



PAN AMERICAN  
— SILVER —

# Management's Discussion and Analysis

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FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2019

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# MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

November 6, 2019

## INTRODUCTION

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This Management's Discussion and Analysis ("MD&A") is intended to help the reader understand the significant factors that influence the performance of Pan American Silver Corp. and its subsidiaries (collectively "Pan American", "we", "us", "our" or the "Company") and such factors that may affect its future performance. This MD&A should be read in conjunction with the Company's audited consolidated financial statements for the year ended December 31, 2018 (the "2018 Financial Statements"), and the related notes contained therein, and the unaudited condensed interim consolidated financial statements for the three and nine months ended September 30, 2019 (the "Q3 2019 Financial Statements"), and the related notes contained therein. All amounts in this MD&A, the 2018 Financial Statements, and the Q3 2019 Financial Statements are expressed in United States dollars ("USD"), unless identified otherwise. The Company reports its financial position, results of operations and cash flows in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board. Pan American's significant accounting policies are set out in Note 3 of the 2018 Financial Statements.

This MD&A refers to various non-Generally Accepted Accounting Principles ("non-GAAP") measures, such as "all-in sustaining costs per ounce sold", "cash costs per ounce sold", "adjusted earnings" and "basic adjusted earnings per share", "total debt", "capital", and "working capital", which are used by the Company to manage and evaluate operating performance at each of the Company's mines and are widely reported in the mining industry as benchmarks for performance, but do not have standardized meaning under IFRS. To facilitate a better understanding of these non-GAAP measures as calculated by the Company, additional information has been provided in this MD&A. Please refer to the section of this MD&A entitled "Alternative Performance (Non-GAAP) Measures" for a detailed description of "all-in sustaining cost per ounce sold", "cash costs per ounce sold", "adjusted earnings" and "basic adjusted earnings per share", "total debt", "capital", and "working capital" as well as details of the Company's by-product credits and a reconciliation, where appropriate, of these measures to the Q3 2019 Financial Statements.

Any reference to "Cash Costs" in this MD&A should be understood to mean cash costs per ounce of silver or gold sold, net of by-product credits. Any reference to "AISC" in this MD&A should be understood to mean all-in sustaining costs per silver or gold ounce sold, net of by-product credits.

Except for historical information contained in this MD&A, the following disclosures are forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and forward-looking information within the meaning of applicable Canadian provincial securities laws or are future oriented financial information and as such are based on an assumed set of economic conditions and courses of action. Please refer to the cautionary note regarding forward-looking statements and information at the back of this MD&A and the "Risks Related to Pan American's Business" contained in the Company's most recent Annual Information Form on file with the Canadian provincial securities regulatory authorities and Form 40-F on file with the U.S. Securities and Exchange Commission (the "SEC"). Additional information about Pan American and its business activities, including its Annual Information Form, is available on SEDAR at [www.sedar.com](http://www.sedar.com)

## CORE BUSINESS AND STRATEGY

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Pan American engages in silver and gold mining and related activities, including exploration, mine development, extraction, processing, refining and reclamation. The Company owns and operates silver and gold mines located in Peru, Mexico, Argentina, Bolivia, and Canada. We also own the Escobal mine in Guatemala that is currently not operating. In addition, the Company is exploring for new silver deposits and opportunities throughout the Americas. The Company is listed on the Toronto Stock Exchange (Symbol: PAAS) and on the Nasdaq Global Select Market (“NASDAQ”) in New York (Symbol: PAAS).

Pan American’s vision is to be the world’s pre-eminent silver producer, with a reputation for excellence in discovery, engineering, innovation and sustainable development. To achieve this vision, we base our business on the following strategy:

- Generate sustainable profits and superior returns on investments through the safe, efficient and environmentally sound development and operation of silver assets.
- Constantly replace and grow our mineable silver reserves and resources through targeted near-mine exploration and global business development.
- Foster positive long-term relationships with our employees, our shareholders, our communities and our local governments through open and honest communication and ethical and sustainable business practices.
- Continually search for opportunities to upgrade and improve the quality of our silver assets both internally and through acquisition.
- Encourage our employees to be innovative, responsive and entrepreneurial throughout our entire organization.

To execute this strategy, Pan American has assembled a sector-leading team of mining professionals with a depth of knowledge and experience in all aspects of our business, which enables the Company to confidently advance early stage projects through construction and into operation.

Pan American is determined to conduct its business in a responsible and sustainable manner. Caring for the environment in which we operate, contributing to the long-term development of our host communities and ensuring that our employees can work in a safe and secure manner are core values at Pan American. We are committed to maintaining positive relations with our employees, the local communities and the government agencies, all of whom we view as partners in our enterprise.

## Q3 2019 HIGHLIGHTS

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### Integration of Tahoe Resources Inc. ("Tahoe")

On February 22, 2019, the Company completed the previously announced transaction whereby Pan American acquired all of the issued and outstanding shares of Tahoe (the "Acquisition"). Tahoe was a mid-tier publicly traded precious metals mining company with ownership interests in a diverse portfolio of mines and projects including the following principal mines: La Arena and Shahuindo in Peru; Timmins West and Bell Creek in Canada (together "Timmins"); and Escobal in Guatemala, where operations have been suspended since June 2017 (together the "Acquired Mines"). The Company now operates three gold mines as a result of the Acquisition. Consequently, the Company's operations have been divided into silver and gold segments for the purposes of reporting in this MD&A.

All production, operating and financial results of the Acquired Mines (including Cash Costs and AISC amounts) reported in this MD&A and included in the Company's consolidated results and updated guidance, reflect only the results from February 22, 2019 onwards. Further details of the Acquisition are provided in the "Acquisition of Tahoe" section of this MD&A.

### Assets Held for Sale

Prior to the third quarter of 2019 ("Q3 2019") the Timmins assets and liabilities were classified as held for sale and were presented separately under current assets and current liabilities on the Company's consolidated balance sheet. Further, the Timmins' net income after tax was presented as a single and separate item on the Company's consolidated income statement.

A change in Management's intentions related to the sale of Timmins during Q3 2019 resulted in the Company no longer meeting the IFRS criteria to classify Timmins as held for sale. Management's intentions changed based on several factors, including but not limited to current market conditions and the strong economic performance of the assets. As a result, the Timmins assets and liabilities are no longer presented separately on the Company's September 30, 2019 balance sheet and the net income generated by Timmins for the three and nine months are reflected on the Company's income statements in the normal course.

The reclassification of Timmins described above resulted in the Company no longer being required to present long-term assets and liabilities as current, which was required while classified as held for sale. As such these long term assets and liabilities are included in the long term portion of the Company's September 30, 2019 balance sheet. This presentation change resulted in a decrease in working capital from the June 30, 2019 balance sheet, which is further discussed in the "Liquidity and Capital Position" section of this MD&A. As of September 30, 2019 Timmins' net long-term assets were \$349.9 million (June 30, 2019: \$368.8 million).

Furthermore, the reclassification of Timmins resulted in a one-time, non-cash adjustment of \$15.6 million related to depreciation, that decreased Q3 2019 mine operating earnings and net-income, which is further discussed in the "Overview of Q3 Financial Results" section of this MD&A.

### Operations

- **Silver production of 6.67 million ounces**

Consolidated silver production for Q3 2019 of 6.67 million ounces was 7% higher than the 6.25 million ounces produced in the three months ended September 30, 2018 ("Q3 2018"). Total production for the nine months ended September 30, 2019 ("YTD 2019") of 19.26 million was 3% higher than the 18.65 million ounces produced in the nine months ended September 30, 2018 ("YTD 2018").

- **Gold production of 150.2 thousand ounces**

Consolidated gold production for Q3 2019 of 150.2 thousand ounces was 257% higher than the 42.1 thousand ounces produced in Q3 2018, reflecting additional production from the Acquired Mines. YTD 2019 gold production of 385.3 thousand ounces was 172% higher than the 141.7 thousand ounces produced in YTD 2018.

- **Base metal production**

Zinc production in Q3 2019 was 16.8 thousand tonnes, which was consistent with the comparable quarter of 2018. Lead production was 6.8 thousand tonnes, 19% more than Q3 2018 production, while copper production of 2.3 thousand tonnes was 11% lower than in Q3 2018. YTD 2019 production was 51.0 thousand tonnes, 20.2 thousand tonnes, and 6.4 thousand tonnes for zinc, lead and copper, respectively.

## Financial

- **Revenue and net income**

Revenue in Q3 2019 of \$352.2 million was up 88% from Q3 2018, primarily due to sales from the Acquired Mines, and higher precious metal prices.

Net income for Q3 2019 was \$37.7 million (\$0.18 basic earnings per share) compared with a loss of \$9.2 million (\$0.06 basic loss per share) in Q3 2018. The quarter-over-quarter improvement in earnings mainly reflects: (i) a \$68.3 million increase in mine operating earnings from higher gold and silver prices, the addition of the Acquired Mines and the reversal of net realizable value ("NRV") inventory adjustments that increased costs in the comparable period; (ii) investment income of \$36.1 million recognized in Q3 2019; partially offset by (iii) a \$37.0 million increase in the income tax expense due to higher taxable income and the impact of foreign exchange movements on tax assets; (iv) Escobal mine care and maintenance costs, and transaction and integration costs associated with the Acquisition, which totaled \$9.2 million in Q3 2019; and (v) a \$6.0 million increase in interest and financing costs, reflecting interest on the amounts drawn on the Company's \$500 million revolving credit facility (the "Credit Facility").

Adjusted income in Q3 2019 was \$74.2 million (\$0.35 basic adjusted earnings per share) compared with an adjusted loss of \$4.7 million (\$0.03 basic adjusted loss per share) in Q3 2018, due primarily to the higher mine operating earnings and increased investment income described above.

- **Liquidity and working capital position**

As at September 30, 2019, the Company had cash and short-term investment balances of \$177.0 million, working capital of \$459.3 million, and \$185.0 million available under its \$500.0 million revolving credit facility. Total debt of \$360.5 million was related to the drawn portion of the Credit Facility (\$315.0 million) and to the financing of lease liabilities (\$45.5 million), which were partially attributable to the new lease accounting standard (IFRS-16) adopted on January 1, 2019.

- **Cash Costs per ounce sold**

Silver Segment Cash Costs were \$5.47 per silver ounce sold for Q3 2019. YTD 2019 Cash Costs of \$5.89 per ounce were lower than the most recent annual 2019 forecast, as provided in the Company's Q2 2019 MD&A dated August 7, 2019 (the "August 2019 Forecast") of \$6.50 to \$7.50 per ounce.

Gold Segment Cash Costs related to the Acquired Mines were \$729 per gold ounce sold in Q3 2019. YTD 2019 Cash Costs of \$722 per gold ounce sold were lower than the August 2019 Forecast range of \$740 to \$810 per gold ounce sold.

Consolidated Cash Costs per silver ounce sold, including by-product credits from the Acquired Mines' gold production, were negative \$8.66 for Q3 2019. YTD 2019 Cash Costs of negative \$3.58 per silver ounce sold were lower than the August 2019 Forecast of negative \$3.30 to negative \$1.80 per silver ounce sold.

Cash Costs is a non-GAAP measure, please refer to the "Alternative Performance (Non-GAAP) Measures" section of this MD&A for a detailed reconciliation of this measure to the Q3 2019 Financial Statements.

- **All-In Sustaining Costs per ounce sold ("AISC")**

Silver Segment AISC for Q3 2019 were \$8.80 per silver ounce sold. YTD 2019 AISC were \$10.14 per silver ounce sold, which is in-line with the August 2019 Forecast range of \$9.75 to \$11.25 per ounce.

Gold Segment AISC for Q3 2019 were \$920 per gold ounce sold. YTD 2019 AISC of \$972 per gold ounce sold were lower than the August 2019 Forecast of \$1,025 to \$1,125 per ounce.

Consolidated AISC per silver ounce sold, including by-product credits from the Acquired Mines' gold production, were negative \$0.11 per silver ounce sold for Q3 2019. YTD 2019 consolidated AISC of \$5.62 per silver ounce sold were lower than the August 2019 Forecast range of \$7.00 to \$9.00.

AISC is a non-GAAP measure, please refer to the "Alternative Performance (Non-GAAP) Measures" section of this MD&A for a detailed reconciliation of this measure to the Q3 2019 Financial Statements.

## Annual Forecast

### • Revised Cash Costs and AISC Forecasts

Based on Cash Costs and AISC achieved YTD 2019, increased gold price assumption and the operating outlook for the remainder of 2019, Management is lowering its cash cost and AISC estimates for the full year.

Silver and Gold Segment cash costs forecasts are revised to between \$6.00 and \$7.00 per silver ounce (reduced from \$6.50 to \$7.50 per silver ounce) and between \$725 and \$775 per gold ounce (reduced from \$740 to \$810 per gold ounce), respectively.

Silver and Gold Segment AISC forecasts are revised to between \$9.50 and \$11.00 per silver ounce (reduced from \$9.75 to \$11.25 per silver ounce) and between \$1,000 and \$1,100 per gold ounce (reduced from \$1,025 to \$1,125 per gold ounce), respectively.

Consolidated Silver Basis Cash Costs and AISC forecasts are revised to between (\$5.50) and (\$3.80) per silver ounce (reduced from (\$3.30) to (\$1.80) per silver ounce) and between \$6.00 and \$7.50 per silver ounce (reduced from \$7.00 to \$9.00 per silver ounce), respectively.

## OPERATING PERFORMANCE

### Silver and Gold Production

The following table provides silver and gold production at each of Pan American's operations for the three and nine month periods ended September 30, 2019 and 2018, except for the Acquired Mines, which for the nine months ended September 30, 2019 only include production from the February 22, 2019 acquisition date:

	Silver Production (ounces '000s)				Gold Production (ounces '000s)			
	Three months ended September 30,		Nine months ended September 30,		Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018	2019	2018	2019	2018
<b>Operations:</b>								
La Colorada	2,091	2,020	6,126	5,543	1.2	1.1	3.3	3.2
Dolores	1,496	967	3,835	3,257	33.1	33.1	91.6	107.2
Huaron	975	922	2,860	2,595	0.3	0.2	0.8	0.6
Morococha <sup>(1)</sup>	588	758	1,901	2,141	0.3	0.4	1.2	1.9
San Vicente <sup>(2)</sup>	860	867	2,651	2,607	0.1	0.1	0.3	0.4
Manantial Espejo	606	718	1,782	2,505	5.4	7.1	15.7	28.4
Shahuindo <sup>(3)</sup>	37		82		40.6		101.9	
La Arena <sup>(3)</sup>	6		15		31.0		74.1	
Timmins <sup>(3)</sup>	5		12		38.3		96.4	
<b>Total<sup>(4)</sup></b>	<b>6,665</b>	<b>6,253</b>	<b>19,264</b>	<b>18,649</b>	<b>150.2</b>	<b>42.1</b>	<b>385.3</b>	<b>141.7</b>

(1) Morococha data represents Pan American's 92.3% interest in the mine's production.

(2) San Vicente data represents Pan American's 95.0% interest in the mine's production.

(3) Reflects production results subsequent to the February 22, 2019 closing date of the Acquisition as described in the "Acquisition of Tahoe" section of this MD&A.

(4) Totals may not add due to rounding.

## Silver Production

Consolidated silver production in Q3 2019 of 6.67 million ounces was 7% higher than the 6.25 million ounces produced in Q3 2018. Dolores, Huaron, and La Colorada drove the increases, primarily due to increased grades at all three operations. The increase was partially offset by lower production at Morococha and Manantial Espejo, primarily due to lower grades and throughput, respectively. Each operation's silver production variances are further discussed in the "Individual Mine Performance" section of this MD&A.

## Gold Production

Consolidated gold production in Q3 2019 of 150.2 thousand ounces was 257% higher than the 42.1 thousand ounces produced in Q3 2018. The increase was attributable to the production from the Acquired Mines during the quarter, which totaled 109.8 thousand ounces, partially offset by lower production at Manantial Espejo as a result of anticipated lower grades and throughput. Each operation's production variances are further discussed in the "Individual Mine Performance" section of this MD&A.

## Base Metal Production

The following table provides the Company's base metal production for the three-month and nine-month periods ended September 30, 2019 and 2018:

	By-Product Production			
	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Zinc – kt	16.8	16.7	51.0	46.3
Lead – kt	6.8	5.7	20.2	16.1
Copper – kt	2.3	2.6	6.4	7.6

Zinc production in Q3 2019 was consistent with Q3 2018 production, driven by higher sulphide ore throughput at La Colorada, which was partially offset by lower grades at the other operations.

Lead production in Q3 2019 was 19% higher than Q3 2018, resulting primarily from higher sulphide ore throughput at La Colorada and higher grades at Morococha, from mine sequencing.

Copper production in Q3 2019 was 11% lower than Q3 2018, driven by lower grades and recoveries at Morococha. Each operation's by-product production variances are further discussed in the "Individual Mine Performance" section of this MD&A.

## Cash Cost and AISC

The Company currently operates three gold mines as a result of the Tahoe Acquisition. Consequently, the Company's operations have been divided into silver and gold segments for the purposes of reporting Cash Costs and AISC, as set out in the table below. Based on the increased gold production, the Company has determined it necessary to adjust certain components of how cash costs per ounce and all-in-sustaining costs per ounce are calculated and reported. The quantification of both the current Cash Costs and AISC measures is described in detail, and where appropriate reconciled to the Q3 2019 financial statements, in the "Alternative (Non-GAAP) Performance Measures" section of this MD&A.

The following table reflects the Cash Costs and AISC net of by-product credits at each of Pan American's operations for the three and nine months ended September 30, 2019, as compared to the same periods in 2018 for the Silver Segment mines and since February 22, 2019 for the newly acquired Gold Segment mines:

	Cash Costs <sup>(1)</sup> (\$ per ounce)				AISC <sup>(1)</sup> (\$ per ounce)			
	Three months ended September 30,		Nine months ended September 30,		Three months ended September 30,		Nine months ended September 30,	
	2019	2018 <sup>(2)</sup>	2019	2018 <sup>(2)</sup>	2019	2018 <sup>(3)</sup>	2019	2018 <sup>(3)</sup>
La Colorada	2.82	4.46	2.59	2.19	4.03	6.27	4.15	4.20
Dolores	0.00	(2.91)	3.27	(3.93)	7.45	25.52	17.89	11.40
Huaron	5.32	3.55	3.80	1.56	8.69	11.03	7.24	7.27
Morococho	5.66	(0.97)	2.52	(5.75)	11.36	6.39	7.60	0.02
San Vicente	13.04	9.07	10.90	9.76	15.21	11.12	11.94	11.93
Manantial Espejo	24.22	13.23	22.09	12.79	21.35	24.78	19.33	14.07
<b>Silver Segment Consolidated</b>	<b>5.47</b>	<b>4.41</b>	<b>5.89</b>	<b>2.64</b>	<b>8.80</b>	<b>12.76</b>	<b>10.14</b>	<b>7.93</b>
Shahuindo	552	—	555	—	775	—	738	—
La Arena	738	—	685	—	988	—	1,217	—
Timmins	922	—	914	—	1,026	—	1,005	—
<b>Gold Segment Consolidated</b>	<b>729</b>	<b>—</b>	<b>722</b>	<b>—</b>	<b>920</b>	<b>—</b>	<b>972</b>	<b>—</b>
<b>Consolidated metrics per silver ounce sold<sup>(4)</sup>:</b>								
<b>All Operations</b>	<b>(8.66)</b>	<b>4.41</b>	<b>(3.58)</b>	<b>2.64</b>	<b>(0.11)</b>	<b>13.93</b>	<b>5.62</b>	<b>9.16</b>
<b>All Operations before NRV inventory adjustments</b>	<b>(8.66)</b>	<b>4.41</b>	<b>(3.58)</b>	<b>2.64</b>	<b>1.07</b>	<b>10.25</b>	<b>5.67</b>	<b>8.54</b>

- (1) Cash Costs and AISC are non-GAAP measures. Please refer to the section "Alternative Performance (Non-GAAP) Measures" of this MD&A for a detailed description of these measures and where appropriate a reconciliation of the measure to the Q3 2019 Financial Statements.
- (2) Silver Segment Cash Costs per ounce sold are calculated based on Cash Costs, net of by-product credits divided by per ounce of silver sold and they are therefore different from previously reported Q3 2018 "Cash Costs" which were calculated based on cash costs net of by-product credits divided by payable silver ounces produced. The Q3 2018 cash costs per ounce sold included in the table above have been calculated and presented as comparative amounts to conform to the methodology used by the Company to calculate the Q3 2019 Cash Cost per ounce sold.
- (3) 2018 AISC per ounce sold included in the table above have been calculated and presented as comparative amounts to conform to the methodology used by the Company to calculate the 2019 AISC per ounce sold. The change in methodology relates to the sustaining capital calculation to account for the adoption of IFRS 16, and sustaining capital now includes lease payments. Previously, leased assets were included as sustaining capital in the period of acquisition, while future related lease payments were excluded.
- (4) Consolidated silver basis total is calculated per silver ounce sold with total gold revenues included within by-product credits. G&A costs are included in the consolidated AISC, but not allocated in calculating AISC for each operation.

## Cash Costs

Consolidated Cash Costs on a silver basis were negative \$8.66 per ounce for Q3 2019, down \$13.07 from Q3 2018, as a result of the increase in gold by-product credits from the newly acquired Gold Segment mines, which was partially offset by increased Silver Segment cash costs due to a combination of lower base metal prices and higher operating costs per ounce at Dolores, Morococho and Manantial Espejo. Consolidated Cash Costs are based on total silver ounces sold and are net of by-product credits from all metals other than silver.

## AISC

Consolidated AISC on a silver basis for Q3 2019 were negative \$0.11 per ounce, a \$14.04 decrease from Q3 2018. The decrease was primarily the result of the same factors driving the decrease in quarter-over-quarter cash costs, as well as a \$30.2 million positive swing in NRV adjustments. Consolidated AISC are based on total silver ounces sold and are net of by-product credits from all metals other than silver.

## Individual Mine Performance

An analysis of performance at each operation in Q3 2019 compared with Q3 2018 follows. The project capital amounts invested in Q3 2019 are further discussed in the "Project Development Update" section of this MD&A.

## La Colorada mine

	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Tonnes milled – kt	190.9	191.2	571.7	538.5
Average silver grade – grams per tonne	370	360	363	352
Average zinc grade - %	3.27	2.62	3.19	2.74
Average lead grade - %	1.63	1.30	1.64	1.36
Production:				
Silver – koz	2,091	2,020	6,126	5,543
Gold – koz	1.23	1.14	3.33	3.24
Zinc – kt	5.51	4.33	16.12	12.70
Lead – kt	2.74	2.17	8.23	6.40
<b>Cash Costs<sup>(1)</sup></b>	\$ 2.82	\$ 4.46	\$ 2.59	\$ 2.19
<b>Sustaining capital - ('000s)<sup>(2)</sup></b>	\$ 1,921	\$ 3,902	\$ 7,764	\$ 10,097
<b>AISC<sup>(1)</sup></b>	\$ 4.03	\$ 6.27	\$ 4.15	\$ 4.20
<b>Payable silver sold - koz</b>	<b>1,802</b>	<b>2,258</b>	<b>5,814</b>	<b>5,289</b>

(1) Cash Costs and AISC are non-GAAP measures. Please refer to the “Alternative Performance (Non-GAAP) Measures” section of this MD&A for a detailed reconciliation of these measures to cost of sales.

(2) Sustaining capital expenditures exclude \$3.8 million and \$8.2 million investing activity cash outflows for Q3 2019 and YTD 2019, respectively (Q3 2018 and YTD 2018: \$1.1 million and \$4.2 million respectively) related to investment capital incurred on the La Colorada projects, as disclosed in the “Project Development Update” section of this MD&A.

### Q3 2019 vs. Q3 2018

#### Production:

- Silver: 3% increase, driven primarily from higher throughput of sulfide ore and higher silver grades in the oxide ores from mine sequencing.
- By-products: 27% and 26% increases in zinc and lead production, respectively, resulting primarily from a higher throughput of sulfide ores.

Cash Costs: the \$1.64 per ounce decrease was primarily the result of higher by-product credits per ounce sold from higher base metal production and sales, partially offset by higher treatment and refining charges.

Sustaining Capital: primarily related to underground infrastructure, lease payments for equipment and office leases, and near-mine exploration activities. The decrease in sustaining capital expenditures relative to the prior quarter relates to lower expenditures in equipment replacements and refurbishments.

AISC: the decrease was due to the same factors affecting Cash Costs, in addition to the lower sustaining capital.

## Dolores mine

	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Tonnes placed – kt	1,486.5	1,522.9	4,920.4	5,084.8
Average silver grade – grams per tonne	51	33	36	33
Average gold grade – grams per tonne	0.78	0.84	0.59	0.91
Production:				
Silver – koz	1,496	967	3,835	3,257
Gold – koz	33.1	33.1	91.6	107.2
<b>Cash Costs<sup>(1)</sup></b>	<b>\$ 0.00</b>	<b>\$ (2.91)</b>	<b>\$ 3.27</b>	<b>\$ (3.93)</b>
<b>Sustaining capital - ('000s)<sup>(2)</sup></b>	<b>13,522</b>	<b>9,971</b>	<b>41,554</b>	<b>35,587</b>
<b>AISC<sup>(1)</sup></b>	<b>\$ 7.45</b>	<b>\$ 25.52</b>	<b>\$ 17.89</b>	<b>\$ 11.40</b>
<b>Payable silver sold - koz</b>	<b>1,328</b>	<b>950</b>	<b>3,522</b>	<b>3,335</b>

(1) Cash Costs and AISC are non-GAAP measures. Please refer to the “Alternative Performance (Non-GAAP) Measures” section of this MD&A for a detailed reconciliation of these measures to cost of sales.

(2) Sustaining capital expenditures exclude \$nil and \$0.4 million of investing activity cash outflow for Q3 2019 and YTD 2019, respectively (Q3 and YTD 2018: \$1.8 million and \$10.3 million, respectively) related to investment capital incurred on Dolores expansion projects, as disclosed in the “Project Development Update” section of this MD&A.

### Q3 2019 vs. Q3 2018

#### Production:

- Silver: 55% higher due to improved grades from mine sequencing.
- Gold: consistent with prior period production, as lower grades from mine sequencing and lower stacking rates were offset by improved leach kinetics and increased pulp agglomeration throughput.

Cash Costs: increased \$2.91 per ounce primarily due to higher operating costs partially offset by increased by-product credits.

Sustaining Capital: comprised mainly of pre-stripping expenditures and leach pad expansions.

AISC: decreased \$18.07 per ounce, due primarily to a \$20.49 per ounce cost-decreasing swing in non-cash NRV adjustments, which was partially offset by the factors increasing cash costs described above.

## Huaron mine

	Three months ended September 30,		Nine months ended September 30,	
	2019	2018 <sup>(1)</sup>	2019	2018 <sup>(1)</sup>
Tonnes milled - kt	251.5	244.8	741.8	683.0
Average silver grade – grams per tonne	146	141	143	142
Average zinc grade - %	2.22	2.39	2.35	2.42
Average lead grade - %	1.21	1.29	1.19	1.17
Average copper grade - %	0.86	0.81	0.79	0.76
Production:				
Silver – koz	975	922	2,860	2,595
Gold – koz	0.28	0.21	0.76	0.57
Zinc – kt	4.10	4.45	13.12	12.56
Lead – kt	2.31	2.33	6.71	5.88
Copper – kt	1.66	1.57	4.45	3.92
<b>Cash Costs<sup>(2)</sup></b>	\$ 5.32	\$ 3.55	\$ 3.80	\$ 1.56
<b>Sustaining capital - ('000s)</b>	\$ 2,740	\$ 5,698	\$ 8,102	\$ 11,671
<b>AISC<sup>(2)</sup></b>	\$ 8.69	\$ 11.03	\$ 7.24	\$ 7.27
<b>Payable silver sold – koz</b>	<b>869</b>	<b>785</b>	<b>2,517</b>	<b>2,236</b>

(1) 2018 AISC per ounce sold included in the table above have been calculated and presented as comparative amounts to conform to the methodology used by the Company to calculate the 2019 AISC per ounce sold. The change in methodology relates to the sustaining capital calculation to account for the adoption of IFRS 16, and sustaining capital now includes lease payments. Previously leased assets were included as sustaining capital in the period of acquisition, while future related lease payments were excluded.

(2) Cash Costs and AISC are non-GAAP measures. Please refer to the “Alternative Performance (Non-GAAP) Measures” section of this MD&A for a detailed reconciliation of these measures to cost of sales.

### Q3 2019 vs. Q3 2018

#### Production:

- Silver: 6% higher, primarily due to higher throughput and grades.
- By-products: zinc and lead production were 8% and 1% lower, respectively, while copper production was 5% higher, primarily as a result of mine sequencing into higher copper ore zones.

**Cash Costs:** increased \$1.77 per ounce primarily due to decreased base metal credits, which were partially offset by increased silver sales.

**Sustaining Capital:** related primarily to payments for equipment leases, near mine exploration, mine development, and equipment replacements and refurbishments. The decrease is primarily related to the reduction in expenditures in both the tailings storage facility construction project which is substantially complete, and the mine deepening project which has advanced to allow mining production, though some construction remains to be completed.

**AISC:** a decrease of \$2.34 per ounce, as the factors increasing quarter-over-quarter cash costs were offset by lower sustaining capital expenditures.

## Morococho mine<sup>(1)</sup>

	Three months ended September 30,		Nine months ended September 30,	
	2019	2018 <sup>(2)</sup>	2019	2018 <sup>(2)</sup>
Tonnes milled – kt	169.9	169.5	509.7	509.0
Average silver grade – grams per tonne	122	155	131	147
Average zinc grade - %	3.82	3.89	3.83	3.72
Average lead grade - %	1.20	0.90	1.22	0.87
Average copper grade - %	0.46	0.67	0.44	0.74
Production:				
Silver – koz	588	758	1,901	2,141
Gold – koz	0.26	0.44	1.16	1.90
Zinc – kt	5.78	5.80	17.04	16.40
Lead – kt	1.60	1.14	4.95	3.29
Copper – kt	0.46	0.85	1.36	2.85
<b>Cash Costs<sup>(3)</sup></b>	<b>\$ 5.66</b>	<b>\$ (0.97)</b>	<b>\$ 2.52</b>	<b>\$ (5.75)</b>
<b>Sustaining capital (100%) - ('000s)<sup>(4)</sup></b>	<b>\$ 3,004</b>	<b>\$ 4,797</b>	<b>\$ 8,654</b>	<b>\$ 10,681</b>
<b>AISC<sup>(3)</sup></b>	<b>\$ 11.36</b>	<b>\$ 6.39</b>	<b>\$ 7.60</b>	<b>\$ 0.02</b>
<b>Payable silver sold (100%) - koz</b>	<b>564</b>	<b>688</b>	<b>1,820</b>	<b>1,978</b>

(1) Production figures are for Pan American's 92.3% share only, unless otherwise noted.

(2) 2018 AISC per ounce sold included in the table above have been calculated and presented as comparative amounts to conform to the methodology used by the Company to calculate the 2019 AISC per ounce sold. The change in methodology relates to the sustaining capital calculation to account for the adoption of IFRS 16, and sustaining capital now includes lease payments. Previously leased assets were included as sustaining capital in the period of acquisition, while future related lease payments were excluded.

(3) Cash Costs and AISC are non-GAAP measures. Please refer to the "Alternative Performance (Non-GAAP) Measures" section of this MD&A for a detailed reconciliation of these measures to cost of sales.

(4) Sustaining capital expenditures exclude \$0.8 million and \$1.5 million of investing activity cash outflow for Q3 2019 and YTD 2019, respectively (Q3 and YTD 2018: \$nil) related to investment capital incurred on Morococho plant studies, as disclosed in the "Project Development Update" section of this MD&A.

### Q3 2019 vs. Q3 2018

#### Production:

- Silver: 22% lower due to lower grades from mine sequencing.
- By-products: zinc production was consistent with the prior period, whereas lead production increased 41% and copper production decreased 46%. This was the result of mine sequencing into higher lead ore zones.

**Cash Costs:** \$6.63 per ounce higher, primarily because of lower by-product metal prices, lower silver and copper production, and higher treatment and refining charges.

**Sustaining Capital:** primarily related to near-mine exploration, equipment replacements and refurbishments, and equipment and facility leases. The decrease over the comparable period is related to lower brownfield exploration in the current quarter.

**AISC:** \$4.97 per ounce higher due to the same factors affecting quarter-over-quarter cash costs, which were only partially offset by lower sustaining capital expenditures.

## San Vicente mine <sup>(1)</sup>

	Three months ended September 30,		Nine months ended September 30,	
	2019	2018 <sup>(2)</sup>	2019	2018 <sup>(2)</sup>
Tonnes milled – kt	88.0	82.9	258.5	244.7
Average silver grade – grams per tonne	330	354	352	358
Average zinc grade - %	2.01	3.12	2.28	2.45
Average lead grade - %	0.20	0.36	0.13	0.34
Average copper grade - %	0.33	0.35	0.32	0.41
Production:				
Silver – koz	860	867	2,651	2,607
Gold – koz	0.13	0.12	0.35	0.39
Zinc – kt	1.40	2.16	4.70	4.65
Lead – kt	0.16	0.10	0.29	0.54
Copper – kt	0.23	0.21	0.63	0.80
<b>Cash Costs</b> <sup>(3)</sup>	\$ 13.04	\$ 9.07	\$ 10.90	\$ 9.76
<b>Sustaining capital (100%) - ('000s)</b>	\$ 1,508	\$ 1,740	\$ 2,912	\$ 5,346
<b>AISC</b> <sup>(3)</sup>	\$ 15.21	\$ 11.12	\$ 11.94	\$ 11.93
<b>Payable silver sold (100%) - koz</b>	<b>728</b>	876	<b>3,002</b>	2,551

(1) Production figures are for Pan American's 95.0% share only, unless otherwise noted.

(2) 2018 AISC per ounce sold included in the table above have been calculated and presented as comparative amounts to conform to the methodology used by the Company to calculate the 2019 AISC per ounce sold. The change in methodology relates to the sustaining capital calculation to account for the adoption of IFRS 16, and sustaining capital now includes lease payments. Previously leased assets were included as sustaining capital in the period of acquisition, while future related lease payments were excluded.

(3) Cash Costs and AISC are non-GAAP measures. Please refer to the "Alternative Performance (Non-GAAP) Measures" section of this MD&A for a detailed reconciliation of these measures to cost of sales.

### Q3 2019 vs. Q3 2018

#### Production:

- Silver: 1% lower primarily from lower grades partially offset by higher throughput.
- By-products: the 35% decrease in zinc was the result of lower grades from mine sequencing, whereas the 73% and 7% increases in lead and copper production related to mine sequencing.

**Cash Costs:** \$3.97 per ounce higher due to increased direct operating costs per ounce from inflation in labour costs, reduced ore zone widths and increased consumables, as well as lower zinc by-product credits.

**Sustaining Capital:** Q3 2019 expenditures primarily relate to mine equipment replacements and rehabilitation, and near-mine exploration.

**AISC:** the \$4.09 per ounce increase was due primarily to the same factors that increased cash costs.

## Manantial Espejo mine

	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Tonnes milled - kt	180.9	206.1	522.1	605.9
Average silver grade – grams per tonne	120	121	119	148
Average gold grade – grams per tonne	1.02	1.12	1.03	1.56
Production:				
Silver – koz	606	718	1,782	2,505
Gold – koz	5.41	7.06	15.71	28.37
<b>Cash Costs<sup>(1)</sup></b>	<b>\$ 24.22</b>	<b>\$ 13.23</b>	<b>\$ 22.09</b>	<b>\$ 12.79</b>
<b>Sustaining capital - ('000s)</b>	<b>\$ 677</b>	<b>\$ 763</b>	<b>\$ 2,062</b>	<b>\$ 2,391</b>
<b>AISC<sup>(1)</sup></b>	<b>\$ 21.35</b>	<b>\$ 24.78</b>	<b>\$ 19.33</b>	<b>\$ 14.07</b>
<b>Payable silver sold - koz</b>	<b>348</b>	<b>810</b>	<b>1,532</b>	<b>2,471</b>

(1) Cash Costs and AISC are non-GAAP measures. Please refer to the “Alternative Performance (Non-GAAP) Measures” section of this MD&A for a detailed reconciliation of these measures to cost of sales.

### Q3 2019 vs. Q3 2018

#### Production:

- Silver and Gold: 16% and 23% decreases, respectively, primarily from lower throughput and the processing of lower grade stockpiles.

Cash Costs: an increase of \$10.99 per ounce, primarily as a result of higher direct selling costs due to the introduction of an export tax in late 2018 and lower silver and gold sales.

Sustaining Capital: Q3 2019 expenditures were primarily related to lease payments for diesel generators on site.

AISC: the \$3.43 per ounce decrease was primarily the result of a \$15.42 per ounce positive move in non-cash NRV inventory adjustments, which was partially offset by the factors described above that increased cash costs.

## Gold Segment Mines

The Gold Segment Mines were acquired on February 22, 2019, and as such, the financial and operating results of these mines have only been reported, and included in the Company's consolidated results, from this date forward. All comparative 2018 period amounts for the Acquired Mines will be nil.

	Three months ended September 30,			Nine months ended September 30,		
	Shahuindo	La Arena	Timmins	Shahuindo	La Arena	Timmins
Tonnes milled - kt	3,318.8	2,962.0	413.8	7,769.4	5,877.9	1,006.8
Average silver grade – grams per tonne	8.72	0.48	—	7.90	0.44	—
Average gold grade – grams per tonne	0.60	0.38	3.26	0.61	0.41	3.18
Production:						
Silver – koz	37.22	6.36	4.89	82.41	15.34	12.00
Gold – koz	40.56	30.96	38.28	101.85	74.09	96.44
Cash Costs <sup>(1)</sup>	\$ 552	\$ 738	\$ 922	\$ 555	\$ 685	\$ 914
Sustaining capital - ('000s) <sup>(2)</sup>	\$ 8,652	\$ 7,250	\$ 2,982	\$ 15,717	\$ 39,176	\$ 6,969
AISC <sup>(1)</sup>	\$ 775	\$ 988	\$ 1,026	\$ 738	\$ 1,217	\$ 1,005
Payable gold ounces sold	40,904	30,886	36,200	93,449	76,145	96,900

(1) Cash Costs and AISC are non-GAAP measures. Please refer to the “Alternative Performance (Non-GAAP) Measures” section of this MD&A for a detailed reconciliation of these measures to cost of sales.

(2) Timmins sustaining capital expenditures exclude \$0.4 million and \$2.6 million of investing activity cash outflow for Q3 2019 and YTD 2019, respectively, and related primarily to reduction in accounts payable balances from the Bell Creek shaft project completed prior to acquisition. Shahuindo sustaining capital expenditures exclude \$1.5 million and \$3.3 million of investing activity cash outflow for Q3 2019 and YTD 2019, respectively, relating to project development.

### YTD 2019 Performance:

#### Shahuindo

**Production:** gold production of 101.9 thousand ounces since the acquisition was consistent with Management's expectations and is on track to meet Management's annual August 2019 Forecast range of 137.0 thousand to 165.0 thousand ounces.

**Cash Costs:** of \$555 per gold ounce in YTD 2019 were within Management's 2019 annual forecast range of \$550 to \$625 per ounce.

**Sustaining Capital:** primarily comprised of leach pad construction and mining equipment, and was consistent with expectations.

**AISC:** YTD 2019 of \$738 were lower than Management's 2019 annual forecast range of \$875 to \$1,000, as a result of lower sustaining capital expenditures in the first half of the year.

#### La Arena

**Production:** gold production of 74.1 thousand ounces since the acquisition was consistent with Management's expectations and is on track to meet Management's 2019 annual forecast range of 117.5 thousand to 122.5 thousand ounces.

**Cash Costs:** YTD 2019 of \$685 per gold ounce were lower than Management's 2019 annual forecast range of \$800 to \$850 per ounce, due to the timing of cost recognition related to pre-stripping activities.

**Sustaining Capital:** primarily comprised of pre-stripping activities, leach pad construction, mine infrastructure, and land purchases, and was consistent with Management's expectations.

**AISC:** YTD 2019 of \$1,217 was lower than Management's 2019 annual forecast range of \$1,275 to \$1,325, due to better than expected gold sales, as well as the timing of some projects into the fourth quarter of 2019.

## Timmins

**Production:** gold production of 96.4 thousand ounces since the Acquisition was approximately 61% of the midpoint of Management's 2019 annual forecast range of 155.0 thousand to 160.0 thousand ounces.

**Cash Costs:** YTD 2019 of \$914 per gold ounce are within Management's 2019 annual forecast range of \$890 to \$940 per ounce.

**Sustaining Capital:** primarily comprised of exploration, equipment rebuilds and infrastructure upgrades, and was consistent with expectations.

**AISC:** YTD 2019 was \$1,005, which is slightly below the lower end of Management's 2019 annual forecast range of \$1,025 to \$1,075.

## 2019 ANNUAL OPERATING OUTLOOK

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These estimates are forward-looking statements and information that are subject to the cautionary note associated with forward-looking statements and information at the end of this MD&A. The following forecast amounts refer the August 2019 Forecast, as provided in the Company's Q2 2019 MD&A dated August 7, 2019, and include certain forecast amounts for the Acquired Mines from February 22, 2019 to December 31, 2019.

### Production Relative to Forecast:

The following table summarizes the 2019 metal production up to September 30, 2019 compared to the August 2019 Forecast amounts:

	YTD 2019 Actual	August 2019 Forecast	% of 2019 Forecast <sup>(1)</sup>
Silver – Moz	19.26	25.3 - 26.3	75%
Gold <sup>(1)</sup> – koz	385.3	550.0 - 600.0	67%
Zinc – kt	51.0	65.0 - 67.0	77%
Lead – kt	20.2	24.0 - 25.0	82%
Copper – kt	6.4	9.8 - 10.3	64%

(1) Percentage calculated based on mid-point of the guidance ranges in the table above. Note the annual gold forecast is predominantly made up of the approximately 10 months of 2019 production from the acquired Gold Segment mines from the February 22, 2019 acquisition date to December 31, 2019, as such the YTD seven months of production is 70% of forecasted 10 months for the Acquired Mines.

Based on year-to-date production results and the expected production for the remainder of the year, Management reaffirms the August 2019 Forecast annual consolidated metal production as shown in the table above.

### Cash Costs and AISC Compared to Forecast:

The following table summarizes 2019 Cash Costs and AISC for each operation up to September 30, 2019 compared to the respective August 2019 Forecast amounts. These forecast estimates are largely influenced by Management's assumptions and estimates for productivity, input costs, commodity prices and currency exchange rates.

For the purposes of these comparisons, the symbols have the following meanings:

- ✓✓ Actual results were better than August 2019 Forecast range
- ✓ Actual results met the August 2019 Forecast range
- ✗ Actual results were short of August 2019 Forecast range

	Cash Costs <sup>(1)</sup> (\$ per ounce)			AISC <sup>(1)</sup> (\$ per ounce)		
	August 2019 Forecast <sup>(2)</sup>	YTD 2019 Actual		August 2019 Forecast <sup>(2)</sup>	YTD 2019 Actual	
<b>Silver Segment:</b>						
La Colorada	2.50 - 3.50	2.59	✓	3.50 - 4.50	4.15	✓
Dolores	2.80 - 3.40	3.27	✓	15.00 - 17.00	17.89	✗
Huaron	6.00 - 7.00	3.80	✓✓	7.50 - 9.25	7.24	✓✓
Morococha	3.10 - 4.00	2.52	✓✓	7.00 - 9.00	7.60	✓
San Vicente	10.60 - 11.50	10.90	✓	12.25 - 13.50	11.94	✓✓
Manantial Espejo	21.70 - 22.60	22.09	✓	22.00 - 24.00	19.33	✓✓
<b>Total<sup>(3)</sup></b>	<b>6.50 - 7.50</b>	<b>5.89</b>	<b>✓✓</b>	<b>9.75 - 11.25<sup>(3)</sup></b>	<b>10.14</b>	<b>✓</b>
<b>Gold Segment:</b>						
Shahuindo	550 - 625	555	✓	875 - 1,000	738	✓✓
La Arena	800 - 850	685	✓✓	1,275 - 1,325	1,217	✓✓
Timmins <sup>(4)</sup>	890 - 940	914	✓	1,025 - 1,075	1,005	✓✓
<b>Total</b>	<b>740 - 810</b>	<b>722</b>	<b>✓✓</b>	<b>1,025 - 1,125</b>	<b>972</b>	<b>✓✓</b>
<b>Consolidated Silver Basis<sup>(5)</sup></b>	<b>(3.30) - (1.80)</b>	<b>(3.58)</b>	<b>✓✓</b>	<b>7.00 - 9.00</b>	<b>5.62</b>	<b>✓✓</b>

- (1) Cash Costs and AISC are non-GAAP measures. Please refer to the "Alternative Performance (Non-GAAP) Measures" section of this MD&A for a detailed description of these calculations and a reconciliation of these measures to the Q3 2019 Financial Statements. The cash costs and AISC August 2019 Forecasts assume realized metal prices for H1 2019 and the following metal prices for the remainder of 2019: of \$15.00/oz for silver, \$2,400/tonne (\$1.09/lb) for zinc, \$1,950/tonne (\$0.88/lb) for lead, \$6,000/tonne (\$2.72/lb) for copper, and \$1,375/oz for gold; and average annual exchange rates relative to 1 USD of 19.50 for the Mexican peso ("MXN"), 3.33 of the Peruvian sol ("PEN"), 41.80 for the Argentine peso ("ARS"), 6.91 for the Bolivian boliviano ("BOL"), and \$1.30 for the Canadian dollar ("CAD").
- (1) Consolidated total is calculated per silver ounce sold with gold revenues included in the by-product credits.
- (2) As shown in the detailed quantification of consolidated AISC, included in the "Alternative Performance (Non-GAAP) Measures" section of this MD&A, corporate general and administrative expense, and exploration and project development expense are included in consolidated (silver basis) AISC, but are not allocated amongst the operations and thus are not included in either the silver or gold segment totals.
- (3) Consolidated silver basis is calculated by treating all revenues from metals other than silver, including gold, as a by-product credit.

## Capital Expenditures Relative to Forecast:

The following table summarizes the 2019 capital expenditures up to September 30, 2019 compared to the August 2019 Forecast:

	2019 Capital Expenditures (\$ millions)		
	YTD 2019 Actual	August 2019 Forecast	% of Annual Guidance <sup>(1)</sup>
La Colorada	7.8	6.5 – 7.0	116%
Dolores	41.6	53.0 – 54.0	78%
Huaron	8.1	6.5 – 7.5	116%
Morococha	8.7	11.0 – 12.0	76%
San Vicente	2.9	6.5 – 7.5	41%
Manantial Espejo	2.1	1.5 – 2.0	120%
Shahuindo	15.7	47.5 - 49.0	33%
La Arena	39.2	54.0 - 56.0	71%
Timmins	7.0	16.5 - 18.0	41%
<b>Sustaining Capital Sub-total</b>	<b>132.9</b>	<b>203.0 - 213.0</b>	<b>64%</b>
Morococha projects	1.5	2.50	60%
Mexico projects	8.6	7.50	115%
Joaquin and COSE projects	18.1	25.00	72%
Acquired Mines projects	6.9	10.00	69%
<b>Project Capital Sub-total</b>	<b>35.1</b>	<b>45.00</b>	<b>78%</b>
<b>Total Capital</b>	<b>168.0</b>	<b>248.0 - 258.0</b>	<b>66%</b>

(1) Percentage calculated based on mid-point of the related 2019 guidance range.

Based on year-to-date capital expenditures and those expected for the remainder of the year, Management reaffirms the August 2019 Forecast as shown in the table above.

## November 2019 Forecast:

Based on Cash Costs and AISC achieved YTD 2019, increased gold price expectations and the expected results for the remainder of 2019, Management is lowering Silver Segment, Gold Segment and Consolidated Silver Basis cash costs and AISC forecasts as set out in the table below:

	Cash Costs <sup>(1)</sup> (\$ per ounce)		AISC <sup>(1)</sup> (\$ per ounce)	
	November 2019 Forecast	August 2019 Forecast	November 2019 Forecast	August 2019 Forecast
<b>Silver Segment</b>	<b>6.00 - 7.00</b>	6.50 - 7.50	<b>9.50 - 11.00</b>	9.75 - 11.25
<b>Gold Segment</b>	<b>725 - 775</b>	740 - 810	<b>1,000 - 1,100</b>	1,025 - 1,125
<b>Consolidated Silver Basis</b>	<b>(5.50) - (3.80)</b>	(3.30) - (1.80)	<b>6.00 - 7.50</b>	7.00 - 9.00

(1) Cash Costs and AISC are non-GAAP measures. Please refer to the "Alternative Performance (Non-GAAP) Measures" section of this MD&A for a detailed description of these calculations and a reconciliation of these measures to the Q3 2019 Financial Statements. The cash costs and AISC November 2019 Forecasts assume realized metal prices for YTD 2019 and the following metal prices for the remainder of 2019: of \$17.25/oz for silver, \$2,400/tonne (\$1.09/lb) for zinc, \$2,150/tonne (\$0.98/lb) for lead, \$5,750/tonne (\$2.61/lb) for copper, and \$1,475/oz for gold; and average annual exchange rates relative to 1 USD of 19.50 for the Mexican peso ("MXN"), 3.33 of the Peruvian sol ("PEN"), 41.80 for the Argentine peso ("ARS"), 6.91 for the Bolivian boliviano ("BOL"), and \$1.30 for the Canadian dollar ("CAD").

## PROJECT DEVELOPMENT UPDATE

The following table reflects the amounts spent at each of Pan American's major projects in Q3 2019 and YTD 2019 as compared with Q3 2018 and YTD 2018:

Project Development Capital <sup>(1)</sup> (thousands of USD)	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Mexico Projects	3,821	2,835	8,577	14,520
Joaquin and COSE projects	5,232	5,964	18,132	17,031
Morococha projects	825	—	1,480	—
Acquired Mines projects	1,910	—	6,927	—
<b>Total</b>	<b>11,788</b>	<b>8,799</b>	<b>35,116</b>	<b>31,551</b>

(1) Amounts provided in the table above, including prior year amounts, reflect cash-outflows for project capital in the respective periods, amounts provided in similar tables provided in previous MD&As represented amounts capitalized as part of the projects in the period reported. As a result of periodic changes in accounts payable balances, the amounts capitalized for the projects during the period may be different than the project investment cash outflows in the period.

During Q3 2019, the Company achieved the following progress on its projects:

### Mexico Projects:

The Company spent \$3.8 million in Q3 2019 for exploration drilling activities relating to the La Colorada skarn deposit discovery first announced in October 2018.

### Joaquin and COSE Projects:

The Company spent a combined \$5.2 million on the Joaquin and COSE projects during Q3 2019. As previously disclosed on June 17, 2019, development at both projects had been suspended following a fatal ground fall accident at COSE. At COSE, waste development resumed at the end of Q3 2019, while recommencing mining activities in the ore zones is pending a review of the ground control management procedures and the results of a geotechnical drilling program, which is anticipated to be completed in Q4 2019. The haulage of stockpiled ore from COSE to the Manantial Espejo plant started at the end of Q3 2019 with a total milled to date of 410 tonnes at 42.6 g/t gold and 1,688 g/t silver. Although this is a limited amount of high-grade COSE ore treated so far, the calculated mill recoveries rates were 95.6% for gold and 86.0% for silver, both rates greater than anticipated.

Development activities resumed at Joaquin in Q3 2019, and both ore and waste headings are currently active. Ore is being stockpiled on surface prior to transporting to the Manantial Espejo plant for processing.

### Morococha Project:

Project capital spending at Morococha during Q3 2019 related to the installation of a new powerline to the existing processing plant and preliminary engineering and design work for a future plant relocation.

### Acquired Mines Projects:

The Company spent \$1.9 million primarily related to completing the crushing and agglomeration plant at Shahuindo and the mine shaft and paste plant projects at Bell Creek.

## OVERVIEW OF Q3 2019 FINANCIAL RESULTS

### Selected Annual and Quarterly Information

The following tables set out selected quarterly results for the past eleven quarters as well as selected annual results for the past two years. The dominant factors affecting results in the quarters and years presented below are volatility of realized metal prices and the timing of sales, which varies with the timing of shipments.

2019 (In thousands of USD, other than per share amounts)	Quarter Ended		
	March 31	June 30	September 30
Revenue	\$ 232,643	\$ 282,948	\$ 352,187
Mine operating earnings	\$ 17,194	\$ 36,140	\$ 63,850
Earnings for the period attributable to equity holders	\$ 33,275	\$ 18,371	\$ 37,657
Basic earnings per share	\$ 0.19	\$ 0.09	\$ 0.18
Diluted earnings per share	\$ 0.19	\$ 0.09	\$ 0.18
Cash flow from operating activities	\$ (12,911)	\$ 83,518	\$ 81,948
Cash dividends paid per share	\$ 0.035	\$ 0.035	\$ 0.035
<b>Other financial information</b>			
Total assets			\$ 3,456,131
Total long-term financial liabilities <sup>(1)</sup>			\$ 535,067
Total attributable shareholders' equity			\$ 2,445,263

(1) Total long-term financial liabilities are comprised of non-current liabilities excluding deferred tax liabilities, deferred revenue, and share purchase warrant liabilities.

2018 (In thousands of USD, other than per share amounts)	Quarter Ended				Year Ended
	March 31	June 30	Sept 30	Dec 31	Dec 31
Revenue	\$ 206,961	\$ 216,460	\$ 187,717	\$ 173,357	\$ 784,495
Mine operating earnings (loss)	\$ 55,124	\$ 54,851	\$ (4,412)	\$ (4,666)	\$ 100,897
Earnings (loss) for the period attributable to equity holders	\$ 47,376	\$ 36,187	\$ (9,460)	\$ (63,809)	\$ 10,294
Basic earnings (loss) per share	\$ 0.31	\$ 0.24	\$ (0.06)	\$ (0.42)	\$ 0.07
Diluted earnings (loss) per share	\$ 0.31	\$ 0.24	\$ (0.06)	\$ (0.42)	\$ 0.07
Cash flow from operating activities	\$ 34,400	\$ 66,949	\$ 41,699	\$ 11,930	\$ 154,978
Cash dividends paid per share	\$ 0.035	\$ 0.035	\$ 0.035	\$ 0.035	\$ 0.140
<b>Other financial information</b>					
Total assets					\$ 1,937,476
Total long-term financial liabilities <sup>(1)</sup>					\$ 96,828
Total attributable shareholders' equity					\$ 1,508,212

(1) Total long-term financial liabilities are comprised of non-current liabilities excluding deferred tax liabilities, deferred revenue, and share purchase warrant liabilities.

2017 (In thousands of USD, other than per share amounts)	Quarter Ended				Year Ended
	March 31	June 30	Sept 30	Dec 31	Dec 31
Revenue	\$ 198,687	\$ 201,319	\$ 190,791	\$ 226,031	\$ 816,828
Mine operating earnings	\$ 32,875	\$ 44,782	\$ 47,818	\$ 43,285	\$ 168,760
Earnings for the period attributable to equity holders	\$ 19,371	\$ 35,472	\$ 17,256	\$ 48,892	\$ 120,991
Basic earnings per share	\$ 0.13	\$ 0.23	\$ 0.11	\$ 0.32	\$ 0.79
Diluted earnings per share	\$ 0.13	\$ 0.23	\$ 0.11	\$ 0.32	\$ 0.79
Cash flow from operating activities	\$ 38,569	\$ 42,906	\$ 63,793	\$ 79,291	\$ 224,559
Cash dividends paid per share	\$ 0.025	\$ 0.025	\$ 0.025	\$ 0.025	\$ 0.100
<b>Other financial information</b>					
Total assets					\$ 1,993,332
Total long-term financial liabilities <sup>(1)</sup>					\$ 90,027
Total attributable shareholders' equity					\$ 1,516,850

(1) Total long-term financial liabilities are comprised of non-current liabilities excluding deferred tax liabilities, deferred revenue, and share purchase warrant liabilities.

## Income Statement: Q3 2019 vs. Q3 2018

**Net earnings** of \$37.7 million were recorded in Q3 2019 compared to a net loss of \$9.2 million in Q3 2018, which corresponds to basic earnings and loss per share of \$0.18 and \$0.06, respectively.

The following table highlights the differences between net earnings in Q3 2019 compared with Q3 2018:

Net loss, three months ended September 30, 2018 (in thousands of USD)		\$	(9,234)	Note
<b>Revenue:</b>				
Increased realized metal prices	\$	47,216		
Higher quantities of metal sold		111,713		
Increased direct selling costs		(5,389)		
Decreased negative settlement adjustments		10,930		
<b>Total increase in revenue</b>			<b>164,470</b>	<b>(1)</b>
<b>Cost of sales:</b>				
Increased production costs and increased royalty charges	\$	(55,821)		<b>(2)</b>
Increased asset held for sale reclassification adjustment		(15,596)		<b>(3)</b>
Increased depreciation and amortization		(24,791)		<b>(4)</b>
<b>Total increase in cost of sales</b>			<b>(96,208)</b>	
<b>Total increase in mine operating earnings</b>			<b>68,262</b>	
Increased income tax expense			(37,004)	<b>(5)</b>
Increased investment income and other expense			37,137	<b>(6)</b>
Increased care and maintenance costs			(6,365)	<b>(7)</b>
Increased interest and finance expense			(5,955)	<b>(8)</b>
Increased foreign exchange loss			(2,872)	
Increased transaction and integration costs			(2,863)	
Increased general and administrative expense			(2,562)	
Decreased net gain on asset sales, commodity contracts and derivatives			(2,257)	
Decreased exploration and project development expense			942	
Increased dilution gain, net of share of income from associate			490	
<b>Net earnings, three months ended September 30, 2019</b>	<b>\$</b>		<b>37,719</b>	

- Revenue** for Q3 2019 was \$164.5 million higher than in Q3 2018. The major drivers were a \$120.8 million increase from higher gold volumes sold, primarily from the addition of the newly acquired Gold Segment mines, and a \$51.2 million increase from higher silver and gold prices, which increased by 15% and 22% from Q3 2018, respectively. These factors were partially offset by decreased silver quantities sold and lower base metal prices.

The following table reflects the metal prices realized by the Company and the quantities of metal sold during each quarter:

	Realized Metal Prices <sup>(1)</sup>		Quantities of Metal Sold <sup>(2)</sup>	
	Three months ended September 30,		Three months ended September 30,	
	2019	2018	2019	2018
Silver	\$ 17.16	\$ 14.88	5,683	6,366
Gold	\$ 1,477	\$ 1,212	144.2	44.6
Zinc	\$ 2,276	\$ 2,472	14.8	13.6
Lead	\$ 2,002	\$ 2,072	6.3	5.8
Copper	\$ 5,780	\$ 6,105	2.0	2.5

(1) Metal price stated as dollars per ounce for silver and gold, and dollars per tonne for zinc, lead and copper, inclusive of final settlement adjustments on concentrate sales.

(2) Metal quantities stated as koz for silver and gold and kt for zinc, lead and copper.

2. **Production and Royalty costs** in Q3 2019 were \$55.8 million higher than in Q3 2018. The increase was mainly attributable to production costs being \$54.0 million higher, the result of: (i) additional production costs from the newly acquired Timmins (\$31.5 million), La Arena (\$30.9 million) and Shahuindo (\$28.8 million) mines; (ii) increased production costs at Dolores largely attributable to higher sales volumes; partially offset by (iii) \$30.2 million benefit from NRV inventory adjustments, which decreased production costs by \$6.7 million in Q3 2019 compared to increasing costs by \$23.4 million in Q3 2018; and (iv) lower production costs at Manantial Espejo and La Colorada, mainly attributable to lower quarter-over-quarter quantities of metals sold. Royalty charges in Q3 2019 were \$1.8 million higher than in Q3 2018, driven by primarily by royalty charges at the Timmins mines which were acquired in 2019.
3. **Assets held for sale reclassification adjustment** in Q3 2019 was a non-cash \$15.6 million revaluation accounting adjustment that was required upon the reclassification of the Timmins mines from 'discontinued assets held for sale' into continued operations. This reclassification is further described in the "Acquisition of Tahoe" section of this MD&A and represents the depletion and amortization of Timmins, which in accordance with IFRS was not recorded while Timmins was classified as held for sale.
4. **Depreciation and amortization ("D&A") expense** was \$24.8 million higher than in Q3 2018, largely as a result of additional depreciation expense from the Acquired Mines (\$18.4 million), and increased depreciation at Dolores due to a higher asset base.
5. **Income tax expense** of \$29.1 million in Q3 2019 was \$37.0 million higher than the \$7.9 million income tax recovery in Q3 2018. The higher taxes were largely attributable to the increase in net earnings before tax and to foreign exchange movements which negatively impacted tax assets.
6. **Investment income** increased by \$35.8 million from Q3 2018, reflecting the fair value mark-to-market adjustment of certain of the Company's equity investments, for which prices appreciated during the quarter.
7. **Care and maintenance costs** of \$6.4 million in Q3 2019, related primarily to the Company's Escobal mine, where operations are currently suspended.
8. **Interest and finance costs** increased \$6.0 million from Q3 2018, primarily reflecting the interest expense relating to the increased debt drawn on the Company's Credit Facility, to partially fund the Tahoe Acquisition, and increased interest expense mainly related to right of use lease assets and obligations recognized in 2019 as a result of the new IFRS standard for leases ("IFRS 16") further discussed in the "Changes in Accounting Standards" section of this MD&A..

## Statement of Cash Flows: Q3 2019 vs. Q3 2018

**Cash flow from operations** in Q3 2019 totaled \$81.9 million, \$40.2 million more than the \$41.7 million generated in Q3 2018. The increase was mainly attributable to the addition of the Acquired Mines and improved cash mine operating earnings at Dolores, which was partially offset by lower operating cash flows at Manantial Espejo due to the impact of lower margins and a build-up in working capital largely due to the timing of sales.

Working capital changes in Q3 2019 resulted in a \$14.9 million use of cash compared with a \$4.2 million source of cash in Q3 2018. The Q3 2019 use of cash was driven by a \$20.2 million build-up in trade and other receivables, most of which was related to La Colorada, Huaron and La Arena sales.

**Investing activities** utilized \$47.5 million in Q3 2019, which related primarily to the \$49.9 million spent on mineral properties, plant and equipment at the Company's mines and projects, as previously described in the "Operating Performance" section of this MD&A. In Q3 2018, investing activities utilized \$35.3 million inclusive of \$3.5 million used for the net purchase of short-term investments, with \$33.6 million spent on mineral properties, plant and equipment at the Company's mines and projects.

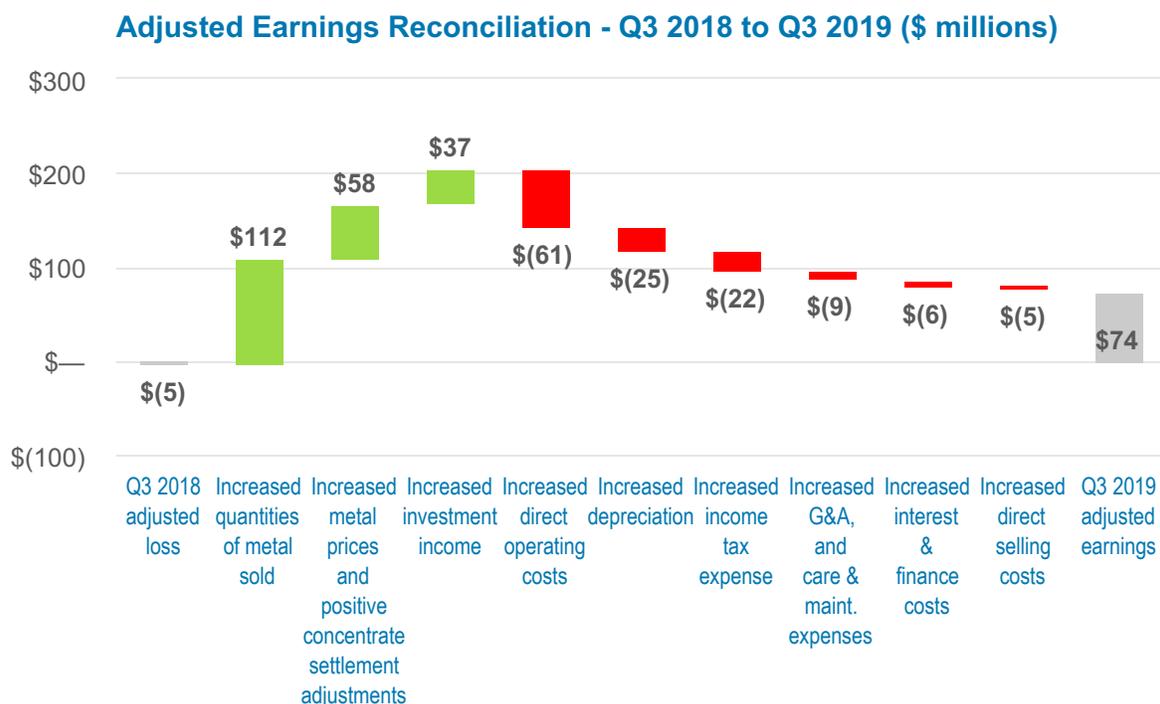
**Financing activities** in Q3 2019 used \$31.2 million compared to \$7.4 million in Q3 2018. Cash used in Q3 2019 primarily consisted of a \$20.0 million repayment of the Credit Facility, \$7.3 million in dividends, and \$4.7 million of lease repayments. In Q3 2018, cash used in financing activities consisted of \$5.4 million in dividends and \$2.2 million of lease repayments.

## Adjusted Earnings: Q3 2019 vs Q3 2018

Adjusted earnings is a non-GAAP measure. Please refer to the section of this MD&A entitled “Alternative Performance (Non-GAAP) Measures” for a detailed description of “adjusted earnings”, and a reconciliation of these measures to the Q3 2019 Financial Statements.

**Adjusted Earnings** in Q3 2019 was \$74.2 million, representing basic adjusted earnings per share of \$0.35, which was \$78.9 million, or \$0.38 per share, higher than Q3 2018 adjusted loss of \$4.7 million, and basic adjusted earnings per share of \$0.03, respectively.

The following chart illustrates the key factors leading to the change in adjusted earnings from Q3 2018 to Q3 2019



## Income Statement: YTD 2019 vs. YTD 2018

**Net earnings** of \$90.0 million were recorded in YTD 2019 compared to \$75.6 million in YTD 2018, which corresponds to basic earnings per share of \$0.45 and \$0.48, respectively.

The following table highlights the difference between net earnings in YTD 2019 compared with YTD 2018:

Net earnings, nine months ended September 30, 2018 (in thousands of USD)		\$	75,618	Note
<b>Revenue:</b>				
Increased realized metal prices	\$	4,967		
Higher quantities of metal sold		331,508		
Increased direct selling costs		(13,870)		
Decreased negative settlement adjustments		12,637		
<b>Total increase in revenue</b>			<b>335,242</b>	<b>(1)</b>
<b>Cost of sales:</b>				
Increased production costs and increased royalty charges	\$	(234,957)		<b>(2)</b>
Increased asset held for sale reclassification adjustment		(15,596)		<b>(3)</b>
Increased depreciation and amortization		(59,574)		<b>(4)</b>
<b>Total increase in cost of sales</b>			<b>(310,127)</b>	
<b>Total increase in mine operating earnings</b>			<b>25,115</b>	
Increased investment income and other expense			51,501	<b>(5)</b>
Increased income tax expense			(30,207)	<b>(6)</b>
Increased bargain purchase gain			30,492	<b>(7)</b>
Increased care and maintenance costs			(15,654)	<b>(8)</b>
Increased interest and finance expense			(15,121)	<b>(9)</b>
Decreased dilution gain, net of share of loss from associate			(12,862)	<b>(10)</b>
Increased transaction and integration costs			(7,712)	<b>(11)</b>
Decreased net gain on asset sales, commodity contracts and derivatives			(6,862)	
Increased general and administrative expense			(4,544)	
Decreased foreign exchange loss			1,759	
Increased exploration and project development expense			(1,493)	
<b>Net earnings, nine months ended September 30, 2019</b>	<b>\$</b>		<b>90,030</b>	

- Revenue** for YTD 2019 was \$335.2 million higher than in YTD 2018. The major factor for the increase was an approximately \$331.5 million contribution from larger quantities of metal sold, primarily from a 239.9 thousand ounce increase in gold sales, reflecting production from the Acquired Mines. Changes in metal prices also increased revenue by approximately \$5.0 million, the result of a 7% increase in gold prices more than offsetting decreased prices for all other metals.

The following table reflects the metal prices realized by the Company and the quantities of metal sold during each period:

	Realized Metal Prices <sup>(1)</sup>		Quantities of Metal Sold	
	Nine months September 30,		Nine months September 30,	
	2019	2018	2019	2018
Silver <sup>(1)</sup>	\$ 15.81	\$ 15.98	18,284	17,860
Gold <sup>(1)</sup>	\$ 1,373	\$ 1,283	377.2	137.3
Zinc <sup>(1)</sup>	\$ 2,605	\$ 2,981	44.9	39.1
Lead <sup>(1)</sup>	\$ 1,972	\$ 2,286	19.7	15.2
Copper <sup>(1)</sup>	\$ 6,019	\$ 6,641	5.6	7.1

1) Metal price stated as dollars per ounce for silver and gold, and dollars per tonne for zinc, lead and copper, inclusive of final settlement adjustments on concentrate sales.

(2) Metal quantities stated as koz for silver and gold and kt for zinc, lead and copper.

2. **Production and royalty costs** in YTD 2019 were \$235.0 million higher than in YTD 2018. The increase was mainly attributable to production costs being \$232.2 million higher due largely to: (i) additional production costs from the newly Acquired Mines (\$232.3 million); (ii) increased production costs at Dolores and San Vicente, from higher sales volumes and costs; partially offset by (iii) lower production costs at Manantial Espejo due to lower gold and silver sales volumes and the depreciation of the ARS. Royalty charges in YTD 2019 were \$2.7 million higher, due primarily to royalty charges at the Timmins mines which were acquired in 2019.
3. **Assets held for sale reclassification adjustment** in YTD 2019 represents the same non-cash \$15.6 million revaluation accounting adjustment previously described in Q3 2019 versus Q3 2018 income statement discussion section of this MD&A.
4. **D&A expense** was \$59.6 million higher than in YTD 2018, largely as a result of additional depreciation expense from the Acquired Mines (\$40.2 million), and increased depreciation at Dolores due to a higher asset base.
5. **Investment income** in YTD 2019 was \$51.0 million compared to \$1.1 million in YTD 2018, the increase reflects the fair value mark-to-market adjustment of certain of the Company's equity investments for which prices appreciated during 2019.
6. **Income tax expense** of \$45.3 million in YTD 2019 was \$30.2 million higher than in YTD 2018. The higher taxes were largely attributable to the same factors described in the quarter-over-quarter differences.
7. A **Bargain purchase gain** was recognized as part of the purchase price allocation of the Tahoe Acquisition as described in the "Acquisition of Tahoe" section of this MD&A.
8. **Care and maintenance costs** totaled \$15.7 million in YTD 2019 and related primarily to the Company's Escobal mine where operations are currently suspended.
9. **Interest and finance costs** of \$21.0 million in YTD 2019 increased by \$15.1 million from YTD 2018, reflecting the interest expense relating to the debt drawn on the Credit Facility, and increased interest expense related to IFRS 16 leases.
10. **Share of income from associate and dilution gains** were \$1.0 million in YTD 2019 compared to \$13.9 million in YTD 2018, and relate to the Company's investment in Maverix Metals Inc. ("Maverix") which is accounted for using the equity method whereby the Company records its portion of Maverix's net income based on Pan American's fully diluted ownership interest. The period over period decrease was attributable to Maverix issuing common shares in 2018 to acquire certain royalty assets which diluted Pan American's ownership in Maverix and resulted in the recognition of a \$13.4 million dilution gain.
11. **Transaction and integration costs** in YTD 2019 of \$7.7 million related to costs incurred as part of the acquisition and integration of Tahoe.

## Statement of Cash Flows: YTD 2019 vs. YTD 2018

**Cash flow from operations** in YTD 2019 was \$152.6 million, \$9.5 million more than the \$143.0 million generated in YTD 2018. The increase was due to the additional operating cash flow from the newly Acquired Mines, which was mostly offset by lower cash mine operating earnings at Dolores and Manantial Espejo due to a combination of lower revenues and higher operating costs per ounce (see "Individual Mine Performance" section of this MD&A), and a \$33.3 million increase in use of cash from working capital changes.

Working capital changes in YTD 2019 resulted in a \$32.7 million use of cash reflecting a \$47.1 million pay down of accounts payable and accrued liabilities partially offset by a \$32.5 million draw-down of inventories. These working capital movements compared to the \$0.6 million source of cash in YTD 2018, which was driven by collections of accounts receivables, partially offset by the settlement of liabilities.

**Investing activities** utilized \$350.6 million in YTD 2019, inclusive of \$41.6 million received from the net sale of short-term investments. The investing cash outflow reflects the \$247.5 million investment (net of cash acquired) related to the Acquisition, as described in the "Acquisition of Tahoe" section of this MD&A, and \$155.5 million spent on mineral properties, plant and equipment at the Company's mines and projects.

In YTD 2018, investing activities utilized \$108.1 million, primarily related to \$102.0 million spent on mineral properties, plant and equipment at the Company's mines and projects, and \$7.5 million spent on the acquisition of the COSE project.

Cash from the sale of certain non-core assets in YTD 2019 and YTD 2018 totaled \$10.2 million and \$15.8 million, respectively.

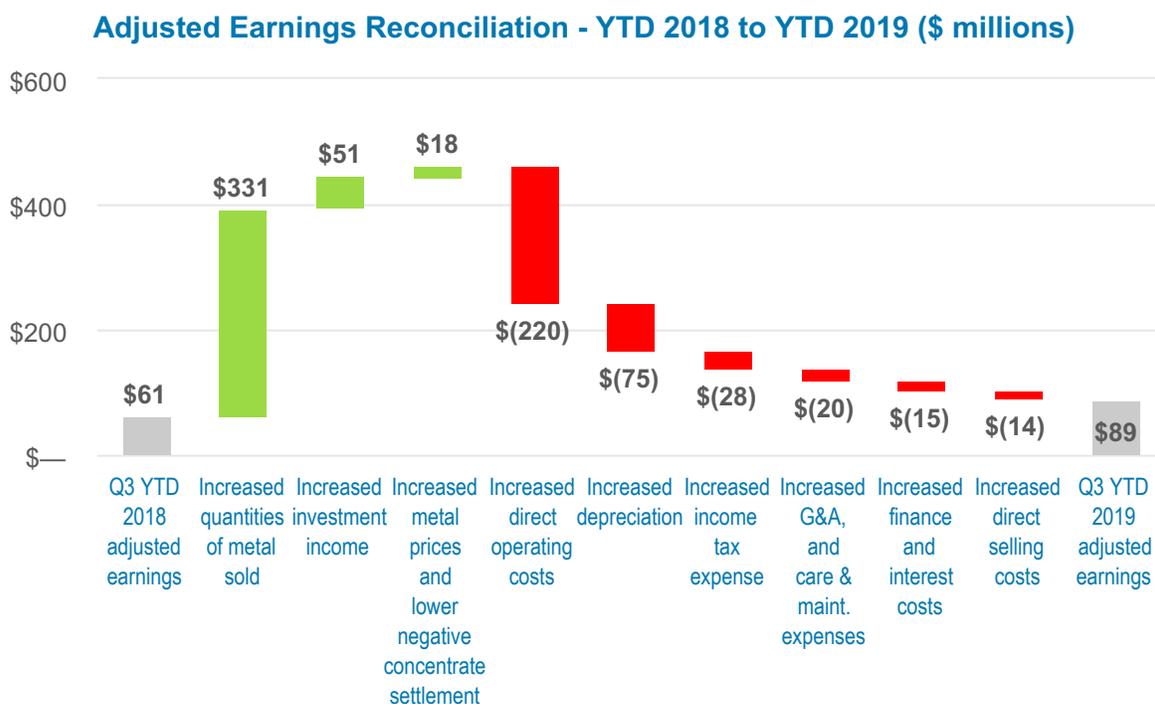
**Financing activities** in YTD 2019 generated a net \$155.2 million compared to a \$24.4 million net use of cash in YTD 2018. Financing activities in YTD 2019 were primarily related to financing the Tahoe Acquisition. The net cash generated consisted of a net \$315.0 million drawn on the Company's Credit Facility, described in the "Liquidity and Capital" section of this MD&A, and \$125.0 million used to settle Tahoe's previously drawn credit facility. In addition to these acquisition related financing activities, \$22.0 million was paid as dividends and \$13.5 million of lease repayments were made in YTD 2019. Financing activities in YTD 2018 consisted of \$15.9 million paid as dividends to shareholders, \$5.7 million of lease repayments, and \$3.0 million used to repay short-term loans.

## Adjusted Earnings: YTD 2019 vs YTD 2018

Adjusted earnings is a non-GAAP measure. Please refer to the section of this MD&A entitled "Alternative Performance (Non-GAAP) Measures" for a detailed description of "adjusted earnings", and a reconciliation of these measures to the Q3 2019 Financial Statements.

**Adjusted Earnings** in YTD 2019 were \$89.1 million, representing basic adjusted earnings per share of \$0.45, which was \$27.6 million, or \$0.05 per share, higher than YTD 2018 adjusted earnings of \$61.5 million, and basic adjusted earnings per share of \$0.40.

The following chart illustrates the key factors leading to the change in adjusted earnings from YTD 2018 to YTD 2019:



## ACQUISITION OF TAHOE

The Company completed the Acquisition on February 22, 2019 (the "Closing Date").

In aggregate, Pan American paid Tahoe shareholders \$275.0 million in cash, issued 55,990,512 Pan American shares, and issued contingent consideration in the form of 313,887,490 contingent value rights (CVRs). Each CVR will be exchanged for 0.0497 of a Pan American share upon first commercial shipment of concentrate following restart of operations at the Escobal mine. The CVRs are transferable and have a term of 10 years. Upon closing of the Arrangement, existing Pan American and former Tahoe shareholders owned approximately 73% and 27% of Pan American, respectively. Upon satisfaction of the payment conditions under the terms of the CVRs, Pan American and Tahoe shareholders will own approximately 68% and 32%, respectively, of the combined company (based upon the number of Pan American shares outstanding as at the Closing Date).

### Revolving credit facility increase and draw-down

The Company amended and extended its Credit Facility. The Credit Facility was increased by \$200.0 million to \$500.0 million in Q1 2019, and now matures on February 1, 2023. At Pan American's option, amounts can be drawn under the Credit Facility and will incur interest based on the Company's leverage ratio at either (i) LIBOR plus 1.875% to 2.750% or; (ii) The Bank of Nova Scotia's Base Rate on U.S. dollar denominated commercial loans plus 0.875% to 1.750%. Undrawn amounts under the Credit Facility are subject to a stand-by fee of 0.4219% to 0.6188% per annum, dependent on the Company's leverage ratio.

In conjunction with the Acquisition, the Company drew down \$335.0 million on the Credit Facility in Q1 2019 under LIBOR-based interest rates to fund, in part, the cash purchase price under the Arrangement and to repay Tahoe's revolving facility, under which \$125.0 million was outstanding at the date of acquisition. The Company repaid \$20 million of the Credit Facility during Q3 2019.

## Consolidation of Tahoe

As described in Note 4 of the Q3 2019 Financial Statements, the Company determined that the Acquisition represents a business combination with Pan American identified as the acquirer. Based on the February 21, 2019, closing share price of Pan American's common shares on the NASDAQ, the total consideration of the acquisition was approximately \$1.14 billion. We commenced the consolidation of the operating results, cash flows and net assets of Tahoe from February 22, 2019 onwards. As such, all production, operating and financial results of the Acquired Mines (including Cash Costs and AISC amounts) reported in this MD&A and included in the Company's consolidated results reflect only the results from February 22, 2019 onwards.

The following table summarizes the consideration paid as part of the purchase price:

<b>Consideration:</b>	<b>Shares Issued/ Issuable</b>	<b>Consideration</b>
Fair value estimate of the Pan American share consideration <sup>(1)</sup>	55,990,512	\$ 795,626
Fair value estimate of the CVRs <sup>(2)</sup>	15,600,208	71,916
Cash <sup>(1)</sup>	—	275,008
Fair value estimate of replacement options <sup>(3)</sup>	835,874	124
<b>Total Consideration</b>	<b>72,426,594</b>	<b>\$ 1,142,674</b>

- (1) The Pan American share consideration value is based on an assumed value of \$14.21 per Pan American common share (based on the NASDAQ closing price on February 21, 2019).
- (2) Assumed fair value of the CVRs is based on the residual amount of the value of the Tahoe shares acquired (based on the NYSE closing price closing of \$3.64 on February 21, 2019) after deducting the cash consideration of \$275 million and the fair value of the Company's common share consideration paid (based on the February 21, 2019 NASDAQ closing price of \$14.21).
- (3) Assumed fair value of 3.5 million Tahoe options that upon the Acquisition vested and converted into 835.8 thousand Pan American stock options (the "Replacement options"). The fair value of the Replacement options was determined using the Black-Scholes option pricing model, as at the Acquisition Closing Date, the assumptions of which are described in the Company's Q3 2019 Financial Statements.

The following table summarizes the allocation of the purchase price to the identifiable assets and liabilities based on their estimated fair values at the Closing Date of the Acquisition:

<b>Allocation of consideration:</b>	<b>Consideration</b>
Cash and cash equivalents	\$ 27,529
Accounts receivable	17,854
VAT Receivable	87,268
Inventory	152,534
Other current assets	4,135
Mineral properties, plant and equipment	1,298,037
Other assets	3,450
Accounts payable and accrued liabilities	(159,675)
Provision for closure and decommissioning liabilities	(70,119)
Debt	(125,000)
Net current and deferred income tax liabilities	(62,847)
Bargain purchase gain	(30,492)
	<b>\$ 1,142,674</b>

As at September 30, 2019, the allocation of the purchase price had not been finalized. The Company is currently in the process of determining the fair values of identifiable assets acquired and liabilities assumed and measuring the associated deferred income tax assets and liabilities, and will finalize the allocation of the purchase price no later than February 21, 2020.

## Held for Sale Assets

Concurrent with the Acquisition, the Company formally initiated an active program to locate a buyer of the Timmins mines. Based on Management's assessment, the Company's sales process met the criteria under IFRS 5 - Non-current assets held for sale and discontinued operations. As such, upon the Acquisition, and as at June 30, 2019, the assets and liabilities related to the Timmins mines were classified as assets and liabilities held for sale and were presented separately under current assets and current liabilities, respectively, and the post-tax profit or

loss from the Timmins operations were presented as a single and separate item on the Company's consolidated income statement.

A change in Management's intentions related to the sale of Timmins during Q3 2019 resulted in the Company no longer meeting the IFRS criteria to classify Timmins as held for sale. As a result, the Timmins assets and liabilities are no longer presented separately on the Company's September 30, 2019 balance sheet and the net income generated by Timmins for the three and nine months are reflected on the Company's income statements in the normal course.

## LIQUIDITY AND CAPITAL POSITION

Liquidity and Capital Measures (in \$000s)	September 30, 2019	June 30, 2019	Dec. 31, 2018	Q3 2019 Change	YTD 2019 Change
Cash and cash equivalents ("Cash")	\$ 94,713	\$ 92,221	\$ 138,510	\$ 2,492	\$ (43,797)
Short-term Investments	\$ 82,310	\$ 46,594	\$ 74,004	\$ 35,716	\$ 8,306
Cash and Short-term investments	\$ 177,023	\$ 138,815	\$ 212,514	\$ 38,208	\$ (35,491)
Working Capital	\$ 459,272	\$ 793,090	\$ 397,846	\$ (333,818)	\$ 61,426
Credit Facility committed amount	\$ 500,000	\$ 500,000	\$ 300,000	\$ —	\$ 200,000
Credit Facility amounts drawn	\$ 315,000	\$ 335,000	\$ —	\$ (20,000)	\$ 315,000
Shareholders' equity	\$ 2,450,231	\$ 2,418,929	\$ 1,513,349	\$ 31,302	\$ 936,882
Total debt <sup>(1)</sup>	\$ 360,492	\$ 378,758	\$ 6,676	\$ (18,266)	\$ 353,816
Capital <sup>(2)</sup>	\$ 2,633,700	\$ 2,658,872	\$ 1,307,511	\$ (25,172)	\$ 1,326,189

(1) Total debt is a non-GAAP measure calculated as the total of amounts drawn on the Revolving Credit Facility, finance lease liabilities and loans payable. Please refer to the "Alternative Performance (Non-GAAP) Measures" section of this MD&A for a detailed description of the calculations.

(2) Capital is a non-GAAP measure and consists of shareholders' equity and debt net of cash and cash equivalents and short term investments. Please refer to the "Alternative Performance (Non-GAAP) Measures" section of this MD&A for a detailed description of the calculations.

### Liquidity and Capital Resources

The Company's cash and short term investments increased by \$38.2 million during Q3 2019. Operating cash flows of \$81.9 million, which included \$16.2 million in tax payments and a \$14.9 million use of cash from working capital changes, more than funded the Company's investing and financing activities in the quarter, including a \$20.0 million repayment of the Credit Facility. The working capital changes, primarily reflect a build-up in trade receivables from concentrate and doré sales.

Pan American's investment objectives for its cash balances are to preserve capital, to provide liquidity and to maximize returns. The Company's strategy to achieve these objectives is to invest excess cash balances in a portfolio of primarily fixed income instruments with specified credit rating targets established by the Board of Directors of the Company (the "Board of Directors"), and by diversifying the currencies in which it maintains its cash balances. The Company does not own any asset-backed commercial paper or other similar, known, at-risk investments in its investment portfolio.

Working capital of \$459.3 million at September 30, 2019 was \$333.8 million lower than working capital of \$793.1 million at June 30, 2019. The working capital decrease primarily reflects the reclassification of Timmins net assets previously classified as held for sale assets and liabilities, which as at June 30, 2019 were included as separate components of both current assets (\$406.8 million), and current liabilities (\$30.9 million). These Timmins' assets and liabilities, presented as current, included long-term assets of \$380.0 million and long-term liabilities of \$11.1 million, which represented a \$368.9 million net working capital inclusion as of June 30, 2019. As of September 30, 2019 Timmins' long-term assets and liabilities are no longer presented as current. The remaining working capital increase was the result of the previously discussed increase in cash and short-term investments.

At September 30, 2019, the Company had \$315.0 million in amounts drawn on its four-year \$500 million Credit Facility, and as a result of repayments during Q3 2019, the amount drawn on the Credit Facility is reduced by \$20.0 million as compared with June 30, 2019. As of September 30, 2019, the Company was in compliance with all covenants required by the Credit Facility.

The Company's financial position at September 30, 2019, and the operating cash flows that are expected over the next twelve months, lead Management to believe that the Company's liquid assets are sufficient to satisfy our 2019 working capital requirements, fund currently planned capital expenditures, and to discharge liabilities as they come due. The Company remains well positioned to take advantage of strategic opportunities as they become available. Liquidity risks are discussed further in the "Risks and Uncertainties" section of this MD&A.

In the normal course of business, the Company enters into contracts that give rise to commitments for future minimum payments, details of which are described in Note 8(e)(ii) of the 2018 Financial Statements, and in the Liquidity and Capital Position section of the Company's annual 2018 Management Discussion and Analysis (the "2018 Annual MD&A"). Since December 31, 2018, there have been no significant changes to these contractual obligations and commitments other than the new liabilities and provisions assumed as part of the Tahoe acquisition as described in the purchase price allocation table included in the "Acquisition of Tahoe" section of this MD&A.

The impact of inflation on the Company's financial position, operational performance, or cash flows over the next twelve months cannot be determined with any degree of certainty.

### Outstanding Share Amounts

As at September 30, 2019, the Company had approximately 1.2 million stock options outstanding (each exercisable for one common share of the Company), with exercise prices in the range of CAD \$9.76 to CAD \$97.26 and a weighted average life of 25 months. Approximately 1.0 million of the stock options were vested and exercisable at September 30, 2019, with an average weighted exercise price of CAD \$35.64 per share.

The following table sets out the common shares and options outstanding as at the date of this MD&A:

	Outstanding as at November 6, 2019
Common shares	209,609,855
Options	1,238,687
<b>Total</b>	<b>210,848,542</b>

As part of the consideration payable to Tahoe shareholders in connection with the Tahoe Acquisition, Tahoe shareholders received contingent consideration in the form of one contingent value right ("CVR") for each Tahoe share. Each CVR has a 10 year term and will be exchanged for 0.0497 of a Pan American share upon first commercial shipment of concentrate following restart of operations at the Escobal mine. The Company issued an aggregate of 313,887,490 CVRs.

## CLOSURE AND DECOMMISSIONING COST PROVISION

The estimated future closure and decommissioning costs are based principally on the requirements of relevant authorities and the Company's environmental policies. The provision is measured using Management's assumptions and estimates for future cash outflows. The Company accrues these costs, which are determined by discounting costs using rates specific to the underlying obligation. Upon recognition of a liability for the closure and decommissioning costs, the Company capitalizes these costs to the related mine and amortizes such amounts over the life of each mine on a unit-of-production basis except in the case of exploration projects for which the offset to the liability is expensed. The accretion of the discount due to the passage of time is recognized as an increase in the liability and a finance expense.

The total inflated and undiscounted amount of estimated cash flows required to settle the Company's estimated future closure and decommissioning costs as of September 30, 2019 was \$252.0 million (December 31, 2018 - \$159.1 million) using inflation rates of between 2% and 4% (December 31, 2018 - between 2% and 17%). The inflated and discounted provision on the statement of financial position as at September 30, 2019, using discount rates between 1% and 9% (December 31, 2018 - between 2% and 22%), was \$161.7 million. Spending with respect to decommissioning obligations at Alamo Dorado and Manantial Espejo began in 2016, while the remainder of the obligations are expected to be paid through 2046, or later if the mine lives are extended. Revisions made to the reclamation obligations in Q3 2019 were primarily a result of increased site disturbance from the ordinary course of operations at the mines, reclamation activities at Alamo Dorado, and revisions to the estimates based on

periodic reviews of closure plans and related costs, actual expenditures incurred, and closure activities completed. These obligations will be funded from operating cash flows, reclamation deposits, and cash on hand.

The accretion of the discount charged in Q3 2019 and YTD 2019 as finance expense was \$2.7 million and \$7.3 million (Q3 2018 and YTD 2018: \$1.6 million and \$4.9 million). Reclamation expenditures incurred during Q3 2019 and YTD 2019 were \$0.3 million and \$1.8 million, respectively (Q3 2018 and YTD 2018: \$1.3 million and \$5.8 million).

## **RELATED PARTY TRANSACTIONS**

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The Company's related parties include its subsidiaries, associates over which it exercises significant influence, and key management personnel. During its normal course of operation, the Company enters into transactions with its related parties for goods and services.

Related party transactions with Maverix Metals Inc. have been disclosed in Note 10 of the Q3 2019 Financial Statements. These transactions are in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the parties.

## ALTERNATIVE PERFORMANCE (NON-GAAP) MEASURES

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### Per Ounce Measures

Cash Costs and AISC are non-GAAP financial measures that do not have any standardized meaning prescribed by IFRS and are therefore unlikely to be comparable to similar measures presented by other companies.

Pan American produces by-product metals incidentally to our silver and gold mining activities. We have adopted the practice of calculating a performance measure with the net cost of producing an ounce of silver and gold, our primary payable metals, after deducting revenues gained from incidental by-product production. This performance measurement has been commonly used in the mining industry for many years and was developed as a relatively simple way of comparing the net production costs of the primary metal for a specific period against the prevailing market price of that metal.

Silver segment Cash Costs and AISC are calculated net of credits for realized revenues from all metals other than silver ("silver segment by-product credits"), and are calculated per ounce of silver sold. Gold segment Cash Costs and AISC are calculated net of credits for realized silver revenues ("gold segment by-product credits"), and are calculated per ounce of gold sold. Consolidated Cash Costs and AISC are based on total silver ounces sold and are net of by-product credits from all metals other than silver ("silver basis consolidated by-product credits").

Prior period cash costs per ounce reported in previous MD&As were based on cash costs per ounce of payable silver produced and were net of by-product credits calculated with average market prices applied to all metals produced other than silver. Given the increased complexity of the business with the addition of the new gold operations, the Company determined that conforming the calculation of Cash Costs with a consistent method to that used for AISC, using realized by-product sales as by-product credits and based on per ounce of silver sold, would provide a more consistent per-ounce measure. As such the comparative Cash Costs amounts in this MD&A have been quantified using the current methodology and are different from those previously reported. As shown in the detailed quantification of consolidated AISC below, corporate general and administrative expense, and exploration and project development expenses are included in the calculation of consolidated (silver basis) AISC, but are not allocated amongst the operations and thus are not included in either the silver or gold segment AISC totals. In prior years these costs were similarly included only in the consolidated all-in-sustaining costs per silver ounce sold ("AISCOS") metrics and not allocated to each mine's AISCOS amount. As such, consolidated AISCOS in previous years included such costs where total silver segment AISC in the current period do not. A detailed description of how previously reported Cash Costs were quantified is provided in the Company's prior period MD&As.

Cash costs per ounce metrics, net of by-product credits, is used extensively in our internal decision making processes. We believe the metric is also useful to investors because it facilitates comparison, on a mine-by-mine basis, notwithstanding the unique mix of incidental by-product production at each mine, of our operations' relative performance on a period-by-period basis, and against the operations of our peers in the silver industry. Cash costs per ounce is conceptually understood and widely reported in the mining industry.

We believe that AISC, also calculated net of by-products, is a comprehensive measure of the full cost of operating our consolidated business, given it includes the cost of replacing silver and gold ounces through exploration, the cost of ongoing capital investments (sustaining capital), general and administrative expenses, as well as other items that affect the Company's consolidated cash flow.

To facilitate a better understanding of these measure as calculated by the Company, the following table provides the detailed reconciliation of these measure to the applicable cost items, as reported in the consolidated financial statements for the respective periods. All operating results from the Acquired Mines, only include results from February 22, 2019 to September 30, 2019 and the year-to-date amounts do not represent a full nine months of operations.

(In thousands of USD, except as noted)	Three months ended September 30, 2019				Three months ended September 30, 2018 <sup>(1)</sup>		
	Silver Segment	Gold Segment	Corporate	Consolidated (silver basis) <sup>(2)</sup>	Silver Segment	Corporate	Consolidated (silver basis)
Production costs	\$ 114,137	\$ 90,491		\$ 204,628	\$ 150,597		\$ 150,597
Purchase Price Allocation Inventory Fair Value Adjustment		(12,783)		(12,783)	—	—	—
NRV inventory adjustments	6,723	—		6,723	(23,432)		(23,432)
<b>On-site direct operating costs</b>	<b>120,860</b>	<b>77,708</b>	—	<b>198,568</b>	<b>127,165</b>	—	<b>127,165</b>
Royalties	3,937	1,506		5,442	3,652		3,652
Smelting, refining and direct selling charges <sup>(3)</sup>	17,519	304		17,823	12,434		12,434
<b>Cash cost of sales before by-product credits<sup>(4)</sup></b>	<b>142,316</b>	<b>79,518</b>	—	<b>221,833</b>	<b>143,251</b>	—	<b>143,251</b>
Silver segment by-product credits <sup>(3)</sup>	(111,491)	—		—	(115,177)		—
Gold segment by-product credits <sup>(3)</sup>	—	(795)		—	—		—
Total Silver basis consolidated by-product credits <sup>(2)(3)</sup>	—	—		(271,036)	—		(115,177)
<b>Cash Costs<sup>(4)</sup></b>	<b>\$ 30,825</b>	<b>\$ 78,723</b>	<b>\$ —</b>	<b>\$ (49,203)</b>	<b>\$ 28,074</b>	<b>\$ —</b>	<b>\$ 28,074</b>
NRV inventory adjustments	(6,723)	—		(6,723)	23,432		23,432
Sustaining capital	23,373	18,883		42,256	26,870		26,870
Exploration and project development	494	1,016	555	2,066	1,395	1,613	3,008
Reclamation cost accretion	1,652	775	291	2,718	1,475	156	1,631
General and administrative expense	—	—	8,237	8,237	—	5,675	5,675
<b>All-in sustaining costs<sup>(4)</sup></b>	<b>\$ 49,621</b>	<b>\$ 99,398</b>	<b>\$ 9,083</b>	<b>\$ (649)</b>	<b>\$ 81,246</b>	<b>\$ 7,444</b>	<b>\$ 88,690</b>
Silver segment silver ounces sold	5,639	—		—	6,366		—
Gold segment gold ounces sold	—	108		—	—		—
Total silver ounces sold <sup>(2)</sup>	—	—		5,683	—		6,366
<b>Cash costs per ounce sold<sup>(5)</sup></b>	<b>\$ 5.47</b>	<b>\$ 729</b>		<b>\$ (8.66)</b>	<b>\$ 4.41</b>		<b>\$ 4.41</b>
<b>AISC per ounce sold</b>	<b>\$ 8.80</b>	<b>\$ 920</b>		<b>\$ (0.11)</b>	<b>\$ 12.76</b>		<b>\$ 13.93</b>
<b>AISC per ounce sold (excluding NRV inventory adjustments)</b>	<b>\$ 9.99</b>	<b>\$ 920</b>		<b>\$ 1.07</b>	<b>\$ 9.08</b>		<b>\$ 10.25</b>

(In thousands of USD, except as noted)	Nine months ended September 30, 2019 <sup>(6)</sup>				Nine months ended September 30, 2018 <sup>(1)</sup>		
	Silver Segment	Gold Segment <sup>(6)</sup>	Corporate	Consolidated (silver basis) <sup>(2)</sup>	Silver Segment	Corporate	Consolidated (silver basis)
Production costs	\$ 380,199	\$ 231,504		\$ 611,703	\$ 379,459		\$ 379,459
Purchase Price Allocation Inventory Fair Value Adjustment		(41,712)		(41,712)	—	—	—
NRV inventory adjustments	842	—		842	(11,067)		(11,067)
<b>On-site direct operating costs</b>	<b>381,041</b>	<b>189,792</b>	—	<b>570,833</b>	<b>368,392</b>	—	<b>368,392</b>
Royalties	15,390	3,396		18,785	16,072		16,072
Smelting, refining and direct selling charges <sup>(3)</sup>	51,747	628		52,375	38,505		38,505
<b>Cash cost of sales before by-product credits<sup>(4)</sup></b>	<b>448,178</b>	<b>193,816</b>	—	<b>641,993</b>	<b>422,969</b>	—	<b>422,969</b>
Silver segment by-product credits <sup>(3)</sup>	(340,917)	—		—	(375,857)		—
Gold segment by-product credits <sup>(3)</sup>	—	(1,277)		—	—		—
Total Silver basis consolidated by-product credits <sup>(2),(3)</sup>	—	—		(707,533)	—		(375,857)
<b>Cash Costs<sup>(4)</sup></b>	<b>\$ 107,261</b>	<b>\$ 192,539</b>	<b>\$ —</b>	<b>\$ (65,540)</b>	<b>\$ 47,112</b>	<b>\$ —</b>	<b>\$ 47,112</b>
NRV inventory adjustments	(842)	—		(842)	11,067		11,067
Sustaining capital	71,048	61,861		132,909	75,773		75,773
Exploration and project development	2,266	2,771	2,204	7,241	3,343	4,286	7,629
Reclamation cost accretion	4,954	1,860	506	7,320	4,427	467	4,893
General and administrative expense			21,743	21,743		17,199	17,199
<b>All-in sustaining costs<sup>(4)</sup></b>	<b>\$ 184,687</b>	<b>\$ 259,031</b>	<b>\$ 24,453</b>	<b>\$ 102,831</b>	<b>\$ 141,722</b>	<b>\$ 21,952</b>	<b>\$ 163,673</b>
Silver segment silver ounces sold	18,207	—		—	17,860		—
Gold segment gold ounces sold	—	266		—	—		—
Total silver ounces sold <sup>(2)</sup>	—	—		18,284	—		17,860
<b>Cash costs per ounce sold<sup>(5)</sup></b>	<b>\$ 5.89</b>	<b>\$ 722</b>		<b>\$ (3.58)</b>	<b>\$ 2.64</b>		<b>\$ 2.64</b>
<b>AISC per ounce sold</b>	<b>\$ 10.14</b>	<b>\$ 972</b>		<b>\$ 5.62</b>	<b>\$ 7.93</b>		<b>\$ 9.16</b>
<b>AISC per ounce sold (excluding NRV inventory adjustments)</b>	<b>\$ 10.19</b>	<b>\$ 972</b>		<b>\$ 5.67</b>	<b>\$ 7.32</b>		<b>\$ 8.54</b>

- (1) 2018 AISC per ounce sold included in the table above have been calculated and presented as comparative amounts to conform to the methodology used by the company to calculate the 2019 AISC per ounce sold. The change in methodology relates to the sustaining capital calculation to account for the adoption of IFRS 16, and the inclusion of lease payments. Previously leased assets were included as sustaining capital in the period of acquisition, while future related lease payments were excluded.
- (2) Consolidated silver basis calculated by treating all revenues from metals other than silver, including gold, as a by-product credit in Cash Costs. Total silver basis consolidated by-product credits include all silver segment by-product credits, as well as gold revenues from the Gold Segment mines as by-products. Total silver ounces sold likewise includes silver ounces sold from Gold Segment operations.
- (3) Included in the revenue line of the consolidated income statements. By-product credits are reflective of realized metal prices for the applicable periods.
- (4) Totals may not add due to rounding.
- (5) Cash costs per ounce sold are calculated based on Cash Costs, net of by-product credits divided by per ounce of silver sold and are therefore different than previously reported 2018 "Cash Costs" which were calculated based on cash costs net of by-product credits divided by payable silver ounces produced. The 2018 cash costs per ounce sold included in the table above have been calculated and presented as comparative amounts to conform to the methodology used by the company to calculate the 2019 Cash Cost per ounce sold.
- (6) All operating results from the Acquired Mines, described in detail in the "Acquisition of Tahoe" section of this MD&A, are only from the Closing Date to September 30, 2019, and do not represent a full nine months of operations.

Sustaining capital is included in AISC, while capital related to growth projects or acquisitions (referred to by the Company as project or investment capital) is not. Inclusion of only sustaining capital in the AISC measure reflects the capital costs associated with current ounces sold as opposed to project capital, which is expected to increase future production. The project capital excluded in the reconciliation below is further described in the "Project Development Update" section of this MD&A.

Reconciliation of payments for mineral properties, plant and equipment and sustaining capital (in thousands of USD)	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Payments for mineral properties, plant and equipment <sup>(1)</sup>	\$ 49,891	\$ 33,555	\$ 155,488	\$ 102,046
Add/(Subtract)				
Lease Payments <sup>(1)</sup>	4,674	2,181	13,544	5,698
Investment (non-sustaining) capital	(12,309)	(8,866)	(36,123)	(31,971)
<b>Sustaining Capital<sup>(2)</sup></b>	<b>\$ 42,256</b>	<b>\$ 26,870</b>	<b>\$ 132,909</b>	<b>\$ 75,773</b>

(1) As presented on the consolidated statements of cash flows.

(2) Totals may not add due to rounding

## Silver Segment Cash Costs and AISC by mine:

SILVER SEGMENT		Three months ended September 30, 2019						
(In thousands of USD, except as noted)	La Colorada	Dolores	Huaron	Morococha	San Vicente	Manantial Espejo	Consolidated Silver Segment	
Production Costs	\$ 17,390	\$ 40,242	\$ 19,792	\$ 18,149	\$ 9,527	\$ 9,038	\$ 114,137	
NRV inventory adjustments	—	4,423	—	—	—	2,299	6,723	
<b>On-site direct operating costs</b>	<b>17,390</b>	<b>44,665</b>	<b>19,792</b>	<b>18,149</b>	<b>9,527</b>	<b>11,337</b>	<b>120,860</b>	
Royalties	176	2,313	—	—	1,070	378	3,937	
Smelting, refining & direct selling costs	5,103	36	5,403	4,040	1,718	1,219	17,519	
<b>Cash Costs before by-product credits</b>	<b>22,669</b>	<b>47,014</b>	<b>25,195</b>	<b>22,189</b>	<b>12,315</b>	<b>12,934</b>	<b>142,316</b>	
Silver segment by-product credits	(17,581)	(47,010)	(20,572)	(18,996)	(2,819)	(4,513)	(111,491)	
<b>Cash Costs</b>	<b>\$ 5,088</b>	<b>\$ 4</b>	<b>\$ 4,623</b>	<b>\$ 3,193</b>	<b>\$ 9,496</b>	<b>\$ 8,421</b>	<b>\$ 30,825</b>	
NRV inventory adjustments	—	(4,423)	—	—	—	(2,299)	(6,723)	
Sustaining capital	1,921	13,522	2,740	3,004	1,508	677	23,373	
Exploration and project development	111	238	5	94	—	46	494	
Reclamation cost accretion	144	560	181	109	78	580	1,652	
<b>All-in sustaining costs</b>	<b>\$ 7,264</b>	<b>\$ 9,901</b>	<b>\$ 7,549</b>	<b>\$ 6,400</b>	<b>\$ 11,082</b>	<b>\$ 7,425</b>	<b>\$ 49,621</b>	
<b>Silver segment silver ounces sold (koz)</b>	<b>1,802</b>	<b>1,328</b>	<b>869</b>	<b>564</b>	<b>728</b>	<b>348</b>	<b>5,639</b>	
<b>Cash cost per ounce sold</b>	<b>\$ 2.82</b>	<b>\$ 0.00</b>	<b>\$ 5.32</b>	<b>\$ 5.66</b>	<b>\$ 13.04</b>	<b>\$ 24.22</b>	<b>\$ 5.47</b>	
<b>AISC per ounce sold</b>	<b>\$ 4.03</b>	<b>\$ 7.45</b>	<b>\$ 8.69</b>	<b>\$ 11.36</b>	<b>\$ 15.21</b>	<b>\$ 21.35</b>	<b>\$ 8.80</b>	
<b>AISC per ounce sold (excluding NRV inventory adjustments)</b>	<b>\$ 4.03</b>	<b>\$ 10.78</b>	<b>\$ 8.69</b>	<b>\$ 11.36</b>	<b>\$ 15.21</b>	<b>\$ 27.96</b>	<b>\$ 9.99</b>	

SILVER SEGMENT <sup>(1)</sup>		Three Months Ended September 30, 2018						
(In thousands of USD, except as noted)	La Colorada	Dolores	Huaron	Morococha	San Vicente	Manantial Espejo	Consolidated Silver Segment	
Production Costs	\$ 22,255	\$ 53,118	\$ 19,700	\$ 17,953	\$ 10,054	\$ 27,519	\$ 150,597	
NRV inventory adjustments	—	(16,301)	—	—	—	(7,130)	(23,432)	
<b>On-site direct operating costs</b>	<b>22,255</b>	<b>36,817</b>	<b>19,700</b>	<b>17,953</b>	<b>10,054</b>	<b>20,389</b>	<b>127,165</b>	
Royalties	150	1,897	—	—	1,207	398	3,652	
Smelting, refining & direct selling costs	2,168	32	5,537	3,274	1,152	271	12,434	
<b>Cash Costs before by-product credits</b>	<b>24,573</b>	<b>38,746</b>	<b>25,237</b>	<b>21,227</b>	<b>12,413</b>	<b>21,058</b>	<b>143,251</b>	
Silver segment by-product credits	(14,505)	(41,512)	(22,449)	(21,891)	(4,475)	(10,344)	(115,177)	
<b>Cash Costs</b>	<b>\$ 10,068</b>	<b>\$ (2,766)</b>	<b>\$ 2,788</b>	<b>\$ (664)</b>	<b>\$ 7,938</b>	<b>\$ 10,714</b>	<b>\$ 28,074</b>	
NRV inventory adjustments	—	16,301	—	—	—	7,130	23,432	
Sustaining capital	3,902	9,971	5,698	4,797	1,740	763	26,870	
Exploration and project development	74	384	14	174	—	749	1,395	
Reclamation cost accretion	114	351	152	87	63	708	1,475	
<b>All-in sustaining costs</b>	<b>\$ 14,158</b>	<b>\$ 24,241</b>	<b>\$ 8,652</b>	<b>\$ 4,394</b>	<b>\$ 9,741</b>	<b>\$ 20,064</b>	<b>\$ 81,246</b>	
<b>Silver segment silver ounces sold (koz)</b>	<b>2,258</b>	<b>950</b>	<b>785</b>	<b>688</b>	<b>876</b>	<b>810</b>	<b>6,366</b>	
<b>Cash cost per ounce sold<sup>(2)</sup></b>	<b>\$ 4.46</b>	<b>\$ (2.91)</b>	<b>\$ 3.55</b>	<b>\$ (0.97)</b>	<b>\$ 9.07</b>	<b>\$ 13.23</b>	<b>\$ 4.41</b>	
<b>AISC per ounce sold</b>	<b>\$ 6.27</b>	<b>\$ 25.52</b>	<b>\$ 11.03</b>	<b>\$ 6.39</b>	<b>\$ 11.12</b>	<b>\$ 24.78</b>	<b>\$ 12.76</b>	
<b>AISC per ounce sold (excluding NRV inventory adjustments)</b>	<b>\$ 6.27</b>	<b>\$ 8.36</b>	<b>\$ 11.03</b>	<b>\$ 6.39</b>	<b>\$ 11.12</b>	<b>\$ 15.97</b>	<b>\$ 9.08</b>	

## SILVER SEGMENT

Nine months ended September 30, 2019

(In thousands of USD, except as noted)	La Colorada	Dolores	Huaron	Morococha	San Vicente	Manantial Espejo	Consolidated Silver Segment
Production Costs	\$ 56,495	\$ 140,110	\$ 57,282	\$ 53,609	\$ 34,120	\$ 38,584	\$ 380,199
NRV inventory adjustments	—	(7,449)	—	—	—	8,291	842
<b>On-site direct operating costs</b>	<b>56,495</b>	<b>132,661</b>	<b>57,282</b>	<b>53,609</b>	<b>34,120</b>	<b>46,875</b>	<b>381,041</b>
Royalties	416	6,138	—	—	7,854	982	15,390
Smelting, refining & direct selling costs	12,645	84	15,496	11,583	7,362	4,577	51,747
<b>Cash Costs before by-product credits<sup>(1)</sup></b>	<b>69,556</b>	<b>138,883</b>	<b>72,778</b>	<b>65,192</b>	<b>49,336</b>	<b>52,434</b>	<b>448,178</b>
Silver segment by-product credits	(54,505)	(127,375)	(63,206)	(60,611)	(16,630)	(18,590)	(340,917)
<b>Cash Costs</b>	<b>\$ 15,051</b>	<b>\$ 11,508</b>	<b>\$ 9,572</b>	<b>\$ 4,581</b>	<b>\$ 32,706</b>	<b>\$ 33,844</b>	<b>\$ 107,261</b>
NRV inventory adjustments	—	7,449	—	—	—	(8,291)	(842)
Sustaining capital	7,764	41,554	8,102	8,654	2,912	2,062	71,048
Exploration and project development	880	831	13	276	—	266	2,266
Reclamation cost accretion	432	1,680	542	327	234	1,739	4,954
<b>All-in sustaining costs<sup>(1)</sup></b>	<b>\$ 24,127</b>	<b>\$ 63,022</b>	<b>\$ 18,229</b>	<b>\$ 13,838</b>	<b>\$ 35,852</b>	<b>\$ 29,620</b>	<b>\$ 184,687</b>
<b>Silver segment silver ounces sold (koz)</b>	<b>5,814</b>	<b>3,522</b>	<b>2,517</b>	<b>1,820</b>	<b>3,002</b>	<b>1,532</b>	<b>18,207</b>
<b>Cash cost per ounce sold</b>	<b>\$ 2.59</b>	<b>\$ 3.27</b>	<b>\$ 3.80</b>	<b>\$ 2.52</b>	<b>\$ 10.90</b>	<b>\$ 22.09</b>	<b>\$ 5.89</b>
<b>AISC per ounce sold</b>	<b>\$ 4.15</b>	<b>\$ 17.89</b>	<b>\$ 7.24</b>	<b>\$ 7.60</b>	<b>\$ 11.94</b>	<b>\$ 19.33</b>	<b>\$ 10.14</b>
<b>AISC per ounce sold (excluding NRV inventory adjustments)</b>	<b>\$ 4.15</b>	<b>\$ 15.78</b>	<b>\$ 7.24</b>	<b>\$ 7.60</b>	<b>\$ 11.94</b>	<b>\$ 24.75</b>	<b>\$ 10.19</b>

(1) Totals may not add due to rounding.

SILVER SEGMENT<sup>(1)</sup>

Nine months ended September 30, 2018

(In thousands of USD, except as noted)	La Colorada	Dolores	Huaron	Morococha	San Vicente	Manantial Espejo	Consolidated Silver Segment
Production Costs	\$ 53,301	\$ 128,061	\$ 55,673	\$ 51,971	\$ 26,479	\$ 63,974	\$ 379,459
NRV inventory adjustments	—	(13,127)	—	—	—	2,060	(11,067)
<b>On-site direct operating costs</b>	<b>53,301</b>	<b>114,934</b>	<b>55,673</b>	<b>51,971</b>	<b>26,479</b>	<b>66,034</b>	<b>368,392</b>
Royalties	486	6,349	—	—	7,388	1,848	16,072
Smelting, refining & direct selling costs	6,487	97	15,266	10,789	5,635	231	38,505
<b>Cash Costs before by-product credits</b>	<b>60,274</b>	<b>121,380</b>	<b>70,939</b>	<b>62,760</b>	<b>39,502</b>	<b>68,113</b>	<b>422,969</b>
Silver segment by-product credits	(48,693)	(134,475)	(67,459)	(74,129)	(14,598)	(36,503)	(375,857)
<b>Cash Costs</b>	<b>\$ 11,581</b>	<b>\$ (13,095)</b>	<b>\$ 3,480</b>	<b>\$ (11,369)</b>	<b>\$ 24,904</b>	<b>\$ 31,610</b>	<b>\$ 47,112</b>
NRV inventory adjustments	—	13,127	—	—	—	(2,060)	11,067
Sustaining capital	10,097	35,587	11,671	10,681	5,346	2,391	75,773
Exploration and project development	168	1,353	653	475	—	694	3,343
Reclamation cost accretion	343	1,054	457	260	189	2,124	4,427
<b>All-in sustaining costs</b>	<b>\$ 22,189</b>	<b>\$ 38,026</b>	<b>\$ 16,261</b>	<b>\$ 47</b>	<b>\$ 30,439</b>	<b>\$ 34,759</b>	<b>\$ 141,722</b>
<b>Silver segment silver ounces sold (koz)</b>	<b>5,289</b>	<b>3,335</b>	<b>2,236</b>	<b>1,978</b>	<b>2,551</b>	<b>2,471</b>	<b>17,860</b>
<b>Cash cost per ounce sold<sup>(2)</sup></b>	<b>\$ 2.19</b>	<b>\$ (3.93)</b>	<b>\$ 1.56</b>	<b>\$ (5.75)</b>	<b>\$ 9.76</b>	<b>\$ 12.79</b>	<b>\$ 2.64</b>
<b>AISC per ounce sold</b>	<b>\$ 4.20</b>	<b>\$ 11.40</b>	<b>\$ 7.27</b>	<b>\$ 0.02</b>	<b>\$ 11.93</b>	<b>\$ 14.07</b>	<b>\$ 7.93</b>
<b>AISC per ounce sold (excluding NRV inventory adjustments)</b>	<b>\$ 4.20</b>	<b>\$ 7.47</b>	<b>\$ 7.27</b>	<b>\$ 0.02</b>	<b>\$ 11.93</b>	<b>\$ 14.90</b>	<b>\$ 7.32</b>

(1) 2018 AISC per ounce sold included in the table above have been calculated and presented as comparative amounts to conform to the methodology used by the company to calculate the 2019 AISC per ounce sold. The change in methodology relates to the sustaining capital calculation to account for the adoption of IFRS 16, and sustaining capital now includes lease payments. Previously leased assets were included as sustaining capital in the period of acquisition, while future related lease payments were excluded.

(2) Cash costs per ounce sold are calculated based on Cash Costs, net of by-product credits divided by per ounce of silver sold and are therefore different from previously reported 2018 "Cash Costs" which were calculated based on cash costs net of by-product credits divided by payable silver ounces produced. The 2018 cash costs per ounce sold included in the table above have been calculated and presented as comparative amounts to conform to the methodology used by the company to calculate the 2019 cash cost per ounce sold.

## Gold Segment Cash Costs and AISC by mine:

GOLD SEGMENT	Three months ended September 30, 2019			
(In thousands of USD, except as noted)	Shahuindo	La Arena	Timmins	Total
Production Costs	\$ 28,375	\$ 30,644	\$ 31,472	\$ 90,491
Purchase Price Allocation Inventory Fair Value Adjustment	(5,396)	(7,826)	440	(12,783)
NRV inventory adjustments	—	—	—	—
<b>On-site direct operating costs</b>	<b>22,979</b>	<b>22,818</b>	<b>31,912</b>	<b>77,708</b>
Royalties	—	—	1,506	1,506
Smelting, refining & direct selling costs	195	76	33	304
<b>Cash Costs before by-product credits</b>	<b>23,174</b>	<b>22,894</b>	<b>33,451</b>	<b>79,518</b>
Gold segment by-product credits	(615)	(96)	(84)	(795)
<b>Cash Costs of Sales</b>	<b>\$ 22,559</b>	<b>\$ 22,798</b>	<b>\$ 33,367</b>	<b>\$ 78,723</b>
NRV inventory adjustments	—	—	—	—
Sustaining capital	8,652	7,250	2,982	18,883
Exploration and project development	216	36	764	1,016
Reclamation cost accretion	290	447	38	775
<b>All-in sustaining costs</b>	<b>\$ 31,717</b>	<b>\$ 30,531</b>	<b>\$ 37,151</b>	<b>\$ 99,398</b>
<b>Gold segment gold ounces sold</b>	<b>40,904</b>	<b>30,886</b>	<b>36,200</b>	<b>107,990</b>
<b>Cash cost per ounce sold</b>	<b>\$ 552</b>	<b>\$ 738</b>	<b>\$ 922</b>	<b>\$ 729</b>
<b>AISC per ounce sold</b>	<b>\$ 775</b>	<b>\$ 988</b>	<b>\$ 1,026</b>	<b>\$ 920</b>
<b>AISC per ounce sold (excluding NRV inventory adjustments)</b>	<b>\$ 775</b>	<b>\$ 988</b>	<b>\$ 1,026</b>	<b>\$ 920</b>

GOLD SEGMENT	Nine months ended September 30, 2019			
(In thousands of USD, except as noted)	Shahuindo	La Arena	Timmins	Total
Production Costs	\$ 65,502	\$ 71,312	\$ 94,690	\$ 231,504
Purchase Price Allocation Inventory Fair Value Adjustment	(13,087)	(19,228)	(9,397)	(41,712)
NRV inventory adjustments	—	—	—	—
<b>On-site direct operating costs</b>	<b>52,415</b>	<b>52,084</b>	<b>85,293</b>	<b>189,792</b>
Royalties	—	—	3,396	3,396
Smelting, refining & direct selling costs	328	228	72	628
<b>Cash Costs before by-product credits</b>	<b>52,743</b>	<b>52,312</b>	<b>88,761</b>	<b>193,816</b>
Gold segment by-product credits	(903)	(186)	(188)	(1,277)
<b>Cash Costs of Sales</b>	<b>\$ 51,840</b>	<b>\$ 52,126</b>	<b>\$ 88,573</b>	<b>\$ 192,539</b>
NRV inventory adjustments	—	—	—	—
Sustaining capital	15,717	39,176	6,969	61,861
Exploration and project development	705	325	1,741	2,771
Reclamation cost accretion	693	1,068	99	1,860
<b>All-in sustaining costs</b>	<b>\$ 68,955</b>	<b>\$ 92,695</b>	<b>\$ 97,382</b>	<b>\$ 259,031</b>
<b>Gold segment gold ounces sold</b>	<b>93,449</b>	<b>76,145</b>	<b>96,900</b>	<b>266,494</b>
<b>Cash cost per ounce sold</b>	<b>\$ 555</b>	<b>\$ 685</b>	<b>\$ 914</b>	<b>\$ 722</b>
<b>AISC per ounce sold</b>	<b>\$ 738</b>	<b>\$ 1,217</b>	<b>\$ 1,005</b>	<b>\$ 972</b>
<b>AISC per ounce sold (excluding NRV inventory adjustments)</b>	<b>\$ 738</b>	<b>\$ 1,217</b>	<b>\$ 1,005</b>	<b>\$ 972</b>

## Adjusted Earnings and Basic Adjusted Earnings Per Share

Adjusted earnings and basic adjusted earnings per share are non-GAAP measures that the Company considers to better reflect normalized earnings because it eliminates items that in Management's judgment are subject to volatility as a result of factors which are unrelated to operations in the period, and/or relate to items that will settle in future periods. Certain items that become applicable in a period may be adjusted for, with the Company retroactively presenting comparable periods with an adjustment for such items and conversely, items no longer applicable may be removed from the calculation. The Company adjusts certain items in the periods that they occurred, but does not reverse or otherwise unwind the effect of such items in future periods. Neither adjusted earnings nor basic adjusted earnings per share have any standardized meaning prescribed by GAAP and are therefore unlikely to be comparable to similar measures presented by other companies.

The following table shows a reconciliation of adjusted earnings for the three and nine months ended September 30, 2019 and 2018, to the net earnings for each period.

(In thousands of USD, except as noted)	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Net earnings for the period	\$ 37,719	\$ (9,234)	\$ 90,030	\$ 75,618
Adjust for:				
- Derivative losses	—	238	14	1,018
- Write-down of project development costs	—	—	1,882	—
- Unrealized foreign exchange (gains) losses	5,888	4,538	7,452	10,685
- Net realizable value adjustments to heap inventory	6,860	11,766	25,705	11,105
- Unrealized gains on commodity contracts	1,182	(289)	400	(3,246)
- Income from associate, net of dilution gain	(79)	411	(999)	(13,861)
- Reversal of previously accrued tax liabilities	—	—	—	(1,188)
- Gains (losses) on sale of assets	673	(225)	(2,818)	(8,029)
- Asset held for sale revaluation adjustment	15,596	—	—	—
- Bargain purchase gain	—	—	(30,492)	—
- Transaction and integration costs	2,863	—	7,712	—
Adjust for effect of taxes relating to the above	\$ (2,447)	\$ (3,731)	\$ (9,753)	\$ (4,082)
Adjust for effect of foreign exchange on taxes	\$ 5,977	\$ (8,147)	(54)	(6,564)
<b>Adjusted earnings (loss) or the period</b>	<b>\$ 74,232</b>	<b>\$ (4,673)</b>	<b>\$ 89,079</b>	<b>\$ 61,456</b>
<b>Weighted average shares for the period</b>	<b>209,535</b>	<b>153,301</b>	<b>198,609</b>	<b>153,302</b>
<b>Adjusted earnings (loss) per share for the period</b>	<b>\$ 0.35</b>	<b>\$ (0.03)</b>	<b>\$ 0.45</b>	<b>\$ 0.40</b>

## Total Debt

Total debt is a non-GAAP measure calculated as the total current and non-current portions of: long-term debt (including amounts drawn on the Revolving Credit Facility), lease liabilities, and loans payable. Total debt does not have any standardized meaning prescribed by GAAP and is therefore unlikely to be comparable to similar measures presented by other companies. The Company and certain investors use this information to evaluate the financial debt leverage of the Company.

## Capital

Capital is a non-GAAP measure and is calculated as total equity plus total debt less cash and cash equivalents and short term investments. Capital does not have any standardized meaning prescribed by GAAP and is therefore unlikely to be comparable to similar measures presented by other companies. The Company and certain investors use this information to evaluate the enterprise value of the Company.

## Working Capital

Working capital is a non-GAAP measure calculated as current assets less current liabilities. Working capital does not have any standardized meaning prescribed by GAAP and is therefore unlikely to be comparable to similar

measures presented by other companies. The Company and certain investors use this information to evaluate whether the Company is able to meet its current obligations using its current assets.

## RISKS AND UNCERTAINTIES

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The Company is exposed to many risks in conducting its business, including but not limited to: metal price risk as the Company derives its revenue from the sale of silver, zinc, lead, copper, and gold; trading and credit risk in the normal course of dealing with other companies; foreign exchange risk as the Company reports its financial statements in USD whereas the Company operates in jurisdictions that utilize other currencies; the inherent risk of uncertainties in estimating mineral reserves and mineral resources; political, economic and social risks related to conducting business in foreign jurisdictions such as Peru, Mexico, Argentina, Bolivia and Guatemala; environmental risks; and risks related to its relations with employees and local communities where we operate. Certain of these risks are described below, and are more fully described in Pan American's Annual Information Form (available on SEDAR at [www.sedar.com](http://www.sedar.com)) and Form 40-F filed with the United States Securities and Exchange Commission (the "SEC"), and in the Risks and Uncertainties section of the Company's 2018 Annual MD&A, and the 2018 Financial Statements. Readers are encouraged to refer to these documents for a more detailed description of some of the risks and uncertainties inherent to Pan American's business.

### Financial Instruments Risk Exposure

The Company's is exposed to financial risks, including metal price risk, credit risk, interest rate risk, foreign currency exchange rate risk, and liquidity risk. The Company's exposures and management of each of those risks is described in Note 8(f) to the Company's 2018 Financial Statements. There were no significant changes to those risks or to the Company's management of exposure to those risks during the three and nine months ended September 30, 2019. The following provides an update to certain relevant financial instrument risks for the quarter:

#### Metal Price Risk

A decrease in the market price of silver, gold and other metals could affect our profitability, along with the commercial viability of our mines and production from some of our mining properties. From time to time, Pan American mitigates the price risk associated with its base metal production by committing some of its future production under forward sales or option contracts. However, decisions relating to hedging may have material adverse effects on our financial performance, financial position, and results of operations. The Board of Directors continually assesses Pan American's strategy towards our base metal exposure. As at September 30, 2019, the Company had no outstanding contracts for its exposure base metals. The Company recorded total gains on zinc and copper base metal collar positions made up of put and call contracts of \$0.5 million and \$1.2 million in Q3 2019 and YTD 2019, respectively (Q3 2018 and YTD 2018: gains of \$1.7 million and \$4.3 million).

#### Trading and Credit Risk

As at September 30, 2019, we had receivable balances associated with buyers of our concentrates of \$61.0 million (December 31, 2018 - \$40.8 million). The vast majority of the Company's concentrate is sold to a limited number of concentrate buyers.

As at September 30, 2019, we had approximately \$66.1 million contained in precious metal inventory at refineries (December 31, 2018 - \$19.7 million). Silver doré production is refined under long-term agreements with fixed refining terms at three separate refineries worldwide. We generally retain the risk and title to the precious metals throughout the process of refining and therefore are exposed to the risk that the refineries will not be able to perform in accordance with the refining contract and that we may not be able to fully recover our precious metals in such circumstances. For example, in November 2018, Republic Metals Corporation ("Republic"), a refinery used by us, filed for bankruptcy. At the time of the bankruptcy, Republic had possession of approximately \$4.9 million of our metal, which for accounting purposes has been fully provided for. While we are pursuing a claim to collect the metals, or in lieu thereof, damages, the prospects for recovery are uncertain.

Supplier advances for products and services yet to be provided are a common practice in some jurisdictions in which the Company operates. These advances represent a credit risk to the Company to the extent that suppliers

do not deliver products or perform services as expected. As at September 30, 2019, the Company had made \$8.3 million of supplier advances (December 31, 2018 - \$14.4 million), which are reflected in "Trade and other receivables" on the Company's balance sheet.

### **Foreign currency exchange rate risk**

A part of the Company's operating and capital expenditures is denominated in local currencies other than USD. These expenditures are exposed to fluctuations in USD exchange rates relative to the local currencies. From time to time, the Company mitigates part of this currency exposure by accumulating local currencies, entering into contracts designed to fix or limit the Company's exposure to changes in the value of local currencies relative to the USD, or assuming liability positions to offset financial assets subject to currency risk. At September 30, 2019, the Company had outstanding positions on its foreign currency exposure of MXN purchases. The MXN positions are collars with a notional amount of \$17.0 million USD, with weighted average USD put and call exchange rates of \$19.74 and \$22.49, respectively. The Company recorded a \$0.4 million loss and a \$0.5 million gain on MXN derivative contracts for the three and nine months ended September 30, 2019, respectively (Q3 2018 and YTD 2018 - nil). At September 30, 2019, the Company held cash and short-term investments of \$85.9 million in Canadian dollars, \$2.2 million in Mexican pesos, \$4.4 million in Peruvian soles, \$2.0 million in Argentine pesos, \$2.2 million in Bolivian bolivianos, and \$0.1 million in Guatemalan quetzals.

### **Taxation Risks**

Pan American is exposed to tax related risks. The nature of these taxation risks and how the risks are managed are described in the Risks and Uncertainties section of the 2018 Annual MD&A, and in Note 29(c) to the Company's 2018 Financial Statements. There were no significant changes to those risks or to the Company's management of exposure to those risks during the three months ended September 30, 2019.

### **Claims and Legal Proceedings**

Pan American is subject to various claims and legal proceedings covering a wide range of matters that arise in the ordinary course of business activities. The nature, assessment and management of such claims is described in the Risks and Uncertainties section of the 2018 Annual MD&A, and in Note 24 to the Company's Q3 2019 Financial Statements.

In July 2017, the Escobal mining license, held by Tahoe's Guatemalan subsidiary Minera San Rafael ("MSR") was suspended as a result of a court proceeding initiated by a non-governmental organization (an "NGO") in Guatemala, based upon the allegation that Guatemala's Ministry of Energy and Mines ("Guatemala MEM") violated the Xinka indigenous people's right of consultation. After several decisions and appeals on the matter, a decision of the Constitutional Court of Guatemala was rendered on September 3, 2018, determining that the Escobal mining license would remain suspended until the Guatemala MEM completes an ILO 169 consultation. The consultation process is proceeding, with the pre-consultation stage underway. Normal operations at Escobal mine remain suspended. Legal challenges to the consultation process have been filed with the Guatemalan Supreme Court and the outcome of those challenges is unknown. The process and timing for completing the ILO 169 consultation remains uncertain. In addition, in June 2017, MSR filed its annual request to renew the Escobal mine's export credential with the Guatemala MEM. However, the Guatemala MEM did not renew the export credential because its renewal had become contingent on the Supreme Court's reinstatement of the Escobal mining license. The export credential therefore expired in August 2017 and has not been renewed.

Tahoe and certain of its officers and directors were named in three purported class action claims in the United States, which have been consolidated in the US District Court, District of Nevada, including alleging violations of Section 10(b) and Section 20(a) of the US Exchange Act and Rule 10b-5, and one purported class action filed in Canada in the Ontario Supreme Court concerning Tahoe's disclosure with respect to the Escobal mine. These class action claims were filed following the issuance of a provisional decision by the Guatemalan Supreme Court suspending the Escobal mining license issued to MSR.

On June 18, 2014, seven plaintiffs filed an action against Tahoe in the British Columbia Supreme Court alleging battery and negligence regarding a security incident that occurred at the Escobal mine on April 27, 2013. The plaintiffs sought compensatory and punitive damages. In April 2017, three of the seven plaintiffs settled their

claims against Tahoe. On July 30, 2019, the Company settled, on behalf of Tahoe, the remaining four plaintiffs' claims and the British Columbia Supreme Court action has been dismissed.

In April 2012, Pan American sold all of its interest in the Quiruvilca mine ("Quiruvilca") in Peru, which was previously owned by our subsidiary, Pan American Silver Huaron S.A. ("Huaron"). Since the 2012 sale, a substantial number of labour-related claims have been made by persons alleging to be former or then-current employees working at the Quiruvilca mine. Notwithstanding that an overwhelming majority of these claims were made exclusively against the subsequent owners of Quiruvilca and that Huaron has not owned or been involved with Quiruvilca for a number of years, the labour courts in Trujillo, Peru, have in many cases, imputed liability on Huaron. In some cases, the courts ordered seizure of monies from Huaron's local bank accounts and garnishment of funds due to Huaron from certain of its trading partners. In August 2018, the current owner of Quiruvilca declared bankruptcy, further exacerbating the situation. Huaron has challenged the basis of the labour court's decisions in Trujillo, and in the Commercial Court and Constitutional Courts of Peru. Pan American believes it has a strong legal position against liability for these claims and intends to continue to vigorously challenge them and enforce certain contractual rights to indemnification. However, there can be no assurance that the outcome of the proceedings or any enforcement of our rights will be favorable to us or that it will not have a material adverse impact on our financial position. In addition, Huaron will likely be directly or indirectly subject to further labour-related claims, and potentially to claims by creditors of the current owner of Quiruvilca, which in aggregate could be material.

These matters may give rise to legal uncertainties or have unfavourable results and divert Management's attention and resources.

### **Foreign Operations and Government Regulations**

Pan American currently conducts operations in Peru, Mexico, Argentina, Bolivia, Canada and Guatemala. Most of these jurisdictions are potentially subject to a number of political and economic risks, as well as civil and labour unrest, violence and the prevalence of criminal activity, including organized crime, theft and illegal mining. We are also subject to extensive laws and regulations in the jurisdictions in which we do business. The costs associated with compliance with these and future laws and regulations can be substantial, and changes to existing laws and regulations could cause additional expense, restrictions on or suspensions of our operations, and delays in the development and permitting of our properties. The nature of the foreign jurisdiction risks and the Company's exposures to and management of those risks, are described in more detail in the Risks and Uncertainties section of the 2018 Annual MD&A.

With respect to Guatemala, incidents of civil unrest, violence and vandalism have occasionally affected the Escobal mine, along with its employees, contractors and their families, including incidents surrounding the roadblock in Casillas, Guatemala. Pan American can provide no assurance that security incidents or roadblocks, in the future, will not have a material adverse effect on our ability to restart operations or conduct future operations at the Escobal mine. Renewed political unrest, including events related to Guatemalan Presidential elections held in 2019, could adversely affect our restart of and future operations at the Escobal mine.

Other than risk associated with the new jurisdictions the Company is now operating in subsequent to the Tahoe Acquisition, specifically Guatemala, there were no significant changes to those risks or to the Company's management of exposure to those risks during the three months ended September 30, 2019.

### **Community Action**

Communities and NGOs have become more vocal and active with respect to mining activities at or near their communities. Some communities and NGOs have taken actions that could have a material adverse effect on our operations, such as setting up road closures and commencing lawsuits. In certain circumstances, such actions might ultimately result in the cessation of mining activities and the revocation of permits and licenses. These actions relate not only to current activities but are often in respect of past activities by prior owners of mining properties. For example, since June 7, 2017, a group of protesters near the town of Casillas have blocked the primary highway that connects Guatemala City to San Rafael Las Flores and the Escobal mine. Tahoe's operations were reduced between June 8, 2017 and June 19, 2017 to conserve fuel, and on July 5, 2017, were ceased following the Supreme Court's provisional decision to suspend the Escobal mining license while the case against the Guatemala MEM was heard on the merits. A second roadblock was initiated in 2018 near the community of

Mataquesuintla. MSR representatives have been pursuing engagement with community leaders, government agencies, and NGOs to develop a dialogue process aimed at resolving this protracted dispute and reaching a peaceful conclusion to the roadblocks, but there is no guarantee that a positive conclusion will be reached.

### **Title to Assets**

In many jurisdictions in which we operate, legal rights applicable to mining concessions are different and separate from legal rights applicable to surface lands. Accordingly, title holders of mining concessions in many jurisdictions must agree with surface landowners on compensation in respect of mining activities conducted on such land. We do not hold title to all of the surface lands at many of our operations and we rely on contracts or other similar rights to conduct surface activities. For example, currently at the Shahuindo and La Arena operations we do not own all surface rights necessary for completion of the current mining plans.

In most of the jurisdictions where we operate the land title system is not well developed, recorded or maintained. There can also be uncertainty and conflicts with respect to physical land boundaries. Where we do own title to surface lands, legal challenges to our title are not uncommon. For example, a legal action was filed in the Guatemala courts in June 2019, by an individual claiming to own title to certain lands within the Escobal mine site, which Mineral San Rafael had previously purchased. In Mexico at our La Colorada mine, certain individuals have asserted community rights and land ownership over our surface lands in the Agrarian Courts and they have also initiated a process before the Ministry of Agrarian, Territorial and Urban Development of Mexico's Federal Government to declare such lands as national property. On June 4, 2019, we filed an amparo against such process and obtained an injunction to protect our surface rights of our La Colorada mine. If we are unable to acquire or maintain access to those surface rights, there could be material adverse impacts on our future mining operations.

## **SIGNIFICANT JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY IN THE APPLICATION OF ACCOUNTING POLICIES**

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In preparing financial statements in accordance with IFRS, Management is required to make estimates and assumptions that affect the amounts reported in the consolidated financial statements. These critical accounting estimates represent Management's estimates and judgments that are uncertain and any changes in these could materially impact the Company's financial statements. Management continuously reviews its estimates, judgments, and assumptions using the most current information available.

Readers should also refer to Note 3 of the 2018 Financial Statements, for the Company's summary of significant accounting policies.

## **CHANGES IN ACCOUNTING STANDARDS**

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The accounting policies applied in the preparation of these unaudited condensed interim consolidated financial statements are consistent with those applied and disclosed in the Company's audited consolidated financial statements for the year ended December 31, 2018, except for the following:

### **Leases**

In January 2016, the IASB issued IFRS 16 which replaces IAS 17 - *Leases and its associated interpretative guidance*, including IFRIC 4 and SIC 15. IFRS 16 applies a control model to the identification of leases, distinguishing between a lease and a non-lease component on the basis of whether the customer controls the specific asset. For those contracts that are or contain a lease, IFRS 16 introduces significant changes for lessees to the accounting for contracts that are or contain a lease, introducing a single, on-balance sheet accounting model that is similar to current finance lease accounting, with limited exceptions for short-term leases less than 12 months in duration or leases of low value assets. Lessor accounting remains similar to current accounting practice. The standard is effective for annual periods beginning on or after January 1, 2019, with early application permitted for entities that apply IFRS 15.

The Company has applied IFRS 16 using the modified retrospective approach from January 1, 2019 and has elected the record the transition date right of use assets at amounts equal to the present value of the minimum lease payments, on a lease by lease basis. Short-term and low-value recognition exemptions were applied, as well as

certain practical expedients allowing for the use of hindsight to assess the lease term for contracts with extension options, the exclusion of initial direct costs from measurement of the ROU asset and the exclusion of leases with a term of less than one year remaining at the transition date.

### **Policy applicable from January 1, 2019:**

#### Lease Definition

At inception of a contract, the Company assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if it conveys the right to control the use of an identified asset for a period of time in exchange for consideration. An identified asset may be implicitly or explicitly specified in a contract, but must be physically distinct, and must not have the ability for substitution by a lessor. The Company has the right to control an identified asset if it obtains substantially all of its economic benefits and either pre-determines, or directs how and for what purpose the asset is used.

#### Measurement of Right-of-Use Assets ("ROU Assets") and Lease Obligations

At lease commencement, the Company recognizes a ROU asset and a lease obligation. The ROU asset is initially measured at cost, which comprises the initial amount of the lease obligation adjusted for any lease payments made at, or before, the commencement date, plus any initial direct costs incurred, less any lease incentives received.

The ROU asset is subsequently amortized on a straight-line basis over the shorter of the term of the lease, or the useful life of the asset determined on the same basis as the Company's property, plant and equipment. The ROU asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease obligation.

The lease obligation is initially measured at the present value of lease payments remaining at the lease commencement date, discounted using the Company's incremental borrowing rate. Lease payments included in the measurement of the lease obligation, when applicable, may comprise fixed payments, variable payments that depend on an index or rate, amounts expected to be payable under a residual value guarantee and the exercise price under a purchase, extension or termination option that the Company is reasonably certain to exercise.

The lease obligation is subsequently measured at amortized cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Company's estimate of the amount expected to be payable under a residual value guarantee, or if the Company changes its assessment of whether it will exercise a purchase, extension or termination option. When the lease obligation is remeasured, a corresponding adjustment is made to the carrying amount of the ROU asset.

#### Recognition Exemptions

The Company has elected not to recognize ROU assets and lease obligations for short-term leases that have a lease term of twelve months or less or for leases of low-value assets. Payments associated with these leases are recognized as an operating expense on a straight-line basis over the lease term within costs and expenses on the consolidated income statement.

Additional disclosures have been presented in Note 14 of the Q3 2019 Financial Statements as a result of adopting IFRS 16.

### **Changes in accounting standards not yet effective**

The Company has not early adopted any amendment, standard or interpretation that has been issued by the IASB but is not yet effective.

## DISCLOSURE CONTROLS AND PROCEDURES

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### Management's Report on Internal Control over Financial Reporting

Management of Pan American is responsible for establishing and maintaining an adequate system of internal control, including internal controls over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, the President and Chief Executive Officer and the Chief Financial Officer and effected by the Board of Directors, Management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board. It includes those policies and procedures that:

- a. pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of Pan American,
- b. are designed to provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with International Financial Reporting Standards, and that receipts and expenditures of Pan American are being made only in accordance with authorizations of Management and Pan American's directors, and
- c. are designed to provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of Pan American's assets that could have a material effect on the annual financial statements or interim financial reports.

The Company's management, including its President and Chief Executive Officer and Chief Financial Officer, believe that due to its inherent limitations, internal control over financial reporting may not prevent or detect misstatements on a timely basis. In addition, projections of any evaluation of the effectiveness of internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

### Changes in Internal Controls over Financial Reporting

There has been no change in the Company's internal control over financial reporting during the three month period ended September 30, 2019 that has materially affected or is reasonably likely to materially affect, its internal control over financial reporting.

## TECHNICAL INFORMATION

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Scientific and technical information contained in this MD&A has been reviewed and approved by Martin Wafforn, P.Eng., Senior Vice President Technical Services and Processing Optimization, and Christopher Emerson, FAusIMM, Vice President Business Development and Geology, each of whom is a Qualified Persons, as the term is defined in Canadian National Instrument 43-101 - *Standards of Disclosure of Mineral Projects* ("NI 43-101").

For more detailed information regarding the Company's material mineral properties as at December 31, 2018 and technical information related thereto, including a complete list of current technical reports applicable to such properties, please refer to the Company's Annual Information Form dated March 12, 2019, filed at [www.sedar.com](http://www.sedar.com) or the Company's most recent Form 40-F filed with the SEC.

## Cautionary Note Regarding Forward-Looking Statements and Information

Certain of the statements and information in this MD&A constitute “forward-looking statements” within the meaning of the United States Private Securities Litigation Reform Act of 1995 and “forward-looking information” within the meaning of applicable Canadian provincial securities laws relating to the Company and its operations. All statements, other than statements of historical fact, are forward-looking statements. When used in this MD&A, the words, “will”, “believes”, “expects”, “intends”, “plans”, “forecast”, “objective”, “guidance”, “outlook”, “potential”, “anticipated”, “budget”, and other similar words and expressions, identify forward-looking statements or information. These forward-looking statements or information relate to, among other things: future financial and operational performance; future production of silver, gold and other metals produced by the Company, including the Acquired Mines; future Cash Costs and AISC; the sufficiency of the Company’s current working capital, anticipated operating cash flow or its ability to raise necessary funds; the anticipated amount and timing of production at each of the Company’s properties and in the aggregate; our expectations with respect to future metal prices and exchange rates; the timing and disclosure of the allocation of purchase price for the Acquisition; the duration and effect of the license suspensions and any road blocks relating to the Escobal mine; the constitutional court-mandated ILO 169 consultation process in Guatemala, and the timing and completion thereof; the anticipated timing for commencement of commercial production at our COSE and Joaquin projects; the estimated cost of and availability of funding necessary for sustaining capital; forecast capital and non-operating spending; and the Company’s plans and expectations for its properties and operations.

These forward-looking statements and information reflect the Company’s current views with respect to future events and are necessarily based upon a number of assumptions and estimates that, while considered reasonable by the Company, are inherently subject to significant operational, business, economic, competitive, political, regulatory, and social uncertainties and contingencies. These assumptions include: tonnage of ore to be mined and processed; ore grades and recoveries; prices for silver, gold and base metals remaining as estimated; currency exchange rates remaining as estimated; capital, decommissioning and reclamation estimates; our mineral reserve and mineral resource estimates and the assumptions upon which they are based; prices for energy inputs, labour, materials, supplies and services (including transportation); no labour-related disruptions at any of our operations; no unplanned delays or interruptions in scheduled production; all necessary permits, licenses and regulatory approvals for our operations are received in a timely manner and can be maintained; and our ability to comply with environmental, health and safety laws, particularly given the potential for modifications and expansion of such laws. The foregoing list of assumptions is not exhaustive.

The Company cautions the reader that forward-looking statements and information involve known and unknown risks, uncertainties and other factors that may cause actual results and developments to differ materially from those expressed or implied by such forward-looking statements or information contained in this MD&A and the Company has made assumptions and estimates based on or related to many of these factors. Such factors include, without limitation: fluctuations in silver, gold, and base metal prices; fluctuations in prices for energy inputs; fluctuations in currency markets (such as the PEN, MXN, ARS, BOL, GTQ and CAD versus the USD); risks related to the technological and operational nature of the Company’s business; changes in national and local government, legislation, taxation, controls or regulations and political, legal or economic developments in Canada, the United States, Mexico, Peru, Argentina, Bolivia, Guatemala or other countries where the Company may carry on business, including the risk of expropriation related to certain of our operations, particularly in Argentina and Bolivia and risks related to the constitutional court-mandated ILO 169 consultation process in Guatemala; risks and hazards associated with the business of mineral exploration, development and mining (including environmental hazards, industrial accidents, unusual or unexpected geological or structural formations, pressures, cave-ins and flooding); risks relating to the credit worthiness or financial condition of suppliers, refiners and other parties with whom the Company does business; inadequate insurance, or inability to obtain insurance, to cover these risks and hazards; employee relations; relationships with and claims by the local communities and indigenous populations; availability and increasing costs associated with mining inputs and labour; the Company’s ability to secure our mine sites or maintain access to our mine sites due to criminal activity, violence, or civil and labour unrest; the speculative nature of mineral exploration and development, including the risk of obtaining or retaining necessary licenses and permits and the presence of laws, regulations and other legal impediments that may impose restrictions on mining, including those currently in the province of Chubut, Argentina, or that might otherwise prevent or cause the suspension or discontinuation of mining activities; diminishing quantities or grades of mineral

reserves as properties are mined; global financial conditions; the Company's ability to complete and successfully integrate acquisitions and to mitigate other business combination risks; challenges to, or difficulty in maintaining, the Company's title to properties and continued ownership thereof; the actual results of current exploration activities, conclusions of economic evaluations, and changes in project parameters to deal with unanticipated economic or other factors; increased competition in the mining industry for properties, equipment, qualified personnel, and their costs; having sufficient cash to pay obligations as they come due; and those factors identified under the caption "Risks Related to Pan American's Business" in the Company's most recent Form 40-F and Annual Information Form filed with the United States Securities and Exchange Commission and Canadian provincial securities regulatory authorities, respectively. Although the Company has attempted to identify important factors that could cause actual results to differ materially, there may be other factors that cause results not to be as anticipated, estimated, described, or intended. Investors are cautioned against attributing undue certainty or reliance on forward-looking statements or information. Forward-looking statements and information are designed to help readers understand Management's current views of our near and longer term prospects and may not be appropriate for other purposes. The Company does not intend, and does not assume any obligation, to update or revise forward-looking statements or information to reflect changes in assumptions or in circumstances or any other events affecting such statements or information, other than as required by applicable law.

### **Cautionary Note to U.S. Investors Concerning Estimates of Mineral Reserves and Mineral Resources**

This MD&A has been prepared in accordance with the requirements of Canadian securities laws, which differ from the requirements of U.S. securities laws. Unless otherwise indicated, all mineral reserve and mineral resource estimates included in the MD&A have been disclosed in accordance with NI 43-101 and the Canadian Institute of Mining, Metallurgy, and Petroleum Definition Standards. NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects.