Silver Standard Resources Inc.

Silver Standard Reports Significant Increase in Silver Resources at Berenguela Project, Peru

Vancouver, British Columbia - Sept. 6, 2005 - Silver Standard Resources Inc. (TSX:SSO)(NASDAQ:SSRI) is pleased to report a significantly increased silver resource estimate for the Berenguela project located five kilometers west of Santa Lucia on the altiplano of southern Peru. The updated resource estimate follows the company's completion of 19,029 meters of reverse circulation drilling in 222 holes since 2004.

The Berenguela project is now estimated to host indicated silver resources totalling 66.1 million ounces and inferred silver resources totalling 21.6 million ounces, based on a cut-off grade of 50 grams of silver per tonne. James A. McCrea, P.Geo., is the independent Qualified Person (QP) responsible for the new Berenguela resource estimate which complies with Canada's National Instrument 43-101.

Prior to Silver Standard's drilling program, the Berenguela property had an historic inferred resource of 56.3 million ounces of silver. The following table summarizes the updated estimate of silver resources at Berenguela

Berenguela, Peru Silver Resource Summary - August 2005
(Based on a silver cut-off grade of 50 grams/tonne)

Category	Tonnage (tonnes, in millions)	Silver Grade (in grams/tonne)	Contained Silver (in millions of oz.)
Indicated	15.6	132.0	66.1
Inferred	6.0	111.7	21.6

Silver Standard holds an option to acquire all of the property's silver resources. Under the terms of the option agreement, Silver Standard is required, among other things, to provide the vendors with a resource estimate in accordance with Canada's National Instrument 43-101, prior to the exercise of the option. With the delivery of the resource estimate to the vendors, Silver Standard has until November 3, 2005 to exercise its option. Based on current silver prices, silver resource acquisition costs at Berenguela would be US$0.06 per ounce.

Following the exercise of the option for the silver resources at Berenguela, the company's projects will host measured silver resources totalling 101.9 million ounces; indicated silver resources totalling 477.1 million ounces; and inferred resources totalling 409.3 million ounces. In addition, the company has significant exposure to gold resources.

In other developments, the company continues updating of feasibility work at its wholly-owned Pirquitas project in northern Argentina, including the commencement of a small-scale underground development program for the Oploca Vein; drilling at the wholly-owned Pitarrilla property in Durango, Mexico; and feasibility studies of the 50%-owned Manantial Espejo silver-gold property in southern Argentina. Pursuant to a property option agreement and TSX regulations, the company also reports the issuance of 3,170 common shares to the holder of a silver-copper property located in northern Argentina.

Silver Standard Resources Inc. is a well-financed silver resource company with $29.7 million in cash, and 1.95 million ounces of physical silver, marketable securities and other investments valued at $21.9 million at August 31, 2005. The company continues to seek resource growth through development of its own projects, exploration and acquisitions.

Cautionary note to U.S. investors concerning disclosure of contained ounces and estimates of measured resources, indicated resources and inferred resources: Disclosure of contained silver expressed in ounces in this news release is in compliance with National Instrument 43-101, Standards of Disclosure for Mineral Projects under the guidelines set out in the Canadian Institute of Mining, Metallurgy and Petroleum (the "CIM") Standards on Mineral Resources and Mineral Reserves, adopted by the CIM Council on August 20, 2000 as may be amended from time to time by the CIM, but does not meet the requirements of Industry Guide 7 of the U.S. Securities and Exchange Commission (SEC) which will only accept the disclosure of tonnage and grade estimates for non-reserve mineralization.

The terms "measured resource", "indicated resource" and "inferred resource" used in this news release are Canadian mining terms as defined in accordance with National Instrument 43-101. We advise U.S. investors that while such terms are recognized and permitted under Canadian regulations, the SEC does not recognize them. U.S. investors are cautioned not to assume that any part or all of the mineral deposits in the measured and indicated categories will ever be converted into reserves. "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 an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules estimates of inferred mineral resources may not form the basis of feasibility or other economic studies. U.S. investors are cautioned not to assume that any part or all of an inferred resource exists, or is economically or legally mineable.

To receive Silver Standard's news releases by e-mail, contact Paul LaFontaine, director, investor relations at invest@silverstandard.com or call (888) 338-0046. The statements that are not historical facts are forward-looking statements involving known and unknown risks and uncertainties which could cause actual results to vary considerably from these statements. The risks and uncertainties include those described in Silver Standard's SEC Form 20F as amended.

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