

# **EM** survey identifies new Ni-Cu-Co targets at Yarawindah Brook

### **HIGHLIGHTS**

- Airborne EM survey identifies new anomalies aligned with a regional structural trend
- Survey also confirms areas of known mineralisation
- Enhances prospectivity of a new Ni-Cu-Co sulphide belt
- Follow-up Moving Loop EM and drilling in second half of 2018

Cassini Resources Limited (ASX:CZI) ("Cassini" or the "Company") is pleased to provide results and interpretation of an Airborne Electromagnetic (AEM) survey at the Yarawindah Brook Project, flown in February 2018. The Yarawindah Brook Project is an early stage Ni-Cu-Co sulphide exploration project, 130km northeast of Perth in Western Australia (Figure 1). The Company has an option to acquire 80% of the Project from private company Souwest Metals Pty Ltd. Further details of the option agreement can be found in ASX release dated 29 January 2018.

#### Airborne EM Results

The Company engaged independent contractor NRG to fly their helicopter supported Xcite™ system, over the entire property, for a total of 440 line km.

The survey has identified a number of new conductive anomalies on the Project (Figure 2). The most significant is a pair of strong anomalies, known as XC05 and XC06, in the western portion of the project. These anomalies measure approximately 800m and 400m in strike respectively and are aligned along a strong regional structural trend, closely associated with a mafic/ultramafic intrusion. Numerous nickel anomalous rockchip samples have been collected from outcrops immediately to the east of the conductors, however the anomalies themselves have no surface expression.

A third new anomaly, XC14, has an extent of 100m, and also appears to be associated with a strong NW-SE trending structural feature in the centre of the project area. Similarly, this anomaly has no surface expression.



Figure 1. Yarawindah Brook Project Location.

There are a number of other anomalies that potentially represent agricultural or regolith features that also require further investigation.

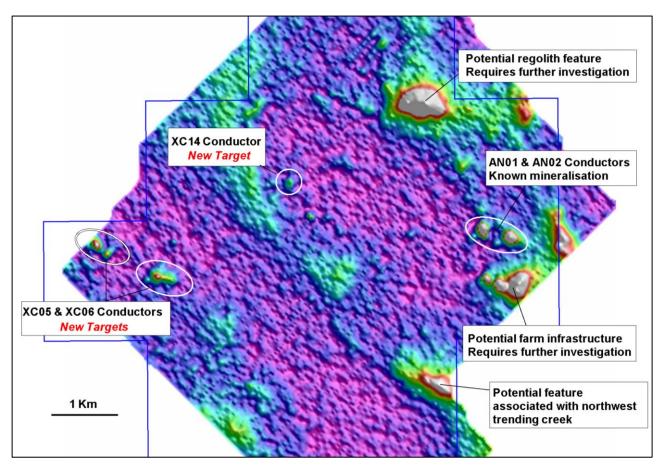


Figure 2. Yarawindah Brook Project gridded image of channel 39 (late time) airborne electromagnetics.

## New survey identifies recognised mineralisation

Importantly, the survey has recognised the known Ni-Cu-Co mineralisation as identified in historical drilling. This confirmation demonstrates that the AEM system is effective at identifying mineralised sulphide bodies and provides further confidence that new anomalies are likely to host sulphide mineralisation. To date, all conductors have proven to be associated with magmatic sulphides.

#### **Project Background**

The Project has had only limited nickel, copper and cobalt exploration despite a favourable regional setting, prospective geology and near-surface occurrences of nickel and copper. Historic exploration has focussed primarily on a small platinum and palladium (PGE's) resource which the Company views as a "path-finder" anomaly for massive nickel - copper - cobalt sulphides. Exploration for nickel and copper has been sporadic, however the most recent drilling in 2007 targeting surface EM anomalies, returned encouraging results from hole YWRC0083 including 7m @ 1.30% Ni, 0.22% Cu, 0.06% Co and 432ppb Pd from 74m. Despite the promising result no further follow-up drilling was conducted due to budget limitations of the previous operator during the exploration downturn post-GFC.

The new conductors are located in agricultural fields with no outcrop, which is likely to have restricted previous exploration efforts in recent times, as well as during the nickel boom of the late 1960's.

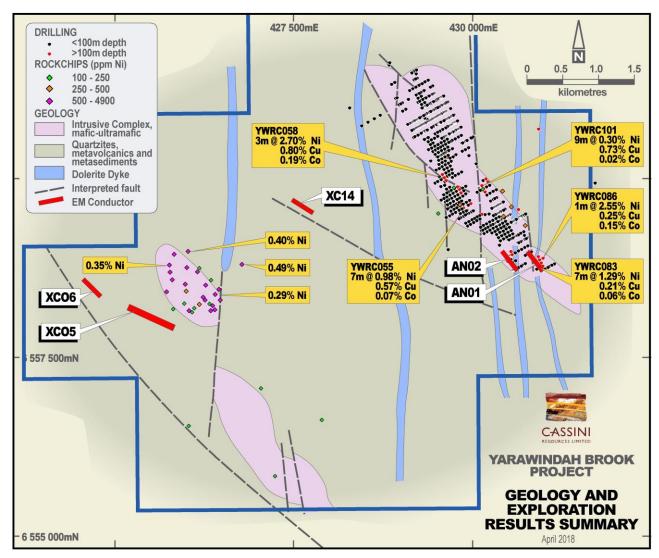


Figure 3. Yarawindah Brook Project Exploration Summary highlighting newly identified EM conductors.

## **Next Steps**

The Company is highly encouraged by these early results, which supports the belief that the Project has excellent potential to host significant bodies of magmatic Ni-Cu-Co sulphides. The exploration team has begun planning for follow-up surface moving loop EM surveys over XC05, 06 & 14 to assist drill targeting. Drill testing is likely to occur at several targets including down-plunge testing of YWRC0083, as soon as practical, following the Company's current activities at West Arunta and Mount Squires. An RC drill program is due to commence at the West Arunta Zinc Project in June, pending heritage and environmental clearances.

For further information, please contact:

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#### **About the Company**

Cassini Resources Limited (ASX: CZI) is a base and precious metals developer and explorer based in Perth. In April 2014, Cassini acquired its flagship West Musgrave Project (WMP), located in Western Australia. The Project is a world-class asset which currently has over 1.0 million tonnes of contained nickel and 2.0 million tonnes of contained copper in Resource. The Project is a new mining camp with three existing nickel and copper sulphide deposits and a number of other significant regional exploration targets already identified. The WMP is the largest undeveloped nickel - copper project in Australia.

In August 2016, Cassini entered into a three-stage \$36M Farm-in/Joint Venture Agreement with prominent Australian mining company OZ Minerals Ltd (ASX: OZL). The Joint Venture provides a clear pathway to a decision to mine and potential cash flow for Cassini.

Cassini is also progressing its Mt Squires Gold Project, an early stage zinc exploration project in the West Arunta region and also has an option to acquire 80% of the Yarawindah Nickel - Copper - Cobalt Project, all located in Western Australia.

#### **Competent Persons Statement**

The information in this report that relates to Exploration Results is based on information compiled or reviewed by Mr Greg Miles, who is an employee of the company. Mr Miles is a Member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Miles consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

The Company is not aware of any new information or data, other than that disclosed in this report, that materially affects the information included in this report and that all material assumptions and parameters underpinning Exploration Results, Mineral Resource Estimates and Production Targets as reported in the market announcements dated 29 January 2018 continue to apply and have not materially changed.