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Inaugural Drilling at Buenaventura and Perro Chico, Northern Chile, Indicates Potential for Iron Oxide Copper Gold Mineralisation.

Mariana Resources Ltd ('Mariana' or 'the Company'), the AIM quoted exploration and development company focussed in Argentina and Chile, announces positive results from initial drilling programmes at its Buenaventura and Perro Chico Iron-Oxide-Copper-Gold ('IOCG') projects in the prospective Atacama Region in northern Chile. The drilling, which indicates potential for IOCG mineralisation, comprised 2280m of reverse circulation ('RC') drilling and 969m of diamond core drilling on three holes at the Buenaventura project and five holes at the Perro Chico project.

Highlights

- Evidence of IOCG style alteration with varying intensity of mineralization is present in all eight drill holes, and whilst well-mineralised centres have yet to be located, the size of the two systems suggest concealed IOCG mineralisation may be present.
- Buenaventura Project:
 - Cerro Berta prospect – drilling indicates the 4x1km silica-albite alteration cap is strongly anomalous in copper and may be overlying an IOCG system.
 - Cerro Brecha prospect – indications of IOCG mineralization were intersected to a depth of 650m on the flank of magnetite-rich andesite breccia body.
- Perro Chico Project – all holes which were designed to test gravity anomalies intersected indications of IOCG mineralisation and associated alteration.
 - Belleza prospect – Drill hole PC-DDH-01 intersected a 40m mineralised zone averaging 0.56% Cu and an underlying 250m zone of intense pyritic mineralisation to the end of hole at 296m – the mineralised zone is open to the north and northwest.

- An international mining company based in the US has been granted a three month exclusive period to negotiate a joint venture farm-in for follow-up exploration at the Buenaventura and Perro Chico. Negotiations include a possible alliance focussing on wider IOCG exploration potential in Chile.

Mariana Managing Director John Sutcliffe said, “These first drilling results confirm the IOCG potential of the Buenaventura and Perro Chico Projects. The current negotiations for a joint venture to follow up exploration at Buenaventura and Perro Chico, together with a possible alliance focussing on wider IOCG exploration potential in Chile, is a very positive development for Mariana which could substantially accelerate its IOCG programme.”

Buenaventura Project (50km NNE Copiapo)

The 44 sq km Buenaventura Project, which is located in the highly prospective Atacama Fault Zone, is under a joint venture agreement with Sociedad Minera Contractual Buenaventura. Under the agreement, Mariana can earn a 51% interest by expenditure of US\$3million over three years from April 2008, and up to 80% by completing a bankable feasibility study within a further four years. Mariana’s current programme covers two specific target areas, namely the Cerro Berta and Cerro Brecha prospects.

At **Cerro Berta**, an area not previously drilled, a large silica-albite alteration zone was targeted by two RC drill holes, located 1km apart, in the northern portion of the area. Both holes intersected strong alteration typical of IOCG systems, including magnetite, hematite and anomalous copper-gold. Hole BV-RC-01 was drilled to 500m and encountered anomalous copper and gold from near surface to 440m, with the highest assays returning:

- 6m @ 0.32% Cu plus 0.44g/t Au from 374m.

The second hole (BV-RC-02) was terminated at 358m due to technical problems; however anomalous copper was encountered throughout, with the bottom 90m averaging 415 ppm Cu and 23 ppb Au.

At **Cerro Brecha**, a single deep hole tested the upper part of an anomaly interpreted to be dense iron oxides (from 3D modelling of the 2008 gravity survey) below known shallow IOCG type copper/gold mineralisation. BV-RD-01 was drilled as a pre-collared diamond hole to 651m. It intersected strong hematite and minor magnetite (10-20%) from 180-234m with anomalous copper (120-1500ppm) from 210-272m. In the cored section, the rock is mainly an andesitic breccia with IOCG style alteration. Anomalous copper mineralisation (chalcopyrite) was intersected from 454-490m (120-1500 ppm

Cu). Andesite breccia with associated magnetite was intersected from about 490m to the bottom of hole and may be the source of the gravity anomaly. While no economic intercepts were made, preliminary interpretation is that a potentially large IOCG system could be present in the vicinity.

Perro Chico Project (67km SSW Copiapo)

Three distinct zones, all related to gravity anomalies, were drilled at the Belleza, El Sauce and Pancho prospects. Mariana can acquire 100% of the 549 hectare property by making option payments totalling US\$205,000 with a buy-out of US\$600,000 at the end of the 39-month option period in December 2010. The Company also has a surrounding 6,600 hectares under application.

At **Belleza**, core hole PC-DDH-01 intersected a 40m zone of strong copper-gold mineralisation and an underlying 250m long zone of intense pyritic mineralisation, up to the end of the hole at 296m. Best results were:

- 40m @ 0.56% Cu from 6m

Including

- 22m @ 0.81% Cu + 0.15 g/t Au from 6m.

The hole was collared 100m north of PC-RC-01 to target down-dip of stratabound copper mineralisation exposed in shallow artisanal mining workings. Mineralisation, consisting of copper oxides and sulphides, is hosted by skarn, sedimentary and andesitic lithologies. Alteration includes calcite, magnetite, hematite, chlorite-epidote and intense pyritisation. Anomalous copper-gold and high iron are present from the collar to 84m down-hole.

Also at **Belleza**, an RC hole PC-RC-01, 100m south of PC-DDH-01, tested a nearby gravity anomaly and the southern extension of the known copper-gold mineralisation. Andesites, with some high iron oxides and anomalous copper, were intersected. The southern extension of the Belleza mineralisation was not intersected and is inferred to have been faulted off to the south. The mineralisation intersected in hole DDH-01 is, however, open to the north and northwest of the Belleza workings.

At **Pancho**, 2km south-southwest of Belleza, hole PC-RC-02 tested the best gravity anomaly under 66m of gravel cover. It intersected a sedimentary sequence with weak to moderate IOCG style alteration with anomalous copper from 66m to end of hole at 388m. The highest copper sections were:

- 6m @ 0.5% Cu from 106m (including 2m @ 1.1% Cu)

- 8m @ 0.1% Cu from 142m
- 8m @ 0.2% Cu from 354m.

At **El Sauce**, located 2.5km east of Pancho and 3km southeast of Belleza, two holes were drilled to test a gravity anomaly. Hole PC-RC-03 intersected andesite breccias with minor calcareous shales and IOCG style alteration. Magnetite with some minor chalcopyrite and pyrite were present. Anomalous sections included:

- 44m @ 598 ppm Cu from 230m.

Hole PC-DDH-02 was similar with highest copper values as follows:

- 58m @ 406 ppm Cu from 54m.

Further Exploration

The Buenaventura and Perro Chico Projects represent very large and strong IOCG systems and the results of this first drilling campaign encourage further exploration. Ground magnetic and other geophysics will be considered at both projects prior to the next stage of drilling.

Furthermore, an international mining company based in the US has been granted a three month exclusive period to negotiate a joint venture farm-in for follow-up exploration at Buenaventura and Perro Chico, and a possible regional programme.

A formatted PDF version of the release, including drill hole locations, is available on Mariana's website under Latest News:

www.marianaresources.com

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Additional Information

IOCG background

IOCGs are economically important complex copper deposits hosted within hydrothermal systems with associated iron oxides and can be enriched in gold, silver, uranium and rare earths. They display strong hydrothermal alteration, brecciation, important regional and local structures and geophysical expressions in the form of prominent magnetic or gravity anomalies. Alteration varies from deposit to deposit but is usually a mix of sodic-calcic (albite-epidote) and potassic (k-felspar). Deeper albite-magnetite alteration can be overlain by silica-k-felspar-sericite in the upper zones of an IOCG system. The major IOCG mines are in Australia (South Australia, Queensland), northeastern Brazil and northern Chile. The Atacama Fault Complex of northern Chile is considered to be one of the world's most prolific IOCG belts, hosting Freeport's giant Candelaria copper deposit.

Qualified Person

The exploration programme is being directed by the Chile Exploration Manager, Mr Walter Espinosa 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 mineralisation 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) programme. All samples are collected under the supervision of the Company geologists and dispatched via commercial transport to ALS Chemex laboratories 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.







