



PAN AMERICAN
— SILVER —

Q4 and FY 2019 Earnings Review

Cautionary Note

Non-GAAP Measures

This presentation of Pan American Silver Corp. and its subsidiaries (collectively, "Pan American", "Pan American Silver", the "Company", "we" or "our") refers to various 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". These measures do not have a standardized meaning prescribed by IFRS as an indicator of performance, and may differ from methods used by other companies. Any reference to "Cash Costs" in this presentation 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 presentation should be understood to mean all-in sustaining costs per silver or gold ounce sold, net of by-product credits.

Readers should refer to the "Alternative Performance (Non-GAAP) Measures" section of the Company's Management's Discussion and Analysis ("MD&A") for the period ended September 30, 2019, available at www.sedar.com.

Reporting Currency and Financial Information

Unless we have specified otherwise, all references to dollar amounts or \$ are to United States dollars.

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 ("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 our financial reporting. All production, operating and financial results of the Acquired Mines (including Cash Costs and AISC amounts) 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 the MD&A for the period ended September 30, 2019.

Cautionary Note Regarding Forward Looking Statements and Information

Certain of the statements and information in this presentation 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. All statements, other than statements of historical fact, are forward-looking statements or information. Forward-looking statements or information in this presentation 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; our mineral resource estimates; the estimated cost of and availability of funding necessary for sustaining capital; forecast capital, sustaining and non-operating spending; and the Company's plans and expectations for its properties, operations and exploration projects.

These statements and information reflect Pan American's current views with respect to future events and are necessarily based upon a number of assumptions that, while considered reasonable by Pan American, are inherently subject to significant operational, business, economic and regulatory 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.

...continued on next page

Cautionary Note

Cautionary Note Regarding Forward Looking Statements and Information (continued)...

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 claims and legal proceedings involving or against the Company and our subsidiaries; risks relating to the credit worthiness or financial condition of suppliers, refiners and other parties with whom the Company does business; risk of liability relating to our past sale of the Quiruvilca mine in Peru; 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.

Technical Information

Scientific and technical information contained in this presentation with respect to Pan American Silver Corp. has been reviewed and approved by Martin Wafforn, P.Eng., SVP Technical Services and Process Optimization, and Chris Emerson, FAusIMM, VP Business Development and Geology, who are Pan American's qualified persons for the purposes of National Instrument 43-101 ("NI 43-101"). Mineral reserves in this presentation were prepared under the supervision of, or were reviewed by, Martin Wafforn and Chris Emerson.

See Pan American's Annual Information Form dated March 12, 2019, available at www.sedar.com for further information on Pan American's material mineral properties as at December 31, 2018, including information concerning associated QA/QC and data verification matters, the key assumptions, parameters and methods used by the Pan American to estimate mineral reserves and mineral resources, and for a detailed description of known legal, political, environmental, and other risks that could materially affect Pan American's business and the potential development of Pan American's mineral reserves and resources. Please also refer to Pan American's news releases dated October 23, 2018, February 21, 2019, May 8, 2019, August 1, 2019, October 30, 2019, December 11, 2019 and February 13, 2020 with respect to the La Colorada skarn exploration results.

For further information on the material mineral properties acquired from Tahoe, please refer to the Company's management information circular dated December 4, 2018, including additional information contained in Tahoe's disclosure incorporated by reference therein, available at www.sedar.com.

The mineral reserves and resources of Pan American in this presentation reflect our mineral reserves and resources estimates as at June 30, 2019, as announced in our news release dated September 4, 2019. See presentation appendix for more detailed information.

Cautionary Note About Mineral Reserves and Resources

Cautionary Note to US Investors Concerning Estimates of Mineral Reserves and Resources

This presentation 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 resource estimates included in this presentation have been prepared in accordance with Canadian *National Instrument 43-101 – Standards of Disclosure for Mineral Projects* (“NI 43-101”) and the Canadian Institute of Mining, Metallurgy and Petroleum classification system. 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.

Canadian standards, including NI 43-101, differ significantly from the requirements of the United States Securities and Exchange Commission (the “SEC”), and information concerning mineralization, deposits, mineral reserve and resource information contained or referred to herein may not be comparable to similar information disclosed by U.S. companies. In particular, and without limiting the generality of the foregoing, this presentation uses the terms “measured resources”, “indicated resources” and “inferred resources”. U.S. investors are advised that, while such terms are recognized and required by Canadian securities laws, the SEC has not recognized them under Industry Guide 7 prior to the adoption of the modernization of Property Disclosure for Mining Registrants. The requirements of NI 43-101 for identification of “reserves” has not the same as those of the SEC, and reserves reported by Pan American in compliance with NI 43-101 may not qualify as “reserves” under SEC standards. Under U.S. standards, mineralization may not be classified as a “reserve” unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. U.S. investors are cautioned not to assume that any part of a “measured resource” or “indicated resource” will ever be converted into a “reserve”. U.S. investors should also understand that “inferred resources” have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of “inferred resources” exist, are economically or legally mineable or will ever be upgraded to a higher category. Under Canadian securities laws, estimated “inferred resources” may not form the basis of feasibility or pre-feasibility studies except in rare cases. Disclosure of “contained ounces” in a mineral resource is permitted disclosure under Canadian securities laws. However, the SEC has previously only permitted issuers to report mineralization that does not constitute “reserves” by SEC standards as in place tonnage and grade, without reference to unit measures. Accordingly, information concerning mineral deposits set forth herein may not be comparable with information made public by companies that report in accordance with U.S. standards.

Consolidated 2019 Highlights

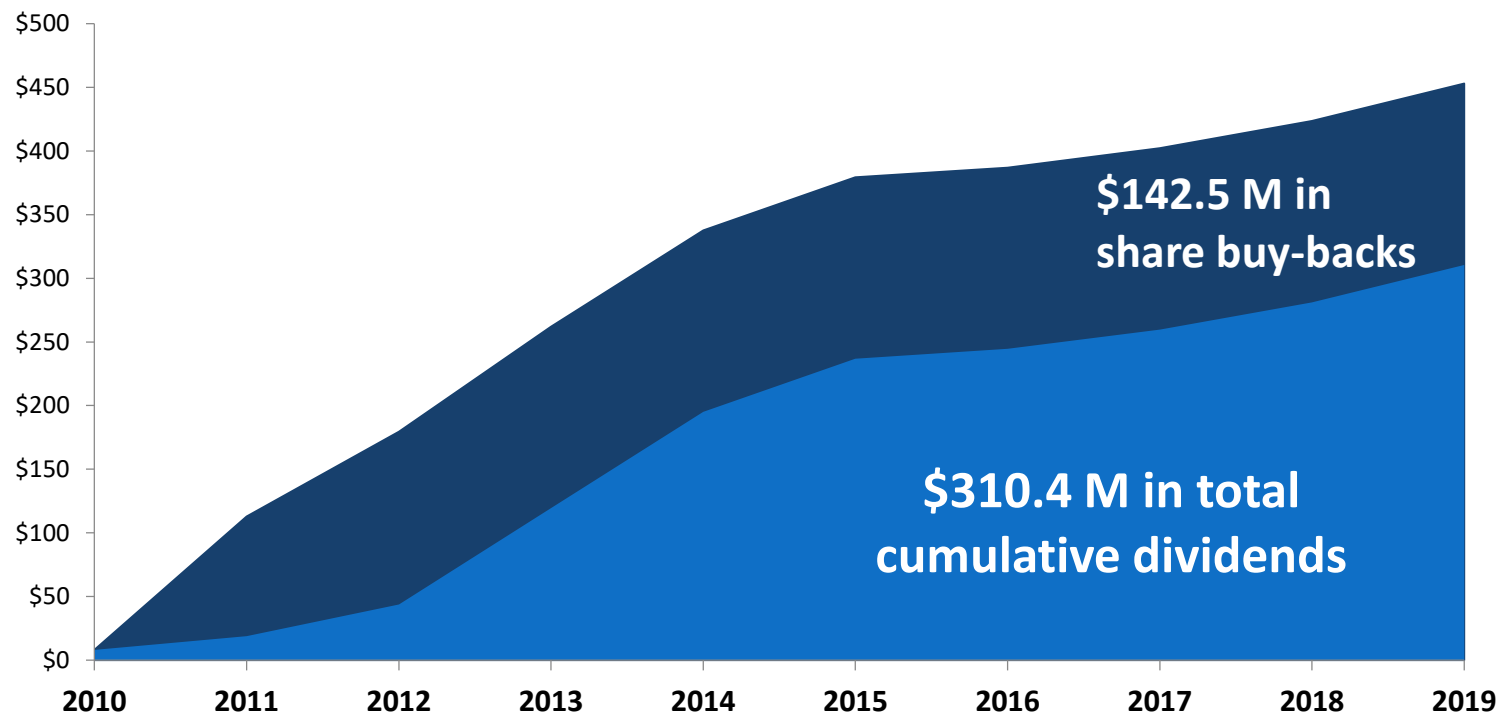
- Cash flow from operations of \$282.0 million
 - Record quarterly cash flow in Q4 of \$129.5 million
- Net earnings of \$111.2M, or \$0.55/share
- Adjusted earnings of \$158.0M, or \$0.78/share
- Annual silver and gold production of 25.9 Moz and 559.2 koz in line with revised guidance⁽¹⁾
- Silver and gold segment Cash Costs and AISC in line with revised guidance⁽¹⁾
- Repaid \$60M of debt, resulting in \$275M of bank debt and a cash and short-term investment balance of \$238.3M at December 31, 2019
- Integration of former Tahoe operations progressing well, with annual G&A savings of \$25M to \$30M
- Initial inferred mineral resource estimate of 72.5 Mt for the La Colorada skarn deposit

(1) 2019 Guidance represents Management's revised forecast as at November 6, 2019.

Return to Shareholders

43% increase in quarterly cash dividend to \$0.05 per common share, payable on or about March 12, 2020⁽¹⁾

in Millions US\$



\$453 M in total cumulative cash returned to shareholders (dividends and share buy-backs) since 2010

(1) The amounts and specific distribution dates of any future dividends will be evaluated and determined by the Board of Directors on an ongoing basis.

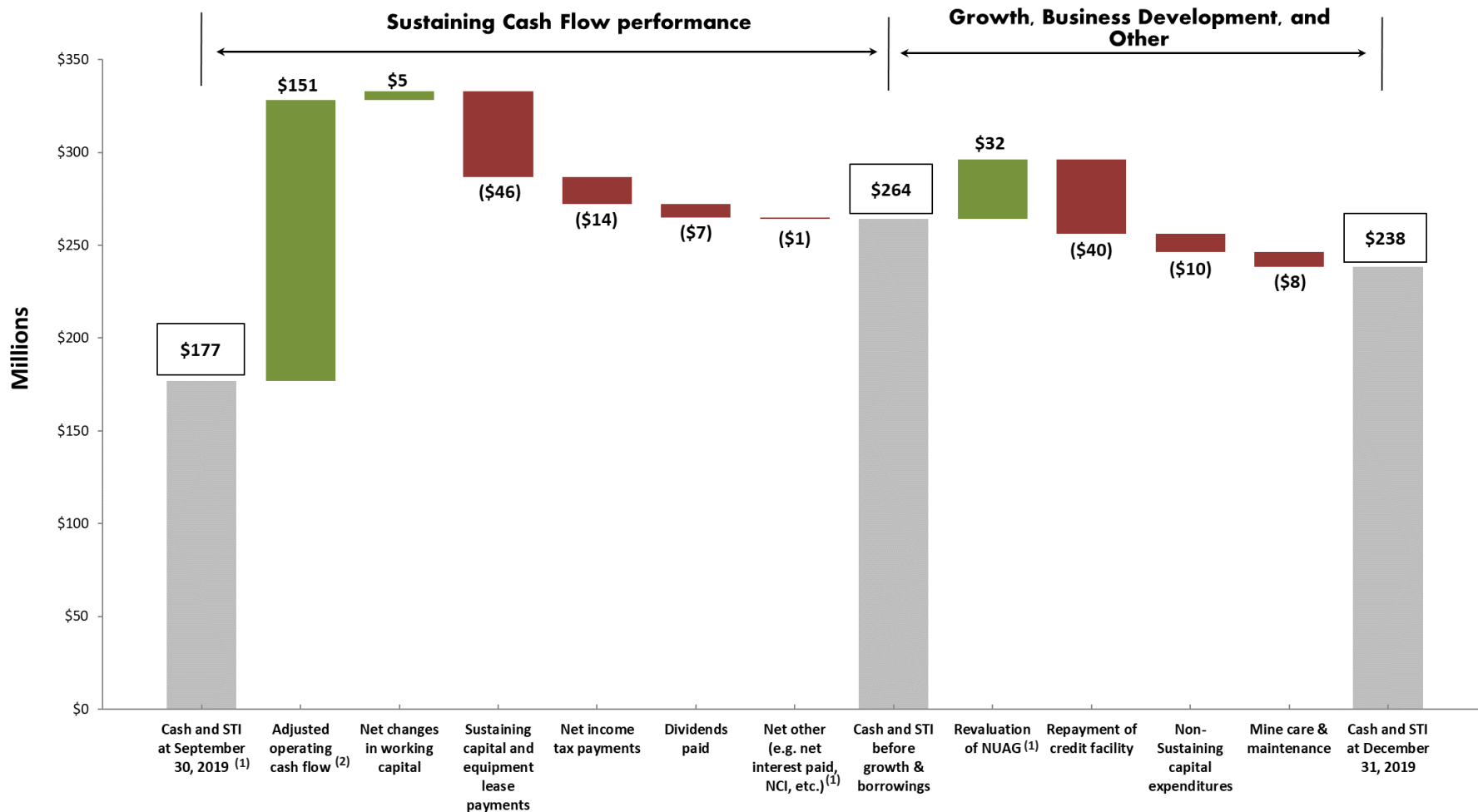
Consolidated Financial Results

| Unaudited in millions of US\$, except per share amounts | Q4 2019 | FY 2019 |
|---|---------|---------|
| Revenue | 404.4 | 1,350.8 |
| Mine operating earnings | 98.6 | 229.3 |
| Net earnings | 51.7 | 111.2 |
| Basic per share ⁽¹⁾ | 0.25 | 0.55 |
| Adjusted earnings ⁽²⁾ | 68.9 | 158.0 |
| Basic adjusted per share ⁽¹⁾ | 0.33 | 0.78 |
| Net cash generated from operating activities | 129.5 | 282.0 |

(1) Per share amounts are based on basic weighted average common shares.

(2) Adjusted earnings is a non-GAAP financial measure; see the "Non-GAAP Measures" section of our Cautionary Note on page 2 of this presentation.

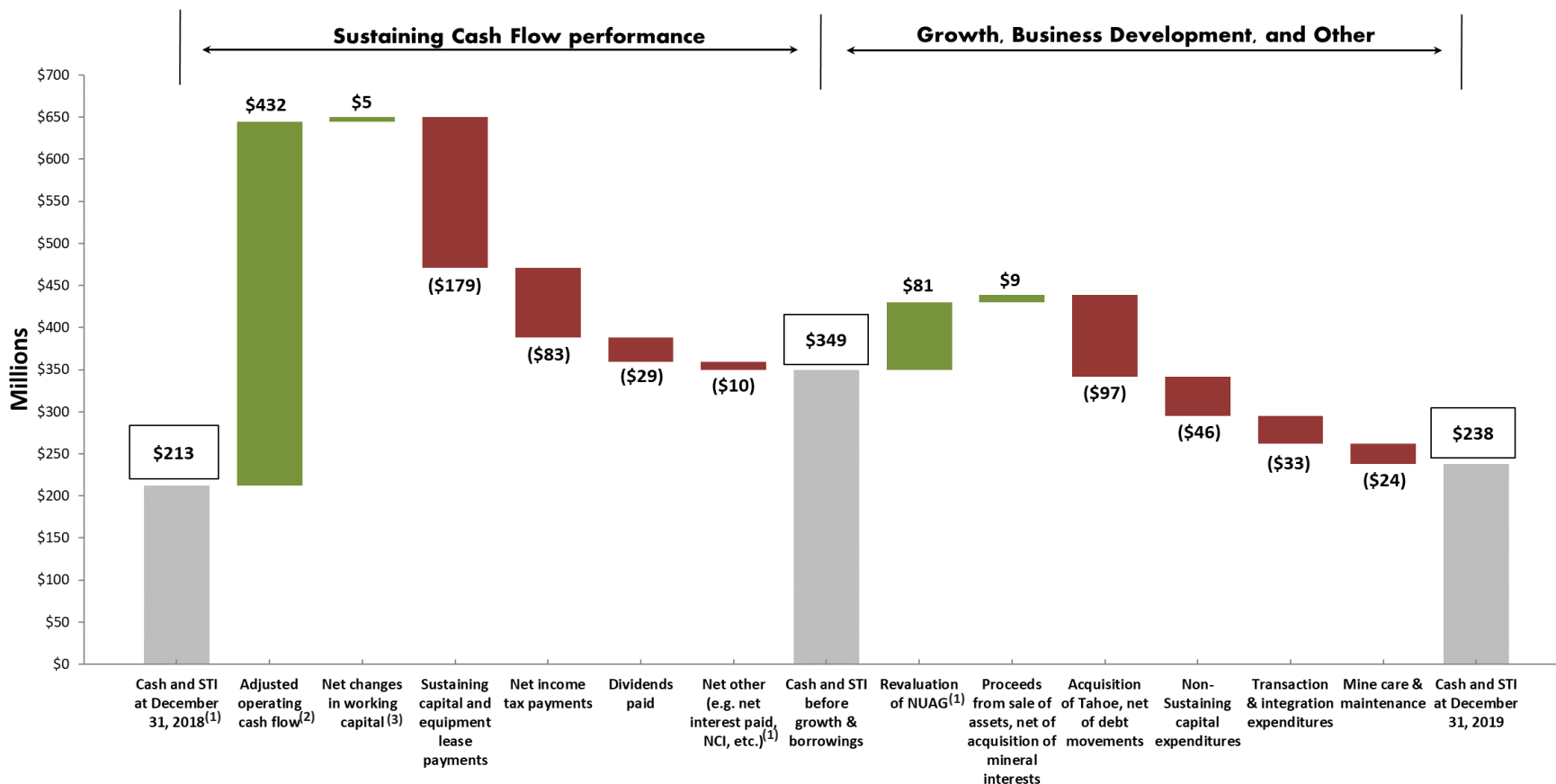
Q4 2019 Consolidated Cash Flows



(1) "STI" means short-term investments, "NCI" means non-controlling interests, and "NUAG" means New Pacific Metals Corp.

(2) Net cash generated from operating activities before changes in working capital, interest and income taxes paid, and mine care and maintenance.

FY 2019 Consolidated Cash Flows



(1) "STI" means short-term investments, "NCI" means non-controlling interests, and "NUAG" means New Pacific Metals Corp.

(2) Net cash generated from operating activities before changes in working capital, interest and income taxes paid, and mine care and maintenance.

(3) Excludes Tahoe transaction and integration expenditures captured as growth expenditures.

Liquidity and Capital Position

| US\$ Millions | December 31, 2019 |
|---|-------------------|
| Cash and Short-term Investments | 238.3 |
| Working Capital ⁽¹⁾ | 517.2 |
| Amount drawn on Revolving Credit Facility | 275.0 |
| Total debt ⁽²⁾ | 316.2 |

(1) Working capital is a non-GAAP measure calculated as current assets less current liabilities. The Company and certain investors use this information to evaluate whether the Company is able to meet its current obligations using its current assets.

(2) Total debt is a non-GAAP measure calculated as the total of amounts drawn on the Company's \$500 million revolving credit facility, finance lease liabilities and loans payable. See the "Non-GAAP Measures" section of our Cautionary Note on page 2 of this presentation.

Production

| | Silver Production (ounces '000s) | | Gold Production (ounces '000s) | |
|-------------------------------|-------------------------------------|---------------|-----------------------------------|--------------|
| | Q4 2019 | FY 2019 | Q4 2019 | FY 2019 |
| Silver Segment: | | | | |
| La Colorada | 2,080 | 8,206 | 1.3 | 4.6 |
| Dolores | 1,287 | 5,122 | 26.1 | 117.6 |
| Huaron | 935 | 3,796 | 0.2 | 1.0 |
| Morococha ⁽¹⁾ | 554 | 2,456 | 0.2 | 1.4 |
| San Vicente ⁽²⁾ | 877 | 3,528 | 0.1 | 0.5 |
| Manantial Espejo/COSE/Joaquin | 817 | 2,599 | 6.7 | 22.4 |
| Gold Segment: | | | | |
| Shahuindo ⁽³⁾ | 54 | 137 | 43.5 | 145.4 |
| La Arena ⁽³⁾ | 11 | 26 | 48.4 | 122.5 |
| Timmins ^{(3)/(4)} | 6 | 18 | 47.3 | 143.8 |
| Total⁽⁵⁾ | 6,622 | 25,886 | 173.9 | 559.2 |

(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 of these mines pursuant to the Tahoe Resources Inc. transaction.

(4) Timmins refers to both the Timmins West and Bell Creek mines.

(5) Totals may not add due to rounding.

Cash Cost and AISC

| | Cash Costs ⁽¹⁾ (\$ per ounce) | | AISC ⁽¹⁾ (\$ per ounce) | |
|--|---|-------------|---------------------------------------|--------------|
| | Q4 2019 | FY 2019 | Q4 2019 | FY 2019 |
| La Colorada | 4.30 | 2.99 | 5.80 | 4.54 |
| Dolores | 2.64 | 3.09 | 9.33 | 15.45 |
| Huaron | 5.34 | 4.15 | 9.44 | 7.74 |
| Morococho | 10.85 | 4.35 | 18.83 | 10.08 |
| San Vicente | 14.38 | 11.77 | 16.50 | 13.08 |
| Manantial Espejo | 15.47 | 19.59 | 16.94 | 18.43 |
| Silver Segment Consolidated⁽²⁾ | 7.80 | 6.39 | 11.37 | 10.46 |
| Shahuindo | 605 | 570 | 970 | 807 |
| La Arena | 580 | 644 | 764 | 1,042 |
| Timmins ⁽³⁾ | 844 | 904 | 984 | 998 |
| Gold Segment Consolidated⁽⁴⁾ | 693 | 712 | 901 | 948 |
| Consolidated metrics per silver ounce sold⁽⁵⁾: | | | | |
| All Operations | | | 1.04 | 4.44 |
| All Operations before NRV inventory adjustments | | | 0.96 | 4.45 |

(1) Cash Costs and AISC are non-GAAP measures. Please refer to the section "Alternative Performance (Non-GAAP) Measures" of the MD&A for the period ended December 31, 2019 for a detailed description of these measures and where appropriate a reconciliation of the measures to the 2019 Financial Statements.

(2) Silver Segment Cash Costs and AISC are calculated net of credits for realized revenues from all metals other than silver ("by-product credits"), divided by per ounce of silver sold.

(3) Timmins refers to both the Timmins West and Bell Creek mines.

(4) Gold Segment Cash Costs and AISC are calculated net of credits for realized silver revenues divided by per ounce of gold sold.

(5) 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 are not allocated in calculating AISC for each operation.

2019: Guidance Achieved

| | 2019 Actual | 2019 Guidance ⁽¹⁾ |
|--|-------------|------------------------------|
| Cash Costs⁽²⁾ (\$/ounce) | | |
| Silver Segment ⁽³⁾ | 6.39 | 6.00 – 7.00 |
| Gold Segment ⁽⁴⁾ | 712 | 725 – 775 |
| Consolidated Silver Basis ⁽⁵⁾ | (4.89) | (5.50) – (3.80) |
| AISC⁽²⁾ (\$/ounce) | | |
| Silver Segment ⁽³⁾ | 10.46 | 9.50 – 11.00 |
| Gold Segment ⁽⁴⁾ | 948 | 1,000 – 1,100 |
| Consolidated Silver Basis ⁽⁵⁾ | 4.44 | 6.00 – 7.50 |
| Production | | |
| Silver (Moz) | 25.9 | 25.3 – 26.3 |
| Gold (koz) | 559.2 | 550.0 – 600.0 |

(1) 2019 Guidance represents Management's revised forecast as at November 6, 2019.

(2) Cash Costs and AISC are non-GAAP measures. See the "Non-GAAP Measures" section of our Cautionary Note on page 2 of this presentation.

(3) Silver Segment Cash Costs and AISC are calculated net of credits for realized revenues from all metals other than silver ("by-product credits"), divided by per ounce of silver sold.

(4) Gold Segment Cash Costs and AISC are calculated net of credits for realized silver revenues divided by per ounce of gold sold.

(5) 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 are not allocated in calculating AISC for each operation.

2019 Capital Expenditures

| (in millions of US\$) | 2019 Actual | 2019 Guidance⁽¹⁾ |
|------------------------------|--------------------|------------------------------------|
| Sustaining Capital | 179.1 | 203.0 – 213.0 |
| Project Capital | 43.6 | 45.0 |
| Total Capital | 222.7 | 248.0 - 258.0 |

(1) 2019 Guidance represents Management's revised forecast as at November 6, 2019.

2020 Guidance

The table provides management's guidance for 2020, as at January 15, 2020.

| | Silver Production (million ounces) | Gold Production (thousand ounces) | Cash Costs (\$ per ounce) ⁽¹⁾ | AISC (\$ per ounce) ⁽¹⁾ |
|---------------------------------------|---------------------------------------|--------------------------------------|---|---------------------------------------|
| Silver Segment | | | | |
| La Colorada | 8.5 - 8.7 | 4.0 - 5.0 | 3.00 - 4.00 | 5.50 - 6.50 |
| Dolores | 4.5 - 5.0 | 133.5 - 143.5 | (8.50) - (5.50) | 4.25 - 6.25 |
| Huaron | 3.8 - 3.9 | 0.5 | 9.25 - 11.00 | 12.50 - 14.25 |
| Morococha ⁽²⁾ | 2.6 - 2.8 | 1.3 - 1.5 | 9.50 - 11.75 | 13.50 - 15.50 |
| San Vicente ⁽³⁾ | 3.5 - 3.6 | 0.5 | 14.00 - 15.00 | 16.00 - 17.00 |
| Manantial Espejo/COSE/Joaquin | 4.0 - 4.3 | 33.2 - 36.5 | 16.75 - 17.75 | 18.50 - 19.50 |
| Total⁽⁴⁾ | 26.8 - 28.3 | 173.0 - 187.5 | 5.75 - 7.50 | 10.25 - 11.75 |
| Gold Segment | | | | |
| Shahuindo | 0.2 | 162.0 - 172.5 | 700 - 750 | 1,070 - 1,150 |
| La Arena | — | 125.0 - 135.0 | 800 - 850 | 1,120 - 1,200 |
| Timmins ⁽⁵⁾ | — | 165.0 - 180.0 | 950 - 1,000 | 1,090 - 1,170 |
| Total | 0.2 | 452.0 - 487.5 | 820 - 870 | 1,090 - 1,170 |
| Total Production⁽⁶⁾ | 27.0 - 28.5 | 625.0 - 675.0 | — | — |
| Consolidated Silver Basis | — | — | n/a ⁽⁷⁾ | 4.50 - 6.50 |

(1) Cash Costs and AISC are non-GAAP measures; refer to the section "Alternative Performance (Non-GAAP) Measures" of the January 15, 2020 press release for a detailed description of these measures. The Cash Costs and AISC forecasts assume average metal prices of \$17.50/oz for silver, \$1,525/oz for gold, \$2,350/tonne (\$1.07/lb) for zinc, \$2,000/tonne (\$0.91/lb) for lead, and \$6,150/tonne (\$2.79/lb) for copper; and average annual exchange rates relative to 1 USD of 19.50 for the Mexican peso ("MXN"), 3.34 of the Peruvian sol ("PEN"), 73.64 for the Argentine peso ("ARS"), 6.91 for the Bolivian boliviano ("BOL"), and \$1.30 for the Canadian dollar ("CAD").

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

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

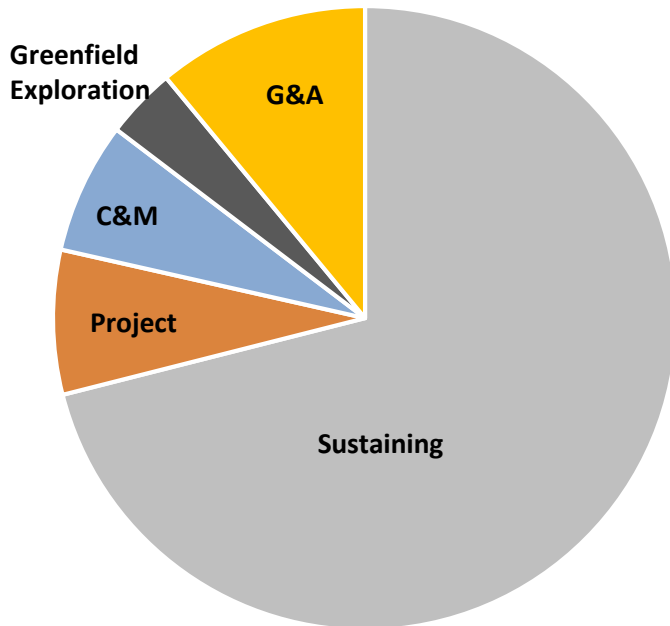
(4) As shown in the detailed quantification of consolidated AISC, included in the "Alternative Performance (Non-GAAP) Measures" section of the MD&A for the period ended September 30, 2019, corporate general and administrative expenses, and exploration and project development expenses are included in Consolidated Silver Basis AISC, but not allocated in calculating AISC for the Silver and Gold segments.

(5) Timmins refers to both the Timmins West and Bell Creek mines.

(6) Totals may not add due to rounding.

(7) Pan American will no longer be providing guidance for Cash Costs on a Consolidated Silver Basis, determining that AISC guidance is a more appropriate measure of reflecting costs on a Consolidated Silver Basis.

2020 Expenditures Guidance⁽¹⁾



Sustaining Capital \$225.0 - \$240.0 M

- Brownfield exploration for reserve replacement
- Dolores and Shahuindo heap leach pad expansions
- La Arena and Shahuindo waste rock storage facilities
- La Colorada and Timmins tailings storage facility expansions
- Dolores and La Arena open-pit pre-stripping
- Huaron and Morococha underground mine development

Project Capital \$22.0 - \$27.0 M

- La Colorada Skarn
- Bell Creek Mine Expansion

Care & Maintenance \$21.5 - \$23.0 M

Greenfield Exploration \$11.5 - \$12.5 M

- Regional, focused on Peru, Mexico and Canada

Corporate G&A \$35.0 - \$37.0 M

(1) For more information on the 2020 Guidance refer to the Jan. 15, 2020 news release.

La Colorada Discovery

Large, high-grade polymetallic skarn deposit

✓ **Deposit located adjacent and below Pan American's La Colorada vein system**

✓ **Inferred Mineral Resource Estimate⁽¹⁾**

| Million Tonnes | Ag g/t | Cu % | Pb % | Zn % |
|----------------|--------|------|------|------|
| 72.5 | 44 | 0.17 | 2.02 | 4.40 |

✓ **65 diamond drill holes with a total length of 54,000 metres**

✓ **Initial metallurgical testing indicates encouraging flotation metal recoveries**

✓ **2020 plans to further define and expand the mineral resource**
44,000 metres of drilling
Deposit remains open in nearly all directions for resource expansion

(1) Assuming a cut-off grade of US\$60/tonne. Prices used to estimate mineral resources were: US\$18.50 per ounce of silver, US\$2,600 per tonne of zinc, US\$2,200 per tonne of lead, and US\$6,500 per tonne of copper Refer to the December, 11, 2019 press release for further details. The effective date of the mineral resources estimate is December 11, 2019. Mineral resources are not mineral reserves and have no demonstrated economic viability. The mineral resource estimate was prepared under the supervision of, or was reviewed by, Christopher Emerson, FAusIMM, Vice President Business Development and Geology and Martin G. Wafforn, P.Eng., Senior Vice President Technical Services and Process Optimization, each of whom is a Qualified Person as that term is defined in National Instrument 43-101. Please refer to cautionary information on forward-looking statements and mineral reserve and resources on pages 2 to 4 of this presentation. For further details on the deposit including drill results, also refer to www.panamericansilver.com/operations/north-and-central-america/la-colorada/.



Q&A

To join the queue:

Press * and 1 on your touch-tone telephone. You will hear a tone acknowledging your request.

If you wish to remove yourself from the queue, press * and 2

Pan American Silver Proven and Probable Reserves^{1,2}

| Property | Location | Classification | Tonnes (Mt) | Ag (g/t) | Contained Ag (Moz) | Au (g/t) | Contained Au (koz) | Cu (%) | Contained Cu (kt) | Pb (%) | Contained Pb (kt) | Zn (%) | Contained Zn (kt) |
|---|-----------|--------------------------|--------------|------------|--------------------|-------------|--------------------|-------------|-------------------|-------------|-------------------|-------------|-------------------|
| Silver Segment | | | | | | | | | | | | | |
| Huaron | Peru | Proven | 6.2 | 168 | 33.5 | - | - | 0.69 | 43.0 | 1.44 | 89.5 | 3.02 | 188.1 |
| | | Probable | 3.7 | 170 | 20.1 | - | - | 0.33 | 12.3 | 1.55 | 57.1 | 3.00 | 110.2 |
| Morococha (92.3%) ⁽³⁾ | Peru | Proven | 4.1 | 147 | 19.5 | - | - | 0.38 | 15.5 | 1.38 | 57.1 | 4.03 | 166.7 |
| | | Probable | 2.2 | 173 | 12.3 | - | - | 0.31 | 6.9 | 1.20 | 26.5 | 3.26 | 72.2 |
| La Colorada | Mexico | Proven | 4.0 | 395 | 50.8 | 0.33 | 42.0 | - | - | 1.72 | 68.9 | 3.11 | 124.4 |
| | | Probable | 5.4 | 287 | 49.6 | 0.26 | 44.4 | - | - | 1.35 | 72.4 | 2.44 | 131.4 |
| Dolores | Mexico | Proven | 35.9 | 26 | 29.8 | 0.84 | 967.4 | - | - | - | - | - | - |
| | | Probable | 7.8 | 28 | 6.9 | 0.84 | 210.7 | - | - | - | - | - | - |
| Manantial Espejo | Argentina | Proven | 0.8 | 170 | 4.6 | 1.35 | 36.2 | - | - | - | - | - | - |
| | | Probable | 0.1 | 204 | 0.9 | 3.64 | 16.0 | - | - | - | - | - | - |
| San Vicente (95%) ⁽³⁾ | Bolivia | Proven | 1.4 | 414 | 18.6 | - | - | 0.43 | 6.0 | 0.35 | 4.9 | 3.06 | 42.9 |
| | | Probable | 0.5 | 345 | 6.0 | - | - | 0.32 | 1.7 | 0.42 | 2.3 | 2.71 | 14.5 |
| Joaquin | Argentina | Probable | 0.5 | 721 | 11.0 | 0.41 | 6.2 | - | - | - | - | - | - |
| COSE | Argentina | Probable | 0.1 | 918 | 2.2 | 17.7 | 43.3 | - | - | - | - | - | - |
| Escobal | Guatemala | Proven | 2.5 | 486 | 39.5 | 0.42 | 34.2 | - | - | 1.02 | 25.7 | 1.75 | 44.4 |
| | | Probable | 22.1 | 316 | 225.0 | 0.34 | 243.8 | - | - | 0.77 | 169.9 | 1.25 | 275.7 |
| Total Silver Segment⁽⁴⁾ | | | 97.5 | 169 | 530.4 | 0.64 | 1,644.1 | 0.47 | 85.4 | 1.10 | 574.1 | 2.24 | 1,170.6 |
| Gold Segment | | | | | | | | | | | | | |
| La Arena | Peru | Proven | 27.4 | - | - | 0.36 | 319.4 | - | - | - | - | - | - |
| | | Probable | 9.5 | - | - | 0.30 | 90.9 | - | - | - | - | - | - |
| Shahuindo | Peru | Proven | 69.8 | 6 | 14.4 | 0.51 | 1,133.2 | - | - | - | - | - | - |
| | | Probable | 42.8 | 6 | 7.8 | 0.46 | 629.9 | - | - | - | - | - | - |
| Timmins | Canada | Proven | 2.7 | - | - | 3.06 | 269.1 | - | - | - | - | - | - |
| | | Probable | 7.2 | - | - | 3.10 | 718.6 | - | - | - | - | - | - |
| La Bolsa | Mexico | Proven | 9.5 | 10 | 3.1 | 0.67 | 202.9 | - | - | - | - | - | - |
| | | Probable | 6.2 | 7 | 1.4 | 0.57 | 113.1 | - | - | - | - | - | - |
| Total Gold Segment⁽⁴⁾ | | | 175.0 | 6 | 26.8 | 0.62 | 3,476.9 | - | - | - | - | - | - |
| Total Gold and Silver Segments⁽⁴⁾ | | Proven + Probable | 272.5 | 77 | 557.2 | 0.63 | 5,121.1 | 0.47 | 85.4 | 1.10 | 574.1 | 2.24 | 1,170.6 |

(1) See table below entitled "Metal price assumptions used to estimate mineral reserves and resources as at June 30, 2019".

(2) Mineral reserve estimates were prepared under the supervision of, or were reviewed by, Christopher Emerson, FAusIMM, Vice President Business Development and Geology and Martin G. Wafforn, P.Eng., Senior Vice President Technical Services and Process Optimization, each of whom are Qualified Persons as that term is defined in National Instrument 43-101 ("NI 43-101").

(3) This information represents the portion of mineral reserves attributable to Pan American based on its ownership interest in the operating entity as indicated.

(4) Totals may not add up due to rounding. Total average grades of each element are with respect to those mines that produce the element.

Pan American Silver Measured and Indicated Resources^{1,2}

| Property | Location | Classification | Tonnes (Mt) | Ag (g/t) | Contained Ag (Moz) | Au (g/t) | Contained Au (koz) | Cu (%) | Pb (%) | Zn (%) |
|---|-----------|-----------------------------|----------------|--------------|--------------------|-------------|--------------------|-------------|-------------|-------------|
| Silver Segment | | | | | | | | | | |
| Huaron | Peru | Measured | 2.2 | 157 | 11.0 | - | - | 0.59 | 1.50 | 2.80 |
| | | Indicated | 2.4 | 155 | 12.0 | - | - | 0.61 | 1.64 | 3.03 |
| Morococha (92.3%) ⁽³⁾ | Peru | Measured | 0.3 | 138 | 1.2 | - | - | 0.29 | 0.86 | 2.14 |
| | | Indicated | 0.3 | 143 | 1.6 | - | - | 0.20 | 0.83 | 2.09 |
| La Colorada | Mexico | Measured | 0.5 | 229 | 3.8 | 0.24 | 4.0 | - | 0.65 | 1.16 |
| | | Indicated | 1.6 | 185 | 9.6 | 0.15 | 7.8 | - | 0.56 | 1.16 |
| Dolores | Mexico | Measured | 2.0 | 21 | 1.3 | 0.35 | 22.0 | - | - | - |
| | | Indicated | 1.5 | 28 | 1.4 | 0.56 | 27.1 | - | - | - |
| Manantial Espejo | Argentina | Measured | 0.1 | 164 | 0.7 | 1.65 | 7.1 | - | - | - |
| | | Indicated | 0.2 | 241 | 1.4 | 2.86 | 16.5 | - | - | - |
| San Vicente (95%) ⁽³⁾ | Bolivia | Measured | 0.9 | 161 | 4.4 | - | - | 0.22 | 0.20 | 2.27 |
| | | Indicated | 0.3 | 158 | 1.4 | - | - | 0.27 | 0.21 | 1.73 |
| Navidad | Argentina | Measured | 15.4 | 137 | 67.8 | - | - | 0.10 | 1.44 | - |
| | | Indicated | 139.8 | 126 | 564.5 | - | - | 0.04 | 0.79 | - |
| Joaquin | Argentina | Indicated | 0.1 | 385 | 0.7 | 0.58 | 1.1 | - | - | - |
| Escobal | Guatemala | Measured | 2.3 | 251 | 18.6 | 0.23 | 16.7 | - | 0.31 | 0.59 |
| | | Indicated | 14.2 | 201 | 91.6 | 0.20 | 93.0 | - | 0.38 | 0.66 |
| Total Silver Segment⁽⁴⁾ | | | 184.0 | 134 | 792.9 | 0.27 | 195.3 | 0.06 | 0.82 | 1.21 |
| Gold Segment | | | | | | | | | | |
| La Bolsa | Mexico | Measured | 1.4 | 11 | 0.5 | 0.90 | 39.9 | - | - | - |
| | | Indicated | 4.5 | 9 | 1.3 | 0.50 | 71.2 | - | - | - |
| Pico Machay | Peru | Measured | 4.7 | - | - | 0.91 | 137.5 | - | - | - |
| | | Indicated | 5.9 | - | - | 0.67 | 127.1 | - | - | - |
| La Arena | Peru | Measured | 1.3 | - | - | 0.41 | 17.5 | - | - | - |
| | | Indicated | 1.7 | - | - | 0.38 | 20.6 | - | - | - |
| Shahuindo | Peru | Measured | 3.7 | 7 | 0.8 | 0.53 | 63.2 | - | - | - |
| | | Indicated | 8.4 | 5 | 1.5 | 0.46 | 123.6 | - | - | - |
| Timmins | Canada | Measured | 1.7 | - | - | 3.89 | 212.4 | - | - | - |
| | | Indicated | 5.4 | - | - | 3.41 | 587.8 | - | - | - |
| La Arena II | Peru | Measured | 155.7 | - | - | 0.25 | 1,265.2 | 0.37 | - | - |
| | | Indicated | 586.7 | - | - | 0.23 | 4,371.9 | 0.35 | - | - |
| Fenn-Gib | Canada | Indicated | 40.8 | - | - | 0.99 | 1,298.6 | - | - | - |
| Whitney | Canada | Measured | 1.0 | - | - | 7.02 | 218.1 | - | - | - |
| | | Indicated | 2.3 | - | - | 6.77 | 490.5 | - | - | - |
| Gold River | Canada | Indicated | 0.7 | - | - | 5.29 | 117.4 | - | - | - |
| Juby | Canada | Indicated | 26.6 | - | - | 1.28 | 1,094.7 | - | - | - |
| Marlhill | Canada | Indicated | 0.4 | - | - | 4.52 | 57.4 | - | - | - |
| Vogel | Canada | Indicated | 2.2 | - | - | 1.75 | 125.0 | - | - | - |
| Total Gold Segment⁽⁴⁾ | | | 854.9 | 7 | 4.1 | 0.38 | 10,439.6 | 0.35 | - | - |
| Total Gold and Silver Segments⁽⁴⁾ | | Measured + Indicated | 1,038.8 | 122.8 | 797.0 | 0.38 | 10,634.9 | 0.30 | 0.82 | 1.21 |

(1) See table below entitled "Metal price assumptions used to estimate mineral reserves and resources as at June 30, 2019".

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(4) Totals may not add up due to rounding. Total average grades of each element are with respect to those mines that produce the element.

Pan American Silver Inferred Resources^{1,2}

| Property | Location | Classification | Tonnes (Mt) | Ag (g/t) | Contained Ag (Moz) | Au (g/t) | Contained Au (koz) | Cu (%) | Pb (%) | Zn (%) |
|---|-----------|-----------------|--------------|------------|--------------------|-------------|--------------------|-------------|-------------|-------------|
| Silver Segment | | | | | | | | | | |
| Huaron | Peru | Inferred | 6.2 | 155 | 30.8 | - | - | 0.41 | 1.45 | 2.77 |
| Morococha (92.3%) ⁽³⁾ | Peru | Inferred | 4.5 | 138 | 19.9 | - | - | 0.37 | 1.02 | 3.26 |
| La Colorada | Mexico | Inferred | 8.1 | 133 | 34.5 | 0.12 | 31.6 | - | 2.03 | 4.01 |
| Dolores | Mexico | Inferred | 4.0 | 47 | 6.0 | 1.22 | 156.3 | - | - | - |
| Manantial Espejo | Argentina | Inferred | 0.5 | 194 | 3.0 | 2.71 | 41.4 | - | - | - |
| San Vicente (95%) ⁽³⁾ | Bolivia | Inferred | 3.0 | 289 | 27.9 | - | - | 0.24 | 0.38 | 3.32 |
| Navidad | Argentina | Inferred | 45.9 | 81 | 119.4 | - | - | 0.02 | 0.57 | - |
| Joaquin | Argentina | Inferred | 0.01 | 389 | 0.1 | 1.29 | 0.2 | - | - | - |
| COSE | Argentina | Inferred | 0.03 | 382 | 0.3 | 7.10 | 6.3 | - | - | - |
| Escobal | Guatemala | Inferred | 1.9 | 180 | 10.7 | 0.90 | 53.7 | - | 0.22 | 0.42 |
| Total Silver Segment⁽⁴⁾ | | | 74.0 | 106 | 252.5 | 0.62 | 289.5 | 0.10 | 0.83 | 3.17 |
| Gold Segment | | | | | | | | | | |
| La Bolsa | Mexico | Inferred | 13.7 | 8 | 3.3 | 0.51 | 224.6 | - | - | - |
| Pico Machay | Peru | Inferred | 23.9 | - | - | 0.58 | 445.7 | - | - | - |
| La Arena | Peru | Inferred | 1.1 | - | - | 0.30 | 10.7 | - | - | - |
| Shahuindo | Peru | Inferred | 10.0 | 5 | 1.6 | 0.44 | 140.6 | - | - | - |
| Shahuindo Sulphide | Peru | Inferred | 97.4 | 14 | 45.1 | 0.74 | 2,323.3 | - | - | - |
| Timmins | Canada | Inferred | 3.7 | - | - | 3.74 | 443.8 | - | - | - |
| La Arena II | Canada | Inferred | 91.6 | - | - | 0.23 | 683.1 | 0.17 | - | - |
| Fenn-Gib | Canada | Inferred | 24.5 | - | - | 0.95 | 750.0 | - | - | - |
| Whitney | Canada | Inferred | 1.0 | - | - | 5.34 | 170.7 | - | - | - |
| Gold River | Canada | Inferred | 5.3 | - | - | 6.06 | 1,027.4 | - | - | - |
| Juby | Canada | Inferred | 96.2 | - | - | 0.94 | 2,908.8 | - | - | - |
| Vogel | Canada | Inferred | 1.5 | - | - | 3.60 | 168.8 | - | - | - |
| Total Gold Segment⁽⁴⁾ | | | 369.8 | 13 | 50.0 | 0.78 | 9,297.6 | 0.17 | - | - |
| Total Gold and Silver Segments⁽⁴⁾ | | Inferred | 443.8 | 48 | 302.5 | 0.78 | 9,587.1 | 0.14 | 0.83 | 3.17 |

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Metal price assumptions used to estimate mineral reserves and resources as at June 30, 2019

| Mine | Category | Ag US\$/oz | Au US\$/oz | Cu US\$/t | Pb US\$/t | Zn US\$/t |
|------------------------|-------------------|------------|------------|-----------|-----------|-----------|
| Huaron | All categories | 17.00 | 1,300 | 6,000 | 2,100 | 2,500 |
| Morococho | All categories | 17.00 | 1,300 | 6,000 | 2,100 | 2,500 |
| La Colorada | All categories | 17.00 | 1,300 | 6,000 | 2,100 | 2,500 |
| Dolores | Reserves | 17.00 | 1,300 | | | |
| | Resources | 22.00 | 1,400 | | | |
| La Bolsa | All categories | 14.00 | 825 | | | |
| Manantial Espejo | All categories | 16.00 | 1,300 | | | |
| San Vicente | All categories | 17.00 | 1,300 | 6,000 | 2,100 | 2,500 |
| Navidad | All categories | 12.52 | | | 1,100 | |
| Pico Machay | All categories | | 700 | | | |
| Joaquin | All categories | 16.00 | 1,300 | | | |
| COSE | All categories | 16.00 | 1,300 | | | |
| Escobal | All categories | 20.00 | 1,300 | | 2,204 | 2,424 |
| Shahuindo | Reserves | 17.00 | 1,300 | | | |
| | Resources | 22.00 | 1,400 | | | |
| Shahuindo Sulphide | Inferred Resource | 15.00 | 1,400 | | | |
| La Arena | Reserves | 17.00 | 1,400 | | | |
| | Resources | 22.00 | 1,500 | | | |
| La Arena II | All categories | | 1,500 | 8,816 | | |
| Timmins - Bell Creek | All categories | | 1,300 | | | |
| Timmins - Timmins West | All categories | | 1,300 | | | |
| Fenn-Gib | Inside pit | | 1,190 | | | |
| | Below pit | | 1,190 | | | |
| Whitney | All categories | | 1,200 | | | |
| Gold river | All categories | | 1,200 | | | |
| Juby ⁽¹⁾ | All categories | | | | | |
| Marlhill | All categories | | 1,125 | | | |
| Vogel | Inside pit | | 1,150 | | | |
| | Below pit | | 1,150 | | | |

(1) Estimation used a cut off grade of 0.40% g/t Au.

Mineral Resource Estimate Details

| Classification | Cut-off US\$/tonne | Tonnes millions | Ag g/t | Cu % | Pb % | Zn % |
|----------------|-----------------------|--------------------|-----------|---------|---------|---------|
| Inferred | 60 | 72.5 | 44 | 0.17 | 2.02 | 4.40 |

Notes:

- CIM definition standards were followed for the estimation of mineral resources.
- Mineral resources are not mineral reserves and have no demonstrated economic viability.
- Prices used to estimate mineral resources were: US\$18.50 per ounce of silver, US\$2,600 per tonne of zinc, US\$2,200 per tonne of lead, and US\$6,500 per tonne of copper.
- The mineral value per tonne was estimated using metallurgical recoveries of 91% Ag, 90% Pb, 85% Zn and 38% Cu, with mineral concentrate qualities from the testing at 60% Pb in lead concentrate, 55% Zn in zinc concentrate and 22% Cu in copper concentrate. The mineral value per tonne also includes estimates for transport and refining/selling costs based on experience and long-term views of the marketing, treating and refining of these types of mineral concentrates.
- The mineral resource estimate is undiluted and mining parameters have not been applied.
- Three million tonnes from the skarn deposit was included as inferred resources in Pan American's mineral resource and reserve estimates effective June 30, 2019.
- Totals may not add up due to rounding.
- This mineral resource estimate was prepared under the supervision of, or was reviewed by, Christopher Emerson, FAusIMM, Vice President Business Development and Geology and Martin G. Wafforn, P.Eng., Senior Vice President Technical Services and Process Optimization, each of whom is a Qualified Person as that term is defined in National Instrument 43-101 ("NI 43-101").
- The effective date of the mineral resources estimate is December 11, 2019.



Archived recording

The audio and presentation archive of this conference call and webcast will be accessible on our website at: <https://www.panamericansilver.com/investors/events-and-presentations/>