

## Silver Standard, Golden Arrow forge ahead at Chinchillas



The San Miguel open pit at Silver Standard Resources' Pirquitas project, northern Argentina. Credit: Silver Standard.

**Silver Standard Resources** (TSX: SSO; NASDAQ: SSRI) is moving forward on pre-development studies that may lengthen mine life at its Pirquitas silver mine in northern Argentina's Jujuy province, by combining material from **Golden Arrow Resources'** (TSXV: GRG; US-OTC: GARWF) Chinchillas silver-lead-zinc project, located 35 km northeast.

Paul Benson, president and CEO of Silver Standard, tells *The Northern Miner* during a phone interview from the company's headquarters in Vancouver, that without Chinchillas, the 4,000 tonnes-per-day open-pit mine at Pirquitas — which has been in operation since December 2009 — would close at the end of 2017 or early 2018.

“We've looked around regionally to see if there were other options to extend the mine life, but outside of Chinchillas there's nothing,” he says.

The miner struck a deal with the junior explorer in October last year, committing up to US\$12.6 million in total expenditures towards the project's evaluation. If the joint-venture goes ahead, Silver Standard will become operator and 75% owner, whereas Golden Arrow will own the remaining 25%.

The decision to proceed at Chinchillas will be reached by the end of this year, Benson says, around the same time open-pit mining at Pirquitas will near completion.

According to Silver Standard's first quarter financial results, the mine processed a record 4,590 tonnes of ore per day during the quarter. It produced 2.6 million oz. silver at a record low cash cost of US\$8.93 per payable oz. silver — down from US\$10.96 per payable oz. silver in the fourth quarter of 2015 — owing in part to the devaluation of the peso against the U.S. dollar.

All-in-sustaining-costs for the quarter were US\$9.67 per payable oz. silver, compared to US\$12.78 in fourth quarter 2015.

The company expects to produce 8 million to 10 million oz. silver from the mine this year — down from 10.3 million oz. silver produced in 2015 — from remaining proven and probable reserves of 2.99 million tonnes of 171.9 grams per tonne silver for 16.5 million oz. silver, assuming US\$16 per oz. silver.

At the end of this year, the company plans to transition from open-pit mining to processing medium- to high-grade stockpiles, which are enough to keep the operation going until end of 2017 to early 2018, Benson adds.

The stockpiles have 2.21 million proven and probable tonnes of 109.1 grams silver and 0.71% zinc for 7.7 million oz. silver, assuming US\$16 per oz. silver.

“The stockpiles will keep the mill running at full capacity, with the caveat being if the price of silver falls significantly you wouldn't treat as many stockpiles,” Benson says. “But our guess, with the silver price and exchange rate the way they are right now, we'll begin processing towards the end of the calendar year.”

He explains that Pirquitas also has an underground resource of 2.34 million indicated tonnes of 241.1 grams silver and 4.11% zinc for 18.2 million oz. silver, assuming US\$22.50 per oz. of silver, but the company won't proceed on its development unless Chinchillas comes online.

“The geometry of the veins is such you can't get enough ore out from underground to keep the mill full, so what we'd have are lower tonnes but higher grade, running at about 400 tonnes per day,” he says. “If Chinchillas goes ahead then we'd consider mining a high grade supplementary feed from underground, so in theory it should improve the economics.”

If the company proceeds with the joint-venture with Golden Arrow, Benson expects to see ore coming out of Chinchillas “around the same time we finish processing the stockpiles, so hopefully there would be fairly continuous production coming out of the plant.”

Since October last year, Silver Standard has spent US\$6.1 million for metallurgical, engineering, permitting and environmental studies at Chinchillas, along with a 15,000-metre in-fill drill program to upgrade the resource.

So far, the studies demonstrate that Chinchillas would make “a simple, open-pit operation,” he says, that could carry the life of Pirquitas “into the next decade.”

“The upgrade has increased our certainty in the resource, the metallurgy appears favourable and there have been no challenges really, there's nothing unusual about it,” he says. “We'd end up with slightly different products than we do now because Chinchillas has lead and zinc with the silver. But we don't have to make major changes to the plant, maybe more filter capacity but that would be about it.”

Golden Arrow tabled the updated resource in April, which saw over 50 million oz. silver equivalent converted into the measured and indicated categories, for a total of 34.2 million tonnes of 91 grams silver, 0.82% lead and 0.57% zinc for 155 million oz. silver equivalent.

Inferred resources add another 90 million oz. silver equivalent within 39.2 million tonnes of 42 grams silver, 0.44% lead and 0.76% zinc. Both calculations use 45 grams silver equivalent cut-off and US\$19 per oz. silver and US\$1 per lb. lead and zinc.

The low-sulphidation, epithermal deposit is divided into four main areas: the Silver Mantos and Mantos basement zones in the west, and the Socavon del Diablo and Socavon basement zones.

Mineralization is largely flat-lying, near-surface and disseminated within favourable volcanic tuff horizons, but also includes cross-cutting mineralized structures and breccias.

Golden Arrow updated the project's preliminary economic assessment (PEA) in October 2014, modelling an 8,000-tonne-per-day, open-pit operation with a US\$237-million price tag.

The economics assumed US\$22 per oz. silver, US\$1 per lb. lead and zinc, returning a US\$226-million after-tax net present value and a 24.3% internal rate of return, with a 3.4-year payback.

Joseph Grosso, chairman, CEO and president of Golden Arrow says during a phone interview that Silver Standard has hired mining consultant firm SRK Consulting to evaluate Chinchillas in a similar production scenario as Pirquitas.

"We've done two PEAs at Chinchillas and both assume totally different operating scenarios than at Pirquitas, so we expect the outcome of this study to be different," he says. "It's very exciting times because we feel we've reached the milestones necessary to drive this project forward."

Grosso also points out that if Silver Standard agrees to the joint-venture, Golden Arrow will accrue 25% interest in Pirquitas' cash equivalent earnings, less expenses, since Sept. 30, 2015.

"When we signed the agreement with Silver Standard we agreed we'd own 25% of all the assets the merger would bring, including the earnings that Pirquitas has produced from that day forward," he says. "So, theoretically, we could be in production right now."

Grosso explains that Golden Arrow's objective is to become "cash-flow positive."

"If Silver Standard goes ahead with agreement, we wouldn't have to raise any money, or very little money, as we'll be changing from an exploration company into producing cash flow. So it's a very good deal for our shareholders," he says.

Silver Standard has traded within a 52-week range of \$5.28 to \$12.96 per share, and closed at \$12.92 at press time. The company has 80.83 million shares outstanding, for a \$1-billion market capitalization.

Golden Arrow has traded within a 52-week range of 17¢ to 83¢ per share, and last closed at 81¢. The company has 63.14 million shares outstanding for a \$53-million market capitalization.