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# ASX ANNOUNCEMENT

24 January 2014

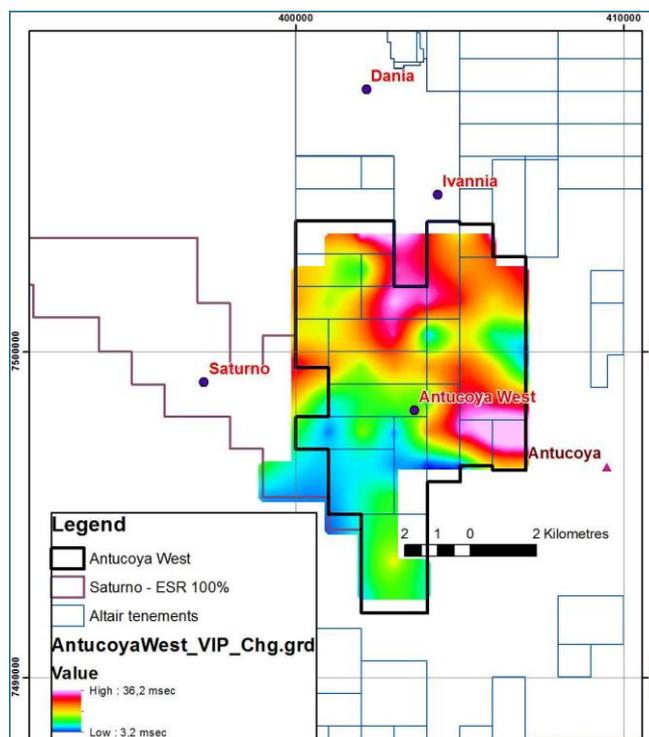
## Antucoya West Geophysics Update

### HIGHLIGHTS

- ✓ Identifies a 7 km<sup>2</sup> high chargeability zone at Antucoya West Prospect within Project Altair being less than 2 km west of Antofagasta Minerals' Antucoya porphyry deposit.
- ✓ Geophysical surveys define extensive anomalous chargeability responses potentially associated with sulphide mineralisation.
- ✓ Elevated chargeability responses observed at over 35% of the observation points.

### 1. Overview

Estrella Resources Limited (ASX:ESR) (**Estrella** or **Company**) is pleased to report that the recent Induced Polarisation (**IP**), Resistivity (**Res**) and Magnetotelluric (**MT**) surveys at the Antucoya West Prospect within Project Altair conducted by Southern Rock Geophysics (**SRG**) has identified a 7 km<sup>2</sup> high chargeability zone less than 2 km east of Antofagasta Minerals' (Antofagasta) Antucoya porphyry deposit (**Antucoya Deposit**).



**Figure 1.** The VIP survey results show high chargeability responses in the southeast of Antucoya West Prospect being less than 2 km to the west of Antucoya Deposit.

## 2. Vector Induced Polarisation results

SRG performed a Vector Induced Polarisation (**VIP**) survey over the Antucoya West Prospect area (**Figure 1**), totalling 80 observation stations. The objective of the survey was to characterize the distribution of the chargeability and resistivity parameters to define potential response characteristic of disseminated porphyry style sulphide mineralisation.

In SRG's opinion, general responses over 25 msec are characteristic of sulphide mineralisation in volcanic and intrusive geological environments similar to elsewhere in the district.

There are high chargeability responses over 25 msec evident in the southeast of the survey area of the Antucoya West Prospect (**Figure 1**), trending towards the north and open in directions out of the current survey coverage.

In **Figure 2**, the VIP responses have been overlaid on the airborne magnetics for the Antucoya West Prospect to qualitatively assess correlations between the two datasets. The most noteworthy characteristic about the now identified anomaly (**Figure 2**) is that it trends toward the west along the known magnetic anomaly that trends west-northwest to northwest and extends over Antofagasta's Antucoya Deposit, which is located less than 2 km to the east.

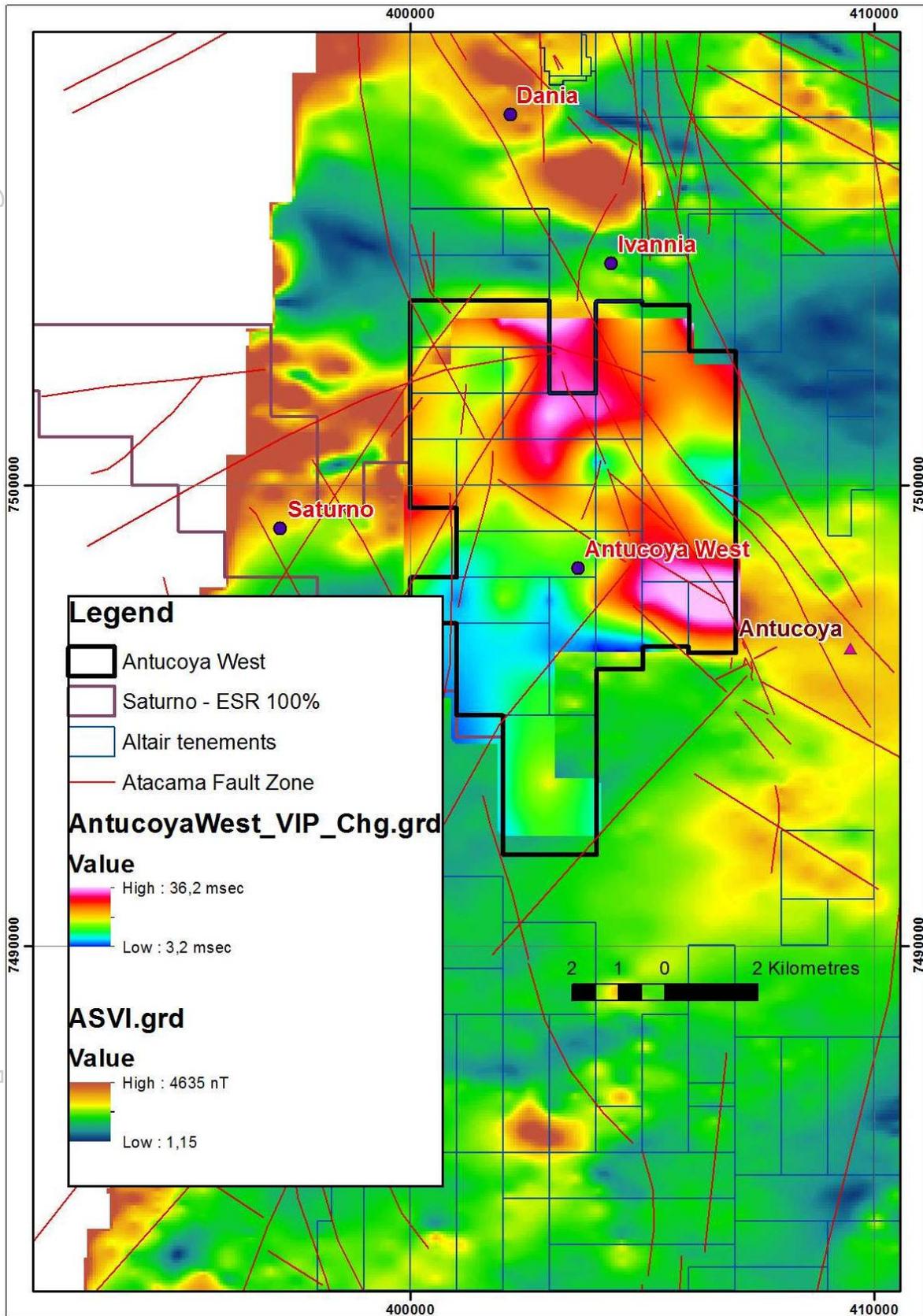
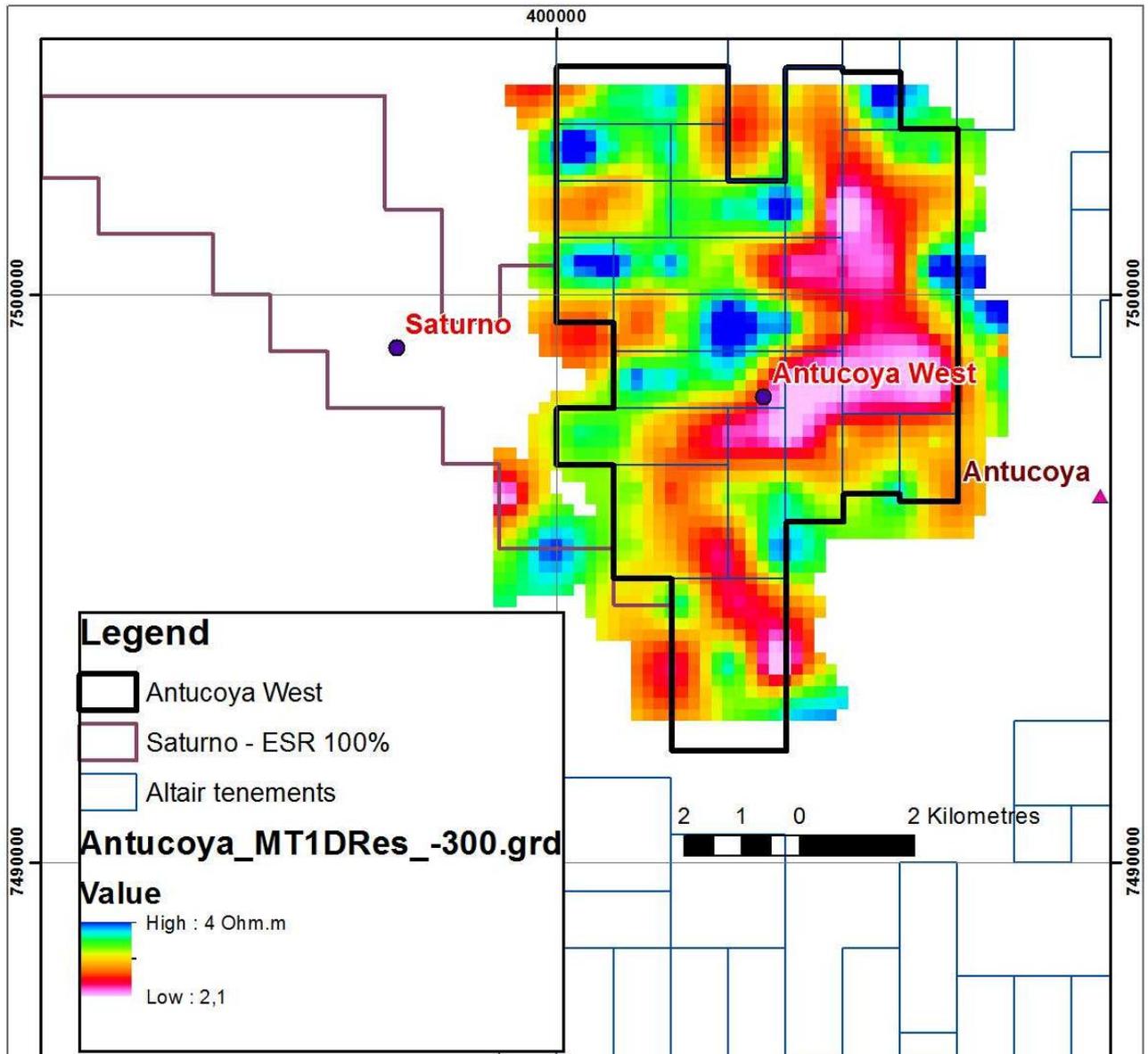


Figure 2. The VIP survey results for Antucoya West superimposed on the Analytic Signal of the first Vertical derivative (ASVI) total magnetic image for Altair Project. The high chargeability zone in the southwest of the VIP image displays a near 1:1 relationship with the west-northwest trending ASVI magnetic anomaly.

### 3. Magneto-Telluric and Resistivity inversion results

MT and resistivity data was also used by SRG to derive a 1D resistivity inversion model for each VIP station. The 1D models are then interpolated into a 3D block model from which depth slice figures were produced to analyse the results. **Figure 3** shows the 3D depth slice for 300 metres beneath the surface and is provided as a representative example of the conductivity responses at depth. SRG concluded that the south and southeastern areas of Antucoya West results indicate deeper conductivity to a depth of at least 900 metres. The conductivity zone identified by the MT-resistivity inversion model is compatible with the chargeable zone found in the VIP survey (**Figure 3**).



**Figure 3. Magneto-telluric and resistivity inversion model depth slice for 300 metres below the surface displays conductive zones in the south and southeast of Antucoya West.**

#### 4. Next Steps for Antucoya West

Estrella is currently incorporating hyperspectral data image processing and ground reconnaissance of identified geological alteration areas of interest to constrain the 7 km<sup>2</sup> of prospective surface area. Infill geophysics is also in planning to assist in further identifying fault structures and zones of high strain which are more likely to host mineralisation. Once these activities have been completed, Estrella expects to test the area for mineralisation with mechanical drilling.

#### 5. Antucoya porphyry deposit

The Antucoya porphyry project (owned by Antofagasta Minerals PLC) is currently being developed (CAPEX US\$ 1.9B), will have a 20 year mine life and is on schedule to produce its first copper cathode production in April 2015. The Antucoya mine will be a conventional open pit with heap-leaching using sea water and solvent-extraction electro-winning processing of the ore to produce 85,000 tpa of copper cathode for the first 5 years.

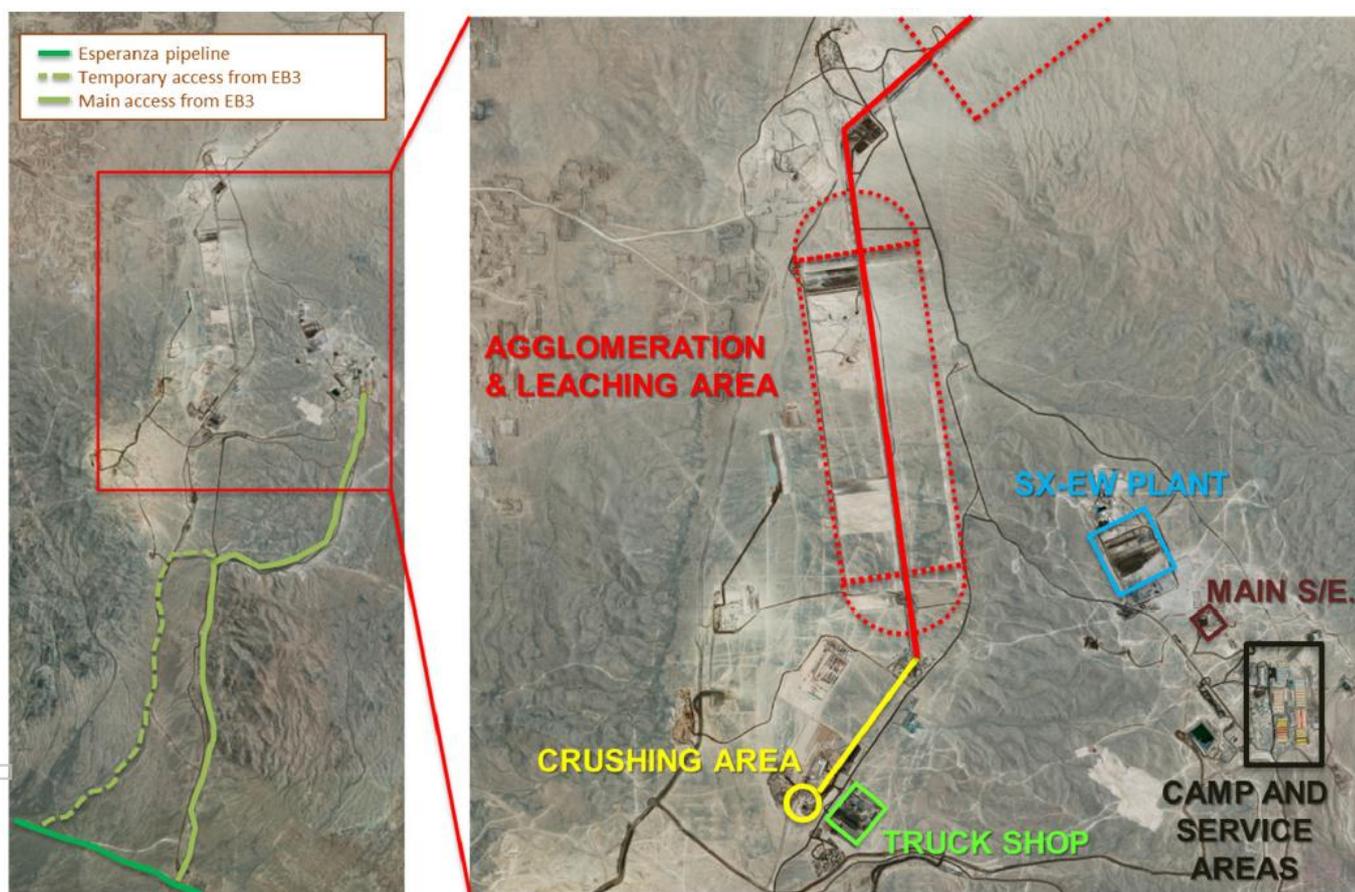


Figure 4 Aerial view of the Antucoya porphyry project construction (source: Antofagasta Minerals PLC – Antucoya Site Visit presentation <http://www.antofagasta.co.uk/investors/reports-and-presentations/year-2013>).

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## 6. Commentary

Commenting on the exploration success at Colupo, Estrella's Managing Director, Dr. Jason Berton, said:

*“The Vector IP results have neatly ‘fit’ into the anomalous magnetic trend that extends across Antofagasta Minerals’ Antucoya porphyry deposit and confirms our opinion that the Antucoya porphyry deposit is not an isolated occurrence and is likely to be part of a mineralised porphyry system that trends into the Antucoya West area.*

*Estrella’s Antucoya West Project is a large prospective area and we are progressing quickly to define exploration targets within the area that will be drill tested.”*

### Competent Person’s Statement

Exploration information in this announcement is based upon work undertaken by Dr. Jason Berton, the Managing Director and a full-time employee of Estrella Resources Limited whom is a Member of the Australasian Institute of Metallurgy and Mining (AusIMM). Dr Berton has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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’ (JORC Code). Dr Berton consents to the inclusion in this presentation of the statements based on his information and context in which they appear.

#### About Estrella Resources

Estrella Resources Limited is an ASX listed, Chilean focused copper-gold exploration company. Estrella has a number of exploration projects in Chile. With a highly experienced board, a strong operational and management team and a sole focus on Chilean copper and gold projects, the Company is well positioned to develop its projects and add value for shareholders.

#### Directors and Management

Dr. Jason Berton  
Managing Director

Gavin Solomon  
Non-Executive Chairman

Julian Bavin  
Non-Executive Director

Simon Kidston  
Non-Executive Director

Justin Clyne  
Company Secretary

ESTRELLA RESOURCES LIMITED  
ACN 151 155 207

ASX CODE: ESR

ORDINARY FULLY PAID SHARES:  
96,601,000

UNLISTED OPTIONS:  
11,130,000