



## Mount Squires Gold Project - Exploration Update

### KEY POINTS

- **Field activities commencing at 100% owned Mount Squires Project**
- **Targeted RC drilling to commence at the Handpump Gold Prospect**
- **Previous drilling intersected 15m @ 2.30 g/t Au**
- **High-resolution aeromagnetic survey over gold and base metal target zones**
- **Follow-up programs of soil geochemistry and further reconnaissance drilling**

Cassini Resources Limited (ASX:CZI) (“Cassini” or the “Company”) is pleased to provide an update on exploration activities at the Mount Squires Project in the Musgrave Province of Western Australia (“the Project”). The 100%-owned Mount Squires Project is an early stage exploration project, highly prospective for gold, located adjacent to the Company’s West Musgrave Project (CZI 30% JV with OZ Minerals). Details of the 2019 field program are outlined below.

Cassini Managing Director Richard Bevan commented, “We’re delighted to begin on-ground exploration activities at Mount Squires. We’ve got an immediate target to drill at the Handpump Prospect but also recognise numerous other early-stage and conceptual targets that demand further geophysical and geochemical data collection and analysis prior to drilling. There are extensive areas under cover that have not been previously explored. We expect to generate a pipeline of prospects for testing.

“It’s also worth recognising our activities coincide with near record-high Australian Dollar gold prices and a dearth of early-stage, regional-scale Australian gold exploration projects. This is a good strategic fit with the development studies and exploration at our West Musgrave Joint Venture.”

### Aeromagnetic Survey

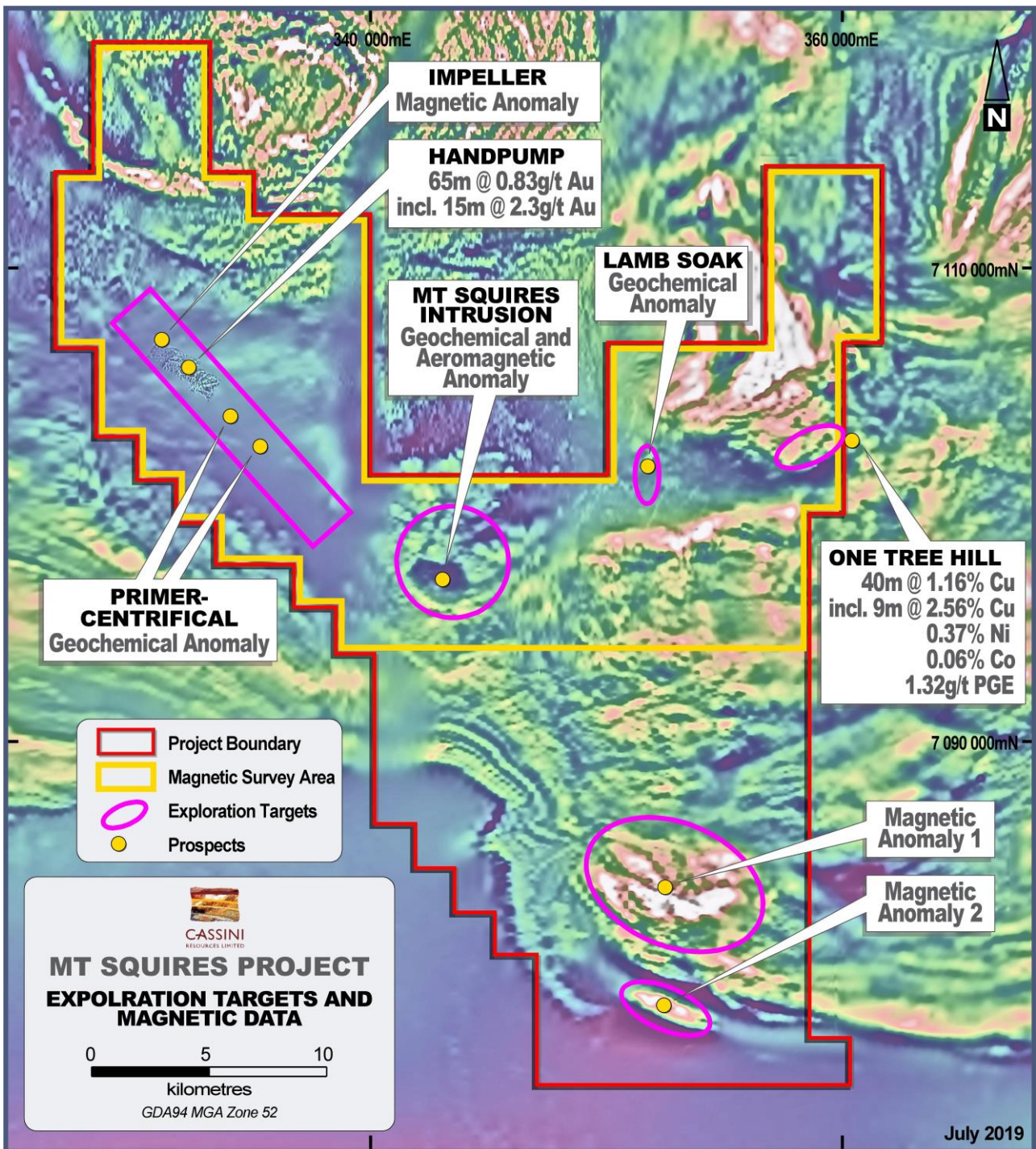
An aeromagnetic survey is due to commence late this month. The survey will provide high-resolution magnetic coverage over key target areas for the first time. The existing magnetic data is too coarse to allow detailed mapping of structures that are critical in understanding and targeting gold mineralisation. The total survey area is approximately 440km<sup>2</sup>, comprising over half the Mount Squires Project area and covering all of the priority targets (Figure 1).

The aeromagnetic survey will provide direct targeting opportunities such as magnetic anomalies and greater resolution at prospect to regional scales to assist structural and lithological mapping.

### RC Drilling of Handpump Prospect

Previous drilling at the Handpump Prospect returned significant gold intercepts including 15m @ 2.30g/t from only 31m down hole (refer ASX announcement 14 July 2016). Previous drilling has been limited to only a handful of holes and the geology is poorly understood. A new geological interpretation suggests mineralisation is controlled by two intersecting faults creating a westerly to north-westerly plunging mineralised breccia. Mineralisation appears open in the down-plunge position and this zone will be drill tested.

All necessary approvals are in place and ground preparation complete in preparation for a short, but targeted RC drill program, with a drill rig scheduled to be on-site by mid-August.



**Figure 1.** Mount Squires Project showing prominent exploration targets. Note the poor resolution of the magnetic coverage through the Impeller to Centrifical Prospects which will be re-flown in the up-coming survey.

### Surface Geochemistry

Approximately 4,000 surface geochemical samples have been collected over the Project area by previous operators. Coverage across the Project is uneven and comprises several sample mediums. Much of the area sampled is overlain by transported cover and surface sampling is likely to be ineffective in those areas.

The Company has engaged a geochemical consultant to assist with normalising the data so that samples can be compared on a like-for-like basis and assist with anomaly identification and further surface geochemical surveys. Following this process it is likely that infill or extensional sampling will be undertaken to assist with reconnaissance drill targeting. The timing of this program will depend on results from the other programs and prioritisation of targets.

Initial analysis of previous work shows the most prominent geochemical anomaly is at the Centrifical Prospect with a zoned Mo-Pb-Zn anomaly at the intersection of prominent northwest and northeast striking structures (Figure 2). This may represent the heart of an epithermal mineralised setting. In this case, gold mineralisation at Handpump may represent more distal mineralisation that has “leaked” north-westwards along the major structure.

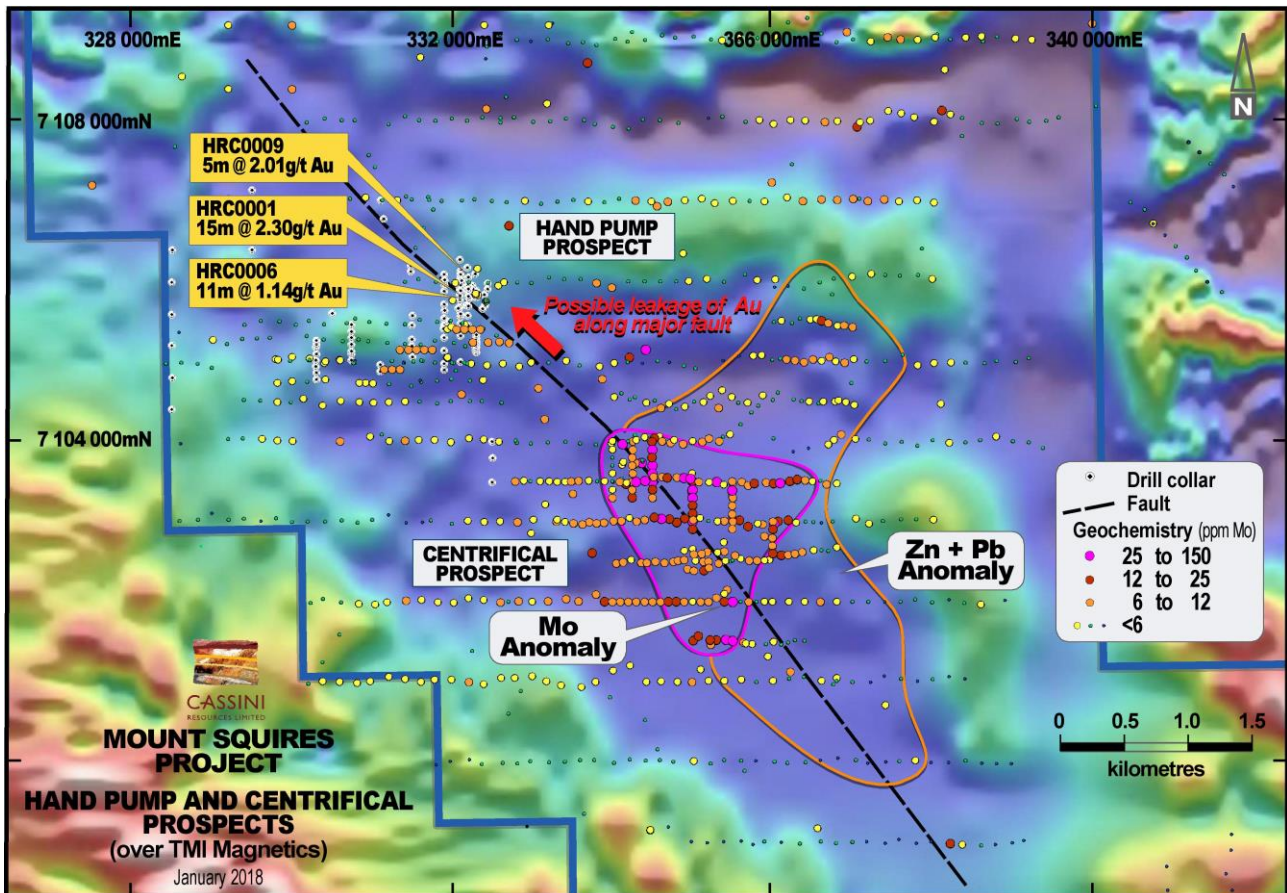


Figure 2. Handpump and Centrifical Prospects and associated geochemical anomalies and drilling.

## Project Background

Gold prospectivity was first identified at Mount Squires by Western Mining Corporation during geochemical surveying in the late 1990’s. The Company’s primary target was nickel and copper sulphide mineralisation, which returned poor results, however several gold anomalies were identified. Despite this the tenements were later surrendered.

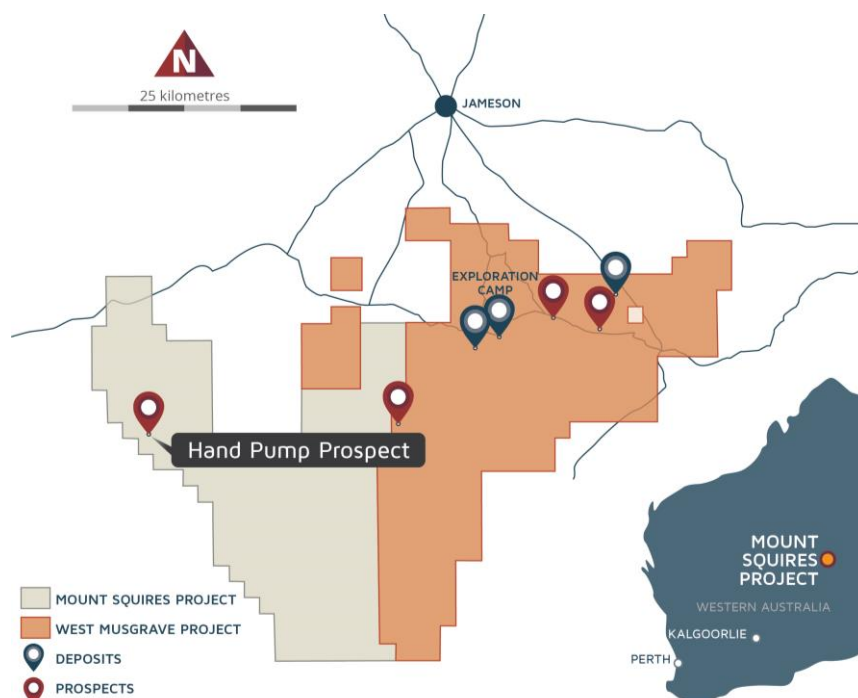
Later exploration by Beadell Resources Ltd in the mid 2000’s identified a number of gold prospects with further soil geochemistry, rock chip sampling and mapping. Drilling of these anomalies led to the discovery of gold mineralisation at the Handpump Prospect with significant intercepts of 15m @ 2.3g/t from 31m including 5m @ 4.7g/t from 34m and 12m @ 1.3 g/t including 5m @ 2.0g/t from 25m. Mineralisation is described as flat-lying, hosted in rhyolite breccias and appears to have epithermal style characteristics.

Beadell's exploration after the initial discovery was limited due to a change in corporate strategy and the Project was later surrendered.

Anglo American PLC has also explored the region, primarily for nickel and copper sulphide mineralisation, but their soil geochemical programs included a large multi-element analytical suite suitable for gold exploration. Anglo American surrendered their tenements following a decision to reduce global exploration expenditure.

The Company believes the geological setting may have some affinity with intracontinental "hot-spot" epithermal gold mineralisation, rather than the more common island arc setting found elsewhere along the Pacific Rim. Examples of this style are deposits in the northern Nevada region, including the Sleeper Deposit, with high, or "bonanza", gold grades from shallow crustal emplacement.

Cassini has compiled all previous exploration into a consolidated database and utilised public geological and geophysical datasets to assist with geological interpretation and targeting. This program marks the beginning of the Company collecting new data to close the gaps in the existing data sets. The Company has demonstrated expertise in operating in the region and continues to operate all field activities at the adjacent West Musgrave JV nickel and copper Project.



For further information, please contact:

**Richard Bevan**  
Managing Director

Cassini Resources Limited  
Telephone: +61 8 6164 8900  
E-mail: [admin@cassiniresources.com.au](mailto:admin@cassiniresources.com.au)

## **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 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, and the Yarawindah Nickel - Copper - Cobalt Project (CZI 80%), both 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 19 February 2018 and 14 July 2016 continue to apply and have not materially changed.