

Developing the Next Major Silver Mine in Mexico



SouthernSilver
EXPLORATION CORP

PM Summit
Beaver Creek
September, 2023



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.

Persons should not place undue reliance on the Company’s forward-looking statements. Further information regarding these and other factors, which may cause results to differ materially from those projected in forward-looking statements, are included in the filings by the Company with securities regulatory authorities. The Company does not assume any obligation to update or revise any forward looking statement that may be made from time to time by the Company or on its behalf, except in accordance with applicable securities laws, whether as a result of new information, future events or otherwise.

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 Geosciences Ltd. (KGL): mineral resource estimate from Oct, 27, 2021;

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

M3 Engineering & Technology Corp. (M3): process flowsheet, mine site design and surface OpEx, CapEx and discounted cash-flow model

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

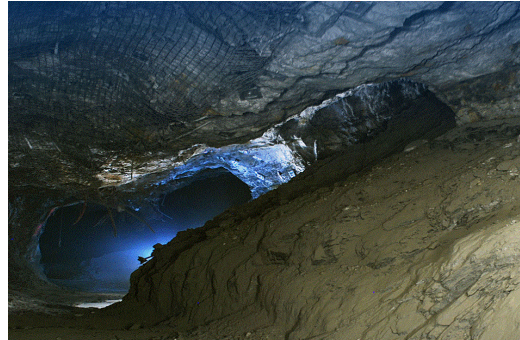
Focused on developing the Cerro Las Minitas (CLM) Ag-Cu-Pb-Zn project located in Durango, Mexico



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

New Mineral Resource Update

- **Ind: 140Moz AgEq at 349g/t AgEq¹**
- **Inf: 210M oz AgEq at 311g/t AgEq¹**
- Well-established silver mining district in Durango, Mexico near several major mining companies



PEA Highlights

- 15yr Life-of-Mine
- Robust Project Economics
- High Revenues/Free Cash-flow
- Balanced Precious / Base Metal revenues
- **Leveraged to Silver and Zinc**



Corporate Highlights

- 100% ownership and control of the CLM Project
- Full treasury to continue ESG initiatives, permitting, drilling, engineering and other Corporate objectives



Company Catalysts (pending News Flow)

- **Resource Update - Completed**
- Engineering Upgrades
- New targeting developed at Oro Cu-Mo project, NM
- Permitting for 2024 drilling-Hermanas Au-Ag Project, NM

1. Parameters for the NI 43-101 Compliant Mineral Resource Estimate are described on Slide 11 and in the SSV News Release, dated Mar 22nd, 2023

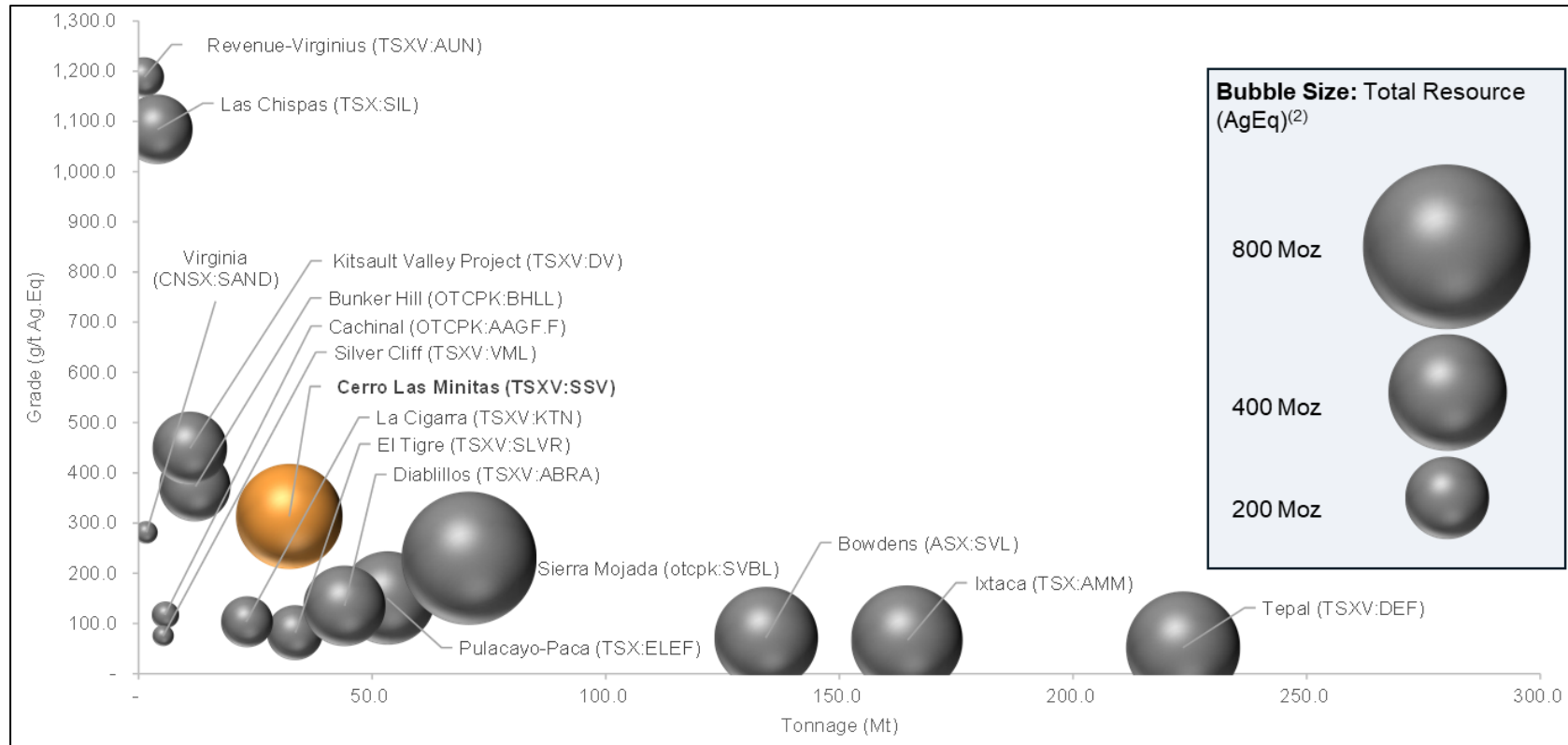
Cerro Las Minitas

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

2023 Mineral Resource Estimate (as of March 22nd, 2023 using a \$60NSR/t cut-off)¹;

Indicated – 140Moz AgEq 42.7Moz Ag, 446Mlb Cu, 364Mlb Pb and 903Mlb Zn

Inferred – 210Moz AgEq: 80Moz Ag, 101Mlb Cu, 571Mlb Pb and 1,029Mlb Zn



Notes:

- Parameters for the NI 43-101 Compliant Mineral Resource Estimate are described on Slide 11 and in the SSV News Release, dated Mar 22nd, 2023

Notes for chart

- Data as of September 8, 2022
- Prices Used (US\$): Gold - \$1,708/oz, Silver - \$18.59/oz, Copper - \$7811/MT, Iron - \$98/dMT, Lead - \$1,881/MT, Zinc - \$3,128/MT
- Discovery Silver's Cordero Mine removed from output. Total tonnage of 782 Mt, grade of 44.1 g/t Ag.Eq
- Applies to primary asset only (100% basis)

1. Parameters for the NI 43-101 Compliant Mineral Resource Estimate are described on Slide 11 and in the SSV News Release, dated Mar 22nd, 2023

Capital Structure

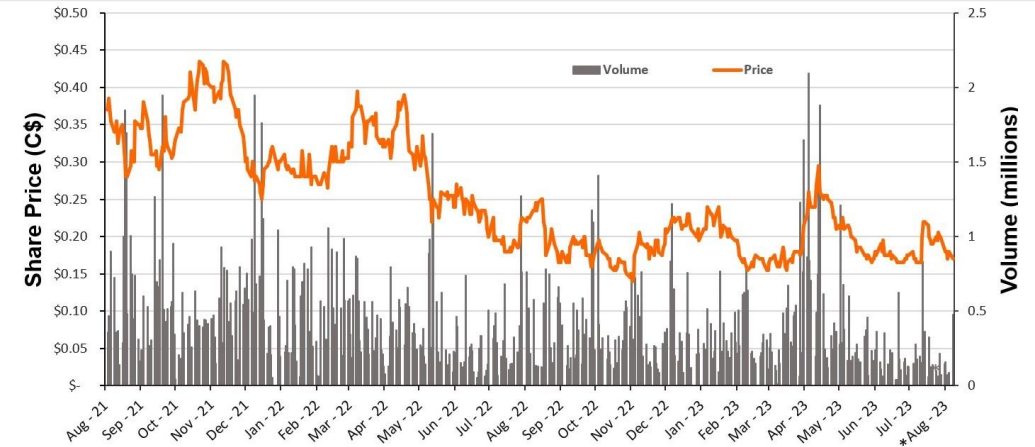
Ticker	TSX-V:SSV
Share Price (Aug. 25, 2023)	C\$0.185
Current Shares Outstanding	292M
Options	25.2M ¹
Warrants	57.1M ²
Fully Diluted Shares Outstanding	368M
Market Capitalization (<i>basic</i>)	C\$54M
Cash & Cash Equivalents	C\$4.0M
Enterprise Value (<i>basic</i>)	C\$64.1M
EV/Oz AgEq	C\$0.18
P/NAV	0.15x

Top Shareholders

Electrum Global Holdings	25%
Institutional (as of July 30 , 2021)	12%
Management & Directors	2.3%

- Includes 28.3M options outstanding with a weighted average exercise price of C\$0.37/share and a weighted average remaining term of 3.8 years
- Includes 59.9M warrants outstanding with a weighted average exercise price of C\$0.42/share and a weighted average remaining term of 1.8 years
- Includes 6.0MM finder's warrants outstanding with a weighted average exercise price of C\$0.34/share and a weighted average remaining term of 1.7 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>	Mar-23-2023	Buy (\$0.90)
<i>Fundamental Research</i>	Apr-11-2023	Buy (\$0.54)

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



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

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

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

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.

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

Peter Cheesbrough (CA)

Director

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

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.

Eugene Spiering (PGeo)

Director

- Served as VP Exploration of Quaterra Resources Inc. and Rio Narcea Gold Mines
- Major Projects and Mines Involvement: El Valle and Aguablanca, Spain

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

Nigel Bunting

Director

- Served as director Suffolk Life Pensions Ltd

Cerro Las Minitas, Durango, Mexico – Flagship

- 100% owned
- Silver-enriched Skarn/CRD deposits
- +US\$35M spent on acquisition and exploration since 2011
- **NEW RESOURCE UPDATE/GOLD METALLURGY**
- Further Upside on both Exploration and Engineering basis

Oro Project, New Mexico

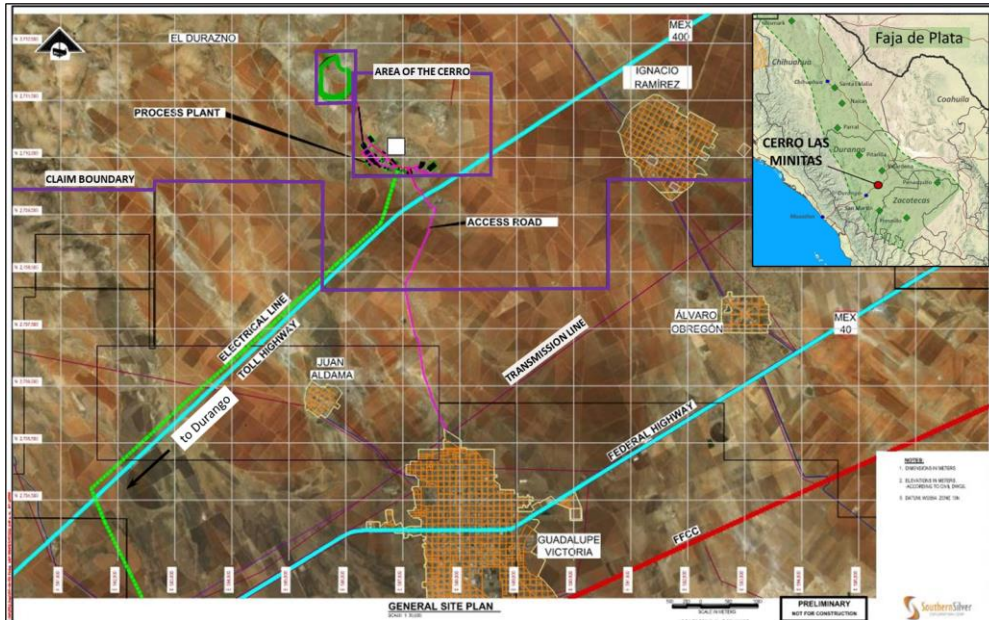
- 100%-owned
- Large Laramide Cu-Au-Mo porphyry system with an adjacent near surface gold target
- New targeting developed based on recent drill results

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

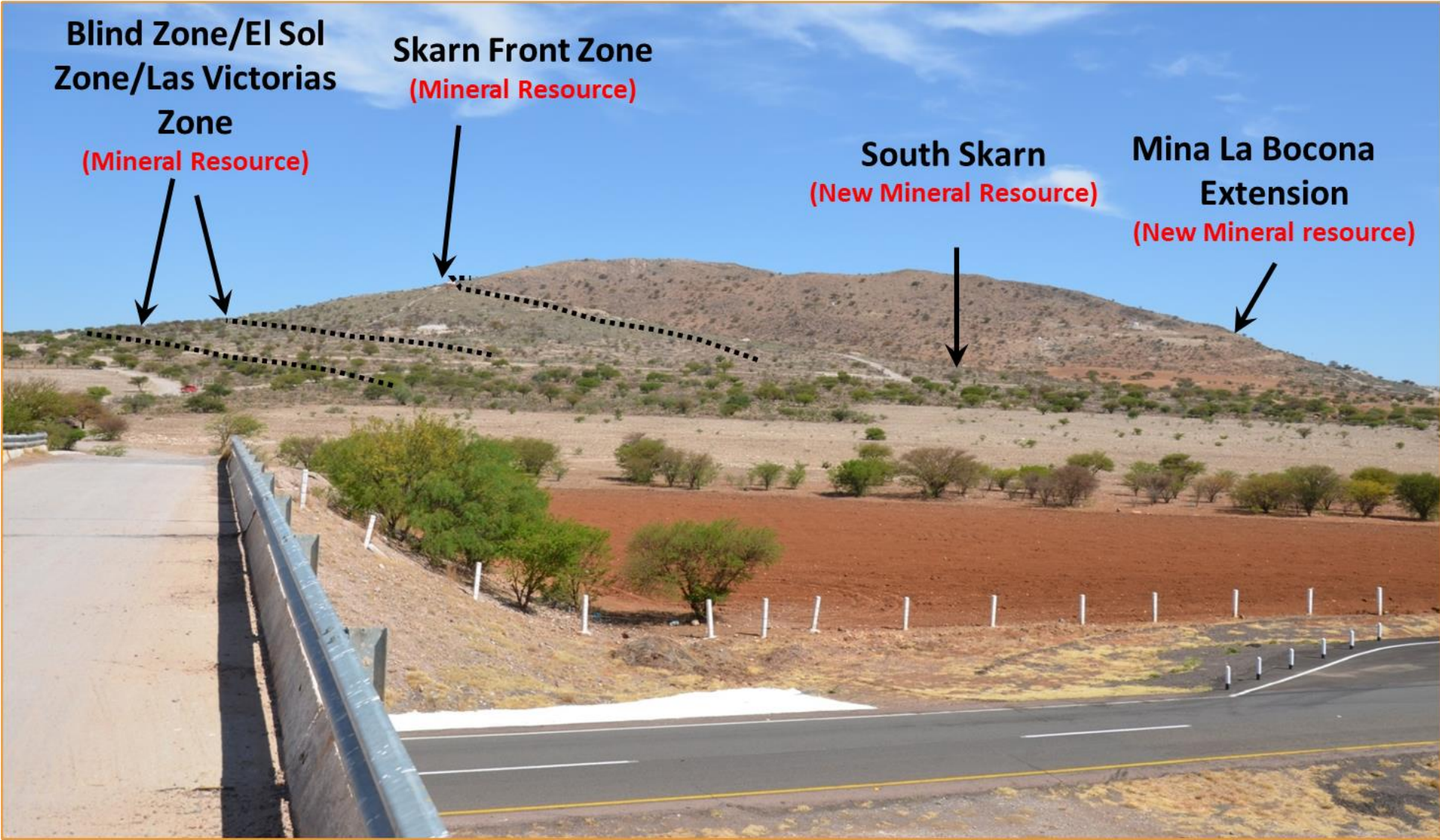
Knowledgeable and Supportive Local Community



- 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

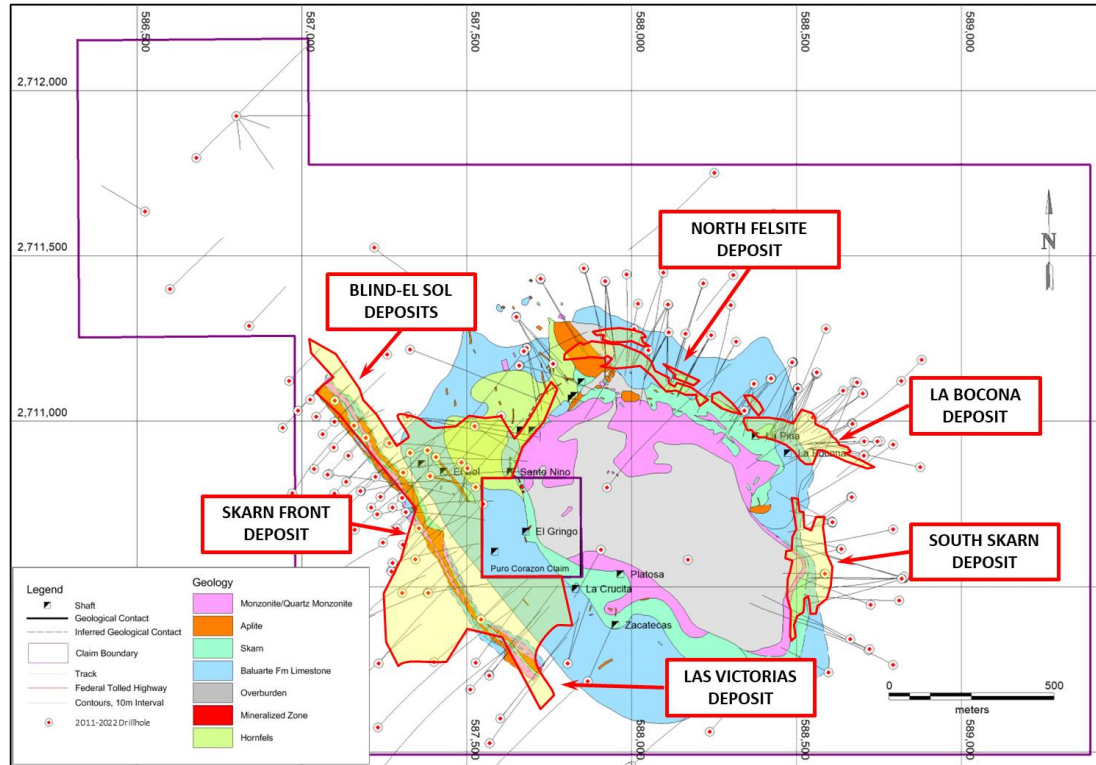
Looking North from the Autopista (Highway)



Cerro Las Minitas

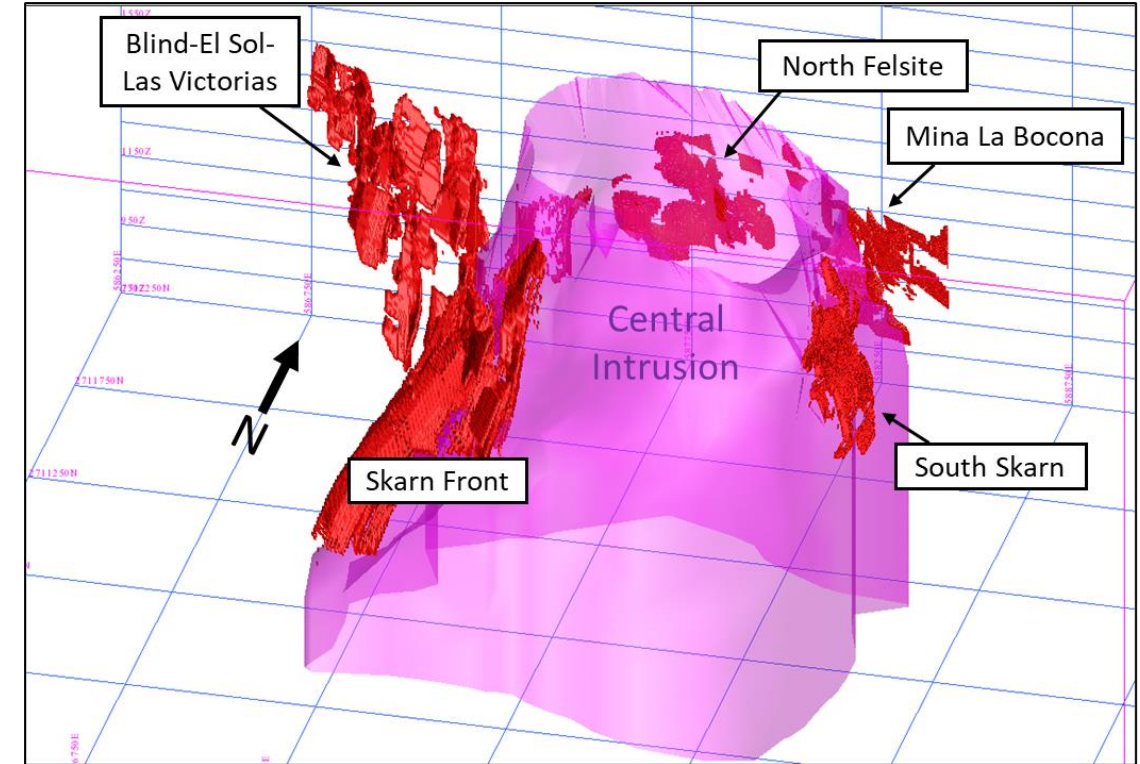
Site Geology and Deposit Distribution

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

2023 Mineral Resource Estimate (as of March 22, 2023 using a US\$60/t NSR cut-off);

- Indicated – 140Moz AgEq 42.7Moz Ag, 46Mlb Cu, 364Mlb Pb and 903Mlb Zn (349g/t AgEq; or US\$130 NSR/t)
- Inferred – 210Moz AgEq: 80.0Moz Ag, 101Mlb Cu, 571Mlb Pb and 1,029Mlb Zn (311g/t AgEq or US\$123 NSR/t)

Indicated Resources		Average Grade								Contained Metal						
Zone	Tonnes (Kt)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Cu (%)	AgEq (g/t)	ZnEq (%)	NSR (US\$/t)	Ag TrOz (000's)	Au TrOz (000's)	Pb (Mlbs)	Zn (Mlbs)	Cu Lbs (Mlbs)	AgEq TrOz (000's)	ZnEq Lbs (Mlbs)
Blind Zone	2,347	97	0.04	1.9	2.1	0.11	295	7.2	108	7,350	3	99	109	5.5	22,291	371
El Sol Zone	1,154	80	0.04	2.2	2.0	0.09	279	6.8	100	2,956	2	55	51	2.2	10,337	172
Skarn Front Zone	7,254	108	0.06	0.8	4.2	0.19	383	9.3	140	25,106	14	126	678	30.7	89,421	1,490
La Bocona Zone	1,755	130	0.18	2.2	1.7	0.21	326	7.9	136	7,331	10	84	65	8.0	18,406	307
Total	12,510	106	0.07	1.3	3.3	0.17	349	8.5	130	42,742	29	364	903	46	140,455	2,341

Inferred Resources		Average Grade								Contained Metal						
Zone	Tonnes (Kt)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Cu (%)	AgEq (g/t)	ZnEq (%)	NSR (US\$/t)	Ag TrOz (000's)	Au TrOz (000's)	Pb (Mlbs)	Zn (Mlbs)	Cu Lbs (Mlbs)	AgEq TrOz (000's)	ZnEq Lbs (Mlbs)
Blind Zone	1,347	83	0.14	1.4	1.8	0.06	248	6.0	88	3,582	6	40	55	2	10,749	179
El Sol Zone	863	65	0.03	1.8	2.3	0.05	263	6.4	90	1,816	1	35	43	1	7,283	121
Las Victorias Zone	1,083	148	0.66	2.1	2.6	0.14	431	10.5	145	5,152	23	51	62	3	15,006	250
Skarn Front Zone	11,466	115	0.05	0.7	2.7	0.32	318	7.7	126	42,462	18	177	687	80	117,065	1,951
South Skarn Zone	3,789	140	0.18	2.0	1.3	0.09	309	7.5	130	17,007	22	167	112	7	37,660	628
La Bocona Zone	2,481	125	0.17	1.8	1.3	0.13	285	6.9	120	9,977	14	100	71	7	22,702	378
Total	21,030	118	0.12	1.2	2.2	0.22	311	7.6	123	79,997	85	571	1,029	101	210,464	3,507

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. The same methodology was used to calculate the ZnEq value.
- 5) Silver Equivalents and NSR\$/t values were calculated using average long-term prices of \$20/oz. silver, \$1,650/oz. gold, \$3.25/lb. copper, \$1.0/lb. lead and \$1.20/lb. zinc. All prices are stated in \$USD.
- 6) 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.
- 7) 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.
- 8) All figures are rounded to reflect the relative accuracy of the estimate and therefore numbers may not appear to add precisely.

PEA Highlights – Effective Aug 29, 2022

15yr Mine Life

Robust Project Economics

- Base Case¹: after-tax NPV5% of US\$349M (C\$450M, C\$1.55/share), IRR of 17.9%

Excellent Silver and Zinc Price Leverage

- Base-case +15%²: after-tax NPV5% of US\$561M (C\$ 728M, C\$2.49/share), IRR of 24.4%

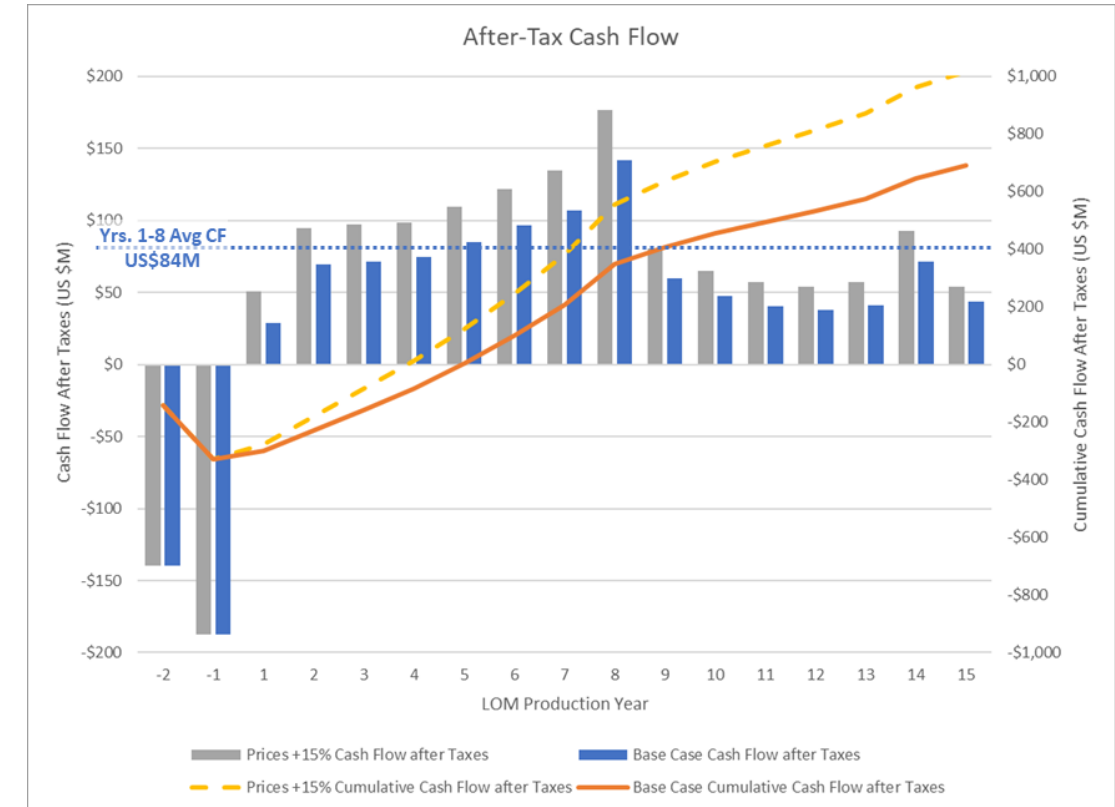
High-Revenue Project

- Base Case revenues: US\$3.7B
- Balanced precious vs base metal revenues with silver representing 42% of revenues and zinc representing 39% of revenues
- Initial CapEx of \$341M

Well Located Project

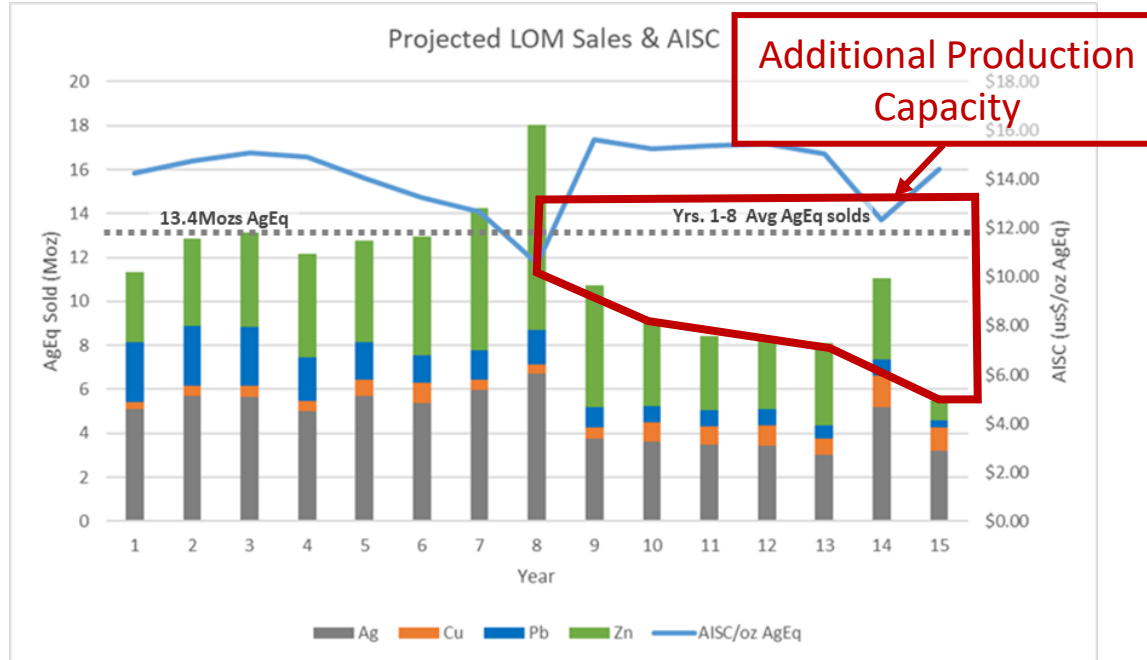
- Mining friendly jurisdiction with excellent infrastructure in southeast Durango

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



1. Base case: assumes (Ag- \$21.95/oz, Cu – \$3.78/lb, Pb – \$0.94/lb and Zn - \$1.33/lb)
2. Base Case +15% assumes (Ag- \$25.24/oz, Cu – \$4.35/lb, Pb – \$1.08/lb and Zn - \$1.53/lb)

Modelled LOM Production: 24.5 Mt @ 0.2% Cu, 1.1% Pb, 2.6% Zn, 110g/t Ag, 0.09g/t Au - Average NSR of \$US 128/t



LOM Ag/Cu/Pb/Zn sales are shown on an AgEq basis based on: Ag = \$21.95/oz, Cu = \$3.78/lb, Pb = \$0.94/lb and Zn = \$1.33/lb

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 AgEq payable basis

Robust AgEq Production which Peaks in Year 8

Large-Scale Underground Mining Operation

- Modelled LOM Production: 24.5 Mt @ 0.2% Cu, 1.1 % Pb, 2.6 % Zn, 110 Ag, 0.09 g/t Au - Average NSR of \$US 128 /t
- 15-year mine life
- Annual Production of **11.3Mozs/yr AgEq** (inc. **4.7 Mozs Ag**)
- LOM Production of **168.8Mozs AgEq** (inc. **70.8Mozs Ag**)
- LOM AISC of \$13.27/oz AgEq sold

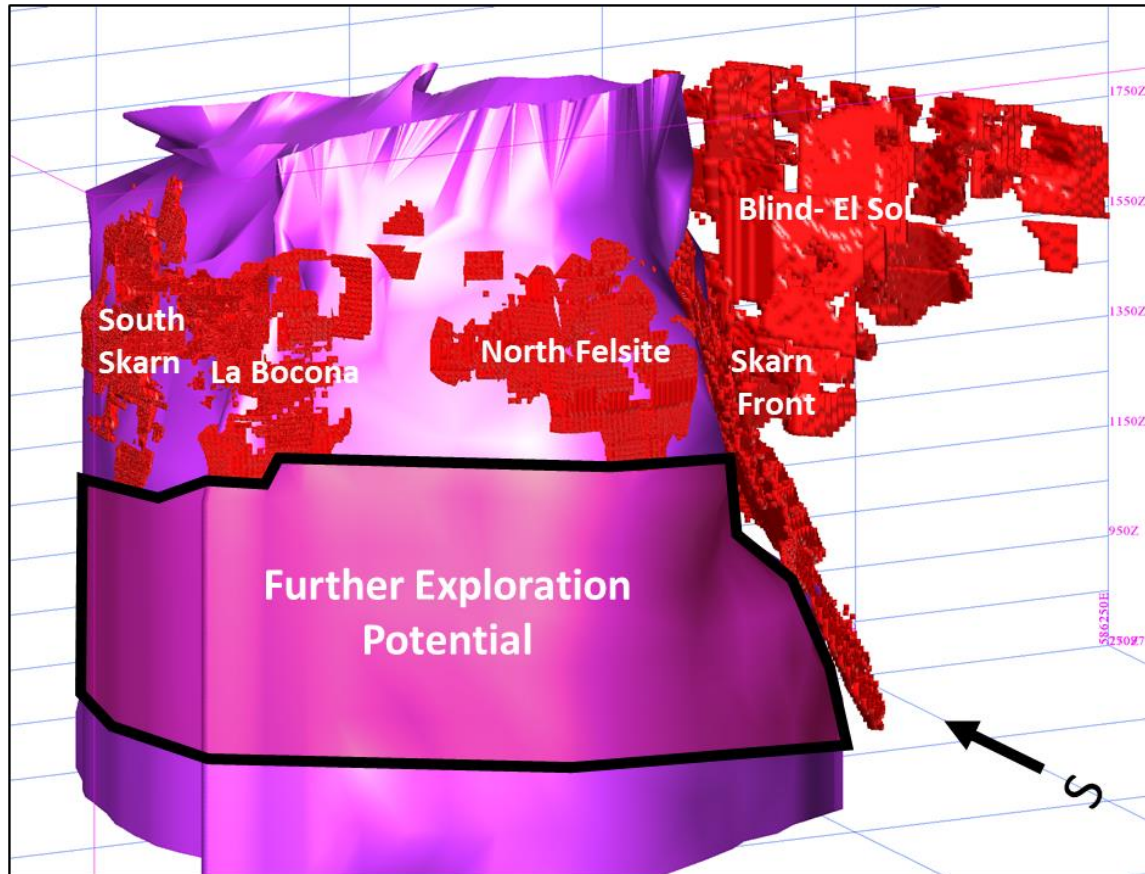
Further Project Upside

- **New deposits:** deposits remain open laterally and to depth to be explored
- **Gold Recovery:** to be incorporated into the process flowsheet
- **Ore-sorting:** initial test work is positive; to be included in the Process flowsheet

Cerro Las Minitas

New Discoveries and Resource Expansion

Drilling has now identified a 1200 metre strike-length of mineralization on the East side of the Cerro



- Three mineralized “Shoots” identified on the eastern side of the Cerro
- Mineralization is open at depth for further resource expansion
- Clear exploration pathway to a +40Mt deposit

Work on the Cerro Las Minitas project over the coming months will continue to de-risk the project and add further value in preparation for the next stage of assessment

ESG - Continuing on the Pathway to Production

- Permitting parameters - **established**
- Environmental/Hydrology baseline studies
- Social/Government engagement

Preparation for Next Phase of Economic Assessment

- Establish Budgeting for:
 - Infill drilling - spacing study - **completed**
 - Geotech program
 - Further metallurgical testwork - **completed**

Technical Opportunities to Upgrade the Project Economics

- Mineral Resource Update - **completed**
- Evaluate gold recovery from sulphide sources and impact on the cash-flow model - **completed**
- Update Engineering design – **in progress**
- Ore-sorting to reduce plant size and tailings – **in progress**
- Further exploration drilling to optimize production time-line

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 system

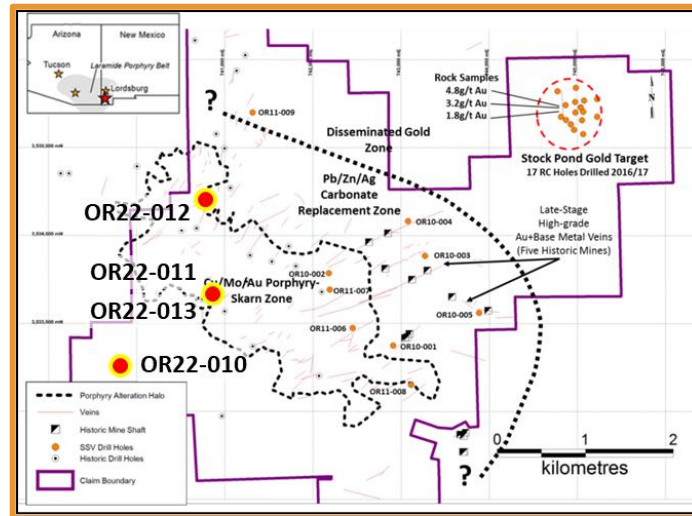
➤ Hermanas

- Widespread Au-Ag epithermal vein system.

The Company has Identified Favorable Targets to Provide Investors an Exposure to Copper, Gold and Silver

Oro Property

- 100% owned by SSV
- 22.4 sq. km property
- +\$5 million in Acquisition and Exploration
- Airborne Z-TEM in 2018
- Surface sampling, clay alteration studies, historic compilation and 26 drill holes



Geology Favorable for Large Cu-Mo Porphyry Discovery

- Target is deposit similar to El Chino (P+P reserves of 301Mt of 0.38%Cu) or Tyrone (P+P reserves of 59Mt at 0.32% Cu)¹
- Zoning over a 4km extent transitioning from Cu-Mo porphyry to Ag-Pb-Zn replacements to distal gold targets
- Evidence suggest the very top of a major porphyry system
- Drilling identified broad areas of mineralization and alteration; new targets identified

1. All Reserves on this page are derived from company annual reports and are as of December 31st, 2014

Hermanas Project, Southern New Mexico

- Newly optioned from Bud and Nick Hillemeier and Perry Durning
- Optioned by SSV to own 100%
- Geology Favorable for Large Epithermal Vein System
 - Numerous occurrences of anomalous Au, Ag and pathfinder metals
 - High-level textures suggesting good exploration potential at depth
 - Limited historic drilling
- Permitting in progress for drilling in 2024





Diverse Assets

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

PEA Results

Highlights Robust Asset
Value of the CLM Project

Ongoing

CLM: ESG, Engineering
Upgrades Q3'23

Ongoing

Oro: New Targeting
Hermanas: Drilling 2024