

# Developing the Cerro Las Minitas Project into the Next Major Silver Mine in Mexico



**SouthernSilver**  
EXPLORATION CORP

Corporate Presentation  
January, 2025



SSV: TSX-V  
SSVFF: OTCQX

Some of the statements contained in this presentation may be deemed “forward-looking statements.” These include estimates and statements that describe the Company’s future plans, objectives or goals, and expectations of a stated condition or occurrence.

Forward-looking statements may be identified by the use of words such as “believes”, “anticipates”, “expects”, “estimates”, “may”, “could”, “would”, “will”, or “plan”. Since forward-looking statements are based on assumptions and address future events and conditions, by their very nature they involve inherent risks and uncertainties.

Actual results relating to, among other things, results of exploration, reclamation, capital costs, and the Company’s financial condition and prospects, could differ materially from those currently anticipated in such statements for many reasons such as but not limited to; changes in general economic conditions and conditions in the financial markets; changes in demand and prices for the minerals the Company expects to produce; litigation, legislative, environmental and other judicial, regulatory, political and competitive developments; technological and operational difficulties encountered in connection with the Company’s activities; and changing foreign exchange rates and other matters discussed in this presentation.

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The TSX Venture Exchange has not reviewed and does not accept responsibility for the adequacy or accuracy of the contents of this presentation, that has been prepared by management.

The scientific and technical content of this disclosure was reviewed and approved by Robert Macdonald, MSc. P.Geo, VP. Exploration, and is a Qualified Person as defined by National Instrument 43-101 – Standards of Disclosure for Mineral Projects.

All mineral resources have been estimated in accordance with Canadian Institute of Mining and Metallurgy and Petroleum (CIM) definitions, as required under NI43-101.

Mineral resources reported demonstrate reasonable prospect of eventual economic extraction, as required under NI43-101.

Mineral resources are not mineral reserves and do not have demonstrated economic viability. The mineral resources may be materially affected by environmental, permitting, legal, marketing, and other relevant issues.

The PEA is preliminary in nature, it may include 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, and there is no certainty that the PEA will be realized.

An inferred mineral resource has a lower level of confidence than that applying to an indicated mineral resource and must not be converted to a mineral reserve. It is reasonably expected that most of the inferred mineral resources could be upgraded to indicated mineral resources with continued exploration.

All-in Sustaining cost (AISC) is calculated as: Operating costs (mining, processing and G&A) + Incremental PTUs + Concentrate Transportation + Treatment & Refining Charges + Penalties + Sustaining Capital + Closure Costs + Silver Revenue Royalty and is reported on using a per tonne mined, AgEq plant feed, AgEq recovered for sale, and AgEq payable basis

**PEA work completed by:**

**Kirkham Geosystems Ltd. (KGL):** mineral resource estimate from June, 2024;

**Entech Mining Limited (Entech):** mine design and mine OpEx and capital;

**Ausenco Engineering (Ausenco):** process flowsheet, mine site design and surface OpEx, CapEx and discounted cash-flow model – reviewed and scrutinized metallurgical assumptions;

**Metallurgical Process Consultants Limited (MPC):** metallurgy and process flowsheet

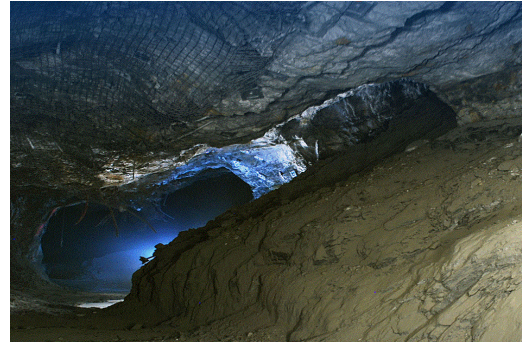
Focused on developing the Cerro Las Minitas (CLM) Ag-Cu-Pb-Zn project located in Durango, Mexico



## One of the Largest and Highest Grade Undeveloped Silver Projects in the World

### Mineral Resource Update

- **Ind: 116Moz AgEq at 271g/t AgEq<sup>1</sup>**
- **Inf: 186M oz AgEq at 248g/t AgEq<sup>1</sup>**
- Well-established silver mining district in Durango, Mexico near several major mining companies



## 2024 PEA Highlights

- 17yr Life-of-Mine
- **Underground Mine**
- Robust Project Economics
- **Strongly Leveraged to Silver and Zinc prices**
- High Revenues/Free Cash-flow



## Corporate Highlights

- 100% ownership and control of the CLM Project
- **No Royalties**
- Treasury to continue ESG initiatives, permitting, drilling, engineering and other Corporate objectives



## Company Catalysts (pending News Flow)

- **Updated PEA - announced**
- Drilling started at CLM project
- Permitting for 2025 drilling-Hermanas Au-Ag Project, NM; Oro Cu-Mo project, NM

1. Parameters for the NI 43-101 Mineral Resource Estimate are described on Slide 19 and in the SSV News Release, dated Mar 22<sup>nd</sup>, 2023

# Cerro Las Minitas

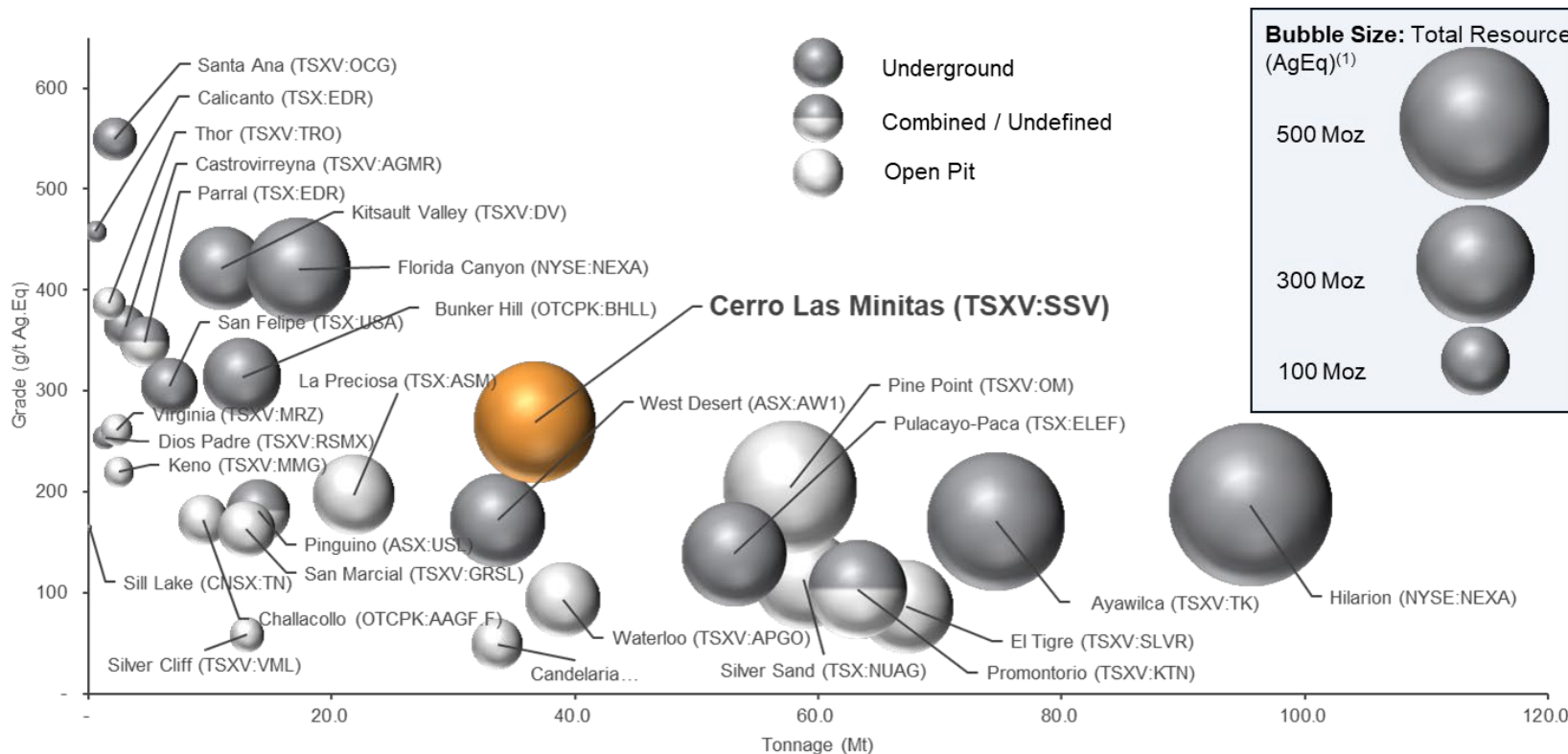
One of the Largest and Highest Grade Undeveloped Silver Assets in the World

**2024 Mineral Resource Estimate (as of March 20<sup>nd</sup>, 2024 using a \$60NSR/t cut-off)<sup>1</sup>;**

**Indicated – 116Moz AgEq 43Moz Ag, 32Kozs Au, 49Mlb Cu, 374Mlb Pb and 921Mlb Zn**

**Inferred – 186Moz AgEq: 83Moz Ag, 104Kozs Au, 111Mlb Cu, 582Mlb Pb and 1,106Mlb Zn**

Silver or Zinc primary development assets in the Americas with a resource or study published since January 1, 2020 and whose primary owners have market capitalization between US\$10M and US\$1B



The CLM project remains on the leading edge of the Grade vs Tonnage curve of peer group deposits throughout the world

Notes:

1. Parameters for the NI 43-101 Mineral Resource Estimate are described on Slide 22 and in the SSV News Release, dated Jun 10<sup>th</sup>, 2024

Notes for chart

Note: Data as of August 30, 2024

Prices Used (US\$): Gold - \$1,850/oz, Silver - \$22.50/oz, Copper - \$3.78/lb, Lead - \$0.94/lb, Zinc - \$1.25/lb

A 100% basis

Excludes assets with resources that exceed 120 Mt

## Capital Structure

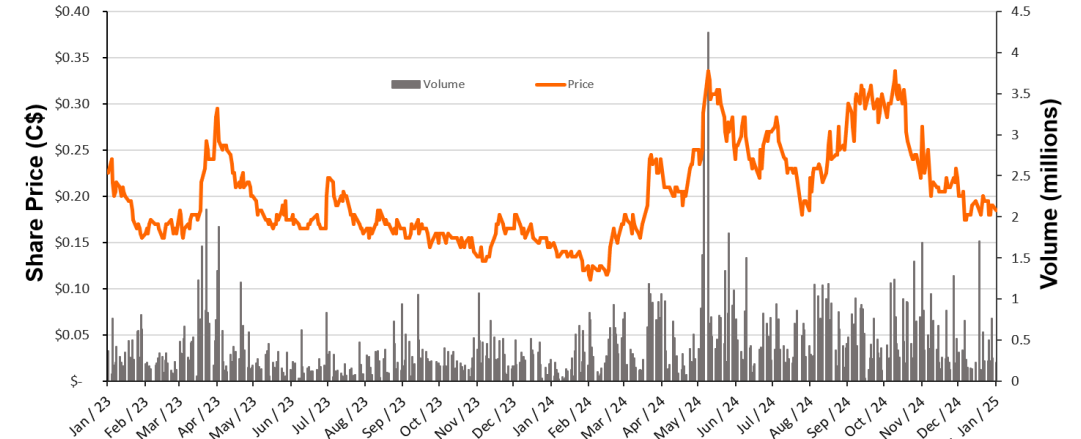
Ticker	TSX-V:SSV
Share Price (Jan 9, 2025)	C\$0.19
Current Shares Outstanding	309M
Options	27.6M <sup>1</sup>
Warrants	46.0M <sup>2</sup>
Fully Diluted Shares Outstanding	383M
Market Capitalization	C\$58.8M
Cash & Cash Equivalents	C\$1.3M
Enterprise Value	C\$62.7M
Enterprise Value	US\$45.2M
EV/Oz AgEq	US\$0.15
P/NAV	0.12x

## Top Shareholders

Institutional	34%
Management & Directors	2.3%

- Includes 24.3M options outstanding with a weighted average exercise price of C\$0.37/share and a weighted average remaining term of 3.8 years
- Includes 49.8M warrants outstanding with a weighted average exercise price of C\$0.44/share and a weighted average remaining term of 1.8 years

## Share Price and Volume (Last 24 Months)



## Analyst Coverage

Timothy Lee – *Red Cloud Securities Ltd.*  
 Siddharth Rajeev – *Fundamental Research Corp.*

## Recent Ratings

	Date	Reccomendation (C\$)
<i>Red Cloud Securities</i>	Jun-11-2024	Buy (\$0.90)
<i>Fundamental Research</i>	Jun-21-2024	Buy (\$0.60)

## Newsletter Coverage

*Caesars Report* – Thibaut Lepouttre  
*Silver Stock Investor* – Peter Krauth  
*GoldSilver.com/SilverChartist* – Jeff Clark

# Management Team and Board

*Experienced Mine Finders with a History of Success in Mexico*



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**Lawrence Page (LL.B, KC)**

*President, Director*

- Director and Officer of a number of public prominent exploration and mining companies
- Major Projects and Mines involvement: Penasquito, Mexico; Hemlo and Eskay Creek, Canada

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**Rob MacDonald (MSc, PGeo)**

*VP, Exploration*

- VP of Geological Services for the Manex Resource Group of Companies and Exploration Manager for several publicly listed companies
- Overseen the exploration of many projects throughout North America including the discovery and delineation of the Homestake Ridge high-grade 1.2M oz Au-Ag deposit in northern British Columbia

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**Killian Ruby (CPA, CA, B. Sc.)**

*Chief Financial Officer*

- President and CEO of Malaspina Consultants & Manex Resource Group
- Served as an Assurance Partner at Wolrige Mahon LLP and served as Served as Senior Manager of KPMG LLP

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**Arie Page**

*Corporate Secretary*

- Currently serves as corporate secretary to several public resource companies in the minerals sector including Bravada Gold Corporation, Pacific Ridge Exploration Ltd., Southern Silver Exploration Corp. and Valterra Resource Corporation.

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**Russell Ball (CA, CPA)**

*Director*

- Managing Director of QDBS Resources Inc. and former CEO, Director and Exec. Chairman of Calibre Mining Corp
- Former EVP and CFO of Goldcorp Inc as well as varying capacities with Newmont Mining Corp

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**Peter Cheesbrough (CA)**

*Director*

- President, Exploration Division, Electrum Group
- Served as CFO, Echo Bay Mines

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**Gina Jones (CPA, CA, CF, ICD.D)**

*Director*

- Currently serves as CFO, CCO PenderFund Capital Management Ltd., Served as CFO for two Vancouver Investment Dealers and CFO, COO for an independent Vancouver brokerage firm.

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**Roger Scammell (BSc, PGeo)**

*Director*

- Served as President Scorpio Mining Corporation and VP Exploration of Tamaka Gold Corporation
- Major Projects and Mines involvement: San Nicolas, El Limon and Nuestra Senora, Mexico

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**Nigel Bunting**

*Director*

- Served as director Suffolk Life Pensions Ltd

## Cerro Las Minitas, Durango, Mexico – Flagship

- 100% owned
- Silver-enriched Skarn/CRD deposits
- +US\$28M spent on acquisition and exploration since 2011
- Further Upside on both Exploration and Engineering basis

## Oro Project, New Mexico

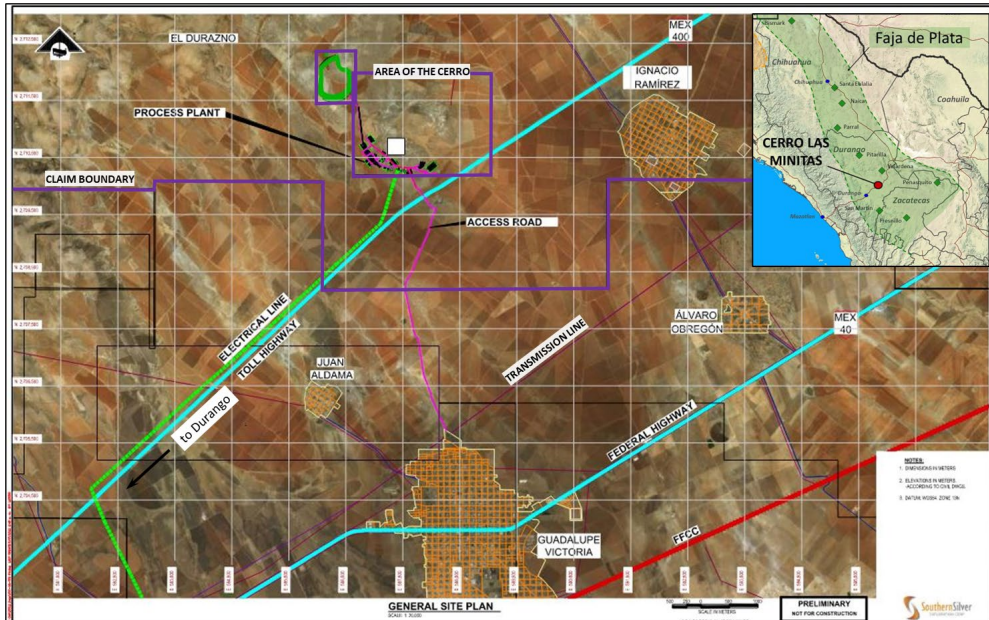
- 100%-owned
- Large Laramide Cu-Au-Mo porphyry system with an adjacent near surface gold target
- New targeting developed based on recent drill results

## Hermanas Project, New Mexico

- Option to 100% own
- Large early-stage Au-Ag epithermal vein system



### Well Located in an Active Exploration and Development Jurisdiction with Superior Infrastructure



- Safe jurisdiction, around non-narcotic related agriculture
- Located 70km NE of Durango (pop. ~650,000)
- The property is transected by infrastructure including two federal highways, a railway line and transmission lines
- Property is accessed via the town of Guadalupe Victoria (pop: ~35,000) located just 6km to the south

### Knowledgeable and Supportive Local Community

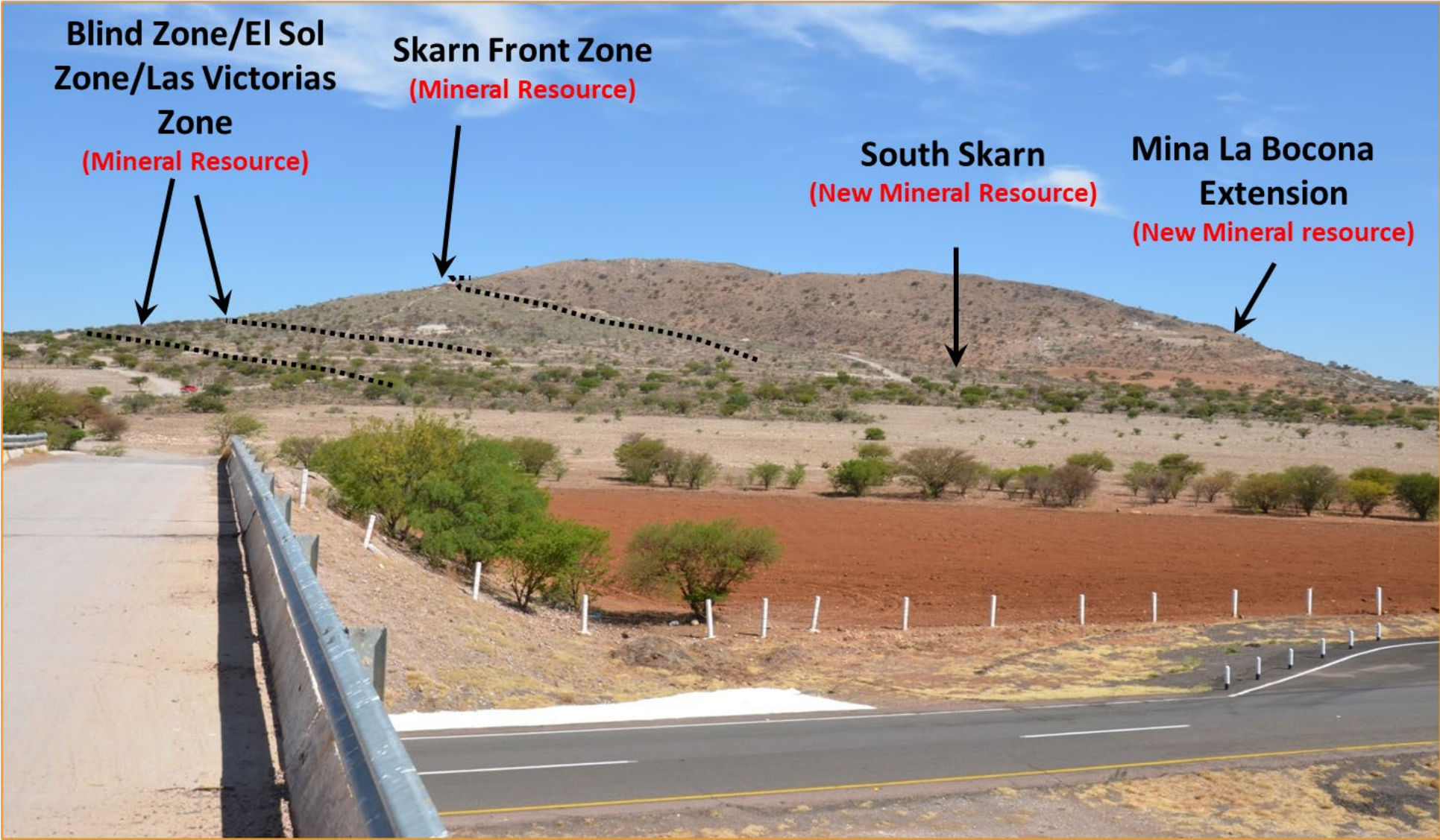


- Exploration permits in place
- Social license initiatives: exploration access agreements in place with the local Ejido;
- Exploration/development team is embedded in the community with a local workforce



# Cerro Las Minitas

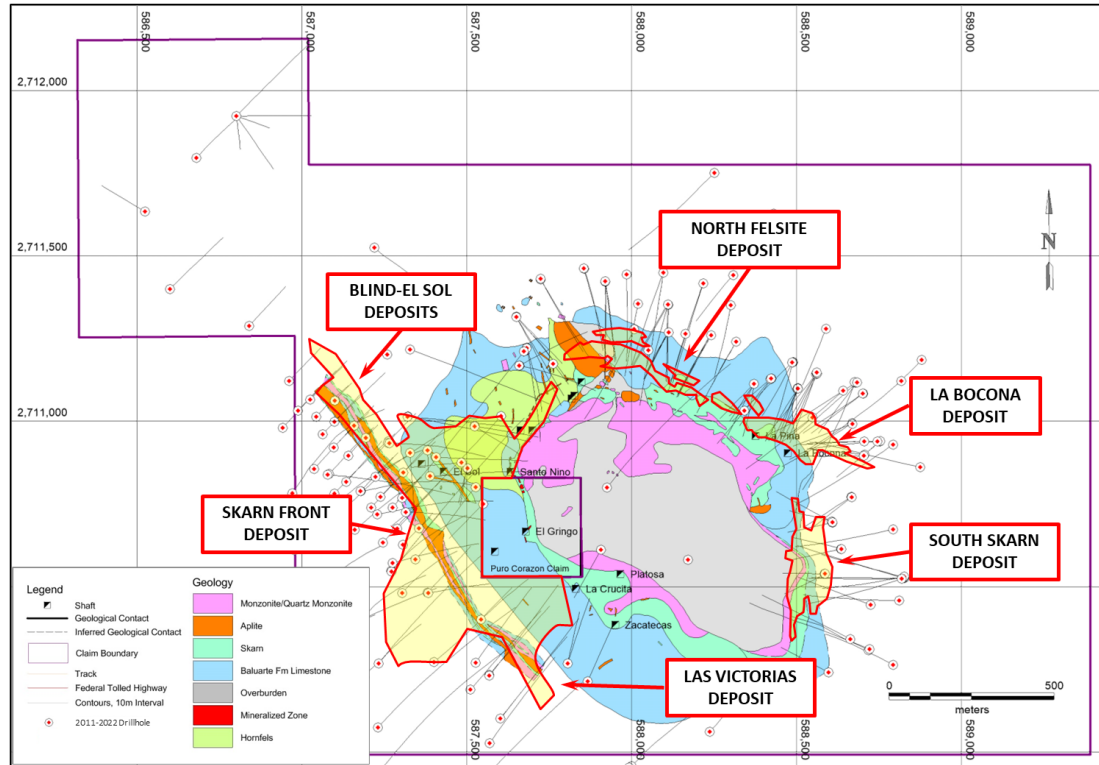
Looking North from the Autopista (Highway)



# Cerro Las Minitas

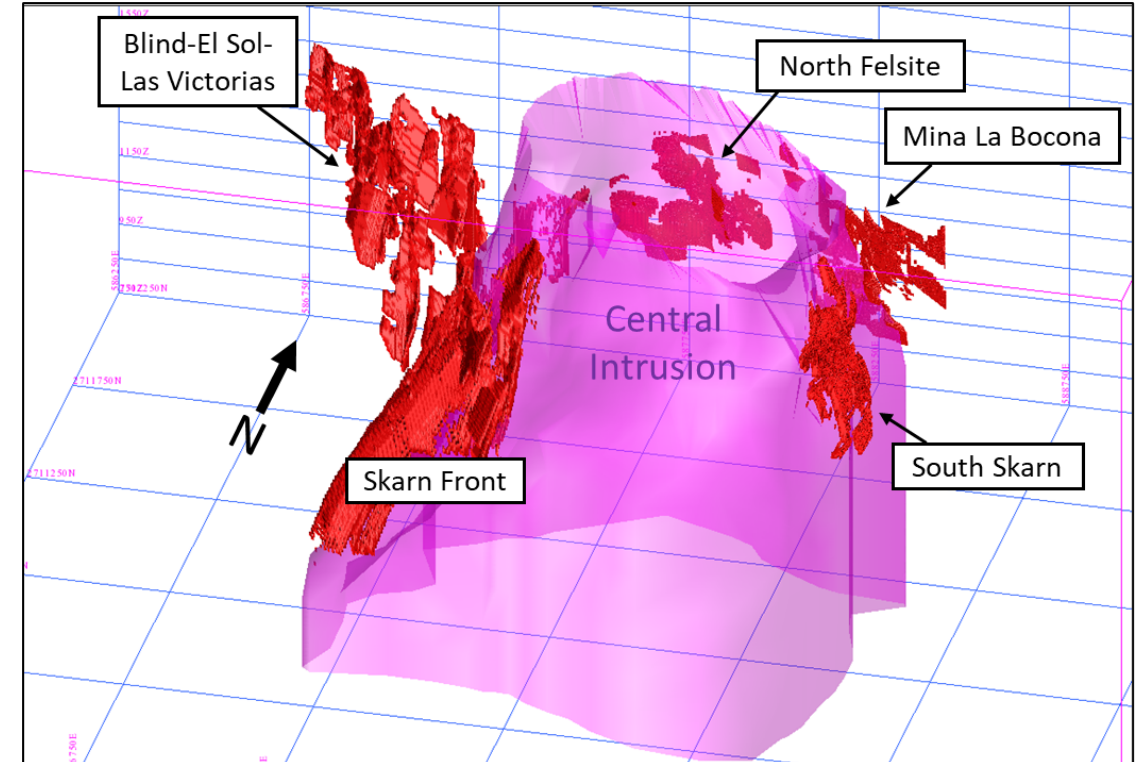
## Site Geology and Deposit Distribution

*A classic Ag-Pb-Zn CRD/Skarn system similar to major polymetallic Mexican deposits*



- A Central Monzonite acts as the heat pump to the mineralizing system
- Historic Mines are localized in the skarn/hornfelsed margin of the monzonite

*Seven deposits make up the current Mineral Resources*



- Mineralization is localized in sub-vertical structures and on dyke margins in the Blind and El Sol deposits; and
- Semi-massive and massive sulphide lenses occur at the marble-skarn transition, adjacent to the monzonite contact in the Skarn Front, South Skarn and Mina La Bocona deposits

## *Robust Project Economics:*

- Base Case<sup>1</sup>: post-tax NPV5% = **US\$501M** (C\$682M) and IRR of **21.2%**;

## *Excellent Silver and Zinc Price Leverage:*

- Base-case +20%<sup>2</sup>: after-tax NPV5% of **US\$875M** (C\$1,193M) and IRR of **30.2%**;

## *A Large-Scale Underground Mining Operation: 17-year mine life*

*Annual average plant feed:* **14.3 Mozs AgEq** (inc. 5.8 Mozs Ag)

*Life-of-Mine (LOM) feed:* **242.7 Mozs AgEq** (inc. 98.6 Mozs Ag). LOM sales total 194.3 Mozs AgEq at an AISC of US\$13.23/oz AgEq sold; and

*Base-case gross revenues:* **US\$4.5B** with silver and gold representing 45% of revenues, and zinc representing 35% of projected revenues.

*Initial CapEx:* **US\$388M**,

*NPV5%-to-CapEx ratio:* of **1.3X** and a paydown of **48** months;

## *In comparison to the earlier 2022 economic model, the updated PEA now:*

- Increases the Life of Mine (LOM) production by **5Mt**, representing an approximate 20% increase;
- Increases daily mine production to up to **5300tpd**, representing an approximate 18% increase;
- Extends the mine life by **2.6yrs**;
- Increases the LOM Revenue by **US\$765M**, representing an approximate 17% increase in revenues.
- Increases the after-tax NPV5% by 45% and
- Similarly, increases the IRR by 3.3%

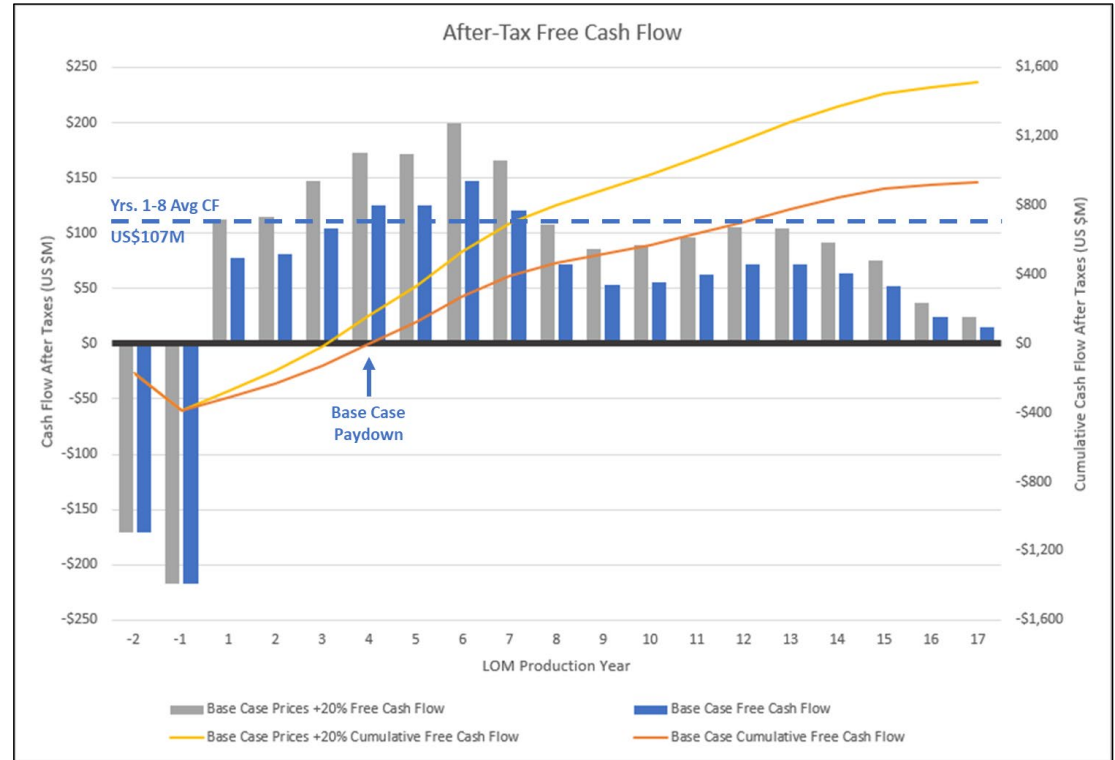
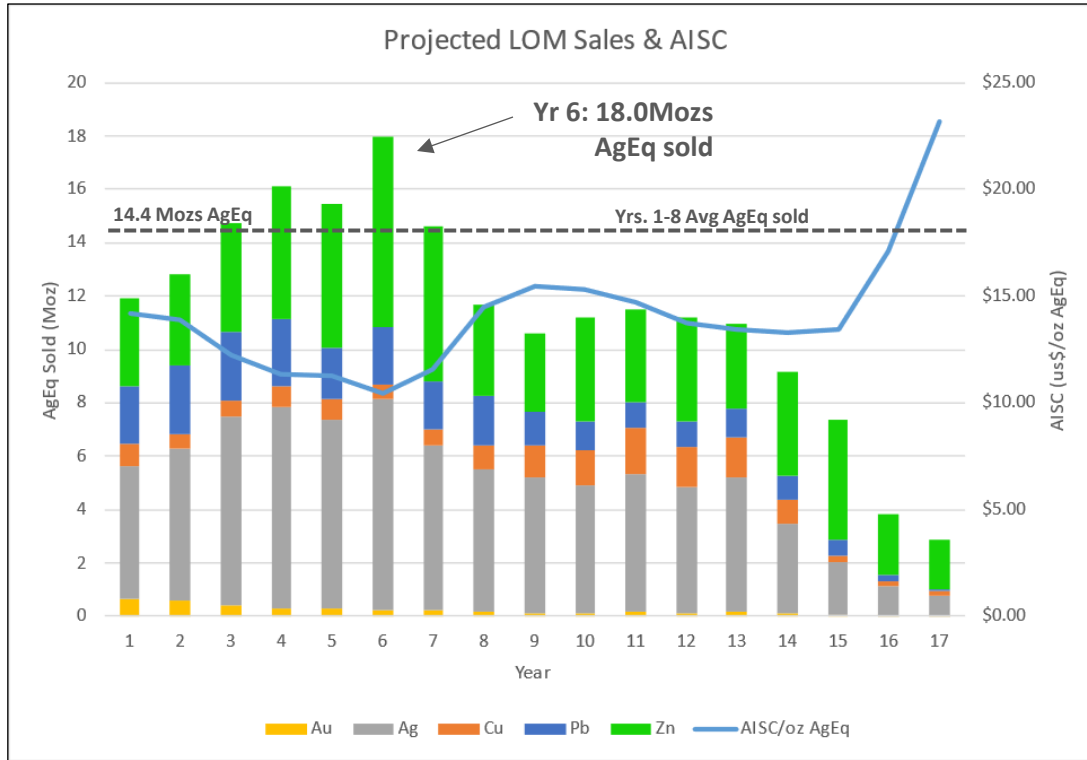
1. Base Case Metal Prices (\$US): Ag- \$23.00/oz, Au - \$1850/oz, Cu – \$4.00/lb, Pb – \$1.00/lb and Zn - \$1.25/lb
2. Base Case +20% metal prices (\$US): Ag- \$27.60/oz, Au - \$2220/oz, Cu – \$4.80/lb, Pb – \$1.20/lb and Zn - \$1.50/lb

# Cerro Las Minitas

## Project Economics – Production Schedule and Cash Flow

**Modelled LOM Production: 29.5 Mt @ 104 g/t Ag, 0.11g/t Au, 0.19 % Cu, 1.06 % Pb, and 2.41 % Zn - Average NSR of \$US 131/t**

**Higher Margin Mineralization Targeted in the First Eight Years of Production Leading to Improved Economics.**



LOM Ag/Au/Cu/Pb/Zn sales are shown on an AgEq basis based on: Ag = \$23.00/oz, Au = \$1850/oz, Cu = \$4.00/lb, Pb = \$1.00/lb and Zn = \$1.25/lb

All-in Sustaining cost (AISC) is calculated as: Operating costs (mining, processing and G&A) + Concentrate Transportation + Treatment & Refining Charges + Penalties + Sustaining Capital + Closure Costs and is reported on co-byproduct basis using AgEq.

1. Base Case Metal Prices: Ag- \$23.00/oz, Au - \$1850/oz, Cu – \$4.00/lb, Pb – \$1.00/lb and Zn - \$1.25/lb
2. Base Case +20% metal prices: Ag- \$27.60/oz, Au - \$2220/oz, Cu – \$4.80/lb, Pb – \$1.20/lb and Zn - \$1.50/lb

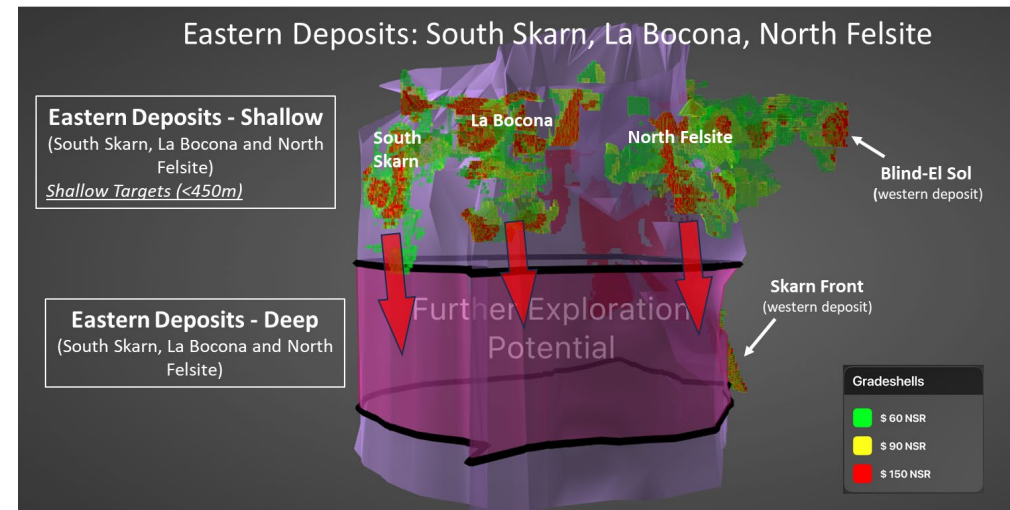
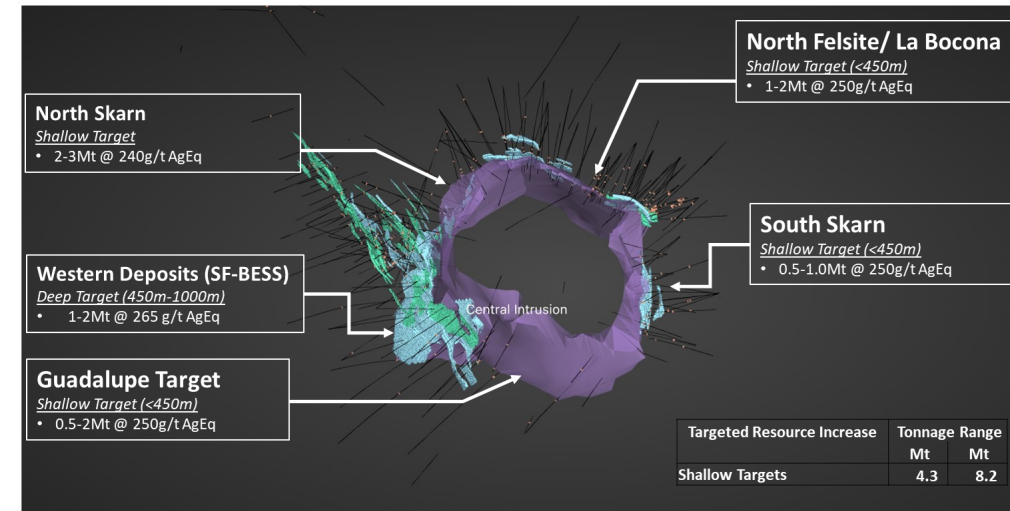
### Several Significant Shallow Extensions to Existing Deposits Remain to be Tested

#### 25,000m of new drilling is identified which would target Resource Expansion in the Eastern and Northern Deposits

- Potential Staged Program:
  - 6000m to test shallow targets around the eastern and northern deposits
  - Up to 19,000m to test down-dip projections of the South Skarn and Bocona deposits
- Exploration target of 4Mt to 8Mt

#### Near Term Milestone:

- Increase the total resources of the project to 45Mt
- Deeper Targets are more speculative and will require significantly more drilling but could add further value to the project

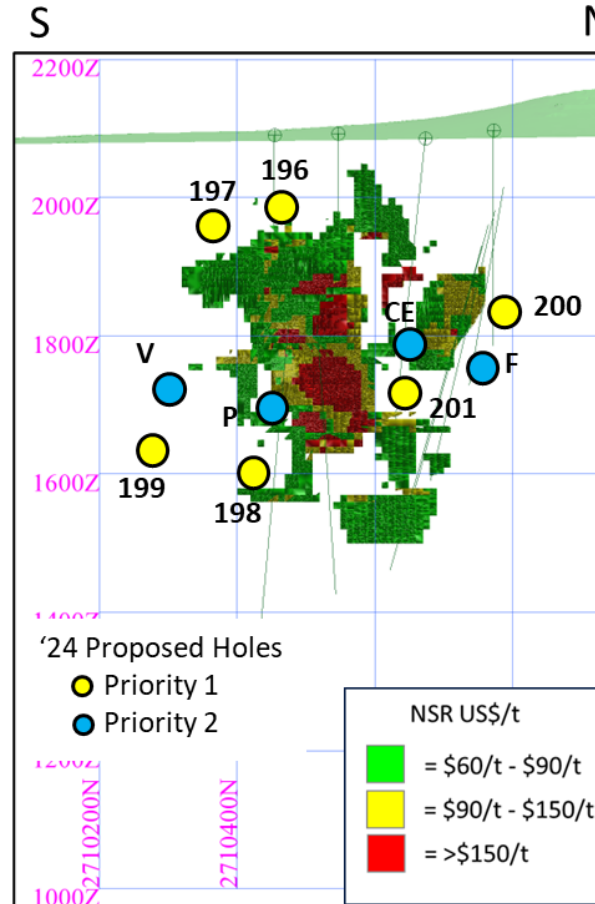


The exploration targets are conceptual in nature and rely on projections of mineralization that are beyond the standard CIM classification of mineral resources and should not be relied on as a mineral resource estimate

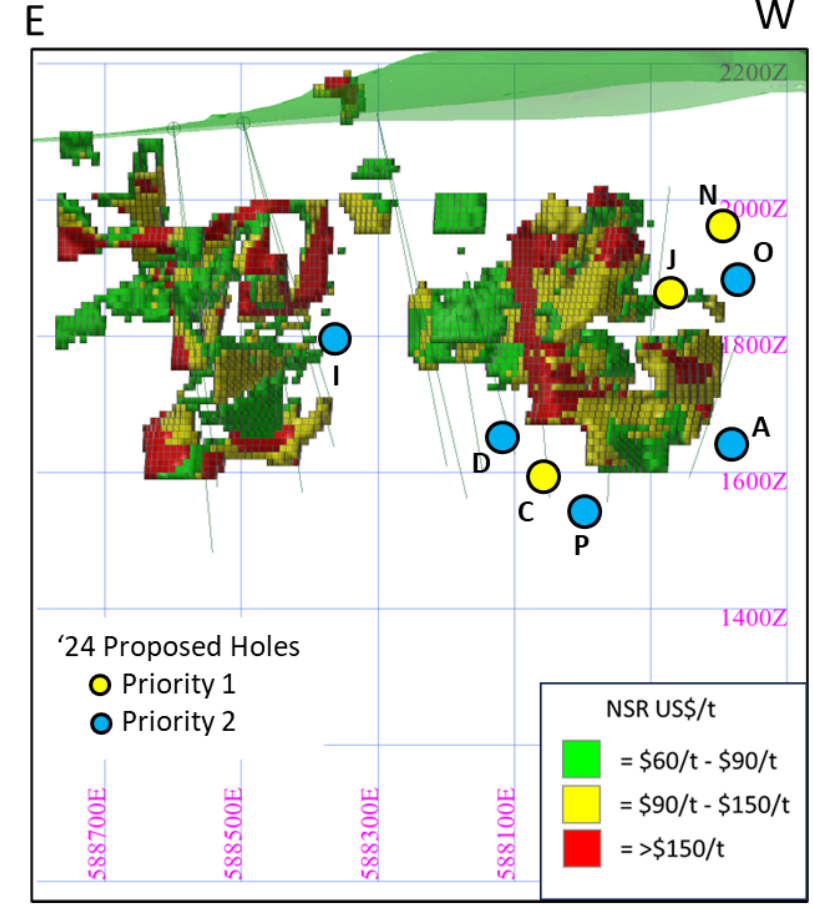
### Mine Life Extension

- **Priority:** Fill in Gaps in both the resource model and near-term expansion of the existing mine-plan
- Initial 6000m program; shallow targets <500m
- 6 holes completed = 2395m
- **Assays Pending**
- Next step: drilling at N. Felsite

### South Skarn



### La Bocona - North Felsite



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*The PEA has modelled robust annual average cashflow particularly in the first eight years of mine-life. Further work could enhance the profitability of the project*

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### Further Opportunities

#### **Mine life extension:**

- 25,000 metres of drilling could add 4Mt - 8Mt of additional shallow (<500m depth) mineralization to the Mineral Resource
- Further deeper exploration potential
- 6,000m Proof-of-concept drilling initiated to test shallow targets

#### **Engineering**

- Development Rate
- Mill Through-put
- Processing Circuit Optimization
- Ore-sorting

### ESG and Permitting

#### **Continuing on the Pathway to Production**

- Permitting parameters - **established**
- Baseline studies (Environmental/Hydrology) – **in progress**
- Social engagement – **ongoing**; inc. preparation for Exploitation Agreements
- Government engagement – **ongoing**

#### **Preparation for Resource Expansion**

- Technical studies to assist initial drill targeting – **completed**
- Targeting established to grow the Resource to +45Mt

### US Exploration

Southern continues to advance two earlier stage projects in southern New Mexico, giving the shareholder additional exposure to copper, gold and silver



#### ➤ Oro Project – Large Laramide Cu-Mo-Au Porphyry

- 100% Owned
- +22.4 sq. km property – large zoned porphyry system
- +\$8M Expenditures – 29 Drill holes by SSV
- New claims added
- Permitting in progress for drilling in 2025

#### ➤ Hermanas – Widespread Epithermal Vein system

- Geology Favorable for Large Epithermal Vein System with limited historic drilling
- High-level textures suggesting good exploration potential at depth
- Numerous Au, Ag occurrences
- Permitting in progress for drilling in 2025





## Diverse Assets

Property Package with  
Exposure to both  
Precious and Base/EV  
Metals

## CLM - PEA Results

17yr Mine life  
US\$4.5B – revenues  
NPV5% - US\$501M  
IRR – 21.2%

## Catalysts

Q4 '24 Drill Results  
Metal Prices

## Ongoing

CLM: Resource Expansion  
targets and Project  
Optimization

## Appendix

### 2024 Mineral Resource Estimate (as of March 20, 2024 using a US\$60/t NSR cut-off);

- Indicated – 116Moz AgEq: 43Moz Ag, 49Mlb Cu, 374Mlb Pb and 921Mlb Zn (272g/t AgEq; or US\$132 NSR/t)
- Inferred – 186Moz AgEq: 83Moz Ag, 111Mlb Cu, 582Mlb Pb and 1,106Mlb Zn (247g/t AgEq or US\$124 NSR/t)

Indicated Resources		Average Grade							Contained Metal					
Zone	Tonnes (Kt)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Cu (%)	AgEq (g/t)	NSR (US\$/t)	Ag TrOz (000's)	Au TrOz (000's)	Pb (Mlbs)	Zn (Mlbs)	Cu Lbs (Mlbs)	AgEq TrOz (000's)
Blind Zone	2,614	92	0.04	1.8	2.0	0.10	227	113	7,751	4	106	116	6	19,108
El Sol Zone	1,252	77	0.04	2.1	1.9	0.08	214	106	3,102	2	57	54	2	8,598
Skarn Front Zone	7,626	104	0.06	0.8	4.1	0.19	298	143	25,557	15	128	692	32	73,181
La Bocona/North Felsite Zone	1,807	121	0.19	2.1	1.5	0.23	262	135	7,039	11	82	59	9	15,243
<b>Total</b>	<b>13,299</b>	<b>102</b>	<b>0.07</b>	<b>1.3</b>	<b>3.1</b>	<b>0.17</b>	<b>272</b>	<b>132</b>	<b>43,449</b>	<b>32</b>	<b>374</b>	<b>921</b>	<b>49</b>	<b>116,130</b>

Inferred Resources		Average Grade							Contained Metal					
Zone	Tonnes (Kt)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Cu (%)	AgEq (g/t)	NSR (US\$/t)	Ag TrOz (000's)	Au TrOz (000's)	Pb (Mlbs)	Zn (Mlbs)	Cu Lbs (Mlbs)	AgEq TrOz (000's)
Blind Zone	1,697	74	0.20	1.2	1.8	0.08	192	95	4,029	11	46	66	3	10,456
Las Victorias Zone	1,417	124	0.65	1.9	2.2	0.12	307	155	5,629	30	58	69	4	14,001
El Sol Zone	1,168	57	0.03	1.7	2.1	0.06	185	90	2,150	1	43	53	1	6,962
Skarn Front Zone	12,444	110	0.05	0.7	2.6	0.32	254	126	43,834	20	180	711	88	101,620
La Bocona/North Felsite Zone	2,666	120	0.22	1.4	1.6	0.13	243	124	10,327	19	85	95	7	20,864
South Skarn Zone	4,036	134	0.19	1.9	1.3	0.08	250	129	17,393	24	170	112	7	32,481
<b>Total</b>	<b>23,428</b>	<b>111</b>	<b>0.14</b>	<b>1.1</b>	<b>2.1</b>	<b>0.21</b>	<b>247</b>	<b>124</b>	<b>83,362</b>	<b>104</b>	<b>582</b>	<b>1,106</b>	<b>111</b>	<b>186,384</b>

*Notes:*

- 1) The current Resource Estimate was prepared by Garth Kirkham, P.Geo., of Kirkham Geosystems Ltd.
- 2) All mineral resources have been estimated in accordance with Canadian Institute of Mining and Metallurgy and Petroleum ("CIM") definitions, as required under National Instrument 43-101 ("NI43-101").
- 3) Mineral resources were constrained using continuous mining units demonstrating reasonable prospects of eventual economic extraction.
- 4) Silver Equivalents were calculated from the interpolated block values using relative recoveries and prices between the component metals and silver to determine a final AgEq value. Metal recoveries: 95% silver, 75% gold, 70% copper, 87% lead and 93.2% zinc.
- 5) Silver Equivalents and NSR\$/t values were calculated using average long-term prices of \$22.5/oz. silver, \$1,850/oz. gold, \$3.78/lb. copper, \$0.94/lb. lead and \$1.25/lb. zinc. All prices are stated in \$USD.
- 6) The formula used for NSR\$/t calculations was as follows -  $NSR = (Ag\ g/t \times 0.55) + (Au\ g/t \times 34.45) + (Cu\ \% \times 48.68) + (Pb\ \% \times 13.41) + (Zn\ \% \times 15.59)$
- 7) Mineral resources are not mineral reserves until they have demonstrated economic viability. Mineral resource estimates do not account for a resource's mineability, selectivity, mining loss, or dilution.
- 8) An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.
- 9) All figures are rounded to reflect the relative accuracy of the estimate and therefore numbers may not appear to add precisely.