

MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE QUARTER ENDED MARCH 31, 2024

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MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE QUARTER ENDED MARCH 31, 2024

This Management's Discussion and Analysis ("MD&A") should be read in conjunction with the unaudited condensed interim consolidated financial statements for the three months ended March 31, 2024, and the annual audited financial statements and MD&A for the year ended December 31, 2023, and related notes thereto which have been prepared in accordance with International Financial Reporting Standards ("IFRS Accounting Standards") as issued by the International Accounting Standards Board (IASB). For further information on Jaguar Mining Inc., reference should be made to its public filings (including its most recently filed annual information form ("AIF") which is available on SEDAR+ at www.sedarplus.ca). 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 Reais. This report is dated as of May 8, 2024.

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

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

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

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

Abbreviation	Period	Abbreviation	Period
Q1 2024	January 1, 2024 – March 31, 2024	Q1 2023	January 1, 2023 – March 31, 2023

BUSINESS & STRATEGIC PRIORITIES

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

FIRST QUARTER 2024 HIGHLIGHTS

Release of updated mineral reserves and resources

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

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

Changes to the Board of Directors

On January 19, 2024, the Company announced the appointment of Vernon Baker to the Company Board of Directors. Vern was appointed Chief Executive Officer of Jaguar on August 6, 2019, following an extensive search conducted by the Company. On April 11, 2024, the Company announced the passing of director John Ellis, who had joined the board in 2016. With the appointment of Vernon as a Director and the passing of John Ellis, the Board now consists of seven members, five of whom are independent.

Investment in Faina

Development of dual access drifts from the Turmalina mine reached the Faina resource at the end of Q4 2023. During Q1 2024, the Company conducted definition drilling in the Faina resource as the first step of planning the development to access the better-grade zones in preparation for the first ore production from Faina, expected in the second half of 2024.

2023 Production shortfall, mining method change

After encountering changing geometry of the main ore body at the Pilar mine and block-model reconciliation differences at the Turmalina mine (see the Company's July 11, 2023 press release), the Company made changes in the mining methods at its operations. At Pilar mine, long-hole stoping was reduced in favour of more conventional cut-and fill stoping, where appropriate. In addition, more rigorous grade-control measures at both Pilar and Turmalina.

Operating cost reductions

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

FINANCIAL AND OPERATIONAL SUMMARY

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

- Revenue in Q1 2024 of \$32.6 million was 9% below the \$35.8 million in revenue reported for Q1 2023, driven by lower production and fewer ounces sold partially offset by higher realized gold prices year-over-year. During Q1 2024, 15,692 gold ounces were sold which was 17% below the 19,008 ounces sold in Q1 2023, however realized gold prices were \$2,076 per ounce in Q1 2024 and 10% higher than the \$1,886 per ounce realized in Q1 2023.
- Consolidated gold production decreased by 11% to 16,177 ounces in Q1 2024, compared to 18,156 ounces in Q1 2023, reflecting a 7% reduction in ore tonnes processed, from 206,000 in Q1 2023 to 191,000 in Q1 2024, combined with a 4% drop in the average head grade of 3.03 g/t in Q1 2024, compared to 3.17 g/t in Q1 2023.
- In Q1 2024, total development of 2,489 metres was down by 30%, compared to total development in Q1 2023 of 2,880 metres. Development in Q1 2024 included primary development of 929metres, and secondary development of 1,082 metres. These development rates reflect sustainable progress on the ramp and for ore development. There were no exploration development metres completed during Q1 2024, reflecting the timing of work in the Faina resource and in the BA zone at Pilar (refer to the Company's news release on February 28, 2024).
- Operating costs totaled \$18.3 million in Q1 2024, a decrease of 11% compared to the \$20.6 million reported in Q1 2023. Lower operating costs in Q1 2024 mainly reflect cost reductions that were executed in the second half of 2023.
- Net income for Q1 2024 was \$2.8 million, up by \$0.3 million compared to net income of \$2.5 million reported for Q1 2023.
- Basic earnings per share for Q1 2024 of \$0.04 are higher than the basic earnings per share of \$0.03 reported in Q1 2023, the increase is driven by higher net income, as explained above, and a larger denominator for the weighted-average number of shares outstanding, of 79,066,665 in Q1 2024 compared to 72,564,246 in Q1 2023.

Cash Operating Costs per ounce sold¹, All-In-Sustaining Costs ("AISC")¹, Non-Sustaining Capital Expenditures¹ and Free Cash Flow¹

- Cash operating costs per ounce¹ increased by 8% to \$1,167 per ounce of gold sold in Q1 2024 compared to \$1,084 in Q1 2023 reflecting operating cost savings explained above more than offset by the volume impact of a 17% decrease in ounces of gold sold, from 19,008 ounces in Q1 2023 to 15,692 ounces sold in Q1 2024.
- All-in sustaining costs per ounce¹ were \$1,608 per ounce of gold sold in Q1 2024, 2% above the AISC of \$1,575 per ounce in Q1 2023. The modest increase in AISC per ounce reflects the volume impact of 17% fewer ounces sold, largely offset by lower gross costs particularly a \$2.1 million reduction in sustaining capital expenditures in Q1 2024 compared to Q1 2023.
- Non-sustaining capital expenditures¹ increased by 32% from \$2.2 million in Q1 2023 to \$2.9 million in Q1 2024. Expenditures in Q1 2024 include growth capital expenditures on the Northwest zone at Turmalina and Southwest zone at Pilar, the leach tailings filtration system at the Caeté plant, as well as growth exploration drilling.
- Free cash flow in Q1 2024 was \$3.2 million and was based on operating cash flow plus asset retirement obligation expenditures, less capital expenditures, compared to \$3.3 million in Q1 2023. Free cash flow was \$207 per ounce of gold sold in Q1 2024 compared to \$176 in Q1 2023.

¹ 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.

Cash Position and Working Capital²

- As of March 31, 2024, the Company had cash and cash equivalents of \$26.4 million, compared to balances of \$22.0 million at December 31, 2023. Cash and cash equivalents increased by about \$4.4 million during the first quarter, mainly reflecting the receipt of other accounts receivable of \$4.0 million from BHP in March 2024.
- Working capital, defined as the excess of current assets over current liabilities, was \$21.4 million at March 31, 2024, compared to working capital of \$12.6 million at December 31, 2023. This \$8.8 million increase in working capital reflects a \$4.4 million increase in ending cash and cash equivalents position, a \$1.8 million increase in gold-in-process and finishedgoods inventory, a \$0.5 reduction in short-term recoverable taxes and a \$0.5 million increase in prepaid expenses. Among current liabilities, there was a \$0.7 million reduction in notes payable and lease liabilities and a \$0.7 million decrease in reclamation provision.

Q1 2024 FINANCIAL AND OPERATING SUMMARY

(\$ thousands, except where indicated)		onths ended arch 31
	2024	2023
Financial Data		
Revenue	\$ 32,57	'7 \$ 35,844
Operating costs	18,31	20,612
Depreciation	7,16	5,765
Gross profit	7,10	9,467
Net income	2,82	2,473
Per share ("EPS")	0.0	0.03
EBITDA	12,01	11,046
Adjusted EBITDA ^{1,2}	11,32	12,487
Adjusted EBITDA per share ^{1,2}	0.1	4 0.17
Cash operating costs (per ounce sold) ¹	1,16	1,084
All-in sustaining costs (per ounce sold) ¹	1,60	1,575
Average realized gold price (per ounce) ¹	2,07	1,886
Cash generated from operating activities	8,10	10,365
Free cash flow ¹	3,24	3,347
Free cash flow (per ounce sold) ¹	20	17 6
Sustaining capital expenditures ¹	5,10	7,212
Non-sustaining capital expenditures ¹	2,87	2,212
Total capital expenditures	7,97	9,424

¹ 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.

² 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.

² 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.

	Three mor	nths ended ch 31
	2024	2023
Operating Data		
Gold produced (ounces)	16,177	18,156
Gold sold (ounces)	15,692	19,008
Primary development (metres)	929	1,259
Exploration development (metres)	478	216
Secondary development (metres)	1,082	1,405
Definition, infill, and exploration drilling (metres)	6,843	9,654

Q1 2024 net income of \$2.8 million (\$ 0.04per share) was higher than Q1 2023 net income of \$2.5 million (\$ 0.03 per share) by \$0.3 million or 14% (\$0.01 per share). Q1 2024 net income includes the benefit of a 10% higher average realized gold price partly offset by 17% fewer ounces sold, compared to Q1 2023. Q1 2024 AISC per ounce were \$1,608 compared to \$1,575 in Q1 2023, with the increase in unit costs partly explained by the lower volume of gold sold in Q1 2024 compared to Q1 2023.

CONSOLIDATED FINANCIAL RESULTS

Quarterly Financial Review

	Q1 2024	Q4 2023	Q3 2023	Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022
(\$ thousands except where indicated)								
Revenue	\$ 32,57	7 \$ 35,872	\$ 31,621	\$ 33,192	\$ 35,844	\$ 36,108	\$ 37,846	\$ 37,927
Operating cost	(18,315	(19,707)	(19,603)	(19,462)	(20,612)	(21,439)	(22,098)	(21,075)
Depreciation	(7,161	(5,977)	(6,697)	(6,220)	(5,765)	(5,229)	(5,384)	(4,866)
Gross profit	7,10	l 10,188	5,321	7,510	9,467	9,440	10,364	11,986
Net income (loss)	2,82	7 10,697	3,785	(1,101)	2,473	11,525	6,475	9,478
Cash flows from operating activities	8,10	9,355	6,346	9,973	10,365	10,352	13,266	9,440
Total assets	309,06	309,119	296,740	291,429	289,055	288,133	266,645	263,196
Total liabilities	65,95	L 68,846	67,217	72,109	69,104	71,112	61,221	62,067
Non-current financial liabilities	34,669	35,435	36,535	38,769	36,932	36,032	27,774	27,319
Current income taxes	1,24	1,388	-	1,521	1,895	1,884	999	146
Notes payable	\$ 3,12	3 \$ 3,295	\$ 3,405	\$ 3,067	\$ 3,040	\$ 3,040	\$ 3,026	\$ 3,032

Revenue

(4.1)	-	Three months ended March 31										
(\$ thousands, except where indicated)				iviarch	31							
	20	024	20	023	Change							
Revenue		\$	32,577	\$	35,844	(9%)						
Ounces sold			15,692		19,008	(17%)						
Average realized gold price ¹		\$	2,076	\$	1,886	10%						
Average market gold price ¹		\$	2,071	\$	1,890	10%						

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

The Company's revenue in Q1 2024 of \$32.6 million was 9% below the prior-year quarterly revenue of \$35.8 million reported in Q1 2023, driven by 17% fewer ounces sold partly offset by 10% higher average realized gold prices. The Q1 2024 ounces sold of 15,692 were below the 19,008 ounces sold in Q1 2023 reflecting lower production, as explained earlier. Realized gold prices were 2,076 per ounce in Q1 2024, \$190 per ounce or 10% higher than the realized gold price of \$1,886 per ounce in Q1 2023.

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

During Q1 2024, gold traded at an average market price³ of \$2,071 per ounce (London PM Fix), varying between \$1,991 per ounce and \$2,211 per ounce, and closed at \$2,207 per ounce on March 31, 2024. The average realized price³ of \$2,076 per ounce for Q1, was in line with the average market prices during the quarter.

Consolidated Production Costs

(\$ thousands, except where indicated)	Three months ended March 31										
		2	2024	2	2023	Change					
Mining		\$	10,024	\$	11,811	(15%)					
Processing Direct mining and processing cost			7,377 17,401		7,739 19,550	(5%) (11%)					
Royalties, production taxes and others			914		1,062	(14%)					
Total operating expenses		\$	18,315	\$	20,612	(11%)					
Depreciation			7,161		5,765	24%					
Total cost of sales		\$	25,476	\$	26,377	(3%)					

Direct mining and processing costs of \$17.4 million in Q1 2024 decreased by \$2.2 million or 11% from the \$19.6 million reported in Q1 2023. This reduction is driven by lower mining costs, which were 15% below the prior-year quarter, reflecting the impact of reductions in personnel and other cost savings implemented in Q4 2023, combined with the volume impact of 7% fewer tonnes mined and processed. Depreciation expense increased by 24% mostly reflecting the impact of higher depreciable assets including an \$8.9 million impairment reversal on Turmalina PPE recorded as at December 31, 2023.

Care and Maintenance Costs

The Paciência Complex, including the Santa Isabel mine and plant, has been on care and maintenance since 2012, and the Roça Grande Mine has been on care and maintenance since 2018. Care and maintenance costs were \$0.2 million in Q1 2024, in line with Q1 2023.

General and Administration Expenses

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

(\$ thousands) Three months ended									
	March 31								
		20	024	20	023	Change			
Directors' fees and expenses		\$	100	\$	98	2%			
Audit related and insurance			206		296	(30%)			
Corporate office (Toronto)			478		390	23%			
Belo Horizonte office			1,015		917	11%			
Total G&A expenses		\$	1,799		1,701	6%			

Total G&A expenses for Q1 2024 increased by \$0.1 million or 6% compared to Q1 2023. Costs associated with the Belo Horizonte office increased by 11% mainly reflecting additional costs related to the IAMGOLD office integration but also include the impact of foreign exchange between the Brazilian real versus the US dollar, as the average BRL-USD exchange rate was

³ 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.

stronger during Q1 2024 compared to Q1 2023. Audit-related and insurance expenses were 30% below Q1 2023 mainly reflecting the timing of insurance premium amortization. Corporate office costs in Q1 2024 were up by \$0.09 million or 23% partly reflecting the timing of TSX listing fees (\$0.04 million) and higher consulting supporting the year-end reporting process.

Non-Operating Expenses

(\$ thousands) Three months ended										
		March 31								
	2024 2023 Cha									
Foreign Exchange (gain) loss		\$	(1,211)	\$	952	(227%)				
Finance costs			745	\$	894	(17%)				
Other non-operating expenses (recoveries)		541 (462) (21								
Non-operating expenses		\$ 75 \$ 1,384 (959)								

A significant portion of the Company's expenditures at its Brazilian operation are denominated in the Brazilian real. The foreign-exchange gain of \$1.2 million in Q1 2024 is \$2.2 million higher than the \$1.0 million foreign-exchange loss in Q1 2023, reflecting the trend of exchange rates between the Brazilian real and the US dollar in respective periods. During Q1 2023, the Brazilian real was becoming stronger, which generated foreign-exchange losses in the period. However, during Q1 2024 the Brazilian real was weakening, which generated gains in the latest quarter. The exchange rate on January 1, 2023, was R\$5.29 and it strengthened to R\$5.09 by March 31, 2023. On January 1, 2024, the exchange rate was R\$4.84 and it weakened to R\$5.02 by March 31, 2024.

Other non-operating expenses were \$0.5 million in Q1 2024 and \$1.0 million higher than the \$0.5 million recovery reported in Q1 2023. This \$1.0 million change from a recovery to an expense principally reflects gains and losses on the disposition of equipment, specifically a \$1.0 million loss realized during Q1 2024 on the sale of used trucks mainly at the Caeté processing facility.

Taxes

Brazilian Taxes

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

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

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

Government and Beneficiaries Royalty

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

Income Tax Expenses

(\$ thousands)	Three	e months ended	Three months ended										
		March 31											
		2024	2023	Change									
Current income tax expense	\$	1,249	\$ 1,89	5 (34%)									
Income tax expense	\$	\$ 1,249 \$ 1,895											

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

The income tax provision is subject to a number of factors including the allocation of income between different countries, at disparate tax rates, the non-recognition of tax assets, foreign-currency exchange-rate movements, changes in tax laws and the impact of specific transactions and assessments. Due to the number of factors that can potentially impact the effective tax rate and the sensitivity of the tax provision to these factors, it is expected that the Company's effective tax rate will fluctuate in future periods. Due to the facts mentioned above, current income taxes decreased to \$1.3 million in Q1 2024, compared to \$1.9 million in Q1 2023.

OPERATIONAL REVIEW

Jaguar Mining Gold Production

	Q1 2024	Q1 2023	Change
Tonnes of ore mined	191,000	198,000	(4%)
Tonnes of ore processed	191,000	206,000	(7%)
Average head grade $(g/t)^1$	3.03	3.17	(4%)
Average recovery rate (%)	87%	86%	1%
Gold (oz.)			
Produced	16,177	18,156	(11%)
Sold	15,692	19,008	(17%)

 $^{^{\}rm 1}\,{\rm The}$ 'average head grade' represents the recalculated head-grade milled.

Consolidated gold production of 16,177 ounces in Q1 2024 was 11% below the 18,156 ounces produced in Q1 2023, driven by lower average head grades and fewer tonnes processed compared to Q1 2023. The average head grade in Q1 2024 of 3.03g/t was 5% below the 3.17g/t average head grade reported in Q1 2023. Ore processed in Q1 2024 was 191,000 tonnes which was 7% below the 206,000 ore tonnes processed in Q1 2024.

Turmalina Gold Mine Complex

Turmalina Quarterly Production

	Q	1 2024	Q.	4 2023	С	3 2023	С	2 2023	Q	1 2023	Q4 2	2022	C	ევ 2022	С	22 2022
Tonnes of ore mined		92,000	1	02,000		99,000	1	102,000	1	.00,000	107	7,000		106,000	1	100,000
Tonnes of ore processed		95,000		99,000	1	101,000	1	100,000	1	.08,000	101	L,000	:	105,000	1	101,000
Average head grade (g/t) ¹		2.59		3.02		3.01		2.80		2.84		3.50		3.41		3.10
Average recovery rate (%)		86%		88%		87%		87%		84%		86%		87%		88%
Gold (oz.)																
Produced		6,820		8,457		8,529		7,874		8,258	9	9,803		9,966		8,816
Sold		6,426		8,455		8,464		7,661		8,870	9	9,269		10,867		7,643
Cash operating cost (per oz. sold) ²	\$	1,210	\$	1,070	\$	1,071	\$	1,118	\$	1,136	\$	973	\$	995	\$	1,194
All-in sustaining cost (per oz. sold) ²	\$	1,623	\$	1,460	\$	1,399	\$	1,787	\$	1,574	\$ 1	L,444	\$	1,265	\$	1,594
Cash operating cost (per tonne) ²	\$	82	\$	91	\$	90	\$	86	\$	93	\$	89	\$	103	\$	90
Cash operating cost (R\$ per tonne) ²	\$	405	\$	453	\$	439	\$	424	\$	485	\$	470	\$	541	\$	445

¹ The 'average head grade' represents the recalculated head-grade milled.

During Q1 2024, the Turmalina gold mine ("Turmalina") produced 6,820 ounces of gold compared to 8,258 ounces in Q1 2023, a decrease of 17% or 1,438 ounces. Fewer ounces produced reflects a lower average head grade of 2.59 g/t in Q1 2024 compared to 2.84 g/t in Q1 2023, combined with a 12% decrease in the tonnes of ore processed, from 108,000 in Q1 2023 to 95,000 tonnes in Q1 2024. The Turmalina operating team has improved ore sampling and drilling to better follow ore-waste definition yet challenges with development headings during Q1 2024 contributed to fewer tonnes mined and lower grades. The cash operating cost per ounce sold of \$1,210 for Q1 2024 increased by \$74 or 7%, compared to Q1 2023 mainly reflecting the volume impact of fewer ounces sold in Q1 2024, partially offset by lower gross operating expenses; specifically, lower fuel consumption based on shorter cycles, lower expenses for external services (underground excavation and equipment rental) and lower expenses on plant consumables (cyanide and grinding balls) based on fewer ore tonnes processed.

Turmalina Capital Expenditures

(\$ thousands)		Three months ended March 31							
	2024	20)23						
Sustaining capital ¹									
Primary development	\$ 1,870	\$	3,056						
Brownfield exploration	210		174						
Mine-site sustaining	573		650						
Total sustaining capital ¹	2,653		3,880						
Mine-site non-sustaining	2,445		1,717						
Asset retirement obligation (Dam closing project)	10		21						
Total non-sustaining capital ¹	2,455		1,738						
Total capital expenditures	\$ 5,108	\$	5,618						

¹ 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.

² Cash operating costs (per oz. sold), All-in sustaining costs, and 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.

Turmalina Development and Drilling Progress (metres)

(metres)		Three months ended March 31				
	2024	2023				
Primary development	1,070	1,027				
Primary development	592	811				
Exploration development	478	216				
Secondary development	665	753				
Total development	1,735	1,780				
Definition drilling	-	2,008				
Infill drilling	3,573	3,033				
Exploration drilling	-	220				
Total definition, infill, and exploration drilling	3,573	5,261				

Mining

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

Turmalina processed 95,000 ore tonnes in Q1 2024, which represents a decrease of 12% compared to Q1 2023. Lower mine production during Q1 2024 reflects challenges with stope cycling but also a very active Dengue epidemic during the rainy season which drove sick-day losses and affected manpower levels more than experienced during the COVID-19 pandemic. Current development rates in the C-zone orebody structure are adequate to sustain production. Development is being completed by both Jaguar crews and the mining contractor Toniolo Busnello ("TBSA").

Q1 2024 total development of 1,735 metres was in line with the 1,780 metres developed in Q4 2023. These development rates provide sustainable progress on the ramp, ore development, as well as exploration drives.

Processing

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

Caeté Gold Mine Complex

Caeté Complex Quarterly Production

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

Pilar Quarterly Production

	Q	1 2024	Q4	4 2023	С	(3 2023	С	2 2023	C	Q1 2023	C	շ4 2022	(ე3 2022	C	22 2022
Tonnes of ore mined		99,000		97,000	1	107,000	1	103,000		98,000	:	108,000		111,000	:	124,000
Tonnes of ore processed (t)		96,000		96,000	1	107,000	1	103,000		98,000	:	108,000		111,000	1	127,000
Average head grade (g/t) ¹		3.46		3.68		2.88		3.04		3.54		3.71		3.51		3.73
Average recovery rate (%)		88%		88%		88%		88%		88%		88%		89%		87%
Gold (oz.)																
Produced		9,357		10,025		8,787		8,876		9,898		11,313		11,195		13,212
Sold		9,266		9,643		8,038		9,256		10,138		11,671		11,254		12,839
Cash operating cost (per oz. sold) ²	\$	1,137	\$	1,105	\$	1,311	\$	1,177	\$	1,039	\$	1,064	\$	1,002	\$	931
All-in sustaining cost (per oz. sold) ²	\$	1,390	\$	1,422	\$	1,701	\$	1,508	\$	1,356	\$	1,562	\$	1,238	\$	1,045
Cash operating cost (per tonne) ²	\$	110	\$	111	\$	98	\$	106	\$	107	\$	115	\$	102	\$	94
Cash operating cost (R\$ per tonne) ²	\$	543	\$	551	\$	481	\$	524	\$	559	\$	605	\$	533	\$	464

 $^{^{\}rm 1}\,\mbox{The}$ 'average head grade' represents the recalculated head-grade milled.

During Q1 2024, Pilar produced 9,357 ounces of gold compared to 9,898 gold ounces in Q1 2023, a decrease of 541 ounces or 5%, mainly driven by a 2% decrease in ore tonnes processed, from 98,000 in Q1 2023 to 96,000 in Q1 2024, with average grades within 2% of grades in Q1 2023. After experiencing rapid geometry changes in the main orebody in Q2 2023 and adopting a more conventional cut-and fill stoping method during Q3 2023, Pilar production and grades recovered in Q4 2023. The cash operating cost per ounce sold for Q1 2024 increased by \$98/ounce or 9% compared to Q1 2023, mainly due to fewer gold ounces sold, with 9,266 ounces sold in Q12024 compared to 10,138 ounces sold in Q1 2023. The volume impact of fewer ounces sold is \$73/ounce, which explains most of the \$98/ounce increase. Additional cost growth in Q1 2024 versus Q1 2023 includes higher hauling expenses from Pilar mine to the Caeté plant which were affected by the rainy season from January to March.

Pilar Capital Expenditures

(\$ thousands, except where indicated)		Three months ended March 31							
	2024	2023							
Sustaining capital ¹									
Primary development	\$ 1,849	\$ 2,103							
Brownfield exploration	117	125							
Mine-site sustaining	376	988							
Total sustaining capital ¹	2,342	3,216							
Mine-site non-sustaining	192	301							
Asset retirement obligation (Dam closing project)	229	33							
Total non-sustaining capital ¹	421	334							
Total capital expenditures	\$ 2,763	\$ 3,550							

¹Sustaining 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.

² Cash operating costs (per oz. sold), All-in sustaining costs, and 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.

Pilar development and drilling progress (metres)

(metres) Three months ende March 31						
	2024	2023				
Primary development	337	448				
Primary development	337	448				
Exploration development	-	-				
Secondary development	417	652				
Total development	754	1,100				
Definition drilling	1,038	1,417				
Infill drilling	1,428	2,206				
Exploration drilling	804	770				
Total definition, infill, and exploration drilling	3,270	4,393				

Mining

Located 100 kilometres east of Belo Horizonte, Pilar is an underground mine that predominantly utilizes sub-level stoping and cut-and-fill as a mining method. Backfilling is completed using loose rockfill. The main ore block is in a fold structure of banded iron formation and has been developed to the 16 level and appears to extend to depth. This area provides the majority of the mine's production, which is augmented by ore from the Southwest Zone from higher levels in the mine (ranging from levels 2 through 9) and is expected to be fed by ore from the BA-Torre zone as it is further drilled and developed. The development rate in Q1 2024 dropped by 31% with a total development of 754 metres compared to 1,100 metres developed in Q1 2023, mainly reflecting the completion of exploration development at the Southwest Zone in Q4 2022.

Processing

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

REVIEW OF FINANCIAL CONDITION

Outstanding Debt, Liquidity and Cash Flow

As of March 31, 2024, the Company had working capital of \$21.4 million (\$ 12.6 million as of December 31, 2023), including \$3.1 million in notes payable to Brazilian banks, which secure the Company's gold exportations and mature every six months and are expected to continue to be renewed into the future.

	Ma	rch 31	Dece	mber 31			
(\$ thousands)	2	2024	2	2023			
Cash and cash equivalents	\$	26,475	\$	22,041			
Other current assets:							
Restricted cash		1,011		897			
Inventory		17,493		15,639			
Recoverable taxes		5,038		5,584			
Other accounts receivable		595		310			
Prepaid expenses and advances		2,100		1,556			
Current liabilities:							
Accounts payable and accrued liabilities		(15,699)		(16,082)			
Notes payable		(3,128)		(3,295)			
Lease liabilities		(1,390)		(1,953)			
Current tax liability		(1,245)		(1,381)			
Other taxes payable		(1,141)		(1,334)			
Reclamation provisions		(3,646)		(4,298)			
Legal and other provisions		(5,033)		(5,068)			
Working capital ¹	\$	21,430	\$	12,616			

 $^{^{1}}$ This is a non-GAAP financial performance measure with no standard definition under IFRS.

Working capital increased by \$ 8.8 million or 70% during Q1 2024 based on a \$4.4 million increase in cash and cash equivalents at March 31, 2024, a \$2.2 million build-up of current assets including inventories and a \$2.1 million reduction of current liabilities including accounts payable and the current reclamation provision.

The cash impact of lower gold production and sales during Q1 2024 was partially offset by higher realized average gold prices, as the \$4.4 million increase in ending cash is explained by the receipt of a \$4 million other receivable and the net impact (\$0.4 million) of working capital changes during the first quarter. Excluding these items, the operations and associated capital expenditures were cash neutral during Q1 2024, despite ounces sold being 17% below gold ounces sold in Q1 2023. Working capital was helped during Q1 2024 by a weakening Brazilian real compared to the US dollar, which lowered monetary liabilities when translated to USD at more favourable current exchange rates. The exchange rate on January 1, 2024 was R\$4.85 per US dollar (R\$5.29 per US dollar on January 1, 2023), and the closing exchange rate on March 31, 2024 was at R\$5.02 per US dollar (R\$5.09 per US dollar on March 31, 2023), with the average exchange rate during Q1 2024 being R\$4.95 per US dollar (R\$5.20 per US dollar during Q1 2023).

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

⁴ This is a non-GAAP financial performance measure with no standard definition under IFRS. It is a common measure of nearterm liquidity.

The use of funds during the three months ended March 31, 2024 and 2023, is outlined as follows:

(\$ thousands)	Three months ended					
		Ma	rch	31		
		2024		2023		
Cash provided by operating activities before income taxes	\$	9,639	\$	12,294		
Income taxes paid		(1,530)		(1,929)		
Net cash provided by operating activities	\$	8,109	\$	10,365		
Investing activities						
Investment in mineral exploration projects		-		(797)		
Purchase of property, plant and equipment		(7,194)		(8,072)		
Proceeds from dispositions of property, plant and equipment		285		209		
Proceeds from disposition of mineral exploration projects		4,000		-		
Net cash (used in) investing activities	\$	(2,909)	\$	(8,660)		
Financing activities						
Cash received upon issuance of notes payable		1,650		1,650		
Cash received upon issuance of shares via stock options exercised		-		38		
Repayment of notes payable and lease liabilities		(2,411)		(2,439)		
Interest paid		(72)		(106)		
Net cash (used in) financing activities	\$	(833)	\$	(857)		
Effect of exchange rate changes on cash balances		67		(247)		
Net increase (decrease) in cash and cash equivalents	\$	4,434	\$	601		

Cash generated by operating activities decreased by 22% in Q1 2024 to \$8.1 million, compared to \$10.4 million in Q1 2023, reflecting a 17% decrease in ounces sold in Q1 2024 to 15,692 ounces compared to 19,008 ounces in Q1 2023, partly offset by the higher average realized gold price of \$2,076 per ounce in Q1 2024, compared to \$1,886 per ounce in Q1 2023. Operating costs decreased by 11%, combined the fewer ounces produced with foreign exchange gain related to a weaker Brazilian real compared to the US dollar in Q1 2024, with the average exchange rate being R\$4.95/USD during Q1 2024 (R\$5.20 during Q1 2023).

Net cash flows used for investing activities decreased to \$2.9 million for Q1 2024, compared to \$8.7 million in Q1 2023. Investing net cash outflows in Q1 2024 mainly relate to primary development at Turmalina and Pilar. The proceeds of disposition of mineral exploration projects reflect the receipt of a \$4.0 million other receivable initially relating to the 2017 sale of the Gurupí project.

Cash used for financing activities of \$0.8 million in Q1 2024 is in line with Q1 2023.

Contractual Obligations and Commitments

The Company's contractual obligations as of March 31, 2024, are summarized as follows:

	Lo							
(\$ thousands, except where indicated)		1 year	1	- 3 years	3 - 5 years		5 years	Total
Financial Liabilities								
Accounts payable and accrued liabilities	\$	15,699	\$	-	\$	-	\$ -	\$ 15,699
Other Taxes Payable ¹								
ICMS Settlement Due		236		-		-	-	236
INSS		672		-		-	-	672
IRPJ & CSLL Settlement Due		248		128		-	-	376
Notes payable ²								
Principal		3,128		-		-	-	3,128
Interest		36		10		-	-	46
Lease liabilities		1,519		647		-	-	2,166
Reclamation provisions ³		4,058		11,635		4,228	18,458	38,379
Current tax liability		1,245		-		-	-	1,245
Total financial liabilities	\$	26,841	\$	12,420	\$	4,228	\$ 18,458	\$ 61,947
Other Commitments								
Suppliers' agreements ⁴		6,294		123		-	-	6,417
Insurance agreements ⁵		448		90		-	-	538
Total other commitments	\$	6,742	\$	213	\$	-	\$ -	\$ 6,955
Total	\$	33,583	\$	12,633	\$	4,228	\$ 18,458	\$ 68,902

¹ 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).

CAPITAL STRUCTURE

The capital structure of the Company as of March 31, 2024, is as follows:

All amounts in \$ thousands, except number of common shares	As	at March 31, 2024
Cash and cash equivalents	\$	26,475
Less: Bank indebtedness	\$	3,128
Less: Leasing Liabilities	\$	1,939
Less: Total debt	\$	5,067
Total net cash and cash equivalents balance ¹	\$	21,408
Number of common shares outstanding		79 million

¹ 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.

² Notes payable represents the principal on Brazilian short-term bank loans which are renewed in 180 day periods.

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

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

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

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 \$0.03 million in Q1 2024 (\$0.01 million in Q1 2023).

The Company incurred office rent expenses from Orix Geoscience 2018 Inc. ("Orix"), a mineral exploration service firm where Shastri Ramnath, a director of Jaguar is the chief executive officer. Rent expenses paid to Orix were \$2,000 for the three months ended March 31, 2024 (\$nil for the three months ended March 31, 2023).

DEVELOPMENT AND EXPLORATION PROJECTS

IAMGOLD Acquisition – Pitangui and Acuruí projects

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

Onças de Pitangui Project

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

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

Acurui Project

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

QUALIFIED PERSON

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

OUTSTANDING SHARE DATA

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

	As at May 8, 2024
Issued and outstanding common shares	79,066,665
Stock options	993,792
Deferred share units	1,133,773
Total	81,194,230

NON-GAAP PERFORMANCE MEASURES

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

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

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

(\$ thousands, except where indicated)	Three months ended						
		Marc	ch 31				
		2024		2023			
Operating costs	\$	18,315	\$	20,612			
General & administration expenses		1,799		1,701			
Corporate stock-based compensation		9		419			
Sustaining capital expenditures ¹		5,102		7,212			
All-in sustaining cash costs		25,225		29,944			
Reclamation (operating sites)		9		-			
All-in sustaining costs	\$	25,234	\$	29,944			
Non-sustaining capital expenditures		2,876		2,212			
Exploration and evaluation costs (greenfield)		582		987			
Reclamation (non-operating sites)		255		-			
Care and maintenance (non-operating sites)		190		168			
All-in costs	\$	29,137	\$	33,311			
Ounces of gold sold		15,692		19,008			
Cash operating costs per ounce sold ²	\$	1,167	\$	1,084			
All-in sustaining costs per ounce sold ²	\$	1,608	\$	1,575			
All-in costs per ounce sold ²	\$	1,857	\$	1,752			
Average realized gold price	\$	2,076	\$	1,886			
Cash operating margin per ounce sold	\$	909	\$	802			
All-in sustaining margin per ounce sold	\$	468	\$	311			

 $^{^{1}}$ Capital expenditures are included in our calculation of all-in sustaining costs and all-in costs.

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

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

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

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

² 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.

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

(\$ thousands, except where indicated)	Q	1 2024	Q	4 2023	С	3 2023	Q	2 2023	C	1 2023	Q	4 2022	Q	3 2022	Q	2 2022
Turmalina Complex																
Operating costs	\$	7,776	\$	9,050	\$	9,068	\$	8,568	\$	10,079	\$	9,016	\$	10,816	\$	9,122
Sustaining capital expenditures		2,653		3,293		2,773		5,122		3,880		4,365		2,928		3,063
All-in sustaining costs ¹	\$	10,429	\$	12,343	\$	11,841	\$	13,690	\$	13,959	\$	13,381	\$	13,744	\$	12,185
Ounces of gold sold		6,426		8,455		8,464		7,661		8,870		9,269		10,867		7,643
Cash operating cost (per oz. sold) ¹	\$	1,210	\$	1,070	\$	1,071	\$	1,118	\$	1,136	\$	973	\$	995	\$	1,194
All-in sustaining cost (per oz. sold) ^{1,2}	\$	1,623	\$	1,460	\$	1,399	\$	1,787	\$	1,574	\$	1,444	\$	1,265	\$	1,594
												·				
(\$ thousands, except where indicated)	Q	1 2024	Q	4 2023	C	3 2023	Q	2 2023	C	1 2023	Q	4 2022	Q	3 2022	Q	2 2022
Pilar Mine																
Operating costs	\$	10,539	\$	10,657	\$	10,535	\$	10,894	\$	10,533	\$	12,423	\$	11,282	\$	11,953
Sustaining capital expenditures		2,342		3,059		3,140		3,061		3,216		5,810		2,653		1,458
All-in sustaining costs ¹	\$	12,881	\$	13,716	\$	13,675	\$	13,955	\$	13,749	\$	18,233	\$	13,935	\$	13,411
Ounces of gold sold		9,266		9,643		8,038		9,256		10,138		11,671		11,254		12,839
Cash operating cost (per oz. sold) ¹	\$	1,137	\$	1,105	\$	1,311	\$	1,177	\$	1,039	\$	1,064	\$	1,002	\$	931
All-in sustaining cost (per oz. sold)1,2	\$	1,390	\$	1,422	\$	1,701	\$	1,508	\$	1,356	\$	1,562	\$	1,238	\$	1,045

¹ 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.

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

(\$ thousands, except where indicated)	C	21 2024	C	14 2023		3 2023		22 2023	(21 2023	С	4 2022		3 2022	C	2 2022
Turmalina Complex		<u> </u>						-		•		-				
Operating Costs	\$	7,776	\$	9,050	\$	9,068	\$	8,568	\$	10,079	\$	9,016	\$	10,816	\$	9,122
Gold (oz.) sold		6,426		8,455		8,464		7,661		8,870		9,269		10,867		7,643
Cash operating cost (per oz. sold) 1	\$	1,210	\$	1,070	\$	1,071	\$	1,118	\$	1,136	\$	973	\$	995	\$	1,194
Tonnes of ore processed (t)		95,000		99,000	1	101,000	:	100,000		108,000	1	101,000		105,000	1	01,000
Average foreign exchange rate $(BRL - USD)^1$	\$	4.95	\$	4.96	\$	4.88	\$	4.95	\$	5.20	\$	5.26	\$	5.25	\$	4.93
Cash operating cost (R\$ per tonne) ¹	\$	405	\$	453	\$	438	\$	424	\$	485	\$	470	\$	541	\$	445
(\$ thousands, except where indicated)	C	Q1 2024	C	24 2023	С	3 2023	C	22 2023	(Q1 2023	С	4 2022	C	3 2022	С	2 2022
Pilar Mine																
Operating Costs	\$	10,539	\$	10,657	\$	10,535	\$	10,894	\$	10,533	\$	12,423	\$	11,282	\$	11,953
Gold (oz.) sold		9,266		9,643		8,038		9,256		10,138		11,671		11,254		12,839
Cash operating cost (per oz. sold) ¹	\$	1,137	\$	1,105	\$	1,311	\$	1,177	\$	1,039	\$	1,064	\$	1,002	\$	931
Tonnes of ore processed (t)		96,000		96,000	1	107,000	:	103,000		98,000	1	108,000	:	111,000	1	27,000
Average foreign exchange rate (BRL - USD) ¹	\$	4.95	\$	4.96	\$	4.88	\$	4.95	\$	5.20	\$	5.26	\$	5.25	\$	4.93
Cash operating cost (R\$ per tonne)1	\$	543	\$	551	\$	481	\$	524	\$	559	\$	605	\$	533	\$	464

¹ 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 $no\ standard\ definition\ under\ IFRS.\ Refer\ to\ the\ non-GAAP\ Financial\ Performance\ Measures\ section\ of\ the\ MD\&A.$

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

Reconciliation of Sustaining Capital and Non-Sustaining Capital Expenditures

(\$ thousands)	Thro	Three months ended March 31					
	2024		20	23			
Sustaining capital ¹							
Primary development	\$ 3	3,719	\$	5,159			
Brownfield exploration		327		299			
Mine-site sustaining		949		1,638			
Equipment		949		1,638			
Other sustaining capital ²		107		116			
Total sustaining capital ¹	Ţ	5,102		7,212			
Non-sustaining capital (including capital projects) ¹							
Mine-site non-sustaining	2	2,637		2,018			
Asset retirement obligation - non-sustaining ²		239		194			
Other non-sustaining capital ¹		-		-			
Total non-sustaining capital ¹	2	2,876		2,212			
Total capital expenditures	\$ 7	7,978	\$	9,424			

¹ 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.

Reconciliation of Free Cash Flow

The Company uses free cash flow¹ to supplement information in its consolidated financial statements. Free cash flow is a non-GAAP financial performance measure with no standard definition under IFRS, and therefore it may not be comparable to similar measures employed by other companies. The Company believes that, in addition to conventional measures prepared in accordance with IFRS, the Company and certain investors and analysts use free cash flow to evaluate the Company's performance and assess its capacity to meet non-discretionary cash obligations.

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

(\$ thousands, except where indicated)	, except where indicated) T			
		2024		2023
Cash generated from operating activities	\$	8,109	\$	10,365
Adjustments				
Asset Retirement Obligation		239		194
Sustaining capital expenditures ²		(5,102)		(7,212)
Free cash flow	\$	3,246	\$	3,347
Ounces of gold sold		15,692		19,008
Free cash flow per ounce sold	\$	207	\$	176

 $^{^{\}rm 1}$ This is a non-GAAP financial performance measure with no standard definition under IFRS.

² 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.

² 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 March 31							
		2024		2023				
Net Income	\$	2,827	\$	2,473				
Income tax expense		1,249		1,895				
Finance costs		745		894				
Depreciation and amortization		7,195		5,784				
EBITDA ¹	\$	12,016	\$	11,046				
Changes in other provisions and VAT taxes		508		70				
Foreign exchange loss		(1,211)		952				
Stock-based compensation		9		419				
Adjusted EBITDA ¹	\$	11,322	\$	12,487				
Weighted average outstanding shares		79,066,665		72,564,246				
Adjusted EBITDA per share ¹	\$	0.14	\$	0.17				

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

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

SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGMENTS

The preparation of the condensed interim 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 those estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. 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 significant accounting estimates and judgments applied in the preparation of the Company's condensed interim consolidated financial statements for the three months ended March 31, 2024, are consistent with those applied and disclosed in the audited annual consolidated financial statements for the year ended December 31, 2023. 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, 2023, which are available on the Company's website and on SEDAR+ at www.sedarplus.com.

OTHER MANAGEMENT DISCUSSION AND ANALYSIS DISCLOSURES

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

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

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.
- Mining is inherently risky and subject to conditions and events beyond Jaguar's control.
- Mineral Reserve and Mineral Resources Estimates.
- Significant uncertainty exists related to inferred Mineral Resources.
- Replacement of depleted reserve.

Risks Relating to Jaguar's Business

- Fluctuations in currency exchange rates may adversely affect Jaguar's financial position and results of operations.
- Competition.
- Reliance on management and key personnel.
- Actual operating and financial results may differ from plans.
- Energy supply and costs.
- Title defects.
- Brazil government regulation and political instability.
- Brazil corruption perceptions index.
- Demanding environmental laws and regulations.
- Cyber security.
- Employment regulations and labour disruptions.
- Jaguar may be subject to litigation.
- Production and cost estimates.
- Road link between Pilar Mine and the Caeté plant.
- Repatriation of earnings.
- Termination of mining concessions.
- Compliance with anti-corruption laws.
- Reliance on local advisors and consultants in foreign jurisdictions.
- Pandemic and infectious disease.
- Climate volatility and climate change.
- Mining and insurance risks.
- Geotechnical challenges could impact profitability.
- Suply chain risk.

Risks Relating to Jaguar's Business

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

For a comprehensive discussion of these and other risks facing the Company, please refer to the section entitled "Risk Factors" in the Company's most recent Annual Information Form and the section entitled "Risks and Uncertainties" in the Company's Management's Discussion and Analysis for the year ended December 31, 2023, both of which are filed on SEDAR+ at www.sedarplus.com.

There were no significant changes to those risks or to the Company's management of exposure to those risks, during the three months ended March 31, 2024.

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

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

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

Internal Control over Financial Reporting

Management is responsible for the design, implementation and operating effectiveness of internal control over financial reporting. Under the supervision of the Chief Executive Officer and Chief Financial Officer, management evaluated the design and effectiveness of the Company's internal control over financial reporting as of March 31, 2024. In making the assessment, management used the criteria set forth in Internal Control - Integrated Framework (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on a review of internal control procedures at the end of the period covered by this MD&A, management determined internal control over financial reporting was appropriately designed as at March 31, 2024.

Changes in Internal Control over Financial Reporting

There were no material changes in the Company's internal control over financial reporting that occurred during the three months ended March 31, 2024 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting

Disclosure Controls and Procedures

Management is also responsible for the design and effectiveness of disclosure controls and procedures. The Company's Chief Executive Officer and Chief Financial Officer have each evaluated the effectiveness of the Company's disclosure controls and procedures as at March 31, 2024 and have concluded that these disclosure controls and procedures were appropriately designed as at March 31, 2024

Limitations of Controls and Procedures

The Company's management, including the Chief Executive Officer and Chief Financial Officer, believe that internal controls over financial reporting and disclosure controls and procedures, no matter how well designed and operated, have inherent limitations. Therefore, even those systems determined to be properly designed and effective can provide only reasonable assurance that the objectives of the control system are met.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

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

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

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

The above-referenced risks, uncertainties and other factors include, but are not limited to, risks associated with: general economic conditions; adverse industry events; marketing costs; loss of markets; future legislative and regulatory developments, including the Company's ability to obtain the requisite regulatory and governmental approvals for its development projects and other operation on a timely basis; inability to access sufficient capital from internal and external sources, and/or inability to access sufficient capital on favorable terms; the mining industry generally; the Company's ability to procure mining equipment and operating supplies in sufficient quantities or on a timely basis; engineering and construction timetables and capital costs for the Company's development and expansion projects; unforeseen changes to the political stability or government regulation in Brazil; lack of certainty with respect to foreign legal systems; corruption and other factors that are inconsistent with the rule of law; the Company's ongoing relations with its employees, that are inconsistent with the rule of law; the Company's ongoing relations with its employees, affected communities, business partners and joint venture partners; income tax and regulatory matters; the ability of the Company to implement its business strategies and plans, including in regards to the Company's projects; competition; foreign currency exchange and interest rate fluctuations; and fluctuations in the price of gold. In addition, there are risks and hazards associated with the business of mineral exploration, development and mining, including environmental hazards, industrial accidents, unusual or unexpected formations, pressure, cave-ins, flooding and gold bullion or gold concentrate losses (and the risk of inadequate insurance, or inability to obtain insurance, to cover these risks). Additional risks are described in detail in the Company's Annual Information Form for the year ended December 31, 2023, which is filled on SEDAR+ under the profile of Jaguar Mining Inc. on March 25, 2024 and available at www.sedarplus.ca

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

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