

## **Santacruz Silver Announces Mineral Resources and Reserves and Files NI 43-101 Technical Reports for its Bolivian Assets**

**Vancouver, B.C. – Santacruz Silver Mining Ltd. (TSX.V:SCZ)** (“Santacruz” or “the Company”) is pleased to announce its National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* (“NI 43-101”) compliant Mineral Resource and Reserve estimates for its three Bolivian producing assets, the Bolivar mine, Porco mine, and Caballo Blanco Group of mines (“Caballo Blanco”, and together with the Bolivar mine and the Porco mine, the “Bolivian Producing Mines”), and the Soracaya exploration project (“Soracaya”), also located in Bolivia. The Mineral Resources and Reserves for the Bolivian Producing Mines were prepared on behalf of the Company by JDS Energy & Mining Inc. (“JDS”), an international firm specializing in mineral resource evaluation and development, and the Mineral Resource for Soracaya was prepared on behalf of the Company by Kirkham Geosystems Ltd. The effective date of all the technical reports is January 1, 2024, the technical reports for the Bolivian Producing Mines have been filed on [www.sedarplus.ca](http://www.sedarplus.ca), and the Soracaya technical report will be filed on [www.sedarplus.ca](http://www.sedarplus.ca) within 45 days of this news release. All figures are in US dollars unless otherwise indicated.

### **Highlights:**

- Total Proven and Probable Mineral Reserves of 54 million silver equivalent ounces including 19 million ounces of silver and 259 thousand tonnes of zinc.
- Total Measured and Indicated Resources of 102 million silver equivalent ounces including 32 million ounces of silver and 518 thousand tonnes of zinc.
- Total Inferred Resources at the Bolivian Producing Mines of 189 million silver equivalent ounces including 72 million ounces of silver and 882 thousand tonnes of zinc.
- Initial Inferred Resource for Soracaya of 35 million ounces of silver.
- Independent third-party verification of Santacruz’ estimation processes reinforce the quality of our Mineral Resources and Reserves, and the methodology in place to accurately represent them. Garth Kirkham, P.Geo, FGC, of Kirkham Geosystems Ltd., Richard Goodwin, P.Eng., and Shane Tad Crowie, P. Eng., of JDS who are Independent Qualified Persons, as defined by NI 43-101 performed the verification.

Arturo Préstamo, Executive Chairman and CEO of Santacruz, commented, “This marks a noteworthy milestone for Santacruz as we continue to build a mid-tier silver and base metals company. The verified Mineral Resources and Reserves underscore our solid asset base. It is important to note that our Bolivian producing mines are open along strike and at depth, and with our ongoing exploration program, we believe there is potential to grow the current Mineral Resources and Reserves.”

Mr. Préstamo added, “The Mineral Reserve estimates use actual information from recent operating data including: operating costs, selling costs, metallurgical recoveries and smelter contracts. As such, these estimates should accurately reflect costs and conditions of exploitation that enabled the application of meaningful cut-off-grades to the deposit, such that confidence in the resultant mine plans are high. As well, the existing methodology for Mineral Reserve calculation was verified during the NI 43-101 review, which adds additional confidence to the

veracity of our mine plans and development strategies. In addition, the initial Inferred Resource estimate for Soracaya suggests that we have another high-quality silver project in our portfolio.”

**Important Notes to Mineral Resource and Mineral Reserve tables below:**

Mineral Resources and Reserves are stated for the first time under NI 43-101 standards of disclosure and verified by independent Qualified Persons. Garth Kirkham, P.Geol, FGC, of Kirkham Geosystems Ltd., Richard Goodwin, P.Eng., and Shane Tad Crowie, P. Eng., of JDS who are Independent Qualified Persons, as defined by NI 43-101 performed the verification.

Mineral Resources were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.

Mineral Resources, which are not Mineral Reserves, do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.

An inferred mineral resource has a lower level of confidence than that applying to an indicated mineral resource and must not be converted to a mineral reserve. It is reasonably expected that most of the inferred mineral resources could be upgraded to indicated mineral resources with continued exploration.

Updated structure for operating and sustaining capital costs were applied to the Mineral Resource to confirm Santacruz generated Mineral Reserves at projected metal prices of \$21.00 per ounce silver, \$1.15 per pound zinc, \$1.00 per pound lead and \$3.65 per pound copper.

Mineral Reserve estimates are derived using actual mining and metallurgical performance data from 2022 at each operation to deliver robust estimates.

The effective date of the Mineral Resource and Reserve estimates at the Bolivian Producing Mines is January 1, 2023. The effective date of the Mineral Resource estimate at Soracaya is January 1, 2024. Production data for the calendar year 2023 has been included in Section 24 of the various NI 43-101 compliant technical reports for the Bolivian Producing Mines and shows the depletion and typical replenishment of resources and reserves over a calendar year.

## Total Bolivian Producing Mines

	Tonnes (kt)	Grade				Contained Metal			
		Ag (g/t)	Zn (%)	Pb (%)	AgEq (g/t)	Ag (koz)	Zn (kt)	Pb (kt)	AgEq (koz)
Measured Mineral Resources	2,147	292	15.01	1.80	915	20,155	322.3	38.8	63,132
Indicated Mineral Resources	1,431	263	13.70	1.77	836	12,118	196.1	25.3	38,460
<b>Measured &amp; Indicated Mineral Resources</b>	<b>3,578</b>	<b>281</b>	<b>14.49</b>	<b>1.79</b>	<b>883</b>	<b>32,274</b>	<b>518.4</b>	<b>64.1</b>	<b>101,592</b>
Inferred Mineral Resources	7,426	303	11.88	1.32	792	72,395	881.8	98.2	189,169
Proven Mineral Reserves	1,473	255	10.57	1.45	699	12,053	155.7	21.3	33,083
Probable Mineral Reserves	1,117	192	9.22	1.35	582	6,886	103.0	15.1	20,901
<b>Proven &amp; Probable Mineral Reserves</b>	<b>2,590</b>	<b>227</b>	<b>9.99</b>	<b>1.41</b>	<b>648</b>	<b>18,939</b>	<b>258.6</b>	<b>36.4</b>	<b>53,983</b>

### Notes:

1. The combined Mineral Resources and Mineral Reserves include all Bolivian Producing Mines including Bolivar, Porco and the Caballo Blanco group of mines which consist of the Colquechaquita, Tres Amigos and Reserva mines.
2. The Mineral Resource and Mineral Reserves Estimates were prepared for each operation using a zinc equivalent (ZnEq) cut-off grade and reporting silver equivalent (AgEq) grade that varies for each operation due to costs and economic parameters that are specific to each operation and are detailed within the footnotes for each as shown in the following tables.
3. AgEq grade information is presented in this table reflects metal prices of \$21.00/oz Ag, \$1.15/lb Zn, and \$1.00/lb Pb.
4. Certain totals may not add due to the use of rounded numbers.

## Bolivar Mine, Bolivia

	Tonnes (kt)	Grade			Contained Metal		
		Ag (g/t)	Zn (%)	Pb (%)	Ag (koz)	Zn (kt)	Pb (kt)
Measured Mineral Resources	855	327	12.78	1.37	9,003	109.3	11.7
Indicated Mineral Resources	677	295	12.24	1.25	6,426	82.9	8.4
<b>Measured &amp; Indicated Mineral Resources</b>	<b>1,532</b>	<b>313</b>	<b>12.54</b>	<b>1.32</b>	<b>15,429</b>	<b>192.2</b>	<b>20.2</b>
Inferred Mineral Resources	4,202	403	10.35	1.00	54,436	434.8	41.9
Proven Mineral Reserves	742	299	10.65	1.31	7,144	79.1	9.7
Probable Mineral Reserves	495	233	8.92	0.97	3,705	44.1	4.8
<b>Proven &amp; Probable Mineral Reserves</b>	<b>1,237</b>	<b>273</b>	<b>9.96</b>	<b>1.17</b>	<b>10,849</b>	<b>123.2</b>	<b>14.5</b>

### Notes:

1. The Mineral Resource estimate was prepared using a 10.6% zinc equivalent cut-off grade. Cut-off grades were derived from \$25.20/oz silver, \$1.38/lb zinc and \$1.20/lb lead, and process recoveries of 91% for zinc, 70% for lead, and 89.7% for silver.
2. The Mineral Reserve estimate was prepared using a 12.7% zinc equivalent cut-off grade, using the formula  $ZnEqV = Zn\% + 0.7 \times Pb\% + 0.046 \times Ag \text{ (g/t)}$ . This cut-off grade was based on current smelter agreements and metal prices of \$21.00/oz silver, \$1.15/lb zinc and \$1.00/lb lead, total OPEX costs of \$120.22/t based on 2022 actual costs plus capital costs of \$48.68/t, with process recoveries of 91.0% for zinc, 70.0% for lead, and 89.7% for silver.
3. Bolivar and Porco Mines are part of the Illapa Joint Operation with COMIBOL. Bolivar and Porco are presented at 100% production, whereas the Company records 45% of revenues and expenses in its consolidated financial statements. The Joint Operation agreement expires in 2028.

## Porco Mine, Bolivia

	Tonnes (kt)	Grade			Contained Metal		
		Ag (g/t)	Zn (%)	Pb (%)	Ag (koz)	Zn (kt)	Pb (kt)
Measured Mineral Resources	566	202	17.17	0.88	3,672	97.2	5.0
Indicated Mineral Resources	253	166	16.38	1.02	1,349	41.4	2.6
<b>Measured &amp; Indicated Mineral Resources</b>	<b>819</b>	<b>191</b>	<b>16.92</b>	<b>0.92</b>	<b>5,021</b>	<b>138.7</b>	<b>7.6</b>
<b>Inferred Mineral Resources</b>	<b>1,007</b>	<b>117</b>	<b>15.16</b>	<b>0.92</b>	<b>3,775</b>	<b>152.6</b>	<b>9.2</b>
Proven Mineral Reserves	162	181	12.53	0.68	944	20.3	1.1
Probable Mineral Reserves	157	142	12.90	0.77	718	20.3	1.2
<b>Proven &amp; Probable Mineral Reserves</b>	<b>319</b>	<b>162</b>	<b>12.71</b>	<b>0.72</b>	<b>1,662</b>	<b>40.6</b>	<b>2.3</b>

### Notes:

1. The Mineral Resource estimate was prepared using a 11.2% zinc equivalent cut-off grade. Cut-off grades were derived from \$25.2/oz silver, \$1.38/lb zinc and \$1.20/lb lead; and process recoveries of 94.3% for zinc, 75.6% for lead, and 88.6% for silver.
2. The Mineral Reserve estimate was prepared using a 13.4% zinc equivalent cut-off grade, using the formula  $ZnEQV = Zn\% + 1.14 \times Pb\% + 0.044 \times Ag \text{ (g/t)}$ . This cut-off grade was based on current smelter agreements and metal prices of \$21.00/oz silver, \$1.15/lb zinc and \$1.00/lb lead, total OPEX costs of \$125.02/t based 2022 actual costs plus capital costs of \$21.79/t, with process recoveries of 94.3% for zinc, 75.6% for lead, and 88.6% for silver.
3. Bolivar and Porco Mines are part of the Illapa Joint Operation with COMIBOL. Bolivar and Porco are presented at 100% production, whereas the Company records 45% of revenues and expenses in its consolidated financial statements. The Joint Operation agreement expires in 2028.

## Caballo Blanco Group of Mines, Bolivia

	Tonnes (kt)	Grade			Contained Metal		
		Ag (g/t)	Zn (%)	Pb (%)	Ag (koz)	Zn (kt)	Pb (kt)
Measured Mineral Resources	726	321	15.96	3.03	7,481	115.8	22.0
Indicated Mineral Resources	502	269	14.32	2.86	4,343	71.8	14.3
<b>Measured &amp; Indicated Mineral Resources</b>	<b>1,227</b>	<b>300</b>	<b>15.29</b>	<b>2.96</b>	<b>11,824</b>	<b>187.6</b>	<b>36.4</b>
<b>Inferred Mineral Resources</b>	<b>2,217</b>	<b>199</b>	<b>13.28</b>	<b>2.12</b>	<b>14,183</b>	<b>294.4</b>	<b>47.1</b>
Proven Mineral Reserves	569	217	9.90	1.85	3,965	56.3	10.5
Probable Mineral Reserves	465	165	8.30	1.96	2,463	38.6	9.1
<b>Proven &amp; Probable Mineral Reserves</b>	<b>1,034</b>	<b>193</b>	<b>9.18</b>	<b>1.90</b>	<b>6,428</b>	<b>94.9</b>	<b>19.6</b>

### Notes:

1. Caballo Blanco Group of Mines consists of the Colquechaquita, Tres Amigos and Reserva mines.
2. The Mineral Resource estimate was prepared using a 10.0% zinc equivalent cut-off grade. Cut-off grades were derived from \$25.20/oz silver, \$1.38/lb zinc and \$1.20/lb lead; and process recoveries of 92.1% for zinc, 77.2% for lead and 90.8% for silver.
3. The Mineral Reserve estimate was prepared using a 11.9% zinc equivalent cut-off grade, using the formula  $ZnEQV = Zn\% + 1.22 \times Pb\% + 0.051 \times Ag \text{ (g/t)}$ . This cut-off grade was based on current smelter agreements and metal prices of \$21.00/oz silver, \$1.15/lb zinc and \$1.00/lb lead, total OPEX costs of \$106.94/t based on 2022 actual costs plus capital costs of \$42.33/t, with process recoveries of 92.1% for zinc, 77.2% for lead, and 90.8% for silver.

**Soracaya Exploration Project, Bolivia**

	Tonnes (kt)	Grade			Contained Metal		
		Ag (g/t)	Zn (%)	Pb (%)	Ag (koz)	Zn (kt)	Pb (kt)
<b>Inferred Mineral Resources</b>	<b>4,137</b>	<b>260</b>	<b>1.23</b>	<b>7.23</b>	<b>34,550</b>	<b>50.9</b>	<b>299.1</b>

**Notes:**

1. The Mineral Resource estimate was prepared using a 10.0% zinc equivalent cut-off grade. Cut-off grades were derived from \$25.20/oz silver, \$1.38/lb zinc and \$1.20/lb lead; and process recoveries of 92.1% for zinc, 77.2% for lead and 90.8% for silver.
2. A full technical report for Soracaya will be prepared in accordance with NI 43-101 and will be filed on SEDAR+ within 45 days of this news release.

**Quality Assurance/Quality Control and Data Verification**

Mineral Resources for the Bolivian Producing Mines were previously performed by local Bolivian staff supported by Glencore. Currently, the same local technical resources are employed by Santacruz ensuring continuity and consistency. The Glencore, and now Santacruz, procedures and methods remain and are adhered to. These procedures and methods have been well documented and follow industry best practice guidelines and the QP (Kirkham) performed extensive site investigations for due diligence and audit to validate and verify.

The Bolivian sites utilize internal laboratories that were reviewed by the technical report authors. Assay preparation and analytical procedures and methods were reviewed and were acceptable for resource estimation purposes. Following the facilities visit to the laboratories, systematic checks of the assay databases against the certified and internal assay databases showed good agreement and the transfer of data is automated to ensure against transpositional errors. The assay database was in good agreement with the laboratory database. The laboratory at the Don Deigo process plant in Bolivia is an ISO 17025:2018 certified laboratory.

Independent samples were taken and analysed by an outside independent umpire assay laboratory, SGS Peru which is ISO 9001 certified laboratory. The results showed good agreement with the original sample assays while validating and verifying the results of the internal assay laboratories.

The resource block models have been created and maintained in the Datamine™ System, a well-known resource modelling and mine planning system. The vein domain models were created within LeapFrog™. Block and vein domain models were imported into secondary modelling system MineSight™ and were validated and verified. Furthermore, estimation vein domains and resource block models were independently created by QP (Kirkham) which showed good agreement with Santacruz models and results.

For all the operating mines, checks were performed to ensure that pillars, sterilized areas and mined out volumes were accounted for and excluded along with material below topography and overburden. Classification criteria and methodology was reviewed showing reasonable and even conservative judgment with respect to threshold distances and grades for drillhole and channel sample data. Geological and grade continuity was demonstrated, and cut-off grades were calculated using updated metal prices and actual mine operating costs. Design underground stope shapes were utilized for the reporting of resources demonstrating Reasonable Prospect of Eventual Economic Extraction (“RP3E”).

In conclusion, the assay data, domain models and block estimation models have been validated and verified by QP (Kirkham). Economic and classification criteria have been adjusted to insure reasonable prospect of eventual

economic extraction. Kirkham assumes responsibility for the resources and states that the data, models and results reported in the resource estimates may be relied upon to report.

The reserves for all assets were prepared by Sinchi Wayra in Deswik™. JDS (QP Goodwin) verified that the correct dilution and recovery factors were applied to the stope shapes, that inferred resources were not used in any stope reserves, manually checked all calculations, and verified the tonnages and metal content of each reserve estimate. Other factors that were checked include equipment rates, historic production performance, predicted stoping productivities, and mining sequence assumptions. On the basis of this QA/QC review, the QP (Goodwin) verified that the Deswik-based reserves have been correctly estimated and assumes responsibility for them.

Cutoff grade (COG) criteria were also developed using the site metallurgical data and smelter contracts. The final reserve was estimated by the application of these factors (mining dilution, mining recovery, COG) to the LOM plan and the elimination of all inferred resources in the stope shapes.

The QP (Goodwin) is satisfied that this exercise resulted in a valid result and assumes responsibility for the reserve estimation.

### **Qualified Person**

The Mineral Resource and Reserve estimates were prepared under the supervision of Garth Kirkham, P.Geo, FGC, of Kirkham Geosystems Ltd., Richard Goodwin, P.Eng., and Shane Tad Crowie, P. Eng., of JDS who are Independent Qualified Persons, as defined by NI 43-101. Mr. Kirkham, Mr. Goodwin, and Mr. Crowie have reviewed and approved the scientific and technical information contained in this news release.

Wayne Corso, P.Eng., a consultant to the Company, is a qualified person under NI 43-101 and has approved the scientific and technical information related to operational matters contained in this news release.

### **About Santacruz Silver Mining Ltd.**

Santacruz Silver is engaged in the operation, acquisition, exploration, and development of mineral properties in Latin America. The Bolivian operations are comprised of the Bolivar, Porco and the Caballo Blanco Group, which consists of the Tres Amigos, Reserva and Colquechaquita mines. The Soracaya exploration project and San Lucas feed sourcing business are also in Bolivia. The Zimapan mine is located in Mexico.

‘signed’

Arturo Préstamo Elizondo,  
Executive Chairman and CEO

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### **Forward looking information**

*This news release includes certain statements and information that may constitute forward-looking information within the meaning of applicable Canadian securities laws. Forward-looking statements relate to future events or future performance and reflect the expectations or beliefs of management of the Company regarding future events. Generally, forward-looking statements and information can be identified by the use of forward-looking terminology such as “intends”, “expects” or “anticipates”, or variations of such words and phrases or statements that certain actions, events or results “may”, “could”, “should”, “would” or will “potentially” or “likely” occur. This information and these statements, referred to herein as “forward-looking statements”, are not historical facts, are made as of the date of this news release and include without limitation, statements regarding the Company continuing to build a mid-tier silver and base metals company, the filing of a technical report for Soracaya on SEDAR+, the accuracy of the Mineral Reserve and Resource estimates, and the potential to grow the current Mineral Resources and Reserves.*

*These forward-looking statements involve numerous risks and uncertainties and actual results might differ materially from results suggested in any forward-looking statements. These risks and uncertainties include, among other things, risks that the Company will not continue to build a mid-tier silver and base metals company, that the Company will not file a technical report for Soracaya on SEDAR+ on the anticipated timeline, or at all, that the Mineral Reserve and Resource estimates will be less accurate than management currently anticipates, that it is not possible to grow the current Mineral Resources and Reserves, risks related to changes in general economic, business and political conditions, including changes in the financial markets, changes in applicable laws, and compliance with extensive government regulation, as well as those risk factors discussed or referred to in the Company’s disclosure documents filed with the securities regulatory authorities in certain provinces of Canada and available at [www.sedarplus.ca](http://www.sedarplus.ca).*

*In making the forward-looking statements in this news release, the Company has applied several material assumptions, including without limitation, the assumption that the Company will continue to pursue its goal of building a mid-tier silver and base metals company, that the Company will file a technical report for Soracaya on SEDAR+ within 45 days of this news release, that there is the potential to grow the current Mineral Resources and Reserves, that because the Mineral Reserve estimates use actual information from recent operating data they should accurately reflect costs and conditions of exploitation that enabled the application of meaningful cut-off-grades to the deposit, and that the estimation of Mineral Resources may be impacted by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.*

*There can be no assurance that any forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, the reader should not place any undue reliance on forward-looking information or statements. The Company undertakes no obligation to update forward-looking information or statements, other than as required by applicable law.*