



**2022**

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**ANNUAL INFORMATION FORM  
FOR THE YEAR ENDED DECEMBER 31, 2022**

March 31, 2023

## TABLE OF CONTENTS

<b>TABLE OF CONTENTS</b> .....	<b>1</b>	Impact of Epidemics .....	45
<b>DATE OF INFORMATION, CURRENCY AND ABBREVIATIONS</b> .....	<b>1</b>	Supply Chain Disruptions.....	45
<b>FORWARD-LOOKING STATEMENTS</b> .....	<b>1</b>	War in Ukraine.....	46
<b>CORPORATE STRUCTURE</b> .....	<b>2</b>	Changes in Climate .....	46
Name, Address and Incorporation .....	2	<b>DIVIDENDS</b> .....	<b>46</b>
Intercompany Relationships .....	3	<b>CAPITAL STRUCTURE</b> .....	<b>46</b>
<b>GENERAL DEVELOPMENT OF THE BUSINESS</b> .....	<b>4</b>	<b>MARKET FOR SECURITIES</b> .....	<b>47</b>
Three-Year History .....	4	Trading Price and Volume .....	47
<b>BUSINESS</b> .....	<b>11</b>	<b>DIRECTORS AND OFFICERS</b> .....	<b>47</b>
Summary .....	11	Directors .....	47
Production .....	11	Cease Trade Orders, Bankruptcies, Penalties or Sanctions .....	50
Specialized Skill and Knowledge .....	12	Conflicts of Interest .....	52
Competitive Conditions .....	12	<b>AUDIT COMMITTEE INFORMATION</b> .....	<b>52</b>
Reagents .....	12	The Audit and Risk Management Committee Charter.....	52
Environmental Protection.....	12	Composition of the Audit Committee .....	52
Permits.....	12	Relevant Education and Experience .....	53
Employees.....	13	Reliance on Certain Exemptions.....	53
Foreign Operations .....	13	Audit Committee Oversight.....	53
<b>MINING PROPERTIES</b> .....	<b>13</b>	Pre-Approval Policies and Procedures.....	53
Zgounder Silver Mine .....	13	External Auditor Service Fees .....	54
<b>RISK FACTORS</b> .....	<b>40</b>	<b>LEGAL PROCEEDINGS AND REGULATORY ACTIONS</b> .....	<b>54</b>
Financial Risk Factors .....	40	<b>INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS</b> .....	<b>54</b>
Risks Inherent to Mining Exploration.....	40	<b>TRANSFER AGENT AND REGISTRAR</b> .....	<b>55</b>
Uncertainty in the Calculation of Mineral Reserves, Resources and Silver Recovery ....	40	<b>MATERIAL CONTRACTS</b> .....	<b>55</b>
Inaccuracies in Production and Cost Estimates .....	40	<b>INTERESTS OF EXPERTS</b> .....	<b>56</b>
Uninsured Risks.....	41	<b>ADDITIONAL INFORMATION</b> .....	<b>57</b>
Metal Price Volatility.....	41	<b>SCHEDULE "A" - AUDIT AND RISK MANAGEMENT COMMITTEE CHARTER</b> .....	<b>A</b>
Additional Funding Requirements .....	41		
Integration of Future Acquisitions into Existing Operations .....	41		
Regulatory Requirements .....	42		
Risk Related to Indebtedness.....	42		
Environmental Matters.....	43		
Risk of Project Delay .....	43		
Risk on the Uncertainty of Title .....	43		
Risk Linked to Conflict of Interest .....	43		
Human Resource Risk .....	44		
Reputational Risk .....	44		
Cyber Security Threats .....	44		
Political Risk and Illegal Miners.....	44		

## DATE OF INFORMATION, CURRENCY AND ABBREVIATIONS

All the information contained in this Annual Information Form ("**AIF**") is up to date as at December 31, 2022, unless stated otherwise. For greater certainty, this AIF sets forth the results for the fiscal year ended December 31, 2022 and is dated March 31, 2023.

Except as otherwise indicated, references to "**we**", "**our**", "**us**", "**its**", the "**Corporation**" or "**Aya**" mean Aya Gold & Silver Inc. and its subsidiaries.

All currency references in this AIF are in US dollars, unless otherwise indicated.

Unless otherwise defined, abbreviations used in this AIF have the following meanings:

<b>ABBREVIATION</b>	<b>DEFINITION</b>
<b>Ag</b>	silver
<b>Au</b>	gold
<b>g</b>	gram
<b>ha</b>	hectare
<b>kg</b>	kilogram
<b>km</b>	kilometer
<b>koz</b>	thousand ounces
<b>kt</b>	thousand tonnes
<b>kV</b>	kilovolt
<b>m</b>	meter
<b>M</b>	million
<b>Moz</b>	million ounces
<b>oz</b>	ounce
<b>t</b>	metric tonne
<b>tpd</b>	tonnes per day

## FORWARD-LOOKING STATEMENTS

This AIF contains forward-looking information, within the meaning of applicable Canadian securities legislation, which reflects management's expectations regarding Aya's future growth, results of operations (including, without limitation, future production and capital expenditures), performance (both operational and financial), business prospects and opportunities (including the timing and development of new deposits and the success of exploration activities), proposed plans with respect to mine plans, anticipated results, mineral reserves and mineral estimates, anticipated life of mine operating and financial results and the completion of construction of future plans related thereto and opportunities. Words such as "plans", "expects", "budget", "scheduled", "estimates", "forecasts", "anticipate" or "does not anticipate", "believe", "intend" and similar expressions or statements that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved, have been used to identify such forward-looking information. Although the forward-looking information contained in this AIF reflects management's current beliefs based upon information currently available to management and based upon what management believes to be reasonable assumptions, Aya cannot be certain that actual results will be consistent with such forward-looking information. A number of factors could cause actual

results, performance or achievements to differ materially from the results expressed or implied in the forward-looking information, including those listed in the “Risk Factors” section of this AIF. The documents incorporated by reference herein also identify additional factors that could affect the operating results and performance of Aya. These factors should be considered carefully and prospective or existing investors should not place undue reliance on any forward-looking information contained in them. Forward-looking information necessarily involves significant known and unknown risks, assumptions and uncertainties that may cause Aya’s actual results, performance, prospects and opportunities in future periods to differ materially from those expressed or implied by such forward-looking information. Although Aya has attempted to identify important risks and factors that could cause actual actions, events or results to differ materially from those described in forward-looking information, there may be other factors and risks that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that the forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, prospective or existing investors should not place undue reliance on such forward-looking information. The forward-looking information is stated as of the date of this AIF and, except as required under applicable laws, Aya assumes no obligation to update or revise such information to reflect new events or circumstances.

Forward-looking information and other information contained herein concerning, among other things, mineral exploration and management’s general expectations concerning the mineral exploration industry are based on estimates prepared by management using data from publicly available industry sources as well as from market research and industry analysis as well as assumptions based on data and knowledge of the industry which management believes to be reasonable, including, among other things, the ability to obtain any requisite Moroccan governmental approvals, the accuracy of mineral reserve and mineral resource estimates, silver price, exchange rates, fuel and energy costs, future economic conditions and courses of action. However, this data is inherently imprecise, although generally indicative of relative market positions, market shares and performance characteristics. While management is not aware of any misstatements regarding any industry data presented herein, mineral exploration involves risks and uncertainties, and industry data is subject to change based on various factors.

In addition, please note that statements relating to “reserves” or “resources” are deemed to be forward-looking information as they involve the implied assessment, based on certain estimates and assumptions that the resources and reserves described can be profitably mined in the future.

All of the forward-looking statements made in this AIF and the documents incorporated by reference herein are qualified by these cautionary statements and other cautionary statements or factors contained herein, and there can be no assurance that the actual results or developments will be realized or, even if substantially realized, that they will have the expected consequences to, or effects on, Aya.

## **CORPORATE STRUCTURE**

### **NAME, ADDRESS AND INCORPORATION**

Aya Gold & Silver Inc. was incorporated pursuant to the *Canada Business Corporations Act* on December 19, 2007. The head office of the Corporation is located at 1320 boulevard Graham, Suite 132, Mont-Royal, Québec, Canada, H3P 3C8. On February 27, 2018, articles of amendment were issued to consolidate the common shares of the Corporation on a 4 for 1 basis. On July 22, 2020, articles of amendment were issued to change the name of the Corporation from Maya Gold & Silver Inc. to Aya Gold & Silver Inc.

The Corporation is a reporting issuer in the provinces of British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland. Its common shares are listed on the Toronto Stock Exchange (“**TSX**”) under the ticker symbol “**AYA**” and on the OTCQX® Best Market (“**OTCQX**”) under the ticker symbol “**AYASF**”.

#### INTERCORPORATE RELATIONSHIPS

The following figure shows the intercorporate relationships among Aya and its material subsidiaries:



**Figure 1: Intercorporate Relationships**

- Aya Gold & Silver Maroc S.A. (“**AGSM**”), previously Compagnie Minière Maya-Maroc S.A., was incorporated on August 24, 2009 under the laws of the Kingdom of Morocco (“**Morocco**”). Its registered office is located at the corner of Boulevard Ibnou Sina and Rue Abou Rayane Al Falaki, 20370, Casablanca, Morocco. This corporation is involved in the exploration of mining properties located in Morocco. It notably owns 100% of Boumadine Global Mining S.A., which owns the Boumadine project (“**Boumadine**”) in a 85%-15% joint venture with Morocco’s Office of Hydrocarbons and Mines; and
- Zgounder Millenium Silver Mining S.A. (“**ZMSM**”) was incorporated on October 19, 2013 under the laws of Morocco. Its registered office is located at corner Boulevard Ibnou Sina and Rue Abou Rayane Al Falaki, 20370, Casablanca, Morocco. ZMSM is involved in the development, ownership and operation of mining properties located in Morocco.

## GENERAL DEVELOPMENT OF THE BUSINESS

### THREE-YEAR HISTORY

#### Year ended December 31, 2020

##### ● *Operations*

###### Zgounder Silver Mine

On February 27, 2020, the Corporation announced advancements in infrastructure development for the Zgounder Silver Mine. These works included building a new tailings facility, paving access roads, and developing a new ramp to reach the 1,950m level.

On March 25, 2020, the Corporation announced the completion of works to expand the total nameplate production capacity from 500 tpd to 700 tpd at the Zgounder Silver Mine. These expansion works occurred from October 2019 to March 2020 and was entirely funded from cash flow generated by the Zgounder Silver Mine.

On May 11, 2020, the Corporation announced results of its 2019 drilling program at the Zgounder Silver Mine. The Corporation reported the final pending assay results comprised of eight DDH (ZG-19-01 to -08) totaling 2,034m and 32 RC holes totaling 3,611m all drilled from surface.

On July 14, 2020, the Corporation announced the start of the first phase of the 2020 Zgounder Silver Mine exploration program which included an initial 10,000m DDH and 5,000m RC drilling.

On August 6, 2020, the Corporation announced that it has launched the feasibility study for the expansion of its Zgounder Silver Mine in partnership with Montreal-based DRA Met-Chem, a division of DRA Global Ltd (“**DRA**”).

On December 22, 2020, the Corporation reported that 17,465m of drilling had been completed in 2020. The Corporation subsequently expanded its original 2020 drill exploration program from 15,000m to 19,000m.

##### ● *Corporate*

On April 24, 2020, the Corporation announced that Nouredine Mokaddem Chairman, President and Chief Executive Officer, was retiring and stepping down as Chairman, President and CEO of the Corporation. Concurrently, Mr. Benoit La Salle FCPA, CPA was appointed by the Board of Directors as President and Chief Executive Officer and appointed as Director. In addition, Robert Taub was appointed as Chairman.

On May 14, 2020, the Corporation announced the appointment of Mr. Ugo Landry-Tolszczuk, Ing., CFA as Chief Financial Officer and Mr. Mustapha Elouafi as General Manager and President of AGSM.

On May 28, 2020, Aya announced that it no longer considered as material any asset other than the Zgounder Silver Mine and considered all studies regarding non-material assets, including Boumadine, to no longer be current.

On July 30, 2020, the Corporation announced that it had received the approval from the TSX to change the name of the Corporation from Maya Gold & Silver Inc. to Aya Gold & Silver Inc./Aya Or & Argent Inc. Effective at market open on July 31, 2020, the Corporation began trading under its

new ticker TSX: AYA and its new name Aya Gold & Silver Inc./Aya Or & Argent Inc.

On August 18, 2020, the Corporation announced that it had entered into an agreement with Desjardins Capital Markets, to act as lead underwriter of a syndicate of underwriters whereby the underwriters have agreed to purchase 9,524,000 units of the Corporation to be priced at C\$2.10 per unit for gross proceeds to the Corporation of approximately C\$20,000,400. Each Unit consisted of one common share in the Corporation and one-half of one common share purchase warrant. Each warrant is exercisable for one common share at an exercise price of C\$3.30 for a period of 36 months following the closing date.

On September 3, 2020, the Corporation announced that it had upsized and closed its underwritten private placement and has issued 12,488,095 units of the Corporation at a price of C\$2.10 per unit for gross proceeds of C\$26,225,000. Net proceeds received from the financing was \$20,016,468. Each warrant is exercisable for one common share at an exercise price of C\$3.30 until September 3, 2023.

## Year ended December 31, 2021

### ● Operations

On March 16, 2021, the Corporation announced a new mineral resource estimate for the Zgounder Silver Mine. The mineral resource estimate incorporates drilling carried out on Zgounder between February 2018 and the end of 2020. The mineral resources total 4.9Mt averaging 282 g/t Ag for 44.4M oz Ag. This represents an increase of 340% compared to the March 2018 measured and indicated Mineral Resources of 10M oz Ag. The resource estimate was conducted by independent Qualified Persons from P&E Mining Consultants Inc. (“P&E”) as described in section “Interest of Experts” herein.

On April 26, 2021, the Corporation announced preliminary production of 389,132 oz of silver at an average head grade of 295 g/t silver in Q1 2021 at the Zgounder Silver Mine.

On May 3, 2021, the Corporation announced that it had filed on SEDAR an independent Technical Report prepared in accordance with National Instrument 43-101 for the Zgounder Silver.

On May 13, 2021, the Corporation announced a strong quarter with record operating cash flow of \$4.2M for the quarter ended March 31, 2021 as well as silver production of 389,132 oz.

On August 13, 2021, the Corporation reported another solid quarter of operations, development and exploration performance for the quarter ended June 30, 2021 including silver production of 439,149 oz, average mill recovery was 82%, tonnes mined averaged of 700 tpd, and a robust financial position with \$36.9M of cash.

On November 9, 2021, the Corporation sadly reported that a fatal accident occurred at the Zgounder Silver Mine. The accident occurred when an employee of a contractor was working underground. No other personnel were injured in the incident.

On November 15, 2021, the Corporation reported results for the third quarter ended September 30, 2021 including silver production of 338,624 oz, average mill recovery of 81%, tonnes mined averaged 609 tpd, enhanced financial position to \$88M of cash.

On December 14, 2021 the Corporation reported an updated Mineral Resource Estimate for the Zgounder Silver Mine in Morocco. The Mineral Resource Estimate has an effective date of December 13, 2021 and incorporates drilling carried out at the Zgounder Silver Mine between



January and September 10, 2021. Zgounder Silver Mine's M&I Mineral Resources total 9.8Mt averaging 306 g/t Ag for 96.1M oz Ag. This represents an increase of 116% compared to the March 2021 M&I Mineral Resources of 44.4M oz Ag (the "**Technical Report**")

## **Corporate**

On January 11, 2021, the Corporation announced that it had entered into a definitive agreement with the creditors of Algold Resources Ltd. ("**Algold**"), which owns 75% of the Tijirit Gold Project in the Islamic Republic of Mauritania ("**Mauritania**"), to acquire their 2018 secured loan for a then face value of \$5M. The Loan was secured against the assets of Algold. The current loan value and outstanding balance stood at \$8 million. Under the terms of the Arrangement Agreement, the creditors received 2,133,333 common shares of Aya. This consideration was based on CAD\$3.00 per Aya share. Aya was then the largest creditor of Algold and sole secured creditor.

On February 19, 2021, the Corporation announced it had entered into a binding term sheet with Algold Resources Ltd. pursuant to which Aya would fund Algold's proposal to its creditors and at closing, would become the sole shareholder of Algold. Under the terms of the Agreement, Aya provided Algold with CAD\$100,000 in cash and CAD\$2,500,000 in Aya shares to fund Algold's proposal to its creditors. Aya also provided CAD\$2,400,000 in Aya shares to be distributed to Algold current shareholders with a view to become Algold's sole shareholder.

On March 5, 2021, the Corporation announced that Algold's creditors approved Algold's proposal.

On June 11, 2021, the Corporation announced the closing of the previously announced acquisition of Algold and a mineral resources estimate for its Tijirit Gold Project in Mauritania.

On June 28, 2021 the Corporation announced that it has been granted seven new exploration permits by Morocco's Ministry of Energy, Mines and Environment, increasing its total land position by 40% within its Zgounder Regional and Azegour area properties.

On August 12, 2021 the Corporation announced that it has published an inaugural sustainability report for the year 2020. This marked the first time that the Corporation has reported on its corporate sustainability activities, and in accordance with the Global Reporting Initiative Standards, Core option.

On August 23, 2021 the Corporation announced that it has entered into an agreement with a syndicate of underwriters co-led by Desjardins Capital Markets ("**Desjardins**") and Sprott Capital Partners with Desjardins acting as sole bookrunner, (collectively, the "**Underwriters**") pursuant to which the Underwriters have agreed to purchase on a bought deal basis, an aggregate of 6,830,000 common shares at a price of CAD\$10.25 per common share (the "**Offering Price**") for aggregate gross proceeds to Aya of CAD\$70,007,500 (the "**Offering**"). The Corporation has granted the Underwriters an option (the "**Over-Allotment Option**"), exercisable, in whole or in part, at any time until and including 30 days following the closing of the Offering, to purchase up to an additional 15% of the Offering at the Offering Price to cover over-allotments, if any. If the Over-Allotment Option is exercised in full, the total gross proceeds of the Offering will be CAD\$80,508,625.

On September 15, 2021 the Corporation announced that it had closed its previously announced bought deal financing. A total of 6,830,000 common shares were sold under the Offering at a price of CAD\$10.25 per common share for aggregate gross proceeds to Aya of CAD\$70,007,500.



## ● Operations

On January 19, 2022, the Corporation reported 2021 operational results with a production of 1.6M oz Ag at the Zgounder Silver Mine, representing a 120% year-over-year increase in production. It was also reported that the Ag production in the fourth quarter of 2021 totalled 433,742 oz, a 6% increase compared with the 2020 fourth quarter, that the quarterly head grade was of 248 g/t and that the 2021 head grade was of 269 g/t and, that the throughput had increased to 716 tpd in the fourth quarter of 2021. The silver recovery was reported to be of 82.4% for the fourth quarter of 2021 and of 82.1% for the year 2021.

On February 22, 2022, the Corporation announced results from its feasibility study to expand the Zgounder Silver Mine from 700 tpd to 2,700 tpd capacity. The project economics announced included a before-tax 5% net present value of \$471M, a before-tax internal rate of return of 57%, an after-tax 5% net present value of \$373M, an after-tax internal rate of return of 48%, a payback period of 1.7 years post expansion and an initial life of mine of 11 years. It was further announced that the increased throughput was expected to drive a 394% increase in annual Ag production, bringing it to 7.9M oz/year by 2024 and, that the annual revenue was expected to increase from \$37M in 2021 to \$172M by 2024, representing an increase of 364%. The Corporation also announced that the initial proven and probable mineral reserves estimate of 8.59M t grading 257 g/t Ag for 71M oz of Ag positioned the Zgounder Silver Mine among the highest-grade silver projects globally. Additionally, it was announced that the life of mine all-in sustaining cost was expected to be of \$9.58/oz including sustaining capital expenditures, that the initial capital expenditures for the expansion project were of \$139.4M, including \$16.6M in contingency cost and, that the expansion project was expected to be completed with the first silver pour planned for the first quarter of 2024.

On February 28, 2022, the Corporation announced the receipt of regulatory approval by Moroccan Authorities of the Environmental Impact Assessment for the expansion of the Zgounder Silver Mine. The Corporation also announced its partnership with the Biotechnology for Sustainable Development in Africa Foundation to develop and support local agribusinesses and provide access to international markets in the Askaoun region in Morocco.

On March 1, 2022, the Corporation announced initial drill results from its 2021 drill exploration program at its Imiter bis property in Morocco. Among other highlights, it was announced that new mineralization and many anomalous gold and silver values had been discovered within the middle and northeast zones within the 4 km initial strike, including hole IM-DD21-014 which intercepted 1.81 g/t Au over 2.20m, hole IM-DD21-013 which intercepted 2.74 g/t Au over 1m while hole IM-DD21-010 intercepted 2.24 g/t Au over 0.9m.

On March 30, 2022, the Corporation reported results for the fourth quarter and year ended December 31, 2021, including a record annual Ag production of 1,600,646 oz, operating cash flows of \$17.5M, revenue from silver sales of \$34.3M, a financial position of \$84.2M in cash, cash equivalents and restricted cash, net income of \$1,27M and a milling averaged 609 tpd throughput.

On April 5, 2022, the Corporation announced that, further to a tender launched by the Corporation in November 2021, Moroccan-based company TRAV SOUSS MASSA had been selected to carry out lateral underground development at the Zgounder Silver Mine and had already executed 314m of development. The Corporation also informed that it had selected Canadian contractor CMAC-Thyssen to carry out the vertical underground mine development, including Alimak raises and that their mobilization to the site was scheduled for June 2022.

On April 21, 2022, the Corporation reported high-grade silver results from its drill exploration

program at the Zgounder Silver Mine, including hole D28-22-2030-042 which intercepted of 4,101 g/t Ag over 14.4m, representing the thickest high-grade silver intercept publicly recorded on the property.

On May 13, 2022, the Corporation reported interim financial and operational results for the first quarter ended March 31, 2022, including Ag production of 308,345 oz, Ag sales of 406,808 oz, revenue of \$9.2M, total ore processed of 62,001 t, mill recoveries reaching 80.4%, head grade of 192g/t and, a total milling rate of 689 tpd.

On May 24, 2022, the Corporation announced that it has completed airborne geophysics surveys at its Boumadine and Imiter bis projects and was launching their 2022 drill exploration program at the Boumadine property.

On July 7, 2022, the Corporation reported that it had completed the front-end engineering design (FEED) with Lycopodium Minerals Canada Ltd. and provided an update on the expansion of the Zgounder Silver Mine. A simplified processing flowsheet was developed through the FEED phase. Procurement of the new plant was advanced with principal packages quotes already received. The company provided details on the earthwork contractor mobilisation, start of detailed engineering of the future tailings storage facility and the underground development ongoing rate.

On August 12, 2022, the Corporation reported interim financial and operational results for the second quarter ended June 30, 2022, including the production of 459,061 oz of Ag, Ag sales of 439,080 oz, revenue of \$8.6M, total ore processed of 59,995 t, mined 63,817 t mined, mill recovery of 87.9% and, operating cash flows for the period of \$1.1M.

On October 17, 2022, the Corporation reported, for the third quarter of 2022, a record mine and mill throughput of 825 tpd and 803 tpd, respectively, along with a production of 451,681 oz of Ag, head grade of 216 g/t mined and 232 g/t Ag and, a recovery rate of 86,2%.

On November 1, 2022, the Corporation announced the launch of its 7,500-meter drill exploration program at Zgounder Regional and, an addition of 4,000m to the 2022 drilling program at Boumadine to explore strike length extensions and the central zone at depth. The Corporation also announced full results from the first phase of drilling at Imiter bis, which returned new mineralized intersections on the north target including hole IM-DD22-041 which intercepted 3.94 g/t Au over 5.0m and hole IM-DD22-039 which intercepted 1.46 g/t Au over 11.5m. The Corporation finally announced the mobilization and launch of the 25,000m drilling program at the Tijirit property in Mauritania.

On November 15, 2022, the Corporation reported interim financial and operational results for the third quarter ended September 30, 2022, including record mill and mine throughput of 758 tpd and 825 tpd, respectively, Ag production of 451,681 oz, Ag sales of 419,760 oz, revenue of \$7.2M, combined mill recovery of 86.2%, operating cash flow of \$5.7M and a financial position of \$58.1M of cash, cash equivalents and restricted cash. The Corporation also reported having completed over 7,000m of drilling on the eastern zone of the Zgounder Silver Mine and that the expansion project was one time and on budget. Finally, the Corporation reported having completed 7,500m of the initial diamond drill hole program at Boumadine and having expanded budget twice to 17,500m, to follow up on promising results.

## **Corporate**

On March 15, 2022, the Corporation announced that its subsidiary ZMSM had signed an agreement with the Office National de l'Électricité et de l'Eau Potable ("**ONEE**"), Morocco's state-owned utility, for the construction of a 90km, 60kV powerline and substation upgrades, ensuring access to clean

energy long-term from ONEE's electrical grid. The Corporation informed that the line is expected to be built over the next 2 years and will be capable of supporting Zgounder's projected expanded power requirements.

On April 7, 2022, the Corporation announced that its commons shares had commenced trading on the OTCQX under the ticker symbol "AYASF".

On June 9, 2022, the Corporation announced the completion of its first mobile health clinic near the Zgounder Silver Mine.

On June 16, 2022, the Corporation announced that it had filed on SEDAR an amended version of the independent feasibility study technical report prepared in accordance with National Instrument 43-101, for the expansion of the Zgounder Silver Mine. The amendments pertained to the replacement of certain members as external independent qualified persons and the did not change the mineral reserve estimates, economic analysis, conclusions, and recommendations of said report filed on March 31, 2022.

On September 12, 2022, the Corporation reported that it had reached an agreement with the National Office of Hydrocarbons and Mines (the "ONHYM") to acquire ONHYM's 15% interest in the Zgounder Silver Mine project and five adjacent permits to the Zgounder Silver Mine for a total consideration of 67 million dirhams (approximately \$6.5 million). The agreement entailed that the ONHYM would maintain its 3% royalty on the Zgounder Silver Mine property and, that a 3% royalty would be granted on production coming from the new permits.

On October 25, 2022, the Corporation announced that its subsidiary, ZMSM, secured a \$100M debt financing package to support the expansion of the Zgounder Silver Mine. The European Bank for Reconstruction and Development ("EBRD") received final board approval to provide a senior debt facility of \$92M, while the Climate Investment Funds, through its Climate Technology Fund ("CTF") will be providing a \$8M tranche, pari-passu with the EBRD. See "Material Contracts – EBRD Agreements".

On November 4, 2022, the Corporation announced that it had filed a preliminary base shelf prospectus with the securities regulatory authorities in all the provinces of Canada (except the territories).

On December 1, 2022, the Corporation announced that its subsidiary, ZMSM, had entered into a multicurrency fixed price engineering, procurement and construction (EPC) contract with Duro Felguera S.A. (DF) for the construction of the new process plant at the Zgounder Silver Mine. Aya project team will ensure earthworks and concrete foundation construction of the new plant and DF the rest of the plant on a EPC basis. Mobilisation to site was planned in early 2023 and commissioning of the plant in 2024. The Corporation has also announced that it had awarded contracts for the construction of its ball mill and crushing equipment package, in line with the Zgounder Silver Mine expansion development timeline. See "Material Contracts – EPC Agreements"

On December 14, 2022, the Corporation announced the completion of its deal with the ONHYM to acquire its 15% interest in the Zgounder Silver Mine and five adjacent permits to the Zgounder Silver Mine, for the price and under the terms announced on September 12, 2022.

## Recent Events – Year 2023

### ● Operations

On January 10, 2023, the Corporation announced its 2022 fourth quarter and annual silver production results at the Zgounder Silver Mine, including 661,621 oz of Ag produced, 63,283 t of ore

processed at a head grade of 364 g/t, an Ag recovery rate of 89.9%, combined mill availability of 88.8% and mine production of 80,426t, for the quarter. The Corporation also announced that, for the year 2022, a total of 1,880,707 oz of Ag was produced, 254,976 t of ore were processed at 265 g/t, there was an Ag recovery of 86.6%, the combined mill availability was 91.7% and the total mine production was of 283,090 t of ore.

On March 29, 2023, the Corporation reported results for the fourth quarter and year ended December 31, 2022, including a record annual silver production of 1,880,707 oz, operating cash flow for the year of \$9.6M, revenue \$38.2M, silver sales of 1,935,154 oz, a financial position of \$41.8M of cash, cash equivalents and restricted cash, a net income of \$1.5M and milling operations averaging 699 tpd.

## Corporate

On January 13, 2023, the Corporation announced that it had obtained a receipt for a final short form base shelf prospectus further to the filing of a preliminary short form base shelf prospectus, announced on November 4, 2022. The filing of the final short form base shelf prospectus will allow the Corporation, if it chooses, to make offerings of common shares, debt securities, warrants, subscription receipts, or any combination thereof, of up to CAD\$200M during the next 25 months in Canada.

On January 17, 2023, the Corporation announced that it had entered into an agreement pursuant to which Eight Capital and Desjardins Capital Markets, as joint bookrunners and co-lead underwriters, together with a syndicate of underwriters (collectively, the “**Underwriters**”), have agreed to purchase, on a bought deal basis, 8,485,000 common shares in the capital of the Company (the “**Shares**”), at a price of CAD\$8.25 per Share for gross proceeds of CAD\$70,001,250 (the “**Bought Deal Offering**”). The Corporation informed that it intended to use the net proceeds of the Bought Deal Offering to advance its business objectives including for the advancement of its exploration program namely at Boumadine and Zgounder, the funding of the Zgounder expansion project, and for working capital and general corporate purposes.

On January 18, 2023, the Corporation announced the upsizing of its Bought-Deal Offering and that it had entered into an amended agreement with the Underwriters pursuant to which the latter had agreed to purchase, on a bought deal basis, 9,697,000 Shares at a price of CAD\$8.25 per Share for gross proceeds of \$80,000,250 (the “**Upsized Bought Deal Offering**”). The Corporation agreed to grant the Underwriters an over-allotment option to purchase up to an additional 15% of the Shares at the same price, exercisable in whole or in part, at any time on or prior to the date that is 30 days following the closing of the Upsized Bought Deal Offering.

On January 25, 2023, the Corporation announced that it had closed its previously announced Upsized Bought Deal Offering of 11,151,550 Shares at a price of \$8.25 per Share for gross proceeds of approximately \$92,000,000, including the full exercise of the over-allotment option in the amount of approximately \$12,000,000.

On February 7, 2023, the Corporation announced that it had closed the \$100M financing facility to support the Zgounder Silver Mine expansion, previously announced on October 25, 2022. The key terms of the loan agreement include a \$92M loan provided by EBRD and a \$8M loan provided by CTF. The loan is not subject to mandatory silver hedging, offtakes, production-linked payments or equity issuances. See “Material Contracts – EBRD Agreements”.

On February 16, 2023, the Corporation announced that its subsidiary, ZMSM, had entered into a 20-year Power Purchase Agreement (the “**PPA**”) with Energie Éolienne du Maroc, for the procurement of renewable energy starting upon completion of the Zgounder Silver Mine expansion project. The PPA will allow the new and existing processing plants and surrounding infrastructure to operate

predominantly with renewable electricity and supports the Corporation's objective of implementing responsible mining and climate change initiatives in Morocco.

## BUSINESS

Aya Gold & Silver Inc. is a publicly traded Canadian company focused on the operation, acquisition, exploration and development of silver and gold deposits. Aya is currently operating mining and milling facilities at its Zgounder Silver Mine, which is 100% owned by Aya since December 14, 2022.

Aya's mining portfolio also includes the Boumadine, Amizmiz, Azegour, and Imiter-bis properties, all located in Morocco and the Tijirit gold project located in Mauritania.

### SUMMARY

The Corporation mines, produces, exports and sells its silver as ingots and silver concentrate. Silver ingots are sold to one customer in Switzerland based on the market price at the time of sale. Silver concentrate is sold to a Swiss trading company via an offtake agreement where silver is sold based on a 30-day average silver price from the date of sale. Silver can easily be sold on numerous markets throughout the world therefore, the Corporation is not economically dependent upon these specific customers.

In 2022, total sales of silver for the year amounted to \$38,244,921 compared to \$34,301,914 in 2021. Silver prices fluctuate widely and are affected by numerous factors such as, but not limited to, inflation, exchange rates, interest rates, global and regional political and economic crises. The demand and supply of silver usually affects prices but not necessarily in the same manner as other commodities.

### PRODUCTION

The current method of production at the Zgounder Silver Mine is cyanide leaching to silver ingots (48% of revenues) and flotation to a silver rich concentrate (52% of revenues).

Several key hires continued to be made throughout the year to reinforce production, mining, and operations teams. A major maintenance and refurbishment plan was established which included mining equipment, tailings facilities, living quarters, flotation plant, cyanidation plant and surrounding infrastructure, which have undergone significant work throughout the year. Major maintenance has and will continue to require intermittent stoppages of certain parts of the two plants. Continuous maintenance, repair and improvement of the tailings facilities continuous to be a priority. Water deviation canals were completed before the rainy season of 2020. The comminution circuits of both the flotation plant and the cyanidation plant were refurbished in 2021. The flotation plant ball mill as well as other material existing mining equipment underwent major repairs in 2021 and 2022 and additional equipment was brought online.

Aya significantly changed its mining operations at Zgounder in 2021 by moving from a shrinkage-stope mining method to a cut-and-fill method. Furthermore, increased mechanization began in 2021 with the introduction of the mine's first jumbo. The changes remained in effect in 2022 with a look towards increasing mechanization, while looking towards ramp up of production with bringing online the new plant in 2024.

The year 2022 had a record production of 1,880,707 oz, a 17.5% increase compared with 2021 (1,600,646 oz), the processing of 254,976 t of ore, at 265 g/t in 2022, a 13.6% increase compared with 2021, combined silver recovery of 86.6%, combined mill availability of 91.7%, and mine

production of 283,090 t of ore.

#### ● **SPECIALIZED SKILL AND KNOWLEDGE**

The Corporation hired its team from different mining operations across Morocco, West African countries and Canada, each of which are hosts to several higher education institutions specializing in mining engineering and geology, as well as several significant mining companies and operations. The team has extensive experience in the mining industry in Morocco. This knowhow and workforce pool allows Aya to advance its projects with confidence. See “Risk Factors – Human Resource Risk”

#### ● **COMPETITIVE CONDITIONS**

Mining is a competitive industry, particularly in the acquisition of mineral reserves and mineral resources. Aya competes with numerous other mining companies, including larger and well-established mining companies with established capabilities and significant financial and technical resources, in the search and acquisition of prospective silver and other precious metals mining properties. Aya’s continued success and growth not only depends on its ability to develop its present properties, but also on its search, selection and acquisition of future valuable silver exploration and/or producing properties and permits. Although Aya is a fully permitted silver producer in Morocco, is well established and has a reputation as an effective operator, there can be no assurance that its acquisition or organic development efforts will succeed in the future. See “Risk Factors”.

#### ● **REAGENTS**

The Corporation imports most of its reagents and consumables such as cyanide, zinc powder, xanthate collector, steel balls, flocculant, MIBC frother and lead nitrate from China and Europe. The prices are based on international market rates. The Corporation, with a view to manage market fluctuations and availability, maintains a four-month reserve at its storage facilities. The remainder of the raw materials are available locally without issue.

#### ● **ENVIRONMENTAL PROTECTION**

Aya’s primary objective is to minimize potential impacts of its mines and to continue to improve its environmental performance. Each mine is subject to environmental assessment and permitting processes during development. The Corporation works closely with regulatory authorities in each jurisdiction where it operates to ensure ongoing compliance.

Aya is subject to strict environmental laws and regulations in connection with its exploration, development, construction, mining, and reclamation activities in Morocco. Our policy is to conduct business in a way that safeguards public health and the environment. All of Aya’s mining, exploration and development activities are subject to local laws and statutory and regulatory requirements relating to the protection of the environment, including, but not limited to, air quality, water management and quality, solid and hazardous waste management and disposal, land use and reclamation. Failure to comply with these environmental laws or regulations could result in fines, penalties, the suspension or revocation of permits, civil sanctions or lawsuits.

The Corporation’s total liability for reclamation and closure cost obligations on December 31, 2022 was \$1,021,373. For more information, please see note 10 to the Corporation’s annual financial statements for the fiscal year ended December 31, 2022.

#### ● **PERMITS**

Exploration and production activities on the Corporation’s properties require permits from local authorities. Such activities are subject to local laws and regulations governing exploration activities,



mining activities, exports, taxation, labor standards, health and safety, land use and environmental protection. Failure to comply with applicable laws and regulations and permit requirements or amendments to them could have a harmful effect on the Corporation and could cause an increase of capital expenditures, exploration costs or production costs, or a decrease in the levels of production. Such amendments or the implementation of such laws and regulations could further cause the abandonment or delay the development of certain properties of the Corporation.

In order for the Corporation to commence exploration or mining activities on its various properties, the Corporation must obtain all the required approvals and permits including local, provincial and other government approvals. Additional permits or studies, which may include environmental impact studies, are necessary prior to launching the mining phase on properties in which the Corporation may have an interest. To that effect, no assurance can be provided or obtained that the Corporation will be able to obtain or maintain all required permits to commence the construction, development or operation of mining facilities on these properties on terms which enable operations to be conducted at economically justifiable costs.

## ● EMPLOYEES

As at March 21, 2023, the Corporation had a total of 400 full-time employees, of which 20 employees worked in Canada and the balance are employees of the Corporation's subsidiaries in Morocco and Mauritania.

## ● FOREIGN OPERATIONS

As at December 31, 2022, all mining properties and production activities and equipment are located in Morocco, with a non-material development project located in Mauritania.

## MINING PROPERTIES

### ZGOUNDER SILVER MINE

The Zgounder Silver Mine is the only material asset of the Corporation. It is located in the central Anti-Atlas Mountains in the Taroudant Province, Morocco, approximately 265 km east of Agadir.

#### Current Technical Report

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**") 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.

The Zgounder Report, which covers the entire property, is available under Aya's profile on SEDAR at [www.sedar.com](http://www.sedar.com).

#### 1 Current Technical Report

##### 1.1 Property Description and Location



The Zgounder Project (the “**Project**” or “**Mine**”) is a silver mining project located in Morocco, approximately 265 km east of the City of Agadir (pop. 575,320), in the Taroudant Province.

Aya was authorised by the Office National des Hydrocarbures et des Mines (“**ONHYM**”) to prospect and exploit base and precious metals at the Zgounder Silver Mine. The mining title number 09/2096 and exploitation permit No. 2306 (now exploitation licence No. 393459) provide surface rights and access to the Project and allows any type of mining. The exploitation licence number 393459 covers 16 km<sup>2</sup>. As of December 14, 2022, ZMSM became a wholly owned subsidiary of Aya.

## 1.2 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

The Zgounder Mine is accessible from the City of Agadir via well-maintained paved highways N10 and P1706 that run east for 205 km to Taliouine in the Taroudant Province. Most of the remaining 61 km to the Zgounder Mine are via a paved road to the village of Askaoun. The final five (5) km drive to the Mine is via a dirt road. The Zgounder Mine is also accessible via a 278 km drive on paved highway from the City of Marrakesh.

The Zgounder Silver Mine is located 2,000 metres above sea level (“**MASL**”), on the western flank of the Siroua Massif in the Anti-Atlas Mountains. This region is separated from the influence of the Mediterranean climate by the High Atlas Mountains to the north, and therefore is subject to the Sahara Desert climate.

The main villages are located near rivers for water sources and select vegetation (cereals, vegetables and some trees). The local population is exclusively Amazigh (aboriginal) with a semi-sedentary lifestyle. The economy is principally supported by livestock, agriculture and food trade (saffron, potatoes, dates), and manufacture of traditional carpets. Basic supplies, such as food and limited accommodation, are available at Askaoun. The larger City of Taliouine offers more amenities and services. Special items must be purchased from Agadir.

The mining manpower for Zgounder resides in nearby villages, located from 5 km to 10 km from the Mine site. Skilled labour is available in nearby villages and some inhabitants were employees of previous operators of the Zgounder Mine. Mine site facilities include crew houses, offices, drill core shack, a mine portal and trails linking mine entrances. The Project is powered from two (2) substations connected to national power grid at Askaoun, the closest village to the Zgounder Mine. In addition to the national powerline, standby power is available from three (3) 1,000 kVA (850 kW) generators.

The topography at Zgounder consists of moderately steep hills with high altitudes, in the range of 2,000 MASL, and low valleys with seasonal water flow in rivers. Vegetation is limited to minor alpine flowers, mosses, lichens and small evergreen trees. Wheat is cultivated on man-made terraces near the villages. The terraces are irrigated by springs and dams.

## 1.3 History

The Zgounder Silver Deposit has a long history of intermittent exploration and mining activities from ancient times to present day. The Zgounder Silver Deposit was first exploited between the 10<sup>th</sup> and 12<sup>th</sup> Century mainly in exposed oxidized zones with native silver stringers in veins. Since then, exploration campaigns and mining activities have been completed by SNAM-BRGM (1950-1979), SOMIL (1982-1990); BRPM (1990-1999); CMT (2000-2004) and Maya Gold & Silver (2012-2020).

In 2014, Maya Gold & Silver (now Aya) commissioned GoldMinds Geoservices Inc. to prepare a NI 43-101 compliant Mineral Resource estimation and a Preliminary Economic Assessment (PEA) of the Zgounder Mine, in order to resume mining and exploitation. Aya publicly disclosed a Pre-Feasibility Study (PFS) on May 2014, which was jointly prepared by Gold Minds Global (“**GMG**”) and

SGS. Processing operations commenced in July 2014 and Aya announced the first silver pour in August 2014 and production of the first 20 silver ingots.

The surface diamond drilling programs of 2015 and 2017 allowed Maya to increase the Mineral Resource of Zgounder and intersect silver-rich mineralisation in the East Zone, close to surface. Maya also intersected very rich silver mineralisation that probably corresponded to the extension of known underground mineralisation at elevation 1,655 MASL.

On April 12, 2017, Maya commissioned GMG to prepare a Mineral Resource Estimate and PEA of the Zgounder Mine. Maya publicly disclosed the Mineral Resources Estimate on January 8, 2018 and the PEA on February 5, 2018. The PEA was based on the January 8, 2018 Mineral Resources Estimate.

In 2021, Aya mandated P&E to prepare a new Mineral Resource Estimate based on new drilling information. A Mineral Resource Estimate was prepared in April 2021 and a subsequent update in December 2021, being the Technical Report defined hereinabove.

In 2022, Aya depleted the mineral resource estimate with mining until December 31<sup>st</sup>, 2022.

#### 1.4 Geological Setting and Mineralisation

The Zgounder Deposit occurs within the Proterozoic Siroua Massif that occupies a transitional position between the northern mobile Panafrican Belt and the southern Eburnean Domain in the West-African Craton. The Siroua Massif is composed of geological assemblages belonging to the Precambrian I, II and III; each separated by major discontinuities. The oldest rocks of the Siroua Massif (P1) consist of gneisses and amphibolites unconformably overlain by ophiolitic complexes, volcano-sedimentary units, alternating schist-sandstones and limestones, quartzites, and turbidites (PII). The Zgounder Deposit occurs in the PIII assemblage (Late Neoproterozoic), which is characterized by felsic calc-alkaline/alkaline volcanic units corresponding to the initiation of rifting at the start of the Infracambrian-Cambrian Transgression.

The Zgounder volcano-sedimentary assemblage forms a large EW-oriented monoclinial structure with a general southerly tilt. To the north, the assemblage sits on an andesite basement, to the west it is intruded by the Askaoun Granodioritic Massif (PIII), whereas to the east, it is overlain by volcano-sedimentary rocks of the Ouerzazate series (PII) and Neogene phonolites.

The Zgounder Series is divided into three units, which in stratigraphic (oldest to youngest) order are:

1. Blue Formation (300 m to 400 m) thick composed of sandstone, greywacke and shale with layers of tuff and quartz keratophyre followed by an orange rhyolite unit;
2. Brown Formation (350 m to 450 m thick) composed of micaceous schistose sandstone overlain by a 45 m thick dolerite sill/dyke; and
3. Black Formation (900 m thick) containing at its base a felsic volcanic complex (ignimbrite, rhyolitic breccia, devitrified rhyolite) and forming the hanging wall rock of the silver mineralisation in the Brown Formation. To the south, the Black Formation transitions into sandstone, greywacke and conglomerate.

The Zgounder shale-sandstone strikes east and dips steeply to the south, forming the south flank of an anticline generated by north-to-south compression. There are four faulting and fracturing system sets at Zgounder:

1. East to West oriented set corresponding to the opening and filling of fractures with argillaceous material and to subvertical fractures;
2. North to South oriented set;
3. NNE to NNW oriented set dipping 60° to 75° E; and
4. NNE-SSW sub-horizontal set.

The silver mineralisation occurs in three, commonly superimposed styles:

1. Mm-thick beds of well crystallized, finely disseminated pyrite associated with quartz and other sulphides found in chloritized and tuffaceous pelitic layers of the Brown Formation with silver grades of 5 g/t to 25 g/t Ag;
2. Native silver veinlets associated with proustite ( $\text{Ag}_3\text{AsS}_3$ ), argentite ( $\text{Ag}_2\text{S}$ ) and filling micro-fractures discordant with the stratification and suggesting stockwork-type mineralisation; and
3. Native silver dissemination with or without sulphide veinlets (sphalerite, galena, argentite and cinnabar) in brecciated sandstone-shale layers and spotted by nodules and flakes of chlorite and (or) carbonate.

The paragenetic sequence indicates two (2) stages of mineralisation: an early Fe-As stage (silver-bearing pyrite and arsenopyrite) and a later Ag-bearing polymetallic (Zn, Pb, Cu, Hg; sphalerite and chalcopyrite) stage. Native silver is the most common silver mineral and forms an amalgam with Hg. Tension gashes originally trapped the silver mineralisation within a NNE-oriented shear zone affecting the Brown Formation shale-sandstone beds containing anomalous Ag values. These mineralised structures were subsequently transposed by EW-oriented structures to form isolated Ag-mineralised lenses and bodies.

Zgounder is a low-sulphidation epithermal silver deposit hosted in Neoproterozoic age, sedimentary rocks.

## 1.5 Exploration Work and Drilling

### 1.5.1 Exploration

Since 2013, exploration programs included geological mapping, trenching, sampling and prospecting activities at Zgounder. These activities focused mainly on mineralised fracture sets. In addition, 3-D laser scan surveys were completed in all of the underground workings.

The purpose of these laser surveys was to generate accurate 3-D maps of the underground development and stopes.

Several exploration surface and underground drilling, channelling and trenching campaigns have been completed, starting in the 1980s by previous operators followed by Maya in 2013, 2015 and 2017 through 2019 and Aya in 2020-2022. The drilling database comprised a total of 4,669 holes for 221,539 m.

Percussion drilling (T28 and YAK-T28) is routinely used for production purposes and for exploration purposes. Data gathered from T28/YAK-T28 holes is used in Mineral Resource estimation and to identify new mineralised areas for short-term mine planning. A total of 3,072 T28/YAK-T28 holes for 68,914 m were drilled historically and until the end of December 2022 as exploration and production holes.

In addition to drilling, underground wall and roof channel sampling were performed on all adits, galleries and stopes. A total of 658 channels for 9,071 m are used in the drilling database supporting

the Mineral Resource Estimate presented in Section 14 of the Zgounder Report.

Reverse circulation (“RC”) and percussion drill programs (“T28”) were completed in 2015, 2016 and 2018 to 2019. The 2015 RC percussion hole data have not been included in the Zgounder database, due to issues with that program.

### 1.5.2 Drilling

In 2015, Maya completed a diamond drill program of 17 drill holes totalling 5,896 m. Native silver was observed in all eight of the holes drilled. The silver mineralisation is associated with sphalerite and galena.

In 2016, a total of 1,598 m was drilled using T28 percussion drills on the 2000 and 2100 Levels of the Zgounder Mine. The percussion holes drilled in the North Zone intersected some mineralised intervals and confirmed the extension to the east of Panel 9.

In 2017, Maya conducted a diamond drilling program planned and supervised by Goldminds.

The program consisted of 57 drill holes totalling 14,823 m of diamond drilling. A new zone was intersected to the East, where the mineralisation was identified at the surface. At the North Zone, hole ZG-17-03 extended mineralisation at depth from known occurrences (panels 8 & 9) at higher elevation. Similar mineralisation was observed in drill hole ZG-17-10. Drill hole ZG-17-16 is the deepest hole drilled to date at Zgounder, with a depth of 684 m (at an elevation of 1,613 MASL). The drill hole intersected disseminated native silver over 3 m at 630 m and an altered granite contact was intersected at 653 m along the drill hole. Zinc in the form of sphalerite is associated with high-grade silver reaching up to 2.38% over 1.5 m. It was the first time that the Aya intersected this type of mineralisation at depth at Zgounder.

The 2019 reverse circulation drilling program consisted of 32 drill holes totalling 3,611 m that were drilled from the surface on the East Zone of the Zgounder Property. The RC drilling campaign aimed to provide a better understanding of the distribution, orientation and thickness of the mineralised structures, and to explore the vertical extensions of the exposed mineralised structures. The results confirmed the continuity of the known mineralised domains and new occurrences hosted in the same major East to West oriented structures. The RC drilling results of this campaign led to an underground diamond drilling program to explore the vertical extensions of the mineralisation in the western and the central part of the Zgounder Mine. Drill holes ZG-RC-1, -2, -3, -4, -5, -6, -7, and -9 intersected silver mineralisation <50 g/t, in attempt to expand mineralised zones to the south.

In 2019, Maya completed an eight-hole drill program totalling 2,033.9 m. The drill program focused to the east, which corresponded to a new zone. This new zone covers an area of 200 m x 150 m that includes several mineralised envelopes, which are oriented mostly E-W with a vertical extent of 185 m below the surface intersected in drill hole ZG-19-01. The presence of the mineralisation near the surface was confirmed by the trenches results (Trench 02 11 m at 130.9 g/t Ag) and requires further work to fully define the extent of mineralisation.

In 2020 and 2021, Aya also conducted localised definition drilling using T28. Hole ZG-20-30, which intersected 1,946 g/t Ag over 9 m extended the strike to the east. Furthermore, hole ZG-20-31, located east of ZG-20-30, intersected 688 g/t Ag over 17.5 m.

Drill holes ZG-SF-20-03 and ZG-SF-20-07 from the underground drill program confirm extensions of mineralised lenses toward the west at underground level 1975. Additionally, drill hole ZG-SF-20-15 intersected several significant high-grade intervals including 1,505 g/t Ag over 6 m and 855 g/t Ag over 5.5 m, confirming high-grade silver mineralisation at depth to the east and below the 1,975 m

level. Drill holes ZG-SF-20-25 and ZG-SF-20-23 intersected 2,728 g/t Ag and 4,517 g/t Ag over 6 m and 3.5 m, respectively, below the previous (March 2021) Mineral Resources and to the east. Drill hole ZG-SF-20-18 intersected 854 g/t Ag over 12 m below the previous (March 2021) Mineral Resources. In the post-February 2021 period, drill hole T28-21-2125-203 intersected 2,417 g/t Ag over 12 m, drill hole T28-21-1975-253 returned 3,272 g/t Ag over 7.2 m, and drill hole T28-21-1975-253bis intersected 3,101 g/t Ag over 7.2 m. These three drill holes indicated continuity of high-grade mineralisation in a previously untested area below current operations.

Diamond drilling programs were completed at Zgounder in 2015, 2017 and 2019 through 2021. A total of 84,362 m has been drilled in 449 surface and underground diamond drill holes at Zgounder. In 2015, Maya completed a diamond drill program of 17 drill holes totalling 5,896 m. Native silver was observed in all eight of the holes drilled. The silver mineralisation is associated with sphalerite and galena. A 10 m sample from drill hole HL-Ext-012 was selected as a high priority sample to evaluate a sub-parallel mineralised trend north of the main Zgounder Deposit. This sample was collected from 31.3 m to 41.3 m in drill hole HL-Ext-012. GoldMind's independent assay prepared and analyzed by Fire Assay at Bourlamaque Assay Laboratories Ltd. in Val d'Or (Quebec) returned an average grade of 1,098 g/t Ag. This drill hole was collared in the valley going northward and likely intersected an extension to the east of the northern body. Three diamond holes were drilled in West Zone. Sulphide mineralisation consisting of sphalerite, galena and pyrite was encountered in altered sandstone. Multi-element analysis, particularly for zinc, lead and copper, led to identification of at least two important polymetallic corridors with horizontal widths of approximately 25 m and 40 m, extending over 1,000 m in length, with shoots of higher-grade silver mineralisation.

In 2020, the initial diamond drilling program at Zgounder was expanded twice to follow-up on promising results, completing the year with 13,904 m of surface and underground diamond drilling. Aya extended the mineralisation approximately 90 m along the eastern strike extension and at depth. Drilling at the Zgounder Mine commenced in September 2020 and continued to mid-January 2021. Four diamond drills were operating on surface and two drills operated underground. High-grade mineralised extensions were encountered at 408 m and 467 m (ZG-20-04 and ZG-20-09, respectively) from surface, which indicates potential for new underground mineralised zones. In addition, drill holes ZG-20-19 and ZG-20-22 both extend the mineralisation eastward. The results confirm high-grade silver mineralisation below the current mining operations (ZG-20-06) with an intercept of 4.0 m at 9,346 g/t Ag. In addition, drill hole ZG-20-01 confirms new high-grade mineralisation at depth at the granite contact. Results from drill hole ZG-20-13 confirm high-grade Ag mineralisation at depth with an intercept of 5.5 m at 1,273 g/t Ag. In addition, drill hole ZG-20-36 intercepted 1,587 g/t Ag over 3 m, confirming a new high-grade extension to the east.

In the post-February to December 2021 period, 166 surface and underground diamond holes were drilled totalling 33,987 m at Zgounder. The drilling campaign had two objectives: increase the confidence level of the Exploration Target area identified in the March 2021 resource estimate; and further extend mineralisation in the eastern part of the Deposit. Up to eight diamond drill rigs were in operation on the permit. Hole ZG-SG-21-67 encountered 1,383 g/t Ag over 13.5 m to extend the mineralisation trend below the 1975 level; drill hole ZG-21-51 intersected 1,615 g/t Ag over 8.5 m to confirm eastern vertical continuity 200 m below surface; hole ZG-21-50 returned 2,446 g/t Ag over 4.0 m continued definition of high-grade mineralisation below the 2030 m Level; drill hole ZG-21-43 (surface) returned 2,311 g/t Ag over 2.0 m to continue definition of eastern high-grade mineralisation. An outcome of this diamond drill program was extension of the mineralised strike length eastward by an additional 375 m.

In 2022, 288 surface and underground diamond holes were drilled totalling 35,993 m at Zgounder. The objectives of the campaign were to better define the existing resources and to extend mineralization both at depth and toward the East. To support the eastern target exploration, 4 trenches for 543 m were completed. In addition, 695 T28 and YAK-T28 holes totalling 20,056m were

completed. Historical best results came from TD28-22-2000-308 with 3,956 g/t Ag over 21.6 m while several other important intersections like DZG-SF-22-176 with 4,980 g/t Ag over 7.5 m ZG-DCD-22-06 with 5,132 g/t Ag over 2.5 m successfully extended the mineralization at depth.

## 1.6 Sample Preparation, Analysis, Security and Verification

### Logging and Sampling

Logging drill core or RC chipped materials and sampling are performed at the Zgounder Mine drill core shed facility. Internationally accepted procedures and standards are applied by Aya's technical team.

Drill core logging is carried out directly into Geotic Log since January 2022, significantly increasing the speed and the integrity of the data set. Geotic Log greatly improved the quality of the data by increasing the validation process and eliminating transcription errors. Each hole, once fully described, are validated by a geologist and by the database administrator before being integrated into the Geotic database.

Digital photographs are taken of the drill core and drill core recovery, RQD, basic geotechnical information, geological and structural elements are recorded in the drill logs. Samples for bulk density determination are also selected.

Nominal drill core sample intervals are 1.0 m and 1.5 m, but are adjusted to respect lithological contacts or abrupt changes in mineralisation, generally between 0.3 m to 2.0 m. Hard drill core material is cut using a diamond-blade saw. The rock saw operator cuts along contacts between samples along a line drawn by the logging geologists.

One-half of the drill core is placed into a polyethylene bag with a sample tag and sent to the assay laboratory for analysis, and the remaining half-drill core is carefully returned to its original position in the drill core boxes. An arrow to mark downhole direction is drawn along each drill core sample by the geologist, for future reference. Paper sample tags are stapled to the drill core boxes at the end of the sample intervals. Sample books were utilized with pre-recorded, unique sequential number tags reserved for QC samples at pre-determined locations.

### Bulk Density Determination

Bulk density determination is performed onsite by Aya geologists, with the water immersion method selected as an appropriate method to determine the bulk density of rocks at Zgounder.

Aya's protocol calls for the determination of wet (moisture percent) and dry densities of mineralised and barren samples. Full drill core pieces of approximately 10 cm to 15 cm are used for the determinations. When this process is complete, the drill core is cut and one-half is returned to the original location in the drill core box, with a piece of flagging tape stapled to the box to aid with future sample identification.



**Table 0.1 – Bulk Density Factor for Each Rock Type and Mineralised Material Observed at the Zgounder Project**

Facies	Rock Code	No. Samples	Dry Bulk Density
<b>Brown Formation</b>			
Schist + Ag	300	62	2.76
Schists not mineralised	200, 310, 320, 330, 350	256	2.75
Schist + Pyrite	340	20	2.77
<b>Volcanics</b>			
Andesite	400	7	2.54
Diorite	500	19	2.70
Rhyolite	475	30	2.67
<b>Intrusives</b>			
Pink Granite	600	5	2.61
Granodiorite	650	26	2.71
Fault (BX, Cis, FZ)	70	0	2.70
	<b>Total</b>	<b>425</b>	

Preparation and Analysis

Sample preparation and analysis for samples collected from T28 production drilling are carried out in Aya’s laboratory facilities at the Zgounder Mine. Chip samples collected from the T28 drilling operation are collected on a 1.2 m length basis. The samples are dried and analyzed for silver at the Zgounder Mine laboratory using aqua regia (1/3 HNO<sub>3</sub> and 2/3 HCL) with atomic absorption finish. In October 2020, Aya’s geologists began inserting certified reference materials (CRMs), blanks and duplicates, in accordance with industry accepted quality assurance/quality control (“QA/QC” or “QC”) procedures. Select pulps were also sent to ALS in Seville, Spain laboratory for check assaying of Ag only, using aqua regia and atomic absorption spectroscopy finish.

Sample preparation and analysis for samples generated from diamond drill holes are performed by African Laboratory for Mining and Environment (“AfriLab”); the preparation is made directly on site since April 2022 in the newly installed AfriLab preparation unit. The prepared pulps are then shipped to AfriLab Laboratory in Marrakesh, Morocco. All individual samples represent approximately one-metre length ½-cut drill cores, with half of the drill core length stored on-site for reference. Table 0.2 lists various independent and reputable Spanish, Moroccan, and Canadian laboratories used since the 1980s and includes the laboratory certification/accreditation details.



**Table 0.2 – Summary of the Independent and Reputable Assay Laboratories Used Since 1980s**

<b>Drill Program</b>	<b>Sample Preparation</b>	<b>Analytical Laboratory</b>	<b>Analytical Methods</b>	<b>Accreditation / Independent of Aya</b>	
1980s to present	Aya	Aya	Aqua Regia ICP-AES	None	No
2013	ALS Val d'Or, Canada	ALS Val d'Or	AG-GRA21	ISO/IEC 17025:2017	Yes
2015 to present	AfriLab, Morocco	AfriLab	Aqua Regia ICP-AES	SGS MA20/819942595	Yes
2015	ALS, Seville, Spain	ALS Spain	AG-GRA21	INAB NO.173T	Yes
2019 to present	AfriLab, Morocco	ALS Spain-Ireland	AG-GRA21	INAB NO.173T	Yes

*Zgounder Laboratory Sample Preparation and Analysis*

Prior to the 2020 drilling program, all percussion drilling samples were prepared and analyzed at the Zgounder Mine laboratory. Samples are completely crushed to 80% passing 2 mm and riffle-split to obtain a 100 g subsample, which is then pulverized to a pulp 80% passing 75 µm.

Each sample is subject to chemical digestion using aqua regia. The solutions are analyzed by atomic absorption spectrometer. Fire assay is used for high-grade silver samples.

*AfriLab Laboratory Sample Preparation and Analysis*

The total sample is crushed to <2 mm with a passing rate of 85% using a ROCKLABS jaw crusher. A sieving operation is used to ensure the sample is 85% <2 mm. To control the risk of contamination, the jaw crusher is cleaned thoroughly between each sample using compressed air and local waste rock.

The crushed sample is then divided using a Riffle splitter, to have a sub-sample of between 250 g to 300 g. The splitter is cleaned thoroughly between each sample using compressed air.

The sub-sample is pulverized using a ROCKSLABS pulverizer. Pulverizing performance is targeted to a size of 85% of the sample at <75 µm. One sample in twenty is selected at random to verify this performance, by wet sieve test (standard 75 µm sieve).

Silver is analyzed by atomic absorption after aqua regia. Silver grades of >200 g/t Ag are further analyzed by a fire assay method.

*ALS Laboratory Sample Preparation and Analysis*

After ALS logs the sample into its tracking system, the sample is crushed, riffle split, and then pulverized to >85% passing 75 µm screen. Routine QC pulp testing is randomly carried out on at least one in 50 samples. Silver is analyzed by fire assay fusion with gravimetric finish.

*Security – Chain of Custody*

Drill core is under ZMSM's control from the drill site, where ZMSM geologists supervise operations,

to the drill core shed at the mine site, where drill core boxes are transported at the end of each shift for logging, cutting and sampling. Prepared samples are stored at the Aya facility until a sufficient number of samples have accumulated, at which time samples are packed into 50 litre plastic drums and transported to the AfriLab preparation facility on site, or to the ALS laboratory in Seville, using a commercial transport group. Samples analyzed by ALS in Ireland are shipped directly to the ALS facility in Ireland from the ALS laboratory in Seville, Spain and tracked through ALS's Global Enterprise Management System.

All samples remain under constant surveillance until delivery to the laboratory facility, thereby preserving a continuous chain of custody.

When logging and sampling are completed, the drill core boxes are safely stored at the warehouse with the coarse reject and pulp samples returned from the laboratory.

### 1.7 Metallurgy and Processing

A main composite and five variability samples were selected to represent the ore body spatially, by lithology and to cover a range of grades. Comminution testing showed all the samples can be classified as very hard but only mildly abrasive. Mineralogical examination revealed the potential for nugget effects as a few unexpectedly large silver particles were observed. Gravity concentration testing yielded an average gravity recovery of 15% for conventional tests and 34% for the EGRG test. This is sufficient to warrant inclusion of a gravity concentration step. Whole ore rougher flotation tests showed an insensitivity to grind size hence a  $P_{80}$  of 100 microns was adopted for the remainder of the test program. Comparative cleaner flotation tests showed a significant shift of the grade vs recovery curve when regrinding the rougher concentrate to 80% passing 20 microns. Locked cycle tests (LCT) revealed that inclusion of a gravity step would result in a small improvement in overall silver recovery.

Cyanidation tests were performed on whole-ore, gravity tails as well as both flotation products. Whole-ore cyanidation yielded an 89% silver recovery. Leaching of flotation tails yielded silver extractions of around 65% at a NaCN consumption of 1.4 kg/t. Pre-oxygenation tests indicated that the cyanide consumption can be effectively curbed through oxidizing cyanide consumers prior to and during the initial part of the leach. The NaCN consumption decreased to 0.96 kg/t at a constantly maintained concentration of 2g/l. Further reductions are possible at lower cyanide concentrations, but the silver extraction also decreases.

Leaching of flotation concentrate showed a sensitivity to NaCN with the extraction of silver increasing by 5% when increasing the NaCN concentration from 4 to 12 g/l. Unfortunately, the cyanide consumption also doubled over this range. Tests performed using samples of the current operating flotation plant concentrate showed that it behaves similarly to the samples tested during this testwork program.

Merrill-Crowe cementation tests indicated that almost all (>99.8%) of the silver will precipitate from the combined pregnant solutions and that excess zinc is not required.

Cyanide destruction tests were conducted on barren solution from a cementation test at four (4) different hydrogen peroxide additions. It showed an optimum minimum free cyanide is achieved when adding 250% of the stoichiometric  $H_2O_2$  requirement.

Carbon adsorption kinetic and equilibrium tests were conducted to derive modelling parameters for subsequent simulations of various CIP scenarios. These showed that a 12 t/d carbon advancement through an 8-stage carousel with 12 tonnes carbon in each tank would yield loaded carbon silver grades of around 5.5 kg/t and dissolved silver losses of 0.34 mg/l. It may be more economical to target even higher loadings in order to decrease elution costs at the expense of additional dissolved

losses. When moving only 10 t/d the predicted dissolved loss can be expected to increase to 0.5 mg/l which is still acceptable and justifiable given the saving in elution costs.

Flotation concentrate samples were subjected to dynamic settling test. These showed that a 66% w/w solids underflow density is achievable at a unit rate of 0.2 m<sup>2</sup>/(t/d). This would decrease to 59.9% w/w solids at 0.12 m<sup>2</sup>/(t/d). A critical solids density of 68% w/w solids was established with a yield stress of 36 kPa (unsheared). CCD thickener testing and modelling showed a 5 stage CCD train would provide 99.5% washing efficiency using 1.69 m<sup>3</sup>/t washing water.

Sedimentation testing of the flotation tailings showed that a 54% underflow density is readily achievable at a unit area of around 0.22 m<sup>2</sup>/(t/d) but it demands 110 g/t flocculation.

Variability testing yielded overall silver recoveries ranging from 84.4% to 94% when subjecting these samples to tests mimicking the selected flowsheet.

### 1.8 Mineral Resource Estimate

The Mineral Resource Estimate incorporates drilling carried out on Zgounder between February 2018 and December 2021. The Mineral Resource Estimate is reflected in the Zgounder Report which effective date is December 13, 2021 and is summarized in Table 1.1, along with the depleted Mineral Resource Estimate. The depleted Mineral Resource and Reserve Estimates were prepared by Mr. David Lalonde, P. Geo., Head of Exploration of the Corporation, a Qualified Person. In preparing the estimates, Mr. Lalonde has taken account of changes to the mineral reserves and resources due to mining depletion as of the effective date of the Zgounder Report to December 31, 2022. The changes to the resource and reserve report reflect mine depletion due to mining activities; no other adjustments to the estimate have been made to the mineral resource and reserve estimate in the Zgounder Report. All economic parameters are based on the Zgounder Report. All risks associated with the Zgounder Silver Mine are defined in the risks section of the Zgounder Report. Disclosure follows assumptions and parameters used in the Zgounder Report.

As at December 31, 2022, at a cut-off grade of 65 g/t Ag, Pit-Constrained Measured and Indicated Mineral Resource totals 514 kt grading 357 g/t Ag for 5.9 Moz Ag. At a cut-off grade of 75 g/t Ag, Out-of-Pit Measured and Indicated Mineral Resource totals 8.7 Mt grading 311 g/t Ag for 86.9 Moz Ag and Inferred Mineral Resource totals 542 kt grading 367 g/t Ag for 6.4 Moz Ag. At a cut-off grade of 50 g/t Ag, tailings Indicated Mineral Resource totals 272 kt grading 94 g/t Ag for 817 koz Ag. The Measured and Indicated Mineral Resources for Zgounder totalling 9.5 Mt averaging 307 g/t Ag for 93.6 Moz Ag.

**Table 1.1 –Mineral Resource Estimate and Depleted Mineral Resource Estimate <sup>(1-15)</sup>**

Area	Class	Cut-Off <sup>(1)</sup>	Cut-Off depleted <sup>(2)</sup>	Tonnes <sup>(1)(2)</sup>	Tonnes depleted <sup>(2)</sup>	Ag <sup>(1)</sup>	Ag depleted <sup>(2)</sup>	Ag <sup>(1)</sup>	Ag depleted <sup>(2)</sup>
		(Ag g/t)	(Ag g/t)	(kt)	(kt)	(g/t)	(g/t)	(koz)	(koz)
<b>Pit Constrained</b>	Measured	65	65	108	108	477	477	1,656	1,656
	Indicated	65	65	406	406	325	325	4,242	4,242
	<b>Measured +Indicated</b>	65	65	514	514	357	357	5,898	5,898
	Inferred	-	-	-	-	-	-	-	-
<b>Out-of-Pit</b>	Measured	75	75	3,403	3,216	343	350	37,527	36,152
	Indicated	75	75	5,576	5,479	289	288	51,810	50,773
	<b>Measured +Indicated</b>	75	75	8,979	8,696	309	311	89,337	86,925
	Inferred	75	75	542	542	367	367	6,395	6,395
<b>Tailings</b>	Measured	-	-	-	-	-	-	-	-
	Indicated	50	50	272	272	94	94	817	817
	<b>Measured +Indicated</b>	50	50	272	272	94	94	817	817
	Inferred	-	-	-	-	-	-	-	-
<b>Total</b>	Measured	-	-	<b>3,511</b>	<b>3,324</b>	<b>347</b>	<b>354</b>	<b>39,183</b>	<b>37,808</b>
	Indicated	-	-	<b>6,254</b>	<b>6,157</b>	<b>283</b>	<b>282</b>	<b>56,869</b>	<b>55,832</b>
	<b>Measured +Indicated</b>	-	-	<b>9,765</b>	<b>9,482</b>	<b>306</b>	<b>307</b>	<b>96,052</b>	<b>93,640</b>
	Inferred	-	-	<b>542</b>	<b>542</b>	<b>367</b>	<b>367</b>	<b>6,395</b>	<b>6,395</b>

- December 13, 2021 is the effective date for the Mineral Resource Estimate, as reported in the Zgounder Report.
- The numbers presented in the grey columns represent the Mineral Resource Estimate depleted through December 31, 2022.
- 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, taxation, socio-political, marketing, or other relevant issues. There is no certainty that Mineral Resources will be converted to Mineral Reserves. No additional Inferred Mineral Resources were reported for this update.
- Mineral Resources are reported inclusive of Mineral Reserves.
- The Inferred Mineral Resource in this estimate has a lower level of confidence that that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.
- The Mineral Resources in this news release were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.
- A Ag price of \$22.5/oz with a process recovery of 90%, \$20/t rock process cost, US\$16.5/t tailings process cost and \$7/t G&A cost were used.
- The constraining pit optimization parameters were \$15/t of mineralized material (including waste mining) and 50° pit slopes with a 65 g/t Ag cut-off.
- The out-of-pit parameters used a \$22/t mining cost. The out-of-pit Mineral Resource grade blocks were quantified above the 75 g/t Ag cut-off, below the constraining pit shell and within the constraining mineralized wireframes. Out-of-pit Mineral Resources exhibit continuity and reasonable potential for extraction by the cut and fill underground mining method.
- The tailings parameters were at a \$9/t mining cost, and Mineral Resource grade blocks were quantified above the 50 g/t Ag cut-off.
- Individual calculations in tables and totals may not sum correctly due to rounding of original numbers.
- Grade capping of 6,000 g/t Ag was applied to composites before grade estimation.
- Bulk density was determined from measurements taken from drill core samples.
- 1.2 m composites were used during grade estimation.
- Previously mined areas of the deposit were depleted from the Mineral Resource Estimate.

The Mineral Resource Estimate incorporates drilling carried out on Zgounder from February 2018 to September 2021. The Mineral Resource database update consists of 516 drill holes (surface and underground combined) for 41,932 m completed at Zgounder.

Three-dimensional block models were created for the Zgounder Deposit and for the historical tailings located a few hundred meters northwest of the mine site. A geological rock code system was introduced and assigned to the various lithological units and mineralized domains. Continuity directions were assessed based on the orientation of the domains and the spatial distribution of silver. Separate variograms were generated for 1.2 m down-hole silver composites within each domain. Mineralization modelling, grade estimation and Mineral Resource reporting were conducted using Gemcom<sup>TM</sup>, Leapfrog<sup>TM</sup>, Snowden Supervisor<sup>TM</sup> and NPV Scheduler<sup>TM</sup> software. Ordinary kriging was used for grade estimation into 2.0 m x 2.0 m x 2.0 m model blocks.

This Mineral Resource Estimate forms the basis of Aya's Mineral Reserve Estimate in conjunction with the Zgounder Report.

### 1.9 Mineral Reserves Estimate

Mineral Reserves for the Zgounder mine were estimated using HxGN MinePlan's MSOPit module to determine the economic pit shell for the open pit portion, and Deswik.SO to determine the underground reserves. The historical tailings were converted from Mineral Resources to Mineral Reserves using economic parameters and calculations. Only Measured and Indicated Mineral Resource categories were considered for the Mineral Reserves.

For the open pit mining and historical tailings reclamation, a standard open pit truck and shovel operation was assumed, with no drill & blast requirements for the historical tailings. For the underground mining, a combination of cut-and-fill and longhole stoping was used. A combined ore production of 2.7 ktpd, combining the new mill at 2.0 ktpd and the existing mill at 0.7 ktpd, was used.

Mine designs were created for the open pit and the underground portions of the mine. The operational pit was designed using the economic pit shell as a guide, adding 12 m wide ramps to accommodate the chosen 8x6 trucks, and ensure an appropriate mining width is respected. Developments to access the stopes were designed for the underground mine to ensure access to the ore.

The Mineral Reserves have been depleted through December 31<sup>st</sup>, 2022 and include the Mineral Reserves estimates announced on February 22<sup>nd</sup>, 2022. The depleted Mineral Reserves are estimated at 2.9 Mt proven reserves grading 293 g/t Ag and 5.4 Mt probable reserves grading 237 g/t Ag, for a total of 8.3 Mt ore grading 257 g/t Ag. Table 1.2 presents a summary of the Mineral Reserves Estimate as reported in the Zgounder Report and of the depleted Mineral Reserves Estimate for the Zgounder Silver Mine as at December 31, 2022.

**Table 1.2 – Mineral Reserves Estimate<sup>(1-13)</sup> and Depleted Mineral Reserves Estimate<sup>(14)</sup>**

Description	Classification	Tonnage	Tonnage depleted <sup>(14)</sup>	Ag Grade	Ag Grade Depleted <sup>(14)</sup>	In-Situ Ag	In-Situ Ag Depleted <sup>(14)</sup>
		(Mt)	(Mt)	(g/t)	(g/t)	(Moz)	(Moz)
Open Pit	Proven Reserves	0.6	0.6	312	312	5.7	5.7
	Probable Reserves	1.6	1.6	233	233	12.1	12.1
	<i>Total Open Pit Reserves</i>	2.2	2.2	253	253	17.8	17.8
Historical Tailings	Probable Reserves	0.3	0.3	77	77	0.8	0.8
Underground	Proven Reserves	2.5	2.3	283	292	23.0	21.8
	Probable reserves	3.6	3.5	256	268	29.3	27.5
	<i>Total Underground Reserves</i>	6.1	5.8	267	268	52.3	50.1
Total	Proven Reserves	3.1	2.9	288	293	28.7	27.5
	Probable Reserves	5.5	5.4	239	237	42.1	41.3
	<b>Total Reserves</b>	<b>8.6</b>	<b>8.3</b>	<b>257</b>	<b>257</b>	<b>70.9</b>	<b>68.7</b>

1. The Mineral Reserve is estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.
2. The Mineral Reserve is estimated with a variable COG which was calculated by mining method.
3. Ag content (oz) are estimated as in-situ
4. An ONHYM royalty of 3% is included in the Mineral Reserve Estimate.
5. The Mineral Reserve is estimated with a mining recovery of 95%.
6. The Mineral Reserve includes both internal and external dilution. The external dilution included a mining dilution of 0.3 m width on the hanging wall and footwall for the long-hole mining method and a 0.1 m width on the hanging wall and footwall for the cut-and-fill mining methods.
7. A minimum mining width of 4m was used for the long-hole and cut-and-fill mining methods.
8. The economic viability of the Mineral Reserve has been demonstrated.
9. For the historical tailings Reserves Estimate, a silver price of US\$20/oz with a process recovery of 92%, a process cost of \$20.93/t (including G&A), and a mining cost of \$4.31/t (including haulage) were used.
10. For the Open-pit Reserves Estimate, a silver price of US\$20/oz with a process recovery of 92%, a process cost of US\$22.91/t (including G&A), and a mining cost of \$4.00/t (including haulage) were used.
11. For the Underground Reserves Estimate, a silver price of \$20/oz with a process recovery of 92%, a process cost of US\$22.91/t (including G&A), and a mining cost of \$24.13/t (including haulage and backfill) were used for the combined cut-and-fill and long-hole methods.
12. The Mineral Reserve Estimate has an effective date of December 13, 2021, as reported in the Zgounder Report.
13. Totals may not add due to rounding.
14. The grey columns represent the depleted Mineral Reserve Estimates, as at December 31, 2022.

### 1.9.1 MINING METHODS

The Zgounder Project will be mined in a combination of open pit mining, reclamation of historical tailings, and underground mining. The mine will operate year-round, seven days a week, twenty-four hours per day (three, 8-hour shifts). Two weeks of adverse weather conditions per year are considered in the mine plan.

#### 1.9.1.1 Open Pit Mining

Conventional open pit mining with 8x6 trucks and matching shovels, undertaken by a local mining contractor, was chosen for open pit portion of the Zgounder mine. The material extracted from the pit will be loaded into 8x6 trucks and hauled to its destination. The pit will be mined over a 7-year period, with two years of pre-production mining and an additional year for stockpile rehandling at

the end of the mine life.

Ore material will be sent to either the ore pass or an ore stockpile; the stockpiles will separate the low-grade and high-grade material. Rehandled stockpile material will be loaded onto the trucks and brought to the ore pass. Waste material will be sent to the waste stockpile located near the pit. Some waste material will be sent underground for use in backfill.

The mine will be operated by a local mining contractor, who will supply all equipment and staff necessary for the operation.

#### 1.9.1.2 Historical Tailings Reclamation

The nearby historical tailings will be reclaimed at the end of the open pit mine life using a loader and truck operation. No drilling and blasting will be required. Additionally, the tailings material will not require any crushing.

The material will be loaded on to the 8x6 trucks and hauled to the mill. No waste material will be excavated. The reclamation will take place over the course of two (2) years.

The historical tailings reclamation will be undertaken by the open pit mining contractor.

#### 1.9.1.3 Underground Mining

The underground mine will be mined using a combination of drift-and-fill and long-hole stoping. The underground mine will be accessed from surface and from the historic underground drift excavations that will require rehabilitation. The main ramp will begin from the underground on 2000L main level and be excavated up and down to the 2092L and 1648L Levels, respectively.

The development of the underground mine will be undertaken by mining contractors while the ore production will be undertaken by Aya staff. The underground operation will be undertaken over 11 years.

### 1.9.2 COMBINED MINE PLAN

Table 1.3 presents the combined mine plan for the open pit, historical tailings and underground portions of the Project.



**Table 1.3 – Combined Mine Plan**

	Unit	PP2	PP1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Total	
<b>Open Pit Mine</b>														
<b>Ore</b>	<b>Pit to Mill</b>	kt	-	-	200.9	192.6	185.8	251.0	248.6	234.2	202.8	-	-	1,516
	<b>Pit to Low-Grade Stockpile</b>	kt	-	8.1	20.3	113.2	98.9	36.7	36.7	29.2	29.3	-	-	372.4
	<b>Pit to High-Grade Stockpile</b>	kt	-	62.6	48.2	80.8	45.7	28.9	11.3	4.1	8.4	-	-	290.2
	<b>Low-Grade Stockpile to Mill</b>	kt	-	-	14.5	0.1	7.6	30.1	9.5	45.3	76.8	-	188.6	372.4
	<b>High-Grade Stockpile to Mill</b>	kt	-	-	46.6	95.3	94.7	6.9	29.9	8.4	8.4	-	-	290.2
	<b>Total Mill Feed</b>	kt	-	-	262.0	288.0	288.0	288.0	288.0	288.0	288.0	-	188.6	2,178.6
	<b>Silver Grade at Mill</b>	g/t	-	-	350.0	303.3	202.2	279.5	311.7	231.8	230.1	-	61.8	253.5
<b>Waste</b>	kt	-	3,171.2	4,320.0	3,940.0	3,880.7	3,295.8	2,509.6	1,393.3	937.4	-	-	23,447.9	
<b>Total Mined</b>	kt	-	3,241.9	4,589.5	4,326.5	4,211.1	3,612.4	2,806.2	1,660.9	1,177.9	-	-	25,626.5	
<b>Stripping Ratio</b>	w/o	-	44.8	16.0	10.2	11.7	10.4	8.5	5.2	3.9	-	-	10.8	
<b>Tailings Reclamation</b>														
<b>Ore</b>	<b>Tonnage to Mill</b>	kt	-	-	-	-	-	-	-	-	288.0	30.8	318.8	
	<b>Silver Grade</b>	g/t	-	-	-	-	-	-	-	-	80.5	39.5	7.6	
<b>Underground Mine</b>														
<b>Ore</b>	<b>Tonnage to Mill</b>	kt	226.3	251.4	594.9	671.6	673.1	673.1	673.2	673.2	673.2	745.9	237.5	6,093.4
	<b>Silver Grade</b>	g/t	264.4	286.4	284.5	249.8	283.3	291.9	322.8	243.8	257.6	225.2	208.5	267.5
<b>Waste</b>	kt	566.3	655.0	671.7	663.0	704.2	307.3	196.7	136.2	156.9	104.1	33.0	4,194.5	
<b>Total Mined</b>	kt	792.64	906.44	1266.59	1334.61	1377.33	980.44	869.86	809.42	830.14	849.97	270.50	10,287.9	
<b>Combined Mine Plan</b>														
<b>Ore to ROM Pad</b>	kt	226.3	251.4	856.9	959.6	961.1	961.1	961.2	961.2	961.2	1,033.9	456.9	8,590.8	
<b>Silver Grade</b>	g/t	264.4	286.4	304.5	265.9	259.0	288.2	319.5	240.2	249.4	184.9	136.6	256.7	
<b>Waste</b>	kt	566.3	3,826.2	4,991.7	4,603.0	4,584.9	3,603.1	2,706.3	1,529.5	1,094.3	104.1	33.0	27,642.5	
<b>Total Mined</b>	kt	792.6	4,077.6	5,848.6	5,562.6	5,546.0	4,564.2	3,667.5	2,490.7	2,055.5	1,138.0	489.9	36,233.3	

## 1.10 Processing and Recovery Operations

The processing complex at Zgounder will comprise of the following three (3) facilities:

1. Existing Plant #1 (cyanidation plant);
2. Existing Plant #2 (flotation plant); and
3. New Plant #3.

Products from the existing plants will be processed by the new facility. The existing Plant # 1 (Cyanidation Plant) will continue to treat 180 t/d of mineralised material feed and its silver sludge will be transferred to the New Plant #3 for refining. The existing Plant # 2 (Flotation Plant) will continue to crush and grind 500 t/d of mineralised material and it pump the ore slurry New Plant #3, for leaching, precipitation, calcination and smelting.

The new mineral processing facility has been designed to treat mineralised material at a nominal throughput rate of 2,000 t/d and at a head grade of 210 g/t of silver. The plant will comprise of the following unit operations:

- Crushing: two stage crushing circuit closed out by a vibrating screen;
- Grinding: single stage ball milling circuit closed out by hydrocyclones to grind the mineralised material to 80% passing 100 microns;
- Gravity Separation: gravity concentrator integrated within the grinding circuit. Fed by diverting some cyclone underflow to the scalping screen. Gravity tailings will return to the ball mill feed chute;
- Intensive cyanidation: of the gravity concentrate with the pregnant solution combining with the counter current decantation (CCD) overflow solution recovered solution ahead of the Merrill-Crowe section;
- Pre-thickening of the cyclone overflow followed by cyanidation of the whole ore slurry.
- Counter-Current Decantation (CCD): Cyanidation of the liquid-solid separation in a train of CCD thickeners with the CCD overflow reporting to the Merrill-Crowe and the barren CCD underflow reporting the tailing storage facility
- Merrill-Crowe: to recover silver from the combined pregnant solutions through zinc cementation; and
- Refinery: drying and smelting of sludge to produce doré silver bars.

Key design parameters (most from testwork results) are as follows:

- Crushing circuit utilisation of 68.5% and the remainder of the plant at 91.3%;
- Silver recovery into the gravity concentrate of 16% with 84% of the remaining silver recovered into the flotation concentrate;
- Cyanidation extraction efficiencies of 96% for both the gravity concentrate and the flotation concentrate;
- An overall extraction of 91%;

- A hardness Axb of 23.2 units which classifies the ore as very hard;
- A ball mill work index of 23.1 kWh/t which confirms the hardness classification;

## 1.11 Infrastructure, Permitting, and Compliance Activities

### 1.11.1 EXISTING INFRASTRUCTURE

The Zgounder mine has been in production since 2019 (for the flotation plant) and has all the necessary infrastructure required to support the current mining operation. This includes, but is not limited to laboratory, fuel storage, offices, warehouse and storage, 700 t/d processing capacity (flotation and cyanidation plants combined), camp, underground mine and related infrastructure, waste stockpiles and TSF capacity for 5 years production:

### 1.11.2 NEW INFRASTRUCTURE FOR ZGOUNDER EXPANSION

The new process plant #3 facility has nine (9) areas: crushing, grinding, gravity concentration, intensive leach reactor, cyanidation leaching tanks, counter-current decantation, Merrill-Crowe and a smelting area

The other major facilities and services outside the new process plant, which are included as part of the expansion Project, include: new electrical line and substation, new emergency power facilities, additional fuel storage tanks, new open pit, including waste storage stockpiles, and new automation and telecommunication system.

### 1.11.3 SURFACE WATER MANAGEMENT

Englobe was retained by Aya Gold & Silver (Aya) to complete the global water balance for the Zgounder mine expansion project as part of the Zgounder feasibility study. The objectives were to validate the hydraulic conditions to supply the new processing plant with water and to size the new water management infrastructure for the mine expansion. During the development of this study, one of the requirements was to develop a strategy that did not include any additional freshwater wells. No site visit was conducted due to COVID-19 restrictions.

Following the feasibility study, GCIM (a Moroccan engineering firm) was mandated to refine the water management strategy through detailed engineering. Two large water ponds will be added to the existing one to provide a cumulative water storage capacity of 300 000m<sup>3</sup> of water. The water will be sourced from an existing 20m<sup>3</sup>/h gravity fed mountain water source and collected rainwater passing by the Zgounder river. Additionally, the new tailing storage facility will provide a temporary buffer to ensure sufficient water for commissioning.

### 1.11.4 NEW TSF

For the purposes of this FS, using the current information concerning the characteristics of the construction materials and the foundation, the TSF design was carried out with the aim of defining a budget estimate for the needs of the FS and was designed in three (3) phases for a total capacity of 10 years of expanded capacity beyond the existing TSF capacity of 5 years

- Phase 1: Volume stored: 2.48 Mm<sup>3</sup>, 2.85 years;
- Phase 2: Volume stored (Phase 1 + Phase 2): 4.84 Mm<sup>3</sup>, 7 years;
- Phase 3 Volume stored: 2.66 Mm<sup>3</sup>, 3 years.

## 1.12 Market Studies and Contracts

The end product that is planned to be marketed from the Zgounder Expansion plant is in the form of silver doré bars (silver ingots). The silver ingots produced at Zgounder will be of high purity, typically in excess of 98% of Ag content by weight. The silver doré bars are delivered to refineries where they will be refined to commercially marketable 99.9% pure silver bars.

Silver is considered a global liquid commodity and is predominantly traded on the London Bullion Market Association (LBMA) and COMEX in New York.

A recommendation as to acceptable consensus pricing is put forward to the company executives, and a decision is made to set the metal price guidance for Mineral Resource and Mineral Reserve estimates. This guidance is updated at least annually, or on an as-required basis.

Metal prices used for the Technical Report (December 2021 Mineral Resource Estimate (P&E Report)) and for the Mineral Reserves Estimate as part of the Zgounder Report are listed in the Table 1.4.

For the economic analysis of the Project, a silver price of \$22.00/oz was used.

**Table 1.4 – Metal Prices Used for the Mineral Resources and Mineral Reserves Estimates**

<b>Metal</b>	<b>Unit</b>	<b>Mineral Resource Estimate</b>	<b>Mineral Reserves Estimate</b>
<b>Silver</b>	\$US/oz	22.50	20.00

### 1.13 Environmental Studies, Permitting and Social or Community Impact

The first Environmental Impact Assessment (EIA) study of the Zgounder mine was prepared in 2013 by Hydraumet, Morocco. Subsequently, operating permit No. 2306, which included exploration permit, surface rights, access to property and any type of mining operations, was issued to Maya Gold and Silver Inc. by ONHYM. On August 15, 2014, the operation of the Zgounder mine by ZMSM obtained its environmental acceptability from the prefecture of Agadir Ida-Outanane. An environmental monitoring program was developed by ENGITECH/TEVARI in 2014 and implemented in 2015.

In December 2021, NOVEC submitted a new Environmental and Social Impact Assessment (ESIA) as part of the Zgounder Silver Mine Expansion Project. This expansion project includes an open pit mine, a waste dump, a new 2,000 t/d concentrator and a new tailings impoundment. The International Finance Corporation's Performance Standards were applied when defining the scope and terms of reference of this new ESIA.

Under the current regulatory framework, no new permits are required for the Zgounder Expansion Project.

### 1.14 Capital and Operating Cost Estimates

#### 1.14.1 CAPITAL COST ESTIMATE (CAPEX)

The initial Capex estimate for the Zgounder Expansion Project includes all the Projects' direct and indirect costs to be expended during the implementation of the Project, inclusive of an upcoming basic engineering as well as the execution phase, complete with detailed engineering. The Capex is deemed to cover the period starting at the approval by Aya of this Report and finishing after commissioning is achieved.

All capital costs are expressed in United States Dollars (USD). Currency exchange rates are dated Q4 2021. Inflation and risk are not included in the estimate.

The initial Capex for the Zgounder Expansion Project is estimated at \$ 139.4M USD. Details are presented in Table 1.5.

**Table 1.5 – Initial Capex Summary by Major Area (USD)**

WBS	Major Area	Total Cost (\$ USD)
1000	Mining – UG equipment & infrastructures	9,713,352
2000	Mining – Open pit pre-stripping	2,943,170
4000	New Processing Plant	60,770,216
5000	Power Generation and Distribution	8,643,184
6000	TSF	5,536,670
	<i>Sub-Total Direct Costs</i>	<i>87,606,593</i>
9000	Indirect Costs	30,808,881
10000	Owner’s Costs	5,386,250
20000	Contingency	15,621,809
	<b>Grand Total</b>	<b>139,423,533</b>

#### 1.14.2 OPERATING COST ESTIMATE (OPEX)

The Opex is presented in United States Dollars (USD) and uses prices obtained in Q4 2021. DRA developed these operating costs in conjunction with Aya.

The following are examples of cost items specifically excluded from the Opex:

- Value Added Tax (VAT);
- Project financing and interest charges.

Table 1.6 presents the operating costs summary by major Project area over the LOM.

The average operating cost, including transport is \$55.42/t.

**Table 1.6 – Operating Costs Summary**

Description	LOM Cost	Cost (\$/t) <sup>2</sup>	Cost (\$/oz)	Total Cost (%)
<b>Mining – Underground</b>	226,634,161	26.38	3.50	47.6
<b>Mining – Open Pit Ore to ROM Pad</b>	24,777,360	2.88	0.38	5.2
<b>Process (average)</b>	163,450,368	19.03	2.53	34.4
<b>General and Administration</b>	50,264,337	5.85	0.78	10.6
<b>ESG</b>	10,972,885	1.28	0.17	2.3
<b>Total</b>	<b>476,099,911</b>	<b>55.42</b>	<b>7.36</b>	<b>100.0</b>

1. Figures may not add due to rounding.

## 1.15 Economic Analysis

A financial model has been developed to include the relevant study results in order to estimate and evaluate project cash flows and economic viability. The evaluation method takes into account mill feed tonnages and grades (including dilution) for the ore and the associated recoveries, silver price, operating costs, transport and refining charges, government royalties and capital expenditures (both initial and sustaining). The project has been evaluated on a 100% ownership basis, with no debt financing.

The economic analysis demonstrates that the project has positive economics under the assumptions used. On a before tax basis, the project has a 5% NPV of \$471 M and an IRR of 57%. On an after-tax basis, the project has a 5% NPV of \$373 M and an IRR of 48%. Total undiscounted cash flow over the life of mine equals \$522 M and payback period is estimated at 1.7 years post expansion.

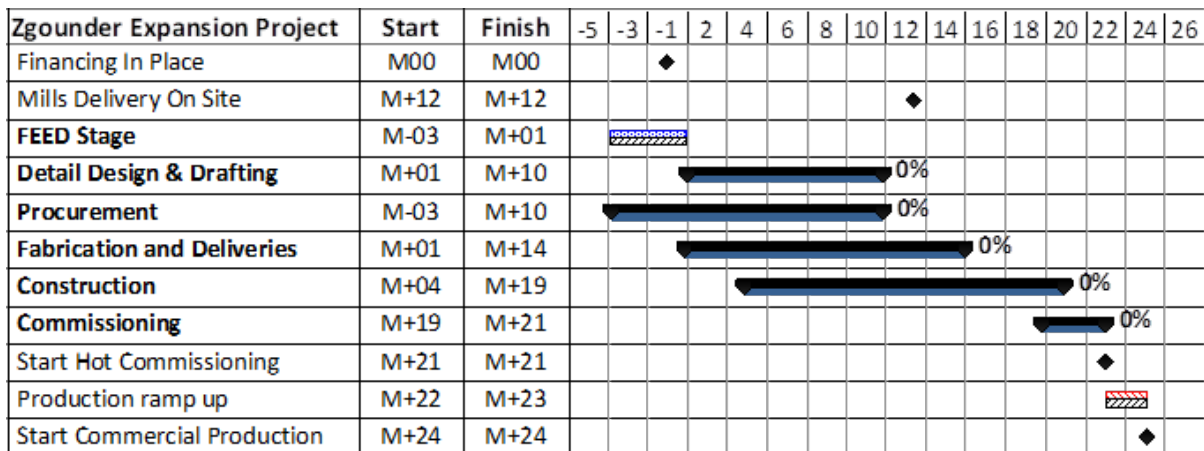
The Project also demonstrates a favourable cost structure with an all-in sustaining cost of \$9.58 per ounce of silver produced.

## 1.16 Other Relevant Information

### 1.16.1 PROJECT EXECUTION SCHEDULE

A milestone schedule has been developed for the Zgounder Expansion Project covering the main activities of studies, permitting, engineering, procurement, construction, commissioning and ramp-up. The Level-one schedule is presented in Figure 1.1.

**Figure 1.1 – Project Schedule**



#### 1.16.1.1 Schedule Assumptions

The Project milestone schedule has been developed based on the following assumptions:

- Project assumes EPCM / EPC construction strategy
- Geotechnical studies and survey reports (in their final version) are received by the EPCM / EPC contractor (s) before the start of basic engineering;
- Hydrogeological surveys and reports (in their final version) are received by the EPCM / EPC contractor (s) before the start of basic engineering and are favourable to the Project;
- All permits required will be awarded before the beginning of construction;

- Design criteria, process flowsheet and scope of work will be frozen and agreed upon by all stakeholders before the start of basic engineering;
- Qualified resources will be available for the EPCM / EPC contractor(s);
- Qualified construction workers will be available at the time of construction.

#### 1.16.2 RISK REVIEW

A risk review meeting was held in March 2022 between DRA and Aya personnel as part of the Feasibility Study. The risks covered geology, mining, mineral processing, tailings, environmental, social and permitting project Capex, Opex, construction, and general risks.

A total of 58 risks were identified by the group. Of these, five (5) were resolved during the meeting or judged as obsolete, leaving 53 active risks. From this list, four (4) were classified as High risk, 24 were classified as medium risk, and 25 were classified as low risk in the pre-mitigation rating. Post mitigation, 53 out of 54 risks were downgraded to low risk, and one remained as a medium risk. No risks remained at a high rating after mitigation.

In order to continue to mitigate project risks, it is recommended that sufficient risk management effort be included in the next phase of the Project (EPCM). Specifically, it is recommended that (a) a second risk review be held at the onset of the next phase to continue to identify and detail any special scope required early-on, and (b) particular emphasis be placed on conducting a full HAZOP review as per standard engineering practices.

#### 1.17 Interpretation and Conclusions

##### 1.17.1 GEOLOGY AND MINERAL RESOURCES

The mineral exploration results for the Zgounder Silver Property have been very positive with a significant upgrade in the Mineral Resources since March 2021. The Property shows further upside potential and additional exploration is warranted.

The following numbers refer to the Zgounder Report (Dec. 13, 2021). At a cut-off grade of 65 g/t Ag, pit-constrained Measured and Indicated Mineral Resource totals 514 kt grading 357 g/t Ag for 5.9 Moz Ag. At a cut-off grade of 75 g/t Ag, out-of-pit Measured and Indicated Mineral Resource totals 9.0 Mt grading 309 g/t Ag for 89.3 Moz Ag, and updated Inferred Mineral Resource totals 542 kt grading 367 g/t Ag for 6.4 Moz Ag. At a cut-off grade of 50 g/t Ag, tailings Indicated Mineral Resource totals 272 kt grading 94 g/t Ag for 817 koz Ag. The effective date of this Mineral Resource Estimate is December 13, 2021.

The Measured and Indicated Mineral Resources for Zgounder totalling 9.8 Mt averaging 306 g/t Ag for 96.1 Moz Ag represent an increase of 116% compared to the previous (March 2021) Measured and Indicated Mineral Resources of 44.4 Moz Ag. The Inferred Mineral Resources for Zgounder totalling 542 kt averaging 367 g/t Ag for 6.4 Moz Ag represents an increase of 1,519% compared to the previous (March 2021) Inferred Mineral Resources of 395 koz Ag.

The Mineral Resource Estimate incorporates drilling carried out on Zgounder from February 2018 to September 2021. The Mineral Resource database update consists of 516 drill holes (surface and underground combined) for 41,932 m completed at Zgounder. The drilling successfully extended the east-west strike length of the Zgounder silver mineralization from 775 m to 1,100 m and at depth in successfully intersecting silver mineralization in the Exploration Target established by P&E (2021).

Three-dimensional block models were created for the Zgounder Deposit and for the historical tailings located



a few hundred metres northwest of the mine site. A geological rock code system was introduced and assigned to the various lithological units and mineralized domains. Continuity directions were assessed based on the orientation of the domains and the spatial distribution of silver. Separate variograms were generated for 1.2 m down-hole silver composites within each domain. Mineralization modelling, grade estimation and Mineral Resource reporting were conducted using Gemcom™, Leapfrog™, Snowden Supervisor™ and NPV Scheduler™ software. Ordinary kriging was used for grade estimation into 2.0 m x 2.0 m x 2.0 m model blocks.

Mineral Resources have been estimated using Ordinary Kriging of capped composites. Potentially economic mineralization has been identified by categorizing blocks based on a Nearest Neighbor ("NN") assignment. Blocks assigned a NN grade of 40 g/t Ag or higher are categorized as potentially economic mineralisation, whereas blocks assigned a NN grade less than 40 g/t Ag are categorised as waste. The Mineral Resource Estimates have classified into Measured, Indicated and Inferred based on a series of expanding search ellipsoids.

#### 1.17.2 PROCESS

Metallurgical testing confirmed that the ore is amenable to the flowsheet consisting of crushing, grinding, gravity concentration, whole ore cyanidation and silver recovery from pregnant solutions through zinc cementation.

#### 1.17.3 MINERAL RESERVES AND MINING METHODS

The Mineral Reserves are estimated at 8.9 Mt of ore grading 251 g/t Ag, combining the open pit, historical tailings reclamation and underground portions of the mine. Further Mineral Reserves could be defined by reclamation the pillar located between the bottom of the open pit and the top of the underground at the end of the mine life.

The Report for the Zgounder Project is based on an 11-year mine life combining the open pit mining, historical tailings reclamation, and underground mining. The mine will operate year-round, seven (7) days per week, twenty-four (24) hours per day (two (2) 12-hour shifts). Two (2) weeks of adverse weather conditions per year are considered in the mine plan.

Approximately 71% of the ore will be coming from the underground portion of the operation while 29% will come from the open pit and historical tailings reclamation. Over the LOM, 8.6 Mt of ore will be mined or reclaimed, of which 92% will be sent directly to the crusher and mill and 8% will be sent to an ore stockpile to be rehandled later. A total of 27.6 Mt of waste material will be mined to access the ore.

#### 1.17.4 RECOVERY METHODS

The flowsheet was reviewed post feasibility study for a conventional whole-ore cyanidation leach, followed by a counter current decantation series of thickener. Finally, the pregnant solution is recovered and fed to a merry crow for silver precipitation and smelting.

#### 1.17.5 PROJECT INFRASTRUCTURE

##### 1.17.5.1 Tailings Storage Facility (TSF)

Given the production volumes contemplated at this stage of the Project, and the estimated duration of the mine, the topographic and hydrographic conditions of Sites C and A have shown that the tailings dam can be built in three (3) phases, allowing for a distribution of the capital investments over the entire period of the operation thus reducing the initial Capex.

The first two (2) phases will be constructed at Site C, and will support approximately 7 years of the LOM. The

last phase will be constructed at Site A, for an initial period of 3 years of operation. It is important to note that Site A TSF could be extended in the future if new mineralised zones are discovered and the mine life is extended.

#### 1.17.5.2 Surface Water Management

Following the feasibility study, GCIM (a Moroccan engineering firm) was mandated to refine the water management strategy through detailed engineering. Two large water ponds will be added to the existing one to provide a cumulative water storage capacity of 300 000m<sup>3</sup> of water. The water will be sourced from an existing 20m<sup>3</sup>/h gravity fed mountain water source and collected rainwater passing by the Zgounder river. Additionally, the new tailing storage facility will provide a temporary buffer to ensure sufficient water for commissioning.

For the water management strategy to be effective, the site must be appropriately instrumented and controlled. All data must be stored and analysed to make valuable conclusions about the interaction between the mine site operation, the local climate and environment. The proposed system, comprised of physical infrastructure and instrumentation, can be adapted to the variable annual and seasonal precipitation, changing climate and operational requirements, and ensure that all available water resources are accounted for and effectively managed.

#### 1.17.6 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

The Zgounder Mine site has a very long mining history and can be described as a “brownfield site”. The surface mineralized showings were exploited as far back as the 10th century. More recent mining and processing activities took place between the 1950s and 1970s, and later from the 1980s to 1990s with a cyanide-leaching process plant. There is evidence of heavy metal leaching and cyanide contamination in surface water and potentially groundwater water and soils on site. Since 2014, Aya has undertaken civil work to reduce the impacts and risks, targeting especially the tailings impoundments’ containment, stability, and revegetation.

The ESIA identifies the relevant risks and proposes mitigation measures. The environmental management plan and monitoring program will ensure that the mining activities comply with their permits and the applicable laws and regulations for mining operations in Morocco.

### 1.18 Recommendations

#### 1.18.1 GEOLOGY AND MINERAL RESOURCES

It is recommended that issues noted in the database be corrected, and that the methodology implemented for the Mineral Resource Estimate as described be continuously reconciled and validated against actual production results.

An exploration budget of US\$6.6 M is recommended for Zgounder in 2022, for a total of 46,000 m of step-out and infill drilling on the Zgounder Mine Property. The drill program is to focus on:

- Expanding the Mineral Resources along strike, particularly to the east, and at depth to the granite contact; and
- Advance Inferred Mineral Resources to Indicated Mineral Resources to support Mineral Reserve Estimates.

#### 1.18.2 MINERAL RESERVES AND MINING METHODS

In the next phase of the Project, DRA recommends looking at the possibility of mining the crown pillar at the end of the mine life. DRA also recommends looking at the possibility of in-pit waste stockpiling in the mined-out portions of the open pit to minimise the ex-pit waste stockpile size and its related environmental footprint.

The COG was estimated according to the available information at the time of this study and should be reviewed and optimised if the Project has more updated circumstances or cost rates to improve the Project's profitability and Mineral Reserves.

Improvement opportunities still remain and can be included in the next phase. Special open pit and underground sequencing and redesigning relying on new geological targets currently under development can be undertaken.

Mine design should be reviewed and redesigned taking into account new geological targets and Mineral Resources that are being currently developed. Some of the newly identified areas are close to the main decline and could bring in ore production sooner than the Main deposit.

Due to the complexity of the geometry of the deposit, definition drilling should be done planned during detail engineering, and the mining method selection should be revisited.

Drill and blast parameters in the study were designed according to typical stope geometry in each area. During detail engineering and in the operations phase, determination of optimal burden and spacing should be reviewed stope by stope to optimise drilling and blasting costs.

Battery operated mining fleets are currently being developed by the major mine equipment manufacturers and implemented in more and more operations to reduce mine ventilation needs. It is recommended that this technology be considered when replacing the mine fleet in a few years and that this new technology has proven itself at other operation.

For the CRF, DRA recommends that UCS testing be performed for CRF to gain understanding of strength development with regards to the target strength of 235 kPa.

RockEng geotechnical review of the current mine design has identified the following recommendations to be explored further during later phases of the Project.

- Level stacking with small level spacing introduces pillar stability risk between level, particularly in intersections and wide span excavations. It is recommended that level layouts be adjusted to avoid direct stacking of lateral development level-to-level.
- Cross-cut stacking in long-hole stopes will introduce pillar stability risk for drill-horizons during overhand advance. This may be de-risked by implementing double-lift long-hole stopes (i.e., effectively skipping every other level for long-hole mining blocks). It is recommended that opportunities to achieve double-lift long-hole stopes be investigated further.
- Backfill strength requirements are based on 25 m level spacing. For shorter vertical exposures there may be opportunity to reduce backfill strength. It is recommended that backfill strengths be reviewed as stope designs and sequencing plans advance.

### 1.18.3 PROCESS

Prior to detail engineering of the new plant, the flowsheet was reviewed to for a conventional whole ore cyanidation leach, followed by a counter current decantation circuit, Merrill-Crow precipitation and smelting.

### 1.18.4 RECOVERY METHODS

The recovery method selected is well known and has been proven at the Zgounder mine for over 30years with

the 180tpd existing cyanidation plant

#### 1.18.5 PROJECT INFRASTRUCTURE

##### 1.18.5.1 Tailings Storage Facility

Currently, testwork is ongoing at the geotechnical laboratory and therefore, the conclusions of this testwork are not included in this FS. It is recommended to complete the stability analysis of the Site C TSF design including the results of the ongoing geotechnical testwork and depending on the results, a modification of the TSF Site C could be considered in order to increase its storage capacity.

Also, additional design work is recommended to consider the borrow materials for the TSF dam construction to be excavated from inside the footprint of the TSF Site C, and hence increase its storage capacity.

##### 1.18.5.2 Surface Water Balance and Infrastructure

The proposed water management strategy and resulting water balance consider several assumptions that need to be refined before the next phase of the Project. The following list presents the main assumptions and limitations that should be refined at the next design phase:

- A monthly water balance should be developed;
- The current and future TSFs should have a tailings and water management manual (OMS manual) where the water management principles are presented and integrated with the tailings management principles;
- The proposed water management strategy requires actions and procedures based on a time-sensitive understanding of the current site water storage conditions and forecasting of short-term environmental conditions. A flexible water management tool should be developed and implemented;
- The current and future operations should monitor the TSFs and document input and output parameters to better refine the water balance model;
- The water balance model in this study relies on weather data that is not site-specific. The site weather station should be used at the next phase of the Project to better define the site-specific weather data; and,
- Mine dewatering is an important input to the global water balance. A more precise dewatering plan would increase the precision of the proposed water balance.
- Incorporate the new waste dump water management and infrastructure into the overall site water balance.

Finally, it is recommended to execute the geotechnical, hydraulic, and hydrological studies required to move to the detailed engineering phase.

#### 1.18.6 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

- Develop a water management program, including hydrological and hydrogeological characterisations, to ensure the project's design compliance with commitments, permits and legislation requirements.
- With the increase of the project footprint try to reduce the number of effluents with the collection ditches. This will help defining the required water treatment if required.
- Environmental monitoring program should clearly identify sampling locations (water, soil, air) and coordinates and maintain the sampling labels for traceability.
- More sampling locations of soil samples should be added, near petroleum storage tanks.

- Sediments or alluvion along oueds should also be characterised.
- Continue geochemical characterisation on waste rock and tailings to verify the potential of acid mine drainage and metal leaching, as recommended in the report from Lamont inc, 2021.
- Continue to investigate water and soil contamination upstream, at the mine site and downstream, as recommended in the ESIA.
- Revise and increase the frequency of the mine effluents monitoring for a more efficient control within the operations. In Canada for example, monitoring is performed on a weekly basis and reported on a monthly basis.
- Introduce treatment at the source with the addition of a cyanide destruction process (example SO<sub>2</sub> air);
- Continue to treat tailings to increase pH and help the precipitate heavy metals and arsenic within the tailings.
- Ensure that the emergency responses plan is known and tested and the intervention material is available.
- Perform root cause analysis for recurrent accidental spills in order to identify appropriate solutions.
- Consider in the closure plan to fill the open pit with waste rock from the waste dump to reduce project footprint and remediate old tailings pond after the processing of tailings.
- Ensure a sufficient number of environmental staff in order to meet regulatory performance.

## RISK FACTORS

The business of the Corporation involves a high degree of risk and must be considered highly speculative due to the financial and operational risks inherent to the nature of the Corporation's business and the present stage of exploration and development of its mineral resource properties. These risks may affect the Corporation's profitability and level of operating cash flow. Prospective buyers of the common shares of the Corporation should give careful consideration to all information contained or incorporated by reference in this AIF and, in particular, the following risk factors.

### ● FINANCIAL RISK FACTORS

Disclosure and description of the Corporation's capital management, financial risks and financial instruments in notes 19, 20 and 21 of the audited consolidated financial statements for the year ended December 31, 2022 contain the risk factors associated with the Corporation.

### ● RISKS INHERENT TO MINING EXPLORATION

The Corporation is engaged in the business of operating, exploring, developing, and acquiring mineral properties in the hope of locating or expanding on economic mineral deposits. Except for the Zgounder Silver Mine, all of the Corporation's property interests are at the exploration stage and are without a known mineral reserve. Accordingly, there is little likelihood that the Corporation will realize any profits in the short to medium term from these properties. Any profitability in the future from the Corporation's business will be dependent upon locating economic mineral deposits. There can be no assurance, even if an economic mineral deposit is located, that it can be commercially mined.

### ● UNCERTAINTY IN THE CALCULATION OF MINERAL RESERVES, RESOURCES AND SILVER RECOVERY

There is a degree of uncertainty attributable to the calculation of Mineral Reserves and Mineral Resources (as defined in National Instrument 43-101). Until Mineral Reserves or Mineral Resources are mined, extracted, and processed, the quantity of minerals and their grades must be considered estimates only. In addition, the quantity of Mineral Reserves and Mineral Resources may vary depending on, among other things, applicable metal prices. Any material change in the quantity of Mineral Reserves, Mineral Resources, grade or mining widths may affect the economic viability of some or all of the Corporation's mineral properties and may have a material adverse effect on the Corporation's operational results and financial condition. Mineral Resources on the Corporation's properties have been calculated based on economic factors at the time of calculation; variations in such factors may have an impact on the amount of the Corporation's Mineral Resources. In addition, there can be no assurance that silver recoveries or other metal recoveries in small-scale laboratory tests will be duplicated in larger scale tests under on-site conditions or during production, or that the existing known and experienced recoveries will continue.

### ● INACCURACIES IN PRODUCTION AND COST ESTIMATES

From time to time, the Corporation prepares estimates of future production and future production costs for operations. No assurance can be given that production and cost estimates will be achieved. These production and cost estimates are based on, among other things, the following factors: the accuracy of Mineral Reserve estimates; the accuracy of assumptions regarding ground conditions and physical characteristics of ores, such as hardness and presence or absence of particular metallurgical characteristics; equipment and mechanical availability; labour; and the accuracy of estimated rates and costs of mining and processing, including the cost of human and physical resources required to carry out the Corporation's activities. Failure to achieve production or cost estimates, or increases in costs, could have an adverse impact on the Corporation's future cash flows, earnings, results of operations and financial condition.

Actual production and costs may vary from estimates for a variety of reasons, including actual ore mined varying from estimates of grade, tonnage, dilution and metallurgical and other characteristics; short-term operating factors relating to the Mineral Reserves, such as the need for sequential development of ore bodies and the processing of new or different ore grades; and risks and hazards associated with mining. In addition, there can be no assurance that silver recoveries or other metal recoveries in small scale laboratory tests will be duplicated in larger scale tests under on-site conditions or during production, or that the existing known and experienced recoveries will continue. Costs of production may also be affected by a variety of factors including: dilution, widths, ore grade and metallurgy, labour costs, costs of supplies and services (such as, for example, fuel and power), general inflationary pressures and currency exchange rates. Failure to achieve production estimates could have an adverse impact on the Corporation's future cash flows, earnings, results of operations and financial condition.

#### ● **UNINSURED RISKS**

The Corporation's business is subject to several risks and hazards, including environmental conditions, adverse environmental regulations, political and foreign country uncertainties, industrial accidents, labour disputes, unusual or unexpected geological conditions, ground or slope failures, cave-ins, and natural phenomena such as inclement weather conditions, floods and earthquakes. Such occurrences could result in damage to mineral properties or production facilities, personal injury or death, environmental damage to the Corporation's properties or the properties of others, delays in mining, monetary losses and possible legal liability.

#### ● **METAL PRICE VOLATILITY**

The profitability of the Corporation's operations will be significantly affected by changes in metal prices. Metal prices are volatile, can fluctuate substantially and are affected by numerous factors beyond the Corporation's control. In addition, metal prices are sometimes subject to rapid short-term changes because of speculative activities.

#### ● **ADDITIONAL FUNDING REQUIREMENTS**

To continue exploration and development of the Corporation's projects, it will require additional capital. In addition, a positive production decision at the projects or any other development projects acquired in the future would require significant capital for project engineering and construction. Accordingly, the continuing development of the Corporation's projects will depend upon the Corporation's ability to obtain financing through debt financing, equity financing, the joint venturing of projects or other means. There is no assurance that the Corporation will be successful in obtaining the required financing for these or other purposes.

#### ● **INTEGRATION OF FUTURE ACQUISITIONS INTO EXISTING OPERATIONS**

The Corporation may make select future acquisitions. If the Corporation does make acquisitions, any positive effect on the Corporation's results will depend on a variety of factors, including, but not limited to: integrating the operations of an acquired business or property in a timely and efficient manner; maintaining the Corporation's financial and strategic focus while integrating the acquired business or property; implementing uniform standards, controls, procedures and policies at the acquired business, as appropriate; and to the extent that the Corporation makes an acquisition outside of markets in which it has previously operated, conducting and managing operations in a new operating environment. Acquiring additional businesses or properties could place pressure on the Corporation's cash reserves if such acquisitions involve cash consideration or if such acquisitions involve share consideration existing shareholders may experience dilution. The integration of the Corporation's existing operations with any acquired business may require significant expenditures of time, attention and funds. Achievement of the benefits expected from consolidation may require the Corporation to incur significant costs in connection with, among other things, implementing financial and planning systems. The Corporation may not be able to integrate the operations of a recently acquired business or restructure the



Corporation's previously existing business operations without encountering difficulties and delays. In addition, this integration may require significant attention from the Corporation's management team, which may detract attention from the Corporation's day-to-day operations. Over the short-term, difficulties associated with integration could have a material adverse effect on the Corporation's business, operating results, financial condition and the price of the Corporation's Common Shares. In addition, the acquisition of mineral properties may subject the Corporation to unforeseen liabilities, including environmental liabilities, which could have a material adverse effect on the Corporation. There can be no assurance that any future acquisitions will be successfully integrated into the Corporation's existing operations.

## ● REGULATORY REQUIREMENTS

Mining operations, development and exploration activities are subject to extensive laws and regulations governing prospecting, development, production, exports, taxes, labour standards, occupational health, waste disposal, environmental protection and remediation, protection of endangered and protected species, mine safety, toxic substances and other matters. Changes in these regulations or in their application are beyond the control of the Corporation and could adversely affect its operations, business and results of operations.

Government approvals and permits are currently, and may in the future be, required in connection with the Projects. To the extent such approvals are required and not obtained, the Corporation may be restricted or prohibited from proceeding with planned exploration or development activities. Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions.

## ● RISK RELATED TO INDEBTEDNESS

In connection with the financing of the ZMSM expansion project the Corporation and its subsidiaries entered into various financing agreements with the European Bank for Reconstruction and Development, notably a loan facility agreement as well as a Guarantee, Indemnity and Subordination Agreement. Provisions of our present and future debt instruments may restrict our ability to pursue business strategies. We currently have one credit facility, which is collateralized by substantially all our assets. Our credit facility requires us, and any debt instruments we may enter into in the future may require us, to comply with various covenants that may limit our ability to, among other things: dispose of assets; complete mergers or acquisitions, other than as permitted, or change of control transactions; investments, other than as permitted;

- engage in any business other than that in which we currently engage; incur indebtedness; encumber assets;
- pay dividends or make other distributions to holders of our shares; and engage in transactions with our affiliates.

These restrictions could inhibit our ability to pursue our strategies. If we default under a credit facility, and such event of default is not cured or waived, the lenders could terminate commitments to lend and cause all amounts outstanding with respect to the debt to be due and payable immediately. We may also incur additional indebtedness in the future. The instruments governing such indebtedness could contain provisions that are as, or more, restrictive than those to which we are presently subject. Our ability to meet our payment and other obligations under our existing and future debt instruments depends on our ability to generate significant cash flow in the future. This, to some extent, is subject to general economic, financial, competitive, legislative, and regulatory factors as well as other factors that are beyond our control. We cannot assure you that our business will generate cash flow from operations, or that future borrowings will be available to us under our existing or any future credit facilities or otherwise, in an amount sufficient to enable us to meet our current and future indebtedness and to fund other liquidity needs. If we are not able to generate sufficient cash flow to service our debt obligations, we may need to refinance or restructure our debt, sell assets, reduce or delay capital investments, or seek to raise additional capital, which may have an adverse impact on our business, financial

condition, and results of operations.

#### ● ENVIRONMENTAL MATTERS

The Corporation's operations are subject to environmental regulations, which can make operations expensive or prohibit them altogether.

The Corporation may be subject to potential risks and liabilities associated with pollution of the environment and the disposal of waste products that could occur as a result of its mineral exploration, development and production. In addition, other environmental hazards may exist on a property in which the Corporation directly or indirectly holds an interest that are unknown to the Corporation at present which have been caused by previous or existing owners or operators of the property. Environmental legislation provides for restrictions and prohibitions on spills, releases or emissions of various substances produced in association with certain mining industry operations, such as seepage from tailings disposal areas, which would result in environmental pollution. A breach of such legislation may result in the imposition of fines and penalties.

To the extent the Corporation is subject to environmental liabilities, the payment of such liabilities or the costs that it may incur to remedy environmental pollution would reduce funds otherwise available to it and could have a material adverse effect on the Corporation. If the Corporation is unable to fully remedy an environmental problem, it might be required to suspend operations or enter into interim compliance measures pending completion of the required remedy. The potential exposure may be significant and could have a material adverse effect on the Corporation.

#### ● RISK OF PROJECT DELAY

There is significant risk involved in the development and construction of mining projects. There could be project delays due to circumstances beyond the Corporation's control. Risks include but are not limited to delays in acquiring all of the necessary mining and surface rights, project economics, capital funding, delays in obtaining environmental and construction authorizations and permits, as well as unforeseen difficulties encountered during the development process including labour disputes. Any of these factors among many others could cause delays in the Corporation's ability to achieve its targeted timelines.

#### ● RISK ON THE UNCERTAINTY OF TITLE

Although the Corporation has obtained title opinions with respect to its key properties and has taken all possible measures to ensure proper title to its properties, including filing of necessary documents and payment of rents to local regulatory authorities, there is no guarantee that the title to any of its properties will not be challenged. Third parties may, unbeknownst to the Corporation, have valid claims underlying portions of the Corporation's interests.

#### ● RISK LINKED TO CONFLICT OF INTEREST

Certain directors and officers of the Corporation may also serve as directors and/or officers of other public and private companies and devote a portion of their time to manage other business interests. Furthermore, certain directors and officers of the Corporation may also serve as directors of other companies involved in mineral exploration and development. Consequently, the possibility of conflict of interest exists at several levels.

To the extent that such other companies may participate in ventures in which the Corporation is also participating, or participate in business transactions with the Corporation, such directors and officers may have a conflict of interest in negotiating and reaching an agreement with respect to the extent of each Corporation's participation. Canadian law requires the directors and officers of the Corporation to act honestly, in good faith, and in the best interests of the Corporation and its shareholders. However, in conflict-of-interest situations, our directors and officers may owe the same duty to another Corporation and will need to balance the competing

obligations and liabilities of their actions or declare and refrain from voting on any matters in which such directors have a conflict of interest.

#### ● HUMAN RESOURCE RISK

The Corporation is dependent on its ability to attract, retain and develop highly skilled and experienced workforce and key management employees. The loss of these employees may adversely affect its business and operations. To this effect, the Corporation offers competitive remuneration and benefits and it also implemented regular training sessions to improve general and specific skills of its work force. As part of its succession planning, the Corporation also identified a limited number of high potential employees whose development aims at making them key managers within a short to medium term.

#### ● REPUTATIONAL RISK

The consequence of reputational risk is a negative impact to the Corporation's public image, which may influence its ability to acquire future mining projects and retain or attract key employees. Reputational risk may arise under many situations including, among others, cyber-attacks and media crisis. Prior to acquiring a particular project, the Corporation mitigates reputational risk by performing due diligence, which includes a review of the mining project, the country, the scope of the project and local laws and culture. Once the decision to participate in a mining project has been taken, the Corporation continues to assess and mitigate reputational risk through regular Board and Board Committees reviews.

#### ● CYBER SECURITY THREATS

As alluded to above, the Corporation is subject to cyber risk as a result of increased digital transformation and reliance on relatively new operational technology, which could make us vulnerable to data breaches. There can be no assurance that such risk from current or future exploitable vulnerabilities of the Corporation's information technology systems will not adversely impact its future cash flows, earnings, results of operations and financial condition. In particular, the Corporation may suffer lost revenue arising from breach costs, including legal expenditures and regulatory fines/penalties, costs associated with incident investigations, assessments, audits and communication management, the expense of notifying victims and appropriate authorities, as well as revenue churn due to reputational damage following a data breach.

#### ● POLITICAL RISK AND ILLEGAL MINERS

Aya operates in the Kingdom of Morocco and in Mauritania.

##### ***Morocco***

The government of Morocco supports the development of its natural resources by foreign companies, but there is no assurance that, in the future, the government will not adopt different policies or new interpretations respecting foreign ownership of mineral resources, exchange rates, environmental protection, labour relations, and repatriation of income or return of capital. Any limitation on transfer of cash or other assets between Aya and our subsidiaries could restrict our ability to fund our operations or materially adversely affect our financial condition and results of operation.

Moreover, mining tax regimes in foreign jurisdictions are subject to differing interpretations and constant changes and may not include fiscal stability provisions. Our interpretation of taxation law, including fiscal stability provisions, as applied to our transactions and activities may not coincide with that of the tax authorities. As a result, taxes may increase and transactions may be challenged by tax authorities and our operations may be assessed, which could result in significant taxes, penalties, and interest. The possibility that a future government may adopt substantially different policies or interpretations, which might extend to the expropriation of assets, cannot be ruled out. Political risk also includes the possibility of civil disturbances and political instability in this or neighbouring countries.

## **Mauritania**

The Mauritanian government supports the development of its natural resources by foreign companies, but there is no assurance that it will maintain this policy respecting foreign exploration and mining operations, exchange rates, environmental protection, labour relations, and repatriation of income or return of capital. Therefore, notwithstanding the Corporation's constructive relationship with the Mauritanian government, the Corporation remains subject to certain risks associated with foreign ownership, including currency fluctuations, inflation, geographical and political risk. Both mineral exploration and mining activities and production activities in foreign countries may be affected in varying degrees by political stability, local conditions, and government changes to the operating environment and regulations relating to the mining industry.

Changes in local regulations and shifts in political conditions are beyond the Corporation's control and may adversely affect its business or ability to operate and carry out normal industry operations and engagement of international consultants and personnel. Travel and access to the projects may be curtailed due to political instability, risks to personnel in remote areas, or contagion. The Corporation's operations may be affected to varying degrees by government regulations with respect to community rights, restrictions on production, price controls, export controls, restriction of earnings, capital controls, taxation laws, expropriation of property, environmental legislation, water use, labour standards and workplace safety.

Since the acquisition of the Tijirit Project in June of 2021, the Corporation has faced and may continue to face risks associated with illegal artisanal mining on its properties in Mauritania. Illegal miners may compromise the safety of the operations on site, cause contamination of the environment as the result of unauthorized use of chemicals, including cyanide and mercury, and in certain cases, accelerate the depletion of our ore bodies. Although the local government authorities have undertaken measures that have reduced the occurrence of illegal mining and removed some from the area of interest on the Corporation's mining permit, the Corporation cannot provide assurance that these measures will be sustainable or successful in reducing or eliminating illegal mining in the future or on the entirety of its permit. The Corporation may also be held liable for environmental damage and/or personal injury associated with illegal mining activity on its properties despite its efforts to prevent that activity. Any of these factors could have a material adverse effect on the Corporation's business, results of operations and financial condition.

### **● IMPACT OF EPIDEMICS**

The COVID-19 pandemic negatively impacted the worldwide economic activity and adversely impacted the global economy. It has resulted in extreme volatility in the financial markets as well as volatility in the prices and demand for commodities, including gold and silver. As a result of the COVID-19 pandemic, the Corporation encountered challenges in terms of mobilization of its staff to and from its sites, delayed shipments of materials and augmentation of costs for supplies and transportation. The extent to which the Corporation may be operationally or financially impacted by COVID-19 or any other pandemic, epidemic or public health crisis in the future depends on various factors which are highly uncertain and unpredictable. These factors include the continued spread of the current COVID-19 variants, the emergence of new variants and their severity and, the actions taken by governments in the countries where the Corporation operates in response to any future outbreaks.

### **● SUPPLY CHAIN DISRUPTIONS**

Global supply chain disruptions, including prolonged disruptions to the procurement of equipment, or the flow of materials, supplies and services to the Corporation could have adverse impacts on its operating costs and capital expenditures and delay its exploration, construction and production activities. These disruptions may be the result of macroeconomic matters outside of the Corporation's control or ability to mitigate, such as from natural disasters, transportation disruptions, economic instability, global pandemics and international

sanctions, including those imposed in the context of the invasion of Ukraine by Russia, among others. Supply chain impacts may also manifest as rising costs or shortages of certain commodities and labor.

#### ● WAR IN UKRAINE

Following the invasion of Ukraine by Russia in February 2022, global energy costs have significantly risen and are affecting the Corporation in terms of costs for key inputs required for its operations, including the price of diesel and natural gas, as well as through higher transportation costs for supplies. As the war in Ukraine persists, the Corporation continues to face the inflationary pressures and risks related thereto, including potential disruption of supply routes, increase in energy costs and transportation and possible negative effects on commodity prices.

#### ● CHANGES IN CLIMATE

Several governments have introduced or are moving to introduce climate legislation and treaties at the international, national, state/provincial and local levels. Regulation relating to emission levels (such as carbon emission taxes) and energy efficiency is becoming more stringent. If the current regulatory trend continues, this may result in increased costs at some or all the Corporation's operations. In addition, the physical risks of climate change may also have an adverse effect on the Corporation's operations. These risks include the following:

- Changes in sea levels could affect ocean transportation and shipping facilities that are used to transport supplies, equipment and workforce and products from the Company's operations to world markets.
- Extreme weather events (such as prolonged drought or flooding) have the potential to disrupt operations at the Company's mines and may require the Corporation to make additional expenditures to mitigate the impact of such events. Extended disruptions to supply lines could result in interruption to production.
- Continued desertification of the region around Zgounder may cause a disruption in its water supply which may require additional costs to ensure sufficient water supply to support its operations.

The Corporation's facilities depend on regular supplies of consumables (diesel, tires, sodium cyanide, etc.) and reagents to operate efficiently. If the effects of climate change or extreme weather events cause prolonged disruption to the delivery of essential commodities, production levels at the Corporation's operations may be reduced. There can be no assurance that efforts to mitigate the risks of climate changes will be effective and that the physical risks of climate change will not have an adverse effect on the Corporation's operations and profitability.

### DIVIDENDS

The Corporation has currently no dividend policy. The amount of cash dividends, if any, to be paid is subject to the approval of the Board of Directors and may adapt given a range of factors such as: (i) the prevailing economic and ore-processing environment; (ii) the Corporation's operational results and net earnings; (iii) the Corporation's financial condition; (iv) capital requirements for the operations and growth of the Corporation; (v) contractual restrictions on its current loan; (vi) other relevant factors and conditions that may have consequences over time. To date, it has not declared or paid any cash dividends on any of its issued shares.

### CAPITAL STRUCTURE

The authorized share capital of the Corporation consists of an unlimited number of common shares without par value. There were 116,326,740 common shares issued and outstanding as of the date of this AIF. The Corporation also has 6,151,334 stock options outstanding, at exercise prices ranging from CAD\$ 1.43 to CAD\$7.69 and 4,828,198 warrants are outstanding with an exercise price of C\$3.30 per warrant until

September 3, 2023.

The holders of common shares of the Corporation are entitled to one vote per common share at all meetings of the shareholders of the Corporation. The holders of common shares have the right to receive dividends if, as and when declared by the board of directors. In the event of the liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary, or any other distribution of its assets among its shareholders for the purpose of winding-up its affairs, the holders of the common shares are entitled to receive the remaining property and assets of the Corporation pro rata according to the number of common shares held.

## MARKET FOR SECURITIES

### ● TRADING PRICE AND VOLUME

The Corporation's common shares are currently listed and posted for trading on the TSX under the symbol "AYA".

The following table shows the price ranges and volume of the common shares traded in 2022.




Month	Volume	High (\$)	Low (\$)
January	3,406,801	9.74	8.27
February	4,558,956	10.55	9.90
March	7,342,953	11.58	8.33
April	3,439,535	9.71	7.65
May	4,223,681	8.50	5.69
June	4,802,235	8.77	6.50
July	3,500,340	7.56	5.20
August	2,385,439	8.45	6.88
September	4,719,912	8.54	6.59
October	2,733,559	9.08	7.80
November	4,278,859	8.79	7.52
December	6,116,717	9.75	8.03

### ● DIRECTORS







## DIRECTORS AND OFFICERS




The board of directors is currently comprised of eight directors, each of whom is elected at each annual meeting of shareholders to hold office for one year or until his successor is elected or appointed, unless he resigns or his office becomes vacant.

The following table sets forth, as at March 31, 2023, for each director and officer, his name, place of residence, his principal occupation during the past five years, as well as the year during of his election or nomination as director or officer of the Corporation, along with the number of common shares owned by them. The Directors and Officers have provided their respective information.

	Name and Municipality of Residence	Positions Held Within the Corporation	Director or Officer Since	Principal Occupation During the Five Preceding Years	Number and Percentage of Common Shares owned as at Dec 31, 2022
	Natacha Garoute Montréal, Canada	Director <sup>(1)</sup>	June 2022	Chief Financial Officer of Patriot Battery Metals (since January 2023)  Chief Financial Officer of Champion Iron Limited (from 2018 to 2022)	0 0.00%
	Benoit La Salle Montréal, Canada	President, Chief Executive Officer and Director	April 2020	Chartered Professional Accountant  President and Chief Executive Officer of Aya Gold & Silver Inc. (since April 2020)  President and Chief Executive Officer of Windiga Energy Inc. (since 2013)  Chairman of the Board (February 2013 to January 2021) and Chief Executive Officer of Algold Resources Ltd. (March 2018 to June 2021)  Chairman of the Board of The Canadian Council on Africa (since 2012)  Executive Chairman of the Board of Sama Resources Inc. (2012 to date)  Director of Earth Alive Clean Technologies Inc. (October 2015 to June 2022)  Lead Director at Goviex Uranium Ltd. (since 2012)  Director and Executive Chairman of the Board of SRG Mining Inc. (since 2017)	61,221 0.0526%
	Yves Grou Montréal, Canada	Director <sup>(1) (2)</sup>	June 2020	Chartered Professional Accountant  Chief Financial Officer and Director of Maclos Capital Inc. (since 2001)  Director of SRG Mining Inc. (since 2017)  Director of Algold Resources Inc. (May 2011 to July 2021)	28,815 0.0247%



	<b>Dr. Jürgen Hambrecht</b> Neustadt, Germany	Director <sup>(2) (3)</sup>	June 2020	Director of Nyxoah SA (since 2020)  Chairman of the Board of Trumpf SE (January 2013 to March 2023)  Chairman of the Supervisory Board of BASF SE (June 2014 to June 2020)  Director of Daimler Truck AG (January 2008 to May 2020)  Chairman of the Supervisory Board of Fuchs Petrolub SE (May 2011 to May 2019)	1,193,250 1.0257%
	<b>Eloise Martin-Nederveen</b> Bad Homburg, Germany	Director <sup>(1)(2)</sup>	June 2022	Self Employed at EM Conseil (since 2021)  Director of EM Conseil BV (January 2020 to July 2021)  Executive Director, HCF International Advisers Ltd. (July 2011 to August 2019)	0 0%
	<b>Nikolaos Sofronis</b> Luxembourg, Luxembourg	Director <sup>(3)</sup>	June 2016	CEO (since October 2021) and Director (since June 2021) of Earth Alive Clean Technologies Inc.  Director of Irimi Investment of Luxembourg (since May 2008)	2,114,361 1.817%
	<b>Robert Taub</b> Brussels, Belgium	Chairman of the Board of Directors	Nov. 2016	Chairman of Nyxoah SA (since July 2009)	9,421,262 8.098%
	<b>Marc Nolet de Brauwere van Steeland</b> Brussels, Belgium	Director <sup>(3)</sup>	June 2021	Chief Executive Officer (August 1997 to February 2019) and President (January 2019 to July 2021) of PHYSIOL SA	3,084,210 2.651%
	<b>Ugo Landry-Tolszczuk</b> Mont-Royal, Canada	Chief Financial Officer	May 2020	Chief Financial Officer of Aya (since May 2020)  President and Chief Operating Officer (January 2018 – February 2021) and Interim Chief Financial Officer (since February 2021) of SRG Mining Inc.  Managing Director of Windiga Energy Inc. (2013 to 2018)	0 0%

	<b>Mustafa El Ouafi</b> Casablanca, Morocco	President - General Manager (Morocco)	April 2020	President-General Manager of Aya Gold & Silver Morocco S.A. Deputy Managing Director of OCP S.A. and President of OCP Africa	0 0.0%
	<b>Raphaël Beaudoin</b> Montreal, Canada	Vice- President, Operations	June 2020	Vice-President, Operations of Aya (since June 2020) Director of Operations of SAMA Resources Inc. (since September 2017) Vice-President Operations of SRG Mining Inc. (since August 2018) Concentration Superintendent at Canadian Royalties (August 2012 to September 2017)	0 0.0%
	<b>Elias J. Elias</b> Montreal, Canada	Vice- President, Legal & Corporate Secretary	July 2020	Vice-President Legal and Corporate Secretary of Aya (since July 2020) VP Legal & Corporate Secretary of SRG Mining Inc. (since January 2018) VP Legal of Sama Resources Inc. (since January 2018) General Counsel of Windiga Energy Inc. (November 2013 to January 2018)	0 0.0%

#### Notes

- (1) Member of the Audit Committee
- (2) Member of the Corporate Governance and Compensation Committee
- (3) Member of the Environmental, Health and Safety and Sustainability Committee

As the date hereof, the directors and executive officers of the Corporation and its subsidiaries as a group own beneficially, directly or indirectly, or exercise control or direction over 15,903,119 common shares of the Corporation or 13.67% of the outstanding common shares.

#### ● CEASE TRADE ORDERS, BANKRUPTCIES, PENALTIES OR SANCTIONS

Except as described below, to the best of the Corporation's knowledge, after having made due inquiry, none of our directors or executive officers or, to our knowledge, shareholders holding a sufficient number of our securities to affect materially the control of the Corporation, if any:

- (a) is, as at the date hereof, or has been, within the 10 years before the date hereof, a director, chief executive officer or chief financial officer of any company, including the Corporation, that while that person was acting in that capacity:
  - i. was subject of a cease trade or similar order or an order that denied the company access to any exemption under securities legislation, for a period of more than 30 consecutive days;
  - ii. was subject to an event that resulted, after the proposed director ceased to be a director, chief executive officer or chief financial officer, in the company being the subject of a cease

- trade or similar order or an order that denied the company access to any exemption under securities legislation, for a period of more than 30 consecutive days;
- (b) is, as at the date hereof, or has been, within the 10 years before the date hereof, a director or executive officer of any company, including the Corporation, that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets;
  - (c) has, within the 10 years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the proposed director; and
  - (d) has been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority, nor has been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in deciding whether to vote for a proposed Director.

Mr. Benoit La Salle was the President, Executive Officer and director of Algold when it filed under the Bankruptcy and Insolvency Act in February 2021. A proposal made in the context of a notice of intention was approved by the creditors and homologated by the court on March 26, 2021. Under such proposal, Algold became a wholly owned subsidiary of Aya, effective as of June 11, 2021. Mr. La Salle was also President, Executive Officer and director of Algold when the Autorité des marchés financiers and the Ontario Securities Commission handed down a cease-trade order against Algold on June 22, 2020 for having failed to file its annual statements for the fiscal year ended December 31, 2019. In addition, this decision came into affect automatically in every jurisdiction in Canada that the company in which has an automatic reciprocity legislation.

Mr. Yves Grou was a director of Algold when it filed under the Bankruptcy and Insolvency Act in February 2021. A proposal made in the context of a notice of intention was approved by the creditors and homologated by the court on March 26, 2021. Under such proposal, Algold became a wholly owned subsidiary of Aya, effective as of June 11, 2021. Mr. Grou was also director of Algold when the Autorité des marchés financiers and the Ontario Securities Commission handed down a cease-trade order against Algold on June 22, 2020 for having failed to file its annual statements for the fiscal year ended December 31, 2019. In addition, this decision came into affect automatically in every jurisdiction in Canada that the company in which has an automatic reciprocity legislation. Mr. Grou was also a non-executive director of Jourdan Resources Inc. ("Jourdan"), when on May 25, 2015, the Ontario Securities Commission issued a permanent management cease trade order, which superseded a temporary management cease trade order dated May 12, 2015, against the CEO and the CFO of Jourdan. The permanent management cease trade order was issued in connection with Jourdan's failure to file its (a) audited annual financial statements for the period ended December 31, 2014, (b) management's discussion and analysis relating to the audited annual financial statements for the period ended December 31, 2014, and (c) corresponding certifications of the foregoing filings as required by National Instrument 52-109 Certification of Disclosure in the Issuer's Annual and Interim Filings. On July 3, 2015, the permanent management cease trade order was replaced with a temporary issuer cease trade order dated July 3, 2015. On July 15, 2015, the temporary issuer cease trade order was replaced with a permanent issuer cease trade order dated July 15, 2015 and similar orders were issued by the British Columbia Securities Commission and Autorité des marchés financiers. The cease trade orders were lifted on February 21, 2017 following the filing of the required continuous disclosure documents.

While Dr. Hambrecht was a non-executive director of Daimler AG ("Daimler"), Daimler was, in several jurisdictions worldwide, either fined or reached agreements with various authorities or parties regarding emission control systems of certain diesel vehicles. The cost of proceedings, fines and settlements is expected

to exceed US\$2B. In July 2016, the European Commission fined Daimler in excess of Euro1B in connection with its participation in the referred to European Truck Cartel which covered the collusion between cartel members for 14 years on the truck pricing and on passing on the costs of compliance with stricter emission rules in Europe. In July 2021, at which time Mr. Hambrecht was not on Daimler's board of directors, the European Commission has found that Daimler, BMW and Volkswagen group (Volkswagen, Audi and Porsche) breached EU antitrust rules by colluding on technical development in the area of nitrogen oxide cleaning. Daimler was, however, not fined.

## CONFLICTS OF INTEREST

There are potential conflicts of interest to which the directors and officers of the Corporation or its subsidiaries may be subject in connection with the operations of the Corporation or its subsidiaries, notably due to the nature of the roles of some Directors and Officers in the management and/or the Board of the Corporation and the management and/or the Board of other corporations. See "Directors and Officers – Directors (chart columns entitled "Positions within the Corporation" and "Principal Occupation During the Five Preceding Years")". Some of the directors and officers are engaged and will continue to be engaged, directly or indirectly, in other businesses and situations may arise where some of the directors and officers will be in direct competition with the Corporation or its subsidiaries. Conflicts, if any, will be subject to the procedures and remedies under the *Canada Business Corporations Act*. No conflicts of interest currently exist between the Corporation or its subsidiaries and a director or officer of the Corporation or its subsidiaries.

Mr. Benoit La Salle was the President, Executive Officer of Algold when it was acquired by Aya on June 11, 2021. This relationship had no material impact on the Corporation and Mr. La Salle disclosed his interest to the Board, refrained from voting for or against the acquisition and was not present during the vote.

Mr. Yves Grou was a director of Algold when it was acquired by Aya on June 11, 2021. This relationship had no material impact on the Corporation and Mr. Grou disclosed his interest to the Board, refrained from voting for or against the acquisition and was not present during the vote.

## AUDIT COMMITTEE INFORMATION

### THE AUDIT AND RISK MANAGEMENT COMMITTEE CHARTER

A copy of the audit and risk management committee charter is attached to this AIF as Schedule "A".

### COMPOSITION OF THE AUDIT COMMITTEE

The following directors are members of the audit committee:

- Yves Grou, Chairman of the committee
- Eloise Martin
- Natacha Garoute

All the members of the audit committee are financially literate and independent as defined in National Instrument 52-110 – *Audit Committees* (for the purposes of Québec, Regulation 52-110 respecting *Audit Committees*) (Regulation "52-110").

## **RELEVANT EDUCATION AND EXPERIENCE**

The education and experience of each audit committee member that is relevant to the performance of his responsibilities are as follows:

Mr. Grou is a CPA CA, having received his Bachelor in Commerce degree from McGill University. He is a member of the Quebec Institute of Chartered Accountants. He was co-founder in 1980 and a partner until 2004 of Grou, La Salle & Associates ("GLA"). The firm grew from two original partners to a staff of over 50. He developed a business valuation expertise, having several high-profile clients. At GLA, Mr. Grou coordinated and led the reverse take-over process related to several public companies, having successfully completed several transactions with mining, oil and gas, telecommunications and medical devices companies of which some were located in France, Cuba, Thailand, West Africa and China. In 2004, GLA was sold to a major international accounting firm. Prior to 1980, Mr. Grou worked with Ernst & Young (Montreal) for three years. In addition to his current directorships, Mr. Grou is/was part of a board of directors of several public companies, in natural resources, renewable energy and materials.

Mrs. Garoute is the Chief Financial Officer of Patriot Battery Metals, a mineral exploration company listed on the TSX Venture Exchange. Mrs. Garoute was the Chief Financial Officer of Champion Iron Limited, an iron ore producer listed on the Toronto Stock Exchange, and Chief Financial Officer and Corporate Secretary of Roxgold Mining Corporation, a gold mining company also listed on the TSX.

Eloise Martin-Nederveen is, since 2011, the Executive Director, HCF International Advisers Limited (London Branch), a leading independent corporate finance advisory boutique focused on the global natural resources and infrastructure sectors. Mrs. Martin-Nederveen specializes in Project and Corporate Finance advisory services in the Metals & Mining, Oil & Gas and Infrastructure sectors. Prior to 2011, Ms. Martin-Nederveen worked at ING, a global bank present in over 40 countries where she was part of the Advisory team focussing on large scale projects in the energy and natural resources sector. Mrs. Martin-Nederveen holds a Master of Humanities Degree from Sorbonne University as well as a Master of International Business Degree (Honours) from l'Institut d'Etudes Politiques (Paris) and an MBA from ESSEC Graduate School of Management (Paris).

## **RELIANCE ON CERTAIN EXEMPTIONS**

At no time since the commencement of the Corporation's most recently completed financial year has the Corporation relied on any exemptions identified in Section 4, 5 or 6 of Regulation 52-110F1.

## **AUDIT COMMITTEE OVERSIGHT**

At no time since the commencement of the Corporation's most recently completed financial year, a recommendation of the audit committee to nominate or compensate an external auditor was not adopted by the board of directors.

## **PRE-APPROVAL POLICIES AND PROCEDURES**

The audit committee has not adopted specific policies and procedures for the engagement of non-audit services.

## EXTERNAL AUDITOR SERVICE FEES

	2022 (CAD)	2021 (CAD)
Audit Fees <sup>(1)</sup>	\$172,270	CAD\$242,485
Audit-Related Fees	NIL	NIL
Tax Fees <sup>(2)</sup>	\$37,129	\$13,108
Other	NIL	NIL
<b>Total</b>	<b>209,399</b>	<b>255,593\$</b>

### Notes:

- (1) Audit Fees include the aggregate fees billed by Aya's external auditor for audit services.
- (2) Tax fees include fees for assistance with tax planning, during restructurings and when taking a tax position, as well as preparation and review of income and other tax returns and tax opinions.

## LEGAL PROCEEDINGS AND REGULATORY ACTIONS

In June 2021, Aya filed in the Superior Court of Quebec a lawsuit against Mr. Nouredine Mokaddem, former president and CEO of the Corporation, seeking the nullification of a settlement transaction, damages in the order of \$1.74M. Proceedings in court are expected to occur in two years. In November 2021, Glowat SARL, a holding company related to Mr. Mokadeem and members of his immediate family, filed a claim against Aya in the courts of Morocco seeking approximately MAD 5.3M for allegedly unpaid amounts under an NPI Agreement entered into between the parties. On October 11, 2022 Glowat's case was dismissed in first instance. Glowat has the right to appeal.

## INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Except as disclosed below, no director, executive officer or principal shareholder of the Corporation, or associate or affiliate of any of the foregoing, has had any material interest, direct or indirect, in any transaction within the preceding three years or in any proposed transaction that has materially affected or will materially affect the Corporation or any subsidiary of the Corporation.

- Legal fees of \$nil (December 31, 2021 - \$nil; December 31, 2020 - \$99,688) were paid to Lavery de Billy, L.L.P., a firm of which a former director of the Corporation is a partner. As at December 31 2022, \$nil (December 31, 2021 - \$nil; December 31, 2020 - \$1,479) was due to that firm;
- Accounting consulting fees of \$nil (December 31, 2021 - \$nil; December 31, 2020 - \$66,599) were paid ATP Inc., a firm of which a former director and interim CFO of the Corporation is a partner. As at December 31, 2022, \$nil (December 31, 2021 - \$nil; December 31, 2020 - \$80,527) was due to that firm;
- A net profit interest of \$nil paid to Global Works, Assistance and Trading S.A.R.L. ("Glowat"), a private company owned by a party related to a former officer and director of the Corporation. As at December 31, 2022, \$nil (December 31, 2021 - \$195,241; December 31, 2020 - \$195,133) was due to Glowat;
- General and administrative fees to SRG Mining Inc., a public company where the Corporation's Chief Executive Officer is also the Director and Executive Chairman of the Board, of \$nil (December 31, 2021 - \$9,564). As at December 31, 2022, \$nil (December 31, 2021 - \$nil) was due to that company;
- Management and consulting fees to SRG Guinea S.A.R.L., a wholly owned subsidiary of SRG Mining Inc, a public company of which the Corporation's Chief Executive Officer is also the Director and Executive Chairman of the Board, of \$57,005 for the year ended December 31, 2022 (\$65,909 for year ended December 31, 2021) and exploration and evaluation fees amounting to \$54,620 for the year ended December 31, 2022 (\$47,273 for the year ended December 31, 2021). As at December 31, 2022, \$nil (December 31, 2021 - \$nil) was due to that company;

- Management and consulting fees to Groupe Conseils Grou, La Salle Inc., a company owned by the President and Chief Executive Officer of \$767,925 for the year ended December 31, 2022 (\$743,087 for the year ended December 31, 2021) and general and administrative fees of \$nil for the year ended December 31, 2022 (\$35,519 for the year ended December 31, 2021). As at December 31, 2022, \$406,162 (December 31, 2021 - \$445,141) was due to that company;

## TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar of the Corporation is Computershare Investor Services Inc. having offices in Montréal, Toronto, Calgary and Vancouver.

## MATERIAL CONTRACTS

This AIF includes a summary description of certain material contracts. Each summary description discloses all material attributes of the applicable contract but is not complete and is qualified by reference to the terms of the material contracts, which are available under the Corporation's SEDAR profile at [www.sedar.com](http://www.sedar.com).

No other material contracts, other than those contracts entered into in the ordinary course of business, have been entered into by the Corporation since the beginning of the last financial year ended December 31, 2022, or entered into prior to such date, but which are still in effect and which are required to be filed with Canadian securities regulatory authorization in accordance with Section 12.2 of National Instrument 51-102 – *Continuous Disclosure Obligations* (for the purposes of Québec, Regulation 51-102 respecting *Continuous Disclosure Obligations*) ("**NI 51-102**").

The capitalized terms used in the summary description of the material contracts below have the same meaning as in the related agreement(s), except if another meaning is specified herein.

- EPC Agreements:** On November 30, 2022, Aya's subsidiary, ZMSM, entered into a multicurrency fixed price Engineering, Procurement and Construction Contract (the "**EPC Contract**", composed of a Supply Agreement and a Services Agreement) for a total of approximately USD \$78 million with Duro Felguera S.A. and Dufel Marruecos (together, "**DF**") for the engineering, design, manufacturing, construction, delivery, erection, start-up and commissioning of a new 2,000 tpd processing plant at the Zgounder Silver Mine. The EPC Contract price is fixed based on the USD, Euro and Moroccan Dirham.
- EBRD Agreements:** On January 19, 2023, Aya's subsidiary, ZMSM, entered into a Loan Agreement with the European Bank for Reconstruction and Development ("**EBRD**") pursuant to which the EBRD agreed to lend to ZMSM an amount not to exceed \$100M, consisting of: i) an "EBRD Tranche" not to exceed \$92M, which shall be funded by EBRD Resources and; ii) a "CTF Tranche" not to exceed \$8M, which shall be funded from the Clean Technology Fund. Any Disbursements made shall be on a *pro rata* basis as between the EBRD Tranche and the CTF Tranche. ZMSM shall pay to EBRD, during the Commitment Period of 24 months, a charge on the portion of the Loan that has been disbursed to ZMSM or cancelled. ZMSM shall also pay to EBRD a front-end commission in respect of the Loan, an underwriting commission and, an annual administration fee. With respect to the EBRD Tranche, ZMSM shall pay interest on the principal amount of each Disbursement. With respect to the CTF Tranche, ZMSM shall pay interest on the principal amount of each Disbursement to the extent it forms part of the CTF Tranche from time to time outstanding during each Interest Period for such Disbursement at a rate equal to the all-in rate at the signing of the Loan Agreement, reduced following the achievement of three milestones: (1) the Task Force on Climate-related Financial Disclosures ("**TCFD**") report disclosed by end of 2023 will result in a 25% rate reduction; (2) the completion of certain capital expenditure set out in the TCFD report and in the development plan by end of 2024 will result in a 50% rate reduction and; (3) reaching "advanced" maturity on the TCFD's Climate Governance and Strategy



recommendation will result in reduction of interest to an all-in rate of 1.00%. The capital and interest on the EBRD Tranche and on the CTF Tranche are payable twice yearly and the Final Maturity Date is six years from the execution of the Loan Agreement. Prior to the first Disbursement to be made available, a Cost Overrun Account of \$18M and a Debt Service Reserve Account of \$16.25M million must be funded. All Disbursements made under the Loan Agreement are available to ZMSM upon satisfaction of certain customary conditions precedent.

To secure ZMSM's obligations under the Loan Agreement, a variety of Security Agreements were executed, including : 1) a Business Pledge Agreement pursuant to which ZMSM granted to EBRD a first ranking security interest in all of its present and future tangible movable assets and intangible assets belonging to its ongoing business; 2) a Receivables Pledge pursuant to which ZMSM granted a first ranking security interest in the receivables held or to be held by ZMSM and arising from any sale agreement or offtake agreement under which a receivable is held or will be held by ZMSM pursuant to the sale of the Zgounder Silver Mine production; 3) a Bank Accounts Pledge pursuant to which ZMSM granted to EBRD a first ranking security interest in the Onshore Bank Accounts and; 4) a Share Pledge Agreement pursuant to which the parent company of ZMSM, AGSM, pledged in favor of EBRD all of its issued and outstanding shares of ZMSM. The Loan Agreement was also conditional to the execution of a Guarantee, Indemnity and Subordination Agreement ("**Guarantee Agreement**") pursuant to which: (a) Aya guaranteed to EBRD the punctual performance of ZMSM of all its obligations under the Loan Agreement and the amounts owing to EBRD under the Loan Agreement; and (b) Aya and AGSM agreed to subordinate all amounts owing to them in respect of the Subordinated Debt to all amounts owing to EBRD under the Loan Agreement.

#### INTERESTS OF EXPERTS

The following are the names of persons or companies (a) that have prepared or certified a statement, report or valuation described or included in a filing, or referred to in a filing made under NI 51-102 by the Corporation, during, or relating to, the Corporation's most recently completed financial year; and (b) whose profession or business gives authority to the statement, report or valuation made by the person or the Corporation:

- (i) KPMG LLP, Chartered Professional Accountants, provided an auditor's report dated March 28, 2023, in respect of the Corporation's financial statements for the year ended December 31, 2022.
- (ii) KPMG LLP, Chartered Professional Accountants, provided an auditor's report dated March 29, 2022, in respect of the Corporation's financial statements for the year ended December 31, 2021.
- (iii) Raymond Chabot Grant Thornton LLP, Chartered Professional Accountants, provided an auditor's report dated March 25, 2021, in respect of the Corporation's financial statements for the year ended December 31, 2020
- (iv) P&E Mining Consultants Inc., Geology and Mining Engineers were Qualified Person consultants to the "Technical Report and Updated Mineral Resource Estimate to the Zgounder Silver Project, Kingdom of Morocco" dated January 28, 2022 and the "Technical Report And Updated Mineral Resource Estimate Of The Zgounder Silver Project, Kingdom Of Morocco" dated April 30, 2021
- (v) DRA and Daniel M. Gagnon, with the participation of William Stone, Antoine Yassa, Jarita Barry, Fred Brown, Eugen Puritch, Daniel Morrison, Daniel M. Gagnon, André-Francois Gravel, Claude Bisailon, Julie Gravel, Kathy Kalenchuk, Hugo Della Sbarba, Philippe Rio Roberge, Richard Barbeau & Stephen Coates all "qualified persons" for the purpose as Qualified Person with regard to the "NI43-101 TECHNICAL REPORT – FEASIBILITY STUDY ZGOUNDER EXPANSION PROJECT", originally dated March 31, 2022 and amended on June 16, 2022.
- (vi) McCarthy Tétrault LLP passed on behalf of the underwriters, expertise on certain legal matters relating to the Final Prospectus filed by the Corporation on September 9, 2021.
- (vii) Dentons Canada LLP passed on behalf of the Corporation, expertise on certain legal matters relating to the Final Prospectus filed by the Corporation on September 9, 2021.

To the best of the Corporation's knowledge, the experts named above did not have any registered or beneficial interest, direct or indirect, in any securities or other property of the Corporation, when the experts prepared their respective reports, and no securities or other property of the Corporation or one of its subsidiaries was subsequently received or to be received by such experts.

### **ADDITIONAL INFORMATION**

Additional information relating to the Corporation can be found on SEDAR web site at [www.sedar.com](http://www.sedar.com).

Additional information including directors' and officers' remuneration and indebtedness, principal holders of the Corporation's securities and securities authorized for issuance under equity compensation plans, where applicable will be contained in the Corporation's management information circular in respect of its next annual meeting of shareholders involving the election of directors.

Additional financial information is provided in the annual audited financial statements of the Corporation for the year ended December 31, 2022 and the notes thereto and also in management's discussion and analysis for the same period.

## SCHEDULE "A" - AUDIT AND RISK MANAGEMENT COMMITTEE CHARTER

The following charter, which shall be interpreted to be in compliance with *Regulation 52-110 respecting Audit Committees ("52-110")*, sets forth the purpose, composition, responsibilities and authority of the Audit and Risk Management Committee (the "**Committee**") of the Board of Directors (the "**Board**") of Aya Gold & Silver Inc. (the "Corporation").

### 1. COMPOSITION

The Committee shall be comprised of at least three directors as determined by the Board. The members of the Committee shall be independent, within the meaning of 52-110.

At least one member of the Committee shall have accounting or related financial management expertise. All members of the Committee shall be financially literate.

For the purposes of this charter, the definition of "financially literate" is the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can presumably be expected to be raised by the Corporation's financial statements.

The appointment of members to the Committee shall take place annually pursuant to the recommendation of the Corporate Governance Committee, as early as possible after the general assembly of shareholders. If the appointment of members of the Committee is not so made, the directors who are then serving as members of the Committee shall continue to serve as members until their successors are validly appointed. The Board may appoint a member to fill a vacancy that occurs in the Committee between annual elections of directors.

Unless a chairman is appointed by the Board, the members of the Committee may designate a chairman by a majority vote of all Committee members.

### 2. MEETINGS AND PROCEDURES

The Committee shall meet at least quarterly, or more frequently if required.

At all meetings of the Committee, every item brought to resolution shall be decided by a majority of the votes cast. In the case of an equality of votes, the chairman shall not be entitled to a second vote.

Quorum for meetings of the Committee shall be a majority of its members and the rules for calling, holding, conducting and adjourning meetings of the Committee shall be the same as those governing meetings of the Board.

The powers of the Committee may be exercised at a meeting at which a quorum of the Committee is present in person or by telephone or other electronic means or by a resolution signed by all members entitled to vote on that resolution at a meeting of the Committee. Each member (including the chairman of the Committee) is entitled to one vote in Committee proceedings.

The Committee may meet separately with senior management and may request that any member of the Corporation's senior management or the Corporation's outside counsel or independent auditors to attend meetings of the Committee or other meetings with any members of, or advisors to, the Committee.

Furthermore, the Committee has the authority to hire the services of outside advisors, from time to time, when it is necessary to do so for carrying out its mandate.

The Committee shall, at the meeting of the Board following its own meeting, report to the directors on its work, activities and recommendations.

### **3. DUTIES AND RESPONSIBILITIES**

Responsibility for the Corporation's financial reporting, accounting systems and internal controls is vested in the officers of the Corporation and is overseen by the Board. The responsibility of the Committee is to assist the Board in fulfilling its oversight responsibilities. The following are the general duties and responsibilities of the Committee:

#### **A. FINANCIAL STATEMENTS AND DISCLOSURE MATTERS**

- i. review the Corporation's financial statements, management's discussion and analysis and any press releases regarding annual and interim (as required by the Board) profit or loss, before the Corporation publicly discloses such information, and any reports or other financial information which are submitted to any governmental body or to the public;
- ii. assess the risk that the financial statements contain material misstatements
- iii. assess the accounting principles used and their application, as well as being aware of new and developing accounting standards that may affect the Corporation
- iv. assess the significant estimates made by management; and
- v. assess the disclosures in the financial statements

#### **B. INDEPENDENT AUDITORS**

- i. recommend to the Board the selection and, where applicable, the replacement of the independent auditors to be appointed annually as well the compensation of such independent auditors;
- ii. determine that the independent auditors appointed are a Public Accounting Firm that has entered into a Participation Agreement as such terms are defined in Regulation 52-108 respecting Auditor Oversight and that at the time of their report on the annual financial statements of the Corporation, they are in compliance with any restrictions or sanctions imposed by the Canadian Public Accountability Board;
- iii. oversee the work and review annually the performance and independence of the independent auditors;
- iv. on an annual basis, review and discuss with the independent auditors all significant relationships they may have with the Corporation that may impact their objectivity and independence;
- v. consult with the independent auditors about the quality of the Corporation's accounting principles, internal controls and the completeness and accuracy of the Corporation's financial statements;
- vi. review and approve the Corporation's hiring policies regarding partners, employees and former partners and employees of the present and former independent auditors of the Corporation;
- vii. review the audit plan for the year-end financial statements and intended template for such

statements;

- viii. review and pre-approve all audit and audit-related services and the fees and other compensation related thereto, as well as any non-audit services provided by the independent auditors to the Corporation or its subsidiary entities. The pre-approval requirement is satisfied with respect to the provision of non-audit services if:
1. the aggregate amount of all such non-audit services provided to the Corporation constitutes no more than 5% of the total amount of fees paid by the Corporation and its subsidiary entities to its independent auditors during the fiscal year in which the non-audit services are provided; and
  2. such services were not recognized by the Corporation or its subsidiary entities as non-audited services at the time of the engagement; and
  3. such services are promptly brought to the attention of the Committee by the Corporation and approved, prior to the completion of the audit, by the Committee or by one or more of its members to whom authority to grant such approvals has been delegated by the Committee;

The Committee may delegate to one or more independent members of the Committee the aforementioned authority to pre-approve non-audited services, provided the pre-approval of the non-audit services is presented to the Committee at its first scheduled meeting following such approval.

#### **C. FINANCIAL REPORTING PROCESSES**

- i. review with management, in consultation with the independent auditors, the integrity of the Corporation's financial reporting process, both internal and external, and internal controls;
- ii. consider the independent auditor's judgments about the quality and appropriateness of the Corporation's accounting principles as applied in its financial reporting;
- iii. consider and report to the Board changes to the Corporation's auditing and accounting principles and practices as suggested by the independent auditors and management;
- iv. review any significant disagreement among management and the independent auditors in connection with the preparation of the financial statements;
- v. review, with the independent auditors and management, the extent to which changes and improvements in financial or accounting practices have been implemented;
- vi. establish procedures for the confidential, anonymous submission by employees of the Corporation of concerns regarding questionable accounting or auditing matters and the receipt, retention and treatment of complaints received by the Corporation regarding accounting, internal accounting controls or auditing matters.

#### **D. RISK MANAGEMENT**

- i. assess and oversee the overall process for identifying principal business, political, financial and control risks and providing its views on the effectiveness of this process to the Board.
- ii. direct the facilitation of risk assessments and measurement to determine the material risks to

- which the Corporation may be exposed and to evaluate the strategy for managing those risks;
- iii. monitor the changes in the internal and external environment and the emergence of new risks;
  - iv. review the adequacy of insurance coverage;
  - v. monitor the procedures to deal with and review disclosure of information to third parties insofar as these disclosures represent a risk for the Corporation;
  - vi. review the systems established to ensure compliance with the Corporation's policies, plans, procedures, laws, regulations and means of safeguarding assets including adequacy of controls including surrounding electronic data processing and computer security;
  - vii. review the adequacy of resources assigned to assess control and what steps the officers of the Corporation have taken to eliminate any potentially serious weaknesses in internal control including a review of executive expense procedures and use of Corporation assets, the capital investment control process and financial instruments procedures;
  - viii. review the Corporation's disclosure controls and procedures and internal control over financial reporting (the "Controls"), and consider whether the Controls:
    - 1. provide reasonable assurance that material information relating to the Corporation, including its consolidated subsidiaries, if any, is made known to the Corporation's Chief Executive Officer and Chief Financial Officer, particularly during the period in which the Corporation's annual filings are being prepared; and
    - 2. provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the Corporation's accounting practices.
  - ix. The Committee shall evaluate the effectiveness of the Controls as of the end of each period covered by the annual filings and provide the Board and management with its conclusions about the effectiveness of the Controls.

**E. WHISTLEBLOWING POLICY**

- i. monitor and review compliance with the Corporation's Whistleblowing Policy;
- ii. establish a procedure for the receipt and treatment of complaints received by the Corporation regarding accounting, internal accounting controls or auditing matters;

**F. REPORTING RESPONSIBILITIES**

- i. the Committee shall report to the Board on a regular basis, and in any event:
  - 1. at least annually, with an assessment of the performance of management in the preparation of financial statements and Auditors in conducting the annual audit of the Corporation and discuss the report with the full Board following the end of each fiscal year;
  - 2. before the public disclosure by the Corporation of its financial statements, management's discussion and analysis and any press releases regarding annual and interim profit or loss and any reports or other financial information which are submitted

to any governmental body or to the public; and

3. as required by applicable legislation, regulatory requirements and policies of the Canadian Securities Administrators.

**G. ANNUAL EVALUATION**

- i. annually, the Committee shall, in a manner it determines to be appropriate:
  1. conduct a review and evaluation of the performance of the Committee and its members, including the compliance of the Committee with this charter; and
  2. review and assess the adequacy of this charter and the position description for the chairman of the Committee and recommend to the Board any improvements to this charter or the position description that the Committee determines to be appropriate, except for minor technical amendments to this charter, authority for which is delegated to the Corporate Secretary, who will report any such amendments to the Board at its next regular meeting.