Pan American
SILVER CORP.

Annual Information Form

For the Year
Ended December 31, 2014

March 30, 2015

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Vancouver, British Columbia
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WHAT'S INSIDE

IMPORTANT INFORMATION ABOUT THIS DOCUMENT

This annual information form ("AIF") provides important information about Pan American Silver Corp. It describes our history, our markets, our operations and development projects, our mineral reserves and resources, sustainability, our regulatory environment, the risks we face in our business and the market for our shares, 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 dollar amounts are in United States dollars. Any references to CAD$ mean 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.

This AIF refers to various non-GAAP (generally accepted accounting principles) measures, such as "cash and total cost per ounce of silver" and "all-in sustaining costs per silver ounce sold" ("AISCOS"), which are used by us to manage and evaluate operating performance at each of our mines and are widely reported in the silver mining industry as benchmarks for performance, but do not have standardized meaning. Please refer to our management's discussion and analysis for the year ended December 31, 2014 (the "2014 MD&A") for detailed descriptions and reconciliations of these non-GAAP measures to their closest respective GAAP measures under IFRS.

Glossary of Terms

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

Caution about forward-looking information

Our 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 and US securities laws. We refer to them 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 on page 3).
- It is based on a number of material assumptions, including 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 the risks associated with our business. We list a number of these material risks below. We recommend you

also review other parts of this document, including "Risks Related to Our Business" starting on page 90, and our 2014 MD&A, which include a discussion of other material risks that could cause our actual results to differ from 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 will not necessarily update this forward-looking information unless we are required to by securities laws.

Examples of forward-looking information in this AIF:

- the price of silver and other metals;
- the sufficiency of our current working capital, anticipated operating cash flow or our ability to raise necessary funds;
- the accuracy of mineral reserve and mineral resource estimates, estimates of future production and future cash, and total costs of production, as applicable, at Huaron, Morococha, La Colorada, Dolores, Alamo Dorado, Manantial Espejo, Navidad, San Vicente, or other properties;
- estimated production rates for silver and other payable metals we produce, timing of production and estimated cash and total costs of production at our properties, including forecasted cash costs of production;
- the estimated cost of and availability of funding for ongoing capital replacement, improvement or remediation programs;
- access to and availability of funding for the future construction and development of our projects;
- estimated costs of construction, development and ramp-up of our projects;
- future successful development of the Navidad property and our other development projects;
- 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 feasibility and pre-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;
- estimated future closure, reclamation and remediation costs;
- forecast capital and non-operating spending;
- future sales of the metals, concentrates or other products produced by us;
- continued access to necessary infrastructure, including, without limitation, access to power, water, lands and roads to carry on activities as planned;
- our plans and expectations for our properties and operations, including, without limitation, the production estimates, forecasts regarding our investment activities, and other matters discussed under the heading "Outlook for 2015" and under the headings "Activities in 2015" with respect to each of our material properties;
- the expected investment and development activities at the La Colorada mine;
- the expected investment and development activities at the Dolores mine; and
- the ability to obtain permits, including for future project development and expansion.

Material risks and assumptions:

These statements reflect our current views with respect to future events and are necessarily based upon a number of assumptions and estimates that, while considered reasonable by us, are inherently subject to significant business, economic, competitive, political 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 such forward-looking statements contained in this AIF and documents incorporated by reference, 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);
- risks relating to our operations in Peru, Mexico, Argentina, Bolivia and other foreign jurisdictions where we may operate;

- restrictions on mining in the jurisdictions in which we operate;
- laws and regulations governing our operation, exploration and development activities;
- 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;
- 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);
- inherent risks associated with tailings facilities and heap leach operations, including failure or leakages;
- 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;
- reclamation requirements;
- risks relating to the creditworthiness and financial condition of our suppliers, refiners and other third parties;
- fluctuations in currency markets (such as the Peruvian nuevo sol, Mexican peso, Argentine peso and Bolivian boliviano versus the U.S. dollar and Canadian dollar);
- 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;
- employee relations;
- 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;
- relations with and claims by indigenous populations;
- relations with and claims by local communities and non-governmental organizations;
- the effectiveness of our internal control over financial reporting;
- claims and legal proceedings arising in the ordinary course of business activities;
- and those factors identified under the caption “Risks Related to our Business” in this AIF and the documents incorporated by reference herein.

You should not attribute undue certainty to forward-looking statements. 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 these statements or information to reflect changes in assumptions or changes in circumstances or any other events affecting the information, other than as required by applicable law.

Please see “Cautionary Note to U.S. Investors Concerning Estimates of Measured, Indicated and Inferred Resources” on page 6 of this AIF.

Conversion Table

In our AIF, metric units are used with respect to mineral properties located in Peru, Mexico, Argentina, Bolivia and elsewhere, unless otherwise indicated. Conversion rates from imperial measures to metric units and from metric units to imperial measures are provided in the table set out below.

Imperial Measure	=	Metric Unit
2.47 acres		1 hectare
3.28 feet		1 metre
0.62 miles		1 kilometre
0.032 ounces (troy)		1 gram
1.102 tons (short)		1 tonne
0.029 ounces (troy)/ ton (short)		1 gram/tonne
2205 pounds		1 tonne

Metric Unit	=	Imperial Measure
0.4047 hectares		1 acre
0.3048 metres		1 foot
1.609 kilometres		1 mile
31.1 grams		1 ounce (troy)
0.907 tonnes		1 ton (short)
34.28 grams/tonne		1 ounce (troy)/ton (short)

Scientific and Technical Information

Scientific or technical information in our AIF relating to mineral reserves or mineral resources for Pico Machay, La Colorada, Alamo Dorado, Manantial Espejo, San Vicente, La Bolsa, and Calcatreu is based on information prepared under the supervision of, or has been reviewed by, Michael Steinmann, P.Geo., President of Pan American and Martin Wafforn, P.Eng., Vice President, Technical Services of Pan American. Scientific and technical information relating to Huaron, Morococha and Dolores are based on information prepared and reviewed by Michael Steinmann, Martin Wafforn and Americo Delgado, P. Eng., Director of Metallurgy for Pan American. Scientific or technical information relating to the geology of particular properties, and the exploration programs described in this AIF, are prepared and/or designed and carried out under the supervision of Michael Steinmann. Scientific and technical information herein relating to the Navidad property is based on information contained in the Navidad Technical Report (as defined below) and the disclosure in our AIF about the Navidad property has been reviewed and consented to by Michael Steinmann, Martin Wafforn and Pamela De Mark, P.Geo., Director of Resources for Pan American, the experts involved in the preparation of the applicable sections of the Navidad Technical Report. In particular, scientific or technical information in our AIF relating to the estimation of mineral resources for the Navidad property was prepared by Pamela De Mark. All other disclosures of scientific and technical information contained in the descriptions of our mineral properties were prepared under the supervision of Michael Steinmann and Martin Wafforn. Each of Michael Steinmann, Martin Wafforn, Pamela De Mark and Americo Delgado is a "Qualified Person" as defined in National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("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.

Scientific and technical disclosure in our AIF for our material properties is based on technical reports prepared for those properties in accordance with NI 43-101 (collectively, the "Technical Reports"). The Technical Reports have been filed on SEDAR at www.sedar.com. The technical information in our AIF has been updated with current information where applicable. The Technical Reports are as follows:

- a report entitled "Technical Report – Preliminary Economic Analysis for the Expansion of the La Colorada Mine, Zacatecas, Mexico", with an effective date of December 31, 2013 (the "La Colorada Report") relating to the La Colorada mine;

- a report entitled "Feasibility Study Volume I – NI-43-101 Technical Report for Alamo Dorado Project, Alamos, Sonora, Mexico" dated March 31, 2005 (the "Alamo Report") relating to the Alamo Dorado mine;
- a report entitled "Technical Report for the Dolores Property, Chihuahua, Mexico - Preliminary Economic Assessment of a Pulp Agglomeration Treatment and Underground Option", with an effective date of May 31, 2014 (the "Dolores Technical Report") relating to the Dolores mine;
- a report entitled "Technical Report for the Huaron Property, Pasco, Peru" dated effective June 30, 2014 (the "Huaron Report") relating to the Huaron mine;
- a report entitled "Technical Report for the Morococha Property, Yauli, Peru" dated effective June 30, 2014 (the "Morococha Report") relating to the Morococha mine;
- a report entitled "Technical Report for San Vicente Mine Expansion Project, Potosi, Bolivia" dated effective June 6, 2007 (the "San Vicente Report") relating to the San Vicente mine;
- a report entitled "Manantial-Espejo Project Canadian Standard NI 43-101, Santa Cruz Province, Argentina" dated March 2006 (the "Manantial Report") relating to the Manantial Espejo mine; and
- a report entitled "Pan American Silver Corp.: Navidad Project, Chubut Province, Argentina: Preliminary Assessment" dated January 14, 2011 (the "Navidad Technical Report") relating to the Navidad property.

Cautionary Note to U.S. Investors Concerning Estimates of Measured, Indicated and Inferred Resources

Our AIF and the documents incorporated by reference in it have been prepared in accordance with the requirements of Canadian provincial securities laws, that differ from the requirements of U.S. 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 prepared in accordance with NI 43-101 and CIM 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 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. 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. **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''. 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. 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. 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.

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 by way of amendment to our memorandum, the last occurring on April 11, 1995, when the present name of Pan American was adopted. Amendments to the memorandum of Pan American to that date had been limited to name changes and capital alterations. In May 2006, Pan American obtained shareholder approval to amend our memorandum and articles, including the increase in our authorized share capital from 100,000,000 to 200,000,000 common shares, in connection with Pan American's required transition under the *Business Corporations Act* (British Columbia).

Pan American's head office is situated at 1500 - 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

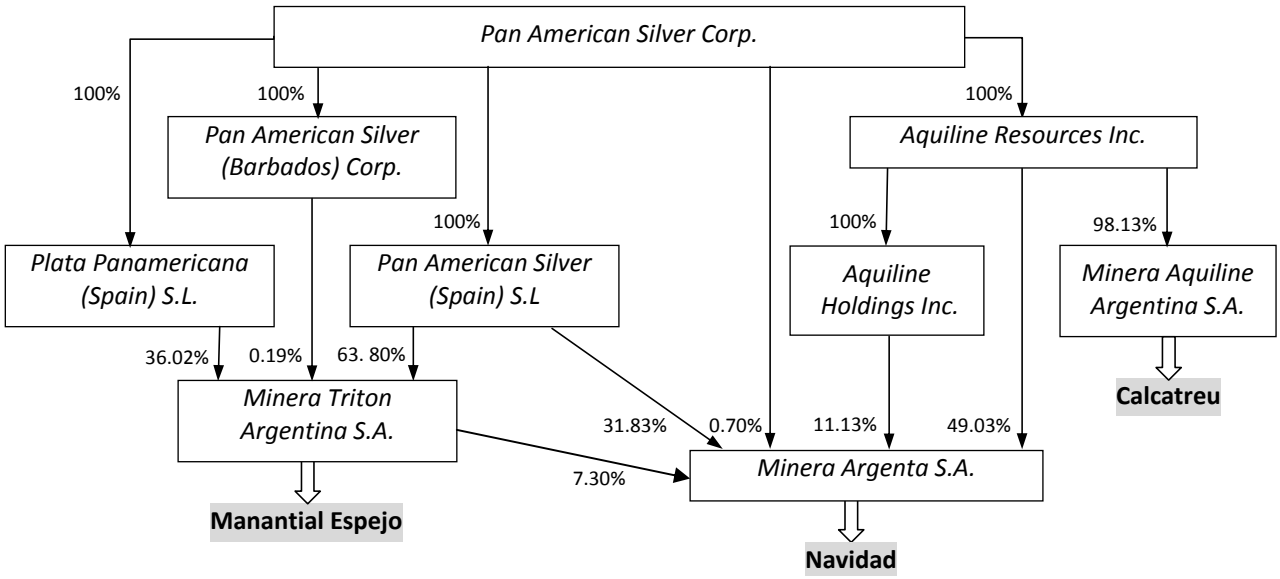
Pan American's authorized share capital consists of 200,000,000 common shares without par value. The holders of common shares are entitled to: (i) one vote per common share at all meetings of shareholders; (ii) receive dividends as and when declared by the directors of Pan American; and (iii) receive 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.

Subsidiaries

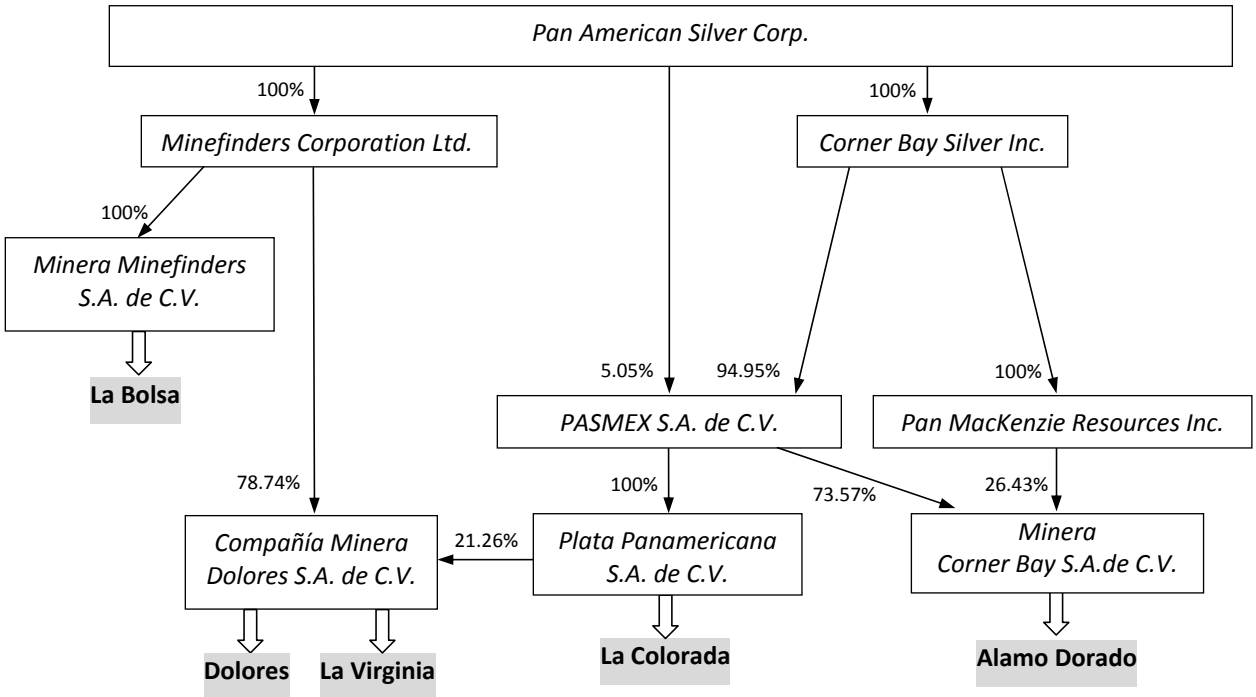
A significant portion of our business is carried on through various subsidiaries. The following table and charts (as applicable, set out by jurisdiction of the respective mineral properties) show, as at December 31, 2014, our significant subsidiaries:

Name of Subsidiary	Jurisdiction
Corner Bay Silver Inc. (“Corner Bay”)	Canada
Aquiline Resources Inc. (“Aquiline”)	Ontario
Minefinders Corporation Ltd. (“Minefinders”)	Ontario
Absolut Resources Inc. (“Absolut”)	Yukon
Pan MacKenzie Resources Inc.	Delaware
PAS (Lux) S.á r.l.	Luxembourg
Pan American Silver (Barbados) Corp. (“Pan American Barbados”)	Barbados
Aquiline Holdings Inc. (“Aquiline Barbados”)	Barbados
PASCAP Insurance (Barbados) Ltd. (“PASCAP”)	Barbados
Pico Machay Cayman Limited (“PM Cayman”)	Cayman Islands
Plata Panamericana (Spain) S.L.	Spain
Pan American Silver (Spain) S.L.	Spain
Minera Triton Argentina S.A. (“MTA”)	Argentina
Minera Aquiline Argentina S.A. (“MAA”)	Argentina
Minera Argenta S.A. (“MASA”)	Argentina
PASMEX, S.A. de C.V. (“PASMEX”)	Mexico
Minera Corner Bay S.A. de C.V. (“MCB”)	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 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
Minera Calipuy S.A.C. (“Minera Calipuy”)	Peru
Minera Pico Machay S.A.C. (“MPM”)	Peru
Pan American Silver (Bolivia) S.A. (“PASB”)	Bolivia

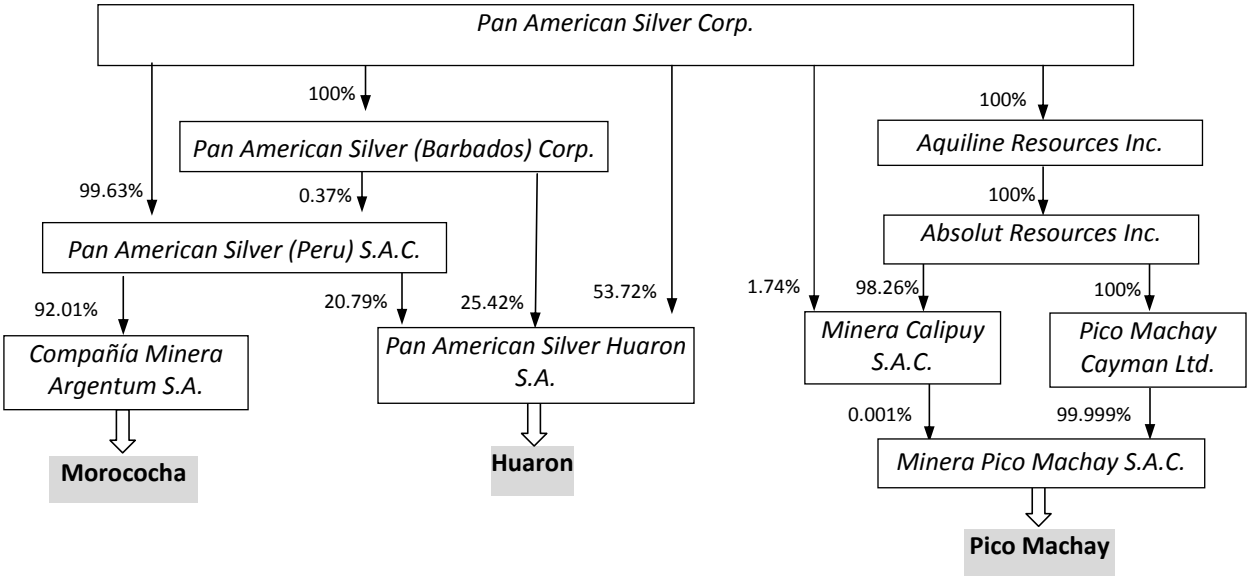
Argentina Properties



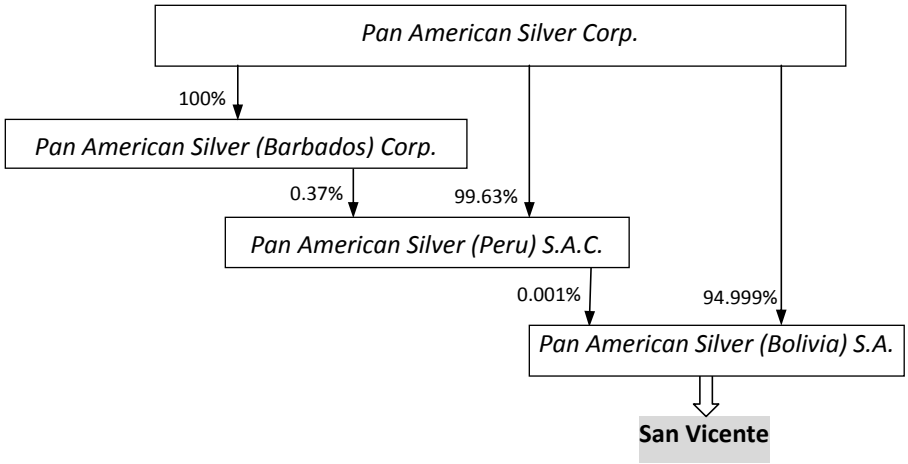
Mexico Properties



Peru Properties



Bolivia 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 common share and other voting interests and do not include holdings of investment shares in Peru or non-voting preferred shares in Argentina. Percentages are rounded.

GENERAL DEVELOPMENT OF THE BUSINESS

Business of Pan American

We are principally engaged in the operation and development of, and exploration for, silver producing properties and assets. Our principal product is silver, although we also produce and sell gold, zinc, lead, and copper. At present, we carry on mining operations and are developing mining projects in Mexico, Peru, Argentina and Bolivia, and have control over non-producing silver assets in each of those jurisdictions and in the United States. Exploration work is carried out in all of those countries, as well as elsewhere throughout the world.

Corporate Strategy and Financial Objectives

Our mission is to be the world's preeminent 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 elements of our strategy are to:

Strategy	Implementation
Increase production	After acquiring our first operating mine (Quiruvilca in Peru) in 1995, we have increased annual silver production almost every year, and in 2014 achieved production of just over 26 million ounces of silver. We also increased gold production to a record high 161,500 ounces in 2014, an 8% increase over gold production in 2013. This growth has been accomplished through a combination of acquisition, development and expansion efforts. In 2015, Pan American expects to produce between 25.50 and 26.50 million ounces of silver and between 165,000 and 175,000 ounces of gold.
Increase mineral reserves and mineral resources	Historically, we have achieved annual increases in our mineral reserves and mineral resources through exploration and acquisitions. During the last 11 years, our mine-site exploration efforts (excluding acquisitions) have been very successful, adding over 279 million ounces of silver to our proven and probable mineral reserves, which more than replaced the 257.5 million ounces of silver mined in that same period. While 2014 was another successful year for exploration, the discovery and definition of approximately 29.4 million ounces of new proven and probable silver mineral reserves was insufficient to replace the approximately 32.9 million contained ounces that were mined in 2014. Additionally, approximately 20.1 million ounces of silver were lost from reserves as a result of re-categorization, primarily due to lower metal prices. At December 31, 2014, our proven and probable silver and gold mineral reserves were approximately 299.9 million and 2.3 million ounces, respectively, which represent an approximate 7% decrease in both cases from the previous year's totals. Our measured and indicated mineral resources were approximately 731 million ounces of silver and 1.8 million ounces of gold as at the end of 2014. This represents a 2% and a 13% increase, respectively, from 2013.
Continue to be a "Low Cost Producer"	Full year 2014 consolidated cash costs[1] to produce an ounce of silver were approximately $11.46, net of by-product credits, which was below management's guidance of between $11.80 and $12.80 per ounce. AISCSOS[1] for the full year 2014 declined slightly to $17.88 per ounce of silver. Our strategy continues to emphasize reducing overall unit production costs. To keep production costs down, we will continue to review mining plans at our operating mines in order to find greater productivities and efficiencies as well as develop financial strategies to reduce exposure to foreign currency exchange fluctuations and base metal price fluctuations. Cash costs for the full year 2015 are forecast at between $10.80 and $11.80 per ounce of silver, net of by-product credits.

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. This includes our acquisition of the Dolores mine and the La Bolsa property by virtue of acquiring all of the issued and outstanding shares of Minefinders in 2012, and the acquisition of the Navidad, Calcatreu and Pico Machay properties pursuant to our acquisition of all of the issued and outstanding shares of Aquiline in 2010.
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 annually 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 impact their host communities and nearby populations both positively and negatively. 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, employees, local communities, business partners and other stakeholders affected by our operations. We have adopted, among other things, a Global Code of Ethical Conduct and a Global Anti-Corruption Policy that formalize how we must conduct our business and interact with stakeholders and others. We are aware that our business is in many ways dependent on these 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 sustainable development performance according to the Global Reporting Initiative Framework, with the current report available on Pan American's website.

Note:

[1] Cash costs per payable ounce of silver, net of by-product credits, and AISCSOS are non-GAAP measures. Please see "Reporting currency and financial information" on page 2 of this AIF.

Key Developments Over the Last Three Financial Years

Year	Key Developments
2012	• Increased silver production to 25.1 million ounces and gold production to 112,300 ounces. Alamo Dorado led our silver production at 5.4 million ounces, followed by La Colorada at 4.4 million ounces. • Completed the acquisition of Minefinders Corporation Ltd. and integrated the Dolores mine to our portfolio of assets. • Divested the high-cost Quiruvilca mine in Peru. • Invested approximately $41.7 million to repurchase approximately 2.4 million shares of Pan American under our normal course issuer bid. • Paid total cash dividends of $24.9 million on Pan American common shares. • Spent approximately $52 million on major projects including $20 million for advancing the Navidad project engineering and design, which involved the preparation of an Environmental Impact Assessment, $6.1 million to complete the Morococha ancillary facility relocation project, and $21.3 million at the Dolores mine to conduct preliminary studies to assess the potential to enhance long-term value with the addition of a milling circuit and/or underground mine and to advance leach pad stabilization and construction efforts to ensure sustainability of heap leach production. • Spent approximately $37 million on our exploration programs, including $16.3 million in near-mine exploration at our seven operations, $8.7 million in greenfield exploration activities at selected properties, and $12.0 million on other exploration and project development.
2013	• Increased silver production to 26 million ounces and gold production to 149,800

	ounces. Alamo Dorado led our silver production at 5.1 million ounces, followed by La Colorada at 4.6 million ounces, while Dolores was our largest gold contributor producing just over 65,000 ounces of gold for the year. • Invested approximately $6.7 million to repurchase approximately 415,000 shares of Pan American under our normal course issuer bid. • Paid total cash dividends of $75.8 million on Pan American common shares, representing $0.50 per common share on an annualized basis. • Spent approximately $16.3 million on mine-site exploration and completed nearly 150 kilometres of diamond drilling. • Announced that we will be proceeding with the production expansion project at La Colorada that is expected to increase the mine's silver production rate to approximately 7.7 million ounces of silver annually by the end of 2017, for an incremental capital investment of approximately $80 million.
2014	• Produced 26.1 million ounces of silver, slightly more than in 2013, and increased gold production to 161,500 ounces. La Colorada became our largest silver producer at approximately 5.0 million ounces for the full year 2014, followed by Dolores with approximately 4.0 million ounces of silver produced in that period. • Paid total cash dividends of $75.8 million on Pan American common shares, representing $0.50 per common share on an annualized basis. • In 2014, we spent $99.1 million in sustaining capital at our seven mining operations and invested approximately $17.9 million on the La Colorada expansion project and another $17.3 million on completing the second phase of the Dolores' pad 3 expansion. • Spent $16.6 million on mine-site exploration and completed over 152.5 kilometres of diamond drilling.

Outlook for 2015

In 2015, Pan American expects to maintain current production levels of between 25.50 and 26.50 million ounces of silver at consolidated cash costs of between $10.80 and $11.80 per ounce of silver, net of by-product credits. In addition, higher gold grades at Dolores are expected to contribute to an increase in consolidated gold production to between 165,000 and 175,000 ounces.

We plan to spend between $71.0 and $84.0 million on sustaining capital in 2015, and a further $90.0 to $97.0 million on long-term and expansion projects. The sustaining capital is primarily for open pit pre-stripping at Dolores and Manantial Espejo, tailings dam expansion at La Colorada, underground developments at Huaron and Morococha and mine-site exploration across all seven of our mines. The spending on long-term projects will primarily be for the La Colorada production expansion project, but also includes work at the Dolores mine relating to a power line project to the mine and process plant optimization. We intend to spend approximately $2.1 million in greenfield exploration activities at selected properties.

We will continue to investigate, evaluate and, where appropriate, acquire additional silver production, exploration and development properties.

NARRATIVE DESCRIPTION OF THE BUSINESS

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 2014, the Huaron, Morococha, Alamo Dorado, Dolores, La Colorada, Manantial Espejo and San Vicente mines accounted for all of our production of concentrates and doré.

Consolidated production for the year ended December 31, 2014 was as follows:

	La Colorada	Alamo Dorado	Dolores	Huaron	Morococha[1]	San Vicente[2]	Manantial Espejo	Total
Tonnes milled[3]	471,000	1,763,000	6,054,000	893,000	566,000	316,000	797,000	10,860,000
Grade								
Silver - g/t	366	75	40	154	152	417	157	N/A
Gold - g/t		0.37	0.44				2.82	N/A
% Zinc	1.94%			2.41%	3.60%	2.37%		N/A
% Lead	0.92%			0.97%	1.12%	0.20%		N/A
% Copper				0.86%	0.76			N/A
Production								
Ounces silver[3]	4,979,000	3,473,000	3,982,000	3,635,000	2,370,000	3,949,000	3,725,000	26,112,000
Ounces gold[4]	2,570	17,560	66,820	1,160	2,920		70,470	161,500
Tonnes zinc[4]	7,700			14,200	15,800	5,840		43,530
Tonnes lead[4]	3,740			6,030	4,740	510		15,020
Tonnes copper[4]		30		5,880	3,080			8,990

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 Rounded to the nearest thousand.

4 Rounded to the nearest ten.

Our revenue by product category for the financial years ended December 31, 2014 and December 31, 2013 was as follows:

Product Revenue	2014	2013
	($000's)	($000's)
Silver and Gold Doré	424,591	500,928
Zinc Concentrate	73,487	68,094
Lead Concentrate	163,854	162,601
Copper Concentrate	90,010	92,881
Total[1]	**751,942**	**824,504**

Note:

1 Total may vary due to rounding.

Additional information related to our segmented information is set forth in Note 25 to the Pan American's Audited Consolidated Financial Statements for the year ended December 31, 2014 and is referred to in the 2014 MD&A under the heading "2014 Operating Performance".

Silver and Gold Doré

Our principal buyers of silver and gold doré produced from our Dolores, Alamo Dorado, La Colorada, and Manantial Espejo mines, once refined, are international bullion banks and traders. Silver and gold doré is delivered to refineries in Mexico, Germany, and the United States, and subsequently transferred to the accounts of our buyers.

Zinc, Lead and Copper Concentrates

Our principal markets for copper concentrates produced from Morococha, Huaron, and occasionally from San Vicente, as well as a unique copper precipitant product from Alamo Dorado, are Canada, Chile, and China through a number of contracts with smelters and traders. Copper concentrates are delivered to customers first via truck to seaports, and from there by ship.

Our principal markets for zinc concentrates produced from La Colorada, Morococha and Huaron, and occasionally from San Vicente, are Peru, South Korea and Japan through a number of contracts with smelters and traders. Zinc concentrate is delivered to Peruvian customers by truck. Zinc concentrates are delivered to customers in South Korea and Japan first via truck to seaports, and from there by ship.

Our principal markets for lead concentrates produced from La Colorada, Morococha and Huaron, and occasionally from San Vicente, are Japan, South Korea, China, and Belgium through a number of contracts with traders. Lead concentrates are delivered first via by truck to seaports and from there by ship.

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

Employees

At the end of 2014, we had approximately 4,800 employees and over 2,200 contractors. The majority of those employees and contractors were working at our operations in South America and in Mexico. Pan American also had 38 employees and one contractor at our head office in Vancouver as at December 31, 2014. Our Peruvian operations had approximately 3,400 total employees and contractors, while our Bolivian operations had about 600 employees and contractors, our Argentinean operations had approximately 900 employees and contractors and our Mexican operations had slightly more than 2,000 employees and contractors.

Research and Development

We conduct research and development activities through feasibility work and operational enhancement evaluations in order to develop improved production processes and exploration techniques. Costs associated with this work are usually expensed as incurred. Apart from the expansion studies conducted at La Colorada and Dolores, as well as the process flowsheet development at Navidad, we did not incur, or specifically account for, any significant research and development costs during 2012, 2013 or 2014.

Environment

All phases of our operations are subject to environmental regulation in the various jurisdictions in which we operate. To the best of management's knowledge, our activities in 2014 were, and continue to be, in compliance in all material respects with such environmental regulations applicable to our mining operations, development, and exploration activities. We have implemented an environmental policy, a corporate social responsibility policy, and a health and safety policy in which we accept our corporate responsibility to practice environmental protection and provide a safe and healthy workplace for our employees, and commit to comply with all relevant industry standards, environmental legislation and regulations in the countries where we carry on business.

During 2014, reviews of the environmental performance of all the operations and projects were conducted by Pan American's Vice President of Environment and Sustainability. The reviews included inspections of the mine and project sites with key operations personnel, a review of environmental monitoring program procedures and results and a review of the principal environmental 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. In addition to the periodic reviews, detailed Corporate Environmental Audits are conducted at each mine at least once every two years, in accordance with the Mandate of the Board's Health Safety and Environment Committee. These audits review environmental compliance and implementation of best practice procedures and management systems. During 2013, audits were undertaken at Alamo Dorado, La Colorada, Dolores and Manantial Espejo and in 2014, Morococha, San Vicente, and Huaron were audited. In intervening years between audits, the implementation of the corrective actions required by each audit is checked at each mine and the Alamo Dorado, La Colorada, Dolores and Manantial Espejo corrective actions were found to be satisfactory in 2014.

Our Huaron, Morococha, La Colorada, Alamo Dorado, Dolores San Vicente, and Manantial Espejo operations were all inspected by government agencies in 2014 and no material issues were observed during these inspections.

The Peruvian government has proposed implementing changes to its liquid effluent discharge and receiving water quality limits. We have conducted a baseline assessment at each of our two operating mines in Peru in order to evaluate the potential impact of these changes to water treatment practices at each operation. We proactively implemented changes in order to be in a better position to meet the new water quality limits and presented three-year water quality limit compliance plans to the Peruvian government in 2012 for both Huaron and Morococha. These plans are still being reviewed by the government and the schedule for implementation has not yet been approved.

We completed our comprehensive Sustainability Report for 2013 in accordance with the Global Reporting Initiative guidelines and improved our disclosure and report quality to be in accordance with the new G4 guidelines. The report includes detailed information on our environmental, social, economic, and health and safety performance. The Sustainability Report is available at our head and country offices and also on our website.

In the financial year-end dated December 31, 2014, our environmental expenditures for concurrent reclamation were approximately $2.0 million. The closure and decommissioning liabilities were prepared using the standard reclamation cost estimator methodology developed in the State of Nevada, USA, using quantity estimates and cost data obtained at each mine site. We estimate the aggregate present value of expenditures required for closure and reclamation costs in respect of the Huaron, Morococha, Alamo Dorado, La Colorada, Dolores, Manantial Espejo, and San Vicente mines, along with our development properties, to be approximately $43.2 million, which is an increase from the previous estimate at December 31, 2013, due principally to normal course disturbance growth from operations and revisions to certain cost input estimates.

Other than specific environmental concerns discussed in our AIF, we are not aware of any material environmental matter requiring significant capital 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, 2014.

Health and Safety

We have implemented a health and safety policy in which we accept corporate responsibility to provide a safe and healthy workplace for our employees and contractors, and commit to comply with all relevant industry standards, legislation, and regulations in the countries where we carry on business. The policy is reviewed annually to ensure that we remain current, if not ahead, of industry standards and best practices.

Periodically, both formal and informal corporate health and safety audits are conducted at our operating mines and active development properties. In 2014, all of our seven operating mines were subject to internal safety audits conducted by a team of safety managers and operations supervisors from some of our other operations and led by Pan American's Director of Health and Safety. Management reports health and safety findings and mitigation progress to Pan American's Board of Directors on a regular basis.

During 2014, we continued to focus on introducing new safety programs and training at our operating mines in Peru as well as maintaining excellent safety records at the other mines and development projects. The total hours worked at operating mines and active development and exploration projects declined by approximately 9% versus 2013 while the number of lost time injuries ("LTI") increased by approximately 11% to 21. We recorded a lost time injury frequency ("LTIF") of 1.14 during 2014, compared to 0.94 during 2013 and 1.11 during 2012. LTIF is calculated as follows:

$$LTIF = \frac{(\#\ of\ accidents) * (1{,}000{,}000)}{Total\ hours\ worked}$$

In 2005, we introduced the "Chairman's Safety Award" which is presented to our mine with the best overall safety performance. In 2014, all three of our Mexican mines (La Colorada, Alamo Dorado and Dolores) and our exploration and active development properties had perfect safety records with no LTI's. The winner of the Chairman's Safety Award for 2014 was the La Colorada mine.

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: the Huaron mine, the Morococha mine, the Alamo Dorado mine, the Dolores mine, the La Colorada mine, the Manantial Espejo mine, the San Vicente mine and the Navidad property. We do not consider any of our other 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 5.

Mineral Reserve and Mineral Resource Estimate Information

The process for economic assessment of the mineral reserves and mineral resources at our properties is described below in each property section. Although we believe that our mineral reserve and mineral resource estimates will not be materially impacted by external factors such as metallurgical, safety, environmental, permitting, legal, taxation, and other factors disclosed in our AIF, there can be no assurance that these factors will not have an impact. There are numerous uncertainties inherent in estimating mineral reserves and resources. The accuracy of any mineral reserve and mineral resource estimation is the function of the quality 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, and investors are cautioned against attributing undue certainty to mineral reserves and mineral resources.

I. Operating Properties

A. Mexico

(i) La Colorada Mine

Project Description and Location

The La Colorada underground silver mine is located in the Chalchihuites district in Zacatecas State, Mexico, approximately 99 kilometres south of the city of Durango and 156 kilometres northwest of the city of Zacatecas.

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 8,395 hectares, and we also have control over approximately 1,119 hectares of surface rights covering the main workings. All of the La Colorada mineral reserves and 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.

We pay an annual fee to maintain the claims in good standing. To the best of our knowledge, La Colorada is not subject to any royalties or encumbrances, but is subject to certain duties imposed by the Mexican government as described under the heading “Mining Operations”.

To the best of our knowledge, our operations at La Colorada currently comply in all material respects with applicable Mexican environmental laws.

To the best of our knowledge, all permits and licenses required to conduct our activities on the project have been obtained and are currently in good standing.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

The La Colorada mine is accessed primarily from the city of Durango by a continuously maintained 120 kilometre all-weather, paved, two lane highway (Highway 45) and by a 23 kilometre public, all weather, gravel road. The mine is also accessible from the city of Zacatecas by similar types of roads.

The main municipality in the district is the city of Chalchihuites, 16 kilometres northwest of La Colorada, with a population of approximately 1,000. A long history of silver mining in Zacatecas State has resulted in an experienced workforce in the region. La Colorada provides a camp on site to house about 300 workers and provides daily transport for local employees.

The physiography of the region is characterized by wide flat valleys and narrow, relatively low mountain ranges and hills, which are typically vegetated with mesquite and cactus. Topographic relief is between 2,100 metres and 2,550 metres above sea level.

The climate at the project site is arid to semi-arid, with a rainy season occurring from July to September, which can be extreme and may cause regional flooding and wash-outs. However, in general, precipitation in the area is quite low and the mine is able to operate year round.

The La Colorada mine surface infrastructure is located on land owned by us, and besides a new power line right-of-way being implemented as part of the expansion project, no additional surface rights requirements are anticipated over the life of the mine. La Colorada operates two separate tailings storage facilities and sufficient storage capacity exists for the current mineral reserves. All of the waste rock generated is currently used as backfill material for the cut and fill stope mining method.

The mine purchases power from the national power utility, Comisión Federal de Electricidad, and has a 1.8 megawatt diesel power station for back up use. The mine also has plans to construct a new 115 kilovolt power line as part of the ongoing mine expansion project. Water for the mining operation is supplied from the underground mine dewatering systems. As permitted by Mexican law, underground water is pumped to the surface and stored in head tanks for use in the milling process and for domestic services. Underground water is also pumped to a water treatment plant to provide potable water. The current water supply is adequate for the existing and planned future requirements of the mine.

History

The first known mining in the Chalchihuites district began during pre-colonial times, when indigenous people produced silver and malachite. The village of Chalchihuites was founded during Spanish colonization in the 16th century and the mineral deposits in the area were intermittently exploited. By the 19th century the Spanish mines were operating continuously, producing on the order of 30 million ounces of silver and 39,000 ounces of gold district-wide. The War of Independence curtailed production from this and many other silver producing areas between 1910 and 1920.

In 1925, the Dorado family operated mines at two locations on the La Colorada property. From 1929 to 1955, Candelaria y Canoas S.A., a subsidiary of Fresnillo S.A., installed a 100 tonne per day 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 a single breccia pipe on the property. From 1949 to 1993, Compañía de Minas Victoria Eugenia S.A. de C.V. operated a number of mines on the La Colorada property.

In 1994, Minas La Colorada S.A. de C.V. ("MLC") acquired the exploration and exploitation claims and surface rights of Compañía de Minas Victoria Eugenia S.A. de C.V. Until 1997, MLC conducted mining operations on three of the old mines on the La Colorada property at a rate of approximately 150 tonnes per day.

Historically, exploration has been in the form of development drifting on the veins. Prior to our ownership, 131 diamond drill holes had been drilled for a total of 8,665 metres.

In 1997 we entered into an option agreement with MLC, during which time we conducted exploration and diamond drilling programmes as part of our due diligence reviews. We resampled four of 14 drillholes completed by MLC, and the results of these samples form part of the database of samples we use for the estimation of mineral resources and reserves. We acquired the La Colorada mine from MLC in April 1998 and have focussed our production on the Candelaria, Estrella, and Recompensa mines. No activity takes place at the Campaña mine.

Geological Setting

The La Colorada property is located on the eastern flanks of the Sierra Madre Occidental mountain range at the contact between the Lower Volcanic Complex and the Upper Volcanic Supergroup. The La Colorada property lies 16 kilometres southeast of Chalchihuites and 30 kilometres south-southwest of Sombrerete, two mining camps with significant silver and base metal production from vein and associated skarn deposits, such as at the San Martin and Sabinas mines.

The oldest rocks exposed in the mine area are Cretaceous aged carbonates and calcareous clastic rocks of the Cuesta del Cura and Indidura formations. Overlying the calcareous rocks is a conglomerate unit containing clasts derived mostly from the sub adjacent sedimentary rocks. In the Chalchihuites district this unit is of Early Tertiary age and is referred to as the Ahuichila Formation.

Most of the outcrop in the mine area is represented by altered dacite of the regional Lower Volcanic Complex. The stratigraphically highest rocks in the mine area are felsic tuffs correlated with the Upper Volcanic sequence. These tuffs unconformably overlie the trachyte along the southern property boundary.

Thirteen breccia pipes have been mapped on the surface or in underground workings. The pipes are round to ovoid in shape, up to 100 metres in diameter, and can extend vertically more than 400 metres below the surface. The breccias contain clasts of limestone and trachyte, often mineralized, in an altered trachyte matrix. Clasts of vein material have been found in the breccias suggesting that the pipes postdate the vein emplacement.

East to northeast striking faults form the dominant structures in the project area and controlled the deposition of mineralization by acting as conduits for mineralizing hydrothermal fluids. Most of these faults dip from moderately to steeply to the south. Stratigraphic contacts are displaced from ten to over a hundred metres lower on down-dropped blocks.

Exploration

Mining had taken place at La Colorada for several decades prior to any modern exploration work. During that time most of the major structures became known and production data was used to design diamond drilling programs, which comprise the bulk of the exploration activities. For those reasons there has been little surface sampling or geophysics and other surveys.

Our initial exploration program was completed between September 1997 and March 1998 to evaluate the economic potential while the property was under an option agreement with the previous owners. Following the encouraging results of that program the decision was made to acquire the mine. For the past several years we have typically drilled on the order of 100 to 200 drillholes each year from surface and underground. The primary objectives of our drilling programs are to increase the quantity and confidence in the mineral resource and reserve estimates with step-out and tighter drilling patterns on known structures, to outline new inferred mineral resources, and test the main structures at depth.

Channel sampling and detailed geological and structural mapping is performed in ore development and stopes for grade control and reconciliation purposes and to collect close spaced data for mineral resource and reserve estimation. The mine operation completes drifting in close proximity and along vein structures, providing extensive reconciliation data. The results of these reconciliations are usually within ±5%. The channel sample results are also used to predict mill feed grade, reconciled monthly to the plant head grade, and are usually in the ±2% range. Channel sample results are used, either on their own or in conjunction with diamond drill sample results, for the estimation of mineral reserves and resources.

All drilling at La Colorada is diamond core drilling and is performed using industry standard wire line methods from both surface and underground. The work is performed by either company employees with a company owned drill or by specialized drilling contractors. All diamond drilling is performed under the supervision of the La Colorada mine geology department.

There are no known sample recovery, contamination, or bias issues that could have a material impact on the reliability of the sample results.

Mineralization

La Colorada is a typical epithermal silver-gold deposit, with a transition in the lower reaches of the deposit to a more base metal predominant system.

There are three separate active mining areas on the property, including the Candelaria, Estrella, and Recompensa areas. The main structure at Candelaria strikes generally east west. The west part of the vein is referred to as HW and the east part is referred to as NC2, and there are a number of off-splits from these veins. The Estrella area includes the Amolillo vein, which is a split from the HW vein, and the Palomas vein, which is a split from Amolillo. The Recompensa zone produces or has produced from three areas: the Recompensa vein; Erika, which is a split from the Recompensa vein; and the Yuri replacement body, which lies between Erika and Recompensa.

Four dominant styles of mineralization are present at La Colorada, including breccia pipes, vein-hosted mineralization, replacement mantos within limestone, and deeper seated transitional mineralization.

Mineralization in the breccia pipes generally has lower silver values and elevated base metal values. Mineralization is associated with intense silicification and occurs as disseminated galena and sphalerite with minor chalcopyrite and bornite. Sulphides are found in the clasts and the matrix.

Most mineralized veins on the property strike east to northeast and dip moderately to steeply to the south. Veins occur in the dacite and limestone units and cut across the bedding and contacts with little change in the width or grades of the vein. Mineralized widths in the veins are generally less than two metres, but may be wider in the presence of a surrounding halo of replacement or brecciated material. The HW Corridor at the Candelaria mine strikes east-west and dips moderately to the south, with true widths of approximately up to 15 metres, but most of the economic mineralization is located in quartz veins, which are on average one to two metres wide. In some cases vein fillings consist of quartz, calcite, and locally barite and rhodochrosite. Where the veins are unoxidised, galena, sphalerite, pyrite, native silver, and silver sulphosalts are present. The major mineralized veins are strongly brecciated and locally oxidised.

Manto style mineralization is found near vein contacts where the primary host rock is limestone. This style of mineralization was previously mined at Recompensa and is also present in areas of the Candelaria zone. The mantos appear to be controlled by thrust faulting adjacent to the veins, and can form bodies up to six metres wide. Most commonly, they occur in the footwall north of the steeply dipping vein, but depending on the orientation of the fault they can occur in the footwall, the hanging wall, or both. The mineralogy of the mantos is characterized by galena and sphalerite with minor pyrite and chalcopyrite. Gangue minerals include quartz, rhodochrosite, pyrolusite, and other manganese oxides.

The deep seated transition mineralization, also known as NC2 Deep at the Candelaria mine, consists of both vein type mineralization and more diffuse stockwork and breccia zones. There appear to be seven distinct zones within the transitional zone, and these can be sub-grouped into three main categories: vein mineralization, including the down dip extension of the HW and NC2 and veins in the hangingwall and footwall of both; a peripheral stockwork vein zone that envelopes the NC2 structure; and sub-horizontal manto-like stockwork zones in the NC2 hangingwall.

Deep drilling has defined a restricted manto replacement body with lower silver-gold grades and higher lead zinc grades at the 1,000 metre level and remains open to depth. It is adjacent to the known vein system which continues at that depth.

The current mineral resource and reserve currently comprises vein and manto hosted mineralization. The NC2 and HW Corridor veins at the Candelaria mine are economically the most important and contain over 40% of the mineral reserve and resource ounces of silver. These zones are characterized by a broad mineralized shear within limestone containing one or more quartz veins parallel to the orientation of the shear. The majority of the silver mineralization is found in the quartz veins which range from 2.0 to 2.9 metres wide. The HW and NC2 structures provide nearly 90% of the mine's current production. The two veins have a combined strike length of over 1,500 metres.

The NC2 vein is the most important source of sulphide silver mineralization and contains approximately 30% of the mineral resource and reserve ounces of silver. It is a narrow, one to seven metre wide mainly sulphide and partly oxide vein with a strike length of over 900 metres. It is open to the east where it is cut by a trachyte dyke, and has been confirmed by drilling and drifting to continue in both width and grade on the other side of the dike. The down-dip exploration potential is significant. In 2012, we drilled a hole that intersected the vein 400 metres below the current probable mineral reserves. There are a number of other splits from this vein.

The HW vein, also at the Candelaria mine, is a one to two metre thick vein with a strike length of over 1.1 kilometres. The HW Corridor consists of four structures. Two structures are brecciated-altered zones in the hangingwall of the HW vein, and the other two structures of the footwall are controlled by a broad mineralized

shear in limestone containing one or more quartz veins parallel to the orientation of the shear. The majority of the silver mineralization is found in the quartz veins which average two metres wide but can widen up to six to seven metres at the intersections with the HW vein.

At the Estrella mine, the Amolillo oxide/sulphide vein is located 500 metres north of the NC2 and HW vein complex and approximately along strike to the east of the Recompensa vein. The vein lies mostly within dacite host rock and limestone at depth, and has an average width of 1.9 metres and a strike length of approximately 1,300 metres. Our drilling results indicate that the Amolillo vein could be key to a possible mine expansion, as indicated in the La Colorada Report. Diamond drilling has intersected the vein 480 metres below the deepest mining level, and expanded the lateral extension to the east and west by 900 metres for a total of 1,300 metres of current strike length.

The Recompensa mine contributes the fewest silver ounces to the mineral resources and reserves. The main zones being exploited are the Recompensa and Erika veins and the Yuri manto replacement body located between the two veins. The Recompensa and Yuri are located more than a kilometre northwest of the NC2 and HW vein complex. The vein mineralization averages about 1.8 metres wide in the economically mineable zones, and contains a minor amount of oxide but mostly sulphide material. Erika is a hangingwall split from the Recompensa vein and is relatively narrow at an average width of 1.0 metres in the economically mined zone. It contains only sulphide material.

Drilling

We completed approximately 46,300 metres of diamond drilling during 2014, mainly at the NC2 and Amolillo structures. The drilling database contains on the order of thousands of drillholes from both surface and underground. In the past, underground holes were drilled BQ size until 2000 when the drillhole diameter in the HW corridor was increased to HQ size to improve core recovery. From 2008 to present the surface hole size has been increased to HQ and underground holes are drilled either at HQ, NQ or BQ sizes depending on the location and/or depth of the holes.

The holes generally range in length from 100 to 300 metres. Hole collar coordinates are surveyed by total station survey equipment.

Sampling and Analysis

The drill core is logged and sampled by a geologist using industry standard methods. The geologist marks the beginning and end of the samples, which vary in width depending upon the geology and the vein intersection. Trained staff cut the core in half with a diamond blade equipped saw. One half of the core is placed in a sample bag and the other half is returned to the core box and stored on a rack in the core library. A two piece sample tag with a bar code is filled out with information relevant to the sample. One half of the tag is inserted in the sample bag and the other half is used for data entry into the geology database.

Channel sampling is performed every three metres in development headings and every five metres in stopes by sampling crews under the supervision of the mine geologist. Vein and wall rock are sampled separately and with lengths selected according to geology. The sampler uses a hammer and chisel to take a representative sample of approximately two kg from across the marked location. A sample tag is inserted into the sample bag and the bag is closed to prevent contamination.

Both channel and drill core sample intervals are selected according to the width of geological features and are usually approximately a metre in width. All channels are sampled regardless of expected grade, and samples several metres into the hangingwall and footwall are also taken.

We have used four commercial labs in the past for exploration assaying at La Colorada, including Bondar Clegg (Vancouver, B.C.), ALS Chemex (Vancouver, B.C.), Luismin (Durango, Mexico) and ALS Chemex de México (Guadalajara, México). All gold and silver assays by the commercial labs have been done using fire assay with

either an atomic absorption ("AA") or gravimetric finish on a 30 g charge. Base metals were assayed using acid digestion and AA determination. All samples are now prepared at the La Colorada mine laboratory operated by our employees. Samples are analyzed for gold and silver using fire assay with gravimetric finish, and for lead, zinc, copper, iron, and manganese by acid digestion followed by AA.

There were some core recovery problems in the underground drilling in the HW corridor prior to 2000 which was rectified by increasing the drilling core size from BQ to HQ, which improved both sample recovery and core quality. We identified no significant bias in the grade of the samples with poorer recovery. Since 2006, sample recovery has varied between 89% and 96%. We have identified no drilling, sampling, or recovery factors that could materially impact the reliability of the results, and the data is considered acceptable for mineral resource and reserve estimation.

To the best of our knowledge, the past core sample recovery issues were rectified and the number and location of the affected holes are not material to the current mineral resource and reserve estimate. Diamond drillholes and channel samples are oriented and spaced to ensure as representative a sample as possible. There are no known factors that could have resulted in any sample biases.

The La Colorada mine geology department conducts a quality assurance/quality control ("QAQC") program that is independent from the laboratory. The program includes the insertion of standards and blanks to the on-site laboratory and the submission of pulp duplicate samples to an external laboratory. The QAQC data are reviewed daily and any failed samples are identified immediately. The results of the QAQC samples demonstrate acceptable accuracy and precision and that no significant contamination is occurring at the mine laboratory.

The La Colorada database has been audited a number of times by an external independent consultant and only minor transcription errors were found and corrected. The database software has built in validation tools that are used regularly along with visual verifications of the sample location when plotted on plans and sections. Assay data is transferred directly from the laboratory information management system ("LIMS") to the geology database eliminating errors from manual data entry. We are of the opinion that the data quality and reliability is to industry standard and is sufficient for use in resource and reserve estimation and mine planning.

Security of Samples

Underground channel samples are brought directly from one of the portals to the on-site laboratory at the end of each shift. Underground drill cores are brought from underground to the core shack, which is fenced and locked when there are no geology department employees present. Once the drillhole has been logged and sampled, the samples are transported to the on-site laboratory. A work order accompanies all samples and is verified by the geologist and the laboratory worker. The samples are bar code labeled which are read at regular points from reception of the sample through to the final result. Assay results are safeguarded using a secure database for which each user is assigned only the required access.

Mineral Resource and Reserve Estimates

Management estimates that mineral reserves at La Colorada, as at December 31, 2014, 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	3.0	427	0.33	2.65	1.46
Probable	3.8	364	0.37	2.26	1.29
TOTAL	6.8	391	0.35	2.43	1.37

Notes:

[1] Estimated using a price of $18.50 per ounce of silver, $1,250 per ounce gold, $2,000 per tonne of zinc and $2,000 per tonne of lead.

[2] Mineral Reserves for La Colorada have been prepared under the supervision or were reviewed by, Michael Steinmann, P. Geo., 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 La Colorada, as at December 31, 2014, are as follows:

La Colorada Mineral Resources [1, 2, 3]					
Resource Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**Grams of Gold per tonne**	**% Zinc**	**% Lead**
Measured	0.3	153	0.13	0.59	0.33
Indicated	2.3	222	0.23	0.71	0.48
Inferred	3.4	251	0.51	3.02	1.77

Notes:

[1] These mineral resources are in addition to mineral reserves. Estimated using a price of $18.50 per ounce of silver, $1,250 per ounce gold, $2,000 per tonne of zinc and $2,000 per tonne of lead.

[2] Mineral resource estimates for La Colorada have been prepared under the supervision, or were reviewed by, Michael Steinmann, P. Geo., 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.

Mineral resources are estimated using a polygonal method based on the data collected from both diamond drilling and underground channel samples. The data is plotted on sections and plans for review and interpretation by the geologist. Once the data is confirmed to represent the appropriate structure, a long section is produced of each structure to visualize the structure in its entirety. The structures are then divided into mineable blocks. The volume of the block is estimated from the average width of the vein or mineralization intersection of each drillhole or channel located within the mining block. The grade of each block is estimated by the length weighted average of the grade of the vein or mineralization of each intersection within the block. The samples are assessed and treated for extreme sample grades prior to averaging. The data is processed using Excel software structure by structure which is then combined to arrive at the total tonnes and grade of the mineral resource estimate. The mineral resource estimates are updated annually with new information and updated geological interpretations and depleted annually for mining in the previous year.

Weighted average bulk density values are applied to each mining block volume to estimate the tonnes of each block. The bulk density value is a mathematical function that varies depending on the lead and zinc grade of each sample. The function is derived from bulk density measurements and the lead and zinc grade of those samples.

Planned dilution is applied to each intersection. First a minimum of 2.18 metres true width is applied to the structure. This provides a minimum horizontal width of 2.4 metres in order to permit access for the scoop trams. Additional planned dilution is then added to account for the mining method which varies depending on whether the vein is present in development or stoping areas. A further 3% dilution is applied to account for backfill which is inadvertently mucked each lift during the cut and fill stoping. An additional 5% unplanned dilution is also applied in order to correlate with the reconciliation between the mineral reserve and the plant results.

Mining recovery is considered to be between 85% and 95% depending on vein width. This figure is based on experience and observation at each mining area and considers losses of ore in permanent pillars, losses into the backfill, and other losses such as those that may be caused by ground failures or other geomechanical conditions. The mine workers attempt, where possible, to recover all pillars, however, some crown pillar ore and some safety pillars inevitably remain to ensure safe working conditions for the miners in the stopes.

The procedure used to handle multiple commodities in the mineral resource and mineral reserve estimates is to apply a monetary value for each metal based on their respective grades and to add them to give the total value per tonne. The value per tonne considers the value paid for each metal, the expected metallurgical recovery of each metal to concentrate or to doré, and costs including insurance, penalties, refining, and transport.

Mineral resource confidence classifications are based on the proximity and density of geological and grade information in each block, as well as the interpretation and the experience of the mine geologist. Measured resources are assigned to blocks adjacent to the development or stope excavations, and which have been channel sampled. The classification is extended 50 metres vertically and 30 metres horizontally. Indicated resources are assigned to blocks adjacent to the measured blocks. They extend vertically from measured blocks but are not extended any further horizontally than measured blocks. Indicated classification is also assigned to blocks where diamond drilling spaced 50 metres and closer confirms grade and geological continuity. Inferred classification is assigned to blocks where there is sufficient geological and grade data to reasonably assume continuity but not enough to confirm or verify.

Mineral resources are then converted to mineral reserves depending on the resource classification and whether they can be economically mined. Mineral resources may not be converted to mineral reserves for reasons such as poor accessibility or mining recovery, or because the grade of the resource is not economic to mine. The operating costs are based on actual operating costs at the mine and are used to define the economic limit.

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 La Colorada.

Mining Operations

La Colorada produces oxide and sulphide ores from the Candelaria, Estrella and Recompensa underground mines. The amount of oxide material mined each year has decreased as the mine progresses deeper in the system. The La Colorada Report projects that approximately a quarter of the material mined during the remainder of the currently planned mine life will be oxide and sent to the oxide process plant while the remaining three-quarters will be sulphide and processed in the sulphide plant.

The mining method used at all three mines is cut and fill stoping. This method allows for improved ore recovery and selectivity from irregular, steeply dipping veins. Ground support is provided by rock bolts, with screen and shotcrete as required, as well as by backfilling the voids created by mining with development rock or mill tailings as the ore extraction advances.

Mine levels are 30 metres vertically apart. Cut and fill stoping begins at the bottom of each 30 metre panel and works upward in horizontal slices that follow the strike, dip, and width of the ore zone. Ore extraction begins by cutting a 2 metre thick slice from the bottom of the ore zone and removing the broken ore from the stope. As each successive slice of the stope is taken, the void below is backfilled to support the side walls and to provide a stable working platform for mining the next ore slice.

The cut sequence begins with drilling the mine face. Working on a platform of the ore broken in the previous advance, miners use jacklegs and stopers to drill blast holes into the ore in the mine face above the work platform. After drilling, blasting agent is loaded into the holes, and the material is broken and dropped to the floor below. This material then becomes the working platform for advancing the next cut.

After blasting, and after the atmosphere in the stope has been ventilated and is determined to be safe, roof support is completed by removing loose rocks from the newly exposed area and installing rock bolts.

The fill sequence is completed by bringing in backfill material and placing it in the void created by ore extraction. The advancing face of the backfill material is separated from the ore to limit ore dilution.

Either hand held drills or electric hydraulic jumbo drills are used for development mining to access the ore, depending on the size of the excavation required. The mine currently has sufficient ore development ahead of stoping to provide flexibility for planning and scheduling.

Ore extracted from the Candelaria and Estrella mines is currently hoisted approximately 450 metres to the surface through the El Aguila Shaft. Two different 300 tonne capacity bins are used to segregate sulphide from oxide/mixed ore. Once on surface, the ore is dumped into one of two 200 tonne capacity ore storage bins according to material type. The ore is removed from the bins and hauled to the appropriate mill crusher stockpile by 12 tonne capacity surface haul trucks. The hoist system is capable of delivering approximately 1,200 tonnes per day to the surface. When required, Candelaria and Estrella ore can be hauled up to the surface using one of the mine access ramps.

Ore extracted from the Recompensa mine is hauled to the surface by an underground mine truck fleet and stockpiled on the surface near the mine portals. The ore is then reclaimed from the stockpile and hauled to the appropriate mill crusher stockpile by surface haul trucks. Pending the results of further exploration drilling, no production is scheduled from the Recompensa mine in the current life of mine plan.

The operation currently produces approximately 430 tonnes per day of oxide ore and 870 tonnes per day of sulphide ore. Each type of ore is processed through separate circuits which share a single crushing plant. Material mined from the transition zone between the oxide and sulphide zones is typically treated as oxide ore for processing. The daily processing capacity of the oxide plant is nominally 650 tonnes of ore and the capacity of the sulphide plant is nominally 750 tonnes.

The oxide plant comprises a conventional cyanide leach plant consisting of crushing, grinding, leaching, Merrill Crowe zinc precipitation and on-site refining to produce precious metal doré. Doré bars produced at La Colorada typically contain 98% precious metal, primarily silver, some gold and 2% impurities. The sulphide plant is a conventional flotation plant comprised of crushing, grinding and selective lead and zinc froth flotation circuits to recover precious and base metals into separate lead and zinc concentrates.

Tailings from both plants are delivered as slurry to separate lined tailings storage facilities. Tailings from the sulphide plant are directed as required to a hydraulic backfill plant for re-use underground as backfill in the stopes.

As the maximum capacity of the mine in its existing configuration has been reached, an expansion project was approved in December 2013 to increase the overall production rate of the mine.

The mine's expansion will require the construction of new mining infrastructure, the development of new mining zones to reach deeper mineralization and the expansion of the sulphide ore processing plant. A new 600-metre deep bore hole shaft is planned between the main Candelaria area that contains the NC2 and HW veins, and the Estrella area that contains the Amolillo vein. The new shaft, which over the long term is necessary regardless of the expansion project, will increase hoisting capacity to 2,300 tonnes per day (“tpd”), accommodating ore and waste extraction as well as serving as the main access to working areas for mine personnel and materials. Preliminary engineering work for the new shaft and hoist has already been conducted and detailed engineering is currently underway. Construction of the new shaft is in progress and commissioning is expected to follow in the second half of 2016. The shaft and associated hoisting equipment will be designed such that it can be deepened in the future if justified by future exploration success.

Mining at both the Estrella and Candelaria areas is expected to continue utilizing the current cut-and-fill method. The capacity of the ventilation and dewatering systems will be increased to handle the mine's hot and wet ground conditions as mining operations extend at depth. The expansion plan also includes the addition of 22 new pieces of mining equipment to the fleet and the hiring of over 100 additional mining personnel.

Total throughput at La Colorada's processing plants will progressively increase from the 1,290 tpd achieved in 2014 to 1,500 tpd starting in 2016 and to 1,800 tpd by the end of 2017. While the oxide plant will not be modified due to La Colorada's limited remaining oxide mineral reserves, the sulphide plant will be expanded to treat the increased sulphide ore feed.

Expansion of the sulphide plant to nominally 1,500 tpd will be implemented through the installation of a new crusher and grinding mill. New lead and zinc flotation circuits will be built. The plan also includes an upgrade and expansion of the plant's dewatering circuits and installation of a new 115 kV power line connection to the national grid replacing the existing 33 kV lines. Work on the plant's expansion has commenced and is scheduled to be completed by mid-2016.

The total incremental expansion capital over the next four years has been estimated at $80 million, the majority of which is expected to be spent between 2014 and 2016. The sulphide plant expansion, additional mining equipment and accelerated development, plus several important infrastructure upgrades account for the largest portion of the incremental capital for the project. The economic analysis assumes that the expansion project can be completed without materially disrupting the current operation.

Production at La Colorada in 2014 was approximately 5.0 million ounces of silver, 2,600 ounces of gold, 7,700 tonnes of zinc, and 3,700 tonnes of lead. Metal recovery at La Colorada has been relatively constant over the past several years of production. In 2014, silver recovery averaged 80.5% from the oxide processing circuit and 93.2% from the sulphide processing circuit.

All precious metal doré produced at La Colorada is sent to one of two arm’s length precious metals refineries for refining under fixed term contracts. After refining, the silver and gold is sold on the spot market to various bullion traders and banks. All lead and zinc concentrate produced at La Colorada is sold to arm’s length smelters and concentrate traders under negotiated fixed term contracts.

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

2014	Revenue[1, 2]	Quantity
Silver and Gold in Doré	$21.5 million	1,165,000 ounces of silver 860 ounces of gold
Lead Concentrate[3]	$62.8 million	8,666 tonnes
Zinc Concentrate[3]	$13.7 million	13,201 tonnes
2013		
Silver and Gold in Doré	$28.5 million	1,230,000 ounces of silver 1,070 ounces of gold
Lead Concentrate[3]	$61.7 million	8,023 tonnes
Zinc Concentrate[3]	$11.3 million	12,046 tonnes
2012		
Silver and Gold in Doré	$47.1 million	1,470,000 ounces of silver 1,516 ounces of gold
Lead Concentrate[3]	$69.3 million	5,787 tonnes
Zinc Concentrate[3]	$10.0 million	9,111 tonnes

Notes:

1 Consists of sales to arm's length customers.

2 Calculated as gross revenue less treatment and refining charges.

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

Considerable exploration success during the year has extended the life of mine plan. Based on the La Colorada Report, there is potential that the mine will operate beyond 2027.

In 2013, the Mexican government enacted significant changes to its tax laws (the "Tax Reform") which took effect on January 1, 2014. The components of the Tax Reform expected to have the greatest impact on our Mexican operations are as follows:

(i) Reversal of the planned reduction to the corporate income tax rate from 30% to 28%.

(ii) Elimination of the Impuesto Empresarial a Tasa Única ("IETU"), a flat business tax of 17.5%.

(iii) Elimination of accelerated depreciation on exploration expenditures.

(iv) A new deductible Special Mining Duty ("SMD") of 7.5% applied to taxable earnings before interest, inflation, taxes, depreciation, and amortization.

(v) A new deductible extraordinary mining duty ("EMD") of 0.5% applied to the sale of gold, silver, and platinum.

The initial deferred tax impact of the Tax Reform was approximately $3.5 million.

As a result of the Tax Reform, in 2014 the principal taxes of Mexico affecting Plata Panamericana include income tax, SMD, EMD, annual fees for holding mineral properties, various payroll and social security taxes, and a refundable value added tax.

Plata Panamericana generated an income tax expense of approximately $4.5 million, $17.0 million and $14.2 million in 2014, 2013 and 2012, respectively. Included in the income tax expense is SMD of approximately $2.6 million and $3.1 million in 2014 and 2013 respectively.

Activities in 2015

In 2015, we anticipate producing between 4.90 million and 5.00 million ounces of silver, between 2,500 and 2,700 ounces of gold, 7,000 to 7,500 tonnes of zinc, and between 3,700 and 3,800 tonnes of lead.

Work relating to the production expansion project will be the primary focus of capital spending in 2015. Capital spending relating to the expansion project is expected to be between $75.0 million and $80.0 million in 2015, while total capital expenditures at La Colorada during the year are expected to be approximately $86.0 million and $92.0 million. Non expansion project capital spending at La Colorada includes a mine discharge water treatment plant, a ventilation raise, equipment overhauls, development exploration, and processing plant capital.

Environmental

An environmental impact statement ("EIS") and risk assessment on the La Colorada property was submitted to the Mexican environmental authorities in early March 1999. The EIS described the impact of proposed development and mining activities and provided conceptual plans for closure and remediation. The EIS was approved by the Mexican authorities in November 1999 and renewed in late 2010. The new permit is valid for five years. In 2013, the Mexican authorities approved a modification to the existing environmental permits that allow the proposed expansion of the mine and process plant up to 2,000 tonnes per day. A modification application to the plant expansion permit has been lodged and is expected to be approved in the first half of 2015.

La Colorada has voluntarily participated in the Mexican Environmental Protection Authority's ("PROFEPA") "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 mine obtained its first certification in 2008 and has been re-certified every two years since, with the most recent certificate awarded in 2014. The mine will go through the re-certification process again in 2016.

The main environmental focus at the La Colorada property is the stability of the historic tailings facilities and mine water discharges.

A closure cost estimate for La Colorada was prepared according to State of Nevada approved SRCE methodology in 2011 and is updated every year. Pan American has estimated the present value of the final site reclamation costs for the La Colorada property to be approximately $4.1 million as at December 31, 2014. See "Narrative Description of the Business – Environmental Protection" for further disclosure regarding forward looking statements related to reclamation costs.

Health and Safety

A formal safety audit was conducted in December of 2006 at La Colorada by a third party consultant and Pan American's Director of Health and Safety, resulting in an update of all protocols and procedures. Subsequent audits are conducted by Pan American's Director of Health and Safety and safety managers from some of our other mines. The most recent safety audits have taken place in 2012 and 2014, and as of the end of December, 2014, the mine has accumulated more than 2.6 million hours of work without an LTI.

La Colorada was the recipient of the prestigious "Casco de Plata" award for 2007, 2009, and 2014, for the best safety record for underground mines in Mexico with in excess of 500 employees, and took second place in the same category in 2013. In both 2009 and 2014, La Colorada was awarded our Chairman's Safety Award. During 2014, personnel employed at the mine attended over 45,000 hours of training.

(ii) Alamo Dorado

Project Description and Location

The Alamo Dorado open pit silver mine is located 45 kilometres south-southeast of the town of Alamos in the southeast corner of the state of Sonora, near the border with the state of Sinaloa in northwest Mexico. The mine consists of two contiguous mining concessions, the 509 hectare Alamo Ocho concession and the 4,865 hectare Alamo Dorado concession, and five exploration concessions covering 6,014 hectares, and surface rights covering 763.64 hectares.

On February 20, 2003, Pan American acquired Corner Bay and its subsidiaries pursuant to a plan of arrangement. As a result, the Alamo Dorado mine is 100% owned and operated through a Mexican subsidiary of Pan American, MCB.

We pay an annual fee to maintain the concessions in good standing, and to our knowledge, we have met all of the necessary obligations to retain the project. To the best of our knowledge, the Alamo Dorado mine is not subject to any royalties or encumbrances, but is subject to certain duties imposed by the Mexican government as described under the heading “Mining Operations”.

Much of the surface rights with respect to Alamo Dorado are owned by ejido. An “ejido” is a Mexican institution established by the government during a period of land reforms in the early 1900’s and essentially consists of communal land tenure held by local community groups. We have surface rights agreements with a number of local ejido groups, including the Ejido Sombrerito, Ejido Zapote, Ejido Maquipo, Ejido El Carrizal and Ejido La Quintera, and with certain other private land owners allowing us access and use in connection with our exploration and mining activities. Our mining operations, waste storage areas and other facilities fall within these surface rights agreements.

All of the known mineralized zones, mineral resources and mineral reserves, mine workings, the processing plant, effluent management and treatment systems, and tailings disposal areas relating to Alamo Dorado are located within the boundaries of the Alamo Ocho and Alamo Dorado concessions and surface rights.

To the best of our knowledge, all permits and licenses required to conduct our activities on the project have been obtained and are currently in good standing.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

Access to Alamo Dorado is by a four lane paved highway that runs from the border town of Nogales, Sonora, through the cities of Hermosillo and Ciudad Obregon, and into the city of Navojoa. From Navojoa, there is a two lane paved road to the town of Alamos. The mine is located 40 kilometres southeast of Alamos, and access to the mine is primarily via an unpaved road. A secondary access route is also available that may be used for heavy deliveries and other shipments. Major airports in the state of Sonora are located in Hermosillo and Ciudad Obregon. The Ciudad Obregon airport is located approximately 75 kilometres north of Navojoa and 125 kilometres northwest of the mine. The town of Alamos is also serviced by a sealed airstrip.

Qualified workers can be recruited from local villages near the mine and in the town of Alamos, and there is also a large pool of experienced workers in Hermosillo and Ciudad Obregon. Workers commute locally to the mine in private or company owned vehicles.

The climate is transitional between the tropical climates further south and the subtropical desert typical of the Pacific coast of Baja California. The area is generally dry with the warmest period typically occurring between June and September. Precipitation occurs during a short but intense rainy season that typically extends from July through September. There are water crossings along the secondary access road that are impassable for short periods during heavy local downpours in the rainy season, however, the mine can be accessed and is operational year round.

The local terrain consists of the moderate to steep foothills that characterize the area located between the coastal plain of the Sea of Cortez to the west and the Sierra Madre Occidental mountain range to the east. Local elevation ranges from 300 metres above sea level to approximately 550 metres above sea level at the top of the ridge where the Alamo Dorado deposit is located. Vegetation is generally sparse and includes shrubs, cactus, grasses, and locally cultivated pastureland.

All of the mineral resources and reserves, mine workings, processing plant, tailings and waste disposal areas, and effluent management and treatment facilities are located within the boundaries of the mining leases and surface rights controlled by us.

Power is supplied by a 115 kilovolt power transmission line from a hydroelectric station located 35 kilometres from the mine. Water is supplied from wells located 27 kilometres to the southwest and pumped through a pipeline to the mine.

History

There is no record of any modern exploration conducted at Alamo Dorado prior to 1997, nor are there any records of production, although there is evidence of a few old adits in the general area. All recorded drilling at the property has been undertaken since 1997.

MCB geologists collected grab samples along a north trending ridge in 1997. After receiving positive assay results from those samples, MCB began a surface sampling program and made an agreement to purchase the Alamo Ocho concession from the previous owners. The surface sampling program outlined a 300 metre long north-south trending silver-gold anomaly situated along the east side of the Cerro Colorado Ridge.

Prior to our acquisition, exploration at Alamo Dorado was primarily comprised of reverse circulation drill campaigns conducted annually from 1998 to 2001. In 2000 a thorough mapping of surface exposures along drill access roads was undertaken. A more comprehensive 1:2500 scale geological mapping program was conducted in 2001 over an area of approximately four square kilometres in the project area. The results established the surface extents of the volcanic lithologic units, cross cutting dykes, and alteration patterns.

After acquiring the project, we commenced a feasibility study in 2003 based on an updated mineral resource and mineral reserve estimate and a proposed conventional milling and leaching circuit. In 2005, we approved a $17.6 million project to construct the mine. Site construction commenced in April 2005 and completion of the open pit mine and the processing facility was reached in the fourth quarter of 2006, and production of silver commenced in 2007. Total construction costs amounted to approximately $81.5 million.

Geological Setting

The Alamo Dorado mine is located in the Sierra Madre Occidental mountain range, a late Cretaceous to Tertiary age volcanic plateau that extends for hundreds of kilometres through northwestern Mexico. The volcanic sequence is divided into the Upper and Lower Volcanic Series. The Lower Volcanic Series is of late Cretaceous to early Tertiary age and consists of up to 1,000 metres of tuffs, flows, and volcanic breccias. The Upper Volcanic Series is of middle Tertiary age and consists of more than 1,000 metres of ash flow and ash fall tuffs that lie unconformably on the Lower Volcanic Series.

A period of particularly active tectonism, including intrusion and uplift, occurred between the deposition of the Lower Volcanic Sequence and the Upper Volcanic Sequence. Uplift and faulting of the Sierra Madre was accompanied by the intrusion of dykes along with the local emplacement of intrusive stocks and batholiths. Mining districts in the Sierra Madre are typically located along sheared and faulted structural zones formed in the Lower Volcanic Series, and to a lesser extent, within the underlying granitic intrusive. After emplacement of the granitic body, the area continued to be a centre of igneous activity, with the intrusion of at least seven distinct dykes or plugs post-dating the granitic intrusion. Uplift of the Sierra Madre continued following volcanism in the Tertiary. Erosion of the uplifted area has resulted in deep canyons and rugged topography.

In the area of the Alamo Dorado property, the Upper Volcanic Series is present in the higher parts of the surrounding mountains, but has largely been removed by extensive erosion in the region. The rocks hosting mineralization at the mine consist of a sequence of deformed, steeply dipping, Mesozoic aged marine rocks that contain minor intercalated siliceous exhalite and pillow basalt. The Laramide Orogeny event probably caused at least the first phase of deformation which resulted in the development of a strong planar fabric and the metamorphism of the sediments to greenschist facies. Deformation of the rocks at Alamo Dorado was episodic and occurred before, during, and twice after the mineralizing events. The metamorphosed marine sedimentary rocks were intruded by a number of dykes and granodiorite stocks. Silver mineralization is mostly hosted by the metamorphosed volcanic rocks, but weak mineralization also occurs in a post-metamorphic porphyritic diorite dyke.

Exploration

The main form of exploration on the property has been through drilling campaigns using reverse circulation and diamond drill coring methods. Detailed geological mapping and structural interpretation as well as surface rock chip samples were historically used to identify promising targets for follow up by drilling. There are no known sample recovery, contamination, or bias issues that could have a material impact on the reliability of the sample results. The results of the drillhole samples are used for the estimation of mineral resources and mineral reserves. We also undertake geotechnical drilling to confirm that the geotechnical parameters applied in the pit wall designs are appropriate.

Both mine geologists and consulting structural geologists have carried out geological mapping on the property. Exploration drilling is currently carried out by a third party under the supervision of the Alamo Dorado mine geology department.

Mineralization

Stratiform, low sulphidation epithermal mineralization and alteration of the rocks at Alamo Dorado is controlled by a structural zone that has been folded and metamorphosed by regional deformation events. Silver and gold mineralization may have been associated with the emplacement of a diorite feldspar porphyry dyke and/or a granodiorite stock, both of which display hydrothermal alteration and contain silver mineralization.

Hypogene silver mineralization occurs predominantly as argentite with fine disseminated pyrite in quartz veins, within quartz crystals of siliceous gangue, and within fractures in siliceous gangue. It also occurs as tetrahedrite intergrown with pyrite, galena, and sphalerite. In the upper oxide environment the silver mineralization occurs in the form of silver chloride minerals, acanthite, and silver sulphosalts.

Drilling

Approximately 120 reverse circulation and 160 diamond drillholes have been drilled in or in the vicinity of the deposit, mainly on a 25 metre grid pattern over the currently defined mineral resources and reserves. No diamond drilling took place at the mine in 2014, in anticipation of the closure of the mine. In the recent past, drillholes were drilled using diamond drilling methods with HQ diameter surface drill rigs. The collar coordinates were surveyed using total station methods and downhole surveys were taken at regular intervals down the hole.

The information obtained from the reverse circulation and diamond drilling programs was used for the estimation of mineral resources and reserves.

Sampling and Analysis

Samples from reverse circulation drillholes were collected at intervals dependent upon the length of the drill rod, which at Alamo Dorado was 1.52 metres, and split to obtain a 3.5 to 5 kilogram sample. The drill core was logged and sampled by a geologist using industry standard methods. The geologist marked the location of the samples on the drill core, which varied in length depending on the width of the geological features, and was

usually approximately 1.5 metres. The sample was split in half using a diamond bladed saw and placed in a sample bag and sealed. The other half of the drill core has been retained for future reference.

Drill core samples were prepared and analysed by ALS Chemex in Durango, Mexico, using fire assay with gravimetric finish methods for the analysis of gold and for silver. Trace silver content below the detection limit of the fire assay method was determined using aqua regia digest with inductively coupled plasma – atomic emission spectroscopy ("ICP-AES") finish.

Drill core recovery was good, while recovery for reverse circulation drilling was approximately 70%. Some of the reverse circulation drillholes were drilled wet, which may result in a less reliable sample, but no significant issues have been identified. There appears to be no drilling, sampling, or recovery factors that have had a material impact on the results of the data used to estimate mineral resources and reserves.

The Alamo Dorado mine geology department conducted a QAQC programme including the insertion of standards and blanks to the laboratory. The QAQC data were reviewed daily and any failed samples were identified and followed up on. To date, the results of the QAQC samples demonstrate acceptable accuracy and precision.

Regular checks were made on the database to ensure the data was correct. The database software has built in validation tools that were used as well as visual confirmation of the sample location when plotted in mining software. Assay data was transferred from the LIMS system at the laboratory to the geology database, eliminating any transcription errors.

Security of Samples

The drillholes were brought from the drill rig to the core shack and kept in a secure location. Once the drillhole was logged and sampled, the samples were collected by the commercial laboratory where they were maintained under the control of the laboratory. We have no reason to believe that the validity and integrity of the samples were compromised.

Mineral Resource and Mineral Reserve Estimates

Management estimates that mineral reserves for the Alamo Dorado mine, as at December 31, 2014, are as follows:

Alamo Dorado Mineral Reserves [1, 2]			
Reserve Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**Grams of Gold per tonne**
Proven	2.8	60	0.25
Probable	0.6	84	0.61
TOTAL	3.4	64	0.31

Notes:

1 Estimated using a price of $17 per ounce of silver and $1,200 per ounce of gold.

2 Mineral Reserve estimates for Alamo Dorado were prepared under the supervision of, or were reviewed by, Michael Steinmann, P.Geo., and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

Management estimates that mineral resources at Alamo Dorado, as at December 31, 2014, are as follows:

Alamo Dorado Mineral Resources [1, 2]			
Resource Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**Grams of Gold per tonne**
Measured	1.2	50	0.23
Indicated	1.0	79	0.39
Inferred	0.0	41	0.65

Notes:

1 These mineral resources are in addition to Alamo Dorado mineral reserves. Mineral resources were constrained within a pit shell using a price of $30 per ounce of silver and $1,400 per ounce of gold.

2 Mineral resource estimates for Alamo Dorado were prepared under the supervision of, or were reviewed by, Michael Steinmann, P.Geo., and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

Mineral resources are estimated on an annual basis using the additional drillhole information acquired during the year, although no new drilling information was available in 2014. Previously, mineral resources were estimated using an indicator method with industry standard mining software. The block model dimensions were chosen with respect to the average drillhole spacing and mining selectivity and were set at a block size of 10 metres east, 10 metres north, and 5 metres in elevation. The drillhole samples were composited to 3 metres and top cut for extreme values. The composites were then flagged for a code depending on whether the sample was greater than or less than 39 grams per tonne silver equivalent. Variograms were calculated and modelled for the flagged sample composites, and used to estimate the probability that the cell will have an estimated grade greater or less than 39 grams per tonne silver equivalent. Composites coded as greater than 39 grams per tonne silver equivalent were then used to estimate silver and gold grades in cells flagged with a 50% or greater probability while composites coded as less than 39 grams per tonne silver equivalent were used to estimate the silver and gold grades in cells flagged with a less than 50% probability.

Three dimensional interpretations of lithology and silica content were prepared based on the drill hole logging information and coded to the block model. Bulk density was applied to the block model by lithology from 820 bulk density measurements. The block model was then depleted for previous mining and classified for confidence categories depending upon the confidence in the sample data, the estimate, and the density of available drillhole samples. Estimation validation was undertaken by comparing estimated and input composite grades and by comparing estimated grades against closer spaced grade control drilling.

Mineral reserves were estimated by preparing an optimized pit design in Whittle software based on measured and indicated blocks in the resource estimate. The mineral reserve was classified depending upon the resource classification and whether the blocks can be economically mined.

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 Alamo Dorado.

Mining Operations

Alamo Dorado is a conventional surface mine that utilizes hydraulic shovels, front end loaders, and mechanical trucks on 5 metre high benches. Ore control is carried out by sampling blast holes to provide closer spaced sample data for marking the ore and waste boundaries during mining. The mine stockpiles low grade and mineralized waste category material. High grade material is processed first to maximize the return on investment. As the mining operations wind down, a greater percentage of the mill feed will be sourced from the stockpiles.

Ore is treated by conventional crushing and semi-autogenous and ball mill grinding followed by thickening, agitated cyanide leaching, leach residue filtration, direct electrowinning to produce a cathode sludge, AVR (acidify, volatilize, and re-neutralize) cyanide recovery and recirculation, leach residue washing with AVR product solutions, dry stack tailings, and conventional silver and gold doré production from melting of the cathode sludge. The nominal design treatment rate is 4,000 tonnes per day of ore on a 24 hour per day schedule, but Alamo Dorado regularly exceeds this processing rate. The mine's tailings treatment process recovers approximately 45% of the sodium cyanide used and also neutralizes mill tailings, thus reducing the mine's environmental impact and reclamation costs. During 2014, we processed 1.8 million tonnes of ore, producing 3.5 million ounces of silver and 17,600 ounces of gold with metallurgical recoveries of 81.4% of silver and 86.3% of gold. Alamo Dorado was our largest producing gold mine for five of the six years between 2008 and 2013. It is anticipated that 2015 will be the final year of production from the open pit as the mine exhausts the last of the available ore that is accessible by open pit. Processing of the lower grade stockpile is expected to be completed in 2016.

Most production from Alamo Dorado 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. We enter into multi-year refining contracts with refiners for the production from Alamo Dorado. The mine also produces a small amount of silver and gold in the form of a copper-lead rich precipitate from the AVR circuit. This material is typically sold to concentrate traders under annual contracts. We have not had any difficulty in securing contracts for the sale of Alamo Dorado doré and 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 and doré produced by the Alamo Dorado mine for the past three years were as follows:

2014	**Revenue[1, 2]**	**Quantity**
Silver and Gold in Doré	$90.5 million	3,590,000 ounces of silver 17,500 ounces of gold
AVR copper/silver Concentrates[3]	$0.0 million	320 tonnes
2013		
Silver and Gold in Doré	$158.7 million	5,519,557 ounces of silver 19,674 ounces of gold
AVR copper/silver Concentrates[3]	$1.4 million	790 tonnes
2012		
Silver and Gold in Doré	$196.5 million	5,427,541 ounces of silver 18,239 ounces of gold
AVR copper/silver Concentrates[3]	$4.8 million	643 tonnes

Notes:

1 Consists of sales to arm's length customers.

2 Calculated as gross revenue less treatment and refining charges.

3 AVR concentrates contain payable silver and gold.

In 2013, the Mexican government enacted the Tax Reform (described in detail under the "Mining Operations" heading of the La Colorada section of this AIF). The initial deferred income tax impact of the Tax Reform was approximately $2.5 million.

As a result of the Tax Reform, in 2014 the principal taxes of Mexico affecting MCB include income tax, SMD, EMD, annual fees for holding mineral properties, various payroll and social security taxes, and a refundable value added tax.

MCB generated an income tax expense of approximately $1.6 million, $27.2 million and $39.8 million in 2014, 2013 and 2012 respectively. Included in the income tax expense is SMD of approximately $(0.3) million and $2.6 million for 2014 and 2013 respectively.

The income tax expense for 2014 includes a recovery of $6.0 million related to the impairment of property, plant, and equipment booked during the year. No impairments were booked for 2013 or 2012.

Activities in 2015

In 2015, we anticipate producing between 2.95 million and 3.20 million ounces of silver and between 15,500 and 16,600 ounces of gold.

In 2014, total capital expenditures at Alamo Dorado were negligible, totalling $0.3 million. No sustaining capital expenditure has been planned for 2015. Decommissioning obligations are expected to be incurred starting in two to three years while the remainder of the obligations are expected to be paid through 2028.

Environmental

The original environmental permitting work for Alamo Dorado considered options developed for the 2002 feasibility study, and was provided by MCB in conjunction with Aguayo Consultoría Ambiental, MCB's environmental consultant and coordinator. An EIS and risk assessment study, as well as ancillary documents were submitted by MCB to the Secretariat of Environment and Mineral Resources ("SEMARNAT") to identify potential major deficiencies and for appropriateness for permitting Alamo Dorado. SEMARNAT recommended a finding of no significant impact in the original impact statement/permitting document. Following completion of the updated feasibility study, the original EIS and risk assessment study documents were revised, resubmitted and approved by SEMARNAT. Project construction commenced in 2005 based on the approved EIS and an improved modification of the SEMARNAT Temporary Land Use Permit for the operation of a mill and disposal of non-toxic tailings in a dry stack tailings area.

MCB had an agreement with SEMARNAT for compensation activities for mitigation of the environmental impact of the Alamo Dorado project. MCB conducted its compensation activities on schedule during the term of the agreement (2005-2007) and within the framework of its agreement with SEMARNAT. Confirmation was received in August 2007 from SEMARNAT acknowledging the end of the third and final stage of the agreement.

The main environmental focus at the Alamo Dorado property is the stability of the tailings facility and mine water discharges.

Alamo Dorado has voluntarily participated in the PROFEPA "Clean Industry" Program which involves independent verification of compliance with all environmental permits and the implementation of good practice environmental management procedures and practices. PROFEPA awarded Alamo Dorado the "Clean Industry" distinction in 2013 and the mine is currently in the process of the biennial renewal of the certification.

A closure cost estimate for Alamo Dorado was prepared according to State of Nevada approved SRCE methodology in 2011 and is updated every year. We have estimated the present value of reclamation costs for the Alamo Dorado property at December 31, 2014 to be approximately $5.1 million. See "Narrative Description of the Business – Environmental Protection" for further disclosure regarding forward looking statements related to reclamation costs.

Health and Safety

In 2005, a detailed emergency response plan was developed for the Alamo Dorado project that outlines responses to safety and environmental emergencies. In February 2007, a formal safety audit of the Alamo Dorado mine was completed by a third party consultant. Internal safety audits have been conducted most recently in 2012 and 2014 by Pan American's Director of Health and Safety and safety managers from other Pan American operations. During 2014, personnel employed at Alamo Dorado attended over 12,600 hours of safety related training. Alamo Dorado was awarded the "Casco de Plata" award in the open pit category for the best safety record in Mexico during 2008 and during 2010. In 2013, Alamo Dorado was the recipient of the Chairman's Safety Award for safety performance during 2012. The mine has recorded only one LTI since the start of the project.

(iii) Dolores

Project Description and Location

The Dolores open pit silver-gold mine is located in the Sierra Madre Occidental mountain range in the state of Chihuahua, in the municipality of Madera, approximately 250 kilometres west of the city of Chihuahua. The area of the concessions is 27,700 hectares.

In 2012, Pan American acquired all of the issued and outstanding shares of Minefinders by way of a plan of arrangement. Upon completion, Pan American owned 100% of Minefinders and its subsidiaries, including Minefinders' wholly owned Mexican subsidiary, CMD, which directly owns 100% of the three contiguous concessions referred to as Dolores, Silvia, and Unificacion Real Cananea, which comprise the Dolores mine. We pay an annual fee to maintain the concessions, and to our knowledge, all permits, licenses, and obligations required for the conduct of our activities at Dolores are currently in good standing. The mineral resources and mineral reserves, mining operations, waste storage areas, heap leach pad areas, and the processing plant site are all located within the concessions controlled by us.

Much of the surface rights on the property are owned by Ejido Huizopa. We have surface rights agreements with Ejido Huizopa and with several individual members of the Ejido 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.

A net smelter return royalty of 2% payable on all metal production, plus an additional net smelter return 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. There are no other royalties relating to the property, but CMD is subject to certain duties imposed by the Mexican government as described under the heading "Mining Operations".

Accessibility, Climate, Local Resources, Infrastructure and Physiography

The main road access to the property is via 92 kilometres of maintained dirt access road from Yepachi, Chihuahua, to the mine site. Access is also possible by light aircraft landing on a dirt strip located about eight kilometres from the mine. The nearest population centre is at Chihuahua located 250 kilometres to the east. Employees travel to the mine either by road or by light aircraft, while materials come by road.

The topography at the mine site is rugged, with elevations ranging from 1,200 to 2,000 metres above sea level. Vegetation is typical of the foothills of the Sierra Madre and ranges from thorn scrub with cacti to oak and pine forests at higher elevations.

The climate is typical of the Sierra Madre with an average annual temperature of about 18° C, annual lows of -10° C, and highs of 45° C. The long term total annual rainfall for the region is between 600 and 750 millimetres with approximately 70 days of rainfall, with much of it occurring from between July and September as brief heavy

rainstorms. Snowfall is common in December and January but does not remain on the ground for long. Mining and exploration work is carried out year round.

There are sufficient surface rights for mining, processing, and waste disposal. Water for the operations is sourced from wells, historic underground workings, pit dewatering activities, and from the nearby Rio Tutuaca. Additional water rights have been acquired for the mine, and a dam and reservoir provide storm-water control and a primary water supply. A new power line project is currently underway to connect the mine to the power grid in Chihuahua state, which will replace the current diesel generated power upon completion.

The local economy is based on logging, ranching, and subsistence farming. Workers are sourced from nearby small villages, and we have recruiting and training programs in place to develop the local workforce. Much of the mine workforce is supplemented from Chihuahua and Hermosillo in the state of Sonora, 350 kilometres to the west. Both Sonora and Chihuahua states have a strong mining culture and provide a pool of experienced workers.

History

Placer mining began in the region of the Dolores mine in the 1860s and was followed by lode mining in 1898. A power line was installed from the town of Madera by 1915, and a 25 tonne per day stamp mill began treating the Dolores ore until early 1929 when it was destroyed by fire. Only sporadic production occurred from 1929 to 1931, and there are no records of any historical production after 1931. Incomplete mining records from between 1922 and 1931 indicate that on the order of 372,000 tonnes of ore containing over 116,000 ounces of gold and six million ounces of silver were mined from several underground mine operations, including Dolores.

The property remained inactive until 1993 when Minefinders Ltd. began acquiring a land position in the district. Minefinders began a full exploration programme in November 1995 and drilling started in September 1996, using both diamond and reverse circulation drilling methods. In July 1996 Minefinders granted Echo Bay Mines ("Echo Bay") an option in the property. Echo Bay completed drilling, sampling, environmental data collection, and metallurgical testing. Minefinders bought out the Echo Bay interest, including the technical information collected by Echo Bay, in October 1997.

Minefinders completed a feasibility study for the project in June 2005, based upon the results of earlier studies, and completed a separate feasibility study in March of 2006 which formed the basis for Minefinders' mine development. Following construction, Minefinders commenced mining in 2008. During the years 2008 and 2011, Minefinders produced 25.5 million tonnes and stacked 18.3 million tonnes on the leach pads, producing 210,660 ounces of gold and 6.2 million ounces of silver.

We acquired the Dolores mine at the end of March 2012 and began to operate the mine in April 2012.

Geological Setting

The Dolores mine is located in the Sierra Madre Occidental mountain range, which comprises a long northwest trending volcanic plateau. The region is dominated by rhyolitic ash flow tuffs of Oligocene age known as the Upper Volcanic Series. The Upper Volcanic Series unconformably overlies rocks of the slightly older Lower Volcanic Series which are comprised primarily of andesites with interlayered felsic ash flow tuff deposits of Eocene age. The deposition of the Lower Volcanic Series was accompanied by the emplacement of quartz diorite and granodiorite batholiths and small intrusive bodies. The majority of the epithermal and porphyry related precious metals deposits in the Sierra Madre are hosted in the Lower Volcanic Series. The oldest structural episode is related to the Laramide orogeny, which produced east striking, steeply dipping strike slip faults. Later extensional forces resulted in the regional development of north-south to northwest-southeast striking sub-vertical normal faults. The structures hosting mineralization in the Dolores area are believed to have controlled emplacement of a series of north-northwest trending andesite to latite intrusions. Zones of permeability associated with these faults and intrusive contacts formed conduits for the ascending mineralizing hydrothermal fluids.

The Dolores project is underlain by the Lower and Upper Volcanic Series. At the mine site the Lower Volcanic Series consists of gently tilted lavas, flow breccias, and tuffaceous rocks with a minimum thickness of 700 metres. It is conformably overlain by 100 to 200 metres of felsic latite volcaniclastic breccia. These units are overlain by the Upper Volcanic Series, which comprise a volcaniclastic assemblage of mostly felsic ignimbrites and tuffs. The Upper and Lower Volcanic Series are separated by a distinctive erosional rubble zone unconformity that formed after development of north-northwest trending anticlinal uplift. Subsequent erosion has exposed mineralized rocks of the Lower Volcanic Series in the Dolores district.

Exploration

Minefinders carried out 12 square kilometres of reconnaissance geological mapping, 6 square kilometres of detailed mapping, as well as 14.9 square kilometres of geophysical surveys (induced polarization surveys, resistivity surveys, and magnetic surveys). Minefinders also collected more than 10,000 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 property, we have continued with a programme of near mine surface geological mapping and diamond drilling. Sample assays from both Minefinders and our drilling programmes are used for the estimation of mineral resources and mineral reserves.

The objectives of our drilling programs are increasing confidence in the mineral resource and reserve estimates with tighter drilling patterns on known structures as well as outlining new inferred mineral resources at depth and to the south of the deposit.

Minefinders' staff geologists carried out surface mapping and sampling, and employed contractors to complete the geophysical and drilling programs. Our geologists and consulting geologists under our supervision now carry out surface geological mapping. We currently employ Rock Drill of Aguascalientes, Mexico, to undertake surface diamond drilling.

The reliability of the data obtained in Minefinders' exploration program could be affected by certain factors, including the use of reverse circulation drilling (which may result in a less reliable sample than diamond drillholes, particularly when the sample is wet) and orienting some of the drillholes down the dip of mineralization. Since acquiring the project, we have undertaken measures to ensure the data used for the estimation of mineral resources and reserves is reliable. This includes employing only diamond drilling methods for any new drill holes and orienting holes to obtain as perpendicular an intersection with mineralization as possible, and removing most of the down dip oriented drillholes from the estimate to minimize the risk of any sample grade bias. Reliability of the sample data has been considered when applying confidence categories to the mineral resource and reserve estimates.

Mineralization

Gold and silver mineralization at Dolores is present as low to medium sulphidation, epithermal gold-silver bearing veins, silica stock works, breccias, and replacements. The system is mostly structurally controlled within a north-northwest striking extensional fault system. Gold and silver mineralization identified on the surface at Dolores lies over an area 4,000 metres long and up to 1,000 metres wide, at elevations ranging between 1,100 metres to 1,700 metres above sea level. The extent of mineralization at depth and along strike has not been fully defined.

Relatively deep mineralization tends to be located in high grade veins typically five to ten metres wide, while at higher elevations these feeder veins change into wider, lower grade stock works, veinlets, and disseminations toward the less competent and more permeable overlying latite flows and tuffs of the Lower Volcanic Series. These wider areas are on the order of a few hundred metres. Near the surface, mineralization shows a strong structural control, but widens out owing to development of breccia and fractures adjacent to the main mineralizing conduits. The main mineralization occurs as a series of parallel structures trending to the north-northwest and dipping steeply to the west.

Mineralization is generally associated with quartz and may be composed primarily of iron-oxides, silver sulphosalts, electrum, and native gold in the oxidized zone and with pyrite, silver sulphides, native silver, visible gold, galena, and sphalerite deeper in the sulphide zone.

Drilling

Drillholes on the project include both reverse circulation and diamond drilling methods. Since we acquired the project in 2012, diamond drilling has been performed using HQ sized diamond drill rigs on the surface. Approximately 1500 drillholes have been completed at the project, mostly focussed on a pattern over the mineral resources and reserves, and roughly spaced 25 metres along strike. Collar coordinates are surveyed using total station or a multi-station GPS. Minefinders took downhole surveys of most diamond drillholes and few of the reverse circulation holes. Since acquiring the property, we have taken regular downhole surveys of all drillholes. The results of both the reverse circulation and diamond drillhole samples have been used to estimate mineral resources and reserves.

Sampling and Analysis

Reverse circulation drillholes were drilled either wet or dry, depending on ground conditions, and a 10 to 13 kilogram sample was selected from the length of the drill rod, which was 1.52 metres. Diamond drillhole samples are marked according to geological features by the project geologist after logging. Minefinders set the sample interval at 2 metres but varied the interval with respect to geological boundaries, while we set the sample interval according to the width of geological features. Most drill core samples have been taken at 2 metre intervals. The core samples were split in half by Minefinders using a hydraulic splitter. We have since changed this method and use a diamond bladed saw to improve the representativity of the sample.

Minefinders sent samples to either Bondar Clegg, ALS Chemex, or Inspectorate laboratories for preparation and analysis. Silver assays were initially prepared using aqua regia digest with atomic absorption spectrometry, but after later metallurgical test work indicated that the digestion technique may not be adequate, Minefinders re-assayed many samples using a multi-acid digestion technique and atomic absorption spectrometry, and switched to that technique for the remainder of their drilling campaigns. Depending on the year of analysis, any sample with an assay greater than 100 or 200 grams per tonne silver was re-assayed using fire assay with gravimetric finish. Gold was analyzed using fire assay with atomic absorption finish and with gravimetric finish if the assay was greater than one or two grams per tonne, depending on which laboratory was used. Since acquiring the project, we have sent samples to SGS Laboratories in Durango, Mexico. Samples are assayed for gold using fire assay with atomic absorption spectrometry finish, and by fire assay with gravimetric finish for samples greater than 10 grams per tonne of gold. Silver is analysed by three acid digestion with ICP-AES finish for trace silver values, by three acid digest with atomic absorption spectrometry finish for samples less than 300 grams per tonne silver, and by fire assay with gravimetric finish for samples containing greater than 300 grams per tonne silver.

We have mitigated the risk of sample grade bias by removing poorly oriented drillholes. There are some potential issues related to reliability of the reverse circulation samples that may affect the accuracy or reliability of the results, however, reconciliation of grade control estimates and mine production to the mineral resource estimates prepared since 2008 indicates that these potential issues have not had a material impact on the mineral resource and reserve estimates.

Minefinders submitted blank and standard samples with their drillhole samples at irregular time periods but had no effective quality assurance systems in place to ensure that the sample results were reliable. As part of our project review prior to acquisition, all samples in the database with anomalously high gold or silver content or with anomalous gold to silver ratios were compared against the original assay certificate. No significant discrepancies were found during this review. We also reviewed the geological logs, downhole surveys, collar coordinates, and the location of the drillholes. Since acquiring the Dolores mine, we have implemented an industry standard QAQC program including the submission of certified standards, blanks, and duplicate samples to the laboratory and review the results regularly to ensure the appropriate action is taken in the event of a QAQC failure.

Security of Samples

All samples are transported from the drill rig to the core logging shed by company employees and the shed is locked when no geological staff is present. Samples are secured in sealed plastic sample bags and collected from the mine by the commercial laboratory where they are maintained under the control of the laboratory. We have no reason to believe that the integrity of the samples has been compromised.

Mineral Resource and Mineral Reserve Estimates

Management estimates that mineral reserves for the Dolores mine, as at December 31, 2014, are as follows:

Dolores Mineral Reserves [1, 2]			
Reserve Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**Grams of Gold per tonne**
Proven	28.1	32	0.91
Probable	31.8	35	0.88
TOTAL	59.9	33	0.89

Notes:

1 Estimated using a price of $18.50 per ounce of silver and $1,250 per ounce of gold.

2 Mineral Reserve estimates for Dolores were prepared under the supervision of, or were reviewed by, Michael Steinmann, P.Geo., 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, as at December 31, 2014, are as follows:

Dolores Mineral Resources [1, 2]			
Resource Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**Grams of Gold per tonne**
Measured	13.4	17	0.27
Indicated	21.9	26	0.63
Inferred	4.9	28	1.05

Notes:

1 These mineral resources are in addition to Dolores mineral reserves. Estimated resources are constrained within an optimized open pit shell and mineable underground shapes using metal prices of $30 per ounce of silver and $1,400 per ounce gold.

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

Mineral resource estimates were prepared using multiple indicator kriging within three dimensional geological interpretations using industry standard mining software. Geological interpretations of lithology, mineralization, and oxidation were prepared based on the geological logs of the drillholes and used to code the block model. The block dimensions were chosen according to the average drillhole spacing and mining selectivity, and was set at a parent block size of 12.5 metres east, 12.5 metres north, and 7.5 metres elevation, using sub-cells to obtain a good resolution fit of the cells at the interface with the wireframes. Silver and gold grades were estimated using multiple indicator or ordinary kriging into the parent cell. Bulk density was applied to the block model using a nearest neighbour estimate of spatially and geologically representative bulk density measurements of drill core samples. 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 was then depleted for previous surface and underground mining. Planned dilution was applied to the block model by re-blocking to the standard mining unit (SMU) block size of 6.25 by 6.25 by 7.5 and weight averaging the grades of the mineralized blocks and sub-blocks with the estimated grade of the additional waste material. A value per tonne was estimated and applied to each block based on estimated gold and silver grades, estimated metallurgical recoveries, metal prices, and mining and processing costs. An optimized pit shell and design were prepared using the re-blocked resources block model to report proven and probable reserves. A second pit shell was prepared with the value per tonne calculations for each block re-estimated with resource metal prices to report mineral resources. Below the resource pit, mineral resources that may potentially be mined by underground mining methods were also defined.

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 which may have a material negative impact on the estimated mineral reserves or mineral resources at Dolores.

Mining Operations

Mining at Dolores is by standard open pit methods using shovels, loaders, and haul trucks. Each bench is 7.5 metres high. Angled reverse circulation drill holes perpendicular to the strike of mineralization are used for grade control to provide high quality data for interpreting the ore/waste contacts in advance of mining. Low to medium grade material may be placed on stockpiles allowing for the preferential crushing and stacking of higher grade material.

The mine uses conventional cyanide heap leaching technology to produce gold and silver doré. Broken ore is trucked from the open pit to the crushing plant, where it is crushed, conveyed to the leach pads, and placed on the pads using conveyors and a radial stacking system. A distribution piping and nozzle system is used to irrigate the heaps with cyanide solution. The leaching period can cover years, and continues as subsequent lifts are placed on the pads. The pregnant solution is collected in a pond, clarified, and processed through a Merrill-Crowe circuit to precipitate gold and silver from solution onto zinc dust. The solution is pumped to filter presses, where the resulting material containing zinc, gold, and silver is dried. The dried material is then melted in a furnace to form doré bars.

We stacked 6.1 million tonnes on the leach pads and produced 4.0 million ounces of silver and approximately 66,800 ounces of gold in 2014.

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 a multi-year refining contract in place with a refiner in the USA. 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:

2014	Revenue[1,2]	Quantity
Silver and Gold in Doré	$156.6 million	3,911,600 ounces of silver 64,301 ounces of gold
2013		
Silver and Gold in Doré	$164.0 million	3,360,730 ounces of silver 61,559 ounces of gold
2012[3]		
Silver and Gold in Doré	$139.4 million	2,385,045 ounces of silver 40,038 ounces of gold

Notes:

1 Consists of sales to arm's length customers.

2 Calculated as gross revenue less treatment and refining charges.

3 Includes only the period of April 1, 2012 to December 31, 2012 during which we owned the Dolores mine.

In 2013, the Mexican government enacted the Tax Reform (described in detail under the "Mining Operations" heading in the La Colorada section of this AIF). The initial deferred income tax impact of this reform was approximately $78.5 million.

As a result of the Tax Reform, in 2014 the principal Mexican taxes affecting CMD, the entity which holds the Dolores mine, include income tax, SMD, EMD, annual fees for holding mineral properties, various payroll and social security taxes, and a refundable value added tax.

CMD generated an income tax (recovery) of approximately $(80.3) million, approximately $(46.1) million and $8.2 million in 2014, 2013 and 2012, respectively. Included in the income tax is SMD of approximately $(11.8) million and $40.7 million in 2014 and 2013 respectively.

The income tax in CMD includes a recovery of approximately $66.8 million and $118.7 million related to the impairment of property, plant, and equipment at Dolores and at the La Virginia exploration project in 2014 and 2013 respectively.

In 2014, total capital expenditures at Dolores were approximately $44.9 million, primarily for capitalized stripping to develop access to ore that is to be mined in future periods, near-mine exploration drilling, access roads and camp upgrades, and mining equipment replacements. $17.3 million of this expenditure was invested in projects including the second phase of the leach pad 3 expansion, advancement of the new power line, and processing optimization studies.

Activities in 2015

In 2015, we anticipate producing between 4.00 and 4.15 million ounces of silver and between 75,000 and 80,000 ounces of gold.

We currently expect sustaining capital spending of between $30.0 and $35.0 million at Dolores in 2015, primarily for pre-stripping activities, truck rehabilitation, loading and drilling equipment rehabilitation, and the installation of a process solution treatment plant. In addition to sustaining capital expenditures, capital expenditures relating primarily to the power line installation and optimization projects are expected to require between $15.0 and $17.0 million.

Environmental

Permit applications for construction and operation of Dolores, including an EIS, and a Technical Justification Study for Change of Land-Use, and Risk Study were approved by SEMARNAT in April 2006. An additional modification to the mine permit was made to allow the construction of an underground exploration ramp in 2012.

Prior to our acquisition of the project, problems related to the stability of heap leach Pad 1 developed in 2010 and significant leakage was detected through the pad liner that was unable to be contained by the leak collection system. This issue resulted in cessation of stacking and irrigation on the pad and the relocation of approximately 2 million tonnes of ore to a newly constructed heap leach Pad 2. Soil and water sampling below Pad 1 in 2012 confirmed that no residual cyanide was present, however full remediation of the liner system will be required if Pad 1 were ever to be used for production again. At the request of PROFEPA, we submitted an approximate schedule for the relocation of residual ore from Pad 1 commencing in 2017, depending on economic and technical factors, and during 2014 we relocated approximately 617,600 tonnes of this residual ore to Pad 2 ahead of the committed schedule.

The first phase of heap leach Pad 3 was completed and commissioned in the fourth quarter of 2013 with a subsequent second phase completed by the end of 2014, giving a total capacity constructed at Pad 3 to-date of approximately 17.5 million tonnes. It is expected that the third phase of Pad 3 construction will commence before the end of 2015. There is future potential to join Pad 3 to a reconstructed Pad 1 in a configuration that would significantly improve the stability and overall capacity of the original Pad 1. As well as receiving some Pad 1 residual ore, Pad 2 is being utilized for continued trickle-down leaching using a staged leach application circuit in combination with leachate solution application to Pad 3 which is expected to continue for several years depending on economic output.

Dolores has voluntarily participated in the PROFEPA “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 mine obtained its first certification in 2010 and was re-certified again on June 8, 2012. The mine is currently completing the recertification process with PROFEPA.

A closure cost estimate for Dolores was prepared according to State of Nevada approved SRCE methodology in 2012 and is updated every year. We have estimated the present value of reclamation costs for the Dolores property at December 31, 2014 to be approximately $9.5 million. See “Narrative Description of the Business – Environmental Protection” for further disclosure regarding forward looking statements related to reclamation costs.

Health and Safety

Internal safety audits were conducted at Dolores in 2012, 2013, and 2014. During 2014, personnel employed at Dolores attended over 106,900 hours of safety related training. Dolores was the recipient of the Chairman’s Safety Award for safety performance during 2013, and has achieved greater than 6.2 million hours worked since the last LTI. In 2013, Dolores was the recipient of the prestigious “Casco de Plata” award for the best safety record for open pit mines in Mexico with in excess of 500 employees.

B. Peru

(i) Huaron Mine

Project Description and Location

Huaron is an underground silver mine located 320 kilometres northeast of Lima in the province of Pasco in the Central Highlands of Peru. The nearest town is Cerro de Pasco, a major mining center, and is connected to Lima by road and rail. The area of the PAS Huaron concessions spans approximately 29,344 hectares.

Huaron is 100% owned and operated by PAS Huaron, a Peruvian entity which is approximately 99.94% held, directly or indirectly, by Pan American. The concessions owned by us give us exclusive right to explore, develop, exploit, and market all of the products. 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.

To the best of our knowledge, Huaron is not subject to any agreements or encumbrances except for a Peruvian mining royalty tax and a special mining tax, which are described later.

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

To the best of our knowledge, all permits and licenses required to conduct our activities on the project have been obtained and are currently in good standing.

Accessibility, Climate, Local Resources, Infrastructure, and Physiography

Access to the Huaron mine is by a continuously maintained 285 kilometre paved highway between Lima and Unish and a 35 kilometre road between Unish and Huaron. There are two other longer and more difficult access routes by gravel road. There is also a light aircraft strip at the town of Vicco, which is located approximately 30 minutes flying time from Lima, at which point an additional 30 minutes of driving is required to reach Huaron.

The nearest city is Cerro de Pasco, a major mining center with a population of approximately 70,000 people, which is connected to Lima 320 kilometres to the southwest by road and rail. Employees commute to the property via company sponsored buses, company vehicles, or privately owned vehicles. Materials, fuel, and the concentrates we produce are transported to their destinations by road. Concentrates may also be transported by rail.

The climate at the mine site is classified as “cold climate” or “boreal” with average annual temperatures ranging from 3°C to 10°C. The Huaron mine operates throughout the entire year. The topography at the mine site is hilly with locally steep slopes, at elevations ranging from 4,250 metres to 4,800 metres above sea level. Natural vegetation consists mainly of grasses forming meadows which have permitted development of varied livestock operations.

As far as we are aware, the surface rights for mining operations are sufficient and secure. We are authorized to use up to 320 litres per second of water obtained from a system of nearby lakes for mining activities through payment of a water use permit. This volume of water is more than sufficient for the mine’s requirements. The primary source of power for the mine is the Peruvian national power grid and is sufficient for the mine’s current requirements.

Peru’s economy is dependent upon mining and the Huaron property is located in a historical mining area with a sufficient supply of experienced mining personnel to support operations.

History

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

After the April 1998 flooding, the Huaron mine operations were shut down, the labour force was terminated, the camp closed, and work was undertaken to clean up the flood damage, drain the workings, and prepare for an eventual mine re-opening. 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. In September 2000, the Animon mine, in accordance with a settlement agreement reached with Cía. Minera Huaron S.A., constructed a channel to route water around the lake to provide water for the Huaron mine operation and to reduce the water in upstream lakes to prevent agricultural flooding, which had created local social pressures.

We acquired a majority interest in the Huaron mine from Hochschild in 2000 and began full-scale operations in 2001. We subsequently acquired the remaining interest in the mine and, following a demerger from Pan American Silver Mina Quiruvilca S.A. in connection with the sale of the Quiruvilca mine in 2013, Pan American now holds, directly or indirectly, approximately 99.94% of PAS Huaron.

Prior to our acquisition of the mine, approximately 22 million tonnes of silver-rich base metal sulphide ore were produced at the property. Silver made up about 49% of historic sales value, with zinc, lead, and copper contributing 33%, 15%, and 3% of the remaining portion. Ore from the mine was processed on site by crushing, grinding, and flotation to produce copper, lead, and zinc concentrates, as it is today.

Geological Setting

The Huaron property is located within the Western Cordillera of the Andes Mountains and the regional geology is dominated by Cretaceous aged Machay Group limestones and Tertiary aged Pocobamba continental sedimentary rocks, which are referred to as the Casapalca Red Beds. 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 and 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 overlay massive marine limestones. A series of andesites and dacites outcrop to the west of the mine. North-south trending sub-vertical porphyritic quartz monzonite dykes cross cut the mine stratigraphy.

Thinly bedded marls and sandstones known as the lower redbeds are present in the central part of the mine and at lower elevations. The upper redbeds are present on the eastern side of the mine, and are comprised of calcareous chert overlying sandstone and marls, in turn overlying the Barnabe quartzite conglomerate at the base of the sequence. On the western side of the mine, the stratigraphy consists of a series of interbedded conglomerates and sandstones.

Huaron is located within an anticline formed by east-west compressional forces. The axis of the anticline strikes approximately north-south and plunges 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.

Exploration

Since Huaron is an active mining operation, current exploration is conducted using a combination of underground diamond drilling and channel sampling from drifts excavated along the mineralized zones. Generally, underground drillholes that intersect promising economic grade mineralization are followed up by drifting. Vein intersections and sample grade information from both the channel samples and the diamond drillholes are used to estimate mineral resources and mineral reserves.

Underground diamond drilling utilizes an external drilling contractor supervised by us.

Channel sampling and diamond drilling generally provide reliable data for the estimation of mineral resources and mineral reserves, provided that appropriate measures are taken to minimize material loss, to prevent contamination, and to ensure a representative sample is taken. Ground conditions for diamond drilling are generally good, resulting in high core recovery, and measures are taken to minimize potential contamination. There are no known issues that could materially impact the reliability of the results.

Mineralization

Huaron 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. Most of the structures show open mineralization at depth and along strike and have excellent exploration potential. Vein orientations vary but generally trend east-west or north-south. The current mineral reserves are based on approximately 100 different structures which have been grouped into 13 families of mineralized trends according to location and orientation.

The first pulse of mineralization was associated with the emplacement of intrusive bodies and the subsequent opening of structures, when zinc, iron, tin, and tungsten minerals were deposited. This was followed by a copper, lead, and silver rich stage, and finally by an antimony/silver phase associated with quartz.

The most important economic minerals are tennantite-tetrahedrite (containing most of the silver), sphalerite, and galena, but more than 90 other minerals have been identified. The principal gangue minerals are pyrite, quartz, calcite, and rhodochrosite. Enargite and pyrrhotite are common in the central copper core of the mine and zinc oxides and silicates are encountered in structures with deep weathering. Silver is also found in pyrargyrite, proustite, polybasite, and pearceite.

There is a definite mineral zoning at Huaron. There is a central copper core where the principal economic mineral is enargite and the structures contain copper with pyrite and quartz. This area was extensively mined by previous operators but further mining in this area is dependent on metal grades and prices overcoming the negative economic impacts of high arsenic and antimony content and poor metal recoveries. To the east and west of the central core silver, lead, and zinc minerals are associated principally with calcite and rhodochrosite. Areas to the north of the central core contain silver, lead, and zinc minerals associated with pyrite. A narrow band running north-south along the general axis of the anticline contains principally sphalerite and sulfosalts with rhodochrosite.

Drilling

Due to Huaron's long mine life, there is extensive diamond drillhole coverage within reach of the underground workings. We orient diamond drillholes to intersect the targeted vein as close to perpendicular as possible and they are spaced as regularly as possible to ensure representative sample coverage.

All underground holes are drilled by an external drilling contractor under our supervision using BQ, NQ, and HQ diameter industry standard underground diamond drill rigs. The collar coordinates and bearing and dip are surveyed with a total station instrument and the drill hole deviation is measured regularly using a down hole survey instrument.

Diamond drilling at Huaron generally provides reliable data for the estimation of mineral resources and mineral reserves, provided appropriate measures are taken to minimize sample material loss, to prevent sample contamination, and to ensure an unbiased, representative sample is taken. Ground conditions for diamond drilling at Huaron are generally good, resulting in high drill core recovery, and measures are taken to minimize potential contamination. There are no known drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the results.

Sampling and Analysis

Diamond drillhole samples are split in half with a diamond bladed saw after the core has been logged and the sample intervals have been marked by the geologist. Channel samples are collected with a hammer and chisel every 4 metres across the vein in stoping areas, every 2 metres across the vein in sublevels and drifts, and every 1 metre in vertical developments. Each channel sample weighs between 4 kg and 6 kg and is taken perpendicular to the structure after the face has been cleaned with a water hose or hard brush to reduce the risk of sample contamination.

Samples from both channel samples and diamond drillholes are selected according to geological intervals and the width of the intersection with the vein, and vary between 0.1 metres and 1.5 metres in length. Unmineralized hangingwall and footwall host rocks are sampled for at least 3 metres beyond visible mineralization. Internal unmineralized material located between mineralized intersections is sampled over the entire length if the unmineralized zone is less than 6 metres wide.

The rock mass is generally of good quality and there have been few issues regarding sample loss or contamination during sample collection and splitting. There are no known drilling, sampling, or recovery issues that could materially impact the reliability of the results.

Both channel and drill core samples are placed in new, clean plastic bags with two sample number tags on the inside and one number and barcode tag on the outside, and sealed with a metal strip.

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

The laboratory conducts a routine internal quality assurance/quality control ("QAQC") programme. For each batch of 20 samples at least one duplicate sample and one certified standard is submitted by the laboratory. The laboratory information management system eliminates as much manual data entry as possible and ensures that no transcription errors occur when applying the assay results to the sample intervals in the geological database.

A QAQC programme supervised by the geology department is also implemented which includes the submission of one certified standard and one blank on a daily basis to the onsite laboratory. Duplicate samples comprising one quarter of the second half of the diamond drill core and duplicate samples obtained by collecting a sample of equal weight from the same channel sample location as the original are also submitted, both to the onsite laboratory and to a second laboratory to act as a check on the onsite laboratory. A system is in place to ensure that any failed QAQC samples are identified and that the required corrective action is taken in a timely manner, which usually involves a review of procedures to ensure that the established sample preparation and analysis protocols are being followed.

Security of Samples

No out of the ordinary security measures are taken with the samples, but as the samples are prepared and analysed within the confines of the general mine security enclosures, there is no reason to believe that the validity and integrity of the samples have been compromised.

Mineral Resource and Mineral Reserve Estimates

Management estimates that mineral reserves at the Huaron mine, as at December 31, 2014, are as follows:

Huaron Mineral Reserves [1, 2, 3]

Reserve Category	Tonnes (Mt)	Grams of Silver per tonne	% Zinc	% Lead	% Copper
Proven	6.5	165	2.86	1.35	0.35
Probable	4.2	166	2.89	1.52	0.40
TOTAL	10.7	166	2.87	1.42	0.37

Notes:

1 Estimated using a price of $18.50 per ounce of silver, $2,000 per tonne of zinc, $2,000 per tonne of lead and $6,800 per tonne of copper.

2 Mineral Reserve estimates for Huaron were prepared under the supervision of, or were reviewed by, Michael Steinmann, P.Geo., and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

3 Numbers may not add due to rounding.

Management estimates that mineral resources at the Huaron mine, as of December 31, 2014, are as follows:

Huaron Mineral Resources [1, 2]

Resource Category	Tonnes (Mt)	Grams of Silver per tonne	% Zinc	% Lead	% Copper
Measured	2.1	155	2.76	1.46	0.50
Indicated	1.5	161	2.88	1.44	0.60
Inferred	8.4	154	2.67	1.45	0.32

Notes:

1 These mineral resources are in addition to Huaron mineral reserves. Estimated using a price of $18.50 per ounce of silver, $2,000 per tonne of zinc, $2,000 per tonne of lead and $6,800 per tonne of copper.

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

Mineral resource estimates are prepared on an annual basis and updated with the additional diamond drilling and channel samples collected during the year, using a variation of the polygonal method in AutoCAD and Excel software. Each vein structure is projected onto a longitudinal section and divided into a series of geometrical blocks created to best fit an area of mineralization into a minable block, if the mineralization present is considered economic. The dimensions of the mining blocks are based on mining levels, stope layouts, and previously mined out areas, and range in length from between 20 metres and 70 metres. They are generally on the order of 50 metres long and 20 metres high.

The average true width of the vein intersections is applied to the block area to determine the volume. Sample grades are reviewed and treated for extreme values if necessary, and then the average grade of the intersections within each block is assigned to the block. Bulk density values are applied to the volume of the block

to estimate the tonnes of each block, based on the average bulk density measured from samples selected from the different veins.

The blocks are then depleted for previous mining. Planned mining dilution is applied to each block considering the width, dip angle, mining method, and expected ground conditions of each vein and an allowance is made for expected mining losses. A value per tonne is applied to each block based on metal content, metal prices, concentrate sales terms, concentrate quality, processing recovery, transportation, refining, and other selling costs such as storage fees, port fees, etc. Metallurgical recoveries are determined separately for each group of veins or structures to account for variability in the recovery. Any blocks that do not meet the criteria of resources are removed. Each block is classified for measured, indicated, and inferred confidence categories depending on the location of the block relative to mine workings, the type of sample available in each block, and the number of samples available to estimate each block.

We have been operating the Huaron mine since 2001 and the nature of the deposit, the mining operations, and the mineral processing are well understood. 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 a combination of conventional cut and fill, mechanised cut and fill and mechanized sub-level long hole stoping methods. The selection of the mining method depends on the location, width, orientation, and ground conditions of the vein to be mined, as well as the ground conditions of the hangingwall and footwall. Conventional cut and fill stoping is typically used in the narrowest veins, where blast holes are drilled using hand held jackleg drills and slushers are used to remove the blasted ore. Mechanised cut and fill is often used in areas where sufficiently wide and economic veins are present or where additional mining faces are present. Drilling is undertaken with hand held drills (jacklegs or stopers) or electric hydraulic jumbo drill and broken ore is removed using scoop trams. Cycloned mill tailings are piped into the cut and fill stopes as backfill. Mechanized sub-level long hole stoping is now the primary mining method at the mine. Sub levels are typically developed on 10 to 15 metre vertical intervals depending on the expected ground conditions. Long hole drilling is conducted with electric hydraulic drills with broken ore removed by remote control scoop trams. Unconsolidated development waste is used for backfill.

A combination of haul trucks and electric locomotives are in place for haulage from the upper parts of the mine. A rehabilitated shaft with a tower mounted friction hoist is used for hoisting ore and occasionally waste to the surface. Ore sourced from below the 500 level is hauled to the surface crusher using a combination of diesel haul trucks and hoisting in the mine shaft.

Huaron operates an 870,000 tonne per year capacity mill using froth induced flotation technology to produce silver in copper, lead, and zinc concentrates. The mill flowsheet consists of three-stage crushing, ball mill grinding, and selective flotation of the ore to concentrates, followed by thickening and filtering of the concentrates.

Tailings from the processing plant are classified in a hydro-cyclone to obtain two products, the coarser fraction is returned underground hydraulically to act as backfill material in the cut and fill mining areas and the fine material is delivered to a tailing impoundment area via a pipeline. The tailing impoundment area is constructed primarily of waste rock from the mine. The tailings facilities are continually reviewed and expanded as required, and engineered and constructed to ensure geotechnical stability by Pan American's independent consultants. Monitoring instrumentation is in place to confirm that the performance of the facilities is within design limits.

In 2014, the mill processed approximately 893,000 tonnes of ore with metallurgical recoveries averaging 83.2% for silver, 68.0% for zinc, 71.5% for lead, and 77.5% for copper. Metal production during the year was approximately 3.6 million ounces of silver, 14,200 tonnes of zinc, 6,000 tonnes of lead, and 5,900 tonnes of copper.

The silver rich zinc, lead, and copper concentrates from Huaron are sold under contracts with arm's length smelters and concentrate traders. Huaron receives payment for an agreed percentage of the silver, 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 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:

2014	**Revenue[1, 2]**	**Quantity (Tonnes of Concentrate)**
Zinc Concentrate[3]	$21.3 million	30,058
Lead Concentrate[3]	$19.3 million	12,095
Copper Concentrate[3]	$54.3 million	22,497
2013		
Zinc Concentrate[3]	$20.5 million	28,788
Lead Concentrate[3]	$22.1 million	11,905
Copper Concentrate[3]	$50.2 million	13,822
2012		
Zinc Concentrate[3]	$20.5 million	26,718
Lead Concentrate[3]	$25.6 million	10,147
Copper Concentrate[3]	$54.7 million	9,430

Notes:

1 Consists of sales to arm's length customers.

2 Calculated as gross revenue less treatment and refining charges.

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

The life of mine plan is based on the mineral reserves and contemplates an annual processing rate of 870,000 tonnes (2,384 tonnes per day) throughout the mine life for a remaining mine life of approximately 12 years. The projected mine life may increase if the current mineral resources can be converted to mineral reserves or if additional mineral resources are defined and can be converted to mineral reserves.

Since the mine is in operation, any sustaining capital expenditures are justified on an on-going basis. Capital expenditures at Huaron during 2014 totalled $17.3 million, primarily on tailings storage facility expansion, mine development, and exploration drilling.

The principal Peruvian taxes affecting Huaron include income tax, an employee profit sharing tax, annual fees for holding mineral properties, various payroll and social security taxes, a refundable value added tax, 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.

In December 2014, the Peruvian Parliament approved a bill that is effective January 1, 2015 and decreases the corporate income tax rates from 30% in 2014, to 28% in 2015 and 2016, to 27% in 2017 and 2018, and to 26% in 2019 and future years. There was a deferred income tax recovery of $1.5 million recorded in 2014 associated with the change.

The new law also increases the withholding taxes on dividends paid to non-Peruvian-resident shareholders from 4.1% in 2014, to 6.8% in 2015 and 2016, to 8% in 2017 and 2018, and to 9.3% in 2019 and future years.

Huaron generated an income tax expense of approximately $1.5 million, $4.7 million, and $6.9 million in 2014, 2013, and 2012 respectively. Included in the income tax expense was the Peruvian mining royalty tax and SMT, of approximately $1.2 million, $1.1 million, and $1.2 million in 2014, 2013, and 2012 respectively.

In addition, employee profit sharing taxes of approximately $0.5 million, $1.1 million, and $1.1 million were generated in 2014, 2013, and 2012, respectively. These amounts are not included in the income tax expense above.

Activities in 2015

In 2015, Huaron is forecast to produce between approximately 3.70 and 3.80 million ounces of silver and between 1,000 and 1,200 ounces of gold. Base metal production is expected to be between 13,500 and 14,000 tonnes of zinc, between 6,100 and 6,200 tonnes of lead, and between 4,750 and 5,000 tonnes of copper.

Capital spending plans at Huaron in 2015 are expected to be between $8.0 million and $10.0 million to allow us to continue our long term mine developments, including tailings storage facility expansion, ventilation raises and mining equipment, camp additions, and equipment maintenance, as well as near-mine exploration.

Environmental

In October 2003, the Peruvian government passed legislation requiring active mining operations to file closure plans. In October 2005, administrative rules associated with this legislation were promulgated which laid out detailed closure requirements and required that detailed closure plans and cost estimates be filed by October 2006.

The original closure plan for Huaron was filed by mid-year 2004 and in August of 2006, we submitted a comprehensive closure plan for Huaron to the Ministry of Energy and Mines ("MEM") in accordance with that ministry's regulations and the updated rules. The closure plan was prepared by third party consultants registered with the Peruvian authorities as qualified to present closure plans to the MEM. The closure plan includes a summary of the proposed closure scheme for each of the major areas of impact such as mine water, tailings areas, waste rock dumps, plant site infrastructure, and underground mine. A detailed cost estimate was prepared based on our and the consultant's shared experience with closure works and experience with other projects in Peru. As required by the MEM, the costs were summarized in three phases: concurrent closure, final closure, and post closure. Updated closure plans are filed as required, with the most recent closure plan modification approved on 24 October 2012.

The most significant environmental issue currently associated with the mine is relatively high metal concentrations in the waters discharged from the mine and localized areas of acid rock drainage from the mine's tailings deposit areas. All waters are captured and treated in a treatment plant to achieve compliance with discharge limits. Peruvian legislation sets out the progressive implementation of new, stricter water quality limits both for discharges and receiving waters. An "Adaptation Plan" which sets out a program of baseline monitoring and data collection to evaluate future compliance of Huaron with the new limits was presented to the MEM on September 3, 2012. The plan, which sets out a three year program to achieve compliance with the new proposed limits, is still under evaluation and the schedule for implementation of new guideline limits is not yet confirmed.

An agreement signed in 2000 allows Volcan Compañia Minera S.A.'s ("Volcan") Chungar mine, which neighbours Huaron, 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, however provisions of the agreement which would enable 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 Chungar to Huaron represents 19% of the total flow in the drainage tunnel and recommended the installation of a permanent monitoring system for ongoing verification. We are currently negotiating the details of the monitoring and future payments with Volcan and the scale of benefits, if any, to Pan American is still unclear.

A closure cost estimate for Huaron was prepared according to State of Nevada approved Standard Reclamation Cost Estimator methodology in 2011 and is updated every year. The current present value of closure expenditures at Huaron as at December 31, 2014 is estimated at $6.4 million. See "Narrative Description of the Business – Environmental Protection" for further disclosure regarding forward looking statements related to reclamation costs.

Health and Safety

Internal safety audits are conducted annually by Pan American's Director of Health and Safety and safety managers from our other operations at Huaron. All Huaron employees are required to undergo safety and environmental training and all new underground employees are required to undergo task specific training prior to being assigned to their first position. During 2014, personnel at Huaron attended over 253,000 hours of training and at the end of 2014 had achieved greater than 1.8 million work hours without an LTI.

(ii) Morococha Mine

Project Description and Location

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. The area of the concessions owned by Argentum covers approximately 10,522 hectares, and there are an additional 106 hectares of concessions held with different third party participations.

Morococha 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, 2014 (excluding certain investment shares held by Argentum itself).

Morococha is comprised of three economic administrative units ("UEA") and various concessions held outside of these UEAs, for a total of 541 mining concessions with an area of approximately 10,522hectares, 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 Morococha are contiguous.

The known mineralized zones, mineral reserves and resources, mine workings, processing plants, effluent management and treatment systems, and the mine's tailings and waste disposal areas 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. 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.

Argentum did not hold registered legal title of most of the surface lands that overlie the mining concessions which comprise Morococha when we acquired Morococha 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 will 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 will receive a package of surface rights, easements, and other rights to relocate the facilities and to continue uninterrupted operations, and will 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 will receive periodic cash payments from MCP totalling $40 million, which will offset a portion of the capital required for the facility relocation. The transfer of lands and rights and the cash payments will occur over a period of time in accordance with 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 has 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 would be partially offset by the remaining payments due from MCP to honour 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, Morococha is not subject to any agreements or encumbrances except for a Peruvian mining royalty tax and a special mining tax, which are described below.

To the best of our knowledge, all permits and licenses required to conduct our activities on the project have been obtained and are currently in good standing.

Accessibility, Climate, Local Resources, Infrastructure, and Physiography

Morococha is accessible via Peru's paved central highway, by travelling approximately 137 kilometres east of Peru's capital city of Lima, then 2.9 kilometres north via a public, all-weather gravel road. Rail service from Lima is also available via a national rail line that passes adjacent to the operations.

Mining has taken place at Morococha and nearby areas such as Casapalca for more than 100 years, resulting in a well-developed regional transportation and power infrastructure and a large local labour pool. Peru's economy is dependent on mining and currently there is a sufficient local source of mining personnel and related infrastructure.

The climate of the operations area is typical of the Andean Cordillera in Peru, with two distinct seasons – wetter summer months (November through March) and dryer, colder winter months (April through October). Because all mining currently takes place underground, climate has minimal effect on production at Morococha, which operates throughout the year. The topography of the mine operating area is characterized by steep, rugged ridges and peaks ranging in elevation from 4,400 metres to over 5,100 metres above sea level. Vegetation is sparse and wildlife is limited to mostly birds and small mammals, amphibians, and reptiles.

The mine is authorized through payment of a water use permit to take water from the nearby Huacracocha and Venecia lakes for mining and processing activities and typically uses on the order of 1.1 million cubic metres per annum. The mine is also permitted to take water from Huacracocha Lake for human consumption and typically uses approximately 50,000 cubic metres per annum for that use. This permitted volume of water is more than sufficient for the mine's requirements.

The mine is also authorized to dispose of mine tailings at the adjacent Huascacocha Lake, which has been used for this purpose since 1960. Several mine development waste disposal sites exist and are sufficient to meet the needs of mining operations.

The primary source of power for the mine is the Peruvian national power grid and is sufficient for the mine's current requirements. The nearby areas of Casapalca and La Oroya provide a large local labour pool.

History

Mining began in the region around Morococha before the 1500s, and production has been continuous in the district since the late 1800s. The former owners of the mines that comprise the Morococha operations conducted only minimal systematic exploration in the district. Most of the older exploration efforts were limited to underground development along strike of known structures, which was immediately followed by stope development and mining. The Morococha District has excellent exploration potential owing to the prevalence of carbonate units favourable for replacement mineralization as well as the significant vertical extents of known mineralization. As a result, drilling was not typically part of the exploration efforts. Prior to our acquisition of Morococha, little effort was given to the exploration and economic evaluation of areas that were not immediately adjacent to the existing mine workings. Previous operators utilized both surface and underground diamond drilling only to test for potential economic mineralization in the various veins, replacement mantos, and skarn bodies. Once the presence of economic mineralization was confirmed, the vein or manto was accessed by underground crosscutting and drifting for further exploration.

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 tonnes per day from primarily copper ores containing 6% copper. 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 4,020 metre elevation of the tunnel. The Kingsmill Tunnel is still in use and is a vital feature of the Morococha mining district.

In the 1940s, the Gubbins family began operating mines in the Morococha District through Minera Santa Rita S.A. and Minera Yauli S.A., which were subsequently consolidated in the late 1990s into Sociedad Minera

Corona S.A. ("SMC"). Cerro de Pasco continued to operate in other areas around the Morococha District until 1974, when its mines were nationalized by the Peruvian government. Production from the Cerro de Pasco mines in the district continued under the Peruvian national mining company, Centromin, until 2003, when SMC acquired these operations from Centromin through privatization.

On January 20, 2004, we entered into an agreement with 14 individuals, estates and companies, all of whom were arm's length to us and are members of the Gubbins family or entities in which members of the Gubbins family hold beneficial interests (the "Morococha Vendors"), to purchase 92.014% of the voting shares of Argentum, a sociedad anónima organized under Peruvian company law, for $35,425,390 in cash. Argentum acquired, through a corporate restructuring undertaken under Peruvian company law, the Anticona and Manuelita mining units and related infrastructure and processing assets from SMC. At the time of acquisition, Argentum held in its treasury as cash, all profits earned by SMC's Anticona and Manuelita mining operations since November 1, 2003. The transaction was subject to regulatory approval and a number of conditions, including: (i) the completion of the corporate restructuring; (ii) the listing on the Lima Stock Exchange of 100% of the shares of Argentum, including those issued in connection with the corporate restructuring; and (iii) our successfully undertaking a public bid for not less than 92.014% of the voting shares of Argentum through the Lima Stock Exchange.

On February 24, 2004, we entered into a further agreement with the Morococha Vendors to purchase all of the issued and outstanding shares of Empresa Minera Natividad S.A. ("Natividad"), a corporation organized under Peruvian company law which holds mining concessions and operations that are complementary to the Anticona and Manuelita mining units, for $1.5 million in cash. Closing of the acquisitions of Argentum and Natividad occurred contemporaneously in August 2004, with effect as of July 1, 2004 and in 2005, Argentum amalgamated with Natividad. Argentum made all necessary applications for delisting its shares from the Lima Stock Exchange and the delisting process was completed in 2006. In addition, Pan American Peru continues to acquire the labour shares in Argentum when able to do so. The labour shares were created as a means through which workers would be able to take part in our success (but do not afford the holders of such shares influence over our decision-making, as they are non-voting), and are 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.

Geological Setting

Morococha is located on the eastern side of the Western Cordillera of the Andes Mountains. The host rocks for the mineralization in the Morococha district comprise a 2,000 metre thick Palaeozoic to Mesozoic aged sequence of schists, volcanic rocks, and predominantly carbonate sediments cut by a series of Upper Tertiary aged 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 the anticlinal feature referred to as the Yauli Dome, which trends north-northwest and divides the district roughly in half. The Mitu volcanics outcrop in the core of the dome, with Pucará limestones on the east and other sediments on the west. Continued compression apparently 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 (northeast-southwest) 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 formed along the dominant system of northeast trending tensional faults. With the exception of an agglomerate unit in the upper Mitu Group and the sedimentary breccias in the upper and lower Pucará, the Mitu volcanics, Anticona diorite, and much of the sedimentary sequence are good vein hosts.

Mineralization associated with the veins is mostly fracture filling in nature except in some carbonate hosts where irregular replacement can take place in the wall rocks.

Replacement manto mineralization is generally restricted to receptive stratigraphic horizons where favourable lithologies are intersected by mineralized veins or are proximal to pre-mineral intrusives. Some of the replacement mineralization occurs as structurally controlled irregular chimneys within generally favourable stratigraphic horizons. Intrusive contact related skarn bodies are common the in the Pucará, generally in areas of pre-mineral intrusives, giving rise to contact related silicification and/or calc-silicate alteration. For the most part these skarns are generally small and irregular, with disseminated rather than massive sulphide mineralization.

Exploration

Since Morococha is an active mining operation, exploration is conducted using a combination of underground diamond drilling and channel sampling from drifts excavated along the mineralized zones. Generally, underground drillholes that intersect promising economic grade mineralization are followed up by drifting. Vein intersections and sample grade information from both the channel samples and the diamond drillholes are used to estimate mineral resources and mineral reserves of the volumes anticipated to be mined.

Channel samples are collected from the backs of drifts, the ribs of crosscuts, the backs of stopes, and the ribs of raises. The channel samples are taken every two metres across the veins or mantos in exploration drifts and the stopes are sampled on two metre centres along strike. The samples are always taken perpendicular to the structures, and where cross-cutting vein systems or other mineralization is present, care is taken to avoid sampling along the strike of the cross cutting structure. The surface to be sampled is cleaned to avoid sample contamination by washing with a hose and scrubbing with a brush. The samples are collected using a hammer and chisel, and weigh between 4.0 to 6.0 kg, and are usually between 0.2 m and 2.0 m wide.

Channel sampling generally provides reliable data for the estimation of mineral resources and mineral reserves, provided that appropriate measures are taken to prevent contamination and to ensure a representative sample is taken. Because the channel samples are taken at a regular spacing in drifts above and below the mineral reserve volumes, the samples are as spatially representative as possible. There are no known issues that could materially impact the reliability of the results.

Mineralization

Mineralization at Morococha includes epi-mesothermal silver-zinc-lead-copper veins, bedded silver-base metal replacements or mantos (which together account for the majority of the previously mined and presently known mineralization at Morococha), intrusive-sediment contact skarns, and the quartz porphyry-hosted Toromocho disseminated copper system. The size and geometry of individual ore shoots are lithology and structure dependent. Shoots range up to 400 metres in length with some traced for over 800 metres down plunge. Economic widths in the veins 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.

Replacement manto mineralization is generally restricted to receptive stratigraphic horizons where favourable lithologies, especially carbonates, are intersected by mineralized veins or are proximal to pre-mineral intrusive rocks. 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.

Ore and gangue mineralogy is similar in veins and mantos but varies considerably. Sphalerite, galena, and chalcopyrite are the most important primary minerals for zinc, lead, and copper while silver is generally present as freibergite (silver-tetrahedrite) or argentiferous galena. Gangue generally consists of quartz, calcite, barite, and rhodochrosite.

Similar to most large Peruvian polymetallic deposits, Morococha exhibits a distinct lateral and vertical metal zonation. The central Toromocho copper deposit grades outward through a lead-zinc minor silver zone and

then into an outermost zone that is richer in silver with significant lead-zinc grades. There is also a distinct trend of higher silver grades at higher elevations on the west side of the Morococha mine. Silver assays of greater than 2,200 grams per tonne are not uncommon above 4,800 metres above sea level, and greater than 300 grams per tonne silver grades are also common in the outer silver-lead-zinc zone above the 4,400 metre elevation. In veins with significant vertical extents, silver grades tend to decrease as zinc grades increase with depth.

The hydrothermal alteration present at Morococha is typical of central Peruvian zoned polymetallic deposits.

Drilling

We orient diamond drillholes to intersect the targeted vein as close to perpendicular as possible and they are spaced as regularly as possible to ensure representative sample coverage. Both surface and underground holes are drilled by external drilling contractors under Pan American supervision using BQ, NQ, and HQ diameter industry standard underground diamond drill rigs. The collar coordinates and the bearing and dip are surveyed with a total station instrument and the drillhole deviation is measured regularly using a downhole survey instrument.

Diamond drilling at Morococha generally provides reliable data for the estimation of mineral resources and mineral reserves, provided appropriate measures are taken to minimize material loss, to prevent contamination, and to ensure a representative sample is taken. Ground conditions for diamond drilling at Morococha are generally good, resulting in high drill core recovery, and measures are taken to minimize potential contamination. There are no known drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the results.

Sampling and Analysis

Diamond drillhole samples are cut in half with a diamond bladed saw after the core has been logged and the sample intervals have been marked by the geologist. Downhole intervals are logged for fracture density and core recovery to determine the rock quality, and for lithology, structure, and alteration types.

The veins mostly comprise massive sulphides in a clear and sharp contact with the unmineralized wall rock. For sampling diamond drillholes, the geologist marks the sample intervals across the entire vein width and at least 3 metres into the hangingwall and footwall waste beyond the vein contacts. Sample intervals within the veins vary in length between 0.10 and 1.5 metres, depending on the total vein width and the complexity of the mineralization. Unmineralized intervals less than 6 metres wide between the veins are sampled at a maximum length of 1.5 metres.

The channel samples are taken every two metres across the veins or mantos in exploration drifts and the stopes are sampled on two metre centres along strike. The samples are always taken perpendicular to the structures, and where cross-cutting vein systems or other mineralization is present, care is taken to avoid sampling along the strike of the cross cutting structure. If the vein contains different types of mineralization, separate samples are taken of each type. Mantos are similarly sampled across their entire width, perpendicular to the mineralization. The surface to be sampled is cleaned to avoid sample contamination by washing with a hose and scrubbing with a brush. The samples are collected using a hammer and chisel, and weigh between 4.0 to 6.0 kg.

The rock mass is generally of good quality and there have been few issues regarding sample loss or contamination during sample collection and splitting. There are no known drilling, sampling, or recovery issues that could materially impact the reliability of the results.

Security of Samples

No out of the ordinary security measures are taken with the samples, but as the samples are prepared and analysed within the confines of the general mine security enclosures, there is no reason to believe that the validity and integrity of the samples have been compromised.

Mineral Resource and Mineral Reserve Estimates

Management estimates that mineral reserves for the Morococha mine, as at December 31, 2014, are as follows:

Morococha Mineral Reserves [1, 2, 3]					
Reserve Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**% Zinc**	**% Lead**	**% Copper**
Proven	2.4	181	3.32	1.18	1.15
Probable	2.7	202	3.90	1.36	0.67
TOTAL	5.1	192	3.63	1.27	0.90

Notes:

1 Estimated using a price of $18.50 per ounce of silver, $2,000 per tonne of zinc, $2,000 per tonne of lead and $6,800 per tonne of copper.

2 Mineral Reserve estimates for Morococha were prepared under the supervision of, or were reviewed by, Michael Steinmann, P.Geo., and Martin G. Wafforn, P.Eng., as Qualified Persons, as that term is defined in NI 43-101.

3 Tonnes are shown for 92.3% of the Morococha property. Through our subsidiary, Pan American Peru, we have a 92.3% interest in the Morococha property.

Management estimates that mineral resources at the Morococha mine, as at December 31, 2014, are as follows:

Morococha Mineral Resources [1, 2, 3]					
Resource Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**% Zinc**	**% Lead**	**% Copper**
Measured	0.5	125	3.32	1.16	0.33
Indicated	1.0	163	4.05	1.34	0.53
Inferred	6.5	247	3.27	1.31	0.44

Notes:

1 These mineral resources are in addition to mineral reserves. Estimated using a price of $18.50 per ounce of silver, $2,000 per tonne of zinc, $2,000 per tonne of lead and $6,800 per tonne of copper.

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

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

Mineral resource estimates are prepared on an annual basis and updated with the additional diamond drilling and channel samples collected during the year, using a variation of the polygonal method in AutoCAD and Excel software. Each vein structure is projected onto a longitudinal section and divided into a series of geometrical blocks created to best fit an area of mineralization into a minable block, if the mineralization present is considered economic. The dimensions of the mining blocks are based on mining levels, stope layouts, and previously mined out areas, and range in length from between 20 metres and 70 metres. They are generally on the order of 50 metres long and 20 metres high.

The average true width of the vein intersections is applied to the block area to determine the volume. Sample grades are reviewed and treated for extreme values if necessary, and then the average grade of the intersections within each block is assigned to the block. Bulk density values are applied to the volume of the block

to estimate the tonnes of each block, based on the average bulk density measured from samples selected from the different veins.

The blocks are then depleted for previous mining. Planned mining dilution is applied to each block considering the width, dip angle, mining method, and expected ground conditions of each vein, and an allowance is made for expected mining losses. A value per tonne is applied to each block based on metal content, metal prices, concentrate sales terms, concentrate quality, processing recovery, transportation, refining, and other selling costs such as storage fees, port fees, etc. Processing costs are assumed to be the same for all ore types, and metallurgical recoveries are based on averages for all of the groups of veins or structures. Any blocks that do not meet the criteria of resources are removed. Each block is classified for measured, indicated, and inferred confidence categories depending on the location of the block relative to mine workings, the type of sample available in each block, and the number of samples available to estimate each block.

Mineral resource blocks classified as measured and indicated that can be mined economically are converted to mineral reserves. Some small isolated blocks may be removed if the cost associated with development, production, and logistics make them uneconomic to mine. A value per tonne is applied to each block based on metal content, metal prices, concentrate sales terms, concentrate quality, metallurgical recovery, transportation, refining, and other selling costs such as storage fees, port fees, etc. A minimum required value per tonne cut-off is calculated for the blocks depending on the block location in the mine. A minimum required value per tonne cut-off is calculated for the blocks depending on the block location in the mine. As the plant has an annual processing capacity of 800,000 tonnes and the annual mining capacity is currently 630,000 tonnes, the minimum required value per tonne cut-off is calculated to be a percentage of the full break even cost. This allows for processing of incremental material that pays for all of the variable costs of the operation, utilizing more of the existing plant capacity, and providing a margin for profitability. Processing costs are assumed to be the same for all ore types, and metallurgical recoveries are based on averages for all of the groups of veins or structures.

Any blocks which are considered uneconomic after these parameters are applied either remain as mineral resources or may be removed from the inventory completely if they do not meet the criteria of resources. The mineral reserves are classified as proven or probable depending on the resource classification.

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 operations at Morococha consist primarily of conventional and mechanized overhand cut and fill, long hole open stoping, and stope development. The selection of the mining method depends on the location, width, orientation, and ground conditions of the vein to be mined, as well as the ground conditions of the footwall and hangingwall. Classified tailings pumped hydraulically to stopes and waste rock are used for backfill where needed.

Conventional cut and fill stoping is typically used in the narrowest veins, where blast holes are drilled using hand held jackleg drills and slushers are used to remove the blasted ore. Depending on ground conditions, the blast holes are drilled either upward or horizontally with a hand held drill. Mechanised cut and fill is often used in areas where the development of an access ramp can be economically justified. This is typically the case where sufficiently wide and economic veins are present or where economic mineralization is present in wider manto or replacement ore bodies. Drilling is undertaken with hand held drills (jacklegs or stopers) or electric hydraulic jumbo drills and the broken ore is removed using scoop trams. Mechanized cut and fill mining using development jumbos is limited to horizontal holes only. Sub-level long hole mining is undertaken in wider spatially continuous economic veins with good wall conditions.

In the Manuelita and Sulfurosa areas of the mine, locomotives transport the ore in rail cars from the chutes to the shafts for hoisting. Highway dump trucks then haul the ore from the coarse ore bins at the shaft to the stockpiles at the mill. In the Codiciada and Alapampa areas of the mine, ore is transported to underground stockpiles using scoop trams and then loaded onto haul trucks for transportation to surface via a haulage ramp. Later in the mine life, underground development from the Alapampa area to the Yacumina area will be necessary to provide access and ore haulage.

The Yauli (also known as the Manuelita) production shaft provides access from an underground adit down to the Kingsmill drainage tunnel level at an elevation of 4,020 metres above sea level. It is equipped with two 2.6 tonne skips which feed into chutes from where it is then transported in rail cars by a small locomotive to an adjacent subsurface truck loading facility. The Maria shaft provides access from surface down to one level above the Kingsmill tunnel, and is comprised of a single split drum hoist with two skips, each with a capacity of 2 tonnes.

We plan to develop the Manuelita and Sulfurosa areas of the mine to 70 m below the Kingsmill drainage tunnel. This development was started by a previous operator and is now in the process of being extended and expanded using a small inclined shaft to haul waste and a limited amount of ore up to the Kingsmill tunnel elevation, where it is transferred to the Manuelita shaft. The long term plan for the development of these zones includes the deepening of the Manuelita shaft.

Morococha operates an 803,000 tonne per year capacity mill, known as the Amistad mill, using froth induced selective flotation technology to produce silver in zinc, lead, and copper concentrates. The mill flowsheet consists of two-stage crushing, ball mill grinding, selective flotation of the ore to concentrates, followed by thickening and filtering of the concentrates. About half of the tailings from the concentrator are pumped to a hydrocyclone for classification, then the classified fines are combined with the other half of the tailings and pumped to the Huascacocha tailings facility. The underflow from the hydrocyclone is stored in a tank and then transported back underground where it is used for hydraulic backfill.

In 2014, the mill processed approximately 613,800 tonnes of ore with metallurgical recoveries of 86.4% for silver, 77.2% for zinc, 74.0% for lead, and 72.2% for copper. Total metal production for the year was approximately 2.6 million ounces of silver, 17,100 tonnes of zinc, 5,100 tonnes of lead, and 3,300 tonnes of copper.

The Morococha mine produces silver-rich zinc, lead, and copper concentrates which are sold under contracts that are negotiated periodically with arm's length smelters and concentrate traders. Morococha receives payment for an agreed percentage of the silver, 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".

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

2014	**Revenue[1, 2]**	**Tonnes**
Zinc Concentrate[3]	$25.5 million	35,893
Lead Concentrate[3]	$17.8 million	10,113
Copper Concentrate[3]	$35.7 million	15,557
2013		
Zinc Concentrate[3]	$24.1 million	33,763
Lead Concentrate[3]	$16.9 million	8,423
Copper Concentrate[3]	$41.3 million	11,713

2012		
Zinc Concentrate[3]	$20.1 million	27,245
Lead Concentrate[3]	$20.1 million	7,816
Copper Concentrate[3]	$38.4 million	7,875

Notes:

1 Consists of sales to arm's length customers.

2 Calculated as gross revenue less treatment and refining charges.

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

The life of mine plan is based on the mineral reserves and contemplates, on a 100% basis, an annual processing rate of 630,000 tonnes (1,726 tonnes per day) and then gradually increasing as more mining areas become available in Manuelita and Sulfurosa below the Kingsmill tunnel, in Alapampa, and later in Yacumina. This processing rate results in a remaining mine life of an estimated 7.3 years. The Morococha deposit is extensive and if current mineral resources can be converted to mineral reserves and/or if new mineral resources are defined and can be converted to mineral reserves, then a new plant will be required to replace the current Amistad plant prior to 2020. The future economic justification of a new plant will rely primarily on mineral reserve growth and metal prices. 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, on the order of up to $100 million. This cost would be partially offset by the remaining payments due from MCP to honour the June 2010 agreement.

The bottom level of the currently estimated mineral reserves and the life of mine plan is assumed to be the Kingsmill drainage tunnel in all areas except for the Manuelita and Sulfurosa, where the bottom is 70 m below the bottom of the Kingsmill tunnel. There is no reason to believe that the veins and other mineralized structures stop at the Kingsmill tunnel, and so if pumping operations can be conducted economically, the mine life could be extended considerably.

The principal taxes of Peru affecting Argentum include income tax, an employee profit sharing tax, annual fees for holding mineral properties, various payroll and social security taxes, a refundable value added tax, a mining royalty tax, and the SMT. Please see the Huaron "Mining Operations" section above for a description of the SMT and revised mining royalty tax.

In December 2014, the Peruvian Parliament approved a bill that is effective January 1, 2015 and decreases the corporate income tax rates from 30% in 2014, to 28% in 2015 and 2016, to 27% in 2017 and 2018, and to 26% in 2019 and future years. There was a deferred income tax recovery of $1.3 million recorded in 2014 associated with the change.

The new law also increases the withholding taxes on dividends paid to non-Peruvian-resident shareholders from 4.1% in 2014, to 6.8% in 2015 and 2016, to 8% in 2017 and 2018, and to 9.3% in 2019 and future years.

Argentum generated an income tax (recovery) expense of $(3.6) million, $(0.7) million, and $3.1 million in 2014, 2013, and 2012 respectively. Included in the income tax expense is the revised Peruvian mining royalty tax and SMT, of approximately $0.8 million, $0.8 million and $0.8 million in 2014, 2013, and 2012 respectively.

In addition, employee profit sharing taxes of $NIL were generated in 2014, 2013, and 2012. These amounts are not included in the income taxes above.

Capital expenditures at Morococha during 2014 totalled $10.2 million, primarily on long term mine development advances and infrastructure, exploration drilling, plant upgrades, and equipment overhauls.

Activities in 2015

In 2015, based on an ownership interest of approximately 92.3% of Argentum, our proportionate interest in Morococha's production is forecast to be between 2.3 and 2.4 million ounces of silver, between 2,000 and 2,500 ounces of gold, between 14,500 and 15,000 tonnes of zinc, between 4,200 and 4,400 tonnes of lead, and between 3,240 and 3,490 tonnes of copper.

In 2015, we anticipate spending between approximately $6.0 million and $8.0 million in sustaining capital, the majority of which are allocated for near mine exploration drilling, mining equipment, and studies on deepening the Manuelita mine area beneath the primary drainage tunnel.

Environmental

In October 2003, the Peruvian government passed legislation requiring active mining operations to file closure plans. In October 2005, administrative rules associated with this legislation were promulgated which laid out detailed closure requirements and required that detailed closure plans and cost estimates be filed by October 2006.

The original closure plan for Morococha was filed by mid-year 2004, and in August of 2006, we submitted a comprehensive closure plan for Morococha to the MEM in accordance with that ministry's regulations and new rules. The closure plan was prepared by third party consultants registered with the Peruvian authorities as qualified to present closure plans to the MEM. The closure plan includes a summary of the proposed closure scheme for each of the major areas of impact such as mine water, tailing facilities areas, waste rock facilities, plant site infrastructure, and the underground mine. A detailed cost estimate was prepared based on Pan American's and the consultant's shared experience with closure works and experience with other projects in Peru. As required by the MEM, the costs were summarized in three phases: concurrent closure, final closure, and post closure. Updated closure plans are filed as required, with the most recent closure plan modification approved in 2012.

Peruvian legislation sets out the progressive implementation of new, stricter water quality limits both for discharges and receiving waters. An "Adaptation Plan" which demonstrates compliance of the Huascacocha lagoon discharge with the new limits was presented to the MEM on 3 September 2012.

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 Kingsmill Tunnel is an 11.5 kilometre long underground opening excavated between 1929 and 1934 to dewater the Morococha district mine workings above 4,020 metres above sea level. The water treatment plant was built and is currently being operated by MCP to treat the 1.5 to 1.8 cubic metres per second of 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 Morococha, MCP assumed the cost of the construction of the Kingsmill water treatment plant.

The treatment and operating costs for the water treatment 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 its purchase of the applicable mining concessions. As a purchase contract entered into during 2003 between Natividad and Argentum establishes that the purchaser is responsible for incremental flows in those concessions, subsequent studies in 2004 were carried out 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 study estimated that 38.46% of the baseline flows were derived from Natividad and Corona concessions now under our control. We challenged this estimate but our challenge was not accepted. The scope of the study and the resulting recommendations exceeded the terms of the study and presented

conclusions that conflicted with previous conclusions and the terms of our purchase of the applicable concessions. It appears that in connection with the acquisition by MCP of the mining concessions near Morococha, MCP also assumed the cost of treatment of the Kingsmill tunnel water so it can be used to supply MCP mineral processing plant.

A closure cost estimate for Morococha was prepared according to State of Nevada approved SRCE methodology in 2011 and is updated every year. The current present value of closure expenditures at Morococha as at December 31, 2014, is approximately $5.0 million. See "Narrative Description of the Business – Environmental Protection" for further disclosure regarding forward looking statements related to reclamation costs.

Health & Safety

In May 2006, a formal safety audit was conducted at the Morococha mine by a third party consultant and Pan American's Director of Health and Safety. Internal safety audits have been conducted each year since 2009 by Pan American's Director of Health and Safety and safety managers from our other operations. During 2014, personnel employed at Morococha attended a total of over 139,000 hours of training.

C. Bolivia

(i) San Vicente

Project Description and Location

The San Vicente underground silver-zinc mine is located in the south of Bolivia in the Province of Sud-Chichas, Department of Potosí, and covers an area of 8,159 hectares and consists of 15 concessions. San Vicente is located 460 kilometres south of the city of Oruro and 300 kilometres west of the city of Tarija.

Pan American holds a 95% interest in PASB. The remaining 5% of PASB is owned by Urion Holdings (Malta) Ltd. ("Urion"), an affiliate of Trafigura Baheer B.V. ("Trafigura") (which is described in more detail under "San Vicente - History"). PASB owns a 50% joint venture interest in, and is the operator of, the San Vicente project. The remaining interest in the joint venture project is held by Corporación Minera de Bolivia ("COMIBOL"), the Bolivian state mining company. All mining property concessions of the San Vicente mine are in the name of COMIBOL, and PASB is contractually responsible for paying the yearly mining tenure tax to maintain the concessions. All of the concessions include the rights for mining, water, and surface usage. As far as we are aware, all of the concessions are in good standing.

Pursuant to an option agreement entered into with COMIBOL with respect to the development of the San Vicente property, PASB is obligated to pay COMIBOL a participation fee of 37.5% (the "Participation Fee") of the operations cash flow. Once full commercial production of San Vicente began, the Participation Fee was reduced by 75% until PASB recovered its investment in the property in December 2012. Thereafter, the Participation Fee reverted back to its original percentage. In 2014, the royalties to COMIBOL amounted to approximately $10.4 million (2013 - $10.0 million).

A 2% net smelter royalty is also payable to Empresa Minera Unificada S.A. ("EMUSA"), a former partner of PASB on the project. The royalty is payable only after PASB recovered its capital investment in the project and only when the average price of silver in a given financial quarter is $9.00 per ounce or greater. The first royalty paid was $0.4 million in 2012. Payments of $0.7 million and $1.0 million were made in respect of this royalty during 2013 and 2014 respectively

A Bolivian state mining royalty is applied to gross metal value of sales (before smelting and refining deductions) and the royalty percentage is a sliding scale depending on metal prices. At current metal prices, the

royalty is 6% for silver metal value and 5% for zinc and copper metal value of sales. The royalty is income tax deductible; however, it is not creditable.

The known mineralized zones, mineral resources and reserves, mine workings, the processing plant, tailing impoundments, effluent management and treatment systems, and waste rock storage facilities are located within the concessions held by COMIBOL which are subject to the agreement between PASB and COMIBOL.

To the best of our knowledge, all permits and licenses required to conduct our activities on the mine have been obtained and are currently in good standing.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

The property is accessible by dirt road 100 kilometres west of the town of Tupiza and 150 kilometres south of Uyuni. The best routes are via the capital city of La Paz in the north or from Arica or Antofagasta to the west. From La Paz, a paved highway leads to the town of Challapata, and from there a gravel road, which serves as the major north-south route in the country, leads to Uyuni. Daily commercial flights operate between Uyuni and La Paz. Transport to the mine is by road for equipment and workers. Tupiza is connected to the rail system which serves Bolivia and connects with the ports of Arica and Antofagasta in Chile.

The San Vicente mine is located in a high plateau known as the Altiplano, which is characterized by its high elevation and arid climate. The topography at the mine is rugged and lies at approximately 4,400 metres above sea level. Vegetation is sparse and the only use of the ground, other than for mining activities, is as a wild pasture for llamas.

Daytime temperatures range from 4° C in winter and 14° C in summer. In the winter, night time temperatures are frequently below zero with extremes of -15° C. The average annual rainfall is 190 millimetres, with no rain falling from between May and September. Rainfall occurs mainly in the summer months, when up to 20 millimetres of rain can fall in one day. The mine operates year round.

We have sufficient surface rights and area for our mining operations. We have agreements in place to obtain the water required for mining and processing from a combination of water wells and surface water. A power transmission line approximately 20 kilometres in length connects the mine to the main grid line at Portugalete and supplies sufficient power for the plant and mining operations. The mine is located in a historical mining area and there is a sufficient local supply of mining personnel.

History

Mining in the area of San Vicente has occurred sporadically since colonial times when the initial exploitation was from veins exposed at the surface. The first written records of mining activity are from 1820, when the area was named the Guernica Mine. Several different owners operated the mine from 1911 through 1950. From 1950 until 1952, the mine was operated by the Aramayo Mining Company. In 1952, the Bolivian government nationalized the mine and placed it under the control of COMIBOL.

Following the discovery of new silver and zinc veins in the late sixties, COMIBOL constructed the 400 tonnes per day Vetillas concentrating plant in 1972. Only one product, a zinc concentrate rich in silver, was produced. Mine infrastructure at the site included an underground mine, the Vetillas flotation mill, power and water supplies, and worker housing.

The mine was operated by COMIBOL until 1993, at which time mining was suspended pending the privatization of mining in Bolivia. In 1995, the San Vicente mine was offered as part of a joint-venture contract by COMIBOL. On June 21, 1999, Pan American signed a joint-venture agreement (Contrato de Riesgo Compartido) with COMIBOL. At that time, PASB was a 100% subsidiary of Pan American. The mine was maintained by COMIBOL until the joint venture contract was signed.

Between late 2001 and early 2009, PASB and COMIBOL entered into a number of toll mining agreements with EMUSA to process San Vicente's ore at EMUSA's nearby Chilcobija mill. In 2003, PASB entered into a share purchase agreement with EMUSA, whereby EMUSA could acquire up to 49% of the outstanding shares of PASB. This agreement required EMUSA to fund feasibility and development related expenses to an aggregate of $2.5 million by May 1, 2005. By year end 2004, EMUSA had invested $2.34 million of the $2.5 million required to vest as a 49% owner of PASB, and EMUSA indicated it intended to proceed with the remaining investment to acquire a 49% interest.

In the fourth quarter of 2005, Pan American negotiated a shareholders' agreement with EMUSA and Trafigura (a minority stakeholder of EMUSA), which agreement contemplated an increase in our shareholding in PASB from 50% to 55%. Pursuant to this shareholders' agreement, which was signed in January 2006, EMUSA would hold 40% of the shares of PASB and Trafigura would hold the remaining 5%.

In July 2006, PASB and COMIBOL renegotiated the terms of the main joint venture contract, changing COMIBOL's participation fee to a fixed percentage participation fee of 37.5% of the operating cash flow subject to certain deductions in respect of development costs. The contract has a 30 year term. The original contract stated that for PASB to maintain its participation in the contract it should invest a minimum of $20 million dollars in the San Vicente project. Pursuant to an amendment to the contract signed in June 2006, PASB committed to build a new mill, tailings storage facilities and other civil works at San Vicente during an 18 month time period with a minimum additional investment of $23 million. The 18 month construction period commenced on June 10, 2007.

In 2007, Pan American purchased EMUSA's 40% interest in the project, increasing our share ownership from 55% to the current 95%, and Trafigura continued to hold its 5% interest in PASB.

Between 2008 and 2009, we completed construction of a new 750 tonnes per day capacity selective flotation plant and infrastructure as well as continued mining and toll treating ores under an agreement with COMIBOL. Commercial production commenced at the end of the first quarter of 2009.

Pan American and Trafigura entered into a new shareholders agreement in 2010 to reflect the new shareholder relationship. Trafigura assigned its 5% interest in PASB to its affiliate, Urion, in 2013.

Geological Setting

San Vicente is located 2.5 kilometres west of the prominent north-south striking San Vicente thrust fault, which forms the eastern limit of the intermountain Bolivian Altiplano basin. Mineralization at the mine site is hosted by conglomerates of Late Oligocene age. The clastic sediments are over-thrusted by a turbidite sequence of Ordovician age which outcrop on the east side of the mine. Mid-Miocene aged volcanic rocks are also present on site.

The regional sedimentary sequence consists of a basement of Palaeozoic marine siliciclastic sediments. This sequence was folded and later unconformably overlain by non-continuous Cretaceous aged continental sediments and a thick sequence of Tertiary aged continental clastic sediments (the Potoco and San Vicente formations). Sedimentation in the Tertiary aged basin was controlled by thrust faults to the east and west and contains various thin volcanic flows. A sequence of felsic volcanics forms the top of the Tertiary basin in the southern part.

An important lithology in the project area is the fanglomerates of the San Vicente formation which are in contact with Ordovician aged shales along the strike of the San Vicente fault. The fanglomerate consists of poorly sorted conglomerate with fragments of Palaeozoic sediments cross cut by younger quartz veins. The matrix is red in colour and consists of iron-bearing sandstone.

The structural environment of the mine area consists of a series of moderately to steeply dipping pre-mineral faults striking west-northwest.

Exploration

There is no known modern exploration on the property aside from the exploitation of silver from exposed veins. Our exploration program began in 1999 following the execution of the joint venture agreement with COMIBOL. The work started with mapping and sampling the surface and was followed by the construction of drill access roads and platforms. Surface diamond drilling was undertaken using HQ sized drill rigs and underground diamond drilling was done using NQ sized drill rigs. In addition to the diamond drilling, an extensive channel sampling program was undertaken in the mine, initially by COMIBOL and later by PASB. Soil sampling was conducted in six parallel lines on a 100 metre line spacing and a 50 metre sample spacing along the lines, which cut the extension of the Guernica vein, the Litoral area, and the extension of the San Francisco and San Lorenzo veins. The results of the underground channel samples and the surface and underground drillholes are used for the estimation of mineral resources and reserves.

Channel sampling was originally partially done by COMIBOL and later by PASB employees under the supervision of PASB geologists. Diamond drilling is executed by third party contractors under the supervision of PASB geologists.

Some of the channel samples taken by COMIBOL did not extend across the full width of the economic vein intersection and are therefore not representative of the entire mineralized zone. Where possible, COMIBOL's channel samples were replaced by channels sampled by PASB. Mineral resource blocks that are estimated using entirely COMIBOL channel samples have not been converted to mineral reserves and remain in the mineral resource categories.

Mineralization

San Vicente is a polymetallic vein deposit formed by hydrothermal systems associated with repeated calc-alkaline intrusions and their extrusive products forming vein type and disseminated polymetallic deposits. Mineralization in the district is known to cover an area of three by four kilometres to a depth of 300 metres. It consists of replacement veins filling pre-existing faults, replacements in brecciated conglomerates in the San Vicente fault, and mineralization in dacitic dykes.

The minerals of economic importance are sphalerite, tetrahedrite, chalcopyrite, and galena. Cassiterite, covellite, and bornite are found in some veins. The primary gangue minerals are quartz, pyrite, marcasite, and barite.

Drilling

Diamond drilling at the mine has been undertaken using a combination of HQ sized drill rigs at the surface and NQ sized drill rigs from underground. Downhole surveys are taken regularly down the drillhole. Drillhole spacing is variable and ranges from between 35 to 100 metres, depending on the vein.

Sampling and Analysis

Channel samples are taken by PASB from the backs of drifts, the ribs of crosscuts, the backs of stopes, and the ribs of raises. The channel samples are taken using a hammer and chisel every four metres across the veins in 20 centimetre wide channels approximately three centimetres deep. Stopes are channel sampled every 1.6 metres vertical cut on two metre centres along strike. The samples are prepared by Bondar-Clegg laboratories (now ALS Chemex) in Oruro, Bolivia or by SGS in La Paz and then sent to their respective Lima facilities for analysis of silver, zinc, lead, and copper content using atomic absorption spectroscopy. Any sample with a silver grade greater than 500 grams per tonne is re-assayed by fire assay, and samples with greater than 10% zinc are performed using titrimetric analysis.

The sample interval width is based on the visible vein width, which varies from 0.2 to 7.5 metres. Wide vein intersections are sampled in several intervals dependent upon the variations in visible mineralization. In areas

where the wall rock shows disseminated mineralization, additional samples are taken in regular intervals from 0.7 to 1.0 metres in length.

Diamond drillholes are split in half using a diamond bladed saw after the hole is logged by the geologist. One half of the drill core is submitted to the same laboratory as the channel samples and prepared and analysed using the same methods. The remaining half of the drill core is stored at the mine for reference.

There are no known core or sample recovery problems which could have materially impacted the accuracy and reliability of the results.

There is a bias in the COMIBOL channel methodology toward narrower vein widths and higher grades because they did not cover the entire width of the mineralization in the vein. This bias has been mitigated by replacing the COMIBOL channel samples by PASB channel samples wherever possible and by applying a lower resource confidence classification to blocks estimated with COMIBOL channel samples.

The sample locations are plotted in plan and section to ensure they are in the correct location. The QAQC programme includes the submission of certified standards and duplicate assays on sample pulps to the primary laboratory and the submission of check assays on coarse rejects to a secondary laboratory. The results of the QAQC programmes indicate that the sample assays are reliable for the estimation of mineral resources and reserves.

Security of Samples

During the entire procedure from drilling, sampling, and analysis, sample security is controlled by PASB employees or by the commercial laboratories once the samples have been delivered to the preparation facilities. We have no reason to believe that the validity and integrity of the samples has been compromised.

Mineral Resource and Mineral Reserve Estimates

Management estimates that mineral reserves at the San Vicente mine, as at December 31, 2014, are as follows:

San Vicente Mineral Reserves [1, 2, 3]				
Reserve Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**% Zinc**	**% Lead**
Proven	1.9	460	3.03	0.39
Probable	0.7	425	2.44	0.49
TOTAL	2.7	451	2.86	0.42

Notes:

1 Estimated using a price of $18.50 per ounce of silver, $2.000 per tonne of zinc and $2,000 per tonne of lead.

2 Mineral Reserve estimates for the San Vicente mine were prepared under the supervision of, or were reviewed by, Michael Steinmann, P.Geo., and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

3 Tonnes are shown for 95% of the San Vicente property as Pan American holds a 95% interest in PASB.

Management estimates that mineral resources at the San Vicente mine, as at December 31, 2014, are as follows:

San Vicente Mineral Resources [1, 2, 3, 4]				
Resource Category	Tonnes (Mt)	Grams of Silver per tonne	% Zinc	% Lead
Measured	0.6	169	2.45	0.15
Indicated	0.3	156	2.12	0.12
Inferred	3.0	366	2.68	0.33

Notes:

1 These mineral resources are in addition to San Vicente mineral reserves.

2 Estimated using a price of $18.50 per ounce of silver, $2,000 per tonne of zinc and $2,000 per tonne of lead.

3 Mineral resource estimates for San Vicente were prepared under the supervision of, or were reviewed by, Michael Steinmann, P.Geo., and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

4 Tonnes are shown for 95% of the San Vicente property as Pan American holds a 95% interest in PASB.

Mineral resource estimates are prepared annually based on the additional drillhole and channel samples collected during the year, using industry standard mining software. The samples are composited to a common vein width and treated for extreme grades. A block model for each vein is constructed based on the vein intersections in the channel and drillhole samples. Bulk density is applied to the block model based on the average of bulk density measurements taken at each vein. Variography is undertaken for each metal and each vein and used in the estimation of silver, lead, and zinc grades using ordinary kriging interpolation. The estimate is validated and classified for confidence categories depending on the number of samples available to the estimate and the grade continuity in each vein. Any vein with a width of less than the minimum mining width of 0.8 metres is diluted with waste to reach the minimum mining width. Additional mining dilution is added to the resource considering the vein width and the dip angle of each vein. A mining recovery factor of 90% is applied to each block to account for loss of material left behind for stability and safety reasons, which mostly occurs in sills, man ways, and crown pillars. The dilution and loss applied to each vein is assessed each year and adjusted according to the actual dilution experienced during mining. The estimate is depleted annually to account for production occurring during the previous year.

Following the estimation of diluted tonnes and grade in each block, economic parameters are applied to the measured and indicated mineral resources and economic blocks are converted to proven and probable mineral reserves as appropriate. Any small isolated blocks that do not justify development, as well as any measured or indicated resource blocks that are uneconomic to mine each year, remain in the resource category. The economic parameters include an NSR value per tonne which is applied to each block using existing and projected smelter terms and current metal prices. A value per tonne cut-off is estimated including operating costs and mining costs dependent upon the mining method. Any measured resource block with a value per tonne greater than the cut off is converted to proven reserves, and any indicated resource block with a value per tonne greater than the cut off is converted to probable 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 San Vicente.

In early 2009, a new constitution was enacted in Bolivia that further entrenches the government's ability to amend or enact certain laws, including those that may affect mining. On May 1, 2011 Bolivian President Evo Morales announced the formation of a multi-disciplinary committee to re-evaluate several pieces of legislation, including the mining law and this has caused some concerns amongst foreign companies doing business in Bolivia due to the government's policy objective of nationalizing parts of the resource sector.

On May 28, 2014, the Bolivian government enacted Mining Law No. 535 (the "New Mining Law"). Among other things, the New Mining Law has established a new Bolivian mining authority to provide principal mining oversight (varying the role of COMIBOL) and sets out a number of new economic and operational requirements relating to state participation in mining projects. Further, the New Mining Law provides that all pre-existing contracts are 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 migration to a new form of agreement and may require renegotiation of some terms in order to conform to the New Mining Law requirements. We are assessing the potential impacts of the New Mining Law on our business and are awaiting further regulatory developments, but 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.

Additional risks of doing business in Bolivia include being subject to new higher taxes and mining royalties (some of which have already been proposed or threatened) and threatened expropriation of assets, all of which could have a material adverse effect on our operations or profitability.

Please see the discussion under "Risks Relating to Our Business - Foreign Operations" for a further discussion of this risk.

Mining Operations

Ore is extracted at the San Vicente underground mine using conventional shrinkage stoping in areas where the veins are narrow and long hole mining in areas where the veins are wider. Access to the mine for workers and equipment is provided by ramps leading to adits at the surface while waste and ore material is hoisted to the surface using both haul trucks on the ramp and hoisting at the Pelayo shaft. Locomotives are used to move broken ore and waste on the levels.

San Vicente operates a 750 tonne per day capacity plant using a standard flotation process to produce a silver-zinc concentrate and a silver-lead concentrate, however this throughput is regularly exceeded during normal operations. Ore from the mine passes through a jaw crusher at the plant, and then is fed into a semi-autogenous mill/ ball mill grinding circuit. Following the concentration process in the flotation circuit, the concentrates are thickened and dewatered in filter presses prior to shipping. Tailings are stored in a tailings storage facility approximately 1.5 kilometres from the concentrator. In 2014, a total of 332,600 tonnes of ore were processed with metallurgical recoveries of 93.2% for silver, 78.1% for zinc, and 81.6% for lead. Total metal production for the year was approximately 4.2 million ounces of silver, 6,100 tonnes of zinc, and 500 tonnes of lead.

The San Vicente mine produces silver-zinc and silver-lead concentrates. Both the silver-zinc and the silver-lead concentrates are taken by truck and rail to ports in Chile for shipment. We have not had any difficulty in securing contracts for the sale of the San Vicente concentrates, however, there can be no certainty 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 San Vicente mine for the past three years were as follows:

2014	Revenue[1, 2]	Quantity
Zinc Concentrate[3]	$12.9 million	12,099 tonnes
Lead Concentrate[3]	$63.9 million	7,444 tonnes
2013	**Revenue[1, 2]**	**Quantity**
Zinc Concentrate[3]	$12.2 million	11,815 tonnes
Lead Concentrate[3]	$61.8 million	6,452 tonnes
2012	**Revenue[1, 2]**	**Quantity**
Zinc Concentrate[3]	$18.0 million	11,764 tonnes
Lead Concentrate[3]	$78.3 million	5,124 tonnes

Notes:

1 Consists of sales to arm's length customers.

2 Calculated as gross revenue less treatment and refining charges.

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

The principal tax of Bolivia affecting PASB includes income tax, asset and financial transaction taxes, export duties, a refundable value added tax and a mining surtax of 12.5% on the annual income of mining companies.

PASB generated a combined income tax and mining surtax expense of approximately $7.5 million, $5.5 million, and $8.5 million in 2014, 2013, and 2012, respectively.

The previously existing Complementary Mining Tax, which had a tax levy of 1% to 6% based on gross metal value of minerals, was transformed into a royalty with a similar tax levy percentage but is no longer creditable against the corporate income tax when the international metal prices are above a certain price level (for example, $5.50 per ounce of silver), but is deductible for income tax purposes.

During 2007 and early 2008, two significant tax exemptions were granted to PASB. First, a value added tax ("VAT") and an import duty tax exemption on certain operating materials and supplies were granted in 2007. In 2008, under Regulation 877, the project was granted a VAT exemption on most imported equipment and duties associated with the importation of this equipment.

VAT on other project-related costs will be required to be paid; however, it is expected that these taxes will be recovered.

The mine life based on the current mineral reserves and processing rate is estimated to be seven years.

In 2014, capital expenditures at San Vicente totalled $3.4 million and consisted primarily of mine infrastructure upgrades, equipment overhauls, and exploration drilling.

Activities in 2015

The expected sustaining capital budget for 2015 at San Vicente totals between $4.0 million and $5.0 million, the major components of which include mill equipment refurbishment, mine equipment replacements, a ventilation raise, a pump station, and near mine exploration.

In 2015, we anticipate producing between 4.00 million and 4.15 million ounces of silver, between 6,000 and 6,500 tonnes of zinc, and between 500 and 600 tonnes of lead.

Environmental

In compliance with the Environmental Regulation for Mining Activities, PASB commissioned MINCO SRL, a Bolivian consulting firm, to conduct a base line environmental audit ("ALBA") of the San Vicente mine, as well as other environmental studies in satisfaction of Bolivian laws and regulations. The ALBA sets out the present situation of the environment at the project and identifies environmental liabilities regarding pre-existing waste rock dumps and the environmental impact on soil, water, vegetation and solid residues caused by previous mining activities conducted on the property.

Construction of the new processing plant, tailings facility and ancillary facilities at San Vicente required another update to the environmental licence that was originally issued in 2002. To this end, PASB presented the application in 2007 and was advised by the Bolivian authorities that a comprehensive environmental impact assessment ("EIA") would be required for the proposed projects due to the scope and nature of the proposed changes to the operations. After a public consultation period, PASB submitted a comprehensive EIA in December 2007. A review of the EIA was initiated by the Bolivian authorities and the environmental license was granted for the San Vicente mine in May 2008.

The most significant environmental issues currently associated with the San Vicente mine are related to the waste dumps, the need to pump low pH water from the mine, the permanent drainage from the Pelayo waste rock dump that runs into the San Vicente River, and water discharge from the San Juan and San Francisco adits. PASB constructed and operates an active chemical treatment system to improve the water quality and comply with its environmental permits. Improvements to the historic Pelayo waste rock dump were implemented in 2013 and 2014 to reduce contact with the San Vicente River.

In order to remediate environmental hazards or concerns caused by previous owners of the San Vicente mine, PASB has focused on the recommendations outlined in the EIA, together with the complementary studies of Health and Industrial Safety, the Handling of Solid Residues procedures, the Closure and Rehabilitation Plan and the Contingency Plan. As per the joint venture agreement between COMIBOL and PASB, the equipment, facilities and infrastructure become the property and responsibility of COMIBOL upon the cessation of operations.

A closure cost estimate for San Vicente was prepared according to State of Nevada approved SRCE methodology in 2011 and is updated every year. We have estimated the present value of reclamation costs for the San Vicente property to be approximately $2.5 million at December 31, 2014. Pan American has not accrued any amounts for any prior existing environmental liabilities. See "Narrative Description of the Business – Environmental Protection" for further disclosure regarding forward looking statements related to reclamation costs.

Health and Safety

Internal safety audits are conducted annually at the San Vicente mine by Pan American's Director of Health and Safety and safety managers from some of our other mines. During 2014, personnel employed at the mine attended approximately 8,000 hours of safety training.

D. Argentina

(i) Manantial Espejo

Project Description and Location

The Manantial Espejo open pit and underground silver-gold mine is located in the Province of Santa Cruz, Argentina. The Manantial Espejo mine consists of 17 mineral concessions covering a total of 25,533 hectares and extending approximately 36 kilometres east-west and 19 kilometres north-south.

The mine is held 100% by our wholly owned Argentine subsidiary, MTA. The mineral concessions forming Manantial Espejo are, by law, subject to minimum expenditure requirements with respect to which we had entered into an agreement with the government of Argentina. We believe that MTA has continuously been in compliance with such agreement.

The property includes ownership of three surface properties purchased by MTA to facilitate support and to improve the performance of its mining and exploration activities. These surface rights cover an area of 43,207 hectares and at this time all mining and processing related activities occur within these properties.

Production from the Manantial Espejo property is subject to royalties to be paid to Barrick Exploraciones Argentina S.A. ("Barrick") according to the following: (i) $0.60 per metric tonne of ore mined from the property and fed to process at a mill or leaching facility to a maximum of 1 million tonnes; and (ii) one-half of one percent (0.5%) of net smelter returns derived from the production of minerals from the property. In addition, MTA has negotiated a royalty equal to 3.0% of operating cash flow payable to the Province of Santa Cruz.

All of the mineral resources and reserves, mine workings, plant facilities, tailings ponds, and waste storage areas are contained within the leases controlled by MTA.

To the best of our knowledge, all permits and licenses required to conduct our activities on the project have been obtained and are currently in good standing.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

The main access is via a wide gravel secondary road that connects the project with Puerto San Julian and Gobernador Gregores, the nearest major urban centers to the mine. Puerto San Julian is located 160 kilometres to the east on the Atlantic coast and Gobernador Gregores is located 60 kilometres to the west. Puerto San Julian has a population of approximately 5,500.

The topography of the region is generally characterized by relatively low-lying mesas with broad flat valleys. The project site has very limited development of soils and vegetation. The elevation of the project site is situated between 350 and 400 metres above sea level.

The climate at the project area is dry to arid. The average monthly temperatures vary between 1° Celsius in June and July and 15° Celsius in January and February. This area of Argentina is well known for fierce westerly winds, particularly from August to October when daily winds can gust to between 120 and 170 kilometres per hour. The highest average monthly precipitation of 21 millimetres occurs in the month of June. Snow frequently accumulates on site between June and August, and infrequent snowfall events can range up to about 50 millimetres or more. The mine operates year round.

We have sufficient surface rights for our mining and processing operations as well as for tailings and waste rock storage. Power is sourced from an approximately 200 kilometre long 132 kV transmission line connected to the national power grid. Water is sourced from underground mine water and surface mine dewatering wells.

The property is located in a remote area with a limited population but we have been able to attract and retain employees based on competitive benefits and wage rates, our community involvement, and by offering housing developed by us.

History

Reconnaissance exploration on the Manantial Espejo property was first carried out in the 1970s by the Argentinean government and in 1989, ownership of the original interest in the mineral properties constituting the Manantial Espejo project was acquired by Mr. Roberto Schupbach. Pursuant to an agreement entered into in 1991 between Mr. Schupbach and Compañía Minera San Jose S.A. (a wholly owned subsidiary of St. Joe Minerals), Mr.

Schupbach sold his mineral property rights to Minera San Jose. Later in the same year, St. Joe Minerals was acquired by Lac Minerals Ltd., and then in 1994 Barrick acquired Lac Minerals Ltd. and assumed ownership.

In 1996, Triton Mining Corporation ("Triton") entered into an option agreement with Barrick to earn the right to acquire an 80 percent interest in the project for a total cost of $2.5 million, such right Triton then assigned to its wholly owned subsidiary MTA. Exploration on the property was advanced in 1996 by Barrick, which completed 62 diamond drill holes on the property totalling 9,653 metres on the Maria Vein. In 1997, an additional 42 core drill holes were completed totalling 6,795 metres and a pre-feasibility study commenced for the construction of an open pit mine and cyanidation mill processing facility to treat and recover silver and gold from the Maria Vein resource.

In 1998, MTA completed making the required payments under the option agreement. Barrick and MTA subsequently incorporated Compañía Minera Alto Valle ("Alto Valle") for the purpose of holding beneficial title to the properties, and pursuant to a shareholders' agreement, Barrick held 20 percent and MTA held 80 percent of the shares of Alto Valle, respectively, and MTA was designated operator of the project.

In 1998, Blackhawk Mining Inc. ("Blackhawk") purchased all of the issued shares of Triton, which was a public company with shares traded on the Toronto Stock Exchange.

Also, in 1998, Silver Standard Resources ("SSR") entered into an option agreement with Triton to acquire a 50% interest in MTA. Then, in April of 2001, SSR acquired Barrick's 20% interest in Alto Valle (2,400 shares), half of which it agreed to sell to Blackhawk in consideration for an interest in an unrelated mining venture.

In 2002, SSR acquired Triton's remaining 50% interest in MTA, as well as Blackhawk's 1,200 shares in Alto Valle. Concurrently, SSR agreed to sell to us 50% of the shares of MTA and half of the shares (1,200) it held in Alto Valle directly. Pan American acquired this 50% interest in the project for a purchase price of $1,912,433, which consisted of a cash payment in the amount of $662,433 and a transfer of 231,511 common shares in the capital of Pan American valued at $1,250,000. In addition, we agreed to pay 50% of $200,000 in order to eliminate a 1.2% net smelter return royalty payable by SSR to Blackhawk and agreed to fund the first $3 million of joint venture expenditures following the issuance of a production notice. In March 2006, we negotiated and entered into a purchase agreement with SSR to acquire SSR's 50% interest in MTA and Alto Valle, respectively, thus becoming a 100% owner of the Manantial Espejo project.

In March 2006, we approved a project to construct and initiate operations of the Manantial Espejo mine. Simultaneously, we received approval of the EIS from the Santa Cruz Province of Argentina and signed an agreement with the Federal Government of Argentina and the Province of Santa Cruz to bring grid electrical power to the town of Gobernador Gregores with a sub-connection to Manantial Espejo.

In April 2006, following completion of a feasibility study, mine development activities were initiated and by 2008, mining operations had commenced in two open pits and two underground mines and a total of 239,900 tonnes of ore was stockpiled on site in preparation for plant operations. The commissioning of the Manantial Espejo plant began with dry commissioning activities in August 2008 and the mills, leach circuits, counter-current-decantation, Merrill Crowe and refinery were commissioned and commenced operations in mid-December 2008. Final completion and commissioning of the primary crusher, recycle pebble crusher and concentrate circuits were underway by mid-January 2009.

We celebrated the official inauguration of the Manantial Espejo gold and silver mine on March 16, 2009. The first doré was poured in mid-December 2008 and the mine commenced commercial production in January 2009. The mine quickly achieved design capacities during 2009.

In 2010, we completed a merger of MTA with Alto Valle.

Geological Setting

Manantial Espejo lies near the southwestern end of the Deseado Massif, a large igneous province dominated by ignimbrites of the Chon Aike and La Matilde Formations and minor andesites and basaltic andesites of the Bajo Pobre Formation, covering an area of about 60,000 square kilometres. The project area consists of a volcanic complex related to a collapsed caldera that domed during the latest extrusive episode. The lithologies of the area consist mostly of sub-aerial volcanic extrusive sequences of Jurassic age.

Silver and base metal mineralization in the Manantial Espejo district is spatially and genetically related to the Deseado Massif. The older volcanics form the basement unit and are locally mineralized. The Chon-Aike and La Matilde Formations host mineralization, which occurs at the faulted contacts of volcanic facies as well as at contacts of volcanic stages.

Exploration

Reconnaissance exploration on the Manantial Espejo mine was first carried out in the 1970s by the Argentinean government.

Exploration on the property was advanced in 1996 and 1997 by Barrick, which drilled 104 diamond holes totalling 16,500 metres on the María vein. In 1998, Triton, with SSR as the operator, drilled 1,024 metres in 18 diamond drillholes on the María vein, and in 1999, Triton completed some additional prospecting, soil sampling, mapping, and a further 1,417 metres of diamond drill core in 17 holes on other targets. In 2000, a reverse circulation and diamond drilling campaign was completed to sample the newly defined Karina, Unión, and Melissa deposits. In 2001, a reconnaissance campaign was conducted with the goal of expanding the mineral resources by drilling the María, Melissa, and Karina-Unión veins.

We began exploration efforts in 2002 by collecting 2,200 metres of surface trench sampling and completing 4,472 metres of diamond drilling on the María and Karina-Unión veins. Since 2002, we have completed diamond drilling programmes on an annual basis to estimate mineral resources and reserves.

All of the project exploration has been carried out by company geologists or contractors under the supervision of company geologists.

The majority of the data collected in the exploration programs comprises diamond drillholes, and there are no known issues affecting the reliability of the data collected from the drillholes.

Mineralization

The mineralized deposits at the Manantial Espejo mine are predominantly veins with short strike slip and larger down dip displacements. The styles of mineralization include massive quartz veins, vein breccias, sheeted and stockwork veining, and minor dissemination. Quartz is the main infill mineral.

Mineralization is interpreted as occurring at the intersection of west-northwest trending fault zones and arcuate structures that could be related to a possible volcanic center. Gold occurs mainly as electrum in pyrite while the silver occurs in a number of forms including argentiferous galena and silver sulphosalts. Sulphides account for up to 3% to 5% of the rock mass as veinlets and disseminations.

Mineralization at Manantial Espejo is hosted in four main veins known as María, Karina/Unión, Melissa, and Concepción. The majority of the mineralization outlined to date is in the María Vein. The vein is a thick silica vein exposed on surface for more than one kilometre and has been intersected at a depth of up to 275 metres. This vein averages 7.8 metres in true width and ranges from 0.63 metres to 20 metres. The vein is open to the east and at depth. Economic grade mineralization of the vein is less continuous. Open pit economic grade zones measure tens to hundreds of metres in longitudinal dimension. Underground economic grade zones measure tens of metres in longitudinal dimension, with over 100 metres of vertical extent in the María West area.

The sulphide content at María is low and consists of primarily 3% to 5% pyrite. Minor amounts of galena, sphalerite, chalcopyrite, bornite, chalcocite and covellite have been observed. Silver occurs as electrum along with minor amounts of argentite, acanthite, sulphosalts, and proustite-pyrargyrite. Gold occurs as electrum inclusions contained in pyrite. Very minor visible gold has been observed in drill core along goethite-coated fractures.

The Karina/Unión Vein is exposed on surface for a distance of 850 metres and has been drilled to a depth of 150 metres. The host rocks, alteration, and mineralogy of the vein are similar to the María Vein. Several interconnected high grade silver-gold epithermal veins in excess of 20 metre true widths have been observed in drillhole intersections.

The Melissa Vein has a faint surface expression that rarely outcrops. The mineralization and host geology is very similar to that encountered at the María Vein. Structurally, Melissa is thought to be the extensional component to the María shear system. The Melissa Vein has been defined by drill holes along a 300 metre strike length and 200 metres down dip and averages from between 1.5 metres and 2.5 metres wide.

The Concepción Vein is a single quartz vein. Mineralization occurs over a strike length of 600 metres and is open at depth and at both ends. The host rocks, mineralogy and alteration are similar to the other veins on the property.

The María Vein has been exposed by underground development and by open pit mining, the Karina/Unión Vein by open pit mining and the Melissa Vein by underground development.

Drilling

Drilling on the Manantial Espejo mine has been by diamond core, reverse circulation and wagon-mounted percussion drilling methods. The diamond core samples are considered to be of superior quality and representative of the deposits, and only five of the reverse circulation holes in the María vein have been used to estimate mineral resources and reserves.

All MTA core has been HQ diameter with the exception of re-entry into Barrick holes for deepening, for which NQ diameter was used. Diamond drillholes are located and oriented by geologists in the field to obtain drill spacing in the 25 to 50 metre range on vein, with closer spacing in the higher grade zones.

Sampling and Analysis

The drill core is logged for geological and geotechnical features by the site geologists. Samples are selected with respect to geological features, and average approximately 1.0 metres. The diamond drill core is sawn in half with a diamond bladed saw. One half of the sample is placed in a sample bag and sent to ALS Chemex in Mendoza for preparation and analysis, while the second half is stored at the mine for reference. Some of the holes with barren intervals were not sawed or sampled.

ALS Chemex assays the sample for gold using fire assay with atomic absorption finish and for silver by four acid digest with atomic absorption finish. Any samples with assays greater than 100 grams per tonne silver and/or 10 grams per tonne gold are re-assayed by fire assay with gravimetric finish.

There are no known drilling, sampling, or recovery factors that could materially impact the accuracy of reliability of the results.

The samples used to estimate mineral resources and reserves at Manantial Espejo are considered to be representative and there are no known factors that may have resulted in sample biases.

MTA geologists submit certified standard samples and blanks to the primary laboratory and approximately 10% of the samples are sent to Acme Analytical Laboratories S. A. of Santiago for check assays. Other data verification procedures include checking the drillhole location and downhole deviation by plotting in

plan and section. A number of independent database reviews have been undertaken by consultants, and only a few minor issues were noted.

Security of Samples

All drill core is delivered from the drill rigs to the core shed at the Manantial Espejo site by MTA personnel. Each sample is placed in a plastic bag and sealed, then grouped into larger bags for shipping. The bagged samples are transported by MTA personnel to Puerto San Julian, where they are then transported by bus or truck to Mendoza. Once the samples are received by ALS, they are maintained under the control of the laboratory.

There is no reason to believe that the validity and integrity of the samples has been compromised.

Mineral Resource and Mineral Reserve Estimates

Management estimates that mineral reserves at Manantial Espejo, as at December 31, 2014, are as follows

Manantial Espejo Mineral Reserves [1, 2]			
Reserve Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**Grams of Gold per tonne**
Proven	2.4	123	1.82
Probable	0.4	193	3.08
TOTAL	2.8	132	1.98

Notes:

1 Estimated using prices of $18.50 per ounce of silver and $1,250 per ounce of gold.

2 Mineral Reserve estimates for Manantial Espejo were prepared under the supervision of, or were reviewed by Michael Steinmann, P.Geo., and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

Management estimates that mineral resources at Manantial Espejo, as at December 31, 2014, are as follows:

Manantial Espejo Mineral Resources [1, 2]			
Resource Category	**Tonnes (Mt)**	**Grams of Silver per tonne**	**Grams of Gold per tonne**
Measured	2.8	66	0.79
Indicated	2.0	113	1.50
Inferred	0.3	129	1.98

Notes:

1 These mineral resources are in addition to Manantial Espejo mineral reserves using prices of $30 per ounce of silver and $1,800 per ounce of gold.

2 Mineral resource estimates for Manantial Espejo were prepared under the supervision of, or were reviewed by, Michael Steinmann, P.Geo., and Martin G. Wafforn, P.Eng., as Qualified Persons as that term is defined in NI 43-101.

Mineral resource estimates are prepared on an annual basis using industry standard mining software and based on the information collected during drilling campaigns in the previous year. Three dimensional lithological and grade estimation domains are prepared with respect to geological and geostatistical exploratory data analysis. Interpretations of clay alteration, disseminated pyrite content, and bulk density are also applied to the model. The samples are treated for extreme grades and composited to a common length. Variograms are calculated for each metal by grade estimation domain and used to estimate gold and silver grades into the block model using ordinary

kriging interpolation methods. The resource estimate is then classified for confidence categories based on the density of available drillholes. The resource estimate is diluted with respect to the anticipated mining method in each resource estimate, and depleted for the previous year's mining. Metal prices, cost, revenue, and metal extraction parameters are estimated on an annual basis to define a silver equivalent cut-off grade.

Mineral reserves are estimated by discounting the mineral resources by 15% for mining losses associated with pillars left behind for stability and safety reasons. The mineral reserve estimate is then classified depending on the silver equivalent grade and the mineral resource classification. Optimized pit designs are prepared for each open pit mining area and geometries are prepared for underground mining panels.

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 Manantial Espejo.

Mining Operations

Ore is mined at Manantial Espejo using a combination of conventional open pit and underground mining methods. The surface mining operations use 54 tonne trucks and front end loaders and track shovel loading equipment. The open pits are being mined using ten metre high benches in ore and waste. Ore and waste is transported out of the pits by truck haulage via ramps built into the walls of the pits. Truck haulage continues from the open pit ramp exit points on surface roads leading to waste dumps and the primary crusher ore feed stockpile. Open pits have been constructed for portions of the María, Karina-Unión, and Concepción deposits, however the Karina-Unión pit has now been mined out.

The considerable variation in dip and thickness of the various mineralized zones throughout the property requires the use of a number of different underground mining methods to maximize the profitability and recovery of the mineral reserves. The underground mining operations consist of either long-hole, cut and fill, or shrinkage methods to accommodate the geometry and accessibility of the deposit, although long-hole sub-level open stoping with delayed backfill is the primary mining method. Underground mining equipment includes 20 tonne capacity low profile haul trucks, 1.5 to 4.6 cubic metre capacity scoop trams, development face and long hole drill jumbos, and service equipment.

Ore from the Manantial Espejo deposits is treated by conventional crushing, semi-autogenous/ball mill grinding, bulk gravity concentration, intensive gravity concentrate agitation leaching, thickening, agitated cyanide leaching of the gravity tailings slurry, counter current decantation thickening, Merrill Crowe zinc precipitation, sulphur dioxide cyanide neutralization, conventional pulp tailings disposal and conventional silver and gold doré bar production from melting of the Merrill Crowe precipitate. The nominal treatment rate at design capacity is 2,000 tonnes per day of ore on a 24 hour per day schedule.

In 2014, we processed approximately 797,000 tonnes of ore with metallurgical recoveries of 92.1% silver and 95.4% gold, producing 3.7 million ounces of silver and 70,500 ounces of gold.

All production from the Manantial Espejo 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. We have entered into multi-year refining contracts with two refineries for the production from Manantial Espejo. We have not had any difficulty in securing contracts for the sale of Manantial Espejo 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".

During the past three years, the revenue produced by the Manantial Espejo mine was as follows:

2014	Revenue[1, 2]	Quantity
Silver and Gold in Doré	$156.1 million	3,859,900 ounces of silver 72,278 ounces of gold
2013		
Silver and Gold in Doré	$149.7 million	3,306,429 ounces of silver 55,617 ounces of gold
2012		
Silver and Gold in Doré	$180.8 million	3,501,609 ounces of silver 43,373 ounces of gold

Notes:

1 Consists of sales to arm's length customers.

2 Calculated as gross revenue less treatment and refining charges.

The principal Argentine taxes affecting MTA include income tax, asset and financial transaction taxes, export duties and a refundable value added tax. The export duties can potentially be reduced by a silver doré export credit of 2.05%.

MTA mine generated an income tax (recovery) expense of approximately $(23.1) million, $1.1 million, and $13.3 million in 2014, 2013, and 2012, respectively. Approximately $1.3 million included in the 2013 income tax expense is related to the asset tax liability determined for 2007 to 2013 (there are no asset tax liabilities included in the income tax expense for 2014 or 2012).

Included in the income tax in 2014 is a recovery of approximately $20.8 million related to the impairment of property, plant, and equipment at Manantial Espejo.

In September 2013, the provincial government of Santa Cruz, Argentina, passed amendments to its tax code that introduced a new mining property tax with a rate of 1% to be charged on published reserves which has the potential to significantly affect the Manantial Espejo mine as well as other companies operating in the province. We have in place certain contracts that could potentially affect or exempt us from the application of this new tax and as such are evaluating our options with our advisors. We, as well as other mining companies in the Province, have taken steps to challenge the legality and constitutionality of the tax.

Capital expenditures at Manantial Espejo during 2014 totalled $26.7 million and consisted mainly of open pit pre-stripping, tailings dam expansion, and near mine exploration.

Activities in 2015

Capital investments in 2015 are expected to be between $12.0 million and $14.0 million, primarily on open pit pre-strip development and brownfield exploration.

In 2015, we anticipate producing between 3.65 and 3.80 million ounces of silver, and between 69,000 and 72,000 ounces of gold.

Environmental

An EIA for the project as required under the laws of the Province of Santa Cruz and the Argentine Republic was prepared including mine design, tailing design, utility supply, water development studies, impact assessment,

and records of extensive public consultation. In March 2006, we obtained approval of the EIA from the Province of Santa Cruz. The EIA is updated every two years.

No reclamation bond is currently required for mining operations in Argentina, however environmental reclamation insurance is required and we hold a policy for Manantial Espejo. A preliminary reclamation plan was developed for the project and included in the EIS submitted to the Argentine government during 2006.

A closure cost estimate for Manantial Espejo was prepared according to State of Nevada approved SRCE methodology in 2011 and is updated every year. Pan American has estimated the present value of reclamation costs for the Manantial Espejo mine to be approximately $8.8 million as at December 31, 2014. See "Narrative Description of the Business – Environmental Protection" for further disclosure regarding forward looking statements related to reclamation costs.

Health and Safety

Internal safety audits have been conducted annually by Pan American's Director of Health and Safety and safety managers from some of our other operations. Because of excellent safety performance at Manantial Espejo between 2008 and 2012, management decided in 2013 to conduct internal audits every two years. Consequently the Director of Health and Safety conducted an inspection in 2014 and the next is scheduled for 2016. Manantial Espejo was the recipient of the Chairman's Safety Award for safety performance in both 2010 and 2011, years in which Manantial Espejo went without any LTI's, and also worked all of 2013 without an LTI. Personnel at Manantial Espejo attended more than 9,000 hours of training during 2014.

II. Development Properties

(i) Navidad Property

Project Description and Location

The Navidad silver development property is located in Gastre Department in the Province of Chubut, southern Argentina and covers an area of 10,000 hectares. The project is 1,580 kilometres southwest of Buenos Aires and 360 kilometres west of Puerto Madryn.

We are the operators of the development project through our wholly owned subsidiary, Minera Argenta S. A. ("MASA"). The main Navidad property block, containing all of the current resources, has been granted Manifestación de Descubrimiento ("MD") permits. An MD is an exploration permit granted to properties on which mineralization has been discovered. There are four main MDs at the Navidad property, each of which is 2,500 ha in area. MASA also holds the rights to additional MD's in the Province of Chubut. Several of these additional MD's are located adjacent to or near the main Navidad claim block along strike of the mineralized trend, but most are located in three different areas approximately 50 kilometres to 150 kilometres to the south. All of these MD's are in good standing with the mining authorities of the Province of Chubut.

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 its holdings.

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 the parties to a future "silver stream" agreement. This agreement remains to be negotiated with Silver Wheaton Corp.

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.

The Navidad property is not currently subject to any other royalties, back-in rights, payments, encumbrances or similar agreements.

The Province of Chubut passed a law in 2003 (Law 5001) that prohibits open pit mining and the use of cyanide in mineral processing in the entire province, effectively preventing the development of Navidad. After a number of years of debate on the future of mining in Chubut, on December 5, 2014, a new law (Law XVII No. 127) came into force in Chubut which suspended the start of all metalliferous mining activity in the Province for a period of 120 days and established that mining projects must obtain social license through a public consultation process and binding referendum prior to any mining exploitation activity beginning. We are currently awaiting further regulatory developments and assessing this new law and the potential impacts on the Navidad project. Please see the discussion below under "Risks Relating to Our Business – Restrictions on Mining".

All of the known mineral resources and potential mine workings, tailings ponds, and waste deposits are located within the MDs controlled by MASA.

Accessibility, Climate, Infrastructure, Local Resources and Physiography

The Navidad project is 1,580 kilometres southwest of Buenos Aires and 360 kilometres west of Puerto Madryn and is accessible by road and air.

Daily flights are available from Buenos Aires to Trelew, located about 370 kilometres by road from the site to the southeast near the Atlantic coast. The nearest airport, which also has regularly scheduled flights, is located in Esquel, about four hours' drive to the southwest by gravel road. The provincial capital of Rawson is located 20 kilometres east of Trelew. The communities nearest to the Navidad property are Gastre, with a population of approximately 800 inhabitants, 35 kilometres to the northwest, and Gan Gan, with a population of approximately 900 inhabitants, about 47 kilometres to the east. Both communities are located on Provincial Highway #4, a gravel highway that passes just north of the property. The Navidad property is accessible year round. Mining personnel are expected to be sourced from within both the local communities and elsewhere in Argentina.

The climate is semi-arid with average monthly temperatures ranging from 1°C to 20°C. High winds frequently occur from October through December, but may also occur at other times throughout the year. Monthly average precipitation ranges between 7 mm and 29 mm, with the highest precipitation during the winter months from May to August that may occur as either rain or snow. Field activities run throughout the year and are typically not curtailed by weather conditions.

The Navidad property is located in the Patagonian Plateau region with steppe vegetation characterised by low and compact bushes of grass and by stocky shrubs of less than a metre high. Elevation ranges from 1,060 metres to 1,460 metres with gentle topographic relief interrupted by local structurally controlled ridges.

Access to land for drilling and other exploration activities is allowed through outright surface ownership as well as through a series of easement contracts with neighbouring surface owners. We hold large 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.

Our base of operations for the Navidad property is in Gastre and Gan Gan. Facilities include offices, modular living facilities, and core-storage warehouses. Communications are provided by land-line telephone service and satellite internet. The Gastre modular living facilities provide lodging and meals for up to 20 people. The Gastre warehouses include three drill core storage sheds, a logging and sampling shed, metal shop, vehicle workshop, and a regional exploration office. Electrical power is provided by small generators.

In Gan Gan, we have built two core storage facilities as well as an office on land purchased on the western edge of town. The office serves as a base of operation for its social and community relations personnel, while the warehouses contain older drill core from the Navidad property.

Near the Navidad property a small camp facility has been installed at an acquired farmhouse with electrical power provided by several small generators. Drilling contractors and consultants were located in the temporary camp. Alex Stewart Assayers Argentina S.A. ("Alex Stewart") formerly operated a sample preparation lab at the campsite. Communication is provided by a satellite internet uplink. Other infrastructure on site includes storage areas for drill supplies and contractors. There are several water supply bore holes authorized by the Chubut Provincial Water Institute to pump water for camp use and diamond drilling.

History

The first known exploration program that included the Navidad property area consisted of a preliminary regional geochemical sampling program conducted by Normandy Argentina ("Normandy") in mid-2000 to locate additional deposits to supplement those known at its Calcatreu Property, a gold and silver deposit located approximately 80 kilometres from Navidad. The program consisted of 1,200 bulk leach extractable gold (BLEG) stream sediment samples taken from drainage systems overlying Jurassic volcanic rocks in the Province of Chubut in the general vicinity of Calcatreu, Mina Angela, Gastre, Lagunita Salada, Gan Gan, and other areas. This program took place on what was then considered open exploration ground, and resulted in the identification by Normandy of various anomalies, including the Flamingo Prospect and Sacanana, which is today known as Navidad.

In January and February 2002, Newmont Mining ("Newmont") purchased Normandy's worldwide mining interests, and in March 2002, Newmont decided to sell all of its interests in Argentina. In September 2002, IMA Exploration Inc. ("IMA") signed a confidentiality agreement in order to obtain a copy of the Information Brochure and technical data related to Newmont's Argentinean interests, which included the Calcatreu Project. In December 2002, IMA applied for exploration concessions (cateos) over the area formerly known as Sacanana and now known as Navidad, utilizing and relying upon the Normandy BLEG data (known as BLEG A), and began undertaking a regional exploration program over the Navidad area, including regional mapping and sampling. From December 2002 to July 2006, IMA conducted diamond drilling, geochemical sampling, geophysical exploration, and mineral resource estimates at Navidad.

In January 2003 Aquiline entered into an agreement with Newmont, which was completed in July 2003, to purchase all of the shares of Normandy and Newmont's 100% interest in Calcatreu, and acquired all of Newmont's assets including the BLEG A data. In May 2003 Aquiline reviewed the BLEG A data and found that the ground covered by the BLEG A data had already been claimed by IMA. After failure to receive a credible response from IMA as to how they could otherwise have made a legitimate discovery at Navidad without having breached the terms of the confidentiality agreement, Aquiline went on to file suit in the Supreme Court of British Columbia in March 2004.

The Supreme Court of British Columbia awarded ownership of the Navidad property to Aquiline on 14 July 2006 following a court case with IMA where IMA was found to have breached the Confidentiality Agreement. IMA subsequently appealed to the Court of Appeal for British Columbia, but lost the appeal by unanimous decision in June 2007. An Application for Leave to Appeal to the Supreme Court of Canada was filed by IMA in September 2007. Sole ownership rights were granted to Aquiline by the Supreme Court of Canada on December 20, 2007, subject to Aquiline making payment to IMA which would reimburse the latter for its accrued exploration expenditures up to the July 2006 court decision. Aquiline's final payment to IMA was made on February 8, 2008, giving Aquiline full ownership of the Navidad property.

From October 2006, Aquiline undertook diamond drilling, geophysical and geochemical exploration, metallurgical test work, resource estimates, and a preliminary economic assessment for Loma de La Plata.

On October 14, 2009, we announced a friendly offer to acquire all of the issued and outstanding securities of Aquiline. On December 7, 2009, we acquired approximately 85% of the issued and outstanding shares of Aquiline and extended our bid to December 22, 2009, and on that later date, we took up approximately an additional 7% of the issued and outstanding shares in the capital of Aquiline. Since the offer to acquire the Aquiline shares was accepted by holders of more than 90% of the Aquiline shares, on December 23, 2009, we provided notice to the remaining shareholders of our intention to exercise our right to acquire the remaining issued and

outstanding Aquiline shares pursuant to the compulsory acquisition provisions of the Business Corporation Act (Ontario). Pursuant to the compulsory acquisition, we acquired the balance of the Aquiline shares on or about 22 January 2010.

Early in 2010, we took possession of the Navidad property. We continued with a rigorous drilling campaign, metallurgical testing, hydrologic analysis, environmental studies, and several other works on the Navidad property site during 2011. A preliminary economic assessment of the Navidad property deposits was completed in January 2011. Metallurgical testing of both older and new drill core continued at G&T in Kamloops, British Columbia. Crushing and grinding test work was completed at the SGS laboratories in Santiago, Chile.

Geological Setting

The Navidad Project is located on the southwest edge of the Northern Patagonia Massif in southern Argentina. This boundary of the massif is coincident with the Gastre Fault System, a mega-structural feature believed to be the result of continental-scale northeast to southwest extension that produced a series of northwest to southeast trending half grabens and tectonic basins. Granitoid rocks of the basement in the northern part of the Province of Chubut belong to the Palaeozoic age Mamil Choique and Lipetren formations. Locally these rocks are exposed at surface in windows through the overlying Mesozoic age volcanic and sedimentary rocks. At Navidad the Mesozoic sequence consists of the Lonco Trapial Formation and overlying Cañadón Asfalto Formation. The latter of these formations hosts the Navidad mineralization.

The oldest rocks are Palaeozoic aged (Mamil Choique Formation) and crop out along the west side of the area. They comprise red and grey granitoids, cut by aplite dykes and quartz-rich pegmatites. These crystalline basement rocks are overlain by a Jurassic sequence of volcanic (Lonco Trapial Formation), and sedimentary (Cañadón Asfalto Formation) rocks. These are the host for silver mineralization at Navidad. The contact between the Mamil Choique and Lonco Trapial formations lies about 6.5 kilometres southwest of Navidad.

The older rocks are overlain unconformably by the Cretaceous aged Cerro Barcino Formation of the Chubut Group, comprising continental sandstones, conglomerates and tuffs. The youngest rocks are Miocene aged plateau basalts of the Pire Mahuida Volcanic Complex.

The oldest rocks at the Navidad Project comprise the Mamil Choique Formation. This is overlain by ignimbrites, volcanic agglomerates, and lavas of the Lonco Trapial Formation. These rocks crop out on the southwest side of a complex, faulted sedimentary basin filled by sandstones, mudstones and limestones of the Cañadón Asfalto Formation. Lonco Trapial ignimbrites also occur on the northeast side of the basin. The basin includes, and is defined by, three northwest-striking major fault zones, generally referred to as ‘trends’. These comprise the Argenta, Esperanza, and Navidad 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 referred to as latite. The latites overlie an extensive andesite flow.

Exploration

The first exploration on the Navidad property area consisted of a preliminary regional geochemical sampling program conducted by Normandy in mid-2000. The program consisted of 1,200 BLEG stream sediment samples taken from drainage systems overlying Jurassic age volcanic rocks in the Province of Chubut in the general vicinity of Calcatreu, Mina Angela, Gastre, Lagunita Salada, Gan Gan, and other areas. This program resulted in the identification of various anomalies, including the Flamingo Prospect and the Navidad project.

IMA commenced initial detailed outcrop mapping of the Navidad Project along the Navidad Trend in 2003 at both 1:500 and 1:5,000 map scales. During 2004 this mapping was expanded to cover a wider portion of the mineral tenement at 1:5,000 and 1:10,000 map scales. Commencing in 2002 and continuing through 2006, IMA collected soil, rock chip and stream silt samples over the Navidad Project. A total of 1,852 rock, 6,411 soil and 63 stream sediment geochemical samples are listed in the IMA database spatially related to the Project area. This

work led to the identification of nearly all mineralized bedrock exposures known on the Property. The best example of soil geochemistry leading to the identification of a mineralized zone is that of Loma de La Plata. Collectively the anomalous rock chip samples clearly delineate the Navidad, Esperanza and Argenta trends, as does the soil geochemistry. Between 2003 and 2006, IMA completed 367 drillholes for 60,921 metres on the property.

Between October 2006 and June 2009, Aquiline focused exploration efforts on identifying new exploration targets with diamond drilling, with delineation and infill drilling at the Loma de La Plata deposit, and with minor infill drilling of the other previously identified mineralized zones. Exploration for additional deposits through the use of fence drilling across prospective covered areas was also undertaken. Geological mapping and geophysical and geochemical exploration also progressed to provide data for structural interpretation. Prior to our acquisition of the property, 950 drillholes for 188,881 metres had been drilled on the property.

We continued exploration drilling on several open or new targets along the mineralized trends as well as infill drilling at Loma de La Plata, Valle Esperanza, Barite Hill, Calcite Hill, Calcite NW, the Connector Zone, and Galena Hill during 2010 and 2011, completing approximately 129,500 metres of diamond drillholes. These infill drillholes also provided new samples for metallurgical analysis. In addition, condemnation and geotechnical drilling was conducted in the various planned facility areas during 2010.

All exploration work on the project has been undertaken by employees of IMA, Aquiline, or MASA, or by contractors under the supervision of these employees. Proingeo S. A. and Quantec Geoscience Argentina S. A. both conducted geophysical exploration programmes on the property under the direction of IMA. Detailed geological mapping and structural interpretation has been carried out under the direction of MASA.

All of the samples collected during surface exploration have been used to guide the location of diamond drillholes. There are no known issues regarding the quality of the surface exploration or diamond drilling samples, and none of the surface exploration samples have been used to estimate mineral resources.

Mineralization

To date, 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 and is found 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.

In all of the Navidad deposits the gangue minerals are principally calcite with minor barite. Silica is less important and occurs mostly as chalcedony and late amethyst. Ore minerals recognizable with a hand lens include native silver, clots of black sulphide comprising argentite/acanthite, discrete grains of sphalerite, galena, chalcopyrite, cuprite, bornite, native copper, and copper carbonates (malachite, azurite). Similar styles of mineralization and a similar paragenesis 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. Various pulses of mineralization are observed, principally at Galena Hill.

The principal metal association is Ag-Pb. Other associations include Ag-Pb-Cu and Cu-Ag and, more rarely, Ag-Zn. Occasionally there is Ag only, or Cu-Pb-Zn or simply isolated occurrences of these base metals. This suggests that deposition occurred through successive pulses of mineralization. Gold appears to be totally absent from the system.

Mineralization is mostly hosted in the upper latite, but important mineralization occurs in the lower latite at Galena Hill. In a few places the underlying andesite also hosts high grade mineralization. Deposits with mostly latite-hosted mineralization include Loma de La Plata, Valle Esperanza, Calcite Hill, and Galena Hill. Sedimentary rocks and volcaniclastics that overlie or are laterally equivalent to the upper latite also host significant

mineralization. Deposits where the mineralization is dominantly hosted by these rock types include Calcite NW, Navidad Hill, Barite Hill, and Connector Zone.

High grade mineralization mostly occurs in permeable host rocks. Examples of primary porosity include coarse volcaniclastic rocks and autobrecciated lava flows. Secondary porosity occurs as crackle brecciation of the brittle lava flows, hydrothermal eruption breccias, and tectonic breccias. At both Valle Esperanza and Loma de La Plata, the autobrecciated upper latite acted as an aquifer, sealed by overlying organic-rich sedimentary rocks (mudstones, limestones). The sediments were unconsolidated and are commonly slumped. Mixing of reduced water, derived from the organic-rich sediments, and rising metal-laden hydrothermal fluid probably triggered sulphide precipitation.

Drilling

All diamond drilling on the Navidad property undertaken by all operators since the first drillhole in November 2003 has been completed by Boart Longyear Connors Argentina S.A. of Mendoza, Argentina, who was subsequently taken over by Boart Longyear in 2007. Nearly all holes have been drilled at HQ3 diameter with 3 metre long rods, except for rare instances where the drillhole was collared at HQ size diameter and subsequently reduced to NQ diameter down the drillhole and where larger diameter PQ holes were drilled to collect metallurgical samples. Approximately 320,000 metres of drilling have been completed on the Navidad property, mostly on 25 metre centres across the eight deposits. The results of these drilling campaigns are used to estimate mineral resources at the project.

Drill hole collar coordinates were surveyed by a surveying contractor using total station methods prior to 2009 and by differential GPS for later holes. Downhole surveys were taken at regular intervals down the hole.

Sampling and Analysis

After the hole was logged, the sample interval was selected according to geological features, and varied from between 1 metre and 3 metres long. Prior to 2010, sampling commenced from the top of the drillhole, and from 2010 onwards sampling often commenced at just above the zone of anticipated silver mineralization.

The drill core was cut in half with a diamond-bladed core saw. Then, one half was sent for geochemical analysis and the other half remains in the core boxes at our core storage facilities in Gastre and Gan Gan for future reference.

All diamond drill core samples at the Navidad property have been analysed by Alex Stewart Assayers Argentina S.A. of Mendoza, Argentina, and have been analysed by fire assay for silver with gravimetric finish and gold for AAS finish and ICP-ES for 19 elements using the ICP ORE technique.

There are no known drilling, sampling, or drill core recovery factors that could materially impact the accuracy and reliability of the results and the data is considered suitable for use in mineral resource estimates. Drill core logging, cutting, sampling, and sample preparation and analytical techniques at the Project follow industry practices.

There are no known issues with sample quality, and the samples are believed to be representative and free from sample biases.

The QAQC protocol employed by Alex Stewart consisted in batches of 50 samples for fire assay and up to 100 samples for ICP. Fire assay batches included one preparation blank, one analytical blank, one coarse duplicate, four pulp duplicates, one international certified standard for base metal and silver, one uncertified in-house standard, and two standards made from pure silver to calibrate losses in cupellation. ICP batches included two blanks, four standards, and 10% duplicates.

Certified standards, blanks, and field duplicates were routinely inserted by the project geologist with sample submissions as part of the project sample assay QAQC programme. Analysis of the QAQC samples

submitted with the geological samples used to estimate mineral resources at Navidad indicates that there is no significant source of bias, cross contamination, or inaccuracy.

On two separate occasions in 2003 and 2007, Smee and Associates conducted a laboratory inspection and considered the laboratory to conform to industry best practice methods for analysis.

Independent consultants from Snowden Mining Industry Consultants have visited the property on a number of occasions, and reviewed geological plans and cross sections, selected diamond drillhole logs and the corresponding drill core intersections, reviewed the logging, cutting, and sampling procedures, selected mineralized intersections for independent analyses, and compared assays in the database against the original assay certificates. No issues were identified during these reviews.

Security of Samples

Sample security is a low risk considering the remote nature of the project and the core storage facilities. There is no reason to believe that the validity and integrity of the samples have been compromised.

Mineral Resource Estimates

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

Navidad Mineral Resource [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 Navidad 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 as of April 2009 using industry standard mining software. Geological interpretations and modelling of lithological and mineralization domains was completed based on the information on the drillhole logs. Samples were composited to a common length and indicator variogram analysis and modelling was undertaken by mineralization domain for silver, lead, and copper grades. A three dimensional block model was prepared with a block size of 12.5 metres east, 12.5 metres north, and 5 metres elevation, based on the average drillhole spacing and anticipated mining selectivity. Bulk density values were applied to the block model by domain according to the mean of bulk density measurements made on drill core samples. Silver and lead grades were estimated into the blocks using multiple indicator kriging and copper grades were estimated using ordinary kriging. The estimate was validated by comparing global and local grade trends of the input composite and estimated grades. The mineral resources were classified for confidence categories with respect to the confidence in the data and the interpretation, and the drillhole density. Resources were reported above a cut-off grade of 50 grams per tonne silver equivalent, using metal prices of $12.52 per ounces of silver and $1,100 per tonne of lead.

There are material governmental and legal factors that affect the mineral resources at Navidad 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 at Navidad, but given the depth and orientation of the deposits, the economic

mine plan involves open pit mining. On December 5, 2014, a new law came into force in Chubut which suspended the start of all metalliferous mining activity in the Province for a period of 120 days and established that mining projects must obtain social license through a public consultation process and binding referendum prior to any mining exploitation activity beginning. We are currently awaiting further regulatory developments in connection with this new law and will continue to assess the potential impacts on the Navidad project. Because of these governmental and legal factors, the otherwise economically viable portions of the deposit cannot be estimated as mineral reserves at this time.

On October 26, 2011, the Federal Government of Argentina promulgated an "economic emergency" decree requiring all oil, gas and mining exporters to repatriate 100% of revenue receipts, in an attempt to stem ongoing capital flight. The Government of Argentina has also instituted certain other currency and import and export controls. See "Risks Related to Our Business – Foreign Operations".

Mining Operations

A preliminary economic assessment completed in 2011 anticipated a daily production rate of 15,000 tonnes per day from open pit mines at the eight deposits using shovels and 150 tonne trucks. The mine schedule, based on the current mineral resources, was anticipated to last nearly 15 years after a pre-production and construction period with an additional 18 months of re-handling ore from a low grade stockpile for plant feed after mining is completed.

The process plant was anticipated to consist of a gyratory crusher, stockpile, and a 15,000 tonne per day capacity semi-autogenous/ball mill with flotation and filtration, producing a copper silver concentrate and a lead silver concentrate. Metallurgical recoveries were anticipated to vary depending on the concentrate type and head grade, and ranged from 78% silver, 52% copper, and 57% lead for copper silver concentrates and 34% silver, 33% copper, and 77% lead for lead silver concentrates. We had no contracts in place for the sale of the concentrates at the time of the assessment.

The principal Argentine taxes affecting MASA include income tax, asset and financial transaction taxes, and a refundable value added tax.

MASA generated an income tax expense of $0.1 million in each of 2014 and 2013.

In 2014, an impairment charge of $286.1 million was recorded related to property, plant, and equipment at Navidad but there was no tax impact was recorded as a result of this impairment.

In 2014, $4.4 million was spent on activities at Navidad, while in 2013, $2.8 million was spent.

Activities in 2015

Over the past two years, the Navidad project budget assumed that the law in the Province of Chubut would not be amended in a manner which encouraged further investment at this stage and hence, our activities at Navidad were guided by an investment plan which focussed primarily on satisfying the legal requirements necessary to maintain our property interests under the current mining law. We plan to continue with such maintenance requirements, but also anticipate additional activities relating to the public consultation process previously discussed. All expenditures will be expensed as incurred.

Environmental

Drilling at the Navidad property requires a separate permit for each affected tenement valid for one year, subject to the submission of an EIS update within a one year period from the date of granting each successive permit. An updated EIS is required to cover the exploration activities, environmental impacts and mitigation/monitoring actions implemented in the period following the last permit. The level of the exploration activity dictates the level of study required.

Environmental and social baseline studies have been completed for the Navidad property. The most recent EIS update was submitted in 2011 and is currently under administrative review by the Chubut Ministry for the Environment and Control of Sustainable Development. This drilling permit in connection with the EIS would allow for the operation of up to eight drill rigs, however no drilling is planned in the immediate future. Rehabilitation of the drilling platforms and impacted areas is carried out continuously and we maintain an extensive environmental management and monitoring program on site.

Water rights are treated separately from environmental permits. Two extraction wells have been permitted for use in exploration activities.

Currently, Chubut's Law 5001 prohibits open pit mining and the use of cyanide in mineral processing in the entire province. However, as previously discussed, amendments to the law are currently being considered and Law 5001 banning open pit mining methods would need to be changed before permits for the development of Navidad can be obtained.

A closure cost estimate for Navidad was prepared according to State of Nevada approved SRCE methodology in 2011 and is updated every year. We have estimated the present value of reclamation costs for the Navidad development property to be approximately $0.4 million at December 31, 2014. Minera Argenta holds environmental reclamation insurance for the Navidad property in accordance with Argentinean law. See "Narrative Description of the Business – Environmental Protection" for further disclosure regarding forward looking statements related to reclamation costs.

III. Non-Material Properties and Interests

Other Operations, Exploration, Resource and Investment Properties

We gained ownership of several exploration projects in connection with the acquisition of Minefinders in 2012, including the La Virginia and La Bolsa projects in Mexico. Pan American is considering opportunities with respect to these projects, but they are not material properties for the purposes of NI 51-102.

We also own interests in other investment and resource properties in each of the jurisdictions in which it operates, and in Canada and the United States, including the Waterloo property in California and the Hog Heaven property in Montana. Pan American does not consider these investment and resource properties to be material properties for the purposes of NI 51-102.

Mineral Property Expenditures

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

		2014	2013	2012
Acquisition		$ NIL	$ NIL	$ NIL[1]
Development	Huaron	$ 17,327	$ 15,474	$ 22,936
	Morococha	10,199	18,652	27,194
	Alamo Dorado	293	7,621	10,936
	Dolores	44,886	86,641	57,118
	La Colorada	31,400	13,574	21,700
	Manantial Espejo	26,741	12,002	15,858
	Navidad	-	246	11,318
	San Vicente	3,415	8,165	3,053
	Other	730	357	1,259
	TOTAL[2]	$ 134,991	$ 162,732	$ 171,372
Exploration	Huaron	$ 1,312	$ 936	$ 813
	Morococha	1,453	1,722	2,335
	Alamo Dorado	336	1,297	1,806
	Dolores	1,602	3,856	2,420
	La Colorada	9	225	1,129
	Manantial Espejo	1,657	608	217
	Navidad	4,437	2,515	8,726
	San Vicente	-	-	-
	La Preciosa	-	-	581
	Other[3]	2,419	4,316	18,719
	TOTAL[2]	$ 13,225	$ 15,475	$ 36,746

Notes:

1 Minefinders was acquired by way of a share transaction with a cash component paid that was exceeded by cash acquired.

2 Numbers may not add due to rounding.

3 Includes spending on the early stage La Virginia, La Bolsa and Waterloo projects as well as other indirect exploration spending.

Metals Trading

We take the view that our precious metals production should not be hedged, thereby allowing the maximum exposure to precious metal prices. However, in times of extreme price volatility or deteriorating market conditions, the Board of Directors may make exceptions to this approach and authorize management to enter short-duration hedging for a limited portion of our forecasted production of precious metals in order to protect our margins at its higher cost operations.

During 2013, we hedged approximately 25% of our silver and gold production, contracting for the sale of 5.3 million ounces of silver and 24,000 ounces of gold. On September 10, 2013, we decided to accelerate the closing out of its outstanding silver and gold hedges after a re-evaluation of the financial risk of further price declines. The total realized loss recognized from closing our silver and gold hedges in 2013 was $5.1 million. At December 31, 2014 there were no outstanding positions under this program.

We have engaged in forward sales of base metals production from our mines over the past several years, however there were no forward sales in 2014. The forward sales of base metals in 2012 and 2013 were as follows:

- During 2012, we settled 2,000 tonnes of zinc in forward sales at an average price of approximately $2,000 per tonne, and 1,600 tonnes of lead forward sales at an average price of approximately $2,000 per tonne. We realized a gain of approximately $0.3 million from the settlement of zinc and lead contracts during 2012.
- During 2013, we settled 10,000 tonnes of zinc in forward sales at an average price of approximately $1,990 per tonne, and 600 tonnes of lead forward sales at an average price of approximately $2,050 per tonne. We realized a gain of approximately $1.1 million from the settlement of zinc and lead contracts during 2013.

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

RISKS RELATED TO OUR BUSINESS

We face a number of risks in our business. Several of them can have a material adverse effect on our operations and on the value of our securities, and we discuss them in this next section.

Metal Price Fluctuations

The majority of our revenue is derived from the sale of silver, zinc, gold, and, to a lesser degree, copper and lead, and therefore fluctuations in the price of these commodities represents one of the most significant factors affecting our operations and profitability. In addition, since base metal and gold sales are treated as a by-product credit for the purposes of calculating cash costs per ounce of silver, this non-IFRS measure is highly sensitive to base metal and gold prices. From time to time, we mitigate the risk associated with our base metal production by committing some of our forecast base metal production to forward sales and options contracts. The Board of Directors of Pan American continually assesses Pan American's strategy towards our base metal exposure, depending on market conditions.

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; and
- reduced demand resulting from obsolescence of technologies and processes utilizing silver.

A decrease in the market price of silver, gold and other metals could affect the commercial viability of our mines and our production assumptions. Lower prices could also adversely affect our ability to finance future exploration and development of our mineral properties and mines, including the development of capital intensive projects such as Navidad, all of which would have a material adverse effect on our financial condition, results of operations and future prospects. There can be no assurance that the market prices will remain at current levels or that such prices will improve. Declining market prices for these metals could materially adversely affect our operations and profitability.

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 and sensitivity of the recoverable amounts to metal prices as well as operating costs in Note 11 of Pan American's Audited Consolidated Financial Statements for the year ended December 31, 2014. Due to the sensitivity of the recoverable amounts to long term metal prices as well as unforeseen factors including changes to mine plans and cost escalations, any significant change in the key assumptions and inputs could result in impairment charges in future periods.

Foreign Operations

All of our current production and revenue is derived from our operations in Peru, Mexico, Argentina and Bolivia. As our business is carried on in a number of developing countries, it is exposed to a number of risks and uncertainties, including:

- expropriation or nationalization without adequate compensation;
- economic and regulatory instability;
- military repression and increased likelihood of international conflicts or aggression;
- possible need to obtain political risk insurance and the costs and availability of this and other insurance;
- unreliable or undeveloped infrastructure;
- labour unrest;
- lack of availability of skilled labour;
- difficulty obtaining key equipment and components for equipment;
- regulations and restrictions with respect to import and export and currency controls;
- changing fiscal regimes;
- high rates of inflation;
- the possible unilateral cancellation or forced re-negotiation of contracts;
- inability to obtain fair dispute resolution or judicial determinations because of bias, corruption or abuse of power
- unanticipated changes to royalty and tax regimes;
- extreme fluctuations in currency exchange rates;
- volatile local political and economic developments;
- uncertainty regarding enforceability of contractual rights;
- difficulty understanding and complying with the regulatory and legal framework respecting the ownership and maintenance of mineral properties, mines and mining operations, and with respect to permitting;
- violence and more prevalent or stronger organized crime groups;
- terrorism and hostage taking;
- difficulties enforcing judgments obtained in Canadian or United States courts against assets located outside of those jurisdictions; and
- increased public health concerns.

In most cases, the effect of these factors cannot be accurately predicted and we are unable to determine the impact of these risks on our future financial position or results of operations. Our exploration, development and production activities may be substantially affected by risks and uncertainties which are, in many cases, outside of our control. We currently have no political risk insurance coverage against these risks.

In late 2013, the Mexican government enacted significant changes to its tax laws which took effect on January 1, 2014. Among the many changes included in the Tax Reform, there is a reversal of the planned reduction to the corporate income tax rate from 30% to 28%, an elimination of the IETU, an elimination of accelerated

depreciation on exploration expenditures, the new deductible SMD of 7.5% applied to taxable earnings before interest, inflation, taxes, depreciation, and amortization, and a new deductible EMD of 0.5% applied to the sale of gold, silver, and platinum.

Local opposition to mine development projects has arisen in Peru in the past, and such opposition has at times been violent. In particular, in November 2004, approximately 200 farmers attacked and damaged the La Zanja exploration camp located in Santa Cruz province, Peru, which was owned by Compañía de Minas Buenaventura and Newmont Mining Corporation. One person was killed and three injured during the protest. There can be no assurance that similar local opposition will not arise in the future with respect to Pan American's foreign operations. If we were to experience resistance or unrest in connection with our foreign operations, it could have a material adverse effect on our operations or profitability.

In September 2011, Peru's Parliament approved a law that increased mining taxes to fund anti-poverty infrastructure projects in the country, effective October 1, 2011. The law changed the scheme for royalty payments, so that mining companies that had not signed legal stability agreements with the government had to pay royalties of 1% to 12% on operating profit; royalties under the previous rules were 1% to 3% on net sales. In addition to these royalties, such companies were subject to a special mining tax (the SMT) at a rate ranging from 2% to 8.4% of operating profit. Companies that had concluded legal stability agreements (under the General Mining Law of Peru (1992)) are required to pay a "special contribution" of between 4% and 13.12% of operating profits. The change in the royalty and the new tax had no material impact on the results of our Peruvian operations. Under the previous tax scheme, royalties were based on net revenue. In the case that the calculated royalty payments are less than 1% of net revenue, then we will pay a minimum royalty of 1% of net revenue. The SMT is also based on operating profits and a tax rate that varies depending on operating margins.

In December 2014, the Peruvian Parliament approved a bill that decreases the corporate income tax rate applicable to our Peruvian operations. The law is effective January 1, 2015 and decreases the corporate income tax rate from 30% in 2014, to 28% in 2015 and 2016, to 27% in 2017 and 2018, and to 26% in 2019 and future years. In addition, this law increases the withholding tax on dividends from 4.1% in 2014, to 6.8% in 2015 and 2016, to 8% in 2017 and 2018, and 9.3% in 2019 and future years.

Since the 2005 national elections, there have been some concerns of nationalization amongst foreign companies doing business in Bolivia, particularly in the oil and gas industries. There is no certainty the government of Bolivia will not take steps to implement such measures targeting the mining industry. In early 2009, a new constitution was enacted that further entrenches the government's ability to amend or enact such laws, including those that may affect mining, and which enshrined the concept that all natural resources belong to the Bolivian people and that the state was entrusted with its administration. In early 2011, media reports from Bolivia indicated that the Bolivian government was considering unilaterally terminating contracts and taking control of several privately-operated mines formerly operated by the government. On May 1, 2011, Bolivian President Evo Morales announced the formation of a multi-disciplinary committee to re-evaluate several pieces of legislation, including the mining law.

On May 28, 2014, the Bolivian government enacted the New Mining Law. Among other things, the New Mining Law has established a new Bolivian mining authority to provide principal mining oversight (varying the role of COMIBOL) and sets out a number of new economic and operational requirements relating to state participation in mining projects. Further, the New Mining Law provides that all pre-existing contracts are 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 migration to a new form of agreement and may require renegotiation of some terms in order to conform to the New Mining Law requirements. We are assessing the potential impacts of the New Mining Law on our business and are awaiting further regulatory developments, but 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. In the meantime, we understand that pre-existing agreements will be respected during the period of migration and 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.

Government regulation in Argentina related to the economy has increased substantially over the past year. In particular, the government has intensified the use of price, foreign exchange, and import controls in response to unfavourable domestic economic trends. As an example of the changing regulations which have affected our activities in Argentina, on October 26, 2011, the Federal Government of Argentina promulgated an "economic emergency" decree requiring all oil, gas and mining exporters to repatriate 100% of revenue receipts in an attempt to stem ongoing capital flight. The Argentinean Ministry of Economy and Public Finance (the "Ministry") also reduced the time within which exporters were required to repatriate net proceeds from export sales from 180 days to 15 days after the date of export. As a result of this change, the Manantial Espejo operation temporarily suspended doré shipments for a period in early 2012 while local management reviewed how the new resolution would be applied by the government. In response to petitions from numerous exporters for relief from the new resolution, shortly thereafter the Ministry issued a revised resolution which extended the 15-day limit to 120 days and the effect of the delayed shipments and sales was made up during the quarter ended September 30, 2012.

The Argentine government has also imposed restrictions on the importation of goods and services and increased administrative procedures required to import equipment, materials and services, including those required for operations at Manantial Espejo. In addition, in May 2012, the government mandated that mining companies establish an internal function to be responsible for substituting Argentinian-produced goods and materials for imported goods and materials. Under this mandate, we are required to submit our plans to import goods and materials for government review 120 days in advance of the desired date of importation.

The government of Argentina has also tightened control over capital flows and foreign exchange, including informal restrictions on dividend, interest, and service payments abroad and limitations on the ability of individuals and businesses to convert Argentine pesos into United States dollars or other hard currencies. These measures, which are intended to curtail the outflow of hard currency and protect Argentina's international currency reserves, may adversely affect our ability to convert dividends paid by current operations or revenues generated by future operations into hard currency and to distribute those revenues to offshore shareholders. Maintaining operating revenues in Argentine pesos could expose us to the risks of peso devaluation and high domestic inflation.

Expropriation is a risk in several jurisdictions in which we have operations, most notably in Argentina and in Bolivia as described above. Although we do not presently anticipate that any of our properties will be the subject of expropriation, we cannot guarantee that this will not occur, particularly in light of historical precedence and also recent cases involving oil and gas operations and at least one mining operation. Such governmental actions may have a material adverse effect on our operations and profitability.

Restrictions on Mining

Many of the jurisdictions in which we operate have certain laws or policies that impose restrictions on mining. 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, these laws in the Province of Chubut would likely render any future construction and development of the Navidad property uneconomic or not possible at all.

On December 5, 2014, a new law came into force in Chubut which suspended the start of all metalliferous mining activity in the Province for a period of 120 days and established that mining projects must obtain social license through a public consultation process and binding referendum prior to any mining exploitation activity

beginning. We are currently awaiting further regulatory developments in connection with this new law and will continue to assess the potential impacts on the Navidad project.

There is no guarantee that the present restrictions on mining will be removed or that they will not become more restrictive, or that new constraints will not be imposed. Such restrictions, particularly those affecting the development of the Navidad property, could have a material adverse effect on our future profitability, growth and value.

Governmental Regulation

In addition to restrictions on mining, our operations, exploration and development activities are subject to extensive Canadian, United States, Peruvian, Mexican, Argentinean, Bolivian, and other foreign federal, state, provincial, territorial, and local laws and regulations governing various matters, including:

- environmental protection;
- permitting;
- management and use of toxic substances and explosives;
- management of natural resources;
- 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; and
- historic and cultural preservation.

The costs associated with compliance with these laws and regulations can be substantial, and future laws and regulations, changes to existing laws and regulations (including the imposition of higher taxes and mining royalties which have been implemented or threatened in the countries in which we do business) or more stringent enforcement of current laws and regulations by governmental authorities, could cause additional expense, capital expenditures, restrictions on or suspensions of our operations and delays in the development of our properties. Moreover, these laws and regulations may allow or encourage governmental authorities and private parties to bring lawsuits based upon damages to property and injury to persons resulting from the environmental, health and safety impacts of our past and current operations, or possibly even those actions of parties from whom we acquired our mines or properties, and could lead to the imposition of substantial fines, penalties or other civil or criminal sanctions. It is difficult understanding and complying with the regulatory and legal framework in some jurisdictions in which we operate due to their arcane, inconsistent and sometimes unsophisticated nature. We may inadvertently fail to comply with such laws. This non-compliance can lead to financial restatements, fines, penalties, loss, reduction or expropriation of entitlements, the imposition of additional local or foreign parties as joint venture partners with carried or other interests and other material negative impacts on us. We may also be required to compensate private parties suffering loss or damage by reason of a breach of any such laws, regulations or permitting requirements. We may also be subject to 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 and which could result in financial or other losses, reduction, removal or expropriation of rights or entitlements, or other negative impacts on us, some of which could be material.

In December 2012, the government of Mexico introduced changes to the federal labour law which, among other things, made certain amendments to the law relating to the use of service companies and subcontractors, and the obligations with respect to employee benefits. In some cases, these amendments may also have a carry-over effect on the distribution of profits to workers and this could result in additional, and potentially significant,

financial obligations for a business. We are evaluating these amendments in detail, but currently believe that we continue to be in compliance with the federal labour law and that these amendments will not result in any new material obligations for us. During 2013, we continued to monitor developments in Mexico and to assess the potential impact of these amendments.

Taxation and royalties with respect to mining are often subject to change and in many resource rich countries, are vulnerable to increases in both poor and good economic climates. In late 2013, the Mexican government enacted significant changes to its tax laws that took effect on January 1, 2014, which included the SMD, inflation, taxes, depreciation, and amortization, and a new EMD of 0.5% applied to the sale of gold, silver, and platinum. 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.

Obtaining and Renewing of Permits

In the ordinary course of business, 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 is a complex and time-consuming process involving numerous jurisdictions and often involving public hearings and costly undertakings on our part. The duration and success of our efforts to obtain and renew permits are contingent upon many variables not within our control including the interpretation of applicable requirements implemented by the permitting authority. 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 what we believe we can recover from a given property once in production. Any unexpected delays, failure to obtain such permits, a failure to comply with the terms of the permit or costs associated with the permitting process could delay the development or impede the operation of a mine, which could adversely impact our operations and profitability.

Ownership and Operating Hazards and Risks

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

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

These risks could result in:

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

- claims for compensation of loss of life and/or damages by third parties in connection with accidents (for loss of life and/or damages and related pain and suffering) that occur on our property, and punitive awards in connection with those claims; and
- other liabilities.

These risks could result in damage to, or destruction of, mineral properties, production facilities and other properties, personal injury, environmental damage, delays in mining, increased production costs, monetary losses and possible legal liability. 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 both suffered from 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.

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 involves a high degree of risk and 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 any discoveries of economic quantities of mineralization. There is also no assurance that even if economic quantities of mineralization are discovered that a mineral property will be brought into commercial production. Development of our mineral properties will follow only upon obtaining satisfactory exploration results. Discovery of mineral deposits is dependent upon a number of factors, not the least of which is the technical skill of the exploration personnel involved. The commercial viability of a mineral deposit once discovered is also dependent upon a number of factors, some of which are the particular attributes of the deposit (such as size, grade and proximity to infrastructure), metal prices and government regulations, including regulations relating to royalties, allowable development and production, importing and exporting of minerals and environmental protection. Most of the above factors are beyond our control. As a result, 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.

Replacement of Reserves

The Huaron, Morococha, La Colorada, Dolores**,** Alamo Dorado, Manantial Espejo and San Vicente mines are our current sources of metals production. Current life-of-mine plans provide for a defined production life for mining at each of our mines. If our mineral reserves are not replaced either by the development or discovery of additional 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.

Imprecision in Mineral Reserve and Mineral Resource Estimates

There is a degree of uncertainty attributable to the estimation of mineral reserves and mineral resources. Until mineral reserves or mineral resources are actually mined and processed, the quantity and grade of mineral resources and mineral reserves must be considered as estimates only and no assurances can be given that the estimated levels of metals will be produced or that we will receive the price assumed in determining our mineral reserves. These estimates are expressions of judgment based on knowledge, mining experience, analysis of drilling results and industry practices. Valid estimates made at a given time may significantly change when new information becomes available. By their nature mineral reserve and mineral resource estimates are imprecise and depend, to a certain extent, upon analysis of drilling results and interpretations that may ultimately prove unreliable.

Furthermore, fluctuations in the market price of metals, as well as increased capital or production costs or reduced recovery rates may render mineral reserves uneconomic and may ultimately result in a reduction of mineral reserves. The extent to which resources may ultimately be reclassified as proven or probable mineral reserves is dependent upon the demonstration of their profitable recovery. The evaluation of mineral reserves or mineral resources is always influenced by economic and technological factors, which may change over time. No assurances can be given that any resource estimate will ultimately be reclassified as proven or probable mineral reserves or that mineralization can be mined or processed profitably. If our mineral reserve or mineral resource figures are inaccurate or 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.

Inaccuracies in 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, among other things, the following factors: the accuracy of mineral reserve estimates; the accuracy of assumptions regarding 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 described above under "Ownership and Operating Hazards and Risks". 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 sources, and water supply are important determinants for capital and operating costs. The lack of availability on acceptable terms or the delay in the availability of any one or more of these items could prevent or delay exploitation or development of our projects. If adequate infrastructure is not available in a timely manner, there can be no assurance that the exploitation or development of our projects will be commenced or completed on a timely basis, if at all; the resulting operations will achieve the anticipated

production volume, or the construction costs and ongoing operating costs associated with the exploitation and/or development of our advanced projects will not be higher than anticipated. 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.

The equipment on site at the Morococha property, particularly the Amistad plant, is old and may require higher capital investment than we have estimated.

Environmental Legislation, Regulations and Hazards

All phases of our operations are subject to environmental regulation in the various jurisdictions in which we operate. Environmental legislation in almost all jurisdictions are evolving in a manner which will require stricter standards and will be subject to 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. Compliance with environmental laws and regulations may require significant capital outlays on our behalf and may cause material changes or delays in our intended activities. Changes in environmental regulation, if any, may adversely impact our operations and profitability. In addition, 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.

Our operations at Dolores 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 7 tailings dams in total at all our mines except Dolores. In 2013 and 2014 we conducted detailed internal dam safety reviews of all seven tailings dams. Those reviews, completed in August and September 2014, found that the dam design, construction, operation and monitoring at all of our tailings dams are generally in line with the Canadian Dam Safety Guidelines and best practice. Additionally, an independent dam safety review for the Huaron tailings dam was commissioned to Newfields consultants of Denver, Colorado. The review concurred with the previously completed internal review. Design of all of our tailings dams includes detailed consideration of dam stability under static and dynamic (pseudostatic) seismic conditions to ensure exceedance of relevant safety factors. While appropriate steps may be taken to prevent dam 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 dam 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 Huascacocha Lake, 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.

Reclamation Obligations

Reclamation requirements vary depending on the location of the property and the managing governmental agency, but they are similar in that they aim to minimize long-term effects of mining exploitation and exploration disturbance by requiring the operating company to control possible deleterious effluents and to re-establish to some degree pre-disturbance land forms and vegetation. We are actively providing for or carrying out any required reclamation activities on our properties. Any significant environmental issues that may arise, however, could lead to increased reclamation expenditures and have a material adverse effect on our financial resources.

Trading Activities and Credit Risk

We generally take the view that our precious metals production should not be hedged, thereby allowing the maximum exposure to precious metal prices. However, in times of extreme price volatility or deteriorating market conditions, the Board of Directors may make exceptions to this approach and authorize management to enter short-duration hedging for a limited portion of our forecasted production of precious metals. Decisions relating to hedging may have material adverse effects upon our financial performance, financial position and results of operations.

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. For example, the Doe Run Peru smelter, a significant buyer of our production in Peru, experienced financial difficulties in the first quarter of 2009 and closed. We continued to sell copper concentrates to other buyers but on inferior terms. The Doe Run Peru smelter remains closed and we are owed approximately $8.2 million under the terms of our contract with Doe Run Peru. We continue to pursue all legal and commercial avenues to collect the amount outstanding.

At December 31, 2014, we had receivable balances associated with buyers of our concentrates of $29.3 million (2013 - $31.7 million). All of this receivable balance is owed by eight well known concentrate buyers and the vast majority of our concentrate is sold to those same counterparts.

Silver doré production is refined under long term agreements with fixed refining terms at three separate refineries worldwide. We generally retain the risk and title to the precious metals throughout the process of refining and therefore are exposed to the risk that the refineries will not be able to perform in accordance with the refining contract and that we may not be able to fully recover our precious metals in such circumstances. At December 31, 2014 we had approximately $44.7 million contained in precious metal inventory at refineries (2013 - $54.7 million). We maintain insurance coverage against the loss of precious metals at our mine sites, in-transit to refineries, and while at the 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 the credit risk of our counterparties to the extent that our trading positions have a positive mark-to-market value.

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.

Competitive Conditions

The mining industry is intensely competitive, particularly in the acquisition of additional mineral reserves and mineral resources in all of its phases of operation, and we compete with many companies possessing similar or greater financial and technical resources.

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.

Economic Dependence

We have 14 customers that account for 100% of our concentrate and silver and gold sales revenue. We have four customers that accounted for 30%, 16%, 13% and 10% of total sales in 2014. 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.

Exchange Rate Risk

We report our financial statements in United States Dollars (“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 Pan American’s 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. The local currencies that we have the most exposure to are the Peruvian Nuevo sol (“PEN”), Mexican pesos (“MXN”) and Argentine pesos (“ARS”).

In order to mitigate this exposure, we maintain a portion of our cash balances in PEN, MXN and Canadian dollars and, from time to time, enter into forward currency positions to match anticipated spending. At December 31, 2014, we had no foreign currency contract positions. We were holding cash and short term investments of $74.3 million in CAD$ and $18.7 million in Mexican pesos at the end of 2014.

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

In addition to the foregoing, governmental restrictions and controls relating to exchange rates also impact our operations. In Argentina, for example, the government has established an official exchange rate that, although said to be floating, is significantly different than the unofficial exchange rates prevailing outside of institutions and which are more readily utilized in the local economy to determine prices and value. Our investments in Argentina are primarily funded from outside of the country and are therefore required to be converted at the official exchange rate. As a result, conversion of foreign currencies like United States dollars at the official exchange rate has the effect of reducing purchasing power and substantially increasing relative costs in an already high inflationary market. Maintaining operating revenues in Argentine pesos could also expose us to the risks of peso 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.

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.

Despite efforts to attract and retain qualified personnel, as well as the retention of qualified consultants, to manage our interests, even when those efforts 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

Some of our employees and contractors are unionized. In particular, unions have been established at our operations in Peru, Argentina, and Bolivia. 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.

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. 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 and that such exploration and mining titles or claims will not be challenged or impugned by third parties. We operate in countries with developing mining laws and changes in such laws could materially impact our rights to our various properties or interests therein.

Although we have received title opinions for those material properties in which we have a material interest (or if we have not been able to obtain such opinions, have made a determination, which we believe is reasonable in the circumstances, to accept the risks associated with the subject property), there is no guarantee that title to such properties will not be challenged or impugned. 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. Our properties may be subject to prior unregistered liens, agreements or transfers, native land claims or undetected title defects. Although we may update our title opinions from time to time in connection with corporate activities such as financings or acquisitions, we do not update all of our title opinions regularly. As such, circumstances and facts may change such that some or all of our previously obtained title opinions may be inaccurate or outdated.

As discussed under "Risks Related to our Business – Foreign Operations", we are subject to expropriation risk in a number of countries in which we operate, most notably in Bolivia and Argentina. Both of these countries have recently seen expropriations or nationalizations in the resource industries and it is not an uncommon occurrence from a historical perspective. Expropriation, or the threat of expropriation, is often as a result of poor economic conditions within a country or has underlying political rationales. Foreign authorities have in some cases also taken the position that the lack of development or advancement of a project is a basis on which to expropriate or to extinguish property rights. Some of the jurisdictions in which we operate are subject to a number of these factors and therefore the risk is heightened. In particular, the economic and political environment in Argentina is such that the threat of expropriation in the mining industry is not unrealistic and, in connection with our Navidad project in particular, we may be at even greater risk of expropriation or extinguishment of rights given our current activity level at the project. Since there have been no amendments to the law that would permit open-pit mining in the Province of Chubut, our activities at Navidad have changed from rapidly advancing the project to instead developing and filing an investment plan focused primarily on satisfying the legal requirements necessary to maintain our property interests under the current mining law. There is a further risk that if the federal or provincial governments in Argentina are dissatisfied with our activities at Navidad, this could also impact our operations at the Manantial Espejo mine. 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 have not held ownership title to most of the surface lands in the areas that overlie our mining concessions comprising the Morococha property, nor in the areas where administration and operations are taking place therein, but were used by us pursuant to a usufruct agreement. 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 us with easier and less costly underground access to some areas of the Morococha concessions.

Beginning in 2005, with the opposition of Centromin, we 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.

In June 2010, we reached an agreement with MCP which clearly defines each party's long term surface rights and therefore provides certainty to the land situation for our Morococha mine. 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 will relocate the core Morococha facilities over a 5 year period and transfer certain mineral concessions and access rights to MCP that it needs in order to proceed with the development of the Toromocho project, including the surface lands within the planned open pit mining area of the Toromocho project. In exchange, Argentum will receive a package of surface rights, easements and other rights to relocate the facilities and to continue uninterrupted operations, and will 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 will receive periodic cash payments from MCP totalling $40 million, which will off-set a portion of the capital required for the facility relocation. The transfer of lands and rights and the cash payments will occur over a period of time in accordance with meeting certain milestones. In addition to the foregoing, the parties agreed to dismiss the judicial and administrative claims between them. Although this agreement has diminished the risks associated with the Morococha land situation, there is no certainty that the required milestones will be met, 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.

We acquired our interest in the Manantial Espejo project on the understanding that while strict compliance with the mining law had not occurred, prior owners had reached an agreement with the mining authorities to bring the property, to the extent possible under existing law, into compliance. With respect to the required minimum expenditure threshold originally applicable to Barrick Gold Corp.'s operations at Manantial Espejo, we were able to secure a different expenditure threshold with the Argentine government. Until recently, although we have always complied with the terms of this agreement, we could never be certain that the original non-compliance of previous owners would not impair title to the properties. On March 23, 2006 the Argentine government approved the Environmental Impact Statement we submitted to it, effectively authorizing construction of the mine. There can be no guarantee that this approval waives a significant amount of uncertainty and confirms that the government recognizes and will abide by our title to the properties.

Acquisitions

An element of our business strategy is to make selected acquisitions. For example, Pan American completed the acquisition of Corner Bay and with it, the Alamo Dorado mine, in February 2003, the acquisition of Argentum and the Morococha mine in August 2004, the acquisition from Silver Standard Resources Inc. in 2006 of a 50% interest in the Manantial Espejo project, in May 2007 an additional 40% interest in respect of the San Vicente mine, the acquisition of Aquiline and the Navidad and Calcatreu properties in January 2010, and the acquisition of Minefinders and the Dolores mine in 2012. 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 our ability to effectively manage the integration and operations of entities we acquire and to realize other anticipated benefits. The process of managing acquired businesses may involve unforeseen difficulties and may require a disproportionate amount of management resources. 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.

Competition for New Properties

The mining industry is exceptionally 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 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 at all levels 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.

Limited Supplies and Supply Chain Disruptions

Our operations depend on an uninterrupted supply of reagents (including, but not limited to, 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.

Developments regarding Aboriginal and Indigenous Peoples

We operate in areas inhabited by aboriginal and indigenous peoples and by local communities. Developing laws and movements respecting the acquisition of lands and other rights from such people and communities 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 aboriginal and indigenous people and with local communities in accordance with the laws governing aboriginal and indigenous peoples and local communities or that future laws and actions will not have a material adverse effect on our rights to explore or mine, or our financial position, cash flow and results of operations. Furthermore, it is not uncommon for local communities and aboriginal and indigenous peoples to challenge agreements or arrangements previously entered into for various reasons. If we cannot maintain an agreement with aboriginal or indigenous peoples or with the communities within which we operate, there may be significant disruptions in our operations and activities, or we may be unable to operate at all in such areas.

Community Action

In recent years communities and non-governmental organizations (“NGOs”) have become more vocal and active with respect to mining activities at or near their communities. These communities and NGOs have taken such actions as road closures, work stoppages, and lawsuits for damages. These actions relate not only to current activities but often in respect of decades old mining activities by prior owners of mining properties. Such actions by communities and NGOs may have a material adverse effect on our financial position, cash flow and results of operations or may force the cessation of mining activities altogether.

Internal Control over Financial Reporting

We documented and tested during our most recent fiscal year our internal control procedures in order to satisfy the requirements of Section 404 of the Sarbanes-Oxley Act (“SOX”). SOX requires an annual assessment by management and an independent assessment by our Independent Registered Public Accounting Firm of 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 in accordance with Section 404 of SOX. Our failure to satisfy the requirements of Section 404 of SOX on an ongoing, 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 common 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.

No evaluation can provide complete assurance that our internal control over financial reporting will 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. Although we intend to devote substantial time and incur costs, as necessary, to ensure ongoing compliance and to adopt new standards and practices as required, we cannot be certain that we will be successful in complying with Section 404 of SOX.

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. While we have established programs, policies and training to reduce and mitigate risks in certain areas, including anti-corruption compliance, there is no guarantee such programs, policies 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. Such fines penalties or other civil or criminal prosecutions and sanctions could have a material adverse effect on our business and severely damage our reputation.

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 relate to current or ex-employees, some of which involve claims of significant value, for matters ranging from workplace illnesses such as silicosis to claims for additional profit-sharing and bonuses in prior years. 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 and such claimants may seek sizeable monetary damages against us and/or the return of surface or mineral rights 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 carry liability insurance coverage and establish provisions for matters that are probable and can be reasonably estimated. 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.

DIRECTORS AND EXECUTIVE OFFICERS

The names and municipalities of residences of our directors and executive officers as at December 31, 2014, the positions held by them with Pan American at that time and their principal occupations for the past five years are set out below:

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.
GEOFFREY A. BURNS[4,5] North Vancouver, B.C. Canada	Director, President and Chief Executive Officer (director of Pan American since July 1, 2003)	President of Pan American since July 1, 2003, Chief Executive Officer of Pan American since May 11, 2004.
MICHAEL CARROLL[1,5] Walnut Creek, California, U.S.A.	Director of Pan American since January 1, 2011	Corporate Director
CHRISTOPHER N. DUNN[2,3,5] VANCOUVER, B.C. CANADA	Director since January 1, 2012	Corporate Director, non-executive Managing Partner of Ero Resource Partners LLC, an equity investment firm.
NEIL DE GELDER, Q.C.[1, 3] VANCOUVER, B.C. CANADA	Director since July 3, 2012	Executive Vice President of Stern Partners, a private diversified investment firm.
ROBERT P. PIROOZ, Q.C. Vancouver, B.C. Canada	Director, General Counsel (director of Pan American since April 30, 2007)	General Counsel since January 2003.
DAVID PRESS[1,2,4] West Vancouver, B.C. Canada	Director of Pan American since May 13, 2008	Corporate Director
WALTER T. SEGSWORTH[2, 4,6] West Vancouver, B.C. Canada	Director of Pan American since May 12, 2009	Corporate Director
STEVEN BUSBY Vancouver, B.C. Canada	Chief Operating Officer	Chief Operating Officer since May 13, 2008; Senior Vice President, Project Development & Technical Services of Pan American from August 2003 to May 13, 2008.
A. ROBERT DOYLE North Vancouver, B.C. Canada	Chief Financial Officer	Chief Financial Officer of Pan American since January 2004.

Name and Municipality of Residence	Position with Pan American	Principal Occupation During the Past Five Years
MICHAEL STEINMANN North Vancouver, B.C. Canada	Executive Vice President, Corporate Development & Geology	Executive Vice President, Corporate Development & Geology since September 1, 2008; Senior Vice President, Geology & Exploration of Pan American from November 2005 to August 2008.

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 and Environment 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, 2013, the board consisted of eight directors six of whom, Ross Beaty, Christopher N. Dunn, Neil de Gelder, Michael Carroll, David Press and Walter Segsworth, qualify as unrelated directors who are independent of management. The board has established five committees: the Audit Committee, the Human Resources and Compensation Committee, the Health, Safety and Environment 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 does not have an Executive Committee. The composition of the various committees as at December 31, 2014 is set forth in the preceding table.

As at March 27, 2015, the directors and officers of Pan American named above as a group exercised control or direction or beneficially owned, directly or indirectly, 2,930,576 common shares of Pan American representing approximately 1.93% of the issued and outstanding common shares of Pan American.

Except as noted below, 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 an order that was issued while the proposed director 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 proposed director 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 proposed director.

Robert Pirooz was formerly a director of Pacific Ballet British Columbia Society (the "Ballet"). On December 23, 2008, within a year following Mr. Pirooz's resignation from the board of directors of the Ballet, the Ballet filed a Notice of Intention to Make a Proposal under subsection 50.4(1) of the *Bankruptcy and Insolvency Act*. Subsequently, on January 9, 2009, the proposal was unanimously accepted by the creditors of the Ballet.

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

(a) 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

(b) 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.

Audit Committee

As at December 31, 2014, the members of the Audit Committee were Michael Carroll (Chair), Neil de Gelder, and David Press. 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 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 Securities and Exchange 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.

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 has been the Executive Director of the British Columbia Securities Commission, and is currently Executive Vice-President of a private diversified investment firm based in Vancouver. In this capacity, he is routinely involved in reviewing internal management financial reporting and external audited and unaudited financial statements from the perspective of an owner or director. 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. Mr. de Gelder is a frequent participant in seminars presented by the Institute of Corporate Directors and by audit firms relating to audit committees and financial matters.

David Press is a mining engineer with almost 40 years of diversified experience in the mining industry, including the evaluation and investigation efforts for potential acquisitions. Mr. Press graduated from Nottingham University with an honours degree in mining engineering in 1967. In addition to his previous experience in public

companies, since becoming a director of Pan American, Mr. Press has attended a number of finance related seminars and courses, including satisfying the academic requirements for the Directors Education Program of the Institute of Corporate Directors which includes audit and finance modules.

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, 2013 and 2014 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 $2,073,000 and $2,064,000, respectively.

Audit-Related Fees

The aggregate fees billed by Deloitte LLP for the fiscal years ended December 31, 2013 and 2014 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 $22,000 and $28,000, respectively. For 2013 and 2014, such fees related primarily to the review of certain of our securities filings and subsidiary audit procedures.

Tax Fees

The aggregate fees billed by Deloitte LLP for the fiscal years ended December 31, 2013 and 2014 for professional services rendered by it for tax compliance, tax advice, tax planning and other services were $149,000 and $81,000, respectively. In 2013 and 2014, such fees related primarily to the provision of services related to transfer pricing, preparation of tax reports and Canadian audit support relating to tax.

Other Fees

The aggregate fees billed by Deloitte LLP for the fiscal years ended December 31, 2013 and 2014 for products and services provided by Deloitte LLP, other than the services reported in the preceding three paragraphs, were $33,000 and $10,000, 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

Certain officers and directors of Pan American are officers and/or directors of, or are associated with, other natural resource companies that acquire interests in mineral properties. Such associations may give rise to conflicts of interest from time to time. However, the directors are required by law 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 personal interest which they may have in any material transaction which is proposed to be entered into by us and to abstain from voting as a director for the approval of any such transaction.

EXCEPTIONS FROM NASDAQ CORPORATE GOVERNANCE REQUIREMENTS

Under Rule 4350(a) of the Nasdaq Stock Market Rules (the "Nasdaq Rules"), a foreign private issuer (as defined in Rule 12b-2 under the U.S. Securities Exchange Act of 1934, as amended) 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 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 memorandum or 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 Pan American's common shares are also listed, do not contain specific quorum requirements.

DIVIDENDS

On February 15, 2010, Pan American announced that our Board of Directors had approved a semi-annual cash dividend to holders of our common shares. In conjunction with this approval, the Board declared its first cash dividend of $0.025 per common share to holders of record of our common shares as of the close of business on February 26, 2010. Pan American approved further dividends of $0.025 per common share on August 11 and November 8, 2010 and on February 15, May 18, August 10, and November 8, 2011. On February 22, 2012, Pan American announced our first dividend of the year and increased the amount of that dividend to $0.0375 per common share. Pan American approved another dividend of $0.0375 per common share on May 15, 2012, before increasing the amount to $0.050 per common share for dividends announced on August 14 and November 7, 2012. Pan American increased our dividend once again when we approved a dividend of $0.125 per common share on February 20, 2013 and approved additional dividends of $0.125 per common share on each of May 13, August 14 and November 13, 2013, and on February 19, May 8, August 13 and November 13, 2014, and most recently on February 18, 2015. Each of these dividends was designated to be an eligible dividend for the purposes of the *Income Tax Act* (Canada). Specific dates and amounts of future dividends will be determined by the Board on an ongoing basis.

MARKET FOR SECURITIES

Pan American's common shares are listed and posted for trading on the Toronto Stock Exchange (under the symbol PAA) and the Nasdaq stock market (under the symbol PAAS). The majority of trading of our common shares takes place on the Nasdaq exchange. The following table outlines the closing share price trading range and volume of shares traded by month in 2014:

Toronto Stock Exchange (CAD$)				Nasdaq Stock Market (US$)			
Month	**High**	**Low**	**Volume**	**Month**	**High**	**Low**	**Volume**
January	14.95	12.35	6,546,905	January	13.45	11.45	40,056,704
February	17.41	13.58	7,496,485	February	12.24	15.63	40,969,686
March	16.83	14.01	6,273,486	March	12.65	15.19	36,090,746
April	15.10	13.58	4,932,712	April	12.32	13.86	24,968,217
May	14.74	13.02	3,458,119	May	12.02	13.54	22,729,026
June	16.63	13.15	3,988,375	June	12.05	15.50	25,669,798
July	17.02	15.45	3,971,042	July	14.33	15.97	22,183,473
August	16.77	15.11	3,219,239	August	13.75	15.34	19,884,294
September	15.57	12.18	3,980,383	September	10.86	14.31	31,055,320
October	12.65	10.39	5,533,018	October	9.22	11.32	47,083,899
November	12.35	9.97	5,314,856	November	8.75	10.93	55,170,477
December	12.33	10.11	7,871,612	December	8.69	10.75	72,309,178

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

A description of certain legal proceedings to which we are a party appear under the heading "Commitments and Contingencies" in Note 28 to our Audited Consolidated Financial Statements for the year ended December 31, 2014.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

To the best of our knowledge, there were no directors or executive officers or any associate or affiliate of a director or executive officer with 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 will materially affect Pan American.

TRANSFER AGENTS AND REGISTRAR

The transfer agent and registrar for the common shares of Pan American 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, USA.

MATERIAL CONTRACTS

We did not enter into any material contracts, other than material contracts entered into in the ordinary course of business, during the most recently completed financial year that remain in effect.

INTERESTS OF EXPERTS

Deloitte LLP, an Independent Registered Public Accounting Firm, is the auditor of Pan American and is independent within the meaning of the Rules of Professional Conduct of the Institute of Chartered Accountants of British Columbia.

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 as at December 31, 2014 and who supervised the preparation of and approved the scientific and technical information disclosed in this AIF are Michael Steinmann, President, Martin Wafforn, Vice President, Technical Services, Pamela De Mark, Director of Resources, and Americo Delgado, Director of Metallurgy, all of whom are employees of Pan American.

Michael Steinmann, P. Geo., Martin Wafforn, P. Eng., Pamela De Mark, P. Geo., and Americo Delgado, P.Eng. are the companies or persons who have prepared or certified a statement, report or valuation described in this AIF.

None of Michael Steinmann, P. Geo., Martin Wafforn, P. Eng., Pamela De Mark, P. Geo., or Americo Delgado, P. Eng. beneficially owns, directly or indirectly, 1% or more of any class of Pan American's outstanding securities.

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 Pan American's Information Circular for the most recent annual meeting of shareholders. Additional financial information is also provided in Pan American's Audited Consolidated Financial Statements for the years ended December 31, 2014 and 2013, and Management's Discussion and Analysis for the year ended December 31, 2014. Additional information relating to Pan American may be found on SEDAR at www.sedar.com.

GLOSSARY OF TERMS

"Mineral Resource" - A mineral resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge.

"*Inferred Mineral Resource*" – That part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological grade and continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

"*Indicated Mineral Resource*" – That part of a mineral resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

"Measured Mineral Resource" – That part of a mineral resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

"*Mineral Reserve*" – A mineral reserve is the economically mineable part of a measured or indicated mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A mineral reserve includes diluting materials and allowances for losses that may occur when the material is mined.

"Probable Mineral Reserve" - The economically mineable part of an indicated, and in some circumstances, a measured mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

"Proven Mineral Reserve" - The economically mineable part of a measured mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

APPENDIX "A"

PAN AMERICAN SILVER CORP.
(the "Company")

AUDIT COMMITTEE CHARTER

MISSION

Senior management of Pan American Silver Corp. (the "Company"), as overseen by its Board of Directors (the "Board"), has primary responsibility for Pan American'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: (i) overseeing the integrity of Pan American's financial statements and accounting processes of Pan American; and (ii) overseeing the external auditor's qualifications and independence. The external auditors of Pan American will report directly to the Committee.

COMPOSITION AND MEETINGS

1. The Committee shall be composed of at least three independent directors.[1]
2. 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).
3. The members of the Committee shall be appointed by the Board, based on the recommendation of the Nominating and Governance Committee, to serve one year terms and are permitted to serve an unlimited number of consecutive terms.
4. The Committee shall appoint a chair (the "Chair") from among its members who shall be an unrelated director.
5. The Committee will make every effort to meet at least four times per year and each member is entitled to request that an additional meeting be called, which will be held within one week of the request for such meeting. A quorum at meetings of the Committee shall be two members.
6. The external auditor may request the Chair to 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 Pan American.

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1 In order to be considered "independent", the following applies:

(a) Pursuant to the Canadian Securities Administrators' Multilateral Instrument 52-110 "Audit Committees", a member of the Committee must not have a direct or indirect material relationship with Pan American. A "material relationship" is a relationship which could, in the view of Pan American's Board, be reasonably expected to interfere with the exercise of a member's independent judgment.

(b) Pursuant to United States securities laws, a member of the Committee may not accept directly or indirectly any consulting, advisory, or other compensatory fee from Pan American or any of its subsidiaries; nor be an affiliated person, as such term is defined in Rule 10A-3 of the Securities and Exchange Act of 1934, of Pan American or any of its subsidiaries.

7. The Committee will make every effort to ensure that minutes of the Committee meetings be distributed to all members of the Committee with copies to the chief financial officer and the external auditor.

RESPONSIBILITIES

Charter

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

Financial Information

The Committee will review and discuss with the external auditors:

1. the audited annual financial statements, and recommend to the Board they be approved for inclusion in Pan American's annual report;
2. interim financial statements, and the notes related thereto, and recommend to the Board they be approved for inclusion in Pan American's quarterly financial release;
3. other financial information included in Pan American's annual report;
4. quarterly and annual Management Discussion and Analysis;
5. the annual and interim earnings press releases before Pan American publicly discloses the information contained therein;
6. any press release to be publicly disseminated which contains material information of a financial nature; and
7. the AIF.

External Auditors

1. The Committee will recommend to the Board the external auditor to be nominated for appointment by shareholders at each annual general meeting of Pan American.
2. The Committee will review the performance of the external auditor and, where appropriate, recommend to the Board the removal of the external auditor.
3. The Committee will 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 Pan American and any other factors that might affect the independence of the auditor.
4. The external Auditor will report directly to the Audit Committee.
5. The Committee will oversee the work of the external auditor generally, and review and report to the Board on the planning and results of external audit work, including:
    (a) the external auditor's engagement letter or other reports of the auditor;
    (b) the reasonableness of the estimated fees and other compensation to be paid to the external auditor;
    (c) the form and content of the quarterly and annual audit report, which should include, *inter alia*:

(i) a summary of Pan American's internal controls and procedures;

(ii) any material issues raised in the most recent meeting of the Committee;

(d) any other related audit, review or attestation services performed for Pan American by the external auditors; and

(e) an assessment of the external auditor's performance.

6. The Committee will 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 the Board take, appropriate actions to oversee the independence of the external auditor.

7. The Committee will review and pre-approve all non-audit services provided to Pan American or its subsidiaries by the external auditor prior to the commencement of such services. Pre-approval of non-audit services will be satisfied only if the requirements as set out in National Instrument 52-110 "Audit Committees" are satisfied.

8. The Committee will monitor the relationship between management and the external auditor and resolve any disagreements between them regarding financial reporting.

Accounting System and Internal Controls

The Committee will:

1. obtain reasonable assurance from discussions with (and/or reports from) management, and reports from external and internal auditors that Pan American's financial and accounting systems are reliable and that the prescribed internal controls are operating effectively;

2. in consultation with the external auditor and the Disclosure Committee of the Board, review the integrity of Pan American's financial reporting process and the internal control structure;

3. review the acceptability of Pan American's accounting principles and direct the auditors' examinations to particular areas of question or concern, as required;

4. request the auditors to undertake special examinations (e.g., review compliance with conflict of interest policies);

5. together with management, review control weaknesses identified by the external and internal auditors; and

6. review the appointments of the chief financial officer and key financial executives.

Internal Audit

The Committee will:

1. review activities, organization structure and qualifications of the internal audit function;

2. review the resources, budget, reporting relationships and planned activities of the internal audit function;

3. review internal audit findings and determine that they are being properly followed up;

4. annually review and recommend changes, if any, to the internal audit procedures; and

5. review with Pan American's legal counsel any legal matter that could have a significant impact on Pan American's financial statements.

Ethical and Legal Responsibilities

1. The Committee will review and monitor Pan American's compliance with applicable legal and regulatory requirements, particularly those related to financial reporting and disclosure.

2. The Committee will review all related-party transactions.

Complaints

The Committee will establish procedures for:

1. the receipt, retention and treatment of complaints received by Pan American regarding accounting, internal accounting controls or auditing matters; and

2. the confidential, anonymous submission by employees of Pan American and its subsidiaries of similar concerns.

AUTHORITY

1. The Committee shall have the authority to:
   (a) engage independent counsel and other advisors as it determines necessary to carry out its duties;
   (b) set and pay the compensation for any advisors employed by the Committee; and
   (c) communicate directly with the internal and external auditors.
2. The Committee shall have the power, authority and discretion delegated to it by the Board which shall not include the power to change the membership of or fill vacancies in the Committee.
3. A resolution approved in writing by the members of the Committee shall be valid and effective as if it had been passed at a duly called meeting. Such resolution shall be filed with the minutes of the proceedings of the Committee and shall be effective on the date stated thereon or on the latest date stated in any counterpart.
4. The Board shall have the power at any time to revoke or override the authority given to or acts done by the Committee except as to acts done before such revocation or act of overriding and to terminate the appointment or change the membership of the Committee or fill vacancies in it as it shall see fit.
5. The Committee shall have unrestricted and unfettered access to all Company personnel and documents and shall be provided with the resources necessary to carry out its responsibilities.

DEFINITIONS

Capitalized terms used in this Charter and not otherwise defined have the meaning attributed to them below:

"**Financially Literate**" means 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 in Pan American'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 Pan American'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.