



PERFORMANCE SECURITE		أداء السلامة	
Mine de Zgounder		منجم الزكندر	
Nombre de jours sans accident de travail	0 4	عدد أيام العمل بدون حادث	0 4
Nombre des accidents de cette année	0 0 1	عدد حوادث السنة الحالية	0 0 1
Nombre des accidents de l'année précédente	0	عدد حوادث السنة الماضية	0
Date du dernier accident de travail	8 0 1	تاريخ آخر حادث	8 0 1
Meilleure performance sans accident de travail	1 0 7	أفضل أداء بدون حادث	1 0 7



TSX: AYA | OTCQX: AYASF

# BUILDING THE LARGEST PURE-PLAY SILVER PRODUCER GLOBALLY

TD Securities Mining Conference – January 25-27, 2023



# FORWARD-LOOKING STATEMENT

The Zgounder Expansion Feasibility Study (“FS”) is based on a technical report entitled “NI43-101 TECHNICAL REPORT – FEASIBILITY STUDY ZGOUNDER EXPANSION PROJECT”, originally dated March 31, 2022, and amended on June 16, 2022 with an effective date of December 13, 2021 (the “Zgounder Report”) which was prepared under the supervision of Daniel M. Gagnon, DRA, with the participation of William Stone, Antoine Yassa, Jarita Barry, Fred Brown, Eugene Puritch, Daniel Morrison, André-François Gravel, Claude Bisailon, Julie Gravel, Kathy Kalenchuk, Hugo Della Sbarba, Philippe Rio Roberge, Richard Barbeau & Stephen Coates all “qualified persons” for the purpose of the Zgounder Report. Scientific and technical information contained in this presentation has been reviewed and approved by Marc-Antoine Audet, Ph.D. P. Geo, Geological Consultant and a QP as defined under NI 43-101.

Certain statements and information contained in this presentation are “forward-looking information” within the meaning of applicable securities laws. Such statements involve known and unknown risks, uncertainties and assumptions and accordingly actual results and events may differ materially from those implied or expressed therein. This includes statements such as “demonstrate”, “high-potential”, “developing”, “potential”, “continuous”, “will”, “timeline”, “favorable”, “opportunities”, “backstopped”, “expand”, “potential”, “growing”, “increasing”, as well as statements by the Corporation concerning expected timelines, including the expected timeline for the Corporation to produce new resources estimates, and exploration results, including deposit size, quantities, grades and contained metals, which are generally made on the basis of estimations and extrapolations from a limited number of drill holes and assays. These estimations and extrapolations are subject to uncertainties, which include but are not limited to uncertainty in connection with evaluating a deposit until the deposit has been extensively drilled on closely spaced centers. Should one or more of these underlying estimations or extrapolations prove incorrect, actual results may vary materially from those described in forward-looking statements.

Forward-looking statements contained herein also include the Corporation’s plans for its mineral properties, which involve known and unknown risks, uncertainties and other factors which may cause the Corporation’s actual results, performance or achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking information. Forward-looking information is subject to a variety of risks and uncertainties, which could cause actual events or results to differ from those reflected in the forward-looking information, including, without limitation, the ability of the Corporation to continue to access capital markets for the funding necessary to acquire and maintain exploration properties and to carry out its desired exploration programs; difficulties in executing exploration programs according to the Corporation’s proposed schedules and within its cost estimates, whether due to weather conditions in the areas where it operates, increasingly stringent environmental regulations and other permitting restrictions, or the availability of essential supplies and services; and factors beyond the capacity of the Corporation to anticipate and control, such as the marketability of minerals, government regulations relating to health, safety and the environment, and the scale and scope of royalties and taxes on production and other risks described in the Corporation’s documents filed with Canadian securities regulatory authorities. You can find further information with respect to these and other risks in the Corporation’s 2022 Q3 MD&A, and other filings made with Canadian securities regulatory authorities and available at [www.sedar.com](http://www.sedar.com). Should one or more of these risks or uncertainties materialize, actual results may vary materially from those described in forward-looking statements.

Accordingly, readers are advised and cautioned not to place undue reliance on forward-looking information. Except as required under applicable securities legislation, the Corporation undertakes no obligation to publicly update or revise forward-looking information, whether as a result of new information, future events or otherwise.

# AYA MANAGEMENT



**Benoit La Salle, FCPA, CPA**  
**President & CEO**

Benoit has over 25 years of experience as a corporate executive in the mining industry. Benoit founded, developed and led SEMAFO into a 250,000 oz gold producer in West Africa, delivering in excess of a billion dollars of value to shareholders. Benoit holds a BCom from McGill University and an MBA from IMEDE, Switzerland.



**Mustapha Elouafi**  
**President-Managing Director, Morocco**

Mustapha is an established mining executive with almost 30 years in mining and senior management in Morocco and MENA. Previously, he was Managing Director of OCP S.A., the world's largest producer of phosphate and phosphate-based products, and served as president of affiliates of OCP Group. A graduate of the Mohammadia School of Engineering in Morocco, Mr. Elouafi holds an Executive MBA from École des Ponts Business School in Paris.



**Ugo Landry-Tolszczuk**  
**Chief Financial Officer**

Ugo's involvement with Africa spans 10 years of his 15-year professional experience and includes positions as President and COO of TSXV-listed SRG Mining and director of operations for Windiga Energy. A CFA charter holder, Ugo holds a bachelor's degree of applied science in computer engineering, management science option, from the University of Waterloo.



**Elias Elias**  
**Vice-President, Legal & Corporate Secretary**

Elias brings with him 10 years of legal experience advising West African-focused mining and energy companies such as SRG Mining, Sama Resources, Windiga Energy and SEMAFO. Elias holds a civil law degree (summa cum laude), a common law degree (cum laude) from the University of Ottawa, and has been a member of the Barreau du Québec since 2007.



**David Lalonde**  
**Head of Exploration & Aya's Qualified Person**

David is a geologist with over 20 years of experience in progressively senior exploration roles. His expertise has been acquired in Canada and internationally (Russia, West Africa, and Oman), primarily in precious metals exploration with SEMAFO Inc. and Kinross Gold. Prior to joining Aya, David was head of exploration for MDO, Oman's government-backed mining company. David earned his B.Sc. in geology at Université du Québec à Montréal.



**Alex Ball, CPA, CA**  
**Vice-President, Corporate Development & Investor Relations**

During his more than 15-year corporate finance career, Alex managed \$5 billion in debt, equity financings and M&A transactions in mining with UBS Canada, CIBC World Markets, and BMO Capital Markets. Previously, he was Executive Vice-President, Finance & Corporate Development at Algold Resources. Alex has an MBA majoring in finance from University of Toronto's Rotman School of Management and a BA in Economics from McGill University.



**Raphaël Beaudoin**  
**Vice-President, Operations**

Raphaël has over 10 years of mineral processing experience across various operations and projects in West Africa and Canada. Prior to Aya, Raphaël was Vice-President, Operations, Metallurgy and Process Design at SRG Mining and director of operations at Sama Resources, two resource companies focused on West African projects. Before this, he held positions of increasing responsibility at Canadian Royalties Inc. Raphaël earned a degree in materials engineering at McGill University.

# AYA BOARD OF DIRECTORS



**Benoit La Salle, FCPA, CPA**  
**President & CEO, Director**

Benoit has over 25 years of experience as a corporate executive in the mining industry. Benoit founded, developed and led SEMAFO into a 250,000 oz gold producer in West Africa, delivering in excess of a billion dollars of value to shareholders. Benoit holds a BCom from McGill University and an MBA from IMEDE, Switzerland.



**Robert Taub**  
**Chair**

Robert is an entrepreneur in life sciences and investor in several pharmaceutical and medical device companies. Mr. Taub is currently chairman of a NASDAQ-listed company. Robert holds a BA Languages from the University of Antwerp, Belgium and an MBA from INSEAD, France.



**Natacha Garoute, CPA, CA**  
**Director**

Natacha has more than 20 years of finance experience as a CPA, including with Champion Iron Limited, Roxgold Inc., and SEMAFO Inc. She also sits on the Board of Directors, Audit Committee and Special Governance Committee of Corem. Ms. Garoute holds a BCom from the Université du Québec à Montréal and a law degree from the Université de Montréal.



**Yves Grou, CPA, CA**  
**Director**

A CPA CA, Yves holds a degree in Commerce (BCom) from McGill University. He is a member of the Québec Institute of Chartered Professional Accountants. Between 1980 and 2004, he was co-founder and partner of Grou La Salle & Associates. Mr. Grou coordinated and led reverse take-over processes related to several public companies.



**Dr. Jürgen Hambrecht**  
**Lead Director**

Dr. Jürgen Hambrecht served BASF in various capacities around the world for more than 40 years, lastly as CEO and Chairman of the Supervisory Board. He has served on a multitude of board including Daimler Truck AG, Mercedes Benz AG, Bosch, Lufthansa AG, and Fuchs SE. Currently, he is Chairman of Trumpf SE. Dr. Hambrecht earned his doctorate in Chemistry in 1975 from the University of Tübingen, Germany.



**Eloïse Martin-Nederveen**  
**Director**

Eloïse has over 10 years of experience in project finance, structured finance, and capital structuring advisory with a focus on the energy and natural resources sector. Currently, she is an Executive Director with HCF International Advisers. She holds an MBA from ESSEC Graduate School of Management, Paris, a Master of International Business (Honours) from L'Institut d'Études Politiques (Paris), and a Master of Humanities from Sorbonne University.



**Marc Nolet de Brauwere**  
**Director**

Marc is a mining engineer with over 35 years of industrial experience gained across the mining, management consulting and healthcare sectors. He holds master degrees in mining civil engineering and industrial management. Since 1997, Mr. Nolet de Brauwere serves as president of PhysiOL SA.



**Nikolaos Sofronis**  
**Director**

Nikolaos is founder of BS Family Office Assets Management S.A Geneva, specialized in private equity. He gained his over 16 years of experience in private banking within prestigious institutions in Luxembourg and Switzerland. He previously served as Chairman of a London-listed corporation. For the last 20 years, he has been actively involved in the mining sector.



## ZGOUNDER SILVER MINE – CORNERSTONE OF AYA'S GROWTH STORY

- Commercial production in 2019
- 2022 production of **1.88M oz**
- 2024 production of **~7.9M oz, +394%**
- 96M oz** M&I resources at 306 g/t Ag

### DEVELOPMENT UPSIDE

- Boumadine
- Tijirit – FS 85% complete, pending drilling results

### EXPLORATION UPSIDE

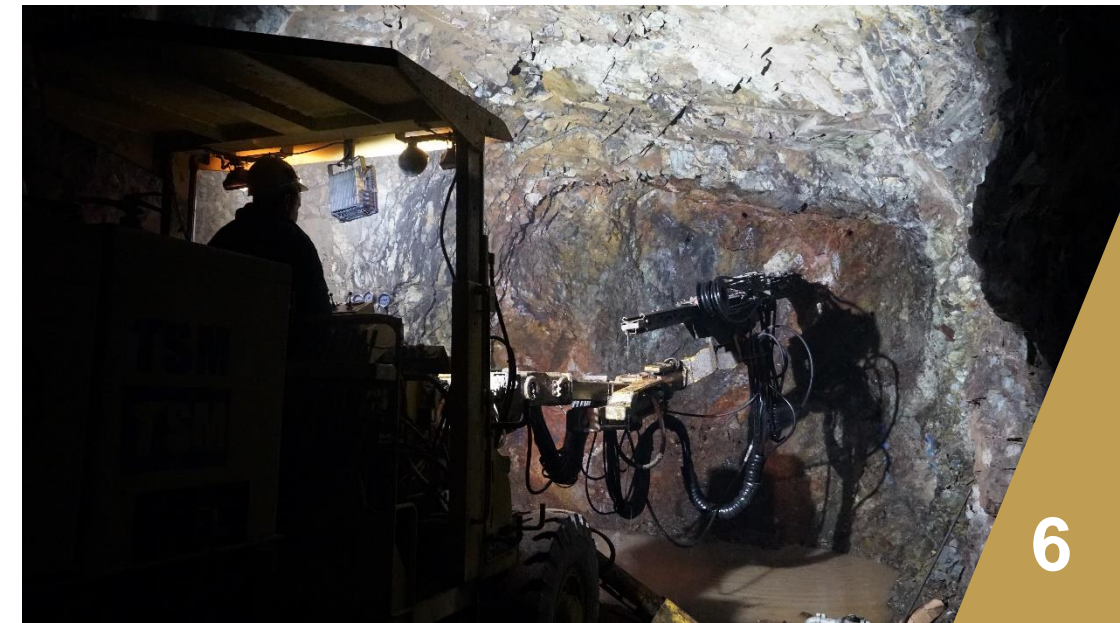
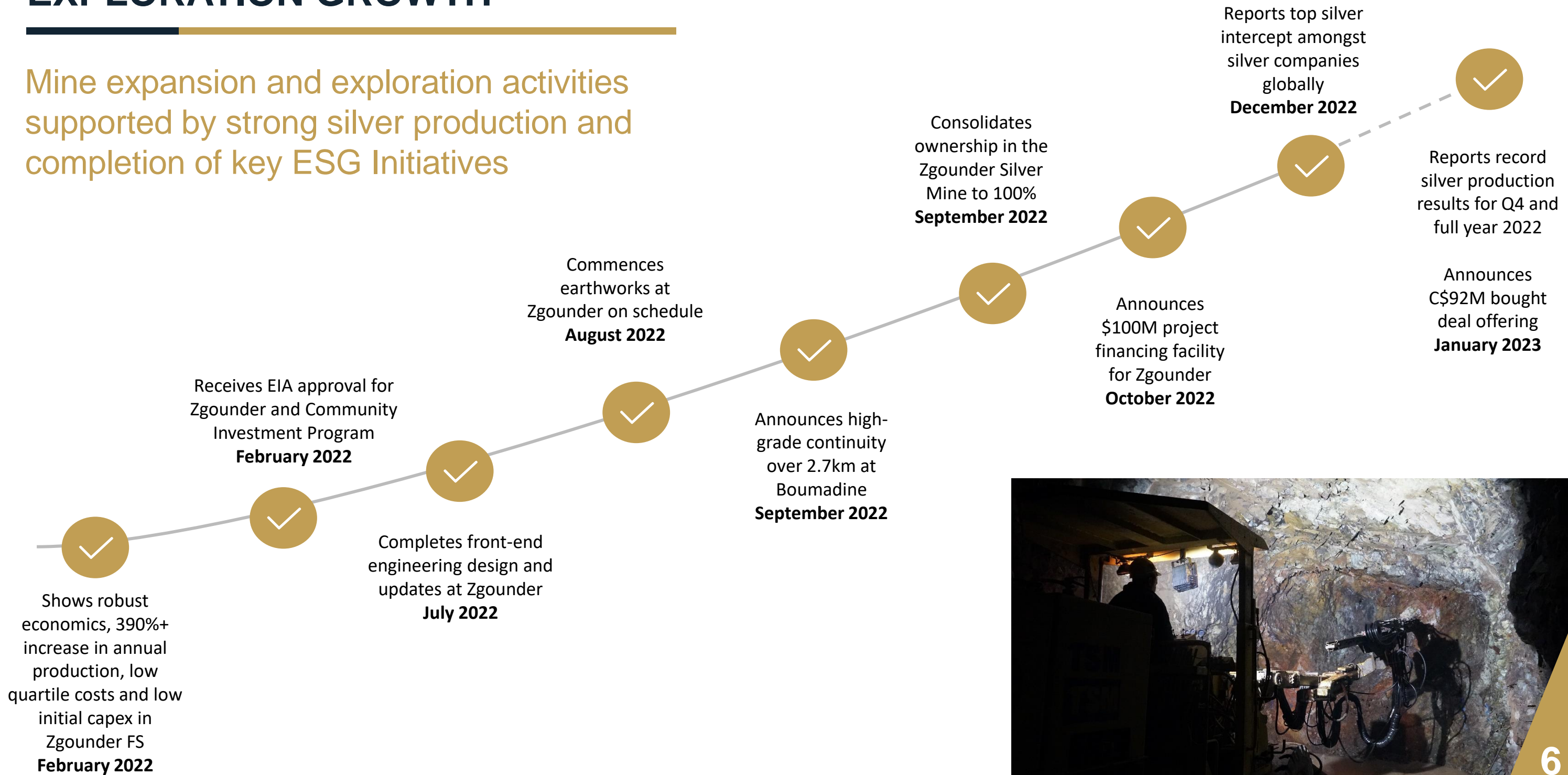
- Zgounder Regional
- Imiter bis
- Azegour
- Amizmiz



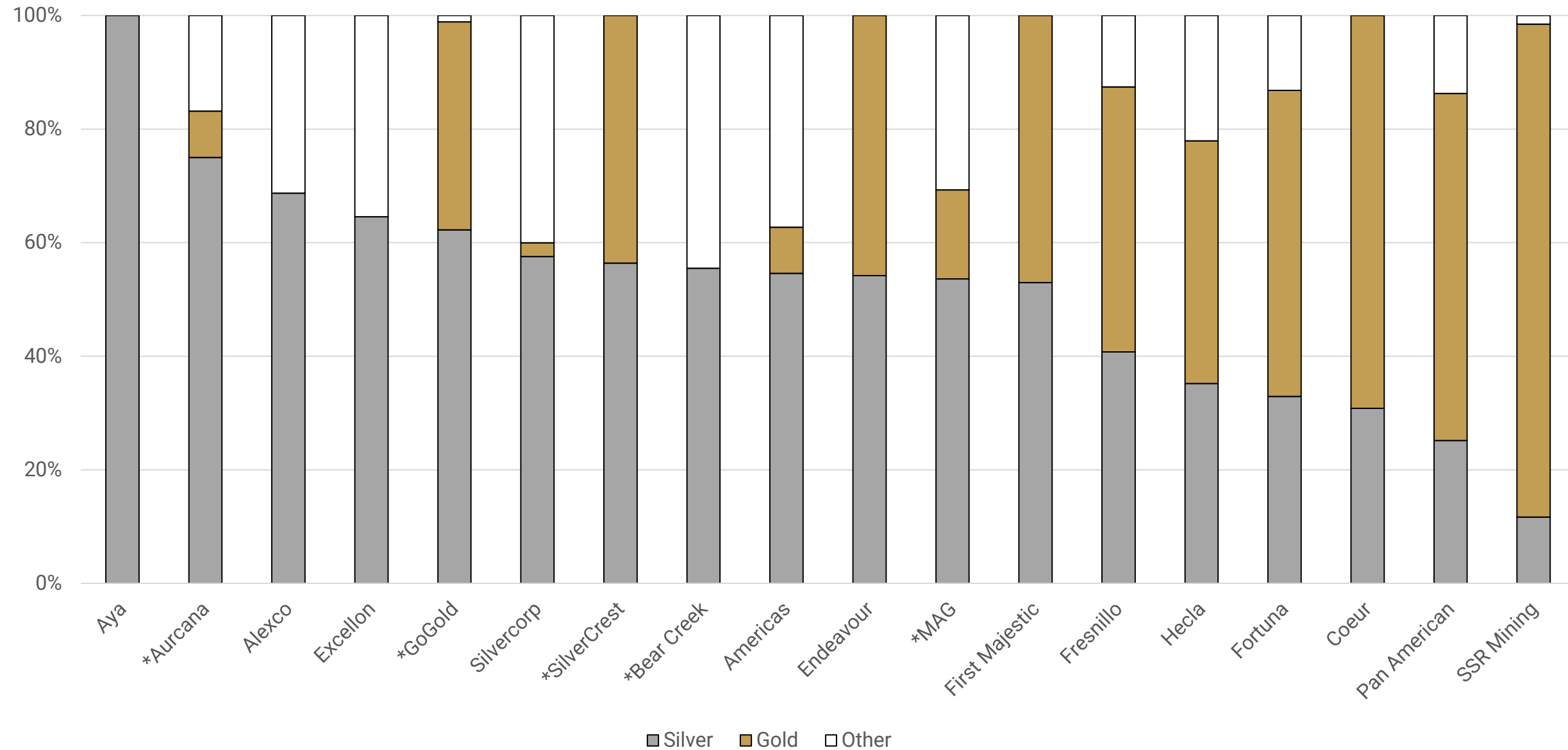


# 2022 ACHIEVEMENTS – DELIVERING ON MINE EXPANSION PLANS AND EXPLORATION GROWTH

Mine expansion and exploration activities supported by strong silver production and completion of key ESG Initiatives



# AYA – THE ONLY TSX-LISTED PURE SILVER PRODUCER



Source: Desjardins Capital Markets, company reports

\*Developer, for which 2021 metal prices and latest technical report LOM payable production were used

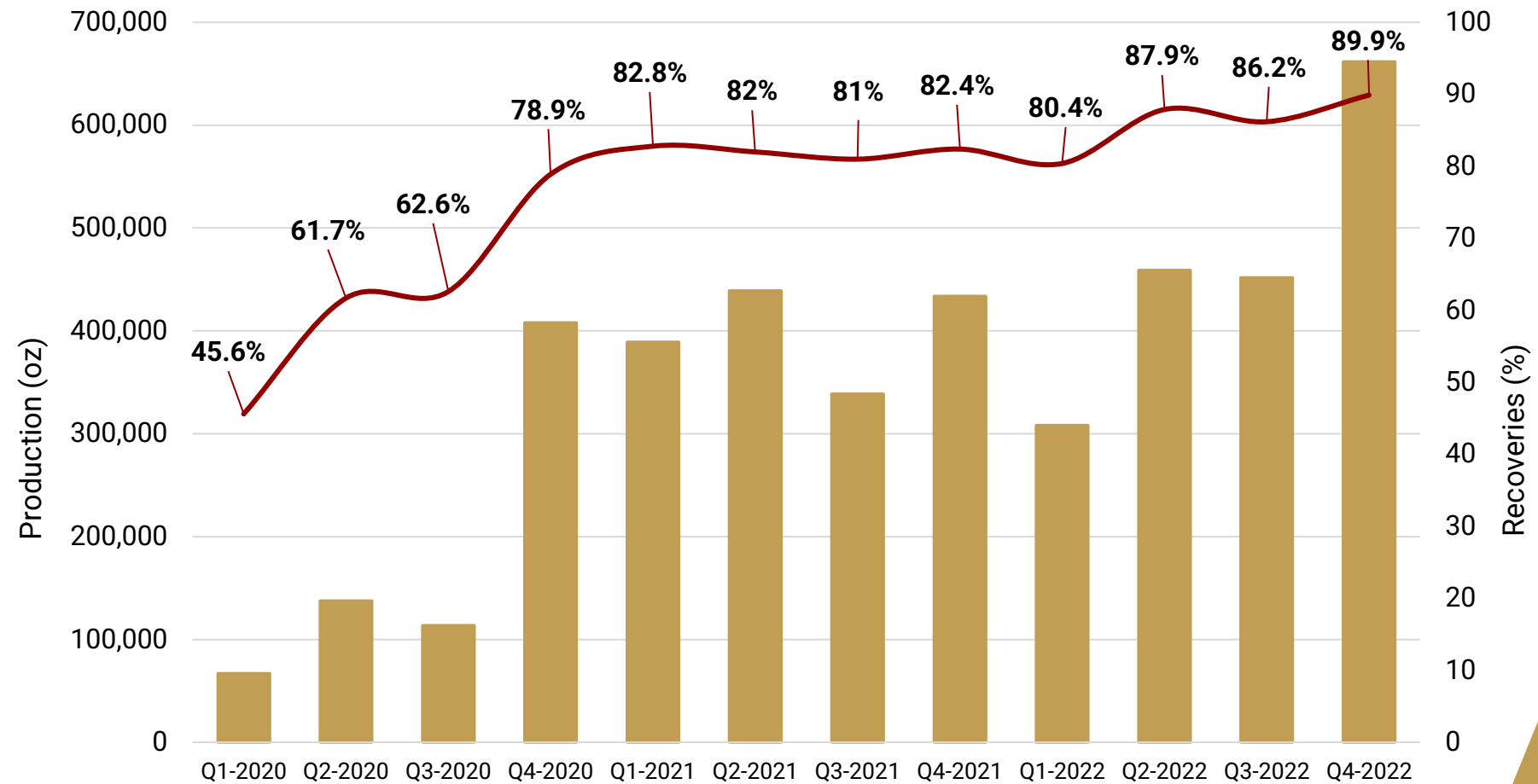
# ZGOUNDER – MOMENTUM FROM INCREASED MECHANIZATION

## Solid operational standard reached in 2021 via:

- Switch to cut-and-fill mining method
- Implementation of operating best practices
- Capital infrastructure and equipment upgrades
- Recruitment of key personnel

## Pre-expansion mechanization began in 2022:

- Addition of cone crusher increased throughput; 700tpd+ nameplate capacity
- Commissioning of new equipment, such as jumbos, scoops, crane, scissor lift platforms
- Improved operational standards
- Block model mining
- Grade control





# MOROCCO – DEVELOPING THE MINING SECTOR BEYOND PHOSPHATES



36.6M inhabitants



Arabic, Amazigh & French-speaking



710,850 km<sup>2</sup>

1914

First mining legislation

1920

First modern mines

1951

Revision of mining code

1951 - 1995

Mainly Moroccan miners: OCP, SOMIFER, SAMINE, SACEM, SMI, CTT & ONA (now Managem)

1995 - 1998

Privatization of 114 state-owned mining assets

2016

Revision of mining code

2022

45 ONHYM projects (incl. 16 base metals & 13 precious metals)



**Silver** - 1<sup>st</sup> producer in Africa, 15th worldwide  
2021 silver production [9.3 million oz]



**Phosphate** - 1<sup>st</sup> producer in Africa, 4th worldwide

**Barite** - 1<sup>st</sup> producer in Africa, 3rd worldwide

**Fluorite** - 2<sup>nd</sup> producer in Africa, 7th worldwide

**Cobalt** - 3<sup>rd</sup> producer in Africa, 11th worldwide



21% of Morocco's export value, 80% in volume [MINING SECTOR]

GDP

10% [ MINING SECTOR, 90% of which from phosphates ]



**Eighth Most-Attractive Mining Jurisdiction Globally**  
[Fraser Institute Annual Survey of Mining Companies, 2021]

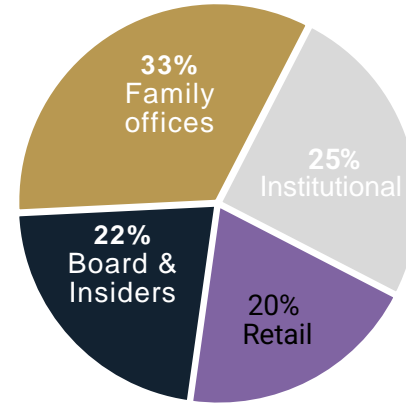
2016 Mining Code Zgounder

Royalty	3% of sales
Tax rate	20%
State free-carried interest	Nil
Foreign ownership permitted	Yes
Repatriation of profits	Yes
Mining permit (renewable)	10 years

Sources: CIA World Factbook, October 2021, Silver Institute's World Silver Survey 2022, and ONHYM's Mining Overview 2020

# STRONG BALANCE SHEET WITH SUPPORTIVE, LONG-TERM SHAREHOLDERS

## Our Shareholders



Exchanges – TSX: AYA | OTCQX: AYASF

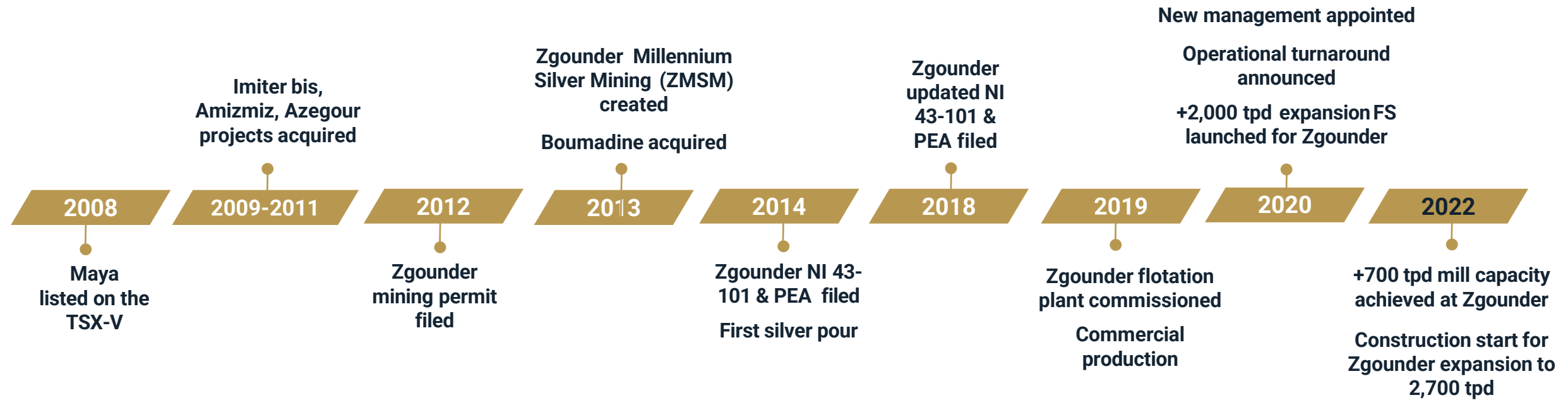
Shares – Basic*		105.0M
Shares – F.D.		116.3M
Share Price (Jan. 18, 2023)	C\$	\$8.43
Market Cap	C\$	\$885M
Cash* (Sept. 30, 2022)	US\$	\$58M
Debt (Sept. 30, 2022)	US\$	nil
30-day average volume	'000	0.3

\*Shares o/s and cash position expected to increase by 11.2M and C\$90M, respectively, from recent bought deal offering closing on January 25, 2023.





# AYA / ZGOUNDER TIMELINE



# ZGOUNDER – TOP SILVER INTERCEPTS GLOBALLY

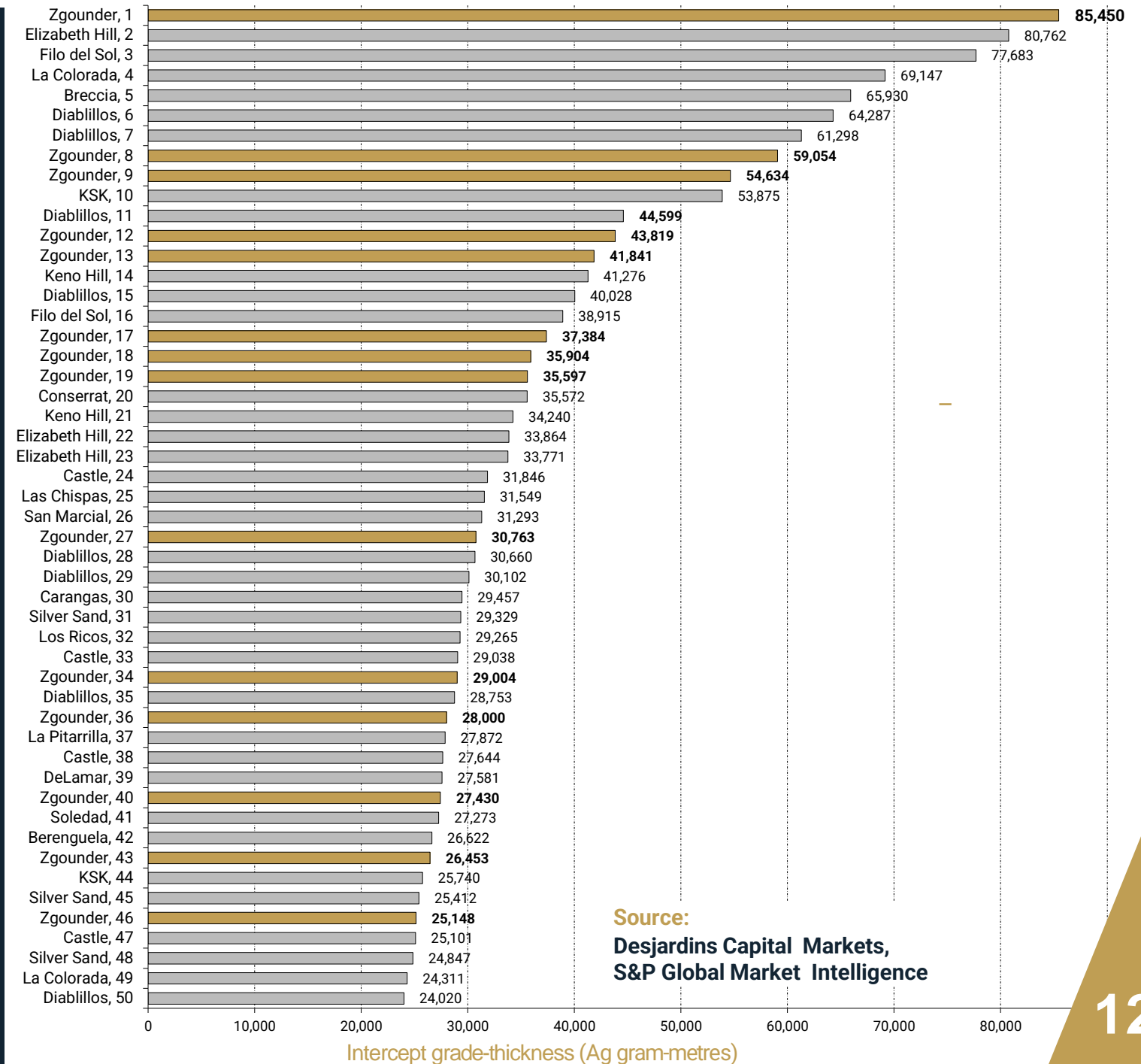
Zgounder reported 3 out of the top 10 and 14 out of the top 50 global silver intersections of 2020-2022 YTD<sup>1</sup>

- 21.6m @ 3,956 g/t Ag
- 14.4m @ 4,101 g/t Ag
- 14.4m @ 3,043 g/t Ag
- 6.5m @ 6,437 g/t Ag
- 4.0m @ 9,346 g/t Ag

The strength of the drill exploration results bodes well for adding additional high-grade oz to the current resource

<sup>1</sup> Refer to Aya Gold & Silver Press Releases (<https://ayagoldsilver.com/press-releases/>)

Top 50 global primary silver intercepts 2020 – 2022 YTD, ranked by Ag grade-thickness



Source:  
Desjardins Capital Markets,  
S&P Global Market Intelligence



# ZGOUNDER – TOP SILVER INTERCEPTS

## 2020-2022 YTD drill exploration program returned 42 of the top 50 Zgounder intercepts<sup>1</sup>

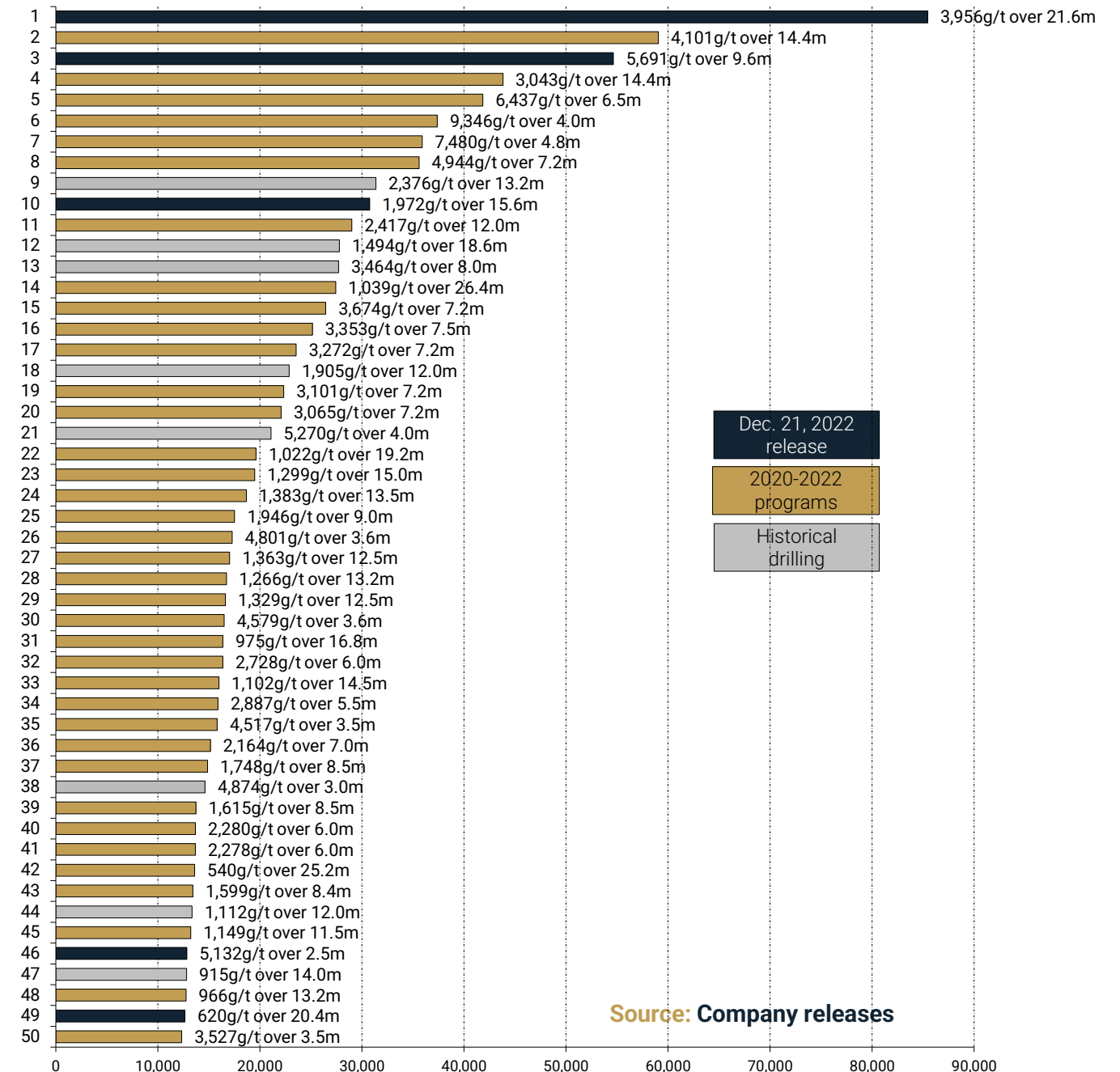
Of these 42 top Zgounder drill intercepts:

- **2022 YTD** results returned **18 including the top result**
- **2021** results yielded **22** including 4<sup>th</sup>, 5<sup>th</sup>, 8<sup>th</sup>, and 11<sup>th</sup> best results, proving up mineralization along strike to the east and at depth (below the current resource)
- **2020** results yielded **2** of Zgounder’s top 50 drilling results, including the 6<sup>th</sup> and 28<sup>th</sup> best results
- Top drilling results expanded mineralization both along the eastern strike extension and at depth

<sup>1</sup> Refer to the December 14, 2021, press release entitled “Aya Gold & Silver Grows Measured and Indicated Mineral Resources By 116% at Zgounder”

<sup>2</sup> Refer to the February 22, 2022, press release entitled “Aya Gold & Silver Announces Robust Expansion Feasibility Study for Zgounder”

Zgounder top 50 all-time drill intercepts, ranked by Ag grade-thickness<sup>1 2</sup>



Source: Company releases

# ZGOUNDER – 2022 MINERAL RESERVES

On a 100% basis. M&I resources shown inclusive of reserves. <sup>1 2</sup>	TONNES (K)	AG (G/T)	CONTENT (AG K OZ)
PROVEN RESERVES	2,100	288	28,748
PROBABLE RESERVES	5,490	239	42,128
<b>P&amp;P RESERVES</b>	<b>8,590</b>	257	70,876
MEASURED RESOURCES (INCL. RESERVES)	3,511	347	39,183
INDICATED RESOURCES (INCL. RESERVES)	6,254	283	56,874
<b>M&amp;I RESOURCES (INCL. RESERVES)</b>	<b>9,765</b>	306	96,057
INFERRED RESOURCES	196	367	6,400

The mineral reserves were estimated based on a Ag price of \$20/oz and a corresponding COG of 47 g/t for open-pit reserves, 85 g/t for underground reserves and 44 g/t for historical tailings.

## Maiden Silver Reserve

- The maiden reserve includes drilling carried out between **January and September 2021**
- Reserves include **29%** open-pit and **71%** underground ore
- **Well-positioned to extend the 11-year LOM**, given the 71% resource-to-reserve conversion ratio and that the deposit is open at depth to the granite

<sup>1</sup> Refer to the December 14, 2021, press release entitled "Aya Gold & Silver Grows Measured and Indicated Mineral Resources By 116% at Zgounder"

<sup>2</sup> Refer to the February 22, 2022, press release entitled "Aya Gold & Silver Announces Robust Expansion Feasibility Study for Zgounder"



# ZGOUNDER – EXPANSION FEASIBILITY STUDY HIGHLIGHTS



**71Moz**  
P&P reserves



**\$373M**  
Post-tax NAV (5%;\$22/oz)



**\$9.58**  
AISC (LOM)



**\$139.4M**  
Growth capex



**11-Year**  
LOM



**48%**  
Post-tax IRR (\$22/oz)

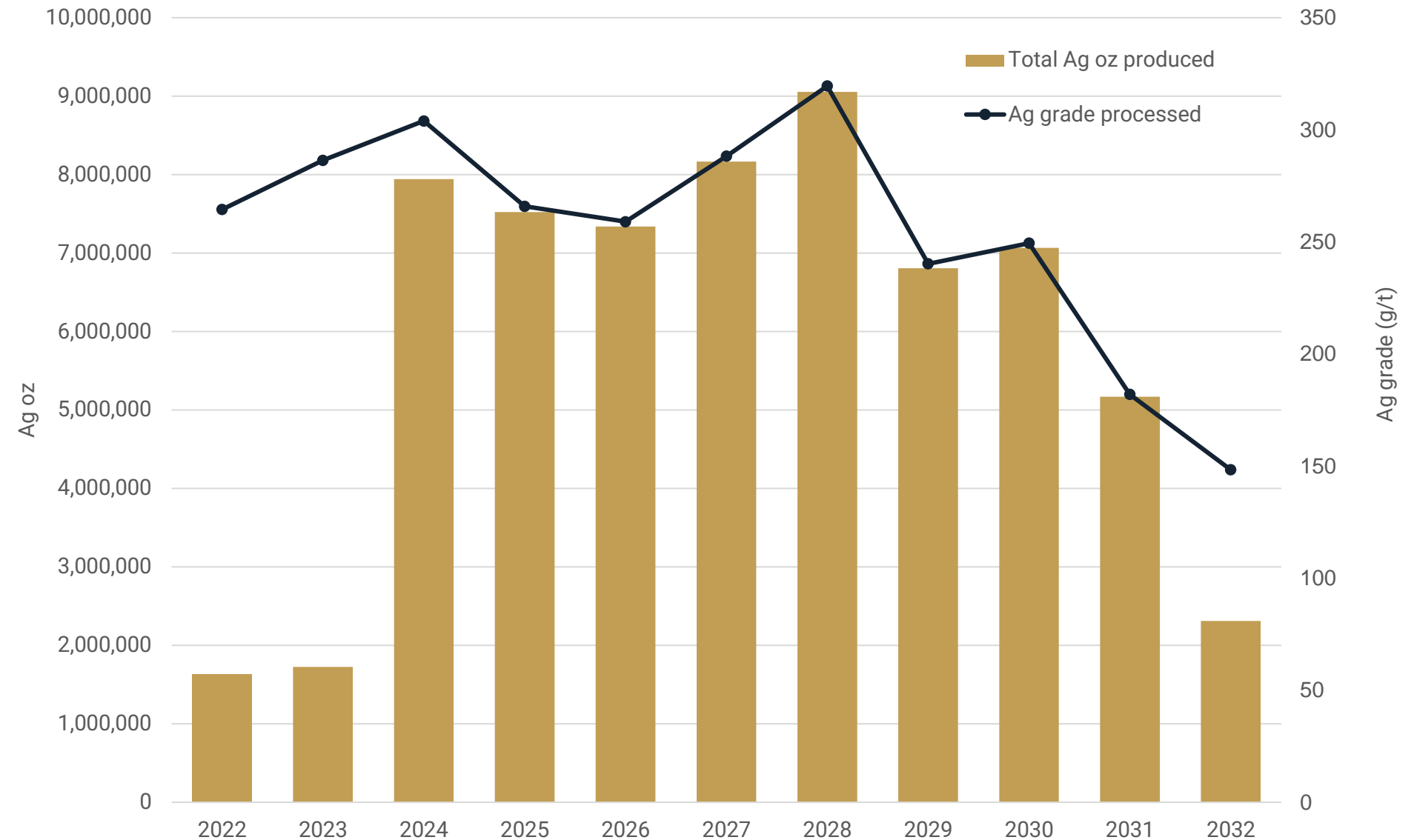


**1.7-Year**  
Payback (post-expansion)



**ESG**  
Plan enhancements

## LOM Production Profile





# ZGOUNDER MINE | Open-pit production

Combined open-pit and UG production to average 6.8M oz silver per year, when in full production

Expanded operations will combine:

- 2,000 tpd flotation-CIP plant and 700 tpd flotation-cyanidation plant
- Open-pit & UG operations

EXISTING TAILINGS  
STORAGE FACILITY

NEW PROCESS PLANT

OPEN PIT

HISTORICAL TAILINGS  
STORAGE FACILITY

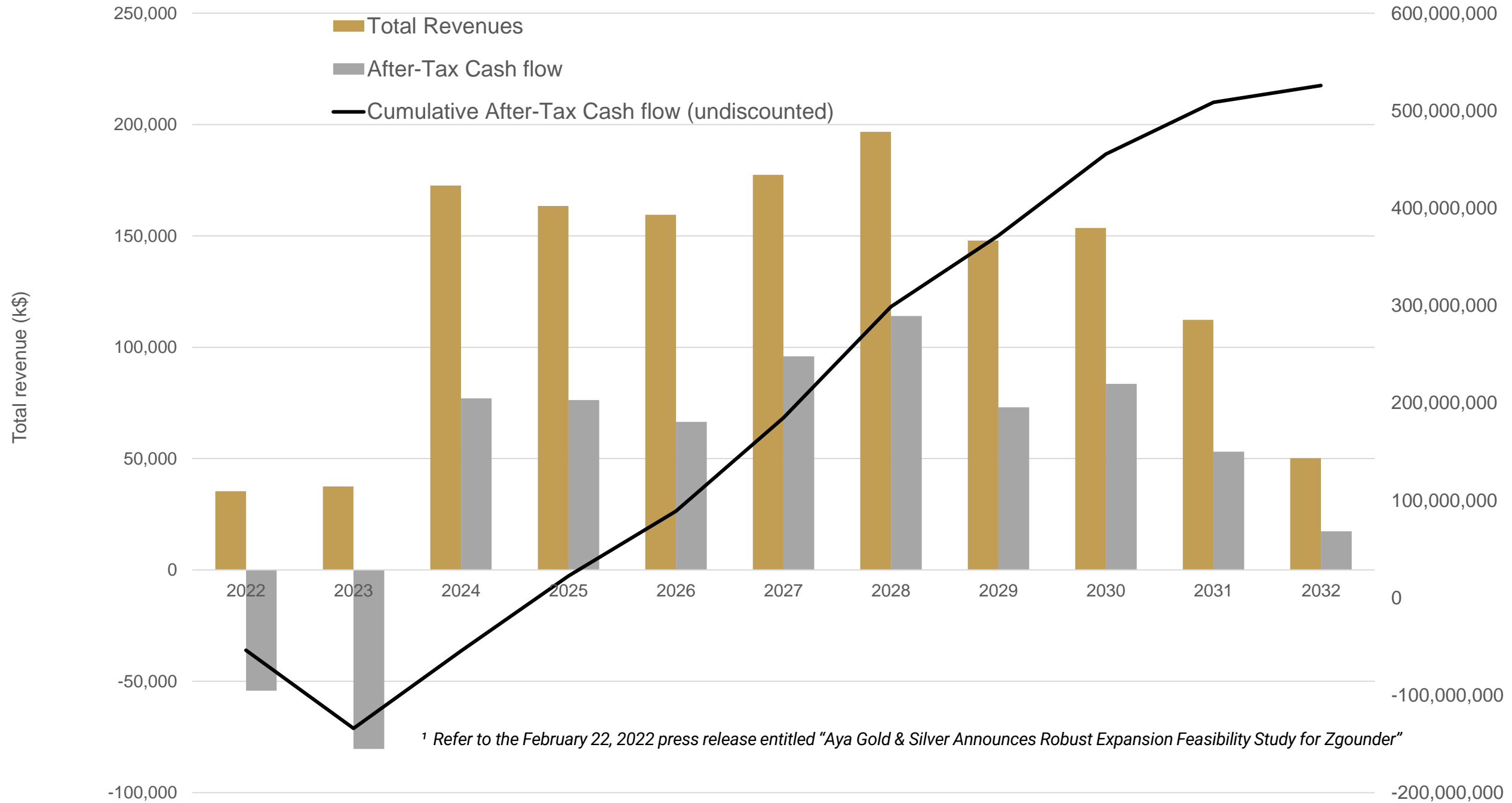


# ZGOUNDER | New Process Plant

2,700 tpd combined processing capacity



# ZGOUNDER – STRONG POST-EXPANSION CASH FLOW GENERATION



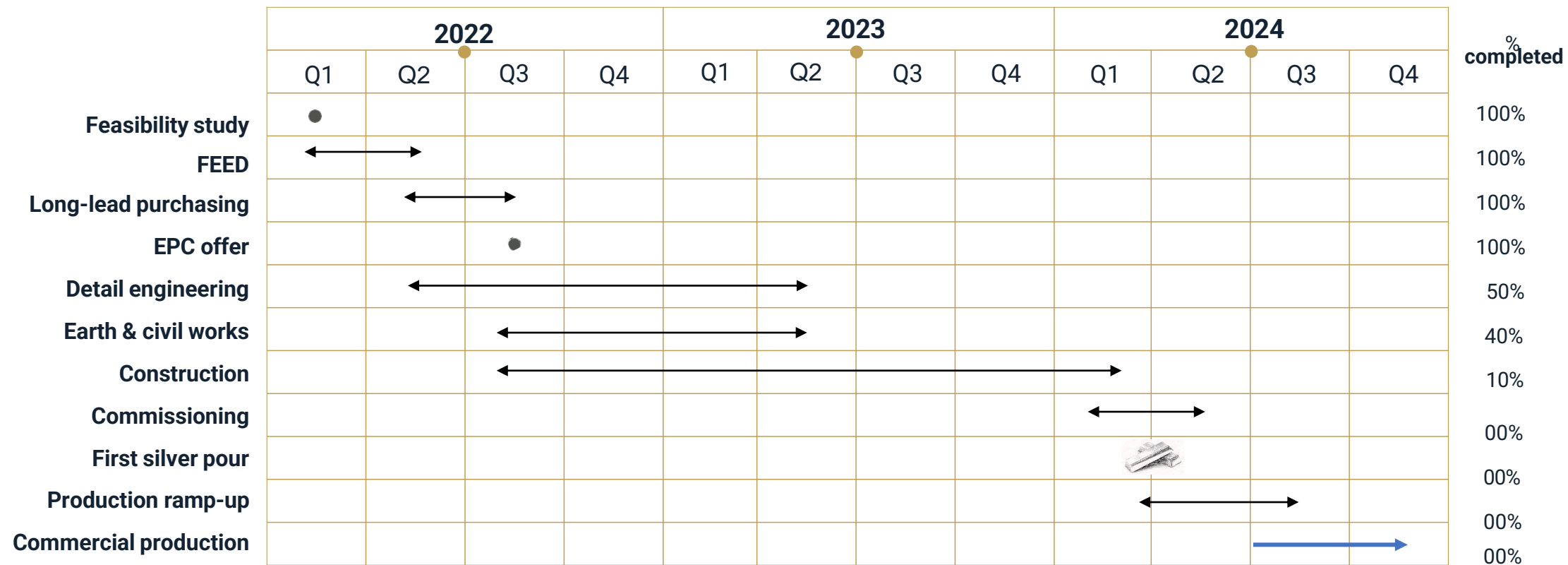


# ZGOUNDER – STRONG POST-EXPANSION ECONOMICS

	\$16 oz Ag	\$19 oz Ag	<b>BASE CASE \$22 oz Ag</b>	SPOT (\$23.5 oz Ag)	\$28 oz Ag	\$36 oz Ag
<b>AFTER-TAX 5% NPV (\$M)</b>	\$132M	\$253M	<b>\$373M</b>	\$433M	\$612M	\$927M
<b>AFTER-TAX IRR (%)</b>	21%	34%	<b>48%</b>	54%	75%	117%
<b>UNDISCOUNTED LOM FREE CASH FLOW (\$M)</b>	\$213M	\$368M	<b>\$522M</b>	\$599M	\$828M	\$1,232M
<b>PAYBACK PERIOD (YEARS)</b>	3.7	2.5	<b>1.7</b>	1.5	1.0	0.6

<sup>1</sup> Refer to the February 22, 2022 press release entitled “Aya Gold & Silver Announces Robust Expansion Feasibility Study for Zgounder”

# ZGOUNDER – EXPANSION MILESTONES ON TRACK





# SUSTAINABILITY FOCUS TO LOWER ENVIRONMENTAL IMPACT

## Reducing carbon emissions intensity

- Target of **ZERO Scope 2 Emissions** by 2024
  - Interconnection agreement with ONEE, Morocco's state-owned utility
  - Plan to sign a renewable power purchase agreement
- Evaluate a clean energy fleet-replacement strategy for end-of-service trucks

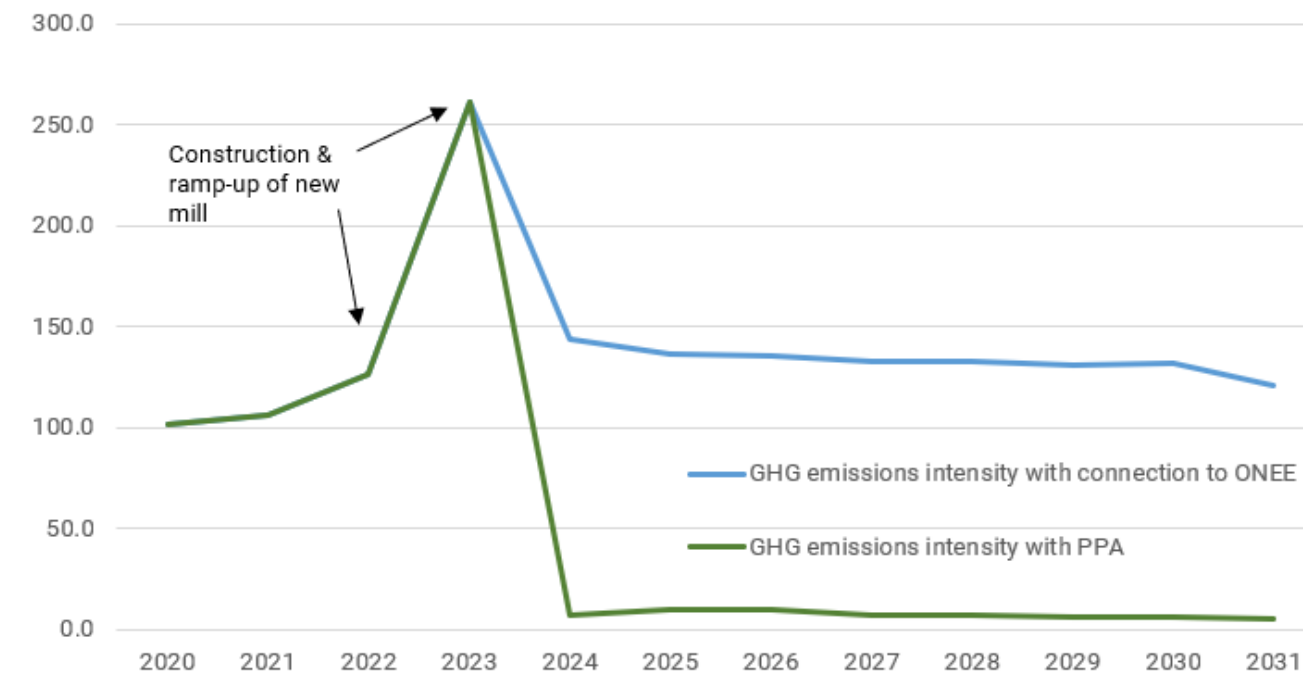
## Lowering water consumption

- Increase water recycling
  - Use of recycled water from TSFs in the cyanidation and flotation circuits
  - Reuse of mine dewatering water in the process plant
  - Installation of a facility that collects wastewater from the base camp for reuse in watering plants and paths
- Increase on-site storage – 60,000m<sup>3</sup> water retention basin to feed existing and new plants
- Use alternative sources - Produce domestic drinking water from 10 SOURCE hydropanels installed in H2-2022

## Safe tailings management

- Implementation of *Global Industry Standard on Tailings Management*
- Construction of new TSF for expanded plant - four existing TSFs will be environmentally rehabilitated

GHG Emissions Intensity of Zgouder Silver Mine  
(Tonnes Co2 Equivalent / Kt Processed Ore)







- 1 AYA
- 2 ZGOUNDER SILVER MINE
- 3 **EXPLORATION**
- 4 CATALYSTS



# AYA – 82,500-METRE DRILL EXPLORATION PROGRAM IN 2022

## GROWTH PIPELINE INCLUDES FOUR POTENTIAL PROJECTS

### ZGOUNDER SILVER MINE

- 30,000m 2022 budget, of which 7,500m regionally
- Add near-mine oz and identify Zgounder Regional oz

### BOUMADINE (Development)

- 2022 budget expanded twice to 17,500m
- Drill airborne survey targets

### IMITER BIS (Exploration)

- 10,000m 2022 budget
- Test drill priority targets

### TIJIRIT - MAURITANIA

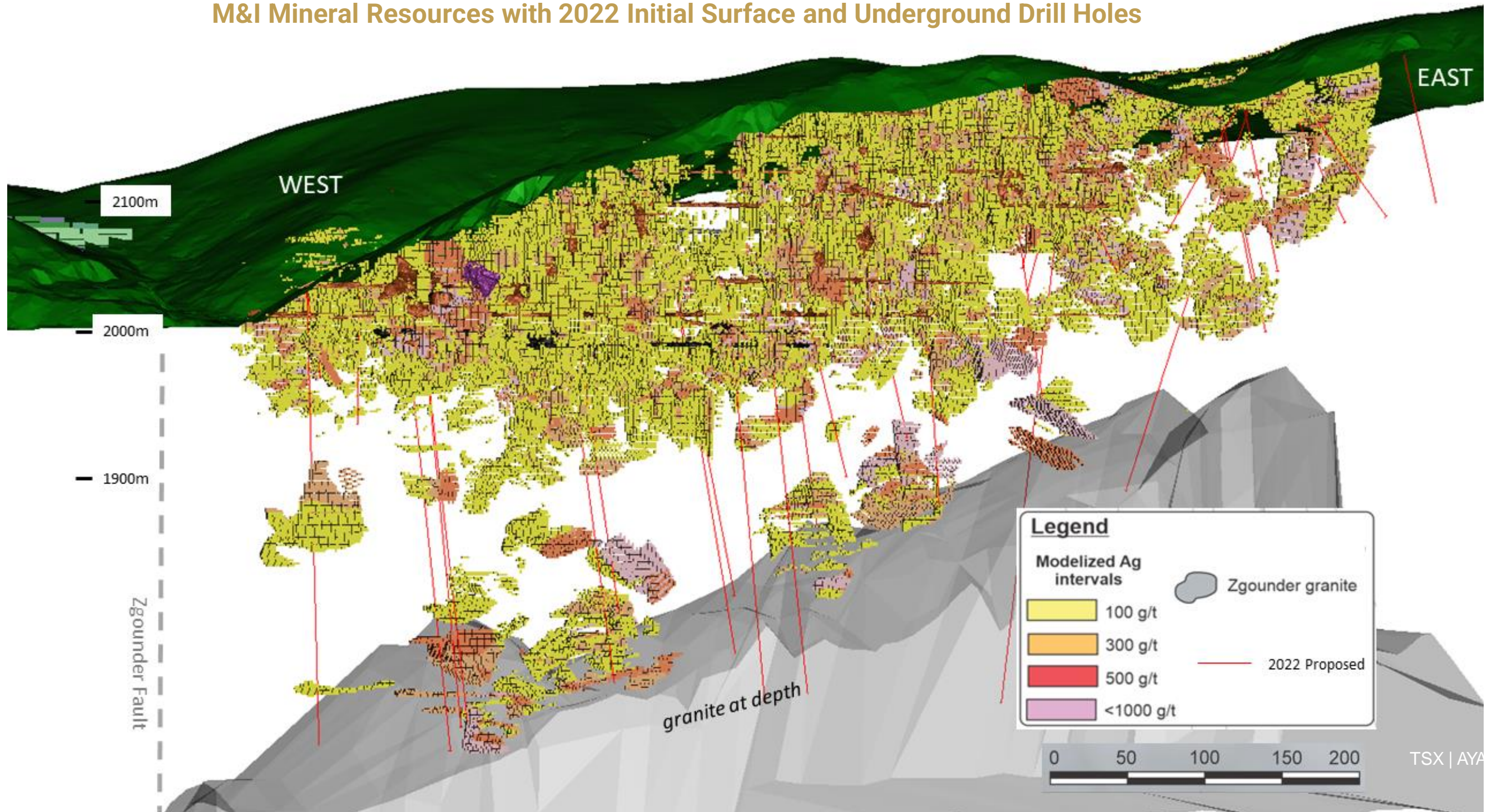
- 25,000m 2022 budget
- Convert resources into reserves





# ZGOUNDER – 22,500M NEAR-MINE DRILL PROGRAM IN 2022

## M&I Mineral Resources with 2022 Initial Surface and Underground Drill Holes





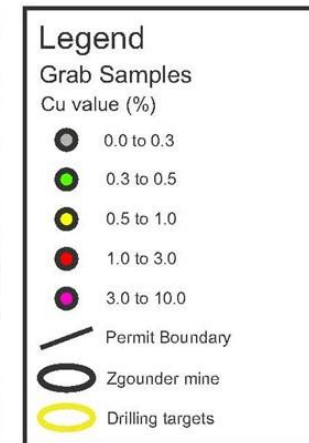
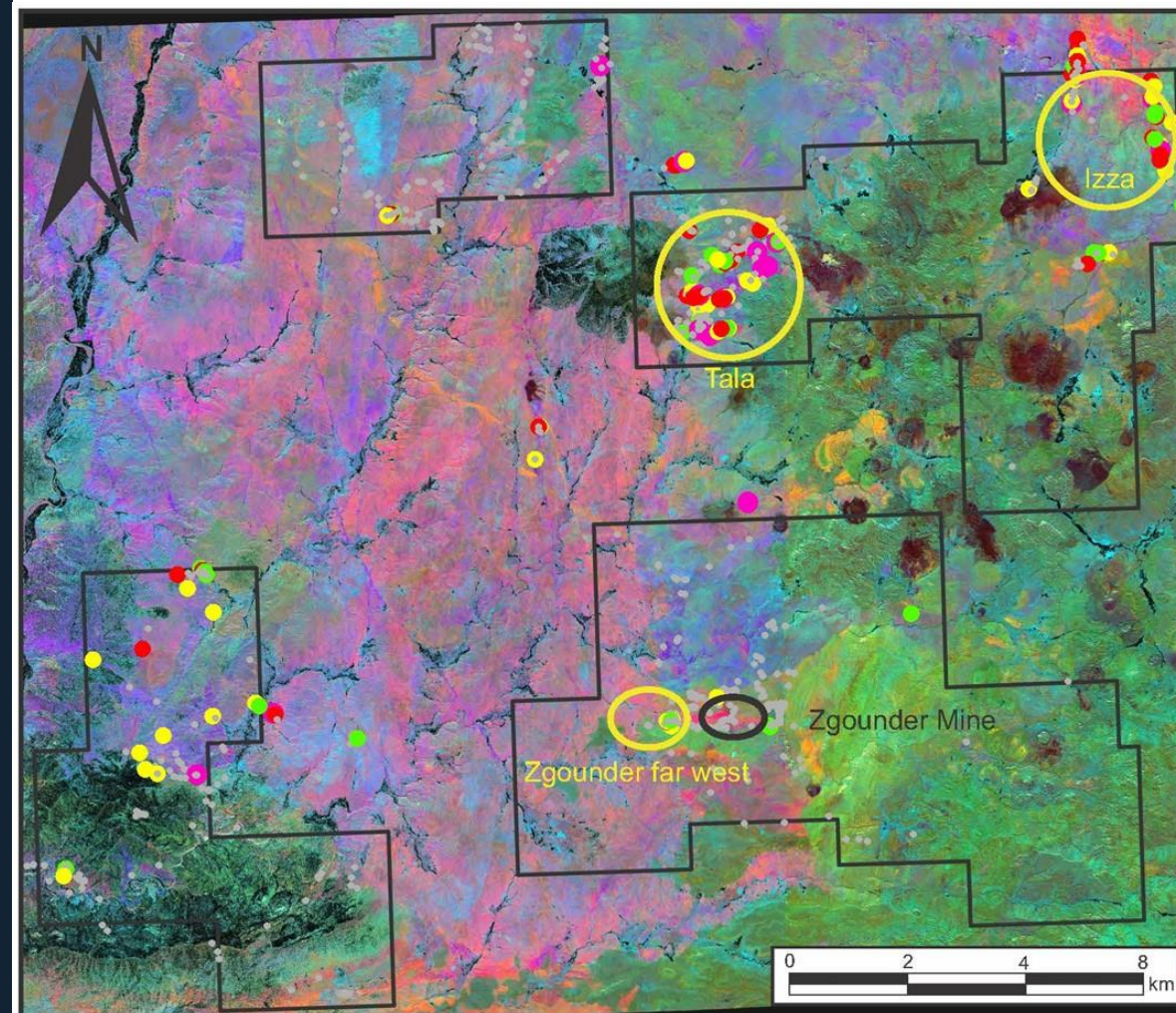
# ZGOUNDER REGIONAL EXPLORATION PROGRAM (Ag – Cu – Au)

## Comprehensive geophysics and mapping programs

- 748 grab samples taken to date across the exploration permits
- Prospective package for epithermal Ag, Au or Cu-Au vein mineralization
- Receipt of final data from airborne geophysics survey (magnetic, VTEM and radiometric)
- Identification of five target areas with Ag, Cu and Au showings
- Results from stream sediment campaign (954 samples) expected shortly

## Inaugural drill program began in Q4-2022

- **7,500m of RC and DDH** will be completed before year-end 2022
- **Focus on defining more drill targets** from integration of airborne geophysics results, sediment geochemistry survey and ongoing mapping and prospecting



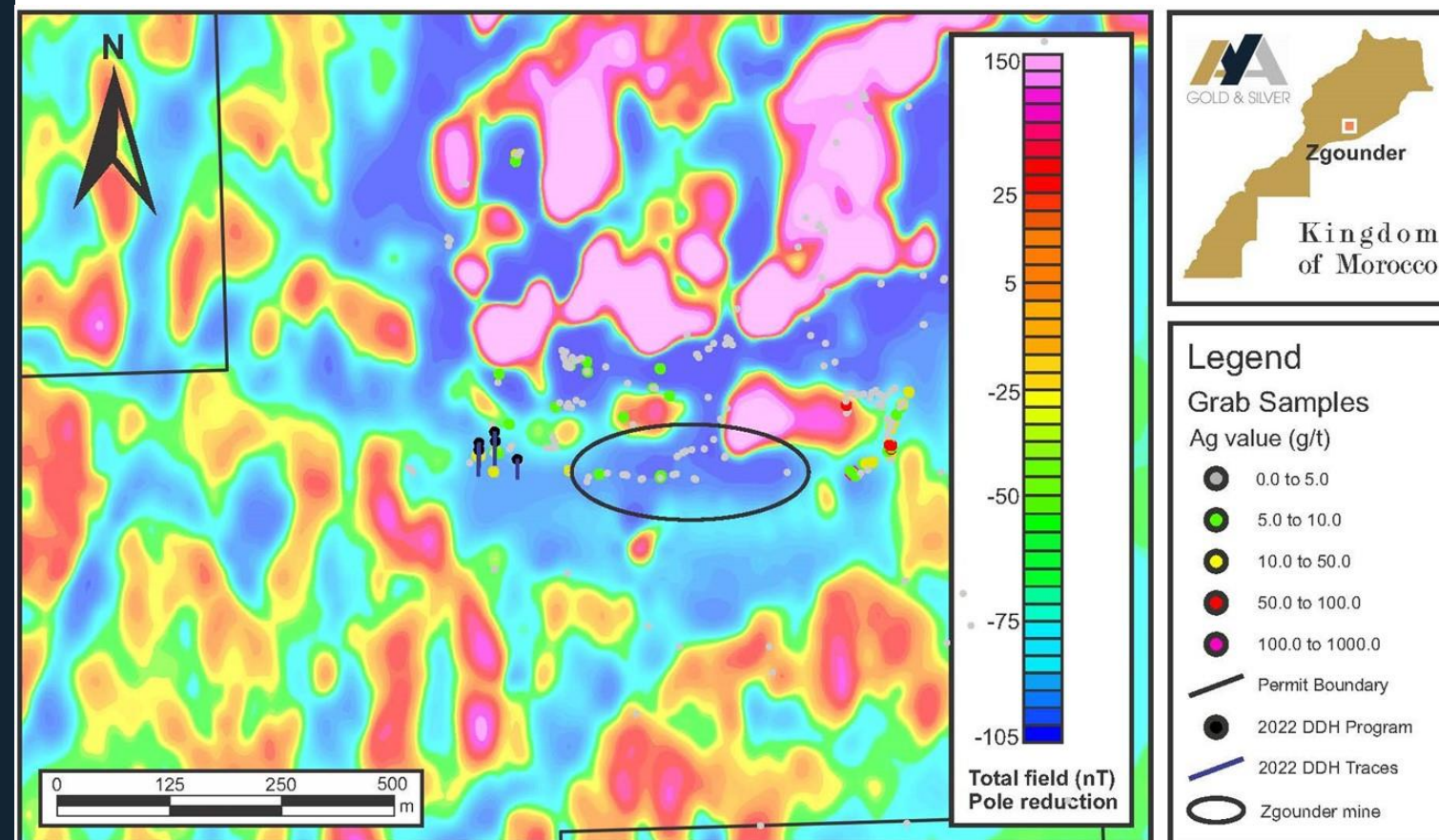
<sup>1</sup> Refer to Aya Gold & Silver's November 1, 2022 press release titled "Aya Gold & Silver Provides Exploration Update Including Drilling On Zgounder Regional Properties and Campaign Extension at Boumadine"



# ZGOUNDER – REGIONAL DRILL TARGETS (Au – Ag – Cu)

## Drill program will test five different targets

- “Zgounder Far West” is the first test area
  - The “Far West” returned anomalous values for **Ag** and **Cu** from grab samples (see right)
  - Area exhibits **same** sedimentary units, **similar** alteration and **same** lithological contact with rhyolite as Zgounder
  - Three drills are currently turning on the “Far West”

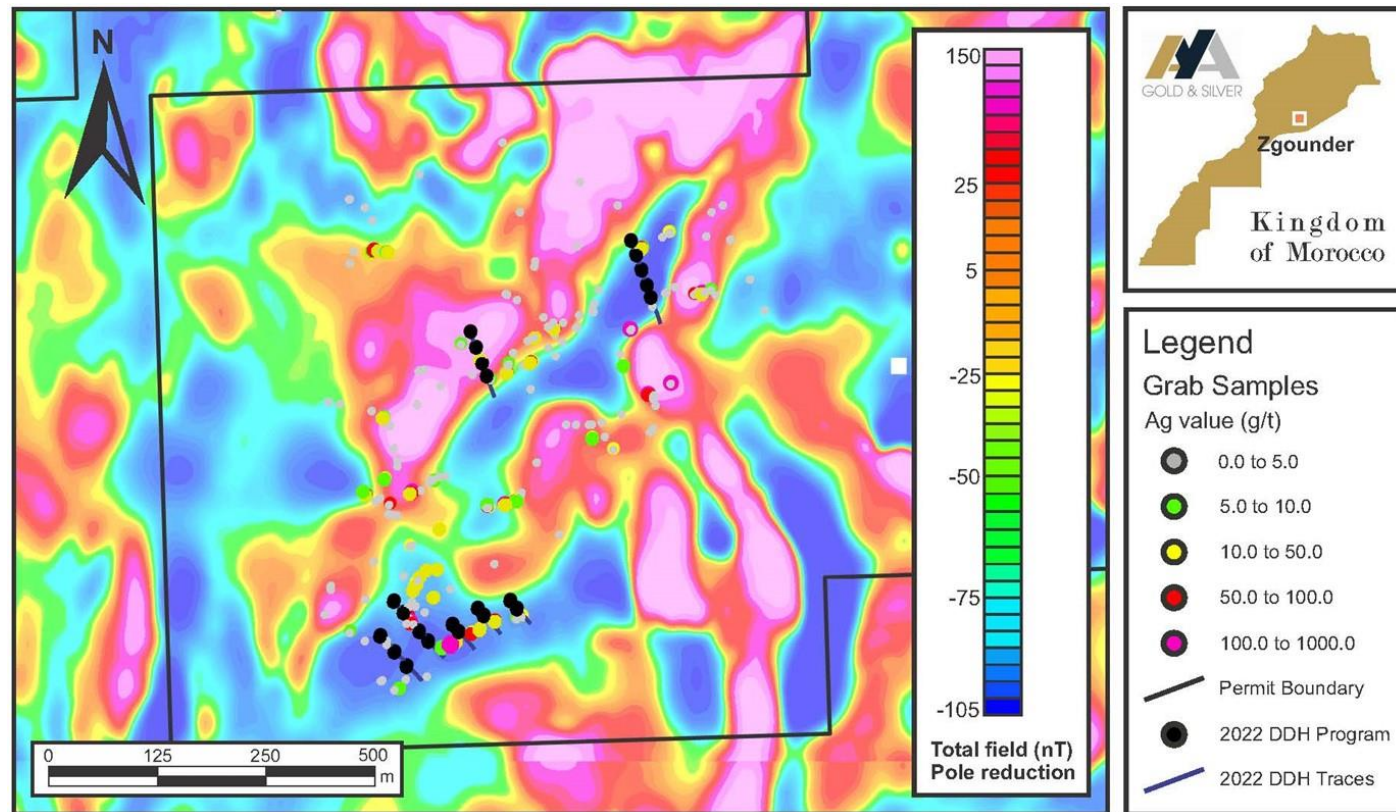


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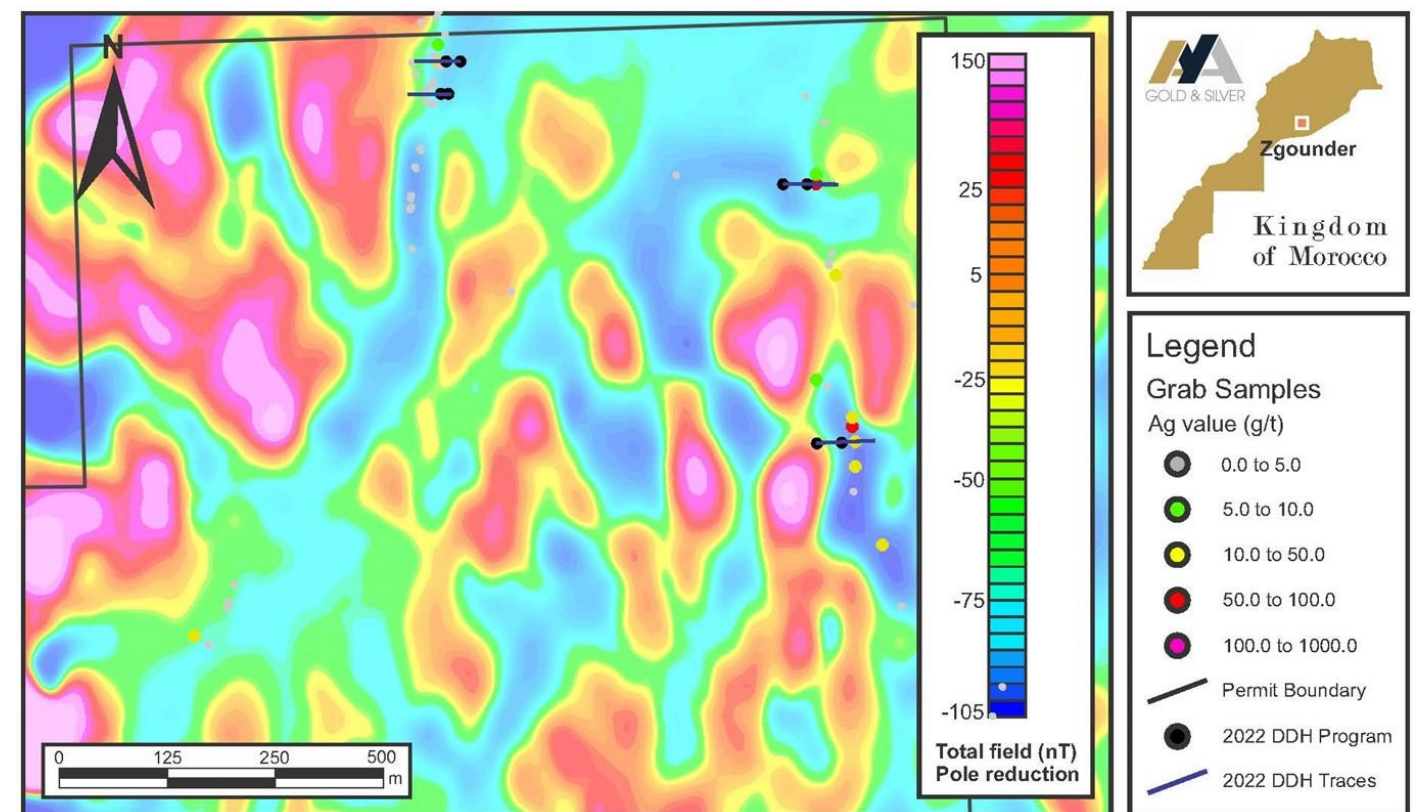


# ZGOUNDER REGIONAL - TALA AND IZZA AREA GRAB SAMPLES (Ag – Cu – Au)

- The Tala and Izza areas returned high-grade samples in Ag, Cu and Au associated with a very strong spectral alteration signature
- 2023 priority drill areas



Tala Area with Magnetics (Gradient RTP) and Ag Grab Samples



Izza Area with Magnetics (Gradient RTP) and Ag Grab Samples

<sup>1</sup> Refer to Aya Gold & Silver's November 1, 2022 press release titled "Aya Gold & Silver Provides Exploration Update Including Drilling On Zgounder Regional Properties and Campaign Extension at Boumadine"



# BOUMADINE – 2022 DRILL EXPLORATION PROGRAM

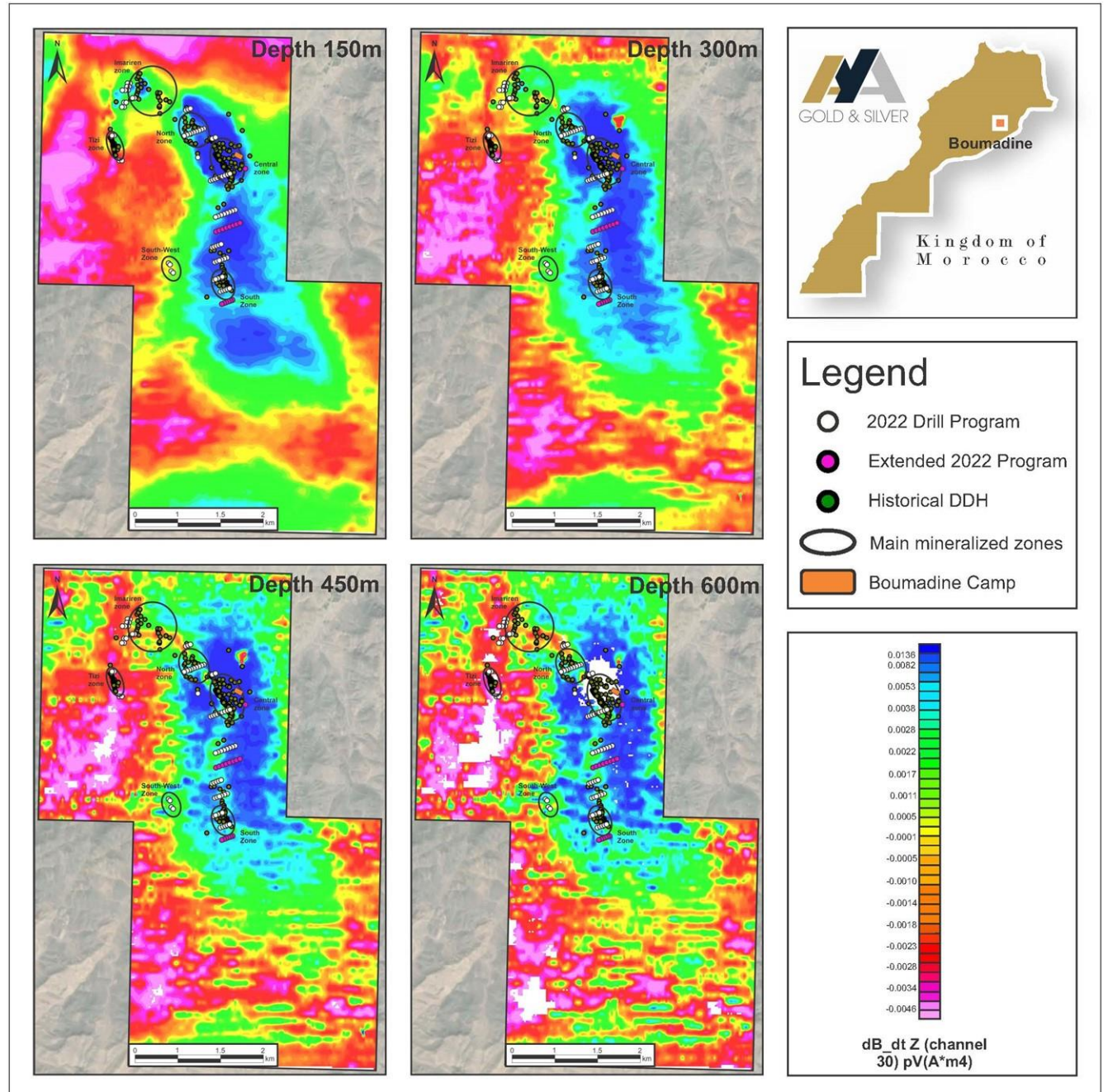
## RC and DDH Drill Program Ongoing

- 2022 drill program expanded twice to 17,500m
  - Follow up promising results from initial program on the Imariren, Tizi and South-West Zones
  - Extend mineralization to the south and at depth of the Central area
  - Conduct step-out holes at depth and along the main trend
- Data from airborne geophysical survey (see right) indicates
  - Conductive anomaly down to at least 600m below surface along the main trend, suggesting at-depth extension
  - New conductive anomalies identified south and west of main trend
- Additional geological targets will be defined from new geophysical data and ongoing stream sediment geochemistry program

## Historical Results

- Historical underground production: **261,485t @ 3.8% Zn, 1.5% Pb, 200 g/t Ag & 3.50 g/t Au**

<sup>1</sup> Refer to Aya Gold & Silver's November 1, 2022 press release titled "Aya Gold & Silver Provides Exploration Update Including Drilling On Zgounder Regional Properties and Campaign Extension at Boumadine"





# BOUMADINE – DRILL PROGRAM

(Au-Ag-Pb-Cu-Zn)

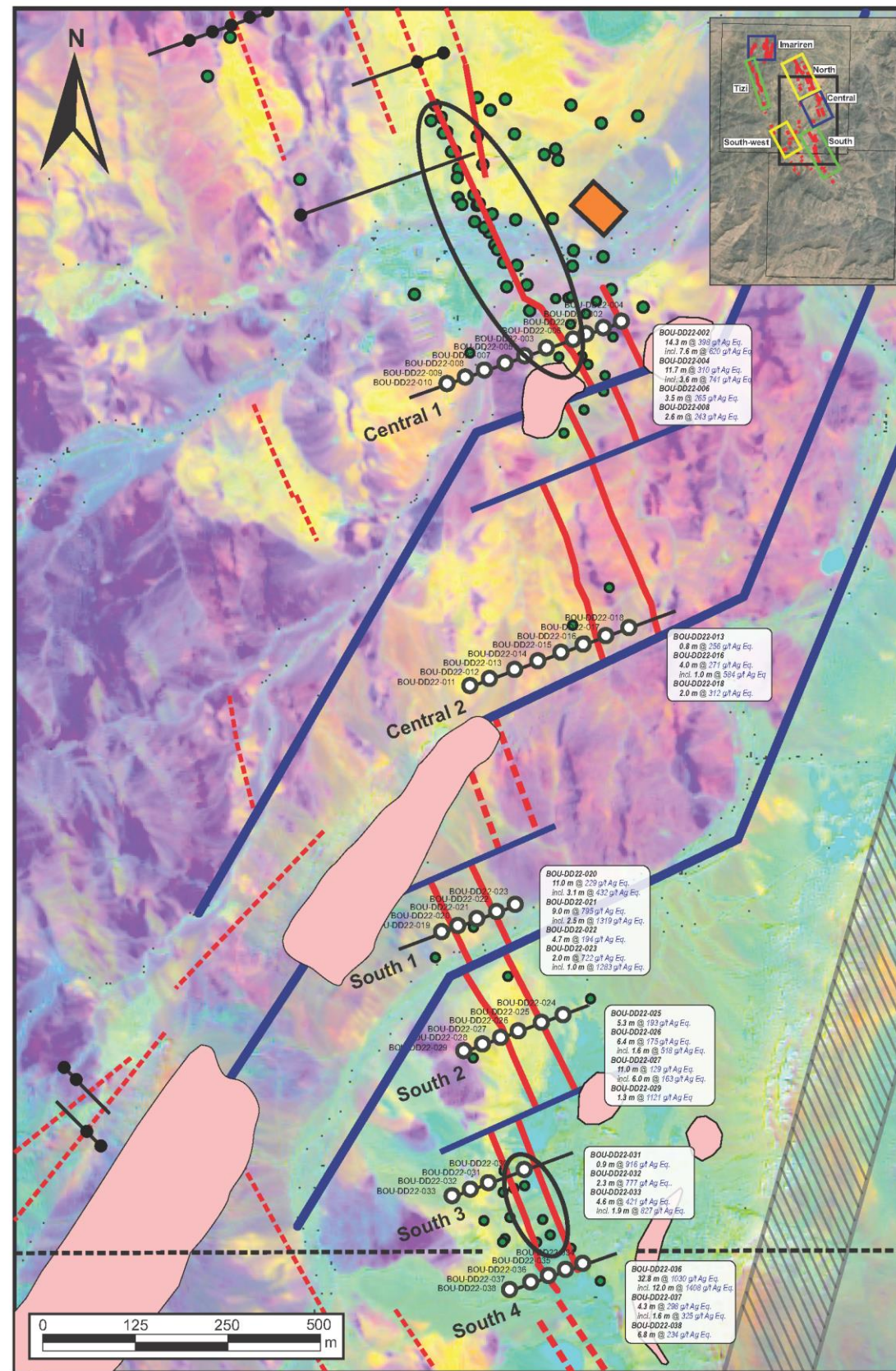
## Results From 2022 Drill Program

- Identified **2.7 km mineralized trend** and extension of the Central and South Zones after completing **11,772m** of drilling on 6 different sections.
- Open at both ends along strike and at depth within **6 km hydrothermal system**

## Drill Exploration Results

- 1,030 g/t AgEq over 32.8m** including 1,408 g/t AgEq over 12m (4.64 g/t Au, 236 g/t Ag, 11.0% Zn, 4.3% Pb and 0.04% Cu)
- 795 g/t AgEq over 9.0m** (5.37 g/t Au, 67 g/t Ag, 2.9% Zn, 0.9% Pb and 0.3% Cu)
- 398 g/t AgEq over 14.3m** including 620 g/t AgEq over 7.60m (3.82 g/t Au, 126 g/t Ag, 1.6% Zn, 0.8% Pb and 0.2% Cu)
- 777 g/t AgEq over 2.3m** (3.81 g/t Au, 158 g/t Ag, 2.5% Zn, 0.1% Pb and 0.9% Cu)
- 310 g/t AgEq over 11.7m** (1.08 g/t Au, 41 g/t Ag, 2.7% Zn, 0.4% Pb and 0.1% Cu) including 392 g/t AgEq over 7.2m (1.99 g/t Au, 100 g/t Ag, 1.6% Zn, 0.4% Pb and 0.1% Cu)

<sup>1</sup> Refer to Aya Gold & Silver's September 8, 2022 press release titled "Aya Gold & Silver Confirms High-Grade Continuity Over 2.7 Kilometers at Boumadine"



### Legend

- 2022 Drilled DDH
- 2022 Planned DDH
- Historical DDH
- 2022 DDH Traces
- ▨ Major Deformation Zone
- Major Faults
- Mineralized Structures
- - - Interpreted Mineralized Structures
- ☁ Rhyolite, Dykes & Domes
- - - Permit Boundary
- Boumadine Camp
- Historic Mining Works

### Background Legend

WorldView-3 band ratios

- Ferric alteration
- Clay alteration
- Chlorite-Carbonate alteration

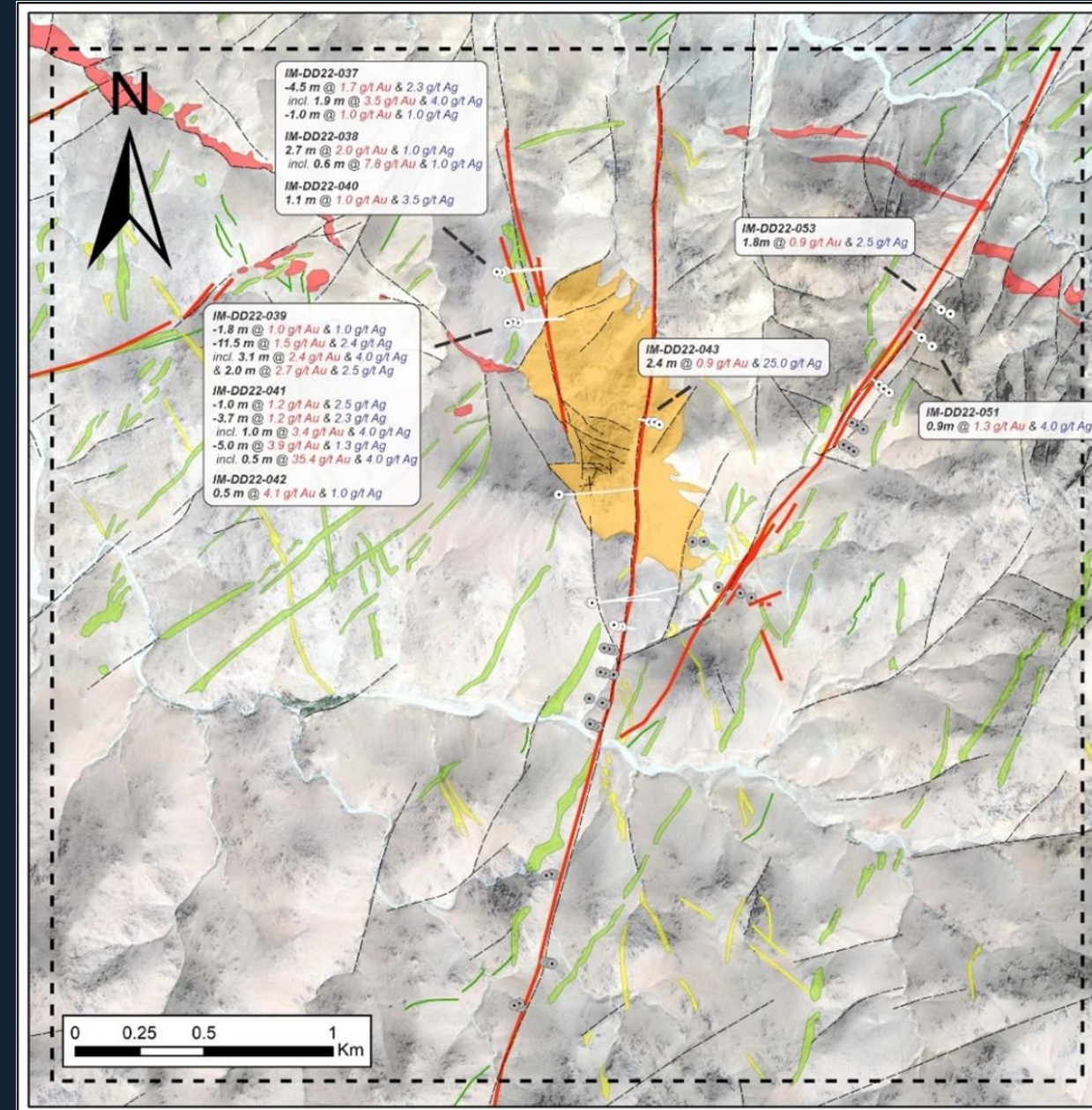


# IMITER BIS – DRILL EXPLORATION PROGRAM (Au, Ag, Cu, Pb, Zn)

**4 km potential at-surface polymetallic structure** on Morocco's sub-Atlas range, 5 km south of the world-class Imiter Silver Mine

**10,000 DDH exploration program completed in 2022**

- Low-sulphidation epithermal system
- 4,754m of DDH (phase I) completed in 24 DDH
- Targets tested on Northwest, Daoud, Northeast-Extension and Dilatation Zones
  - Discovery holes within the Middle Zone, intercepting **2.2m @ 1.81 g/t Au and 2.3m @1.10 g/t Au**
  - North Zone returned encouraging results including **5.0m@ 3.94 g/t Au and 11.5m @1.46 g/t Au**
- Assay results received in Q3-2022, together with remaining data from the geophysical airborne survey
- Evaluating further drilling with objective of finding “boiling zone” that could host higher-grade mineralization



**Legend**

- 2021 DDH Campaign
- 2022 DDH Campaign
- 2022 Drillhole Trace
- Imiter Bis Property Limits

**Structures**

- Faults
- Mineralized Structures

**CGG Interpretation**

- Felsic Intrusive
- Mafic intrusive
- Rhyolitic Dome Complex
- Argyllic Alteration Zones

Coordinate system : Lambert Maroc  
Scale : 1 : 20 000

<sup>1</sup> Refer to Aya Gold & Silver's November 1, 2022, press release titled "Aya Gold & Silver Provides Exploration Update Including Drilling On Zgounder Regional Properties and Campaign Extension at Boumadine"  
<sup>2</sup> Refer to Aya Gold & Silver's May 24, 2022, press release titled "Aya Gold & Silver Completes Airborne Geophysics Survey and Launches Drill Exploration Program at Boumadine"  
<sup>3</sup> Refer to Aya Gold & Silver's October 28, 2021, press release titled "Aya Gold & Silver Completes Detailed Ground MAG Survey, Launches Drill Program at Imiter bis; Prepares VTEM™ Survey for Three Moroccan Properties"  
<sup>4</sup> Refer to Aya Gold & Silver's August 19, 2021, press release titled "Aya Gold & Silver: Initial Fieldwork Program Identifies Five Priority Drill Targets and 4-km Potential Strike at Imiter bis"





- 1 AYA
- 2 ZGOUNDER SILVER MINE
- 3 EXPLORATION
- 4 CATALYSTS



# 2023 CATALYSTS

- ❑ Instill strong ESG culture throughout the organization
- ❑ Continue operational optimization – focus on H&S and cost efficiencies
- ❑ Deliver 2023 milestones for 2,700 tpd Zgounder expansion
  - Q1-2023 – Start of construction of new TSF
  - Q2-2023 - Complete detail engineering, earth and civil works; and beginning of OP operations
  - Q3-2023 - Delivery of ball mill on site; and completion of new water storage basin
- ❑ Continue exploration drilling on Zgounder and Zgounder Regional to increase resources
- ❑ Complete drill exploration programs on priority regional properties
  - Exploration drilling on Boumadine and Imiter bis
  - Q1-2023 - Complete 25,000m drill program on Tijirit (Mauritania)
- ❑ Achieve 2023 silver production and cost guidance







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