

# ANDEAN PRECIOUS METALS EXTENDS LIFE OF SAN BARTOLOMÉ OPERATION TO 4.6 YEARS BASED ON NEW 2P MINERAL RESERVE ESTIMATE

**M+I** mineral resources of 6.1 Mt grading 98 g/t silver, containing 19.0 million silver ounces, including **2P** mineral reserves of 5.1 Mt at 93 g/t silver, with 11.95 million recoverable silver ounces

(All amounts are in U.S. dollars unless otherwise stated)

**TORONTO, ON** – December 27, 2023 – **Andean Precious Metals Corp.** ("**Andean**" or the "**Company**") (TSX-V: APM) (OTCQX: ANPMF) is pleased to announce an updated mineral reserve and resource estimate for the Company's San Bartolomé mine and mill operations, the largest commercial oxide processing facility in Bolivia.

The 2023 mineral resource and reserve estimates herein ("2023 MR&RE") were prepared by SRK Consulting (U.S.) Inc. ("SRK") and will be supported by a technical report prepared in compliance with National Instrument 43-101 – *Standards for Disclosure for Mineral Projects* ("NI 43-101") that is expected to be filed by Andean within 45 days of this press release.

"The results reported today reflect the work undertaken to extend the life of our San Bartolomé processing facility and create value for our stakeholders. Our new mineral reserve and resource estimate excludes our low-grade and high cost "pallacos" for the areas of Antuco, Huacajchi and Santa Rita, and includes material from our fines deposit facility<sup>1</sup>, as well as other higher grade third-party contracted ore," stated Alberto Morales, Executive Chairman and Chief Executive Officer of Andean.

While Andean has been processing ore from both its internal pallacos and third-party contracted material, the percentage of the contracted material has steadily increased. As of the end of the third quarter, on a year-to-date basis, third-party material represented more than 60% of tonnes processed and nearly 70% of ounces produced. During the first nine months of 2023, only 30% of ounces produced came from the Company's low-grade and high cost pallacos.

"To feed our mill during this next phase of operations, we will completely transition away from pallacos and focus on processing higher margin third-party sourced ore and on our FDF material," added Mr. Morales. "During the course of 2023, we have successfully negotiated agreements for a significant amount of tonnage of higher-grade material to feed San Bartolomé, and we will continue to negotiate with COMIBOL and look for other third-party sources during the course of 2024."

<sup>&</sup>lt;sup>1</sup> The estimate includes the resources in our Fines Deposit Facility ("FDF") which contains untreated finegrained plant feed from the oxide reserves previously mined as well as third party contracted high-grade oxide material.



## 2023 MR&RE Highlights

- 2023 MR&RE for San Bartolomé reports:
  - a contained M&I silver ("Ag") resource of 19.0 Moz at 98 grams per tonne ("g/t") Ag;
     and
  - a recoverable 2P reserve of 11.95 Moz with an average grade of 93 g/t Ag.
- New sources of mill feed acquired including high-grade silver oxides from Paca, Alta Vista and three deposits in the Tollojchi area will augment FDF production.
- Life of operations from 2P mineral reserves stands at 4.6 years.
- Given the reprocessing of FDF tailings and an expanded portfolio of feed sources, operations at San Bartolomé are expected to extend into 2028, more than 8 years beyond the original 12-year life of mine, which was expected to end in 2020<sup>2</sup>.
- Potential opportunities remain to further expand the life of operations by upgrading portions of the high-grade inferred, which stands at 965 kt grading 167 g/t Ag.
- The Company has an active program to identify and acquire new oxidized materials that would otherwise not be suitable for processing with typical flotation plants in the country.

# Mineral Resource Estimate Methodology - FDF

The estimates of mineral resources are effective as of December 1, 2023, and are presented in the *Appendix - Table 1*.

San Bartolomé mine processed the pallacos oxidized deposits formed from erosion of the world-class Cerro Rico hydrothermal deposit (high sulphidation-type) since its commissioning in 2008. The San Bartolomé processing plant screened out fine-grained material of less than 2.5 mm in size (-8 mesh), effectively upgrading the silver content of material. This untreated material contained silver and was stockpiled in the FDF at San Bartolomé.

The tails material was sampled for silver content before being stockpiled and based on that historical sampling data, the Company previously estimated the silver grade to be between 35 and 40 g/t.

The FDF has been drilled extensively utilizing Sonic core drilling methods from a barge-mounted platform. Personnel from Empresa Minera Manquiri SA ("**Manquiri**"), the wholly owned, Bolivian subsidiary of Andean, logged and sampled the drill core and submitted the samples to ALS

<sup>&</sup>lt;sup>2</sup> \*Coeur d'Alene Mine, San Bartolomé Technical Report, January 1, 2009, p.111. The San Bartolomé operation started up in 2008 with an estimated end of mine of 2020.



Global's ("ALS") sample preparation and analytical facilities in Oruro, Bolivia and Lima, Peru, respectively. ALS is a certified commercial analytical services company.

SRK completed an analysis of the raw exploration data, analysis of outliers and defined capping levels where necessary and composited the samples to a 2 meter (m), consistent vertical length. Variogram analysis was completed to define the block size, search strategy used in the estimation. Silver grade estimates were made from the composited data into the block model, with a dimension of 20 m x 20 m x 5 m using ordinary kriging, inverse distance, and nearest neighbor methods, as appropriate. A bulk density of 1.52 g/cm³ was assigned to the block material. FDF mineral resources were categorized by SRK in a manner consistent with CIM Guidelines and considered spacing of drilling, numbers of composites, and geostatistical indicators of estimation quality as well as other factors.

## Mineral Resource Estimate Methodology - Contracted Material

Since 2015, Manquiri supplemented its pallacos plant feed with material purchased from Corporación Minera de Bolivia ("COMIBOL"), the Bolivian state mining company, and from other non-governmental sources.

Manquiri has performed drilling and rock sampling in the areas that are sources of contracted material.

Manquiri and SRK completed the geological model and the resource estimation for the oxidized material in the three areas of Tollojchi (Platera, Manto and Rosario), Alta Vista and Paca, and included the partially oxidized (transition) material in Paca. SRK completed an analysis of the raw exploration data for each project, including the analysis of outliers in each zone of the projects, defining capping levels where necessary and composited the samples to a 2.5 m in Paca and no compositing was applied to samples in Tollojchi and Alta Vista. Variogram analysis was completed to define the block size, search strategy used in the estimation. Silver grade estimates were made from the composited data into the block model for each domain where necessary. Parent block dimensions used are: 20 m x 20 m x 10 m in Paca, 10 m x 10 m x 10 m in Manto, 5 m x 5 m x 5 m x 5 m in Rosario and Platera, and 10 m x 10 m x 10 m in Alta Vista. The estimation methods included ordinary kriging, inverse distance, and nearest neighbor methods, as appropriate. The bulk density was assigned according to the geological domains in each area.

## Mineral Reserves Estimate Methodology – All Material and Mining Methods

The estimates of mineral reserves are effective as of December 1, 2023, and are presented in the *Appendix - Table 2*. The prefeasibility study ("**PFS**") models an open pit mine with a proven and probable mineral reserve containing 15.19 Moz of contained silver. Measured and indicated resources were used for conversion to proven and probable reserves within the optimized PFS pit designs. The mineral reserve (in-pit) cut-off grades used were 70 g/t Ag for Antuco, Santa Rita, Huacajchi, Manto, Platera, Rosario; 50 g/t Ag for FDF material; 180 g/t Ag for Paca; and 250 g/t Ag for Alta Vista. The mineral reserves were calculated using a silver price of \$23/oz.



The reserves have 12.2 Mt of waste, and the life of mine stripping ratio is 1.26 (waste to in situ RoM ore).

The following process and modifying factors were followed to calculate the mineral reserves:

- Selection of metal selling prices based on historical and projected prices.
- Review of all modifying factors including metal prices, costs, dilution, mining recovery, processing recovery, sustaining capital, royalties, and mining methods.
- Convert geological block models to mine models (addition of dilution to mine models).
- Dilution studies.
- Pit optimization using all modifying factors.
- Selection of economical pit using Rev Factor 1.
- Pit design following geotechnical recommendations.
- Monthly mine schedules for the life of the project.
- Cost model verification based on new mine schedule and inventory.
- · Generation of post-tax cash flow.

Mining activities at the Manquiri operations will include removal of any growth medium (topsoil), free-digging, drilling, blasting, loading, hauling and mining support activities. Material within the pits will be generally blasted on a 2.5 m high bench. Saprolite material can be loaded directly with hydraulic excavators without the need for blasting. Lower-grade economic material will be placed in stockpiles, near to the primary crusher location. Higher-grade economic material will be sent directly to the primary crusher.

A conventional truck-shovel method was considered for the open pit portion of all the deposits except the FDF (tailings recovery) and Alta Vista (underground) deposit. The open pit analysis results in several distinct open pits coalescing into over 14 pits. Most pits are shallow due to the nature of mining only the oxide portion of the resources.

For the underground portion of the PFS analysis the block model created in Datamine using 5 m x 5 m x 5 m parent cell and variable sub-celling was evaluated. The planned mining inventory provided the contents of the underground design including estimated mining dilution and mining recovery. The dilution and mining recovery was built in during the reblock (subblock) exercise applied to the original model. The planned mining from Alta Vista underground consists of evaluated tonnes and grade within Mineable Stope Optimizer (MSO) software shapes that met the cut-off grade. The planned mining from underground is near the surface and multiple access will be minimal.

The FDF tailings will be reprocessed using submersible pumps on a barge and slurried for classification and thickening with the undersized material going directly into the dry stack facility ("**DSF**") with the coarse material pumped into the ball mill. The barge loops systematically over cells at depth of 2.5 m to hydraulically mine horizontal layers considering the original topography



of the FDF. The grades of the blocks were modelled from barge-supported sonic drilling. Low grade material is also passed into the DSF. The block model was created in Datamine and reblocked using  $20 \,\mathrm{m} \times 20 \,\mathrm{m} \times 5 \,\mathrm{m}$  with a dilution of approximately 5%.

A monthly production schedule and cash flow were prepared to verify the economic feasibility of the estimated mineral reserves. Production is based on a maximum mine movement of roughly 38,000 tonnes per day, ore and waste, and the processing rate of about 4,500 tonnes per day.

Cost estimates were prepared based on site-specific recent historic data and covered the mining, processing, and G&A operating costs. Cost estimates related to the sustaining capital of the operation include the installation of a hydraulic mining operation for the reclaim of the FDF and a pre-concentration circuit, maintenance capital to sustain the fixed assets and an estimate of closure costs.

Revenue projections by the cash flow are based on reviewed contracts in place for the sale of doré bars containing silver and the related costs include shipping, assaying, and refining associated with a refining recovery. Private and governmental royalties were included in the cash flow, the former being 4% and the latter 6% of sales revenue net of all selling costs.

## **Qualified Persons**

The scientific and technical content disclosed in this press release was reviewed and approved by:

Giovanny Ortiz, BSc, FAusIMM, SEG, Principal Resource Geologist of SRK Consulting (U.S.) Inc. Mr. Ortiz has sufficient experience which is relevant to the type of material under consideration including mineral resources and to the activities being undertaken to qualify as a Qualified Person as defined by NI 43-101. The most recent site visit occurred in May 2022 and included: review and verification of the exploration procedures, sampling, analytical analysis, and the geological interpretations of all the deposit areas.

Fernando Rodrigues, BS Mining, MBA, MAusIMM, MMSAQP, Practice Leader/Principal Consultant (Mining) of SRK Consulting (U.S.) Inc. Mr. Rodrigues has sufficient experience which is relevant to the type of material under consideration including Mineral Reserves and to the activities being undertaken to qualify as a Qualified Person as defined by NI 43-101. Mr. Rodrigues visited the site in July 2023 and reviewed active pallacos mining areas, the FDF tailings area, and the contracted material stockpiles.

Donald J. Birak, Independent Consulting Geologist to the Company, a Qualified Person as defined by NI 43-101, Registered Member, Society for Mining, Metallurgy and Exploration (SME) and Fellow, Australasian Institute of Mining and Metallurgy (AusIMM). During his periodic site visits, he inspected the geology and mineralization of all the deposit areas referenced herein. Mr. Birak also verified Sonic sample quality and assay data and QAQC used to prepare the FDF mineral resource estimates.



## **About Andean Precious Metals**

Andean is a growth-focused precious metals producer that owns and operates the San Bartolomé project located in the department of Potosí, Bolivia. San Bartolomé has been operating continuously since 2008, producing an average of 5 million oz of silver equivalent per year. The Company is seeking accretive growth opportunities in Bolivia and the Americas. Andean is committed to fostering safe, sustainable and responsible operations.

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# **Caution Regarding Forward-Looking Statements**

Certain statements and information in this release constitute "forward-looking statements" within the meaning of applicable U.S. securities laws and "forward-looking information" within the meaning of applicable Canadian securities laws, which we refer to collectively as "forward-looking statements". Forward-looking statements are statements and information regarding possible events, conditions or results of operations that are based upon assumptions about future economic conditions and courses of action. All statements and information other than statements of historical fact may be forward-looking statements. In some cases, forward-looking statements can be identified by the use of words such as "seek", "expect", "anticipate", "budget", "plan", "estimate", "continue", "forecast", "intend", "believe", "predict", "potential", "target", "may", "could", "would", "might", "will" and similar words or phrases (including negative variations) suggesting future outcomes or statements regarding an outlook.

Forward-looking statements in this release include, but are not limited to, statements and information regarding timing to file the technical report supporting the 2023 MR&RE, the expected sources of the Company's mill feed in the upcoming year, the ability of the Company to extend San Bartolomé life of mine, and the Company's plans for growth through exploration activities, acquisitions or otherwise. Such forward-looking statements are based on a number of material factors and assumptions, including, but not limited to: the Company's ability to carry on exploration and development activities; the Company's ability to secure and to meet obligations under property and option agreements and other material agreements; the timely receipt of required approvals and permits; that there is no material adverse change affecting the Company or its properties; that contracted parties provide goods or services in a timely manner; that no unusual geological or technical problems occur; that plant and equipment function as anticipated and that there is no material adverse change in the price of silver, costs associated with production or recovery. Forward-looking statements involve known and unknown risks, uncertainties and other factors



which may cause actual results, performance or achievements, or industry results, to differ materially from those anticipated in such forward-looking statements. The Company believes the expectations reflected in such forward-looking statements are reasonable, but no assurance can be given that these expectations will prove to be correct, and you are cautioned not to place undue reliance on forward-looking statements contained herein.

Some of the risks and other factors which could cause actual results to differ materially from those expressed in the forward-looking statements contained in this release include, but are not limited to: risks and uncertainties relating to the interpretation of drill results, the geology, grade and continuity of mineral deposits and conclusions of economic evaluations; results of initial feasibility, pre-feasibility and feasibility studies, and the possibility that future exploration, development or mining results will not be consistent with the Company's expectations; risks relating to possible variations in reserves, resources, grade, planned mining dilution and ore loss, or recovery rates and changes in project parameters as plans continue to be refined; mining and development risks, including risks related to accidents, equipment breakdowns, labour disputes (including work stoppages and strikes) or other unanticipated difficulties with or interruptions in exploration and development; the potential for delays in exploration or development activities or the completion of feasibility studies; risks related to the inherent uncertainty of production and cost estimates and the potential for unexpected costs and expenses; risks related to commodity price and foreign exchange rate fluctuations; the uncertainty of profitability based upon the cyclical nature of the industry in which the Company operates; risks related to failure to obtain adequate financing on a timely basis and on acceptable terms or delays in obtaining governmental or local community approvals or in the completion of development or construction activities; risks related to environmental regulation and liability; political and regulatory risks associated with mining and exploration; risks related to the uncertain global economic environment; and other factors contained in the section entitled "Risk Factors" in the MD&A and the Company's Management Discussion and Analysis dated November 29, 2023.

Although the Company has attempted to identify important factors that could cause actual results or events to differ materially from those described in the forward-looking statements, you are cautioned that this list is not exhaustive and there may be other factors that the Company has not identified. Furthermore, the Company undertakes no obligation to update or revise any forward-looking statements included in this release if these beliefs, estimates and opinions or other circumstances should change, except as otherwise required by applicable law.



#### **APPENDIX**

Table 1: Updated Mineral Resources - San Bartolomé Operation as of December 1, 2023

Material Source	Area	Category	Tonnes <sup>(1)</sup> (000s)	Ave. Silver Grade (g/t)	Contained Silver (Moz)
San Bartolomé Tailings	FDF <sup>(2)</sup>	Measured	-	-	-
		Indicated	3,813	56	6.90
		M+I	3,813	56	6.90
		Inferred	92	52	0.15
Tollojchi Area - Contracted	Manto (3)	Measured	-	-	-
		Indicated	773	127	3.15
		M+I	773	127	3.15
		Inferred	35	131	0.15
	Platera (3)	Measured	-	-	-
		Indicated	636	160	3.28
		M+I	636	160	3.28
		Inferred	445	145	2.07
	Rosario <sup>(3)</sup>	Measured	-	-	-
		Indicated	183	148	0.87
		M+I	183	148	0.87
		Inferred	115	136	0.50
Other Areas - Contracted	Alta Vista (4)	Measured	-	-	-
		Indicated	34	354	0.39
		M+I	34	354	0.39
		Inferred	55	371	0.66
	Paca (5)	Measured	-	-	-
		Indicated	666	223	4.78
		M+I	666	223	4.78
		Inferred	223	230	1.65
Owner + Contracted	Totals	Measured	0	0	0
		Indicated	6,105	98	19
		M+I	6,105	98	19
		Inferred	965	167	5

## Notes to Table 1

- 1. Mineral resources are effective as of December 1, 2023, and inclusive of mineral reserves. Mineral resources that are not mineral reserves have not demonstrated economic viability. There is no certainty that all or any part of those mineral resources will be converted into mineral reserves estimate. Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, any apparent errors are insignificant. Silver assays were capped where appropriate. Given the historical production and knowledge of the projects, it is the Company's opinion that all the silver grades included in the calculations have a reasonable potential to be recovered and sold.
- 2. The following assumptions are considered for the FDF mineral resources:
  - a) Assumed silver price of \$25/oz and metallurgical recovery of 78%.
  - b) Mineral resources are reported at an in-situ cut-off of 47 g/t Ag, grade of material above mesh #14. This cut-off considers, on a per tonne basis: mining cost: \$1.42/t; processing costs: \$17.89/t; general & administrative and indirect costs: \$6.1/t; capital: \$0.63/t; refining, shipping,



- and laboratory costs: \$0.65/t. Other costs considered are the COMIBOL royalty of 4% and the silver Bolivian royalty of 6%.
- c) 100% mining recovery.
- 3. The following assumptions are considered for the mineral resources deriving Manto, Platera and Rosario:
  - a) The mineral resources are reported at an in-situ cut-off of 64.3 g/t Ag.
  - b) Mineral resources are reported within a constraining pit shell. Assumed silver price of \$25/oz; assumed metallurgical silver recovery: 80%; mining and transport: \$6.49/t; process costs: \$22.98/t; G&A and other indirect costs: \$3.67/t; administrative costs: \$2.74/t; capital expenditures: \$2.65/t. Other costs are the COMIBOL royalty of 4%, the silver Bolivian royalty of 6%, and refining and shipping and laboratory costs of \$0.66/t.
  - c) Material from Manto, Platera and Rosario transportation costs of \$18.50/t has been applied to the economic analysis. SRK is using an incremental cutoff to define if the material is considered as mineral resources.
  - d) 100% mining recovery.
- 4. The following assumptions are considered for the mineral resources deriving from Alta Vista:
  - The mineral resources are reported at an in-situ cut-off of 247 g/t Ag, considering underground mining methods.
  - b) Assumed silver price of \$25/oz; Assumed metallurgical silver recovery: 70%; transport: \$29.58/t; mining: \$63,8/t; process costs: \$24.69/t; G&A and other indirect costs: \$3.8/t; administrative costs: \$4.57/t; capital expenditures: \$0.41/t. Other costs are the silver Bolivian royalty of 6%, and refining and shipping and laboratory costs of \$0.66/t.
  - c) 100% mining recovery.
- 5. The following assumptions are considered for the mineral resources deriving from Paca:
  - a) The mineral resources are reported at an in-situ cut-off of 172 g/t Ag.
  - b) Oxidized and transitional (partially oxidized) materials are reported.
  - c) The mineral resources are reported within a constraining pit shell. Assumed silver price of \$25/oz; assumed metallurgical silver recovery: 80%; mining and haulage costs: \$30.86/t; transport: \$18.0/t; process costs: \$20.29/t; ore purchase costs: \$11.90/t. refining, shipping, and laboratory costs: \$0.45/oz Ag. Other costs are the COMIBOL royalty of 4%, the silver Bolivian royalty of 6%.
  - d) 100% mining recovery.



Table 2: Updated Mineral Reserves - San Bartolomé Mine as of December 1, 2023

Material Source	Area	Ag Cutoff (g/t)	Category	Ore (Mt)	Ag (g/t)	Contained Ag (Moz)	Recovered Ag (Moz)
San Bartolomé Tails		50	Proven	-	-	-	-
	FDF (2)		Probable	3.27	58	6.09	4.75
			P+P	3.27	58	6.09	4.75
Tollojchi Area Contracted		70	Proven	-	-	-	-
	Manto (3)		Probable	0.76	126	3.07	2.46
			P+P	0.76	126	3.07	2.46
		70	Proven	-	-	-	-
	Platera (3)		Probable	0.58	157	2.92	2.34
			P+P	0.58	157	2.92	2.34
		70	Proven	-	-	-	-
	Rosario (3)		Probable	0.18	143	0.81	0.65
			P+P	0.18	143	0.81	0.65
Other Areas Contracted	A11. \C. 1	250	Proven	-	-	-	-
	Alta Vista		Probable	0.03	357	0.39	0.27
			P+P	0.03	357	0.39	0.27
		180	Proven	-	-	-	-
	Paca (5)		Probable	0.26	228	1.91	1.53
			P+P	0.26	228	1.91	1.53
Owner + Contracted		Variable	Proven	-	-	-	-
	Totals		Probable	5.08	93	15.19	11.95
			P+P	5.08	93	15.19	11.95

### **Notes to Table 2**

- \* The costs used in the cash flow have minor differences when compared to costs used in the cut-off grade calculation, however, these are not considered material.
- \* Waste tonnes within pit is 12.2 Mt at a strip ratio of 1.26:1 (waste to in situ RoM ore).
- \* Open pit reserves are diluted (further to dilution inherent in the resource model and assumes selective mining unit of 2.5 m x 2.5 m).
- \* Open pit reserves assume complete mine recovery.
- \* Metallurgical recoveries are 80% except for FDF at 78% and Alta Vista at 70%.
- \* Mining type is all open pit except for FDF tailings reprocessing and Alta Vista underground.
- 1. Mineral reserves are effective as of December 1, 2023, and inclusive of mineral reserves. Mineral reserves tonnage and contained metal have been rounded to reflect the accuracy of the estimate. Any apparent errors are insignificant. Given the historical production and knowledge of the projects, it is the company's opinion that all the silver grades included in the calculations have a reasonable potential to be recovered and sold.
- 2. The following assumptions are considered for the FDF mineral reserves:
  - a) Assumed silver price of \$23/oz. Metallurgical recovery is estimated to be in the range of 76% to 78%. Assume metallurgical recovery of 78%.
  - b) Mineral reserves are reported at an in-situ cut-off of 50 g/t Ag, grade of material above mesh #14, has been used for reporting the mineral reserves at the FDF. This cut-off considers, on a



per tonne basis, \$1.42 mining cost, \$17.89 processing costs, \$6.1 G&A and indirect costs, \$0.63 capital, \$0.65 refining, shipping, and laboratory costs. Other costs considered are the COMIBOL royalty of 4% and the silver Bolivian royalty of 6%.

- c) 100% mining recovery and dilution of approximately 5%.
- 3. The following assumptions are considered for the mineral reserves deriving Manto, Platera, and Rosario:
  - a) The mineral reserves are reported at an in-situ cut-off of 70 g/t Ag.
  - b) The mineral reserves are reported within a constraining pit shell. Assumed silver price of \$23/oz; assumed metallurgical silver recovery: 80%; mining and transport: \$6.49/t; process costs: \$22.98/t; G&A and other indirect costs: \$3.67/t. Other costs considered included smelting; administrative costs: \$2.74; capital expenditures: \$2.65/t. Other costs are the COMIBOL royalty of 4%, the silver Bolivian royalty of 6%, and refining and shipping and laboratory costs of \$0.66/t.
  - c) 100% mining recovery and dilution of approximately 5%.
- The following assumptions are considered for the mineral reserves deriving from Alta Vista:
  - a) The mineral reserves are reported at an in-situ cut-off of 250 g/t Ag, considering underground mining methods.
  - b) Oxidized and transitional (partially oxidized) materials are reported.
  - c) Assumed silver price of \$23/oz; assumed metallurgical silver recovery: 70%; transport: \$29.58/t; mining: \$63,8/t; process costs: \$24.69/t; G&A and other indirect costs: \$3.8/t; administrative costs: \$4.57/t; capital expenditures: \$0.41/t. Other costs are the silver Bolivian royalty of 6%, and refining and shipping and laboratory costs of \$0.66/t.
  - d) 100% mining recovery and dilution of approximately 20%.
- 5. The following assumptions are considered for the mineral reserves deriving from Paca:
  - a) The mineral reserves are reported at an in-situ cut-off of 180 g/t Ag.
  - b) Oxidized and transitional (partially oxidized) materials are reported.
  - c) Mineral reserves are reported within a constrained pit shell. Assumed silver price of \$23/oz; assumed metallurgical silver recovery: 80%; ore purchase, mining and haulage costs: \$60.80/t; process costs: \$20.29/t; refining, shipping, and laboratory costs: \$0.45/oz Ag. Other costs are the COMIBOL royalty of 4%, the silver Bolivian royalty of 6%.
  - d) 100% mining recovery and dilution of approximately 5%.
     Mining plan assumes use of Paca instead of other contracted material.
- \* The mineral reserve estimate for the project was calculated by Fernando P. Rodrigues, BSc, MBA MMSAQP #01405QP of SRK Consulting (U.S.) Inc. in accordance with the Canadian Securities Administrators NI 43-101 and generally accepted CIM Guidelines.