



### **DISCLAIMER**

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Stephen Biggins (BSc(Hons)Geol, MBA) as Managing Director of Core Exploration Ltd who is a member of the Australasian Institute of Mining and Metallurgy and is bound by and follows the Institute's codes and recommended practices. He has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities 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". Mr. Biggins consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

This document has been prepared by Core Exploration Limited ("Core", "Company") and provided as a basic overview of the tenements held or controlled by the Company. This presentation does not purport to be all-inclusive or to contain all the information that you or any other party may require to evaluate the prospects of the Company.

None of the Company, any of its related bodies corporate or any of their representatives assume any responsibility for, or makes any representation or warranty, express or implied, with respect to the accuracy, reliability or completeness of the information contained in this document and none of those parties have or assume any obligation to provide any additional information or to update this document.

To the fullest extent permitted by law, the Company, its related bodies corporate and their representatives expressly disclaim liability for any loss or damage arising in respect of your reliance on the information contained in this document (including your reliance on the accuracy, completeness or reliability of that information), or any errors in or omissions from this presentation, including any liability arising from negligence.

The mineral tenements of the Company as described in this presentation are at various stages of exploration, and potential investors should understand that mineral exploration and development are high-risk undertakings.

There can be no assurance that exploration of the Tenements, or any other tenements that may be acquired in the future, will result in the discovery of an economic ore deposit. Even if an apparently viable deposit is identified, there is no guarantee that it can be economically exploited.

This document contains statements which may be in the nature of forward-looking statements. No representation or warranty is given, and nothing in this presentation or any other information made available by the Company or any other party should be relied upon as a promise or representation, as to the future condition of the respective businesses and operations of the Company.

There is a low level of geological confidence associated with the 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 target itself will be realised.

### **Important and Cautionary Notes**

#### **Cautionary Statement:**

The PFS results are based upon the updated Grants Mineral Resource of 8 May 2018 (ASX announcement 8 May 2018). The Mineral Resource contains Indicated and Inferred material (see Table 5 in section 3.1 below – 37% Inferred material and 63% Indicated material) and does not contain any material in the Measured classification. Whilst there is sufficient Indicated Mineral Resources to complete the production schedule during the 12-month payback period, there is a reliance on Inferred Mineral Resources for the full PFS schedule. There is a low level of geological confidence associated with the 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 target itself will be realised. The inferred Mineral Resource is not the determining factor in determining the viability of the Finniss Lithium Project as the inferred Mineral Resource represents 14% of the production during the 12 month pay-back period. The PFS has targeted a well-defined mineralised pegmatite envelope where it is considered that there are reasonable grounds for the conversion of Inferred to Indicated or Measured Resource status. Which will then reasonably allow the production target to be achieved in both the grade and size which has been outlined in this PFS. This PFS development option considers the Grants Mineral Resource alone. The PFS does not rely upon additional Mineral Resources from the company's other prospects. Further drilling in 2018 is expected to improve the classification of all of the company's Mineral Resources.

#### **Competent Person Statements:**

Core confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimates in the announcements "Grants Lithium Resource Upgrade" dated 8 May 2018 and "Maiden Resource Estimate at BP33' dated 23 May 2018 continue to apply and have not materially changed. The Mineral Resources underpinning the production target have been prepared by a Competent Person in accordance with the requirements of the JORC code. Core confirms that it is not aware of any new information or data that materially affects the Exploration Results included in this announcement as cross referenced in the body of this announcement. Core confirms that all material assumptions underpinning production target and forecast financial information derived from the product target announced on 25 June 2018 continue to apply and have not materially changed.

#### **Forward-looking Statements:**

This release contains "forward-looking information" that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the pre-feasibility and feasibility studies, the Company's business strategy, plan, development, performance, outlook, growth, cash flow, projections, targets and expectations, Mineral Resources, results of exploration and relations expenses. Generally, this forward-looking information dentified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely',' believe', 'estimate', 'expect', intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'scheduled', 'will', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'scheduled', 'will', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'scheduled', 'will', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'scheduled', 'will', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'scheduled', 'will', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'scheduled', 'will', 'gould', 'gould' st','evolve' and similar expressions. Persons reading this news release are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be material. lly different Forwardlooking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance for activity achieve ents to be materially different from those expressed or implied by such forward-looking information. Forward-looking information is developed based on assumptions about such risks, undertainties, other factors set out nomic evaluations; herein, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; competitive, political and social uncertainties; the actual results of current exploration activities; competitive, political and social uncertainties; the actual results of current exploration activities; competitive, political and social uncertainties; the actual results of current exploration activities; competitive, political and social uncertainties; the actual results of current exploration activities. changes in project parameters as plans continue to be refined; future prices of scandium and other metals; possible variations of ore grade or recovery rates; failure of plant, equ ent or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining governmental approvals or financing or in the completion of development ent or construction activities. This list is not exhaustive of the factors that may affect our forward-looking information. These and other factors should be considered carefully, and readers should no undue reliance on such forward-looking information. The Company disclaims any intent or obligations to or revise any forward-looking statements whether as a result of new information, estimates, o options, future events or results or otherwise, unless required to do so by law. Statements regarding plans with respect to the Company's mineral properties may contain forward application of the company's mineral properties may contain forward application of the company's mineral properties may contain forward application of the company's mineral properties may contain forward application of the company's mineral properties may contain forward application of the company's mineral properties may contain forward application of the company's mineral properties may contain forward application of the company of ation to future matters that can be only made where the Company has a reasonable basis for making those statements.

#### **Currency:**

Unless otherwise stated, all cashflows are in Australian dollars, are undiscounted and are not subject to inflation/escalation factors, and all years are calendar years Accuracy:

The PFS has been prepared to an overall level of accuracy of approximately -15% to +25%.

# CORE EXPLORATION ON PATHWAY TO PRODUCTION

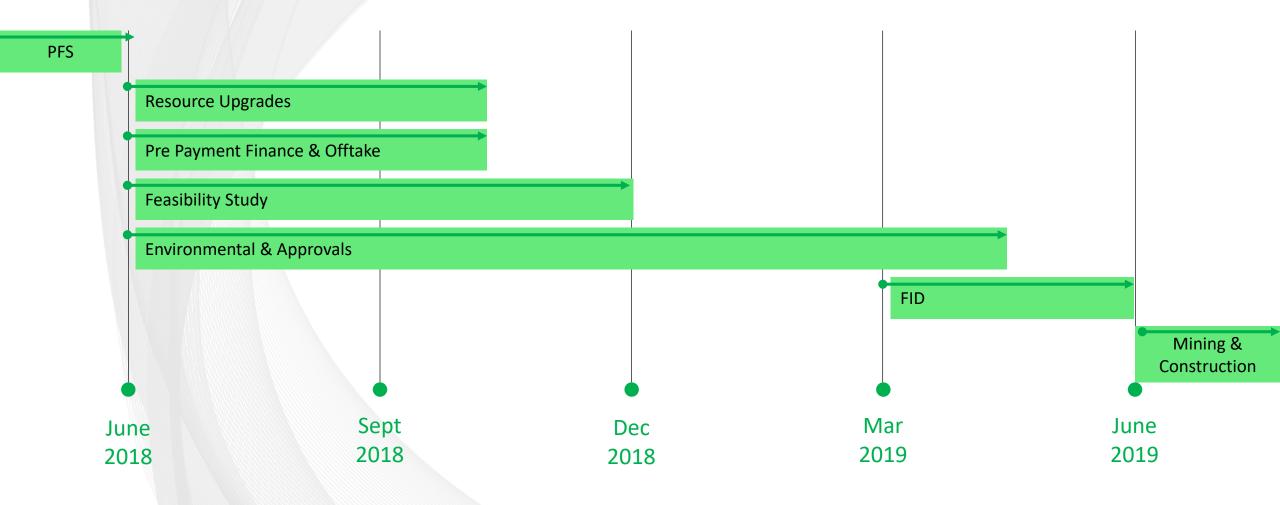


- Finniss Project is unlocking a new lithium rich province in the Bynoe Pegmatite Field, near Darwin
- Low risk, conventional, open pit mining operation with simple metallurgy
- Favourable project characteristics gives rise to high margins and a rapid payback
- ✓ Enterprise value of approximately \$20 million offers substantial leverage to development and exploration
- Arguably the best logistics chain to Asia and supporting infrastructure of any Australian lithium project, providing significant strategic advantages
- Capex of only \$53.5 million US\$20 million already committed by major lithium offtake partner, Yahua Group and project fully funded when combined with the Ruifu US\$35 million\* pre-payment facility
- ✓ Preliminary Feasibility Study (PFS) now complete, Definitive Feasibility Study (DFS) scheduled for delivery by the end of 2018

\* U\$35M non-binding term sheet subject to negotiation and finalisation of binding documentation (ASX:30/7/2018)

# COUNTDOWN TO FIRST LITHIUM PRODUCTION



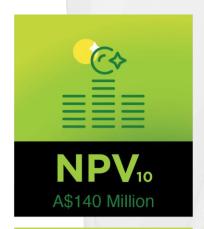


# GRANTS PRE-FEASIBILITY STUDY HIGHLIGHTS

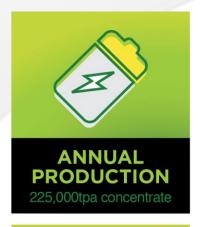
- CXO on pathway to low-capex lithium concentrate production near Darwin targeting late 2019
- Preliminary Feasibility Study (PFS) only models development of Grants deposit only
- PFS delivers strong financial outcomes:
  - Capital Cost only \$53.5 million
  - A\$168 million in free cashflow generated
  - Low Operating Cost US\$279/t concentrate delivers 57% operating profit margin
  - NPV<sub>10</sub> of A\$140 million (pre-tax)
  - IRR of 142%
  - Payback in less than 12 months
- Definitive Feasibility Study (DFS) expected later this year aiming to include:
  - Increased resources
  - Increased concentrate grade and optimised recovery
  - Increased offtake commitment
  - Increased prepayment (customer) finance
- Binding US\$20 million prepayment facility and offtake agreement with Yahua and recent non-binding agreement for US\$35 million pre-payment and concentrate with Ruifu (announced post-PFS)
- Potential to grow Resource base across a number of high grade prospects

























# Grants Deposit Pre-Feasibility Study Key Metrics

### **Company Information**



#### **Shares**

**Price A\$** ~\$0.045

Shares on issue ~633.5M

Market cap ~\$32M

**Cash (30/6/2018)** ~\$8M

Enterprise Value ~\$20M

#### **Directors**

**Stephen Biggins** 

Managing Director ex SAU, IVR

**Greg English** 

Non-Executive Chairman AXE, LCK

**Heath Hellewell** 

Non-Executive Director CMM, DKM, ex DRM

#### Management

**Blair Duncan** 

General Manager Development

**Dr David Rawlings** 

**Exploration Manager** 

**Erik Palmbachs** 

Chief Financial Officer

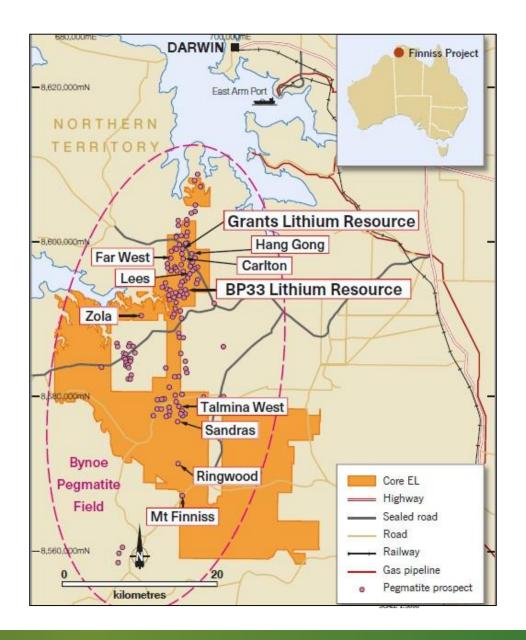
**Jarek Kopias** 

**Company Secretary** 

# FINNISS LITHIUM PROJECT PFS OVERVIEW

### Potentially best logistics chain to Asia of any Australian lithium project

- One of Australia's highest grade lithium resources
- Grants is close to grid power, gas and rail infrastructure
- 88km haul route to Darwin Port is on all NT Government roads licenced for road trains (Bitumen all the way).
- Large area ~500km² of tenements including over 100 historic pegmatite occurrences and MLs
- Widespread high grade spodumene drill intersections at multiple prospects
- Existing and new large pegmatite targets to be tested
- Easy trucking distance by sealed road to Darwin Port



# EXCEPTIONAL ECONOMICS FINNISS PFS OPERATING MARGINS



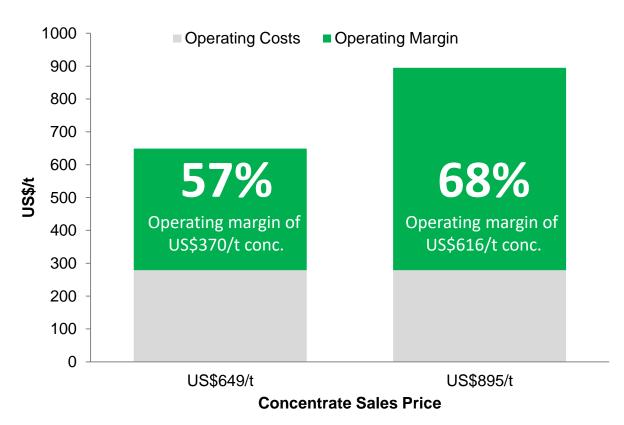


### Competitive, low operating costs

Operating Costs	A\$/t	US\$/t¹
Mining	208.7	156.5
Processing	71.2	53.4
Hauling	11.5	8.6
General & Administration	8.0	6.0
Port Costs	7.5	5.6
Operating Costs (excl. Royalties)	306.9	230.1
Royalties	64.9	48.6
Operating Costs	371.7	278.8



### Strong margins in a range of price environments



<sup>1.</sup> Converted using an exchange rate of 0.75 AUD/USD

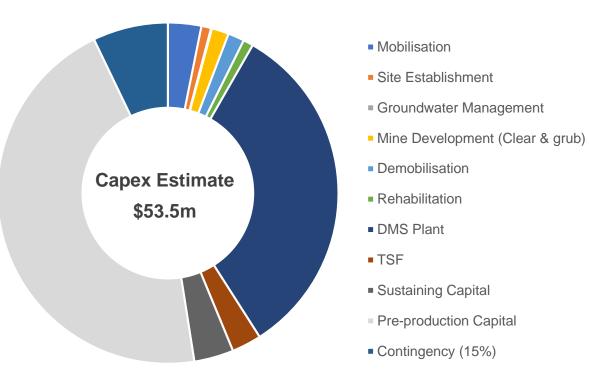
# LOW CAPEX FINNISS PFS CAPITAL COSTS





### Among the least capital intensive Australian lithium projects

Capital Costs	AUD M	USD M <sup>1</sup>
Mobilisation	1.7	1.3
Site Establishment	0.5	0.4
Groundwater Management	0.9	0.6
Mine Development (Clear & Grub)	8.0	0.6
Demobilisation	0.5	0.4
DMS Plant	17.4	13.1
TSF	1.5	1.1
Sustaining Capital	2.0	1.5
Pre-production Capital	24.2	18.2
Contingency (15%)	3.8	2.9
Total	53.5	40.0

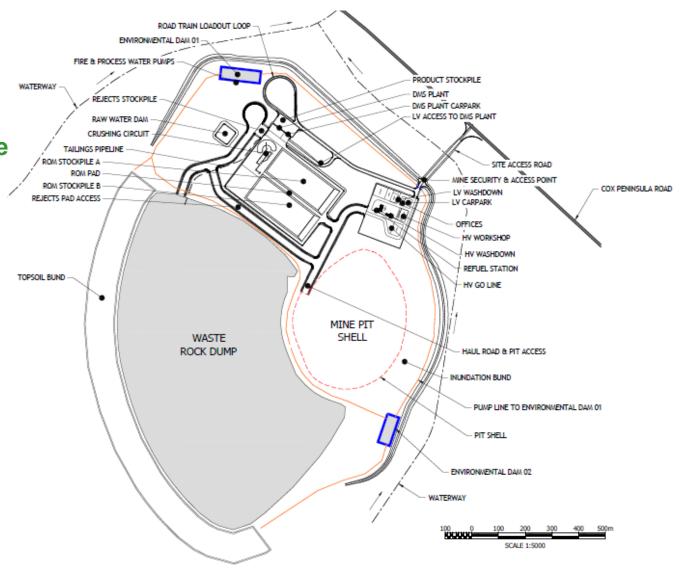


<sup>1.</sup> Converted using an exchange rate of 0.75 AUD/USD

# PROPOSED SITE LAYOUT GRANTS DEPOSIT

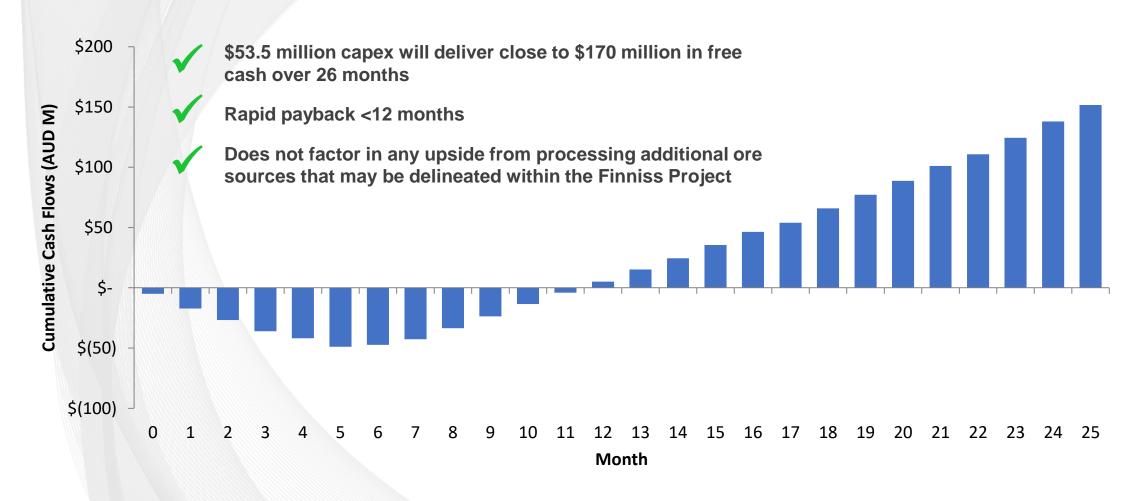
Mining of spodumene containing pegmatite using simple open pit mining methods

- Conventional open pit mining
  - Drill & blast
  - Excavate, load & haul
- Crush and screen circuit
  - 3-Stage crush
- DMS (gravity separation) plant
  - 5.5 % Li<sub>2</sub>O concentrate
- Truck to Darwin Port
  - 1hr by sealed road



# STRONG CASH GENERATION FINNIS PFS CASH FLOWS



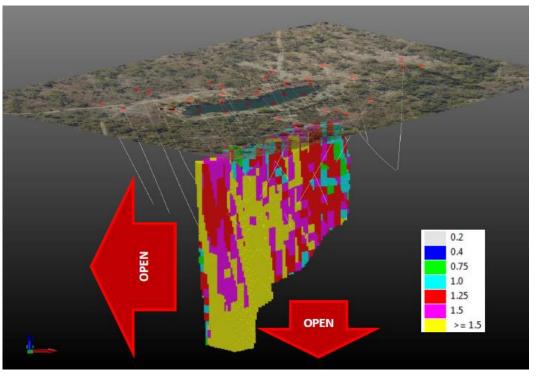


# SIGNIFICANT UPSIDE POTENTIAL FEASIBILITY STUDY IN PROGRESS



### PFS focussed on Grants only, BP33 to be considered as part of 2018 Feasibility Study

- Significant upside potential through addition of other ore sources within the Finniss Project
- The incremental value of additional ore sources is very high given no need for additional process plant infrastructure
- BP33 Mineral Resource of 1.4Mt at 1.40% Li<sub>2</sub>O represents obvious opportunity for additional mine life
  - Current resource adds 70% to Grants resource
  - BP33 open to south and south-west
  - Similar geology to Grants
  - Most southern intercept in resource 75m at 1.68% Li<sub>2</sub>O<sup>1</sup>
- Other widespread lithium-bearing pegmatites yet to be drilled



Schematic view of BP33, showing resource open along strike

### BINDING LITHIUM OFFTAKE AND US\$20M PRE-PAYMENT

### Core has signed a binding offtake and US\$20 million pre-payment agreement with Yahua

- Binding offtake and pre-payment agreements signed with Yahua (8B yuan market cap)
- Yahua is one of China's largest lithium producers
- Offtake agreement provides for the supply of 220,000t of lithium concentrate (equivalent of 1 million tonnes of DSO) from Finniss Lithium Project over 5 years
- US\$20 million conditional prepayment facility, to be repaid through the supply of future DSO or Li<sub>2</sub>O concentrate
- Targeting first deliveries from 2019





# LITHIUM OFFTAKE AND US\$35M PRE-PAYMENT

# CORE

### Core has signed a non-binding Term Sheet with Shandong Ruifu Lithium Co Ltd

- Up to 150,000 tonnes lithium concentrate offtake per year from Core's Finniss Lithium Project
- Ruifu is one of China's largest lithium hydroxide and carbonate producers
- US\$35 million conditional pre-payment facility to be provided by Ruifu
- Placement to Ruifu for approximately \$3 million at 5 cents per share, resulting in Ruifu holding a 10% interest in Core
- Binding agreements being finalised in next few weeks



# 2018 METALLURGICAL TESTWORK TARGETING HIGHER RECOVERIES



### New test work produces 6.1% Li<sub>2</sub>O concentrate at 69% recovery

- Recent metallurgical testwork shows a strong improvement in the assumptions (2017) utilised in the PFS, with up to 79% lithium recovery at a grade of 5.5% Li<sub>2</sub>O
- Overall mass yield of up to 27% of head feed
- Gravity only plant to be designed to deliver optimal yield
- New test work demonstrates a DMS circuit can easily produce a 6.1% Li<sub>2</sub>O concentrate at good recoveries of 69%
- Testwork continuing to optimise recoveries and design in Feasibility Study

Concentrate	PFS	New Results	
Grade (Li₂O)	5.0%	5.5%	6.1%
Recovery	76%	79%	69%

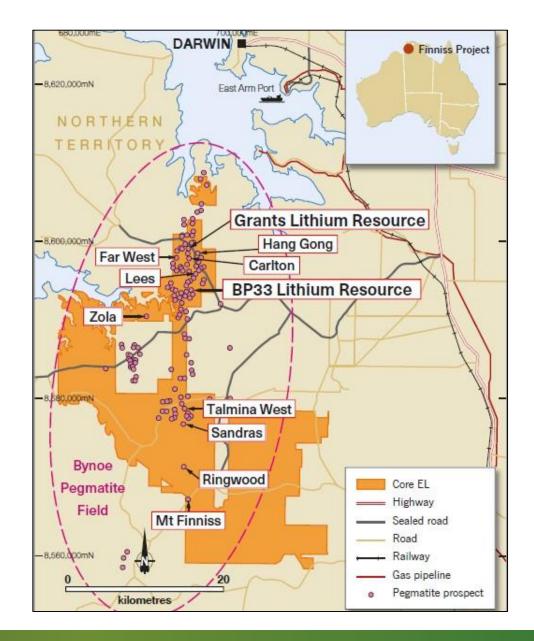


ASX:CXO 02/08/18

### 2018 DRILLING FINNISS PROJECT

### **Targeting substantial resource growth**

- Upcoming exploration and aggressive drill programs in 2018 to target growth in the resource base to support a long-life lithium production hub at Finniss Project
- Core's exploration has discovered some of the highest grade lithium in Australia, capable of producing a quality spodumene concentrate
- Numerous high grade lithium pegmatite targets already identified
- High potential for additional resources from 500km<sup>2</sup> covering 100s of pegmatites
- 3 rigs currently drilling at Finniss with 40,000m of drilling to be conducted over 12 months
- Drilling results over coming weeks and months leading to multiple Resource increases and upgrades

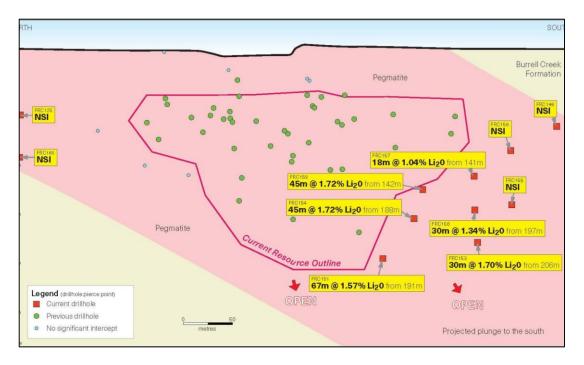


# 2018 DRILLING GRANTS EXPANDING



#### 67M @ 1.6% intersection outside resource

- Multiple new high-grade lithium intersections outside the Mineral Resource at Grants include:
  - 67m @ 1.57% Li<sub>2</sub>O from 191m in FRC151
    - Including 16m @ 2.17% Li<sub>2</sub>O
    - And 12m @ 2.08% Li<sub>2</sub>O
  - 45m @ 1.72% Li<sub>2</sub>O from 188m in FRC154
    - Including 22m @ 2.09% Li<sub>2</sub>O
  - 45m @ 1.72% Li<sub>2</sub>O from 142m in FRC159
    - Including 16m @ 2.03% Li<sub>2</sub>O
- New assays confirm significant extensions directly south along strike and at depth at Grants - outside of the existing defined Mineral Resource
- These extensions demonstrate the potential to further increase the size of the Mineral Resource and mine life at Grants
- Expected to have material positive impact on the financial returns from development of the proposed 1Mtpa Finniss Lithium Project

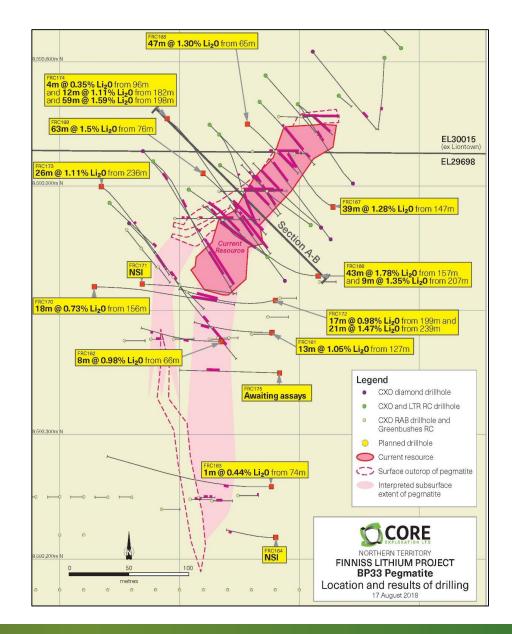


. ASX:CXO 24/7/2018

# 2018 DRILLING BP33 EXPANDING

### 55M @ 2.0% spodumene pegmatite drill intersection

- Wide and high-grade lithium assays returned from drilling at BP33 prospect delivers spodumene intersection amongst the best in Australia:
  - 75m @ 1.68% Li<sub>2</sub>O from 210m\*; including:
    - 55m @ 1.97% Li<sub>2</sub>O from 230;
    - 23m @ 2.07% Li<sub>2</sub>O from 262m.
- Drill hole still in high-grade spodumene pegmatite at end of hole, with last metre grading 2.41% Li<sub>2</sub>O
- Wide spodumene intersections indicate an increased thickness and grade down-plunge
- Diamond drilling currently at BP33 ahead of new resource estimate next month

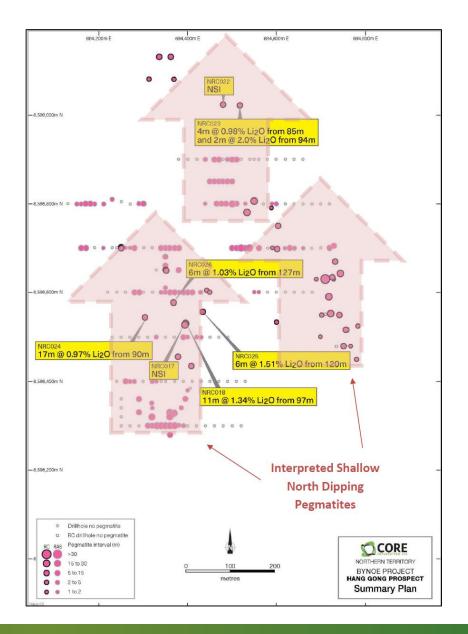


1. ASX:CXO 11/4/18

# 2018 DRILLING RESOURCE GROWTH POTENTIAL

### New high grade hits demonstrate potential to grow resources

- Intersections at Carlton Prospect include:
  - 16m @ 1.79% Li<sub>2</sub>O from 84m (NRC015)
  - 21m @ 0.89% Li<sub>2</sub>O from 113m (NRC027)
- Drill results at Hang Gong highlights potential for shallowdipping, multiple stacked pegmatites and include:
  - 11m @ 1.34% Li<sub>2</sub>O from 97m (NRC018)
  - 17m @ 0.97% Li<sub>2</sub>O from 90m (NRC024)
- Drill results pending from Sandras, Carlton, Lees, Hang Gong, Grants, BP33, etc over coming weeks

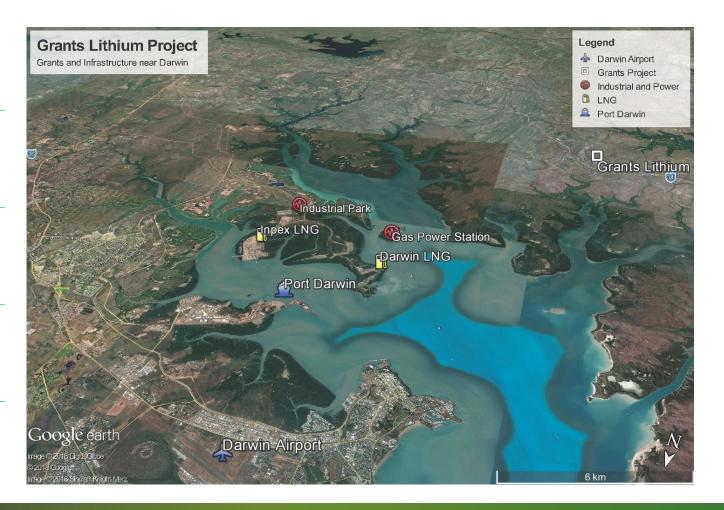


1. ASX:CXO 16/8/18

### PROJECT INFRASTRUCTURE ADVANTAGE



- Potentially best logistics chain to China of any Australian lithium project
- ✓ Darwin Port located close to Grants
- 88km route is on all Northern Territory
   Government roads licensed for road trains
- ✓ Bitumen (blacktop) all the way
- Grants is close to grid power, gas and rail infrastructure

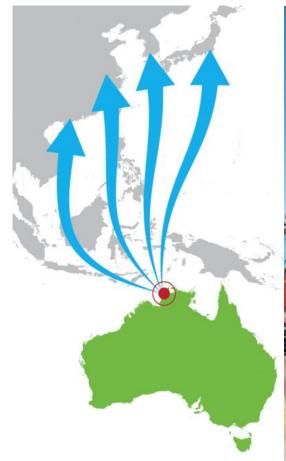


### DARWIN PORT AGREEMENT



### **Core has agreement with Darwin Port to ship 1Mtpa of spodumene**

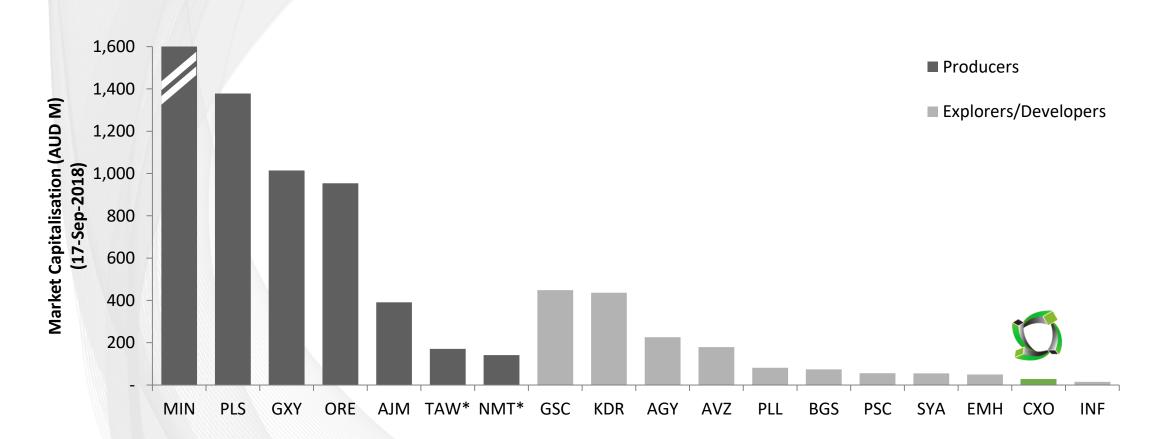
- Darwin Port is Australia's nearest port to China
- East Arm Wharf facilities at Darwin Port are well suited to handle potential future production from Core's lithium projects
- Heads of Agreement signed with Darwin Port in respect of potential export of lithium products from Grants
- Agreement provides Core with capacity to export up to either:
  - 1 Mtpa of spodumene Direct Shipping Ore (DSO); or
  - 250 ktpa of spodumene concentrate





# ASX LITHIUM SECTOR COMPARATIVE MARKET CAPITALISATIONS





\*TAW 50%, NMT 14%

# CXO & ASX LITHIUM SECTOR 1st Quartile Project



High Grade – 1<sup>st</sup> Quartile 1.4% Li<sub>2</sub>O

Low capital intensity – 1<sup>st</sup> Quartile A\$4,500/tpa concentrate

Attractive operating costs – 1<sup>st</sup> Quartile US\$230 C1/t concentrate

# CORE EXPLORATION ON PATHWAY TO PRODUCTION



- Finniss Project is unlocking a new lithium rich province in the Bynoe Pegmatite Field, near Darwin
- Low risk, conventional, open pit mining operation with simple metallurgy
- Favourable project characteristics gives rise to high margins and a rapid payback
- ✓ Enterprise value of approximately \$20 million offers substantial leverage to development and exploration
- Arguably the best logistics chain to Asia and supporting infrastructure of any Australian lithium project, providing significant strategic advantages
- Capex of only \$53.5 million US\$20 million already committed by major lithium offtake partner, Yahua Group and project fully funded when combined with the Ruifu US\$35 million\* pre-payment facility
- ✓ Preliminary Feasibility Study (PFS) now complete, Definitive Feasibility Study (DFS) scheduled for delivery by the end of 2018

\* U\$35M non-binding term sheet subject to negotiation and finalisation of binding documentation (ASX:30/7/2018)

### **THANK YOU**



#### For more information:

Stephen Biggins

**Managing Director** 

+61 8 7324 2987

### For broker and media enquiries:

Warrick Hazeldine +61 417 944 616

Andrew Rowell +61 400 466 226

Cannings Purple

