



Compelling Drill Targets at West Arunta

HIGHLIGHTS

- **Airborne EM survey provides new geological interpretation and supports sedimentary zinc mineralisation model**
- **Prospective horizon not previously tested by drilling**
- **Prioritisation of Janus and Mimas Prospects with support from AEM, gravity, magnetics and soil geochemistry data**
- **Heritage surveys completed**
- **On track for drilling in June 2018, partly funded by WA EIS scheme**

Cassini Resources Limited (ASX:CZI) (“Cassini” or the “Company”) is pleased to provide an update on the West Arunta Project following results of an Airborne Electromagnetic (AEM) survey, flown in March 2018. The West Arunta Project is an early stage sedimentary zinc exploration project, near the community of Kiwirrkurra in northern Western Australia (Figure 1).

New Data Set Supports Geological Interpretation

The Company engaged independent contractor NRG to fly their helicopter supported Xcite™ system, over the extent of the prospective basin, for a total of over 1,000 line km.

The previous geological interpretation was limited to a magnetic survey that had been processed to its limits, broad-spaced soil geochemistry and the very sparse geological data gathered from outcrop and drilling in 2016.

The AEM survey has been able to map the stratigraphic horizons within the sedimentary basin and in particular the “Dione Horizon” which is believed to be a discrete, sulphide or graphite-rich and perhaps locally mineralised stratigraphic unit within the broader Bitter Springs Formation. Such horizons are favourable targets for base metal mineralisation.

Four datasets now support the conceptual targets at the Janus and Mimas Prospects, outlined in Figures 2-5.



Figure 1. West Arunta Project Location.

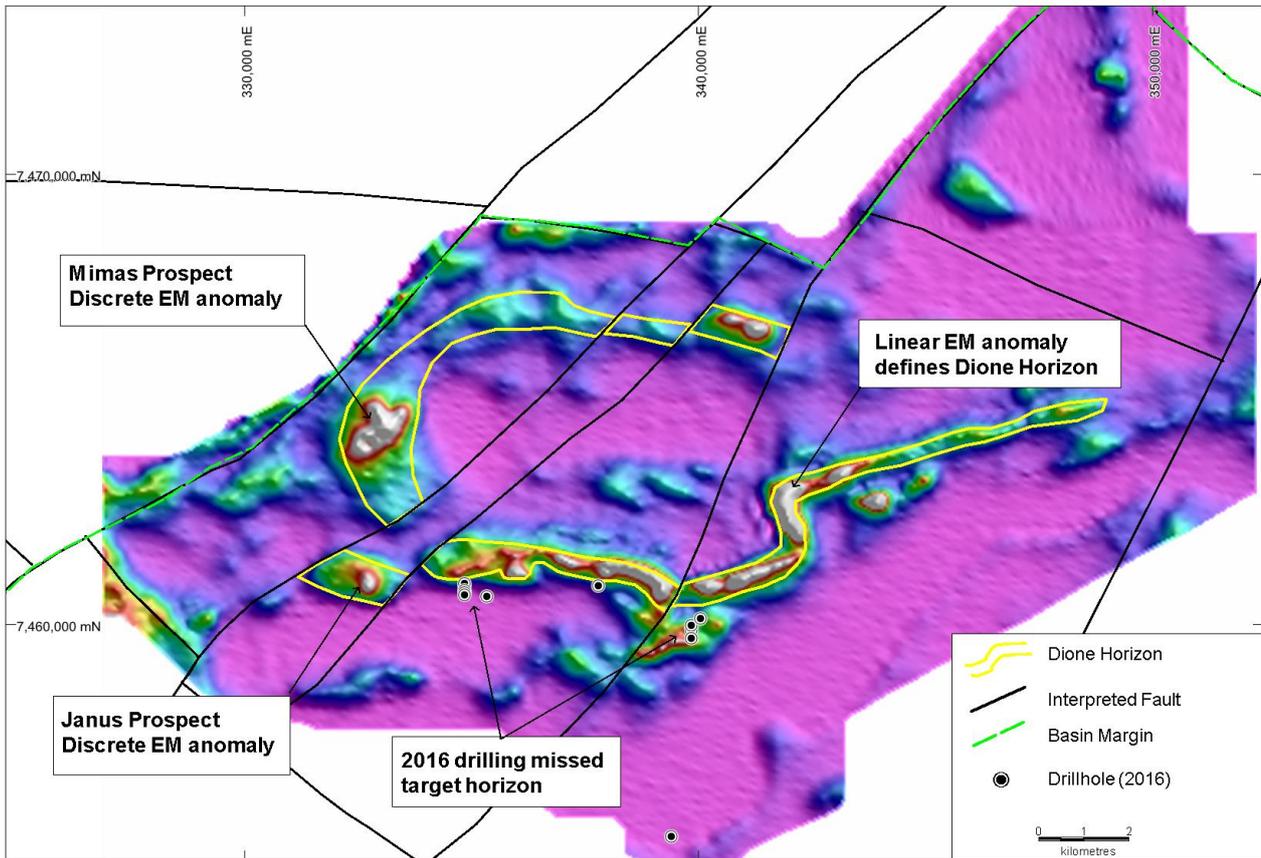


Figure 2. AEM gridded image (Channel 35) highlighting the Dione Horizon and anomalies at Mimas and Janus.

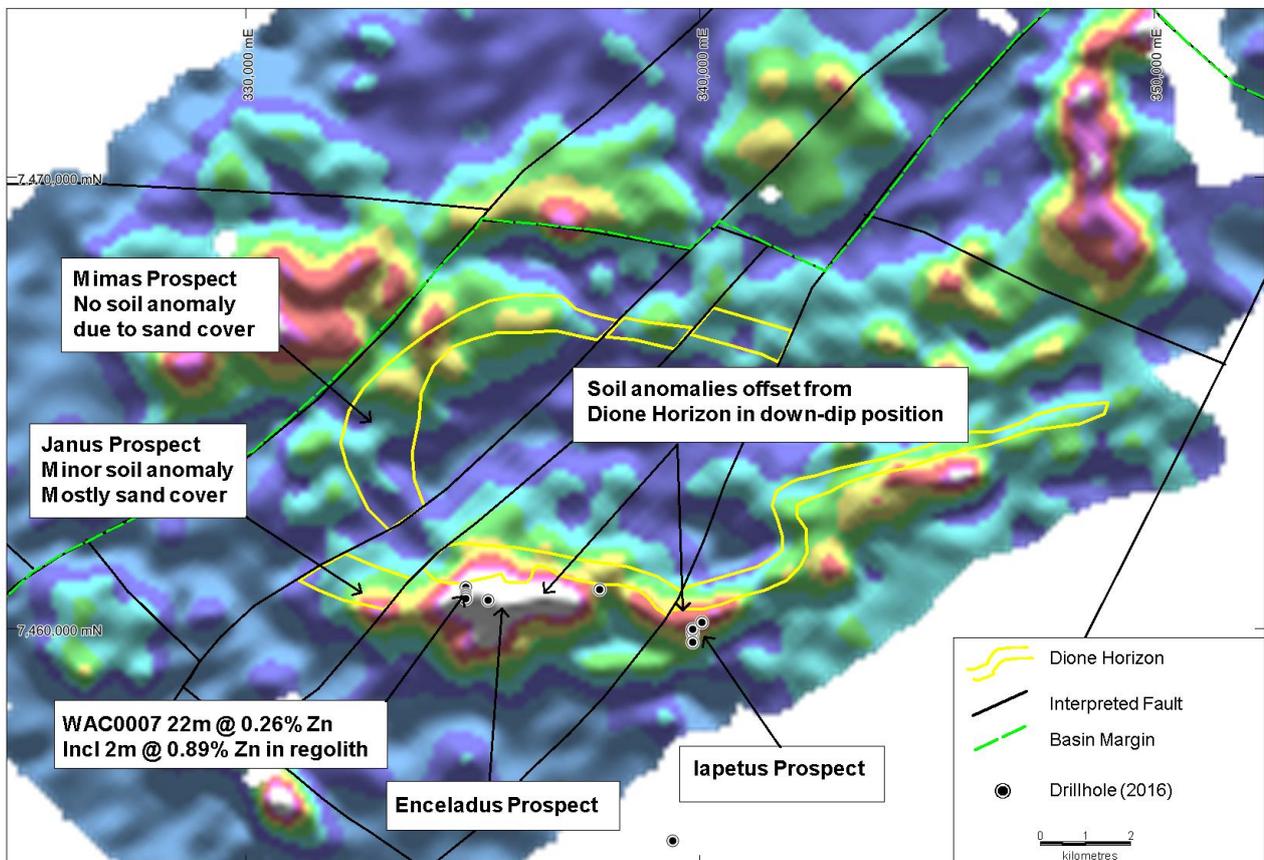


Figure 3. Zn soil geochemistry (normalised to Fe to reduce effects of sand dilution). Note offset of soil anomalies from the Dione Horizon.

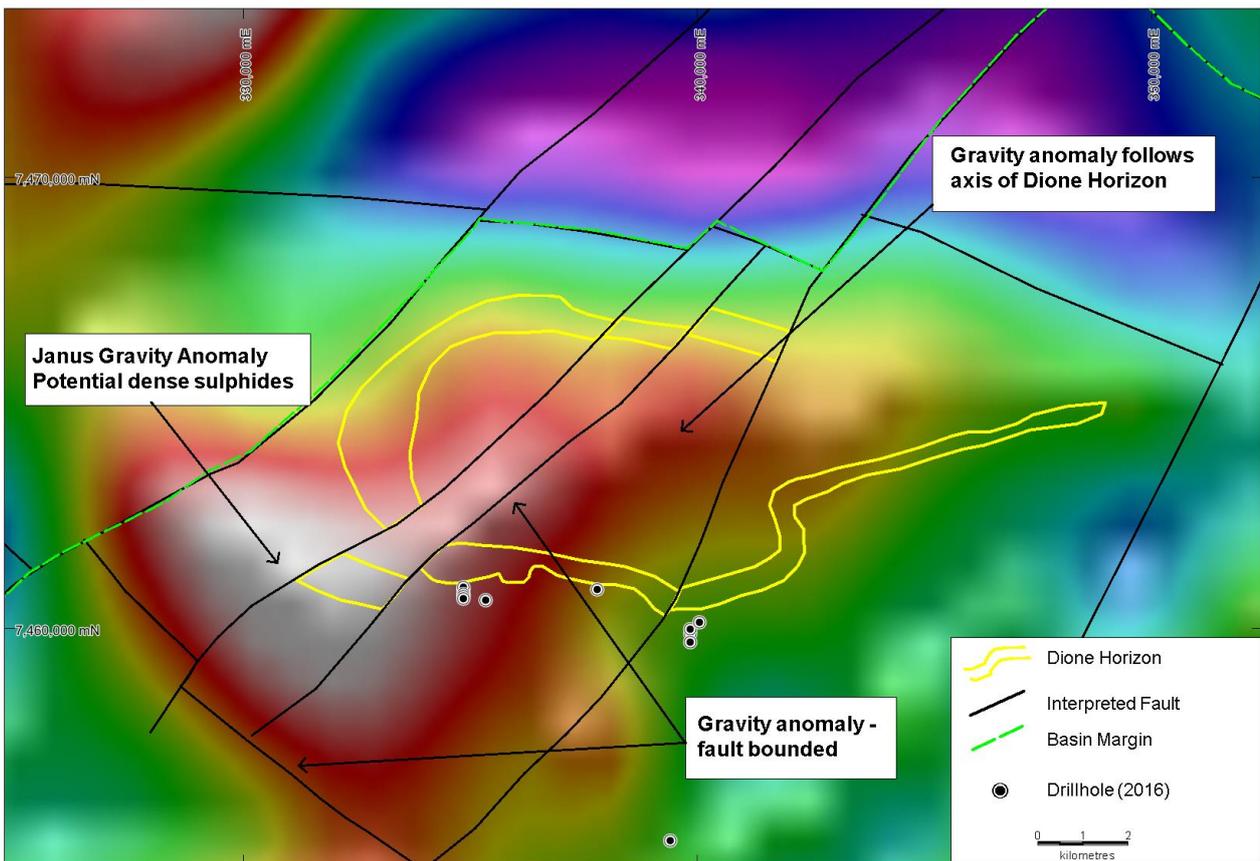


Figure 4. Residual Bouguer Gravity image showing large gravity anomaly at the Janus Prospect

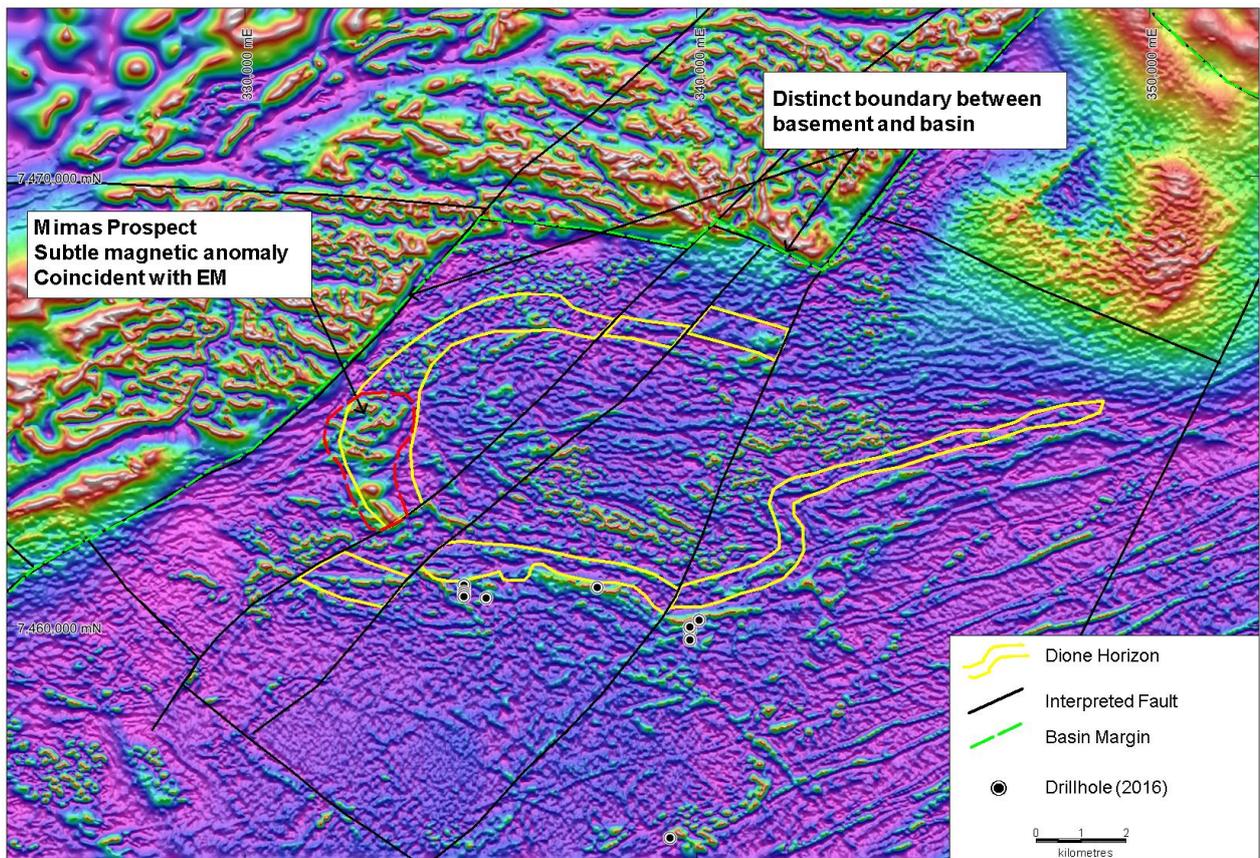


Figure 5. Regional magnetics (with RTP tilt filter) showing subtle magnetic feature at Mimas and regional structures.

It is particularly interesting to note that the Dione Horizon is not uniformly conductive but rather is more conductive close to the major NE trending fault corridor that defines the basin margin in this area; this is consistent with the conductivity relating to hydrothermal sulphides controlled by basin margin permeability. It is important to note that the 2016 drilling did not test the Dione Horizon, but was rather focussed on the gossanous outcrops which now appear to have resulted by “down-dip” lateral dispersion through the weathering profile.

With the addition of the AEM data, the conceptual targets at Mimas and Janus are now each supported by several anomalous features drawn from independent data sets and are clearly the highest priority targets for future drilling.

MIMAS PROSPECT:

- A discrete AEM anomaly and the most conductive along the Dione Horizon implying an anomalous local process
- Strongest magnetic response in the basin coincident with the AEM anomaly, possibly representing iron sulphide mineralisation, magnetite alteration or perhaps gossan formation over a sulphide orebody
- Favourable position in the synclinal axis of the Dione Horizon (similar structural position to the recently-discovered Teena zinc deposit in the Northern Territory)

JANUS PROSPECT:

- The peak of a residual gravity anomaly that appears to be structurally controlled, potentially representing a dense sulphide body
- A discrete, isolated AEM anomaly, coincident with a small geochemical anomaly
- Structurally favourable position, close to major NE-trending faults, of the type often associated with sedimentary mineralisation

Next Steps

A drill program has been designed to test the Janus and Mimas Prospects, consisting of approximately 2,000m which will take about 2 weeks to complete. Aboriginal heritage surveys have now been completed, paving the way for the drilling program to commence as soon as possible. A drilling company has been engaged and is due to mobilise to the Project by mid-June.

Costs of the drill program will be off-set by the WA Government Exploration Incentive Scheme meaning shareholders will enjoy exposure to potential short-term exploration success with minimised down-side risk.

The Company looks forward to providing further updates on the progress of the program.

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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 23 June 2016 continue to apply and have not materially changed.