

ENCOURAGING GEOPHYSICAL RESULTS FROM LA BORITA COPPER PROSPECT, NW ARGENTINA

- Target is a concealed porphyry copper deposit confirmed by geophysics
- Mining-friendly Catamarca Province (Alumbraera copper mine)
- Extensive area of exotic copper mineralization in surface travertine deposit
- Ground magnetic and IP survey, recently completed
- **The data collected in the geophysical programme are consistent with expectation for a non-magnetic porphyry intrusion and related sulphide mineralisation at depth.**
- Four year option to acquire 100% interest for total US \$900,000
- Final one-off option to purchase 2% royalty for \$1,200,000

Mariana Resources Ltd (Mariana) is pleased to announce that it has received a preliminary report from Quantec Geoscience Argentina (“Quantec”) detailing encouraging results obtained from the recently completed geophysical survey carried out at La Borita copper prospect located in the northern part of Catamarca province, approximately 60km SW of the town of Antofagasta de la Sierra, north-west Argentina. Catamarca hosts a number of porphyry copper-gold deposits, the most important of which is the Alumbraera mine of Xstrata Plc (350 Mt at 0.5% copper {Cu} and 0.45 g/t gold {Au}; containing 5.8 Moz Au) and Agua Rica (Yamana Gold Inc) with 750 Mt averaging 0.6% Cu and 0.2 g/t Au.

La Borita Copper Prospect

Copper-bearing travertine (carbonate rock deposited at surface from a hot spring) occupies a 1.0 x 1.5 km area within a topographic low coincident with a magnetic low. The prospect is located in a prominent topographic low which coincides with a NE trending airborne magnetic low anomaly approximately 7km long and up to 3.2 km wide. Regionally, this anomaly coincides with a “fold-closure” of Tertiary sediments sub-parallel to the long axis of the magnetic low.

Mariana considers that this fold-closure may be an expression of an intrusion at depth and that the magnetic-low could be due to the destruction of magnetic minerals by hydrothermal alteration of an intrusion. Copper-bearing travertines are not well understood but may result from copper mineralisation displaced from source by solution and subsequent precipitation. For this reason, Mariana geologists believe that the hot spring conduits may have intersected *in-situ* copper mineralisation at depth resulting in the current surface expression at La Borita.

The Geophysical Survey

Mariana contracted Quantec Geoscience Argentina to conduct a ground magnetic survey and three lines (totalling 12 line km) of pole-dipole IP geophysics across the magnetic-low target zone.

The geophysical survey at La Borita was designed to:

- 1) confirm and delineate a low magnetic feature detected by fixed-wing airborne surveys; and

2) detect and delineate sulphide mineralisation and layered resistivity contrasts that could be indicative of porphyry mineralisation below cover .

Results

Textures evident in the profile magnetic data on the three lines shows smooth magnetic traces (due to magnetite destruction) flanked by irregular magnetic borders: The report from Quantec Geoscience states *“A reasonable interpretation of the magnetic data is that the smooth portions of profile traces show an absence of magnetite, perhaps due to a low-magnetite intrusion. A very common signature of non-magnetic porphyries is that the magnetic texture is very flat over the porphyry and very irregular over the halo. The geophysical data give the impression that this is the situation at La Borita”*.

“Since the original airborne magnetic target was a magnetic-low feature, extracted from a pole-reduced map, the authors conclude that the widely spaced survey lines have successfully determined its source”.

“In general, the IP/resistivity survey identified broad zones of elevated chargeability, consistent with expectation for broad lithologies hosting several percent of chargeable sulphides such as pyrite and chalcopyrite. The IP survey appears to have produced reliable data that suggest significant sulphides occur on a porphyry-like scale, at depth. The observed chargeabilities at La Borita are within the range of expectation for mineralized porphyry deposits. The zones of elevated chargeability are broad, typically broader than the limits determined from the magnetic data. The occurrence of a pyritic halo around a porphyry intrusion would completely explain this occurrence”

“All the geophysical data collected in this program are consistent with expectation for a non-magnetic porphyry intrusion and related sulphide mineralisation”.

Terms of the Option Agreement

Mariana has the right to acquire a 100% interest in the property from the owner by making staged payments over a four year period for a cumulative total of \$900,000 and subject to a 2% NSR royalty, which Mariana can buy-out for \$1.2 M. An initial payment of US\$20,000 was made on signing the option agreement, with a further payment of US\$30,000 made recently. Subsequent option payments are made on the anniversary date as follows: US\$50,000 in 2009, US\$150,000 in 2010, US\$250,000 in 2011 and US\$400,000 in 2012.

A map showing the location and geological setting of La Borita will shortly be available on the Mariana website, www.marianaresources.com

Commenting today, Managing Director, John Sutcliffe said: *“La Borita is a concealed porphyry copper target which has been significantly ungraded by the positive geophysical results consistent with a sulphide bearing intrusion target at depth. As a result, Mariana now has a 100% interest in a most attractive porphyry copper target obtained at very low initial cost. Mariana will consider drill testing La Borita after the Cordilleran winter period. This will follow some time after the upcoming drill programme planned at the Sierra Blanca multiple-bonanza vein target, in Santa Cruz Province, Argentina, planned for September 2008”*

ON BEHALF OF THE BOARD

John Sutcliffe
Managing Director

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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.

