



# 2021

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AMENDED ANNUAL INFORMATION FORM  
FOR THE YEAR ENDED DECEMBER 31, 2021

June 16, 2022

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Except as otherwise indicated, references to “we”, “our”, “us”, “its”, “Corporation” or “Aya” mean Aya Gold & Silver Inc. and its subsidiaries. All the information contained in this Annual Information Form (“AIF”) is up to date as at December 31, 2021 and the amounts are expressed in US dollars, unless otherwise indicated. For greater certainty, this AIF sets forth the results for the fiscal year ended December 31, 2021 and is dated June 16, 2022.

## 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 and its common shares are listed on the Toronto Stock Exchange (“**TSX**”) under the stock symbol “**AYA**”.

### **INTERCORPORATE RELATIONSHIPS**

The following chart shows the inter-corporate relationships among Aya and its material subsidiaries:



**Figure 1: Corporation chart**

- ▶ Aya Gold & Silver Maroc S.A., previously Compagnie Minière Maya-Maroc S.A. was incorporated on August 24, 2009 pursuant to Moroccan Law. Its registered office is located at corner of Boulevard Ibnou Sina and Rue Abou Rayane Al Falaki, BP 20 370, Casablanca, Morocco ("Morocco"). This corporation is involved in the exploration of mining properties located in Morocco; and
- ▶ Zgounder Millenium Silver Mining S.A. ("ZMSM") was incorporated on October 19, 2013 pursuant to Moroccan Law. Its registered office is located at corner Boulevard Ibnou Sina and Rue Abou Rayane Al Falaki, BP 20 370, Casablanca, Morocco. This corporation is involved in the development of mining properties located in Morocco.

## GENERAL DEVELOPMENT OF THE BUSINESS

### THREE-YEAR HISTORY

**Year ended December 31, 2019**

#### ● **Operations**

##### Zgounder Silver Mine

On January 9, 2019, Aya announced the commissioning of its 500 tonnes per day (tpd) flotation mill had been completed and the Corporation declared commercial production as of January 1<sup>st</sup>, 2019.

In 2019, Aya produced 452,416 ounces of silver at an average head grade of 217.6 g/t Ag. Silver was sold as ingots (262,837 oz) and as concentrate (163,068 oz) for a total of 425,905oz sold.

##### Boumadine

A total of 3,959m of DDH occurred at the Boumadine project in 2019 showing extension of mineralization at depth in the Imarigen Ouest zone, above the -50 m and to the south in the North zone.

On February 25, 2019, Aya announced the compilation of results from its DDH program, drilling on the historical tailings and surface sampling at Boumadine property including historical mineralized panels which are still in place.

On April 24, 2019, Aya announced the results of the independent Preliminary Economic Assessment study prepared by GMG and the filing of a NI 43-101 compliant technical report on the Boumadine project titled "NI 43-101 Technical Report Preliminary Economic Assessment Boumadine Polymetallic Mine of the Kingdom of Morocco" and dated March 29, 2019. Such report is available on Aya's profile on SEDAR at [www.sedar.com](http://www.sedar.com) but, as announced by Aya on May 28, 2020 is no longer current and the Boumadine project is no longer considered material.

##### Azegour

The Azegour property is located in the Tizguine-Amizmiz-Azegour area, High Atlas Occidental, Province of Marrakech, Morocco (the "**Azegour Property**").

On March 1, 2019, Aya announced it began to explore and develop its Azegour Property where Copper, Molybdenum, Tungsten and Uranium were mined in the past. The Corporation hired GMG to guide and assist the Aya.

On May 8, 2019, the Corporation reported positive findings at Azegour Property and announced the launch of its preliminary economic assessment's ("**PEA**") work.

#### ● **Financing**

Aya converted to a US dollar reporting currency starting January 1, 2019.

On April 29, 2019, the Corporation announced that the TSX has approved its notice of intention to make a normal course issuer bid (the "**NCIB**"), through which Aya may purchase up to 5,567,799 of

its common shares or approximately 10% of the public float through the facilities of the TSX and certain alternative Trading Systems over a period of twelve months, commencing on May 1, 2019, and ending April 30, 2020. At the end of the NCIB program, Aya had repurchased 49,019 shares.

## 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 its 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 its 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 15, 2020, the Corporation reported high-grade Ag results from its ongoing drill exploration program at the Zgounder Silver Mine. The results confirmed high-grade Ag mineralization below the current mining operations with an intercept of 4.00 m at 9,346 g/t Ag, which was an all-time best within the mine's database include the highest Ag value of 60,000 g/t Ag over 0.5m. In additional hole Zg-20-01 confirmed new high-grade mineralization at depth at the granite contact.

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 Aya

Gold & Silver Morocco.

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

On July 30, 2020, the Corporation announced that it has received the approval from the Toronto Stock Exchange (the “**Exchange**”) 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 of 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 (the “**Units**”) to be priced at C\$2.10 per Unit for gross proceeds to the Corporation of approximately C\$20,000,400 (the “**Offering**”). 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 April 26, 2021, the Corporation announced preliminary production of 389,132 oz 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 Mine.

On May 13, 2021, the Corporation announced a strong quarter with record operating cash flow of \$4.2 million for the quarter ended March 31, 2021 as well as silver production of 389,132 oz, silver sales of 352,019 oz, revenue of \$8.5 million, operating cash flow for the period of \$4.2 million, ore processed of 48,472 tonnes, mill recovery of 82.8%, average throughput of 538 tpd, and a balance sheet with \$31.8 million of cash.

On June 8, 2021, the Corporation announced high-grade silver results from its 2021 drill exploration program including its second-highest drill exploration result ever with a step-out intercept of 6,437 g/t over 6.5 m.

On July 13, 2021, the Corporation announced record quarterly silver production of 439,149 ounces in Q2 2021 at an average head grade of 297 grams per tonne silver at Zgounder.

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, Silver sales of 419,997 oz, revenue of \$9.9 million, operating cash flow for the period of \$5.5 million, ore processed of 56,318 tonnes, mill recovery of 82%, tonnes mined averaged 700 tpd, and a robust financial position with \$36.9 million of cash.

On October 14, 2021, the Corporation announces silver production of 338,624 ounces at an average grade of 242 grams per tonne in the third quarter of 2021 and an increase in 2021 production guidance to 1.55 million oz Ag or a 29% increase over initial guidance of 1.20 million oz Ag and silver recovery of 81%.

On November 9, 2021, the Corporation sadly reported that a fatal accident occurred at the Zgounder 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, silver sales of 403,950 oz, revenue of \$7.8 million, operating cash flow for the period of \$5.9 million, ore processed of 53,869 tonnes, mill recovery of 81%, tonnes mined averaged 609 tpd, enhanced financial position to \$88 million of cash.

On December 14, 2021 the Corporation reported an updated Mineral Resource Estimate for its Zgounder Silver Mine in the Kingdom of Morocco. The updated Mineral Resource Estimate has an effective date of December 13, 2021 and incorporates drilling carried out on Zgounder between January and September 10, 2021. Zgounder'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.

## **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 Mauritania, to acquire their 2018 secured loan for a then face value of \$5 million. 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 C\$100,000 in cash and C\$2,500,000 in Aya shares to fund Algold's proposal to its creditors. Aya also provided C\$2,400,000 in Aya shares to be distributed to Algold current shareholders with a view to become Algold's sole shareholder.

On February 22, 2021, the Corporation provided guidance of Silver production of 1.2 million oz and a silver cash cost of \$11.28/oz, of 41,000 meters of drilling planned: 35,000 meters on the Zgounder mining permit and 6,000 meters on Zgounder regional exploration permits, of preparing two resource estimates: one expected in Q1 2021 and one in Q4 2021, as part of the Zgounder feasibility study and the completion of the Zgounder capacity expansion feasibility study to 2,000 tpd expected in Q4 2021.

On March 5<sup>th</sup>, 2021, the Corporation announced that Algold's creditors approved Algold's proposal.

On March 16, 2021, the Corporation announced a new mineral resource estimate for the Zgounder Silver Mine. The updated mineral resource estimate incorporates drilling carried out on Zgounder between February 2018 and the end of 2020. The mineral resources total 4.9 million tonnes averaging 282 g/t Ag for 44.4 million ounces Ag. This represents an increase of 340% compared to the March 2018 measured and indicated Mineral Resources of 10 million ounces 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 June 10, 2021 the Corporation announced that at its annual general meeting of shareholders held on June 10, 2021, all directors nominated in the management proxy circular were elected. A total of 31,084,145 common shares or 32.54% of Aya's issued and outstanding common shares at the record date were represented in person or by proxy at the AGM.

On June 11, 2021, the Corporation announced the closing of the previously announced acquisition of Algold and an updated 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 (the "Common Shares") at a price of \$10.25 per Common Share (the "Offering Price") for aggregate gross proceeds to Aya of \$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 \$80,508,625.

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

## DESCRIPTION OF THE 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, an 85%/15% joint venture between its subsidiary, ZMSM, and Office Nationale des Hydrocarbures et des Mines (ONHYM).

Aya's mining portfolio also includes the Boumadine, Amizmiz, Azegour, and Imiter-bis, all located in

Morocco and the Tijirit gold project located in Mauritania.

#### **SUMMARY**

The Corporation mines, produces and 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 at a discount to 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 2021, total sales of silver for the year amounted to \$34,301,914 compared to \$13,822,709 in 2020. Silver prices fluctuate widely and are affected by numerous factors such as, but not limited to, inflation rate, 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 concentrate (52% of revenues).

Several key hires continue to be made throughout the year to reinforce production, mining, and operations teams. A major maintenance and refurbishment plan was established which includes 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 2020. The flotation plant ball mill as well as other material existing mining equipment underwent major repairs in 2021 and additional machinery 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.

With the turnaround plan implement in 2021, throughput averaged 609 tonnes per day during 2021, combined mill recovery averaged 83% and global availability of 86% and 90.5% for the flotation and cyanidation plants, respectively.

The Corporation produced a record 1,600,646 oz of silver in 2021 compared to 726,319 oz in 2020.

#### **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 such as cyanide, zinc powder 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, 2021 was \$1,149,441. For more information, please see note 10 to the Corporation's annual financial statements for the fiscal year ended December 31, 2021.



## ● **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 December 31, 2021, the Corporation had a total of 285 full-time employees, of which 20 employees worked in Canada and the balance are employees of the Corporation's subsidiaries in Morocco.

#### **FOREIGN OPERATIONS**

As at December 31, 2021, 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 the Kingdom of 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 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>. Ownership is an 85% and 15% joint venture between Aya subsidiary Zgounder Millenium Silver Mining SA (“ZMSM”) and ONHYM.

### 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 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 that could be upgraded. The Zgounder Mine is also accessible via a 278 km drive on paved highway from the City of Marrakesh.

The Zgounder Mine is located between 1,925 and 2,200 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 Talioune 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 2,100 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 10th and 12th 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 the first 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 an updated Mineral Resource Estimate and PEA of the Zgounder Mine. Maya publicly disclosed the updated Mineral Resources Estimate on January 8, 2018 and the PEA on February 5, 2018. The PEA was based on the January 8, 2018 updated Mineral Resources Estimate.

In 2021, Aya mandated P&E to prepare a new Mineral Resource Estimate based on new drilling information. An initial Mineral resource estimate was prepared in October 2021 and a subsequent update in December 2021.

#### 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 2020-2021. The drilling database comprised a total of 3,148 holes for 136,816 m.

Percussion drilling using air compressed hammer (T28 and YAK-T28) are 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 1,653 T28/YAK-T28 holes for 31,719 m were drilled historically and until the end of January 2021 as exploration and also 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 this Technical 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 2016, a total of 1,598.4 m was drilled using a T28 percussion hammer rig 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. The data highlighted a new zone to the northeast of Corps D, above the 2100 Level. The holes have been drilled from an exploration raise in a fan and alongside the drift to delineate the shape of the mineralised body. Furthermore, the area has been drilled to delineate the geometry of the Y6 with an extension to the east of that body on level 2100. New findings occurred on the 2030 and 2000 Levels.

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 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 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.

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, 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 electric drills operated underground within the mine. 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 Ag 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 33,986.90 m at Zgounder. The drilling campaign had two (2) objectives: 1) increase the confidence level of the Exploration Target area identified in March 2021; and 2) further extend mineralisation in the eastern part of the Deposit. Up to eight (8) diamond drill rigs were in operation

on the mine permit. Hole ZG-SG-21-67 (underground) encountered 1,383 g/t Ag over 13.5 m to extend the mineralisation trend below the 1975 level; drill hole ZG-21-51 (surface) cut 1,615 g/t Ag over 8.5 m to confirm eastern vertical continuity 200 m below surface; hole ZG-21-50 (surface): 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.

## 1.6 Sample Preparation, Analysis, Security and Verification

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 in hand-written format and all the information transferred into Excel spreadsheets. This method provides duplicate records of all the drill core logging and sampling information, and facilitates data verification and validation. Aya considers that these advantages outweigh the additional time required to copy the data.

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, with up to four diamond-blade saws operating simultaneously during the peak of the 2020 to 2021 drilling campaigns. 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 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. Bulk density determinations are completed in a dedicated area, where the equipment is protected from disturbances, such as drafts that might influence balance readings.

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 11.1 – 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>	

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 (Ag) at the Zgounder Mine laboratory using aqua regia (1/3 HNO<sub>3</sub> and 2/3 HCL) with atomic absorption (AA) 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 ("AAS") finish.

Sample preparation and analysis for samples generated from diamond drill holes are performed at African Laboratory for Mining and Environment ("AfriLab") 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. Each ½-drill core sample is sent for preparation and analysis to AfriLab.

Table 11.2 lists various independent and reputable Spanish, Moroccan, and Canadian laboratories used since the 1980s and includes the laboratory certification/accreditation details.

**Table 11.2 – Summary of the Independent and Reputable Assay Laboratories Used Since 1980s**

Drill Program	Sample Preparation	Analytical Laboratory	Analytical Methods	Accreditation / Independent of Aya	
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 2021	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 (T28- YAK-T28) 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 the bi-acid (1/3 nitric acid and 2/3 hydrochloric acid), in order to dissolve trace elements within the sample into solution. The solutions are analyzed by atomic absorption spectrometer (AA ICE 3500). Fire assay is used for high-grade silver samples. The assay results are then sent in a file format, supported in Microsoft Excel, to the geological department for integration.

#### 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, in order 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 (of 250 g to 300 g) is pulverized using a ROCKS LABS 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 mixture (HCl and HNO<sub>3</sub>) preparation. 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 facility in Marrakesh, or 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 (GEMS).

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 (5) 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 updated Mineral Resource Estimate incorporates drilling carried out on Zgounder between February 2018 and December 2021. The updated Mineral Resource Estimate is summarised in Table 1.1. At a cut-off grade of 65 g/t Ag, pit-constrained updated 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 updated 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 updated Indicated Mineral Resource totals 272 kt grading 94 g/t Ag for 817 koz Ag.

The updated 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 updated 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.

**Table 1.1 – Updated Mineral Resource Estimate** <sup>(1-13)</sup>

Area	Class	Cut-Off	Tonnes	Ag	Ag
		(Ag g/t)	(k)	(g/t)	(koz)
<b>Pit Constrained</b>	Measured	65	108	477	1,656
	Indicated	65	406	325	4,242
	<b>Measured +Indicated</b>	65	514	357	5,898
	Inferred	-	-	-	-
<b>Out-of-Pit</b>	Measured	75	3,403	343	37,527
	Indicated	75	5,576	289	51,810
	<b>Measured +Indicated</b>	75	8,979	309	89,337
	Inferred	75	542	367	6,395
<b>Tailings</b>	Measured	-	-	-	-
	Indicated	50	272	94	817
	<b>Measured +Indicated</b>	50	272	94	817
	Inferred	-	-	-	-
<b>Total</b>	Measured	-	<b>3,511</b>	<b>347</b>	<b>39,183</b>
	Indicated	-	<b>6,254</b>	<b>283</b>	<b>56,869</b>
	<b>Measured +Indicated</b>	-	<b>9,765</b>	<b>306</b>	<b>96,052</b>
	Inferred	-	<b>542</b>	<b>367</b>	<b>6,395</b>

1. December 13, 2021 is the effective date for the Updated Mineral Resource
2. 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.
3. Mineral Resources are reported inclusive of Mineral Reserves
4. 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.
5. 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.
6. A silver price of US\$22.5/oz with a process recovery of 90%, US\$20/t rock process cost, US\$16.5/t tailings process cost and US\$7/t G&A cost were used.
7. The constraining pit optimization parameters were US\$15/t of mineralised material (including waste mining) and 50° pit slopes with a 65 g/t Ag cut-off.
8. The out-of-pit parameters used a US\$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 mineralised wireframes. Out-of-pit Mineral Resources exhibit continuity and reasonable potential for extraction by the cut and fill underground mining method.
9. The tailings parameters were at a US\$9/t mining cost, and Mineral Resource grade blocks were quantified above the 50 g/t Ag cut-off.
10. Individual calculations in tables and totals may not sum correctly due to rounding of original numbers.
11. Grade capping of 6,000 g/t Ag was applied to composites before grade estimation.
12. Bulk density was determined from measurements taken from drill core samples.
13. 1.2 m composites were used during grade estimation.
14. Previously mined areas of the deposit were depleted from the Mineral Resource Estimate.

The Updated 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 campaign had two (2) objectives: 1) increase the confidence level of the Exploration Target area identified in March 2021; and 2) and further extend mineralisation in the eastern part of the Deposit. The two (2) objectives were achieved, in that the drilling extended the east-west strike length of the mineralisation from 775 m to 1,100 m and at depth.

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 mineralised 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. Mineralisation 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 initial Mineral Reserve Estimate in conjunction with the Feasibility Study of Zgounder.

#### 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 drift-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 are estimated at 3.1 Mt proven reserves grading 289 g/t Ag and 5.8 Mt probable reserves grading 231 g/t Ag, for a total of 8.9 Mt ore grading 251 g/t Ag. The access the Mineral Reserves, a total of 27.6 Mt of waste will need to be extracted. Table 1.2 presents a summary of the Mineral Reserves Estimate for the Zgounder mine.

**Table 1.2 – Mineral Reserves Estimate – Effective December 13, 2021**

Description	Classification	Tonnage	Ag Grade	In-Situ Ag
		(Mt)	(g/t)	(Moz)
Open Pit	Proven Reserves	0.6	312	5.7
	Probable Reserves	1.6	233	12.1
	<i>Total Open Pit Reserves</i>	<i>2.2</i>	<i>253</i>	<i>17.8</i>
Historical Tailings	Probable Reserves	0.3	77	0.8
Underground	Proven Reserves	2.5	283	23.0
	Probable reserves	3.6	256	29.3
	<i>Total Underground Reserves</i>	<i>6.1</i>	<i>267</i>	<i>52.3</i>
Total	Proven Reserves	3.1	288	28.7
	Probable Reserves	5.5	239	42.1
	<b>Total Reserves</b>	<b>8.6</b>	<b>257</b>	<b>70.9</b>

NOTES:

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 reserves estimate has an effective date of December 13, 2021.
13. Totals may not add due to rounding.

## 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 (7) days a week, twenty-four (24) hours per day (two (2) 12-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>														
Ore	Pit to Mill	kt	-	-	200.9	192.6	185.8	251.0	248.6	234.2	202.8	-	-	1,516
	Pit to Low-Grade Stockpile	kt	-	8.1	20.3	113.2	98.9	36.7	36.7	29.2	29.3	-	-	372.4
	Pit to High-Grade Stockpile	kt	-	62.6	48.2	80.8	45.7	28.9	11.3	4.1	8.4	-	-	290.2
	Low-Grade Stockpile to Mill	kt	-	-	14.5	0.1	7.6	30.1	9.5	45.3	76.8	-	188.6	372.4
	High-Grade Stockpile to Mill	kt	-	-	46.6	95.3	94.7	6.9	29.9	8.4	8.4	-	-	290.2
	Total Mill Feed	kt	-	-	262.0	288.0	288.0	288.0	288.0	288.0	288.0	-	188.6	2,178.6
	Silver Grade at Mill	g/t	-	-	350.0	303.3	202.2	279.5	311.7	231.8	230.1	-	61.8	253.5
Waste	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	
Total Mined	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	
Stripping Ratio	w/o	-	44.8	16.0	10.2	11.7	10.4	8.5	5.2	3.9	-	-	10.8	
<b>Tailings Reclamation</b>														
Ore	Tonnage to Mill	kt	-	-	-	-	-	-	-	-	-	288.0	30.8	318.8
	Silver Grade	g/t	-	-	-	-	-	-	-	-	-	80.5	39.5	7.6
<b>Underground Mine</b>														
Ore	Tonnage to Mill	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
	Silver Grade	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
Waste	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	
Total Mined	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>														
Ore to ROM Pad	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	
Silver Grade	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	
Waste	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	
Total Mined	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 treat 500 t/d of mineralised material and it will produce a concentrate slurry which will be pumped to the New Plant #3 for leaching and refinery. Additionally, its flotation tails will also be transferred to the New Plant #3, where it will combine with the new plant's flotation tailings in the Leaching-CIP circuit.

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;
- Flotation: One rougher stage followed by regrinding of the rougher concentrate to 80% passing 45 microns prior to three cleaner stages;
- Intensive cyanidation: of the gravity concentrate with the pregnant solution combining with two (2) other high grade solutions (eluate and CCD overflow) ahead of the Merrill-Crowe section;
- Concentrate Leaching and Counter-Current Decantation (CCD): Cyanidation of the 3rd flotation cleaner concentrate at elevated cyanide concentrations followed by liquid-solid separation in a train of CCD thickeners with the CCD overflow reporting to the Merrill-Crowe and the barren CCD underflow reporting to the tailings leach;
- Tailings Cyanidation and CIP: leaching of flotation tailings and other tailings streams followed by adsorption onto activated carbon in a carousel CIP circuit;
- ADR process: acid-washing and elution circuit to strip silver from the carbon and regenerate it for re-use;
- 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;
- A flotation mass pull of 3.5%
- Cyanidation extraction efficiencies of 96% for both the gravity concentrate and the flotation concentrate and 60% extraction from the flotation tailings;
- An overall extraction of 91 to 95%;
- 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;
- Concentrate and tailings leach residence times of 48 hrs and 36 hrs respectively;
- Carbon elution rate of 162 tpd (Split AARL elution circuit)
- CIP slurry residence time of 9.6 hrs (8 tanks of 1.2 hrs each)

## 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, flotation, intensive leach reactor, counter-current decantation, cyanidation, ADR process, Merrill-Crowe.

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.

Therefore, Englobe developed a water management strategy and a water balance model to accommodate

those challenges and requirements. The water management strategy utilizes the large catchment areas of the project site and existing and proposed infrastructure to collect and convey fresh water, contact water and non-contact water to the TSF Site C storage basin. Englobe proposes a flexible system that can adapt to variable precipitation conditions by selectively collecting and discharging water on site, using a system of one large water reservoir, two (2) new collection ponds, new and existing diversion ditches, and pumping stations.

Based on obtained results, Englobe recommends to maintain a minimal available water volume of 150,000 m<sup>3</sup> in the TSF Site C for dry year conditions, and a maximal additional free water storage capacity in the new TSF Site C of 470,000 m<sup>3</sup> for wet year water storage. As the maximal free water storage capacity is significant, the volume could be reduced over time following more precise water input modelling. With the proposed storage capacity, the site water management system would then be able to provide an adequate supply of process water to the plant. The water treatment plant does not seem to be required under the analyzed conditions.

#### 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 December 2021 Mineral Resource Estimate (P&E Report) and for the Mineral Reserves Estimate as part of this Technical 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.

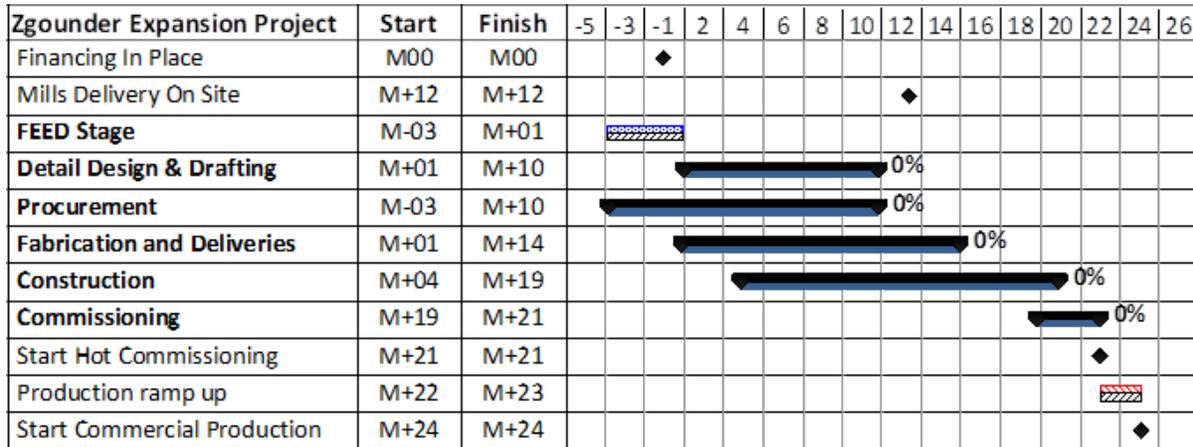
### 1.16 Other Relevant Information

#### 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 in 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.

At a cut-off grade of 65 g/t Ag, pit-constrained updated 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 updated 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 updated Indicated Mineral Resource totals 272 kt grading 94 g/t Ag for 817 koz Ag. The effective date of this updated Mineral Resource Estimate is December 13, 2021.

The updated 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 updated 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 Updated 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, flotation, cyanidation of both concentrates and the flotation tailings and carbon adsorption followed by 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 is complex and provides only a small improvement in recovery above that of a much simpler whole-ore cyanidation flowsheet. A major benefit of the flotation circuit is that the footprint of the CCD thickener train is much smaller than that of a comparative whole-ore cyanidation plant. Another benefit is the opportunity to oxidize cyanide consumers in the flotation concentrate in a more intensive pre-oxidation step. These benefits need to be traded-off against the complexity of the flotation circuit and the downside of being forced to destroy cyanide in the reclaim solution prior to its introduction into the flotation circuit.

### 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

The water management strategy and a water balance model were developed to account for dry, average and wet years. The water management strategy utilizes the large catchment areas of the project site and existing and proposed infrastructure to collect and convey fresh water, contact water and non-contact water to the TSF Site C storage basin. Engobe proposes a flexible system that can adapt to variable precipitation conditions by selectively collecting and discharging water on-site, using a system of one (1) large water reservoir, two (2) new collection ponds, new and existing diversion ditches, and pumping stations.

Based on obtained results, Englobe concludes that the site can manage the water supply to the processing plant during variable conditions by operating a water reservoir with a maximum initial capacity of 620,000 m<sup>3</sup> and maintain the minimum water volume at around 150,000 m<sup>3</sup>. Those volumes can be refined to suit the staged TSF pond construction sequence as more climatic and operational information become available. The water treatment plant does not seem to be required under the analyzed conditions.

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

While the selected flowsheet does improve overall recoveries marginally (~2%) it is complex and somewhat costly and it requires detoxification of reclaim water in order to minimise the risk of cyanide affecting the performance of the flotation section. The value of a simpler flowsheet needs to be revisited.

The concept, assumed during the preparation of the FS, was that peroxide would be injected into the reclaim water line at the tailings dam and that the residence time between this point and the discharge into the water tanks at the plant would be sufficient to destroy most of the free and WAD cyanide. The tests conducted were performed for 60 minutes which likely exceed the residence time in the reclaim pipeline. The requirement for a small reactor tank to add residence time for this reaction would need to be evaluated in future phases of the Project.

#### 1.18.4 RECOVERY METHODS

It is recommended to perform additional confirmatory testwork on the whole-ore cyanidation and CCD flowsheet using several cyanide concentrations for leaching and on variable head grade samples. This would allow comparison of this simplified flowsheet against the more complex flowsheet that formed the basis of this FS.

#### 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, 2021 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.

### ● 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.

#### ● **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.

#### ● **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

Aya exclusively operates in the Kingdom of Morocco. While the current government of Morocco has supported the development of its natural resources by foreign companies, there is no assurance that the government will not, in the future, adopt different policies or new interpretations respecting foreign ownership of mineral resources, rates of exchange, 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.

## IMPACT OF EPIDEMICS

All of Aya's operations are subject to the risk of emerging infectious diseases or the threat of viruses or other contagions or epidemic diseases, including COVID-19. Any outbreak or threat of an outbreak of a virus or other contagions or epidemic disease could have a material adverse effect on the Corporation's business, results of operations and financial condition.

## 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 104,959,503 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 2021.

Month	High (\$)	Low (\$)	Volume
January	4.87	3.53	7,199,918
February	6.14	4.13	6,250,518
March	5.76	4.10	4,798,008
April	8.03	4.80	6,130,414
May	8.08	6.62	5,116,600
June	9.19	7.16	5,969,837
July	10.62	8.54	4,778,457
August	11.85	9.57	9,587,326
September	11.38	7.18	22,556,082
October	9.69	7.58	5,823,350
November	10.36	8.00	8,554,791
December	10.00	8.30	3,956,821

### ● DIRECTORS

## DIRECTORS AND OFFICERS

The board of directors is currently comprised of seven 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, 2022, 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, 2021
	Dr Elena Clarici <sup>(1) (3)</sup> London, England	Director	June 2018	President and CEO of Micah Minerals Corp.	0 0.00%
	Benoit La Salle <sup>(2)</sup> Montréal, Québec, Canada	President, Chief Executive Officer and Director	April 2020	Chartered Professional Accountant; Chairman of the Board and Chief Executive Officer of Algold Resources Ltd. (February 2013 to January 2021); President and Chief Executive Officer of Windiga Energy Inc Canada (November 2010 to date) Chairman of the Board of The Canadian Council on Africa (October 2012 to date) Executive Chairman of the Board of Sama Resources Inc. (2012 to date); Director of Earth Alive Clean Technologies Inc. (October 2015 to date), Lead Director at Goviex Uranium Ltée (October 2012 to date), Director and Executive Chairman of the Board of SRG Mining Inc. (January 2017 to date)	61,221 0.058%
	Yves Grou <sup>(1) (2)</sup> Montréal, Canada	Director	June 2020	Chartered Professional Accountant, CFO and director of Maclos Capital Inc. (October 2001 to date), director of Jourdan Resources Inc. (December 9 to May 2016), Director of Algold Resources Inc. (May 2011 to July 2021), Director of SRG Mining Inc. (June 2017 to date)	28,815 0.027%
	Dr Jürgen Hambrecht <sup>(2) (3)</sup> Neustadt, Germany	Director	June 2020	Chairman of the Supervisory Board of BASF SE	1,193,250 1.14%

	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, 2021
	Nikolaos Sofronis <sup>(2)</sup> <sup>(3)</sup> Luxembourg, Luxembourg	Director	June 2016	Director of Irini Investment of Luxembourg	2,114,361 2.02%
	Robert Taub Brussels, Belgium	Chairman of the Board of Directors	November 2016	Retired (January 2009 to present)	9,284,162 8.85%
	Marc Nolet de Brauwere van Steeland <sup>(1)</sup> Belgium	Director	June 2021	CEO, PHYSIOL SA 1997 to date); Director and Chairman, Endo Tools Therapeutics; Director of Osimis and KiOmed Pharma; Member of Ashoka Support Network (2011 to date)	3,084,210 2.94%
	Ugo Landry-Tolszczuk Mount Royal, Quebec, Canada	Chief Financial Officer	May 2020	President and Chief Operating Officer and Interim Chief Financial Officer of SRG Mining Inc. (January 2018 to present only as CFO), and Managing Director of Windiga Energy Inc. (2013 to 2018)	23,600 0.022%
	Mustafa El Ouafi Casablanca, Morocco	President - General Manager (Morocco)	April 2020	Managing Director of OCP S.A. and President of OCP Africa, President of Teal Technology Services, CEO of IMACID, PMP and Emaphos	0 0.0%
	Raphaël Beaudoin, Montreal, Quebec, Canada	Vice-President, Operations	June 2020	Director of Operations at SAMA Resources Inc. (September 2017 to present), VP Operations at SRG Mining Inc. (August 2018 to present), Concentration Superintendent at Canadian Royalties (August 2012 to September 2017)	0 0.0%
	Elias J. Elias, Montreal, Quebec, Canada	Vice-President, Legal & Corporate Secretary	July 2020	VP Legal & Corporate secretary of SRG Mining Inc. (January 2018 to present), VP Legal of Sama Resources Inc., (January 2018 to present), Legal 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 15,789,619 common shares of the Corporation or 15.06% 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. Yves 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 Mr. 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.

Ms. Elena Clarici was a director of Barkerville Gold Mines Limited ("Barkerville") when cease trade order was issued effective August 14, 2012 by the British Columbia Securities Commission, which disclosed that Barkerville filed a technical report on August 13, 2012 which was not in the required form under NI 43-101 "Standards of Disclosure for Mineral Projects". The company filed a revised technical report on June 18, 2013 to address the technical disclosure concerns. The cease trade order was revoked effective July 15, 2013.

## 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. 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.

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 and refrain from voting for or against the acquisition.

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 and refrain from voting for or against the acquisition.

## 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
- Marc Nolet
- Elena Clarici

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.

Marc Nolet serves as CEO and owner at PHYSIOL. He is a Board Member and Chairman at Endo Tools Therapeutics. He is a Board member of Osimis and KiOmed Pharma. He obtained his Master's degree as a Mining Civil Engineer from the Catholic University of Louvain (UCL) in 1982, then specialized as a Civil Engineer in Industrial Management at the Katholieke Universiteit Leuven (KUL) in 1983. His mining sector experience spans back to 1984 as Manager of the Engineering department at Petrofina (Kentucky Prince Coal Corporation). In 1978, he took charge of the development of a downstream activity (gold mining) at Chemetech Corporation. He served for these two companies until 1989, then moved on to McKinsey & Company, as an Associate. Mr. Nolet then founded and established a number of biotech specialty companies and has been CEO of Physiol SA since 1997. Mr. Nolet served on a number of boards, including namely as chairman of the audit committee, and chairman of the nomination and remuneration committee. Since 2011 he also is a member of the Ashoka Support Network.

Dr Elena Clarici is an independent mining consultant, with more than 20 years of experience gained across mining capital markets at various financial institutions in the City of London, most recently as portfolio co-

manager of Scipion Mining and Resources Fund and the mining investment analyst for the group, Scipion Capital. Originally Elena was trained as a sell-side mining analyst with T. Hoare & Co (acquired by Canaccord Genuity) specializing in North American junior mining and exploration companies. Elena was also trained as an investment banker and mining corporate financier with ABN AMRO Bank. In 2004, she co-founded Commodity Energy Capital (CeCap LLP) – a boutique investment advisor and asset manager to family offices and investment funds providing investment analysis and technical and financial due diligence for their natural resources investments. Dr Clarici obtained her B.Eng. in Mining Engineering from University of Belgrade. She completed her MPhil and PhD at Royal School of Mines, Imperial College of Science and Technology, London. The members of the Corporation’s audit committee have provided the information disclosed hereinabove.

#### 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

	2021	2020
Audit Fee <sup>(1)</sup>	\$216,051	\$203,518
Audit-Related Fees <sup>(2)</sup>	NIL	\$63,000
Tax Fees <sup>(3)</sup>	\$13,108	Nil
Other <sup>(4)</sup>	\$82,775	\$7,140
<b>Total</b>	<b>\$311,934</b>	<b>\$273,658</b>

#### Notes:

- (1) Audit Fees include the aggregate fees billed by Aya’s external auditor for audit services.
- (2) Audit-Related Fees include the aggregate fees billed for assurance and related services by Aya’s external auditor that are related to the performance of the audit or review of the financial statements and are not reported under “Audit Fee”. These include additional resources provided to the Corporation by the external auditor to complete the audit and additional time provided as the Corporation transitioned to new management.
- (3) 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.
- (4) Other fees include fees services related to the Corporation’s financing and regulatory compliance.

## LEGAL PROCEEDINGS AND REGULATORY ACTIONS

Neither the Corporation nor its subsidiaries is party to any legal proceedings nor regulatory actions as of the date of the AIF. Neither the Corporation nor its subsidiaries was a party or the subject of such legal proceedings or regulatory actions in the last financial year. The Corporation is not aware of any contemplated legal proceedings or regulatory actions involving it or its subsidiaries.

## 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, 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, 2021, nil (December 31, 2020 - \$1,479) was due to that firm;
- Accounting consulting fees of 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, 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, 2021, \$195,241 (December 31, 2020 - \$195,133) was due to Glowat;
- General and administrative fees of \$9,564 (December 31, 2020 - \$3,686) were paid to SRG Mining Inc., a public company of which the Corporation's Chief Executive Officer is also a Director and the Executive Chairman of the Board. In addition, management and consulting fees of nil (December 31, 2020 - \$69,848). As at December 31, 2021, nil (December 31, 2020 - \$693) was due to that company;
- Management and consulting fees of \$65,909 (December 31, 2020 - nil) were paid to SRG Guinee S.A.R.L., a wholly owned subsidiary of SRG Mining Inc. In addition, exploration and evaluation expenses of \$47,273 (December 31, 2020 - nil) were also paid. As at December 31, 2021, no amount (December 31, 2020 - nil) was due to that company;
- Management and consulting fees of \$743,087 (December 31, 2020 - \$324,881) and general and administrative fees of \$35,519 (December 31, 2020 - \$33,327) were paid to Groupe Conseils Grou, La Salle Inc., a company owned by the President and Chief Executive Officer and a Director. As at December 31, 2021, \$445,141 (December 31, 2020 - \$190,953) was due to that company;
- Management and consulting fees of \$53,052 (December 31, 2020 - \$78,861) were paid to TMR Advisory Inc., a company of which an officer of the Corporation is the sole owner. As at December 31, 2021, no amount (December 31, 2020 - \$19,043) 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

No contract, 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, 2021, 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**").

## 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 29, 2022, in respect of the Corporation's financial statements for the year ended December 31, 2021.
- (ii) 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
- (iii) 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
- (iv) DRA and Daniel M. Gagnon, with the participation of William Stone, Antoine Yassa, Jarita Barry, Fred Brown, Eugen Puritch, Niel 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.
- (v) 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.
- (vi) 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, 2021 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.