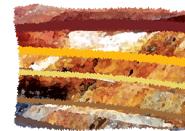


# Driving down Battery Road

Australian Nickel Conference, 15 October 2019

RICHARD BEVAN, MANAGING DIRECTOR



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RESOURCES LIMITED



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## Competent Persons Statement

The information in this statement which relates to the Mineral Resource data, including tenement information, drilling, sampling, and analytical results, geology interpretation, and selection of cut-off grade has been overseen by Mr Greg Miles who is a full-time employee of Cassini Resources Ltd and a Member of the Australasian Institute of Geoscientists. Mr Miles has sufficient relevant experience to the style of mineralisation and type of deposit under consideration and to the activity for which he is undertaking to qualify as a Competent Person as defined in the JORC Code, 2012 Edition.

The information in this report that relates to Nebo-Babel Mineral Resource estimate is based on information compiled by Mark Burdett, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (224519). Mark Burdett is a full-time employee of OZ Minerals Ltd. Mark Burdett has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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 2012). Mark Burdett consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Mark Burdett BSc (Geology), has over 18 years of relevant and continuous experience as a geologist including significant experience in Base Metal deposits. Mark Burdett has visited the site in August 2018.

Please refer to Cassini's ASX announcement of 7 December 2015 for the Competent Person Statement and JORC disclosure tables relating to the Succoth Mineral Resource Estimate.

Cassini 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 continue to apply and have not materially changed.

The nickel equivalent (NiEq) and copper equivalent (CuEq) calculations take into account resources, reserves, and grades as stated in latest ASX releases and assumes 100% payability for all metals recovered generating a commodity equivalent value for Ni, Cu, Co, Zn, Au, Ag, Pb and Mo. Only projects with JORC 2012 resources and reserves have been used. Nickel equivalent grade =  $\text{Ni}\% + \text{Cu}\% \times 0.56$ . Copper equivalent grade =  $\text{Cu}\% + \text{Ni}\% \times 1.97$ . Based on assumed recoveries of 73% for Cu and 59% for Ni and commodity prices shown below. It is the Cassini's opinion that all the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold. NiEq grades have been published to enable a comparison to similar sized nickel sulphide assets. CuEq grades have been published to enable a comparison to similar sized copper assets.

## Forward Looking Statements

Some statements in this report regarding estimates or future events are forward-looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward-looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected", "estimated", "may", "scheduled", "intends", "anticipates", "believes", "potential", "could", "nominal", "conceptual" and similar expressions. Forward-looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward-looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward-looking statements may be affected by a range of variables that could cause actual results to differ from estimated results, and may cause the Company's actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward-looking statements. These risks and uncertainties include but are not limited to liabilities inherent in mine development and production, geological, mining and processing technical problems, the inability to obtain mine licenses, permits and other regulatory approvals required in connection with mining and processing operations, competition for among other things, capital, acquisitions of reserves, undeveloped lands and skilled personnel; incorrect assessments of the value of acquisitions; changes in commodity prices and exchange rates; currency and interest rate fluctuations; various events which could disrupt operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions; the demand for and availability of transportation services; the ability to secure adequate financing and management's ability to anticipate and manage the foregoing factors and risks. There can be no assurance that forward-looking statements will prove to be correct.

The production targets referred to in this announcement are based on 52% In-pit Indicated Resources and 48% Inferred Mineral Resources. The Inferred Resources do not determine the economic viability of the project, and approximately 80% of resources within the optimisation pit shells are in the Indicated Category during the pay-back period. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production targets themselves will be realised.

Statements regarding plans with respect to the Company's mineral properties may contain forward looking statements. Statements in relation to future matters can only be made where the Company has a reasonable basis for making those statements.

# Corporate Snapshot

## CAPITAL STRUCTURE

ASX Code	<b>CZI</b>
Frankfurt Stock Exchange code	<b>ICR</b>
ASX Share price (close 11-Oct-2019)	A\$0.085
Shares outstanding	415.5M
Options on Issue	29.72M
<b>Market capitalization</b>	<b>A\$35.3 M</b>
Cash (30 Jun 2019)	A\$8.0M

## MAJOR SHAREHOLDERS (22 Sept 2019)

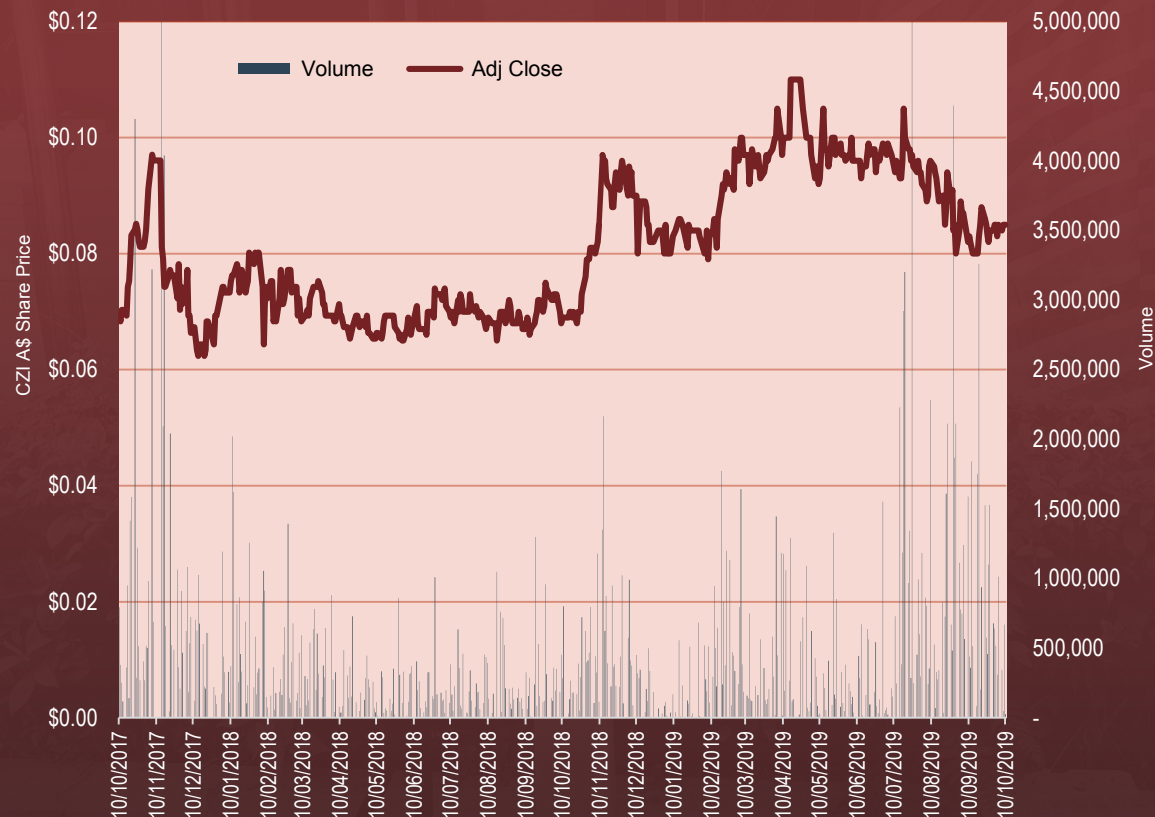
Buxiao Yu	7.65%
Atasa Holdings Pty Ltd	7.49%
Tinci (HK) Limited	6.02%
Mr Colin Iles	5.53%
Mr Sufan Siau & Lusmiati Marsudidaja	5.12%

## CASH EXPENDITURE - next 12 months

Corporate	A\$1.5M
Exploration (100% CZI Projects)	A\$1-\$1.5M
Forecast cash 30 June 2020	circa A\$5M



## SHARE PRICE PERFORMANCE - 24 month CZI Price & Volume



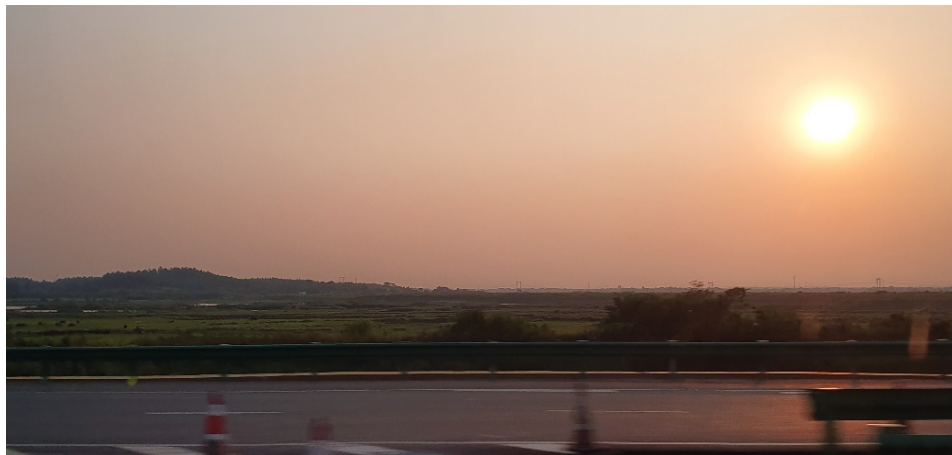


# Cassini insights on the China EV story



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- ✓ Rapid urbanisation and air quality concerns



- ✓ Licensing subsidies for Electric Vehicles





# China EV Adoption well ahead of Australia



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## ✓ Charging stations on regional highways



## ✓ Electric Buses & Taxis



Running costs for EV taxi ~75-80% less than ICE

## ✓ New Tesla factory in Shanghai



## ✓ Electric Trucks





# Tinci Material Technology Co

- Guangzhou Tinci Materials Technology Co. Ltd (002709.SHE, market capitalisation of ~A\$2.2b)
- Chemical manufacturer with ~2,500 employees in multiple facilities across China
- Substantial shareholder of CZI with circa 6%
- One of the largest battery electrolyte producers in China
- Strong customer relationships with battery manufacturers. Major providers of product to:
  - » CATL
  - » LG
  - » Aviation Industry Corp of China (AVIC)
- Actively looking to secure future supply of high quality nickel product



中小企业能办大事

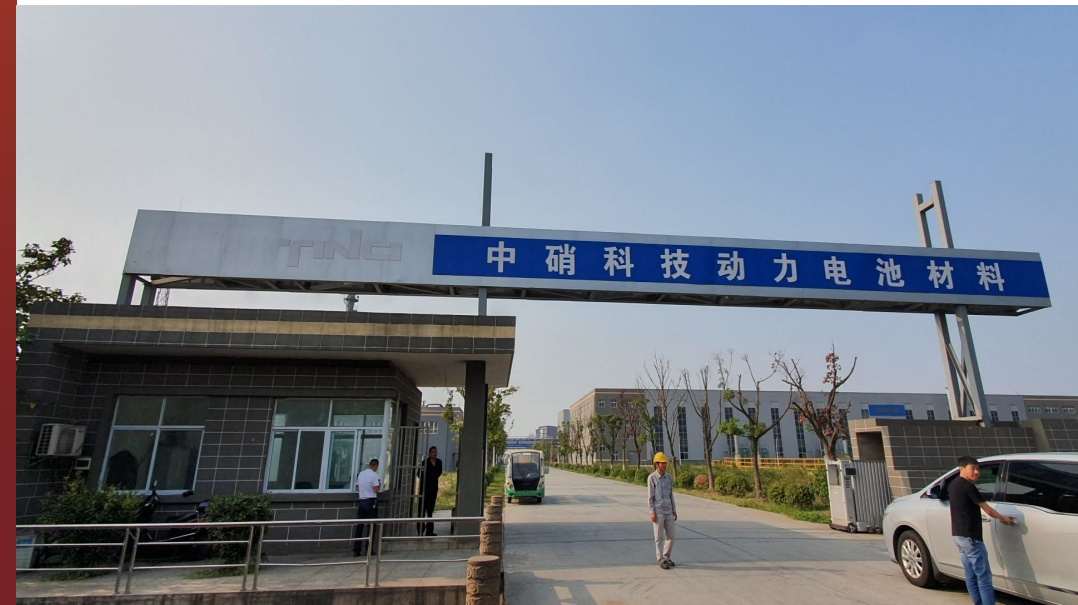


2018年10月24日下午，习近平来到广州开发区，同在场的中小企业负责人亲切交谈，肯定他们在自主创新方面取得的成就。

天赐材料董事长徐金富（右一）



- Rapidly growing Hi-tech business
- Recently acquired nickel sulphate plant in Jiujiang, Jiangxi Province China
- Fully licenced and permitted – a key barrier to new entrants
- Refurbishing and expanding facility with goal of being operational in early 2021



# Uniquely positioned to capitalise on growing nickel sulphate demand

## BHP joins battery revolution with \$US43m Kwinana plant

Stuart McKinnon and Nick Evans, Kalgoorlie

The West Australian

Thursday, 10 August 2017

## Independence moves closer to producing battery ingredients at Nova

Peter Milne

The West Australian

Tuesday, 2 April 2019

## Problem child Nickel West gets back in BHP's good books

Stuart McKinnon

The West Australian

Saturday, 3 August 2019

## Born-again BHP nickel unit eyes battery market

Brad Thompson

Australian Financial Review

August 2<sup>nd</sup>, 2019

## Nickel sulphate demand to exceed 900,000t by 2029

Jacqueline Holman

Mining Journal

7 June 2019





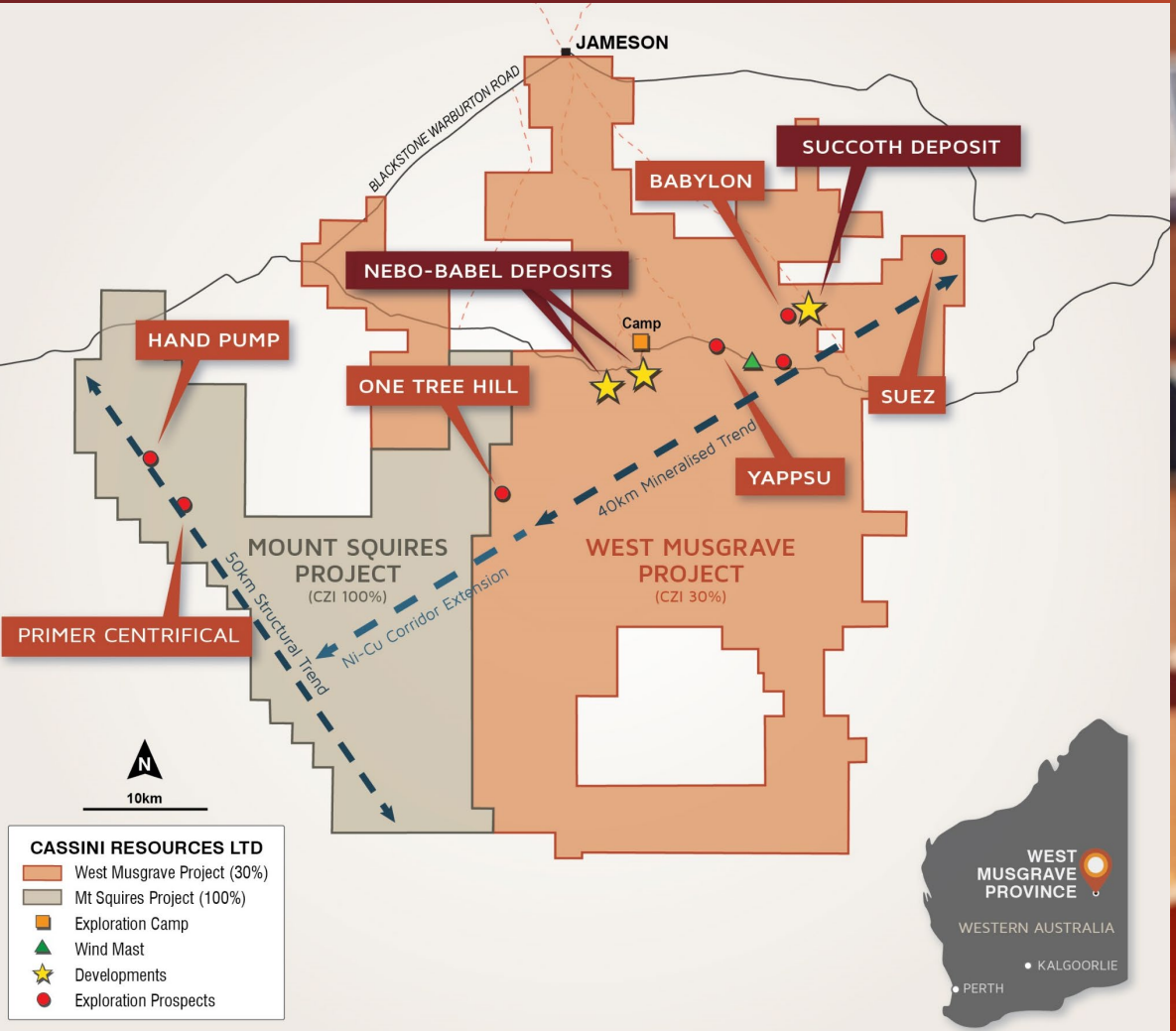
# Cassini Resources

## On a drive down Battery Road

- ✓ WMP is one of the largest, active nickel-copper sulphide development projects globally
- ✓ Strong Joint Venture partner  
**OZ Minerals (ASX:OZL)**
- ✓ OZL will spend **>A\$50M** delivering high quality PFS in early 2020
- ✓ Cassini **not required to fund** until “Decision to Mine” (mid 2021)
- ✓ Advancing **nickel sulphide exploration** targets at Yarawindah Brook



# West Musgrave Project (Ni-Cu-Co-PGE)





# Nebo-Babel PFS Update

Comparison to Further Scoping Study – **Significant Improvements with more to come...**

## Life of Mine



**>15 years**

Plus potential for resource extensions + inclusion of Succoth

## “Bulk Separation”



Processing  
**Improved Recoveries  
& Coarser grind**  
= reduced Opex

## Metal Recoveries



**Ni up 8%**  
Ni con: 10.9% @ 67.4%  
**Cu up 12%**  
Cu con: 26.4% @ 84.6%

## Power Solution



**Reduced demand**  
55MW  
Solar-wind-diesel

## Innovation



Opportunities in new  
tech, remote ops,  
logistics



# World-class Stakeholder Engagement



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## Continuing engagement with stakeholders to add value through PFS & beyond

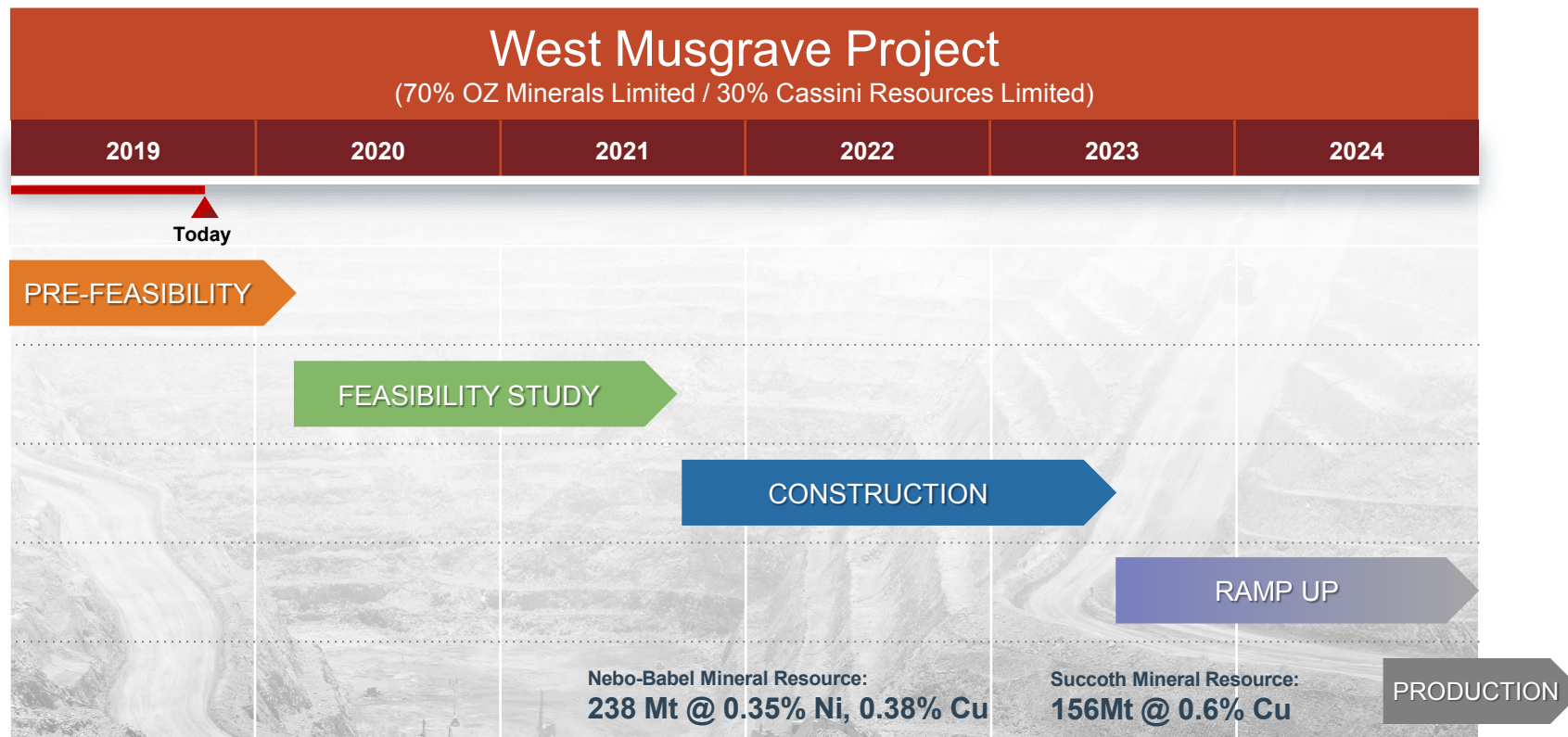
- » Social Impact and Opportunities Assessment
- » Consultation with local indigenous community, Ngaanyatjarra Council and government agencies
- » Best practice environmental studies to assist regulatory approvals





# Indicative Project timeline

## Nebo-Babel Development



# Cassini: Driving exploration success at WMP

## Nebo-Babel is just the start ...

- **Succoth** – new interpretation provides resource upside
- **One Tree Hill** – discovery of massive sulphides in early stage prospect
- **Yappsu** – high-grade shoot of Ni-Cu, still open
- **Large legacy database** provides opportunities for further discovery

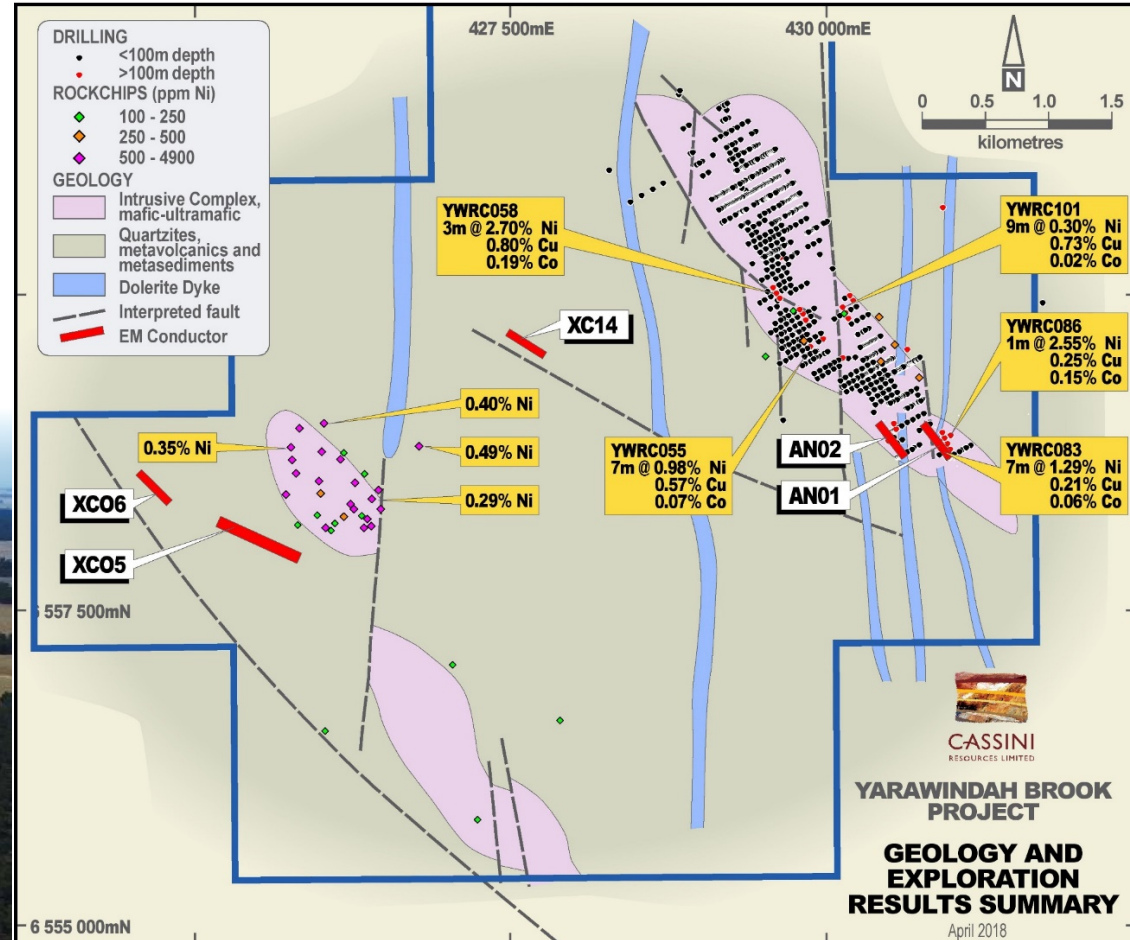




# Yarawindah Brook Ni-Cu-Co Project (CZI 80%)

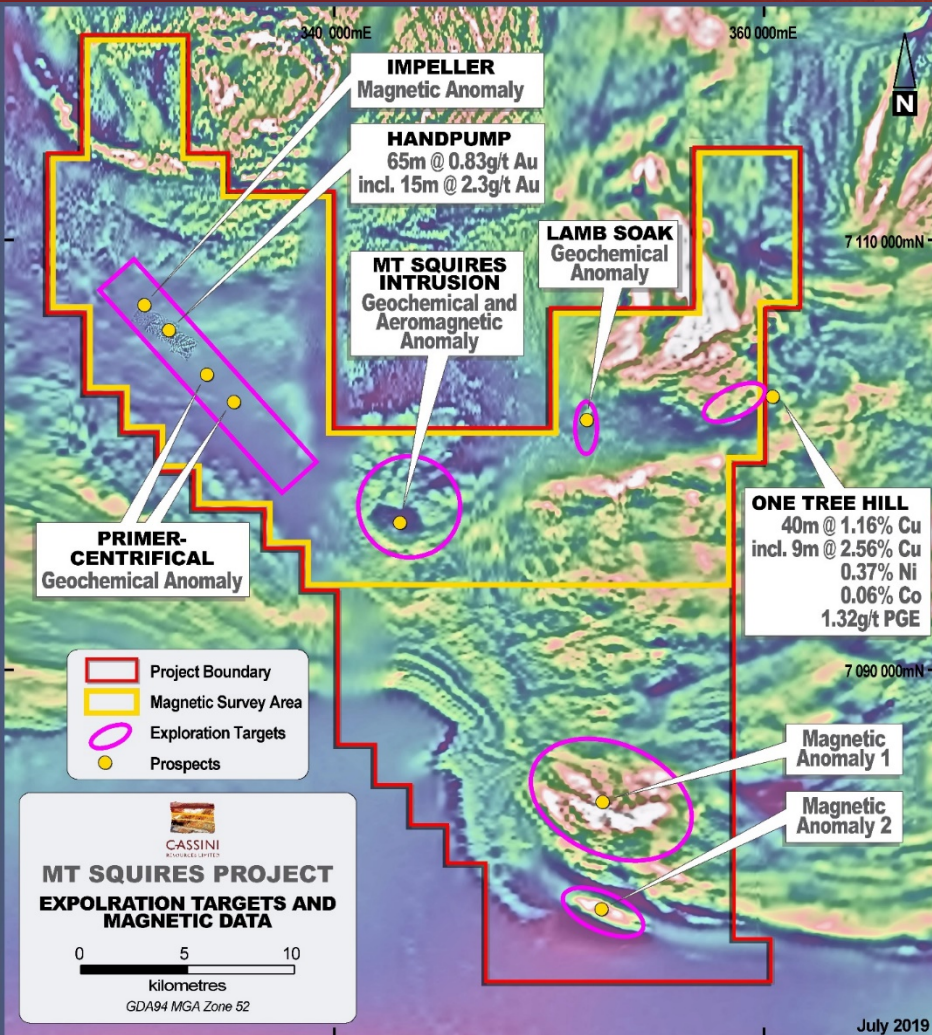
## Exploring for Nickel Sulphides on Perth's Doorstep

- Under-explored magmatic Ni-Cu system
- Last drilled 2007:
  - » 7m @ 1.29% Ni, 0.21% Cu, 0.06% Co
  - » 3m @ 2.70% Ni, 0.80% Cu, 0.19% Co
- All clearances now received
- Field program in December 2019 to test new conductors





# Mount Squires Gold Project (CZI 100%)



## Large scale greenfield gold project

- The only active gold exploration project in the Musgrave Province
- Leveraging IP and operational capability in an under-explored region
- September drill results include:
  - » 20m @ 1.27g/t Au from 23m, including **7m @ 2.54g/t Au**
- Now recognised Ni-Cu potential extensions from One Tree Hill



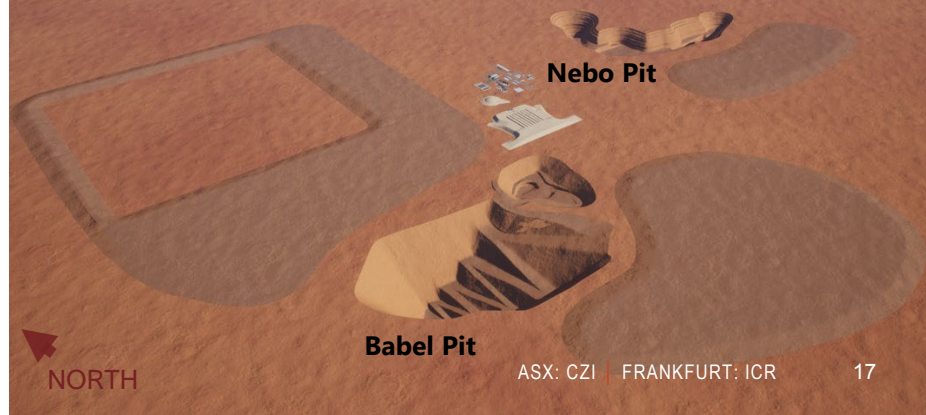


# Realising Value

- ✓ WMP is a large scale, long life Ni + Cu sulphide project in a safe, first world jurisdiction
- ✓ De-risked by JV partner **OZ Minerals** –a mining operator with strong financial capability
- ✓ **Re-rate opportunity** with delivery of positive PFS
- ✓ **Key shareholders** within China's battery industry
- ✓ Progressing **multiple funding options**
- ✓ Progressing **early stage exploration** projects within our means
- ✓ Leveraged to positive Ni and Cu price outlook and **emerging battery metals thematic**



The PFS is considering multiple design options. —  
This diagram is just one of the options being considered.







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**AMEC**  
ASSOCIATION OF MINING  
AND EXPLORATION COMPANIES  
2019 MEMBER



# Nebo-Babel PFS Update

## Comparison to Further Scoping Study – Significant Improvement

	FSS	PFS Update	PFS Commentary
<b>LOM</b>	8	>15 (+Succoth)	Additional 50km infill drilling to deliver LOM extension and maiden reserve
<b>Throughput</b>	10Mtpa “Sequential”	10Mtpa “Bulk”	Bulk separation flowsheet provides better recoveries with lower operating costs
<b>Ni Production</b>	20-25ktpa	In line with FSS	Cassini retains 30% of product
<b>Ni C1 Costs</b>	US\$2.00-2.30/lb	-	40% of cost derived from power generation
<b>Ni Con grade &amp; recovery</b>	10.8% Ni @ 59.0%	10.9% Ni @ 67.4%	Low impurities, further recovery improvements expected
<b>Cu Production</b>	25-30ktpa	In line with FSS	Improved logistics solution to Esperance
<b>Cu C1 Costs</b>	US\$0.20-0.40/lb	-	Highly leveraged to comminution and power opportunities currently under investigation
<b>Cu Con grade &amp; recovery</b>	22.7% Cu @ 72.6%	26.4% Cu @ 84.6%	Quality product with potential for further improvement
<b>Capex</b>	A\$730-800M	-	10Mtpa anchors FSS order of magnitude
<b>Power</b>	60MW solar-diesel	55MW solar-wind-diesel	PPA process underway – Confidence in lowering cost assumptions used in FSS
<b>Innovation</b>	Nil	“...a modern mine”	Opportunities: remote operations, autonomous mining, new flotation technology...etc

# Nebo-Babel PFS - Key Opportunities

Priority	Detail	Opportunity / Risk
1 <b>Comminution</b>	Complete 2nd pilot test work on Loesche mill in Germany before inclusion in base case	<p>Potential for 30% reduction in power for similar capital cost of SAG / Ball Mill circuit</p> <p>Very common technology used in cement industry, never before applied to base metal comminution</p>
2 <b>Processing</b>	Trials of Woodgrove and HydroFloat Cell technology	Reduced size/footprint and air consumption compared to conventional float cells, reducing capex & opex
3 <b>Resource &amp; Reserve update</b>	Additional 50km of infill drilling completed since April '19 resource update	Targeting >80% Indicated resources for LOM including Maiden Reserve.
4 <b>Power</b>	<p>Currently 70-80% renewable penetration</p> <p>Large number of proposals received. Identify partner to deliver additional cost savings</p>	<p>Options to further reduce reliance on high cost fossil fuels</p> <p>Leverage to dynamic renewable energy sector</p>
5 <b>Workforce Planning</b>	Evaluation of Remote Operations Centre and Autonomous Mine Haulage	<p>Potential to reduce labour costs and infrastructure from site</p> <p>Maintaining balanced social responsibilities</p>
6 <b>LOM extensions</b>	Succoth and other exploration	Will underpin further reduction in power costs through longer amortisation of capital costs