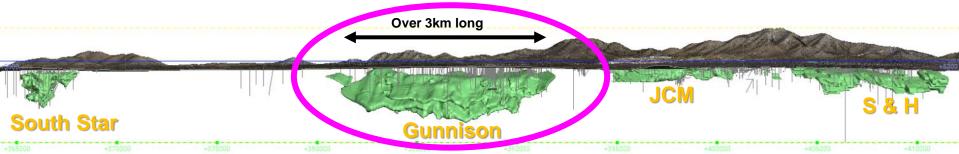


### JCM Cross Section 2200 Through Burro Open Pit



Excelsior

## **Our Multi-Asset Copper Mining Camp in Arizona**

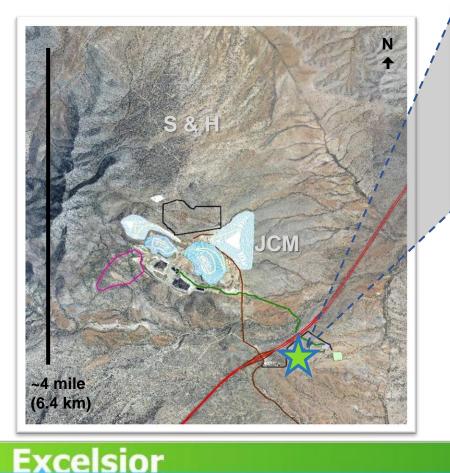


		Resources (million lb)		A	After Tax Financial Metrics			Mining & Reporting		
Project	Commodity	M&I <sup>(1)</sup>	Inferred	NPV US\$M	IRR	Cu Price	Discount	Туре	Date	Life
Gunnison	Cu	5,320	1,070	\$1,697	50.4%	\$4.50	7.50%	ISR	PFS 2023	24
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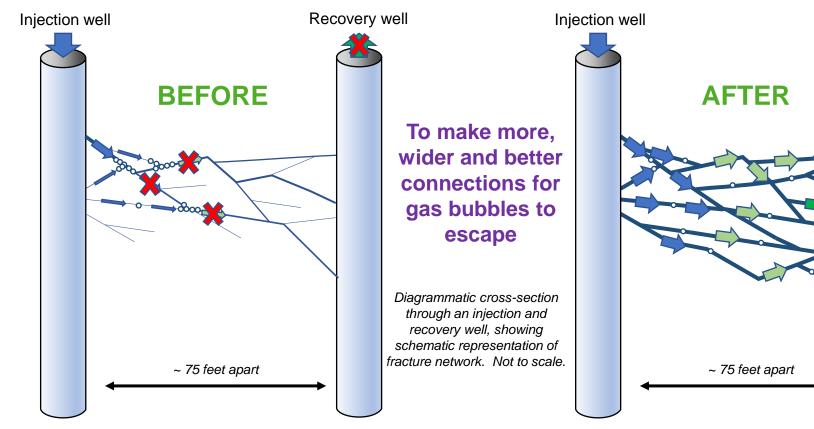
### **Gunnison: Industry-leading Economics**





- US\$1.17bn NPV & 37.5% IRR (LOM US\$3.75/lb Cu price, @ 7.5% discount rate)
- Direct Operating Costs: \$0.945/lb & Total Cash Costs:
  \$1.23/lb
- ✓ All-In Cost (capital & operating) \$1.73/lb.
- ✓ 24-year LOM, staged to 125M lbs/yr (57Kt)
- ✓ Starts at 25M lbs per year & expands to 125M lbs/year
- 2.15 billion lbs of pure Cu cathode to be produced

## **The Intent of Well Stimulation**





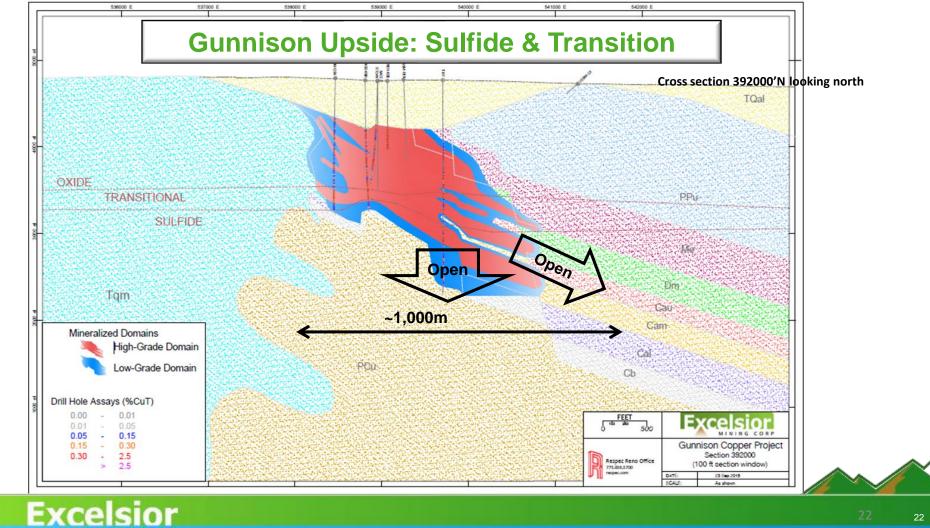
Recovery well

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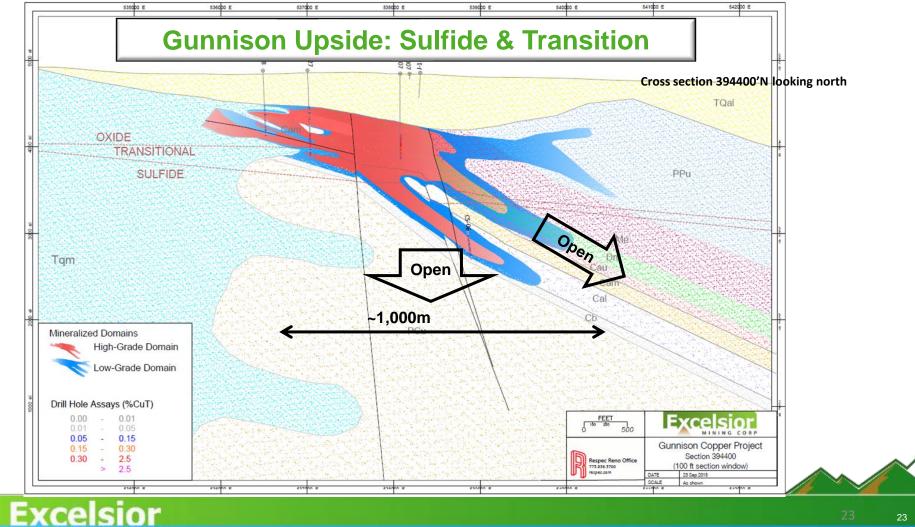
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## **Our Multi-Asset Copper Mining Camp in Arizona**



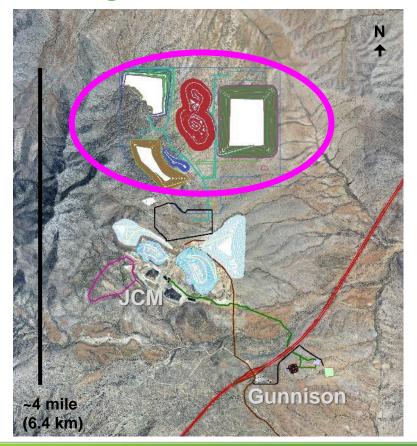
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#### **Strong & Harris**

Excelsior



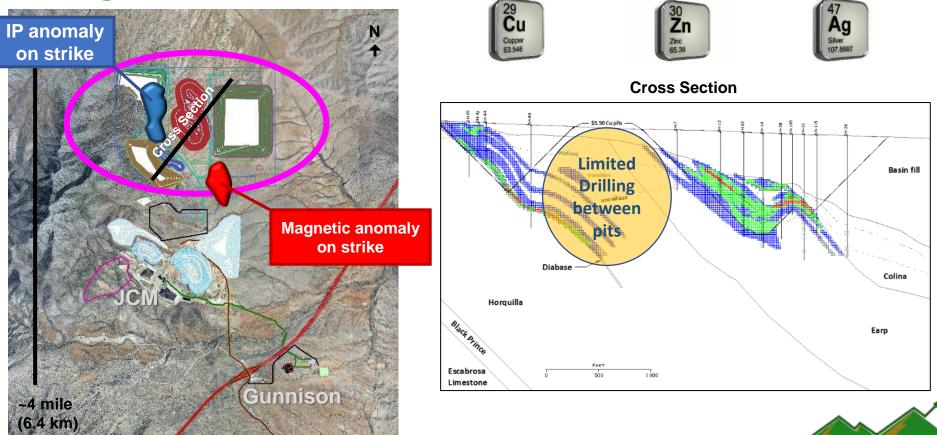
PEA: After-tax NPV ~US\$260 million IRR ~23% (@8% with US\$3.75/lb Cu price)

Low operating costs of ~\$1.75/lb. CuEq Average Cu/Zn Production 62/82 Mlbpa

S & H Mineral Resources (09/09/21)	Tons	Grade	Metal (millions)	
Inferred	76 million	0.52 % Cu	794 lb (0.36 mt)	
	short	0.56 % Zn	858 lb (0.39 mt)	
	tons 0.	0.12 oz/t Ag	9.5 oz	
Inferred: ~ 1 billion lb CuEq (0.48 million metric ton)				

The Mineral Resources (0.1% Cu cut-off) has the potential to be mined using open pit with oxide leaching and sulfide concentrating. The PEA is preliminary in nature and includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the conclusions reached in the PEA will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

#### **Strong & Harris**





## **Significant Permitting Track-Record**

#### **COMPLETED PERMITS**

- ✓ All Operating Permits are in place
- ✓ Major State permits obtained in less than 18 months
- ✓ Major Federal (EPA) permits obtaining in ~ 2.5 years
- Significant Amendments to State Permits in 2017, 2018 & 2019 in less than 6 months
- Amendments to Federal Permits in 2019 & 2020 in less than 6 months
- Major Amendment to State Permit for new JCM leach pad in 2023 in 9 months
- EPA well stimulation amendment in April 2023 in 12 months

#### **FUTURE PERMITS**

✓ For new JCM open pit operations: Two State Permit Amendments expected to take 3 to 6 months

Completed Permits	Year	Time	
Major Amendment to JCM APP	2016	4 months	
Major Amendment to JCM AQP	2016	4 months	
Major Amendment to JCM APP	2017	5 months	
Major Amendment to JCM MRP	2018	3 months	
New APP for Gunnison	2017	17 months	
New UIC (EPA) for Gunnison	2018	30 months	
New MRP for Gunnison	2018	3 months	
Minor Amendments to UIC & APP Gunnison	2017, 18, 19 & 20	2-9 months	
Major Amendment JCM APP for Gunnison	2019	4 months	
Major Amendment JCM APP new leach pad	2023	9 months	
Major Amendment UIC (EPA) Fracking	2023	12 months	
Future Permits	Т	ime	
JCM MRP Amendment (2024)	3-4 months		
JCM AQP Amendment (2024)	3-4 months		



Notes: APP (Aquifer Protection Permit and AQP (Air Quality Permit) are administered by ADEQ (Arizona Department of Environmental Quality); MRP (Mine Reclamation Plan) is administered by ADMMR (Arizona Department of Mines and Mineral Resources); UIC (Underground Injection Control permit) is administered by EPA (Federal Environmental Protection Agency).

## **Excelsior Forecast Looking Forward**



✓ EPA amended permit **received** (ISL)

- ✓ Mineralogy tests and modelling (Nuton)
- ✓ Commence column testing (Nuton)

#### Q3/Q4

- ✓ Commercial discussion with Nuton and potential deal
- ✓ Complete column testing (Nuton)
- ✓ Commence feasibility study

#### Q2

2024

**JCM** 

- ✓ Complete Feasibility Study
- ✓ Finance construction for JCM (Capital based on Nuton Stage 2I)

#### Gunnison

Q2/Q3

- ✓ Mobilize team for well stimulation trials (ISL)
- ✓ Complete well stimulation trials (ISL)





## **Great Long-Term Supporters**





: US\$65.5M (Equity, Royalty, Convertible)



:**US\$9M** (Equity & Royalty)



Excelsion



#### TSX: MIN / OTCQX: EXMGF / FSE: 3XS

Shares I/O	315.4 M
Fully Diluted	368.0 M
Recent Price	~US\$0.18
Market Cap	~US\$50M
Convertible Debt	US\$3 M @ \$0.19
	US\$2.4 M @ \$0.114
Top Holders	
Greenstone	45.4%
Triple Flag	4.4%
Management	4.0%
	53.8%
US\$3.4 M cash bala	ince as at December
31 <sup>st</sup> 2023	

- Experienced team
- First class SXEW
- Operational base
- Gunnison
  - ISR = Superior economics & ESG
  - Well Stimulation Trials
- Johnson Camp: Oxide, Sulfide & Transition
  - Near-term cash flow to fund activities
  - Upside Projects: Integration, Exploration, e.g., Strong & Harris

## **Investment Strengths**

**Optionality & Value Creation** 

\$50 Million Market Cap

Excelsior Market Cap ~0.04xNPV\*



Junior Cu Producers ~0.5xNAV\*\*

## **Dedicated to Success**

Based on February 2023 PFS After-tax US\$1,167 million NPV & 37.5% IRR (LOM US\$3.75/lb Cu price, 7.5% discount rate) \* RBC Capital Markets Comparable as of October 20, 2022: Average Junior Copper Producers ~0.5x P/NAV



## **EXCELSIOR** Quality refined

#### We make copper green

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