

## **Forward-Looking Statements**

The information contained in this presentation is provided solely for general knowledge purposes. This presentation is not intended to be a comprehensive review of all matters and development concerning the Company and we assume no responsibility for its completeness, accuracy and currency. For current information, please refer to the Company's filings on SEDAR + (www.sedarplus.ca) or contact the Company directly.

This presentation is not to be construed as an offer to sell, or a solicitation of an offer to buy, securities of the Company. No securities commission has in any way passed on the merits of any of the information contained in this presentation.

The Company's technical disclosure in this presentation uses terms such as "measured resources", "indicated resources" and "inferred resources", which are defined by the Canadian Institute of Mining, Metallurgy and Petroleum, and required to be disclosed in accordance with Canadian National Instrument 43-101 ("NI 43-101"). The disclosure standards in the United States Securities and Exchange Commission's (the "SEC") Subpart 1300 of Regulation S-K contain significant differences from the disclosure requirements of NI 43-101 and information presented in this presentation may not be comparable with United States standards in documents filed with the SEC. All disclosure of scientific or technical information in this presentation concerning our projects, including disclosure regarding mineral resources, has been reviewed and approved by Steven Dischler, P.E., MMSA QP, CEO and Director of Lion Copper and Gold Corp. and a qualified person as defined in NI 43-101.

References are made in this presentation to historic mineral resource estimates. A qualified person has not done sufficient work to classify the historic estimates as current mineral resources or mineral reserves. The Company is not treating the historical estimates as current mineral resources or mineral reserves and, accordingly, they should not be relied upon.

The information in this presentation contains "forward-looking statements" and "forward-looking information" (collectively, "forward-looking statements") within the meaning of applicable United States and Canadian securities legislation. Forward-looking statements reflect the expectations of management and consist of statements that are not purely historical, including any statements regarding the economic prospects of the Company's projects, the Company's future plans or future revenues, and the timing of development, potential expansion or improvements, are forward-looking statements. Often, but not always, forward looking statements can be identified by the use of the words such as "will", "may", "expect", "could", "intend", "potential", "aims", "probable", "believe", "would", "continue", and "possibility" (and variations of these or similar expressions). All of the forward-looking statements in this presentation are qualified by this cautionary note. Should one or more risks, uncertainties, contingencies or other factors materialize or should any factor or assumption prove incorrect, actual results could vary materially from those expressed or implied in the forward-looking statement.

Such risks and uncertainties include, but are not limited to, the Company's ability to raise sufficient capital to fund development, changes in general economic conditions or financial markets, changes in prices for the Company's mineral products or increases in input costs, litigation, legislative, environmental and other judicial, regulatory, political and competitive developments in countries where the Company operates, technological and operational difficulties or inability to obtain permits encountered in connection with our exploration and development activities, labor relations matters, and changing foreign exchange rates, which are described more fully in the Company's filings available on SEDAR and EDGAR

Readers are cautioned that forward-looking statements are not guarantees of future performance and, accordingly, you should not place undue reliance on forward-looking statements. Any forward looking statements made by us in this presentation are based only on information currently available to us and speaks only as of the date on which it is made. The Company does not undertake to update any forward-looking statement after the date of this presentation or to explain any material difference between subsequent actual events and any forward-looking statement except as required by applicable law.

# **The Right Company: Lion CG**



**Experienced Management Team & Board with a Proven Track Record and a Vision for Yerington** 



**Brownfield Property with Near-Term Production Potential in a Tier 1 Mining District** 



Low CapEx Project with Expansion Potential



**Potential Catalyst to District Consolidation** 



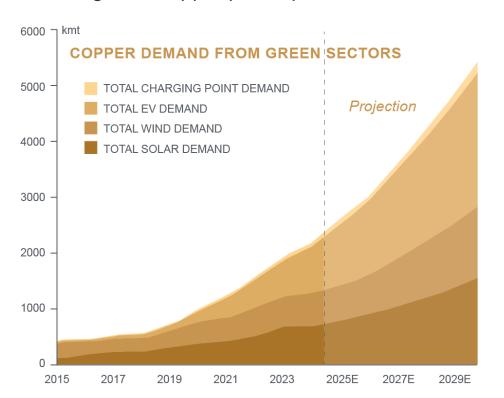
Option Agreement with Major Mining Company and Aligned Vision for Responsible Copper Production

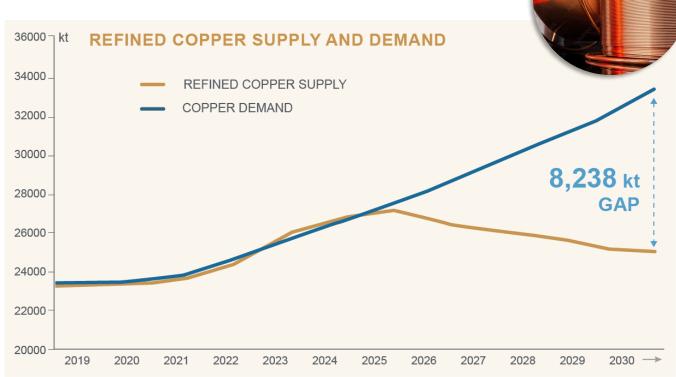


**Additional Pre-discovery Properties in Tier 1 Districts** 

# **The Right Space: Copper**

- Transition to EV and renewables requires copper
- Al and data centers increasing global demand
- Mine supply predicted to fall well below demand after 2024 driving the largest long-term supply gap on record
- Long term copper prices predicted to remain strong





## **The Right Team:**

### MANAGEMENT AND BOARD WITH EXPERIENCE & VISION

Decades of experience in the industry, in the Yerington area, and a commitment to progress with integrity

<b>C.</b> 7	<b>Travis</b>	Naugle,	P.E.	<b>QP-MMSA</b>
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Co-Chairman of the Board

### **Tom Patton**

Co-Chairman of the Board

### **Tony Alford**

Director

### **Steven Dischler, P.E. QP-MMSA**

CEO, Director

### **John Banning**

COO, Vice President

### Lei Wang

**CFO** 

### **Doug Stiles**

VP Sustainability & Environment



See full biographies in Appendix

# The Right Place: Nevada

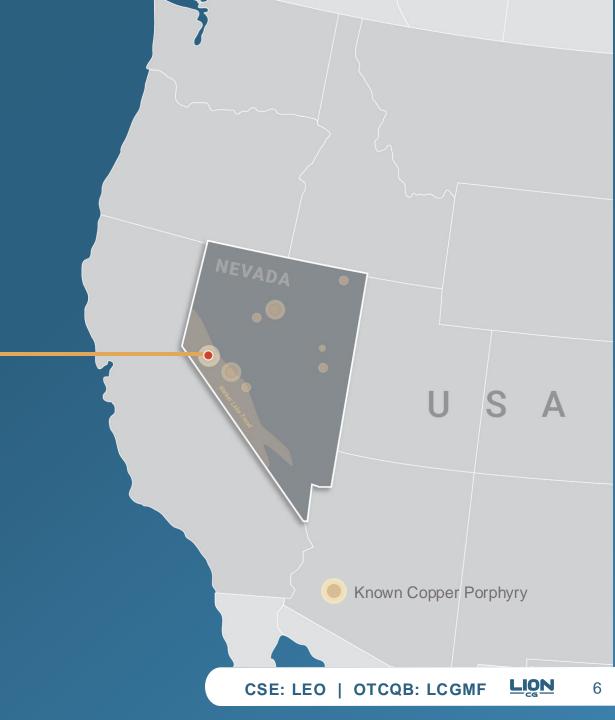
Nevada is second most attractive investment destination for mining projects in the world

(Fraser Institute Annual Survey of Mining Companies, 2023)

- Remarkable geological potential
- Mining-friendly State
- Clear permitting process
- Favorable industry tax rate
- Proximity to mining infrastructure
- Availability of experienced mining workforce

## **Yerington Copper Project**

Mason Valley, Nevada



# **Right Place: Yerington District**

#### THE OPPORTUNITY IN YERINGTON

### Copper discovered in the Yerington district in 1865

- Anaconda copper mine produced 1.7 billion pounds of copper over 25 years at Yerington.
- District inventory 17+ billion lbs of copper in the M&I\*\* categories (Ann Mason, Blue Hills, Pumpkin Hollow, in addition to the Lion CG deposits)
- **Community Support:** Local mining experience, engagement with local, tribal, state and federal governments
- **Central Position in the District:** Strategic for mine development & district consolidation
- **Excellent Location:** For plant, equipment, earthen facilities; access to extensive infrastructure

\*\*Mineral resources that are not mineral reserves do not have demonstrated economic viability

**Open-pittable Resources:** Large-scale, low-cost, with a low strip ratio (0.3:1)

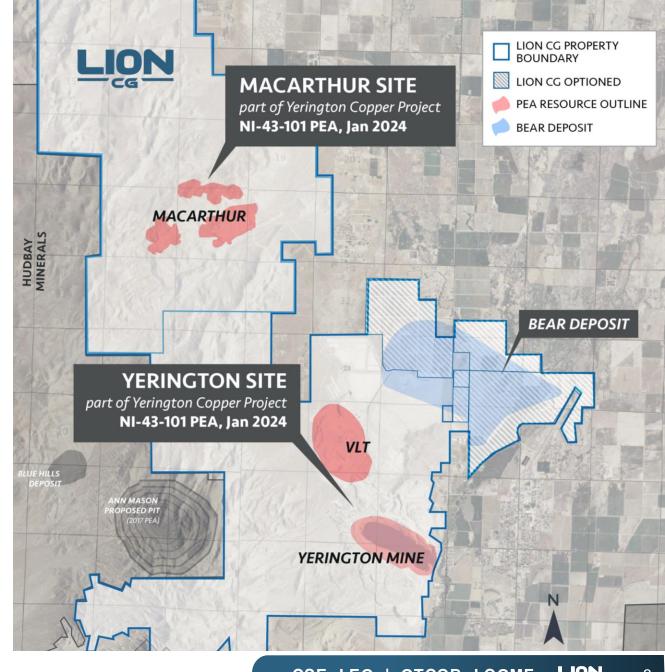
LION CG/SPS CLAIMS OTHER COMPANY PROPERTIES POWER PLANT HIGHWAY **MACARTHUR** RAIL MINE' CITY **BEAR DEPOSIT** LION CG **HUDBAY MINERALS ABACUS** MINING Blue Hills Deposit Yerington 0 Ann Mason Deposit LION CG Wassuk YERINGTON MINE Mason Pumpkin Hollow Mine **NEVADA COPPER** NOWN RESOURCE (LEO) HISTORIC RESOURCE\* (LEO) KNOWN RESOURCE (OTHERS) MILES MOPERATING MINE

<sup>\*</sup>A qualified person has not done sufficient work to classify this historic estimate as a current mineral resource. It should not be relied upon and Lion CG does not

# **Yerington Copper Project**

#### THE OPPORTUNITY IN YERINGTON

- Lion Copper & Gold has operated in Yerington since 2006
- 100% interest in prolific Yerington copper district
- Historic mining camp: Portfolio of deposits, significant exploration upside
- Central Brownfield starting position for District consolidation
- Potential for discovery: large property with many untested targets, expansion of known resources
- Open pit with low strip ratio, heap leach project: cleaner to extract, less expensive to develop, faster into production



# **Nuton LLC Option Agreement (a Rio Tinto Company)**

### OPTION TO EARN IN, APPLICATION OF NUTON™ TECHNOLOGY

- In a strategic Option Agreement with Nuton LLC, Lion CG demonstrates its unwavering commitment to develop the Yerington Copper Project. This Project represents a new vision for mining in Mason Valley, grounded in considerations of environmental sustainability, water conservation, and respect for tribal and social issues.
- The Nuton LLC partnership:
  - Creates a highly visible Positive Impact given the legacy-affected nature of the Yerington site.
  - Allows for enhanced recovery of sulfide copper ore via leaching instead of traditional flotation.
  - Aspires to showcase Nuton's commercial viability while setting the standard for Positive Impact in the mining industry.

A high visibility Positive Impact Project will bring Yerington to an even better post-mining state

# **Option Agreement: SPS & Nuton**

#### INVESTMENT BASED ON ACHIEVING KEY MILESTONES

- Nuton<sup>™</sup> Application of Rio Tinto's innovative and proprietary copper leach-related technologies
- Unlock low-grade copper sulfide resources and copper tailings
- Leading environmental performance: more efficient water use and lower carbon emissions per unit of copper, and better reclamation outcomes by reprocessing mine wastes

PFS 2Q 2025

STAGE 1: SCOPING Nuton invests
US\$4.0M
(2022)

STAGE 2B: PFS
Nuton invests
US\$11.5M
(2024/2025)

STAGE 3: Earn-In & FEASIBILITY STUDY per Option Agreement (timing TBD)

Stage 3 Yet to be opted in by Nuton

STAGE 2: PEA
Nuton invests

U\$\$7.5M
(2023)

Nuton Investment Decision – after investing \$US50M (timing TBD)

# **Yerington Copper Project - A New Vision**

COMMITTED TO MINIMIZING OUR FOOTPRINT WHILE MAXIMIZING POSITIVE COMMUNITY AND STAKEHOLDER OUTCOMES

**Local Resource, Local Prosperity, Local Control:** 

Integrated Yerington & MacArthur mines

**AFTER TAX: NPV \$356M, IRR 17.4%** 

from 1Q-2024 PEA

**Copper, Produced in America:** 

Cutting-edge Nuton™ technologies

**ENVIRONMENTAL BENEFITS** 

**Low Risk/Low-Cost Operations:** 

Development at brownfield mine location

**CLOSE TO EXISTING INFRASTRUCTURE** 

**Delivering Clean Water to Mason Valley:** 

Dewater Pit Lake with multiple beneficial uses

BENEFITS LOCAL WATER RESOURCES

**Re-mining to Enhance Clean Up:** 

Modern mine closure plan

**FULLY FUNDED RECLAMATION BOND** 

Open pit heap leach projects:

Cleaner, less expensive, faster into production

LOWER OPERATIONAL RISK AND COST

# **Yerington Copper Project**

**1Q-2024 PEA HIGHLIGHTS\*** 

17.4% \$356M \$413M

\$653M

After-tax IRR

After-tax NPV7.5%

**Initial CAPEX** 

**Sustaining CAPEX** 

5.0 YEARS

Post-tax payback period

**1.4** B<sub>Ib</sub> LOM

Payable copper production

0.3:1.0

**Exceptionally** low overall open pit strip ratio (waste:ore)

\*All figures in US Dollars. For technical information please see "Preliminary Economic Assessment of the Yerington Copper Project, Lion Copper and Gold, Yerington, Nevada," March 12 2024

Readers are cautioned that this PEA is preliminary in nature. It includes inferred mineral resources considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty the PEA will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, socio-political, marketing, and other relevant issues.



# Yerington Copper Project - Prefeasibility Study Underway

### **FULLY FUNDED BY NUTON, PLANNED COMPLETION 2Q 2025**

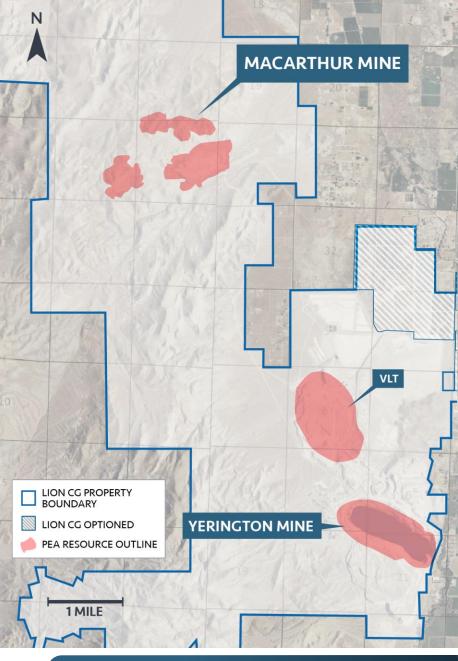


- Detailed studies underway to optimize and de-risk the Project presented in the PEA
- Drilling to expand and upgrade the Resource at Yerington and MacArthur to Measured & Indicated, and Proven & Probable Reserves
- Metallurgical testing column testing on oxide and sulfide materials
- Mine development mine design and scheduling
- Mine Infrastructure trade-off and optimization studies
  - Power, water, Heap leach facilities, waste rock, etc.
- Pit lake dewatering and water discharge alternatives
  - Ground water modeling
- Baseline environmental studies
- Community and tribal outreach

# **Yerington Copper Project – Drilling**

### DRILLING COMPLETED FOR RESOURCE EXPANSION/UPGRADE

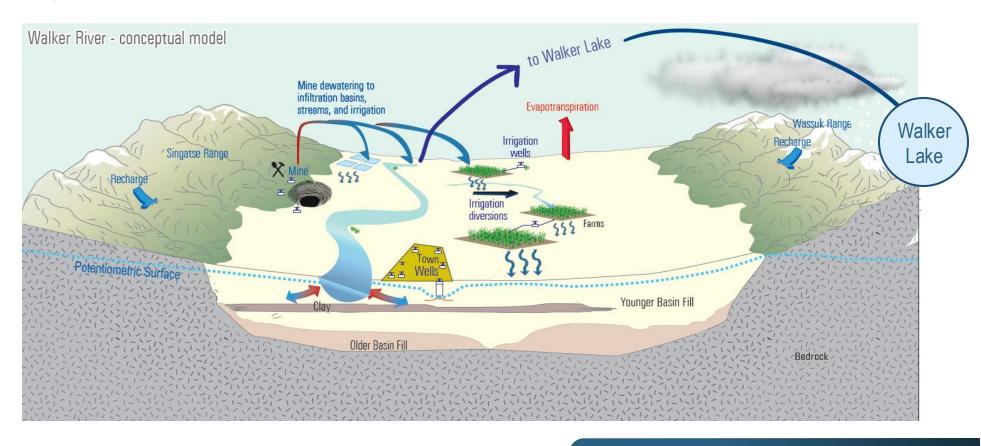
- Yerington Mine drilling
  - 3,326 ft in four angled core drill holes
  - Pit slope stability, metallurgical testing and geochemical characterization of waste
- MacArthur Mine drilling
  - 6,165 ft of RC drilling
- Vat Leached Tailings (VLT) drilling
  - Reprocessing potential to recover copper
  - No PFS drilling planned



# **Yerington Pit Lake**

#### CLEAN WATER THAT POSES NO RISK TO HUMANS AND WILDLIFE

- Dewatering required to access copper resources
- 43,000 acre-feet (14 billion gallons)
- Beneficial uses:
  - Walker River
  - Irrigation
  - Aquifer recharge



# The right perspective: progress with integrity

OUR COMMITMENT TO ALL STAKEHOLDERS AND AREAS OF OPERATION

- We have open communications with all affected stakeholders
- We listen to stakeholder concerns & strive to incorporate them into our project
- We use sound science to quantify impacts caused by the new mine
- We meet or exceed all regulatory requirements
- We will design and operate our project to lower environmental and social impacts, enabled by the Nuton<sup>™</sup> process



Lion CG and our people are part of the communities where we operate

# **Capital Structure**

### LION CG IS UNDERVALUED AND DE-COUPLED FROM COPPER PRICE

Shares Issued:	385,855,710
Options:	58,021,020
Warrants:	133,035,981
Fully Diluted:	576,912,711

### 90-DAY AVG VOLUME:

OTCQB: LCGMF	187,000
CSE: LEO	31,000

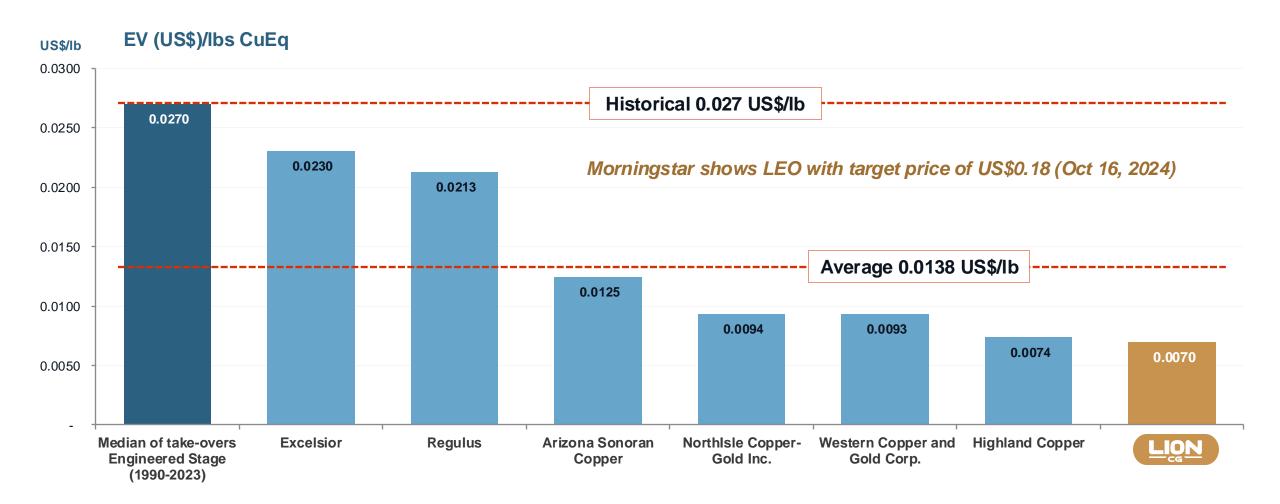
### MARKET CAP:

OTCQB: LCGMF	US\$20.28M	
CSE: LEO	C\$32.53M	

#### **3-month Share Price Performance** \$COPPER (CME) 5.00 **CSE: LEO Share Price** Copper Price (\$/lb) Sprott Junior Copper Miners ETF 4.80 PRICE PERFORMANCE LEO.C 0.09 0.085 4.60 0.08 4.40 0.075 0.07 4.20 0.065 0.06 4.00 0.055 0.05 3.80 APR SEP OCT MAY JUN JUL AUG

### **Lion CG Stock is undervalued**

#### STOCK PRICE/ENTERPRISE VALUE

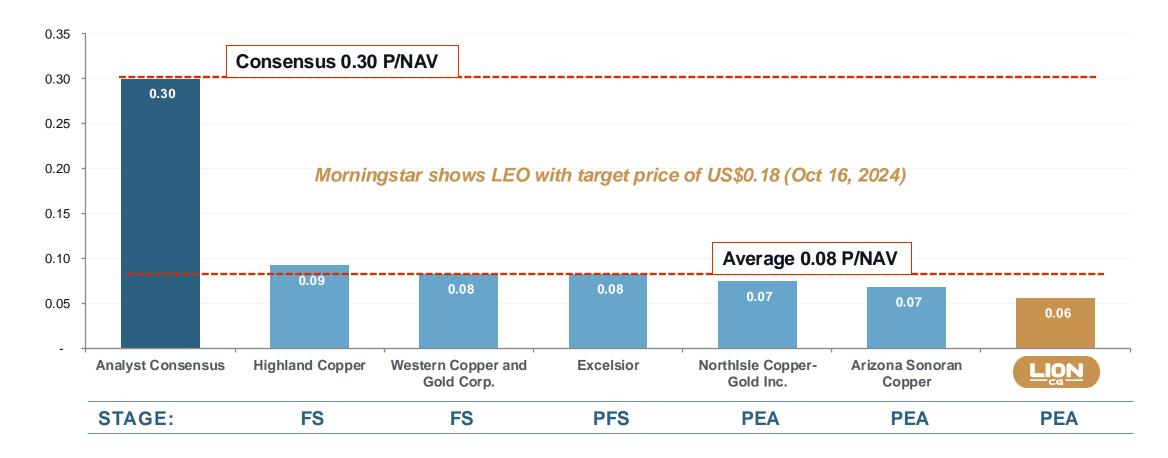


EV/lb CuEq: Calculated as Market Cap (in US\$ over reported total CuEq (Measured + Indicated + Inferred)
Sources/Notes: Market cap data per S&P Capital IQ (September 27, 2024). Project data per each projects latest technical report or other corporate disclosures

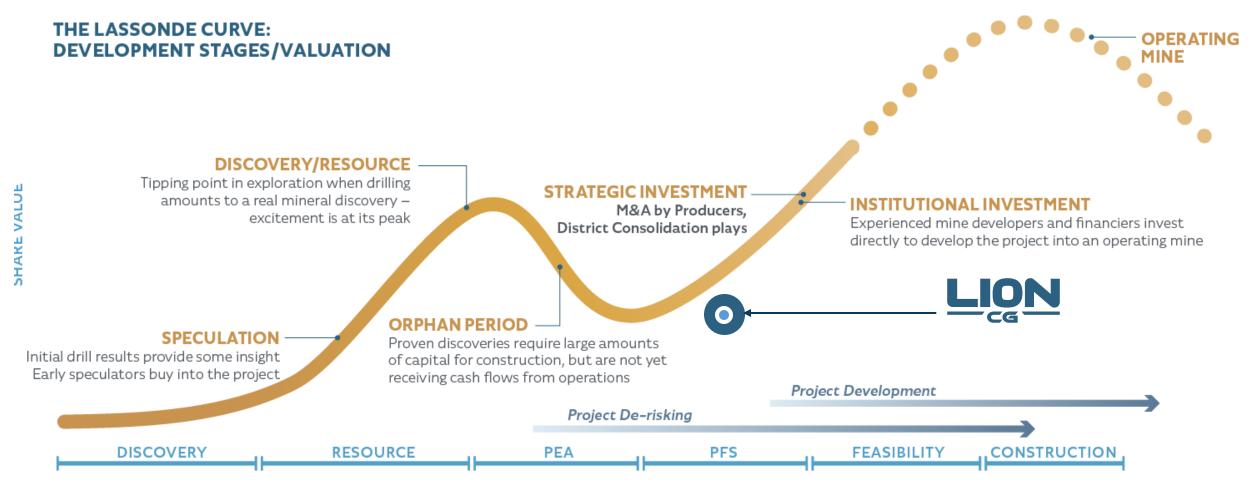
### **Lion CG Stock is undervalued**

### STOCK PRICE/NET PRESENT VALUE (PEA)

### P/NAV (US\$EV/US\$NPV)



# **The Right Time**

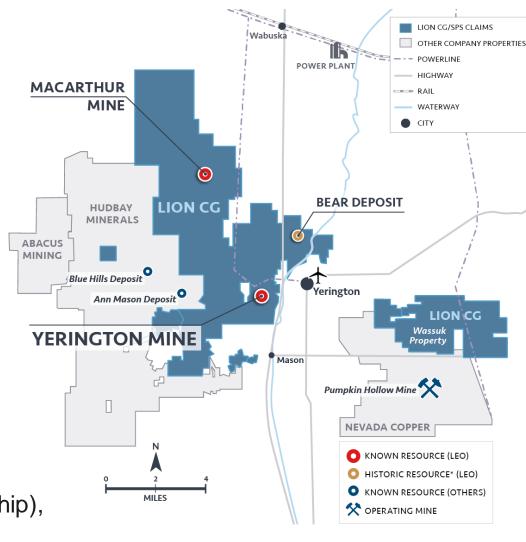


A recent study by S&P Global found the timeline from discovery to a producing mine takes an average of 29 years in the United States

# **Lion Copper & Gold**

#### **UPSIDE OPPORTUNITIES**

- Currently undervalued PFS delivery 2Q-2025
- Potential resource expansion at Yerington
  - Yerington Mine open to North and at depth
  - MacArthur Mine underlying sulfide resource
- **District consolidation** Central Brownfield location as logical center for a hub and spoke operation
- **Bear Deposit** Very large porphyry copper deposit, mineralization extends over 4.25 sq mi, > 0.40% TCu up to 2,400-ft-thick, Multiple high-grade intervals (1-2% TCu), Warrants additional systematic exploration
- **Pre-discovery potential** Falcon Copper Corp (42% ownership), Falcon Butte (20%), Wassuk (100%), Copper Canyon (100%)
- **Falcon Copper** consider participating in future Falcon Copper financings



<sup>\*</sup> Historic resource is not 43-101 compliant (from Howard, 1980)

## Thank you for your time!

LION COPPER & GOLD CORP www.lioncg.com





## Nuton™ - a high-recovery and low-footprint technology

**∩∪ton** | A Rio Tinto venture

### **Key differentiators**

#### 01

#### **High-performing technology:**

Outstanding copper recovery rates:

# up to 85% on primary copper sulphide ore bodies

Multiple applications

#### 02

#### Partnership approach:

Partnering with resource holders to access copper volumes



### Leading sustainability credentials

Aim to produce world's lowest footprint copper across our five pillars, and stretch to have a positive impact in at least one:



#### Nuton's performance<sup>1</sup>

vs. conventional concentrating/smelting

CO2e emissions up to 60% lower

Water consumption >80% more efficient

Capital intensity >40% lower

**RioTinto** 

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1Will vary depending from site to site, ore characteristics and operating environment. Rio Tinto analysis.

# **Nuton<sup>TM</sup>: Positive Impact copper**

#### LION CG AND NUTONTM - A SHARED VISION FOR POSITIVE IMPACT COPPER PRODUCTION

- Nuton's suite of bioleaching technologies offers the potential to unlock copper from previously hard-to-leach ores –
  from material with complex mineralogy at new greenfield mines, low-grade material at existing brownfield mines, or
  copper in mineralized waste or tailings.
- Nuton has the ambition to deliver the **lowest footprint copper to the market across 5 impact pillars** (water, energy, land, materials and society), and to achieve a **Positive Impact** in at least one of those pillars at each partner's site.
- Nuton's sustainability strategy responds to an increasingly sophisticated demand for copper that values ESG performance.
- Nuton's determination to produce the lowest-footprint copper in the market is ambitious but achievable. Nuton
  technology compares favorably in terms of its environmental footprint versus a concentrator process, which is
  the alternative processing route for primary sulfides.
- Nuton's ability to economically process lower grade primary sulfides and achieve higher copper recoveries supports
  our commitment to resource stewardship, by processing previously uneconomic material and producing more copper
  units from the same resources.

## **Yerington Mineral Resources - PEA**

Measured Resources of

**Indicated Resources of 62.9 MTons** at 0.30 TCu% **94.7 MTons** at 0.27 TCu%

Inferred Resources of **113.2 MTons** at 0.22 TCu%

### **Yerington Copper Project Mineral Resource Estimate**

Material	Cut-off Grade (TCu%)	Tons	TCu%	TCu lbs
Measured Oxide	0.038	20,230,000	0.25	99,367,000
Measured Sulfide	0.126	42,671,000	0.32	274,578,000
Measured Total		62,901,000	0.30	373,945,000
Indicated Oxide	0.038	13,749,000	0.22	60,166,000
Indicated Sulfide	0.126	80,960,000	0.28	457,921,000
Indicated Total		94,709,000	0.27	518,087,000
Measured + Indicated Oxide	0.038	33,979,000	0.23	159,533,000
Measured + Indicated Sulfide	0.126	123,631,000	0.30	732,499,000
Measured + Indicated Total		157,610,000	0.28	892,032,000
Inferred Oxide	0.038	33,347,000	0.18	122,221,000
Inferred Sulfide	0.126	79,881,000	0.24	385,938,000
Inferred Total		113,229,000	0.22	508,159,000



Notes: Effective date for this Mineral Resource estimate is May 1, 2023. The 2023 Mineral Resource estimate uses a variable break-even economic cut-off grade of 0.038 % TCu and 0.126% TCu based on assumptions of a net copper price of US\$4.08 per pound (after smelting, refining, transportation, and royalty charges), 70% recovery in oxide material, 75% recovery in sulfide material. Mineral Resource are not Mineral Reserves and do not demonstrate economic viability. Mineral Resource estimate reported from within resource pit shell. There is no certainty that all or any part of the Mineral Resource estimate will be converted into Mineral Reserves. All figures are rounded to reflect the relative accuracy of the estimates and totals may not add correctly.

## **MacArthur Mineral Resources - PEA**

**Measured Resources of 116.7 MTons** at 0.18 TCu% **183.7 MTons** at 0.18 TCu%

**Indicated Resources of** 

**Inferred Resources of 156.5 MTons** at 0.151 TCu%

#### **MacArthur Mineral Resource Estimate**

Classification	Ktons	TCu	TCu lbs x 1000
Measured	116,666	0.180	420,929
Indicated	183,665	0.158	579,479
Measured + Indicated	300,331	0.167	1,000,408
Inferred	156,450	0.151	471,714

Notes: Effective date for this Mineral Resource estimate is Feb. 25,2022. Mineral Resource are not Mineral Reserves and do not demonstrate economic viability. Cut-off grade: 0.06% TCu for Leach Cap, Oxide & Transition; cut-off grade for Sulfide: 0.06% for MacArthur & North Ridge, 0.08% for Gallagher. Total resource shell tonnage = 628,831 ktons

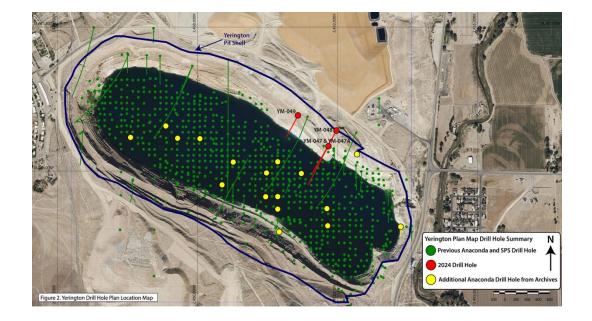
Mineral Resource estimate reported from within resource pit shell. There is no certainty that all or any part of the Mineral Resource estimate will be converted into Mineral Reserves. All figures are rounded to reflect the relative accuracy of the estimates and totals may not add correctly.



# **Yerington Mine – PFS Drilling**

#### 2024 DRILLING TO SUPPORT PFS

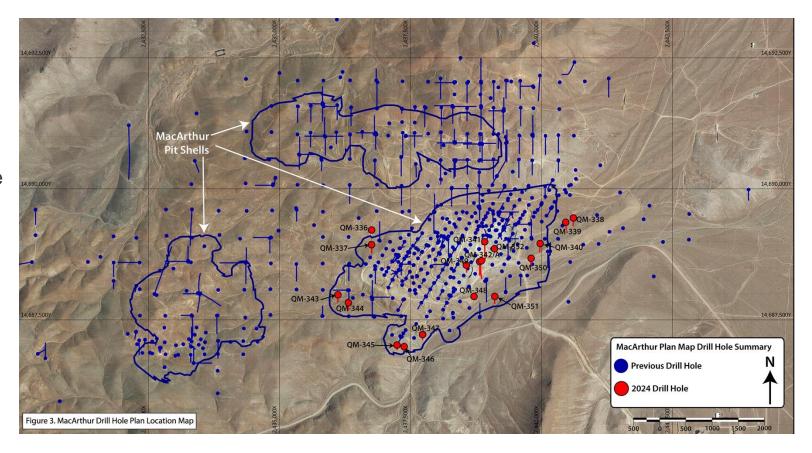
- Extensive previous Anaconda and SPS drilling very low geologic risk
- 2024 PFS drilling offers opportunity for resource expansion and classification upgrade
  - Four step out angle boreholes discovered an extension of the mineralized footprint compared to the PEA.
  - 17 additional historic Anaconda drill logs
- Eliminates need for expensive barge drilling for PFS
- Classification upgrade to Measured & Indicated Resources for PFS



# **MacArthur Mine: PFS Drilling**

#### 2024 DRILLING TO SUPPORT PFS

- Extensive previous SPS drilling very low geologic risk
- Classification upgrade to Measured & Indicated Resources for PFS
- Potential underlying sulfide resource for future copper production





### **Lion CG - Other Assets**

# PRE-DISCOVERY PROPERTIES – LOCATED IN HIGHLY PROSPECTIVE AND WELL-KNOWN PORPHYRY COPPER DISTRICTS

### **Other Yerington District Assets (100% Interest)**

- Bear Copper Project (part of Nuton Agreement)
- Copper Canyon Prospect (outside Nuton Agreement)

### **Falcon Copper Corporation (42% Interest)**

- Blue Copper Project (Montana)
- Schell Creek Project Cabin & Muncy Prospects (Nevada)
- Muncy Project (Nevada)
- Pioneer Prospect (Arizona)
- Ground Hog Project (Alaska)

### Falcon Butte (20.48% Ownership)

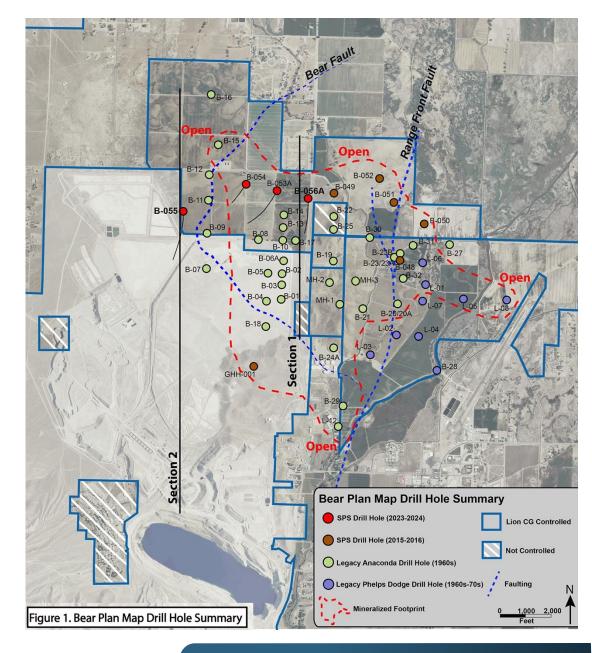
### **Blue Copper Royalties (48% Interest)**

- Butte Valley royalty (Nevada), 1% NSR, buydown to 0.5% for US\$15.0M
- Nieves Silver (Mexico), 5% net profits interest



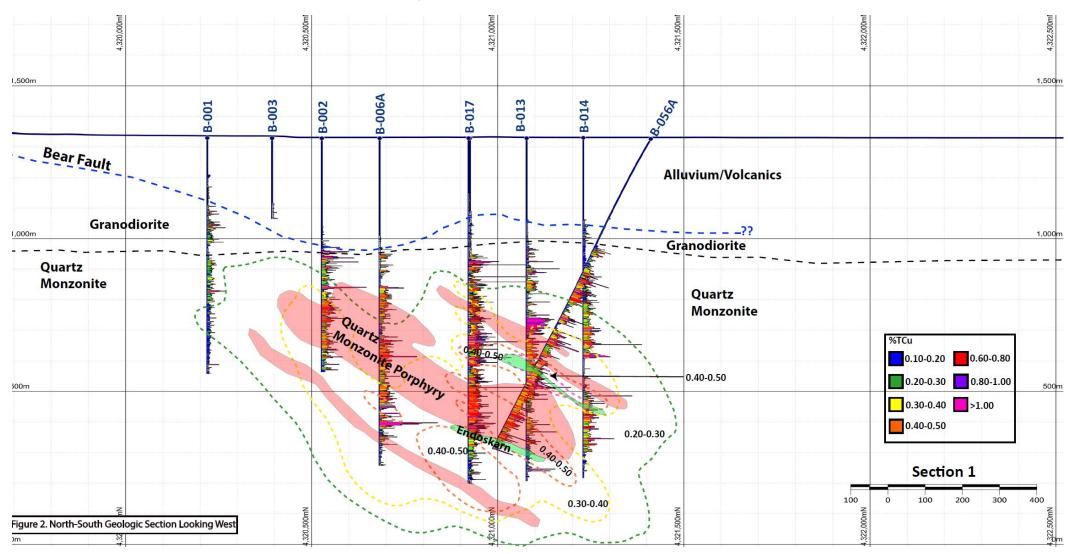
# **Bear Deposit - Yerington**

- Large porphyry copper deposit on private land controlled by Lion CG
- Known mineralization covers 4.25 square miles
- Previous exploration drilling and geophysics by Anaconda,
   Phelps Dodge (now Freeport)
- SPS first to consolidate Bear property
- Copper intercepts > 0.40% TCu; up to 2,400-ft thick
- Multiple high-grade intervals (1-2% TCu)
- Warrants additional systematic exploration



# **Bear Deposit - N-S Section looking west**

### **MINERALIZATION EXTENDS OVER 4.25 SQ MI**



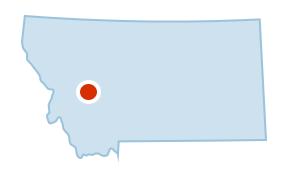
# Falcon Copper Corp: Lion CG has 42% Interest

#### POTENTIAL FOR DISCOVERY IN DISTRICTS OF KNOWN LARGE COPPER PORPHYRY SYSTEMS



### **SCHELL CREEK**

Two porphyry copper prospects located near Ely, Nevada, 35 miles northeast of the Robinson copper deposit and 30 miles east of the Butte Valley Project



#### **BLUE COPPER**

A Butte-style copper-gold system located 45 miles north of the world famous Butte, Montana copper mines
District-scale consolidation sitting on top of a prolific placer gold system with extensive copper showings



### **PIONEER**

Large covered target area prospective for high-grade primary or enriched porphyry copper mineralization located within Arizona's prolific Copper Triangle – within 10 miles of the Resolution & Ray mines.



### **GROUNDHOG**

Earn-in agreement on the Groundhog copper-gold porphyry prospect on the Alaskan peninsula