



**MANAGEMENT'S DISCUSSION AND ANALYSIS**

**FOR THE YEAR ENDED  
DECEMBER 31, 2023**

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## MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE YEAR ENDED DECEMBER 31, 2023

*This Management's Discussion and Analysis ("MD&A") should be read in conjunction with the consolidated annual audited financial statements for the year ended December 31, 2023, and related notes thereto which have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board (IASB). For further information on Jaguar Mining Inc., reference should be made to its public filings (including its most recently filed annual information form ("AIF") which is available on SEDAR+ at [www.sedarplus.ca](http://www.sedarplus.ca)). Information on risks associated with investing in the Company's securities and technical and scientific information under National Instrument 43-101 concerning the Company's material properties, including information about mineral resources and reserves, are contained in the Company's most recently filed AIF and technical reports.*

*All amounts included in this MD&A are in United States dollars ("\$"), unless otherwise specified. The use of C\$ refers to Canadian dollars and the use of R\$ refers to Brazilian Reals. This report is dated as of March 25, 2024.*

*The Company included certain non-GAAP financial measures, which the Company believes that, together with measures determined in accordance with IFRS, provide investors with an improved ability to evaluate the underlying performance of the Company. Non-GAAP financial measures do not have any standardized meaning prescribed under IFRS, and therefore they may not be comparable to similar measures employed by other companies. The data is intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. The non-GAAP financial measures in this MD&A include:*

- *Net cash and cash equivalents;*
- *Cash operating costs (per ounce sold);*
- *Cash operating costs (per tonne of ore processed);*
- *All-in sustaining costs (per ounce sold);*
- *All-in costs (per ounce sold);*
- *Average realized gold price (per ounce sold);*
- *Cash operating margin (per ounce sold);*
- *All-in sustaining margin (per ounce sold);*
- *Earnings before interest, taxes, depreciation, and amortization ("EBITDA"), Adjusted EBITDA and Adjusted EBITDA per share;*
- *Free cash flow (per ounce sold);*
- *Working capital;*
- *Sustaining capital expenditures; and*
- *Non-sustaining capital expenditures.*

*Definitions and reconciliations associated with the above metrics can be found in the Non-GAAP Performance Measures section of this MD&A.*

*Where we say "we," "us," "our," the "Company" or "Jaguar," we mean Jaguar Mining Inc. or Jaguar Mining Inc. and/or one or more or all of its subsidiaries, as it may apply. The following abbreviations are used to describe the periods under review throughout this MD&A:*

<b>Abbreviation</b>	<b>Period</b>	<b>Abbreviation</b>	<b>Period</b>
<b>FY 2023</b>	January 1, 2023 – December 31, 2023	<b>FY 2022</b>	January 1, 2022 – December 31, 2022
<b>Q1 2023</b>	January 1, 2023 – March 31, 2023	<b>Q1 2022</b>	January 1, 2022 – March 31, 2022
<b>Q2 2023</b>	April 1, 2023 – June 30, 2023	<b>Q2 2022</b>	April 1, 2022 – June 30, 2022
<b>Q3 2023</b>	July 1, 2023 – September 30, 2023	<b>Q3 2022</b>	July 1, 2022 – September 30, 2022
<b>Q4 2023</b>	October 1, 2023 – December 31, 2023	<b>Q4 2022</b>	October 1, 2022 – December 31, 2022

## BUSINESS & STRATEGIC PRIORITIES

Jaguar Mining Inc. (“Jaguar” or the “Company”) is a TSX-listed junior gold mining, development and exploration company operating in Brazil with three gold mining complexes and a large land package with significant prospectivity. The Company’s principal operating assets are in the iron quadrangle, a prolific greenstone belt in the Brazilian state of Minas Gerais and include the Turmalina Gold Mine Complex (Turmalina Gold Mine and plant) and Caeté Gold Mine Complex (Pilar Gold Mine, Roça Grande Gold Mine and Caeté plant). The Company also owns the Paciência Gold Mine complex (“Paciência”), which has been on care and maintenance since 2012. Jaguar’s Brazilian exploration projects and operating assets are held by Jaguar’s wholly owned subsidiary Mineração Serras dos Oeste LTDA (“MSOL”), and its exploration projects and assets acquired from IAMGOLD are held by Jaguar’s wholly-owned subsidiary IAMGOLD Brasil Prospecção Mineral Ltda. The Company’s latest NI- 43-101 technical report was filed on SEDAR+ on February 2, 2024.

## FY 2023 AND FOURTH QUARTER HIGHLIGHTS

### Release of updated mineral reserves and resources

On February 26, 2024 the Company announced its annual Mineral Reserves and Mineral Resources (MRMR) statement for 2023.

- **Consolidated Proven and Probable Mineral Reserves** show additions of 132 koz reflecting the addition of reserves at the Faina project, offset by mined depletion at Pilar and Turmalina of 88 koz and removal of remnant material from inventory at Turmalina of 28 koz for a net increase of 4% to 470 koz, (4,015 kt @ 3.64 g/t Au).
- **Faina Probable Mineral Reserves** added 132 koz (787 kt @ 5.22 g/t Au) to Jaguar’s 2P Mineral Reserves inventory.
- **Consolidated Measured and Indicated Mineral Resources** increased by 27% to 1,676 koz, (12,633 kt @ 4.12 g/t Au), reflecting the addition of measured and indicated mineral resources from the Onças de Pitangui project.
- **Onças de Pitangui Indicated Mineral Resources** added 448 koz, (3,423 kt @ 4.07 g/t Au) to Jaguar’s Mineral Resources inventory.
- **Consolidated Inferred Mineral Resources** increased by 41% to 1,628 koz, (14,175 kt @ 3.58 g/t Au), driven by the addition of inferred mineral resources from the Onças de Pitangui project.
- **Onças de Pitangui Inferred Mineral Resources** added 379 koz, (3,343 kt @ 3.53 g/t Au) to the Company’s inventory.
- **Life of Mine (LOM)** plans at the Pilar operation forecast production at current rates into 2028. At the Turmalina Complex, with Faina ramping up from this year through 2026, the LOM extends at increased production rates beyond 2030. The Company continues to progress project work required to support the publication of initial mineral reserves for the Onças de Pitangui project (current Indicated and inferred mineral resource at Sao Sebastiao) in the fourth quarter of 2024.

### Appointment of Vernon Baker as Director

On January 19, 2024, the Company announced the appointment of Vernon Baker to the Company Board of Directors. Vern was appointed Chief Executive Officer of Jaguar on August 6, 2019, following an extensive search conducted by the Company. With the appointment of Vernon as a Director, the Board now consists of eight members, six of whom are independent. Jeff Kennedy, Chairman, commented that after over four years as Chief Executive Officer, Vernon’s additional contributions as a member of the Board will be valuable.

### Corporate update

On August 8, 2023, the Company announced the appointment of Alfred Colas, CPA, CA as Chief Financial Officer. Hashim Ahmed, the former Chief Financial Officer, completed a transition through the third quarter of 2023 and his association with Jaguar ceased before September 30, 2023.

## **Investment in Faina**

Development to reach the Faina resource from the Turmalina mine continued, with the dual accesses reaching the Faina resource by the end of Q4, after investing \$9.6 million through December 31, 2023. During the first half of 2024, the Company plans to extend development into the heart of the Faina resource and to begin developing within the better-grade zones. The first ore production from Faina is expected in the second half of 2024.

## **Recognition of deferred-tax asset**

In December 2023 the Company recognized a deferred-tax asset of \$5.8M as a result of the Company's tax planning strategy adopted since FY2022, when MSOL commissioned Jaguar Mining Inc. to become an intermediary in the gold sales with its end customer. As Jaguar Canada charges MSOL an intermediation fee equivalent to 4% of the gold revenue generated, Jaguar Canada is projected to continue to generate taxable income in the coming years. The recognized deferred-tax asset represents the tax loss carry-forwards projected to be used in offsetting future corporate income tax obligations in Canada.

## **Closing of IAMGOLD Brazil acquisition and Pitangui project**

During Q3 2023 the Company announced the successful closing of its acquisition of the Pitangui project and the remaining interest in the Acurui project from IAMGOLD Corporation (combined, "IAMGOLD Brazil"), for \$9 million in shares of the Company with a fair value under IFRS 2 – Shared-based Payment - of \$6.4 million. The Pitangui project, renamed the Onças de Pitangui project ("Pitangui") is located approximately 110 kilometres northwest of the city of Belo Horizonte in Minas Gerais State, Brazil, and it comprises mineral exploration licenses and license applications covering the Pitangui Greenstone Belt, located near the Company's principal operating assets in the Iron Quadrangle. Based on the mineral resource estimate (NI 43-101) filed by Jaguar on February 26, 2024, the Pitangui project has 448,000 ounces of indicated mineral resources and 379,000 ounces of inferred mineral resources.

The Company has assigned a project team to review and incorporate drilling data and test work of Pitangui ore into its process flowsheet and is developing plans to leverage favourable permitting regulations in Minas Gerais towards fast tracking the timing to achieve first production within four years. The Pitangui deposit is located within 20 kilometres of the Company's Turmalina plant, where spare processing capacity exists.

## **2023 Production guidance suspended, mining method change**

Pursuant to the Company's press release dated July 11, 2023 the Company announced it had suspended its forward-looking guidance for fiscal 2023 for the Company's expected gold production and costs. This change was due to the changing geometry of the main ore body at the Pilar mine, and block-model reconciliation differences at Turmalina. In response, the Company made changes in the mining method at Pilar, away from long-hole stoping and towards more conventional cut-and fill stoping, where appropriate, and with more rigorous grade-control measures at both Pilar and Turmalina.

## **Operating cost reductions**

In order to ensure the long-term profitability of its operations considering lower 2023 production and amid fluctuating gold prices and currency exchange rates, the Company began a cost-reduction plan during the third quarter which continued into the fourth quarter. The focus of reductions was the rationalization of contracts and manpower levels and, more broadly, scrutiny of the Company's general and administrative and exploration costs.

## **Exchange of non-cash Royalty with AngloGold Ashanti**

During Q3 2023 the Company announced an agreement with a subsidiary of AngloGold Ashanti Limited (NYSE: AU) ("AngloGold") to exchange a non-cash royalty payable with an equal and offsetting royalty receivable. The result of this exchange was to cancel a royalty obligation previously attached to the Company's Paciência Gold Mine Complex (CPA) under an historical accord. CPA is located close to two of the Company's operating assets (Caeté and Turmalina Complexes). CPA consists of two mines and a mill which have the potential to produce following modest refurbishment capital investment.

## Impairment reversals and charges

The Company reviews its mining and mineral properties at each period-end, assessing whether there existed indicators of impairment under IFRS, including IFRS 6 for exploration and evaluation mineral exploration projects, and IAS 36 for mining properties. The impairment assessment is done for each Cash Generating Unit (“CGU”), which includes the Turmalina complex (Turmalina CGU) and the Caeté complex (Caeté CGU), Paciencia and Oncas do Pitangui.

### *Turmalina CGU*

As of December 31, 2023 the Company recorded an impairment reversal of \$8.9 million for Turmalina CGU (\$10.7 million in 2022). The reversal was based on life-of-mine estimates of gold prices and foreign exchange rates, with gold prices projected at \$1,950 for 2024 \$1,900 for 2025, \$1,850 for 2026, \$1,800 for 2027, and \$1,750 from 2028 to 2033, and exchange rates ranging between R\$4.90/USD and R\$5.10/USD. The calculation included recoverable reserves and resources, projected mineral production, and a post-tax discount rate of 9.1%. The reversal indicated that the discounted cash flows exceeded the carrying value of the project, leading to the impairment reversal. This amount was fully allocated to property, plant and equipment for the year ended December 31, 2023.

### *Caeté – CGU*

As of December 31, 2023, the Company determined that the Catita, Boa Vista, Camará, Trindade and Serra Paraíso properties shall be assessed for impairment under IFRS 6 – Exploration for and Evaluation of Mineral Resources, and the Pilar and Roça Grande properties shall be assessed for impairment under IAS 36 – Impairment of Assets.

Under its IFRS 6 impairment assessment the Company determined the Camará, Serra Paraíso and Trindade properties do not have any budgeted or planned future exploration expenditures. As such, the Company recorded a \$5.0 million impairment provision expense in the year ended December 31, 2023, reducing the carrying amounts for these properties to \$nil.

Under its IAS 36 impairment assessment the Company identified the following indicators for potential changes to impairment at the Caeté CGU: (i) operating results less favourable than those forecasted, offset by (ii) replenished mineral resource and reserve estimates and (iii) an improved gold-price outlook. Based on the results of its assessment as of December 31, 2023, no impairment charges were considered necessary (December 31, 2022 – no impairment charges were considered necessary).

## FINANCIAL AND OPERATIONAL SUMMARY

### ***Revenue, Gold Production, Total Development, Operating Costs and Net Income***

- Revenue in Q4 2023 of \$35.9 million was fairly level with the \$36.1 million in revenue reported for Q4 2022, with lower production and fewer ounces sold mostly offset by higher realized gold prices year-over-year. During Q4 2023, 18,098 gold ounces were sold, compared to 20,940 ounces sold in Q4 2022, however realized gold prices were \$1,982 per ounce in Q4 2023 compared to \$1,724 per ounce realized in Q4 2022.
- For FY 2023, revenue decreased by 4% reaching \$136.5 million, compared with \$142.5 million reported in FY 2022, with the reduction in yearly revenue driven by fewer ounces produced and consequently sold, partially offset by higher realized gold prices in 2023 compared to 2022. FY 2023 gold sales totaled 70,525 ounces compared to 80,050 ounces sold in FY 2022. Gold realized prices increased by 8% per ounce in FY 2023, averaging \$1,936 compared to \$1,780 realized in FY 2022.
- Consolidated gold production decreased by 13% to 18,482 ounces in Q4 2023, compared to 21,116 ounces in Q4 2022, reflecting a 7% drop in ore tonnes processed, from 209,000 in Q4 2022 to 195,000 in Q4 2023, combined with a 5% lower average head grade of 3.35 g/t in Q4 2023, compared to 3.61 g/t in Q4 2022.
- Gold production totaled 70,704 in FY 2023 compared to 80,968 in FY 2022, a reduction of 13%, reflecting fewer tonnes processed, of 808,000 tonnes in 2023 compared to 840,000 in 2022, combined with 10% lower average head grade in 2023 of 3.09 g/t, compared to 3.43 g/t in 2022.
- In Q4 2023, total development of 2,793 metres was down by 10%, compared to total development in Q4 2022 of 3,104 metres. Q4 2023 development included primary development of 1,123 metres, exploration development of 513 metres, and secondary development of 1,157 metres. These development rates reflect sustainable progress on the ramp and for ore development, as well as exploration drives. The exploration development metres in Q4 2023 mainly reflect lateral development towards the Faina ore body at Turmalina and development of the SouthWest area at Pilar.

- Operating costs totaled \$19.7 million in Q4 2023, a decrease of 8% compared to the \$21.4 million reported in Q4 2022. Lower year-on-year operating costs in Q4 2023 mainly reflect cost reductions that were executed earlier in the year. In FY 2023, operating costs totaled \$79.4 million compared to \$84.2 million in 2022, with the reduction mainly reflecting the volume impact of fewer tonnes processed.
- Net income for Q4 2023 was \$10.7 million, down by \$0.8 million compared to net income of \$11.5 million reported for Q4 2022. This reduction is more than explained by the \$6.8 million impact of fewer impairment reversals, which were a credit of \$10.7 million in Q4 2022 and a much smaller credit of \$3.9 million in Q4 2023, offset by the recognition of \$5.8 million of deferred tax asset in Q4 2023 (Nil Q4 2022). Net income for Q4 2023 also includes a \$1.0 million charge for a provision against a long-term receivable balance, and an offsetting \$4.4 million credit for income tax expense.
- Basic earnings per share for Q4 2023 of \$0.14 are less than the basic earnings per share of \$0.16 reported in Q4 2022, the decrease is driven by lower net income, as explained above, and a higher denominator for the weighted-average number of shares outstanding, of 79,066,665 in Q4 2023 compared to 74,452,927 in Q4 2022. FY 2023 earnings per share dropped from \$0.30 in FY 2022 to \$0.21 in FY 2023, also including the impact of higher weighted-average shares outstanding, which increased from 72,461,530 in FY 2022 to 74,596,125 in FY 2023.

### **Cash Operating Costs per ounce sold<sup>1</sup>, All-In-Sustaining Costs (“AISC”)<sup>1</sup>, Non-Sustaining Capital Expenditures<sup>1</sup> and Free Cash Flow<sup>1</sup>**

- Cash operating costs per ounce<sup>1</sup> increased by 6% to \$1,089 per ounce of gold sold in Q4 2023 compared to \$1,024 in Q4 2022, despite the decrease of 12% of ounces of gold sold, from \$20,940 in Q4 2022 to 18,098 sold in Q4 2023, with volume impact of fewer ounces sold partly offset by operating cost savings, as explained above.
- All-in sustaining costs per ounce<sup>1</sup> decreased to \$1,510 per ounce of gold sold in Q4 2023, compared to \$1,597 in Q4 2022. The drop in AISC per ounce was despite having higher cash operating unit costs explained above, as there also was a reduction of \$3.8 in sustaining capital expenditures when comparing Q4 2023 with Q4 2022, when the investment in a new truck fleet and rehabilitation of a ventilation raise at the Pilar increased AISC per ounce in comparative period.
- Non-sustaining capital expenditures<sup>1</sup> decreased by 15% from \$5.9 million in Q4 2022 to \$5.0 million in Q4 2023. Expenditures in Q4 2023 include growth capital expenditures on the Northwest zone at Turmalina and Southwest zone at Pilar, the leach tailings filtration system at the Caeté plant, as well as growth exploration drilling.
- Free cash flow<sup>1</sup> in Q4 2023 was \$4.3 million and was based on operating cash flow plus asset retirement obligation expenditures, less capital expenditures, compared to \$1.5 million in Q4 2022. Free cash flow was \$236 per ounce of gold sold in Q4 2023 compared to \$72 in Q4 2022. FY 2023 free cash flow was \$11.5 million compared to \$17.9 million in FY2022, with the decrease from FY 2022 reflecting lower cash generated from operating activities, from \$40.7 million FY 2022 to \$36.0 million in FY 2023, and an 8% increase in sustaining capital expenditures.

### **Cash Position and Working Capital<sup>2</sup>**

- As of December 31, 2023, the Company had cash and cash equivalents of \$22.0 million, compared to balances of \$20.0 million at September 30, 2023 and \$25.2 million on December 31, 2022. Cash and cash equivalents increased by about \$2.0 million during the fourth quarter, mainly reflecting higher revenue on higher realized average gold prices and more ounces sold.
- Working capital, defined as the excess of current assets over current liabilities, was \$12.6 million at December 31, 2023, compared to working capital of \$19.5 million at December 31, 2022. This \$6.9 million decrease in working capital mainly reflects a \$3.2 million reduction in ending cash position, a \$3.0 million reduction in short-term recoverable taxes and a \$2.0 million reduction in prepaid expenses. Among current liabilities, there was a \$3.7 million reduction in accounts payable and accrued liabilities, partly offset by increases of \$1.1 million in reclamation provision and \$1.3 million in legal and other provision.

<sup>1</sup> This is a non-GAAP financial performance measure with no standard definition under IFRS. For more details, refer to the Non-GAAP Performance Measures section of the MD&A.

<sup>2</sup> This is a non-GAAP financial performance measure with no standard definition under IFRS. For more details, refer to outstanding debt, liquidity and cash flow section of the MD&A.



## Q4 AND FY 2023 FINANCIAL AND OPERATING SUMMARY

(\$ thousands, except where indicated)	Three months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
<b>Financial Data</b>				
Revenue	\$ 35,872	\$ 36,108	\$ 136,528	\$ 142,500
Operating costs	19,707	21,439	79,384	84,229
Depreciation	5,977	5,229	24,659	20,175
Gross profit	10,188	9,440	32,485	38,096
Net income	10,697	11,525	15,854	21,440
Per share ("EPS")	0.14	0.16	0.21	0.30
EBITDA	13,135	19,274	42,974	49,699
Adjusted EBITDA <sup>1,2</sup>	10,779	10,995	44,021	42,397
Adjusted EBITDA per share <sup>1,2</sup>	0.14	0.15	0.59	0.59
Cash operating costs (per ounce sold) <sup>1</sup>	1,089	1,024	1,126	1,052
All-in sustaining costs (per ounce sold) <sup>1</sup>	1,510	1,597	1,618	1,483
Average realized gold price (per ounce) <sup>1</sup>	1,982	1,724	1,936	1,780
Cash generated from operating activities	9,355	10,352	36,039	40,765
Free cash flow <sup>1</sup>	4,272	1,509	11,520	17,936
Free cash flow (per ounce sold) <sup>1</sup>	236	72	163	224
Sustaining capital expenditures <sup>1</sup>	6,481	10,289	28,534	26,417
Non-sustaining capital expenditures <sup>1</sup>	5,030	5,934	15,816	23,805
Total capital expenditures	11,511	16,223	44,350	50,222

<sup>1</sup> Average realized gold price, sustaining and non-sustaining capital expenditures, cash operating costs and all-in sustaining costs, free cash flow, EBITDA and adjusted EBITDA, and adjusted EBITDA per share are non-GAAP financial performance measures with no standard definition under IFRS. Refer to the Non-GAAP Financial Performance Measures section of the MD&A.

<sup>2</sup> Adjusted EBITDA excludes non-cash items such as impairment, foreign exchange, stock-based compensation and write downs. For more details refer to the Non-GAAP Performance Measures section of the MD&A.

	Three months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
<b>Operating Data</b>				
Gold produced (ounces)	18,482	21,116	70,704	80,968
Gold sold (ounces)	18,098	20,940	70,525	80,050
Primary development (metres)	1,123	983	4,959	3,659
Exploration development (metres)	513	583	1,655	2,649
Secondary development (metres)	1,157	1,538	5,219	5,264
Definition, infill, and exploration drilling (metres)	11,285	12,757	45,934	93,311

Q4 2023 net income of \$10.7 million (\$0.14 per share) was below Q4 2022 net income of \$11.5 million (\$0.15 per share) by \$0.8 million or 7% (\$0.01 per share). Q4 2023 net income includes the benefit of a 15% higher average realized gold price and lower AISC per ounce sold of \$1,510 compared to AISC of \$1,597 per ounce in Q4 2022, partly offset by 14% fewer ounces sold compared to Q4 2022. Net earnings in Q4 2023 also include one-time credits associated with recording deferred-tax assets and an associated credit to earnings of \$5.8 million (\$0.08 per share) (Q4 2022 – nil).

FY 2023 net income of \$15.9 million (\$0.21 per share) was below FY 2022 net income of \$21.4 million (\$0.30 per share) by \$5.5 million or 26% (\$0.09 per share). Gold sales in FY 2023 fell short of FY 2022 by 9,525 ounces or 12%, partially offset by a 9% higher average realized gold price, and AISC per ounce sold of \$1,618 in FY 2023 were \$135 per ounce or 9% higher than FY 2022 AISC per ounce of \$1,483. Deferred tax credits (\$5.8 million) and impairment reversals (\$3.9 million) realized in FY 2023 compare to FY 2022, when a \$10.7 million impairment reversal benefited net earnings in FY 2022.



## CONSOLIDATED FINANCIAL RESULTS

### Quarterly Financial Review

	Q4 2023	Q3 2023	Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022	Q1 2022
(\$ thousands except where indicated)								
Revenue	\$ 35,872	\$ 31,621	\$ 33,192	\$ 35,844	\$ 36,108	\$ 37,846	\$ 37,927	\$ 30,619
Operating cost	(19,707)	(19,603)	(19,462)	(20,612)	(21,439)	(22,098)	(21,075)	(19,617)
Depreciation	(5,977)	(6,697)	(6,220)	(5,765)	(5,229)	(5,384)	(4,866)	(4,696)
Gross profit	10,188	5,321	7,510	9,467	9,440	10,364	11,986	6,306
Net income (loss)	10,697	3,785	(1,101)	2,473	21,440	6,475	9,478	(6,034)
Cash flows from operating activities	9,355	6,346	9,973	10,365	10,352	13,266	9,440	7,707
Total assets	309,119	296,740	291,429	289,055	288,133	266,645	263,196	261,320
Total liabilities	68,846	67,217	72,109	69,104	71,112	61,221	62,067	67,857
Non-current financial liabilities	35,435	36,535	38,769	36,932	36,032	27,774	27,319	30,583
Current income taxes	1,388	-	1,521	1,895	1,884	999	146	2,396
Notes payable	\$ 3,295	\$ 3,405	\$ 3,067	\$ 3,040	\$ 3,040	\$ 3,026	\$ 3,032	\$ 3,038

### Revenue

(\$ thousands, except where indicated)	Three months ended December 31,			Year ended December 31,		
	2023	2022	Change	2023	2022	Change
Revenue	\$ 35,872	\$ 36,108	(1%)	\$ 136,528	\$ 142,500	(4%)
Ounces sold	18,098	20,940	(14%)	70,525	80,050	(12%)
Average realized gold price <sup>1</sup>	\$ 1,982	\$ 1,724	15%	\$ 1,936	\$ 1,780	9%
Average market gold price <sup>1</sup>	\$ 1,974	\$ 1,726	14%	\$ 1,941	\$ 1,800	8%

<sup>1</sup> Average realized gold price and average market gold price are a non-GAAP financial performance measure with no standard definition under IFRS. For further information, refer to the non-GAAP Financial Performance Measures section of the MD&A.

The Company's revenue in Q4 2023 of \$35.9 million was slightly below the prior-year quarterly revenue of \$36.1 million reported in Q4 2022, driven by fewer ounces sold largely offset by higher realized gold prices. The Q4 2023 ounces sold of 18,098 were 14% below the 20,940 ounces sold in Q4 2022, reflecting lower production, as explained earlier. Realized gold prices were \$1,982 per ounce in Q4 2023, \$258 per ounce or 15% higher than the realized gold price of \$1,724 per ounce in Q4 2022.

A similar trend is reflected in the full-year 2023 revenues, which were \$136.5 million and 4% below the prior-year revenues of \$142.5 million, reflecting fewer ounces sold (down by 9,525 ounces or 12%), partly offset by 9% higher average realized gold prices, of \$1,936 per ounce in 2023 compared to \$1,780 per ounce in 2022.

The substantial increase in the gold price helped to mitigate the negative impact on overall revenue of fewer ounces produced and sold.

During Q4 2023, gold traded at an average market price of \$1,974 per ounce (London PM Fix), varying between \$1,819 per ounce and \$2,078 per ounce, and closed at \$2,062 per ounce on December 31, 2023. During the full year 2023, the market price of gold (London PM Fix) traded in a range of \$1,811 per ounce to \$2,078 per ounce, averaging \$1,941 per ounce, and closed at \$2,078 per ounce on December 31, 2023. The average realized prices<sup>3</sup> of \$1,982 per ounce for Q4 and \$1,936 the full year of 2023, are in line with the average market prices.

<sup>3</sup> This is a non-GAAP financial performance measure with no standard definition under IFRS. For more details, refer to the Non-GAAP Performance Measures section of the MD&A.

## Consolidated Production Costs

(\$ thousands, except where indicated)	Three months ended December 31,			Year ended December 31,		
	2023	2022	Change	2023	2022	Change
Mining	\$ 10,335	\$ 12,154	(15%)	\$ 44,075	\$ 48,241	(9%)
Processing	8,243	8,227	0%	31,224	31,820	(2%)
Direct mining and processing cost	18,578	20,381	(9%)	75,299	80,061	(6%)
Royalty expense and CFEM taxes	1,052	1,047	0%	4,007	4,143	(3%)
Others	77	11	600%	78	25	212%
Royalties, production taxes and others	1,129	1,058	7%	4,085	4,168	(2%)
<b>Total operating expenses</b>	<b>\$ 19,707</b>	<b>\$ 21,439</b>	<b>(8%)</b>	<b>\$ 79,384</b>	<b>\$ 84,229</b>	<b>(6%)</b>
Depreciation	5,977	5,229	14%	24,659	20,175	22%
<b>Total cost of sales</b>	<b>\$ 25,684</b>	<b>\$ 26,668</b>	<b>(4%)</b>	<b>\$ 104,043</b>	<b>\$ 104,404</b>	<b>(0%)</b>

Direct mining and processing costs of \$18.6 million in Q4 2023 decreased by \$1.8 million or 9% from the \$20.4 million reported in Q4 2022. This reduction is driven by lower mining costs, which were 15% below the prior-year quarter, reflecting the impact of reductions in personnel and other cost savings, combined with the volume impact of 7% fewer tonnes mined and processed. The depreciation expense increased by 14% mostly reflecting the impact of higher depreciable assets after a \$10.2 million impairment reversal on PPE on December 31, 2022, following an increase to inferred resources at Turmalina.

For the full year 2023, direct mining and processing costs of \$75.3 million decreased by 6% from the \$80.1 million reported for FY 2022, reflecting a 9% decrease in mining costs and a 2% reduction in processing costs. The 9% decrease in mining costs was driven by cost reduction initiatives commenced during the year.

## Care and Maintenance Costs

The Paciência Complex, including the Santa Isabel mine and plant, has been on care and maintenance since 2012, and the Roça Grande Mine has been on care and maintenance since 2018. Care and maintenance costs were \$0.2 million in Q4 2023, in line with Q4 2022. In the full year 2023, care and maintenance cost were \$0.7 million and in line with FY 2022.

## General and Administration Expenses

General and administration (“G&A”) expenses exclude mine-site administrative costs, which are charged directly to operations, and include legal and accounting costs and the costs to maintain offices and personnel in Belo Horizonte, Brazil and Toronto, Canada, and other corporate costs associated with being a publicly traded Company.

(\$ thousands)	Three months ended December 31,			Year ended December 31,		
	2023	2022	Change	2023	2022	Change
Directors' fees and expenses	\$ 97	\$ 141	(31%)	\$ 402	\$ 442	(9%)
Audit related and insurance	295	264	12%	1,292	1,236	5%
Corporate office (Toronto)	299	278	8%	1,650	1,435	15%
Belo Horizonte office	1,136	953	19%	4,014	3,812	5%
<b>Total G&amp;A expenses</b>	<b>\$ 1,827</b>	<b>1,636</b>	<b>12%</b>	<b>\$ 7,358</b>	<b>6,925</b>	<b>6%</b>

For Q4 2023, total G&A expenses increased by \$0.2 million or 12% compared to Q4 2022. Costs associated with the Belo Horizonte office increased by 19% mainly reflecting severance costs associated with headcount reductions from Q3 but also include the impact of foreign exchange between the Brazilian real versus the US dollar, as the BRL strengthened during Q4 2023 compared to Q4 2022. The 31% decrease in Directors' fees and expenses from Q4 2023 to Q4 2022 reflects the savings in Q4 2023 from having a virtual annual strategy meeting, which saved travel and accommodations costs incurred at the in-person meeting during Q4 2022.

For FY 2023, total G&A expenses of \$7.4 million were 6% above the \$6.9 million expense in FY 2022 mainly reflecting the appreciation of the Brazilian real over the US dollar during 2023, with the average exchange rate during FY 2023 being R\$5.0 per US dollar compared to R\$5.16 per US dollar in FY 2022, combined with the labour cost increases explained in the previous paragraph, and others costs associated with office operation.

## Non-Operating Expenses

(\$ thousands)	Three months ended December 31,			Year ended December 31,		
	2023	2022	Change	2023	2022	Change
Foreign Exchange loss	\$ 1,426	\$ 1,022	40%	\$ 3,031	\$ 1,008	201%
Finance costs	840	617	36%	3,368	2,581	30%
Other non-operating expenses (recoveries)	1,465	(53)	(2864%)	(44)	831	(105%)
<b>Non-operating expenses</b>	<b>\$ 3,731</b>	<b>\$ 1,586</b>	<b>135%</b>	<b>\$ 6,355</b>	<b>\$ 4,420</b>	<b>44%</b>

A significant portion of the Company's expenditures at its Brazilian operation are denominated in the Brazilian real. The foreign-exchange loss of \$1.4 million in Q4 2023 is \$0.4 million larger than the \$1.0 million foreign-exchange loss in Q4 2022, reflecting the appreciation in the value of Brazilian real compared to the US dollar. The exchange rate on September 30, 2023, was R\$5.01 per US dollar (R\$5.41 per US dollar on September 30, 2022) and the closing exchange rate was R\$4.84 per US dollar on December 31, 2023 (R\$5.16 per US dollar on December 31, 2022), with the average exchange rate being R\$4.96 per US dollar during Q4 2023 (R\$5.26 during Q4 2022). In Q4 2023, other non-operating expenses of \$1.5 million include a \$1.0 million charge for the provision recorded against other long-term receivables relating to BHP Group Limited.

Non-operating expenses of \$6.4 million in FY 2023 increased by \$1.9 million or 44% compared to the \$4.4 million reported as non-operating expenses in FY 2022. The increase in FY 2023 mainly was driven by higher foreign exchange losses connected with the Brazilian real, which appreciated in value through 2023 compared to the US dollar. The exchange rate as of January 1, 2023 was R\$5.34 per US dollar (R\$5.63 per US dollar on January 1, 2022), and the closing rate was at R\$4.84 per US dollar on December 31, 2023 (R\$5.22 per US dollar on December 31, 2022), with the average exchange rate being R\$5.00 during FY 2023 per US dollar (R\$5.17 during FY 2022). Other non-operating expenses were a modest income of \$0.04 million in FY 2023 compared to an expense of \$0.8 million in FY 2022. This \$0.9 million decrease in other non-operating expense includes a \$0.8 million gain on disposition of a property, plant and equipment during 2023 (2022 - \$0.6 million loss on disposition), partly offset by a \$0.5 million loss on the factoring of taxes recoverable with third parties, and other offsetting variances.

## Impairment (reversal) charges

As at December 31, 2023 and December 31, 2022, the Company reviewed the mineral exploration properties within each CGU to determine (i) which properties should be assessed for impairment under IFRS 6 – Exploration for and Evaluation of Mineral Resources and (ii) which should be assessed for impairment under IAS 36 – Impairment of assets. The Company assessed each CGU for indicators of potential impairment or potential reversal to impairment. In the event such indicators were identified, the Company proceeded to compare the CGU's carrying value to the recoverable amount determined. The recoverable amount was determined to be fair value less costs to dispose ("FVLCD").

The significant assumptions used in determining the recoverable amount of the project were life of mine (LOM) future production profiles, future gold prices, proven and probable reserves and estimated amount of resources, discount rates, foreign exchange rates, and capital expenditures. LOM plans are typically developed annually and are based on management's current best estimates of optimized mine and processing plans, future operating expenditures and capital costs, and income taxes. The Company bases its future gold price estimate with reference to forward prices and industry analyst consensus.

As of December 31, 2023 and December 31, 2022, the following were the indicators for potential impairment or potential reversal to impairment identified:

## **Turmalina CGU**

As at December 31, 2023, the Company determined that all of the Turmalina CGU's mineral exploration properties shall be assessed for impairment under IAS 36 – Impairment of Assets. The Company identified the following indicators for potential changes to impairment at the Turmalina CGU: (i) operating results less favorable than those forecasted offset by (ii) replenished mineral resource and reserve estimates and (iii) an improved gold price outlook.

The Company compared the Turmalina CGU's carrying value to its recoverable amount. The Company used the following key assumptions in determining the recoverable amount: gold prices, foreign exchange rates, quantities of recoverable reserves and resources and future mineral production, discount rate and costs used to determine the future cash flows.

The life-of-mine gold price per-ounce estimates used to calculate recoverable amounts as at December 31, 2023 were \$1,950 for 2024, \$1,900 for 2025, \$1,850 for 2026, \$1,800 for 2027, and \$1,750 from 2028 to 2033. The foreign exchange rates used were based on Brazil Central Bank projections as at December 31, 2023 and ranged between R\$4.90/USD and R\$5.10/USD. Quantities of recoverable reserves and resources and future mineral production were included in projected cash flows based on mineral-reserve and resources estimates including all proven and probable reserves and the portion of inferred and indicated resources deemed to hold a probable likelihood of recovery, as undertaken by qualified persons. A post-tax discount rate of 9.1% was used to calculate the present value of the estimated future cash flows from the operation. The assessment indicated that the discounted cash flows exceeded the associated carrying value of the Turmalina CGU as at December 31, 2023 and, consequently, an impairment reversal of \$8.9 million was recorded. The impairment reversal for the year ended December 31, 2023 was fully allocated to property, plant and equipment. As at December 31, 2022, the Company recorded a \$10.7 million impairment reversal, with \$10.2 million allocated to property, plant and equipment and \$0.5 million to mineral exploration projects.

## **Caeté CGU**

As at December 31, 2023, the Company determined that the Catita, Boa Vista, Camará, Trindade and Serra Paraíso properties shall be assessed for impairment under IFRS 6 – Exploration for and Evaluation of Mineral Resources, and the Pilar and Roça Grande properties shall be assessed for impairment under IAS 36 – Impairment of Assets.

Under its IFRS 6 impairment assessment at December 31, 2023, the Company determined the Camará, Serra Paraíso and Trindade properties do not have any budgeted or planned future exploration expenditures. As such, the Company recorded a \$5.0 million impairment provision expense (Note 10), reducing the carrying amounts for these properties to \$nil.

Under its IAS 36 impairment assessment at December 31, 2023, the Company identified the following indicators for potential changes to impairment at the Caeté CGU: (i) operating results less favorable than those forecasted offset by (ii) replenished mineral resource and reserve estimates and (iii) an improved gold price outlook.

The Company compared the Caeté CGU's carrying value to its recoverable amount. The Company used the following key assumptions in determining the recoverable amount: gold prices, foreign exchange rates, quantities of recoverable reserves and resources and future mineral production, discount rate and costs used to determine future cash flows.

The life-of-mine gold price per ounce estimates used to calculate recoverable amounts as at December 31, 2023 were \$1,950 for 2024, \$1,900 for 2025, \$1,850 for 2026, \$1,800 for 2027, and \$1,750 from 2028 to 2030. The foreign exchange rates used were based on Brazil Central Bank projections as at December 31, 2023 and ranged between R\$4.90/USD and R\$5.10/USD. Quantities of recoverable reserves and resources and future mineral production were included in projected cash flows based on mineral reserve and resources estimates including all proven and probable reserves and the portion of inferred and indicated resources deemed to hold a probable likelihood of recovery, as undertaken by qualified persons. A post-tax discount rate of 9.7% was used to calculate the present value of the estimated future cash flows from the operation.

Based on the results of its assessment as at December 31, 2023, the Company concluded no impairment charges were considered necessary. As at December 31, 2022, no impairment charges were considered necessary.

## Taxes

### Brazilian Taxes

Brazilian tax regulation involves three jurisdictions and tax collection levels: federal, state and municipal. The main taxes levied are: corporate income tax with companies generally subject to income tax at a rate of 25%, social contribution tax on the net profit at a current rate of 9%, value-added taxes at a rate of 9.25% for PIS/COFINS (Federal Taxes) and 12–18% for ICMS (State Tax).

PIS and COFINS are federal taxes imposed monthly on gross revenue earned by legal entities. The calculation method is, in the Company's case, non-cumulative, under which PIS and COFINS are levied on gross revenue at 1.65% and 7.6%, respectively, with deductions of input tax credits for expenses strictly connected to the Company's business and prescribed by the regulating laws. The export of goods and services are exempt provided funds effectively enter the country. PIS and COFINS are due on importations of goods and services from abroad (PIS-Import and COFINS-Import).

As of December 31, 2023, the Company's \$8.2 million withholding tax provision remained outstanding (December 31, 2022 – \$8.2 million).

### Government and Beneficiaries Royalty

Compensação Financeira pela Exploração de Recursos Minerais ("CFEM") is a 1.5% Brazilian government royalty levied on gross gold sales less refining charges and insurance, as well as any applicable sales taxes that are calculated on gross revenue only.

## Income Tax Expenses

(\$ thousands)	Three months ended December 31,			Year ended December 31,		
	2023	2022	Change	2023	2022	Change
Current income tax expense	\$ 1,388	\$ 1,884	(26%)	\$ 4,805	\$ 5,426	(11%)
Deferred income tax recovery	\$ (5,800)	\$ -	100%	\$ (5,800)	\$ -	100%
<b>Income tax (recovery) expense</b>	<b>\$ (4,412)</b>	<b>\$ 1,884</b>	<b>(334%)</b>	<b>\$ (995)</b>	<b>\$ 5,426</b>	<b>(118%)</b>

The current income tax expense relates to taxable income in Brazil. At the beginning of the year, MSOL had significant accumulated tax loss carryforwards; however, under Brazilian tax legislation, only 30% of taxable income can be applied against tax loss carryforwards each year.

The income tax provision is subject to a number of factors including the allocation of income between different countries, at disparate tax rates, the non-recognition of tax assets, foreign-currency exchange-rate movements, changes in tax laws and the impact of specific transactions and assessments. Due to the number of factors that can potentially impact the effective tax rate and the sensitivity of the tax provision to these factors, it is expected that the Company's effective tax rate will fluctuate in future periods.

For Q4 2023, income tax recovery of \$4.4 million includes a current income tax expense of \$1.4 million, more than offset by a deferred income tax recovery of \$5.8 million. Current income tax expense for Q4 2023 is 26% below current income tax expense in Q4 2022, mainly reflecting lower taxable income in Brazil year-over-year. Deferred income tax recovery of \$5.8 million relates to future tax savings expected to be realized in Canada under a transfer-pricing arrangement in place since 2022.

For FY 2023, current income tax recovery was \$1.0 million including current income tax expense of \$4.8 million more than offset by the \$5.8 million deferred tax recovery realized during the fourth quarter. Current income tax expense in 2023 was 11% below current income tax expenses in FY 2022. The decrease of 11% is explained by: (i) a 4% decrease in revenue; (ii) a 22% increase in depreciation costs mainly stemming from the impairment reversal recorded in Turmalina CGU at December 31, 2022; (iii) a 45% reduction in exploration and evaluation costs; and (iv) a stronger Brazilian real as compared to the US dollar in FY 2023.

As at December 31, 2023, the Company recognized a deferred income-tax recovery of \$5.8 million as a result of Company's tax planning strategy adopted since FY2022 when MSOL commissioned Jaguar Mining Inc. to be an intermediary in the gold sales with its end customer. As Jaguar Canada charges MSOL an intermediation fee equivalent to 4% of the gold sales revenue generated, Jaguar Canada is projected to continue to generate taxable income in the coming years and recognized a deferred-tax asset representing the tax loss-carryforwards projected to be used in offsetting future corporate income tax obligations in Canada.

## OPERATIONAL REVIEW

### Jaguar Mining Gold Production

	Q4 2023	Q4 2022	Change	FY 2023	FY 2022	Change
Tonnes of ore mined	199,000	215,000	(7%)	808,000	840,000	(4%)
Tonnes of ore processed	195,000	209,000	(7%)	812,000	837,000	(3%)
Average head grade (g/t) <sup>1</sup>	3.35	3.61	(7%)	3.09	3.43	(10%)
Average recovery rate (%)	88%	87%	1%	87%	88%	(1%)
Gold (oz.)						
Produced	18,482	21,116	(12%)	70,704	80,968	(13%)
Sold	18,098	20,940	(14%)	70,525	80,050	(12%)

<sup>1</sup> The 'average head grade' represents the recalculated head-grade milled.

Consolidated gold production of 18,482 ounces in Q4 2023 was 12% below the 21,116 ounces produced in Q4 2022, driven by lower average head grades and fewer tonnes processed compared to Q4 2022. The average head grade in Q4 2023 of 3.35 g/t was 7% below the 3.61 g/t average head grade reported in Q4 2022. Ore processed in Q4 2023 was 195,000 tonnes which was 7% below the 209,000 ore tonnes processed in Q4 2022.

While average grades were lower than the prior-year period, grades in Q4 2024 recovered from the 2.95 g/t average grade processed in Q3 2023. On a successive-quarter basis, Q4 2023 gold production of 18,482 ounces was 7% higher than the 17,316 gold ounces produced in Q3 2023, driven by a 14% (or 0.4 g/t) increase in average head grade. A steady improvement in production from low points in Q2 2023 reflects the implementation of adjustments in the mining method at Pilar and in grade control protocols at both Turmalina and Pilar mines during the second half of 2023.

### Turmalina Gold Mine Complex

#### Turmalina Quarterly Production

	Q4 2023	Q3 2023	Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022	Q1 2022
Tonnes of ore mined	102,000	99,000	102,000	100,000	107,000	106,000	100,000	85,000
Tonnes of ore processed	99,000	101,000	100,000	108,000	101,000	105,000	101,000	86,000
Average head grade (g/t) <sup>1</sup>	3.02	3.01	2.80	2.84	3.50	3.41	3.10	3.10
Average recovery rate (%)	88%	87%	87%	84%	86%	87%	88%	88%
Gold (oz.)								
Produced	8,457	8,529	7,874	8,258	9,803	9,966	8,816	7,581
Sold	8,455	8,464	7,661	8,870	9,269	10,867	7,643	8,073
Cash operating cost (per oz. sold) <sup>2</sup>	\$ 1,070	\$ 1,071	\$ 1,118	\$ 1,136	\$ 973	\$ 995	\$ 1,194	\$ 1,320
All-in sustaining cost (per oz. sold) <sup>2</sup>	\$ 1,460	\$ 1,399	\$ 1,787	\$ 1,574	\$ 1,444	\$ 1,265	\$ 1,594	\$ 1,683
Cash operating cost (per tonne) <sup>2</sup>	\$ 91	\$ 90	\$ 90	\$ 124	\$ 89	\$ 103	\$ 90	\$ 124
Cash operating cost (R\$ per tonne) <sup>2</sup>	\$ 453	\$ 444	\$ 424	\$ 485	\$ 470	\$ 541	\$ 445	\$ 648

<sup>1</sup> The 'average head grade' represents the recalculated head-grade milled.

<sup>2</sup> Cash operating costs (per oz. sold), All-in sustaining costs, and cash operating cost (R\$ per tonne) are non-GAAP financial performance measures with no standard definition under IFRS. Refer to the Non-GAAP Financial Performance Measures section of the MD&A.

During Q4 2023, the Turmalina gold mine ("Turmalina") produced 8,457 ounces of gold compared to 9,803 ounces in Q4 2022, a decrease of 14% or 1,346 ounces. Fewer ounces produced reflects a lower average head grade of 3.02 g/t in Q4 2023 compared to 3.50 g/t in Q4 2022, combined with a 2% decrease in the tonnes of ore processed, from 101,000 in Q4 2022 to 99,000 in Q4 2023. The Turmalina operating team has improved ore sampling and drilling to better follow ore-waste definition



and increase the grade mined. The cash operating cost per ounce sold for Q4 2023 increased by 10%, or \$97, compared to Q4 2022 mainly reflecting the volume impact of fewer ounces sold in Q4 2023, partially offset by lower gross operating expenses; specifically, lower fuel consumption based on more efficient hauling and shorter cycles, and lower maintenance-parts consumption.

#### Turmalina Capital Expenditures

(\$ thousands)	Three months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
Sustaining capital <sup>1</sup>				
Primary development	\$ 2,140	\$ 2,515	\$ 10,154	\$ 8,910
Brownfield exploration	371	123	1,106	562
Mine-site sustaining	782	1,727	3,808	3,820
<b>Total sustaining capital<sup>1</sup></b>	<b>3,293</b>	<b>4,365</b>	<b>15,068</b>	<b>13,292</b>
Mine-site non-sustaining	3,021	2,547	10,021	12,415
Asset retirement obligation (Dam closing project)	269	503	656	948
<b>Total non-sustaining capital<sup>1</sup></b>	<b>3,290</b>	<b>3,050</b>	<b>10,677</b>	<b>13,363</b>
<b>Total capital expenditures</b>	<b>\$ 6,583</b>	<b>\$ 7,415</b>	<b>\$ 25,745</b>	<b>\$ 26,655</b>

<sup>1</sup> Sustaining and non-sustaining capital are non-GAAP financial measures with no standard definition under IFRS. Refer to the non-GAAP Financial Performance Measures section of the MD&A. Capital expenditures are included in the calculation of all-in sustaining costs and all-in costs.

#### Turmalina Development and Drilling Progress (metres)

(metres)	Three months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
Primary development	1,210	1,016	4,777	3,819
Primary development	697	642	3,122	2,309
Exploration development	513	374	1,655	1,510
Secondary development	558	833	2,615	3,009
<b>Total development</b>	<b>1,768</b>	<b>1,849</b>	<b>7,392</b>	<b>6,828</b>
Definition drilling	-	2,100	2,505	5,582
Infill drilling	4,936	2,216	16,869	12,161
Exploration drilling	1,128	1,745	3,591	36,228
<b>Total definition, infill, and exploration drilling</b>	<b>6,064</b>	<b>6,061</b>	<b>22,965</b>	<b>53,971</b>

#### *Mining*

Located 110 kilometres west of Belo Horizonte, Turmalina is an underground mine that predominantly utilizes sub-level stoping as a mining method. Backfilling is completed using loose rockfill or cemented paste depending upon the situation. During 2023 Turmalina adapted its production profile to utilize the shallower C-zone orebodies on a much larger scale than in prior years. Planning and execution within the C-zone orebodies have enabled savings from shorter hauls and faster cycle times compared to average levels mined over the preceding two years.

Turmalina processed 99,000 ore tonnes in Q4 2023, which represents a decrease of 2% compared to Q4 2022. Current development rates in the C-zone orebody structure are adequate to sustain production. Development is being completed by both Jaguar crews and the mining contractor Toniolo Busnello ("TBSA").

Q4 2023 total development of 1,768 metres was 4% lower than the 1,849 metres from Q4 2022, reflecting reduced secondary development partly offset by increased development to access the Faina Project. These development rates provide sustainable progress on the ramp, ore development, as well as exploration drives.



## Processing

The Turmalina processing plant is onsite, and the C-zone portal is within 200 metres of the crusher. The plant circuit begins with primary and secondary crushing, feeding a crushed-ore bin. The ore bin can feed any of the three ball-mill circuits. The total grinding capacity is 3,000 tonnes per day. The plant currently operates only mill #3, supplemented by mill #1 when needed, which can easily handle current and expected future mined tonnage rates. The ball mills feed pulverized ore to the carbon-in-pulp (“CIP”) circuit. The plant management team continues to advance improvements to stabilize operations, focusing on cost reductions while maintaining optimal production rates. Tailings are sent to a filtration system from which they can be provided to the paste plant for backfill or be diverted to a dry-stack area.

## Caeté Gold Mine Complex

### Caeté Complex Quarterly Production

The Caeté mining complex (“Caeté”) includes the Pilar gold mine (“Pilar”), the Caeté processing plant and the Roça Grande gold mine (“Roça Grande”). On March 22, 2018, Roça Grande was placed on care and maintenance. Ore from Pilar is trucked a total distance of approximately 40 kilometres by road to the Caeté plant, which has a capacity of 2,200 tonnes per day and includes gravity, flotation and CIP circuits.

### Pilar Quarterly Production

	Q4 2023	Q3 2023	Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022	Q1 2022
Tonnes of ore mined	<b>97,000</b>	107,000	103,000	98,000	108,000	111,000	124,000	99,000
Tonnes of ore processed (t)	<b>96,000</b>	107,000	103,000	98,000	108,000	111,000	127,000	98,000
Average head grade (g/t) <sup>1</sup>	<b>3.68</b>	2.88	3.04	3.54	3.71	3.51	3.73	3.27
Average recovery rate (%)	<b>88%</b>	88%	88%	88%	88%	89%	87%	89%
Gold (oz.)								
Produced	<b>10,025</b>	8,787	8,876	9,898	11,313	11,195	13,212	9,082
Sold	<b>9,643</b>	8,038	9,256	10,138	11,671	11,254	12,839	8,434
Cash operating cost (per oz. sold) <sup>2</sup>	<b>\$ 1,105</b>	\$ 1,311	\$ 1,177	\$ 1,039	<b>\$ 1,064</b>	\$ 1,002	\$ 931	\$ 1,063
All-in sustaining cost (per oz. sold) <sup>2</sup>	<b>\$ 1,422</b>	\$ 1,701	\$ 1,508	\$ 1,356	<b>\$ 1,562</b>	\$ 1,238	\$ 1,045	\$ 1,392
Cash operating cost (per tonne) <sup>2</sup>	<b>\$ 111</b>	\$ 98	\$ 106	\$ 107	<b>\$ 115</b>	\$ 102	\$ 94	\$ 91
Cash operating cost (R\$ per tonne) <sup>2</sup>	<b>\$ 551</b>	\$ 487	\$ 524	\$ 559	<b>\$ 605</b>	\$ 533	\$ 464	\$ 478

<sup>1</sup> The 'average head grade' represents the recalculated head-grade milled.

<sup>2</sup> Cash operating costs (per oz. sold), All-in sustaining costs, and cash operating cost (R\$ per tonne) are non-GAAP financial performance measures with no standard definition under IFRS. Refer to the Non-GAAP Financial Performance Measures section of the MD&A.

During Q4 2023, Pilar produced 10,025 ounces of gold compared to 11,313 gold ounces in Q4 2022, a decrease of 11% or 1,288 ounces, mainly driven by a 10% decrease in ore tonnes processed, from 108,000 in Q4 2022 to 97,000 in Q4 2023, with average grades roughly in line with the prior-year quarter. After experiencing rapid geometry changes in the main orebody in Q2 2023 and adopting a more conventional cut-and fill stoping method during Q3 2023, Pilar production and grades recovered in Q4 2023. The cash operating cost per ounce sold for Q4 2023 increased by \$41/ounce or 4% compared to Q4 2022, mainly due to fewer gold ounces sold: 9,643 ounces sold in Q4 2023 compared to 11,671 ounces sold in Q4 2022. The volume impact of fewer ounces sold is \$183/ounce, which was partly offset by lower gross operating costs in Q4 2023 including lower fuel and other materials costs, lower maintenance-parts, and the impact of less reliance on more costly contract mining.

## Pilar Capital Expenditures

(\$ thousands, except where indicated)	Three months ended		Year ended	
	December 31,		December 31,	
	2023	2022	2023	2022
Sustaining capital <sup>1</sup>				
Primary development	\$ 2,314	\$ 3,263	\$ 8,921	\$ 7,920
Brownfield exploration	185	97	854	535
Mine-site sustaining	560	2,450	2,703	4,239
<b>Total sustaining capital<sup>1</sup></b>	<b>3,059</b>	<b>5,810</b>	<b>12,478</b>	<b>12,694</b>
Mine-site non-sustaining	611	1,801	1,783	7,576
Asset retirement obligation (Dam closing project)	526	677	1,800	1,373
<b>Total non-sustaining capital<sup>1</sup></b>	<b>1,137</b>	<b>2,478</b>	<b>3,583</b>	<b>8,949</b>
<b>Total capital expenditures</b>	<b>\$ 4,196</b>	<b>\$ 8,288</b>	<b>\$ 16,061</b>	<b>\$ 21,643</b>

<sup>1</sup>Sustaining and non-sustaining capital are non-GAAP financial measures with no standard definition under IFRS. Refer to the non-GAAP Financial Performance Measures section of the MD&A. Capital expenditures are included in the calculation of all-in sustaining costs and all-in costs.

## Pilar development and drilling progress (metres)

(metres)	Three months ended		Year ended	
	December 31,		December 31,	
	2023	2022	2023	2022
Primary development	426	550	1,837	2,489
Primary development	426	341	1,837	1,350
Exploration development	-	209	-	1,139
Secondary development	599	705	2,604	2,255
<b>Total development</b>	<b>1,025</b>	<b>1,255</b>	<b>4,441</b>	<b>4,744</b>
Definition drilling	644	1,585	5,733	5,231
Infill drilling	2,310	1,169	11,647	7,803
Exploration drilling	2,256	2,810	4,502	22,889
<b>Total definition, infill, and exploration drilling</b>	<b>5,210</b>	<b>5,564</b>	<b>21,882</b>	<b>35,923</b>

## Mining

Located 100 kilometres east of Belo Horizonte, Pilar is an underground mine that predominantly utilizes sub-level stoping and cut-and-fill as a mining method. Backfilling is completed using loose rockfill. The main ore block is in a fold structure of banded iron formation and has been developed to the 16 level and appears to extend to depth. This area provides the majority of the mine's production, which is augmented by ore from the Southwest Zone from higher levels in the mine (ranging from levels 2 through 9). The development rate in Q4 2023 dropped by 18% with a total development of 1,025 metres compared to 1,255 metres developed in Q4 2022, mainly reflecting the completion of exploration development at the Southwest Zone in Q4 2022.

## Processing

Ore from Pilar is processed at Jaguar's Caeté processing plant, which is located approximately 40 km from Pilar. The plant has a gravity recovery circuit which recovers about 50% of the gold, followed by a flotation circuit and leaching of the flotation concentrate in a CIP circuit. Historic total recoveries have typically ranged between 85% and 90%. The plant has a designed capacity of approximately 2,200 tonnes per day and it has excess capacity for incremental feed. The non-sulfide tails (flotation tails) are dry-stacked, and leach tails are filtered and hauled to Moita tailings dam, as part of the Moita dam's decommissioning process.

## REVIEW OF FINANCIAL CONDITION

### Outstanding Debt, Liquidity and Cash Flow

As of December 31, 2023, the Company had working capital<sup>4</sup> of \$13.4 million (\$19.5 million as of December 31, 2022), including \$3.3 million in notes payable to Brazilian banks, which secure the Company's gold exportations and mature every six months and are expected to continue to be renewed into the future.

(\$ thousands)	December 31, 2023	December 31, 2022
Cash and cash equivalents	\$ 22,041	\$ 25,208
Other current assets:		
Restricted cash	897	618
Inventory	15,639	16,239
Recoverable taxes	5,584	8,545
Other accounts receivable	310	343
Prepaid expenses and advances	1,556	3,615
Current liabilities:		
Accounts payable and accrued liabilities	(16,082)	(19,782)
Notes payable	(3,295)	(3,040)
Lease liabilities	(1,953)	(2,414)
Current tax liability	(1,381)	(1,881)
Other taxes payable	(1,334)	(1,056)
Reclamation provisions	(4,298)	(3,156)
Legal and other provisions	(5,068)	(3,751)
<b>Working capital<sup>1</sup></b>	<b>\$ 12,616</b>	<b>\$ 19,488</b>

<sup>1</sup> This is a non-GAAP financial performance measure with no standard definition under IFRS.

The \$6.9 million or 31% decrease in working capital reflects lower operating cash flow generated during FY 2023, which was mainly driven by a \$5.9 million decrease in revenue compared to FY 2022, resulting from fewer ounces sold partially offset by higher realized gold prices during FY 2023. Working capital was also impacted by a stronger Brazilian real compared to the US dollar in FY 2023. The exchange rate on January 1, 2023 was R\$5.34 per US dollar (R\$5.63 per US dollar on January 1, 2022), and the closing exchange rate was at R\$4.84 per US dollar on December 31, 2023 (R\$5.22 per US dollar on December 31, 2022), with the average exchange rate being R\$5.0 during FY 2023 per US dollar (R\$5.17 during FY 2022).

Working capital is a common measure of near-term liquidity and it is calculated by deducting current liabilities from current assets as reported in the Company's consolidated statement of financial position.

<sup>4</sup> This is a non-GAAP financial performance measure with no standard definition under IFRS. It is a common measure of near-term liquidity.

The use of funds during the three months and year ended December 31, 2023, is outlined as follows:

(\$ thousands)	Three months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
<b>Cash provided by operating activities before income taxes</b>	\$ 9,355	\$ 11,104	\$ 41,420	\$ 43,985
Income taxes paid	-	(752)	(5,381)	(3,220)
<b>Net cash provided by operating activities</b>	\$ 9,355	\$ 10,352	\$ 36,039	\$ 40,765
<b>Investing activities</b>				
Investment in mineral exploration projects	(1,457)	(872)	(4,122)	(4,662)
Purchase of property, plant and equipment	(6,356)	(13,371)	(32,604)	(39,502)
Proceeds from acquisition of IAMGOLD Brazil	-	-	124	-
Proceeds from dispositions of property, plant and equipment	411	284	818	443
<b>Net cash (used in) investing activities</b>	\$ (7,402)	\$ (13,959)	\$ (35,784)	\$ (43,721)
<b>Financing activities</b>				
Cash received upon issuance of notes payable	1,350	1,350	6,000	6,000
Cash received upon issuance of shares via stock options exercised	-	-	133	20
Repayment of notes payable	(2,195)	(1,936)	(9,289)	(8,621)
Cash paid for purchase and cancellation of shares	-	-	-	(75)
Interest paid	66	(80)	(277)	(287)
Share issuance costs	-	-	(20)	-
Cash dividends paid	-	-	-	(6,821)
<b>Net cash (used in) financing activities</b>	\$ (779)	\$ (666)	\$ (3,453)	\$ (9,784)
Effect of exchange rate changes on cash balances	876	(466)	31	(2,425)
<b>Net increase (decrease) in cash and cash equivalents</b>	\$ 2,050	\$ (4,739)	\$ (3,167)	\$ (15,165)

Cash generated by operating activities decreased by 12% in FY 2023 to \$36.0 million, compared to \$40.8 million in FY 2022, reflecting a 12% decrease in ounces sold in FY 2023 to 70,525 ounces compared to 80,050 ounces in FY 2022, partly offset by the higher average realized gold price of \$1,982 per ounce in FY 2023, compared to \$1,724 per ounce in FY 2022. Operating costs decreased by 6%, combined with foreign exchange losses related to a stronger Brazilian real compared to the US dollar in FY 2023, with the average exchange rate being R\$5.00/USD during FY 2023 (R\$5.17 during FY 2022).

Net cash flows used for investing activities decreased to \$35.8 million for FY 2023, compared to \$43.7 million in FY 2022. Investing net cash outflows in 2023 include capital invested in primary development at Turmalina, including the lateral development twin drifts that reached the Faina project by the end of 2023.

Cash used for financing activities of \$3.5 million in FY 2023 decreased by \$6.3 million or 40% compared to the \$9.8 million in financing outflows in FY 2022, mainly reflecting the cessation of dividend payments in 2022, \$6.8 million was paid in dividends during FY 2022.

## Contractual Obligations and Commitments

The Company's contractual obligations as of December 31, 2023, are summarized as follows:

(\$ thousands, except where indicated)	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years	Total
<b>Financial Liabilities</b>					
Accounts payable and accrued liabilities	\$ 16,082	\$ -	\$ -	\$ -	\$ 16,082
Other Taxes Payable <sup>1</sup>					
ICMS Settlement Due	48	192	-	-	240
INSS	697	158	-	-	855
IRPJ & CSLL Settlement Due	253	191	-	-	444
Notes payable <sup>2</sup>					
Principal	3,295	-	-	-	3,295
Interest	111	15	-	-	126
Lease liabilities	2,112	747	82	-	2,941
Reclamation provisions <sup>3</sup>	4,682	10,390	5,833	20,586	41,491
Current tax liability	1,381	-	-	-	1,381
<b>Total financial liabilities</b>	<b>\$ 28,661</b>	<b>\$ 11,693</b>	<b>\$ 5,915</b>	<b>\$ 20,586</b>	<b>\$ 66,855</b>
<b>Other Commitments</b>					
Suppliers' agreements <sup>4</sup>	7,088	236	-	-	7,324
Insurance agreements <sup>5</sup>	90	90	-	-	180
<b>Total other commitments</b>	<b>\$ 7,178</b>	<b>\$ 326</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 7,504</b>
<b>Total</b>	<b>\$ 35,839</b>	<b>\$ 12,019</b>	<b>\$ 5,915</b>	<b>\$ 20,586</b>	<b>\$ 74,359</b>

<sup>1</sup> Financial liabilities within Other taxes payable include state value-add taxes payable (ICMS – Imposto sobre circulação de mercadorias e prestação de serviços), payroll taxes payable (INSS - Instituto Nacional do Seguro Social), and federal income taxes payable (IRPJ - Imposto de renda pessoa jurídica and CSLL - Contribuição social).

<sup>2</sup> Bank indebtedness represents the principal on Brazilian short-term bank loans which are renewed in 180 day periods.

<sup>3</sup> Reclamation provisions - amounts presented in the table represent the undiscounted uninflated future payments for the expected cost of reclamation.

<sup>4</sup> Purchase obligations for supplies and consumables - includes commitments related to new purchase obligations to secure a supply of cyanide, reagents, mill balls and other spares. The Company has the contractual right to cancel the mine operation contracts with 30 to 90 days advance notice. The amount included in the commitments table represents the contractual amount due within 30 to 90 days.

<sup>5</sup> Insurance premium commitments in accordance with the Company's liability and property insurance policies.

## CAPITAL STRUCTURE

The capital structure of the Company as of December 31, 2023, is as follows:

All amounts in \$ thousands, except number of common shares	As at December 31, 2023
<b>Cash and cash equivalents</b>	<b>\$ 22,041</b>
Less: Bank indebtedness	\$ 3,295
Less: Leasing Liabilities	2,545
<b>Less: Total debt</b>	<b>\$ 5,840</b>
<b>Total net cash and cash equivalents balance<sup>1</sup></b>	<b>\$ 16,201</b>
Number of common shares outstanding	79 million

<sup>1</sup> Net cash and cash equivalents balance is a non-GAAP Performance Measure and is defined as total indebtedness excluding unamortized transaction costs and premiums or discounts associated with debt, less cash and cash equivalents. The Company reduces cash and cash equivalents balance by gross indebtedness on the basis to identify the net cash and cash equivalents balance.

## OFF-BALANCE SHEET ITEMS

The Company does not have any off-balance sheet investment or debt arrangements.

## RELATED PARTY TRANSACTIONS

The Company incurred legal fees from Azevedo Sette Advogados (“ASA”), a law firm where Luis Miraglia, a Director of Jaguar, is a partner. Fees paid to ASA are recorded at the exchange amount, representing the amount agreed to by the parties and included in general and administrative expenses in the consolidated statements of operations and comprehensive income. Legal fees paid to ASA were \$0.01 million in FY 2023 (\$0.01 million in FY 2022).

On October 20, 2023, the Company entered into a sublease agreement with Orix Geoscience 2018 Inc. (“Orix”), a mineral exploration service firm where Shastri Ramnath, a director of Jaguar is the chief executive officer. The sublease agreement with Orix commenced March 1, 2024, and is for office space at 25 Adelaide St. East, Suite 1400, Toronto, Ontario, Canada, M5C 3A1. The terms and cost of the lease reflect market prices and the expense is recorded monthly at the exchanged amount.

## DEVELOPMENT AND EXPLORATION PROJECTS

### IAMGOLD Acquisition – Pitangui and Acuruí projects

On September 13, 2023, the Company completed the acquisition (“the Acquisition”) of IAMGold Brasil Prospecções Minerais Ltda. (“IAMGold Brazil”) from AGEM Ltd. (the “Vendor”) which was a subsidiary of IAMGOLD Corporation (NYSE: IAG) (TSX: IMG) (“IAMGOLD”). Through this transaction the Company acquired a 100% interest in the Pitangui Project and the remaining interest in the Acurui Project, with two gold mineral exploration projects located in Brazil in proximity to the Company’s Turmalina Complex and Paciência Complex.

#### Onças de Pitangui Project

The Onças de Pitangui Project is located approximately 110 kilometers northwest of the city of Belo Horizonte in the state of Minas Gerais, Brazil. It encompasses mineral exploration licenses and license applications that cover the Pitangui Greenstone Belt, strategically located in proximity to our primary operational assets in the Iron Quadrangle.

The Company’s annual Mineral Reserves and Mineral Resources (MRMR) statement for 2023 was announced on February 26, 2024, including 448,000 ounces of indicated mineral resources and 379,000 ounces of inferred mineral resources for the Onças de Pitangui Project.

#### Acurui Project

The Acurui Project was an exploration joint venture between Jaguar and IAMGOLD, where Jaguar was the operator. The project is composed of exploration tenements located near the Company’s Paciência complex in the iron quadrangle. After the conclusion of the IAMGOLD Brazil acquisition, the Company owns 100% of Acurui project. For further information regarding the Acurui project, please refer to the Company’s news releases dated August 26, 2020, August 30, 2021, and August 2, 2023 which are available on SEDAR+.

## QUALIFIED PERSON

Scientific and technical information contained in this MD&A have been reviewed and approved by Jonathan Victor Hill, BSc (Hons) (Economic Geology - UCT), FAUSIMM, Senior Expert Advisor Geology and Exploration to the Jaguar Mining Management Committee, who is also an employee of Jaguar Mining Inc., and is a “qualified person” as defined by National Instrument 43-101 - *Standards of Disclosure for Mineral Projects*. A copy of the Company’s most recent NI 43-101 technical report was filed on SEDAR+ on February 2, 2024.

## OUTSTANDING SHARE DATA

The following are the issued and outstanding common shares and numbers of shares issuable under share-based compensation and warrants:

	As at March 25, 2024
Issued and outstanding common shares	79,066,665
Stock options	993,792
Deferred share units	843,455
<b>Total</b>	<b>80,903,912</b>

## NON-GAAP PERFORMANCE MEASURES

The Company has included the following non-GAAP performance measures in this document: net cash and cash equivalents, cash operating costs per tonne of ore processed, cash operating costs per ounce of gold sold, all-in sustaining costs per ounce of gold sold, cash operating margin per ounce of gold sold, all-in sustaining margin per ounce of gold sold, average realized gold price per ounce of gold sold, sustaining capital expenditures, non-sustaining capital expenditures, free cash flow, earnings before interest, taxes, depreciation and amortization (EBITDA), adjusted EBITDA, adjusted EBITDA per share and working capital. These non-GAAP performance measures do not have any standardized meaning prescribed by IFRS and, therefore, may not be comparable to similar measures presented by other companies.

The Company believes that, in addition to conventional measures prepared in accordance with IFRS, certain investors use non-GAAP performance measures to evaluate the Company's performance. Accordingly, they are intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. More specifically, Management believes that these figures are useful indicators to investors and management of a mine's performance as they provide: (i) a measure of the mine's cash margin per ounce, by comparison of the cash operating costs per ounce to the price of gold; (ii) the trend in costs as the mine matures; and (iii) an internal benchmark of performance to allow for comparison against other mines. The definitions of these performance measures and reconciliation of the non-GAAP measures to reported IFRS measures are outlined below.

### Reconciliation of Cash Operating Costs, All-In Sustaining Costs and All-In Costs per Ounce Sold

(\$ thousands, except where indicated)	Three months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
Operating costs	\$ 19,707	\$ 21,439	\$ 79,384	\$ 84,229
General & administration expenses	1,827	1,636	7,358	6,925
Corporate stock-based compensation	51	77	884	1,163
Sustaining capital expenditures <sup>1</sup>	6,481	10,289	28,534	26,417
All-in sustaining cash costs	28,066	33,441	116,160	118,734
Reclamation (operating sites)	(741)	-	(2,032)	8
<b>All-in sustaining costs</b>	<b>\$ 27,325</b>	<b>\$ 33,441</b>	<b>\$ 114,128</b>	<b>\$ 118,742</b>
Non-sustaining capital expenditures	5,030	5,934	15,816	23,804
Exploration and evaluation costs (greenfield)	544	1,543	3,295	6,037
Reclamation (non-operating sites)	(460)	-	(1,261)	3
Care and maintenance (non-operating sites)	196	162	734	609
<b>All-in costs</b>	<b>\$ 32,635</b>	<b>\$ 41,080</b>	<b>\$ 132,712</b>	<b>\$ 149,195</b>
Ounces of gold sold	18,098	20,940	70,525	80,050
<b>Cash operating costs per ounce sold<sup>2</sup></b>	<b>\$ 1,089</b>	<b>\$ 1,024</b>	<b>\$ 1,126</b>	<b>\$ 1,052</b>
<b>All-in sustaining costs per ounce sold<sup>2</sup></b>	<b>\$ 1,510</b>	<b>\$ 1,597</b>	<b>\$ 1,618</b>	<b>\$ 1,483</b>
<b>All-in costs per ounce sold<sup>2</sup></b>	<b>\$ 1,803</b>	<b>\$ 1,962</b>	<b>\$ 1,882</b>	<b>\$ 1,864</b>
<b>Average realized gold price</b>	<b>\$ 1,982</b>	<b>\$ 1,724</b>	<b>\$ 1,936</b>	<b>\$ 1,780</b>
<b>Cash operating margin per ounce sold</b>	<b>\$ 893</b>	<b>\$ 700</b>	<b>\$ 810</b>	<b>\$ 728</b>
<b>All-in sustaining margin per ounce sold</b>	<b>\$ 472</b>	<b>\$ 127</b>	<b>\$ 318</b>	<b>\$ 297</b>

<sup>1</sup> Capital expenditures are included in our calculation of all-in sustaining costs and all-in costs.



<sup>2</sup> Cash operating costs, all-in sustaining costs and all-in costs are all non-GAAP financial performance measures with no standard definition under IFRS. Result may not calculate due to rounding.

Cash operating costs per ounce sold is calculated by dividing operating costs per the consolidated statement of operations and comprehensive income (loss) by the gold ounces sold during the applicable period. Operating expenses include mine site operating costs such as mining, processing and administration as well as royalties, but excludes depreciation.

All-in sustaining cost comprise all the expenditures that are required to produce an ounce of gold from current operations. While there is no standardized meaning of the measure across the industry, the Company's definition of the all-in sustaining costs conforms to that set out by the World Gold Council in its guidance dated June 27, 2013. The World Gold Council is a non-regulatory, non-profit organization established in 1987 whose members include global senior mining companies. The Company believes that this measure will be useful to external users in assessing operating performance and the ability to generate free cash flow from current operations.

The Company defines all-in sustaining costs as the sum of operating cash costs, sustaining capital (capital required to maintain current operations at existing levels), corporate administration costs and sustaining exploration. All-in sustaining costs exclude capital expenditures for significant improvements at existing operations deemed to be expansionary in nature, exploration and evaluation related to growth projects, financing costs, debt repayments and taxes.

In the gold mining industry, average realized gold price per ounce sold is a common performance measure that does not have any standardized meaning; however, the most comparable measure is gold revenue as calculated and prepared in accordance with IFRS. The measure is intended to help investors to evaluate the revenue earned in a period from each ounce of gold sold.

#### Reconciliation of Cash Operating Costs, All-In Sustaining Costs per Ounce Sold by Mine Complex/Site

(\$ thousands, except where indicated)	Q4 2023	Q3 2023	Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022	Q1 2022
<b>Turmalina Complex</b>								
Operating costs	\$ 9,050	\$ 9,068	\$ 8,568	\$ 10,079	\$ 9,016	\$ 10,816	\$ 9,122	\$ 10,654
Sustaining capital expenditures	3,293	2,773	5,122	3,880	4,365	2,928	3,063	2,934
<b>All-in sustaining costs<sup>1</sup></b>	<b>\$ 12,343</b>	<b>\$ 11,841</b>	<b>\$ 13,690</b>	<b>\$ 13,959</b>	<b>\$ 13,381</b>	<b>\$ 13,744</b>	<b>\$ 12,185</b>	<b>\$ 13,588</b>
Ounces of gold sold	8,455	8,464	7,661	8,870	9,269	10,867	7,643	8,073
<b>Cash operating cost (per oz. sold)<sup>1</sup></b>	<b>\$ 1,070</b>	<b>\$ 1,071</b>	<b>\$ 1,118</b>	<b>\$ 1,136</b>	<b>\$ 973</b>	<b>\$ 995</b>	<b>\$ 1,194</b>	<b>\$ 1,320</b>
<b>All-in sustaining cost (per oz. sold)<sup>1,2</sup></b>	<b>\$ 1,460</b>	<b>\$ 1,399</b>	<b>\$ 1,787</b>	<b>\$ 1,574</b>	<b>\$ 1,444</b>	<b>\$ 1,265</b>	<b>\$ 1,594</b>	<b>\$ 1,683</b>

(\$ thousands, except where indicated)	Q4 2023	Q3 2023	Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022	Q1 2022
<b>Pilar Mine</b>								
Operating costs	\$ 10,657	\$ 10,535	\$ 10,894	\$ 10,533	\$ 12,423	\$ 11,282	\$ 11,953	\$ 8,963
Sustaining capital expenditures	3,059	3,140	3,061	3,216	5,810	2,653	1,458	2,774
<b>All-in sustaining costs<sup>1</sup></b>	<b>\$ 13,716</b>	<b>\$ 13,675</b>	<b>\$ 13,955</b>	<b>\$ 13,749</b>	<b>\$ 18,233</b>	<b>\$ 13,935</b>	<b>\$ 13,411</b>	<b>\$ 11,737</b>
Ounces of gold sold	9,643	8,038	9,256	10,138	11,671	11,254	12,839	8,434
<b>Cash operating cost (per oz. sold)<sup>1</sup></b>	<b>\$ 1,105</b>	<b>\$ 1,311</b>	<b>\$ 1,177</b>	<b>\$ 1,039</b>	<b>\$ 1,064</b>	<b>\$ 1,002</b>	<b>\$ 931</b>	<b>\$ 1,063</b>
<b>All-in sustaining cost (per oz. sold)<sup>1,2</sup></b>	<b>\$ 1,422</b>	<b>\$ 1,701</b>	<b>\$ 1,508</b>	<b>\$ 1,356</b>	<b>\$ 1,562</b>	<b>\$ 1,238</b>	<b>\$ 1,045</b>	<b>\$ 1,392</b>

<sup>1</sup> Cash operating costs and all-in sustaining costs are all non-GAAP financial performance measures with no standard definition under IFRS. Results of individual mines may not add up to the consolidated numbers due to rounding.

<sup>2</sup> The calculation by mine site does not include allocation of the Corporate G&A - Toronto and Belo offices.

## Reconciliation of Cash Operating Costs in Brazilian Real per tonne by Mine Complex/Site

(\$ thousands, except where indicated)	Q4 2023	Q3 2023	Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022	Q1 2022
<b>Turmalina Complex</b>								
Operating Costs	\$ 9,050	\$ 9,068	\$ 8,568	\$ 10,079	\$ 9,016	\$ 10,816	\$ 9,122	\$ 10,654
Gold (oz.) sold	8,455	8,464	7,661	8,870	9,269	10,867	7,643	8,073
Cash operating cost (per oz. sold) <sup>1</sup>	\$ 1,070	\$ 1,071	\$ 1,118	\$ 1,136	\$ 973	\$ 995	\$ 1,194	\$ 1,320
Tonnes of ore processed (t)	99,000	101,000	100,000	108,000	101,000	105,000	101,000	86,000
Average foreign exchange rate (BRL - USD) <sup>1</sup>	\$ 4.96	\$ 4.95	\$ 4.95	\$ 5.20	\$ 5.26	\$ 5.25	\$ 4.93	\$ 5.23
Cash operating cost (R\$ per tonne) <sup>1</sup>	\$ 453	\$ 444	\$ 424	\$ 485	\$ 470	\$ 541	\$ 445	\$ 648

(\$ thousands, except where indicated)	Q4 2023	Q3 2023	Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022	Q1 2022
<b>Pilar Mine</b>								
Operating Costs	\$ 10,657	\$ 10,535	\$ 10,894	\$ 10,533	\$ 12,423	\$ 11,282	\$ 11,953	\$ 8,963
Gold (oz.) sold	9,643	8,038	9,256	10,138	11,671	11,254	12,839	8,434
Cash operating cost (per oz. sold) <sup>1</sup>	\$ 1,105	\$ 1,311	\$ 1,177	\$ 1,039	\$ 1,064	\$ 1,002	\$ 931	\$ 1,063
Tonnes of ore processed (t)	96,000	107,000	103,000	98,000	108,000	111,000	127,000	98,000
Average foreign exchange rate (BRL - USD) <sup>1</sup>	\$ 4.96	\$ 4.95	\$ 4.95	\$ 5.20	\$ 5.26	\$ 5.25	\$ 4.93	\$ 5.23
Cash operating cost (R\$ per tonne) <sup>1</sup>	\$ 551	\$ 487	\$ 524	\$ 559	\$ 605	\$ 533	\$ 464	\$ 478

<sup>1</sup> Cash operating cost (per oz. sold), average foreign exchange rate (BRL - USD), and cash operating cost (R\$ per tonne) are non-GAAP financial performance measures with no standard definition under IFRS. Refer to the non-GAAP Financial Performance Measures section of the MD&A.

## Reconciliation of Sustaining Capital and Non-Sustaining Capital Expenditures

(\$ thousands)	Three months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
Sustaining capital <sup>1</sup>				
Primary development	\$ 4,454	\$ 5,778	\$ 19,075	\$ 16,830
Brownfield exploration	556	220	1,960	1,097
Mine-site sustaining	1,342	4,177	6,511	8,059
Engineering	-	-	-	-
Equipment	1,342	4,177	6,511	8,059
Other sustaining capital <sup>2</sup>	129	114	988	431
<b>Total sustaining capital<sup>1</sup></b>	<b>6,481</b>	<b>10,289</b>	<b>28,534</b>	<b>26,417</b>
Non-sustaining capital (including capital projects) <sup>1</sup>				
Mine-site non-sustaining	3,632	4,348	11,804	19,991
Asset retirement obligation - non-sustaining <sup>2</sup>	1,398	1,446	4,015	3,588
Other non-sustaining capital <sup>1</sup>	-	140	(3)	226
<b>Total non-sustaining capital<sup>1</sup></b>	<b>5,030</b>	<b>5,934</b>	<b>15,816</b>	<b>23,805</b>
<b>Total capital expenditures</b>	<b>\$ 11,511</b>	<b>\$ 16,223</b>	<b>\$ 44,350</b>	<b>\$ 50,222</b>

<sup>1</sup> Sustaining and non-sustaining capital are non-GAAP financial measures with no standard definition under IFRS. Refer to the non-GAAP Financial Performance Measures section of the MD&A. Capital expenditures are included in the calculation of all-in sustaining costs and all-in costs.

<sup>2</sup> Asset retirement obligation - non-sustaining is related to expenditures with dam closing projects. Payments related to the Company asset retirement obligation are classified as operating activities in accordance with IFRS financial measures.

## Reconciliation of Free Cash Flow

The Company uses free cash flow<sup>1</sup> to supplement information in its consolidated financial statements. Free cash flow is a non-GAAP financial performance measure with no standard definition under IFRS, and therefore it may not be comparable to similar measures employed by other companies. The Company believes that, in addition to conventional measures prepared in accordance with IFRS, the Company and certain investors and analysts use free cash flow to evaluate the Company's performance and assess its capacity to meet non-discretionary cash obligations.

Free cash flow from operations is defined as cash provided from operating activities, less changes in long-term sustaining capital expenditures, adding back the impact from expenditures against the asset retirement obligation. This measure is used by the Company and investors to measure the cash flow available to fund the Company's growth through investments and capital expenditures.

(\$ thousands, except where indicated)	Three months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
Cash generated from operating activities	\$ 9,355	\$ 10,352	\$ 36,039	\$ 40,765
Adjustments				
Asset Retirement Obligation	1,398	1,446	4,015	3,588
Sustaining capital expenditures <sup>2</sup>	(6,481)	(10,289)	(28,534)	(26,417)
<b>Free cash flow</b>	<b>\$ 4,272</b>	<b>\$ 1,509</b>	<b>\$ 11,520</b>	<b>\$ 17,936</b>
Ounces of gold sold	18,098	20,940	70,525	80,050
<b>Free cash flow per ounce sold</b>	<b>\$ 236</b>	<b>\$ 72</b>	<b>\$ 163</b>	<b>\$ 224</b>

<sup>1</sup> This is a non-GAAP financial performance measure with no standard definition under IFRS.

<sup>2</sup> Further detail on the sustaining capital expenditures composition can be found on the reconciliation of sustaining capital and non-sustaining capital expenditures in the non-GAAP reconciliation.

## Reconciliation of Net Income to EBITDA and Adjusted EBITDA

(\$ thousands, except where indicated)	Three months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
Net Income	\$ 10,697	\$ 11,525	\$ 15,854	\$ 21,440
Income tax expense	(4,412)	1,884	(995)	5,426
Finance costs	840	617	3,368	2,581
Depreciation and amortization	6,010	5,248	24,747	20,252
<b>EBITDA<sup>1</sup></b>	<b>\$ 13,135</b>	<b>\$ 19,274</b>	<b>\$ 42,974</b>	<b>\$ 49,699</b>
Impairment (reversal)	(3,917)	(10,661)	(3,917)	(10,661)
Changes in other provisions and VAT taxes	84	1,283	1,049	1,188
Foreign exchange loss	1,426	1,022	3,031	1,008
Stock-based compensation	51	77	884	1,163
<b>Adjusted EBITDA<sup>1</sup></b>	<b>\$ 10,779</b>	<b>\$ 10,995</b>	<b>\$ 44,021</b>	<b>\$ 42,397</b>
Weighted average outstanding shares	79,066,665	72,452,927	74,596,125	72,461,530
<b>Adjusted EBITDA per share<sup>1</sup></b>	<b>\$ 0.14</b>	<b>\$ 0.15</b>	<b>\$ 0.59</b>	<b>\$ 0.59</b>

<sup>1</sup> This is a non-GAAP financial performance measure with no standard definition under IFRS.

EBITDA is earnings before finance expense, current and deferred income tax expense and depreciation and amortization. Adjusted EBITDA excludes from EBITDA the results of the impact of changes in other provisions and VAT, foreign-exchange loss/(gain), Stock-based compensation and financial instruments loss.

## FINANCIAL RISK MANAGEMENT AND FINANCIAL INSTRUMENTS

The Company's activities expose it to a variety of financial instrument risks, including but not limited to: credit risk, liquidity risk, currency risk, interest rate risk, inflation risk and price risk.

### a) Credit risk

Credit risk associated with financial assets and royalty interests arises from cash and cash equivalents held with banks, recoverable taxes refundable from tax authorities, and other accounts receivable due to credit exposure to customers and counterparties to sales agreements. The credit risk is limited to the carrying amount on the statement of financial position.

The Company is exposed to credit-related losses in the event of non-performance by counterparty to recoverable tax claims and sales agreements but does not expect any counterparties to fail to meet their obligations. The Company's cash and cash equivalents are held through large financial institutions in Brazil, Canada and the United States of America. The Company manages its credit risk by entering into transactions with high-credit quality counterparties, limiting the amount of exposure to each counterparty where possible, and monitoring the financial condition of the counterparties.

### b) Liquidity risk

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities that are settled by delivering cash or another financial asset. The Company's approach to managing this risk is to ensure sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage.

To manage its liquidity risk, the Company undergoes an in-depth budgeting process each year which is supplemented by a continuous detailed cash forecasting process. Future financing requirements, if any, will depend on a number of factors that are difficult to predict and are often beyond the control of the Company. The main factors are the realized price of gold received for gold produced from the Company's operating mines and the operating and capital costs of those mines. The Company's financial liabilities and other commitments are listed in the December 31, 2023, audited consolidated financial statements note 23.

### c) Derivative financial instruments

The Company assesses its financial instruments and non-financial contracts on a regular basis to determine the existence of any embedded derivatives that would be required to be accounted for separately at fair value and to ensure that any embedded derivatives are accounted for in accordance with the Company's policy. On an ongoing basis, the Company evaluates its price risk and currency risk and, when envisioned to be beneficial, engages in derivative financial instruments to manage these risks, including gold forward contracts, gold price collar contracts, gold call option contracts, and foreign exchange call and put option contracts. As at December 31, 2023, the Company did not have any derivative positions outstanding (December 31, 2022 – nil positions outstanding).

#### 1) Price risk

The Company is exposed to price risk with respect to gold prices on gold sales. The Company evaluates price risk and, when envisioned to be beneficial, may enter into hedge contracts to manage this risk and to secure future sales terms with customers. The Company does not use hedge accounting for these instruments, and gains and losses are recorded in earnings as fair value changes occur as a component of revenue. In the year ended December 31, 2023, the Company did not enter into any price hedge contracts (nil price derivative contracts in the year ended December 31, 2022).

#### 2) Currency risk

The Company is exposed to financial risk related to the fluctuation of foreign exchange rates. Financial instruments that impact the Company's net earnings due to currency fluctuations include: Brazilian-real and Canadian-dollar-denominated cash and cash equivalents, recoverable taxes, accounts payable and accrued liabilities, income taxes payable, reclamation and other provisions, deferred compensation liabilities, capital lease obligations in Euros, and other foreign exchange transactions.

i. Assets and liabilities with foreign exchange exposure

The exposure of the Company's financial assets and liabilities (and certain other assets and liabilities) to currency risk is as follows, as at December 31, 2023:

	Denominated in Brazilian reais	Denominated in Canadian dollars	Denominated in European euros
<b>Assets with FX exposure</b>			
Cash and cash equivalents	\$ 10,295	\$ 130	\$ -
Recoverable taxes	7,282	70	-
Other accounts receivable	310	-	-
Restricted cash	1,556	-	-
Derivative assets	-	-	-
<b>Total assets with FX exposure</b>	<b>\$ 19,443</b>	<b>200</b>	<b>-</b>
<b>Liabilities with FX exposure</b>			
Accounts payable and accrued liabilities	\$ 15,230	\$ 167	\$ -
Lease liabilities	1,230	-	349
Current tax liability	1,381	-	-
Reclamation provision	27,484	-	-
Legal and other provisions	8,350	-	-
Other liabilities	-	-	-
<b>Total liabilities with FX exposure</b>	<b>53,675</b>	<b>167</b>	<b>349</b>
<b>Net assets/(liabilities) with FX exposure</b>	<b>\$ (34,232)</b>	<b>\$ 33</b>	<b>\$ (349)</b>

The table below summarizes a sensitivity analysis for significant unsettled currency risk exposures with respect to the Company's financial instruments (and certain other assets and liabilities) over FY 2023 with all other variables held constant. It shows how income before taxes would have been affected by 10% changes in the foreign exchange rate.

Exchange Rates	Change for Sensitivity Analysis	Gain/(loss) of change to 2023 Foreign Exchange
USD per Brazilian real	10% increase	\$ 3,112
USD per Brazilian real	10% decrease	(3,112)
USD per Canadian dollar	10% increase	(3)
USD per Canadian dollar	10% decrease	3
USD per European euro	10% increase	(32)
USD per European euro	10% decrease	32

**d) Interest rate risk**

The Company is potentially exposed to interest rate risk on its outstanding borrowings and short-term investments. The Company managed its risk by entering into agreements with fixed interest rates on all of its notes payable with interest rates ranging from 6.7% to 6.9% per annum.

**e) Inflation risk**

The Company is exposed to risk with respect to inflation. Inflation risk refers to the potential for rising prices in an economy to erode the value of the purchasing power of the Company's cash over time. Brazil had inflation of 4.62% in 2023 and 5.79% in 2022. In Canada, the annual inflation rate was 4.19% in 2023 and 6.80% in 2022.

## f) Financial instruments

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In assessing the fair value of a particular contract, the market participant would consider the credit risk of the counterparty to the contract. Consequently, when it is appropriate to do so, the Company adjusts its valuation models to incorporate a measure of credit risk.

The fair value of the following financial assets and liabilities approximate their carrying amount due to the limited terms of these instruments:

- a. Cash and cash equivalents
- b. Restricted cash
- c. Other accounts receivable
- d. Accounts payable and accrued liabilities
- e. Notes payable
- f. Other provisions

### Fair value estimation:

The Company categorizes each of its fair value measurements in accordance with a fair-value hierarchy. The fair value hierarchy establishes three levels to classify the inputs to valuation techniques used to measure fair value.

- a. Level 1 – quoted prices (unadjusted) of identical instruments in active markets that the reporting entity has the ability to access at the measurement date.
- b. Level 2 – inputs are quoted prices of similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, inputs other than quoted prices used in a valuation model that are observable for that instrument, and inputs that are derived principally from or corroborated by observable market data by correlation or other means.
- c. Level 3 – one or more significant inputs used in a valuation technique that are unobservable for the instruments.

Determination of fair value and the resulting hierarchy requires the use of observable market data whenever available. The classification of a financial instrument in the hierarchy is based upon the lowest level of input that is significant to the measurement of fair value.

The fair values of the Company's financial assets and liabilities approximate their carrying values at December 31, 2023 and 2022.

## g) Changes in liabilities arising from financing activities

	Changes from financing cash flows				Other changes				Balance as at December 31, 2023
	Balance as at January 1, 2023	Proceeds from debt issuance	Debt repayments	Interest paid	Interest expense	Lease liability additions	Foreign exchange (gain) loss	Other non- cash changes	
Notes payable	\$ 3,040	\$ 6,000	\$ (6,254)	\$ (186)	\$ 208	\$ -	\$ 24	\$ 463	\$ 3,295
Lease liabilities	3,964	-	(3,035)	(91)	211	1,400	96	-	2,545
	\$ 7,004	\$ 6,000	\$ (9,289)	\$ (277)	\$ 419	\$ 1,400	\$ 120	\$ 463	\$ 5,840

	Changes from financing cash flows				Other changes				Balance as at December 31, 2022
	Balance as at January 1, 2022	Proceeds from debt issuance	Debt repayments	Interest paid	Interest expense	Lease liability additions	Foreign exchange (gain) loss	Other non- cash changes	
Notes payable	\$ 3,027	\$ 6,000	\$ (6,000)	\$ (118)	\$ 131	\$ -	\$ -	\$ -	\$ 3,040
Lease liabilities	3,865	-	(2,621)	(80)	-	2,619	27	154	3,964
	\$ 6,892	\$ 6,000	\$ (8,621)	\$ (198)	\$ 131	\$ 2,619	\$ 27	\$ 154	\$ 7,004



## RISKS AND UNCERTAINTIES

The Company is subject to various business, financial and operational risks which could adversely affect the Company's future business, operations and financial condition, and could cause such future business, operations and financial condition to differ materially from the forward-looking statements and information contained in this MD&A and as described in the Cautionary Statement on Forward-Looking Information found in this document. The Company is subject to various risks, known and unknown, arising from factors within or outside of its control. This section describes certain risks and uncertainties that may have an adverse effect on the Company's business, operations and financial results.

The business of the Company involves significant risk due to the nature of mining, exploration and development activities. Certain risk factors, including but not limited to those listed below, are related to the mining industry in general, while others are specific to Jaguar. For a comprehensive discussion of the risks and uncertainties that may have an adverse effect on the Company's business, operations and financial results, refer to the Company's latest AIF, filed with Canadian securities regulatory authorities at [www.sedarplus.ca](http://www.sedarplus.ca).

### I. Risks Relating to the Mining and Gold Industries

#### **Gold prices are volatile, and there can be no assurance that a profitable market for gold will exist.**

Jaguar's business and profitability are significantly affected by the world market price of gold. Jaguar's gold production is sold into the spot market. Gold prices have fluctuated widely in recent years. These fluctuations can be material and can occur over short periods of time and are affected by numerous factors, all of which are beyond Jaguar's control. Gold prices are subject to changes resulting from a variety of factors including international economic and political trends, expectations of inflation, global and regional supply and demand and consumption patterns, stock levels maintained by producers and others, currency exchange fluctuations, inflation rates, interest rates and increased production due to improved mining and production methods. Future production from Jaguar's mining properties is dependent on gold prices that are adequate to make these properties economically viable.

If the market price of gold were to drop and prices realized by Jaguar were to decrease substantially and remain at such level for any substantial period, Jaguar's profitability and cash flow would be negatively affected. Jaguar may determine that it is not economically feasible to continue commercial production at some or all of its operations or the development of some or all of its current projects, as applicable, which could have an adverse impact on Jaguar's financial performance and results of operations. In such a circumstance, Jaguar may also curtail or suspend some or all of its exploration activities, with the result that depleted reserves are not replaced. In addition, the market value of Jaguar's gold inventory may be reduced, and existing reserves may be reduced to the extent that ore cannot be mined and processed economically at the prevailing prices.

#### **Mining is inherently risky and subject to conditions and events beyond Jaguar's control.**

Mining operations entail various types of risks and hazards, comprising:

- environmental hazards;
- unforeseen geological challenges such as such as rock bursts, structural cave-ins or slides;
- natural disasters like flooding and fires;
- labour disruptions;
- industrial accidents;
- unexpected mining dilution;
- metallurgical processing problems; and/or
- metal losses and periodic interruptions due to inclement or hazardous weather conditions.

The consequences of these risks may encompass property damage, facility destruction, personal harm, environmental damage, mining delays, increased production costs, financial losses and potential legal liability.



## **Mineral Reserve and Mineral Resources Estimates**

Jaguar's mineral reserves and mineral resources presented herein are estimates, and no assurance can be given that the estimated reserves and resources are accurate or that the indicated level of gold or any other mineral will be produced. Such estimates are, in large part, based on interpretations of geological data obtained from drill holes and other sampling techniques. Actual mineralization or formations may be different from those predicted. Further, it may take many years from the initial phase of drilling before production is possible, and during that time the economic feasibility of exploiting a discovery may change.

As Jaguar adheres to the disclosure standards mandated by Canadian securities law, its Annual Information Form included resource estimates as required by NI 43-101. These estimates for mineral resource on properties yet to commence production often rely on sparse and widely spaced drill hole data, which may not accurately reflect conditions between and around drill holes. Consequently, these estimates may need adjustment as additional drilling data is gathered, as actual production experience is gained or as modifications are made to its mining methods.

There can be no assurance Jaguar's mineral resources, in whole or in part, will qualify as reserves or be converted into reserves. Fluctuations in market price of gold alongside increased production and capital costs or reduced recovery rates, may render Jaguar's proven and probable reserves uneconomical to develop at a particular site or sites for periods of time, or may render mineral reserves containing relatively lower grade mineralization uneconomical. Moreover, short-term operating factors such as the need for the orderly development of ore bodies, the processing of varying ore grades, technical complexity of ore bodies, unusual or unexpected ore body formations, ore dilution or diverse metallurgical and other ore characteristics may lead to reserve reductions or unprofitability for Jaguar in certain accounting periods. Estimation on reserves may have to be recalculated based on actual production experiences, metal price fluctuations, or changes in underlying assumptions. Any of these factors may require Jaguar to reduce its mineral reserves (or ore reserves) and resources, which could have a negative impact on Jaguar's financial results.

### **Significant uncertainty exists related to inferred Mineral Resources.**

There is a risk that inferred Mineral Resources referred to in this MD&A cannot be converted into measured or indicated Mineral Resources. Due to the uncertainty relating to inferred Mineral Resources, there is no assurance that inferred Mineral Resources will be upgraded to resources with sufficient geological and grade continuity to constitute measured and indicated resources as a result of continued exploration.

### **Replacement of depleted reserve**

Jaguar's mineral reserves must be replaced to maintain production levels over the long-term. Reserves can be replaced by expanding known ore bodies, locating new deposits or making acquisitions. Exploration is highly speculative in nature and identifying new ore bodies is becoming increasingly difficult. Jaguar's exploration projects involve many risks and are frequently unsuccessful. Once a site with mineralization is discovered, it may take several years from the initial phases of drilling until production is possible, during which time the economic feasibility of production may change. Substantial expenditures are required to establish proven and probable reserves and to construct mining and processing facilities. As a result, there is no assurance that current or future exploration programs will be successful. Depletion of reserves may not be offset by discoveries or acquisitions and divestitures of assets could lead to a lower reserve base. Reserves estimated in accordance with NI 43-101 may also decrease due to economic factors such as the use of a lower metal price assumption. However, such a decline would not be a reduction in the actual mineral base of the Company, as the ounces or pounds removed from Jaguar's reserves due to the use of a lower gold assumption would be transferred to resources, preserving the option to access them in the future at higher gold prices. The mineral base of Jaguar will decline if reserves are mined without adequate replacement and Jaguar may not be able to sustain production to or beyond the currently contemplated mine lives, based on current production rates.

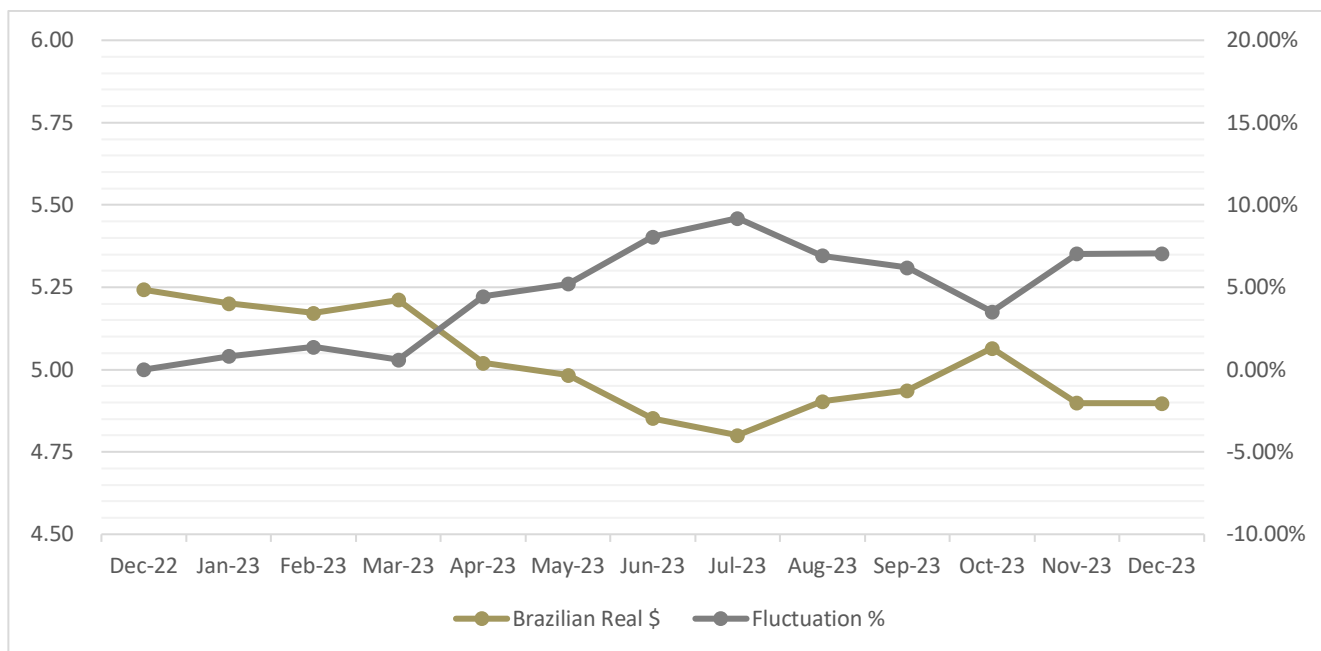
## II. Risks Relating to Jaguar’s Business

### Fluctuations in currency exchange rates may adversely affect Jaguar’s financial position and results of operations.

Fluctuations in currency exchange rates, particularly as applied to translate operating costs denominated in currencies other than US dollars, may significantly impact Jaguar’s financial position and results of operations. Jaguar generally sells its gold based on a US dollar price, but the vast majority of Jaguar’s operating expenses are incurred in non-US currencies. In addition, the appreciation of the Brazilian Real against the US dollar could further increase the dollar costs of gold production at Jaguar’s mining operations in Brazil, which could materially and adversely affect Jaguar’s earnings and financial condition.

#### US Dollar - Market Update

The following summarizes the movement in key currencies vis-à-vis the US dollar (source: Central Bank of Brazil):



During the year ended December 31, 2023, the Brazilian Real strengthened against the US dollar.

#### **Competition**

The gold mining industry is characterized by intense competition. Significant and increasing competition exists for gold and other mineral acquisition opportunities worldwide. Many competitors are well-established mining companies with significant financial resources, operational expertise, and technical capabilities than Jaguar. Consequently, Jaguar may face challenges in securing rights to desirable mining properties on terms it considers acceptable. Increased competition may also hinder Jaguar’s capacity to attract essential capital funding or acquire an interest in additional operations that would yield Mineral Reserves or result in commercial mining operations.

#### **Reliance on management and key personnel.**

Jaguar relies heavily on its management. Recruiting and retaining qualified personnel is critical to Jaguar’s success. The number of persons skilled in the acquisition, exploration and development of mining properties is limited, and competition for the services of such persons is intense. In addition, as Jaguar’s business activity grows, it may require additional key financial, administrative, technical and mining personnel. Jaguar does not maintain “key-man” insurance. The failure to attract and/or retain such personnel to manage growth effectively could have a material adverse effect on Jaguar’s business, prospects, financial condition and results of operations.

### Actual operating and financial results may differ from plans.

Capital and operating costs, production and economic returns, and other estimates contained in the feasibility studies and life of mine plans for Jaguar's projects may differ significantly from those anticipated by Jaguar's current studies and estimates, and there can be no assurance that Jaguar's actual capital and operating costs will not be higher than currently anticipated. In addition, delays to construction schedules may negatively impact the net present value and internal rates of return of Jaguar's mineral properties as set forth in the applicable feasibility studies.

Jaguar's cash operating costs per ounce sold<sup>1</sup> and all-in sustaining costs per ounce sold<sup>1</sup> for the years ending December 31, 2023, 2022, and 2021 were as follows:

		2023	2022	2021
Turmalina	Cash operating costs per ounce sold <sup>1</sup>	\$ 1,099	\$ 1,105	\$ 881
	All-in sustaining costs per ounce sold <sup>1</sup>	\$ 1,550	\$ 1,475	\$ 1,251
Pilar	Cash operating costs per ounce sold <sup>1</sup>	\$ 1,150	\$ 1,010	\$ 790
	All-in sustaining costs per ounce sold <sup>1</sup>	\$ 1,486	\$ 1,297	\$ 1,031
Consolidated	Cash operating costs per ounce sold <sup>1</sup>	\$ 1,126	\$ 1,052	\$ 831
	All-in sustaining costs per ounce sold <sup>1</sup>	\$ 1,618	\$ 1,483	\$ 1,215

<sup>1</sup> Cash operating costs per ounce sold, and all-in sustaining costs per ounce sold, are non-GAAP financial performance measures with no standard definition under IFRS. Refer to the Non-GAAP Financial Performance Measures section of the MD&A.

### Energy supply and costs.

Jaguar's operations are energy-intensive and rely upon third parties to supply the energy resources consumed in its operations. The prices for and availability of energy resources may be subject to change or curtailment, respectively, due to, among other things, new laws or regulations, imposition of new taxes or tariffs, interruptions in production by suppliers, worldwide price levels and market conditions. Disruptions in supply or increases in costs of energy resources could have a material adverse impact on Jaguar's financial condition and the results of operations.

### Title defects.

Jaguar's properties may be subject to prior recorded, and unrecorded agreements, transfers or claims, and title may be affected by, among other things, undetected defects. Title insurance is generally not available for mineral properties, and Jaguar's ability to ensure that it has obtained a secure claim to individual mining properties or mining concessions may be severely constrained. Jaguar has not conducted surveys of all of the claims in which it holds direct or indirect interests. A successful challenge to the precise area and location of these claims could result in Jaguar being unable to operate on its properties as permitted or unable to enforce its rights with respect to its properties. No assurance can be given that Jaguar's rights will not be revoked or significantly altered to its detriment. There can also be no assurance that third parties will not challenge or impede its rights.

### Brazil government regulation and political instability.

Jaguar holds mineral interests in Brazil that may be affected, in varying degrees, by political instability, government regulations relating to the mining industry and foreign investment therein, and the policies of other nations in respect to Brazil. Any changes in regulations or shifts in political conditions are beyond Jaguar's control and may adversely affect its business. Jaguar's operations may be affected in varying degrees by government regulations, including those with respect to restrictions on production, price controls, export controls, income taxes, expropriation of property, employment, land use, water use, environmental legislation and mine safety. The regulatory environment is in a state of continuous change, and new laws, regulations and requirements may be retroactive in their effect and implementation. Jaguar's operations may also be adversely affected in varying degrees by political and economic instability, economic or other sanctions imposed by other nations, terrorism, military repression, crime, extreme fluctuations in currency exchange rates and high inflation.

### **Brazil corruption perceptions index.**

The Company's principal operations and mineral properties are located in Brazil. There are additional business and financial risks inherent to doing business in Brazil compared to the United States or Canada. Since 1996, Transparency International has published the Corruption Perceptions Index ("CPI"), which annually ranks countries by their perceived levels of corruption, as determined by expert assessments and opinion surveys. The CPI ranks countries on a scale from 100 (very clean) to 0 (highly corrupt). In 2023, out of 180 countries in the world, Canada was ranked 12th with a CPI score of 76, the United States was ranked 24th with a CPI score of 69, and Brazil was ranked 104th with a CPI score of 36. The average score on the 2023 Corruption Perceptions Index was 43 out of 100. Anything below a score of 50 indicates governments are failing to tackle corruption and represents a challenge in those countries requiring extra attention by those who conduct business there.

Corruption does not only occur with the misuse of public, government or regulatory powers, it also can occur in a business's supplies, inputs and procurement functions (such as illicit rebates, kickbacks and dubious vendor relationships), as well as the inventory and product sales functions (such as inventory shrinkage or skimming). Employees, as well as external parties (such as suppliers, distributors, and contractors), have opportunities to commit procurement fraud, theft, embezzlement and other wrongs against the Company. While corruption, bribery and fraud risks can never be fully eliminated, the Company reviews and implements controls to reduce the likelihood of these irregularities occurring. The Company utilizes an internal auditor, third-party security services and closed-circuit video surveillance at its operations in Brazil.

### **Demanding environmental laws and regulations.**

All phases of Jaguar's operations are subject to environmental regulations in the jurisdictions in which it operates. These laws address emissions into the air, discharges into water, management of waste and hazardous substances, protection of natural resources and reclamation of lands disturbed by mining operations. Environmental legislation is evolving in a manner that will require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees.

In light of tailings dam accidents in Brazil in 2015 and 2019, federal lawmakers have proposed legislation aimed at addressing risks of future tailings dam failures. While there are a variety of measures under consideration, recently approved legislation at the federal and state level includes the potential increase of financial assurance requirements, increased fines and penalties for environmental damages and/or requiring the Company to further address risks to residents downstream. While regulations are pending on these issues, these laws and regulations may adversely affect Jaguar's operations or increase the costs associated with those operations.

The properties in which Jaguar holds interests may contain environmental hazards, which are presently unknown to it, and which were caused by previous or existing owners or operators of the properties. Because of this risk in 2021, Jaguar started the Management of Mined Areas procedure, a system that previews for three years the elaboration of recovery and closing plans for all properties where Jaguar developed mines before. With this plan, it will be possible to update the asset retirement obligation cost considering the potential contamination and other impacts. All these processes remained compliant with the new legislation in Brazil by the National Mining Agency (ANM) in through the end of 2023.

### **Cyber security.**

The Company's information assets and critical infrastructure may be subject to cyber security risks. The Company is subject to a variety of information technology and system risks as part of its normal course of operations, including potential breakdown, invasion, virus, cyber-attack, cyber-fraud, ransomware, security breach, and destruction or interruption of the Company's information technology systems by third parties or insiders. Despite Jaguar's security measures and controls, which are designed to mitigate these risks, a breach of its security measures and/or a loss of information could occur and result in a loss of material and confidential information and damage to reputation, breach of privacy laws and a disruption to the Company's business activities by limiting its capacity to effectively monitor Jaguar's operations. Jaguar's failure to appropriately maintain the security of the data it holds, whether a result of its own error or the malfeasance or errors of others, could harm Jaguar's reputation or trigger legal liabilities and increased costs.

### **Employment regulations and labour disruptions.**

Employees of Jaguar's principal projects are unionized, and the collective bargaining agreements between Jaguar and the unions that represent these employees must be renegotiated on an annual basis. Although Jaguar believes it has good relations with its employees and with their unions, production at Jaguar's mining operations is dependent upon the continuous efforts of Jaguar's employees. In addition, relations between Jaguar and its employees may be affected by changes in the scheme of labour relations that may be introduced by the relevant governmental authorities in whose jurisdictions Jaguar carries on business. Labour disruptions or any changes in labour or employment legislation or in the relationship between Jaguar and its employees may have a materially adverse effect on Jaguar's business, results of operations and financial condition. Labour litigation in Brazil is an ongoing exposure for all companies working in Brazil, especially in the mining sector. Jaguar has a number of labour claims, and the settlement of such claims may result in significant cash outflow in future.

### **Jaguar may be subject to litigation.**

All industries, including the mining industry, are subject to legal claims, with and without merit. The Company may become involved in legal disputes in the future. Defense and settlement costs can be substantial, even with respect to claims that have no merit. Due to the inherent uncertainty of the litigation process, there can be no assurance that the resolution of any particular legal proceeding will not have a materially adverse effect on the Company's financial position or results of operations.

Generally, the labour claims are due to disputed overtime, danger pay, wage parity, etc. Brazilian labour law is a complex system of statutes and regulations, which in general, favours employees of the Company. As such a key success factor in Brazilian-based operations is the minimization of the impact of labour claims.

### **Production and cost estimates.**

Jaguar prepares estimates of future production, total cash costs and capital costs of production for particular operations. No assurance can be given that such estimates will be achieved. Failure to achieve production or cost estimates or material increases in costs could have an adverse impact on Jaguar's future cash flows, profitability, results of operations and financial condition. Jaguar's actual production and costs may vary from estimates for a variety of reasons, including: actual ore mined varying from estimates of grade, tonnage, dilution and metallurgical and other characteristics; short-term operating factors relating to mineral or ore reserves, such as the need for sequential development of ore bodies and the processing of new or different ore grades; revisions to mine plans; unusual or unexpected ore body formations; risks and hazards associated with mining; and unexpected labour shortages or strikes.

### **Road link between Pilar Mine and the Caeté plant.**

Jaguar has material properties located in the state of Minas Gerais, Brazil. Typically, the state's wet season is from November to April. During the wet season, the properties and surrounding infrastructure may be subject to unpredictable weather conditions such as heavy rains, strong winds, and flash flooding. Pilar is located approximately 40 km by road from the Caeté plant. Ore from Pilar is hauled to the Caeté plant for processing. Ore haulage activities may be slowed or delayed as roads may be temporarily flooded or if the maintenance or provision of such infrastructure is impacted by other events. Any delays could adversely affect Jaguar's operations, financial condition, and results of operations. Jaguar has undertaken to mitigate the potential effects of the wet season by discussing alternative routes with the neighbouring communities.

### **Repatriation of earnings.**

There is no assurance that any country in which the Company carries on business, or may carry on business in the future, will not impose restrictions on the repatriation of earnings to a foreign jurisdiction.

### **Termination of mining concessions.**

The Company's mining concessions may be terminated in certain circumstances. Under the laws of Brazil, Mineral Resources belong to the federal government and governmental concessions are required to explore for, and exploit, Mineral Reserves. The Company will hold mining, exploration and other related concessions in each of the jurisdictions where the Company operates and where it will carry on development projects and prospects. The concessions the Company will hold in respect to its operations, development projects and prospects may be terminated under certain circumstances. Termination of any one

or more of the Company's mining, exploration or other concessions could have a material adverse effect on the Company's financial condition or results of operations.

#### **Compliance with anti-corruption laws.**

The Company's operations are governed by, and involve interaction with, many levels of government in Brazil. The Company is subject to various anti-corruption laws and regulations, such as the Canadian Corruption of Foreign Public Officials Act, which prohibits a company and its employees or intermediaries from bribing or making improper payments to foreign officials or other persons to obtain or retain business or gain some other business advantage. In addition, the Extractive Sector Transparency Measures Act recently introduced by the Canadian government contributes to global efforts to increase transparency and deter corruption in the extractive sector by requiring extractive entities active in Canada to publicly disclose, on an annual basis, specific payments made to all governments in Canada and abroad. According to Transparency International, Brazil is perceived as having fairly high levels of corruption relative to Canada. The Company cannot predict the nature, scope or effect of future regulatory requirements to which the Company's operations might be subject or the manner in which existing laws might be administered or interpreted.

In recent years, there has been a general increase in both the frequency of enforcement and the severity of penalties under such anti-corruption and anti-bribery laws, resulting in greater scrutiny and punishment of companies found in violation of such laws. Failure to comply with the applicable anti-corruption laws and regulations could expose the Company and its senior management to civil or criminal penalties or other sanctions, which could materially and adversely affect the Company's business, financial condition and results of operations. Likewise, any investigation of any alleged violations of the applicable anti-corruption legislation by Canadian or foreign authorities could also have an adverse impact on the Company's business, reputation, financial condition and results of operations. Although the Company has adopted policies to mitigate such risks, such measures may not be effective in ensuring that the Company, its employees or third-party agents will comply with such laws.

#### **Reliance on local advisors and consultants in foreign jurisdictions.**

The Company holds mining and exploration properties in Brazil. The legal and regulatory requirements in Brazil with respect to conducting mineral exploration and mining activities, banking systems and controls, as well as local business culture and practices, are different from those in Canada and the United States. The officers and directors of the Company must rely, to a great extent, on the Company's local legal counsel and local consultants retained by the Company in order to keep abreast of material legal, regulatory and governmental developments as they pertain to and affect the Company's business operations, and to assist the Company with its governmental relations. The Company must rely, to some extent, on those members of management and the Board who have previous experience working and conducting business in these countries in order to enhance its understanding of and appreciation for the local business culture and practices. The Company also relies on the advice of local experts and professionals in connection with current and new regulations that develop in respect of banking, financing, labour, litigation and tax matters in these countries. Any developments or changes in such legal, regulatory or governmental requirements or in local business practices are beyond the control of the Company. The impact of any such changes may adversely affect the business of the Company.

#### **Pandemic and infectious disease.**

An outbreak of infectious disease, pandemic or a similar public health threat, such as the COVID-19 outbreak and the response thereto, could adversely impact the Company, both operationally and financially. Supply chain disruptions could result in a reduction or interruption of the Company's operations, including mine shutdowns or suspensions. The inability to transport and/or refine and process the Company's products could have a materially adverse effect on the Company's future cash flows, earnings, results of operations and financial condition.



### **Climate volatility and climate change.**

Climate risks are typically seen in the form of extreme weather and weather-related events, such as tropical storms, wildfires, droughts, and flooding, which may affect the Company from time to time, particularly during Brazil's rainy season between November and April every year.

Recent increased attention regarding the risks of climate change may result in an increase in the stigmatization of the Company's industry (mineral resource development and mineral extraction and processing). This may result in reduced interest or investment participation by capital market participants and the Company, thereby making it more difficult for the Company to raise funding on terms that are acceptable to the Company. In addition, increased concerns about climate change and any negative sentiments about the Company's industry and sector may adversely affect the timing or ability to receive or maintain any required environmental permits. To address these risks, the Company considers the importance of environmental, social and governance (ESG) issues and outcomes in terms of the Company's business plans and activities, and their impacts on the Company's stakeholders. Although ESG considerations are embedded in the Company's current and future operational plans, the Company has not set a long-term emissions-reduction goal, and the Company does not have a formal decarbonization strategy.

### **Mining and insurance risks.**

Jaguar maintains insurance to cover some of the risks and hazards inherent to the underground mining business. The insurance is maintained in amounts that are believed to be reasonable depending on the circumstances surrounding the identified risk. No assurance can be given that such insurance will continue to be available, or that it will be available at economically feasible premiums, or that Jaguar will obtain or maintain such insurance. Jaguar's property, liability and other insurance may not provide sufficient coverage for losses related to these or other risks or hazards. In addition, Jaguar does not have coverage for certain environmental losses and other risks, as such coverage cannot be purchased at a commercially reasonable cost. The lack or insufficiency of insurance coverage could adversely affect Jaguar's cash flow and overall profitability.

### **Geotechnical challenges could impact profitability.**

Jaguar and the mining industry are facing continued geotechnical challenges associated with the aging of certain mines and the need to mine deeper pits and more complex deposits. This leads to more complex underground operations and increased exposure to geotechnical instability. As Jaguar's operations mature, the underground operations at certain sites are getting deeper. Seismic events can be a risk affecting the stability of underground infrastructure. No assurance can be given that unanticipated adverse geotechnical conditions, such as underground cave-ins and other ground-related instability, will not occur in the future or that such events will be detected in advance. Geotechnical instabilities can be difficult to predict and are often affected by risks beyond Jaguar's control, such as higher than average rainfall and seismicity.

The failure of tailings dam and storage facilities, and other impoundments at Jaguar's mine sites, could cause severe and potentially catastrophic damage to property, the environment, persons, and Jaguar's reputation. The Company regularly reviews and inspects all Jaguar-owned or controlled tailings storage facilities for compliance with applicable legal requirements and global best practices; however, there can be no assurance that these events will not occur in the future. Tailings storage-facility failures can result in limited access to mine sites, suspension of operations, production delays, government investigations, increased costs, as well as injuries and deaths in the most extreme cases. All of these could adversely impact Jaguar's results of operations and financial position.

### **Ontario Securities Commission ("OSC") statement of allegations involving a board member.**

On November 9, 2022, the Ontario Securities Commission ("OSC") issued a Statement of Allegations involving William Jeffrey Kennedy, along with other capital market participants, regarding a capital markets transaction that occurred in March 2017, approximately 2.5 years prior to Mr. Kennedy joining Jaguar's board of directors in September 2019. The full text of the allegations and other documents related to the proceeding can be found on the website of the Capital Markets Tribunal at: <https://www.capitalmarketstribunal.ca/en/proceedings/cormark-securities-inc-re>. Although none of the OSC's allegations involves any business or capital markets activities of Jaguar and although Jaguar is not a respondent and Jaguar does not expect to be participating in the proceeding, there is a risk that the allegations and/or the outcome of the proceeding could result in some reputational harm to Mr. Kennedy and, perhaps indirectly, bad optics for Jaguar. In the Statement of Allegations, the OSC has requested that the Capital Markets Tribunal order, among other sanctions, that Mr. Kennedy resign any position he



may hold as an officer or director of an issuer and that Mr. Kennedy be prohibited from becoming or acting as a director or officer of an issuer for a period to be specified by the Capital Markets Tribunal. Accordingly, there is a risk that Mr. Kennedy may be required to resign from his position as a chair and director of Jaguar at the conclusion of the proceedings. Jaguar will be paying close attention to the proceedings. Mr. Kennedy and the other respondents are defending the proceedings and the allegations have not been proven.

#### **Supply chain risk.**

In May 2023, An Act to enact the Fighting Against Forced Labour and Child Labour in Supply Chains Act and to amend the Customs Tariff was passed and came into force on January 1, 2024. Pursuant to the new legislation, any company that is subject to the reporting requirements, including the Company, is required to conduct certain due diligence on its supply chains and to file an annual report accordingly. While the Company is currently unaware of any forced or child labour in any of its supply chains, the increased scrutiny on the supply chains of Canadian companies could uncover the risk or existence of forced or child labour in a supply chain to which the Company has a connection, which could negatively impact the reputation of the Company.

## **SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGMENTS**

The Company's consolidated annual financial statements are prepared in conformity International Financial Reporting Standards ("IFRS") as issued by International Accounting Standards Board IASB. Jaguar's significant accounting policies, including a summary of current and future changes in accounting policies are disclosed in Note 3 in the consolidated annual financial statements.

The preparation of consolidated financial statements in conformity with IFRS as issued by IASB requires management to make estimates, judgments and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the period. Actual results could differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Certain accounting estimates depend on subjective or complex judgments about matters that may be uncertain, and changes in said estimates could materially impact these consolidated financial statements. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

#### **Accounting Changes**

On January 1, 2023, the Company adopted amendments to IAS 1 "Presentation of Financial Statements", amendments to IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors" and IAS 12 "Income Taxes" as disclosed in Note 3 of the audited consolidated financial statements. On May 23, 2023, the IASB issued amendments to IAS 12 "Income Taxes". Details of this accounting change are disclosed in Note 3 of the audited consolidated financial statements, which are available on the Company's website and on SEDAR+.

## **DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROLS OVER FINANCIAL REPORTING**

#### *Disclosure Controls and Procedures*

Disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed in reports filed or submitted by the Company under Canadian securities legislation is recorded, processed, summarized and reported within the time periods specified in those rules, and include controls and procedures designed to ensure that information required to be disclosed in reports filed or submitted by the Company under Canadian securities legislation is accumulated and communicated to management, including the President and Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO"), as appropriate, to permit timely decisions regarding required disclosure.

Management, including the CEO and CFO, believe that any disclosure controls and procedures or internal controls over financial reporting, no matter how well conceived and operated can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints,

and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, they cannot provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been prevented or detected. These inherent limitations include the realities that judgements in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by unauthorized override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Accordingly, because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Management, including the CEO and CFO, has evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures, as defined in the rules of the Canadian Securities Administrators, as at December 31, 2023.

#### *Internal Control over Financial Reporting*

Management, with the participation of the CEO and CFO, is responsible for establishing and maintaining adequate internal control over financial reporting ("ICFR") as defined in the rules of Canadian Securities Administrators. The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with IFRS as issued by the IASB. The Company's ICFR includes policies and procedures that:

- are designed to provide reasonable assurance that the Company's receipts and expenditures are made in accordance with authorizations of management and the Company's Directors;
- are designed to provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the Company's consolidated financial statements; and
- accounting records are maintained that accurately and fairly reflect, in reasonable detail, the transactions and dispositions of assets of the Company.

The Company's ICFR may not prevent or detect all misstatements because of inherent limitations. Additionally, projections of any evaluation of effectiveness for future periods are subject to the risk that controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with the Company's policies and procedures.

Management assessed the effectiveness of the Company's ICFR based on the criteria for effective internal control over financial reporting established in "Internal Control – Integrated Framework" issued by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission (2013). Management concluded that internal control over financial reporting was effective as at December 31, 2023 and that the material weakness existing as at December 31, 2022 and during the interim reporting periods for 2023 has been remediated as described below.

As at December 31, 2022 and during 2023, the following material weaknesses had been identified and included in Management's assessment:

During the preparation of the Company's financial statements for the year ended December 31, 2022, an error was identified in the determination of the carrying value in the impairment test performed for the MTL CGUs for the year ended December 31, 2021. This required a restatement of the financial statements for the year ended December 31, 2021, to reflect a \$10.1 million impairment charge (see note 27 of the audited consolidated financial statements for the year ended December 31, 2022). This error revealed a control deficiency such that there appeared to be a reasonable possibility that a material misstatement would not be prevented or detected on a timely basis in the consolidated financial statements. Management determined that this impairment charge error occurred due to a lack of review being performed over the impairment test at a level which was able to prevent errors and changes to the financial statements.

During 2023, the Company addressed the material weakness, which had earlier been identified in the fourth quarter of 2022, as described above. Since there were no indicators of impairment at the end of each interim reporting period during 2023, the control was not required to operate until the 2023 financial statements were being prepared. The Company's remedial measures that were adopted and implemented in 2023 focused on enhancing the asset and CGU valuation processes and internal controls. The Company implemented the following measures: (i) engagement of an external valuation specialist to collaborate in the formulation and review of the Company's existing valuation models (ii) implementation of a new valuation model equipped with automated checks between the various sources of information to enhance accuracy and reliability; and

(iii) enhancement of our review process integrating additional steps in the Company's internal control process and documentation. The financial statement close for the year ended December 31, 2023 included impairment testing which was thoroughly documented.

#### *Changes in Internal Control over Financial Reporting and Remediation*

Other than the earlier material weakness and complete remediation described above, there were no changes in the Company's internal control over financial reporting during the year ended December 31, 2023, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

#### *Limitations of Controls and Procedures*

The Company's management, including the CEO and CFO, believe that disclosure controls and procedures and internal control over financial reporting, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Furthermore, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, they cannot provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been prevented or detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by unauthorized override of the controls. The design of any control system is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed.

## **CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS**

Certain statements in this MD&A may constitute forward-looking information within the meaning of applicable Canadian securities legislation. Generally, forward-looking information can be identified by the use of forward-looking terminology such as, without limitation, "believes", "anticipates", "budget", "schedule", "forecasts", "intends", "projections", "upcoming", "plans" and/or the negatives thereof or other variations of such words and phrases (or comparable terminology), or by statements that certain actions, events or results "may", "will", "could", "would", "might", "be taken", "occur" or "be achieved". Certain statements, beliefs and opinions in this MD&A (including those contained in graphs, tables and charts), which reflect the Company's or, as appropriate, the Company's directors' and/or management's, current expectations and projections about future events, constitute forward-looking information.

This forward-looking information includes, but is not limited to, metal price assumptions, cash flow forecasts, projected capital and operating costs, metal or mineral recoveries, mine life and production rates, none of which are based on any preliminary economic assessment, pre-feasibility study or feasibility study.

Forward-looking information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements to be materially different from any estimated future results, performance or achievements expressed or implied by those forward-looking statements, and forward-looking statements are not guarantees of future performance.

The above-referenced risks, uncertainties and other factors include, but are not limited to, risks associated with: general economic conditions; adverse industry events; marketing costs; loss of markets; future legislative and regulatory developments, including the Company's ability to obtain the requisite regulatory and governmental approvals for its development projects and other operation on a timely basis; inability to access sufficient capital from internal and external sources, and/or inability to access sufficient capital on favorable terms; the mining industry generally; the Company's ability to procure mining equipment and operating supplies in sufficient quantities or on a timely basis; engineering and construction timetables and capital costs for the Company's development and expansion projects; unforeseen changes to the political stability or government regulation in Brazil; lack of certainty with respect to foreign legal systems; corruption and other factors that are inconsistent with the rule of law; the Company's ongoing relations with its employees, that are inconsistent with the rule of law; the Company's ongoing relations with its employees, affected communities, business partners and joint venture partners; income tax and regulatory matters; the ability of the Company to implement its business strategies and plans, including in regards to the Company's projects; competition; foreign currency exchange and interest rate fluctuations; and fluctuations in the price of gold. In addition, there are risks and hazards associated with the business of mineral exploration, development and mining, including environmental hazards, industrial accidents, unusual or unexpected formations, pressure, cave-ins, flooding and gold bullion or gold concentrate losses (and the risk of inadequate insurance, or inability to obtain insurance, to cover these risks). Additional risks are described in detail in the Company's Annual Information Form for the year

ended December 31, 2023, which will be filed on SEDAR+ under the profile of Jaguar Mining Inc. on or before March 31, 2024 and available at [www.sedarplus.ca](http://www.sedarplus.ca)

Notwithstanding the foregoing, readers are cautioned that the list of risks set forth herein and in the Company's disclosure documents is not exhaustive. Except as required by law, we disclaim any obligation to update or revise any forward-looking statements, whether as a result of new information, events or otherwise. No forward-looking statement or projections can be guaranteed. Accordingly, you should not place undue reliance on any forward-looking statements or information. It is not the intention to provide a complete or comprehensive analysis of the Company's financial or business prospects. The information contained in these materials should be considered in the context of the circumstances prevailing at the time and has not been, and will not be, updated to reflect material developments which may occur after the date these materials were prepared.

Where any opinion or belief is expressed in this MD&A, it is based on the assumptions and limitations mentioned herein and is an expression of present opinion or belief only. No warranties or representations can be made as to the origin, validity, accuracy, completeness, currency or reliability of the information. The Company disclaims and excludes all liability (to the extent permitted by law) for losses, claims, damages, demands, costs and expenses of whatever nature arising in any way out of or in connection with the information in this MD&A, its accuracy, completeness or by reason of reliance by any person on any of it.