

17th July, 2012

To: Company Announcements officer

TEST WORK INDICATES OVER 90% SILVER RECOVERY TO DORE BARS AT WEBBS.

HIGHLIGHTS

- Test work demonstrates excellent potential to recover over 90% of silver to doré bars as;
 - **96% Ag is recovered to flotation concentrate and 98% Ag recovered via cyanide leach after Albion Process™. Silver then recovered to doré through Merrill-Crowe process.**
- Albion leach has rapid leach kinetics, less than 60% of total Sulphur requires oxidation.
- Specific grinding power requirements for ultra-fine grind Albion feed indicate only moderate power usage.
- Potential to recover base metal (zinc and copper) concentrates to be investigated.
- Further optimisation work underway.

Silver Mines Limited (ASX:SVL) is pleased to announce that further results from the metallurgical testwork program started in May 2012 have been received for its 100% owned Webbs Silver Project in NE NSW, Australia. The Company considers the results to be outstanding with very high silver recoveries returned after utilising the Albion Process™ followed by cyanide leaching demonstrating the potential for over 90% of the silver at Webbs to be recovered as doré bars.

This current testwork program utilised the following key phases;

1. A bulk sulphide flotation concentrate was produced at the relatively coarse grind of 212 microns. This initial process recovered 95.9% of the silver to a 12% mass pull (ASX news release 31st May 2012) which assayed 2.2 kg/t Ag and also recovered appreciable amounts of Cu, Zn and Pb (see Table 1).
2. The bulk concentrate was then subjected to the Albion Process™ which consisted of ultra-fine grinding the bulk concentrate down to a product size of 80% passing 8.5 microns followed by oxidative alkaline leaching.
3. The Albion leach residue was then treated with conventional cyanidation. Cyanide soluble silver analysis showed 98.4% recovery of Ag.
4. **This testwork outlined in points 1 to 3 above results in total overall silver recovery of 94.3% into cyanide solution.**

Recovery of silver into doré from the cyanide solution has not been investigated as yet, however the well recognised Merrill-Crowe process is currently favoured which, based on many commercial applications SVL would expect to recover over 95% of the silver from the silver cyanide solution, thus delivering greater than 90% silver recovery overall to doré bars .

The Company will continue optimisation testwork and is aiming to demonstrate silver recoveries to doré of over 90% are commercially achievable.

ADDITIONAL TESTWORK UNDERWAY.

- Optimise concentrate mass pull versus recovery: testwork aiming for <10% mass pull at >95% Ag recovery.
- Establish optimal grind size, oxidative leach conditions, sulphide oxidation requirements and cyanide leaching parameters for **Albion Process™-Cyanide Leach-Merrill Crowe Flowsheet**.
- Investigate options for Zn and Cu recovery post Albion leach.
- Commence bench scale testwork on composite sample for Webbs South deposit using similar flotation and leach conditions to existing testwork.
- Develop capital and operating cost estimates for an Albion plant at Webbs to treat 0.5Mt per year.

FLOTATION CLEANER TESTWORK RESULTS.

Cleaner testwork was conducted on samples from the bulk sulphide concentrate. This work primarily aimed to decrease the amount of non-sulphide gangue in the concentrate and decrease the overall mass pull to concentrate. The testwork was conducted on the bulk sulphide concentrate at the 212 micron grind size. A grade/recovery comparison of the bulk concentrate and successive cleaner concentrates is presented in Table 1.

Table 1. Flotation results

Bulk Concentrate 12.3% mass pull		Cleaner Concentrate 6.8% mass pull		Re-Cleaner Concentrate 3.5% mass pull	
Assay	Recovery %	Assay	Recovery %	Assay	Recovery %
Ag g/t 2128	95.9	Ag g/t 3150	91.6	Ag g/t 4024	84.8
Cu % 2.6	90.0	Cu % 4.7	84.0	Cu % 5.3	76.2
Pb % 7.7	72.4	Pb % 11.3	62.5	Pb % 10.4	54.9
Zn % 10.5	88.2	Zn % 19.6	86.1	Zn % 19.4	80.6

This work indicates an expected decrease in metal recovery with decreasing mass pull to concentrate. Additional grinding and flotation testwork is required to optimise this process. However, based on results to date, a relatively low mass pull to concentrate does achieve high silver and associated metal recoveries. Silver recovery of around 95% at <10% mass pull will be targeted.

THE ALBION PROCESS™

The Albion Process™ was developed by MIM Holdings (now Xstrata Plc) to treat concentrates produced from refractory base and precious metals ores. The process was developed in 1993 and has since been patented in 45 countries worldwide.

The Albion Process™ consists of a hot oxidative leach of finely ground concentrates at atmospheric pressure. The process does not employ autoclaves, and does not rely on bacterial cultures. The Albion Process™ is jointly owned by Xstrata and Highlands Pacific. Core Resources is the exclusive global agent for the Albion Process™ technology.

The Albion Process™ offers the mining industry an effective and simple solution for the treatment of refractory sulphide ores, to maximise metal recovery and minimise costs.

HISTORY

The development of the Albion Process™ has paralleled the development of revolutionary new fine grinding mills (IsaMill) within the mining industry. The emergence of efficient low cost fine grinding machines has enabled leaching to be carried out under far less demanding conditions than previously required in pressure or bacterial leach plants.

MIM Holdings began developing the Albion Process™ technology in 1993, while looking at a treatment process for the high arsenic copper/gold resources at Nena/Freida River in Papua New Guinea. Various small scale continuous pilot plant campaigns on this ore were conducted in 1994 and 1995 for Highlands Gold (which was later floated from MIM Holdings and is now Highlands Pacific).

A larger pilot plant (120kg zinc cathode/day) was constructed in 1997 to conduct testwork as part of a feasibility study on the zinc/gold resources of Pueblo Viejo in the Dominican Republic.

Extensive piloting was also conducted on lower grade chalcopyrite concentrates for Cyprus Amax in 1998, and for Mount Isa Mines in 2000. Pre-feasibility and feasibility pilot testing was conducted on the zinc/lead bulk concentrates from McArthur River and Mount Isa in Australia between 2001 and 2005. During this time the Albion Process™ has been successfully tested on over 70 different ores and concentrates.

Xstrata continues to actively develop the technology for its copper and zinc projects. In parallel with these developments the IsaMill technology (which is the enabling technology for the Albion Process™) has been further developed into an extremely robust, proven and now large scale ultrafine grinding technology, with over 100 IsaMills now in operation around the world. This represents the largest installed capacity of any ultrafine grinding technology in the world.

Currently there are three Albion plants in operation around the world. These include two zinc Albion Process™ plants in Spain and Germany, as well as the recently commissioned Las Lagunas refractory gold-silver plant in the Dominican Republic. Several other projects are investigating or planning to utilise the Albion Process™ to treat refractory gold +/- silver 'ores'. For comparative purposes a summary of these projects is presented in Table 2. In terms of Au equivalent and recovered Au equivalent Webbs compares very favourably to the other projects, before any potential revenue from base metal concentrates is considered. Also based on the information available it would appear that Webbs has many favourable processing advantages compared to the other projects with regards to grinding, flotation and Albion performance.

Table 2. Precious metal projects 'using' Albion Process™

Company	Project	Resource# Reserve Grade	AuEQ* g/t	AuEQ recovered g/t	% AuEQ recovered	Status
Panterra	Las Lugas (tailings) Dominican Republic	3.78g/t Au and 39g/t Ag	4.49	3.16	70%	Operating
Eldorado	Certej, Romania	1.6g/t Au and 12g/t Ag	1.81	1.48	82%	Feasibility
GPM	Zod-Ararat, Armenia	4.0g/t#	4.00	3.44	86%	Feasibility- Construction
Liongold	Hellyer (tailings), Aust	2.6g/t Au and 104g/t Ag	4.49	3.86	86%	Scoping Level
Silver Mines	Webbs, Aust	245g/t Ag# (excluding Cu, Pb & Zn)	4.45	4.18	>90%	Scoping Level

*AuEQ = gold equivalent grade using Au:Ag ratio of 55:1

Silver Mines looks forward to providing additional results of the metallurgical testwork program as they become available.

Please direct any queries regarding the content of this report to Charles Straw (CEO) on +61 2 9253 0900 or cstraw@silverminesltd.com.au.

Competent Person Statement.

The information in this Document that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr David Hobby, consulting geologist to SVL, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Hobby has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Hobby consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward Looking Statement.

Certain statements made during or in connection with this release, including, without limitation those concerning exploration targets, upcoming testwork and the results of additional flotation testwork contain or comprise certain forward-looking statements regarding Silver Mines Limited's exploration operations and results. Although Silver Mines Limited believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, testing results, success of business and operating initiatives, changes in the regulatory environment and other government actions and operational risk management. Investors are cautioned that forward looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein. Silver Mines Limited undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of anticipated events.