

PAN AMERICAN SILVER CORP  
Form F-10/A  
March 09, 2010

As filed with the Securities and Exchange Commission on March 8, 2010  
Registration No. 333-164752

---

U.S. SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

---

Amendment No. 1  
to  
FORM F-10  
REGISTRATION STATEMENT UNDER  
THE SECURITIES ACT OF 1933

---

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

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

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

CT Corporation  
111 Eighth Avenue  
New York, New York 10011  
(212) 894-8940  
(Name, address and telephone number of agent for service in the United States)

---

Copies to:

Riccardo A. Leofanti, Esq.  
Skadden, Arps, Slate, Meagher & Flom LLP  
222 Bay Street, Suite 1750, P.O. Box 258  
Toronto, Ontario, Canada M5K 1J5

Fred R. Pletcher, Esq.  
Borden Ladner Gervais LLP  
1200 Waterfront Centre, 200 Burrard Street  
P.O. Box 48600

Approximate date of commencement of proposed sale of the securities to the public:  
From time to time after this Registration Statement becomes effective.  
Province of British Columbia, Canada  
(Principal jurisdiction regulating this offering)

It is proposed that this filing shall become effective (check appropriate box):

A. Upon filing with the Commission, pursuant to Rule 467(a) (if in connection with an offering being made  
o contempo-ra-ne-ously in the United States and Canada).

B. At some future date (check the appropriate box below):

- x
- 1.                    "                    pursuant to Rule 467(b) on ( ) at ( ).
- 2.                    "                    pursuant to Rule 467(b) on ( ) at ( ) because the securities  
regulatory authority in the review jurisdiction has issued a receipt  
or notifica-tion of clearance on ( ).
- 3.                    x                    pursuant to Rule 467(b) as soon as practicable after notification of  
the Commis-sion by the Registrant or the Canadian securities  
regulatory authority of the review jurisdiction that a receipt or  
notification of clearance has been issued with respect hereto.
- 4.                    "                    after the filing of the next amendment to this Form (if preliminary  
material is being filed).

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to the  
home jurisdiction's shelf prospectus offering procedures, check the follow-ing box. x

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its  
effective date until the registration statement shall become effective as provided in Rule 467 under the Securities  
Act or on such date as the Commission, acting pursuant to Section 8(a) of the Securities Act, may determine.

PART I  
INFORMATION REQUIRED TO BE DELIVERED TO OFFEREES OR PURCHASERS

---

Information has been incorporated by reference in this prospectus from documents filed with securities commissions or similar authorities in Canada. Copies of the documents incorporated herein by reference may be obtained on request without charge from the General Counsel and Secretary of the Company at its head office at 1500 – 625 Howe Street, Vancouver, British Columbia, V6C 2T6, telephone (604) 684-1175 and are also available electronically at [www.sedar.com](http://www.sedar.com).

SHORT FORM BASE SHELF PROSPECTUS

New Issue

March 8, 2010

PAN AMERICAN SILVER CORP.

Cdn\$280,389,106

8,353,905 Common Shares

This short form base shelf prospectus (the “Prospectus”) relates to the issuance and sale (the “Offering”), from time to time during the 25-month period that this Prospectus, including any amendments, remains valid, of up to 8,353,905 common shares (the “Warrant Shares”) of Pan American Silver Corp. (the “Company”) to be offered from time to time upon exercise of 7,873,618 common share purchase warrants (the “Consideration Warrants”) and 480,287 replacement common share purchase warrants (the “October 2008 Replacement Warrants”) of the Company described in this Prospectus, and such indeterminate number of additional common shares (the “Additional Shares” and together with the Warrant Shares, the “Shares”) that may be issuable by reason of the anti-dilution provisions contained in the warrant indenture (the “Warrant Indenture”) dated December 7, 2009 between the Company and Computershare Trust Company of Canada (the “Trustee”) governing the Consideration Warrants and the certificates for the October 2008 Replacement Warrants (the “October 2008 Replacement Warrant Certificates”) described in this Prospectus.

Subject to adjustment in accordance with the terms of the Warrant Indenture, each Consideration Warrant will entitle its holder to purchase one Share (a “Consideration Warrant Share”) at a price of Cdn\$35.00 at any time on or prior to 4:30 p.m. (Pacific Standard Time) on December 7, 2014 (the “Expiry Date”), after which date such Consideration Warrant will become null and void. The Warrant Indenture requires the Company to issue to the holders of Consideration Warrants, upon the due exercise of their Consideration Warrants, that number of Shares to which such holder of Consideration Warrants is entitled.

Subject to adjustment in accordance with the terms of the October 2008 Replacement Warrant Certificates, each October 2008 Replacement Warrant will entitle its holder to purchase one Share (an “October 2008 Replacement Warrant Share”) at a price of Cdn.\$10.02 at any time on or prior to 5:00 p.m. (Eastern time) on October 22, 2011, after which date such October 2008 Replacement Warrant will become null and void. The October 2008 Replacement Warrant Certificates require the Company to issue to the holders of October 2008 Replacement Warrants, upon the due exercise of their October 2008 Replacement Warrants, that number of Shares to which such holder of October 2008 Replacement Warrants is entitled.

(cover page continued on next page)

(cover page cont'd.)

No underwriter has been involved in the preparation of, or has performed any review of, this Prospectus.

This Prospectus is being filed with the British Columbia Securities Commission and as part of a registration statement filed with the United States Securities and Exchange Commission (the "SEC") pursuant to a multi-jurisdictional disclosure system adopted by the securities regulatory authorities in Canada and the United States (the "MJDS") solely for the purpose of registering the issuance and sale, from time to time, of the Shares under the United States Securities Act of 1933, as amended (the "U.S. Securities Act"). This Prospectus has not been filed in respect of, and will not qualify, any distribution of the Shares in British Columbia or in any other province or territory of Canada. No supplements to this Prospectus will be filed in relation to the Shares. See "Plan of Distribution" and "Recent Developments-Acquisition of Aquiline Resources Inc.-The Offers" below.

The common shares of the Company (the "Common Shares") are listed on the Toronto Stock Exchange (the "TSX") under the symbol "PAA" and quoted on the Nasdaq Stock Market ("Nasdaq") under the symbol "PAAS". On March 5, 2010, the closing price of the Common Shares on the TSX was Cdn\$23.46 per Common Share. On March 5, 2010, the closing price of the Common Shares on Nasdaq was US\$22.80 per Common Share.

Price: Cdn\$35.00 per Consideration Warrant Share  
Cdn\$10.02 per October 2008 Replacement Warrant Share

	Price to the Public	Underwriters' Fee	Net Proceeds to the Company
Per Consideration Warrant Share	Cdn\$35.00	Nil	Cdn\$275,576,630.00
Per October 2008 Replacement Warrant Share	Cdn\$10.02	Nil	Cdn\$4,812,475.74
Total	Cdn\$280,389,105.74	Nil	Cdn\$280,389,105.74

Investing in the Shares involves a high degree of risk. You should carefully read the "Risk Factors" section beginning on page 33 of this Prospectus.

The Company is permitted under the MJDS to prepare this Prospectus in accordance with the disclosure requirements of Canada. Prospective investors in the United States should be aware that such requirements are different from those of the United States. The financial statements incorporated by reference in this Prospectus have been prepared in accordance with Canadian generally accepted accounting principles ("Canadian GAAP") and are subject to Canadian auditing and auditor independence standards, and thus may not be comparable to financial statements of United States companies.

Owning securities may subject you to tax consequences both in Canada and the United States. Such consequences for investors who are resident in, or citizens of, the United States may not be described fully herein. You should consult your own tax advisor with respect to your own particular circumstances.

Your ability to enforce civil liabilities under the U.S. federal securities laws may be affected adversely because the Company is incorporated in Canada, some of the Company's officers and directors and the experts named in this Prospectus are not residents in the United States, and a substantial portion of the Company's assets and the assets of those officers, directors and experts are located outside of the United States.

Neither the SEC nor any state securities regulator has approved or disapproved the Shares offered hereby or determined if this Prospectus is truthful or complete. Any representation to the contrary is a criminal offence.

- 2 -

---

## TABLE OF CONTENTS

DOCUMENTS INCORPORATED BY REFERENCE	4
SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION	5
CAUTIONARY NOTE TO UNITED STATES INVESTORS CONCERNING ESTIMATES OF MEASURED, INDICATED AND INFERRED RESOURCES	6
CERTAIN AVAILABLE INFORMATION	7
PRESENTATION OF FINANCIAL INFORMATION AND EXCHANGE RATE DATA	8
THE COMPANY	8
BUSINESS OF THE COMPANY	9
RECENT DEVELOPMENTS	9
USE OF PROCEEDS	28
DESCRIPTION OF COMMON SHARES	28
PRICE RANGE AND TRADING VOLUME	28
DESCRIPTION OF CONSIDERATION WARRANTS	29
DESCRIPTION OF OCTOBER 2008 REPLACEMENT WARRANTS	31
PLAN OF DISTRIBUTION	32
CHANGES TO CONSOLIDATED CAPITALIZATION	33
RISK FACTORS	33
AUDITORS, TRANSFER AGENT AND REGISTRAR	43
EXPERTS	43
LEGAL MATTERS	44
DOCUMENTS FILED AS PART OF THE U.S. REGISTRATION STATEMENT	44

---

Prospective investors should rely only on the information contained or incorporated by reference in this Prospectus and on the other information included in the registration statement of which this Prospectus forms a part. The Company has not authorized anyone to provide different or additional information. The Company is not making an

offer to sell or seeking an offer to buy the Shares in any jurisdiction where the offer or sale is not permitted. Prospective investors should assume that the information contained in this Prospectus is accurate only as of the date on the front of those documents and that information contained in any document incorporated by reference is accurate only as of the date of that document, regardless of the time of delivery of this or of any sale of the Shares. The Company's business, financial condition, results of operations and prospects may have changed since those dates.

In this Prospectus, unless the context otherwise requires, references to the "Company" refer to Pan American Silver Corp., and references to "Pan American" refer to the Company together with its subsidiaries.

- 3 -

---



## DOCUMENTS INCORPORATED BY REFERENCE

Information has been incorporated by reference in this Prospectus from documents filed with securities commissions or similar authorities in each of the Provinces and Territories of Canada, which have also been filed with, or furnished to, the SEC. Copies of the documents incorporated by reference in this Prospectus may be obtained on request without charge from the General Counsel and Secretary of the Company at 1500-625 Howe Street, Vancouver, British Columbia, V6C 2T6 (telephone: (604) 684-1175). These documents are also available through the Internet on the System for Electronic Document Analysis and Retrieval (“SEDAR”), which can be accessed at [www.sedar.com](http://www.sedar.com).

The following documents, filed with the securities commissions or similar regulatory authorities in each of the Provinces and Territories of Canada, are specifically incorporated by reference into and form an integral part of this Prospectus:

- (a) the Annual Information Form of the Company, dated March 31, 2009;
- (b) the audited consolidated financial statements of the Company and the notes thereto as at and for the years ended December 31, 2008 and 2007, together with the auditors’ report thereon;
- (c) management’s discussion and analysis of financial condition and results of operations for the Company for the years ended December 31, 2008 and 2007;
- (d) the unaudited interim consolidated financial statements of the Company and the notes thereto for the three and nine month periods ended September 30, 2009 and 2008;
- (e) management’s discussion and analysis of financial conditions and results of operations for the Company for the three and nine month periods ended September 30, 2009 and 2008;
- (f) supplemental financial information relating to the reconciliation of the Company’s unaudited interim financial statements for the three and nine months ended September 30, 2009 and 2008 to U.S. GAAP in accordance with Item 18 of Form 20-F;
- (g) a business acquisition report, dated February 22, 2010, relating to the Company’s acquisition of Aquiline Resources Inc.;
- (h) the information circular of the Company, dated April 7, 2009, in connection with the Company’s May 12, 2009 annual general meeting of shareholders;
- (i) a material change report, dated February 6, 2009, relating to the announcement of the Company’s intention to make a public offering of 5,540,000 Common Shares and the filing of preliminary shelf prospectus supplement in connection therewith;
- (j) a material change report, dated October 22, 2009, relating to the announcement of the Offers (as defined below);
- (k) a material change report, dated December 9, 2009, relating to the announcement of the initial results of securities deposited pursuant to the Offers and the extension of certain of the Offers; and
- (l) a press release, dated February 15, 2010, relating to the announcement of the Company’s earnings results for the year ended 2009.

Any documents of the types referred to in the preceding paragraph (excluding confidential material change reports) or of any other type required to be incorporated by reference into a short form prospectus pursuant to National Instrument 44-101 - Short Form Prospectus Distributions that are filed by the Company with a securities commission or similar authority in Canada after the date of this Prospectus and prior to the termination of the Offering shall be deemed to be incorporated by reference into this Prospectus. Any document filed by the Company with the SEC or Report of Foreign Private Issuer on Form 6-K furnished to the SEC pursuant to the United States Securities Exchange Act of 1934, as amended (the "U.S. Exchange Act"), after the date of this Prospectus shall also be deemed to be incorporated by reference into this Prospectus if and to the extent provided in such document.

Any statement contained in this Prospectus or in a document incorporated or deemed to be incorporated by reference in this Prospectus shall be deemed to be modified or superseded for the purposes of this Prospectus to the extent that a statement contained in this Prospectus or in any other subsequently filed document which also is or is deemed to be incorporated by reference in this Prospectus modifies or supersedes that statement. The modifying or superseding statement need not state that it has modified or superseded a prior statement or include any other information set forth in the document that it modifies or supersedes. The making of a modifying or superseding statement is not to be deemed an admission for any purposes that the modified or superseded statement, when made, constituted a misrepresentation, an untrue statement of material fact or an omission to state a material fact that is required to be stated or is necessary to make a statement not misleading in light of the circumstances in which it was made. Any statement so modified or superseded shall not constitute a part of this Prospectus, except as so modified or superseded.

Upon a new annual information form and related annual financial statements being filed by the Company with, and where required, accepted by, the applicable securities regulatory authorities during the currency of this Prospectus, the previous annual information form, the previous annual financial statements and all interim financial statements, material change reports and information circulars filed prior to the commencement of the Company's financial year in which the new annual information form was filed shall be deemed no longer to be incorporated into this Prospectus for purposes of future offers and sales of Shares hereunder.

#### SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION

Certain of the statements included or incorporated by reference in this Prospectus constitute "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 and "forward-looking information" within the meaning of applicable Canadian securities laws. All statements, other than statements of historical fact are forward-looking statements or information. When used in this Prospectus and the documents incorporated by reference herein, the words "anticipate", "believe", "estimate", "expect", "target", "plan", "forecast", "may", "schedule" and similar words or expressions, identify forward-looking statements or information. These forward-looking statements or information relate to, among other things:

- the price of silver and other metals;
- the sufficiency of Pan American's current working capital, anticipated operating cash flow or its ability to raise necessary funds;
- the accuracy of mineral reserve and resource estimates and estimates of future production and future cash and total costs of production at Quiruvilca, Huaron, Morococha, La Colorada, Alamo Dorado, Manantial Espejo, San Vicente, Navidad or other properties;
- estimated production rates for silver and other payable metals produced by Pan American, timing of production and the cash and total costs of production at each of Pan American's properties;
- the estimated cost of and availability of funding for ongoing capital, replacement, improvement or remediation programs;
- the estimated cost of development of Navidad or other development projects;
- the effects of laws, regulations and government policies on Pan American's operations, including, without limitation, the laws in the Province of Chubut which currently have significant restrictions relating to mining;

- the estimates of expected or anticipated economic returns from a mining project, as reflected in feasibility studies or other reports prepared in relation to development of projects;
- estimated exploration expenditures to be incurred on Pan American's various silver exploration properties;
- compliance with environmental, health, safety and other laws and regulations;

- obtaining or maintaining necessary permits, licences and approvals from government authorities;
- forecast non-operating spending;
- future sales of the metals, concentrates or other products produced by Pan American;
- continued access to necessary infrastructure, including, without limitation, access to power, land, water and roads to carry on activities as planned; and
- Pan American's plans and expectations for its properties and for its fourth quarter financial results as a result of the acquisition of Aquiline Resources Inc. ("Aquiline") and as described under "Recent Developments".

These statements reflect the Company's current views with respect to future events and are necessarily based upon a number of assumptions and estimates that, while considered reasonable by the Company, are inherently subject to significant 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 or information and the Company has made assumptions and estimates based on or related to many of these factors. Such factors include, without limitation: fluctuations in the spot and forward price of silver, gold, base metals or certain other commodities (such as natural gas, fuel oil and electricity); fluctuations in the currency markets (such as the Canadian dollar, Peruvian sole, Argentina peso, Bolivian boliviano and Mexican peso versus the U.S. dollar); changes in national and local government, legislation, taxation, controls, regulations and political or economic developments in Canada, Peru, Mexico, Argentina, Bolivia, the United States or other countries in which Pan American may carry on business in the future; operating or technical difficulties in connection with mining or development activities; risks and hazards associated with the business of mineral exploration, development and mining (including environmental hazards, industrial accidents, unusual or unexpected formations, pressures, cave-ins and flooding); risks relating to the credit worthiness or financial condition of suppliers, refiners and other parties with whom Pan American does business; inadequate insurance, or inability to obtain insurance, to cover these risks and hazards and the presence of laws and regulations that may impose restrictions on mining, including those currently enacted in the Province of Chubut, Argentina; employee relations; relationships with and claims by local communities and indigenous populations availability and increasing costs associated with mining inputs and labor; the speculative nature of mineral exploration and development, including the risks of obtaining necessary licenses, permits and approvals from government authorities; diminishing quantities or grades of mineral reserves as properties are mined; business opportunities that may be presented to, or pursued by, Pan American; Pan American's ability to successfully integrate acquisitions; challenges to, or difficulty in maintaining, Pan American's title to properties; and the factors identified under the caption "Risk Factors" in this Prospectus, in the Company's Annual Information Form, dated March 31, 2009, under the caption "Risks Relating to Pan American's Business" and in the management's discussion and analysis of financial condition and results of operations for the years ended December 31, 2008 and 2007 under the caption "Risks and Uncertainty". Investors are cautioned against attributing undue certainty to forward-looking statements or information. Although the Company has attempted to identify important factors that could cause actual results to differ materially, there may be other factors that cause results not to be anticipated, estimated or intended. The Company does not intend, and does not assume any obligation, to update these forward-looking statements or information to reflect changes in assumptions or changes in circumstances or any other events affecting such statements or information, other than as required by applicable law.

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

This Prospectus has been prepared in accordance with the requirements of Canadian provincial securities laws, which differ from the requirements of U.S. securities laws. Unless otherwise indicated, all reserve and resource

- 6 -

---

estimates included or incorporated by reference in this Prospectus have been prepared in accordance with Canadian National Instrument 43-101 - Standards of Disclosure for Mineral Projects (“NI 43-101”) and the Canadian Institute of Mining, Metallurgy and Petroleum classification system. NI 43-101 is an instrument developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects.

Canadian standards, including NI 43-101, differ significantly from the requirements of the SEC, and reserve and resource information contained in or incorporated by reference into this Prospectus 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. Under U.S. standards, mineralization may not be classified as a “reserve” unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. U.S. investors are cautioned not to assume that any part of a “measured resource” or “indicated resource” will ever be converted into a “reserve”. U.S. investors should also understand that “inferred resources” have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of “inferred resources” exist, are economically or legally mineable or will ever be upgraded to a higher category. Under Canadian securities laws, estimated “inferred resources” may not form the basis of feasibility or pre-feasibility studies except in rare cases. Disclosure of “contained ounces” in a mineral resource is permitted disclosure under Canadian securities laws. However, the SEC 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. The requirements of NI 43-101 for identification of “reserves” are also not the same as those of the SEC, and reserves reported by the Company in compliance with NI 43-101 may not qualify as “reserves” under SEC standards. Accordingly, information concerning mineral deposits set forth herein may not be comparable with information made public by companies that report in accordance with U.S. standards.

#### CERTAIN AVAILABLE INFORMATION

The Company has filed with the SEC a registration statement on Form F-10 (the “Registration Statement”) under the U.S. Securities Act, with respect to the Shares. This Prospectus, which constitutes a part of that Registration Statement, does not contain all of the information set forth in such Registration Statement and its exhibits, to which reference is made for further information. See “Documents Filed as Part of the U.S. Registration Statement”.

The Company is subject to the informational reporting requirements of the U.S. Exchange Act, and in accordance therewith files reports and other information with the SEC. Under MJDS, the Company is permitted to prepare such reports and other information in accordance with the disclosure requirements of Canada, which are different from those of the United States. As a foreign private issuer, the Company is exempt from the rules under the U.S. Exchange Act prescribing the furnishing and content of proxy statements, and its officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery rules contained in Section 16 of the U.S. Exchange Act. Under the U.S. Exchange Act, the Company is not required to publish financial statements as frequently or as promptly as U.S. companies.

The Company files annual reports with the SEC on Form 40-F, which includes:

- the Company’s Annual Information Form;
- the Company’s management’s discussion and analysis of financial condition and results of operations;
-

the Company's consolidated financial statements, which have been prepared in accordance with Canadian GAAP and reconciled to generally accepted accounting principles in the United States ("U.S. GAAP"); and

· other information specified by the Form 40-F.

The Company also furnishes the following types of information to the SEC under cover of Form 6-K:

- 7 -

---



- material information the Company otherwise makes publicly available in reports that it files with securities regulatory authorities in Canada;
- material information that the Company files with, and which is made public by, the TSX; and
- material information that the Company distributes to its shareholders in Canada.

Investors may read and, by paying a fee, copy any document the Company files with, or furnishes to, the SEC at the SEC's public reference room at Station Place, 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. Certain of the Company's filings are also electronically available from the SEC's Electronic Document Gathering and Retrieval System, which is common known by the acronym EDGAR, and which may be accessed at [www.sec.gov](http://www.sec.gov), as well as from commercial document retrieval services.

#### PRESENTATION OF FINANCIAL INFORMATION AND EXCHANGE RATE DATA

The Company presents its consolidated financial statements in United States dollars. All references in this Prospectus to "dollars", "\$" or "US\$" are to United States dollars and all references to "Cdn\$" are to Canadian dollars, unless otherwise noted. Except as otherwise indicated, all financial statements and financial data contained in, or incorporated by reference into, this Prospectus have been prepared in accordance with Canadian GAAP, which differ in certain significant respects from U.S. GAAP. For a description of the material differences between Canadian GAAP and U.S. GAAP as they relate to the Company's financial statements, see note 22 to the Company's audited consolidated financial statements for the years ended December 31, 2008 and 2007 and the supplemental financial information relating to the reconciliation of the Company's audited annual financial statements for the years ended December 31, 2008 and 2007 and unaudited interim financial statements for the three and nine months ended September 30, 2009 and 2008, which is incorporated by reference into this Prospectus.

The following table sets forth, for each period indicated, the exchange rates of the Canadian dollar to the U.S. dollar for the end of each period indicated and the high, low and average (based on the exchange rate on the last day of each month during such period) exchange rates for each of such periods (such rates, which are expressed in Canadian dollars are based on the noon buying rates for U.S. dollars as reported by the Bank of Canada).

	Nine Months Ended September 30, 2009 Cdn	Nine Months Ended September 30, 2008	Year Ended December 31,		
			2009	2008	2007
High	\$1.3000	Cdn\$1.0796	Cdn\$1.3000	Cdn\$1.2969	Cdn\$1.1853
Low	1.0613	0.9719	1.0292	0.9719	0.9170
Average	1.1701	1.0184	1.1420	1.0660	1.0748
End of Period	1.0722	1.0599	1.0466	1.2246	0.9981

On March 5, 2010, the noon buying rate as reported by the Bank of Canada was US\$1.00 = Cdn\$1.0286.

#### THE COMPANY

The Company is a corporation existing under the Business Corporations Act (British Columbia). The Company's head office is located at 1500 - 625 Howe Street, Vancouver, British Columbia, V6C 2T6 and its registered and records office is located at 900 Waterfront Centre, 200 Burrard Street, Vancouver, British Columbia, V7X 1T2.

## BUSINESS OF THE COMPANY

Pan American is principally engaged in the exploration for, and the acquisition, development and operation of, silver producing properties and assets. Pan American's principal product is silver, although copper, zinc, lead and gold are also produced and sold. At present, Pan American carries on mining operations in Mexico, Peru, Argentina and Bolivia, and has control over non-producing silver resources in those countries as well as in the United States. Exploration work is carried out in all of the aforementioned countries, as well as elsewhere throughout the world.

## RECENT DEVELOPMENTS

## Mineral Reserve and Mineral Resource Update

On February 11, 2010, the Company announced that, in 2009, successful exploration programs added 36.8 million contained ounces of proven and probable silver mineral reserves at Pan American's operating mines. The new mineral reserves were more than sufficient to replace the 26.6 million contained silver ounces mined during the year. As a result, Pan American increased its proven and probable silver mineral reserves by approximately 5% to 234 million ounces as at December 31, 2009.

The Company's acquisition of Aquiline, with its Navidad Property (as defined below) in Argentina, had an enormous positive impact on the Pan American's mineral resources. See "Recent Developments – Acquisition of Aquiline Resources Inc." below. Pan American's aggregate measured and indicated silver mineral resources increased to 711 million ounces, from the 82 million ounces Pan American carried at the end of 2008, while inferred silver mineral resources more than doubled to 229 million ounces. These resource numbers do not include Pan American's La Preciosa joint venture project.

Complete silver and gold reserves and resource information at December 31, 2009 is as follows:

## Mineral Reserves – Proven and Probable 3,4,5

	Location	Type	Classification	Tonnes (000's)	Silver (grams/ tonne)	Silver Contained (000's ounces)	Gold (grams/ tonne)	Gold Contained (ounces)
Huaron	Peru	Vein	Proven	6,471	185	38,385	N/A	N/A
		Vein	Probable	4,371	184	25,845	N/A	N/A
Morococha (92.2%)	Peru	Vein/Mantos	Proven	4,079	166	21,709	N/A	N/A
		Vein /Mantos	Probable	2,707	187	16,267	N/A	N/A
La Colorada	Mexico	Vein	Proven	1,106	400	14,236	0.55	19,496
		Vein	Probable	1,176	429	16,199	0.47	17,935
Quiruvilca	Peru	Vein	Proven	407	168	2,201	0.77	10,103
		Vein	Probable	363	148	1,725	0.56	6,503
Silver Stockpiles	Peru	Flux Material	Proven	189	318	1,935	N/A	N/A
Alamo Dorado	Mexico	Disseminated	Proven	6,468	100	20,779	0.34	70,491

Edgar Filing: PAN AMERICAN SILVER CORP - Form F-10/A

	Disseminated	Probable	3,678	86	10,116	0.31	36,656
Manantial Argentina Espejo	Vein	Proven	4,308	163	22,631	2.33	322,749
	Vein	Probable	3,033	138	13,501	2.00	195,032
San Vicente Bolivia (95%)	Vein	Proven	1,548	423	21,059	N/A	N/A
	Vein	Probable	706	323	7,329	N/A	N/A
TOTALS		Proven + Probable	40,609	179	233,916	--	678,966

- 9 -

---

Edgar Filing: PAN AMERICAN SILVER CORP - Form F-10/A

Mineral Resources – Measured and Indicated 1,2,3,4,5,6,7

	Location	Type	Classification	Tonnes (000's)	Silver (grams/ tonne)	Silver Contained (000's ounces)	Gold (grams/ tonne)	Gold Contained (ounces)
Huaron	Peru	Vein	Measured	819	159	4,179	N/A	N/A
		Vein	Indicated	521	157	2,638	N/A	N/A
Morococha (92.2%)	Peru	Vein/Mantos	Measured	1,091	145	5,098	N/A	N/A
		Vein /Mantos	Indicated	1,409	213	9,667	N/A	N/A
La Colorada	Mexico	Vein	Measured	129	232	960	0.26	1,088
		Vein	Indicated	1,259	215	8,700	0.19	7,839
Quiruvilca	Peru	Vein	Measured	2,386	135	10,392	0.76	58,163
		Vein	Indicated	986	124	3,923	0.80	25,381
A l a m o Dorado	Mexico	Disseminated	Measured	1,468	73	3,466	0.36	17,138
		Disseminated	Indicated	2,229	59	4,203	0.52	37,550
Manantial Espejo	Argentina	Vein	Measured	815	100	2,618	1.02	26,723
		Vein	Indicated	2,154	103	7,099	0.98	67,866
San Vicente (95%)	Bolivia	Vein	Measured	1,048	156	5,256	N/A	N/A
		Vein	Indicated	569	187	3,422	N/A	N/A
Navidad <sup>6</sup>	Argentina	Mantos, Diss.	Measured	15,400	137	67,832	N/A	N/A
		Mantos, Diss.	Indicated	139,800	126	564,531	N/A	N/A
P i c o Machay	Peru	Disseminated	Measured	4,700	N/A	N/A	0.91	137,509
		Disseminated	Indicated	5,900	N/A	N/A	0.67	127,092
Calcatreu <sup>7</sup>	Argentina	Vein	Indicated	7,995	26	6,606	2.63	676,028
TOTALS			Measured + Indicated	190,678	116	710,590	--	1,182,377

Mineral Resources – Inferred 1,2,3,4,5,6,7

	Location	Type	Classification	Tonnes (000's)	Silver (grams/ tonne)	Silver Contained (000's ounces)	Gold (grams/ tonne)	Gold Contained (ounces)
Huaron	Peru	Vein	Inferred	5,416	177	30,754	N/A	N/A
Morococha (92.2%)	Peru	Vein/Mantos	Inferred	6,260	177	35,621	N/A	N/A
La Colorada	Mexico	Vein	Inferred	2,750	308	27,245	0.35	31,113
Quiruvilca	Peru	Vein	Inferred	923	113	3,368	0.44	12,951

Edgar Filing: PAN AMERICAN SILVER CORP - Form F-10/A

A l a m o Dorado	Mexico	Disseminated	Inferred	1,146	44	1,622	0.59	21,885
Manantial Espejo	Argentina	Vein	Inferred	1,410	103	4,685	1.09	49,419
San Vicente (95%)	Bolivia	Vein	Inferred	513	302	4,977	N/A	N/A
Navidad6	Argentina	Mantos, Diss.	Inferred	45,900	81	119,386	N/A	N/A
P i c o Machay	Peru	Disseminated	Inferred	23,900	N/A	NA	0.58	445,673
Calcatreu7	Argentina	Vein	Inferred	3,413	17	1,822	2.06	226,045
TOTALS			Inferred	91,631	78	229,479	--	787,086

Notes:

- (1) Mineral resources are in addition to mineral reserves. Mineral reserves and mineral resources are as defined by the CIM Definition Standards on Mineral Resources and Mineral Reserves. See "Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Resources".
- (2) Mineral resources do not have demonstrated economic viability.
- (3) These tables illustrate Pan American's share of mineral reserves and mineral resources. Properties in which Pan American has less than 100% interest are noted next to the property name.
- (4) Environmental, permitting, legal, title, taxation, socio-economic, political, marketing or other issues are not expected to materially affect the above estimates of mineral reserves.
- (5) Prices used to calculate December 31, 2009 mineral reserves and mineral resources for all mines were Silver: \$13.00 per ounce, Gold: \$875 per ounce, Lead: \$1,600 per tonne, Copper: \$5,000 per tonne, Zinc: \$1,600 per tonne.
- (6) Prices used to calculate December 31, 2009 mineral resources for Navidad were Silver: \$12.52 per ounce and Lead: \$1,100 per tonne.
- (7) Prices used to calculate December 31, 2009 mineral resources for Calcatreu were Silver: \$12.50 per ounce and Gold: \$650 per ounce.

Mineral reserve and mineral resource estimates for Huaron, Quiruvilca, San Vicente, La Colorada, Manantial Espejo, Alamo Dorado and Morococha were prepared under the supervision of Michael Steinmann, P. Geo., Executive Vice-President Geology & Exploration and Martin G. Wafforn, P. Eng., Vice-President Technical Services as Qualified Persons as that term is defined in NI 43-101. Navidad resource estimates were prepared under the supervision of John J. Chulick, P. Geo., an independent Qualified Person as that term is defined in NI 43-101.

Acquisition of Aquiline Resources Inc.

## The Offers

On October 14, 2009, the Company announced its intention to make a friendly offer to acquire all of the outstanding common shares (“Aquiline Shares”), common share purchase warrants and the convertible debenture (the “Convertible Debenture”) of Aquiline by way of separate take-over bids. The take-over bids were formally launched on October 30, 2009 with the mailing of an offer and circular (the “Offer and Circular”) to securityholders of Aquiline. Specifically, the Company offered to purchase:

- (a) all of the issued and outstanding Aquiline Shares, including any Aquiline Shares that may become issued and outstanding after the date of the Offers (as defined below) but prior to the expiry time of the Offers upon the exchange, conversion or exercise of any securities of Aquiline that are convertible into or exchangeable or exercisable for Aquiline Shares, but excluding Aquiline Shares owned by the Company or its affiliates, for consideration consisting of 0.2495 of a Common Share and 0.1 of a Consideration Warrant for each Aquiline Share (the “Share Offer”). Each whole Consideration Warrant entitles the holder thereof to purchase one Common Share at the price of Cdn.\$35.00 per Common Share until December 7, 2014;
- (b) any and all of the outstanding common share purchase warrants of Aquiline, comprised of Aquiline’s February 2008 series of common share purchase warrants (the “February 2008 Warrants”), Aquiline’s May 2008 series of common share purchase warrants (the “May 2008 Warrants”), Aquiline’s October 2008 series of common share purchase warrants (the “October 2008 Warrants”), Aquiline’s November 2008 series of common share purchase warrants (the “November 2008 Warrants” and, collectively with the February 2008 Warrants, May 2008 Warrants and October 2008 Warrants, the “Aquiline Warrants”), but excluding Aquiline Warrants owned by the Company or its affiliates, as follows:
  - (i) each of the outstanding February 2008 Warrants for consideration consisting of 0.2495 of a common share purchase warrant of the Company (a “February 2008 Replacement Warrant”), with each whole February 2008 Replacement Warrant exercisable to purchase from the Company one Common Share at an exercise price of Cdn.\$52.10 per Common Share (the “February Warrant Offer”);
  - (ii) each of the outstanding May 2008 Warrants for consideration consisting of 0.2495 of a common share purchase warrant of the Company (a “May 2008 Replacement Warrant”), with each whole May 2008 Replacement Warrant exercisable to purchase from the Company one Common Share at an exercise price of Cdn.\$40.08 per Common Share (the “May Warrant Offer”);
  - (iii) each of the outstanding October 2008 Warrants for consideration consisting of 0.2495 of an October 2008 Replacement Warrant, with each whole October 2008 Replacement Warrant exercisable to purchase from

the Company one Common Share at an exercise price of Cdn.\$10.02 per Common Share (the “October Warrant Offer”); and

- (iv) each of the outstanding November 2008 Warrants for consideration consisting of 0.2495 of a common share purchase warrant of the Company (a “November 2008 Replacement Warrant”), with each whole November 2008 Replacement Warrant exercisable to purchase from the Company one Common Share at an exercise price of Cdn.\$10.02 per Common Share (the “November Warrant Offer”),

(collectively, the “Warrant Offers”); and

- (c) the outstanding Convertible Debenture for consideration consisting of a debenture of the Company (the “Replacement Debenture”), which may be converted into either:

- (i) 363,854 Common Shares at a conversion price of Cdn.\$48.10 per Common Share; or
- (ii) a contract granting the holder of the Replacement Debenture the right to purchase 12.5% of the life of the mine payable silver from the Loma de La Plata deposit of the Navidad Property (as defined below),

(the “Debenture Offer” and, together with the Share Offer and the Warrant Offers, the “Offers”), upon the terms and subject to the conditions set out in the Offer and Circular.

Only the Common Shares issuable upon the exercise of the Consideration Warrants and the October 2008 Replacement Warrants are qualified by this Prospectus.

#### Nature of Business Acquired

Aquiline Resources Inc. (“Aquiline”) is an exploration and development company advancing one of the world’s largest undeveloped silver deposits, the Navidad property in Argentina (the “Navidad Property”), as well as other gold and silver deposits in Argentina and Peru, including the Calcatreu and Pico Machay properties. See “Recent Developments – Navidad Property” below.

#### Date of Acquisition

On December 7, 2009, the Company acquired ownership and control of 67,216,956 Aquiline Shares, representing approximately 81.8% of the issued and outstanding Aquiline Shares, assuming no other convertible securities of Aquiline are exercised, and 1,925,000 October 2008 Warrants. Following the take-up of these securities on December 7, 2009, and taking into account the securities of Aquiline owned by the Company prior to this take-up, the Company owned 72,291,956 Aquiline Shares (assuming the exercise by the Company of all of the convertible securities of Aquiline owned by it or taken up by it to date under the Offers), representing approximately 88.0% of the Aquiline Shares based on the total number of Aquiline Shares outstanding as of December 7, 2009.

By way of a notice of extension and variation dated December 9, 2009, the Company extended the Share Offer, May Warrant Offer and February Warrant Offer until December 22, 2009.

On December 22, 2009, the Company acquired ownership and control of an additional 5,403,461 Aquiline Shares, representing approximately 6.96% of the issued and outstanding Aquiline Shares, assuming no other convertible



securities of Aquiline are exercised, and an additional 206,366 February 2008 Warrants. Following the take-up of these securities on December 22, 2009, and taking into account the securities of Aquiline owned by the Company prior to this take-up, the Company owned 77,901,783 Aquiline Shares (assuming the exercise by Pan American of all of the convertible securities of Aquiline owned by it or taken up by it to date under the Offers), representing approximately 92.7% of the Aquiline Shares based on the total number of Aquiline Shares outstanding as of December 22, 2009.

On December 23, 2009, the Company announced its intention to acquire the remaining Aquiline Shares by exercising its statutory right of compulsory acquisition. On January 22, 2010, the Company completed its compulsory acquisition of the remaining Aquiline Shares and is now the holder of 100% of the outstanding Aquiline Shares.

As a result, a total of 7,873,618 Consideration Warrants and 480,287 October 2008 Replacement Warrants were issued in connection with the Offers and the subsequent compulsory acquisition.

The 31,134 February 2008 Warrants which were not deposited to the Warrant Offers or exercised in advance of the completion of the compulsory acquisition will remain outstanding in accordance with their respective terms.

#### Consideration

Pursuant to the Offers and the Compulsory Acquisition, the Company issued an aggregate of 19,644,669 Common Shares, 7,873,618 Consideration Warrants, 480,287 October 2008 Replacement Warrants, 51,488 February 2008 Replacement Warrants and the Replacement Debenture.

#### Navidad Property

As a result of the Company's acquisition of Aquiline, Pan American obtained the rights to the Navidad Property. Certain statements in the following summary of the Navidad Property are based on and, in some cases, extracted directly from the technical report entitled "Pan American Silver Corp: Navidad Project, Chubut Province, Argentina" dated February, 2010 and prepared by Pamela De Mark, P. Geo., BAppSc (App Geo, Hons), MAusIMM, John J. Chulick, Licensed Professional Geologist, Dean K. Williams, B.Sc, LPG, MBA, Damian Spring, B.E. (Mining), MAusIMM and John A. Wells, B.Sc (Hons), MBA, MCIMM, FSAIMM.

#### Property Description and Location

The Navidad Property is located in Gastre Department in the Province of Chubut, southern Argentina, at approximately 42°24' 54" S and 68°49' 12" W.

The Navidad Property is flanked by the communities of Gastre to the northwest, Gan Gan to the east and Blancuntre and Lagunita Salada to the southwest. Blancuntre is the closest recognised indigenous community to the Navidad Property, with approximately 50 indigenous families living within the town and surrounding area.

#### Land tenure

The Navidad Property is divided into four property claims (registration numbers 14340/04, 14341/04, 14902/06, and 14903/06), each of which is an MD (as defined below) 2,500 hectares in area. Approximately 120,000 hectares of additional mineral rights are held or have been applied for in the name of Minera Argentina S. A. and Minera Aquiline Argentina S.A. in the Province for exploration in connection with the Navidad Property.

In Argentina, exploration concessions are not physically surveyed or staked in the field, but are electronically filed using the Gauss Kruger coordinate system, zone (faja) 2, relative to the WGS 84 datum. There are three levels of mineral rights (which do not include surface rights):

- Cateo – an exploration permit granting any mineral discoveries on the cateo to the applicant. Cateos are measured in units of 500 hectares, with a minimum of one unit (500 hectares) and a

maximum of 20 units (10,000 hectares) granted to any holder. Cateo units must be reduced over time relative to the number of units held; the maximum duration for any granted cateo is three years. The holder may conduct prospecting, mapping, sampling, geophysical surveys, drilling and trenching after notifying the mining office of the exploration plan.

- Manifestacion de Discumbrimiento (“MD”) – once mineralisation is discovered on a cateo, the cateo lease expires and the permit is upgraded to an MD. The maximum area of an MD is 7,000 hectares. A basic environmental impact assessment, a physical survey, and boundary markers are required at this stage.
- Pertenenencia – a lease allowing mining. A physical survey and boundary markers are required.

Pan American’s 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.

#### Agreements and encumbrances

Silver Wheaton Corp., through its subsidiary, Silverstone Resources (Barbados) Corp., has rights to 12.5% of the eventual silver produced at the Loma de La Plata deposit under a “silver stream” agreement. The Navidad Property is not subject to any other royalties, back-in rights, payments, encumbrances or similar agreements.

#### Environmental liabilities

The Province holds the Navidad Property administrator responsible for any potential environmental damage liabilities that may arise.

Environmental and social baseline studies are in the process of being completed for the Navidad Property. The bulk of baseline work done to date has been contracted to local Argentine consultants working under the supervision of international firms including Water Management Consultants (WMC)/Schlumberger Water Services, Ground Water International, On Common Ground Consultants Inc., and Klohn Crippen Berger Ltd. An international consultant that will finalise the baseline work and prepare the future Environmental Impact Assessment (“EIA”) for the Navidad Property is currently being selected.

#### Permits

Drilling at the Navidad Property requires a separate permit for each affected tenement valid for one year, subject to the approval of an Environmental Impact Statement (“EIS”). An EIS is required to be submitted which covers the impacts and mitigation/monitoring procedures for the exploration activities, in order to obtain environmental permits. The level of the exploration activity dictates the level of study required.

The Navidad Property is in an advanced exploration stage involving drilling and trenching activities. The most recent EIS update was submitted in 2008 and was approved in January 2010. Until this EIS update was approved, the Navidad Property operated under the existing valid permit which was modified in 2008. As a result of the EIS approval, a new drilling permit was issued for a one year period and this new permit allows for the operation of up to eight drill rigs. Rehabilitation of the drilling platforms and impacted areas is carried out throughout the year.

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

Depending on overall timing of the development of the Navidad Property, an Environmental and Social Impact Assessment report for the Navidad Property is expected to be completed and presented to the provincial Chubut government in 2010. While the government has publicly indicated its support for the Navidad Property proceeding, the status of a provincial law banning open pit mining would need to be clarified before permits for mining can be obtained.

- 12 -

---

## Accessibility, Climate, Local Resources, Infrastructure and Physiography

### Accessibility

The nearest towns to the Navidad Property are Gastre, with a population of about 500, 40 kilometres to the northwest, and Gan Gan, with a population of about 600, about 40 kilometres to the east. Both towns are located on Provincial Route 4, a gravel highway that passes just north of the Navidad Property. Offices, accommodation, and facilities for core storage and logging have been established in Gastre and to a lesser degree in Gan Gan. The Navidad Property is accessible year round except in very wet conditions.

Daily scheduled flights are available to the city of San Carlos de Bariloche, a tourism centre with a population of approximately 100,000, located about 355 kilometres by road to the northwest. Daily flights are also available to Trelew, located about 390 kilometres by road to the southeast near the coast, with a population of approximately 90,000. The nearest airport, which has regularly scheduled flights, is located in Esquel, about four hours drive to the southwest by gravel road. The provincial capital of Rawson, located 20 kilometres east of Trelew, has a population of approximately 23,000. An office has been established from which to advance the technical studies of the Navidad Property in Puerto Madryn, a city with a population of approximately 70,000, located 60 kilometres north of Rawson. There are at least three scheduled flights per week between Puerto Madryn and Buenos Aires. Offices are also maintained in Buenos Aires and in the regional centre of Ingeniero Jacobacci, which has a population of approximately 8,000, located two hour's drive to the north of Gastre.

### Climate

The climate is semi-arid with average annual temperatures ranging from 1°C to 20°C. High winds frequently occur from October through December, but may also occur throughout the year. Annual precipitation averages between five millimetres to ten millimetres per month, but during the winter months from May to August, higher accumulations ranging from 15 millimetres to 20 millimetres may occur as either rain or snow. Field activities run throughout the year and are not curtailed by weather conditions.

### Infrastructure and local resources

The base of operation for the Navidad Property is in Gastre. Facilities include offices, modular living facilities, and core-storage warehouses. Communications are provided by land line telephone service, national mobile phone operator, and a satellite internet dish. The modular living facilities provide lodging and meals for up to 20 people. The warehouses include three drill core storage sheds, a logging and sampling shed, metal shop, vehicle workshop, and a regional exploration office. In the logging shed there are four diamond saws used to cut drill core.

In Gan Gan, two core storage facilities have been built as well as an office on land purchased on the western edge of town in 2007. The office serves as a base of operation for social and community relations personnel, while the warehouses contain older drill core from the Navidad Property.

On the Navidad Property, a small camp facility has been installed with electrical power provided by several small generators. Communication is provided by a satellite internet uplink. Other infrastructure on site includes storage areas for drill supplies. There are two water bores authorised by the Chubut Province Hydrology Department to pump water for use with diamond drilling. Water pumping is accomplished by one of two company owned water pumps. To provide access for drilling, a total of 26 kilometres of access roads have been constructed on the Navidad Property.

During 2008, the drilling contractor, Boart Longyear, installed a transportable 60-person camp in the Yanquetru Valley, on owned land to the south of the Navidad Property. A water tank and sewerage facilities have been installed

in support of the camp.

- 13 -

---

## Land Access

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 the remaining surface owners. Land acquisition activities continue in order to facilitate unimpeded land access to the Navidad Property through land swap deals and direct land purchases.

## Physiography

The 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.

## History

The first exploration programme that included the Navidad Property area consisted of a preliminary regional geochemical sampling programme 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 the Navidad Property. The programme consisted of 1,200 bulk leach extractable gold (“BLEG”) stream sediment samples taken from drainage systems overlying Jurassic volcanic rocks in Chubut Province in the general vicinity of Calcatreu, Mina Angela, Gastre, Lagunita Salada, Gan Gan, and other areas. This programme 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 the Navidad Property.

In January and February 2002, Newmont Mining Inc. (“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 (“Confidentiality Agreement”) in order to obtain an information brochure and technical data related to Newmont's Argentinean interests, which included its Calcatreu property. In December 2002, IMA applied for a cateo over the area formerly known as Sacanana and now known as the Navidad Property, utilising and relying upon the Normandy BLEG data (known as BLEG A), and began undertaking a regional exploration programme over the Navidad Property, including regional mapping and sampling. From December 2002 to July 2006, IMA conducted diamond drilling, geochemical sampling, geophysical exploration, and mineral resource estimates at the Navidad Property.

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 the Navidad Property 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 July 14, 2006 following a court case 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 in reimbursement 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.

Since October 2006, Aquiline has undertaken diamond drilling, geophysical and geochemical exploration, metallurgical test work, resource estimates and a preliminary economic assessment for the Loma de La Plata deposit.

- 14 -

---



## Geological Setting

### Regional geology

The Navidad Property 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”, which was originally interpreted as a large-scale dextral shear zone. This mega-structural feature is now believed to be the result of continental-scale northeast to southwest extension that produced through down-faulting a series of northwest to southeast trending half grabens and tectonic basins.

Granitoid rocks of the basement in northern Chubut Province 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 the Navidad Property, the Mesozoic sequence consists of the Lonco Trapial Formation and overlying Cañadón Asfalto Formation. The latter of these formations hosts the Navidad mineralisation.

The Province was tectonically active during the Jurassic with abundant evidence of syn-sedimentary faulting observed in the Cañadón Asfalto Formation. Continued post-sediment tectonic activity resulted in the faulting, tilting, and local folding of the Lonco Trapial and Cañadón Asfalto formation stratigraphies. This resulted in the formation of a series of northwest trending half and full horsts and grabens.

Overlying these tilted Jurassic age volcanics and sediments are the generally flat lying sediments and pyroclastic rocks of the Cretaceous age Chubut Group Formation. To the east and south these are covered by Tertiary age plateau basalts.

### Local and property geology

The oldest rocks are the crystalline basement rocks of the Mamil Choique Formation located in the southwest corner of the Navidad Property area. These basement rocks are overlain by a sequence of pyroclastics, volcanic agglomerates and lavas of the Lonco Trapial Formation. These rocks are exposed along a northwest to southeast trending strip in the southwest quadrant of the Navidad Property area and in the valley northeast of the Sauzal Fault along the Navidad trend. They are also exposed on the southeast Navidad Property section of the Esperanza trend at the Fold Zone.

The welded pyroclastics of the Lonco Trapial Formation exposed to the southwest of the Navidad Property area are also found directly north of Calcite Hill and in deep drilling along the Navidad trend below the Sauzal Fault. Here they are interbedded with juvenile volcanoclastics derived from the same flows. A drill hole northeast of Navidad Hill crossed in excess of 500 metres of this volcanoclastic/pyroclastic sequence without encountering the underlying agglomerates or basement rocks. This thick sequence of rock is generally oxidised as denoted by its characteristic red colour.

Stratigraphically above the Lonco Trapial volcanic sequence and forming the base of the Cañadón Asfalto Formation are coarse clastic sediments of arkosic composition. Basal conglomerates of the arkoses may contain boulders up to two metres in diameter. They are composed almost exclusively of angular grains of quartz and feldspar derived from the Mamil Choique Formation. Locally the arkoses contain horizons of limestone, some with stromatolites. Coarser beds include pebble to cobble size clasts of granite and metamorphic rocks. These beds may locally exhibit cross-bedding sedimentary textures. These sediments extend from the valley floor southwest of the Argenta trend to the Esperanza trend. Intersections from drillholes southeast of Loma de La Plata and further south on the Argenta trend indicate the arkoses are interbedded with thick sequences of argillaceous shales. At surface the coarser arkoses horizons are resistive and form extensive exposures. The shales are erosionally recessive and are rarely if ever exposed at surface.

At Loma de La Plata and between the Esperanza and Navidad trends there are no arkose sediments. In their place intercalated with the argillaceous black shales are mature greywackes of intermediate volcanic composition.

- 15 -

---

These are deposited in rhythmic sequences consisting of pebble conglomerates that grade normally into coarse muddy sandstones. The greywackes locally contain thin carbonaceous horizons.

Above the greywackes from Loma de La Plata to Sector Z and between Esperanza and Navidad trends southeast of Calcite NW are argillaceous black shales. These sediments contain limestone horizons and zones with intercalations of coarser grained muddy sediments. They are rich in organic carbon and locally may contain thin coal seams. In the northwest to central portions of the Esperanza Valley the shales may also contain horizons of pyroclastics with varying degrees of re-working with thicknesses that range from one metre up to ten metres. At Galena Hill the shales host massive sulphide replacement bodies at their lower contact with the latite lavas. At several of the Navidad Property deposits these shales contain lead and zinc mineralisation distal to the higher grade silver zones.

Contemporaneous with the deposition of the sediments within the Navidad Property area, there were a minimum of three distinct extrusive lava and multiple pyroclastic volcanic events. The oldest of the lavas are fine-grained and of intermediate to mafic composition. These are referred to at the Navidad Property as andesite. These rocks are believed to be extruded sub-aerially as the auto-brecciated tops of the flows show the effects of thermal oxidation. These lavas were either simultaneously deposited within two separate basins, one dominated by arkoses and the other by black argillaceous shales, or there were multiple andesite eruptive events. On the Argenta trend the andesites are inter-bedded with arkoses and on the southern end of the Navidad trend they are inter-bedded with black shales. At the northwestern end of the Navidad trend and north of Provincial Route No. 4 they are overlain by pyroclastics and other latite lava flows with no intervening sediments. The andesite lavas are generally not mineralised; however, locally they can host silver-copper mineralisation. The best known mineralisation hosted in andesite is located at the southern limit of the Connector Zone. Here the tectonically brecciated and hydrothermally altered andesite returns grades of up to 11 kilograms per tonne of silver in surface rock chip samples. There are also mineralised showings in andesites south of the Loma de La Plata deposit on the Argenta trend and at the Fold Zone at the southeast end of the Esperanza trend.

The next extrusive lava event produced what is referred to on the Navidad Property as the Lower Latite unit. It is actually a hybrid consisting of a trachyandesite contaminated by quartz, which appears as rounded one millimetre to three millimetres quartz phenocrysts with reaction rings in quantities ranging from 1% to 5%. The Lower Latite also contains cognate clasts 0.5 centimetres to three centimetres in size of fine-grained material of the same composition without quartz phenocrysts. On the Navidad Property these are referred to as "xenoliths". The Lower Latite was preceded by a pyroclastic eruption that produced pumice bearing ash tuff. At Navidad Hill and Galena Hill the exposed volcanic sequence is andesite, pumice tuff followed by the Lower Latite with no intercalated sediments. The Lower Latite lava is restricted in distribution to the northern end of the Argenta trend and the northern half of the Esperanza and Navidad trends. These lavas host high grade mineralisation at Calcite Hill, where the Upper Latite lavas are believed to have been removed by erosion prior to the deposition of the black shales. The Lower Latites also host mineralisation together with the Upper Latites at Galena Hill.

The last extrusive volcanic event produced the Upper Latite lava flows. These rocks are macroscopically identical to the Lower Latite except they do not contain cognate clasts. Potentially, these autoclasts were completely reabsorbed by the magma before their extrusion. It is believed the initial eruption of the Upper Latite encountered sufficient ground water to create a maar – diatreme complex located at Calcite NW. Evidence supporting this hypothesis is a two kilometres wide zone of milled matrix breccia containing rounded clasts of the welded pyroclastic flows and Lower Latite lavas. Horizons of reworked pyroclastics observed within the sediment sequences at the northern end of the Navidad trend may represent surge deposits. Continued eruption of the Upper Latite lavas led to its distribution over an area minimally 60 kilometres squared in size including the entire length of the Argenta, Esperanza and Navidad trends and north of the Provincial Route No. 4. At the southeast end of the trend the groundmass of the lava is glassy and has devitrified to form spherulites. At the northwest end of the Argenta trend and on the Esperanza and Navidad trends the lava is interbedded with greywackes and shales. The Upper Latite lava hosts practically all of the

silver-sopper mineralisation at the Loma de La Plata and Esperanza Valley deposits and a larger portion of the mineralisation at the Navidad Hill and Galena Hill deposits.

Collectively the individual mineralised deposits along the Navidad trend exhibit a strong northwest to southeast lineation. A few observed small mineralised veins and breccia dikes located along the trend also exhibit northwest to southeast to north-northwest to south-southeast orientations. No large potential feeder structure

- 16 -

---

common to all the deposits has yet been discovered. If such a structure exists, it is likely that post-mineral movement on the Sauzal Fault laterally displaced it from beneath the known mineralised bodies.

At the individual deposit scale the mineralisation is clearly controlled by zones of primary or secondary porosity. Examples of this are the upper latite lavas at Esperanza Valley and Loma de La Plata and volcaniclastic horizons at the Connector Zone and Calcite NW. These zones are often capped by impermeable horizons. These aquitards effectively capped the ascending hydrothermal fluids and forced lateral migration outward from the plumes. The result was the formation of mineralised bodies with strataform geometries.

Almost all the Navidad Property mineralised deposits are contained within structural blocks separated from each other by three major structures. These structures are believed to be pre-mineralisation in some cases and are definitely post-mineralisation in others as evidenced by these structures truncating mineralisation. The most influential of these post-mineral structures are the Sauzal, Esperanza and Arco Iris faults. The Sauzal Fault is located along the northeast side of the Navidad trend and dips shallowly to the southwest. This structure truncates the mineralisation at depth on the Galena Hill, Connector Zone, Navidad Hill and Calcite Hill deposits. The Esperanza Fault located along the Esperanza trend has resulted in the drag folding of the host lithologies of the Valle Esperanza deposit. The Arco Iris Fault is located in the northern end of the Argenta trend. This steeply northeast dipping fault limits the Loma de La Plata mineralised deposit to the southwest where it juxtaposes it against unmineralised andesite. The Barite Hill deposit is also interpreted to be affected by post-mineral low angle faulting, potentially analogous to the interpreted movement on the nearby and similarly orientated Sauzal Fault.

#### Exploration

Exploration efforts were focused 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 other previously identified mineralised zones. Exploration for additional deposits through the use of fence drilling across prospective covered areas is feasible, since as is so far known, the occurrence of the latite unit hosting mineralisation is generally of relatively large areal extent that can be measured in units of tens of hectares. Mineralisation is frequently stratiform with relatively shallow dips, and most of the known deposits occur as large roughly tabular bodies.

Geophysical and geochemical methods have proved useful in mapping the distribution of the latite unit and potassic-style alteration, in detecting Galena Hill style sulphide-rich mineralisation, and in interpreting the Navidad Property-scale structural regime. The characteristics of the host rock and wall rock units are favourable for diamond drilling, and extensive areas can be rapidly explored by drilling at relatively low cost. As was demonstrated during the 2007 diamond drilling programme, additional mineral resources can be delineated by extension drilling laterally away from known deposit areas.

Aquiline completed 583 diamond drillholes from November 2006 to March 2009, for 127,960 metres drilled.

#### Mineralization

In all of the deposits and mineral showings the gangue minerals are principally calcite with or without barite and a much lower proportion of silica. Visibly recognisable ore minerals are native silver, grains and clots of black sulphides containing argentite, acanthite and discrete grains of sphalerite, galena, chalcopyrite, cuprite, bornite, native copper and copper carbonates. Distinct styles of mineralisation are reflected in the differences in ore minerals and proportion of gangue between the deposits. Various pulses of mineralisation are observed, principally at Galena Hill. With the exception of the latter, pyrite and sulphides in general are relatively scarce.

The principal mineral association of interest is silver-lead. Other associations of interest are silver-lead-copper and copper-silver or more rarely silver-zinc. Occasionally there is silver only, or copper-lead-zinc or simply isolated occurrences of these base metals. This further suggests that deposition occurred through successive pulses of mineralisation. So far as it is known to date, gold is totally absent from the system.

- 17 -

---

Mineralisation is preferentially hosted in lavas with the upper latite containing the dominant proportion, followed by the lower latite and then rarely by the andesite. Deposits with the dominant portion of mineralisation within lavas include Loma de La Plata, Valle Esperanza, Calcite Hill, and Galena Hill. Sedimentary rocks and volcanoclastics can also contain significant mineralisation. Deposits where the mineralisation is dominantly hosted by these rock types include Calcite NW, Navidad Hill, Barite Hill, and the Connector Zone.

To date the general Navidad Property is comprised of eight individual mineral deposits in three separate mineralised trends referred to as the Navidad trend, the Esperanza trend, and the Argenta trend. The six deposits in the Navidad trend are essentially contiguous and include, in a 5.8 kilometres alignment 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 370 metres to the south-southwest of Galena Hill. The Loma de La Plata deposit occurs along the northern portion of the Argenta trend and lies approximately 2.2 kilometres southwest from the centre of Calcite Hill.

#### Calcite NW

Calcite NW is located stratigraphically in the upper sedimentary package found directly above the latite unit. This package is comprised of mudstone, sandy volcanic tuffs, tuffaceous sandstones, lapilli tuffs, and volcanoclastic intervals. In general the layers with a significant tuffaceous component exhibit a strong argillic alteration.

Mineralisation occurs disseminated in the sediments where it is observed as galena with occasional scarce chalcopyrite. Facies with high permeability, such as the tuffaceous sandstones and volcanic tuffs, are preferentially mineralised. Towards the northwest the mineralisation is characterised by lead with low silver and is hosted mainly by tuffs and pyroclastic units. In the central to southwest area of Calcite NW, silver and lead mineralisation with low grade copper and occasional zinc mineralisation are hosted by sandy mudstones and tuffaceous sandstones.

Mineralisation at Calcite NW takes the form of three long and tabular to slightly synformal bodies. The main body lies from the surface to a depth of 130 metres below surface and has an average overburden thickness of approximately 60 metres. It has a strike length of 1,825 metres towards the northwest, a width between 350 metres to 500 metres, and a thickness between ten metres and 80 metres. The mineralised body plunges gently to the northeast with a dip between 1° to 5°. The base of the main body is normally identified by the Galena Marker.

Towards the south-eastern end of the deposit, a smaller lens lies close to the surface parallel to the main body and about 80 metres above it. It has a regular shape 275 metres long, up to 250 metres wide and between 20 metres and 40 metres thick.

Another elongated lens of mineralisation lies between 15 metres to 50 metres below and parallel to the northern end of the main body. The body is 1,000 metres long, between 200 metres and 350 metres wide, and ranges between ten metres and 30 metres in thickness.

#### Calcite Hill

The mineralisation is hosted principally in the latite with xenoliths unit (lower latite) and occurs upwards for a few metres above the contact with the overlying upper sedimentary or pyroclastic package depending on the sequence. The style of mineralisation is typically banded epithermal vein filling and stockworks in breccias developed in the brittle massive portions of the flow. Where present in the upper sedimentary package, mineralisation occurs as disseminations infilling the primary porosity as well as micro-veinlets that are comprised of argentiferous lead and zinc sulphides along with interstratified galena.

Gangue mineralisation is comprised of calcite, minor silica, and barite either white in colour or as a caramel-coloured variety that occurs almost exclusively at Calcite Hill although it has been occasionally identified on nearby Navidad Hill. High grade mineralisation is comprised of galena, black sulphides, native silver, and occasional chalcopyrite. The overlying geochemical signature is silver-lead with minor copper.

- 18 -

---



Azonation of the mineralisation hosted in the latite unit is exhibited in the sequence of the three principal zones which in descending depth order are:

- An upper zone with principally lead mineralisation with minor silver, and minor to absent copper;
- An intermediate zone with high grade silver mineralisation and proportionally less lead and moderate copper; and
- A lower zone with primarily silica fracture filling, low in sulphides and silver mineralisation.

On the north flank of Calcite Hill, the mineralisation is hosted in volcanoclastic rocks, in the lower portion of the overlying calcareous mudstone unit and in the contact between the same volcanoclastic unit with the lower latite with xenoliths. The entire sequence exhibits structural disturbance. This is attributed to a possible low-angle fault at the base of the sequence which has underlying it the reddish-coloured volcanoclastic basal unit.

Mineralisation at Calcite Hill forms an irregular body with a narrow upper portion outcropping towards the western end of Calcite Hill, which merges with a larger mineralised lens. Mineralisation outcrops and extends to a depth of around 250 metres below surface. It forms a relatively flat surface 600 metres long, ranging from 270 metres to 600 metres in width. The lower portion of the body has an irregular shape resulting from two nearly separate lenses that merge into one lens having a variable thickness between 150 metres to 20 metres. The body plunges to the southwest with a -5° dip.

#### Navidad Hill

The Navidad Hill deposit exhibits two different types of mineralisation and control. The first of these outcrops along the crest of the hill where mineralisation related to structural control is most evidently displayed compared to elsewhere on the Navidad Property. Here outcropping vein structures exhibit breccias comprised of finely banded crystalline calcite gangue, barite, and finely crystalline to chalcedonic silica. Visually identifiable ore grade minerals include galena, black sulphides, copper and manganese oxides, and lesser quantities of pyrite, chalcocopyrite, and rare native copper and silver.

The high grade brecciated vein structures occur in a belt approximately 100 metres in width with discontinuous sub-vertical extensions, striking generally at an oblique angle to the main Navidad trend in the range of 310° to 345°. Vein thicknesses are one metre or less with silver values in the 1,000 grams per tonne to 10,000 grams per tonne range. Vein development discontinuity is also evidenced by “rosario” outcrops along strike and by changes in mineralogical composition along strike as well as at depth. The latite wall rock adjacent to the breccia veins is also found mineralised with the development of veinlets, stockworks, and breccia zones. As indicated so far by drilling, the outcropping breccia veins do not extend to a depth exceeding 80 metres where the vein integrity tends to break down into a zone of veinlets comprised principally of chalcedonic silica that increases at depth. To date the base of the latite has not been encountered by drilling at Navidad Hill which leaves open the possibility of a dome structure in this area.

Mineralisation at Navidad Hill trends for 520 metres towards the northwest and forms an irregular globular shape ranging from 270 metres to 470 metres wide and ten metres to 175 metres thick. The mineralised zone has a shallow dip to the southwest and lies at the subsurface along the ridge crest to around 50 metres depth along the southern flank.

#### Connector Zone

The mineralisation occurs as disseminations and replacement of the matrix in the volcanoclastic rocks. Locally the volcanoclastic rock is crackle brecciated with a matrix of hydrothermal minerals, sulphides and rare native silver. The volcanoclastic rock can exhibit a wide range of textures ranging from conglomeratic horizons to thinly bedded strata. The volcanoclastic unit contains sub-rounded to very angular clasts of latite derived from the uplift and erosion of the latite lavas. Lesser, and generally lower grade mineralisation can also be hosted in the underlying greywacke and the overlying mudstones.

- 19 -

---

The mineralisation at Connector forms two intersecting, but distinct bodies, which combined, are 670 metres in strike length, and between 240 metres and 590 metres wide. The mineralisation lies from the surface to a depth of 330 metres. The deposits are hosted in a sedimentary sequence comprised of sandstones and fine conglomerates with minor mudstones, interbedded with volcanoclastic layers which are mostly formed by sub- rounded to angular latite fragments derived from the erosion of the latite lavas. Locally the host rocks exhibit micro-veinlets up to one centimetre thick and poorly developed stockwork texture. The intensity of the brecciation is weak to moderate and the gangue infilling is comprised of calcite and silica. Alteration is weak and is manifested by a moderate bleaching of the rock due to the presence of low-temperature illitic-smectitic clays.

#### Galena Hill

Mineralisation at Galena Hill is hosted in a variety of distinct fragmental rock types. These include hyaloclastites at the margins and ends of lava flows and crackle breccias within the massive cores of the flows. Also present are dikes and pipes of hydrothermal breccia. The predominant style of mineralisation is the selective replacement of breccia matrix, or as open space filling. Locally the mineralisation pervasively replaces the matrix of the host lithologies including the mudstones. Where the mudstones are mineralised, they can form massive sulphide-rich stratiform lenses containing galena and marcasite.

The lithology that hosts mineralisation varies within the different portions of the deposit. At the far northwest end of the deposit the mineralisation is primarily hosted within the lower latite with minor mineralisation in the overlying mudstones and underlying volcanoclastics. Towards the southeast end of the deposit the mineralisation is hosted in both the lower latite unit and the upper latite unit and locally in the overlying mudstones. To the far southeast end of the deposit all of the mineralisation is contained within the upper latite with only trace mineralisation contained in the overlying mudstones.

The extent of mineralisation is long and wide with a strike length of roughly 900 metres and a width of between 250 metres and 700 metres. In section views orientated at 030° to 210°, the mineralised body forms a roughly strataform body with a slight dip to the southwest. This body resembles an inverted shield with a flat top and a thicker central portion that thins to the margins. On nearly every section the mineralisation is affected by post-mineralisation movement on the northwest to southeast trending block faults resulting in displacements of roughly ten metres to 50 metres. Those portions of the mineralisation located above the horst are partly eroded whilst those portions to either side are preserved in their entirety. The mineralised zone ranges from a few metres thick at the extreme margins to over 200 metres thick in the central portions of the deposit.

Mineralisation outcrops in several locations including the upper northwest flank and within the window through the mudstones in the area of the structural horst. The top of mineralisation ranges from surface to 200 metres below surface with an average depth less than 40 metres.

There are 12 drill holes in the Galena Hill sector of the Navidad Property that are being monitored on a regular basis for determining the level of the water table. Across the area the top of the water table is at approximately 1,137 metres elevation. The majority of the mineral resource at Galena Hill lies beneath this level.

#### Barite Hill

At Barite Hill two styles of mineralisation are present in distinct stratigraphic units. The first occurrence from surface to depth is a relatively weak silver-lead mineralisation with minor copper and zinc hosted in calcite and lesser barite gangue filling veinlets and breccia matrix within the upper latite unit.

The second style of mineralisation is found in two clastic units below the upper latite flow that is normally found mineralised at the Navidad Property. The units are a sedimentary unit comprised of sandstone and mudstone, and a volcanoclastic unit derived from latite. Mineralisation is interpreted to have been emplaced through the migration of hydrothermal fluids across zones of primary permeability in the sandstones or through zones of secondary permeability through fracturing. This lithology package is bounded on top by a greywacke unit and underneath by fine-grained clastic sediments (mudstones), both of which are interpreted to have relatively low permeability.

- 20 -

---

Observed mineralisation occurs as a matrix gangue filling of calcite, barite and clays that contains sparse chalcopyrite, black sulphides, and native silver. It is deposited in fine fractures, stockworks and breccias in the mudstones and volcaniclastic rocks, and occurs as disseminations of black sulphides in the sandstones. In areas reporting high silver assay values, native silver is very common and occurs as pure veinlet fillings up to five millimetres in thickness. The principal geochemical association is silver with low copper; in general lead is scarce.

Mineralisation at Barite Hill forms three lenses. The northern lens is about 230 metres long along strike, between 170 metres and 430 metres wide in the dip direction and between five metres and 30 metres thick. The southwest dip varies between 3° where the body outcrops in the north to 25° in the southwest where the body lies approximately 120 metres below surface. The second lens is found towards the southern end of Barite Hill. Its dimensions are approximately 300 metres long by 350 metres wide with thicknesses ranging from 4 metres to 32 metres. It occurs at the subsurface on the crest of the ridge and plunges to the southwest.

The third mineralised body, characterised by high silver values, forms an irregularly shaped mass around 350 metres long, between 100 metres and 400 metres wide, and between seven metres to 100 metres thick. It lies between 50 metres and 200 metres below the second lens in southern Barite Hill and has a dip of 30° to the west-southwest.

#### Loma de La Plata

At the Loma de La Plata deposit the stratigraphy consists of basal andesites overlain by greywackes and sandy conglomerates that change laterally to mudstones and arkoses. Autoclastic breccias lay between the lower sedimentary sequence and the volcanic flow units comprised by the two latite units, with and without xenoliths, which are separated by an interbedded sedimentary layer. The sequence is completed by mudstones and fine to very fine sandstones that vary to limestones laterally to the east.

In the west to southwest the sedimentary units are thin or missing due to erosion and the lithology is typically comprised by the latites with and without xenoliths that overlay the andesites. Towards the east the sequence is complete due to down-dropped blocks that are the product of normal faulting with an approximate north-south strike presumably resulting from northwest to southeast orientated compression.

The entire sequence has a 325° strike and dips -20° to -30° to the northeast; the dip tends to flatten somewhat along strike to the northwest.

Mineralisation is hosted primarily in the upper latite unit which outcrops in the southwest part of the deposit area and dips towards the northeast where it has been intercepted up to 300 metres below the surface. Drilling in 2008 demonstrated that the mineralisation tends to be enriched in breccia zones associated with north-south normal faults that have a spacing on the order of 70 metres to 90 metres.

The style of mineralisation is characterised by hydrothermal veinlets up to three centimetres thick and tectonic and crackle breccias developed in the brittle massive portions of the lava flow. Gangue mineralisation is comprised of calcite, laumontite, barite and silica present as a white quartz and occasional amethyst. Textures are massive to crustiform and occasionally botryoidal; bladed calcite replacement textures have been observed.

Mineralisation is comprised of acanthite, native silver, argentite, stromeyerite, silver sulphosalts, galena, chalcopyrite and bornite disseminated in the matrix of the breccias and as rims in veinlets. Chalcopyrite is the only mineral that is also disseminated in the host rock. The acanthite and lesser stromeyerite are the principal silver-bearing sulphide minerals that contain approximately 80% of the reported silver. QEMSCAN analyses performed by Xstrata Process Support report an average silver grain size in the range of six micrometres to 20 micrometres.

Two distinct mineralised bodies are present at Loma de La Plata. The main deposit is 850 metres long with a north-south strike, between 600 metres to 1,200 metres wide and 40 metres to 50 metres thick. It covers a surface area of 74 hectares. The second body is considerably lower in grade and is located approximately 60 metres beneath the main deposit. It has approximately the same surface area as the upper main body but with an average thickness of only five metres.

- 21 -

---

The area with the highest grade mineralisation is located in the central and western side of the upper Loma de La Plata deposit; overburden thickness varies from zero metres to 50 metres. The dimensions of the high grade zone are 500 metres north-south by 170 metres east-west.

To the southeast of the deposit the latite lava flow continues towards the Bajo del Plomo area but with greatly diminished silver and relatively high lead values. To the east the deposit was expanded by some 400 metres where the mineralised portion of the latite becomes progressively thinner with diminishing silver values and higher lead. Towards the northeast drilling has confirmed that the deposit is cut off by the Esperanza Fault. Towards the north the 2007 perimeter was expanded 200 metres where generally no further significant silver mineralisation has been encountered despite the presence of the host unit.

In summary, the total mineralised footprint has been increased by 100% with respect to the area defined in 2007. The deposit still has limited potential to expand towards the northwest where the latite as well as the mineralisation continues to Valle La Plata sector, and there remain some restricted possibilities for expansion to the east- southeast.

#### Valle Esperanza

At Valle Esperanza the main mineralised deposit is emplaced in the upper latite volcanic unit without xenoliths immediately below the contact with the upper carbon-rich sedimentary package comprised of mudstone, sandstone, and greywacke. The latite varies from massive to autobrecciated in the flow top depending on the number of lava flows. The unit is brecciated with a matrix of calcite, with minor laumontite, barite and silica that are present as massive in-filling, sometimes as banded textures. In the brittle massive portions of the flows, the breccias occur as tectonic or crackle breccias that were hydrothermally in-filled. In the autobrecciated zones with abundant amygdaloids, the hydrothermal fluids used the primary porosity in the contacts between fragments to generate the breccia. The intensity of brecciation is moderate and at least two events of brecciation are recognised.

Of less importance, a lower grade mineralisation is hosted in the underlying lower latite with xenoliths that is below the upper latite and overlain by another sedimentary package comprised of mudstones, greywacke and volcanoclastic rocks.

Alteration is weak to locally strongly argillic in breccias. In general alteration is limited to a gentle bleaching of the host volcanic rock in close proximity to the mineralisation.

The predominate style of mineralisation is the disseminated occurrence of black sulphides, native silver, chalcopryrite, malachite, pyrite and galena in the breccia matrix and in veinlets up to one centimetres thick. Locally the mineralisation of chalcopryrite and galena pervasively replaces both the matrix and the host lithologies. The silver shows a very good correlation with copper and low correlation with lead.

Drillhole intersections have traced the two mineralised zones from surface to approximately 400 metres below surface. The upper body is about 1,100 metres long and between 130 metres and 700 metres wide. The lower body lies approximately 50 metres below the upper deposit, and is 800 metres long and between 140 metres and 500 metres wide. Both bodies range in thickness between five metres to 30 metres.

The mineralised horizon strikes approximately to 290° with a variable northeast dip between -70° to -10°. The dip appears to flatten towards the northeast.

The Valle Esperanza deposit is not fully defined as yet and future work will include drilling along strike to the north-west and south-east and down dip to the north of the presently defined deposit.

Drilling

All diamond drilling on the Navidad Property since the first drillhole in November 2003 has been completed by Boart Longyear Connors Argentina S.A. of Mendoza, Argentina (subsequently taken over by Boart Longyear in 2007). One rig is employed on a discontinuous basis and is capable of drilling deeper than 400 metres

- 22 -

---



with HQ sized rods. Nearly all holes have been drilled at HQ3 diameter (61 millimetres) with three 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. No liners or split-tube core barrels have been used in the drilling process. Frequently used drilling additives include Polyplus, Platinum Lube, and G-Stop. Common rod grease may be used for exceptionally deep holes. Drilling conditions are very good with drilling rates of approximately 120 metres per day per machine. During 2008, up to three additional drill rigs operated on the Navidad Property: one continued with exploration drilling; the other two rigs were dedicated to a programme of in-fill and extensional drilling and orientated-core drilling in support of a geotechnical study of the Loma de La Plata deposit. One of the Loma de La Plata drill rigs was swapped for a period of time with a rig capable of drilling PQ3 diameter (83 millimetres) drill core for metallurgical sampling. The holes for metallurgical sampling doubled as in-fill drillholes. Split-tube core barrels were used during the orientated core drilling of Loma de La Plata for geotechnical analysis.

Staff geologists set up drill collars in the field by locating the planned collar coordinates with a GPS unit or occasionally by tape measure from a nearby drillhole. The geologist aligns the azimuth of the rig by setting out a row of stakes oriented on the desired azimuth, frequently 030°, with a Brunton compass. The edge of the drill rig, such as the Nodwell track or the outer wall of the mounted housing unit, is aligned with the stakes. Drillhole inclination is set by placing the inclinometer of the Brunton compass directly on the drill rod.

After drilling the hole, collar coordinates are periodically surveyed by a professional contract surveyor using total station methods or more recently with a differential GPS. The survey point of reference is a federal government geocentric reference frame (POSGAR) point. Coordinates are expressed in the Gauss Kruger Zone II system, relative to the Campo Inchauspe datum. Drillhole azimuths at the Navidad Property have historically used a magnetic declination correction of 08°E, but beginning in 2009 drillholes from number NV-949 onwards will use an updated correction of 06.5°E.

A number of different instruments have been employed at the Navidad Property to define the drillhole trace down the hole. Aquiline previously used a system of taking downhole surveys either halfway downhole, or every third of the hole, or every quarter of the hole, depending on hole length. In October 2008, Aquiline implemented a system of standardising downhole surveys every 50 metres, and beginning in 2009, in deposits where resources have previously been estimated, downhole readings are now taken at 30 metre intervals. Currently no downhole survey of the bearing and dip is taken at the collar, but the first measurement is now taken not lower than ten metres below the drill collar. No surveys are taken of vertical holes. Snowden Mining Consultants Inc. (“Snowden”) recommends that all drillholes be surveyed regardless of their orientation with the first measurement taken at the collar of the hole.

The average distance between downhole surveys is 84 metres between surveys, with a maximum distance of 232 metres. Beginning with drillhole 616, survey measurements have averaged 52 metres between readings. No serious drillhole deviation problems have been encountered in the drilling to date. Azimuth swing between downhole surveys ranges between 0° and 10°, with lifts of between 0° and 3°.

## Sampling and Analysis

### Sampling

The sampling method at the Navidad Property has followed similar protocols for the life of the Navidad Property.

The same sampling methodology for diamond drill core sampling at the Navidad Property has been followed since the acquisition of the Navidad Property from IMA, with a few refinements. Approximately five staff geologists are responsible for logging drill core, which takes place in Gastre. Drill core from NV07-459 onwards are stored in Gastre, along with core selected as representative of each deposit (NV05-241 to NV05- 245, NV06-278, NV06-324,

Edgar Filing: PAN AMERICAN SILVER CORP - Form F-10/A

NV06-343, NV06-363, NV06-372, NV06-379, NV06-403, NV07-442, and NV07-449). Drill core up to NV07-458 is stored in Gan Gan, except the representative drillholes stored in Gastre.

Drill core is stored and well maintained in wooden core boxes with a nominal capacity of approximately three metres. The drillhole number, box number, and downhole interval are marked in felt tip marker on the side of

- 23 -

---

the box. Wooden downhole core depth markers are placed in the core box by the driller indicating the drillhole number and end of run depth.

Staff geologists log the drill core in detail using standardised logging sheets on handheld computers for: lithology; alteration type, style, and intensity; mineralisation type, style, and intensity; and structural information. The entire drillhole is photographed prior to cutting. Geotechnical information including drill core recovery, rock quality designation, weathering, texture, fracture frequency, type, roughness, infill, shape and angle, hardness, and other notes are recorded on a drill-run basis.

Samples are taken continuously downhole within the prospective lithologies, along geological boundaries rather than by a pre-determined length, which represents best practice. Samples within geological similar units are selected at three metre intervals. Samples are marked for cutting by indicating the sample interval with a yellow paint marker and stapling a waterproof sample number tag on the core box. The drill core is cut in half with a diamond bladed core saw, using recycled water decanted from a settling tank. There is evidence that core samples are not always cleaned subsequent to cutting. Wherever the drill core is too broken for cutting, samples are selected by hand or with a spatula, and very rarely a mechanical splitter is used for core intervals too small for cutting with the saw.

Samples are collected by staff, placed into a previously numbered plastic bag along with a waterproof sample number tag indicating the sample depth interval and the sample number corresponding to the tag stapled to the core box. The plastic sample bag and tag are then sealed with a tamper-proof plastic tie embossed with the sample number.

Several sample bags are then placed into larger poly-woven plastic bags, weighed, and transported to the Alex Stewart Mendoza sample preparation facility by drivers from the Gastre community or by staff.

The remaining drill core is stored under cover at the core storage facilities in Gastre and Gan Gan.

Density determinations are made on a box by box basis for the entire drillhole. Technicians record the downhole interval marked on the box and the length of the sample contained within the box to obtain the recovery percentage. The volume of the sample is calculated by multiplying the core diameter (6.1 centimetres) by the recovered core length. The density is then calculated by weighing the core box, subtracting the weight of the wooden core box (previously set at 3,580 grams, but now set at the average weight of each new shipment of boxes), and dividing by the volume of the recovered sample. Boxes with more than 15% core loss are excluded from the database.

There are a number of potential sources of error when determining density values using this method, including the accuracy of the scale in use, the accuracy of the drill core recovery estimation, using a set weight for a wooden core box, and the crossing of lithological and/or mineralisation boundaries within the core box.

Since October 2008, drillholes numbered NV08-876 and above have had their density determined using the water displacement method, in addition to the box method. Older drillholes under examination have also had density determinations made using the water displacement method. An approximately 20 centimetres long piece of competent core is selected, quartered with a saw, washed, and dried on a hot plate for between five and ten minutes. The weight of the dry sample is recorded, and the sample is suspended on a length of string and completely submerged into a 1,000 milliliters capacity cylinder containing 600 milliliters of water. The displaced water volume is recorded, and the density is calculated by dividing the volume of the displaced water by the weight of the dry sample.

## Analysis

All diamond drill core samples at the Navidad Property have been analysed by Alex Stewart Assayers Argentina S.A. ("Alex Stewart") of Mendoza, Argentina. Alex Stewart is ISO 9001:2000 accredited for the preparation and chemical

analysis of mining exploration samples. On two separate occasions in 2003 and 2007,

- 24 -

---

Smee and Associates conducted a laboratory inspection and considered the laboratory to conform to industry best practice methods for analysis.

Upon receipt of the sample submission, each sample bag is weighed and the entire sample is removed from the bag and placed in a drying pan. Samples are dried at 70°C for up to 40 hours.

After drying, the entire sample is removed from the drying pan and jaw crushed to #10 mesh to reduce its fragment size so that 95% of the sample is less than two millimetres in size (which is monitored by subsequent screen tests). The entire sample is passed through a riffle splitter several times before a final split of 1.2 kilograms is collected.

At this point a 1.2 kilograms duplicate of the coarse reject is collected randomly from each analytical batch. This coarse reject duplicate is subsequently re-numbered as the original sample number with the suffix "DC" and then treated as a normal sample. The residual coarse reject is stored.

The sample is then pulverised ensuring that at least 80% of the material is less than 75 micrometres in size (80% passing through #200 mesh, also monitored by screen tests). A representative 250 gram split of the sample pulp is taken as the sample and pulp duplicates are routinely collected by the laboratory and assayed as part of their analytical quality control measures. The remaining pulp reject (approximately 950 grams) is stored for future reference.

The crusher a