



# Echo Resources Limited

On the Road to Production

Diggers & Dealers Conference  
August 2018  
ASX | EAR



# Cautionary statements and disclaimer



**Nature of Document:** This presentation has been prepared and issued by Echo Resources Ltd (Company) to provide general information about the Company. The information in this document is in summary form and should not be relied upon as a complete and accurate representation of any matters that a reader should consider in evaluating the Company. While management has taken every effort to ensure the accuracy of the material in this presentation, the Company and its advisers have not verified the accuracy or completeness of the material contained in this presentation.

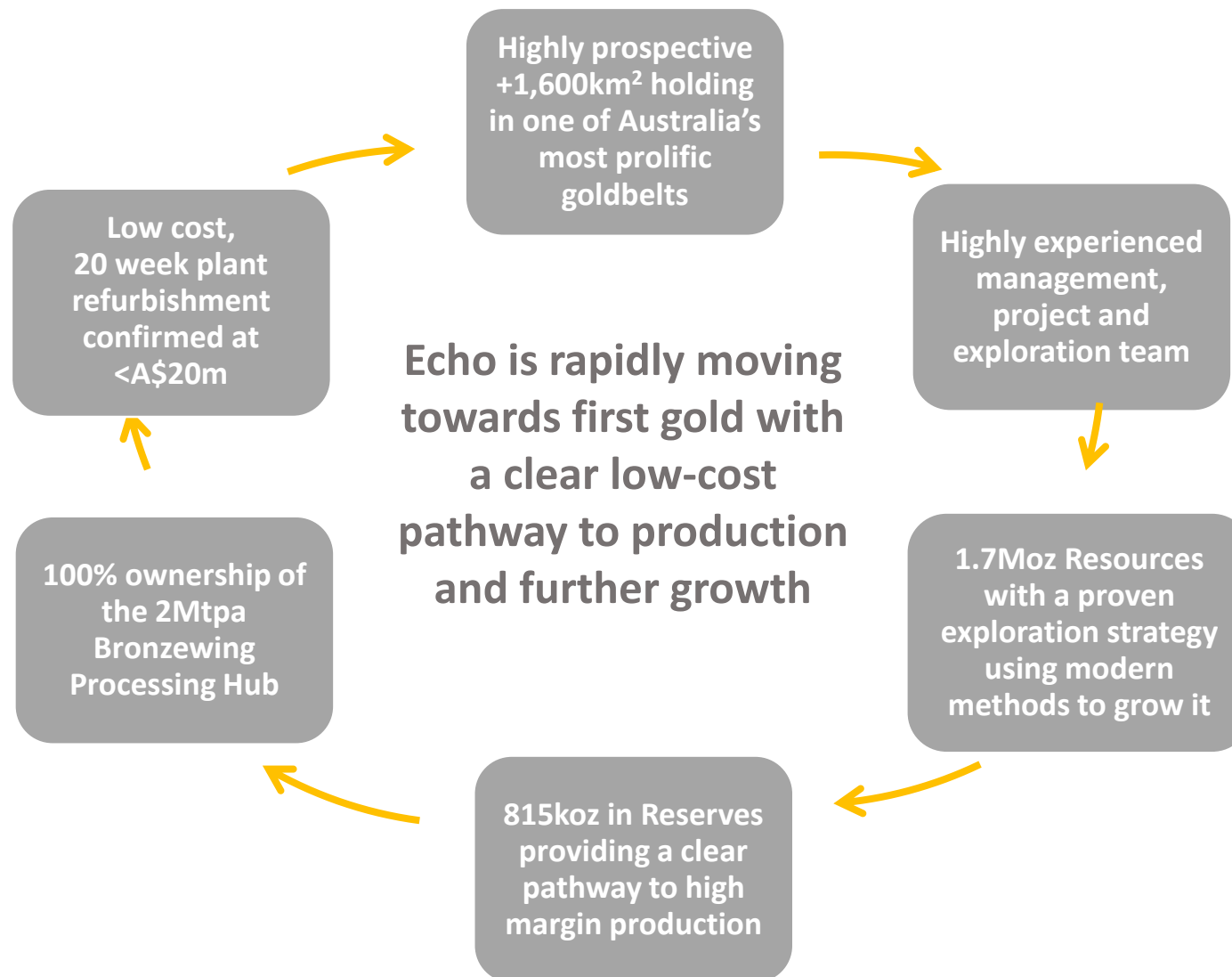
**Not an offer:** This presentation and its contents are not an invitation, offer, solicitation or recommendation with respect to the purchase or sale of any securities in the Company in any jurisdiction and must not be distributed, transmitted, or viewed by any person in any jurisdiction where the distribution, transmission or viewing of this document would be unlawful under the securities or other laws of that or any other jurisdiction. This presentation is not a prospectus or any other offering document under Australian law (and will not be lodged with the Australian Securities and Investments Commission) or any other law.

**Not financial product advice:** Neither the Company nor any of its related bodies corporate is licensed to provide financial product advice in respect of the Company's securities or any other financial products. You should not act and refrain from acting in reliance on this presentation. Nothing contained in this presentation constitutes investment, legal, tax or other advice. This presentation does not take into account the individual investment objectives, financial situation and particular needs of Company shareholders. Before making a decision to invest in the Company at any time, you should conduct, with the assistance of your broker or other financial or professional adviser, your own investigation in light of your particular investment needs, objectives and financial circumstances and perform your own analysis of the Company before making any investment decision.

**Forward looking statements:** This presentation contains forward-looking information about the Company and its operations. In certain cases, forward-looking information may be identified by such terms as "anticipates", "believes", "should", "could", "estimates", "target", "likely", "plan", "expects", "may", "intend", "shall", "will", or "would". These statements are based on information currently available to the Company and the Company provides no assurance that actual results will meet management's expectations. Forward-looking statements are subject to risk factors associated with the Company's business, many of which are beyond the control of the Company. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially from those expressed or implied in such statements. There can be no assurance that actual outcomes will not differ materially from these statements.

**Disclaimer:** No representation or warranty, express or implied, is made by the Company that the material contained in this presentation will be achieved or proved correct. Except for statutory liability which cannot be excluded, each of the Company, its directors, officers, employees, advisors and agents expressly disclaims any responsibility for the accuracy, fairness, sufficiency or completeness of the material contained in this presentation and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this presentation or any effort or omission therefrom. The Company will not update or keep current the information contained in this presentation or to correct any inaccuracy or omission which may become apparent, or to furnish any person with any further information. Any opinions expressed in the presentation are subject to change without notice.

# The Echo fundamentals



# Corporate Overview

## Capital Structure 6 August 2018

Ordinary Shares on Issue	489M
Share Price	~A\$0.19
Undiluted Market Capitalisation <i>Diluted (21 million options &amp; rights)</i>	~A\$93M ~A\$97M
Cash (as at 30 June 2018)	A\$7.6M
Liquidity (avg. shares traded per day)	1.6M
1 Year Turnover	81%

## Board of Directors<sup>1</sup>

Barry Bolitho – Non-Executive Chairman  
 Simon Coxhell – Chief Executive Officer  
 Gary Lethridge – Finance Director  
 Anthony McIntosh – Non-Executive Director  
 Mark Hanlon – Non-Executive Director  
 Robin Dean – Non-Executive Director

<sup>1</sup> Detailed biographies are available in the appendices

## Price History (1 Year)

ASX: EAR



## Substantial Holders

Northern Star Resources Ltd – 19.8%  
 1832 Asset Management – 6.1%  
 Other Institutions – 19.9%

# What we have – the people to deliver

## **John Zimmerman (Resident Manager)**

- Operational and project management
- Site management roles with St Barbara, Minjar and Hanking
- Metallurgist

## **Simon Coyle (Mining Manager)**

- Open pit operational expertise
- Operational management roles with contractor and owner mined projects in Au, Mn and Fe
- BSc (Mine Surv.) and Diploma Mining (WASM)

## **Dr James Warren (Exploration Manager)**

- Extensive Eastern Goldfields experience
- Gold mineral systems and specific exploration targeting expertise
- PHD Geologist

## **Paul Savich (GM Corporate)**

- Business development, corporate and compliance
- Previous roles with Gryphon, Reward and Deloitte
- Finance and accounting

## **Gary Lethridge (Finance Director)**

- Business and Corporate Expertise
- Jubilee, LionOre, Talisman
- Extensive Corporate Strategy, Debt and Equity Experience

## **Simon Coxhell (Managing Director)**

- Geologist
- Mining, Metallurgical and Exploration Expertise
- Loves the NE Goldfields of WA



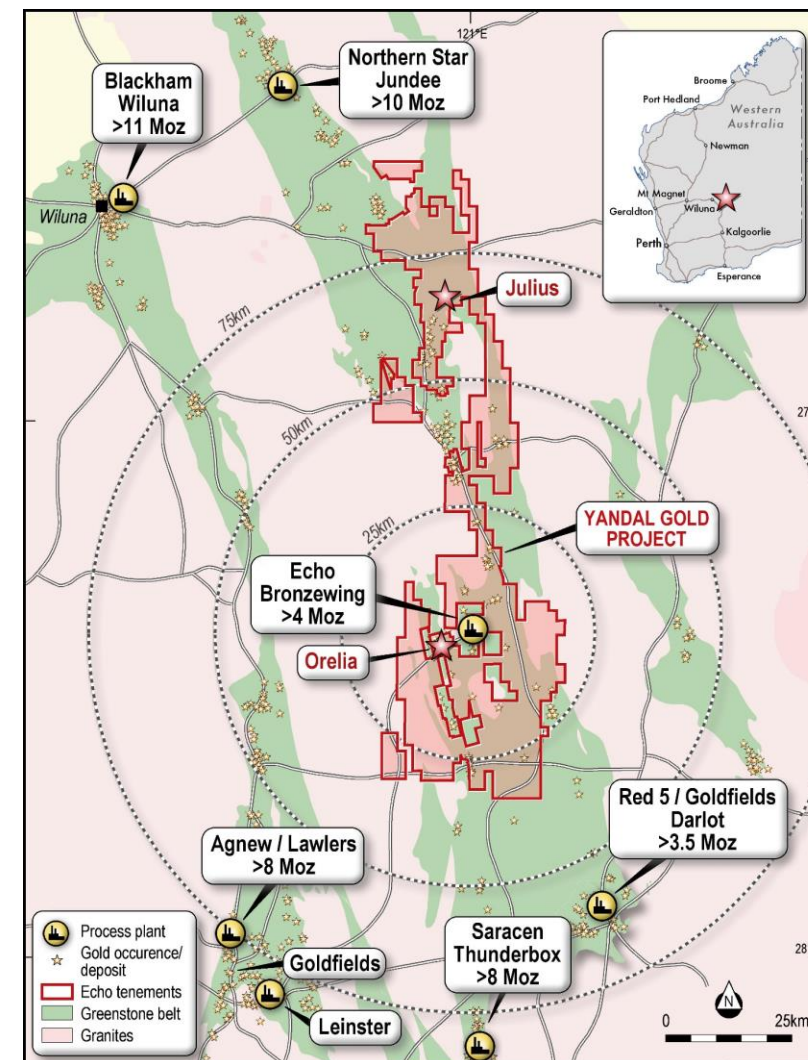
# Yandal Gold Project – An Ideal Location

## Yandal Greenstone Belt

- 400km north of Kalgoorlie and 70km northeast of Leinster
- First discovered in the 1980's
- One of Australia's most prolific gold production belts
- Complex regolith
- Home to a number of multi-million ounce deposits (i.e. Bronzewing, Jundee, Darlot, Thunderbox)

## Yandal Gold Project

- A large (+ 1,600km<sup>2</sup>), contiguous and highly prospective tenement holding
- 1.7 million ounces of Mineral Resources<sup>1</sup>
- 815,000 ounces in Ore Reserves<sup>1</sup>
- Staged development approach



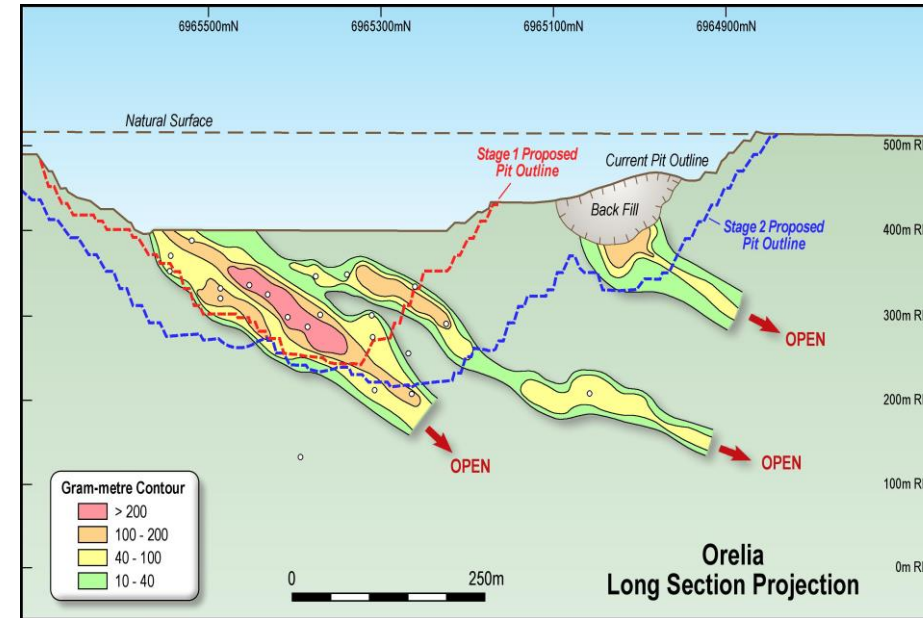
Echo Tenement Holdings

<sup>1</sup> Refer to Appendix 2

# A Solid Platform for Growth

## Yandal Gold Project BFS<sup>1</sup> key elements:

- Two-stage open pit mining of the Orelia and Julius gold deposits
- 58% of Stage 1 Ore Reserves categorised as Proved
- Refurbishment of the Bronzewing plant and infrastructure
- 1.8Mtpa throughput for production of 746koz over 8.5 year life
- Estimated AISC for Stage 1 of A\$1,035/oz (Stage 1+2: A\$1,273/oz)
- Very low capital intensity with total capital (\$30M) and pre-production costs (\$9M) of A\$39.3M
- Select pre-development site activities have commenced
- Advancing project financing solutions



Orelia Long-Section with Pit Designs

JORC (2012)	Ore Reserves (Julius + Orelia)
Stage 1	6.5Mt @ 2.0g/t for 412koz
Stage 1+2 (LOM)	14.9Mt @ 1.7g/t for 815koz

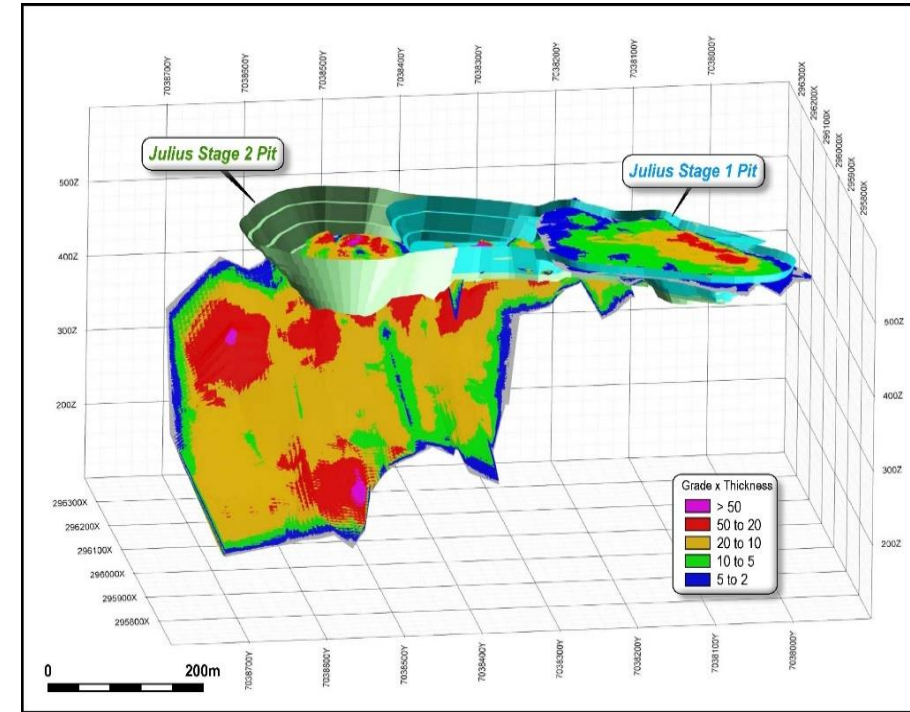
Yandal Gold Project – Ore Reserves

<sup>1</sup> Refer to ASX announcement dated 6 August 2018 for full details

# A Solid Platform for Growth (cont.)

## Yandal Gold Project BFS key elements (cont.):

- Two-stage open pit mining of the Orelia and Julius gold deposits
- Minimal pre-strip at Julius and ore at the base of the current Orelia pit
- Allows mining of highest grade (+2g/t), lowest strip ore in earlier phases
- Accelerates value, capital payback and delivers maximum flexibility
- In summary:
  - **Stage 1:** de-risked and with robust projected returns
  - **Stage 2:** Orelia cutback decision late in Year 2 of project life



Julius Proposed Pit Outlines in 3D Orthogonal View

## Staging delivers accelerated value and flexibility



# Yandal Gold Project BFS: Key Outcomes\*

- Short pathway to production
- Low capital intensity
- Simple refurbishment of existing plant and infrastructure
- Mining of two low-strip open pits
- Stage 1 delivers a 2g/t Au average grade
- Rapid payback
- Strong internal rate of return
- Healthy margins
- Strong platform for growth

	Units	Stage 1	Stage 1+2
Project Life	Years	3.75	8.50
Total Ore (contained) <sup>1</sup>		6.5Mt @ 2.0 g/t Au for 412koz	14.9Mt @ 1.7 g/t Au for 815koz
<b>Gold Revenue</b>			
Gold Price	A\$/oz	1,600	1,600
Gold Sales	Oz	380,402	746,168
<b>Gold Sales Revenue</b>	<b>A\$M</b>	<b>609</b>	<b>1,194</b>
<b>Pre-Production Costs</b>			
Development Capital	A\$M	30	30
Pre-Production Mining & Other <sup>4</sup>	A\$M	9	9
<b>Total Pre-Production Costs</b>	<b>A\$M</b>	<b>39</b>	<b>39</b>
<b>Production Period Costs</b>			
Mining & Haulage <sup>4</sup>	A\$M	172	459
Processing <sup>4</sup>	A\$M	131	315
General & Administrative <sup>4</sup>	A\$M	41	91
Royalties	A\$M	36	69
Sustaining Capital	A\$M	4	7
<b>Project Net Cashflow, pre-tax</b>	<b>A\$M</b>	<b>184</b>	<b>214</b>
<b>Pre-tax NPV (8%)</b>	<b>A\$M</b>	<b>141</b>	<b>147</b>
<b>Pre-tax IRR</b>	<b>% p.a.</b>	<b>168%</b>	<b>155%</b>
<b>Payback Period</b>	<b>Years</b>	<b>1.0</b>	<b>1.0</b>
<b>Production Cost Metrics</b>			
C1 Cost <sup>2</sup>	A\$/oz	936	1,175
<b>AISC<sup>3</sup></b>	<b>A\$/oz</b>	<b>1,035</b>	<b>1,273</b>

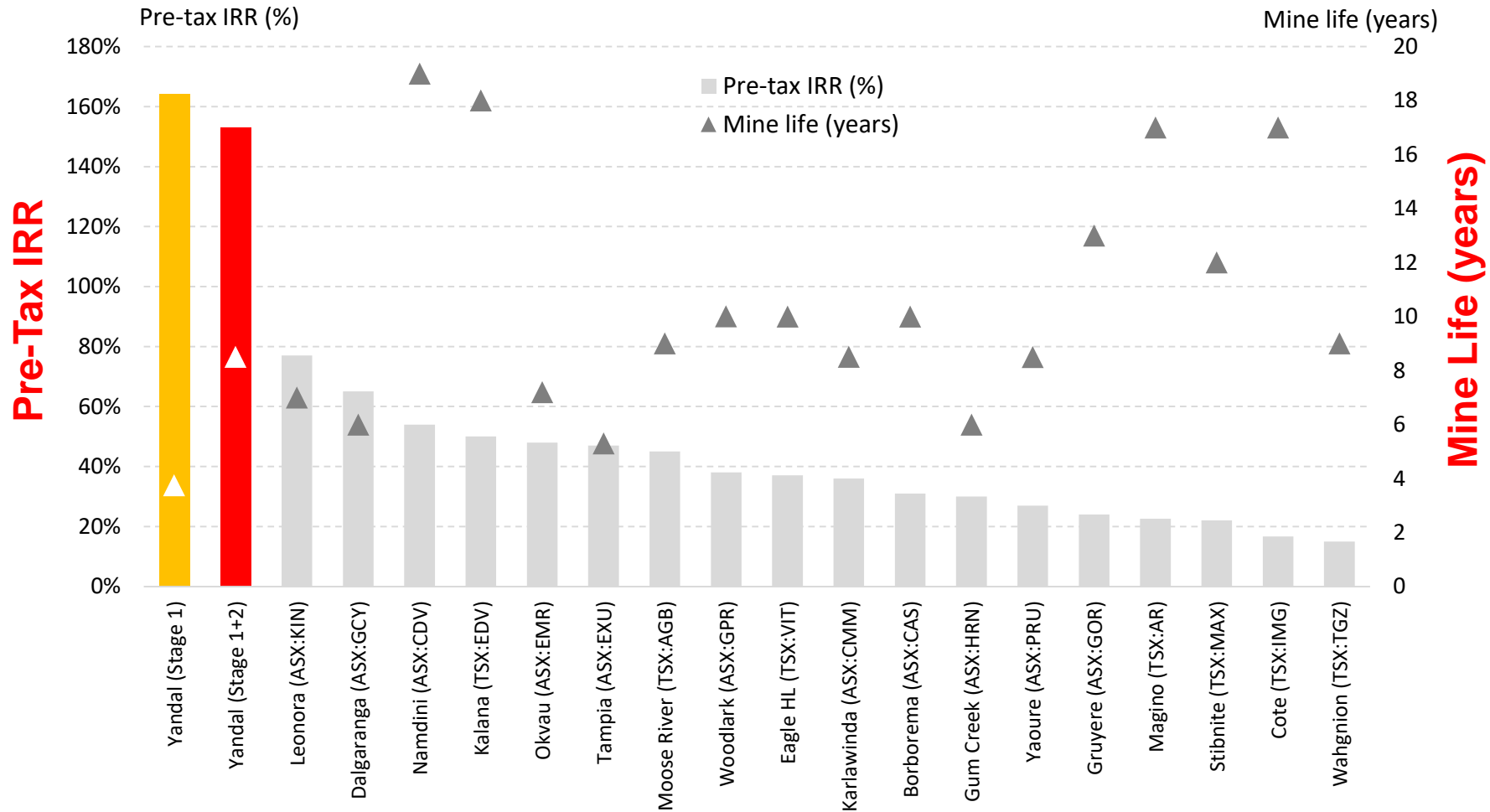
\*Refer to ASX announcement dated 6 August 2018 for full details

## Yandal Gold Project Key Economics

1: The Ore Reserves underpinning the above production target have been prepared by a Competent Person or Persons in accordance with the requirements of the JORC (2012) Code. Refer to JORC tables, Qualifications and Competent Persons Statements. Based on assumed throughput of 1.8Mtpa. 2: C1 operating costs include all mining and processing costs, site administration costs, transport, refining charges. 3: AISC = C1 costs plus royalties and sustaining capital however excludes corporate head office costs. 4: Refer to Table 1-17 for a detailed breakdown of costs, pre-production costs are net of commissioning revenue. 5: All figures are presented in nominal Australian dollars, tax is applied at a flat corporate rate of 30%, unadjusted for inflation. 6: Rounding errors may occur.

# Peer Comparison

## IRR vs Mine Life

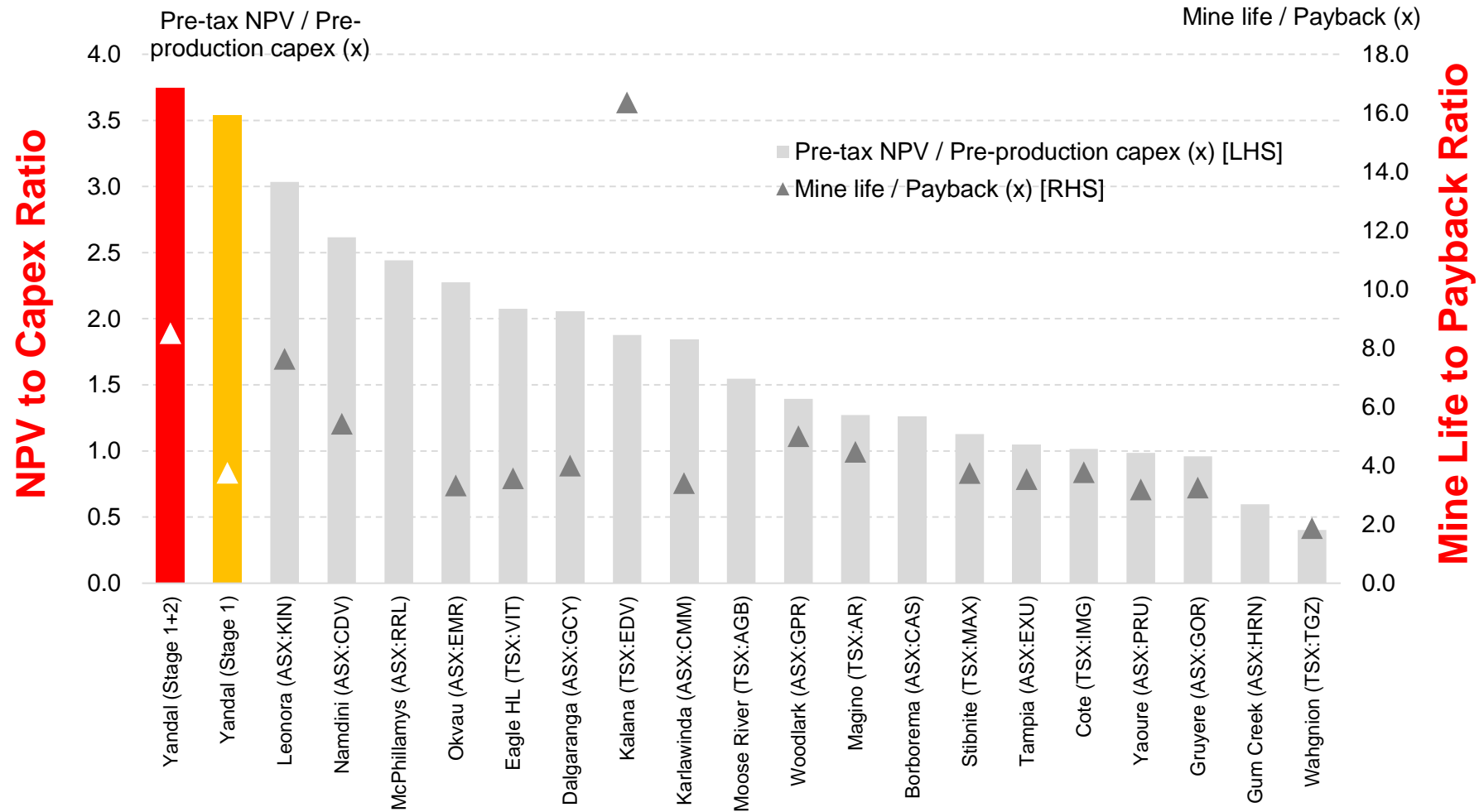


Peer Comparisons: IRR vs Mine Life

Source: Company Announcements, Echo Research

# Peer Comparison

## NPV to Capital, Mine Life to Payback



Peer Comparisons: NPV Capex Cover Ratio

Source: Company Announcements, Echo Research

# Extensive Existing Infrastructure

## All major infrastructure already in place:

- 2Mtpa Bronzewing processing plant
- 240 person accommodation camp
- Electrical reticulation and power station infrastructure
- Significant existing haulage road network
- Large capacity fully permitted tailings storage facility
- Airstrip



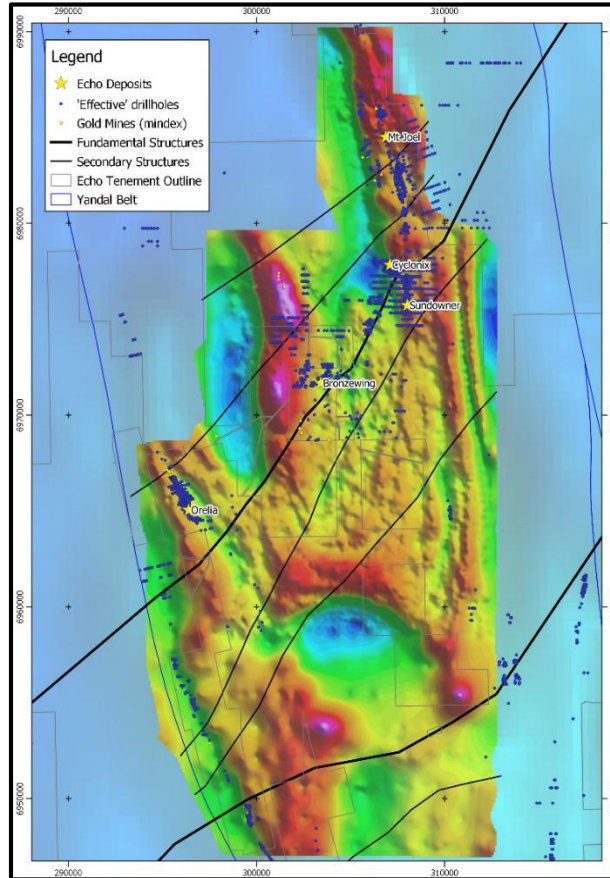
Bronzewing Process Plant



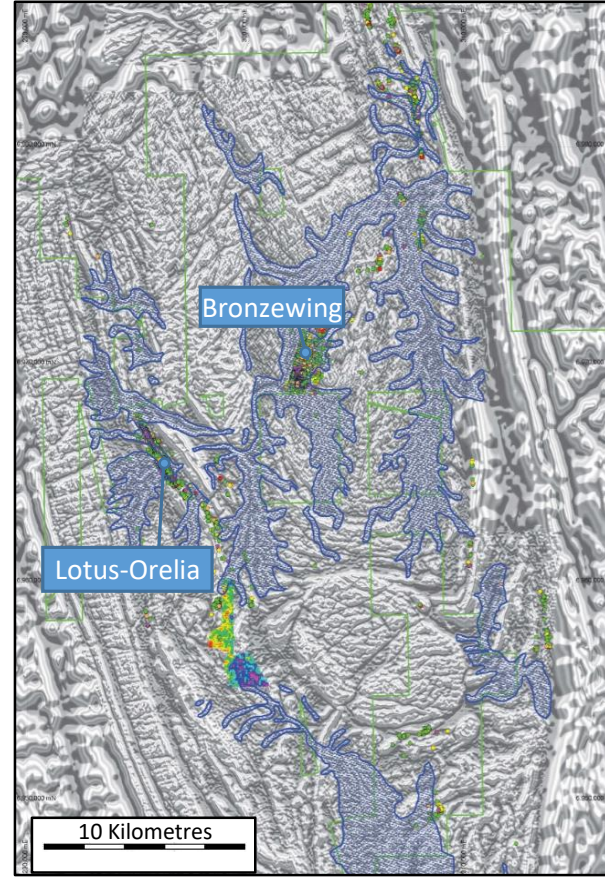
# The Exploration Upside

- In excess of 1600km<sup>2</sup> of prime exploration ground
- A number of advanced projects with scope for the delineation of additional oxide ounces
- Extensive and detailed datasets to interpret, identify and locate new zones of mineralisation
- Two large gold systems (Bronzewing and Lotus-Orelia), relatively untested at depth
- An evolving and increasing understanding on the controls of gold mineralisation within our belt
- Collaboration with CSIRO to unlock the large alteration systems around gold deposits
- Detailed ground gravity data highlights structures important in localising mineralisation at the camp scale
- Large areas where drilling has been relatively 'ineffective' (i.e. not intersecting fresh rock)
- Data driven exploration defines the 'search space' in 3D
- Significant un-tapped potential in a world-class district

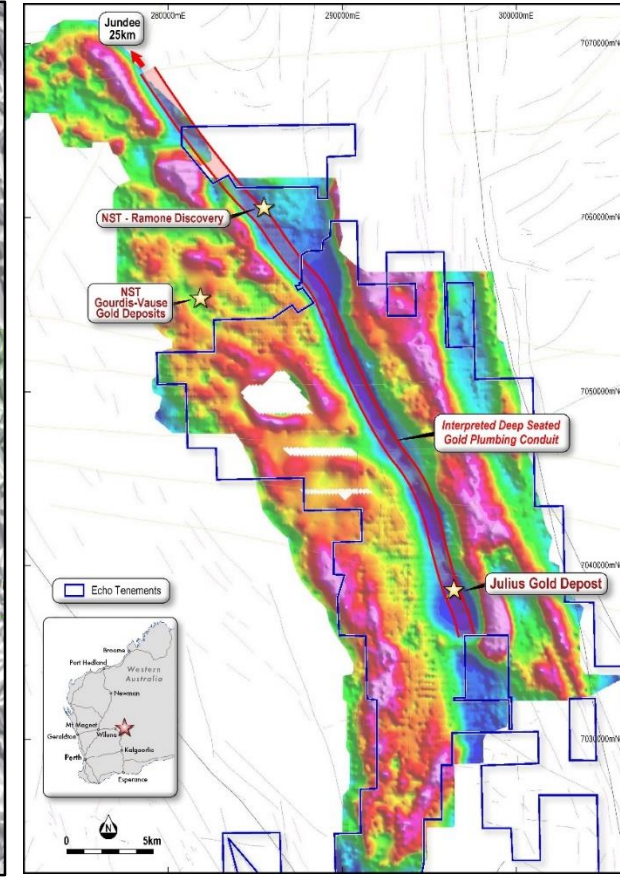
# Developing and Exploring for New Deposits in a World Class Province



Bronzewing District Gravity Image and Interpreted Gold Structures



Greyscale TILT Image with Paleo-drainage Overlay



Outcrop Geology: North Julius with Tenements and Interpreted Major Gold Structure



# On the Road to Production

- BFS<sup>1</sup> confirms the Yandal Gold Project's robust forecast economics
- BFS considers a two-stage project with open pit mining from two deposits
- 746,000 ounces produced over an 8.5 year life
- A staged approach allows Echo to maximise early returns by mining the higher grade and lowest strip ore in Stage 1
- Select pre-development site activities have commenced
- A formal project financing process has commenced with a variety of potential funding solutions being evaluated
- Exploration continues in a world class ground holding looking for the next discovery



<sup>1</sup> Refer to ASX announcement dated 6 August 2018 for full details



## CONTACT US

P +61 8 9389 8726

F +61 8 9467 2896

Level 1, 7 Rheola St  
West Perth WA 6005

PO Box 1099  
West Perth WA 6872





## APPENDICES

# Board of Directors

## **Non-Executive Chairman – Barry Bolitho**

Qualified metallurgist with 40+ years experience from exploration to project management and has been responsible for the commissioning and management of a number of mining operations in Western Australia

## **Managing Director & CEO - Simon Coxhell**

Geologist with 30+ years diverse experience from exploration and resource development to metallurgy and mining as well as corporate and capital markets. Previously executive director of Navigator Resources Ltd, Crucible Gold Ltd, Venus Metals Ltd

## **Finance Director – Garry Lethridge**

Experienced executive whose industry involvement has included exposure to all phases of mineral resources projects. This included managerial roles at Talisman Mining Limited , Jubilee Mines NL and Lion Ore Mining International Limited, plus non-executive director roles at Northern Star Resources Limited

## **Non-Executive Director – Anthony McIntosh**

Manages investment portfolios including listed and unlisted companies and rural and commercial properties with valuable marketing, investor relations and strategic planning skills

## **Non-Executive Director – Mark Hanlon**

Substantial resources and resource services experience as well as merchant banking. Most recently held the role of Finance Director at ENK plc, and is a director of Copper Strike Ltd and Red River Resources Ltd

## **Non-Executive Director – Robin Dean**

30+ years banking, project finance and commodity hedging experience, CEO of a number of public companies including St Barbara Mines Ltd and Structural Monitoring Systems plc

## **Company Secretary & GM Finance - Kate Stoney**

Substantial experience performing financial and management accounting as well as company secretarial duties for a number of mining and mining services companies.

# Global Mineral Resources & Reserves

## Echo Mineral Resource Estimates<sup>7</sup>

(Ownership, Cut-off)	Measured			Indicated			Inferred			Total		
	Tonnes (Mt)	Grade (g/t Au)	Ounces (Au)	Tonnes (Mt)	Grade (g/t Au)	Ounces (Au)	Tonnes (Mt)	Grade (g/t Au)	Ounces (Au)	Tonnes (Mt)	Grade (g/t Au)	Ounces (Au)
Julius <sup>4</sup> (100%, 0.8)	1.8	2.1	124,227	1.6	1.3	67,789	1.8	2.5	142,991	5.2	2.0	335,007
Regional <sup>5</sup> (100%, 0.5)							2.8	1.5	134,925	2.8	1.5	134,925
Corboys <sup>3</sup> (100%, 1.0)				1.7	1.8	96,992	0.5	1.8	28,739	2.2	1.8	125,731
Orelia <sup>4</sup> (100%, 1.0)	2.8	2.6	237,000	11.2	2.0	732,000	1.9	1.7	101,000	15.9	2.1	1,070,000
Woorana North <sup>2</sup> (100%, 0.5)				0.3	1.4	13,811				0.3	1.4	13,811
Woorana South <sup>2</sup> (100%, 0.5)				0.1	1.0	3,129				0.1	1.0	3,129
Fat Lady <sup>1,2</sup> (70%, 0.5)				0.7	0.9	19,669				0.7	0.9	19,669
Mt Joel 4800N <sup>1,2</sup> (70%, 0.5)				0.2	1.7	10,643				0.2	1.7	10,643
<b>Total Mineral Resources</b>	<b>4.6</b>	<b>2.4</b>	<b>361,227</b>	<b>15.8</b>	<b>1.9</b>	<b>944,033</b>	<b>7.0</b>	<b>1.8</b>	<b>407,655</b>	<b>27.4</b>	<b>1.9</b>	<b>1,712,915</b>

## Echo Ore Reserves

(Ownership, Cut-off)	Proved			Probable			Total		
	Tonnes (Mt)	Grade (g/t Au)	Ounces (Au)	Tonnes (Mt)	Grade (g/t Au)	Ounces (Au)	Tonnes (Mt)	Grade (g/t Au)	Ounces (Au)
Orelia <sup>6</sup> (100%, 0.6)	2.4	2.4	179,264	11.0	1.5	531,000	13.3	1.7	710,031
Julius <sup>6</sup> (100%, 0.8)	1.5	2.1	96,747	0.2	1.7	8,000	1.6	2.0	105,034
<b>Total Ore Reserves</b>	<b>3.8</b>	<b>2.2</b>	<b>276,012</b>	<b>11.1</b>	<b>1.5</b>	<b>539,000</b>	<b>14.9</b>	<b>1.7</b>	<b>815,065</b>

### Notes:

1. Resources are adjusted for Echo's 70% ownership interest

2. Resources estimated by Coxrocks (refer to Competent Persons Statements) in accordance with JORC Code 2012. For full Mineral Resource estimate details refer to the Metaliko Resources Limited announcement to ASX on 1 September 2016. Echo is not aware of any new information or data that materially affects the information included the previous announcement, and all material assumptions and technical parameters underpinning mineral resource estimates in the previous announcement continue to apply and have not materially changed.

3. Resources estimated by HGS (refer to Competent Persons Statements) in accordance with JORC Code 2012, for full details of the Mineral Resource estimate refer to the Metaliko Resources Limited announcement to ASX on 23 August 2016. Echo is not aware of any new information or data that materially affects the information included the previous announcement, and all material assumptions and technical parameters underpinning mineral resource estimates in the previous announcement continue to apply and have not materially changed.

4. Resources estimated by Mr Lynn Widenbar (refer to Competent Persons Statements) in accordance with JORC Code 2012, for full details of the Mineral Resource estimate refer to the Echo Resources Limited announcement to ASX on 7 September 2017 & 14 June 2018. Echo Resources Limited is not aware of any new information or data that materially affects the information included the previous announcement, and all material assumptions and technical parameters underpinning mineral resource estimates in the previous announcement continue to apply and have not materially changed.

5. Resource estimates include Bills Find, Shady Well, Orpheus, Empire & Tipperary Well and were estimated by Golders (refer to Competent Persons Statements) in accordance with JORC Code 2004, for full details of the Mineral Resource estimates refer to the Echo Resources Limited prospectus released to ASX on 10 April 2006.

6. Reserve estimated by Mr Stuart Cruickshanks (refer to Competent Persons Statements) in accordance with JORC Code 2012, for full details of the Ore Reserve estimate refer to the Echo Resources Limited announcement to ASX on 6 August 2018. Echo Resources Limited is not aware of any new information or data that materially affects the information included the previous announcement, and all material assumptions and technical parameters underpinning Ore Reserve estimate in the previous announcement continue to apply and have not materially changed.

7. Mineral Resources are inclusive of Ore Reserves, rounding errors may occur

# Competent Persons Statements



The information in this presentation relating to Julius and Orelia Resource Estimation is based on information compiled by Mr Lynn Widenbar, a consultant of Echo Resources Limited, who is a member of the Australasian Institute of Mining and Metallurgy. The information in this announcement that relates to Exploration Results and metallurgical considerations at Julius and Orelia is based on information compiled by Simon Coxhell, a Director of Echo Resources and a member of the Australasian Institute of Mining and Metallurgy. Both have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that they are undertaking 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". Mr Widenbar and Mr Coxhell consent to the inclusion in the presentation of the matters based on the information in the form and context in which it appears.

The information in this presentation relating to Echo's exploration activities and exploration potential at Julius, Orelia, Woorana North, Woorana South, Fat Lady and Mt Joel Mineral Resource estimates is based on information compiled by Mr Simon Coxhell, a Director of Echo Resources Limited, who is a member of the Australasian Institute of Mining and Metallurgy. He has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking 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'. Mr Coxhell consents to the inclusion in the presentation of the matters based on the information in the form and context in which it appears.

The information in this presentation relating to Echo's Regional Mineral Resource estimates is based on information compiled by Stephen Godfrey, a full-time employee of the independent geological consulting group Golder Associates Pty Ltd. He has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Godfrey consents to the inclusion in the presentation of the matters based on the information in the form and context in which it appears.

The information in this presentation relating to Echo's Corboys Deposit Mineral Resource estimate is based on information compiled by Andrew James Hawker, a Competent Person who is a Member or Fellow of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Hawker is the Principle Geologist employed by HGS Australia. He has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking 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'. Mr Hawker consents to the inclusion in the presentation of the matters based on the information in the form and context in which it appears.

The information in this presentation that relates to ore reserves is based on, and fairly represents, information and supporting documentation prepared by Mr Stuart Cruickshanks, an independent specialist mining consultant. Mr Cruickshanks is a Fellow of the Australian Institute of Mining and Metallurgy. Mr Cruickshanks has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 (the JORC Code). Mr Cruickshanks has reviewed the contents of this presentation and consents to the inclusion in this presentation of all technical statements based on his information in the form and context in which they appear.