



**MANAGEMENT'S DISCUSSION AND ANALYSIS**

**FOR THE YEAR ENDED  
DECEMBER 31, 2022**

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## MANAGEMENT’S DISCUSSION AND ANALYSIS FOR THE YEAR ENDED DECEMBER 31, 2022

*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, 2022, which includes the restatement for the year ended December 31, 2021, 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). More details about the restatement for the year ended December 31, 2021, can be found in the Disclosure Controls and Procedures section on this MD&A. 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.sedar.com](http://www.sedar.com)). 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 30, 2023.*

*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:*

- *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 2022</b>	January 1, 2022 – December 31, 2022	<b>FY 2021</b>	January 1, 2021 – December 31, 2021
<b>Q1 2022</b>	January 1, 2022 – March 31, 2022	<b>Q1 2021</b>	January 1, 2021 – March 31, 2021
<b>Q2 2022</b>	April 1, 2022 – June 30, 2022	<b>Q2 2021</b>	April 1, 2021 – June 30, 2021
<b>Q3 2022</b>	July 1, 2022 – September 30, 2022	<b>Q3 2021</b>	July 1, 2021 – September 30, 2021
<b>Q4 2022</b>	October 1, 2022 – December 31, 2022	<b>Q4 2021</b>	October 1, 2021 – December 31, 2021

## OUR BUSINESS

Jaguar Mining Inc. (“Jaguar” or the “Company”) is a Canadian-listed junior gold mining, development and exploration company operating in Brazil with three gold mining complexes, and a large land package with significant upside exploration potential. The Company’s principal operating assets are located in the 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 assets and operations are held by Jaguar’s wholly owned subsidiary Mineração Serras dos Oeste LTDA (“MSOL”).

## Q4 2022 & FY 2022 FINANCIAL & OPERATING SUMMARY

(\$ thousands, except where indicated)	Three months ended December 31,		Year ended December 31,	
	2022	2021 (Restated) <sup>1</sup>	2022	2021 (Restated) <sup>1</sup>
<b>Financial Data</b>				
Revenue	\$ 36,108	\$ 42,703	\$ 142,500	\$ 151,467
Operating costs	21,439	18,838	84,229	70,337
Depreciation	5,229	5,089	20,175	21,092
Gross profit	9,440	18,776	38,096	60,038
Net income <sup>1</sup>	11,525	3,552	21,440	24,055
Per share (“EPS”) <sup>1</sup>	0.16	0.05	0.30	0.33
EBITDA <sup>1</sup>	19,274	8,887	49,699	53,929
Adjusted EBITDA <sup>1,2,3</sup>	10,995	18,523	42,397	66,454
Adjusted EBITDA per share <sup>1,2,3</sup>	0.15	0.26	0.59	0.92
Cash operating costs (per ounce sold) <sup>2</sup>	1,024	802	1,052	831
All-in sustaining costs (per ounce sold) <sup>2</sup>	1,597	1,127	1,483	1,215
Average realized gold price (per ounce) <sup>2</sup>	1,724	1,819	1,780	1,790
Cash generated from operating activities	10,352	9,581	40,765	45,036
Free cash flow <sup>2</sup>	1,509	8,168	17,936	24,079
Free cash flow (per ounce sold) <sup>2</sup>	72	348	224	284
Sustaining capital expenditures <sup>2</sup>	10,289	6,015	26,417	25,671
Non-sustaining capital expenditures <sup>2</sup>	5,934	4,279	23,805	12,500
Total capital expenditures	16,223	10,294	50,222	38,171

<sup>1</sup> Further information about the restatement for the year ended December 31, 2021, can be found in the *Restatement – Impairment to Property, plant and equipment and Mineral exploration projects* section.

<sup>2</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>3</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,	
	2022	2021	2022	2021
<b>Operating Data</b>				
Gold produced (ounces)	21,116	22,903	80,968	83,878
Gold sold (ounces)	20,940	23,479	80,050	84,638
Primary development (metres)	983	1,174	3,659	4,438
Exploration development (metres)	583	284	2,649	284
Secondary development (metres)	1,538	1,189	5,264	4,835
Definition, infill, and exploration drilling (metres)	12,757	27,818	93,311	89,181

## Financial and Operational Summary

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

- Revenue for Q4 2022 decreased 15% to \$36.1 million, compared with \$42.7 million in Q4 2021, mainly due to reduction in ounces produced, which resulted in lower ounces of gold sold of 20,940 in Q4 2022 as compared to 23,479 ounces in Q4 2021, combined with a decrease in the average realized gold price of \$1,724 per ounce in Q4 2022 compared to \$1,819 per ounce in Q4 2021.
- Consolidated gold production decreased by 8% to 21,116 ounces in Q4 2022, compared to 22,903 ounces in Q4 2021, reflecting a decrease of 2% in tonnes of ore processed from 213,000 in Q4 2021 to 209,000 in Q4 2022, and combined with a 5% decrease in the average head grade of 3.61 g/t in Q4 2022, compared to 3.81 g/t in Q4 2021.
- Q4 2022 total development increased 17% to 3,104 metres, based on primary development metres of 983, exploration development of 583 metres, and secondary development metres of 1,538; compared to Q4 2021 development of 2,647 metres. These development rates provide sustainable progress on the ramp, ore development, as well as exploration drives. The exploration development metres are primarily the ramp development towards Faina ore body and development of the SouthWest area of Pilar.
- Operating costs totaled \$21.4 million an increase of 14% compared to \$18.8 million Q4 2021. The increase in operating costs came predominantly from a 29% increase in secondary development combined with the inflationary pressures of the first six months of the year.
- Net income for Q4 2022 increased to \$11.5 million, compared with \$3.5 million in Q4 2021, which includes an impairment reversal of \$10.7 million in Q4 2022 due to the increase in inferred resources, compared with an impairment charge of \$10.1 million in Q4 2021. Others major variances included a \$6.6 million decline in revenue, \$2.6 million increase in operating costs, \$1.6 million reduction on foreign exchange gain, and an income tax expense increase of \$1.9 million.

### **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<sup>1</sup> increased 28% to \$1,024 per ounce of gold sold in Q4 2022 compared to \$802 in Q4 2021 due to a 14% increase in operating costs as explained above, combined with an 11% decrease of ounces of gold sold in Q4 2022 with 20,940 ounces sold compared to 23,479 ounces sold in Q4 2021.
- All-in sustaining costs<sup>1</sup> increased to \$1,597 per ounce of gold sold in Q4 2022, compared to \$1,127 in Q4 2021 due to the cash cost increase as explained above, combined with higher sustaining capital expenditures in Q4 2022 primarily related to the investment in a new fleet of trucks for the Pilar Gold Mine and the rehabilitation of a ventilation raise at Pilar.
- Non-sustaining capital expenditures<sup>1</sup> increased 39% from \$4.3 million in Q4 2021 to \$5.9 million in Q4 2022. Expenditures include growth capital expenditures on the NorthWest Turmalina and SouthWest Pilar projects, the leach tailings filtration system at the CCA plant, as well as growth exploration drilling. The Company also spent \$0.7 million in Q4 2022 on tailings closure at Pilar, compared to \$0.5 million in Q4 2021.
- Free cash flow<sup>1</sup> in Q4 2022 was \$1.5 million and was based on operating cash flow plus asset retirement obligation expenditures, less capital expenditures, compared to \$8.2 million in Q4 2021. Free cash flow was \$72 per ounce of gold sold in Q4 2022 compared to \$348 in Q4 2021.

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

- As of December 31, 2022, the Company had a cash and cash equivalents position of \$25.2 million, compared to \$40.4 million on December 31, 2021.
- As of December 31, 2022, working capital was \$19.5 million, compared to \$32 million on December 31, 2021. The decrease in working capital is due to a reduction of 9% or \$4.3 million in operating cash flow generated during FY 2022, combined with a 62% increase in net cash used in investing activities from \$27 million in FY 2021 to \$43.7 million in FY 2022.

<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.

## FY 2023 Guidance

For 2023, the Company expects to produce approximately 84,000 to 88,000 ounces of gold at an All-In-Sustaining-Cost<sup>1</sup> range of \$1,275 to \$1,375 per ounce (1 USD = 5.20 BRL).

## REVIEW OF OPERATING AND FINANCIAL RESULTS

### Jaguar Mining Gold Production

	Q4 2022	Q4 2021	Change	FY 2022	FY 2021	Change
Tonnes of ore mined	215,000	216,000	(0%)	840,000	861,000	(2%)
Tonnes of ore processed	209,000	213,000	(2%)	837,000	856,000	(2%)
Average head grade (g/t) <sup>1</sup>	3.61	3.81	(5%)	3.43	3.47	(1%)
Average recovery rate (%)	87%	88%	(1%)	88%	88%	0%
Gold (oz.)						
Produced	21,116	22,903	(8%)	80,968	83,878	(3%)
Sold	20,940	23,479	(11%)	80,050	84,638	(5%)

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

Gold production decreased 8% in Q4 2022 with 21,116 ounces, compared to 22,903 ounces produced in Q4 2021, mainly due to a 5% decrease in the average head grade from 3.81 g/t in Q4 2021 to 3.61 g/t in Q4 2022, combined with a 2% decrease in the tonnes of ore processed from 213,000 in Q4 2021 to 209,000 in Q4 2022.

### Turmalina Gold Mine Complex

#### Turmalina Quarterly Production

	Q4 2022	Q3 2022	Q2 2022	Q1 2022	Q4 2021	Q3 2021	Q2 2021	Q1 2021
Tonnes of ore mined	107,000	106,000	100,000	85,000	101,000	105,000	96,000	108,000
Tonnes of ore processed	101,000	105,000	101,000	86,000	101,000	103,000	100,000	105,000
Average head grade (g/t) <sup>1</sup>	3.50	3.41	3.10	3.10	3.55	3.49	3.01	2.84
Average recovery rate (%)	86%	87%	88%	88%	88%	89%	88%	89%
Gold (oz.)								
Produced	9,803	9,966	8,816	7,581	10,142	10,265	8,581	8,517
Sold	9,269	10,867	7,643	8,073	10,476	10,057	8,846	8,427
Cash operating cost (per oz. sold) <sup>2</sup>	\$ 973	\$ 995	\$ 1,194	\$ 1,320	\$ 861	\$ 847	\$ 944	\$ 880
All-in sustaining cost (per oz. sold) <sup>2</sup>	\$ 1,444	\$ 1,265	\$ 1,594	\$ 1,683	\$ 1,201	\$ 1,252	\$ 1,388	\$ 1,167
Cash operating cost (R\$ per tonne) <sup>2</sup>	\$ 470	\$ 541	\$ 445	\$ 648	\$ 499	\$ 433	\$ 442	\$ 387

<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 2022, Turmalina produced 9,803 ounces of gold compared to 10,142 ounces in Q4 2021, a decrease of 3% or 339 ounces. The decrease in ounces produced was a result of a reduction in the average recovery rate from 88% in Q4 2021 to 86% in Q4 2022 combined with a decrease in the average head grade from 3.55 g/t in Q4 2021 to 3.50 g/t in Q4 2022. The cash operating cost per ounce sold<sup>1</sup> for Q4 2022 increased by 13%, or \$112, compared to Q4 2021 as a result of the decrease in gold sold of 9,269 ounces in Q4 2022 as compared to 10,476 ounces in Q4 2021.

<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.

## Turmalina Capital Expenditures

(\$ thousands)	Three months ended		Year ended	
	December 31,		December 31,	
	2022	2021	2022	2021
Sustaining capital <sup>1</sup>				
Primary development	\$ 2,515	\$ 2,557	\$ 8,910	\$ 9,572
Brownfield exploration	123	197	562	661
Mine-site sustaining	1,727	808	3,820	3,741
<b>Total sustaining capital<sup>1</sup></b>	<b>4,365</b>	<b>3,562</b>	<b>13,292</b>	<b>13,974</b>
Mine-site non-sustaining	2,547	926	12,415	2,770
Asset retirement obligation (Dam closing project)	503	1,585	948	3,474
<b>Total non-sustaining capital<sup>1</sup></b>	<b>3,050</b>	<b>2,511</b>	<b>13,363</b>	<b>6,244</b>
<b>Total capital expenditures</b>	<b>\$ 7,415</b>	<b>\$ 6,073</b>	<b>\$ 26,655</b>	<b>\$ 20,218</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.

(metres)	Three months ended		Year ended	
	December 31,		December 31,	
	2022	2021	2022	2021
Primary development	1,016	849	3,819	2,948
Primary development	642	732	2,309	2,831
Exploration development	374	117	1,510	117
Secondary development	833	577	3,009	2,505
<b>Total development</b>	<b>1,849</b>	<b>1,426</b>	<b>6,828</b>	<b>5,453</b>
Definition drilling	2,100	-	5,582	2,226
Infill drilling	2,216	4,834	12,161	16,047
Exploration drilling	1,745	12,145	36,228	28,429
<b>Total definition, infill, and exploration drilling</b>	<b>6,061</b>	<b>16,979</b>	<b>53,971</b>	<b>46,702</b>

### Mining

Located 1.5 hours 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. Turmalina is adapting its production profile to utilize the C orebodies on a much larger scale than in prior years. Planning and execution within the C orebodies have brought the average mining depth up significantly over the last two years.

The Turmalina Mine processed 101,000 ore tonnes in Q4 2022, which was in line with Q4 2021. The mine has seen an increase in the ratio of development tonnes as the C orebodies require more secondary development than was experienced in the A orebody. Current development rates in the C orebody structure are adequate to sustain production. Development is being completed by both Jaguar crews and the mining contractor Toniolo Busnello ("TBSA").

Q4 2022 total development of 1,849 metres was 30% higher than the 1,426 metres from Q4 2021, mainly due to the 374-metre exploration development in the Northwest project in Q4 2022. The Northwest Project is progressing well and on schedule, where two ramps are now being developed in order to connect Turmalina to Faina.

### Processing

The processing plant at Turmalina is onsite, and the C-zone portal is within 200 metres of the crusher. The plant begins with primary and secondary crushing that feeds 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 mined tonnage rates. The ball mills provide ground ore to the carbon-in-pulp ("CIP") circuit. Recoveries in 2022 were 87%. The plant operations continue working toward ongoing improvements to stabilize operations, focusing on cost reductions at the optimal possible rate. Tails are sent to a filtration system from which they can be provided to the paste plant for backfill, or to a dry stack area. As of Q4 2021, all tailings produced by the plant are being filtered and stacked in the dry stack facility already available in Turmalina.

## Caeté Gold Mine Complex

### Caeté Complex Quarterly Production

The Caeté Mining Complex (“Caeté”) includes the Pilar Gold Mine, 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 processing.

### Pilar Quarterly Production

	Q4 2022	Q3 2022	Q2 2022	Q1 2022	Q4 2021	Q3 2021	Q2 2021	Q1 2021
Tonnes of ore mined	108,000	111,000	124,000	99,000	115,000	119,000	113,000	104,000
Tonnes of ore processed (t)	108,000	111,000	127,000	98,000	112,000	119,000	114,000	102,000
Average head grade (g/t) <sup>1</sup>	3.71	3.51	3.73	3.27	4.04	3.68	3.65	3.37
Average recovery rate (%)	88%	89%	87%	89%	88%	88%	87%	87%
Gold (oz.)								
Produced	11,313	11,195	13,212	9,082	12,761	12,338	11,631	9,643
Sold	11,671	11,254	12,839	8,434	13,003	13,190	11,389	9,250
Cash operating cost (per oz. sold) <sup>2</sup>	\$ 1,064	\$ 1,002	\$ 931	\$ 1,063	\$ 755	\$ 823	\$ 791	\$ 790
All-in sustaining cost (per oz. sold) <sup>2</sup>	\$ 1,562	\$ 1,238	\$ 1,045	\$ 1,392	\$ 935	\$ 1,000	\$ 1,043	\$ 1,193
Cash operating cost (R\$ per tonne) <sup>2</sup>	\$ 605	\$ 533	\$ 464	\$ 478	\$ 490	\$ 477	\$ 418	\$ 393

<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 2022, Pilar produced 11,313 ounces of gold compared to 12,761 ounces in Q4 2021, a decrease of 11% or 1,448 ounces, mainly due to the 8% decrease in average head grade from 4.04 g/t in Q4 2021 to 3.71 g/t in Q4 2022, and a 4% decrease in tonnes of ore processed from 112,000 in Q4 2021 to 108,000 in Q4 2022. The cash operating cost per ounce sold for Q4 2022 increased 41% compared to Q4 2021 as a result of increased costs due to labour costs increasing by approximately 12%, combined with a 15% higher secondary development of 705 meters in Q4 2022, compared to 612 meters in Q4 2021, and also a 10% reduction in gold sold of 11,671 in Q4 2022 as compared to 13,003 ounces in Q4 2021.

### Pilar Capital Expenditures

(\$ thousands, except where indicated)	Three months ended		Year ended	
	December 31,		December 31,	
	2022	2021	2022	2021
Sustaining capital <sup>1</sup>				
Primary development	\$ 3,263	\$ 1,572	\$ 7,920	\$ 6,128
Brownfield exploration	97	119	535	381
Mine-site sustaining	2,450	646	4,239	4,760
<b>Total sustaining capital<sup>1</sup></b>	<b>5,810</b>	<b>2,337</b>	<b>12,694</b>	<b>11,269</b>
Mine-site non-sustaining	1,801	936	7,576	3,112
Asset retirement obligation (Dam closing project)	677	495	1,373	518
<b>Total non-sustaining capital<sup>1</sup></b>	<b>2,478</b>	<b>1,431</b>	<b>8,949</b>	<b>3,630</b>
<b>Total capital expenditures</b>	<b>\$ 8,288</b>	<b>\$ 3,768</b>	<b>\$ 21,643</b>	<b>\$ 14,899</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.



(metres)	Three months ended		Year ended	
	December 31,		December 31,	
	2022	2021	2022	2021
Primary development	550	609	2,489	1,774
Primary development	341	442	1,350	1,607
Exploration development	209	167	1,139	167
Secondary development	705	612	2,255	2,330
<b>Total development</b>	<b>1,255</b>	<b>1,221</b>	<b>4,744</b>	<b>4,104</b>
Definition drilling	1,585	1,084	5,231	1,961
Infill drilling	1,169	2,279	7,803	5,831
Exploration drilling	2,810	7,476	22,889	26,387
<b>Total definition, infill, and exploration drilling</b>	<b>5,564</b>	<b>10,839</b>	<b>35,923</b>	<b>34,179</b>

### Mining

Located two hours east of Belo Horizonte, Pilar is an underground mine that predominantly utilizes sub-level stoping as a mining method. Backfilling is completed using loose rockfill. The main ore block is in a fold structure of banded iron formation has been developed to the 16 level and appears to be going to depth. This area provides 65% to 75% of the mine's production, which is augmented by the Southwest zone from higher levels (ranging from level 2 to 9) in the mine.

The development rate in Q4 2022 increased by 3% with a total development of 1,255 metres in Q4 2022, compared to 1,221 metres in Q4 2021. The Company initiated Project Southwest in 2021 to increase access and expand the southwest ore system. The Project is on track and now contributing a modest amount of development ore to the mine's production. A ventilation issue reduced the development rate at the bottom of the mine, and provided the development capacity to increase the Southwest Project metres at the top part of the mine. In Q4 2022, 209 metres were developed in four different levels on Project Southwest, with 1,139 metres completed in 2022. Project Southwest has 282,000 ounces of measured, indicated, and inferred resources at approximately 4.0 g/t of gold (see AIF December 31, 2021).

### Processing

Ore is processed at Jaguar's Caeté processing plant, which is located approximately 40 km from Pilar. The plant utilizes gravity recovery which recovers about 50% of the gold, followed by a flotation circuit and leaching of the flotation concentrate in a CIP circuit. Historic recoveries have commonly ranged from 85% to 90%. The plant has capacity for approximately 2,200 tonnes per day, and has capacity for additional feed. The non-sulfide tails (flotation tails) are dry-stacked, and leach tails have been sent to the Moita Tails Dam. The construction and implementation of a filtration plant for the tails of the leaching process will allow these tails to also be dry stacked starting in 2023.

## CONSOLIDATED FINANCIAL RESULTS

### Quarterly Financial Review

	Q4 2022	Q3 2022	Q2 2022	Q1 2022	Q4 2021	Q3 2021	Q2 2021	Q1 2021
(\$ thousands except where indicated)		(Restated) <sup>1</sup>	(Restated) <sup>1</sup>	(Restated) <sup>1</sup>	(Restated) <sup>1</sup>			
Revenue	\$ 36,108	\$ 37,846	\$ 37,927	\$ 30,619	\$ 42,703	\$ 40,748	\$ 36,330	\$ 31,686
Operating cost	(21,439)	(22,098)	(21,075)	(19,617)	(18,838)	(19,373)	(17,365)	(14,761)
Depreciation	(5,229)	(5,384)	(4,866)	(4,696)	(5,089)	(5,608)	(5,636)	(4,759)
Gross profit	9,440	10,364	11,986	6,306	18,776	15,767	13,329	12,166
Net income (loss) <sup>1</sup>	11,525	6,475	9,478	(6,034)	3,552	11,415	2,980	6,109
Cash flows from operating activities	10,352	13,266	9,440	7,707	9,581	16,354	12,634	6,466
Total assets <sup>1</sup>	288,133	266,645	263,196	261,320	259,875	255,301	249,122	246,875
Total liabilities	71,112	61,221	62,067	67,857	58,581	55,237	58,554	54,660
Non-current financial liabilities	36,032	27,774	27,319	30,583	27,740	27,522	29,813	27,890
Current income taxes	1,884	999	146	2,396	-	3,491	2,552	1,894
Notes payable	\$ 3,040	\$ 3,026	\$ 3,032	\$ 3,038	\$ 3,027	\$ 3,023	\$ 3,037	\$ 3,017

<sup>1</sup> Further information about the restatement for the year ended December 31, 2021, can be found in the *Restatement – Impairment to Property, plant and equipment and Mineral exploration projects* section.

## Revenue

(\$ thousands, except where indicated)	Three months ended December 31,			Year ended December 31,		
	2022	2021	Change	2022	2021	Change
Revenue	\$ 36,108	\$ 42,703	(15%)	\$ 142,500	\$ 151,467	(6%)
Ounces sold	20,940	23,479	(11%)	80,050	84,638	(5%)
Average realized gold price <sup>1</sup>	\$ 1,724	\$ 1,819	(5%)	\$ 1,780	\$ 1,790	(1%)
Average market gold price <sup>1</sup>	\$ 1,726	\$ 1,795	(4%)	\$ 1,800	\$ 1,799	0%

<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.

Revenue for Q4 2022 decreased 15% compared to Q4 2021, primarily due to an 11% decrease in ounces of gold sold of 20,940 in Q4 2022 as compared to 23,249 ounces in Q4 2021, combined with a decrease in average realized gold price from \$1,819 per ounce in Q4 2021 to \$1,724 per ounce in Q4 2022. The market price of gold (London PM Fix) traded at an average market price of \$1,726 per ounce, varying between \$1,629 per ounce and \$1,824 per ounce, and closed at \$1,814 per ounce on December 31, 2022. The average realized price<sup>1</sup> of \$1,724 per ounce for Q4 2022 is in line with the average market price.

For the full year of 2022, revenue decreased 6% compared to the same period in 2021, primarily due to a 5% reduction in the ounces sold from 84,638 ounces in 2021 to 80,050 ounces in 2022, and also a 1% decrease in average realized gold price from \$1,790 per ounce in 2021 to \$1,780 per ounce in 2022. During 2022, the market price of gold (London PM Fix) traded in a range of \$1,629 per ounce to \$2,017 per ounce, averaged \$1,800 per ounce, and closed at \$1,814 per ounce on December 31, 2022. The average realized price<sup>1</sup> of \$1,780 per ounce for the full year of 2022, is in line with the average market price.

## Consolidated Production Costs

(\$ thousands, except where indicated)	Three months ended December 31,			Year ended December 31,		
	2022	2021	Change	2022	2021	Change
Direct mining and processing cost	\$ 20,381	\$ 17,423	17%	\$ 80,061	\$ 66,034	21%
Mining	12,154	10,454	16%	48,241	39,620	22%
Processing	8,227	6,969	18%	31,820	26,414	20%
Royalties, production taxes and others	1,058	1,415	(25%)	4,168	4,303	(3%)
Royalty expense and CFEM taxes	1,047	1,413	(26%)	4,143	4,565	(9%)
Others	11	2	450%	25	(262)	(110%)
<b>Total operating expenses</b>	<b>\$ 21,439</b>	<b>\$ 18,838</b>	<b>14%</b>	<b>\$ 84,229</b>	<b>\$ 70,337</b>	<b>20%</b>
Depreciation	5,229	5,089	3%	20,175	21,092	(4%)
<b>Total cost of sales</b>	<b>\$ 26,668</b>	<b>\$ 23,927</b>	<b>11%</b>	<b>\$ 104,404</b>	<b>\$ 91,429</b>	<b>14%</b>

Operating costs totaled \$21.4 million an increase of 14% compared to \$18.8 million in the fourth quarter of 2021. The increase in operating costs came predominantly from a 29% increase in secondary development combined with the inflationary pressures of the first six months of the year. Costs in US\$ were also impacted by the strengthening of the Brazilian Real versus the US dollar, with the average exchange rate during Q4 2022 being R\$5.26 per US dollar compared to R\$5.59 per US dollar in Q4 2021.

Total operating expenses increased 20% in FY 2022 compared to FY 2021, impacted by a 22% increase in mining costs and 20% in processing costs. The 22% increase in mining costs was driven by inflation of both labour and supply costs, and a 9% increase in secondary development (5,264 metres in FY 2022 vs 4,835 metres in FY 2021). The increase in secondary development occurred due to a mining design change at Turmalina where the C orebodies require an increase in secondary development. Processing costs increased by 20% in FY 2022 compared to FY 2021, primarily due to inflation in labour and all processing inputs. The strength of the Brazilian Real in FY 2022 also impacted total operating costs as compared to FY 2021. The exchange rate as of January 1, 2022, was R\$5.63 per US dollar (R\$5.16 per US dollar on January 1, 2021), and the closing rate was at R\$5.22 per US dollar on December 31, 2022 (R\$5.58 per US dollar on December 31, 2021), with the average exchange rate being R\$5.17 during FY 2022 per US dollar (R\$5.40 during FY 2021).

<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.

## Care and Maintenance Costs

The Paciência Gold Mine Complex 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 2022, in line with Q4 2021.

## General and Administration Expenses

General and administration (“G&A”) expenses exclude mine-site administrative costs that are charged directly to operations and include legal, accounting, 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,		
	2022	2021	Change	2022	2021	Change
Directors' fees and expenses	\$ 141	\$ 92	53%	\$ 442	\$ 339	30%
Audit related and insurance	264	285	(7%)	1,236	1,185	4%
Corporate office (Toronto)	278	266	5%	1,435	1,424	1%
Belo Horizonte office	953	864	10%	3,812	2,755	38%
<b>Total G&amp;A expenses</b>	<b>\$ 1,636</b>	<b>\$ 1,507</b>	<b>9%</b>	<b>\$ 6,925</b>	<b>\$ 5,703</b>	<b>21%</b>

For Q4 2022, total G&A expenses increased 9% compared to Q4 2021. Costs associated with the Belo Horizonte office increased 10% mainly due to higher labour expenses. The 53% increase in Directors' fees and expenses from Q4 2021 to Q4 2022 are due to the 2022 in-person annual strategy meeting travel expenses, which occurred virtually in 2021 due to COVID-19 restrictions.

The 21% increase in general and administrative expenses to \$6.9 million for FY 2022 compared to \$5.7 million for FY 2021 was due to the valuation of the Brazilian Real versus the US dollar, with the average exchange rate during FY 2022 being R\$5.17 per US dollar compared to R\$5.40 per US dollar in Q4 2021, combined with the labour cost increases explained in the previous paragraph, and others costs associated with office operation.

## Non-Operating Expenses (Recoveries)

(\$ thousands)	Three months ended December 31,			Year ended December 31,		
	2022	2021	Change	2022	2021	Change
Foreign Exchange loss (Gain)	\$ 1,022	\$ (577)	(277%)	\$ 1,008	\$ (1,698)	(159%)
Finance costs	617	227	172%	2,581	776	233%
Other non-operating (recoveries) expenses	(53)	1,432	(104%)	831	3,720	(78%)
<b>Non-operating expenses</b>	<b>\$ 1,586</b>	<b>\$ 1,082</b>	<b>47%</b>	<b>\$ 4,420</b>	<b>\$ 2,798</b>	<b>58%</b>

A significant portion of the Company's expenditures at its Brazilian operation are denominated in the Brazilian Real. The loss of \$1 million in foreign exchange in Q4 2022, compared to a \$0.6 million gain in Q4 2021, is a result of the valuation and devaluation, respectively, of the Brazilian Real as compared to the US dollar. The exchange rate as of September 30, 2022, was R\$5.41 per US dollar (R\$5.44 per US dollar on September 30, 2021) but closing at R\$5.22 per US dollar on December 31, 2022, (R\$5.58 per US dollar on December 31, 2021), with the average exchange rate being R\$5.26 per US dollar during Q4 2022 (R\$5.59 during Q4 2021).

For FY 2022 non-operating expenses increased by 58% to \$4.4 million compared \$2.8 million in FY 2021, mainly due to the increase with expenses related to ARO from \$0.8 million FY 2021 to \$4.8 million in FY 2022 driven by the upward revision to the ARO liability estimate in 2022 as a result of legislative changes, combined with the increase on accretion expenses due to higher market interest rates in the period. In addition, for the FY 2022, The Company had a foreign exchange loss of \$1 million in the period, compared to a gain of \$1.7 million for the FY 2021, as a result of the strength of the Brazilian Real as compared to the US dollar in FY 2022. The exchange rate as of January 1, 2022, was R\$5.63 per US dollar (R\$5.16 per US dollar on January 1, 2021), and the closing rate was at R\$5.22 per US dollar on December 31, 2022 (R\$5.58 per US dollar on December 31, 2021), with the average exchange rate being R\$5.17 during FY 2022 per US dollar (R\$5.40 during FY 2021). These non-operating expenses were partially offset by the increase on interest income from \$0.1 million in FY 2021 to \$2.8 million in FY 2022, due to a court judgment with respect to the Company's litigation over Brazil Federal VAT input tax credit claims from past years.

## **Impairment charges (reversal)**

The Turmalina, Caeté, and Paciência projects are each cash generating units (“CGUs”) which include property, plant and equipment, mineral rights, deferred exploration costs, and asset retirement obligations net of amortization. The CGUs also include mineral exploration project assets relating to properties not in production. A CGU is generally an individual operating mine or development project.

As at December 31, 2022 and December 31, 2021, 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 the fair value less costs to dispose (“FVLCD”) and the Company’s estimate of the FVLCD is classified as Level 3 in the fair value hierarchy based on the inputs used in the valuation technique.

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 at December 31, 2022 and December 31, 2021, the following were the indicators for potential impairment or potential reversal to impairment identified:

### **Turmalina CGU**

As at December 31, 2022, the Company identified replenished mineral resource and reserve estimates and an improved gold price outlook as indicators for potential impairment reversal at the Turmalina CGU.

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, and discount rate.

The life-of-mine gold price per ounce estimates used to calculate recoverable amounts as at December 31, 2022 were \$1,788 for 2023, \$1,700 for 2024 through 2032. The foreign exchange rates used were based on Brazil Central Bank projections as at December 31, 2022 and ranged between R\$5.20/USD and R\$5.00/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. The assessment indicated that the discounted cash flows exceeded its carrying value of the Turmalina CGU as at December 31, 2022, and consequently an impairment reversal of \$10.7 million was recorded. The impairment reversal for the year ended December 31, 2022 was allocated as follows: \$10.2 million to property, plant and equipment and \$0.5 million to mineral exploration projects.

As at December 31, 2021, the Company recorded a \$10.1 million impairment charge with \$9.7 million allocated to property, plant and equipment and \$0.4 million to mineral exploration projects (further details provided on the following note: Restatement – Impairment to Property, plant and equipment and Mineral exploration projects). The life-of-mine gold price per ounce estimates used to calculate recoverable amounts as at December 31, 2021 were \$1,740 for 2022, \$1,700 for 2023, and \$1,625 from 2024 to 2026, and \$1,600 for 2027 through 2031. The foreign exchange rates used were based on Brazil Central Bank projections as at December 31, 2021 and ranged between R\$5.40/USD and R\$4.82/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 7.4% was used to calculate the present value of the estimated future cash flows from the operation.

## Restatement – Impairment to Property, plant and equipment and Mineral exploration projects

During the year ended December 31, 2022, the Company identified an error in the calculation of the Turmalina CGU carrying amount used in its December 31, 2021, impairment assessment which resulted in an improper conclusion to forego the recognition of an impairment charge in the year ended December 31, 2021. Using the accurate carrying amount, the Turmalina CGU's recoverable value computed based on the assumptions disclosed in Note 8 of the audited consolidated financial statements for the year ended December 31, 2022, was \$10.1 million less than its carrying amount as at December 31, 2021, which, in accordance with the Company's accounting policies, required a \$10.1 million impairment charge to be recorded. As a result of the impairment charge for the year ended December 31, 2021, the Condensed Interim Consolidated Statements of Financial Position as at March 31 2022, June 30, 2022 and September 30, 2022 also required restatement.

The Company has restated the comparative figures to correct the impact of this error, and the correcting adjustments as at December 31, 2021, March 31 2022, June 30, 2022 and September 30, 2022 are summarized below.

### Consolidated statements of financial position

	December 31, 2021		December 31, 2021
	<i>As previously reported</i>	<i>Adjustments</i>	<i>Restated</i>
<b>ASSETS</b>			
Non-current assets			
Property, plant and equipment	172,498	(9,704)	162,794
Mineral exploration projects	23,817	(431)	23,386
<b>Total assets</b>	<b>\$ 270,010</b>	<b>(10,135)</b>	<b>\$ 259,875</b>

### LIABILITIES AND SHAREHOLDERS' EQUITY

#### SHAREHOLDERS' EQUITY

Deficit	(382,114)	(10,135)	(392,249)
<b>Total shareholders' equity</b>	<b>\$ 211,429</b>	<b>\$ (10,135)</b>	<b>\$ 201,294</b>
<b>Total liabilities and shareholders' equity</b>	<b>\$ 270,010</b>	<b>\$ (10,135)</b>	<b>\$ 259,875</b>

	March 31, 2022		March 31, 2022
	<i>As previously reported</i>	<i>Adjustments</i>	<i>Restated</i>
<b>ASSETS</b>			
Non-current assets			
Property, plant and equipment	174,922	(9,704)	165,218
Mineral exploration projects	24,986	(431)	24,555
<b>Total assets</b>	<b>\$ 271,455</b>	<b>(10,135)</b>	<b>\$ 261,320</b>

### LIABILITIES AND SHAREHOLDERS' EQUITY

#### SHAREHOLDERS' EQUITY

Deficit	(390,467)	(10,135)	(400,602)
<b>Total shareholders' equity</b>	<b>\$ 203,598</b>	<b>\$ (10,135)</b>	<b>\$ 193,463</b>
<b>Total liabilities and shareholders' equity</b>	<b>\$ 271,455</b>	<b>\$ (10,135)</b>	<b>\$ 261,320</b>

	June 30, 2022		June 30, 2022
	<i>As previously reported</i>	<i>Adjustments</i>	<i>Restated</i>
<b>ASSETS</b>			
Non-current assets			
Property, plant and equipment	178,586	(9,704)	168,882
Mineral exploration projects	26,651	(431)	26,220
<b>Total assets</b>	<b>\$ 273,331</b>	<b>(10,135)</b>	<b>\$ 263,196</b>

#### LIABILITIES AND SHAREHOLDERS' EQUITY

##### SHAREHOLDERS' EQUITY

Deficit	(383,249)	(10,135)	(393,384)
<b>Total shareholders' equity</b>	<b>\$ 211,264</b>	<b>\$ (10,135)</b>	<b>\$ 201,129</b>
<b>Total liabilities and shareholders' equity</b>	<b>\$ 273,331</b>	<b>\$ (10,135)</b>	<b>\$ 263,196</b>

	September 30, 2022		September 30, 2022
	<i>As previously reported</i>	<i>Adjustments</i>	<i>Restated</i>
<b>ASSETS</b>			
Non-current assets			
Property, plant and equipment	185,144	(9,704)	175,440
Mineral exploration projects	27,607	(431)	27,176
<b>Total assets</b>	<b>\$ 276,780</b>	<b>(10,135)</b>	<b>\$ 266,645</b>

#### LIABILITIES AND SHAREHOLDERS' EQUITY

##### SHAREHOLDERS' EQUITY

Deficit	(379,015)	(10,135)	(389,150)
<b>Total shareholders' equity</b>	<b>\$ 215,559</b>	<b>\$ (10,135)</b>	<b>\$ 205,424</b>
<b>Total liabilities and shareholders' equity</b>	<b>\$ 276,780</b>	<b>\$ (10,135)</b>	<b>\$ 266,645</b>

#### Consolidated statement of operations and comprehensive income

	Year Ended December 31,		
	2021	2021	2021
	<i>As previously reported</i>	<i>Adjustment</i>	<i>Restated</i>
Impairment charge	-	10,135	10,135
<b>Operating income</b>	<b>44,927</b>	<b>(10,135)</b>	<b>34,792</b>
Income before income taxes	42,129	(10,135)	31,994
<b>Net income</b>	<b>\$ 34,190</b>	<b>\$ (10,135)</b>	<b>\$ 24,055</b>
Basic	\$ 0.47	\$ (0.14)	\$ 0.33
Diluted	\$ 0.47	\$ (0.14)	\$ 0.33

#### Consolidated statement of cash flows

There was no impact to the consolidated statement of cash flows as a result of this restatement of impairment charges, other than (i) a \$10.1 million decrease in net income offset by (ii) a \$10.1 million increase in impairment charges, both changes of which reside in the operating activities section and, therefore, resulted in no change to the net cash provided by operating activities.

#### Consolidated statement of changes in shareholders' equity

There was no impact to the consolidated statement of changes in shareholders' equity as a result of this restatement of impairment charges, other than the \$10.1 million decrease in net income for the year ended December 31, 2021, and the resulting \$10.1 million increase in deficit as at December 31, 2021, March 31, 2022, June 30, 2022, and September 30,

2022, as presented in Note 27(a) and Note 27(b) of the audited consolidated financial statements for the year ended December 31, 2022.

## Caeté CGU

As at December 31, 2022, the Company identified the following indicators for potential changes to impairment at the Caete 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 Caete 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, and discount rate.

The life-of-mine gold price per ounce estimates used to calculate recoverable amounts as at December 31, 2022 were \$1,788 for 2023 and \$1,700 for 2024 through 2029. The foreign exchange rates used were based on Brazil Central Bank projections as at December 31, 2022 and ranged between R\$5.20/USD and R\$5.00/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, 2022, the Company concluded no impairment charges were considered necessary (December 31, 2021 – no impairment indicators were identified and 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, 2022, the Company's \$8.2 million withholding tax provision remained outstanding (December 31, 2021 – \$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			Year ended		
	December 31,			December 31,		
	2022	2021	Change	2022	2021	Change
Current income tax expense	\$ 1,884	\$ -	100%	\$ 5,426	\$ 7,939	(32%)
<b>Income tax expense</b>	<b>\$ 1,884</b>	<b>\$ -</b>	<b>100%</b>	<b>\$ 5,426</b>	<b>\$ 7,939</b>	<b>(32%)</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, different tax rates in various jurisdictions, 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.

Income taxes increased to \$1.9 million in Q4 2022, compared to \$nil in Q4 2021. The decrease in income taxes during Q4 2021 was achieved mainly through a Brazil tax election made to treat historical unrealized foreign exchange losses as tax deductible in the period which resulted in a taxable loss in the period.

For FY 2022, current income tax expense was \$5.4 million compared to \$7.9 million in the same period of 2021. The decrease of 32% is explained by (i) a 6% decrease in revenue, (ii) a 20% increase in production costs due mainly to an increase in labour during the period, and an increase in secondary development in 2022, (iii) combined with the strength of the Brazilian Real as compared to the US dollar in FY 2022.

## REVIEW OF FINANCIAL CONDITION

### Outstanding Debt, Liquidity and Cash Flow

As of December 31, 2022, the Company had a working capital<sup>1</sup> of \$19.5 million (\$32 million as of December 31, 2021), including \$3 million in loans from Brazilian banks, which mature every six months and are expected to continue to be rolled forward.

(\$ thousands)	December 31, 2022	December 31, 2021
Cash and cash equivalents	\$ 25,208	\$ 40,373
Non-cash working capital		
Other current assets:		
Restricted cash	618	501
Inventory	16,239	14,546
Recoverable taxes	8,545	5,143
Other accounts receivable	343	92
Prepaid expenses and advances	3,615	2,176
Current liabilities:		
Accounts payable and accrued liabilities	(19,782)	(15,660)
Notes payable	(3,040)	(3,027)
Lease liabilities	(2,414)	(1,431)
Current tax liability	(1,881)	-
Other taxes payable	(1,056)	(935)
Reclamation provisions	(3,156)	(6,847)
Legal and other provisions	(3,751)	(2,941)
Working capital <sup>1</sup>	\$ 19,488	\$ 31,990

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

The decrease of 39% in working capital is due to lower operating cash flow generated during FY 2022, which was mainly due to a \$13.9 million increase in operating costs in FY 2022 compared to FY 2021 resulting from an increase in labour costs, combined with higher development rates. Working capital was also impacted by the strength of the Brazilian Real as compared to the US dollar in FY 2022. The exchange rate as of January 1, 2022, was R\$5.63 per US dollar (R\$5.16 per US dollar on January 1, 2021), and the closing rate was at R\$5.22 per US dollar on December 31, 2022 (R\$5.58 per US dollar on December 31, 2021), with the average exchange rate being R\$5.17 during FY 2022 per US dollar (R\$5.40 during FY 2021).



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

The use of funds during the three months and year ended December 31, 2022, is outlined as follows:

	2022	2021	2022	2021
<b>Cash provided by operating activities before income taxes</b>	\$ 11,104	\$ 12,372	\$ 43,985	\$ 55,587
Income taxes paid	(752)	(2,790)	(3,220)	(10,551)
<b>Net cash provided by operating activities</b>	\$ 10,352	\$ 9,582	\$ 40,765	\$ 45,036
<b>Investing activities</b>				
Investment in mineral exploration projects	(872)	(187)	(4,662)	(1,385)
Purchase of property, plant and equipment	(13,371)	(3,848)	(39,502)	(32,845)
Proceeds from dispositions of royalty interests	-	-	-	6,950
Proceeds from dispositions of property, plant and equipment	284	-	443	280
<b>Net cash (used in) investing activities</b>	\$ (13,959)	\$ (4,035)	\$ (43,721)	\$ (27,000)
<b>Financing activities</b>				
Cash received upon issuance of debt	1,350	1,350	6,000	7,336
Cash received upon issuance of shares via stock options exercised	-	(145)	20	410
Restricted cash margin deposits paid	-	-	-	289
Repayment of debt	(1,936)	(2,027)	(8,621)	(10,217)
Cash paid for purchase and cancellation of shares	-	-	(75)	-
Interest paid	(80)	(29)	(287)	(199)
Cash dividends paid	-	(2,266)	(6,821)	(13,915)
<b>Net cash (used in) financing activities</b>	\$ (666)	\$ (3,117)	\$ (9,784)	\$ (16,296)
Effect of exchange rate changes on cash balances	(466)	(137)	(2,425)	(275)
<b>Net (decrease) in cash and cash equivalents</b>	\$ (4,739)	\$ 2,293	\$ (15,165)	\$ 1,465

Cash generated by operations decreased 9% in FY 2022 to \$40.8 million, compared to \$45 million in FY 2021, due to an 5% decrease in ounces sold in 2022 to 80,050 ounces compared to 84,638 ounces in 2021, combined with an 1% decrease in average realized gold price to \$1,780 per ounce in FY 2022, compared to \$1,790 per ounce in the same period of 2021. Operating costs increases are related to inflation and higher development rates in 2022, combined with strengthening of the Brazilian Real, as compared to the US dollar in FY 2022 with the average exchange rate being R\$5.17 during FY 2022 per US dollar (R\$5.40 during FY 2021).

Net cash flows used in investing activities increased to \$43.7 million for FY 2022, compared to \$27 million in the same period of 2021, primarily due to the increase in non-sustaining Capex from \$5.9 million FY 2021 to \$20 million for FY 2022, which includes the NorthWest Turmalina and SouthWest Pilar projects, the cyanide filtration system at the CCA plant, as well as growth exploration drilling. In FY 2021, \$7 million was received in cash related to the sale of the Company's Net Smelter Return ("NSR") royalty from gold production at the CentroGold Project, which is described further in Note 7 of the Company's December 31, 2022, audited consolidated financial statements.

Cash used in financing activities decreased 40% or \$6.5 million for FY 2022 to \$9.8 million compared to \$16.3 million in FY 2021, primarily the result of lower dividend payments in FY 2022.

## Contractual Obligations and Commitments

The Company's contractual obligations as of December 31, 2022, 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	\$	19,782	\$	-	\$	-	\$	19,782		
Other Taxes Payable <sup>1</sup>										
ICMS Settlement Due		255		25		-		280		
INSS		587		723		-		1,310		
IRPJ & CSLL Settlement Due		213		363		13		589		
Notes payable										
Principal										
Bank indebtedness <sup>2</sup>		3,040		-		-		3,040		
Interest		64		20		-		84		
Lease liabilities		2,612		1,679		8		4,299		
Reclamation provisions <sup>3</sup>		3,539		10,055		5,521		19,194		
Current tax liability		1,881		-		-		1,881		
<b>Total financial liabilities</b>	\$	31,973	\$	12,865	\$	5,542	\$	19,194	\$	69,574
<b>Other Commitments</b>										
Suppliers' agreements <sup>4</sup>		197		-		-		-		197
Insurance agreements <sup>5</sup>		463		-		-		-		463
<b>Total other commitments</b>	\$	660	\$	-	\$	-	\$	-	\$	660
<b>Total</b>	\$	32,633	\$	12,865	\$	5,542	\$	19,194	\$	70,234

<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 days advance notice. The amount included in the commitments table represents the contractual amount due within 30 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, 2022, is as follows:

All amounts in \$ thousands, except number of common shares	As at December 31, 2022	
<b>Cash and cash equivalents</b>	\$	25,208
Less: Bank indebtedness	\$	3,040
Less: Leasing Liabilities		3,964
<b>Less: Total debt</b>	\$	7,004
<b>Total net cash and cash equivalents balance<sup>1</sup></b>	\$	18,204
Number of common shares outstanding		72 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 2022 (\$0.03 million in FY 2021).

## DEVELOPMENT AND EXPLORATION PROJECTS

### Iron Quadrangle Option Agreement with IAMGOLD Corporation

On August 26, 2020, the Company entered into a JV Agreement (the “Iron Quadrangle Agreement”) with IAMGOLD on a package of 28 exploration tenements (the “Package”) in the prolific Iron Quadrangle, located in Minas Gerais, Brazil. Pursuant to the Iron Quadrangle Agreement, the Company has the option to earn an initial 60% interest in the Package by spending \$6 million in exploration expenditures over four years commencing in the fourth quarter of 2020. Jaguar will be the project operator and will be subject to oversight by a technical committee with representatives from both companies. According to the Iron Quadrangle Agreement:

- The earn-in period will require a minimum expenditure of \$500,000 per annum, and the exploration program must include the completion of a minimum of 5,000 metres of diamond drilling over the option agreement time frame.
- Upon Jaguar earning an initial 60% interest, IAMGOLD may elect to participate and fund its pro-rata share of ongoing expenditures under a conventional 60:40 JV that will be formed for this purpose and will be agreed-upon by both companies. Should such an election be made, both parties will be required to fund their pro-rata share for ongoing expenditures or be subject to dilution. Should either party dilute to <10% interest, their interest will revert to a 1.5% NSR.

The Company has invested a total of \$3.8 million in exploration expenditures on the option agreement with IAMGOLD since Q3 2020, of which \$2.3 million was expended in FY 2022 (\$0.4 million in Q4 2022) and \$1.4 million in FY 2021 (\$0.4 million in Q4 2021).

### Greenfield Exploration

Jaguar currently holds approximately 34,000 hectares of mineral rights in Brazil. In late 2020, the Company announced it was increasing its investment in growth exploration initiatives with in-mine exploration supplemented by renewed focus on its prospective property portfolio close to its active mining and plant facilities. Any discoveries derived from this exploration investment would immediately leverage the excess plant capacity currently available.

## 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), 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*.

## 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 28, 2023
Issued and outstanding common shares	72,460,987
Stock options	1,040,411
Deferred share units	1,033,050
<b>Total</b>	<b>74,534,448</b>

## NON-GAAP PERFORMANCE MEASURES

The Company has included the following non-GAAP performance measures in this document: 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 this information 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 a useful indicator 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,	
	2022	2021	2022	2021
Operating costs	\$ 21,439	\$ 18,838	\$ 84,229	\$ 70,337
General & administration expenses	1,636	1,507	6,925	5,703
Corporate stock-based compensation	77	88	1,163	1,044
Sustaining capital expenditures <sup>1</sup>	10,289	6,015	26,417	25,671
All-in sustaining cash costs	33,441	26,448	118,734	102,755
Reclamation (operating sites)	-	7	8	60
<b>All-in sustaining costs</b>	<b>\$ 33,441</b>	<b>\$ 26,455</b>	<b>\$ 118,742</b>	<b>\$ 102,815</b>
Non-sustaining capital expenditures	5,934	4,279	23,804	12,500
Exploration and evaluation costs (greenfield)	1,543	1,829	6,037	5,129
Reclamation (non-operating sites)	-	94	3	155
Care and maintenance (non-operating sites)	162	237	609	1,013
<b>All-in costs</b>	<b>\$ 41,080</b>	<b>\$ 32,894</b>	<b>\$ 149,195</b>	<b>\$ 121,612</b>
Ounces of gold sold	20,940	23,479	80,050	84,638
<b>Cash operating costs per ounce sold<sup>2</sup></b>	<b>\$ 1,024</b>	<b>\$ 802</b>	<b>\$ 1,052</b>	<b>\$ 831</b>
<b>All-in sustaining costs per ounce sold<sup>2</sup></b>	<b>\$ 1,597</b>	<b>\$ 1,127</b>	<b>\$ 1,483</b>	<b>\$ 1,215</b>
<b>All-in costs per ounce sold<sup>2</sup></b>	<b>\$ 1,962</b>	<b>\$ 1,401</b>	<b>\$ 1,864</b>	<b>\$ 1,437</b>
<b>Average realized gold price</b>	<b>\$ 1,724</b>	<b>\$ 1,819</b>	<b>\$ 1,780</b>	<b>\$ 1,790</b>
<b>Cash operating margin per ounce sold</b>	<b>\$ 700</b>	<b>\$ 1,017</b>	<b>\$ 728</b>	<b>\$ 959</b>
<b>All-in sustaining margin per ounce sold</b>	<b>\$ 127</b>	<b>\$ 692</b>	<b>\$ 297</b>	<b>\$ 575</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 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 performance reflects all of 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 conforms to the all-in sustaining cost definition as 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 excludes 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. The most directly comparable measure prepared in accordance with IFRS is gold revenue. The measure is intended to assist investors in evaluating the revenue received 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 2022	Q3 2022	Q2 2022	Q1 2022	Q4 2021	Q3 2021	Q2 2021	Q1 2021
<b>Turmalina Complex</b>								
Operating costs	\$ 9,016	\$ 10,816	\$ 9,122	\$ 10,654	\$ 9,015	\$ 8,517	\$ 8,350	\$ 7,436
Sustaining capital expenditures	4,365	2,928	3,063	2,934	3,562	4,073	3,926	2,414
<b>All-in sustaining costs<sup>1</sup></b>	<b>\$ 13,381</b>	<b>\$ 13,744</b>	<b>\$ 12,185</b>	<b>\$ 13,588</b>	<b>\$ 12,577</b>	<b>\$ 12,590</b>	<b>\$ 12,276</b>	<b>\$ 9,850</b>
Ounces of gold sold	9,269	10,867	7,643	8,073	10,476	10,057	8,846	8,427
<b>Cash operating cost (per oz. sold)<sup>1</sup></b>	<b>\$ 973</b>	<b>\$ 995</b>	<b>\$ 1,194</b>	<b>\$ 1,320</b>	<b>\$ 861</b>	<b>\$ 847</b>	<b>\$ 944</b>	<b>\$ 880</b>
<b>All-in sustaining cost (per oz. sold)<sup>1,2</sup></b>	<b>\$ 1,444</b>	<b>\$ 1,265</b>	<b>\$ 1,594</b>	<b>\$ 1,683</b>	<b>\$ 1,201</b>	<b>\$ 1,252</b>	<b>\$ 1,388</b>	<b>\$ 1,167</b>

(\$ thousands, except where indicated)	Q4 2022	Q3 2022	Q2 2022	Q1 2022	Q4 2021	Q3 2021	Q2 2021	Q1 2021
<b>Pilar Mine</b>								
Operating costs	\$ 12,423	\$ 11,282	\$ 11,953	\$ 8,963	\$ 9,822	\$ 10,856	\$ 9,015	\$ 7,325
Sustaining capital expenditures	5,810	2,653	1,458	2,774	2,337	2,337	2,867	3,727
<b>All-in sustaining costs<sup>1</sup></b>	<b>\$ 18,233</b>	<b>\$ 13,935</b>	<b>\$ 13,411</b>	<b>\$ 11,737</b>	<b>\$ 12,159</b>	<b>\$ 13,193</b>	<b>\$ 11,882</b>	<b>\$ 11,052</b>
Ounces of gold sold	11,671	11,254	12,839	8,434	13,003	13,190	11,389	9,250
<b>Cash operating cost (per oz. sold)<sup>1</sup></b>	<b>\$ 1,064</b>	<b>\$ 1,002</b>	<b>\$ 931</b>	<b>\$ 1,063</b>	<b>\$ 755</b>	<b>\$ 823</b>	<b>\$ 791</b>	<b>\$ 790</b>
<b>All-in sustaining cost (per oz. sold)<sup>1,2</sup></b>	<b>\$ 1,562</b>	<b>\$ 1,238</b>	<b>\$ 1,045</b>	<b>\$ 1,392</b>	<b>\$ 935</b>	<b>\$ 1,000</b>	<b>\$ 1,043</b>	<b>\$ 1,193</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 2022	Q3 2022	Q2 2022	Q1 2022	Q4 2021	Q3 2021	Q2 2021	Q1 2021
<b>Turmalina Complex</b>								
Operating Costs	\$ 9,016	\$ 10,816	\$ 9,122	\$ 10,654	\$ 9,015	\$ 8,517	\$ 8,350	\$ 7,436
Gold (oz.) sold	9,269	10,867	7,643	8,073	10,476	10,057	8,846	8,427
Cash operating cost (per oz. sold) <sup>1</sup>	\$ 973	\$ 995	\$ 1,194	\$ 1,320	\$ 861	\$ 847	\$ 944	\$ 880
Tonnes of ore processed (t)	101,000	105,000	101,000	86,000	101,000	103,000	100,000	105,000
Average foreign exchange rate (BRL - USD) <sup>1</sup>	\$ 5.26	\$ 5.25	\$ 4.93	\$ 5.23	\$ 5.59	\$ 5.23	\$ 5.29	\$ 5.48
Cash operating cost (R\$ per tonne) <sup>1</sup>	\$ 470	\$ 541	\$ 445	\$ 648	\$ 499	\$ 433	\$ 442	\$ 387

(\$ thousands, except where indicated)	Q4 2022	Q3 2022	Q2 2022	Q1 2022	Q4 2021	Q3 2021	Q2 2021	Q1 2021
<b>Pilar Mine</b>								
Operating Costs	\$ 12,423	\$ 11,282	\$ 11,953	\$ 8,963	\$ 9,822	\$ 10,856	\$ 9,015	\$ 7,325
Gold (oz.) sold	11,671	11,254	12,839	8,434	13,003	13,190	11,389	9,250
Cash operating cost (per oz. sold) <sup>1</sup>	\$ 1,064	\$ 1,002	\$ 931	\$ 1,063	\$ 755	\$ 823	\$ 791	\$ 790
Tonnes of ore processed (t)	108,000	111,000	127,000	98,000	112,000	119,000	114,000	102,000
Average foreign exchange rate (BRL - USD) <sup>1</sup>	\$ 5.26	\$ 5.25	\$ 4.93	\$ 5.23	\$ 5.59	\$ 5.23	\$ 5.29	\$ 5.48
Cash operating cost (R\$ per tonne) <sup>1</sup>	\$ 605	\$ 533	\$ 464	\$ 478	\$ 490	\$ 477	\$ 418	\$ 393

<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		Year ended	
	December 31,		December 31,	
	2022	2021	2022	2021
Sustaining capital <sup>1</sup>				
Primary development	\$ 5,778	\$ 4,129	\$ 16,830	\$ 15,700
Brownfield exploration	220	316	1,097	1,042
Mine-site sustaining	4,177	1,454	8,059	8,501
Other sustaining capital <sup>2</sup>	114	116	431	428
<b>Total sustaining capital<sup>1</sup></b>	<b>10,289</b>	<b>6,015</b>	<b>26,417</b>	<b>25,671</b>
Non-sustaining capital (including capital projects) <sup>1</sup>				
Mine-site non-sustaining	4,348	1,862	19,991	5,882
Asset retirement obligation - non-sustaining <sup>2</sup>	1,446	2,261	3,588	4,233
Other non-sustaining capital <sup>1</sup>	140	156	226	2,385
<b>Total non-sustaining capital<sup>1</sup></b>	<b>5,934</b>	<b>4,279</b>	<b>23,805</b>	<b>12,500</b>
<b>Total capital expenditures</b>	<b>\$ 16,223</b>	<b>\$ 10,294</b>	<b>\$ 50,222</b>	<b>\$ 38,171</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 this information to evaluate the Company's performance with respect to its operating cash flow capacity to meet non-discretionary outflows of cash.

Free cash flow from operations is defined as cash provided from operating activities, less changes in long-term receivable sustaining capital expenditures, and add back impact from 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		Year ended	
	December 31,		December 31,	
	2022	2021	2022	2021
Cash generated from operating activities	\$ 10,352	\$ 9,581	\$ 40,765	\$ 45,036
Adjustments				
Asset Retirement Obligation	1,446	4,602	3,588	4,714
Sustaining capital expenditures <sup>2</sup>	(10,289)	(6,015)	(26,417)	(25,671)
<b>Free cash flow</b>	<b>\$ 1,509</b>	<b>\$ 8,168</b>	<b>\$ 17,936</b>	<b>\$ 24,079</b>
Ounces of gold sold	20,940	23,479	80,050	84,638
<b>Free cash flow per ounce sold</b>	<b>\$ 72</b>	<b>\$ 348</b>	<b>\$ 224</b>	<b>\$ 284</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		Year ended	
	December 31,		December 31,	
	2022	2021 (Restated) <sup>1</sup>	2022	2021 (Restated) <sup>1</sup>
Net Income	\$ 11,525	\$ 3,552	\$ 21,440	\$ 24,055
Income tax expense	1,884	-	5,426	7,939
Finance costs	617	227	2,581	776
Depreciation and amortization	5,248	5,108	20,252	21,159
<b>EBITDA<sup>2</sup></b>	<b>\$ 19,274</b>	<b>\$ 8,887</b>	<b>\$ 49,699</b>	<b>\$ 53,929</b>
Impairment (reversal) charges	(10,661)	10,135	(10,661)	10,135
Changes in other provisions and VAT taxes	1,283	(10)	1,188	1,358
Foreign exchange loss (gain)	1,022	(577)	1,008	(1,698)
Stock-based compensation	77	88	1,163	1,044
Other non-operating expenses (recoveries) <sup>3</sup>	-	-	-	1,686
<b>Adjusted EBITDA<sup>2</sup></b>	<b>\$ 10,995</b>	<b>\$ 18,523</b>	<b>\$ 42,397</b>	<b>\$ 66,454</b>
Weighted average outstanding shares	72,452,927	72,441,622	72,461,530	72,396,926
<b>Adjusted EBITDA per share<sup>2</sup></b>	<b>\$ 0.15</b>	<b>\$ 0.26</b>	<b>\$ 0.59</b>	<b>\$ 0.92</b>

<sup>1</sup> Further information about the restatement for the year ended December 31, 2021, can be found in the Restatement – Impairment to Property, plant and equipment and Mineral exploration projects section.

<sup>2</sup> This is a non-GAAP financial performance measure with no standard definition under IFRS.

<sup>3</sup> CentroGold royalty interest sales. As a result of the sale, the Company (i) derecognized the \$8.5 million CentroGold project royalty interest asset, (ii) received and recorded \$7.0 million in Cash, (iii) recorded \$0.2 million in legal and consulting costs associated with the transaction.

EBITDA is earnings before finance expense, current and deferred income tax expense and depletion and depreciation. Adjusted EBITDA excludes from EBITDA the results of the impact of changes in other provision and VAT, Foreign exchange (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, and price risk.

### a) Credit risk

Credit risk associated with financial assets and royalty interests arises from cash held with banks, derivative financial instruments with positive fair values, recoverable taxes refundable from tax authorities, 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 counterparties to derivative financial instruments, 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, 2022, audited consolidated financial statements note 22.

### 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, 2022, the Company did not have any derivative positions outstanding (December 31, 2021 – 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, 2022, the Company did not enter into any price hedge contracts (nil price derivative contracts in the year ended December 31, 2021).

#### 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 reais 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, Euro denominated capital lease obligations, and foreign exchange call and put option contracts.

##### 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, 2022:

	Denominated in Brazilian reais	Denominated in Canadian dollars	Denominated in European euros
<b>Financial assets</b>			
Cash and cash equivalents	\$ 2,572	\$ 136	\$ -
Recoverable taxes	10,744	46	-
Other accounts receivable	343	-	-
Prepaid expenses and advances	2,403	439	-
Restricted cash	1,135	-	-
<b>Total financial assets</b>	<b>\$ 17,197</b>	<b>\$ 621</b>	<b>\$ -</b>
<b>Financial liabilities</b>			
Accounts payable and accrued liabilities	\$ 18,691	\$ 19	\$ -
Lease liabilities	3,288	-	676
Current tax liability	1,881	-	-
Reclamation provision	24,304	-	-
Legal and other provisions	7,792	-	-
<b>Total financial liabilities</b>	<b>55,956</b>	<b>19</b>	<b>676</b>
<b>Net financial assets/(liabilities)</b>	<b>\$ (38,759)</b>	<b>\$ 602</b>	<b>\$ (676)</b>



The table below summarizes a sensitivity analysis for significant unsettled currency risk exposure with respect to the Company's financial instruments (and certain other assets and liabilities) as at FY 2021 and FY 2022 with all other variables held constant. It shows how income before taxes would have been affected by changes in the relevant risk variables that were reasonably possible at that date.

Exchange Rates	Change for Sensitivity Analysis	Gain/(loss) of change to 2022 Foreign Exchange	Gain/(loss) of change to 2021 Foreign Exchange
USD per Brazilian real	10% increase	\$ 3,524	\$ 2,805
USD per Brazilian real	10% decrease	(3,524)	(2,805)
USD per Canadian dollar	10% increase	(55)	(11)
USD per Canadian dollar	10% decrease	55	11
USD per European euro	10% increase	(61)	86
USD per European euro	10% decrease	61	(86)

ii. Foreign exchange call and put options

The Company is exposed to the 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 reais and Canadian dollar denominated cash and cash equivalents, recoverable taxes, accounts payable and accrued liabilities, income taxes payable, reclamation and other provisions and Euro denominated capital lease obligations. The Company may, at its discretion, use forward or derivative contracts to manage its exposure to foreign currencies. In the year ended December 31, 2022, the Company did not enter into any foreign exchange forward or derivative contracts (nil foreign exchange derivative contracts in the year ended December 31, 2021).

**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 debt with interest rates ranging from 3.9 to 6.6% per annum.

**e) 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 term of these instruments:

- a. Cash and cash equivalents
- b. Restricted cash
- c. Other accounts receivable
- d. Accounts payable and accrued liabilities
- e. 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 value of the Company's financial assets and liabilities approximate their carrying values at December 31, 2022 and 2021.

#### f) Changes in liabilities arising from financing activities

	Changes from financing cash flows				Other changes				Balance as at December 31, 2022
	Balance as at December 31, 2021	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)	-	2,554	27	219	3,964
	\$ 6,892	\$ 6,000	\$ (8,621)	\$ (198)	\$ 131	\$ 2,554	\$ 27	\$ 219	\$ 7,004

	Changes from financing cash flows				Other changes				Balance as at December 31, 2021
	Balance as at January 1, 2021	Proceeds from debt issuance	Debt repayments	Interest paid	Interest expense	Lease liability additions	Foreign exchange (gain) loss	Other non-cash changes	
Notes payable	\$ 3,058	\$ 7,336	\$ (7,312)	\$ (176)	\$ 135	\$ -	\$ (14)	\$ -	\$ 3,027
Lease liabilities	2,723	-	(2,905)	-	-	3,965	(49)	131	3,865
	\$ 5,781	\$ 7,336	\$ (10,217)	\$ (176)	\$ 135	\$ 3,965	\$ (63)	\$ 131	\$ 6,892

## 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.sedar.com](http://www.sedar.com).

### 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 is strongly affected by the world market price of gold. If the world market price of gold was to drop and the prices realized by Jaguar on gold sales were to decrease significantly and remain at such a level for any substantial period, Jaguar's profitability and cash flow would be negatively affected. Jaguar's gold production is sold into the spot market or to refiners at market prices. 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, hedging activities 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. While the price of gold has recently been strong, there can be no assurance that gold prices will remain at such levels or be such that Jaguar's properties can be mined at a profit. Some credible industry experts predict that gold will continue to increase in price during 2023 and the next several years. However, other credible industry experts expect that the price of gold has generally peaked during the recent pandemic and resulting economic crisis. As economies slowly recover over the next few years, the price of gold will decrease and be worth much less per ounce than it is today.

Depending on the market price of gold, 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 involves various types of risks and hazards, including:

- environmental hazards;
- unusual or unexpected geological operating conditions, such as rock bursts, structural cave-ins or slides;
- flooding, earthquakes and fires;
- labour disruptions;
- industrial accidents;
- unexpected mining dilution, such as what occurred at Turmalina in 2017;
- metallurgical and other processing problems; and/or
- metal losses and periodic interruptions due to inclement or hazardous weather conditions.

These risks could result in damage to, or destruction of, mineral properties, production facilities or other properties, personal injury or death, environmental damage, delays in mining, increased production costs, monetary losses and possible legal liability.

Jaguar may not be able to obtain insurance to cover these risks at affordable premiums or at all. Insurance against certain environmental risks, including potential liability for pollution or other hazards as a result of the disposal of waste products occurring from production, is not generally available to Jaguar or other companies within the mining industry. Jaguar may suffer a materially adverse effect on its business if it incurs losses related to any significant events that are not covered by its insurance policies.

**Calculation of Mineral Reserves and Mineral Resources and metal recovery is only an estimate, and there can be no assurance about the quantity and grade of minerals until Mineral Resources are actually mined.**

Jaguar's mineral reserves (or ore reserves) and mineral resources 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.

Because Jaguar prepares its Annual Information Form in accordance with the disclosure requirements of Canadian securities laws, it contains resource estimates, which are required by NI 43-101. Mineral resource estimates for properties that have not commenced production are based, in many instances, on limited and widely spaced drill hole information, which is not necessarily indicative of the conditions between and around drill holes. Accordingly, such mineral resource estimates may require revision as more drilling information becomes available, as actual production experience is gained or as the Company's mining methods are changed.

No assurance can be given that any part or all of Jaguar's mineral resources constitute or will be converted into reserves. Market price fluctuations of gold and certain other metals, as well as 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 relating to the mineral reserves, such as the need for the orderly development of ore bodies, the processing of new or different ore grades, the technical complexity of ore bodies, unusual or unexpected ore body formations, ore dilution or varying metallurgical and other ore characteristics may cause mineral reserves (or ore reserves) to be reduced or Jaguar to be unprofitable in any particular accounting period. Estimated reserves may have to be recalculated based on actual production experience, fluctuations in the price of metals, or changes in other assumptions on which they are based. 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.

Failure to obtain or maintain necessary permits or government approvals or changes to applicable legislation could also cause Jaguar to reduce its reserves. In addition, changes to mine plans due to capital allocation decisions could cause Jaguar to reduce its reserves. There is also no assurance that Jaguar will achieve indicated levels of gold recovery or obtain the prices assumed in determining such reserves.

The calculation of Mineral Reserves, Mineral Resources, and corresponding grades being mined or dedicated to future production is imprecise and depends on geological interpretation and statistical inferences or assumptions drawn from drilling and sampling analysis, which might be unpredictable. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Until Mineral Reserves or Mineral Resources are actually mined and processed, the quantity of Mineral Reserves or Mineral Resources and grades must be considered as estimates only. Any material changes in Mineral Reserves, Mineral Resources, grade or stripping ratio at Jaguar's properties may affect the economic viability of Jaguar's properties. In addition, there can be no assurance that metal recoveries in small-scale laboratory tests will be duplicated in larger-scale tests under on-site conditions or during production.

#### **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. Jaguar may continue to dispose of additional assets in 2023 or future years as part of its ongoing focus on gold properties and other strategic initiatives, which may further deplete Jaguar's reserves. 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

**Jaguar’s operations involve exploration and development, and there is no guarantee that any such activity will result in commercial production of mineral deposits.**

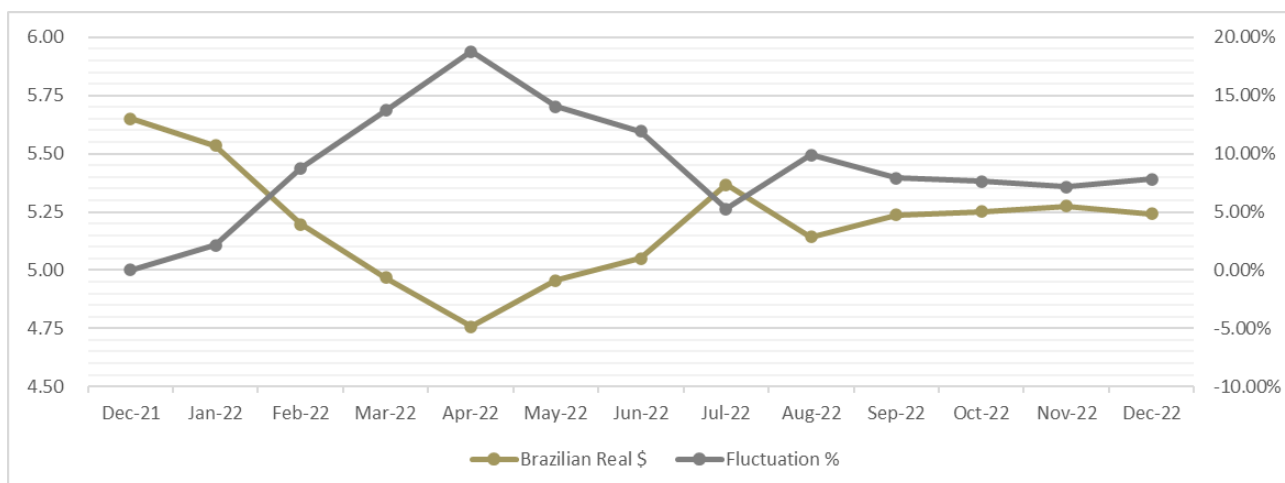
The proposed programs on the exploration properties in which Jaguar holds an interest are exploratory in nature, and such properties do not host known bodies of commercial ore. The development of these mineral properties is contingent upon, among other things, obtaining satisfactory exploration results. Mineral exploration and development involve substantial expenses related to locating and establishing Mineral Reserves, developing metallurgical processes and constructing mining and processing facilities at a particular site. It also involves a high degree of risk, which even a combination of experience, knowledge and careful evaluation may not be able to mitigate adequately. As a result, few properties that are explored are ultimately developed into producing mines, and there is no assurance that commercial quantities of ore will be discovered on any of Jaguar’s exploration properties. There is also no assurance that, even if commercial quantities of ore are discovered, a mineral property will be brought into commercial production or that it will be profitable if brought into production. The discovery of mineral deposits is dependent upon a number of factors, including the technical skill of the exploration personnel involved. The commercial viability of a mineral deposit is also dependent upon, among a number of other factors, its size, grade, proximity to infrastructure, current metal prices, and government regulations, including regulations relating to required permits, royalties, allowable production, importing and exporting of minerals and environmental protection. The exact effect of these factors cannot be accurately predicted, but any of these factors, or the combination of any of these factors, may prevent Jaguar from receiving an adequate return on invested capital. In addition, depending on the type of mining operation involved, several years can elapse from the initial phase of drilling until commercial operations are commenced. Some ore reserves may become unprofitable to develop if there are unfavorable long-term market price fluctuations in gold or significant increases in operating or capital costs. Most of the above factors are beyond Jaguar’s control, and it is difficult to ensure that the exploration or development programs proposed by Jaguar will result in a profitable commercial mining operation.

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

Fluctuations in currency exchange rates, particularly 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 a major portion of Jaguar’s operating expenses is 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, 2022, the Brazilian Real strengthened against the US dollar.

**Competition for new mining properties may prevent Jaguar from acquiring interests in additional properties or mining operations.**

The gold mining industry is intensely competitive. Significant and increasing competition exists for gold and other mineral acquisition opportunities throughout the world. Some of the competitors are large, more established mining companies with substantial capabilities and greater financial resources, operational experience and technical capabilities than Jaguar. As a result of this competition, Jaguar may be unable to acquire rights to additional attractive mining properties on terms it considers acceptable. Increased competition could adversely affect Jaguar's ability to attract necessary capital funding or acquire an interest in additional operations that would yield Mineral Reserves or result in commercial mining operations.

**Jaguar relies on its management and key personnel, and there is no assurance that such persons will remain at Jaguar or that it will be able to recruit skilled individuals.**

Jaguar relies heavily on its management. Jaguar does not maintain "key man" insurance. 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. 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 capital costs, operating costs, production and economic returns may differ significantly from those estimated by Jaguar, and there can be no assurance that any future development activities will result in profitable mining operations.**

Capital and operating costs, production and economic returns, and other estimates contained in the feasibility studies 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, 2022, 2021, and 2020 were as follows:

		2022	2021	2020
Turmalina	Cash operating costs per ounce sold <sup>1</sup>	\$ 1,105	\$ 881	\$ 660
	All-in sustaining costs per ounce sold <sup>1</sup>	\$ 1,475	\$ 1,251	\$ 1,109
Pilar	Cash operating costs per ounce sold <sup>1</sup>	\$ 1,010	\$ 790	\$ 637
	All-in sustaining costs per ounce sold <sup>1</sup>	\$ 1,297	\$ 1,031	\$ 858
Consolidated	Cash operating costs per ounce sold <sup>1</sup>	\$ 1,052	\$ 831	\$ 647
	All-in sustaining costs per ounce sold <sup>1</sup>	\$ 1,483	\$ 1,215	\$ 1,044

<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.

**Increases in energy costs or the interruption of Jaguar's energy supply may adversely affect Jaguar's results of operations.**

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.



**There can be no assurance that the interests held by Jaguar in its properties are free from 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.

**Jaguar is exposed to risks of changing political stability and government regulation in the countries in which it operates.**

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.

**Jaguar is subject to additional business and financial risks inherent in doing business in Brazil.**

The Company's principal operations and mineral properties are located in Brazil. There are additional business and financial risks inherent in 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 2022, out of 180 countries in the world, Canada was ranked 14th with a CPI score of 74, the United States was ranked 24th with a CPI score of 69, and Brazil was ranked 94th with a CPI score of 38. The average score on the 2022 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. High-profile examples of alleged corruption were reported in 2021. Beginning on October 3, 2021, the International Consortium of Investigative Journalists ("ICIJ") published another 11.9 million leaked documents with 2.9 terabytes of data. This was the second leak by ICIJ, and these leaks have become known as the "Panama Papers." This leak in 2021 exposed the secret offshore accounts of 35 world leaders, including current and former presidents, prime ministers and heads of state, as well as more than 100 billionaires, celebrities and business leaders. The initial leak of the Panama Papers occurred in 2016, exposing 11.5 million confidential documents. Brazil did not escape scrutiny from the 2021 leak of the Panama Papers. One of the noteworthy names was Paulo Guedes. He, while in office as Brazil's minister of economy, is alleged to have kept a company in the British Virgin Islands with almost US\$10 million invested in a Credit Suisse account in New York, USA. Roberto Campos Neto, the Chairman of Brazil's Central Bank, was also featured in the 2021 release of the Panama Papers. Both deny any wrongdoing.

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.

Political and economic conditions directly affect the Company's business and can result in a material adverse effect on the Company. Macroeconomic policies imposed by the Brazilian government can have significant impact on Brazilian companies or companies with significant operations in Brazil, including the Company. On January 8, 2023, protesters broke into Brazil's Congress building, Supreme Court, and presidential palace, following the inauguration of Luiz Inácio

“Lula” da Silva on January 1, 2023, after a victory over Brazil’s former leader, Jair Bolsonaro, in a run-off election on October 30, 2022. The political unrest associated with the former administration coming to an end and the new administration taking over is reminiscent of the January 6, 2021 insurrection by rioters on the U.S. capitol building, and the short and long-term impacts on business and capital markets are unknown. Any actions taken by the current administration may have a negative impact on the economy and on the businesses, financial condition, results of operations, prospects and the valuation of mining companies, which could also negatively impact the Company, which negative impact could prove to be material over time.

**The ability of Jaguar to pay a dividend will be dependent on the financial condition of Jaguar.**

On November 9, 2022, Jaguar announced that the Board of Directors and management of the Company had decided to suspend its regular quarterly dividend in order to prioritize the maximization of cashflow to invest in growth capital, in particular the advancement of the Faina project and convert its exploration success into value enhancing propositions for its shareholders.

The declaration, timing, amount and payment of any future dividends are at the discretion of the Board and will depend upon, among other things, Jaguar’s future earnings, cash flows, acquisition capital requirements and financial condition, and other relevant factors. There can be no assurance that Jaguar will be in a position to declare any future dividends (at the current dividend amount or at all) due to the occurrence of one or more of the risks described herein.

**Jaguar is subject to significant governmental regulations.**

Jaguar’s mining and exploration activities are subject to extensive local laws and regulations. Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities, which may require operations to cease or be curtailed, or corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions. Parties engaged in mining operations may be required to compensate those suffering loss or damage by reason of the mining activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations.

Amendments to current laws, regulations and permits governing operations and activities of mining companies, or more stringent implementation of such requirements, could have a materially adverse impact on Jaguar and cause increases in capital expenditures or production costs or reductions in levels of production at producing properties or require abandonment or delays in the development of new mining properties.

**Jaguar’s operations are subject to numerous governmental permits, which are difficult to obtain, and it may not be able to obtain or renew all of the permits it requires, or such permits may not be timely obtained or renewed.**

Government approvals and permits are sometimes required in connection with Jaguar’s operations. Although Jaguar believes it has all of the material approvals and permits to carry on its operations, Jaguar may require additional approvals or permits or may be required to renew existing approvals or permits from time to time. Obtaining or renewing approvals or permits can be a complex and time-consuming process. There can be no assurance that Jaguar will be able to obtain or renew the necessary approvals and permits on acceptable terms, in a timely manner, or at all. To the extent such approvals are required and not obtained, Jaguar may be delayed or prohibited from proceeding with planned exploration, development or mining of mineral properties.

Under current regulations, all exploration activities that the Company undertakes through its subsidiaries must be carried out on valid exploration licences or prospecting permits issued by the DNPM, a department of the Brazilian federal government. The DNPM is responsible for the administration of all mining and exploration licences and prospecting permits. According to local regulations, the Company must submit a final exploration report before the expiry date of any licence or permit, which is usually three years from the date of grant. However, Brazilian mining laws and regulations are currently undergoing a major restructuring, and draft legislation to this effect has been submitted to the federal legislature for review and approval. The effects of this restructuring will, if adopted, be far-reaching in the ways that mining rights can be acquired and maintained in the country. Current proposals include an auction process for new licences, minimum expenditures designed to eliminate the “warehousing” of mining permits and licences as well as new fee schedules. They also provide for landowner participation where applicable. It is the Company’s understanding, based on consultations with local counsel, that licences currently held in good standing will be grandfathered and not subject to certain requirements of the proposed new regime. Production from the Company’s mines results in a 1.5% royalty fee



payment to the CFEM on the value of the ore produced. However, and as mentioned above, the Brazilian government is currently considering the adoption of new mining legislation that would include increases in the CFEM royalties.

Environmental permits are granted for one- to ten-year periods, and all local agencies have the right to monitor and evaluate compliance with the issued permits even though such monitoring tends to be minimal in scope and nature. Any changes to the exploration activities that result in a greater environmental impact require approval.

The work the Company carries out on its exploration licences is largely restricted to drilling and ancillary activities associated with the drilling programs (i.e., low impact road construction, drilling stations). As such, the reclamation costs in respect of drilling activities are not material to the Company and are factored into the budget for exploration programs.

**Jaguar is subject to substantial environmental laws and regulations that may increase its costs and restrict its operations.**

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. This is especially true following the high-profile Brumadinho dam disaster that occurred on January 25, 2019, when Dam I—a tailings dam at Vale's Córrego do Feijão iron ore mine, 9 kilometres east of Brumadinho, Minas Gerais, Brazil—suffered a catastrophic failure. Compliance with environmental laws and regulations may require significant capital outlays and may cause material changes or delays in, or the cancellation of, Jaguar's intended activities. There can be no assurance that future changes in environmental regulation, if any, will not be materially averse to Jaguar's operations. Specifically, new laws and regulations, amendments to existing laws and regulations, or more stringent enforcement of existing laws and regulations could have a materially adverse impact on the Company, increase costs, cause a reduction in levels of production and/or delay or prevent the development of new mining properties.

In light of tailings dam incidents 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 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 plan 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 others impacts. All these processes stayed in line with the new legislation in Brazil by the National Mining Agency (ANM) in 2021.

**The Company's information assets and critical infrastructure may be subject to cyber security risks.**

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 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 as 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.

Any future cyber security attacks that affect Jaguar's facilities, communications systems, Jaguar's customers or any of Jaguar's financial data could have an adverse effect on Jaguar's business. In addition, cyber-attacks on employee data may result in a financial loss and may negatively impact the Company's reputation. Third-party systems on which the

Company relies could also suffer operational system failure but the significance of any such event is difficult to quantify. Privacy and information security risks have generally increased in recent years because of the proliferation of new technologies, such as ransomware, and the increased sophistication and activities of perpetrators of cyber-attacks.

Jaguar has taken the following steps to protect against cyber security attacks: hiring third-party information technology consultants to review and monitor Jaguar's cyber security and conduct security tests; educating employees on cyber security threats, including phishing attacks, and best practices to protect against cyber threats; using multi-factor authentication by employees; preparing incident response plans; and limiting third-party access to Jaguar's key networks and technology infrastructure. In the future, Jaguar may expend additional resources to continue to enhance Jaguar's information security measures and/or to investigate and remediate any information security vulnerabilities.

Despite these steps, there can be no assurance that Jaguar will not suffer a data security incident in the future, that unauthorized parties will not gain access to sensitive data stored on Jaguar's systems, or that any such incident will be discovered in a timely manner. Furthermore, the techniques used by criminals to obtain unauthorized access to sensitive data, such as phishing and other forms of human engineering, are increasing in sophistication and are often novel or change frequently; accordingly, Jaguar may be unable to anticipate these techniques or implement adequate preventative measures.

**Land reclamation requirements for Jaguar's mining and exploration properties may be burdensome.**

Land reclamation requirements are generally imposed on companies engaged in mining operations and mineral exploration activities in order to minimize the long-term effects of land disturbance. Reclamation may include requirements to control the dispersion of potentially deleterious effluents and reasonably re-establish pre-disturbance landforms and vegetation. In order to carry out reclamation obligations imposed on Jaguar in connection with its mining and exploration activities, Jaguar must allocate financial resources that might otherwise be spent on further exploration and development programs. If Jaguar is required to carry out unanticipated reclamation work, its financial position could be adversely affected.

**Jaguar may need additional capital to accomplish its exploration and development plans or to cover its expenses and maintain adequate working capital, and there can be no assurance that financing will be available on terms acceptable to Jaguar or at all.**

Depending on gold prices and Jaguar's ability to achieve its plans and generate sufficient operating cash flow from its existing operations, the Company may require substantial additional financing to accomplish its exploration and development plans, maintain adequate working capital, or fund any non-operating expenses that may arise or become due such as interest, tax (in Canada or Brazil) or other expenses. Failure to obtain sufficient financing, or financing on terms acceptable to Jaguar, may result in a delay or indefinite postponement of exploration, development or production on any or all of Jaguar's properties or even a loss of an interest in a property, or an inability to pay any of Jaguar's non-operating expenses which could also lead to late fees or penalties, depending on the nature of the expense. The only source of funds now available to Jaguar is through production at Turmalina and Caeté, the sale of debt or equity capital, properties, royalty interests or the entering into of joint ventures or other strategic alliances in which the funding sources could become entitled to an interest in Jaguar's properties or projects. Additional financing may not be available when needed. If funding is available, the terms of such financing might not be favourable to Jaguar and might involve substantial dilution to existing shareholders. If financing involves the issuance of debt, the terms of the agreement governing such debt could impose restrictions on Jaguar's operation of its business. Failure to raise capital when needed could have a materially adverse effect on Jaguar's business, financial condition and results of operations.

**Jaguar is exposed to risks of labour disruptions and changing labour and employment regulations.**

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.

**Substantially all of Jaguar's assets are held by foreign subsidiaries that are subject to the laws of the Federal Republic of Brazil.**

Jaguar conducts operations through its wholly owned foreign subsidiary MSOL, and substantially all of Jaguar's assets are held through this entity. Accordingly, any governmental limitation on the transfer of cash or other assets between Jaguar and MSOL could restrict Jaguar's ability to fund its operations efficiently. Any such limitations or the perception that such limitations may exist now or in the future could have an adverse impact on Jaguar's prospects, financial condition and results of operations.

**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, has a favourable approach to employees of the Company. As such, corporate labour compliance is a key success factor in Brazilian-based operations to minimize the impact of labour claims. The Company has historically not been in full compliance of labour regulations, nor did it have the proper procedures in place to support labour claims defenses, which led to the bulk of the litigation provisions recorded.

**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; natural phenomena, such as inclement weather conditions, water availability, floods, and earthquakes; and unexpected labour shortages or strikes. Costs of production may also be affected by a variety of factors, including: changing waste-to-ore ratios, ore grade metallurgy, labour costs, the cost of commodities, general inflationary pressures and currency exchange rates.

**Jaguar may be subject to impacts on production if the road route between the Pilar Mine and the Caeté plant cannot be used due to rain or other events.**

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 50 km by road from the Caeté plant. Ore from Pilar is hauled to the Caeté plant. 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.

**Global financial conditions may negatively impact its operations and share pricing.**

Current global financial conditions have been characterized by increased volatility, particularly the markets for commodities, including gold. Access to public financing has been negatively impacted by several factors, including efforts by financial institutions to deleverage their balance sheets in the face of current economic conditions. These factors may

impact the ability of Jaguar to obtain equity or debt financing in the future on terms favourable to Jaguar. Additionally, these factors, as well as other related factors, may cause decreases in asset values that are deemed to be other than temporary, which may result in impairment losses. If Jaguar had to idle any of its producing properties or delay the development of any project, there is no assurance that it would be able to restart production or development without undue delay, if at all. If such increased levels of volatility and market turmoil continue, Jaguar's operations could be adversely impacted, and the trading price of its common shares may be adversely affected.

### **Russia Ukraine Conflict**

The Russian invasion of Ukraine and the Russia-Ukraine conflict is likely to have wide-ranging consequences on the peace and stability of the region and the rest of the world. Prevailing global financial conditions from time to time may impact the ability of the Company to obtain equity or debt financing in the future on terms favourable to the Company or at all. Recent global economic and geopolitical events, such as the war in Ukraine and sanctions on Russia, have created further uncertainty in global financial and equity markets. Any of these related economic factors may cause decreases in asset values that are deemed to be other than temporary, which may result in impairment losses and the Company's operations could be adversely impacted and the trading price of the common shares may be adversely affected.

The war in Ukraine and the sanctions imposed on Russia could result in increased input costs, particularly for energy and ammonium nitrate, used in explosives by the mining industry, for which Russia is a significant global supplier.

**The trading price for Jaguar's common shares is volatile and has been, and may continue to be, greatly affected by the ongoing market volatility.**

Securities of mineral exploration and early-stage base metal production companies have experienced substantial volatility in the past, often based on factors unrelated to the financial performance or prospects of the companies involved. These factors include macroeconomic developments in North America and globally and market perceptions of the attractiveness of particular industries. Jaguar's common share price is also likely to be significantly affected by short-term changes in gold prices or its financial condition or results of operations as reflected in its quarterly earnings reports. Other factors unrelated to Jaguar's performance that may have an effect on the price of its common shares include the following: the extent of analytical coverage available to investors concerning Jaguar's business may be limited if investment banks with research capabilities do not continue to follow Jaguar's securities; the lessening in trading volume and general market interest in Jaguar's securities may affect an investor's ability to trade significant numbers of Jaguar's common shares; and the size of Jaguar's public float may limit the ability of some institutions to invest in Jaguar's securities. As a result of any of these factors, the market price of Jaguar's common shares at any given point in time may not accurately reflect Jaguar's long-term value.

**Jaguar's mineral properties in Brazil operate in an emerging market and are subject to political, economic, social and geographic risks of doing business in Brazil**

The Company's mining and development properties in Brazil expose the Company to the socioeconomic conditions in Brazil, as well as to the laws governing the mining industry in the country. Inherent risks with conducting foreign operations include, but are not limited to: high rates of inflation, changes in monetary and exchange policies, changes in interest rates, decreased liquidity in the domestic capital and lending markets, energy shortages, military repression, war or civil war, social and labour unrest, organized crime, hostage-taking, terrorism, violent crime, extreme fluctuations in currency exchange rates, expropriation and nationalization, renegotiation or nullification of existing concessions, licences, permits and contracts, illegal mining, changes in taxation policies, restrictions on foreign exchange and repatriation and changing political norms, currency controls and governmental regulations that favour or require the Company to award contracts in, employ citizens of, or purchase supplies from a particular jurisdiction.

Failure to comply strictly with applicable laws, regulations and local practices relating to mineral rights applications and tenure could result in loss, reduction or expropriation of entitlements or the imposition of additional local or foreign parties as joint venture partners with carried or other interests. In addition, changes in government laws and regulations, including taxation, royalties, the repatriation of profits, restrictions on production, export controls, changes in taxation policies, environmental and ecological compliance, expropriation of property and shifts in the political stability of the country, could adversely affect the Company's exploration, development and production initiatives in Brazil.

The Brazilian government frequently intervenes in the Brazilian economy and occasionally makes significant changes in policies and regulations. Changes, if any, in mining or investment policies or shifts in political attitude in Brazil or any of

the jurisdictions in which the Company operates, may adversely affect the Company's operations or profitability. Operations may be affected in varying degrees by government regulations with respect to, but not limited to, restrictions on production, price controls, export controls, currency remittance, importation of parts and supplies, income and other taxes, expropriation of property, foreign investment, maintenance of claims, environmental legislation, land use, land claims of local people, water use and mine safety.

Uncertainty over whether the Brazilian government will implement changes in policy or regulation may contribute to economic uncertainty in Brazil. Historically, Brazilian politics have affected the performance of the Brazilian economy. Past political crises have affected the confidence of investors and the public, generally resulting in an economic slowdown.

Global economic crises could negatively affect investor confidence in emerging markets or the economies of the principal countries in Latin America, including Brazil. Such events could materially and adversely affect the Company's business, financial condition and results of operations.

The occurrence of these various factors and uncertainties cannot be accurately predicted and could have an adverse effect on the Company's business, results of operations and financial position.

**Inflation in Brazil, along with Brazilian governmental measures to combat inflation, may have a significant negative effect on the Brazilian economy and, as a result, on the Company's financial condition and results of operations.**

In the past, high levels of inflation have adversely affected the economies and financial markets of Brazil, and the ability of its government to create conditions that stimulate or maintain economic growth. Moreover, governmental measures to curb inflation and speculation about possible future governmental measures have contributed to the negative economic impact of inflation in Brazil and have created general economic uncertainty. As part of these measures, the Brazilian government has at times maintained a restrictive monetary policy and high interest-rates that have limited the availability of credit and economic growth. Brazil may experience high levels of inflation in the future. Inflationary pressures may weaken investor confidence in Brazil and lead to further government intervention in the economy, including interest rate increases, restrictions on tariff adjustments to offset inflation, intervention in foreign exchange markets and actions to adjust or fix currency values, which may trigger or exacerbate increases in inflation, and consequently, have an adverse impact on the Company. In an inflationary environment, the value of uncollected accounts receivable, as well as of unpaid accounts payable, declines rapidly. If Brazil experiences high levels of inflation in the future and price controls are imposed, the Company may not be able to adjust the rates the Company charges the Company's customers to fully offset the impact of inflation on the Company's cost structures, which could adversely affect the Company's results of operations or financial condition.

#### **Corruption and fraud in Brazil relating to ownership of real estate.**

Under Brazilian law, real property ownership is normally transferred by means of a transfer deed and subsequently registered at the appropriate real estate registry office under the corresponding real property record. There are uncertainties, corruption and fraud relating to title ownership of real estate in Brazil, mostly in rural areas. In certain cases, a real estate registry office may register deeds with errors, including duplicate and/or fraudulent entries, and, therefore, deed challenges frequently occur, leading to judicial actions. Property disputes over title ownership are frequent in Brazil, and, as a result, there is a risk that errors, fraud or challenges could adversely affect the Company's ability to operate, although ownership of mining rights are separate from ownership of land.

#### **Repatriation of earnings.**

There is no assurance that any countries 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 foreign entities.

#### **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.

#### **Internal controls provide no absolute assurances as to the reliability of financial reporting and financial statement preparation, and ongoing evaluation may identify areas in need of improvement.**

The Company's Audit and Risk Committee actively oversees the monitoring of any identified deficiencies and weaknesses in internal controls, as well as the risks they create for the Company. The Audit and Risk Committee, and more generally the Board, oversees the timely remediation of any weaknesses and, in the interim, the mitigation of the related risks. In consultation with the Company's internal auditors, as well as the Board, the Audit and Risk Committee monitors and evaluates, among other things, the following on an ongoing basis: (i) the effectiveness of internal controls; (ii) the materiality of, and potential risks that may arise from, any deficiencies or weaknesses in internal controls; (iii) how any such deficiencies and weaknesses can be remediated; (iv) management's plan and timeframe for any such remediation; (v) the status of any ongoing remediation plans of the Company; and (vi) whether any interim measures should be adopted prior to the completion of any remediation.

The Company has invested resources to document and assess its system of internal control over financial reporting and undertakes an evaluation process of such internal controls. Internal control over financial reporting are procedures designed to provide reasonable assurance that transactions are properly authorized, assets are safeguarded against unauthorized or improper use, and transactions are properly recorded and reported. A control system, no matter how



well designed and operated, can provide only reasonable, not absolute, safeguards with respect to the reliability of financial reporting and financial statement preparation.

The Company 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, 2022. Based on this evaluation, the CEO and CFO have concluded that the Company's disclosure controls and procedures in relation to the annual impairment testing were not effective as at December 31, 2022 due to the material weakness in internal control over financial reporting described in the "Disclosure Controls and Procedures and Internal Controls over the Financial Reporting" section herein. Other than the identification of the material weakness described in that section, there were no changes in the Company's internal control over financial reporting during the year ended December 31, 2022, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

In 2023, management will design and implement additional internal controls to perform the impairment review at a detailed level sufficient to prevent a material error going forward by implementing additional steps in the Company's review process. The material weakness will not be considered remediated, however, until the applicable controls operate for a sufficient period and management has concluded, through testing, that these controls are operating effectively.

If the Company fails to maintain the adequacy of its internal control over financial reporting, as either the Company's or the applicable regulatory standards are modified, supplemented, or amended from time to time, then the Company may not be able to ensure that it can conclude on an ongoing basis that it has effective internal controls over financial reporting. If in the future the Company is required to disclose a material weakness in its internal controls over financial reporting, then this could result in the loss of investor confidence in the reliability of the Company's financial statements, which in turn could harm the Company's business and negatively impact the trading price of its common shares. In addition, any failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm the Company's operating results or cause it to fail to meet its reporting obligations.

#### **Potential Secondary Market Liability**

Pursuant to amendments to the *Securities Act* (Ontario) which took effect on December 31, 2005 (and similar legislation that was enacted in most of Canada's other provinces), a new regime of statutory provisions governing the civil liability of public companies (and of their directors, officers, influential persons, experts and spokespersons) was adopted to give protection to investors who buy or sell corporate securities in the secondary markets during a period when a public company's corporate disclosure obligations are not being met.

Although the statutory secondary market liability provisions that were adopted at the end of 2005 speak of a statutory "right" of action, the prospective plaintiff can only commence a proceeding under these provisions with the leave (i.e., permission) of the court. Leave will be granted only if the court is satisfied that: (i) the action is being brought in good faith; and (ii) there is a "reasonable possibility" that the action will be resolved in favour of the plaintiff.

During the preparation of the Company's financial statements for the year ended December 31, 2022, an error was identified on 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 to the 2022 audited annual consolidated financial statements). Although KPMG LLP has not withdrawn its audit opinion letter dated March 21, 2022 that accompanies the Company's financial statements for the year ended December 31, 2021 (as filed on SEDAR on March 21, 2022), the Company faces the risk of a potential civil action regarding a potential allegation that the error resulted in there being a misrepresentation in the Company's financial statements for the year ended December 31, 2021 that existed from March 21, 2022 until the announcement and filing of the Company's comparative financial statements for the year ended December 31, 2022. However, the Company believes that a potential plaintiff will likely be unsuccessful in any such claim since the error is not likely material enough to constitute a misrepresentation because there was no impact to the Company's consolidated statement of cash flows as a result of this restatement of impairment charges, other than (i) a \$10.1 million decrease in net income offset by (ii) a \$10.1 million increase in impairment charges, both changes of which resulted in no change to the net cash provided by operating activities. Nonetheless, the probability of any litigation and the cost to defend or settle any such litigation is not known.

**Jaguar may be subject to community relations and social licence to operate issues, or involvement from Non-Governmental Organizations (NGOs).**

Jaguar mines in a peri-urban environment adjacent to communities surrounded by lands used for agriculture, residence, and other industry. Jaguar has no significant community relations issues at present. However, ore from Pilar is trucked to the Caeté plant for processing, which passes through one or two towns depending on the route. Jaguar has maintained good community relations with the neighbouring communities and city councils to date. Relations between Jaguar and its local communities may be affected by elections changing the relevant governmental authorities in whose jurisdictions Jaguar carries on business, by local community dissatisfaction with our operations, or by the involvement of an NGO opposed to mining. Community disruptions, changes in the relationship between Jaguar and the communities wherein it operates, or new involvement by NGOs opposed to mining, may have a materially adverse effect on Jaguar's business, which could result in changes in operational and financial conditions. Social licence to operate in Brazil is an ongoing exposure for all companies working in Brazil, especially in the mining sector.

**Jaguar may be negatively affected by an outbreak of infectious disease or pandemic.**

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. The global response to the COVID-19 outbreak has resulted in, among other things, border closures, severe travel restrictions and extreme fluctuations in financial and commodity markets. Additional measures may be implemented by one or more governments around the world in jurisdictions where the Company operates. Labour shortages due to illness, Company or government-imposed isolation programs, restrictions on the movement of personnel or possible 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. As efforts are undertaken to slow the spread of the COVID-19 virus, the operation and development of mining projects may be impacted. If the operation or development of one or more of the properties of Jaguar, or in which Jaguar holds a royalty, stream or other interest, is suspended or the development is delayed for precautionary purposes or as governments declare states of emergency or other actions are taken in an effort to combat the spread of COVID-19, it may have a materially adverse impact on Jaguar's profitability, results of operations, financial condition and the trading price of Jaguar's securities.

The adverse effects described above could be rapid and unexpected. The spread of the Omicron variant in late 2021 and early 2022 adversely impacted the workforce levels and operations of the Company. The actual and threatened spread of COVID-19 globally could adversely affect global economies and financial markets resulting in a prolonged economic downturn and a decline in the value of Jaguar's stock price.

The growing emergence of COVID-19 variants of concern that are more transmissible and carry increased health risks threaten another surge in cases and hospitalizations, which may lead to the adoption of new emergency measures. Disruptions caused by the imposition of these emergency measures may negatively impact the Company's operations.

Jaguar's management will continue to monitor the situation regarding COVID-19 and may take actions that alter Jaguar's business operations as may be required by federal, provincial or local authorities, or that management determines are in the best interests of Jaguar's employees, customers, suppliers, shareholders and other stakeholders. Such alterations or modifications could cause substantial interruption to Jaguar's business, any of which could have a materially adverse effect on, among other things, Jaguar's operations or financial results. The extent to which COVID-19 and any other pandemic or public health crisis impacts Jaguar's business, affairs, operations, financial condition (including Jaguar's ability to raise funds), liquidity, availability of credit and results of operations will depend on future developments that are highly uncertain and cannot be accurately predicted, including new information which may emerge concerning the effectiveness, acceptance and availability of vaccines, as well as the duration of associated immunity and efficacy of the vaccines against emerging variants of COVID-19, which may prolong the impacts of COVID-19 on the American, Canadian and Brazilian economies, the mining industry and Jaguar (including its workforce).

Even after the COVID-19 pandemic has subsided, Jaguar may continue to experience adverse impacts to its business as a result of the pandemic's global economic impact, including any related recession, as well as lingering impacts on Jaguar's workforce, suppliers and third-party service providers.



## **Climate change-related risks.**

Climate change is one of the most complex challenges facing the world today. It is a global, multi-dimensional problem. Climate-related risks are typically categorized as transitional risks and physical risks, the latter risks being further subdivided into acute physical risks (severe and short-term) and chronic physical risks (long-term and gradual in nature). Acute physical climate risks are typically witnessed in the form of extreme weather and weather-related events, such as tropical storms, wildfires, droughts and flooding, whereas chronic physical climate risks refer to enduring changes and shifts in average air or land temperatures, water acidification, soil quality and other persistent trends. Because of climate change, the Company and the broader gold mining industry faces new geotechnical risks, which could adversely impact the Company's production and profitability. Unanticipated adverse geotechnical and hydrological conditions, such as landslides, droughts, pit wall failures and rock fragility, may occur in the future and such events may not be detected in advance. Geotechnical instabilities and adverse climatic conditions can be difficult to predict and are often affected by risks and hazards outside of the Company's control, such as seismic activity, extreme severe weather events and considerable rainfall, which may lead to periodic floods, mudslides and embankment instability, and which could potentially result in, among other things, slippage of material.

Geotechnical failures could result in limited or restricted access to mine sites, suspension of operations, government investigations, increased monitoring costs, remediation costs, loss of ore and other impacts, including financial liability, which could cause one or more of the Company's projects to be less profitable than currently anticipated and could result in a materially adverse effect on the Company's results of operations and financial position.

Furthermore, the occurrence of physical climate change events may result in substantial costs to respond to and/or recover from an event, and to prevent recurrent damage, through either the modification of, or addition to, existing infrastructure at the Company's operations. The scientific community has predicted an increase, over time, in the frequency and severity of extraordinary or catastrophic natural phenomena as a result of climate change. The Company can provide no assurance that it will be able to predict, respond to, measure, monitor or manage the risks posed as a result.

The in-combination and cumulative effects of more than one physical climate risk can create a compounding or cascading set of risks which, together, can impose a far greater overall level of risk on mining operations. For example, the risk of flash flooding from extreme rainfall (an acute impact) is significantly magnified by long-term dry weather (a chronic impact) reducing the ground's ability to absorb water. Similarly, the combined effects of warmer average temperatures and greater wind speeds, resulting in increased dust levels, may likely shorten the operational life span of machinery.

Interconnected climate impacts may also affect communities that reside outside of usual risk assessment boundaries. While these risks may be indirect to our operations and mine sites, their magnitude may significantly affect our operations. For example, local communities will share climate change conditions with neighbouring mines and acute and chronic climate change risks may negatively affect employee welfare, social wellbeing and local economy stability which may, in turn, raise challenges for mine sites, even if they have proven to be relatively unaffected by a particular impact or hazard.

Also, the geography of our mine sites located in remote locations with limited and/or fragile infrastructure, means that the Company may find itself at the "front line" of climate change risks and efforts to manage their potential physical consequences.

In addition, as climate change is increasingly perceived as a broad societal and community concern, stakeholders may increase demands for emissions reductions and call upon mining companies to better manage their consumption of climate-relevant resources. Physical climate change events, and the trend toward more stringent regulations aimed at reducing the effects of climate change, could impact the Company's decisions to pursue future opportunities or maintain existing operations, which could have an adverse effect on its business and future operations. The Company can provide no assurance that efforts to mitigate the risks of climate change will be effective and that the physical risks of climate change will not have an adverse effect on its operations and profitability.

## **Environmental, health and safety regulations.**

Jaguar's mining and processing operations and development and exploration activities are subject to extensive laws and regulations governing the protection of the environment, waste disposal, worker safety, mine development, water management and protection of endangered and other special status species. Failure to comply with applicable

environmental and health and safety laws and regulations could result in injunctions, fines, suspension or revocation of permits and other penalties. While Jaguar strives to achieve full compliance with all such laws and regulations and with its environmental and health and safety permits, there can be no assurance that Jaguar will at all times be in full compliance with such requirements. Activities required to achieve full compliance can be costly and involve extended timelines. Failure to comply with such laws, regulations and permits will create reputational risks for the Company and can have serious consequences, including: stopping Jaguar from proceeding with the development of a project; negatively impacting the operation or further development of a mine; or increasing the costs of development or production and litigation or regulatory action against Jaguar, and may materially adversely affect Jaguar's business, results of operations or financial condition.

Future changes in applicable environmental and health and safety laws and regulations, such as the imposition of a carbon tax, could substantially increase costs and burdens to achieve compliance or otherwise have an adverse impact on Jaguar's business, results of operations or financial condition. Jaguar may also be held responsible for the costs of addressing contamination at the site of current or former activities or at third party sites. Jaguar could also be held liable to third parties for exposure to hazardous substances. The costs associated with such responsibilities and liabilities may be significant. While Jaguar has implemented extensive health and safety initiatives at its sites to protect the health and safety of its employees, contractors and members of the communities affected by its operations, there is no guarantee that such measures will eliminate the occurrence of accidents or other incidents which may result in personal injuries or damage to property, and in certain instances such occurrences could give rise to regulatory fines and/or civil liability.

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

The mining industry is subject to significant risks and hazards, including environmental hazards, industrial accidents, catastrophic equipment failures, unusual or unexpected geological conditions, labour force disruptions, civil strife, unavailability of materials and equipment, weather conditions, pit wall failures, tailings dam failures, rock bursts, cave-ins, flooding, seismic activity and water conditions, most of which are beyond Jaguar's control. Jaguar is also exposed to theft or loss of gold bullion or gold concentrate. These risks and hazards could result in: damage to, or destruction of, mineral properties or producing facilities; personal injury or death; environmental damage; delays in mining; and monetary losses and possible legal liability. As a result, production may fall below historic or estimated levels and Jaguar may incur significant costs or experience significant delays that could have a materially adverse effect on Jaguar's financial performance, liquidity and results of operations.

Jaguar maintains insurance to cover some of these risks and hazards. 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 higher pit walls, more complex underground operations and increased exposure to geotechnical instability. As Jaguar's operations mature, the open pit and underground operations at certain sites are getting deeper. Jaguar has experienced geotechnical failures at some open pit operations and seismic events at some underground operations. Seismic events may also affect mining operations in other ways, such as damage to critical infrastructure. No assurances can be given that unanticipated adverse geotechnical conditions, such as pit wall failures, 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 severe weather, higher than average rainfall and seismic events

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. Geotechnical or 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.

**Availability and increased cost of critical parts, equipment and skilled labour.**

Availability and increased cost of critical parts, equipment and skilled labour, and an increase in worldwide demand for critical resources such as input commodities, drilling equipment, tires and skilled labour may cause unanticipated cost increases and delays in delivery times, thereby impacting the Company's operating costs, capital expenditures and construction and production schedules.

**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 involve 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, other respondents, and also perhaps to the companies that they are highly associated or connected with, including, in the case of Mr. Kennedy, 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 of time 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 director of Jaguar at the conclusion of the proceeding. Jaguar will be paying close attention to the proceeding. Mr. Kennedy and the other respondents are defending the proceedings and the allegations have not been proven.

## **CRITICAL ACCOUNTING ESTIMATES**

The preparation of consolidated financial statements in conformity with IFRS 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. Certain estimates, such as those related to the valuation of mineral exploration projects and royalty assets, recoverability of property plant and equipment, reclamation provisions, derivatives, measurement of inventory and disclosure of contingent assets and liabilities depend on subjective or complex judgments about matters that may be uncertain. Changes in those estimates could materially impact the Company's condensed interim consolidated financial statements.

The critical accounting estimates, judgments, and assumptions applied in the preparation of the Company's audited annual consolidated financial statements for the year ended December 31, 2022, are consistent with those applied and disclosed in the audited annual consolidated financial statements for the year ended December 31, 2021. For details of these estimates, judgments, and assumptions, please refer to the Company's audited annual consolidated financial statements for the year ended December 31, 2022, 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, 2022. Based on this evaluation, the CEO and CFO have concluded that the Company’s disclosure controls and procedures in relation to the annual impairment testing were not effective as at December 31, 2022 due to the material weakness in internal control over financial reporting described below.

### *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:

- accounting records are maintained that accurately and fairly reflect, in reasonable detail, the transactions and dispositions of assets of the Company;
- 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; and
- 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.

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 not effective as at December 31, 2022 due to the material weakness described below.

During the preparation of the Company's financial statements for the year ended December 31, 2022, an error was identified on 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 appears to be a reasonable possibility that a material misstatement will not be prevented or detected on a timely basis to 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.

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

Other than the identification of the material weakness described above, there were no changes in the Company's internal control over financial reporting during the year ended December 31, 2022, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

In 2023, management will design and implement additional internal controls to perform the impairment review at a detailed level sufficient to prevent a material error going forward by implementing additional steps in the Company's review process. The material weakness will not be considered remediated, however, until the applicable controls operate for a sufficient period and management has concluded, through testing, that these controls are operating effectively.

#### *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 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 constitute "forward-looking information" within the meaning of applicable Canadian securities legislation. This forward-looking information includes, but is not limited to, statements concerning the Company's future objectives, Measured and Indicated Mineral Resources, Proven and Probable Mineral Reserves, their average grade, the commencement period of production, cash operating costs per ounce and completion dates of feasibility studies, gold production and sales targets, capital expenditure costs, future profitability and growth in mineral reserves. Forward-looking information can be identified by the use of words such as "are expected," "is forecast," "is targeted," "approximately," "plans," "anticipates," "projects," "continue," "estimate," "believe" or variations of such words and phrases or statements that certain actions, events or results "may," "could," "would," "might," or "will" be taken, occur or be achieved. Forward-looking information involves known and unknown risks, uncertainties and other factors which may cause the actual results or performance to be materially different from any future results or performance expressed or implied by the forward-looking information. These factors include the inherent risks involved in the exploration and development of mineral properties, the uncertainties involved in interpreting drilling results and other geological data, fluctuating gold prices and monetary exchange rates, the possibility of project delays and cost overruns or unanticipated costs and expenses, uncertainties relating to the availability and costs of financing needed in the future, uncertainties related to production rates, timing of production and the cash and total costs of production, changes in applicable laws including laws related to mining development, environmental protection, and the protection of the health and safety of mine workers, the availability of labour and equipment, the possibility of civil insurrection, labour strikes and work stoppages, changes in general economic conditions and the declaration, timing, amount and payment of potential future dividends. Although the Company has attempted to identify important factors that could

cause actual actions, events or results to differ materially from those contained in forward-looking information, there may be other factors that could cause actions, events or results to differ from those anticipated, estimated or intended.

This forward-looking information represents the Company's views as of the date of this MD&A. The Company anticipates that subsequent events and developments may cause the Company's views to change. The Company does not undertake to update any forward-looking information, either written or oral, that may be made from time to time by, or on behalf of the Company, subsequent to the date of this discussion, other than as required by law. For a discussion of important factors affecting the Company, including fluctuations in the price of gold and exchange rates, uncertainty in the calculation of mineral resources, competition, uncertainty concerning geological conditions and governmental regulations and assumptions underlying the Company's forward-looking information, see "CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS" and "RISK FACTORS" in the Company's Annual Information Form for the year ended December 31, 2022, which will be filed on SEDAR under the profile of Jaguar Mining Inc. on or before March 31, 2023 and available at [www.sedar.com](http://www.sedar.com). Further information about the Company is available on its corporate website at [www.jaguarmining.com](http://www.jaguarmining.com).