

# MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE FIRST QUARTER ENDED MARCH 31, 2016

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MD&A – First Quarter Ended March 31, 2016

# MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE FIRST QUARTER ENDED MARCH 31, 2016

This Management's Discussion and Analysis ("MD&A") should be read in conjunction with the condensed interim consolidated financial statements for the three months ended March 31, 2016 and related notes thereto which have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board (IASB). For further information on Jaguar Mining Inc., reference should be made to its public filings (including its most recently filed annual information form ("AIF") which is available on SEDAR at <a href="www.sedar.com">www.sedar.com</a>). 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. References to Cdn\$ are to Canadian dollars and R\$ are to Brazilian Reais. This report is dated as at May 9, 2016.

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
YTD 2016	January 1, 2016 – March 31, 2016	YTD 2015	January 1, 2015 – March 31, 2015
Q1 2016	January 1, 2016 – March 31, 2016	Q1 2015	January 1, 2015 – March 31, 2015

## **OUR BUSINESS**

MD&A – First Quarter Ended March 31, 2016

Jaguar Mining Inc. 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 ("Mineração Turmalina Ltda" or "MTL") and Caeté Gold Mine Complex ("Mineração Serras do Oeste Ltda" or "MSOL") which combined produce more than 90,000 ounces of gold annually. The MSOL legal entity also owns the Paciência Gold Mine Complex, which has been on care and maintenance since 2012.

Led by a proven and experienced senior management team in Brazil, our operating philosophy focuses on creating excellent shareholder value through the execution of a safe and sustainable operating plan, increasing Mineral Reserves and Resources, prudent cost management practices, generating free cash flow, and increasing production through the development of high value growth projects including the open-pit gold mining Gurupi Project ("MCT Mineração Ltda" or "MCT").

We benefit from the exploration and development of the Company's existing brownfield land package and from mineral concessions comprising approximately 25,000 hectares, proximal to current operations, in the Iron Quadrangle mining district of Brazil, a prolific greenstone belt located near the city of Belo Horizonte in the State of Minas Gerais. In addition, more than 131,000 hectares of mineral concessions in the State of Maranhão, where the Company's Gurupi Project is located, and approximately 35,000 hectares in the State of Ceará, where the Company's Pedra Branca Project is located, provide significant future upside potential. The Company may consider the acquisition, exploration, development, and operation of other gold properties.

# Q1 2016 FINANCIAL & OPERATING HIGHLIGHTS

(\$ thousands, except where indicated)	l	For the three months ended March 31,							
		2016	201						
Financial Data									
Revenue	\$	26,664	\$ 28,747						
Cost of sales		25,281	26,537						
Depreciation (included in cost of sales)		7,702	6,404						
Gross margin		1,383	2,210						
Gross margin (excluding depreciation) <sup>1</sup>		9,085	8,614						
Net loss		(15,001)	(12,946						
Per share ("EPS")		(0.13)	(0.12						
EBITDA <sup>1</sup>		(5,860)	(1,510						
Adjusted EBITDA <sup>1,2</sup>		5,216	7,056						
Cash operating costs (per ounce sold) <sup>1</sup>		742	831						
All-in sustaining costs (per ounce sold) <sup>1</sup>		1,061	1,150						
Average realized gold price (\$ per ounce) <sup>1</sup>		1,165	1,187						
Cash generated from operating activities		9,526	12,177						
Sustaining capital expenditures 1,3		5,013	4,789						
Non-sustaining capital expenditures 1,3		382	592						
Total capital expenditures <sup>3</sup>		5,395	5,381						

 $<sup>^{1}\,\</sup>text{Average realized gold price, sustaining and non-sustaining capital expenditures, cash operating costs and all-in sustaining costs, EBITDA and all-in sustaining costs, and all-in sus$ adjusted EBITDA and gross margin (excluding depreciation) are non-IFRS financial performance measures with no standard definition under IFRS. Refer to the Non-IFRS Financial Performance Measures section of the MD&A.

 $<sup>^3</sup>$  These amounts are presented on accrual basis. Capital expenditures are included in our calculation of all-in sustaining costs.

		months ended th 31,
	2016	2015
Operating Data		
Gold produced (ounces)	21,197	21,336
Gold sold (ounces)	22,881	24,228
Primary development (metres)	1,161	705
Secondary development (metres)	1,046	306
Definition, infill, and exploration drilling (metres)	11,892	8,968

#### **Cash and Gold Bullion**

	March 31,	December 31,
(\$ thousands)	2016	2015
Cash and equivalents	\$ 18,016	\$ 15,319
Gold bullion	-	-
Total cash and gold bullion	\$ 18,016	\$ 15,319

<sup>&</sup>lt;sup>2</sup> Adjusted EBITDA excludes non-cash items such as impairment and write downs. For more details refer to the Non-IFRS Performance Measures section of the MD&A.

## **Financial Highlights**

#### Revenue, Net Income (Loss), and External Factors

- Gold ounces sold for Q1 2016 were 22,881 ounces compared with 24,228 ounces sold for Q1 2015.
- Revenue during Q1 2016 decreased to \$26.7 million, compared with \$28.7 million in Q1 2015, due to a 2% decrease year-over-year in the average realized gold price to \$1,165 in Q1 2016 compared with \$1,187 in Q1 2015 and a 6% decrease in ounces sold.
- Net income (loss) was impacted negatively due to the change in the fair value of the convertible debentures (\$20.8 million) based on the significant increase in the share price from December 31, 2015 to March 31, 2016, which was partially offset by a reversal in the litigation provision amounting to \$10.2 million due to a change in the estimate. Adjusted EBITDA (excluding non-cash items) for Q1 2016 was \$5.2 million compared to \$7.1 million for Q1 2015.
- The average Brazilian Real and Canadian dollar, versus the US dollar during Q1 2016 was approximately R\$3.90 and C\$1.37 per US dollar, respectively.

#### Cash Operating Costs, Capital Expenditures, and All-In-Sustaining Costs ("AISC")

- Cash operating costs decreased 11% to \$742 per ounce of gold sold in Q1 2016, compared to \$831 per ounce during Q1 2015.
- AISC decreased 8% to \$1,061 per ounce of gold sold in Q1 2016, compared to \$1,150 per ounce sold during Q1 2015.
- In Q1 2016, sustaining capital expenditures totaled \$5.0 million and focused on increasing primary development and exploration drilling at Pilar and RG compared to \$4.8 million in Q1 2015.
- Operating cash flow (excluding cash tax refunds) was \$8.6 million for Q1 2016, compared to \$6.1 million in Q1 2015.
- Free cash flow was \$3.2 million for Q1 2016 based on operating cash flow (excluding cash tax refunds) less total capital expenditures, compared to \$0.7 million in Q1 2015.

## Cash Position, Working Capital, Operational Excellence, and Tax Refunds

- As at March 31, 2016, the Company had a cash position of \$18.0 million, an increase of \$2.7 million over cash of \$15.3 million as at December 31, 2015.
- Working capital declined to a working capital deficiency of \$1.0 million as at March 31, 2016 compared to working capital of \$2.0 million as at December 31, 2015, reflecting a quarter over quarter increase of 65% in primary development, a 33% increase in definition drilling, and \$1.9 million in interest payments on the convertible debentures and one-time severance payments.
- After a diagnostic review during Q1 2016, the Company entered into a commercial agreement in April 2016 with the
  Aquila Group to launch a mine-wide Operational Excellence Program at Turmalina. The program will identify and
  eliminate waste, lower costs, and improve productivities with the end goal of creating and delivering results in order to
  establish sustainable growth.
- The Company received a total of \$1.0 million of cash tax refunds in respect of its Federal VAT input tax credits for years 2009 through 2011, for its operating Brazilian subsidiaries during Q1 2016 (Q1 2015 \$6.1 million).

## **Operational Highlights**

## Strong Gold Production, Recovery, and Primary Development

- Consolidated gold production of 21,197 ounces in Q1 2016 compared to 21,336 ounces in Q1 2015.
- Gold recovery increased to 90.2% in Q1 2016 compared to 89.4% in Q1 2015.
- Turmalina produced 15,772 ounces of gold in Q1 2016, up 34%, with average grade of 4.29 g/t, up 19% compared to Q1
- The Company completed 1,161 metres of primary waste development during Q1 2016, an increase of 65% over 705 metres in Q1 2016.

## Improving Consolidated Grades

- Consolidated average head grade increased 15% to 3.78 g/t in Q1 2016 versus 3.28 g/t in Q1 2015.
- Total processing was 196,000 tonnes in Q1 2016 (Q1 2015 226,000 tonnes) at an average head grade of 3.78 g/t (Q1 2015 - 3.28 g/t).
  - o In Q1 2016, Turmalina processed 128,000 tonnes (Q1 2015 111,000 tonnes) at an average head grade of 4.29 g/t  $(Q1\ 2015 - 3.59\ g/t)$ .
  - Caeté processed 68,000 tonnes in Q1 2016 (Q1 2015 115,000 tonnes) at an average head grade of 2.83 g/t (Q1 2015 - 3.16 g/t).

#### Postive Drill Results at Pilar and Turmalina Gold Mines; 310% Increase in Pilar Reserves

- Consolidated Mineral Reserves, representing Southern Brazil operating mines, increased 34% to 357,000 ounces with a 9% increase in grade to 4.82 g/t Au.
- Pilar Mineral Reserves increased 310% to 172,000 ounces of gold after depletion, while also exceeding reserve replacement targets, as a result of the increased gold presence encountered on the BF and BFII Ore Bodies which comprise 91% of Pilar's underground Mineral Reserves.
- Consolidated M&I Mineral Resources for the Southern Brazil operating mines remain strong at 1.1 million ounces grading 4.45 g/t Au.
- The Company completed 11,892 metres of definition, infill, and exploration drilling during Q1 2016, an increase of 33% over 8,968 metres in Q1 2015.

## **OUTLOOK FOR 2016**

Looking ahead, the Company continues to be focused on delivering positive and sustainable physical performance, profitability, and cost optimization. The Company has established the following strategic initatives that are expected to create significant shareholder value:

- Safe and Sustainable Physical Results: Safely delivering on the near-term mine plans to drive positive physical results and ensure a sustainable production performance.
- Cost Reduction and Optimization: Developing a value-driven culture that will identify and eliminate waste, lower costs, and improve productivities with the end goal of creating and delivering results. Cost control measures will be reviewed and implemented across the operations to centralize and streamline various functions company-wide.
- Generating Positive Cash Flow: Operations are focused on generating cash flow, after sustaining capital, with mine plans focused on achieving the right amount of tonnes, at the right grade and with exploration programs that ensure sustainability. Management is focused on expanding operational excellence programs and developing a value-driven culture to increase operating cash flow.
- Strategic Investment: Investment in exploration and development will be prioritized to targets that increase the mineral reserve base around the operating assets and build confidence in our mine plans in the near to medium term. Expanding

brownfield exploration programs to grow organically and take advantage of the underutilized processing capacity currently installed.

Divesting of Non-Core Assets: Reviewing opportunities to divest non-core assets and land positions across all sites to minimize carrying costs of these assets.

#### 2016 Guidance

The following is the Company's production and cost guidance for 2016 and represents achievable results from operations:

	Turmalina	Complex	Caeté Co	omplex	Consol	lidated
	Low	High	Low	High	Low	High
Gold production (ounces)	62,000	65,000	28,000	30,000	90,000	95,000
Cash operating costs (per ounce sold) <sup>1</sup>	600	650	925	975	700	750
All-in sustaining costs (per ounce sold) <sup>1</sup>	850	900	1,150	1,200	950	1,000
Recovery	90%	90%	90%	90%	90%	90%
Development						
Primary (metres)	3,000	3,300	1,700	1,900	4,700	5,200
Secondary (metres)	3,200	3,400	2,500	2,700	5,700	6,100
Definition, infill, and exploration drilling (metres)	18,000	20,000	10,000	12,000	28,000	32,000

<sup>1.</sup> Cash operating costs and all-in sustaining costs are non-IFRS financial performance measures with no standard definition under IFRS. Refer to Non-IFRS Financial Performance Measures below. 2016 cost guidance has been prepared on the basis of a foreign exchange rate of 3.8 Brazilian Reais vs. the US dollar and a gold price of US\$1,150 per ounce.

## **BACKGROUND**

Jaguar is a junior gold producer focused on the operation and development of gold assets in Brazil. The Company has two operating units being the Turmalina and Caeté Gold Mine Complexes. The Paciência Gold Mine Complex, comprised of one processing facility and mine, is on care and maintenance. Additionally, the Gurupi development project continues to be reviewed. The Company holds mineral rights over approximately 191,000 hectares.

On December 16, 2015, Mr. Rodney Lamond was appointed as Chief Executive Officer. Prior to becoming the CEO of Jaguar, Mr. Lamond was a board director of Jaguar. Mr. Lamond is a Professional Mining Engineer who brings more than 27 years of mining experience and has held senior management positions overseeing or stationed at operations in Peru, Chile, Honduras, Mexico, USA, Canada, and Australia. From 2013 to 2015, Mr. Lamond was the President and Chief Executive Officer of Crocodile Gold Corp. before the July 2015 business combination of Crocodile Gold Corp. and Newmarket Gold Inc.

On February 19, 2016, Mr. Hashim Ahmed was appointed as Interim Chief Financial Officer after Mr. Derrick Weyrauch stepped down as Chief Financial Officer to pursue other opportunities. Mr. Ahmed joined the Company in August 2014 and has previously served as Jaguar's Vice President of Finance.

Management believes there is excellent potential to decrease the operating cost profile of Jaguar in a reasonable timeframe; however, success is dependent on the prudent deployment of capital spending to advance drilling and development ahead of operations. Management's belief is supported by confidence in the geological endowment of the Company's existing land positions surrounding its current mining operations.

The Company is focused on optimizing existing mining operations through increasing confidence in the mineral reserve base to deliver positive and sustainable physical and financial performance. Over time and through exploration, the Company will focus on prudently increasing production and taking advantage of the underutilized processing capacity currently installed.

On February 27, 2015, the Company announced that its board of directors (the "Board") had formed a special committee ("Special Committee") with a mandate to explore alternatives for the enhancement of shareholder value and to oversee the financing process. The Special Committee appointed Origin Merchant Partners as its exclusive financial advisor in conjunction with its mandate. The review considered various alternatives for the Company, including: merger opportunities, the potential sale of some of the Company's assets, potential partnership or joint venture agreements, and other transactions to maximize value for the Company's shareholders and to provide appropriate liquidity.

Subsequent to the completion of the convertible debenture financing in October 2015, the Special Committee reduced its activity level and is presently in a standby mode in the event that it is needed to oversee and evaluate a potential transaction. Origin Merchant Partners' engagement with the Special Committee has been terminated. No material expenses have been incurred by the Special Committee since the completion of the convertible debenture financing.

There can be no assurance that it will become necessary for the Special Committee to become more active in the future or that this process will result in any transaction. The current members of the Special Committee are Messrs. Reeser and Miraglia. Mr. Reeser is the Chairman of the Special Committee. Mr. Hope was a member of the Special Committee prior to his resignation as a director on March 28, 2016.

## **REVIEW OF OPERATING AND FINANCIAL RESULTS**

## **Turmalina Gold Mine Complex**

## **Turmalina Quarterly Production**

(\$ thousands, except where indicated)	Q1	2016	Q4	2015	Q3	2015	Q2	2015	Q1	1 2015	Q.	4 2014	Q3	2014	Q2	2014
Tonnes of ore processed ('000)	128	3,000	10	0,000	10	1,000	9	4,000	11	11,000	1	17,000	10	7,000	10	7,000
Average head grade (g/t) <sup>1</sup>		4.29		4.79		4.77		3.91		3.59		3.60		3.69		4.14
Average recovery rate (%)		90%		91%		91%		90%		90%		90%		91%		91%
Gold (ozs)																
Produced	15	5,772	1	4,449	1	3,994	1	0,420	1	11,796	:	12,067	1	1,336	1	3,190
Sold	16	5,635	1	5,527	1	3,485	!	9,610	1	13,196	:	11,243	1	1,710	1	3,481
Cash operating cost (per oz sold) <sup>2</sup>	\$	590	\$	483	\$	587	\$	717	\$	756	\$	655	\$	801	\$	761
Cash operating cost (per tonne) <sup>2</sup>	\$	77	\$	75	\$	78	\$	73	\$	90	\$	63	\$	88	\$	96

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

MD&A - First Quarter Ended March 31, 2016

During the first quarter of 2016, Turmalina produced 15,772 ounces of gold compared to 11,796 ounces in the corresponding 2015 period, an increase of 34% or 3,976 ounces. The increase in ounces produced was a result of a 19% increase in the average head grade from 3.59 g/t in Q1 2015 to 4.29 g/t in Q1 2016 and a 15% increase in the tonnes processed from 111,000 in Q1 2015 to 128,000 in Q1 2016. Turmalina processed more tonnes in Q1 2016 due to the processing of the stockpile remaining at the end of 2015, due to the plant shutdown during part of December 2015.

The cash operating costs per ounce sold for the first quarter of 2016 decreased by 22%, or \$166 per ounce, as compared to the same period in 2015, due to the net impact of the 19% increase in average head grade, an increase in the cost of materials due to inflation, an increase in electricity tariffs, and the devaluation of the Brazilian Real. The cash operating costs per ounce sold increased 22% from Q4 2015 to Q1 2016 as a result of the 10% decrease in average head grade and an increase in the costs from the allocation of a greater amount of the mine-site fixed overheads to mining activity due to the 24% decrease in primary development from Q4 2015 to Q1 2016.

After a diagnostic review during Q1 2016, the Company entered into a commercial agreement in April 2016 with the Aquila Group to launch a mine-wide Operational Excellence Program at Turmalina. The program will identify and eliminate waste,

<sup>&</sup>lt;sup>2</sup> Cash operating costs is a non-IFRS financial performance measure with no standard definition under IFRS. Refer to the Non-IFRS Financial Performance Measures section of the MD&A.

lower costs, and improve productivities with the end goal of creating and delivering results in order to establish sustainable growth.

## **Turmalina Capital Expenditures**

(\$ thousands)		Three months ended March 31,			
	2016	i	2015		
Sustaining capital <sup>1</sup>					
Primary development	\$ 2,324	\$	1,697		
Brownfield exploration	32		197		
Mine-site sustaining	810		1,316		
Total sustaining capital <sup>1</sup>	3,166		3,210		
Total non-sustaining capital <sup>1</sup>	46	<b>46</b> 94			
Total capital expenditures	\$ 3,212	<b>\$ 3,212</b> \$ 3,304			

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

	Three mon	Three months ended					
(metres)	Marc	h 31,					
	2016	2015					
Primary development	731	657					
Secondary development	838	306					
Total development	1,569	963					
Definition drilling	3,562	1,277					
Infill drilling	287	1,546					
Exploration drilling	842	1,542					
Total definition, infill, and exploration drilling	4,691	4,365					

Primary development at the Turmalina mine totaled 731 metres for the first quarter of 2016, compared to 657 metres in the comparative 2015 period. On a per metre basis, the cost of primary development increased over the comparative 2015 period.

#### Mining

The mining method utilized at the Turmalina underground mine is sublevel open stoping with backfill. Our priority is to reduce costs by focusing on ore grade control, minimizing dilution and minimizing the extraction of non-profitable or marginal material. A focus on grade control, along with a number of mining and process initiatives, is intended to lower cash operating costs per ounce and improve the overall operating performance. Cost reduction initatives include decreasing the length of development needed from the primary ramp to access ore, postponing the mining of low grade narrow ore bodies that may require additional development, and extraction of high-grade ore by the selective removal of pillars. There is also a push to improve stope blasting techniques to reduce dilution.

A specialized development contractor arrived on site in August 2015 to accelerate the mining of both the new Orebody C ramp to surface and to extend the Orebody A ramp to open up additional resources. In the fourth quarter of 2015, the development contractor completed the Orebody C ramp to surface. This reduced ore haulage and congestion in the top section of the ramp. In Q1 2016, good ventilation conditions allowed the Orebody A ramp to accelerate the advance and pass Level AN9 SN0, which will allow the Company to push development on the lowest level of Level 9 to allow for a second stoping level to begin on Level AN9 SNO.

The previous mining design of stopes separated by rib pillars (developed prior to 2015) resulted in significant quantities of ore being left behind and not mined. With footwall drifts and primary and secondary stopes being installed in 2015 below Level 8, there is now a need for cemented backfill in the primary stopes. Successful trials on surface indicated the ability to backfill primary stopes with good quality cemented rockfill (CRF) exists. There were some concerns regarding fill rates with CRF underground, but a trial carried out in Level 9 of the mine showed that rapid fill rates could be achieved. At the same time, surface trials have been carried out on using a low solids paste (68% solids) that can be produced with the existing system. A system for producing filter cake and then re-mixing to paste is in place, but to ensure consistent quality paste, a batching process with a controlled shear mixer will be incorporated. Because of the desire to avoid hauling development waste to surface, it is expected that CRF will be used to fill the bulk of the primary stopes with low density paste to allow for the 100% extraction of stopes immediately below the sill pillars.

## **Processing**

Ore produced at the Turmalina mine is transported to the adjacent Carbon-In-Leach ("CIL") processing plant. The Turmalina plant consists of three ball mills, having total capacity of 3,000 tonnes per day, of which two have been operating since January 2016 (Mills #1 and #2) at 1,500 – 1,600 tonnes per day. During Q1 2016, the mill processed 128,000 tonnes at an average grade of 4.29 g/t compared to 111,000 tonnes at 3.59 g/t in Q1 2015. Overall, the processing plant maintained a recovery rate of 90.5% during Q1 2016, which is consistent with the 90.4% recovery rate for Q1 2015. Work is ongoing to refurbish Mill #3, which will provide uninterrupted ore processing during shutdowns of Mill #2, but more importantly provides additional capacity.

## Caeté Gold Mine Complex

#### Caeté Quarterly Production

(\$ thousands, except where indicated)	Q	1 2016	Q	4 2015	Q3	2015	Q2	2015	Q1	1 2015	Q.	4 2014	Q:	3 2014	Q2	2 2014
Tonnes of ore processed (t)		68,000	1	16,000	12	2,000	11	6,000	11	15,000	1	41,000	14	12,000	15	6,000
Average head grade (g/t) <sup>1</sup>		2.83		2.59		3.17		3.00		3.16		2.57		2.71		2.40
Average recovery rate (%)		90%		90%		89%		90%		89%		88%		88%		88%
Gold (ozs)																
Produced		5,425		8,720	1	1,241	1	.0,262		9,540		10,389	:	11,038	1	L0,677
Sold		6,246		8,889	1	1,674		9,574	1	11,032		10,157	:	10,971	1	10,521
Cash operating cost (per oz sold) <sup>2</sup>	\$	1,146	\$	888	\$	897	\$	984	\$	918	\$	938	\$	1,199	\$	1,182
Cash operating cost (per tonne) <sup>2</sup>	\$	105	\$	68	\$	86	\$	81	\$	88	\$	68	\$	93	\$	80

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

The Caeté Gold Mining Complex has two underground mines (Pilar and Roça Grande). Pilar primarily uses sub-level open stoping with backfill, while Roça Grande ("RG") exclusively uses the mechanized horizontal cut and fill mining method. The Pilar mine provides 1,000 tonnes per day, or two-thirds of the Caeté complex ore, while the RG mine provides 500 tonnes per day from the underground RG-1 deposit.

Ore produced from these mines is transported to the 2,200 tonnes per day gravity, flotation and CIL treatment of flotation concentrate processing plant adjacent to the Roça Grande mine, a total distance of approximately 50 kilometres by road from the Pilar mine. This haulage expense is a significant cost and during Q1 2016, management began investigating with Outotec sensor-based ore sorting solutions for waste removal to reduce haulage costs for the Pilar mine.

During Q1 2016, the Caeté plant achieved gold recovery of 90% utilizing gravity, flotation, and CIL treatment of flotation concentrate. Optimization of the plant offers opportunities for both increased gold extraction and reduced unit processing costs. Various options are being explored and evaluated to better use the currently underutilized processing facility.

<sup>&</sup>lt;sup>2</sup> Cash operating costs is a non-IFRS financial performance measure with no standard definition under IFRS. Refer to the Non-IFRS Financial Performance Measures section of the MD&A.

## **Pilar Quarterly Production**

(\$ thousands, except where indicated)	Q1 2016	Q4 2015	Q3 2015	Q2 2015	Q1 2015	Q4 2014	Q3 2014	Q2 2014
Tonnes of ore processed (t)	56,000	77,000	78,000	75,000	79,000	94,000	94,000	116,000
Average head grade (g/t) <sup>1</sup>	2.89	2.83	3.70	3.30	3.24	2.72	2.85	2.41
Average recovery rate (%)	90%	90%	89%	90%	89%	88%	88%	88%
Gold (ozs)								
Produced	4,552	6,278	8,340	7,314	7,310	7,283	7,725	8,080
Sold	5,369	6,389	8,641	6,835	8,433	7,213	7,681	7,852
Cash operating cost (per oz sold) <sup>2</sup>	\$ 1,096	822	772	893	\$ 829	877	1,165	1,174
Cash operating cost (per tonne) <sup>2</sup>	\$ 105	68	86	81	\$ 88	67	95	79

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

During the first quarter of 2016, Pilar produced 4,552 ounces of gold compared to 7,310 ounces in the corresponding 2015 period, a decrease of 38% or 2,758 ounces. The decrease in ounces produced was a result of the depletion in mineable reserves in 2015, as development at Pilar was only restarted in Q4 2015. Operational delays occurred in Q1 2016 due to the shortage of alternative stopes as the primary focus during the quarter was on increasing development to access newly defined reserves below current mining levels.

The cash operating costs per ounce sold for the first quarter of 2016 increased by 32%, or \$267 per ounce, as compared to Q1 2015 and increased by 33%, or \$274 per ounce, as compared to Q4 2015, largely as a result of the significantly lower ounces produced in Q1 2016 and the increased costs associated with the restart of secondary development.

#### **Pilar Capital Expenditures**

MD&A - First Quarter Ended March 31, 2016

(\$ thousands, except where indicated)		nths ended th 31,
	2016	2015
Sustaining capital <sup>1</sup>		
Primary development	\$ 1,055	\$ 288
Brownfield exploration	17	761
Mine-site sustaining	249	119
Total sustaining capital <sup>1</sup>	1,321	1,168
Total non-sustaining capital <sup>1</sup>	29	325
Total capital expenditures	\$ 1,350	\$ 1,493

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

<sup>&</sup>lt;sup>2</sup> Cash operating costs is a non-IFRS financial performance measure with no standard definition under IFRS. Refer to the Non-IFRS Financial Performance Measures section of the MD&A.

(metres)	Three mon Marc	
	2016	2015
Primary development	312	11
Secondary development	24	
Total development	336	11
Definition drilling	1,511	460
Infill drilling	496	889
Exploration drilling	501	2,457
Total definition, infill, and exploration drilling	2,508	3,806

Primary development at Pilar was suspended during Q4 2014 and was restarted in Q1 2016 due to the success of the exploration drilling program initiated in 2015. Primary development totaled 312 metres in Q1 2016 compared to 11 metres in Q1 2015.

## Mining

Historically, significantly higher tonnage, including lower grade material, was fed to the plant from Pilar which had a diluting effect on the grade and profitability. During 2015, grade improvement at Pilar was achieved through the discontinuation of mining ore below the marginal cut-off grade and by modifying the shape of the sub-level open stopes to minimize the inclusion of waste at the edge of the plunging ore-shoots. Previous initiatives to reduce dilution from overbreak had proven successful and there were some gains from the update of the geological model.

Exploration drilling results for Pilar from 2015 enabled the Company to announce a 310% increase in total Mineral Reserves to 172,000 ounces at Pilar, with a 63% increase in grade to 4.39 g/t Au, in its 2015 year-end mineral resources and mineral reserve estimate announced March 4, 2016. Based on the strong exploration drilling results and increased reserves and resources, primary and secondary development that had been suspended during Q4 2014 was resumed at Pilar during Q1 2016. This development is being carried out by the same contractor as at Turmalina. The mobilization of the contractor took place in January 2016.

Mine production was 58,000 mined tonnes at an average grade of 2.99 g/t compared to 80,000 tones at 3.19 g/t in Q1 2015. The decrease in production was a result of the focus on increasing development to access the newly defined reserves below current mining levels. During the quarter, mine development advanced a total of 336 metres (averaging 112 metres per month) compared to a total of 11 metres in Q1 2015. Definition drilling totaled 2,507 metres in Q1 2016 compared to 3,804 metres in Q1 2015, which was when a large part of the exploration drilling that led to the increase in the 2015 year-end reserve estimate occurred.

During most of 2016, stoping ore grade will be dominated by ore from the B Ore Body above Level 7. The focus in 2016 is in getting the ramp down to Level 10 by year end, while providing access on the levels to the high-grade BFII Ore Body that starts to dominate the ore production below Level 7.

#### **Processing**

During Q1 2016, the Caeté plant processed 56,000 tonnes from Pilar at an average grade of 2.89 g/t compared to 79,000 tonnes at 3.24 g/t in Q1 2015. Recovery for the quarter was 89.8%, which was higher than the Q1 2015 recovery of 88.5%.

## **Roça Grande Quarterly Production**

(\$ thousands, except where indicated)	Q1	2016	Q	4 2015	Q	3 2015	Q	2 2015	Q	1 2015	Q	4 2014	Q.	3 2014	Q	2 2014
Tonnes of ore processed (t)	12	2,000	3	39,000	2	14,000	4	1,000	3	36,000	4	17,000	4	8,000	4	10,000
Average head grade (g/t) <sup>1</sup>		2.53		2.11		2.26		2.46		2.20		2.27		2.36		2.20
Average recovery rate (%)		90%		90%		89%		90%		89%		88%		88%		88%
Gold (ozs)																
Produced		873		2,442		2,901		2,948		2,230		3,106		3,313		2,597
Sold		877		2,500		3,033		2,739		2,599		2,944		3,290		2,669
Cash operating cost (per oz sold) <sup>2</sup>	\$ :	1,454	\$	1,058	\$	1,254	\$	1,210	\$	1,207	\$	1,091	\$	1,277	\$	1,207
Cash operating cost (per tonne) <sup>2</sup>	\$	106	\$	68	\$	86	\$	81	\$	87	\$	68	\$	88	\$	81

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

During the first quarter of 2016, RG produced 873 ounces of gold compared to 2,230 ounces in the corresponding 2015 period, a decrease of 61% or 1,357 ounces. Operational delays occurred in Q1 2016 due to the shortage of developed stopes as the primary focus during the quarter was on infill drilling of the production area for Q2 2016 and beyond.

The cash operating costs per ounce sold for the first quarter of 2016 increased by 20% compared to Q1 2015 and increased 37% compared to Q4 2015, largely as a result of the significantly lower tonnes processed and ounces produced in Q1 2016, as well as the increased costs related to the restart of secondary development during Q1 2016.

## Roça Grande Capital Expenditures

(\$ thousands, except where indicated)		Three months ended March 31,				
	2016	5	2015			
Sustaining capital <sup>1</sup>						
Primary development	\$ 390	\$	102			
Brownfield exploration	98	3	309			
Mine-site sustaining	38	3				
Total sustaining capital <sup>1</sup>	526	,	411			
Total non-sustaining capital <sup>1</sup>	30	)	67			
Total capital expenditures	\$ 556	\$	478			

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

(metres)		onths ended rch 31,		
	2016	2015		
Primary development	118	37		
Secondary development	184	-		
Total development	302	37		
Definition drilling	-	-		
Infill drilling	3,778	-		
Exploration drilling	915	797		
Total definition, infill, and exploration drilling	4,693	797		

<sup>&</sup>lt;sup>2</sup> Cash operating costs is a non-IFRS financial performance measure with no standard definition under IFRS. Refer to the Non-IFRS Financial Performance Measures section of the MD&A.

Primary development at RG was suspended during Q4 2014 and the decision to keep RG operating through 2016 meant the restart of development in Q1 2016 in order to provide access to the orebody, with a focus on proving up the higher grade/thickness targets. Primary development totaled 118 metres at RG in Q1 2016 compared to 37 metres in Q1 2015.

#### Mining

The Roça Grande mining activity has historically focused on surface exposures of gold deposits, in the form of outcrops. These outcrops, mined using open-pit mining techniques, have had limited exploration, focusing solely on the immediate down-dip projection of gold mineralization. The RG operations team continues to evaluate more effective methods to mine the 1.0 to 2.0 metre wide veins without excessive dilution, using a frontal-attack mechanised cut-and-fill mining method. A targeted exploration program has helped identify sufficient resources to continue mining to the end of 2016 and beyond. Ore in Q1 2016 was generated primarily from ore development, but for the rest of 2016, stoping returns will be the dominant ore source. Continued exploration drilling is now focused on generating resources for 2017 and beyond. The exceptional exploration potential along strike and in the down-dip extension of related multiple orebodies that have only open pits at present, justifies treating the Roça Grande operation as an "incremental ore" producer until the other orebodies can be brought into production.

In Q1 2016, mine production was 12,000 mined tonnes at an average grade of 2.61 g/t compared to 36,000 tonnes at 2.24 g/t in Q1 2015. The decrease in production was due to a focus on proving up higher grade development targets as development was restarted during the quarter. Mine development advanced at an average monthly rate of 101 metres during Q1 2016 compared to an average of 12 metres per month in Q1 2015, while definition drilling totaled 4,693 metres for Q1 2016 compared to 799 metres in Q1 2015.

#### **Processing**

During Q1 2016, the Caeté plant processed 12,000 tonnes from RG at an average grade of 2.53 g/t compared to 36,000 tonnes at 2.20 g/t in Q1 2015. Recovery for the quarter was 89.8%, which was higher than the Q1 2015 recovery of 88.5%.

## CONSOLIDATED FINANCIAL RESULTS

## Selected Quarterly Financial Information<sup>1</sup>

(\$ thousands, except where indicated)	Q1 2016	Q4 2015	Q3 2015	Q2 2015	Q1 2015	Q4 2014	Q3 2014	Q2 2014
Revenue	\$ 26,664	\$ 26,820	\$ 28,126	\$ 22,820	\$ 28,747	\$ 25,766	\$ 29,015	\$ 30,481
Cost of sales (excluding depreciation) <sup>2</sup>	(17,579)	(15,397)	(17,892)	(16,808)	(20,133)	(23,508)	(22,312)	(23,274)
Gross margin (excluding depreciation) <sup>2</sup>	9,085	11,423	10,234	6,012	8,614	2,258	6,703	7,207
Net (loss) income	(15,001)	1,670	4,445	(4,383)	(12,946)	(90,530)	(9,491)	246,646
Cash flows from operating activities	9,526	6,786	3,660	1,652	12,151	(1,156)	(253)	(8,045)
Total assets	184,996	183,409	174,500	179,496	181,131	195,264	293,356	308,220
Total liabilities	108,349	90,624	83,949	94,077	91,648	93,676	101,325	107,522
Average realized gold price (per ounce) <sup>2</sup>	\$ 1,165	\$ 1,098	\$ 1,118	\$ 1,190	\$ 1,187	\$ 1,204	\$ 1,279	\$ 1,280
Cash operating cost (per oz sold) <sup>2</sup>	\$ 742	\$ 630	\$ 731	\$ 850	\$ 831	\$ 789	\$ 993	\$ 946

<sup>&</sup>lt;sup>1</sup> Sum of all the quarters may not add up to the annual total due to rounding.

The continued volatility in the global gold market continues to impact the Company's revenue. However, the impact of the lower gold prices experienced throughout 2015 was partially offset by the sharp devaluation of the Brazilian Real as compared to the US dollar, resulting in gross profit and positive operating cash flows. The net loss for Q1 2016 primarily reflects the

<sup>&</sup>lt;sup>2</sup> Average realized gold price, gross margin (excluding depreciation) and cash operating costs are all non-IFRS financial performance measures with no standard definition under IFRS. For further information, refer to the Non-IFRS Financial Performance Measures section of the MD&A.

impact of the revaluation of the convertible debentures as at March 31, 2016, while the net income during Q2 2014 mainly represents a gain on the extinguishment of debt as part of the CCAA restructuring in the second quarter of 2014.

Current assets decreased \$0.4 million as at March 31, 2016 compared to December 31, 2015, primarily as a result of a decrease in inventory. Current liabilities increased primarily due to an increase in accounts payable at quarter-end. The increase in non-current liabilities represents the net impact of the decrease in the labour litigation provision (\$8.5 million), the increase in the reclamation provision, and the revaluation of the convertible debentures at March 31, 2016, which resulted in a loss due to the significant increase in the share price from December 31, 2015 to March 31, 2016.

#### Revenue

(\$ thousands, except where indicated)	Three months ended March 31,					
	2016		2015	Change		
Revenue	\$ 26,664	\$	28,747	(7%)		
Ounces sold	22,881		24,228	(6%)		
Average realized gold price <sup>1</sup>	\$ 1,165	\$	1,187	(2%)		

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

Revenue for the first guarter of 2016 decreased 7%, compared to the same period in 2015, due to a 6% decrease in ounces sold and a 2% reduction in the average realized gold price.

The market price of gold is the primary driver of our profitability and our ability to generate free cash flow. During the three months ended March 31, 2016, the market price of gold (London PM Fix) traded in a range of \$1,077 to \$1,278, averaged \$1,183 per ounce, and closed at \$1,237 per ounce on March 31, 2016. The average price during the first quarter of 2016 decreased 3% as compared to the average market price of \$1,218 per ounce for the first quarter of 2015.

#### Production

A total of 196,000 tonnes were processed in Q1 2016 (Q1 2015 – 226,000 tonnes) at an average head grade of 3.78 g/t (Q1 2015 – 3.28 g/t), a 15% increase in average head grade compared to the same period in 2015. Total tonnes processed in Q1 2016 decreased 13%, compared to the same period in 2015, primarily due to an increased focus on mining higher grade.

## **Consolidated Production Costs**

(\$ thousands, except where indicated)		Three months ended March 31,						
			2016		2015	Change		
Direct mining and processing cost	,	\$	15,929	\$	19,145	(17%)		
Mining			9,977		12,202	(18%)		
Processing			5,952		6,943	(14%)		
Royalties, production taxes and others			1,650		988	67%		
Royalty expense and CFEM taxes			1,030		980	5%		
NRV adjustment and others			620		8	7650%		
Total operating costs	:	\$	17,579	\$	20,133	(13%)		
Depreciation			7,702		6,404	20%		
Total cost of sales		\$	25,281	\$	26,537	(5%)		

Total operating costs decreased 13% from \$20.1 million in Q1 2015 to \$17.6 million in Q1 2016. The decrease was due to the impact of the devaluation of the Brazilian Real and the decrease in tonnes processed, offset by an increase in the cost of materials in local currency due to inflation and higher electricity tariffs. The net realizable value ("NRV") adjustment for Q1 2016 was a result of the increase in the depreciation expense for Caeté, which increased due to the impairment reversal recorded as at December 31, 2015 for Caeté in relation to the increase in Pilar's mineral reserves.

## **Operating Expenses**

(\$ thousands)	Three months ended March 31,						
	<b>2016</b> 2015 Cha						
Changes to legal provisions and recoverable VAT	\$ (10,228)	\$	7,771	(232%)			
General and administration expenses	2,119	:	2,281	(7%)			
Exploration and evaluation costs	2		50	(96%)			
Care & maintenance costs (Paciência mine)	207		284	(27%)			
Stock-based compensation	116		184	(37%)			
Restructuring costs	567		-	100%			
Amortization	23		243	(91%)			
Other operating expenses	413		925	(55%)			
Total operating (recoveries) expenses	\$ (6,781)	\$ 1:	1,738	(158%)			

## Care & Maintenance Costs – Paciência Gold Complex

The Paciência mining complex remained on care and maintenance during the first quarter of 2016. No gold has been produced since the third quarter of 2012, when the mine was put on care and maintenance. No underground development or drilling work was carried out by the Company at the Paciência mine during the first quarter of 2016. The complex has been secured and the facilities are preserved and patrolled. A limited maintenance staff periodically turns the mills and equipment to maintain the plant in working order.

## **General and Administration Expenses**

The general and administration ("G&A") expenses exclude mine-site administrative costs which 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.

Three more (\$ thousands)  Marc								
	2016	2	2015	Change				
Director's fees	:	\$ 90	\$	237	(62%)			
Audit related and insurance		79		126	(37%)			
Corporate office (Toronto)		767		948	(19%)			
Belo Horizonte office		1,183		970	22%			
Total G&A expenses		\$ 2,119	\$	2,281	(7%)			

For the first quarter of 2016, the total G&A expenses were 7% lower as compared to the same period in 2015. Costs associated with the Belo Horizonte office were 22% higher in the first quarter of 2016, due to the net impact of the reallocation of certain activities from the mine sites to the Belo Horizonte corporate office in Q4 2015 and the devaluation of the Brazilian Real. Costs for the corporate office in Toronto were lower in Q1 2016 compared to Q1 2015 due to general cost cutting measures adopted by managment. Throughout 2016, management will continue its cost reduction focus for both Toronto and Belo Horizonte corporate office expenses.

## **Restructuring Costs**

		Three months ended						
(\$ thousands)		March 31,						
	20	)16	2015	Change				
Restructuring costs	\$	567	\$	- 100%				

Restructuring costs in Q1 2016 represent the severance payments for former management. No other restructuring costs were incurred in Q1 2016.

## **Changes to Legal and Recoverable Taxes Provisions**

(\$ thousands)  Three months ended  March 31,										
	<b>2016</b> 2015 Cha									
Changes to legal provisions	\$	(9,409)	\$	6,660	(241%)					
Changes to recoverable taxes provision		(819)		1,111	(174%)					
Changes to legal and recoverable taxes provisions	<b>\$ (10,228)</b> \$ 7,771 (232%)									

## **Legal Provisions**

As at March 31, 2016, there were 499 employee-initiated active lawsuits against the Company, largely related to disputed wages. Based on management's assessment of the likelihood of loss related to 410 lawsuits, the Company has recorded approximately \$9.1 million as labour legal contingencies as at March 31, 2016 (\$4.5 million is classified as a current liability as at March 31, 2016).

During Q1 2016, 17 new lawsuits were initiated. The Company paid approximately \$53,000 in appeal deposits, \$200,000 paying settlements instalments, \$77,000 with respect to final decisions, and \$180,000 for other costs such as social security, income tax, expert fees, etc. The total amount spent in Q1 2016 was \$510,000 in comparison to \$601,000 in Q1 2015.

## **Recoverable Taxes Provision**

Certain taxes paid in Brazil on consumables and property, plant, and equipment generate tax credits through various mechanisms. The Company is currently working on several initiatives to ensure optimum utilization of those tax credits, which includes assessment of the tax credits for offset against taxes otherwise payable and restitution in cash.

A valuation provision for recoverable taxes is prepared on a quarterly basis. The calculation takes into account various factors including the limited methods to recover such taxes, the length of time it will take to recover such taxes and the estimated operating tenure of the Company. Any provision reduces the net carrying value of recoverable taxes to their estimated present value based on the manner and timing of expected recovery, discounted at Brazilian Selic rate as at the quarter end.

In 2014, the Company initiated procedures in respect of recovery of its Brazilian Federal Value Added Tax ("VAT") input tax credits with respect to the years 2009 to 2011. As a result of these ongoing efforts, during the first quarter of 2016, the Company obtained a VAT cash refund of approximately \$1.0 million (R\$3.5 million) relating to the MSOL legal entity. The movement in the provision for recoverable taxes during the three months ended March 31, 2016 considers this refund and the possibility of additional refunds, offsets of certain income taxes payable, and the impact of changes in the discount rate.

As at March 31, 2016, gross recoverable taxes (which are primarily denominated in Brazilian Reais) and also include Canadian HST recoverable of \$1.4 million, amounted to \$24.9 million (December 31, 2015 – \$23.3 million). Also as at March 31, 2016, the provision for recoverable taxes was approximately \$5.8 million (December 31, 2015 - \$6.3 million). Consequently, the book value of recoverable taxes as at March 31, 2016 was \$19.1 million (December 31, 2015 – \$17.0 million).

## **Impairment and Impairment Reversal**

The Turmalina, Paciência, and Caeté complexes 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 such as mineral rights and deferred exploration costs. A CGU is generally an individual operating mine or development project.

For the three months ended March 31, 2016, there were no indicators of impairment or reversal of past impairment charges.

## **Non-Operating Expenses**

(\$ thousands)	Three months ended March 31,						
	<b>2016</b> 2015 Cha						
Foreign exchange loss (gain)	\$ 2,358	\$	(1,924)	(223%)			
Financial instruments loss	19,435		579	3257%			
Finance costs	1,223		1,124	9%			
Other non-operating recoveries	(44)		(26)	69%			
Non-operating expenses (income)	\$ 22,972	\$	(247)	(9400%)			

During the first quarter of 2016, finance costs represent interest on debt and accretion expense.

## **Accounting for Convertible Senior Secured Debentures**

On October 27, 2015, the Company closed financing of the Convertible Senior Secured Debentures (the "Debentures") at a price of \$1,000 per Debenture, for aggregate proceeds of \$21.5 million. The Debentures will mature on December 27, 2018 and bear an interest rate of 12% per annum, payable in cash on a quarterly basis. The Debentures are convertible at the holder's option into common shares of the Company, at a ratio of 8,781 common shares per \$1,000 of the principal amount. The Debentures can be redeemed after 12 months (October 28, 2016 or the "Call Date"), and prior to the maturity date, in cash in whole or in part. The redemption price is 120% of the principal amount of the Debentures outstanding within one year after the Call Date, and 110% thereafter, plus, in each case, any accrued and unpaid interest thereon. The Debentures include a general security agreement over all of the Company's and its subsidiaries' present and future assets, delivery of the shares of the Company's subsidiaries, and loan guarantees by the Company's subsidiaries. Within 30 days following the occurrence of a Change in Control, the Company shall be obligated to offer to purchase all of the Debentures then outstanding. The offer price shall be 120% of the principal amount plus accrued interest to-date if the payment date occurs prior to October 27, 2016, or 110% thereafter.

The Company has chosen to designate the Debentures to be measured at fair value through profit or loss. Upon initial recognition, the Company recorded the Debentures at their fair value of \$21.5 million which was the consideration received for the instrument at the inception date. The transaction costs of \$2.1 million, which include \$0.8 million of cash finder's fee, \$0.2 million of finder's warrants, and \$1.1 million of legal costs, were immediately charged as an expense upon closing.

The Company has chosen to designate the Debentures to be measured at fair value through profit or loss. Upon initial recognition, the Company recorded the Debentures at their fair value of \$21.5 million which was the consideration received for the instrument at the inception date. Subsequent to the initial measurement, at each reporting period the financial liability is measured at fair value in its entirety.

As at March 31, 2016, the Company revised its methodology to the finite difference method in order to calculate a more representative valuation of the financial liability due to significant changes in inputs during the period. The use of the finite difference method would not have any impact on the valuation of the financial liability as at December 31, 2015. The following inputs were used to value the financial liability as at March 31, 2016:

	March 31,
	2016
Remaining contractual life (in years)	2.58
Share price at period end (Cdn\$/share)	0.32
Credit spread (%)	36.2%
Volatility (%)	60%
Risk free discount rate (%)	0.534%

As at March 31, 2016, the change in the fair value of the financial liability in the amount of \$20.8 million was recorded as an expense through profit or loss (March 31, 2015 – \$nil). All other variables remaining the same, in subsequent periods a change in the share price, discount rate, and reduction in the remaining contractual life of the liability at each reporting period will cause a change in the fair value of the financial instrument. An increase or decrease in the period-end share price by Cdn\$0.01 will result in an increase or decrease in the fair value of the option of approximately \$1.25 million.

#### **Taxes**

#### **Brazilian Taxes**

Brazilian tax regulation involves three jurisdictions and tax collection levels: the Federal, State, and Municipal levels. 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%, and VAT taxes at a rate of 9.25% for PIS/CONFINS and 12-18% for ICMS.

## **Government Royalty**

A federal 1% royalty, Compensação Financeira pela Exploração de Recursos Minerais ("CFEM"), is levied on gold sales. The rate is calculated on the gross gold sale proceeds less refining charges and insurance, as well as any applicable sales taxes.

## **Income and Deferred Taxes Expenses**

(\$ thousands)	Three months ended March 31,					
		2016		2015	Change	
Current income tax expense (recovery)	\$	1,288	\$	672	92%	
Deferred income tax (recovery) expense		(1,095)		2,993	(137%)	
Income tax expense	\$	193	\$	3,665	(95%)	

The income tax expense of \$0.2 million for the first quarter of 2016 primarily relates to the current income tax expense in Turmalina offset by the deferred tax impact of the weakening of the US dollar. The balance sheet reflects a deferred income tax liability of \$1.2 million as at March 31, 2016 (December 31, 2015 – \$2.5 million).

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 as discussed above, it is expected that the Company's effective tax rate will fluctuate in future periods.

## **REVIEW OF FINANCIAL CONDITION**

## **Outstanding Debt**

Total debt outstanding as at March 31, 2016 was \$61.3 million (of which \$47.1 million was the Debentures), compared to \$41.2 million as at December 31, 2015 (of which \$26.3 million was the Debentures).

#### **Convertible Senior Secured Debentures**

On October 27, 2015, the Company closed an over-subscribed financing of the Convertible Senior Secured Debentures. The Company raised aggregate gross proceeds of \$21.5 million, of which approximately \$8.4 million was paid to Renvest to transfer its interest in its credit facility and security interest with the Company to the lendors in the financing, which facility was amended and restated under the indenture governing the debentures.

The Company is using the remainder of the net proceeds of the financing of approximately \$11.2 million, after paying the legal and closing costs, to advance asset optimization plans in conjunction with the Company's ongoing development and production activities, and for general corporate purposes.

## **Liquidity and Cash Flow**

The Company had a working capital deficiency of \$1.0 million as at March 31, 2016 (working capital of \$2.0 million as at December 31, 2015). As at March 31, 2016, the Company had cash and cash equivalents of \$18.0 million compared to \$15.3 million as at December 31, 2015.

	March 31,	December 31,
(\$ thousands)	2016	2015
Cash and cash equivalents	\$ 18,016	\$ 15,319
Gold bullion	-	
Cash and gold bullion	\$ 18,016	\$ 15,319
Non-cash working capital:		
Other current assets:	16,084	19,149
Inventory	11,125	12,038
Recoverable taxes	3,511	3,161
Others	1,448	3,950
Current liabilities:	(35,144)	(32,489)
Accounts payable and accrued liabilities	(16,498)	(12,991)
Notes payable	(12,981)	(13,582)
Other provisions and liabilities	(4,522)	(5,338)
Other current liabilities	(1,143)	(578)
Working capital (deficiency)	\$ (1,044)	\$ 1,979

The Company will continue to review and implement cost control measures across the operations and corporate offices to improve operating cash flow and enhance the Company's working capital position.

The use of funds during the three months ended March 31, 2016 is outlined below:

			Three months ended					
_(\$ thousands)	March 3			.,				
		2016		2015				
Cash generated from operating activities	\$	9,526	\$	12,177				
Financing activities								
Deferred share units redeemed		(41)		-				
Net change in debt		(616)		(3,200)				
Interest paid		(907)		(718)				
Other		-		(26)				
Cash used in financing activities	\$	(1,564)	\$	(3,944)				
Investing activities								
Capital expenditures on equipment and brownfield exploration		(5,395)		(5,381)				
Net proceeds from asset sales		-		37				
Cash used in investing activities	\$	(5,395)	\$	(5,344)				
Effect of exchange rate		130		208				
Increase in cash and equivalents	\$	2,697	\$	3,097				

The \$2.7 million decrease in operating cash flows for Q1 2016 compared to the same period in 2015 is primarily due to the receipt of \$6.0 million in cash tax refunds in Q1 2015 versus the receipt of \$1.0 million in Q1 2016. The \$2.4 million improvement in financing outflows relates to the repayments of the Renvest credit facility in Q1 2015.

Overall, capital expenditures remained consistent with Q1 2015; however, in Q1 2016, the Company invested a significant amount into primary development at Turmalina and Pilar compared to Q1 2015, when greater capital expenditures were on brownfield exploration as well as major rebuilds and capital repairs undertaken for mining equipment.

A brief summary of capital spending is outlined below:

	Three mor	Three months ended				
(\$ thousands)		h 31,				
	2016	2015				
Sustaining capital <sup>1</sup>						
Primary development	\$ 3,769	\$ 2,087				
Brownfield exploration	147	1,267				
Mine-site sustaining						
Engineering	202	5				
Equipment	895	1,430				
Total sustaining capital <sup>1</sup>	5,013	4,789				
Non-sustaining capital (including capital projects) <sup>1</sup>						
Gurupi	158	101				
Others	224	491				
Total non-sustaining capital <sup>1</sup>	382	592				
Total capital expenditures	\$ 5,395	\$ 5,381				

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

## **Contractual Obligations and Commitments**

The Company's contractual obligations as at March 31, 2016 are summarized as follows:

	Le	ss than 1					Мо	re than 5	
(\$ thousands, except where indicated)		year	1	- 3 years	3	3 - 5 years		years	Total
Financial Liabilities									
Notes payable									
Principal									
Bank indebtedness	\$	12,510	\$	-	\$	-	\$	-	12,510
Vale Note		500		1,000		750		-	2,250
Convertible debentures		-		21,500		-		-	21,500
Interest		2,959		4,085		-		-	7,044
Total financial liabilities	\$	15,969	\$	26,585	\$	750	\$	-	\$ 43,304
Other Commitments									
Operating lease agreements	\$	167	\$	-	\$	-	\$	-	\$ 167
Suppliers' agreements 1,2		4,522		6,261		-		-	10,783
Other provisions and liabilities		1,152		4,949		5,542		10,674	22,317
Reclamation provisions <sup>3</sup>		6,606		11,210		5,542		10,674	34,032
Total other commitments	\$	12,447	\$	22,420	\$	11,084	\$	21,348	\$ 67,299
Total	\$	28,416	\$	49,005	\$	11,834	\$	21,348	\$ 110,603

<sup>&</sup>lt;sup>1</sup> 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.

## **Derivative Financial Instruments – Hedging**

The Company assesses its financial instruments and non-financial contracts on a regular basis to determine the existence of any embedded derivatives which 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.

The Company enters into gold forward contracts to hedge against the risk of declining US dollar denominated gold prices for a portion of its forecasted gold sales. The Company closely monitors the changes in gold price and, as deemed appropriate, may enter into gold forward contracts with the aim of minimizing the impact of adverse changes to the US dollar denominated price of gold. As at March 31, 2016, the Company did not have any outstanding gold forward contracts.

Hedge accounting is applied to cash flow hedges that qualify under the hedging requirements of IAS 39 Financial Instruments: Recognition and Measurement ("IAS39"). Under hedge accounting, derivative instruments are recorded on the statement of financial position at fair value. The effective portion of any gain or loss on the hedging instrument, net of any tax effects, is recognized in other comprehensive income ("OCI") and recorded into earnings when the hedge item affects earnings. The ineffective portion is reported as an unrealized gain (loss) on derivatives contracts in the statements of operations and comprehensive loss.

Unrealized gains and losses on forward sales contracts are a result of the difference between the forward spot price of the gold and the forward sales contract price. Unrealized gains and losses on forward foreign exchange contracts are primarily a result of the difference between the forward currency contract price and the spot price of the Brazilian Real.

<sup>&</sup>lt;sup>2</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.

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

## CAPITAL STRUCTURE

The capital structure of the Company as at March 31, 2016 is outlined below:

All amounts in \$ thousands, except number of common shares	As at March 31, 2016
Bank indebtedness	\$ 12,510
Convertible debentures	47,075
Vale note	1,758
Total debt	\$ 61,343
Less: cash and cash equivalents	(18,016)
Total net debt <sup>1</sup>	\$ 43,327
Number of common shares outstanding	111.1 million

<sup>1</sup> Net debt is a Non-IFRS Performance Measure and is defined as total indebtedness excluding unamortized transaction costs and premiums or discounts associated with debt, less cash and cash equivalents. Net debt provides a measure of indebtedness in excess of the current cash available. We reduce gross indebtedness by cash and cash equivalents on the basis that they could be used to pay down debt.

## **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 senior partner. Fees paid to ASA are recorded at the exchange amount – being the amount agreed to by the parties and included in general and administration expenses in the statements of operations and comprehensive loss - and amount to \$27,000 for the three months ended March 31, 2016 (three months ended March 31, 2015 – \$23,000).

## **HEALTH, SAFETY, AND ENVIRONMENT**

## **Health and Safety**

Jaguar places high priority on the safety and welfare of its employees. We recognize that our employees are our most valuable asset. We have a code of conduct that is strictly enforced. While our accidents rate has reduced over the past few years, we strive for improving it further in future. We have an integrated management system in place that promotes open communication at all levels. Over the past few years, the health and safety team has expanded in order to meet compliance and regulatory requirements, and also to improve our operating standards. Our training program for new employees is extensive and includes the participation of experienced professionals that act as mentors, providing hands-on guidance and conducting periodical reviews.

During the first quarter of 2016, the Lost Time Incidents ("LTIs") decreased to two as compared to five incidents during the same period in 2015. For each incident, management identifies the likely causes and develops remediation plans to prevent future recurrences. The overall LTI frequency rate is calculated as the number of lost-time injuries per million hours worked. All accidents are analyzed and the underlying causes are identified to implement corrective actions. Proposed actions include the reinforcement of safe behavior with the Loss Prevention Program, thus aiming to strengthen the safety culture at Jaguar.

## **Environment**

Jaguar is environmentally focused and continuously strives to improve our practices. In our commitment to the resources, land, and stakeholders, we work closely with surrounding communities, governments, and other partners to continuously improve the Company's sustainable development programs. Jaguar's programs ensure its operations and development efforts protect the environment and surrounding natural resources.

Jaguar's operations are subject to environmental regulation in Brazil. The Company has not been in full compliance with all environmental laws and regulations or held, or been in full compliance with, all required environmental and health and safety permits at all times. The Company is currently subject to a number of reclamation and remediation liabilities and may have civil or criminal fines or penalties imposed for alleged violations of applicable laws or regulations in Brazil. The Company has implemented and prioritized control structures and monitoring programs to address environmental non-compliance, and a reclamation plan for its mining/project sites is being prepared.

During the fourth quarter of 2015, Jaguar updated the reclamation plans for all Company's assets in the Iron Quadrangle that were closed in the previous years. The reclamation plans were developed by Jaguar's environmental team along with Agroflor Engenharia e Meio Ambiente ("Agroflor"), a Brazilian company with expertise in environmental studies and identification of liabilities. In Q1 2016, Agroflor completed reclamation plan reports on the Caeté Complex that include Camará, Catita, Serra Paraiso, and Sabará. Agroflor has also completed field vists for CPA (Ouro Fino, Rio de Peixe, Santa Isabel and Palmital) and MTL (Faina) and the reports for these assets will be concluded in the second half of 2016.

In December 2015, the State Regional Environmental Regulation Agency ("SUPRAM") started the evaluation of the renewal request for the Operating Licence ("LO") for MTL, that was filed in 2012. The operating licence for MTL continues to be valid even after the initial expiration date (June 19, 2012), as the Company has applied for renewal within the legal time frame.

## LITIGATION AND CONTINGENCIES

#### **Labour Practices**

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 defences, which led to the bulk of the litigation contingencies recorded.

In March 2013, management retained external counsel to review the Company's labour practices in Brazil to determine areas of improvement. As a result, management received a report which identified 48 labour law violations in the Company's legacy human resource practices capable of generating financial liability. Management has been tracking these 48 violations and has since implemented changes in procedures to eliminate those issues going forward and made significant progress during 2014 and 2015 in addressing the deficiencies. The Company's human resource and legal departments continue to monitor the implementation of actions to remediate the legacy deficiencies.

#### **Labour Lawsuits**

As at March 31, 2016, there were 499 employee-initiated active lawsuits against the Company, largely related to wages. Based on management's assessment of the likelihood of loss related to 410 lawsuits, the Company has recorded \$9.1 million as labour litigation contingencies as at March 31, 2016 (\$4.5 million is classified as a current liability as at March 31, 2016).

During Q1 2016, management in conjunction with external counsel revised its estimate in regards to the labour litigation contingencies in order for the provision to be more representative of the likelihood of loss. The change in estimates was derived from applying certain percentages to the potential loss claim amounts based on the stage of each lawsuit. This change resulted in a decrease of \$9.4 million from the provision recorded as at December 31, 2015.

During Q1 2016, 17 new lawsuits were initiated. The Company paid approximately \$53,000 in appeal deposits, \$200,000 in instalments for settlements, \$77,000 with respect to final decisions, and \$180,000 for other costs such as social security, income tax, expert fees, etc. The total amount spent in the first quarter of 2016 was \$510,000 in comparison to \$601,000 in Q1 2015.

## DEVELOPMENT AND EXPLORATION PROJECTS

## **Gurupi - Development Project**

The Gurupi Project, wholly owned by the Company, is located in the State of Maranhão, Brazil, and comprises a total area of 140,332 hectares made of 33 mineral claims. Jaguar received its the Preliminary License ("LP") for the Gurupi project in June 2011. After the LP was granted, Jaguar completed part of the detailed engineering required to obtain the Installation License ("LI"). In January 2012, Jaguar received the LI, which authorizes the construction of Gurupi's processing plant. On November 20, 2013, Jaguar became aware that the Public Prosecutor in Brazil filed a lawsuit against MCT aiming at suspending the environmental licenses based on a number of unsupported allegations. In the preliminary decision, the judge decided to: (i) suspend the environmental licenses granted to MCT, (ii) prohibit any construction at the gold beneficiation plant, and (iii) stop any kind of negotiation with settlers without the participation of the National Institute for Colonization and Agrarian Reform ("INCRA").

During the fourth quarter of 2015, Jaguar Mining was formally notified about this injunction. The appeal of the injunction was filed in Q1 2016 as required by the law. The main point of the injunction is that MCT wants to develop a mine on land that was designated as an agricultural settlement project by INCRA. However, the mineral rights for the region are from the 1980's and 1990's, while INCRA established an "Agricultural Settlement" in 2005. Mineral Production under the National Department for Mineral Production ("DNPM") has the same level of importance as agricultural development under Brazilian law.

The main part of Jaguar's defense against the injunction is that there is very little to no agricultural work occurring in the areas of Chega Tudo and Cipoeiro and only large scale "garimpeiro" (illegal artisanal miners) mining is being carried out. In FY 2015, DNPM officially published information regarding eight mineral rights belonging to Jaguar. This publication will require Jaguar to complete mineral exploration and deliver a final exploration report to the DNPM within three years. Failure to identify and report mineralization during this period may likely result in a loss of these mineral rights.

Jaguar has continued the detailed planning for the resumption of limited mineral exploration in order to retain its mineral rights. In Q1 2016, the project development team also started preliminary works to start the socio-economic research and the implementation of a stakeholder management plan. These works will support proposed solutions regarding land issues with INCRA surrounding the area affected by the project.

During Q1 2016, the Company also continued its interactions and engagement with stakeholders at Gurupi, including senior national government officials and ministries. Discussions have been positive and officials appear supportive of advancing economic activity, including mining, in Maranhão. Meetings with INCRA in Maranhão are ongoing and are critical to resolve the land issues surrounding the project area.

## **Greenfield Exploration**

Jaguar currently holds approximately 191,000 hectares of mineral rights. New mining legislation in Brazil has been tabled and the outcome of any mining law reform is, as of yet, unknown. The Company intends to assess its holdings in due course, to establish a disposition plan of certain assets in the context of any change to holding cost, which are currently minimal.

Apart from properties in relatively close proximity to the existing mining operations, the only significant greenfield asset within the exploration portfolio is the Pedra Branca target where good grade surface expressions were identified by mapping and channel samples and have led to some 8,000 metres of exploration drilling to date. Due to prior financial constraints, this prospect has remained dormant but offers opportunity for further exploration should funds be available.

## **Pedra Branca Project**

The Pedra Branca Project is located in the State of Ceará in northeastern Brazil and is currently comprised of 18 exploration licences, totaling 34,855 hectares covering a 38 kilometre section of a regional shear zone. Final exploration reports and a Preliminary Economic Analysis ("PEA") have been delivered to DNPM for three of these licences. The concessions are located in and around municipal areas with good infrastructure. The mineralized structures are open along strike with potential for significant gold mineralization.

Further work on the Pedra Branca Project, has been delayed as the Company focuses its efforts on the Turmalina and Caeté operations. Consequently, the Company made only those expenditures required to maintain the claims and land tenure in good standing.

The Pedra Branca Project is 100% owned by Jaguar. Based on the acquisition agreement of the project entered into with Glencore Xstrata plc. ("Glencore"), Glencore holds rights to a Net Smelter Royalty of one percent (1%) on future gold production and rights of first refusal on any Base Metal Dominant Deposit (as defined in the amendment) discovered, which if exercised, would allow Glencore to hold 70% of equity in a newly formed legal entity to hold such rights upon payment of three hundred percent (300%) of the Company's exploration expenditures incurred exclusively on the relevant Base Metal Dominant Area of the property.

## Turmalina – Zona Basal Project

During 2013, the Company completed the final exploration report on the southeastern portion of the Zona Basal target, located 3 kilometres west of the Turmalina plant facility and filed it with the DNPM. The Company has subsequently applied for the mining permit.

## **QUALIFIED PERSON**

The technical contents of this MD&A have been reviewed and verified by Marcos Dias Alvim, BSc Geo., MAusIMM (CP), Project Development Manager, who is an employee of Jaguar Mining Inc., and is a "qualified person" as such term is defined in National Instrument 43-101 ("NI 43-101").

## **OUTSTANDING SHARE DATA**

	As at May 9, 2016
Issued and outstanding common shares	111,136,038
Stock options	7,679,735
Deferred share units	4,002,320
Finder's warrants	6,607,833
Convertible debentures	185,905,750
Total	315,331,676

Effective May 1, 2014, the common shares of Jaguar commenced trading on the TSX Venture Exchange (the "TSX-V") on a post-consolidated basis.

Subsequent to March 31, 2016, 24,482 deferred share units were granted to a new director of the Board. An additional 1,500,000 deferred share units that were granted in 2015, vested subsequent to quarter-end when the volume weighted average trading price of the common shares of the Company for 20 trading days exceeded Cdn\$0.33.

## **NON-IFRS PERFORMANCE MEASURES**

The Company has included the following non-IFRS performance measures: 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 sold, earnings before tax, depreciation and amortization ("EBITDA"), and adjusted EBITDA in this document. These non-IFRS 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-IFRS measures to reported IFRS measures are as follows:

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

(\$ thousands, except where indicated)		ths ended h 31,		
	2016	2015		
Operating costs (per note 13 of the consolidated FS)	\$ 17,579	\$ 20,133		
Cost adjustment <sup>1</sup>	(605)			
Adjusted operating costs	16,974	20,133		
General & administration expenses	2,119	2,281		
Corporate stock-based compensation	116	184		
Sustaining capital expenditures	5,013	4,789		
All-in sustaining cash costs	24,222	27,387		
Reclamation - accretion (operating sites)	52	487		
All-in sustaining costs	\$ 24,274	\$ 27,874		
Non-sustaining capital expenditures	382	592		
Exploration and evaluation costs (greenfield)	2	50		
Reclamation - accretion (non-operating sites)	190	42		
Care and maintenance (non-operating sites)	207	284		
All-in costs	\$ 25,055	\$ 28,842		
Ounces of gold sold	22,881	24,228		
Cash operating costs per ounce sold	\$ 742	\$ 831		
All-in sustaining costs per ounce sold	\$ 1,061	\$ 1,150		
All-in costs per ounce sold	\$ 1,095	\$ 1,190		
Average realized gold price	\$ 1,165	\$ 1,187		
Cash operating margin per ounce sold	\$ 423	\$ 356		
All-in sustaining margin per ounce sold	\$ 104	\$ 36		

<sup>&</sup>lt;sup>1</sup> Cost adjustment includes any unusual items recorded during the quarter that do not relate to the current quarter's cost of sales or are noncash items.

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

(\$ thousands, except where indicated)	Thr	ee mont March	nths ended ch 31,		
· · · · · · · · · · · · · · · · · · ·	20	16	2015		
Turmalina Complex					
Operating costs	\$	9,817	\$ 9,977		
Sustaining capital expenditures		3,166	3,210		
All-in sustaining costs <sup>1</sup>	\$ 1	2,983	\$ 13,187		
Ounces of gold sold	1	.6,635	13,196		
Cash operating costs per ounce sold <sup>1</sup>	\$	590	\$ 756		
All-in sustaining cost per ounce sold <sup>1</sup>	\$	780	\$ 999		
Caeté Complex Operating costs	\$	7,158	\$ 10,124		
Sustaining capital expenditures	•	1,847	1,579		
All-in sustaining costs <sup>1</sup>	\$		\$ 11,703		
Ounces of gold sold		6,246	11,032		
Cash operating costs per ounce sold <sup>1</sup>	\$	1,146	\$ 918		
All-in sustaining cost per ounce sold <sup>1,2</sup>	\$	1,442	\$ 1,061		
Pilar Mine					
Operating costs	\$	-	\$ 6,988		
Sustaining capital expenditures		1,321	1,168		
All-in sustaining costs <sup>1</sup>	\$		\$ 8,156		
Ounces of gold sold		5,369	8,433		
Cash operating costs per ounce sold <sup>1</sup>	\$		\$ 829		
All-in sustaining cost per ounce sold <sup>1</sup>	\$	1,342	\$ 967		
RG Mine					
Operating costs	\$	1,275			
Sustaining capital expenditures		526	411		
All-in sustaining costs <sup>1</sup>	\$		\$ 3,547		
Ounces of gold sold		877	2,599		
Cash operating costs per ounce sold <sup>1</sup>	\$		\$ 1,207		
All-in sustaining cost per ounce sold <sup>1,2</sup>	\$	2,054	\$ 1,365		

<sup>&</sup>lt;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>&</sup>lt;sup>2</sup> The AISC calculation by mine site does not include allocation of Corporate (Toronto and Belo Office G&A).

#### Reconciliation of Net Loss to EBITDA and Adjusted EBITDA

Three months endernousands)  March 31,			ed
	2016		2015
Net loss	\$ (15,001)	\$ (12	,946)
Income tax expense	193	3	3,665
Finance costs	1,223	1	1,124
Depreciation and amortization	7,725	E	6,647
EBITDA	\$ (5,860)	\$ (1	,510)
Changes to legal provisions and recoverable VAT	\$ (10,228)	\$ 7	7,771
Foreign exchange loss (gain)	2,358	(1	,924)
Stock based compensation	116		184
Net realizable value adjustment	(605)		32
Financial instruments loss	19,435		579
Adjusted EBITDA	\$ 5,216	\$ 5	5,132

# **RISKS AND UNCERTAINTIES**

The business of the Company involves significant risk due to the nature of mining, exploration, and development activities. Certain risk factors are related to the mining industry in general while others are specific to Jaguar. The Company's exposure to risks and other uncertainties are particularly described in the Company's Annual Information Form for the year ended December 31, 2015 filed on SEDAR under the profile of Jaguar Mining Inc. Such risk factors could materially affect the future operating results of the Company and could cause actual events to differ materially from those described in forward-looking statements relating to the Company.

#### CRITICAL ACCOUNTING ESTIMATES

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 assessment of recoverability of the carrying amount of property, plant, and equipment and mineral exploration projects, valuation of recoverable taxes, deferred tax assets and liabilities, reclamation provisions, derivatives, liabilities associated with certain long-term incentive plans, measurement of inventory, provisions for legal actions and contingencies, and disclosure of contingent assets and liabilities depend on subjective or complex judgments about matters that may be uncertain. Changes in these 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 condensed interim consolidated financial statements for the three months ended March 31, 2016 are consistent with those applied and disclosed in the audited annual consolidated financial statements for the year ended December 31, 2015. 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, 2015, which are available on the Company's website and on SEDAR.

## CHANGES IN ACCOUNTING POLICIES INCLUDING INITIAL ADOPTION

The accounting policies applied in the condensed interim consolidated financial statements as at March 31, 2016 are consistent with those used in the Company's annual audited consolidated financial statements for the year ended December 31, 2015. The following are recent pronouncements approved by the IASB that are pending adoption. These new standards are not yet effective and have not been applied in preparing the consolidated financial statements, however, they may impact future periods:

- IFRS 9 Financial Instruments ("IFRS 9") In July 2014, the IASB issued the final version of IFRS 9 Financial Instruments, bringing together the classification and measurement, impairment and hedge accounting phases of the IASB's project to replace IAS 39 Financial Instruments: Recognition and Measurement. The mandatory effective date of IFRS 9 would be annual periods beginning on or after January 1, 2018, with early adoption permitted. The impact of IFRS 9 on the Company's financial instruments has not yet been determined.
- IFRS 15 Revenue from Contracts with Customers ("IFRS 15") In May 2014, the IASB issued IFRS 15, which covers principles that an entity shall apply to report useful information to users of financial statements about the nature, amount, timing, and uncertainty of revenue and cash flows arising from a contract with a customer. In September 2015, the IASB deferred the effective date of the standard to annual reporting periods beginning on or after January 1, 2018, with earlier application permitted. We are currently assessing the impact on our consolidated financial statements along with timing of our adoption of IFRS 15. The impact of IFRS 15 on the Company's consolidated financial statements has not yet been determined.
- IFRS 16 Leases ("IFRS 16") In January 2016, the IASB issued IFRS 16, which requires lessees to recognize assets and liabilities for most leases. Application of the standard is mandatory for annual reporting periods beginning on or after January 1, 2019, with earlier application permitted, provided the new revenue standard, IFRS 15, has been applied or is applied at the same date as IFRS 16. The impact of IFRS 16 on the Company's consolidated financial statements has not yet been determined.

# DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROLS OVER FINANCIAL REPORTING

Management of the Company is responsible for establishing and maintaining a system of disclosure controls and procedures to provide reasonable assurance that all material information relating to the Company is gathered and reported to senior management on a timely basis so that appropriate decisions can be made regarding public disclosure.

Management is also responsible for establishing and maintaining adequate internal controls over financial reporting (as such term is defined under National Instrument 52-109 as issued by the Canadian Securities Administrator). Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS.

There have been no changes during the three months ended March 31, 2016 that, in management's view, would have materially affected, or that are reasonably likely to materially affect, the Company's internal controls over financial reporting. The Company's management has attested to its internal controls over financial reporting for the three months ended March 31, 2016.

## **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", "anticipates", "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 forwardlooking 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 and changes in general economic conditions. 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, 2015 that can be accessed under the profile of Jaguar Mining Inc. on SEDAR at www.sedar.com. Further information about the Company is available on its corporate website at www.jaguarmining.com.

#### **CORPORATE DIRECTORY**

## **BOARD OF DIRECTORS**

Richard D. Falconer<sup>(1)(3)</sup> Chairman Rodney Lamond Edward V. Reeser(1)(2)(3)(4) Luis R. Miraglia<sup>(2)(4)</sup> Jared Hardner(3) Thomas Weng(1)(2)

- (1) Audit & Risk Committee
- (2) Governance, Compensation and Nominating Committee
- (3) Safety, Environmental, Technical & Reserves Committee
- (4) Special Committee

#### OFFICERS AND SENIOR MANAGEMENT

Rodney Lamond **Chief Executive Officer** 

Hashim Ahmed Interim Chief Financial Officer

Ubiratã Oliveira **Executive Vice President, Operations** 

Jean-Marc Lopez Vice President, Geology and Exploration

Neil Hepworth Vice President, Technical Services

Cintia Zanellato Corporate Secretary and General Counsel

## PRINCIPAL EXECUTIVE OFFICE

67 Yonge Street, Suite 1203 Toronto, ON, Canada M5E 1J8

Phone: (416) 628-9601

Website: www.jaguarmining.com

#### **REGISTERED OFFICE**

67 Yonge Street, Suite 1203 Toronto, ON, Canada M5E 1J8

#### ADMINISTRATIVE OFFICE

Rua Levindo Lopes, 323 - Funcionários CEP 30140-170 - Belo Horizonte, MG, Brazil

#### **AUDITORS**

KPMG LLP Toronto, ON, Canada

#### LEGAL COUNSEL

Azevedo Sette Advogados Belo Horizonte, MG, Brazil

## STOCK TRANSFER AGENT

Computershare Investor Services Inc. 100 University Avenue, 9th Floor Toronto, ON, Canada M5J 2Y1

Phone: 1 (800) 564-6253 Fax: 1 (866) 249-7775

Email: service@computershare.com

#### **EXCHANGE LISTING**

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