



Mining Corp.

OPTIMIZATION EXPLORATION EXPANSION

Q3 2024

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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 Tahuehueto 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 Tahuehueto 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

Campo Morado and Tahuehueto

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

~70k oz Au Eq
production 2024

Can reach 200k with
current assets

\$1,633 average
AISC YTD

Expect to decline as mines
optimize and ramp up

De-risked
operations

No further major
capex required

\$500+ million
infrastructure

Is in place

2.7 Moz Au Eq

Resource with upside

See Forward Looking Statements.
Subject to changes in metal prices.
Campo Morado technical report pending.

Resource and
throughput
upside

At both mines

REVENUE BREAKDOWN BY METAL

2024E U\$105 million

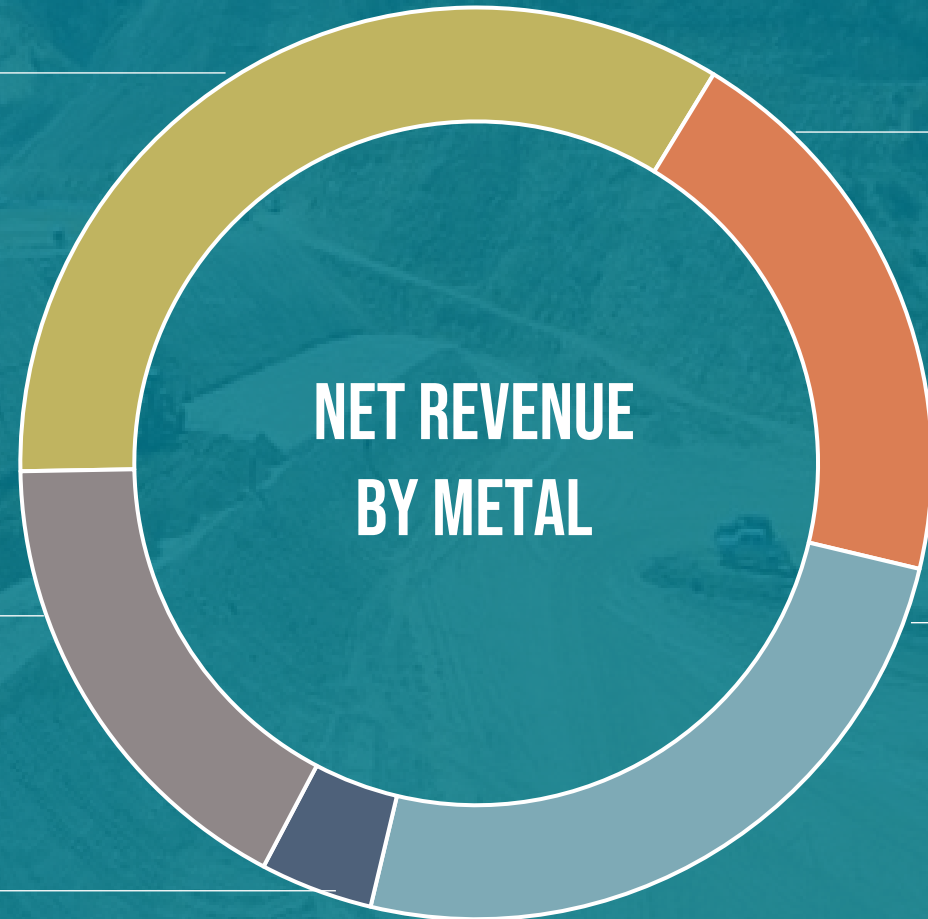
41%
GOLD

18%
COPPER

15%
SILVER

24%
ZINC

2%
LEAD





Our management team has particular expertise in Mexico

SOME OF THE LARGEST MINING COMPANIES IN THE WORLD SURROUND US IN MEXICO

CAMPO MORADO FACTS

16.6 Mt
M&I

1.2B lbs
Zn M&I

700k oz
Au M&I

62M oz
Ag M&I

0.2B lbs
Cu M&I

0.3B lbs
Pb M&I

Location	Guerrero State
Ownership	100%
Royalty	3%
Mine Type	Underground
Deposit Type	VMS copper/gold/silver/zinc
M&I	16.6 million tons of M&I resources grading 4.01% zinc, 0.80% copper, 0.93% lead, 123 g/t Ag and 1.70 g/t Au

Resource	10+ years
Replacement Value	US \$500 million
Processing	2,400 tpd throughput capacity (crushing, milling, flotation)
2024E Full Year Production	43,000-50,000 Au equivalent oz
Infrastructure	Portal and decline, ventilation raises and fans, mineral processing plant, ore stockpiles, tailings storage, camp, workshops, office, cafeteria, medical services facility, sufficient surface rights, power and water for mining operations, etc.



Concentrates	Zinc and bulk copper. Being optimized to produce 3 higher value concentrates: zinc, copper and lead
Rev 2024E	\$55 - \$65 million
AISC YTD per oz Au Eq produced	\$1,516

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

Q4 2023 Initiated Optimization Program

STAGE 1 *Back to Basics*

Refurbish & upgrade metallurgical lab
Review and update testing and operating procedures
Data management

STAGE 2 *Sustainable Operations*

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

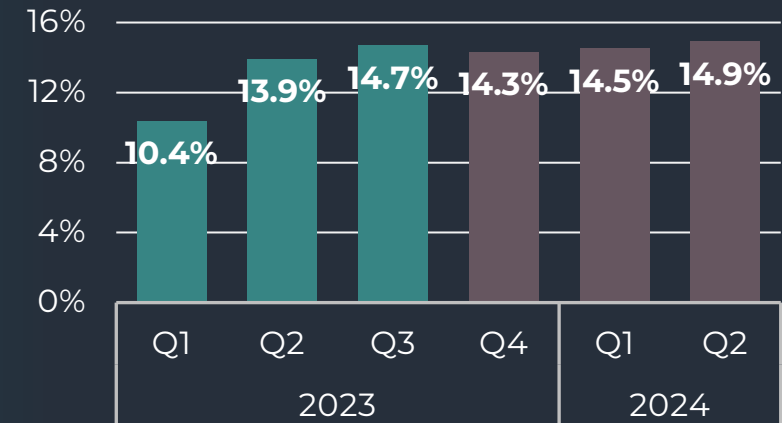
STAGE 3 *Improvement Projects*

Partial flotation cell mechanism replacement
Improved process control (i.e. air flow, level control)
Copper-lead separation implementation

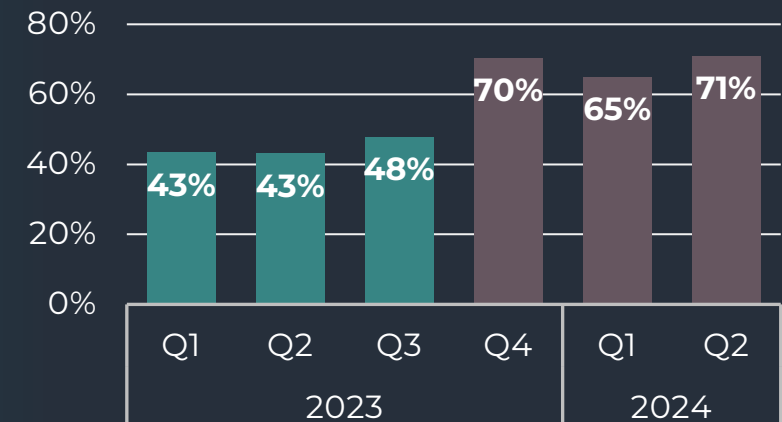
STAGE 4 *Campo Morado 4.0*

Studies for additional improvements

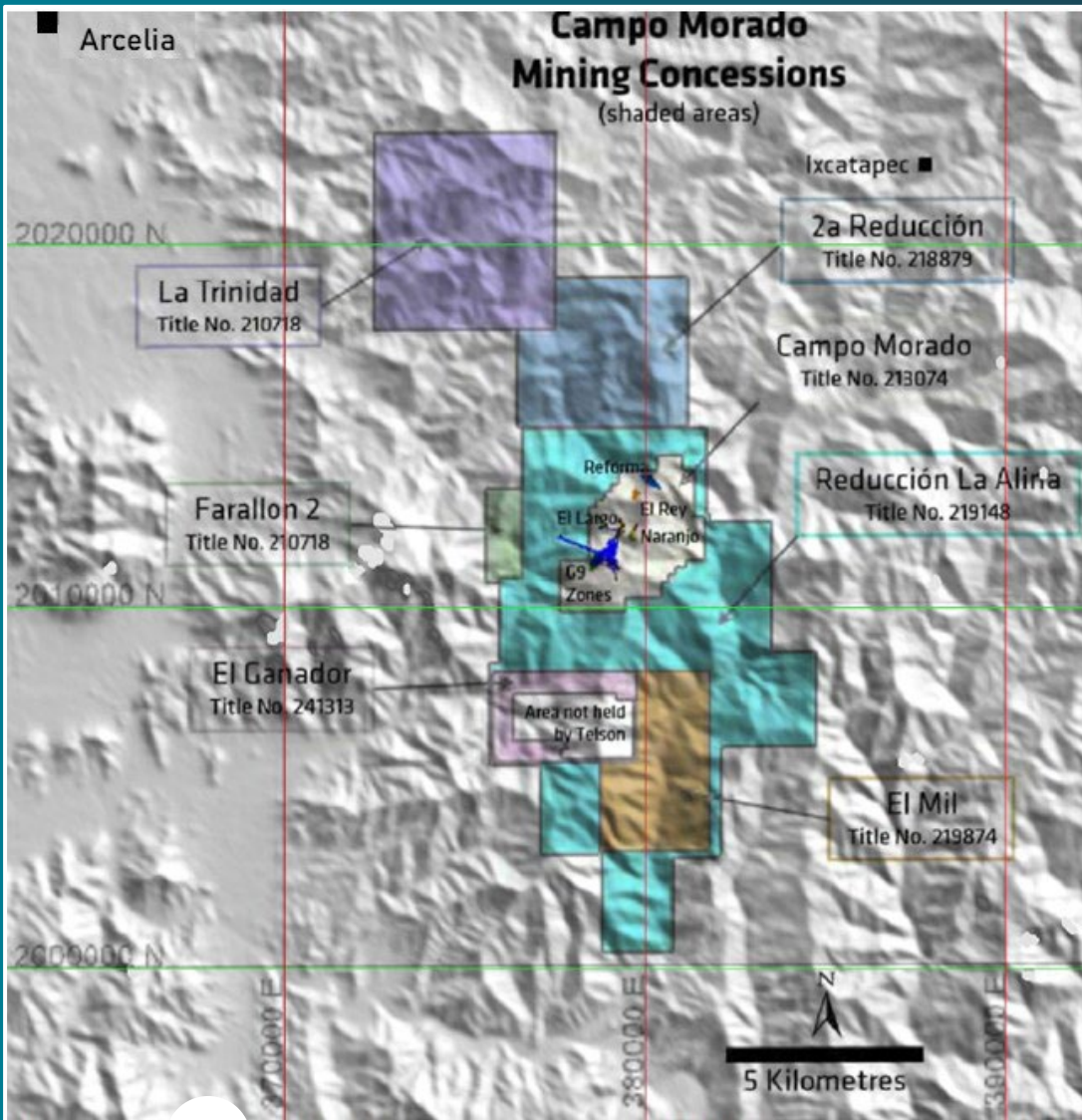
Bulk Conc Grade (Cu%)



Cu Recovery (Bulk)

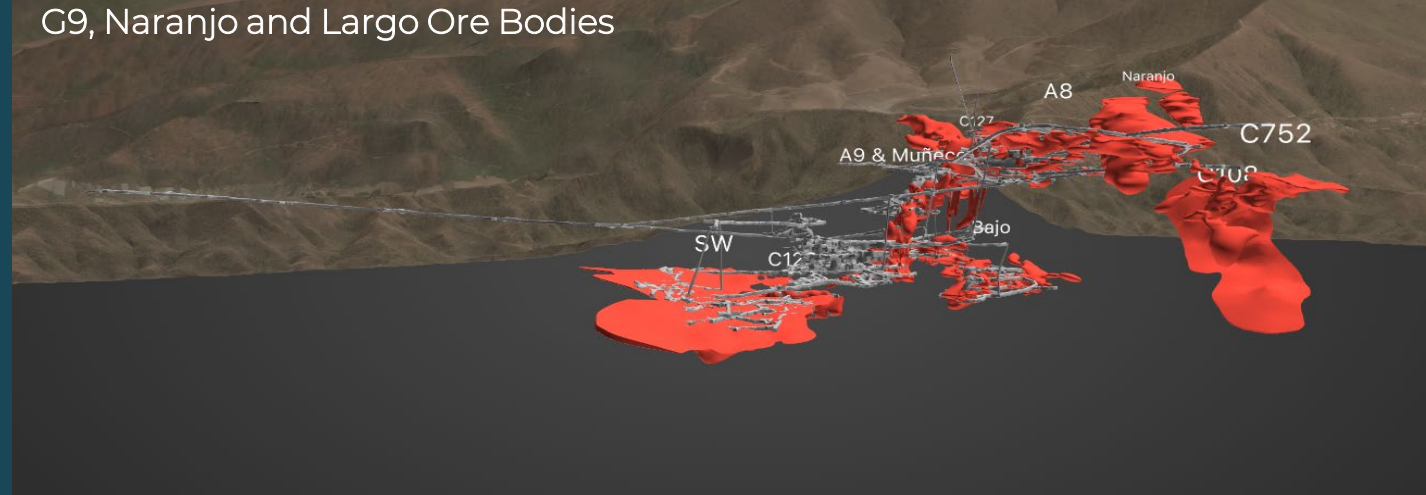


EXPLORATION UPSIDE AT CAMPO MORADO



Main Declines, Development
G9, Naranja and Largo Ore Bodies

(looking North)



- Well-defined, drilled and developed ore bodies.
- Higher Cu recovery, should increase economical and mineable resources.
- Large amounts of technical data:
 - Surface and structural mapping
 - >29,000 soil samples
 - 580,886 m of drilling
 - Geochemistry
 - Gravity survey
 - Airborne magnetics
 - EM surveys
 - IP Surveys

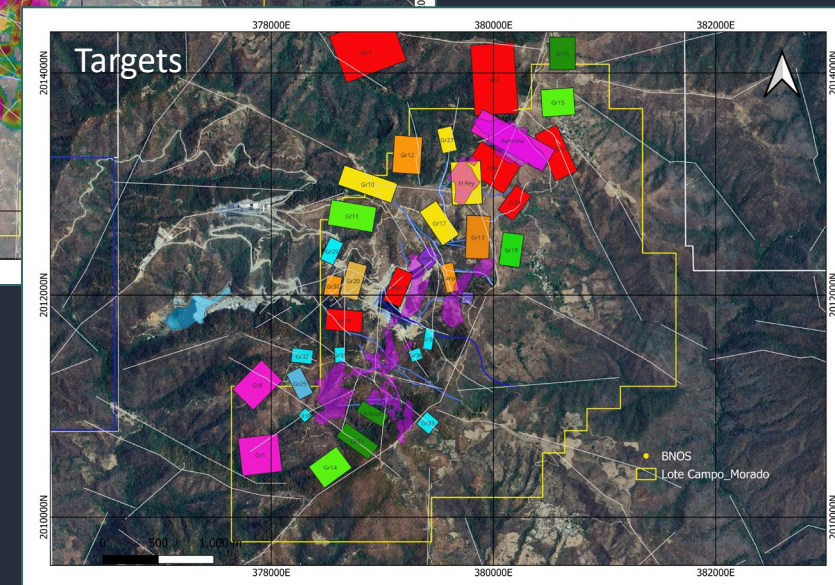
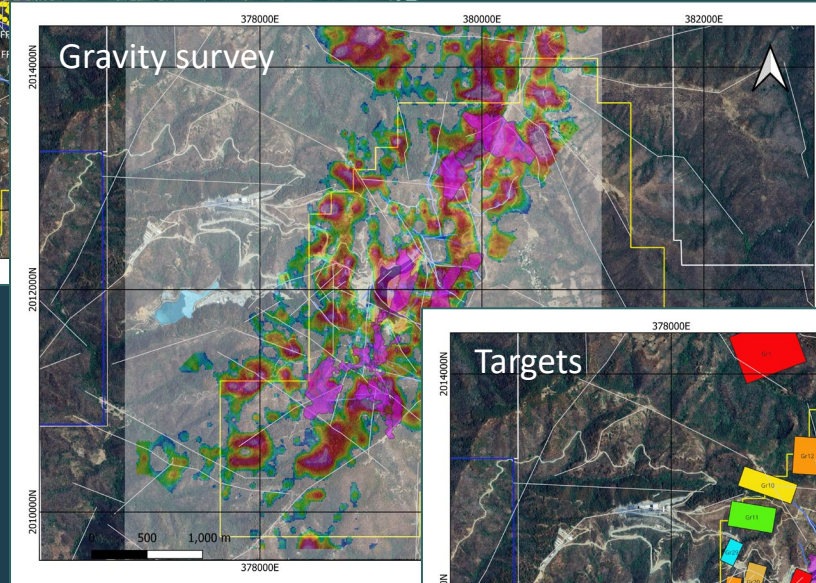
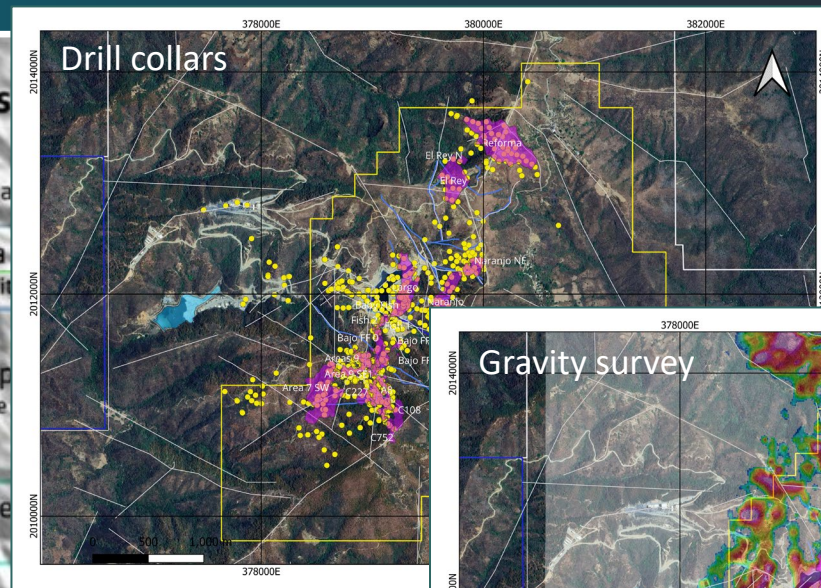
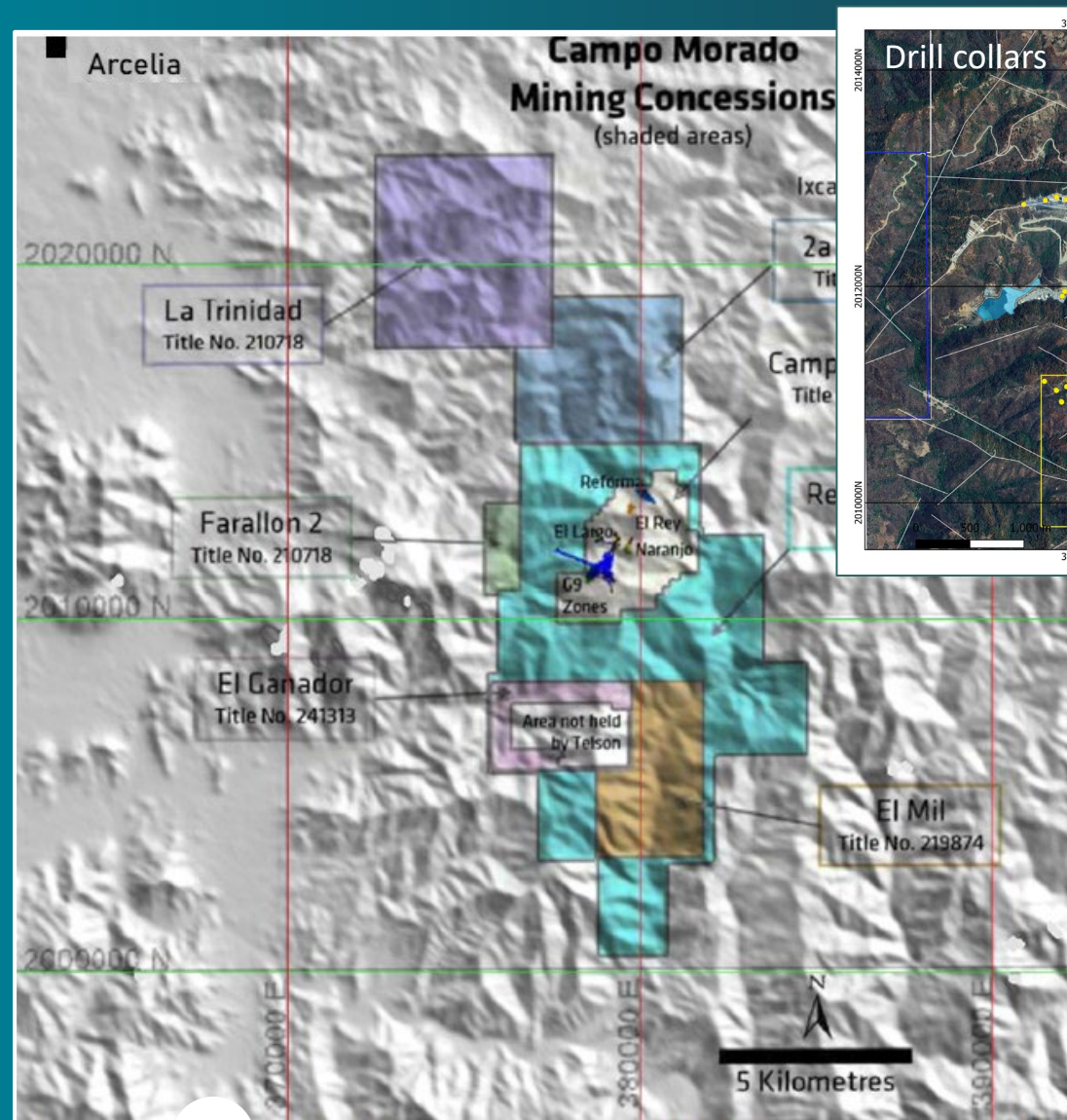
EXPLORATION UPSIDE AT CAMPO MORADO

EXPLORATION
TARGETS

38

4 of
TOP 10
"Drill ready"

Mining Concessions
>12,000 ha



TAHUEHUETO FACTS

6.3 Mt
M&I

273 Mlbs
Zn M&I

425 koz
Au M&I

9 Moz
Ag M&I

36 Mlbs
Cu M&I

123 Mlbs
Pb M&I

Location	Durango State
Ownership	100%
Royalty	1.6% NSR
Mine Type	Underground
Deposit Type	Epithermal gold/silver and breccias rich in Pb-Zn-Cu
2P Reserves	3.6 million tonnes @ 2.55 g/t gold, 50.06 g/t silver, 0.26% copper, 1.11% lead and 1.92% zinc

Life of Mine	10+ years
Replacement Value	~\$100M
Processing	1,000 tpd throughput capacity (crushing, milling, flotation)
2024E Full Year Production	17,000-20,000 Au equivalent oz Construction completed July 2024 - ramping to plant capacity throughout during Q3 Commercial production expected in Q4 2024



Infrastructure	Portal and decline, ventilation raises and fans, mineral processing plant, ore stockpiles, dry stack tailings storage, camp, workshops, office, cafeteria, medical services facility, sufficient surface rights, power and water for mining operations, etc. Hybrid solar panel generators with gas generators planned.
Concentrates	Zinc and Lead with precious metals
Rev 2024E	\$35 - \$40 million
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.

TAHUEHUETO – A BRAND NEW GOLD MINE

Level 12 & 14 Portals

Level 20 Portal

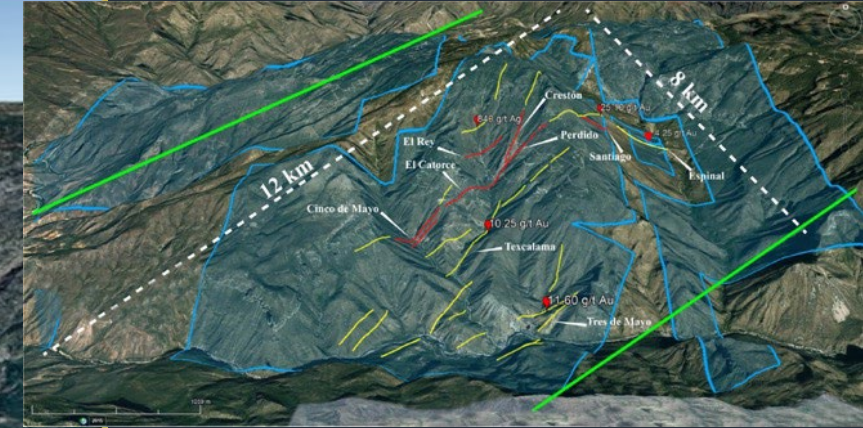
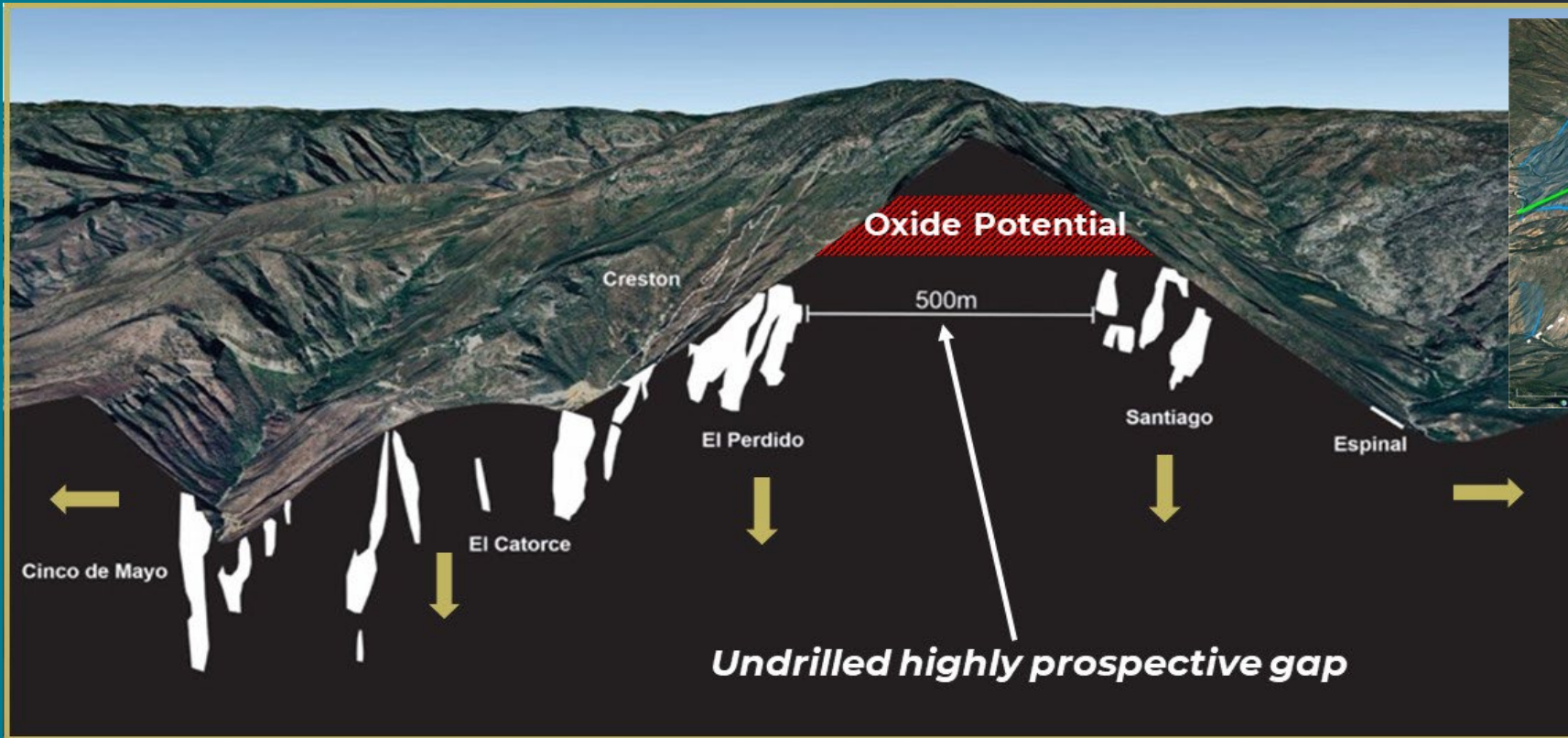
Crushing Circuit

Process Plant

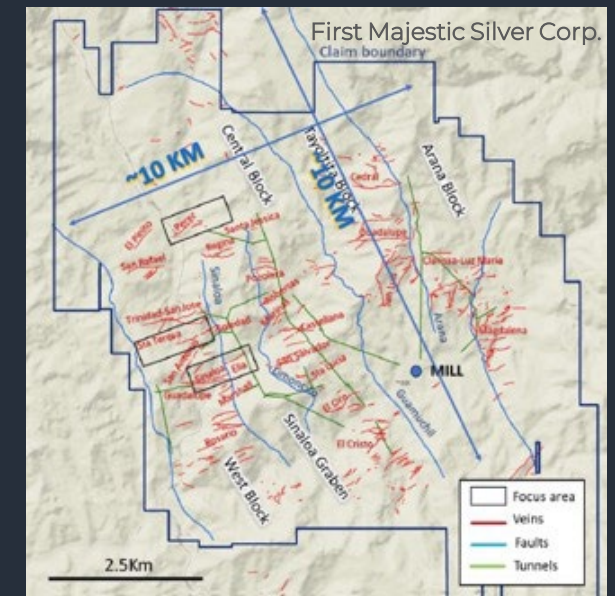
Main Camp



TRANSFORMATIVE EXPLORATION POTENTIAL AT TAHUEHUETO



ON TREND
with San Dimas



EXPLORATION OBJECTIVES

1. Step-out drilling along strike (north and south)
2. Determine vertical extent of mineralization
3. Drill and explore multiple, known, untested mineralized structures
4. 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

LUCA

TSXV

LUCMF

OTCQX

Z68

Frankfurt

Shares Outstanding 171 million

Fully Diluted 233 million

Market Cap (Sep 3, 2024) C\$92 million

52 Week C\$0.66 high
C\$0.21 low

Debt U\$18.1 million
of which U\$5.8 million is
convertible at C\$0.35

Cash U\$1.3 million

Warrants 23.9 mm @ \$0.50 Apr 25
16.7 mm @ \$0.50 Jun 25
2.9 mm @ \$0.50 Dec 25

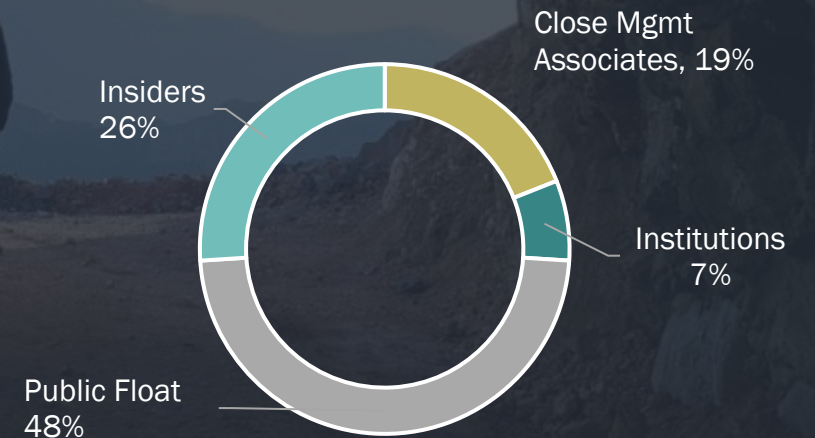
PRICE CHART

January 1, 2024
to-date



SHAREHOLDER BASE

Updated
September 3, 2024



A STRONG BOARD OF DIRECTORS

MINE BUILDERS OPPORTUNITY DRIVEN



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

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



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.



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.



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.



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.



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.



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 Reliquias S.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 Josemaria Project and the Candelaria operations (both Lundin Mining); and previously held a series of management roles within the Lundin Mining and Freeport companies.



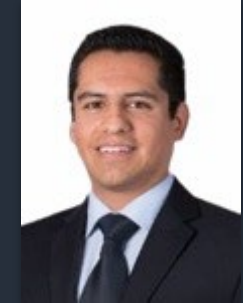
Armando Alexandri, M.Eng.
Chief Operating Officer

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 transformational 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 exploration upside at both mines

AND LONGER TERM GROWTH AHEAD

- M&A growth
- Targeting mid-tier ranking with 200,000 oz gold equivalent production



THANK YOU

lucamining.com



APPENDIX

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	%	%	%	%	% ZnEq	000s	g/t	g/t	%	%	%	%
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	%	000 lbs	%	000 lbs	%	000 lbs	g/t
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

2024 GUIDANCE

	Consolidated	Campo Morado	Tahuehueto
Gold Production (AuEq)	60,000 – 70,000	43,000 – 50,000	17,000 – 20,000
AISC (\$/AuEq Ounce produced) YTD	\$1,633	\$1,516	\$1,600
Revenue (USD)	\$90m - \$105m	\$55m - \$65m	\$35m - \$40m

Based on metals prices of \$2,190 Au per oz, 25.90 Ag per oz, 0.95 Pb per lb, \$1.20 Zn per lb and \$4.10 Cu per lb.

INTERNAL ESTIMATED PRODUCTION BY METAL

assuming a gold equivalent of 65,000 oz in 2024

Mine	Gold (oz/year)	Silver (oz/year)	Copper (lbs/year)	Zinc (lbs/year)	Lead (lbs/year)	Gold Equiv (oz/year)
Camp Morado	5,200	980,000	7.9 million	27.1 million	5.6 million	40,000
Tahuehueto	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

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

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

A LOOK AT OUR PRODUCTION BY METAL

~60-70,000

Estimated gold equivalent oz in 2024