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Companies Announcements Office Australian Securities Exchange

# LA TECA GOLD-COPPER PORPHYRY TARGET, CHILE

RMG Limited (ASX:RMG) ("RMG" or "the Company") is pleased to announce that it has received the geophysical data from a targeted survey over a portion of its La Teca gold-copper project in northern Chile. The three studies undertaken were, Magneto-Telluric ("MT"), Induced Polarisation ("IP") and ground magnetic ("GMag") geophysical surveys.

### Key highlights include:

- MT survey has identified a strong conductive zone spatially coincident with a zone of high-grade gold and copper rock chips
- Rock chips<sup>1</sup> around the MT conductivity zone show values that range between
  - o 0.1 to 11g/t Au
  - o 0.1 to 3.8% Cu
- The MT conductive zone is over 1km long and open north and south
- The MT conductive zone is coincident with a de-magnetised zone as is evident at other significant porphyry copper mines in northern Chile<sup>2</sup>
- Stream sediments draining this area have high molybdenum, gold and copper<sup>3</sup>
- The MT conductive zone may represent a porphyry copper target beginning at approximately 500m below surface
- The La Teca gold-copper zone is located 50 kms southeast of Chuquicamata, the world's largest porphyry copper open pit mine<sup>4</sup>

The 2014 geophysical data from a targeted section of the 5 km long La Teca gold-copper zone confirms the significance of the previously reported geochemical results. Whilst the project is at an early stage the combined data may indicate a large porphyry copper target which is located in the northern Chile region, an area renowned for large world class porphyry copper deposits.

<sup>&</sup>lt;sup>1</sup> Previously reported in ASX release of 3 February 2014

<sup>&</sup>lt;sup>2</sup> Behn et al. 2001. Econ. Geol:96(2), pp239-248

<sup>&</sup>lt;sup>3</sup> Previously reported in ASX release of 3 February 2014

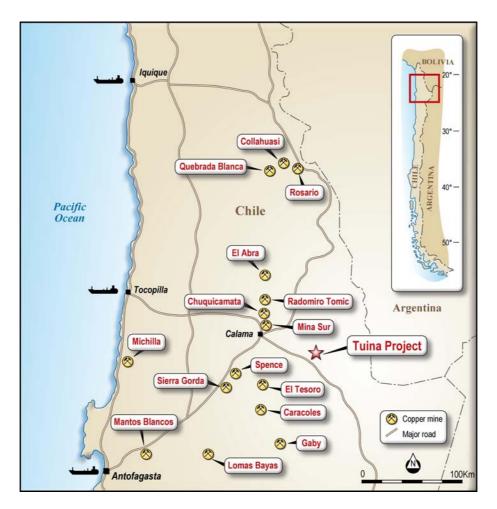
<sup>&</sup>lt;sup>4</sup> http://www.codelco.com/prontus\_codelco/site/edic/base/port/chuquicamata.html



# **Introduction**

RMG commissioned experienced Chilean geophysical contractors, Southern Rock Geophysics ("SRG"), to undertake three limited geophysical surveys over a targeted portion of its La Teca gold-copper zone in northern Chile. The La Teca gold-copper zone is part of RMG's larger Tuina copper project (Figure 1) and is located in a region of Chile that is highly endowed with a number of the world's largest porphyry copper mines including

- Chuquicamata 10.5Bt @ 0.6% Cu<sup>5</sup>
- Radomiro Tomic 7.2Bt @ 0.4% Cu<sup>2</sup>
- Mina Sur 1.3Bt @ 0.9% Cu<sup>2</sup>
- Sierra Gorda 1.35Bt @ 0.4% Cu<sup>6</sup>
- Spence 285Mt @ 0.9% Cu<sup>7</sup>
- El Abra 725Mt @ 0.44% Cu
- Quebrada Blanca 350Mt @ 0.8% Cu
- Gaby 620Mt @ 0.4% Cu



#### Figure 1 Location of Tuina copper project

<sup>5</sup> Codelco Annual Report 2010

- <sup>6</sup> KGHM Presentation Dec 2011
- <sup>7</sup> BHPBilliton Annual Report 2011

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The 5 km long La Teca gold-copper zone is in the south-west area of RMG's Tuina Project (Figure 2) and is owned 100% by RMG.

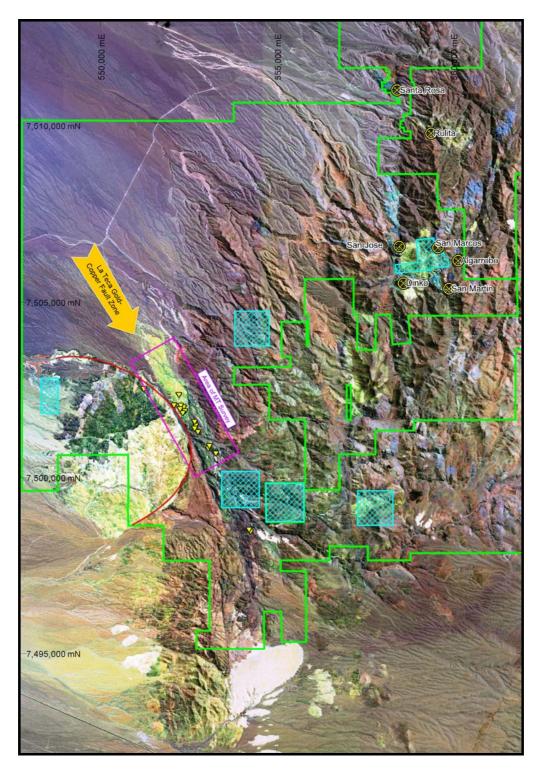


Figure 2 Location of La Teca Gold-Copper Fault Zone on WorldView Imagery Green = RMG leases; Blue hatch = excluded leases; Yellow triangles= >0.1g/t Au

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## **Geophysical Surveys**

SRG undertook three geophysical surveys in the La Teca Gold-Copper area for RMG. The IP and MT surveys were completed within the purple box as shown in Figure 2 and the GMag survey covered a slightly larger area as shown in Figure 5.

**The MT Survey** was undertaken along the two lines shown as blue dots in Figure 5. Figures 3 and 4 show images of the 2D resistivity inversion model for Line 1 (the southwestern line) and Line 2 (the north-eastern line) respectively as modelled by SRG and imaged by Resource Potentials from Perth.

The inversion model of the two MT lines both show a strong sub-vertical conductive zone that commences from around 500m below surface and extends to depth.

This strong conductive zone could be interpreted to be a mineralised copper porphyry system at depth.

Further work is required with a more extensive geophysical survey to better identify the orientation and extents of this conductive zone and its relevance to geology.

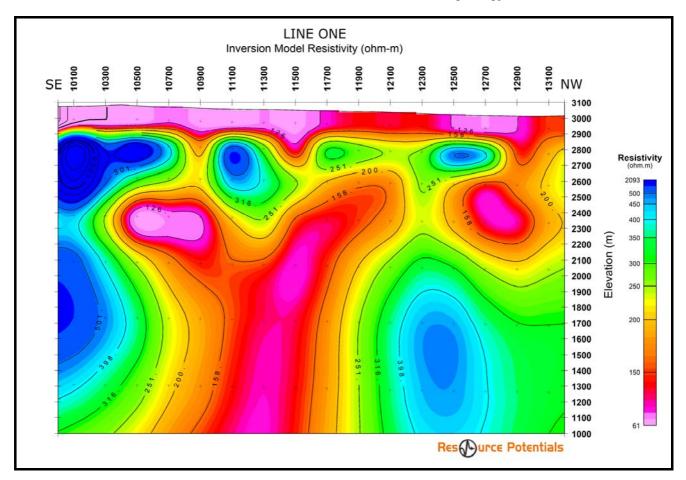


Figure 3 MT Resistivity – Line 1 – 2D Inversion Model

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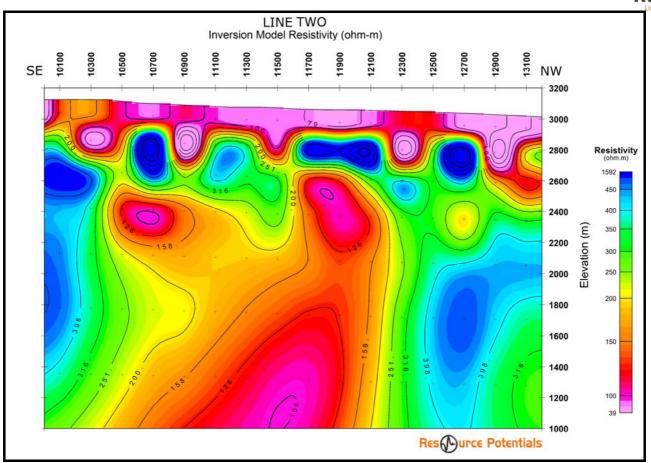


Figure 4 MT Resistivity – Line 2 – 2D Inversion Model

The GMag survey shows a corridor of highly magnetic andesites trending north-west and parallel to the La Teca Fault Zone. In the region of the rock chips with >0.1g/t Au (shown in the yellow triangles in Figure 5), the high magnetic zone is reduced in intensity and the rocks appear to have been "de-magnetised" (the area shown in the yellow polygon in Figure 5). In the spectral imagery as seen in Figure 2, and supported by field mapping, this demagnetised area coincides with a strong chlorite-silica-epidote alteration zone.

The de-magnetisation of the area coincident with the MT conductive zone supports the interpretation that the MT conductive zone is a mineralised porphyry system at depth. This coincident signature is also evidenced at the Chuquicamata, Collahuasi, Quebrada Blanca, Radomiro Tomic, and Escondida<sup>8</sup> porphyry copper mines. The de-magnetisation is possibly due to alteration of the magnetic andesites by magnetite destructive phyllic alteration emanating from the porphyry complex at depth (e.g. Cadia East whilst magnetic at depth has no magnetic response at surface because of intense phyllic alteration in its upper 200-500m<sup>9</sup>).

<sup>&</sup>lt;sup>8</sup> Behn et al. 2001. Econ. Geol:96(2), pp239-248

<sup>&</sup>lt;sup>9</sup> http://www.dmec.ca/exo7-dvd/Eo7/pdfs/53.pdf



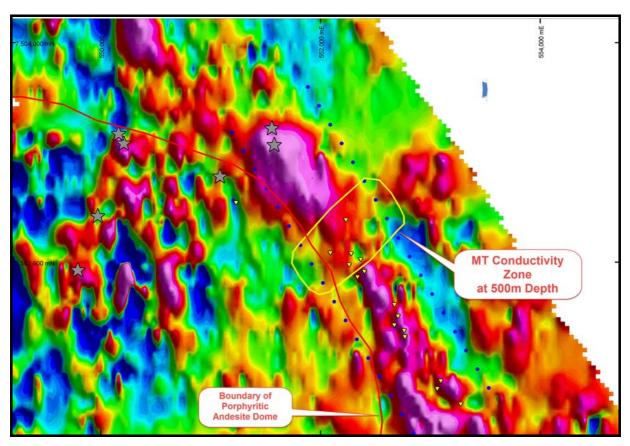


Figure 5 Ground magnetic survey (TMI – RTP) Yellow triangles = gold rocks; grey stars = potassic altered porphyry; blue dots – receiver stations for MT /IP survey

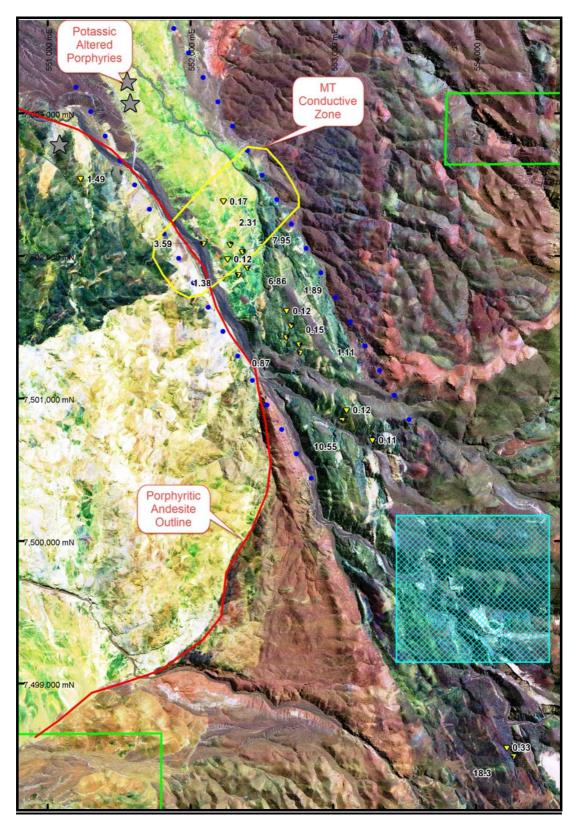
**The IP survey** showed a weak chargeability anomaly (2x background) also coincident with the de-magnetised zone and vertically above the MT conductivity anomaly. However, the GMag image indicates that the IP survey lines (shown as blue dots in Figure 5) are in fact located parallel to the geologic structures and therefore may not be optimal for the orientation of the geology or the MT target. Further work is required to assess the effectiveness of this IP data, or the benefit of a new IP survey where a more optimal orientation may yield better results.

## **Geology and Geochemistry**

RMG has previously reported the stream sediment and rock chip geochemistry for this La Teca area (ASX release 3 February 2014). In summary;

- Rock chips with values to 18.3 g/t Au along the La Teca zone over 5 kms (Figure 6)
- Steam sediments with high molybdenum, lead, cadmium, copper, gold, mercury
- Rock chips with elevated molybdenum to 0.01% Mo
- Strongly potassic altered feldspar porphyries in outcrop (Figure 7)
- Banded quartz veins with biotite, silica, K-feldpsar alteration (Figure 7)





**Figure 6 Gold grades in La Teca gold-copper zone** Yellow triangles = rock chips with gold g/t; Blue hatch = excluded leases; Blue dots = IP/MT receiver points

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Figure 7 Potassic altered porphyries and banded quartz veins

## Summary

The La Teca gold-copper target is an exciting new gold-copper province discovered by RMG geologists.

The zone of elevated gold-copper at La Teca extends for at least 5 kilometres, part of which has been covered by an MT survey and is coincident with the zone of magnetic and MT anomalism.

The MT conductive zone identified by the MT survey is coincident with the area previously identified as a zone of high gold, copper, molybdenum and strong silica-chlorite-epidote alteration.

The coincidence of copper, gold, and molybdenum anomalism with potassic alteration, MT conductivity and magnetite destruction are also present at the major porphyry copper mines in northern Chile and may indicate a significant porphyry copper target is present at depth at La Teca.



#### About RMG's Tuina Project

RMG has the rights to 100% ownership of 170 sq. km of mineral concessions in the Tuina area of northern Chile near to the world's largest copper open pit mine, Chuquicamata. Northern Chile produces 1.8 million tonnes copper metal per year and is the world's largest copper producing area.

The Tuina project has been the subject of small Chilean copper oxide producers for 30-40 years and never been operated under consolidated ownership. The main mineralisation style is a copper manto, similar to the northern Chile manto copper mines of Mantos Blancos (500Mt @ 1.0% Cu).

#### About RMG Limited

RMG is a gold, copper and base metals exploration and development company with projects located in Queensland and Chile. RMG owns and has agreements to earn a 100% interest in over 170 sq. km in northern Chile and is continuing to expand the copper endowment of this area. In Queensland RMG holds the Kamarga zinc and lead project located adjacent to the Century mine and has progressed the project to inferred resource stage.

Ends

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Competent Persons Statement for the Exploration Results in this Public Report

The information in this report that relates to Exploration Results is based on information compiled by Mr Peter Rolley a Competent Person who is a Member of The Australian Institute of Geoscientists (MAIG). Mr Rolley has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code 2012"). Mr Rolley is a shareholder and a consultant to RMG Ltd. Mr Rolley consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

This document may include forward looking statements. Forward looking statements include, but are not necessarily limited to, statements concerning RMG Limited's planned exploration programme and other statements that are not historic facts. When used in this document, the words such as "could", "indicates", "plan", "estimate", "expect", "intend", "may", "potential", "should", "believe" and similar expressions are forward looking statements. Such statements involve risks and uncertainties, and no assurances can be provided that actual results or work completed will be consistent with these forward looking statements.

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