PAN AMERICAN SILVER CORP Form 6-K July 25, 2007

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER TO RULE 13A or 15D-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the Month of: July, 2007 File No.: 000-13727 PAN AMERICAN SILVER CORP. (Translation of Registrant s Name into English) Suite 1500, 625 Howe Street Vancouver British Columbia, Canada V6C 2T6 (Address of Principal Executive Office) Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F: Form 20-F Form 40-F Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1). Yes No Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7). Yes No Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934. Yes If Yes is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82

Submitted herewith:

- 1. Form 43 101 Technical Report for the San Vicente Mine Expansion Project
- 2. Press Release dated July 20, 2007

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

PAN AMERICAN SILVER CORP.

Date: July 24, 2007 Robert Pirooz
General Counsel

TECHNICAL REPORT
FOR THE
SAN VICENTE MINE EXPANSION PROJECT
POTOSÍ BOLIVIA
Effective: June 6, 2007
PREPARED BY:

Martin Wafforn, P. Eng Michael Steinmann, P. Geo Douglas K. Maxwell, P.E.

1

TABLE OF CONTENTS

1.0 TITLE PAGE	5
2.0 TABLE OF CONTENTS	5
3.0 SUMMARY	5
3.1. Background	5
3.2. Property Ownership, Location and Description	5
3.3. Geology and Mineralization	6
3.4. Exploration and Development	6
3.5. Mineral Resource and Reserve Estimates as at December 31, 2006	7
3.6. Mining Operations	9
3.7. Authors Conclusions	9
3.8. Authors Recommendations	10
4.0 INTRODUCTION	10
5.0 RELIANCE ON OTHER EXPERTS	12
6.0 PROPERTY DESCRIPTION AND LOCATION	12
6.1. Mineral Tenure	12
6.2. Permits and Agreements	13
6.3. Environmental	14
7.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND	
PHYSIOGRAPHY	15
8.0 HISTORY	16
9.0 GEOLOGICAL SETTING	18
10.0 DEPOSIT TYPES	18
11.0 MINERALIZATION	21
12.0 EXPLORATION	24
13.0 DRILLING	25
13.1. Surface Diamond Drilling	26
13.2. Underground Diamond Drilling	29
14.0 SAMPLING METHOD AND APPROACH	31

15.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY	32
16.0 DATA VERIFICATION	34
17.0 ADJACENT PROPERTIES	34
18.0 MINERAL PROCESSING AND METALLURGICAL TESTING ii	34
11	

19.0 MINERA	AL RESOURCE AND MINERAL RESERVE ESTIMATES	37
19.1. Mineral 19.2. Mineral		40 41
20.0 OTHER	RELEVANT DATA AND INFORMATION	42
21.0 INTERP	RETATION AND CONCLUSIONS	42
22.0 RECOM	MENDATIONS	43
23.0 REFERI	ENCES	44
24.0 DATE		44
	ONAL REQUIREMENTS FOR TECHNICAL REPORTS ON DEVELOPMENT IES AND PRODUCTION PROPERTIES	44
	ound Mine Operations	44
25.2. Recovera	<u>ıbılıty</u>	48
25.3. Markets		51
25.4. Revenues		51
	mental Considerations	51 52
_	ion Expenditures	53 53
25.7. <u>Taxes</u>	nd Operating Costs	55 55
•	and Operating Costs	55 60
25.9. Economi 25.10. Mine L	· · · · · · · · · · · · · · · · · · ·	64
<u> 23.10. Willie L</u>	LIST OF FIGURES	04
Figure 1-1	Location of the San Vicente mine in Bolivia	65
Figure 1-2	San Vicente Mine Location Map in Potosi	66
Figure 1-3	San Vicente Mine General Site Layout	67
Figure 1-4	San Vicente Mine Mine Site General Layout	68
Figure 1-4a	San Vicente Mine, Mining Concessions	69
Figure 1-4b	San Vicente Mine, Geology Map	70
Figure 1-5	Longitinal Section of a Typical Shrinkage Stope	71
Figure 1-6	Longitudinal Section Showing the Modified Avoca Longhole Mining Method	72
Figure 1-7	San Vicente Mine Deposit Areas	73
Figure 1-8	Geology Map	74
Figure 1-9	San Vicente Process Plant Flow Diagram	75
Figure 1-10	Process Plant General Arrangement	76
Figure 1-11	Section of 6 de Agosto Vein	77
Figure 1-12	Section of Litoral Vein	78
	iii	

LIST OF APPENDICES

Appendix A Certificates and Consents Appendix B Diamond Drill Hole Intercepts Appendix C Channel Sampling Results Qualified Persons

Responsibility

Ø Certificate of Qualified Persons and Consent of Authors

Qualified Person

Responsibility	Quantica i cison	Registration
Mineral Resource Modelling	Michael Steinmann, PAS	P. Geo.
Mineral Reserves	Martin Wafforn, PAS	P.Eng.
Geology	Michael Steinmann, PAS	P.Geo.
Mine Planning	Martin Wafforn, PAS	P.Eng.
Metallurgy	Douglas K. Maxwell, Lyntek	P.E.
Process Plant Design	Douglas K. Maxwell, Lyntek	P.E.
	LIST OF TABLES	
Table 1 San Vicente Mineral Rese		8
Table 2 San Vicente Mineral Reso	purces	8
Table 3 References		11
Table 4 Mining Concessions		13
Table 5 Water Sources		15
	in Vicente Mine. (Modified from JICA, 1979)	20
••	e Veins Recognized Under Microscope	23
Table 8a Summary Data San Vices		27
Table 8b Summary Data San Vicente Underground Diamond Drill Holes		30
Table 8c Diamond Drilling Check Assays		33
Table 9 Lyntek Recommended Metal Recoveries Table 10 Anticipated Plant Metal Recoveries Table 11 Specific Gravity by Vein Table 12 Dilution Calculation		36
		37
		38
		39
Table 13 Resource Metal Prices ar		39
Table 14 San Vicente Mineral Res		40
Table 15 San Vicente Measured and Indicated Mineral Resources		41
Table 16 San Vicente Inferred Mineral Resources		42
Table 17 Mining Method Cost per tonne		46
Table 18 Mechanized Equipment		46
Table 19 Life of Mine Plan	A Estimate	47 52
Table 20 San Vicente Closure Cos		53
Table 21 Capital Cost Estimate Su		56
Table 22 Life-of-Mine Unit Opera	unig Costs	59 61
Table 23 Economic Model		
Table 24 Metal Price Sensitivity		62 62
Table 25 Metal Grade Sensitivity		63
Table 26 Capital Cost Sensitivity Table 27 Operating Cost Sensitivity	ts.	63
Table 28 Copper Grade Samples	ıy	63
Table 29 Copper Revenue Sensitiv	vity	64
1 aute 29 Coppet Revellue Selisitiv	vity	04

Registration

1.0 TITLE PAGE

This Technical Report has been prepared in accordance with the *National Instrument 43-101 Standards of Disclosure* for *Mineral Projects* (N.I. 43-101) and the contents herein are organized and in compliance with *Form 43-101F1* Contents of the Technical Report (Form 43-101F1). The first two items are the Title Page and the Table of Contents presented previously in this report. They are mentioned here simply to maintain the specific report outline numbering required in Form 43-101F1.

2.0 TABLE OF CONTENTS

See discussion in Section 1.

3.0 SUMMARY

3.1. Background

This Technical Report has been compiled from studies completed by an international team of professionals and consultants for the San Vicente Mine Expansion Project. Mr. Martin Wafforn, P. Eng. Vice President of Mine Engineering of Pan American Silver Corp. (PAS), Dr. Michael Steinmann, P. Geo. Senior Vice President of Exploration and Geology of PAS, and Mr. Douglas K. Maxwell, P.E. of Lyntek Inc. are the co-authors of this report. Each of Mr. Wafforn, Dr. Steinmann and Mr. Maxwell is a Qualified Person as that term is defined in N.I. 43-101. The goal of the San Vicente Mine Expansion Project described in this Technical Report is to expand the current mine capacity from approximately 250 tonnes per day (TPD), to 750 TPD. The San Vicente Mine Expansion Project includes the construction of a new process plant and tailings storage facility at the mine site.

3.2. Property Ownership, Location and Description

PAS has a 94.999% interest in Pan American Silver Bolivia (PASB), a Bolivian company that holds a 50% joint venture interest in, and is the operator of the San Vicente property. The remaining interest in the joint venture is held by Corporación Minera de Bolivia (COMIBOL), the Bolivian state mining company. Trafigura Beheer B.V. (Trafigura), a commercial trading company domiciled in Holland holds a 5% interest in PASB with the remaining 0.001% being held by Pan American Silver Peru S.A.

Pursuant to the joint venture agreement entered into with COMIBOL in 1999, with respect to the development of the San Vicente property, PASB is obligated to pay COMIBOL a participation fee of 37.5% of the operations cash flow. Once the commercial production phase of the San Vicente Mine Expansion Project begins, the COMIBOL participation fee will be reduced by 75% until PASB recovers its investment in the property. Thereafter the COMIBOL participation fee will revert back to 100% of the participation fee described above.

In May 2007, PAS purchased the 40% interest in PASB that was held by Empresa Minera Unificada S.A. (EMUSA), a Bolivian company. EMUSA has retained 80% of a 2.0% net smelter return royalty interest in the property that is payable only, after recovery of the costs to complete the San Vicente Mine Expansion Project from January 1, 2007 up to the point of commercial production; after recovery of the cost of the purchase of EMUSA s 40% interest in PASB; and is only payable in a calendar quarter where the average price of silver is \$9.00 per ounce or greater.

The San Vicente silver-zinc mine is located at latitude 21°-16′south and longitude 66°-19′west in the southern end of Bolivia in the Province of Sud-Chichas, Department of Potosí. The mine is 460 kilometres south of the city of Oruro and 300 kilometres west of Tarija. Access is by dirt road 100 km west of the town of Tupiza and 150 km south of Uyuni. The property is in the Andean High Plateau (Altiplano), at approximately 4,400 metres above sea level, with semi-arid climatic conditions. The land is sterile and rugged.

5

The project consists of 13 mining concessions totalling 7,075 hectares that are part of COMIBOL s contribution to the joint venture. Of the concessions, five, totalling 662 hectares, start with the name Aguas which is Spanish for water. However, all of the concessions include the rights for mining, water and surface usage. PASB has continually complied with the joint venture agreement (and various addendums thereto), and as a result the project and the concessions are in good standing. All mining property concessions of the San Vicente property are in the name of COMIBOL, and contractually PASB is responsible for paying the annual mining tenure tax. These payments are currently up to date.

3.3. Geology and Mineralization

The regional sedimentary sequence consists of a basement of a thin sequence of Palaeozoic marine siliciclastic sediments overlying non-continuous cretaceous continental sediments, and a package of thick continental clastics of Tertiary age of the Potoco and San Vicente Formations. Various thin intrusive volcanic flows with an intermediate composition are also included in the Tertiary sequence. The Palaeozoic sediments were folded before the deposition of the Cretaceous sediments. Sedimentation in the tertiary basin was controlled during the Upper Oligocene and Lower Miocene periods by thrust faults to the east and west.

The lithology of the Project area is relatively simple. Included are the fanglomerate facies of the San Vicente formation, which are in contact with Ordovician shales along the San Vicente fault. The fanglomerate consists of poorly sorted conglomerate with clastic sub angular fragments of Palaeozoic sediments cross cut by quartz veins. The matrix is red in colour and consists of iron bearing sandstone.

The structural environment of the mine area consists of a series of pre-mineral faults dipping 50-80 degrees and striking west-northwest. They are part of the first and second tension shearing pattern of structures with an environment of tension running east-west caused by a thrust of the San Vicente fault.

Mineralization in the district is known to cover an area of 3 by 4 kilometres to a depth of 300 metres. It consists of vein mineralization in pre-existing faults, dissemination in brecciated conglomerates in the San Vicente fault and mineralization in dacitic dykes.

3.4. Exploration and Development

There has been sporadic mining activity in the San Vicente area since colonial times. Initial exploitation was the mining of oxidized silver from exposed veins. The first written records of mining activity were in 1820, when the area was named the Guernica Mine. Several different owners operated the mine from 1911 through 1950. From 1950 until 1952, the Aramayo Mining Company operated the mine. In 1952, the Bolivian government nationalized the mine and placed it under control of COMIBOL. Following the discovery of new silver and zinc veins in the late sixties, COMIBOL constructed the Vetillas concentrating plant in 1972 with a capacity of 400 tonnes per day. The mine was operated by COMIBOL until 1993, at which time mining was suspended pending the privatization of mining in Bolivia. In 1995, the San Vicente property was offered for a joint-venture contract by COMIBOL. On June 21, 1999, PASB signed a joint-venture agreement (Contrato de Riesgo Compartido) with COMIBOL. In late 2001, PASB and COMIBOL, the Bolivian state mining company that optioned the San Vicente property to PASB, entered into a two-year toll milling agreement with EMUSA, to process up to 250 tonnes of San Vicente s ore per day at EMUSA s nearby Chilcobija mill. In late 2005, PASB and COMIBOL entered into an additional 7-month toll milling agreement with EMUSA to process up to 250 tonnes of San Vicente s ore per day at EMUSA s nearby Chilcobija mill. This toll milling agreement was renewed for an additional 150,000 tonne program that is currently in progress. The economic analysis assumes that COMIBOL will approve an additional program for mining in 2008 and that the toll milling agreement will be extended.

The PASB exploration program began in 1999 following the execution of the joint venture agreement with COMIBOL. The work started with mapping and sampling the surface and was followed by the construction of drill access roads and platforms. Contracts were established with Leduc Drilling and Exploration Core Drilling S.R.L., and a total of 21 holes (3,831 m) were drilled from surface using HQ core and a further 8 holes (405 m) from underground using NQ core. These holes targeted the old stoping areas, continuations of the principal veins along strike and at depth, and other veins to the northeast and south of the mine. Since the start of the exploration program, a total of 109 diamond core holes have been drilled, with 2,575 vein intercepts sampled with varying lengths from 0.2 metres to 7.14 metres.

In addition to the diamond drilling, a sampling program was started in the mine. An initial 41 channel samples were taken in four of the principal structures (6 de Agosto, Adela, Litoral and Unión). The results of the surface drilling showed wider intersections than had previously been mined underground and so the channel samples were unable to explore the full width of each vein. After this realization, mining work was undertaken to develop small cross section cross cuts (1.5 m by 2.0 m) at a maximum of 75 metres apart along strike in the four veins on levels 0, -30, -70 and -110 in order to explore the full economic width of each vein. Some 5,807 channel samples were taken by COMIBOL and a further 2,449 channel samples taken by PAS. Some of the PAS channel samples replace the COMIBOL channel samples where the vein width is actually greater than was initially thought by COMIBOL.

Exploration activities continued in 2004 with the concept of drilling 13,919 metres of surface and underground diamond drilling, 2983 metres of underground development and resampling of historical reserve blocks for purposes of resource definition and exploration. Mine development and production to supply the Chilcobija mill continued in 2005, 2006 and 2007 and provided additional channel sample data for the resource database. A requirement of the interim mining programs agreed between PASB and COMIBOL was that sufficient additional development work be undertaken so that the total quantity of ore developed and ready for mining is maintained. This development provided additional channel samples in the principal and other structures.

3.5. Mineral Resource and Reserve Estimates as at December 31, 2006

The proven and probable mineral reserves at the San Vicente mine as at December 31, 2006 are estimated to be as shown in Table 1. This mineral reserve estimate was calculated using a price of \$9.00 per ounce of silver and \$2,100 per tonne of zinc, and was prepared under the supervision of and reviewed by Martin Wafforn, P. Eng. Vice President of Mine Engineering of PAS and Dr. Michael Steinmann, P. Geo. Senior Vice President of Exploration and Geology of PAS. Each of Mr. Wafforn and Dr. Steinmann is a Qualified Person as that term is defined in N.I. 43-101.

Table 1 San Vicente Mineral Reserves

Reserve	Grams of Silver		
Category	Tonnes	per tonne	Z n (%)
Proven	1,988,538	304	3.85
Probable	1,069,647	430	2.66
TOTAL	3,058,185	348	3.43
Notes:			

- 1. Total grades of silver and zinc before mill recoveries of 85.0% for both metals are applied.
- 2. PAS s share is 94.999% of the total mineral reserves,
- 3. San Vicente s mineral reserves have been estimated at a minimum mineralized width of 0.8 metres and at a cut off value per tonne of \$34 for shrinkage stoping and \$30 for longhole stoping.
- 4. The geological model employed for San Vicente involves geological interpretations on sections and

plans derived from core drill hole information and channel sampling,

5. Mineral

reserves have been estimated using the O Hara dilution formula, which typically adds 20% to 50% dilution at zero grade depending on dip angle and vein width.

6. Mineral

reserves have been estimated using a mining recovery of 90% with a further 5% subtracted for other mining losses.

7. Mineral

reserves were estimated based on the use of longhole stoping in the Litoral Ramal 2 vein and shrinkage stoping in all other veins. The mining and processing rate is assumed to be 750 tonnes per day on completion of the new plant.

8. Mineral reserves for the principal structures are estimated with a 3 dimensional block model using datamine software. Mineral reserves for minor structures are estimated using polygonal methods on

reserves were estimated using a price of \$9.00 per ounce of

9. Mineral

longitudinal sections.

silver and

\$2,100 per

tonne of zinc.

10. Environmental,

permitting,

legal, title,

taxation, socio

economic,

political,

marketing or

other issues are

not expected to

materially

effect the above

estimate of

mineral

reserves.

The measured, indicated and inferred mineral resources at the San Vicente mine as at December 31, 2006 are estimated to be as shown in Table 2. This mineral resource estimate was calculated using a price of \$9.00 per ounce of silver and \$2,100 per tonne of zinc, and was prepared under the supervision of and reviewed by Martin Wafforn, P. Eng. Vice President of Mine Engineering of PAS and Dr. Michael Steinmann, P. Geo. Senior Vice President of Exploration and Geology of PAS. Each of Mr. Wafforn and Dr. Steinmann is a Qualified Person as that term is defined in N.I. 43-101. The mineral resources shown in Table 2 are in addition to the mineral reserves shown in Table 1.

Table 2 San Vicente Mineral Resources

Class Reserve		Grams of Silver	
Category	Tonnes	per tonne	Z n (%)
Measured	224,953	74	1.15
Indicated	445,244	294	3.67
Inferred	531,223	243	2.34
Notes:			

- 1. PAS reports mineral resources and mineral reserves separately. Reported mineral resources do not include amounts identified as mineral reserves.
- 2. PAS s share is 94.999% of the total mineral resources.
- 3. Inferred mineral resources have a great amount of uncertainty as to their existence and as to whether, they can be mined legally economically. It cannot be assumed that all or any part of the inferred mineral resources will ever be upgraded to a higher category.

4. The geological model employed for San Vicente involves geological interpretations on sections and plans derived from core drill hole information and channel sampling,

5. Mineral

resources have been estimated using the O Hara dilution formula, which typically adds 20% to 50% dilution at zero grade depending on dip angle and vein width.

6. Mineral resources have been estimated using a mining recovery of 90%.

7. Mineral

resources were estimated based on the use of longhole stoping in the Litoral Ramal 2 vein and shrinkage stoping in all other veins. The mining and processing rate is assumed to be 750 tonnes

per day on completion of the new plant.

8. Mineral

resources for the principal structures are estimated with a 3 dimensional block model using datamine software. Mineral resources for minor structures are estimated using polygonal methods on longitudinal sections.

9. Mineral

resources were estimated using a price of \$9.00 per ounce of silver and \$2,100 per tonne of zinc.

permitting, legal, title, taxation, socio economic, political, marketing or other issues are not expected to materially effect the above estimate of

10. Environmental,

11. Mineral

mineral resources.

resources that are not mineral reserves do not

have demonstrated economic viability.

12. A cut off value per tonne of \$17.00 was used for inclusion in the mineral resources.

8

The resource estimate involved statistical and geostatistical interpolation. Composites and 3-dimensional models were constructed utilizing Data Mine®, commercial mine modeling software. Variables interpolations were done for silver and zinc grades and the true thickness of economic mineralization. Ordinary kriging was applied in two phases, first to Pan American silver sampling data only (channels and drill holes) and later to remnant blocks containing data collected by COMIBOL. Variogram models were obtained for each variable and for each vein which were divided in blocks of 40 metres x 20 metres (strike and dip. The blocks have been classified as measured, indicated or inferred based on the relative confidence of the supporting data for each evaluated block.

3.6. Mining Operations

The existing mine was designed and built to extract from steeply dipping narrow veins using conventional shrinkage stoping. Levels have been developed at 30 to 40 metre intervals and include the +70, +35, 0, -30, -70, and -110 levels. For reference, the 0 level is at an elevation of 4,440 metres above sea level. The main accesses to the mine are via the San Jose adit at the 0 level and the San Juan adit on the -30 level. The vertical Pelayo shaft extends from the surface above the 0 level down to the -110 level, which is currently the deepest level in the mine. The inclined Rampa shaft also extends down to the -110 level. Existing track drift dimensions are small at 2.4 by 2.3 metres and therefore mine cars and locomotives are restricted to 40 cubic feet and 6 tonnes respectively.

The San Vicente Mine Expansion Project includes the construction of a new 750 tonnes-per-day flotation process plant at the mine site. The implementation of the project will require an increase in the mine s production capacity to match the production rate of the new mill. The mine produced 300 tonnes per day from shrinkage stoping in 2003. The mine intends to continue using shrinkage stoping in the narrow vein stopes and increase the conventional mining capacity by improving the Pelayo shaft and the haulage equipment. The remainder of the production will be by longhole mining using mechanized equipment and will require the development of a new decline from surface for equipment access and for ore haulage using mine trucks. The discovery by diamond drilling of the Litoral Ramal Dos vein has provided a wide and high-grade addition to the mine resource base. This vein is amenable to longhole mining which may allow a reduction in mine operating costs and will allow a higher mining recovery of the wider ore zones than could be achieved through shrinkage mining. PASB has determined that these advantages warrant the introduction of longhole mining methods.

3.7. Authors Conclusions

The results of the study for the San Vicente Mine Expansion Project indicate that the project is technically feasible and economically viable using PAS ore reserve silver and zinc prices. These prices are considerably lower than the current spot market prices. The economics take into account an increase in the mining taxation rate that has been discussed by the Bolivian government but not yet implemented. The project will provide jobs and economic stimulus to an area that is economically depressed, and can be constructed in and operated in an environmentally sound manner. The project enjoys strong support from the union that represents the current employees at the mine and current indications are that the Bolivian national mining company COMIBOL and joint venture partner in the project will provide support as well. There have been some threats of nationalization of mining projects in Bolivia, however this has not occurred to date and the risk is balanced by the high projected IRR of the project and the relatively small cash outlay that is required when considering the cash benefits that will be received from on-going operations during the construction period.

The results of the metallurgical testwork as well as the previous processing of San Vicente ore at the Vetillas plant and the current processing of San Vicente ore at the Chilcobija plant give the authors a high degree of confidence that the projected metallurgical recoveries of 85% for silver and 85% for zinc will be realized.

The economic analysis calculates an Internal Rate of Return of 22% and capital payback in 2.9 years. The Net Present Value is \$23.6 million at a 10% discount rate and is \$14.4 million at a 15% discount rate. The undiscounted after tax cash flow is \$53.8 million. PAS s 95% share of the undiscounted after tax cash flow

is estimated to be \$50.9 million. Capital cost is estimated to total \$40.5 million in 2007 and 2008. The San Vicente Mine Expansion Project is not sensitive to capital fluctuations of up to 25% which is the expected accuracy of the engineering estimate. When in full production, the San Vicente mine unit operating costs are expected to total \$48.16 per tonne.

The life of mine plan presented in this study is based solely on proven and probable mineral reserves. The life of mine plan extends until 2019. Any conversion of the mineral resources to proven and probable mineral reserves and any new exploration discoveries will add to the mine life.

The environmental license for the San Vicente mine is now in the process of being updated to reflect the proposed expansion of the mine, construction of a new processing plant, new tailings facility and associated infrastructure. PAS is committed to developing the San Vicente Mine Expansion Project by minimizing and mitigating environmental impacts in accordance with Bolivian regulations, industry best management practices and its own Environmental Policy.

3.8. Authors Recommendations

It is the recommendation of the co-authors of this Technical Report that the San Vicente Mine Expansion Project be implemented. The agreement with COMIBOL stipulates that this construction must be completed within 18 months of approval by COMIBOL of an engineering report that was presented to them (the permission was received in July 2007).

The co-authors recommend that the San Vicente Mine Expansion Project should proceed according to the designs and schedules contained in this Technical Report. PAS currently has sufficient cash to develop this project and does not need to arrange for project financing. The next key step will be the award of an EPCM contract for the construction of the new process plant and upgraded infrastructure. The co-authors recommend that the mineral reserve and resource statements presented herein be adopted.

4.0 INTRODUCTION

This Technical Report has been prepared in accordance with NI 43-101 and the format and contents of this report are intended to conform to Form 43-101 F1. This Technical Report has been prepared for PAS for the purposes of: Reporting and summarizing the results of the studies shown in Table 3 into the feasibility of the San Vicente Mine Expansion Project, and presenting the technical basis for the reserve and resource estimate for the San Vicente Mine property.

Mr. Martin Wafforn, P.Eng., PAS s Vice President of Mine Engineering serves as the Qualified Person with respect to the mineral reserve statements described herein and sections 1, 2, 3, 4, 5, 6, 7, 8, 19, 20, 21, 22, 23, 24 and 25 of this Technical Report and the figures 1-4, 1-4a, 1-5 and 1-6, contained in this Technical Report. Mr. Wafforn last visited the San Vicente mine site from January 21st to January 23rd, 2007.

Dr. Michael Steinmann, P.Geo., PAS s Senior Vice President of Exploration and Geology serves as the Qualified Person with respect to the mineral resource statements described herein and sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23 and 24 of this Technical Report and the figures 1-1, 1-2, 1-3, 1-4b, 1-7, 1-8, 1-11 and 1-12 contained in this Technical Report. Dr. Steinmann last visited the San Vicente mine site from January 21st to January 23rd, 2007.

Mr. Maxwell, P.E. of Lyntek Inc. serves as a qualified person with respect to the mineral processing and metallurgical testing, as well as process design, capital cost estimates for the plant and infrastructure, and operating cost estimates for the plant and for sections 18 and 25 and the figures 1-9 and 1-10 of this Technical Report. Mr. Maxwell has not visited the San Vicente mine site. Other members of the Lyntek team visited the San Vicente site from August 12, 2006 to August 18, 2006 and have reviewed site photos and discussed the project with Mr. Maxwell.

Elmer Ildefonso a consulting mining engineer to PAS performed the geostatistical evaluation and resource modelling under the direct supervision of Dr. Steinmann.

Sources of information and data contained in this Technical Report or used in its preparation are shown in Table 3. **Table 3 References**

Report	Section
Assessment of Borrow Sources for concrete Aggregates Worley, Parson, Komex April 4, 2007	25
San Vicente Mine Site D Tailings Facility Preliminary Design Worley, Parsons, Komex April 12, 2007	25
Interim Report Geotechnical Engineering Assessment of the Proposed Process Plant	25
Worley, Parsons, Komex January 22, 2007 ²	
Evaluation of Water Sources for the San Vicente Mine Worley, Parsons, Komex October 31, 2006	3, 6, 7, 25
PASB Internal Report Updating COMIBOL on Project power supply E. Robles January, 2007	25
Shaft and Hoist Review and Recommendations Dynatec Mining Corporation October 19, 2005	25
Metallurgical Study of the Metallic Minerals at the San Vicente Mine conducted at TECSUP lab,	18, 25
Lima, Peru- A. Vargas October, 2004 ⁴	
Metallurgical Study of the Metallic Minerals at the San Vicente Mine conducted at Quiruvilca Mine, Peru-	18, 25
G. Portales September, 2005	
Determination of Bond Work Index Universidad Nacional de Ingeniería, September, 2005	18, 25
Numerous correspondences and reports Estudios Mineros latest in May, 2007	25
Preliminary Design and Evaluation of Alternate Tailings Disposal Sites Komex October 28, 2005	18, 25
Electrical Project of San Vicente (Upgrading transmission lines and sub-stations) Alicon SRL August 29,	25
2005	
Upgrading existing electrical facilities Empresa de Servicios Eléctricos	25
Feasibility Study Report San Vicente, Bolivia Lyntek Inc.October, 2006	18, 25
Basic Engineering Interim Report San Vicente, Bolivia Lyntek Inc.December, 2006	18, 25
Notes:	

1. PAS retained Estudios

Mineros, an Engineering company based in Lima, Peru, to assist with the preparation of the mine plan and schedule. The work performed included a determination of the required capacity of the Pelayo shaft, preliminary

geotechnical report,

recommendation of dilution

quantities to be applied, Litoral ramp design, and development layouts for each of the major levels, and short and long-term mine plans.

2. PAS retained Worley Parsons Komex (Komex) of Calgary, Alberta, Canada to provide engineering and reports on the design of the tailings storage facility, geotechnical assessment of the proposed plant location as well as on ground water hydrology and the location of the required water supply for the San Vicente Mine Expansion Project.

3. PAS retained
Dynatec USA of
Salt Lake City,
Utah, USA to
inspect the
Pelayo shaft and
hoisting system.
Their scope
includes
replacing the
mine hoist, the
small headframe
and making
necessary repairs
in the shaft.

Alfredo Vargas P.E. was retained to supervise the metallurgical testwork and to compile the data.

5. Lyntek

Incorporated of Denver, Colorado, USA has been retained to provide detailed engineering and procurement for the new flotation process plant and selected mine infrastructure. Lyntek prepared a feasibility study report in October 2006 and a basic engineering interim report in December 2006 concentrating on the following specific areas: 1) Design of a new concentrator, 2) Milling, 3) Complete process circuit, flotation circuit, and metallurgy, 4) Electrical requirements, and 5) Plant infrastructure. Their work included providing capital and operating cost estimates for the above areas as well as

preparing a project schedule.

6. Sistemas de
Agua of Bolivia
were retained for
water well
drilling.

The co-authors have reviewed the information contained in these documents and included in this Technical Report and determined in their professional judgement that such information is sound and confirm and approve of such information.

11

All tonnages stated in this Technical Report are dry metric tonnes (dmt) unless otherwise specified. Ounces pertaining to silver metal content are expressed in troy ounces. All dollar values stated in this report are U.S. dollars.

5.0 RELIANCE ON OTHER EXPERTS

Martin Wafforn, Michael Steinmann and Douglas Maxwell, as co-authors of this Technical Report, have relied upon the references, opinions and statements from the following Non-Qualified Persons contained within the references listed in Section 23 References. These reports, documents, and statements were found to be generally well organized and presented, and where applicable, the conclusions reached are judged reasonable.

MINCO of Bolivia were retained to provide the environmental assessment as well as to conduct field sampling, data interpretation and permit application.

It is assumed that technically qualified and competent persons prepared these reports and documents. It is the authors opinion that the materials referenced above are prepared and presented according to mining and engineering industry standards. The co-authors conclude that the contents are reasonably organized and presented and the conclusions reached are prudent.

6.0 PROPERTY DESCRIPTION AND LOCATION

The San Vicente silver-zinc mine is located at latitude 21°-16′south and longitude 66°-19′west in the southern end of Bolivia in the Province of Sud-Chichas, Department of Potosí. The mine is 460 kilometres south of the city of Oruro and 300 kilometres west of Tarija. Access is by dirt road 100 km west of the town of Tupiza and 150 km south of Uyuni. The property is in the Andean High Plateau (Altiplano), at approximately 4,400 metres above sea level, with semi-arid climatic conditions. The land is sterile and rugged. The following figures show the location of the San Vicente Mine:

- § Figure 1-1 Location of the San Vicente Mine in Bolivia
- § Figure 1-2 San Vicente Mine Location Map in Potosi
- § Figure 1-3 San Vicente Mine General Site Layout
- § Figure 1-4 San Vicente Mine, Mine Site General Layout (view of the mine area)
- § Figure 1-4a San Vicente Mine, Mining Concessions
- § Figure 1-4b San Vicente Mine, Geology Map

Property boundaries are located by co-ordinates and are not marked physically in the field.

The locations of all know mineralized veins and structures containing the mineral reserves and mineral resources are shown in Figure 1-8. The plant site, tailings facility, mine workings and other infrastructure are shown in Figures 1-3 and 1-4.

6.1. Mineral Tenure

The Project consists of 13 concessions, with a combined area of 7,075 hectares as shown in Table 4. Of the concessions, five with an area of 662 hectares start with the name Aguas which is Spanish for Waters. All of these concessions were contributed to the joint venture by COMIBOL in exchange for its participation in the project. COMIBOL however retains ownership of the concessions. PASB has the same exclusive right on all of the concessions to explore, develop and exploit as well as the right to marketing of the products. The use of all other mining resources existing on the concessions are included, as well as water rights, surface rights, its easements, uses and customs, without any limitation or restriction. All of the concessions, with the exception of Cinturón I and Cinturón II, were granted under the old mining code that was superseded on March 17th, 1997 by Law No. 1777, the new mining code. The current mining code provides that the previously awarded mining rights for the properties are still valid as long as the

registration requirements have been met. All San Vicente mining concessions are in good standing, according to article 93 of the Bolivian Mining Code. PASB has complied with the joint venture agreement (and various addendums thereto) and as a result the project and the concessions are in good standing.

Table 4 Mining Concessions

Concession	Hectares
Aguas Confianza	125
Aguas Confianza 2	145
Aguas Jayajmayu	103
Aguas San Francisco	60
Aguas San Vicente 2	229
Sub Total	662
Apolo 2	3,467
Codiciada	229
Complemento	16
La Confianza	10
Sucre	28
Marcela	1,163
Cinturón	225
Cinturón 2	1,275
Sub Total	6,413
Total Mining Concessions	7,075

Since 1997, the granting of concessions in Bolivia has been legislated by the Political Constitution of the State, under Mining Code No. 1777. Code DS 23230-A authorizes COMIBOL to grant concessions and mining centers in Lease and Joint Venture agreements. Supreme Decrees and Laws regulate taxation, environmental regulations, and administrative matters for joint ventures and leases.

Mineral resources, whether surface or underground, are the domain of the State, and may be granted for Lease and Joint Venture agreements for their exploitation as stated by Article 136 of the Political Constitution of the State. Bolivian incorporated companies, foreign companies, or individuals may possess mining concessions (with the exception of: minors, government employees, members of the armed forces, police, and relatives of people employed in the aforementioned), in accordance with Chapter II, Part I of the Mining Code (Articles 16 to 23). Foreigners are not permitted, according to article 25 of the Political Constitution of the State and article 17 of the Mining Code, to exploit concessions within 50 km of any international boundary but they are authorized to subscribe to agreements to form Joint Venture Companies in said areas. (San Vicente is 62 km from the Argentina border). Once a mining concession has been granted, the concessionaire can explore and exploit ores inside the concession, including tailings and residual material. Mining concessions cannot be transferred, sold, or mortgaged.

6.2. Permits and Agreements

Pursuant to the Joint Venture Agreement between PASB and COMIBOL, PASB is required to pay to COMIBOL a participation fee of 37.5% of the operations cash flow after deducting management fees. Once the commercial production phase of San Vicente begins, the COMIBOL participation fee will be reduced by 75% until PASB recovers

its investment in the property. Thereafter the COMIBOL participation will revert to 100% of the participation fee described above.

In the latest amendment, PASB was authorized to execute a program of mining and toll milling at the Chilcobija plant of 150,000 tonnes of ore. This decree allows time for execution of the projects outlined in the feasibility study while permitting mining and milling operations, providing cash flow to COMIBOL and PASB and addressing the social issues relating to the San Vicente miners. During this program, COMIBOL participation is 50% of operating cash flow.

In May 2007, PAS purchased the 40% interest in PASB held by EMUSA. 80% of a 2% net smelter return royalty interest in the property has been retained by EMUSA. This royalty is payable only: (1) after PASB recovers the costs to develop the project from January 1, 2007 up to the point of commercial production; (2) recovery of the cost of the purchase of EMUSA s 40% interest in PASB, and (3) is only payable in a calendar quarter where the average price of silver is \$9.00 per ounce or higher.

6.3. Environmental

The environmental license for the San Vicente mine is now in the process of being updated to reflect the proposed expansion of the mine, construction of a new processing plant, new tailings facility and associated infrastructure. The existing license only contemplated the operation of the mine where the ore was processed off site by EMUSA at the Chilcobija plant under a toll milling contract. The existing environmental license also included the provision for all tailings produced from the processing of San Vicente ores at the Chilcobija plant to be permanently stored at a tailings facility near the plant. The responsibility for the design, operation and permitting of this tailings facility was part of the responsibilities of EMUSA under the terms of the toll milling contract.

PASB contracted the Bolivian consulting firm of Minco to carry out an environmental baseline study, ALBA, as they are known for the acronym in Spanish, in 2001. Between 2001 and the present, this baseline information has been complemented with semi-annual monitoring of air, soil and water quality parameters at various monitoring locations in the vicinity of the San Vicente Mine. This existing information will be further complemented by a further round of sampling to establish the baseline conditions for the proposed expansion of the San Vicente Mine.

Minco is currently in the stage of preparing the Environmental Impact Study, or EEIA, as it is known under Bolivian legislation, for submittal to Bolivian environmental authorities. The main incremental impacts resulting from the proposed expansion of the mine are related to:

- § Construction of a new tailings facility in a valley that is tributary to the San Vicente River, downstream of the mine;
- § Construction of a new processing plant on the south side of the San Vicente river valley between the proposed location of the tailings facility and mine;
- § Increased groundwater use in the new plant; and
- § Waste rock storage from mine development.

Pan American Silver is committed to developing the San Vicente Mine Expansion Project by minimizing and mitigating environmental impacts in accordance with Bolivian regulations, industry best management practices and its own Environmental Policy.

The Vetillas plant and old tailings will not be used for the San Vicente Mine Expansion Project, and any environmental liability related to the Vetillas tailings is COMIBOL s responsibility as specified in the Joint Venture Agreement.

There are no other known environmental liabilities.

7.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

Access to the San Vicente mine is by dirt road from the towns of Tupiza or Uyuni. Tupiza is approximately 100 kilometres east. There is a road from Tupiza to the border with Argentina, which is to the south. Tupiza is connected to the rail system, which serves Bolivia and connects with the ports of Arica and Antofagasta in Chile. Zinc concentrates produced at EMUSA s Chilcobija are loaded to rail cars in Tupiza and transported by rail to Antofagasta. Uyuni is another hub for the rail line and is 119 road kilometres to the north of San Vicente. Concentrates produced at the new San Vicente mill in San Vicente will be transported to Uyuni to be loaded onto rail cars. The roads from Uyuni and Tupiza are open year round; nevertheless, in the rainy season some sections suffer from landslides and flooding and may close from time to time. There are gravel airstrips near both Uyuni and Tupiza however; they do not have regularly scheduled plane service.

Plant equipment and heavy equipment for the San Vicente Mine Expansion Project will be transported via road to the plant site. The best route is via the town of Uyuni either from La Paz in the north or from Arica or Antofagasta to the West. The route from La Paz starts with a paved highway to the town of Challapata. After Challapata, the paved highway becomes a heavily traveled gravel road that is the major North/South route through the country. Depending upon the season of the year, this road is normally sufficiently graded to carry light vehicular traffic. There are several rivers that must be forded between Challapata and Uyuni. The road from Chile and the port of Antafogasta up to the Bolivian Border is in good condition. The road from the border to the town of Uyuni was upgraded recently. The road from Uyuni to San Vicente is 119 kilometres and the last 88 kilometres of this road will be upgraded to an all weather road in particular five areas where rivers or streams are crossed.

Climatic data from the weather station in Atocha (60 kilometres to the Northeast) reflects weather conditions in the Altiplano in the south of Bolivia. Daytime temperatures range from 4°C in June and July to 14°C in December and January. The winter months are May to September and night time temperatures are frequently below zero with extremes of minus 15°C. Average annual rainfall is 190mm, with no rain from May to September. Rainfall occurs mainly in the summer months, when up to 20mm of rain can fall in a day.

The continuous fresh water supply requirements for the new San Vicente concentrator are calculated to be 22 litres per second. A combination of the water wells drilled and the surface water sources within the area will be required to provide the required water supply. The four confirmed water sources within the immediate plant site vicinity are shown in Table 5:

Table 5 Water Sources

Source Rio San Vicente	Reported Flow Rate 2 to 3 L/Sec.	pH 3.5
Mine Discharge	2 to 3 L/Sec.	3.5
Vetillas Mill	14 L/Sec.	3.5

Angosto Mica 18 to 20 L/Sec. 7.0 to 8.0

Angosto Mica is a proven water source that supplied water to the Vetillas Mill when it was in operation. It is located some 16 kilometres from the plant site and has an existing concrete dam that will be rehabilitated. As the new power line that will be constructed to supply the new plant will pass close by the Angosto Mica dam, a power line can be run down to the selected pump station area. Water from the dam will be pumped to a concrete storage sump that will be located near Vetillas. Water from the Vetillas River will also be pumped to this storage sump.

The Vetillas Mill is not on a mining concession owned by PASB, however, it is part of the assets that COMIBOL contributed to the joint venture. There are verbal agreements that San Vicente has the right to use part of the Vetillas Mill water source, however, for the purposes of

this report and for the purposes of the economic analysis it has been assumed that Angosto Mica and other water sources will supply the water to the project. As can be seen from Table 5 the surface water sources only just cover the projected requirements of the mine and some additional water well drilling is recommended by the authors to provide a more plentiful water supply.

At this time, only one domestic water source is being considered for use and is located 2.7 km from Vetillas. This well was drilled and cased by Komex and the initial pump tests from this well were reported to be 10L/sec of water flow at a pH = 7.0. Martin Wafforn, one of the authors of this Technical Report, has verified this number from the report Evaluation of Water Sources from the San Vicente Mine by Worley, Parsons, Komex. Actual flow rates are yet to be confirmed by additional pump testing.

A pump will be installed in this well to pump water to a domestic water storage tank that is located at the man camp in Vetillas and a distribution pump at the storage tank will supply the water requirements for the man-camp. A second booster pump located at the Vetillas storage tank will pump water to a second domestic water storage tank that is located at the San Vicente concentrator. A distribution pump at this second water storage tank will provide the mine, mill and the mine offices with domestic water.

The power supply must be upgraded to meet the increased electrical demand from the new mill and the expanded facilities. The existing power supply is via a 27.7 kilometre long 15 Kv, 2MVA, line from a substation that is owned and operated by a cooperative in Telamayu. A new 34 Kv, 5MVA, electrical transmission line and associated sub stations and switch gear will be constructed parallel to the existing line so that the power supply is maintained to the town and the mine during the construction period. After the new electrical transmission line has been commissioned, the old one can be removed.

The area is poorly vegetated. With the exception of those employed at the mine there are very few other inhabitants in the area. The only use of the ground, other than for mining activities, is a wild pasture for llamas.

The property is in the Andean High Plateau (Altiplano) at an average elevation of about 4,400 metres above sea level. Elevations in the immediate area of the mine vary from 4,300 metres to 4,550 metres above sea level. The property is in an historical mining area with a sufficient supply of experienced mining personnel. The project holds sufficient mining claims and surface rights for all of the mining buildings, processing plant, tailings dam etc for all of the operations that are in the mine plan.

8.0 HISTORY

The area of San Vicente has been sporadically exploited since Colonial times. The first written records of mining activities are from 1820 when the mine was known as Guernica mine. It was operated under this name from 1820 to 1830. The area was originally exploited for Silver Oxide and some of the old mine workings are still visible today. The mine was closed from 1880 to 1910 and then operated by various owners between 1911 and 1950. A Chilean company operated the mine in the 1920 s. Between 1950 and 1952, Compañía Minera Aramayo operated the mine. In 1952, the Bolivian government nationalized the mine and placed it under control of COMIBOL who in 1972 constructed the Vetillas concentrating plant with a capacity of 400 tonnes per day. The mine was operated by COMIBOL from 1972 until 1993 at which time mining was suspended pending the privatization of the mine. During the last 5 years of operations under COMIBOL (1988 to 1993), the mine produced an average of 106,000 tonnes per year grading 402 grams/tonne silver and 3.58% zinc per tonne. The mill produced a simple concentrate with a grade of 41% Zinc and 7,800 grams of Silver per tonne. The mine was maintained by COMIBOL until 1999. In 1995, the Bolivian government launched a tender to joint venture the San Vicente mine and the Vetillas mill. After two failed attempts, the tender was declared void. COMIBOL was then authorized and permitted to invite

two failed attempts, the tender was declared void. COMIBOL was then authorized and permitted to invite international companies to present offers. PASB submitted a proposal. The COMIBOL Board of Directors accepted PASB s proposal and a joint venture contract with respect to the development of the San Vicente property was subscribed with Resolution number 1751/99, on June 21, 1999.

The joint venture contract was protocolized by Notary of Public Faith, a requirement of Bolivian law, and later inscribed in the Mining Registry and the Registry of Trade. The joint venture contract for San Vicente

is registered in Testimony #132/99, dated July 28 1999, granted by Dra. Nelly Alfaro de Maldonado, Notary of Public Faith, registration #003.

There have been several amendments to the original joint venture contract as follows:

The first amendment to the joint venture contract was executed on May 18, 2001. The amendment, in accordance with Bolivian law, was protocolized by Notary and then inscribed in the Mining Registry and the Registry of Trade. The amendment is Testimony #101/2001 dated June 13, 2001 granted by Dra. Nelly Alfaro de Maldonado, Notary of Public Faith, registration #003. The amendment modifies the original schedule of the Committed Investment. The second amendment was executed on July 20, 2001. The amendment was protocolized by Notary and inscribed in the Mining Registry and the Registry of Trade. The amendment is Testimony number 127/2001 dated August 7, 2001, granted by Dra. Nelly Alfaro de Maldonado, Notary of Public Faith, registration #003. The amendment specifies the addition of two new mining concessions to the Joint Venture Contract: the concessions Cinturón I and Cinturón II. The third amendment was executed on December 19, 2003. The amendment was protocolized by Notary and then inscribed in the Mining Registry and the Registry of Trade. The amendment is Testimony number 17/2004 dated February 12, 2004, granted by Dra. Nelly Alfaro de Maldonado, Notary of Public Faith, registration #003. In this amendment, PASB gave up the rights to the Montserrat concession.

The fourth amendment was executed on March 25 2004. The amendment was protocolized by Notary and then inscribed in the Registry Mining and the Registry of Trade. The amendment is Testimony Nr. 51/2005 dated April 21 of 2005, granted by Dra. Nelly Alfaro de Maldonado, Notary of Public Faith, registration #003. In this amendment, COMIBOL authorizes PASB to execute a program of the exploitation and tolling of 55,000 tonnes of ore. The fifth amendment was executed on June 13 of 2005. The amendment was protocolized by Notary and later inscribed in the Mining Registry and the Registry of Trade. The amendment is Testimony Nr. 74/2005 dated June 20, 2005, granted by Dra. Nelly Alfaro de Maldonado, Notary of Public Faith, registration #003. In this amendment, COMIBOL authorizes PASB to execute a program of the exploitation and tolling of 35,000 tonnes of ore. The sixth amendment was executed on August 01 of 2006. The amendment was protocolized by Notary and later inscribed in the Mining Registry and the Registry of Trade. The amendment is Testimony Nr. 411/2006 dated August 08, 2006, granted by Dra. Ruth Rosario Villarroel Quisbert, Notary of Public Faith, registration number 4450. In this amendment, it is recognized the participation COMIBOL is increased to 37.5% of operating cash flow. The seventh amendment was executed on August 01 of 2006. The amendment was protocolized by Notary and later inscribed in the Mining Registry and the Registry of Trade. The amendment is Testimony Nr. 412/2006 dated August 08, 2006, granted by Dra. Ruth Rosario Villarroel Quisbert, Notary of Public Faith, registration number 4450. In this amendment, COMIBOL authorizes PASB to execute a program of the exploitation and tolling of 150,000 tonnes of ore. This decree allows time for execution of the projects outlined in the feasibility study while permitting mining and milling operations, providing cash flow to COMIBOL and PASB and addressing the social issues relating to the San Vicente miners. During this program, COMIBOL participation is 50% of operating cash flow. On June 21, 1999, when the joint-venture contract (Contrato de Riesgo Compartido) was signed with COMIBOL, PASB was a 100% subsidiary of PAS. In the fourth quarter of 2003, PAS signed a joint-venture agreement with EMUSA, granting them an option to earn a 50% interest in PASB. To vest its interest, EMUSA agreed to spend \$2.5 million in project costs in 2004 including drilling, underground tunnelling and initiating small-scale production. EMUSA had some difficulties fulfilling the requirements of the option agreement and the ownership of PASB settled at 55% to PAS, 40% to EMUSA and 5% to Trafigura. PAS being the major shareholder became operator and appointed the president of PASB. In May 2007, EMUSA sold its 40% interest in PASB to PAS. PAS transferred one share to Pan American Silver Peru S.A. to fulfill the Bolivian corporate law requirements, leaving PAS with a 94.999% ownership in PASB and Pan American Silver Peru with a 0.001% ownership.

9.0 GEOLOGICAL SETTING

San Vicente is a Polymetallic Vein Deposit, located 2.5 kilometres west of a prominent thrust fault. This north-south striking San Vicente fault forms the eastern limit of the intermountain Bolivian Altiplano basin. Mineralization at the mine site is hosted by conglomerates of Late Oligocene age. The clastic sediments are overthrusted by an Ordovician turbidite sequence, outcropping on the east side of the mine. Igneous activity at the site is represented by intermediate to acid volcanism related to a volcanic complex of mid-Miocene age.

The regional sedimentary sequence consists of a basement of Paleozoic marine siliciclastic sediments. This sequence was folded and later unconformably overlain by non continuous cretaceous continental sediments, and a thick sequence of Tertiary continental clastic sediments (Potoco and San Vicente Formations). Sedimentation in the Tertiary basin was controlled during the Upper Oligocene and Lower Miocene by thrust faults to the east and west and contains various thin volcanic flows with an intermediate composition. A sequence of felsic volcanics forms the top of the Tertiary basin in the southern part.

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

Mineralisation is related to hydrothermal systems associated to repeated calc-alkaline intrusions and their extrusive products forming vein type and disseminated polymetallic deposits.

10.0 DEPOSIT TYPES

San Vicente is a polymetallic vein type deposit with a large amount of mineralised structures. The three different vein systems strike west-northwest, northwest and in a minor extent northeast and show dip angles of 50 to 80 degrees. The mine site area can be divided into four areas with variable degree of exploration information (see Figure 1-7). The North San Vicente area includes veins D , E , F , Lipeña, Brunton, Miriam, Lucero, Gandy and San Vicente; with strikes varying from N100-N120. The veins dip mostly to the north with angles from 55 degrees to sub vertical. Other veins located in the same area are the N060 striking H vein and some minor east west striking structures all of them with a sub vertical dip. All these veins are located north of the San Vicente river on the Rosario Hill, NW of the town San Vicente. There is a large amount of underground workings and small pits in this area. The veins are narrow, showing widths from 0.30 m to about 1.0 m. Mineralization is polymetallic, alteration is typically comprised of manganese oxides, and silicification in variable degrees.

The central San Vicente area includes some of the economically most important structures like Adela-Guernica, Jesus Maria, Disputada, Cantera, 6 de Agosto, Litoral, Litoral Ramo 2, San Lorenzo, Deseada, and Arturo veins. At surface they are marked by open stopes and silicified fault zones of variable length; being the 6 de Agosto vein the longest one up to today with about 1.3km of outcropping strike length and vein widths from cm to several metres. The Litoral and Litoral Ramo 2 veins do not outcrop. However, they are recognized by underground workings and diamond drilling for over 800 m along strike. Litoral Ramo 2 is locally up to 20 metres wide and shows some areas with very high silver grades. Most of the outcropping veins have been worked for centuries having historical grades from 500 to more than 1000 g/mt Ag.

The South San Vicente Area includes San Francisco, Nueva, Rica, and Potoco. These veins are characterized by having a roughly E-W trend; with San Francisco vein mined to an unknown depth with historical values of more than 500 g/mt of Ag and minor tin content. The other veins show only small amounts of open stopes and are structures for future exploration programs.

Far South San Vicente includes the Chichas, Lucio, Crucera, and Bandy veins. These veins were only subject of minor surface sampling and have not been exploited in the past but will be included in future exploration programs.

The West of San Vicente area includes different veins with some underground workings of unknown length and depth. Values from surface samples returned more than 100 g/mt Ag. In the area there is evidence for hydrothermal brecciation with strong silicification.

A list of the mentioned veins at the San Vicente site is shown in Table 6. Their location and strike direction are shown in Figure 1-8. The economic model used for this report uses only proven and probable mineral reserves. Therefore no additional exploration is required in order to meet the projections in the economic model. In the future a program may be initiated to explore by diamond drilling for additional mineralized structures and or to convert mineral resources into proven and probable mineral reserves.

19

Table 6 Occurrence of Veins in San Vicente Mine. (Modified from JICA, 1979)

						Principal	Secondary
Vein	Level	Surface	Azimuth	Dip	Length (m)	mineral	Mineral
Inca	0		N240°	60°S	300	Sp-Py-Gn	Td-Cpy
Guernica II	0		N50°	80°N	400	Sp-Gn-Td-Cp-Py	1 7
Guernica I	0		N300°	80°N	150	Sp-Gn-Td-Cp-Py	
Adela		X	N305°	65°S	300	Sp-Gn-Td-Cp-Py	
Jesús Maria		X	N280°	85°N	440	Sp-Gn-Td-Cp-Py	Gn
Disputada		X	N280°	65°N	300	Sp-Gn-Td-Cp-Py	
San José		X	N310°	65°N	650	Sp-Td-Cp-Py	Gn-Mc
Ferelys	0		N50°	60°N	150	Sp-Td-Py	Cp-Gn
Cantera		X	N305°	60°N	520	Sp-Td-Py	Cp-Gn
Artola	0		N65°	70°S	200	Sp-Td-Py	Cp-Gn
Rmo 6 de	0		N65°	60°N	150	Sp-Td-Py	Cp-Gn
Agosto						1 ,	1
6 de Agosto		X	N280°	65°N	2000	Sp-Td-Py	Cp-Gn
Litoral			N65°	70°S	1160	Sp-Gn-Td-Cp-Py	1
San Lorenzo		X	EW	70°S	600	Sp-Gn-Td-Cp-Py	
Peritas	0		N75°	70°S	250	Sp-Td-Cp-Py	Gn
Deseada	0		N285°	65°N	950	Sp-Td-Cp-Py	Gn-Mc
Esperanza	0		N290°	60°S	150	Sp-Py	Gn-Cp
Porvenir	0		N75°	70°S	250	Sp-Td-Py	Gn-Cp
Rmo. Arturo	0		N75°	80°N	150	Sp-Td-Py	Gn-Cp
Arturo		X	N300°	65°N	1350	Sp-Td-Py	Gn-Td.Cc-Cv-Mc
Unión			N68°	65°NW	450	Sp-Td-Py-Cp	
Sophia		X	N84°	80°NE	570	Sp-Td-Cp-Py	
Sophia I		X	N103°	80°SW	900	Sp-Td-Cp-Py	
San Francisco		X	N93°	82°N	250	Sp-Td-cc-Cv-Py-Cp	
Chichas		X	N95°	70°N	1250	Sp-Gn-Py	
Brunton		X	N122°	68°NE	110	Sp-Gn-Py	
Miriam		X	N122°	70°NE	400	Sp-Gn-Py	
Lucero		X	N97°	66°NE	450	Sp-Gn-Py	
Gandy		X	N105°	67°NE	650	Sp-Gn-Py	
San Vicente		X	N130°	68°NE	400	Sp-Gn-Py	
Nueva		X	N102°	61°NE	380	Sp-Gn-Py	
Rica		X	N97°	78°NE	500	Sp-Gn-Py	
Potoco		X	N112°	70°NE	500	Sp-Gn-Py	
Bandy		X	N85°	70°NW	570	Sp-Gn-Py	
Lucio		X	N100°	68°NE	550	Sp-Gn-Py	
Crucero		X	N102°	62°NE	500	Sp-Gn-Py	
Negro		X	N97°	60°SW	360	Sp-Gn-Py	
SECTOR		T	AJOS				
Colonial		X	N103°	65°NE	450	Gn-Td-Sulfs-Py	
Veta D		X	N130°	73°NE	1350	Gn-Td-Sulfs-Py-Pr	
Veta G		X	N105°	77°SW	430	Gn-Td??-Sulfs-Py-Pr	
veta G		Λ	INTU3	// SW	430	Gil-Tu!!-Suils-Py-Pr	

Veta E	X	N115°	75°NE	850	Gn-Td??-Sulfs-Py-Pr
Veta H	X	N55°	82°SE	320	Gn-Td??-Sulfs-Py-Pr
Veta F	X	N105°	68°SW	630	Gn-Td??-Sulfs-Py-Pr
Lipeña	X	N110°	66°SW	360	Gn-Td??-Sulfs-Py-Pr

REFERENCES

Sp: Sphalerite Py: Pyrite Cp: Chalcopyrite Mc: Marcasite Cv: Covellite Td: Tetrahedrite Gn: Galena Pr: Pyrolusite Cc: Chalcocite Sulfs.: Sulfosalts

20

11.0 MINERALIZATION

The polymetallic mineralization in the district is known to cover an area of 3 km by 4 km to a depth of 300 metres below surface. The mineralization consists of (1) veins filling pre-existing faults, (2) replacements in brecciated conglomerates along the San Vicente fault and (3) in a lesser extent in dacitic dykes (Photographs 1, 2 and 3). The structural environment of the mine area consists of a series of pre-mineral faults dipping 50°- 80° to the south and striking west northwest. A second set of structures is striking northeast.

The west northwest striking structures contain veins that have longer horizontal extensions and a mineralized width of 2 m to 6 m. The northeast veins are developed in the more dilatational direction and are characterized by the best widths and grades but over a shorter strike length.

The minerals of economic importance are sphalerite, tetrahedrite (the variety of freibergite rich in silver), chalcopyrite and galena. Cassiterite, covellite and bornite are found in some veins. The primary gangue minerals are quartz, pyrite, marcasite and barite.

The paragenetic sequence consists of an early phase of quartz—pyrite, followed by the main phase of mineralization of sphalerite, galena, freibergite, and chalcopyrite with subsequent phases of quartz—pyrite, barite and marcasite. A lateral zonation of metals exists in a central zone of high zinc grades that superimposes an area of high silver grades. More distant zones have medium silver grades and significant lead grades. The only significant vertical zonation encountered is the increasing copper grades (in chalcopyrite) in the deeper parts of some veins.

Hydrothermal alteration in the district is restricted to a 20 m band along the mineralized structures. It is represented by a fine grained sericite pyrite assemblage that has bleached the original red matrix. A moderate amount of silicification is also present. Locally iron and manganese oxides are present at surface.

The geologic history can be generally summarized as follows:

- § Deposition of a continental fanglomerate at the margin of a tectonically active basin resulting in the emplacement of the San Vicente conglomerate.
- § Formation of west northwest, northwest and northeast striking faults in the conglomerate.
- § Emplacement of a dacitic intrusive 2 km to the east of San Vicente with small dykes and bodies in the area of the mine.
- § Alteration and zinc silver mineralization in the breccia zones of the faults by hydrothermal fluids over a time span of about 13 million years.

The known mineralized veins and structures are shown in Figure 1-8.

Photograph 1.

Fault vein with open space filling mineralization

Photograph 2.

Replacement style of mineralization. Replaced breccia matrix and clasts by sulphides

Photograph 3.

Intermediate intrusion hosting sulfide veinlets.

22

Table 7 Mineralogy of San Vicente Veins Recognized Under Microscope

CHannel N° 0-007	Ag (g/t) 345	Zn (%) 4.13	Pb (%) 2.05	Cu (%) 0.41	-		_	Gal 3	-		Pol	Sulfi des		Born		<i>Bar</i> 40	_	Paragenesis qz-sph-Ttet-gal>marc>barita
0-006	218	15.57		0.78	5	2	<1		5	2			<1		23	3	58	py>tet>barita
0-005	733	22.52		0.88	20	<1	1		5						30		43	py>tet-cp-sph>qz
0-008	49	2.11		0.24	3	2	2	<1	2		<1				40		49	Sulfuros>qz
0-013	47	2.72	0.50	0.10	25	<1	<1	<1	2	2							60	marc>sphal
0-009 0-010	74 256	1.80 20.08	0.72	0.20 0.62	5 10	<1 2	<1 2	1		15 <1	<1	<1	<1		25 35		48 38	sulfs>marc qz>sulfs
0-011	252	29.97	0.23	0.35	6	<1	<1		15	3					20		36	
0-004	1291	28.79	0.16	0.48	30	<1	<1	<1	25	<1					35		8	
0-003 0-002 0-001	203 295 476	2.91 1.49 0.66		0.26 0.24 0.90	5	<1 <1		<1	24	8 20 <1					40 40 40		22 10 30	sulfs>qz py>sphal>qz
0-012	74	9.43		0.10	30	<1			40	2					10		12	sphal-py>qz-py>sph vetillas
30-010	156	3.21	1.43	0.29	10	<1	<1	8	2						40	3	37	qz>bar
30-006	294	14.66	0.13	0.27	20	<1	<1		3						30		47	qz>sph-py-yet>qz-py
30-005	391	10.44	2.64	0.78	3	8	1	2	30					<1	30	3	22	qz>suls>qz>sph-cp-tet vetill
30-008	2267	17.24			30	<1	<1	<1	6	2							62	
30-004	2650	12.99	0.12	1.00	5	<1	<1		30						10		55	py>tet

30-004	470	12.72	0.57	0.27	30	2	<1		10			40	1	16	qz>sulfs>qz
30-007	72	1.87	0.13	0.20	2	<1	<1	<1	3	1		5		88	
30-003	1073	7.41		2.20	15	2	40		10			33			cp>qz-py; sph-tet-cp>qz
30-002	892	0.45		0.88	<1	<1	<1		20			80			sulfs>qz
30-001 30-002	330 396	2.49 1.55	0.22	1.70 0.47	3 2	<1 <1	2 3	<1 <1	20 35	12	<	40 40	3 10	20 8	sulfs>qz>bar qz>py-cp-sph-dig-bn>bar
30-001	446	0.37		0.60	<1	3	2		40	20		35			py>cp-tet vetillas
30-011	1159	2.04	0.99	0.40	20	5	<1	<1	1	1		20		53	
70-001	58	5.84			40	<1		<1	2			30	10	18	qz-sulfs>bar
70-002	640	10.53		0.57	20	<1	<1		2			8	20	50	sulfs>qz-bar
70-003	122	7.34		0.17	40	<1	<1	<1	3			20	12	25	sulfs-qz>bar
70-004	788	8.98	0.11	0.69	3	2	1	1	8			20		65	qz>py>sulfs>qz
70-007	333	6.16		0.44	65	<1	<1	<1	2	<1		30		3	py>sph>
70-009 70-005	101 639	4.34 9.10		0.37 1.10	10 3	<1 2	2 6		40 10			40 40		10 38	sph>cp vetillas>py>qz qz-py-sph-tet-cp>qz
70-006	244	1.43		0.41	20	<1	<1	<1	5			60		15	py>cp>sph>gal>qz
70-008	282	8.52	0.67	0.22	5			<1	10			45		40	sulfs>qz
70-013	125	6.95		0.34	42	<1	25	<1	20				<1		py>tet-gal>bar
70-012	605	0.32		0.27	<1	1	<1	<1	2			40	4	56	py>tet-sph>qz
70-011 70-010	935 30	3.79 4.90	0.12	0.61		<1 <1			30 5	<1		40 30	10	28 50	py>cp-tet-sph>qz
110-002	123	4.64	0.17	0.10	20	<1	<1	<1	3	8		40	5	25	cp>sph>gal>py>tet>qz>bar-
	1615 1617	0.15 1.55	0.92 0.31	0.67 1.02				3				40 40		45 34	py>gal-tet-cp>qz

243	9.81	0.13	0.56	15	<1	<1	2	3		<1	4	0		35	sulfs>qz>bar
116	5.29	0.11	0.11	50	<1	<1		2			3	0		13	
950	5.48	2.51	0.21	5	<1	<1	8	<1	<1		7	0		17	sulfs>qz
1415	0.55	0.16		<1				8	2		3	0		60	
14049	0.80	0.11	0.68					5	2		2	0		65	
2906	0.97	0.38	0.15	5	2	<1	<1	2		1	2	0	60	10	barita>sulfs-qz???
1006	3.35	0.52	0.19	12	1	<1	10	3			3	0	15	30	sulfs>bar
4292	0.86	0.70	0.12	<1				5	1		2	0		75	
575				<1	<1			5			3	0	3	61	
677					<1	<1		3			4	0	2	55	
									23						

12.0 EXPLORATION

There has been sporadic mining activity in the San Vicente area since colonial times. Initial exploitation was the mining of oxidized silver from exposed veins. The first written records of mining activity were in 1820, when the area was named the Guernica Mine. Several different owners operated the mine from 1911 through 1950. From 1950 until 1952, the mine was operated by the Aramayo Mining Company. In 1952, the Bolivian government nationalized the mine and placed it under control of COMIBOL. Following the discovery of new silver and zinc veins in the late sixties, COMIBOL constructed the Vetillas concentrating plant in 1972 with a capacity of 400 tonnes per day. The mine was operated by COMIBOL until 1993, at which time mining was suspended pending the privatization of mining in Bolivia. In 1995, the San Vicente property was offered for a joint-venture contract by COMIBOL. On June 21, 1999, PAS signed a joint-venture agreement (Contrato de Riesgo Compartido) with COMIBOL. In late 2001, PASB and COMIBOL, the Bolivian state mining company entered into a two-year toll mining agreement with EMUSA, to process up to 250 tonnes of San Vicente s ore per day at EMUSA s nearby Chilcobija mill. In late 2005, PASB and COMIBOL entered into an additional 7 month toll mining agreement with EMUSA to process up to 250 tonnes of San Vicente s ore per day at EMUSA s nearby Chilcobija mill. This toll mining agreement was renewed on August 8, 2006 for an additional 150,000 tonne program that is currently in progress.

The PASB exploration program began in 1999 following the execution of the joint venture agreement with COMIBOL. The work started with mapping and sampling the surface and was followed by the construction of drill access roads and platforms. Contracts were established with Leduc Drilling and Exploration Core Drilling S.R.L., and a total of 21 holes (3,831 m) were drilled from surface using HQ core and a further 8 holes (405 m) from inside the mine using NQ core. These holes targeted the old stoping areas, continuations of the principal veins along strike and at depth, and other veins to the northeast and south of the mine. Since the start of the exploration program, a total of 109 diamond core holes have been drilled, with 2,575 vein intercepts sampled with varying lengths from 0.2 metres to 7.14 metres.

In addition to the diamond drilling, a sampling program was started in the mine. An initial 41 channel samples were taken in four of the principal structures (6 de Agosto, Adela, Litoral and Unión). The results of the surface drilling showed wider intersections than had previously been mined underground and so the channel samples were unable to explore the full width of each vein. After this realization, mining work was undertaken to develop small cross section cross cuts (1.5 m by 2.0 m) at a maximum of 75 metres apart along strike in the four veins on levels 0, -30, -70 and -110 in order to explore the full economic width of each vein. Some 5,807 channel samples were taken by COMIBOL and 4,371 of these channel samples taken by COMIBOL remain in the database. The remainder have been excluded due to uncertainties over their location or replaced by PASB samples. A further 2,223 channel samples taken by PASB are included in the database. Some of the PAS channel samples replace the COMIBOL channel samples where the vein width is actually greater than was initially thought by COMIBOL.

Exploration activities continued in 2004 with 13,919 metres of surface and underground diamond drilling, and 2983 metres of underground development and resampling of historical reserve blocks for purposes of resource definition and exploration. Mine development and production to supply the Chilcobija mill continued in 2005, 2006 and 2007 and provided additional channel sample data for the resource database. A requirement of the interim mining programs agreed between PASB and COMIBOL was that sufficient additional development work be undertaken so that the total quantity of ore developed and ready for mining is maintained. This development provided additional channel samples in the principal and other structures.

All diamond drilling (underground and surface) was executed by Leduc Drilling S.R.L., and by Exploration Core Drilling S.R.L. Both are Bolivian companies and both were contractors to PASB under the supervision of PASB geologists.

Channel sampling underground was originally partially done by COMIBOL and later done by PASB employees under the supervision of PASB geologists. The channel sampling conducted by COMIBOL has been resampled and replaced by PASB sampling in the major structures as explained in section 14.0.

Mineral resource blocks that rely entirely on the COMIBOL channel samples have not been converted to mineral reserves and remain in the mineral resource categories.

Soil sampling was conducted in 6 parallel lines with a 100 m line spacing and 50 m sample spacing along lines. These lines cut the extension of the Guernica vein, the Litoral area and the extension of San Francisco and San Lorenzo veins. Samples were analyzed by SGS del Peru S.A.C for Cu, Zn, Cd, Pb, Au, Ni, Pd, and Ag.

The principal structures explored by PASB are: 6 de Agosto; Litoral Ramal 2; Litoral; Deseada; Adela, and Union. These principal structures contain 2,504,619 tonnes or 82% of the 3,058,185 tonnes in the mineral reserves. The highest grades and widest widths were discovered to be in the Litoral Ramal 2 structure, which has been diamond drilled using a 70 metre by 30 metre pattern. This structure contains 801,895 tonnes or 26% of the mineral reserves. The San Vicente deposit is typical of the polymetallic vein deposits found in the Bolivian Andes. The system contains a large amount of mineralized structures and veins which in many cases remain open for exploration both at depth and laterally.

13.0 DRILLING

109 drill holes were completed by PASB from 1999 to 2006 totalling 18,155 metres, obtaining HQ (approximately 6 cm) diameter core. Downhole deviation surveys were executed using a Tropari (mechanical) compass.

The initial drilling program was focused on the North San Vicente Area, where veins are close together and abundant. Results were not completely satisfactory and drilling was re-focused on the central zone. Although the veins in the north show economic values they do not have exploitable widths. The north zone maintains its exploration potential as many structures show increasing thickness at depth and sigmoidal loops. Minor reconnaissance drilling was done outside of the central San Vicente area.

A listing of the San Vicente drill hole collar locations and the economically important down hole intersects are given in Tables 8a and 8b. More detailed information on the intercepts and the channel sampling is shown in Appendix B. Tables 8a and 8b show the surface and underground diamond drill results and includes the structures that were interpreted to be intercepted as well as the approximate level at which the intersection occurred.

The diamond drill hole spacing and covered areas are derived from a combination of underground and surface diamond drilling. The information for veins that received the most exploration diamond drilling focus are as follows:

6 de Agosto vein drill spacing is 70 metres horizontal by 30 metres vertical centers. Some holes were drilled at the extents of the vein with wider spacing in order to evaluate the continuation of the structure. The explored portion of this vein covers an area that extends 450 metres horizontally by 90 metres vertically.

Litoral Ramal 2 vein drill spacing is 70 metres horizontal by 30 metres vertical centers. Some holes were drilled at the extents of the vein with wider spacing in order to evaluate the continuation of the structure. The explored portion of this vein covers an area that extends 800 metres horizontally by 250 metres vertically.

Litoral vein drill spacing is 50 to 70 metres horizontal by 30 metres vertical centers. Some holes were drilled at the extents of the vein with wider spacing in order to evaluate the continuation of the structure. The explored portion of this vein covers an area that extends 200 metres horizontally by 50 metres vertically.

Union vein drill spacing is 35 to 90 metres horizontal by 30 to 50 metres vertical centers. Some holes were drilled at the extents of the vein with wider spacing in order to evaluate the continuation of the structure. The explored portion of this vein covers an area that extends 420 metres horizontally by 160 metres vertically.

Colonial vein although this is not a principal vein it was subject to a drilling program. Drill spacing is 90 metres horizontal by 40 metres vertical centers. Some holes were drilled at the extents of the vein with wider spacing in order to evaluate the continuation of the structure. The explored portion of this vein covers an area that extends 300 metres horizontally by 90 metres vertically.

Deseada vein drill spacing is 150 metres horizontal by 30 metres vertical centers. Due to disappointing results from drilling the depth extension of this vein, no further infill drilling was done. The mineral reserve on this vein Is based on development channel samples.

13.1. Surface Diamond Drilling

Drilling from surface was carried out in two stages totalling 15,922 metres. The first stage included 13 drill holes mainly located in the North San Vicente area; the second one contains 63 diamond drill holes mostly in the central zone. Diamond drill holes are located and oriented by geologists in the field. Typical drill holes are oriented to cut across the vein zones at an orientation perpendicular to the local strike of the zones and inclined to intercept the vein at as high an angle as is practical. In these cases the true width is assumed to be the same as the sample length of the vein intercept. In other cases, drilling to greater depths caused veins to be intercepted at less than 90 degree core axial angles. In these cases true widths of the vein intersection was calculated using trigonometry and stated in table 8a together with drill hole numbers, level of intersection and geochemical results for the mineralized zones.

Table 8a Summary Data San Vicente Surface Diamond Drill Holes

		Level			RESULTS		
			Width			Pb	Zn
HOLE No.	STRUCTURE	intersected	(True)	Ag(g/t)	Cu (%)	(%)	(%)
DDH-99-001	Desconocida	-50	0.55	288	0.12	0.86	0.30
DDH-99-001	Clavo Inca	-95	3.36	150	0.09	0.09	0.11
DDH-99-002	Veta E			NO SIGN	IFICANT IN	TERCEPTS	
DDH-99-003	Lipena	+25	0.23	282	0.05	0.90	0.71
DDH-99-004	Desconocida	+122	0.16	669	0.08	0.04	0.06
DDH-99-004	Desconocida	+50	1.80	158	0.03	0.07	0.01
DDH-99-005	Veta D			NO SIGN	IFICANT IN	TERCEPTS	
DDH-99-006	Veta "G"	-65	0.25	35	0.02	0.21	2.45
DDH-99-007	Guernica	-113	0.71	279	0.48	0.14	0.24
DDH-99-007	Rmo-Guernica		0.25	167	0.34	0.12	0.22
DDH-99-008	Desconocida	+116	0.47	358	0.02	0.31	0.16
DDH-99-008	Veta "E"	+78	1.83	234	0.01	0.36	0.10
DDH-99-009	Desconocida	+120	0.90	1,425	0.03	0.18	0.35
DDH-99-009	Desconocida	+70	0.90	246	0.007	0.05	0.56
DDH-99-010	Brunton y Myriam			NO SIGN	IFICANT IN	TERCEPTS	
DDH-99-011	Gandy	-52	1.31	65	0.04	0.12	2.70
DDH-99-011	San Vicente	-97	0.75	22	0.03	0.09	3.68
DDH-99-012	6Agosto	-40	5.20	275	0.13	0.12	3.57
DDH-99-014	Rmo Arturo		0.70	36	0.04	0.05	6.32
DDH-99-014	Arturo Footwall	-60	0.74	80	0.20	0.11	4.19
DDH-99-014	Arturo	-60	6.70	41	0.06	0.04	5.54
DDH-99-015	San Francisco	-110	1.66	93	0.15	0.02	2.00
DDH-99-016	Chichas			NO SIGN	IFICANT IN	TERCEPTS	
DDH-99-017	Litoral	-95	7.14	1022	0.78	0.02	1.45
DDH-99-017	Litoral Ramo 2	-105	2.78	351	0.11	0.01	1.18
DDH-99-018	Veta "H"	+30	0.55	286	0.02	0.07	0.57
DDH-99-019	Veta E			NO SIGN	FICANT IN	TERCEPTS	
DDH-99-020	Stockwork			NO SIGN	IFICANT IN	TERCEPTS	
DDH-99-021	6Agosto	+50	3.42	183	0.10	0.11	3.59
DDH-99-021	6Agosto	+50	1.25	208	0.20	0.07	5.24
DDH-52-3	Cantera	-55	0.86	153	0.10	0.43	6.00
DDH-52-3	6Agosto			NO SIGN	FICANT IN	TERCEPTS	
DDH-03-022	Litoral	-120	1.50	54	0.70	0.10	0.57
DDH-03-023	Litoral	-117	2.03	1,201	2.50	0.30	3.80
DDH-03-023	Litoral Ramo 2	-125 a -135	6.29	813	0.51	0.10	3.10
DDH-03-024	Arturo	-110	1.75	88	0.18	0.16	4.55
DDH-03-025	Litoral	-55	1.50	93	0.76	0.01	0.11
DDH-03-025	SLorenzo	-131	0.70	422	0.54	0.08	2.32
DDH-03-026	Litoral	-61	4.45	429	0.61	0.05	0.07
DDH-03-026	Litoral Ramo 2	-102 a -110	6.10	454	0.16	0.07	2.29
DDH-03-027	Litoral	-78 a -92	4.45	793	0.69	0.08	0.23

DDH-03-027	Litoral Ramo 2	-126 a -150	6.29	741	0.71	0.03	1.05
DDH-04-028	Litoral		1.97	38	0.21	0.05	1.19
DDH-04-028	SLorenzo		0.70	13	0.01	0.03	0.07
		27	7				

		Level			RESULTS			
			Width		Cu	Pb		
HOLE No.	STRUCTURE	intersected	(True)	Ag(g/t)	(%)	(%)	Zn (%)	
DDH-04-029	Litoral Ramo 2	-128	3.07	1,398	0.47	0.27	11.26	
DDH-04-030	SLorenzo	-100	0.70	153	0.27	0.05	0.14	
DDH-04-030	Litoral	-116	1.69	261	0.76	0.10	1.49	
DDH-04-031	Litoral Ramo 2	-90	1.50	81	0.08	0.02	2.73	
DDH-04-032	Litoral Ramo 2		1.50	8	0.01	0.01	0.02	
DDH-04-033	Litoral		1.50	9	0.03	0.08	0.49	
DDH-04-034	Litoral Ramo 2	-33	1.50	118	0.62	0.32	3.31	
DDH-04-035	Guernica2	-155	0.85	119	0.16	0.09	0.86	
DDH-04-036	Union	-98	0.70	25	0.05	0.01	0.02	
DDH-04-037	Deseada	-84	0.70	206	0.42	0.07	1.64	
DDH-04-038	Litoral Ramo 2	-117	1.50	74	0.05	0.02	0.06	
DDH-04-038	Litoral	-130	1.50	200	0.23	0.02	0.66	
DDH-04-039	Deseada	-105	1.06	171	0.09	0.05	7.51	
DDH-04-040	Ramo Arturo	+35	1.02	58	0.06	0.30	6.63	
DDH-04-040	Arturo	+31	1.17	101	0.22	0.42	5.28	
DDH-04-040	Arturo	-27	0.83	114	0.26	0.35	3.00	
DDH-04-41	Unión	-32	0.70	5	0.00	0.01	0.13	
DDH-04-41	Ramo Unión	-54	0.42	109	0.09	0.48	14.10	
DDH-04-042	Desconocida	-85	0.33	205	0.56	0.10	3.58	
DDH-04-042	Litoral Ramo 2	-160	1.70	260	0.37	0.01	3.46	
DDH-04-042	Litoral.	-196	0.70	202	0.33	0.01	0.10	
DDH-04-043	Union	+4	0.70	3	0.00	0.02	0.05	
DDH-04-044	Deseada	-88	0.70	5	0.01	0.01	0.96	
DDH-04-045	Union	-60	0.70	3	0.00	0.01	0.06	
DDH-04-046	Litoral	-134	1.50	1,171	0.37	0.10	0.40	
DDH-04-046	Litoral Ramo 2		1.50	10	0.01	0.01	0.01	
DDH-04-047	Sophia I	-91	0.77	204	0.08	0.57	0.16	
DDH-04-048	Desconocida	0	1.25	279	0.06	0.07	0.47	
DDH-04-048	Rmo. Colonial	-68	0.37	475	0.04	0.02	0.15	
DDH-04-048	Colonial	-75	2.32	732	0.21	0.16	0.37	
DDH-04-049	Rmo Adela ???	-40	0.37	300	0.03	0.05	1.27	
DDH-04-049	Disputada.	-82	0.3	167	0.02	0.50	1.98	
DDH-04-049	Rmo Unión	-140	0.5	374	1.62	0.48	2.40	
DDH-04-049	Union	-148	0.70	9	0.00	0.01	0.05	
DDH-04-050	Rmo Deseada	-62	1.13	154	0.02	0.05	5.43	
DDH-04-050	Deseada	-91	0.70	6	0.00	0.02	0.28	
DDH-04-051	6Agosto	-134	0.72	30	0.00	0.01	0.28	
DDH-04-052	Desconocida	-32	0.79	165	0.02	0.07	0.13	
DDH-04-052	Veta Colonial	-50	1.86	294	0.03	0.39	0.35	
DDH-04-053	Sophia I	-99	1.27	607	0.01	0.16	0.02	
DDH-04-054	Ramo Adela	-13	0.4	21	0.03	0.04	3.71	
DDH-04-054	Unión	-97	1.94	179	0.26	0.14	1.74	

DDH-04-054	Union	-133	0.70	82	0.07	0.03	0.21
DDH-04-055	Litoral Ramo 2	-163	5.35	306	0.71	0.01	0.41
DDH-04-056	Desconocida	-15	0.42	128	0.02	0.06	0.62
DDH-04-056	Colonial	-95	0.9	78	0.05	0.41	0.42
			28				

		Level		1	RESULTS		
			Width		Cu	Pb	Zn
HOLE No.	STRUCTURE	intersected	(True)	Ag(g/t)	(%)	(%)	(%)
DDH-04-057	Desconocida	+17	0.29	1,015	0.01	0.04	0.01
DDH-04-057	Desconocida A	+11	0.54	392	0.02	0.05	0.01
DDH-04-057	Colonial	-76	0.63	167	0.14	0.60	0.97
DDH-04-058	Desconocida A	-14	0.9	438	0.12	0.08	0.16
DDH-04-058	Colonial	-115	NO SIGN	NIFICANT IN	TERCEPTS	S	
DDH-04-059	Desconocida	-14	0.92	378	0.26	0.15	0.49
DDH-04-059	Colonial	-90	0.37	200	0.17	0.14	0.36
DDH-04-060	Sophia I	-89	1.22	71	0.05	0.23	0.35
DDH-04-061	Litoral Ramo 2	-78	3.79	757	0.31	0.11	3.06
DDH-04-062	Litoral Ramo 2	-125	3.56	2,262	0.45	0.36	5.75
DDH-04-063	Litoral Ramo 2	-68	1.50	79	0.23	0.09	0.51
DDH-04-064	Litoral Ramo 2	-114	1.68	534	0.22	0.20	1.41
DDH-04-065	Litoral Ramo 2	-160	5.42	1,967	0.56	0.12	0.37
DDH-04-066	Litoral Ramo 2	-70	1.81	32	0.05	0.07	0.36
DDH-04-067	Litoral Ramo 2	-113	1.60	321	0.10	0.31	5.45
DDH-04-068	Litoral Ramo 2	-163	2.71	287	0.38	0.27	0.36
DDH-04-069	Litoral Ramo 2	-132	1.58	231	0.02	0.36	4.83
DDH-04-070	Litoral Ramo 2	-127	1.78	275	0.27	0.08	2.51
DDH-04-071	Litoral Ramo 2	-127	1.50	53	0.01	0.36	0.63
DDH-04-072	Litoral Ramo 2	-122	1.53	355	0.40	0.30	4.61
DDH-04-073	Litoral Ramo 2	-156	1.50	44	0.02	0.01	0.03
DDH-04-074	Litoral Ramo 2	-215	1.50	93	0.02	0.25	0.10
DDH-04-075	Litoral Ramo 2	-269	1.50	43	0.01	0.08	0.63
DDH-04-076	Litoral Ramo 2	-160	6.29	564	0.16	0.08	1.56
DDH-04-077	Litoral Ramo 2	-231	1.50	22	0.01	0.02	0.42
DDH-04-078	Litoral Ramo 2	-196	1.50	44	0.71	0.01	0.35
DDH-04-079	Litoral Ramo 2	-42	1.94	302	0.71	0.18	0.74
DDH-04-080	Litoral Ramo 2	-209	1.50	150	0.09	0.19	1.01
DDH-04-081	Litoral Ramo 2	-180	1.54	263	0.09	0.36	1.98
DDH-04-082	Litoral Ramo 2	-230	1.50	48	0.02	0.10	0.36
DDH-04-083	Litoral Ramo 2	-185	1.84	814	0.71	0.36	0.71
DDH-04-084	Litoral Ramo 2	-245	1.50	407	0.10	0.36	1.32

13.2. Underground Diamond Drilling

Underground drilling was carried out in two stages, totalling 2,233 metres. The first campaign was directed to test down dip extensions of 6 de Agosto with 8 drill holes totalling 405.30 metres. NQ diameter core was obtained for further logging and sampling. The second campaign was targeting the down dip and extension of Litoral vein. Typical drill holes are oriented to cut across the vein zones at an orientation perpendicular to the local strike of the zones and inclined to intercept the vein at as high an angle as is practical. In these cases the true width is assumed to be the same as the sample length of the vein intercept. In other cases, drilling to greater depths caused veins to be intercepted at less than 90 degree core axial angles. In these cases true widths of the vein intersection was calculated using trigonometry and stated in Table 8b together with drill hole numbers, level of intersection and geochemical results for the mineralized zones.

Table 8b Summary Data San Vicente Underground Diamond Drill Holes

		HITS AT		RES	ULTS		
			Trure Width		Cu	Pb	
DRILL HOLE	STRUCTURE	LEVEL	(m)	Ag(g/t)		(%)	Zn (%)
DDH-99-70-001	Veta Unión	-105		NO SIGNIFICA			
DDH-99-70-002	Veta Adela	-75		NO SIGNIFICA			
DDH-99-70-003	Veta Adela	-73	2.68	304.0	0.33	0.05	1.89
DDH-99-70-003	Veta Ramo Union	-95	1.02	244.2	0.23	0.03	0.41
DDH-99-70-003	Veta Unión	-90	1.65	2125.4	1.03	0.37	4.99
DDH-99-70-004	Veta Litoral	-80	10.65	355.0	0.16	0.04	2.47
DDH-99-70-004	Veta Adela Ramo-2	-90	3.20	469.0	0.46	0.02	6.91
DDH-99-70-005	Veta 6 de Agosto	-85	0.86	433.3	0.56	0.11	0.37
DDH-99-70-006	Veta 6 de Agosto	-110	4.19	76.4	0.15	0.09	6.85
DDH-99-70-007	Veta Desconocida	-74	0.53	475.0	0.44	0.05	2.48
DDH-99-70-007	Veta Rmo. Adela	-88	0.72	150.5	0.21	0.05	0.94
DDH-99-70-008	Veta Desconocida	-74	0.41	198.0	0.15	0.04	0.58
	Veta Ramo San			NO SIGNIFICA	ANT INTE	RCEPTS	
DDH-9101	José						
DDH-9101	Veta 6 de Agosto	-160		NO SIGNIFICA	ANT INTE	RCEPTS	
	Veta Ramo San	-173	1.19	626.5	0.16	0.09	0.18
DDH-9102	José						
DDH-9101	Veta 6 de Agosto	-260		NO SIGNIFICA	ANT INTE	RCEPTS	
DDH-03-70-009	6 de Agosto	-142	1.71	34.7	0.08	0.08	0.70
DDH-03-70-010	Deseada	-122	0.68	174.0	0.48	0.18	1.88
DDH-04-70-011	Adela			NO SIGNIFICA	ANT INTE	RCEPTS	
	Ramo 6 de	-122	0.49	101.0	0.28	0.05	2.00
DDH-04-70-012	Agosto??						
DDH-04-70-012	6 de Agosto	-135	1.61	74.5	0.24	0.12	7.58
DDH-04-70-013	Adela Rmo -2	-80	1.02	369.8	0.11	1.63	13.41
DDH-04-70-013	Rmo-Ramo Adela	-84	0.31	60.0	0.07	0.04	7.20
DDH-04-70-013	Ramo Adela	-92	0.63	2231.0	0.64	0.02	7.20
DDH-04-70-013	Unión	-107	1.41	314.6	1.90	0.15	1.44
DDH-04-70-014	Unión	-114	2.04	1090.0	0.49	0.02	2.14
DDH-04-70-014	Ramo Unión	-124	0.35	65.6	0.08	0.04	9.13
DDH-04-70-015	Adela			NO SIGNIFICA	ANT INTE	RCEPTS	
DDH-04-70-016	Unión			NO SIGNIFICA	ANT INTE	RCEPTS	
DDH-03-70-017	6 de Agosto	-154	1.37	89.0	0.92	0.18	1.80
DDH-04-30-018	6 de Agosto	-112	0.92	290.0	0.68	0.02	2.41
DDH-04-30-019	6 de Agosto	-150		NO SIGNIFICA	ANT INTE	RCEPTS	
DDH-04-30-020	Rmo San Lorenzo	-32	1.67	163.3	0.94	0.16	3.44
DDH-04-30-020	Vet. Desconocida	-52	1.65	19.6	0.03	0.34	3.30
DDH-04-30-020	Vet. Desconocida	-57	1.69	100.7	0.25	1.01	8.91
DDH-04-30-021	Vet. Desconocida	-36	0.69	324.0	0.24	0.01	1.30
DDH-04-30-021	Vet. Desconocida	-43	1.85	77.2	0.17	0.02	1.80
DDH-04-30-021	Veta Porvenir	-51	0.44	127.0	0.08	0.01	0.36
DDH-04-30-021	Rmo. Arturo	-53		NO SIGNIFICA	ANT INTE	RCEPTS	

14.0 SAMPLING METHOD AND APPROACH

In addition to the diamond drilling, a sampling program was started in the mine. An initial 41 channel samples were taken in 4 of the principal structures (6 de Agosto, Adela, Litoral and Unión). The results of the surface drilling showed wider intersections than had previously been mined underground; hence the channel samples were unable to explore the full width of each vein. After this realization, mining work was undertaken to develop small cross section cross cuts (1.5 m by 2.0 m) at a maximum of 75 metres apart along strike in the four veins on levels 0, -30, -70 and -110 in order to explore the full economic width of each vein. Some 5,807 channel samples were taken by COMIBOL and a further 2,449 channel samples taken by PASB. Some of the PAS channel samples replace the COMIBOL channel samples where the vein width is actually greater than was initially thought by COMIBOL. All underground channel sampling and re-sampling (COMIBOL and PASB) which includes two generation of samples are shown in detail in Appendix C. The first generation includes samples collected from similar locations and the same sample widths as sampled by COMIBOL. The second generation of samples is a selective sampling with variable widths that considers the behaviour (splitting and development of veinlets) of the vein. Data comparison shows variability of results that do not allow a correlation factor to be defined. In many locations it was impossible to precisely reconstruct the COMIBOL sample location and/or the COMIBOL samples never included disseminated mineralization in the hanging or foot walls. Hence COMIBOL samples returned in most cases higher grades over more narrow widths. Both data sets were used in the mineral resource/reserve estimation and treated as two different populations which were superimposed once the grade interpolation was established on each population. Blocks containing only historical sample information have not been included in the mineral reserve estimation and remain in the indicated resource category. A second round of channel re-sampling was completed during 2005 by collecting 2,562 channel samples from different veins and levels. Refer to Appendix C for detailed sample results. The samples were collected under the supervision of PASB geologists, who ensured the quality of the collected samples, and verified that they were properly labelled; identifying them with an alpha numeric label (i.e. CH-99-30-001, being CH for channel sample, collected in the year 99 in level 30 and finally the sample number). These samples were then transported by PASB personnel to Bondar-Clegg laboratories (now ALS Chemex) in Oruro, Bolivia for sample preparation and analyses.

The typical core sampling procedure was to half-saw the HQ core after descriptive geological and geotechnical logging and core recovery estimation by PASB employees. Half of the core was submitted for analysis to the same laboratories as the underground channel samples, while the remaining half is stored at the San Vicente site. The rock mass at San Vicente is generally good to excellent and diamond drill core recovery on the whole was excellent. There are no core or sample recovery problems which could have materially impacted the accuracy and reliability of the results.

The data used for the estimation of mineral reserves and resources consists almost entirely of drill hole samples and underground chip channel samples from the backs of drifts, the ribs of crosscuts, the backs of stopes and the ribs of raises. The channel samples are taken using hammer and chisel, every 4 metres across the veins in 20 cm wide channels approximately 3 cm deep. Stopes are channel sampled every vertical cut (1.6 metres) on 2-metre centers along strike. Due to the dense and regular nature of the underground channel sample pattern the sample results are representative for this type of polymetallic vein deposit. There is a bias inherent in the COMIBOL methodology to narrower vein widths and higher grades. The methodology used to mitigate this effect is as follows: Ordinary kriging was applied in two phases, first to PAS sampling data only (channels and drill holes) and later to remnant blocks containing data collected by COMIBOL. Variogram models were obtained for each variable and for each vein which has been divided in blocks of 40 x 20 m (strike and dip).

The lithology of the San Vicente Mine area is relatively simple. Included are the fanglomerate facies of the San Vicente formation, which are in contact with Ordovician shales along the San Vicente fault. The fanglomerate consists of poorly sorted conglomerate with clastic sub angular fragments of Palaeozoic sediments cross cut by quartz veins. The matrix is red in colour and consists of iron bearing sandstone. Mineralization is in structurally controlled veins. Sample width is based on visible vein width, which varies

from 0.2 metres to 7.5 metres. Wide vein intersections are sampled in several intervals dependant on the visible mineralization changes. In areas where the wall rock shows disseminated mineralization, additional samples were taken in regular intervals from 0.7 metres to 1.0 metres in length.

A summary of samples with grades and measured true widths is shown in Appendix C.

In conclusion, it is Michael Steinmann s opinion that the sampling method applied at San Vicente by PASB gives representative results and meets industry standards.

15.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

PASB employees prepared the various drill and channel samples and sent them to commercial laboratories for sample preparation and analysis. None of the sample preparation and analysis done at the commercial laboratories was conducted by an employee, officer, director, or associate of PASB.

Drill hole samples are taken from half cores cut with a diamond saw after the core logging took place. The second half of the core is stored in a secured location on site for cross checks and further analysis. Samples are sent to Oruro (ALS Chemex) or La Paz (SGS) for sample preparation where samples are crushed, split and milled for Atomic Absorption Spectroscopy (AA) analysis. The prepared samples are then shipped by the laboratories to their respective Lima facilities and analyzed for Ag, Zn, Pb and Cu. If Ag grades are higher than 500 g/t, a fire assay is performed; if values for zinc are greater than 10%, a titrimetric analysis is performed. During the entire procedure from sampling to analysis, sample security is controlled by PASB employees or by the certified laboratories once samples have been delivered to the Bolivian preparation facilities. Both of these laboratories fulfill the requirement of ISO 9001:2000 standards In addition the SGS laboratory in Lima is accredited for ISO 17025. Both laboratories report assay results by e-mail and by certified paper copy to PASB.

The standard sample flow, preparation, analysis, and database entry consists of the following steps:

- 1. PASB geologists make lithologic logs and mark core for assay sample selection.
- 2. Core is half-sawed at San Vicente site.
- 3. Each half-sawed sample is placed into a plastic bag with sample number and stapled shut (remaining half core is stored in warehouse facility at San Vicente site).
- 4. Bagged samples are transported by PASB personnel by light truck to Oruro or La Paz.
- 5. ALS or SGS receives core, logs it in, and weighs it as received.
- 6. ALS or SGS crushes entire sample to 70% -10 mesh (Tyler Series basis).
- 7. ALS or SGS splits sample with riffle splitter down to 1000 grams, retaining the coarse reject until instructed by PASB as to disposition.
- 8. ALS or SGS pulverizes the entire split to 85% -200 mesh (Tyler Series basis).
- 9. ALS or SGS performs Atomic Absorption (AA) on Ag, Zn, Pb and Cu
- 10. ALS or SGS performs a 50 gram fire assay for Ag grades > 500 g/t.
- 11. ALS or SGS performs a titrimetric analysis on Zn grades > 10%
- 12. ALS or SGS reports assay by email and by paper copy to PASB, both as spreadsheet and as certificate

- 13. PASB personnel assign the assay data to hole and depth interval, keying on sample number.
- 14. Incremental assay data are combined into a global drill and sampling database. Historically, no duplicate assays have been systematically performed. QA/QC for drill samples was applied in the second phase drilling starting in the year 2003, including the re-assaying of about 3% of the samples. Comparison of results are shown in Table 8c. (Sample results from check assays from diamond drilling). Check assays were performed on the same samples on pulps by the same primary laboratory and on rejects by a secondary laboratory. In 2007 PASB implemented certified standards as an additional QA/QC control. One standard is submitted in every batch of 20 samples. All of the drilling, sampling and QA/QC programs were conducted under the direct supervision of Pan American s geology staff. In addition, 21 mineral reserve blocks have been resampled for quality control.

In conclusion, it is Dr. Michael Steinmann s opinion that the San Vicente sampling, sample preparation, security, analytical procedures, and quality assurance program meets industry standards.

Table 8c Diamond Drilling Check Assays

	SAMPLES			SILVER			ZINC	
			1st.	2nd.	<i>3rd</i> .	1st.	2nd.	<i>3rd</i> .
<i>SAMPLE</i>	<i>SAMPLE</i>	<i>SAMPLE</i>	Analisis	Analisis	Analisis	Analisis	Analisis	Analisis
NUMBER	NUMBER	NUMBER	Ag	SGS	CHEMEX	Zn	SGS	CHEMEX
ORIGINAL	SGS-PulpaGH	HEMEX-rechazo	os g/t	Pulps	Rejects	%	Pulps	Rejects
7020	30001	7020	1788.0	1706.0	2040.0	0.76	0.76	0.80
7041	30005	7041	8.0	5.2	1.4	0.27	0.29	0.03
7060	30002	7060	8.4	42.4	10.6	0.07	0.08	0.08
7083	30006	7083	33.0	7.2	69.7	0.11	0.12	0.13
7104	30003	7104	344.0	38.8	331.0	0.03	0.03	0.03
7120	30007	7120	3893.0	4014.0	4330.0	18.00	20.90	19.25
7140	30004	7140	13.0	7.2	10.3	0.32	0.35	0.40
7160	30008	7160	203.0	224.0	168.0	0.19	0.26	0.23
7181	30009	7181	3.2	3.2	1.8	0.03	0.02	0.02
7200	30010	7200	1453.0	1446.0	1540.0	1.36	1.36	1.38
7221	30015	7221	42.0	55.6	52.5	1.28	1.44	1.34
7222	30014	7222	23.0	27.2	27.7	0.68	0.80	0.88
7227	30013	7227	4.8	4.8	4.3	0.56	0.56	0.64
7230	30012	7230	45.0	56.8	55.1	0.44	0.48	0.55
7240	30011	7240	4.0	1.0	2.0	0.60	0.60	0.63
7260	30016	7260	1467.0	1997.0	1930.0	6.40	6.71	6.33
7280	30018	7280	12.0	12.3	12.6	1.16	1.20	1.17
7304	30017	7304	173.0	164.6	171.0	0.26	0.28	0.27
7320	30020	7320	39.5	42.5	41.9	6.80	7.03	6.71
7339	30019	7339	2231.0	2227.0	2310.0	7.20	7.13	7.48
7361	30021	7361	15.0	13.2	14.3	0.12	0.16	0.14
7383	30022	7383	185.0	155.7	164.0	2.40	2.45	2.40
7415	30024	7415	1433.0	1490.0	1465.0	2.80	3.29	2.92
7420	30025	7420	62.4	12.4	10.3	0.64	0.69	0.68
7440	30023	7440	110.0	96.4	99.0	0.52	0.66	0.60
7460	30026	7460	27.2	26.5	24.7	0.09	0.11	0.11
7477	7477	30027	500.0	579.0	592.0	3.95	4.00	4.31
7497	7497	30028	7.1	7.0	4.2	0.11	0.11	0.06
7515	7515	30029	130.0	131.0	137.0	0.91	0.93	0.93
7538	7538	30030	4.3	3.3	4.5	0.26	0.25	0.27
7569	7569	30031	101.0	98.0	98.0	5.28	5.29	5.28
7590	7590	30032	256.0	255.0	244.0	16.35	16.00	15.60
7608	7608	30033	677.0	682.0	571.0	9.54	9.47	9.35
7630	7630	30034	20.1	21.0	21.0	1.88	2.09	1.90
7666	7666	30035	192.0	208.0	174.0	5.43	5.43	4.85
7683	7683	30036	3740.0	3757.0	2950.0	1.23	1.34	1.11
7701	7701	30037	625.0	664.0	774.0	0.38	0.38	0.44
7724	7724	30038	36.1	37.0	40.6	0.34	0.33	0.36

Edgar Filing: PAN AMERICAN SILVER CORP - Form 6-K

7748	7748	30039	876.0	953.0	983.0	0.19	0.19	0.21
//48	1148					0.19	0.19	
7775	7775	30040	776.0	782.0	165.0	0.15	0.15	0.05
7788	7788	30041	9.1	9.0	9.4	0.13	0.13	0.14
7809	7809	30042	107.0		96.0	0.23		0.22
7830	7830	30043	87.2		85.5	0.07		0.07
7853	7853	30044	678.0		630.0	0.77		0.73
7874	7874	30045	2270.0		2160.0	6.60		6.69
7892	7892	30046	90.2		90.3	4.14		3.81
				33				

16.0 DATA VERIFICATION

Sampling results returning from the laboratories are plotted on level plans and visually checked for outliers. Check samples are plotted against each other for every element analysed. Most of the data verification is done using Data Mine[®], commercial mine modeling software Samples are plotted on plans and sections to verify the correct location in the drifts or stopes. Further details about data verification and applied geostatistics are given in Section 19. PASB performs routine assay data verification by primary and secondary laboratory check sample analyses. In addition, ALS Chemex and SGS perform numerous internal standard determinations and checks. Historically, no duplicate assays have been systematically performed because this was not a standard procedure for COMIBOL at their operations.

Data analysis and verification evaluations have been performed for the San Vicente mine by Mr. Elmer Ildefonso, Geostatistical consultant to PASB. Mr. Ildefonso is an accomplished expert in mineral resource and reserve model development; however, he is not a Qualified Person. As such, PAS s Dr. Michael Steinmann has reviewed and verified the work of Mr. Elmer Ildefonso.

17.0 ADJACENT PROPERTIES

There is no information on adjacent properties in this Technical Report.

18.0 MINERAL PROCESSING AND METALLURGICAL TESTING

PASB employed the engineering firm Lyntek Inc, based in Denver, Colorado, to design the process plant flow sheet and to estimate the plant capital costs. PASB provided Lyntek with engineering reports and operating data from the Chilcobija Concentrator when processing San Vicente ore. Detailed below is a summary of the most significant information contained in these sources that Lyntek used in developing the flow sheet for the new concentrator at San Vicente.

- 1. Grinding to 65% -200 mesh (80% -150 mesh) provides sufficient liberation for selective flotation of the San Vicente ore.
- 2. Bond Work Index = 11.64 KwH/T
- 3. Regrinding of the ore is not necessary.
- 4. Two stages of cleaning are required for the copper/silver concentrate;
- 5. Total flotation times of more than 10 minutes are required in the copper/silver flotation stages;
- 6. It is possible to produce zinc concentrate with grades higher than 48% zinc with recoveries approaching 90% depending upon the depression of zinc in the copper/silver flotation stages;
- 7. Grinding to 65% -200 mesh (80% -150 mesh) is required for optimum selective separation of the silver, zinc, and copper.
- 8. Tests indicate that the Cu/Ag concentrate will recover 80% of the Ag, 73% of the CU, and 17% of the Zn and the Zn/Ag concentrate will recover 12% of the Ag, 16% of the Cu, and 78% of the Zn (pilot test number PS-105).

Mr. Douglas Maxwell, P.E, one of the authors of this Technical Report, has reviewed the foregoing information and approves it. He has determined that in his professional judgement the conclusions reached are sound and approves of and confirms the use of this information.

Metallurgical Testwork includes the following:

- 1. Determination of Bond Work Index Universidad Nacional de Igenieria, September 2005.
 - o This comminution testing was performed at the Mineral Processing Laboratory of the National University of Engineering College of Mining, Metallurgical and Geological Engineering located in Lima Peru. The conclusion was that the Bond Work Index = 11.64 Kwh/T. The procedure used was to determine the amount of fines minus 150 mesh generated in each turn of a grinding mill over a number of 100 revolution cycles, with the fines being replaced with fresh sample after each cycle until equilibrium was reached.
- 2. Metallurgical Study of the Metallic Minerals at the San Vicente mine conducted at Tecsup Laboratories Alfredo Vargas, October, 2004.
- 3. This study was conducted in Lima, Peru. The objective was to produce silver and zinc concentrates with the highest grades and recoveries that could be reproduced in new plant. Five samples that were provided by San Vicente from different levels of the Litoral and 6 de Agosto veins were crushed separately to 10 mesh, mixed and separated into 1 kilogram samples and stored in a freezer until used. The samples were milled in a laboratory 21 centimetre by 24-centimetre ball mill with a 12 kilogram soft steel ball charge to reproduce industrial conditions. Natural flotation and selective flotation tests were performed.
 - Metallurgical Study of the Metallic Minerals of the San Vicente mine conducted at Quiruvilca mine, Peru G. Portales, September 2005.
- 4. Additional floatation testwork was performed by A. Vargas, P.E.. The purpose of the testwork was to verify the results of Test 105 in the metallurgical study conducted by A. Vargas. The conclusion of the work was that the test results were confirmed. In order to obtain a representative sample, the 4,500 tonne stockpile at the San Vicente mine was sampled and the size reduced to ½ inch. The total weight of the sample was 180 kilograms. The sample had an average head grade of 384 g/t silver, 0.34% copper, 0.12% lead, 5.92% zinc. The flotation testwork was conducted at the Quiruvilca mine who have a long history of production using the flotation process.
- 5. Metallurgical Testwork on San Vicente Ore. Carried out in the Metallurgical Laboratory of the National University of Peru, Faculty of Mining, Geological and Metallurgical Engineering. By Julio Uza Teruya, September 2005.
- 6. Determination of Work Index, Carried out in the Metallurgical Laboratory of the National University of Peru, Faculty of Mining, Geological and Metallurgical Engineering, by Julio Uza Teruya. September 2005.
- 7. Information gathered from 3 phases of toll milling San Vicente ore at Chilcobija mill from 2001 to present, consisting of a 200,00 tonne, 55,000 tonne and a 35,000 tonne program.

Mr. Douglas Maxwell, P.E, an author of this Technical Report, has reviewed the foregoing information and approves it. He has determined that in his professional judgement the conclusions reached are sound and approves of and confirms this information.

A zinc-silver flotation concentrate and a copper-silver flotation concentrate are currently being produced at Chilcobija and in the future will be produced at the new plant.

The zinc-silver concentrate that will be produced in the new mill to be constructed as part of the San Vicente Mine Expansion Project is forecast to average a concentrate grade of 56% zinc and contain 12% of the recovered silver. The amount of zinc concentrate produced each year will vary depending on the zinc head grade with an average at full production of 13,700 tonnes per annum. Zinc concentrates are currently sold under a long-term contract to Trafigura which has been used to establish the economic terms for the zinc concentrate that have been used in the economic

model. Deleterious elements are forecast to be below the thresholds that require the payment of penalties. The copper-silver concentrate that will be produced in the new mill to be constructed as part of the San Vicente Mine Expansion Project is forecast to contain a concentrate grade of 16% copper and to average

2% silver. At full production, some 3,500 tonnes of concentrate will be produced per annum. Deleterious elements in the copper-silver concentrate include antimony and bismuth and the penalties for these elements are estimated to total \$160 per tonne. In order to construct an economic model of the process it has been necessary to make an assumption for the copper head grade. Copper assays have not been routinely taken at San Vicente and therefore no estimate of copper grades in the mineral resource is possible. In October 2006 when it was recognized that the optimum process flowsheet would include producing a copper-silver concentrate, PAS initiated taking copper feed grade assays to the Chilcobija plant. In the seven months since then the copper grade has averaged 0.37% with a low of 0.35% and a high of 0.41%. By back calculating a copper head grade from previous smelter concentrate assays, the copper head grade has averaged 0.4%. For the purpose of modelling of the process, a copper grade of 0.3% has been assumed, however for the purposes of sizing the flotation cells, Lyntek has used a copper grade of 0.4%. As the economic analysis considers only proven and probable mineral reserves, the life of mine revenue from copper has been eliminated from the economic analysis. It is recommended however, that copper be routinely assayed for and eventually included in the resource calculation when sufficient data permits. This process should start in earnest on the construction of the assay laboratory at the new plant site.

Lyntek reviewed flow sheet and mass balance information provided by PAS and provided recommendations for the design of a new process plant. The flowsheet design for the new San Vicente Plant utilizes conventional unit operations, including primary crushing, SAG and ball milling, copper and zinc flotation circuits, thickening, filtration, and tailings disposal. Figure 1-9 provides a drawing of the plant flow diagram.

The design basis for the ore processing facility is an average of 750 dry tonnes per day (DTPD), 35 tonnes per hour, and 270,000 dry tonnes per year (DTPY at 100% utilization) on an operating basis of 360 days per year. Figure 1-10 is a general arrangement drawing showing the process facilities.

Using the results obtained from processing San Vicente ore at Chilcobija and test results from crushing, grinding and flotation tests, Lyntek has designed a plant which they report will achieve the metal recoveries shown in Table 9.

Table 9 Lyntek Recommended Metal Recoveries

		Total % Recovery (2 and 4)							
	Grade				• `				
Stream	Range	Ag (2)	Ag (4)	Zn (2)	Zn (4)	Cu (2)	Cu (4)		
	2.8 -								
Zinc	5.92%			80%	90%				
	444 -								
	458.9								
Silver	g/t	85%	88%						
	0.2 to								
Copper	0.4%					53%	75%		
					Recovery	by Concentr	rate (3)		
Item					Ag	Zn	Cu		
Cu/Ag Concentrate					80%	17%	73%		
Zn/Ag Concentrate					12%	78%	16%		
Tailings					8%	5%	11%		

1) The ore grades vary by sample.

Notes:

The Average Grade for each metal is calculated to be:

Ag = 444 g/t / Zn = 3.8 % / Copper 0.38 %.

- 2) % Recovery from PASB Feasibility Study 2005
- 3) % Recovery from A. Vargas Test Report 2004 Test 105
- 4) Lyntek/Vargas projected Recovery values. Chilcobija is currently recovering 86.34% Ag.

The recoveries projected by Lyntek are a considerable improvement over that currently being achieved in the Chilcobija plant; however the data is supported by testwork and as previously stated the Chilcobija plant is in poor condition. The testwork was however geared towards the proven and probable mineral reserve average grade at the end of 2005 (2.38 million tonnes at 436 g/t Ag and 3.82% Zn). At the end of

2006, the tonnes had increased and the grades decreased to 3.06 million tonnes at 348 g/t Ag and 3.44% Zn. This change was primarily due to the impact of higher metal price assumptions. In order to recognize this change, the recoveries used for the economic assessment used in the report were reduced to the values shown in Table 10.

Table 10 Anticipated Plant Metal Recoveries

		Recoveries Used		
		for		
	Ultimate Design	Economics in this		
	Recoveries	report		
Silver	88%	85%		
Zinc	90%	85%		
Copper	75%	70%		

19.0 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

The mineral resources at the San Vicente mine were estimated by a consultant to PAS, Elmer Ildefonso, under the supervision of Dr. Michael Steinmann, P. Geo. Senior Vice-President of Exploration and Geology for PAS. Following the application of mining parameters, preparation of a mine plan, and an economic analysis, the measured and indicated portions of the mineral resources were converted to proven and probable mineral reserves under the supervision of Mr. Martin Wafforn, P. Eng. PAS s Vice-President of Mine Engineering. All mineral resources and mineral reserves quoted are estimated in accordance with accepted industry practices, are in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum definitions on Mineral Resources and Mineral Reserves, and are in compliance with NI 43-101.

Block models were constructed in Datamine for the major veins 6 de Agosto, Litoral, Litoral Ramo 2, Unión, Adela, San Lorenzo, Guernica II, Cantera, Artola, San Jose and Deseada veins. These veins were previously identified as having the potential of having wider mineralization and being economically more significant. They were subsequently the focus of the exploration campaigns conducted by PASB and therefore have a more complete data set. The Project s database has been used for metals exploration, resource modeling, geotechnical studies, metallurgical studies, and hydrological exploration/studies. The resource models were derived from the following data sets:

Diamond core drill hole location, orientation, and assays for both surface and underground drilling

Diamond core density determinations

Underground channel samples by PAS

Underground channel samples by COMIBOL

The underground channel samples were entered into the database as pseudo diamond drill holes with collar co-ordinates, length, azimuth and grade. In many cases, the COMIBOL channel samples did not fully sample the entire width of the structure, focusing instead on the high-grade core of the vein. This contrasted with the samples taken by PAS, where the entire width of the vein out to its economic limits was sampled. In the major veins, the PAS sampling replaced the COMIBOL sampling, however in the minor veins it was decided to use the old COMIBOL data uncorrected. The potential impact of the COMIBOL data to the overall resource calculation (overestimating grades but underestimating tonnes and contained metal in the minor veins) is reduced each year as new channel sample data is added.

A statistical and geostatistical analysis of each vein was conducted. From this analysis, a top cut for each vein was estimated and applied as well as the search radius for resource categorization. A geometric model for each vein was constructed in Datamine that considered the intersections of drill holes and

channel samples with the vein, the underground and surface surveys, and the geologic interpretation. The method of grade interpolation used was ordinary kriging.

The variography of the samples of each major vein has been reviewed and shows the continuity of the silver and zinc grade distribution to be greater than the current block size of 40 m along strike and 20 m along dip. The following classification scheme has been applied to the resources:

Measured resources 20 m up and down dip with samples on at least one level.

Indicated resources 10 m up and down dip as a continuation of the measured resource blocks. In the case of individual drill hole intercepts with no support from channel samples the indicated resource is for 20 m diameter. This is valid for all veins except Litoral R2 where variography allows 70 m along strike and 30 m up and down dip.

Inferred resources 10 m up and down dip as a continuation of the indicated resource blocks, or an additional 10 m diameter donut outside the indicated resource.

The average specific gravity for the entire deposit had been assumed to be 2.90 in previous resource calculations. Owing to the significantly different base metal grades of some of the veins, it was recognized by PASB that this SG data quality needed to be improved. In order to acquire the data necessary to make this improvement, a sampling and specific gravity measurement program was conducted in 2005. More than 3,800 samples were collected from the different structures in the mine and tested to determine their specific gravity. The results were grouped by vein in order to determine the average specific gravity for each vein that is shown in Table 11.

Table 11 Specific Gravity by Vein

Vein	New S.G.
6 de Agosto	2.81
Union	2.91
San Lorenzo	2.83
Guernica II	2.85
Cantera	2.82
Artola	2.72
Adela	2.71
San Jose	2.64
Litoral	2.81
Litoral Ramal 2	2.81
Deseada	2.72

For the end of 2006 resource calculation, dilution was added utilizing an empirical formula similar to that proposed by T. Alan O. Hara. The formula takes into account the vein width and dip angle when calculating the dilution percentage. The calculated amount of dilution decreases as a percentage as the dip and or the vein width increase. This is consistent with PAS experience in Peru in similar mining and ground conditions. Consideration was given to modifying the dilution formula to increase the amount of dilution for the Litoral Ramal 2 vein where longhole mining will be used. The co-authors reviewed the formulae proposed and concluded that for a mine with such good ground conditions the proposed formula for longhole mining resulted in an excessive amount of dilution and decided to use one formula for the entire deposit. The co-authors recommend that as mining progresses at San Vicente actual dilution measurements be taken that will allow the formula to be modified or replaced based on actual experience. The formula used for calculating dilution is as shown in Table 12.

Table 12 Dilution Calculation

The minimum mining width at the San Vicente mine is 0.8 m, based on observations and measurements of stopes at the mine the stope miners there have demonstrated their ability to mine down to these narrow widths. After the application of O Hara dilution, however as all of the blocks were greater than 0.8 metres wide there was no need to apply a minimum mining width restriction to the resource calculation.

As permanent ore pillars must be left for stability and safety as well as other mining losses, a mining recovery factor of 90% has been applied to each blocks tonnage while leaving the grades unchanged. The majority of these losses occur in sill, manway (rib), and crown pillars.

Following the calculation of the diluted tonnes and grade in each block, economic parameters were applied to the measured and indicated mineral resources to calculate the proven and probable mineral reserves. The measured and indicated mineral resources remaining are that portion of the overall resource that have the necessary data density and geologic confidence to be assigned to those mineral resource categories but require improvements in the economic conditions or assumptions in order to convert to mineral reserves.

The first economic parameter applied was a Net Smelter Return (NSR) value per tonne. This was calculated for each block by applying metal prices and using the existing and projected smelter terms to derive NSR or Value per Tonne (VPT) factors. The concentrates are sold under a contract with Consorcio Minero S.A. (CORMIN), a division of Trafigura, under a contract that runs until 2010. The factors and metal prices calculated are shown in Table 13.

Table 13 Resource Metal Prices and Factors

Metal	Price	Factor
Silver	\$9.00 / ounce	6.6730
Zinc	\$2,100 / tonne	8.9667

The second economic parameter was applied in the overall mine plan by considering the economic merits of each zone to ensure that small isolated blocks that do not justify development are not included in the proven and probable mineral reserves.

The third economic parameter applied was the calculation of a cut off VPT. In consideration of the estimated operating costs and metallurgical recoveries, a cut off VPT of \$34 was calculated for shrinkage

stoping and a VPT of \$30 was calculated for longhole stoping. All measured mineral resource blocks with the application of the mining parameters that have a VPT higher than shown above for the respective mining methods were converted to proven mineral reserves. Similarly, all indicated mineral resource blocks that met the requirements above were converted to probable mineral reserves. As all mineral resources must have a potential to be economic, all remaining measured and indicated mineral resource blocks as well as any inferred mineral resource blocks (no inferred mineral resource blocks were converted to proven or probable mineral reserves) with a VPT of less than \$17 per tonne were eliminated from the mineral resource summary.

As a final step, and in order to be conservative, the proven and probable mineral reserves were reduced by a further 5% to account for the potential losses that may occur where ore is left behind in stopes. This could be for a variety of reasons such as local poor ground conditions that cause a stope or a part of a stope to be abandoned and/or the inability to recover all of the ore on the walls or between drawpoints. The co-authors recommend that reconciliations be conducted when the mine is in full production in order to calculate the actual mining losses.

In late 2005, a national election in Bolivia resulted in the emergence of a left-wing government. This has caused some concerns amongst foreign companies doing business in Bolivia due to the government spolicy objective of nationalizing the oil and gas industries. There is no certainty the government will not take steps to implement such measures targeting the mining industry. Risks of doing business in Bolivia include being subject to higher taxes, and mining royalties, some of which have already been proposed or threatened, revision of contracts and threatened expropriation of assets, all of which could have a material adverse impact on the Company s operations or profitability. The co-authors conclude that PAS has taken reasonable steps to include the likely taxes that the property will be subject to in the economic model. There are no other known issues relating to environmental, permitting, legal, title, taxation, socio-economic, marketing, political, metallurgical, infrastructure, or other relevant factors that would materially affect the reported mineral resource and mineral reserve estimates reported in this Technical Report.

19.1. Mineral Reserves

The proven and probable mineral reserves at the San Vicente mine as of December 31, 2006 are estimated to be as follows:

Table 14 San Vicente Mineral Reserves

	Proven			Pr	Probable			TOTAL		
		Ag			Ag			Ag		
Structure	DMT	(g/t)	Zn (%)	DMT	(g/t)	Zn (%)	DMT	(g/t)	Zn (%)	
Stookmiles	44 222	225	2.50				44.222	225	2.50	
Stockpiles	44,323	325	3.58				44,323	325	3.58	
6 de Agosto	587,248	172	3.46	72,067	114	2.34	659,315	165	3.33	
Adela	209449	298	4.01	21,703	277	4.94	231,153	297	4.10	
Artola	17,925	203	1.20				17,925	203	1.20	
Cantera	150,182	179	3.42	35,517	201	4.04	185,699	184	3.54	
Deseada	279,080	237	6.48	52,394	268	7.04	331,474	242	6.57	
Guernica II	136,379	665	0.93	40,321	539	1.13	176,700	636	0.97	
Litoral R2	146,752	521	3.57	655,143	504	2.08	801,895	507	2.36	
Litoral	116,239	410	5.42	96,846	376	2.42	213,085	394	4.05	
San Jose	83,164	448	2.39				83,164	448	2.39	
San Lorenzo	43,371	395	2.79	2,386	445	2.47	45,756	398	2.77	
Union	174,426	352	3.94	93,271	374	4.40	267,697	359	4.10	
TOTAL	1,988,538	304	3.85	1,069,647	430	2.66	3,058,185	348	3.44	

Notes:

- 1. Total grades of silver and zinc are shown before mill recoveries of 85.0% percent for both metals are applied.
- 2. PAS s share is 94.999% of the total mineral reserves.
- 3. San Vicente s mineral reserves have been estimated at a minimum mineralized width of 0.8 metres and at a cut off value per tonne of \$34 for shrinkage stoping and \$30 for longhole stoping.
- 4. The geological model employed for San Vicente involves geological interpretations on sections and plans derived from core drill hole information and channel sampling.
- 5. Mineral reserves have been estimated using the O Hara dilution

formula, which typically adds 20% to 50% dilution at zero grade depending on dip angle and vein width.

6. Mineral

reserves have been estimated using a mining recovery of 90% with a further 5% subtracted for other mining losses.

- 7. Mineral reserves were estimated based on the use of longhole stoping in the Litoral Ramal 2 vein and shrinkage stoping in all other veins. The mining and processing rate is assumed to be 750 tonnes per day on completion of the new plant.
- Mineral reserves for the principal structures are estimated with a 3 dimensional block model using datamine software. Mineral reserves for minor structures are estimated using polygonal methods on longitudinal sections.
- 9. Mineral reserves were estimated using a price of \$9.00 per ounce of silver and \$2,100 per tonne of zinc.
- 10. Environmental, permitting, legal, title, taxation, socio

Edgar Filing: PAN AMERICAN SILVER CORP - Form 6-K

economic, political, marketing or other issues are not expected to materially effect the above estimate of mineral reserves.

19.2. Mineral Resources

The measured and indicated mineral resource estimates for the San Vicente mine as of December 31, 2006 are in addition to the mineral reserves and are estimated to be as follows:

Table 15 San Vicente Measured and Indicated Mineral Resources

	M	leasured			Indicated		-	ΓΟΤΑL	
		Ag						Ag	
Structure	DMT	(g/t)	Zn (%)	DMT	Ag (g/t)	Zn (%)	DMT	(g/t)	Zn (%)
6 de Agosto	94,616	71	1.28	24,332	58	0.90	118,947	68	1.20
Adela	64851	81	0.81	4,950	86	0.58	69,801	81	0.79
Artola	0	0	0.00				0	0	0.00
Cantera	28,015	63	1.51	10,088	83	5.28	38,103	68	2.51
Deseada	14,462	58	2.15	4,252	86	0.98	18,715	64	1.89
Guernica II				8,875	91.49	0.17	8,875	91	0.17
Litoral R2				14,229	81	0.59	14,229	81	0.59
San Jose	18,553	99	0.54				18,553	99	0.54
San Lorenzo	1,271	55	1.53	9,747	129	0.13	11,017	121	0.29
Union	3,186	72	0.38	2,433	22	2.69	5,619	50	1.38
Jesus Maria*				6,490	402	0.14	6,490	402	0.14
Pepitas*				24,720	218	8.71	24,720	218	8.71
Inca*				78,839	455	0.00	78,839	455	
Tajos*				62,167	369	0.00	62,167	369	
6 de Agosto									
split 3*				39,994	458	6.39	39,994	458	6.39
6 de Agosto									
split 4*				32,400	377	4.70	32,400	377	4.70
Guernica I *				11,648	340	2.27	11,648	340	2.27
Arturo*				105,662	207	8.19	105,662	207	8.19
Artola Ramo									
A*				4,419	358	3.95	4,419	358	3.95
TOTAL	224,953	74	1.15	445,244	294	3.67	670,198	220	2.82

Notes:

- 1. PAS reports mineral resources and mineral reserves separately. Reported mineral resources do not include amounts identified as mineral reserves.
- 2. PAS s share is 94.999% of the total mineral resources.
- 3. The geological model employed for San Vicente involves geological interpretations on sections and plans derived from core drill hole information and channel sampling.

- 4. Mineral resources have been estimated using the O Hara dilution formula, which typically adds 20% to 50% dilution at zero grade depending on dip angle and vein width.
- 5. Mineral resources have been estimated using a mining recovery of 90%.
- 6. Mineral resources were estimated based on the use of longhole stoping in the Litoral Ramal 2 vein and shrinkage stoping in all other veins. The mining and processing rate is assumed to be 750 tonnes per day on completion of the new plant.
- 7. Mineral resources for the principal structures are estimated with a 3 dimensional block model using datamine software. Mineral resources for minor structures are estimated using polygonal methods on longitudinal sections.
- 8. Mineral resources were estimated using a price of \$9.00 per ounce of silver and \$2,100 per tonne of zinc.
- 9. Environmental, permitting, legal, title, taxation, socio economic, political, marketing or other issues are not expected to materially effect the above estimate of mineral resources.
- 10. Mineral resources that are not mineral reserves do not have demonstrated economic viability.
- 11. A cut off value per tonne of \$17.00 was used for inclusion in the mineral resources.

Table 16 San Vicente Inferred Mineral Resources

	Inferred						
Structure	DMT	Ag(g/t)	Zn (%)				
6 de Agosto	66,956	98	2.16				
Adela	2108	99	0.62				
Artola	0	0	0.00				
Cantera	0	0	0.00				
Deseada	49,655	255	7.28				
Guernica 2	45,982	418	0.82				
Litoral R2	212,729	214	1.55				
Litoral	74,899	363	2.15				
San Jose	0	0	0.00				
San Lorenzo	14038	131	0.56				
Union	64856	247	3.05				
TOTAL	531,223	243	2.34				

Notes:

- 1. PAS reports
 mineral
 resources and
 mineral reserves
 separately.
 Reported
 mineral
 resources do not
 include amounts
 identified as
 mineral
 reserves.
- 2. PAS s share is 94.999% of the total mineral resources.
- 3. Inferred mineral resources have a great amount of uncertainty as to their existence and as to whether, they can be mined legally or

economically. It cannot be assumed that all or any part of the inferred mineral resources will ever be upgraded to a higher category.

- 4. The geological model employed for San Vicente involves geological interpretations on sections and plans derived from core drill hole information and channel sampling.
- 5. Mineral resources have been estimated using the O Hara dilution formula, which typically adds 20% to 50% dilution at zero grade depending on dip angle and vein width.
- 6. Mineral resources have been estimated using a mining recovery of 90%.
- 7. Mineral resources were estimated based on the use of longhole stoping in the Litoral Ramal 2 vein

and shrinkage stoping in all other veins. The mining and processing rate is assumed to be 750 tonnes per day on completion of the new plant.

8. Mineral resources for the principal structures are estimated with a 3 dimensional block model using datamine software. Mineral resources for minor structures are estimated using polygonal methods on longitudinal sections.

- 9. Mineral resources were estimated using a price of \$9.00 per ounce of silver and \$2,100 per tonne of zinc.
- 10. Environmental, permitting, legal, title, taxation, socio economic, political, marketing or other issues are not expected to materially effect the above estimate of mineral

resources.

11. Mineral

resources that are not mineral reserves do not have demonstrated economic

viability.

Ordinary kriging was applied in two phases, first to Pan American silver sampling data only (channels and drill holes) and later to remnant blocks containing data collected by COMIBOL. Variogram models have been obtained for each variable and for each vein which have been divided in blocks of 40 x 20 m (strike and dip). The blocks have been classified as measured, indicated or inferred based on the relative confidence of the supporting data for each evaluated block.

Mineral resources that are not mineral reserves do not have demonstrated economic viability and therefore were not included in the economic analysis contained in this Technical Report.

20.0 OTHER RELEVANT DATA AND INFORMATION

No other data or information is relevant for the review of the San Vicente Mine Expansion Project.

21.0 INTERPRETATION AND CONCLUSIONS

In the opinion of the co-authors, the diamond drilling and channel sampling information that has been collected is of sufficient quality, density and reliability for mineral resource and mineral reserve estimation.

The quality assurance/quality control programs are conducted under the direct supervision of Pan American s geology staff and periodically reviewed and revised by Michael Steinmann, P.Geo.

This Technical Report details the methodology employed and demonstrates why the co-authors conclude that the expansion of the San Vicente mine is technically feasible and economically viable at the assumed metal prices (i.e. based on \$9.00 per ounce silver and \$2,100 per tonne zinc). It is the opinion of Martin Wafforn P. Eng., Michael Steinmann P.Geo. and Douglas Maxwell, P.E, co-authors of this Technical Report, that the data contained herein is of sufficient quality and reliability to make the conclusions stated.

The economics take into account an increase in the mining taxation rate that has been discussed by the Bolivian government but not yet implemented. The project will provide jobs and economic stimulus to an area that is economically depressed, and can be constructed in and operated in an environmentally sound manner. The project enjoys strong support from the union that represents the current employees at the mine and current indications are that the Bolivian national mining company COMIBOL and joint venture partner in the project will provide support as well. There have been some threats of nationalization of mining projects in Bolivia, however this has not occurred to date and the risk is balanced by the high projected IRR of the project and the relatively small cash outlay that is required when considering the cash benefits that will be received from on-going operations during the construction period.

The results of the metallurgical testwork as well as the previous processing of San Vicente ore at the Vetillas plant and the current processing of San Vicente ore at the Chilcobija plant give the authors a high degree of confidence that the projected metallurgical recoveries of 85% for silver and 85% for zinc will be realized.

The economic analysis calculates an Internal Rate of Return of 22% and capital payback in 2.9 years. The Net Present Value is \$23.6 million at a 10% discount rate and is \$14.4 million at a 15% discount rate. The undiscounted after tax cash flow is \$53.8 million. PAS s 95% share of the undiscounted after tax cash flow is estimated to be \$50.9 million. The Capital Cost is estimated to total \$40.5 million in 2007 and 2008. The San Vicente Mine Expansion Project is not sensitive to capital fluctuations of up to 25%.

The life of mine plan presented in this study is based solely on proven and probable mineral reserves. The life of mine plan extends until 2019. Any conversion of the mineral resources to proven and probable mineral reserves and any new exploration discoveries will add to the mine life.

The environmental license for the San Vicente mine is now in the process of being updated to reflect the proposed expansion of the mine, construction of a new processing plant, new tailings facility and associated infrastructure. PAS is committed to developing the San Vicente Mine Expansion Project by minimizing and mitigating environmental impacts in accordance with Bolivian regulations, industry best management practices and its own Environmental Policy.

22.0 RECOMMENDATIONS

The co-authors recommend that the San Vicente Mine Expansion Project should proceed according to the designs and schedules contained in this Technical Report. PAS currently has sufficient cash to develop this project and does not need to arrange for project financing. The next key step will be the award of an EPCM contract for the construction of the new process plant and upgraded infrastructure. The co-authors recommend that the reserve and resource statements presented herein be adopted.

Further the co-authors recommend that the following procedures be followed to enhance further mineral resource calculations:

Continue the program of replacing channel samples in the database that do not sample the full economic width of the deposit. The purchase of a small compressed air powered diamond drill would assist with this.

Analyse all future channel and diamond drill hole samples for copper grades.

When the San Vicente Mine Expansion Project is complete, conduct regular reconciliations of the mineral reserves to the mill actual results. This combined with actual dilution and ore loss observations underground

will allow the resource and reserve assumptions to be optimized.

It is recommended that additional water supply wells be drilled to ensure a more plentiful supply of water. The agreement with COMIBOL stipulates that this construction must be completed within 18 months of approval by COMIBOL of an engineering report that was presented to them (the permission was received in July 2007).

23.0 REFERENCES

Report

Assessment of Borrow Sources for concrete Aggregates Worley, Parson , Komex April 4, 2007
San Vicente Mine Site D Tailings Facility Preliminary Design Worley, Parsons, Komex April 12, 2007
Interim Report Geotechnical Engineering Assessment of the Proposed Process Plant Worley, Parsons, Komex January 22, 2007

Evaluation of Water Sources for the San Vicente Mine Worley, Parsons, Komex October 31, 2006

PASB Internal Report Updating COMIBOL on Project power supply
E. Robles January, 2007

Shaft and Hoist Review and Recommendations Dynatec Mining Corporation October 19, 2005

Metallurgical Study of the Metallic Minerals at the San Vicente Mine conducted at TECSUP lab, Lima, Peru- A. Vargas October, 2004

Metallurgical Study of the Metallic Minerals at the San Vicente Mine conducted at Quiruvilca Mine, Peru- G. Portales September, 2005

Determination of Bond Work Index Universidad Nacional de Ingeniería, September, 2005

Numerous correspondences and reports Estudios Mineros latest in May, 2007

Preliminary Design and Evaluation of Alternate Tailings Disposal Sites Komex October 28, 2005

Electrical Project of San Vicente (Upgrading transmission lines and sub-stations) Alicon SRL August 29, 2005

Upgrading existing electrical facilities Empresa de Servicios Eléctricos

Feasibility Study Report San Vicente, Bolivia Lyntek Inc. October, 2006

Basic Engineering Interim Report San Vicente, Bolivia Lyntek Inc. December, 2006

24.0 DATE

The information in this report is current as of June 6, 2007.

25.0 ADDITIONAL REQUIREMENTS FOR TECHNICAL REPORTS ON DEVELOPMENT PROPERTIES AND PRODUCTION PROPERTIES

25.1. Underground Mine Operations

Estudios Mineros, a third party Peruvian engineering company, completed the San Vicente mine plan. Martin Wafforn, who is a co-author of this Technical Report, has reviewed and determined, in his professional judgement that the mine plan and other work performed by Estudios Mineros discussed in this section 25 is sound and that this mine plan be adopted. The plan is based on providing 750 TPD of ore to the new mill that will start up in mid 2008 and ramp up production throughout the remainder of 2008 and early 2009. Included in the plan is the provision of 105,850 tonnes in 2007 and a further 100,000 tonnes of ore to the Chilcobija mill in 2008. The planned processing of 100,000 tonnes of ore at Chilcobija in 2008 remains subject to obtaining approval under the joint venture agreement with COMIBOL. At the end of 2006 there was an ore stockpile containing 44,000 tonnes at the San Vicente mine site that is available for processing over the start up and commissioning period.

All of the proven and probable mineral reserves totalling 3.06 million tonnes grading 348 g/t silver and 3.44% zinc are planned to be mined over a mine life that extends until 2019. The mine plan does not include any of the measured, indicated or inferred mineral resources or any possible mineral reserve additions that may occur in the future through exploration.

The plan comprises a continuation of the current shrinkage mining method for the narrow vein deposits that have been mined at San Vicente for many years. Figure 1-5 shows a longitudinal section of a typical shrinkage stope at the San Vicente mine. The wider Litoral Ramal Dos deposit that was discovered over the course of the past 4 years will be mined using a longhole mining method and mechanized equipment. Over the course of the life of mine, longhole mining is expected to account for some 26% of the production tonnage. Figure 1-6 shows a longitudinal section of the modified Avoca longhole mining method that will be used.

The existing mine was designed and built to extract steeply dipping narrow veins using conventional shrinkage stoping. Track levels are established at 30 to 40 metre intervals and include the +70, +35, 0, -30, -70, and -110 levels. For reference the 0 level is at an elevation of 4,440 m above sea level. The main accesses to the mine are via the San Jose adit at the 0 level and the San Juan Adit on the -30 level.

A vertical shaft (Pelayo shaft) extends from surface through the 0, -30, -70 and -110 levels. This shaft has 2 in-balance 1.5 tonne skips and hoists ore from the lower levels to the 0 level where the ore is trammed in rail cars to an ore dump on surface. Dynatec and Spencer Engineering have been retained to replace the existing Allis-Chalmers main production hoist with a refurbished CIR hoist. This work will include replacement of the small headframe as well as strengthening the shaft installations. Although safety was the main reason for replacing the existing hoist, the new hoist will have additional capacity and have the capability to be used in the event of a future shaft deepening program. A separate inclined shaft starts from underground at the -30 level and extends down to the -110 level. Ore hoisted up this shaft is trammed to an ore dump on surface in rail cars via the -35 level. Existing track drift dimensions are 2.4 metres by 2.3 metres restricting the size of mine cars and locomotives to 40 cubic feet and 6 tonnes respectively. The vertical and inclined shafts will hoist all of the production from the shrinkage stopes in the plan to surface. In order to transport the longhole stoping ore to surface, it is planned to develop a ramp from surface to access the Litoral vein with the company owned conventional trackless mining equipment. The ramp will be driven at a grade of minus 12%, at a section profile of 4.5m (wide) by 4.0m (high). Total planned ramp length to the -220 level is 2.5 kilometres. The ramp will connect with the existing tracked development at the -70 and -110 levels in order to be used as part of the ventilation circuit and to provide a large amount of flexibility as an alternate route for escape and for hauling ore and waste to surface. The box cut for the ramp has now been completed and a mine contractor will start development in July 2007.

The shrinkage method that is used at San Vicente does not require backfill of the mined stopes. Broken ore is retained in the stopes to provide a platform for the miners to work off of, with the swell of the broken ore removed after each blast in a set pattern so as to avoid the development of dangerous voids within the broken rock pile. A projection of the shrinkage stoping method is shown in Figure 1-5. The ground conditions in the vein ore bodies are considered good, in fact, the co-authors have observed stopes at the San Vicente mine that have stood open for many years and remain in good condition. The San Vicente miners are experienced in shrinkage stoping and are expected to continue to do an excellent job in recovering the ore body with minimal dilution.

Shrinkage stopes are designed to be 40 m along strike with a vertical interval of either 30 m or 40 m depending on the location in the mine. Level development is all in ore except where development is done between vein systems or in waste areas of vein systems. Timber chutes for extracting the ore are constructed above the track drift. Raises are developed in ore on each side of the stope that are timbered to provide access as the stope progresses up dip. Vertical 2.0 m wide rib pillars are left between stopes and a horizontal 4.0 m thick crown pillar is typically left under the track of the level above (wide shrinkage stopes require a thicker pillar). Productivity varies greatly depending on the width of the vein being mined and the cycle of the stope (as 2/3rds of the ore is retained in the stope during the drilling and blasting phases). The operating cost for shrinkage stoping (excluding energy costs) is estimated from historical

data to be \$15.50 per tonne, an allowance of 10% has been added to this amount due to price escalations that are occurring in the industry for a total of \$17.05 per tonne.

All ore production in 2007 and 2008 will be provided by shrinkage stoping, while the longhole areas are being developed and the mine works up the learning curve with the new longhole mining method.

The discovery by diamond drilling of the extension of the Litoral vein has provided a wide and high grade addition to the mines proven and probable reserve. PASB determined that a significant portion of the mineral reserve is amenable to longhole mining warranting the introduction of longhole mining methods. Longhole mining should result in a reduction in mining cost, compared to shrinkage mining, (Table 17) and will allow a higher mining recovery of the wider ore zones than could be achieved through shrinkage. The shrinkage method requires more permanent ore pillars to ensure stability of the stopes and safety of the miners.

The longhole cost per tonne of \$11.34 was calculated by PAS in Vancouver using a first principles estimate. Assumptions were made for units of work such as tonnes per metre drilled, productivity, mobile equipment maintenance requirements and the cost of consumables from suppliers in Bolivia, Peru, Argentina and Canada. A unit cost was calculated for each of the primary activities of development, longhole drilling, longhole blasting, mucking, backfilling, and truck haulage. These estimated unit costs were consolidated with the estimates for units of work in order to arrive at a cost per tonne for longhole mining. The operating cost estimates all assume a company workforce.

Table 17 Mining Method Cost per tonne

		N	Model US\$/tonne		
Mining Method		(US\$/tonne)			
Shrinkage	\$	15.50	10%	\$	17.05
Longhole	\$	11.34	10%	\$	12.47

In June 2006, PASB purchased mechanized equipment from Atlas Copco conjunctively with a maintenance service contract from the supplier. With a positive decision to proceed with the project, the only mechanized equipment remaining to be purchased are two underground trucks. All scoops were purchased with remote control packages to allow the maximum safe extraction of ore from longhole stopes. A listing of the mechanized equipment is as follows in Table 18:

Table 18 Mechanized Equipment

Equipment Type	Model/Capacity ST-3.5G (3.5yd ³	Number Required	Cost Each	Total Cost	Status
Scooptram LHD	Bucket) ST-2G (2.0yd ³	2	\$375,000	\$ 750,000	purchased
Scooptram LHD Longhole Drill	Bucket)	1	\$240,000	\$ 240,000	purchased
(production) Jumbo Drill	AC281 H253 single Boom	1	\$320,000	\$ 320,000	purchased
(development)	16 AC2010 20-tonne	1	\$380,000	\$ 380,000	purchased included in
Haulage Truck	capacity	2	\$335,000	\$ 670,000 \$2,360,000	capital

PASB has invested \$1.69 million in mechanized equipment required to start the Litoral decline which will access the Litoral vein. The capital estimate made for the economic model in this report contains \$670,000 in capital to purchase two 20 tonne underground low profile haul trucks.

A cost savings of \$4.58 per tonne is estimated for longhole mining as compared to shrinkage mining. When applied to the 800,000 tonnes that are planned to be mined using longhole mining methods a \$3.7 million LOM savings results.

This operating cost savings combined with increased safety from a non-entry mining method and increased ore recovery justifies the capital expenditure of \$2.36 million for longhole equipment. Although not included in this report or analysis there is some potential that the longhole mining equipment will have significant use beyond the current known mineral reserves.

Initial planning considered utilizing longhole mining for all vein structures with a width of greater than 3 metres, a dip greater than 60° and a Rock Mass Rating (RMR) greater than 50. Areas of the Litoral Ramal 2, Litoral and 6 de Agosto veins met these criteria. However, in order to simplify the long-term development and planning it was decided to apply longhole techniques in the Litoral Ramal 2 vein only. Opportunities do exist for cost savings by applying longhole in portions of vein structures as the mining and mine planning progresses.

The longhole mining method selected is a modification of the Avoca method. This low cost mining method is applicable to the ore geometry at San Vicente and particularly to the good ground conditions. Figure 1-6 shows the modified Avoca method intended to be used. Sub levels are to be developed off of the planned decline at 20 vertical metre intervals and used as access for long hole drilling of the block below; backfilling of the block below with unconsolidated waste, and for mucking ore from the block above.

Levels and sub-levels will be developed off the ramp as the ramp passes the designed elevations. This will provide additional working faces to increase productivity of the trackless equipment. Levels are designed at -70, -110, -150, -195 and -220 levels. A 3.8m (wide) and 3.8m (high) haulage drift will be driven in waste in the footwall. Drawpoints will connect the haulage drift with the ore drive. The ore drive will be at a profile of 3.0m (wide) and 3.0m (high) and provide the platform for the longhole drill. Ore from the ore drives will be transported to the mill for processing and therefore are operating costs and not included in the initial capital cost estimate. Broken ore will be extracted from the stopes from the level below with remote control scooptrams.

In order to arrive at a production and development schedule, Estudios Mineros summarised all of the proven and probable mineral reserve blocks by vein and by level. The blocks were then scheduled in a systematic manner in order to meet the expected production requirements of first the Chilcobija mill and later the new mill that will be built at San Vicente. In order to confirm the scheduling logic of the plan the stopes were sequenced on level plans and colour coded by year of mining. The life of mine development requirements were identified in a similar manner. The life of mine plan is summarized in Table 19.

Table 19 Life of Mine Plan

	2007	2008	2009	2010	2011	2012	2013
Mining							
Shrinkage	101,527	141,242	197,808	180,007	143,996	144,004	144,008
Mining Longhole			36,038	90,000	126,003	126,000	126,000
Total Mining	101,527	141,242	233,846	270,007	269,999	270,004	270,008
Opening							
Stockpile	44,323	40,000	29,492	88	95	94	98
Processing							
Chilcobija	105,850	100,000					
Processing New							
Plant		51,750	263,250	270,000	270,000	270,000	270,000
Total Processing	105,850	151,750	263,250	270,000	270,000	270,000	270,000
Silver Grade (g/t)	289	340	324	365	393	398	402
Zinc Grade (%)	3.80	3.74	3.84	3.59	3.48	3.42	3.11
	2014	2.0	015	2016	2017	2018	2019
Mining Shrinkage	144,00		1,049	223,554	270,068	238,070	139,040
Mining Longhole	126,00		5,000	46,449	270,000	230,070	137,010
Total Mining	270,00),049	270,003	270,068	238,070	139,040
Opening Stockpile	10		107	155	158	227	155,010
Processing Chilcobija			10.	100	100	22,	
Processing New Plant		0 270),000	270,000	270,000	238,296	139,040

Total Processing	270,000	270,000	270,000	270,000	238,296	139,040
Silver Grade (g/t)	397	385	316	283	287	251
Zinc Grade (%)	3.02	2.95	3.41	3.52	3.56	3.75
			47			

25.2. Recoverability

Mineral processing and metallurgical testing are discussed in section 18. This section 25.2 provides additional information on the recoverability of the valuable metals and the amenability of the mineralization to processing by describing the design of the process that will be used to recover the valuable metals.

For calculation of the amount of copper silver concentrate to be produced, a copper weight of 0.3% has been used as an average head grade for the San Vicente ore for the life of the mine. Chilcobija operational data indicates that there could be closer to 0.4% copper in the ore even after losses of copper to the tailings. However, in order to ensure that the economic analysis is based solely on proven and probable reserves, the value of the copper produced has been reduced to zero by setting the revenue for copper to \$0. This is a very conservative method of estimation as the analysis includes smelting and refining charges for the copper content in the copper-silver concentrate. Lyntek was been directed by PASB to use an average head grade of 0.4% for copper for design purposes only, as is indicated in the Design Criteria. The flotation circuits were sized conservatively in order to account for any changes in grade of the desired mineral values in the San Vicente ore as well as any vagaries in the operating characteristics of the concentrator.

Process Design Criteria

Comminution Circuit: The purpose of the Comminution Circuit is to crush/grind the ore to the desired particle size in order to obtain optimum flotation and recovery of the desired mineral values in the downstream Flotation Circuits. The use of either a SAG Mill/Ball arrangement as well as a Two-Stage Crushing/Ball Mill arrangement to perform the comminution of the San Vicente ore was investigated. It was found that the two stage crushing circuit would have required a third stage crushing plant, hence the decision was made to proceed on the basis of a SAG Mill/Ball Mill arrangement.

The circuit will utilize a 800 mm x 550 mm Primary Jaw Crusher and a 14 x 5 SAG Mill, which produces as system discharge of F100 = 10 mesh particles as feed to a 9 x 14 Ball Mill that is equipped with a 500 Hp motor. Lyntek used a design tonnage of 35 metric tonnes per hour (MTPH), a Bond Work Index = 11.54 KwHrs/Tonne, and the desired P80 = 105 microns Ball Mill discharge to the flotation circuit and contracted two prominent equipment vendors (Metso Minerals and Outokumpu) to provide a recommended size for the SAG Mill/Ball Mill circuit for this project. Both vendors recommended the size for the SAG Mill to be 14 Diameter x 5 long and the size for the Ball Mill to be 9 diameter x 14 long. This recommendation has been reviewed and confirmed by Mr. Douglas Maxwell. Both the SAG Mill and Ball Mill will be equipped with 500 Hp drives. A flow of 35 MTPH is equivalent to a capacity of 756 metric tonnes per day (MTPD) at a concentrator availability of 90%.

Outokumpu (now Outotec Technologies) was asked to conduct a milling analysis for a 9 Diameter x 12 Long Ball Mill that was being considered rather than the previously selected 9 diameter x 14 ball mill given the Bond Work Index = 11.54 KwHrs/Tonne and the desired discharge particle size of P80 = 105 microns. Outokumpu determined that the 9 diameter x 12 long ball mill would be capable of only processing 32 MTPH rather than the desired 35 MTPH and so this option was rejected.

A Regrind Mill was not included into the comminution circuit as Lyntek estimated that the Primary 9 \times 14 Ball Mill will be able to produce a particle size of P80 = 74 microns. This will also result in 62% of the particles being -53 microns and approximately 55% of the particles being -37 microns. This particle distribution data is contained in the

Determination of Work Index Report of September 2005. This particle sizing would release the majority of the locked Zn particles so that the Cu/Ag flotation concentrate will now have less Zn and be much cleaner and would not report to a regrind circuit; thus a Regrind Mill is not required.

Flotation Circuits: The purpose of the Flotation Circuits is to separate the economic metals from the waste rock and to separate the metals into saleable concentrates.

Lyntek has relied upon the information and data in the following test reports in order to develop the proposed flowsheet: (a) Alfredo Vargas 2004 Test Report, Test No. 105; (b) Guillermo Portales 2005 Test Report; and (c) Chilcobija Concentrator Operating Data when processing the San Vicente ore. The Material Balance for the proposed flowsheet is based upon the laboratory test data from both A. Vargas test report and G. Portales test report as well as Lyntek s experience in designing similar mineral processing concentrators. The flotation circuit design and selection of individual flotation cell volume is based upon the laboratory test data from both A. Vargas test report, G. Portales test report and a review of the Chilcobija operating data when processing the San Vicente ore. Mr. Douglas Maxwell has reviewed these reports and using his professional judgement has determined them to be sound and agrees with the adoption of the results. The flotation circuit design and flotation cell selection is also based upon Lyntek s professional assessment of the flotation requirements to process the San Vicente ore. The flotation circuits have been sized conservatively in order to provide for upsets and increased flow from the upstream Comminution Circuit. The flotation circuits have also been designed to provide for ease of operation by plant personnel. Additionally, the flotation cells have been selected to be as maintenance-free as possible while also providing for optimum metallurgical performance and equipment service and wear life. Both the flotation circuit design and equipment selection incorporate many years of flotation experience and knowledge as well as many years of concentrator trouble-shooting experience.

A single Flash Float or Pre-Float was included in order to take advantage of the natural flotation of desired values contained in the San Vicente ore. This initial flotation process should improve the overall recovery of these desired values while also decreasing the use of reagents to process the ore.

The flotation circuit design will include the following flotation circuits:

- 1. Flash Float or Pre-Float Circuit;
- 2. Bulk Cu/Ag Flotation Circuit; and
- 3. Bulk Zn/Ag Flotation Circuit.

The Flash Float or Pre-Float Floation Circuit will be one single conventional Flash Flotation cell The Flash Flotation concentrate will report directly to the Cu/Ag concentrate thickener and the Flash Flotation tailings will report to the conditioner for the Bulk Cu/Ag Rougher Flotation Circuit.

The Bulk Cu/Ag Flotation Circuit will consist of the following flotation stages:

- 1. Cu/Ag Rougher Flotation using conventional flotation cells;
- 2. Cu/Ag Scavenger Flotation using conventional flotation cells;
- 3. Cu/Ag 1st Cleaner Flotation using conventional flotation cells; and
- 4. Cu/Ag 2nd Cleaner Flotation using conventional flotation cells.

The Cu/Ag Rougher flotation concentrate will report to the 1st Cleaner Flotation, the 1st Cleaner flotation concentrate will report to the 2nd Cleaner Flotation and the 2nd Cleaner flotation concentrate will report to the Cu/Ag concentrate thickener. The Scavenger Flotation concentrate will report back to the Ball Mill feed and the Scavenger Flotation tailings will report to the Zn/Ag conditioner for the Bulk Zn/Ag Rougher Flotation Circuit.

The Bulk Zn/Ag Flotation Circuit will consist of the following flotation stages:

- 1. Zn/Ag Rougher Flotation using conventional flotation cells;
- 2. Zn/Ag Scavenger Flotation using conventional flotation cells;
- 3. Zn/Ag 1st Cleaner Flotation using conventional flotation cells;

- 4. Zn/Ag 2nd Cleaner Flotation using conventional flotation cells; and
- 5. Zn/Ag 3rd Cleaner Flotation using conventional flotation cells.

The Zn/Ag Rougher Flotation concentrate will report to the 1st Cleaner Flotation, the 1st Cleaner flotation concentrate will report to the 2nd Cleaner Flotation, the 2nd Cleaner flotation concentrate will report to the 3rd Cleaner Flotation, and the 3rd Cleaner Flotation concentrate will report to the Zn/Ag concentrate thickener. The Scavenger Flotation concentrate will report to the feed to the Zn/Ag Rougher Flotation and the Scavenger Flotation tailings will report to the Tailings thickener.

The same size flotation cells (300 cubic feet (8.5 cubic metres) and 24 cubic feet (0.68 cubic metres)) were selected in both the Cu/Ag and Zn/Ag flotation circuits in order to have a commonality of flotation cell sizes for operating personnel to understand the operating and maintenance characteristics as well as to have a commonality of spare parts for both maintenance and inventory purposes at San Vicente.

All flotation conditioners have been sized at 10 Diameter x 10 Deep (3m x 3m) in order to provide for a minimum of 10 minutes of conditioning time for the particles within the slurry. Each conditioner will also provide for high-intensity conditioning of the slurry particles in the slurry with the reagents via a two- propeller mechanism to assure that the mineral particles are coated with the reagents. Each conditioner tank will be designed with an up-comer (vertical trough) outlet in order to prevent short-circuiting of the conditioning reagents as well as to assure the conditioning of the mineral particles. The up-comer will rise about 5 inches above the slurry surface within the conditioner and extend downward into the conditioning tank to about one foot above the tank bottom so that all conditioned slurry within the tank will be forced to exit from the bottom of the conditioner.

Thickeners and Filtration circuits: The purpose of the Thickeners and the Filtration circuits are to provide solid separation in order to provide target moisture contents for saleable concentrates and for pumping tailings to the tailings storage facility.

The information provided in the Alfredo Vargas 2004 Test Report was relied upon to size both the thickeners and the filters. When test data was missing, Lyntek relied upon professional in-house experience as well as Vendor personnel experience in order to size and select the proper equipment. Both the thickeners and the filters have been sized conservatively in order to provide for optimum dewatering performance as well as to allow for ease of maintenance and equipment longevity.

High-rate thickeners have been selected for use at San Vicente in order to minimize the diameter of the thickener tanks that are required for the process. This also decreases the ground area required outside the plant building for locating the concentrate thickeners. The Cu/Ag and Zn/Ag concentrate thickeners have both been specified to be 20 ft. in diameter. The tailings thickener that will be located on the outside of the building has been specified to be 50 ft. in diameter. All thickeners have been sized conservatively in order to account for any upstream upsets as well as any increase in mineral values within the ore body.

Membrane filter presses have been selected for use in the San Vicente concentrator to allow for adequate dewatering at high altitude. Two filter presses will be installed; one for the Cu/Ag concentrate and the other for the Zn/Ag concentrate. At average mine head grades, approximately 40 tonnes per day of Zn/Ag concentrate and approximately 10 tonnes per day of the Cu/Ag concentrate will be produced.

Process Water and Reagents: Process water and reagents are required for the operation of the circuits within the process plant.

Refer to Table 5 and Section 7.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography for a complete description of the proposed water sources and the water requirement for the San Vicente concentrator. Reagents used in the concentrator will be a combination of frothers, collectors, depressants, pH adjusters(lime) and flocculants.

General Plant Design Philosophy

It was agreed during several meetings between Lyntek, PAS and PASB that a simple process design with a limited amount of instrumentation would best suit the location of the concentrator as well as the fit with the basic design philosophy. This simplified design philosophy has been utilized by Lyntek throughout the design process for the San Vicente concentrator.

Automation within the plant will be kept to a minimum in order to maintain a simple yet efficient plant. An automated belt scale and feeder will control the ore feed rate to the concentrator and automated samplers will be installed in the various circuits within the concentrator to obtain samples of the plant feed, concentrates and tailings. At this time, it is not considered necessary to fully instrument the plant. All pumps and cyclones will be equipped with pressure gauges for local display to be viewed by the operators. A PLC room has been incorporated into the building design for the instrumentation that will initially be installed as well as for use in the future for continued upgrading of the plant if more automation is justified.

25.3. Markets

Prices for the metals that San Vicente produces have been robust for the last three years, after several years of prolonged weakness. Factors contributing to the recovery in metal prices include demand resulting from strong industrial growth in China, weakness in the US dollar and supply concerns due to under-investment in new production capacity. PAS anticipates that these factors will continue to support prices during 2007 and that the long-term fundamentals for metal prices are positive.

The metal prices used in the mineral reserve calculations and the life of mine plan are considerably lower than the current market prices. Higher metal price assumptions in a range between the mineral reserve prices and the current market prices would positively affect the cash flow in the life of mine plan, but an increase to the mineral reserves would not be significant.

Contracts for the sale of concentrates from the San Vicente mine and from the San Vicente Mine Expansion Project are currently in place. The sale of metal concentrates to smelting companies and metal traders is a common practice in Bolivia and there is an active and competitive market for the concentrates that is expected to continue. PASB with the assistance of PAS intend to negotiate the sale of future concentrates directly with metal trading or smelting companies and do not intend to use agents to assist with this.

25.4. Revenues

The San Vicente mine will produce a zinc-silver and a copper-silver concentrate. Contracts are currently in place for these concentrates until the end of 2010. The concentrates are being sold under an agreement with Trafigura and their trading company Cormin. Both the zinc-silver and the copper-silver concentrates are taken by truck and rail to the port of Antofagasta in Chile for shipment. The smelter terms and conditions used in the economic model are assumed to be the same as those that are currently in place. Although San Vicente has historically received revenues from copper, as there is insufficient data to estimate the copper grade of the mineral reserves or mineral resources, the assumption in the economic analysis is that copper revenue will be zero. The model is not sensitive to reasonable changes in concentrate smelting charges. The assumptions for smelting the concentrates are considered by the co-authors to be reasonable and within industry norms.

25.5. Environmental Considerations

The environmental license for the San Vicente mine is now in the process of being updated to reflect the proposed expansion of the mine, construction of a new processing plant, new tailings facility and associated infrastructure. The existing license only contemplated the operation of the mine where the ore was processed off site by EMUSA at the Chilcobija plant under a toll milling contract. The existing environmental license also included the provision for all tailings produced from the processing of San Vicente ores at the Chilcobija plant to be permanently stored at a tailings facility near the plant. The responsibility for the design, operation and permitting of this tailings facility was part of the responsibilities of EMUSA under the terms of the toll milling contract.

PASB contracted the Bolivian consulting firm of Minco to carry out an environmental baseline study, ALBA, (as they are know for the acronym in Spanish) in 2001. Between 2001 and the present, this

baseline information has been complemented with semi-annual monitoring of air, soil and water quality parameters at various monitoring locations in the vicinity of the San Vicente mine. This existing information will be further complemented by a further round of sampling to establish the baseline conditions for the proposed expansion of the San Vicente mine.

Minco is currently in the stage of preparing the Environmental Impact Study, EEIA, as it is known under Bolivian legislation, for submittal to Bolivian environmental authorities. The main incremental impacts resulting from the proposed expansion of the mine are related to:

Construction of a new tailings facility in a tributary to the San Vicente River, downstream of the mine;

Construction of a new processing plant on the south side of the San Vicente river valley between the proposed location of the tailings facility and mine;

Increased groundwater use in the new plant; and

Wasterock storage from mine development.

PAS is committed to developing the San Vicente Mine Expansion Project by minimizing and mitigating environmental impacts in accordance with Bolivian regulations, industry best management practices and its own Environmental Policy.

A closure cost estimate was conducted by the PAS environmental department at the end of 2005, the remediation and reclamation cost estimate for the San Vicente Mine Expansion Project is shown in Table 20. There is no requirement to post a bond for a portion of the estimated costs.

The unit costs used in the estimate were based on experience gained at other mining projects and are generally accepted in the mining industry. For the economic assessment of the San Vicente mine presented in this report, PAS has escalated the closure cost estimate by 10%. The assumptions used in the preparation of the closure cost estimate are as follows:

Final closure requirements will be optimized and updated as the operation proceeds.

Cyanide destruct will not be required to treat tailings pond solution (although the San Vicente process plant will utilize a flotation process and not a cyanide process, there will be a small amount of cyanide used as a reagent in the flotation process).

The tailings pond area will be capped with approximately one (1) metre of soil material and revegetated to limit infiltration during precipitation events.

The mill area as well as other infrastructure will be reclaimed by removing all equipment, removing/demolishing all buildings and foundations, grading, and revegetating.

When possible waste dumps will be stabilized to a 2/1 slope and revegetated.

Underground adits/portals/etc. will be bulk headed for hazard abatement.

Drainage from the underground will not require active treatment. Instead a passive system will be utilized.

Table 20 San Vicente Closure Cost Estimate

				Ī	Cost Estimate
Area	Hectares	Acres	Cost Basis	•	(USD)
Tailings Area	15	33.9	Based on \$10K/acre. Includes placement of cover, recontouring, and revegetation.	\$	339,000
Waste Dump	5	11.3	Based on \$2.7K/acre. Includes stabilization, recontouring and revegetation	\$	30,510
Underground	N/A	N/A	Three adits/3 vent raises @ \$25K/adit or shaft.	\$	200,000
Decommissioning	N/A	N/A	Approximately \$.25/dollar of the capital amount (\$5,000,000)	\$	1,250,000
Roads					
Mine	10	22.6	Based on \$1.5K/acre.	\$	33,900
Access	10	22.6	Based on \$1.5K/acre.	\$	33,900
Post Closure Monitoring					
Surface and Ground Water	N/A	N/A	Monitoring (sampling/analysis) on a bi-annual basis for three (3) years. (\$20K/year)	\$	60,000
Tailings Area	N/A	N/A	Monitoring (sampling/analysis) on a quarterly basis for three (3) years. (\$20K/year)	\$	60,000

Sub Total (Direct) \$ 2,007,310

Add Ons

A salvage value for the equipment at the mine and new process plant has been estimated to be \$2,500,000 based on the value of the mobile and plant equipment that will be at the mine. In the economic analysis, the closure costs are expended in 2019 and 2020, while the salvage value is realized in 2020.

25.6. Exploration Expenditures

The mine plan and economic model presented in this report are based on proven and probable mineral reserves only. The exploration expenditures on these mineral reserves have already been made. As no mineral resources or other potential have been included in the plan and no accounting has been made of their value, no exploration expenditures have been included in the economic analysis.

25.7. Taxes

The following is a summary of the Bolivian taxes used in the San Vicente feasibility study economic model. Due to the fact that the current Bolivian government has been proposing substantial changes to the current tax laws, the latest proposed changes to the tax law have been incorporated in the economic model.

Mining Royalty (used in economic model)

- 1. The new mining royalty has rates similar to the current ICM tax (between 1 and 6%)
- 2. The royalty is applied to gross metal value (before smelting and refining charges) and rates based on sliding scale to metal prices
 - a. Silver Minimum 3% / Maximum 6%
 - b. Zinc Minimum 1% / Maximum 6%
 - c. Copper Minimum 1% / Maximum 6%

At PAS mineral reserve prices, the royalties are at the maximum rate of 6%

- 3. The royalty can be credited against income tax
- 4. The royalty is not income tax deductible

Corporate Tax (used in economic model)

1. The corporate tax rate on taxable income is 25%

Additional Profit Tax (used in economic model)

- 1. This is a new tax that has been referred to as ICM (complementary tax) and IUM.
- 2. All mining companies, except for cooperatives, will be subject to the new tax
- 3. The new tax will be based on annual profit after income tax
- 4. Exploration expenses are allowed to be deducted twice
- 5. Tax rate is 12.5%

Value Added Taxes (VAT) (used in economic model)

- 1. Equipment purchased for the project has an effective VAT rate of 14.94%
- 2. Because PASB is domiciled in the Province of Potosi, it is expected that it will be exempt from paying VAT for a portion of the equipment purchased.

In order to allow a comparison, the following is a summary of the current tax legislation in Bolivia:

Complimentary Mining Tax (ICM) (current)

The complimentary mining tax is applied to gross metal value (before smelting and refining charges) and the rates based on sliding scale to metal prices.

- a. Silver Minimum 3% / Maximum 6%
- b. Zinc Minimum 1% / Maximum 6%
- c. Copper Minimum 1% / Maximum 6%

The complimentary mining tax can be credited against income tax. The complimentary mining tax is not income tax deductible.

Corporate Tax

The corporate tax rate on taxable income is 25%.

Value Added Taxes (VAT)

Equipment purchased for the project has an effective VAT rate of 14.94%.

Due to the fact that PASB is domiciled in the Province of Potosi, it is expected that it will be exempt from paying VAT for a portion of the equipment purchased.

25.8. Capital and Operating Costs Capital Cost Estimate

Capital costs were calculated in the 3rd quarter of 2006. These costs have been escalated by 7.5% for the costs that will be incurred in 2007, 15% for the costs in 2008 and 22.5% for the costs that will be incurred in 2009. Much of the major mining equipment required has already been purchased and the majority of it is at the San Vicente mine working on starting the new ramp access to the Litoral vein. As these expenditures have already been made, they have not been considered in the cash flow analysis other than from the perspective of being on the books for depreciation purposes. The capital expenditures that are included in the economic analysis are shown in Table 21. The economic analysis that was used to confirm the economic viability of the proven and probable mineral reserves that are detailed in this report is summarized in Table 23.

Capital expenditures in 2007 and 2008 are expected to total \$40.5 million. The new processing plant is expected to start operating in 2008 and ramp up production to near to its full capacity of 750 TPD by the end of 2008. Further capital expenditures for items required to sustain production such as raises to the tailings storage dam are projected to cost a further \$2.5 million in 2009 and a further \$8.5 million from 2010 to the end of the mine life in 2019.

Table 21 Capital Cost Estimate Summary

	20	007	20	008	20	09	2010 LOM	
Mining								
Mining Equipment for Trackless Development &								
Longhole	\$	111	\$	64				
Mining Equipment for Track Development &								
Shrinkage	\$	177	\$	54	\$	59		
Hoisting & Tramming	\$	408	\$	8				
Haulage Fleet	\$	335	\$	510				
Service Fleet	\$	337	\$	172				
Ore Reserves / Geology								
Underground Electrical Distribution	\$	384	\$	46				
Mine Rescue Equipment								
Sustaining Equipment and Capital					\$	200	\$	1,900
Enginering / Geology								,
Sub Total Mine Equipment	\$	1,751	\$	854	\$	259	\$	1,900
Sub Total Mine Equipment	Ψ	1,751	Ψ	051	Ψ	237	Ψ	1,500
Existing Mine								
Rebuild Rail Car Dump on 0 Level	\$	14						
Rebuild Rail Car Dump on -35 Level	\$	14						
Alimak Ventilation Raise For Shrinkage Stoping	\$	120						
Deepen Vertical Shaft to -150 Level	Ψ	120					\$	380
Shaft Station and Ore Dumps on -150 Level							\$	50
Shaft Loading Pockets on -150 Level							\$	100
-							\$ \$	
Ventilation Raise -150 to -110 Level							Э	32
Litoral Access	ф	1 200	ф	020				
Develop Litoral Ramp	\$	1,200	\$	820	ф	700	ф	265
Develop Sub Level Lateral Access	\$	263	\$	788	\$	788	\$	265
Alimak Ventilation Raise For Longhole Stoping			\$	176	\$	176	\$	176
Alimak Waste Backfill Raise For Longhole Stoping					\$	264		
Sustaining Equipment and Capital					\$	150	\$	1,425
Sub Total Mine	\$	1,611	\$	1,784	\$	1,378	\$	2,428
7504-1 CAC MUI O D								
750tpd SAG Mill Ore Porcessing Plant	ф	1 205	ф	154				
Total Area 10 - Primary Crushing to SAG Mill	3	1,385	\$	154				
Total Area 20 - Grinding & Classification, SAG and	Ф	1 507	ф	171				
Ball Mills	\$	1,537	\$	171				
Total Area 30 - Flotation & Cleaner Silver, Copper, &	4	4.056	4	4.50				
Lead	\$	1,376	\$	153				
Total Area 40 - Flotation and Cleaner, Zinc	\$	1,072	\$	119				
Total Area 50 - Tailings Thickening	\$	238	\$	26				
Total Area 70 - Water Treatment and Supply	\$	114	\$	13				
Total Area 100 - Reagents	\$	175	\$	19				
Total Area 145 - Mill Electrical System	\$	757	\$	252				
Total Area 160 - Plant/Mine Water and Plant Air	\$	16	\$	2				

Total Area 170 - Standby Power			\$ 450			
Total Area 180 - Piping and Steel	\$	680	\$ 227			
Total Area 200 - Flotation Plant Building, HVAC	\$	550	\$ 550			
Total Area 700 - Tailings and Reclaim	\$	843	\$ 94			\$ 1,431
Total Area 800 - Infrastructure & Gen. Site Serv.	\$	1,154				
Total Area 810 - Main Access Roads Const.	\$	350	\$ 150			
Total Area 825 - Water Supply, Plant & Domestic	\$	1,900	\$ 211			
Total Area 900 - Power Supply	\$	2,300				
Total Area 925 - Freight and Insurance	\$	828	\$ 276			
Mobilization	\$	40	\$ 0			
Construction Power	\$	173	\$ 173			
Improvement to Housing for Permanent Plant Workers	\$	150				
Camp and Transportation Costs	\$	505	\$ 337			
EPCM @ 20%	\$	1,694	\$ 726			
Lyntek Pre-EPCM Engineering	\$	100				
Detailed Engineering EPCM	\$	630				
Komex Pre-EPCM Engineering	\$	72				
Tailings Dam EPCM Phases I, II	\$	282				
Owner s Project Admin Costs 2006, 2007, & 2008	\$	890	\$ 357			
Construction Insurance	\$	60	\$ 40			
Commissioning and Spares	\$	70	\$ 209			
Working Capital	\$	196	\$ 589			
First Fills	\$	145	\$ 434			
Startup Labor			\$ 148			
ADR Environmental costs						
Sustaining Equipment and Capital				\$	150	\$ 1,425
Sub Total Mill, Tailings Dam, Water, Electricity	\$2	20,280	\$ 5,881	\$	150	\$ 2,856
Community Sustainability and Infrastructure						
Fixing of Existing Prefabricated Housing	\$	84	\$ 0			\$ 60
School Repair and Expansion	\$	50	\$ 10			\$ 30
Cooperative Technical Assistance	\$	20	\$ 10	\$	10	\$ 60
Sanitary and Drainage	\$	100	\$ 15			\$ 30
Repair of Theather and Union Facilities	\$	40	\$ 10			\$ 15
Small Fabrics and Tourist Study for Community	\$	51	\$ 15	\$	15	\$ 45
Sub -Total Community Sustainability and						
Infrastructure	\$	345	\$ 60	\$	25	\$ 240
Subtotal Capital	\$2	23,987	\$ 8,578	\$	1,811	\$ 7,424
Contingency 15%		3,598	1,287	\$	272	\$ 1,114
Cost Escalation		1,799	1,287	\$	407	,
TOTAL CAPEX	\$2	29,384	\$ 11,152	\$ 2	2,490	\$ 8,538
	56					

The capital cost estimate for the processing plant was been generated by Lyntek based on a detailed equipment list, flow sheets, electrical one-line drawings, and plant general arrangement drawings. Mr. Douglas Maxwell, one of the authors of this Technical Report, has reviewed this information and determined that in his professional judgement these estimates are sound and approves of these estimates.

A design criteria document was developed from the metallurgical information provided to Lyntek by PASB. The design criteria were used to specify and size the equipment required for the concentrator circuitry and subsequently to submit requests for quotations to a minimum of two vendors for equipment.

Capital equipment costs were estimated from formal quotations obtained from vendors and pricing information obtained from recent similar Lyntek projects. When vendor quotes were exclusive of taxes, freight, import duties, or other fees, the appropriate cost was estimated and added by PASB.

DIRECT PLANT COST DETAIL

When possible, equipment vendors from Bolivia, Brazil, Chile and Peru were selected, to minimize delivery times. Lyntek also received equipment quotations from vendors who had been contacted by PASB. These quotations were utilized as much as possible to take advantage of work already done by in-house personnel. Other local and out of country vendors quotations were incorporated into the capital cost estimate as appropriate.

This capital cost estimate does not include contingency factors applied to the individual quoted items or areas. An over-all contingency factor of 15% has been applied to the final total capital cost, in addition, capital cost escalation factors of 7.5% for expenditures in 2007, 15% for expenditures that are projected to be incurred in 2008 and 22.5% for capital expenditures that will be incurred in 2009 have been added to the totals.

Capital equipment costs used for estimating the transportation and capital spares is the sum of the Crusher area, mill/flotation area, system piping, structural steel and the building, equipment costs only.

The installation and construction costs that are associated with Crushing/Grinding have been developed from Bolivian contractor pricing, Lyntek s recent experience on similar projects in Bolivia and from Lyntek s cost database. Bolivian pricing for civil/site work, concrete and some man-hours associated with placement of the equipment have been provided by PASB and area contractors. The installation cost estimate utilizes contracted labour for installation of specialized and heavy equipment, construction of the process building, heavy structural steel/plate work, and installation of electrical and instrumentation wiring. Equipment rentals for cranes and heavy equipment not currently owned by PASB have been included at current Bolivian rental rates. Small tools with values of less than \$1,000 will be purchased directly by PASB.

Lyntek has developed a built-up construction labour rate of \$11.70 per man-hour that includes base rate, burden, subsistence, safety, management and supervision, craft support (labourers), warehousing, fuel/oil/maintenance and overtime

The costs associated with installation of the equipment in the concentrator are based upon Lyntek s experience with other plant equipment installations and whenever possible, equipment installation estimates that were obtained from equipment vendors.

The estimated costs for installation of the electrical system and the Motor Control Center (MCC) are based upon the electrical one-line drawings, from vendor quotes.

A diesel generator, quoted at \$450,000 is included in standby power.

The estimated costs for installation of the system piping are based upon a bulk piping material estimate from Lyntek General Arrangement Drawing No. 06023 G-01 (Figure 1-10) and the associated flow diagrams. Material and piping costs were obtained from the Komex reports and from current material costs. The labour hours that are required are an estimate based upon Lyntek s past installation

experience. This section of the estimate is for the flotation plant, tailings line, and water reclaim line only. All water system costs are covered in the plant major equipment capital estimate.

The estimated costs for installation of the structural steel in the concentrator are based upon a bulk materials estimate obtained from the same Figure 1-10 and the associated sections. Steel costs of \$ 0.63/lb. were used and the labour hours that are required are an estimate based upon Lyntek s past installation experience.

Lyntek developed basic architectural drawings of the concentrator building and forwarded these drawings to PASB personnel who obtained local vendor quotations. Lyntek also developed costs for pre-engineered buildings from past experience for comparison purposes. It is assumed that the concentrator building will be supplied and constructed by a local Bolivian contractor; therefore, no freight costs that would be associated with the building have been included in the capital cost estimate. The building required is approximately 73.2m long x 19.1m wide x 15.5 m high. In addition to the main building, a 73.2m long x 6m wide x 4m high lean-to will be added that will house the laboratory, MCC room, PLC room, administration offices, and maintenance shop with a storage area.

The calculated installed costs for the concentrator building are estimated to be \$1,055/ m2 for the entire structure. An allowance of \$80,000 has been estimated for heating, ventilation, and air conditioning (HVAC) of the building. This estimate is based upon HVAC for a similar size pre-engineered building.

The main road connecting the San Vicente Mine Expansion Project to Uyuni must be upgraded to provide access for heavy equipment and machinery. PASB will fund the 30 kilometres from the mine towards Uyuni; the Government is upgrading the road from Uyuni towards the mine. Funding of \$500,000 for the PASB portion has been included for this work which is scheduled to be performed in 2007 and 2008.

Lyntek has contacted Transera, a freight forwarding company, and together the two companies have developed a freight estimate based on prior project experience and recent in-country experience by Transera. Freight costs for transporting the major equipment to the plant site have been developed based upon the capital equipment costs. It has been assumed that all of the equipment will require export packaging. Only a small portion of the equipment has been sourced from North America. The ball and SAG mills have been sourced from Europe or Brazil. All items not manufactured in Bolivia are anticipated to be delivered via Ocean freight and will be shipped to the Port of Antofagasta, Chile. The equipment vendor pricing for all equipment is FOB factory. The equipment sources are from Chile, Peru, Brazil and North America. No contingency has been applied to the estimate. The calculated value does not include VAT, duty or other taxes. The total estimated transport costs have been calculated to be \$1,104,088. The only equipment items that are deemed useable from the existing Vetillas mill are the lime regrind mill and the associated feed conveyor. These two items have been included in the capital equipment list; however, no costs have been assigned to these items as items in Vetillas are included for use under the joint venture. An estimate of the hours required and associated costs, to remove and install this equipment has been included in the capital cost estimate.

INDIRECT PLANT COST DETAIL

Mobilization and demobilization have been included in the hourly rates used in the capital cost estimate and are therefore included in the estimates for each area. The exception to this is a line item of \$40,000 for the mobilization and demobilization of a crane, from a local contractor.

Allocated power costs to the project were based on power demand calculated by Lyntek, using recent power costs. Upgrading the existing bunkhouses in Vetillas is underway. Further housing will be required for construction and operational personnel. Costs associated with room and board of the construction workers and bussing costs from Vetillas to San Vicente.

Spares include one set of liners each for the SAG mill, ball mill, and primary jaw crusher. Spares also include conveyor belting, flotation cell, disc filter, and conveyor components, and oil and lubricants. A total of \$278,899 is budgeted for spares.

Due to the remote location of San Vicente, a three month supply of reagents, grinding media, lubricants and gasoline is included with first fills.

OPERATING COST ESTIMATE

Historic actual costs were used for the operating cost estimates for shrinkage stoping and operating the mine infrastructure at San Vicente. PAS in Vancouver developed an operating cost estimate for longhole stoping. This estimate was a first principles estimate based on assumptions made for units of work such as tonnes per metre drilled, productivity, mobile equipment maintenance requirements and the cost of consumables from suppliers in Bolivia, Peru, Argentina and Canada. A unit cost was calculated for each of the primary activities of development, longhole drilling, longhole blasting, mucking, backfilling, and truck haulage. These estimated unit costs were consolidated with the estimates for units of work in order to arrive at a cost per tonne for longhole mining. The operating cost estimate was later reviewed and confirmed by Estudios Mineros del Perú. Mr. Wafforn has reviewed these estimates and determined in his professional judgement that these estimates are sound and approves of these estimates. The operating cost estimate for the process plant was developed by Lyntek and various infrastructure costs were estimated by PASB. Labour unit rates and consumable costs for the region are provided by PASB who has access to the operating costs at the Chilcobija plant where the San Vicente ore will be processed while the construction of the new plant is in progress. Other sources for costs include estimates provided by equipment suppliers, contractors, consultants and engineering standard cost estimating guides.

Labour rates have been derived from existing rates paid to San Vicente employees, in 2006, and costs based on Bolivian national averages. Social burdens reflect current legal requirements.

The operating cost estimates exclude any consideration for inflation. The estimates were calculated using 3rd quarter 2006 US dollars and a flat Bolivian Boliviano to US dollar exchange rate of 8.08:1 for the life of the San Vicente Mine Expansion Project. In order to reflect the cost escalations in the industry, all of the operating costs were subsequently escalated by 10%.

The average unit operating costs are summarized in Table 22.

Table 22 Life-of-Mine Unit Operating Costs

		2007	2008	2009	2010 to LOM
Costs					
	\$/				
Mining Costs	DMT	\$20.35	\$16.99	\$16.38	\$ 15.75
	\$/				
Mill costs	DMT	\$13.97	\$16.18	\$13.64	\$ 13.64
	\$/				
Transport Mine-Chilcobija	DMT	\$ 4.95	\$ 3.36	\$ 0.28	\$ 0.28
	\$/				
Shipping and Selling	DMT	\$ 5.05	\$ 5.15	\$ 5.34	\$ 4.82
	\$/				
Administration Costs (office)	DMT	\$ 4.79	\$ 5.07	\$ 3.55	\$ 3.84
	\$/				
Administration San Vicente	DMT	\$ 2.59	\$ 4.35	\$ 3.05	\$ 3.29
	\$/				
Insurance and legal	DMT	\$ 3.30	\$ 4.40	\$ 0.00	\$ 0.00
	·				
Security & Environmental		\$ 0.55	\$ 0.25	\$ 0.21	\$ 0.23
	\$/				
Energy Costs	DMT	\$ 0.39	\$ 0.00	\$ 0.84	\$ 0.90
Administration San Vicente Insurance and legal Security & Environmental	\$/ DMT \$/ DMT \$/ DMT \$/	\$ 2.59 \$ 3.30 \$ 0.55	\$ 4.35 \$ 4.40 \$ 0.25	\$ 3.05 \$ 0.00 \$ 0.21	\$ 3.29 \$ 0.00 \$ 0.23

Edgar Filing: PAN AMERICAN SILVER CORP - Form 6-K

	\$/				
Maintenance Costs	DMT	\$ 2.59	\$ 3.62	\$ 2.09	\$ 2.26
	\$/				
Vancouver Management Cost	DMT	\$ 2.59	\$ 5.07	\$ 2.92	\$ 3.16
	\$/				
Operating Cost per tonne	DMT	\$61.10	\$64.45	\$48.30	\$ 48.16
		59			

25.9. Economic Analysis

An economic model has been constructed in order to demonstrate the economic viability of the San Vicente mine long range plan and therefore mineral reserves. The PAS metal price assumptions for the end of 2006 mineral reserves have been used. The mine Expansion Project has very positive economics at the mineral reserve metal price assumptions. PAS has committed to funding the San Vicente Mine Expansion Project and has commenced work. A summary of the economic model is shown in Table 23. The metal prices used for 2007 are \$10.00 per ounce for silver and \$3,000 per tonne for zinc which is higher than the long term reserve prices used of \$9.00 per ounce for silver and \$2,100 per tonne for zinc. This only applies to the relatively small amount of production from the Chilcobija plant. The analysis is for the full year in 2007 and metal prices have averaged significantly higher than those values during the first half of the year. Although San Vicente has historically received revenues from copper, as there is insufficient data to estimate the copper grade of the mineral reserves or mineral resources, the assumption in the economic analysis is that copper revenue will be zero. This is a conservative estimate as the economic analysis includes smelting, transportation and refining charges for copper.

The analysis calculates an Internal Rate of Return of 22% and capital payback in 2.9 years. The Net Present Value is \$23.6 million at a 10% discount rate and is \$14.4 million at a 15% discount rate. The undiscounted after tax cash flow is \$53.8 million. PAS s 95% share of the undiscounted after tax cash flow is estimated to be \$50.9 million. The payback is calculated as the amount of time required to pay back the capital expenditures with undiscounted cash flow starting from the beginning of 2009 when the new plant is assumed to be operating at almost full capacity. The payback period does not include any actual or imputed interest as the economic model assumes that PAS and Trafigura will fund cash calls according to their respective interests in PASB.

1 able	23	Economic	Model

009	2010		2011		2012		2013		2014		2015		2016		2017		2018	
9.00	\$	9.00	\$	9.00	\$	9.00	\$	9.00	\$	9.00	\$	9.00	\$	9.00	\$	9.00	\$	9.0
2,100	\$	2,100	\$	2,100	\$	2,100	\$	2,100	\$	2,100	\$	2,100	\$	2,100	\$	2,100	\$	2,10
28,549	2	,695,536	,	2,900,839	2	2,939,728	2	2,968,078	2	2,931,913	2	2,840,512	2	2,329,223	4	2,090,841	1	1,867,39
,585.4		8,229.3		7,993.2		7,851.9		7,144.3		6,932.6		6,776.5		7,831.3		8,070.3		7,203.
28,839	\$	31,326	\$	32,686	\$	32,819	\$	32,130	\$	31,561	\$	30,616	\$	27,834	\$	26,208	\$	23,41
12,934)	(\$	12,866)	(\$	12,670)	(\$	12,651)	(\$	12,556)	(\$	12,528)	(\$	12,508)	(\$	13,012)	(\$	13,258)	(\$	12,12
1,283)	(\$	1,538)	(\$	1,674)	(\$	6,714)	(\$	6,513)	(\$	6,340)	(\$	6,009)	(\$	4,860)	(\$	4,215)	(\$	3,68
6,179)	(\$	6,491)	(\$	6,812)	(\$	6,893)	(\$	6,968)	(\$	7,150)	(\$	6,116)	(\$	2,521)	(\$	1,199)	(\$	88
8,443	\$	10,431	\$	11,531	\$	6,561	\$	6,092	\$	5,543	\$	5,982	\$	7,441	\$	7,537	\$	6,71
8,443	\$	10,431	\$	11,531	\$	6,561	\$	6,092	\$	5,543	\$	5,982	\$	7,441	\$	7,537	\$	6,71
2,995	\$	3,616	\$	4,096	\$	2,849	\$	2,650	\$	2,637	\$	2,632	\$	2,640	\$	2,653	\$	2,36
5,447	\$	6,815	\$	7,435	\$	3,712	\$	3,442	\$	2,906	\$	3,350	\$	4,801	\$	4,883	\$	4,34
6,179	\$	6,491	\$	6,812	\$	6,893	\$	6,968	\$	7,150	\$	6,116	\$	2,521	\$	1,199	\$	88
481)	(\$	114)	(\$	10)	(\$	95)	(\$	135)	(\$	62)	(\$	96)	(\$	120)	(\$	113)	(\$	4

2,490)	(\$	2,566)	(\$	650)	(\$	604)	(\$	1,452)	(\$	633)	(\$	621)	(\$	575)	(\$	575)	(\$	57.
0	\$	0	\$	0	(\$	356)	(\$	462)	(\$	454)	(\$	440)	(\$	397)	(\$	372)	(\$	33:
8,656	\$	10,625	\$	13,587	\$	9,550	\$	8,361	\$	8,907	\$	8,309	\$	6,230	\$	5,023	\$	4,28
8,223	\$	10,093	\$	12,908	\$	9,055	\$	7,920	\$	8,439	\$	7,871	\$	5,899	\$	4,753	\$	4,05
38,408	2	,482,952	2	2,675,919	2	2,712,859	2	2,742,218	2	2,709,244		2,624,384	2	2,141,941		1,918,023		1,713,11
2.46	\$	2.40	\$	2.33	\$	2.50	\$	2.80	\$	2.91	\$	3.04	\$	3.13	\$	3.36	\$	3.5
2.03	\$	1.89	\$	1.87	\$	1.88	\$	1.89	\$	2.01	\$	2.13	\$	2.70	\$	0.17	\$	0.19
4.49	\$	4.29	\$	4.20	\$	4.37	\$	4.70	\$	4.93	\$	5.17	\$	5.83	\$	3.52	\$	3.7
109.55 48.30)	\$ (\$	116.02 46.84)	\$ (\$	121.06 46.11)	\$ (\$	121.55 46.04)	\$ (\$	119.00 45.69)						103.09 47.38)	\$ (\$		\$ (\$	
61.25	\$	69.18	\$	74.95	\$	75.51	\$	73.31	\$	71.31	\$	67.88	\$	55.71	\$	48.78	\$	48.3
									61									

Sensitivity analysis were conducted for variants in metal prices, grade, capital and operating costs. A further sensitivity was conducted to show the economics of the project using a estimate for the copper grade.

Metal Price Sensitivity

A table showing the positive economics of the project over a wide range of metal prices is shown in Table 24. Note that the higher metal prices are used in 2007 for each case. As the date of this report is effective mid-2007 and as the prices have been considerably higher than those used in the first 6 months this is considered by the co-authors to be a reasonable assumption. In addition, metal prices in 2007 are only applied to the small amount of production coming from the Chilcobija plant meaning that this assumption has a relatively minor impact on the calculation of Net Present Value and Internal Rate of Return of the project.

Table 24 Metal Price Sensitivity

	Year	Case 1	Case 2	Case 3
\$/Ounce \$ Silver	2007	10.00	\$ 10.00	\$ 12.50
Zinc \$/Tonne	2007	\$ 3,000	\$ 3,000	\$ 3,600
Silver \$/Ounce	(2008 - 20)	\$ 6.25	\$ 9.00	\$ 12.50
Zinc \$/Tonne	(2008 - 20)	\$ 1,200	\$ 2,100	\$ 3,600
NPV 0%		\$ 3,745	\$ 53,756	\$ 123,951
NPV 10%		(\$10,847)	\$ 23,552	\$ 68,973
NPV 15%		(\$15,405)	\$ 14,368	\$ 52,608
IRR		2%	22%	44%
Pay Back (years)		7.5	2.9	1.5
Grade Sensitivity				

In order to test the sensitivity of the project to the grade of the mineral reserves, the estimated head grade for each metal and for each year of operation was multiplied by factors of 100% (the case presented in Table 25), 125%, 110%, 90% and 75%. The cash flow and financial metrics for each case were then recalculated and are shown in Table 25. The co-authors conclude that the economics of the project are clearly very robust when after a 25% reduction in the estimated head grades of each of silver and zinc (essentially a 25% reduction in revenue) the IRR is 6%.

Table 25 Metal Grade Sensitivity

1	100%	125%	110%	90%	75%
NPV 0%	\$ 53,756	\$ 90,175	\$70,490	\$ 39,446	\$ 13,843
NPV 10%	\$ 23,552	\$47,174	\$ 34,604	\$ 14,107	(\$3,567)
NPV 15%	\$ 14,368	\$ 34,299	\$ 23,737	\$ 6,294	(\$9,077)
IRR	22%	34%	27%	16%	6%
Pay Back (years)	2.9	2.0	2.5	3.5	5.5
C!4-1 C4 C!4!!4					

Capital Cost Sensitivity

The economics of the San Vicente Mine Expansion Project are not sensitive to changes in capital cost up to the limits of the engineering estimate that is plus or minus 25%.

Table 26 Capital Co	st Sensitivity
---------------------	----------------

1	100%	125%	110%	90%	75%
NPV 0%	\$ 53,756	\$47,891	\$49,890	\$ 57,578	\$60,001
NPV 10%	\$ 23,552	\$ 16,462	\$ 19,692	\$ 27,391	\$ 30,652
NPV 15%	\$ 14,368	\$ 6,835	\$ 10,504	\$ 18,217	\$ 21,800
IRR	22%	16%	19%	25%	31%
Pay Back (years)	2.9	3.6	3.3	2.6	2.2

Operating Cost Sensitivity

The economics of the project to variances in operating costs were calculated in a similar manner. This calculation further demonstrates the robust economics of the project.

Table 27 Operating Cost Sensitivity

1	100%	125%	110%	90%	75%
NPV 0%	\$ 53,756	\$ 35,657	\$45,700	\$61,389	\$72,900
NPV 10%	\$ 23,552	\$11,924	\$ 18,419	\$ 28,443	\$35,813
NPV 15%	\$ 14,368	\$ 4,517	\$ 10,074	\$ 18,465	\$ 24,637
IRR	22%	15%	19%	24%	28%
Pay Back (years)	2.9	3.6	3.2	2.7	2.5
~					

Sensitivity to Copper Head Grade

The economic model presented in this section 25.8 assumes that there will be no revenue from the production of copper from the San Vicente mine. This assumption is used because there is not sufficient copper grade sample data density available to make an estimate of the copper grade in the proven and probable mineral reserves or the measured and indicated mineral resources. Some of the older sampling programs did not include analysis for copper. As this Technical Report presents the economics of the proven and probable mineral reserves only, any revenues from copper have been eliminated. However the expected smelting, refining and transportation costs for a copper head grade of 0.3% have been retained. This is a degree of conservatism inherent in the calculation of the economics of the San Vicente Mine Expansion Project. The presence of copper at the mine is well established from the historical records, from the recent processing of San Vicente ores at Chilcobija and from the sampling data base. From a review of the production records at Chilcobija, the copper head grade in the last seven months has ranged between 0.35% and 0.41% with an average of 0.37%. When the copper head grade is back calculated from the smelter returns a grade of 0.4% is suggested. Because of this Lyntek was directed by PASB to design the process plant with the capacity to recover copper with a head grade of 0.4%. From the geology database, of a total of 6,561 samples, 1,521 samples have copper grades. The weighted average of those samples is 0.31% with a coefficient of variation of 1.01. Table 28 shows the sampling data:

Table 28 Copper Grade Samples

Vein	Total samples	Samples with grade	Cu	% of data	Resource MT	Average Cu (%)	Stand dev.	CV
Adela	755	85	11.3		300,954	0.25	0.342	1.393
Cantera	356	220	61.8		223,802	0.14	0.134	0.932
Deseada	1,465	178	12.2		350,189	0.49	0.502	1.017
Guernica2	616	213	34.6		185,575	0.57	0.679	1.195
Litoral	383	16	4.2		213,085	0.52	0.218	0.423
Litoral_R2	288	43	14.9		227,314	0.38	0.264	0.689
SanJose	630	131	20.8		101,717	0.27	0.342	1.257
SLorenzo	237	4	1.7		56,773	0.24	0.199	0.845

Union	534	73	13.7	273,316	0.33	0.422	1.262
6Agosto	1,297	558	43.0	778,262	0.18	0.192	1.091
	6,561	1,521	23.2	2,710,987	0.31	0.329	1.010
			63				

Edgar Filing: PAN AMERICAN SILVER CORP - Form 6-K

Table 29 presents the economic sensitivity of the San Vicente Mine Expansion Project with and without the inclusion of the revenues from a copper head grade of 0.3%. All other assumptions are as shown in Table 23 including long-term silver price of \$9.00 per ounce and a long term zinc price of \$2,100 per tonne.

Table 29 Copper Revenue Sensitivity

		ding Copper evenues at	As Presented in this Technical Report - Not Including			
	0.3%	Head Grade	-	er Revenues		
NPV 0%	\$	68,345	\$	53,756		
NPV 10%	\$	32,996	\$	23,552		
NPV 15%	\$	22,312	\$	14,368		
IRR		26%		22%		
Pay Back (years)		2.6		2.9		
25 10 Mine Life						

25.10. Mine Life

The life of mine plan presented in this study is based solely on proven and probable mineral reserves. The life of mine plan extends until 2019. Any conversion of the mineral resources to proven and probable mineral reserves and any new exploration discoveries will add to the mine life.

In the opinion of the co-authors there is excellent potential for new mineral resource discoveries on the mining claims held by PASB.

This report has been prepared by Martin G. Wafforn, P. Eng., Michael Steinmann P. Geo., and Douglas Maxwell, P.E. each of whom are qualified persons.

Respectfully submitted this 20th day of July 2007.

Signed and Sealed

Martin G. Wafforn, P. Eng.

Signed and Sealed

Michael Steinmann, P. Geo.

Signed and Sealed

Mr. Douglas Maxwell, P.E.

Edgar Filing: PAN AMERICAN SILVER CORP - Form 6-K

Technical Report for the San Vicente Mine Potosí Bolivia Appendix A Certificates and Consents

CERTIFICATE OF QUALIFIED PERSON

- I, Dr. Michael Steinmann, P.Geo., Ph.D., of Pan American Silver Corp., 1500-625 Howe St., Vancouver, B. C., Canada V6C 2T6, do hereby certify that:
- 1. I graduated with a degree in Master of Science in Geology from the University of Zurich In 1993. In addition, I earned a Doctor of Natural Science in Geology from the Swiss Federal Institute of Technology, Zurich, Switzerland.
- 2. I am a Professional Geoscientist in good standing in the Province of British Columbia in the areas of mining geology and exploration.
- 3. I have worked as a geologist for a total of fourteen years since my graduation from the University of Zurich.
- 4. I have read the definition of qualified person set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of the NI 43-101.
- 5. I am currently employed as Senior Vice President of Exploration and Geology for Pan American Silver Corp. and, by reason of my employment, am not independent of Pan American Silver Corp. as described in section 1.4 of NI 43-101.
- 6. Pan American Silver Corp. is a producing issuer as defined in NI 43-101.
- 7. I visited the San Vicente mine site from January 21, 2007 to January 23, 2007. I am responsible for the sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23 and 24 of the report entitled Technical Report for the San
- Vicente Mine Expansion Project, Potosi, Bolivia dated effective June 6, 2007 (the Technical Report) and for the Figures 1-1, 1-2, 1-3, 1-4b, 1-7, 1-8,1-11, and 1-12 of the Technical Report.
- 8. I am co-author of the Technical Report for the San Vicente Mine Expansion Project, Potosi, Bolivia.
- 9. I have read NI 43-101 and the Technical Report has been prepared in compliance with NI 43-101.
- 10. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated the 20th day of July, 2007.

(SEAL)

Signature and seal of Qualified Person Michael Steinmann, P.Geo., Ph.D. Print Name of Qualified Person

CONSENT OF QUALIFIED PERSON

TO: British Columbia Securities Commission

Alberta Securities Commission

Saskatchewan Financial Services Commission

The Manitoba Securities Commission

Ontario Securities Commission

Autorité des marchés financiers

New Brunswick Securities Commission

Securities Commission of Newfoundland & Labrador

Nova Scotia Securities Commission

Registrar of Securities, Prince Edward Island

Government of Northwest Territories, Department of Justice, Securities Registry

Nunavut Legal Registries

Registrar of Securities, Government of the Yukon Territory

I, Dr. Michael Steinmann, P.Geo., Ph.D., do hereby consent to the filing, with the regulatory authorities referred to above, of the technical report titled Technical Report for the San Vicente Mine Expansion Project, Potosi, Bolivia dated effective June 6, 2007 (the Technical Report) and to extracts from, or a summary of, the Technical Report in Pan American Silver Corp. s news release dated June 6, 2007 and material change report dated June 6, 2007, as updated by Pan American Silver Corp. s news release dated July 20, 2007 (collectively, the Written Disclosure). I hereby confirm that I have read the Written Disclosure and the Written Disclosure fairly and accurately represents the information in the Technical Report that supports the Written Disclosure. Dated the 20 day of July, 2007.

(SEAL)

Signature and seal of Qualified Person

Michael Steinmann, P.Geo., Ph.D.

Print Name of Qualified Person

Edgar Filing: PAN AMERICAN SILVER CORP - Form 6-K

CERTIFICATE OF QUALIFIED PERSON

- I, Martin Wafforn, P.Eng, of Pan American Silver Corp., 1500-625 Howe St., Vancouver, British Columbia, Canada V6C 2T6. do hereby certify that:
- 1. I graduated with a degree in Bachelor s of Science in Mining from Camborne School of Mines in Cornwall, England in 1980.
- 2. I am a Professional Engineer in good standing in the Province of British Columbia in the areas of Mining engineering. I am a Chartered Engineer in good standing in the United Kingdom.
- 3. I am currently employed as Vice President of Mine Engineering for Pan American Silver Corp. and, by reason of my employment, am not independent of Pan American Silver Corp. as described in section 1.4 of NI 43-101.
- 4. I have worked as an engineer in the mining industry for a total of twenty six years since my graduation from Camborne School of Mines.
- 5. I have read the definition of qualified person set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
- 6. Pan American Silver Corp. is a Producing Issuer as defined in NI 43-101.
- 7. I visited the San Vicente mine site from January 21, 2007 to January 23, 2007. I am responsible for the sections 1, 2, 3, 4, 5, 6, 7, 8, 19, 20, 21, 22, 23, 24 and 25 of the report entitled Technical Report for the San Vicente Mine Expansion Project, Potosi, Bolivia dated effective June 6, 2007 (the Technical Report) and for the Figures 1-4, 1-4a, 1-5 and 1-6 of the Technical Report.
- 8. I am co-author of the Technical Report dated June 6th, 2007.
- 9. I have read NI 43-101 and the Technical Report has been prepared in compliance with NI 43-101.
- 10. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated the 20 day of July, 2007.

(SEAL) Reg. No. 22636

Signature and Seal of Qualified Person

Martin G. Wafforn, P.Eng.

CONSENT of QUALIFIED PERSON

TO: British Columbia Securities Commission

Alberta Securities Commission

Saskatchewan Financial Services Commission

The Manitoba Securities Commission

Ontario Securities Commission

Autorité des marchés financiers

New Brunswick Securities Commission

Securities Commission of Newfoundland & Labrador

Nova Scotia Securities Commission

Registrar of Securities, Prince Edward Island

Government of the Northwest Territories, Department of Justice, Securities Registry

Nunavut Legal Registries

Registrar of Securities, Government of the Yukon Territories

I, Martin Wafforn P.Eng. do hereby consent to the filing, with the regulatory authorities referred to above, of the technical report titled Technical Report for the San Vicente Mine Expansion Project, Potosi, Bolivia dated effective June 6, 2007 (the Technical Report) and to extracts from, or a summary of, the Technical Report in Pan American Silver Corp. s news release dated June 6, 2007, as updated by Pan American Silver Corp. s news release dated July 20, 2007 (collectively the Written Disclosure).

I hereby confirm that I have read the Written Disclosure and the Written Disclosure fairly and accurately represents the information in the Technical Report that supports the Written Disclosure. Dated the 20 day of July, 2007.

(SEAL) Reg. No. 22636

Signature and seal of Qualified Person

Martin Wafforn P. Eng.

Print name of Qualified Person

CERTIFICATE OF QUALIFIED PERSON

- I, Douglas K. Maxwell, of Lyntek Inc., 775 Mariposa Street, Denver CO 80204, do hereby certify that:
- 1. I graduated from the Colorado School of Mines with a Bachelor of Science Degree in Metallurgical Engineering in 1979 and with a Masters of Engineering in Metallurgy in 1982. In both programs I specialized in Mineral Processing and Extractive Metallurgy.
- 2. I am a Registered Professional Engineer Metallurgy in the State of Colorado. My registration number is 26758. I have been a member of the Extractive Metallurgy Chapter of Denver for 15 years.
- 3. I have worked in the mineral processing industry for over 20 years.
- 4. I am currently employed as Process Engineer by Lyntek Inc.
- 5. I have read the definition of qualified person set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of the NI 43-101.
- 6. I am independent of Pan American Silver Corp. as described in section 1.4 of NI 43-101.
- 7. I am responsible for the sections in the report entitled Technical Report for the San Vicente Mine Expansion Project, Potosi, Bolivia dated effective June 6, 2007 (the Technical Report) relating to mineral processing and metallurgical testing, as well as process design, capital cost estimates for the plant and infrastructure, and operating cost estimates for the plant and for sections 18 and 25 and Figures 1-9 and 1-10 of this Technical Report, I have not visited the San Vicente mine site.
- 8. I have read NI 43-101 and the Technical Report as has been prepared in compliance with NI 43-101.
- 9. I have not had any prior involvement with the San Vicente mine property.
- 10. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated the 20th day of July, 2007.

(SEAL)

Signature and seal of Qualified Person

Douglas K. Maxwell P.E.

Print name of Qualified Person

CONSENT of QUALIFIED PERSON

TO: British Columbia Securities Commission

Alberta Securities Commission

Saskatchewan Financial Services Commission

The Manitoba Securities Commission

Ontario Securities Commission

Autorité des marchés financiers

New Brunswick Securities Commission

Securities Commission of Newfoundland & Labrador

Nova Scotia Securities Commission

Registrar of Securities, Prince Edward Island

Government of the Northwest Territories, Department of Justice, Securities Registry

Nunavut Legal Registries

Registrar of Securities, Government of the Yukon Territories

I, Douglas K. Maxwell, P. E. do hereby consent to the filing, with the regulatory authorities referred to above, of the technical report titled Technical Report for the San Vicente Mine Expansion Project, Potosi, Bolivia dated effective June 6, 2007 (the Technical Report) and to extracts from, or a summary of, the Technical Report in Pan American Silver Corp. s news release dated June 6, 2007, as updated by Pan American Silver Corp. s news release dated July 20, 2007 (collectively the Written Disclosure).

I hereby confirm that I have read the Written Disclosure and the Written Disclosure fairly and accurately represents the information in the Technical Report that supports the Written Disclosure. Dated the 20th day of July, 2007.

(SEAL)

Signature and seal of Qualified Person

Douglas K. Maxwell, P.E.

Print name of Qualified Person

Edgar Filing: PAN AMERICAN SILVER CORP - Form 6-K

Technical Report for the San Vicente Mine Potosi Bolivia Appendix B Diamond Drill Hole Intercepts

Hole		Interval						
Identification Co	llar Co-ordinates	Orientation		A	ssay Re	sults		
HOLE					$\mathbf{A}\mathbf{g}$			
Vein N° Eastin		on LengthAzimuthDip		To	(g/t)	Cu%	Pb%	Zn%
Clavo IDD: H-99- 007 ,98	7 7,645,648 4,440	205.13 31° -45°		35.44				
DDH-99-001			35.44	36.11	6.1	0.00	0.02	0.10
DDH-99-001			36.11	87.27				
DDH-99-001			87.27	87.49	0.2	0.00	0.01	0.01
DDH-99-001			87.49	87.66	2	0.00	0.02	0.08
DDH-99-001			87.66	88.58	1	0.00	0.01	0.04
DDH-99-001			88.58	89.26	2.6	0.00	0.02	0.05
DDH-99-001			89.26	89.48	2	0.00	0.01	0.03
DDH-99-001			89.48	92.01	0.7	0.00	0.01	0.05
DDH-99-001			92.01	92.35	0.7	0.00	0.01	0.05
DDH-99-001			92.35 93.75	93.75	2.2	0.00	0.01	0.01
DDH-99-001				94.09	3.2	0.00	0.01	0.01
DDH-99-001			94.09 94.31	94.31 94.95	352.2 256.4	0.13 0.11	0.07	0.07
DDH-99-001 DDH-99-001			94.31	122.63	230.4	0.11	1.25	0.42
DDH-99-001 DDH-99-001			122.63	122.84	35.9	0.03	0.01	0.07
DDH-99-001 DDH-99-001			122.84	122.84	33.9	0.03	0.01	0.07
DDH-99-001 DDH-99-001			127.98	127.98	4	0.00	0.02	0.06
DDH-99-001			127.98	128.23	4	0.00	0.02	0.00
DDH-99-001			128.23	128.70	3.6	0.00	0.01	0.05
DDH-99-001			128.93	135.12	3.0	0.00	0.01	0.03
DDH-99-001			135.12	135.36	191.7	0.02	0.02	0.08
DDH-99-001			135.36	153.71	171.7	0.02	0.02	0.00
DDH-99-001			153.71	154.21	81.6	0.04	0.05	0.11
DDH-99-001			154.21	155.66	01.0	0.0.	0.02	0.11
DDH-99-001			155.66	156.36	131.3	0.08	0.12	0.08
DDH-99-001			156.36	156.97	179.5	0.11	0.12	0.10
DDH-99-001			156.97	157.47	199.4	0.12	0.12	0.13
DDH-99-001			157.47	157.97	125.6	0.07	0.04	0.07
DDH-99-001			157.97	158.47	166.4	0.09	0.08	0.12
DDH-99-001			158.47	158.94	98	0.06	0.11	0.15
DDH-99-001			158.94	159.49	129.5	0.09	0.04	0.13
DDH-99-001			159.49	159.92	77.5	0.06	0.03	0.10
DDH-99-001			159.92	160.42	78.9	0.06	0.05	0.11
DDH-99-001			160.42	160.72				
DDH-99-001			160.72	161.27	38.3	0.04	0.02	0.07
DDH-99-001			161.27	163.46				
DDH-99-001			163.46	163.67	210	0.17	0.02	0.14
DDH-99-001			163.67	166.60				
DDH-99-001			166.60	167.70	42.1	0.04	0.03	0.11
DDH-99-001			167.70	178.50				
DDH-99-001			178.50	179.03	119.7	0.07	0.08	0.96
DDH-99-001			179.03	179.91				

Edgar Filing: PAN AMERICAN SILVER CORP - Form 6-K

	DDH-99-001						179.91	180.43	30.5	0.02	0.02	0.06
	DDH-99-001						180.43	180.75	19.4	0.01	0.01	0.02
	DDH-99-001						180.75	181.21	17.6	0.01	0.01	0.04
	DDH-99-001						181.21	181.65	14.6	0.00	0.01	0.03
	DDH-99-001						181.65	182.15	25	0.01	0.02	0.03
	DDH-99-001						182.15	182.64	44	0.02	0.05	0.08
	DDH-99-001						182.64	183.14	66.6	0.04	0.04	0.08
	DDH-99-001						183.14	183.64	140.8	0.08	0.07	0.15
	DDH-99-001						183.64	184.14	84.9	0.04	0.03	0.05
	DDH-99-001						184.14	184.44	66.4	0.03	0.03	0.02
	DDH-99-001						184.44	184.82	85.1	0.05	0.06	0.07
	DDH-99-001						184.82	185.22	61.1	0.04	0.03	0.05
	DDH-99-001						185.22	185.55	74.2	0.04	0.03	0.05
	DDH-99-001						185.55	186.02	19.9	0.01	0.01	0.03
	DDH-99-001						186.02	186.46	51.8	0.03	0.02	0.03
	DDH-99-001						186.46	186.86	16.4	0.01	0.01	0.02
	DDH-99-001						186.86	187.15	19.7	0.01	0.01	0.02
	DDH-99-001						187.15	187.75	15.3	0.01	0.01	0.02
	DDH-99-001						187.75	188.25	27.4	0.01	0.02	0.03
	DDH-99-001						188.25	188.74	114.6	0.05	0.02	0.12
	DDH-99-001						188.74	189.57	8.4	0.00	0.01	0.02
	DDH-99-001						189.57	190.00	345.7	0.17	0.01	0.06
	DDH-99-001						190.50	191.01	83.7	0.04	0.01	0.04
	DDH-99-001						191.01	192.56				
	DDH-99-001						192.56	192.94	13.4	0.00	0.02	0.05
	DDH-99-001						192.94	193.30	64	0.02	0.03	0.04
	DDH-99-001						193.30	193.70	33.9	0.01	0.03	0.03
	DDH-99-001						193.70	194.12	59.5	0.03	0.02	0.03
	DDH-99-001						194.12	194.67	19.2	0.01	0.03	0.03
	DDH-99-001						194.67	205.13	17.2	0.01	0.03	0.05
	DDII						171.07	203.13				
E	DDH-99- 007 ,658	7,645,624	4,423	214.00	7° -	48°		3.96				
	DDH-99-002	7,013,021	1, 123	211.00	,	10	3.96	4.36	43.9	0.00	0.07	0.01
	DDH-99-002						4.36	41.14	13.7	0.00	0.07	0.01
	DDH-99-002						41.14	41.49	28.2	0.01	0.01	0.49
	DDH-99-002						41.49	53.43	20.2	0.01	0.01	0.47
	DDH-99-002 DDH-99-002						53.43	53.43	5.4	0.00	0.02	0.36
	DDH-99-002						53.43	54.31	20.9	0.00	0.02	0.30
	DDH-99-002 DDH-99-002							54.84	20.9	0.01	0.09	
							54.31					0.34
	DDH-99-002 DDH-99-002						54.84	55.18	14.1	0.01	0.02	0.37
							55.18	57.50	155	0.01	0.00	0.62
	DDH-99-002						57.50	58.79	15.5	0.01	0.08	0.62
	DDH-99-002						58.79	59.27	5 0.4	0.07	0.62	0.70
	DDH-99-002						59.27	59.76	58.4	0.07	0.63	0.72
	DDH-99-002						59.76	60.48				

Hole												
Identification	Collar	r Co-ordina	ates	Interval	Orienta	ation		A	ssay Res	sults		
HOLE									Ag			
Vein N° Eas	ting	Northing	Elevation	Length A	Azimuth	n Dip	From	To	(g/t)	Cu %	Pb %	Zn %
DDH-99-002						_	60.48	61.47	29.8	0.01	0.05	0.52
DDH-99-002							61.47	72.98				
DDH-99-002							72.98	73.24	3.9	0.00	0.01	0.31
DDH-99-002							73.24	74.06	14	0.01	0.02	0.46
DDH-99-002							74.06	75.14	15.2	0.00	0.02	0.39
DDH-99-002							75.14	75.34	3	0.00	0.02	0.28
DDH-99-002							75.34	87.65				
DDH-99-002							87.65	88.25	35.1	0.01	0.01	0.17
DDH-99-002							88.25	89.30				
DDH-99-002							89.30	89.92	104.6	0.01	0.02	0.23
DDH-99-002							89.92	90.12				
DDH-99-002							90.12	90.66	56.9	0.00	0.01	0.10
DDH-99-002							90.66	91.26				
DDH-99-002							91.26	91.54	19.9	0.01	0.01	0.12
DDH-99-002							91.54	91.79	46.8	0.01	0.01	0.22
DDH-99-002							91.79	92.29	51.4	0.00	0.01	0.16
DDH-99-002							92.29	92.55				
DDH-99-002							92.55	92.90	13.3	0.00	0.01	0.18
DDH-99-002							92.90	93.50				
DDH-99-002							93.50	94.00	39.1	0.00	0.01	0.08
DDH-99-002							94.00	192.14				
DDH-99-002							192.14	192.44	25.9	0.01	0.03	0.37
DDH-99-002							192.44	192.94	44.4	0.02	0.02	0.42
DDH-99-002							192.94	194.04	9.6	0.00	0.04	0.43
DDH-99-002							194.04	194.34	5.7	0.00	0.02	0.44
DDH-99-002							194.34	213.97				
Lipeña DDH-99-003	.936	7,646,119	4,571	171.60	20°	-48°		70.07				
DDH-99-003	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,	-,-,-			70.07	70.25	5.9	0.01	0.02	0.24
DDH-99-003							70.25	71.51				
DDH-99-003							71.51	71.72	21.3	0.00	0.27	0.27
DDH-99-003							71.72	102.00				
DDH-99-003							102.00	102.26	0.5	0.00	0.04	0.13
DDH-99-003							102.26	102.56	40.3	0.01	0.17	2.88
DDH-99-003							102.56	102.77	22	0.00	0.32	0.15
DDH-99-003							102.77	102.97	45.9	0.01	0.16	0.63
DDH-99-003							102.97	103.17				
DDH-99-003							103.17	103.68	62	0.01	0.08	0.39
DDH-99-003							103.68	154.31				
DDH-99-003							154.31	154.54	281.5	0.05	0.88	0.71
DDH-99-003							154.54	171.60				

Edgar Filing: PAN AMERICAN SILVER CORP - Form 6-K

Б		7 (46 151	4.604	041.71	20.50	450		10.60				
Descon	o DDH-99-004 ,792	7,646,151	4,604	241.71	205°	-45°	10.60	19.60	17	0.01	0.06	0.54
	DDH-99-004						19.60	20.06	17	0.01	0.06	0.54
	DDH-99-004						20.06	63.27	((0,0	0.00	0.04	0.06
	DDH-99-004						63.27	63.45	668.9	0.08	0.04	0.06
	DDH-99-004						63.45	95.90	160	0.00	0.06	0.44
	DDH-99-004						95.90	96.24	16.9	0.00	0.06	0.44
	DDH-99-004						96.24	165.50		0.00	0.10	0.00
	DDH-99-004						165.50	165.92	4	0.02	0.18	0.02
	DDH-99-004						165.92	166.24	511.5	0.05	0.17	0.03
	DDH-99-004						166.24	166.66	56.7	0.01	0.05	0.00
	DDH-99-004						166.66	166.98	36.8	0.05	0.03	0.01
	DDH-99-004						166.98	167.63	110.8	0.02	0.04	0.01
	DDH-99-004						167.63	168.11	132.1	0.06	0.09	0.02
	DDH-99-004						168.11	169.55				
	DDH-99-004						169.55	169.98	18.8	0.01	0.03	0.02
	DDH-99-004						169.98	199.73				
	DDH-99-004						199.73	199.98	9.5	0.00	0.09	0.29
	DDH-99-004						199.98	241.71				
D	DDII 00 005 452	7 (4(045	1516	171 (0	2200	5 00		157.56				
D	DDH-99-005 ,453	7,646,045	4,546	171.60	220°	-58°	157.56	157.56	(7.0	0.02	0.05	0.15
	DDH-99-005						157.56	158.44	67.9	0.02	0.05	0.15
	DDH-99-005						158.44	159.91	2.0	0.00	0.02	0.12
	DDH-99-005						159.91	160.25	3.2	0.00	0.03	0.13
	DDH-99-005						160.25	160.65	7.2	0.00	0.04	0.10
	DDH-99-005						160.65	171.60				
G	DDH-99-006 ,322	7,645,736	4,448	186.84	11°	-47°		113.89				
G	DDH-99-006	7,013,730	1,110	100.01	11	-17	113.89	114.29	0.4	0.00	0.01	0.03
	DDH-99-006						114.29	114.99	0.1	0.00	0.01	0.05
	DDH-99-006						114.99	115.24	1	0.00	0.02	0.02
	DDH-99-006						115.24	115.51	35.4	0.02	0.02	2.45
	DDH-99-006						115.51	115.95	18.1	0.02	0.19	0.42
	DDH-99-006						115.95	119.78	10.1	0.02	0.17	0.12
	DDH-99-006						119.78	119.89	1.1	0.00	0.01	0.06
	DDH-99-006						119.89	132.38	1.1	0.00	0.01	0.00
	DDH-99-006						132.38	133.02	2.9	0.00	0.05	0.03
	DDH-99-006						133.02	186.84	2.7	0.00	0.03	0.03
	DDII-77-000						133.02	100.04				
Guernio	caDDH-99-007,385	7,645,641	4,447	253.90	220°	-53°		67.32				
	DDH-99-007	, ,	,				67.32	67.44	1.9	0.02	0.01	0.05
	DDH-99-007						67.44	77.51				
	DDH-99-007						77.51	77.80	2	0.00	0.00	0.07
	DDH-99-007						77.80	102.00		-	-	-
	DDH-99-007						102.00	102.57	0	0.00	0.00	0.05
	DDH-99-007						102.57	121.49	-			

Hole										
Identification	Collar Co-ordina	ates	Interval Orient	tation		A	ssay Res	sults		
HOLE							Åg			
Vein N° Eas	ting Northing	Elevation	Length Azimut	h Dip	From	To	(g/t)	Cu %	Pb %	Zn %
DDH-99-007			_	-	121.49	121.86	6	0.01	0.00	0.06
DDH-99-007					121.86	123.43				
DDH-99-007					123.43	123.78	4.9	0.01	0.00	0.05
DDH-99-007					123.78	123.96	7.4	0.02	0.00	0.05
DDH-99-007					123.96	124.44	16.1	0.04	0.01	0.07
DDH-99-007					124.44	125.88				
DDH-99-007					125.88	126.46	23.6	0.19	0.01	0.06
DDH-99-007					126.46	126.56	6.1	0.01	0.00	0.06
DDH-99-007					126.56	126.96				
DDH-99-007					126.96	127.55	5.5	0.01	0.01	0.04
DDH-99-007					127.55	127.75				
DDH-99-007					127.75	128.01	2.8	0.00	0.01	0.03
DDH-99-007					128.01	129.93				
DDH-99-007					129.93	130.04	5.4	0.02	0.01	0.05
DDH-99-007					130.04	130.63				
DDH-99-007					130.63	130.74	5.3	0.01	0.00	0.06
DDH-99-007					130.74	130.84				
DDH-99-007					130.84	131.16	3.7	0.03	0.00	0.05
DDH-99-007					131.16	131.98				
DDH-99-007					131.98	132.12	10.3	0.07	0.01	0.06
DDH-99-007					132.12	133.30				
DDH-99-007					133.30	133.68	1.2	0.00	0.00	0.03
DDH-99-007					133.68	152.27				
DDH-99-007					152.27	152.42	3.2	0.00	0.01	0.01
DDH-99-007					152.42	152.60	0.3	0.00	0.01	0.00
DDH-99-007					152.60	153.16	12.4	0.00	0.06	1.05
DDH-99-007					153.16	153.51	0.4	0.00	0.01	0.03
DDH-99-007					153.51	153.99	11.4	0.02	0.06	0.02
DDH-99-007					153.99	154.34	4.7	0.01	0.02	0.04
DDH-99-007					154.34	154.79	531.9	0.66	0.29	0.38
DDH-99-007					154.79	155.27	59.8	0.32	0.02	0.12
DDH-99-007					155.27	155.57	3.5	0.02	0.00	0.03
DDH-99-007					155.57	156.56				
DDH-99-007					156.56	156.94	4	0.01	0.00	0.05
DDH-99-007					156.94	157.26	0.5	0.00	0.00	0.03
DDH-99-007					157.26	157.76				
DDH-99-007					157.76	158.15	167.2	0.34	0.12	0.22
DDH-99-007					158.15	158.75				
DDH-99-007					158.75	159.16	2.1	0.00	0.01	0.03
DDH-99-007					159.16	159.81				
DDH-99-007					159.81	160.20	4.8	0.00	0.00	0.03
DDH-99-007					160.20	161.60				

Edgar Filing: PAN AMERICAN SILVER CORP - Form 6-K

	•	•									
DDH-99-007						161.60	162.02	4.7	0.01	0.01	0.03
DDH-99-007						162.02	164.00				
DDH-99-007						164.00	164.53	13.3	0.07	0.05	0.06
DDH-99-007						164.53	169.15				
DDH-99-007						169.15	169.49	2.9	0.00	0.00	0.04
DDH-99-007						169.49	170.59				
DDH-99-007						170.59	170.89	2.2	0.02	0.02	0.04
DDH-99-007						170.89	171.29				
DDH-99-007						171.29	171.52	2.6	0.00	0.00	0.03
DDH-99-007						171.52	174.65				
DDH-99-007						174.65	174.90	1.1	0.00	0.00	0.03
DDH-99-007						174.90	210.38				
DDH-99-007						210.38	210.82	1.3	0.00	0.00	0.04
DDH-99-007						210.82	213.03				
DDH-99-007						213.03	213.20	1	0.00	0.00	0.05
DDH-99-007						213.20	213.68	1.4	0.00	0.00	0.05
DDH-99-007						213.68	216.47				
DDH-99-007						216.47	216.75	29.4	0.00	0.06	0.06
DDH-99-007						216.75	253.90				
BDH-99-008 7,648	7,646,190	4,571	147.22	200°	-45°		26.60				
DDH-99-008						26.60	26.82	941.6	0.04	0.52	0.32
DDH-99-008						26.82	27.16	26.8	0.00	0.20	0.07
DDH-99-008						27.16	37.24				
DDH-99-008						37.24	37.43	1	0.00	0.03	0.02
DDH-99-008						37.43	47.43				
DDH-99-008						47.43	47.70	3.4	0.00	0.01	0.52
DDH-99-008						47.70	51.18				
DDH-99-008						51.18	51.38	1	0.00	0.04	0.16
DDH-99-008						51.38	52.73				
DDH-99-008						52.73	52.90	5	0.00	0.11	0.53
DDH-99-008						52.90	53.23	1.3	0.00	0.07	0.23
DDH-99-008						53.23	58.68				
DDH-99-008						58.68	58.96	9	0.00	0.61	0.24
DDH-99-008						58.96	59.26	14.5	0.00	0.59	0.16
DDH-99-008						59.26	60.96				
DDH-99-008						60.96	61.21	19.6	0.01	0.27	0.30
DDH-99-008						61.21	61.38	36.7	0.01	0.87	0.32
DDH-99-008						61.38	61.60	10.9	0.00	0.34	0.12
DDH-99-008						61.60	61.90				
DDH-99-008						61.90	62.06	12.9	0.00	0.06	0.22
DDH-99-008						62.06	63.06				
									_	_	_
DDH-99-008						63.06	63.16	17.1	0.00	0.04	0.36

Hole					_			
Identification	Collar Co-ordinates	Interval Orientation		A	ssay Re	sults		
HOLE	Alice New Alice Place	de la constanta	F	T	Ag	C 01	DI. 0/	7 . 01
Vein N° Eas	iting Northing Elevat	tion Length Azimuth Dip	From	To	(g/t)	Cu %	Pb %	Zn %
DDH-99-008			63.16	69.67	2.0	0.00	0.02	0.00
DDH-99-008			69.67	69.84	3.8	0.00	0.03	0.09
DDH-99-008			69.84	82.64	227.2	0.01	0.74	0.07
DDH-99-008			82.64	82.90	337.3	0.01	0.74	0.07
DDH-99-008			82.90	83.21	5.3	0.00	0.21	0.05
DDH-99-008			83.21	83.51	002.5	0.06	0.47	0.00
DDH-99-008			83.51	83.81	902.5	0.06	0.47	0.08
DDH-99-008			83.81	84.31	5 <i>1</i> 1 1	0.02	1 22	0.54
DDH-99-008			84.31	84.62	541.1	0.02	1.23	0.54
DDH-99-008			84.62	100.50	111 /	0.02	0.02	0.00
DDH-99-008			100.50	100.70	111.4	0.02	0.02	0.08
DDH-99-008			100.70	102.50	<i>5</i> 1	0.00	0.04	0.05
DDH-99-008			102.50	102.69	5.4	0.00	0.04	0.05
DDH-99-008 DDH-99-008			102.69	103.69	12.2	0.00	0.02	0.26
			103.69	103.78	13.3	0.00	0.02	0.36
DDH-99-008			103.78 107.10	107.10	15.0	0.00	0.02	0.50
DDH-99-008 DDH-99-008				107.24 110.24	15.2	0.00	0.02	0.50
DDH-99-008 DDH-99-008			107.24	110.24	2.6	0.00	0.06	0.10
DDH-99-008 DDH-99-008			110.24 110.45		2.6	0.00	0.06	0.10
DDH-99-008 DDH-99-008				113.84	11.6	0.00	0.02	0.24
DDH-99-008 DDH-99-008			113.84	114.27	40.4	0.00	0.02	0.34
DDH-99-008 DDH-99-008			114.27 114.55	114.55 114.77	40.4	0.00	0.02	0.46 0.15
DDH-99-008 DDH-99-008			114.33	114.77	4.7	0.00	0.01	0.13
DDH-99-008 DDH-99-008			114.77	117.14	34.4	0.00	0.02	0.18
DDH-99-008			117.14	122.19	34.4	0.00	0.02	0.16
DDH-99-008			122.19	122.19	72.9	0.01	0.19	0.47
DDH-99-008			122.19	124.38	12.9	0.01	0.19	0.47
DDH-99-008			124.38	124.72	4.1	0.00	0.07	0.03
DDH-99-008			124.72	125.06	7.6		0.07	0.03
DDH-99-008			125.06	125.50	2.9	0.00	0.10	0.01
DDH-99-008			125.50	125.77	8.4	0.00	0.20	0.02
DDH-99-008			125.77	126.17	9.9	0.00	0.20	0.03
DDH-99-008			126.17	126.47	1.1	0.00	0.20	0.02
DDH-99-008			126.47	126.87	4.2	0.00	0.04	0.01
DDH-99-008			126.87	127.05	1.1	0.00	0.02	0.02
DDH-99-008			127.05	127.51	1.8	0.00	0.03	0.05
DDH-99-008			127.51	127.31	1.0	0.00	0.05	0.05
DDH-99-008			127.31	128.93	2.2	0.00	0.09	0.06
DDH-99-008			128.93	129.68	2.2	0.00	0.07	0.00
DDH-99-008			129.68	129.91	0	0.00	0.04	0.24
DDH-99-008			129.91	130.23	2	0.00	0.10	0.24
DD11-33-000			147.71	130.23	2	0.00	0.10	0.20

Edgar Filing: PAN AMERICAN SILVER CORP - Form 6-K

DDH 00 000	-					120.22	120.62				
DDH-99-008						130.23	130.63	0	0.00	0.05	0.00
DDH-99-008						130.63	131.09	0	0.00	0.05	0.08
DDH-99-008						131.09	138.32	0	0.00	0.00	0.00
DDH-99-008						138.32	138.59	0	0.00	0.00	0.08
DDH-99-008						138.59	147.22				
Descono DDH-99-009 ,998	7,645,922	4,568	202.08	335°	-54°		3.55				
DDH-99-009						3.55	3.96	20.3	0.01	0.07	0.01
DDH-99-009						3.96	4.45	3392	0.03	0.18	0.02
DDH-99-009						4.45	4.86	18.1	0.02	0.08	0.10
DDH-99-009						4.86	5.06	364.7	0.06	0.47	1.82
DDH-99-009						5.06	5.47	3.5	0.00	0.05	0.10
DDH-99-009						5.47	5.81	4.6	0.00	0.04	0.24
DDH-99-009						5.81	6.17	12.2	0.01	0.07	0.54
DDH-99-009						6.17	6.75	55.2	0.11	0.06	0.22
DDH-99-009						6.75	7.11	59.3	0.02	0.03	0.43
DDH-99-009						7.11	7.41	10.2	0.01	0.01	0.13
DDH-99-009						7.41	7.86	7.1	0.00	0.02	0.07
DDH-99-009						7.86	8.18	2.1	0.00	0.03	0.05
DDH-99-009						8.18	8.48				
DDH-99-009						8.48	8.68	22.8	0.02	0.07	0.42
DDH-99-009						8.68	10.26				
DDH-99-009						10.26	10.47	1.1	0.00	0.01	0.10
DDH-99-009						10.47	11.27				
DDH-99-009						11.27	11.76	2	0.00	0.01	0.08
DDH-99-009						11.76	12.46				
DDH-99-009						12.46	12.69	1	0.00	0.02	0.10
DDH-99-009						12.69	13.11				
DDH-99-009						13.11	13.47	2.5	0.00	0.01	0.05
DDH-99-009						13.47	14.47				
DDH-99-009						14.47	14.88	5.9	0.00	0.01	0.06
DDH-99-009						14.88	15.93				
DDH-99-009						15.93	16.15	4.5	0.00	0.01	0.08
DDH-99-009						16.15	16.90				
DDH-99-009						16.90	17.09	3.4	0.00	0.01	0.05
DDH-99-009						17.09	17.39				
DDH-99-009						17.39	17.49	5.4	0.00	0.01	0.04
DDH-99-009						17.49	19.85				
DDH-99-009						19.85	19.99	3.6	0.00	0.01	0.05
DDH-99-009						19.99	43.04				
DDH-99-009						43.04	43.16	0.2	0.00	0.00	0.03
DDH-99-009						43.16	65.92				
DDH-99-009						65.92	66.36	13.4	0.01	0.07	0.46

Hole												
Identification	Collar Co-	ordina	ites	Interval	Orient	ation		A	ssay Res	sults		
HOLE									Ag			
Vein N° East	ting Nort	hing	Elevation	Length A	Azimutl	n Dip	From	To	(g/t)	Cu %	Pb %	Zn %
DDH-99-009							66.36	66.91	9.3	0.00	0.04	0.29
DDH-99-009							66.91	67.27	138.1	0.01	0.05	0.51
DDH-99-009							67.27	67.55	26.6	0.00	0.06	0.53
DDH-99-009							67.55	68.17	417	0.01	0.05	0.61
DDH-99-009							68.17	68.82	8.8	0.00	0.04	0.17
DDH-99-009							68.82	83.56				
DDH-99-009							83.56	83.76	5.1	0.00	0.02	0.04
DDH-99-009							83.76	84.96				
DDH-99-009							84.96	85.10	0.5	0.00	0.02	0.31
DDH-99-009							85.10	88.16				
DDH-99-009							88.16	88.34	13.8	0.01	0.03	0.14
DDH-99-009							88.34	88.68	0.7	0.00	0.02	0.04
DDH-99-009							88.68	88.93	105.1	0.07	0.10	0.29
DDH-99-009							88.93	100.20				
DDH-99-009							100.20	100.72	6.3	0.00	0.02	0.36
DDH-99-009							100.72	100.98	0.6	0.00	0.01	0.09
DDH-99-009							100.98	104.70				
DDH-99-009							104.70	105.02	36.8	0.02	0.04	0.38
DDH-99-009							105.02	105.46	5.3	0.00	0.03	0.13
DDH-99-009							105.46	118.39				
DDH-99-009							118.39	118.75	0	0.00	0.01	0.08
DDH-99-009							118.75	129.23				
DDH-99-009							129.23	129.48	18	0.02	0.02	0.92
DDH-99-009							129.48	148.72				
DDH-99-009							148.72	148.89	0	0.00	0.02	0.05
DDH-99-009							148.89	173.95				
DDH-99-009							173.95	174.19	0.7	0.00	0.02	0.04
DDH-99-009							174.19	189.79				
DDH-99-009							189.79	190.09	0	0.00	0.01	0.04
DDH-99-009							190.09	190.79				
DDH-99-009							190.79	191.08	0	0.00	0.01	0.03
DDH-99-009							191.08	202.08				
Brui DDH-99-070	,166 7,640	6,090	4,482	156.36	217°	-49°		14.31				
Miri Dib H-99-010							14.31	14.55	0	0.00	0.01	0.02
DDH-99-010							14.55	16.55				
DDH-99-010							16.55	16.86	0	0.00	0.00	0.01
DDH-99-010							16.86	25.90				
DDH-99-010							25.90	26.07	0	0.00	0.00	0.02
DDH-99-010							26.07	31.39				
DDH-99-010							31.39	31.77	0	0.00	0.00	0.03
DDH-99-010							31.77	32.27				

Edgar Filing: PAN AMERICAN SILVER CORP - Form 6-K

DDH-99-010	32.27	32.63	0.4	0.00	0.01	0.03
DDH-99-010	32.63	33.01	0.5	0.00	0.01	0.04
DDH-99-010	33.01	33.51				
DDH-99-010	33.51	33.75	0	0.00	0.01	0.02
DDH-99-010	33.75	34.20				
DDH-99-010	34.20	34.43	0	0.00	0.01	0.02
DDH-99-010	34.43	37.84				
DDH-99-010	37.84	37.97	0.4	0.00	0.05	0.07
DDH-99-010	37.97	38.18				
DDH-99-010	38.18	38.29	0.5	0.00	0.01	0.04
DDH-99-010	38.29	41.29				
DDH-99-010	41.29	41.44	0.9	0.00	0.03	0.03
DDH-99-010	41.44	44.14				
DDH-99-010	44.14	44.44	0	0.00	0.00	0.03
DDH-99-010	44.44	44.79				
DDH-99-010	44.79	44.94	0.4	0.00	0.00	0.03
DDH-99-010	44.94	45.34				
DDH-99-010	45.34	45.55	0.6	0.00	0.00	0.08
DDH-99-010	45.55	47.08				
DDH-99-010	47.08	47.39	0.2	0.00	0.01	0.03
DDH-99-010	47.39	48.39				
DDH-99-010	48.39	48.51	0.3	0.00	0.01	0.03
DDH-99-010	48.51	49.21				
DDH-99-010	49.21	49.50	0.4	0.00	0.01	0.06
DDH-99-010	49.50	49.98	0	0.00	0.01	0.00
DDH-99-010	49.98	50.43	0.3	0.00	0.01	0.02
DDH-99-010	50.43	50.83	2.9	0.02	0.05	0.06
DDH-99-010	50.83	60.38	,	0.02	0.00	0.00
DDH-99-010	60.38	60.70	0	0.00	0.03	0.06
DDH-99-010	60.70	65.07	Ů	0.00	0.02	0.00
DDH-99-010	65.07	65.63	1.4	0.00	0.01	0.05
DDH-99-010	65.63	66.38	1	0.00	0.01	0.02
DDH-99-010	66.38	66.72	0.4	0.00	0.02	0.03
DDH-99-010	66.72	67.07	0	0.00	0.02	0.05
DDH-99-010	67.07	67.24	0	0.00	0.01	0.03
DDH-99-010	67.24	71.02	Ü	0.00	0.01	0.05
DDH-99-010	71.02	71.48	0	0.00	0.02	0.06
DDH-99-010	71.48	77.11	O	0.00	0.02	0.00
DDH-99-010	77.11	77.30	0.9	0.00	0.03	0.05
DDH-99-010 DDH-99-010	77.11	79.82	0.7	0.00	0.03	0.05
DDH-99-010 DDH-99-010	79.82	80.16	0	0.00	0.01	0.03
DDH-99-010 DDH-99-010	80.16	80.58	0	0.00	0.01	0.03
DDH-99-010 DDH-99-010	80.58	81.17	0	0.00	0.01	0.03
DDII // 010	00.50	01.17	U	0.00	0.01	0.03

Hole Identification Collar Co-ordinates Interval Orientation		A	ssay Re	esults		
HOLE			Ag			
Vein N° Easting Northing Elevation Length Azimuth Dip	From	To	(g/t)	Cu %	Pb %	Zn %
DDH-99-010	81.17	81.41	2	0.00	0.01	0.02
DDH-99-010	81.41	81.56				
DDH-99-010	81.56	81.79	0	0.00	0.01	0.02
DDH-99-010	81.79	82.19				****
DDH-99-010	82.19	82.48	0.4	0.00	0.01	0.03
DDH-99-010	82.48	89.21	٠	0.00	0.01	0.00
DDH-99-010	89.21	89.57	0	0.00	0.01	0.03
DDH-99-010	89.57	101.15	O	0.00	0.01	0.05
DDH-99-010	101.15	101.54	6.2	0.01	0.02	0.07
DDH-99-010	101.13	117.69	0.2	0.01	0.02	0.07
DDH-99-010	117.69	117.89	19.8	0.04	0.17	0.08
DDH-99-010 DDH-99-010	117.89	126.68	19.0	0.04	0.17	0.08
DDH-99-010 DDH-99-010	126.68		2.4	0.00	0.07	0.00
		127.10	2.4	0.00	0.07	0.08
DDH-99-010	127.10	132.93	21.2	0.10	0.54	0.12
DDH-99-010	132.93	133.03	21.3	0.19	0.54	0.12
DDH-99-010	133.03	138.27	<i>5</i> 0	0.00	0.10	0.00
DDH-99-010	138.27	138.39	5.8	0.02	0.18	0.08
DDH-99-010	138.39	141.97	- 1	0.00	0.01	0.00
DDH-99-010	141.97	142.07	6.4	0.02	0.21	0.08
DDH-99-010	142.07	142.17				
DDH-99-010	142.17	142.30	0	0.00	0.01	0.02
DDH-99-010	142.30	150.52				
DDH-99-010	150.52	150.69	4.3	0.02	0.13	0.13
DDH-99-010	150.69	155.06				
Gan D)DH-99-07B ,869 7,645,821 4,486 171.60 178° -58°		68.27				
San	60 27	<i>(</i> 0, <i>(</i> 0	0	0.00	0.01	0.04
Vicand-99-011	68.27	68.68	0	0.00	0.01	0.04
DDH-99-011	68.68	69.38	0	0.00	0.02	0.07
DDH-99-011	69.38	70.17		0.00		0.07
DDH-99-011	70.17	71.05	0.3	0.00	0.05	0.12
DDH-99-011	71.05	71.53	0	0.00	0.04	0.05
DDH-99-011	71.53	71.80	0.5	0.00	0.06	0.05
DDH-99-011	71.80	72.20	0	0.00	0.01	0.04
DDH-99-011	72.20	72.90				
DDH-99-011	72.90	73.83	0	0.00	0.04	0.09
DDH-99-011	73.83	74.44	0.5	0.00	0.09	0.31
DDH-99-011	74.44	75.32	0	0.00	0.03	0.09
DDH-99-011	75.32	75.82				
DDH-99-011	75.82	76.01	0	0.00	0.01	0.04
DDH-99-011	76.01	93.65				
DDH-99-011	93.65	93.84	2.8	0.04	0.01	0.19

Edgar Filing: PAN AMERICAN SILVER CORP - Form 6-K

DDII 00 011						02.04	10501				
DDH-99-011						93.84	105.04	- 0	0.00	0.00	0.22
DDH-99-011						105.04	105.34	7.9	0.00	0.02	0.33
DDH-99-011						105.34	105.92	73.3	0.04	0.06	1.79
DDH-99-011						105.92	106.36	25.7	0.01	0.11	0.84
DDH-99-011						106.36	106.76	97	0.06	0.23	6.40
DDH-99-011						106.76	106.98	13.5	0.00	0.03	0.23
DDH-99-011						106.98	108.85				
DDH-99-011						108.85	109.06	5	0.00	0.03	0.30
DDH-99-011						109.06	159.41				
DDH-99-011						159.41	159.71	11	0.01	0.01	0.45
DDH-99-011						159.71	160.46	21.6	0.03	0.09	3.68
DDH-99-011						160.46	160.81	10.3	0.05	0.05	0.31
DDH-99-011						160.81	171.60				
6 de											
	7 645 220	4 402	245 26	2029	-67°		69.93				
Ago DDH-99-072 ,041	7,645,329	4,493	245.36	203°	-07	60.02		17	0.00	0.01	Λ 10
DDH-99-012						69.93	70.60	1.7	0.00	0.01	0.18
DDH-99-012						70.60	71.16	2.6	0.00	0.01	0.17
DDH-99-012						71.16	78.02	• •	0.00	0.04	0.00
DDH-99-012						78.02	78.37	2.9	0.00	0.01	0.28
DDH-99-012						78.37	78.62				
DDH-99-012						78.62	79.28	3.2	0.00	0.00	0.17
DDH-99-012						79.28	88.77				
DDH-99-012						88.77	89.41	1.3	0.00	0.01	0.21
DDH-99-012						89.41	94.46				
DDH-99-012						94.46	95.40	8.5	0.03	0.01	0.25
DDH-99-012						95.40	95.68	257	0.21	0.03	4.70
DDH-99-012						95.68	96.37	3.4	0.00	0.01	0.16
DDH-99-012						96.37	96.86	4.6	0.00	0.03	0.20
DDH-99-012						96.86	97.46	85	0.08	0.02	4.19
DDH-99-012						97.46	97.93	152	0.14	0.03	6.56
DDH-99-012						97.93	98.17	12	0.01	0.01	1.08
DDH-99-012						98.17	98.56	7.2	0.01	0.01	0.35
DDH-99-012						98.56	99.37	115		0.10	1.95
DDH-99-012						99.37	99.66	92.2	0.11	0.03	4.78
DDH-99-012						99.66	100.47	30.8	0.03	0.01	0.38
DDH-99-012						100.47	100.47	711	0.47	0.60	15.90
DDH-99-012						100.47	101.51	1621	0.31	0.36	3.35
DDH-99-012						100.50	102.05	18	0.04	0.03	0.29
DDH-99-012 DDH-99-012						101.31			0.04	0.03	0.29
							102.57	11.3			
DDH-99-012						102.57	102.87	5	0.01	0.01	0.15
DDH-99-012						102.87	103.47	25.0	0.05	0.06	1.50
DDH-99-012						103.47	103.73	35.8	0.05	0.06	1.58
DDH-99-012						103.73	105.16	2.2	0.00	0.07	0.21
DDH-99-012						105.16	106.12	2.2	0.00	0.07	0.31
DDH-99-012						106.12	106.46	6.8	0.01	0.02	1.84

Hole												
Identification	Colla	ır Co-ordina	tes	Interv	al Orientat	ion		As	ssay Re	esults		
HOLE									Ag			
Vein N° Eas	ting	Northing	Elevation	Length	Azimuth	Dip	From	To	(g/t)	Cu %	Pb %	Zn %
DDH-99-012							106.46	106.56				
DDH-99-012							106.56	106.96	3.3	0.00	0.12	0.55
DDH-99-012							106.96	107.46				
DDH-99-012							107.46	107.64	5.7	0.01	0.02	1.20
DDH-99-012							107.64	159.32				
DDH-99-012							159.32	159.54	2.7	0.01	0.01	0.50
DDH-99-012							159.54	160.37				
DDH-99-012							160.37	160.56	0.2	0.00	0.01	0.13
DDH-99-012							160.56	245.36				
Lit baaH-99-0773	686	7,644,905	4,473	236.80	5°	-57°		67.37				
DDH-99-013	,000	7,044,703	7,773	230.00	3	-37	67.37	68.17	0	0.00	0.01	0.02
DDH-99-013							68.17	68.78	0.4	0.00	0.01	0.02
DDH-99-013							68.78	69.03	0.4	0.00	0.02	0.03
DDH-99-013							69.03	69.84	0.3	0.00	0.02	0.03
DDH-99-013							69.84	70.65	0.5	0.00	0.00	0.02
DDH-99-013							70.65	71.45	0	0.00	0.00	0.02
DDH-99-013							71.45	72.25	0	0.00	0.00	0.01
DDH-99-013							72.25	73.05	0	0.00	0.00	0.02
DDH-99-013							73.05	73.85	0	0.00	0.00	0.02
DDH-99-013							73.85	74.70	0	0.00	0.00	0.02
DDH-99-013							74.70	89.90	Ü	0.00	0.00	0.01
DDH-99-013							89.90	90.28	0	0.00	0.00	0.01
DDH-99-013							90.28	91.48	U	0.00	0.00	0.01
DDH-99-013							91.48	92.02	0	0.00	0.00	0.05
DDH-99-013							92.02	92.65	O	0.00	0.00	0.05
DDH-99-013							92.65	93.39	0	0.00	0.00	0.03
DDH-99-013							93.39	94.19	0	0.00	0.00	0.02
DDH-99-013							94.19	94.89	0	0.00	0.00	0.02
DDH-99-013							94.89	101.25	O	0.00	0.00	0.02
DDH-99-013							101.25	101.46	0	0.00	0.00	0.01
DDH-99-013							101.46	108.60	Ü	0.00	0.00	0.01
DDH-99-013							108.60	109.64	0.5	0.00	0.00	0.04
DDH-99-013							109.64	117.24	0.5	0.00	0.00	0.01
DDH-99-013							117.24	117.94	0.8	0.00	0.00	0.01
DDH-99-013							117.24	117.54	4.3	0.00	0.00	1.37
DDH-99-013							117.94	119.73	0.6	0.01	0.00	0.01
DDH-99-013							119.73	120.40	1.9	0.01	0.00	0.01
DDH-99-013							120.40	120.40	11.3	0.02	0.00	0.01
DDH-99-013							120.40	120.07	1.3	0.24	0.00	0.00
DDH-99-013							120.07	121.22	0.5	0.02	0.00	0.02
DDH-99-013							121.22	121.62	0.5	0.01	0.00	0.01
110-66-נות							121.82	123.08				

Edgar Filing: PAN AMERICAN SILVER CORP - Form 6-K

DDH-99-013		123.68	124.32	0	0.01	0.00	0.01
DDH-99-013		124.32	124.52				
DDH-99-013		124.52	124.87	0.4	0.01	0.00	0.01
DDH-99-013		124.87	125.37				
DDH-99-013		125.37	125.83	0.7	0.01	0.00	0.01
DDH-99-013		125.83	126.06	2	0.01	0.00	0.02
DDH-99-013		126.06	126.50	0.7	0.00	0.00	0.01
DDH-99-013		126.50	126.89	2.3	0.02	0.00	0.03
DDH-99-013		126.89	127.19				
DDH-99-013		127.19	127.49	0.4	0.00	0.00	0.02
DDH-99-013		127.49	167.00				
DDH-99-013		167.00	167.38	2.2	0.09	0.00	0.03
DDH-99-013		167.38	167.86	42.5	0.74	0.02	0.05
DDH-99-013	&nbs						