

Pan American Silver Corporation Mineral Reserves as of June 30, 2022 ^(1,2)

Property	Location	Classification	Tonnes (Mt)	Ag (g/t)	Contained Ag (Moz)	Au (g/t)	Contained Au (koz)	Cu (%)	Contained Cu (kt)	Pb (%)	Contained Pb (kt)	Zn (%)	Contained Zn (kt)
Silver Segment													
Huaron	Peru	Proven	7.0	169	38.1			0.54	38.0	1.51	105.6	2.97	208.2
		Probable	3.9	167	21.1			0.30	11.8	1.63	64.2	2.97	116.6
Morococha (92.3%) ⁽³⁾	Peru	Proven	3.3	156	16.6			0.44	14.7	1.31	43.3	3.95	130.7
		Probable	3.3	158	16.6			0.32	10.6	1.43	46.5	3.78	123.1
La Colorada	Mexico	Proven	3.8	340	41.5	0.23	27.5			1.13	43.0	2.02	76.6
		Probable	6.2	303	59.9	0.18	36.0			1.12	69.1	1.97	121.5
Manantial Espejo	Argentina	Proven	0.3	250	2.4	2.35	22.8						
		Probable	0.1	246	0.9	3.06	10.8						
San Vicente (95%) ⁽³⁾	Bolivia	Proven	1.1	314	10.8			0.25	2.7	0.29	3.1	3.55	37.9
		Probable	0.6	289	5.2			0.25	1.4	0.32	1.8	2.98	16.6
Joaquin	Argentina	Proven	0.1	401	1.6	0.24	1.0						
		Probable	0.0	575	0.6	0.31	0.3						
Escobal	Guatemala	Proven	2.5	486	39.5	0.42	34.2			1.02	25.7	1.75	44.4
		Probable	22.1	316	225.0	0.34	243.8			0.77	169.9	1.25	275.7
Total Silver Segment⁽⁴⁾			54.3	275	479.7	0.33	376.3	0.41	79.0	1.06	572.2	2.14	1,151.3
Gold Segment													
La Arena	Peru	Proven	20.5			0.38	251.4	-	-	-	-	-	-
		Probable	21.8			0.27	191.8	-	-	-	-	-	-
Dolores	Mexico	Proven	12.9	21	8.6	0.57	235.4	-	-	-	-	-	-
		Probable	4.1	18	2.4	0.60	77.7	-	-	-	-	-	-
Shahuindo ⁽⁵⁾	Peru	Proven	58.9	8	15.3	0.51	971.3	-	-	-	-	-	-
		Probable	45.3	6	8.8	0.41	604.2	-	-	-	-	-	-
Timmins	Canada	Proven	5.3			2.89	491.0	-	-	-	-	-	-
		Probable	4.9			2.74	432.5	-	-	-	-	-	-
Total Gold Segment⁽⁴⁾			173.6	9	35.1	0.58	3,255.2	-	-	-	-	-	-
Total Gold and Silver Segments⁽⁴⁾		Proven + Probable	228.0	91	514.9	0.54	3,631.5	0.41	79.0	1.06	572.2	2.14	1,151.3

(1) See table below entitled "Metal price assumptions used to estimate mineral reserves and mineral resources as of June 30, 2022".

(2) Mineral reserve estimates were prepared under the supervision of, or were reviewed by, Christopher Emerson, FAusIMM, Vice President Business Development and Geology, and Martin G. Wafforn, P.Eng., Senior Vice President Technical Services and Process Optimization, each of whom are Qualified Persons as that term is defined in NI 43-101.

(3) This information represents the portion of mineral reserves attributable to Pan American based on its ownership interest in the operating entity as indicated.

(4) Totals may not add up due to rounding. Total average grades of each element are with respect to those mines that produce the element.

(5) Effective date for the Shahuindo mineral reserve estimate is November 30, 2022.

Pan American Silver Corporation Measured and Indicated Mineral Resources as of June 30, 2022 ^(1,2)

Property	Location	Classification	Tonnes (Mt)	Ag (g/t)	Contained Ag (Moz)	Au (g/t)	Contained Au (koz)	Cu (%)	Pb (%)	Zn (%)
Silver Segment										
Huaron	Peru	Measured	2.1	163	10.9			0.42	1.58	3.05
		Indicated	2.4	166	12.7			0.40	1.71	2.92
Morococha (92.3%) ⁽³⁾	Peru	Measured	0.6	130	2.7			0.64	0.79	2.59
		Indicated	0.7	124	3.0			0.61	0.74	2.37
La Colorada	Mexico	Measured	1.9	216	13.0	0.14	8.2		0.76	1.30
		Indicated	3.4	191	20.8	0.17	18.0		0.95	1.65
La Colorada Skarn ⁽⁴⁾	Mexico	Indicated	95.9	31	94.4				1.28	2.77
Manantial Espejo	Argentina	Measured	0.2	158	1.1	1.79	11.9			
		Indicated	0.7	264	5.8	2.94	63.9			
COSE	Argentina	Indicated	0.1	349	1.3	0.29	1.0			
Joaquin	Argentina	Indicated	0.4	329	4.2	0.26	3.3			
San Vicente (95%) ⁽³⁾	Bolivia	Measured	0.9	191	5.7			0.20	0.22	2.35
		Indicated	0.3	188	2.1			0.20	0.21	2.60
Navidad	Argentina	Measured	15.4	137	67.8			0.10	1.44	
		Indicated	139.8	126	564.5			0.04	0.79	
Escobal	Guatemala	Measured	2.3	251	18.6	0.23	16.7		0.31	0.59
		Indicated	14.2	201	91.6	0.20	93.0		0.38	0.66
Total Silver Segment⁽⁵⁾			281.3	102	920.1	0.29	216.2	0.06	0.98	2.44

Measured and Indicated Mineral Resources continued on next page

Pan American Silver Corporation Measured and Indicated Mineral Resources as of June 30, 2022 ^(1,2)

Property	Location	Classification	Tonnes (Mt)	Ag (g/t)	Contained Ag (Moz)	Au (g/t)	Contained Au (koz)	Cu (%)	Pb (%)	Zn (%)
Gold Segment										
Dolores	Mexico	Measured	2.1	30	2.1	0.53	36.5		-	-
		Indicated	0.8	57	1.5	1.13	29.7		-	-
La Bolsa	Mexico	Measured	10.8	10	3.5	0.70	242.8		-	-
		Indicated	10.6	8	2.7	0.54	184.3		-	-
Pico Machay	Peru	Measured	4.7			0.91	137.5		-	-
		Indicated	5.9			0.67	127.1		-	-
La Arena	Peru	Measured	0.8			0.16	4.0		-	-
		Indicated	2.1			0.17	11.9		-	-
Shahuindo ⁽⁶⁾	Peru	Measured	8.3	5	1.3	0.29	76.7		-	-
		Indicated	13.2	4	1.8	0.23	98.1		-	-
Timmins	Canada	Measured	3.4			3.32	357.6		-	-
		Indicated	4.5			3.08	449.6		-	-
La Arena II	Peru	Measured	148.9			0.25	1,209.7	0.39	-	-
		Indicated	547.5			0.23	4,070.0	0.37	-	-
Whitney (82.84%) ⁽³⁾	Canada	Measured	0.8			7.02	180.7		-	-
		Indicated	1.9			6.77	406.3		-	-
Gold River	Canada	Indicated	0.7			5.29	117.4		-	-
Marlhill	Canada	Indicated	0.4			4.52	57.4		-	-
Vogel	Canada	Indicated	2.2			1.75	125.0		-	-
Total Gold Segment⁽⁵⁾			769.7	9	12.9	0.32	7,922.2	0.38	-	-
Total Gold and Silver Segments⁽⁵⁾		Measured + Indicated	1,051.1	89	933.0	0.32	8,138.4	0.32	0.98	2.44

(1) See table below entitled "Metal price assumptions used to estimate mineral reserves and mineral resources as of June 30, 2022".

(2) Mineral resource estimates were prepared under the supervision of, or were reviewed by, Christopher Emerson, FAusIMM, Vice President Business Development, and Geology and Martin G. Wafforn, P.Eng., Senior Vice President Technical Services and Process Optimization, each of whom are Qualified Persons as that term is defined in NI 43-101.

(3) This information represents the portion of mineral resources attributable to Pan American based on its ownership interest in the operating entity as indicated.

(4) Effective date for the La Colorada Skarn mineral resource estimate is September 13, 2022.

(5) Totals may not add up due to rounding. Total average grades of each element are with respect to those mines that produce the element.

(6) Effective date for the Shahuindo mineral resource estimate is November 30, 2022.

Pan American Silver Corporation Inferred Mineral Resources as of June 30, 2022 ^(1,2)

Property	Location	Classification	Tonnes (Mt)	Ag (g/t)	Contained Ag (Moz)	Au (g/t)	Contained Au (koz)	Cu (%)	Pb (%)	Zn (%)
Silver Segment										
Huaron	Peru	Inferred	7.2	155	36.1			0.26	1.47	2.73
Morococha (92.3%) ⁽³⁾	Peru	Inferred	5.2	143	24.0			0.35	1.28	3.74
La Colorada	Mexico	Inferred	14.9	195	93.9	0.20	98.4		1.05	1.89
La Colorada Skarn ⁽⁴⁾	Mexico	Inferred	147.8	28	132.9				1.04	2.29
Manantial Espejo	Argentina	Inferred	0.5	180	3.1	1.71	29.4			
San Vicente (95%) ⁽³⁾	Bolivia	Inferred	2.9	249	23.3			0.21	0.29	2.65
Navidad	Argentina	Inferred	45.9	81	119.4			0.02	0.57	
Joaquin	Argentina	Inferred	0.2	282	1.6	0.23	1.3			
Escobal	Guatemala	Inferred	1.9	180	10.7	0.90	53.7		0.22	0.42
Total Silver Segment⁽⁵⁾			226.6	61	445.1	0.32	182.7	0.09	0.95	2.31
Gold Segment										
Dolores	Mexico	Inferred	2.5	29	2.4	0.92	74.4		-	-
La Bolsa	Mexico	Inferred	13.7	8	3.3	0.51	224.6		-	-
Pico Machay	Peru	Inferred	23.9			0.58	445.7		-	-
La Arena	Peru	Inferred	6.0			0.22	42.3		-	-
Shahuindo ⁽⁶⁾	Peru	Inferred	14.6	8	3.7	0.41	194.5		-	-
Timmins	Canada	Inferred	4.4			3.11	436.5		-	-
La Arena II	Canada	Inferred	54.7			0.23	413.2	0.29	-	-
Whitney (82.84%)	Canada	Inferred	0.8			5.34	141.4		-	-
Gold River	Canada	Inferred	5.3			6.06	1027.4		-	-
Vogel	Canada	Inferred	1.5			3.60	168.8		-	-
Total Gold Segment⁽⁵⁾			127.4	10	9.5	0.77	3,168.9	0.29	-	-
Total Gold and Silver Segments ⁽⁵⁾		Inferred	354.0	55	454.5	0.72	3,351.6	0.18	0.95	2.31

(1) See table below entitled "Metal price assumptions used to estimate mineral reserves and resources as at June 30, 2022".

(2) Mineral resource estimates were prepared under the supervision of, or were reviewed by, Christopher Emerson, FAusIMM, Vice President Business Development and Geology and Martin G. Wafforn, P.Eng., Senior Vice President Technical Services and Process Optimization, each of whom are Qualified Persons as that term is defined in NI 43-101.

(3) This information represents the portion of mineral reserves attributable to Pan American based on its ownership interest in the operating entity as indicated.

(4) Effective date for the La Colorada Skarn mineral resource estimate is September 13, 2022.

(5) Totals may not add up due to rounding. Total average grades of each element are with respect to those mines that produce the element.

(6) Effective date for the Shahuindo mineral resource estimate is November 30, 2022.

Metal Price Assumptions Used to Estimate Mineral Reserves and Resources as of June 30, 2022

Mine	Category	Ag US\$/oz	Au US\$/oz	Cu US\$/t	Pb US\$/t	Zn US\$/t
Huaron	All categories	19.00	1,300	7,000	2,000	2,600
Morococho	All categories	19.00	1,300	7,000	2,000	2,600
La Colorada	All categories	19.00	1,300	7,000	2,000	2,600
La Colorada skarn	All categories	22.00			2,200	2,800
Dolores	Reserves	19.00	1,600			
	Resources	22.00	1,700			
La Bolsa	All categories	14.00	825			
Manantial Espejo	Reserves	19.00	1,500			
	Resources	22.00	1,700			
San Vicente	All categories	19.00	1,300	7,000	2,000	2,600
Navidad	All categories	12.52			1,100	
Pico Machay	All categories		700			
Joaquin	Reserves	19.00	1,500			
	Resources	22.00	1,700			
Escobal	All categories	20.00	1,300		2,204	2,424
Shahuindo	Reserves	19.00	1,500			
	Resources	22.00	1,700			
Shahuindo Sulphide	Inferred Resource	15.00	1,400			
La Arena	Reserves	19.00	1,500			
	Resources	22.00	1,700			
La Arena II	All categories		1,500	8,816		
Timmins	All categories		1,500			
Whitney	All categories		1,200			
Gold River	All categories		1,200			
Marlhill	All categories		1,125			
Vogel	Inside pit		1,150			
	Below pit		1,150			

General Notes with Respect to Technical Information

Mineral reserves and mineral resources are as defined by the Canadian Institute of Mining, Metallurgy and Petroleum.

Pan American reports mineral resources and mineral reserves separately. Reported mineral resources do not include amounts identified as mineral reserves. Mineral resources that are not mineral reserves have no demonstrated economic viability.

Pan American does not expect these mineral reserve and mineral resource estimates to be materially affected by metallurgical, environmental, permitting, legal, taxation, socio-economic, political, and marketing or other relevant issues.

The Company has undertaken a verification process with respect to the data disclosed in this news release. The mineral resource and mineral reserves databases compiling drilling and, in some cases, sampling, have been accumulated at each of Pan American mine sites by the qualified staff. Samples are analyzed at a variety of laboratories, including by in-house staff at the mine (San Vicente, Manantial Espejo, La Colorada), mine laboratories operated by third party independent commercial labs (Huaron, Morococha), and commercial laboratories off-site (Shahuindo, La Arena, Timmins, Dolores). All the assay data used in the resource evaluation provided by each of the mines has been subjected to the industry standard quality assurance and quality control ("QA/QC") program including the submission of certified standards, blanks, and duplicate samples. The results are reviewed on a monthly basis by management. In general, the assay analytical technique for silver, lead, zinc and copper is acid digestion with either ICP or atomic absorption finish. The analytical technique for gold uses fire assay and an atomic absorption (AA) finish. A gravimetric finish would be used if the gold assay exceeds >10 g/t. The results of the QA/QC samples submitted for the resource databases demonstrate acceptable accuracy and precision. The Qualified Person is of the opinion that the sample preparation, analytical, and security procedures followed for the samples are sufficient and reliable for the purpose of this mineral resource and mineral reserve estimates. Pan American is not aware of any drilling, sampling, recovery or other factors that could materially affect the accuracy or reliability of the data reported herein.

See the Company's Annual Information Form dated February 23, 2022, available at www.sedar.com for further information on the Company's material mineral properties, including detailed information concerning associated QA/QC and data verification matters, the key assumptions, parameters and methods used by the Company to estimate mineral reserves and mineral resources, and for a detailed description of known legal, political, environmental, and other risks that could materially affect the Company's business and the potential development of the Company's mineral reserves and mineral resources.

Quantities and grades of contained metal are shown before metallurgical recoveries.

Technical information contained in these tables with respect to Pan American has been reviewed and approved by Christopher Emerson, FAusIMM., Vice President Business Development and Geology, and Martin Wafforn, P.Eng., Senior Vice President Technical Services and Process Optimization, who are each Qualified Persons for the purposes of NI 43-101.

Pan American Silver Corp is authorized by The Association of Professional Engineers and Geoscientists of the Province of British Columbia to engage in Reserved Practice under Permit to Practice number 1001470.

Disclosure of Mineral Technical Information and Cautionary Note to United States Investors

This website, including the documents and materials posted thereon, has been prepared in accordance with the requirements of Canadian securities laws, which differ from the requirements of U.S. securities laws. Unless otherwise indicated, all mineral estimates included on this website have been based upon mineral resource estimates prepared in accordance with Canadian National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and the Canadian Institute of Mining, Metallurgy and Petroleum classification system. NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects.

Canadian standards, including NI 43-101, differ significantly from the requirements of the United States Securities and Exchange Commission (the "SEC"), and information concerning mineralization, deposits, and mineral resource information contained or referred to herein may not be comparable to similar information disclosed by U.S. companies. In particular, and without limiting the generality of the foregoing, estimates included on this website have been based upon "measured resources", "indicated resources" and "inferred resources". U.S. investors are advised that, while such terms are recognized and required by Canadian securities laws, the SEC does not recognize them. Under U.S. standards, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. U.S. investors are cautioned not to assume that any part of an "indicated resource" will ever be converted into a "reserve". U.S. investors should also understand that "inferred resources" have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of "inferred resources" exist, are economically or legally mineable or will ever be upgraded to a higher category. Under Canadian securities laws, estimated "inferred resources" may not form the basis of feasibility or pre-feasibility studies except in rare cases. Disclosure of "contained ounces" in a mineral resource is permitted disclosure under Canadian securities laws. However, the SEC normally only permits issuers to report mineralization that does not constitute "reserves" by SEC standards as in place tonnage and grade, without reference to unit measures. Accordingly, information concerning mineral deposits set forth herein may not be comparable with information made public by companies that report in accordance with U.S. standards.