



**BUILDING THE LARGEST PURE-PLAY
SILVER PRODUCER GLOBALLY**

TSX: AYA; OTCQX: AYASF

FORWARD-LOOKING STATEMENT

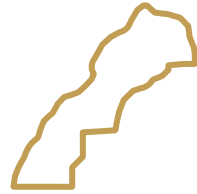
The Zgounder Expansion Feasibility Study (“FS”) is based on a technical report entitled “NI43-101 TECHNICAL REPORT – FEASIBILITY STUDY ZGOUNDER EXPANSION PROJECT”, originally dated March 31, 2022, and amended on June 16, 2022 with an effective date of December 13, 2021 (the “Zgounder Report”) which was 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 David Lalonde, B.Sc, Aya’s Head of Exploration and a QP as defined under NI 43-101. Mineral Resources are reported exclusive of Mineral Reserves and as such the Mineral Resources do not have demonstrated economic viability. Numbers may not add or multiply accurately due to rounding. Inferred Mineral Resources 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 therefore no certainty that the conclusions of the initial exploration drilling results will be realized. Additionally, where the Company discusses exploration/expansion potential, any potential quantity and grade is conceptual in nature and there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the target being delineated as a Mineral Resource. Varying cut-off grades have been used depending on the mine, methods of extraction and type of ore contained in the reserves. Mineral resource metal grades and material densities have been estimated using industry-standard methods appropriate for each mineral project with support of various commercially available mining software packages. Additional details regarding Mineral Reserve and Mineral Resource estimation, classification, reporting parameters, key assumptions and associated risks for each of the Company’s mineral properties are provided in the respective NI 43-101 Technical Reports which are available at www.sedar.com and the Company’s website at www.ayagoldsilver.com.

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 “expected”, “anticipated”, “growth”, “demonstrate”, “high-potential”, “developing”, “lower”, “prospective”, “adding”, “continuous”, “will”, “timeline”, “favorable”, “opportunities”, “backstopped”, “expand”, “extend”, “expected”, “continue”, “potential”, “deliver”, “complete”, “achieve”, “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 Q4 MD&A, and other filings made with Canadian securities regulatory authorities and available at 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 – AFRICA'S DOMINANT SILVER PRODUCER



Morocco-focused

Producing, developing and exploring in an underexplored, premier mining-friendly jurisdiction



Significant growth profile

Expanding Zgounder Silver Mine to an intermediate producer (8M oz) by 2024



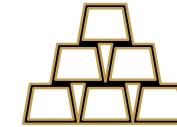
Upside optionality

Large mineral resource base and aggressive exploration program lay pathway for future potential growth



Climate change leadership

Clear, near-term decarbonization plan, supported by expanded disclosure



Financial and management strength

Strong management team and balance sheet, fully funded expansion, and generating free cash flow

AYA - PROVEN MANAGEMENT TEAM



Benoit La Salle, FCPA, MBA
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 over 15 years of legal experience, mainly focused on 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
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 - INVESTED BOARD OF DIRECTORS



Benoit La Salle, FCPA, MBA
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'Etudes Politiques (Paris), and a Master of Humanities from Sorbonne University.



Marc Nolet de Brauwere
Director

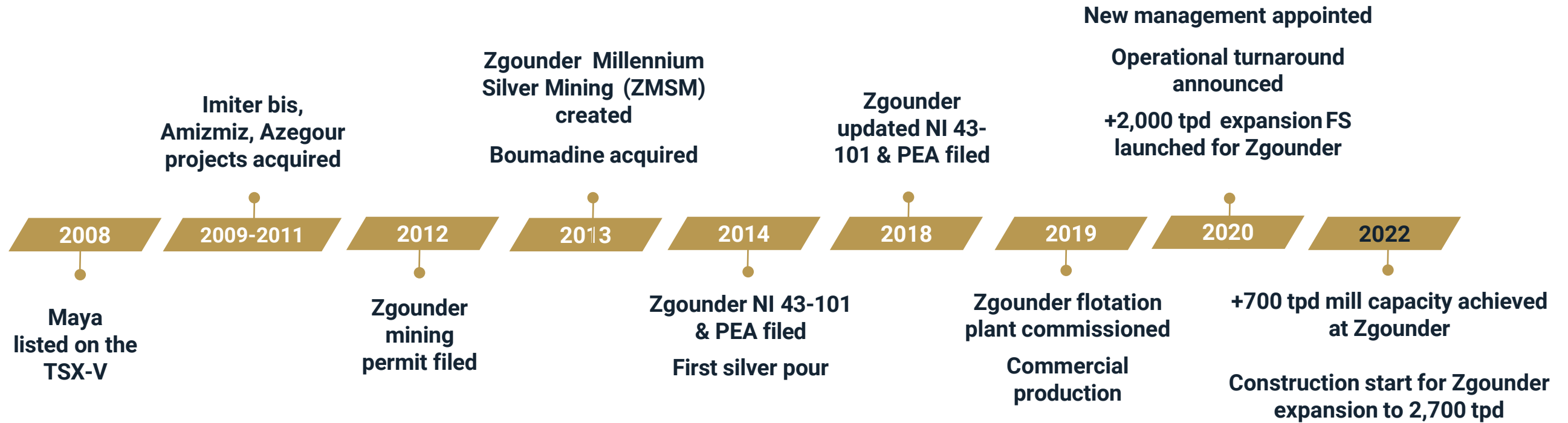
Marc is a mining engineer with over 35 years of industrial experience gained across the mining, management consulting and healthcare sectors. He holds master degrees in mining civil engineering and industrial management. Since 1997, Mr. Nolet de Brauwere serves as president of PhysiOL SA.



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.

AYA - 15-YEAR TIMELINE



MOROCCO – TOP MINING JURISDICTION



36.6M inhabitants



Arabic, Amazigh & French-speaking



710,850 km²

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 - 1st producer in Africa, 15th worldwide
2021 silver production [9.3 million oz]



Phosphate - 1st producer in Africa, 4th worldwide
Barite - 1st producer in Africa, 3rd worldwide
Fluorite - 2nd producer in Africa, 7th worldwide
Cobalt - 3rd 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]



#2 Policy Perception Global Index
#8 Investment Attractiveness Global Index
[Fraser Institute Annual Survey of Mining Companies, 2021]

2016 Baseline Mining Code Zgounder

Royalty	3% of sales
Tax rate*	25%
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
* 2023

ZGOUNDER SILVER MINE – CORNERSTONE OF AYA'S GROWTH STORY

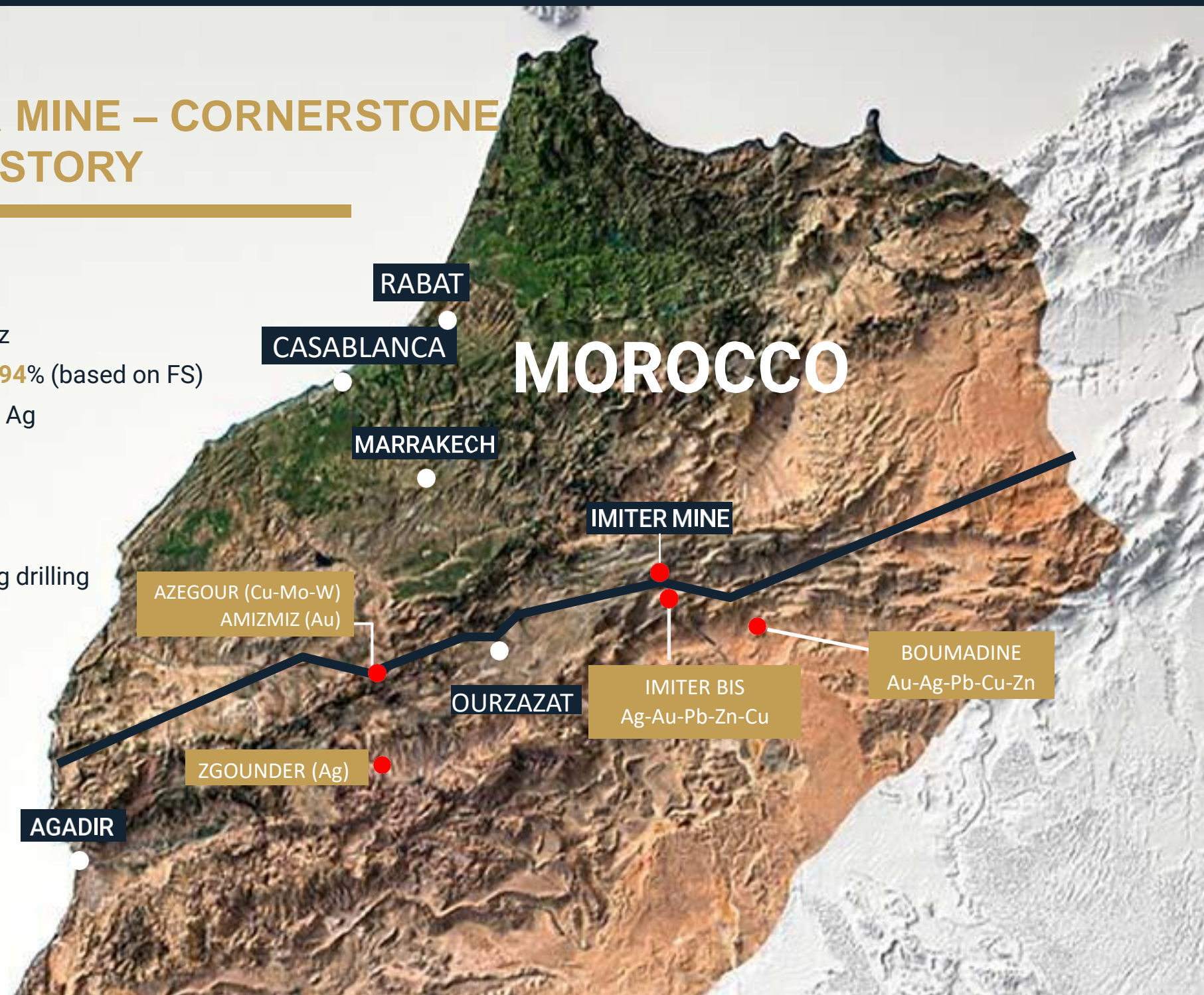
- 2022 production of **1.88M** oz
- 2023 guidance of **1.7M – 1.9M** oz
- 2024 production of **~7.9M** oz, **+394%** (based on FS)
- **96M** oz M&I resources at 306 g/t Ag

DEVELOPMENT UPSIDE

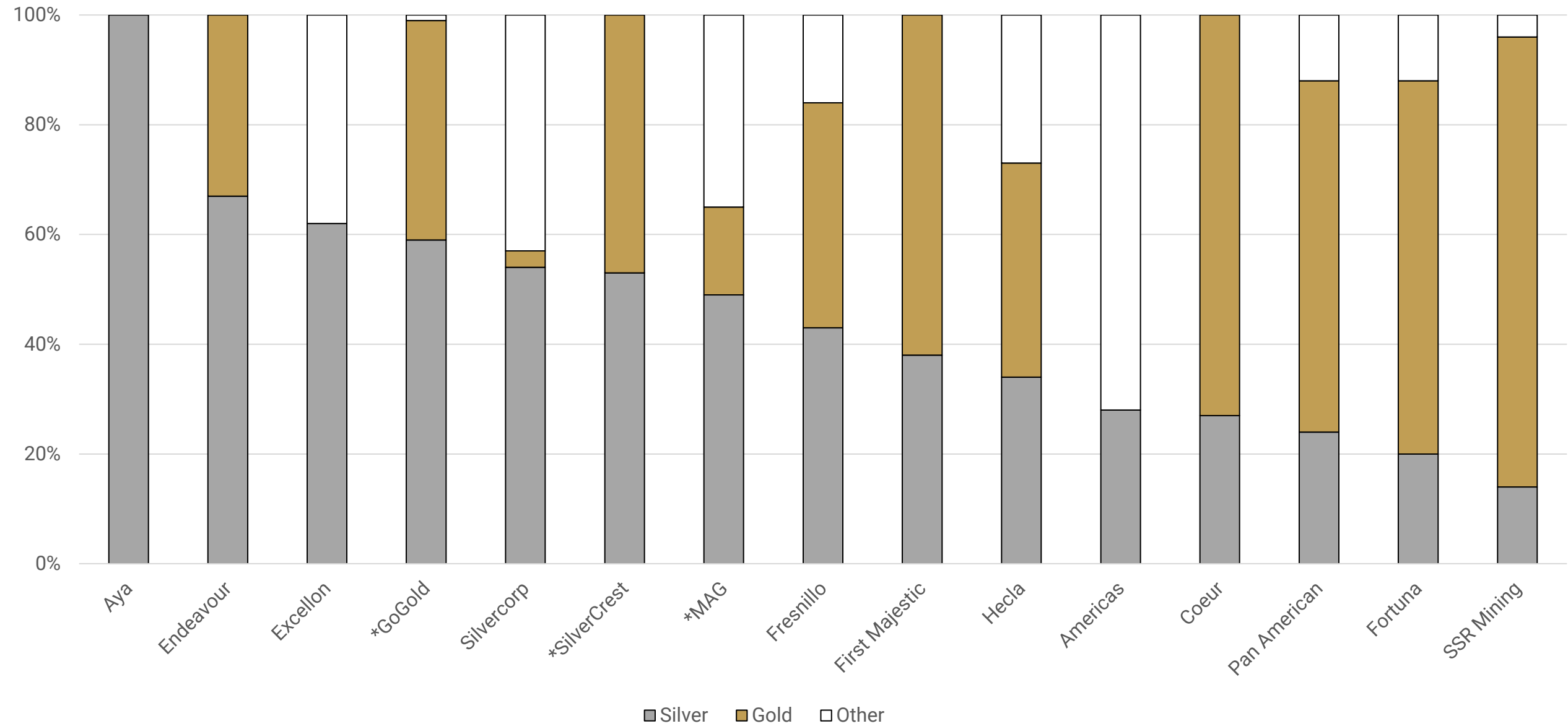
- Boumadine
- Tijirit – FS 85% complete, pending drilling results

EXPLORATION UPSIDE

- Zgounder Regional
- Imiter bis
- Azegour
- Amizmiz



AYA – THE ONLY TSX-LISTED PURE SILVER PRODUCER

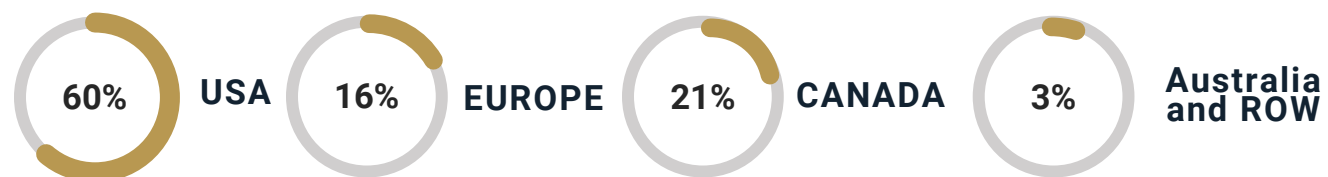


Source: Desjardins Capital Markets, company reports

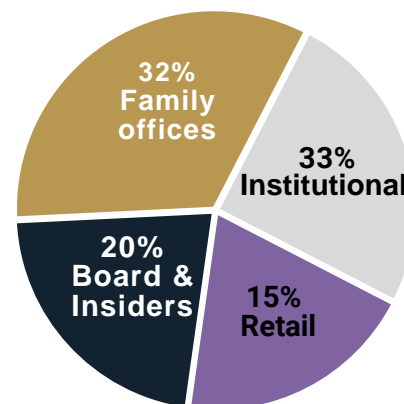
*Developer, for which 2022 metal prices and latest technical report were used

CAPITAL STRUCTURE – ROBUST BALANCE SHEET

Institutional Shareholder Breakdown¹



¹ Based on 42.5M shares outstanding (institutional ownership)



Exchanges – TSX: AYA | OTCQX: AYASF

Shares – Basic*		116.2M
Shares – F.D.		127.0M
Share Price (April 17, 2023)	C\$	\$10.05
Market Cap	C\$	\$1.2B
Cash (Dec. 31, 2022)*	US\$	\$112M
Debt**	US\$	\$100M
30-day average volume	'000	500

* Includes Dec. 31, 2022 cash of US\$42M and US\$70M equity bought deal (Jan. 25, 2023 press release)

**Undrawn project financing from EBRD (Feb. 7, 2023 press release)



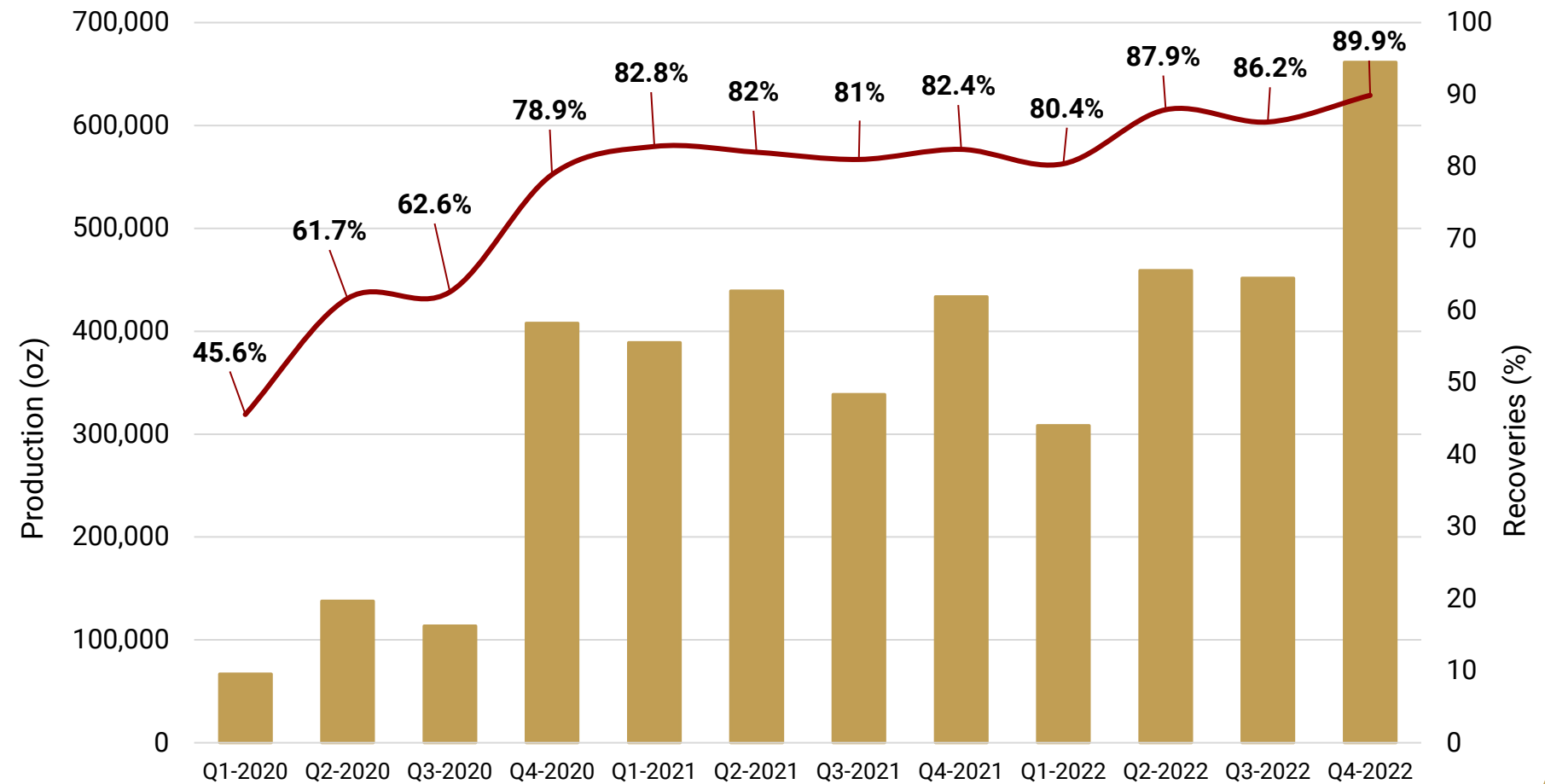
ZGOUNDER – STRONG EXECUTION AND OPERATIONAL EFFICIENCIES

Solid operational standard reached in 2021 via:

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

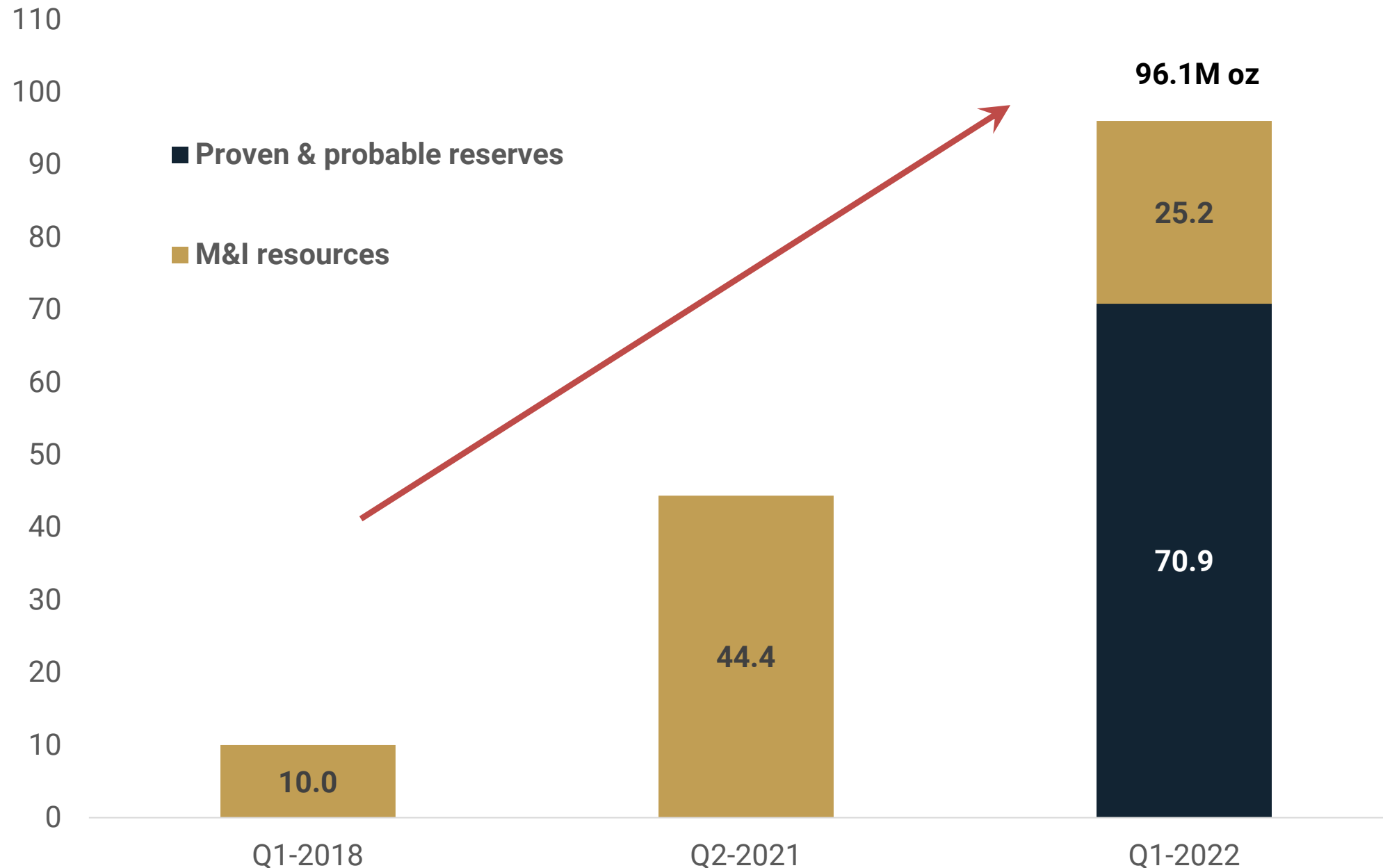
Pre-expansion mechanization began in 2022:

- 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



ZGOUNDER – INDUSTRY - LOW DISCOVERY COSTS

In Moz Ag



- **Resources as a unit of total shares outstanding up >630% to 96.1M oz** since management change in 2020 (0.124, 0.423, 0.915 from 2020-2022)
- **Industry-low discovery cost of \$0.18 with only \$15.3M spent** since management change in 2020

All mineral resources are exclusive of mineral reserves.

ZGOUNDER – TOP SILVER INTERCEPTS GLOBALLY

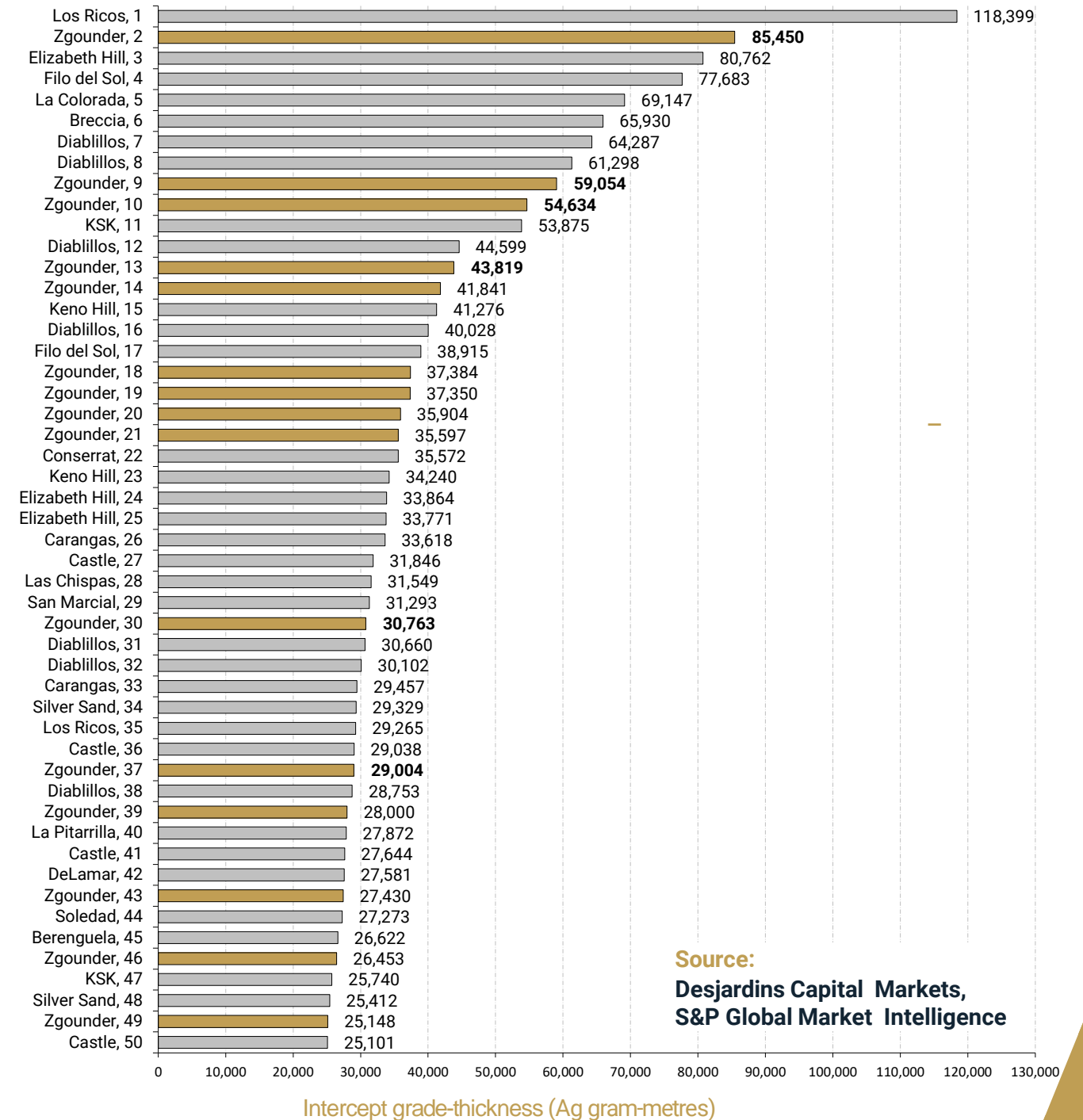
Zgounder reported 3 out of the top 10 and 15 out of the top 50 global silver intersections of 2020-2023¹

- 21.6m @ 3,956 g/t Ag
- 14.4m @ 4,101 g/t Ag
- 9.6m @ 5,691 g/t Ag
- 14.4m @ 3,043 g/t Ag
- 6.5m @ 6,437 g/t Ag

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

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

Top 50 global primary silver intercepts 2020 – 2023 YTD, ranked by Ag grade-thickness



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

ZGOUNDER – TOP SILVER INTERCEPTS

2020-2023 drill exploration program returned 44 of the top 50 Zgounder intercepts¹

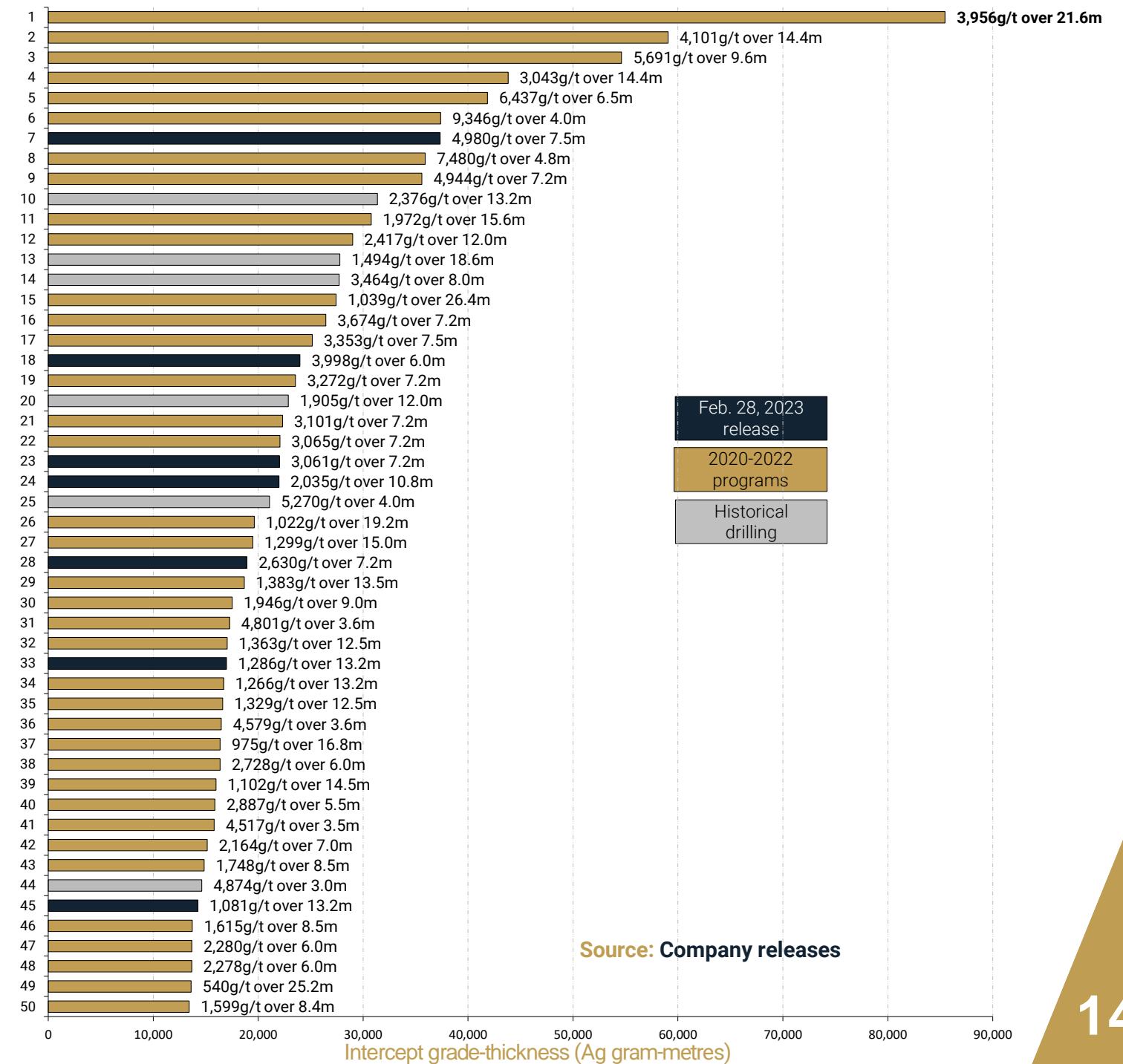
Of these 44 top Zgounder drill intercepts:

- **2023** results returned **7** including the **7th** and **18th** best results
- **2022** results returned **15** including the **top result**
- **2021** results yielded **20** including **4th**, **5th**, **9th**, and **12th** 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 **6th** and **32nd** best results
- Top drilling results expanded mineralization both along the eastern strike extension and at depth

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

² 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^{1 2}



Source: Company releases

ZGOUNDER – MINERAL RESERVES

On a 100% basis. M&I resources shown inclusive of reserves. ^{1 2}	TONNES (K)	AG (G/T)	CONTENT (AG K OZ)
PROVEN RESERVES	2,100	288	28,748
PROBABLE RESERVES	5,490	239	42,128
P&P RESERVES	8,590	257	70,876
MEASURED RESOURCES (INCL. RESERVES)	3,511	347	39,183
INDICATED RESOURCES (INCL. RESERVES)	6,254	283	56,874
M&I RESOURCES (INCL. RESERVES)	9,765	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.

Silver Reserves

- The reserves include 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

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

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

³ Refer to June 16, 2022, amended NI 43-101 Technical Report Feasibility Study, Zgounder Expansion Project.

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

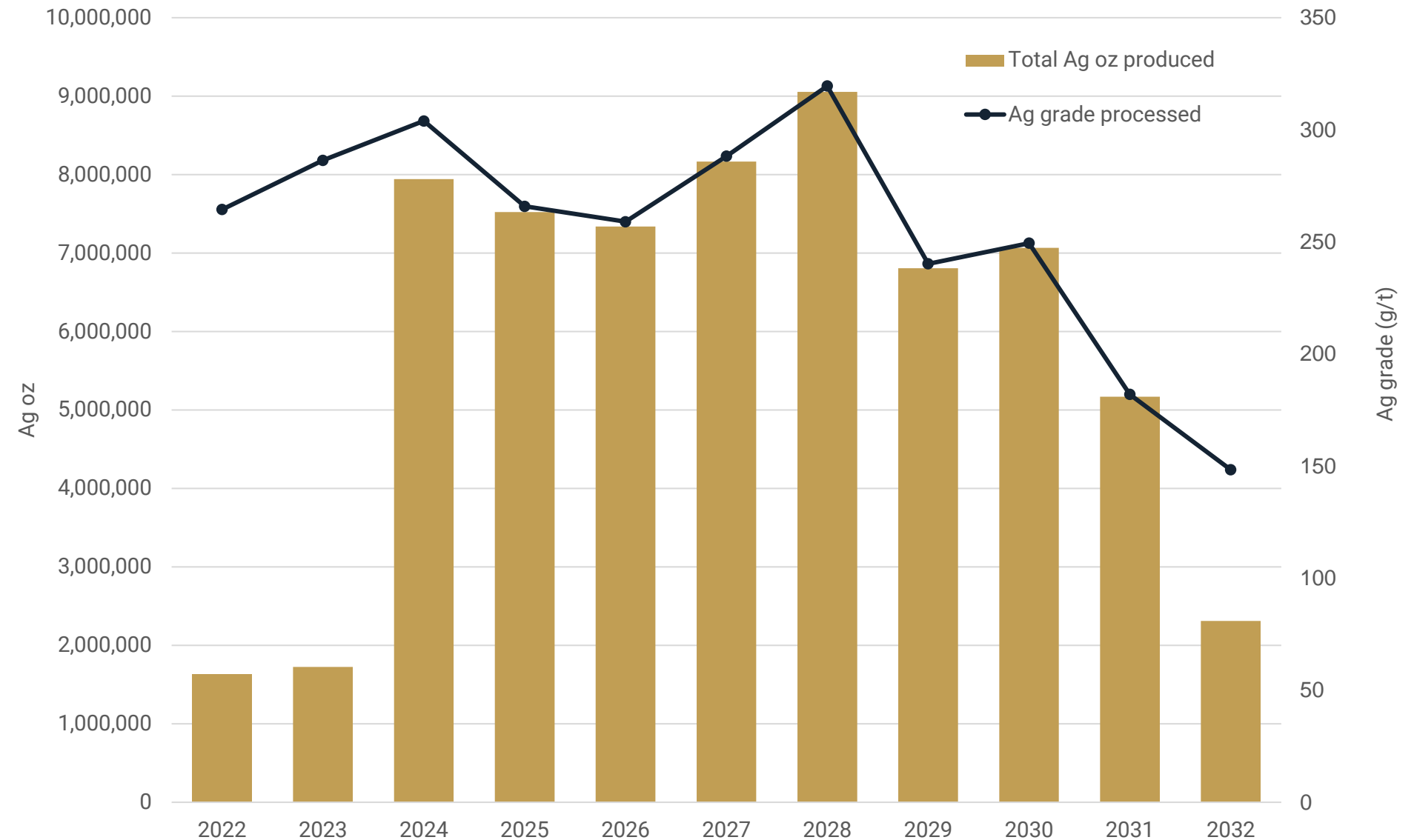
Payback (post-expansion)



ESG

Plan enhancements

LOM Production Profile*



* Based on projections of 2022 Zgounder Expansion feasibility study

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

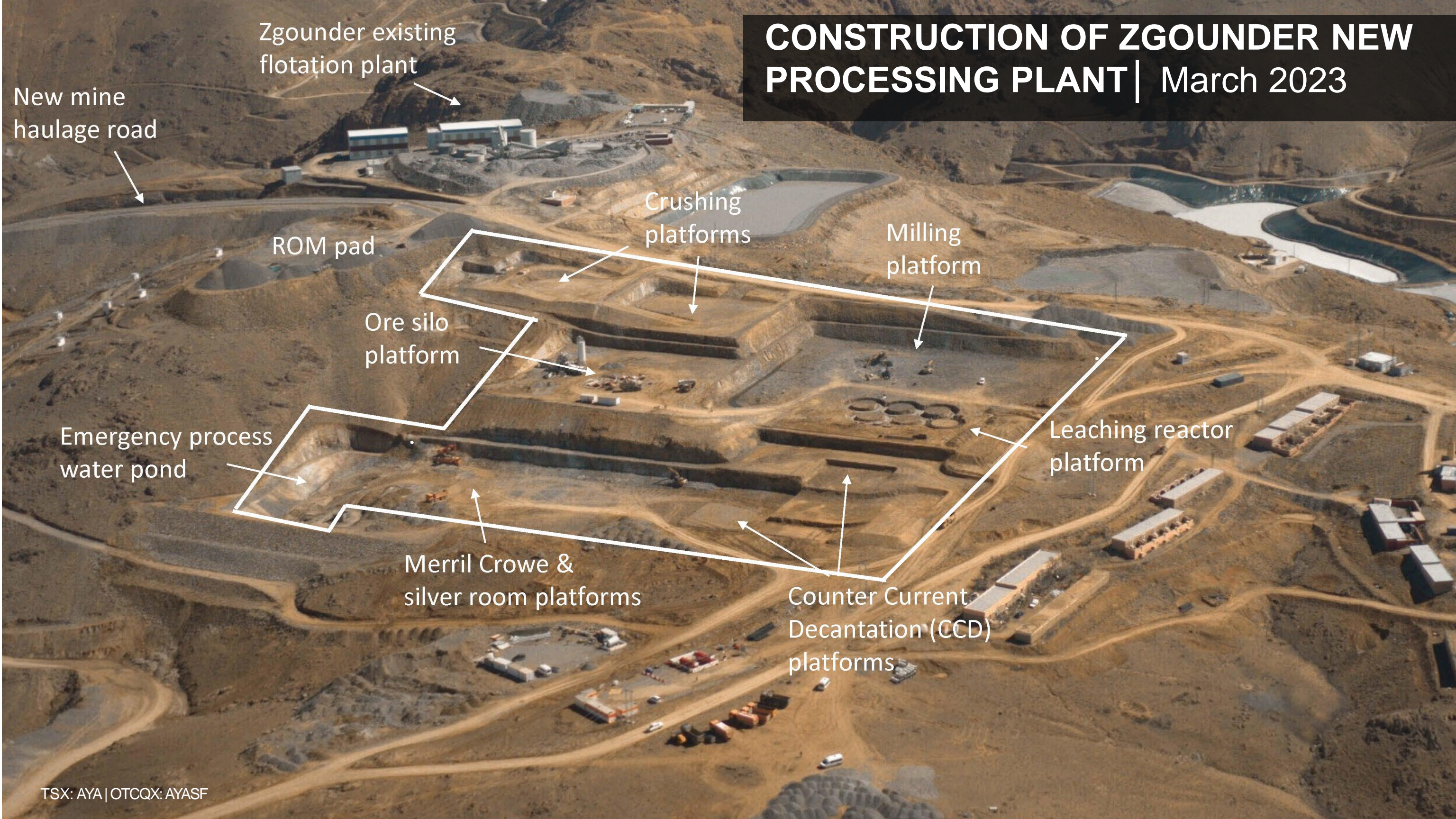
EXISTING TAILINGS
STORAGE FACILITY

NEW PROCESS PLANT

OPEN PIT

HISTORICAL TAILINGS
STORAGE FACILITY

CONSTRUCTION OF ZGOUNDER NEW PROCESSING PLANT | March 2023



Zgounder existing flotation plant

New mine haulage road

ROM pad

Crushing platforms

Milling platform

Ore silo platform

Emergency process water pond

Leaching reactor platform

Merrill Crowe & silver room platforms

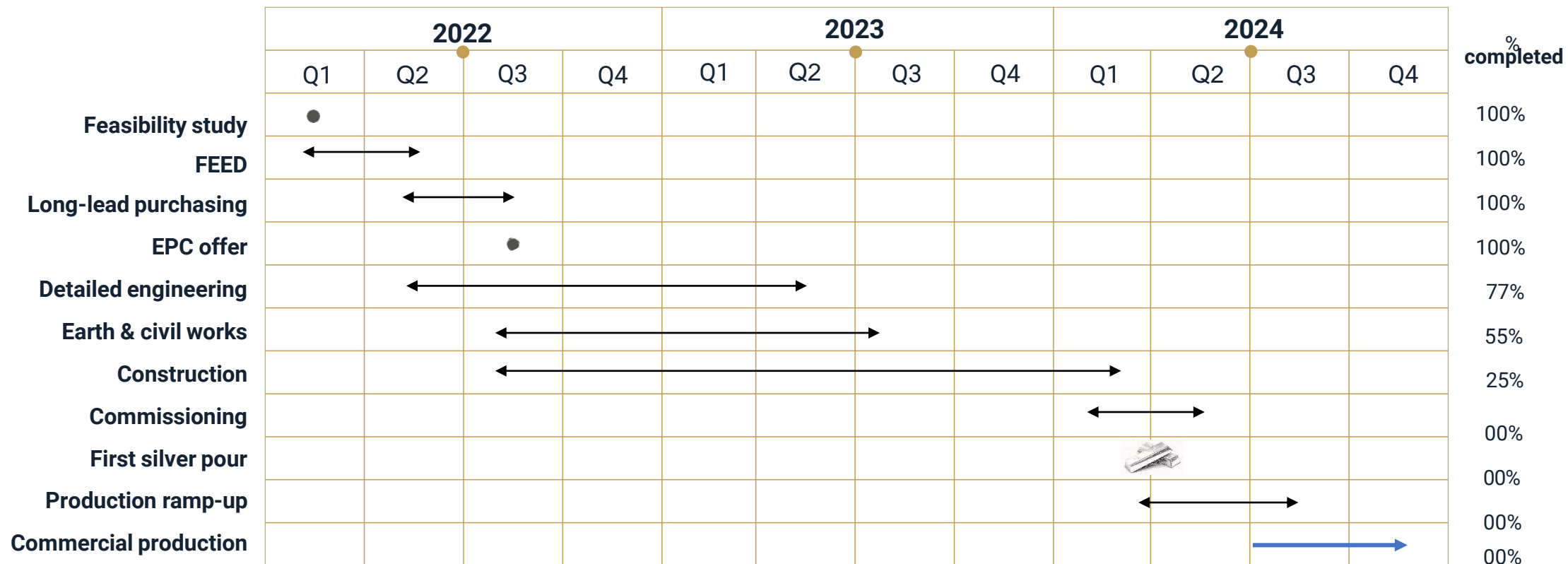
Counter Current Decantation (CCD) platforms

ZGOUNDER – STRONG POST-EXPANSION ECONOMICS

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

¹ Refer to the February 22, 2022 press release entitled "Aya Gold & Silver Announces Robust Expansion Feasibility Study for Zgounder"

ZGOUNDER – EXPANSION ON BUDGET



AYA – ACHIEVING SUSTAINABILITY LEADERSHIP

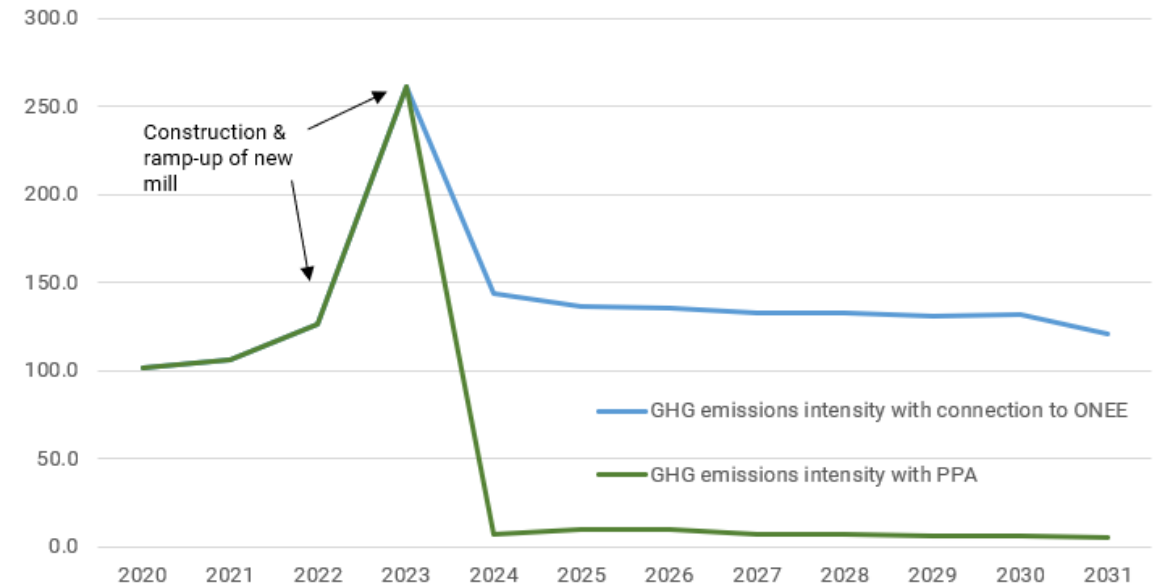


Environmental stewardship and low-carbon strategy

Priorities: water, tailings management and clean energy. 2024 near-zero Scope 2 emissions.

· 52% Water recycled	Ongoing Global Industry Standard on Tailings Management	20-year wind PPA signed	85%¹ Reduction in Scope 2 emissions in 2024
--------------------------------	---	-----------------------------------	--

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



Health & safety culture

2023 priorities: solidifying H&S management processes, mine rescue, emergency readiness, and training.

Ongoing Best practices for risk management	3,166 hours of H&S training in 2022	Zero fatalities reported in 2022
--	---	----------------------------------



Local wealth creation

Priorities: national recruitment and procurement, combined with a four-pronged community program.

45% Local workforce	99% National workforce	80% National procurement	13,000 villagers impacted by medical clinic support
-------------------------------	----------------------------------	------------------------------------	--

Alignment of community program with Morocco's National Initiative for Human Development



¹ Reduction compared to same year, 2024, in the absence of a signed PPA with a renewable energy producer, as per the mining plan in the NI 43-101 FS study presented in 2022

AYA – HIGH GOVERNANCE STANDARDS

ACHIEVED IN THE LAST THREE YEARS SINCE ARRIVAL OF NEW MANAGEMENT TEAM

25%

Women
board members

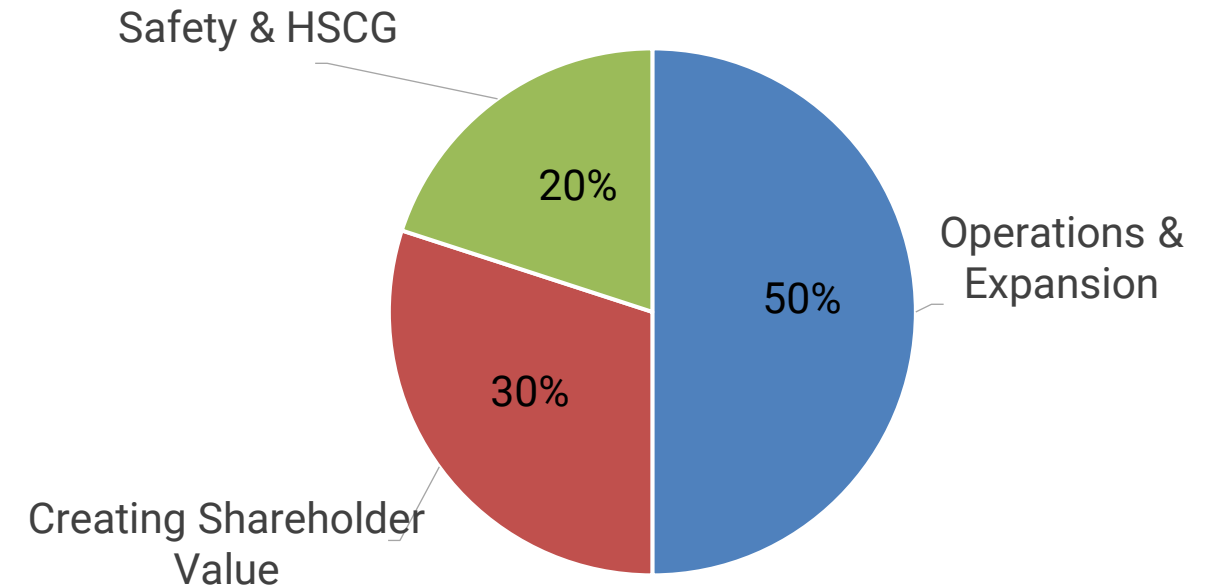
75%

Director
independence

52%

Board &
management holdings¹

Alignment of executive pay to performance and shareholder interests



- Implementation of high **governance standards** & alignment of executive remuneration with performance and shareholders:
- Increased transparency of **ESG disclosure** in support of the below frameworks:





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

AYA – DRILL EXPLORATION PROGRAM OF 68,700M

GROWTH PIPELINE INCLUDES THREE PRIORITY PROJECTS

ZGOUNDER SILVER MINE

- 26,000m 2023 budget for near-mine drilling
- Expand resource oz at depth

BOUMADINE (Development)

- 2023 budget of 36,000m, +100% over 2022 budget
- Infill drill & explore along strike, at depth, new targets

ZGOUNDER REGIONAL (Exploration)

- 6,700m 2023 budget
- Build on 2022 results & test new targets

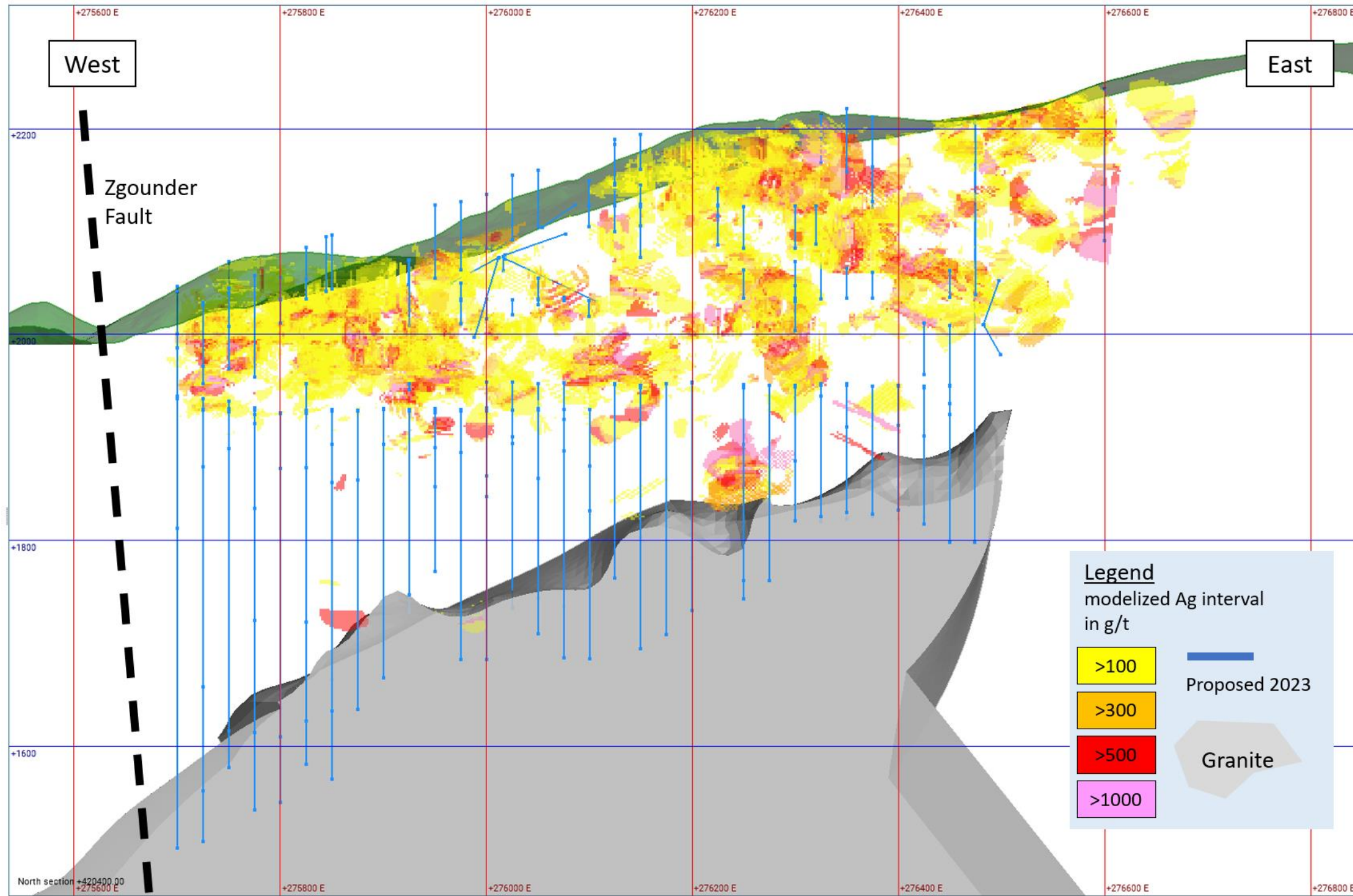
TIJIRIT - MAURITANIA

- 25,000m program ending in Q2-2023
- Convert resources into reserves



ZGOUNDER – NEAR-MINE DRILL EXPLORATION PROGRAM (Ag)

M&I Mineral Resources with 2023 Initial Surface and Underground Drill Holes



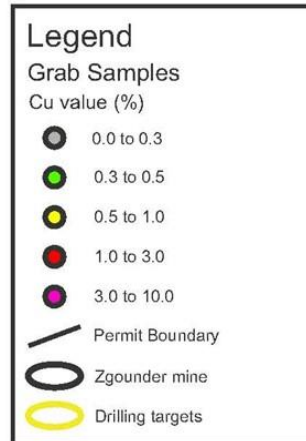
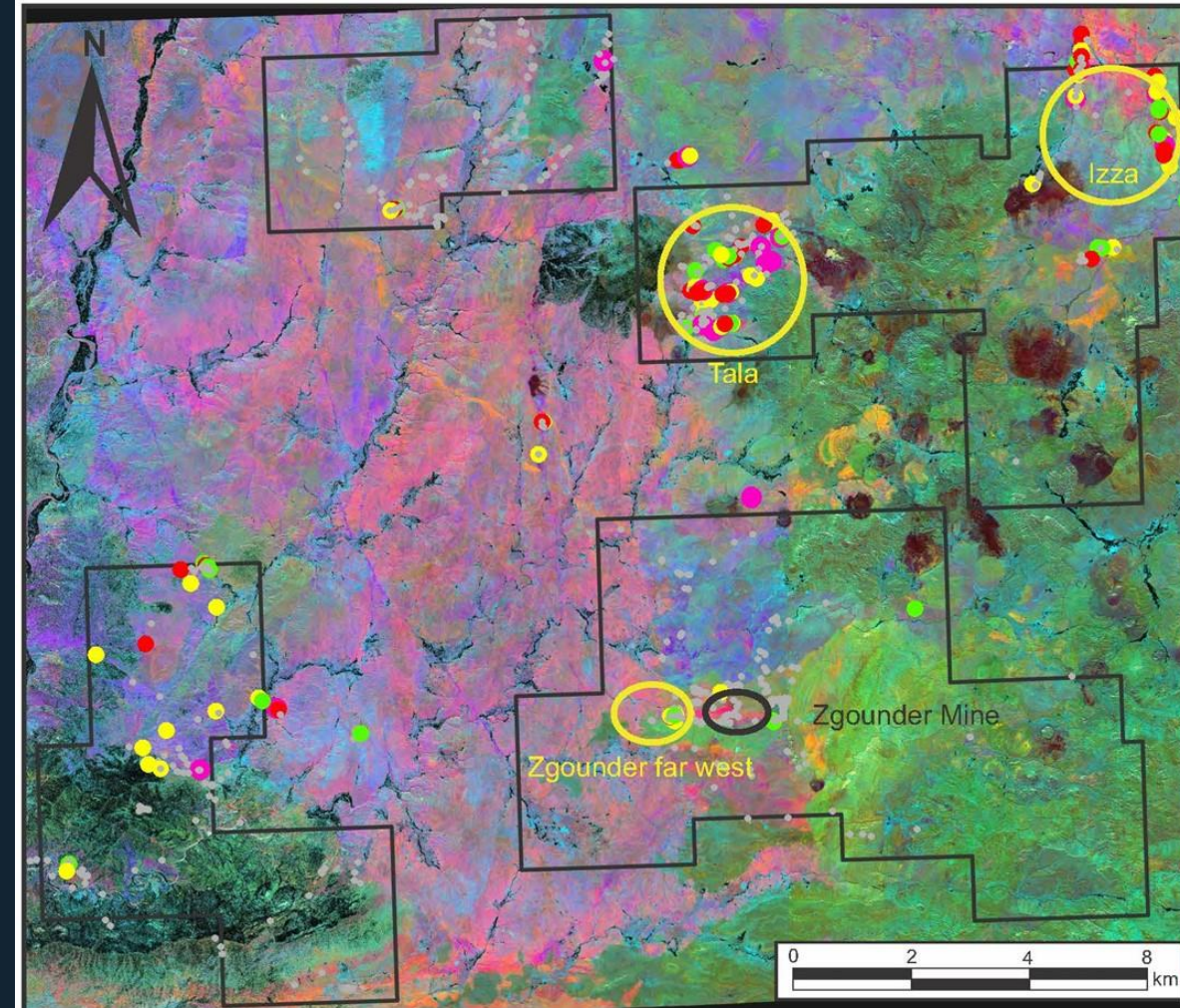
ZGOUNDER REGIONAL – DRILL EXPLORATION PROGRAM (Ag, Au, Cu)

2023 drill program

- 6,700m of DDH will be completed before year-end 2023
- Focus on following up 2022 results and testing new targets
- Prospective package for epithermal Ag, Au or Cu-Au vein mineralization
- Identification of five target areas with Ag, Cu and Au showings

Informed by comprehensive geophysical and mapping programs

- 1,061 grab samples taken to date across the exploration permits
- Airborne geophysics survey data (magnetic, VTEM and radiometric)
- Stream sediment campaign (954 samples)

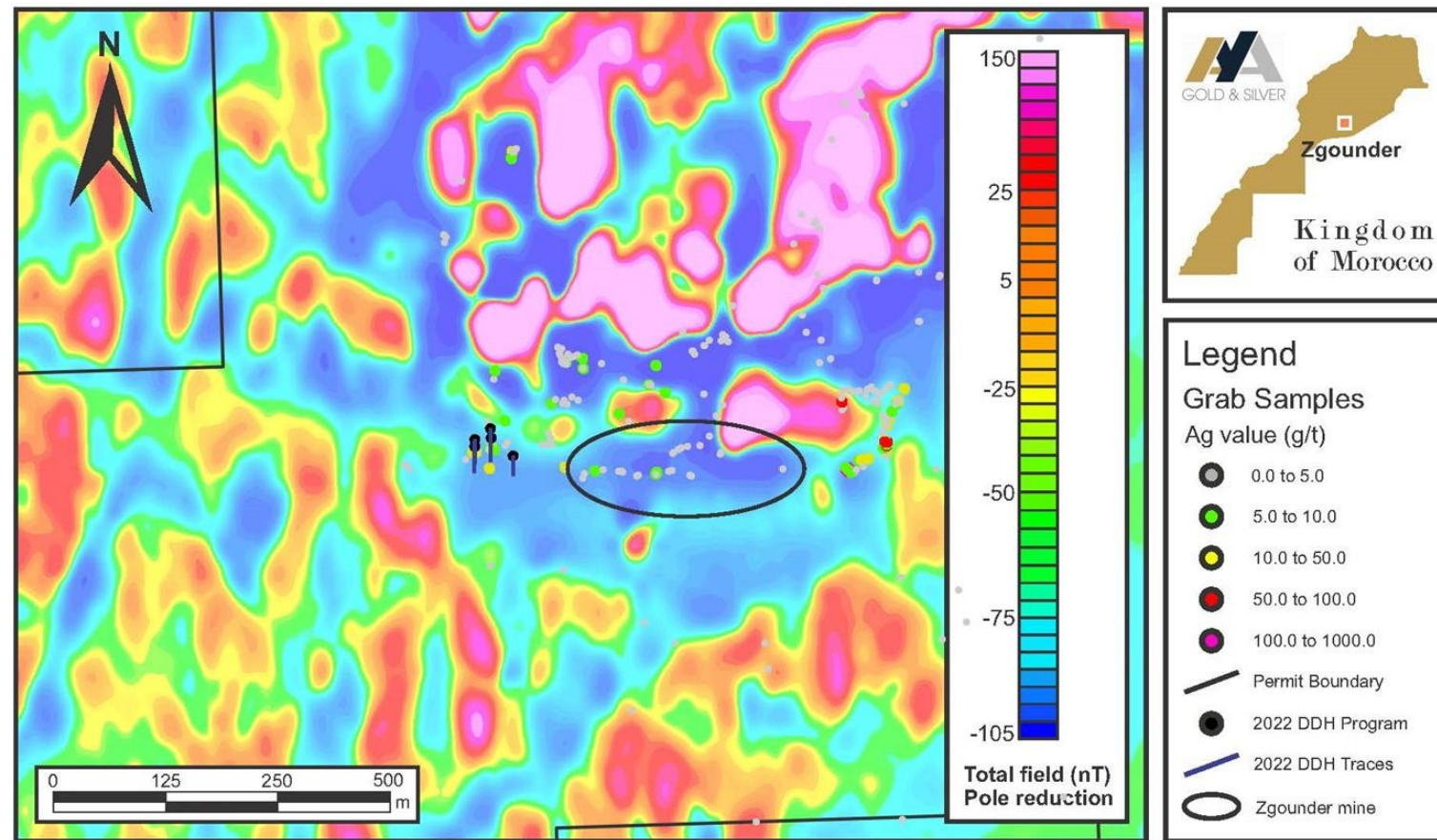


¹ Refer to Aya Gold & Silver's November 1, 2022 press release titled "Aya Gold & Silver Provides Exploration Update Including Drilling On Zgounder Regional Properties and Campaign Extension at Boumadine"

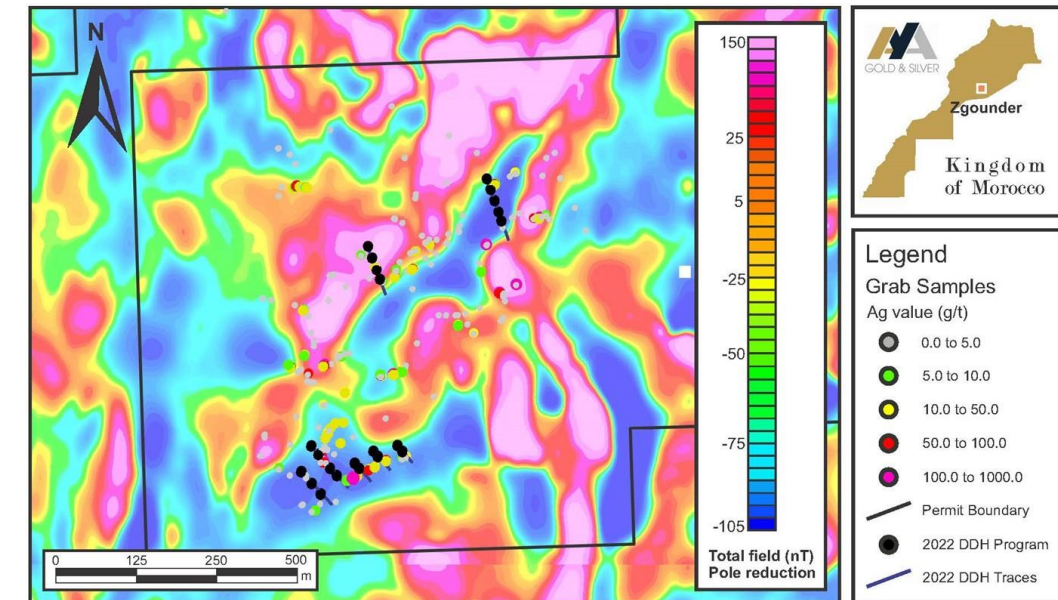
¹ Refer to Aya Gold & Silver's February 9, 2023 press release titled "Aya Gold & Silver Provides Production Guidance and Outlook for 2023"

ZGOUNDER REGIONAL – ZGOUNDER FAR WEST, TALA, AND IZZA AREAS

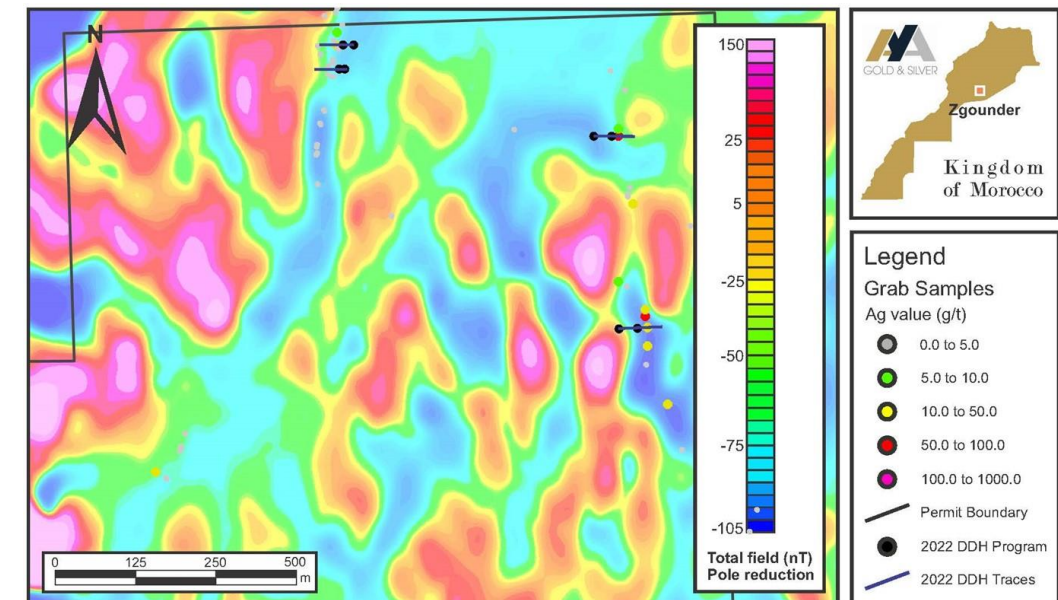
- Grab samples from the Tala and Izza areas returned high-grade Ag, Cu and Au, associated with a very strong spectral alteration signature
- Zgounder Far West returned anomalous Ag grab results
- 2023 priority drill areas



Zgounder Area with Geology and Ag Grab Samples



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



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

¹ 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 EXPLORATION PROGRAM (2022) (Au, Ag, Pb, Cu, Zn)

Results from 18,335m drill program in 2022

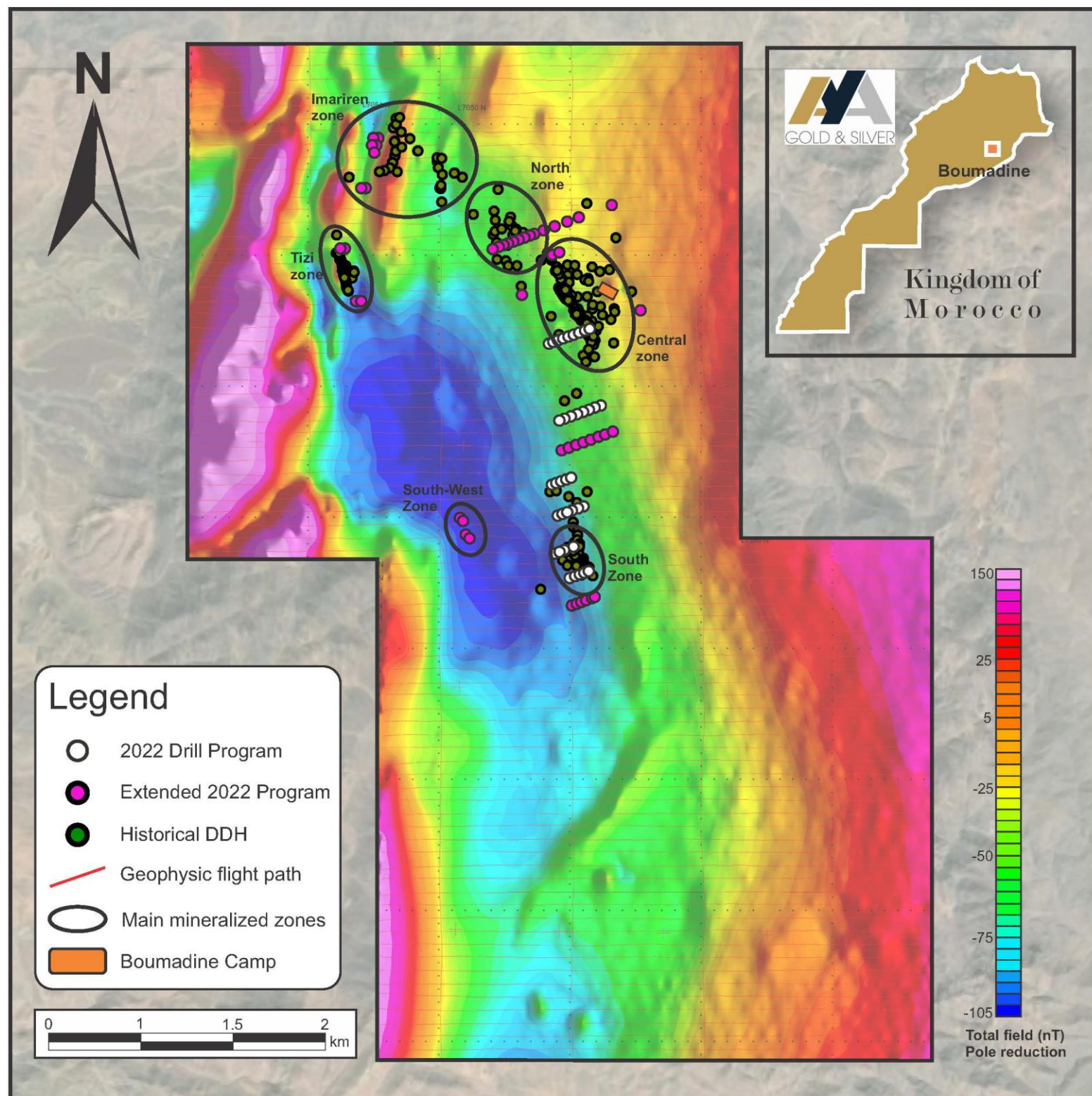
- Confirmed mineralization of the main trend and **extended the strike to 3.2 km** Open at both ends along strike and at depth within **6 km hydrothermal system**

Drill exploration results

- 1,039 g/t AgEq over 32.8m** including 1,416 g/t AgEq over 12m (4.64 g/t Au, 236 g/t Ag, 11.0% Zn, 4.3% Pb and 0.04% Cu)¹
- 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)¹
- 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)¹
- 2,715 g/t AgEq over 1.4m** (2.86 g/t Au, 1,717 g/t Ag, 9.6% Zn, 3.5% Pb and 0.7% Cu)²
- 392 g/t AgEq over 7.2m** (1.99 g/t Au, 100 g/t Ag, 1.6% Zn, 0.35% Pb and 0.1% Cu)¹

¹ 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". Ag equivalent is based on a 100% recovery with the following ratio calculated with September 7, 2022 prices; 1 g/t Au: 93.4 g/t Ag; 1% Cu:130.4 Ag; 1% Pb: 31.8 Ag; 1% Zn: 54.1 Ag.

² Refer to Aya Gold & Silver's February 14, 2023 press release titled "Aya Gold & Silver Confirms Discovery of Parallel Zones and Extends High-Grade Mineralization at Boumadine". Ag equivalent is based on a 100% recovery with the following ratio: 1 g/t Au: 93.4 g/t Ag; 1% Cu:130.4 Ag; 1% Pb: 31.8 Ag; 1% Zn: 54.1 Ag.



BOUMADINE – DRILL EXPLORATION ONGOING (2023)

2023 DDH drilling expands the strike south with record intercept

- Drill results to date extend the main trend to 3.4 km, which remains open in all directions
- Identification of high-grade sulphide stockwork zone south of trend:
 - Widest-ever mineralized interval recorded on property
 - 192 g/t AgEq over 129.4m (1.06 g/t Au, 25 g/t Ag, 1.0% Zn, 0.2% Pb and 0.03% Cu)
- 16,680m of drilling completed, some 50% of 2023 drilling program
- Relogging and resampling of historical data ongoing
- NI 43-101-compliant resource estimate expected in Q1-2024

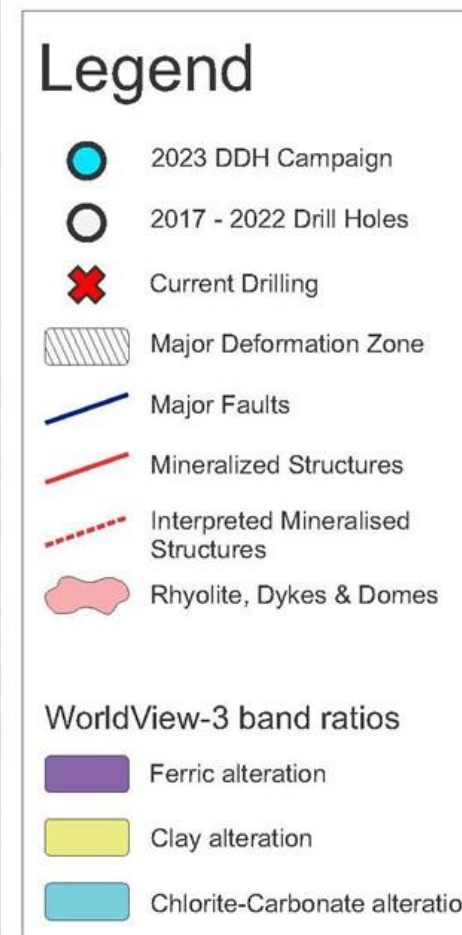
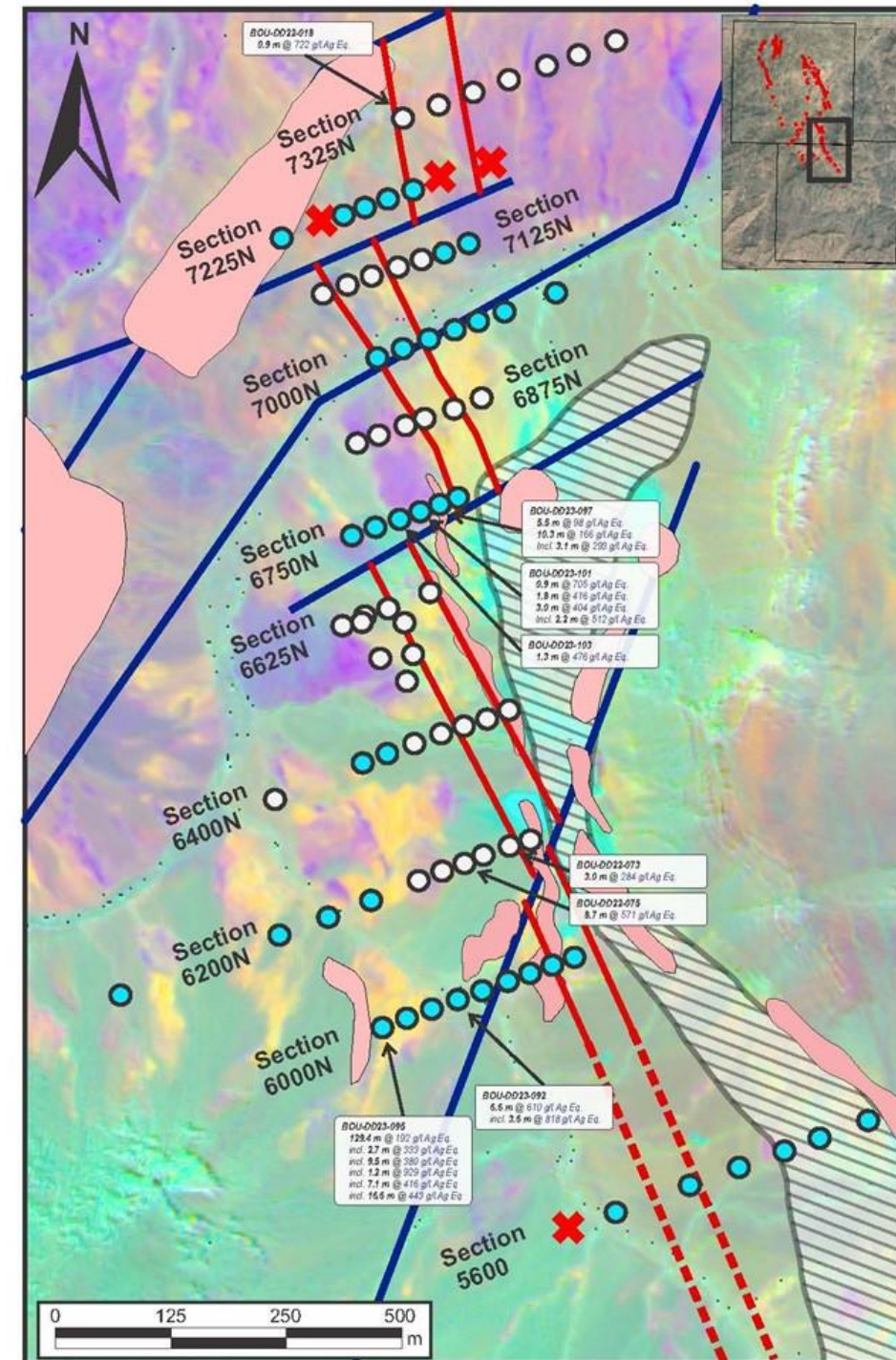
Drilling informed by mapping and geophysical programs

- Detailed airborne geophysics survey (magnetics, electromagnetic & radiometric)
 - Conductive anomaly continues south and down to at least 600m below the main trend, suggesting at-depth extension
 - Conductive anomalies identified east and west of main trend
- Hyperspectral survey covering entire license
- Surface mapping ongoing

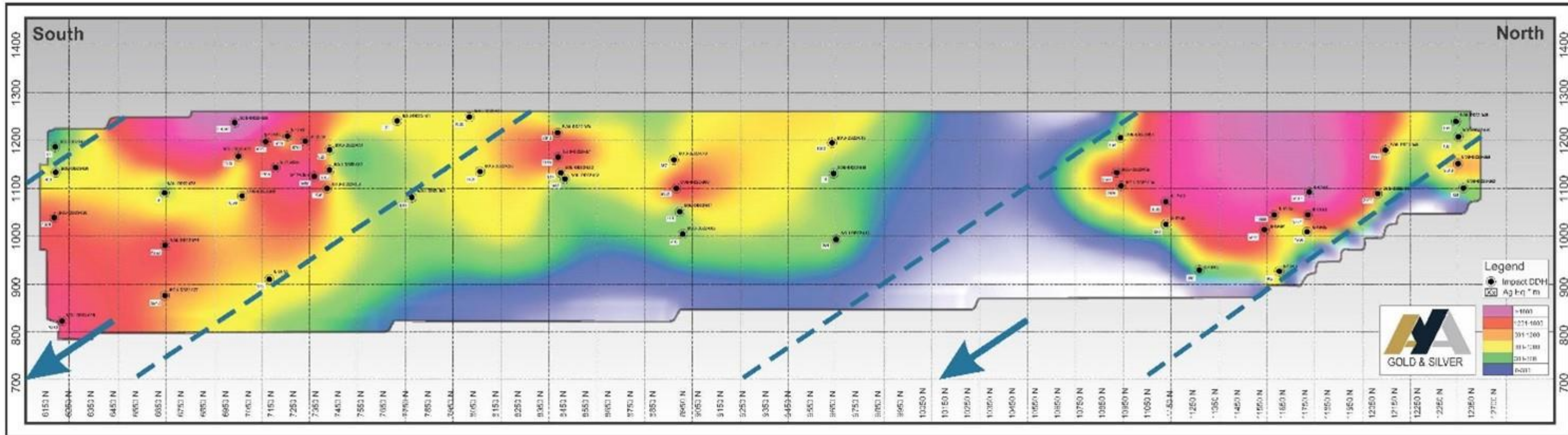
¹ Refer to Aya Gold & Silver's November 1, 2022 press release titled "Aya Gold & Silver Provides Exploration Update Including Drilling On Zgouder Regional Properties and Campaign Extension at Boumadine"

² Refer to Aya Gold & Silver's February 14, 2023 press release titled "Aya Gold & Silver Confirms Discovery of Parallel Zones and Extends High-Grade Mineralization at Boumadine"

³ Refer to Aya Gold & Silver's April 19, 2023 press release titled "Aya Gold & Silver Extends Mineralization to the South at Boumadine with Record Intercept"



BOUMADINE – LONGITUDINAL VIEW OF BOUMADINE MAIN ZONE

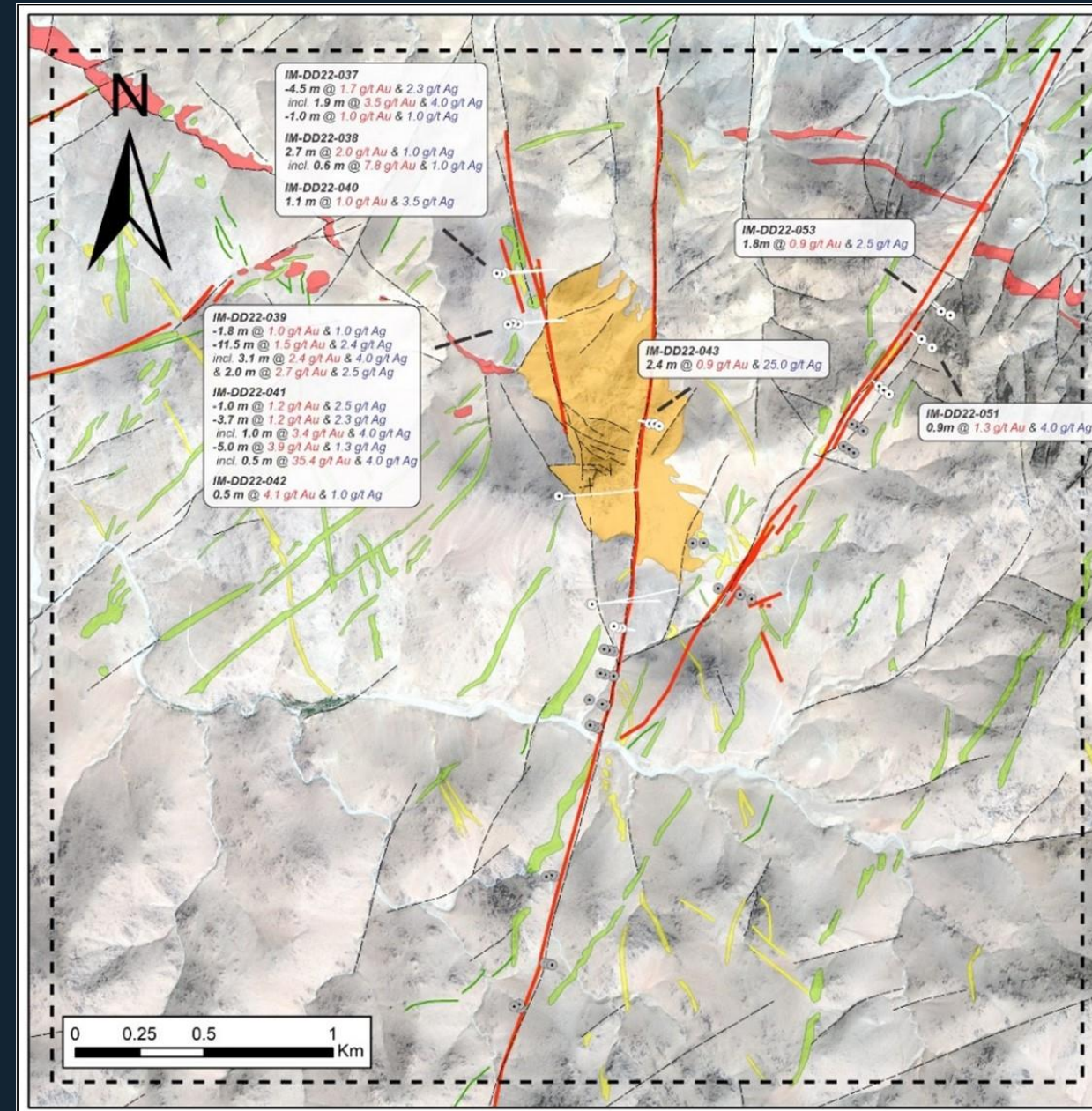


IMITER BIS – DRILL EXPLORATION PROGRAM (Au, Ag, Cu, Pb, Zn)

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

4,754m 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

¹ 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"
² 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"
³ 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"
⁴ 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

AYA CATALYSTS/ MILESTONES FOR 2023

Continue **operational optimization** – focus on cost efficiencies and H&S

Deliver 2023 milestones for **2,700 tpd Zgounder Silver Mine** expansion

- **Q1-2023** – Start construction of new **TSF** ✓ **Completed**
- **Q2-2023** - Complete **detail engineering**; and begin OP operations
- **Q3-2023** - Deliver ball mill on site; and complete new water storage basin, bulk and civil works

32,700m drilling at **Zgounder and Zgounder Regional** to increase resources

Complete drill exploration programs on priority regional properties:

- **36,000m** exploration drilling at **Boumadine**
- **H1-2023** - Complete **25,000m** drill program at **Tijirit (Mauritania)**

Achieve 2023 **silver production and cost guidance**

Achieve 2023 **ESG** milestone of **EBRD-CTF loan agreement**





1320 Graham, suite 132
 Ville Mont-Royal, QC H3P 3C8

Benoit La Salle : Benoit.Lasalle@ayagoldsilver.com
Alex Ball : Alex.Ball@ayagoldsilver.com

www.ayagoldsilver.com | info@ayagoldsilver.com

TSX | AYA; OTCQX | AYASF

