MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE YEAR ENDED
DECEMBER 31, 2016

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MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE YEAR ENDED DECEMBER 31, 2016

This Management's Discussion and Analysis ("MD&A") should be read in conjunction with the annual audited consolidated financial statements for the year ended December 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 www.sedar.com). Information on risks associated with investing in the Company's securities and technical and scientific information under National Instrument 43-101 concerning the Company's material properties, including information about mineral resources and reserves, are contained in the Company's most recently filed AIF and technical reports.

All amounts included in this MD&A are in United States dollars ("$"), unless otherwise specified. References to C$ are to Canadian dollars and R$ are to Brazilian Reais. This report is dated as at March 20, 2017.

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
FY 2016	January 1, 2016 – December 31, 2016	**FY 2015**	January 1, 2015 – December 31, 2015
Q1 2016	January 1, 2016 – March 31, 2016	**Q1 2015**	January 1, 2015 – March 31, 2015
Q2 2016	April 1, 2016 – June 30, 2016	**Q2 2015**	April 1, 2015 – June 30, 2015
Q3 2016	July 1, 2016 – September 30, 2016	**Q3 2015**	July 1, 2015 – September 30, 2015
Q4 2016	October 1, 2016 – December 31, 2016	**Q4 2015**	October 1, 2015 – December 31, 2015

OUR BUSINESS

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 95,000 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, prudent cost management practices, generating free cash flow, and increasing Mineral Reserves and Resources through exploration growth projects.

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. On October 4, 2016, the Company announced that it has entered into an earn-in agreement with Avanco Resources Limited ("Avanco"), pursuant to which Avanco may earn up to a 100% interest in the Gurupi Project. The Company may consider the acquisition, exploration, development, and operation of other gold properties.

Q4 & FY 2016 FINANCIAL & OPERATING HIGHLIGHTS

($ thousands, except where indicated)	For the three months ended December 31,		For the twelve months ended December 31,	
	2016	2015	**2016**	2015
Financial Data				
Revenue	**$ 30,261**	$ 26,820	**$ 120,539**	$ 106,513
Operating costs	**19,355**	13,933	**71,012**	67,327
Depreciation	**10,153**	3,628	**35,752**	16,519
Gross profit	**753**	9,259	**13,775**	22,667
Gross profit (excluding depreciation)[1]	**10,906**	12,887	**49,527**	39,186
Loss on change in fair value of notes payable	**361**	4,821	**77,977**	4,818
Net (loss) income	**(9,280)**	1,670	**(82,795)**	(11,212)
Per share ("EPS")	**(0.03)**	0.02	**(0.50)**	(0.10)
EBITDA[1]	**3,037**	(2,873)	**(38,671)**	9,189
Adjusted EBITDA[1,2]	**6,348**	7,431	**36,648**	21,438
Adjusted EBITDA per share[1]	**0.02**	0.07	**0.22**	0.19
Cash operating costs (per ounce sold)[1]	**735**	631	**719**	755
All-in sustaining costs (per ounce sold)[1]	**1,098**	991	**1,099**	1,079
Average realized gold price (per ounce)[1]	**1,205**	1,098	**1,239**	1,145
Cash generated from operating activities	**8,467**	6,786	**37,781**	24,249
Free cash flow[1]	**2,292**	899	**11,346**	(661)
Free cash flow (per ounce sold)[1]	**91**	37	**117**	(7)
Sustaining capital expenditures[1]	**6,172**	5,598	**25,419**	17,243
Non-sustaining capital expenditures[1]	**1,648**	334	**4,429**	1,618
Total capital expenditures	**7,820**	5,932	**29,848**	18,861

[1] Average realized gold price, sustaining and non-sustaining capital expenditures, cash operating costs and all-in sustaining costs, free cash flow, EBITDA and Adjusted EBITDA, Adjusted EBITDA per share, and gross profit (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.

[2] 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.

	For the three months ended December 31,		For the twelve months ended December 31,	
	2016	2015	**2016**	2015
Operating Data				
Gold produced (ounces)	**25,407**	23,169	**96,608**	90,421
Gold sold (ounces)	**25,110**	24,416	**97,277**	92,988
Primary development (metres)	**1,091**	987	**5,462**	3,796
Secondary development (metres)	**1,205**	742	**4,751**	2,232
Definition, infill, and exploration drilling (metres)	**9,914**	6,760	**37,860**	36,240

Financial Highlights

Revenue, Net Income (Loss), and External Factors

- Gold ounces sold for the three and twelve months ended December 31, 2016 were 25,110 and 97,277 ounces, respectively, compared with 24,416 and 92,988 ounces sold for the comparative 2015 periods.
- Revenue for Q4 2016 increased 13% to $30.3 million, compared with $26.8 million in Q4 2015, due to a 10% year-over-year increase in the average realized gold price to $1,205 in Q4 2016 compared with $1,098 in Q4 2015, and a 3% increase in ounces sold. Revenue for FY 2016 also increased 13% to $120.5 million from $106.5 million in FY 2015.
- Net loss for the year ended December 31, 2016 resulted mainly due to the change in the fair value of the convertible debentures (non-cash loss of $78.0 million) based on the significant increase in the share price from December 31, 2015 to the respective conversion dates of the debentures, which was partially offset by a decrease in the labour litigation provision amounting to $6.6 million primarily due to a change in the estimate in the first quarter of 2016.
- Adjusted EBITDA for Q4 2016 was $6.3 million compared to $7.4 million for Q4 2015, while adjusted EBITDA for the year ended December 31, 2016 was $36.6 million compared to $21.4 million in FY 2015.
- In Q3 and Q4 2016, all of the convertible debentures holders elected to voluntarily convert their debentures into common shares of the Company. The Company has significantly strengthened its balance sheet with the elimination of its senior secured debt.

Foreign Exchange

- The average exchange rate during Q4 2016 was R$3.30 Brazilian Reias per US dollar compared to R$3.84 per US dollar in Q4 2015. The closing exchange rate as at December 31, 2016 was R$3.26 per US dollar compared to R$3.90 per US dollar as at December 31, 2015.

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

- Cash operating costs decreased 5% to $719 per ounce of gold sold for FY 2016, compared to $755 per ounce sold during FY 2015, and have increased 16% to $735 per ounce sold in Q4 2016 compared to $631 per ounce sold in Q4 2015, largely due to the strengthening of the Brazilian Real, and the restart of secondary development at Pilar in 2016.
- AISC increased 1% to $1,099 per ounce of gold sold in FY 2016, compared to $1,088 per ounce sold during FY 2015, largely as a result of a 40% increase in sustaining capital expenditures, mainly on mine development activities.
- In Q4 2016, sustaining capital expenditures totaled $6.2 million and focused on increasing primary development and exploration drilling, as well as the recommissioning of Mill #3 at Turmalina, compared to $5.6 million in Q4 2015.
- Operating cash flow (excluding cash tax refunds) was $8.5 million for Q4 2016, compared to $6.5 million in Q4 2015. For FY 2016, operating cash flow (excluding cash tax refunds) was $36.8 million compared to $16.6 million for FY 2015. Operating cash flow includes approximately $10.4 million of cash recoverable taxes paid on operating expenditures.
- Free cash flow was $2.3 million for Q4 2016 and $11.3 million for FY 2016 based on operating cash flow (excluding cash tax refunds) less total capital expenditures, compared to $0.9 million and negative $1.6 million in Q4 2015 and FY 2015, respectively. Free cash flow was $117 per ounce sold in FY 2016 compared to negative $7 per ounce sold in FY 2015.

Cash Position, Working Capital, TSX Listing, Secured Loan Facility, Gurupi Earn-in Agreement

- As at December 31, 2016, the Company had a cash position of $26.3 million, an increase of $11.0 million over cash of $15.3 million as at December 31, 2015, primarily due to the new loan financing of $10 million in Q4 2016.
- Working capital was $8.9 million as at December 31, 2016 compared to $2.0 million as at December 31, 2015, including increased capital spending including annual increases of 44% in primary development and 113% in secondary development. Working capital includes $10.3 million in loans from Brazilian banks which are renewed every six months, and are expected to continue to be rolled forward.
- On August 3, 2016, the Company's common shares and senior secured convertible debentures recommenced trading on the Toronto Stock Exchange ("TSX") and were delisted from the TSX Venture Exchange; an important step in the evolution of the Company by providing more visibility and a broader base of retail and institutional shareholders.
- On November 7, 2016, the Company closed an agreement with Sprott Private Resource Lending (Collector) LP ("Sprott Lending") for a $10 million secured loan facility (the "Sprott Facility") to fund accelerated growth exploration initiatives.
- On October 4, 2016, the Company announced that it has entered into an earn-in agreement with Avanco Resources Limited ("Avanco"), pursuant to which Avanco may earn up to a 100% interest in the Gurupi Project.

Operational Highlights

Strong Gold Production, Recovery, and Primary and Secondary Development

- Consolidated gold production increased 7% to 96,608 ounces in FY 2016 compared to 90,421 ounces in FY 2015 and exceeded the 2016 full year guidance of 90,000 to 95,000 ounces of gold production.
- Record gold recovery of 91.2% in FY 2016 compared to 90.1% in FY 2015 due to continuous improvement projects initiated at both plants.
- Turmalina delivered 25% higher gold production of 63,260 ounces based on record gold recovery of 91.5%, a 24% increase in ore processed, and improved average head grade of 4.29 g/t over FY 2016. In Q4 2016, Turmalina gold production increased 11%, the best quarterly production since Q3 2011, with record recovery of 92.5%.
- Milling capacity at Turmalina increased with the recommissioning of Mill #3 (announced January 5, 2017).
- The Company completed 1,091 and 5,462 metres of primary development during Q4 2016 and FY 2016, increases of 11% and 44% over 987 and 3,796 metres in the comparative 2015 periods.
- The Company also completed 1,205 metres of secondary development during Q4 2016 (Q4 2015 – 742 metres), for a total of 4,751 metres in FY 2016, an increase of 113% over 2,232 metres in FY 2015, thus increasing the number of available underground working areas.

Improving Consolidated Grades

- Consolidated average head grade of 3.77 g/t in FY 2016 increased 4% over 3.62 g/t in FY 2015.
- Total processing was 237,000 tonnes in Q4 2016 (Q4 2015 – 216,000 tonnes) at an average head grade of 3.61 g/t (Q4 2015 – 3.96 g/t).
  - In Q4 2016, Turmalina processed 122,000 tonnes (Q4 2015 – 100,000 tonnes) at an average head grade of 4.39 g/t (Q4 2015 – 4.79 g/t).
  - Caeté processed 115,000 tonnes in Q4 2016 (Q4 2015 – 116,000 tonnes) at an average head grade of 2.79 g/t (Q4 2015 – 2.59 g/t).
- Total processing for FY 2016 was 881,000 tonnes, a 1% increase from 875,000 tonnes processed for FY 2015.

Positive Drill Results at Turmalina and Pilar; Major Growth Exploration Initiative

- On February 8, 2017, the Company announced multiple high-grade drill intercepts generated from 36 infill drill holes (5,393 metres) designed to test the currently reported mineral resource envelope of Orebodies A and C at Turmalina.
  - Significant drill intercepts for Orebody A include 11.33 g/t Au over 17.1 metres (estimated true width ("ETW") – 14.6 metres), 9.95 g/t Au over 14.2 metres (ETW – 10.8 metres), and 6.08 g/t Au over 20.3 metres (ETW – 10.4 metres). Significant drill intercepts for Orebody C include 6.39 g/t Au over 6.1 metres (ETW – 6.0 metres), 9.27 g/t Au over 3.8 metres (ETW – 3.6 metres), and 7.04 g/t Au over 2.8 metres (ETW – 2.7 metres).
- On September 26, 2016, the Company announced positive drill results generated from 40 underground diamond drill holes from a 5,369 metre drill program designed to test the current resource envelope and to test the down-plunge extensions of the Pilar ore bodies.
  - Significant drill intercepts include 17.40 g/t Au over 6.80 metres (estimated true width ("ETW") – 6.46 metres), 7.73 g/t Au over 16.35 metres (ETW – 15.52 metres), 24.19 g/t Au over 5.65 metres (ETW – 4.46 metres), 23.95 g/t Au over 4.00 metres (ETW – 3.35 metres), and 9.05 g/t Au over 7.90 metres (ETW – 6.24 metres).
- The Company completed 9,914 metres of definition, infill, and exploration drilling during Q4 2016 (Q4 2015 – 6,760 metres) focused on key targets at Turmalina and Caeté, for a total of 37,860 metres of drilling in FY 2016, a 4% increase over 36,240 metres in FY 2015.
- On October 27, 2016, Jaguar announced the commencement of a major growth capital investment program primarily focused on increasing identified mineral resources at its core assets and the discovery of new resources near existing infrastructure at its operating mines. The expanded growth exploration program, starting in Q4 2016, includes approximately 31,000 metres of diamond drilling, including approximately 15,000 metres drilling down-plunge continuities of ore bodies A and C at Turmalina and BFII and BF at Pilar, and approximately 8,500 metres of surface diamond drilling to test the high priority Pacheca and Cubas targets in the vicinity of Pilar and other advanced targets.

2017 KEY GROWTH DRIVERS

Looking ahead, the Company continues to be focused on safely delivering positive and sustainable operational performance, profitability, and cost optimization. The Company has established the following as key growth drivers for 2017:

- Completing 2017 capital investment program to increase the number of available working areas through increased development and exploration to grow sustainable production across all operating mines.
- $8.0 million to be spent on major growth exploration program including Turmalina and Pilar, as well as the high priority Pacheca and Cubas targets near Pilar and other advanced targets. Approximately $6.0 million will be allocated towards Jaguar's core assets, Turmalina and Pilar, to drive increased mine life. The remaining $2.0 million will be distributed towards other growth targets.
- This growth exploration program is primarily focused on increasing identified mineral resources at core assets and the discovery of new resources near existing infrastructure across operating mines. The growth exploration program is expected to complete approximately 31,000 metres of diamond drilling, including approximately 15,000 metres of drilling down-plunge continuities of Orebodies A and C at Turmalina and Orebodies BFII and BF at Pilar. Lastly, approximately 8,500 metres of surface diamond drilling will test the Pacheca and Cubas targets and other advanced targets.
- Growing mine production, increasing throughput, and reducing cash operating costs guidance.
- Commencing mine-wide Operational Excellence Program ("OEP") at Pilar to identify and eliminate waste, lower costs, and improve productivity to create and deliver results, which will drive future growth; while continuing the OEP at Turmalina.
- Implementation of formalized capital allocation and value driven decision making.

2017 Guidance

The following is the Company's production and cost guidance for 2017:

	Turmalina Complex		Caeté Complex		Consolidated	
	Low	High	Low	High	Low	High
Gold production (ounces)	60,000	65,000	40,000	45,000	100,000	110,000
Cash operating costs (per ounce sold)[1]	600	650	900	1,000	720	755
All-in sustaining costs (per ounce sold)[1]	800	850	1,020	1,180	900	1,000
Development						
Primary (metres)	2,500	2,900	2,200	2,600	4,700	5,500
Secondary (metres)	2,200	2,700	3,400	3,850	5,600	6,550
Definition, infill, and exploration drilling (metres)	16,000	18,000	10,000	13,000	26,000	31,000
Growth exploration investment (core assets) ($Ms)					$7.5	$8.0

[1] Cash operating costs and all-in sustaining costs are non-gaap financial performance measures with no standard definition under IFRS. Refer to the Non-IFRS Financial Performance Measures section of the MD&A. 2017 cost guidance has been prepared on the basis of a foreign exchange ratio of 3.5 Brazilian Reias vs. the US dollar.

In 2017, the Company is maintaining the increased pace of mine development and accelerated exploration programs at its core assets in order to continue to build confidence in current geological models and mine plans. This focus will enable the Company to achieve its 2017 production guidance, with the increase in production expected during the second half of 2017.

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, on October 4, 2016, the Company entered into an

earn-in agreement with Avanco Resources Limited ("Avanco"), pursuant to which Avanco may earn up to a 100% interest in the Gurupi development project. 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 June 24, 2016, Mr. Hashim Ahmed was appointed as Chief Financial Officer after serving as Interim Chief Financial Officer of Jaguar since February 2016. Mr. Ahmed joined the Company in August 2014 and has previously served as Jaguar's Vice President of Finance.

On October 11, 2016, the Company announced the appointment of Mr. Bob Gill as Vice President, Operations. Mr. Gill has over 30 years of expertise in the design and operation of international and domestic, open pit and underground, base metal and gold mines. Prior to joining the Company, he held the position of Principal Engineer and Study Manager with AMEC Americas Limited Mining Division, where he managed prefeasibility studies and PEA's, including being the project manager on the Galore Creek prefeasibility study.

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 geological models to deliver positive and sustainable operational 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.

REVIEW OF OPERATING AND FINANCIAL RESULTS

2016 Guidance

The following was the Company's production and cost guidance for 2016, with the consolidated results for the twelve months ended December 31, 2016:

	Turmalina Complex		**Caeté Complex**		**Consolidated**		
	Low	**High**	**Low**	**High**	**Low**	**High**	**FY Actual**
Gold production (ounces)	62,000	65,000	28,000	30,000	90,000	95,000	96,609
Cash operating costs (per ounce sold)[1]	600	650	925	975	700	750	719
All-in sustaining costs (per ounce sold)[1]	850	900	1,150	1,200	950	1,000	1,099
Recovery	90%	90%	90%	90%	90%	90%	91%
Development							
Primary (metres)	3,000	3,300	1,700	1,900	4,700	5,200	5,462
Secondary (metres)	3,200	3,400	2,500	2,700	5,700	6,100	4,751
Definition, infill, and exploration drilling (metres)	18,000	20,000	10,000	12,000	28,000	32,000	37,860

[1] Cash operating costs and all-in sustaining costs are non-gaap financial performance measures with no standard definition under IFRS. Refer to the Non-IFRS Financial Performance Measures section of the MD&A.

Jaguar exceeded 2016 annual production guidance based on consolidated production of 96,609 ounces. The Company also achieved its guidance for consolidated cash operating costs of $700 to $750 per ounce sold, with cash operating costs of $719 per ounce sold for FY 2016. Consolidated AISC of $1,099 per ounce sold was higher than the Company's 2016 annual guidance due to sustaining capital expenditures of $25.4 million for FY 2016, which represented a 47% increase over FY 2015, as well as the impact of the strengthening of the Brazilian Reais over the course of the year.

The Company's cost guidance for 2016 was prepared on the basis of a foreign exchange ratio of 3.8 Brazilian Reias per US dollar. On a consolidated basis, the Company's annual cash operating costs and all-in sustaining costs would have been approximately $689 and $1,039 per ounce sold respectively, if the average exchange rate for 2016 been R3.80 per US dollar instead of R$3.48 per US dollar.

Turmalina Gold Mine Complex

Turmalina Quarterly Production

($ thousands, except where indicated)	**Q4 2016**	Q3 2016	Q2 2016	Q1 2016	Q4 2015	Q3 2015	Q2 2015	Q1 2015
Tonnes of ore processed ('000)	**122,000**	128,000	124,000	128,000	100,000	101,000	94,000	111,000
Average head grade (g/t)[1]	**4.39**	4.36	4.10	4.29	4.79	4.77	3.91	3.59
Average recovery rate (%)	**93%**	92%	91%	90%	91%	91%	90%	90%
Gold (ozs)								
Produced	**16,101**	16,304	15,083	15,772	14,449	13,994	10,420	11,796
Sold	**16,024**	15,945	15,035	16,635	15,527	13,485	9,610	13,196
Cash operating cost (per oz sold)[2]	**$ 562**	$ 528	$ 586	$ 590	$ 483	$ 587	$ 717	$ 756
Cash operating cost (R$ per tonne)[2]	**$ 243**	$ 214	$ 249	$ 299	$ 288	$ 277	$ 225	$ 258

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

[2] 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.

During the fourth quarter of 2016, Turmalina produced 16,101 ounces of gold compared to 14,449 ounces in the corresponding 2015 period, an increase of 11% or 1,652 ounces. The increase in ounces produced was a result of a 22% increase in the tonnes processed from 100,000 in Q4 2015 to 122,000 in Q4 2016, offset by an 8% decrease in the average head grade from 4.79 g/t in Q4 2015 to 4.39 g/t in Q4 2016.

The cash operating costs per ounce sold for the fourth quarter of 2016 increased by 16%, or $79 per ounce, as compared to the same period in 2015, due to the impact of the strengthening of the Brazilian Real by 14%, an increase in the cost of materials due to inflation, and the 8% decrease in the average head grade, which were partially offset by certain cost control measures in operations and the increase in recovery. The cash operating costs per ounce sold for Q4 2016 increased by 6%, or $34 per ounce, as compared to Q3 2016, mainly due to the decrease in tonnes processed.

Operational Excellence Program

Since April 2016, Jaguar Mining and Instituto Aquila ("Aquila"), a Brazilian management consultancy group with a presence in 16 countries and previous experience in mining companies around the world, signed a two year partnership.

Initially established only for Turmalina, Aquila has been helping to develop and sustain a continuous improvement program focused on results through the Operational Excellence Program, by eliminating waste and rework, lowering cost and increasing productivity. The key to success is to build culture from mine to management where everyone can understand and seek excellence. The ultimate goal is aligning everyone to deliver results and growing in a sustainable and safe way to achieve long term production.

By evaluating Turmalina's current processes and establishing its value chain, all processes and KPIs were mapped, bottlenecks were identified to implement the Excellence Teams (multifunctional teams with aligned goals and financial impact defined) guided by a systematic routine follow-up.

Turmalina's team have been training and applying the program through OJT (On the Job Training) and formal trainings that cover the PDCA (Plan, Do, Check, Act) approach, Microsoft Excel, and ICAM (Incident Cause Analysis Methodology) directly with more than 150 employees at all levels, and an additional 250 employees through indirect involvement in the program.

Jaguar Excellence Teams have been covering improvements on primary processes at mine development, such as scaling, blast efficiency, haulage process improvements on equipment efficiency, and better loading to maximize the capacity usage. Additionally, we are also reducing operational expenditures by managing electricity consumption and ventilation efficiency.

Analyzing with facts and supported with data to debottleneck processes and improve results, all Excellence Teams are adopting the culture of defining the problems, understanding underlying causes by brainstorming sessions and analyzing using fishbone diagrams to establish action plans followed by the implementation of visual management boards and weekly meetings. Once processes are debottlenecked, they are standardized and people involved are trained on the new procedures. Throughout 2016, Turmalina's Operational Excellence Program achieved savings and so far, the program's return on investment is estimated at 10 times the cost of investment in this program. As a next step, Jaguar's management plans to replicate this program at Pilar and the Caeté plant in 2017, with an aim to standardize processes across the Company and share best practices.

Turmalina Capital Expenditures

($ thousands)	Three months ended December 31,		Twelve months ended December 31,	
	2016	2015	**2016**	2015
Sustaining capital[1]				
Primary development	**$ 2,090**	$ 3,190	**$ 9,439**	$ 10,336
Brownfield exploration	**360**	203	**866**	886
Mine-site sustaining	**1,107**	1,202	**3,751**	2,584
Total sustaining capital[1]	**3,557**	4,595	**14,056**	13,806
Total non-sustaining capital[1]	**1,186**	-	**2,972**	-
Total capital expenditures	**$ 4,743**	$ 4,595	**$ 17,028**	$ 13,806

[1] Sustaining and non-sustaining capital are non-IFRS financial 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)	Three months ended December 31,		Twelve months ended December 31,	
	2016	2015	**2016**	2015
Primary development	**483**	965	**2,985**	3,568
Secondary development	**466**	605	**2,620**	2,002
Total development	**949**	1,570	**5,605**	5,570
Definition drilling	**1,073**	2,815	**3,491**	10,418
Infill drilling	**2,136**	1,801	**9,933**	6,090
Exploration drilling	**1,914**	2,143	**4,224**	9,095
Total definition, infill, and exploration drilling	**5,123**	6,760	**17,648**	25,604

Primary development at the Turmalina mine totaled 483 and 2,985 metres for the three and twelve months ended December 31, 2016, respectively, compared to 965 and 3,568 metres in the comparative 2015 periods. In July 2016, the Company demobilized the development contractor at Turmalina, thereby bringing 100% of the development activities in-house. On a per metre basis, the cost of primary development for FY 2016 remained consistent with FY 2015.

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 initiatives 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. At the end of Q2 2016, the Company ended the contractor's work after advancing the Orebody A ramp to reach Level AN10SN1, which is the bottom stoping level for 2017.

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 and the filling of other primary stopes and mining of secondary stopes with CRF on both sidewalls has confirmed that good quality CRF can be installed quickly and efficiently. A system for producing filter cake from detoxified tailings and then re-mixing to paste is in place, but to ensure consistent quality paste, a batching process with a controlled shear mixer is expected to be commissioned by the end of Q2 2017. Because of the desire to avoid hauling development waste to surface, it is planned that CRF will be used to fill the bulk of the primary stopes with paste only installed in the upper stoping sub-level to allow for the 100% extraction of stopes immediately below the sill pillars.

On February 8, 2017, the Company announced multiple high-grade drill intercepts generated from 36 infill drill holes (5,393 metres) designed to test the current indicated and inferred mineral resource envelope of Orebody A and Orebody C at Turmalina. The drill intercepts completed confirm the continuation of high-grade gold mineralization down-plunge of Orebody A, and confirm the widening of the mineralization below current workings. Drill intercepts at Orebody C confirm a number of high-grade gold mineralized intercepts which suggests higher mineralization at depth, and could potentially increase mining production at Turmalina. The Turmalina drill program continues to increase the confidence in the geological model of both orebodies through increased drill density. Significant drill intercepts for Orebody A include 11.33 g/t Au over 17.1 metres (estimated true width ("ETW") – 14.6 metres), 9.95 g/t Au over 14.2 metres (ETW – 10.8 metres), and 6.08 g/t Au over 20.3 metres (ETW – 10.4 metres). Significant drill intercepts for Orebody C include 6.39 g/t Au over 6.1 metres (ETW – 6.0 metres), 9.27 g/t Au over 3.8 metres (ETW – 3.6 metres), and 7.04 g/t Au over 2.8 metres (ETW – 2.7 metres).

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, of which two were operating since January 2016 (Mills #1 and #2) at a capacity of 1,500 – 1,600 tonnes per day. During Q4 2016, the plant processed 122,000 tonnes at an average grade of 4.39 g/t compared to 100,000 tonnes at 4.79 g/t in Q4 2015. Overall, the processing plant maintained a recovery rate of 92.5% during Q4 2016, which is an improvement over the 91.3% recovery rate for Q4 2015. On January 5, 2017, the Company announced the successful recommissioning of Mill #3 with an estimated installed capacity of 1,600 tonnes per day. Using only Mill #3, Turmalina will be able to achieve the entire throughput of the plant with a lower operating cost, through electricity consumption savings, compared to using both Mills #1 and #2 in 2016. Mills #1 and #2 have been taken off-line for maintenance and will be kept on standby mode.

Caeté Gold Mine Complex

Caeté Quarterly Production

($ thousands, except where indicated)	Q4 2016	Q3 2016	Q2 2016	Q1 2016	Q4 2015	Q3 2015	Q2 2015	Q1 2015
Tonnes of ore processed (t)	**115,000**	103,000	93,000	68,000	116,000	122,000	116,000	115,000
Average head grade (g/t)[1]	**2.79**	3.17	3.30	2.83	2.59	3.17	3.00	3.16
Average recovery rate (%)	**91%**	91%	91%	90%	90%	89%	90%	89%
Gold (ozs)								
Produced	**9,307**	9,479	9,139	5,425	8,720	11,241	10,262	9,540
Sold	**9,085**	9,372	8,935	6,246	8,889	11,674	9,574	11,032
Cash operating cost (per oz sold)[2]	**$ 1,041**	$ 842	$ 1,049	$ 1,146	$ 888	$ 854	$ 1,036	$ 918
Cash operating cost (R$ per tonne)[2]	**$ 267**	$ 249	$ 354	$ 411	$ 262	$ 304	$ 250	$ 253

[1] The 'average head grade' represents the recalculated head-grade milled.
[2] 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.

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 Q3 2016, management continued to investigate and complete feasibility work for an XRF Ore Sorting system for waste removal to reduce haulage costs for the Pilar mine.

During Q4 2016, the Caeté plant achieved gold recovery of 90.8% 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.

Pilar Quarterly Production

($ thousands, except where indicated)	Q4 2016	Q3 2016	Q2 2016	Q1 2016	Q4 2015	Q3 2015	Q2 2015	Q1 2015
Tonnes of ore processed (t)	**84,000**	78,000	72,000	56,000	77,000	78,000	75,000	79,000
Average head grade (g/t)[1]	**3.11**	3.51	3.62	2.89	2.83	3.70	3.30	3.24
Average recovery rate (%)	**91%**	91%	91%	90%	90%	89%	90%	89%
Gold (ozs)								
Produced	**7,569**	7,923	7,804	4,552	6,278	8,340	7,314	7,310
Sold	**7,326**	7,821	7,622	5,369	6,389	8,641	6,835	8,433
Cash operating cost (per oz sold)[2]	**$ 942**	$ 762	$ 958	$ 1,096	$ 822	$ 735	$ 940	$ 829
Cash operating cost (R$ per tonne)[2]	**$ 271**	$ 248	$ 356	$ 410	$ 262	$ 303	$ 250	$ 254

[1] The 'average head grade' represents the recalculated head-grade milled.
[2] 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.

During the fourth quarter of 2016, Pilar produced 7,569 ounces of gold compared to 6,278 ounces in Q4 2015, an increase of 21% due to the 10% increase in average head grade and 9% increase in tonnes processed. Production decreased 4% from Q3 2016 to Q4 2016 as a net result of an 8% increase in tonnes processed and an 11% decline in average head grade.

The cash operating costs per ounce sold for the fourth quarter of 2016 increased by 15%, or $120 per ounce, as compared to Q4 2015 due to the impact of the strengthening of the Brazilian Real by 14%, and increased by 24%, or $180 per ounce, as compared to Q3 2016 due to the impact of a 153% increase in secondary development from Q3 2016 to Q4 2016.

Pilar Capital Expenditures

($ thousands, except where indicated)	Three months ended December 31,		Twelve months ended December 31,	
	2016	2015	**2016**	2015
Sustaining capital[1]				
Primary development	**$ 2,135**	$ 54	**$ 8,013**	$ 604
Brownfield exploration	**134**	87	**699**	1,010
Mine-site sustaining	**258**	772	**1,427**	1,127
Total sustaining capital[1]	**2,527**	913	**10,139**	2,741
Total non-sustaining capital[1]	**189**	-	**345**	686
Total capital expenditures	**$ 2,716**	$ 913	**$ 10,484**	$ 3,427

[1] 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)	Three months ended December 31,		Twelve months ended December 31,	
	2016	2015	**2016**	2015
Primary development	**608**	22	**2,262**	172
Secondary development	**718**	137	**1,293**	230
Total development	**1,326**	159	**3,555**	402
Definition drilling	**473**	-	**1,275**	460
Infill drilling	**1,557**	-	**6,898**	1,920
Exploration drilling	**558**	-	**2,994**	5,661
Total definition, infill, and exploration drilling	**2,588**	-	**11,167**	8,041

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 608 and 2,262 metres in the three and twelve months ended December 31, 2016 compared to 22 and 172 metres in the comparative 2015 periods.

Mining

Pilar continued to focus on improvements in minimizing dilution of the grade and profitability, continuing on the initiatives to reduce dilution from overbreak. Pilar focused predominantly on infill drilling in 2016, trying to improve the percentage of ore mined from the measured category on a monthly basis. A new wireframe model is being completed to better reflect the geology and lithology at Pilar which will improve the estimation process.

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. A specialized development contractor arrived on site in March 2016 to accelerate the main ramp below Level 10 to open up additional resources. The contractor continues to assist with primary and secondary development at Pilar in the first quarter of 2017.

A hanging wall drift was started in Q3 2016 to create a drilling platform for deeper drilling of the orebodies. Surfact drilling began at two brownfield geophysics anomalies, Pacheca and Cubas, near the Pilar mine. Drilling on the brownfield targets and deeper drilling of the main orebodies BA, BF, and BFII will continue through 2017.

During the quarter, mine development advanced a total of 1,326 metres (averaging 442 metres per month) compared to a total of 159 metres in Q4 2015. Definition, infill, and exploration drilling totaled 2,588 and 11,167 metres in the three and twelve months ended December 31, 2016 compared to 0 and 8,041 metres in the comparative 2015 periods.

Processing

During Q4 2016, the Caeté plant processed 84,000 tonnes from Pilar at an average grade of 3.11 g/t compared to 77,000 tonnes at 2.83 g/t in Q4 2015. Recovery for the quarter was 90.8%, which was higher than the Q4 2015 recovery of 89.8%.

Roça Grande Quarterly Production

($ thousands, except where indicated)	**Q4 2016**	Q3 2016	Q2 2016	Q1 2016	Q4 2015	Q3 2015	Q2 2015	Q1 2015
Tonnes of ore processed (t)	**31,000**	25,000	21,000	12,000	39,000	44,000	41,000	36,000
Average head grade (g/t)[1]	**1.93**	2.12	2.18	2.53	2.11	2.26	2.46	2.20
Average recovery rate (%)	**91%**	91%	91%	90%	90%	89%	90%	89%
Gold (ozs)								
Produced	**1,738**	1,556	1,335	873	2,442	2,901	2,948	2,230
Sold	**1,759**	1,551	1,313	877	2,500	3,033	2,739	2,599
Cash operating cost (per oz sold)[2]	**$ 1,454**	$ 1,249	$ 1,578	$ 1,454	$ 1,058	$ 1,195	$ 1,274	$ 1,207
Cash operating cost (R$ per tonne)[2]	**$ 272**	$ 252	$ 346	$ 415	$ 261	$ 306	$ 248	$ 250

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

[2] 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.

During the fourth quarter of 2016, RG produced 1,738 ounces of gold compared to 2,442 ounces in the corresponding 2015 period, a decrease of 29% or 704 ounces. Operational delays have occurred in 2016 due to the shortage of developed stopes as the primary focus has been on infill drilling and development in an effort to extend mine life.

The cash operating costs per ounce sold for the fourth quarter of 2016 increased 37% compared to Q4 2015 and increased 16% compared to Q3 2016 due to higherer maintenance expenditures and lower average grades in Q4 2016, as well as the impact of the strengthening Brazilian Real.

Roça Grande Capital Expenditures

($ thousands, except where indicated)	**Three months ended December 31,**		**Twelve months ended December 31,**	
	2016	2015	**2016**	2015
Sustaining capital[1]				
Primary development	**$ -**	$ -	**$ 717**	$ 176
Brownfield exploration	**69**	66	**387**	453
Mine-site sustaining	**20**	24	**120**	67
Total sustaining capital[1]	**89**	90	**1,224**	696
Total non-sustaining capital[1]	**-**	-	**47**	217
Total capital expenditures	**$ 89**	$ 90	**$ 1,271**	$ 913

[1] 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)	Three months ended December 31,		Twelve months ended December 31,	
	2016	2015	**2016**	2015
Primary development	**-**	-	**215**	56
Secondary development	**21**	-	**838**	-
Total development	**21**	-	**1,053**	56
Definition drilling	**-**	-	**-**	-
Infill drilling	**1,395**	-	**6,786**	-
Exploration drilling	**808**	-	**2,259**	2,595
Total definition, infill, and exploration drilling	**2,203**	-	**9,045**	2,595

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 for FY 2016 was 215 metres compared to 56 metres in FY 2015.

Mining

The Roça Grande mining activity has historically focused on surface exposures of gold deposits, where the orebody outcropped. The outcrops were mined using open-pit mining techniques, with exploration focused solely on the immediate down-dip projection of gold mineralization, and minimal exploration along strike between the outcrops.

Underground, 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 mechanized cut-and-fill mining method. A targeted exploration program has helped identify sufficient resources to continue mining to the end of 2017 and ore development has continued to allow mining mining to the end of 2017. Ore in Q1 2016 was generated primarily from ore development, but for the rest of 2016 stoping returns were the dominant ore source. Continued exploration drilling is now focused on proving up the potential resources being accessed by development and generating resources for 2018 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 Q4 2016, mine production was 31,000 mined tonnes at an average grade of 1.97 g/t compared to 37,000 tonnes at 2.13 g/t in Q4 2015. The decrease in production was due to a continued focus on proving up higher grade development targets as development was restarted in Q1 2016. Definition, infill, and exploration drilling totaled 2,203 and 9,045 metres for Q4 2016 and FY 2016 compared to 0 and 2,595 metres in the comparative 2015 periods.

Processing

During Q4 2016, the Caeté plant processed 31,000 tonnes from RG at an average grade of 1.93 g/t compared to 39,000 tonnes at 2.11 g/t in Q4 2015. Recovery for the quarter was 90.8%, which was higher than the Q4 2015 recovery of 89.8%.

CONSOLIDATED FINANCIAL RESULTS

Quarterly Financial Review[1]

($ thousands, except where indicated)	Q4 2016	Q3 2016	Q2 2016	Q1 2016	Q4 2015	Q3 2015	Q2 2015	Q1 2015
Revenue	**$ 30,261**	$ 33,618	$ 29,996	$ 26,664	**$ 26,820**	$ 28,126	$ 22,820	$ 28,747
Cost of sales (excluding depreciation)[2]	**(19,355)**	(16,191)	(17,887)	(17,579)	**(15,397)**	(17,892)	(16,808)	(20,133)
Gross profit (excluding depreciation)[2]	**10,906**	17,427	12,109	9,085	**11,423**	10,234	6,012	8,614
Net (loss) income	**(9,280)**	(31,648)	(26,866)	(15,001)	**1,670**	4,445	(4,383)	(12,946)
Cash flows from operating activities	**8,467**	9,353	10,435	9,526	**6,786**	3,660	1,652	12,151
Total assets	**192,788**	189,779	189,554	184,996	**183,409**	174,500	179,496	181,131
Total liabilities	**78,454**	131,618	139,665	108,349	**90,624**	83,949	94,077	91,648
Average realized gold price (per ounce)[2]	**$ 1,205**	$ 1,328	$ 1,251	$ 1,165	**$ 1,098**	$ 1,118	$ 1,190	$ 1,187
Cash operating cost (per oz sold)[2]	**$ 735**	$ 645	$ 758	$ 742	**$ 631**	$ 731	$ 850	$ 831

[1] Sum of all the quarters may not add up to the annual total due to rounding.

[2] 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.

The relative strength in the global gold market during the year positively impacted the Company's revenue and gross margin in FY 2016. However, the impact of the higher gold prices was largely offset by the strengthening of the Brazilian Real as compared to the US dollar. The net loss for FY 2016 primarily reflects the impact of the revaluation of the convertible debentures at period-ends and at each conversion date, as well as an increase in the depreciation expense due to the impairment reversal recorded as at December 31, 2015.

Current assets increased $14.8 million as at December 31, 2016 compared to December 31, 2015, primarily as a result of the Sprott Facility as well as an increase in recoverable taxes. Current liabilities increased from December 31, 2015 primarily due to an increase in accounts payable and accrued liabilities at year-end which was partially a result of the strengthening Brazilian Real, as well as the recognition of the current portion of the Sprott Facility. The decrease in non-current liabilities represents the net impact of the decrease in the labour litigation provision, the increase in the reclamation provision, and the full conversion of the convertible debentures during the year ended December 31, 2016 (with the fair value of the debentures at each conversion date being transferred to common shares).

Revenue

($ thousands, except where indicated)	Three months ended December 31,			Twelve months ended December 31,		
	2016	2015	Change	**2016**	2015	Change
Revenue	**$ 30,261**	$ 26,820	13%	**$ 120,539**	$ 106,513	13%
Ounces sold	**25,110**	24,416	3%	**97,277**	92,988	5%
Average realized gold price[1]	**$ 1,205**	$ 1,098	10%	**$ 1,239**	$ 1,145	8%

[1] 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 fourth quarter of 2016 increased 13%, compared to the same period in 2015, primarily as a result of a 10% improvement in the average realized gold price. Revenue for the year ended December 31, 2016 increased 13% over the comparative 2015 period, due to a 5% increase in ounces sold and an 8% improvement 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 December 31, 2016, the market price of gold (London PM Fix) traded in a range of $1,126 to $1,313, averaged $1,221 per ounce, and closed at $1,146 per ounce on December 31, 2016. The average market price during the fourth quarter of 2016 increased 9% as compared to the average market price of $1,106 per ounce for the fourth quarter of 2015.

Production

A total of 237,000 tonnes were processed in Q4 2016 (Q4 2015 – 216,000 tonnes) at an average head grade of 3.61 g/t (Q4 2015 – 3.96 g/t), a 9% decrease in average head grade compared to the same period in 2015. Total tonnes processed for the year ended December 31, 2016 were relatively consistent with 2015, while average head grade for the year increased 4% compared to 2015.

Consolidated Production Costs

($ thousands, except where indicated)	Three months ended December 31,			Twelve months ended December 31,		
	2016	2015	Change	**2016**	2015	Change
Direct mining and processing cost	**$ 17,531**	$ 14,554	20%	**$ 65,174**	$ 67,138	(3%)
Mining	**10,936**	8,614	27%	**40,317**	41,791	(4%)
Processing	**6,595**	5,940	11%	**24,857**	25,347	(2%)
Royalties, production taxes and others	**1,824**	843	116%	**5,838**	3,092	89%
Royalty expense and CFEM taxes	**879**	823	7%	**3,844**	3,163	22%
NRV adjustment and others	**945**	20	4625%	**1,994**	(71)	(2908%)
Total operating expenses	**$ 19,355**	$ 15,397	26%	**$ 71,012**	$ 70,230	1%
Reclamation recovery	**-**	(1,464)		**-**	(2,903)	(100%)
Depreciation	**10,153**	3,628	180%	**35,752**	16,519	116%
Total cost of sales	**$ 29,508**	$ 17,561	68%	**$ 106,764**	$ 83,846	27%

Total operating expenses increased slightly from $70.2 million in the year ended December 31, 2015 to $71.0 million in 2016. The increase was due to an increase in the cost of materials in local currency due to inflation and higher electricity tariffs, slightly offset by the impact of a weaker Brazilian Real on average in 2016. The increase in the depreciation expense is a result of 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 December 31,			Twelve months ended December 31,		
	2016	2015	Change	**2016**	2015	Change
Changes to legal and recoverable tax provisions	**$ 587**	$ 1,121	(48%)	**$ (7,635)**	$ 10,933	(170%)
General and administration expenses	**2,523**	2,643	(5%)	**10,137**	10,863	(7%)
Exploration and evaluation costs	**300**	12	2400%	**349**	108	223%
Care & maintenance costs (Paciência mine)	**334**	203	65%	**1,096**	1,016	8%
Stock-based compensation	**189**	350	(46%)	**538**	798	(33%)
Amortization	**826**	(422)	(296%)	**869**	77	1029%
Impairment reversal	-	(43,979)	(100%)	-	(43,979)	(100%)
Impairment charges	**1,095**	48,323	(98%)	**1,095**	48,323	(98%)
Other operating expenses	**1,524**	1,249	22%	**2,425**	3,019	(20%)
Total operating expenses	**$ 7,378**	$ 9,500	(22%)	**$ 8,874**	$ 31,158	(72%)

Care & Maintenance Costs – Paciência Gold Complex

The Paciência mining complex remained on care and maintenance during the fourth 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 2016. The complex has been secured and the

facilities are preserved and patrolled. A limited maintenance staff turns the mills and equipment on a monthly basis 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.

($ thousands)	Three months ended December 31,			Twelve months ended December 31,		
	2016	2015	Change	**2016**	2015	Change
Director's fees	**$ 89**	$ 44	102%	**$ 423**	$ 459	(8%)
Audit related and insurance	**204**	220	(7%)	**632**	1,103	(43%)
Corporate office (Toronto)	**592**	844	(30%)	**3,425**	3,359	2%
Belo Horizonte office	**1,638**	1,535	7%	**5,657**	5,942	(5%)
Total G&A expenses	**$ 2,523**	$ 2,643	(5%)	**$ 10,137**	$ 10,863	(7%)

For the three and twelve months ended December 31, 2016, the total G&A expenses were 5% and 7% lower, respectively, as compared to the same periods in 2015. Costs associated with the Belo Horizonte office were 5% lower in the year ended December 31, 2016, due to general cost cutting measures. Costs for the corporate office in Toronto were lower in Q4 2016 compared to Q4 2015 due to third party services being engaged for investor relations and data room set-up to support the strategic review process during Q4 2015. Management will continue its cost reduction focus for both Toronto and Belo Horizonte corporate office expenses.

Changes to Legal and Recoverable Taxes Provisions

($ thousands)	Three months ended December 31,			Twelve months ended December 31,		
	2016	2015	Change	**2016**	2015	Change
Changes to legal provisions	**$ 1,126**	$ 774	45%	**$ (6,014)**	$ 10,365	(158%)
Changes to recoverable taxes provision	**(539)**	347	(255%)	**(1,621)**	568	(385%)
Changes to legal and recoverable taxes provisions	**$ 587**	$ 1,121	(48%)	**$ (7,635)**	$ 10,933	(170%)

Legal Provisions

As at December 31, 2016, there were 472 employee-initiated active lawsuits (December 31, 2015 – 502) against the Company, largely related to disputed wages. Based on management's assessment of the likelihood of loss related to 385 lawsuits (December 31, 2015 – 411), the Company has recorded approximately $11.2 million as labour legal provisions as at December 31, 2016 ($4.9 million is classified as a current liability as at December 31, 2016).

During Q1 2016, management in conjunction with external counsel revised its estimate in regards to the labour litigation provisions in order for the provision to be more representative of the likelihood of loss. The change in estimates was derived from applying certain probability factors to the potential loss claim amounts based on the stage of each lawsuit. This change in estimates resulted in a decrease of $6.6 million from the provision of $17.8 million recorded as at December 31, 2015 ($5.3 million was classified as a current liability as at December 31, 2015). The strengthening of the Brazilian Real has resulted in a $2.6 million increase in the provision from December 31, 2015 to December 31, 2016.

During Q4 2016, 18 new lawsuits were initiated. The Company paid approximately $558,000 in appeal deposits and escrow payments, $322,000 in settlements instalments, and $113,000 for other costs such as social security, income tax, legal fees, and expert fees. The total amount spent in Q4 2016 was $993,000 in comparison to $584,000 in Q4 2015.

Recoverable Taxes Provision

As at December 31, 2016, gross recoverable taxes (which are primarily denominated in Brazilian Reais) and also include Canadian HST recoverable of $1.5 million, amounted to $27.3 million (December 31, 2015 – $23.3 million). Also as at December 31, 2016, the provision for recoverable taxes was approximately $5.2 million (December 31, 2015 – $6.3 million). Consequently, the book value of recoverable taxes as at September 30, 2016 was $22.1 million (December 31, 2015 – $17.0 million).

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 they can take to recover, 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.

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 2008 to 2011. As a result of these ongoing efforts, during Q1 2016, the Company obtained a VAT cash refund of approximately $1.0 million (R$3.5 million) relating to the MSOL legal entity. In July 2016, the Company initiated a lawsuit to obtain a court order to force the tax authority to review the Company’s remaining tax credits for MSOL with respect to the years 2008 to 2011. By the end of November 2016, the tax authority reviewed the Company’s claim, partially recognizing its tax credits. Although the tax credits were partially recognized, the Company will continue to challenge the tax authority’s review by appealing its results.

The movement in the provision for recoverable taxes during the year ended December 31, 2016 considers the cash refund received and the possibility of additional refunds and offsets of certain income taxes payable.

ICMS is a type of value added tax which can either be sold to other companies (usually at a discount rate) or be used to purchase specified machinery and equipment, as subject to approval by government authority. The ICMS credits can only be realized in the state where they were generated; in the case of Jaguar, in the state of Minas Gerais, Brazil. In October 2016, the Company received approval from the state to be able to sell R$4.3 million of its gross ICMS deferred tax credits related to MSOL to third parties.

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, such as the Gurupi Project.

As at December 31, 2016, the Company identified the negative operating cash flows for Roça Grande as an indicator of impairment for the Caeté complex. The Company concluded that the carrying value of Roça Grande in the Caeté CGU should be $nil based on RG’s negative operating cash flows and consequently recorded an impairment charge of $1.1 million for the year ended December 31, 2016.

Non-Operating Expenses

($ thousands)	Three months ended December 31,			Twelve months ended December 31,		
	2016	2015	Change	**2016**	2015	Change
Foreign exchange loss (gain)	**$ 68**	$ 1,262	(95%)	**$ 2,816**	$ (5,608)	(150%)
Financial instruments loss	**292**	4,688	(94%)	**76,321**	4,650	1541%
Finance costs	**840**	2,733	(69%)	**5,310**	6,112	(13%)
Other non-operating expenses (recoveries)	**957**	(112)	(954%)	**1,056**	(126)	(938%)
Non-operating expenses	**$ 2,157**	$ 8,571	(75%)	**$ 85,503**	$ 5,028	1601%

During the three and twelve months ended December 31, 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 had a maturity date of October 27, 2018 and bore interest at a rate of 12% per annum, payable in cash on a quarterly basis. The Debentures were convertible at the holder's option into common shares of the Company, at a ratio of approximately 8,781 common shares per $1,000 of the principal amount. The Debentures could 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 was 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 included 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 would have been obligated to offer to purchase all of the Debentures then outstanding. The offer price would have been 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. Subsequent to the initial measurement, at each reporting period the financial liability was measured at fair value in its entirety.

In Q1 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.

During the year ended December 31, 2016, the Company recorded an increase in the fair value of the financial liability, in the amount of $78.0 million, as an expense through profit or loss (year ended December 31, 2015 – $4.8 million).

On October 5, 2016, the Company issued a notice of redemption to holders of the outstanding Debentures. As set out in the notice of redemption, the outstanding Debentures would be redeemed as of November 8, 2016 (the "Redemption Date") upon payment of 120% of the principal amount and all accrued and unpaid interest to but excluding the Redemption Date.

During the year ended December 31, 2016 and before the Redemption Date, the Debentures were converted. Upon conversion, 188,795,215 common shares were issued and $104.3 million, representing the fair value of the financial liability associated with the converted Debentures at the conversion dates, was transferred to common shares.

Accounting for Sprott Facility

On November 7, 2016, the Company entered into an agreement with Sprott Private Resource Lending (Collector) LP ("Sprott Lending") for a secured loan facility (the "Sprott Facility") totaling $10.0 million to fund accelerated growth exploration initiatives. The Sprott Facility is payable over a term of 30 months, in equal monthly repayments, with an interest rate of 6.5% per annum, plus the greater of US dollar LIBOR or 1.25% per annum. In consideration for the structuring and syndication of the Sprott Facility, the Company has made a cash payment to Sprott Lending for structuring and legal fees. In consideration for and providing the financing commitment, the Company has issued an aggregate of 650,000 common shares of Jaguar to Sprott Lending and to Natural Resource Income Investing Limited Partnership.

The Company also incurred transaction costs, totaling $584,000, to obtain the Sprott Facility, which includes legal fees, transaction fees, listing fees, and common share issuance (valued at $366,000). All transaction costs, other than the common shares, were measured and recorded at the amount paid as it represents fair value.

The Sprott Facility qualifies as a financial liability, under IAS 32, and was initially measured at fair value and subsequently measured at amortized cost using the effective interest method. During the year ended December 31, 2016, $66,000 was recorded as finance costs in the consolidated statements of operations and comprehensive loss related to the accretion of the transaction costs. In accordance with the terms of the Sprott Facility, the Company made principal repayments and interest payments of $667,000 and $117,000, respectively, during the year ended December 31, 2016 ($nil and $nil, respectively, during the year ended December 31, 2015).

The Sprott Facility is provided by security agreements comprising the Company's and two of its subsidiaries', MSOL and MTL's, present and future assets, the shares of MSOL and MTL, and loan guarantees by MSOL and MTL. The Sprott Facility requires among other things that the Company adhere to specific financial covenants, such as maintaining a minimum of $5.0 million unrestricted cash and cash equivalents and positive working capital computed monthly.

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 December 31,			Twelve months ended December 31,		
	2016	2015	Change	**2016**	2015	Change
Current income tax expense	**$ 486**	$ 391	24%	**$ 4,721**	$ 1,327	256%
Deferred income tax expense (recovery)	**12**	(10,873)	(100%)	**(2,528)**	(3,634)	(30%)
Income tax expense	**$ 498**	$ (10,482)	(105%)	**$ 2,193**	$ (2,307)	(195%)

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 December 31, 2016 was $22.6 million (of which $8.8 million was the amortized cost of the Sprott facility), compared to $41.2 million as at December 31, 2015 (of which $26.3 million was the fair value of the Debentures). All of the Debentures were converted into common shares of the Company during the second half of 2016.

Liquidity and Cash Flow

The Company had working capital of $8.9 million as at December 31, 2016 ($2.0 million as at December 31, 2015). Working capital as at December 31, 2016 includes $10.3 million in loans from Brazilian banks ($13.1 million as at December 31, 2015) which are renewed every six months, and are expected to continue to be rolled forward. Working capital excluding the Brazilian bank loans was $19.2 million as at December 31, 2016 ($15.1 million as at December 31, 2015). As at December 31, 2016, the Company had cash and cash equivalents of $26.3 million compared to $15.3 million as at December 31, 2015.

	December 31, 2016	December 31, 2015
Cash and cash equivalents	**$ 26,304**	$ 15,319
Non-cash working capital		
Other current assets:		
Inventory	**12,615**	12,038
Recoverable taxes	**9,509**	3,161
Others	**1,707**	3,950
Current liabilities:		
Accounts payable and accrued liabilities	**(19,879)**	(12,991)
Notes payable	**(15,173)**	(13,582)
Other provisions and liabilities	**(4,869)**	(5,338)
Other current liabilities	**(1,302)**	(578)
Working capital	**$ 8,912**	$ 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 and twelve months ended December 31, 2016 is outlined below:

($ thousands)	Three months ended December 31,		Twelve months ended December 31,	
	2016	2015	**2016**	2015
Cash generated from operating activities	**$ 8,467**	$ 6,786	**$ 37,781**	$ 24,249
Investing activities				
Capital expenditures on equipment and brownfield exploration				
Mineral exploration projects	**$ (289)**	$ (127)	**$ (1,622)**	$ (494)
Purchase of property, plant and equipment	**(7,508)**	(5,805)	**(28,202)**	(18,367)
Proceeds from disposition of property, plant and equipment	**519**	43	**542**	162
Cash used in investing activities	**$ (7,278)**	$ (5,889)	**$ (29,282)**	$ (18,699)
Financing activities				
Net change in debt	**$ 7,989**	$ 12,225	**$ 5,689**	$ 4,774
Interest paid	**(338)**	(701)	**(3,076)**	(2,406)
Deferred share units redeemed	**-**	-	**(41)**	-
Other	**395**	-	**395**	-
Cash provided by financing activities	**$ 8,046**	$ 11,524	**$ 2,967**	$ 2,368
Effect of exchange rate	**(211)**	9	**(481)**	240
Increase in cash and equivalents	**$ 9,024**	$ 12,430	**$ 10,985**	$ 8,158

The $13.5 million increase in operating cash flows for FY 2016 compared to FY 2015 is primarily due to the decrease in cash operating costs from $755 per ounce sold in FY 2015 to $719 in FY 2016 and the 5% increase in the ounces sold. The $8.1 million in cash provided by financing activities in Q4 2016 relates to the closing of the $10.0 million credit facility with Sprott Lending compared to $11.5 million in Q4 2015 which reflects the net impact of the convertible debentures financing and repayment of the Renvest credit facility. Overall, capital expenditures increased significantly in three and twelve months ended December 31, 2016 compared to 2015 due to the Company's focus on carrying out its development and capital investment programs at Turmalina and Caeté during 2016. In Q4 2016, the Company completed 2,296 metres of total development compared to 1,729 metres in Q4 2015, while the capital investment program included advancing a newly designed paste-fill plant and the recommissioning of Mill #3 at Turmalina. A summary of capital spending is outlined below:

($ thousands)	Three months ended December 31,		Twelve months ended December 31,	
	2016	2015	**2016**	2015
Sustaining capital[1]				
Primary development	**$ 4,226**	$ 3,244	**$ 18,170**	$ 11,116
Brownfield exploration	**563**	357	**1,952**	2,350
Mine-site sustaining				
Engineering	**138**	252	**1,819**	339
Equipment	**1,245**	1,745	**3,478**	3,438
Total sustaining capital	**6,172**	5,598	**25,419**	17,243
Non-sustaining capital (including capital projects)[1]				
Gurupi	**273**	128	**922**	499
Turmalina	**1,186**	-	**2,972**	-
Caete	**189**	-	**392**	903
Others	**-**	206	**143**	216
Total non-sustaining capital[1]	**1,648**	334	**4,429**	1,618
Total capital expenditures	**$ 7,820**	$ 5,932	**$ 29,848**	$ 18,861

[1] Sustaining and non-sustaining capital are non-IFRS financial 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.

Annual Review

($ thousands, except per share amounts)	2016	2015	2014	Change 2016 vs 2015	Change 2015 vs 2014
	Year Ended December 31,				
Revenue	**$ 120,539**	$ 106,513	$ 116,362	$ 14,026	$ (9,849)
Gross profit (loss)	**13,775**	22,667	(4,590)	(8,892)	27,257
Net (loss) income	**(82,795)**	(11,212)	130,863	(71,583)	(142,075)
Basic (loss) income per share	**(0.50)**	(0.10)	1.69	(0.40)	(1.79)
Diluted (loss) income per share	**(0.50)**	(0.10)	1.64	(0.40)	(1.74)
Current assets	**50,135**	34,468	40,225	15,667	(5,757)
Non-current assets	**142,653**	148,941	155,039	(6,288)	(6,098)
Total assets	**192,788**	183,409	195,264	9,379	(11,855)
Current liabilities	**41,223**	32,489	63,466	8,734	(30,977)
Non-current liabilities	**37,231**	58,135	30,210	(20,904)	27,925
Total liabilities	**78,454**	90,624	93,676	(12,170)	(3,052)

The continued volatility in the global gold market continues to impact the Company's revenue, year over year. The net loss recorded for 2016 resulted mainly due to the change in the fair value of the convertible debentures (non-cash loss of $78.0 million) based on the significant increase in the share price from December 31, 2015 to the respective conversion dates of the debentures. The net income during 2014 mainly represents a gain on the extinguishment of debt as part of the CCAA restructuring in the second quarter of 2014.

Current assets increased $5.2 million as at December 31, 2016 compared to December 31, 2015, due to the net impact of the increase in cash due to the closure of the Sprott Facility in Q4 2016, the increase in recoverable taxes, and the strengthening of the Brazilian Real. The decrease in non-current assets is a result of the depreciation recorded on property, plant and equipment offset by the impact of the strengthening of the Brazilian Real on the value of certain assets. Current liabilities increased due to the foreign exchange impact due to the strengthening of the Brazilian Real and the current portion of the Sprott Facility. The decrease in non-current liabilities represents the full conversion of the debentures in Q3 and Q4 2016 and the reduction of other provisions and liabilities due to a change in estimates derived from applying certain probability factors to the potential loss claim amounts based on the stage of each lawsuit, offset by non-current portion of the Sprott Facility.

Contractual Obligations and Commitments

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

($ thousands, except where indicated)	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years	Total
Financial Liabilities					
Notes payable					
Principal					
Bank indebtedness[1]	$ 10,326	$ -	$ -	$ -	**$ 10,326**
Capital leasing obligations	734	1,531	-	-	**2,265**
Vale note	500	1,000	250	-	**1,750**
Sprott Facility[2]	4,000	5,333	-	-	**9,333**
Interest	783	407	-	-	**1,190**
Total financial liabilities	$ 16,343	$ 8,271	$ 250	$ -	**$ 24,864**
Other Commitments					
Operating lease agreements	$ 55	$ -	$ -	$ -	**$ 55**
Suppliers' agreements[3,4]	992	-	-	-	**992**
Other provisions and liabilities	4,869	8,465	-	-	**13,334**
Reclamation provisions[5]	1,258	6,892	5,702	9,775	**23,627**
Total other commitments	$ 7,174	$ 15,357	$ 5,702	$ 9,775	**$ 38,008**
Total	**$ 23,517**	**$ 23,628**	**$ 5,952**	**$ 9,775**	**$ 62,872**

[1] Bank indebtedness represents the principal on Brazilian bank loans that are renewed every six months.

[2] Amounts payable as at December 31, 2016.

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

[4] Purchase obligations for supplies and consumables - includes commitments related to new purchase obligations to secure a supply of cyanide, reagents, mill balls and other spares.

[5] 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 December 31, 2016 is outlined below:

All amounts in $ thousands, except number of common shares		As at December 31, 2016
Bank indebtedness	$	10,326
Capital leasing obligations		2,048
Vale note		1,401
Sprott Facility		8,815
Total debt	**$**	**22,590**
Less: cash and cash equivalents		(26,304)
Total net debt[1]	**$**	**(3,714)**
Number of common shares outstanding		307.1 million

[1] 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 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 $128,000 for the year ended December 31, 2016, respectively (year ended December 31, 2015 – $87,000).

On November 7, 2016, the Company entered into an agreement (the "Agreement") with Sprott Private Resource Lending (Collector) LP ("Sprott Lending"), that is an indirectly wholly-owned subsidiary of Sprott Inc., of which the Chairman is Mr. Eric Sprott. Mr. Sprott is a shareholder and held approximately 19% of the common shares of the Company as at December 31, 2016. The Agreement is a secured loan facility (the "Facility") totaling $10.0 million to fund accelerated growth exploration initiatives. The Facility is for a term of 30 months with an interest rate of 6.5% per annum, plus the greater of US dollar LIBOR and 1.25% per annum. In consideration for the structuring and syndication of the Facility, the Company has made a cash payment to Sprott Lending for structuring and legal fees. In consideration for and providing the financing commitment, the Company has issued an aggregate of 650,000 common shares of Jaguar to Sprott Lending and to Natural Resource Income Investing Limited Partnership, which is also indirectly wholly-owned by Sprott Inc.

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 fourth quarter of 2016, the Lost Time Incidents ("LTIs") decreased to two as compared to four incidents during the same period in 2015. For the year ended December 31, 2016, the Company had seven LTIs, a reduction from twelve in 2015. More significantly, Jaguar's severity rate for the year decreased in the fourth quarter to an average of 12.50 days lost per LTI in Q4 2016 from an average of 176.25 days per LTI in Q4 2015. Additionally, the year to year severity rate decreased in 2016 to an average of 32.86 days lost per LTI compared to an average of 105.83 days lost per LTI 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 full reclamation plan for its mining/project sites is being prepared and specific actions are being developed.

During the fourth quarter of 2015, Jaguar updated the reclamation plans for all of the Company's assets in the Iron Quadrangle that were on care and maintenance. 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, Rio de Peixe, Ouro Fino, and Sabará. In Q4 2016, Agroflor also completed reclamation plan reports for CPA (Santa Isabel and Palmital) and MTL (Faina). The reports indicate the need for further study of additional geotechnical and topographical information, which will be carried out by Jaguar. Topographical surveys started in Q4 2016 and will be concluded in Q1 2017.

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 provisions 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 the last three years in addressing the deficiencies. The Company's human resource and legal departments have been continually reviewing the Company's practices and establishing action plans to improve labour practices and both departments continue to monitor the implementation of actions to remediate the legacy deficiencies.

DEVELOPMENT AND EXPLORATION PROJECTS

Gurupi - Development Project

Avanco – Gurupi Earn-In Agreement

On October 4, 2016, the Company announced that it has entered into an earn-in agreement (the "Agreement") with Avanco, pursuant to which Avanco may earn up to a 100% interest in the Gurupi Project.

Upon the satisfactory completion of certain closing conditions, the Agreement provides Avanco with the right to earn 20% of Jaguar's interest in the Project by paying to Jaguar an aggregate cash fee of $1.7 million plus an additional fee of $500,000 in cash or shares of Avanco, and by expending a minimum of $300,000 on permitting and access in respect of the Project. Avanco will earn an additional 31% interest in Gurupi upon the publication of a JORC compliant reserve estimate in excess of 500,000 ounces, and will earn a further 29% interest in Gurupi upon demonstration of adequate funding coupled with the start of

construction of a process plant with capacity in excess of 50,000 ounces per year. In the event that Avanco cannot demonstrate adequate funding for the Project, Jaguar will have a one-time right to buy-back a 31% interest in Gurupi and control of the Project by paying to Avanco the reasonable costs and expenses incurred in the preparation of the JORC compliant reserve estimate and technical studies. Avanco will have the option to acquire the remaining 20% interest in the Project at any time by paying a fee equal to the greater of $6.25 million or the sum of $12.50 per ounce of gold as per the JORC compliant reserve estimate.

Pursuant to the Agreement, Jaguar will retain a Net Smelter Return ("NSR") royalty ("Royalty") upon the commissioning of production at the Project. The Royalty will be 1% NSR on the first 500,000 ounces of gold or gold ounce equivalents produced; 2% NSR on production from 500,001 to 1,500,000 ounces of gold or gold ounce equivalents; and 1% NSR on production exceeding 1,500,000 ounces of gold or gold ounce equivalents.

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 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.

During 2016, Jaguar continued the detailed planning for the resumption of limited mineral exploration in order to retain its mineral rights and 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.

In Q3 2016, Jaguar supplied the municipality of Centro Novo do Maranhão with the preparation of the Municipal Development Plan that should be used to guide the growth and the proper exploration of the potential economic and social opportunities of the municipality.

In accordance to the earn-in agreement with Avanco Resources Limited (“Avanco”), Avanco is now conducting the conversations with INCRA and the environmental licensing process. The exploration program is also under Avanco’s management. In Q1 2017, INCRA agreed to send a technical team to Chega Tudo and Cipoeiro to assess the local settlement and presence of “garimpeiros”. The visit by the INCRA team is expected to occur in the first half of 2017. A specialized Brazilian company has been retained to develop the research of a socioeconomic study and prepare a final report to be delivered for INCRA.

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.

SPECIAL COMMITTEE

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 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, after reviewing and approving the earn-in agreement with Avanco on the Gurupi Project, was disbanded in December 2016. No material expenses were incurred by the Special Committee after the completion of the convertible debenture financing.

QUALIFIED PERSON

The technical contents of this MD&A have been reviewed and verified by Geraldo Santos, BSc Geo., MAIG (CP), Geology 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

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

	As at March 20, 2017
Issued and outstanding common shares	307,115,675
Stock options	9,045,581
Deferred share units	2,760,964
Finder's warrants	3,073,411
Total	**321,995,631**

Effective August 3, 2016, the common shares and convertible senior secured debentures of Jaguar commenced trading on the Toronto Stock Exchange (“TSX”) under the symbols “JAG” and “JAG.DB.U”, respectively. Concurrent with the TSX listing, the common shares of the Company were delisted from the TSX Venture Exchange (“TSX-V”).

On October 5, 2016, the Company issued a notice of redemption to holders of the outstanding Debentures. As set out in the notice of redemption, the outstanding Debentures would be redeemed as of November 8, 2016 (the “Redemption Date”) upon payment of 120% of the principal amount and all accrued and unpaid interest to but excluding the Redemption Date. During the year ended December 31, 2016, all of the outstanding Debentures were converted into 188,795,215 common shares.

During the three months ended December 31, 2016, 3,534,422 warrants were exercised resulting in total gross proceeds to the Company of approximately C$530,000.

On January 27, 2017, the Company granted 733,740 stock options to executives of the Company. The options are exerciseable at a price of C$0.70 and expire on January 27, 2025. The options vest on a quarterly basis, in twelve equal instalments, starting on April 27, 2017 and are exercisable upon vesting. The Company also granted 103,400 DSUs to each of the non-executive directors, totalling a grant of 620,400 DSUs, 50% of which vested immediately, with the remaining 50% vesting July 27, 2017. The DSUs are exercisable upon the retirement of such directors. In addition, the Company granted executives of the Company 278,380 time-vested DSUs, that vest on a quarterly basis, in twelve equal instalments, starting on April 27, 2017, and 278,380 performance-vested DSUs, that shall vest if the Company’s stock price reaches C$1.00 measured on a 5-day VWAP basis, and is maintained at that level for at least 20 consecutive trading days. The DSUs granted to executives of the Company are exercisable upon vesting.

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, free cash flow, 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)	Three months ended December 31,		Twelve months ended December 31,	
	2016	2015	**2016**	2015
Operating expenses (per note 15 of the consolidated FS)	**$ 19,355**	$ 15,397	**$ 71,012**	$ 70,230
Cost adjustment[1]	**(895)**	-	**(1,080)**	-
Adjusted operating expenses	**18,460**	15,397	**69,932**	70,230
General & administration expenses	**2,523**	2,643	**10,137**	10,863
Corporate stock-based compensation	**189**	350	**538**	798
Sustaining capital expenditures	**6,172**	5,598	**25,419**	17,243
All-in sustaining cash costs	**27,344**	23,988	**106,026**	99,134
Reclamation - accretion (operating sites)	**222**	215	**892**	1,162
All-in sustaining costs	**$ 27,566**	$ 24,203	**$ 106,918**	$ 100,296
Non-sustaining capital expenditures	**1,648**	334	**4,429**	1,618
Exploration and evaluation costs (greenfield)	**300**	12	**349**	108
Reclamation - accretion (non-operating sites)	**72**	-	**749**	739
Care and maintenance (non-operating sites)	**334**	203	**1,096**	1,016
All-in costs	**$ 29,920**	$ 24,752	**$ 113,541**	$ 103,777
Ounces of gold sold	**25,110**	24,416	**97,277**	92,988
Cash operating costs per ounce sold	**$ 735**	$ 631	**$ 719**	$ 755
All-in sustaining costs per ounce sold	**$ 1,098**	$ 991	**$ 1,099**	$ 1,079
All-in costs per ounce sold	**$ 1,192**	$ 1,014	**$ 1,167**	$ 1,116
Average realized gold price	**$ 1,205**	$ 1,098	**$ 1,239**	$ 1,145
Cash operating margin per ounce sold	**$ 470**	$ 467	**$ 520**	$ 390
All-in sustaining margin per ounce sold	**$ 107**	$ 107	**$ 140**	$ 66

[1] Cost adjustment includes any unusual items recorded during the quarter that do not relate to the current quarter's cost of sales or are non-cash items.

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

($ thousands, except where indicated)	Three months ended December 31,		Twelve months ended December 31,	
	2016	2015	**2016**	2015
Turmalina Complex				
Operating costs	**$ 9,000**	$ 7,502	**$ 36,049**	$ 32,319
Sustaining capital expenditures	**3,557**	4,595	**14,056**	13,806
All-in sustaining costs[1]	**$ 12,557**	$ 12,097	**$ 50,105**	$ 46,125
Ounces of gold sold	**16,024**	15,527	**63,639**	51,818
Cash operating costs per ounce sold[1]	**$ 562**	$ 483	**$ 566**	$ 624
All-in sustaining cost per ounce sold[1,2]	**$ 784**	$ 779	**$ 787**	$ 890
Caeté Complex				
Operating costs	**$ 9,460**	$ 7,895	**$ 33,883**	$ 37,911
Sustaining capital expenditures	**2,616**	1,003	**11,363**	3,437
All-in sustaining costs[1]	**$ 12,076**	$ 8,898	**$ 45,246**	$ 41,348
Ounces of gold sold	**9,085**	8,889	**33,638**	41,169
Cash operating costs per ounce sold[1]	**$ 1,041**	$ 888	**$ 1,007**	$ 921
All-in sustaining cost per ounce sold[1,2]	**$ 1,329**	$ 1,001	**$ 1,345**	$ 1,004
Pilar Mine				
Operating costs	**$ 6,903**	$ 5,249	**$ 26,043**	$ 25,016
Sustaining capital expenditures	**2,527**	913	**10,139**	2,741
All-in sustaining costs[1]	**$ 9,430**	$ 6,162	**$ 36,182**	$ 27,757
Ounces of gold sold	**7,326**	6,389	**28,138**	30,298
Cash operating costs per ounce sold[1]	**$ 942**	$ 822	**$ 926**	$ 826
All-in sustaining cost per ounce sold[1,2]	**$ 1,287**	$ 964	**$ 1,286**	$ 916
RG Mine				
Operating costs	**$ 2,557**	$ 2,645	**$ 7,840**	$ 12,895
Sustaining capital expenditures	**89**	90	**1,224**	696
All-in sustaining costs[1]	**$ 2,646**	$ 2,735	**$ 9,064**	$ 13,591
Ounces of gold sold	**1,759**	2,500	**5,500**	10,871
Cash operating costs per ounce sold[1]	**$ 1,454**	$ 1,058	**$ 1,425**	$ 1,186
All-in sustaining cost per ounce sold[1,2]	**$ 1,504**	$ 1,094	**$ 1,648**	$ 1,250

[1] Results of individual mines may not add up to the consolidated numbers due to rounding.

[2] The AISC calculation by mine site does not include allocation of Corporate (Toronto and Belo Office G&A).

Reconciliation of Free Cash Flow

($ thousands, except where indicated)	Three months ended December 31,		Twelve months ended December 31,	
	2016	2015	**2016**	2015
Cash generated from operating activities	**$ 8,467**	$ 6,786	**$ 37,781**	$ 24,249
Sustaining capital expenditures	**(6,172)**	(5,598)	**(25,419)**	(17,243)
Cash tax refunds	**(3)**	(289)	**(1,016)**	(7,667)
Free cash flow	**$ 2,292**	$ 899	**$ 11,346**	$ (661)
Ounces of gold sold	**25,110**	24,416	**97,277**	92,988
Free cash flow per ounce sold	**$ 91**	$ 37	**$ 117**	$ (7)

Reconciliation of Net (Loss) Income to EBITDA and Adjusted EBITDA

($ thousands, except where indicated)	Three months ended December 31,		Twelve months ended December 31,	
	2016	2015	**2016**	2015
Net (loss) income	**$ (9,280)**	$ 1,670	**$ (82,795)**	$ (11,212)
Income tax expense (recovery)	**498**	(10,482)	**2,193**	(2,307)
Finance costs	**840**	2,733	**5,310**	6,112
Depreciation and amortization	**10,979**	3,206	**36,621**	16,596
EBITDA	**$ 3,037**	$ (2,873)	**$ (38,671)**	$ 9,189
Reclamation recovery	**-**	(1,464)	**-**	(2,903)
Impairment reversal	**-**	(43,979)	**-**	(43,979)
Impairment charges	**1,095**	48,323	**1,095**	48,323
Changes to legal provisions and recoverable VAT	**587**	1,121	**(7,635)**	10,933
Foreign exchange loss (gain)	**68**	1,262	**2,816**	(5,608)
Stock-based compensation	**189**	350	**538**	798
Inventory write-down	**1,080**	3	**2,184**	35
Financial instruments loss	**292**	4,688	**76,321**	4,650
Adjusted EBITDA	**$ 6,348**	$ 7,431	**$ 36,648**	$ 21,438

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. on April 27, 2016, and updated risk disclosures will be made available as part of the Company's Annual Information Form for the year ended December 31, 2016, which will be filed on SEDAR on or before March 31, 2017. 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 annual audited 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 annual audited consolidated financial statements.

The judgments that management has applied in the application of accounting policies and related estimates that have the most significant effect on the amounts recognized are discussed in Note 2 of the Company's annual audited consolidated financial statements for the year ended December 31, 2016.

CHANGES IN ACCOUNTING POLICIES INCLUDING INITIAL ADOPTION

The following are recent pronouncements approved by the IASB that are pending adoption. These new standards have not been applied in preparing the consolidated financial statements, however, they may impact future periods:

- IFRS 2 Share-based Payment ("IFRS 2") – In June 2016, the IASB issued amendments to IFRS 2 Share-based Payment, covering the measurement of cash-settled share-based payments, classification of share-based payments settled net of tax withholdings, and accounting for a modification of a share-based payment from cash-settled to equity-settled. The new requirements could affect the classification and/or measurement of these arrangements, and potentially the timing and amount of expense recognized for new and outstanding awards. The amendments apply for annual periods beginning on or after January 1, 2018, with early adoption permitted. The impact of the amendments to IFRS 2 on the Company's consolidated financial statements has not yet been determined.
- 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.
- IAS 12 Income Taxes ("IAS 12") – In January 2016, the IASB issued amendments to IAS 12. The amendments clarify that the existence of a deductible temporary difference is not affected by possible future changes in the carrying amount or expected manner of recovery of the asset and also clarify the methodology to determine the future taxable profits used for assessing the utilization of deductible temporary differences. The amendments apply for annual periods beginning on or after January 1, 2017 with retrospective application. Early application of the amendments is permitted. The impact of the amendments to IAS 12 on the Company's consolidated financial statements 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. 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.
- IFRIC 22 Foreign Currency Transactions and Advance Consideration ("IFRIC 22") – In December 2016 the IASB issued IFRIC 22. IFRIC 22 clarifies the date that should be used for translation when a foreign currency transaction involves an advance

payment or receipt. The Interpretation is applicable for annual periods beginning on or after January 1, 2018. The impact of IFRIC 22 on the Company's consolidated financial statements has not yet been determined.

DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROLS OVER FINANCIAL REPORTING

Disclosure Controls and Procedures

Disclosure controls and procedures are designed to provide reasonable assurance that material information is gathered and reported to senior management, including the President and Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO"), as appropriate to permit timely decisions regarding public disclosure.

The Company's management, including the CEO and CFO, have as at December 31, 2016 designed Disclosure Controls and Procedures (as defined in National Instrument 52-109 of the Canadian Securities Administrators), or caused them to be designed under their supervision, to provide reasonable assurance that material information relating to the issuer is made known to them by others, particularly during the period in which the interim filings are being prepared; and information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation.

Internal Control over Financial Reporting

The Company's management, including the CEO and CFO, is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, the CEO and CFO and effected by management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. Management used the Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") to evaluate the effectiveness of the Company's internal controls for the year ended December 31, 2016. Based on this evaluation, management concluded that the Company's internal control over financial reporting was operating effectively as at December 31, 2016 to provide reasonable assurance the financial information is recorded, processed, summarized and reported in a timely manner.

Limitations of Controls and Procedures

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

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 forward-looking information. These factors include the inherent risks involved in the exploration and development of mineral properties, the uncertainties involved in interpreting drilling results and other geological data, fluctuating gold prices and monetary exchange rates, the possibility of project delays and cost overruns or unanticipated costs and expenses, uncertainties relating to the availability and costs of financing needed in the future, uncertainties related to production rates, timing of production and the cash and total costs of production, changes in applicable laws including laws related to mining development, environmental protection, and the protection of the health and safety of mine workers, the availability of labour and equipment, the possibility of civil insurrection, labour strikes and work stoppages 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, 2016, which will be filed under the profile of Jaguar Mining Inc. on SEDAR at www.sedar.com on or before March 31, 2017. Further information about the Company is available on its corporate website at www.jaguarmining.com.