

SANTA CRUZ EXPLORATION UPDATE

Directors are pleased to provide an update of Mariana's exploration activities in Santa Cruz province, southern Argentina.

Sierra Blanca Silver-Gold Project

Mariana Resources Ltd has now earned a 70% interest in Sierra Blanca and the nearby Canadon Largo concessions located in the centre of the Deseado Massif, in joint venture with IAMGOLD Corporation (30%).

The Fourth Quarter 2008 3,000m drilling programme at Sierra Blanca included sixteen RC drill holes for 1,130m and six diamond drill holes for 550m drilled along the 1,200m Veta Chala trend and other drilling at Lucila and Vetarron. As was reported on 12th December 2008, the drilling at Veta Chala resulted in the discovery of intermediate sulphidation style epithermal silver-gold mineralisation, at Chala West, Chala Central and Chala Splay.

Highlights of drill results in the 12th December release included the following:

Chala Splay

11.0m @ 3.4 g/t Au (gold) and 386 g/t Ag (silver) from 46m in hole SBD51 including 2.8 @ 12.7 g/t Au 1,172 g/t Ag

14.3m @ 2.8 g/t Au and 242 g/t Ag from 31m in hole SBD55 including 1.5m @ 15.2 g/t Au, 775 g/t Ag

Chala Central

21.0m @ 0.7 g/t Au and 189 g/t Ag from 33m in hole SBR27

5.0m @ 0.9 g/t Au and 173 g/t Ag from 70m in hole SBD50

Chala West

3.0m @ 4.3 g/t Au and 236 g/t Ag from 30m in hole SBR38

4.0m @ 2.3 g/t Au and 120 g/t Ag from 33m in hole SBR40

Subsequently, Mariana conducted a detailed review of results, including a recent field visit by international geological consultant, Dr Richard Sillitoe, accompanied by Mariana geologists.

Main conclusions from the review by Mariana and Dr Sillitoe may be summarised as follows:

- The epithermal silver-gold mineralisation discovered at Veta Chala and Lucila is considered to be intermediate sulphidation.
- The Veta Chala zone is the most prospective silver-gold target to date with a cumulative strike length of about 1200m. Highest precious metal values from trenching and drilling have been discovered over the easternmost 550m at Chala Central and Chala Splay.
- Bonanza silver grades (>2000 g/t) and associated gold values (1-25 g/t) at Chala Central and Chala Splay are not regarded as surficial supergene enrichment.
- The grade and ore shoot geometry seen at Veta Chala may be compared to that found at the Mina Martha high grade underground silver mine during its early exploration phase, according to Dr Sillitoe.
- Precious metal mineralisation at Veta Chala occurs in veins and wallrock as disseminations, stockworks and breccia-fillings. Minor sulphides include pyrite, marcasite, galena, sphalerite and chalcopyrite.
- These zones are locally well mineralised and characterised by irregular ore shoots, often a feature of intermediate sulphidation silver-rich veins.
- The presence of illite alteration, adularia and boiling texture at Chala suggests a fairly shallow epithermal level with untested potential at depth.
- Irregular mineralised shoots hosted in veins and immediate wall rocks are typically 5-10m wide and up to 16m locally.
- At Chala West, a strong vein structure dominated by manganese carbonate is less well mineralised but has recorded maxima of 800 g/t Ag and 6 g/t Au and best drill intercept of ***3.0m @ 4.3 g/t Au and 236 g/t Ag from 30m in hole SBR38.***
- The Lucila vein, located 1.5km west of Veta Chala consists of a fault-hosted quartz vein, up to 15m wide and 1800m in strike. Drilling intersected broad zones of anomalous to low grade silver and is also regarded to be intermediate sulphidation type.

Dr Sillitoe recommended 3,500m of follow up drilling in to test the Chala Central and Chala Splay zones for high grade shoots at vertical depths of 75 and 150m. He suggested an additional five deep holes at Lucila for vein extensions at 150-200m depths, and a further five holes at a new target, La Cresta. The recommendations will be considered by Mariana and IAMGOLD in planning the 2009 joint venture exploration programme.

Tongoril Gold Project

The Tongoril Project, 100km NE from Sierra Blanca (100% owned by Mariana) was also visited recently by Dr. Sillitoe. The key features of this promising property can be summarised as follows:

Outcropping NW striking veins have been discovered located near the margins of a rhyolite dome. The irregular veins are up to 1m in width and contain chalcedony, pyrite, marcasite and in some samples, visible gold. Initial grab samples returned assays up to 21.7 g/t Au and follow up shallow channel sampling has returned 2.7m @ 5.4 g/t Au, including 0.7m @ 20.2 g/t Au, 25 g/t Ag.

Dr. Sillitoe considers the prospect to have potential for low sulphidation epithermal mineralisation and assigns it a high exploration priority. Importantly, an intact vein system could be present with a shallow level of erosion indicated by vein textures and pathfinder rock chemistry (elevated arsenic, antimony and mercury). A programme of mapping, soil sampling and backhoe trenching is recommended to define drill targets.

Commenting today, Managing Director of Mariana Resources Ltd, John Sutcliffe said *“Mariana is encouraged by and fully endorses Dr Sillitoe’s comments. There is clearly scope for more exploration drilling at what are still relatively early stage projects. We are now keen to brief our joint venture partner at Sierra Blanca, IAMGOLD Corporation on results to date so that we can discuss the next stage of the project. Meanwhile, Tongoril is the first property to emerge from Mariana’s 100% owned Santa Cruz epithermal gold-silver portfolio as a high priority target”.*

ON BEHALF OF THE BOARD

John Sutcliffe
Managing Director

For maps of the projects see Company’s the website: www.marianaresources.com

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ADDITIONAL INFORMATION

The exploration programme is being directed by the Argentina Exploration Manager, Dr Gustavo A. Rodriguez under supervision of Managing Director Mr John Sutcliffe. Exploration information in this announcement has been compiled by John Sutcliffe who is a Fellow of the Geological Society of London, a Chartered Engineer and a Member of the Institute of Mining and Metallurgy. Mr Sutcliffe has sufficient experience relevant to the style of mineralization and types of gold deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the JORC Code.

Quality Assurance/Quality Control

All technical information for the Company's Argentina projects is obtained and reported under a quality assurance and quality control (QA/QC) program. All samples are collected under the supervision of the Company geologists and dispatched via commercial transport to ALS Chemex laboratories in Mendoza, Argentina, and assayed in Santiago de Chile. ALS Chemex's quality system complies with the requirements for the International Standards ISO 9001:2000 and ISO 17025: 1999. Samples returning greater than 10 g/t gold and/or greater than 100 g/t silver are assayed using gravimetric analyses. Systematic assaying of sample duplicates and commercially prepared standards and blanks is performed for analytical reliability.

