

ASX Release (CZI) 17 July 2018

COMPANY PRESENTATION

Cassini Resources Limited (ASX: CZI) is pleased to lodge a copy of the presentation that Managing Director Mr Richard Bevan will be presenting at the Melbourne Mining Club Cutting Edge Series this evening, and at the Noosa Mining Conference on Thursday 19 July 2018.

For further information, please contact:

Richard Bevan Managing Director

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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.



Company Update JULY 2018

www.cassiniresources.com.au

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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 which relates to the Nebo-Babel Mineral Resource estimation and classification has been prepared by Mr Andrew Weeks who is a full-time employee of Golder Associates Pty Ltd and a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Weeks 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. Both Mr Miles and Mr Weeks consent to the inclusion in this report of the matters based on information in the form and context in which it appears.

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 = $Ni\% + Cu\% \times 0.56$. Copper equivalent grade = $Cu\% + Ni\% \times 1.97$. 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 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 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 statem

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.

Company Highlights



- Rapidly progressing a world class nickel + copper sulphide project with ASX100 partner
 OZ Minerals (ASX:OZL)
- ✓ One of the few new sulphide projects of scale being developed globally
- Significant opportunity to add value to project through Prefeasibility Study and continued exploration
- Base metal market dynamics continue to improve with new demand for high quality products
- Progressing Cassini owned projects in gold, zinc & nickel-copper-cobalt in WA





Developing Australia's largest nickel & copper sulphide project through a A\$36m Earnin/JV

CAPITAL STRUCTURE		
Australian Stock Exchange (ASX) code		CZI
Frankfurt Stock Exchange code		ICR
ASX Share price (close 16-Jul-18)	Ą	\$0.072
52 week low / high	A\$0.049 / A	\$0.125
Shares outstanding	:	276.5M
Options on Issue		15.35M
Market capitalisation	A	\$19.9M
Cash (30-Mar-18)	/	A\$1.6M
Debt		Nil
Enterprise value	A	\$18.3M
MAJOR SHAREHOLDERS		·
MACA (ASX:MLD) ASX-listed mining contractor		10.8%
GR Engineering (ASX:GNG) ASX-listed engineerir	ng consultant	5.4%

on Engineering (AoA. Groc) Advaisted engineering consultant	0.470
Directors and Management	4.6%



Source: miracle – Orient Capital



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- High grade Ni-Cu-Co massive sulphides •
- "Walk-up" drill targets •

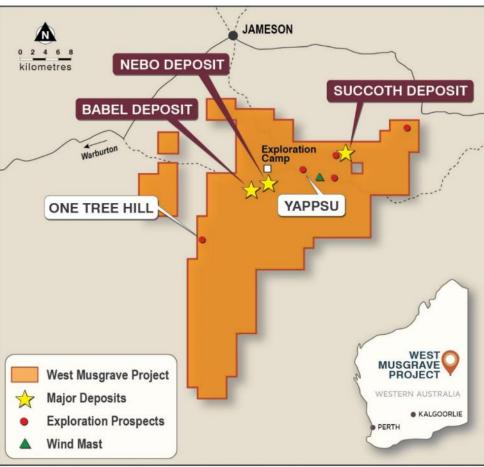
West Musgrave Project (WMP): Overview



Globally significant Ni and Cu deposits with significant exploration upside

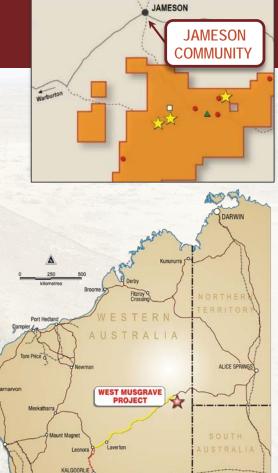
- Nebo-Babel discovered by Western Mining Corporation in May 2000
- Cassini acquired WMP from BHP Billiton in April 2014
- Commenced Earnin/ JV with OZ Minerals August 2016
- Significant regional landholding (>1,500 km²)
- Leveraging off significant historical exploration work





Project Access



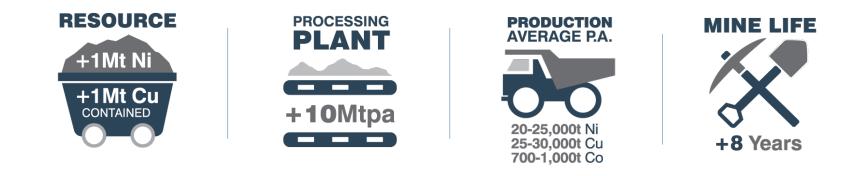


Eucla

Esperance

Nebo-Babel – Scoping Study Outcomes











West Musgrave Project camp

Current Status:

• 50+ people on site

CULS SAT

JAMESON

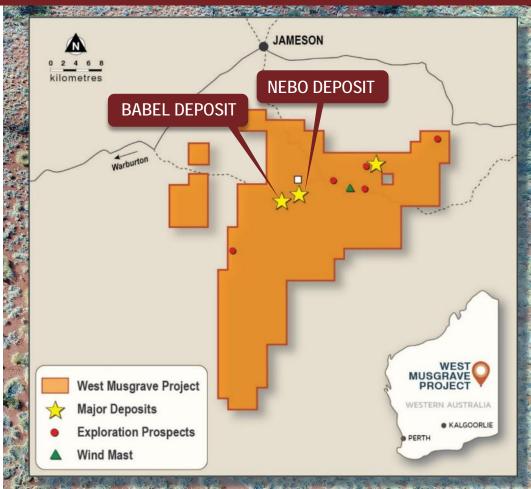
CAMP

- 2 Diamond rigs
- 3 RC rigs
- 1 Water bore rig
- Geophysics crew
- Environmental crew

Nebo-Babel Prefeasibility Study – work programs

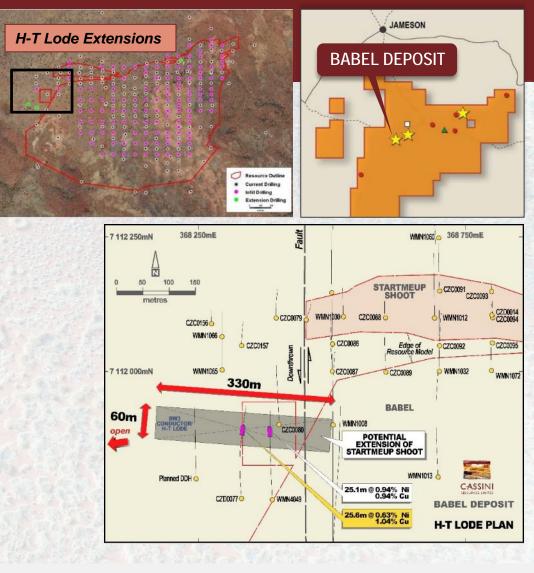
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- **40,000m Resource Infill** increase confidence leading to maiden Reserve
- Resource Extension drilling potential higher grade extensions of the existing resource
- **Metallurgy** Advanced test work to maximise metal recovery and reduce risk
- Hydrogeology Quantify groundwater resource through exploration drilling and pump tests
- **Renewable energy study -** baseline data collection from wind mast installation
- Improved mine scheduling and stockpile management
- Environmental surveys for mine permitting
- Consultation with key stakeholder groups

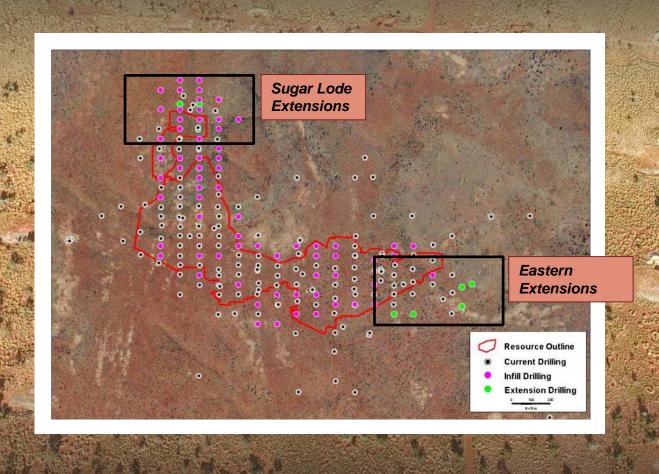


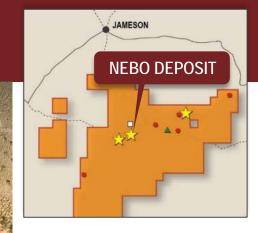
Babel Resource

- 27,000m Resource Drill out on nominal 100m x 50m centres
- Aiming to report maiden Reserve at end of PFS
- Resource Extension drilling opportunities to add high-grade mineralisation and options for development
- Early success at H-T lode 25.6m
 @ 0.63% Ni, 1.04% Cu
- Apparent fault off-set of Startmeup Shoot
- Mineralisation remains open along strike, follow-up drilling still to come



Nebo Resource





- 13,000m Resource Drill out on nominal 100m x 50m centres
- Aiming to report maiden Reserve at end of PFS
- Resource Extension drilling targeting high grade at Sugar Lode and Eastern Strike Extension

Metallurgy and Processing

- 5,000m PQ DD program yielding
 > 9t of sample
- Samples provide a full spatial representation across all ore types and grade ranges

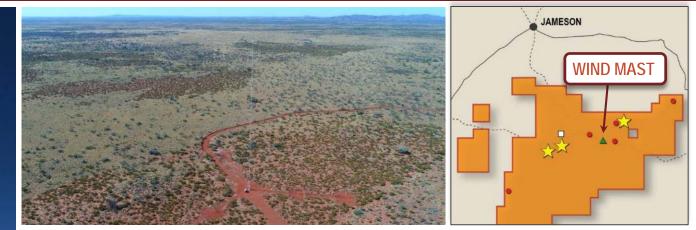
BABEL DEPOSIT

- Specific focus on lower grade material (~0.3%Ni, ~0.3% Cu)
- Optimisation of Scoping Study flow sheet targeting improvements in metal recovery
- Investigation of ore sorting potential
- Comminution testing
- Optimisation of concentrate properties
- Significantly reducing risk on processing



Prefeasibility Study - Opportunities to Add Value



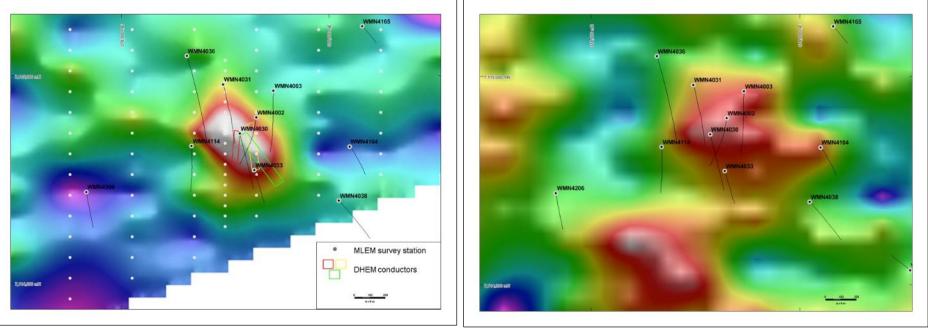


- Evaluation of renewable (wind) power to be combined with hybrid dieselsolar energy systems to further reduce power costs
- High-tech "Smart Mine" solutions to reduce capital and operating costs
- Metallurgical recovery and processing improvements
- Improved mine scheduling and stockpile management
- Assess the potential for Succoth and high-value exploration discoveries, such as Yappsu and One Tree Hill, to be included in development scenarios

WMP Exploration – Significant discovery opportunity remains



- Exploration program targeting high value mineralisation to support Nebo Babel development
- Significant areas where there has been no or ineffective exploration
- Success a function of improved geological understanding, commitment to the Project and improved technology (geophysics)

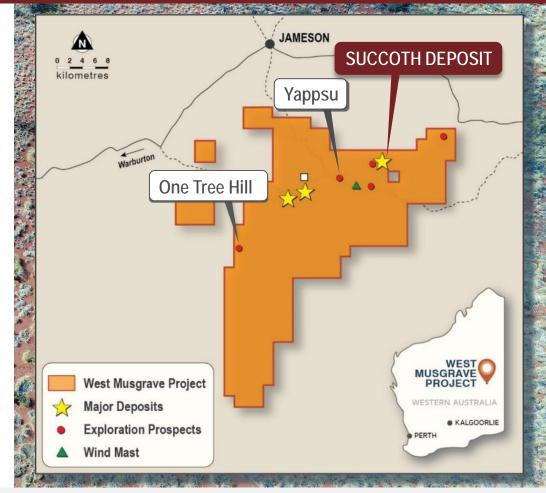


Yappsu - Squid MLEM 2018 - clear anomaly

Yappsu – Sampson MLEM image <u>2009</u> – noisy data

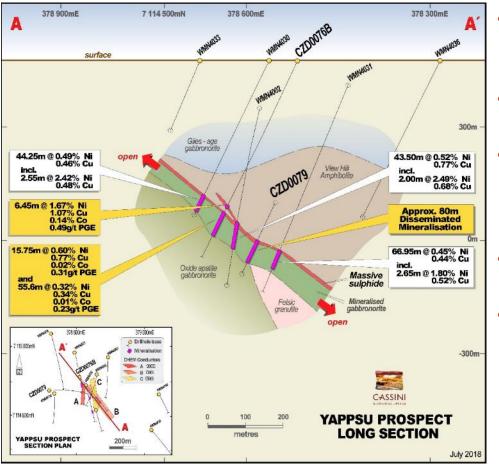
Priority exploration targets

- Exploration strategy is to identify additional high grade sources of ore to complement the Nebo-Babel mining operation
- Exploration program is managed by CZI and funded by OZL JV
- Ni + Cu mineralisation identified over 40km of strike
- Multi-commodity prospectivity Ni, Cu, Co, Au & PGE's
- Initial priority targets are Yappsu and One Tree Hill
- Drilling is underway





Yappsu Prospect – Early success

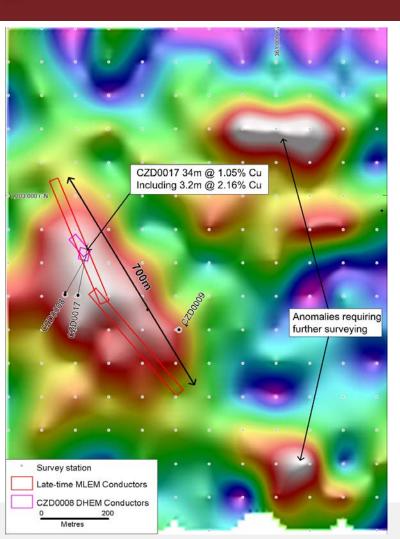


- Thick 78m zone of Ni, Cu, Co, PGE and gold mineralisation (CZD0076B)
- Highest PGE, Au and Co values at WMP to date
- A higher grade version of Babel – potentially a significant deposit in its own right
- Mineralisation open in all directions
- Drilling to continue after down-hole EM

Substantial discovery with positive implications for Project development



One Tree Hill Prospect



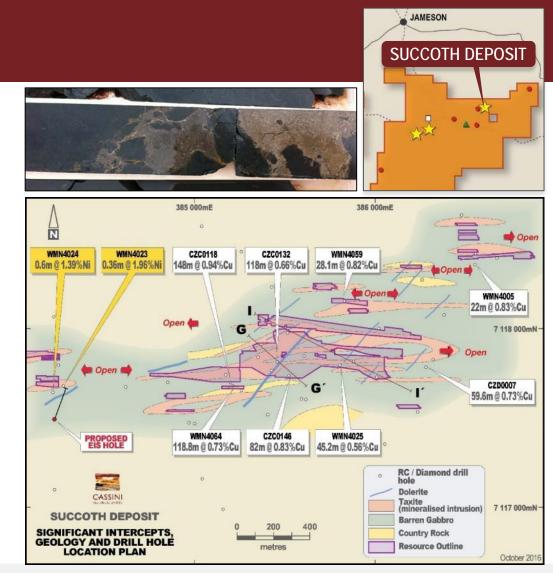
- Dec 2016, intersected two magmatic mineralised zones
- Widespread low level PGE and Cu anomalism - possible halo of a large system
- Potential for more high-value massive sulphide mineralisation
- Recent DH and ground EM identified 2 large conductors striking over 700m
- Initial program of 2 step out holes from CZD0017
- Diamond drilling now underway



Succoth Copper Deposit

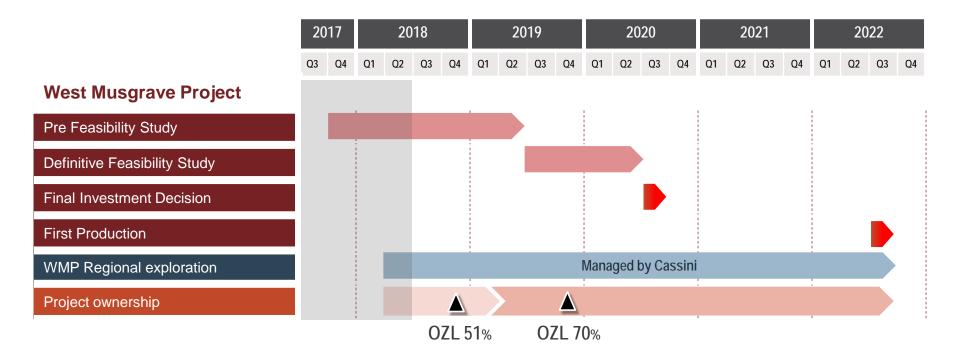
- Current Inferred resource of 156mt @ 0.6% Cu
- Not currently included in Nebo-Babel development plans
- Provides significant option to extend operations
- Excellent leverage to copper
- Exploration programs targeting:
 - higher grade, thick zones of mineralisation close to surface; and
 - chasing nickel mineralisation remains a focus

PHOTO TOP: WMN4023 – 226.1m: 1.96% Ni, 0.13% Cu 1.2 g/t Pt+Pd. Ni-rich massive sulphide from Babylon (hosted in late dolerite therefore remobilised, but proximal to source)



West Musgrave Indicative Schedule







Other Exploration Projects





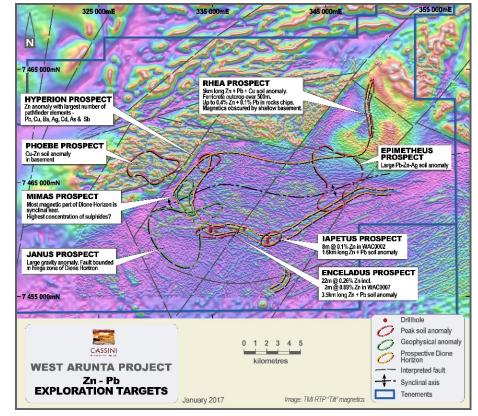


Multiple prospective zinc targets across a 35km prospective strike horizon

- Early-stage, sedimentary zinc exploration project

 First mover advantage due to minimal historical exploration in region
- Maiden drill program identified broad zones of sub-surface enrichment in zinc and associated elements
- Airborne geophysics completed
- Drilling likely August (pending rig availability)





Yarawindah Brook (Ni+Cu+Co+PGE) CZI option to earn 80%

WESTERN

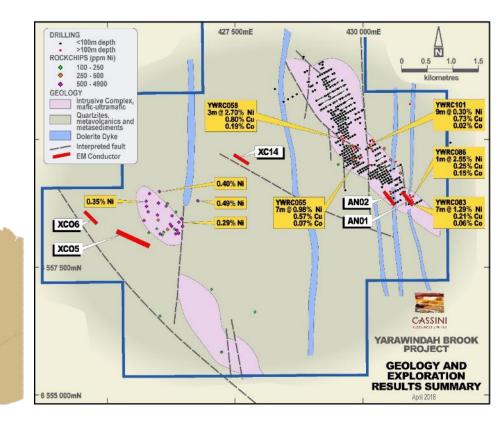
AUSTRALIA

YARAWINDAH PROJECT



Increasing exposure to critical EV and battery metals

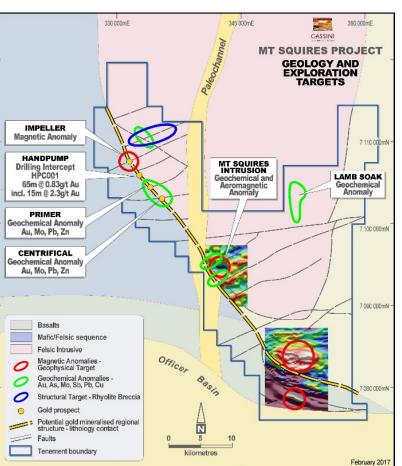
- Early stage massive Ni-Cu-Co-PGE sulphide project
- Significant intercepts not followed up
 - » 7m @1.29% Ni, 0.21% Cu, 0.06% Co
 - » 3m @ 2.70% Ni, 0.80% Cu, 0.19% Co
- New EM anomalies identified
- Anomalous surface rocks not tested no drilling
- Infrastructure advantages close to power, transport & water
- Applying learnings from WMP to a similar, but under-explored project



Mt Squires Project (Au) - 100% CZI

50km long structure with confirmed gold mineralisation

- Large-scale greenfields gold project
- Historical drilling identified significant mineralisation at the Handpump Prospect:
 - » 15m @ 2.3g/t Au from 31m, including 5m
 @ 4.7g/t from 34m
 - » 12m @ 1.3g/t Au from 25m, including 5m
 @ 2.0g/t from 25m
- Multiple new targets identified with no previous exploration
- On ground program scheduled Q4 2018









- Significant exploration programs underway at West Musgrave Project
 - » Exploration drilling underway at One Tree Hill
 - » Yappsu: Results for CZD0079, DHEM then follow-up drilling in August
 - » Results from Nebo-Babel resource extension program
- Prefeasibility study delivery expected Q2 2019 with anticipated move into DFS
- ✓ Visibility on Cassini funding options over next 3-6 months
- ✓ Drilling at Cassini's 100% West Arunta Zinc Project expected Aug/Sept





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2018 MEMBER





West Musgrave Project Indicated and Inferred Mineral Resources^{1,2,3}

Classification **Prospect** Tonnes (Mt) Ni (%) Cu (%) Co (ppm) Pd (ppm) Pt (ppm) Au (ppm) Nebo Indicated 37.8 0.49 0.44 211 0.04 0.08 0.07 Inferred 1.9 0.37 0.34 149 0.04 0.08 0.07 Total 39.7 0.48 0.43 208 0.04 0.08 0.07 Babel Indicated 73.9 0.36 0.41 132 0.06 0.10 0.09 Inferred 169.4 0.33 0.37 123 0.06 0.10 0.09 Total 243.3 0.34 0.38 126 0.06 0.10 0.09 Nebo + Babel Total 283.0 0.36 0.39 137 0.06 0.10 0.09 Inferred Succoth 156 0.06 0.60 0.02 0.11 0.04 -

Mineral Resource estimates provided by independent resource consultants CSA Global Pty Ltd

NOTES:

1. Nebo-Babel Indicated and Inferred Mineral Resource (0.25% Ni cut-off), 8 November 2017

2. Succoth Deposit Inferred Mineral Resource estimate (0.3% Cu cut-off), 7 December 2015

3. The Mineral Resource estimates have been completed in accordance with the guidelines of the JORC Code (2012 edition) - Refer to the company website page: http://www.cassiniresources.com.au/jorc-compliance

Appendix B: Key Financial and Production Estimates



Key Financial and Production Metrics		
Processing capacity	10+ Mtpa	
Mine life	8+ years	
LOM average Nickel Metal production	20-25ktpa	
LOM average Copper Metal production	25-30ktpa	
LOM average Cobalt Metal production	700–1,000tpa	
Nickel equivalent grade [*]	0.5-0.6%	
Copper equivalent grade [*]	1.0-1.2%	
Nickel grade	0.30-0.40%	
Copper grade	0.35-0.45%	
LOM C1 cost Ni main**	200-230US¢/lb	
LOM All-in sustaining cost Ni main	290-330US¢/lb	
LOM C1 cost Cu main**	20-40US¢/lb	
LOM All-in sustaining cost Cu main	60-90US¢/lb	
Pre-production capital***	\$730-800m	

Ranges are representative of sensitivities and improvement opportunities for metallurgical recoveries, power and pre-production capital. Excludes OZ Minerals earn-in/study costs and discounting is applied from 1 January 2020.

*Nickel equivalent grade = $Ni\% + Cu\% \times 0.56$. Copper equivalent grade = $Cu\% + Ni\% \times 1.97$. 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.

**Financial valuation has used long term consensus forecasts of Ni: US\$7.13/lb, Cu: US\$2.95/lb, Co: US\$14.20/lb, Au: US\$1,292/oz, Pt: US\$1,128/oz, Pd: US\$769/oz and AUD:USD of \$0.74.

*** Pre-production capital includes capitalised pre-strip of up to \$175m, although it is expected that approximately 50% of this cost will be incurred during the first year of production.

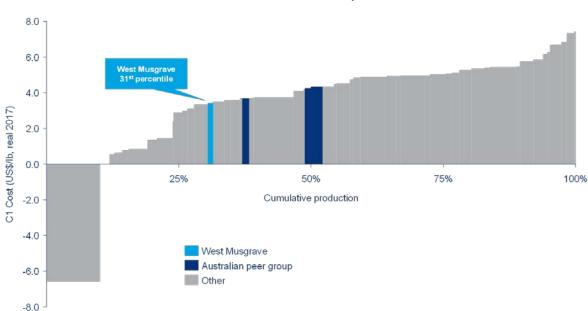
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	Post-tax	Pre-tax
LOM average net cash flow	\$120-150m	\$150-200m
Internal Rate of Return****	20-25%	25-30%
Project Payback	3-4yrs	2-3yrs

Appendix C: Global Nickel C1 cost curve

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- C1 Cash cost
 - » US\$1.30 1.60/lb Ni in con.
 - » US\$2.00 2.30/lb Payable Ni
- First production forecast for FY2022
- Estimates are at the low end of the range of nickel assets held by ASX listed peers



* Note: West Musgrave costs and production are the life-of-mine average. Cassini's costs for West Musgrave have been aligned with Wood Mackenzie's assumptions related to prices for by-products, and Wood Mackenzie's definition and methodology of C1 costs. The cost estimates are on a paid nickel basis. Source: Cost curve from Wood Mackenzie data, West Musgrave Project costs provided by Cassini Resources Limited)

Global Nickel C1 Cash Cost League 2022 showing the range of Australian nickel producers