# Date: April 28, 2023

The following management discussion and analysis ("MD&A") of the consolidated financial condition and results of the operations of Rio Silver Inc. (the "Company" or "Rio Silver") constitutes management's review of the factors that affected the Company's financial and operating performance for the years ended December 31, 2022 and 2021. This MD&A has been prepared in compliance with the requirements of National Instrument 51-102 – Continuous Disclosure Obligations and should be read in conjunction with the audited annual consolidated financial statements of the Company for the years ended December 31, 2022 and 2021, together with the notes thereto. Results are reported in Canadian dollars, unless otherwise noted. The Company's consolidated financial statements and the financial information contained in this MD&A are prepared in accordance with International Financial Reporting Standards ("IFRS"). The results for the periods presented are not necessarily indicative of the results that may be expected for any future period. Please review the cautionary note regarding forward looking statements at the end of this MD&A. Information contained herein is presented as at April 28, 2023, unless otherwise indicated. All of the scientific and technical information has been prepared or reviewed by Jeffrey Reeder, P.Geo., Mr. Reeder is a Qualified Person within the meaning of National Instrument 43-101.

Further information about the Company and its operation can be obtained from www.riosilverinc.com.

# **DESCRIPTION OF BUSINESS**

Rio Silver is a Canadian-based resource company with a mandate to acquire, explore and develop precious and base metal deposits in the Americas and is currently focused on properties in Canada and Peru. The Company is a reporting issuer in British Columbia and Alberta and trades on the TSX Venture Exchange ("TSXV") under the symbol "RYO".

# **OVERVIEW - MINERAL EXPLORATION EXPENDITURES AND ACTIVITES**

The following table summarizes the continuity of expenditures by the Company's on its various mineral property projects during the years ended December 31, 2022 and December 31, 2021:

	Niñobamba	Palta Dorada		
Accumulated costs/ expenditures	Peru	Peru	Gerow Lake	Total
Balance, December 31, 2020	3,252,710	334,090	876,633	4,463,433
Acquisition costs and annual fees	-		-	-
Expenditures	58,344	_	-	58,344
Balance, December 31, 2021	3,311,054	334,090	876,633	4,521,777
Acquisition costs and annual fees	-		-	-
Expenditures	212,483	-	-	212.483
Balance, December 31, 2022	3,523,537	334,090	876,633	4,734,260

The following table provides details of the exploration expenditures for the years ended December 31, 2022 and December 31, 2021:

	Niñobamba	Palta Dorada	Gerow Lake
Balance, December 31, 2020	3,252,710	334,090	876,633
Local office	(7,229)	-	-
Geological	65,573	-	-
Balance, December 31, 2021	3,311,054	334,090	876,633
Local office	43,174	-	-
Geological	169,309	-	-
Balance, December 31, 2022	3,523,537	334,090	876,633

# Niñobamba silver and gold project, Peru

The Company released the results of its successful 2012 trenching program in a news release on January 14, 2013. Highlights from the trenching program at the Niñobamba main zone where the Company discovered a new gold-silver zone include; 56 metres of 1.03 g/t Au and 98.9 g/t Ag in trench TR-01 and 21.77 metres of 1.32 g/t Au and 102.46 g/t Ag in TR-04 ending in mineralization. These results show that the Niñobamba property has a strong gold component, and further exploration is required to determine the precious metal zonation, alteration patterns and widths. The trenches were cut approximately perpendicular to the mineralized structure, and the true width of mineralization cannot be determined at this time. Detailed assays and trenching results can be viewed at the Company's website <a href="http://www.riosilverinc.com/peru.php">http://www.riosilverinc.com/peru.php</a>. The Company has closed out the open trenches left from the 2012 program as well as fulfilling its community obligations, employing the community members. Further work is subject to the Company's successful accessing of exploration funding.

In September 2016 the Company acquired 3 concessions from Newmont/Southern Peru Copper Corp. that adjoin to the west of the principal Niñobamba concession. In January 2017 the Company acquired by application, an additional 553 hectare concession immediately west of and adjoining to the Niñobamba property; this concession is pending title confirmation. The acquisition of the 3 concessions acquired in September 2016 included an extensive database with results and reports from a substantial exploration program which also encompassed the 553 hectares acquired by application. The Company is reviewing data that was part of the acquisition and will undertake follow up exploration work as a result of this compilation and the recommendations from this review.

Significant exploration by the previous owners was completed within the new concession that covers extensive alteration believed to be part of the same high-sulphidation silver-gold system identified on the main Niñobamba zone located 6.5 kilometres to the east. Four prospective areas were identified by the previous owners of which a zone called Jorimina returned prospective precious metal results.

The Jorimina zone is situated within a collapsed caldera and the rocks are dominantly rhyolite to dacite volcanics. Gold and silver mineralization in the zone is related to north easterly striking, steeply dipping, quartz-galena-pyrite veins and veinlets. Surface work programs completed by Newmont Mining included mapping, 2114 rock samples, and induced polarization geophysics that identified a gold anomalous area of approximately 700 metres by 1000 metres and four strong chargeability anomalies coinciding with gold-silver in rock anomalies. Two of the four chargeability anomalies were defined as 680 metres by 150 metres and 700 metres by 200 metres. Highlights of the surface sampling from channel rock samples from the historic database include 17.4 metres of 3.06 grams per tonne ("g/t") Au and 200 metres of 0.26 g/t Au. The Company has not completed work to verify the results of the historical surface work and diamond drilling.

From 2009 to 2010, Newmont Mining Corp. completed thirteen diamond drill holes totaling 4377 metres at Jorimina testing the 4 chargeability anomalies and limited detailed assays are available from the mineralized drill-hole intercepts in this zone. In highlight from the historic reports available, the better intercept from those holes, show drill-hole JOR-001 returned 72.3 metres of 1.19 grams per tonne ("g/t") Au starting at 53 metre depth. The

# Rio Silver Inc. Management's Discussion and Analysis For the year ended December 31, 2022

true widths of mineralization from this drilling are not yet known and the Company is reviewing the historic data in preparation for future work programs.

The Jorimina zone is located 6.5 kilometers west of the main Niñobamba mineralized zones located on the original concessions owned by the Company. Historical diamond drilling results conducted by AngloGold in 2001 on the main Niñobamba zone included DDH-2, which reported assay results of 87 g/t silver over a drilled interval of 130 metres starting from a depth of nine metres, and DDH-4, reporting 54 g/t silver over a drilled interval of 96 metres starting from 23 metres. The true widths of mineralization from this drilling are not yet known.

# Palta Dorada, Peru

On October 30, 2019, the Company closed a Transfer Agreement dated September 3, 2019, pursuant to which the Company's subsidiary, Minera Rio Plata S.A.C. acquired 100% rights of 2 mining concessions (Palta Dorada property) located in Moro district of Santa province, Ancash, Peru.

The total purchase price agreed upon by Transfer Agreement amounts to the sum of US\$250,000 which will be paid as follows:

- On the signing date, the sum of US\$100,000 will be paid as down payment (paid);
- On September 30, 2019, the sum of US\$100,000 will be paid as down payment (paid);
- On October 15, 2019, the sum of US\$50,000 will be paid(paid).

During the year ended December 31, 2020, the Company signed a Memorandum of Understanding ("MOU") with Peruvian Metals Corp ("Peruvian Metals") to jointly explore the Palta Dorada Au-Ag-Cu property ("Palta Dorada" or the "Property") by initially conducting a detailed sampling and mapping program along with a bulk sampling campaign and processing the mineral at Peruvian Metals' 80% owned Aguila Norte Processing Plant ("Aguila Norte or Plant").

The Property is located in the Ancash Mining Department in Northern Peru and covers an area of approximately 1200 hectares. The MOU establishes a joint effort to explore and develop the property. Any sales from metal concentrates produced from the bulk sampling activity and all operational expenses will be shared between companies. Peruvian Metals' 80% owned Plant will charge the joint effort commercial mineral processing rates on a similar basis to its other clients for processing the bulk samples. Peruvian Metals will also have the option to earn a 50% ownership in the Property. Equal ownership will occur once Peruvian Metals has matched Rio Silver's acquisition price of the project of \$250,000 US by assuming all capital and exploration expenditures. Any shortfall of capital expense by Peruvian Metals will require a cash payment to the joint effort by December 31, 2021. As at December 31, 2021, Peruvian Metals completed its earn-in requirement by investing USD \$250,000 into the project, as result, the Company equally owns Palta Dorada with Peruvian Metals.

As at December 31, 2022, Peruvian Metals has spent USD\$547,573 (2021: USD\$394,606) toward the Property and has an excess of USD\$297,573 (2021: USD\$144,606). The excess investment contribution is considered as the loan. The loan will charge a 12% interest annually on the amount of exceeding the USD\$250,000 from the proposed joint venture to be formed between the Company and Peruvian Metals and will be paid back from the cash flow of sales of concentrates or oxide gold after all operation expenses are paid. 50% of any positive cash flow will be paid to the loan and remining 50% will be divided equally by the Company and Peruvian Metals. The Company has accrued \$Nil on this loan and interest as at December 31, 2022 because the proposed joint venture has not been formed. If the joint venture is not eventually formed, the Company is not liable for this loan and the accrued interest.

The Niñobamba concession is located in the Department of Ayacucho, Peru and is owned 100% by the Company's wholly owned Peruvian subsidiary, Minera Rio Plata S.A.C., and is not subject to any royalties or exploration expenditures commitments.

#### **Gerow Lake**

The Company has continued its dialogue with the Ontario Ministry of Northern Development and Mines and the local First Nation representatives in an ongoing effort to access the properties and begin exploration work.

# **Summary**

The Company does not presently have sufficient financial resources to complete, by itself, the exploration required to develop its properties to an advanced stage. The exploration and development of the Company's properties will therefore depend upon the Company's ability to obtain financing through private placement financing, public financing, the joint venturing of projects, or other means. There is no assurance that the Company will be successful in obtaining the required financing.

## SELECTED ANNUAL FINANCIAL INFORMATION

The following is selected data derived from the audited consolidated financial statements of the Company at December 31, 2022, 2021 and 2020.

Years Ended December 31,	2022	2021	2020
	\$	\$	\$
Comprehensive loss for the year	634,033	846,360	389,897
Net loss per share-basic and diluted	0.01	0.01	0.01
Total assets	37,237	47,300	37,459

## SELECTED QUARTERLY INFORMATION

The following table sets out certain financial information for the last eight quarters:

For the questers	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
For the quarters	2022	2022	2022	2022	2021	2021	2021	2021
Total Revenue (\$)	-	-	-	-	-	-	-	-
Comprehensive Loss for the period (\$)	125,717	74,432	144,296	289,588	94,952	108,054	179,468	463,886
Basic and Diluted Loss per Share	\$ (0.00)	\$(0.00)	\$ (0.00)	\$ (0.00)	\$ (0.00)	\$ (0.00)	\$ (0.00)	\$ (0.01)

Basic and diluted loss per share is calculated based on weighted-average number of shares outstanding. Diluted loss per share is the same as basic loss per share as the stock options and warrants outstanding are anti-dilutive.

#### DISCUSSION OF OPERATIONS

	Th	ree Months Ended	Т	hree Months Ended		Year Ended		Year Ended
	Dece	mber 31, 2022	Dec	ember 31, 2021	Dec	ember 31, 2022	Dece	mber 31, 2021
Expenses								
Consulting fees	\$	6,750	\$	-	\$	16,750	\$	-
Exchange loss		49,602		(1,587)		(26,167)		25,666
Exploration and evaluation expenditures		22,727		(54,836)		212,483		58,344
Filling fees		4,907		2,378		19,215		15,141
Management fees		29,500		22,500		97,000		90,000
Office and administration		9,727		14,090		33,133		61,941
Professional fees		18,500		38,982		88,235		128,160
Rent		2,000		4,500		5,500		6,000
Stock based compensation		-		69,037		205,878		461,221
	\$	(143,713)		(95,065)		(652,027)		(846,473)
Other income								
Other income		-		113		-		113
Gain or loss on fair value of derivative liability		23,270		-		23,270		-
Interest expenses		(5,276)		-		(5,276)		-
		17,994		113		17,994		113
Loss for the year before income taxes	\$	(125,717)	\$	(94,952)	\$	(634,033)	\$	(846,360)
Income taxes recovery	\$	-	\$	-	\$	-	\$	-
Net loss and comprehensive loss for the year	\$	(125,717)	\$	(94,952)	\$	(634,033)	\$	(846,360)

Three months ended December 31, 2022 compared with three months ended December 31, 2021

The comprehensive loss for the three months ended December 31, 2022 was \$125,717 compared to a comprehensive loss of \$94,952 for the same quarter in 2021. Exploration and evaluation expenditures of \$22,727 (\$2021 - Exploration and evaluation expenditures recovery of \$54,835) are higher in the current year period due to more activities associated exploration activities. Management fees of \$29,500 (\$2021 - \$22,500) are higher in the current year period due to the Company increased management fee. Consulting fees of \$6,750 (2021 - \$ nil) are higher in the current year period due to the more consulting service incurred during the period. Professional fees of \$18,500 (2021 - \$38,982) are higher in the prior year period due to more costs associated with the IR consulting fee. Office and administration expense of \$9,727 (2021 - \$14,090) is lower as a result of less activities incurred during the period. Share-based payments of \$nil (2021 - \$69,037) are lower in the current year period due to the Company did not granted stock option during the period. Gain on fair value of derivative liabilities of \$23,270 (2021-\$nil) are higher as result of the Company issued convertible debenture during the period. Interest expenses of \$5,276 (2021-\$nil) are higher as result of the Company issued convertible debenture during the period.

Year ended December 31, 2022 compared with year ended December 31, 2021

The comprehensive loss for the year ended December 31, 2022 was \$634,033 compared to a comprehensive loss of \$846,360 for the same period in 2021. The Company incurred exploration and evaluation expenditures in the

amount of \$212,483 (2021 – \$58,344), as current year incurred more exploration activities. Consulting fees of \$16,750 (2021 - \$nil) are higher in the current year period due to the more consulting service incurred during the period. Management fees of \$97,000 (\$2020 - \$90,000) are higher in the current year period due to the Company increased management fee. Professional fees of \$88,235 (2021 – \$128,160) are lower in the current year due to less cost associated with the IR consulting fee. Office and administration expense of \$33,133 (2021-\$61,941) is lower as a result of less activities incurred during the period. Stock based compensation of \$205,878 (2020 - \$461,221) reflects less stock options issued in the current year. Gain on fair value of derivative liabilities of \$23,270 (2021-\$nil) are higher as result of the Company issued convertible debenture during the period. All other expenses are comparable to the prior year costs.

### LIQUIDITY AND CAPITAL RESOURCES

At December 31, 2022, the Company had cash of \$11,917 (December 31, 2021 - \$42,662) and a working capital deficit of \$629,044 (December 31, 2021 - \$651,820).

During the year ended December 31, 2022, there were 3,842,400 options exercised at \$0.05 per share for gross proceeds of \$192,120. In relation to the exercise of the stock option, the fair value of \$213,438 was allocated from reserves.

During the year ended December 31, 2022, there were 1,000,000 options exercised at \$0.055 per share for gross proceeds of \$55,000. In relation to the exercise of the stock option, the fair value of \$39,871 was allocated from reserves.

During the year ended December 31, 2021, there were 3,183,500 options exercised at \$0.05 per share for gross proceeds of \$159,175. In relation to the exercise of the stock option, the fair value of \$95,286 was allocated from reserves.

During the year ended December 31, 2021, there were 3,050,000 warrants exercised at \$0.07 per share for gross proceeds of \$213,500. In relation to the exercise of the stock option, the fair value of \$37,640 was allocated from reserves.

During the year ended December 31, 2022 the Company's average monthly cash burn rate, excluding exploration expenditures, share-based payments, foreign exchange and interest, was approximately \$22,000, compared to approximately \$50,000 per month for the year ended December 31, 2021, with the decrease being attributable to lower consulting fee and exploration and evaluation expenditures during the current period. The Company expects its monthly burn rate to continue to be at a low level going forward due to ongoing monitoring of operating expenses. The Company's future exploration programs will be a function of the Company's ability to raise additional capital.

As a junior exploration stage company, Rio Silver has traditionally relied on equity financings and warrant exercises to fund exploration programs and general working capital requirements of a publicly traded junior resource company. The Company will need additional capital in 2023 to cover its current working capital requirements and fund further exploration work.

The Company's ability to raise additional funds and its future performance are largely tied to the health of the financial markets and investor interest in the junior resource sector. Financial markets continue to be volatile, and are likely to remain so throughout 2023 and 2024 reflecting ongoing concerns about the stability of the global economy, sovereign debt levels, global growth prospects and many other factors that might impact the Company's ability to raise additional funds.

Although the Company has been successful to date in raising capital to fund project exploration programs and meet working capital requirements, there can be no assurance that adequate or sufficient funding will be available in the future on terms that are acceptable to the Company. These circumstances indicate the existence of a material uncertainty which may cast significant doubt as to the ability of the Company to continue as a going concern.

### DISCLOSURE OF OUTSTANDING SHARE DATA

#### **Common shares**

As at the date of this report, the Company has 74,444,844 common shares issued and outstanding.

#### Warrants

Common share purchase warrants outstanding as at the date of this MD&A are as follows:

Expiry Date	Exercise Price	Number of Warrants as at date of this report
May 12, 2024	0.080	6,440,000

## Stock options

Stock options outstanding as at the date of this MD&A are as follows:

Expiry Date	Exercise Price	Number of Options as of December 31, 2022
January 29, 2023	\$0.05	1,375,000
January 29, 2024	\$0.05	1,200,000
March 9, 2024	\$0.06	500,000
February 10, 2025	\$0.06	2,450,000
December 23, 2026	\$0.05	21,500
	\$0.06	5,546,500

## **OFF-BALANCE SHEET ARRANGEMENTS**

As of the date of this filing, the Company does not have any off balance sheet arrangements that have, or are reasonably likely to have, a current or future effect on the results of operations or financial condition of the Company, including, and without limitation, such considerations as liquidity and capital resources.

#### RELATED PARTY BALANCES AND TRANSACTIONS

Related parties include the board of directors, officers, and enterprises that are controlled by these individuals as well as persons performing similar functions. Related party transactions conducted in the normal course of operations are measured at the exchange value (the amount established and agreed to by the related parties).

During the years ended December 31, 2022 and December 31, 2021 the Company's related parties consisted of the following officers and directors:

Edward J. Badida Director

Steven Brunelle Chairman and Director

Richard Mazur Director

Christopher Verrico Director and Chief Executive Officer

Christopher Hopton Chief Financial Officer

(a) Remuneration of the President and Chief Executive Officer, Chief Financial Officer, and Chairman was as follows:

	2022	2021
	\$	\$
Management fees	97,000	90,000
Accounting fees	54,000	54,000
Consulting fees	5,000	-
Interest expenses	2,341	-
Rent	5,500	6,000
Share-based payments	117,448	263,033
	281,289	413,033

The Company's related parties consist of its Directors, Chief Executive Officer, and Chief Financial Officer. The following is a summary of the Company's related party transactions and balances during the year:

- a) Due to related parties includes \$40,719 (December 31, 2021 \$52,095) payable to a private company owned by the Company's current CEO; \$24,302 (December 31, 2021 \$33,821) payable to the Company's CFO. The balance has been included in accounts payable.
- b) Due to related parties includes \$89,386 (December 31, 2021 \$89,386) of cash advanced from current directors. These amounts are unsecured, non-interest bearing and without fixed repayment terms.
- c) Convertible debentures include \$73,903 (December 31, 2021- \$nil) of loan from CEO.

# PROPOSED TRANSACTION

The Company has not entered into any significant transaction, nor is it currently reviewing any such transaction, that has not been discussed within this MD&A.

#### SUBSEQUENT EVENTS

Subsequent to year ended December 31, 2022, 1,375,000 stock options expired.

#### DISCLOSURE OF INTERNAL CONTROLS

Management has established processes which are in place to provide them sufficient knowledge to support management representations that they have exercised reasonable diligence that (i) the financial statements do not contain any untrue statement of material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it is made, as of the date of and for the periods presented by the financial statements; and (ii) the financial statements fairly present all material respects the financial condition, results of the operations and cash flows of the Company, as of the date of and for the periods presented by the financial statements.

In contrast to the certificate required under Multilateral Instrument 52-109 Certification of Disclosure in Issuer and Interim Filings (MI 52-109), the Company utilizes the Venture Issuer Basic Certificate which does not include representations relating to the establishment and maintenance of disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as defined in MI 52-109. In particular, the certifying officers filing the Certificate are not making any representations relating to the establishment and maintenance of:

- controls and other procedures designed to provide reasonable assurance that information required to be disclosed by the issuer its annual filings, interim filings or other reports filed or submitted under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and
- ii) a process to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. The Company's certifying officers are responsible for ensuring that processes are in place to provide them with sufficient knowledge to support the representations they are making in this certificate.

Investors should be aware that inherent limitations on the ability of certifying officers of a venture issuer to design and implement on a cost effective basis DC&P and ICFR as defined in MI 52-109 may result in additional risks to the quality, reliability, transparency and timeliness of interim and annual filings and other reports provided under securities legislation.

#### SIGNIFICANT ACCOUNTING JUDGEMENTS AND ESTIMATES

## Critical accounting estimates:

The preparation of these consolidated financial statements requires management to make judgment, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities at the date of the financial statements and reported amounts of expenses during the reporting period. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgments about carrying values of assets and liabilities that are not readily apparent from other sources. Actual outcomes could differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and further periods if the review affects both current and future periods.

# Critical accounting judgments:

The critical judgments that the Company's management has made in the process of applying the Company's accounting policies that have the most significant effect on the amounts recognized in these consolidated financial statements are as follows:

Evaluation of the Company's ability to continue as a going concern

As at December 31, 2022, the Company has working capital deficit of \$629,044 (2021: \$651,820) and has incurred accumulated deficit of \$17,742,640 (2021: \$17,090,607) since incorporation. The Company possesses \$11,917 (2021: \$42,662) in cash. The continuation of the Company as a going concern is dependent upon its ability to execute its strategy and finance the operations through achieving positive cash flow from operations of by obtaining additional funding through debt or equity financing involves judgments. Management routinely plans future activities including forecasting future cash flows. Management has reviewed their plan with the Directors and has collectively formed a judgement that the Company has adequate resources to continue as a going concern for the foreseeable future, which Management and the Directors have defined as being at least the next 12 months.

# Management's Discussion and Analysis For the year ended December 31, 2022

In arriving at this judgment, Management has prepared the cash flow projections of the Company. Directors have reviewed this information provided by management and have considered the financial resources available to the Company. The expected cash flows have been modeled based on anticipated debt and equity funding programmed into the model and reducing over time.

Management has assessed and concluded that the going concern assumption is appropriate for a period of at least twelve months following the end of the reporting period. Management applied significant judgement in arriving at this conclusion by considering the following:

- The amount of cash on hand as of year end;
- The ability to source new debt and equity financing to provide sufficient cash flow to continue to fund operations and other committed expenditures; and
- The ability to delay the payment for the due to related parties balance in order to manage cash flows.

Considering the above, Management and Directors continue to adopt the going concern basis in preparing the consolidated financial statements.

Given the judgement involved, actual results may lead to a materially different outcome.

### Determination of functional currency of the Company

The functional currency for each of the Company and its subsidiary is the currency of the primary economic environment in which each entity operates. The determination of each entity's functional currency requires analyzing facts that are considered primary factors, and if the result is not conclusive, the secondary factors. The analysis requires management to apply significant judgment since primary and secondary factors may be mixed. In determining its functional currency, management analyzed both the primary and secondary factors, including the currency of each entity's operating cash flow, and sources of financing.

## Fair value calculation of derivative liabilities

Derivative liabilities arising from convertible debentures are determined by Black-Scholes option pricing model. Significant judgements and estimates are used in the calculation of the input variables in the Black-Scholes model, which includes: share price, risk free interest rate, expected stock price volatility, expected life, and expected dividend yield.

# Key sources of estimation uncertainty

# Deferred taxes

The calculation of deferred tax is based on assumptions, which are subject to uncertainty as to timing and which tax rates are expected to apply when temporary differences reverse. Deferred tax recorded is also subject to uncertainty regarding the magnitude on non capital losses available for carry forward and of the balances in various tax pools.

Share-based payment transactions and FV value of warrants issued with common shares

The fair value of share-based payment and fair value of warrants are determined using the Black-Scholes option pricing model. Estimating fair value requires determining the most appropriate valuation model for a grant of equity instruments, which is dependent on the terms and conditions of the grant. Option-pricing models require the use of highly subjective estimates and assumptions including the expected stock price volatility. Changes in the underlying assumptions can materially affect the fair value estimates and, therefore, existing models do not necessarily provide reliable measurement of the fair value of the Company's stock options and warrants issued with common shares.

#### CHANGES IN ACCOUNTING POLICIES

# Recent accounting pronouncements not yet effective

Certain pronouncements have been issued by the IASB or the IFRS Interpretations Committee ("IFRIC") that are mandatory for accounting periods ending after these consolidated financial statements. Some are not applicable or do not have a significant impact to the Company and have been excluded from the discussion below.

#### Presentation of financial statements

An amendment to IAS 1 was issued in January 2020 and applies to annual reporting periods beginning on or after January 1, 2024. The amendment clarifies the criterion for classifying a liability as non-current relating to the right to defer settlement of a liability for at least 12 months after the reporting period.

The application of these amendments is expected to have an impact on the current/non-current classification of the Company's convertible debentures and certain derivative liabilities.

## **CAPITAL MANAGEMENT**

The Company considers its cash and share capital as capital. The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to maintain a flexible capital structure which optimizes the costs of capital at an acceptable risk.

When managing capital, the Company's objective is to ensure that the Company continues as a going concern, as well as to maintain optimal returns to shareholders and benefits for other stakeholders. Management adjusts the capital structure as necessary in order to support the acquisition, exploration and development of mineral properties. The Board of Directors does not establish quantitative return on capital criteria for management, but rather relies on the expertise of the Company's management team to sustain the future development of the business.

The properties in which the Company currently has an interest are in the exploration stage; as such, the Company is dependent on external financing to fund its activities. In order to carry out the planned exploration and pay for administrative costs, the Company will spend its existing working capital and raise additional funds as needed. The Company will continue to assess new properties and seek to acquire an interest in additional properties if it feels there is sufficient geologic or economic potential and if it has adequate financial resources to do so.

Management reviews its capital management approach on an ongoing basis and believes that this approach, given the relative size of the Company, is appropriate.

There were no changes in the Company's approach to capital management during the year ended December 31, 2022. The Company is not subject to externally imposed capital requirements.

# FINANCIAL INSTRUMENTS RISK MANAGEMENT

The Company's activities expose it to a variety of financial risks. The Company's overall business strategies, tolerance of risk and general risk management philosophy are determined by the directors in accordance with prevailing economic and operating conditions.

## Fair value of financial instruments

The Company classifies its fair value measurements in accordance with the three level fair value hierarchies as follows:

# Management's Discussion and Analysis For the year ended December 31, 2022

Level 1 - quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2 - inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and

Level 3 - inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The fair value of cash, accounts payable and accrued liabilities, promissory note and due to related parties approximate their carrying values due to the short-term nature of these instruments. The difference between the fair value and carrying amount is minimal. The fair value of the derivative liabilities was based on Level 3 inputs.

A summary of the Company's risk exposures as it relates to financial instruments are reflected below:

#### Credit risk

Credit risk is the risk of loss associated with the counterparty's inability to fulfill its payment obligations. The Company's credit risk is primarily attributable to cash. Cash is held with reputable financial institutions, for which management believes the risk of loss to be minimal.

#### Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company's approach to managing liquidity risk is to ensure that it will have sufficient cash available to meet liabilities when they become due and payable. As at December 31, 2022, the Company had cash of \$11,917 (December 31, 2021 - \$42,662) to settle current liabilities of \$666,281 (December 31, 2021 - \$699,120). All of the Company's financial liabilities have contractual maturities of 30 days or less and are subject to normal trade terms except the promissory note and convertible debentures.

## Market risk

Market risk is the risk of loss that may arise from changes in market factors such as interest rates, commodity and equity prices, and liquidity

#### Foreign exchange risk

Foreign currency risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Company's functional currency, and that of all its subsidiaries, is the Canadian dollar. Some of the operational and other expenses incurred outside of Canada are paid in US dollars or Peruvian Nuevo sol. All assets and liabilities of the Company are recorded in Canadian dollars and as a result, fluctuations in the US dollar or Peruvian Nuevo sol vis-à-vis the Canadian dollar result in foreign exchange gains/losses. The Company currently has no plans for hedging its foreign currency transactions.

The Company has net financial liabilities of approximately \$177 (2021 - \$7,758) that are denominated in US dollars. A 5% change in the US dollars to the Canadian dollar exchange rate would impact the Company's profit or loss by \$9 (2021 - \$492).

The Company also has net financial liabilities of approximately \$30,941 (2021 - \$159,583) that are denominated in Peruvian Nuevo Sol. A 5% change in the Peruvian Nuevo Sol to the Canadian dollar exchange rate would impact the Company's profit or loss by \$1,414 (2021 - \$2,534).

# Commodity and equity price risk

The Company is exposed to price risk with respect to commodity prices. Commodity price risk is defined as the potential adverse impact on earnings and economic value due to commodity price movements and volatilities. The Company closely monitors commodity prices, particularly as they relate to base and precious metals,

# Rio Silver Inc. Management's Discussion and Analysis For the year ended December 31, 2022

individual equity movements, and the stock market in general to determine the appropriate course of action to be taken by the Company.

#### **OUTLOOK**

The capital markets for resource companies, and particularly for those in the junior space, continue to suffer from the continued slowdown in commodity consumption making the environment for financing early stage exploration projects challenging. (See Liquidity and Capital Resources above).

Management is confident about the prospects for its principal projects and believes it is prudent to continue to move them forward, subject to adequate financing being available, through well managed and modest cost exploration programs.

See section titled "Mineral Exploration Expenditures and Activities" for the Company's plans to develop its exploration properties. There is no guarantee that the Company will discover a viable mineral deposit.

#### COMMITMENTS AND CONTINGENCIES

The Company has no contingent assets or liabilities and commitments.

#### **RISKS AND UNCERTAINTIES**

An investment in the securities of the Company is highly speculative and involves numerous and significant risks. Only investors whose financial resources are sufficient to enable them to assume such risks and who have no need for immediate liquidity in their investment should undertake such investment. Prospective investors should carefully consider the risk factors that have affected, and which in the future are reasonably expected to affect, the Company and its financial position.

At the present time, the Company does not hold any interest in a mining property in production. The Company's viability and potential successes lie in its ability to develop, exploit and generate revenue out of mineral deposits. Revenues, profitability and cash flow from any future mining operations involving the Company will be influenced by precious and/or base metal prices and by the relationship of such prices to production costs. Such prices have fluctuated widely and are affected by numerous factors beyond the Company's control.

The Company has limited financial resources and there is no assurance that additional funding will be available to it for further exploration and development of its exploration projects, or to fulfill its obligations under applicable agreements. Although the Company has been successful in the past in obtaining financing through the sale of equity securities, there can be no assurance that the Company will be able to obtain adequate financing in the future or that the terms of such financing will be favourable. Failure to obtain such additional financing could result in delay or indefinite postponement of further exploration and development of the property interests of the Company, with the possible dilution or loss of such interests.

Resource exploration and development is a speculative business, characterized by a number of significant risks including, among other things, unprofitable efforts resulting not only from the failure to discover mineral deposits but from finding mineral deposits which, though present, are insufficient in quantity and quality to return a profit from production. The marketability of minerals acquired or discovered by the Company may be affected by numerous factors which are beyond the control of the Company and which cannot be accurately predicted, such as market fluctuations of metal prices, the proximity and capacity of milling facilities, mineral markets, processing reagents and equipment, and such other factors as government regulations, including regulations relating to royalties, allowable production, importing and exporting of minerals, and environment protection, the combination of which factors may result in the Company not receiving an adequate return on investment capital.

Operating in a Foreign Country Usually Involves Uncertainties Relating to Political and Economic Matters
Peru, where the Company's principle foreign mineral properties are located is considered by the Company to be a
mining friendly country. However, any change of government may result in changes to government legislation
and policy, which may include changes that impact the Company's ownership of and its ability to continue
exploration and, possibly, the development of its properties. Further, changes in the government may result in
political and economic uncertainty, which may cause the Company to delay its exploration and, possibly, its
development activities or they may decrease the willingness of investors to provide financing to the Company.
Accordingly, changes in legislation and policy could result in increased costs to explore and develop the
Company's projects and could require the Company to delay or suspend these activities.

# Exploration and Development Efforts May Not Be Successful

There is no certainty that the expenditures to be made by the Company in the exploration of its properties as described herein will result in the discovery of mineralized material in commercial quantities. Most exploration projects do not result in the discovery of commercially mineable ore deposits and no assurance can be given that any particular level of recovery of ore reserves will in fact be realized or that any identified mineral deposit will ever qualify as a commercially mineable (or viable) ore body which can be legally and economically exploited. Estimates of reserves, mineral deposits and production costs can also be affected by such factors as environmental permitting regulations and requirements, weather, environmental factors, unforeseen technical difficulties, unusual or unexpected geological formations and work interruptions. In addition, the grade of ore ultimately mined may differ from that indicated by drilling results. Short term factors relating to ore reserves, such as the need for orderly development of ore bodies or the processing of new or different grades, may also have an adverse effect on mining operations and on the results of operations. There can be no assurance that minerals recovered in small scale tests will be duplicated in large scale tests under on-site conditions or in production scale. Material changes in ore reserves, grades, stripping ratios or recovery rates may affect the economic viability of any project.

# Lack of Cash Flow

None of the Company's properties have advanced to the commercial production stage and the Company has no history of earnings or cash flow from operations. The Company does not expect to generate material revenue from mining operations or to achieve self-sustaining commercial mining operations for several years. The Company has paid no dividends on its shares since inception and does not anticipate doing so in the foreseeable future. Historically, the only source of funds available to the Company is through the sale of its securities. Future additional equity financing would cause dilution to current shareholders.

#### No Proven Reserves

The properties in which the Company has an interest or the right to earn an interest are in the exploratory stage only and are without a known body of ore in commercial production.

### No Guarantee of Clear Title to Mineral Properties

While the Company has investigated title to all of its mineral properties and, to the best of its knowledge, title to all of its properties and properties in which it has the right to acquire or earn an interest are in good standing, this should not be construed as a guarantee of title. The properties may be subject to prior unregistered agreements or transfers and title may be affected by undetected defects.

## Uncertainty of Obtaining Additional Funding Requirements

Programs planned by the Company may necessitate additional funding, which could cause a dilution of the value of the investment of the shareholders of the Company. The recuperation value of mining properties indicated in the balance sheet depends on the discovery of mineralization that can be profitably exploited and on the Company's capacity to obtain additional funds in order to realize these programs. The Company's exploration activities can therefore be interrupted at any moment if the Company is incapable of obtaining the necessary funds in order to

# Management's Discussion and Analysis For the year ended December 31, 2022

continue any additional activities that are necessary and that are not described in the exploration programs outlined in the Company's geological report for its properties.

# Mineral Prices May Not Support Corporate Profit

The mining industry in general is intensely competitive and there is no assurance that, even if commercial quantities of mineral resources are developed, a profitable market will exist for the sale of same. Factors beyond the control of the Company may affect the marketability of any substances discovered. The price of minerals is volatile over short periods of time, and is affected by numerous factors beyond the control of the Company, including international economic and political trends, expectations of inflation, currency exchange fluctuations, interest rates and global or regional consumption patterns, speculative activities and increased production due to improved mining techniques.

# Competition

The mining industry is intensively competitive in all its phases. The Company competes with many companies possessing greater financial resources and technical facilities than itself for the acquisition of mineral interests as well as for the recruitment and retention of qualified employees.

## Environmental Regulations

The current and future operations of the Company, including further exploration, development activities and commencement of production on its properties, require permits from various Provincial, Federal and State governmental authorities.

Such operations are subject to various laws governing land use, the protection of the environment, production, exports, taxes, labor standards, occupational health, waste disposal, toxic substances mine safety and other matters. There can be no assurance, however, that all permits which the Company may require for construction of mining facilities and conduct of mining operations will be obtainable on reasonable terms. Amendments to current laws, regulations and permits governing operations and activities of mining companies, or more stringent implementation thereof, could have a material adverse impact on the Company and cause increases in capital expenditures or production costs or reduction in levels of production at producing properties or require abandonment or delays in development of new mining properties. Amendments to current laws, regulations and permits governing operations and activities of mining companies, or more stringent implementation thereof, could have a material adverse impact on the Company and cause increases in capital expenditures or production costs or reduction in levels of production at producing properties or require abandonment or delays in development of new mining properties.

Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions there under, 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.

Parties engaged in mining operations may be required to compensate those suffering loss or damage by reason of the mining activities and may have civil or criminal fines or penalties imposed for violation of applicable laws or regulations.

#### Uncertainty of Reserves and Mineralization Estimates

There are numerous uncertainties inherent in estimating proven and probable reserves and mineralization, including many factors beyond the control of the Company. The estimation of reserves and mineralization is a subjective process and the accuracy of any such estimates is a function of the quality of available data and of engineering and geological interpretation and judgment. Results of drilling, metallurgical testing and production and the evaluation of mine plans subsequent to the date of any estimate may justify revision of such estimates. No assurances can be given that the volume and grade of reserves recovered and rates of production will not be less

# Management's Discussion and Analysis For the year ended December 31, 2022

than anticipated. Assumptions about prices are subject to greater uncertainty and metal prices have fluctuated widely in the past. Declines in the market price of base or precious metals also may render reserves or mineralization containing relatively lower grades of ore uneconomic to exploit. Changes in operating and capital costs and other factors including, but not limited to, short-term operating factors such as the need for sequential development of ore bodies and the processing of new or different ore grades, may materially and adversely affect reserves.

# Operating Hazards and Risks Associated with the Mining Industry

Mining operations generally involve a high degree of risk, which even a combination of experience, knowledge and careful evaluation may not be able to overcome. Hazards such as unusual or unexpected formations and other conditions are involved. Operations in which the Company has a direct or indirect interest will be subject to all the hazards and risks normally incidental to exploration, development and production of precious and base metals, any of which could result in work stoppages, damage to or destruction of mines and other producing facilities, damage to life and property, environmental damage and possible legal liability for any or all damage. The Company may become subject to liability for cave-ins and other hazards for which it cannot insure or against which it may elect not to insure where premium costs are disproportionate to the Company's perception of the relevant risks. The payment of such insurance premiums and of such liabilities would reduce the funds available for exploration activities.

### The Ability to Manage Growth

Should the Company be successful in its efforts to develop its mineral properties or to raise capital for other mining ventures it will experience significant growth in operations. If this occurs management anticipated that additional expansion will be required in order to continue development. Any expansion of the Company's business would place further demands on its management, operational capacity and financial resources. The failure to manage growth effectively could have a material adverse effect on the Company's business, financial condition and results of operations.

# Lack of Dividend Policy

The Company does not presently intend to pay cash dividends in the foreseeable future, as any earnings are expected to be retained for use in developing and expanding its business. However, the actual amount of dividends received from the Company will remain subject to the discretion of the Company's Board of Directors and will depend on results of operations, cash requirements and future prospects of the Company and other factors.

#### Possible Dilution to Present and Prospective Shareholders

The Company's plan of operation, in part, contemplates the accomplishment of business negotiations by the issuance of cash, securities of the Company, or a combination of the two, and possibly, incurring debt. Any transaction involving the issuance of previously authorized but unissued common shares, or securities convertible into common shares, would result in dilution, possibly substantial, to present and prospective holders of common shares.

# Dependence of Key Personnel

The Company strongly depends on the business and technical expertise of its management and key personnel. There is little possibility that this dependence will decrease in the near term. As the Company's operations expand, additional general management resources will be required, especially since the Company encounters risks that are inherent in doing business in several countries.

## Conflict of Interest

Certain directors of the Company are also directors, officers or shareholders of other companies that are similarly engaged in the business of acquiring, developing and exploiting natural resource properties. Such associations may give rise to conflicts of interest from time to time. The directors of the Company are required by law to act honestly and in good faith with a view to the best interests of the Company and to disclose any interest which they may

# Management's Discussion and Analysis For the year ended December 31, 2022

have in any project or opportunity of the Company. If a conflict of interest arises at a meeting of the Board of Directors, any director in a conflict will disclose his interest and abstain from voting on such matter. In determining whether or not the Company will participate in any project or opportunity, the directors will primarily consider the degree of risk to which the Company may be exposed and its financial position at that time.

## Lack of Trading

The lack of trading volume of the Company's shares reduces the liquidity of an investment in the Company's shares.

# Volatility of Share Price

Market prices for shares of early stage companies are often volatile. Factors such as announcements of mineral discoveries, financial results, and other factors could have a significant effect on the price of the Company's shares.

## CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

Certain statements contained in the sections "Overview - Mineral Exploration Expenditures and Activities", "Liquidity and Capital Resources" and "Outlook" of this MD&A constitute forward-looking statements. These statements relate to future events or the Company's future performance, business prospects or opportunities. All statements other than statements of historical fact may be forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek", "anticipate", "plan", "continue", "estimate", "expect, "may", "will", "project", "predict", "potential", "targeting", "intend", "could", "might", "should", "believe" and similar expressions. Information concerning the interpretation of drill results, mineral resource and reserve estimates and capital cost estimates may also be deemed as forward-looking statements as such information constitutes a prediction of what mineralization might be found to be present and how much capital will be required if and when a project is actually developed. These statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements. The Company believes that the expectations reflected in those forward-looking statements are reasonable, but no assurance can be given that these expectations will prove to be correct and such forward-looking statements included in this MD&A should not be unduly relied upon. These statements speak only as of the date of this MD&A. Actual results and developments are likely to differ, and may differ materially, from those expressed or implied by the forward-looking statements contained in this MD&A. Such statements are based on a number of assumptions which may prove to be incorrect, including, but not limited to, assumptions about:

- general business and economic conditions;
- the supply and demand for, deliveries of, and the level and volatility of prices of precious metals;
- the availability of financing for the Company's development project on reasonable terms;
- the ability to procure equipment and operating supplies in sufficient quantities and on a timely basis;
- the ability to attract and retain skilled staff;
- market competition;
- the accuracy of our resource estimate (including, with respect to size, grade and recoverability) and the geological, operational and price assumptions on which it is based; and/or
- tax benefits and tax rates.

These forward-looking statements involve risks and uncertainties relating to, among other things, changes in commodity prices, access to skilled mining development and mill production personnel, results of exploration and development activities, the Company's limited experience with production and development stage mining operations, uninsured risks, regulatory changes, defects in title, availability of materials and equipment, timeliness of government approvals, actual performance of facilities, equipment and processes relative to specifications and expectations and unanticipated environmental impacts on operations. Actual results may differ materially from those expressed or implied by such forward-looking statements. Factors that could cause actual results to differ

# Rio Silver Inc. Management's Discussion and Analysis For the year ended December 31, 2022

materially include, but are not limited to, the risk factors incorporated by reference herein. See "Risk Factors". The Company cautions that the foregoing list of important factors is not exhaustive. Investors and others who base themselves on the Company's forward-looking statements should carefully consider the above factors as well as the uncertainties they represent and the risk they entail. The Company undertakes no obligation to update forward-looking statements if these beliefs, estimates and opinions or other circumstances should change, accept as otherwise required by applicable law. The Company also cautions readers not to place undue reliance on these forward-looking statements. Moreover, these forward-looking statements may not be suitable for establishing strategic priorities and objectives, future strategies or actions, financial objectives and projections other than those mentioned above.

18