

**Corporate Presentation April 2024** 

# DENARIUS METALS

### An Emerging Metals Producer in Spain and Colombia

www.denariusmetals.com

UNE D

The strategic acquisition of the 5,000 tpd Rio Narcea processing plant and the Aguablanca underground mine, Spain's only nickel producer, will also accelerate production at our Lomero Project.

### **Cautionary Notes**



#### **Forward Looking Statements**

This presentation contains statements that, to the extent that they are not historical fact, may constitute "forward-looking information" within the meaning of applicable securities legislation. Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often, but not always using words or phrases such as "may", "would", "could", "will", "likely", "except", "anticipate", "believe", "intend", "plan", "forecast", "propose", "outlook", and other similar expressions, or stating that certain actions, events or results may, could, would, might or will occur or be taken or achieved) are not statements of historical fact and may be forward-looking information. Forward-looking information in this presentation includes, but is not limited to, information concerning the completion of any financings (including the size and timing for completion thereof); preparation of technical information or studies; the estimated valuation of the Company; the business, operations and financial performance and condition of the Toral Project option; information concerning the plans and objectives of management for future exploration and operations on the Company's projects; timing, type and amount of future exploration activities; results of future exploration and operations is based on management's reasonable estimates, expectations, analyses and opinions at the date the information. Forth and is based on a number of assumptions and subject to a variety of risks and uncertainties and other factors that could cause actual results to differ materially from those anticipated in these forward-looking information. Forward-looking statements are described under the caption "Risk Factors" in the Company's Annual Information Form dated as of April 21, 2023 which is available for view under Denarius Metals' profile on SEDAR+ at <u>www.sedarplus.ca</u>. Forward-looking statements, exepts, circumstances, or if management's estimates o

#### All amounts are denominated in U.S. dollars, unless indicated otherwise.

#### **Cautionary Statement on Mineral Resources**

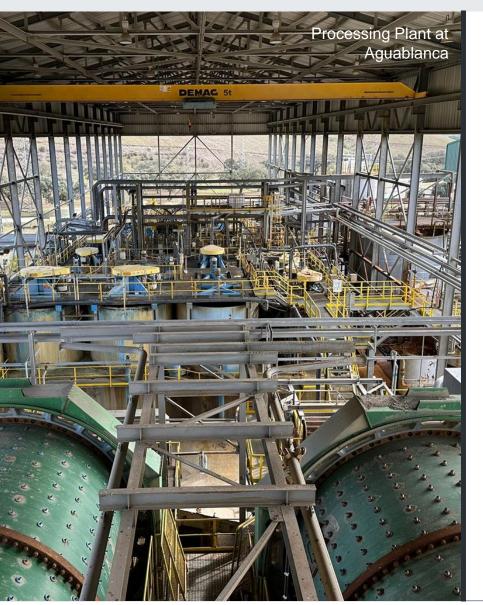
Mineral resources are not mineral reserves and do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, socio-political, marketing, or other relevant issues. In particular, the quantity and grade of reported inferred mineral resources are uncertain in nature and there is insufficient exploration to define these inferred mineral resources as an indicated or measured mineral resources to an indicated or measured mineral resource category.

#### Cautionary Statement on PEA and Use of Inferred Resources

Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources will be converted to mineral reserves. The PEA is preliminary in nature, includes inferred 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. The PEA is based on mine plan tonnages and mill feed schedules, derived from the MRE. The PEA was prepared to allow the Company to evaluate whether underground mining at the existing Independencia Mine would be economically viable and is subject to the assumptions and qualifications expressed in the Company's press release dated October 30, 2023. Mineral resources are assumed to be mined underground. The cut-off grade for the PEA was based on mining costs of US\$105/tonne, processing costs of US\$42/tonne, general and administrative costs of US\$21/tonne and royalties of 3.2%. The gold selling price used in the cut-off grade calculation was US\$1,800/oz and the silver selling price used was UD\$24/oz. Gold recovery was assumed to be 75% and silver recovery was assumed to be 80%. Gold equivalent grade ("AuEq") was calculated by the formula "Au \*Au Recovery (75%) \* AuPrice + Ag \*Ag Recovery (80%) \* AgPrice)) / (Au Recovery (75%) \*Au Price".

# **Emerging Metals Producer in Spain and Colombia**





In-Demand Critical Minerals Cu, Zn, Pb, Ni, Au, Ag, Co, Pt, Pd

### Favorable Proximity The Right Jurisdictions; Proximal to Nearby Producers

The Right Julistictions, Floxinal to Nearby Floquce

High-Grade Projects Rich History; Exploration Upside

Seasoned Team A Proven Track Record of Success

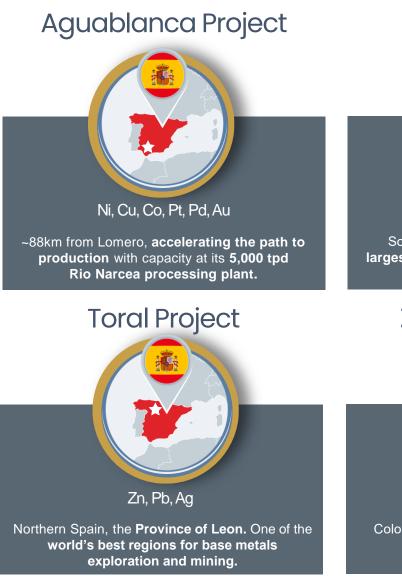
Long-Term ESG Strategies Community, Health & Safety, Environment

Poised for Re-Rating Well Positioned; Near Term Production

Corporate Presentation | April 2024

## **Our Projects**





# Lomero Project Cu, Zn, Pb, Au, Ag Southern Spain's Iberian Pyrite Belt, the largest concentration of massive sulfides in the world. Zancudo Project Au, Ag, Zn, Pb

Colombia's Cauca Belt in the Department of Antioquia, **on the path to production in 2024**.



Corporate Presentation | April 2024

www.denariusmetals.com

# **Company Overview**

#### Management

Serafino Iacono	Executive Chairman & CEO
Michael Davies	Chief Financial Officer
Alessandro Cecchi	Vice President, Exploration
Amanda Fullerton	General Counsel & Secretary
Jesus Perez	Vice President, Corporate Affairs, Spain
Luisa Masso	Vice President, Finance, Spain & Colombia
Santiago Suarez	Vice President, Corporate Affairs, Colombia
Sasha Villoza	Corporate ESG Manager
Melissa Mackie	Investor Relations Manager

#### **Board of Directors**

Serafino Iacono	Executive Chairman & CEO
Paul Sparkes	Lead Independent Director Audit Committee Chair

Federico Restrepo-Solano CCGNC Chair

Francisco Sole

Mateo Restrepo Villegas

**Capital Structure** 

Expiry 2026 2026 2026 2024 - 2031 2028	CA\$8.00 CA\$8.00 CA\$0.60 CA\$0.52 - CA\$6.50 CA\$0.45
2026 2026 2024 - 2031	CA\$8.00 CA\$0.60 CA\$0.52 - CA\$6.50
2026 2026 2024 - 2031	CA\$8.00 CA\$0.60 CA\$0.52 - CA\$6.50
2026 2024 - 2031	CA\$0.60 CA\$0.52 - CA\$6.50
2024 - 2031	CA\$0.52 - CA\$6.50
2028	CA\$0.45
	All O
16	6% Aris M (TSX:
/0	

A total of 75,000,000 Listed warrants are issued and outstanding. 10 warrants must be exercised to acquire 1 common share.
 Based on CA\$0.76 per share at close on April 1, 2024 and number of common shares issued and outstanding.

Corporate Presentation | April 2024

www.denariusmetals.com

### Spain

### A Historic, Prolific and Supportive Mining Jurisdiction



Spain has a **rich history of mining**, with evidence of mining activity dating back to **pre-roman times**. The **Iberian Pyrite Belt** has been mined for more than **5,000 years** 



The Spanish mining industry is composed of both **metallic minerals and industrial minerals**. Spain is one of the **largest producers of lead and zinc in Europe**, and is also a **significant producer of copper, tungsten and gypsum** 

$\frown$
$\langle \bigtriangledown \rangle$

The Spanish mining sector **employs over 30,000 people** with more than **95% of the workforce** being **Spanish nationals** 



Spain is considered a **mining-friendly jurisdiction**, with a transparent and predictable legal system, stable political environment, and skilled workforce



The mining industry in Spain has undergone **significant modernization** in recent years, with the adoption of **new technologies** and more **sustainable practices** 





Projects deemed as "strategic" will benefit from access to **financing opportunities** as well as a **shorter wait for permits.** 

**Target of mining at least 10% of strategic minerals within the bloc**; moreover, 40% of processed strategic materials and 15% of its recycled strategic materials must also be domestically produced.

On March 16, 2023, the EU unveiled its

Critical Raw Materials Act in a bid to secure

the resources needed for technologies such

as renewable energy and battery power.

### **In-Demand Critical Minerals**

### Copper

World's third most-used metal.

Uses

Building construction, **electronic vehicles (EVs) and products**, transportation, industrial machinery and equipment, medical.

### Zinc

Used to **galvanise other metals** to prevent rusting (car bodies, street posts, safety barriers and suspension bridges).

Used to produce **die-castings** (automobile, electrical and hardware industries.

### Lead

Demand for lead is primarily driven by **lead-acid batteries** used in conventional fuel car batteries as well as EVs.

# emand

roject

S&P Global forecasts that **global demand for copper could** <u>double by</u> <u>2035</u>, from 25 million metric tons to 50 million metric tons.<sup>(1)</sup>

By 2030, supply from both existing and projected copper mining activities will **meet just 80% of our needs**. Stimulus-driven growth in China will increase zinc demand by 3.1% in 2023, from a 3% drop in 2022, according to CRU (Fitch, 2022). Global lead metal production is recovering following a 5% decline to 4.5 million tonnes (Mt) in 2020. Lead production is forecast to reach 5.2Mt in 2025, according to GlobalData.

Lomero Project IPB, Spain

(1) Thomas Insights "The Reasons Why Demand for Copper is Growing"

Lomero Project IPB, Spain

Toral Project Leon, Spain

### Zancudo Project

Titiribi, Colombia

Lomero Project IPB, Spain

Toral Project Leon, Spain

Zancudo Project Titiribi, Colombia



utu

re

Powering

Cboe CA: DMET | OTCQX: DNRSF

www.denariusmetals.com

Corporate Presentation | April 2024



### Proximity to Nearby Producers and Projects

Approximate distance from Lomero to:	
Aguablanca Project and 5,000 tpd Plant	8
Lundin Mining - Neves-Corvo	13
Sandfire Matsa - Aguas Tenidas	1
Atalaya Mining - Rio Tinto	4
First Quantum - Las Cruces	11
Huelva Port	10
Seville	13



TSXV: DSLV | OTCQX: DNRSF 8

Extremadura, Spain 50% Owned through Alto Minerals S.L.U.

### Aguablanca Project Highlights

Ni

Cu



### Historic Producer with Turnkey Processing Plant

Pd

Au

Discovered in 1994, the Aguablanca Mine is one of the only deposits in Spain able to produce nickel (sole producer) and copper.

The Aguablanca Mine is accessed via a paved, four lane national highway from Seville. The highway runs approximately 100 km north from Seville towards the town of Santa Olalla del Cala and from there, the mine is accessible by paved roads. Aguablanca is 88 km from our Lomero Project.

Aguablanca was operated through an open pit operation from 2005 through 2015 (11 years) with a total volume of ore milled of ~14 million tonnes. Lundin Mining acquired the Project in 2007, transitioning from open pit to underground operations in 2015. Lundin closed the mine in early 2016 amidst lower nickel and copper prices.

The Project includes a 5,000 tpd plant and auxiliary facilities which can be used for underground exploitation.

Potential for resource expansion through further exploration.



Cboe CA: DMET | OTCQX: DNRSF

www.denariusmetals.com

### **Aguablanca Project - A Rich History**



1994 Discovery of the Ni-Cu deposit in Aguablanca 1996 Atlantic Copper acquires rights to exploit the Deposit 2001 Rio Narcea Recursos S.A. acquires rights to exploit the Deposit Environmental Impact Statement (EIS) received by the authorities. 2003 Beginning of **plant construction** 2004 Beginning of open pit mining 2005 Construction of the underground research facility 2007 Acquisition of Rio Narcea S.S. by Lundin Mining Corporation Lundin Mining commences transition to underground operation; operations 2015 suspended pending approval by government of mining method change **Mine permanently closed** by Lundin Mining amidst lower nickel and copper prices 2016 and expectations of continued financial losses 2016 Acquisition of Rio Narcea S.A. by Valoriza Minería (SACYR) 2021 Acquisition of Rio Narcea S.A. by RNR Shareholder Group 2022 Report to Administration of the updated Underground Exploitation Plan 2023 Exploitation Project final approval received

Cboe CA: DMET | OTCQX: DNRSF

Corporate Presentation | April 2024

www.denariusmetals.com

### **Aguablanca Project - Accelerating our Path to Production in Spain**



- Agreement with RNR Shareholder Group to acquire 50% of Rio Narcea Recursos, S.L. ("RNR") in an arms-length transaction.
- Acquisition price is EUR 25 million (~US\$27 million), payable in cash.
  - EUR 2.5 million was paid on signing of the Agreement in December 2023.
  - The balance will be paid in instalments of EUR 5.0 million on March 31, 2024 and approximately EUR 5.8 million at the end of each of June, September and December 2024.
  - Denarius Metals is in discussions with several parties regarding potential structured financing sources, including royalties, streaming, prepayments on offtake contracts and other similar arrangements, to fund the future payments due in 2024.
- The **RNR Shareholder Group** have broad interests in real estate and manufacturing in Spain, including a project to build a modular supercapacitor plant in Badajoz that will be the first of its kind in Spain. With an initial production capacity of 700,000 units per year, this plant will be one of Nanomate's flagship projects, part of the *"Integral Energy Storage Project in Extremadura"*, which, together with their interest in Lithium Iberia, aims to contribute to Spain's energy transition and become the spearhead of Extremadura's booming economy.
- Denarius Metals and the RNR Shareholder Group have also entered into a *JV Agreement* whereby:
  - Each of the Company and the RNR Shareholder Group can appoint 3 members to the RNR Board.
  - The Company will be the operator of the Project.
  - The RNR Shareholder Group will provide a line of credit to RNR to fund the resumption and start-up of operations the plant.
  - RNR will process material from Lomero based on conditions to be agreed upon by the parties.

Based on a nickel price of US\$10.00/lb, the following table summarizes the Historical MRE (March 2023 by CRS Ingeneria Consultoria) for underground resources at the Aguablanca Project at a cutoff grade of 0.30% Ni:

Classification	Tonnes (kt)	Ni Grade (%)	Ni Metal (kt)	Cu Grade (%)	Cu Metal (kt)	Co Grade (g/t)	Pt Grade (g/t)	Pd Grade (g/t)	Au Grade (g/t)
Measured	3,632	0.67	24.41	0.59	21.59	259	0.30	0.26	0.16
Indicated	2,782	0.58	16.18	0.51	14.21	134	0.25	0.22	0.14
Measured & Indicated	6,414	0.63	40.59	0.56	35.79	150	0.28	0.24	0.15
Inferred	242	0.52	1.25	0.42	1.02	93	0.11	0.10	0.06

A qualified person has not done sufficient work to classify the Historical MRE as current mineral resources or mineral reserves, and the Company is not treating the Historical MRE as current mineral resources or mineral reserves or is using the Historical MRE for the basis of a production decision. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Corporate Presentation | April 2024

Terms

Deal

### **Aguablanca Project - Key Investment Highlights**



Aguablanca mine is the **unique nickel mine in Spain**.

**Nickel and copper have been classified as critical raw materials** for the European Union as these metals are considered key for the energy transition.

Solid financial partner committed to investing in the region.



**Proven track record** with 11 years of prior mining operations, extracting ~14 million tonnes of mineral with grades of 0.59% Ni and 0.35% Cu.

Reopening project with **approved Environmental Impact Statement and updated Underground Exploitation Plan already approved** by the local mining authority.

**Existing ore processing, underground mining and facilities** infrastructure (more than EUR 40M invested historically).

Access to the spare capacity in the Aguablanca processing plant creates synergies with our Lomero Project:

- represents a significant time and capital cost saving for the development of the Lomero Project;
- accelerates the commencement of Lomero's mining operations and the resultant creation of local employment in the area
  of Lomero;
- consolidation of processing at the Aguablanca Project also reduces the environmental impact at Lomero that should speed up the environmental permitting process for Lomero; and,
- enhances our exposure to a broader range of metals and opportunities to benefit from cyclical demand.

Previous exploration indicates potential upside for future resource expansion.

Corporate Presentation | April 2024



Iberian Pyrite Belt, Spain 100% Owned through Alto Minerals S.L.U.

### Lomero Project Highlights







The Iberian Pyrite Belt is the largest concentration of massive sulfides in the world.

The Lomero-Poyatos deposit site is well serviced by water, power and paved highways to Seville and Huelva.

Multiple high-capacity processing facilities as well as shipping access at Huelva Port.

Several nearby villages, representing sources of labour, accommodation and general services.

A rich history of exploration and production to substantiate potential for future exploitation.



Corporate Presentation | April 2024

www.denariusmetals.com

### **Lomero Project - A Rich History**



### **Exploration**

Billiton

1984

1989

2001

2007

2015

2017

Conducted a program of 60 underground diamond drilling holes

#### **Outokumpu & Tharsis Mining**

The Joint Venture drilled several (9) holes from surface to assess the potential at depth beyond the mined areas

#### Cambridge Mineral Resources (CMR)

Carried out a major exploration program including a PA with Newmont Mining, drilling 48 holes, and commissioned several technical studies on potential mining and processing methods

#### Kimberly Diamonds Ltd (KDL)

Drilled 8 diamond holes when it held an "Investigation Permit"

### **Production**

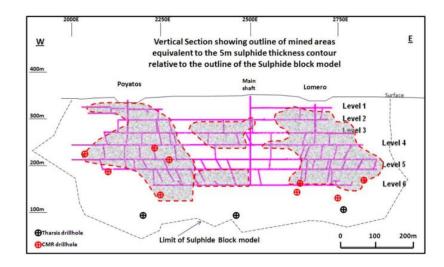
Mining commenced in the late 1850's and continued until 1990

A small amount of ore came from the two pits at Lomero (east) and Poyatos (west), but **most of the historical production (2.6 million tonnes)** came from **underground** 

1970's - the mine produced 40 Kt - 60 Kt of ore per year

1980 - produced 40.6 Kt averaging 46% S and 0.7% Cu

The gold grades at Lomero-Poyatos are some of the highest known in the IPB



#### Palomarejo

- 151 hectares area adjacent to and on strike with the mineralized Lomero-Poyatos deposit
- 100% held by Alto Minerals S.L.U.

SAN TELMO

• Investigation Permit Nº 14,978 granted in early 2023 for 3 years

Telmo

#### Lomero-Poyatos

- 454 hectares
- 100% held by Alto Minerals S.L.U., a subsidiary of Denarius Metals
- Rubia Investigation Permit Nº 14,977...extended in early 2023 for another 3 years
- Includes former mine workings in the Lomero-Poyatos deposit
- 10 km west of Aguas Tenidas mining operation; 3 km east of San Telmo
- 90 km from Seville and 60 km from the port of Huelva

U-610

#### Aguas Tenidas (Sandfire Matsa)

- MRE (2022): 51.3Mt at 1.1% Cu, 3.3% Zn, 0.9% Pb
- Mining rate: ~2.0 Mtpa
- In production since 2009

Source: Sandfire Matsa website

### **Lomero Project**

Corporate Presentation | April 2024

Lomero-Poyatos

T-MINER

Palomarejo

Cboe CA: DMET | OTCQX: DNRSF

Sandfire matsa

**AGUAS TEÑIDAS** 

### **Denarius Metals - Exploration Summary**





- Completed July 2022
- Surface validation and in-fill drilling
- 26,000 meters
- 83 diamond drill holes
- Prepared initial Mineral Resource Estimate (MRE) of 10.66 Mt with an effective date of July 19, 2022
- Filed NI 43-101 in November 2022
- Identified mineralization over a strike of 1 km and with a vertical extension of 400 m
- Increased confidence in the geological model using data validated from previous historic drilling campaigns



- Completed February 2023
- Surface validation and in-fill drilling
- I3,225 meters
- 42 diamond drill holes
- Confirmed higher grades at depth
- Irill assays validated the lateral and horizontal continuity of the massive sulphide and semimassive sulphide mineralized lenses
- Confirmed the presence of higher-grade mineralized zones within the broader resource envelope
- Refer to the Company's press release dated May 29, 2023

Phase 3

- Completed July 2023
- Surface validation and in-fill drilling
- 4,760 meters
- 20 diamond drill holes
- Confirmed higher grades at surface
- Confirmed high grades in the underground drill holes drilled in the 1980s by Indumetal/Billiton from the polymetallic mineralization hosted in the eastern part of the historical mine
- Refer to the Company's press release dated August 16, 2023

Phases 1, 2, and 3 = Total of ~47,200 meters of drilling in 149 drill holes Prepared an NI 43-101 Technical Report dated November 2, 2023 including an **updated Mineral Resource Estimate** incorporating the Phase 2 and 3 drilling results

#### Denarius Metals prepared an updated NI 43-101 compliant MRE<sup>(1)</sup> for the Lomero Project effective July 31, 2023

Category	Tonnes	Gold Grade	Gold Metal Content	Silver Grade	Silver Metal Content	Copper Grade	Copper Metal Content	Zinc Grade	Zinc Metal Content	Lead Grade	Lead Metal Content	CuEq Grade <sup>(2)</sup>
Indicated	7.73 Mt	2.27 g/t	565 koz	25 g/t	6,095 koz	0.66%	51.3 kt	1.03%	79.9 kt	0.46%	35.5 kt	1.91%
Inferred	3.45 Mt	1.86 g/t	206 koz	22 g/t	2,478 koz	0.29%	9.9 kt	1.18%	40.7 kt	0.53%	18.4 kt	1.46%

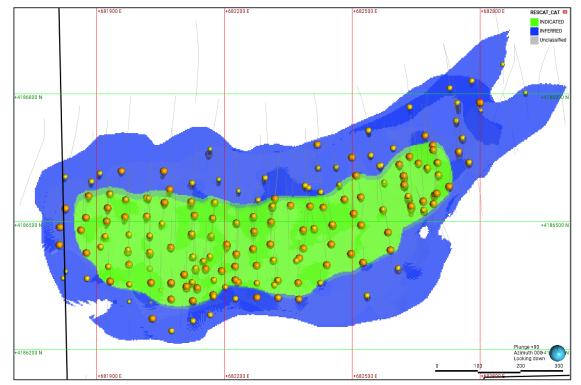
The updated MRE effective as of July 31, 2023 has been prepared following the completion of the Company's Phase 2 and Phase 3 infill and validation drilling campaigns (refer to page 17 of this presentation).

The current geological model and updated MRE include the results obtained from a total of 146 holes representing 44,228 meters of drilling completed to date by the Company plus another 55 historical holes drilled by CMR representing 10,053 meters.

The most significant change in the updated MRE compared to the initial MRE prepared after completion of the Phase 1 drilling campaign has been an increase in the confidence in the geological model to include Indicated Mineral Resources.

The Phase 2 and Phase 3 drilling campaigns have successfully **converted approximately 73%** of the initial inferred MRE to the Indicated Mineral Resources category.

There have also been *gains in both tonnage and grades for all metals reported* since the initial MRE published in 2022.



Final Classification of the updated MRE for the Lomero-Poyatos deposit

<sup>(1)</sup> Refer to the NI 43-101 Technical Report dated November 2, 2023 with an effective date of July 31, 2023 filed on SEDAR+ and the Company's website for additional information. Refer to Cautionary Notes on page 2 of this Presentation.

<sup>(2)</sup>  $CuEq = ((Au^{21.38})+(Ag^{0.42})+(Cu^{69.45})+(Pb^{12.68})+(Zn^{25.46})/99.21)/Cu Recovery$ 

### Lomero Project Exploration Program Next Steps

LEGEND

 DENARIUS Drilling
 Previous Drilling

I.P. Palomarejo nº 14978

POYATOS - LAS MERINAS TARGET AREA

> This year, we will commence a 6,000 m greenfield exploration drill program targeting the Las Merinas and Alianza areas with the objective of increasing the tonnage in the next MRE update.

These areas, located to the south and to the north of the shear zone that hosts the Lomero-Poyatos deposit, are outside the footprint of the deposit previously mined.

Corporate Presentation | April 2024

1 km

www.denariusmetals.com

Las Merinas Old Mine

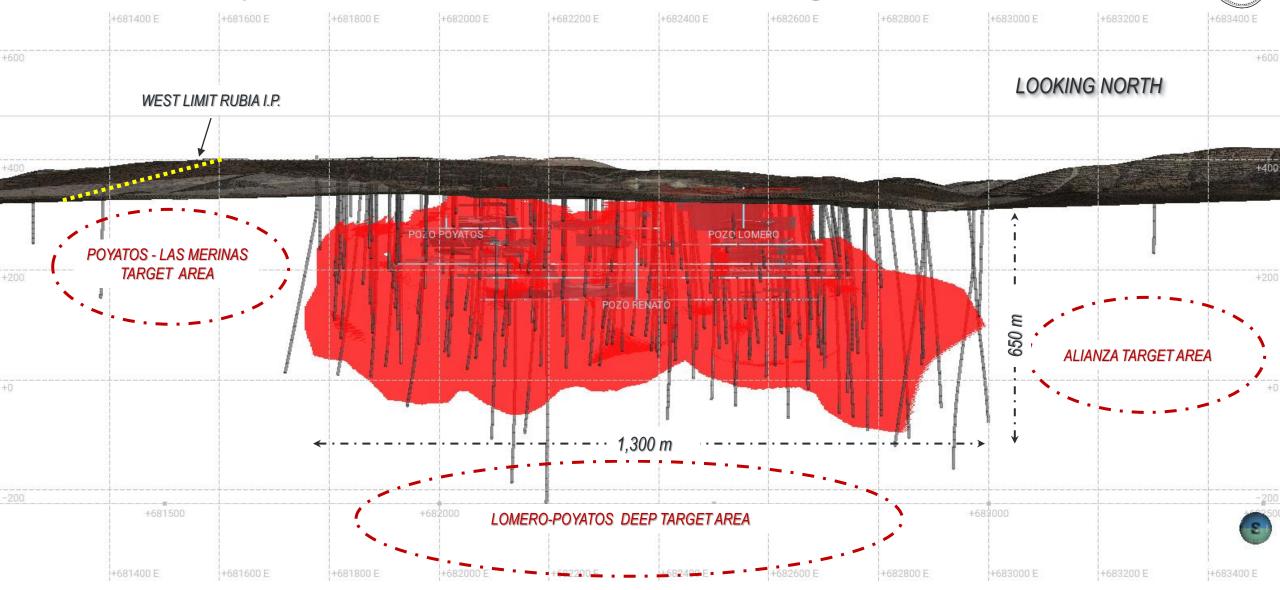
I.P. Rubia nº 1497

omero

ALIANZA TARGET

LOMERO

### **Lomero Project - Greenfield Exploration Target Areas**



Leon Province, Spain

Ph

7n

### **Toral Project Highlights**



Option Agreement to Acquire up to 80%

Aa

### **Located in a Well-Mineralized Historic Mining Area and Proactive Jurisdiction**

Represents a unique opportunity to develop a high-quality base metal project in the heart of western Europe in a pro mining jurisdiction.

Located approximately 400 km or 4 hours' drive northwest of Madrid in the Province of León, an established mining region.

The Toral exploration license covers an area of 20.29 km<sup>2</sup>.

Located next to a main highway and is very well connected to several industrial ports in northern Spain as well as a major zinc smelter in the Asturias region.

Through a definitive option agreement with **Europa Metals Ltd.**, Denarius can acquire up to 80% ownership of the Toral Project in two stages:

- First Option 51% interest: spend minimum of US\$4 million over three years, complete a PEA and complete/submit a mining license application to the local Junta in 2023.
- Second Option additional 29% interest: pay US\$2 million to Europa within 12 months following First Option and deliver a PFS.



Corporate Presentation | April 2024

www.denariusmetals.com

### Toral Project - Exploration History...Over 60,000 m Drilled



Peñarroya-Adaro 80 holes and 40 deviations (~45,000 m) drilling

**Geominera** Re-evaluation

**Lundin Mining** 7 holes (4,700 m)

#### **Goldquest Mining**

Soil and rock geochemistry, old labors mapping, re-evaluation, MICON NI-43-101

**Portex Mining Corporation** Exploration, detail mapping

2015 <sup>to</sup> 2016

2017

to

2022

1972

1984

1992

to

1995

2005

2008

2009

to 2011

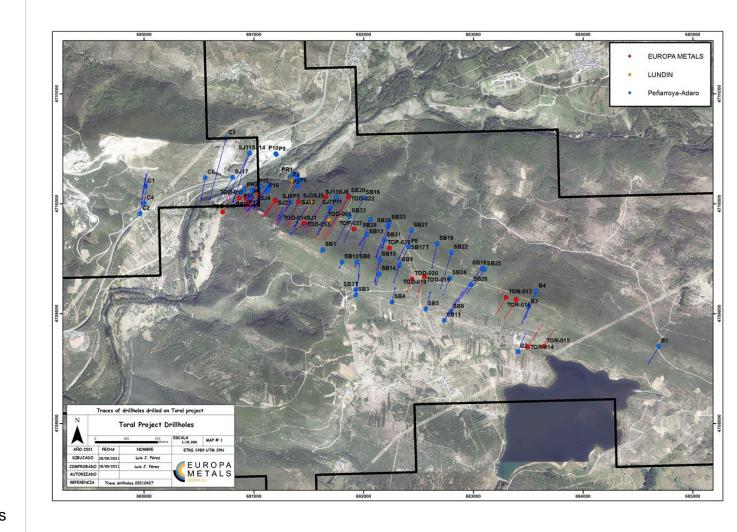
2012

2015

Mineral and Financial Ltd

#### Europa Metals Ltd.

39 holes (~12,000 m) drilling completed Re-logged 9,000 m of historic core Created new database Hydrogeological, geotechnical and metallurgical studies Mineral resource estimates and 2020 economic study



Source: Europa Metals

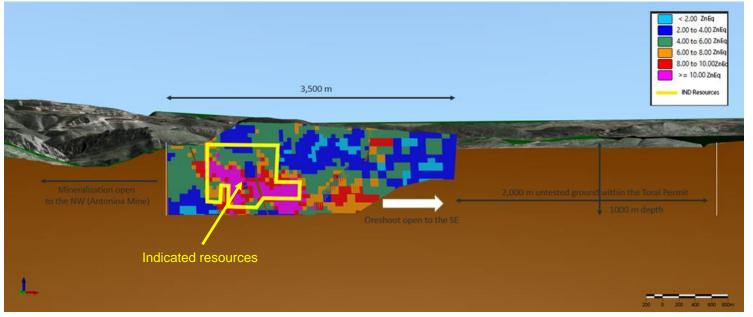


#### Europa Metals published<sup>(1)</sup> an updated JORC 2012 compliant MRE<sup>(2)</sup> for the Toral Project in November 2022

Europa Metals' successful 2022 drilling campaign led to a 19% increase in the Indicated MRE and a 14% increase in overall grade.

A total of 61,545 m of drilling is now included in the Toral drillhole database.

Category	Tonnes	ZnEq (PbAg) <sup>(3)</sup>	Zinc Grade	Zinc Metal Content	Lead Grade	Lead Metal Content	Silver Grade	Silver Metal Content
Indicated	7 Mt	8.9%	5.0%	349 kt	3.7%	260 kt	29 g/t	6,600,000 ozs
Inferred	13 Mt	6.5%	4.1%	540 kt	2.3%	300 kt	19 g/t	8,000,000 ozs



Refer to Europa Metals press release dated November 30, 2022.
 Refer to Cautionary Notes on page 2 of this Presentation.
 (3) ZnEq (PbAg) refer to note on page 24.

### **Toral Project - 2023 Exploration Program**



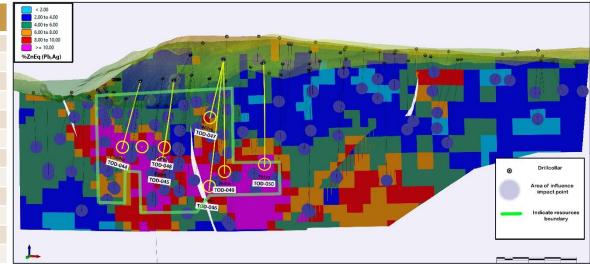
The 2023 drilling campaign, comprised of **9 holes** for a total of approximately **6,200 m**, and represented a **combination** of **confirmatory drilling** followed by a **series of in-fill drillholes** designed to corroborate the existing Indicated MRE.

The Company is currently working on an updated MRE incorporating the 2023 drilling results and designing the 2024 drilling program with Europa.

#### Latest Assay Results Reported from 2023 Drilling Program

Press Release dated August 22, 2023

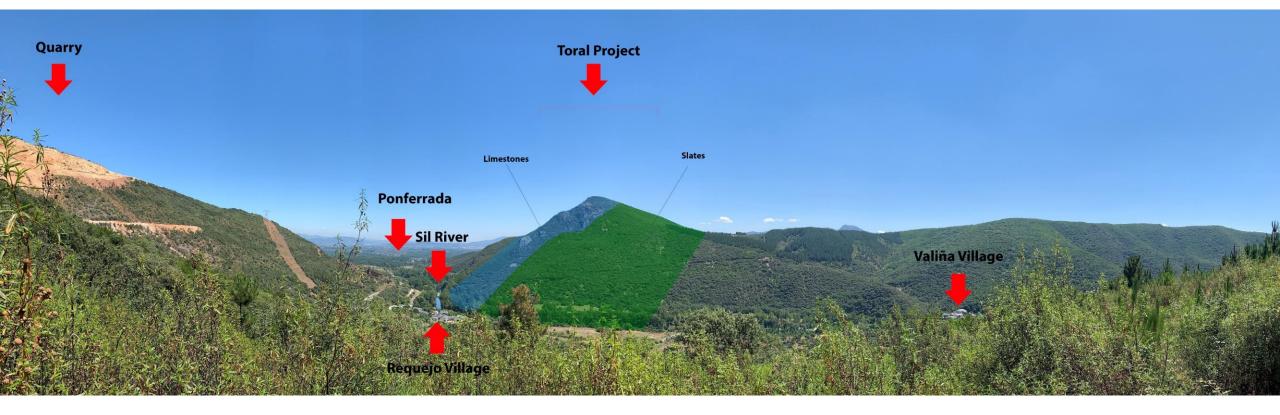
Hole ID	From	То	Interval (m)	Zn_%	Pb_%	Ag_ppm	Cu_%	ZnEq(PbAg)%*
TOD-044	490.85	498.80	7.95	2.56	1.73	14.65	0.04	4.46
Including	490.85	495.10	4.25	3.93	2.06	16.79	0.04	6.17
Including	492.65	494.20	1.55	8.35	2.76	24.31	0.05	11.40
TOD-045	592.00	596.95	4.95	7.31	12.77	160.52	0.10	22.71
TOD-046	845.50	847.00	1.50	8.30	3.45	12.80	0.04	11.64
Including	845.50	846.50	1.00	11.08	4.91	18.75	0.06	15.84
TOD-047	442.00	442.60	0.60	15.20	3.30	10.50	0.17	18.34
TOD-047	453.10	455.50	2.40	1.61	1.57	27.69	0.20	3.72
TOD-048	505.25	509.95	4.70	3.53	2.81	26.34	0.31	6.68
Including	508.30	509.95	1.65	7.94	5.78	53.95	0.51	14.41
TOD-048	513.05	519.70	6.65	4.01	2.75	63.60	0.31	8.12
Including	515.90	519.70	3.80	6.35	4.14	97.92	0.44	12.58
TOD-049	745.00	750.00	5.00	1.17	6.14	15.63	0.07	6.91
Including	745.85	747.10	1.25	2.01	20.45	43.96	0.23	20.93
TOD-050	675.00	678.90	3.90	2.24	8.05	40.24	0.03	10.30
Including	677.45	678.9	1.45	5.76	14.39	91.04	0.07	20.69
TOD-050	680.10	682.50	2.40	1.71	2.67	35.44	0.01	4.98



\* **ZnEq(PbAg)%** is the calculated Zn equivalent incorporating lead and silver credits; (ZnEq(PbAg)% = Zn + Pb\*0.926 + Ag\*0.019). Zn equivalent calculations were based on 3-year trailing average price statistics obtained from the London Metal Exchange and London Bullion Market Association giving an average Zn price of US\$2,680/t, Pb price of US\$2,100/t and Ag price of US\$16.2/oz. Significant ZnEq intercepts were generated using a 1% ZnEq trigger value, minimum width of 1m, maximum consecutive waste interval of 1m and minimum average ZnEq grade of >1%.

### **Toral Project...Next Steps**





A formal application for a mining license for the Toral Project was completed and submitted in October 2023 to the Junta of Castille and Leon, the local mining authority.

The Company and Europa are preparing an updated MRE in advance of the preparation of a PEA study planned for later in 2024.

### Zancudo Project Highlights



### Colombia

Cauca Belt, Colombia 100% Owned



### Located in a Historic Mining District

Aq

Au

**Municipality of Titiribí**, Department of Antioquia, ~30 km SW of Medellin.

Mining of **high-grade gold-silver-quartz** veins was carried out in the Zancudo district from 1793 to 1948 with an **estimated production of 1.4 to 2.0 Mozs AuEq.** 

Project includes the former producing Independencia Mine.

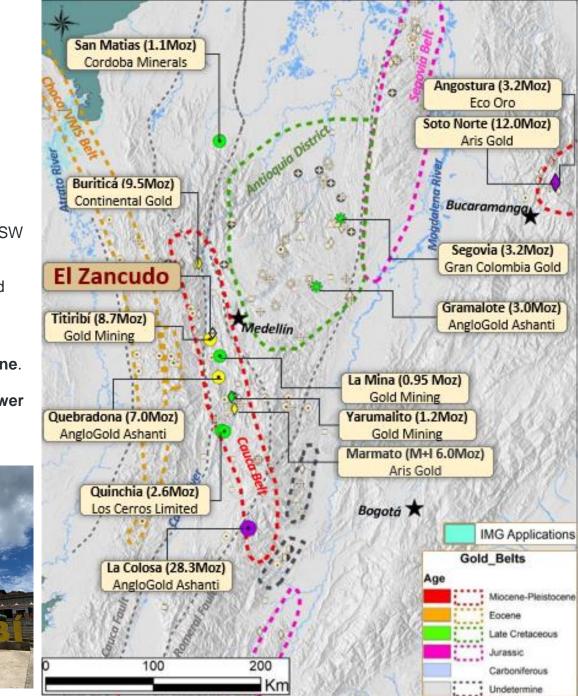
Project has access to labour, the Colombian national power grid and ample water resources.

Acquired by Denarius in the 2021 RTO.

Updated Inferred MRE of **1,060,000 Gold Equivalent Ounces.** 

PEA announced in October 2023.

An opportunity to develop **near-term production** and cash flow through local contract miners and **long-term growth** through exploration.



Corporate Presentation | April 2024

www.denariusmetals.com

### Zancudo Project - A Rich History



1746

1848

1851

1945

2010

2012

2017

2022

2021

2022

2023

Gold first discovered in the Zancudo district. Mining has been carried out since 1793 in 58 mines.

The Sociedad del Zancudo mining company was created. Regarded as one of Colombia's most important companies of the 19th century, it operated until 1948.

First gold roaster installed at Sabaletas, 6 km SW of Sitio Viejoto treat refractory gold associated with arsenopyrite using locally produced coal.

Zancudo mine closed. No major activity again until 1993-2010 during which scoria dumps were re-processed.

Gran Colombia (now "Aris Mining") acquires Zancudo in 2010 and carries out exploration and diamond drilling (~14,000 m) campaigns in 2011 and 2012.

IAMGOLD signs option agreement with Gran Colombia in 2017 to earn 70% over a 6-year period. Carries out exploration, completing ~26,000 m of diamond drilling, over the first 5 years.

Denarius acquires the Zancudo Project from Gran Colombia for shares in the February 2021 RTO Transaction.

IAMGOLD fails to complete the earn-in due to factors unrelated to the project. Denarius retains 100% interest and initiates work at Zancudo. Completes inferred mineral resource estimate with ~1Mozs AuEq. Charts the course to re-start mining using local contract miner.



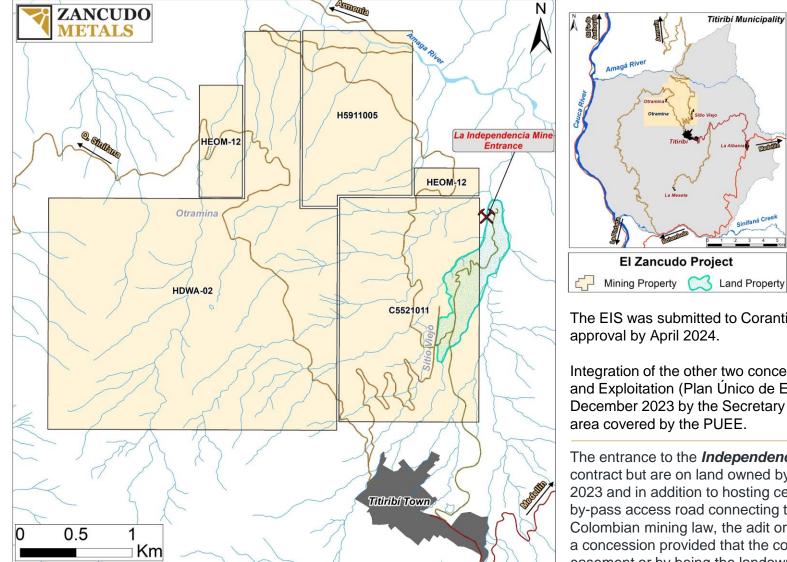
Historical gold roaster chimneys at the Village of Sitio Viejo



In 1883, the Sociedad de Zancudo company created its own bank, issuing banknotes to pay the bills and expenses of miners, contractors, and suppliers.

### **Zancudo Project - Location**





#### The Zancudo Project comprises:

Titiribí Municipality

- three adjoining mining concession contracts (HDWA-02, H5911005 and C5521011) and one exploration license (HEOM-12):
- a total area of 1.054 hectares; and
- is located about 30 km SW, about a 1.5 hour drive by paved road, from Medellin.

For concession 5521, which includes the historic producing Independencia Mine, the Mining Technical Work Plan (Programa de Trabajo y Obras, "PTO") was approved in December 2023 by the Secretary of Mines of Antioquia. This permit allows the Company to start mining activities within this area at the Zancudo Project once the Environmental Impact Study ("EIS") is approved by Corantioquia, the local environmental authority.

The EIS was submitted to Corantioquia in November 2023 and the Company expects to receive approval by April 2024.

Integration of the other two concessions and the exploration license through a Plan of Exploration and Exploitation (Plan Único de Exploración y Explotación, "PUEE") was also approved in December 2023 by the Secretary of Mines of Antioquia. The EIS noted above will also apply to the area covered by the PUEE.

The entrance to the *Independencia mine* and the plant site are located outside of the concession contract but are on land owned by the Company. The land was acquired by the Company in Q1-2023 and in addition to hosting certain facilities associated with the Zancudo Project, will include the by-pass access road connecting the project with the regional highway to the east of Tititiribi. Under Colombian mining law, the adit or infrastructure of a mine may be located outside the boundaries of a concession provided that the concession holder has a right to use such land by way of a lease, easement or by being the landowner.

### Zancudo Project – La Independencia Mine, A Former Producer



# 1,000,000 OUNCES

AuEq – October 2023 MRE <sup>(1)</sup>

(1) Refer to Page 30 for details

Corporate Presentation | April 2024

www.denariusmetals.com

Cboe CA: DMET | OTCQX: DNRSF

LA INDEPENDENCIA MINE

### Zancudo Project - Mineral Resource Estimate of 1,060,000 AuEq Ounces



The following table<sup>(1)</sup> summarizes the Inferred Mineral Resource estimate ("MRE") for the Zancudo Project effective as at October 24, 2023:

			Gr	Material Content			
Category	Tonnes (kt)	Au (g/t)	Ag (g/t)	AuEq (g/t)	Au (koz)	Ag (koz)	AuEq (koz)
Inferred	4,100	6.53	107	8.1	860	14,090	1,060

1. Mineral Resources are classified as Inferred Mineral Resources and are based on the 2014 CIM Definition Standards.

2. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources estimated will be converted into mineral reserves.

3. Mineral Resources are estimated using a gold selling price of US\$1,850/ounce and a silver selling price of US\$23/ounce.

4. Cutoff grade of 4 g/t AuEq is based on underground mining costs (US\$105/tonne), mill processing and concentrating (US\$42/tonne), G&A (US\$21/t) and royalties of 3.2%.

5. The quantity and grade classified as Inferred Mineral Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred Mineral Resources as Indicated or Measured Mineral Resources.

6. Gold Equivalent is calculated with the formula AuEq = (Au \*Au Recovery (75%) \* AuPrice + Ag \*Ag Recovery (80%) \* AgPrice)) / (Au Recovery (75%) \*Au Price).

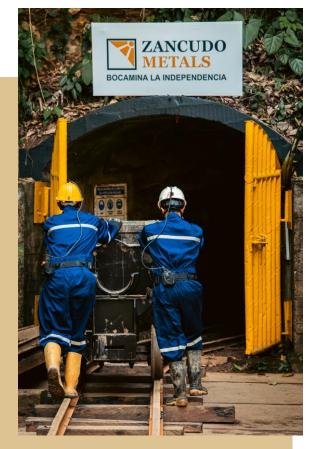
7. Scott E. Wilson, CPG, President of Resource Development Associates Inc. is the Qualified Person. The qualified person knows of no environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors that may materially affect the Mineral Resource estimate.

**Mineralization occurs in stacked mantos** and steeply dipping veins that have been exploited over a strike length of 3,500 m. The average vein width is 0.35 m with a maximum width of 3.0 m. The known vertical extent of mineralization is 400 m.

The database for the MRE includes **a total of 40,100 m of diamond drilling in 149 holes**, including 33 underground holes drilled in the Independencia Mine, that was carried out by Gran Colombia Gold and IAMGOLD from 2011 through 2021.

The Zancudo deposit **remains open for further expansion in all directions.** Preparing to carry out a 10,000 meters drilling campaign in 2024 split between infill drilling and step-out drilling aimed to extend the current mineralization in the northern and central areas of the deposit.

Refer to the NI 43-101 Technical Report dated December 14, 2023 with an effective date of October 24, 2023 filed on SEDAR+ and the Company's website for additional information.
 Refer to Cautionary Notes on page 2 of this Presentation.



#### **Entrance to Independencia Mine**

Corporate Presentation | April 2024

### Zancudo Project - Preliminary Economic Assessment (1)



Key Economic Parameters of the PEA effective as at October 24, 2023:

Assumption / Results	2023 PEA
Total tonnes processed over the LOM	3,463,000
Total waste mined over the LOM	346,000
Gold grade mined – LOM average (g/t)	6.77
Silver grade mined – LOM average (g/t)	106.13
Gold recovery – LOM average	85%
Silver recovery – LOM average	87%
Expected long-term gold price (US\$/oz)	\$1,800
Expected long-term silver price (US\$/oz)	\$22
Total gold production (payable ounces)	575,514
Total silver production (payable ounces)	8,809,108
LOM net revenue, after refining and treatment charges (US\$ millions)	\$1,021.3
Initial capital costs (US\$ millions) (Table 2, page 32)	\$14.8
Sustaining capital costs (US\$ millions)	\$5.2
LOM operating costs and royalties (US\$ millions) (Table 3, page 32)	\$589.7
LOM cash cost per ounce of gold (US\$) (Table 3, page 32)	\$1,050
LOM AISC per ounce of gold (US\$) (Table 3, page 32)	\$1,059
Mine Life	10.3 Years
Average LOM process rate (tpd)	925
After-tax undiscounted LOM Project Cash Flow (US\$ millions)	\$266.4
After-Tax NPV (5% discount) (US\$ millions)	\$206.3
After-Tax IRR	287%
Payback Period	1.2 Years

The PEA affirms the robust economic viability of our planned underground mining operation at our Zancudo Project, generating near-term production and cash flow from a long-life asset yielding attractive returns for our shareholders.

Serafino Iacono, Executive Chairman and CEO



"

#### Mining commencing in 2024

- conventional crushing and milling facilities
- initial rate of 500 tpd
- increasing to 1,000 tpd in 2025
- generating a high-grade gold-silver concentrate

#### 10-year mine life



Expect to generate **net revenue of ~US\$1.0 billion** from the sale of ~576,000 payable ounces of gold and 8.8 million payable ounces of silver over the life-of-mine ("LOM")

Life-of-mine average AISC of US\$1,059 per ounce of gold

#### Deposit remains open for further expansion in all directions

(1) Refer to the NI 43-101 Technical Report dated December 14, 2023 with an effective date of October 24, 2023 filed on SEDAR+ and the Company's website for additional information. Refer also to Cautionary Notes on page 2 of this Presentation.

Corporate Presentation | April 2024

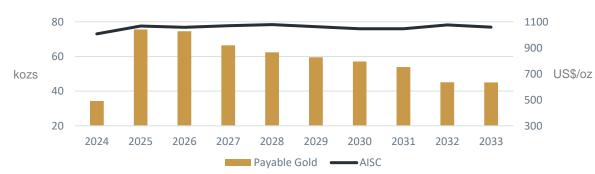
www.denariusmetals.com

### Zancudo Project - Preliminary Economic Assessment (1)



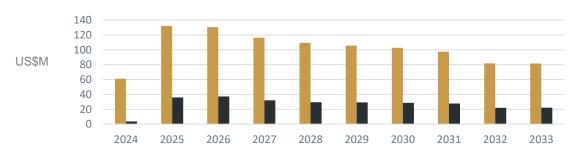
#### Capital Costs (Table 2)

Initial Capital Costs	Costs (US\$)
Mine access rehabilitation (initial work excluded from mine contractor responsibility)	29,000
Access road	2,492,000
Crushing plant	752,000
Crushing plant electrical	806,000
Civil works	325,000
Processing plant	5,284,000
Tailings storage facility	1,000,000
Permitting	408,000
Indirect costs	1,200,000
Owner's costs, including lab and other site infrastructure	500,000
Contingency	2,000,000
Total initial capital costs	14,796,000



#### **Operating Costs (Table 3)**

Operating Costs	Life-of-Mine (US\$M)	Per Oz Au (US\$)
Mining	435.1	756
Processing	57.6	100
Site administration and social programs	16.1	28
Shipping and port handling	31.4	55
Royalties	49.6	86
Refining and treatment charges	208.4	362
Less: silver by-product credits	(193.8)	(337)
Total cash costs	604.3	1,050
Sustaining capital and exploration	5.2	9
All-in sustaining costs	609.5	1,059



(1) Refer to the NI 43-101 Technical Report dated December 14, 2023 with an effective date of October 24, 2023 filed on SEDAR+ and the Company's website for additional information. Refer also to Cautionary Notes on page 2 of this Presentation.

Net revenue After-tax cash flow

#### Corporate Presentation | April 2024

#### www.denariusmetals.com





### Zancudo Project... Path to Near-Term Production

- Local contract miner engaged
- Permitting nearing completion to start mining/crushing
- By-pass road construction near completion
- Surplus/old equipment removed from plant site
- Crushing equipment installed at the plant site
- Mine plan finalized with 500 tpd operation starting in 2024
- New 1,000 tpd processing plant has been ordered
- Offtake arrangements being finalized
- Preparing to execute next phase of exploration campaign in 2024

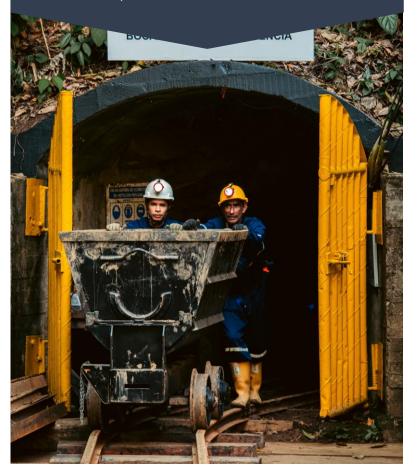
TSXV: DSLV | OTCQX: DNRSF 33

### **Zancudo Project - Advancing Toward Production in 2024**



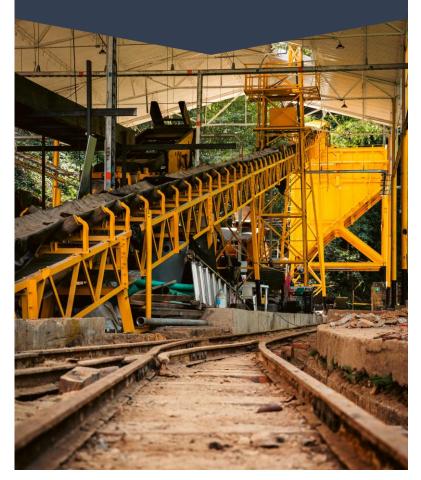
#### Mine

The local mine contractor was engaged in 2023 and has been preparing the existing mine to commence operations when the permits are received in 2024.



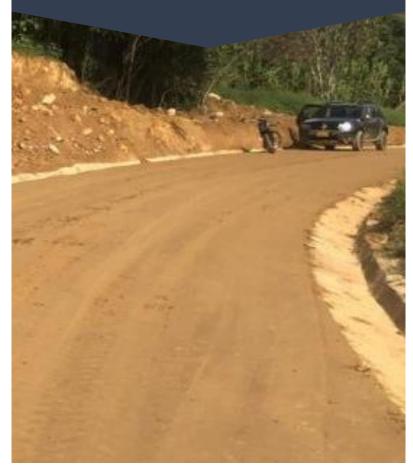
#### Plant

New crushing equipment has been installed. Concentrate plant has been ordered and will be in operation later this year.



#### Infrastructure

Constructing an ~3.7 km access road connecting the Project with the regional highway, allowing transportation to bypass the Town of Titiribi



Corporate Presentation | April 2024









### **Zancudo Project - Significant Exploration Upside**

**Mineralization occurs in stacked mantos** and steeply dipping veins that have been exploited over a strike length of 3,500 m. The average vein width is 0.35 m with a maximum width of 3.0 m. The known vertical extent of mineralization is 400 m.

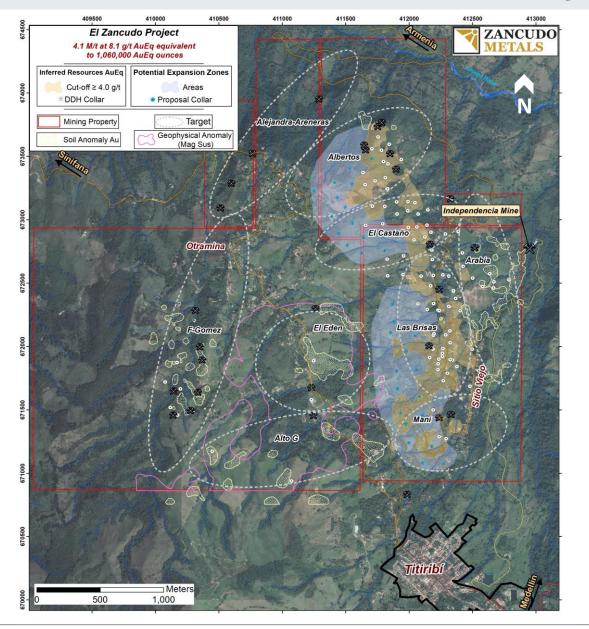
As a **next step** in the exploration program at Zancudo, Denarius plans to carry out a **US\$1M drilling campaign comprising up to 10,000 m** of infill and step out drilling in the "*Potential Expansion Zones*", as shown in the image to the right.

- These areas extend from Mani to Albertos, adjacent to the area covered by the existing Inferred Mineral Resources and are related to known structures and the historic Independencia mine.
- The objective of the exploration drilling campaign is to extend the current mineralization in the northern and central areas of the Zancudo deposit.

Mineralization remains open to the west and at depth.

Through geophysics and geochemistry in the central and western part of the Zancudo Project, Denarius Metals has also identified several other *exploration targets,* as shown in the image to the right, which will be tested in future drilling campaigns for potential resource expansion.

The most prospective target is **Otramina**, which is delineated by several small abandoned mines.



### **Sustainability** Mining for the Future

Denarius Metals' board and management team have a long history of positively impacting areas of operations through tailored sustainability initiatives.

We are committed to working collaboratively with our *local communities* and are in the process of developing strategies and collecting data.



#### **Spain - Lomero**

Completed drilling/exploration courses, in collaboration with local authorities and Explomin, aimed at improving local employability

**Donated toys** to children in need through our "Regalando Ilusiones" (Gifting Dreams) Campaign

**Communications training** for all local employees

Restoration of exploration platforms in our area of influence

Donated sporting goods at the Three Kings parade to children between 2-12 years old

### **Colombia**

Acquired phosphorite mining rights in 2023 to develop a phosphate mining operation that will support the growth in locally sourced fertilizer for use in the Colombian agriculture industry

In partnership with Angelitos de Luz Foundation, eye exams were provided to students from local schools in the Titiribi area. Prescription glasses were subsequently donated to 55% of participating students who needed glasses.

Donations of gifts to children in need in four towns within our area of influence at Zancudo, and donations to support community festivals

Facilitated craft workshops for local women in Titiribi to foster and encourage creativity and community

Corporate Presentation | April 2024

### Some initiatives to date include...







#### In-Demand Critical Metals



We are focused on in demand metals

#### **Favourable Proximity**



We are in the right jurisdictions

#### **High Grades**



We have quality high-grade projects

#### **Rich History**



There's rich history where our projects are located

#### **Proven Team**



We have the right team that knows how to unlock value

Why

Invest



# DENARIUS

#### METALS

Michael Davies Chief Financial Officer

Melissa Mackie Manager, Investor Relations

+1 (416) 360-4653 investors@denariusmetals.com





DenariusMetals



#### TSXV: DSLV | OTCQX: DNRSF