

# MINERALISED HYDROTHERMAL BRECCIAS DISCOVERED ADJACENT TO THE LOS CALATOS DEPOSIT

**Metminco Limited ("Metminco" or the "Company") (ASX: MNC; AIM: MNC**) provides an update on the re-logging program of the Los Calatos drill core, and the preliminary results of the work completed to-date.

The re-logging of the 125,000 metres of drill core has been completed, as well as the geological interpretation thereof. This has resulted in a revised structural model for the evolution of the Los Calatos Porphyry System, and an improved understanding of the controls on the associated mineralisation.

Having completed the re-logging of the drill core, the current work is focussed on completing a 3D Geological Model for the Los Calatos deposit, with specific reference to the anhydrite breccia systems that are known to contain significantly higher copper and molybdenum grades. The 3D Geological Model, once completed, will form the basis of a revised mineral resource estimate, followed by a Preliminary Economic Assessment (PEA) of the proposed smaller, high grade, starter operation at Los Calatos.

Importantly, the revised structural and mineralisation model has led to the discovery of mineralised hydrothermal breccias immediately southwest of the Los Calatos deposit (Target TD2), which is coincidental with strong magnetic and geochemical anomalies. Furthermore, a field inspection of the area has confirmed the presence of copper mineralisation (as chrysocolla) associated with the hydrothermal breccias, which are similar to those breccias identified in the Los Calatos drill core.

As has been reported previously, a further high priority target has been identified to the southeast of the Los Calatos deposit (Target TD3), where copper and molybdenum soil geochemical anomalies are associated with similar lithology's to those seen at the Los Calatos deposit.

The proximity of exploration targets TD2 and TD3 to the Los Calatos deposit, could ultimately enhance the development potential of the larger Los Calatos Project, should the planned exploration work yield positive results.

*Mr* William Howe, Managing Director, commented: "The ongoing geological interpretive work at Los Calatos has resulted in the discovery of a significant copper occurrence to the southwest of the main Los Calatos deposit (TD2 Target), which is associated with outcropping hydrothermal breccias similar to those identified in the Los Calatos drill core.

The TD2 Target together with the TD3 Target to the southeast of the Los Calatos deposit, is considered to have the greatest potential for further exploration success, and could ultimately enhance the development potential of the project."

Metminco Limited ABN 43 119 759 349 ASX Code: MNC.AX; AIM Code: MNC.L Level 6, 122 Walker Street, North Sydney, NSW, 2060 Tel: +61 (0) 2 9460 1856; Fax: +61 (0) 2 9460 1857

www.metminco.com.au

#### **Detailed re-interpretation of the Los Calatos Porphyry Complex**

The drill core re-logging program at Los Calatos has recently been completed, and will form the basis of a revised 3D Geological Model. An updated mineral resource estimate will then be undertaken by an independent consultant. This mineral resource estimate, and supporting Block Model, will form the basis of a PEA and revised mine plan which is scheduled to be completed by mid-2015. The focus of this work will be to examine the opportunity to develop Los Calatos at an earlier stage as an initial, smaller tonnage, high grade mining operation with a substantially lower pre-production capital expenditure requirement. This in turn would facilitate broader optionality for financing the development of the project.

The program involved the re-logging of 125,000 metres of drill core (108 drill holes), and has resulted in an improved geological understanding of the Los Calatos Porphyry Complex through the better definition of the nature, extent and timing of the various lithological, structural and alteration components of the porphyry system, and their impact on the distribution of the copper and molybdenum mineralisation.

The program has identified a series of sub-vertical monzonite porphyry dykes and associated anhydrite breccia complexes which collectively form two elongate, NW-SE trending sub-vertical zones that contain the higher copper and molybdenum grades encountered in the drilling. It is envisaged that the 3D wireframe modelling of the two anhydrite breccia complexes, in particular, is likely to facilitate the more constrained and less diluted (smoothed) reporting of the Cu-Mo mineralisation at higher cut-off grades. This in turn may result in the definition of discrete zones of higher grade material that are amenable to smaller-scale bulk mining methods than those contemplated in the current Optimised L3\_Model.

It is likely that the abovementioned two zones could potentially be mined as discrete, high grade zones, which would form the basis for a less capital intensive starter operation. This will be fully evaluated through the conduct of a PEA once a new mineral resource has been estimated.

## **Exploration Targets TD2 and TD3**

The re-logging and re-interpretation of the Los Calatos drill core has resulted in the development of a structural model for the evolution of the Los Calatos Porphyry Complex and the associated mineralisation (Annexure 2). This has led to the discovery of a mineralised hydrothermal breccia immediately southwest of the Los Calatos deposit (Target TD2) (Annexures 1 and 3). Annexure 1 shows the spatial relationship between the Los Calatos deposit and the TD2 exploration target, whereas Annexure 3 is a schematic section through the Los Calatos mineralised system (deposit) and the TD2 Target, indicating the proximity of the target to the known mineralised system.

A field inspection of the TD2 Target has revealed the presence of outcropping shallow-level hydrothermal breccias containing chrysocolla (hydrated copper cyclosilicate) mineralisation. In addition, the presence of cryptocrystalline quartz is indicative of the upper levels of a hydrothermal system, possibly developed above a porphyry system. Accordingly, the Company's senior exploration team, in evaluating the site, have confirmed that this target could constitute a new significant mineralised Cu porphyry system which is ready for drill testing.

As previously reported, recent work on the target to the southeast of Los Calatos (TD3) (Annexures 1 and 4) indicates that the Los Calatos Porphyry Complex extends to the southeast of the presently defined mineral resource at Los Calatos. The presence of a late stage unmineralised felsic intrusive suggests that the felsic intrusive has intruded the Los Calatos Porphyry Complex (rather than peripheral to it), separating the Porphyry Complex into a north-westerly and south-easterly component – the latter of which has not been explored to any great extent.

# Way Forward

The Company will continue with its planned work program to complete the PEA on the high grade starter mining option by mid-2015.

Further exploration work is planned for Targets TD2 and TD3 with the objective of confirming the geology and mineralisation potential, with a particular focus on Target TD2 by virtue of its similarity with the presently defined Los Calatos deposit.

William Howe

**Managing Director** 

**METMINCO LIMITED** 

For further information contact:

# METMINCO LIMITED

Stephen Tainton / Phil Killen

Office: +61 (0) 2 9460 1856

# NOMINATED ADVISOR AND BROKER

# RFC Ambrian

Australia Will Souter/ Nathan Forsyth

United Kingdom Samantha Harrison / John van Eeghen

## **PUBLIC RELATIONS**

## Buchanan (UK)

Gordon Poole/Bobby Morse

Office: +61 (0) 2 9250 0000

Office: +44 (0) 20 3440 6800

Office: +44 (0) 207 466 5000

#### Company Background

Metminco is a dual ASX and AIM listed company with a portfolio of copper, molybdenum and gold projects in Peru and Chile.

#### **Projects and Mineral Resources**

The Los Calatos Project, located in southern Peru, has an open pittable Mineral Resource of 493 million tonnes at 0.38% Cu and 0.023% Mo (at cut-off grade of 0.15% CuEq) to a vertical depth of 700 metres below surface and an underground bulk mining Mineral Resource of 926 million tonnes at 0.51% Cu and 0.022% Mo (at a cut-off grade of 0.35% CuEq) commencing at an elevation of 2,300 metres (approximately 700 metres below surface).

The Chilean assets include the Mollacas Copper Project with a Mineral Resource of 15.5 million tonnes consisting of a Measured Resource of 11.2 million tonnes at 0.55% Cu and 0.12g/t Au and an Indicated Resource of 4.3 million tonnes at 0.41% Cu and 0.14g/t Au(at a 0.2% copper cut-off); and the Vallecillo Project with a Mineral Resource of 8.9 million tonnes consisting of a Measured Resource of 5.5 million tonnes at 0.84g/t Au, 9.99g/t Ag, 1.12% Zn and 0.32% Pb, an Indicated Resource of 2.6 million tonnes at 0.80g/t Au, 10.23g/t Ag, 0.94% Zn and 0.35% Pb and an Inferred Resource of 0.8 million tonnes at 0.50g/t Au, 8.62g/t Ag, 0.48% Zn and 0.17% Pb (at a cut-off grade of 0.2g/t Au).

The Company also has a number of early stage exploration projects where initial exploration activities have identified anomalous copper, molybdenum and gold values.

#### **Competent Persons Statement**

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Colin Sinclair, BSc, MSc, who is a Member of the Australasian Institute of Mining and Metallurgy and is currently employed by the Company in Chile.

Colin Sinclair has sufficient experience (over 30 years) which is relevant to the style of mineralisation, 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'. Mr Sinclair, as Competent Person for this announcement, has consented to the inclusion of the information in the form and context in which it appears herein.

## Forward Looking Statement

All statements other than statements of historical fact included in this announcement including, without limitation, statements regarding future plans and objectives of Metminco are forward-looking statements. When used in this announcement, forward-looking statements can be identified by words such as "anticipate", "believe", "could", "estimate", "expect", "future", "intend", "may", "opportunity", "plan", "potential", "project", "seek", "will" and other similar words that involve risks and uncertainties.

These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this announcement, are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, its directors and management of Metminco that could cause Metminco's actual results to differ materially from the results expressed or anticipated in these statements.

The Company cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements. Metminco does not undertake to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this announcement, except where required by applicable law and stock exchange listing requirements.

Location of the exploration targets at Los Calatos, noting the *position of the high priority targets* TD2 and TD3 relative to the known Los Calatos mineral resource.



Simplified structural model showing the relationship between the Los Calatos deposit and the TD2 Target.







Schematic cross-section through the Los Calatos Porphyry Complex and Target TD2.



**Photograph:** Outcropping shallow-level hydrothermal breccia containing chrysocolla (hydrated copper cyclosilicate) mineralisation.



Location of Target TD3 - south-eastern extension of the Los Calatos Porphyry Complex.

