SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 40-F
[ ] REGISTRATION STATEMENT PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

[X] ANNUAL REPORT PURSUANT TO SECTION 13(a) OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2020 Commission File Number 000-13727

Pan American Silver Corp.
(Exact name of Registrant as specified in its charter)

British Columbia	**1044**	**Not Applicable**
(Province or other Jurisdiction of Incorporation or Organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

1500 – 625 Howe Street
Vancouver, British Columbia
V6C 2T6
(604) 684-1175
(Address and telephone number of Registrant's principal executive offices)

CT Corporation
28 Liberty St.
New York, NY 10005
(212) 894-8940
(Name, address (including zip code) and telephone number (including area code) of agent for service in the United States)

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of Each Class	Name of Each Exchange on Which Registered
Common Shares, No Par Value	The Nasdaq Stock Market

Securities registered or to be registered pursuant to Section 12(g) of the Act.

Title of Each Class
Contingent Value Rights

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.
None
For annual reports, indicate by check mark the information filed with this Form:

[**X**] Annual information form [**X**] Audited annual financial statements

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by this annual report:

The Registrant had 210,258,667 Common Shares outstanding as at December 31, 2020.

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes __X__ No __

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this Chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files).

Yes __X__ No __

Indicate by check mark whether the Registrant is an emerging growth company as defined in Rule 12b-2 of the Exchange Act.

Emerging growth company Yes _____ No __X__

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the Registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards* provided pursuant Section 13(a) of the Exchange Act.

Yes ____ No __X___

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Yes __X__ No _____

NOTE TO UNITED STATES INVESTORS CONCERNING
ESTIMATES OF MEASURED, INDICATED AND INFERRED MINERAL RESOURCES

Unless otherwise indicated, all reserve and resource estimates included in this Annual Report on Form 40-F 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 reserve and resource information included herein may not be comparable to similar information disclosed by U.S. companies. In particular, and without limiting the generality of the foregoing, this Annual Report on Form 40-F 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 does not recognize them. The requirements of NI 43-101 for the identification of "reserves" are also not the same as those of the SEC, and reserves reported by the Registrant 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 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 rules, estimated "inferred resources" may not form the basis of feasibility or pre-feasibility studies except in rare cases. In addition, disclosure of "contained ounces" in a mineral resource is permitted disclosure under Canadian regulations. However, the SEC normally only permits 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 in this Annual Report on Form 40-F may not be comparable with information made public by companies that report in accordance with U.S. standards.

The SEC has adopted amendments to its disclosure rules to modernize the mineral property disclosure requirements for issuers whose securities are registered with the SEC under the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"). These amendments became effective February 25, 2019 (the "SEC Modernization Rules") with compliance required for the first fiscal year beginning on or after January 1, 2021. Under the SEC Modernization Rules, the historical property disclosure requirements for mining registrants included in Industry Guide 7 under the U.S. Securities Act of 1933, as amended, will be rescinded and replaced with disclosure requirements in subpart 1300 of SEC Regulation S-K. Following the transition period, as a foreign private issuer that is eligible to file reports with the SEC pursuant to the multi-jurisdictional disclosure system (the "MJDS"), the Registrant is not required to provide disclosure on its mineral properties under the SEC Modernization Rules and will continue to provide disclosure under NI 43-101. If the Registrant ceases to be a foreign private issuer or loses its eligibility to file its annual report on Form 40-F pursuant to the MJDS, then the Registrant will be subject to the SEC Modernization Rules, which differ from the requirements of NI 43-101.

As a result of the adoption of the SEC Modernization Rules, the SEC now recognizes estimates of "measured mineral resources", "indicated mineral resources" and "inferred mineral resources." In addition, the SEC has amended its definitions of "proven mineral reserves" and "probable mineral reserves" to be "substantially similar" to the corresponding standards under NI 43-101. While the SEC will now recognize "measured mineral resources", "indicated mineral resources" and "inferred mineral resources", U.S. investors should not assume that any part or all of the mineralization in these categories will ever be converted into a higher category of mineral resources or into mineral reserves. Mineralization described using these terms has a greater amount of uncertainty as to its existence and feasibility than mineralization that has been characterized as reserves. Accordingly, U.S. investors are cautioned not to assume that any measured mineral resources, indicated mineral resources, or inferred mineral resources that the Registrant reports are or will be economically or legally mineable. Further, "inferred

mineral resources” have a greater amount of uncertainty as to their existence and as to whether they can be mined legally or economically. Therefore, U.S. investors are also cautioned not to assume that all or any part of the “inferred mineral resources” exist. Under Canadian securities laws, estimates of “inferred mineral resources” may not form the basis of feasibility or pre-feasibility studies, except in rare cases. While the above terms are “substantially similar” to the standards under NI 43-101, there are differences in the definitions under the SEC Modernization Rules. Accordingly, there is no assurance any mineral reserves or mineral resources that the Registrant may report as “proven mineral reserves”, “probable mineral reserves”, “measured mineral resources”, “indicated mineral resources” and “inferred mineral resources” under NI 43-101 would be the same had the Registrant prepared the reserve or resource estimates under the standards adopted under the SEC Modernization Rules.

A. Disclosure Controls and Procedures

Disclosure controls and procedures are defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as those controls and other procedures that are designed to ensure that information required to be disclosed by the Registrant in reports filed or submitted by it under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Rules 13a-15(e) and 15d-15(e) also provide that disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Registrant is accumulated and communicated to the Registrant's management as appropriate to allow timely decisions regarding required disclosure.

As of December 31, 2020, the end of the period covered by this Annual Report on Form 40-F, the Registrant carried out an evaluation, under the supervision and with the participation of the Registrant's management, including the Registrant's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Registrant's disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that, as of December 31, 2020, the Registrant's disclosure controls and procedures were effective. See "Disclosure Controls and Procedures" in Management's Discussion and Analysis for the fiscal year ended December 31, 2020, filed as Exhibit No. 1.2 to this Annual Report on Form 40-F.

B. Management's Annual Report on Internal Control Over Financial Reporting

See "Management's Report on Internal Control over Financial Reporting" in the section titled "Disclosure Controls and Procedures" in Management's Discussion and Analysis for the fiscal year ended December 31, 2020, filed as Exhibit 1.2 to this Annual Report on Form 40-F.

C. Attestation Report of the Independent Registered Public Accounting Firm

The attestation report of Deloitte LLP, the Registrant's Independent Registered Public Accounting Firm, on management's assessment of the Registrant's internal control over financial reporting is included in the "Report of Independent Registered Public Accounting Firm" filed with the Registrant's Audited Consolidated Financial Statements for the fiscal years ended December 31, 2020 and 2019, as Exhibit 1.3 to this Annual Report on Form 40-F.

D. Changes in Internal Control Over Financial Reporting

There was no change in the Registrant's internal control over financial reporting that occurred during the period covered by this report that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting.

E. Notice of Pension Fund Blackout Period

The Registrant was not required by Rule 104 of Regulation BTR to send any notice to any of its directors or executive officers during the fiscal year ended December 31, 2020.

F. Audit Committee Financial Expert

The Registrant's board of directors has determined that Michael Carroll, an individual serving on the Audit Committee of the Registrant's board of directors, is an audit committee financial expert, as that term is defined in General Instruction B(8)(b) of Form 40-F and is independent under Rule 10A-3 under the Exchange Act and the rules and regulations of the Nasdaq Stock Market.

The Commission has indicated that the designation of a person as an audit committee financial expert does not make such person an "expert" for any purpose, impose any duties, obligations or liabilities on such person that are greater than those imposed on members of the audit committee and the board of directors who do not carry this designation or affect the duties, obligations or liability of any other member of the audit committee or board of directors.

G. Code of Ethical Conduct

The Registrant has adopted a global code of ethical conduct (the "Code") that applies to all directors, officers and employees. A copy of the Code may be obtained at www.panamericansilver.com. No waivers from the requirements of the Code were granted to any principal officer of the Registrant or any person performing similar functions during the year ended December 31, 2020.

H. Principal Accountant Fees and Services and Audit Committee Pre-Approval Policies

Information about the Registrant's principal accountant fees and services and a description of the Registrant's pre-approval policies and procedures is included under the heading "External Auditor Service Fees" of the Registrant's Annual Information Form for the fiscal year ended December 31, 2020, filed as Exhibit 1.1 to this Annual Report on Form 40-F.

I. Off-Balance Sheet Arrangements

The Registrant is not a party to any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on its financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors.

J. Tabular Disclosure of Contractual Obligations

The required disclosure can be found under the heading "Commitments" of Management's Discussion and Analysis for the fiscal year ended December 31, 2020, filed as Exhibit 1.2 to this Annual Report on Form 40-F.

K. Nasdaq Stock Market Exemptions

On March 16, 2005, the Registrant informed the Nasdaq Stock Market that as permitted by Rule 4350(a)(1) of the Nasdaq Marketplace Rules, it intended to follow British Columbia practice with respect to quorum requirements in lieu of those required by Rule 4350(f) of the Nasdaq Marketplace Rules (which provides that a quorum for a shareholder meeting of a Nasdaq-listed company must be at least 33-1/3% of the outstanding common shares of the company). The Registrant's by-laws provide that the minimum quorum for a meeting of holders of Common Shares is two individuals who are shareholders, proxy holders or duly authorized representatives of corporate shareholders personally present and representing shares aggregating not less than 25% of the issued shares of the Registrant carrying the right to vote. The Registrant's quorum requirements are not prohibited by the requirements of the *Business Corporations Act* (British Columbia) and the Registrant intends to continue to comply with the requirements of the *Business Corporations Act* (British Columbia). The rules of the Toronto Stock Exchange, upon which the Common Shares are also listed, do not contain specific quorum requirements.

L. Identification of the Audit Committee

The Registrant has a separately designated standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Exchange Act. The members of the Audit Committee are Gillian D. Winckler, Neil de Gelder and Michael Carroll. Gillian D. Winckler, Neil de Gelder and Michael Carroll are independent as such term is defined under Rule 10A-3 under the Exchange Act and the rules and regulations of the Nasdaq Stock Market. Further information about the Registrant's Audit Committee can be found under the heading "Audit Committee" of the Registrant's Annual Information Form for the fiscal year ended December 31, 2020, filed as Exhibit 1.1 to this Annual Report on Form 40-F.

M. Mine Safety

The Registrant is not currently required to disclose the information required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

UNDERTAKING AND CONSENT TO SERVICE OF PROCESS

A. Undertaking

The Registrant undertakes to make available, in person or by telephone, representatives to respond to inquiries made by the Commission staff, and to furnish promptly, when requested to do so by the Commission staff, information relating to the securities in relation to which the obligation to file an annual report on Form 40-F arises; or transactions in said securities.

B. Consent to Service of Process

The Registrant has previously filed with the Commission a Form F-X in connection with its Common Shares. Any change to the name and address of the agent for service of process shall be communicated promptly to the Commission by an amendment to Form F-X.

EXHIBITS

The following exhibits are filed as part of this report:

Exhibit Number	Title
1.1	Annual Information Form for the fiscal year ended December 31, 2020.
1.2	Management's Discussion and Analysis for the fiscal year ended December 31, 2020 .
1.3	Audited Consolidated Financial Statements for the fiscal years ended December 31, 2020 and 2019.
23.1	Consent of Deloitte LLP.
23.2	Consent of Martin Wafforn.
23.3	Consent of Michael Steinmann.
23.4	Consent of Pamela De Mark.
23.5	Consent of Americo Delgado.
23.6	Consent of Christopher Emerson.
23.7	Consent of Kara Byrnes.
23.8	Consent of Tim Williams.
23.9	Consent of Carl E. Defilippi.
23.10	Consent of Charles V. Muerhoff.
23.11	Consent of M3 Engineering & Technology Corporation.
31.1	Certification of CEO pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of CFO pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 .
32.1	Certification of CEO and CFO pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	Interactive Data File.

Exhibits 1.1, 1.2 and 1.3 are incorporated by reference into the Registrant’s Registration Statements on Form S-8 (File Nos. 333-180494, 333-180495, 333-206162 and 333-229795).

SIGNATURE

Pursuant to the requirements of the Exchange Act, the Registrant certifies that it meets all of the requirements for filing on Form 40-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereto duly authorized.

PAN AMERICAN SILVER CORP.

Dated: February 17, 2021

/s/ "Delaney Fisher"

By: Delaney Fisher

Title: Vice President, Associate General Counsel and Corporate Secretary



Annual Information Form

For the Year Ended December 31, 2020

February 17, 2021

1500-625 Howe Street

Vancouver, British Columbia
V6C 2T6
www.panamericansilver.com

PAN AMERICAN SILVER CORP.
ANNUAL INFORMATION FORM

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APPENDIX "A" – AUDIT COMMITTEE CHARTER A-1

IMPORTANT INFORMATION ABOUT THIS DOCUMENT

This annual information form ("AIF") provides important information about Pan American Silver Corp. It describes our business, including our goals and strategy, our history, our operations and development projects, our mineral reserves and mineral resources, our approach to environmental, social and governance ("ESG") matters, the regulatory environment that we operate in, the risks we face, and the market for our products, among other things.

We have prepared this document to meet the requirements of Canadian securities laws, which are different from what US securities laws require.

Throughout this document, the term *Pan American* means Pan American Silver Corp. and the terms *we, us,* and *our* mean Pan American and its subsidiaries.

Reporting Currency and Financial Information

Unless we have specified otherwise, all references to dollar amounts or $ or USD are United States dollars. Any references to CAD or CAD$ are Canadian dollars.

All financial information presented in this AIF was prepared in accordance with international financial reporting standards ("IFRS") as issued by the International Accounting Standards Board.

Non-GAAP Measures

This AIF refers to various non-generally accepted accounting principles ("non-GAAP") measures, such as cash costs per ounce sold, net of by-product credits ("Cash Costs"), all-in sustaining costs per ounce sold ("AISC"), working capital and total debt.

Per Ounce Measures - Cash Costs and AISC

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.

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 and gold 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 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 our consolidated cash flow.

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").

Included in the Silver Segment for 2020 were the La Colorada, Dolores, Huaron, Morococha, San Vicente, and Manantial Espejo (including COSE and Joaquin) mines, while the Gold Segment was comprised of the Shahuindo, La Arena, Timmins West and Bell Creek mines. Due to the expected production profile of the Dolores mine, we have determined that the mine is better identified as a Gold Segment operation going forward. As such,

beginning in 2021, we will begin to report Dolores Cash Costs and AISC, including recast comparative amounts, on a per ounce of gold basis and include it as part of its Gold Segment Cash Costs and AISC calculations.

Prior to 2019, cash costs per ounce reported by Pan American in its AIFs, news releases and other disclosure documents 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 our business with the addition of the new gold operations, we 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 Cash Costs amounts in this AIF have been quantified using the current methodology and are different from those previously reported. 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 ("AISCSOS") metrics and not allocated to each mine's AISCSOS; as such, consolidated AISCSOS in previous years included such costs, where total Silver or Gold Segment AISC in the current period does not. A detailed description of how previously reported cash costs were quantified is provided in our management's discussion and analysis for periods prior to 2019.

Readers should refer to our management's discussion and analysis for the year ended December 31, 2020 (the "2020 MD&A") for a detailed description and reconciliation of these non-GAAP measures.

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 IFRS and is therefore unlikely to be comparable to similar measures presented by other companies. Pan American and certain investors use this information to evaluate whether Pan American is able to meet its current obligations using its current assets.

Total Debt

Total debt is a non-GAAP measure calculated as the total current and non-current portions of long-term debt, finance 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. Pan American and certain investors use this information to evaluate the financial debt leverage of Pan American.

Glossary of Terms

The glossary of terms under "Glossary of Terms" of this AIF contains definitions of certain scientific or technical terms used in this AIF that might be useful for your understanding.

Conversion Table

In this AIF, metric units are used with respect to mineral properties unless otherwise indicated. Conversion rates from imperial to metric units and from metric to units imperial are provided in the table set out below.

Imperial Measure = Metric Unit		Metric Unit = Imperial Measure	
2.47 acres	1 hectare	0.4047 hectares	1 acre
3.28 feet	1 metre	0.3048 metres	1 foot
0.62 miles	1 kilometre	1.609 kilometres	1 mile
0.032 ounces (troy)	1 gram	31.1 grams	1 ounce (troy)
1.102 tons (short)	1 tonne	0.907 tonnes	1 ton (short)
0.029 ounces (troy)/ton (short)	1 gram/tonne	34.28 grams/tonne	1 ounce (troy)/ton (short)
2205 pounds	1 tonne		

Caution About Forward-Looking Information

This AIF includes statements and information about our expectations for the future. When we discuss our strategy, plans and future financial and operating performance, or other things that have not yet taken place, we are making statements considered to be forward-looking information or forward-looking statements under Canadian securities laws and the United States Private Securities Litigation Reform Act of 1995. We refer to such forward-looking information and forward-looking statements together in this AIF as forward-looking information.

Key things to understand about the forward-looking information in this AIF are:

- It typically includes words and phrases about the future, such as *believe*, *estimate*, *anticipate*, *expect*, *plan*, *intend*, *predict*, *goal*, *target*, *forecast*, *project*, *scheduled*, *potential*, *strategy* and *proposed* (see examples starting on page 4).
- It is based on a number of material assumptions, including, but not limited to, those we have listed below, that may prove to be incorrect.
- Actual results and events may be significantly different from what we currently expect, because of, among other things, the risks associated with our business. We list a number of these material risks below under “Material Risks and Assumptions”. We recommend you also review other parts of this AIF, including "Risks Related to Our Business" starting on page 67, and our 2020 MD&A, which includes a discussion of other material risks that could cause our actual results to differ from our current expectations.

Forward-looking information is designed to help you understand management’s current views of our near and longer term prospects. It may not be appropriate for other purposes. We do not intend to update forward-looking information unless we are required to do so by applicable securities laws.

Examples of Forward-Looking Information in this AIF:

- the price of silver, gold and other metals and assumed foreign exchange rates;
- estimated production of silver, gold and other metals forecasted for 2021, as well as our estimated Cash Costs, AISC and expenditures in 2021;
- the sufficiency of our liquid assets to satisfy our 2021 working capital requirements, fund currently planned capital expenditures (including both sustaining and project capital) for existing operations, and to discharge liabilities as they come due;
- the accuracy of mineral reserve and mineral resource estimates at the La Colorada, Dolores, Huaron, Morococha, La Arena, Shahuindo, Timmins West, Bell Creek, San Vicente, Manantial Espejo, Joaquin and Cap-Oeste Sur Este (“COSE”) mines, as well as the Escobal mine, Navidad project, La Colorada skarn, and other projects and properties;
- estimated production rates for silver and other payable metals we produce, timing of production and estimated cash and total costs of production;
- our anticipated operating cash flow and the estimated cost of and availability of funding for working capital requirements and capital replacement, improvement or remediation programs, care and maintenance programs, and for future construction and development projects;
- expectations with respect to the future anticipated impact of COVID-19 on our operations, assumptions related to the global supply of COVID-19 vaccines and the roll-out in each country, and the effectiveness and results of any vaccines, the lessening or increase in pandemic-related restrictions, and the anticipated rate and timing for the same;
- the ability of Pan American to continue with its operations, or to successfully maintain our operations on care and maintenance, should the situation related to COVID-19 not be as anticipated;
- the outcome of the International Labour Organization Convention No. 169 (“ILO 169”) consultation process in Guatemala with respect to the Escobal mine, the resolution of other matters ordered by the courts in Guatemala, and our anticipated engagement with local communities and the Xinka population;
- the Escobal mine remaining on care and maintenance in 2021;
- our ability to successfully restart the Escobal mine and begin production and export therefrom;
- our ability to obtain necessary permits and licenses, including for current or future operations, project development and expansion;
- future successful development of Navidad, the La Colorada skarn and other development projects;

- the effect of the New Mining Law established by the Bolivian government on the current joint venture agreement relating to the San Vicente mine;
- the effects of laws, regulations and government policies affecting our operations, including, without limitation, expectations relating to or the effect of certain highly restrictive laws and regulations applicable to mining in the Province of Chubut, Argentina;
- the estimates of expected or anticipated economic returns from a mining project, as reflected in preliminary economic assessments, pre-feasibility, and feasibility studies or other reports prepared in relation to development of projects;
- estimated exploration expenditures to be incurred on our various silver exploration properties;
- compliance with environmental, health, safety and other regulations;
- our goal to continue to be a responsible company, committed to sustainable development and conducting our activities in an environmentally and socially responsible manner, including the development and implementation of policies and practices in support of these goals;
- the future results of, and impact on the Pan American, of class action claims in Canada and the United States relating to alleged misrepresentations by Tahoe Resources Inc. (“Tahoe”);
- the pursuit of legal and commercial avenues to collect amounts owing to us, and the defense and future results of claims against us, including alleged preference claims against certain of our subsidiaries by the litigation trustee for Republic Metals Corporation (“Republic”);
- estimated future closure, reclamation and remediation costs;
- our belief that we are well positioned to take advantage of strategic opportunities as they become available;
- forecast capital and non-operating spending;
- future income tax rates;
- future sales of the metals, concentrates or other products produced by us, and any plans and expectations with respect to hedging;
- our ability to maintain relationships of trust with our stakeholders and community support for our activities;
- continued access to necessary infrastructure, including, without limitation, access to power, water, lands and roads to carry on activities as planned;
- that we will be, or will continue to be, the world’s premier silver producer and one of the world’s leading silver mining companies;
- our intention to acquire or discover silver resources that have the potential to be developed economically and to add meaningfully to our production profile while lowering consolidated units costs of production;
- our plans and expectations for our properties and operations, including, without limitation, production estimates, capital expenditures, exploration drilling and development, forecasts regarding investment activities, and other matters discussed under the heading “Outlook for 2021” and under the headings “Capital and Operating Costs” and “Exploration, Development, and Production” with respect to each of our material properties; and
- the results of investment and development activities at our material mineral properties.

Material Risks and Assumptions:

The forward-looking information in this AIF reflects our current views with respect to future events and is based upon a number of assumptions and estimates that, while considered reasonable by us, are inherently subject to significant business, economic, competitive, political, environmental, and social uncertainties and contingencies. Many factors, both known and unknown, could cause actual results, performance or achievements to be materially different from the results, performance or achievements that are or may be expressed or implied by forward-looking information in this AIF and documents incorporated by reference herein, and we have made assumptions based on or related to many of these factors.

Such factors include, without limitation:

- fluctuations in spot and forward markets for silver, gold, base metals and certain other commodities (such as natural gas, fuel oil and electricity);
- restrictions on mining in the jurisdictions in which we operate;

- laws and regulations governing our operation, exploration and development activities, including international laws and legal norms, such as those relating to indigenous populations and human rights;
- our ability to obtain or renew the licenses and permits necessary for the operation and expansion of our existing operations and for the development, construction and commencement of new operations, including the license and export permits necessary to operate the Escobal mine which are currently suspended or have not been renewed;
- risks relating to our operations in Canada, Mexico, Peru, Bolivia, Argentina, Guatemala and other foreign jurisdictions where we may operate;
- the impact of pandemics such as COVID-19 on our operations, and our and governments' ability to curtail or control the spread of the virus through health protocols, vaccines, and other means, and to mitigate the multitude of negative effects caused by it;
- inherent risks associated with tailings facilities and heap leach operations, including failure or leakages;
- work stoppages or other impacts of roadblocks, civil unrest, riots, terrorism and other similar events;
- relations with and claims by indigenous populations, local communities and non-governmental organizations;
- the speculative nature of mineral exploration and development;
- diminishing quantities or grades of mineral reserves as properties are mined;
- the inability to determine, with certainty, the production of metals or the price to be received before mineral reserves or mineral resources are actually mined;
- the inability to determine, with certainty, production and cost estimates;
- inadequate or unreliable infrastructure (such as roads, bridges, power sources and water supplies);
- environmental regulations and legislation;
- our ability to maintain or obtain additional surface rights or other access that are necessary for future operations and planned mine developments;
- risks and hazards associated with the business of mineral exploration, development and mining (including environmental hazards, potential unintended releases of contaminants, industrial accidents, unusual or unexpected geological or structural formations, pressures, cave-ins and flooding);
- reclamation and ongoing post-closure monitoring and maintenance requirements;
- the effects of climate change, extreme weather events, water scarcity, and seismic events, and the effectiveness of strategies to deal with these issues, including risks and strategies related to the transition to a low-carbon global economy;
- risks relating to the creditworthiness and financial condition of our suppliers, refiners and other parties;
- fluctuations in currency markets (such as the Peruvian nuevo sol ("PEN"), Mexican peso ("MXN"), Argentine peso ("ARS"), the Bolivian boliviano ("BOB"), and the Guatemalan quetzal ("GTQ") versus the USD and CAD);
- the volatility of the metals markets, and its potential to impact our ability to meet our financial obligations;
- the inability to recruit and retain qualified personnel, or maintain positive relationships with our employees;
- disputes as to the validity of mining or exploration titles or claims or rights, which constitute most of our property holdings;
- our ability to complete and successfully integrate acquisitions;
- increased competition in the mining industry for properties and equipment;
- limited supply of materials and supply chain disruptions;
- the effectiveness of our internal control over financial reporting;
- claims and legal proceedings arising in the ordinary course of business activities, including the class action claims initiated against Tahoe; and
- those factors identified under the caption "Risks Related to our Business" in this AIF and the documents incorporated by reference herein, if any.

You should not attribute undue certainty to forward-looking information. Although we have 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 described. We do not intend to update forward-looking information to reflect changes in

assumptions or changes in circumstances or any other events affecting such information, other than as required by applicable law.

Please see “Cautionary Note to U.S. Investors Concerning Estimates of Mineral Reserves and Mineral Resources” on page 9 of this AIF.

Scientific and Technical Information

Christopher Emerson, FAusIMM, our VP, Business Development and Geology, and Martin Wafforn, P. Eng., our Senior VP, Technical Services and Process Optimization, have reviewed and approved the scientific and technical information in this AIF. Scientific and technical disclosure in this AIF for our material properties is based on reports prepared in accordance with National Instrument 43-101 – *Standards for Disclosure of Mineral Projects* ("NI 43-101") (collectively, the "Technical Reports"). The Technical Reports have been filed on SEDAR at www.sedar.com. The technical information in this AIF has been updated with more current information where applicable, such updated information having been prepared under the supervision of, or reviewed by, Christopher Emerson and Martin Wafforn. Scientific and technical information relating to current and planned exploration programs set out in this AIF are prepared and/or designed and carried out under the supervision of, or were reviewed by, Christopher Emerson.

The Technical Reports are as follows:

- a report relating to the La Colorada mine entitled "Technical Report for the La Colorada Property, Zacatecas, Mexico", dated effective December 31, 2019 (the "La Colorada Report") by M. Wafforn, C. Emerson and A. Delgado;
- a report relating to the Dolores mine entitled "Technical Report for the Dolores Property, Chihuahua, Mexico", dated effective December 31, 2016 (the "Dolores Report") by M. Wafforn, C. Emerson and A. Delgado;
- a report relating to the Huaron mine entitled "Technical Report for the Huaron Property, Pasco, Peru" dated effective June 30, 2014 (the "Huaron Report") by M. Steinmann, M. Wafforn and A. Delgado;
- a report relating to the Morococha mine entitled "Technical Report for the Morococha Property, Yauli, Peru" dated effective June 30, 2014 (the "Morococha Report") by M. Steinmann, M. Wafforn and A. Delgado;
- a report relating to the Shahuindo mine entitled "Technical Report on the Shahuindo Mine, Cajabamba, Peru" dated effective January 1, 2016 (the "Shahuindo Report") by C. Defilippi, C. Muerhoff, and T. Williams;
- a report relating to the Timmins West mine entitled "National Instrument 43-101 Technical Report, Timmins West Mine, Timmins, Ontario, Canada" dated effective May 15, 2017 (the "Timmins West Report") by E. Kallio, N. Vaz, and K. Byrnes;
- a report relating to the Bell Creek mine entitled "NI 43-101 Technical Report, Updated Mineral Reserve Estimate For Bell Creek Mine, Hoyle Township, Timmins, Ontario, Canada" dated effective December 31, 2014 (the "Bell Creek Report") by E. Kallio and N. Vaz;
- a report relating to the Escobal mine entitled "Escobal Mine Guatemala: NI 43-101 Feasibility Study, Southeastern Guatemala" dated effective November 5, 2014 (the "Escobal Report") by M3 Engineering & Technology Corp., with authors C. Huss, T. Drielick, D. Roth, P. Tietz, M. Blattman, and J. Caldwell; and
- a report relating to the Navidad property entitled "Pan American Silver Corp.: Navidad Project, Chubut Province, Argentina: Preliminary Assessment" dated January 14, 2011 (the "Navidad Report") by M. Steinmann, M. Wafforn and P. De Mark.

Each of Michael Steinmann, P. Geo., Martin Wafforn, P. Eng., Chris Emerson, FAusIMM, Pamela De Mark, P. Geo., Americo Delgado, P.Eng., Eric Kallio, P.Geo., Natasha Vaz, P.Eng., Kara Byrnes, P.Geo., Carl Defilippi, M.Sc., Charles Muerhoff, B.Sc., Tim Williams, M.Sc., Conrad Huss, P.Eng., Thomas Drielick, P.Eng., Daniel Roth, P.Eng., Paul Tietz, C.P.G., Matthew Blattman, P.Eng., and Jack Caldwell, P.Eng. is, or was in relation to the Technical Reports, a "Qualified Person" as defined in NI 43-101. A "Qualified Person" means an engineer or geoscientist with a university degree, or equivalent accreditation, in an area of geoscience, or engineering, relating to mineral exploration or mining, with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these, that is relevant to his or her professional degree or area of practice, has experience relevant to the subject matter of the mineral project, and is a member in good standing of a professional association.

Mineral reserve and mineral resource estimates in this AIF relating to the La Colorada, Dolores, Huaron, Morococha, Shahuindo, Timmins West, Bell Creek, and Escobal mines have been prepared by, or under the supervision of, Christopher Emerson and Martin Wafforn. Mineral resource estimates in this AIF relating to the Navidad property were prepared by, or under the supervision of, Pamela De Mark.

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

This AIF and the documents incorporated by reference herein have been prepared and disclosed in accordance with the requirements of Canadian securities laws that differ from the requirements of United States securities laws. Unless otherwise indicated, all mineral reserve and mineral resource estimates included in this AIF and the documents incorporated by reference herein have been disclosed in accordance with NI 43-101 and the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") - Definition Standards adopted by the CIM Council. NI 43-101 is an instrument 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 public disclosure standards, including NI 43-101, differ significantly from the requirements of the U.S. Securities and Exchange Commission (the "SEC"), and information with respect to mineralization and mineral reserves and mineral resources contained or incorporated by reference herein may not be comparable to similar information disclosed by U.S. companies. In particular, and without limiting the generality of the foregoing, these documents use 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 does not recognize them. The requirements of NI 43-101 for identification of ''reserves'' are 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 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, ''Inferred Resources'' may not form the basis of feasibility or pre-feasibility studies except in certain cases. Disclosure of ''contained ounces'' in a mineral resource is a permitted disclosure under Canadian securities laws, however, the SEC normally only permits 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 in this AIF and the documents incorporated by reference herein may not be comparable with information made public by companies that report in accordance with U.S. standards.

The SEC has adopted amendments to its disclosure rules to modernize the mineral property disclosure requirements for issuers whose securities are registered with the SEC under the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"). These amendments became effective February 25, 2019 (the "SEC Modernization Rules") with compliance required for the first fiscal year beginning on or after January 1, 2021. Under the SEC Modernization Rules, the historical property disclosure requirements for mining registrants included in Industry Guide 7 under the U.S. Securities Act of 1933, as amended, will be rescinded and replaced with disclosure requirements in subpart 1300 of SEC Regulation S-K. Following the transition period, as a foreign private issuer that is eligible to file reports with the SEC pursuant to the multi-jurisdictional disclosure system (the "MJDS"), the Registrant is not required to provide disclosure on its mineral properties under the SEC Modernization Rules and will continue to provide disclosure under NI 43-101. If the Registrant ceases to be a foreign private issuer or loses its eligibility to file its annual report on Form 40-F pursuant to the MJDS, then the Registrant will be subject to the SEC Modernization Rules, which differ from the requirements of NI 43-101.

As a result of the adoption of the SEC Modernization Rules, the SEC now recognizes estimates of "measured mineral resources", "indicated mineral resources" and "inferred mineral resources." In addition, the SEC has amended its definitions of "proven mineral reserves" and "probable mineral reserves" to be "substantially similar" to the corresponding standards under NI 43-101. While the SEC will now recognize "measured mineral resources", "indicated mineral resources" and "inferred mineral resources", U.S. investors should not assume that any part or all of the mineralization in these categories will ever be converted into a higher category of mineral resources or into mineral reserves. Mineralization described using these terms has a greater amount of uncertainty as to its existence and feasibility than mineralization that has been characterized as reserves. Accordingly, U.S. investors are cautioned not to assume that any measured mineral resources, indicated mineral resources, or inferred mineral resources that the Registrant reports are or will be economically or legally mineable. Further, "inferred mineral resources" have a greater amount of uncertainty as to their existence and as to whether they can be mined legally or economically. Therefore, U.S. investors are also cautioned not to assume that all or any part of the "inferred mineral resources" exist. Under Canadian securities laws, estimates of "inferred mineral resources"

may not form the basis of feasibility or pre-feasibility studies, except in rare cases. While the above terms are “substantially similar” to the standards under NI 43-101, there are differences in the definitions under the SEC Modernization Rules. Accordingly, there is no assurance any mineral reserves or mineral resources that the Registrant may report as “proven mineral reserves”, “probable mineral reserves”, “measured mineral resources”, “indicated mineral resources” and “inferred mineral resources” under NI 43-101 would be the same had the Registrant prepared the reserve or resource estimates under the standards adopted under the SEC Modernization Rules.

CORPORATE STRUCTURE

Incorporation

Pan American is the continuing corporation of Pan American Energy Corporation, which was incorporated under the *Company Act* (British Columbia) on March 7, 1979. Pan American underwent two name changes, the last occurring on April 11, 1995, when the present name of Pan American Silver Corp. was adopted. Amendments to the constating documents of Pan American to that date had been limited to name changes and capital alterations. In May 2006, we amended our memorandum and articles in connection with Pan American's required transition under the Business Corporations Act (British Columbia), and in January 2019, we obtained shareholder approval to increase our authorized share capital from 200,000,000 to 400,000,000 common shares without par value ("Common Shares").

Pan American's head office is situated at 1440 - 625 Howe Street, Vancouver, British Columbia, Canada, V6C 2T6 and our registered and records offices are situated at 1200 Waterfront Centre, 200 Burrard Street, Vancouver, British Columbia, Canada, V7X 1T2. Our website is www.panamericansilver.com.

Capital Structure

Pan American's authorized share capital consisted of 400,000,000 Common Shares as at December 31, 2020 and there were 210,258,667 Common Shares issued and outstanding as at that date. The holders of Common Shares are entitled to: (i) one vote per Common Share at all meetings of shareholders; (ii) receive dividends as and when declared by the directors of Pan American; and (iii) receive a pro rata share of the assets of Pan American available for distribution to the shareholders in the event of the liquidation, dissolution or winding-up of Pan American. There are no pre-emptive, conversion or redemption rights attached to the Common Shares.

In connection with Pan American's acquisition of Tahoe, Pan American issued 313,887,490 contingent value rights (each, a "CVR") to Tahoe shareholders. The CVRs are not entitled to any voting or dividend rights, and the CVRs do not represent any equity or ownership interest in Pan American or any of its affiliates. More details about the Tahoe transaction and the CVRs can be found below under the heading, "Business of Pan American".

Subsidiaries

A significant portion of our business is carried on through various subsidiaries. The table below lists our significant subsidiaries and their jurisdiction of organization, and the chart following shows the structure of our organization as it relates to the countries of our mines. Not all of our operating mines are material properties for the purposes of NI 43-101. This information is provided as at December 31, 2020.

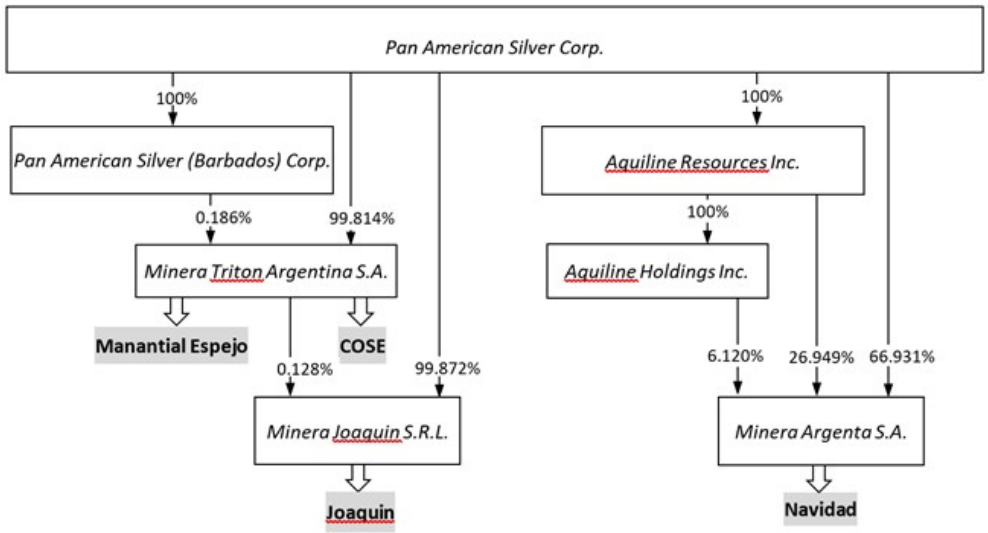
Name of Subsidiary	Jurisdiction
Tahoe Resources Ltd.	Alberta
0799714 B.C. Ltd.	British Columbia
Corner Bay Silver Inc. ("Corner Bay")	Canada
Lake Shore Gold Corp. ("Lake Shore")	Canada
Aquiline Resources Inc. ("Aquiline")	Ontario
Minefinders Corporation Ltd. ("Minefinders")	Ontario
Pan American Silver (Barbados) Corp.	Barbados
Aquiline Holdings Inc.	Barbados
PASCAP Insurance (Barbados) Ltd. ("PASCAP")	Barbados
Escobal Resources Holdings Ltd.	Barbados
Minera Triton Argentina S.A. ("MTA")	Argentina
Minera Argenta S.A. ("MASA")	Argentina
Minera Joaquín S.R.L.	Argentina
Pan American Silver (Bolivia) S.A. ("PASB")	Bolivia

Name of Subsidiary	Jurisdiction
Pan American Silver Guatemala, S.A. (“PASG”, formerly Minera San Rafael S.A.)	Guatemala
PASMEX, S.A. de C.V.	Mexico
Plata Panamericana S.A. de C.V. (“Plata Panamericana”)	Mexico
Compañía Minera Dolores, S.A. de C.V. (“CMD”)	Mexico
Minera Minefinders S.A. de C.V.	Mexico
Pan American (Netherlands) B.V.	Netherlands
Pan American Silver (Peru) S.A.C. (“Pan American Peru”)	Peru
Pan American Silver Huaron S.A. (“PAS Huaron”)	Peru
Compañía Minera Argentum S.A. (“Argentum”)	Peru
Tahoe Resources Peru S.A.C. (“Tahoe Peru”)	Peru
Shahuindo S.A.C.	Peru
La Arena S.A.	Peru

Corporate Organization by Material Mineral Property Location

The following charts depict the corporate organizational structure of our significant subsidiaries as they relate to the country of our material mineral properties as at December 31, 2020, and identifies the main property asset interests (including non-material properties, as applicable) held by the respective entities[1].

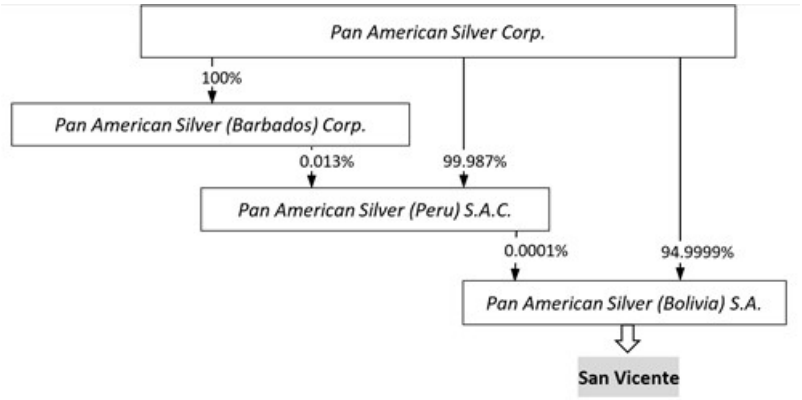
Argentina Properties



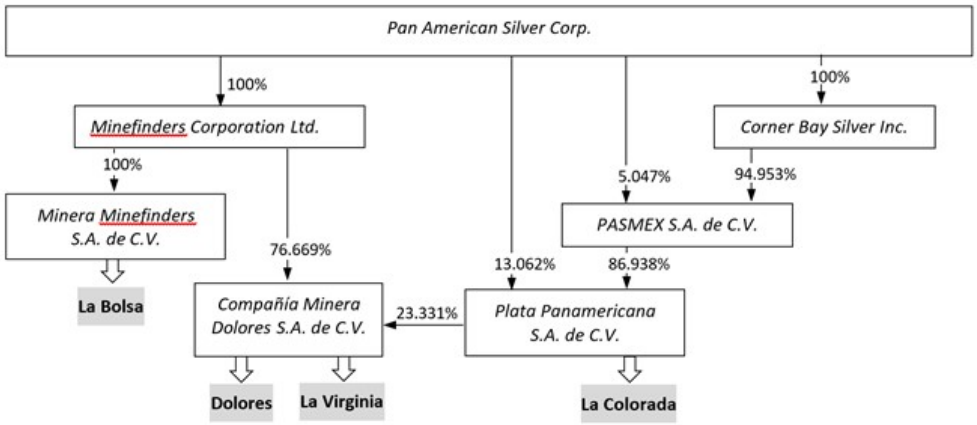
Canada Properties



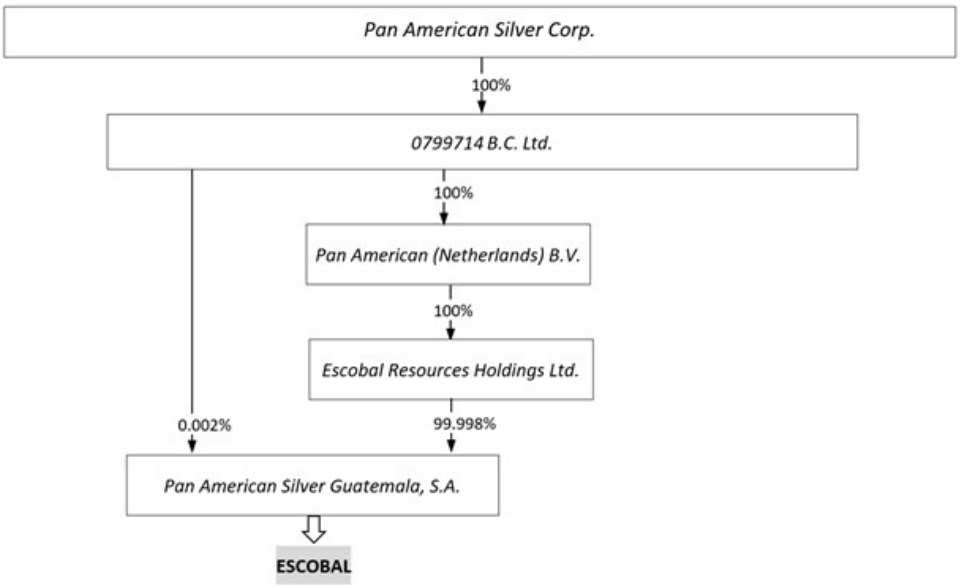
Bolivia Properties



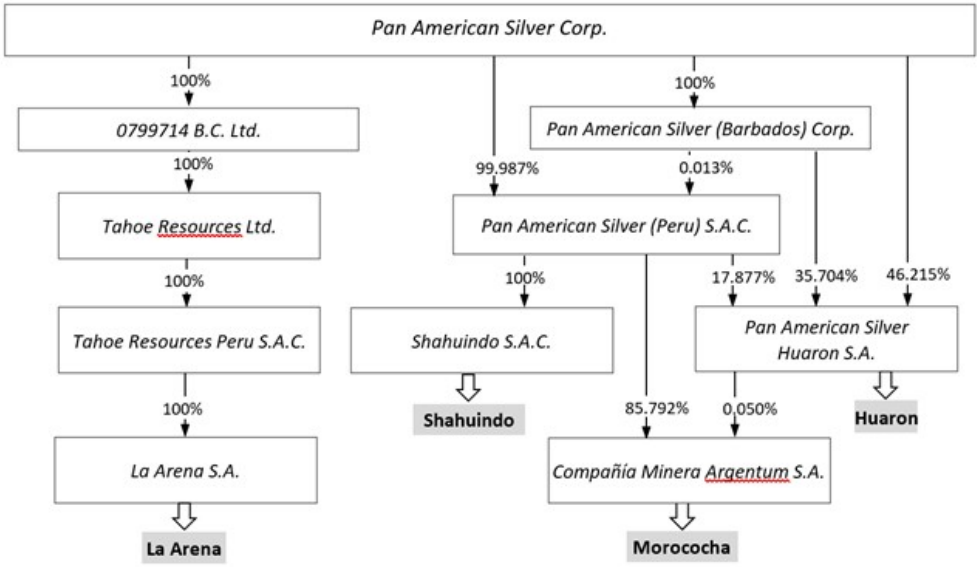
Mexico Properties



Guatemala Properties



Peru Properties



Note:

In some jurisdictions in which we operate, laws require that a company operating mineral properties must have more than one shareholder. For those jurisdictions, a nominal interest may be held by an individual or other affiliated entity and this may not be represented on the charts. Percentages shown indicate ownership of common shares and other voting interests and do not include holdings of investment shares in Peru or other non-voting shares. Percentages are rounded (in most cases, to a maximum of three decimal places). Minority interests of less than 0.001% are therefore not shown.

GENERAL DEVELOPMENT OF THE BUSINESS

Business of Pan American

We are principally engaged in the operation and development of, and exploration for, silver and gold producing properties and assets. Our principal products are silver and gold, although we also produce and sell zinc, lead, and copper. As at December 31, 2020, we operated mines and developed mining projects in Mexico, Peru, Canada, Argentina and Bolivia, and had control over non-producing silver assets in each of those jurisdictions, in addition to Guatemala and the United States.

On November 14, 2018, we entered into a definitive agreement for Pan American to acquire all of the outstanding shares of Tahoe pursuant to a plan of arrangement (the "Arrangement"). We completed the Arrangement on February 22, 2019. In aggregate, we paid $275 million in cash and issued 55,990,512 Common Shares to Tahoe shareholders under the Arrangement. In addition, Tahoe shareholders received an aggregate of 313,887,490 CVRs, each CVR having a term of ten years and being exchangeable for 0.0497 of a Common Share upon first commercial shipment of concentrate following restart of operations at the Escobal mine.

With the completion of the Tahoe transaction, we acquired four operating mines in Peru and Canada, as well as the Escobal mining property and facilities in Guatemala. The Escobal mine is currently not operating primarily as a result of the suspension of its mining license in July 2017, pending, among other things, the successful completion of an ILO 169 consultation process with Xinka indigenous communities to be undertaken by Guatemala's Ministry of Energy and Mines. In addition to supporting the consultation process, we believe that it is important to engage with local communities and the Xinka people in an effort to build long-lasting, trusting relationships for the benefit of all stakeholders.

The following map depicts the location of our operating mines and certain of our exploration and non-operating projects as at December 31, 2020.



Corporate Strategy and Objectives

Our mission is to be the world's premier silver producer with a reputation for excellence in discovery, engineering, innovation and sustainable development. We will continue to strengthen our position as one of the world's leading primary silver mining companies by acquiring or discovering silver resources that have the potential to be developed economically and to add meaningfully to our production profile while lowering consolidated unit costs of production.

The key objectives of our strategy are to:

Strategy Objective	Implementation
Increase production	Prior to 2020, our production had increased almost every year since 1995. In 2020, however, we produced 17.3 million ounces of silver, which was significantly less than the 25.9 million ounces produced in 2019. Gold production also declined to 522,400 ounces, about 37 thousand ounces less that the record high 559,200 ounces produced in 2019. This decrease in production in 2020 was primarily related to COVID-19, where on average, our operations were placed on care and maintenance for approximately two months of the year due to governmental restrictions and health protocols. The Huaron and Morococha operations were suspended for three additional months through the third quarter of 2020. Our Timmins operation in Canada continued to operate throughout 2020 at reduced rates to accommodate COVID-19 related protocols. Note that 2019 production totals did not include any production prior to February 22, 2019, from mines acquired through the Tahoe transaction. Our long-term growth has been accomplished through a combination of acquisition, exploration, development and expansion efforts, with the acquisition of Tahoe in February 2019 contributing significantly to our production, particularly gold. In 2021, Pan American expects to produce between 22.5 and 24.0 million ounces of silver and between 605,000 and 655,100 ounces of gold from its portfolio of assets.
Increase mineral reserves and mineral resources	Historically, we have achieved annual increases in our mineral reserves and mineral resources through exploration and acquisitions. In addition to mineral reserves and resources added through acquisitions, Pan American's history of replacing silver ounces mined at its operations reflects our ability to invest in mine and near-mine exploration programs throughout the silver price cycle and to the exploration potential of our asset portfolio. Effective June 30, 2020, our proven and probable silver and gold mineral reserves were approximately 550 million and 5.2 million ounces, respectively, which was similar to the 557 million ounces of silver and 5.1 million ounces of gold at the end of 2019. Our measured and indicated mineral resources (excluding mineral reserves) were approximately 806 million ounces of silver and 9.4 million ounces of gold effective the end of June 2020. Please refer to the complete mineral resource and mineral reserve information under each of our material properties contained in this AIF, and to the "Reserves & Resources" page of our website at www.panamericansilver.com for additional information.
Continue to be a "Low Cost Producer"	In 2019, with the acquisition of Tahoe, we began reporting Cash Costs[1] and AISC[1] on both a Silver Segment and Gold Segment basis, as well as AISC on a consolidated silver[1] basis, in order to better reflect our assets' production profiles. For 2020, Silver Segment Cash Costs and AISC were $7.05 and $11.38 per silver ounce sold, respectively, and Gold Segment Cash Costs and AISC in 2020 were $797 and $1,011 per gold ounce sold, respectively. Consolidated silver basis AISC in 2020 was $(3.29) per silver ounce sold.
Acquire additional silver properties	We actively investigate and evaluate strategic opportunities to acquire promising silver production, development and exploration properties in those jurisdictions where we are presently active, as well as elsewhere throughout the world. In February 2019, we acquired all of the issued and outstanding shares of Tahoe. Among other assets, Tahoe owned two mines in each of Peru and Canada, as well as the Escobal mine in Guatemala. The Escobal mine is currently suspended pending the completion of an ILO 169 consultation process, as well as the renewal of certain other permits. In addition to the more recent acquisition of Tahoe, we acquired the Joaquin and COSE projects in 2017, the Dolores mine and the La Bolsa property by virtue of acquiring Minefinders in 2012, and the Navidad property pursuant to our acquisition of Aquiline in 2010. Please refer to the section of this AIF entitled "Risks Related to Our Business" starting on page 67 for more information about the risks relating to our business and our mining properties, particularly with respect to the Escobal mine, and to our website at www.panamericansilver.com for additional information.

Strategy Objective	Implementation
Maintain strong financial performance from mining operations	In an effort to ensure we continue to have a strong and prosperous business, financial performance is monitored against targets for operating earnings and cash flow from operations, as well as against operating measures such as production and cash costs.
Continue to be a responsible company, committed to sustainable development	We are committed to operating our business in accordance with the highest standards of governance and ethics, and the principles of sustainable development. We also place a high priority and particular emphasis on the health and safety of our personnel. We have operations in a number of countries and across diverse cultures that have the potential to both positively and negatively impact their host communities and nearby populations. Our goal is to minimize the negative impacts and maximize the benefits garnered to local populations, while at the same time achieving success from a business perspective. We conscientiously strive to operate within a framework of moral principles and values and to engage and interact regularly, and in an open and honest way, with governments, shareholders, and employees. We have adopted board-level corporate policies that formalize how we must conduct our business and interact with stakeholders and others. These policies include our: Global Code of Ethical Conduct, Global Anti-Corruption Policy, Environmental Policy, Corporate Social Responsibility Policy, and Global Human Rights Policy. We have also adopted a Supplier Code of Conduct setting out expectations we have of our suppliers. We are implementing the Towards Sustainable Mining ("TSM") protocols and frameworks of the Mining Association of Canada ("MAC"), a world-class management standard designed to enhance our community engagement processes, drive industry-leading environmental practices and reinforce our commitment to the safety and health of our employees and surrounding communities. By implementing TSM at our operations within and outside of Canada, we are voluntarily exceeding MAC's membership requirements and setting a consistently high performance standard across all of our operating jurisdictions. As part of our commitment to driving global sustainable development and contributing to the United Nations Sustainable Development Goals, we became signatories of the United Nations Global Compact in 2020 and we formed a high-level and multidisciplinary group to guide the implementation and communication of our progress in the 10 principles established in the UN Global Compact. We are aware that our business is in many ways dependent on various stakeholders, and we view establishing relationships of mutual trust and respect as important. By building such relationships and conducting ourselves in a transparent manner, we can further the exchange of information, address specific concerns of stakeholders and work cooperatively and effectively towards achieving mutual goals. We report annually on our sustainability performance in accordance with the Global Reporting Initiative Standards and have begun to align our reporting with the Sustainability Accounting Standards Board ("SASB") and Taskforce on Climate-related Financial Disclosures ("TCFD") reporting frameworks. Our current report for the year-ended 2019 is available on Pan American's website at www.panamericansilver.com, and future reports will similarly be posted to our website.

Note:

[1] Cash Costs and AISC are non-GAAP measures and do not have standardized meanings prescribed by IFRS. For additional information, please see "Non-GAAP Measures" on page 2 of this AIF.

Key Developments Over the Last Three Financial Years

Year	Key Developments
2020	• COVID-19 had significant impact on the world for much of the year and took a terrible toll on human life and well-being. This included the areas where we work, and the effects were felt by local communities and members of our workforce and their families. Most of our mines were also transitioned to care and maintenance for an average of two months during the year as a result of government restrictions and the implementation of protocols to keep our workforce safe and reduce the spread of the virus. Our Huaron and Morococha operations were suspended for approximately three additional months due to COVID. The Timmins operations in Canada remained in operation throughout 2020, operating at reduced rates to accommodate COVID-19 protocols. • Produced 17.3 million ounces of silver and 522,400 ounces of gold. Despite the production disruptions due to COVID-19, the La Colorada mine continued to lead our silver production with 5.0 million ounces of silver produced in 2020, with our Dolores mine producing approximately 3.8 million ounces. Timmins West and Bell Creek (combined) led in gold production, producing nearly 150,000 ounces of gold, followed closely by the Shahuindo mine which produced over 140,000 ounces. Our La Arena and Dolores mines each produced about 100,000 ounces of gold during 2020. • We repaid $275.0 million on our corporate credit facility and distributed approximately $46.2 million in dividends to shareholders during the year. • Continued exploration of the La Colorada skarn discovery and reported an inferred mineral resource estimate of 100.4 million tonnes with grades averaging 44 g/t silver, 0.20% copper, 1.77% lead and 4.29% zinc, and containing 141.0 million ounces of silver, 4.3 million tonnes of zinc, 1.8 million tonnes of lead, and 199 thousand tonnes of copper using a cut-off value of $60 per tonne after accounting for transportation, smelting and refining costs. • As part of our commitment to driving global sustainable development and contributing to the United Nations Sustainable Development Goals, we became signatories to the United Nations Global Compact in July 2020. We also made advances on our commitment to inclusion and diversity.
2019	• Completed the acquisition of Tahoe on February 22, 2019, whose assets included the Shahuindo and La Arena mines in Peru, the Timmins West and Bell Creek mines in Ontario, Canada, and the Escobal mine (currently suspended) in Guatemala. • Produced 25.9 million ounces of silver and 559,200 ounces of gold. The La Colorada mine continued to lead our silver production with 8.2 million ounces produced in 2019, and the Timmins West and Bell Creek (combined), Shahuindo, La Arena, and Dolores mines each produced over 100,000 ounces of gold during 2019. Reported 2019 production from the mines acquired through the Tahoe transaction does not include any production prior to February 22, 2019. • Reported proven and probable mineral reserves of 557 million ounces of silver and 5.1 million ounces of gold, as well as measured and indicated mineral resources of 797 million ounces of silver and 10.6 million ounces of gold, each as of June 30, 2019. • Reported an initial inferred mineral resource estimate for the La Colorada skarn discovery on December 11, 2019, of 72.5 million tonnes, averaging 44 grams per tonne silver, 0.17% copper, 2.02% lead and 4.40% zinc, assuming a cut-off value of $60 per tonne after accounting for transportation, smelting and refining costs. • Amended our corporate credit facility to extend the maturity to February 2023 and increase availability from $300 million to $500 million.
2018	• Produced 24.8 million ounces of silver and 178,900 ounces of gold. The La Colorada mine continued to be our largest silver producer at approximately 7.6 million ounces for 2018, followed by Dolores with 4.1 million ounces of silver. Dolores also produced 136,600 ounces of gold. • Advanced the Joaquin and COSE project development in Santa Cruz, Argentina, towards expected initial production that was expected in 2019. • Made a major exploration discovery at the La Colorada mine. • Announced the proposed acquisition of Tahoe. • Substantially completed active reclamation at the Alamo Dorado site.

Outlook for 2021

In 2021, we expect to produce between 22.5 and 24.0 million ounces of silver and between 605,000 and 655,100 ounces of gold at consolidated silver basis AISC of between $(2.80) and $2.70 per ounce of silver. To forecast AISC, Pan American has assumed metal prices of $23.50/oz for silver, $1,825/oz for gold, $2,700/tonne ($1.22/lb) for zinc, $1,900/tonne ($0.86/lb) for lead, and $7,400/tonne ($3.36/lb) for copper; and average annual exchange rates relative to 1 USD of 20.00 for MXN, 3.50 for PEN, 96.67 for ARS, 7.00 for BOB, and $1.30 for CAD. In preparing this forecast, we also assumed, among other things, that operations will continue to be impacted by our comprehensive COVID-19 protocols to protect health and safety, which increase costs and restrict throughput levels, especially at our underground mines. The impact of COVID-19 on operations is expected to diminish over the course of 2021, as vaccinations are deployed throughout our operating jurisdictions later in the year. For the first quarter of 2021, we assume operations will experience the full effect of COVID-19 restrictions, similar to Q4 2020. We assume the impact of restrictions declines to 75% in the second quarter, 50% in the third quarter and 25% in the fourth quarter of 2021. The first quarter of 2022 is assumed to be the first period that will be free of COVID-19 restrictions, allowing operations to run at full capacity. The impact regarding the restrictions could improve or worsen relative to our assumptions, depending on how each jurisdiction manages potential outbreaks of COVID-19, the development and supply of vaccines, the roll-out of vaccination programs in each country, and the effectiveness of these vaccines. The Escobal mine is also assumed to remain on care and maintenance during 2021, as Guatemala's Ministry of Energy and Mines conducts the court-mandated ILO 169 consultation process.

In 2021, we plan on incurring project capital expenditures of approximately $55 million to $60 million, relating mostly to the La Colorada skarn project for infill drilling, early stage engineering, metallurgical testing, completion of a preliminary economic assessment, and investment to advance longer-term infrastructure. The anticipated project capital expenditures also include approximately $5 million relating to exploration of the Wetmore area near the Bell Creek mining operation in Ontario, Canada.

We expect to spend approximately $245 to $260 million on sustaining capital in 2021, largely on open pit pre-stripping, leach pads and tailings storage facilities, exploration, site infrastructure and mine equipment overhauls and replacements. Approximately $50 to $60 million of capital spending is being carried forward from 2020, as we had deferred certain capital projects because of COVID-19.

Exploration expenditures in 2021, including both amounts that will be expensed and capitalized, are expected to total approximately $42 million, comprised of: (1) $12.5 million for 105,000 metres of near-mine brownfield exploration drilling for reserve replacement, which is included in the forecast for 2021 sustaining capital expenditures; (2) $8.0 million in regional, greenfield exploration in Peru, Mexico and Canada and corporate overhead; and (3) $22 million for 84,500 metres of project drilling on the La Colorada skarn discovery and the Wetmore project, which is included in the forecast for 2021 project capital expenditures.

In 2021, we also expect to spend $22.0 million to $23.5 million in care and maintenance expenditures, comprised of $20 million to $21 million related to the Escobal mine focused on safely completing the actions required by our approved environmental management plan and maintaining the condition of the mine during the government-led ILO 169 consultation process, as well as $2.0 million to $2.5 million for the Navidad project.

Annual corporate general and administrative expense, including share-based compensation, is forecast to be between $39.0 million and $42.0 million in 2021.

Cash Costs and AISC are non-GAAP measures and do not have standardized meanings prescribed by Canadian accounting standards. For additional information, please see “Non-GAAP Measures” on page 2 of this AIF.

Please refer to the section of this AIF entitled “Risks Related to Our Business” starting on page 67 for more information about the risks relating to our business and our mining properties.

Principal Products and Operations

Our principal products and sources of sales are silver and gold doré and silver bearing zinc, lead, and copper concentrates. In 2020, the La Colorada, Dolores, Huaron, Morococha, Shahuindo, La Arena, Timmins West, Bell Creek, Manantial Espejo and San Vicente mines accounted for all of our production of concentrates and doré.

Consolidated production for the year ended December 31, 2020 was as follows:

	La Colorada	Dolores	Huaron	Morococha[1]	San Vicente[2]	Manantial Espejo[3]	Shahuindo	La Arena	Timmins[4]	Total[5]
Tonnes Milled[5]	559,100	6,429,900	555,600	328,600	285,100	604,700	10,603,400	10,079,300	1,643,100	31,088,800
Grade										
Silver - g/t	308	29	144	126	276	146	9	1		
Gold - g/t	0.32	0.64	0.13	0.28		1.30	0.56	0.37	2.85	
Zinc %	2.80		2.58	3.43	2.34					
Lead %	1.39		1.32	1.29	0.02					
Copper %			0.88	0.43	0.27					
Production										
Ounces Silver[6]	5,024,800	3,779,300	2,148,500	1,172,800	2,320,200	2,546,800	268,300	33,500	17,600	17,311,700
Ounces Gold[6]	3,470	98,020	530	590	310	23,370	142,380	105,370	148,400	522,450
Tonnes Zinc[7]	13,580		11,210	9,860	5,570					40,220
Tonnes Lead[7]	6,630		5,590	3,460	50					15,740
Tonnes Copper[7]			3,650	880	620					5,160

Notes:

1 Morococha data represents our 92.3% interest in mine production based on ownership of the operating entity.
2 San Vicente data represents our 95% interest in mine production based on ownership of the operating entity.
3 Manantial Espejo data includes production from the COSE and Joaquin mines.
4 Timmins refers to the Timmins West and Bell Creek mines.
5 Totals may not add due to rounding.
6 Rounded to the nearest hundred.
7 Rounded to the nearest ten.

Our approximate revenue by product category for the financial years ended December 31, 2020 and December 31, 2019 was as follows:

Product Revenue	2020	2019
	($000's)	($000's)
Silver and Gold Doré	1,047,601	894,202
Zinc Concentrate	65,033	134,992
Lead Concentrate	132,823	183,343
Copper Concentrate	50,081	78,865
Silver Concentrate	43,274	59,357
Total	**1,338,812**	**1,350,759**

Additional segmented information is set forth in Note 27 to Pan American's Audited Consolidated Financial Statements for the year ended December 31, 2020, and further information on individual mine performance and other metrics is presented in the 2020 MD&A under the heading "Individual Mine Performance".

Silver and Gold Doré

Our principal buyers of silver and gold doré produced from our La Colorada, Dolores, Manantial Espejo, Shahuindo, La Arena and Timmins mines, once refined, are international bullion banks and traders, except for the gold produced from La Colorada, which is sold to Maverix Metals Inc. ("Maverix") pursuant to the Maverix Gold

Stream (as defined below) discussed on page 25 herein. Silver and gold doré is delivered to refineries in Canada, Mexico, Germany, Switzerland, and the United States, and subsequently transferred to the accounts of our buyers.

Zinc, Lead, Copper and Silver Concentrates

The majority of our concentrate production is sold to international concentrate traders and smelters. In 2020, lead concentrate production from the La Colorada mine was delivered to the buyers at the Manzanillo, Mexico, Altimira, Mexico, and Antwerp, Belgium ports, and zinc concentrate production was delivered to a Torreon smelting facility in Mexico. In 2021, lead concentrate production from the La Colorada mine is expected to be delivered to the buyers at the Manzanillo, Mexico, Altimira, Mexico, and Antwerp, Belgium ports, and zinc concentrate production is expected to be delivered to Torreon smelting facilities in Mexico. Concentrate production from the Huaron and Morococha mines is delivered to the buyers at the port of Callao, Peru, with the exception of a portion of the zinc concentrate which is delivered to the Cajamarquilla smelting facility in Peru. Silver concentrate production from the San Vicente mine is delivered to the buyers at the Altonorte smelting facility near Antofagasta, with the exception of a portion of the silver concentrate which is delivered at the port of Antofagasta, Chile. Zinc concentrate production from the San Vicente mine is delivered to the buyers at the port of Arica, Chile. From these ports, the concentrates are shipped by the buyers to various international locations.

Please see the discussion under “Risks Relating to Our Business – Trading Activities and Credit Risk”.

Employees and Contractors

At the end of 2020, we had approximately 6,850 employees and about 3,740 contractors. The majority of those employees and contractors were working at our operations in South and Central America, Mexico and Canada. Our Peruvian operations had the largest workforce with approximately 4,770 employees and contractors as of December 31, 2020, while our Mexican operations had over 3,050 total employees and contractors. Our Argentina and Bolivia operations had approximately 860 and 620 employees and contractors, respectively, and there were nearly 350 employees and contractors in Guatemala. In Canada, our operations had nearly 870 employees and contractors, and nearly 70 persons worked for Pan American’s head office in Vancouver, British Columbia at year-end.

Protecting the health, safety and wellbeing of our employees, contractors, suppliers, and community partners where we operate is always a priority for us. Please refer to the Sustainability page of our website at www.panamericansilver.com for further information on our health and safety programs.

Research and Development

While we conduct feasibility work and operational enhancement evaluations in order to improve production processes and exploration and mining operations, we do not, in the normal course, embark on any research and development activities in relation to products or services. Costs associated with this work would usually be expensed as incurred. As such, we did not incur any significant research and development costs during 2018, 2019 or 2020.

Working Capital and Liquidity Position

As at December 31, 2020, we had cash and cash equivalents and short-term investment balances of $279.1 million and working capital of $495.2 million, with no outstanding amounts on our corporate credit facility.

On April 15, 2015, we entered into a senior secured revolving credit facility (the "Facility") with a syndicate of eight lenders. The Facility was a $300 million secured revolving line of credit available for general corporate purposes, including acquisitions, and originally had a four year term. In 2016, we amended the Facility to extend the term by an additional year. On February 1, 2019, the Facility was increased by $200 million to $500 million, and extended to mature on February 1, 2023. At our option, amounts can be drawn under the revolving facility and will incur interest based on Pan American'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 revolving facility are subject to a stand-by fee of 0.4219% to 0.6188% per annum, dependent on Pan American's leverage ratio. We drew down $301 million under the Facility under LIBOR-based interest rates to fund, in part, the cash purchase price under the Tahoe Arrangement and to repay, in full, and cancel Tahoe's second amended and restated revolving facility, under which $125 million had been drawn. During 2020, Pan American

repaid $275.0 million on its corporate credit facility, bringing the outstanding balance to zero as at December 31, 2020.

Our financial position at December 31, 2020, and the operating cash flows that are expected over the next twelve months lead management to believe that our liquid assets are sufficient to satisfy our 2021 working capital requirements, fund currently planned capital expenditures (including both sustaining and project capital) for existing operations, and to discharge liabilities as they come due. We also remain well positioned to take advantage of further strategic opportunities as they are identified and become available.

Environment, Community and Sustainability

We are committed to the principles of sustainable development and conducting our activities in an environmentally and socially responsible manner. Our core ESG values are: caring for the environment in which we operate; contributing to the long-term development of our host communities; ensuring safe and secure workplaces for our employees; contributing to the welfare of our employees, local communities and governments; and, operating transparently.

We have implemented a number of policies relating to the environment and sustainability, including an environmental policy, a corporate social responsibility policy, a health and safety policy, and an inclusion and diversity policy in which we accept our corporate responsibility to practice environmental stewardship, community engagement and development, and provide a safe, healthy, respectful and open and inclusive workplace for our employees. We also joined the BlackNorth Initiative in June 2020 as part of our commitment to inclusion and diversity and to support the fight against racism. Our code of ethical conduct, anti-corruption policy, and supplier code of conduct further formalize our commitment to operating ethically. We comply with all relevant industry standards, legislation and regulations in the countries where we carry on business.

All operations are continuing to implement and align their management systems with TSM, a world-class management framework designed to enhance our community engagement processes, drive environmental and tailings best practices and reinforce our commitment to the safety and health of our employees and surrounding communities.

During 2020, reviews of the environmental and social performance of our operations were led by Pan American's Senior Vice President of Corporate Affairs and Sustainability, and Vice President, Environment, and our reviews of our tailings facilities were led by our Vice President, Mineral Processing, Tailings and Dams. The reviews included virtual inspections of our mine sites and surrounding areas with key operations personnel, reviews of monitoring programs and operating procedures and evaluation of the principal environmental and social issues related to each of these operations. The key observations and recommendations from the reviews are reported monthly to senior management and quarterly to the Board of Directors and its Health, Safety, Environment and Communities Committee (the "HSEC Committee"). In addition to periodic reviews, detailed environmental audits and social audits are conducted at each operation approximately once every two years.

We conduct environmental audits to assess the mines' facilities, operating procedures and control systems to ensure that procedures comply with regulations, are consistent with our corporate standards, and that potential risks are being managed. During 2019, environmental audits were undertaken at the La Arena, Shahuindo and Manantial Espejo mines. The ability to complete the environmental audit program was affected by pandemic-related travel restrictions in 2020, however the La Colorada mine audit was completed. In intervening years between audits, the implementation of the corrective actions required by each audit is monitored and confirmed. The La Arena, Shahuindo, and Manantial Espejo mines' corrective actions were found to be satisfactory in 2020.

We continuously work to ensure that all tailings storage facilities, dams, heap leach pads, and waste stockpiles are robustly designed, built, operated, maintained and closed in accordance with our internal standards, the TSM Tailings Management protocol, the Canadian Dam Association guidelines, and known global best practices in order to prevent any incidents or failures. Our tailings storage facilities and water dams are subject to routine inspections, audits, geotechnical and environmental monitoring, annual reviews, and independent reviews to continually improve systems and methods in order to minimize potential harm associated with these long-term facilities. During 2020, tailings management audits were also undertaken at the San Vicente, Morococha, Huaron and La Colorada mines.

Our La Arena, Shahuindo, Huaron, Morococha, La Colorada, Dolores, and Escobal mines were all inspected by government agencies in 2020 and no material environmental issues were recorded as a result of these inspections.

In the financial year ended December 31, 2020, our environmental expenditures for concurrent reclamation were approximately $2.5 million. The closure and decommissioning liabilities for all sites other than Timmins West, Bell Creek, and Alamo Dorado were prepared using the standard reclamation cost estimator ("SRCE") methodology developed in the State of Nevada, USA, using quantity estimates and cost data obtained at each mine site. Estimates for Timmins West, Bell Creek and Alamo Dorado were developed by each site using direct estimation with site-specific closure plans, engineering estimates, local rates and contractor quotes. We currently estimate the aggregate present value of expenditures required for future closure and decommissioning costs in respect of the Huaron, Morococha, Shahuindo, La Arena, Alamo Dorado, La Colorada, Dolores, Timmins West, Bell Creek, Manantial Espejo, San Vicente, and Escobal mines, along with our development properties, to be approximately $235.1 million.

We have adopted formal policies, procedures, and industry best practices to manage our impacts and contribute to the social and economic development of local communities. Our social management framework provides a consistent methodology for measuring and tracking social impacts and sustainability performance across our mines, while offering the flexibility needed to tailor our approach to the circumstances of each operation. We conduct social audits at all operations to help us monitor and manage the impacts of our activities on communities, our work force, and in our regional supply chains. Our audit framework is based on the ISO 26000 guidance on social responsibility and incorporates content from best practices and other standards, including the United Nations Guiding Principles on Business and Human Rights, as well as the TSM Protocol on Community and Aboriginal Relationships. During 2020, we conducted a social audit of the Manantial Espejo operation in Argentina.

In 2019, we adopted a new human rights policy that is based on the three pillars of the United Nations Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises. This policy consolidates several of our existing objectives in the areas of environment, labour, diversity and social responsibility. It formalizes our approach to fostering a positive human rights culture throughout our organization and our work to prevent, minimize or mitigate adverse impacts from our activities on our employees, communities, and other external stakeholders. We also took additional steps to align with international human rights best practices and launched a gap assessment of our security practices against the requirements of the Voluntary Principles on Security and Human Rights and UNICEF's Child Rights and Security Checklist at two of our three operations with armed security forces: La Colorada in Mexico and Escobal in Guatemala. In 2020, we completed the final assessment at Dolores in Mexico.

We also recognize and respect the rights, cultures, heritage and interests of indigenous peoples. We are committed to building and maintaining positive relationships with indigenous groups through on-going engagement, and identification of mutually beneficial opportunities.

As part of our commitment to driving global sustainable development and contributing to the United Nations Sustainable Development Goals, in 2020, we became signatories to the United Nations Global Compact and established a working group to lead the implementation and develop our first Communications of Progress report, a membership requirement.

To further our sustainability performance and risk management processes, in 2020, we developed a set of ESG Performance Indicators, to measure and monitor the performance progress of the key environmental and social sustainability activities at our operations on a monthly basis. Our social performance indicators cover social risk management, grievance management and community investment. Our environmental performance indicators cover environmental incidents, audits, water, energy and greenhouse gas emissions, and implementation of the TSM program.

We also recognize that climate change is a threat to the global environment, society, our stakeholders and our business. We support the recommendations from the Financial Stability Board TCFD, and we are working towards their implementation, targeting 2021 for the release of our first TCFD-aligned report. In 2020, we started work on climate-related goals for 2021 and climate change risk analysis for TCFD reporting purposes, including transitional risks. The nature of such risks is expected to include, but are not necessarily limited to, the climate change risks further described in the Risk and Uncertainties section of the 2020 MD&A. We will also continue to

report on our emissions, targeted emission reductions, climate risks and other climate-related actions in our annual sustainability reports.

Other than specific environmental and social concerns discussed in more detail elsewhere in this AIF, we are not aware of any material environment or social related matter requiring significant capital or operating outlays in the immediate future. Closure and reclamation costs and actual costs may vary, perhaps materially, from estimates and investors are cautioned against attributing undue certainty to these estimates. The reclamation and closure costs estimate for each of the operating mines and development projects was updated to reflect the conditions as of December 31, 2020.

Our 2019 Sustainability Report was prepared in accordance with the Global Reporting Initiative (GRI) Standards: core option and GRI Mining & Metals Sector Disclosures. The report includes detailed information on our environmental, social, socio-economic and health and safety programs and performance. Our 2019 Sustainability Report is available on our website at www.panamericansilver.com. In addition to GRI Standards, our 2020 Sustainability Report will also take into consideration the Sustainability Accounting Standards Board and TCFD reporting framework and will be made available on our website once completed.

Please refer to our 2020 MD&A under the heading “Environmental, Social and Governance” for additional details on our ESG strategy and performance.

Operating and Development Properties

Pursuant to National Instrument 51-102 *Continuous Disclosure Obligations* (“NI 51-102”), we have identified the following properties and projects as being material as at December 31, 2020: the La Colorada mine, the Dolores mine, the Huaron mine, the Morococha mine, the Shahuindo mine, the Timmins West mine, and the Bell Creek mine. We have also identified the currently-suspended Escobal mine and the Navidad property as material properties for 2020. We do not consider any of our other mines, development or investment properties to be material properties for the purposes of NI 51-102.

Certain statements in the following property summaries are based on and, in some cases, extracted directly from the relevant Technical Reports identified under the heading “Scientific and Technical Information” beginning on page 8.

Mineral Reserve and Mineral Resource Estimate Information

The process for estimating mineral reserves and mineral resources at our properties is described below in each property section. Pan American is exposed to many risks in conducting its business, both known and unknown, and there are numerous uncertainties inherent in estimating mineral reserves and mineral resources. Although we have no current expectation that our mineral reserve and mineral resource estimates will be materially negatively impacted by external factors such as metallurgical, safety, environmental, permitting, title, access, legal, taxation, availability of resources, and other factors disclosed in this AIF, changes in relation to such factors are not uncommon in the mining industry and there can be no assurance that these factors will not have a material impact. There are numerous uncertainties inherent in estimating mineral reserves and mineral resources. The political, economic, regulatory, judicial and social risks related to conducting business in foreign jurisdictions, and changes in metal and commodity prices, pose particular risk and uncertainty to us and could result in material impacts to our business and performance. In addition to external factors and risks, the accuracy of any mineral reserve and mineral resource estimate is, among other things, the function of the quality and quantity of available data and of engineering and geological interpretation and judgment. Results from drilling, testing, and production, as well as a material change in metal prices or a change in the planned mining method, subsequent to the date of the estimate, may justify revision of such estimates and may differ, perhaps materially, from current estimates, and investors are cautioned against attributing undue certainty to mineral reserves and mineral resources. Readers are encouraged to read the discussion under “Risks Relating to Our Business” in this AIF.

I. Operating Properties

A. Mexico

(i) La Colorada Mine

Project Description, Location, and Access

The La Colorada underground silver mine is located in Zacatecas State, Mexico, approximately 100 kilometres south of the city of Durango and 155 kilometres northwest of the city of Zacatecas. The mine is accessed primarily from the cities of Durango and Zacatecas by paved highway and all weather gravel roads.

Our wholly-owned subsidiary, Plata Panamericana, owns and operates the mine. The La Colorada property, including certain exploration concessions outside the mining area, is comprised of 56 mining claims totalling approximately 8,840 hectares. We pay an annual fee to maintain the claims in good standing, and to our knowledge, we have met all of the necessary obligations to retain the property.

We have control over or rights in respect of approximately 1,300 hectares of surface area covering the main workings. All of the La Colorada mineral reserves and mineral resources and all of the known mineralized zones, mine workings, the processing plant, effluent management and treatment systems, and tailings disposal areas are located within the mining claims controlled by us.

In 2016, as part of the transaction with Maverix, Maverix acquired a gold stream equivalent of one hundred percent (100%) of the payable gold production from the La Colorada mine, less a fixed price of USD$650 per ounce for the life of the mine (the “Maverix Gold Stream”). In 2020, the Maverix Gold Stream resulted in Maverix acquiring 3,608 ounces of gold (2019 – 3,758 ounces).

To the best of our knowledge, the La Colorada mine is not subject to any other royalties, overrides, back-in rights, payments, or other agreements and encumbrances, other than governmental taxes, fees and duties. Our Mexican operations are subject to governmental taxes, fees and duties, including: (i) a special mining duty (“SMD”) of 7.5% applied to taxable earnings before interest, inflation, taxes, depreciation, and amortization; and (ii) a deductible extraordinary mining duty (“EMD”) of 0.5% that is applied to the sale of gold, silver, and platinum.

In late December 2016, the Zacatecas state government also enacted a new set of ecological taxes which took effect on January 1, 2017 (the “Zacatecas Tax”). The Zacatecas Tax applied broadly across a number of industries in the State of Zacatecas that involve extraction, emissions to the air, soil or water, and deposits of residue or waste. The Zacatecas Tax primarily affects the La Colorada mine in respect of the materials placed in its tailings storage facility, with only about 5% of the tax relating to emissions. We paid approximately $4.0 million in respect of the Zacatecas Tax from 2017 to 2019. However, pursuant to a challenge of the Zacatecas Tax constitutional grounds, in mid-2020, the Supreme Court of Mexico determined that the tax for the deposit or storage of waste rock was not within the jurisdiction of the State of Zacatecas and that Plata was entitled to be reimbursed for payments previously made in respect of the La Colorada mine. The Court also ruled, however, that the State of Zacatecas was empowered to impose a tax for the prevention and control of air pollution generated by industrial establishments, which are not within the federal competence, and therefore that portion of the tax on Plata was upheld. It is currently unknown whether Plata will be able to recover the amounts previously paid, and a modified version of the Zacatecas Tax has recently been introduced by the State of Zacatecas with respect to waste management facilities. We are currently evaluating what, if any, impact that this modified tax might have on our operations in Zacatecas.

While there are no known significant factors or risks that we currently expect to be reasonably likely to affect access or title, or the right or ability to perform work on the La Colorada mine, certain community and land ownership rights have been asserted over a portion of our La Colorada surface lands. In addition to claims in the Agrarian Courts in Mexico, a process was initiated before the Secretariat of Agrarian, Territorial and Urban Development (“SEDATU”) in Zacatecas to declare such lands as national property. While we are seeking to protect our rights, there could be a material adverse impact on La Colorada’s future mining operations if we are unable to maintain access to those surface areas. Please refer to “Risks Related to Our Business” starting on page 67 for a general discussion of the risks relating to our operations.

History

The Dorado family operated mines at two locations on the property in 1925. From 1929 to 1955, Candelaria y Canoas S.A., a subsidiary of Fresnillo S.A., installed a flotation plant and worked the old dumps of two previous mines on the La Colorada property. From 1933 to the end of World War II, La Compañía de Industrias Peñoles also conducted mining operations on the property. From 1949 to 1993, Compañía de Minas Victoria Eugenia S.A. de C.V. ("Eugenia") operated a number of mines on the property. In 1994, Minas La Colorada S.A. de C.V. ("MLC") acquired the exploration and exploitation claims and surface rights of Eugenia. Until 1997, MLC conducted mining operations on three of the old mines on the property.

During these time periods, exploration was mainly in the form of development along the veins. Prior to our ownership, 131 diamond drill holes had been drilled. In 1997, we entered into an option agreement with MLC, during which time we conducted exploration and diamond drilling programs as part of our due diligence reviews.

We have been producing from La Colorada since 1998.

Geological Setting, Mineralization, and Deposit Types

The La Colorada mine is located in the Sierra Madre Occidental volcanic belt, at the contact between the Lower Volcanic Supergroup and the Upper Volcanic Supergroup. The oldest rocks exposed on the property are Cretaceous limestones of the Cuesta del Cura Formation and calcareous clastic rocks of the Indidura Formation. They are overlain by conglomerates of the early Tertiary Ahuichilla Formation. East to northeast striking faults form the dominant structures at the property and play a strong role in local mineralization.

Economic mineralization is found in veins, replacement mantos, and skarn. The majority of the mineral resources and mineral reserves are sourced from the NC vein series, the HW vein series, Veta 3, the Amolillo vein system, vein and manto mineralization at the Recompensa system, and the new undeveloped skarn deposit.

Most mineralized veins strike east to northeast and dip moderately to steeply to the south. Most of the mineralization of economic significance is located in quartz veins that average 1 metre to 2 metres wide, but may be significantly wider. Amolillo strikes over 1.5 km to the northeast and dips 60° to the southeast, for over 800 metres down dip. The average vein width is 2.2 metres. The NC vein series lies around 700 m to the southeast of Amolillo. The most significant of these veins, NC2, strikes around 1.2 km to the northeast and dips 75° to the southeast, for over 1 km down dip. The average vein width is 1.9 metres. The HW series is the western continuation of the NC series, strikes east-west, and dips 50° to the south, for over 600 m down dip. The average vein width is 1.8 metres. Veta 3 runs parallel to the HW and NC series, strikes for over 900 m to the northeast, and dips 75° to the northwest, for around 400 m down dip. The average vein width is 1.7 metres.

Manto style mineralization is found near vein contacts where the primary host rock is limestone.

A significant skarn deposit was discovered in 2018 at depth and to the east of the NC2 vein. With increasing depth, mineralization styles progress from epithermal style veins, to manto style mineralization in calcareous sediments, skarn, magmatic hydrothermal breccia skarn, proximal skarn, epithermal veins overprinting porphyry, and copper-molybdenum-silver porphyry. Common minerals include galena and sphalerite, with quartz, carbonate, feldspar, pyroxene, and garnet. The deposit, as currently defined, comprises several zones of mineralization located between 600 metres to 1,900 metres below surface, over an area of around 850 metres by 650 metres.

Exploration

The mine had been working for several decades prior to any specific exploration work and most major structures became known through mine development. Prior to Pan American's ownership, 131 diamond drillholes for a total of 8,665 metres had been completed by MLC, and between September 1997 and March 1998, while the property was under option, Pan American conducted a geophysical survey comprising very low frequency radio and induced polarization.

Since Pan American acquired the La Colorada mine, staff and consulting structural geologists have carried out near mine surface and underground geological and structural mapping. Underground channel and raise sampling is conducted for grade control and mineral resource and reserve estimates as mining progresses.

Drilling

All drilling is by diamond drilling from surface and underground using industry standard drill machines and downhole survey tools. Drilling is conducted by both our employees and private drilling contractors under the supervision of the mine geology department. Near mine surface and underground diamond drilling exploration campaigns are ongoing on an annual basis for mineral resource and mineral reserve estimates.

Sampling, Analysis, and Data Verification

The drill core is cut in half with a diamond bladed saw and samples are selected with respect to geological features, at 2 metre lengths or less. Channel samples of approximately one metre in width are taken in ore development areas and stopes. The samples are maintained in secure facilities and are under the control of our employees or the independent laboratory at all times. We have no reason to believe that the validity and integrity of the samples has been compromised.

The drillhole samples are prepared by the internal La Colorada mine laboratory, which is operated by our employees, and by independent laboratories including SGS of Durango, Activation Laboratories Ltd ("Actlabs") of Zacatecas, and Bureau Veritas of Hermosillo. Both Actlabs and SGS used fire assay with gravimetric finish for gold and acid digestion with ICP finish for silver, lead, zinc, and copper. Bureau Veritas used fire assay with gravimetric finish for gold and acid digestion with ICP finish for silver, lead, zinc, and copper in their Vancouver, Canada laboratory. The La Colorada mine laboratory used fire assay with gravimetric finish for gold and silver, and acid digestion with atomic absorption ("AA") finish for lead, zinc, and copper.

The mine geology department conducts a quality assurance/quality control ("QAQC") program that is independent from the laboratory. The program includes the insertion of certified standards, blanks and duplicate samples. The results of the QAQC samples demonstrate acceptable accuracy and precision and that no significant contamination is occurring at the mine or external laboratories.

Mineral Processing and Metallurgical Testing

As part of normal plant operation procedures, metallurgical analysis and testing is undertaken as required. The majority of these analyses are to assess mill performance and metallurgical recovery. Metal recovery forecasts used in our mine plans are based on the historical performance of the plant operations and the tonnes and grade of material that is planned to be mined.

Mineral Resource and Mineral Reserve Estimates

Management estimates that mineral reserves at the La Colorada mine, effective June 30, 2020, are as follows:

La Colorada Mineral Reserves [1, 2, 3]

Reserve Category	Tonnes (Mt)	Grams of Silver per tonne	Grams of Gold per tonne	% Zinc	% Lead
Proven	4.4	339	0.25	2.29	1.28
Probable	5.7	301	0.20	1.90	1.09
TOTAL	10.1	318	0.22	2.07	1.17

Notes:

1 Estimated using a price of $18 per ounce of silver, $1,300 per ounce of gold, $2,350 per tonne of zinc and $2,000 per tonne of lead. Totals may not add due to rounding.

2 Mineral reserve estimates for La Colorada have been prepared under the supervision or were reviewed by Christopher Emerson, FAusIMM, and Martin Wafforn, P. Eng., as Qualified Persons as that term is defined in NI 43-101.

3 Lead and zinc grades shown are the average for the deposit. However, the base metals are only payable in the concentrates produced from the sulphide ores and not in the doré produced from the oxide ores.

Management estimates that mineral resources at the La Colorada mine, effective June 30, 2020, are as follows:

La Colorada Mineral Resources [1, 2, 3]						
Resource Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**Grams of Gold per tonne**	**% Copper**	**% Zinc**	**% Lead**
Measured	0.9	204	0.20	0.00	1.43	0.88
Indicated	1.1	242	0.16	0.00	0.98	0.54
Inferred	6.2	232	0.13	0.00	3.10	1.60
Inferred skarn	100.4	44	0.00	0.20	4.29	1.77

Notes:

1 These mineral resources are in addition to mineral reserves. Estimated using a price of $18 per ounce of silver, $1,300 per ounce of gold, $2,350 per tonne of zinc and $2,000 per tonne of lead, except for the skarn deposit, where metal prices of $18.50 per ounce of silver, $6,500 per tonne of copper, $2,600 per tonne of zinc, and $2,200 per tonne of lead were used. At the skarn deposit, a cut-off value of $60 per tonne, which used metallurgical recoveries of 91% silver, 90% lead, 85% zinc, and 38% copper, was used to tabulate resources.

2 Mineral resource estimates for the La Colorada mine have been prepared under the supervision, or were reviewed by Christopher Emerson, FAusIMM, and Martin Wafforn, P. Eng., as Qualified Persons, as that term is defined in NI 43-101.

3 Lead and zinc grades shown are the average for the deposit. However, the base metals are only payable in the concentrates produced from the sulphide ores and not in the doré produced from the oxide ores.

Resource estimates were made for the veins using either two dimensional or three dimensional methods.

Following the two dimensional method, mineral resources are estimated using averaging of the channel and diamond drillhole samples. A long section is produced of each structure and divided into mineable panels. The volume of the panel is estimated from the average width of the vein or mineralization intersection of each drillhole or channel located within a 30 metre radius of the panel. The grade of each panel is estimated by the length weighted average of the sample grade of each intersection within a 30 metre radius of the panel.

Following the three dimensional method, three dimensional interpretations are made in each vein or mineralized structure around spatially continuous trends of drillhole and channel sample grades greater than the sub-marginal cut-off values for each vein. A similar interpretation is made of hangingwall and footwall dilution volumes expected to be mined with each structure. The wireframe interpretations are filled with blocks for the ordinary kriged estimate.

For both estimation methods, a long section is produced of each structure and divided into mineable panels. Average bulk density values are applied to each mining panel volume to estimate the tonnes of each panel. The volumes are depleted annually for mining in the previous year. Mineral resource confidence classifications are based on the proximity and density of sample information in each block, as well as the interpretation and the experience of the mine geologists. Planned dilution and loss is applied to the estimate and a value per tonne is calculated in each panel. Any panel with a value above the mineral resource cut-off is converted to mineral resources. Mineral resources that can be economically mined are converted to mineral reserves.

Mineral resources for the skarn were estimated using inverse distance grade interpolation into three dimensional blocks within mineralised envelopes defined using a mineralized cut-off grade.

The mineral resource estimate is depleted annually for mining in the previous year. Planned dilution and loss is applied to the block model and a value per tonne is applied to each block. Reserve and resource underground stope shapes were prepared on blocks above the economic cut-off. Mineral resources that can be economically mined are converted to mineral reserves.

Mineral reserve estimates are based on a number of assumptions that include metallurgical, taxation, and economic parameters. Increasing costs or increasing taxation could have a negative impact on the estimation of mineral reserves. There are currently no known factors that may have a material negative impact on the estimate of mineral reserves or mineral resources at the La Colorada mine.

Mining Operations

Underground mining currently takes place utilizing cut and fill and long hole open stoping methods. Ore is hoisted to the surface in a shaft, and when required, may also be hauled to the surface using the two mine access ramps present in both mines.

Processing and Recovery Operations

The operation produces both oxide and sulphide ore processed in two separate circuits with a total nominal plant capacity of 2,000 tpd. The oxide plant is a conventional cyanide leach process comprised of crushing, grinding, leaching, Merrill Crowe zinc precipitation, and on-site refining to produce doré. The sulphide plant has a conventional flotation process comprised of crushing, grinding, and selective lead and zinc froth flotation circuits to produce separate precious metal rich lead and zinc concentrates. In the oxide plant, metallurgical recoveries averaged 85% for silver and 53% for gold in 2020. In the sulphide plant, recoveries in 2020 averaged 92% for silver, 61% for gold, 85% for lead, and 87% for zinc.

During 2020, we processed 559.1 thousand tonnes, producing 5.0 million ounces of silver, 3.5 thousand ounces of gold, 13.6 thousand tonnes of zinc, and 6.6 thousand tonnes of lead.

All precious metal doré produced at the La Colorada mine is sent to one of two arm's length precious metals refineries for refining under fixed-term contracts. After refining, the silver is sold on the spot market to various bullion traders and banks, and the gold is sold to Maverix pursuant to the Maverix Gold Stream. All lead and zinc concentrates produced at the La Colorada mine are sold to arm's length smelters and concentrate traders under negotiated fixed-term contracts, which consider the presence of any deleterious elements. To date, we have not experienced difficulty with renewing existing or securing new contracts for the sale of the La Colorada doré or concentrates, however, there can be no certainty that we will always be able to do so or what terms will be available in the future. We regularly review the terms of smelting and refining agreements and the terms are considered to be within industry norms. Please see "Risks Related to our Business – Trading Activities and Credit Risk".

The revenues per type of concentrate and doré produced by the La Colorada mine for the past three years were as follows:

2020	**Revenue[1, 2]**	**Quantity Sold**
Silver and Gold in Doré	$5.1 million[3]	797,506 ounces of silver
		437 ounces of gold
Lead Concentrate[4]	$101.5 million	16,358 tonnes
Zinc Concentrate[4]	$22.2 million	24,148 tonnes
2019	**Revenue[1, 2]**	**Quantity Sold**
Silver and Gold in Doré	$16.8 million	1,145,000 ounces of silver
		680 ounces of gold
Lead Concentrate[4]	$121.4 million	20,986 tonnes
Zinc Concentrate[4]	$39.5 million	36,221 tonnes
2018		
Silver and Gold in Doré	$21.0 million	1,440,000 ounces of silver
		757 ounces of gold
Lead Concentrate[4]	$100.1 million	18,611 tonnes
Zinc Concentrate[4]	$42.9 million	30,799 tonnes

Notes:

1 Consists of sales to arm's length customers.

2 Calculated as gross revenue plus export credit incentives (as applicable), less treatment and refining charges and export taxes.

3 Reduced by approximately $8.5 million in 2020 as a result of a non-cash adjustment, $5.3 million of which relates to prior periods.

4 Lead concentrates contain payable silver and gold. Zinc concentrates contain payable silver.

Infrastructure, Permitting, and Compliance Activities

The mine workings, processing plant, tailings storage facilities, waste disposal areas, effluent management and treatment facilities, roads, and power and water lines have all been constructed and are located within the boundaries of the mining leases and surface rights controlled by us. To the best of our knowledge, all permits and licenses required to conduct our activities on the property have been obtained and are currently in good standing.

The La Colorada mine purchases electrical power from the Mexican national power utility and back up diesel power is also available. Water for the mining operation is supplied from the underground mine dewatering systems.

An environmental impact statement ("EIS") and risk assessment on the La Colorada property was first submitted to the Mexican environmental authorities in early March 1999 and has subsequently been maintained and updated, including a major permit modification for the La Colorada mine expansion in 2017.

The main environmental projects focus on the stability and revegetation of historic tailings facilities. There are no known environmental issues that could materially impact our ability to extract the mineral resources or mineral reserves.

Permitting activities related to the La Colorada Skarn deposit commenced in 2020 with applications for twin decline ramps to access the deposit currently under evaluation by the Mexican environmental authorities.

The La Colorada mine voluntarily participates in the Mexican Environmental Protection Authority's "Clean Industry" program, which involves independent verification of compliance with all environmental permits and the implementation of good practice environmental management procedures and practices. The La Colorada mine obtained its first certification in 2008 and is periodically re-certified.

A closure cost estimate for La Colorada prepared according to State of Nevada approved SRCE methodology is updated every year for unit costs and discount rates, and every other year for physical disturbance. Pan American has estimated the present value of the final site reclamation costs for the La Colorada mine to be approximately $7.2 million effective December 31, 2020. See "Narrative Description of the Business – Environment, Community and Sustainability" for further disclosure regarding forward-looking statements related to reclamation costs.

Capital and Operating Costs

In 2020, total capital additions at La Colorada were approximately $29.4 million, with $11.0 million invested in expenditures related to the expansion activities, including exploration on the new skarn mineralization.

Capital investments for the La Colorada mine in 2021 are anticipated to total between $77.0 million to $84.5 million. In addition to sustaining capital investments of between $27.0 million and $29.5 million relating to underground ventilation infrastructure improvements, mine equipment replacement and refurbishments, tailing storage facility expansions and near-mine exploration, we also expect to invest between $50 million and $55 million in project capital spending relating to the skarn project for infill drilling, early stage engineering, metallurgical testing, completion of a preliminary economic assessment, and some investment to advance certain longer-term infrastructure items.

In 2020, direct operating costs at La Colorada were $69.1 million.

Exploration, Development, and Production

In 2021, we anticipate producing between 7.16 million and 7.44 million ounces of silver and between 4.0 thousand and 4.2 thousand ounces of gold from the La Colorada mine. We plan to undertake approximately 83,000 metres of exploration drilling at the La Colorada mine, including the skarn, in 2021.

(ii) Dolores Mine

Project Description, Location, and Access

The Dolores open pit and underground silver-gold mine is located in the state of Chihuahua, approximately 250 kilometres west of the city of Chihuahua. The main road access to the property is by maintained dirt access road from Yepachic, Chihuahua. Access is also possible by light aircraft landing on a dirt strip located about eight kilometres from the Dolores mine.

In 2012, Pan American acquired Minefinders and its wholly-owned subsidiary, CMD, that owns and operates the Dolores mine. The mine is comprised of three mineral concessions with an area of approximately 27,700 hectares. We make the required payments to maintain the concessions in good standing, and to our knowledge, we have met all of the necessary obligations to retain the property.

Many of the surface rights on the property are comprised in communal land registered with the National Agrarian Registry of Mexico (such communal land areas are referred to as "ejidos"). We have surface rights agreements with the local ejido community, Ejido Huizopa, and with several individual members of the Ejido Huizopa, dating from 2006, allowing us irrevocable access and the right to carry out exploration and mining activities for a term of 15 years with a right to extend for a further 15 years**.** These surface rights provide us with access to our mining operations, waste storage areas, heap leach pad areas, and other facilities.

All of the known mineralized zones, mineral resources and mineral reserves, mine workings, processing plant, effluent management and treatment systems, and heap leach pad areas relating to the Dolores mine are located within the boundaries of the concessions and surface rights.

An NSR royalty of 2% payable on all metal production, plus an additional NSR royalty of 1.25% on gold production, is payable to RG Mexico Inc., a subsidiary of Royal Gold Inc. These royalties are only on the portion of the deposit contained within one of the three concessions. To the best of our knowledge, the Dolores mine is not subject to any other royalties, overrides, back-in rights, payments or other agreements and encumbrances. Our Mexican operations are subject to governmental taxes, fees and duties, including the SMD and the EMD, as described in more detail under "La Colorada – Project Description, Location and Access".

While there are no known significant factors or risks that we currently expect to be reasonably likely to affect access or title, or the right or ability to perform work on the property, including permitting and environmental liabilities, please refer to "Risks Related to Our Business" starting on page 67 for a general discussion of the risks relating to our operations.

History

Mining began in the region of the Dolores mine in the 1860s. A stamp mill began treating the Dolores ore from 1915 until early 1929, when it was destroyed by fire. Only sporadic production occurred from 1929 to 1931, after which there are no records of any historical production. Incomplete mining records from between 1922 and 1931 indicate that approximately 372,000 tonnes of ore containing over 116,000 ounces of gold and six million ounces of silver were produced from several underground mine operations, including the Dolores mine.

The property lay idle until 1993 when Minefinders began acquiring a land position in the district. Minefinders began a full exploration program in 1995 and commenced diamond drilling and reverse circulation drilling programmes in 1996. In July 1996, Minefinders granted Echo Bay Mines ("Echo Bay") an option in the property and Echo Bay commenced drilling, sampling, environmental data collection, and metallurgical testing. Minefinders bought back the option, including the technical information collected by Echo Bay, in 1997.

Following construction, Minefinders commenced mining in 2008. During the 2008 to 2011 period, Minefinders mined 25.5 million tonnes and stacked 18.3 million tonnes of ore on the leach pads, producing 210,660 ounces of gold and 6.2 million ounces of silver.

We have been producing from Dolores since the aqusition of Minefinders in 2012.

Geological Setting, Mineralization, and Deposit Types

Dolores is located in the Sierra Madre Occidental volcanic belt, which comprises calc-alkaline batholiths and volcano sedimentary rocks of the Lower Volcanic Series and ignimbrites of the Upper Volcanic Series.

The San Francisco fault and its footwall host most of the mineralization at Dolores. The immediate footwall and hanging wall of the fault forms a 500 metre wide northwest-striking corridor of igneous intrusions.

Low sulphidation epithermal silver and gold mineralization is hosted in north-northwest trending hydrothermal breccias and sheeted vein zones in the order of 5 metres to 10 metres wide. Most high grade mineralization occurs along three major structures. Silver and gold mineralization identified on the surface lies over an area 4,000 metres long and up to 1,000 metres wide.

The highest grade mineralization occurs within the San Francisco Breccia, a well-defined and continuous hydrothermal breccia and stockwork zone that occurs in the immediate footwall of the San Francisco fault. The breccia trends further away from the fault towards the north until it joins a second major breccia zone known as the Alma Maria Breccia.

Hydrothermal breccias carry the highest silver and gold grades and pass outward into vein stock works. The veins are thin, rarely over 30 mm, and tend to occur as sheeted swarms. Economically mineable grades occur where the veins are sufficiently closely spaced.

Exploration

Minefinders carried out reconnaissance geological mapping, detailed mapping, and geophysical surveys including induced polarization surveys, resistivity surveys, and magnetic surveys. Minefinders also collected rock chip samples from the surface and underground, and followed up on promising targets with both reverse circulation and diamond drilling. Since we acquired the Dolores mine, we have continued with a program of near mine geological mapping and diamond drilling.

Drilling

All drilling is by diamond drilling from surface and underground using industry standard drill machines and downhole survey tools. Drilling is conducted by private drilling contractors under the supervision of the mine geology department. Near mine surface and underground diamond drilling exploration campaigns are ongoing as required for mineral resource and mineral reserve estimates.

Sampling, Analysis, and Data Verification

Reverse circulation drillholes were sampled from the length of each drill rod and diamond drillhole samples are selected according to geological features. Most drill core samples have been taken at 2 metre intervals. The samples are maintained in secure facilities and are under the control of our employees or the independent laboratory at all times. We have no reason to believe that the validity and integrity of the samples has been compromised.

Minefinders sent samples to Bondar Clegg, ALS Chemex, or Inspectorate laboratories for preparation and analysis. Silver assays were mostly prepared using a multi-acid digestion technique and AA spectrometry. Any assay overlimits were re-assayed using fire assay with gravimetric finish. Gold was analyzed using fire assay with AA finish and with gravimetric finish for any AA overlimits. Since acquiring the Dolores mine, we have sent samples to SGS Laboratories in Durango, Mexico. Samples are assayed for gold using fire assay with AA finish, and by fire assay with gravimetric finish for any AA overlimits. Silver is analysed by three acid digestion with ICP-AES finish for trace silver values, by three acid digest with AA finish for ICP-AES overlimits, and by fire assay with gravimetric finish for any AA overlimits.

The mine geology department conducts a QAQC program that is independent from the laboratory. The program includes the insertion of certified standards, blanks and duplicate samples. The results of the QAQC samples demonstrate acceptable accuracy and precision and that no significant contamination is occurring at the mine or external laboratories.

Mineral Processing and Metallurgical Testing

As part of normal mineral processing procedures, metallurgical analysis and testing is undertaken as required. The majority of these analyses are to assess leaching performance and metallurgical recovery. Metal recovery forecasts used in our mine plans are based on the recovery model, historical performance of the leaching operations and the tonnes, grade and type of material that is planned to be mined.

Mineral Resource and Mineral Reserve Estimates

Management estimates that mineral reserves for the Dolores mine, effective June 30, 2020, are as follows:

Dolores Mineral Reserves [1, 2]			
Reserve Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**Grams of Gold per tonne**
Proven	30.1	23	0.88
Probable	6.8	26	0.81
TOTAL	36.9	23	0.87

Notes:

1 Estimated using a price of $18 per ounce of silver and $1,350 per ounce of gold. Totals may not add due to rounding.

2 Mineral reserve estimates for the Dolores mine were prepared under the supervision of, or were reviewed by, Christopher Emerson, FAusIMM, and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

Management estimates that mineral resources at Dolores, effective June 30, 2020, are as follows:

Dolores Mineral Resources [1, 2]			
Resource Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**Grams of Gold per tonne**
Measured	1.6	12	0.36
Indicated	0.8	15	0.47
Inferred	3.8	43	1.14

Notes:

1 These mineral resources are in addition to mineral reserves. Estimated using metal prices of $18.50 per ounce of silver and $1,700 per ounce of gold. Mineral Resources are reported within a final pit outline and above a mineral resource cut-off grade.

2 Mineral resource estimates for the Dolores mine were prepared under the supervision of, or were reviewed by, Christopher Emerson, FAusIMM, and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

Mineral resource estimates were prepared using kriging methods within three dimensional geological interpretations. The block model was classified for measured, indicated, and inferred confidence categories depending on the location of the block relative to the number of drillhole intersections available to estimate each block, as well as other factors affecting confidence in the estimate.

The mineral resource estimate is depleted annually for mining in the previous year. Planned dilution and loss is applied to the block model and a value per tonne is applied to each block. Reserve and resource pits and underground stope shapes were prepared on blocks above the mineral resource cut-off grade. Mineral resources that can be economically mined are converted to mineral reserves.

Mineral reserve estimates are based on a number of assumptions that include metallurgical, taxation and economic parameters. Increasing costs, lower metal prices or increasing taxation could have a negative impact on the estimated mineral reserves. There are currently no known factors that may have a material negative impact on the estimated mineral reserves or mineral resources at the Dolores mine.

Mining Operations

Mining at Dolores is by standard open pit methods using shovels, loaders, and haul trucks and by underground methods using sub level open stoping and ramp haulage to the surface.

Processing and Recovery Operations

The Dolores mine uses conventional cyanide heap leaching and Merrill-Crowe technology on the crushed ores to produce gold and silver doré. The high grade portion of the ore is processed through the pulp agglomeration treatment plant and is conveyed with the lower grade portion to the heap leach pads for leaching. The pulp agglomeration plant is comprised of crushing, grinding, particle size classification, filtration, agglomeration, and reagent facilities. The average plant throughput is 20,000 tpd.

During 2020, we stacked 6.4 million tonnes on the leach pads and produced approximately 3.8 million ounces of silver and 98.0 thousand ounces of gold.

All production from Dolores is in the form of doré bars, which is refined at arm's length refineries prior to the sale of refined silver and gold to bullion banks and traders. Pan American currently has refining contracts in place with refineries in the USA and Mexico. We have not had any difficulty in securing contracts for the sale of Dolores doré, however, there can be no certainty that we will always be able to do so or what terms will be available at the time. Please see "Risks Related to Our Business – Trading Activities and Credit Risk".

Pan American's revenue from the doré produced by the Dolores mine was as follows:

2020	**Revenue[1,2]**	**Quantity Sold**
Silver and Gold in Doré	$250.2 million	4,063,450 ounces of silver
		96,179 ounces of gold
2019	**Revenue[1,2]**	**Quantity Sold**
Silver and Gold in Doré	$248.7 million	4,924,110 ounces of silver
		120,731 ounces of gold
2018		
Silver and Gold in Doré	$236.8 million	4,205,000 ounces of silver
		134,061 ounces of gold

Notes:
1 Consists of sales to arm's length customers.
2 Calculated as gross revenue plus export credit incentives (as applicable), less treatment and refining charges and export taxes.

Infrastructure, Permitting, and Compliance Activities

The mine workings, processing facilities, leach pads, waste disposal areas, effluent management and treatment facilities, roads, and power and water lines have all been constructed and are located within the boundaries of the mining leases and surface rights controlled by us. To the best of our knowledge, all permits and licenses required to conduct our activities on the property have been obtained and are currently in good standing.

Water for the operations is sourced from wells, pit and underground dewatering, and an onsite water storage dam, with a back-up system to supply water from the nearby Rio Tutuaca if required. Power is supplied from the Mexican national grid and backup generators are available when required.

The most significant environmental liabilities associated with the Dolores mine include surface disturbance and reclamation liabilities and issues related to the stability and containment system of heap leach Pad 1, which developed prior to Pan American's acquisition of the Dolores mine. A tear in the liner of Pad 1 developed in June 2010 following movement in the stability berm and significant leakage was collected by the leak collection system. Minefinders ceased stacking and irrigation on Pad 1 and relocated approximately 2 million tonnes of ore to another pad. The pad under the excavated material was examined and stabilized with an additional retaining wall structure, and the damaged liner was repaired. No sodium cyanide was detected in the downstream surface and ground water sampling points as a result of the failure, and continued soil and water sampling below Pad 1 has confirmed that no residual cyanide is present.

Since then, all of the partially spent ore from Pad 1 has been relocated to Pad 3 for leaching, the old liner and base materials were removed, and the area was reconstructed and re-lined. The northern half of Pad 1 is currently stacked and in operation while construction is being completed on the southern half of the Pad.

A closure cost estimate for Dolores prepared according to State of Nevada approved SRCE methodology is updated every year. We have estimated the present value of reclamation costs for the Dolores property at December 31, 2020 to be approximately $56.4 million. See “Narrative Description of the Business – Environment, Community and Sustainability” for further disclosure regarding forward-looking statements related to reclamation costs.

Capital and Operating Costs

In 2020, total capital additions at the Dolores mine were approximately $44.9 million, primarily for capitalized pre-stripping and leach pad expansions.

Capital investments in 2021 are anticipated to total between $26.0 million to $30.0 million. The major components of these investments include heap leach pad expansions, mine equipment refurbishments, and mine infrastructure and plant upgrades.

In 2020, direct operating costs at Dolores were $151.4 million.

Exploration, Development, and Production

In 2021, we anticipate producing between approximately 2.73 million and 2.97 million ounces of silver and between 160.8 thousand and 179.3 thousand ounces of gold from the Dolores mine. We plan to complete brownfield exploration in 2021 including 5,000 meters of drilling.

B. Peru

(i) Huaron Mine

Project Description, Location, and Access

Huaron is an underground silver mine located 320 kilometres northeast of Lima in the province of Pasco in Peru. The nearest town is Cerro de Pasco, and access from Lima is available by rail or paved highway.

Huaron is 100% owned and operated by PAS Huaron, a Peruvian entity which is approximately 99.94% held (99.8% including investment shares), directly or indirectly, by Pan American. The area of the PAS Huaron concessions spans approximately 29,344 hectares. The concessions owned by us give us exclusive right to explore, develop, exploit, and market all of the products from the Huaron mine. Mining concession titles have been granted by and are registered with the Institute of Geology, Mining, and Metallurgy of Peru, and we pay an annual fee to keep the licenses in good standing.

The known mineralized zones, mineral resources, mineral reserves, mine workings, processing plant, tailing storage facilities, effluent management and treatment systems, and waste rock storage facilities are located within our concessions.

To the best of our knowledge, the Huaron mine is not subject to any overrides, back-in rights, payments, or other agreements and encumbrances. Our Peruvian operations are subject to governmental taxes, fees and duties, including a mining royalty tax and a special mining tax (“SMT”). The royalty is applied on a company’s operating income and is based on a sliding scale with marginal rates ranging from 1% to 12% with a minimum royalty rate of 1% of sales regardless of its profitability.

While there are no known significant factors or risks that we currently expect to be reasonably likely to affect access or title, or the right or ability to perform work on the property, including permitting and environmental liabilities, please refer to “Risks Related to Our Business” starting on page 67 for a general discussion of the risks relating to our operations.

History

The first underground mine, mill, and supporting villages were originally built in 1912 by a subsidiary of the French Penarroya Company and was sold to Mauricio Hochschild & Cia. Ltda. (“Hochschild”) in 1987. In April 1998, a portion of the bed of the nearby Lake Naticocha collapsed and flooded the neighbouring Animon underground mine and then the Huaron mine through interconnected tunnels, causing its closure. The water level

in the lake, which provided the source of floodwater, is currently maintained well below the level where it flooded into the old workings and we do not expect further flooding.

There is no available exploration data collected by previous operators other than diamond drilling. Channel samples were taken by the French Penarroya Company and by Hochschild, but no details on the nature and results of the samples are available, and none of the channel samples collected by previous owners are used in the estimation of mineral resources and mineral reserves.

Prior to our acquisition of the Huaron mine, approximately 22 million tonnes of silver-rich base metal sulphide ore was produced at the property and processed on site.

We have been producing from the Huaron mine since 2001.

Geological Setting, Mineralization, and Deposit Types

The Huaron mine is located within the Western Cordillera of the Andes Mountains and the regional geology is dominated by Machay Group limestones and Pocobamba continental sedimentary rocks. These groups have been deformed by the Huaron anticline, the dominant structural feature of the area. The limestones and sedimentary rocks are strongly folded and intruded by quartz monzonites and quartz monzonite dikes with associated fracturing. Following the intrusion of the dikes, the sedimentary rocks were further compressed and fractured, and the fractures were subsequently mineralized by hydrothermal fluids.

The main lithology in the area of Huaron is a sequence of continental redbeds which unconformably overlie massive marine limestones. North-south trending sub-vertical porphyritic quartz monzonite dykes crosscut the mine stratigraphy. The Huaron mine is located within an anticline with an axis striking approximately north-south and plunging gently to the north. There are two main fault systems. One system comprises north-south striking thrust faults, parallel to the axis of the anticline, and the other comprises east-west striking tensional faults.

The Huaron mine is a hydrothermal polymetallic deposit of silver, lead, zinc, and copper mineralization hosted within structures likely related to the intrusion of monzonite dikes, principally located within the Huaron anticline. Mineralization is encountered in veins parallel to the main fault systems, in replacement bodies known as “mantos” associated with the calcareous sections of the conglomerates and other favourable stratigraphic horizons, and as dissemination in the monzonitic intrusions at vein intersections.

The mineralized veins vary from a few centimetres to up to 10 metres wide, and may extend along strike for up to 1,800 metres. Vein orientations vary but generally trend east-west or north-south.

Exploration

Exploration work prior to Pan American’s ownership is unknown, but since we acquired the Huaron mine, exploration has comprised underground diamond drilling and channel sampling, which is used to estimate mineral resources and mineral reserves.

Drilling

All drilling is by diamond drilling from underground using industry standard drill machines and downhole survey tools. Drilling is conducted by private drilling contractors under the supervision of the mine geology department. Near mine underground diamond drilling exploration campaigns are ongoing on an annual basis for mineral resource and mineral reserve estimates.

Sampling, Analysis, and Data Verification

Diamond drillhole and underground channel samples vary between 0.1 metres and 1.5 metres in length. The samples are maintained in secure facilities and are under the control of our employees or the independent laboratory at all times. We have no reason to believe that the validity and integrity of the samples has been compromised.

Both the channel and the underground diamond drillhole samples are sent to the on-site laboratory, which is not certified by any standards association but is managed and operated by the international commercial laboratory firm, SGS. Assays for silver, zinc, lead, and copper are performed using acid digestion and AA finish.

The mine geology department conducts a QAQC program that is independent from the laboratory. The program includes the insertion of certified standards, blanks and duplicate samples. The results of the QAQC samples demonstrate acceptable accuracy and precision and that no significant contamination is occurring at the mine or external laboratories.

Mineral Processing and Metallurgical Testing

As part of normal plant operation procedures, metallurgical analysis and testing is undertaken as required. The majority of these analyses are to assess mill performance and metallurgical recovery. Metal recovery forecasts used in our mine plans are based on the historical performance of the plant operations and the tonnes and grade of material that is planned to be mined.

Mineral Resource and Mineral Reserve Estimates

Management estimates that mineral reserves at the Huaron mine, effective June 30, 2020, are as follows:

Huaron Mineral Reserves [1, 2]					
Reserve Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**% Zinc**	**% Lead**	**% Copper**
Proven	6.9	164	3.03	1.44	0.77
Probable	3.6	169	3.07	1.60	0.31
TOTAL	10.5	166	3.05	1.50	0.61

Notes:

1 Estimated using a price of $18 per ounce of silver, $2,350 per tonne of zinc, $2,000 per tonne of lead and $6,000 per tonne of copper. Totals may not add due to rounding.

2 Mineral reserve estimates for the Huaron mine were prepared under the supervision of, or were reviewed by, Christopher Emerson, FAusIMM, and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

Management estimates that mineral resources at the Huaron mine, effective June 30, 2020, are as follows:

Huaron Mineral Resources [1, 2]					
Resource Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**% Zinc**	**% Lead**	**% Copper**
Measured	1.8	161	3.02	1.65	0.18
Indicated	2.4	155	2.85	1.64	0.61
Inferred	5.8	157	2.83	1.55	0.45

Notes:

1 These mineral resources are in addition to mineral reserves. Estimated using a price of $18 per ounce of silver, $2,350 per tonne of zinc, $2,000 per tonne of lead and $6,000 per tonne of copper. Mineral resources are reported within scheduled mine shapes and above a mineral resource cut-off grade.

2 Mineral resource estimates for the Huaron mine were prepared under the supervision of, or were reviewed by, Christopher Emerson, FAusIMM, and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

Three dimensional interpretations are made in each vein or mineralized structure around spatially continuous trends of drillhole and channel sample grades greater than the sub-marginal cut-off values for each vein. A similar interpretation is made of hangingwall and footwall dilution volumes expected to be mined with each structure. The wireframe interpretations are filled with blocks for the ordinary kriged estimate.

A long section is produced of each structure and divided into mineable panels. Average bulk density values are applied to each mining panel volume to estimate the tonnes of each panel. The volumes are depleted annually for mining in the previous year. Mineral resource confidence classifications are based on the proximity and density of sample information in each block, as well as the interpretation and the experience of the mine geologists. Planned dilution and loss is applied to the estimate and a value per tonne is calculated in each panel. Any panel

with a value above the mineral resource cut-off grade is converted to mineral resources. Mineral resources that can be economically mined are converted to mineral reserves.

Mineral reserve estimates are based on a number of assumptions that include metallurgical, taxation and economic parameters. Increasing costs or increasing taxation could have a negative impact on the estimation of mineral reserves. There are currently no known factors that may have a material negative impact on the estimate of mineral reserves or mineral resources.

Mining Operations

Mining is undertaken using primarily mechanized sub-level long hole stoping methods. Ore is brought to the surface using haul trucks, electric locomotives, or hoisted through a shaft.

Processing and Recovery Operations

The Huaron mine operates a 2,900 tpd nominal capacity mill using froth induced flotation technology to produce silver in copper, lead, and zinc concentrates. Metallurgical recoveries in 2020 averaged approximately 84% for silver, 24% for gold, 78% for zinc, 76% for lead, and 75% for copper.

In 2020, the mill processed approximately 0.6 million tonnes of ore producing approximately 2.1 million ounces of silver, 0.5 thousand ounces of gold, 11.2 thousand tonnes of zinc, 5.6 thousand tonnes of lead, and 3.6 thousand tonnes of copper.

The silver rich zinc, lead, and copper concentrates from the Huaron mine are sold under contracts with arm's length smelters and concentrate traders, which consider the presence of any deleterious elements. Huaron receives payment for an agreed percentage of the silver, gold, zinc, lead, or copper contained in the concentrates it sells after deduction of smelting and refining costs, based on average spot prices over defined 30-day periods that may differ from the month in which the concentrate was produced. Under these circumstances, we may, from time to time, fix the price for a portion of the payable base metal content during the month that the concentrates are produced. To date, we have been able to secure contracts for the sale of all Huaron concentrates produced, however, there can be no certainty that we will always be able to do so or what terms will be available at the time. Please see "Risks Related to Our Business – Trading Activities and Credit Risk".

The revenue per type of concentrate produced by the Huaron mine for the past three years were as follows:

2020	**Revenue[1, 2]**	**Quantity Sold (Tonnes)**
Zinc Concentrate[3]	$22.0 million	24,182
Lead Concentrate[3]	$15.2 million	12,456
Copper Concentrate[3]	$34.9 million	14,537
2019		
Zinc Concentrate[3]	$32.0 million	40,059
Lead Concentrate[3]	$32.5 million	17,755
Copper Concentrate[3]	$52.7 million	25,428
2018		
Zinc Concentrate[3]	$39.1 million	38,374
Lead Concentrate[3]	$29.6 million	15,466
Copper Concentrate[3]	$46.0 million	22,944

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Notes:

[1] Consists of sales to arm's length customers.

[2] Calculated as gross revenue plus export credit incentives (as applicable), less treatment and refining charges and export taxes.

[3] Zinc and lead concentrates contain payable silver. Copper concentrates contain payable silver and gold.

Infrastructure, Permitting, and Compliance Activities

The Huaron mine workings, processing plant, tailings and waste disposal areas, effluent management and treatment facilities, roads, and power and water lines have all been constructed and are located within the

boundaries of the mining leases and surface rights controlled by us. To the best of our knowledge, all permits and licenses required to conduct our activities on the property have been obtained and are currently in good standing.

We are authorized to source the water necessary for our operations from a nearby system of lakes. The primary source of power for the mine is the Peruvian national power grid.

The original closure plan for the Huaron mine was filed with the Peru Ministry of Energy and Mines ("Peru MEM") in 2004 and updated in 2006. The closure plan is updated every five years or whenever new infrastructure or modifications are permitted.

The most significant environmental issue currently associated with the mine is relatively high sediment and metal concentrations in the waters discharged from the mine and the mine's tailings storage facilities. All waters are captured and treated in a treatment plant to achieve compliance with discharge limits.

An agreement signed in 2000 allows Volcan Compañia Minera S.A.'s ("Volcan") Chungar mine, which neighbours the Huaron mine, to discharge water from its mine dewatering into the Huaron drainage tunnel. The agreement also requires Volcan to contribute to the costs of tunnel maintenance and water treatment and discharge if its flows exceed a set limit, however provisions of the agreement that would enable accurate water quality and flow measurement between the mines were not implemented and no payments have been made. In 2014, an independent consultant engaged jointly by both companies concluded that the flow from the Chungar mine to the Huaron mine represents 19% of the total flow in the drainage tunnel and recommended the installation of a permanent monitoring system for ongoing verification. Since then, Volcan has improved its mine dewatering system and flows to the Huaron drainage tunnel fell to below the set limit, however we continue to negotiate the details of the joint monitoring and any responsibility for historic and future costs with Volcan.

A closure cost estimate for the Huaron mine prepared according to State of Nevada approved SRCE methodology is updated every year for unit costs and discount rates, and every other year for physical disturbance. The current present value of closure expenditures at Huaron as at December 31, 2020, is estimated at $11.6 million. See "Narrative Description of the Business – Environment, Community and Sustainability" for further disclosure regarding forward-looking statements related to reclamation costs.

Capital and Operating Costs

Capital additions at Huaron during 2020 totalled $4.5 million, primarily on equipment leases, near mine exploration, and equipment replacements and refurbishments.

We have forecast sustaining capital investments of between $14.5 million and $15.5 million for 2021, primarily related to a tailings storage facility expansion, mine equipment replacements, mine deepening and infrastructure investments, and near-mine exploration.

In 2020, direct operating costs at the Huaron mine were $39.6 million.

Exploration, Development, and Production

In 2021, the Huaron mine is forecast to produce between approximately 3.61 and 3.86 million ounces of silver and 0.5 thousand ounces of gold. We plan to undertake 10,000 metres of exploration drilling in 2021.

(ii) Morococha Mine

Project Description, Location, and Access

The Morococha mine is an underground silver mine located 137 kilometres east of Lima in the province of Yauli. The nearest city is La Oroya, approximately 38 kilometres to the east. Morococha is accessible from Lima via paved highway and an all-weather gravel road.

The Morococha mine is owned and operated by Argentum, a Peruvian company in which Pan American, through our subsidiary Pan American Peru, has a 92.01% voting common share interest (the remaining interest is held by Alejandro Gubbins and Compañía Minera Casapalca S.A.). In addition, we have, directly or indirectly, the majority of the non-voting investment shares resulting in a total ownership interest of approximately 92.3% as at December 31, 2020 (excluding certain investment shares held by Argentum itself).

The Morococha mine is comprised of three economic administrative units ("UEAs") and various concessions held outside of these UEAs, for a total of 541 mining concessions with an area of approximately 10,522 hectares, as well as two processing concessions. The three UEAs contain 454 mining concessions and two processing concessions owned outright by Argentum and 11 concessions transferred to Argentum from Silver Lead Mining Company S. A. There are also 36 concessions under a lease agreement with Corporación Minera Sacracancha S.A.C., 31 concessions under option from Minera Chinalco Peru ("MCP"), and nine concessions held by agreement with different third parties. The majority of the mining concessions comprising the Morococha mine are contiguous.

The known mineralized zones, mineral reserves and mineral resources, mine workings, processing plants, effluent management and treatment systems, and the mine's tailings and waste storage facilities are contained within the boundaries of these concessions. These mining concessions give us the exclusive right to explore, develop, and exploit, as well as the right to market all of the products from the Morococha mine. Mining concession titles for these properties have been granted by and are registered with the Public Registry of Peru, and we pay an annual fee to keep the licenses in good standing and, to our knowledge, we have met all of the necessary obligations to retain the property. To the best of our knowledge, all permits and licenses required to conduct our activities on the property have been obtained and are currently in good standing.

Argentum did not hold registered legal title to most of the surface lands that overlie the mining concessions which comprise the Morococha mine when we acquired it in 2004, including lands on which Morococha's process plants, shafts and access roads were located. These rights were all formerly owned by Centromin. Centromin granted Argentum a right to use certain of Centromin's surface lands throughout the useful life of its mining operations, provided such use does not interfere with the development of a mine in respect of the Toromocho disseminated copper system, which overlies certain of Argentum's mining concessions and underground mining operations. Argentum had an obligation to pay Centromin $60,000 (adjusted annually for inflation) quarterly commencing May 28, 2003 as consideration for this right. Argentum's and its predecessors' use of these surface lands have been exercised for decades with Centromin's knowledge and Argentum's claim to its continued use of these surface rights was based on concepts of rights acquired through long term use often referred to as adverse possession.

Peru Copper Inc. ("Peru Copper"), a copper mining company carrying on business in Peru, acquired mining concessions and surface rights to the Toromocho property from Centromin. In June 2007, Aluminum Corporation of China ("Chinalco") purchased 100% of the outstanding shares in Peru Copper and formed MCP.

In 2005, Argentum, with the opposition of Centromin, engaged in a number of administrative and judicial proceedings to obtain legal title to surface lands and underground access that comprise part of the rights that were acquired by Peru Copper from Centromin. Following Peru Copper's acquisition of Centromin's rights, we began preliminary discussions with Peru Copper, and later with Chinalco and MCP, in respect of negotiating a resolution to the surface rights issues between the parties.

In May 2008, MCP acquired certain surface rights from Centromin (currently, Activos Mineros S.A.) covering the main Morococha area that had been reserved for the Toromocho project by the Government of Peru. In addition, MCP acquired rights including surface lands in the Morococha area where the Morococha mine administration and operations are taking place, as well as certain underground areas. Certain of the underground areas acquired by MCP would also provide Pan American with easier and less costly underground access to some areas of the Morococha concessions.

In June 2010, we reached an agreement with MCP that defined each party's long term surface rights and therefore provides certainty to the land situation for the Morococha property. The primary focus of the agreement is on the lands and concessions around the Morococha mine and MCP's Toromocho copper project. Under the terms of the agreement, Argentum is required to relocate the core Morococha facilities, including the administration offices, warehouse, maintenance facilities, mine compressors, and some camp facilities and construct a new concentrator over a five-year period and transfer certain mineral concessions and access rights to MCP that it needs in order to proceed with the development of Toromocho, including the surface lands within the planned open pit mining area of the Toromocho project. In exchange, Argentum is to receive a package of surface rights, easements, and other rights to relocate the facilities and to continue uninterrupted operations, and would also obtain rights to a number of mineral concessions outside the planned Toromocho pit area where high grade silver veins have been identified. Lastly, Argentum is to receive periodic cash payments from MCP totalling $40 million, which would offset a portion of the capital required for the facility relocation. Pursuant to the agreement,

the transfer of lands and rights and the cash payments will occur over a period of time and are dependent on meeting certain milestones. In addition to the foregoing, the parties agreed to dismiss the judicial and administrative claims between them. To date, Minera Argentum has received a total of $24.0 million (pre-tax) from MCP and has completed a number of phases of the relocation effort. We have completed the abandonment and demolition of all buildings in the Central Shaft area, the construction of the replacement facilities located north of the central highway, but have not yet relocated the plant. We continue to operate the plant, the location of which is projected to eventually interfere with the advance of the Toromocho open pit. Depending on economic justification, mineral reserve growth, and the advance of the Toromocho open pit, the plant will need to be replaced or relocated. Although no up-to-date engineering studies are available, the estimated cost of a new 800,000 tonne per annum processing plant could be significant. This cost might be partially offset by the remaining payments due from MCP in relation to the June 2010 agreement. Please see “Risks Related to Our Business – Title to Assets”.

To the best of our knowledge, and other than as described above, the Morococha mine is not subject to any overrides, back-in rights, payments, or other agreements or encumbrances. Our Peruvian operations are subject to governmental taxes, fees and duties, including the mining royalty tax and the SMT, as described under “Huaron – Project Description, Location and Access”.

While there are no known significant factors or risks that we currently expect to be reasonably likely to affect access or title, or the right or ability to perform work on the Morococha mine, including permitting and environmental liabilities, other than as described above, please refer to “Risks Related to Our Business” starting on page 67 for a general discussion of the risks relating to our operations.

History

Mining began in the region around Morococha before the 1500s, and production has been continuous in the district since the late 1800s. Most of the exploration undertaken by former owners of Morococha was limited to underground development along strike of known structures.

Between 1915 and 1918, much of the district was reorganized and incorporated into Cerro de Pasco Mining Company (“Cerro de Pasco”). By 1924, Cerro de Pasco was producing at a rate of 1,500 tpd from primarily copper ores. Between 1929 and 1934, Cerro de Pasco excavated the 11.5 kilometre long Kingsmill Tunnel, successfully dewatering all of the Morococha District mine workings above the elevation of the tunnel. The Kingsmill Tunnel is still in use.

In January 2004, we entered into an agreement to purchase 92.014% of the voting shares of Argentum, a Peruvian corporation that held the Anticona and Manuelita mining units and related infrastructure. The transaction was subject to regulatory approval and a number of conditions, including that 100% of the shares of Argentum would first be listed on the Lima Stock Exchange and then be subject to a successful public bid by us for at least the 92.014% of voting shares. In February 2004, we entered into a further agreement to purchase Empresa Minera Natividad S.A. (“Natividad”), a corporation that held additional mining concessions and operations complementary to the Anticona and Manuelita mining units. The acquisitions closed contemporaneously in August 2004, and in 2005, Argentum amalgamated with Natividad, and then subsequently delisted from the Lima Stock Exchange in 2006. We continue to acquire the non-voting labour shares in Argentum that were formerly listed on the Lima Stock Exchange and are now held either by current workers, former workers or by third parties who have bought labour shares in the free market.

Extensive mining has taken place at the property prior to Pan American’s acquisition in 2004, but there are no known reliable historical production figures. For the 15 years between 1989 and 2003, approximately 7.9 million tonnes of ore was mined at a grade of 227 ppm Ag, 0.5% Cu, 1.7% Pb, and 4.6% Zn. We have been producing from the Morococha mine since 2004.

Geological Setting, Mineralization, and Deposit Types

Morococha is located in the Western Cordillera of the Andes. The host rocks for the mineralization in the Morococha district comprise schists, volcanic rocks, and predominantly carbonate sediments cut by a series of intrusions. The structures that account for the majority of the vein mineralization in the Morococha district trend predominantly northeast to east-northeast.

The structural setting of the area is dominated by shallowly northwest plunging folds, the most important of which is a north-northwest trending anticlinal feature referred to as the Yauli Dome. Compression gave rise to early northwest trending shears, and the uplifting effect of the intrusion of quartz monzonite stocks produced an arching of the Yauli Dome and an associated phase of tension faulting generally trending perpendicular to the axis of the anticline. This latter set is the most heavily mineralized set of fractures and accounts for the majority of fault hosted mineralization in the Morococha District.

Vein mineralization forms along the dominant system of northeast trending tensional faults.

Replacement manto mineralization generally occurs in carbonate horizons intersected by mineralized veins or proximal to pre-mineral intrusives, and some occurs as structurally controlled irregular chimneys. Mantos can have a significant strike extent where the veins are closely spaced, and can range from less than one metre to up to 12 metres in width.

Mineralization at the Morococha mine includes epi-mesothermal silver-zinc-lead-copper veins, bedded silver-base metal replacements or mantos, intrusive/sediment contact skarns, and the quartz porphyry hosted Toromocho disseminated copper system. Shoots range up to 400 metres in length with some traced for over 800 metres down plunge. Economic vein widths range from 0.5 metres to more than 6.0 metres. Vein width averages in the district are on the order of 1.2 metres.

Exploration

None of the exploration work conducted by previous operators is available. Since Pan American acquired the Morococha mine, exploration has comprised underground diamond drilling and channel sampling which are used to estimate mineral resources and mineral reserves.

Drilling

All drilling is by diamond drilling from surface and underground using industry standard drill machines and downhole survey tools. Drilling is conducted by private drilling contractors under the supervision of the mine geology department. Near mine diamond drilling exploration campaigns are ongoing on an annual basis for mineral resource and reserve estimates.

Sampling, Analysis, and Data Verification

Diamond drill hole and underground channel sample intervals vary in length between 0.10 and 2.0 metres. The samples are maintained in secure facilities and are under the control of our employees or the independent laboratory at all times. We have no reason to believe that the samples' validity or integrity has been compromised.

Both the channel and underground diamond drillhole samples are prepared by the on-site laboratory, which is not certified by any standards association but is managed and operated by the international commercial laboratory firm, SGS. Assays for silver, zinc, lead, and copper are performed using acid digestion and AA finish.

The mine geology department conducts a QAQC program that is independent from the laboratory. The program includes the insertion of certified standards, blanks and duplicate samples. The results of the QAQC samples demonstrate acceptable accuracy and precision and that no significant contamination is occurring at the mine or external laboratories.

Mineral Processing and Metallurgical Testing

As part of normal plant operation procedures, metallurgical analysis and testing is undertaken as required. The majority of these analyses are to assess mill performance and metallurgical recovery. Metal recovery forecasts used in our mine plans are based on the historical performance of the plant operations and the tonnes and grade of material that is planned to be mined.

Mineral Resource and Mineral Reserve Estimates

Management estimates that mineral reserves for the Morococha mine, effective June 30, 2020, are as follows:

Morococha Mineral Reserves [1, 2, 3]					
Reserve Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**% Zinc**	**% Lead**	**% Copper**
Proven	3.3	158	3.98	1.52	0.32
Probable	2.4	187	3.47	1.31	0.36
TOTAL	5.7	170	3.76	1.43	0.34

Notes:

1 Estimated using a price of $18 per ounce of silver, $2,350 per tonne of zinc, $2,000 per tonne of lead and $6,000 per tonne of copper. Totals may not add due to rounding.

2 Mineral reserve estimates for the Morococha mine were prepared under the supervision of, or were reviewed by, Christopher Emerson, FAusIMM, and Martin G. Wafforn, P.Eng., as Qualified Persons, as that term is defined in NI 43-101.

3 Tonnes are shown for our 92.3% ownership of the Morococha property.

Management estimates that mineral resources at the Morococha mine, effective June 30, 2020, are as follows:

Morococha Mineral Resources [1, 2, 3]					
Resource Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**% Zinc**	**% Lead**	**% Copper**
Measured	0.8	135	2.89	0.91	0.70
Indicated	0.6	142	2.94	0.91	0.58
Inferred	4.4	157	3.38	1.05	0.35

Notes:

1 These mineral resources are in addition to mineral reserves. Estimated using a price of $18 per ounce of silver, $2,350 per tonne of zinc, $2,000 per tonne of lead and $6,000 per tonne of copper. Mineral resources are reported within scheduled mine shapes and above a mineral resource cut-off grade.

2 Mineral resource estimates for the Morococha mine were prepared under the supervision of, or were reviewed by, Christopher Emerson, FAusIMM, and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

3 Tonnes are shown for our 92.3% ownership of the Morococha property.

Three dimensional interpretations are made in each vein or mineralized structure around spatially continuous trends of drillhole and channel sample grades greater than the sub-marginal cut-off values for each vein. A similar interpretation is made of hangingwall and footwall dilution volumes expected to be mined with each structure. The wireframe interpretations are filled with blocks for the ordinary kriged estimate.

A long section is produced of each structure and divided into mineable panels. Average bulk density values are applied to each mining panel volume to estimate the tonnes of each panel. The volumes are depleted annually for mining in the previous year. Mineral resource confidence classifications are based on the proximity and density of sample information in each block, as well as the interpretation and the experience of the mine geologists. Planned dilution and loss is applied to the estimate and a value per tonne is calculated in each panel. Any panel with a value above the mineral resource cut-off is converted to mineral resources. Mineral resources that can be economically mined are converted to mineral reserves.

Mineral reserve estimates are based on a number of assumptions that include metallurgical, taxation, and economic parameters. Increasing costs or increasing taxation could have a negative impact on the estimation of mineral reserves. There are currently no known factors that may have a material negative impact on the estimate of mineral reserves or mineral resources.

Mining Operations

Underground mining methods at the Morococha mine consist primarily of long hole open stoping and mechanized cut and fill. Ore is either hoisted to the surface in a shaft or trucked to the surface via a haulage ramp.

Processing and Recovery Operations

The Morococha mine operates a 2,000 tpd processing plant using froth induced selective flotation technology to produce silver in zinc, lead, and copper concentrates. In 2020, metallurgical recoveries averaged approximately 90% for silver, 20% for gold, 88% for zinc, 82% for lead, and 63% for copper.

In 2020, the mill processed approximately 0.3 million tonnes of ore, producing approximately 1.2 million ounces of silver, 0.6 thousand ounces of gold, 9.9 thousand tonnes of zinc, 3.5 thousand tonnes of lead, and 0.9 thousand tonnes of copper (based on our ownership interest of 92.3%).

The silver-rich zinc, lead, and copper concentrates from the Morococha mine are sold under contracts with arm's length smelters and concentrate traders, which consider the presence of any deleterious elements. Morococha receives payment for an agreed percentage of the silver, gold, zinc, lead, and copper contained in the concentrates it sells, after the deduction of smelting and refining costs. We have not had any difficulty securing contracts for the sale of Morococha concentrates; however, there can be no certainty that we will always be able to do so or what terms will be available at the time. Please see "Risks Related to Our Business - Trading Activities and Credit Risk".

The revenue per type of concentrate produced by Morococha mine for the past three years were as follows:

2020	**Revenue[1, 2]**	**Quantity Sold (Tonnes)**
Zinc Concentrate[3]	$15.8 million	21,870
Lead Concentrate[3]	$16.1 million	6,684
Copper Concentrate[3]	$15.1 million	4,730
2019	**Revenue[1, 2]**	**Quantity Sold (Tonnes)**
Zinc Concentrate[3]	$45.9 million	47,732
Lead Concentrate[3]	$29.4 million	13,111
Copper Concentrate[3]	$26.2 million	10,171
2018		
Zinc Concentrate[3]	$55.8 million	46,280
Lead Concentrate[3]	$21.1 million	9,199
Copper Concentrate[3]	$40.6 million	17,018

Notes:
[1] Consists of sales to arm's length customers.
[2] Calculated as gross revenue plus export credit incentives (as applicable), less treatment and refining charges and export taxes.
[3] Zinc concentrates contain payable silver. Lead and copper concentrates contain payable silver and gold.

Infrastructure, Permitting, and Compliance Activities

The Morococha mine workings, processing plant, tailings and waste disposal areas, effluent management and treatment facilities, roads, and power and water lines have all been constructed and are located within the boundaries of the mining leases and surface rights controlled by us. To the best of our knowledge, all permits and licenses required to conduct our activities on the property have been obtained and are currently in good standing.

The original closure plan for the Morococha mine was filed by us with the Peru MEM in 2004 and updated in 2006. The closure plan is updated every five years or whenever new infrastructure or modifications are permitted.

The mine is authorized to source the water necessary for operations from a nearby lake. The primary source of power for the Morococha mine is the Peruvian national power grid.

The most significant environmental liability identified at the Morococha mine is the mine's potential share of the cost to operate the Kingsmill Tunnel water treatment plant. The water treatment plant was built and is currently being operated by MCP to treat the water draining from the Kingsmill Tunnel into the Rio Yauli. Morococha's share of the cost was defined by a hydrogeological study completed in 1997 which apportioned

responsibility for the costs of constructing and operating the treatment plant as follows: (i) Centromin (72.2%); (ii) our Morococha operations (12.3%); (iii) Soc. Minera Puquiococha (8.5%); (iv) Soc. Minera Austria Duvaz (4.9%); and (v) Minera Centrominas (2.1%). Subsequent to the apportionment of costs, it appears that in connection with the acquisition by MCP of the mining concessions near the Morococha mine, MCP assumed the cost of the construction of the Kingsmill water treatment plant.

The treatment and operating costs for facility are directly proportional to both constituent load and flow determined in the 1997 study. The distribution of responsibility stated in the 1997 study was accepted by all involved parties. Our potential share of the responsibility for treatment of the baseline flows, 12.3%, was included in the terms of purchase of the applicable mining concessions. The purchase contract entered into during 2003 between Natividad and Argentum establishes that the purchaser is responsible for incremental flows in those concessions. As a result studies were carried out in 2004 to further characterize the baseline flow conditions in order to establish benchmarks for the determination of responsibility for potential future increases. The results of this 2004 study estimated that 38.46% of the baseline flows were derived from Natividad and Corona concessions now under our control. We challenged this estimate because it conflicted with previous conclusions and with the terms of our purchase, but were unsuccessful in having the study revised.

A closure cost estimate for the Morococha mine prepared according to State of Nevada approved SRCE methodology is updated every year for unit costs and discount rates, and every other year for physical disturbance. The current present value of closure expenditures at Morococha effective December 31, 2020, is approximately $7.8 million. See “Narrative Description of the Business – Environment, Community and Sustainability” for further disclosure regarding forward looking statements related to reclamation costs.

Capital and Operating Costs

Capital additions at Morococha during 2020 totalled $8.3 million, including $7.3 million of sustaining capital, primarily on near-mine exploration, equipment replacements and refurbishments, and equipment and office leases, as well as $1.0 million invested in project capital on advancing engineering and permitting for a future plant relocation.

In 2021, we anticipate investing between approximately $6.0 million and $7.0 million in sustaining capital. The sustaining capital expenditure forecast includes near-mine exploration and underground mine equipment additions and replacements.

In 2020, direct operating costs at the Morococha mine were $35.8 million.

Exploration, Development, and Production

In 2021, based on an ownership interest of approximately 92.3% of Argentum, our proportionate interest in Morococha’s production is forecast to be between 2.25 million and 2.42 million ounces of silver and between 0.8 thousand and 0.9 thousand ounces of gold. We plan to undertake approximately 15,000 metres of exploration drilling at the Morococha mine in 2021.

(iii) Shahuindo Mine

Project Description, Location, and Access

The Shahuindo mine is an open pit gold mine located in northern Peru, 500 kilometres north-northwest of Lima. The project site can be accessed from Cajamarca via approximately 130 kilometres of paved highway, with unimproved roads accessing the site from the highway. There are daily commercial flights between Lima and Cajamarca.

The Shahuindo mine is 100% owned and operated by Pan American’s wholly owned subsidiary, Shahuindo S.A.C. The area of the concession is approximately 7,339 hectares in 26 mineral titles. Shahuindo S.A.C. also controls the neighboring Vikingo and Vikingo I concession covering 1,858 hectares. We pay an annual fee to the Peruvian government to keep the concessions in good standing. To the best of our knowledge, all permits and licenses required to conduct our activities on the property have been obtained and are currently in good standing.

381 surface rights within the Shahuindo mine area cover approximately 2,559 hectares, which is sufficient to operate the mine.

To the best of our knowledge, the Shahuindo mine is not subject to any third-party overrides, back-in rights, payments, or other agreements and encumbrances. Our Peruvian operations are subject to governmental taxes, fees and duties, including the mining royalty tax and the SMT, as described under “Huaron – Project Description, Location and Access”.

While there are no known significant factors or risks that we currently expect to be reasonably likely to affect access or title, or the right or ability to perform work on the property, including permitting and environmental liabilities, other than as described above, please refer to “Risks Related to Our Business” starting on page 67 for a general discussion of the risks relating to our operations.

History

Legal rights to the mineral leases of the Shahuindo mine were in dispute between 1996 and 2009. Several Peruvian, Mexican and Canadian companies have been involved in numerous legal processes that were eventually settled in 2009 with 100% ownership being legally registered to Sulliden Shahuindo S.A.C., a wholly owned subsidiary of Sulliden Gold Ltd. (“Sulliden”). Rio Alto Gold (“Rio Alto”) acquired Sulliden in 2014, and in April 2015, Tahoe completed its acquisition of Rio Alto, thereby acquiring control of Sulliden Shahuindo S.A.C. (renamed Shahuindo S.A.C.). Pan American acquired Tahoe in February 2019.

Exploration and mining activities have taken place on the Shahuindo property since 1945. Between 1945 and 1989, Minera Algamarca S.A. (“Algamarca”) conducted mining and exploration work on the property. Between 1990 and 1998, former operators conducted geological mapping, drilling of approximately 200 holes, soil and rock geochemical sampling, and metallurgical testwork. Sulliden conducted a large surface drilling campaign of approximately 640 holes, geophysical surveys, geological mapping and trenching, soil and surface rock sampling, metallurgical testing, and economic analyses between 2002 and 2012. Rio Alto conducted a campaign of 246 holes between 2014 and 2015 and drilling was continued on the property by Tahoe. Mine construction commenced in 2014 and commercial production was achieved in 2016.

We have been producing from the Shahuindo mine since acquiring it in the Tahoe transaction in late February 2019.

Geological Setting, Mineralization, and Deposit Types

The Shahuindo mine is located in the Western Cordillera of the Andes, within a regional fold and thrust belt of predominantly sedimentary rocks. The principal zone of mineralization in the district occurs in a belt between two large amplitude, regional scale folds. Important structural elements include fold limbs and fold axial surfaces, fold-related fractures, faults and related extension fractures, breccia dikes and irregular bodies, and igneous intrusive contacts. Mineralization is hosted within the siliciclastic sandstone-dominant Farrat formation and the underlying sedimentary Carhuaz formation. These sedimentary rocks have been intruded by at least three felsic stocks which tend to be located along faults and axes of anticlinal structures.

Mineralization comprises an intermediate-sulfidation epithermal system, with high-sulfidation mineralization at depth and in the centre of hydrothermal breccias. Oxidation of mineralization extends to a depth of 150 metres below surface.

Exploration

Algamarca conducted exploration work on the Shahuindo property prior to 1990, but no records of that work are available. From 1990 to 1998, Alta Tecnología e Inversión Minera y Metalúrgica SA, Asarco LLC, and Southern Peru Copper Corp. explored the Shahuindo project area, completing mapping, geochemical sampling, and reverse circulation and diamond drilling. Val Dór Geofisica Peru conducted magnetic and induced polarization geophysical surveys between 2002 and 2012 on behalf of the prior owners of Shahuindo.

Most of the accessible underground adits located on the concession were sampled prior to 2012. Detailed soil sampling completed by Sulliden between 2003 and 2012 revealed a series of continuous, parallel gold anomalies in the central and northern areas of the concession. Base metal anomalies were found to the northwest and to the southeast of the concession.

Current exploration at the Shahuindo mine consists of surface geological mapping, geochemical sampling, and drilling.

Drilling

Drilling is by reverse circulation and diamond drilling from surface using industry standard drill machines and downhole survey tools. Drilling is conducted by private drilling contractors under the supervision of the mine geology department. Near mine drilling exploration campaigns are ongoing on an annual basis for mineral resource and mineral reserve estimates.

Sampling, Analysis, and Data Verification

Limited information is available regarding sample preparation and analyses for the drill programs prior to Sulliden's drilling programs in 2003. That data accounts for a small proportion of the data used in the mineral resource and mineral reserve estimates, and many of the holes drilled prior to Sulliden have been twinned or offset with new drillholes.

From 2003 to 2012, Sulliden sampled diamond drillholes after being cut in half, at typically 1.5 metre intervals or according to geological contacts. Reverse circulation drillholes were sampled according to the length of the drill rod. Sulliden sent their samples to ALS in Lima for preparation and analysis using fire assay with AA finish. A QAQC program supervised by the geology department included the submission of certified standards, duplicates, and blanks to the laboratory.

From 2014 to present, the samples have been analyzed by CERTIMIN in Lima using fire assay with AA finish.

The mine geology department conducts a QAQC program that is independent from the laboratory. The program includes the insertion of certified standards, blanks and duplicate samples. The results of the QAQC samples demonstrate acceptable accuracy and precision and that no significant contamination is occurring at the mine or external laboratories.

The samples are maintained in secure facilities and are under the control of our employees or the independent laboratory at all times. We have no reason to believe that the validity and integrity of the samples has been compromised.

Mineral Processing and Metallurgical Testing

As part of normal plant operations and processing procedures, metallurgical analysis and testing is undertaken as required. The majority of these analyses are to assess leaching performance and metallurgical recovery. Metal recovery forecasts used in our mine plans are based on the recovery model, historical performance of the leaching operations and the tonnes, grade and type of material that is planned to be mined.

Mineral Resource and Mineral Reserve Estimates

Management estimates that mineral reserves at the Shahuindo mine, effective June 30, 2020, are as follows:

Shahuindo Mineral Reserves [1, 2]

Reserve Category	Tonnes (Mt)	Grams of Silver per tonne	Grams of Gold per tonne
Proven	74.8	7	0.50
Probable	49.6	7	0.47
TOTAL	124.4	7	0.49

Notes:

1 Estimated using a price of $18 per ounce of silver and $1,350 per ounce of gold. Totals may not add due to rounding.

2 Mineral reserve estimates for the Shahuindo mine were prepared under the supervision of, or were reviewed by, Christopher Emerson, FAusIMM, and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

Management estimates that mineral resources at the Shahuindo mine, effective June 30, 2020, are as follows:

Shahuindo Mineral Resources [1, 2]			
Resource Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**Grams of Gold per tonne [3]**
Measured	11.0	5	0.25
Indicated	17.4	4	0.25
Inferred	12.0	7	0.52
Inferred Sulphide	97.4	14	0.74

Notes:

1 These mineral resources are in addition to mineral reserves. Estimated using a price of $18.50 per ounce of silver and $1,700 per ounce of gold except for the Shahuindo Sulphide material which was estimated using a price of $15 per ounce of silver and $1,400 per ounce of gold. Mineral resources are reported within a final pit outline and above a mineral resource cut-off grade.

2 Mineral resource estimates for the Shahuindo mine were prepared under the supervision of, or were reviewed by, Christopher Emerson, FAusIMM, and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

Mineral resource estimates for the Shahuindo mine were prepared using inverse power of difference interpolation methods within three dimensional geological interpretations. The block model was classified into measured, indicated, and inferred confidence categories depending on the location of the block relative to the number of drillhole intersections available to estimate each block, as well as other factors affecting confidence in the estimate.

The mineral resource estimate was then depleted for previous mining and planned dilution and ore loss was applied. Reserve and resource pits were prepared on blocks above the economic cut-off. Mineral resources that can be economically mined are converted to mineral reserves.

Mineral reserve estimates are based on a number of assumptions that include metallurgical, taxation, and economic parameters. Increasing costs or increasing taxation could have a negative impact on the estimation of mineral reserves. There are currently no known factors that may have a material negative impact on the estimate of mineral reserves or mineral resources at Shahuindo.

Mining Operations

Mining at the Shahuindo mine is by standard open pit methods using shovels, loaders, and dump trucks.

Processing and Recovery Operations

The Shahuindo mine uses conventional cyanide heap leaching and a carbon-in-column adsorption-desorption-regeneration (“ADR”) process to produce a precipitate that is smelted to gold and silver doré. Average throughput is 36,000 tpd. A 36,000 tpd crushing and agglomeration plant is also available but is currently not in use.

In 2020, a total of 10.6 million tonnes of ore were stacked on the pads. Metal production in 2020 was approximately 142.4 thousand ounces of gold and 0.3 million ounces of silver.

All production from the Shahuindo mine is in the form of doré bars, which is refined at arm’s length refineries prior to the sale of refined silver and gold to bullion banks and traders. Pan American currently has refining contracts in place with refineries in the United States and Switzerland. We have not had any difficulty in securing contracts for the sale of Shahuindo doré, however, there can be no certainty that we will always be able to do so or what terms will be available at the time. Please see “Risks Related to Our Business – Trading Activities and Credit Risk”.

The revenues per type of doré produced at the Shahuindo mine since our acquisition in February 2019 are as follows:

2020	Revenue[2, 3]	Quantity Sold
Silver and Gold in Doré	$270.0 million	295,764 ounces of silver 150,775 ounces of gold
2019[1]		
Silver and Gold in Doré	$189.4 million	83,323 ounces of silver 133,298 ounces of gold

Notes:

1 Consists of production after February 22, 2019.

2 Consists of sales to arm's length customers.

3 Calculated as gross revenue plus export credit incentives (as applicable), less treatment and refining charges and export taxes.

Infrastructure, Permitting, and Compliance Activities

The Shahuindo mine's open pit, leach pads, waste rock dumps, ADR plant, ancillary facilities, roads, and power and water lines have all been constructed and are located within the boundaries of the mining concessions and surface lands owned by us. To the best of our knowledge, all permits and licenses required to conduct our activities on the property have been obtained and are currently in good standing.

The Shahuindo mine operates under an environmental impact assessment ("EIA") approved in 2013 and has been modified to accommodate mine expansion.

The primary source of power for the mine is the Peruvian national power grid. Water for the operation is obtained from water wells, stormwater collection ponds, and pit dewatering.

A closure cost estimate for the Shahuindo mine prepared according to State of Nevada approved SRCE methodology is updated every year. We have estimated the present value of reclamation costs for the Shahuindo property to be approximately $41.8 million at December 31, 2020. See "Narrative Description of the Business – Environment, Community and Sustainability" for further disclosure regarding forward-looking statements related to reclamation costs.

Capital and Operating Costs

In 2020, capital additions at the Shahuindo mine totalled $23.3 million, including $22.7 million of sustaining capital, consisting primarily of leach pad expansions, site infrastructure improvements, near-mine exploration, and payments for leased mining equipment.

The expected sustaining capital budget for 2021 at Shahuindo totals between $66.5 million and $68.0 million, the major components of which include heap leach pad expansions, waste rock storage facility expansions, land purchases and near-mine exploration.

In 2020, direct operating costs at the Shahuindo mine were $94.8 million.

Exploration, Development, and Production

In 2021, we anticipate producing between 0.29 and 0.43 million ounces of silver and between 153.9 thousand and 165.0 thousand ounces of gold from the Shahuindo mine. We plan to undertake approximately 10,900 metres of exploration drilling at Shahuindo in 2021.

C. Canada

(i) Timmins West Mine

Project Description, Location, and Access

The Timmins West mine is an underground gold mine located approximately 19 kilometres west of the city of Timmins, Ontario. All season road access to the property is provided by provincial Highways 101 and 144.

The Timmins West mine property encompasses a total area of approximately 1,712 hectares, including the Timmins Deposit, Thunder Creek, and Highway-144 properties. Through our wholly-owned subsidiary, Lake Shore, we own a 100% interest in most of the Timmins West mine property, subject to underlying royalties. The exception to this is a 55% interest in eleven unpatented mining claims. We pay an annual fee on the claims to maintain them in good standing. To the best of our knowledge, all permits and licenses required to conduct our activities on the property have been obtained and are currently in good standing.

Surrounding the Timmins West mine property are an additional 276 claims, six leases and 33 patents owned by Lake Shore. In all, there are 89 claims and leases with NSR royalty obligations ranging from 1.5 percent to three percent, many with a buy-back option at Lake Shore's discretion.

In February of 2012 Lake Shore and Franco-Nevada entered into a royalty agreement relating to production from the Timmins West mine. Pursuant to the terms of the royalty agreement, Franco-Nevada paid $35 million for a 2.25% NSR royalty on the sale of minerals from the Timmins West mine. The terms of the royalty agreement provide for, among other things, a right of first refusal in respect of any further royalties granted on the Timmins West mine, as well as a preferential processing right with respect to ore from the Timmins West mine being processed at the Bell Creek mill. The preferential processing right ceases to apply once $35 million in royalty payments are made under the royalty agreement. As at the end of 2020, approximately $27.6 million was paid to Franco-Nevada pursuant to the terms of the royalty. As of the date of this AIF, the preferential processing right has not required any payment to be made with respect to any replacement material. In addition, Sandstorm Gold Ltd. holds a 1% NSR royalty over certain additional claims relating to the Thunder Creek and 144 Gap deposits.

The Timmins West mine is also subject to government taxes, fees and duties including a 10% Ontario Mining Tax, which is applied to profits from the extraction of mineral substances from mines within the province.

While there are no known significant factors or risks that we currently expect to be reasonably likely to affect access or title, or the right or ability to perform work on the property, including permitting and environmental liabilities, other than as described above, please refer to "Risks Related to Our Business" starting on page 67 for a general discussion of the risks relating to our operations.

History

Gold was discovered in 1911 on the property above what is currently the Timmins West mine, and two shallow shafts were sunk between 1911 and 1914. Shortly after, fire storms swept through large parts of the area and the surface plants at the local mines were destroyed. Orpit Mines Limited completed diamond drilling between 1938 and 1944, and Rusk Porcupine Mines excavated several pits and trenches.

Lake Shore began shaft sinking and mine development in 2008 and commercial production began in January of 2011 at the Timmins Deposit and in January of 2012 at the Thunder Creek Deposit. Subsequently, the Timmins and Thunder Creek Deposits were combined into a single operation called the Timmins West mine. The 144 deposit was discovered later and currently accounts for the majority of the mine production and mineral reserve. Tahoe acquired the mine in 2016 with its acquisition of Lake Shore.

We have been producing from Timmins West since late February 2019, following our acquisition of Tahoe.

Geological Setting, Mineralization, and Deposit Types

Following the discovery of gold at Timmins West area, exploration conducted by a variety of previous operators included mapping, shaft sinking, pitting, trenching, diamond drilling, geophysics, metallurgical testwork, and resource estimates. Following Lake Shore's acquisition of the property in 2003, exploration on the Timmins,

Thunder Creek, and 144 Gap deposits has consisted primarily of diamond drilling, as well as mapping, surface sampling, and soil geochemical surveys.

Drilling

Exploration drilling in the Timmins West mine area has taken place since 1938, but much of the historical drilling information is not possible to verify. None of the drill data collected prior to 1984 has been considered in the mineral resource and mineral reserve estimates.

Since 2003, all drilling has been by diamond drilling from surface and underground using industry standard drill machines and downhole survey tools. Drilling is conducted by private drilling contractors under the supervision of the mine geology department. Near mine diamond drilling exploration campaigns are ongoing on an annual basis for mineral resource and mineral reserve estimates.

Sampling, Analysis, and Data Verification

Surface drill core is sampled following splitting with a diamond saw, while whole core samples are selected from underground drillholes. The samples are maintained in secure facilities and are under the control of our employees or the independent laboratory at all times. We have no reason to believe that the validity and integrity of the samples has been compromised.

All samples are analyzed for gold at various independent commercial laboratories using fire assay with AA finish, except for samples sent to SGS Labs, which analyzes by ICP-MS finish.

A QAQC program supervised by the geology department includes the submission of certified standards, duplicates, and blanks to the laboratory. The results of the QAQC programs indicate that the sample assays are reliable for the estimation of mineral resources and mineral reserves.

Mineral Processing and Metallurgical Testing

All ore produced from the Timmins West mine is processed at our Bell Creek mill. As part of normal plant operation procedures, metallurgical analysis and testing is undertaken as required. The majority of these analyses are to assess mill performance and metallurgical recovery. Metal recovery forecasts used in our mine plans are based on the historical performance of the plant operations and the tonnes and grade of material that is planned to be mined.

Mineral Resource and Mineral Reserve Estimates

Management estimates that mineral reserves at Timmins West, effective June 30, 2020, are as follows:

Timmins West Mineral Reserves [1, 2]

Reserve Category	Tonnes (Mt)	Grams of Gold per tonne
Proven	0.7	2.7
Probable	4.4	3.0
TOTAL	5.1	2.9

Notes:
[1] Estimated using prices of $1,350 per ounce of gold. Totals may not add due to rounding.
[2] Mineral reserve estimates for the Timmins West mine were prepared under the supervision of, or were reviewed by Christopher Emerson, FAusIMM, and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

Management estimates that mineral resources at Timmins West, effective June 30, 2020, are as follows:

Timmins West Mineral Resources [1, 2]		
Resource Category	**Tonnes (Mt)**	**Grams of Gold per tonne**
Measured	0.2	3.3
Indicated	1.5	3.5
Inferred	0.3	4.2

Notes:

1 These mineral resources are in addition to mineral reserves. Estimated using prices of $1,350 per ounce of gold. Mineral resources are modelled to a minimum mining width and reported above a cut-off grade.

2 Mineral resource estimates for the Timmins West mine were prepared under the supervision of, or were reviewed by Christopher Emerson, FAusIMM, and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

Mineral resource estimates were prepared using inverse power of distance methods within three dimensional geological interpretations based on a nominal cutoff grade and a minimum mining width. The block model was classified into measured, indicated, and inferred confidence categories depending on the location of the block relative to the number of drillhole intersections available to estimate each block, as well as other factors affecting confidence in the estimate.

The mineral resource estimate was then depleted for previous mining and any inaccessible areas removed before reporting above an economic cut-off grade. Mineral resources that can be economically mined are converted to mineral reserves.

Mineral reserve estimates are based on a number of assumptions that include metallurgical, taxation, and economic parameters. Increasing costs or increasing taxation could have a negative impact on the estimation of mineral reserves. There are currently no known factors that may have a material negative impact on the estimate of mineral reserves or mineral resources at the Timmins West mine.

Mining Operations

The underground mining method utilized at the Thunder Creek, Timmins, and 144 Gap deposits at the Timmins West mine is by long hole stoping. Ore is transported to the surface by ramp and shaft.

Processing and Recovery Operations

All ore produced from the Timmins West mine is hauled via surface highway trucks to the Bell Creek mill for processing. Processing, metal production, and revenue are reported for the combined Timmins West and Bell Creek ore. Please see “Bell Creek – Processing and Recovery Operations”.

All production from the Timmins West mine is in the form of doré, which is refined at arm’s length refineries prior to the sale of refined silver and gold to bullion banks and traders. We have not had any difficulty in securing contracts for the sale of this doré, however, there can be no certainty that we will always be able to do so or what terms will be available at the time. Please see “Risks Related to our Business – Trading Activities and Credit Risk”.

Infrastructure, Permitting, and Compliance Activities

The mine workings, effluent management and treatment facilities, roads, and power and water lines have all been constructed and are located within the boundaries of the mining leases and surface rights controlled by us. To the best of our knowledge, all permits and licenses required to conduct our activities on the property have been obtained and are currently in good standing.

Power is sourced from the provincial mine grid and water is sourced from underground mine dewatering.

Lake Shore and two First Nations, namely Mattagami and Flying Post First Nations, entered into an Impact and Benefits Agreement (“IBA”) in February, 2011, which outlines how Lake Shore and the First Nations communities will work together in the following areas: education and training of First Nation community members,

employment, business and contracting opportunities, financial benefits and environmental provisions. The IBA was subsequently amended in early 2019.

A closure cost estimate for Timmins West was prepared based on a government-approved closure plan, engineering estimates, local rates, and contractor quotes. The estimate is updated every year. Pan American has estimated the present value of reclamation costs for the Timmins West mine to be approximately $2.8 million effective December 31, 2020. See “Narrative Description of the Business – Environment, Community and Sustainability” for further disclosure regarding forward-looking statements related to reclamation costs.

Capital and Operating Costs

Capital and operating costs are reported for the combined Timmins West and Bell Creek mines. Please see “Bell Creek – Capital and Operating Costs”.

Exploration, Development, and Production

Exploration, development and production are reported for the combined Timmins West and Bell Creek mines. Please see “Bell Creek – Exploration, Development, and Production”.

(ii) Bell Creek Mine

Project Description, Location, and Access

The Bell Creek mine is an underground gold mine located approximately 20 kilometres northeast of Timmins, Ontario. Access to the property is via an all-weather asphalt and gravel road north of Ontario Provincial Highway 101.

The Bell Creek mine is 100% owned by us through our wholly-owned subsidiary Lake Shore. The Bell Creek property is comprised of 12 leases and five veteran lots covering approximately 512 hectares. All claims are either patented, leased mineral claims requiring yearly lease rents and land tax payments, or patented veteran lots which remain valid in perpetuity as long as the annual land and municipal taxes remain paid in full. To the best of our knowledge, all permits and licenses required to conduct our activities on the property have been obtained and are currently in good standing.

Lake Shore signed a 20-year lease for one of the veteran lots in 2005 and we are required to make annual advanced royalty payments of CAD$50,000 (indexed to inflation) and to pay a 2% NSR royalty once commercial production was achieved at the property.

In December 2007, Lake Shore acquired the Bell Creek mine from Goldcorp Inc. (“Goldcorp”), subject to a 2% NSR royalty payable to the Porcupine Joint Venture comprised of Goldcorp and Kinross Gold Corporation (“Kinross”). Kinross subsequently assigned its rights under the agreement to Goldcorp, and in July 2016, Tahoe acquired the royalty from Goldcorp. Various underlying royalty agreements affect some of the Bell Creek claims including two agreements with net profit interests that can be purchased outright.

Like the Timmins West mine, the Bell Creek mine is also subject to governmental taxes, fees and duties, including the 10% Ontario Mining Tax.

While there are no known significant factors or risks that we currently expect to be reasonably likely to affect access or title, or the right or ability to perform work on the property, including permitting and environmental liabilities, other than as described above, please refer to “Risks Related to Our Business” starting on page 67 for a general discussion of the risks relating to our operations.

History

Gold mineralization was first discovered on the Bell Creek property following trenching, drilling, and geophysical surveys, and the mine was built and operated between 1980 and 1982. Falconbridge Gold Mines Ltd. operated the mine between 1991 and 1992, followed by Kinross in 1993 and 1994 when mining operations ceased. The mine was kept on care and maintenance until 2001, when a decision was made to allow the underground workings to flood.

In 2002, the Porcupine Joint Venture, a joint venture between Placer Dome Canada Ltd. (“Placer”) and Kinross, was formed and in 2005 the property was reactivated. Goldcorp acquired Placer’s interest later that year and became the operator of the Porcupine Joint Venture. Lake Shore acquired the Bell Creek mine in December 2007.

Lake Shore declared commercial production in January 2012. In April 2016, Tahoe acquired the Bell Creek mine as part of its acquisition of Lake Shore, and Tahoe was subsequently acquired by Pan American in February 2019. We have been producing from the Bell Creek mine since our acquisition of Tahoe.

Geological Setting, Mineralization, and Deposit Types

The Bell Creek deposit is located in the Southern Abitibi Greenstone Belt, a complex of deformed, usually greenschist facies, volcanic dominated oceanic assemblages. Rocks in the Timmins region belong to volcanic and sedimentary assemblages within the Western Abitibi Subprovince of the Superior Province.

The Bell Creek property is underlain by carbonate altered, greenschist facies metavolcanics and clastic metasedimentary rock units belonging to the Tisdale and Porcupine assemblages. The stratigraphy generally strikes east-west to west-northwest, and is steeply dipping and highly deformed.

In the Porcupine Camp, gold-bearing structures most commonly form in relatively competent volcanics intruded by felsic porphyry stocks and dykes. Porphyries intruded the folded and faulted greenstone sequences and initiated the mesothermal systems.

Mesothermal shear hosted gold mineralization in the Bell Creek mine area occurs along selvages of quartz veins and wall rocks, in stylolitic fractures in quartz veins, in fine grained pyrite, and in association with amorphous carbon. High grade gold mineralization occurs within quartz veins contained in alteration zones.

Exploration

The nature of any surface exploration programs completed by owners of the Bell Creek mine property prior to Lake Shore is unknown, with the exception of magnetometer surveys. All exploration conducted by Lake Shore and Tahoe on the property comprised surface and underground drilling. Lake shore Gold completed other exploration in the BC area using other methods, including airborne geophysical surveys in 2019.

Drilling

All drilling is by diamond drilling from surface and underground using industry standard drill machines and downhole survey tools. Drilling is conducted by private drilling contractors under the supervision of the mine geology department. Near mine diamond drilling exploration campaigns are ongoing on an annual basis for mineral resource and mineral reserve estimates.

Sampling, Analysis, and Data Verification

Surface drill core is sampled following splitting with a diamond saw, while whole core samples are selected from underground drillholes. The samples are maintained in secure facilities and are under the control of our employees or the independent laboratory at all times. We have no reason to believe that the validity and integrity of the samples has been compromised.

All samples are analyzed for gold at various independent commercial laboratories using fire assay with AA finish, except for samples sent to SGS Labs, which analyzes by inductively coupled plasma mass spectrometry.

A QAQC program supervised by the geology department includes the submission of certified standards, duplicates, and blanks to the laboratory. The results of the QAQC programs indicate that the sample assays are reliable for the estimation of mineral resources and mineral reserves.

Mineral Processing and Metallurgical Testing

As part of normal plant operation procedures, metallurgical analysis and testing is undertaken as required. The majority of these analyses are to assess mill performance and metallurgical recovery. Metal recovery forecasts used in our mine plans are based on the historical performance of the plant operations and the tonnes and grade of material that is planned to be mined.

Mineral Resource and Mineral Reserve Estimates

Management estimates that mineral reserves at the Bell Creek mine, effective June 30, 2020, are as follows:

Bell Creek Mineral Reserves [1, 2]		
Reserve Category	**Tonnes (Mt)**	**Grams of Gold per tonne**
Proven	2.3	3.16
Probable	2.7	2.87
TOTAL	5.0	3.00

Notes:

[1] Estimated using prices of $1,350 per ounce of gold. Totals may not add due to rounding.
[2] Mineral reserve estimates for the Bell Creek mine were prepared under the supervision of, or were reviewed by Christopher Emerson, FAusIMM, and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

Management estimates that mineral resources at the Bell Creek mine, effective June 30, 2020, are as follows:

Bell Creek Mineral Resources [1, 2]		
Resource Category	**Tonnes (Mt)**	**Grams of Gold per tonne**
Measured	2.0	3.38
Indicated	3.4	2.77
Inferred	4.7	3.21

Notes:

[1] These mineral resources are in addition to mineral reserves. Estimated using prices of $1,350 per ounce of gold. Mineral resources are modelled to a minimum mining width and reported above a cut-off grade.
[2] Mineral resource estimates for the Bell Creek mine were prepared under the supervision of, or were reviewed by Christopher Emerson, FAusIMM, and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

Mineral resource estimates were prepared using inverse power of distance methods within three dimensional geological interpretations based on a nominal cut-off grade and a minimum mining width. The block model was classified into measured, indicated, and inferred confidence categories depending on the location of the block relative to the number of drillhole intersections available to estimate each block, as well as other factors affecting confidence in the estimate.

The mineral resource estimate was then depleted for previous mining and any inaccessible areas removed before reporting above an economic cut-off grade. Mineral resources that can be economically mined are converted to mineral reserves.

Mineral reserve estimates are based on a number of assumptions that include metallurgical, taxation, and economic parameters. Increasing costs or increasing taxation could have a negative impact on the estimation of mineral reserves. There are currently no known factors that may have a material negative impact on the estimate of mineral reserves or mineral resources at the Bell Creek mine.

Mining Operations

Underground mining takes place at the Bell Creek mine using long hole stoping methods. Ore is brought to the surface via ramp and by shaft.

Processing and Recovery Operations

Ore from the Bell Creek mine and the Timmins West mine is processed at the Bell Creek mill using grinding, gravity recovery, carbon in leach and carbon in pulp recovery to produce gold doré with minor amounts of silver. The plant has a capacity of 5,000 tpd. Metallurgical recovery averaged approximately 96.15% for gold in 2020.

In 2020, we processed approximately 1.6 million tonnes of ore producing a combined 148.4 thousand ounces of gold and 18 thousand ounces of silver from the Timmins West and Bell Creek mines.

All production from the Bell Creek and Timmins West mines is in the form of doré, which is refined at arm's length refineries prior to the sale of refined silver and gold to bullion banks and traders. Currently, we have refining contracts in place with refineries in Canada. We have not had any difficulty in securing contracts for the sale of Bell Creek and Timmins West mine doré, however, there can be no certainty that we will always be able to do so or what terms will be available at the time. Please see "Risks Related to our Business – Trading Activities and Credit Risk".

Since February 2019, the revenue produced by the Bell Creek and Timmins West mines is as follows:

2020	Revenue[1, 2]	Quantity Sold
Silver and Gold in Doré	$262.1 million	17,318 ounces of silver 148,130 ounces of gold
2019[3]		
Silver and Gold in Doré	$201.2 million	17,113 ounces of silver 143,300 ounces of gold

Notes:

1 Consists of sales to arm's length customers.

2 Calculated as gross revenue plus export credit incentives (as applicable), less treatment and refining charges and export taxes.

3 Consists of production after February 22, 2019.

Infrastructure, Permitting, and Compliance Activities

The mine workings, processing plant, tailings and waste disposal areas, effluent management and treatment facilities, roads, and power and water lines have all been constructed and are located within the boundaries of the mining leases and surface rights controlled by us. To the best of our knowledge, all permits and licenses required to conduct our activities on the property have been obtained and are currently in good standing.

Power is supplied from the provincial power grid and water is sourced from surface and underground dewatering.

Consultations have been undertaken with regulatory agencies, the general public, the Métis Nation of Ontario, Wabun Tribal Council and the First Nation communities of Flying Post First Nation, Mattagami First Nation, and Matachewan First Nation, who are represented by Wabun Tribal Council, and also Wahgoshig First Nation. Consultation provides an opportunity to identify and address the impacts of our activities on external stakeholders and to expedite the authorization process.

As a result of the consultations undertaken, an IBA was signed in September 2016 relating to the Bell Creek mine and surrounding properties with the Mattagami, Wahgoshig, Matachewan and Flying Post First Nation communities in the Timmins area. The IBA established a framework for continued consultation relating to the existing and future operations in and around Timmins, and provides long-term financial benefits to the four First Nations communities as well as opportunities in such areas as new business ventures, employment, training and education.

A closure cost estimate for the Bell Creek mine was prepared based on a government-approved closure plan, engineering estimates, local rates, and contractor quotes. The estimate is updated every year. Pan American has estimated the present value of reclamation costs for the Bell Creek mine to be approximately $10.4 million effective December 31, 2020. See "Narrative Description of the Business – Environment, Community and Sustainability" for further disclosure regarding forward-looking statements related to reclamation costs.

Capital and Operating Costs

Capital additions at the Timmins West and Bell Creek mines during 2020 totalled $20.8 million, including $18.8 million of sustaining capital, consisting mainly of mine equipment refurbishments and replacements, mine infrastructure upgrades, near-mine exploration, and lease payments for mining equipment, as well as $2.0 million in project capital investments to purchase equipment and materials for an expansion of operations.

Sustaining capital investments in 2021 at the Timmins West and Bell Creek mines are anticipated to total between $40.5 million and $43.0 million, primarily related to tailings storage facility expansions, underground mine equipment replacements and refurbishments, mill upgrades, and near-mine exploration. We also expect to invest approximately $5.0 million in project capital in respect of exploration of the Wetmore area near the Bell Creek mine.

In 2020, direct operating costs at the Timmins West and Bell Creek mines were $150.6 million.

Exploration, Development, and Production

In 2021, we anticipate producing 0.02 million ounces of silver and between 148.4 thousand and 158.5 thousand ounces of total gold from the Timmins West and Bell Creek mines. We plan to undertake approximately 68,000 metres of exploration drilling at the mines, including with respect to the Wetmore project, in 2021.

II. Non-Operating and Development Properties

(i) Escobal Mine

Project Description, Location, and Access

The Escobal mine is an underground silver-gold-lead-zinc mine in Guatemala, approximately 40 kilometres east-southeast of Guatemala City and 2 kilometres east of the town of San Rafael Las Flores. Access to the Escobal mine is via 70 kilometres of paved highway from Guatemala City.

The Escobal mine is 100% owned by Pan American through its wholly-owned subsidiary, PASG, and comprises two mineral licenses covering approximately 29.2 km². These include the Escobal Exploitation License (the "Escobal mining license") covering 20 km². PASG also previously held the Juan Bosco Exploration License covering 9.2 km², which was not renewed and is no longer valid. The Escobal mining license is valid for 25 years from receipt of the license on April 3, 2013 and is renewable for an additional 25 years. Exploration licenses in Guatemala are granted for an initial period of three years, which can be extended for two additional two-year periods, for a total holding period of seven years; after which, application must be made for an exploitation license or new exploration concession.

Some communities and non-governmental organizations ("NGOs") have been vocal and active in their opposition to mining and exploration activities in Guatemala. In July 2017, the Escobal mining license was suspended as a result of a court proceeding initiated by an NGO in Guatemala, based upon the allegation that the 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 State of Guatemala completes an ILO 169 consultation process led by MEM. The consultation process is proceeding, and normal operations at the Escobal mine remain suspended. Legal challenges to the consultation process have been filed with the Guatemalan Supreme Court by parties opposed to the Escobal mine and have, to date, been rejected by the Court, but the ultimate outcome of the various challenges remains uncertain. The process, timing, and outcome of the ILO 169 consultation also remains uncertain. The MEM recently set a date for the pre-consultation to commence in April 2021. In addition, in June 2017, PASG (at the time, known as Minera San Rafael, S.A. ("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.

In addition, 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. Mining 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 Mataquescuintla. The attendance at both roadblocks was reduced during 2020 and access to the mine was less restricted. While we continue our efforts to regain trust and repair relationships, there is no guarantee that a positive resolution will be reached or that the roadblocks will be removed.

We make annual payments to the Guatemala MEM for each concession. Annual reports documenting

exploration and operation activities have been filed with the Guatemala MEM, as required.

While Escobal is on care and maintenance, we continue to comply with Escobal's environmental management plan which was updated in 2020. As part of these requirements, we are following through on appropriate commitments made by Tahoe; responding to community requests for information and support; and reporting to the Government of Guatemala.

In Guatemala, there is a statutory one percent royalty on precious and base metal production. In addition, MSR (now PASG) paid an additional 4% NSR royalty on concentrates sold from the Escobal mine, primarily to nearby municipalities. Payments under the voluntary royalty were suspended in 2017 upon the Escobal license suspension, but some payments of these outstanding royalties have been made more recently.

In addition, MSR (now PASG) established a profit-sharing program that provides a 0.5% NSR royalty to an association of former landowners of the Escobal mine property. Ten percent of this royalty is to be deposited in a special fund, administered by the association's board of directors, and used for improvements in local communities.

Within the Escobal mining licence, PASG owns approximately 300 hectares for the area required for mining operations, processing plant and ancillary facilities, surface operations, and tailings and waste rock disposal. Our ownership of certain of these lands has been challenged in the Guatemalan Courts. Please refer to the Risks Related to Our Business for further discussion of this and related risks.

History

Activity at the Escobal property dates back to 1996 when Entre Mares, S.A., the Guatemalan subsidiary of Goldcorp, identified high grade gold values associated with surface quartz veins in the western portion of the Escobal vein. In late 2006, significant silver and gold grades were detected from surface sampling along an extensive alteration zone developed over the Escobal vein. Exploration drilling began on the property in 2007 and resource estimates were prepared in 2010.

In June 2010, Tahoe acquired 100% of the Escobal mine project and associated exploration concessions from Entre Mares, and the Escobal mine was then held by a wholly owned subsidiary of Tahoe, MSR (now PASG). Mine construction began in 2011, and commercial production began in 2013. The mine produced annually until its suspension in 2017. In February 2019, Pan American acquired Tahoe.

Geological Setting, Mineralization, and Deposit Types

The Guatemalan geological setting is comprised of two tectonic terrains juxtaposed across a major tectonic plate boundary. The northern half of Guatemala is on the North American plate, and the southern half is on the Caribbean plate with three major east-west trending faults forming the collision boundary. The Escobal property is situated on the Caribbean plate, south of the faults. The area is characterized by a series of volcanic units derived from multiple eruptive events.

The Escobal deposit is an intermediate sulfidation, fault related vein formed within sedimentary and volcanic rocks. The Escobal vein system hosts silver, gold, lead and zinc, with an associated epithermal suite of elements, within quartz and quartz-carbonate veins. Quartz veins and stockwork up to 50 metres wide, with up to 10% sulfides, form at the centre of the Escobal deposit and grade outward through silicification, quartz-sericite, argillic and propylitic alteration zones.

Precious and base metal mineralization has been identified over a 2,400 metre lateral distance and 1,200 metre vertical range in three zones oriented generally east-west, with variable dips.

Exploration

Exploration at the Escobal mine included surface prospecting, mapping, soil and rock geochemical sampling, geophysical surveys, and drilling.

Drilling

All drilling undertaken between 2007 and 2017 was by diamond drilling from surface and underground using industry standard drill machines and downhole survey tools. Drilling was conducted by both mine employees

and private drilling contractors under the supervision of the mine geology department.

Sampling, Analysis, and Data Verification

The drill core was generally sampled at 1.0 metre to 1.5 metre lengths according to geological features, and cut with a saw. The samples are maintained in secure facilities and were under the control of our employees or the independent laboratory at all times. We have no reason to believe that the validity and integrity of the samples has been compromised. The samples were prepared by Bureau Veritas at their sample preparation facility in Guatemala City and analyzed at their Reno, Nevada USA facility. In late 2015, a portion of the underground stope definition core was analyzed at the on site laboratory.

Gold was assayed by fire assay with AA finish and silver was assayed by digestion with AA finish. Higher grade samples were completed using fire assay and gravimetric finish. Lead and zinc were analyzed by induced coupled polarization or by digestion with AA finish with high grade samples completed using titration methods.

A QAQC program supervised by the geology department included the submission of certified standards, duplicates, and blanks to the laboratory. The results of the QAQC programs indicate that the sample assays are reliable for the estimation of mineral resources and mineral reserves.

Mineral Processing and Metallurgical Testing

As part of normal plant operation procedures, metallurgical analysis and testing were undertaken as required. The majority of these analyses were to assess mill performance and metallurgical recovery. Metal recovery forecasts used in the mine plans are based on the historical performance of the plant operations and the tonnes and grade of material that is planned to be mined.

Mineral Resource and Mineral Reserve Estimates

Management estimates that mineral reserves at the Escobal mine, effective June 30, 2020, are as follows:

Escobal Mineral Reserves [1, 2]					
Reserve Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**Grams of gold per tonne**	**% Lead**	**% Zinc**
Proven	2.5	486	0.42	1.02	1.75
Probable	22.1	316	0.34	0.77	1.25
TOTAL	24.7	334	0.35	0.79	1.30

Notes:

1 Estimated using prices of $20 per ounce of silver and $1,300 per ounce of gold. Totals may not add due to rounding.

2 Mineral reserve estimates for the Escobal mine were prepared under the supervision of, or were reviewed by Christopher Emerson, FAusIMM, and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

Management estimates that mineral resources at the Escobal mine, effective June 30, 2020, are as follows:

Escobal Mineral Resources [1, 2]					
Reserve Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**Grams of gold per tonne**	**% Lead**	**% Zinc**
Measured	2.3	251	0.23	0.31	0.59
Indicated	14.2	201	0.20	0.38	0.66
Inferred	1.9	180	0.90	0.22	0.42

Notes:

1 These mineral resources are in addition to mineral reserves. Estimated using prices of $20 per ounce of silver and $1,300 per ounce of gold. Mineral resources are reported within scheduled mine shapes and above a mineral resource cut-off grade.

2 Mineral resource estimates for the Escobal mine were prepared under the supervision of, or were reviewed by Christopher Emerson, FAusIMM, and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

Mineral resource estimates were prepared using inverse power of distance methods within geological interpretations created in plan and section. The block model was classified into measured, indicated, and inferred

confidence categories depending on the location of the block relative to the number of drillhole intersections available to estimate each block, as well as other factors affecting confidence in the estimate.

The mineral resource estimate was then depleted for previous mining and planned dilution and loss was applied. Reserve and resource stope shapes were prepared on blocks above the economic cut-off. Mineral resources that can be economically mined are converted to mineral reserves.

Mineral reserve estimates are based on a number of assumptions that include metallurgical, taxation, and economic parameters. Increasing costs or increasing taxation could have a negative impact on the estimation of mineral reserves. Aside from the previously mentioned factors, there are currently no known factors that may have a material negative impact on the estimate of mineral reserves or mineral resources at Escobal.

Mining Operations

Underground mining at Escobal utilized long hole stoping methods, with ore brought to the surface by ramp.

No mining operations have been conducted at Escobal since the Escobal mining license suspension in 2017, and Escobal is on care and maintenance. We are required to conduct certain activities in order to be in compliance with our environmental management plan, which includes limited community relations activities to respect any existing commitments and to respond to requests for information regarding our activities. The MEM and the Ministry of Environment have conducted a number of site inspections to verify the condition of the mine and facility, our activities, and compliance with the Court Order.

Processing and Recovery Operations

Prior to the suspension of mining operations, ore from the Escobal mine was processed in 4,500 tpd capacity plant using conventional lead-zinc differential flotation to produce silver and gold rich lead and zinc concentrates.

No processing has taken place since the Escobal mining license suspension in 2017.

In 2016, the last full-year period in which there was production from the mine, the Escobal mine produced 22.5 thousand tonnes of lead concentrate and 27.6 thousand tonnes of zine concentrate, with total contained metal of 21.2 million ounces of silver, 10.7 thousand ounces of gold, 10.3 thousand tonnes of lead, and 17.4 thousand tonnes of zinc. Metallurgical recoveries for the lead concentrate were 80.6% silver, 54% gold, 87.2% lead, and 12.6% zinc, while recoveries for the zinc concentrate were 6.1% silver, 6.2% gold, 3.0% lead, and 78.6% zinc.

Infrastructure, Permitting, and Compliance Activities

The Escobal mine workings, processing plant, tailings and waste disposal areas, effluent management and treatment systems, ancillary facilities, roads and power lines have all been constructed and are located within the boundaries of the exploitation license and surface lands owned by us. When the mine was in operation, power was provided mainly by on-site diesel generation. Water is supplied from mine dewatering and water wells.

The Escobal mine operations were conducted under an EIS approved by the Ministry of Environment and Natural Resources (“MARN”) and an exploitation license issued by the Guatemala MEM. The export of concentrates is licensed through the Guatemala MEM, with annual renewal requirements. Land use changes and vegetation clearing and reforestation are permitted through Guatemala’s National Institute of Forests. Archeological clearances were issued by the Ministry of Culture and Sports. Other than an export credential which has not been renewed by the Guatemala MEM following its expiration in August 2017 and the suspension of the Escobal mine mining license, to the best of our knowledge, all other permits and licenses required to conduct its activities at the Escobal Mine have been obtained and are currently in good standing. See " Risks Related to Our Business".

PASG has implemented a comprehensive environmental management plan developed specifically for the conditions at the Escobal mine, which addresses operating, reporting, and mitigation procedures for surface and underground operations. An update to the environmental management plan was approved in 2020.

A closure cost estimate for the Escobal mine prepared according to State of Nevada approved SRCE methodology is updated every year for unit costs and discount rates, and every other year for physical disturbance if necessary. We have estimated the present value of reclamation costs for the Escobal mine to be approximately $8.6 million effective December 31, 2020. See “Narrative Description of the Business – Environment, Community and Sustainability” for further disclosure regarding forward-looking statements related to reclamation costs.

Capital and Operating Costs

During 2020, Escobal was in care and maintenance, and incurred $21.0 million in holding costs. Capital additions at Escobal during 2020 totalled $4.8 million.

In 2021, we anticipate spending $20.0 and $21.0 million in care and maintenance costs for the Escobal mine.

Exploration, Development, and Production

In 2021, we do not anticipate any production from the Escobal mine. We plan to continue with our property and infrastructure maintenance requirements, and have no plans to undertake any exploration work in 2021. All expenditures will be expensed as incurred.

(ii) Navidad Property

Project Description, Location, and Access

The Navidad silver development property is located in the Province of Chubut, southern Argentina, 1,580 kilometres southwest of Buenos Aires and 360 kilometres west of Puerto Madryn. The Navidad property is accessible year round by road from the small communities of Gastre and Gan Gan, which are located on a provincial highway. The nearest airport is located in Esquel, about a four hour drive to the southwest by gravel road.

We are the 100% owners of the Navidad project through our wholly owned subsidiary, MASA. The main Navidad property block containing all of the current mineral resources is comprised of four 2,500 ha blocks granted with Manifestación de Descubrimiento (“MD”) permits. MASA also holds the rights to additional MDs in the Province of Chubut. All of these MDs are in good standing with the mining authorities of the Province of Chubut, and to our knowledge, we have met all of the necessary obligations to retain the property. Our tenements are subject to Argentinean law and policy, which may in the future result in surrender of certain of its tenements outright and/or the reduction in area of our holdings.

We hold surface land rights covering all known mineral resources through MASA. The remaining surface rights belong to several other land holders and access is either in negotiation or has been granted through agreements with the owners.

All of the known mineralized zones and planned mine workings, processing plant, effluent management and treatment systems, and tailings storage areas relating to the property are located within the boundaries of the concessions and surface rights.

Wheaton Precious Metals Corp. (formerly Silver Wheaton Corp.), through its subsidiary, Silverstone Resources (Barbados) Corp., has the right to purchase 12.5% of the life of mine payable silver produced at the Loma de La Plata deposit pursuant to a convertible debenture that, upon conversion, committed to a future “silver stream” agreement. This agreement remains to be negotiated.

There is a provincial royalty of 3% of the “Operating Income” in the Province of Chubut. Operating Income is defined as revenue minus production cost (not including mining costs), treatment and transportation charges.

To the best of our knowledge, the property is not subject to any other royalties, overrides, back-in rights, payments or other agreements and encumbrances. Our operations in Argentina are subject to government taxes, fees and duties.

The Province of Chubut passed a law in 2003 (“Law 5001”) which prohibits open pit mining and the use of cyanide in mineral processing in the entire province. Law 5001 would need to be changed, or rezoning enacted,

before permits for the development of the Navidad property can be obtained. While there have been several proposals before government to consider amending Law 5001 since we acquired Navidad, including a zonification initiative introduced to the Chabut legislature in late 2020, the review of which is ongoing, the ban on open pit mining remained in place as of the date of this AIF. Please see the discussion under “Risks Relating to Our Business – Government Regulation”.

There are material governmental and legal factors that affect the mineral resources at the Navidad property and the conversion of the mineral resources to mineral reserves. Legislation in place in the Province of Chubut currently prohibits open pit mining and the use of cyanide in the entire province. No cyanide will be used to process the material anticipated to be mined from the Navidad property, but given the depth and orientation of the deposits, the economic mine plan involves open pit mining. Because of these governmental and legal factors, the otherwise economically viable portions of the deposit cannot be estimated as mineral reserves at this time.

Beginning most notably in 2011, the Federal Government of Argentina increasingly controlled foreign exchange, imports and exports and the inflow and outflow of capital in response to unfavourable domestic economic trends. While certain of these restrictions were eased following the 2015 federal elections, the new administration elected in 2019 has reverted to many of the same controls and restrictive measures. See “Risks Related to Our Business – Foreign Operations”.

While there are no known significant factors or risks that we currently expect to be reasonably likely to affect access or title, or the right or ability to perform work on the property, including permitting and environmental liabilities, other than as described herein, please refer to “Risks Related to Our Business” starting on page 67 for a general discussion of the risks relating to our operations.

History

A regional exploration program by Normandy Argentina in mid-2000 consisting of 1,200 stream sediment samples resulted in the identification of the Navidad property. In December 2002, IMA Exploration Inc. (“IMA”) applied for exploration concessions over the Navidad area and began undertaking a regional exploration program including regional mapping and sampling. From December 2002 to July 2006, IMA conducted diamond drilling, geochemical sampling, geophysical exploration, and mineral resource estimates at the Navidad property. After acquiring the Normandy assets in 2003, Aquiline filed a suit against IMA in the Supreme Court of British Columbia in March 2004 claiming that IMA had breached the terms of a confidentiality agreement in obtaining the Navidad concessions. In 2006, the Supreme Court of British Columbia awarded ownership of the Navidad property to Aquiline and, following several appeals, Aquiline obtained full ownership of the Navidad property in 2008. In 2010 we completed the acquisition of Aquiline and, with it, the Navidad property.

From 2006, work included diamond drilling, geophysical surveys, geochemical exploration, metallurgical test work, mineral resource estimates, and a preliminary economic assessment for Loma de La Plata. Following our acquisition of the Navidad property, we continued with diamond drilling, metallurgical testing, hydrologic analysis, environmental studies, and completed a preliminary economic assessment of the Navidad property deposits in 2011. No further work has been undertaken since 2011. There has been no production at the Navidad property.

Geological Setting, Mineralization, and Deposit Types

The Navidad property is located on the southwest edge of the Northern Patagonia Massif in southern Argentina. Geology on the Navidad property consists of ignimbrites, volcanic agglomerates, and lavas of the Lonco Trapial Formation; and sandstones, mudstones, and limestones of the Cañadón Asfalto Formation. The latter of these formations hosts the Navidad mineralization.

The basin is defined by three northwest striking major fault zones known as the Navidad, Esperanza, and Argenta trends. The Navidad trend, which includes the bulk of the silver mineralization, occurs in the immediate hanging wall of a major northeast-striking fault known as the Sauzal Fault. Most of the economic mineralization is hosted by the upper of two trachytic andesite lava flows.

The Navidad property comprises eight individual epithermal mineral deposits in the Navidad, Esperanza, and Argenta trends. The six deposits of the Navidad trend occur along strike over a distance of about 5.8 kilometres and are essentially continuous. They comprise, from northwest to southeast: Calcite NW, Calcite Hill, Navidad Hill, Connector Zone, Galena Hill, and Barite Hill. The Valle Esperanza deposit occurs on the east flank of the Esperanza

Trend, approximately 400 metres south-southwest of Galena Hill. The Loma de La Plata deposit occurs in the north part of the Argenta Trend, approximately 2.2 kilometres southwest from Calcite Hill.

Similar styles of silver and base metal mineralization occur in most of the deposits, however, the proportion of sulphides varies considerably. Loma de La Plata is silver-rich, but is sulphide-poor and contains very low levels of lead, zinc, and copper.

Exploration

The first exploration on the Navidad property area consisted of a preliminary regional geochemical sampling program conducted by Normandy in mid-2000 that resulted in the identification of anomalies at the Navidad property. Detailed surface mapping took place between 2003 and 2004. Commencing in 2002 and continuing through 2006, soil, rock chip and stream silt samples were collected. The anomalous samples clearly delineate the Navidad, Esperanza and Argenta trends. Between 2006 and 2009, geological mapping and geophysical and geochemical exploration was conducted to provide data for structural interpretation. All of the samples collected during surface exploration have been used to guide the location of diamond drillholes.

Drilling

All drilling was by diamond drilling from the surface using industry standard drill machines and downhole survey tools. Drilling was conducted by private drilling contractors under the supervision of the mine geology department. The drilling results were used as the basis for mineral resource and mineral reserve estimates.

Sampling, Analysis, and Data Verification

Drill core sample intervals varied from between 1 metre and 3 metres long. The core was cut in half with a diamond bladed saw. The samples were maintained in secure facilities under the control of our employees or the independent laboratory at all times. We have no reason to believe that the validity and integrity of the samples has been compromised. Samples were prepared and assayed by Alex Stewart Assayers Argentina S.A. of Mendoza, Argentina.

Assays were performed using fire assay with gravimetric finish for silver and with AA finish for gold and inductively coupled plasma mass spectrometry for base metals.

A QAQC program supervised by the geology department included the submission of certified standards, duplicates, and blanks to the laboratory. The results of the QAQC programs indicate that the sample assays are reliable for the estimation of mineral resources and mineral reserves.

Mineral Processing and Metallurgical Testing

Metallurgical testwork on the Navidad mineralization includes mineralogical studies, flotation and recovery, grinding, and variability test work. The results indicate that the material responds well to flotation with acceptable recoveries and concentrate grades. The expected metallurgical performance and recovery algorithms for the Navidad mineralization was determined by laboratory bench-scale flotation test methods and a pilot plant test on one feed type. Two distinct feed types will be produced, including a copper-silver feed and lead-silver feed. Average recoveries of 77.8% for silver, 51.9% for copper, and 56.6% for lead were estimated for the silver-copper feed and average recoveries of 33.6% for silver, 32.6% for copper, and 76.6% for lead were estimated for the silver-lead feed.

Mineral Resource and Mineral Reserve Estimates

Management estimates that mineral resources at the Navidad property, effective April 2009, are as follows:

Navidad Mineral Resources [1, 2]				
Resource Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**% Lead**	**% Copper**
Measured	15.4	137	1.44	0.10
Indicated	139.8	126	0.79	0.04
Inferred	45.9	81	0.57	0.02

Notes:

1 Estimated and reported above a 50 g/t AgEQ using a silver equivalence formula of AgEQ = Ag + (Pb × 10,000/365) and a price of $12.52 per ounce of silver and $1,100 per tonne of lead. The most likely cut-off grade for these deposits is not known at this time and must be confirmed by the appropriate economic studies. The estimated metal content does not include any consideration of mining, mineral processing, or metallurgical recoveries.

2 Mineral resource estimates for the Navidad property were prepared by Pamela De Mark, P. Geo., as a Qualified Person as that term is defined in NI 43-101.

Mineral resource estimates were prepared using multiple indicator kriging within three dimensional geological interpretations. The block model was classified into measured, indicated, and inferred confidence categories depending on the location of the block relative to the number of drillhole intersections available to estimate each block, as well as other factors affecting confidence in the estimate.

The mineral resource estimate was then tabulated for blocks above the potentially economic cut-off.

Mineral resource estimates are based on a number of assumptions that include metallurgical, taxation, and economic parameters. Increasing costs or increasing taxation could have a negative impact on the estimation of mineral reserves and mineral resources. Aside from the previously mentioned factors, there are currently no other known factors that may have a material negative impact on the estimate of mineral resources at the Navidad property.

Exploration, Development, and Production

We plan to continue with our maintenance requirements which are expected to result in approximately $2.0 million to $2.5 million in expenditures in 2021, and have no plans to undertake any exploration drilling at the Navidad property during the year. All expenditures will be expensed as incurred.

III. Non-Material Properties and Interests

Other Operations, Exploration, Resource and Investment Properties

We own interests in other investment and mineral properties in each of the jurisdictions in which we operate, including the La Arena mine and Pico Machay property in Peru, the San Vicente mine in Bolivia, the Manantial Espejo mine and the Joaquin and COSE mines in Argentina, the La Bolsa property in Mexico, the Waterloo property in the United States, and certain other interests in Canada. Our Alamo Dorado mine in Mexico is in the post-reclamation phase and mining activity has ceased. Pan American does not consider these properties to be material properties for the purposes of NI 51-102 or NI 43-101.

Metals Trading

We take the view that our precious metals production should not be hedged, thereby allowing the maximum exposure to precious metal prices.

We have engaged in forward sales and hedging of base metals production from our mines over the past several years. The forward sales of base metals in 2018, 2019 and 2020 were as follows:

- During 2020, we did not hedge any base metal production.
- During 2019, we had 800 tonnes of copper exercised at an average strike price of $6,150 per tonne, resulting in a realized gain of $0.3 million. We had 3,600 tonnes of zinc exercised at a strike price of $2,600 per tonne, resulting in a realized gain of $0.9 million.
- During 2018, we had 1,200 tonnes of lead exercised at a strike price of $2,500 per tonne, resulting in a realized loss of $0.1 million, and 2,375 tonnes of lead exercised at a strike price of $2,200 per tonne,

resulting in a realized gain of $0.5 million. We had 360 tonnes of copper exercised at a strike price of $6,960 per tonne, resulting in a realized gain of $nil, and 1,950 tonnes of copper exercised at a strike price of $6,400 per tonne, resulting in a realized gain of $0.5 million. We had 1,300 tonnes of zinc exercised at a strike price of $3,350 per tonne, resulting in a realized loss of $0.2 million, and 6,600 tonnes of zinc exercised at an average strike price of $2,850 per tonne, resulting in a realized gain of $1.8 million.

Please see the discussion below under “Risks Related to Our Business – Trading Activities and Credit Risk”.

Mineral Property Expenditures

The following table sets out our acquisition, exploration and development expenditures (rounded, in thousands) for the periods indicated:

			2020		2019		2018
Acquisition	COSE	$	-	$	-	$	7,500
	Joaquin		-		-		-
	Shahuindo[1]		-		437,275		-
	La Arena[1]		-		192,506		-
	Timmins[1]		-		378,889		-
	Escobal[1]		-		273,838		-
	TOTAL[2]		-		1,282,508		7,500
Development	Huaron[3]	$	2,359	$	8,013	$	14,551
	Morococha[3]		6,563		10,703		10,370
	Alamo Dorado		-		-		-
	Dolores		43,236		47,722		59,480
	La Colorada		29,335		20,139		22,473
	Manantial Espejo		7,849		23,909		29,881
	Navidad		-		9		39
	San Vicente		4,877		4,938		6,949
	Shahuindo		20,330		31,329		-
	La Arena		37,300		47,557		-
	Timmins		20,081		10,346		-
	Escobal		4,807		-		-
	Other		1,818		125		605
	TOTAL[2]	$	178,555	$	205,807	$	144,348
Exploration	Huaron	$	-	$	13	$	660
	Morococha		138		327		598
	Alamo Dorado		-		-		-
	Dolores		338		1,105		1,594
	La Colorada		998		1,445		880
	Manantial Espejo		-		305		744
	Navidad		-		-		3,832
	San Vicente		-		-		-
	Shahuindo		(5)		787		-
	La Arena		-		358		-
	Timmins		3,418		2,259		-
	Other[4]		2,209		3,204		2,830
	TOTAL[2,5]	$	7,096	$	9,803	$	11,138

Notes:

1 The figures shown relate to the net asset balances as at December 31, 2019.
2 Numbers may not add due to rounding.
3 Net of lease advances.
4 Includes spending on overhead corporate management charges, as well as other indirect exploration spending.
5 The amounts for 2019 exclude $1.9 million from non-cash project development write-downs.

RISKS RELATED TO OUR BUSINESS

The risk factors described below could materially affect Pan American's future operating results and could cause actual events and results to differ materially from those described in forward-looking statements and forward-looking information. Additional risks not presently known to us, or that we currently consider immaterial, may also impair our operations. Readers are strongly encouraged to review the following identified risks in detail.

Metal and Commodity Price Fluctuations

The majority of our revenue is derived from the sale of silver, gold, zinc, copper and lead, and therefore fluctuations in the prices of these metals significantly affects our operations and profitability. Our sales are directly dependent on metal prices, and metal prices have historically shown significant volatility and are beyond our control. The Board of Directors continually assesses Pan American's strategy towards our metal exposure, depending on market conditions.

The prices of silver and other metals are affected by numerous factors beyond our control, including:

- global and regional levels of supply and demand;
- sales by government holders and other third parties;
- metal stock levels maintained by producers and others;
- increased production due to new mine developments and improved mining and production methods;
- speculative activities;
- inventory carrying costs;
- availability, demand and costs of metal substitutes;
- international economic and political conditions;
- interest rates, inflation and currency values;
- increased demand for silver or other metals for new technologies; and
- reduced demand resulting from obsolescence of technologies and processes utilizing silver and other metals.

In addition to general global economic conditions that can have a severely damaging effect on our business in many ways, declining market prices for metals could materially adversely affect our operations and profitability. A decrease in the market price of silver, gold and other metals could affect the commercial viability of our mines and production at some of our mining properties. Lower prices could also adversely affect future exploration and our ability to develop mineral properties and mines, including the development of capital intensive projects such as Navidad, all of which would have a material adverse impact on our financial condition, results of operations and future prospects. There can be no assurance that the market prices will remain at sustainable levels.

If market prices of gold and silver remain below levels used in Pan American's impairment testing and reserve prices for an extended period of time, Pan American may need to reassess its long-term price assumptions, and a significant decrease in the long-term price assumptions would be an indicator of potential impairment, requiring Pan American to perform an impairment assessment on related assets. Pan American further discusses key assumptions used in measuring the recoverable amounts of its mining assets in Note 13 of Pan American's Audited Consolidated Financial Statements for the year ended December 31, 2020. Due to the sensitivity of the recoverable amounts to long term metal prices, as well as to other factors including changes to mine plans and cost escalations, any significant change in these key assumptions and inputs could result in impairment charges in future periods.

The Board of Directors continually assesses Pan American's strategy towards our metal exposure, depending on market conditions. From time to time, we mitigate the market price risk associated with our base metal production by committing some of our forecast base metal production to forward sales and options contracts. However, decisions relating to hedging may have material adverse effects on our financial performance, financial position, and results of operations. As at December 31, 2020, Pan American had no outstanding contracts to sell base metal production.

We take the view that our precious metals production should not be hedged, thereby allowing the maximum exposure to precious metal prices. However, in extreme circumstances, the Board of Directors may make exceptions to this approach. Such decisions could have material adverse effects upon our financial performance, financial position, and results of operations.

Certain commodities used by us in our operations may also be subject to strategic hedging programs. For example, during 2020, we entered into diesel swap contracts designed to fix or limit our exposure to higher fuel prices. At December 31, 2020, we had outstanding positions on its diesel exposure with a notional amount of 15.6 million gallons, with a weighted average fixed price of $1.18 per gallon, expiring between January 2021 and December 2022. We recorded gains of $4.0 million and $4.7 million for the three and twelve months ended December 31, 2020, respectively (Q4 2019 and 2019: $nil and $nil, respectively).

Please refer to the 2020 MD&A for more details, including a sensitivity analysis of the effect of certain metal prices on revenue and AISC.

Foreign Operations

In 2020, a significant portion of our production and revenues were derived from our operations in Peru, Mexico, Argentina and Bolivia, and we also own the currently-suspended Escobal mine in Guatemala. As a result, we are exposed to a number of risks and uncertainties, including:

- expropriation, nationalization, and the cancellation, revocation, renegotiation, or forced modification of existing contracts, permits, licenses, approvals, or title, particularly without adequate compensation;
- changing political and fiscal regimes, sometimes unexpectedly or as a result of precipitous events, and economic and regulatory instability;
- unanticipated adverse changes to laws and policies, including those relating to mineral title, royalties and taxation;
- delays or inability to obtain or maintain necessary permits, licenses or approvals;
- opposition to mine development projects from governments, communities, and other groups, which may include frivolous or vexatious claims, misinformation, and the potential for violence and property damage;
- restrictions on foreign investment;
- limitations on repatriation of operating cash flows, including legal and practical restrictions to transfer funds from foreign jurisdictions;
- unreliable or undeveloped infrastructure;
- labour unrest and scarcity;
- human rights violations, including indigenous rights claims;
- inability of governments or governmental bodies to complete, or properly complete, consultation processes and to comply with national and international laws, protocols, standards and/or norms;
- difficulty obtaining key equipment and components for equipment;
- regulations and restrictions with respect to imports and exports;
- high rates of inflation;
- extreme fluctuations in currency exchange rates and restrictions on foreign exchange, currencies and repatriation;
- inability to obtain fair dispute resolution or judicial determinations because of bias, corruption or abuse of power;
- abuse of power of foreign governments who impose, or threaten to impose, fines, penalties or other similar mechanisms, without regard to the rule of law;
- difficulties enforcing judgments, particularly judgments obtained in Canada or the United States, with respect to assets located outside of those jurisdictions;
- difficulty understanding and complying with the regulatory and legal framework with respect to mineral properties, mines and mining operations, and permitting;
- violence and the prevalence of criminal activity, including organized crime, theft and illegal mining;
- civil unrest, terrorism and hostage taking;
- military repression and increased likelihood of international conflicts or aggression; and
- increased public health concerns, including the impact of COVID-19.

Certain of these risks and uncertainties are illustrated well by circumstances in Guatemala and Bolivia.

Some communities and NGOs have been vocal and active in their opposition to mining and exploration activities in Guatemala. In July 2017, the Escobal mining license was suspended as a result of a court proceeding initiated by an NGO in Guatemala, based upon the allegation that the 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 State of Guatemala completes an ILO 169 consultation process led by MEM. The consultation process is proceeding, and normal operations at the Escobal mine remain suspended. Legal challenges to the consultation process have been filed with the Guatemalan Supreme Court by parties opposed to the Escobal mine and have, to date, been rejected by the Court, but the ultimate outcome of the various challenges remains uncertain. The Guatemala MEM recently set a date for the pre-consultation to commence in April 2021, however the process, timing, and outcome of the ILO 169 consultation also remain uncertain. In addition, in June 2017, PASG (at the time, known as 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.

In 2014, the Bolivian government enacted the New Mining Law. Among other things, the New Mining Law set out a number of new economic and operational requirements relating to state participation in mining projects. Further, the New Mining Law provided that all pre-existing contracts were to migrate to one of several new forms of agreement within a prescribed period of time. As a result, we anticipate that our current joint venture agreement with COMIBOL relating to the San Vicente mine will be subject to such migration and possible renegotiation of key terms. The migration process has been delayed by COMIBOL and has not been completed. The primary effects on the San Vicente operation and our interest therein will not be known until such time as we have, if required to do so, renegotiated the existing contract, and the full impact may only be realized over time. We will take appropriate steps to protect and, if necessary, enforce our rights under our existing agreement with COMIBOL. There is, however, no guarantee that governmental actions, including possible expropriation or additional changes in the law, and the migration of our contract will not impact our involvement in the San Vicente operation in an adverse way and such actions could have a material adverse effect on us and our business.

Criminal activity and violence are also prevalent in some areas that we work in. For example, violence in Mexico is well documented and has, over time, been increasing. Conflicts between the drug cartels and violent confrontations with authorities are not uncommon. Operations at our Dolores mine were temporarily curtailed in 2018 as a result of such violence and the threat of violence on the access roads to the mine. Other criminal activity, such as kidnapping and extortion, is also an ongoing concern. Many incidents of crime and violence go unreported and efforts by police and other authorities to reduce criminal activity are challenged by a lack of resources, corruption and the pervasiveness of organized crime. Incidents of criminal activity have occasionally affected our employees and our contractors and their families, as well as the communities in the vicinity of our operations. Such incidents may prevent access to our mines or offices; halt or delay our operations and production; result in harm to employees, contractors, visitors or community members; increase employee absenteeism; create or increase tension in nearby communities; or otherwise adversely affect our ability to conduct business. We can provide no assurance that security incidents, in the future, will not have a material adverse effect on our operations.

Challenges also exist with respect to inconsistent application of the rule of law, and to sometimes unreliable and biased legal systems and judiciary. In April 2012, Pan American sold all of its interest in the Quiruvilca mine ("Quiruvilca") in Peru, which was previously owned by our subsidiary, 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, that Huaron has not owned or been involved with Quiruvilca for a number of years, and that Huaron was not afforded the opportunity to participate or challenge the assertions in court, 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. Many of these legal proceedings have been delayed as a result of COVID-19

related court closures in Peru. 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. Huaron will likely be subject to further labour-related claims, and could also be subject to, directly or indirectly, claims by creditors of the current owner of Quiruvilca and claims relating to the now abandoned mine site, which in aggregate could be material.

In most cases, the effect of these risks and uncertainties cannot be accurately predicted and, in many cases, their occurrence is outside of our control. We have begun the process of evaluating our operations against the World Gold Council Conflict-free Standard in an effort to gain more insights into potential risks related to security and corruption at our operations, but the success of this initiative remains uncertain. Although we are unable to determine the impact of these risks on our future financial position or results of operations, many of these risks and uncertainties have the potential to substantially affect our exploration, development and production activities and could therefore have a material adverse impact on our operations and profitability.

Governmental Regulation

Our operations, exploration, and development activities are subject to extensive laws and regulations in the jurisdictions in which we conduct our business, including with respect to:

- environmental protection, including greenhouse gas emissions, biodiversity, and water, soil and air quality;
- permitting;
- management and use of toxic substances and explosives;
- management and use of natural resources, including water and energy supplies;
- management of waste and wastewater;
- exploration, development, production, and post-closure reclamation of mines;
- imports and exports;
- transportation;
- price controls;
- taxation;
- mining royalties;
- labour standards, employee profit-sharing, and occupational health and safety, including mine safety;
- community and indigenous rights;
- human rights;
- social matters, including historic and cultural preservation, engagement and consultation, local hiring and procurement, development funds;
- anti-corruption and anti-money laundering; and
- data protection and privacy.

The costs associated with compliance with these and future laws and regulations can be substantial, and changes to existing laws and regulations (including the imposition of higher taxes and mining royalties) could cause additional expense, capital expenditures, restrictions on or suspensions of our operations and delays in the development of our properties. In addition, the regulatory and legal framework in some jurisdictions in which we operate are out-dated, unclear and at times, inconsistent. A failure to comply with these laws and regulations, including with respect to our past and current operations, and possibly even actions of parties from whom we acquired our mines or properties, could lead to, among other things, the imposition of substantial fines, penalties, sanctions, the revocation of licenses or approvals, expropriation, forced reduction or suspension of operations, and other civil, regulatory or criminal proceedings.

Many of the jurisdictions in which we operate also have certain laws or policies that impose restrictions on mining activities. For example, there are currently laws in the Province of Chubut, Argentina, which, among other things, prohibit open pit mining and the use of cyanide in mineral processing across the entire Province. As currently enacted, the laws in the Province of Chubut would likely render any future construction and development of the Navidad property uneconomic or not possible at all. There is no guarantee that these restrictions on mining will be removed or that they will not become more restrictive, or that new constraints will not be imposed, including those that might have significant economic impacts on our operations and profitability.

Unanticipated or drastic changes in laws and regulations have affected our operations in the past. For example, under previous political regimes in Argentina, the government intensified the use of severe price, foreign exchange, and import controls in response to unfavourable domestic economic trends. These included informal restrictions on dividend, interest, and service payments abroad and limitations on the ability to convert ARS into USD, exposing us to additional risks of ARS devaluation and high domestic inflation. While some of these restrictions had begun to ease after the elections in 2015, the government introduced a new export duty in 2018 on silver and gold doré exported from Argentina. In 2020, we paid approximately $3.9 million in export duties (2019: $4.6 million). Following elections in 2019, the new government in Argentina has begun reinstituting some of the previous unfavourable economic policies, such as strict currency controls.

As governments continue to struggle with deficits and concerns over the effects of depressed economies, the mining and metals sector has often been identified as a source of revenue. Taxation and royalties are often subject to change and are vulnerable to increases in both poor and good economic times, especially in many resource rich countries. The addition of new taxes, specifically those aimed at mining companies, could have a material impact on our operations and will directly affect profitability and our financial results. The economic impact of COVID-19 on the global and national economies, the resulting costs to governments and increased fiscal debt is also expect to result in further taxation pressures, the impacts of which could impact our financial performance.

In late December 2016, for example, the Zacatecas state government also enacted a new set of ecological taxes which took effect on January 1, 2017. The Zacatecas Tax applied broadly across a number of industries in the State of Zacatecas that involve extraction, emissions to the air, soil or water, and deposits of residue or waste. The Zacatecas Tax primarily affects the La Colorada mine in respect of the materials placed in its tailings storage facility, with only about 5% of the tax relating to emissions. We paid approximately $4.0 million in respect of the Zacatecas Tax from 2017 to 2019. However, pursuant to a challenge of the Zacatecas Tax on constitutional grounds, in mid-2020, the Supreme Court of Mexico determined that the tax for the deposit or storage of waste rock was not within the jurisdiction of the State of Zacatecas and that Plata was entitled to be reimbursed for payments previously made in respect of the La Colorada mine. The Court also ruled, however, that the state of Zacatecas was empowered to impose a tax for the prevention and control of air pollution generated by industrial establishments, which are not within the federal competence, and therefore that portion of the tax on Plata was upheld. It is currently unknown whether Plata will be able to recover the amounts previously paid, and a modified version of the Zacatecas Tax has recently been introduced by the State of Zacatecas with respect to waste management facilities. We are currently evaluating what, if any, impact that this modified tax might have on our operations in Zacatecas, but it could negatively affect our profitability and our financial results.

In late 2020, the President of Mexico introduced a Federal Bill which if implemented, would repeal various articles of the Federal Labor Law, Social Security Law, Law of the National Workers' Housing Fund Institute, Federal Fiscal Code, Income Tax Law and the Value Added Tax Law. The intent of the Bill is to significantly limit the ability of operating companies to subcontract and outsource labour to contractors and to employ related service providers. If this legislation is approved, additional employee profit sharing costs, payroll taxes and benefits costs may be imposed on our operations, the impacts of which could be significant.

To manage the COVID-19 pandemic, governments in all of our operating jurisdictions have implemented various regulations, orders, protocols and guidelines, many of which have negatively affected our business and our employees, contractors and local communities. COVID-19 has also impacted governments and national economies, and in addition to impacts on labour, supplies, and services that are needed to conduct our business, this may also increase the likelihood of additional taxes, duties, royalties, or similar burdens being placed on mining operations in an effort to generate municipal, state and federal revenues and boost economies. Please refer to the more detailed discussion of the risks related to COVID-19 on our business under the heading, "Risks Related to our Business - COVID-19 and Other Pandemics" on page 77.

Permits

We are required to obtain and renew governmental permits for the operation and expansion of existing operations or for the development, construction, and commencement of new operations. Obtaining or renewing the necessary governmental permits can be costly and involve extended timelines. We may not be able to obtain or renew permits that are necessary to our operations, or the cost to obtain or renew permits may exceed our expected recovery from a given property once in production.

Failure to obtain or maintain the necessary permits, or to maintain compliance with any permits, can result in fines, penalties, or suspension or revocation of the permits. Our ability to obtain and renew permits is contingent upon certain variables, some of which are not within our control, including, introduction of new permitting legislation, the interpretation of applicable requirements implemented by the permitting authority, the need for public consultation hearings or approvals, and political or social pressure.

As previously discussed, in July 2017, the Escobal mining license was suspended as a result of a court proceeding initiated by an NGO in Guatemala. After several decisions and appeals on the matter, a decision of the Constitutional Court of Guatemala was rendered on September 3, 2018, that the Escobal mining license would remain suspended until the Guatemala MEM completes an ILO 169 consultation. The consultation process is proceeding and the mine remains suspended and on care and maintenance.

In addition, in June 2017, PASG (at the time known as MSR) filed its annual request to renew the export credential with the Guatemala MEM. However, the Guatemala MEM did not renew the credential because its renewal had become contingent on the Supreme Court's reinstatement of the Escobal mining license. The credential therefore expired in August 2017 and has not been renewed.

Any unexpected delays, failure to obtain or renew permits, failure to comply with the terms of the permit, or costs associated with the permitting process could impede or prevent the development or operation of a mine, which could have material adverse impacts on our operations and profitability.

Operational Risks

The ownership, operation, and development of a mine or mineral property involves significant risks and hazards which even the combination of experience, knowledge, and careful evaluation may not be able to overcome.

These risks include:

- environmental and health hazards;
- industrial and equipment accidents, explosions and third party accidents;
- the encountering of unusual or unexpected geological formations;
- ground falls and cave-ins;
- flooding;
- labour disruptions;
- mechanical equipment, machinery, and facility performance problems;
- seismic events; and
- periodic interruptions due to inclement or hazardous weather conditions.

These risks could result in:

- damage to, or destruction of, mineral properties or production facilities;
- personal injury or death;
- environmental damage and liabilities;
- delayed production;
- labour disruptions;
- increased production costs;
- asset write downs;
- abandonment of assets;
- monetary losses;

- civil, regulatory or criminal proceedings, including fines and penalties, relating to health, safety and the environment;
- community unrest, protests, and legal proceedings at local or international levels;
- loss of social acceptance for our activities; and
- other liabilities.

Advancements in science and technology and in mine design, methods, equipment, and training have created the possibility of reducing some of these risks, but there can be no assurances that such occurrences will not take place and that they will not negatively impact us, our operations, and our personnel.

In addition to those other risks identified above, mining operations are also subject to ownership and operating risks relating to the valuable nature of the product being produced. Our Mexican operations have experienced armed robberies of doré within the past three years. We have instituted a number of additional security measures and a more frequent shipping schedule in response to these incidents. We have subsequently renewed our insurance policy to mitigate some of the financial loss that would result from such criminal activities in the future, however, a substantial deductible amount would apply to any such losses in Mexico.

Liabilities that we incur may exceed the policy limits of our insurance coverage or may not be insurable, in which case we could incur significant costs that could adversely impact our business, operations, profitability, or value.

Title to Assets

The validity of mining or exploration titles or claims or rights, which constitute most of our property holdings, can be uncertain and may be contested. Our properties may be subject to prior unregistered liens, agreements or transfers, indigenous land claims, or undetected title defects. In some cases, we do not own or hold rights to the mineral concessions we mine, including in Bolivia where the government has title to the concessions and our right to mine is contractual in nature. We have not conducted surveys of all the claims in which we hold direct or indirect interests and therefore, the precise area and location of such claims may be in doubt. No assurance can be given that applicable governments will not revoke or significantly alter the conditions of the applicable exploration and mining titles or claims, or that such exploration and mining titles or claims will not be challenged or impugned by third parties. We may be unable to operate our properties as expected, or to enforce our rights to our properties. Any defects in title to our properties, or the revocation of our rights to mine, could have a material adverse effect on our operations and financial condition.

For example, certain individuals have asserted community rights and land ownership over a portion of the La Colorada mine's surface lands in the Agrarian Courts of Mexico. They have also initiated a process before SEDATU in Zacatecas to declare such lands as national property. In 2019, we filed an amparo against such process and obtained an injunction to protect its ownership of these surface rights pending the outcome of the amparo and a further review by SEDATU. The final resolution of the amparo has not yet been determined by the Court. If we are unable to acquire or maintain access to those surface rights, there could be material adverse impacts on the La Colorada mine's future mining operations.

Similarly, in Guatemala, the land title system is not well developed and in many cases, relies on informal, hereditary or possessory rights. Such informal systems can create significant uncertainty in obtaining and maintaining ownership or rights of access, in defining precise locations or clear boundaries to properties, and substantiating rights if challenged. It is also difficult to establish the identity of parties who may have, or purport to have, an interest in such property. Many of the surface areas on which the Escobal mine is located are based on such informal rights. PASG is subject to a legal action by an individual claiming to own title to certain lands within the Escobal mine site that PASG had previously purchased. If we are unable to maintain existing lands and access, or to obtain new lands as required, there may be significant adverse impacts to the mine and its operation.

We operate in countries with developing mining laws, and changes in such laws could materially impact our rights or interests to our properties. We are also subject to expropriation risk in a number of countries in which we operate, including the risk of expropriation or extinguishment of property rights based on a perceived lack of development or advancement. There is limited activity at our Navidad property, for example, as a result of legal restrictions relating to mining, and there is a risk that the federal or provincial governments in Argentina are dissatisfied with a lack of advancement. Expropriation, extinguishment of rights and any other such similar governmental actions would likely have a material adverse effect on our operations and profitability.

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 land owners 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 rely on contracts or other similar rights to conduct surface activities.

We do not own most of the surface rights to the areas that overlie our mining concessions comprising the Morococha mine, nor to the areas where administration and operations are taking place, but were used by us pursuant to a usufruct agreement. These surface rights have been the subject of various disputes over the many years of operation at the Morococha mine. In June 2010, we reached an agreement with MCP that clearly defines each party's long-term surface rights. Under the terms of the agreement, Argentum is required to relocate the core Morococha facilities and the parties were to exchange certain mineral concessions and access rights in order for both parties to proceed with their planned activities. Pursuant to the agreement, the transfer of lands and rights and certain payment obligations would occur over a period of time and were dependent on meeting certain milestones. During the course of the agreement, however, certain adjustments have been made by the parties with respect to the timing of achieving milestones, in some cases informally, and additional adjustments will be required going forward. As of December 31, 2020, the Morococha facilities had not been relocated within the time period originally established in the agreement, and the parties had not yet agreed on a revised milestone for doing so. Although this agreement has diminished the risks associated with the Morococha land situation, there is no certainty that amended milestones can be agreed upon or achieved by the parties, that the relationship will continue in an amicable fashion, and that the future relocation and other costs associated with the commitments in the agreement will not render continued operations at the Morococha mine uneconomic.

Environmental Legislation, Regulations, and Hazards

We are subject to environmental laws and regulation in the various jurisdictions in which we operate that impose requirements or restrictions on our activities, such as mine development, water management, use of hazardous substances, reclamation, and waste transportation, storage and disposal. Compliance with environmental laws and regulations may require significant costs and may cause material changes or delays in our operations. There is no assurance that we will be in full compliance with environmental legislation at all times. Failure to comply with applicable environmental legislation could lead to adverse consequences, including expropriation, suspension or forced cessation of operations, revocation of or restrictions on permits, fines and other penalties, civil or regulatory proceedings, and, in certain circumstances, criminal proceedings. Furthermore, any such failures could increase costs and extend timelines, requiring additional capital expenditures and remedial actions. These negative consequences could significantly impact our financial condition, operations, and cash flow.

Future environmental legislation could also require stricter standards and mandate increased enforcement, fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees.

Environmental hazards may exist on our properties which are currently unknown to us. We may be liable for losses associated with such hazards, or may be forced to undertake extensive remedial cleanup action or to pay for governmental remedial cleanup actions, even in cases where such hazards have been caused by previous or existing owners or operators of the property, or by the past or present owners of adjacent properties, or by natural conditions. The costs of such cleanup actions may have a material adverse effect on our operations and profitability.

We are subject to environmental reclamation requirements to minimize long-term effects of mining exploitation and exploration disturbance by requiring the operating company to control possible deleterious elements and to re-establish, to some degree, pre-disturbance land forms and vegetation. These environmental reclamation requirements vary depending on the location of the property and the managing governmental agency. We are actively providing for and carrying out reclamation activities on our properties as required. In 2017, we commenced full scale closure and reclamation of the Alamo Dorado mine and have applied some of that experience to closure cost estimates for our other mines. Any significant environmental or social issues that may arise, however, could lead to increased reclamation expenditures and have a material adverse effect on our financial resources.

Our operations at the Dolores, Shahuindo and La Arena mines involve heap leaching and this method of mineral processing may be employed in the future at other mines and projects. Heap leaching often employs

sodium cyanide, a hazardous material, to leach metal-bearing ore and then collect the resulting metal-bearing solution. There is an inherent risk of unintended discharge of hazardous materials in the operation of leach pads. Should sodium cyanide escape from a leach pad and collection infrastructure or otherwise be detected in the downstream surface and ground water points, we could become subject to liability for remediation costs, which could be significant and may not be insured against. In addition, metal production could be delayed or halted to prevent further discharges and to allow for remediation. Such delays or cessations in production could be long-term or, in some cases, permanent, and any interference with production could result in a significant reduction in, or loss of, cash flow and value for us. While appropriate steps may be taken to prevent discharges of sodium cyanide and other hazardous materials into the ground water, surface water, and the downstream environment, there is inherent risk in the operation of leach pads and there can be no assurance that a release of hazardous materials would not occur.

We operate seven tailings storage facilities, have one closed filtered (dry) stack tailings facility at the Alamo Dorado mine, one filtered (dry) stack tailings facility at the Escobal mine, which is currently suspended, and operate a water dam at the Dolores mine. Between 2014 and 2019 we completed Independent Dam Safety Reviews for all our operating tailings facilities. The reviews found that the storage facilities design, construction, operation, maintenance, and monitoring at the tailings and water storage facilities are generally in line with the Canadian Dam Safety Guidelines, TSM Tailings Protocol, and known best practices. We continue to implement the TSM Tailings Protocol and Canadian Dam Safety Guidelines at all of our sites. The development and update of guidelines and standards, such the Canadian Dam Association Technical Bulletin on Tailings Dam Breach Analyses and the Global Industry Standard for Tailings Management, may change requirements, costs, and ultimate capacity of our tailings facilities. Design of all of our tailings and water storage facilities includes detailed consideration of stability under static and dynamic (pseudostatic) seismic conditions to ensure exceedance of relevant safety factors. The design criteria for the construction and stability analysis are defined from the consequence classification based on the dam breach analyses, and in 2021 we will be updating the dam breach analyses for consequence classification for Morococha and Huaron mines and reviewing their design criteria. While we believe that appropriate steps have been taken to prevent safety incidents, there are inherent risks involved with tailings facilities, including among other things, seismic activity, particularly in seismically active regions such as Peru, and the ability of field investigations completed prior to construction to detect weak foundation materials. There can be no assurance that a dam or other tailings facility safety incident will not occur and such an incident could have a material adverse effect on our operations and profitability.

Responsibility for the operation of a water treatment plant for the Kingsmill Tunnel and the tailings mitigation program at the Huascacocha tailings facility, near the Morococha mine, have been apportioned by Water Management Consultants Inc. in environmental studies among the Morococha mine and the mining companies operating neighbouring projects. The continued development of the Toromocho project by MCP may alleviate some of our funding requirements. There can be no guarantee, however, that our proportionate share of the costs of such environmental projects will not change and this may affect cash flow from the Morococha mine operations.

In addition to increasing regulatory requirements and operational risks, claims from local communities and NGOs with respect to real or alleged environmental incidents are becoming more common and may impact operations. In the case of legitimate claims, such actions could result in injunctions, suspensions, or other work stoppages, including revocation of permits, or significant fines or awards of damages. In other cases, we may be subject to frivolous or exaggerated claims made in an effort to obstruct or prevent mining operations or to affect our reputation. We have and continue to face such alleged claims in Guatemala related to the Escobal mine, as well as in Peru.

Community Action

The success of our business is, in many ways, dependent on maintaining positive and respectful relationships with communities in the areas where we work. There is an increasing level of public concern relating to the perceived effects of mining activities, particularly on communities and peoples impacted by such activities. 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. The manner with which we respond to civil disturbances and other activities can give rise to additional risks where

those responses are perceived to be inconsistent with international standards, including those with respect to human rights.

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, we settled, on behalf of Tahoe, the remaining four plaintiffs' claims and the British Columbia Supreme Court action was dismissed.

Since June 7, 2017, a group of protesters near the town of Casillas has blocked the primary highway that connects Guatemala City to San Rafael Las Flores and the Escobal mine that we recently acquired. Operations were reduced between June 8 and June 19, 2017 to conserve fuel, and on July 5, 2017, were ultimately 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 Mataquescuintla. The attendance at both roadblocks reduced during 2020 and access to the mine was less restricted. The attendance at both roadblocks was reduced during 2020 and access to the mine was less restricted. However, while we continue our efforts to regain trust and repair relationships, there is no guarantee that a positive resolution will be reached to have the roadblocks removed permanently to maintain free access to the mine.

Artisanal, or informal, mining is associated with a number of negative impacts, including environmental degradation, human rights abuse and funding of conflict. Additionally, effective local government administration is often lacking in the locations where these miners operate informally or illegally. These activities are largely unregulated and work conditions are often unsafe and present health risks to the artisanal miners and local communities, which while unrelated to our operations, may have a material impact on them. Informal miners are active on land adjacent to our Shahuindo operation. These miners, represented by the Asociación de Mineral Artesanal San Blas ("AMASBA"), are in dialogue with the Peruvian government to formalize their operations. We support formalization and are collaborating with the government, local authorities and AMASBA in this regard.

Pan American is continuing with the implementation of TSM, a program designed to enhance our community engagement processes, drive world-class environmental practices and reinforce our commitment to the safety and health of our employees and surrounding communities. As part of TSM, we have implemented response mechanisms which help us manage our social risks by better understanding and responding to community questions or concerns around the perceived or actual impacts of our activities. While we are committed to operating in a responsible manner, there is no assurance that our efforts will be successful at mitigating adverse impacts to our operations, and we may suffer material consequences to our business, including among other things, delays and closures, increased costs, and significant reputational damage.

From time to time, individuals or communities may allege that our activities have impacted or are impacting their human rights. For example, we are currently in discussions with certain individuals regarding a 2015 relocation of worker housing at our La Colorada project. This is being done under the observations of the Office of the United Nations High Commissioner on Human Rights in Mexico. In Canada, recent jurisprudence has permitted foreign claimants to bring legal actions in relation to alleged human rights violations and tort claims which may have occurred in their home country. This includes the adoption of international customary law principles as actionable torts in Canada. In addition, international bodies, such as the Inter-American Commission and the Inter-American Court of Human Rights, may adopt precautionary measures or make orders for member states in respect of human rights violations that could materially impact our operations. In 2019 we established a *Global Human Rights Policy*, which sets out our commitment to respect human rights. We also appointed a human rights officer. To align with international best practices, we have conducted a gap assessment of our security practices against the requirements of the Voluntary Principles on Security and Human Rights and UNICEF's Child Rights and Security Checklist at our three operations with armed security forces: La Colorada and Dolores in Mexico, and Escobal in Guatemala. As part of our commitment to driving global sustainable development and contributing to the United Nations Sustainable Development Goals, we became signatories to the United Nations Global Compact in July 2020. As a signatory, we will annually report our progress beginning in 2021 on embedding the United Nations Global Compact Principles into business operations. These initiatives were designed, in part, to further reduce the risks of alleged human rights violations. However, there is no assurance that claims of human rights violations will not be asserted against us and we may suffer material consequences to our business, including among other things, damages awards, delays and closures, increased costs, and significant reputational damage.

Developments Regarding Indigenous Peoples

Some of our operations are near areas presently or previously inhabited or used by indigenous peoples, or have communities nearby. There are many national and international laws, regulations, conventions, codes and other instruments dealing with the rights of indigenous peoples that impose obligations on governments and entities. Many of these are complex and interwoven in application. These may include a mandate that government consult with indigenous communities surrounding our projects and mines regarding actions affecting local stakeholders, prior to granting us mining rights, permits or approvals. Applicable conventions, such as the ILO Convention 169 which has been ratified by Argentina, Peru and Guatemala, is an example of such an international convention and one that is presently impacting our operations in Guatemala where the Escobal mine has been suspended pending completion of an ILO 169 consultation process.

The United Nations Declaration on the Rights of Indigenous Peoples ("UNDRIP") was negotiated over a 24-year period with indigenous peoples, member states and UN experts and was adopted by the UN General Assembly in September 2007. In December 2020 the Canadian government introduced legislation to align and harmonize Canadian laws with UNDRIP. The substantive impact of UNDRIP on each member states' obligations to indigenous peoples remains uncertain, particularly with respect to the principle of free, prior and informed consent. Such requirements under UNDRIP could impact our operations and our ability to develop new operations.

In Canada, our Timmins West and Bell Creek operations engaged in consultation processes with local First Nations communities, and Lake Shore is a party to IBAs with certain local First Nation communities which outlines a framework for the ongoing relationship between the parties, including with respect to consultation.

New or amended laws, regulations and conventions respecting the rights of indigenous peoples, including with respect to the acquisition and use of lands, may alter decades old arrangements or agreements made by prior owners of our mines and properties, or even those made by us in more recent years. There can be no guarantee that we have entered into all agreements with indigenous peoples in accordance with the laws and international standards and norms governing such relationships or that future laws and actions will not have a material adverse effect on our rights or ability to explore or mine, or on our financial position, cash flow, and results of operations. Furthermore, it is not uncommon for indigenous peoples to challenge agreements or arrangements previously entered into for various reasons. Public opposition, including opposition by NGOs, to mining activities has also increased in recent years, in part due to the perceived effects of those activities on local communities and on indigenous peoples.

If we cannot maintain an agreement or positive relationship with indigenous peoples in respect of our operations, there may be significant disruptions in our operations and activities, we may be subject to legal or administrative proceedings, and we may be precluded from operating, or from continuing to operate, in such areas. There could also be significant harm to our reputation. The risks associated with operating or conducting activities in or near areas presently or previously inhabited by indigenous peoples could further impact our ability to acquire or advance development projects and complete, or realize benefits from, future acquisitions.

COVID-19 and Other Pandemics

Since the outbreak of the coronavirus (COVID-19) in late 2019, it has spread into areas where we have operations and where our offices are located. Government efforts to curtail the spread of COVID-19 resulted in the temporary suspensions of our operations in Mexico, Peru, Argentina and Bolivia, and we have reduced throughput at our Canadian operations in Timmins in order to enhance physical distancing and protect our personnel and the community. The spread of COVID-19 has impacted our employees and contractors, not only as it relates to potential health concerns, but also in terms of limitations on movement, availability of food and other goods, and personal well-being, among others. Our suppliers and service providers have also been impacted.

While COVID-19 has already had significant, direct impacts on our operations, our business, our workforce, and our production, the extent to which COVID-19 will continue to impact our operations will depend on future developments which are highly uncertain and cannot be predicted with confidence. These future developments include, but are not limited to, the duration of the outbreak, new information that may emerge concerning the severity of COVID-19, and the actions taken to contain COVID-19 or treat it. The impact of governmental restrictions and health and safety protocols could improve or worsen relative to our assumptions, depending on how each jurisdiction manages potential outbreaks of COVID-19, the development and adequate supply of vaccines, and the roll-out of vaccination programs in each jurisdiction. We assume operations will continue to be impacted by comprehensive COVID-19 protocols in 2021, which would increase costs and restrict throughput levels, especially at our underground mines. Our ability to conduct exploration and development programs was

also impacted in 2020 due to COVID-related restrictions, protocols and travel restrictions, and we anticipate that this impact will also be felt in 2021. Our ability to continue with our operations and activities, or to successfully maintain our operations on care and maintenance if so required, or to restart or ramp-up any such operations efficiently or economically, or at all, is unknown.

Moreover, the continued presence of, or spread, of COVID-19, and any future emergence and spread of COVID-19 mutations or other pathogens, globally would likely have material adverse effect on both global and regional economies, including those in which we operate, as we have seen already. Such effects would not only affect our business and results of operations, but also the operations of our suppliers, contractors and service providers, including smelter and refining service providers, and the demand for our production. COVID-19 could also negatively impact stock markets, including the trading price of our shares, adversely impact our ability to raise capital, cause continued interest rate volatility and movements that could make obtaining financing or refinancing our debt obligations more challenging or more expensive (if such financing is available at all), and result in any operations affected by coronavirus becoming subject to quarantine or shut down. Any of these developments, and others, could have a material adverse effect on our business and results of operations.

Exploration and Development Risks

The long-term operation of our business and its profitability is dependent, in part, on the cost and success of our exploration and development programs. Mineral exploration and development is highly speculative and involves significant risks. Few properties that are explored are ultimately developed into producing mines. There is no assurance that our mineral exploration and development programs will result in discoveries of economic quantities of mineralization that are necessary for a property to be brought into commercial production. The commercial viability of a mineral deposit, once discovered, is also dependent upon a number of factors, including, among other things, (i) the particular attributes of the deposit, such as size, grade, and metallurgy; (ii) interpretation of geological data; (iii) feasibility studies; (iv) proximity to infrastructure and availability of labour, power, and water; (v) metal prices; (vi) foreign currency exchange rates; and (vii) government regulations, including regulations relating to development, taxation, royalties, import and export, and environmental protection.

The actual operating results of our projects may differ materially from those we had anticipated due to these and other factors, many of which are beyond our control. There can be no assurance that our acquisition, exploration, and development programs will yield new mineral reserves to replace or expand current mineral reserves, or that they will result in additional production. Unsuccessful exploration or development programs could have a material adverse effect on our operations and profitability.

Imprecision in Mineral Reserve and Mineral Resource Estimates

Our mineral reserves and mineral resources are estimates. No assurances can be given that the estimated levels of mineral reserves or mineral resources are accurate, or that the estimates will result in material being produced or processed profitably. These estimates are expressions of judgment based on knowledge and experience, and are based on assumptions and interpretation of available geological, geochemical and operational data and information. Valid estimates made at a given time may significantly change when new information becomes available. It may take many years from the initial phase of drilling before production occurs, and during that time, the economic feasibility of our projects may change and may ultimately prove unreliable.

Fluctuations in the market price of silver, gold and other metals, as well as increased capital or production costs or reduced recovery rates, may render our mineral reserves uneconomic to develop for a particular project or result in a reduction of mineral reserves. No assurances can be given that any mineral resource estimate will ultimately be reclassified as proven or probable mineral reserves or that mineralization can be mined or processed profitably. Inferred mineral resources have a great amount of uncertainty as to their existence and as to their economic and legal feasibility. Mineral resource estimates may also be recalculated based on actual production experience. The evaluation of mineral reserves or mineral resources is influenced by economic and technological factors, which may change over time. If our mineral reserve or mineral resource figures are reduced in the future, this could have an adverse impact on Pan American's future cash flows, earnings, results of operations, and financial condition.

This AIF and the documents incorporated by reference herein have been prepared and disclosed in accordance with the requirements of Canadian securities laws that differ from the requirements of United States

securities laws. Please refer to the section, "Cautionary Note to U.S. Investors Concerning Estimates of Mineral Reserves and Mineral Resources" on page 9.

Production and Cost Estimates

We prepare estimates of future production and future production costs for our operations. No assurance can be given that production and cost estimates will be achieved. These production and cost estimates are based on many factors and assumptions, including: the accuracy of mineral reserve estimates; ground conditions and physical characteristics of ores, such as hardness and the presence or absence of particular metallurgical characteristics; equipment and mechanical availability; labour availability and productivity; access to the mine; facilities and infrastructure; sufficient materials and supplies on hand; and the accuracy of estimated rates and costs of mining and processing, including the cost of human and physical resources required to carry out our activities. Failure to achieve production or cost estimates, or increases in costs, could have an adverse impact on our future cash flows, earnings, results of operations, and financial condition.

Actual production and costs may vary from estimates for a variety of reasons, including actual ore mined varying from estimates of grade, tonnage, dilution and metallurgical and other characteristics; short-term operating factors relating to the mineral reserves**,** such as the need for sequential development of orebodies and the processing of new or different ore grades; and risks and hazards associated with mining. In addition, there can be no assurance that silver recoveries or other metal recoveries in small scale laboratory tests will be duplicated in larger scale tests under on-site conditions or during production, or that the existing known and experienced recoveries will continue. Costs of production may also be affected by a variety of factors, including changing stripping ratios, ore grade metallurgy, labour costs and productivity, costs of supplies and services (such as, for example, fuel and power), general inflationary pressures, and currency exchange rates. Failure to achieve production estimates could have an adverse impact on our future cash flows, earnings, results of operations, and financial condition.

Infrastructure

Mining, processing, development, and exploration activities depend, to one degree or another, on adequate infrastructure. Reliable roads, bridges, power, and water supply are important determinants for capital and operating costs, and sufficient and functional processing equipment and facilities are critical to our operations. The lack of availability or the delay in the availability of any one or more of these items could prevent or delay the development of our projects, result in the failure to achieve the anticipated production volume, and increase the construction costs and ongoing operating costs associated with our projects and operations. Similarly, continued improvements or replacement of existing infrastructure may require high capital investments and involve significant delays. In addition, unusual weather phenomena, sabotage, government, or other interference in the maintenance or provision of such infrastructure could adversely affect our operations and profitability.

Replacement of Reserves

The La Colorada, Dolores, Huaron, Morococha, Shahuindo, La Arena, Timmins West, Bell Creek, San Vicente and Manantial Espejo (including COSE and Joaquin) mines accounted for all of our production in 2020. Current life-of-mine plans provide for a defined production life for mining at each of our mines. For example, active mining at the Alamo Dorado mine ended in 2017 and the mine has transitioned to a reclamation phase. There is no assurance that any of our green field or near mine exploration projects will be successful, and substantial expenditures are required to establish mineral reserves. If our mineral reserves are not replaced either by the development or discovery of additional mineral reserves and/or extension of the life-of-mine at our current operating mines or through the acquisition or development of additional producing mines, this could have an adverse impact on our future cash flows, earnings, results of operations, and financial condition, and this may be compounded by requirements to expend funds for reclamation and decommissioning.

Trading Activities and Credit Risk

The zinc, lead, and copper concentrates produced by us are sold through long-term supply arrangements to metal traders or integrated mining and smelting companies. The terms of the concentrate contracts may require us to deliver concentrate that has a value greater than the payment received at the time of delivery, thereby introducing us to credit risk of the buyers of our concentrates. Should any of these counterparties not honour supply arrangements, or should any of them become insolvent, we may incur losses for products already shipped

and be forced to sell our concentrates in the spot market or we may not have a market for our concentrates and therefore our future operating results may be materially adversely impacted.

As at December 31, 2020, we had receivable balances associated with buyers of our concentrates of $35.1 million (2019 - $48.8 million) and receivable balances associated with buyers of its doré of $nil (2019 - $17.5 million). The vast majority of our concentrate is sold to a limited number of concentrate buyers.

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, 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 and we are pursuing a claim to collect damages, but, like many other creditors, we are also subject to alleged preference claims against us. As at December 31, 2020, we had approximately $61.8 million (2019 - $58.2 million) contained in precious metal inventory at refineries. We maintain insurance coverage against the loss of precious metals at our mine sites and in-transit to refineries.

Refined silver and gold is sold in the spot market to various bullion traders and banks. Credit risk may arise from these activities if we are not paid for metal at the time it is delivered, as required by spot sale contracts.

We maintain trading facilities with several banks and bullion dealers for the purposes of transacting our trading activities. None of these facilities are subject to margin arrangements. Our trading activities can expose us to our counterparties' credit risk to the extent that our trading positions have a positive mark-to-market value.

Supplier advances for products and services yet to be provided are a common practice in some jurisdictions in which we operate. These advances represent a credit risk to us to the extent that suppliers do not deliver products or perform services as expected. As at December 31, 2020, we had made $8.2 million of supplier advances (2019 - $3.4 million), which are reflected in "Trade and other receivables" on Pan American's balance sheet.

Management constantly monitors and assesses the credit risk resulting from our concentrate sales, refining arrangements, and commodity contracts. Furthermore, management carefully considers credit risk when allocating prospective sales and refining business to counterparties. In making allocation decisions, management attempts to avoid unacceptable concentration of credit risk to any single counterparty.

From time to time, we may invest in equity securities of other companies. Just as investing in Pan American is inherent with risks such as those set out in this AIF, by investing in other companies we will be exposed to the risks associated with owning equity securities and those risks inherent in the investee companies.

Taxation Risks

In addition to the risks relating to taxation discussed under the heading "Risks Related to Our Business – Governmental Regulation", we are also exposed to other tax related risks. In assessing the probability of realizing income tax assets recognized, we make estimates related to expectations of future taxable income, applicable tax planning opportunities, expected timing of reversals of existing temporary differences and the likelihood that tax positions taken will be sustained upon examination by applicable tax authorities. In making its assessments, we give additional weight to positive and negative evidence that can be objectively verified. Estimates of future taxable income are based on forecasted cash flows from operations and the application of existing tax laws in each jurisdiction. We consider relevant tax planning opportunities that are within our control, are feasible, and within management's ability to implement. Examination by applicable tax authorities is supported based on individual facts and circumstances of the relevant tax position examined in light of all available evidence. Where applicable tax laws and regulations are either unclear or subject to ongoing varying interpretations, it is reasonably possible that changes in these estimates can occur that materially affect the amounts of income tax assets recognized. Also, future changes in tax laws could limit us from realizing the tax benefits from the deferred tax assets. We reassess unrecognized income tax assets at each reporting period.

Exchange Rate Risk

We report our financial statements in USD; however, we operate in jurisdictions that utilize other currencies. As a consequence, the financial results of our operations, as reported in USD, are subject to changes in the value of the USD relative to local currencies. Since our sales are denominated in USD and a portion of our operating costs and capital spending are in local currencies, we are negatively impacted by strengthening local currencies relative to the USD and positively impacted by the inverse.

From time to time, we mitigate part of this currency exposure by accumulating local currencies, entering into contracts designed to fix or limit our 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. Pan American held cash and short-term investments of $118.0 million in CAD, $1.0 million in MXN, $13.9 million in PEN, $7.2 million in ARS, $0.5 million in QTZ and $0.6 million in BOB as at December 31, 2020. For the year ended December 31, 2020, we recorded gains of $1.6 million (2019 - gains of $1.0 million), losses of $2.2 million (2019 - gains of $0.7 million), and losses of $0.6 million (2019 - gains of $0.3 million) on MXN, PEN, and CAD derivative contracts, respectively.

As at December 31, 2020, Pan American had outstanding positions on $51.0 million in foreign currency exposure of MXN purchases and $45.6 million of PEN purchases. The MXN positions had weighted average USD put and call exchange rates of $21.29 and $30.43, respectively, expiring between January 2021 and December 2021. The PEN positions had weighted average USD put and call exchange rates of $3.50 and $3.67, respectively, expiring between January 2021 and December 2021.

Our balance sheet contains various monetary assets and liabilities, some of which are denominated in foreign currencies. Accounting convention dictates that these balances are translated at the end of each period, with resulting adjustments being reflected as foreign exchange gains or losses on our income statement.

In addition to the foregoing, governmental restrictions and controls relating to exchange rates also impact our operations. In Argentina, for example, the government has at times established official exchanges rates that were significantly different than the unofficial exchange rates more readily utilized locally to determine prices and value. Our investments in Argentina are primarily funded from outside of the country, and therefore conversion of foreign currencies, like USD, at the official exchange rate has had the effect of reducing purchasing power and substantially increasing relative costs in an already high inflationary market. Maintaining monetary assets in ARS also exposes us to the risks of ARS devaluation and high domestic inflation.

Please refer to the 2020 MD&A for a detailed sensitivity analysis of the effect of changes in the exchange rates of certain currencies against the USD on anticipated cost of sales for 2021.

Liquidity Risk

Liquidity risk is the risk that we will not be able to meet our financial obligations as they come due. The volatility of the metals markets can impact our ability to forecast cash flow from operations. We must maintain sufficient liquidity to meet our short-term business requirements, taking into account our anticipated cash flows from operations, our holdings of cash and cash equivalents, and committed loan facilities.

We manage our liquidity risk by continuously monitoring forecasted and actual cash flows. We have in place a rigorous reporting, planning and budgeting process to help determine the funds required to support our normal operating requirements on an ongoing basis and our expansion plans. We continually evaluate and review capital and operating expenditures in order to identify, decrease, and limit all non-essential expenditures.

We are required to use a portion of our cash flow to service principal and interest on debt, which will limit the cash flow available for other business opportunities. We also maintain and enter into intercompany credit arrangements with our subsidiaries in the normal course. Our ability to make scheduled principal payments, pay interest on or refinance our indebtedness depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Unexpected delays in production, the suspension of our mining licenses, or other operational problems could impact our ability to service the debt and make necessary capital expenditures when the debt becomes due. If we are unable to generate such cash flow to timely repay any debt outstanding, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to

engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

Limited Supplies and Supply Chain Disruptions

Our operations depend on an uninterrupted supply of reagents (including cyanide at some operations), production inputs, and other supplies and resources such as skilled personnel. Supply may be interrupted due to a shortage or the scarce nature of inputs, especially with regard to chemical reagents. Supply might also be interrupted due to transportation and logistics associated with the remote location of some of our operations, and government restrictions or regulations which delay importation of necessary items. Any interruptions to the procurement and supply of reagents, production inputs and other supplies, or the availability of skilled personnel could have an adverse impact on our future cash flows, earnings, results of operations, and financial condition.

Competitive Conditions

The mining industry is very competitive, particularly with respect to properties that produce, or are capable of producing, silver, gold, and other metals. Mines have limited lives and, as a result, Pan American continually seeks to replace and expand mineral reserves through the acquisition of new properties. In addition, there is a limited supply of desirable mineral lands available in areas where we would consider conducting exploration and/or production activities. Because we face strong competition for new properties from other mining companies, some of which have greater financial resources than we do, we may be unable to acquire attractive new mining properties on terms that we consider acceptable.

Competition for resources is intense, particularly affecting the availability of manpower, drill rigs, mining equipment, and production equipment. Competition in the mining business for limited sources of capital could adversely impact our ability to acquire and develop suitable silver mines, silver developmental projects, silver producing companies, or properties having significant exploration potential. As a result, there can be no assurance that our acquisition and exploration programs will yield new mineral reserves to replace or expand current mineral reserves, or that we will able to maintain production levels in the future.

Our competitive position is largely determined by our costs compared to other producers throughout the world and our ability to maintain our financial integrity through the lows of the metal price cycles. Costs are governed to a large extent by the location, grade, and nature of mineral reserves as well as by operating and management skills. In contrast with diversified mining companies, we focus on silver production, development, and exploration, and are therefore subject to unique competitive advantages and disadvantages related to the price of silver and to a lesser extent, the price of gold and base metal by-products. If silver prices substantially increase, we will be in a relatively stronger competitive position than diversified mining companies that produce, develop, and explore for other minerals in addition to silver. Conversely, if silver prices substantially decrease, we may be at a competitive disadvantage to diversified mining companies.

Employee Recruitment, Retention and Human Error

Recruiting and retaining qualified personnel is critical to our success. We are dependent on the services of key executives including Pan American's President and Chief Executive Officer and other highly skilled and experienced executives and personnel focused on managing our interests. The number of persons skilled in acquisition, exploration, and development of mining properties is limited and competition for such persons is intense. As our business activity grows, we will require additional key financial, administrative, and mining personnel as well as additional operations staff. There can be no assurance that we will be successful in attracting, training, and retaining qualified personnel as competition for persons with these skill sets increases. If we are not successful in attracting, training, and retaining qualified personnel, the efficiency of our operations could be impaired, which could have an adverse impact on Pan American's future cash flows, earnings, results of operations, and financial condition.

Even when efforts to attract and retain qualified personnel and consultants to manage our interests are successful, people are fallible and human error and mistakes could result in significant uninsured losses to us. These could include, but are not limited to, loss or forfeiture of mineral claims or other assets for non-payment of fees or taxes, erroneous or incomplete filings or non-fulfillment of other obligations, significant tax liabilities in connection with any tax planning effort we might undertake or mistakes in interpretation and implementation of tax laws and practices, and legal claims for errors or mistakes by our personnel.

Employee Relations

Our employees and contractors are free to pursue collective bargaining and unions have been established at many of our operations. Although we have reached agreements with our various unions and place significant emphasis on maintaining positive relationships with the unions and employees, we have experienced labour strikes and work stoppages in the past. Should they occur, some labour strikes and work stoppages have the potential to materially affect our operations and thereby adversely impact our future cash flows, earnings, production, and financial conditions.

Economic Dependence

We have 26 customers that account for 100% of our concentrate and silver and gold sales revenue. We had 7 customers that accounted for 19%, 17%, 12%, 11%, 7%, 7%, and 5% of total sales in 2020. The loss of certain of these customers or curtailment of purchases by such customers could have a material adverse effect on our results of operations, financial condition, and cash flows.

General Economic Conditions

General economic conditions may adversely affect our growth, profitability and ability to obtain financing. Events in global financial markets in the past several years have had a profound impact on the global economy. Many industries, including the silver and gold mining industry, have been and continue to be impacted by these market conditions. Some of the key impacts of the current financial market turmoil include contraction in credit markets resulting in a widening of credit risk, devaluations, high volatility in global equity, commodity, foreign exchange and precious metal markets and a lack of market confidence and liquidity. A continued or worsened slowdown in the financial markets or other economic conditions, including but not limited to, consumer spending, employment rates, business conditions, inflation, fuel and energy costs, consumer debt levels, lack of available credit, the state of the financial markets, interest rates and tax rates, may adversely affect our growth, profitability and ability to obtain financing. A number of issues related to economic conditions could have a material adverse effect on our business, financial condition and results of operations, including:

- contraction in credit markets could impact the cost and availability of financing and our overall liquidity;
- the volatility of silver, gold and other metal prices would impact our revenues, profits, losses and cash flow;
- recessionary pressures could adversely impact demand for our production;
- volatile energy, commodity and consumables prices and currency exchange rates could impact our production costs; and
- the devaluation and volatility of global stock markets could impact the valuation of our equity and other securities.

As noted, COVID-19 has had dramatic impacts on many countries and on the global economy. The ongoing efforts against the spread of COVID-19, including with respect to recent mutations, will likely continue to result in governmental restrictions that will impact economies around the world, reduce the availability of workforces, and drive up consumer costs for supplies and services. It is uncertain whether vaccines will be successful in combating the virus, and there remains concerns that vaccines may not be available or distributed adequately. The presence of COVID-19 and its continued spread will likely have ongoing negative impacts on our business and financial performance, and such impacts could be material.

Compliance

We are subject to complex laws and regulatory regimes that differ in the various jurisdictions in which we operate and are sometimes extra-jurisdictional in application. Ensuring that such laws and regulatory requirements are understood and followed by our personnel is difficult and we may inadvertently fail to comply with such laws and requirements or they may be contravened by our personnel. We have established programs, policies, controls, and training to reduce and mitigate risks in certain areas, including anti-corruption compliance. In this respect, we have adopted a Global Code of Ethical Conduct and a Global Anti-Corruption Policy, developed a training program, implemented internal controls to identify potential risks, and taken other steps to reduce the risk of non-compliance with applicable anti-corruption laws, including in the United States and Canada. However, there is no guarantee such programs, policies, controls or training will prevent violations of the law, particularly by individual employees or agents. Violations of such laws, particularly those relating to corruption, could lead to the imposition of substantial fines, penalties or other civil or criminal prosecution or sanctions, and could severely damage our

reputation. Such fines, penalties, and sanctions, and any damage to our reputation, could have a material adverse effect on our business.

Climate Change

There is significant evidence of the effects of climate change on our planet and an intensifying focus on addressing these issues. We recognize that climate change is a global challenge that may have both favorable and adverse affects on our business in a range of possible ways. Mining and processing operations are energy intensive and result in a carbon footprint either directly or through the purchase of fossil-fuel based electricity. As such, we are impacted by current and emerging policy and regulation relating to green house gas emission levels, energy efficiency, and reporting of climate-change related risks. While some of the costs associated with reducing emissions may be offset by increased energy efficiency, technological innovation, or the increased demand for our metals as part of technological innovations, the current regulatory trend may result in additional transition costs at some of our operations. Governments are introducing climate change legislation and treaties at the international, national, and local levels, and regulations relating to emission levels and energy efficiency are evolving and becoming more rigorous. Current laws and regulatory requirements are not consistent across the jurisdictions in which we operate, and regulatory uncertainty is likely to result in additional complexity and cost in our compliance efforts. Public perception of mining is, in some respects, negative and there is increasing pressure to curtail mining in many jurisdictions as a result, in part, of perceived adverse effects of mining on the environment. Concerns around climate change may also affect the market price of our shares as institutional investors and others may divest interests in industries that are thought to have more environmental impacts. While we are committed to operating responsibly and reducing the negative effects of our operations on the environment, our ability to reduce emissions, energy and water usage by increasing efficiency and by adopting new innovation is constrained by technological advancement, operational factors and economics. Adoption of new technologies, the use of renewable energy, and infrastructure and operational changes necessary to reduce water usage may also increase our costs significantly. Concerns over climate change, and our ability to respond to regulatory requirements and societal pressures, may have significant impacts on our operations and on our reputation, and may even result in reduced demand for our products.

The physical risks of climate change could also adversely impact our operations. These risks include, among other things, extreme weather events, resource shortages, changes in rainfall and in storm patterns and intensities, water shortages, changing sea levels and extreme temperatures. Climate-related events such as mudslides, floods, droughts and fires can have significant impacts, directly and indirectly, on our operations and could result in damage to our facilities, disruptions in accessing our sites with labour and essential materials or in shipping products from our mines, risks to the safety and security of our personnel and to communities, shortages of required supplies such as fuel and chemicals, inability to source enough water to supply our operations, and the temporary or permanent cessation of one or more of our operations. There is no assurance that we will be able to anticipate, respond to, or manage the risks associated with physical climate change events and impacts, and this may result in material adverse consequences to our business and to our financial results.

Information and Cyber Security

The secure processing, maintenance and transmission of information and data is critical to our business. Furthermore, we and our third-party service providers collect and store sensitive data in the ordinary course of our business, including personal information of our employees, as well as proprietary and confidential business information relating to ourselves and in some cases, our customers, suppliers, investors and other stakeholders. With the increasing dependence and interdependence on electronic data communication and storage, including the use of cloud-based services and personal devices, we are exposed to evolving technological risks relating to this information and data. These risks include targeted attacks on our systems or on systems of third parties that we rely on, failure or non-availability of a key information technology systems, or a breach of security measures designed to protect our systems. While we employ security measures in respect of our information and data, including implementing systems to monitor and detect potential threats, the performance of periodic audits, and penetration testing, we cannot be certain that we will be successful in securing this information and data and there may be instances where we are exposed to malware, cyber-attacks or other unauthorized access or use of our information and data. Any data breach or other improper or unauthorized access or use of our information could have a material adverse effect on our business and could severely damage our reputation, compromise our network or systems and result in a loss or escape of sensitive information, a misappropriation of assets or incidents of fraud, disrupt our normal operations, and cause us to incur additional time and expense to remediate and improve our information systems. For example, in 2020, a silver concentrate customer, on the basis of a fraudulent

email received referencing the concentrate delivery details from Bolivia and the precise payment amounts due, made payment for the concentrate shipment into an unknown bank account, which monies have to date not been recovered and Pan American has not received further replacement payment. In addition, we could also be subject to legal and regulatory liability in connection with any such cyber-attack or breach, including potential breaches of laws relating to the protection of personal information.

Stakeholder Confidence

Our business and operations require us to develop and maintain strong and trusting relationships with key stakeholders, including local communities, indigenous peoples, governments and other groups and institutions. Poor management of these relationships, inadequate attention to matters of importance to these stakeholders, and operating in a manner that is perceived as unethical or damaging to the environment or to people could result in an erosion of trust and confidence in us and have negative impacts on our business and our financial and operating results. It can also affect our reptuation more broadly, including with shareholders, government bodies, NGOs and other interest groups, the media, and the general public. A loss of trust and confidence and negative public opinion could impact our ability to obtain permits, licenses and other approvals, impede our efforts to find growth opportunities, materially increase our costs and expenses, result in legal claims and challenges, decrease the price of our shares and create negative market sentiment, all of which could have material impacts on our business and profitability. In 2020, the importance of ESG perfomance requirements, standards and reporting has increased significantly across all stakeholder groups. While the Company has in place numerous programs and commitments with respect to ESG, there is no assurance that the Company will be able to adequately address all ESG pressures and potential requirements to maintain stakeholder confidence.

Acquisitions and Integration

An element of our business strategy is to make selected acquisitions. For example, we completed the acquisition of Tahoe on February 22, 2019, and spent significant time and effort on integrating the Tahoe operations and workforce during the remainder of 2019 and into 2020. Over our history, we have also completed a number of other important acquisitions, including: the La Colorada mine in 1998; Corner Bay (the Alamo Dorado mine) in 2003; Argentum (the Morococha mine) in 2004; the remaining 50% interest in the Manantial Espejo project in 2006; an additional 40% interest in PASB in respect of the San Vicente mine in May 2007; Aquiline (the Navidad property) in 2010; Minefinders (the Dolores mine) in 2012; and in 2017, the Joaquin and COSE properties in Argentina. We expect to continue to evaluate acquisition opportunities on a regular basis and intend to pursue those opportunities that we believe are in our long-term best interests. The success of our acquisitions will depend upon a number of factors, including the adequacy, completeness, analysis and interpretation of information obtained during due diligence, our ability to effectively manage the integration and operations of entities once we complete an acquisition, and our ability, in some cases, to make improvements or advancements that we anticipated. The process of managing acquired businesses may involve unforeseen difficulties and risks, and may require a disproportionate amount of management resources and expenditures. There can be no assurance that we will be able to successfully manage the integration and operations of businesses we acquire, or that the anticipated benefits of our acquisitions will be realized.

In addition to acquisitions, we periodically enter into joint venture, option and similar arrangements which, among other things, also require an investment in time and capital, and are subject to risks associated with due diligence matters. We also occasionally make investments in other mining companies, such as our investments in Maverix and in New Pacific Metals Corp. Such arrangements may depend, in part, on other parties and may be speculative in nature. There is no guarantee that any of these arrangements will be successful or that we will recover any capital or other investments made in relation thereto.

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 IFRS. Management assesses the effectiveness of our internal control over financial reporting based on the criteria set forth in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). We also engage an independent registered

public accounting firm to audit and provide independent opinions on the effectiveness of our internal control over financial reporting.

We may fail to achieve and maintain the adequacy of our internal control over financial reporting as such standards are modified, supplemented, or amended from time to time, and we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal control over financial reporting. Also, 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. No evaluation can provide complete assurance that our internal control over financial reporting will prevent or detect misstatements on a timely basis, or detect or uncover all failures of persons employed by us to disclose material information otherwise required to be reported. The effectiveness of our control and procedures could also be limited by simple errors or faulty judgments. In addition, as we continue to expand, the challenges involved in implementing appropriate internal control over financial reporting will increase and will require that we continue to improve our internal control over financial reporting.

Our failure to satisfy these requirements on a timely basis could result in the loss of investor confidence in the reliability of our financial statements, which in turn could harm our business and negatively impact the trading price of our shares or market value of our other securities. In addition, any failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our operating results or cause us to fail to meet our reporting obligations. There can be no assurance that we will be able to remediate material weaknesses, if any, identified in future periods, or maintain all of the controls necessary for continued compliance, and there can be no assurance that we will be able to retain sufficient skilled finance and accounting personnel, especially in light of the increased demand for such personnel among publicly traded companies. Future acquisitions of companies may provide us with challenges in implementing the required processes, procedures and controls in our acquired operations. Acquired companies may not have disclosure controls and procedures or internal control over financial reporting that are as thorough or effective as those required by securities laws currently applicable to us.

Claims and Legal Proceedings

We are subject to various claims and legal proceedings covering a wide range of matters that arise in the ordinary course of business activities.

Many of these claims are from current or ex-employees, or employees of former or current owners of our operations such as the Quiruvilca-related claims in Peru, which could in the aggregate, be of significant value, and include alleged improper dismissals, workplace illnesses, such as silicosis, and claims for additional profit-sharing and bonuses in prior years.

We may also become subject to class action lawsuits. For example, in mid-2017, Tahoe, which was acquired by us in late February 2019, and certain of its former directors and officers became the subject of three purported class action lawsuits filed in the United States that center primarily around alleged misrepresentations. These U.S. class action lawsuits were later consolidated into one class action suit that is ongoing in Nevada. In October 2018, Tahoe learned that a similar proposed class action lawsuit had been filed against Tahoe and its former chief executive officer in the Superior Court of Ontario. These lawsuits seek significant damages. We have disputed the allegations made in these suits, however the outcomes are not determinable at this time.

We may also be subject to proceedings in our commercial relationships. In November 2018, 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 and we are pursuing a claim to collect damages. However, like many other creditors, we are now also subject to alleged preference claims against us by the litigation trustee in the Republic bankruptcy. The trustee has alleged that certain transfers that occurred in the three month period leading up to the bankruptcy are avoidable pursuant to applicable bankruptcy laws and that such amounts received by us from Republic are subject to recovery by the bankrupt's estate. While we believe that we have defenses to such allegations, if we are unsuccessful in our defense of these claims, we may be subject to significant losses.

Furthermore, we are in some cases the subject of claims by local communities, indigenous groups or private land owners relating to land and mineral rights, or environmental or social damage, and such claimants may seek sizeable monetary damages against us and/or the return of surface or mineral rights or revocation of permits and licenses that are valuable to us and which may impact our operations and profitability if lost.

Each of these matters is subject to various uncertainties and it is possible that some of these matters may be resolved unfavourably against us. We establish provisions for matters that are probable and can be reasonably estimated. We also carry liability insurance coverage, however such insurance does not cover all risks to which we might be exposed and in other cases, may only partially cover losses incurred by us. In addition, we may be involved in disputes with other parties in the future that may result in litigation, which may result in a material adverse effect on our financial position, cash flow and results of operations.

DIVIDENDS

On February 15, 2010, Pan American's Board of Directors declared its first cash dividend, and has paid a dividend quarterly since that time. Over the past three years, we have declared the following dividends:

Year	Declaration Date	Amount per Common Share
2020	• November 4 • August 5 • May 6 • February 19	• $0.07 • $0.05 • $0.05 • $0.05
2019	• November 6 • August 7 • May 8 • February 20	• $0.035 • $0.035 • $0.035 • $0.035
2018	• November 6 • August 8 • May 9 • February 20	• $0.035 • $0.035 • $0.035 • $0.035

Each of the foregoing dividends was designated to be an eligible dividend for the purposes of the *Income Tax Act* (Canada). The amounts and specific distribution dates of any future dividends will be evaluated and determined by the Board of Directors on an ongoing basis.

MARKET FOR SECURITIES

Pan American's Common Shares are listed and posted for trading on the Toronto Stock Exchange and The Nasdaq Stock Market ("Nasdaq") under the symbol "PAAS". The majority of trading of our Common Shares takes place on Nasdaq. The following table outlines the closing share price trading range and volume of shares traded by month in 2020:

Toronto Stock Exchange (CAD$)				Nasdaq Stock Market (USD$)			
Month	High	Low	Volume	Month	High	Low	Volume
January	$ 31.23	$ 27.30	10,529,866	January	$ 24.02	$ 20.91	56,990,900
February	$ 34.79	$ 24.71	12,068,042	February	$ 26.20	$ 18.37	63,292,000
March	$ 30.66	$ 14.22	27,731,177	March	$ 22.94	$ 10.61	135,377,500
April	$ 32.16	$ 19.85	13,906,872	April	$ 22.90	$ 14.02	76,723,000
May	$ 41.22	$ 28.60	30,383,887	May	$ 29.90	$ 20.35	88,560,900
June	$ 41.40	$ 33.86	18,458,590	June	$ 30.59	$ 24.82	74,161,100
July	$ 52.64	$ 39.14	15,848,805	July	$ 39.33	$ 28.81	88,271,600
August	$ 53.30	$ 42.30	12,339,783	August	$ 40.11	$ 31.84	69,257,900
September	$ 48.78	$ 39.77	12,318,216	September	$ 37.11	$ 29.63	50,990,700
October	$ 45.47	$ 39.90	8,961,317	October	$ 34.68	$ 29.81	44,976,100
November	$ 48.57	$ 36.79	12,029,299	November	$ 37.28	$ 28.33	45,223,000
December	$ 44.76	$ 36.80	9,664,266	December	$ 35.08	$ 28.82	46,700,900

DIRECTORS AND EXECUTIVE OFFICERS

The names of our directors and executive officers as at December 31, 2020, are set out below, as well as their municipalities of residence, positions with Pan American, and principal occupations for the past five years:

Name and Municipality of Residence	Position with Pan American	Principal Occupation During the Past Five Years
ROSS J. BEATY[5] Vancouver, B.C. Canada	Director and Chairman (director of Pan American since September 30, 1988)	Business Executive and Chairman of Pan American
MICHAEL CARROLL[1,5] Walnut Creek, California, U.S.A.	Director since January 1, 2011	Corporate Director
NEIL DE GELDER, Q.C.[1,3] Vancouver, B.C. Canada	Director since July 3, 2012	Exec. VP of Stern Partners, a private diversified investment firm
CHARLES JEANNES[2,4] Reno, Nevada U.S.A.	Director since February 22, 2019	Corporate Director
WALTER T. SEGSWORTH[2, 4, 6] West Vancouver, B.C. Canada	Director since May 12, 2009	Corporate Director
KATHLEEN SENDALL[4] Calgary, Alberta Canada	Director since December 16, 2020	Corporate Director
MICHAEL STEINMANN[4,5] North Vancouver, B.C. Canada	Director (since January 1, 2016) and President and CEO	CEO of Pan American since January 1, 2016; President since February 18, 2015; prior to that, other senior management roles with Pan American since 2004
GILLIAN WINCKLER[1,2,3] Vancouver, B.C. Canada	Director since May 11, 2016	Corporate Director
STEVEN BUSBY Vancouver, B.C. Canada	COO	COO of Pan American since May 13, 2008; prior to that, other senior management roles with Pan American since 2003
BRENT BERGERON North Vancouver, B.C. Canada	SVP, Corporate Affairs & Sustainability	SVP, Corporate Affairs & Sustainability since September 1, 2019; previously Executive VP, Corporate Affairs & Sustainability for Goldcorp Inc.
A. ROBERT DOYLE North Vancouver, B.C. Canada	CFO	CFO of Pan American since January 2004
CHRISTOPHER EMERSON Vancouver, B.C. Canada	VP, Business Development and Geology	VP, Business Development & Geology of Pan American since August 10, 2015
GEORGE GREER Surrey, B.C. Canada	SVP, Project Development	SVP, Project Development of Pan American since January 1, 2012; prior to that, other senior management roles with Pan American since 2007

Name and Municipality of Residence	Position with Pan American	Principal Occupation During the Past Five Years
CHRISTOPHER LEMON Vancouver, B.C. Canada	General Counsel	General Counsel of Pan American since August 2, 2017; previously General Counsel and Corporate Secretary of First Quantum Minerals Ltd.
SEAN MCALEER Guatemala City Guatemala	SVP and Managing Director, Guatemala	SVP and Managing Director, Guatemala since September 2019; prior to that, other senior management roles with Pan American since February 1, 2010

Notes:
1 Member of the Audit Committee.
2 Member of the Human Resources and Compensation Committee.
3 Member of the Nominating and Governance Committee.
4 Member of the Health, Safety, Environment and Communities Committee.
5 Member of the Finance Committee.
6 Mr. Segsworth is our Lead Independent Director.

The directors of Pan American are elected at each annual general meeting to hold office until the next annual general meeting or until their successors are elected or appointed. As at December 31, 2020, the Board of Directors consisted of eight directors, seven of whom, Ross Beaty, Michael Carroll, Neil de Gelder, Charles Jeannes, Walter Segsworth, Kathleen Sendall and Gillian Winckler, qualify as unrelated directors who are independent of management. Mr. Steinmann is not independent due to his current management position with us. Kathleen Sendall joined the Board of Pan American on December 16, 2020. Mr. Beaty has advised us that he will retire from the Board effective as at our next annual general meeting to be held on May 12, 2021.

The Board of Directors has established five committees: the Audit Committee, the Human Resources and Compensation Committee, the Health, Safety, Environment and Communities Committee, the Nominating and Governance Committee, and the Finance Committee. Detailed information regarding the duties and obligations of the Audit Committee is annexed as Appendix “A” to this AIF. The Board of Directors does not have an Executive Committee. The composition of the various committees as at December 31, 2020, is set forth in the preceding table.

As of the close of business on February 16, 2021, the directors and executive officers of Pan American named above as a group exercised control or direction or beneficially owned, directly or indirectly, 3,461,151 Common Shares, or approximately 1.65% of the issued and outstanding Common Shares of Pan American.

From May 2010 to April 2018, Ms. Sendall was a board member of CGG SA, a French Company listed at the time on the New York Stock Exchange and Euronext Paris. On June 15, 2017, following the execution of legally binding agreements in support of the terms of the agreement-in-principle with its key financial creditors, CGG SA began legal processes to implement a comprehensive pre-arranged restructuring, with the opening of a Safeguard proceeding in France and Chapter 11 and Chapter 15 filings in the U.S. The restructuring plan was approved by both the Paris Commercial Court and the New York Bankruptcy Court. The implementation of the financial restructuring plan was finalized in February 2018.

Other than the above, none of Pan American’s directors or executive officers:

(a) are, as at the date of this AIF, or have been, within 10 years before the date of this AIF, a director, chief executive officer or chief financial officer of any company (including Pan American) that,

(i) was subject to cease trade order, an order similar to a cease trade order, or an order that denied the relevant company access to any exemption under securities legislation (collectively, an “Order”) that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer; or

(ii) was subject to an Order that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer;

(b) are, as at the date of this AIF, or has been within 10 years before the date of this AIF, a director or executive officer of any company (including Pan American) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or

(c) have, within the 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director or executive officer.

In addition, none of Pan American's directors and executive officers has been subject to:

(d) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or

(e) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable shareholder in making an investment decision.

As of the date of this AIF, Pan American is not aware of any shareholder holding a sufficient number of securities of Pan American to affect materially the control of Pan American.

Audit Committee

As at December 31, 2020, the members of the Audit Committee were Michael Carroll (Chair), Neil de Gelder, and Gillian Winckler. The Board of Directors has determined based on the information provided by each director that all members of the Audit Committee meet the independence requirements set out in National Instrument 52-110 – *Audit Committees*, and as defined under Rule 10A-3 of the U.S. Securities Exchange Act of 1934, as amended, and the rules and regulations of the Nasdaq Stock Market. All members of the Audit Committee are financially literate and Michael Carroll, an individual serving on the audit committee of the Board of Directors, is an audit committee financial expert, as that term is defined in General Instruction B(8)(b) of Form 40-F.

The SEC has indicated that the designation of a person as an audit committee financial expert does not make such person an "expert" for any purpose, impose any duties, obligations or liabilities on such person that are greater than those imposed on members of the audit committee and the board of directors who do not carry this designation or affect the duties, obligations or liability of any other member of the audit committee or board of directors.

Relevant Education and Experience of Audit Committee Members

The relevant education and experience of each member of the Audit Committee that is relevant to the performance of the Audit Committee responsibilities are as follows:

Michael L. Carroll (Chair) is a Certified Public Accountant with over 30 years of financial management expertise, primarily with publicly traded mining companies and has previously served on the audit committee of another public company.

Neil de Gelder, Q.C., has over 25 years of experience as a lawyer specializing in corporate, mergers and acquisitions, and financing matters with a major Canadian law firm, frequently advising boards of publicly traded companies. He is a former Executive Director of the British Columbia Securities Commission, and is currently Vice-Chair of a private diversified investment firm based in Vancouver. He is routinely involved in reviewing internal management financial reporting and external audited and unaudited financial statements. Mr. de Gelder has served on a wide variety of corporate, Crown, charitable, and community boards over the years, including serving on the audit committee of a B.C. venture capital fund.

Gillian Winckler is a former mining and business executive with over 25 years of diversified experience in the metals and mining industry and the financial sector. Among other senior positions, Ms. Winckler has been both a Chief Executive Officer and Chief Financial Officer of a Canadian and Australian publicly listed resource company. Ms. Winckler has been extensively involved with corporate strategy, mergers and acquisitions, divestments, exploration, as well as project evaluation and development. Ms. Winckler is a Chartered Accountant (South Africa), with a BSc and BComm (Hons) obtained in South Africa. Her professional expertise includes strategic planning, mergers, acquisitions and divestments in the mining sector, as well as IFRS, GAAP, risk management and regulatory reporting. Ms. Winckler also currently serves on the audit committee of two other publicly listed companies.

External Auditor Service Fees

Audit Fees

The aggregate fees billed by Deloitte LLP, Pan American's Independent Registered Public Accounting Firm, for the fiscal years ended December 31, 2020 and 2019 for professional services rendered by Deloitte LLP for the audit of Pan American's annual consolidated financial statements or services that are normally provided by Deloitte LLP in connection with statutory and regulatory filings or engagements for such years were approximately $2,497,000 and $2,748,500, respectively.

Audit-Related Fees

The aggregate fees billed by Deloitte LLP for the fiscal years ended December 31, 2020 and 2019 for assurance and related services rendered by it that are reasonably related to the performance of the audit or review of Pan American's consolidated financial statements and are not reported above as audit fees were approximately $34,400 and $103,900, respectively. The fees in both 2020 and 2019 also include amounts with respect to Pan American's Canadian Public Accountability Board fees that are remitted by Deloitte on behalf of Pan American.

Tax Fees

The aggregate fees billed by Deloitte LLP for the fiscal years ended December 31, 2020 and 2019 for professional services rendered by it for tax compliance, tax advice, tax planning, and other services were approximately $1,600 and $2,600, respectively. In 2020, such fees related primarily to the provision of services related to tax compliance matters.

Other Fees

The aggregate fees billed by Deloitte LLP for the fiscal years ended December 31, 2020 and 2019 for products and services provided by Deloitte LLP, other than those services reported in the preceding three paragraphs, were approximately $0 and $38,900, respectively.

Audit Committee Pre-Approval Policies

All audit and non-audit services performed by the Independent Registered Public Accounting Firm are pre-approved by the Audit Committee.

CONFLICTS OF INTEREST

To the best of our knowledge, and other than as disclosed in this AIF, there are no known existing or potential conflicts of interest between us and any of our directors or officers, except that certain officers and directors of Pan American are officers and directors of, or are associated with, other public or private companies. Such associations may give rise to conflicts of interest from time to time between their duties as an officer or director of Pan American and their duties as an officer or director or such other companies. The directors are aware of laws requiring them to act honestly and in good faith with a view to act in the best interests of Pan American and our shareholders and to disclose any conflicts of interest.

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

A description of certain legal proceedings to which we are a party appear under the heading “Contingencies” in Note 30 to our Audited Consolidated Financial Statements for the year ended December 31, 2020. We have not been subject to any regulatory penalties or sanctions during the financial year, nor entered into any settlement agreements relating to securities legislation.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than as described below, to the best of our knowledge, no director or executive officer of Pan American, nor any person or company that beneficially owns, controls, directs, directly or indirectly, more than 10% of our Common Shares, nor any associate or affiliate of any of the foregoing persons, has or had a material interest in any transaction within the three most recently completed financial years or during the current financial year that has materially affected or is reasonably expected to materially affect Pan American.

Pursuant to the terms of his employment contract with Tahoe, Mr. McArthur, who was a director of Pan American from February 2019 to May 2020, and who formerly held the position of Executive Chair and director of Tahoe prior to the Arrangement, received a lump-sum payment equal to approximately US$1.13 million upon completion of the Arrangement. In addition, in accordance with the Tahoe long term incentive plan, the Tahoe deferred share awards held by Mr. McArthur accelerated and vested in exchange for common shares of Tahoe at the effective time of the Arrangement. These shares were then exchanged for Common Shares of Pan American under the Arrangement.

TRANSFER AGENTS AND REGISTRAR

The transfer agent and registrar for our Common Shares is Computershare Investor Services Inc. at its principal office in Vancouver, British Columbia, and Computershare Trust Company, N. A. at its office in Denver, Colorado, U.S.A.

MATERIAL CONTRACTS

Except for contracts entered into in the ordinary course of business, no other material contracts have been entered into by Pan American during the financial year ended December 31, 2020 or before such time which are still in effect.

INTERESTS OF EXPERTS

Deloitte LLP, Independent Registered Public Accounting Firm, is the auditor of Pan American and is independent of Pan American within the meaning of the Rules of Professional Conduct of the Chartered Professional Accountants of British Columbia and within the meaning of U.S. Securities Exchange Act of 1933, as amended, and the applicable rules and regulations thereunder adopted by the SEC and the Public Company Accounting Oversight Board (United States).

The Qualified Persons as defined by NI 43-101 who have prepared or supervised the preparation of Pan American's mineral reserve and mineral resource estimates effective June 30, 2020, and who supervised the preparation of and approved the scientific and technical information disclosed in this AIF, as described under the heading "Scientific and Technical Information" on page 8.

Michael Steinmann, P. Geo., Martin Wafforn, P. Eng., Chris Emerson, FAusIMM, Pamela De Mark, P. Geo., Americo Delgado, P.Eng., Eric Kallio, P.Geo., Natasha Vaz, P.Eng., Kara Byrnes, P.Geo., Tim Williams, M.Sc., Carl Defilippi, M.Sc., Charles Muerhoff, B.Sc., Conrad Huss, P.Eng., Thomas Drielick, P.Eng., Daniel Roth, P.Eng., Paul Tietz, C.P.G., Matthew Blattman, P.Eng., Jack Caldwell, P.Eng., and M3 Engineering & Technology Corporation are the persons who have prepared or certified a statement, report, or valuation described in this AIF.

To the best of our knowledge, none of Messrs./Mmes. Steinmann, Wafforn, Emerson, De Mark, Delgado, Kallio, Vaz, Byrnes, Williams, Defilippi, Muerhoff, Tietz, Roth, Blattman, Drielick, Huss, Caldwell or M3 Engineering & Technology Corporation beneficially owns, directly or indirectly, 1% or more of any class of Pan American's outstanding securities.

EXCEPTIONS FROM NASDAQ CORPORATE GOVERNANCE REQUIREMENTS

Under Rule 4350(a) of Nasdaq Rules (the "Nasdaq Rules"), a foreign private issuer (as defined in Rule 12b-2 under the Exchange Act) may follow its home country practice in lieu of certain of the corporate governance requirements of the Nasdaq Rules.

Pursuant to Rule 4350(a), Pan American follows British Columbia practice with respect to quorum requirements in lieu of Nasdaq Rule 4350(f). Nasdaq Rule 4350(f) requires that the minimum quorum for a shareholder meeting is 33-1/3% of the outstanding common shares, whereas Pan American's articles provide that the minimum quorum for a meeting of the holders of our Common Shares is two individuals who are shareholders, proxy holders representing shareholders or duly authorized representatives of corporate shareholders personally present and representing shares aggregating not less than 25% of the issued Common Shares of Pan American carrying the right to vote at that meeting. In the event there is only one shareholder, the quorum is one person personally present and being, or representing by proxy, that shareholder, or in the case of a corporate shareholder, a duly authorized representative of that shareholder. Pan American's quorum requirement complies with the *Business Corporations Act* (British Columbia), which requires that unless the articles otherwise provide, two shareholders entitled to vote at a meeting of shareholders, whether in person or represented by proxy, constitute a quorum. Furthermore, the rules of the Toronto Stock Exchange, upon which our Common Shares are also listed, do not contain specific quorum requirements.

ADDITIONAL INFORMATION

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of Pan American's securities, and securities authorized for issuance under equity compensation plans, is contained in our management information circular for the most recent annual meeting of shareholders. Additional financial information is also provided in our audited consolidated financial statements for the years ended December 31, 2020 and 2019, and management's discussion and analysis for the year ended December 31, 2020. The foregoing disclosure documents, along with additional information relating to Pan American, may be found on SEDAR at www.sedar.com, on the SEC website at www.sec.gov, or on our website at www.panamericansilver.com.

GLOSSARY OF TERMS

"mineral resource" - A mineral resource is a concentration or occurrence of solid material of economic interest in or on the earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.

"*inferred mineral resource*" – An inferred mineral resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An inferred mineral resource has a lower level of confidence than that applying to an indicated mineral resource and must not be converted to a mineral reserve. It is reasonably expected that the majority of inferred mineral resources could be upgraded to Indicated mineral resources with continued exploration.

"*indicated mineral resource*" – An indicated mineral resource is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An indicated mineral resource has a lower level of confidence than that applying to a measured mineral resource and may only be converted to a probable mineral reserve.

"measured mineral resource" – A measured mineral resource is that part of a mineral resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of modifying factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A measured mineral resource has a higher level of confidence than that applying to either an indicated mineral resource or an inferred mineral resource. It may be converted to a proven mineral reserve or to a probable mineral reserve.

"*mineral reserve*" – A mineral reserve is the economically mineable part of a measured and/or indicated mineral resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at pre-feasibility or feasibility level as appropriate that include application of modifying factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which mineral reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported. The public disclosure of a mineral reserve must be demonstrated by a pre-feasibility study or feasibility study.

"probable mineral reserve" - A probable mineral reserve is the economically mineable part of an indicated, and in some circumstances, a measured mineral resource. The confidence in the modifying factors applying to a probable mineral reserve is lower than that applying to a proven mineral reserve.

"proven mineral reserve" - A proven mineral reserve is the economically mineable part of a measured mineral resource. A proven mineral reserve implies a high degree of confidence in the modifying factors.

APPENDIX "A"

AUDIT COMMITTEE CHARTER

PURPOSE

Senior management of Pan American Silver Corp. (the "**Company**"), as overseen by its Board of Directors (the "Board"), has primary responsibility for the Company's financial reporting, accounting systems and internal controls. The Audit Committee (the "**Committee**") is a standing committee of the Board established for the purposes of overseeing:

a. the quality and integrity of the Company's financial and accounting reporting processes and internal accounting and financial control systems;

b. the external auditor's qualifications and independence;

c. management's responsibility for assessing the effectiveness of internal controls; and

d. the Company's compliance with legal and regulatory requirements in connection with financial and accounting matters.

COMPOSITION AND OPERATION

The Committee shall be composed of at least three independent directors[1] and all members of the Committee shall, to the satisfaction of the Board, be Financially Literate and at least one member will be a Committee Financial Expert ("**Financially Literate**" and "**Committee Financial Expert**" are defined in the Definitions section of this Charter).

The members of the Committee shall be appointed by the Board annually, and the Board may at any time remove or replace any member of the Committee and may fill any vacancy with another Board member, as required.

The Board shall appoint a chair (the "**Chair**") from among the Committee members. If the Chair is not present at any meeting of the Committee, one of the other Committee members present at the meeting shall be chosen to preside as chairperson at the meeting.

A quorum at meetings of the Committee shall be a majority of members present in person or by telephone or other telecommunication device that permits all persons participating in the meeting to speak and hear one another.

The Committee will make every effort to meet at least five times per year, and shall conduct such additional meetings as required from time to time. Each member is entitled to request that an additional meeting be called. The external auditor may also request that the Chair call a meeting of the Committee to consider any matter that the auditor believes should be brought to the attention of the directors or the shareholders of the Company.

[1] A director's "independence" shall be determined in accordance with the securities laws, rules, regulations and guidelines of all applicable securities regulatory authorities, including without limitation the securities commissions in each of the provinces and territories of Canada and the U.S. Securities and Exchange Commission, and the stock exchanges on which the Company's securities are listed, including without limitation the Toronto Stock Exchange and Nasdaq (collectively, "Securities Laws").

The Committee shall fix its own procedures for meetings, keep records of its proceedings and report to the Board routinely at the next regularly scheduled Board meeting. Copies of meeting records will be made available to the external auditor as requested.

In camera sessions will be scheduled for each Committee meeting.

The Committee may act by unanimous written consent of its members. A resolution approved in writing by members of the Committee shall be valid and effective as if it had been passed at a duly called meeting.

RESPONSIBILITIES AND DUTIES

Overall Committee:

To fulfill its responsibilities and duties the Committee will:

a. review this Charter periodically, but at least once per annum, and recommend to the Board any necessary amendments;

b. review and, where necessary, recommend revisions to the Company's disclosure in the Management Information Circular regarding Committee's composition and responsibilities and how they are discharged;

c. assist the Board in the discharge of its responsibilities relating to the quality, acceptability and integrity of the Company's accounting policies and principles, reporting practices and internal controls;

d. review and recommend to the Board for approval the audited annual financial statements, with the report of the external auditor, and corresponding management's discussion and analysis prior to public dissemination and filing with securities regulatory authorities;

e. review and approve, or recommend to the Board for approval, the quarterly financial statements of the Company and corresponding management's discussion and analysis prior to public dissemination and filing with securities regulatory authorities;

f. review any other financial disclosure documents that contain material financial information about the Company requiring approval by the Board prior to public dissemination and filing with securities regulatory authorities, including, but not limited to, financial information in earnings press releases, annual reports, Form 40-F, annual information forms, and prospectuses;

g. oversee the relationship and maintain a direct line of communication with the Company's internal and external auditors and assess their respective performance; and

h. review with management any tax matters that could have a material effect on the Company's financial statements.

Public Filings, Policies and Procedures:

The Committee will:

a. satisfy itself that adequate procedures are in place for the review of the Company's disclosure of financial information extracted or derived from the Company's financial statements, other than the Company's financial statements, management's discussion and analysis, and earnings press

releases, and periodically assess such disclosure controls and procedures, and management's evaluation thereof, to ensure that financial information is recorded, processed, summarized and reported within the time periods required by law;

b. review disclosures made to the Committee by the Chief Executive Officer and the Chief Financial Officer during their certification process for any significant deficiencies in the design or operation of internal controls or material weaknesses therein and any fraud involving management or other employees who have a significant role in internal controls;

c. review with management and the external auditor any correspondence with securities regulators or other regulatory or government agencies which raise material issues regarding the Company's financial reporting or accounting policies; and

d. review with management, the external auditors and the Company's legal counsel, any claim or other contingency, including tax assessments, that could have a material effect upon the financial position or operating results of the Company and the manner in which these matters have been disclosed in the financial statements.

External Auditors

The responsibilities and duties of the Committee as they relate to the external auditor are to:

a. consider and make recommendations to the Board with respect to the external auditor to be nominated for appointment, re-appointment, or removal by shareholders at each annual general meeting of the Company;

b. make recommendations to the Board with respect to the compensation of the external auditor, assess whether fees and any other compensation to be paid to the external auditor for audit or non-audit services are appropriate to enable an audit to be conducted and to maintain the independence of the external auditor;

c. review the performance of the external auditor and, where appropriate, recommend to the Board appropriate action with respect to the external auditor;

d. confirm the independence and effectiveness of the external auditor, which will require receipt from the external auditor of a formal written statement delineating all relationships between the auditor and the Company and any other factors that might affect the independence of the auditor;

e. actively engage in dialogue with the external auditor with respect to any disclosed relationships or services that may affect the independence and objectivity of the external auditor and take, or recommend that the Board take, appropriate actions to oversee the independence of the external auditor;

f. oversee the work of the external auditor engaged for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Company, including the resolution of disagreements between management and the external auditor regarding financial reporting, including, review and, as applicable, approval of the following:

   i. the external auditor's engagement letter and audit plans;

   ii. the form and content of the quarterly and annual audit report, which should include, *inter alia*:

      • a summary of the Company's internal controls findings resulting from the annual audit procedures;

- any material issues raised in the most recent meeting of the Committee; and
- any other related audit, review or attestation services performed for the Company by the external auditors;

iii. form and content of other reports of the auditors;

and the Committee shall report to the Board, as necessary, in respect of the above noted matters;

g. review and pre-approve all non-audit services provided to the Company or its subsidiaries by the external auditor prior to the commencement of such services, and in doing so, the Committee may delegate to one or more independent members of the Committee the authority to pre-approve any such non-audit services, provided that the decision of such member(s) on such non-audit services will be presented to the Committee at its next regularly scheduled meeting, and in all cases, pre-approval of non-audit services must satisfy the requirements set out in *National Instrument 52-110 – Audit Committees*;

h. monitor the relationship between management and the external auditor and resolve any disagreements between them regarding financial reporting;

i. engage the external auditor in discussions regarding any amendments to critical accounting policies and practices; alternative treatments of financial information within generally accepted accounting principles related to material items that have been discussed with management, including any potential ramifications and the preferred treatment by the independent auditor; and lastly, written communication between management and the independent auditor, including but not limited to, the management letter and schedules of adjusted and unadjusted differences, as applicable.

Internal Controls and Financial Reporting

The Committee will::

a. obtain reasonable assurance from discussions with (and/or reports from) management, and reports from external and internal auditors that the Company's financial and accounting systems are reliable and that the internal controls are operating effectively;

a. in consultation with the external auditor, the CEO, the CFO, and where necessary, other members of management, review the integrity of the Company's financial reporting process and the internal control structure;

b. review the acceptability of the Company's accounting principles and identify areas of concern and, where appropriate to do so, discuss with the external auditor;

c. request the auditors to undertake special examinations (e.g., review compliance with conflict of interest policies) when it deems necessary;

d. together with management, review control weaknesses identified by the external and internal auditors;

e. consider proposed appointees for the position of chief financial officer and, if deemed appropriate by the Committee, other key financial executives involved in financial reporting;

f. satisfy itself that CEO and CFO certifications pursuant to Securities Laws are prepared and filed and make inquiries and initiate discussion as necessary with management regarding the practices and procedures adopted to permit management's assurance on the underlying controls; and

g. during the annual audit process, consider if any significant matters regarding the Company's internal controls and procedures over financial reporting, including any significant deficiencies or material weaknesses in their design or operation, need to be discussed with the external auditor, and review whether internal control recommendations made by the auditor have been implemented by management.

Internal Audit

The Committee shall be responsible for reviewing:

a. activities, organization structure and qualifications, of the internal audit function;

b. the resources, budget, reporting relationships and planned activities of the internal audit function;

c. internal audit findings and the implementation of any accepted recommendations;

d. the internal audit procedures and recommending changes, if any; and

e. the adequacy of the line of communication between internal audit and the Committee, ensuring that it is maintained.

Ethical and Legal Compliance and Risk Management

The responsibilities and duties of the Committee as they relate to compliance and risk management are to:

a. satisfy itself as to the integrity of the CEO and other senior management and that the CEO and other senior management strive to create a culture of integrity throughout the Company;

b. review the adequacy, appropriateness and effectiveness of the Company's policies and business practices which impact on the financial integrity of the Company, including those relating to hedging, insurance, accounting, information services and systems, financial controls and management reporting;

c. receive a report from management on tax issues and planning, including compliance with the Company's source deduction obligations and other remittances under applicable tax or other legislation;

d. receive a report on the annual policy attestation process for the Company's Global Code of Ethical Conduct, Global Anti-Corruption Policy, Gifts and Hospitality Guidelines, and any other relevant policies and guidelines (collectively, the "**Policies**");

e. review annually the adequacy and quality of the Company's financial and accounting staffing, including the need for and scope of internal audit reviews (if any);

f. receive reports from management and other Board committees, including without limitation the Health Safety, Environment and Communities Committee, on the identification, assessment and management of risks;

g. in conjunction with any other committee designated by the Board from time to time, review major financial, audit and accounting related risks and the policies, guidelines and mechanisms that management has put in place to govern the process of monitoring, controlling and reporting such risks;

h. oversee the establishment of procedures for:

   i. the receipt, retention and treatment of complaints received by the Company regarding accounting, internal controls, or auditing matters; and

   ii. the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.

i. review any material complaints and concerns received regarding accounting, internal controls, or auditing matters or with respect to the Policies, and the investigation and resolution thereof, and, where appropriate to do so, provide all relevant information relating to such complaints and concerns to the Nominating and Governance Committee, taking into account the complainants' confidentiality concerns and the roles and responsibilities of each Committee;

j. review and approve the Company's hiring policies regarding partners, employees and former partners and employees of the present and former external auditor;

k. review and monitor the Company's compliance with applicable legal and regulatory requirements related to financial reporting and disclosure;

l. review all related-party transactions; and

m. carry the responsibility for reviewing reports from management, internal and external auditors with respect to the Company's compliance with the laws and regulations having a material impact on financial reporting and disclosure, including: tax and financial reporting laws and regulations; legal withholding requirements; environmental protection laws and regulations; and any other laws and regulations which expose directors to liability.

AUTHORITY

The Committee shall have the authority to:

a. at the Company's expense, engage independent counsel and other advisors as it determines necessary to carry out its duties;

b. set and pay the compensation for any advisors engaged by the Committee; and

c. communicate directly with any such advisors and with the internal and external auditors.

The Committee shall have unrestricted access to all records, facilities, and personnel of the Company necessary to carry out its responsibilities and may meet separately with head of internal audit, the Chief Executive Officer, the Chief Financial Officer, the General Counsel and such other members of management as they may deem necessary.

The Committee shall be provided with the resources necessary to carry out its responsibilities.

At the invitation of the Chair, one or more officers or employees of the Company may, and if required by the Committee, shall, attend a meeting of the Committee.

The Committee may, upon approval by a majority of the members of the Committee, delegate certain of its duties and responsibilities to subcommittees of the Committee, which must report back to the full Committee.

DEFINITIONS

Capitalized terms used in this Charter and not otherwise defined have the meaning attributed to them below:

"**Financially Literate**" shall have the meaning as defined by Securities Laws, which includes, without limitation, the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company's financial statements.

"**Committee Financial Expert**" means a person who has the following attributes:

a. an understanding of generally accepted accounting principles and financial statements;

b. the ability to assess the general application of such principles in connection with the accounting for estimates, accruals and reserves;

c. experience preparing, auditing, analyzing or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and level of complexity of issues that can reasonably be expected to be raised in the Company's financial statements, or experience actively supervising one or more persons engaged in such activities;

d. an understanding of internal controls and procedures for financial reporting; and

e. an understanding of audit committee functions; acquired through any one or more of the following:

   i. education and experience as a principal financial officer, principal accounting officer, controller, public accountant or auditor or experience in one or more positions that involve the performance of similar functions;

   ii. experience actively supervising a principal financial officer, principal accounting officer, controller, public accountant, auditor or person performing similar functions; or

   iii. experience overseeing or assessing the performance of companies or public accountants with respect to the preparation, auditing or evaluation of financial statements; or other relevant experience.

Exhibit 1.2



PAN AMERICAN SILVER

Management's Discussion and Analysis

FOR THE YEAR ENDED DECEMBER 31, 2020

February 17, 2021

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

INTRODUCTION

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, 2020 (the "2020 Financial Statements") and the related notes contained therein. All amounts in this MD&A and the 2020 Financial Statements are expressed in United States dollars ("USD"), unless identified otherwise. The Company reports its financial position, financial performance and cash flows in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board ("IASB"). Pan American's significant accounting policies are set out in Note 3 of the 2020 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, do not have standardized meanings under IFRS, and the methodology by which these measures are calculated may differ from similar measures reported by other companies. 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 2020 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

CORE BUSINESS AND STRATEGY

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 premier silver mining company, with a reputation for excellence in discovery, engineering, innovation and sustainable development. Our strategy to achieve this vision is to:

- Generate an attractive return on invested capital through the safe, efficient and environmentally sound development and operation of our assets.
- Constantly replace and grow our reserves and resources through targeted near-mine exploration and business development.
- Foster positive long-term relationships with our employees, shareholders, communities and 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 assets, both internally and through acquisition.
- Encourage our employees to be innovative, responsive and entrepreneurial.

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.

2020 HIGHLIGHTS

Operations

Coronavirus disease ("COVID-19") pandemic impact

Pan American's normal operations in Mexico, Peru, Argentina and Bolivia were suspended for an average duration of approximately two months during the first half of 2020 in order to comply with mandatory national quarantines imposed in response to the COVID-19 pandemic. The Huaron and Morococha operations were suspended for another approximately three months through the third quarter of 2020. The Company conducted care and maintenance activities at the suspended operations until the government restrictions were lifted and Pan American determined it was safe to resume operations. During these suspensions, limited production continued from the circulation of process solutions on the heap leach pads at the Shahuindo and La Arena open pit operations in Peru and the Dolores open pit operation in Mexico. Pan American incurred care and maintenance costs for the COVID-19 related mine suspensions of $75.1 million in 2020, inclusive of depreciation and amortization related to fixed assets.

Following the restart of operations, production was below normal capacity rates in order to accommodate COVID-19 related protocols to help protect the health and safety of our workforce and communities. Implementation of COVID-19 related protocols also resulted in the Timmins operation in Canada operating below normal capacity rates; however, operations at Timmins were not suspended during 2020. Further discussion on the operational status of each mine is included in the "2020 Operating Performance" section of this MD&A under the sub-heading "Impact of COVID-19".

The COVID-19 pandemic also delayed progress on certain capital projects in 2020, resulting in approximately $50.0 million to $60.0 million of sustaining and project capital being deferred into 2021.

Due to the uncertainties regarding the impact of COVID-19 on our operations, in May 2020, the Company withdrew its 2020 annual production, Cash Costs, AISC and capital expenditure forecasts, as provided in the 2019 annual MD&A dated March 12, 2020 (the "Original 2020 Forecasts"). The Company subsequently issued a new 2020 annual forecast in the Q2 2020 MD&A dated August 5, 2020 (the "August 2020 Forecast"). In the MD&A for the third quarter of 2020 ("Q3 2020"), dated November 4, 2020, management further revised forecasts for 2020 annual silver production and capital expenditures (the "Revised 2020 Forecast"). A comparison of 2020 results to the Revised 2020 Forecast is included and discussed in the 2020 Operating Performance section of this MD&A.

Silver production of 17.3 million ounces

Consolidated silver production for 2020 of 17.3 million ounces was 8.6 million ounces less than in 2019, mainly reflecting COVID-19 related mine suspensions and restricted capacities. 2020 silver production was less than the Revised 2020 Forecast range of 18.0 to 19.0 million ounces, largely due to the production shortfall at La Colorada from the impact of the loss of a ventilation raise from surface in Q4 2020.

Gold production of 522.4 thousand ounces

Consolidated gold production for 2020 of 522.4 thousand ounces was 36.7 thousand ounces less than in 2019, largely reflecting the same COVID-19 related factors that affected 2020 silver production, partially offset by continued limited production at the Gold Segment mines during their suspensions from circulation of process solutions on the heap leach pads, and better ability to operate the open pit mines at rates closer to design capacity than in the underground mines where social distancing measures are more restrictive. 2020 gold production was slightly lower than the Revised 2020 Forecast range of 525.0 to 575.0 thousand ounces.

Base metal production

Zinc production in 2020 of 40.2 thousand tonnes was lower than 2019, primarily due to the impact of COVID-19, and was within management's Revised 2020 Forecast production range of 40.0 to 43.0 thousand tonnes.

Lead production in 2020 of 15.7 thousand tonnes was lower than 2019, due to the impact of COVID-19, and was below management's Revised 2020 Forecast production range of 17.0 to 18.0 thousand tonnes.

Copper production in 2020 of 5.2 thousand tonnes was lower than 2019, and above management's Revised 2020 Forecast production range of 4.3 to 4.9 thousand tonnes.

Financial

Revenue, net earnings, and operating cash flows

Revenue in 2020 of $1.34 billion was 1% lower than in 2019, reflecting decreased quantities of metal sold offset by higher realized precious metal prices. Quantities of metals sold were largely impacted by the COVID-19 related mine suspensions and throughput reductions. Revenue in the fourth quarter of 2020 ("Q4 2020") of $430.5 million was a Company quarterly record.

Net earnings of $176.5 million ($0.85 basic income per share) was recorded for 2020 compared with $111.2 million ($0.55 basic income per share) in 2019. The $65.2 million year-over-year increase mainly reflects: a $130.9 million increase in mine operating earnings; a $40.1 million decrease in impairment charges, with no impairment charges or impairment reversals recorded in 2020; a $9.2 million decrease in interest and finance expense; and a $7.5 million decrease in transaction and integration costs; all partially offset by a $78.4 million increase in care and maintenance costs, reflecting the COVID-19 related mine suspensions; a $4.3 million increase in income tax expense; a $21.7 million decrease in investment income; and a $17.1 million increase in other expenses.

Adjusted earnings: in 2020 were $243.4 million, representing basic adjusted earnings per share of $1.16, which was $85.4 million, or $0.37 per share, higher than 2019 adjusted earnings of $158.0 million, and basic adjusted earnings per share of $0.78, respectively.

Cash flow from operations: in 2020 totaled $462.3 million for a Company record, which was $180.3 million more than the $282.0 million generated in 2019. Cash flow from operations in Q4 2020 of $170.6 million was also a Company quarterly record.

Liquidity and working capital

As at December 31, 2020, the Company had cash and short-term investment balances of $279.1 million, working capital of $495.2 million, and the full $500.0 million available under its revolving credit facility (the "Credit Facility"), following repayment in Q4 2020 of the remaining $90.0 million drawn amount. Total debt of $33.6 million was related to lease liabilities.

Cash costs per ounce sold

Silver Segment 2020 cash costs were $7.05 per silver ounce sold, in-line with the Revised 2020 Forecast range of $6.20 to $7.70 per silver ounce sold.

Gold Segment 2020 cash costs were $797 per gold ounce sold, which was slightly lower than the Revised 2020 Forecast range of $800 to $860 per gold 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 2020 Financial Statements.

All-in Sustaining Costs per ounce sold (“AISC”)

Silver Segment 2020 AISC were $11.38 per silver ounce sold, in-line with the Revised 2020 Forecast range of $10.50 to $12.50 per silver ounce sold.

Gold Segment 2020 AISC were $1,011 per gold ounce sold, which was lower than the Revised 2020 Forecast range of $1,050 to $1,125 per gold ounce sold.

Consolidated 2020 AISC per silver ounce sold, including by-product credits from the Gold Segment mines, were negative $(3.29) per silver ounce sold, which was lower than the Revised 2020 Forecast range of $(3.00) to $0.75 per silver ounce sold.

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 2020 Financial Statements.

ENVIRONMENTAL, SOCIAL, AND GOVERNANCE

Pan American is committed to the principles of sustainable development and conducting our activities in an environmentally and socially responsible manner. Our core environmental, social, governance ("ESG") values are: caring for the environment in which we operate; contributing to the long-term development of our host communities; ensuring safe and secure workplaces for our employees; contributing to the welfare of our employees, local communities and governments; and, operating transparently.

The Company sets annual corporate performance goals with an effort to instill a high level of understanding and commitment by those who carry out our day-to-day business activities. These goals and performance relative to them are reported in our sustainability report, which also includes our ESG, and health and safety performance. Our 2019 sustainability report (the "Sustainability Report") released on May 8, 2020 is available on our website at www.panamericansilver.com, and the Company plans to release an updated 2020 sustainability report (the "2020 Sustainability Report") in the early part of the second quarter of 2021.

On September 14, 2020 the Company hosted its first "Responsible Investor Conference Call" where senior members of the Company's management team discussed the Company's approach and performance on ESG matters, the key opportunities and challenges regarding our sustainability strategy, and the Company's 2019 Sustainability Report, and responded to questions from investors and analysts. A webcast of this call along with the related presentation slides are available on our website at www.panamericansilver.com.

As part of our commitment to driving global sustainable development and contributing to the United Nations Sustainable Development Goals, we became signatories to the United Nations Global Compact in July 2020. As a signatory, in 2021 we will begin reporting on our progress implementing the United Nations Global Compact Principles into business operations.

Governance

Pan American adheres to high standards of corporate governance and closely follows the requirements established by both the Canadian Securities Administrators and the SEC. We believe that our current corporate governance systems meet or exceed these requirements.

The Company's board of directors (the "Board of Directors" or "Board") oversees the direction and strategy of the business and the affairs of the Company. The Board is comprised of eight directors, six of whom were independent as at December 31, 2020. The Board's wealth of experience allows it to effectively oversee the development of corporate strategies, provide management with long-term direction, consider and approve major decisions, oversee the business generally and evaluate corporate performance. The Nominating and Governance Committee, appointed by the Board, oversees the effective functioning of the Board and the implementation of governance best practices.

We believe that good corporate governance is important to the effective performance of the Company, and plays a significant role in protecting the interests of all stakeholders while helping to maximize value.

The Health, Safety, Environment, and Communities Committee ("HSEC Committee") of the Board provides oversight related to health and safety and guidance to management in ensuring mine operations and project development are conducted in an environmentally and socially responsible manner. The full charter of the HSEC Committee is available at www.panamericansilver.com.

At the management level, we have established an ESG Committee comprised of cross-departmental senior and executive management representatives, including: the Chief Executive Officer; the Chief Operating Officer; the Chief Financial Officer; the Senior Vice President, Corporate Affairs and Sustainability; the General Counsel; the Senior Vice President, Technical Services & Process Optimization; the Vice President, Sustainability, Diversity and Inclusion; the Vice President, Environment; and, the Vice President, Mineral Processing, Tailings & Dams.

The ESG Committee meets frequently and is responsible for establishing and overseeing the Company's ESG policies and performance, and monitoring the Company's human rights programs.

Health and Safety

Pan American is deeply committed to protecting the health, safety and well-being of our employees, contractors, suppliers, and communities where we operate. We believe that operating safe mines and building a culture of safety are directly related to our operational success and the ability to create long-term value for all our stakeholders.

Environmental

Environmental Stewardship

We are committed to operating our mines and developing our new projects in an environmentally responsible manner. Guided by our Environmental Policy, we take measures to minimize and mitigate the environmental impacts of our operations in each phase of the mine life cycle, from early exploration through development, construction and operation, up to and after the mine's closure. We are actively implementing the Mining Association of Canada's Towards Sustainable Mining ("TSM") program at all of our mines.

We have a company-wide goal, connected to our annual executive compensation plan, of incurring zero significant environmental incidents ("SEI") at our operations. An SEI is defined as an incident that has a direct negative impact on the environment, or the communities outside the Company's mines or project sites, including environmental incidents that significantly impact communities' perceptions of the Company. We have had no SEIs in 2020 or in 2021 as of the date of this MD&A.

We conduct corporate environmental audits of our operations to monitor and continuously improve environmental performance. Environmental staff from the mines periodically assist the corporate environmental team in conducting these audits, which improves commitment, definition and adoption of best practices, and

integration and consolidation of company-wide standards across our operations. In 2020 a corporate environmental audit was conducted on the La Colorada operation. In 2019, environmental audits were conducted on the Manantial Espejo, La Arena, and Shahuindo mines. No material issues were identified in either the 2020 or 2019 environmental audits. The corporate audit program was restricted in 2020 due to COVID-19 travel restrictions.

Climate Strategy

We recognize that climate change is a threat to the global environment, society, our stakeholders and our business. We support the recommendations from the Financial Stability Board Task Force on Climate Related Financial Disclosure ("TCFD"), and we are working towards their implementation, targeting 2021 for the release of our first TCFD-aligned report. In 2020, we started work on climate-related goals for 2021 and climate change risk analysis for TCFD reporting purposes, including transitional risks. The Company plans to include in the 2020 Sustainability Report details on the approach and status of management's assessment of climate change related risks and opportunities facing the Company. The nature of such risks are expected to include, but are not necessarily limited to, the climate change risks further described in the Risk and Uncertainties section of this MD&A. We will also continue to report on our emissions, targeted emission reductions, climate risks and other climate-related actions in our annual sustainability reports.

Tailings

We continuously work to ensure that all tailings storage facilities, dams, heap leach pads, and waste stockpiles are robustly designed, built, operated, maintained and closed in accordance with our internal standards, the TSM Tailings Management protocol, the Canadian Dam Association guidelines, and known global best practices in order to prevent any incidents or failures. Our tailings storage facilities and water dams are subject to routine inspections, audits, geotechnical and environmental monitoring, annual reviews, and independent reviews to continually improve systems and methods in order to minimize potential harm associated with these long-term facilities.

In 2020, we advanced the implementation of the TSM protocols at all of our sites and ensured safe management of tailings facilities during mine suspensions related to the COVID-19 pandemic. All installations are in satisfactory condition, and continue to be monitored to confirm readings and trends are acceptable.

Water

We recognize competition to access valuable water resources is intensifying in the regions where we operate due to population growth, economic development, degraded water quality and climate change. Our effective water stewardship is essential to secure access to valuable water resources, protecting shared resources, respecting the rights of other water users, and where possible avoiding impacts that may occur within and beyond our operating boundaries. This involves developing comprehensive understandings in the quantity, quality, competing rights and uses, and renewability of the water resource regimes that has been allocated to our business and closely managing our use of freshwater, investigating ways of using water more efficiently, minimizing negative impacts on water quality and, in many instances, developing access to water resources for regional benefits that were previously unknown or undeveloped.

In 2020, we continued to implement the TSM Water Stewardship protocol and had no material incidents or non-compliance related to water in the quarter.

Corporate Social Responsibility

Supporting Communities during the COVID-19 Pandemic

The COVID-19 pandemic has resulted in a humanitarian crisis in many of the communities where Pan American operates. The Company is engaging with its communities to better understand the effects of the pandemic on its residents and how we can support them during this time. Pan American has committed to donate $2.0 million towards food, hygiene and medical supplies, and personal protection equipment; and included the donation of an

oxygen plant from our Shahuindo operation to the Cajambamba province of Peru. The oxygen plant supplies oxygen to local hospitals and health care centres in the Cajamarca region. The Company is also providing health care support, assisting with sanitation efforts, and facilitating access to education. At the request of some of the communities, we paused the implementation of our local economic development programs earlier in 2020. Most of these programs are now in the process of being resumed.

In 2020, Pan American entered into a 3-year, $1.5 million partnership commitment with UNICEF Canada to provide health and education to vulnerable children in Latin America affected by the COVID-19 pandemic.

Community Engagement

We have adopted formal policies, procedures, and industry best practices to manage our impacts and contribute to the social and economic development of local communities. Our social management framework provides a consistent methodology for measuring and tracking social impacts and sustainability performance across our mines, while offering the flexibility needed to tailor our approach to the circumstances of each operation. Components of our management framework include:

- Community teams at each operation are responsible for community engagement, impact management, and program implementation.
- Response mechanisms help us understand and respond to community questions, concerns or complaints around the perceived or actual impacts of our activities.
- Participatory baseline assessments conducted with communities and third parties help us understand a community's social context, the potential impacts of our activities, and communities of interest and vulnerable groups.
- Programs and initiatives intended to provide long-term sustainable benefits are designed in collaboration with communities.

We conduct social audits at all operations to help us monitor and manage the impacts of our activities on communities, our work force, and in our regional supply chains. Our audit framework is based on the ISO 26000 guidance on social responsibility and incorporates content from best practices and other standards, including the United Nations Guiding Principles on Business and Human Rights, as well as the TSM Protocol on Community and Aboriginal Relationships. During 2020, we conducted a social audit of the Manantial Espejo operation in Argentina.

Human Rights

In 2019, Pan American adopted its Global Human Rights Policy that is based on the three pillars of the United Nations Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises. This policy consolidates several of our existing objectives in the areas of environment, labour, diversity and social responsibility. It formalizes our approach to fostering a positive human rights culture throughout our organization and our work to prevent, minimize or mitigate adverse impacts from our activities on our employees, communities, and other external stakeholders.

We took additional steps to align with international human rights best practices in 2019 and conducted a gap assessment of our security practices against the requirements of the Voluntary Principles on Security and Human Rights and UNICEF Canada's Child Rights and Security Checklist at two of our three operations with armed security forces: La Colorada in Mexico and Escobal in Guatemala. In 2020, we completed the final assessment at Dolores in Mexico.

Our on-going community engagement, social audit process, and response mechanisms are designed to help us identify actual and potential human rights risks resulting from our activities and take appropriate steps to manage and mitigate these risks. Our social audit process screens for human rights risks in the provisions of certain contractor and subcontractor agreements, as well as from contractor security practices. Our Supplier Code of Conduct provides an additional framework to help manage human rights risks in our supply chain. We also follow

the guidelines set by the World Gold Council's Conflict-Free Gold Standard, which helps us ensure that our actions do not contribute to human rights violations.

In December 2020, Pan American adopted an Inclusion and Diversity Policy, which provides guidance on standards of conduct that must be followed by our directors, officers, employees, contractors and business partners acting on behalf of or representing Pan American. The Policy is available at panamericansilver.com.

Indigenous Rights

Pan American recognizes and respects the rights, cultures, heritage and interests of indigenous peoples. We are committed to building and maintaining positive relationships with indigenous groups through on-going engagement, and identification of mutually beneficial opportunities.

Through our acquisition (the "Tahoe Acquisition") of Tahoe Resources Inc. ("Tahoe"), we now control three mining properties located near Indigenous communities – our Timmins West and Bell Creek operating mines (collectively, "Timmins") in Canada and the Escobal mine in Guatemala. Mining operations at Escobal are suspended while the government of Guatemala completes an International Labour Organization 169 ("ILO 169") consultation process with local Indigenous communities.

2021 OPERATING OUTLOOK

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. We may revise forecasts during the year to reflect actual results to date and those anticipated for the remainder of the year. The 2021 production, cash costs and AISC outlooks for each mine are further discussed in the "2021 Mine Operation Forecasts" section of this MD&A.

2021 Silver and Gold Production, Cash Costs and AISC Forecasts:

	Silver Production (million ounces)	Gold Production (thousand ounces)	Cash Costs ($ per ounce)[1]	AISC ($ per ounce)[1]
Silver Segment:				
La Colorada	7.16 - 7.44	4.0 - 4.2	4.00 - 5.00	8.50 - 9.50
Huaron	3.61 - 3.86	0.5	4.80 - 7.90	9.50 - 12.50
Morococha (92.3%)[2]	2.25 - 2.42	0.8 - 0.9	10.00 - 14.20	13.50 - 17.50
San Vicente (95.0%)[3]	3.23 - 3.37	0.5	12.30 - 13.50	16.75 - 17.75
Manantial Espejo/COSE/Joaquin	3.18 - 3.46	33.2 - 35.3	16.30 - 17.30	19.00 - 20.00
Total[4,5]	**19.43 - 20.55**	**39.0 - 41.4**	**8.50 - 10.00**	**12.50 - 14.00**
Gold Segment:				
Dolores	2.73 - 2.97	160.8 - 179.3	665 - 820	850 - 1,000
Shahuindo	0.29 - 0.43	153.9 - 165.0	715 - 795	1,125 - 1,250
La Arena	0.03	102.9 - 110.9	870 - 940	1,275 - 1,400
Timmins	0.02	148.4 - 158.5	1,085 - 1,160	1,375 - 1,450
Total[4,5]	**3.07 - 3.45**	**566.0 - 613.7**	**825 - 925**	**1,135 - 1,250**
Total Production[5]	**22.50 - 24.00**	**605.0 - 655.1**	n/a	n/a
Consolidated Silver Basis[6]	n/a	n/a	n/a	**(2.80) - 2.70**

(1) Cash costs and AISC are non-GAAP measures. Please refer to the "Alternative Performance (Non-GAAP) Measures" section of this MD&A for further information on these measures. The cash costs and AISC forecasts assume average metal prices of $23.50/oz for silver, $1,825/oz for gold, $2,700/tonne ($1.22/lb) for zinc, $1,900/tonne ($0.86/lb) for lead, and $7,400/tonne ($3.36/lb) for copper; and average annual exchange rates relative to 1 USD of 20.00 for the Mexican peso ("MXN"), 3.50 for the Peruvian sol ("PEN"), 96.67 for the Argentine peso ("ARS"), 7.00 for the Bolivian boliviano ("BOB"), 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) Silver Segment Cash Costs and AISC are calculated net of credits for realized revenues from all metals other than silver and are calculated per ounce of silver sold. Gold Segment Cash Costs and AISC are calculated net of credits for realized silver revenues and are calculated per ounce of gold sold.
(5) Totals may not add due to rounding.
(6) Consolidated AISC is calculated per silver ounce sold with total gold revenues included within by-product credits. General and administrative ("G&A") and greenfield exploration costs are included in the consolidated AISC, but not allocated in calculating AISC for each operation.

The 2021 forecast assumes operations will continue to be impacted by comprehensive COVID-19 protocols, which increase costs and restrict throughput levels, especially at our underground mines. The impact of COVID-19 on operations is expected to diminish over the course of 2021, as vaccinations are deployed throughout our operating jurisdictions later in the year. For the first quarter of 2021, we assume operations will experience the full effect of COVID-19 restrictions, similar to Q4 2020. We assume the impact of restrictions declines to 75% in the second quarter, 50% in the third quarter and 25% in the fourth quarter of 2021. The first quarter of 2022 is assumed to be the first period that will be free of COVID-19 restrictions, allowing operations to run at full capacity. The impact regarding the restrictions could improve or worsen relative to our assumptions, depending on how each jurisdiction manages potential outbreaks of COVID-19, the development and supply of vaccines, and the roll-out of vaccination programs in each jurisdiction.

The Company has forecast 2021 silver production of 22.50 to 24.00 million ounces, representing a 30% to 39% increase over the 2020 consolidated production of 17.31 million ounces, as operating restrictions related to COVID-19 begin to diminish over 2021. The silver production guidance for 2021 reflects: the decline in silver grades and increase in gold grades at Dolores from mine sequencing; restricted mining rates at La Colorada during the first half of the year due to the replacement of ventilation infrastructure; and a continued scarcity of qualified underground mining personnel in southern Argentina due to inter-provincial travel restrictions, which results in reduced production rates at Manantial Espejo, COSE and Joaquin while extending the mine lives by approximately one year.

Gold production in 2021 is expected to be between 605.0 thousand and 655.1 thousand ounces, which is an increase of between 16% and 25% from 2020 production levels. The expected increase is primarily driven from the higher gold production at Dolores due to an expected 40% to 45% increase in gold grades, as well as the assumption that operating restrictions related to COVID-19 begin to diminish over 2021.

Due to the expected gold production at Dolores, the Company has determined that the mine is better identified as a Gold Segment operation. As such, the Company will report Dolores cash costs and AISC in 2021 on a per ounce of gold basis and include it as part of its Gold Segment cash costs and AISC calculations.

Silver Segment cash costs for 2021 are forecast to be between $8.50 and $10.00 per payable ounce of silver, while Silver Segment AISC are expected to be between $12.50 and $14.00 per ounce, which compare to 2020 Silver Segment cash costs and AISC of $7.05 and $11.38, respectively. The expected increases relative to 2020 are primarily driven by the reallocation of Dolores from the Silver Segment, as the 2020 cash costs and AISC, exclusive of Dolores, were $10.14 and $13.10, respectively. Excluding the impact from moving Dolores into the Gold Segment, Silver Segment cash costs are expected to decrease in 2021 due to higher by-product credits from higher price assumptions and better grades at Manantial Espejo and San Vicente, which should more than offset increased operating costs. Similarly, Silver Segment AISC are expected to decrease from 2020 AISC (excluding Dolores) due to higher grades and by-product credits, despite higher anticipated sustaining capital investments for several long life projects, such as tailings storage facility expansions and other mine infrastructure.

Gold Segment cash costs for 2021 are forecast to be between $825 and $925 per payable ounce of gold, while Gold Segment AISC are expected to be between $1,135 and $1,250 per ounce, which compare to 2020 Gold Segment cash costs and AISC of $797 and $1,011, respectively. The expected increase in the Gold Segment unit cost per ounce metrics are primarily due to higher waste mining at La Arena and Shahuindo from an increase in the waste-to-ore strip ratio and increased costs in consumables and community spending, as well as increased capital spending at Shahuindo, La Arena and Timmins, as described in the "2021 Capital Expenditure Forecasts" section, which largely reflects the deferral of major projects from 2020 into 2021. The increases at Shahuindo, La

Arena and Timmins are expected to be partially offset by the reallocation of Dolores into the Gold Segment, which is expected to be our lowest unit cost per ounce producer in 2021.

Consolidated AISC (on a silver basis, net of by-product credits) in 2021 is forecast to be between negative $2.80 and positive $2.70 compared to the negative $3.29 per ounce recorded in 2020. The expected increase in AISC is largely driven by higher anticipated capital spending.

2021 Consolidated Base Metal Production Forecasts:

	Zinc (kt)	Lead (kt)	Copper (kt)
Consolidated Production	**60.7 - 64.5**	**23.4 - 25.7**	**7.1 - 8.0**

Base metal production is expected to increase for zinc, lead and copper in 2021 compared to 2020. The expected increases are largely due to an assumption of steadily increasing operating capacity at all underground mines during 2021, given the assumption of gradually decreasing pandemic impacts.

2021 Capital Expenditure Forecasts

Pan American expects sustaining capital expenditure of between $245.0 million and $260.0 million in 2021, which is an increase from the $162.0 million invested in 2020. In addition, Pan American expects to invest between $55.0 million and $60.0 million in project capital, primarily to advance the skarn deposit at La Colorada and for exploration drilling of the Wetmore project adjacent to the Bell Creek Mine. Approximately $50.0 million to $60.0 million of sustaining and project capital was deferred into 2021 from 2020 due to COVID-19 related delays.

The following table details the forecast capital expenditures at the Company's operations and projects in 2021:

	2021 Forecast Capital Investment ($ millions)
La Colorada	27.0 - 29.5
Huaron	14.5 - 15.5
Morococha	6.0 - 7.0
San Vicente	13.5 - 14.5
Manantial Espejo	6.5 - 7.5
Dolores	26.0 - 30.0
Shahuindo	66.5 - 68.0
La Arena	44.5 - 45.0
Timmins	40.5 - 43.0
Sustaining Capital Total	**245.0 - 260.0**
La Colorada Skarn	50.0 - 55.0
Timmins Expansion	5.0
Project Capital Total	**55.0 - 60.0**
Total Capital	**300.0 - 320.0**

The forecast 2021 sustaining capital is related primarily to the following activities:

- La Colorada - underground ventilation infrastructure improvements, mine equipment replacement and refurbishments, tailing storage facility expansions and near-mine exploration;
- Huaron - a tailings storage facility expansion, mine deepening and infrastructure investments, mine equipment replacements, and near-mine exploration;
- Morococha - near-mine exploration and mine equipment additions and replacements;
- San Vicente - a tailings storage facility expansion, mine infrastructure and equipment replacements, and near-mine exploration;

- Manantial Espejo - a tailings storage facility expansion, and lease payments related to on-site electricity generation;
- Dolores - heap leach pad expansions, mine equipment refurbishments, and mine infrastructure and plant upgrades;
- Shahuindo - heap leach pad expansions, waste rock storage facility expansions and other mine infrastructure, land purchases and near-mine exploration;
- La Arena - open pit mine waste pre-stripping, waste rock storage facility expansions, leach pad expansions, and near-mine exploration; and,
- Timmins - tailings storage facility expansions, mine equipment replacements and refurbishments, mill upgrades, and near-mine exploration.

Forecast 2021 project capital consists of:

- La Colorada - continued exploration and in-fill drilling, early stage engineering and metallurgical testing for the skarn discovery; camp upgrades; and a refrigeration unit to address temperatures in the underground mine, which appear to increase at depth. The investment in camp upgrades and the refrigeration unit is expected to benefit the current operation, and especially the long-term development of the skarn deposit;
- Timmins - underground development from the existing Bell Creek workings at depth and exploration expenditures related to the Wetmore project.

2021 Care & Maintenance and General & Administrative Expense Forecast

Forecast care and maintenance expense for 2021 is $22.0 million to $23.5 million, and is comprised of $20.0 million to $21.0 million for the Escobal mine and $2.0 million to $2.5 million for the Navidad project. Annual corporate general and administrative expense, including share-based compensation, is forecast to be between $39.0 million and $42.0 million in 2021.

2021 Exploration Expenditures Forecast

Exploration expenditures in 2021, including amounts that will be expensed and capitalized, are expected to total approximately $42.0 million, comprised of: (1) $12.5 million for 105,000 metres of near-mine brownfield exploration drilling targeting reserve replacement, which is included in the forecast for 2021 sustaining capital expenditures for each mine, (2) $8.0 million in regional, greenfield exploration in Peru, Mexico and Canada and corporate overhead; and (3) $22.0 million for drilling the La Colorada skarn and adjacent vein systems, as well as exploring the Wetmore project adjacent to the Bell Creek mine in Timmins, which is included in the forecast for 2021 project capital expenditures.

2021 Mine Operation Forecasts

Management's expectations for each mine's 2021 operating performance, including production, cash costs, and AISC, are provided below:

La Colorada operation

Silver production is forecast to be between 7.16 and 7.44 million ounces in 2021, which is 42% to 48% more than the 5.02 million ounces produced in 2020. The expected increase is driven primarily by higher throughput rates and higher grades, as the ventilation systems are restored and operating restrictions related to COVID-19 diminish during the year.

Cash costs per silver ounce in 2021 are forecast to be between $4.00 and $5.00, significantly lower than the $6.99 recorded in 2020, given the higher production from higher throughput and grades.

AISC in 2021 is forecast to be between $8.50 and $9.50 per silver ounce, lower than the $10.80 achieved in 2020, driven by the same factors affecting cash costs, partially offset by higher sustaining capital per ounce in 2021 for

investments in ventilation and tailings storage projects and because of the COVID-19 related deferral of certain projects from 2020 into 2021.

Huaron operation

Silver production is forecast to be between 3.61 to 3.86 million ounces in 2021, which is 68% to 80% higher than the 2.15 million ounces produced in 2020, reflecting higher anticipated throughput as the operating restrictions related to COVID-19 diminish during the year. The higher throughput is similarly expected to result in an increase in base metal production, offset by slightly lower grades from mine sequencing.

Cash costs per silver ounce in 2021 are forecast to be between $4.80 and $7.90, an increase from the 2020 cash costs of $3.77 per ounce. Higher cost per tonne estimates for 2021 are based on assumptions for modest escalations in wages and consumable costs and increased depth of mining, partially offset by higher by-product credits from higher base metal price assumptions.

AISC for 2021 is forecast to be between $9.50 and $12.50 per silver ounce, higher than the $6.53 per ounce achieved in 2020. The anticipated increase in AISC reflects higher operating costs and higher sustaining capital from the COVID-19 related deferral of certain projects from 2020 into 2021.

Morococha operation

Silver production is forecast to be between 2.25 and 2.42 million ounces in 2021, approximately double the 1.17 million ounces produced in 2020. The expected increase reflects higher anticipated throughput, as the operating restrictions related to COVID-19 diminish during the year, and slightly higher grades. The higher throughput is similarly expected to result in an increase in base metal production, which more than offsets lower base metal grades from mine sequencing.

Cash costs per silver ounce in 2021 are forecast to be between $10.00 and $14.20, comparable to the 2020 cash costs of $11.40 per ounce.

AISC is forecast to be between $13.50 and $17.50 per silver ounce in 2021, significantly lower than the $18.38 per ounce reported in 2020. The decrease largely reflects lower anticipated sustaining capital per ounce in 2021, given the higher production.

San Vicente operation

Silver production is forecast to be between 3.23 and 3.37 million ounces in 2021, a meaningful increase over 2020 production of 2.32 million ounces. The expected increase reflects higher anticipated throughput, as the operating restrictions related to COVID-19 diminish during the year, and higher grades from mine sequencing. The higher throughput and grades are similarly expected to result in an increase in lead and zinc production, while copper production is expected to decrease due to changes in the commercialization strategy.

Cash costs per silver ounce in 2021 are forecast to be between $12.30 and $13.50, which is between $2.04 and $3.24 per ounce lower than 2020 cash costs of $15.54 per ounce. The expected decrease is driven by higher by-product credits per ounce from increased zinc grade and improved concentrate treatment terms, partially offset by higher operating costs, including an increase in royalties based on price assumptions.

AISC for 2021 is forecast to be between $16.75 and $17.75 per silver ounce, slightly lower than the $17.94 per ounce recorded in 2020. The expected decrease is due to the same factors affecting the cash costs forecast, partially offset by higher sustaining capital from the COVID-19 related deferral of certain projects from 2020 into 2021.

Manantial Espejo operation

Silver production is forecast to be between 3.18 and 3.46 million ounces in 2021, which is between 25% and 36% higher than the 2.55 million ounces produced in 2020. Gold production in 2021 is forecast to be between 33.2 and 35.3 thousand ounces, which is between 42% and 51% higher than the 23.4 thousand ounces produced in 2020. The expected increase reflects higher anticipated throughput, particularly from the higher grade COSE and Joaquin operations, as the operating restrictions related to COVID-19 diminish during the year.

Cash costs per silver ounce in 2021 are forecast to be between $16.30 to $17.30, an increase from the 2020 cash costs of $15.68. The expected increase is primarily the result of an assumption that local inflationary pressures will lead to increased wage and consumable costs in dollar terms, and the additional costs for the mining, trucking and processing of COSE and Joaquin ores. These factors increasing costs are partially offset by higher gold by-product credits due to the higher gold grades from COSE displacing low-grade stockpile ores.

AISC for 2021 is forecast to be between $19.00 and $20.00 per silver ounce, higher than the $15.80 per ounce reported in 2020. AISC is expected to increase due to the same factors affecting cash costs, as well as slightly higher sustaining capital.

Dolores operation

Gold production in 2021 is forecast to be between 160.8 and 179.3 thousand ounces, which is between 64% and 83% higher than the 98.0 thousand ounces produced in 2020. Silver production is forecast to be between 2.73 and 2.97 million ounces in 2021, which is 21% to 28% lower than the 3.78 million ounces produced in 2020. The expected increase in gold production and decrease in silver production is primarily driven by planned mine sequencing into higher gold grade but lower silver grade zones in the open pit at depth.

Cash costs per gold ounce in 2021 are forecast to be between $665 and $820 per ounce, compared to $824 per gold ounce had Dolores been reported as a Gold Segment operation in 2020. The expected decrease in cash costs is driven by higher gold grades, despite the lower silver grades expected in 2021, and an increase in operating costs from a higher proportion of non-capitalized open pit waste mining expenditures.

AISC in 2021 is forecast to be between $850 and $1,000 per gold ounce, significantly lower than the $1,189 had Dolores been reported as a Gold Segment operation in 2020. The expected decrease is due to the same factors affecting cash costs, in addition to lower sustaining capital per ounce, largely from a lower open pit strip ratio resulting in lower open pit pre-stripping in 2021.

Shahuindo operation

Gold production is forecast to be between 153.9 and 165.0 thousand ounces in 2021, an increase from the 142.4 thousand ounces produced in 2020. The expected increase reflects higher anticipated throughput, as the operating restrictions related to COVID-19 diminish during the year, partially offset by a decrease in the ratio of ounces produced to gold ounces placed on the heap due to expected leach sequencing during 2021.

Cash costs per gold ounce in 2021 are forecast to be between $715 and $795, up from the 2020 cash costs of $588 per ounce. The expected increase results from: a higher open pit waste strip ratio, operating cost increases for wages and consumables; greater consumption of consumables in the processing circuit; and higher community expenses.

AISC for 2021 is forecast to be between $1,125 and $1,250 per gold ounce, which is $375 to $500 higher than the 2020 AISC of $750 per ounce, reflecting the increase in cash costs, as well as higher sustaining capital from the COVID-19 related deferral of certain projects from 2020 into 2021.

La Arena operation

Gold production is forecast to be between 102.9 and 110.9 thousand ounces in 2021, consistent with the 105.4 thousand ounces produced in 2020 as throughput, grades and recoveries are expected to be relatively stable year-over-year.

Cash costs per gold ounce in 2021 are forecast to be between $870 and $940, which is $149 to $219 higher than 2020 cash costs of $721, largely due to an increase in open pit waste mining, expected cost increases in wages and consumables, and community expenses.

AISC for 2021 is forecast to be between $1,275 and $1,400 per gold ounce, which is between $166 to $291 higher than the $1,109 per ounce reported in 2020 due to the increase in cash costs previously mentioned, as well as higher sustaining capital per ounce. The increase in sustaining capital is primarily from a higher open pit strip ratio and an increase in deferred stripping, which reflect the extension of the mine life following significant exploration success, as disclosed in our 2020 mineral reserves and resources update.

Timmins operation

Gold production is forecast to be between 148.4 and 158.5 thousand ounces in 2021, comparable to the 148.4 thousand ounces produced in 2020, and reflects higher anticipated throughput, as the operating restrictions related to COVID-19 diminish during the year.

Cash costs per gold ounce in 2021 are forecast to be between $1,085 and $1,160, slightly higher than the 2020 cash costs of $1,061. The expected increase primarily reflects an assumption that the Canadian dollar will appreciate relative to the US Dollar in 2021, and for modest cost increases of wages and consumables.

AISC for 2021 is forecast to be between $1,375 and $1,450 per gold ounce, higher than 2020 AISC of $1,213 per ounce due to the expected increase in cash costs, as well as higher sustaining capital investments, largely for a significant expansion of the tailings facility planned for 2021.

2020 OPERATING PERFORMANCE

Impact of COVID-19

- **Operational Impacts**

The following section describes the impact of the COVID-19 pandemic on the Company's operations during the twelve months ended December 31, 2020. Please see the "2021 Operating Outlook" section of this MD&A for our expectation for operations in 2021.

Argentina

On March 20, 2020, the federal government of Argentina imposed mandatory social distancing on its population and ordered the suspension of non-essential activities, including mining. In order to comply with these orders, the Company suspended its Manantial Espejo operations on March 23, 2020, and assigned a work-from-home directive for its administrative personnel. The federal government subsequently deemed mining an essential activity on April 3, 2020. Underground mining at Manantial Espejo resumed on April 26, 2020, and development work at the Joaquin and COSE mines resumed in early May 2020. In addition, the Mining Secretary in the Province of Santa Cruz, Argentina, imposed a suspension of mining operations during the holiday period to help curb the spread of COVID-19, which caused production at Manantial Espejo, COSE and Joaquin to be suspended between December 21, 2020 and January 7, 2021.

Bolivia

On March 22, 2020, the Bolivian government announced a national quarantine and suspension of non-essential activities including mining. In response, the Company halted all supply deliveries and personnel transport to its San Vicente mine, and subsequently suspended operations in an orderly manner, assigning a work-from-home directive for its administrative personnel and support offices. On May 2, 2020, the government authorized the resumption of mining activities. Underground development activities at San Vicente resumed on May 12, 2020, mining resumed on May 18, 2020 and plant operations resumed on June 1, 2020.

Canada

The Timmins mines operated throughout 2020 at reduced capacity to comply with physical distancing restrictions. Health and safety protocols consistent with those recommended by the local and provincial health authorities, best management practices and the World Health Organization were adopted in March 2020 and continue to be refined as new recommendations are adopted.

Mexico

On March 17, 2020, Mexico's Senate announced the need to demobilize the vulnerable population from conducting activities that could increase the possibility of becoming infected from the COVID-19 virus. On March 19, 2020, the Company began to demobilize vulnerable workers, assigned a work-from-home directive for its administrative personnel and reduced the workforce at its mines in Mexico by approximately 30% in order to increase physical distancing throughout the operations, offices, and personnel transport systems. On March 31, 2020, Mexico's Ministry of Health issued a National Agreement for the immediate suspension of non-essential activities until April 30, 2020, which was subsequently extended to May 30, 2020. The Company suspended its La Colorada and Dolores operations in early April to comply with this National Agreement. Mining operations were permitted to prepare to restart in late May, 2020, as the government began lifting some of the lockdown restrictions and redefined the mining industry as an essential business.

On May 24, 2020, underground mining and processing activities resumed at La Colorada at reduced capacity to accommodate physical distancing restrictions.

At the Dolores operation, open pit mining, crushing, and heap leaching production activities resumed on June 1, 2020 at modestly reduced capacity to accommodate physical distancing restrictions. The pulp agglomeration plant

restarted in mid-June 2020 and underground mining resumed in July 2020. Circulation of process solutions on the heap leach pads continued during the suspension, allowing gold and silver production from pad inventory at reduced rates. Construction activity on the heap leach pad expansion resumed in Q4 2020 once the rain season had passed.

Peru

On March 15, 2020, the government of Peru declared a State of Emergency, requiring a national quarantine and suspension of non-essential activities including mining. To comply with the order, the Company assigned a work-from-home directive for its administrative personnel and temporarily suspended operations at its four Peruvian mines: Shahuindo, La Arena, Huaron and Morococha.

Open pit mining and run-of-mine heap leach activities at Shahuindo and La Arena resumed on May 15, 2020 at reduced capacities to accommodate physical distancing restrictions. Construction of the Shahuindo heap leach pad expansion and preparation for construction of the La Arena waste dump resumed in June 2020.

During the suspensions at both Shahuindo and La Arena, circulation of process solutions on the heap leach pads continued.

Operations resumed at Huaron and Morococha on June 7, 2020 and June 23, 2020, respectively; however, both mines were returned to care and maintenance on July 20, 2020 in response to several workers at the mines testing positive for COVID-19. Following intensive health screenings and testing for the virus that were developed and deployed at Shahuindo and La Arena during July and August 2020, the Company began gradually redeploying its workforce at Huaron and Morococha over last two weeks of September 2020.

Financial Impacts

The full financial impacts of the COVID-19 pandemic on the Company are indeterminable given the uncertainty of how long the pandemic impacts will persist. However, management believes that the Company's liquidity is sufficient to satisfy our anticipated 2021 working capital requirements, fund currently planned capital expenditures, and to discharge liabilities as they come due based on the Company's current financial position, the results of a management performed COVID-19 disruption and liquidity analysis, and the Company's access to capital, particularly given the credit facility currently in-place. Please see the "Liquidity and Capital Position" and the "Risks and Uncertainties" sections of this MD&A for further information.

Consolidated 2020 Operating Results

Silver and Gold Production

The following table provides silver and gold production at each of Pan American's operations for the three and twelve month periods ended December 31, 2020 and 2019, except for the Shahuindo, La Arena, and Timmins' mines (the "Acquired Mines"), which for the twelve months ended December 31, 2019 only include production from the February 22, 2019 acquisition date:

	Silver Production (ounces '000s)				Gold Production (ounces '000s)			
	Three months ended December 31,		Year ended December 31,		Three months ended December 31,		Year ended December 31,	
	2020	2019	**2020**	2019	**2020**	2019	**2020**	2019
La Colorada	**1,186**	2,080	**5,025**	8,206	**0.8**	1.3	**3.5**	4.6
Huaron	**892**	935	**2,148**	3,796	**0.3**	0.2	**0.5**	1.0
Morococha[1]	**527**	554	**1,173**	2,456	**0.2**	0.2	**0.6**	1.4
San Vicente[2]	**663**	877	**2,320**	3,528	**0.1**	0.1	**0.3**	0.5
Manantial Espejo	**742**	817	**2,547**	2,599	**8.0**	6.7	**23.4**	22.4
Dolores	**764**	1,287	**3,779**	5,122	**30.5**	26.1	**98.0**	117.6
Shahuindo	**83**	54	**268**	137	**33.6**	43.5	**142.4**	145.4
La Arena	**11**	11	**33**	26	**41.4**	48.4	**105.4**	122.5
Timmins	**4**	6	**18**	18	**38.1**	47.3	**148.4**	143.8
Total [3]	**4,872**	6,622	**17,312**	**25,886**	**152.9**	**173.9**	**522.4**	**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) Totals may not add due to rounding.

Silver Production

2020 consolidated silver production of 17.31 million ounces was 33% lower than the 25.89 million ounces produced in 2019. Production at all Silver Segment operations declined year-over-year due to the COVID-19 related mine suspensions and restricted capacities. Other factors reducing 2020 production were: an inability to access high-grade ore at La Colorada due to the COVID-19 related delay in completing an underground ventilation raise and the loss of a ventilation raise from surface in late Q4 2020; mine sequencing into higher gold grade zones and lower silver grade zones at the Dolores open pit mine; and lower grades at San Vicente from mine sequencing.

Consolidated silver production in Q4 2020 of 4.87 million ounces was 26% lower than the 6.62 million ounces produced in Q4 2019, primarily due to the COVID-19 related impacts on operations, as well as the other factors described previously. Q4 2020 silver production was also reduced by a suspension of operations at Manantial Espejo from December 21, 2020 to January 7, 2021, to help curb the spread of COVID-19.

Gold Production

Consolidated gold production in 2020 of 522.4 thousand ounces was 7% below the 559.2 thousand ounces produced in 2019. Gold production was less impacted by COVID-19 than silver production because: operations at Timmins continued throughout 2020; limited production continued at Dolores, La Arena and Shahuindo during their suspensions from circulation of process solutions on the heap leach pads; and capacities are less restricted at the gold open pit mines than the silver producing underground mines.

Consolidated gold production in Q4 2020 of 152.9 thousand ounces was 12% lower than the 173.9 thousand ounces produced in Q4 2019, largely due to the COVID-19 related restrictions on operating capacities and open pit mine sequencing.

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 twelve-month periods ended December 31, 2020 and 2019:

	Base Metal Production			
	Three months ended December 31,		Year ended December 31,	
	2020	2019	**2020**	2019
Zinc - kt	**14.2**	16.6	**40.2**	67.6
Lead - kt	**5.4**	7.2	**15.7**	27.3
Copper - kt	**2.3**	2.3	**5.2**	8.7

Zinc, lead and copper production were 40%, 42% and 41% lower in 2020 relative to 2019, respectively. The decreases were primarily due to the COVID-19 related mine suspensions and restricted capacities, as well as lower grades at La Colorada because of ventilation issues preventing access to certain high-grade zones of the mine.

Each operation's by-product production variances are further discussed in the "Individual Mine Performance" section of this MD&A.

Per Ounce Measures

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. The quantification of both the current cash costs and AISC measures is described in detail, and where appropriate reconciled to the 2020 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 twelve months ended December 31, 2020, as compared to the same periods in 2019 for the Silver Segment mines and since February 22, 2019 for the Gold Segment mines:

	Cash Costs[1] ($ per ounce)				AISC[1] ($ per ounce)			
	Three months ended December 31,		Year ended December 31,		Three months ended December 31,		Year ended December 31,	
	2020	2019	**2020**	2019	**2020**	2019	**2020**	2019
La Colorada	7.07	4.30	6.99	2.99	11.78	5.80	10.80	4.54
Dolores	(9.79)	2.64	(2.48)	3.09	(2.17)	9.33	6.17	15.45
Huaron	2.03	5.34	3.77	4.15	3.35	9.44	6.53	7.74
Morococha	11.85	10.85	11.40	4.35	18.29	18.83	18.38	10.08
San Vicente	17.67	14.38	15.54	11.77	20.89	16.50	17.94	13.08
Manantial Espejo	18.72	15.47	15.68	19.59	19.24	16.94	15.80	18.43
Silver Segment Consolidated	**6.15**	**7.80**	**7.05**	**6.39**	**10.37**	**11.37**	**11.38**	**10.46**
Shahuindo	619	605	588	570	842	970	750	807
La Arena	556	580	721	644	873	764	1,109	1,042
Timmins	1,126	884	1,061	904	1,355	984	1,213	998
Gold Segment Consolidated	**763**	**693**	**797**	**712**	**1,023**	**901**	**1,011**	**948**
Consolidated per silver ounce sold[2]:								
All Operations					**(7.28)**	**1.04**	**(3.29)**	**4.44**
All Operations before net realizable value ("NRV") inventory adjustments					**(5.85)**	**0.96**	**(2.35)**	**4.45**

(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 2020 Financial Statements.

(2) 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

Silver Segment cash costs in 2020 were $7.05 per ounce, a $0.66 increase from the $6.39 per ounce reported in 2019. The increase was the result of: (i) higher direct operating costs per ounce, largely from the COVID-19 related impact on throughput and the cost associated with protocols to protect health and safety, (ii) higher direct selling costs per ounce from higher concentrate treatment charges, and (iii) higher royalties from increased metal prices. Partially offsetting these factors was an increase in by-product credits per ounce from increased gold, lead, and copper prices.

Gold Segment cash costs in 2020 were $797 per ounce, an $85 increase from the $712 per ounce reported in 2019. The increase was the result of: (i) higher direct operating costs from COVID-19 related protocols, (ii) wage increases and cost escalations in certain consumables, and (iii) utilizing a lower grade cut-off at Timmins, based on mine life extensions identified late in 2019.

AISC

Silver Segment AISC in 2020 was $11.38 per ounce, a $0.92 increase from the $10.46 per ounce reported in 2019. The increase was primarily due to the same factors that increased Silver Segment cash costs, as well as higher sustaining capital per ounce. Partially offsetting these factors were net realizable value ("NRV") inventory adjustments, which reduced costs by $16.2 million in 2020.

Gold Segment AISC in 2020 was $1,011 per ounce, a $63 increase from the $948 per ounce reported in 2019. The increase was primarily due to the same factors that increased Gold Segment cash costs, partially offset by lower sustaining capital per ounce because of COVID-19 related delays or deferrals of certain capital projects.

Consolidated silver basis AISC for 2020 was negative $3.29 per ounce, a $7.73 decrease from the $4.44 per ounce reported in 2019. The decrease was primarily from higher by-product prices and a higher proportion of gold relative to silver revenues, which more than offset the increased costs described above.

2020 Operating Results versus 2020 Guidance

The following table sets out the actual 2020 annual metal production, cash costs, AISC and capital expenditures compared to those forecast by Management throughout the year. The Original 2020 Forecasts were provided in our Annual 2019 MD&A dated March 12, 2020, which was withdrawn on May 6, 2020 due to uncertainties regarding the impact of COVID-19. Management subsequently provided further updates in its Q2 2020 MD&A and Q3 2020 MD&A (the "August 2020 Forecast" and "Revised 2020 Forecasts", respectively). In the table below "NC" denotes no changes to the previously provided forecast.

	Original 2020 Forecast	August 2020 Forecast	Revised 2020 Forecast	2020 Actual
Silver Production - Moz	27.0 - 28.5	19.0 - 22.0	18.0 - 19.0	17.3
Gold Production - koz	625.0 - 675.0	525.0 - 575.0	NC	522.4
Zinc Production - kt	67.5 - 70.5	40.0 - 43.0	NC	40.2
Lead Production - kt	27.5 - 29.5	17.0 - 18.0	NC	15.7
Copper Production - kt	9.3 - 10.3	4.3 - 4.9	NC	5.2
Silver Segment Cash Costs ($ per ounce)	5.75 - 7.50	6.20 -7.70	NC	7.05
Gold Segment Cash Costs ($ per ounce)	820 - 870	800 - 860	NC	797
Silver Segment AISC ($ per ounce)	10.25 - 11.75	10.50 - 12.50	NC	11.38
Gold Segment AISC ($ per ounce)	1,090 - 1,170	1,050 - 1,125	NC	1,011
Consolidated Silver Basis AISC ($ per ounce)	4.50 - 6.50	(3.00) - 0.75	NC	(3.29)
Sustaining Capital ($ millions)	225.0 - 240.0	185.0 - 189.0	175.0 - 180.0	162.0
Project Capital ($ millions)	22.0 - 27.0	25.0 - 26.0	20.0 - 21.0	21.5

The following section compares our August 2020 Forecast to the actual 2020 results.

Silver and Gold Production versus the August 2020 Forecast

	2020 Silver Production (million ounces)		2020 Gold Production (thousand ounces)	
	Forecast [1]	Actual	Forecast [1]	Actual
Silver Segment:				
La Colorada	6.4 - 7.2	5.0	4.0	3.5
Dolores	4.0 - 4.8	3.8	99.0 - 104.0	98.0
Huaron	2.0 - 2.2	2.1	1.0	0.5
Morococha[2]	1.2 - 1.4	1.2	1.0	0.6
San Vicente[2]	2.2 - 2.6	2.3	-	0.3
Manantial Espejo	3.0 - 3.5	2.5	24.0 - 27.0	23.4
Silver Segment Total[3]	**18.8 - 21.7**	**17.0**	**130.0 - 138.0**	**126.3**
Gold Segment:				
Shahuindo	0.2 - 0.3	0.3	147.0 - 164.0	142.4
La Arena	—	—	103.0 - 114.0	105.4
Timmins	—	—	145.0 - 159.0	148.4
Gold Segment Total[3]	**0.2 - 0.3**	**0.3**	**395.0 - 437.0**	**396.2**
Total[3]	**19.0 - 22.0**	**17.3**	**525.0 - 575.0**	**522.4**

(1) The August 2020 Forecast, representing the first revision to annual forecasts subsequent to the withdrawal of the Original 2020 Forecast due to the impact of COVID-19 (previously discussed in the "Impact of COVID-19" section of this MD&A).
(2) Production figures are only for Pan American's ownership share of Morococha (92.3%), and San Vicente (95.0%).
(3) Totals may not add due to rounding.

Silver Production

Consolidated 2020 silver production was 17.3 million ounces, 9% lower than the 19.0 million ounces at the low-end of the August 2020 Forecast range. The production shortfall was primarily due to the loss of a ventilation raise from surface at La Colorada in Q4 2020, slower silver leaching kinetics at Dolores, and a greater than anticipated impact of COVID-19 on operations, including the suspension of Manantial Espejo operations from December 21, 2020 to January 7, 2021.

Gold Production

Consolidated 2020 gold production was 522.4 thousand ounces, slightly below the 525.0 thousand ounce low-end of the August 2020 Forecast range, which reflects the greater than anticipated impact of COVID-19 on our operations.

Base Metal Production versus the August 2020 Forecast

	2020 Zinc Production (thousand tonnes)		2020 Lead Production (thousand tonnes)		2020 Copper Production (thousand tonnes)	
	Forecast [1]	Actual	Forecast [1]	Actual	Forecast [1]	Actual
Consolidated	**40.0 - 43.0**	**40.2**	**17.0 - 18.0**	**15.7**	**4.3 - 4.9**	**5.2**

(1) The August 2020 Forecast, representing the first revision to annual forecasts subsequent to the withdrawal of the Original 2020 Forecast due to the impact of COVID-19 (previously discussed in the "Impact of COVID-19" section of this MD&A).

2020 zinc production was in-line with the August 2020 Forecast, whereas copper production was above the high end of the August 2020 Forecast and lead production was below the low end of the August 2020 Forecast. Strong base metal production at Huaron and San Vicente largely offset the shortfalls at La Colorada from the impact of COVID-19 and the lack of access to high-grade ore due to the ventilation issues .

Cash Costs and AISC versus August 2020 Forecast:

The following table summarizes 2020 cash costs and AISC compared to the August 2020 Forecast on a per ounce basis, net of by-product credits.

	2020 Cash Costs[1] ($ per ounce)		2020 AISC[1] ($ per ounce)	
	Forecast [2]	Actual	Forecast [2]	Actual
Silver Segment:				
La Colorada	6.20 - 7.00	6.99	9.50 - 10.50	10.80
Dolores	(5.60) - (3.90)	(2.48)	3.90 - 7.40	6.17
Huaron	8.20 - 9.10	3.77	11.80 - 12.85	6.53
Morococha	11.00 - 12.30	11.40	16.80 - 18.40	18.38
San Vicente	14.30 - 16.20	15.54	16.10 - 18.20	17.94
Manantial Espejo	13.80 - 15.90	15.68	15.30 - 17.70	15.80
Total[3]	**6.20 - 7.70**	**7.05**	**10.50 - 12.50**	**11.38**
Gold Segment:				
Shahuindo	590 - 660	588	860 - 960	750
La Arena	760 - 860	721	1,140 - 1,260	1,109
Timmins	1,030 - 1,060	1,061	1,175 - 1,240	1,213
Total[3]	**800 - 860**	**797**	**1,050 - 1,125**	**1,011**
Consolidated Silver Basis[3,4]	**n/a**	**n/a**	**(3.30) - 0.75**	**(3.29)**

(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 2020 Financial Statements. The cash costs and AISC forecasts assumed realized prices and exchange rates for the six month period ended June 30, 2020 and the following price and exchange rate assumptions for the period July 1, 2020 to December 31, 2020: metal prices of $18.25/oz for silver, $1,850/oz for gold, $2,050/tonne ($0.93/lb) for zinc, $1,775/tonne ($0.81/lb) for lead, and $6,150/tonne ($2.79/lb) for copper; and

average exchange rates relative to 1 USD of 22.50 for the MXN, 3.50 for the PEN, 77.53 for the ARS, 6.91 for the BOB, and $1.35 for the CAD.

(2) The August 2020 Forecast, representing the first revision to annual forecasts subsequent to the withdrawal of the Original 2020 Forecasts due to the impact of COVID-19 (previously discussed in the "Impact of COVID-19" section of this MD&A).

(3) 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.

(4) Consolidated silver basis is calculated by treating all revenues from metals other than silver, including gold, as a by-product credit.

Cash Costs

Silver segment cash costs of $7.05 per ounce were within the August 2020 Forecast range of $6.20 to $7.70 per ounce. Higher than anticipated cash costs at La Colorada and Dolores were offset by higher by-product metal prices and lower costs at Huaron, as described further in the "Individual Mine Performance" section of this MD&A.

Gold segment cash costs of $797 per ounce were below the low end of the August 2020 Forecast, reflecting lower than anticipated costs at La Arena and Shahuindo, and costs at Timmins narrowly above the forecasted range.

AISC

Silver Segment AISC of $11.38 per silver ounce was within the August 2020 Forecast range. 2020 AISC reflects the same factors affecting cash costs. AISC also benefited from $15.8 million in higher cost reducing NRV adjustments in 2020.

Gold Segment AISC of $1,011 per gold ounce was below the August 2020 Forecast range, primarily because of lower sustaining capital due to the deferral of certain capital expenditures into 2021.

Consolidated AISC, calculated on a silver ounce basis, of negative $3.29 was within the August 2020 Forecast range.

Capital Expenditures versus the August 2020 Forecast:

The following table summarizes the 2020 capital expenditures compared to the August 2020 Forecast:

	2020 Capital Expenditure ($ millions)	
	Forecast (1)	Actual
La Colorada	19.0 – 19.5	18.4
Dolores	42.0 – 42.5	44.9
Huaron	5.5 – 6.0	4.5
Morococha	5.5 – 6.0	7.3
San Vicente	3.5 – 4.0	4.9
Manantial Espejo	3.0	3.3
Shahuindo	44.5 - 45.5	22.7
La Arena	40.0 - 41.0	37.3
Timmins	23.0 - 24.0	18.8
Sustaining Capital Sub-total	**185.0 - 189.0**	**162.0**
La Colorada Skarn project	13.5 - 14.0	11.0
Timmins expansion	4.0 - 4.5	2.0
Other	7.5	8.6
Project Capital Sub-total	**25.0 -26.0**	**21.5**
Total Capital	**210.0 – 215.0**	**183.6**

(1) The August 2020 Forecast, representing the first revision to annual forecasts subsequent to the withdrawal of the Original 2020 Forecast due to the impact of COVID-19 (previously discussed in the "Impact of COVID-19" section of this MD&A).

Sustaining capital expenditures were $23.0 million less than the low end of the August 2020 Forecast range, driven primarily by deferrals of certain sustaining capital, particularly at Shahuindo. Project capital in 2020 was also below the August 2020 Forecast range due to the COVID-19 related deferral of certain projects.

Individual Mine Operation Performance

An analysis of performance at each operation in 2020 compared with 2019 follows. The project capital amounts invested in 2020 are further discussed in the "Project Development Update" section of this MD&A. The Gold Segment operations 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.

La Colorada operation

	Three months ended December 31		Year ended December 31	
	2020	2019	**2020**	2019
Tonnes milled - kt	**139.6**	197.1	**559.1**	768.7
Average silver grade – grams per tonne	**295**	358	**308**	361
Average zinc grade - %	**2.62**	2.85	**2.80**	3.10
Average lead grade - %	**1.29**	1.70	**1.39**	1.65
Production:				
Silver – koz	**1,186**	2,080	**5,025**	8,206
Gold – koz	**0.77**	1.28	**3.47**	4.61
Zinc – kt	**3.13**	4.85	**13.58**	20.97
Lead – kt	**1.50**	2.92	**6.63**	11.15
Cash costs - $ per ounce[1]	**7.07**	4.30	**6.99**	2.99
Sustaining capital - $ thousands[2]	**5,496**	1,957	**18,417**	9,721
Care and maintenances costs - $ thousands	**—**	—	**7,973**	—
AISC - $ per ounce[1]	**11.78**	5.80	**10.80**	4.54
Payable silver sold - koz	**1,291**	1,770	**5,254**	7,583

(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 $1.9 million and $11.0 million investing activity cash outflows for Q4 2020 and full year 2020, respectively (Q4 2019 and full year 2019: $2.9 million and $11.1 million, respectively) related to investment capital incurred on the La Colorada projects, as disclosed in the "Project Development Update" section of this MD&A.

2020 versus 2019

Production:

- Silver: 39% decrease due to the COVID-19 related mine suspension and capacity restrictions, as well as an inability to access high-grade ore due to the COVID-19 related delay in completing an underground ventilation raise and the loss of a ventilation raise from surface.
- By-products: 35% and 41% decrease in zinc and lead, respectively, due to the same factors affecting silver production.

Cash Costs: were $4.00 higher than in 2019, reflecting an increase in operating costs per ounce due to COVID-19 related impacts and the ventilation issues, as well as higher treatment and refining charges.

Sustaining Capital: primarily related to investments in mechanization equipment, underground infrastructure, lease payments for equipment and offices, and near-mine exploration activities. The increase relative to 2019 was related to a tailings storage facility lift and mine ventilation infrastructure investments.

AISC: was $6.26 higher than in 2019, as a result of the factors affecting year-over-year cash costs, in addition to higher sustaining capital per ounce due to the higher investments and lower production in 2020.

Dolores operation

	Three months ended December 31		Year ended December 31	
	2020	2019	**2020**	2019
Tonnes placed - kt	**1,891.1**	1,856.7	**6,429.9**	6,777.0
Average silver grade – grams per tonne	**21**	42	**29**	38
Average gold grade – grams per tonne	**0.76**	0.62	**0.64**	0.60
Production:				
Silver – koz	**764**	1,287	**3,779**	5,122
Gold – koz	**30.5**	26.1	**98.0**	117.6
Cash costs - $ per ounce[1]	**(9.79)**	2.64	**(2.48)**	3.09
Sustaining capital - $ thousands[2]	**12,778**	8,106	**44,861**	49,660
Care and maintenances costs - $ thousands	**—**	—	**10,175**	—
AISC - $ per ounce[1]	**(2.17)**	9.33	**6.17**	15.45
Payable silver sold - koz	**959**	1,402	**4,063**	4,924

(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 $nil investing activity cash outflows for Q4 2020 and full year 2020, respectively (Q4 2019 and full year 2019: $nil and $0.4 million respectively) related to underground mine projects, as disclosed in the "Project Development Update" section of this MD&A.

2020 versus 2019

Production:

- Silver: the 26% decrease was primarily the result of lower grades from mine sequencing, as expected, and slightly lower stacking rates from the suspension of operations in Q2 2020 due to the COVID-19 pandemic.
- Gold: the 17% decrease was primarily due to the timing of leach pad kinetics, which resulted in a build-up of inventory on pad 3 in Q4 2020. Further, gold production in 2019 benefited from the stacking of partially leached pad 1 material, which enhanced recoveries above the expected life of mine recovery rate.

Cash Costs: decreased $5.57 per ounce due to higher by-product credits per ounce from higher gold prices and an increased proportion of revenue from gold in 2020 relative to 2019. This benefit from by-product credits more than offset higher operating costs per ounce from COVID-19 related protocols and the impact from the build-up in gold inventory in Q4 2020.

Sustaining Capital: consistent year-over-year, and primarily related to pre-stripping and leach pad expansions in both periods.

AISC: decreased $9.28 per ounce due to the same factors decreasing cash costs, in addition to a $4.73 per ounce positive swing in cost-reducing NRV inventory adjustments, which more than offset higher sustaining capital per ounce, despite the deferral of some capital spending due to COVID-19.

Huaron operation

	Three months ended December 31		Year ended December 31	
	2020	2019	**2020**	**2019**
Tonnes milled - kt	**230.5**	252.3	**555.6**	994.0
Average silver grade – grams per tonne	**143**	140	**144**	142
Average zinc grade - %	**2.58**	2.49	**2.58**	2.38
Average lead grade - %	**1.32**	1.32	**1.32**	1.22
Average copper grade - %	**0.94**	0.85	**0.88**	0.81
Production:				
Silver – koz	**892**	935	**2,148**	3,796
Gold – koz	**0.29**	0.21	**0.53**	0.97
Zinc – kt	**4.69**	4.95	**11.21**	18.07
Lead – kt	**2.33**	2.50	**5.59**	9.22
Copper – kt	**1.65**	1.57	**3.65**	6.02
Cash costs - $ per ounce[1]	**2.03**	5.34	**3.77**	4.15
Sustaining capital - $ thousands	**776**	2,834	**4,500**	10,936
Care and maintenances costs - $ thousands	**(11)**	—	**20,840**	—
AISC - $ per ounce[1]	**3.35**	9.44	**6.53**	7.74
Payable silver sold – koz	**697**	736	**1,843**	3,253

(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.

2020 versus 2019

Production:

- Silver: 43% lower, primarily from the COVID-19 related mine suspension and capacity restrictions.
- By-products: lead, copper and zinc production declined 39%, 39% and 38%, respectively, primarily due to the same factors affecting silver production, partially offset by higher grades from mine sequencing.

Cash Costs: $0.38 per ounce lower, as higher concentrate treatment charges were more than offset by lower operating costs per ounce and higher by-product credits per ounce from higher base metal grades and higher lead and copper prices.

Sustaining Capital: primarily related to equipment leases, near mine exploration, and equipment replacements and refurbishments. The year-over-year decrease is primarily related to the reduced spending on a tailings storage facility expansion, mine deepening and mine infrastructure projects.

AISC: a decrease of $1.21 per ounce due to the same factors affecting year-over-year cash costs, in addition to lower sustaining capital investments, partly from the deferral of a number of projects due to COVID-19.

Morococha operation[1]

	Three months ended December 31		Year ended December 31	
	2020	2019	**2020**	2019
Tonnes milled – kt	**141.4**	176.5	**328.6**	686.2
Average silver grade – grams per tonne	**129**	112	**126**	126
Average zinc grade - %	**3.30**	3.55	**3.43**	3.76
Average lead grade - %	**1.31**	1.17	**1.29**	1.21
Average copper grade - %	**0.47**	0.44	**0.43**	0.44
Production:				
Silver – koz	**527**	554	**1,173**	2,456
Gold – koz	**0.19**	0.23	**0.59**	1.39
Zinc – kt	**4.08**	5.46	**9.86**	22.50
Lead – kt	**1.51**	1.61	**3.46**	6.56
Copper – kt	**0.43**	0.46	**0.88**	1.83
Cash costs - $ per ounce[2]	**11.85**	10.85	**11.40**	4.35
Sustaining capital - $ thousands[3]	**3,219**	3,945	**7,259**	12,599
Care and maintenances costs - $ thousands	**(3)**	—	**20,023**	—
AISC - $ per ounce[2]	**18.29**	18.83	**18.38**	10.08
Payable silver sold (100%) - koz	**517**	515	**1,108**	2,335

(1) Production figures are for Pan American's 92.3% share only, unless otherwise noted.
(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.
(3) Sustaining capital expenditures exclude $0.2 million and $1.0 million investing activity cash outflows for Q4 2020 and full year 2020, respectively (Q4 2019 and full year 2019, $0.8 million and $2.3 million, respectively) related to investment capital incurred on the Morococha project, as disclosed in the "Project Development Update" section of this MD&A.

2020 versus 2019

Production:

- Silver: 52% lower, entirely from the COVID-19 related mine suspension and capacity restrictions.
- By-products: zinc, lead and copper decreased by 56%, 47%, 52%, respectively, due to the same factors affecting silver production. In addition, zinc grades were lower due to mine sequencing.

Cash Costs: $7.05 per ounce higher, due primarily to higher concentrate treatment charges, COVID-19 related cost impacts, and lower by-product credits per ounce due to lower zinc grades and prices.

Sustaining Capital: primarily related to expanded near-mine exploration, equipment replacements and refurbishments, and equipment and office leases. The year-over-year decrease was primarily related to lower capital investments in equipment replacements and near-mine exploration.

AISC: increased $8.30 per ounce, primarily driven by the same factors affecting year-over-year cash costs, in addition to higher sustaining capital per ounce.

San Vicente operation [1]

	Three months ended December 31		Year ended December 31	
	2020	2019	**2020**	2019
Tonnes milled – kt	**93.0**	91.1	**285.1**	349.7
Average silver grade – grams per tonne	**237**	328	**276**	345
Average zinc grade - %	**2.88**	1.80	**2.34**	2.16
Average lead grade - %	**0.05**	0.15	**0.02**	0.14
Average copper grade - %	**0.24**	0.30	**0.27**	0.31
Production:				
Silver – koz	**663**	877	**2,320**	3,528
Gold – koz	**0.08**	0.13	**0.31**	0.48
Zinc – kt	**2.34**	1.31	**5.57**	6.01
Lead – kt	**0.04**	0.13	**0.05**	0.42
Copper – kt	**0.18**	0.22	**0.62**	0.85
Cash costs - $ per ounce[2]	**17.67**	14.38	**15.54**	11.77
Sustaining capital - $ thousands	**1,391**	2,048	**4,877**	4,960
Care and maintenances costs - $ thousands	**—**	—	**2,890**	—
AISC - $ per ounce[2]	**20.89**	16.50	**17.94**	13.08
Payable silver sold (100%) - koz	**453**	1,001	**2,153**	4,003

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

2020 versus 2019

Production:

- Silver: 34% lower, due to a combination of the COVID-19 related mine suspension and capacity restrictions, and lower grades from mine sequencing and challenges with narrow-vein mining in 2020.
- By-products: zinc, lead and copper production decreased 7%, 87% and 26%, respectively, primarily due to the same factors affecting silver production. Zinc production benefited from higher grades from mine sequencing, whereas the significant decrease in lead production was the result of commercial terms that resulted in lower lead payability.

Cash costs: increased $3.77 per ounce due to higher royalty costs per ounce from increased silver and copper metal prices, lower by-product credits per ounce from lower zinc prices and lower lead marketed in favor of copper contained in the bulk flotation concentrate, and lower silver grades.

Sustaining Capital: consistent with 2019, with expenditures primarily related to mine equipment replacements and rehabilitations, near-mine exploration, and mine site and camp infrastructure.

AISC: a $4.86 per ounce increase due to the same factors affecting year-over-year cash costs, in addition to higher sustaining capital per ounce due to the silver production shortfalls.

Manantial Espejo operations

	Three months ended December 31		Year ended December 31	
	2020	2019	**2020**	2019
Tonnes milled - kt	**149.3**	186.5	**604.7**	708.6
Average silver grade – grams per tonne	**166**	150	**146**	127
Average gold grade – grams per tonne	**1.78**	1.21	**1.30**	1.08
Production:				
Silver – koz	**742**	817	**2,547**	2,599
Gold – koz	**7.98**	6.71	**23.37**	22.41
Cash costs - $ per ounce[1]	**18.72**	15.47	**15.68**	19.59
Sustaining capital - $ thousands[2]	**732**	696	**3,264**	2,757
Care and maintenances costs - $ thousands	**—**	—	**5,617**	—
AISC - $ per ounce[1]	**19.24**	16.94	**15.80**	18.43
Payable silver sold - koz	**702**	928	**2,545**	2,460

(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 $1.2 million and $7.5 million investing activity cash outflows for Q4 2020 and full year 2020, respectively (Q4 2019 and full year 2019, $5.6 million and $23.8 million, respectively) related to the development of the Joaquin and COSE projects, as disclosed in the "Project Development Update" section of this MD&A.

2020 versus 2019

Production: Silver and gold: consistent with 2019 production, as the COVID-19 related mine suspension and capacity restrictions were offset by higher silver and gold grades from the addition of high-grade COSE and Joaquin ores in 2020.

Cash costs: decreased $3.91 per ounce from higher gold prices and lower operating costs per ounce due to the devaluation of the peso and lower diesel prices.

Sustaining Capital: consistent with prior year, and primarily related to near-mine exploration and lease payments for diesel generators.

AISC: decreased $2.63 per ounce due to the same factors affecting year-over-year cash costs, partially offset by a decrease in cost-reducing NRV inventory adjustments.

Shahuindo operation

The Shahuindo mine was acquired on February 22, 2019, and as such, the 2019 financial and operating results have only been reported, and included in the Company's consolidated results, from this date forward.

	Three months ended December 31,		Year ended December 31,	
	2020	2019	**2020**	2019
Tonnes milled - kt	**2,697.3**	3,449.4	**10,603.4**	11,218.8
Average silver grade – grams per tonne	**7**	7	**9**	8
Average gold grade – grams per tonne	**0.54**	0.58	**0.56**	0.60
Production:				
Silver – koz	**83.10**	54.21	**268.30**	136.62
Gold – koz	**33.60**	43.52	**142.38**	145.37
Cash costs - $ per ounce(1)	**619**	605	**588**	570
Sustaining capital - $ thousands	**6,963**	14,156	**22,749**	29,873
Care and maintenances costs - $ thousands	**—**	—	**3,855**	—
AISC - $ per ounce(1)	**842**	970	**750**	807
Payable gold sold - koz	**33.06**	39.85	**150.77**	133.30

(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.

2020 versus 2019

Production: Gold, 2% decrease, primarily from the COVID-19 related mine suspension and capacity restrictions and lower grades from mine sequencing, which were largely offset by higher than anticipated ratio of ounces produced over ounces placed from leach pad sequencing.

Cash Costs: increased $18 per ounce, primarily as a result of the lower grades mined being largely offset by higher by-product credits due to higher silver sales and prices.

Sustaining Capital: 2020 expenditures comprised leach pad expansions, site infrastructure improvements, near-mine exploration, and payments for leased mining equipment.

AISC: decreased $57 per ounce, as lower sustaining capital expenditures per ounce, due to the COVID-19 related deferral of major projects, more than offset the factors increasing year-over-year cash costs.

La Arena operation

The La Arena mine was acquired on February 22, 2019, and as such, the 2019 financial and operating results have only been reported, and included in the Company's consolidated results, from this date forward.

	Three months ended December 31,		Year ended December 31,	
	2020	2019	**2020**	2019
Tonnes milled - kt	**4,132.2**	5,311.8	**10,079.3**	11,189.7
Average silver grade – grams per tonne	**1**	—	**1**	—
Average gold grade – grams per tonne	**0.42**	0.41	**0.37**	0.41
Production:				
Silver – koz	**11.27**	10.81	**33.46**	26.16
Gold – koz	**41.40**	48.43	**105.37**	122.52
Cash costs - $ per ounce(1)	**556**	580	**721**	644
Sustaining capital - $ thousands	**13,030**	8,382	**37,324**	47,557
Care and maintenances costs - $ thousands	**—**	—	**3,712**	—
AISC - $ per ounce(1)	**873**	764	**1,109**	1,042
Payable gold sold - koz	**42.10**	48.06	**99.32**	124.21

(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.

2020 versus 2019

Production: Gold, a 14% decrease from the COVID-19 related mine suspension and capacity restrictions, and lower grades from mine sequencing.

Cash Costs: increased $77 per ounce, primarily from lower grades and certain wage and consumable cost increases.

Sustaining Capital: 2020 expenditures primarily related to capitalized deferred stripping, waste storage facility expansions, and near-mine exploration.

AISC: increased by $67 per ounce, due to the same factors affecting year-over-year cash costs, which were partially offset by a slight decrease in sustaining capital per ounce.

Timmins' operation

The Timmins mines were acquired on February 22, 2019, and as such, the 2019 financial and operating results have only been reported, and included in the Company's consolidated results, from this date forward.

	Three months ended December 31,		Year ended December 31,	
	2020	2019	**2020**	2019
Tonnes milled - kt	**426.2**	473.9	**1,643.1**	1,480.7
Average gold grade – grams per tonne	**2.73**	3.17	**2.85**	3.18
Production:				
Silver – koz	**4.38**	5.53	**17.63**	17.53
Gold – koz	**38.09**	47.33	**148.40**	143.77
Cash costs - $ per ounce[1]	**1,126**	884	**1,061**	904
Sustaining capital - $ thousands[2]	**7,621**	4,066	**18,795**	11,035
Care and maintenances costs - $ thousands	**—**	—	**—**	—
AISC - $ per ounce[1]	**1,355**	984	**1,213**	998
Payable gold sold - koz	**37.20**	46.40	**148.13**	143.30

(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 $0.5 million and $2.0 million investing activity cash outflows for Q4 2020 and full year 2020, respectively (Q4 2019 and full year 2019, $0.1 million and $2.7 million, respectively) related to investment capital incurred on the Timmins projects, as disclosed in the "Project Development Update" section of this MD&A.

2020 versus 2019

Production: Gold, increased 3%, as a full year of operations in 2020 mitigated the impact of the COVID-19 related capacity restrictions and the lower cut-off grade applied in 2020.

Cash Costs: increased $157 per ounce, primarily due to the application of lower grade cut-offs in ore control, encountering some geotechnical issues in the underground mine and COVID-19 safety protocols preventing higher anticipated throughput levels.

Sustaining Capital: 2020 expenditures primarily comprised mine equipment refurbishments and replacements, mine infrastructure upgrades, near-mine exploration, and lease payments for mining equipment.

AISC: increased by $215 per ounce due to the same factors impacting cash costs, as well as higher sustaining capital expenditures.

PROJECT DEVELOPMENT UPDATE

The following table reflects the amounts spent at each of Pan American's major projects in 2020 as compared to 2019.

Project Development Investment[1] (thousands of USD)	Three months ended December 31		Year ended December 31	
	2020	2019	2020	2019
Mexico Projects	**1,909**	2,891	**10,971**	11,469
Joaquin and COSE Projects	**1,198**	5,622	**7,525**	23,754
Timmins projects	**450**	104	**1,956**	2,712
Other	**196**	961	**1,093**	6,799
Total	**3,753**	9,578	**21,545**	44,734

(1) Categorization of the Q4 2019 and full year 2019 amounts have been changed from those reported in the Q4 2019 MD&A to conform to the current period categorizations.

Mexico Projects:

The Company spent $9.4 million in 2020 on exploration drilling and $1.5 million on project engineering relating to the La Colorada skarn deposit compared to $11.5 million spent in 2019. The Company published an updated inferred resource estimate for the skarn on August 4, 2020.

Joaquin and COSE Projects:

In 2020, the Company spent $7.5 million on the final development of the COSE and Joaquin projects, directed mainly at advancing development of the underground mines. The Manantial Espejo plant began processing ore mined from COSE in early September 2020. In 2019, the Company spent a combined $27.1 million on these projects during which development of both projects was delayed to reassess and re-engineer ground control systems.

Timmins Projects:

The Company spent $2.0 million on projects at Timmins in 2020, primarily related to purchasing equipment and materials for an expansion of operations, which continues to be delayed due to the COVID-19 pandemic.

OVERVIEW OF 2020 FINANCIAL RESULTS

Selected Annual and Quarterly Information

The following tables set out selected quarterly results for the past twelve quarters as well as selected annual results for the past three years. The dominant factors affecting results in the quarters and years presented below are the volatility of realized metal prices, and the volume and timing of sales, which varies with the timing of shipments, and which was also impacted by the COVID-19 related suspensions of normal course operations at certain of our mines in 2020. The fourth quarters of both 2019 and 2018 included impairment charges to the Manantial Espejo mine and the COSE and Joaquin projects.

2020	Quarter Ended				Year Ended
(In thousands of USD, other than per share amounts)	March 31	June 30	Sept 30	Dec 31	Dec 31
Revenue	$ 358,428	$ 249,509	$ 300,414	$ 430,461	**$ 1,338,812**
Mine operating earnings	$ 50,058	$ 48,386	$ 124,561	$ 137,172	**$ 360,177**
Earnings (loss) for the period attributable to equity holders	$ (76,807)	$ 20,063	$ 65,741	$ 168,885	**$ 177,882**
Basic earnings (loss) per share	$ (0.37)	$ 0.10	$ 0.31	$ 0.80	**$ 0.85**
Diluted earnings (loss) per share	$ (0.37)	$ 0.10	$ 0.31	$ 0.80	**$ 0.85**
Cash flow from operating activities	$ 114,051	$ 62,750	$ 114,943	$ 170,571	**$ 462,315**
Cash dividends paid per share	$ 0.050	$ 0.050	$ 0.050	$ 0.070	**$ 0.220**
Other financial information					
Total assets					**$ 3,433,875**
Total long-term financial liabilities[1]					**$ 277,696**
Total attributable shareholders' equity					**$ 2,602,519**

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

2019	Quarter Ended				Year Ended
(In thousands of USD, other than per share amounts)	March 31	June 30	Sept 30	Dec 31	Dec 31
Revenue [1]	$ 253,699	$ 340,494	$ 352,187	$ 404,379	**$ 1,350,759**
Mine operating earnings [1]	$ 15,770	$ 51,058	$ 63,850	$ 98,610	**$ 229,288**
Earnings for the period attributable to equity holders	$ 2,783	$ 18,371	$ 37,657	$ 51,927	**$ 110,738**
Basic earnings per share	$ 0.02	$ 0.09	$ 0.18	$ 0.26	**$ 0.55**
Diluted earnings per share	$ 0.02	$ 0.09	$ 0.18	$ 0.26	**$ 0.55**
Cash flow from operating activities	$ (12,911)	$ 83,518	$ 81,948	$ 129,473	**$ 282,028**
Cash dividends paid per share	$ 0.035	$ 0.035	$ 0.035	$ 0.035	**$ 0.140**
Other financial information					
Total assets					**$ 3,461,682**
Total long-term financial liabilities[2]					**$ 517,776**
Total attributable shareholders' equity					**$ 2,463,099**

(1) Concurrent with the Tahoe Acquisition, the Company classified the Timmins mines as a discontinued operation held for sale and, in Q3 2019, reclassified to be a continuing operation after a change in management's intentions. As a result, the previously recorded first and second quarters have been recast to present the Timmins mines as continuing operations.

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

2018	Quarter Ended				Year Ended
(In thousands of USD, other than per share amounts)	March 31	June 30	Sept 30	Dec 31	Dec 31
Revenue	$ 206,961	$ 216,460	$ 187,717	$ 173,357	**$ 784,495**
Mine operating earnings	$ 55,124	$ 54,851	$ (4,412)	$ (4,666)	**$ 100,897**
Earnings for the period attributable to equity holders	$ 47,376	$ 36,187	$ (9,460)	$ (63,809)	**$ 10,294**
Basic earnings per share	$ 0.31	$ 0.24	$ (0.06)	$ (0.42)	**$ 0.07**
Diluted earnings 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**
Other financial information					
Total assets					**$ 1,937,476**
Total long-term financial liabilities[(1)]					**$ 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.

Income Statement: 2020 versus 2019

Net earnings of $176.5 million were recorded in 2020 compared to $111.2 million in 2019, which corresponds to basic earnings per share of $0.85 and $0.55, respectively.

The following table highlights the difference between net earnings in 2020 compared with 2019:

Net earnings, year ended December 31, 2019		$ 111,244	Note
Decreased revenue:			
Lower quantities of metal sold	(260,205)		
Increased realized metal prices	$ 237,298		
Decreased direct selling costs	12,374		
Increased negative settlement adjustments	(1,414)		
Total decrease in revenue		**$ (11,947)**	(1)
Decreased cost of sales:			
Decreased production costs and increased royalty charges	$ 143,852		(2)
Increased depreciation and amortization	(1,016)		
Total decrease in cost of sales		**$ 142,836**	
Increased care and maintenance costs		(78,443)	(3)
Decreased impairment charge		40,050	(4)
Decreased investment income		(21,680)	(5)
Increased other expense		(17,131)	(6)
Decreased interest and finance expense		9,178	(7)
Decreased transaction and integration costs		7,515	(8)
Decreased dilution gain, net of share of loss from associate		(4,716)	
Increased general and administrative expense		(4,623)	
Increased income tax expense		(4,289)	
Decreased exploration and project development expense		4,588	
Increased net gain on asset sales, commodity contracts and derivatives		4,344	
Increased foreign exchange loss		(471)	
Net earnings, year ended December 31, 2020		$ 176,455	

1. **Revenue** for 2020 was $1.34 billion, an $11.9 million decrease from the $1.35 billion of revenue recognized in 2019. The revenue decrease resulted from the impact of increased realized precious metal prices being more than offset by decreased quantities of metal sold. The lower quantities of metal sold were due to lower metal

production and sales volumes for all metals, reflecting COVID-19 related throughput reductions and mine suspensions.

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

	Realized Metal Prices		Quantities of Metal Sold	
	Year ended December 31		Year ended December 31	
	2020	2019	2020	2019
Silver[1] – koz	**$ 20.60**	16.34	**17,317**	24,676
Gold[1] – koz	**$ 1,758**	1,406	**519.7**	548.2
Zinc[1] – kt	**$ 2,288**	2,535	**35.7**	60.0
Lead[1] – kt	**$ 1,851**	1,997	**16.5**	25.7
Copper[1] – kt	**$ 6,412**	$ 5,973	**4.2**	7.6

(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.

Realized prices for silver and gold increased by 26% and 25%, respectively, in 2020 compared to 2019, whereas realized prices for zinc and lead decreased by 10% and 7%, respectively, and realized copper prices increased 7% in 2020.

Lower quantities of all metals were sold in 2020 compared to 2019, with year-over-year quantities of silver, gold, zinc, lead and copper decreased by 30%, 5%, 41%, 36%, and 44%, respectively.

Silver Segment and Gold Segment revenues in 2020 were $630.6 million and $708.2 million, respectively, compared to Silver Segment and Gold Segment revenues in 2019 of $785.4 million and $565.4 million, respectively.

2. **Production and royalty costs** in 2020 were $724.2 million, $143.9 million lower than in 2019. The decrease was attributable to production costs being $144.6 million lower in 2020, which was largely due to production costs from the Silver Segment operations being approximately $142.7 million lower, reflecting reduced throughput largely from the COVID-19 related mine suspensions and operating protocols, and a $15.8M increase in cost reducing NRV adjustments in 2020 relative to 2019. The cost variances reflect the lower sales volumes in 2020 from the COVID-19 related decreased production levels, as previously discussed in the "Individual Mine Performance" section of this MD&A, largely offset by a full year of production from the Gold Segment mines, compared with 2019, which only included production and sales from the Gold Segment mines from the February 22, 2019 closing date of the Tahoe Acquisition onwards.
3. **Care and maintenance costs** were $102.1 million in 2020, a $78.4 million increase from 2019, reflecting the COVID-19 related mine suspensions in 2020, details of which are included in the "Impact of COVID-19" discussion in the "2020 Operating Performance" section of this MD&A. Care and maintenance costs in 2019 related primarily to the Company's Escobal mine where operations are currently suspended.
4. **Impairment charges** no impairment charges or impairment reversals were recorded in 2020. In 2019, $40.1 million ($40.1 million, net of tax expense) of impairments were recorded related to the Company's Manantial Espejo asset in Argentina.

   Non-current assets are tested for impairment, or reversal of previous impairment charges, when events or changes in circumstance indicate that the carrying amount may not be recoverable, or previous impairment charges against assets are recoverable. The Company performs an impairment test for goodwill at each financial year-end and when events or changes in circumstances indicate that the related carrying value may not be recoverable. The Company considers its internal discounted cash flow economic models as a proxy for the calculation of fair value less cost to sell, given a willing market participant would use such models in establishing a value for the properties. The Company considers impairment, or if previous impairment charges

should be reversed, at the cash generating unit ("CGU") level, which is considered to be an individual mine or a development property. The CGU carrying amount for purposes of this test includes the carrying value of the mineral properties plant and equipment less deferred tax liabilities and closure and decommissioning liabilities related to each CGU.

The Company's key assumptions for determining the recoverable amounts of its various CGUs, for the purpose of testing for impairment or impairment reversals, include the most current operating and capital costs information and risk adjusted project specific discount rates. The Company uses an average of analysts' consensus metals prices for the first four years of its economic modeling, and long-term reserve prices for the remainder of each asset's life. The prices used can be found in the key assumptions and sensitivity section below.

Based on the Company's assessment with respect to possible indicators of either impairment or reversal of previous impairments to its mineral properties, including the impact of COVID-19 on our operations and the prevailing market metals prices, the Company concluded that as of December 31, 2020, no impairment or impairment reversal indicators were identified.

As of December 31, 2019, there were indicators of impairment at Manantial Espejo, which required the Company to record impairment charges of $40.1 million.

2019 Impairment - Manantial Espejo

The increase in Argentina export taxes, announced in January 2020, combined with the delayed commencement of production from the COSE and Joaquin deposits, and the deteriorated Argentina economy led Management to conclude that there was an indication of impairment to its Argentine operating assets, namely the Manantial Espejo mine, and the COSE and Joaquin projects. As at December 31, 2020, the Company determined that the combined CGU carrying amount of the Manantial Espejo mine and the Joaquin and COSE development projects, including mineral properties, plant and equipment, and stockpile inventories, net of associated closure and decommissioning liabilities, of $63.6 million was higher than the combined estimated recoverable amount of $23.5 million when using a 9.75% risk adjusted discount rate. Based on this assessment, the Company recorded an impairment charge related to the Manantial Espejo mineral property, and the COSE and Joaquin projects, of $40.1 million ($40.1 million, net of tax).

Key assumptions and sensitivity:

The key assumptions in determining the recoverable value of the Company's mineral properties are individual metal prices, operating and capital costs, foreign exchange rates and discount rates. The metal prices used to calculate the recoverable amounts at December 31, 2019 are based on analyst consensus prices:

Metal prices used at December 31, 2019:

Metal Prices	2020-2022 average
Silver - $/oz	$17.94
Gold - $/oz	$1,474

In 2019 the discount rates used to present-value the Company's life of mine cash flows were derived from the Company's weighted average cost of capital which was calculated at 3.7%, with rates applied to the various mines and projects ranging from 4.0% to 12.3%, depending on the Company's assessment of country risk, project risk, and other potential risks specific to each CGU.

At December 31, 2020, the Company performed a sensitivity analysis on all key assumptions that assumed a 10% adverse change to each individual assumption while holding the other assumptions constant.

At December 31, 2020, an adverse 10% movement in any of the major assumptions in isolation did not cause the recoverable amount to be below the CGU carrying value for any of the Shahuindo, La Arena, Timmins, La Colorada, San Vicente, Huaron, or Morococha mines. For the Dolores mine, Manantial Espejo mine and Navidad project, which previously had their carrying values adjusted to fair-value less cost to sell ("FVLCTS")

through impairment charges, a 10% adverse change in any one key assumption would reduce the recoverable amount below the carrying amount.

At December 31, 2019, an adverse 10% movement in any of the major assumptions in isolation did not cause the recoverable amount to be below the CGU carrying value for any of the Shahuindo, La Arena, Timmins, La Colorada, San Vicente, Huaron, or Morococha mines. For the Dolores mine, Manantial Espejo mine and Navidad project, which previously had their carrying values adjusted to FVLCTS through impairment charges, a 10% adverse change in any one key assumption would reduce the recoverable amount below the carrying amount.

5. **Investment income** of $63.0 million in 2020 was $21.7 million lower than in 2019. Investment income in each period largely reflects fair value "mark-to-market" adjustments and realized gains on certain of the Company's equity investments, the largest component of which being the Company's shares in New Pacific Metals Corp. ("New Pacific").
6. **Other expense** of $22.1 million in 2020 was $17.1 million higher than in 2019. The increase mainly reflects: a $6.1 million provision relating to certain value-added tax receivables in Guatemala; a $5.2 million increase to estimated closure and decommissioning liabilities for the Company's Alamo Dorado mine in Mexico, which went into reclamation at the end of 2017; commissions and transactions costs associated with the Company's sales of certain Maverix Metals Inc. ("Maverix") and New Pacific shares in 2020; and the settlement of certain claims by former contractors of the Company. There were no such comparable costs for these matters in 2019.
7. **Interest and finance costs** of $20.1 million in 2020 were $9.2 million lower than in 2019, reflecting a lower amount drawn on the Credit Facility during the year, as further discussed in the "Liquidity and Capital Position" section of this MD&A, and lower prevailing interest rates compared to 2019.
8. **Transacti*on and integration costs*** were $7.5 million lower in 2020 because no such costs were recorded whereas in 2019 these costs were incurred in relation to the Tahoe acquisition.

Statement of Cash Flows: 2020 versus 2019

Cash flow from operations in 2020 totaled $462.3 million, $180.3 million more than the $282.0 million generated in 2019. The increase was mostly related to a $124.9 million increase in cash from working capital changes and an increase in cash mine operating earnings (which excluded non-cash items such as depreciation and amortization, and NRV inventory adjustments). The increase in cash mine operating earnings was driven by stronger precious metal prices, which more than offset the additional care and maintenance costs.

Working capital changes in 2020 resulted in a $97.0 million source of cash, largely reflecting a $56.8 million increase in current accounts payable and accrued liabilities, and a $54.8 million draw-down of accounts receivables, partially offset by a $14.6 million increase in inventory balances. These working capital movements compared to the $27.9 million use of cash in 2019, which was driven primarily by the settlement of accounts payables and accrued liabilities related to the Tahoe transaction, partially offset by a release of inventories.

Investing activities utilized $83.9 million, primarily from $178.6 million spent on mineral properties, plant and equipment at the Company’s mines and projects, plus $15.6 million invested in the exercise of Maverix warrants, which was partially offset by $90.4 million received from the sale of short-term investments, primarily in New Pacific, and partial disposition of the Company's interest in Maverix, as well as $22.5 million in proceeds from the sale of certain non-core exploration-stage mineral properties.

In 2019, $402.2 million of cash was used in investing activities, inclusive of $39.7 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 Tahoe Acquisition, as described in the "Acquisition of Tahoe" section of this MD&A, and $205.8 million spent on mineral properties, plant and equipment at the Company’s mines and projects. Cash from the sale of certain non-core assets in 2019 totaled $10.3 million.

Financing activities in 2020 used $329.6 million, primarily related to the net repayment of $275.0 million of the Credit Facility, which was repaid in full by December 31, 2020, $46.2 million in dividends to shareholders, and $13.1 million of lease repayments.

Financing activities in 2019 were primarily related to the Tahoe Acquisition. The net cash generated consisted of a net $335.0 million drawn on the 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, $60.0 million of Credit Facility repayments were made, $29.3 million was paid as dividends and $19.3 million of lease repayments were made in 2019.

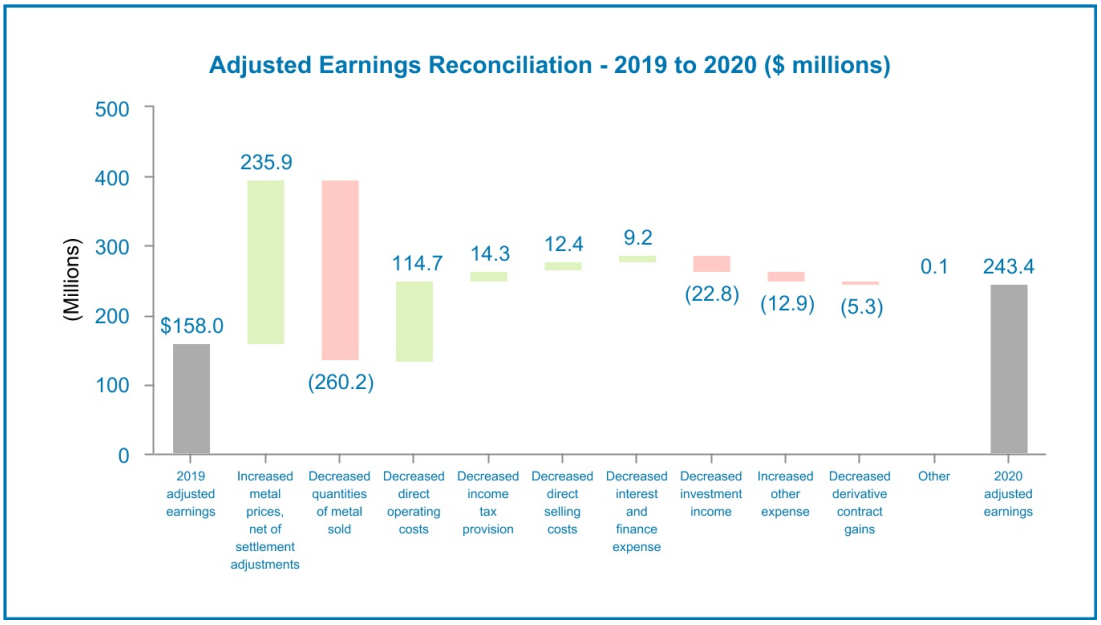
Adjusted Earnings: 2020 versus 2019

Adjusted earnings and basic adjusted earnings per share are non-GAAP measures that the Company considers to better reflect normalized earnings, as it eliminates items that in Management's judgment are subject to volatility as a result of factors that are unrelated to operations in the period, and/or relate to items that will settle 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.

Please refer to the section of this MD&A entitled “Alternative Performance (Non-GAAP) Measures” for a detailed description, and a reconciliation of these measures to the 2020 Financial Statements.

Adjusted Earnings in 2020 were $243.4 million, representing a basic adjusted earnings per share of $1.16, which was $85.4 million, or $0.37 per share, higher than 2019 adjusted earnings of $158.0 million, and basic adjusted earnings per share of $0.78, respectively.

The following chart illustrates the key factors leading to the change in adjusted earnings from 2019 to 2020:



Income Statement: Q4 2020 versus Q4 2019

Net earnings of $169.0 million was recorded in Q4 2020 compared to $51.7 million in Q4 2019, which corresponds to basic earnings per share of $0.80 and $0.25, respectively.

The following table highlights the key items driving the difference between the net earnings in Q4 2020 as compared to the net earnings recorded in Q4 2019:

Net earnings, three months ended December 31, 2019			**$ 51,706**	**Note**
Increased revenue:				
Increased realized metal prices		96,084		
Lower quantities of metal sold	$	(67,711)		
Increased negative settlement adjustments		(1,662)		
Increased direct selling costs		(629)		
Total increase in revenue			**$ 26,082**	**(1)**
Decreased cost of sales:				
Decreased production costs and increased royalty charges	$	21,705		**(2)**
Increased depreciation and amortization		(9,225)		**(3)**
Total decrease in cost of sales			**$ 12,480**	
Decreased impairment charge			40,050	**(4)**
Decreased income tax expense			35,467	**(5)**
Increased net gain on asset sales, commodity contracts and derivatives			14,442	**(6)**
Increased other expense			(7,794)	**(7)**
Increased foreign exchange loss			(4,176)	**(8)**
Decreased interest and finance expense			3,844	
Decreased investment income			(3,032)	
Decreased dilution gain, net of share of income from associate			(1,906)	
Decreased care and maintenance costs			1,253	
Decreased exploration and project development expense			1,471	
Increased other costs			(869)	
Net earnings, three months ended December 31, 2020			**$ 169,018**	

1. **Revenue** for Q4 2020 was $430.5 million, a $26.1 million increase from the $404.4 million recognized in Q4 2019. The revenue increase reflects higher realized metal prices being offset by lower quantities of metal sold. The lower quantities of metal sold reflect lower production, primarily as a result of COVID-19 related throughput reductions, as discussed in the "2020 Operating Performance" section of this MD&A, as well as the loss of a ventilation raise at La Colorada, suspension of operations at Manantial Espejo, and mine sequencing.

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

	Realized Metal Prices Three months ended December 31		Quantities of Metal Sold Three months ended December 31	
	2020	2019	**2020**	2019
Silver[(1)] – koz	**$ 24.72**	$ 17.84	**4,732**	6,392
Gold[(1)] – koz	**$ 1,874**	$ 1,479	**148.1**	171.0
Zinc[(1)] – kt	**$ 2,566**	$ 2,325	**14.5**	15.1
Lead[(1)] – kt	**$ 1,922**	$ 2,078	**5.4**	6.1
Copper[(1)] – kt	**$ 7,234**	$ 5,840	**1.7**	1.9

(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.

Increased quarter-over-quarter realized silver, gold, and zinc prices of 39%, 27% and 10%, respectively, had the most significant impact on revenues. Realized lead price decreased 7%, while realized copper prices

increased 24%, though these price movements had a less significant impact on revenues due to the lower quantities of these metals produced and sold relative to gold, silver and zinc.

Sales volumes decreased for all metals with quarter-over-quarter quantities of silver, gold, copper, lead and zinc down 26%, 13% 12%, 11%, an 4%, respectively.

Silver Segment and Gold Segment revenues in Q4 2020 were $216.1 million and $214.4 million, respectively, compared to Q4 2019 Silver Segment and Gold Segment revenues of $205.5 million and $198.9 million, respectively.

2. **Production and royalty costs** of $215.8 million in Q4 2020 were $21.7 million lower than those in Q4 2019. The quarter-over-quarter decrease was driven by production costs being $22.9 million lower in Q4 2020 compared to Q4 2019. The lower production costs reflect the previously discussed lower sales volumes for all metals, which were partially offset by increased costs relating to COVID-19 operating protocols. Further reducing production costs were $6.7 million in non-cash, cost-reducing, NRV inventory adjustments in Q4 2020, mainly from increased precious metals prices, which compared to negative, cost increasing, NRV inventory adjustments of $0.5 million in Q4 2019. The majority of the adjustments in each period were related to inventories at the Dolores mine.
3. **Depreciation and amortization expense** of $77.5 million in Q4 2020 was $9.2 million higher than in Q4 2019, largely the result of the increased depreciable asset base from capital additions in 2020, with the largest increases being attributable to the open pit operations, which accounted for $6.6 million of the quarter-over-quarter increase, and the Timmins operation, which accounted for $3.1 million of the increase.
4. **Impairment charges** were nil in Q4 2020. In Q4 2019, $40.1 million of impairments were recorded for the previously discussed Manantial Espejo operation.
5. **Income tax recovery** in Q4 2020 was $9.5 million compared to $26.0 million of income tax expense in Q4 2019. The $35.5 million variance was largely attributable to the recognition of previously unrecognized tax attributes related to the Timmins West, Bell Creek, and La Arena mines, and the appreciation of the Mexican Peso, which resulted in an increase in the foreign currency denominated tax attributes (mainly mineral, property, plant and equipment), partially offset by tax on the increase in net earnings before tax.
6. **Net gain on asset sales, commodity contracts and derivatives** was $14.4 million higher in Q4 2020 compared to Q4 2019, driven largely by an $8.8 million increase in gains related to the sale of mineral property plant and equipment ("MPP&E"), and a $5.7 million increase in gains on commodity and foreign currency contracts. The Q4 2020 gain on MPP&E sales largely reflects the disposition of certain Canadian exploration stage assets. The increased commodity and foreign currency contract gains is the result of a $7.3 million gain being recognized in Q4 2020 on foreign currency and diesel contracts, due largely to the appreciation of the Mexican peso relative to the US dollar and the increase in diesel prices during Q4 2020, compared to $1.6 million of gains in Q4 2019.
7. **Other expense** of $13.5 million in Q4 2020 was $7.8 million higher than in Q4 2019. The increase mainly reflects a $6.1 million provision relating to certain value-added tax receivables in Guatemala, a $5.2 million increase to estimated closure and decommissioning liabilities for the Company's Alamo Dorado mine in Mexico, which went into reclamation at the end of 2017. There were no such comparable expenses for these matters in Q4 2019.
8. **Foreign exchange ("FX") losses** were $1.2 million in Q4 2020 compared to FX gains of $3.0 million in Q4 2019. The Q4 2020 FX losses reflect devaluation of Argentinian denominated monetary assets, where the Q4 2019 FX gains reflect appreciation of Peruvian denominated monetary assets.

Statement of Cash Flows: Q4 2020 versus Q4 2019

Cash flow from operations in Q4 2020 totaled $170.6 million, $41.1 million more than the $129.5 million generated in Q4 2019. The increase was mainly attributable to increased cash mine operating earnings (which excluded non-cash items such as depreciation and amortization, and NRV inventory adjustments) driven primarily by stronger precious metal prices and a $13.8 million increase in cash from changes in non-cash operating working capital, partially offset by an $8.0 million increase in income tax payments.

Working capital changes in Q4 2020 resulted in an $18.6 million source of cash, mainly reflecting increased current accounts payable and accrued liabilities largely offset by increased inventories and receivables balances. Changes in non-cash working capital in Q4 2019 resulted in a $4.7 million use of cash, comprised mainly of accounts receivable collections and a build up in payables, partially offset by inventory buildups and increased prepaid expenses.

Investing activities utilized $40.1 million of cash in Q4 2020, comprised mostly of $53.6 million spent on mineral property, plant and equipment additions at the Company's mines and projects, partially offset by $12.0 million of proceeds from asset sales, largely reflecting the sale of certain non-core Canadian exploration stage assets in the quarter. In Q4 2019, investing activities utilized $51.5 million inclusive of $1.8 million used on the net purchase of short-term investments, with the balance relating primarily to spending of $50.3 million on mineral property, plant and equipment at the Company's mines and projects.

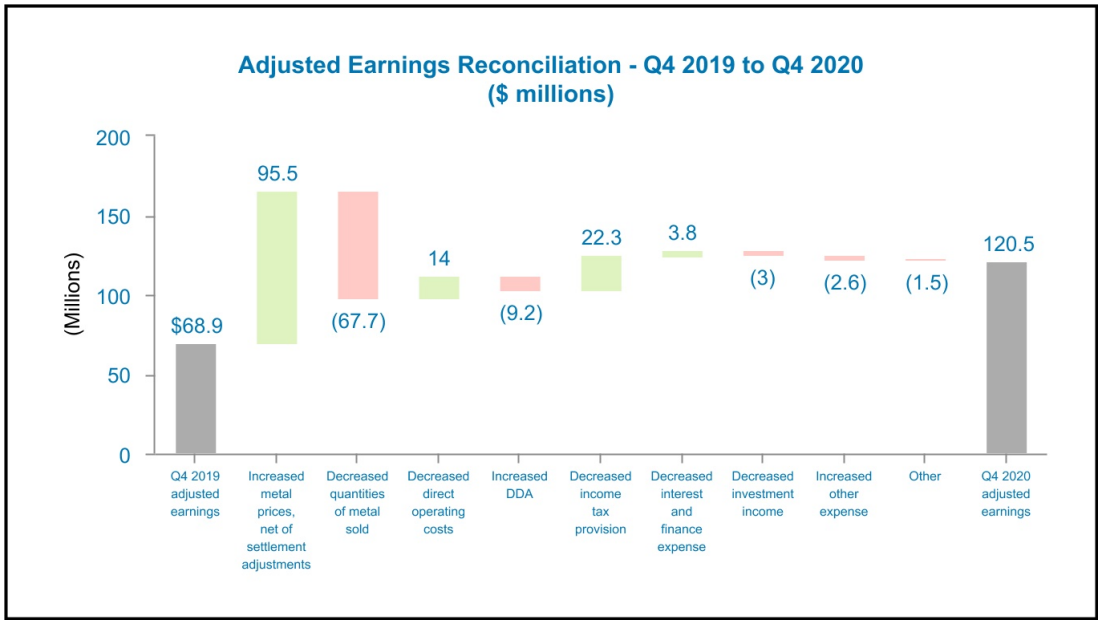
Financing activities in Q4 2020 used $113.5 million, the majority of which related to $90.0 million of repayments on the Credit Facility, which was fully repaid in the quarter, $14.7 million of dividends paid to shareholders, $5.6 million of loan repayments, and $3.2 million of lease repayments. In Q4 2019, $51.9 million was used in financing activities, which consisted of $40.0 million of repayments on the Credit Facility, $7.3 million paid as dividends to shareholders, and $5.7 million of lease repayments.

Adjusted Earnings: Q4 2020 versus Q4 2019

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 2020 Financial Statements.

Adjusted Earnings in Q4 2020 was $120.5 million, representing a basic adjusted earnings per share of $0.57, which was $51.6 million, or $0.24 per share, higher than Q4 2019 adjusted earnings of $68.9 million, and $0.33 of basic adjusted earnings per share.

The following chart illustrates the key factors leading to the change in adjusted earnings from Q4 2019 to Q4 2020:



LIQUIDITY AND CAPITAL POSITION

Liquidity and Capital Measures	December 31, 2020	September 30, 2020	December 31, 2019	Q4 2020 Change	2020 Change
Cash and cash equivalents ("Cash")	**167,113**	150,329	120,564	16,784	46,549
Short-term Investments	**111,946**	81,302	117,776	30,644	(5,830)
Cash and Short-term investments	**279,059**	231,631	238,340	47,428	40,719
Working Capital	**495,168**	465,609	517,249	29,559	(22,081)
Credit Facility committed amount	**500,000**	500,000	500,000	—	—
Credit Facility amounts drawn	**—**	90,000	275,000	(90,000)	(275,000)
Shareholders' equity	**2,605,839**	2,448,886	2,467,846	156,953	137,993
Total debt [(1)]	**33,565**	129,826	316,208	(96,261)	(282,643)
Capital [(2)]	**2,360,345**	2,347,081	2,545,714	13,264	(185,369)

(1) Total debt is a Non-GAAP measure calculated as the total of amounts drawn on the Credit Facility, finance lease liabilities and loans payable.
(2) The capital of the Company consists of items included in shareholders' equity and debt, net of cash and cash equivalents and short term investments.

Liquidity

The Company's cash and short-term investments increased by $16.8 million and $46.5 million during Q4 2020 and the full year 2020, respectively. Operating cash flows of $170.6 million in Q4 2020, which was a Company record, included $22.5 million in tax payments and a $18.6 million source of cash from working capital changes, financed all of the Company's investing and financing activities in the quarter. The significant financing and investing activity cash outflows in the quarter included $90.0 million of repayments to the Credit Facility, which was fully repaid as of December 31, 2020, $53.6 million in payments for mineral property plant and equipment, $14.7 million in dividend payments for which the rate increased to $0.07 per share from $0.05 per share in Q3 2020, and $12.0 million of cash proceeds from the sale of non-core mineral properties. Additionally, the Company's investments in equity investments classified as a short-term investment, including the Company's investment in New Pacific, increased by $21.8 million in the quarter.

Annual operating cash flows in 2020 of $462.3 million, which included $97.0 million source of cash from working capital changes and $81.6 million in tax payments. Annual operating cash flows together with $71.9 million of net cash realized from the partial disposition of the Company's equity investments in Maverix and New Pacific (net of $15.6 million spent to exercise certain Maverix warrants), and $22.5 million of proceeds from the sale of non-core mineral properties was sufficient to finance a net $275.0 million in repayments on the Credit Facility, $178.6 million of investments in mineral property plant and equipment, dividend payments of $46.2 million, and lease payments of $13.1 million during the year. Additionally, the Company's investments in equity investments classified as a short-term investment, including the Company's investment in New Pacific, increased by $21.2 million in 2020.

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, 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 at December 31, 2020 of $495.2 million increased by $29.6 million from September 30, 2020. The increase was attributable to: the $47.4 million combined increase in cash and short-term investments described above; a $65.0 million increase in other current assets other than those relating to taxes, though primarily from a $47.2 million increase in inventories; all partially offset by a $51.5 million increase in current liabilities, other than those relating to taxes, and a $31.4 million net increase in current tax liabilities. Conversely, since December 31, 2019, working capital decreased by $22.1 million, primarily from: a $60.3 million increase in current liabilities other than those relating to taxes, and a $24.9 million net increase in current tax liabilities; partially offset by $40.7 million of cash and short-term investments, and a $22.4 million increase in other current assets other than those relating to taxes.

The net cash generated from the sales of metal production provides our primary source of cash flows. We have not experienced payment delinquencies from our metal sales counterparties during the COVID-19 pandemic, nor do we currently expect to experience such delinquencies as the pandemic continues, though the impact of COVID-19 on the credit risk associated with our counterparties cannot be determined with any degree of certainty.

The Company may periodically experience restrictions on the ability of its subsidiaries to transfer funds to Pan American SIlver Corp., primarily as a result of fiscal restrictions or regulatory changes in the jurisdictions where we operate. For example, Argentina has, at times, instituted unfavourable economic policies and strict currency controls, particularly on USD transactions. These restrictions on our ability to receive funds from our subsidiaries have not, and are not currently expected to, materially impact the Company's ability to meet its obligations.

Capital Resources

The Company manages its capital structure and makes adjustments in light of changes in its economic environment and the risk characteristics of the Company's assets. To effectively manage the Company's capital requirements, Pan American utilizes a planning, budgeting and forecasting process to help determine the funds required to ensure the Company has the appropriate liquidity to meet its operating and growth objectives. The Company ensures that there are sufficient committed loan facilities to meet its short-term business requirements, taking into account its anticipated cash flows from operations and its holdings of cash and cash equivalents and short term investments.

In February 2019, in part related to the Tahoe Acquisition discussed in the "Tahoe Acquisition" section of this MD&A, the Company amended and extended its Credit Facility. The amended Credit Facility was increased by $200.0 million to $500.0 million, and matures on February 1, 2023. At Pan American's option, amounts can be drawn under the amended 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 revolving facility are subject to a stand-by fee of 0.4219% to 0.6188% per annum, dependent on the Company's leverage ratio. The Company drew down US$335 million under the Credit Facility, under LIBOR-based interest rates to fund, in part, the cash purchase price under the Tahoe Acquisition and to repay, in full, and cancel Tahoe's second amended and restated revolving facility, under which US$125 million had been drawn. The Company has since repaid the full outstanding amount on the Credit Facility, and has no balance owing at December 31, 2020, and the Company was in compliance with all covenants required by the Credit Facility.

The Company's financial position at December 31, 2020, 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 2021 working capital requirements, commitments, 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.

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. The Company has no off-balance sheet arrangements.

Commitments

In the normal course of business, the Company enters into contracts that give rise to commitments for future minimum payments. The following table summarizes the remaining contractual maturities of the Company's financial and non-financial liabilities, shown in contractual undiscounted cash flow:

	Payments due by period 2020				
	Within 1 year	2 - 3 years	4- 5 years	After 5 years	Total
Financial liabilities					
Accounts payable and accrued liabilities other than:	$ 272,266	$ —	$ —	$ —	$ 272,266
Severance accrual	2,935	3,711	1,120	76	7,842
Employee compensation	6,737	—	—	—	6,737
Total accounts payable and accrued liabilities	281,938	3,711	1,120	76	286,845
Income taxes payable	54,556	—	—	—	54,556
Loss on commodity contracts	367	—	—	—	367
Debt					
Interest & Standby Fees	2,110	2,294	—	—	4,404
Provisions[1][2]	3,648	3,109	85	1	6,843
Future employee compensation	4,396	11,468	—	—	15,864
Total contractual obligations[2]	**$ 347,015**	**$ 20,582**	**$ 1,205**	**$ 77**	**$ 368,879**

(1) Total litigation provision as further discussed in Note 17 of the 2020 Financial Statements.
(2) Amounts above do not include payments related to the Company's anticipated closure and decommissioning obligation (current $8.4 million, long-term $226.7 million) as discussed in Note 17 of the 2020 Financial Statements (2019 - current $3.4 million, long-term $185.1 million), the deferred credit arising from the Aquiline acquisition ($20.8 million as at December 31, 2020 and December 31, 2019) discussed in Note 20 of the 2020 Financial Statements, and deferred tax liabilities of $175.3 million (2019 - $176.8 million).

Outstanding Share Amounts

As at December 31, 2020, the Company had approximately 0.32 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 $65.71 and a weighted average life of 43 months. Approximately 0.30 million of the stock options were vested and exercisable at December 31, 2020, with an average weighted exercise price of CAD $17.95 per share.

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

	Outstanding as at February 17, 2021
Common shares	210,261,535
Options	314,549
Total	**210,576,084**

In January 2019, the Company obtained shareholder approval to increase its authorized share capital from 200 million to 400 million Common Shares without par value.

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 December 31, 2020 was $330.6 million (December 31, 2019 - $290.4 million) using inflation rates of between 0% and 4% (December 31, 2019 - between 0% and 5%). The inflated and discounted provision on the statement of financial position as at December 31, 2020, using discount rates between 0% and 8% (December 31, 2019 - between 2% and 9%), was $235.1 million (December 31, 2019 - $188.5 million). Spending with respect to decommissioning obligations at the Alamo Dorado and Manantial Espejo mines began in 2016, while the remainder of the obligations are expected to be paid through 2046 or later if mine life is extended. Revisions made to the reclamation obligations in 2020 were primarily a result of increased site disturbance at the mines as well as revisions to the estimate based on periodic reviews of closure plans, actual expenditures incurred and concurrent 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 Q4 2020 and 2020 earnings as finance expense were $2.1 million and $8.3 million, respectively (Q4 2019 and 2019 - $2.6 million and $9.9 million, respectively). Reclamation expenditures incurred during Q4 2020 and 2020 were $0.8 million and $2.5 million, respectively (Q4 2019 and 2019 - $0.5 million and $2.3 million, respectively).

RELATED PARTY TRANSACTIONS

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 have been disclosed in Note 14 of the 2020 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.

ACQUISITION OF TAHOE

On February 22, 2019 (the "Closing Date"), the Company completed the 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 Acquired Mines and Escobal in Guatemala, where operations have been suspended since June 2017. 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.

All 2019 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.

Consolidation of Tahoe

As described in Note 8 of the 2020 Financial Statements, the Company determined that the Tahoe Acquisition represented 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 Tahoe Acquisition was $1.14 billion.

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

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

(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) The assumed fair value of the CVRs was determined using a market approach valuation technique that utilized observable market inputs, which included the Tahoe $3.64 closing share price on the NYSE on February 21, 2019, and the Company's $14.21 closing share price on the NASDAQ on February 21, 2019.
(3) Assumed fair value of 3.5 million Tahoe options that upon the Tahoe 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 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 Tahoe Acquisition:

Allocation of consideration:		
Cash and cash equivalents	$	27,529
Accounts receivable		18,154
VAT Receivable		87,492
Inventory		148,209
Other current assets		1,381
Mineral properties, plant and equipment		1,239,402
Other assets		6,551
Deferred tax assets		30,728
Accounts payable and accrued liabilities		(148,742)
Debt		(125,000)
Provision for closure and decommissioning liabilities		(77,320)
Net current and deferred income tax liabilities		(65,710)
	$	**1,142,674**

ALTERNATIVE PERFORMANCE (NON-GAAP) MEASURES

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").

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.

Due to the expected production profile at Dolores, the Company has determined that prospectively the mine is more appropriately categorized as a Gold Segment operation. As such, beginning in 2021, the Company will begin to report Dolores cash costs and AISC, including recast comparative amounts, on a per ounce of gold basis and include it as part of its Gold Segment cash costs and AISC calculations.

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 2019 operating results from the Gold Segment mines only include results from February 22, 2019 to December 31, 2019.

Consolidated Cash Costs and AISC:

	Three months ended December 31, 2020				Three months ended December 31, 2019			
(In thousands of USD, except as noted)	**Silver Segment**	**Gold Segment**	**Corporate**	**Consolidated (silver basis)[1]**	Silver Segment	Gold Segment	Corporate	Consolidated (silver basis)[1]
Production Costs	**119,407**	**87,296**		**206,702**	**136,443**	**93,151**		**229,594**
Purchase price allocation inventory fair value adjustment	—	(712)		(712)		(1,683)		(1,683)
NRV inventory adjustments	6,742	—		6,742	(486)	—		(486)
On-site direct operating costs[3]	**126,148**	**86,583**		**212,732**	**135,957**	**91,468**		**227,425**
Royalties	7,222	1,902		9,123	6,024	1,912		7,936
Smelting, refining and direct selling charges[2]	22,074	29		22,103	21,148	326		21,474
Cash cost of sales before by-product credits[3]	**155,444**	**88,514**		**243,958**	**163,129**	**93,706**		**256,835**
Silver segment by-product credits[2]	(127,021)	—		—	(113,555)	—		—
Gold segment by-product credits[2]	—	(2,745)		—	—	(690)		—
Consolidated silver basis by-product credits[1,2]	—	—		(337,483)	—	—		(312,015)
Cash costs[3]	**28,424**	**85,769**		**(93,524)**	**49,573**	**93,016**		**(55,180)**
NRV inventory adjustments	(6,742)	—		(6,742)	486	—		486
Sustaining capital	24,392	27,615		52,007	19,584	26,603		46,187
Exploration and project development	596	851	(356)	1,091	929	633	1,000	2,562
Reclamation cost accretion	1,225	749	87	2,061	1,652	777	154	2,583
General and administrative expense	—	—	10,679	10,679	—	—	10,009	10,009
All-in sustaining costs[3]	**47,895**	**114,984**	**10,410**	**(34,428)**	**72,225**	**121,029**	**11,163**	**6,648**
Silver segment silver ounces sold (koz)	4,620	—		—	6,352	—		—
Gold segment gold ounces sold (koz)	—	112		—	—	134		—
Total silver ounces sold (koz)	—	—		4,732	—	—		6,392
Cash costs per ounce sold	**6.15**	**763**			**7.80**	**693**		
AISC per ounce sold	**10.37**	**1,023**		**(7.28)**	**11.37**	**901**		**1.04**
AISC per ounce sold (excluding NRV inventory adjustments)	**11.83**	**1,023**		**(5.85)**	**11.29**	**901**		**0.96**

	Year ended December 31, 2020				Year ended December 31, 2019			
(In thousands of USD, except as noted)	**Silver Segment**	**Gold Segment**	**Corporate**	**Consolidated (silver basis)[1]**	Silver Segment	Gold Segment[4]	Corporate	Consolidated (silver basis)[1]
Production Costs	**375,475**	**321,198**		**696,672**	**516,642**	**324,655**		**841,297**
Purchase price allocation inventory fair value adjustment		(3,463)		(3,463)		(43,395)		(43,395)
NRV inventory adjustments	16,175	—		16,175	356	—		356
On-site direct operating costs[3]	**391,650**	**317,735**		**709,385**	**516,998**	**281,260**		**798,257**
Royalties	20,663	6,832		27,494	21,413	5,308		26,721
Smelting, refining and direct selling charges[2]	61,340	137		61,477	72,898	953		73,851
Cash cost of sales before by-product credits[3]	**473,653**	**324,704**		**798,357**	**611,309**	**287,521**		**898,829**
Silver segment by-product credits[2]	(354,042)	—		—	(454,472)	—		—
Gold segment by-product credits[2]	—	(7,213)		—	—	(1,968)		—
Consolidated silver basis by-product credits[1,2]	—	—		(1,052,852)	—	—		(1,019,548)
Cash costs[3]	**119,611**	**317,490**		**(254,495)**	**156,836**	**285,553**		**(120,718)**
NRV inventory adjustments	(16,175)	—		(16,175)	(356)	—		(356)
Sustaining capital	83,178	78,868		162,047	90,632	88,464		179,096
Exploration and project development[5]	1,474	3,413	2,209	7,096	3,195	3,404	3,204	9,803
Reclamation cost accretion	4,898	2,996	365	8,260	6,605	2,637	661	9,903
General and administrative expense			36,375	36,375			31,752	31,752
All-in sustaining costs[3]	**192,986**	**402,768**	**38,948**	**(56,893)**	**256,913**	**380,058**	**35,617**	**109,480**
Silver segment silver ounces sold (koz)	16,966	—		—	24,559	—		—
Gold segment gold ounces sold (koz)	—	398		—	—	401		—
Total silver ounces sold (koz)	—	—		17,317	—	—		24,676
Cash costs per ounce sold	**7.05**	**797**			**6.39**	**712**		
AISC per ounce sold	**11.38**	**1,011**		**(3.29)**	**10.46**	**948**		**4.44**
AISC per ounce sold (excluding NRV inventory adjustments)	**12.33**	**1,011**		**(2.35)**	**10.48**	**948**		**4.45**

(1) Consolidated silver basis calculated by treating all revenues from metals other than silver, including gold, as a by-product credit in Cash Costs. Consolidated silver basis 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.
(2) Included in the revenue line of the consolidated income statements. By-product credits are reflective of realized metal prices for the applicable periods.
(3) Totals may not add due to rounding.
(4) All operating results from the Gold Segment Mines, are only from the Closing Date to September 30, 2019, and do not represent a full twelve months of 2019 operations.
(5) The amounts for the twelve months ended December 31, 2019 exclude $1.9 million from non-cash project development write-downs.

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.

Reconciliation of payments for mineral properties, plant and equipment and sustaining capital	**Three months ended December 31,**		**Year ended December 31,**	
(in thousands of USD)	**2020**	2019	**2020**	2019
Payments for mineral properties, plant and equipment[1]	**53,637**	50,319	**178,556**	205,807
Add/(Subtract)				
Lease repayments	**3,180**	5,726	**13,101**	19,270
Non-Sustaining capital[2]	**(4,807)**	(9,857)	**(29,610)**	(45,980)
Sustaining Capital	**52,007**	46,187	**162,047**	179,096

(1) As presented on the unaudited interim consolidated statements of cash flows.
(2) Non-sustaining capital includes expenditures disclosed in the "Project Development Update" section of this MD&A, $0.1 million and $4.8 million in Q4 2020 and full year 2020, respectively primarily for Escobal generators, as well as lease payments related to the power plant at Shahuindo and office lease and capital expenditures related to the corporate offices.

Silver Segment Cash Costs and AISC by mine:

SILVER SEGMENT (In thousands of USD, except as noted)	Three months ended December 31, 2020						
	La Colorada	Dolores	Huaron	Morococha	San Vicente	Manantial Espejo	Consolidated Silver Segment
Production Costs	22,069	36,235	16,402	17,207	6,455	21,038	119,407
NRV inventory adjustments	—	6,250	—	—	—	492	6,742
On-site direct operating costs	**22,069**	**42,485**	**16,402**	**17,207**	**6,455**	**21,530**	**126,148**
Royalties	185	2,603	57	—	3,647	730	7,222
Smelting, refining & direct selling costs	4,444	13	7,790	5,775	2,132	1,919	22,074
Cash Costs before by-product credits	**26,698**	**45,101**	**24,249**	**22,982**	**12,234**	**24,180**	**155,444**
Silver segment by-product credits	(17,577)	(54,493)	(22,832)	(16,852)	(4,222)	(11,044)	(127,021)
Cash Costs	**9,121**	**(9,392)**	**1,416**	**6,130**	**8,013**	**13,136**	**28,424**
NRV inventory adjustments	—	(6,250)	—	—	—	(492)	(6,742)
Sustaining capital	5,496	12,778	776	3,219	1,391	732	24,392
Exploration and project development	442	124	—	30	—	—	596
Reclamation cost accretion	143	660	144	84	71	123	1,225
All-in sustaining costs	**15,201**	**(2,079)**	**2,336**	**9,463**	**9,475**	**13,499**	**47,895**
Silver segment silver ounces sold (koz)	**1,291**	**959**	**697**	**517**	**453**	**702**	**4,620**
Cash cost per ounce sold	**7.07**	**(9.79)**	**2.03**	**11.85**	**17.67**	**18.72**	**6.15**
AISC per ounce sold	**11.78**	**(2.17)**	**3.35**	**18.29**	**20.89**	**19.24**	**10.37**
AISC per ounce sold (excluding NRV inventory adjustments)	**11.78**	**4.35**	**3.35**	**18.29**	**20.89**	**19.94**	**11.83**

SILVER SEGMENT (In thousands of USD, except as noted)	Three Months Ended December 31, 2019						
	La Colorada	Dolores	Huaron	Morococha	San Vicente	Manantial Espejo	Consolidated Silver Segment
Production Costs	18,049	42,949	19,680	19,787	12,336	23,642	136,443
NRV inventory adjustments	—	(435)	—	—	—	(51)	(486)
On-site direct operating costs	**18,049**	**42,513**	**19,680**	**19,787**	**12,336**	**23,591**	**135,957**
Royalties	179	2,126	—	—	3,494	224	6,024
Smelting, refining & direct selling costs	4,775	21	5,592	4,091	4,509	2,160	21,148
Cash Costs before by-product credits	**23,003**	**44,660**	**25,272**	**23,878**	**20,339**	**25,975**	**163,128**
Silver segment by-product credits	(15,399)	(40,958)	(21,339)	(18,296)	(5,942)	(11,621)	(113,555)
Cash Costs	**7,604**	**3,702**	**3,934**	**5,582**	**14,396**	**14,354**	**49,572**
NRV inventory adjustments	—	435	—	—	—	51	486
Sustaining capital	1,957	8,106	2,834	3,945	2,048	696	19,584
Exploration and project development	565	274	—	51	—	39	929
Reclamation cost accretion	144	560	181	109	78	580	1,652
All-in sustaining costs	**10,269**	**13,077**	**6,949**	**9,687**	**16,522**	**15,720**	**72,224**
Silver segment silver ounces sold (koz)	**1,770**	**1,402**	**736**	**515**	**1,001**	**928**	**6,352**
Cash cost per ounce sold	**4.30**	**2.64**	**5.34**	**10.85**	**14.38**	**15.47**	**7.80**
AISC per ounce sold	**5.80**	**9.33**	**9.44**	**18.83**	**16.50**	**16.94**	**11.37**
AISC per ounce sold (excluding NRV inventory adjustments)	**5.80**	**9.02**	**9.44**	**18.83**	**16.50**	**16.88**	**11.29**

SILVER SEGMENT	Year ended December 31, 2020						
(In thousands of USD, except as noted)	La Colorada	Dolores	Huaron	Morococha	San Vicente	Manantial Espejo	Consolidated Silver Segment
Production Costs	69,073	138,670	39,572	35,768	25,940	66,451	375,475
NRV inventory adjustments	—	12,713	—	—	—	3,462	16,175
On-site direct operating costs	**69,073**	**151,384**	**39,572**	**35,768**	**25,940**	**69,913**	**391,650**
Royalties	593	8,286	42	—	9,812	1,930	20,663
Smelting, refining & direct selling costs	18,110	66	18,167	11,712	7,092	6,192	61,340
Cash Costs before by-product credits	**87,776**	**159,736**	**57,781**	**47,480**	**42,844**	**78,036**	**473,653**
Silver segment by-product credits	(51,039)	(169,802)	(50,826)	(34,856)	(9,383)	(38,137)	(354,042)
Cash Costs	**36,737**	**(10,066)**	**6,955**	**12,624**	**33,461**	**39,899**	**119,611**
NRV inventory adjustments	—	(12,713)	—	—	—	(3,462)	(16,175)
Sustaining capital	18,417	44,861	4,500	7,259	4,877	3,264	83,178
Exploration and project development	998	338	—	138	—	—	1,474
Reclamation cost accretion	570	2,640	576	336	285	491	4,898
All-in sustaining costs	**56,723**	**25,060**	**12,031**	**20,357**	**38,623**	**40,192**	**192,986**
Silver segment silver ounces sold (koz)	**5,254**	**4,063**	**1,843**	**1,108**	**2,153**	**2,545**	**16,966**
Cash cost per ounce sold	**6.99**	**(2.48)**	**3.77**	**11.40**	**15.54**	**15.68**	**7.05**
AISC per ounce sold	**10.80**	**6.17**	**6.53**	**18.38**	**17.94**	**15.80**	**11.38**
AISC per ounce sold (excluding NRV inventory adjustments)	**10.80**	**9.30**	**6.53**	**18.38**	**17.94**	**17.16**	**12.33**

SILVER SEGMENT[1]	Year ended December 31, 2019						
(In thousands of USD, except as noted)	La Colorada	Dolores	Huaron	Morococha	San Vicente	Manantial Espejo	Consolidated Silver Segment
Production Costs	74,544	183,058	76,962	73,396	46,456	62,226	516,642
NRV inventory adjustments	—	(7,885)	—	—	—	8,240	356
On-site direct operating costs	**74,544**	**175,174**	**76,962**	**73,396**	**46,456**	**70,466**	**516,998**
Royalties	595	8,264	—	—	11,348	1,206	21,413
Smelting, refining & direct selling costs	17,420	106	21,088	15,675	11,871	6,738	72,898
Cash Costs before by-product credits	**92,559**	**183,544**	**98,050**	**89,071**	**69,675**	**78,410**	**611,309**
Silver segment by-product credits	(69,905)	(168,333)	(84,544)	(78,907)	(22,573)	(30,211)	(454,472)
Cash Costs	**22,654**	**15,211**	**13,506**	**10,164**	**47,102**	**48,200**	**156,836**
NRV inventory adjustments	—	7,885	—	—	—	(8,240)	(356)
Sustaining capital	9,721	49,660	10,936	12,599	4,960	2,757	90,632
Exploration and project development	1,445	1,105	13	327	—	305	3,195
Reclamation cost accretion	576	2,240	723	436	311	2,319	6,605
All-in sustaining costs	**34,396**	**76,100**	**25,178**	**23,526**	**52,373**	**45,341**	**256,913**
Silver segment silver ounces sold (koz)	**7,583**	**4,924**	**3,253**	**2,335**	**4,003**	**2,460**	**24,559**
Cash cost per ounce sold	**2.99**	**3.09**	**4.15**	**4.35**	**11.77**	**19.59**	**6.39**
AISC per ounce sold	**4.54**	**15.45**	**7.74**	**10.08**	**13.08**	**18.43**	**10.46**
AISC per ounce sold (excluding NRV inventory adjustments)	**4.54**	**13.85**	**7.74**	**10.08**	**13.08**	**21.78**	**10.48**

Gold Segment Cash Costs and AISC by mine:

GOLD SEGMENT	Three months ended December 31, 2020			
(In thousands of USD, except as noted)	Shahuindo	La Arena	Timmins[1]	Total
Production Costs	23,460	23,797	40,039	87,296
Purchase Price Allocation Inventory Fair Value Adjustment	(688)	(24)	—	(712)
NRV inventory adjustments	—	—	—	—
On-site direct operating costs	**22,772**	**23,772**	**40,039**	**86,583**
Royalties	—	—	1,902	1,902
Smelting, refining & direct selling costs	—	—	29	29
Cash Costs before by-product credits	**22,772**	**23,772**	**41,970**	**88,514**
Gold segment by-product credits	(2,291)	(365)	(89)	(2,745)
Cash Costs of Sales	**20,481**	**23,407**	**41,881**	**85,769**
NRV inventory adjustments	—	—	—	—
Sustaining capital	6,963	13,030	7,621	27,615
Exploration and project development	—	—	851	851
Reclamation cost accretion	404	295	51	749
All-in sustaining costs	**27,848**	**36,732**	**50,404**	**114,984**
Gold segment gold ounces sold	**33,063**	**42,096**	**37,200**	**112,359**
Cash cost per ounce sold	**619**	**556**	**1,126**	**763**
AISC per ounce sold	**842**	**873**	**1,355**	**1,023**
AISC per ounce sold (excluding NRV inventory adjustments)	**842**	**873**	**1,355**	**1,023**

GOLD SEGMENT	Three months ended December 31, 2019			
(In thousands of USD, except as noted)	Shahuindo	La Arena	Timmins[1]	Total
Production Costs	25,375	28,603	39,173	93,151
Purchase Price Allocation Inventory Fair Value Adjustment	(916)	(750)	(17)	(1,683)
NRV inventory adjustments	—	—	—	—
On-site direct operating costs	**24,459**	**27,853**	**39,156**	**91,468**
Royalties	—	—	1,912	1,912
Smelting, refining & direct selling costs	173	118	35	326
Cash Costs before by-product credits	**24,632**	**27,971**	**41,103**	**93,706**
Gold segment by-product credits	(507)	(92)	(91)	(690)
Cash Costs of Sales	**24,125**	**27,879**	**41,012**	**93,016**
NRV inventory adjustments	—	—	—	—
Sustaining capital	14,156	8,382	4,066	26,603
Exploration and project development	82	33	518	633
Reclamation cost accretion	290	447	40	777
All-in sustaining costs	**38,653**	**36,740**	**45,636**	**121,030**
Gold segment gold ounces sold	**39,849**	**48,062**	**46,400**	**134,310**
Cash cost per ounce sold	**605**	**580**	**884**	**693**
AISC per ounce sold	**970**	**764**	**984**	**901**
AISC per ounce sold (excluding NRV inventory adjustments)	**970**	**764**	**984**	**901**

GOLD SEGMENT	Year ended December 31, 2020			
(In thousands of USD, except as noted)	Shahuindo	La Arena	Timmins[1]	Total
Production Costs	97,941	72,676	150,581	321,198
Purchase Price Allocation Inventory Fair Value Adjustment	(3,125)	(336)	(1)	(3,463)
NRV inventory adjustments	—	—	—	—
On-site direct operating costs	**94,816**	**72,339**	**150,580**	**317,735**
Royalties	—	—	6,832	6,832
Smelting, refining & direct selling costs	—	—	137	137
Cash Costs before by-product credits	**94,816**	**72,339**	**157,549**	**324,704**
Gold segment by-product credits	(6,120)	(743)	(350)	(7,213)
Cash Costs of Sales	**88,695**	**71,596**	**157,199**	**317,490**
NRV inventory adjustments	—	—	—	—
Sustaining capital	22,749	37,324	18,795	78,868
Exploration and project development	(5)	—	3,418	3,413
Reclamation cost accretion	1,615	1,179	203	2,996
All-in sustaining costs	**113,055**	**110,098**	**179,615**	**402,768**
Gold segment gold ounces sold	**150,775**	**99,320**	**148,130**	**398,225**
Cash cost per ounce sold	**588**	**721**	**1,061**	**797**
AISC per ounce sold	**750**	**1,109**	**1,213**	**1,011**
AISC per ounce sold (excluding NRV inventory adjustments)	**750**	**1,109**	**1,213**	**1,011**

GOLD SEGMENT	Year ended December 31, 2019			
(In thousands of USD, except as noted)	Shahuindo	La Arena	Timmins[1]	Total
Production Costs	90,877	99,915	133,863	324,655
Purchase Price Allocation Inventory Fair Value Adjustment	(14,003)	(19,978)	(9,414)	(43,395)
NRV inventory adjustments	—	—	—	—
On-site direct operating costs	**76,874**	**79,937**	**124,449**	**281,260**
Royalties	—	—	5,308	5,308
Smelting, refining & direct selling costs	501	345	107	953
Cash Costs before by-product credits	**77,375**	**80,282**	**129,864**	**287,521**
Gold segment by-product credits	(1,411)	(278)	(279)	(1,968)
Cash Costs of Sales	**75,964**	**80,004**	**129,585**	**285,553**
NRV inventory adjustments	—	—	—	—
Sustaining capital	29,873	47,557	11,035	88,464
Exploration and project development	787	358	2,259	3,404
Reclamation cost accretion	983	1,515	139	2,637
All-in sustaining costs	**107,607**	**129,434**	**143,019**	**380,059**
Gold segment gold ounces sold	**133,298**	**124,206**	**143,300**	**400,804**
Cash cost per ounce sold	**570**	**644**	**904**	**712**
AISC per ounce sold	**807**	**1,042**	**998**	**948**
AISC per ounce sold (excluding NRV inventory adjustments)	**807**	**1,042**	**998**	**948**

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

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 as 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 twelve months ended December 31, 2020 and 2019, to the net earnings for each period.

	Three Months Ended December 31		Year ended December 31	
(In thousands of USD, except as noted)	**2020**	2019	**2020**	2019
Net earnings for the period	**$ 169,018**	$ 51,706	**$ 176,455**	$ 111,244
Adjust for:				
Derivative losses (gains)	**75**	—	**(38)**	14
Impairment charges on mineral properties	**—**	40,050	**—**	40,050
Write-down of other assets	**—**	—	**2,013**	1,882
Unrealized foreign exchange losses (gains)	**1,002**	(1,395)	**8,857**	6,057
Heap inventory net realizable value (recovery) charge	**(3,621)**	4,128	**662**	29,833
Unrealized gains on foreign currency and commodity contracts	**(6,787)**	(1,046)	**(6,137)**	(646)
Share of income from associate and dilution gain	**(12,340)**	(14,246)	**(10,529)**	(15,245)
Gain on sale of assets	**(9,832)**	(1,040)	**(7,922)**	(3,858)
COVID 19 mine care and maintenance	**—**	—	**75,097**	—
Transaction and integration costs	**—**	(197)	**—**	7,515
Closure and decommissioning liability	**5,174**	—	**5,174**	—
Effect of taxes on adjusting items	**(30)**	(1,455)	**(18,848)**	(11,208)
Effect of foreign exchange on taxes	**(22,171)**	(7,597)	**18,598**	(7,651)
Total adjustments	**$ (48,530)**	$ 17,202	**$ 66,927**	$ 46,743
Adjusted earnings for the period	**$ 120,488**	$ 68,908	**$ 243,382**	$ 157,987
Weighted average shares for the period	**210,193**	209,671	**210,085**	201,397
Adjusted earnings per share for the period	**$ 0.57**	$ 0.33	**$ 1.16**	$ 0.78

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 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

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, gold, zinc, lead, and copper; 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 jurisdictions such as Canada, Peru, Mexico, Argentina, Bolivia and Guatemala; environmental risks; and risks related to its relations with employees. Certain of these risks are described below. Additional details and other risks facing the Company, including but not limited to: taxation risks, foreign operations, government regulations, community action, title to assets, and general economic conditions are more fully described in Pan American's Annual Information Form (available on SEDAR at www.sedar.com) and Form 40-F filed with the SEC, and in the Financial Instruments and related risks section of the 2020 Financial Statements. Certain additional risk factors relating to the business of Tahoe are described in the Company's management information circular dated December 4, 2018, with respect to the Arrangement, which is available on SEDAR at www.sedar.com. 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 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 the 2020 Financial Statements under Note 9 "Financial Instruments", along with the financial statement classification, the significant assumptions made in determining the fair value, and amounts of income, expenses, gains and losses associated with financial instruments. Fair value estimates are made at a specific point in time, based on relevant market information and information about the financial instrument. These estimates are subjective in nature and involve uncertainties and matters of significant judgment and, therefore, cannot be determined with precision. Changes in assumptions could significantly affect the estimates.

The following provides a description of the risks related to financial instruments and how management manages these risks:

Metal Price Fluctuations

The majority of our revenue is derived from the sale of silver, gold, zinc, copper and lead, and therefore fluctuations in the price of these metals significantly affect our operations and profitability. Our sales are directly dependent on metal prices, and metal prices have historically shown significant volatility and are beyond our control. The Board of Directors continually assesses Pan American's strategy towards our metal exposure, depending on market conditions. The table below illustrates the effect of changes in silver and gold prices on anticipated revenues for 2021, expressed in percentage terms. This analysis assumes that quantities of silver and gold produced and sold remain constant under all price scenarios presented.

2021 Revenue Metal Price Sensitivity

		Gold Price						
		$1,525	$1,625	$1,725	$1,825	$1,925	$2,025	$2,125
Silver Price	$20.50	86%	89%	93%	96%	100%	103%	107%
	$21.50	87%	91%	94%	98%	101%	104%	108%
	$22.50	88%	92%	95%	99%	102%	106%	109%
	$23.50	90%	93%	97%	**100%**	103%	107%	110%
	$24.50	91%	94%	98%	101%	105%	108%	112%
	$25.50	92%	96%	99%	102%	106%	109%	113%
	$26.50	93%	97%	100%	104%	107%	111%	114%

Since base metal and gold revenue are treated as a by-product credit for purposes of calculating Silver Segment cash costs and AISC per ounce of silver sold, and silver revenue is treated as a by-product credit for purposes of calculating Gold Segment cash costs and AISC per ounce of gold sold, these non-GAAP measures are highly sensitive to metal prices. The tables below illustrate this point by plotting the expected Silver Segment AISC per silver ounce according to our 2021 guidance against various price assumptions for the Silver Segment's two main by-product credits, zinc and gold, and plotting the expected Gold Segment AISC per gold ounce according to our 2021 guidance against various price assumptions for the Gold Segment's main by-product credit, Silver, expressed in percentage terms:

2021 Silver Segment AISC Metal Price Sensitivity

		Gold Price						
		$1,525	$1,625	$1,725	$1,825	$1,925	$2,025	$2,125
Zinc Price	$2,400	109%	107%	106%	105%	103%	102%	100%
	$2,500	107%	106%	104%	103%	102%	100%	99%
	$2,600	106%	104%	103%	102%	100%	99%	97%
	$2,700	104%	103%	101%	**100%**	99%	97%	96%
	$2,800	103%	101%	100%	98%	97%	96%	94%
	$2,900	101%	100%	98%	97%	96%	94%	93%
	$3,000	100%	98%	97%	95%	94%	93%	91%

2021 Gold Segment AISC Metal Price Sensitivity

		Silver Price						
		$20.50	$21.50	$22.50	$23.50	$24.50	$25.50	$26.50
Gold Price	$1,825	101%	101%	100%	**100%**	100%	99%	99%

The price of silver and other metals are affected by numerous factors beyond our control, including:

- global and regional levels of supply and demand;
- sales by government holders and other third parties;
- metal stock levels maintained by producers and others;
- increased production due to new mine developments and improved mining and production methods;
- speculative activities;
- inventory carrying costs;
- availability, demand and costs of metal substitutes;

- international economic and political conditions;
- interest rates, inflation and currency values;
- increased demand for silver or other metals for new technologies; and
- reduced demand resulting from obsolescence of technologies and processes utilizing silver and other metals.

In addition to general global economic conditions that can have a significant impact on our business in many ways, declining market prices for metals could materially adversely affect our operations and profitability. A decrease in the market price of silver, gold and other metals could affect the commercial viability of our mines and production at some of our mining properties. Lower prices could also adversely affect future exploration and our ability to develop mineral properties and mines, including the development of capital intensive projects such as Navidad, all of which would have a material adverse impact on our financial condition, results of operations and future prospects. There can be no assurance that the market prices will remain at sustainable levels.

If market prices of gold and silver remain below levels used in Pan American's impairment testing and reserve prices for an extended period of time, Pan American may need to reassess its long-term price assumptions, and a significant decrease in the long-term price assumptions would be an indicator of potential impairment, requiring Pan American to perform an impairment assessment on related assets. Pan American further discusses key assumptions used in measuring the recoverable amounts of its mining assets in Note 13 of the 2020 Financial Statements for the year ended December 31, 2020. Due to the sensitivity of the recoverable amounts to long term metal prices, as well as to other factors including changes to mine plans and cost escalations, any significant change in these key assumptions and inputs could result in impairment charges in future periods.

The Board of Directors continually assesses Pan American's strategy towards our base metal exposure, depending on market conditions. From time to time, we mitigate the market price risk associated with our base metal production by committing some of our forecast base metal production to forward sales and options contracts. However, decisions relating to hedging may have material adverse effects on our financial performance, financial position, and results of operations. The Company recorded gains of $nil and $1.2 million in Q4 2019 and 2019, respectively, on certain outstanding collars made up of put and call contracts on base metal production to manage the Company's financial exposure to these metals. As at December 31, 2020, the Company had no outstanding contracts to sell base metal production.

During 2020, the Company entered into diesel swap contracts designed to fix or limit the Company's exposure to higher fuel prices. At December 31, 2020, the Company had outstanding positions on its diesel exposure with a notional amount of 15.6 million gallons, with a weighted average fixed price of $1.18 per gallon, expiring between January 2021 and December 2022. The Company recorded gains of $4.0 million and $4.7 million for the three and twelve months ended December 31, 2020, respectively (Q4 2019 and 2019: $nil and $nil, respectively).

We take the view that our precious metals production should not be hedged, thereby allowing the maximum exposure to precious metal prices. However, in extreme circumstances, the Board of Directors may make exceptions to this approach. Such decisions could have material adverse effects upon our financial performance, financial position, and results of operations.

Trading Activities and Credit Risk

The zinc, lead, and copper concentrates produced by us are sold through long-term supply arrangements to metal traders or integrated mining and smelting companies. The terms of the concentrate contracts may require us to deliver concentrate that has a value greater than the payment received at the time of delivery, thereby introducing us to credit risk of the buyers of our concentrates. Should any of these counterparties not honour supply arrangements, or should any of them become insolvent, we may incur losses for products already shipped and be forced to sell our concentrates in the spot market or we may not have a market for our concentrates and therefore our future operating results may be materially adversely impacted.

As at December 31, 2020, we had receivable balances associated with buyers of our concentrates of $35.1 million (2019 - $48.8 million) and receivable balances associated with buyers of our doré of $ nil (2019 - $17.5 million). The vast majority of our concentrate is sold to a limited number of concentrate buyers.

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 and we are pursuing a claim to collect damages, but, like many other creditors, we are also subject to alleged preference claims against us. As at December 31, 2020, we had approximately $61.8 million (2019 - $58.2 million) contained in precious metal inventory at refineries. We maintain insurance coverage against the loss of precious metals at our mine sites and in-transit to refineries.

Refined silver and gold is sold in the spot market to various bullion traders and banks. Credit risk may arise from these activities if we are not paid for metal at the time it is delivered, as required by spot sale contracts.

We maintain trading facilities with several banks and bullion dealers for the purposes of transacting our trading activities. None of these facilities are subject to margin arrangements. Our trading activities can expose us to our counterparties' credit risk to the extent that our trading positions have a positive mark-to-market value.

Supplier advances for products and services yet to be provided are a common practice in some jurisdictions in which we operate. These advances represent a credit risk to us to the extent that suppliers do not deliver products or perform services as expected. As at December 31, 2020, we had made $8.2 million of supplier advances (2019 - $3.4 million), which are reflected in "Trade and other receivables" on Pan American's balance sheet.

Management constantly monitors and assesses the credit risk resulting from our concentrate sales, refining arrangements and commodity contracts. Furthermore, management carefully considers credit risk when allocating prospective sales and refining business to counterparties. In making allocation decisions, management attempts to avoid unacceptable concentration of credit risk to any single counterparty.

From time to time, we may invest in equity securities of other companies. Just as investing in Pan American is inherent with risks such as those set out in this MD&A, by investing in other companies we will be exposed to the risks associated with owning equity securities and those risks inherent in the investee companies.

Exchange Rate Risk

We report our financial statements in USD; however we operate in jurisdictions that utilize other currencies. As a consequence, the financial results of our operations, as reported in USD, are subject to changes in the value of the USD relative to local currencies. Since our sales are denominated in USD and a portion of our operating costs and capital spending are in local currencies, we are negatively impacted by strengthening local currencies relative to the USD and positively impacted by the inverse. From time to time, we mitigate part of this currency exposure by accumulating local currencies, entering into contracts designed to fix or limit our 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.

Pan American held cash and short-term investments of $118.0 million in CAD, $1.0 million in MXN, $13.9 million in PEN, $7.2 million in ARS, $0.6 million in BOB, and $0.5 million in Guatemalan quetzals as at December 31, 2020.

As at December 31, 2020, Pan American had outstanding positions on $51.0 million in foreign currency exposure of MXN purchases and $45.6 million of PEN purchases. The MXN positions had weighted average USD put and call exchange rates of $21.29 and $30.43, respectively, expiring between January 2021 and December 2021. The PEN positions had weighted average USD put and call exchange rates of $3.50 and $3.67, respectively, expiring between January 2021 and December 2021.

For the year ended December 31, 2020, the Company recorded gains of $1.6 million (2019 - gains of $1.0 million), losses of $2.2 million (2019 - gains of $0.7 million), and losses of $0.6 million (2019 - gains of $0.3 million) on MXN, PEN, and CAD derivative contracts, respectively.

The following table illustrates the effect of changes in the exchange rate of PEN and CAD against the USD on anticipated cost of sales for 2021, expressed in percentage terms:

2021 Cost of Sales Exchange Rate Sensitivity

		CAD/USD						
		$1.21	$1.24	$1.27	$1.30	$1.33	$1.36	$1.39
PEN/ USD	$3.20	103%	102%	102%	102%	101%	101%	101%
	$3.30	102%	102%	101%	101%	101%	100%	100%
	$3.40	102%	101%	101%	100%	100%	100%	99%
	$3.50	101%	101%	100%	**100%**	100%	99%	99%
	$3.60	101%	100%	100%	100%	99%	99%	99%
	$3.70	100%	100%	99%	99%	99%	98%	98%
	$3.80	100%	99%	99%	99%	98%	98%	98%

Our balance sheet contains various monetary assets and liabilities, some of which are denominated in foreign currencies. Accounting convention dictates that these balances are translated at the end of each period, with resulting adjustments being reflected as foreign exchange gains or losses on our income statement.

In addition to the foregoing, governmental restrictions and controls relating to exchange rates also impact our operations. In Argentina, for example, the government has at times established official exchanges rates that were significantly different than the unofficial exchange rates more readily utilized locally to determine prices and value. Our investments in Argentina are primarily funded from outside of the country, and therefore conversion of foreign currencies, like USD, at the official exchange rate has had the effect of reducing purchasing power and substantially increasing relative costs in an already high inflationary market. Maintaining monetary assets in ARS also exposes us to the risks of ARS devaluation and high domestic inflation.

Liquidity Risk

Liquidity risk is the risk that we will not be able to meet our financial obligations as they come due. The volatility of the metals markets can impact our ability to forecast cash flow from operations.

We must maintain sufficient liquidity to meet our short-term business requirements, taking into account our anticipated cash flows from operations, our holdings of cash and cash equivalents, and committed loan facilities.

We manage our liquidity risk by continuously monitoring forecasted and actual cash flows. We have in place a rigorous reporting, planning and budgeting process to help determine the funds required to support our normal operating requirements on an ongoing basis and our expansion plans. We continually evaluate and review capital and operating expenditures in order to identify, decrease, and limit all non-essential expenditures.

We are required to use a portion of our cash flow to service principal and interest on debt, which will limit the cash flow available for other business opportunities. We also maintain and enter into intercompany credit arrangements with our subsidiaries in the normal course. Our ability to make scheduled principal payments, pay interest on or refinance our indebtedness depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Unexpected delays in production, the suspension of our mining licenses, or other operational problems could impact our ability to service the debt and make necessary capital expenditures when the debt becomes due. If we are unable to generate such cash flow to timely repay any debt outstanding, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time.

We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

Claims and Legal Proceedings

We are subject to various claims and legal proceedings covering a wide range of matters that arise in the ordinary course of business activities. Many of these claims are from current or ex-employees, or employees of former or current owners of our operations such as the Quiruvilca-related claims in Peru, which could in the aggregate be of significant value, and include alleged improper dismissals, workplace illnesses, such as silicosis, and claims for additional profit-sharing and bonuses in prior years.

In some cases, we may also become subject to class action lawsuits. For example, in mid-2017, Tahoe, which was acquired by us in late February 2019, and certain of its former directors and officers became the subject of three purported class action lawsuits filed in the United States that center primarily around alleged misrepresentations. These U.S. class action lawsuits were later consolidated into one class action suit that is ongoing in Nevada. In October 2018, Tahoe learned that a similar proposed class action lawsuit had been filed against Tahoe and its former chief executive officer in the Superior Court of Ontario. These lawsuits seek significant damages. We have disputed the allegations made in these suits, however the outcomes are not determinable at this time.

We may also be subject to proceedings in our commercial relationships. In November 2018, 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 and we are pursuing a claim to collect damages. However, like many other creditors, we are now also subject to alleged preference claims against us by the litigation trustee in the Republic bankruptcy. The trustee has alleged that certain transfers that occurred in the three month period leading up to the bankruptcy are avoidable pursuant to applicable bankruptcy laws and that such amounts received by us from Republic are subject to recovery by the bankrupt's estate. While we believe that we have defenses to such allegations, if we are unsuccessful in our defense of these claims, we may be subject to significant losses.

Furthermore, we are in some cases the subject of claims by local communities, indigenous groups or private land owners relating to land and mineral rights, or environmental or social damage, and such claimants may seek sizeable monetary damages against us and/or the return of surface or mineral rights or revocation of permits and licenses that are valuable to us and which may impact our operations and profitability if lost.

Each of these matters is subject to various uncertainties and it is possible that some of these matters may be resolved unfavourably against us. We establish provisions for matters that are probable and can be reasonably estimated. We also carry liability insurance coverage, however such insurance does not cover all risks to which we might be exposed and in other cases, may only partially cover losses incurred by us. In addition, we may be involved in disputes with other parties in the future that may result in litigation, which may result in a material adverse effect on our financial position, cash flow and results of operations.

COVID-19 and Other Pandemics

Since the outbreak of the coronavirus in late 2019 ("COVID-19") , it has spread into areas where we have operations and where our offices are located. Government efforts to curtail the spread of COVID-19 resulted in temporary suspensions of our operations in Mexico, Peru, Argentina and Bolivia, and we have reduced throughput at our Canadian operations in Timmins in order to enhance physical distancing and protect our personnel and the community. The spread of COVID-19 has impacted our employees and contractors, not only as it relates to potential health concerns, but also in terms of limitations on movement, availability of food and other goods, and personal well-being, among others. Our suppliers and service providers have also been impacted.

While COVID-19 has already had significant, direct impacts on our operations, our business, our workforce, and our production, the extent to which COVID-19 will continue to impact our operations will depend on future developments which are highly uncertain and cannot be predicted with confidence. These future developments include, but are not limited to, the duration of the outbreak, new information that may emerge concerning the severity of COVID-19, and the actions taken to contain COVID-19 or treat it. The impact of governmental

restrictions and health and safety protocols could improve or worsen relative to our assumptions, depending on how each jurisdiction manages potential outbreaks of COVID-19, the development and adequate supply of vaccines, and the roll-out of vaccination programs in each jurisdiction. We assume operations will continue to be impacted by comprehensive COVID-19 protocols in 2021, which would increase costs and restrict throughput levels, especially at our underground mines. Our ability to continue with our operations, or to successfully maintain our operations on care and maintenance if so required, or to restart or ramp-up any such operations efficiently or economically, or at all, is unknown. It is also uncertain, beyond 2020, whether we will be able to maintain an adequate financial condition and have sufficient capital, or have access to capital through our credit facility or otherwise, to sustain our business and operations.

Moreover, the continued presence of, or spread, of COVID-19, and any future emergence and spread of similar pathogens, globally would likely have material adverse effect on both global and regional economies, including those in which we operate, as we have seen already. Such effects would not only affect our business and results of operations, but also the operations of our suppliers, contractors and service providers, including smelter and refining service providers, and the demand for our production. COVID-19 and the spread of similar pathogens could also negatively impact stock markets, including the trading price of our shares, adversely impact our ability to raise capital, cause continued interest rate volatility and movements that could make obtaining financing or refinancing our debt obligations more challenging or more expensive (if such financing is available at all), and result in any operations affected by coronavirus becoming subject to quarantine or shut down. Any of these developments, and others, could have a material adverse effect on our business and results of operations.

Please refer to "Impact of COVID-19" discussion included in the "Operating Performance" section of this MD&A, as well as Pan American's new releases for further information and updates related to the impact of COVID-19 on our operations.

Climate Change

There is significant evidence of the effects of climate change on our planet and an intensifying focus on addressing these issues. The Company recognizes that climate change is a global challenge that may have both favorable and adverse effects on our business in a range of possible ways. Mining and processing operations are energy intensive and result in a carbon footprint either directly or through the purchase of fossil-fuel based electricity. As such, the Company is impacted by current and emerging policy and regulation relating to greenhouse gas emission levels, energy efficiency, and reporting of climate-change related risks. While some of the costs associated with reducing emissions may be offset by increased energy efficiency, technological innovation, or the increased demand for our metals as part of technological innovations, the current regulatory trend may result in additional transition costs at some of our operations. Governments are introducing climate change legislation and treaties at the international, national, and local levels, and regulations relating to emission levels and energy efficiency are evolving and becoming more rigorous. Current laws and regulatory requirements are not consistent across the jurisdictions in which we operate, and regulatory uncertainty is likely to result in additional complexity and cost in our compliance efforts. Public perception of mining is, in some respects, negative and there is increasing pressure to curtail mining in many jurisdictions as a result, in part, of perceived adverse effects of mining on the environment.

Concerns around climate change may also affect the market price of our shares as institutional investors and others may divest interests in industries that are thought to have more environmental impacts. While we are committed to operating responsibly and reducing the negative effects of our operations on the environment, our ability to reduce emissions, energy and water usage by increasing efficiency and by adopting new innovation is constrained by technological advancement, operational factors and economics. Adoption of new technologies, the use of renewable energy, and infrastructure and operational changes necessary to reduce water usage may also increase our costs significantly. Concerns over climate change, and our ability to respond to regulatory requirements and societal pressures, may have significant impacts on our operations and on our reputation, and may even result in reduced demand for our products.

The physical risks of climate change could also adversely impact our operations. These risks include, among other things, extreme weather events, resource shortages, changes in rainfall and in storm patterns and intensities, water shortages, changing sea levels and extreme temperatures. Climate-related events such as mudslides,

floods, droughts and fires can have significant impacts, directly and indirectly, on our operations and could result in damage to our facilities, disruptions in accessing our sites with labour and essential materials or in shipping products from our mines, risks to the safety and security of our personnel and to communities, shortages of required supplies such as fuel and chemicals, inability to source enough water to supply our operations, and the temporary or permanent cessation of one or more of our operations. There is no assurance that we will be able to anticipate, respond to, or manage the risks associated with physical climate change events and impacts, and this may result in material adverse consequences to our business and to our financial results.

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

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 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. The significant judgments and key sources of estimation uncertainty in the application of accounting policies are described in Note 5 and Note 6 of the 2020 Financial Statements, respectively.

Readers should also refer to Note 3 of the 2020 Financial Statements, for the Company's summary of significant accounting policies.

CHANGES IN ACCOUNTING STANDARDS

New and amended IFRS standards not yet effective

New accounting standards and interpretations have been published that are not mandatory for the current period and have not been early adopted. These standards are not expected to have a material impact on the Company.

DISCLOSURE CONTROLS AND PROCEDURES

Pan American's management considers the meaning of internal control to be the processes established by management to provide reasonable assurance about the achievement of the Company's objectives regarding operations, reporting and compliance. Internal control is designed to address identified risks that threaten any of these objectives.

As of December 31, 2020, the Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that, as of December 31, 2020, the Company's disclosure controls and procedures were effective.

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, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS as issued by the IASB. 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 IFRS, 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. Also, 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.

Management assessed the effectiveness of Pan American's internal control over financial reporting as of December 31, 2020, based on the criteria set forth in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on this assessment, management concluded that, as of December 31, 2020, Pan American's internal control over financial reporting was effective.

Management reviewed the results of management's assessment with the Audit Committee of the Board. Deloitte LLP, an independent registered public accounting firm, was engaged, as approved by a vote of the Company's shareholders, to audit and provide independent opinions on the Company's consolidated financial statements and the effectiveness of the Company's internal control over financial reporting as of December 31, 2020. Deloitte LLP has provided such opinions.

Changes in Internal Controls over Financial Reporting

There has been no change in the Company's internal control over financial reporting during the three and twelve month periods ended December 31, 2020 that has materially affected or is reasonably likely to materially affect, its internal control over financial reporting.

MINERAL RESERVES AND RESOURCES

Pan American Silver Corporation Mineral Reserves as of June 30, 2020[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	Proven	6.9	164	36.3	—	—	0.77	1.44	3.03
		Probable	3.6	169	19..8	—	—	0.31	1.60	3.07
Morococha (92.3%)[3]	Peru	Proven	3.3	158	16.6	—	—	0.32	1.52	3.98
		Probable	2.4	187	14.6	—	—	0.36	1.31	3.47
La Colorada	Mexico	Proven	4.4	339	48..2	0.25	35.3	—	1.28	2.29
		Probable	5.7	301	55.1	0.20	36.3	—	1.09	1.90
Dolores	Mexico	Proven	30.1	23	21.9	0.88	853.7	—	—	—
		Probable	6.8	26	5.7	0.81	177.4	—	—	—
Manantial Espejo	Argentina	Proven	0.4	240	3.2	1.87	24.7	—	—	—
		Probable	0.5	276	4.1	2.89	42.4	—	—	—
San Vicente (95%)[3]	Bolivia	Proven	1.1	453	16.5	—	—	0.46	0.33	3.36
		Probable	0.3	366	3.9	—	—	0.35	0.39	3.92
Joaquin	Argentina	Proven	—	591	0.9	0.15	0.2	—	—	—
		Probable	0.3	546	5.8	0.35	3.8	—	—	—
COSE	Argentina	Probable	0.1	903	2.2	17.61	41.9	—	—	—
Escobal	Guatemala	Proven	2.5	486	39.5	0.42	34.2	—	1..02	1.75
		Probable	22.1	316	225.0	0.34	243.8	—	0.77	1.25
Total Silver Segment[4]			**90.7**	**178**	**519.2**	**0.64**	**1,493.8**	**0.51**	**1.06**	**2.13**
Gold Segment										
La Arena	Peru	Proven	26.9	—	—	0.36	311.3	—	—	—
		Probable	15.6	—	—	0.27	135.5	—	—	—
Shahuindo	Peru	Proven	74.8	7	16.1	0.50	1201.4	—	—	—
		Probable	49.6	7	10.4	0.47	750.6	—	—	—
Timmins	Canada	Proven	3.0	—	—	3.05	295.8	—	—	—
		Probable	7.1	—	—	2.93	665.5	—	—	—
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]			**192.5**	**5**	**31.0**	**0.59**	**3,676.0**	—	—	—
Total Gold and Silver Segments[4]		**Proven + Probable**	**283.2**	**63**	**550.2**	**0.61**	**5,169.8**	**0.51**	**1.06**	**2.13**

(1) See table below entitled "Metal price assumptions used to estimate mineral reserves and resources as at June 30, 2020".
(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 Standards of Disclosures of Mineral Projects ("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 Corporation Measured and Indicated Mineral Resources as of June 30, 2020[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	1.8	161	9.5	—	—	0.18	1.65	3.02
		Indicated	2.4	155	11.8	—	—	0.61	1.64	2.85
Morococha (92.3%)[3]	Peru	Measured	0.8	135	3.4	—	—	0.70	0.91	2.89
		Indicated	0.6	142	2.8	—	—	0.58	0.91	2.94
La Colorada	Mexico	Measured	0.9	204	5.9	0.20	5.7	—	0.88	1.43
		Indicated	1.1	242	8.8	0.16	5.7	—	0.54	0.98
Dolores	Mexico	Measured	1.6	12	0.7	0.36	18.8	—	—	—
		Indicated	0.8	15	0.4	0.47	12.5	—	—	—
Manantial Espejo	Argentina	Measured	0.1	213	0.9	1.71	6.9	—	—	—
		Indicated	0.2	229	1.4	2.95	17.8	—	—	—
San Vicente (95%)[3]	Bolivia	Measured	1.1	167	6.1	—	—	0.22	0.19	2.43
		Indicated	0.2	260	1.9	—	—	0.22	0.24	2.80
Navidad	Argentina	Measured	15.4	137	67.8	—	—	0.10	1.44	—
		Indicated	139.8	126	564.5	—	—	0.04	0.79	—
Joaquin	Argentina	Measured	0.2	356	1.8	0.19	0.9	—	—	—
		Indicated	0.2	366	1.9	0.27	1.4	—	—	—
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)			**183.8**	**135**	**799.9**	**0.26**	**179.4**	**0.06**	**0.82**	**1.29**
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	3.6	—	—	0.27	30.8	—	—	—
		Indicated	6.6	—	—	0.25	52.6	—	—	—
Shahuindo	Peru	Measured	11.0	5	1.7	0.25	87.9	—	—	—
		Indicated	17.4	4	2.2	0.25	142.3	—	—	—
Timmins	Canada	Measured	2.2	—	—	3.37	239.6	—	—	—
		Indicated	4.9	—	—	3.00	469.6	—	—	—
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[5]	Canada	Indicated	40.8	—	—	0.99	1,298.6	—	—	—
Whitney	Canada	Measured	0.8	—	—	7.02	172.3	—	—	—
		Indicated	1.8	—	—	6.77	387.5	—	—	—
Gold River	Canada	Indicated	0.7	—	—	5.29	117.4	—	—	—
Marlhill	Canada	Indicated	0.4	—	—	4.52	57.4	—	—	—
Vogel	Canada	Indicated	2.2	—	—	1.75	125.0	—	—	—
Total Gold Segment[4]			**851.1**	**4**	**5.6**	**0.34**	**9,194.0**	**0.35**	—	—
Total Gold and Silver Segments[4]		**Measured + Indicated**	**1,034.9**	**110**	**805.5**	**0.33**	**9,373.4**	**0.30**	**0.82**	**1.29**

(1) See table below entitled "Metal price assumptions used to estimate mineral reserves and resources as at June 30, 2020".
(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 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.
(5) The Company disposed of the the Fenn-Gib property in Q4 2020; as of the date of this MD&A, the property is no longer owned by the Company.

Pan American Silver Corporation Inferred Mineral Resources as of June 30, 2020[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	5.8	157	29.0	—	—	0.45	1.55	2.83
Morococha (92.3%)[3]	Peru	Inferred	4.4	157	22.4	—	—	0.35	1.05	3.38
La Colorada	Mexico	Inferred	6.2	232	46.2	0.13	26.8	—	1.60	3.10
La Colorada Skarn	Mexico	Inferred	100.4	44	141.0	—	—	0.20	1.77	4.29
Dolores	Mexico	Inferred	3.8	43	5.3	1.14	139.0	—	—	—
Manantial Espejo	Argentina	Inferred	0.6	206	3.9	2.18	41.9	—	—	—
San Vicente (95%)[3]	Bolivia	Inferred	2.5	303	24.5	—	—	0.24	0.31	3.14
Navidad	Argentina	Inferred	45.9	81	119.4	—	—	0.02	0.57	—
Joaquin	Argentina	Inferred	0.4	351	4.2	0.27	3.2	—	—	—
COSE	Argentina	Inferred	—	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]			**171.8**	**74**	**406.9**	**0.66**	**270.8**	**0.16**	**1.37**	**4.05**
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	13.3	—	—	0.24	101.0	—	—	—
Shahuindo	Peru	Inferred	12.0	7	2.8	0.52	201.8	—	—	—
Shahuindo Sulphide	Peru	Inferred	97.4	14	45.1	0.74	2,323.3	—	—	—
Timmins	Canada	Inferred	5.0	—	—	3.27	529.3	—	—	—
La Arena II	Peru	Inferred	91.6	—	—	0.23	683.1	0.17	—	—
Fenn-Gib[5]	Canada	Inferred	24.5	—	—	0.95	750.0	—	—	—
Whitney	Canada	Inferred	0.8	—	—	5.34	134.9	—	—	—
Gold River	Canada	Inferred	5.3	—	—	6.06	1027.4	—	—	—
Vogel	Canada	Inferred	1.5	—	—	3.60	168.8	—	—	—
Total Gold Segment[4]			**289.0**	**12**	**51.2**	**0.71**	**6,589.9**	**0.17**	—	—
Total Gold and Silver Segments[4]		**Inferred**	**460.8**	**46**	**458.1**	**0.71**	**6,860.7**	**0.14**	**1.37**	**4.05**

(1) See table below entitled "Metal price assumptions used to estimate mineral reserves and resources as at June 30, 2020".
(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 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.
(5) The Company disposed of the the Fenn-Gib property in Q4 2020; as of the date of this MD&A, the property is no longer owned by the Company.

Metal Price Assumptions Used to Estimate Mineral Reserves and Resources as of June 30, 2019						
Property	**Category**	**Ag US$/oz**	**Au US$/oz**	**Cu US$/t**	**Pb US$/t**	**Zn US$/t**
Huaron	All categories	18.00	1,300	6,000	2,000	2,350
Morococha	All categories	18.00	1,300	6,000	2,000	2,350
La Colorada	All categories	18.00	1,300	6,000	2,000	2,350
La Colorada Skarn	All categories	18.50		6,500	2,200	2,600
Dolores	Reserves	18.00	1,350			
	Resources	18.50	1,700			
La Bolsa	All categories	14.00	825			
Manantial Espejo	All categories	18.00	1,400			
San Vicente	All categories	18.00	1,300	6,000	2,000	2,350
Navidad	All categories	12.52			1,100	
Pico Machay	All categories		700			
Joaquin	All categories	18.00	1,300			
COSE	All categories	18.00	1,300			
Escobal	All categories	20.00	1,300		2,204	2,424
Shahuindo	Reserves	18.00	1,350			
	Resources	18.50	1,700			
Shahuindo Sulphide	Inferred Resource	15.00	1,400			
La Arena	Reserves	18.00	1,400			
	Resources	18.50	1,700			
La Arena II	All categories		1,500	8,816		
Timmins	All categories		1,350			
Fenn-Gib	Inside pit		1,190			
	Below pit		1,190			
Whitney	All categories		1,200			
Gold River	All categories		1,200			
Marlhill	All categories		1,125			
Vogel	Inside pit		1,150			
	Below pit		1,150			

General Notes Applicable to the Foregoing Tables:

Mineral reserves and resources are as defined by the Canadian Institute of Mining, Metallurgy and Petroleum.

Pan American reports mineral resources and mineral reserves separately. Reported mineral resources do not include amounts identified as mineral reserves. Mineral resources that are not mineral reserves have no demonstrated economic viability.

Pan American does not expect these mineral reserve and resource estimates to be materially affected by metallurgical, environmental, permitting, legal, taxation, socio-economic, political, and marketing or other relevant issues.

See the Company's Annual Information Form dated February 17, 2021, available at www.sedar.com for further information on the Company's material mineral properties, including information concerning associated QA/QC and data verification matters, the key assumptions, parameters and methods used by the Company to estimate mineral reserves and mineral resources, and for a detailed description of known legal, political, environmental, and other risks that could materially affect the Company's business and the potential development of the Company's mineral reserves and resources.

Quantities of contained metal are shown before metallurgical recoveries.

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 are Qualified Persons, as the term is defined in NI 43-101.

For more detailed information regarding the Company's material mineral properties 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 February 17, 2021, filed at 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", "intents", "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 or operational performance, and estimates of current production levels including our estimated production of silver, gold and other metals forecasted for 2021, our estimated cash costs, AISC and expenditures in 2021; future anticipated prices for gold, silver and other metals and assumed foreign exchange rates; expectations with respect to the future anticipated impact of COVID-19 on our operations, the assumptions related to the global supply of COVID-19 vaccines and the roll-out in each country, and the effectiveness and results of any vaccines, the lessening or increase in pandemic-related restrictions, and the anticipated rate and timing for the same; the effect that the COVID-19 pandemic may have on our financial and operational results; the ability of Pan American to continue with its operations, or to successfully maintain our operations on care and maintenance, should the situation related to COVID-19 not be as anticipated; whether Pan American is able to maintain a strong financial condition and have sufficient capital, or have access to capital through the Credit Facility or otherwise, to sustain our business and operations; the presence and impact of COVID-19 on our workforce, suppliers and other essential resources and the effect those impacts have on our business; the timing and outcome with respect to Pan American's environmental, social and governance activities, and Pan American Silver's corporate social responsibilities activities and our reporting in respect thereof; the anticipated amount and timing of production at each of the Company's properties and in the aggregate; the timing and impact of the replacement of ventilation infrastructure at the La Colorada mine; the duration and effect of the license suspensions and any road blocks relating to the Escobal mine and; the constitutional court-mandated ILO 169 consultation process in Guatemala, and the timing and completion thereof; the ability of Pan American to successfully complete any capital projects, the expected economic or operational results derived from those projects, and the impacts of any such projects on Pan American; the future results of exploration activities, including with respect to the skarn exploration program at La Colorada; anticipated mineral reserves and mineral resources; 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: the world-wide economic and social impact of COVID-19 is managed and the duration and extent of the coronavirus pandemic is minimized or not long-term; if necessary, continuation of operations following shutdowns or reductions in production, our ability to manage reduced operations efficiently and economically, including to maintain necessary staffing; our ability to implement environmental, social and governance activities; 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: the duration and effects of the coronavirus and COVID-19, and any other pandemics on our operations and workforce, and their effects on global economies and society; 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; presence of or changes in laws, regulations and government practices in the jurisdictions where we operate, including environmental, export and import laws and regulations; 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 Pan American may carry on business, including legal restrictions relating to mining, such as in Chubut, Argentina, risks relating to expropriation, and risks relating to the constitutional court-mandated ILO 169 consultation process in Guatemala, some of which might 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 references to 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. Canadian standards, including NI 43-101, differ significantly from the requirements of 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 MD&A uses the terms "measured resource", "indicated resources" and "inferred resources". U.S. investors are advised that, while such terms are recognized and required by Canadian Securities laws, the SEC does not recognize them. The requirements of NI 43-101 for identification of "reserves" are 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 for 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 in to 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 the "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 normally only permits 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 may not be comparable with information made public companies that report in accordance with U.S. standards.

Exhibit 1.3



Consolidated Financial Statements and Notes

FOR THE YEARS ENDED DECEMBER 31, 2020 AND DECEMBER 31, 2019

Management's Responsibility For Financial Reporting

The accompanying Consolidated Financial Statements of Pan American Silver Corp. were prepared by management, which is responsible for the integrity and fairness of the information presented, including the many amounts that must of necessity be based on estimates and judgments. These Consolidated Financial Statements were prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). Financial information appearing throughout our management's discussion and analysis is consistent with these Consolidated Financial Statements.

In discharging our responsibility for the integrity and fairness of the consolidated financial statements and for the accounting systems from which they are derived, we maintain the necessary system of internal controls designed to ensure that transactions are authorized, assets are safeguarded and proper records are maintained. These controls include quality standards in hiring employees, policies and procedure manuals, a corporate code of conduct and accountability for performance within appropriate and well-defined areas of responsibility.

The Board of Directors of Pan American Silver Corp. (the "Board") oversees management's responsibilities for financial reporting through an Audit Committee, which is composed entirely of directors who are neither officers nor employees of Pan American Silver Corp. The Audit Committee reviews our consolidated financial statements and recommends them to the Board for approval. Other key responsibilities of the Audit Committee include reviewing our existing internal control procedures and planned revisions to those procedures, and advising the directors on auditing matters and financial reporting issues.

Deloitte LLP, Independent Registered Public Accounting Firm appointed by the shareholders of Pan American Silver Corp. upon the recommendation of the Audit Committee and the Board, have performed an independent audit of the Consolidated Financial Statements and their report follows. The auditors have full and unrestricted access to the Audit Committee to discuss their audit and related findings.

"signed"
Michael Steinmann
Chief Executive Officer

"signed"
A. Robert Doyle
Chief Financial Officer

February 17, 2021

Deloitte.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Pan American Silver Corp.

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial position of Pan American Silver Corp. and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated income statements, statements of comprehensive income, cash flows, and changes in equity, for each of the two years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and its financial performance and its cash flows for each of the two years in the period ended December 31, 2020, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 17, 2021, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Deloitte.

Impairments – Assessment of Whether Indicators of Impairment or Impairment Reversal Exist within the Mineral Properties, Plant and Equipment – Refer to Notes 3, 6 and 13 to the financial statements

Critical Audit Matter Description

The Company's determination of whether or not an indicator of impairment or impairment reversal exists at the cash generating unit level requires significant management judgement. Changes in metal price forecasts, increases or decreases in estimated future costs of production, increases or decreases in estimated future capital costs, reductions or increases in the amount of recoverable mineral reserves and mineral resources and/or adverse or favorable current economics can result in a write-down or write-up of the carrying amounts of the Company's mining interests.

While there are several factors that are required to determine whether or not an indicator of impairment or impairment reversal exists, the judgements with the highest degree of subjectivity are future commodity prices (for both silver and gold), forecast production output (for both silver and gold), company performance, ability and timing to commence or restart mine operations, and the discount rate. Auditing these estimates and factors required a high degree of subjectivity in applying audit procedures and in evaluating the results of those procedures. This resulted in an increased extent of audit effort, including the involvement of fair value specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the future commodity prices (for both silver and gold), future production output (for both silver and gold), company performance, ability and timing to commence or restart mine operations, and the discount rate in the assessment of indicators of impairment or impairment reversal included the following, among others:

- Evaluated the effectiveness of the Company's controls over management's assessment of indicators of impairment or impairment reversal.
- Evaluated management's ability to accurately forecast future production by:
    - Assessing the methodology used in management's determination of the future production, and
    - Comparing management's future production to historical data and available market trends.
- Performed independent research to assess if there have been any substantive local, political, or regulatory changes impacting the jurisdictions in which the Company operates impacting the ability to commence or restart mine operations.
- Compared the company performance of the mineral properties to historical results and third-party reports.
- With the assistance of fair value specialists:
    - Evaluated the future commodity prices by comparing management forecasts to third party forecasts, and
    - Evaluated the reasonableness of the change in discount rate by testing the source information underlying the determination of the discount rate.

/s/ Deloitte LLP

Chartered Professional Accountants
Vancouver, Canada
February 17, 2021

We have served as the Company's auditor since 1993.

Deloitte.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Pan American Silver Corp.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Pan American Silver Corp. and subsidiaries (the "Company") as of December 31, 2020, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control — Integrated Framework (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2020, of the Company and our report dated February 17, 2021, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Deloitte.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte LLP

Chartered Professional Accountants
Vancouver, Canada
February 17, 2021

	December 31, 2020	December 31, 2019
Assets		
Current assets		
Cash and cash equivalents (Note 26)	**$ 167,113**	$ 120,564
Short-term investments (Note 10)	**111,946**	117,776
Trade and other receivables	**127,756**	168,753
Income taxes receivable	**22,051**	17,209
Inventories (Note 11)	**406,191**	346,507
Derivative financial instruments (Note 9)	**7,812**	1,272
Prepaid expenses and other current assets	**14,055**	16,838
	856,924	788,919
Non-current assets		
Mineral properties, plant and equipment (Note 12)	**2,415,006**	2,504,901
Inventories (Note 11)	**24,355**	24,209
Long-term refundable tax	**4,009**	17,900
Deferred tax assets	**57,850**	36,447
Investment in associates (Note 14)	**71,560**	84,319
Goodwill and other assets (Note 15)	**4,171**	4,987
Total Assets	**$ 3,433,875**	$ 3,461,682
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities (Note 16)	**$ 281,938**	$ 225,330
Derivative financial instruments (Note 9)	**367**	—
Current portion of provisions (Note 17)	**12,066**	7,372
Current portion of lease obligations (Note 18)	**12,829**	14,198
Income tax payable	**54,556**	24,770
	361,756	271,670
Non-current liabilities		
Long-term portion of provisions (Note 17)	**229,887**	188,012
Deferred tax liabilities	**175,311**	176,808
Long-term portion of lease obligations (Note 18)	**20,736**	27,010
Debt (Note 19)	**—**	275,000
Deferred revenue (Note 14)	**13,273**	12,542
Other long-term liabilities (Note 20)	**27,073**	27,754
Share purchase warrants (Note 14)	**—**	15,040
Total Liabilities	**828,036**	993,836
Equity		
Capital and reserves (Note 21)		
Issued capital	**3,132,140**	3,123,514
Reserves	**93,409**	94,274
Deficit	**(623,030)**	(754,689)
Total Equity attributable to equity holders of the Company	**2,602,519**	2,463,099
Non-controlling interests	**3,320**	4,747
Total Equity	**2,605,839**	2,467,846
Total Liabilities and Equity	**$ 3,433,875**	$ 3,461,682

Commitments and contingencies (Notes 9, 30)
See accompanying notes to the consolidated financial statements
APPROVED BY THE BOARD ON FEBRUARY 17, 2021

"signed" Ross Beaty, Director *"signed" Michael Steinmann, Director*

		2020		2019
Revenue (Note 27)	$	**1,338,812**	$	1,350,759
Cost of sales				
Production costs (Note 22)		**(696,672)**		(841,297)
Depreciation and amortization (Note 12,23)		**(254,469)**		(253,453)
Royalties		**(27,494)**		(26,721)
		(978,635)		(1,121,471)
Mine operating earnings (Note 27)		**360,177**		229,288
General and administrative		**(36,375)**		(31,752)
Exploration and project development		**(7,096)**		(11,684)
Mine care and maintenance (Note 23)		**(102,105)**		(23,662)
Foreign exchange losses		**(5,474)**		(5,003)
Impairments (Note 13)		**—**		(40,050)
Gains on commodity and foreign currency contracts (Note 9d)		**3,543**		3,315
Gains on sale of mineral properties, plant and equipment		**7,922**		3,858
Share of income from associate and dilution gain (Note 14)		**10,529**		15,245
Transaction and integration costs (Note 8)		**—**		(7,515)
Other expense (Note 28)		**(22,067)**		(4,936)
Earnings from operations		**209,054**		127,104
Gain (loss) on derivatives (Note 9d)		**38**		(14)
Investment income (Note 9b)		**63,024**		84,704
Interest and finance expense (Note 24)		**(20,104)**		(29,282)
Earnings before income taxes		**252,012**		182,512
Income tax expense (Note 29)		**(75,557)**		(71,268)
Net earnings for the year	$	**176,455**	$	111,244
Attributable to:				
Equity holders of the Company		**177,882**		110,738
Non-controlling interests		**(1,427)**		506
	$	**176,455**	$	111,244
Earnings per share attributable to common shareholders (Note 25)				
Basic earnings per share	$	**0.85**	$	0.55
Diluted earnings per share	$	**0.85**	$	0.55
Weighted average shares outstanding (in 000's) Basic		**210,085**		201,397
Weighted average shares outstanding (in 000's) Diluted		**210,295**		201,571

See accompanying notes to the consolidated financial statements.

	2020	2019
Net earnings for the year	**$ 176,455**	$ 111,244
Items that may be reclassified subsequently to net earnings:		
Reclassification adjustment for realized gains on short-term investments to earnings (Note 9c)	**—**	(208)
Total comprehensive earnings for the year	**$ 176,455**	$ 111,036
Total comprehensive earnings attributable to:		
Equity holders of the Company	**$ 177,882**	$ 110,530
Non-controlling interests	**(1,427)**	506
	$ 176,455	$ 111,036

See accompanying notes to the consolidated financial statements.

	2020	2019
Cash flow from operating activities		
Net earnings for the year	**$ 176,455**	$ 111,244
Current income tax expense (Note 29)	**98,355**	92,129
Deferred income tax recovery (Note 29)	**(22,798)**	(20,861)
Interest expense (Note 24)	**9,216**	16,879
Depreciation and amortization (Note 12,23)	**272,444**	253,453
Impairment charge (Note 13)	**—**	40,050
Accretion on closure and decommissioning provision (Note 17)	**8,260**	9,903
Unrealized losses on foreign exchange	**8,857**	6,057
Gain on sale of mineral properties, plant and equipment	**(7,922)**	(3,858)
Other operating activities (Note 26)	**(85,934)**	(96,277)
Changes in non-cash operating working capital (Note 26)	**96,982**	(27,944)
Operating cash flows before interest and income taxes	**$ 553,915**	$ 380,775
Interest paid	**(10,217)**	(16,944)
Interest received	**253**	776
Income taxes paid	**(81,636)**	(82,579)
Net cash generated from operating activities	**$ 462,315**	$ 282,028
Cash flow from investing activities		
Payments for mineral properties, plant and equipment	**$ (178,556)**	$ (205,807)
Tahoe Resources Inc. ("Tahoe") acquisition ("Tahoe Acquisition") (Note 8)	**—**	(247,479)
Acquisition of mineral interests	**—**	(1,545)
Net proceeds from short-term investments and other securities	**90,384**	39,727
Proceeds from sale of mineral properties, plant and equipment	**22,474**	10,267
Exercise of warrants (Note 14)	**(15,626)**	—
Net (payments) proceeds from commodity, diesel fuel swaps, and foreign currency contracts	**(2,594)**	2,669
Net cash used in investing activities	**$ (83,918)**	$ (402,168)
Cash flow from financing activities		
Proceeds from issue of equity shares	**$ 4,737**	$ 2,781
Distributions to non-controlling interests	**—**	(924)
Dividends paid	**(46,223)**	(29,332)
Repayment of credit facility (Note 19)	**(355,000)**	(185,000)
Proceeds from credit facility (Note 19)	**80,000**	335,000
Payment of equipment leases	**(13,101)**	(19,270)
Net cash (used in) generated from financing activities	**$ (329,587)**	$ 103,255
Effects of exchange rate changes on cash and cash equivalents	**(2,261)**	(1,061)
Net increase (decrease) in cash and cash equivalents	**46,549**	(17,946)
Cash and cash equivalents at the beginning of the year	**120,564**	138,510
Cash and cash equivalents at the end of the year	**$ 167,113**	$ 120,564

Supplemental cash flow information (Note 26).
See accompanying notes to the consolidated financial statements.

	Attributable to equity holders of the Company							
	Issued shares	Issued capital	Reserves	Investment revaluation reserve	Deficit	Total	Non-controlling interests	Total equity
Balance, December 31, 2018	**153,448,356**	**$ 2,321,498**	**$ 22,573**	**$ 208**	**$ (836,067)**	**$ 1,508,212**	**$ 5,137**	**$ 1,513,349**
Total comprehensive earnings								
Net earnings for the year	—	—	—	—	110,738	110,738	506	111,244
Other comprehensive loss	—	—	—	(208)	—	(208)	—	(208)
	—	—	—	(208)	110,738	110,530	506	111,036
Shares issued on the exercise of stock options	244,299	3,697	(916)	—	—	2,781	—	2,781
Shares issued as compensation (Note 26)	152,391	2,693	—	—	—	2,693	—	2,693
Share-based compensation on option grants	—	—	577	—	—	577	—	577
Tahoe Acquisition consideration	55,990,512	795,626	72,040	—	—	867,666	—	867,666
Distributions by subsidiaries to non-controlling interests	—	—	—	—	(28)	(28)	(896)	(924)
Dividends paid	—	—	—	—	(29,332)	(29,332)	—	(29,332)
Balance, December 31, 2019	**209,835,558**	**$ 3,123,514**	**$ 94,274**	**$ —**	**$ (754,689)**	**$ 2,463,099**	**$ 4,747**	**$ 2,467,846**
Total comprehensive earnings								
Net earnings for the year	—	—	—	—	177,882	177,882	(1,427)	176,455
	—	—	—	—	177,882	177,882	(1,427)	176,455
Shares issued on the exercise of stock options	329,379	5,800	(1,063)	—	—	4,737	—	4,737
Shares issued as compensation (Note 26)	93,730	2,826	—	—	—	2,826	—	2,826
Share-based compensation on option grants	—	—	198	—	—	198	—	198
Dividends paid	—	—	—	—	(46,223)	(46,223)	—	(46,223)
Balance, December 31, 2020	**210,258,667**	**$ 3,132,140**	**$ 93,409**	**$ —**	**$ (623,030)**	**$ 2,602,519**	**$ 3,320**	**$ 2,605,839**

See accompanying notes to the consolidated financial statements.

1. NATURE OF OPERATIONS

Pan American Silver Corp. is the ultimate parent company of its subsidiary group (collectively, the "Company", or "Pan American"). Pan American is a British Columbia corporation domiciled in Canada, and its office is at Suite 1440 – 625 Howe Street, Vancouver, British Columbia, V6C 2T6.

The Company is engaged in the production and sale of silver, gold, zinc, lead and copper as well as other related activities, including exploration, extraction, processing, refining and reclamation. The Company's major products are produced from mines in Canada, Peru, Mexico, Argentina and Bolivia. Additionally, the Company has project development activities in Canada, Peru, Mexico and Argentina, and exploration activities throughout South America, Canada and Mexico. As at December 31, 2020, the Company's Escobal mine in Guatemala continues to be on care and maintenance pending satisfactory completion of a consultation process led by the Ministry of Energy and Mines in Guatemala.

2. BASIS OF PREPARATION

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS"), effective as of December 31, 2020.

These consolidated financial statements were approved for issuance by the Board of Directors on February 17, 2021.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The significant accounting policies used in the preparation of these consolidated financial statements are as follows:

a) Presentation currency

The functional and presentation currency of the Company and each of its subsidiaries is the United States dollar ("USD").

b) Basis of measurement

These consolidated financial statements have been prepared on an historical cost basis, except for those assets and liabilities that are measured at revalued amounts or fair values at the end of each reporting period.

c) Basis of consolidation

The accounts of the Company and its subsidiaries, which are controlled by the Company, have been included in these consolidated financial statements. Control is achieved when the Company is exposed, or has rights, to variable returns from the investee and when the Company has the ability to affect those returns through its power over the investee. Subsidiaries are included in the consolidated financial results of the Company from the effective date of acquisition up to the effective date of disposition or loss of control. The principal subsidiaries of the Company and their geographic locations at December 31, 2020 were as follows:

Subsidiary	Location	Ownership Interest		Accounting	Operations and Development Projects Owned
Lake Shore Gold Corp.	Canada	100	%	Consolidated	Bell Creek and Timmins mines
Plata Panamericana S.A. de C.V.	Mexico	100	%	Consolidated	La Colorada mine
Compañía Minera Dolores S.A. de C.V.	Mexico	100	%	Consolidated	Dolores mine
Pan American Silver Huaron S.A.	Peru	100	%	Consolidated	Huaron mine
Compañía Minera Argentum S.A.	Peru	92	%	Consolidated	Morococha mine
Shahuindo S.A.C.	Peru	100	%	Consolidated	Shahuindo mine
La Arena S.A.	Peru	100	%	Consolidated	La Arena mine
Pan American Silver (Bolivia) S.A.	Bolivia	95	%	Consolidated	San Vicente mine
Pan American Silver Guatemala S.A.	Guatemala	100	%	Consolidated	Escobal mine
Minera Tritón Argentina S.A.	Argentina	100	%	Consolidated	Manantial Espejo mine & Cap-Oeste Sur Este ("COSE") project
Minera Joaquin S.R.L.	Argentina	100	%	Consolidated	Joaquin project
Minera Argenta S.A.	Argentina	100	%	Consolidated	Navidad project

d) Investments in associates

An associate is an entity over which the investor has significant influence but not control and that is neither a subsidiary nor an interest in a joint venture. Significant influence is presumed to exist where the Company has between 20% and 50% of the voting rights, but can also arise where the Company has less than 20%, if the Company has the power to participate in the financial and operating policy decisions affecting the entity. The Company's share of the net assets and net earnings or loss is accounted for in the consolidated financial statements using the equity method of accounting.

e) Business combinations

Upon the acquisition of a business, the acquisition method of accounting is used, whereby the purchase consideration is allocated to the identifiable assets, liabilities and contingent liabilities (identifiable net assets) acquired on the basis of fair value at the date of acquisition. When the cost of the acquisition exceeds the fair value attributable to the Company's share of the identifiable net assets, the difference is treated as goodwill, which is not amortized and is reviewed for impairment annually or more frequently when there is an indication of impairment. If the fair value attributable to the Company's share of the identifiable net assets exceeds the cost of acquisition, the difference is immediately recognized in the consolidated income statement. Acquisition related costs, other than costs to issue debt or equity securities of the acquirer, including investment banking fees, legal fees, accounting fees, valuation fees, and other professional or consulting fees are expensed as incurred. The costs to issue equity securities of the Company as consideration for the acquisition are reduced from share capital as share issuance costs. The costs to issue debt securities are capitalized and amortized using the effective interest method.

Non-controlling interests are measured either at fair value or at the non-controlling interests' proportionate share of the recognized amounts of the acquirers' identifiable net assets as at the date of acquisition. The choice of measurement basis is made on a transaction by transaction basis.

Control of a business may be achieved in stages. Upon the acquisition of control, any previously held interest is re-measured to fair value at the date control is obtained resulting in a gain or loss upon the acquisition of control.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Company reports provisional amounts for the items for which the accounting is incomplete. These provisional amounts are adjusted during the measurement period, or additional assets or liabilities are recognized, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognized at that date.

f) Revenue recognition

Revenue associated with the sale of commodities is recognized when control of the asset sold is transferred to the customer. Indicators of control transferring include an unconditional obligation to pay, legal title, physical possession, transfer of risk and rewards and customer acceptance. This generally occurs when the goods are delivered to a loading port, warehouse, vessel or metal account as contractually agreed with the buyer; at which point the buyer controls the goods. In cases where the Company is responsible for the cost of shipping and certain other services after the date on which control of the goods transfers to the customer, these other services are considered separate performance obligations and thus a portion of revenue earned under the contract is allocated and recognized as these performance obligations are satisfied.

The Company's concentrate sales contracts with third-party buyers, in general, provide for a provisional payment based upon provisional assays and quoted metal prices. Final settlement is based on applicable commodity prices set on specified quotational periods, typically ranging from one month prior to shipment, and can extend to three months after the shipment arrives at the smelter and is based on average market metal prices. For this purpose, the transaction price can be measured reliably for those products, such as silver, gold, zinc, lead and copper, for which there exists an active and freely traded commodity market such as the London Metals Exchange and the value of product sold by the Company is directly linked to the form in which it is traded on that market.

Sales revenue is commonly subject to adjustments based on an inspection of the product by the customer. In such cases, sales revenue is initially recognized on a provisional basis using the Company's best estimate of contained metal, and adjusted subsequently. Revenues are recorded under these contracts at the time control passes to the buyer based on the expected settlement period. Revenue on provisionally priced sales is recognized based on estimates of the fair value of the consideration receivable based on forward market prices and estimated quantities. At each reporting date provisionally priced metal is marked to market based on the forward selling price for the quotational period stipulated in the contract. Variations between the price recorded at the date when control is transferred to the buyer and the actual final price set under the smelting contracts are caused by changes in metal prices resulting in the receivable being recorded at fair value through profit or loss ("FVTPL").

IFRS 15 - *Revenue from Contracts with Customers* ("IFRS 15") requires that variable consideration should only be recognized to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognized will not occur. The Company concluded that the adjustments relating to the final assay results for the quantity and quality of concentrate sold are not significant and do not constrain the recognition of revenue.

Refining and treatment charges under the sales contracts are netted against revenue for sales of metal concentrate.

The Company recognizes deferred revenue in the event it receives payments from customers in consideration for future commitments to deliver metals and before such sale meets the criteria for revenue recognition. The Company recognizes amounts in revenue as the metals are delivered to the customer. Specifically, for the metal agreements entered into with Maverix Metals Inc. ("Maverix"), the Company determines the amortization of deferred revenue to the Consolidated Income Statement on a per unit basis using the estimated total quantity of metal expected to be delivered to Maverix over the terms of the contract. The Company estimates the current portion of deferred revenue based on quantities anticipated to be delivered over the next twelve months.

g) Financial instruments

Measurement – initial recognition

Financial assets and financial liabilities are recognized in the Company's statement of financial position when the Company becomes a party to the contractual provisions of the instrument. On initial recognition, all financial assets and financial liabilities are recorded at fair value, net of attributable transaction costs, except for financial assets and liabilities classified as at FVTPL. Transaction costs of financial assets and liabilities classified as at FVTPL are expensed in the period in which they are incurred.

Subsequent measurement of financial assets and liabilities depends on the classifications of such assets and liabilities.

Classification of financial assets

Amortized cost:

Financial assets that meet the following conditions are measured subsequently at amortized cost:

(i) The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows, and

(ii) The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The amortized cost of a financial asset is the amount at which the financial asset is measured at initial recognition minus the principal repayments, plus the cumulative amortization using effective interest method of any difference between that initial amount and the maturity amount, adjusted for any loss allowance. Interest income is recognized using the effective interest method. Interest income is recognized in Investment (loss) income in the Consolidated Income Statements.

The Company's financial assets at amortized cost primarily include cash and cash equivalents, receivables not arising from sale of metal concentrates included in Trade and other receivables in the Consolidated Statement of Financial Position (Note 9(a)).

Fair value through other comprehensive income ("FVTOCI"):

Financial assets that meet the following conditions are measured at FVTOCI:

(i) The financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets, and

(ii) The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The Company's short-term investments in other than equity securities are measured at FVTOCI (Note 9(c)).

FVTPL:

By default, all other financial assets are measured subsequently at FVTPL.

The Company, at initial recognition, may also irrevocably designate a financial asset as measured at FVTPL if doing so eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities or recognizing the gains and losses on them on different bases.

Financial assets measured at FVTPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognized in profit or loss to the extent they are not part of a designated hedging relationship. Fair value is determined in the manner described in Note 9(e)(ii). The Company's financial assets at FVTPL include its trade receivables from provisional concentrate sales, short-term investments in equity securities, and derivative assets not designated as hedging instruments.

Financial liabilities and equity

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

An equity instrument is any contract that evidences a residual interest in the assets of the Company after deducting all its liabilities. Equity instruments issued by the Company are recognized at the proceeds received, net of direct issue costs. Repurchase of the Company's own equity instruments is recognized and deducted directly in equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

Classification of financial liabilities

Financial liabilities that are not contingent consideration of an acquirer in a business combination, held for trading or designated as at FVTPL, are measured at amortized cost using effective interest method.

Derivatives

When the Company enters into derivative contracts, these transactions are designed to reduce exposures related to assets and liabilities, firm commitments or anticipated transactions. The Company does not have derivative instruments that qualify as cash flow hedges and consequently all derivatives are recorded at fair value with changes in fair value recognized in net earnings.

h) Derivative Financial Instruments

The Company utilizes metals and currency contracts, including forward contracts to manage exposure to fluctuations in metal prices and foreign currency exchange rates. For metals production, these contracts are intended to reduce the risk of falling prices on the Company's future sales. Foreign currency derivative financial instruments, such as forward contracts are used to manage the effects of exchange rate changes on foreign currency cost exposures. Such derivative financial instruments are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently re-measured at fair value. Derivatives are carried as assets when the fair value is positive and as liabilities when the fair value is negative and any gains or losses arising from changes in fair value on derivatives are taken directly to earnings for the year. The fair value of forward currency and commodity contracts is calculated by reference to current forward exchange rates and prices for contracts with similar maturity profiles.

Derivatives, including certain conversion options and warrants with exercise prices in a currency other than the functional currency, are recognized at fair value with changes in fair value recognized in profit or loss.

i) Inventories

Inventories include work in progress, concentrate ore, doré, processed silver and gold, heap leach inventory, and operating materials and supplies. Work in progress inventory includes ore stockpiles and other partly processed material. Stockpiles represent ore that has been extracted and is available for further processing. The classification of inventory is determined by the stage at which the ore is in the production process. Inventories of ore are sampled for metal content and are valued based on the lower of cost or estimated net realizable value ("NRV") based upon the period ending prices of contained metal. Cost is determined on a weighted average basis or using a first-in-first-out basis and includes all costs incurred in the normal course of business including direct material and direct labour costs and an allocation of production overheads, depreciation and amortization, and other costs, based on normal production capacity, incurred in bringing each product to its present location and condition. Material that does not contain a minimum quantity of metal to cover estimated processing expenses to recover the contained metal is not classified as inventory and is assigned no value. The work in progress inventory is considered part of the operating cycle which the Company classifies as current inventory and hence heap leach and stockpiles are included in current inventory. Quantities are assessed primarily through surveys and assays.

The costs incurred in the construction of the heap leach pad are capitalized. Heap leach inventory represents silver and gold contained in ore that has been placed on the leach pad for cyanide irrigation. The heap leach process is a process of extracting silver and gold by placing ore on an impermeable pad and applying a diluted cyanide solution that dissolves a portion of the contained silver and gold, which is then recovered during the metallurgical process. When the ore is placed on the pad, an estimate of the recoverable ounces is made based on tonnage, ore grade and estimated recoveries of the ore type placed on the pad. The estimated recoverable ounces on the pad are used to compile the inventory cost.

The Company uses several integrated steps to scientifically measure the metal content of the ore placed on the leach pads. The tonnage, grade, and ore type to be mined in a period was first estimated using the Mineral Reserve model. As the ore body is drilled in preparation for the blasting process, samples are taken of the drill residue which is assayed to determine their metal content and quantities of contained metal. The estimated recoverable ounces carried in the leach pad inventory are adjusted based on actual recoveries being experienced. Actual and estimated recoveries achieved are measured to the extent possible using various indicators including, but not limited to, individual cell recoveries, the use of leach curve recovery and trends in the levels of carried ounces depending on the circumstances or cumulative pad recoveries.

The Company then processes the ore through the crushing facility where the output is again weighed and sampled for assaying. A metallurgical reconciliation with the data collected from the mining operation is completed with appropriate adjustments made to previous estimates. The crushed ore is then transported to the leach pad for application of the leaching solution. The samples from the automated sampler are assayed each shift and used for process control. The quantity of leach solution is measured by flow meters throughout the leaching and precipitation process. The pregnant solution from the heap leach is collected and passed through the processing circuit to produce precipitate which is retorted and then smelted to produce doré bars.

The Company allocates direct and indirect production costs to by-products on a systematic and rational basis. With respect to concentrate and doré inventory, production costs are allocated based on the silver equivalent ounces contained within the respective concentrate and doré.

The inventory is stated at lower of cost or NRV, with cost being determined using a weighted average cost method. The ending inventory value of ounces associated with the leach pad is equal to opening recoverable ounces plus recoverable ounces placed less ounces produced plus or minus ounce adjustments.

The estimate of both the ultimate recovery expected over time and the quantity of metal that may be extracted relative to the time the leach process occurs requires the use of estimates which rely upon laboratory test work and estimated models of the leaching kinetics in the heap leach pads. Test work consists of leach columns of up to 400 days duration with 150 days being the average, from which the Company projects metal recoveries up to three years in the future. The quantities of metal contained in the ore are based upon actual weights and assay analysis. The rate at which the leach process extracts gold and silver from the crushed ore is based upon laboratory column tests and actual experience. The assumptions used by the Company to measure metal content during each stage of the inventory conversion process include estimated recovery rates based on laboratory testing and assaying. The Company periodically reviews its estimates compared to actual experience and revises its estimates when appropriate. The ultimate recovery will not be known until the leaching operations cease.

Supplies inventories are valued at the lower of average cost and NRV using replacement cost plus cost to dispose, net of obsolescence. Concentrate and doré inventory includes product at the mine site, the port warehouse and product held by refineries. At times, the Company has a limited amount of finished silver at a minting operation where coins depicting Pan American's emblem are stamped.

j) Mineral properties, plant and equipment

On initial acquisition, mineral properties, plant and equipment are valued at cost, being the purchase price and the directly attributable costs of acquisition or construction required to bring the asset to the location and condition necessary for the asset to be capable of operating in the manner intended by management. When provisions for closure and decommissioning are recognized, the corresponding cost is capitalized as part of the cost of the related assets, representing part of the cost of acquiring the future economic benefits of the operation. The capitalized cost of closure and decommissioning activities is recognized in mineral property, plant and equipment and depreciated accordingly.

In subsequent periods, buildings, plant and equipment are stated at cost less accumulated depreciation and any impairment in value, whilst land is stated at cost less any impairment in value and is not depreciated.

Each asset's or part's estimated useful life has due regard to both its own physical life limitations and the present assessment of economically recoverable reserves of the mine property at which the item is located, and to possible future variations in those assessments. Estimates of remaining useful lives and residual values are reviewed annually. Changes in estimates are accounted for prospectively.

The expected useful lives are included below in the accounting policy for depreciation of property, plant, and equipment. The net carrying amounts of mineral property, land, buildings, plant and equipment are reviewed for impairment either individually or at the cash-generating unit level when events and changes in circumstances indicate that the carrying amounts may not be recoverable. To the extent that these values exceed their recoverable amounts, that excess is recorded as an impairment provision in the financial year in which this is determined.

In countries where the Company paid Value Added Tax ("VAT") and where there is uncertainty of its recoverability, the VAT payments have either been deferred with mineral property costs relating to the property or expensed if it relates to mineral exploration. If the Company ultimately recovers previously deferred amounts, the amount received will be applied to reduce mineral property costs or taken as a credit against current expenses depending on the prior treatment.

Expenditure on major maintenance or repairs includes the cost of the replacement of parts of assets and overhaul costs. Where an asset or part of an asset is replaced and it is probable that future economic benefits associated with the item will be available to the Company, the expenditure is capitalized and the carrying amount of the item replaced derecognized. Similarly, overhaul costs associated with major maintenance are capitalized and depreciated over their useful lives where it is probable that future economic benefits will be available and any remaining carrying amounts of the cost of previous overhauls are derecognized. All other costs are expensed as incurred.

Where an item of mineral property, plant and equipment is disposed of, it is derecognized and the difference between its carrying value and net sales proceeds is disclosed as earnings or loss on disposal in the income statement. Any items of mineral property, plant or equipment that cease to have future economic benefits are derecognized with any gain or loss included in the financial year in which the item is derecognized.

k) Operational mining properties and mine development

When it has been determined that a mineral property can be economically developed as a result of establishing proven and probable reserves (which occurs upon completion of a positive economic analysis of the mineral deposit), the costs incurred to develop such property including costs to further delineate the ore body and remove overburden to initially expose the ore body prior to the start of mining operations, are also capitalized. Such costs are amortized using the units-of-production method over the estimated life of the ore body based on proven and probable reserves.

Costs associated with commissioning activities on constructed plants are deferred from the date of mechanical completion of the facilities until the date the Company is ready to commence commercial production. Any revenues earned during this period are recorded as a reduction in deferred commissioning costs. These costs

are amortized using the units-of-production method (described below) over the life of the mine, commencing on the date of commercial production.

Acquisition costs related to the acquisition of land and mineral rights are capitalized as incurred. Prior to acquiring such land or mineral rights, the Company makes a preliminary evaluation to determine that the property has significant potential to economically develop the deposit. The time between initial acquisition and full evaluation of a property's potential is dependent on many factors including: location relative to existing infrastructure, the property's stage of development, geological controls and metal prices. If a mineable deposit is discovered, such costs are amortized when production begins. If no mineable deposit is discovered, such costs are expensed in the period in which it is determined the property has no future economic value. In countries where the Company has paid VAT and where there is uncertainty of its recoverability, the VAT payments have either been deferred with mineral property costs relating to the property or expensed if it relates to mineral exploration. If the Company ultimately makes recoveries of the VAT, the amount received will be applied to reduce mineral property costs or taken as a credit against current expenses depending on the prior treatment.

Major development expenditures on producing properties incurred to increase production or extend the life of the mine are capitalized while ongoing mining expenditures on producing properties are charged against earnings as incurred. Gains or losses from sales or retirements of assets are included in gain or loss on sale of assets.

l) Depreciation of mineral property, plant and equipment

The carrying amounts of mineral property, plant and equipment (including initial and any subsequent capital expenditure) are depreciated to their estimated residual value over the estimated useful lives of the specific assets concerned, or the estimated life of the associated mine or mineral lease, if shorter. Estimates of residual values and useful lives are reviewed annually and any change in estimate is taken into account in the determination of remaining depreciation charges, and adjusted if appropriate, at each statement of financial position date. Changes to the estimated residual values or useful lives are accounted for prospectively. Depreciation commences on the date when the asset is available for use as intended by management.

i) Units of production basis

For mining properties and leases and certain mining equipment, the economic benefits from the asset are consumed in a pattern which is linked to the production level. Except as noted below, such assets are depreciated on a units of production basis.

In applying the units of production method, depreciation is normally calculated using the quantity of material extracted from the mine in the period as a percentage of the total quantity of material to be extracted in current and future periods based on proven and probable reserves.

ii) Straight line basis

Assets within operations for which production is not expected to fluctuate significantly from one year to another or which have a physical life shorter than the related mine are depreciated on a straight line basis.

Mineral properties, plant and equipment are depreciated over their useful life, or over the remaining life of the mine if shorter. The major categories of property, plant and equipment are depreciated on a unit of production and/or straight-line basis as follows:

- Land – not depreciated
- Mobile equipment – 3 to 7 years
- Buildings and plant facilities – 25 to 50 years
- Mining properties and leases including capitalized evaluation and development expenditures – based on applicable reserves on a unit of production basis.
- Exploration and evaluation – not depreciated until mine goes into production
- Assets under construction – not depreciated until assets are ready for their intended use

m) Exploration and evaluation expenditure

Relates to costs incurred on the exploration and evaluation of potential mineral reserves and resources and includes costs such as exploratory drilling and sample testing and the costs of pre-feasibility studies. Exploration expenditures relates to the initial search for deposits with economic potential. Evaluation expenditures arise from a detailed assessment of deposits or other projects that have been identified as having economic potential.

Expenditures on exploration activity are not capitalized.

Capitalization of evaluation expenditures commences when there is a high degree of confidence in the project's viability and hence it is probable that future economic benefits will flow to the Company.

Evaluation expenditures, other than that acquired from the purchase of another mining company, are carried forward as an asset provided that such costs are expected to be recovered in full through successful development and exploration of the area of interest or alternatively, by its sale.

Purchased exploration and evaluation assets are recognized as assets at their cost of acquisition or at fair value if purchased as part of a business combination.

In the case of undeveloped projects there may be only inferred resources to form a basis for the impairment review. The review is based on a status report regarding the Company's intentions for the development of the undeveloped project. In some cases, the undeveloped projects are regarded as successors to ore bodies, smelters or refineries currently in production. Where this is the case, it is intended that these will be developed and go into production when the current source of ore is exhausted or to replace the reduced output, which results where existing smelters and/or refineries are closed. It is often the case that technological and other improvements will allow successor smelters and/or refineries to more than replace the capacity of their predecessors. Subsequent recovery of the resulting carrying value depends on successful development or sale of the undeveloped project. If a project does not prove viable, all unrecoverable costs associated with the project, net of any related impairment provisions, are written off.

A cash-generating unit ("CGU") is identified as the smallest identifiable group of assets that generate cash inflows that are largely independent of the cash inflows from other assets. An impairment review is performed, either individually or at the CGU level, when there are indicators that the carrying amount of the CGU may exceed its recoverable amount. A reversal of impairment test is performed whenever there is an indication that impairment may have reversed. When an impairment loss reverses in a subsequent period, the revised carrying amount shall not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset previously, less subsequent depreciation and depletion. Impairments and reversals of impairment are recognized in net earnings in the period in which they occur. Capitalized exploration and evaluation assets are reassessed on a regular basis and these costs are carried forward provided that the conditions discussed above for expenditure on exploration activity and evaluation expenditures are met.

Expenditures are transferred to mining properties and leases or assets under construction once the technical feasibility and commercial viability of extracting a mineral resource are demonstrable and the work completed

to date supports the future development of the property. In order to demonstrate technical feasibility and commercial viability, the Company evaluates the individual project and its established mineral reserves, assesses the relevant findings and conclusions from the Company's activities and in applicable technical or other studies relating to the project, and considers whether and how any additional factors and circumstances might impact the project, particularly in light of the Company's capabilities, risk tolerance and desired economic returns. The Company conducts its managerial evaluation for commercial viability by assessing the factors it considers relevant to the commercial development of the project, taking into consideration the exploration and technical evaluation activities and work undertaken in relation to the project. If the asset demonstrates technical feasibility and commercial viability, the asset is reclassified to mineral properties, plant and equipment. Assessment for impairment is conducted before reclassification.

n) Deferred stripping costs

In open pit mining operations, it is necessary to remove overburden and other waste in order to access the ore body. During the preproduction phase, these costs are capitalized as part of the cost of the mine property and subsequently amortized over the life of the mine (or pit) on a units of production basis.

The costs of removal of the waste material during a mine's production phase are deferred where they give rise to future benefits. These capitalized costs are subsequently amortized on a unit of production basis over the reserves that directly benefit from the specific stripping activity.

o) Asset impairment

Management reviews and evaluates its assets for impairment, or reversals of impairment, when events or changes in circumstances indicate that the related carrying amounts may not be recoverable or when there is an indication that impairment may have reversed. Impairment is normally assessed at the level of CGUs. In addition, an impairment loss is recognized for any excess of carrying amount over the recoverable amount, being the higher of its fair value less costs to sell ("FVLCTS"), or its value in use (being the net present value of expected future cash flows of the relevant CGU), of a non-current asset. For a disposal group held for sale, an impairment loss is recognized for any excess of carrying amount over the recoverable amount, being the its fair value less costs to sell ("FVLCTS"). The best evidence of FVLCTS is the value obtained from an active market or binding sale agreement. Where neither exists, FVLCTS is based on the best information available to reflect the amount the Company could receive for the CGU in an arm's length transaction. This is often estimated using discounted cash flow techniques.

Where the recoverable amount is assessed using discounted cash flow techniques, the resulting estimates are based on detailed mine and/or production plans. For value in use, recent cost levels are considered, together with expected changes in costs that are compatible with the current condition of the business and which meet the requirements of IAS 36 "Impairment of Assets." The cash flow forecasts are based on best estimates of expected future revenues and costs, including the future cash costs of production, capital expenditure, closure, restoration and environmental clean-up. These may include net cash flows expected to be realized from extraction, processing and sale of mineral resources that do not currently qualify for inclusion in proven or probable ore reserves. Such non-reserve material is included where there is a high degree of confidence in its economic extraction. This expectation is usually based on preliminary drilling and sampling of areas of mineralization that are contiguous with existing reserves. Typically, the additional evaluation to achieve reserve status for such material has not yet been done because this would involve incurring costs earlier than is required for the efficient planning and operation of the mine.

Where the recoverable amount of a CGU is dependent on the life of its associated ore, expected future cash flows reflect long term mine plans, which are based on detailed research, analysis and iterative modeling to optimize the level of return from investment, output and sequence of extraction. The mine plan takes account of all relevant characteristics of the ore, including waste to ore ratios, ore grades, haul distances, chemical and metallurgical properties of the ore affecting process recoveries and capacities of processing equipment that can be used. The mine plan is therefore the basis for forecasting production output in each future year and for forecasting production costs.

The Company's cash flow forecasts are based on estimates of future commodity prices, which assume market prices will revert to the Company's assessment of the long-term average price, generally over a period of three to five years. These assessments often differ from current price levels and are updated periodically.

The discount rates applied to the future cash flow forecasts represent an estimate of the rate the market would apply having regard to the time value of money and the risks specific to the asset for which the future cash flow estimates have not been adjusted, including appropriate adjustments for the risk profile of the countries in which the individual CGU operate. The great majority of the Company's sales are based on prices denominated in USD. To the extent that the currencies of countries in which the Company produces commodities strengthen against the USD without commodity price offset, cash flows and, therefore, net present values are reduced. Non-financial assets other than goodwill that have suffered impairment are tested for possible reversal of the impairment whenever events or changes in circumstances indicate that the impairment may have reversed.

p) Closure and decommissioning costs

The mining, extraction and processing activities of the Company normally give rise to obligations for site closure or rehabilitation. Closure and decommissioning works can include facility decommissioning and dismantling; removal or treatment of waste materials; site and land rehabilitation. The extent of work required and the associated costs are dependent on the requirements of relevant authorities and the Company's environmental policies. Provisions for the cost of each closure and rehabilitation program are recognized at the time that environmental disturbance occurs. When the extent of disturbance increases over the life of an operation, the provision is increased accordingly. Costs included in the provision encompass all closure and decommissioning activity expected to occur progressively over the life of the operation and at the time of closure in connection with disturbances at the reporting date. Routine operating costs that may impact the ultimate closure and decommissioning activities, such as waste material handling conducted as an integral part of a mining or production process, are not included in the provision. Costs arising from unforeseen circumstances, such as the contamination caused by unplanned discharges, are recognized as an expense and liability when the event gives rise to an obligation which is probable and capable of reliable estimation. The timing of the actual closure and decommissioning expenditure is dependent upon a number of factors such as the life and nature of the asset, the operating license conditions, and the environment in which the mine operates. Expenditures may occur before and after closure and can continue for an extended period of time dependent on closure and decommissioning requirements. Closure and decommissioning provisions are measured at the expected value of future cash flows, discounted to their present value and determined according to the probability of alternative estimates of cash flows occurring for each operation. Discount rates used are specific to the underlying obligation. Significant judgements and estimates are involved in forming expectations of future activities and the amount and timing of the associated cash flows. Those expectations are formed based on existing environmental and regulatory requirements which give rise to a constructive or legal obligation.

When provisions for closure and decommissioning are initially recognized, the corresponding cost is capitalized as a component of the cost of the related asset, representing part of the cost of acquiring the future economic benefits of the operation. The capitalized cost of closure and decommissioning activities is recognized in property, plant and equipment and depreciated accordingly. The value of the provision is progressively increased over time as the effect of discounting unwinds, creating an expense recognized in finance expenses. Closure and decommissioning provisions are also adjusted for changes in estimates. Those adjustments are accounted for as a change in the corresponding capitalized cost, except where a reduction in the provision is greater than the un-depreciated capitalized cost of the related assets, in which case the capitalized cost is reduced to nil and the remaining adjustment is recognized in the income statement. In the case of closed sites, changes to estimated costs are recognized immediately in the income statement. Changes to the capitalized cost result in an adjustment to future depreciation and finance charges. Adjustments to the estimated amount and timing of future closure and decommissioning cash flows are a normal occurrence in light of the significant judgements and estimates involved.

The provision is reviewed at the end of each reporting period for changes to obligations, legislation or discount rates that impact estimated costs or lives of operations and adjusted to reflect current best estimate. The cost of the related asset is adjusted for changes in the provision resulting from changes in the estimated cash flows or discount rate and the adjusted cost of the asset is depreciated prospectively.

q) Foreign currency translation

The Company's functional currency and that of its subsidiaries is the USD as this is the principal currency of the economic environments in which they operate. Transaction amounts denominated in foreign currencies (currencies other than USD) are translated into USD at exchange rates prevailing at the transaction dates. Carrying values of foreign currency monetary assets and liabilities are re-translated at each statement of financial position date to reflect the U.S. exchange rate prevailing at that date.

Gains and losses arising from translation of foreign currency monetary assets and liabilities at each period end are included in earnings except for differences arising on decommissioning provisions which are capitalized for operating mines.

r) Share-based payments

The Company makes share-based awards, including restricted share units ("RSUs"), performance share units ("PSUs"), shares and options, to certain employees.

For equity-settled awards, the fair value is charged to the income statement and credited to equity, on a straight-line basis over the vesting period, after adjusting for the estimated number of awards that are expected to vest. The fair value of the equity-settled awards is determined at the date of grant. Non-vesting conditions and market conditions, such as target share price upon which vesting is conditioned, are factored into the determination of fair value at the date of grant. All other vesting conditions are excluded from the determination of fair value and included in management's estimate of the number of awards ultimately expected to vest.

The fair value is determined by using option pricing models. At each statement of financial position date prior to vesting, the cumulative expense representing the extent to which the vesting period has expired and management's best estimate of the awards that are ultimately expected to vest is computed (after adjusting for non-market performance conditions). The movement in cumulative expense is recognized in the income statement with a corresponding entry within equity. No expense is recognized for awards that do not ultimately vest, except for awards where vesting is conditional upon a market condition, which are treated as vested irrespective of whether or not the market condition is satisfied, provided that all other performance conditions are satisfied.

Where the terms of an equity-settled award are modified, as a minimum an expense is recognized as if the terms had not been modified over the original vesting period. In addition, an expense is recognized for any modification, which increases the total fair value of the share-based payment arrangement, or is otherwise beneficial to the employee as measured at the date of modification, over the remainder of the new vesting period.

Where an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognized for the award is recognized immediately. Any compensation paid up to the fair value of the awards at the cancellation or settlement date is deducted from equity, with any excess over fair value being treated as an expense in the income statement. However, if a new award is substituted for the cancelled award, and designated as a replacement award on the date that it is granted, the new awards are treated as if they are a modification of the original award, as described in the previous paragraph.

s) Leases

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 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.

t) Income taxes

Taxation on the earnings or loss for the year comprises current and deferred tax. Taxation is recognized in the income statement except to the extent that it relates to items recognized in other comprehensive income or directly in equity, in which case the tax is recognized in other comprehensive income or equity.

Current tax is the expected tax payable on the taxable income for the year using rates enacted or substantively enacted at the year end, and includes any adjustment to tax payable in respect of previous years.

Deferred tax is provided using the statement of financial position liability method, providing for the tax effect of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for tax assessment or deduction purposes. Where an asset has no deductible or depreciable amount for income tax purposes, but has a deductible amount on sale or abandonment for capital gains tax purposes, that amount is included in the determination of temporary differences.

The tax effect of certain temporary differences is not recognized, principally with respect to goodwill; temporary differences arising on the initial recognition of assets or liabilities (other than those arising in a business combination or in a manner that initially impacted accounting or taxable earnings); and temporary differences relating to investments in subsidiaries, jointly controlled entities and associates to the extent that the Company is able to control the reversal of the temporary difference and the temporary difference is not expected to reverse in the foreseeable future. The amount of deferred tax recognized is based on the expected manner and timing of realization or settlement of the carrying amount of assets and liabilities, with the exception of items that have a tax base solely derived under capital gains tax legislation, using tax rates enacted or substantively enacted at period end. To the extent that an item's tax base is solely derived from the amount deductible under capital gains tax legislation, deferred tax is determined as if such amounts are deductible in determining future assessable income.

The carrying amount of deferred income tax assets is reviewed at each statement of financial position date and reduced to the extent that it is no longer probable that sufficient taxable earnings will be available to allow all or part of the deferred income tax asset to be utilized. To the extent that an asset not previously recognized fulfils the criteria for recognition, a deferred income tax asset is recorded.

Deferred tax is measured on an undiscounted basis at the tax rates that are expected to apply in the periods in which the asset is realized or the liability is settled, based on tax rates and tax laws enacted or substantively enacted at the statement of financial position date.

Current and deferred taxes relating to items recognized in other comprehensive income or directly in equity are recognized in other comprehensive income or equity and not in the income statement. Mining taxes and royalties are treated and disclosed as current and deferred taxes if they have the characteristics of an income tax. Judgements are required about the application of income tax legislation. These judgements and assumptions are subject to risk and uncertainty, hence there is a possibility that changes in circumstances will alter expectations, which may impact the amount of deferred tax assets and deferred tax liabilities recognized on the statement of financial position and the amount of other tax losses and temporary differences not yet recognized. In such circumstances, some or the entire carrying amount of recognized deferred tax assets and liabilities may require adjustment, resulting in a corresponding credit or charge to the income statement.

Deferred tax assets, including those arising from tax losses, capital losses and temporary differences, are recognized only where it is probable that taxable earnings will be available against which the losses or deductible temporary differences can be utilized. Assumptions about the generation of future taxable earnings and repatriation of retained earnings depend on management's estimates of future cash flows. These depend on estimates of future production and sales volumes, commodity prices, reserves, operating costs, closure and decommissioning costs, capital expenditures, dividends and other capital management transactions.

u) Earnings (loss) per share

Basic earnings (loss) per share is calculated by dividing earnings attributable to ordinary equity holders of the parent entity by the weighted average number of ordinary shares outstanding during the period.

The diluted earnings per share calculation is based on the earnings attributable to ordinary equity holders and the weighted average number of shares outstanding after adjusting for the effects of all potential ordinary shares. This method requires that the number of shares used in the calculation be the weighted average number of shares that would be issued on the conversion of all the dilutive potential ordinary shares into ordinary shares. This method assumes that the potential ordinary shares converted into ordinary shares at the beginning of the period (or at the time of issuance, if not in existence at beginning of the period). The number of dilutive potential ordinary shares is determined independently for each period presented.

For convertible securities that may be settled in cash or shares at the holder's option, returns to preference shareholders and income charges are added back to net earnings used for basic EPS and the maximum number of ordinary shares that could be issued on conversion is used in computing diluted earnings per share.

v) Borrowing costs and upfront costs

Borrowing costs that are directly attributable to the acquisition, construction or production of qualifying assets are capitalized. Qualifying assets are assets that require a substantial amount of time to prepare for their intended use, including mineral properties in the evaluation stage where there is a high likelihood of commercial exploitation. Qualifying assets also include significant expansion projects at the operating mines. Borrowing costs are considered an element of the historical cost of the qualifying asset. Capitalization ceases when the asset is substantially complete or if construction is interrupted for an extended period. Where the funds used to finance a qualifying asset form part of general borrowings, the amount capitalized is calculated using a weighted average of rates applicable to the relevant borrowings during the period. Where funds borrowed are directly attributable to a qualifying asset, the amount capitalized represents the borrowing costs specific to those borrowings. Where surplus funds available out of money borrowed specifically to finance a project are temporarily invested, the total borrowing cost is reduced by income generated from short-term investments of such funds.

Upfront costs incurred in connection with entering new credit facilities are recorded as Other assets and are amortized over the life of the respective credit facilities.

4. CHANGES IN ACCOUNTING STANDARDS

New and amended IFRS standards not yet effective

New accounting standards and interpretations have been published that are not mandatory for the current period and have not been early adopted. These standards are not expected to have a material impact on the Company.

5. SIGNIFICANT JUDGEMENTS IN APPLYING ACCOUNTING POLICIES

Judgements that have the most significant effect on the amounts recognized in the Company's consolidated financial statements are as follows:

a) Capitalization of evaluation costs

The Company has determined that evaluation costs capitalized during the year relating to the operating mines and certain other exploration interests have potential future economic benefits and are potentially economically recoverable, subject to the impairment analysis as discussed in Note 13. In making this judgement, the Company has assessed various sources of information including but not limited to the geologic and metallurgic information, history of conversion of mineral deposits to proven and probable mineral reserves, scoping and feasibility studies, proximity to existing ore bodies, operating management expertise and required environmental, operating and other permits.

b) Commencement of commercial production

During the determination of whether a mine has reached an operating level that is consistent with the use intended by management, costs incurred are capitalized as mineral property, plant and equipment and any consideration from commissioning sales are offset against costs capitalized. The Company defines commencement of commercial production as the date that a mine has achieved a sustainable level of production based on a percentage of design capacity along with various qualitative factors including but not limited to the achievement of mechanical completion, continuous nominated level of production, the working effectiveness of the plant and equipment at or near expected levels and whether there is a sustainable level of production input available including power, water and diesel.

c) Assets' carrying values and impairment charges

In determining carrying values and impairment charges the Company looks at recoverable amounts, defined as the higher of value in use or FVLCTS in the case of non-financial assets, and at objective evidence that identifies significant or prolonged decline of fair value on financial assets classified as available-for-sale indicating impairment. These determinations and their individual assumptions require that management make a decision based on the best available information at each reporting period.

d) Functional currency

The functional currency for the Company and its subsidiaries is the currency of the primary economic environment in which each operates. The Company has determined that its functional currency and that of its subsidiaries is the USD. The determination of functional currency may require certain judgements to determine the primary economic environment. The Company reconsiders the functional currency used when there is a change in events and conditions which determined the primary economic environment.

e) Business combinations

Determination of whether a set of assets acquired and liabilities assumed constitute a business may require the Company to make certain judgments, taking into account all facts and circumstances. A business consists of inputs, including non-current assets and processes, including operational processes, that when applied to those inputs have the ability to create outputs that provide a return to the Company and its shareholders.

f) Determination of control of subsidiaries and joint arrangements

Determination of whether the Company has control of subsidiaries or joint control of joint arrangements requires an assessment of the activities of the investee that significantly affect the investee's returns, including strategic, operational and financing decision-making, appointment, remuneration and termination of the key management personnel and when decisions related to those activities are under the control of the Company or require unanimous consent from the investors. Based on assessment of the relevant facts and circumstances, primarily, the Company's limited board representation and restricted influence over operating, strategic and financing decisions, the Company concluded that it does not control Maverix and as a result classified it as an investment in associate subject to significant influence (Note 14).

g) Deferral of stripping costs

In determining whether stripping costs incurred during the production phase of a mining property relate to mineral reserves that will be mined in a future period and therefore should be capitalized, the Company treats the costs of removal of the waste material during a mine's production phase as deferred, where it gives rise to future benefits. These capitalized costs are subsequently amortized on a unit of production basis over the reserves that directly benefit from the specific stripping activity. As at December 31, 2020, the carrying amount of Dolores and La Arena capitalized stripping costs was $40.7 million and $32.9 million, respectively (2019 - $57.5 million and $19.9 million, respectively).

h) Replacement convertible debenture

As part of the 2009 Aquiline transaction, the Company issued a replacement convertible debenture that allowed the holder to convert the debenture into either 363,854 Pan American shares ("Common Shares") or a silver stream contract with Aquiline Resources Inc., a wholly owned subsidiary of the Company. The holder subsequently selected the silver stream contract related to certain production from the Navidad project. The silver stream contract is classified and accounted for as a deferred credit. In determining the appropriate classification of the silver stream contract as a deferred credit, the Company evaluated the economics underlying the contract as of the date the Company assumed the obligation. As at December 31, 2020, the carrying amount of the deferred credit arising from the Aquiline acquisition was $20.8 million (2019 - $20.8 million).

i) Coronavirus disease ("COVID-19") pandemic impact

In March 2020, the World Health Organization declared a global pandemic following the emergence and rapid spread of a novel strain of the coronavirus ("COVID-19"). The outbreak and subsequent measures intended to limit the pandemic contributed to significant declines and volatility in financial markets. The pandemic adversely impacted global commercial activity. The full extent of the impact of COVID-19 on operations and future financial performance is currently unknown. It will depend on future developments that are uncertain and unpredictable, including the duration and spread of COVID-19, its continued impact on capital and financial markets on a macro-scale and any new information that may emerge concerning the severity of the virus. These uncertainties may persist beyond when it is determined how to contain the virus or treat its impact.

IFRS requires management to make estimates and assumptions that affect reported amounts and disclosures. These estimates and assumptions take into account historical and forward looking factors that the Company believes are reasonable, including but not limited to the potential impacts arising from COVID-19 and public and private sector policies and initiatives aimed at reducing its transmission. As the extent and duration of the impacts from COVID-19 remain unclear, the Company's estimates and assumptions may evolve as conditions change. Actual results could differ significantly from those estimates.

Pan American's normal operations in Mexico, Peru, Argentina and Bolivia were suspended for an average duration of approximately two months during the first half of 2020 in order to comply with mandatory national quarantines imposed in response to the COVID-19 pandemic. The Huaron and Morococha operations were suspended for another approximately three months through the third quarter of 2020. The Company conducted care and maintenance activities at the suspended operations until the government restrictions were lifted and Pan American determined it was safe to resume operations. Following the restart of operations, production was below normal capacity rates in order to accommodate COVID-19 related protocols to help protect the health and safety of our workforce and communities.

As of December 31, 2020 no operations were suspended as a result of COVID and, based on management analysis, the Company has concluded that these temporary, short-term, suspensions and resulting deferral of production do not represent indicators of impairment, or require impairment reversal, for any of the Company's assets.

6. KEY SOURCES OF ESTIMATION UNCERTAINTY IN THE APPLICATION OF ACCOUNTING POLICIES

Key sources of estimation uncertainty that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities are:

- *Revenue recognition:* Revenue from the sale of concentrate to independent smelters is recognized when control of the asset sold is transferred to the customer. The Company's concentrate sales contracts with third-party buyers, in general, provide for a provisional payment based upon provisional assays and quoted metal prices. Final settlement is based on applicable commodity prices set on specified quotational periods, typically ranging from one month prior to shipment, and can extend to three months after the shipment arrives at the smelter and is based on average market metal prices. Sales revenue is commonly subject to adjustments based on an inspection of the product by the customer. In such cases, sales revenue is initially recognized on a provisional basis using the Company's best estimate of contained metal, and adjusted subsequently. Revenues are recorded under these contracts at the time control passes to the buyer based on the expected settlement period. Revenue on provisionally priced sales is recognized based on estimates of the fair value of the consideration receivable based on forward market prices and estimated quantities. At each reporting date provisionally priced metal is marked to market based on the forward selling price for the quotational period stipulated in the contract. Variations between the price recorded at the date when control is transferred to the buyer and the actual final price set under the smelting contracts are caused by changes in metal prices resulting in the receivable being recorded at FVTPL. In a period of high price volatility, as experienced under

current economic conditions, the effect of mark-to-market price adjustments related to the quantity of metal which remains to be settled with independent smelters could be significant. For changes in metal quantities upon receipt of new information and assay, the provisional sales quantities are adjusted.

- *Estimated recoverable ounces:* The carrying amounts of the Company's mining properties are depleted based on recoverable ounces. Changes to estimates of recoverable ounces and depletable costs including changes resulting from revisions to the Company's mine plans and changes in metal price forecasts can result in a change to future depletion rates.

- *Mineral reserve estimates:* The figures for mineral reserves and mineral resources are disclosed in accordance with National Instrument 43 - 101, "Standards of Disclosure for Mineral Projects", issued by the Canadian Securities Administrators and in accordance with "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines – adopted November 23, 2003", prepared by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Standing Committee on Reserve Definitions. There are numerous uncertainties inherent in estimating mineral reserves and mineral resources, including many factors beyond the Company's control. Such estimation is a subjective process, and the accuracy of any mineral reserve or mineral resource estimate is a function of the quantity and quality of available data and of the assumptions made and judgments used in engineering and geological interpretation. Differences between management's assumptions including economic assumptions such as metal prices and market conditions could have a material effect in the future on the Company's financial position and results of operation.

- *Valuation of Inventory:* In determining mine production costs recognized in the consolidated income statement, the Company makes estimates of quantities of ore stacked in stockpiles, placed on the heap leach pad and in process and the recoverable silver in this material to determine the average costs of finished goods sold during the period. Changes in these estimates can result in a change in mine operating costs of future periods and carrying amounts of inventories. Refer to Note 11 for details.

- *Depreciation and amortization rates for mineral properties, plant and equipment and mineral interests:* Depreciation and amortization expenses are allocated based on assumed asset lives and depreciation and amortization rates. Should the asset life or depreciation rate differ from the initial estimate, an adjustment would be made in the consolidated income statement prospectively. A change in the mineral reserve estimate for assets depreciated using the units of production method would impact depreciation expense prospectively.

- *Impairment, or impairment reversal, of mining interests:* While assessing whether any indications of impairment, or impairment reversal, exist for mining interests, consideration is given to both external and internal sources of information. Information the Company considers include changes in the market, economic and legal environment in which the Company operates that are not within its control that affect the recoverable amount of mining interests. Internal sources of information include the manner in which mineral property, plant and equipment are being used or are expected to be used and indications of the economic performance of the assets. Estimates include but are not limited to estimates of the discounted future after-tax cash flows expected to be derived from the Company's mining properties, costs to sell the mining properties and the appropriate discount rate. Changes in metal price forecasts, increases or decreases in estimated future costs of production, increases or decreases in estimated future capital costs, reductions or increases in the amount of recoverable mineral reserves and mineral resources and/or adverse or favorable current economics can result in a write-down or write-up of the carrying amounts of the Company's mining interests. Impairments and impairment reversals of mining interests are discussed in Note 13.

- *Estimation of decommissioning and reclamation costs and the timing of expenditures:* The cost estimates are updated annually during the life of a mine to reflect known developments, (e.g. revisions to cost estimates and to the estimated lives of operations), and are subject to review at regular intervals. Decommissioning, restoration and similar liabilities are estimated based on the Company's interpretation of current regulatory requirements, constructive obligations and are measured at the best estimate of expenditures required to settle the present obligation of decommissioning, restoration or similar liabilities that may occur upon

decommissioning of the mine at the end of its productive life. The carrying amount is determined based on the net present value of estimated future cash expenditures for the settlement of decommissioning, restoration or similar liabilities that may occur upon decommissioning of the mine. Such estimates are subject to change based on changes in laws and regulations and negotiations with regulatory authorities. Refer to Note 17 for details on decommissioning and restoration costs.

- *Income taxes and recoverability of deferred tax assets:* In assessing the probability of realizing income tax assets recognized, the Company makes estimates related to expectations of future taxable income, applicable tax planning opportunities, expected timing of reversals of existing temporary differences and the likelihood that tax positions taken will be sustained upon examination by applicable tax authorities. In making its assessments, the Company gives additional weight to positive and negative evidence that can be objectively verified. Estimates of future taxable income are based on forecasted cash flows from operations and the application of existing tax laws in each jurisdiction. The Company considers relevant tax planning opportunities that are within the Company's control, are feasible and within management's ability to implement. Examination by applicable tax authorities is supported based on individual facts and circumstances of the relevant tax position examined in light of all available evidence. Where applicable tax laws and regulations are either unclear or subject to ongoing varying interpretations, it is reasonably possible that changes in these estimates can occur that materially affect the amounts of income tax assets recognized. Also, future changes in tax laws could limit the Company from realizing the tax benefits from the deferred tax assets. The Company reassesses unrecognized income tax assets at each reporting period.

- *Accounting for acquisitions:* The fair value of assets acquired and liabilities assumed and the resulting goodwill, if any, requires that management make certain judgments and estimates taking into account information available at the time of acquisition about future events, including, but not restricted to, estimates of mineral reserves and resources acquired, exploration potential, future operating costs and capital expenditures, future metal prices, long-term foreign exchange rates, discount rates, and the timing of the commencement of commercial production. Changes to the provisional values of assets acquired and liabilities assumed, deferred income taxes and resulting goodwill, if any, are retrospectively adjusted when the final measurements are determined if related to conditions existing at the date of acquisition (within one year of the acquisition date).

- *Provisions and contingencies:* Due to the size, complexity and nature of the Company's operations, various legal and tax matters are outstanding from time to time. In the event the Company's estimates of the future resolution of these matters change, the Company will recognize the effects of the changes in its consolidated financial statements on the date such changes occur. Refer to Note 30 for further discussion on contingencies.

7. MANAGEMENT OF CAPITAL

The Company's objective when managing its capital is to maintain its ability to continue as a going concern while at the same time maximizing the growth of its business and providing returns to its shareholders. The Company's capital structure consists of shareholders' equity (comprising issued capital plus share option reserve plus deficit, plus investment revaluation reserve) with a balance of $2.6 billion as at December 31, 2020 (2019 - $2.5 billion). The Company manages its capital structure and makes adjustments based on changes to its economic environment and the risk characteristics of the Company's assets. The Company's capital requirements are effectively managed based on the Company having a thorough reporting, planning and forecasting process to help identify the funds required to ensure the Company is able to meet its operating and growth objectives.

The Company is not subject to externally imposed capital requirements and the Company's overall objective with respect to capital risk management remains unchanged from the year ended December 31, 2019.

8. TAHOE ACQUISITION

On February 22, 2019, the Company completed the acquisition of 100% of the issued and outstanding shares of Tahoe (the "Tahoe Acquisition"). Tahoe's principal mines included: Timmins West and Bell Creek in Canada; La Arena and Shahuindo in Peru; and Escobal in Guatemala (the "Acquired Mines"). The Escobal mine's operations have been suspended since June 2017.

As a result of the Tahoe Acquisition, the Company paid $275 million in cash, issued 55,990,512 Common Shares, and issued 313,887,490 Contingent Value Rights ("CVRs"). Each CVR has a term of 10 years and will be exchanged for 0.0497 of a Common Share upon the first commercial shipment of concentrate following restart of operations at the Escobal mine (the "First Shipment"). The Company determined this transaction represents a business combination with Pan American identified as the acquirer. The Company began consolidating the operating results, cash flows and net assets of Tahoe from February 22, 2019 onwards. Acquisition-related costs of $7.5 million were expensed during the year ended December 31, 2019 were presented as transaction and integration costs. There were no acquisition-related costs recorded during the year ended December 31, 2020.

The following table summarizes the consideration paid as part of the purchase price which was finalized in the fourth quarter of 2019:

Consideration:	**Shares Issued/ Issuable**		**Consideration**
Fair value estimate of the Pan American Share consideration	55,990,512	$	795,626
Fair value estimate of the CVRs	15,600,208		71,916
Cash [(1)]	—		275,008
Fair value estimate of replacement options	835,874		124
Total Consideration	**72,426,594**	**$**	**1,142,674**

(1) Net of cash and cash equivalents acquired, the Company paid $247.5 million in cash.

The following table below presents the final allocation of the Tahoe purchase price to the identifiable assets and liabilities based on their estimated fair values which was finalized in the fourth quarter of 2019:

Total purchase consideration paid for Tahoe	$	1,142,674
Cash and cash equivalents	$	27,529
Accounts receivable		18,154
VAT Receivable		87,492
Inventory		148,209
Other current assets		1,381
Mineral properties, plant and equipment		1,239,402
Other assets		6,551
Deferred tax assets		30,728
Accounts payable and accrued liabilities		(148,742)
Debt		(125,000)
Provision for closure and decommissioning liabilities		(77,320)
Net current and deferred income tax liabilities		(65,710)
Fair value of Tahoe net assets acquired	**$**	**1,142,674**

9. FINANCIAL INSTRUMENTS

a) Financial assets and liabilities by categories

December 31, 2020	Amortized cost	FVTPL	FVTOCI	Total
Financial Assets:				
Cash and cash equivalents	**$ 167,113**	**$ —**	**$ —**	**$ 167,113**
Trade receivables from provisional concentrates sales[1]	**—**	**35,084**	**—**	**35,084**
Receivable not arising from sale of metal concentrates[1]	**84,486**	**—**	**—**	**84,486**
Short-term investments, equity securities	**—**	**111,946**	**—**	**111,946**
Derivative financial assets	**—**	**7,812**	**—**	**7,812**
	$ 251,599	**$ 154,842**	**$ —**	**$ 406,441**
Financial Liabilities:				
Derivative financial liabilities	**$ —**	**$ 367**	**$ —**	**$ 367**

(1) Included in Trade and other receivables.

December 31, 2019	Amortized cost	FVTPL	FVTOCI	Total
Financial Assets:				
Cash and cash equivalents	$ 120,564	$ —	$ —	$ 120,564
Trade receivables from provisional concentrates sales[1]	—	48,767	—	48,767
Receivable not arising from sale of metal concentrates[1]	116,596	—	—	116,596
Short-term investments, equity securities	—	117,776	—	117,776
Short-term investments, other than equity securities	—	—	—	—
Derivative financial assets	—	1,272	—	1,272
	$ 237,160	$ 167,815	$ —	$ 404,975
Financial Liabilities:				
Debt	$ —	$ 275,000	$ —	$ 275,000

(1) Included in Trade and other receivables.

b) Short-term investments in equity securities recorded at FVTPL

The Company's short-term investments in equity securities are recorded at FVTPL for the year ended December 31, 2020 and 2019. Net gains (losses) on short-term investments recorded at FVTPL were as follows:

	2020[1]	2019[1]
Unrealized net gains on short-term investments, equity securities	**$ 10,577**	$ 83,705
Realized net gains on short-term investments, equity securities	**51,562**	—
	$ 62,139	**$ 83,705**

(1) Excludes $0.9 million in income not recorded at FVTPL for the year ended December 31, 2020 (2019 - $.0 million).

c) Financial assets recorded at FVTOCI

The Company's short-term investments other than equity securities are recorded at FVTOCI. The unrealized gains from short-term investments other than equity securities for the year ended December 31, 2020 and 2019 were as follows:

	2020	2019
Reclassification adjustment for realized gains on short-term investments, other than equity securities	**—**	(208)

d) Derivative instruments

The Company's derivative financial instruments are comprised of foreign currency and commodity contracts.The net gains (losses) on derivatives for the year ended December 31, 2020 and 2019 were comprised of the following:

	2020	2019
Gains on foreign currency and commodity contracts:		
Realized (losses) gains on foreign currency and commodity contracts	**$ (2,594)**	$ 2,669
Unrealized gains on foreign currency and commodity contracts	**6,137**	646
	$ 3,543	$ 3,315
Gain (loss) on derivatives:		
Gain (loss) on warrants	**$ 38**	$ (14)
	$ 38	$ (14)

e) Fair value information

i) Fair Value Measurement

The categories of the fair value hierarchy that reflect the inputs to valuation techniques used to measure fair value are as follows:

Level 1: Quoted prices in active markets for identical assets or liabilities;

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly; and

Level 3: Inputs for the asset or liability based on unobservable market data

The levels in the fair value hierarchy into which the Company's financial assets and liabilities that are measured and recognized on the Consolidated Statements of Financial Position at fair value on a recurring basis were categorized as follows:

	At December 31, 2020		At December 31, 2019	
	Level 1	Level 2	Level 1	Level 2
Assets and Liabilities:				
Short-term investments	**$ 111,946**	**$ —**	$ 117,776	$ —
Trade receivables from provisional concentrate sales	**—**	**35,084**	—	48,767
Derivative financial assets	**—**	**7,812**	—	1,272
Derivative financial liabilities	**—**	**(367)**	—	—
	$ 111,946	**$ 42,529**	$ 117,776	$ 50,039

There were no transfers between Level 1 and Level 2 during the year ended December 31, 2020. The methodology and assessment of inputs for determining the fair value of financial assets and liabilities as well as the levels of hierarchy for the Company's financial assets and liabilities measured at fair value remains unchanged from that at December 31, 2019.

ii) Valuation Techniques

Short-term investments and other investments

The Company's short-term investments and other investments are valued using quoted market prices in active markets and as such are classified within Level 1 of the fair value hierarchy and are primarily money market securities and U.S. Treasury securities. The fair value of the investment securities is calculated as the quoted market price of the investment and in the case of equity securities, the quoted market price multiplied by the quantity of shares held by the Company.

Derivative assets and liabilities

The Company's derivative assets and liabilities were comprised of investments in warrants, commodity swaps and foreign currency contracts. The fair value of the warrants is calculated using an option pricing model which utilizes a combination of quoted prices and market-derived inputs. The Company's commodity swaps and foreign currency contracts are valued using observable market prices. Derivative instruments are classified within Level 2 of the fair value hierarchy.

Receivables from Provisional Concentrate Sales

A portion of the Company's trade receivables arose from provisional concentrate sales and are valued using quoted market prices based on the forward London Metal Exchange for copper, zinc and lead and the London Bullion Market Association P.M. fix for gold and silver.

f) Financial Instruments and related risks

The Company has exposure to risks of varying degrees of significance which could affect its ability to achieve its strategic objectives for growth and shareholder returns. The principle financial risks to which the Company is exposed are:

i) Credit risk
ii) Liquidity risk
iii) Market risk
1. Currency risk
2. Interest rate risk
3. Price risk

The Company's Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework and reviews the Company's policies on an ongoing basis.

i) Credit Risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations and arises principally from the Company's trade receivables. The carrying value of trade receivables represents the maximum credit exposure.

The Company has long-term concentrate contracts to sell the zinc, lead and copper concentrates produced by the Huaron, Morococha, San Vicente and La Colorada mines. Concentrate contracts are common business practice in the mining industry. The terms of the concentrate contracts may require the Company to deliver concentrate that has a value greater than the payment received at the time of delivery, thereby introducing the Company to credit risk of the buyers of concentrates. Should any of these counterparties not honour supply arrangements, or should any of them become insolvent, the Company may incur losses for products already shipped and be forced to sell its concentrates on the spot market or it may not have a market for its concentrates and therefore its future operating results may be materially adversely impacted. At December 31, 2020, the Company had receivable balances associated with buyers of its concentrates of $35.1 million (2019 - $48.8 million) and receivable balances associated with buyers of its doré of $nil (2019 - $17.5 million). The vast majority of the Company's concentrate is sold to five well-known concentrate buyers.

Doré production from Shahuindo, La Arena, Timmins, La Colorada, Dolores and Manantial Espejo is refined under long term agreements with fixed refining terms at five separate refineries worldwide. The Company generally retains the risk and title to the precious metals throughout the process of refining and therefore is exposed to the risk that the refineries will not be able to perform in accordance with the refining contract and that the Company may not be able to fully recover precious metals in such circumstances. At December 31, 2020, the Company had approximately $61.8 million (2019 - $58.2 million) of value contained in precious metal inventory at refineries. The Company maintains insurance coverage against the loss of precious metals at the Company's mine sites, and in-transit to refineries. Risk is transferred to the refineries upon delivery.

The Company maintains trading facilities with several banks and bullion dealers for the purposes of transacting the Company's trading activities. None of these facilities are subject to margin arrangements. The Company's trading activities can expose the Company to the credit risk of its counterparties to the extent that the trading positions have a positive mark-to-market value. However, the Company minimizes this risk by ensuring there is no excessive concentration of credit risk with any single counterparty, by active credit management and monitoring.

Refined silver and gold are sold in the spot market to various bullion traders and banks. Credit risk may arise from this activity if the Company is not paid for metal at the time it is delivered, as required by spot sale contracts.

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 December 31, 2020, the Company had made $8.2 million (2019 - $3.4 million) of supplier advances, which are reflected in "Trade and other receivables" on the Company's consolidated statement of financial position.

Management constantly monitors and assesses the credit risk resulting from its refining arrangements, concentrate sales and commodity contracts with its refiners, trading counterparties and customers. Furthermore, management carefully considers credit risk when allocating prospective sales and refining business to counterparties. In making allocation decisions, management attempts to avoid unacceptable concentration of credit risk to any single counterparty.

At December 31, 2020, the Company had a provision recorded for expected credit losses in the amount of $4.7 million (2019 - $4.7 million) which relates to amounts owning from Republic Metals, one of the refineries of doré, for deliveries that occurred in 2018.

Cash and cash equivalents, trade accounts receivable and other receivables that represent the maximum credit risk to the Company consist of the following:

	December 31, 2020	December 31, 2019
Cash and cash equivalents	**$ 167,113**	$ 120,564
Trade accounts receivable [1]	**35,084**	66,230
Supplier advances	**8,186**	3,391
Royalty receivable [1]	**—**	121
Employee loans [1]	**552**	392

(1) Included in Trade and other receivables.

The Company invests its cash and cash equivalents, which also has credit risk, with the objective of maintaining safety of principal and providing adequate liquidity to meet all current payment obligations.

ii) Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they come due. The Company manages its liquidity risk by continuously monitoring forecasted and actual cash flows. The Company has in place a rigorous planning and budgeting process to help determine the funds required to support the Company's normal operating requirements on an ongoing basis and its expansion plans. The Company strives to maintain sufficient liquidity to meet its short-term business requirements, taking into account its anticipated cash flows from operations, its holdings of cash and short-term investments, and its committed loan facilities.

In the normal course of business, the Company enters into contracts that give rise to commitments for future minimum payments. The following table summarizes the remaining contractual maturities of the Company's financial and non-financial liabilities, shown in contractual undiscounted cash flow:

	Payments due by period 2020				
	Within 1 year	2 - 3 years	4- 5 years	After 5 years	Total
Financial liabilities					
Accounts payable and accrued liabilities other than:	$ 272,266	$ —	$ —	$ —	$ 272,266
Severance accrual	2,935	3,711	1,120	76	7,842
Employee compensation	6,737	—	—	—	6,737
Total accounts payable and accrued liabilities	281,938	3,711	1,120	76	286,845
Income taxes payable	54,556	—	—	—	54,556
Loss on commodity contracts	367	—	—	—	367
Debt					
Interest & Standby Fees	2,110	2,294	—	—	4,404
Provisions[1][2]	3,648	3,109	85	1	6,843
Future employee compensation	4,396	11,468	—	—	15,864
Total contractual obligations[2]	**$ 347,015**	**$ 20,582**	**$ 1,205**	**$ 77**	**$ 368,879**

	Payments due by period 2019				
	Within 1 year	2 - 3 years	4- 5 years	After 5 years	Total
Financial liabilities					
Accounts payable and accrued liabilities other than:	$ 221,488	$ —	$ —	$ —	$ 221,488
Severance accrual	994	5,967	772	109	7,842
Employee compensation	2,848	—	—	—	2,848
Total accounts payable and accrued liabilities	225,330	5,967	772	109	232,178
Income taxes payable	24,770	—	—	—	24,770
Debt					
Credit facility	—	—	275,000	—	275,000
Interest & Standby Fees	12,952	27,040	—	—	39,992
Provisions[1][2]	3,979	633	1,350	967	6,929
Future employee compensation	1,444	8,711	—	—	10,155
Total contractual obligations[2]	**$ 268,475**	**$ 42,351**	**$ 277,122**	**$ 1,076**	**$ 589,024**

(1) Total litigation provision (Note 17).
(2) Amounts above do not include payments related to the Company's anticipated closure and decommissioning obligation (current $8.4 million, long-term $226.7 million) discussed in Note 17 (2019 - current $8.4 million, long-term $185.1 million), the deferred credit arising from the Aquiline acquisition ($20.8 million) (2019 - $20.8 million) discussed in Note 20, and deferred tax liabilities of $175.3 million (2019 - $176.8 million).

The increase in the Company's exposure to liquidity risk during the year ended December 31, 2019 were due primarily to the draw on the credit facility to finance the Tahoe Acquisition (Note 8) and the obligations acquired.

iii) Market Risk

1. Currency Risk

The Company reports its financial statements in USD; however, the Company operates in jurisdictions that utilize other currencies. As a consequence, the financial results of the Company's operations as reported in USD are subject to changes in the value of the USD relative to local currencies. Since the Company's sales are denominated in USD and a portion of the Company's operating costs and capital spending are in local currencies, the Company is negatively impacted by strengthening local currencies relative to the USD and positively impacted by the inverse.

As at December 31, 2020, Pan American had outstanding positions on $51.0 million in foreign currency exposure of Mexican peso ("MXN") purchases, $45.6 million of Peruvian sol ("PEN") purchases. The MXN purchases had weighted averaged USD put and call exchange rates of 21.29 and 30.43, respectively, expiring between January 2021 and December 2021. The PEN positions had weighted average USD put and call exchange rates of 3.50 and 3.67, respectively, expiring between January 2021 and December 2021.

For the year ended December 31, 2020, the Company recorded gains of $1.6 million (2019 - gains of $1.0 million), losses of $2.2 million (2019 - gains of $0.7 million), and losses of $0.6 million (2019 - gains of $0.3 million) on MXN, PEN, and CAD derivative contracts, respectively.

The Company's net earnings are affected by the revaluation of its monetary assets and monetary liabilities at each balance sheet date. The Company has reviewed its monetary assets and monetary liabilities and is exposed to foreign exchange risk through financial assets and liabilities and deferred income tax liabilities denominated in currencies other than USD, as shown in the table below. The Company estimates that a 10% change in the exchange rate of the foreign currencies in which its December 31, 2020 non-USD net monetary liabilities were denominated would result in an income before taxes change of about $9.2 million (2019 - $6.9 million).

The Company is exposed to currency risk through the following financial assets and liabilities, and deferred income tax assets and liabilities denominated in foreign currencies:

At December 31, 2020	Cash and short-term investments	Other current and non-current assets	Income taxes receivable (payable), current and non-current	Accounts payable and accrued liabilities and non-current liabilities	Deferred tax assets and liabilities
Canadian Dollar	$ 117,956	$ 4,952	$ 3,537	$ (24,310)	$ 40,600
Mexican Peso	1,020	29,895	3,657	(45,050)	(72,552)
Argentine Peso	7,175	16,878	1,513	(14,543)	—
Bolivian Boliviano	571	218	(2,443)	(19,402)	(7,700)
European Euro	3	—	—	—	—
Peruvian Sol	13,917	26,257	(38,507)	(54,672)	(77,810)
Guatemala quetzal	453	677	—	(4,559)	1
	$ 141,095	$ 78,877	$ (32,243)	$ (162,536)	$ (117,461)

At December 31, 2019	Cash and short-term investments	Other current and non-current assets	Income taxes receivable (payable), current and non-current [1]	Accounts payable and accrued liabilities and non-current liabilities	Deferred tax assets and liabilities
Canadian Dollar	$ 123,391	$ 3,897	$ (769)	$ (23,387)	$ 23,640
Mexican Peso	5,222	14,215	6,902	(64,589)	(73,938)
Argentine Peso	3,652	18,511	1,400	(16,143)	—
Bolivian Boliviano	3,447	221	(3,135)	(8,749)	(9,925)
European Euro	3	—	—	—	—
Peruvian Sol	2,406	55,851	(12,147)	(39,884)	(80,138)
Guatemala quetzal	353	1,482	—	(669)	—
	$ 138,474	$ 94,177	$ (7,749)	$ (153,421)	$ (140,361)

(1) Recast comparative to provide consistency with current presentation.

2. Interest Rate Risk

Interest rate risk is the risk that the fair values and future cash flows of the Company will fluctuate because of changes in market interest rates. The average interest rate earned by the Company during the year ended December 31, 2020 on its cash and short-term investments was 0.9% (2019 - 0.6%). A 10% increase or decrease in the interest earned from financial institutions on cash and short-term investments would result in a $0.1 million increase or decrease in the Company's before tax earnings (2019 – $0.1 million).

At December 31, 2020, the Company did not have any amounts drawn (2019 - $275.0 million) on its secured revolving credit facility (the "Credit Facility"). The amounts drawn in 2020 had an average interest rate of 2.6% (2019 - 4.3%).

In July and September 2020, the Company borrowed $2.8 million and $2.8 million, respectively, in loans under a Peruvian government COVID-19 pandemic program ("Loans"). During the year ended December 31, 2020, the Company repaid all Loans outstanding. These loans had previously incurred an average interest rate of 1.3%.

At December 31, 2020, the Company has $33.6 million in lease obligations (2019 - $41.2 million), that are subject to an annualized interest rate of 9.3% (2019 - 9.7%).

3. Price Risk

Metal price risk is the risk that changes in metal prices will affect the Company's income or the value of its related financial instruments. The Company derives its revenue from the sale of silver, gold, lead, copper, and zinc. The Company's sales are directly dependent on metal prices that have shown significant volatility and are beyond the Company's control. Consistent with the Company's mission to provide equity investors with exposure to changes in precious metal prices, the Company's current policy is to not hedge the price of precious metal.

During the year ended December 31, 2020, the Company entered into diesel swap contracts designated to fix or limit the Company's exposure to higher fuel prices (the "Diesel Fuel Swaps"). The Company did not enter into any Diesel Fuel Swaps in 2019. The Company recorded gains of $4.7 million on the Diesel Fuel Swaps in the year ended December 31, 2020.

A 10% increase in all metal prices as at December 31, 2020, would result in an increase of approximately $138 million (2019 – $139.1 million) in the Company's revenues. A 10% decrease in all metal prices as at the same period would result in a decrease of approximately $138.2 million (2019 - $140.1 million) in the Company's revenues. The Company also enters into provisional concentrate contracts to sell the zinc, lead and copper concentrates. We have provisionally priced sales for which price finalization, referenced to the relevant zinc, lead, copper and silver index, is outstanding at the balance sheet date. A 10% increase in metals prices on open positions of zinc, lead, copper and silver for provisional concentrate contracts for the year ended December 31, 2020 would result in an increase of approximately $4.6 million (2019 - $6.4 million) in the Company's before tax earnings, which would be reflected in 2020 results. A 10% decrease in metal prices for the same period would result in a decrease of approximately $4.6 million (2019 - $6.4 million) in the Company's before tax earnings.

The Company mitigates the price risk associated with its base metal production by committing some of its forecasted base metal production from time to time under forward sales and option contracts. The Board of Directors continually assesses the Company's strategy towards its base metal exposure, depending on market conditions. At December 31, 2020, the Company had no outstanding contracts to sell base metals production.

10. SHORT-TERM INVESTMENTS

	December 31, 2020			December 31, 2019		
	Fair Value	**Cost**	**Accumulated unrealized holding gains**	Fair Value	Cost	Accumulated unrealized holding gains
Short-term investments	**$ 111,946**	**$ 20,419**	**$ 91,527**	$ 117,776	$ 36,826	$ 80,950

11. INVENTORIES

Inventories consist of:

	December 31, 2020	December 31, 2019
Concentrate inventory	**$ 19,104**	$ 17,433
Stockpile ore [1]	**30,063**	27,708
Heap leach inventory and in process [2]	**219,334**	169,751
Doré and finished inventory [3]	**77,489**	67,820
Materials and supplies	**84,556**	88,004
Total inventories	**$ 430,546**	$ 370,716
Less: current portion of inventories	**$ (406,191)**	$ (346,507)
Non-current portion of inventories [4]	**$ 24,355**	$ 24,209

(1) Includes an impairment charge of $2.0 million to reduce the cost basis of inventory to NRV at Manantial Espejo mine (2019 – $5.0 million at Manantial Espejo and Dolores mines).
(2) Includes an impairment charge of $26.2 million to reduce the cost basis of inventory to NRV at Manantial Espejo and Dolores mines (2019 - $39.3 million at Manantial Espejo and Dolores mines).
(3) Includes an impairment charge of $2.9 million to reduce the cost basis of inventory to NRV at Dolores mine at December 31, 2020. (2019 - $2.9 million at Manantial Espejo and Dolores mines).
(4) Inventories at Escobal mine, which include $17.1 million (2019 - $16.9 million) in supplies with the remainder attributable to metals, have been classified as non-current pending the restart of operations.

The costs of inventories recognized as expense for the year ended December 31, 2020 amounted to $978.6 million (2019 – $1.1 billion), of which $696.7 million (2019 – $841.3 million) and $254.5 million (2019 – $253.5 million) were included in production costs and depreciation and depletion in the Consolidated Income Statements, respectively.

During the year ended December 31, 2020 a $16.2 million NRV recovery (2019 - $0.4 million NRV recovery) was recognized, primarily driven by increased expected precious metal prices, and included in production costs (Note 22). Inventories held at NRV amounted to $215.5 million (2019 - $151.5 million).

A portion of the stockpile ore amounting to $2.7 million (2019 - $1.2 million) and a portion of the heap leach inventory amounting to $147.0 million (2019 - $74.5 million) are expected to be recovered or settled after more than twelve months.

12. MINERAL PROPERTIES, PLANT AND EQUIPMENT

Acquisition costs of investment and non-producing properties together with costs directly related to mine development expenditures are capitalized. Exploration expenditures on investment and non-producing properties are charged to expense in the period they are incurred.

Capitalization of evaluation expenditures commences when there is a high degree of confidence in the project's viability and hence it is probable that future economic benefits will flow to the Company. Evaluation expenditures, other than that acquired from the purchase of another mining company, are carried forward as an asset provided that such costs are expected to be recovered in full through successful development and exploration of the area of interest, or alternatively by its sale. Evaluation expenditures include delineation drilling, metallurgical evaluations, and geotechnical evaluations amongst others.

Mineral properties, plant and equipment consist of:

	Mining Properties				
	Depletable	Non-depletable			
	Reserves and Resources	Reserves and Resources	Exploration and Evaluation	Plant and Equipment	Total
Carrying value					
As at January 1, 2020					
Net of accumulated depreciation	$ 950,752	$ 331,549	$ 450,926	$ 771,674	$ 2,504,901
Additions	142,463	17,159	631	30,971	191,224
Disposals	(235)	(38)	(14,315)	(382)	(14,970)
Depreciation and amortization[(1)]	(125,277)	(1,059)	—	(146,108)	(272,444)
Depreciation charge captured in inventory	(29,618)	—	—	—	(29,618)
Transfers	22,747	(40,531)	(5,592)	23,376	—
Closure and decommissioning – changes in estimate (Note 17)	35,913				35,913
As at December 31, 2020	**$ 996,745**	**$ 307,080**	**$ 431,650**	**$ 679,531**	**$ 2,415,006**
Cost as at December 31, 2020	$ 2,824,861	$ 321,639	$ 844,487	$ 1,461,678	$ 5,452,665
Accumulated depreciation and impairments	**(1,828,116)**	**(14,559)**	**(412,837)**	**(782,147)**	**(3,037,659)**
Carrying value – December 31, 2020	**$ 996,745**	**$ 307,080**	**$ 431,650**	**$ 679,531**	**$ 2,415,006**

(1) Includes $18.0 million of depreciation and amortization included in mine care and maintenance for the year ended December 31, 2020.

	Mining Properties				
	Depletable	Non-depletable			
	Reserves and Resources	Reserves and Resources	Exploration and Evaluation	Plant and Equipment	Total
Carrying value					
As at January 1, 2019					
Net of accumulated depreciation	$ 678,489	$ 73,375	$ 249,231	$ 299,907	$ 1,301,002
Additions	152,033	42,487	549	68,664	263,733
Tahoe acquisition (Note 8)	314,604	274,817	194,900	455,080	1,239,401
Disposals	(2,461)	(13)	—	(2,010)	(4,484)
Depreciation and amortization	(113,067)	—	—	(140,386)	(253,453)
Depreciation charge captured in inventory	(33,810)	—	—	—	(33,810)
Impairment charge	—	(33,245)	(6,805)	—	(40,050)
Transfers	(77,598)	(25,872)	13,051	90,419	—
Closure and decommissioning – changes in estimate (Note 17)	32,562	—	—	—	32,562
As at December 31, 2019	**$ 950,752**	**$ 331,549**	**$ 450,926**	**$ 771,674**	**$ 2,504,901**
Cost as at December 31, 2019	$ 2,429,815	$ 398,485	$ 876,859	$ 1,476,170	$ 5,181,329
Accumulated depreciation and impairments	**(1,479,063)**	**(66,936)**	**(425,933)**	**(704,496)**	**(2,676,428)**
Carrying value – December 31, 2019	**$ 950,752**	**$ 331,549**	**$ 450,926**	**$ 771,674**	**$ 2,504,901**

	December 31, 2020			December 31, 2019		
	Cost	Accumulated Depreciation and Impairment	Carrying Value	Cost	Accumulated Depreciation and Impairment	Carrying Value
Huaron, Peru	$ 218,270	$ (135,932)	$ 82,338	$ 215,109	$ (126,301)	$ 88,808
Morococha, Peru	267,705	(175,844)	91,861	258,862	(164,501)	94,361
Shahuindo, Peru	546,643	(86,855)	459,788	498,960	(39,668)	459,292
La Arena, Peru	170,401	(66,313)	104,088	112,014	(22,853)	89,161
Alamo Dorado, Mexico	71,725	(71,725)	—	71,724	(71,724)	—
La Colorada, Mexico	308,378	(164,443)	143,935	305,357	(143,232)	162,125
Dolores, Mexico [1]	1,709,105	(1,228,492)	480,613	1,608,334	(1,091,862)	516,472
Manantial Espejo, Argentina [2][4]	513,626	(485,036)	28,590	371,677	(367,901)	3,776
San Vicente, Bolivia	144,790	(101,408)	43,382	143,251	(95,360)	47,891
Timmins, Canada	307,243	(75,902)	231,341	292,986	(42,672)	250,314
Other	28,653	(18,313)	10,340	27,711	(17,485)	10,226
Total	$ 4,286,539	$ (2,610,263)	$ 1,676,276	$ 3,905,985	$ (2,183,559)	$ 1,722,426
Land and Non-Producing Properties:						
Land	$ 6,758	$ (1,254)	$ 5,504	$ 5,528	$ (1,267)	$ 4,261
Navidad, Argentina [3]	566,577	(376,101)	190,476	566,577	(376,101)	190,476
Escobal, Guatemala	259,198	(1,072)	258,126	249,353	—	249,353
Timmins, Canada	71,099	—	71,099	87,747	—	87,747
Shahuindo, Peru	6,079	—	6,079	15,586	—	15,586
La Arena, Peru	117,000	—	117,000	117,000	—	117,000
Minefinders, Mexico	80,239	(36,975)	43,264	83,079	(36,975)	46,104
La Colorada, Mexico	21,589	—	21,589	15,544	—	15,544
Morococha, Peru	5,054	—	5,054	7,213	—	7,213
Projects, Argentina [4]	—	—	—	95,851	(66,859)	28,992
Other	32,533	(11,994)	20,539	31,866	(11,667)	20,199
Total non-producing properties	$ 1,166,126	$ (427,396)	$ 738,730	$ 1,275,344	$ (492,869)	$ 782,475
Total mineral properties, plant and equipment	$ 5,452,665	$ (3,037,659)	$ 2,415,006	$ 5,181,329	$ (2,676,428)	$ 2,504,901

(1) Includes previously recorded impairment charges of $748.9 million at December 31, 2020 (2019 - $748.9 million).
(2) Includes previously recorded impairment charges of $173.3 million at December 31, 2020 (2019 - $173.3 million).
(3) Includes previously recorded impairment charges of $376.1 million at December 31, 2020 (2019 - $376.1 million).
(4) Comprised of the Joaquin and COSE projects which entered commercial production and were transferred to Manantial Espejo during the year ended December 31, 2020.

13. IMPAIRMENT OF NON-CURRENT ASSETS

Non-current assets are tested for impairment, or reversal of previous impairment charges, when events or changes in circumstance indicate that the carrying amount may not be recoverable, or previous impairment charges against assets are recoverable. The Company performs an impairment test for goodwill at each financial year end and when events or changes in circumstances indicate that the related carrying value may not be recoverable. The Company considers its internal discounted cash flow economic models as a proxy for the calculation of FVLCTS, given a willing market participant would use such models in establishing a value for the properties. The Company considers impairment, or if previous impairment charges should be reversed, at the CGU level. The Company's CGUs are its mine sites, represented by its principal producing mining properties and significant development projects. The CGU carrying amount for purposes of this test includes the carrying value of the mineral properties plant and equipment and goodwill less deferred tax liabilities and closure and decommissioning liabilities related to each CGU.

The Company's key assumptions for determining the recoverable amounts of its various CGUs, for the purpose of testing for impairment or impairment reversals, include the most current operating and capital costs information and risk adjusted project specific discount rates. The Company uses an average of analysts' consensus prices for the first four years of its economic modeling, and long-term reserve prices for the remainder of each asset's life. The prices used can be found in the key assumptions and sensitivity section below.

Impairment and Reversals

Based on the Company's assessment with respect to possible indicators of either impairment or reversal of previous impairments to its mineral properties, including the impact of COVID-19 on our operations and the prevailing market metals prices, the Company concluded that as of December 31, 2020 no impairment or impairment reversal indicators were identified.

As of December 31, 2019, there were indicators of impairment at Manantial Espejo which required the Company to record impairment charges of $40.1 million.

2019 Impairment - Manantial Espejo

A recent increase in Argentina export taxes, announced in January 2020, combined with the delayed commencement of production from the COSE and Joaquin deposits, and the deteriorated Argentina economy led management to conclude that there was an indication of impairment to its Argentine operating assets, namely the Manantial Espejo mine, and the COSE and Joaquin projects. As at December 31, 2019, the Company determined that the combined CGU carrying amount of the Manantial Espejo mine and the Joaquin and COSE development projects, including mineral properties, plant and equipment, and stockpile inventories, net of associated closure and decommissioning liabilities of $63.6 million was higher than the combined estimated recoverable amount of $23.5 million when using a 9.75% risk adjusted discount rate. Based on this assessment, the Company recorded an impairment charge related to the Manantial Espejo mineral property, and the COSE and Joaquin projects, of $40.1 million ($40.1 million, net of tax).

Key assumptions and sensitivity

The metal prices used to calculate the recoverable amounts at December 31, 2019 are based on analyst consensus prices and the Company's long term reserve prices, and are summarized in the following table.

Metal prices used at December 31, 2019:

Metal Prices	2020-2023 average
Silver price - $/oz.	$17.94
Gold price - $/oz.	$1,474

In 2019, the discount rates used to present value the Company's life of mine cash flows were derived from the Company's weighted average cost of capital, which was calculated as 3.7%, with rates applied to the various mines and projects ranging from 4.0% to 12.3%, depending on the Company's assessment of country risk, project risk, and other potential risks specific to each CGU.

The key assumptions in determining the recoverable value of the Company's mineral properties are individual metal prices, operating and capital costs, foreign exchange rates and discount rates. At December 31, 2019, the Company performed a sensitivity analysis on all key assumptions that assumed a 10% adverse change to each individual assumption while holding the other assumptions constant.

At December 31, 2019, an adverse 10% movement in any of the major assumptions in isolation did not cause the recoverable amount to be below the CGU carrying value for any of Shahuindo, La Arena, Timmins, La Colorada, San Vicente, Huaron, or Morococha mines. For the Dolores mine, Manantial Espejo mine and Navidad project, which previously had their carrying values adjusted to FVLCTS through impairment charges, a 10% adverse change in any one key assumption would reduce the recoverable amount below the carrying amount.

14. INVESTMENT IN ASSOCIATES

The following table shows a continuity of the Company's investment in Maverix and its investment in other associates:

	2020	2019
Balance of investment, December 31, 2019	$ 84,319	$ 69,116
Disposal of investment in associate	(23,467)	—
Adjustment for change in ownership interest	1,489	(42)
Dividends	(1,310)	—
Dilution gains	9,160	13,480
Income from associate	1,369	1,765
Blance of investment, December 31, 2020	$ 71,560	$ 84,319

(1) Includes adjustment for change in ownership.

Investment in Maverix:

On June 5, 2020, the Company completed a Secondary Offering pursuant to an underwriting agreement dated May 29, 2020 between Maverix, the Company, and a syndicate of underwriters (the "Secondary Offering"). As part of the Secondary Offering, the Company sold 10,350,000 common shares of Maverix at a price of $4.40 per common share for aggregate gross proceeds of $45.5 million and paid underwriting fees equal to 4% of the gross proceeds equal to $1.9 million.

Concurrent with the Secondary Offering, the Company acquired ownership or control of an additional 8,250,000 common shares of Maverix through the exercise of its remaining 8,250,000 common share purchase warrants in Maverix (the "Warrants"). 5,000,000 Warrants had an exercise price of $1.56 and 3,250,000 Warrants had an exercise price of $2.408. Maverix received gross proceeds of approximately $15.6 million. As a result, the Company de-recognized the remaining warrant liability representing in substance ownership of Maverix. This warrant liability was $15.0 million as at December 31, 2019.

The Company's share of Maverix income or loss was recorded, based on its 26% interest from January 1, 2020 to June 5, 2020, 18% from June 6, 2020 to October 29, 2020, and 17% from October 30, 2020 to December 31, 2020 (26% for the year ended December 31, 2019), representing the Company's equity interest.

Deferred Revenue:

Deferred revenue relates to precious metal streams whereby the Company will sell 100% of the future gold production from La Colorada and 5% of the future gold production from La Bolsa, which is in the exploration stage, to Maverix for $650 and $450 per ounce, respectively (the "Streams").

The deferred revenue related to the Streams will be recognized as revenue by Pan American as the gold ounces are delivered to Maverix. As at December 31, 2020, the deferred revenue liability was $13.3 million (December 31, 2019 - $12.5 million).

Income Statement Impacts:

The Company recorded a gain of $23.5 million during the year ended December 31, 2020 as a result of the disposition of shares pursuant to the Secondary Offering.

The Company recognized $9.2 million in dilution gains during the year ended December 31, 2020 (2019 - $13.5 million). Dilution gains are recorded in share of income from associate and dilution gain.

For the year ended December 31, 2020, the Company also recognized $1.4 million share of income from associate (2019 - $1.8 million), which represents the Company's proportionate share of Maverix's earnings during the periods.

15. GOODWILL AND OTHER ASSETS

Goodwill and other assets consist of:

	December 31, 2020	December 31, 2019
Goodwill	$ **2,775**	$ 3,057
Other assets	**1,396**	1,930
	$ **4,171**	$ 4,987

16. ACCOUNTS PAYABLE

Accounts payable and accrued liabilities consist of:

	December 31, 2020	December 31, 2019
Trade accounts payable[1]	$ **80,280**	$ 66,924
Royalties payable	**18,166**	16,108
Other accounts payable and trade related accruals	**94,600**	59,295
Payroll and related benefits	**53,780**	47,221
Severance accruals	**2,935**	994
Refundable tax payable	**11,208**	9,844
Other taxes payable	**20,969**	24,944
	$ **281,938**	$ 225,330

(1) No interest is charged on the trade accounts payable ranging from 30 to 60 days from the invoice date. The Company has policies in place to ensure that all payables are paid within the credit terms.

17. PROVISIONS

	Closure and Decommissioning	Litigation	Total
December 31, 2018	$ 70,587	$ 4,568	$ 75,155
Revisions in estimates and obligations incurred	32,909	—	32,909
Acquired from Tahoe (Note 8)	77,320	732	78,052
Charged (credited) to earnings:			
-new provisions	—	2,551	2,551
-change in estimate	—	(252)	(252)
-exchange gains on provisions	—	(265)	(265)
Charged in the year	—	(405)	(405)
Reclamation expenditures	(2,264)	—	(2,264)
Accretion expense (Note 24)	9,903	—	9,903
December 31, 2019	$ 188,455	$ 6,929	$ 195,384
Revisions in estimates and obligations incurred	**40,857**	**—**	**40,857**
Charged (credited) to earnings:			
-new provisions	**—**	**2,402**	**2,402**
-change in estimate	**—**	**(1,754)**	**(1,754)**
-exchange gains on provisions	**—**	**(569)**	**(569)**
Charged in the year	**—**	**(165)**	**(165)**
Reclamation expenditures	**(2,462)**	**—**	**(2,462)**
Accretion expense (Note 24)	**8,260**	**—**	**8,260**
December 31, 2020	**$ 235,110**	**$ 6,843**	**$ 241,953**

Maturity analysis of total provisions:	December 31, 2020	December 31, 2019
Current	**$ 12,066**	$ 7,372
Non-Current	**229,887**	188,012
	$ 241,953	$ 195,384

Closure and Decommissioning Cost Provision

The total inflated and undiscounted amount of estimated cash flows required to settle the Company's estimated future closure and decommissioning costs is $330.6 million (2019 - $290.4 million), which has been inflated using inflation rates of between 0% and 4% (2019 – between 0% and 5%). The total provision for closure and decommissioning cost is calculated using discount rates of between 0% and 8% (2019 - between 2% and 9%). Revisions made to the reclamation obligations in 2020 were primarily a result of increased site disturbance at the mines as well as revisions to the estimate based on periodic reviews of closure plans, actual expenditures incurred and concurrent closure activities completed. These obligations will be funded from operating cash flows, reclamation deposits and cash on hand.

The accretion expense charged to 2020 earnings as finance expense was $8.3 million (2019 - $9.9 million). Reclamation expenditures paid during the current year were $2.5 million (2019 - $2.3 million).

Litigation Provision

The litigation provision, as at December 31, 2020 and 2019, consists primarily of amounts accrued for labour claims at several of the Company's mine operations. The balance of $6.8 million at December 31, 2020 (2019 - $6.9 million) represents the Company's best estimate for all known and anticipated future obligations related to the above claims. The amount and timing of any expected payments are uncertain as their determination is outside the control of the Company.

18. LEASES

a. ROU Assets

The following table summarizes changes in ROU Assets for the years ended December 31, 2020 and 2019, which include land, buildings, vehicles, and machinery and equipment which have been recorded in mineral properties, plant and equipment on the Consolidated Statements of Financial Position:

	December 31, 2020		December 31, 2019
Cost		**Cost**	
Balance, January 1, 2020	**$ 60,779**	Balance, January 1, 2019	$ 34,983
Additions	**5,534**	Additions [1]	42,415
Transfer out	**(10,458)**	Transfer out	(16,619)
Balance, December 31, 2020	**55,855**	Balance, December 31, 2019	60,779
Accumulated Depreciation		**Accumulated Depreciation**	
Balance, January 1, 2020	**(17,418)**	Balance, January 1, 2019	(4,780)
Amortization	**(14,244)**	Amortization [2]	(20,103)
Transfer out	**9,350**	Transfer out	7,465
Balance, December 31, 2020	**(22,312)**	Balance, December 31, 2019	(17,418)
Carrying Amounts		**Carrying Amounts**	
At January 1, 2020	**43,361**	At January 1, 2019	30,203
At December 31, 2020	**$ 33,543**	At December 31, 2019	$ 43,361

(1) Includes $8.5 million in assets acquired from Tahoe Acquisition (Note 8).
(2) Includes an impairment charge of $2.4 million (Note 13) related to the Manantial Espejo mineral property, and the COSE and Joaquin projects.

b. Lease obligations

The following table presents a reconciliation of the Company's undiscounted cash flows at December 31, 2020 and December 31, 2019 to their present value for the Company's lease obligations:

	December 31, 2020	December 31, 2019
Within one year	**$ 13,505**	$ 16,221
Between one and five years	**17,902**	23,099
Beyond five years	**19,255**	21,675
Total undiscounted lease obligations	**50,662**	60,995
Less future interest charges	**(17,097)**	(19,787)
Total discounted lease obligations	**$ 33,565**	$ 41,208
Less: current portion of lease obligations	**(12,829)**	(14,198)
Non-current portion of lease obligations	**$ 20,736**	$ 27,010

19. DEBT

	December 31, 2020	December 31, 2019
Credit Facility	**$ —**	$ 275,000

The Company's four-year, $300.0 million secured revolving credit facility, which was due to mature on April 15, 2020, was increased to $400.0 million on February 1, 2019, and increased to $500.0 million on February 22, 2019, with maturity on February 1, 2023, and resulted in additional upfront costs of $2.0 million. These amendments were made as part of the Tahoe Acquisition.

The upfront costs have been recorded as an asset under the classification "Prepaid expenses and other current assets" and are being amortized over the life of the Credit Facility. The Credit Facility can be drawn down at any

time to finance the Company's working capital requirements, acquisitions, investments and for general corporate purposes.

The financial covenants required the Company to maintain a tangible net worth (exclusive of any prospective write-downs of certain assets) of greater than $1,036.4 million plus 50% of the positive net income from and including the fiscal quarter ended March 31, 2016. As part of the amendment, after March 31, 2019, the financial covenants require the Company to maintain a minimum tangible net worth (exclusive of any prospective write-downs of certain assets) of greater than 70% of its tangible net worth as of March 31, 2019 plus 50% of positive net income from and including the fiscal quarter ended June 30, 2019. In addition, the financial covenants continue to include the requirement for the Company to maintain: (i) a leverage ratio less than or equal to 3.5:1; and (ii) an interest coverage ratio more than or equal to 3.0:1. As of December 31, 2020, the Company was in compliance with all covenants required by the Credit Facility.

At Pan American's option, amounts can be drawn under the revolving 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 revolving facility are subject to a stand-by fee of 0.4219% to 0.6188% per annum, dependent on the Company's leverage ratio. During the year ended December 31, 2020, the Company drew down $80 million, as a precautionary measure to increase liquidity considering the uncertain impacts of the COVID-19 pandemic, and repaid $355 million of the Credit Facility under LIBOR-based interest rates (2019 - The Company drew down $335 million, to fund, in part, the cash purchase price for the Tahoe Acquisition and to repay, in full, and cancel Tahoe's $125 million second amended and restated revolving facility. The Company repaid a further $60 million from the Credit Facility).

During the year ended December 31, 2020, the average interest rate incurred by the Company on the Credit Facility was 2.6% (2019 - 4.3%). During the year ended December 31, 2020, the Company incurred $2.2 million (2019 - $0.9 million) in standby charges on undrawn amounts and $5.0 million (2019 - $11.6 million) in interest on drawn amounts under this Facility.

In July and September 2020, the Company borrowed $2.8 million and $2.8 million, respectively, in Loans under a Peruvian government COVID-19 pandemic program. These loans incur an average interest rate of 1.3% which is deferred and payable after July and September 2021, respectively. At December 31, 2020, the Company had $0.0 million of these Loans outstanding.

20. OTHER LONG TERM LIABILITIES

Other long term liabilities consist of:

	December 31, 2020	December 31, 2019
Deferred credit[1]	**$ 20,788**	$ 20,788
Other income tax payable	**54**	118
Severance accruals	**6,231**	6,848
	$ 27,073	$ 27,754

(1) As part of the 2009 Aquiline transaction the Company issued a replacement convertible debenture that allowed the holder to convert the debenture into either 363,854 Common Shares or a Silver Stream contract related to certain production from the Navidad project. Regarding the replacement convertible debenture, it was concluded that the deferred credit presentation was the most appropriate and best representation of the economics underlying the contract as of the date the Company assumed the obligation as part of the Aquiline acquisition. Subsequent to the acquisition, the counterparty to the replacement debenture selected the Silver Stream alternative. The final contract for the alternative is being discussed and pending the final resolution of this discussion, the Company continues to classify the fair value calculated at the acquisition of this alternative as a deferred credit.

21. SHARE CAPITAL AND STOCK-BASED COMPENSATION

a. Stock options and Common Shares issued as compensation ("Compensation Shares")

For the year ended December 31, 2020, the total share-based compensation expense relating to stock options and Compensation Shares was $3.0 million (2019 - $4.4 million) and is presented as a component of general and administrative expense.

i. Stock options

During the year ended December 31, 2020, the Company granted 7,605 (2019 – 22,788 stock options) stock options.

During the year ended December 31, 2020, the Company issued 329,379 common shares in connection with the exercise of 329,711 options (2019 – 244,299 common shares and options) in connection with the exercise of stock options.

ii. Compensation shares

During the year ended December 31, 2020, 9,883 common shares were issued to Directors in lieu of Directors fees of $0.2 million (2019 - 22,335 shares in lieu of fees of $0.2 million).

The following table summarizes changes in stock options for the years ended December 31:

	Stock Options	
	Shares	Weighted Average Exercise Price CAD$
As at December 31, 2018	**698,387**	**$ 15.00**
Granted	22,788	$ 26.54
Granted pursuant to the Tahoe Acquisition (Note 8)	835,874	$ 48.47
Exercised	(244,299)	$ 15.10
Expired	(141,604)	$ 58.45
Forfeited	(27,798)	$ 34.00
As at December 31, 2019	**1,143,348**	**$ 33.84**
Granted	7,605	39.48
Exercised	(329,711)	$ 19.23
Expired	(482,438)	53.41
Forfeited	(21,387)	$ 43.08
As at December 31, 2020	**317,417**	**$ 18.78**

The following table summarizes information about the Company's stock options outstanding at December 31, 2020:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices CAD$	Number Outstanding as at December 31, 2020	Weighted Average Remaining Contractual Life (months)	Weighted Average Exercise Price CAD$	Number Outstanding as at December 31, 2020	Weighted Average Exercise Price CAD$
$9.76 - $23.61	**269,727**	41.49	$ 15.75	**269,727**	$ 15.75
$23.62 - $35.21	**22,788**	71.16	$ 26.54	**11,396**	$ 26.54
$35.22 - $46.53	**22,019**	37.60	$ 41.68	**14,414**	$ 42.85
$46.54 - $65.71	**2,883**	10.09	$ 65.71	**2,883**	$ 65.71
	317,417	43.07	$ 18.78	**298,420**	$ 17.95

The following assumptions were used in the Black-Scholes option pricing model in determining the fair value of options granted during the years ended December 31:

	2020	2019
Expected life	**4.0**	4.0
Expected volatility	**37.9 %**	37.1 %
Expected dividend yield	**1.1 %**	1.0 %
Risk-free interest rate	**0.8 %**	2.0 %
Weighted average exercise price (CAD$)	**$ 39.45**	$ 26.54
Weighted average fair value (CAD$)	**$ 15.80**	$ 8.34

b. PSUs

PSUs are notional share units that mirror the market value of the Company's Common Shares. Each vested PSU entitles the participant to a cash payment equal to the value of an underlying share, less applicable taxes, at the end of the term, plus the cash equivalent of any dividends distributed by the Company during the three-year performance period. PSU grants will vest on the date that is three years from the date of grant subject to certain exceptions. Performance results at the end of the performance period relative to predetermined performance criteria and the application of the corresponding performance multiplier determine how many PSUs vest for each participant. The Board of Directors approved the issuance of 62,920 PSUs for 2020 with a share price of CAD $39.51 (2019 - 75,311 PSUs approved at a share price of CAD $24.88). Compensation expense for PSUs was $4.2 million for the year ended December 31, 2020 (2019 - $2.2 million) and is presented as a component of general and administrative expense.

At December 31, 2020, the following PSUs were outstanding:

PSU	Number Outstanding	Fair Value
As at December 31, 2018	**210,409**	**$ 3,091**
Granted	75,311	1,784
Paid out	(38,119)	(903)
Change in value	—	1,924
As at December 31, 2019	**247,601**	**$ 5,896**
Granted	62,920	1,942
Paid out	(54,962)	(2,626)
Forfeited	—	—
Change in value	—	3,658
As at December 31, 2020	**255,559**	**$ 8,870**

c. RSUs

Under the Company's RSU plan, selected employees are granted RSUs where each RSU has a value equivalent to one Pan American common share. At the time of settlement, the Board of Directors has the discretion to settle the RSUs with cash or Common Shares. The RSUs vest in three installments, the first 33.3% vest on the first anniversary date of the grant, the second 33.3% vest on the second anniversary date of the grant, and a further33.3% vest on the third anniversary date of the grant. Additionally, RSU value is adjusted to reflect dividends paid on Common Shares over the vesting period.

Compensation expense for RSUs was $5.0 million for the year ended December 31, 2020 (2019 – $2.5 million) and is presented as a component of general and administrative expense.

At December 31, 2020, the following RSUs were outstanding:

RSU	Number Outstanding	Fair Value
As at December 31, 2018	**328,823**	**$ 3,624**
Granted	146,594	3,891
Paid out	(157,584)	(3,140)
Forfeited	(18,617)	(441)
Change in value	—	3,173
As at December 31, 2019	**299,216**	**$ 7,107**
Granted	261,224	6,302
Paid out	(148,049)	(4,762)
Forfeited	(15,819)	(545)
Change in value	—	5,628
As at December 31, 2020	**396,572**	**$ 13,730**

d. Issued share capital

The Company is authorized to issue 400,000,000 Common Shares without par value.

e. Dividends

The Company declared the following dividends for the years ended December 31, 2020 and 2019:

Declaration Date	Record date	Dividend per common share
February 17, 2021 (1)	March 1, 2021	$ 0.0700
November 4, 2020	November 16, 2020	$ 0.0700
August 5, 2020	August 17, 2020	$ 0.0500
May 6, 2020	May 19, 2020	$ 0.0500
February 19, 2020	March 2, 2020	$ 0.0500
November 6, 2019	November 18, 2019	$ 0.0350
August 7, 2019	August 19, 2019	$ 0.0350
May 8, 2019	May 21, 2019	$ 0.0350
February 20, 2019	March 4, 2019	$ 0.0350

(1) These dividends were declared subsequent to the year end and have not been recognized as distributions to owners during the period presented.

f. CVRs

On February 22, 2019, the Company issued 313,887,490 CVRs as part of the Tahoe Acquisition (Note 8), which were convertible into 15,600,208 common shares following the First Shipment upon the restart of operations at the Escobal mine. As of December 31, 2020, there were 313,883,990 CVRs outstanding which were convertible into 15,600,034 common shares (December 31, 2019 - 313,887,490 CVRs convertible into 15,600,208 common shares).

22. PRODUCTION COSTS

Production costs are comprised of the following:

	2020	2019
Consumption of raw materials and consumables	$ 284,215	$ 311,812
Employee compensation and benefits expense[1]	262,753	271,684
Contractors and outside services	125,242	117,018
Utilities	39,242	41,674
Other expenses	18,198	74,469
Changes in inventories [2][3]	(32,978)	24,640
	$ 696,672	$ 841,297

(1) Employee compensation and benefits expense is comprised of:

	2020	2019
Wages, salaries and bonuses	$ 317,668	$ 288,015
Share-based compensation	3,024	4,448
Total employee compensation and benefit expenses	320,692	292,463
Less: Expensed within Care and Maintenance expenses	(37,695)	—
Less: Expensed within General and Administrative expenses	(17,180)	(16,156)
Less: Expensed within Exploration expenses	(3,064)	(4,623)
Employee compensation and benefits expenses included in production costs	$ 262,753	$ 271,684

(2) Includes NRV adjustments to inventory to reduce production costs by $16.2 million for the year ended December 31, 2020 (2019 - reduce by $0.4 million).
(3) Includes the sale of inventory with fair value increases of $3.5 million for the year ended December 31, 2020 (2019 - $43.4 million) resulting from the Tahoe Acquisition (Note 8).

23. MINE CARE AND MAINTENANCE

	2020	2019
Mine care and maintenance expenses[1]	$ 84,130	$ 23,662
Mine care and maintenance depreciation[2]	17,975	—
	$ 102,105	$ 23,662

(1) Includes $58.3 million as a result of the suspension of mines due to COVID 19.
(2) Includes $16.8 million as a result of the suspension of mines due to COVID 19.

24. INTEREST AND FINANCE EXPENSE

	2020	2019
Interest expense	$ 9,216	$ 16,879
Finance fees	2,628	2,500
Accretion expense (Note 17)	8,260	9,903
	$ 20,104	$ 29,282

25. EARNINGS PER SHARE (BASIC AND DILUTED)

For the year ended December 31	2020			2019		
	Earnings (Numerator)	**Shares (000's) (Denominator)**	**Per-Share Amount**	Earnings (Numerator)	Shares (000's) (Denominator)	Per-Share Amount
Net earnings [1]	**$ 177,882**			$ 110,738		
Basic earnings per share	**$ 177,882**	**210,085**	**$ 0.85**	$ 110,738	201,397	$ 0.55
Effect of Dilutive Securities:						
Stock Options	**—**	**210**		—	174	
Diluted earnings per share	**$ 177,882**	**210,295**	**$ 0.85**	$ 110,738	201,571	$ 0.55

(1) Net earnings attributable to equity holders of the Company.

Potentially dilutive securities excluded in the diluted earnings per share calculation for the year ended December 31, 2020 were 24,902 out-of-the-money options (2019 – 711,662).

26. SUPPLEMENTAL CASH FLOW INFORMATION

The following tables summarize other adjustments for non-cash income statement items, changes in operating working capital items and significant non-cash items:

Other operating activities	**2020**	2019
Adjustments for non-cash income statement items:		
Share-based compensation expense	**$ 3,024**	$ 4,448
Gains on securities held	**(58,673)**	(83,705)
Gains on commodity and foreign currency contracts (Note 9d)	**(3,543)**	(3,315)
(Gain) loss on derivatives (Note 9d)	**(38)**	14
Share of income from associate and dilution gain (Note 14)	**(10,529)**	(15,245)
Net realizable value adjustment for inventories	**(16,175)**	(356)
Project development write-down	**—**	1,882
	$ (85,934)	$ (96,277)

Changes in non-cash operating working capital items:	**2020**	2019
Trade and other receivables	**$ 54,838**	$ 1,545
Inventories	**(14,623)**	22,753
Prepaid expenses	**2,353**	(4,093)
Accounts payable and accrued liabilities	**56,816**	(43,527)
Provisions	**(2,402)**	(4,622)
	$ 96,982	$ (27,944)

Significant non-cash items:	**2020**	2019
Share-based compensation issued to employees and directors	**$ 2,826**	$ 2,693

Cash and Cash Equivalents	**December 31, 2020**	December 31, 2019
Cash in banks	**$ 167,113**	$ 120,564

27. SEGMENTED INFORMATION

Operating segments are determined by the way information is reported and used by the Company's Chief Operating Decision Maker ("CODM") to review operating performance. The Company has determined that each producing mine and significant development property represents a reportable segment. The Company has organized its reportable segments by significant revenue streams and geographic regions.

Significant information relating to the Company's reportable segments is summarized in the table below:

For the year ended December 31, 2020

Segment/Country	Mine	Revenue	Production costs and royalties	Depreciation	Mine operating earnings	Mine care and maintenance	Capital expenditures[1]
Silver Segment:							
Mexico	Dolores	**$ 250,219**	**$ 146,961**	**$ 87,694**	**$ 15,564**	**$ 10,175**	**$ 44,861**
	La Colorada	**128,824**	**69,663**	**19,608**	**39,553**	**7,973**	**29,388**
Peru	Huaron	**72,073**	**39,612**	**7,069**	**25,392**	**20,840**	**4,500**
	Morococha	**47,046**	**35,768**	**7,203**	**4,075**	**20,023**	**10,168**
Bolivia	San Vicente	**48,396**	**35,753**	**6,725**	**5,918**	**2,890**	**4,877**
Argentina	Manantial Espejo	**84,051**	**68,381**	**9,787**	**5,883**	**5,617**	**10,789**
Guatemala	Escobal		**—**		**—**	**21,001**	**4,807**
Total Silver Segment		**630,609**	**396,138**	**138,086**	**96,385**	**88,519**	**109,390**
Gold Segment:							
Peru	Shahuindo	**270,043**	**97,940**	**40,562**	**131,541**	**3,855**	**23,335**
	La Arena	**176,028**	**72,676**	**27,683**	**75,669**	**3,712**	**37,324**
Canada	Timmins	**262,132**	**157,412**	**46,605**	**58,115**	**—**	**20,751**
Total Gold Segment		**708,203**	**328,028**	**114,850**	**265,325**	**7,567**	**81,410**
Other segment:							
Canada	Pas Corp		**—**	**491**	**(491)**	**—**	**297**
Argentina	Navidad		**—**	**—**	**—**	**6,019**	**—**
Other	Other	**—**	**—**	**1,042**	**(1,042)**	**—**	**560**
Total		**$ 1,338,812**	**$ 724,166**	**$ 254,469**	**$ 360,177**	**$ 102,105**	**$ 191,657**

(1) Includes payments for mineral properties, plant and equipment and payment of equipment leases.

For the year ended December 31, 2019

Segment/Country	Mine	Revenue	Production costs and royalties	Depreciation	Mine operating earnings	Mine care and maintenance	Capital expenditures[1]
Silver Segment:							
Mexico	Dolores	$ 248,744	$ 191,320	$ 104,701	$ (47,277)	$ —	$ 50,657
	La Colorada	177,698	75,139	23,175	79,384	—	20,275
Peru	Huaron	117,118	76,962	13,638	26,518	—	10,936
	Morococha	101,549	73,396	15,482	12,671	—	15,556
Bolivia	San Vicente	76,968	57,805	9,449	9,714	—	4,960
Argentina	Manantial Espejo	63,289	63,432	5,854	(5,997)	—	26,512
Guatemala	Escobal	—	—	—	—	17,738	1,107
Total Silver Segment		785,366	538,054	172,299	75,013	17,738	130,003
Gold Segment:							
	Shahuindo	189,372	90,877	28,649	69,846	—	33,280
	La Arena	174,803	99,915	14,873	60,015	—	47,557
Canada	Timmins	201,218	139,172	36,302	25,744	—	13,747
Total Gold Segment		565,393	329,964	79,824	155,605	—	94,584
Other segment:							
Canada	Pas Corp	—	—	488	(488)	—	396
Argentina	Navidad	—	—	—	—	5,924	9
Other	Other	—	—	842	(842)	—	85
Total		$ 1,350,759	$ 868,018	$ 253,453	$ 229,288	$ 23,662	$ 225,077

(1) Includes payments for mineral properties, plant and equipment and amounts have been recast, and presented, for the year ended ended December 31, 2020 to include payment of equipment leases.

A reconciliation of segment mine operating earnings to the Company's earnings before income taxes per the Consolidated Income Statements is as follows:

	2020	2019
Mine operating earnings	**$ 360,177**	$ 229,288
General and administrative	**(36,375)**	(31,752)
Exploration and project development	**(7,096)**	(11,684)
Mine care and maintenance	**(102,105)**	(23,662)
Foreign exchange losses	**(5,474)**	(5,003)
Impairments	**—**	(40,050)
Gains on commodity and foreign currency contracts	**3,543**	3,315
Gains on sale of mineral properties, plant and equipment	**7,922**	3,858
Share of income from associate and dilution gain	**10,529**	15,245
Transaction and integration costs	**—**	(7,515)
Other expense	**(22,067)**	(4,936)
Earnings from operations	**209,054**	127,104
Gain (loss) on derivatives	**38**	(14)
Investment income	**63,024**	84,704
Interest and finance expense	**(20,104)**	(29,282)
Earnings before income taxes	**$ 252,012**	$ 182,512

At December 31, 2020 Segment/Country	Mine	Assets	Liabilities	Net assets
Silver Segment:				
Mexico	Dolores	**$ 752,873**	**$ 169,444**	**$ 583,429**
	La Colorada	**231,217**	**48,971**	**182,246**
Peru	Huaron	**113,177**	**40,663**	**72,514**
	Morococha	**121,004**	**34,906**	**86,098**
Bolivia	San Vicente	**83,668**	**40,536**	**43,132**
Argentina	Manantial Espejo	**75,113**	**26,950**	**48,163**
Guatemala	Escobal	**288,588**	**24,427**	**264,161**
Total Silver Segment		**1,665,640**	**385,897**	**1,279,743**
Gold Segment:				
Peru	Shahuindo	**566,734**	**201,427**	**365,307**
	La Arena	**299,372**	**112,475**	**186,897**
Canada	Timmins	**414,396**	**60,482**	**353,914**
Total Gold Segment		**1,280,502**	**374,384**	**906,118**
Other segment:				
Canada	Pas Corp	**230,872**	**18,795**	**212,077**
Argentina	Navidad	**192,999**	**—**	**192,999**
	Other	**63,862**	**48,960**	**14,902**
Total		**$ 3,433,875**	**$ 828,036**	**$ 2,605,839**

At December 31, 2019 Segment/Country	Mine	Assets	Liabilities	Net assets
Silver Segment:				
Mexico	Dolores	$ 763,301	$ 137,396	$ 625,905
	La Colorada	223,416	46,476	176,940
Peru	Huaron	110,642	39,962	70,680
	Morococha	128,280	36,754	91,526
Bolivia	San Vicente	76,418	35,331	41,087
Argentina	Manantial Espejo	77,635	27,455	50,180
Guatemala	Escobal	293,178	19,340	273,838
Total Silver Segment		1,672,870	342,714	1,330,156
Gold Segment:				
Peru	Shahuindo	600,096	162,821	437,275
	La Arena	282,978	90,472	192,506
Canada	Timmins	429,060	50,171	378,889
Total Gold Segment		1,312,134	303,464	1,008,670
Other segment:				
Canada	Pas Corp	229,814	304,184	(74,370)
Argentina	Navidad	193,034	—	193,034
	Other	53,830	43,474	10,356
		$ 3,461,682	$ 993,836	$ 2,467,846

Product Revenue	2020	2019
Refined silver and gold	**$ 1,047,601**	$ 894,202
Zinc concentrate	**65,033**	134,992
Lead concentrate	**132,823**	183,343
Copper concentrate	**50,081**	78,865
Silver concentrate	**43,274**	59,357
Total	**$ 1,338,812**	$ 1,350,759

The Company has 26 customers that account for 100% of the concentrate and silver and gold sales revenue. The Company has 7 customers that accounted for 19%, 17%, 12%, 11%, 7%, 7%, and 5% of total sales in 2020, and 7 customers that accounted for 15%, 15%, 13%, 13%, 9%, 8%, and 8% of total sales in 2019. The loss of certain of these customers or curtailment of purchases by such customers could have a material adverse effect on the Company's financial performance, financial position, and cash flows.

28. OTHER EXPENSES

	2020	2019
Change in closure and decommissioning estimates	**$ 5,230**	$ 221
Change in provisions	**7,493**	—
Commissions on investment dispositions	**3,465**	—
Other expense	**5,879**	4,715
Total	**$ 22,067**	$ 4,936

29. INCOME TAXES

Components of Income Tax Expense

	2020	2019
Current tax expense (recovery)		
Recognized in profit or loss in current year	**$ 99,013**	$ 95,219
Adjustments recognized in the current year with respect to prior years	**(658)**	(3,090)
	98,355	92,129
Deferred tax expense (recovery)		
Deferred tax recovery recognized in the current year	**14,667**	(13,079)
Adjustments recognized in the current year with respect to prior years	**433**	(5,003)
Benefit from previously unrecognized losses, and other temporary differences	**(42,379)**	—
Decrease in deferred tax liabilities due to tax impact of NRV charge to inventory	**4,481**	(2,779)
	(22,798)	(20,861)
Income tax expense	**$ 75,557**	$ 71,268

Income tax expense differs from the amount that would result from applying the Canadian federal and provincial income tax rates to earnings before income taxes. These differences result from the items shown on the following table, which results in an effective tax rate that varies considerably from the comparable period. The main factors that affected the effective tax rate for the year ended December 31, 2020 and the comparable period of 2019 were foreign exchange fluctuations, changes in non-recognition of certain deferred tax assets (most notably the realization of deferred tax benefits associated with the La Arena, Timmins West, and Bell Creek mines in Q4 2020), mining taxes paid, and withholding taxes on payments from foreign subsidiaries. The Company expects that these and other factors will continue to cause volatility in effective tax rates in the future.

Reconciliation of Effective Income Tax Rate

	2020	2019
Earnings before taxes and non-controlling interest	**$ 252,012**	$ 182,512
Statutory Canadian income tax rate	**27.00 %**	27.00 %
Income tax expense based on above rates	**$ 68,043**	$ 49,278
Increase (decrease) due to:		
Non-deductible expenditures	**9,915**	7,271
Foreign tax rate differences	**16,179**	2,507
Change in net deferred tax assets not recognized:		
- Argentina exploration expenditures	**(3,485)**	3,117
- Other deferred tax assets	**(61,280)**	(11,211)
Effect of other taxes paid (mining and withholding)	**22,545**	21,307
Effect of foreign exchange on tax expense	**18,598**	(7,651)
Non-taxable impact of foreign exchange	**(3,000)**	4,158
Change in non-deductible portion of reclamation liabilities	**8,605**	8,207
Change in current tax expense estimated for prior years	**—**	(6,694)
Other	**(563)**	979
Income tax expense	**$ 75,557**	$ 71,268
Effective income tax rate	**29.98 %**	39.05 %

Deferred tax assets and liabilities

The following is the analysis of the deferred tax assets (liabilities) presented in the consolidated financial statements:

	2020	2019
Net deferred tax liability, beginning of year	**$ (140,361)**	$ (136,575)
Initial deferred tax liability associated with the Tahoe Acquisition	**—**	(24,080)
Recognized in net earnings in the year	**22,798**	20,861
Reduction due to Mexican de-consolidation payments applied to current tax	**—**	(705)
Other	**102**	138
Net deferred liability, end of year	**(117,461)**	(140,361)
Deferred tax assets	**57,850**	36,447
Deferred tax liabilities	**(175,311)**	(176,808)
Net deferred tax liability	**$ (117,461)**	$ (140,361)

Components of deferred tax assets and liabilities

The deferred tax assets (liabilities) are comprised of the various temporary differences, as detailed below:

	2020	2019[1]
Deferred tax assets (liabilities) arising from:		
Closure and decommissioning costs	**$ 26,482**	$ 16,002
Tax losses, resource pools and mining tax credits	**140,608**	122,187
Deductible Mexican mining taxes	**3,286**	2,701
Accounts payable and accrued liabilities	**17,737**	17,974
Trade and other receivables	**13,290**	17,194
Provision for doubtful debts and inventory adjustments	**(21,354)**	(7,145)
Short-term investments	**(15,649)**	(15,295)
Mineral properties, plant, and equipment	**(274,483)**	(278,707)
Estimated sales provisions	**(14,028)**	(23,026)
Other temporary differences and provisions	**6,650**	7,754
Net deferred tax liability	**$ (117,461)**	$ (140,361)

(1) Recast comparative deferred tax assets and liabilities to provide consistency with current presentation.

At December 31, 2020, the net deferred tax liability above included the deferred tax benefit of $140.6 million, which includes the benefits from tax losses ($43.8 million) and resource pools ($96.8 million). The increase in this deferred tax asset is mainly due to the Timmins and Bell Creek mine asset additions which were related to previously unbenefitted deductible resource pools, partially offset by losses utilized against taxable income earned. The losses will begin to expire after the 2024 year end, if unused.

At December 31, 2019, the net deferred tax liability above included the deferred tax benefit of $122.2 million, which includes the benefits from tax losses ($59.6 million) and resource pools ($62.6 million). The significant increase in these deferred tax assets from the prior year was primarily related to the Tahoe acquisition. The losses will begin to expire after the 2024 year end, if unused.

Unrecognized deductible temporary differences, unused tax losses and unused tax credits

Deductible temporary differences, unused tax losses and unused tax credits for which no deferred tax assets have been recognized are attributable to the following:

	2020	2019 [1]
Tax loss (revenue in nature)	**$ 284,626**	$ 202,181
Net tax loss (capital in nature)	**32,378**	34,646
Resource pools and other tax credits	**48,773**	260,413
Financing fees	**2,003**	2,849
Mineral properties, plant, and equipment	**58,644**	118,380
Closure and decommissioning costs	**136,728**	141,018
Exploration and other expenses not currently deductible	**33,587**	53,595
Intercompany debt	**12,160**	11,339
Doubtful debt and inventory	**41,378**	23,895
Payroll and vacation accruals	**1,491**	1,055
Other temporary differences	**3,562**	3,399
	$ 655,330	$ 852,770

(1) Recast comparative temporary differences, unused tax losses and unused tax credits to provide consistency with current presentation.

Included in the above amounts are operating losses, which if not utilized will expire as follows:

At December 31, 2020

	Canada	US	Peru	Mexico	Barbados	Argentina	Total
2021	$ —	$ 317	$ 26	$ —	$ 8	$ 1	$ 352
2022	—	529	—	—	12	3	544
2023 – and after	269,001	11,746	314	2,406	183	80	283,730
Total tax losses	**$ 269,001**	**$ 12,592**	**$ 340**	**$ 2,406**	**$ 203**	**$ 84**	**284,626**

At December 31, 2019

	Canada	US	Peru	Mexico	Barbados	Argentina	Total
2020	$ —	$ 79	$ 2,110	$ —	$ 7	$ 1	$ 2,197
2021	—	318	28	—	7	2	355
2022 – and after [1]	178,339	13,185	1,778	2,792	106	3,429	199,629
Total tax losses [1]	**$ 178,339**	**$ 13,582**	**$ 3,916**	**$ 2,792**	**$ 120**	**$ 3,432**	**$ 202,181**

(1) Recast comparative operating losses to provide consistency with current presentation.

Taxable temporary differences associated with investment in subsidiaries

At December 31, 2020, taxable temporary differences of $275.7 million (2019 – $376.5 million) associated with the investments in subsidiaries have not been recognized as the Company is able to control the timing of the reversal of these differences which are not expected to reverse in the foreseeable future.

30. CONTINGENCIES

The following is a summary of the contingent matters and obligations relating to the Company as at December 31, 2020.

General

The Company is subject to various investigations, claims and legal and tax proceedings covering matters that arise in the ordinary course of business activities. Each of these matters is subject to various uncertainties and it is possible that some of these matters may be resolved unfavorably to the Company. Certain conditions may exist as of the date the financial statements are issued, which may result in a loss to the Company. In the opinion of management none of these matters are expected to have a material effect on the results of operations or financial conditions of the Company.

Environment

The Company's mining and exploration activities are subject to various laws and regulations governing the protection of the environment. These laws and regulations are continually changing and are generally becoming more restrictive. The Company conducts its operations so as to protect the public health and environment and believes its operations are in compliance with applicable laws and regulations in all material respects. The Company has made, and expects to make in the future, expenditures to comply with such laws and regulations, but cannot predict the full amount of such future expenditures.

Estimated future reclamation costs are based on the extent of work required and the associated costs are dependent on the requirements of relevant authorities and the Company's environmental policies. As of December 31, 2020, $235.1 million (2019 - $188.5 million) was accrued for reclamation costs relating to mineral properties. See also Note 17.

Tax

The Company operates in numerous countries around the world and accordingly it is subject to, and pays annual income taxes under the various income tax regimes in the countries in which it operates. Some of these tax regimes are defined by contractual agreements with the local government, and others are defined by the general corporate income tax laws of the country. The Company has historically filed, and continues to file, all required income tax returns and to pay the taxes reasonably determined to be due. The tax rules and regulations in many countries are highly complex and subject to interpretation. From time to time, the Company is subject to a review of its historic income tax filings and in connection with such reviews, disputes can arise with the taxing authorities over the interpretation or application of certain rules to the Company's business conducted within the country involved.

Title

The validity of our mining or exploration titles or claims or rights, which constitute most of our property holdings, can be uncertain and may be contested. Although the Company has taken steps to verify title to properties in which it has an interest, these procedures do not guarantee the Company's title. Property title may be subject to, among other things, unregistered prior agreements or transfers, indigenous land claims, or undetected title defects. In some cases, we do not own or hold rights to the mineral concessions we mine, and our rights may be contractual in nature. We have not conducted surveys of all the claims in which we hold direct or indirect interests and therefore, the precise area and location of such claims may be in doubt. The land title system is also not well developed in some countries and may rely on informal, hereditary or possessory rights. Such informal systems can create significant uncertainty in obtaining and maintaining ownership or rights of access, in defining precise locations or clear boundaries to properties, and substantiating rights if challenged. No assurance can be given that applicable governments will not revoke or significantly alter the conditions of the applicable exploration and mining titles or claims, or that such exploration and mining titles or claims will not be challenged or impugned by third parties. Any defects in title to our properties, or the revocation of or challenges to our rights to mine, could have a material adverse effect on our operations and financial condition.

Legal Proceedings

We are subject to various claims and legal proceedings covering a wide range of matters that arise in the ordinary course of business activities. Many of these claims are from current or ex-employees, or employees of former or current owners of our operations, such as the Quiruvilca-related claims in Peru, which could, in the aggregate, be of significant value, and include alleged improper dismissals, workplace illnesses, such as silicosis, and claims for additional profit-sharing and bonuses in prior years.

We may become subject to class action lawsuits. For example, in mid-2017, Tahoe, which was acquired by us in late February 2019, and certain of its former directors and officers became the subject of three purported class action lawsuits filed in the United States that center primarily around alleged misrepresentations. These U.S. class action lawsuits were later consolidated into one class action suit that is ongoing. In October 2018, Tahoe learned that a similar proposed class action lawsuit had been filed in the Superior Court of Ontario. These lawsuits seek significant damages. Tahoe has disputed the allegations made in these suits, however the outcomes are not determinable at this time.

We may also be subject to proceedings in our commercial relationships. 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. Like many other creditors, we are now also subject to alleged preference claims against us by the litigation trustee in the Republic bankruptcy. The trustee has alleged that certain transfers that occurred in the three month period leading up to the bankruptcy are avoidable pursuant to applicable bankruptcy laws and that such amounts received by us from Republic are subject to recovery by the bankrupt's estate. While we believe that we have defenses to such allegations, if we are unsuccessful in our defense of these claims, we may be subject to significant losses.

Furthermore, we are in some cases the subject of claims by local communities, indigenous groups or private land owners relating to land and mineral rights, or environmental or social damage, and such claimants may seek sizeable monetary damages against us and/or the return of surface or mineral rights or revocation of permits and licenses that are valuable to us and which may impact our operations and profitability if lost.

Each of these matters is subject to various uncertainties and it is possible that some of these matters may be resolved unfavourably to us. We establish provisions for matters that are probable and can be reasonably estimated. We also carry liability insurance coverage, however such insurance does not cover all risks to which we might be exposed and in other cases, may only partially cover losses incurred by us. In addition, we may be involved in disputes with other parties in the future that may result in litigation, which may result in a material adverse effect on our financial position, cash flow and results of operations.

Country

Argentina

Unanticipated or drastic changes in laws and regulations have affected our operations in the past. For example, previous governments implemented severe price, foreign exchange, and import controls which included informal restrictions on dividend, interest, and service payments abroad and limitations on the ability to convert ARS into USD which exposed the Company to additional risks of ARS devaluation and high domestic inflation. The current government in Argentina maintains unfavorable economic policies, such as strict currency controls and the imposition of export duties.

The Company has suspended project development activities at Navidad as a result of uncertainty over the zoning, regulatory and tax laws. The Company remains committed to the development of Navidad and to contributing to the positive economic and social development of the province of Chubut upon the adoption of a favorable legislative framework.

Bolivia

On May 28, 2014, the Bolivian government enacted the New Mining Law. Among other things, the New Mining Law provided that all pre-existing contracts were to migrate to one of several new forms of agreement within a prescribed period of time. The Company currently has a joint venture agreement with COMIBOL (the "COMIBOL Joint Venture"), a Bolivian state mining company, relating to the San Vicente mine. As a result, we anticipate that the COMIBOL Joint Venture will be subject to such migration and possible renegotiation of key terms. The migration process has been delayed by COMIBOL and has not been completed.

The primary effects on the San Vicente operation and our interest therein will not be known until such time as we have, if required to do so, renegotiated the COMIBOL Joint Venture, and the full impact may only be realized over time. We will take appropriate steps to protect and, if necessary, enforce our rights under the COMIBOL Joint Venture. There is, however, no guarantee that governmental actions, including possible expropriation or additional changes in the law, and the migration of the COMIBOL Joint Venture will not impact our involvement in the San Vicente operation in an adverse way and such actions could have a material adverse effect on us and our business.

The Company's San Vicente mine, pursuant to the COMIBOL Joint Venture, is obligated to pay COMIBOL a participation fee of 37.5% (the “Participation Fee”) of the operation’s cash flow. For the year ended December 31, 2020, the Company incurred approximately $5.8 million in COMIBOL royalties (2019 - incurred $5.1 million).

Guatemala

Some communities and non-governmental organizations ("NGOs") have been vocal and active in their opposition to mining and exploration activities in Guatemala. In July 2017, the Escobal mining license was suspended as a result of a court proceeding initiated by an NGO in Guatemala, based upon the allegation that Guatemala’s Ministry of Energy and Mines ("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 and the mine remains suspended and on care and maintenance.

Legal challenges to the consultation process have been filed with the Guatemalan Supreme Court by parties opposed to the Escobal mine and the ultimate outcome of the various challenges remains uncertain. The MEM recently set a date for the pre-consultation to commence in April 2021, however the process, timing, and outcome of the ILO 169 consultation also remains uncertain.

31. RELATED PARTY TRANSACTIONS

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. All related party transactions for the year ended December 31, 2020 and 2019 have been disclosed in these consolidated financial statements. Transactions with Maverix, an associate of the Company, have been disclosed in Note 14 of these consolidated 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.

Remuneration of key management personnel

The remuneration of directors and other members of key management personnel during the year was as follows:

	2020	2019
Salaries and short-term benefits [1]	**$ 18,658**	$ 14,180
Post-employment benefits [2]	**1,226**	1,287
Share-based payments [3]	**2,750**	3,195
	$ 22,634	$ 18,662

(1) Includes annual salary and short-term incentives or bonuses earned in the year.
(2) Includes annual contributions to retirement savings plans made by the Company.
(3) Includes annual RSUs, PSUs, stock option and common share grants.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-212468 on Form F-10 and Registration Statement Nos. 333-180494, 333-180495, 333-206162 and 333-229795 on Form S-8, and to the use of our reports dated February 17, 2021 relating to the consolidated financial statements of Pan American Silver Corp. (the "Company") and the effectiveness of the Company's internal control over financial reporting in this Annual Report on Form 40-F of the Company for the year ended December 31, 2020.

/s/ Deloitte LLP
Chartered Professional Accountants
Vancouver, Canada
February 17, 2021

Exhibit 23.2

CONSENT OF MARTIN WAFFORN, P. ENG.

To: United States Securities and Exchange Commission

Re: Expert Consent for Annual Report on Form 40-F

Technical reports entitled:

1. "Technical Report for the La Colorada Property, Zacatecas, Mexico" dated effective December 31, 2019 relating to the La Colorada property;
2. "Technical Report for the Dolores Property, Chihuahua, Mexico" dated effective December 31, 2016 relating to the Dolores property;
3. "Technical Report for the Huaron Property, Pasco, Peru" dated effective June 30, 2014 relating to the Huaron property;
4. "Technical Report for the Morococha Property, Yauli, Peru" dated effective June 30, 2014 relating to the Morococha property; and
5. "Pan American Silver Corp. Navidad Project, Chubut Province, Argentina: Preliminary Assessment" dated January 14, 2011 relating to the Navidad property

(collectively, the "**Technical Reports**") were prepared for Pan American Silver Corp. (the "**Corporation**") in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* by Martin Wafforn, P. Eng., in whole or in part, and filed with applicable securities regulatory authorities.

The undersigned does hereby consent to the inclusion of the written disclosure of the Technical Reports and the extracts from, or summary of, or references to the Technical Reports and other scientific and technical information attributed to the undersigned (the "**Technical Information**") by the Corporation in the annual information form of the Corporation, dated February 17, 2021 (the "**AIF**") and in the Annual Report on Form 40-F of the Corporation, dated February 17, 2021 (the "**40-F**"). The undersigned does also hereby consent to the reference to my name in the AIF and the 40-F.

The undersigned consents to the incorporation by reference in the Registration Statements on Form S-8 (File Nos., 333-180494, 333-180495, 333-206162 and 333-229795) of the references to my name and the above mentioned information in the AIF and 40-F.

The undersigned does hereby confirm that I have read the AIF and the 40-F and have no reason to believe that there are any misrepresentations in the information contained in the AIF or the 40-F that are (a) derived from the Technical Reports or the Technical Information; or (b) within my knowledge as a result of the services I performed in connection with the Technical Reports or the Technical Information.

Dated this 17th day of February, 2021.

/s/ "*Martin Wafforn*"
Martin Wafforn, P. Eng.

Exhibit 23.3

CONSENT OF MICHAEL STEINMANN, P. GEO.

To: United States Securities and Exchange Commission

Re: Expert Consent for Annual Report on Form 40-F

Technical reports entitled:

1. "Technical Report for the Huaron Property, Pasco, Peru" dated effective June 30, 2014 relating to the Huaron property;
2. "Technical Report for the Morococha Property, Yauli, Peru" dated effective June 30, 2014 relating to the Morococha property; and
3. "Pan American Silver Corp. Navidad Project, Chubut Province, Argentina: Preliminary Assessment" dated January 14, 2011 related to the Navidad property

(collectively, the "**Technical Reports**") were prepared for Pan American Silver Corp. (the "**Corporation**") in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* by Michael Steinmann, P. Geo., in whole or in part, and filed with applicable securities regulatory authorities.

The undersigned does hereby consent to the inclusion of the written disclosure of the Technical Reports and the extracts from, or summary of, or references to the Technical Reports and other scientific and technical information attributed to the undersigned (the "**Technical Information**") by the Corporation in the annual information form of the Corporation, dated February 17, 2021 (the "**AIF**") and in the Annual Report on Form 40-F of the Corporation, dated February 17, 2021 (the "**40-F**"). The undersigned does also hereby consent to the reference to my name in the AIF and the 40-F.

The undersigned consents to the incorporation by reference in the Registration Statements on Form S-8 (File Nos. 333-180494, 333-180495, 333-206162 and 333-229795) of the references to my name and the above mentioned information in the AIF and 40-F.

The undersigned does hereby confirm that I have read the AIF and the 40-F and have no reason to believe that there are any misrepresentations in the information contained in the AIF or the 40-F that are (a) derived from the Technical Reports or the Technical Information; or (b) within my knowledge as a result of the services I performed in connection with the Technical Reports or the Technical Information.

Dated this 17th day of February, 2021.

/s/ "Michael Steinmann"
Michael Steinmann, P. Geo.

Exhibit 23.4

CONSENT OF PAMELA DE MARK, P. GEO., BAPPSC (APP GEO, HONS), MAusIMM

To: United States Securities and Exchange Commission

Re: Expert Consent for Annual Report on Form 40-F

A technical report "Pan American Silver Corp. Navidad Project, Chubut Province, Argentina: Preliminary Assessment" and dated effective January 14, 2011, (the "**Technical Report**") was prepared for Pan American Silver Corp. (the "**Corporation**") in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* by Pamela De Mark, P. Geo. BAppSc (App Geo, Hons), MAusIMM, in whole or in part, and filed with applicable securities regulatory authorities.

The undersigned does hereby consent to the inclusion of the written disclosure of the Technical Report and the extracts from, or summary of, or references to the Technical Report and other scientific and technical information attributed to the undersigned (the "**Technical Information**") by the Corporation in the annual information form of the Corporation, dated February 17, 2021 (the "**AIF**") and in the Annual Report on Form 40-F of the Corporation, dated February 17, 2021 (the "**40-F**"). The undersigned does also hereby consent to the reference to my name in the AIF and the 40-F.

The undersigned consents to the incorporation by reference in the Registration Statements on Form S-8 (File Nos. 333-180494, 333-180495, 333-206162 and 333-229795) of the references to my name and the above mentioned information in the AIF and 40-F.

The undersigned does hereby confirm that I have read the AIF and the 40-F and have no reason to believe that there are any misrepresentations in the information contained in the AIF or the 40-F that are (a) derived from the Technical Report or the Technical Information; or (b) within my knowledge as a result of the services I performed in connection with the Technical Report or the Technical Information.

Dated this 17th day of February, 2021.

/s/ "Pamela De Mark"
Pamela De Mark,
P. Geo., BAppSc (App Geo, Hons), MAusIMM

Exhibit 23.5

CONSENT OF AMERICO DELGADO, P. ENG.

To: United States Securities and Exchange Commission

Re: Expert Consent for Annual Report on Form 40-F

Technical reports entitled:

1. "Technical Report for the La Colorada Property, Zacatecas, Mexico" dated effective December 31, 2019 relating to the La Colorada property;
2. "Technical Report for the Dolores Property, Chihuahua, Mexico" dated effective December 31, 2016 relating to the Dolores property;
3. "Technical Report for the Huaron Property, Pasco, Peru" dated effective June 30, 2014 relating to the Huaron property; and
4. "Technical Report for the Morococha Property, Yauli, Peru" dated effective June 30, 2014 relating to the Morococha property

(collectively, the "**Technical Reports**") were prepared for Pan American Silver Corp. (the "**Corporation**") in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* by Americo Delgado, P. Eng., in whole or in part, and filed with applicable securities regulatory authorities.

The undersigned does hereby consent to the inclusion of the written disclosure of the Technical Reports and the extracts from, or summary of, or references to the Technical Reports and other scientific and technical information attributed to the undersigned (the "**Technical Information**") by the Corporation in the annual information form of the Corporation, dated February 17, 2021 (the "**AIF**") and in the Annual Report on Form 40-F of the Corporation, dated February 17, 2021 (the "**40-F**"). The undersigned does also hereby consent to the reference to my name in the AIF and the 40-F.

The undersigned consents to the incorporation by reference in the Registration Statements on Form S-8 (File Nos. 333-180494, 333-180495, 333-206162 and 333-229795) of the references to my name and the above mentioned information in the AIF and 40-F.

The undersigned does hereby confirm that I have read the AIF and the 40-F and have no reason to believe that there are any misrepresentations in the information contained in the AIF or the 40-F that are (a) derived from the Technical Reports or the Technical Information; or (b) within my knowledge as a result of the services I performed in connection with the Technical Reports or the Technical Information.

Dated this 17th day of February, 2021.

/s/ "Americo Delgado"
Americo Delgado, P. Eng.

Exhibit 23.6

CONSENT OF CHRISTOPHER EMERSON, FAusIMM.

To: United States Securities and Exchange Commission

Re: Expert Consent for Annual Report on Form 40-F

Technical Reports entitled:

1. "Technical Report for the La Colorada Property, Zacatecas, Mexico" dated effective December 31, 2019 relating to the La Colorada property; and
2. "Technical Report for the Dolores Property, Chihuahua, Mexico" and dated effective December 31, 2016 relating to the Dolores property

(collectively, the "**Technical Reports**") were prepared for Pan American Silver Corp. (the "**Corporation**") in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* by Christopher Emerson, FAusIMM, in whole or in part, and filed with applicable securities regulatory authorities.

The undersigned does hereby consent to the inclusion of the written disclosure of the Technical Reports and the extracts from, or summary of, or references to the Technical Report and other scientific and technical information attributed to the undersigned (the "**Technical Information**") by the Corporation in the annual information form of the Corporation, dated February 17, 2021 (the "**AIF**") and in the Annual Report on Form 40-F of the Corporation, dated February 17, 2021 (the "**40-F**"). The undersigned does also hereby consent to the reference to my name in the AIF and the 40-F.

The undersigned consents to the incorporation by reference in the Registration Statements on Form S-8 (File Nos. 333-180494, 333-180495, 333-206162 and 333-229795) of the references to my name and the above mentioned information in the AIF and 40-F.

The undersigned does hereby confirm that I have read the AIF and the 40-F and have no reason to believe that there are any misrepresentations in the information contained in the AIF or the 40-F that are (a) derived from the Technical Reports or the Technical Information; or (b) within my knowledge as a result of the services I performed in connection with the Technical Reports or the Technical Information.

Dated this 17th day of February, 2021.

/s/ "Christopher Emerson"
Christopher Emerson, FAusIMM

Exhibit 23.7

CONSENT OF KARA BYRNES, P.Geo.

To: United States Securities and Exchange Commission

To: Pan American Silver Corp.

Re: Expert Consent for Annual Report on Form 40-F

A technical report titled "National Instrument 43-101 Technical Report, Timmins West Mine, Timmins, Ontario, Canada" dated effective May 15, 2017 (the "**Technical Report**") was prepared in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* by Kara Byrnes, P. Geo., in whole or in part, and filed with applicable securities regulatory authorities.

The undersigned does hereby consent to the inclusion of the written disclosure of the Technical Report and the extracts from, or summary of, or references to the Technical Report and other scientific and technical information attributed to the undersigned (the "**Technical Information**") by Pan American Silver Corp. (the "**Corporation**") in the annual information form of the Corporation, dated February 17, 2021 (the " **AIF**") and in the Annual Report on Form 40-F of the Corporation, dated February 17, 2021 (the "**40-F**"). The undersigned does also hereby consent to the reference to my name in the AIF and the 40-F.

The undersigned consents to the incorporation by reference in the Registration Statements on Form S-8 (File Nos. 333-180494, 333-180495, 333-206162 and 333-229795) of the references to my name and the above mentioned information in the AIF and 40-F.

The undersigned does hereby confirm that I have read the AIF and the 40-F and have no reason to believe that there are any misrepresentations in the information contained in the AIF or the 40-F that are (a) derived from the Technical Report or the Technical Information; or (b) within my knowledge as a result of the services I performed in connection with the Technical Report or the Technical Information.

Dated this 17th day of February, 2021.

/s/ "Kara Byrnes"
Kara Byrnes, P. Geo.

Exhibit 23.8

CONSENT OF TIM WILLIAMS, FAusIMM

To: United States Securities and Exchange Commission

To: Pan American Silver Corp.

Re: Expert Consent for Annual Report on Form 40-F

A technical report titled "Technical Report on the Shahuindo Mine, Cajabamba, Peru" dated effective January 1, 2016 (the " **Technical Report**") was prepared in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* by Tim Williams, M.Sc., in whole or in part, and filed with applicable securities regulatory authorities.

The undersigned does hereby consent to the inclusion of the written disclosure of the Technical Report and the extracts from, or summary of, or references to the Technical Report and other scientific and technical information attributed to the undersigned (the "**Technical Information**") by Pan American Silver Corp. (the "**Corporation**") in the annual information form of the Corporation, dated February 17, 2021 (the " **AIF**") and in the Annual Report on Form 40-F of the Corporation, dated February 17, 2021 (the "**40-F**"). The undersigned does also hereby consent to the reference to my name in the AIF and the 40-F.

The undersigned consents to the incorporation by reference in the Registration Statements on Form S-8 (File Nos. 333-180494, 333-180495, 333-206162 and 333-229795) of the references to my name and the above mentioned information in the AIF and 40-F.

The undersigned does hereby confirm that I have read the AIF and the 40-F and have no reason to believe that there are any misrepresentations in the information contained in the AIF or the 40-F that are (a) derived from the Technical Report or the Technical Information; or (b) within my knowledge as a result of the services I performed in connection with the Technical Report or the Technical Information.

Dated this 17th day of February, 2021.

/s/ "Tim Williams"
Tim Williams, FAusIMM

Exhibit 23.9

CONSENT OF CARL E. DEFILIPPI, M.Sc., C.E.M.

To: United States Securities and Exchange Commission

To: Pan American Silver Corp.

Re: Expert Consent for Annual Report on Form 40-F

A technical report titled "Technical Report on the Shahuindo Mine, Cajabamba, Peru" dated effective January 1, 2016 (the " **Technical Report**") was prepared in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* by Carl E. Defilippi, M.Sc., C.E.M., in whole or in part, and filed with applicable securities regulatory authorities.

The undersigned does hereby consent to the inclusion of the written disclosure of the Technical Report and the extracts from, or summary of, or references to the Technical Report and other scientific and technical information attributed to the undersigned (the "**Technical Information**") by Pan American Silver Corp. (the "**Corporation**") in the annual information form of the Corporation, dated February 17, 2021 (the " **AIF**") and in the Annual Report on Form 40-F of the Corporation, dated February 17, 2021 (the "**40-F**"). The undersigned does also hereby consent to the reference to my name in the AIF and the 40-F.

The undersigned consents to the incorporation by reference in the Registration Statements on Form S-8 (File Nos. 333-180494, 333-180495, 333-206162 and 333-229795) of the references to my name and the above mentioned information in the AIF and 40-F.

The undersigned does hereby confirm that I have read the AIF and the 40-F and have no reason to believe that there are any misrepresentations in the information contained in the AIF or the 40-F that are (a) derived from the Technical Report or the Technical Information; or (b) within my knowledge as a result of the services I performed in connection with the Technical Report or the Technical Information.

Dated this 17th day of February, 2021.

/s/ "Carl E. Defilippi"
Carl E. Defilippi, M.Sc., C.E.M.

Exhibit 23.10

CONSENT OF CHARLES V. MUERHOFF, B.Sc.

To: United States Securities and Exchange Commission

To: Pan American Silver Corp.

Re: Expert Consent for Annual Report on Form 40-F

A technical report titled "Technical Report on the Shahuindo Mine, Cajabamba, Peru" dated effective January 1, 2016 (the " **Technical Report**") was prepared in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* by Charles V. Muerhoff, B.Sc., in whole or in part, and filed with applicable securities regulatory authorities.

The undersigned does hereby consent to the inclusion of the written disclosure of the Technical Report and the extracts from, or summary of, or references to the Technical Report and other scientific and technical information attributed to the undersigned (the "**Technical Information**") by Pan American Silver Corp. (the "**Corporation**") in the annual information form of the Corporation, dated February 17, 2021 (the " **AIF**") and in the Annual Report on Form 40-F of the Corporation, dated February 17, 2021 (the "**40-F**"). The undersigned does also hereby consent to the reference to my name in the AIF and the 40-F.

The undersigned consents to the incorporation by reference in the Registration Statements on Form S-8 (File Nos. 333-180494, 333-180495, 333-206162 and 333-229795) of the references to my name and the above mentioned information in the AIF and 40-F.

The undersigned does hereby confirm that I have read the AIF and the 40-F and have no reason to believe that there are any misrepresentations in the information contained in the AIF or the 40-F that are (a) derived from the Technical Report or the Technical Information; or (b) within my knowledge as a result of the services I performed in connection with the Technical Report or the Technical Information.

Dated this 17 day of February, 2021.

/s/ "Charles V. Muerhoff"
Charles V. Muerhoff, B.Sc.

Exhibit 23.11

CONSENT OF M3 Engineering & Technology Corporation

To: United States Securities and Exchange Commission

To: Pan American Silver Corp.

Re: Expert Consent for Annual Report on Form 40-F

A technical report titled "Escobal Mine Guatemala NI 43-101 Feasibility Study" and dated effective November 5, 2014 (the " **Technical Report**") was prepared in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* by M3 Engineering & Technology Corporation and filed with applicable securities regulatory authorities.

The undersigned does hereby consent to the inclusion of the written disclosure of the Technical Report and the extracts from, or summary of, or references to the Technical Report and other scientific and technical information attributed to the undersigned (the "**Technical Information**") by Pan American Silver Corp. (the "**Corporation**") in the annual information form of the Corporation, dated February 17, 2021 (the " **AIF**") and in the Annual Report on Form 40-F of the Corporation, dated February 17, 2021 (the "**40-F**"). The undersigned does also hereby consent to the reference to M3 Engineering & Technology Corporation in the AIF and the 40-F.

The undersigned consents to the incorporation by reference in the Registration Statements on Form S-8 (File Nos. 333-180494, 333-180495, 333-206162 and 333-229795) of the references to my name and the above mentioned information in the AIF and 40-F.

The undersigned does hereby confirm that I have read the AIF and the 40-F and have no reason to believe that there are any misrepresentations in the information contained in the AIF or the 40-F that are (a) derived from the Technical Report or the Technical Information; or (b) within my knowledge as a result of the services I performed in connection with the Technical Report or the Technical Information.

Dated this 17th day of February, 2021.

M3 Engineering & Technology Corporation

By: */s/ "Alberto Bennett"*_____
Name: Alberto Bennet, PE
Title: President

Exhibit 31.1

Certification
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Michael Steinmann, certify that:

1. I have reviewed this annual report on Form 40-F of Pan American Silver Corp.;

i. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;

4. The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and

5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Dated: February 17, 2021

/s/ "Michael Steinmann"
By: Michael Steinmann
Title: President and Chief Executive Officer

Exhibit 31.2

Certification
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, A. Robert Doyle, certify that:

1. I have reviewed this annual report on Form 40-F of Pan American Silver Corp.;

i. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;

4. The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and

5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Dated: February 17, 2021

/s/ "A. Robert Doyle"
By: A. Robert Doyle
Title: Chief Financial Officer

Exhibit 32.1

Certification of CEO and CFO
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of Pan American Silver Corp. (the "Registrant") filed under cover of Form 40-F for the year ended December 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Michael Steinmann, as Chief Executive Officer of the Registrant, and A. Robert Doyle, as Chief Financial Officer of the Registrant, each hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, to the best of his knowledge, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Registrant.

/s/ Michael Steinmann
By: Michael Steinmann
Title: President & Chief Executive Officer
February 17, 2021

/s/ A. Robert Doyle
By: A. Robert Doyle
Title: Chief Financial Officer
February 17, 2021

This certification accompanies the Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by the Registrant for purposes of §18 of the Securities Exchange Act of 1934, as amended.