## TREVALI MINING CORPORATION

# **Management's Discussion and Analysis**

For the three months ended March 31, 2017

# **Dated May 15, 2017**

## INTRODUCTION

This Management's Discussion & Analysis ("MD&A") for Trevali Mining Corporation (the "Company", or "Trevali") for the three months ended March 31, 2017 has been prepared by Management, in accordance with the requirements of National Instrument 51-102 - Continuous Disclosure Obligations ("NI 51-102"), as of May 15, 2017, and discusses its financial results for the three months ended March 31, 2017. This MD&A provides a detailed analysis of the business of Trevali and should be read in conjunction with the Company's condensed interim consolidated financial statements for the three months ended March 31, 2017 and 2016 (the "Financial Statements"), which are prepared in accordance with International Financial Reporting Standards ("IFRS") applicable to the preparation of interim financial statements, including International Accounting Standard 34, Interim Financial Reporting. The Company is a "Non-Venture Issuer" as defined in NI 51-102.

All figures in this MD&A are expressed in thousands of United States Dollars, except for share, per share, per pound and per ounce amounts, unless otherwise noted. References to "C\$" are to Canadian dollars.

This MD&A contains certain "forward-looking information" within the meaning of Canadian securities legislation and "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 (collectively, "forward-looking statements"). These forward-looking statements are made as of the date of this document and the Company does not intend, and does not assume any obligation, to update these forward-looking statements, except as required under applicable securities legislation.

Forward-looking statements relate to future events or future performance and reflect management's expectations or beliefs regarding future events and include, but are not limited to, statements with respect to the estimation of mineral reserves and mineral resources, the realization of mineral reserve estimates, the timing and amount of estimated future production, costs of production, capital expenditures, success of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims, future anticipated property acquisitions, the content, cost, timing and results of future anticipated exploration programs and limitations on insurance coverage. In certain cases, forward-looking statements can be identified by the use of words such as "plans", "expects" or "does not expect", "is expected", "outlook", "guidance", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", 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" or the negative of these terms or comparable terminology. In this MD&A, certain forward-looking statements are identified by words including "guidance", "may", "future", "expected", "intends" and "estimates". By their very nature forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forwardlooking statements. Such factors include, among others, risks related to actual results of current exploration activities; changes in project parameters as plans continue to be refined; future prices of mineral resources; possible variations in ore reserves, grade or recovery rates; accidents; assumptions related to geotechnical conditions of tailings facilities; dependence on key personnel; labour pool constraints; labour disputes; availability of infrastructure required for the development of mining projects;

delays or inability to obtain governmental and regulatory approvals for mining operations or financing or in the completion of development or construction activities; counterparty risks associated with sales of our metals; increased operating and capital costs; operating in foreign jurisdictions with risk of changes to governmental regulation; impact of climatic conditions on the Company's Santander and Caribou mining operations; compliance with debt covenants, and other risks of the mining industry as well as those factors detailed from time to time in the Company's interim and annual financial statements and management's discussion and analysis of those statements, all of which are filed and available for review under the Company's profile on SEDAR at www.sedar.com. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. Historical results of operations and trends that may be inferred from this MD&A may not necessarily indicate future results from operations. The Company provides no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. Please see the "Risk Factors" section of this MD&A.

## Change to Functional of the Company's Canadian Operations and Presentation Currency

Prior to January 1, 2017, the functional currency of the Company's Canadian operations and corporate office, which is based in Canada, was the Canadian dollar. The functional currency of its Peruvian entities was the United States dollar. Per IAS 21, The Effects of Changes in Foreign Exchange Rates, an entity's functional currency should reflect the underlying transactions, events, and conditions relevant to the entity. Determination of functional currency involves certain judgments to determine the primary economic environment and this is re-evaluated for each new entity or if conditions change. Based on management's evaluation, taking into consideration the currency of the main sources of income from the sale of concentrate from the Caribou Mine, sources of funding, as well as the currency in which cash and cash deposits for the Caribou Mine, along with the corporate office, are maintained, management determined that the functional currency of the Canadian operations and corporate office is the United States dollar.

The change in functional currency has been accounted for prospectively, with no impact of this change on prior year comparative information.

With all of Trevali's operations having the United States dollar as it functional currency, the Company has also decided to change its presentation currency from the Canadian dollar to the United States dollar. The change in the financial statement presentation currency is considered an accounting policy change and has been accounted for retrospectively. From January 1, 2017, the USD presentation currency is consistent with the functional currency of the Company. For periods prior to January 1, 2017, the statements of financial position for each period presented have been translated from the Canadian dollar functional currency to the new US dollar presentation currency at the rate of exchange prevailing at the respective financial position date with the exception of equity items, which have been translated at accumulated historical rates from the Company's date of incorporation. The statements of income and comprehensive income were translated at the average exchange rates for the reporting period, or at the exchange rate prevailing at the date of transactions. Exchange differences arising in 2016 on translation from the Canadian dollar functional currency to the US dollar presentation currency have been recognized in other comprehensive income and accumulated as a separate component of equity.

In prior reporting periods, the translation of the Company's Peruvian entities, which, as of January 1, 2013, had a United State dollar functional currency, into the Company's presentation currency of the Canadian dollar, gave rise to a translation adjustment which was recorded as a cumulative translation

adjustment ("CTA"), a separate component of shareholders' equity. With the retrospective application of the change in presentation currency from the Canadian dollar to the US dollar, the CTA that was given rise to by the Peruvian entities since January 1, 2013, was eliminated. However, with the retrospective application of the change in presentation currency to the US dollar, the Company's Canadian operations and corporate office, and the Peruvian entities prior to January 1, 2013, all of which had a Canadian dollar functional currency until January 1, 2017, resulted in a CTA balance. The CTA balance will remain the same until the entities, which gave rise to the CTA balance, are disposed of, or retired.

## **External Technical Reports and Experts**

On March 31, 2017, the Company filed an NI 43-101 technical report in respect of the Santander Property entitled "Mineral Resource Update on the Santander Mine, Province de Huaral, Perû" dated March 12, 2017 (effective November 6, 2016) (the "Santander Resources Report"), prepared by Mr. Daniel Marinov, R.P.Geo, VP Exploration and Dr. Gilles Arseneau, P.Geo., of Arseneau Consulting Services Inc. The report provides a summary of the work completed by Trevali and its independent consultant as of November 6, 2016, in support of a Mineral Resource estimate. Mr. Marinov is an officer of the Company and Dr. Arseneau is independent of the Company, both of whom are "qualified persons" ("QP") within the meaning of NI 43-101.

On March 31, 2017, the Company filed an NI 43-101 technical report in respect of the Santander Property entitled "Mineral Reserve Estimation Technical Report on the Santander Mine, Province de Huaral, Perû" dated March 31, 2017 (effective October 31, 2016) (the "Santander Reserve Report"). The purpose of the Santander Reserve Report is to document the results of the Mineral Resource to Mineral Reserve conversion and the Mineral Reserve Statement for the Santander mine prepared by SRK with contributions from Trevali and other independent consultants. It was prepared following the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1. This report provides a summary of the work completed by Trevali and its independent consultants as of November 6, 2016, in support of a Mineral Reserve estimate. The QPs list include: Yao Hua (Benny) Zhang, P. Eng., Gary Poxleitner, P.Eng, Gilles Arseneau, P. Geo., Leonard Holland, C. Eng., and David Maarse. To the best of our knowledge, as at the date hereof, neither SRK nor its officers, directors, employees or consultants beneficially own, directly or indirectly, any of the securities of the Company.

Estimates contained in the NI 43-101 technical reports prepared for each of the Stratmat Property, the Halfmile Property, the Ruttan Property and the the technical reports for the combined Halfmile and Stratmat Properties were prepared by Wardrop Engineering Inc., a subsidiary of Tetra Tech ("Tetra Tech Wardrop"). The QPs responsible for the preparation of the NI 43-101 technical reports were Tim Maunula, P. Geo., (Stratmat, Halfmile, Ruttan) and Mike McLaughlin, P. Eng., (PEA). To the best of our knowledge, as at the date hereof, neither Tetra Tech Wardrop nor its officers, directors, employees or consultants beneficially own, directly or indirectly, any of the securities of the Company.

Estimates contained in the currently filed NI 43-101 technical report prepared for the Caribou Property and the PEA were prepared by SRK Consulting (Canada) Inc. ("SRK") in January 2013 and May 2014. The QPs list include: Yao Hua (Benny) Zhang, P. Eng., Gilles Arseneau, P. Geo., Leonard Holland, C. Eng., Jeffery Barrett, P. Eng. To the best of our knowledge, as at the date hereof, neither SRK nor its officers, directors, employees or consultants beneficially own, directly or indirectly, any of the securities of the Company.

All the Company's public disclosure filings, including its most recent management information circular, annual information form, material change reports, press releases and other information, may be accessed at <a href="www.sedar.com">www.sedar.com</a> and readers are urged to review these materials, including the technical reports as stated above, which are filed with respect to the Company's mineral properties.

# Internal Qualified Persons and Quality Control/Quality Assurance

Dr. Mark D. Cruise, Trevali's President and Chief Executive Officer, Paul Keller, Chief Operating Officer and Daniel Marinov, Vice President of Exploration are qualified persons as defined by NI 43-101, and have supervised the preparation of the scientific and technical information that form the basis for various news releases issued by the Company. Dr. Cruise is not independent of the Company as he is a senior officer, director and shareholder of the Company. Mr. Keller and Mr. Marinov are not independent of the Company as they are senior officers and shareholders of the Company.

The exploration, definition, construction, pre-production development and production work programs at the Company's properties were designed and supervised by the Company's President and Chief Executive Officer, Chief Operating Officer, and Vice President of Exploration who together are responsible for all aspects of the work including the quality control/quality assurance programs. On-site personnel at the Company's respective projects rigorously collect and track samples which are then security sealed and shipped to internationally accredited geochemical assay laboratories. At Santander, production mine samples are assayed at the independent on-site SGS geochemical laboratory ("SGS"). In the case of the Company's properties in New Brunswick, samples are shipped to Bureau Veritas Minerals Laboratories ("BVML" – formerly ACME) preparation facility in Val D'Or, Quebec, then forwarded to Vancouver, British Columbia for assay. SGS and BVML's quality systems comply with the requirements for the International Standards ISO 17025 with CAN-P-1579 designation. Analytical accuracy and precision are monitored by the analysis of reagent blanks, reference material and replicate samples. Quality control is further assured by the use of international and in-house standards.

#### COMPANY BUSINESS AND BACKGROUND

Trevali is a natural resource company engaged in the acquisition, exploration, development and production of mineral properties. The Company is actively producing zinc and lead-silver concentrates from its Santander Mine in Peru and its Caribou Mine in the Bathurst Mining Camp of northern New Brunswick. Trevali also owns the Halfmile and Stratmat base metal deposits, located in New Brunswick, that are currently undergoing a Preliminary Economic Assessment ("PEA"), and the Ruttan Mine in northern Manitoba.

Common shares of the Company are listed on the Toronto Stock Exchange ("TSX") and the Bolsa de Valores de Lima in Peru, both under the symbol "TV". The common shares also trade on the OTCQX International Quotation System in the United States under the symbol "TREVF", and on the Frankfurt Stock Exchange under the symbol "4T1".

The Company acquired the Santander zinc-lead-silver mine in Peru, through a 50-year assignment agreement dated December 11, 2007 with Compania Minerales Santander S.A.C. ("Santander"). The Santander Mine was formerly a producing mine which the Company returned to commercial production in January 2014. The Property is accessible by road from Lima via the town of Canta to Santander, a distance of approximately 215 kilometres. The current infrastructure is comprised of a camp and associated support facilities, a 2,000 tonne processing per day zinc-lead-silver mine - concentrate processing plant and tailings impoundment.

In April 2011, the Company merged with Kria Resources Ltd. ("Kria"), a Toronto Venture Exchange listed Company with base metal properties in New Brunswick and Manitoba, Canada. Kria's properties included Halfmile and Stratmat in New Brunswick and the Ruttan Mine in northern Manitoba.

On November 5, 2012, the Company acquired Maple Minerals Corporation ("Maple") (now known as Trevali Mining (New Brunswick) Ltd.), a private company located in New Brunswick, by way of

amalgamation. This acquisition provided Trevali with a 3,000 tonne-per-day processing plant, the former Caribou base metal mine, and a permitted tailings treatment facility. On July 1, 2016, the Company entered the production phase at Caribou, producing zinc and lead-silver concentrates.

## 2017 - Highlights for the Quarter

# Agreement to Purchase Glencore's Rosh Pinah and Perkoa Zinc Mines ("African Assets")

On March 13, 2017, the Company announced that it had entered into definitive agreements with Glencore plc ("Glencore") and certain of its subsidiaries whereby Trevali would acquire a portfolio of zinc assets from Glencore (the "Transaction"), including an 80% interest in the Rosh Pinah mine in Namibia ("Rosh Pinah"), a 90% interest in the Perkoa mine in Burkina Faso ("Perkoa"), an effective 39% interest in the Gergarub project in Namibia, an option to acquire a 100% interest in the Heath Steele property in Canada and certain related exploration properties and assets (together, the "Assets") for an aggregate purchase price of approximately \$400 million (the "Consideration").

The Company expects that, upon completion of the Transaction, the Assets will deliver high-quality zinc production to the Company's existing portfolio, and improving asset and geographic diversification.

The purchase consideration is expected to consist of \$227.4 million in cash (which will be raised through both debt and equity) and the issuance of 193,432,310 Trevali common shares to Glencore. Based on the Company's transaction financing plan, Glencore is expected to become an approximate 25% shareholder of the Company at the completion of the agreement to purchase the African Assets.

## \$190 Million Facility

Trevali expects to fund a portion of the cash consideration through a \$190 million five-year senior secured credit amortizing non-revolving credit facility (the "Facility"). The Company expects proceeds from the Facility will be used as follows:

- (i) \$105 million will be used to fund a portion of the cash purchase price for the Acquisition, and fees and expenses incurred in connection with the Agreement to purchase the African Assets;
- (ii) \$40 million will be used to refinance currently outstanding debt obligations owing to Glencore and its affiliates;
- (iii) approximately \$45 million will be used to redeem Trevali's 12.5% senior secured notes due May 30, 2019, of which C\$60.9 million principal amount (plus accrued and unpaid interest and early repayment fee) is outstanding as at March 31, 2017 with a portion of the proceeds from the expected financing being used to satisfy the balance of the redemption amount for the senior secured notes); and
- (iv) fees and expenses incurred in connection with the foregoing.

## **Equity Financing**

On March 29, 2017, in connection with the Agreement to purchase the African Assets, the Company announced the closing, in escrow, of its previously announced bought deal private placement of subscription receipts (the "Subscription Receipts") at a price of C\$1.20 per Subscription Receipt (the "Offering") for gross proceeds of C\$264,546 (\$198,922). A total of 220,455,000 Subscription Receipts were sold pursuant to the Offering, including 28,755,000 Subscription Receipts as a result of the full exercise of an underwriters' option. The net proceeds of the Offering, when available to

the Company, will be used to fund a portion of the cash consideration payable to Glencore and for general working capital purposes.

The gross proceeds of the Offering, less 50% of the commission payable to the underwriters and the underwriters' expenses incurred to date, has been deposited into escrow and shall only be released to the Company's benefit immediately prior to the completion of the Transaction upon the satisfaction of certain conditions, including shareholder and regulatory approval of the Transaction, and will be used to partially fund the Consideration. Each Subscription Receipt entitles the holder thereof to receive one underlying common share of the Company for no additional consideration or further action on the part of the holder.

The TSX has conditionally approved the listing of the Common Shares underlying the Subscription Receipts subject to certain conditions, including receipt of approval of shareholders.

The effective date of the Transaction is April 1, 2017 and the closing of the Transaction is expected to occur on or before July 31, 2017. The Transaction is subject to obtaining requisite regulatory approvals (including in respect of antitrust matters), Trevali shareholder approval and other customary closing conditions.

The special meeting of Trevali shareholders with respect to the proposed Agreement to purchase the African Assets is scheduled for May 17, 2017. The reader is referred to the Company's news release dated March 29, 2017 and the Management Information Circular filed April 18, 2017 on SEDAR under the Company's profile for detailed information.

## Q1-2017 Results

During the quarter the Company reported revenue of \$59.5 million (Q1-2016 - \$19.6 million) and ended the quarter with a working capital position of \$9.2 million (Q1-2016 - \$16.0 million). The Santander operation produced 12,326,834 payable zinc pounds ("lbs"), 1,875,891 payable lead pounds and 128,576 payable ounces of silver (Q1-2016 – 13,662,766 lbs, 6,436,047 lbs and 221,324 oz respectively), with the Caribou mine producing 19,619,395 payable zinc lbs, 8,107,773 payable lead lbs and 217,085 payable silver ounces during the quarter. Total zinc equivalent payable lbs produced during the quarter was 44,826,918 lbs (Q1-2016 – 24,229,762 lbs).

Below is a summary of the Company's key production and operating statistics for the three months ended March 31, 2017 and 2016. The current quarter's results include the Santander Mine and the Caribou Mine. The three months ended March 31, 2016 does not include the Caribou Mine results as it commenced commercial production on July 1, 2016.

### 2017 Consolidated Sales Statistics and 2016 Comparison

	Q1-2017	Q1-2016
Zinc Concentrate (DMT) (dry metric tonne)	38,928	14,423
Lead Concentrate (DMT)	13,034	5,311
Payable Zinc lbs	33,578,241	13,009,008
Payable Lead lbs	9,708,389	6,347,250
Payable Silver ozs	328,636	210,427
Average Realized Metal Price <sup>1</sup>		
Zinc (\$/lb)	\$ 1.26	\$ 0.82
Lead (\$/lb)	\$ 1.05	\$ 0.82
Silver (\$/oz)	\$ 17.98	\$ 15.32
Revenues <sup>2</sup>	\$ 59,491	\$ 19,629
Mine Operation Expenses	\$ 49,809	\$ 16,601
Zinc Equivalent ("ZnEq") lbs Sold	46,153,874	23,286,844

### 2017 Consolidated Production Statistics and 2016 Comparison

	Q1-2017	Q1-2016
Tonnes Mined	370,953	175,579
Tonnes Milled	433,129	209,188
Payable Production		
Zinc lbs	31,946,229	13,662,766
Lead lbs	9,983,664	6,436,047
Silver ozs	345,661	221,324
Zinc Equivalent lbs Payable Produced	44,826,918	24,229,762
Site Cash Operating Cost per ZnEq Payable lbs Produced 3-4	\$ 0.47	\$ 0.28
Total cash costs per ZnEq Payable lbs Produced <sup>3</sup>	\$ 1.04	\$ 0.67
Site Cash Operating Cost per Tonne Milled <sup>4</sup>	\$ 49.10	\$ 32.22

<sup>&</sup>lt;sup>1</sup> Provisional Realized Metal Price.

Please refer to non-IFRS measures at the end of this document

## Three months ended March 31, 2017 and 2016

Revenue from the sale of concentrate, increased by 203% during the first quarter, compared against the first quarter of 2016. Revenues were approximately \$59.5 million in Q1-2017, versus approximately \$19.6 million in the comparative quarter last year. The increase was primarily the result of the Caribou mine declaring commercial production in Q3-2016. During the first quarter of 2017, the Company realized an average zinc price of \$1.26/lb (Q1-2016 - \$0.82/lb), an average lead price of \$1.05/lb (Q1-2016 - \$0.82/lb), and an average silver price of \$17.98 per ounce (oz) (Q1-\$15.32/oz).

Mine operating expenses for the three months ended March 31, 2017 were \$49,809 (Q1-2016 - \$16,601).

The Company's production during the three months ended March 31, 2017, increased significantly over the same period in the prior year largely due to the commencement of commercial production at the Caribou Mine on July 1, 2016. Production during the first quarter of 2017 included 31.9 million lbs of

 $<sup>^2</sup>$  Revenues for the quarter includes the effects of settlement adjustments on sales from prior quarters .

<sup>&</sup>lt;sup>3</sup> ZnEq P ayable P ounds Produced=((Zn P ayable lbs P roduced\*Zn P rice)+(P b P ayable lbs P roduced\*P b P rice)+(Ag o z P ayable P roduced\*Ag P rice))/Zn P rice.

<sup>4</sup> ZnEq P ayable P ounds Sold=((Zn P ayable lbs Sold\*Zn P rice)+(P b P ayable lbs Sold\*P b P rice)+(Ag o z P ayable Sold\*Ag P rice))/Zn P rice.

zinc ("Zn") (Q1-2016 – 13.7 million lbs) and 10.0 million lbs of lead ("Pb") (Q1-2016 – 6.4 million lbs). The increase in payable lead production resulting from Caribou coming online, was partially offset by reduced production from Santander. As previously disclosed Lead and Silver production at Santander decreased as the operation focused on the zinc-rich Magistral Central and South zones during the first quarter. Santander Lead and Silver grades are anticipated to increase in the second half of the year as mining accesses higher grade stopes from the Magistral North – Central zones. Silver production also increased with 345,661 payable ounces ("ozs") of silver during the three months ended March 31, 2017 (Q1-2016 – 221,324 ozs), as a result of the Caribou mine.

Total tonnes milled in the three months ended March 31, 2017, over the comparative period in 2016. The increase was from the start of production at the Caribou Mine.

## Santander Mine, Peru

Santander 2017 Sales Statistics and 2016 Comparison

	Q1-2017	Q1-2016
Zinc Concentrate (DMT)	13,579	14,423
Lead Concentrate (DMT)	2,077	5,311
Payable Zinc lbs	11,804,614	13,009,008
Payable Lead lbs	1,834,682	6,347,250
Payable Silver ozs	125,557	210,427
Average Realized Metal Price <sup>1</sup>		
Zinc (\$/lb)	\$ 1.27	\$ 0.82
Lead (\$/lb)	\$ 1.03	\$ 0.82
Silver (\$/oz)	\$ 17.69	\$ 15.32
Revenues <sup>2</sup>	\$ 19,172	\$ 19,629
Mine Operation Expenses	\$ 16,227	\$ 16,601
Zinc Equivalent ("ZnEq") lbs Sold	15,031,485	23,286,844

Please refer to non-IFRS measures at the end of this document

Santander 2017 Produc	ction Statistics a	and 2016	Comparison
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	Q1-2017	Q1-2016
Tonnes Mined	148,689	175,579
Tonnes Milled	200,249	209,188
Average Head Grades %		
Zinc	3.80%	3.93%
Lead	0.58%	1.66%
Silver - ozs/ton	0.96	1.32
Average Recoveries %		
Zinc	88%	89%
Lead	79%	88%
Silver	63%	76%
Concentrate Produced DMT		
Zinc	14,037	14,840
Lead	2,120	5,469
Concentrate Grades %		
Zinc	48%	49%
Lead	43%	56%
Ag - ozs/ton	57.92	38.70
Payable Production		
Zinc lbs	12,326,834	13,662,766
Lead lbs	1,875,891	6,436,047
Silver ozs/ton	128,576	221,324
Zinc Equivalent lbs Payable Produced	15,627,433	24,229,762
Site Cash Operating Cost per ZnEq Payable lbs Produced 3-4	\$ 0.45	\$ 0.28
Total cash costs per ZnEq Payable lbs Produced <sup>3</sup>	\$ 1.02	\$ 0.67
Site Cash Operating Cost per Tonne Milled <sup>4</sup>	\$ 35.06	\$ 32.22
1 Provisional Pealized Metal Price		

<sup>&</sup>lt;sup>1</sup> Provisional Realized Metal Price.

Please refer to non-IFRS measures at the end of this document

# Three months ended March 31, 2017 and 2016

All concentrates are purchased by Glencore International plc's Peruvian subsidiary, Empresa Minera Los Quenuales S.A. ("Glencore Peru"), under the Company's offtake agreement with Glencore Peru. During the quarter, the Company sold 11.8 million lbs of zinc (Q1-2016 – 13.0 million lbs), 1.8 million lbs of lead (Q1-2016 – 6.3 million lbs), and 125,557 ozs of silver (Q1-2016 – 210,427 ozs). Revenues for the first quarter of 2017 were \$19.2 million (Q1-2016 – \$19.6 million), with the average realized metal prices of \$1.27 (Q1-2016 – \$0.82) per pound of zinc, \$1.03 (Q1-2016 – \$0.82) per pound of lead, and \$17.69 (Q1-2016 – \$15.32) per ounce of silver. The decrease in revenue, versus the first quarter of 2016, was the result of a temporary anticipated decrease in payable lead and silver, due to mine scheduling. Mine operating expenses for the three months ended March 31, 2017 at the Santander operation were \$16,227 (Q1-2016 - \$16,601).

During the three months ended March 31, 2017, the Company's Santander Mine produced 12.3 million payable lbs of zinc (Q1-2016 - 13.7 million lbs), 1.9 million payable lbs of lead (Q1-2016 - 6.4 million lbs) and 128,576 payable ozs of silver (Q1-2016 - 221,324 ozs). Zinc, lead and silver production was lower in first quarter of 2017 due to a combination of lower throughput and lower grade lead and silver

 $<sup>{}^2\,</sup>Revenues\;for\,the\;quarter\,includes\;the\;effects\;of\,settlement\;adjustments\;on\,s\,ales\;from\;prior\,quarters\,.$ 

<sup>&</sup>lt;sup>3</sup> ZnEq P ayable P ounds P roduced=((Zn P ayable lbs P roduced\*Zn P rice)+(P b P ayable lbs P roduced\*P b P rice)+(Ag oz P ayable P roduced\*Ag P rice))/Zn P rice

<sup>&</sup>lt;sup>4</sup> ZnEq P ayable P ounds Sold=((Zn P ayable lbs Sold\*Zn P rice)+(P b P ayable lbs Sold\*P b P rice)+(Ag o z P ayable Sold\*Ag P rice))/Zn P rice.

zones. Mining continued to focus on the Magistral Central and South zones during the quarter which contains lower lead and silver mineralization. The Santander team is currently fast-tracking development of the Magistral North ramp in order to access higher-grade Zn-Pb and Ag mineralization in the Magistral North and Oyon Zones, both of which remain open for expansion. Based on the current mine schedule the Company anticipates run-of-mine Pb and Ag grades to strengthen from late Q2 onwards.

During the three months ended March 31, 2017, the Santander mill continued to operate above its 2,000 tonne-per-day nameplate capacity, with 200,249 tonnes of mineralized material being milled (Q1-2016 – 209,188 tonnes). Underground production was 148,689 tonnes for the first quarter of 2017 (Q1-2016 – 175,579 tonnes). The reduced mined tonnage is due to a combination of mine scheduling and draw down of surface stockpiles in addition to planned power availability while various updates to site power infrastructure were completed. Recoveries during the quarter averaged 88% for zinc, 79% for lead, and 63% for silver.

Average head grades during the first quarter of 2017 were 3.80% zinc, 0.58% lead, and 0.96 oz/ton silver with production of 14,037 tonnes of zinc concentrate averaging 48% Zn, and 2,120 tonnes of lead-silver concentrate averaging 43% Pb and 57.92 oz/ton Ag.

Site cash operating cost during the first quarter of 2017 was \$35.06 per tonne milled, at the lower end of the guidance range of \$35 to \$40 per tonne milled (2016 - \$32.22 per tonne milled), or \$0.45 per zinc equivalent payable lb produced (2016 - \$0.28 per zinc equivalent payable lb) (please see non-IFRS measures at the end of this MD&A).

# **Santander Exploration activity**

The Company commenced its 2017 annual exploration program during the quarter. The aim of the 2017 program is to convert additional inferred tonnages into the rolling Santander mine plan in addition to exploration the depth extents of the Magistral – Santander systems and associated satellites, all of which remain open for expansion. The Company has committed to an approximately four-fold increase to the exploration budget of \$4 million with additional funds available contingent on success. Surface directional drilling of the advanced Santander Pipe target commenced in March and underground drill testing of the Magistral North - Central zones is anticipated to commence in Q2. Assay results will be released upon receipt.

# Caribou Mine, Canada

#### Caribou 2017 Sales Statistics

	Q1-2017	Q4-2016
Zinc Concentrate (DMT)	25,349	26,696
Lead Concentrate (DMT)	10,956	9,471
Payable Zinc lbs	21,773,627	22,563,340
Payable Lead lbs	7,873,706	7,640,960
Payble Silver oz	203,078	217,354
Average Realized Metal Price <sup>1</sup>		
Zinc (\$/lb)	\$ 1.25	\$ 1.13
Lead (\$/lb)	\$ 1.05	\$ 0.97
Silver (\$/oz)	\$ 18.03	\$ 16.67
Revenues <sup>2</sup>	\$ 40,318	\$ 36,525
Mine Operation Expenses	\$ 33,583	\$ 31,610
Zinc Equivalent ("ZnEq") lbs Sold	31,122,390	32,376,420

Please refer to non-IFRS measures at the end of this document

#### **Caribou 2017 Production Statistics**

	Q1-2017	Q4-2016
Tonnes Mined	222,264	244,439
Tonnes Milled	232,880	251,242
Average Head Grades (%)		_
Zinc	6.15%	6.01%
Lead	2.68%	2.68%
Silver - ozs/ton	2.29	2.32
Average Recoveries (%)		
Zinc	75%	76%
Lead	64%	60%
Silver	38%	36%
Concentrate Produced (DMT)		
Zinc	22,539	24,722
Lead	10,390	10,173
Concentrate Grades (%)		
Zinc	47%	46%
Silver - ozs/ton	3.99	4.02
Lead	38%	40%
Silver - ozs/ton	19.26	20.78
Payable Production		
Zinc lbs	19,619,395	20,931,015
Lead lbs	8,107,773	8,214,428
Silver ozs	217,085	231,722
Zinc Equivalent lbs Payable Produced	29,199,484	31,444,029
Site Cash Operating Cost per ZnEq Payable lbs Produced <sup>3-4</sup>	\$ 0.49	\$ 0.44
Total cash costs per ZnEq Payable lbs Produced <sup>3</sup>	\$ 1.06	\$ 0.93
Site Cash Operating Cost per Tonne Milled	\$ 61.17	\$ 54.79

Please refer to non-IFRS measures at the end of this document

Provisional Realized Metal Price.

<sup>2</sup> Revenues for the quarter includes the effects of settlement adjustments on sales from prior quarters.

<sup>3</sup> ZnEq P ayable P ounds P roduced=((Zn P ayable lbs P roduced\*Zn P rice)+(P b P ayable lbs P roduced\*P b P rice)+(Ag oz P ayable P roduced\*Ag P rice))/Zn

<sup>4</sup> ZnEq P ayable P ounds Sold=((Zn P ayable lbs Sold\*Zn P rice)+(P b P ayable lbs Sold\*P b P rice)+(Ag oz P ayable Sold\*Ag P rice))/Zn P rice.

During the first half of 2016, the Company advanced commissioning activities at its Caribou Mine and commenced commercial production on July 1, 2016. Operating costs, net of concentrate revenues, prior to July 1, 2016 were capitalized to property, plant and equipment. As a result, the Caribou Mine has no comparable operating figures for the first two quarters of 2016, and the operating results for 2016 are for the last quarter of 2016.

The first quarter of 2017 marked the Caribou Mine's third commercial production quarter and saw ongoing optimization initiatives, primarily the transition to owner operated. Both lead and silver recoveries continued to improve while zinc recoveries remained static with the prior quarter.

## Three months ended March 31, 2017

Production results from the Caribou Mine for the three months ended March 31, 2017 were 19.6 million payable lbs of zinc, 8.1 million payable lbs of lead and 217,085 payable ozs of silver.

Mill throughput for the quarter was 232,880 tonnes with recoveries averaging 75% for zinc, 64% for lead, and 38% for silver (contained in lead concentrate). Mill throughput for the quarter averaged 2,588 tonnesper-day. The reduced throughput was due to a combination of planned and unplanned maintenance (substandard mill media). Underground production was 222,264 tonnes for the quarter, averaging 2,416 tonnes-per-day, down from 244,439 tonnes during the fourth quarter of 2016. Primary reasons for lower production were the transition of mining operations from contractor to owner operated in addition to seasonal effects.

Zinc recoveries remain below the entitlement range partly reflecting a combination of substandard grinding media (fragmentation of steel balls in the mills), which is now resolved, and winter conditions. They recovered in latter half of the quarter as various seasonal optimization programs took effect. Test work, both internally and with third parties (Surface Science Western and McGill University) including partner Glencore, is ongoing to enable better future management of seasonal zinc recovery variation.

Average head grades of the tonnes milled were 6.15% Zn, 2.68% Pb, and 2.29 oz/ton Ag, with production of 22,539 tonnes of zinc concentrate averaging 47% Zn and 10,390 tonnes of lead-silver concentrate averaging 38% Pb and 19.26 oz/ton Ag.

Site cash operating cost during the first quarter of 2017 was \$61.17 per tonne milled and direct site cash cost per zinc equivalent payable lb produced was \$0.49 per lb. The increase in site cash operating cost per tonne milled was the result of a combination of short-term factors including lower mill throughput, cold weather seasonality costs and the transition to owner-operated mining. Annual cost guidance remains unchanged – ranging from \$55 to \$60 per tonne milled.

All concentrates are purchased by Glencore International plc's Canadian subsidiary, Glencore Canada Corporation ("Glencore Canada"), under the Company's offtake agreement. During the first quarter of 2017, the Caribou Mine sold 21.8 million lbs of zinc, 7.9 million lbs of lead, and 203,078 ozs of silver. Zinc equivalent lbs sold in the first quarter of 2017 were 31.1 million lbs.

Revenues for the first quarter of 2017 were \$40.3 million, with average realized metal prices for the quarter of 1.25 per lb of zinc, \$1.05 per lb of lead, \$18.03 per oz of silver. Revenue during the first quarter increased over fourth quarter of 2016 due to increased commodity prices.

#### MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

### **Santander Mine**

Block model quantities and grade estimates for the Santander Mine were classified according to the CIM *Definition Standards for Mineral Resources and Mineral Reserves* (May 2014) by Dr. Gilles Arseneau, P.Geo., of Arseneau Consulting Services Inc. ("ACS") under the supervision of Daniel Marinov, P.Geo., of Trevali. Both are Qualified Persons (QPs) as this term is defined in NI 43-101.

Table 1 shows the Mineral Resource Estimates for the Santander Property as of November 6, 2016 and Table 2 shows the remaining mineral resources contained within the Tailings impoundment currently being reprocessed by Trevali.

Table 1: Santander Project Mineral Resource Estimate Effective November 6, 2016 at US\$40.00 Cut-off

Resource Category	Tonnes (Mt)	Ag (oz/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (Moz)	Cu (Mlb)	Pb (Mlb)	Zn (Mlb)
Measured	0.74	1.10	34	0.07	0.68	4.10	0.8	1.2	11.0	66.8
Indicated	3.1	1.26	39	0.07	0.86	5.03	3.9	4.9	58.2	339.7
Measured + Indicated	3.8	1.23	38	0.07	0.83	4.85	4.7	6.1	69.3	406.5
Inferred	12.0	0.56	17	0.09	0.23	4.21	6.7	24.8	60.5	1,114.4

Note:

Ag = silver; Cu = copper; g/t = grams per tonne; Mt = million tonnes; Pb = lead; oz/t = ounces per tonne; Mlb = million pounds; Moz = million ounces; Zn = zinc; % = percent.

Dollar Value Cut-off = ((Ag Price x Ag Recovery x Ag Grade) + (Pb Price x Pb Recovery x (Pb Grade) + (Zn Price x Zn Recovery x (Zn Grade)). Price for silver is (US\$16.50/oz) and that for Pb (US\$0.95), Zn (US\$1.15) and Cu (US\$2.50) is per pound. A recovery of 74% was applied to Ag, 85% for Pb, 89% for Zn, and 0% for Cu for calculating the dollar value formula.

Table 2: The Tailings Impoundment Mineral Resource Effective 6 November 2016 at US\$15.00 Cut-off

Resource	Tonnes	Zn	Zn
Category	(Mt)	(%)	(Mlb)
Indicated	3.6	1.98	156.6

Notes:

Mlb = million pounds; Mt = million tonnes; US\$ = United States Dollar; Zn = zinc; % = percent. Dollar Value Cut-off = ( $Zn \ Price \ x \ Zn \ Recovery \ x \ (Zn \ Grade)$ ).  $Zn \ price \ (US$1.15)$  and recovery of 89% for  $Zn \ was applied for calculating the dollar value formula. Mineral resources were estimated by inverse distance squared inside 10 m by 10 m by 5 m blocks. Assays were capped to a maximum of 5% <math>Zn$ .

Resource estimates for Santander Pipe and Puajanca South are unchanged from 2012 but have been updated to reflect 2016 metal prices. Mineral resources were estimated by ordinary kriging inside 5 m by 5 m blocks for the Magistral deposits and 10 m by 10 m by 5 m blocks for the Puajanca and Santander deposits. Assays were capped prior to compositing and assays were composited to 2 m for the Magistral and Puajanca deposit and 3.5 m for the Santander deposit.

Reserve Category	Tonnes	Zn	Pb	Cu	Ag	Zn	Pb	Cu	Ag
	(Mt)		%		Oz/t		M.lbs		M.Oz
Proven	0.4	3.9	0.67	0.07	1.07	34.37	5.89	0.61	0.43
Probable	2.14	4.63	0.69	0.07	1.1	218.42	32.62	3.18	2.35
Proven + Probable	2.54	4.51	0.69	0.07	1.09	252.78	38.51	3.79	2.78

Table 3: Santander Project Mineral Reserve Estimate Effective October 31, 2016

Notes:

Mineral Reserves included in Mineral Resources. All figures have been rounded to reflect the relative accuracy of the estimates. The Mineral Reserve estimates are prepared in accordance with the "CIM Definition Standards on Mineral Resources and Mineral Reserves", adopted by the CIM Council on May 10, 2014, and the "CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines", adopted by CIM Council on November 23, 2003, using geostatistical and/or classical methods, plus economic and mining parameters appropriate to the deposit. Mineral Reserves are based on estimates of long-term metal prices of (US\$): Zn = US\$1.15/lb, Pb = US\$0.95/lb, Cu = US\$2.72/lb, Ag= US\$19.00/Oz, and a US dollar exchange rate = 3.40 PEN. Mineral Reserves are the economic portion of the Measured and Indicated Mineral Resources. Mineral Reserve estimates include mining dilution at grades assumed to be zero. Mining dilution and recovery factors vary for specific reserve sources and are influenced by several factors including deposit type, deposit shape and mining method. Mining cut-off for Mineral Reserves has been determined from net smelter return (NSR) based on Trevali Off-take Agreement metal accountability and a three-year production history and 2017 production forecast in the Santander Mine.

Zn = Zinc, Pb = Lead, Cu = Copper, Ag = Silver (Oz/t = troy ounce/metric tonne)

Mineral Reserves are derived from Measured and Indicated Mineral Resources after applying economic parameters.

The Mineral Reserves were derived and classified according to the following criteria:

- Proven Mineral Reserves are the economically mineable part of the Measured Mineral Resources where development work for mining and information on processing/metallurgy and other relevant factors demonstrate that economic extraction is achievable.
- Probable Mineral Reserves are those Measured and Indicated Mineral Resources where development work for mining and information on processing/metallurgy and other relevant factors demonstrate that economic extraction is achievable.

#### **Caribou Mine**

Block model quantities and grade estimates for the Caribou project were classified according to the CIM *Definition Standards for Mineral Resources and Mineral Reserves* (November 2010) by Guy Dishaw, PGeo, of SRK, under the supervision of Dr. Gilles Arseneau, PGeo. Both are independent Qualified Persons as this term is defined in National Instrument 43-101.

Mineral resources were considered for the Measured category for blocks generally above the lowest mined levels, developed within the mineralized domains. Within this volume, most blocks were estimated by at least three composite samples from a minimum of two drill holes from the first and second interpolation passes, which searched out to 35 metres. Mineral resources were considered for the Indicated category where blocks were estimated by at least three composite samples from a minimum of two drill holes from the first and second interpolation passes which searched out to 35 metres (exclusive of the volume considered for Measured). Measured and Indicated candidate blocks were reviewed in three dimensions to assess how they related to each other and the borehole data. The Measured and Indicated candidate blocks were used to design wireframe models of the final Measured and Indicated category

volumes. All remaining estimated blocks within the estimation domains were classified as Inferred. Mineral resources are summarized in Table 4 below. There are no mineral reserves at the Caribou project.

Table 4: Mineral Resource Statement\*, Caribou Project, Bathurst, New Brunswick, SRK Consulting, May 13, 2014.

	Onontitra		(	Frade					Metal		
Category	Quantity -	Au	Ag	Pb	Zn	Cu	Au	Ag	Pb	Zn	Cu
	(Mt)	(g/t)	(g/t)	(%)	(%)	(%)	(M oz)	(M oz)	(M lbs)	(M lbs)	(M lbs)
Underground**											
Measured	5.61	0.84	84.64	2.93	6.91	0.46	0.15	15.28	362.69	855.36	56.94
Indicated	1.62	1.06	83.68	2.94	7.28	0.34	0.06	4.36	104.95	259.87	12.14
Measured and Indicated	7.23	0.89	84.43	2.93	6.99	0.43	0.21	19.64	467.64	1,115.23	69.08
Inferred	3.66	1.23	78.31	2.81	6.95	0.32	0.14	9.21	226.60	560.44	25.80

<sup>\*</sup> Mineral resources are not mineral reserves and do not have demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate. All composites have been capped where appropriate.

Readers are cautioned that Inferred mineral resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is therefore no certainty that the conclusions of the Caribou PEA Report will be realized.

#### **Disclosure**

Trevali's production plans at the Caribou Mine, are based only on Indicated and Inferred Mineral Resources, not Mineral Reserves. Inferred Mineral Resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is therefore no certainty that the conclusions of the production plans and Preliminary Economic Assessment ("PEA") will be realized. Additionally, where Trevali discusses exploration/expansion potential, any potential quantity and grade is conceptual in nature, as there has been insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the target being delineated as a mineral resource.

Caribou's PEA was completed by SRK in May 2014. The tabled resource estimate utilizes a 5% zinc equivalent (ZnEQ) cut-off grade. ZnEq= ((Cu Grade\*Cu Price\*Cu Recovery) + (Pb Grade\*Pb Price\*Pb Recovery)+(Zn Grade\*Zn Price\*Zn Recover) + (Au Grade\*Au Price\*Au Recovery) + (Ag Grade\*Ag Price\*Ag Recovery))/Zn Price. In calculating ZnEq, SRK utilized the long-term metal prices provide by Energy & Metals Consensus Forecast. Price for Au is \$1,470 per ounce, Ag is \$26 per ounce, Cu is \$3.39 per pound, Pb is \$1.18 per pound, and Zn is \$1.14 per pound. A recovery of 83% was applied to Zn, 71% was applied to Pb, 57% was applied to Cu, 45% was applied to Ag, and 40% was applied to Au. The pounds of metal are in-situ and have not had any mining factors applied to them.

Halfmile-Stratmat resource estimate was completed by Tetra Tech Wardrop in October 2010. The resource estimate utilized a 5% zinc equivalent (ZnEQ) cut-off. The following metallurgical recoveries were applied to the ZnEQ for the resource estimate: 89.7% zinc, 72% lead, 60% copper, and 48.6% silver.

Santander's reserve estimate was completed by SRK Consulting Engineers Ltd in March 2017. A reserve cut-off-grade of \$40 was utilized which is the nominal base-case estimated grade of material that can be mined and processed considering all applicable costs. For reference, the Company's Santander 2017 site cash cost guidance (mining, milling and site G&A) is \$35-\$40 per tonne. A resource cut-off-grade of \$40 was utilized which is the nominal base-case estimated grade of material that can be mined and processed

<sup>\*\*</sup> Underground mineral resources are reported at a cut-off grade of 5% Zn equivalent. Cut-off grades are based on price for Au of US\$1470 per ounce, Ag is US\$26 per ounce, Cu is US\$3.39 per pound, Pb is US\$1.18 per pound, and Zn is US\$1.14 per pound, and exchange rate US\$1.00 per Canadian dollar. A recovery of 83% was applied to Zn, 71% was applied to Pb, 57% was applied to Cu, 45% was applied to Ag, and 40% was applied to Au.

considering all applicable costs. The mineral resources identified are based on Ordinary Kriged (OK) capped values inside 5-by-5-by-5-metre blocks for the Magistral deposits and 10-by-10-by-5-metre blocks for the Puajanca and Santander Pipe deposits. Assays were capped prior to compositing and assays were composited to 2 metres for the Magistral and Puajanca deposit and 3.5 metres for the Santander deposit. Resource estimates for Santander Pipe and Puajanca South are unchanged from 2012 but have been updated to reflect 2016 metal prices. The US dollar value cut-off is based on the formula: Dollar Value = ((Ag Price x Ag Recovery x Ag Grade) + (Pb Price x Pb Recovery x Pb Grade)+(Zn Price x Zn Recovery x (Zn Grade)). Price for silver is (\$16.50/oz) and that for Pb (\$0.95), Zn (\$1.15) and Cu (\$2.50) is per pound. A recovery of 74% was applied to Ag, 85% for Pb, 89% for Zn and 0% for Cu for calculating the dollar value formula.

#### **OUTLOOK**

In **Peru**, the Company's **Santander mine** continues to advance Magistral North ramp development in order to access the higher-grade Zn-Pb and Ag mineralization in the Magistral North and Oyon Zones, both of which remain open for expansion and will result in increased Pb-Ag production in the latter half of 2017 and going forward.

The 2017 production guidance estimate for the Santander Mine remains unchanged at:

- 63-65 million lbs of payable zinc in concentrate,
- 12-14 million lbs of payable lead in concentrate; and,
- 700,000-900,000 ozs of payable silver.

Site cash operating cost for 2017 is estimated at approximately \$35-40 per tonne milled (please see non-IFRS measures and the at the end of this MD&A and the Cautionary Note on Forward Looking Statements at the beginning of this MD&A).

In 2017, a \$4,000 resource definition, and exploration underground and surface drilling campaign of an initial 15,000 metres will be dedicated to the test the down-plunge and lateral (in the hanging wall and footwall) extension and continuity of Magistrales and Pipe deposits. Additionally, it is anticipated that a number of high priority drill ready exploration targets (Puajanca, Blato, and Blanquita) will be drill tested in 2017.

The Santander exploration team commenced the Phase I of the approximately 15,000-metres, during the quarter. The aim of the program is to aggressively probe the depth and lateral extents of the Magistral polymetallic system that remains open for expansion in addition to converting additional inferred tonnages into higher confidence categories to support longer-range mine planning. Conventional and directional surface drilling will initially test the high priority Santander Pipe target, which remains open for expansion at depth, for future mine planning purposes. It is anticipated that underground exploration will commence in June when dedicated exploration footwall drives are completed and will initially test the depth extents of Magistral North-Central and transitioning to Central-South as the program progresses. Contingent on success, Phase II drilling will continue to define and expand the mineralized systems.

In **Canada**, the first quarter of 2017 marked the **Caribou Mine**'s third commercial production quarter. The Caribou Site, in conjunction with partners Glencore and other third parties, will continue to focus on optimizing zinc recoveries.

On February 1, 2017, the Company announced that the transition to an owner-operated model would include procurement of a new underground mining fleet. As initially identified in the 2014 PEA, and following the successful declaration of commercial production, the Company conducted a review of

underground mining operations to further optimize and increase efficiencies. Based on this review, the Company decided that part of the move to an owner-operated model would include a new fleet of mining equipment. The Company announced that it had committed to an investment of approximately C\$20,000 to supply and maintain a full fleet of mining equipment for the Caribou Mine to be transitioned during the first half of 2017.

The Caribou mine transition to owner-operated with its new Sandvik supported mine fleet remains on track for mid-year commencement. Initial training and fleet deliveries will commence in May, which when fully integrated, is anticipated to result in improved operational efficiencies, including mine cost savings, of approximately \$5-6/tonne.

The 2017 production guidance estimate for the Caribou Mine remains unchanged at:

- 90-93 million lbs of payable zinc in concentrate
- 30-32 million lbs of payable lead in concentrate
- 800,000-900,000 ozs of payable silver

Site cash operating cost for 2017 is estimated at approximately \$55-60 per tonne milled (please see non-IFRS measures the at the end of this MD&A and the Cautionary Note on Forward Looking Statements at the beginning of this MD&A).

In 2016, a new independent PEA study by SRK Consulting Engineers ("SRK") commenced at the Company's **Halfmile and Stratmat properties** in New Brunswick. The study will examine the potential for a stand-alone milling solution for the deposits and is now anticipated to be completed during the second quarter of 2017.

#### EXPLORATION AND DEVELOPMENT

# Halfmile-Stratmat Project

As mentioned above under the section entitled, "Outlook", in the second half of 2016, the Company and SRK commenced work on a new PEA study which will examine the feasibility of a combined Halfmile-Stratmat project. Work during 2016 and 2017, included diamond drilling and metallurgical test work. The results will be utilized in the forthcoming PEA study which is anticipated to be completed during the second quarter of 2017 (versus early in the first quarter of 2017 as previously announced as Management focused on the Glencore transaction detailed above).

# Values of exploration and evaluation assets as at March 31, 2017:

	Stratmat Other (Canada) (Canada)		Exploration and evaluation assets		
Net book value, March 31, 2017	\$ 9,342	\$	41	\$	9,383

#### **DISCUSSION OF OPERATIONS**

## Three months ended March 31, 2017, versus the three months ended March 31, 2016

During the three months ended March 31, 2017, the Company recorded net income of \$2,689, or \$0.01 per share, compared to net income of \$603, or \$nil per share, in the same period of 2016. During the quarter, the Company produced 44.8 million equivalent payable lbs of zinc and sold 46.2 million equivalent payable lbs of zinc, compared to the first quarter of 2016, where the Company produced and

sold 24.2 million and 23.3 million equivalent payable lbs of zinc, respectively. Income from mining operations was \$9,682 during the first quarter of 2017 (Q1-2016 - \$3,038).

The Company recorded revenues of \$59,491 (Q1-2016 - \$19,639) on the sale of 38,928 tonnes of zinc concentrate (Q1-2016 - 14,423 tonnes) containing 33.6 million lbs of payable zinc (Q1-2016 - 13.0 million lbs) and 13,034 tonnes of lead-silver concentrate (Q1-2016 - 5,311 tonnes) containing 9.7 million lbs of payable lead (Q1-2016 - 6.3 million lbs), and 328,636 ozs of payable silver (Q1-2016 - 210,427 The Company continues to focus on ramping up the operation to nameplate design levels of 3,000 tpd upon implementation of owner operated mining. It is anticipated that this will result in efficiencies going forward.

Provisional realized commodity prices were \$1.26 per lb per zinc (2016 - \$0.82/lb), \$1.05 per lb. lead (Q1-2016 - \$0.82/lb), and \$17.98 per ounce silver (Q1-2016 - \$15.32/oz). The increase in revenues in the first quarter of 2017 was due to the Caribou Mine achieving "commercial production" on July 1, 2016, as well as increasing metal prices.

Total mine operating expenses of \$49,809 (Q1-2016 - \$16,601) on the sale of concentrate were recorded for the quarter. Costs consisted of direct site production costs of \$22,915 (Q1-2016 - \$6,144) related to mining, milling, camp, lab, and surface maintenance facilities. Smelting, refining, and freight costs were \$20,622 (Q1-2016 - \$7,095) and royalty expense was \$221 (Q1-2016 - \$264). Smelting and refining costs will decrease by approximately \$80-90/t going forward as a result of annual settlement charges decreasing and the elimination of zinc price escalators. The Company recorded \$6,051 of depreciation, depletion and amortization (Q1-2016 - \$3,098). The increase in mine operating expenses was largely the result of the Caribou Mine initiating commercial production on July 1, 2016.

The Company's site cash operating cost per tonne milled for the quarter was \$49.10 per tonne, compared to \$32.22 per tonne during the same period last year. The increase was the result of the Caribou Mine coming online with planned higher costs than the Santander Mine. The Company expects Caribou's operating costs to decrease as operational and production efficiencies are implemented in the coming quarters (please see non-IFRS measures the at the end of this MD&A and the Cautionary Note on Forward Looking Statements at the beginning of this MD&A).

General and administrative expenses increased from \$863 during the first quarter of 2016, to \$1,844 during the first quarter of 2017. The increase was primarily the result of consulting fees related to the proposed purchase of Glencore's Rosh Pinah and Perkoa Zinc Mines in Africa, along with increased share-based payment expense. In addition, investor relations and professional fees also increased due to the increased activity related to the proposed transaction.

Interest expense increased to \$2,816 (Q1-2016 - \$1,696), largely due to the impact of interest of \$1,710 (Q1-2016 - \$nil) on the Company's Senior Secured Notes. Interest on the Senior Secured Notes during the first quarter of 2016 was capitalized to property, plant and equipment as it was prior to the Caribou Mine achieving commercial production.

Deferred tax expense of \$1,981 was recorded during the three months ended March 31, 2017. The deferred tax expense reflects the changes in the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis and are a non-cash expense.

A current tax expense of \$416 for the New Brunswick Mining Tax was recorded in the first quarter of 2017, compared to \$nil in the first quarter of 2016. The mining tax is a profit-based tax which became

positive in the current year. In the first quarter of 2016, deductible expenses offset net revenues and therefore no tax was owed.

# **QUARTERLY FINANCIAL INFORMATION**

The following tables provide highlights, extracted from the Company's financial statements, of quarterly results for the past eight quarters:

	Three Months Ended March 31, 2017	Three Months Ended December 31, 2016	Three Months Ended September 30, 2016	Three Months Ended June 30, 2016
Total assets	\$ 413,010	\$ 409,646	\$ 411,023	\$ 407,752
Total revenue	\$ 59,491	\$ 63,854	\$ 43,754	\$ 22,400
Working capital	\$ 9,181	\$ 7,798	\$ 3,512	\$ 14,094
Net income (loss) for the period	\$ 2,689	\$ 7,026	\$ 1,814	\$ (234)
Basic and diluted earnings (loss) per share	\$ 0.01	\$ 0.02	\$ 0.01	\$ -

	Three Months Ending March 31, 2016	Three Months Ended December 31, 2015	Three Months Ended September 30, 2015	Three Months Ended June 30, 2015
Total assets	\$ 411,341	\$ 373,928	\$ 379,645	\$ 392,249
Total revenue	\$ 19,639	\$ 17,088	\$ 20,688	\$ 24,847
Working capital	\$ 15,975	\$ 6,807	\$ 3,531	\$ 28,523
Net income (loss) for the period	\$ 603	\$ (6,201)	\$ (2,613)	\$ 168
Basic and diluted earnings (loss) per share	\$ -	\$ (0.02)	\$ (0.01)	\$ -

The increase in total assets from the third quarter of 2016 to the first quarter 2017 is as a result of an increase in working capital through cash and accounts receivable resulting from equity raisings until the second quarter of 2016. In addition, concentrate revenues accounts for much of the quarter-to-quarter increase. In 2015, and the first half of 2016, the increase also relates to the capitalization of underground development at both the Caribou and Santander mines. The Company raised approximately \$16,449 during the first quarter of 2016 in equity financing, accounting for a portion of the increase in total assets. During 2015 and 2016, additions and capitalized borrowing costs totaling \$84,763 and \$62,636, respectively, were added to property, plant and equipment.

Revenues commenced in the first quarter of 2014 at the Santander Mine and in the third quarter of 2016 at the Caribou Mine. Revenues continued to fluctuate from quarter-to-quarter due to metal price volatility throughout 2017 and 2016. In the first quarter of 2017, revenues continued to increase due to rising metal prices. In the third and fourth quarters of 2016, revenues increased due to higher metal prices and the addition of the Company's Caribou Mine, which commenced commercial production on July 1, 2016.

Working capital declined in the third quarter of 2015, as a result of a \$7,500 repayment on the Senior Secured Notes being reclassified from long-term to current, (an amendment on December 31, 2015 deferred the repayment date from the third quarter of 2016 to the third quarter of 2017). The Company also continued capital expenditures at the Company's Caribou Mine through 2016. The Company's working capital decreased during the second quarter of 2016, as a result of an interest payment of \$3,763 on the Senior Secured Notes, and continued to decrease in the third quarter of 2016, as a result of the reclassification of the first repayment of \$15,000 on the Senior Secured Notes which is due in August 2017. The Company's working capital increased in the fourth quarter of 2016 and first quarter of 2017 due to an increased accounts receivable and increased cash balance, largely resulting from increased production, with the Caribou Mine coming online, and rising zinc and lead prices.

Net losses in the third and fourth quarters of 2015 was primarily due to a continued decline in metal prices. The net loss in the second quarter of 2016 was mainly due to the increase in deferred tax expense as a result of an increase in the New Brunswick tax rate and changes in the carrying value of assets and liabilities. The net income in the third and fourth quarters of 2016 was mainly due to the increase in operating income at the Santander Mine and from the initial operating income from the Caribou Mine. The increase was partially offset by increased interest expense that, prior to the Caribou Mine entering its production phase, was capitalized to property, plant and equipment. Net income in the first quarter of 2017 decreased as a result of higher production costs and increased consulting fees occurred during the quarter.

# LIQUIDITY AND CAPITAL RESOURCES

The Company's consolidated financial statements have been prepared on the basis of accounting principles applicable to a going concern, which assumes that the Company will be able to continue in operation for the foreseeable future, and will be able to realize its assets and discharge its liabilities and commitments in the normal course of business.

As at March 31, 2017, the Company's working capital position was \$9,181 (December 31, 2016 - \$7,798) and a cumulative deficit of \$51,346 (December 31, 2016 - \$55,878).

During the period ended March 31, 2017, the following financing activities occurred:

- (a) During the period, the Company issued 707,667 shares from the exercise of stock options and warrants for aggregate gross proceeds of \$487.
- (b) During the period, the Company made finance lease payments of \$3,193 and loan and interest payments on long-term debt of \$2,224.
- (c) On February 1, 2017, settled 350,000 restricted shares units in cash at a cost of \$342.
- (d) During the period, security for a reclamation and environmental obligation was released in exchange for a performance guarantee in the amount of \$4,471. The guarantee was provided in the form of an insurance surety bond.
- (e) In March 2017, In March 2017, the Company signed a promissory note with Sandvik Customer Finance Canada to finance the Caribou Mine fleet 15% deposits. The promissory note totals C\$2,755 (committed C\$20,000 from Sandvik) payable in 18 installments until August 1, 2018 at a 5.4% annual interest rate. The deposits are non-refundable and the fleet is scheduled to be delivered in the second quarter of 2017, therefore no fixed assets has been recorded as of March 31, 2017.
- (f) On March 29, 2017, in connection with the acquisition of Glencore's Rosh Pinah and Perkoa zinc mines, the Company announced the closing of its previously announced bought deal private placement of subscription receipts (the "Subscription Receipts") at a price of C\$1.20 per Subscription Receipt (the "Offering") for gross proceeds of C\$264,546 (\$198,922). A total of 220,455,000 Subscription Receipts were sold pursuant to the Offering, including 28,755,000 Subscription Receipts as a result of the full exercise of an underwriters' option. The net proceeds of the Offering will be used to fund a portion of the cash consideration payable to Glencore and for general working capital purposes.

During the period ended March 31, 2016, the following financing activities occurred:

- (a) On January 15, 2016, settled \$56 in certain accounts payable by issuing 156,600 common shares at a price of \$0.36 per share.
- (b) On February 29, 2016, closed a flow-through private placement financing, issuing 4,410,700 common shares on a "flow-through" basis under the Income Tax Act (Canada) ("Flow-through Shares") at a price of \$0.34 per Flow-through Share for aggregate gross proceeds of \$1,500.
- (c) On March 16, 2016, closed a "best efforts" marketed offering of 46,718,750 common shares of the Company at a price of \$0.32 per share for aggregate gross proceeds of \$14,950 and incurred share issue costs of \$1,043.

As at March 31, 2017, the Company had an unrestricted cash balance of \$21,452 and working capital of \$9,181. Based on an anticipated positive cash flow from the Company's Santander and Caribou mines, and the financings expected to be completed in 2017, the Company is expected to have sufficient resources to meet its committed expenditures for the next twelve months.

The Company has not entered into any significant long-term lease commitments other than those outlined under Note 13 in the Company's condensed interim consolidate financial statements for the three months ended March 31, 2017 and in this MD&A. Additionally, the Company is not subject to any significant mineral property commitments.

Other than cash held by its subsidiary for their immediate operating needs in Peru, all of the Company's cash reserves are on deposit with a major Canadian chartered bank or invested in Government of Canada Treasury Bills or Banker's Acceptances issued by major Canadian chartered banks. The Company does not believe that the credit, liquidity or market risks with respect thereto have increased as a result of the current market conditions. However, in order to achieve greater security for the preservation of its capital, the Company has, by necessity, been required to accept lower rates of interest which has also lowered its potential interest income.

Liquidity risk is the risk that the Company will encounter difficulty in satisfying financial obligations as they fall due. The Company manages its liquidity risk by forecasting cash flows required by operations and anticipated investing and financing activities.

# **CAPITAL RESOURCES**

The Company monitors its capital structure and, based on changes in operations and economic conditions, may adjust the structure by issuing new shares, issuing new debt or retiring existing debt. The Company prepares annual budgets approved by the Company's Board of Directors and quarterly forecasts to facilitate the management of its capital requirements.

In 2017, the Company intends to allocate the majority of its capital resources to the ongoing development of its current mining operations as well as debt repayment.

#### OFF-BALANCE SHEET ARRANGEMENTS

The Company currently has no off-balance sheet arrangements.

#### RELATED PARTY TRANSACTIONS

During the three months ended March 31, 2017, the Company entered into the following transactions with related parties:

# **Management compensation**

Key management includes directors (executive and non-executive) and other key officers, including the Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, VP of Investor Relations, VP of Exploration, and Corporate Secretary. The compensation paid or payable to key management in salaries and directors' fees is shown below:

	N	March 31, 2017					
Salaries and wages	\$	231	\$	171			
Share-based payments		741		161			
Total compensation	\$	972	\$	332			

In addition, the Company has management consulting agreements with the following entities and paid consulting fees as follows:

	I	N	March 31, 2016				
Cruise Geoservices Ltd.	\$	48	\$	42			
Ladd Mining Incorporated		45		42			
Keller Consulting		24		23			
Daniel Marinov Ltd.		46		22			
Marval Office Management Ltd.		12		9			
Total compensation	\$	175	\$	138			

#### Other transactions

The Company also entered into the following transactions during the years ended March 31, 2017 and 2016 with Glencore:

- (a) Paid \$3,187 (2016 \$nil) in principal on the Concentrate Plant finance lease.
- (b) Paid \$1,985 (2016 \$nil) in principal and interest on the working capital facility.
- (c) Earned revenue of \$59,491 (2016 \$19,639) on concentrate.
- (d) Paid or accrued production expenses of \$4,722 (2016 \$4,677), and mine development expenses of \$2,699 (2016 \$1,920) capitalized to property, plant and equipment.

As at March 31, 2017, amounts due to related parties was comprised of \$35 (2016 - \$60) due to directors and officers and \$71 (2016 - \$660) due to companies related to officers for consulting fees, and \$2,380 (2016 - \$2,822) bearing approximately 8% interest due to Glencore for mine development and operation expenses. The amounts due to directors are unsecured, bear no interest and are payable on demand.

#### CRITICAL ACCOUNTING ESTIMATES

Significant assumptions about the future and other sources of estimation uncertainty that management has made at the end of the reporting year, which could result in a material adjustment to the carrying amounts of assets and liabilities, in the event that actual results differ from assumptions made, relate to the following significant areas:

- (i) recoverability of the carrying amount of exploration and evaluation assets, and property, plant and equipment;
- (ii) inputs used in measuring the deferred income tax assets and liabilities;
- (iii) inputs used in measuring the provisions for environmental rehabilitation;
- (iv) estimated useful lives of property, plant and equipment; and
- (v) estimated mineral reserves and resources.

Review of asset carrying values and impairment assessment

Each reporting period, assets or cash generating units are evaluated to determine whether there are any indications of impairment. If any such indication exists, which is often judgmental, an impairment test is performed and if indicated, an impairment loss is recognized to the extent that the carrying amount exceeds the recoverable amount. The recoverable amount of an asset or cash generating group of assets is measured at the higher of fair value less costs to sell or value in use. The recoverable amount of the Company's assets was calculated based on cash flow projections using several assumptions and estimates that represent management's best estimate of the range of economic conditions that will exist over the remaining useful lives of the assets. Key estimates in such calculations included estimates of future zinc, lead, copper and silver metal prices, recoverable resources and reserves, operating and capital costs which are subject to certain risk and uncertainties, inflation, discount rates, exchange rates, and estimated life of mines between 7 and 20 years. Although management has made its best estimate of these factors, it is possible that changes could occur in the near term that could adversely affect management's estimate of the net cash flows to be generated from its projects. The carrying value of property, plant and equipment at the balance sheet date is disclosed in Note 10, and by project in Note 21 of the condensed interim consolidation financial statements for the three months ended March 31, 2017.

# Deferred income taxes

The determination of the Company's tax expense or recovery for the year and deferred tax liabilities involves significant estimation and judgment by management. In determining these amounts, management interprets tax legislation in a variety of jurisdictions and makes estimates of the expected timing of the reversal of deferred tax assets and liabilities. Management also makes estimates of future earnings which affect the extent to which potential future tax benefits may be used. Estimates of future taxable income are based on forecasted cash flows from future operations and the application of existing tax laws in each jurisdiction. Forecasted cash flows are based on life of mine projections. To the extent that future cash flows from operations and taxable income differ significantly from estimates, the ability of the Company to realize the net deferred income tax assets recorded on the balance sheet could be impacted. The Company is also subject to assessments by various taxation authorities, which may interpret legislation differently. These differences may affect the final amount or the timing of the payment of taxes. The Company provides for such differences where known based on management's best estimate of the probable outcome of these matters.

## Provision for environmental rehabilitation

The Company's accounting policy requires the recognition of a provision for environmental rehabilitation when the obligation occurs. Provisions for environmental rehabilitation are periodically reviewed to reflect known developments, including updated cost estimates. The calculation of the present value of the necessary costs to settle the obligation in the future includes assumptions regarding the risk-free interest rate for discounting those future cash flows, inflation, foreign exchange rates, and estimates of the underlying currencies in which the provisions will ultimately be settled. Although the ultimate cost to be incurred is uncertain, the Company estimates its costs based on studies using current restoration standards and techniques. Key estimates used to calculate the provision for environmental rehabilitation are in the condensed interim consolidation financial statements for the three months ended March 31, 2017.

# Useful lives of mineral properties, plant and equipment

The Company estimates the remaining lives of its producing mineral properties using a combination of quantitative and qualitative factors including historical results, mineral resources reported under National Instrument 43-101 ("NI 43-101"), estimates of ore mineral feed production from areas not included in the NI 43-101 reports, and management's intent to operate the property. The estimated remaining lives of the producing mineral properties are used to calculate amortization and depletion expense, assess impairment charges and the carrying values of assets, and for forecasting the timing of the payment of reclamation and remediation costs.

There are numerous uncertainties inherent in the estimation of the remaining lives of the producing mineral properties, and assumptions that are valid at the time of estimation may change significantly when new information becomes available. Changes in the forecast prices of commodities, exchange rates, or production costs may change the economic status of the resources, estimates of production from areas not included in the NI 43-101 reports, and management's intent to operate the property, and may ultimately have a material impact on the estimated remaining lives of the properties.

#### Estimated Mineral Reserves and Resources

Mineral reserve and resource estimates are based on various assumptions relating to operating matters. These include production costs, mining and processing recoveries, cut-off grades, long term commodity prices and, in some cases, exchange rates, inflation rates and capital costs. Cost estimates are based on feasibility study estimates or operating history. Estimates are prepared by appropriately qualified persons, but will be affected by forecasted commodity prices, inflation rates, exchange rates, capital and production costs and recoveries amongst other factors. Estimated mineral recoverable reserves and resources are used to determine the depreciation of property, plant and equipment at operating mine sites, in accounting for deferred stripping costs, in performing impairment testing and in forecasting the timing of the payment of decommissioning and restoration costs. Therefore, changes in the assumptions used could affect the carrying value of assets, depreciation and impairment charges recorded in the income statement and the carrying value of the decommissioning and restoration provision. As of March 31, 2017, the Company's Caribou Mine did not have any proven mineral reserves as defined by NI 43-101.

# **Internal Control over Financial Reporting (ICFR)**

Management is responsible for establishing and maintaining adequate ICFR. Any system of ICFR, no matter how well designed, has inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. There were no material changes in the Company's ICFR during the quarter ended March 31, 2017.

#### DISCLOSURE OF OUTSTANDING SHARE DATA

As at May 15, 2017, the Company's authorized capital consists of an unlimited number of common shares without par value, of which 403,623,704 are issued and outstanding as of the date of this MD&A. On a diluted basis, the Company has 421,860,478 common shares outstanding, assuming the exercise of 7,302,880 outstanding warrants, and 10,933,894 outstanding stock options pursuant to the Company's stock option plan.

## **RISK FACTORS**

Trevali is subject to a number of significant risks due to the nature of its business which includes the acquiring, exploring and, if warranted, development and exploiting of natural resource properties, currently in Peru and Canada. The risks and uncertainties described below could have a material adverse effect on the Company's business, financial condition or results of operations, and the trading price of the Company's common shares may decline and investors may lose all or part of their investment. Trevali cannot give assurance that it can control or will successfully address these risks or other unknown risks that may affect its business. Additional risks or uncertainties not presently known to Trevali or that Trevali currently consider immaterial may also impair the Company's business operations. A further discussion of risk factors the Company is subject to can be found in its Annual Information Form which is filed, under the Company's profile, on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a>.

Substantial Sums Owing to Glencore in Relation to the Company's Santander Mine: In connection with the acquisition and development of the Santander Mine, the Company has substantial indebtedness owing to Glencore and its Peruvian subsidiary, Los Quenuales. Such indebtedness includes the amounts (including debt service obligations) owing by Trevali to Glencore in respect to: (i) the \$20,000 Glencore working capital facility first made available by Glencore to Trevali in October 2012 and bearing interest at LIBOR plus 5%; and, (ii) the cost of the Trevali Plant, constructed on the Santander Mine under the supervision and direction of Glencore, of \$44,224, including refundable Peruvian IGV of \$6,746 (calculated at 18%). The liability related to the plant is listed in the consolidated financial statements as a finance lease. The Trevali plant price referred to above, which bears no interest, and the Glencore working capital facility, together with any default interest, as applicable, is to be paid by Trevali to Glencore on a monthly basis over a five-year repayment term based on a fee schedule per tonne of mineralized feed treated at the plant. Glencore and Los Quenuales hold real and personal property security over the indebtedness owed by Trevali. Accordingly, should Trevali fail to meet its obligations to Glencore or to Los Quenuales, such default could result in Glencore/Los Quenuales decision to realize on its security.

On October 30, 2015, the Company arranged a payment grace period with Glencore in relation to the Trevali Plant (Finance Lease). Under the grace period, repayment obligations were suspended starting October 30, 2015 and ending the earlier of: (i) October 31, 2016; and, (ii) the last day of the month that comes before any month in which the price of zinc reaches at least \$1,990 per tonne as an average for ten consecutive quotation days. The outstanding payment obligations continued to accrue without interest; provided, however, compensatory interest accrued on the full amount owing at a rate equivalent to LIBOR (one month) plus 5% during the grace period. During the month of June 2016, the zinc price reached \$1,990 per tonne on ten consecutive days ending the grace period, and payments recommenced in July 2016, the following month. During 2016, the Company repaid the full amount of accrued interest of \$2,894 and at March 31, 2017, the balance outstanding on the Finance Lease was \$20,092.

*Indebtedness Owing Under Senior Secured Notes:* On May 30, 2014, the Company completed the \$52,500 2014 Note Offering. In connection with the offering, the Company provided security in respect to its obligation to pay all principal and interest owing under the 2014 Notes in the form of a charge over

substantially all of the Company's Canadian assets. On December 31, 2015, the Company announced it had amended the indenture governing the 2014 Note Offering by way of entering into a supplemental indenture with its senior secured holders ("Noteholders") to extend and expand the Company's debt facility. In connection with this amendment, which was effected with the consent of the Noteholders, Trevali issued an additional \$8,400 in new notes ("New Notes") to the Noteholders and, among other things, deferred the Company's \$7,500 amortization payment, originally scheduled to be made on August 30, 2016, until August 30, 2017. Additionally, in connection with the foregoing, the exercise price of the 6,468,000 five-year warrants (the "May 2014 Offering Warrants") issued in connection with the 2014 Note Offering was decreased from \$1.26 to \$0.475 per warrant, and the expiration date of such May 2014 Offering Warrants was extended to the five-year anniversary of such repricing. Also, in connection with the foregoing, an additional 1,034,880 five-year warrants (together with the May 2014 Offering Warrants, the "Noteholder Warrants") having an exercise price of \$0.475 per warrant were issued to the Noteholders. The Company also agreed to decrease the exercise price of the Noteholder Warrants further if and whenever, at any time on or after December 30, 2015 and on or prior to June 30, 2016, the Company issues common shares, or securities convertible into or exchangeable for common shares, at a price per share that is lower than 115% or, in some cases, 110% of the then-applicable warrant exercise price. In such cases, the exercise price of the Noteholder Warrants would be decreased so that it equals 115% or 110%, as the case may be, of the price per share in the relevant equity issuance. In relation to the issuance, by way of short-form prospectus dated March 10, 2016, 46,718,750 of Common Shares at a subscription price of \$0.32 per common share we issued to raise gross proceeds of \$14.950,000. Accordingly, the exercise price of the Noteholder Warrants was reduced to \$0.368 per share. Up to June 30, 2016, the warrants were classified as a derivative liability based on the evaluation of the warrants' being carried at fair value and changes of \$509 in fair value of the liability was recorded as gain on derivative liability in net income. On July 1, 2016, the liability was revalued to be reclassified at fair value as equity and resulted in a loss on derivative liability of \$336. At July 1, 2016, the carrying value of the original 6,468,000 warrants and the additional 1,034,880 warrants, which represent transaction costs related to the offering, were estimated at \$1,919.

The Notes bear annual compounded interest at a rate of 12.5% and must be repaid in installments between the second and fourth anniversaries of the closing date. Should Trevali fail to meet its obligations to the holders of the Notes, such default could result in the Note holders' decision to realize on their security. Uncertainty in Regard to Operating Cash Flow: The Santander Mine achieved "commercial production" in 2014 and the Caribou Mine achieved "commercial production" as at July 1, 2016. Accordingly, the sale of concentrates from the Santander and Caribou mines have, and continues, to contribute operating cash flow. With the rising metal prices, the Company expects to have sufficient funds to meet its ongoing operating and capital expenditures at its current operations both in Canada and Peru. However, there are a number of risks which may have a direct impact on the Company's revenue stream, including: (i) risks related to the inherent uncertainty of production and cost estimates, and the potential for unexpected costs and expenses; and, (ii) risks related to commodity prices, smelting and refining charges and foreign exchange rate fluctuations. In the future, the Company's ability to continue its development activities depends primarily on the Company's ability to continue operations to generate revenues or to obtain financing through joint ventures, debt financings, equity financings, production sharing arrangements, sale of assets or some combination of these or other means. There can be no assurance that any such arrangements will be concluded and the associated funding obtained. There can be no assurance that the Company will generate sufficient revenues to meet its obligations as they become due or will obtain necessary financing on acceptable terms, if at all. The failure of the Company to meet its on-going obligations on a timely basis will likely result in the loss or substantial dilution of the Company's interests (as existing or as proposed to be acquired) in its properties.

*Liquidity Risk:* Liquidity risk is the risk that the Company will encounter difficulty in satisfying financial obligations as they fall due. The Company manages its liquidity risk by forecasting cash flows required

by its operations and anticipated investing and financing activities. Based on the anticipated positive cash flows from Santander and Caribou, the Company is expected to have sufficient resources to meet its committed expenditures for the next twelve months.

There are a number of risks which may have a direct impact on the Company's potential revenue stream, including: (i) potential for delays in development activities; (ii) risks related to the inherent uncertainty of production and cost estimates, and the potential for unexpected costs and expenses; (iii) risks related to commodity price, smelting and refining charges and foreign exchange rate fluctuations. In the future, the Company's ability to continue its development activities depends primarily on the Company's ability to commence and continue operations to generate revenues or to obtain financing through joint ventures, debt financing, equity financing, production sharing arrangements, sale of assets or some combination of these or other means. There can be no assurance that any such arrangements will be concluded and the associated funding obtained. There can be no assurance that the Company will generate sufficient revenues to meet its obligations as they become due or will obtain necessary financing on acceptable terms, if at all. The failure of the Company to meet its on-going obligations on a timely basis will likely result in the loss or substantial dilution of the Company's interests (as existing or as proposed to be acquired) in its Properties. In addition, should the Company incur significant losses in future periods, it may be unable to continue as a going concern, and realization of assets and settlement of liabilities in other than the normal course of business may be at amounts significantly different from those reflected in its current financial statements.

Resource Exploration and Development is Generally a Speculative Business: Resource exploration and development is a speculative business and involves a high degree of risk, including, among other things, unprofitable efforts resulting not only from the failure to discover mineral deposits but from finding mineral deposits which, though present, are insufficient in size to return a profit from production. The marketability of natural resources that may be acquired or discovered by the Company will be affected by numerous factors beyond the control of the Company. These factors include market fluctuations, the proximity and capacity of natural resource markets, government regulations, including regulations relating to prices, taxes, royalties, land use, importing and exporting of minerals and environmental protection. The exact effect of these factors cannot be accurately predicted, but the combination of these factors may result in the Company not receiving an adequate return on invested capital. The vast majority of exploration projects do not result in the discovery of commercially mineable deposits of mineralized material. Substantial expenditures are required to establish mineralized material reserves through drilling and metallurgical and other testing techniques, determine metal content and metallurgical recovery processes to extract metal from the mineralized material, and construct, renovate or expand mining and processing facilities. No assurance can be given that any level of recovery of mineralized material reserves will be realized or that any identified mineral deposit, even if it is established to contain an estimated resource, will ever qualify as a commercial mineable mineralized material body which can be legally and economically exploited.

Fluctuation of Metal Prices: Even if commercial quantities of mineral deposits are discovered by the Company, there is no guarantee that a profitable market will continue for the sale of the metals produced. Factors beyond the control of the Company may affect the marketability of any substances discovered. The prices of various metals have experienced significant movement over short periods of time, and are affected by numerous factors beyond the control of the Company, including international economic and political trends, expectations of inflation, currency exchange fluctuations, interest rates and global or regional consumption patterns, speculative activities and increased production due to improved mining and production methods. The supply of and demand for metals are affected by various factors, including political events, economic conditions and production costs in major producing regions. There can be no assurance that the price of any commodities will be such that any of the properties in which the Company has, or has the right to acquire, an interest may be mined, or continued to be mined, at a profit.

**Future Acquisitions:** As part of the Company's business strategy, it may seek to grow by acquiring companies, assets or establishing joint ventures that it believes will complement its current or future business. The Company may not effectively select acquisition candidates or negotiate or finance acquisitions or integrate the acquired businesses and their personnel or acquire assets for its business. The Company cannot guarantee that it can complete any acquisition it pursues on favourable terms, or that any acquisitions completed will ultimately benefit its business.

Global Financial Conditions: Market events and conditions, including disruptions in the Canadian, United States and international credit markets and other financial systems and the deterioration of the Canadian, United States and global economic conditions, could, among other things, impede access to capital or increase the cost of capital, which would have an adverse effect on the Company's ability to fund its working capital and other capital requirements. These unprecedented disruptions in the current credit and financial markets have had a significant material adverse impact on a number of financial institutions and have limited access to capital and credit for many companies, particularly junior natural resource companies, such as the Company. These disruptions could, among other things, make it more difficult for the Company to obtain, or increase its cost of obtaining, capital and financing for its operations. The Company's access to additional capital may not be available on terms acceptable to the Company or at all.

Worldwide securities markets, particularly those in the United States and Canada, have continued to experience a high level of price and volume volatility, and the market price of securities of many companies, particularly those considered exploration or development stage companies, have experienced unprecedented declines in price which have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. Most significantly, the share prices of junior natural resource companies have experienced an unprecedented decline in value and there has been a significant decline in the number of buyers willing to purchase such securities. In addition, significantly higher redemptions by holders of mutual funds have forced many of such funds (including those holding the Company's securities) to sell such securities at any price. As a consequence, despite the Company's past success in securing significant equity financing, market forces may render it difficult or impossible for the Company to secure places to purchase new share issues at a price which will not lead to severe dilution to existing shareholders, or at all. Therefore, there can be no assurance that significant fluctuations in the trading price of the Company's common shares will not occur, or that such fluctuations will not materially adversely impact on the Company's ability to raise equity funding without significant dilution to its existing shareholders, or at all.

Mining Industry is Competitive: The Company's business of the acquisition, exploration and development of mineral properties is intensely competitive. The Company may be at a competitive disadvantage in acquiring additional mining properties because it must compete with other entities and companies, many of which have greater financial resources, operational experience and technical capabilities than the Company. The Company may also encounter increasing competition from other mining companies in efforts to hire experienced mining professionals. Increased competition could adversely affect the Company's ability to attract necessary capital funding or acquire suitable producing properties or prospects for mineral exploration in the future.

**Permits and Licenses**: The operations of the Company require licenses and permits from various governmental authorities. There can be no assurance that the Company will be able to obtain all necessary licenses and permits that may be required to carry out exploration, development and mining operations at its projects, on reasonable terms, or at all. Delays or a failure to obtain such licenses and permits or a failure to comply with the terms of any such licenses and permits that the Company does obtain, could have a material adverse effect on the Company.

Government Regulation: Any exploration, development or mining operations carried on by the Company are subject to government legislation, policies and controls relating to prospecting, development, production, environmental protection, mining taxes and labour standards. In addition, the profitability of any mining prospect is affected by the market for precious and/or base metals which is influenced by many factors including changing production costs, the supply and demand for metals, the rate of inflation, the inventory of metal producing corporations, the political environment and changes in international investment patterns.

Environmental Restrictions: The activities of the Company are subject to environmental regulations promulgated by government agencies in different countries from time to time. Environmental legislation generally provides for restrictions and prohibitions on spills, releases or emissions into the air, ability to use water, discharges into water, management of waste, management of hazardous substances, protection of natural resources, antiquities and endangered species and reclamation of lands disturbed by mining operations. Certain types of operations require the submission and approval of environmental impact assessments. Environmental legislation is evolving in a manner which means stricter standards, and enforcement, fines and penalties for non-compliance are more stringent. Environmental assessments of proposed projects carry a heightened degree of responsibility for companies and directors, officers and employees. The cost of compliance with changes in governmental regulations has a potential to reduce the profitability of operations. In the event that a significant mineralized zone is identified, detailed environmental impact studies will need to be completed prior to initiation of any advanced exploration or mining activities. There is no guarantee that areas for potential mine waste disposal or areas for processing plants will be available within the properties.

Foreign Countries and Political Risk: The mineral properties held by the Company are located in Canada and Peru, where mineral exploration and mining activities may be affected in varying degrees by political instability, expropriation of property and changes in government regulations such as tax laws, business laws, environmental laws and mining laws, affecting the Company's business in that country. Any changes in regulations or shifts in political conditions are beyond the control of the Company and may adversely affect its business, or if significant enough, may make it impossible to continue to operate in that country. Operations may be affected in varying degrees by government regulations with respect to restrictions on production, price controls, foreign exchange restrictions, export controls, income taxes, and expropriation of property, environmental legislation and mine safety.

The Company currently owns and operates the Santander Mine in Peru. The status of Peru as a developing country may make it more difficult to obtain any required exploration financing for projects. The effect of all of these factors cannot be accurately predicted. There is the risk of political violence and increased social tension in Peru as a result of the increased civil unrest, crime and labour unrest. Roadblocks by members of the local communities, unemployed people and unions can occur on most national and provincial routes without notice.

Dependence Upon Others and Key Personnel: The success of the Company's operations will depend upon numerous factors, many of which are beyond the Company's control, including: (i) the ability to design and carry out appropriate exploration programs on its mineral properties; (ii) the ability to produce minerals from any mineral deposits that may be located; (iii) the ability to attract and retain additional key personnel in exploration, marketing, mine development and finance; and, (iv) the ability and the operating resources to develop and maintain the properties held by the Company. These and other factors will require the use of outside suppliers as well as the talents and efforts of the Company and its consultants and employees. There can be no assurance of success with any or all of these factors on which the Company's operations will depend, or that the Company will be successful in finding and retaining the necessary employees, personnel and/or consultants in order to be able to successfully carry out such activities.

Maintenance of Satisfactory Labor Relations: The Caribou Mine workforce is currently negotiating a collective bargaining agreement with the Company which will govern labor relations for the majority of employees on the site. The Company does not anticipate the additional cost to be material. The Company cannot predict at this time when an agreement will be reached with our workforce or whether a work stoppage or other labor unrest will occur. Additional groups of non-union employees may seek union representation in the future. Further, relations with employees may be affected by changes in the scheme of labor relations that may be introduced by the relevant governmental authorities in jurisdictions where the Company conducts business. Changes in such legislation or otherwise in our relationship with our employees may result in higher ongoing labor costs, employee turnover, strikes, lockouts or other work stoppages, any of which could have a higher material adverse effect on our business, results of operations and financial condition.

Currency Fluctuations: The Company presently maintains its accounts in US dollars. Due to the nature of its operations in Peru and Canada, the Company also maintains accounts in Canadian dollars and Peruvian nuevo soles. The Company's operations in Peru and Canada and its proposed exploration expenditures in such countries are often denominated in local currencies, making it subject to foreign currency fluctuations. Such fluctuations are out of the Company's control and may materially adversely affect the Company's financial position and results.

Surface Rights and Access: Although the Company acquires the rights to some or all of the minerals in the ground subject to the tenures that it acquires, or has a right to acquire, in most cases it does not thereby acquire any rights to, or ownership of, the surface to the areas covered by its mineral tenures. In such cases, applicable mining laws usually provide for rights of access to the surface for the purpose of carrying on mining activities, however, the enforcement of such rights can be costly and time consuming. In areas where there are no existing surface rights holders, this does not usually cause a problem, as there are no impediments to surface access. However, in areas where there are local populations or land owners (as with many of the Company's properties), it is necessary, as a practical matter, to negotiate surface access. There can be no guarantee that, despite having the right at law to access the surface and carry on mining activities, the Company will be able to negotiate a satisfactory agreement with any such existing landowners/occupiers for such access, and therefore it may be unable to carry out mining activities. In addition, in circumstances where such access is denied, or no agreement can be reached, the Company may need to rely on the assistance of local officials or the courts in such jurisdiction.

Title Matters: Although the Company has taken steps to verify the title to the mineral properties in which it has, or has a right to acquire, an interest in accordance with industry standards for the current stage of exploration of such properties, these procedures do not guarantee title (whether of the Company or of any underlying vendor(s) from whom the Company may be acquiring its interest). Title to mineral properties may be subject to unregistered prior agreements or transfers, and may also be affected by undetected defects or the rights of indigenous peoples. The Company has investigated title to all of its mineral properties and, to the best of its knowledge, title to all of its properties for which titles have been issued are in good standing. The process of acquiring exploration concessions involves an application process (which can be quite lengthy) and, until title to an exploration concession is actually granted, there can be no assurance that an exploration concession which has been applied for will be granted (especially as it is not always possible to determine if there are prior applications over the same ground). Many of the exploration concessions for which the Company (or the optionee(s) from whom it holds an option to acquire an interest in an exploration concession) has applied for in Peru and the Company cannot provide any estimate of the time likely to complete any such applications or the likelihood of any of such applications being granted.

**Exploration and Mining Risks:** Fires, power outages, labour disruptions, flooding, explosions, cave-ins, landslides and the inability to obtain suitable or adequate machinery, equipment or labour are other risks

involved in the operation of mines and the conduct of exploration programs. Substantial expenditures are required to establish reserves through drilling, to develop metallurgical processes, to develop the mining and processing facilities and infrastructure at any site chosen for mining. Although substantial benefits may be derived from the discovery of a major mineralized deposit, no assurance can be given that minerals will be discovered in sufficient quantities to justify commercial operations or that funds required for development can be obtained on a timely basis. The economics of developing mineral properties is affected by many factors including the cost of operations, variations of the grade of mineralized material mined, fluctuations in the price of gold or other minerals produced, costs of processing equipment and such other factors as government regulations, including regulations relating to royalties, allowable production, importing and exporting of minerals and environmental protection. In addition, the grade of mineralization ultimately mined may differ from that indicated by drilling results and such differences could be material. Short-term factors, such as the need for orderly development of mineralized material bodies or the processing of new or different grades, may have an adverse effect on mining operations and on the results of operations. There can be no assurance that minerals recovered in small scale laboratory tests will be duplicated in large scale tests under on-site conditions or in production scale operations. Material changes in geological resources, grades, stripping ratios or recovery rates may affect the economic viability of projects.

Regulatory Requirements: As stated above, the activities of the Company are subject to extensive regulations governing various matters, including environmental protection, management and use of toxic substances and explosives, management of natural resources, exploration, development of mines, production and post-closure reclamation, exports, price controls, taxation, regulations concerning business dealings with indigenous peoples, labour standards on occupational health and safety, including mine safety, and historic and cultural preservation. Failure to comply with applicable laws and regulations may result in civil or criminal fines or penalties, enforcement actions thereunder, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions, any of which could result in the Company incurring significant expenditures. The Company may also be required to compensate those suffering loss or damage by reason of a breach of such laws, regulations or permitting requirements. It is also possible that future laws and regulations, or more stringent enforcement of current laws and regulations by governmental authorities, could cause additional expense, capital expenditures, restrictions on or suspension of the Company's operations and delays in the exploration and development of the Company's properties.

*Uncertainty of Mineral Resource Estimates/Reserves*: Unless otherwise indicated, mineralization figures presented in the Company's filings with securities regulatory authorities, news releases and other public statements that may be made from time to time are based upon estimates made by Company personnel and independent geologists. These estimates are imprecise and depend upon geological interpretation and statistical inferences drawn from drilling and sampling analysis, which may prove to be unreliable. There can be no assurance that:

- these estimates will be accurate;
- reserves, resource or other mineralization figures will be accurate; or
- this mineralization could be mined or processed profitably.

The Company has not defined or delineated any proven or probable reserves at its Caribou property, mineralization estimates for the Properties may require adjustments or downward revisions based upon further exploration or development work or actual production experience. In addition, the grade of mineral ultimately mined, if any, may differ from that indicated by drilling results. There can be no assurance that minerals recovered in small-scale tests will be duplicated in large-scale tests under on-site conditions or in production scale. The resource estimates contained in the Company's filings with

securities regulatory authorities, news releases and other public statements that may be made from time to time have been determined and valued based on assumed future prices, cut-off grades, recoveries and operating costs that may prove to be inaccurate. Extended declines in market prices for zinc, lead, silver, copper, gold or other metals may render portions of the Company's mineralization uneconomic and result in reduced reported mineralization. Any material reductions in estimates of mineralization, or of the Company's ability to extract this mineralization, could have a material adverse effect on the Company's results of operations or financial condition. The Company has not established the presence of any proven or probable reserves at any of its Caribou property.

**No Assurance of Profitability:** Due to the nature of its business there can be no assurance that the Company can sustain any earnings. The Company has not paid dividends on its shares since incorporation and does not anticipate doing so in the foreseeable future. The Company intends to continue relying upon the issuance of equity or debt securities to finance its future activities, and revenues from production at its mines in Peru and Canada; however, there can be no assurance that such financings will be available on a timely basis under terms acceptable to the Company.

Uninsured or Uninsurable Risks: The Company may become subject to liability for cave-ins, pollution or other hazards against which it cannot insure or against which it may elect not to insure where premium costs are disproportionate to the Company's perception of the relevant risks. The payment of such insurance premiums and of such liabilities would reduce the funds available for exploration and production activities.

**Enforcement of Civil Liabilities:** As part of the assets of the Company and its subsidiaries are located outside of Canada and the United States, and certain of the directors and officers of the Company are resident outside of Canada and/or the United States, it may be difficult or impossible to enforce judgments granted by a court in Canada or the United States against the assets of the Company and its subsidiaries or the directors and officers of the Company residing outside of such country.

Corruption and Bribery Risk: The Company is required to comply with anti-corruption and anti-bribery laws of various countries including, Canada and Peru. In recent years, there has been an increase in enforcement and severity of penalties under such laws. A company may be found liable for violations by employees, contractors and third party agents. The Company has implemented policies and taken measures including training to mitigate the risk of non-compliance, however, such measures are not always effective in ensuring that the Company, its employees, contractors and third-party agents comply strictly with such laws. If the Company is found to be in violation of such laws, this may result in significant penalties, fines and/or sanctions resulting in a material adverse effect on the Company's reputation and financial results.

Cybersecurity Threats: The Company relies on secure and adequate operations of information technology in our operations. Access to and protection of the information technology systems is critical to our operations. We have not experienced any material losses relating to disruptions to our information technology systems. The Company is taking steps to enhance and implement on-going policies, controls and practices to manage and safeguard Trevali and its stakeholders from internal and external cybersecurity threats in addition to comply with changing legal and industry practices. Given the evolving nature of this threat which can't be fully mitigated, we cannot assure that our information technology systems are fully protected from cybercrime or that the systems will not be inadvertently compromised, or without failure or defects. Disruptions to our information technology systems including, without limitation, security breaches, theft, computer viruses, cyber-attacks and non-compliance by third party service providers and inadequate levels of cybersecurity expertise and safeguards of third party information technology service providers may adversely affect the operations of the Company as well as present significant costs and risks including, without limitation, loss or disclosure of confidential,

proprietary, personal or sensitive information and third party data, material adverse effect on our financial performance, compliance with our contractual obligations, compliance with applicable laws, remediation costs, potential litigation, regulatory enforcement proceedings and heightened scrutiny.

Surety Bonding Risks: The Company secures its obligations for reclamation and closure costs with surety bonds provided by a leading global insurance company in favour of regulatory authorities in Peru. These surety bonds include the right of the surety bond provider to terminate the relationship with the Company on providing notice of up to 90 days. The surety bond provider would, however, remain liable to the regulatory authorities for all bonded obligations existing prior to the termination of the bond in the event the Company failed to deliver alternative security satisfactory to the regulator.

Please also refer to the Company's most recent Annual Information Form filed on SEDAR.

#### **NON-IFRS MEASURES**

This MD&A refers to site cash operating cost per pound of payable zinc equivalent produced and total cash operating cost, which are not recognized measures under IFRS. Such non-IFRS financial measures do not have any standardized meaning prescribed by IFRS and are therefore unlikely to be comparable to similar measures presented by other issuers. Management uses these measures internally to evaluate the underlying operating performance of the Company for the reporting periods presented. The use of these measures enables management to assess performance trends and to evaluate the results of the underlying business of the Company. Management understands that a number of investors, and others who follow the Company's performance, also assess performance in this way. Management believes that these measures reflect the Company's performance and are better indications of its expected performance in future periods. This data is intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS.

The following production and financial tables reconcile these non-IFRS measures to the most directly comparable IFRS measures:

# Site cash operating cost per ZnEq payable pound produced

Site cash operating cost per zinc equivalent pound of payable produced include mine site operating costs such as mining, processing, administration, and indirect charges as surface maintenance and camp expenses, but are exclusive of royalties, smelting, refining and freight costs, depreciation, depletion, amortization, reclamation, and capital and exploration costs.

				Three	mo	nths ended		Three	mor	ths ended
				N	Iar	ch 31, 2017		N	Iarc	h 31, 2016
		Santander		Caribou		Total	Santander	Caribou		Total
Expressed in thousands of US dollars,	excep	t pounds and	per	pounds amoun	ts					
Production costs	\$	7,241	\$	15,674	\$	22,915	\$ 6,144	\$ -	\$	6,144
Inventory sales adjustment		(220)		(1,428)		(1,648)	601	-		601
Site cash operating costs	\$	7,021	\$	14,246	\$	21,267	\$ 6,745	\$ -	\$	6,745
Divided by pounds of payable zinc equivalent produced	1	5,627,433		29,199,484	4	14,826,918	24,229,762	-	2	4,229,762
Site cash operating cost per pound of payable zinc equivalent produced	\$	0.45	\$	0.49	\$	0.47	\$ 0.28	\$ -	\$	0.28

# Total cash cost per ZnEq payable pound produced:

Total cash cost per zinc equivalent pound of payable produced include mine site operating costs as calculated above, royalties, smelting, refining and freight costs, but are exclusive of depreciation, depletion, amortization, reclamation, and exploration costs.

				Three	moi	nths ended		Three	mon	ths ended
				N	Iarc	h 31, 2017		N	Iarc	h 31, 2016
	\$	Santander		Caribou		Total	Santander	Caribou		Total
Expressed in thousands of US dollars	, except	pounds and	per 1	pounds amoun	ts					
Production Costs	\$	7,241	\$	15,674	\$	22,915	\$ 6,144	\$ -	\$	6,144
Smelting, refining and freight		6,187		14,435		20,622	7,095	-		7,095
Royalty expense		221		-		221	264	-		264
Capital sustaining costs		2,546		2,130		4,676	2,039	-		2,039
Inventory sales adjustment		(220)		(1,428)		(1,648)	601	-		601
Total cash cost	\$	15,975	\$	30,811	\$	46,786	\$ 16,143	\$ -	\$	16,143
Divided by pounds of payable zinc equivalent produced	1:	5,627,433		29,199,484	4	4,826,918	24,229,762	-	2.	4,229,762
Total cash cost per pounds of payable zinc equivalent produced	\$	1.02	\$	1.06	\$	1.04	\$ 0.67	\$ -	\$	0.67

# Site cash operating cost per tonne milled:

Site cash operating cost per tonne milled include mine site operating costs such as mining, processing, administration, and indirect charges as surface maintenance and camp expenses, but are exclusive of royalties, smelting, refining and freight costs, depreciation, depletion, amortization, reclamation, and capital and exploration costs.

				Three	e mo	nths ended		Three	mo	nths ended	
				N	Marc	ch 31, 2017		N	March 31, 2016		
		Santander		Caribou		Total	Santander	Caribou		Total	
Expressed in thousands of US dollar	rs, excep	t pounds and	per p	ounds amour	nts						
Production costs	\$	7,241	\$	15,674	\$	22,915	\$ 6,144	\$ -	\$	6,144	
Inventory sales adjustment		(220)		(1,428)		(1,648)	601	-		601	
Site cash operating costs	\$	7,021	\$	14,246	\$	21,267	\$ 6,745	\$ -	\$	6,745	
Divided by tonnes milled		200,249		232,880		433,129	209,188	-		209,188	
Site cash operating cost per											
tonne milled	\$	35.06	\$	61.17	\$	49.10	\$ 32.22	\$ -	\$	32.22	