

# OPTIMIZATION EXPLORATION EXPANSION

PRODUCTION

GOLD/ZINC/COPPER/SILVER/LEAD

CASH FLOW

DISTRICT SCALE EXPLORATION

#### FORWARD LOOKING STATEMENTS

#### LEGAL DISCLAIMER

This corporate presentation (this "Corporate Presentation") has been prepared by the management of Luca Mining Corp. (the "Company" or "Luca") for informational purposes only and is not intended to provide financial, tax, legal or accounting advice. This Corporate Presentation and the contents herein do not constitute or form part of any advertisement, any offer to sell or any solicitation of an offer to buy or subscribe for securities of Luca or represent an intention to induce any person to make an investment in the Company or to assist any person in the making of an investment decision. Unless otherwise indicated, the information provided in this Corporate Presentation is provided as of January 31, 2024.

### CAUTIONARY NOTE REGARDING PRODUCTION DECISIONS AND FORWARD-LOOKING STATEMENTS

Statements contained in this corporate presentation that are not historical facts are "forward-looking information" or "forward-looking statements" (collectively, "Forward-Looking Information") within the meaning of applicable securities laws. Forward Looking Information includes, but is not limited to, disclosure regarding: possible events, conditions or financial performance in 2024 and future years that are based on assumptions and forecasts about future economic conditions and courses of action; comparisons to other polymetallic producers in the same jurisdiction as the Company; the timing and costs of future activities on the Company's properties, such as production rates and increases; success of exploration, development and bulk sample processing activities; and timing for processing at the Company's own mineral processing facility on the Tahuehueto project site. In certain cases, Forward-Looking Information can be identified by the use of words and phrases such as "plans", "expects", "scheduled", "estimates", "forecasts", "intends", "anticipates" or variations of such words and phrases. In preparing the Forward-Looking Information in this Corporate Presentation, the Company has applied several material assumptions, including, but not limited to: that the current exploration, development, environmental and other objectives concerning the Campo Morado and Tahuehueto Mines can be achieved; estimates of the price of gold, copper, lead, zinc and other metals; economic and political conditions in the jurisdictions in which the Company operates; foreign currency exchange rates; interest rates; access to capital and debt markets and associated costs of funds; availability of a qualified work force; the ultimate ability to mine, process and sell mineral products on economically favourable terms; and operations. 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 risks and uncertainties includes: fluctuations in metal prices and currency markets; unpredictable results of exploration activities; uncertainties inherent in the estimation of mineral reserves and resources; fluctuations in the costs of goods and services; problems associated with exploration, mining and milling operations; changes in legal, social or political conditions in the jurisdictions in which Luca operates; lack of appropriate funding, and other risk factors discussed in the Company's filings with Canadian regulatory agencies and available at www.sedarplus.ca. The Company believes that the expectations reflected in Forward-Looking Information in this Corporate Presentation are reasonable but there can be no assurance that Forward-Looking Information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on Forward-Looking Information. Except as required by law, the Company does not assume or undertake any obligation to update Forward-Looking Information contained in this Corporate Presentation to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. No statement in this Corporate Presentation, including the asset forecasts, is intended to be nor may be construed as a profit forecast. Luca relies on litigation protection for Forward-Looking Information. It should be noted that Luca has declared commercial production mining at Campo Morado without the benefit of a feasibility study of mineral reserves demonstrating economic and technical viability. Accordingly, readers should be cautioned that Luca's production decision has been made without a comprehensive feasibility study of established reserves such that there is greater risk and uncertainty as to future economic results from the Campo Morado mine and a higher technical risk of failure than would be the case if a feasibility study was completed and relied upon to make a production decision. The Company filed a preliminary economic assessment for the Campo Morado project titled "Campo Morado Project, Guerrero State, Mexico, Technical Report on Preliminary Economic Assessment" with an effective date of March 30, 2018 (the "PEA"), and a preliminary feasibility study for the Tahuehueto project titled "NI 43-101 Technical Report, Preliminary Feasibility Study, Altaley Mining Corporation, Tahuehueto Project, Durango, Mexico" with an effective date of February 23, 2022 (the "PFS"). The Company has continued to conduct mining operations at the Tahueheuto and Campo Morado mines subsequent to the effective dates of the PFS and PEA. In addition, the mining methods utilized as the basis for the economic analysis in the PFS and PEA differ from the mining methods currently employed by the Company at the Tahueheuto and Campo Morado projects, respectively, and the Company cautions that the economic analysis in the PEA and the PFS could be materially affected by such changes. This Corporate Presentation also refers to non-GAAP financial measures and key performance indicators, such as "free cash flow", "EBITDA", "EV" and "P/CF". These measures do not have a standardized meaning or method of calculation, even though the descriptions of such measures may be common. These performance measures have no meaning under International Financial Reporting Standards (IFRS) and therefore, amounts presented may not be comparable to similar data presented by other mining companies. These measures are intended to complement IFRS measures by providing further understanding of the Company's results of operations from the perspective of management. These measures should not be considered in isolation or as a substitute for analysis of the Company's financial information reported under IFRS. For more information please refer to "Non-GAAP measures" in the management's discussion and analysis filed by the Company on www.sedarplus.ca.

This presentation contains future-oriented financial information and financial outlook information (collectively, "FOFI") about the Company's prospective results of operations, production, enterprise value ("EV"), EBITDA, price-to-cash-flow ("P/CF"), revenue and components thereof, all of which are subject to the same assumptions, risk factors, limitations and qualifications as set forth in the above paragraphs. FOFI contained in this presentation was approved by management of the date of this presentation and was provided for the purpose of providing further information about the

Company's anticipated future business operations. The Company disclaims any intention or obligation to update or revise any FOFI contained in this presentation, whether as a result of new information, future events or otherwise, unless required pursuant to applicable law. Readers are cautioned that the FOFI contained in this presentation should not be used for purposes other than for which it is disclosed herein.

Pricing assumptions in connection with gold equivalent production estimates: Gold \$1,850/oz | Copper \$3.65/lb| Zinc \$1.15/lb | Lead \$0.92lb | Silver \$22.50/oz

#### CAUTIONARY NOTES TO U.S. INVESTORS CONCERNING RESOURCE ESTIMATES

The terms "Mineral Resource", "Measured Mineral Resource", "Indicated Mineral Resource" and "Inferred Mineral Resource" are defined in and required to be disclosed by NI 43-101: however, these terms are not defined terms under SEC Industry Guide 7 and normally are not permitted to be used in reports and registration statements filed with the SEC. Investors are cautioned not to assume that any part or all of mineral deposits in these categories will ever be converted into Reserves. "Inferred Mineral Resources" have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an Inferred Mineral Resource will ever be upgraded to a higher category or that Mineral Resources will ever be upgraded to Mineral Reserves. Under Canadian rules, estimates of Inferred Mineral Resources may not form the basis of feasibility or other economic studies other than Preliminary Economic Assessments. United States investors are cautioned not to assume that all or any part of Indicated Mineral Resources will ever be converted into Mineral Reserves. United States investors are also cautioned not to assume that all or any part of an Inferred Mineral Resource exists or is economically or legally mineable, or that an Indicated Mineral Resource is economically or legally mineable. Accordingly, information contained in this corporate presentation containing descriptions of the Company's mineral deposits may not be comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations there under.

### CAUTIONARY NOTE TO U.S. INVESTORS REGARDING ADJACENT OR SIMILAR PROPERTIES

This document may also contain information with respect to adjacent or similar mineral properties in respect of which the Company has no interest or rights to explore or mine. The Company advises United States investors that the United States Securities and Exchange Commission's mining guidelines strictly prohibit information of this type in documents filed with the SEC. Readers are cautioned that the Company has no interest in or right to acquire any interest in any such properties, and that mineral deposits on adjacent or similar properties are not indicative of mineral deposits on the Company's properties.

#### QUALIFIED PERSONS

The technical information contained in this presentation has been reviewed and approved by Mr. Chris Richings, Vice-President Technical of Luca Mining Corp. as the Qualified Person for the Company as defined in National Instrument 43-101.

# **THE LUCA STORY**

TAHUEHUETO

fully permitted operating mines in Mexico producing gold, zinc, copper, silver and lead

#### PRODUCTION 2024 ~70k oz Au Eq

Significant production upside potential

#### 2024 AVERAGE AISC YTD **\$1,633**

Q1 & Q2 average from both mines

#### **De-risked operations**

No further major capex required

### 2.7 Moz AuEq

Resource with upside

#### **\$500+ million infrastructure** In place

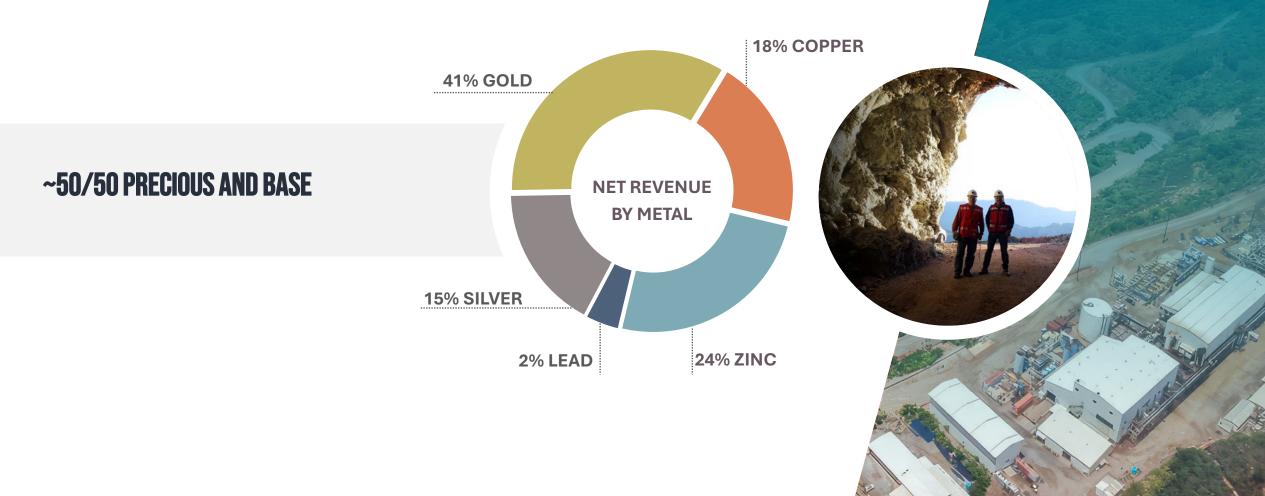
Resource and throughput upside At both mines

### CAMPO MORADO

#### WE ARE CASHED UP - WE RECENTLY RAISED C\$11.3 MILLION AT \$0.45

3

# A LOOK AT OUR METAL BREAKDOWN



# OUR PLAN Q4 AND BEYOND

These primary areas of focus support our three pillars of value creation:



### Ramp up Campo Morado

New contractor - reach 2,000 tpd throughput

### **Optimize Campo Morado**

Sustainable optimized recoveries – implement copper/lead separation

### **Explore Campo Morado**

Explore Campo Morado's extraordinary upside potential. First meaningful exploration in well over a decade. Transformative potential

### **Commission Tahuehueto**

Continue throughput ramp up – achieve commercial production

### **Explore Tahuehueto**

Gamechanger potential. Over a dozen known untested veins – has the signatures of a new San Dimas style district

### Pay off outstanding debt

With cash flow and warrant exercise

# WHAT THIS MEANS

Our mines are permitted, in production, generating cash flow and are profitable – our foundation on which to grow

Our mines have development and resource upside and optimization at both projects is ongoing

**Clean balance sheet** - pay off debt by mid-2026 through cash flow and warrant exercise **The blue sky for the company** is the transformative potential of our two exploration programs. Our properties are highly underexplored

# OUR MANAGEMENT TEAM HAS PARTICULAR Expertise in Mexico

MINING IN MEXICO

We know Mexico and our experienced management team and our knowledge of the Mexican mining landscape give us a competitive advantage in the industry



### LUCA

16.6 Mt M&I	silver 62 Moz M&I	1.2 Blbs M&I	<sup>с о թ թ</sup> 0.2 Blb		و ۵۱۵ 700 Koz M&I	0.3 Blbs		
CAMPO								
	Location	Guerrero State 121 sq km		Processing	2,400 tpd throughput capacity (crushing, milling, flotation)			
MORADO	Ownership	100%		2024E Full Ye Production	ar 43,000-50,000 Au eo	43,000-50,000 Au equivalent oz		
	Royalty	3%		Infrastructur	,	Portal and decline, ventilation raises and fans, mineral processing		
	Mine Type	Underground			plant, ore stockpile storage, camp, wor	s, tailings		
	Deposit Type	VMS copper/gold/silver/zinc			cafeteria, medical s sufficient surface ri	services facility,		
	M&I	16.6 million tons of M&I resource			water for mining operations, etc.			
		grading 4.01% zinc, 0.80% coppe 0.93% lead, 123 g/t Ag and 1.70 g/ Au		Concentrate	optimized to produc	Zinc and bulk copper. Being optimized to produce 3 higher value concentrates: zinc, copper and lead		
	Resource	10+ years		AISC YTD per	\$1,516			
	Replacement Value	US \$500 million		oz Au Eq produced				

PEA 2018. Please see Forward Looking Statements for important information about resource estimates for Campo Morado. An updated technical report on Campo Morado is being commissioned.

### **OPTIMIZATION AT CAMPO MORADO YIELDING EXCELLENT RESULTS**

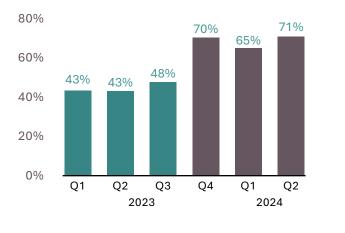
#### 13.9% 14.7% 14.3% 14.5% 14.9% 12% 10.4% 8% 4% 0% Q2 Q3 Q1 2023

16%

Bulk Conc Grade (Cu%)

2

Cu Recovery (Bulk)



**STAGES** 

### **BACK TO BASICS**

- Refurbish & upgrade metallurgical lab
- Review and update testing and operating procedures

2023 INITIATEI

• Data management

### SUSTAINABLE OPERATIONS

- Implement geomet and M2M programs
- Repair critical equipment for reliable plant operation
- Refurbishment of float cells, thickeners and filters

### **IMPROVEMENT PROJECTS**

Q1

2024

Q2

3

• Partial flotation cell mechanism replacement

Q4

- Improved process control (i.e. air flow, level control)
- Copper-lead separation implementation

### CAMPO MORADO 4.0

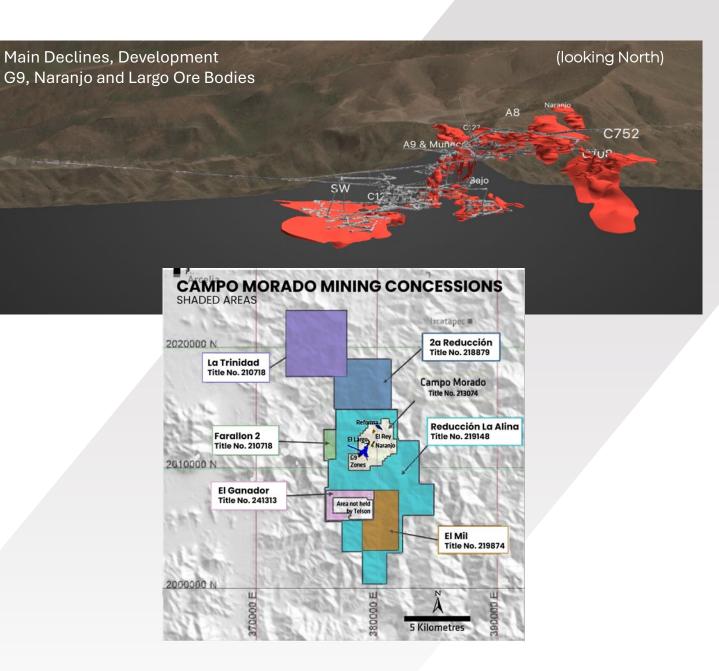
 Studies for additional improvements

# **EXPLORATION UPSIDE AT CAMPO MORADO**

- Well-defined, drilled and developed ore bodies
- Higher Cu recovery, should increase economical and mineable resources

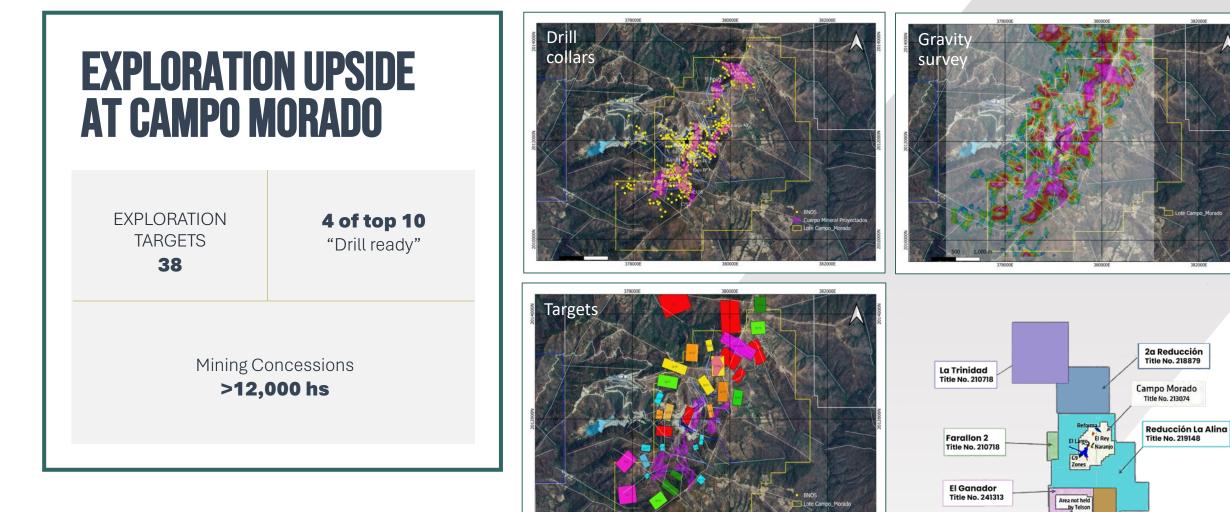
#### Large amounts of technical data:

Surface & structural mapping >29,000 soil samples 580,886 m of drilling Geochemistry Gravity survey Airborne magnetics EM surveys IP Surveys



Lote Campo\_Morado

El Mil Title No. 219874



Moradi

luca

6.3 Mt M&I	silver 9 Moz M&I	273 Mlbs M&I	сорре 36 Mlbs		<sup>согр</sup> 425 Koz M&I	123 Mlbs		
TAIMEIMETO								
TAHUEHUETO	Location	Durango State 75 sq km		Processing	1,000 tpd through (crushing, milling,			
	Ownership	100%		2024E Full Yea Production	,	17,000-20,000 Au equivalent oz Construction completed July 2024 -		
	Royalty	1.6% NSR		ramping to plant capacity throughout during Q3				
	Mine Type	Underground			Commercial prod Q4 2024	uction expected in		
	Deposit Type	Epithermal gold/silver and breccias rich in Pb-Zn-Cu		Infrastructure	raises and fans, m	Portal and decline, ventilation raises and fans, mineral processing plant, ore stockpiles, dry stack		
	M&I	3.6 million tonnes @ 2.55 g/t g 50.06 g/t silver, 0.26% copper, 1.11% lead and 1.92% zinc	old,		tailings storage, c office, cafeteria, r facility, sufficient	amp, workshops, nedical services		
	Life of Mine	10+ years			power and water f operations, etc. H	-		
	Replacement Value	~\$100M			generators with ga planned.	as generators		
				Concentrates	Zinc and Lead wit	n precious metals		
				AISC YTD per oz Au Eq produced	\$1,600			

Please see Forward Looking Statements for important information about reserve and resource estimates for Tahuehueto. PFS completed on Tahuehueto in 2022.

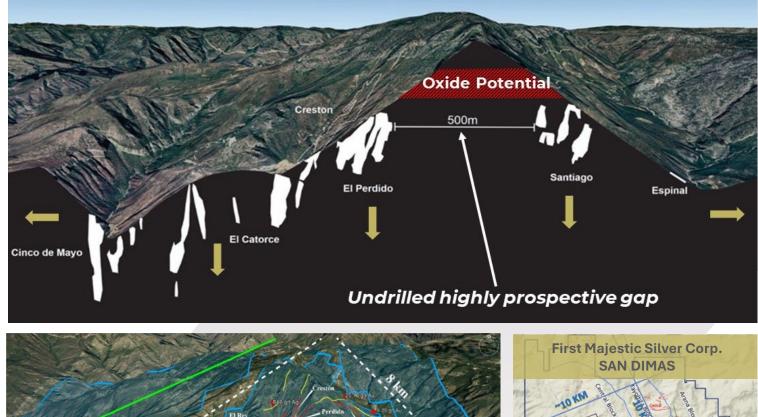




### TRANSFORMATIVE EXPLORATION POTENTIAL AT TAHUEHUETO

#### **EXPLORATION OBJECTIVES**

- Step-out drilling along strike (north and south)
- Determine vertical extent of mineralization
- Drill and explore multiple, known, untested mineralized structures
- Development of new resources



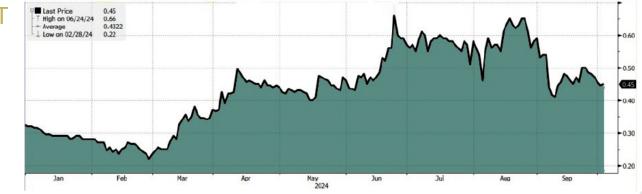


References to other mines and mineral projects is for illustration purposes only. There can be no assurances the Company will achieve comparable results.

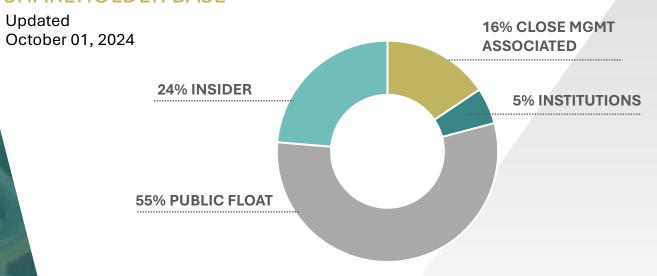
# LUCA CORPORATE STATS

	LUCMF Z68 OTCQX Frankfurt
Shares Outstanding	198 million
Fully Diluted	294 million
Market Cap (Oct 01, 2024)	C\$89 million
52 Week	C\$0.68 high C\$0.20 low
Debt	U\$18.1 million of which U\$5.8 million is convertible at C\$0.35
Cash	U\$7.5 million
Warrants	22.5 mm @ \$0.50 Apr 25 16.4 mm @ \$0.50 Jun 25 2.9 mm @ \$0.50 Dec 25 12.5 mm @ \$0.60 Mar 26 1.1 mm @ \$0.45 Mar 26 250K @ \$0.50 Jun 26

#### PRICE CHART January 1, 2024 to date



### SHAREHOLDER BASE



# **A STRONG BOARD OF DIRECTORS**

Mine builders | Opportunity driven



#### Dr. Neil O'Brien DIRECTOR

Economic geologist and former mining executive with three decades of industry service including Board of Director roles in public and private mineral exploration companies. Dr. O'Brien retired in 2018 from Lundin Mining Corporation as Senior Vice President, Exploration & New Business Development.



#### David Rhodes, B.Sc. (Hons) UMIST CHAIRMAN, DIRECTOR

David's career in the finance industry has spanned more than twentyfive years with an award-winning track record of success in the mining industry, specializing in arranging multi-sourced funding solutions for development companies.



#### Phil Brumit DIRECTOR

Mr. Brumit is a mining executive with over 40 years of experience in property evaluation, engineering, project management, construction, start-up and operations within the industry. He recently served as Executive VP Projects & Operations at Josemaria Resources Inc. Prior to joining Josemaria, Mr. Brumit was President and Managing Director of Minera Candelaria, Chile, a subsidiary of Lundin Mining Corporation.



#### Peter Damouni EXECUTIVE DIRECTOR

Over 20 years of corporate and investment banking experience with a focus on the natural resource sector. Has been instrumental in developing and executing corporate strategies including equity and debt financings, restructurings, joint ventures, acquisitions and sale processes.



#### Ruben Alvidrez Ortega, BIE & MBA DIRECTOR

Since 1994 he worked in several roles with Citigroup, working with corporate clients in the US and Mexico and leading teams of over 200 people.



#### **Rory Godinho**, LLB DIRECTOR

Over 35 years of capital markets experience on broad range of matters including, mergers and acquisitions, public and private equity and debt financings and regulatory compliance.. Mr. Godinho is a senior partner and Co-Chair of Cozen O'Connor's Canadian Capital Markets and Securities Group. Cozen O'Connor is an Amlaw 100 international law firm. Mr. Godinho is the past Chair of the TSX Venture Exchange's National Advisory Committee.



#### Roberto Guzman, M.Fin. DIRECTOR

25 years' experience in financial sector with several Mexican publicly traded and private companies. A Director of Bursametrica Casa de Bolsa, a Mexican brokerage firm.

# **A STRONG MANAGEMENT TEAM**

**Effective Execution** 



Dan Barnholden CEO

Dan Barnholden is a seasoned professional with over 20 years of experience in senior mining investment banking roles at bank-owned and boutique dealers in Toronto and Vancouver . He has raised billions of dollars in debt and equity for junior, mid-tier and senior mining companies, as well as advised dozens of companies on mergers, acquisitions, divestitures, and other financial, strategic and governance matters.



Ramon Perez President

Mining executive with over 15 years of international mining experience. Ten years as VP of the Carrelton Horizon Natural Resource Fund covering the metals and mining sector with a focus on publicly listed junior mining companies in Latin America. Founding member of Sociedad Minera ReliquiasS.A., now listed on the TSXV (AGMR) as Silver Mountain Resources.



**Christopher Richings,** P.Eng. VP Technical

Over 20 years in underground + open pit mining operations in North & South America. Formerly Director of Technical Services for both the JosemariaProject and the Candelaria operations (both Lundin Mining); and previously held a series of management roles within the Lundin Mining and Freeport companies.



Armando Alexandri, M.Eng Chief Operating Officer

Mining engineer with >40 years of experience (mostly in Mexico). Led expansions of the Bolivar mine (500 to 2,000 tpd) and Impact Silver's operations (4,000 to 16,000 tpm). Former COO of Impact Silver, Titan Minerals and Candelaria Mining.



**Lisa Dea** CPA, CA Chief Financial Officer

A highly experienced financial executive with over three decades of expertise in finance, securities, and accounting. As the former Chief Financial Officer of Guanajuato Silver Company Ltd., a TSX-V listed mid-tier producing silver company, Ms. Dea played a pivotal role in strategically reactivating past producing silver and gold mines in central Mexico.



**Israel Munoz,** CPA, CA VP Financial

Over 24 years of expertise spanning IFRS, financial reporting, internal controls (SOX and operational), risk management, and budgeting. His background includes roles at various silver, gold, zinc, and lead mining firms across the USA, Mexico, and Latin America. Prior to joining Luca. Mr. Munoz served over a decade at Ernst & Young in Mexico as an audit manager. solidifying his proficiency in financial oversight and regulatory compliance.

# WHAT'S NEXT

### We see a near-term valuation re-rating

The Campo Morado copper/zinc mine has undergone a highly successful optimization program which significantly increased grades and recoveries

Ramp-up of newly constructed Tahuehueto gold mine – expect to achieve commercial production in the coming months

Result is Increasing revenues and cash flow

# with significant additional upside

Production upside at both mines

Targeting doubling production to 100,000 oz gold equivalent in the near term

Exciting brownfield and greenfield exploration upside at both mines

## and longer term growth ahead

M&A growth

Targeting mid-tier ranking with 200,000 oz gold equivalent production

18



# Mining Corp.

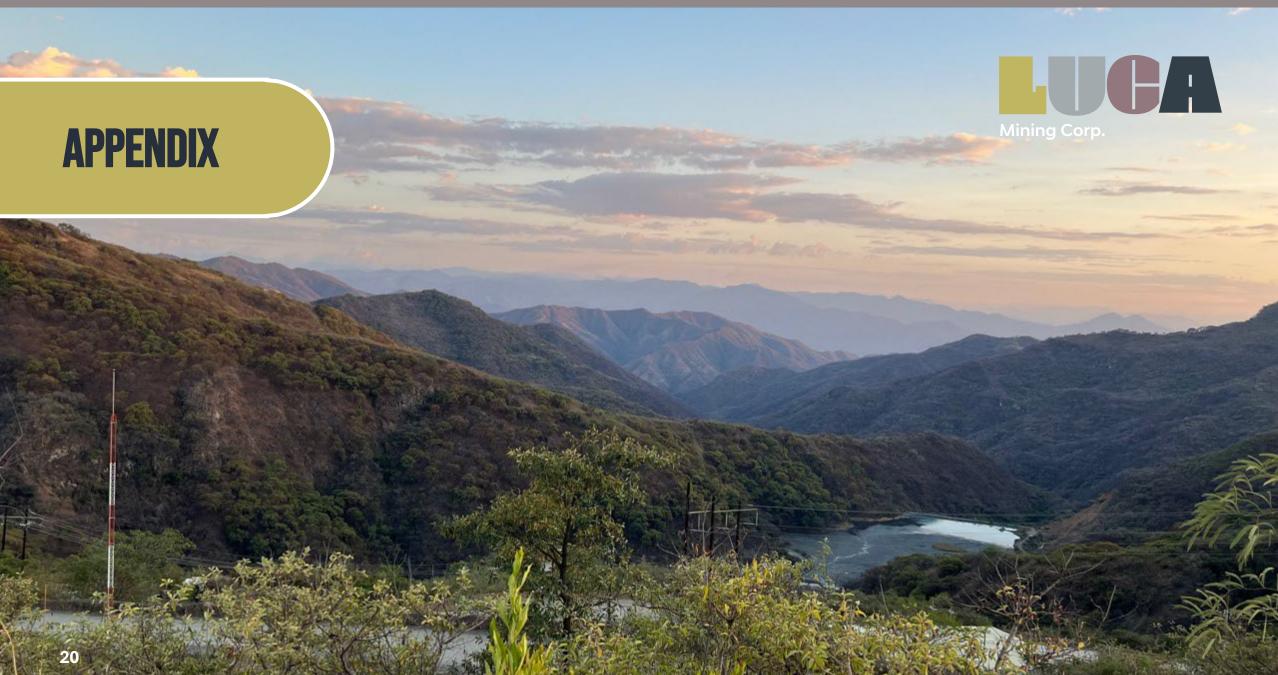
TSX-V: LUCA

OTCQX: LUCMF

FRANKFURT: Z68

# THANK YOU LUCAMINING.COM





# **CAMPO MORADO RESOURCES**

RESOURCES (NI 43-101 Compliant, March 2018)

Measured & Indicated Resources								Inferred Resources							
Cut-off	Tonnes	Gold	Silver	Copper	Lead	Zinc	ZnEq	Cut-off	Tonnes	Gold	Silver	Copper	Lead	Zinc	ZnEq
% ZnEq	000s	g/t	g/t	%	%	96	96	% ZnEq	000s	g/t	g/t	96	96	96	96
3.0	33,850	1.29	88	0.70	0.64	2.71	6.36	3.0	3,316	0.98	76	0.52	0.58	2.10	6.36
4.0	25,730	1.46	102	0.74	0.76	3.22	7.27	4.0	2,152	1.11	90	0.55	0.71	2.54	5.85
5.5	16,620	1.70	123	0.80	0.93	4.01	8.68	5.5	988	1.32	116	0.64	0.92	3.20	7.27
7.0	10,400	1.91	146	0.87	1.11	4.85	10.16	7.0	416	1.52	148	0.76	1.10	3.78	8.75

# **TAHUEHUETO RESOURCES**

### RESERVES & RESOURCES (NI 43-101 Compliant, April 2022)

Category	Tonnes	Gold		Silver		Copper		Lead		Zinc		Gold Equivalent	
	000s	g/t	000 oz	g/t	000 oz	96	000 lbs	%	000 lbs	%	000 lbs	g/t	000 oz
Probable Reserves	3,585	2.55	294	50.06	5,770	0.26	20,550	1.11	87,357	1.92	151,640	4.92	567
M&I Resources	6,260	2.11	425	46.97	9,454	0.27	36,594	0.90	123,872	1.98	273,364	4.40	886
Inferred Resources	918	1.02	30	28.46	840	0.15	3,077	1.16	23,571	1.96	39,755	2.99	88

# A LOOK AT OUR PRODUCTION BY METAL

Internal Estimated production by metal

Mine	Gold (oz/year)	Silver (oz/year)	Copper (Ibs/year)	Zinc (Ibs/year)	Lead (Ibs/year)	Gold Equiv (oz/year)	
Camp Morado	5,200	980,000	7.9 million	27.1 million	5.6 million	40,000	
Taheuheuto	20,000	200,000		5.4 million	3.5 million	25,000	
Total	25,200	1.18 million	7.9 million	32.5 million	9.1 million	65,000	

Price assumptions: Gold \$1,850/oz | Copper \$3.65/lb| Zinc \$1.15/lb | Lead \$0.92lb | Silver \$22.50/oz Please see Forward Looking Statements for important information about basis for production estimates

Over time we expect Campo Morado to account for approximately 70% of gold equivalent production and Tahuehueto approximately 30%

~60-70,000

Estimated gold equivalent oz in 2024