



CASSINI
RESOURCES LIMITED

ASX Release (CZI)
20 February 2018

West Musgrave Exploration Program About To Commence

HIGHLIGHTS

- **Circa \$4m exploration program to commence as part of OZL funded Earn-in/JV, with additional \$4m in next Stage**
- **Testing high value targets to support Nebo-Babel development**
- **Initial targets to include:**
 - **Yappsu Prospect: A Nebo look-a-like – 2.55m @ 2.42% Ni, 0.48% Cu massive sulphide within 44.3m @ 0.49% Ni 0.48% Cu.**
 - **High-grade extensions at Babel: BW3 – 25.1m @ 0.94%Ni 0.94% Cu**
 - **One Tree Hill Prospect: Follow-up 3.2m @ 2.16% Cu, 0.58% Ni massive sulphide within 34m @ 1.05% Cu**
 - **Surface and downhole EM programs designed to generate new targets**
- **Cassini remains manager of exploration activities**
- **Drilling to commence late March/ early April**

Cassini Resources Limited (ASX:CZI) ("Cassini" or the "Company") is pleased to provide an update on exploration targets and activities at the West Musgrave Project ("WMP" or the "Project") in Western Australia. The Project is entering the second stage of the Earn-in/JV Agreement with OZ Minerals Limited (ASX:OZL) ("OZ Minerals") and comprises a \$15M Pre-Feasibility Study for the Nebo-Babel deposits, with a concurrent exploration program of \$4M. A further \$4m is also available during the next stage of the Joint Venture, for a total minimum of \$8M exploration spend over a maximum time of 2.5 years.

Exploration provides potential step-change value drivers

The Nebo-Babel Scoping Study was completed in mid-November 2017 and pointed to a long life, low cost, open pit mine. A number of opportunities to further improve the project economics were identified, as well as recognition of the on-going role exploration will play in the development of a multi-decade mine camp.

The West Musgrave JV partners have a strategic goal of identifying additional high-value ore to complement the development of the Nebo-Babel Deposits. To achieve this, the Company has a number of priority targets with the potential for providing high-grade nickel and/or copper mineralisation. The immediate priorities for 2018 will be to follow-up the One Tree Hill discovery made in 2017, the Yappsu Prospect, a "Nebo look-a-like", and high grade extensions identified at Babel.

The Company expects this to be the start of a long and successful exploration campaign that will ultimately support the project beyond the development of the Nebo-Babel deposits. With over 40km of strike (Figure 1) there are numerous opportunities for further discovery.

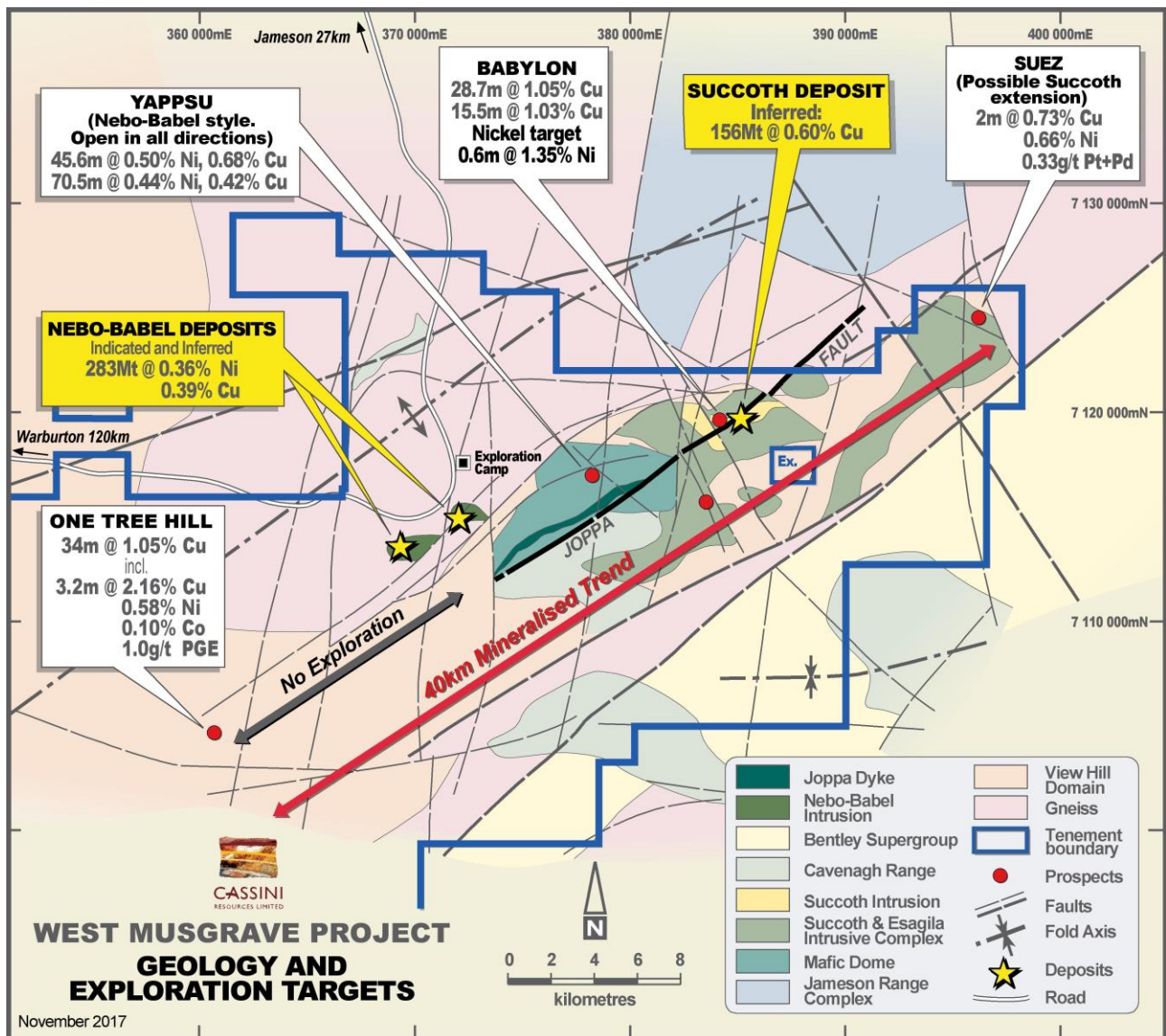


Figure 1 Regional geology, deposits and highest priority exploration targets.

Yappsu Prospect

Following extensive review of historical drill and geophysical databases, the Yappsu Prospect has been identified as a priority exploration target. Discovered in 2009, drilling initially targeted a surface moving loop electro-magnetic (MLEM) anomaly, with several holes intersecting a thick zone of disseminated mineralisation and importantly, including zones of high-grade massive to breccia nickel sulphides. Platinum and palladium grades are significantly higher than Nebo and Babel and are potentially indicative of a higher tenor system.

Review and remodelling of the existing down-hole EM (DHEM) data resulted in a best fit to the data comprising three conductive plates (Figure 2). Importantly, the modelling indicates the known drill hole intersections of conductive massive sulphide from Yappsu represent intersections which have just clipped the margins of the modelled plate anomalies. Plate B in Figure 2 has no drill hole pierce point, and is thus completely untested. The implication of this re-modelling exercise is that the core zones of the plates, all of which exhibit high modelled conductance, may consist of thicker and higher grade massive/matrix sulphide mineralisation. Confirmation of this by drill testing could result in a significant upgrading of Yappsu. Concurrently, a new high-powered MLEM survey will be employed to identify new conductors along strike and down plunge, providing greater coverage and penetration than historical systems.

Table 1. Yappsu Significant drill intercepts.

HOLE ID	East	North	RL	Dip	Azi	EOH (m)	From (m)	Intersection			
								Width (m)	Ni %	Cu %	PGE g/t
WMN4002	378650	7114800	481	-65	187	660.9	467.4	45.6	0.50	0.68	0.50
						Incl.	469.4	2.0	2.49	0.68	1.54
WMN4030	378570	7114722	477	-62	166	579.8	402.0	44.25	0.49	0.48	0.32
						Incl.	405.6	2.55	2.42	0.48	0.88
WMN4031	378490	7114959	470	-65	162	678.6	538.5	70.5	0.44	0.42	0.27
						Incl.	549.1	2.65	1.98	0.50	0.19

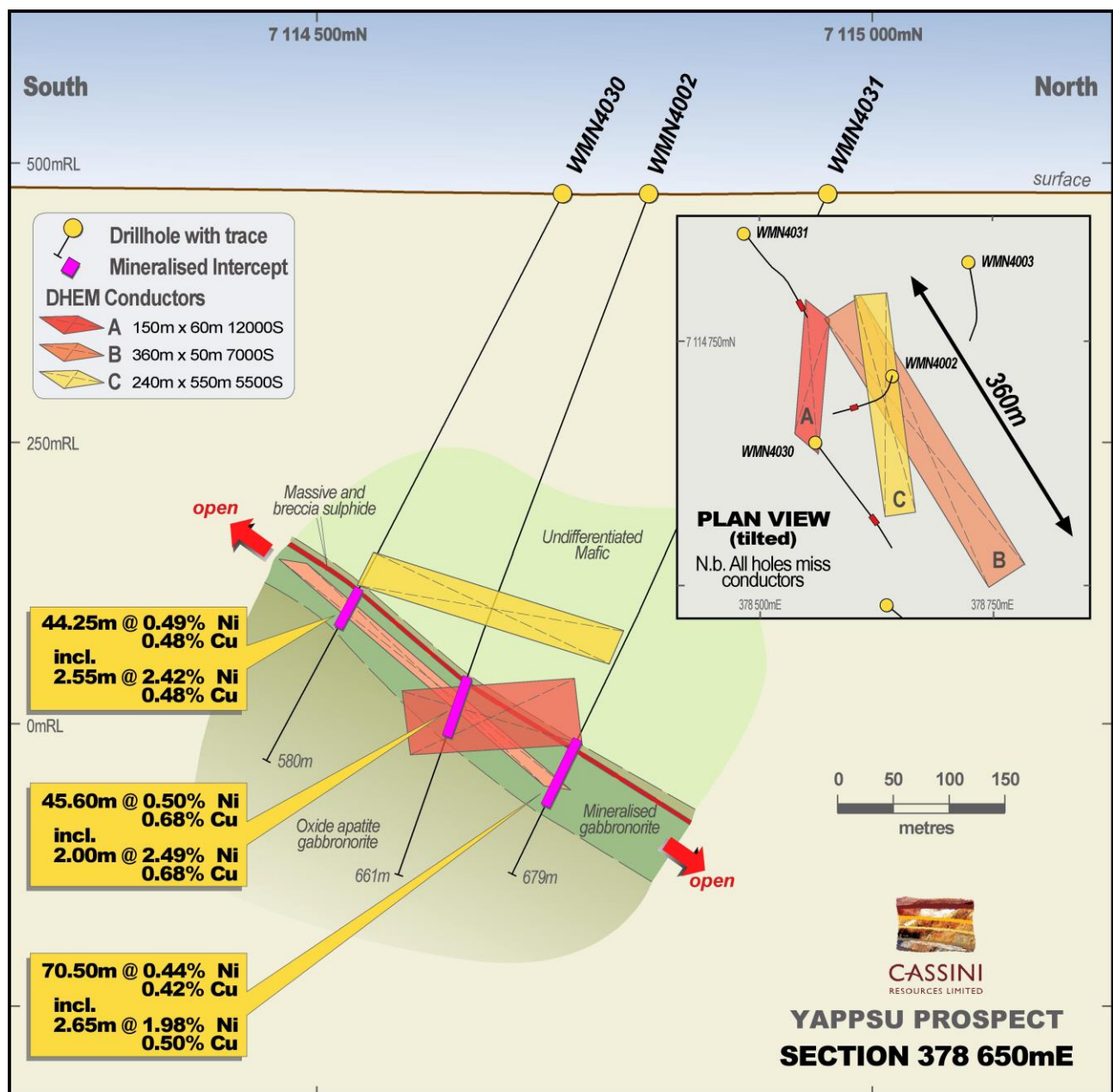


Figure 2. Yappsu section showing conductors and mineralised intersections.

Babel – BW3 Conductor

While development studies are underway at Nebo-Babel, a number of potential opportunities to find high-grade extensions to mineralisation will also be tested. The BW3 conductor is a DHEM anomaly generated from hole WMN4049 which intersected 25.1m @ 0.94% Ni & 0.94% Cu. BW3 is the highest conductance DHEM plate in the entire Babel deposit and strikes over 300m, extending 230m to the west of WMN4049 which has not had any further drill testing. The limit to the extent of the BW3 plate model is only constrained by distance from adjacent holes. Therefore, there is no conceptual reason why this mineralisation could not continue down-plunge.

The BW3 conductor is interpreted as an extension of the Startmeup Shoot, a shallow, high-grade mineralised zone located on the northwest margin of the Babel deposit. The 2017 RC drill programme targeted several EM features to the west of the Startmeup shoot with limited success. Subsequent interpretation has identified a potential north-trending fault, that has down-thrown the Startmeup shoot in the west to the location where mineralisation was intersected in WMN4049 (Figure 3).

While the BW3 target is a relatively deep occurrence, its high-grade nature may provide an economic underground mining option.

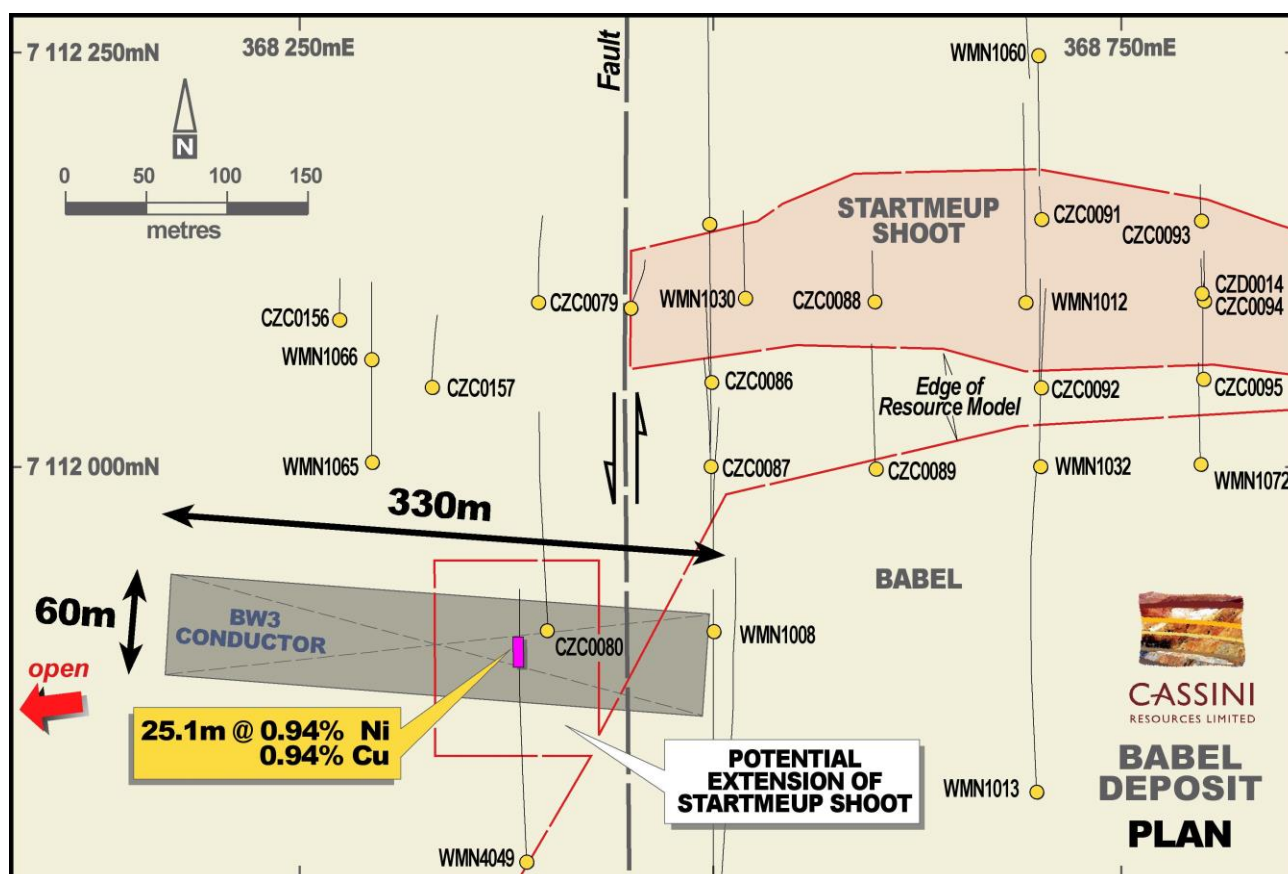


Figure 3. Babel BW3 conductor and potential Startmeup Shoot offset.

One Tree Hill Prospect

In early 2017, the Company announced the discovery of significant copper mineralisation at One Tree Hill, approximately 13km southwest of Nebo-Babel. This was only the 5th hole at the prospect targeting an off-hole conductor from an earlier hole drilled by Cassini in 2015.

Drill hole CZD0017 intersected a massive sulphide zone returning 3.2m @ 2.16% Cu, 0.58% Ni, 0.10% Co and 1.0g/t PGE within a broader disseminated zone of 34m @ 1.05% Cu + 0.5 g/t PGE. An upper or hangingwall zone returned an intercept of 13.4m @ 0.85% Cu from 129.6m, including 1.6m @ 2.76% Cu

from 134.9m (Figure 4). Almost the entire hole is copper anomalous (>250ppm) with numerous spikes of strong PGE anomalism (~0.1 g/t).

The significant widths and particularly concentrations of PGEs which are associated with >30m Cu intersection are all considered hallmarks of a much larger magmatic mineralised system. Mineralisation is open in most directions and therefore DHEM and surface MLEM will be completed initially to assist with drill targeting.

Although Ni concentrations in the massive sulphides at One Tree Hill are low, presence of higher grade Ni zones within a potentially much larger mineralised system are possible, as has previously been invoked for the Succoth deposit.

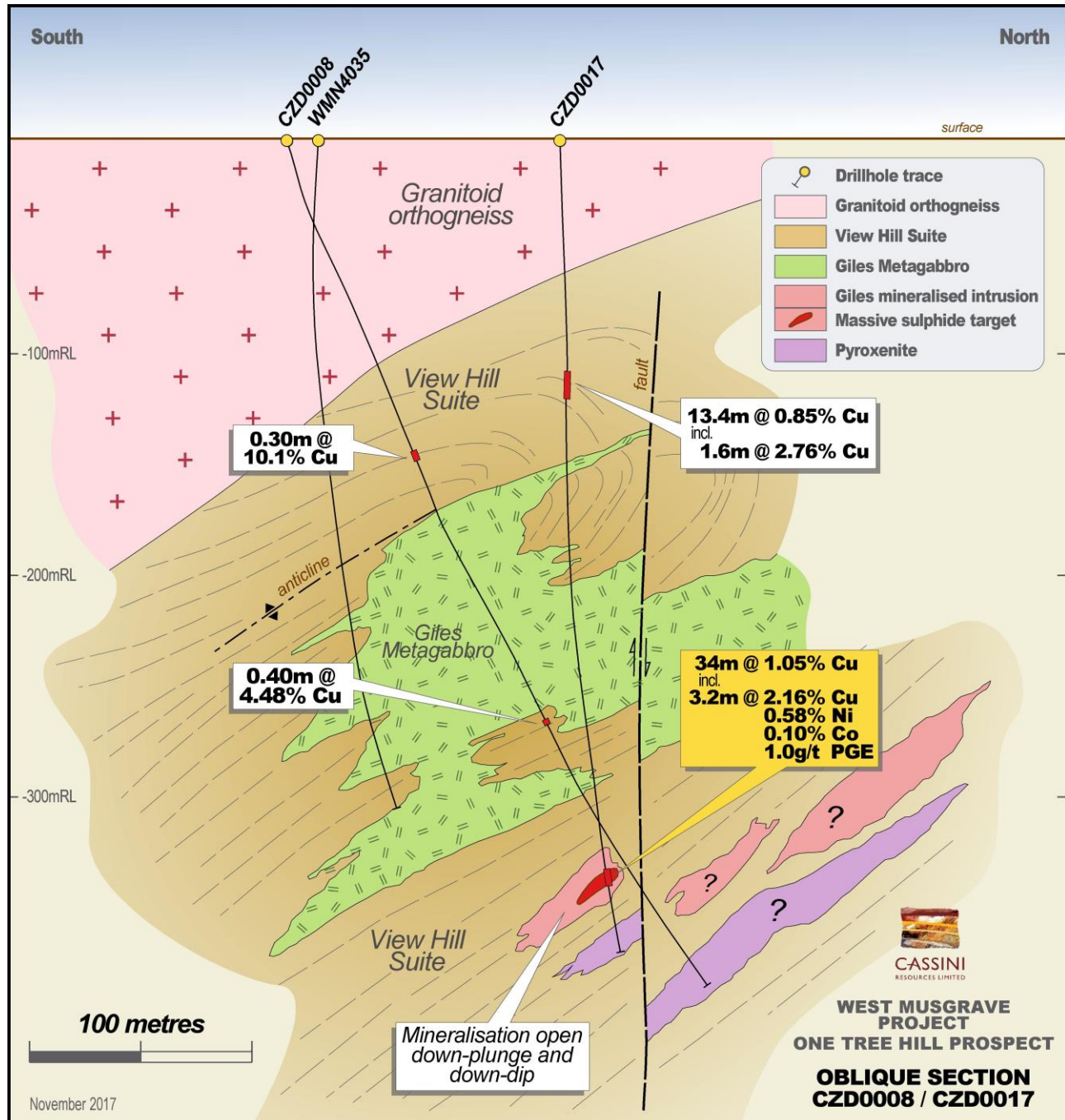


Figure 4. One Tree Hill Prospect interpreted geology.

Work Program

Cassini is currently finalising work programs and preparing to re-open the field camp for the 2018 season. Drilling contractors are expected to mobilise by the end of March. Exploration programs will be run on a campaign basis while resource infill drilling is undertaken at Nebo and Babel for the benefit of the PFS. Surface EM and DHEM surveys will also be undertaken at each prospect and could potentially generate new targets to be tested immediately.

Further interpretation of Succoth is underway to determine the potential for high-grade mineralisation and/or nickel mineralisation. The large copper resource at Succoth provides several development options to complement Nebo-Babel and provides enormous leverage to the copper market.

The Company is continuing to review the historical drill database, containing over 225,000m, to generate the next round of exploration targets.

For further information, please contact:

Richard Bevan
Managing Director

Cassini Resources Limited
Telephone: +61 8 6164 8900
E-mail: 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 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 3 April 2014, 1 May 2017, 14 November 2017 continue to apply and have not materially changed.